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FCR XG-1/CR CL

CR-IR346/348CL

Service Manual

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Export restrictions (TWA) apply to models in which Service Pack/ Internet Explorer 4 have been installed on the hard disk of CR-IR346/348CL controller main unit, such as models equipped with DELL OptiPlex GX110 - Pentium II of 733MHz or more, because the encryption key bit length of the Internet Explorer 4 program exceeds the limit.

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Introduction

■ Notes on the Use of the Service Manual

1. **This document is intended to be read by the service personnel of Fuji Photo Film Co., Ltd. or authorized agent who is commissioned by Fuji Photo Film Co., Ltd. to perform servicing tasks.**

   Under these circumstances, no one is allowed to perform the following actions without the prior written permission from Fuji Photo Film Co., Ltd.

   - Duplicating or reproducing this document in whole or in part
   - Disclosing this document, in whole or in part, to a person other than the authorized service personnel
   - Lending or transferring this document, in whole or in part, to a third party

2. **Due care must be exercised when handling this document because it contains product internal structure descriptions and other confidential information.**

   * When the contents of this document need be changed, the information about such changes will be conveyed using "Engineering Change Notice (ECN)".

     The "Engineering Change Notice (ECN)" must also be handled using the same care as for this document.

3. **Due to a product development schedule, the product specifications and available options/variations prevailing at the time of the release of this document may differ from the descriptions given in this document. In such an instance, a Service Engineering Information will be issued as needed to furnish latest information about inapplicable specifications and components.**

4. **If you have any doubt about the contents of this document or find errors, contact your local Fuji Film representative.**

■ Warning and Cautionary Information

Precautions during the service work are indicated by the following terms and symbols.

WARNING	Serious injuries or death may result if this precaution is not observed. Damage of the unit and customer database may also occur.
CAUTION	Mild or moderate injuries may result if this precaution is not observed. Serious malfunction (which may be unrepairable or difficult to repair) may also occur.
IMPORTANT	Abnormal operations (easy to repair) may result if this precaution is not observed.
NOTE	Indicates items which require particular attention.
REFERENCE	Explanation of related items and terms.

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■ Precautionary Labels

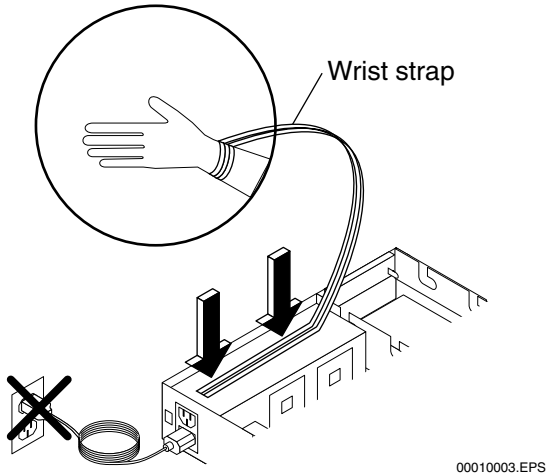
To prevent danger to humans and serious accidents, observe the following.

◆◆ WARNINGS ◆◆

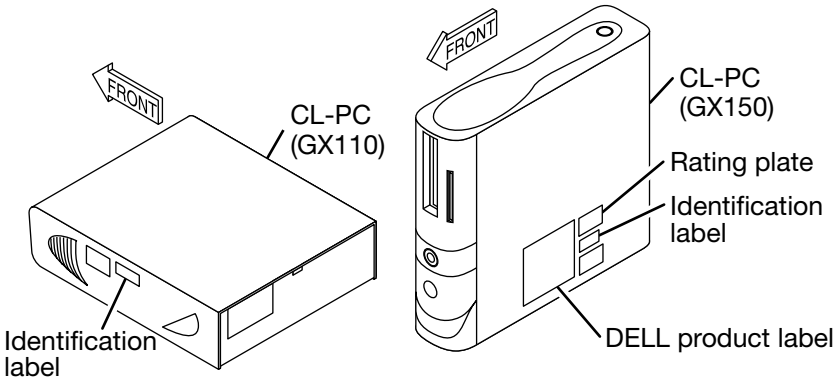
- *Unless indicated otherwise, be sure to turn off the power switch before maintenance work, and disconnect the power plug from the outlet. Even if the power switch is OFF, 100 to 240VAC (differs according to machine specifications) will still be supplied to the primary input terminal of the unit if the power cable is connected, and this may result in possible electric hazards.*
- *As neckties, scarves, and necklaces may get caught in the unit during work, remove these items or take precautions against such accidents.*
- *Never modify the unit unless specified otherwise. Modification of the safety unit (interlock, breaker, temperature fuse, etc.) will cause serious problems as it is not only dangerous but violates the related laws and regulations.*

◆◆ CAUTIONS ◆◆

- *The grounding wire must be connected.*
- *To avoid damages to the parts/units due to static discharge, use a wrist strap putting one end on your wrist and the other end on the grounded section of the equipment, as illustrated below.*
- *When doing so, make sure to unplug the line cord plug to avoid electrical hazards if using a PC in which the power is energized to the internal power supply or circuits when it is inserted into an outlet.*



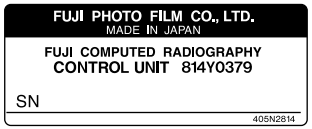
The unit is also pasted with precautionary labels. Follow these instructions on these labels when carrying out work.



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- Identification labels

CR-IR346CL



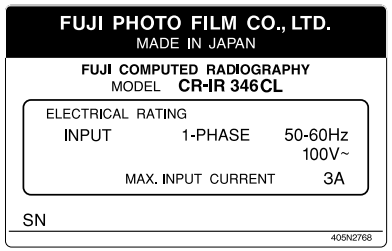
CR-IR348CL



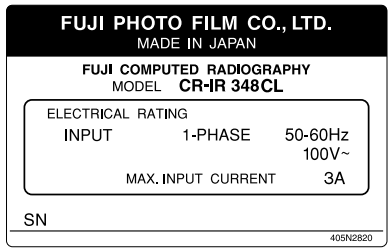
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- Rating plate

CR-IR346CL



CR-IR348CL



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Safety Precautions

■ Safety Precautions (Control Unit)

Follow the precautions below when installing, using, and servicing the control unit (PC).

See the User's Guide provided for details on the control unit.

- Input voltage : 115VC or 230V
- Electric hazard prevention :
  The power cord of the control unit and CRT monitor uses a 3-pin plug. Connect it to a properly grounded power outlet. When using an extension cord, use a 3-line type with a grounding pin.
- Place of installation : Avoid places where dust and foreign particles may enter inside through the computer opening. Avoid installing near heaters and heat sources.
- Precautions when working on internal parts of the control unit :

  (1) Turn off the power of the PC, CRT, and other peripheral devices.

  (2) Disconnect the power cord from the outlet to prevent electric hazard.

  (3) Open the I/O panel on the rear of the PC, touch the metallic part to fully discharge body static electricity before accessing.

  (4) When removing the board and memory module, etc., hold them without directly touching the connectors and pins and place them in a static electricity prevention package.

■ Safety Precautions (CRT monitor)

◆◆ *WARNING* ◆◆

High voltage is applied inside the CRT monitor.

To prevent electric hazards and danger, the CRT internal parts cannot be accessed.

The CRT monitor does not consist of parts serviceable by the service engineer.

Abbreviations adopted in this manual:

- **PC**: Hardware (personal computer) used in the CR-IR346CL controller
- **CL**: CR-IR346CL
- **RU**: CR-IR346RU
- **OS**: Operating System (Windows 2000)
- **AP**: Application Software

Name of the target product of this manual:

Note that the target product name of this manual has been changed from "FCR XG1" to "FCR XG-1". Read thus "XG1" appearing in this manual "XG-1".

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CR-IR346/348CL Service Manual

MD: Machine Description

Control Sheet

Issue date	Revision number	Reason	Pages affected
04/10/2001	01	New release (FM2951)	All pages
05/30/2001	02	Revision for software version A02 and GX150 (FM3027)	I, II, 1-11, 14
05/30/2001	02	Changes in pagination (FM3027)	12, 13, 15, 16
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1-8, 11, 14, 17, 18
08/30/2001	03	Changes in pagination (FM3125)	9, 10, 12, 13, 15, 16
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 7, 8, 10, 15, 16, 18
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 1-3, 6-8, 10

1. System Configuration

This section shows the system configuration, which includes the CR-IR346/348CL application, and the operating environment for the PC.

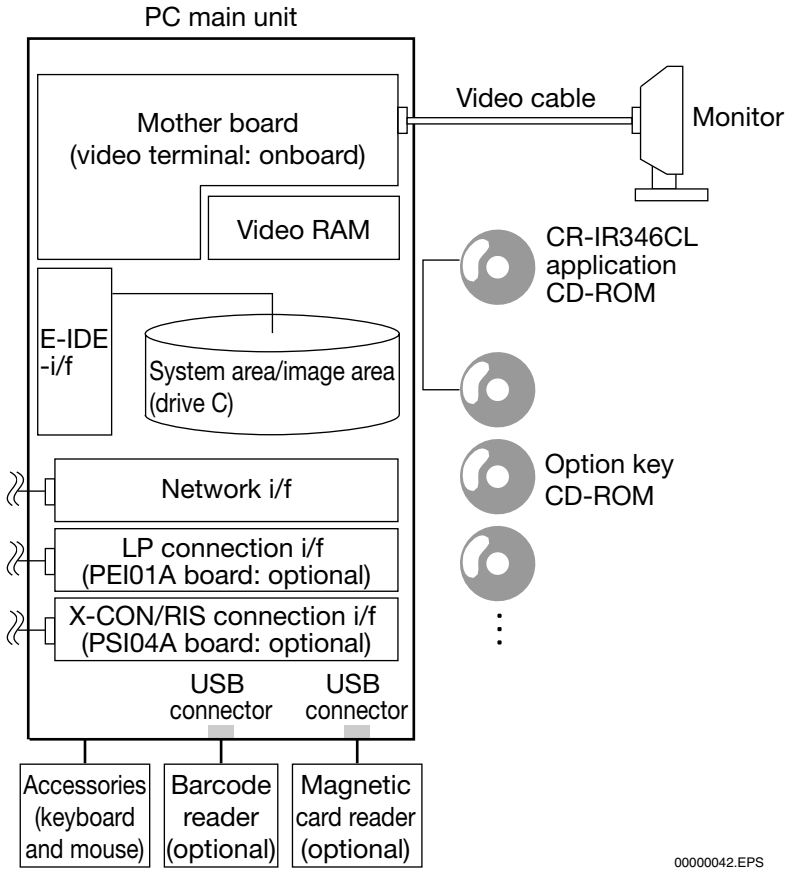
The application is to be installed on the following PCs. The PC to be used varies with the image reader specification.

❍ PC used for XG-1 (one RU+CL) connection
- Dell OptiPlex GX110, etc.
- Dell OptiPlex GX150 (Celeron type), etc.

❍ PC used for 5000 plus (5000 series + CL) or CL-RU N:N connection
- Dell OptiPlex GX150 (Pentium III type), etc.

1.1 PC Used for XG-1 (one RU+CL) Connection

■ System configuration



■ Operating environment

● PC main unit

Item	Description	
CPU	GX110	Pentium III; clock frequency: 500 MHz or higher
	GX150	Celeron ; clock frequency: 700 MHz or higher (only in Japan)
System memory	384MB or more	
VRAM	4MB or more	
HDD	IDE, 6.4GB or more, 5400 rpm or higher	
FDD	3.5" 2-mode	
CD-ROM drive	24-time-speed or faster (recommended)	
Expansion card slots	PCI bus slot × 2 (half-size PCI board)	
Network	10BASE-T/100BASE-TX compatible	
OS	Windows 2000 Professional	
Other	RS-232C × 1, USB × 2	

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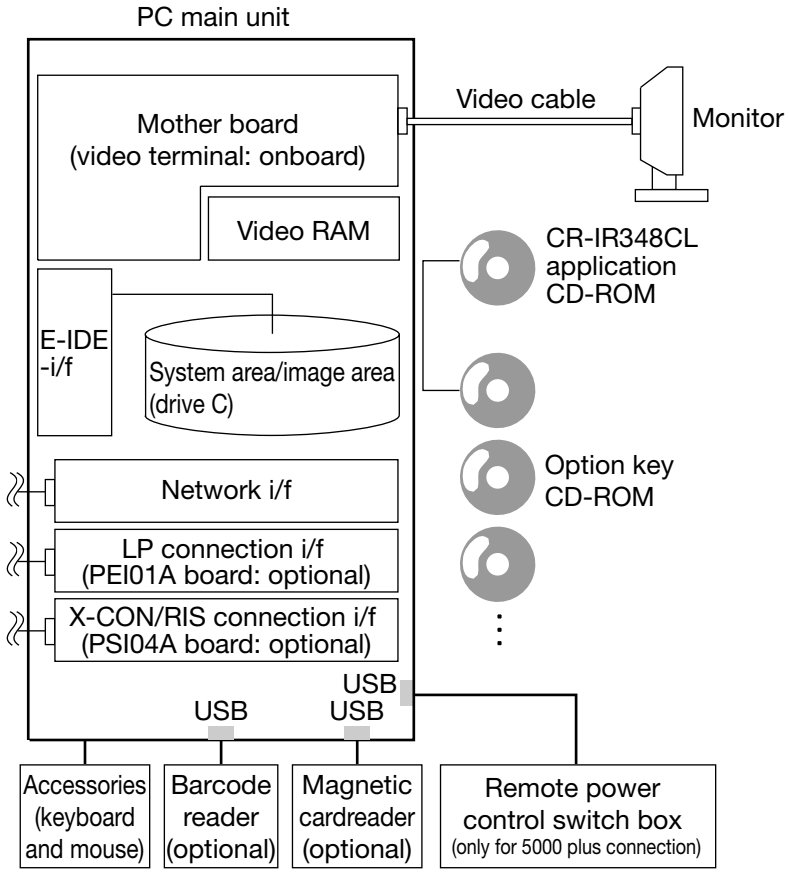
● Monitor

Item	Description
Display resolution	1024 × 768 pixels or higher
Number of display colors	24-bit True-Color (16,777,216 colors)

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1.2 PC Used for 5000 plus (FCR 5000 Series+CL) or CL-RU N:N Connection

■ System configuration



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■ Operating environment

● PC main unit

Item	Description
CPU	Pentium III; clock frequency: 1 GHz or higher*
System memory	512MB or more
VRAM	4MB or more
HDD	IDE, 4GB or more, 7200 rpm or higher
FDD	3.5" 2-mode
CD-ROM drive	24-time-speed or faster (recommended)
Expansion card slots	PCI bus slot × 2 (half-size PCI board)
Network	10BASE-T/100BASE-TX compatible
OS	Windows 2000 Professional
Other	RS-232C × 1, USB × 3

* “Pentium IV; clock frequency: 1.5GHz or higher” when the FCR 5000MA plus is connected.

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● Monitor (15" LCD, 17"CRT)

Item	Description
Display resolution	1024 × 768 pixels or higher
Number of display colors	24-bit True-Color (16,777,216 colors)

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● Monitor (SL-IC300)

☞ See the SL-IC300 Service Manual.

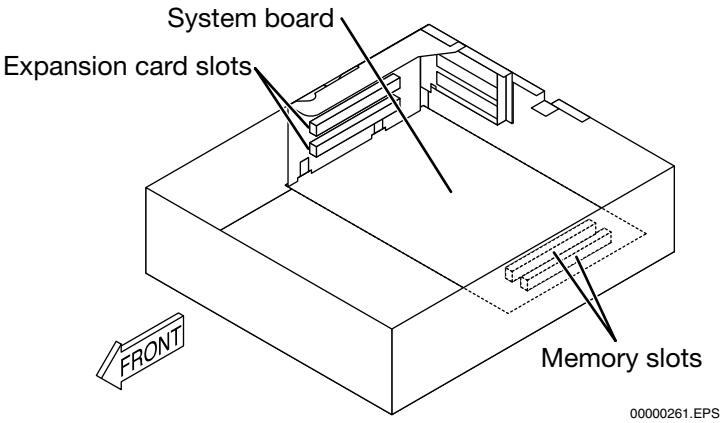
2. Connectors and Slots

This section shows the locations of the following PC connectors, memory modules, and PC board mounting slots.

- Dell OptiPlex GX110
- Dell OptiPlex GX150

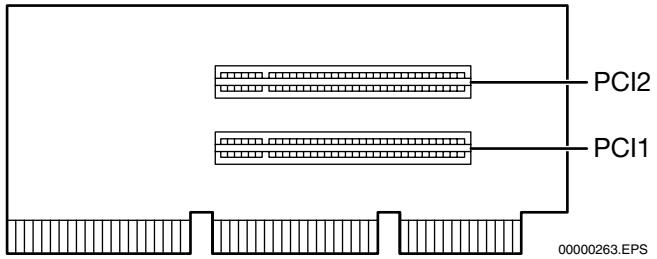
2.1 Dell OptiPlex GX110

■ System board location



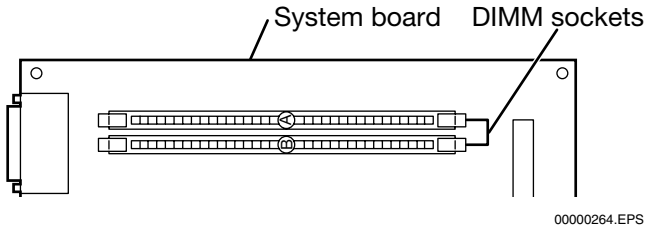
■ Expansion card slots

A total of two expansion card slots are used to accept the PEI01A board (optional) for LP connection and PSI04A board (optional) for RIS connection. These boards can be mounted in either of the two slots.

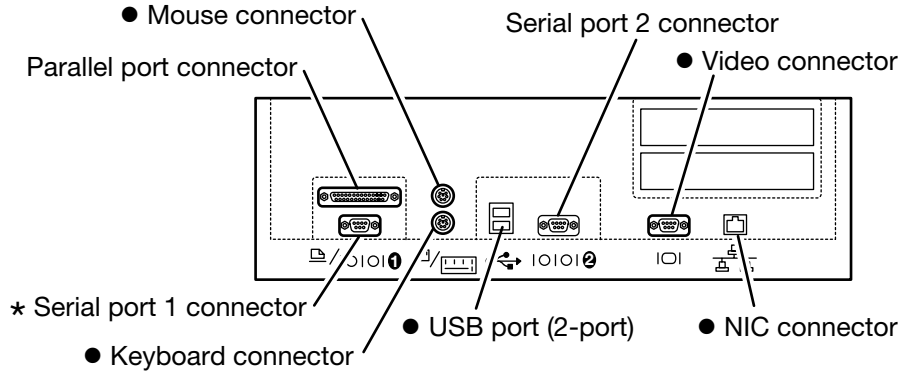


■ Memory modules

The maximum amount of memory (512MB) is factory installed prior to shipment. Therefore, no more memory can be added.



■ Connectors (PC rear panel)



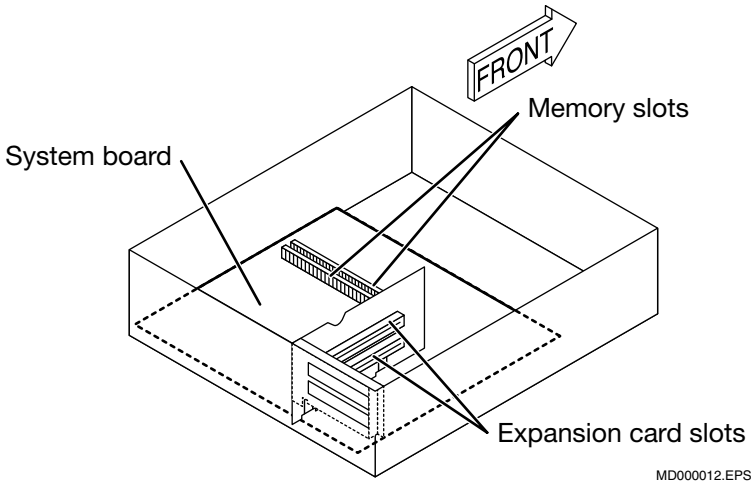
● : Indicates the connector used for the CR-IR346CL.

⋆ : Indicates the connector used only when the 15" monitor with a touch panel is employed.

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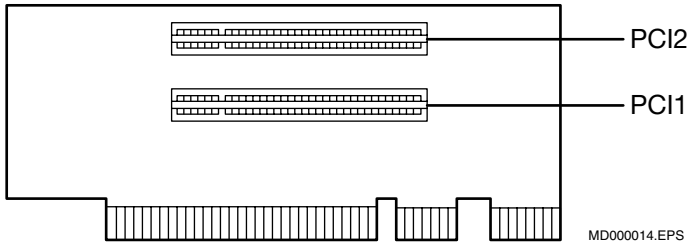
2.2 Dell OptiPlex GX150

■ System board location



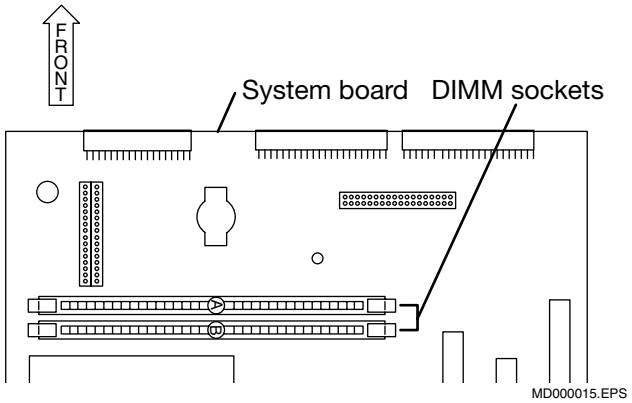
■ Expansion card slots

A total of two expansion card slots are used to accept the PEI01A board (optional) for LP connection and PSI04A board (optional) for RIS connection. These boards can be mounted in either of the two slots.

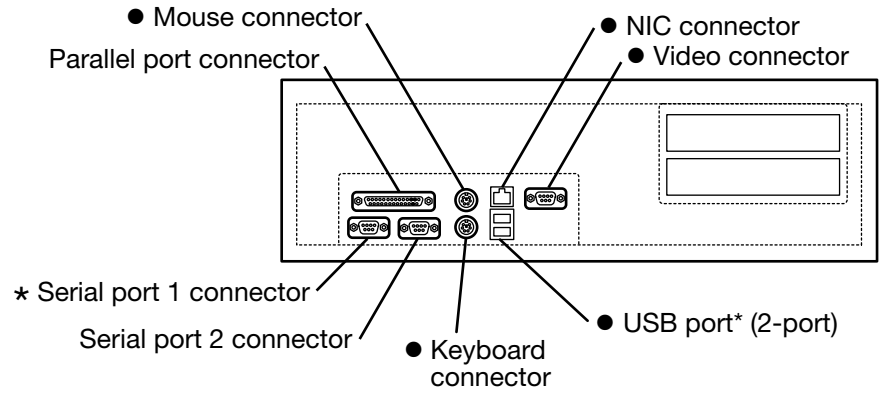


■ Memory configuration

The maximum amount of memory (512MB) is factory installed prior to shipment. Therefore, no more memory can be added.



■ Connector configuration



● : Indicates the connector used for the CR-IR346/348CL.
⋆ : Indicates the connector used only when the 15" monitor with a touch panel is employed.
* : Two-port USB connector is provided on the front as well. Do not use these ports.

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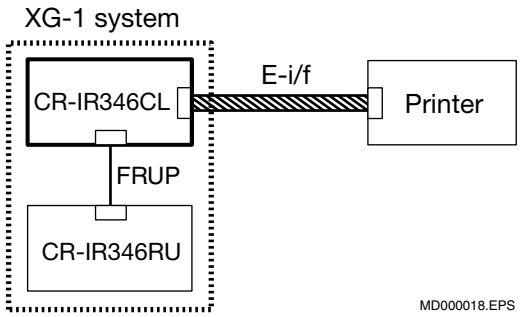
3. System Connection Examples

This section shows CR-IR346/348CL system connection examples.

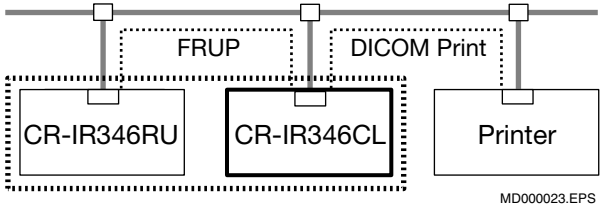
■ Independent type [XG-1 system]

This example represents the most compact system connection, which consists of the CR-IR346RU, CR-IR346CL, and printer.
ID information entry, local storage, and local film output functions can be exercised by this system alone. In this connection example, film output is enabled either via the E-i/f or using the DICOM Print function.

● Connecting a printer via the E-i/f

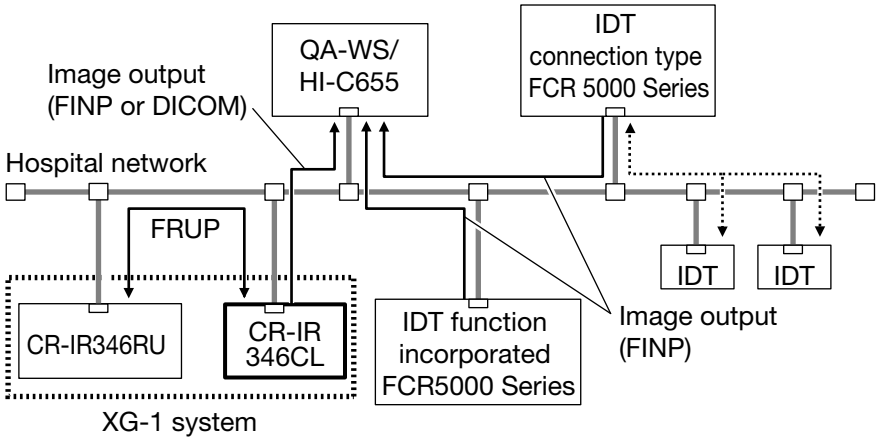


● Connecting a printer using the DICOM Print function

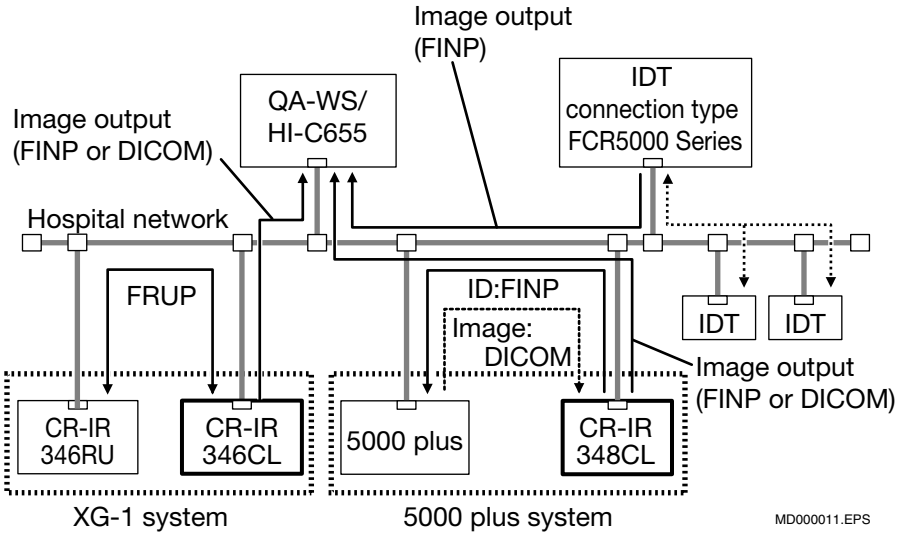


■ Network type

This example represents a system connection that is used with the XG-1 system built into an existing hospital network, to which the ID function incorporated FCR5000 Series, IDT connection type FCR5000 Series, or similar equipment is connected.

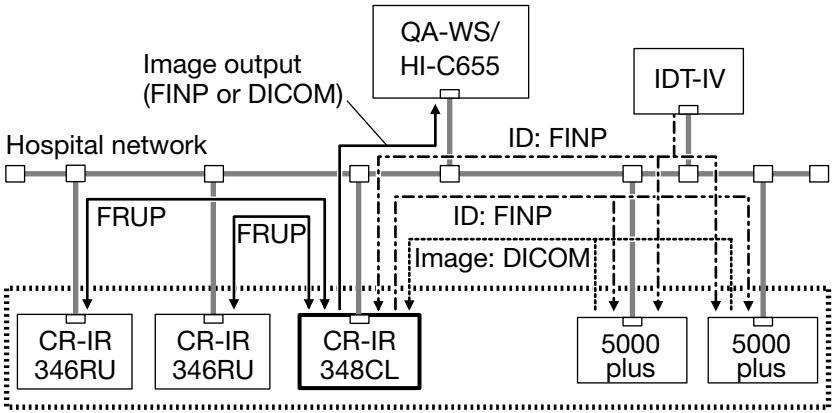


Illustrated below is an example of system connection with the 5000 plus system incorporated into the configuration shown above. This system configuration is available with software version A02 or later.



Illustrated below is an example of system connection where the XG-1 (two or more RUs connected) and 5000 plus are used simultaneously. This system configuration is available with software version A04 or later.

The system configuration that includes the IDT-IV is available with software version A07 or later.



System connection where the XG-1 (two or more RUs connected) and 5000 plus are used simultaneously.

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4. Software Function Overview

■ External equipment connections

Equipment		Description
Image Reader		The 348CL can be simultaneously connected to the RU, FCR5000 cassette type, and FCR5000 built-in type. Software version A03 does not allow you to use the RU and FCR5000 built-in type simultaneously. The 346CL can only be connected to one unit of the RU.
	RU	Up to 16 units can be connected. However, CLs that serve as the master IIP for every RUs are required. The connection protocol used is FRUP. Uncompressed, nonstandardized, 12-bit images are output to the CL.
	FCR5000 cassette type	Up to 16 units can be connected. The connection protocol used is DICOM CR Storage. JPEG-compressed, nonstandardized, 11-bit images are output to the CL.
	FCR5000 built-in type	Up to two units can be connected. The connection protocol used is DICOM CR Storage. JPEG-compressed, nonstandardized, 11-bit images are output to the CL.
Local printer		One unit can be connected through the use of the PEI board. The CR-LP414, FL-IM2636, FL-IM3543, and FL-IM3543M cannot be connected. • The double-density recording function is supported (FM-DPL only). • Two film sizes (35 × 43 cm and 26 × 36 cm) are supported.
Network printer		The connection protocol used is DICOM BGP/Printer SOP. The acceptable connection target is the FN-PS551, DRYPIX, FM-DP L or other specified device of a different manufacturer. However, the network printer cannot be used together with the local printer.
DICOM receiver		This device can deliver its output to one filing device and eight other devices. As the connection protocol, FINP, DICOM CR Storage, or DICOM XR Storage can be used. For the employed filing device, DICOM Storage Commitment can be used. The acceptable connection target is the HI-C655, QA-WS771, HI-C654, OD-F614/624, or other specified devices of different manufacturers.

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Equipment		Description
RIS	NEC new interface compliant device or Fujitsu/Hitachi interface compliant device	Only one unit can be serially connected via the PSI04A board (Serial ordering). Software version A07 or later.
	DICOM MWM or DICOM PPS compliant device	Network connection.
	Host connection device based on Type A/B interface	Only one unit can be serially connected (via the PSI04A board).
X-CON (A04 or later)		Only one unit can be serially connected (via the PSI04A board). Toshiba, Shimadzu, Philips, and Siemens devices are supported.
IDT		The ID information collection and ID information sharing functions are supported.
	IDT-IV	Up to 16 units can be connected.
	IDC-IV	Only one unit can be connected. Patient information is acquired from the host via the IDC-IV.
Monitor		Only one unit can be connected.
	1024×768 color LCD	The touch panel function is provided.
	1024×768 color CRT	—
	SL-IC 300	The dedicated video board is required.
	1600×1200 Ikegami monochrome 1k monitor	The dedicated video board is required. Note, however, that the video board can be mounted on a PC for the CR CL MA.
Other	Magnetic card reader	Only one unit can be connected via USB. The JIS card and ISO card are supported. The functions are the same as those of the IDT-IV.
	Barcode reader	Only one unit can be connected via USB.
	Full-size keyboard	Only one unit can be connected.
	Mouse	Only one unit can be connected.

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■ Start of processing

Function	Description
Study list display	❍Displaying the study list stored on the HDD (local worklist) ❍Displaying the DICOM worklist ❍The following processes can be performed with a study listing selected: • Exposure • QA • Lock • Deletion • Multi-frame forced output
User utility	❍Exposure menu information setup/management • Image processing parameters • Exposure menu • Requesting department • Radiologist • Film annotation characters • X-CON ❍Environment setup ❍Setup data backup/restore ❍RU dust removal

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■ Exposure

Function	Description
Study registration (reception)	❍Patient information input methods • Magnetic card input • Keyboard input • Automatic ID assignment function • Patient information on-line function (Type A/B) • Local database search • Acquisition from IDC-IV ❍Exposure menu registration methods • Choosing from a displayed group of exposure menus - (Two or more exposure menus can be registered.) • Choosing from a study menu ❍Registered study list management function • Displaying a list of registered studies • Deleting registered studies
Performing studies	❍Monitor image display Blackened images are displayed when the automatic blackening process is specified. When an energy-subtracted image is received, the low-pressure, bone, or soft-tissue mode can be selected. ❍The QA function can be exercised with images for study selected. ❍Exposure list manipulation • New-exposure addition • Repeat • Duplication • Reexposure • Exposure menu change • Exposure menu parameter change • Exposure sequence change • Image change • Information change (The patient information/exposure information can be changed. The results will not be fed to the RIS.)

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Function		Description
Performing studies		❍ Automatic printing The user can choose between sequentially printing image exposures and making prints in compliance with the instructions issued upon study. The instructions issued upon study are always complied with except for printing. ❍ Study suspension (suspension/termination) and initiation of a new study When new patient information is entered via the magnetic card or host-connected Type A during study, a new study can be started. In such an instance, the user can choose between proceeding without changing the exposure menu and removing the exposure menu registration.
Other	Starting an exposure (study)	• Choosing from the local worklist (list of registered studies) • Choosing from the DICOM worklist • Making an entry from the RIS • Making an entry from an RIS component
	Temporary study suspension	An ongoing study can be temporarily suspended.
	Study interruption	An ongoing study can be interrupted.
	Study termination	The study ends when all the registered exposures are made.
	Forwarding to QA/printing without QA	The user can choose between forwarding the studied items to QA and printing them without forwarding them to QA.
	Study result management	Ordering and DICOM PPS are supported.

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■ QA function (QA waiting study list/QA upon study)

Function	Description
Information display/ correction	The following items of information can be handled: • Image information • Exposure menus • Image processing conditions • Film formats • Distribution destination selection for each study • Imaging failure setup • Output log
Image manipulation	The following image manipulation functions are supported: • Shuttering process • Increased-length synthesis process (automatic/manual) • Restandardization process • Image processing change • Rotation • Marker imbedding
Operations	The following operations can be performed for images: • The sequence of images within a study can be changed. • The images within a study can be interchanged. • Images can be moved from one study to another. • Images can be output. • The image erasure lock can be set. • Setup can be performed so as indicate the completion of QA. • Images can be deleted. • The image can be magnified and the full screen display is available. • Exposure menus can be additionally registered to an already delivered study.
Other	Window customization function

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■ Image output

Function		Description
Image data output function	Output to printer	Only one unit of the printer can be connected. The QA-WS771's DICOM print format is complied with. The sorter function is the same as for the FCR5000 Series. Printers connectable with the following protocols are supported: • Local connection (E-i/f connection) • DICOM Print • FINP
	Output to network-connected filing device	Only unit of the filing device can be connected. When FINP is employed, standardized, unprocessed images can only be output. When DICOM is used, nonstandardized images, standardized images, and processed images can be output. Further, DICOM Storage Commitment is supported (one unit only). The output of 20 lines/mm images can be generated only when DICOM is used. Filing devices connectable with the following protocols are supported: • FINP • DICOM CR Storage • DICOM XR Storage
	Output to network-connected device	Up to eight units can be connected. When FINP is employed, standardized, unprocessed images can only be output. When DICOM is used, nonstandardized images, standardized images, and processed images can be output. The output of 20 lines/mm images can be generated only when DICOM is used. Filing devices connectable with the following protocols are supported: • FINP • DICOM CR Storage • DICOM XR Storage
Output log function		Outputs are logged in text format. They can be viewed with the user utility.

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■ Image processing

Function	Description	Option key
Standardization (automatic/manual)	This function is not applicable to image reoutputs that are generated by an external device.	Standard
Gradation processing		Standard
Spatial frequency processing		Standard
DRC		Standard*
TAS		Standard*
MFP		IR 346 MFP
PEM		CL PEM
Blackening	This function is not applicable to image reoutputs that are generated by an external device.	CL SHUTTER-PROC
Energy-subtraction processing	This function is applicable when the XU-D1 is connected.	CL ES
20 lines/mm image support		Standard
Increased-length synthesis (automatic/manual)	This function is not applicable to image reoutputs that are	

The DRC and TAS processing items are stored on the standard key CD-ROM.

- XG-1 system : XG-1 Standard key CD-ROM
- 5000 plus : 5000 Standard key CD-ROM
  Standard key CD-ROM (only in Japan)

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■ Other

Function	Description
Supported local storage	• Temporary storage • Simplified image storage • Storage on removable media
User interface	• For hospitals
Supported languages	• Japanese • English • French • German • Swedish • Italian • Spanish • Danish • Norwegian • Korean • Chinese

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5. Relationship between RU and CL

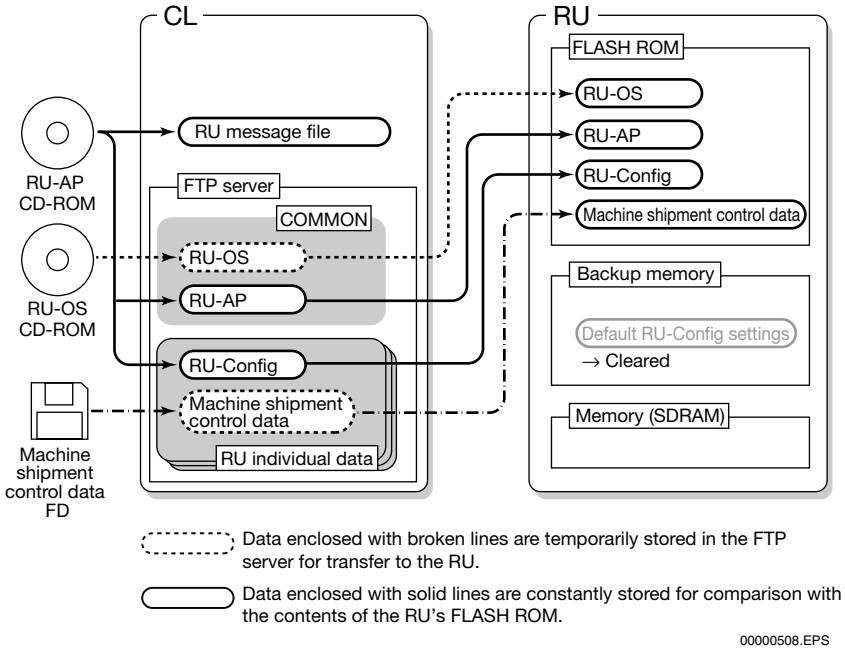
This section explains about the data exchange operations that are performed between the CL and RU (CR-IR346RU) when they are connected.

◆ NOTE ◆

The "application", "operating system", and "RU configuration" are abbreviated hereafter "AP", "OS", and "RU-Config", respectively.

5.1 RU Software (AP/OS) and Data Flow

■ Data flow during installation process



- RU-AP (solid-line arrow mark)

  When the RU-AP is installed, the RU-AP, RU-Config, and RU message file data are copied to the CL.

  The RU-AP and RU-Config data are copied to the FLASH ROM via the network.

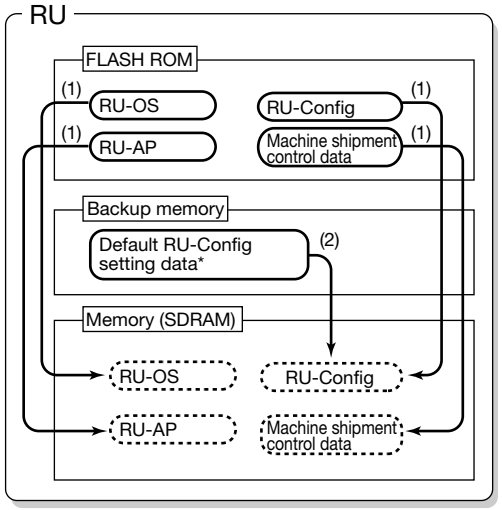
➥ REFERENCE

The RU message file stores a detailed record of RU error events. Codes of the errors encountered in the RU are used as a key for displaying error codes and detailed error information on the CL monitor.

- RU-OS (broken-line arrow mark) and machine shipment control data (chain-line arrow mark)

  The RU-OS and machine shipment control data are copied to the RU's FLASH ROM via the CL's FTP server.

■ Data flow during RU boot process



* Network setting items such as default IP addresses of the RU and CL.

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When you boot the RU, the data in the FLASH ROM is copied to the memory (SDRAM) (arrow mark (1)).

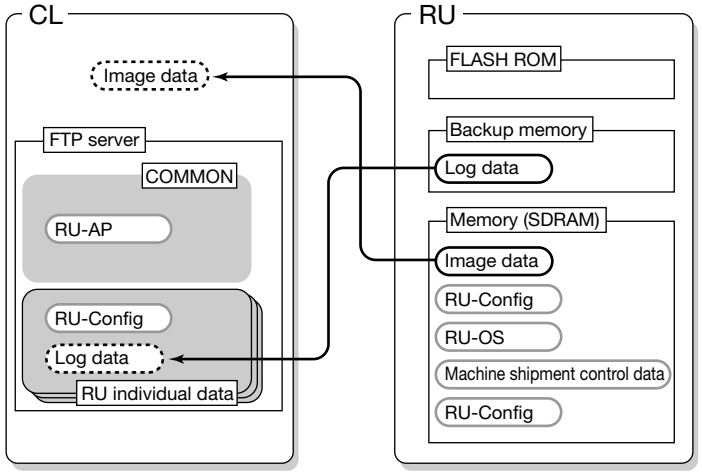
If the backup memory contains default RU-Config setting data, it overwrites the RU-Config data in the memory (SDRAM) (arrow mark (2)).

➥ *REFERENCE*

The default RU-Config setting data does not usually exist in the backup memory. It is written into the backup memory only when any of the following procedures is performed:

- *The <Erasure process> switch activation + RU power ON procedure is performed.*
  ☞ *See "3.1 CL/RU Connection Recovery Procedure to be Performed upon RU Memory Initialization, under "MT: Machine Troubleshooting".*
- *The "Temporary Setting" procedure for the backup memory is performed with the RU's maintenance utility.*
  ☞ *See "MU: Maintenance Utility" for the CR-IR346RU.*
- *The RU-AP is installed from the CR-IR346RU MAINTENANCE TOOLS CD-ROM.*

■ Data flow during normal process



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- Image data

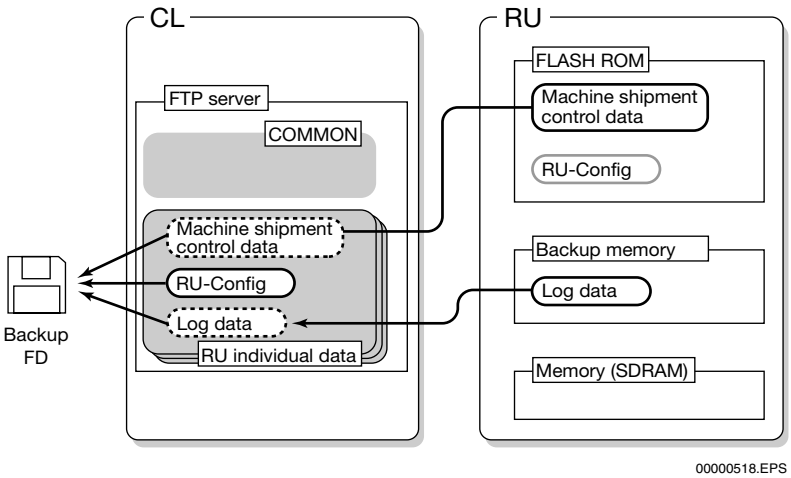
  The image data obtained by IP scanning is saved in the SDRAM and then transferred to the CL via the network.

- Log data

  The RU-AP copies the log data to the CL's FTP server as needed.

■ Data flow during backup/restore process

The RU M-Utility is used to back up or restore the various RU data.



- Log data

  A set of log data stored in the backup memory is backed up onto an FD in the sequence indicated above. Note that the log data cannot be restored.

- RU-Config

  The RU-Config data stored in the FTP server is backed up onto an FD. In the restore process, the data on the FD is copied to the FTP server.

- Machine shipment control data

  The machine shipment control data stored in the FLASH ROM is backed up onto an FD in the sequence indicated above. In the restore process, the data is copied to the FLASH ROM via the FTP server.

5.2 Mechanism of RU-AP/RU-Config AUTO UPDATE

■ AUTO UPDATE

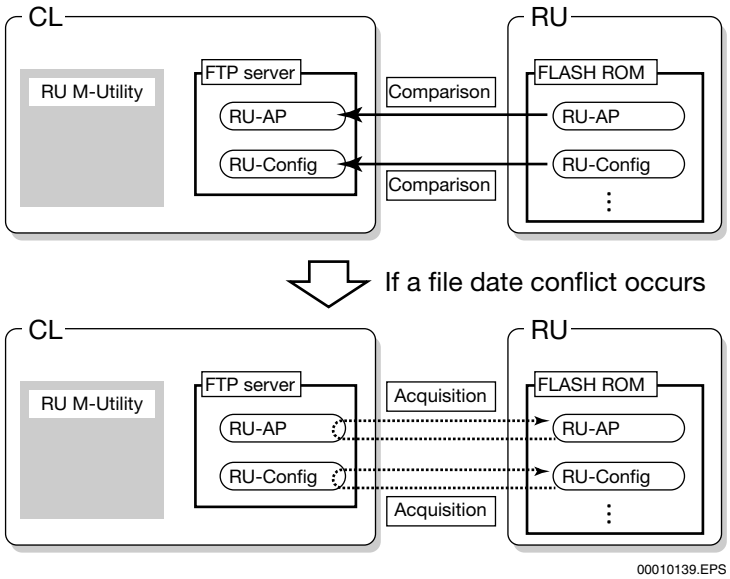
The AUTO UPDATE function will automatically have the RU download RU data from the FTP server if there is a discrepancy between CL FTP server data and RU FLASH ROM data (RU-AP and RU-Config).

The RU-AP and RU-Config are downloaded in the following sequence:

When the CL-AP starts running, the FTP server's RU-AP and RU-Config are compared with the contents of the FLASH ROM. If they do not match, the FTP server data overwrites the data in the FLASH ROM.

➥ *REFERENCE*

- *The FTP (a network protocol for file exchange between terminals) is used for data exchange between the RU and CL.*
- *The RU main unit is not equipped with input devices for directly rewriting the RU internal data (RU-AP, RU-Config, etc.). Therefore, a networked PC is used to rewrite the RU internal data. The CL-PC is basically used when the CL-RU connection is established.*



◆ NOTE ◆

The comparison between the RU-AP and RU-Config is made by checking the file date. It is thus well to remember that the FLASH ROM data is updated even if a file in the FTP server is dated earlier than FLASH ROM data.

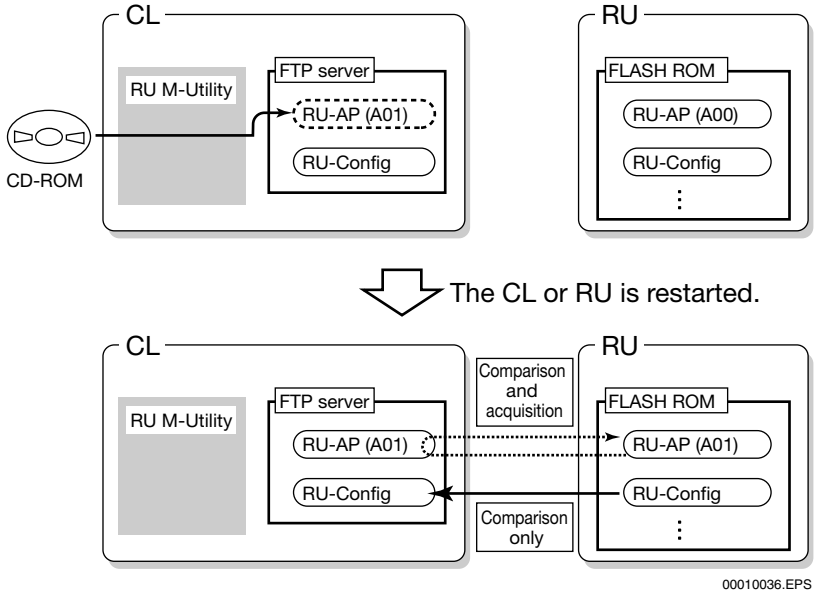
If, for instance, the RU-AP version is upgraded from A00 to A01, the resulting sequence is as indicated below:

1. The A01 version RU-AP is installed in the CL's FTP server.

2. Either the CL or the RU is restarted. At the restart, the data in the FTP server and FLASH ROM are compared with each other.

Since the A00 data and A01 data differ with each other, the RU acquires the A01 version RU-AP from the FTP server and updates the A00 data in the FLASH ROM with the A01 data.

On the other hand, the contents of the RU-Config remain unchanged. Therefore, the RU-Config data does not overwrite the FLASH ROM data even after a comparison is made.



◆ NOTE ◆ [Influence of RU-AP upgrade on RU-Config]

When you upgrade the RU-AP, the RU-Config file date may change for the following reason:

The date changes: When the contents of the RU-Config are changed before the upgrade (including the contents of the RU-Config setup window displayed at the time of RU-AP installation).

The date remains unchanged: When the contents of the RU-Config are not changed at all.

➥ REFERENCE

- *When installing the RU-AP in the FTP server, use the RU M-Utility.*
- *The RU M-Utility is a utility tool that is dedicated to the RU and used, for instance, for RU-AP installation and RU-Config setup.*

  Since this tool is required for RU-AP installation and RU-Config setup, it needs to be installed in advance. It is stored on the CD supplied with the RU.

■ Support for daylight saving time/winter time (AUTO UPDATE)

When the machine is operated in a region where the file time stamp varies depending on whether daylight saving time or winter time is used, it is necessary to turn OFF the AUTO UPDATE function. If daylight saving time is superseded by winter time or vice versa while this function is left ON, the RU downloads FTP server data, throwing the user into confusion.

To avoid the above problem, it is necessary to turn OFF the AUTO UPDATE function when the machine is installed or serviced in a region where the file time stamp varies depending on whether daylight saving time or winter time is used.

6. RU-CL N:N Connection Function Overview

The “RU-CL N:N connection function” is furnished by software version A04. This function enables one CL unit to control two or more RU units and allows you to simultaneously operate two or more CL units (for permitting the RU to transfer images to the CL units in which the associated barcodes are registered). The equipment controlling the use of the above function on a network is called the RU master IIP. The RU master IIP plays an important role in establishing the N:N connections for the RU and CL.

This section mainly deals with the RU master IIP functionality, summarizing the N:N connection function.

◆ NOTE ◆

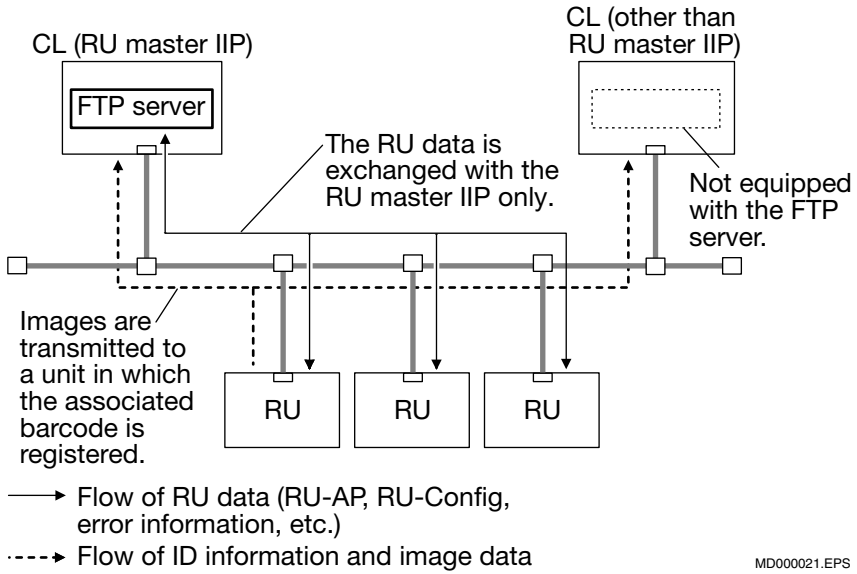
The terms “CR-IR346RU”, “application”, and “RU configuration” are abbreviated hereinafter to ""RU”, “AP”, and “RU-Config”, respectively.

■ CL units serving as the RU master IIP and those not serving as the RU master IIP

The CL units serving as the RU master IIP (hereinafter referred to as the “RU master IIP”) manage the RU units. These CL units have an FTP server for exchanging data with the RU units (the FTP server is detailed earlier). When establishing the N:N connections for the RU and CL, the RU needs to define a networked CL unit as the RU master IIP.

Up to three units of the CL can be managed by one unit of the RU master IIP.

On the other hand, the CL units not serving as the RU master IIP do not have the FTP server for exchanging data with the RU. They merely receive images from the RU. Therefore, the FTP server setup procedures (procedures for installing and setting up the IIS and RU M-Utility) need not be performed for these CL units.



➥ REFERENCE

The RU master IIP also incorporates the interface for displaying the RU status and error information.

■ Handling of data whose ID registration is completed at IDT-IV

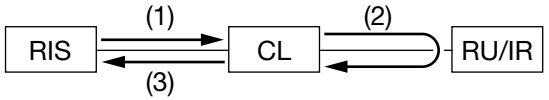
When the barcode of an IP is registered at an IDT-IV unit that shares the patient information setup with the RU master IIP and that IP is read by the RU, the image data is handled as explained below:

- The image data is transferred to the RU master IIP that shares the patient information setup with the IDT-IV.
- The RU master IIP generates a new study in accordance with the ID information registered at the IDT-IV, and stores an image in the area of the newly generated study.
- Only one image is to be stored per study. Even when the IDT-IV is set to issue Study Instance UIDs in relation to the same study, one image will be stored per study.

☞ For details on patient information sharing setup, see “3.9 Patient Information Sharing Function Setup” under “MU: Maintenance Utility”.

7. Ordering Function Overview

When the ordering function is exercised, the patient information, exposure menu, and X-ray information entered at the RIS are transmitted to the CL and, after completion of an exposure process, various items of information used for actual exposures (actual values) are returned to the RIS.
The CL exercises the ordering function via either the serial interface or F-RIS (in Japan only).



(1) Various items of information (patient information, exposure menu, and X-ray information) are transmitted to the CL.
(2) Exposure
(3) The values actually used for exposure (patient information, exposure menu, and X-ray information) are received from the CL.

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CR-IR346/348CL Service Manual

MT: Machine Troubleshooting

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	Pages I, II, 1, 6, 8, 10, 13, 15, 16
04/10/2001	01	Previous Chapter C "Error Information/Service Parts" divided and modified (FM2951)	All pages
05/30/2001	02	Revision for software version A02 and GX150 (FM3027)	I, II, 5, 6, 12, 17, 21
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 5, 18
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 4, Appx MT A-1, A-34, A-50, A-75, A-98, A-99, A-111, A-112
03/20/2002	04	Changes in pagination (FM3297)	Appx MT A-35-49, A-51-74, A-76-97, A-100-110
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 4, 11, 19, 23-36, Appx MT A-34, A-39, A-40, A-42, A-43, A-46, A-51, A-52, A-58, A-66, A-94, A-95, A-104, A-105, A-111
07/20/2002	05	Changes in pagination (FM3428)	Appx MT A-35-38, A-41, A-44, A-45, A-47-50, A-53-57, A-59-65, A-67-93, A-96-103, A-106-110, A-112-116

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1. Error Code Table

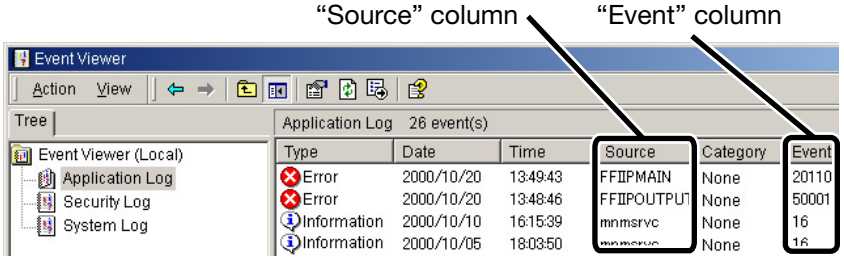
For errors occurring while the CL-AP is being used, take appropriate countermeasures following the error codes (and error messages) listed herein.

☞ See “2. Using the Event Viewer”.

1.1 Referring to Error Messages

- Event (error code) and event source name

  When an error occurs, use the event and event source name information to separate the assumed causes.
  The event and event source name are displayed in the “Source” and “Event” columns of the Event Viewer main window shown below.



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- Meaning of the event (error code)

  A five-digit code displayed in the “Event” column implies the following.

A	B	C	C	C

A: Error-detected process
- 1: Module used in common in the system
- 2: Main process
- 3: Input process
- 4: QA unit
- 5: Output process
- 6: FINP process
- 7: UTILITY process

B: Error level (See the Table Error Levels.)

CCC: For error level 0 or 1, this section of the error code is provided so that it is unique in the process. For error level 2, 3 or 9, this section is unique in the control.

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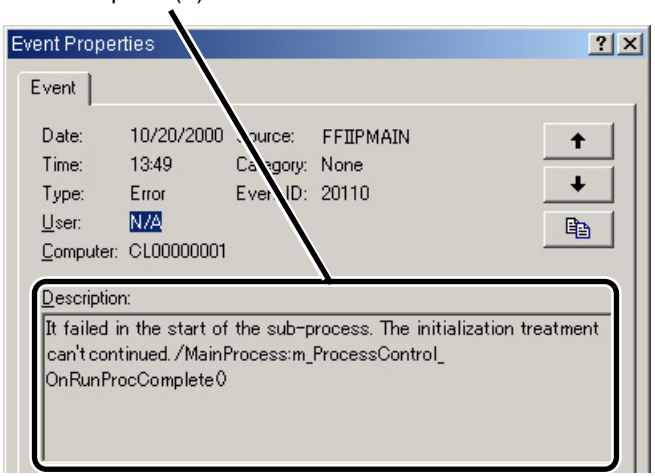
Table Error Levels

Error Level	Description
0: Fatal Error An error that fully disables system operation.	A serious, fatal problem that absolutely disables the system's stable operation. • DB access error • System file access file error
1: Warning An error that enables the system's operation to be continued after user intervention.	Inevitably involves user notification and the system operation can be continued by the user intervention. Causes of this error type can be assumed as follows. • Data file access error • Disk full • Faulty LP board • No response from the target destination for connection
2: Warning An error that enables the system's continuous operation.	A slight error that does not require user notification. The system operation can be continued with no user intervention. The following causes can be assumed. • Unspecified data entered from networks. (An error implying that the system can be continued being substituted by the default).
3: Information Simple information	Information that the system development section wishes to keep.
9: Logical Error Defective program	An error presumably caused by defective program. Basically, this error does not occur at user's site. This error type has been aborted by the RU previously. The following causes can be assumed. • Unspecified value returned from the method • Failure in securing memory • Failure in acquiring Windows resources • Error returned from the Windows API

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● Message

The message is for describing errors and is displayed in the "Description (D)" column of the Event Viewer's Properties window shown below.



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- Identifying the problem cause when two or more errors encountered have the same error code

  The same error code may appear on the display even when the error cause varies. If you encounter such a situation, note both the error code and error message to identify the error cause.

There are two or more occurrences of the same error code (event).

Event	Event Source	Description	Causes
13005	FFCustom MsgBox	MessageBox Dialog Show Error.	A message box could not be displayed. The problem is attributable to resource inadequacy or system instability .
13005	FFIdCon nection Watch	Recv error(%1).%n[%2]	The connection to the RU was closed or an error occurred in the connection.
13005	FFIdFilm Mark	It failed that [%1] getsthe connection string of FilmMarkDB	The “FilmMarkDB” key was not found in Directory.ini.
13005	FFId Menu Change	[%1] failed in the liberating processing of the display group data acquisition	The connection to the display group table was not successfully closed.
13005	FFIdPatIn foInput	It failed that [%1] gets the SexMale caption	The “LangStrDB” key was not found in Directory.ini or the ID “30705” was not registered in the character string database.
13005	FFId RuMain Control	Recv error[%1]	The connection to the RU was closed or an error occurred in the connection.
13005	FFIdRu Main Control	Magnetic card variation error[%1]	The employed magnetic card type was different than specified.
13005	FFIipInput	It failed that [%1] connects to STR DB	The connection character string was not properly registered for the “LangStrDB” key in Directory.ini.
13005	FFIpcInf	[%1] It failed in _beginthread(%2).	Main thread creation was no successful. The problem is attributable to resource inadequacy or system instability.

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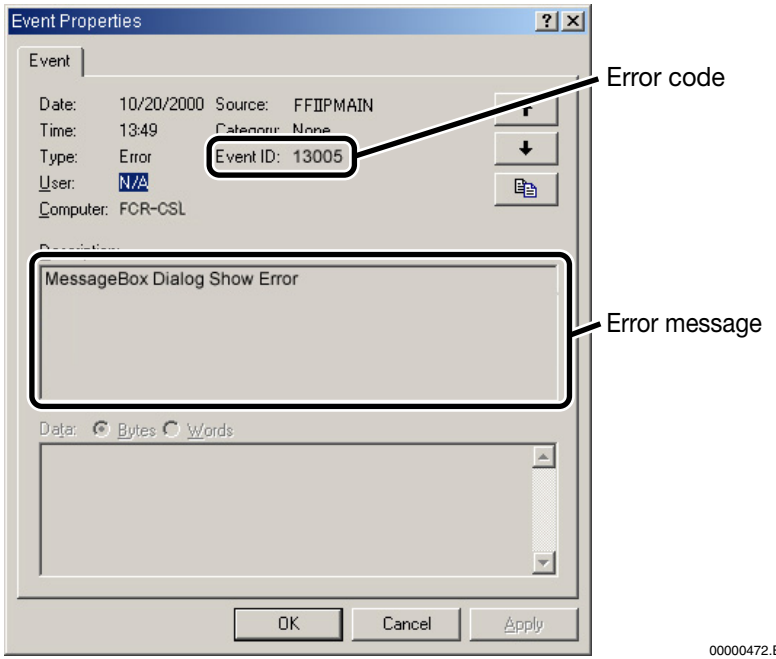
To identify the error cause, perform the following procedure:

1. Start the Event Viewer.

2. Open the Event Properties window.

☞ For details the procedure for opening the above window, see “2.4 Details of Events”.

3. See both the error code and error message, and then locate the associated error description in “Appendix CL Error Message Table”.



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1.2 Precautions

- An error such as incorrectly entered image processing parameters will not be handled as an error.
- An error code starting with “9” (e.g.: 9XXXX) is that generated by the RU.
- The correlation between the error level (the second digit of an error code number) of CL-generated errors and that assumed by Windows (Event Viewer) is as follows.

Error level	Error level assumed by Windows
0 : Fatal Error	EVENTLOG_ERROR_TYPE
1 : Warning	EVENTLOG_WARNING_TYPE
2 : Warning	EVENTLOG_WARNING_TYPE
3 : Information	EVENTLOG_INFORMATION_TYPE
9 : Logical Error	EVENTLOG_ERROR_TYPE

1.3 Error Message

☞ See “Appendix CL Error Message Table (A**)”.

2. Using the Event Viewer

The Windows 2000 Event Viewer is used for checking details of errors occurring with Windows 2000 or the CL-AP.
How to use the Event Viewer is described herein, together with the startup procedures.

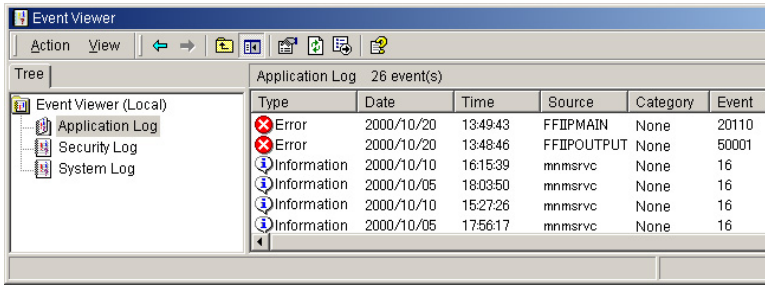
2.1 Overview of the Event Viewer

A variety of information items, such as resource information, system operation status and application errors occurring with Windows 2000, are recorded (logged) to the Event Viewer.

Causes of errors that occur can be specified from the following logs.

- Application Log
- System Log
- Security Log

The CL-AP error information is recorded to the Application Log.
To display the CL-AP error information, select the “Application Log” from the tree menu of the Event Viewer main window shown below.



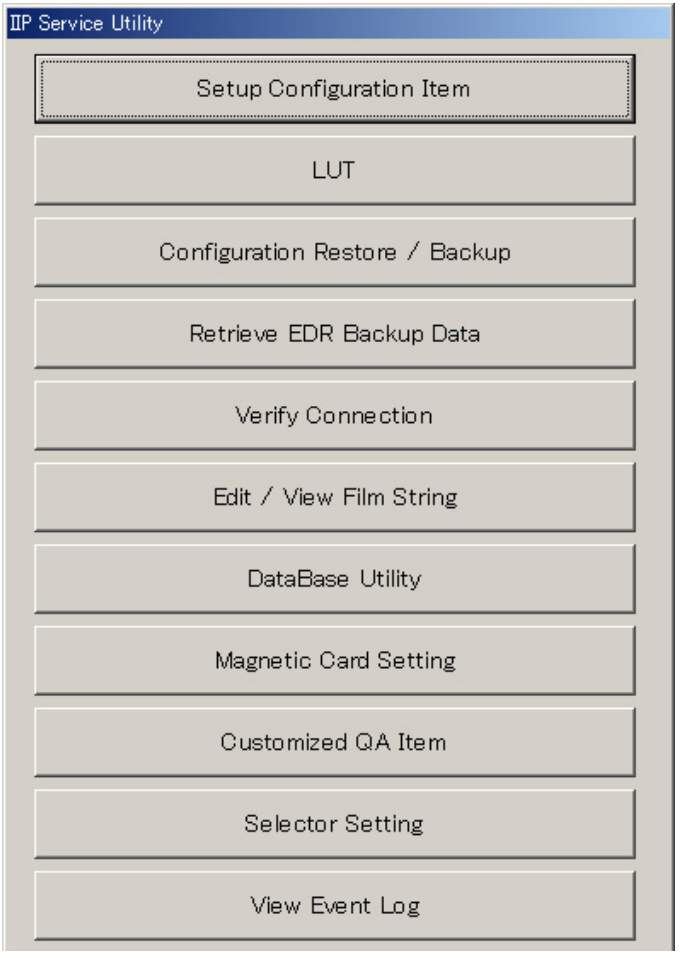
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2.2 Starting the Event Viewer

1. Start up the Service Utility mode.

☞ For details of Service Utility mode startup, see “1. Starting/ Exiting the Service Utility” in “MU: Maintenance Utility”.

➔ The “IIP Service Utility” window opens.



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2. Click View Event Log, the 11th button from the top.

➔ The Event Viewer main window opens.

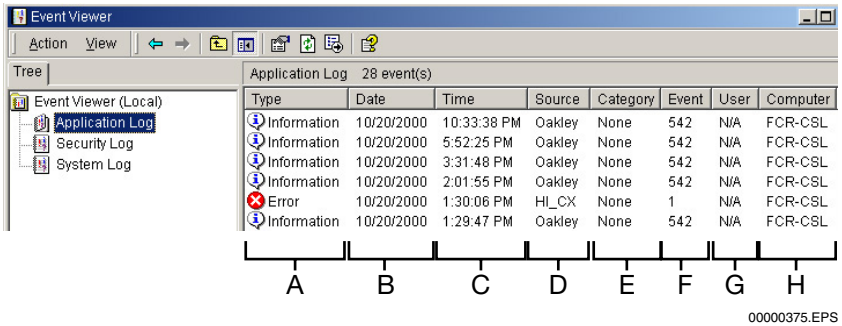
➥ *REFERENCE*

Use the following procedures if you cannot start up the Event Viewer from the Service Utility mode.

1. *From the "Start" menu at the lower left of the desktop window, select "Settings" and then "Control Panel" to display the "Control Panel" window.*
2. *Double-click "Administrative Tool" to display the "Administrative Tool" window.*
3. *Double-click "Event Viewer". The Event Viewer starts up.*

2.3 Configuration and How to View the Event Viewer

Explained herein are the Event Viewer's screen configuration (shown below) and how to view it.



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A Types:

Symbol	Meaning	Description
	Error	Displayed when a fatal error, such as failure in device driver or service startup, or loss of data, occurs while the system is running.
	Information	Displayed to indicate that the system has started normally being successful in startup of services or remote access.
	Warning	Displayed to indicate that the Warning can be attributable to the cause of the error that has occurred.

00000382.EPS

B Date : The date when an event occurs.

C Time : The time when an event occurs.

D Source : The application that wrote an event.

E Category : Event category

F Event : Event ID

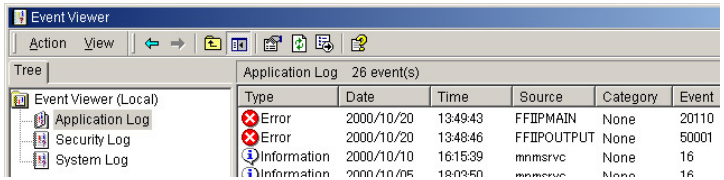
G User : The user who has been logged in when an event occurs. "N/A" will be displayed if software that does not specify the user's name is used.

H Computer : Computer name used when an event occurs.

2.4 Details of Events

Described below are the procedures used for checking detailed event information.

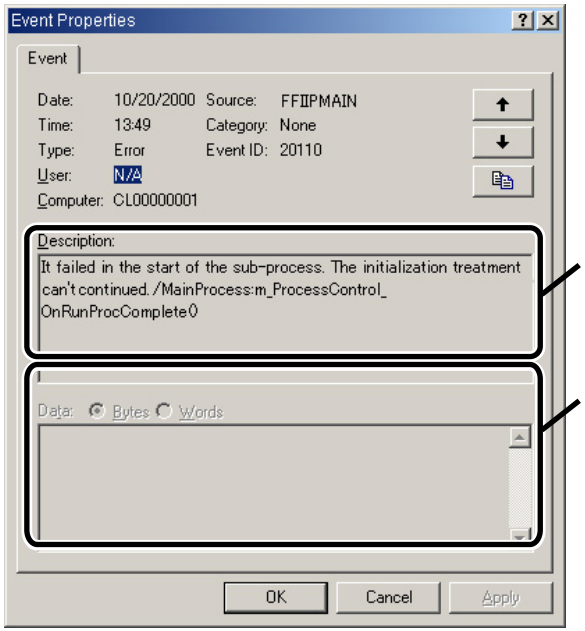
1. On the Event Viewer main window, double-click the log you wish to display.



00000376.EPS

➔ The “Event Properties” window opens.

2. Check detailed information of an event.



“Description (D)” column

“Data (T)” column

00000377.EPS

Description (D): Displays detailed information of an event.

Data (T): Displays the location where an event occurs, using the information based on the number of bytes or words.

3. Click OK.

➔ The system return to the “Event Viewer” window.

2.5 Saving the Event Log

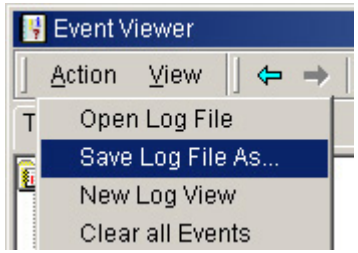
How to save event logs is explained below.

◆ NOTE ◆

Be sure to have a DOS/V-formatted FD ready to use for saving event logs.

1. Insert the FD used for saving event logs into the FDD.

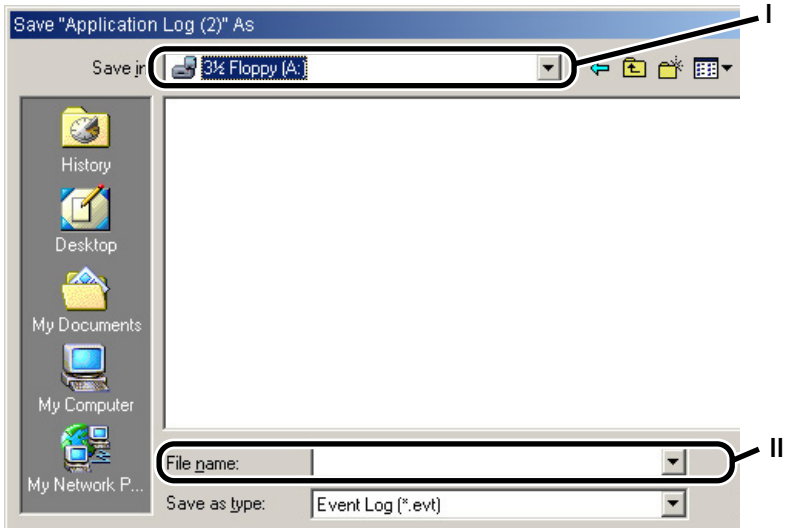
2. From the “Action” menu of the Event Viewer main window, select “Save Log File As...”.



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➔ The “Save “Application Log (2)” As” window opens.

3. Select or enter the following.



00000379.EPS

I. Select “3½ Floppy (A:)”.

II. Enter the filename (e.g.: log).

➥ REFERENCE

If “Text (Tab Separation)” is selected for “Save as Type”, event logs can be saved as text files.

4. Click Save.

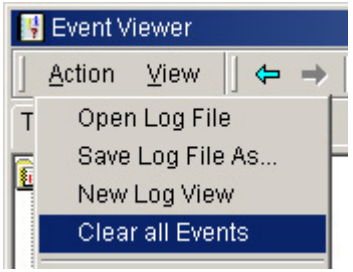
➔ The system returns to the “Event Viewer/Application Log” window.

5. Check to see that the FDD’s access lamp has went off and remove the FD from FDD.

2.6 Deleting the Event Log

How to delete event logs are explained below.

1. **From the “Action“ menu of the Event Viewer window, select “Clear all Events”.**

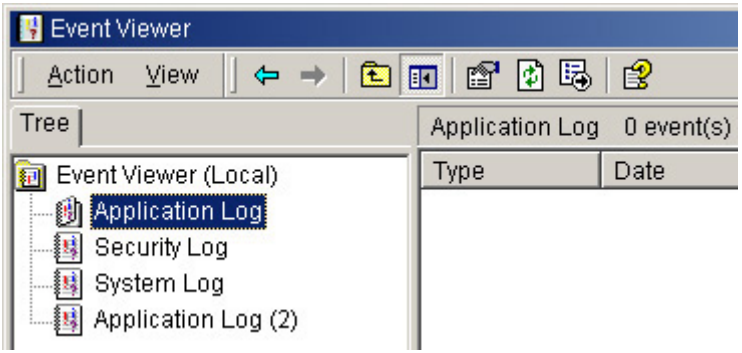


00000380.EPS

➔ A window opens prompting you to confirm the data to be saved.

2. **Click** Cancel **.**

➔ The system returns to the “Event Viewer/Application Log” window, deleting thus all event logs..



00000381.EPS

2.7 Quitting the Event Viewer

How to quit the Event Viewer is explained below.

1. **Click ✕ of the Event Viewer main window.**

➔ The system return to the desktop window.

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3. Information Useful for Error Recovery

- CL/RU connection recovery procedure to be performed upon RU memory initialization

  This procedure is used to restore the RU IP address to its default setting to recover the connection to the CL. Use this procedure when, for instance, the RU is invisible to the network.

- Typical procedure for achieving recovery from an LP (local printer) printout generation failure

  This section describes the troubleshooting procedure to be performed in the event of an LP printing failure.

- Messages displayed upon an RU-AP/RU-Config update (RU-AP of version A06 or earlier)

  When the RU-AP and RU-Config are written into the RU's FLASH ROM, various messages appear on the CL monitor. Such messages are detailed in this section.

- Precautions to be observed during the use of output options

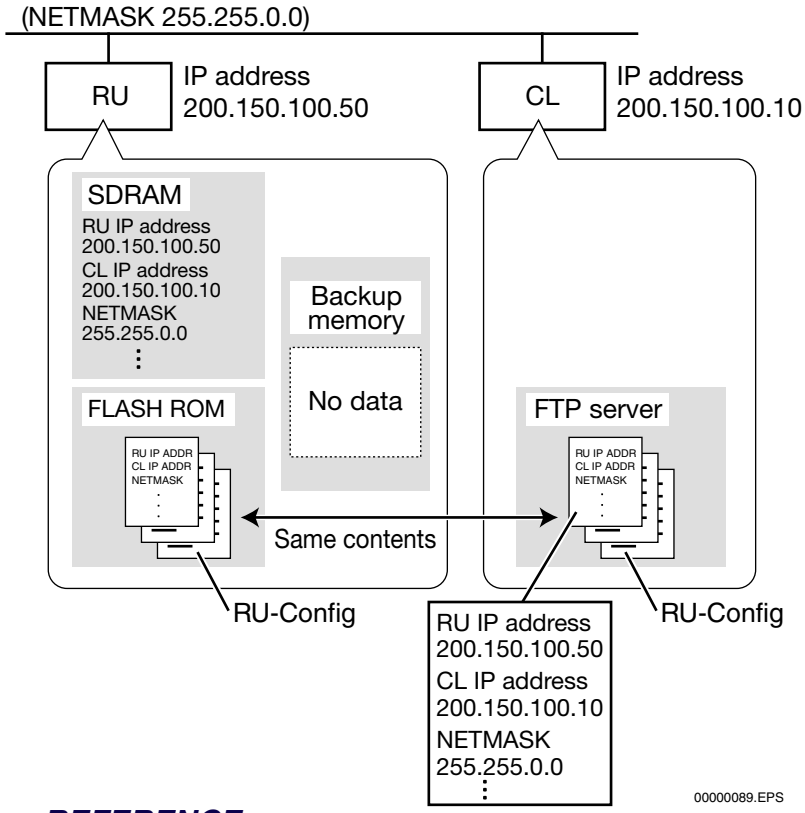
  This section offers a troubleshooting guide that you should follow when the error code 50001 (output option setup error) appears on the display.

3.1 CL/RU Connection Recovery Procedure to be Performed upon RU Memory Initialization

This section explains about the procedure for recovering the connection to the CL when the memory is initialized by performing the memory initialization procedure (<Erasure process> switch activation + RU power ON) at the RU.

☞ See "5. Relationship between RU (CR-IR346RU) and CL" in "MD: Machine Description".

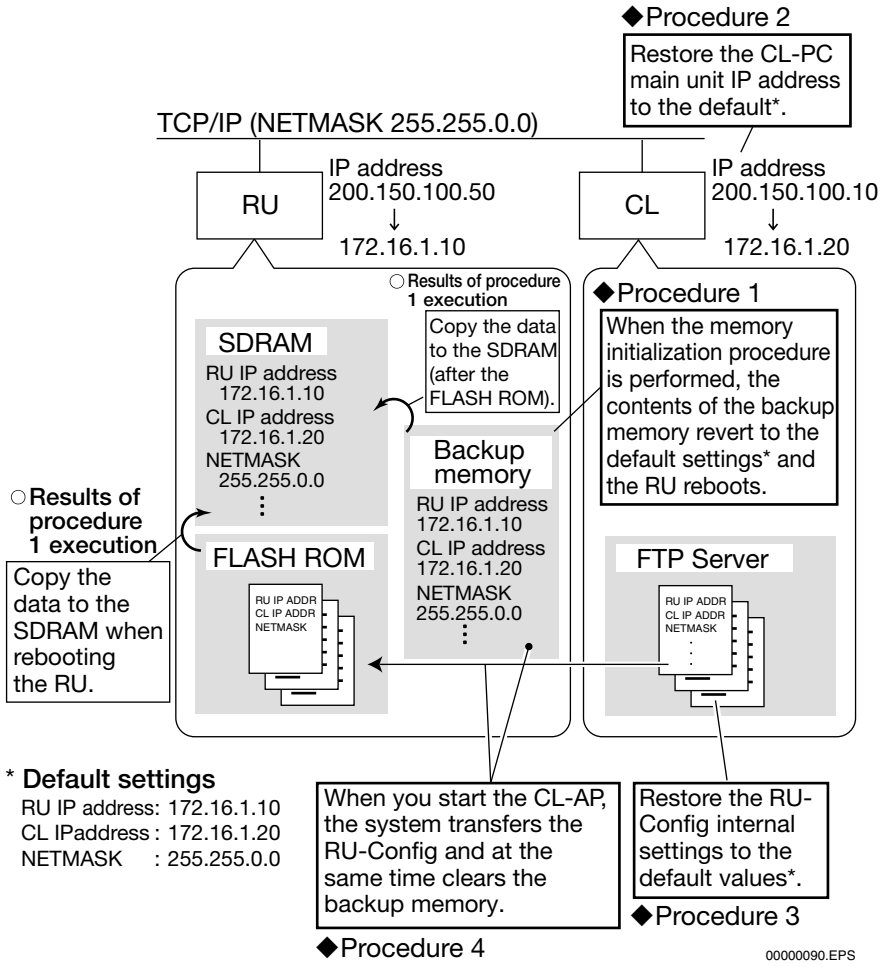
This section explains about the recovery procedure to be performed in situations where the CL and RU are in the following states:



➥ ***REFERENCE***

The SDRAM IP address is used as the IP address for the RU.

■ Recovery sequence overview



◆ *NOTES* ◆

- *The communication between the CL and RU can be restored to normal by performing Procedures 1 and 2.*
- *The RU-Config in the FLASH ROM can be restored to the default settings by performing Procedures 3 and 4.*
- *If the contents of the backup memory are cleared, the SDRAM will not be overwritten on a reboot.*

■ Details of "◆ Procedure 1"

1. **Hold down the RU's <Erasure process> switch, turn ON the power switch.**

<u>You have to still hold down the <Erasure process> switch at this stage.</u>

➔ The RU is rebooted.

2. **Verify that the primary erasure LED on the RU panel comes on (in about 7 seconds).**

◆ *NOTE* ◆

If the primary erasure LED does not come on, the initialization process is not completed. In such an instance, perform steps 1. and beyond again.

3. **Release the <Erasure process> switch.**

■ Details of "◆ Procedure 2"

1. Double-click 

on the CL desktop.

➔ The "My Computer" window opens.

2. Double-click 

.

➔ The "Control Panel" window opens.

3. Double-click 

.

➔ The "Network and Dial-up Connections" window opens.

4. Double-click 

.

➔ The "Local Area Connection" window opens.

5. Click 

.

➔ The "Local Area Connection Properties" window opens.

6. Choose 

and then click 

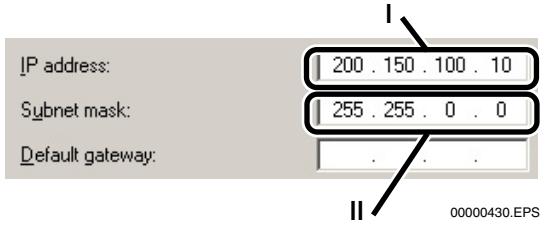
.

➔ The "Internet Protocol (TCP/IP) Properties" window opens.

7. Choose 

.

8. Perform the following setup steps:



I. Change this entry to the default CL IP address (176.16.1.20).

II. Change this entry to the default subnet mask (255.255.0.0).

9. Click 

.

➔ You are returned to the "Local Area Connection Properties" window.

10. Click 

.

➔ You are returned to the desktop.

➥ *REFERENCE*

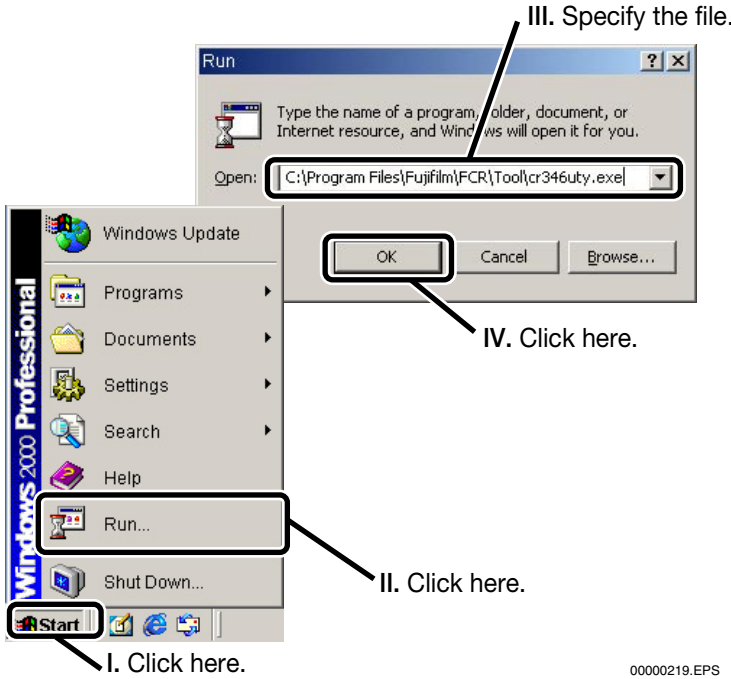
When a dialog box opens to prompt for a restart, click [Yes].
This causes the OS to restart and automatically starts up the CL-AP.

■ Details of "◆ Procedure 3"

1. Start the RU M-Utility as directed below:

◆ *NOTE* ◆

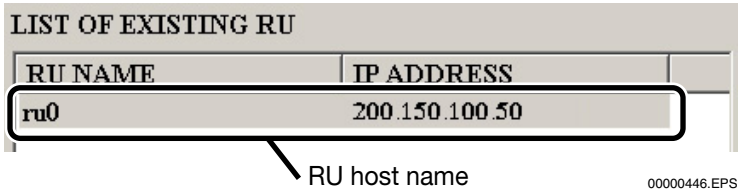
Make sure that the CL-AP, Service Utility, or other AP or Explorer is not running. If any such application is running, quit it.



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➔ The RU M-Utility main menu opens.

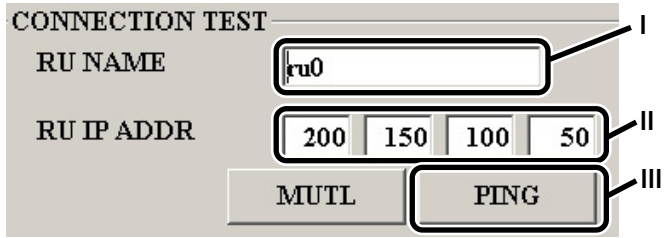
2. In the "LIST OF EXITING RU" field, click the host name of the RU whose configuration file is going to be edited.



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➔ The "EDIT CONFIGURATION" button text color changes from gray to black.

3. Use PING to verify the connection to the RU.



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I. Enter the RU host name (ru0).

II. Enter the RU IP address (172.16.1.10).

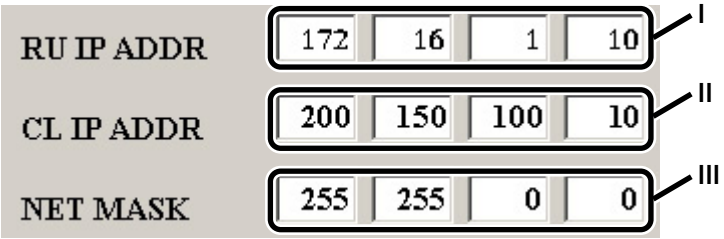
III. Click PING.

IV. Verify that the network connection is normal.

4. Click EDIT CONFIGURATION.

➔ The "READER UNIT SETTING" window opens.

5. Perform the following setup steps:



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I. Verify that the RU's default IP address is entered (172.16.1.10).

II. Switch to the CL's default IP address (172.16.1.20).

III. Switch to the default net mask (255.255.0.0).

6. Click SET.

➔ The system saves your setting entries and returns to the main menu.

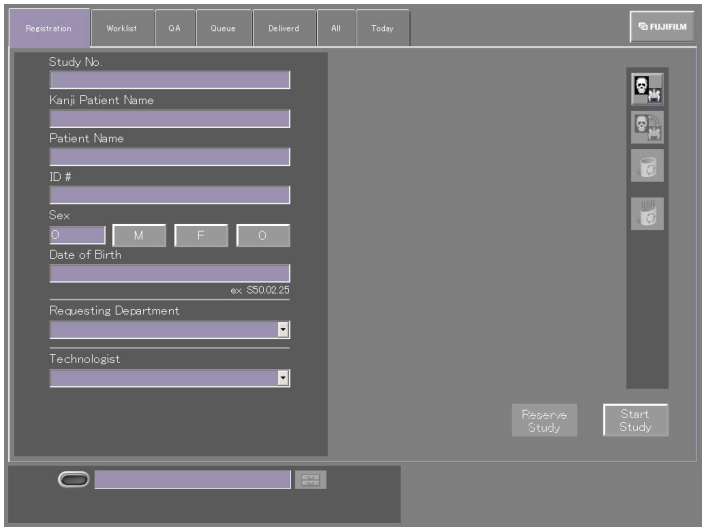
7. Click the ✕ mark at the upper right corner of the window.

➔ The system returns to the desktop screen.

■ Details of "◆ Procedure 4"

1. Click Start. Choose "Programs", "Fuji Film", "FCR".

➔ The CL-AP starts up in about one minute.



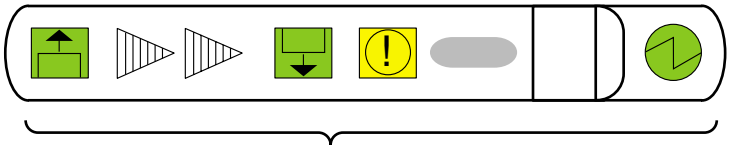
00000195.EPS

◆◆ CAUTION ◆◆

While the RU panel LEDs are illuminated, never turn OFF the RU power because the RU's CPU board may become damaged.

➔ After a while, all the LEDs on the RU panel come on.
A message appears on the CL monitor to indicate that the RU-Config is being updated. (While the update is in progress, the system repeats a single-beep and two-successive-beep cycle.)

● RU



All the LEDs on the RU panel glow. 00000196.EPS

● CL



A message appears to indicate that the RU-Config is being updated. 0000517.EPS

➔ The RU-Config update process ends.

2. Click REBOOT on the CL monitor.

➔ The RU restarts so that the updated RU-Config takes effect.
In several seconds, the "Console Warning" window appears on the CL.

◆ NOTE ◆

Do not touch any operating controls for a while.
The "Console Warning" window automatically disappears.

➔ The RU initialization message appears. In about one minute, the RU becomes operative.

3. Click FUJIFILM.

➔ A menu opens.

4. Hold down the <SHIFT> key and click Shut Down.

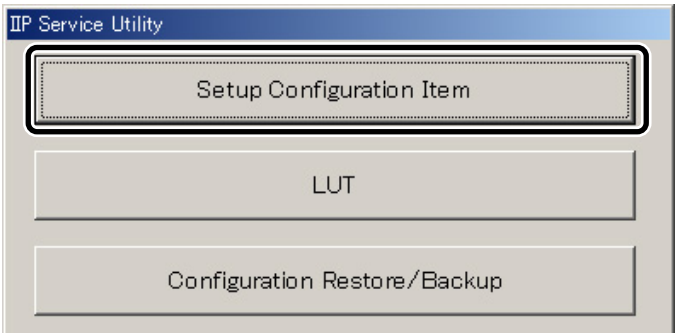
➔ The CL-AP exits.

■ Editing “NETWORK CONFIG”

Change the RU’s IP address that is entered from the CL’s Service Utility. If you do not change the RU IP address, an error (error code: 31382) occurs when an image is read.

1. Start the CL’s Service Utility.

2. Click [Setup Configuration Item].



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➔ The “Setup Configuration Item” window opens.

3. Click the ⊞ sign within ⊞ NETWORK CONFIG.

4. Click the ⊞ sign within ⊞ ALL OTHER NODES and then choose ⊞ ru0.

➔ The “HostName” window opens in the right-hand area of the currently displayed window.

5. Note the IP address indicated in the



field and change it to the RU’s IP address (172.16.1.10).

6. Click Apply

7. From the “Config (F)” menu, choose “Save”.

➔ A window opens, prompting you to confirm the setup data to be saved.

8. Click Yes

➔ The system saves the setup data.

9. From the “Config (F)” menu, choose “Close”.

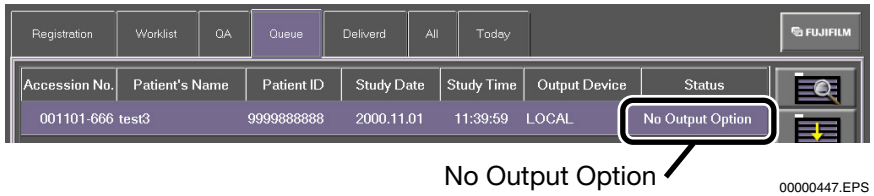
➔ The system returns to the “IIP Service Utility” window.

10. Click [Exit Service Utility].

➔ The system returns to the desktop screen.

3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure

This section explains about the procedures to be performed when the "Status" field of the user window "Wait for Output" indicates the occurrence of the error "No Output Option" (see the window shown below).



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■ Preliminary checkout

First, conduct the following checks to verify the LP settings:

- Check whether the LP option key is installed.
- Check whether the PEI01A board is properly set and mounted.
- Check for an improper cable connection between the PEI01A board and printer.

■ Cause

If the "No Output Option" error is indicated when the above procedures are properly completed, it is conceivable that the PEI01A board driver may be improperly installed.

The PEI01A board driver is stored on the CL-AP's CD-ROM. Installing the CL-AP and starting the AP automatically installs the driver. However, if a different incompatible driver is already installed, starting the CL-AP does not automatically install the correct driver.

First of all, you should check whether the correct driver is installed as directed below.

■ Checking the PEI01A board device driver

1. Right-click 

on the desktop and then choose "Properties".

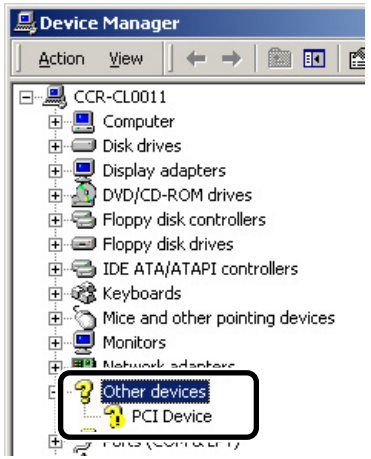
➔ The "System Properties" window opens.

2. Click the Hardware tab.

3. Click Device Manager... in the "Device Manager" area.

➔ The "Device Manager" window opens.

4. Note the hardware information about the PCI port.



No Good : Driver installation is not normally completed.



Good : Driver installation is normally completed.

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◆ *NOTE* ◆

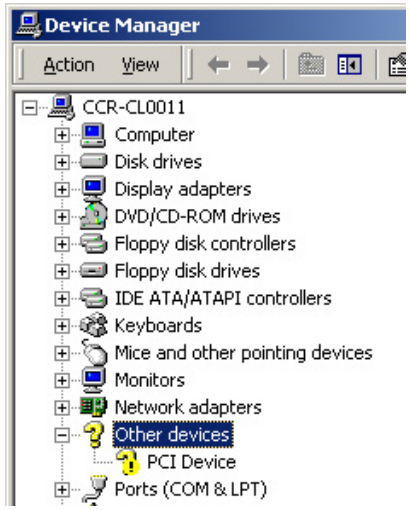
If the OS is installed with the PEI01A board mounted in the PC, the driver installation will not be successful causing a status where other improper drivers have been installed.

■ Deleting an invalid PCI device driver (marked "?")

1. In the "Device Manager" window, click the [+] mark to the left of "Other devices"

➔ "PCI Device" appears under "Other devices".

2. Click PCI Device and then choose "Delete" on the "Action" menu.



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➔ The invalid driver named "PCI Device" is then deleted.

3. Exit the "Device Manager" and then restart the PC.

➔ The CL-AP starts up in about one minute. When it starts up, the PEI01A board driver (FUJIFILM Pei Device) is automatically installed.

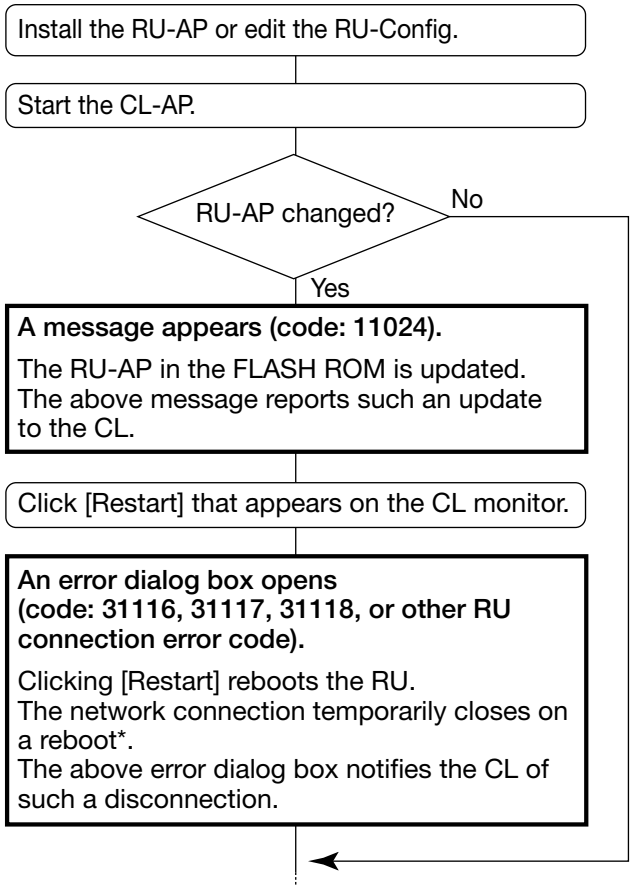
4. Verify that the driver is properly installed.

☞ See "■ Checking the PEI01A board device driver".

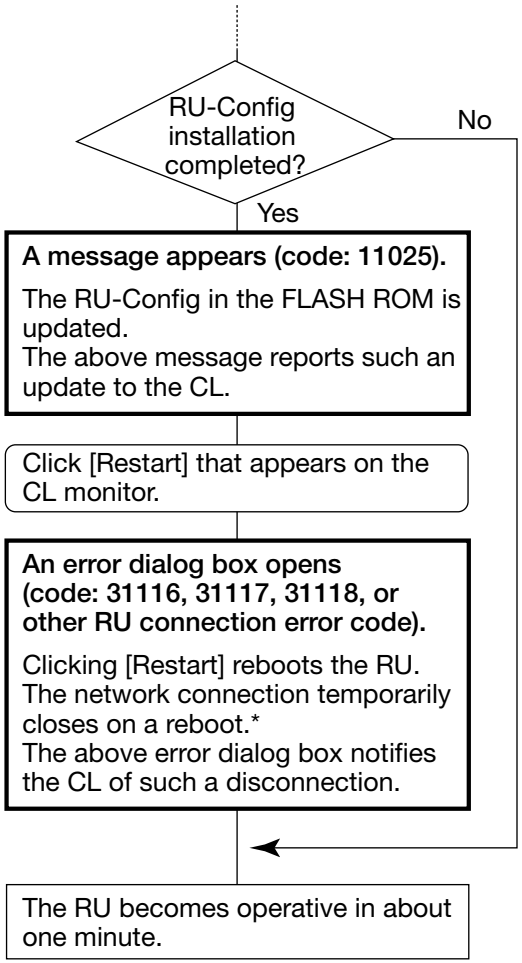
3.3 Messages Displayed upon an RU-AP/ RU-Config Update (RU-AP of version A06 or earlier)

This section describes the sequence that is followed after RU-AP installation or RU-Config editing and explains about the messages that appear on the display.

☞ For details on the data exchanged between the CL and RU, see "5. Relationship between RU (CR-IR346RU) and CL" in "MD: Machine Description".



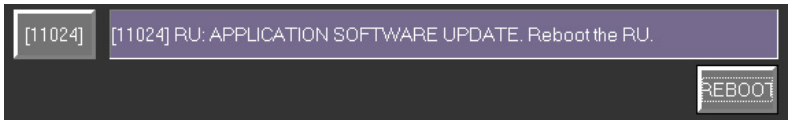
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* The error code to be displayed varies with the disconnection timing.

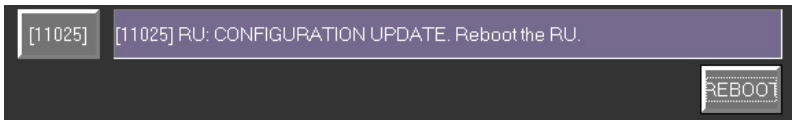
00000515.EPS

- Message window (code: 11024)



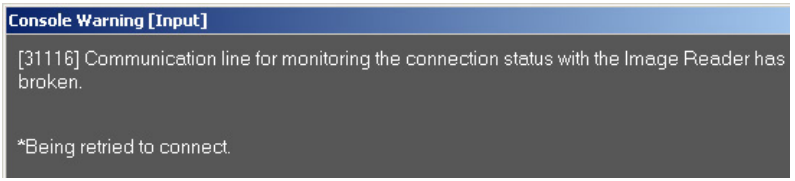
00000603.EPS

- Message window (code: 11025)



00000602.EPS

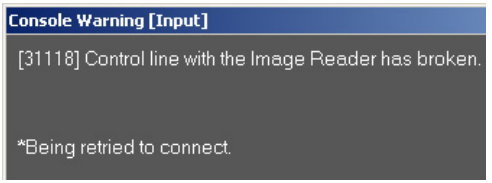
- Error dialog box (code: 31116, 31117, or 31118)



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00000606.EPS



00000605.EPS

3.4 Precautions to be Observed During the Use of Output Options

If an error message of the error code 50001 appears at CL-AP startup, check the settings for the following output options:

- IR346 DICOM CR STORAGE
- IR346 DICOM IM PROCESSED (processed image transmission)
- IR346 DICOM PRINT
- IR346 DMS NET-WORK IN-OUT
- IR346 LOCAL PRINT

The checks to be performed are detailed below:

Option key	Check
• IR346 DICOM CR STORAGE • IR346 DICOM IM PROCESSED • IR346 DICOM PRINT	Verify that the option key is installed, and then check whether SCU setup is properly completed for this equipment. The procedure is described below: 1. With the Service Utility, open the “Setup Configuration Item” window. 2. Open “NETWORK CONFIG” and then “THIS HOST (IIP)”. 3. Check that an AE whose “Role” is SCU is registered. If it is not registered, register it now. ☞ For detailed registration procedure descriptions, see “OE: Connecting the CL to Other Equipment”. IR346 DICOM CR STORAGE → See OE3. IR346 DICOM IM PROCESSED → See OE4. IR346 DICOM PRINT → See OE6.
IR346 DMS NETWORK IN-OUT	Verify that the option key is installed.
IR346 LOCAL PRINT	Verify that the option key is installed, and then check whether the PEI01A board is installed in the PC. Also, check that DIP switch setup is properly completed. ☞ For DIP switch settings and other checkout procedures, see “CL + Local Printer (E-i/f Connection)” in “OE: Connecting the CL to Other Equipment”.

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4. Troubleshooting

The table below summarizes various troubles that may arise with the CL. In accordance with the encountered trouble, perform a procedure indicated in the “Check Method/Remedies” column.

Symptom	Probable Causes	Check Method/Remedies
The PC (Windows 2000) does not start up.	It is conceivable that the PC’s memory may be defective.	Check the PC’s memory. If it is defective, replace it. ☞ For the memory check procedure, see “4.1 Checking the Memory”.
The CL-AP (application) does not start up.	It is conceivable that the data stored on the hard disk may be partly damaged.	Check the hard disk. If any error is revealed by the check, perform a procedure for achieving error recovery or replace the hard disk. ☞ For the hard disk check procedure, see “4.2 Checking the Hard Disk”.
	Output system options are not installed or not properly set up. [Displayed error code: 50001 → 20110]	Install or properly set up output system options. ☞ For details, see “3.4 Precautions to be Observed During the Use of Output Options”.
	The dummy node is not set up. [Displayed error code: 30151 → 20110]	Choose the Service Utility’s “Setup Configuration Item”, “NETWORK CONFIG”, “THIS HOST (IIP)” to check for node setup. If no node is set up, set DICOM Print SCU as a dummy node. The DICOM Print option key need not be installed. ☞ For the setup procedure, see “2.1.4 Setup of Information on this Equipment for the DICOM Print Function” in “OE5: CL+FN-PS551/DRYPIX/FM-DP L (DICOM Print)”.
	The connection to the network is not established. [Displayed error code: 30151 → 20110]	Connect the CL to the network.
	The image database is not initialized. [Displayed error code: 50001 → 20001 → 30107 → 30151 → 20110]	With the Service Utility, initialize the image database. ☞ For the initialization procedure, see “12. Initializing the Image Database” in “RI: Reinstalling the Software”.
	The MAC address is not acquired. [Displayed error code: 20111 → 20110 (Error 20111 is recorded only in the application’s event log.)]	Reinstall the network driver and then update it. ☞ For the reinstallation procedure, see “4.7 Reinstalling the Network Driver”. ☞ For the software version update procedure, see “4.8 Installing the 3Com Network Driver (Ver. A10)”. If the error recurs after the network driver is updated, replace the PC’s motherboard. Before motherboard replacement, acquire the MAC address manually and start up the CL-AP. ☞ For the MAC address acquisition procedure, see “3.10 MAC Address Manual Input” in “MU: Maintenance Utility”.

(Continued to the next page)

MT000017.EPS

Symptom	Probable Causes	Check Method/Remedies
The CL-AP (application) does not start up.	The selector resetup procedure is not completed. [Displayed error code: 31099]	After the host name for the built-in type equipment is changed, use the selector setup of the Service Utility to set the built-in type equipment host name again. ☞ For the setup procedure, see “11. Setting the Selectors – Selector Setting” in “MU: Maintenance Utility”.
The LCD flickers.	The refresh frequency setting is improper.	Correct the refresh frequency setting. ☞ For the refresh frequency setup procedure, see “4.4 Resetting the Refresh Frequency”.
The LCD touch panel does not sound.	The screen contact position correction procedure was performed twice in succession.	With the utility tool for the touch panel, perform the touch panel sound setup procedure again. ☞ For the setup procedure, see “4.5 Resetting the Touch Panel Sound”.
The barcode reader (BCR)/ magnetic card reader (MCR) does not operate.	The proper driver software is not installed. Reinstalling the OS with the BCR or MCR connected to a USB port results in installation of improper driver software.	With Windows 2000’s “Device Manager”, switch to the proper driver software. ☞ For the driver software change procedure, see “4.6 Changing the Barcode Reader/Magnetic Card Reader Driver Software”.
The BCR/MCR does not normally operate.	The BCR/MCR is connected to an improper USB port.	Connect the BCR/MCR to a recommended USB port. ☞ For the reconnection procedure, see “4.3 USB Ports Recommended for Barcode Reader/Magnetic Card Reader Mounting (for GX150 Only)”.
The local printer does not generate a film output.	The proper driver software is not installed. Reinstalling the OS with a PC board mounted in a PCI slot results in installation of improper driver software.	With Windows 2000’s “Device Manager”, switch to the proper driver software. ☞ For details, see “3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure”.
Patient data cannot be exchanged in the ID online state.	The proper driver software is not installed. Reinstalling the OS with a PC board mounted in a PCI slot results in installation of improper driver software.	With Windows 2000’s “Device Manager”, switch to the proper driver software. For the driver software change procedure, see under the preceding symptom, which is entitled “The local printer does not generate a film output”.
The communication with the RU or other equipment cannot be established (“ping” does not work).	It is conceivable that the network driver may be defective. [System event log: type, error; source, EL90Xbc; event ID, 5001]	Update the network driver software version. Before proceeding to perform an update, have on hand the FD labeled “3Com 3C905C Network Driver Ver. A10 Disc 1/1”, which is distributed to the service personnel. ☞ For the update procedure, see “4.8 Installing the 3Com Network Driver (Ver. A10)”.

MT000018.EPS

4.1 Checking the Memory

For checking the memory, use the “Dell Optiplex ResourceCD”, which is supplied with the PC. The “Dell Optiplex ResourceCD” is Dell’s CD-ROM that stores various drivers. The CD name slightly varies with the PC model.

1. **Turn ON the monitor and PC power switches.**

➔ The PC starts up.

2. **When the upper right corner of the screen reads “F2 SETUP”, press the <F2> key.**

◆ ***NOTE*** ◆

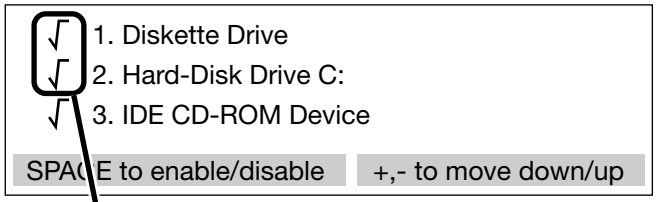
If you do not press the <F2> key in time, the setup screen does not open. In such an instance, restart the PC and then perform step 2.

➔ The setup screen opens.

3. **Choose “Boot Sequence” and then press the <Enter> key.**

➔ The boot drive selection dialog box opens.

4. **Uncheck “Diskette Drive” and “Hard-Disk Drive C:” (by removing their check marks (√)).**



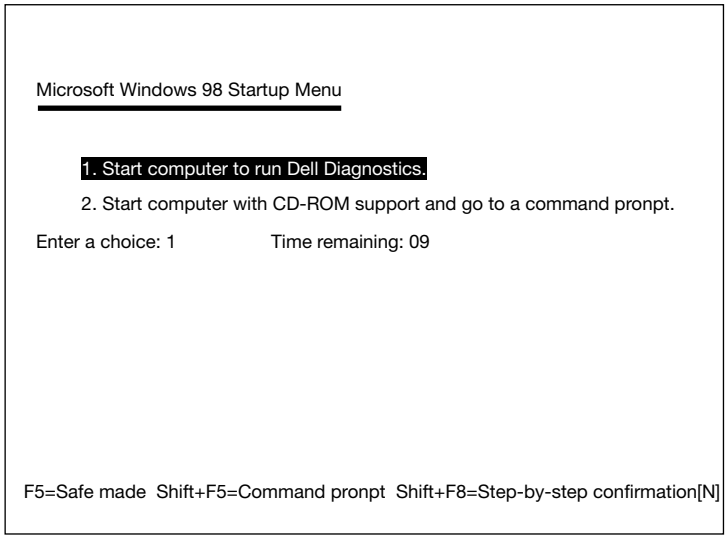
MT000009.EPS

5. **Insert the “Dell Optiplex ResourceCD” into the CD-ROM drive.**

6. **Save the settings and then restart the PC.**

➔ “Microsoft Windows 98 Startup Menu” opens.

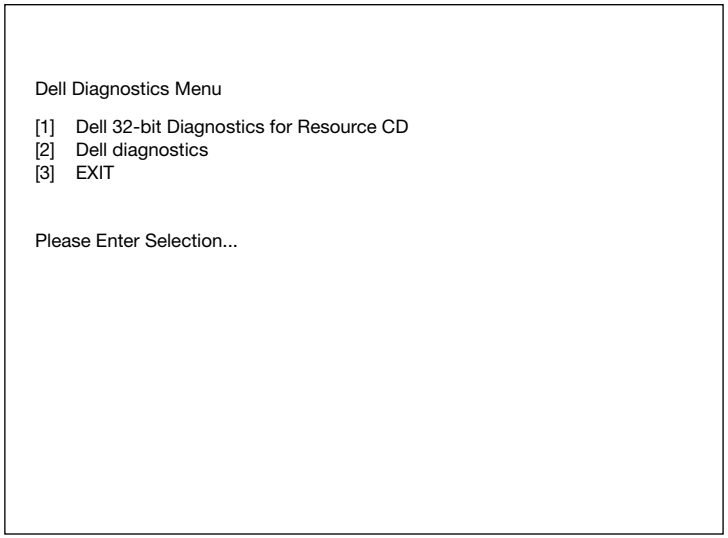
7. **Verify that “1. Start computer to run Dell Diagnostics” is selected, and then press the <Enter> key.**



MT000020.EPS

➔ The “Dell Diagnostics Menu” screen opens.

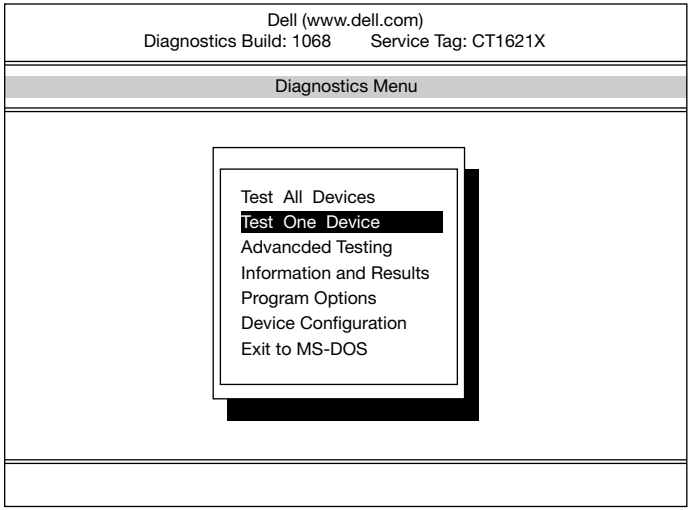
8. **Press the <2> key.**



MT000021.EPS

➔ The reading process for the modules starts (and it takes about two minutes).

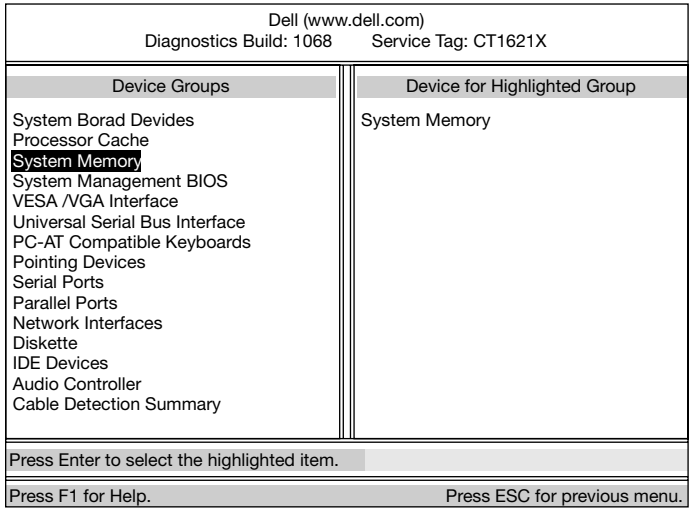
9. Choose “Test One Device” with the <↓> key, and then press the <Enter> key.



MT000022.EPS

➔ The list of tests appears.

10. Choose “System Memory” with the <↓> key, and then press the <Enter> key.



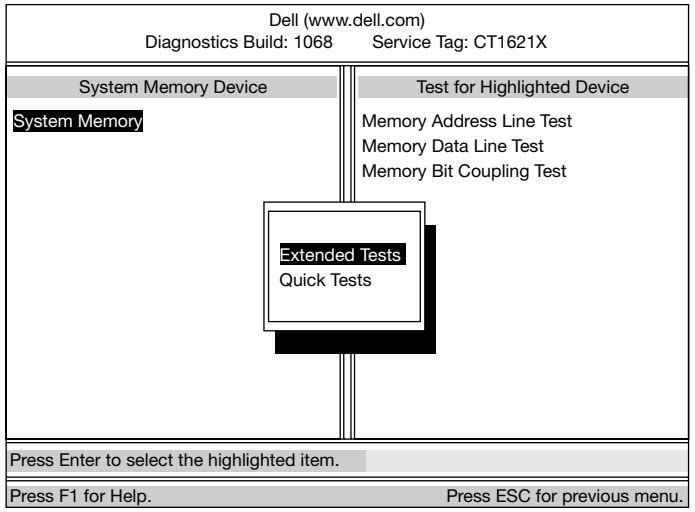
MT000023.EPS

➔ The right-hand area of the screen shows details of the “System Memory” test.

11. Press the <Enter> key again.

➔ The test type selection screen opens.

12. Verify that “Extended Tests” is selected, and then press the <Enter> key.

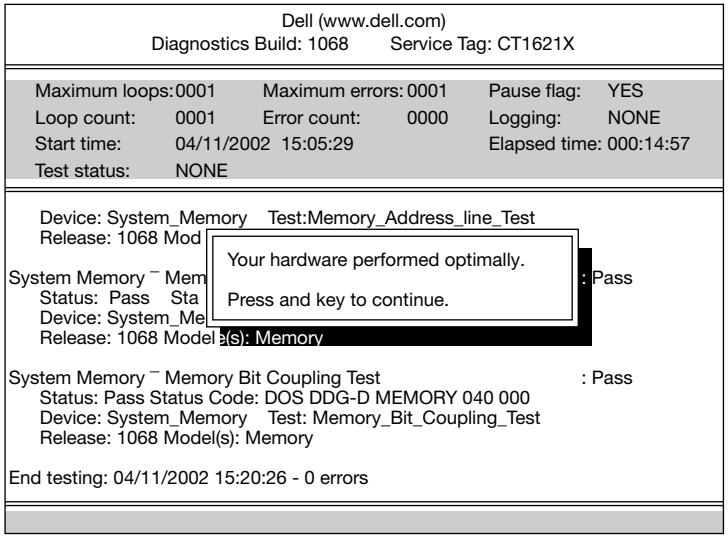


MT000024.EPS

➔ The testing process starts (and it takes about 15 minutes when the memory size is 512MB).

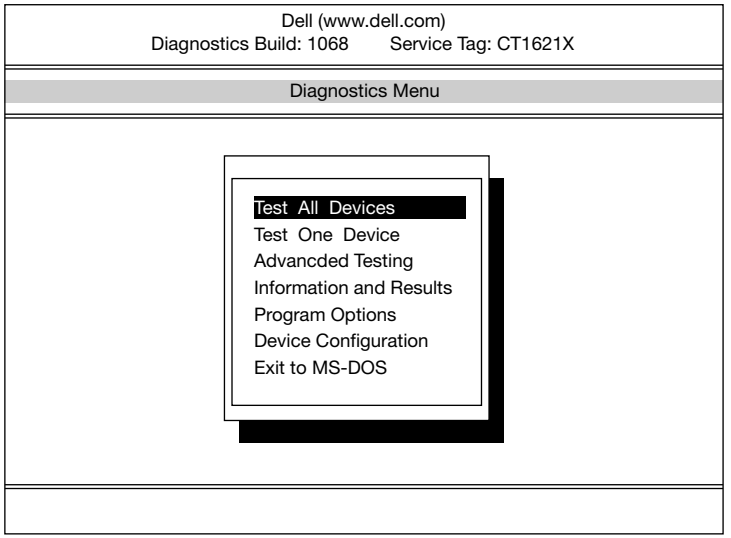
13. When the testing process ends, check for errors.

If any error occurs, its description appears on the screen. Perform an appropriate error recovery procedure in accordance with the on-screen error description.



MT000025.EPS

14. Press the <ESC> key a number of times until you are brought back to the "Dell Diagnostics Menu".



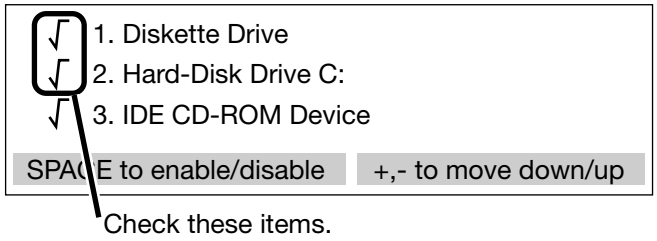
MT000026.EPS

15. Choose "Exit to MS-DOS" with the <↓> key, and then press the <Enter> key.

➔ The "Diagnostics Menu" screen closes.

16. Remove the CD-ROM.

17. Use BIOS to restore the previous setup status (steps 2. to 4.) before startup with the CD-ROM.

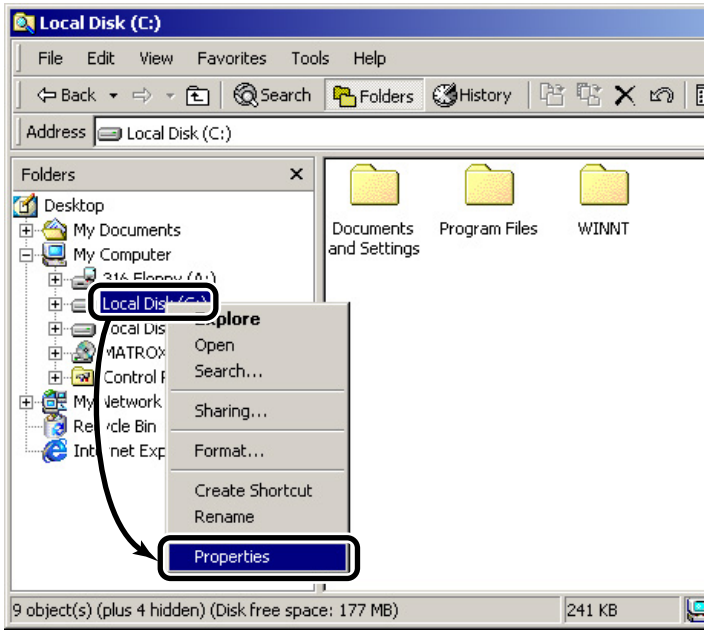


MT000048.EPS

4.2 Checking the Hard Disk

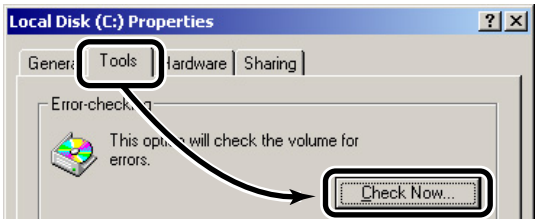
1. Start up Windows 2000 and open Windows Explorer.

2. Right-click drive C (Local Disk C:) and then choose “Properties”.



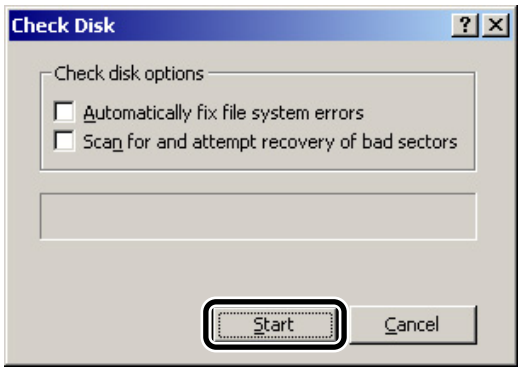
MT000010.EPS

3. Choose the “Tools” tab. In the “Error-checking” area, click Check Now....



MT000011.EPS

4. Verify that the check boxes in the “Check disk options” area are unchecked, and then click Start.



MT000012.EPS

➔ The hard disk check starts (and it takes about 5 minutes when the disk size is 40GB).

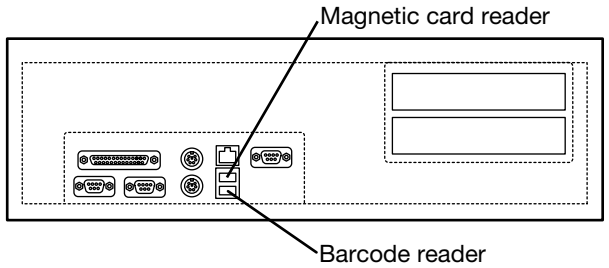
When the hard disk is normal, Phases up to 3 will be completed and a dialog box will open to indicate the completion of the hard disk check.

If the hard disk is not normal, Phases up to 3 will not be completed and a dialog box will open to indicate that the hard disk check is not completed.

4.3 USB Ports Recommended for Barcode Reader/Magnetic Card Reader Mounting (for GX150 Only)

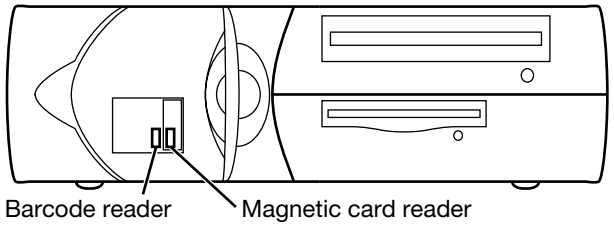
If the barcode reader and magnetic card reader erratically operate from time to time, reconnect their connectors as indicated below.

Connecting to the PC back panel



MT000013.EPS

Connecting to the PC front panel
(as viewed with the front panel removed)



MT000045.EPS

4.4 Resetting the Refresh Frequency

If the screen flickers, it can be restored to normal by changing the refresh frequency setting.

The refresh frequency change procedure is described below.

1. **Choose “Properties” from the right-click menu on the desktop.**

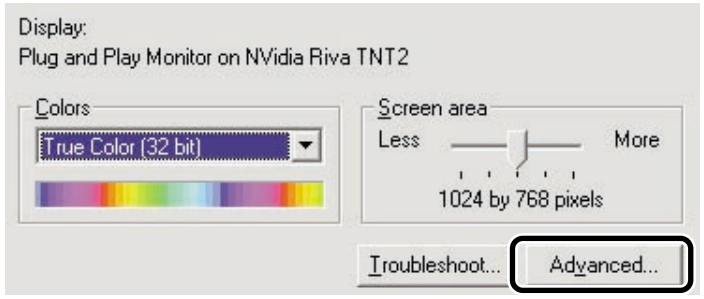
➔ The “Display Properties” window opens.



MT000014.EPS

2. **Click the “Settings” tab.**

3. **Click** Advanced... **.**



MT000015.EPS

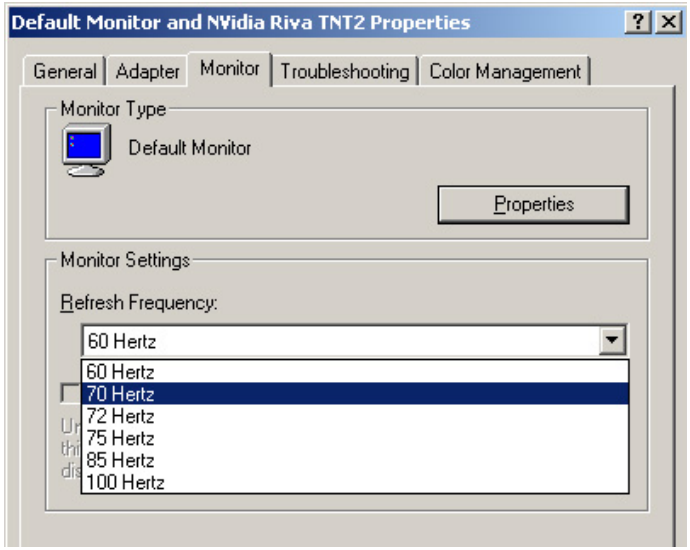
➔ The “Plug and Play Monitor on NVidia Riva TNT2” window opens.

4. **Click the “Monitor” tab.**

5. From the “Refresh Frequency” pull-down menu, choose “75 Hertz”.

◆ ***NOTE*** ◆

If the screen becomes disordered when a setting of 75 Hertz is chosen, change the setting to 70 Hertz.
If the screen becomes disordered even when set to 70 Hertz, change it to 60 Hertz.



MT000016.EPS

6. Click Apply.

➔ The confirmation window opens.

7. Click OK.

➔ The screen area changes and the “Monitor Setup” window opens.

8. Click OK.

◆ ***NOTE*** ◆

If you do not click OK *within 15 seconds, the system reverts the previous setting. Therefore, click it without delay.*

9. Click OK to close the “Display Properties” window.

4.5 Resetting the Touch Panel Sound

If you perform the screen contact position correction procedure two or more times in succession, the touch panel may fail to sound when you touch it.
To recover the touch panel sound generation function, perform the following procedure.

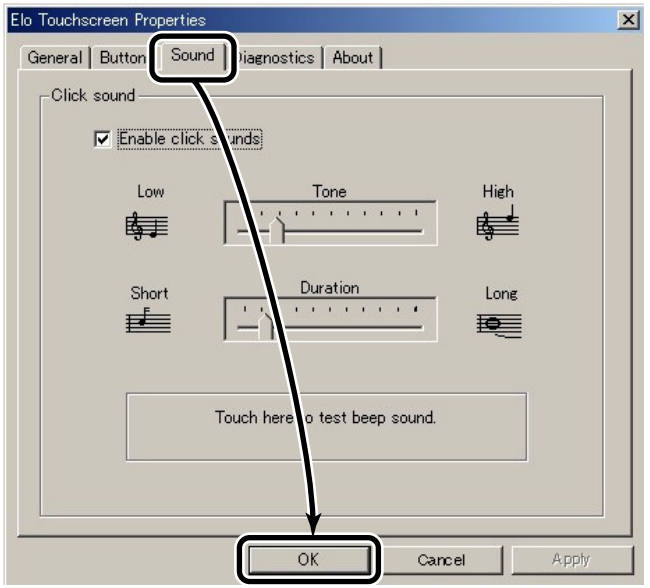
1. From Start of Windows 2000, point to “Settings” and then click “Control Panel”.

➔ The Control Panel opens.

2. Choose “Elo Touchscreen”.

➔ The “Elo Touchscreen Properties” window opens.

3. Click the “Sound” tab and then click OK. The touch panel should sound normally.



MT000019.EPS

4.6 Changing the Barcode Reader/ Magnetic Card Reader Driver Software

If any encountered problem is attributable to the recognition of wrong driver software, use Windows 2000's "Device Manager" to check whether proper driver software is used. If improper driver software is used, replace it with proper driver software.
The driver software check/change procedure is indicated below.

1. **Open the Windows 2000 desktop screen.**

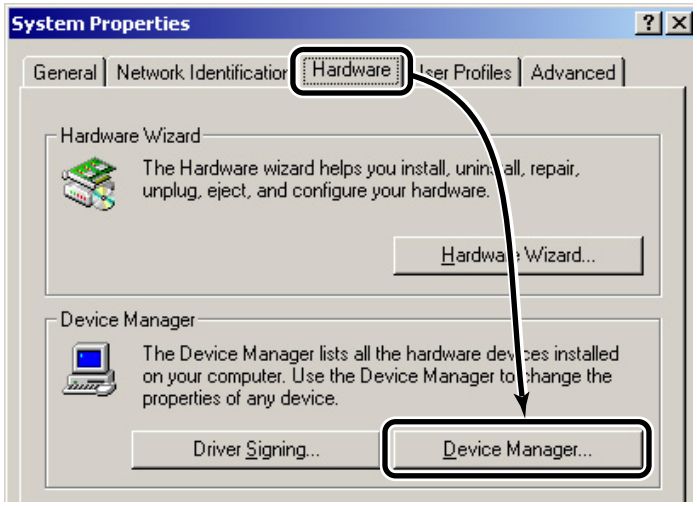
2. **From the Start menu, point to "Settings" and then click "Control Panel".**

➔ The Control Panel opens.

3. **Double-click System.**

➔ The "System Properties" window opens.

4. **Choose the "Hardware" tab and then click Device Manager...**

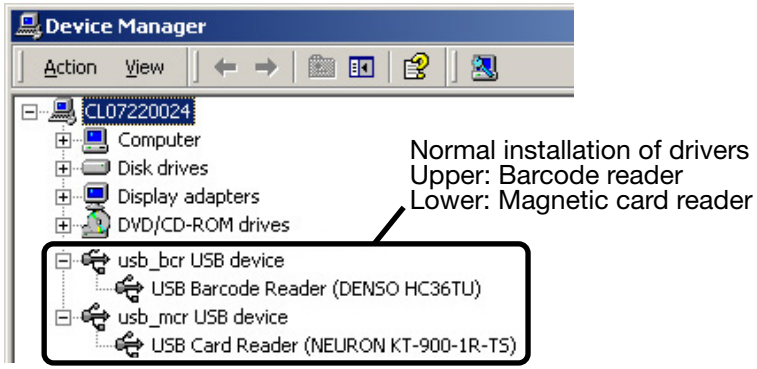


MT000047.EPS

➔ The "Device Manager" window opens.

5. **Note the hardware information about the USB ports.**

If USB drivers other than shown below are set up, perform the following procedure to install proper USB drivers.



MT000046.EPS

6. **In the "Device Manager" window, click the ⊞ mark of the hardware information that is not for the correct USB drivers installsd as above.**

➔ The name of the currently installed USB driver appears.

7. **Select the item that appears at the click of the ⊞ mark. From the "Action" menu, choose "Uninstall...".**

➔ The currently set USB driver is then deleted.

8. **If wrong driver software is set up for the other USB driver, delete it as well.**

9. **Close "Device Manager" and then restart the PC.**

➔ In about one minute, the CL-AP starts up so that the proper USB drivers are automatically installed.

10. **Open "Device Manager" again to verify that the proper USB drivers are installed.**

4.7 Reinstalling the Network Driver

1. Open the Windows 2000 desktop screen.

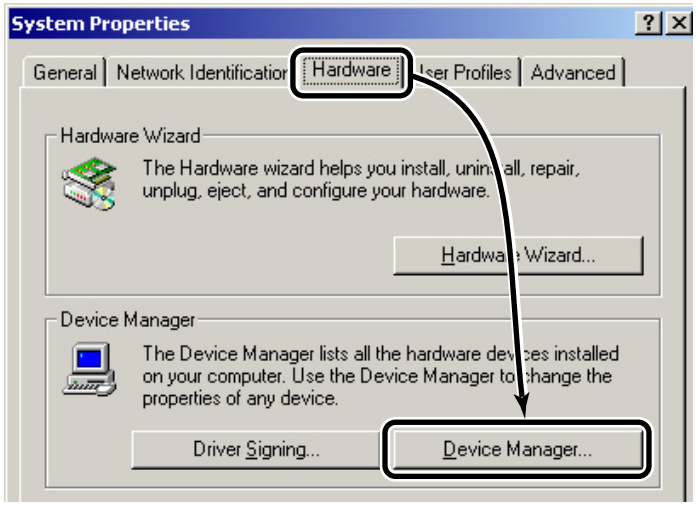
2. From the Start menu, point to “Settings” and then click “Control Panel”.

   ➔ The Control Panel opens.

3. Double-click System.

   ➔ The “System Properties” window opens.

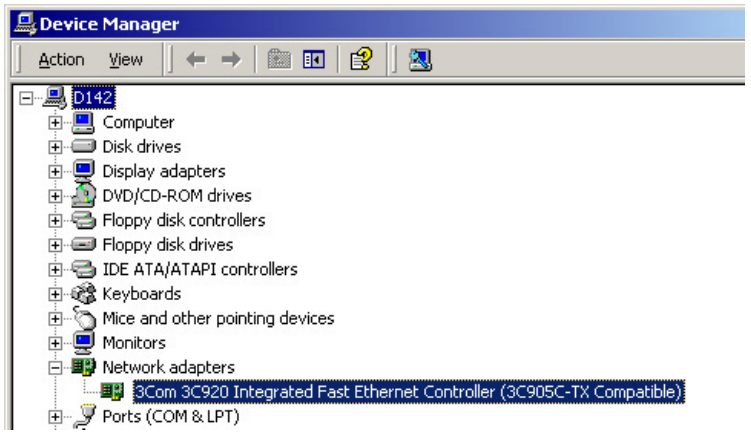
4. Choose the “Hardware” tab and then click Device Manager...



MT000035.EPS

➔ The “Device Manager” window opens.

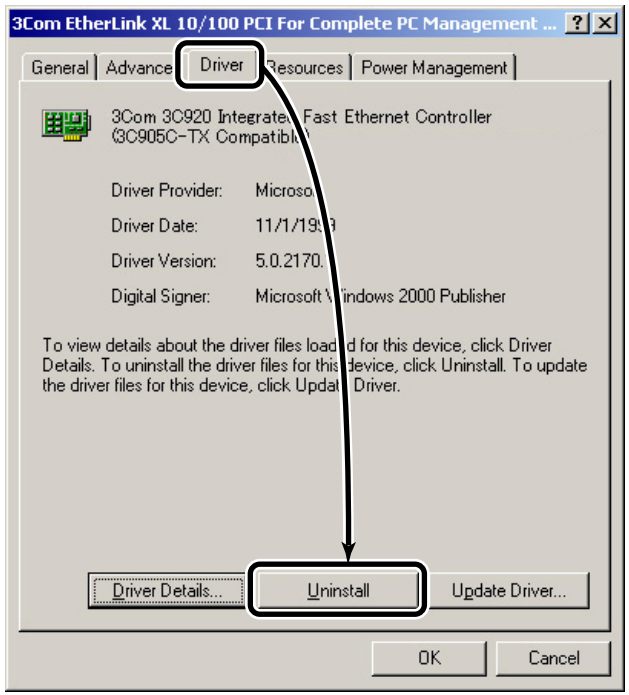
5. Click the ⊞ mark for Network adapters and then double-click “3Com 3C920 Integrated Fast...”.



MT000036.EPS

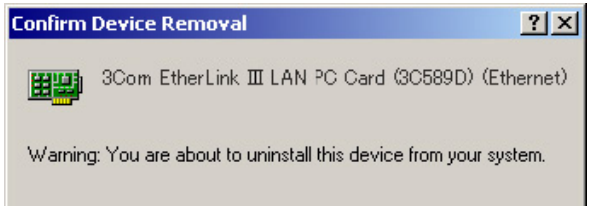
➔ The “3Com 3C920 Integrated Fast...” window opens.

6. Choose the “Driver” tab and then click Uninstall.



MT000037.EPS

➔ The “Confirm Device Removal” window opens.

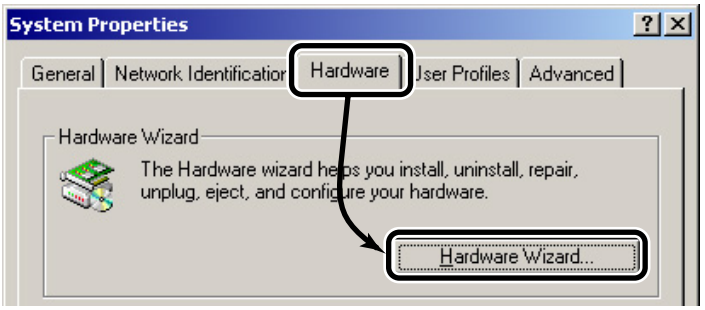


MT000038.EPS

7. Click OK.

➔ The network driver is then deleted.

8. Return to the “Hardware” tab on the “System Properties” window, which was opened in step 3, and then click Hardware Wizard....



MT000039.EPS

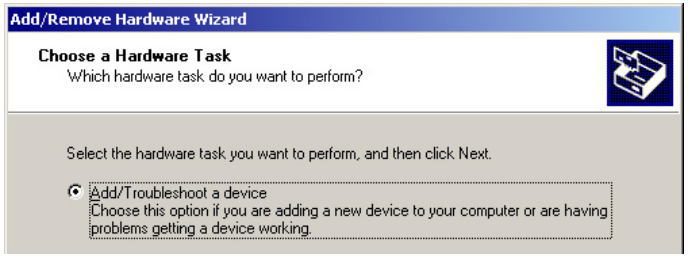
➔ The “Welcome to the Add/Remove Hardware Wizard” window opens.



MT000040.EPS

9. Click Next >.

➔ The following window opens.



MT000041.EPS

10. Just click Next >.

➔ After a while, a window like that shown below opens.



MT000042.EPS

11. Just click Next >.

➔ A window opens to indicate that driver installation is completed.



MT000043.EPS

12. Click Finish.

13. After completion of network driver installation, perform the following network driver setup steps from the driver environment setup window.

- Uncheck ☐ Allow this device to bring (☑ → ☐).
- Uncheck ☐ Allow the computer to turn off (☑ → ☐).

To open the driver environment setup window, double-click “3Com 3C920 Integrated Fast...” as explained in step 5. and then choose the “Power Management” tab.



MT000044.EPS

14. Reinstalling the network driver deletes the IP address and other relevant settings. Set the following network items again.

- IP address
- Subnet mask
- Default gateway (as needed)

4.8 Installing the 3Com Network Driver (Ver. A10)

1. Open the Windows 2000 desktop screen.

2. Insert the network driver FD (Ver. A10) into the FDD.

3. From the Start menu, point to “Settings” and then click “Control Panel”.

➔ The Control Panel opens.

4. Double-click System.

➔ The “System Properties” window opens.

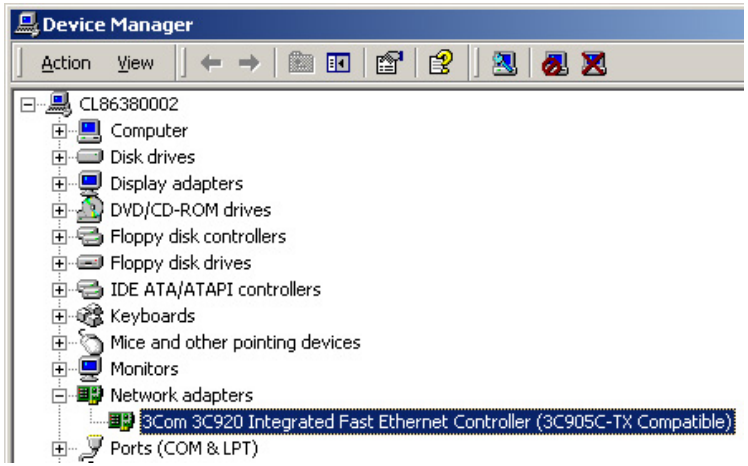
5. Choose the “Hardware” tab and then click Device Manager...



MT000027.EPS

➔ The “Device Manager” window opens.

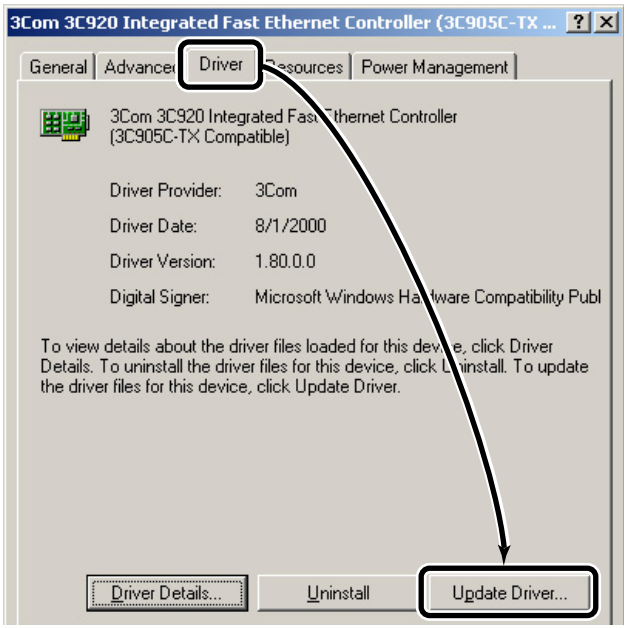
6. Click the ⊞ mark for [⊞ Network adapters] and then double-click "3Com 3C920 Integrated Fast...".



MT000028.EPS

➔ The "3Com 3C920 Integrated Fast..." window opens.

7. Choose the "Driver" tab and then click [Update Driver...].



MT000029.EPS

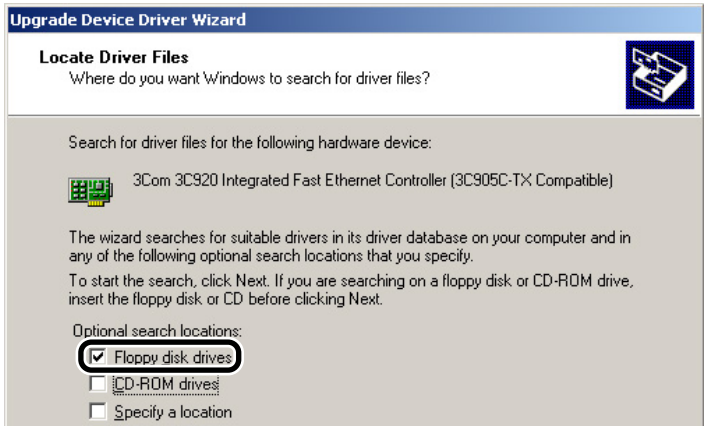
➔ The "Upgrade Device Driver Wizard" window opens.



MT000030.EPS

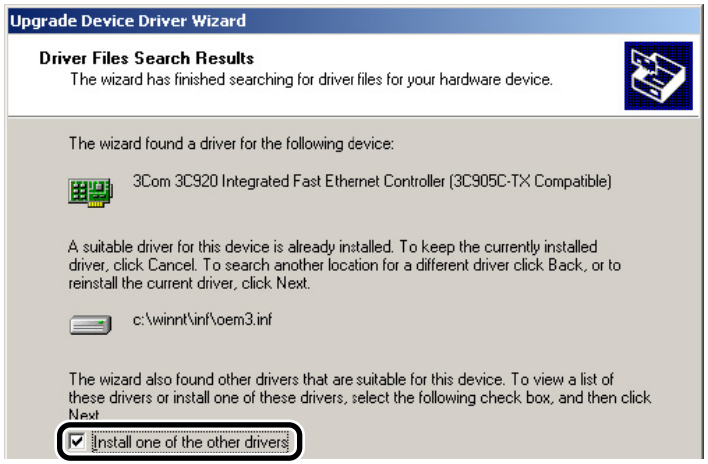
8. Click [Next >] twice.

9. Check [☑ Floppy disk drives] (☐ ➔ ☑), and then click [Next >].



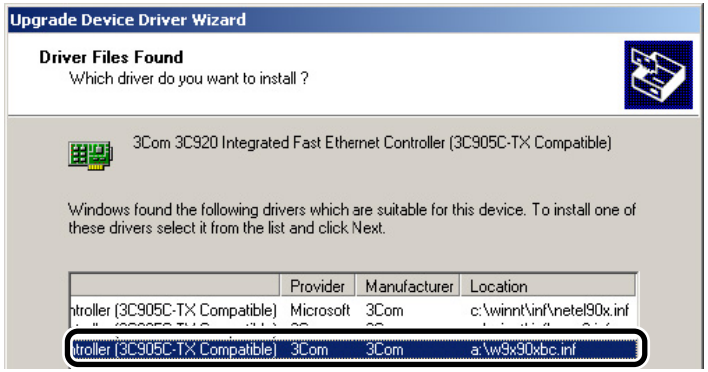
MT000031.EPS

10. Check ☑ Install one of the other drivers (☐ → ☑), and then click Next >.



MT000032.EPS

11. Select the driver whose "location" field reads "a:\w9x90xbc.inf", and then click Next >.



MT000033.EPS

➔ The "Digital Signature Not Found" window opens.

12. Click Yes.

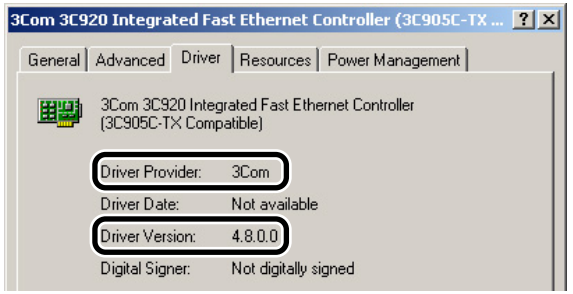
➔ A window opens to indicate that driver installation is completed.

13. Click Finish.

➥ *REFERENCE*

Installation is completed normally when the "3Com 3C920 Integrated Fast..." window opened in step 7. displays the following information.

- *Driver Provider: 3Com*
- *Driver Version: 4.8.0.0*



MT000034.EPS

Appendix CL Error Message Table (A00 to A07)

Event	Event Source	Description	Causes	Remedies	Remarks
10900	IIPInputEz	%1 : Registory Value Get/Set Error%n [Key] %2%n [Exp] %3%n %4%n %5	The acquisition/setup key or registration information is abnormal.	Check the registry key.	
10901	IIPInputEz	%1 : Database Connection Error%n [DB] %2%n [Exp] %3%n %4%n %5	This error is attributable to an abnormal character string in Directory.ini, an incorrect database file name, or a damaged database.	Check Directory.ini or database file name.	
10902	IIPInputEz	%1 : Database Data Get/Set Error%n [DB] %2%n [Table] %3%n [Field] %4%n [Exp] %5	This error is attributable to an abnormal database acquisition/setup key or database.	Check the database table/field name.	
10903	IIPInputEz	%1 : Dicom Data Object Get/Set Error%n [Tag] %2%n [Exp] %3%n %4%n %5	The DDO acquisition/setup tag is abnormal.	Check the DDO tag.	
10904	IIPInputEz	%1 : Other Error%n [Proceedure] %2%n [ErrorCode] %3%n [Exp] %4%n %5	Unknown error.		
11900	IIPInputEz	%1 : Registory Value Get/Set Error%n [Key] %2%n [Exp] %3%n %4%n %5	The acquisition/setup key or registration information is abnormal.	Check the registry key.	
11901	IIPInputEz	%1 : Database Connection Error%n [DB] %2%n [Exp] %3%n %4%n %5	This error is attributable to an abnormal character string in Directory.ini, an incorrect database file name, or a damaged database.	Check Directory.ini or database file name.	
11902	IIPInputEz	%1 : Database Data Get/Set Error%n [DB] %2%n [Table] %3%n [Field] %4%n [Exp] %5	This error is attributable to an abnormal acquisition/setup key or database.	Check the database table/field name.	

Event	Event Source	Description	Causes	Remedies	Remarks
11903	IIPInputEz	%1 : Dicom Data Object Get/Set Error%n [Tag] %2%n [Exp] %3%n %4%n %5	The DDO acquisition/setup tag is abnormal.	Check the DDO tag.	
11904	IIPInputEz	%1 : Other Error%n [Proceedure] %2%n [ErrorCode] %3%n [Exp] %4%n %5	Unknown error.		
12900	IIPInputEz	%1 : Registory Value Get/Set Error%n [Key] %2%n [Exp] %3%n %4%n %5	The acquisition/setup key or registration information is abnormal.	Check the registry key.	
12901	IIPInputEz	%1 : Database Connection Error%n [DB] %2%n [Exp] %3%n %4%n %5	This error is attributable to an abnormal character string in Directory.ini, an incorrect database file name, or a damaged database.	Check Directory.ini or database file name.	
12902	IIPInputEz	%1 : Database Data Get/Set Error%n [DB] %2%n [Table] %3%n [Field] %4%n [Exp] %5	This error is attributable to an abnormal acquisition/setup key or database.	Check the database table/field name.	
12903	IIPInputEz	%1 : Dicom Data Object Get/Set Error%n [Tag] %2%n [Exp] %3%n %4%n %5	The DDO acquisition/setup tag is abnormal.	Check the DDO tag.	
12904	IIPInputEz	%1 : Unknown Error%n [Proceedure] %2%n [ErrorCode] %3%n [Exp] %4%n %5	Unknown error.		
13000	FFIdDepartSelect	It failed that [%1] connects departDB	The requesting department database was not found in the path indicated by the connection character string. The requesting department table did not exist.	Reinstall.	
13000	FFIdFilmMark	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	

Event	Event Source	Description	Causes	Remedies	Remarks
13000	FFIdMenuChange	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13000	FFIdMenuItem	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13000	FFIdParamedicSelect	It failed that [%1] connects paramedicDB	The technician's database was not found in the pass indicated by the connection character string or the technician's table did not exist.	Reinstall.	
13000	FFIdPatInfoInput	It failed that [%1] gets the ID# caption	The "LangStrDB" key was not found in Directory.ini or the ID "30700" was not registered in the character string database.	Reinstall.	
13001	FF32LIB	Image Database Access Failure. ErrNo:%1 NativeErrNo:%2 SQLState:%3 Source:%4 Description:%5	The image database was not successfully accessed (ADO error).	Restart.	
13001	FFCustomMsgBox	MessageBox DataBase Connection Error.	The message database was not successfully connected. It is conceivable that the database did not exist or that the specified data source name was invalid.	Reinstall or check whether the message database exists and the contents of Directory.ini are correct.	
13001	FFCustomMsgBox	MessageBox DataBase Connection Error. [%1]	The connection to the message database was not successfully established. The database did not exist or the specified data source name was invalid.	Perform a reinstallation or check whether the message database exists and the contents of Directory.ini are correct.	
13001	FFIdDepartSelect	It failed that [%1] gets the DepartLabel caption	The "LangStrDB" key was not found in Directory.ini or the ID "30800" was not registered in the character string database.	Reinstall.	
13001	FFIdFilmMark	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry	Reinstall the IIP because the displayed characters can be corrupted.	
13001	FFIdMenuChange	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13001	FFIdMenuItem	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13001	FFIdParamedicSelect	It failed that [%1] gets the ParamedicLabel caption	The "LangStrDB" key was not found in Directory.ini or the ID "30800" was not registered in the character string database.	Reinstall.	
13001	FFIdPatInfoInput	It failed that [%1] gets the EXAM# caption	The "LangStrDB" key was not found in Directory.ini or the ID "30701" was not registered in the character string database.	Reinstall.	
13001	FFIipInput	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	

Event	Event Source	Description	Causes	Remedies	Remarks
13001	FFImageDBCTL	Image Database Access Error. ErroNo:%1 Source:%2 Description:%3	The image database was not successfully accessed (ADO error).	Restart.	
13001	FFImageDBCTL	Image Database Access Failure. ErrNo:%1 NativeErrNo:%2 SQLState:%3 Source:%4 Description:%5	The image database was not successfully accessed (ADO error).	Restart.	
13001	FFIpcInf	[%1] It failed in CoInitialize(%2).	Initialization was unsuccessful. It is conceivable that the system was unstable.	Restart.	"%1": Instance name "%2": Error code
13001	FFLogFile	[%1] It failed in CreateFile(%2). %3	Log file creation was unsuccessful. The problem might have been caused, for instance, by an invalid filename selection, inadequate disk space, or system instability.	Check for a free disk space or restart.	"%1": Instance name "%2": Error code "%3": File name/mutex name
13002	FFCustomMsgBox	MessageBox Data Get Error.	The specified message was not databased. It is conceivable that the message was not registered in the message database or that the specified ID was incorrect (program defect).	Perform a reinstallation or replace the message database with the latest one.	
13002	FFIdDepartSelect	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13002	FFIdFilmMark	It failed that [%1] gets the Clear Caption	The "LangStrDB" key was not found in Directory.ini or the ID "34800" was not registered in the character string database.	Reinstall.	
13002	FFIdMcrControl	Driver initialize error[%1]	The magnetic card was not connected.	Connect the magnetic card reader.	
13002	FFIdMenuChange	It failed that [%1] gets the multibyte flag	The "Multibyte" key was not found in the registry.	Reinstall.	
13002	FFIdMenuItem	It failed that [%1] gets the multibyte flag	The "Multibyte" key was not found in the registry.	Reinstall.	
13002	FFIdParamedicSelect	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13002	FFIdPatInfoInput	It failed that [%1] gets the PatNameSbcs caption	The "LangStrDB" key was not found in Directory.ini or the ID "30702" was not registered in the character string database.	Reinstall.	
13002	FFIdRuMainControl	Driver initialize error[%1]	The magnetic card reader was not connected.	There are no operational problems.	
13002	FFIipInput	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/"FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13002	FFImageDBCTL	[%1] %2	The image database was not successfully accessed.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
13002	FFImageDBCTL	Image Database Access Failure. InstanceName[%1]%2	The image database was not successfully accessed.	Restart.	
13002	FFIpcInf	[%1] It failed in CoCreateInstance(%2). LogFileCom create failure.	A log save control was not successfully created. The problem is attributable to system instability or unregistered control.	Restart. If the same symptom recurs, perform a reinstallation.	"%1": Instance name "%2": Error code
13002	FFLogFile	[%1] It failed in CreateFileMapping(%2).	File map object creation was unsuccessful. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code
13003	FF32LIB	Image Database Access Failure. InstanceName[%1]%2 %3	The image database was not successfully accessed.	Restart.	
13003	FFCustomMsgBox	Same MessageBox Existed. [%1]	The specified message box is already open.	Close the message box.	
13003	FFIdDepartSelect	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13003	FFIdFilmMark	It failed that [%1] gets the connection string of strDB	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13003	FFIdMenuChange	[%1] failed in the initialization for the display group data acquisition	The "DisplayDataDB" key was not found in Directory.ini or the connection character string was not properly registered in the display group table.	Reinstall.	
13003	FFIdMenuItem	Image Folder Path Get Error	The "Bitmap" key was not found in Directory.ini.	Reinstall.	
13003	FFIdParamedicSelect	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13003	FFIdPatInfoInput	It failed that [%1] gets the PatNameDbcs caption	The "LangStrDB" key was not found in Directory.ini or the ID "30703" was not registered in the character string database.	Reinstall.	
13003	FFIpInput	It failed that [%1] gets the multibyte flag	The "Multibyte" key was not found in the registry.	Reinstall.	
13003	FFImageDBCTL	[%1] %2 %3	The image database was not successfully accessed.	Restart.	
13003	FFImageDBCTL	Image Database Access Failure. InstanceName[%1]%2%3	The image database was not successfully accessed.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
13003	FFIpcInf	[%1] Memory allocation failed.	Memory allocation was not successfully achieved for main thread creation. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name
13003	FFLogFile	[%1] It failed in MapViewOfFile(%2).	File mapping was unsuccessful. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code
13004	FFCustomMsgBox	MessageBox Dialog Create Error. [%1]	The message box could not be created. This error occurred due to insufficient resources or system instability.	Restart.	
13004	FFIdDepartSelect	It failed that [%1] gets the depart field list	The "FieldDepartList" key was not found in the system setup database.	Reinstall.	
13004	FFIdFilmMark	It failed that [%1] connects to strDB	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13004	FFIdMcrControl	Magnetic card data aquisition error[%1	The magnetic card was found damaged.	Have a normal magnetic card be read.	
13004	FFIdMenuChange	[%1] failed in the display group data acquisition	The "DisplayDataDB" key was not found in Directory.ini or the connection character string was not properly registered in the display group table.	Reinstall.	
13004	FFIdMenuItem	[Miss]Image Get Error	Id_MissExposure_I.bmp was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13004	FFIdParamedicSelect	It failed that [%1] gets the paramedic field list	The "FieldParamedicList" key was not found in the system setup database.	Reinstall.	
13004	FFIdPatInfoInput	It failed that [%1] gets the Sex caption	The "LangStrDB" key was not found in Directory.ini or the ID "30704" was not registered in the character string database.	Reinstall.	
13004	FFIdRuMainControl	Magnetic card data aquisition error[%1]	The magnetic card is damaged.	Have a normal magnetic card be read.	
13004	FFIipInput	It failed that [%1] gets the connection string of STR DB	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13004	FFIpcInf	[%1] A pipe has already been made(%2).	An attempt was made to duplicate a pipe.	There are no operational problems.	"%1": Instance name "%2": Error code
13004	FFLogFile	[%1] It failed in CreateMutex(%2). %3	Mutex creation was unsuccessful. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code "%3": file name/mutex name
13005	FFCustomMsgBox	MessageBox Dialog Show Error. [%1]	The message box could not be opened. This error occurred due to insufficient resources or system instability.	Restart	

Event	Event Source	Description	Causes	Remedies	Remarks
13005	FFIdConnectionWatchEX	Recv Error Message [%1] Error Code [%2]	The connection to the RU was closed or a connection error occurred.	Restore the RU connection to normal.	
13005	FFIdFilmMark	It failed that [%1] gets the connection string of FilmMarkDB	The "FilmMarkDB" key was not found in Directory.ini.	Reinstall.	
13005	FFIdMcrControl	Magnetic card variation error[%1]	The magnetic card was not of the specified type.	Have the specified type of magnetic card be read.	
13005	FFIdMenuChange	[%1] failed in the liberating processing of the display group data acquisition	The connection to the display group table was not successfully closed.	Restart. If the same symptom recurs, reinstall.	
13005	FFIdPatInfoInput	It failed that [%1] gets the SexMale caption	The "LangStrDB" key was not found in Directory.ini or the ID "30705" was not registered in the character string database.	Reinstall.	
13005	FFIdRuMainControl	Magnetic card variation error[%1]	The employed magnetic card type was different than specified.	Have the specified type of magnetic card be read.	
13005	FFIdRuMainControl	Recv error[%1]	The connection to the RU was closed or an error occurred in the connection.	Check the connection to the RU.	
13005	FFIdRUMainControlEx	Recv Error Message [%1] Error Code [%2]	The connection to the RU was closed or a connection error occurred.	Restore the RU connection to normal.	
13005	FFIipInput	It failed that [%1] connects to STR DB	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13005	FFIpcInf	[%1] It failed in _beginthread(%2).	Main thread creation was not successful. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code
13006	FFCustomMsgBox	List For Modaless MessageBox Management New Error.	The modaless message box management table was not successfully created. The problem is attributable to resource inadequacy or system instability.	Restart.	
13006	FFCustomMsgBox	List For Modaless MessageBox Management New Error. [%1]	The modeless message box management table was not successfully created. This error occurred due to insufficient resources or system instability.	Restart.	
13006	FFIdFilmMark	It failed that [%1] connects to FilmMarkDB	The connection character string was not properly registered for the "FilmMarkDB" key in Directory.ini.	Reinstall.	
13006	FFIdMcrControl	Magnetic card variation check error[%1]	The card format was incorrect or an attempt was made to read an unspecified hospital card.	Have the specified hospital card be read.	
13006	FFIdMenuChange	[%1] failed in the initialization for the display menu data acquisition	The "DisplayDataDB" key was not found in Directory.ini.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13006	FFIdPatInfoInput	It failed that [%1] gets the SexFemale caption	The "LangStrDB" key was not found in Directory.ini or the ID "30706" was not registered in the character string database.	Reinstall.	
13006	FFIdRuMainControl	Magnetic card variation check error[%1]	The card format was wrong or an attempt was made to cause an unspecified hospital card to be read.	Have the specified hospital card be read.	
13006	FFIipInput	It failed that [%1] gets the connection string of SYS DB	The "SysConfigDB" key was not found in Directory.ini.	Reinstall.	
13006	FFIpcInf	[%1] It failed in WaitNamedPipe(%2).	The specified pipe was not successfully connected. It is conceivable that the pipe was not created or was unconnectable or that the system was unstable.	Make a change so as to let the program initiate a retransmission, or restart.	"%1": Instance name "%2": Error code
13007	FFIdDepartSelect	It failed that [%1] gets the connection string of strDB	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13007	FFIdMcrControl	DataFormatDB access error[%1]	"McrDataFormatDB" key was not found in Directory.ini or McrDataFormat.mdb did not exist in the specified path.	Reinstall.	
13007	FFIdMenuChange	[%1] failed in the acquisition of number of records of display menu data	The connection character string was not properly registered in the display group table.	Reinstall.	
13007	FFIdParamedicSelect	It failed that [%1] gets the connection string of strDB	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13007	FFIdPatInfoInput	It failed that [%1] gets the SexOther caption	The "LangStrDB" key was not found in Directory.ini or the ID "30707" was not registered in the character string database.	Reinstall.	
13007	FFIdRuMainControl	DataFormatDB access error[%1]	The "McrDataFormatDB" key was not found in Directory.ini or McrDataFormat.mdb did not exist in the path.	Reinstall.	
13007	FFIipInput	It failed that [%1] connects to SYS DB	The connection character string was not properly registered for the "SysConfigDB" key in Directory.ini.	Reinstall.	
13007	FFIpcInf	[%1] It failed in CreateFile(%2).	The specified pipe was not successfully connected. It is conceivable that the pipe was closed or that the system was unstable.	The problem is attributable to the program. Check the program or restart.	"%1": Instance name "%2": Error code
13007	FFIpcInf	[%1] It failed in CreateFile(%2). [Send Msg:%3]	The connection to the specified pipe was not established. This error occurred because the pipe was closed or the system was unstable.	The problem is attributable to the program. Check the program or restart.	
13008	FFCustomMsgBox	An exception error occurred. [%1] %2	An exception occurred (the system was unstable).	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
13008	FFIdConnectionWatch Ex	Message Send Error [%1] Error Code [%2]	A connection error occurred.	Restore the RU connection to normal.	
13008	FFIdDepartSelect	It failed that [%1] connects to strDB	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13008	FFIdFilmMark	It failed that [%1] get the folder path to Bitmap	The "Bitmap" key was not found in Directory.ini.	Reinstall.	
13008	FFIdMenuChange	[%1] failed in the display menu data acquisition	Not properly registered to the display group table.	Reinstall.	
13008	FFIdParamedicSelect	It failed that [%1] connects to strDB	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13008	FFIdPatInfoInput	It failed that [%1] gets the DateOfBirth caption	The "LangStrDB" key was not found in Directory.ini or the ID "30708" was not registered in the character string database.	Reinstall.	
13008	FFIdRuMainControl	DataFormatDB close error[%1]	The database was faulty.	Reinstall.	
13008	FFIdRUMainControlEx	Message Send Error [%1] WSAGetLastError = [%2]	A connection error occurred.	Restore the RU connection to normal.	
13008	FFIipInput	It failed that [%1] calls the CUSTOM MESSAGE BOX (%2)	The message database did not exist or the program was faulty.	Reinstall.	
13008	FFIpcInf	[%1] It failed in WriteFile(%2).	A message was not successfully transmitted. It is conceivable that the pipe was closed or that the system was unstable.	The problem is attributable to the program. Check the program or restart.	"%1": Instance name "%2": Error code
13008	FFIpcInf	[%1] It failed in WriteFile(%2). [Send Msg:%3]	The message transmission was not successfully completed. This error occurred due to a closed pipe or system instability.	It is conceivable that the program may be faulty. Check the program or restart.	
13009	FFCustomMsgBox	Common function error occurred. [%1] %2	The common function returned an error.	Restart.	
13009	FFIdConnectionWatch	LogFile Name Make error(%1).%n[%2]	The "Log" key was not found in Directory.ini.	Reinstall.	
13009	FFIdConnectionWatch-Ex	Log File Name Make Error[%1] Error Code [%2]	The "Log" key was not found in Directory.ini.	Register the "Log" key in Directory.ini.	
13009	FFIdDepartSelect	It failed that [%1] gets the connection string of sysDB	The "SysConfigDB" key was not found in Directory.ini.	Reinstall.	
13009	FFIdFilmMark	It failed that [%1] get the bitmap to Previous Page	Id_UpScroll_U.bmp/"Id_UpScroll_D.bmp"/"Id_UpScroll_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	

Event	Event Source	Description	Causes	Remedies	Remarks
13009	FFIdMcrControl	DataFormatDB close error[%1]	The database was faulty.	Reinstall.	
13009	FFIdMenuChange	[%1] failed in the liberating processing of the display manu data acquisition	The connection to the display menu table was not successfully closed.	Restart. If the problem frequently occurs, initialize the image database.	
13009	FFIdParamedicSelect	Is failed that [%1] gets the connection string of sysDB	The "SysConfigDB" key was not found in Directory.ini.	Reinstall.	
13009	FFIdPatInfoInput	It failed that [%1] gets the FontName	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
13009	FFIdRuMainControl	LogFile Name Make error[%1]	The "Log" key was not found in Directory.ini.	Reinstall.	
13009	FFIdRUMainControlEx	Log File Name Make Error[%1] Error Code [%2]	The "Log" key was not found in Directory.ini.	Register the "Log" key in Directory.ini.	
13009	FFIpcInf	[%1] Memory allocation failed.	Memory allocation was not successfully achieved for reception thread creation. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code
13010	FFIdConnectionWatch	DB Connect error(%1).%n[%2]	The "SysConfigDB" key was not found in Directory.ini or SysConfig.mdb did not exist in the path.	Reinstall.	
13010	FFIdConnectionWatch-Ex	DB Connect Error [%1] Error Code [%2]	"SysConfigDB" key was not found in Directory.ini or SysConfig.mdb did not exist in the specified path.	Properly register the "SysConfigDB" key in Directory.ini.	
13010	FFIdDepartSelect	It failed that [%1] connects to sysDB	The connection character string was not properly registered for the "SysConfigDB" key in Directory.ini.	Reinstall.	
13010	FFIdFilmMark	It failed that [%1] get the bitmap to Next Page	Id_DownScroll_U.bmp/"Id_DownScroll_D.bmp"/ "Id_DownScroll_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13010	FFIdMcrControl	Patient info data error[%1] %n(%2)	The patient information contained in the magnetic card was incorrect.	Check the data contained in the magnetic card.	
13010	FFIdMenuChange	[%1] failed in the termination of the display manu data acquisition	The connection to the display menu table was not successfully closed.	Restart. If the problem frequently occurs, initialize the image database.	
13010	FFIdParamedicSelect	It failed that [%1] connects to sysDB	The connection character string was not properly registered for the "SysConfigDB" key in Directory.ini.	Reinstall.	
13010	FFIdPatInfoInput	It failed that [%1] gets the FontSize	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	

Event	Event Source	Description	Causes	Remedies	Remarks
13010	FFIdRuMainControl	DB Connect error[%1]	The "SysConfigDB" key was not found in Directory.ini or SysConfig.mdb did not exist in the path.	Reinstall.	
13010	FFIdRuMainControl	Patient info data error[%1]	The patient information carried by the magnetic card was incorrect.	Check the data stored in the magnetic card.	
13010	FFIdRUMainControlEx	DB Connect Error [%1] Error Code [%2]	"SysConfigDB" key was not found in Directory.ini or SysConfig.mdb did not exist in the specified path.	Properly register the "SysConfigDB" key in Directory.ini.	
13010	FFIpcInf	[%1] It failed in CreateNamedPipe(%2).	Pipe creation was not successful. It is conceivable that the system was unstable.	Restart.	"%1": Instance name "%2": Error code
13010	FFIpcInf	[%1] It failed in CreateNamedPipe(%2). [Pipe:%3]	The pipe was not successfully created. The system was unstable.	Restart.	
13011	FFIdConnectionWatch	DB Read error(%1).%n[%2]	The "EchoInterval", "ComBreakTimeout1", "PartFrupStatus", or "EnableLog FrupConnect" key was not found in SysConfig.mdb.	Reinstall.	
13011	FFIdConnectionWatch-Ex	DB Read error[%1] Error Code [%2]	The "EchoInterval", "ComBreakTimeout1", "PortFrupStatus", or "EnableLogFrupConnect" key was not found in SysConfig.mdb.	Ensure that the "EchoInterval", "ComBreakTimeout1", "PortFrupStatus", and "EnableLogFrupConnect" keys are all registered in SysConfig.mdb.	
13011	FFIdDepartSelect	It's failed that [%1] gets the connection string of departDB	DepartDB did not exist in Directory.ini.	Reinstall.	
13011	FFIdFilmMark	It failed that [%1] get the bitmap to Clear	Id_Clear_U.bmp/"Id_Clear_D.bmp"/"Id_Clear_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13011	FFIdParamedicSelect	It failed that [%1] gets the connection string of paramedicDB	ParamedicDB did not exist in Directory.ini.	Reinstall.	
13011	FFIdPatInfoInput	It failed that [%1] gets the max length of ID#	The "IdLength" key was not found in the system setup database.	Reinstall.	
13011	FFIdRuMainControl	DB Read error[%1]	The "PortFrupMain", "AckTimeout", or "EnableLoaFrupMain" key was not found in SysConfig.mdb.	Reinstall.	
13011	FFIdRUMainControlEx	DB Read error[%1] Error Code [%2]	The "PortFrupMain", "AckTimeout", or "EnableLogFrupMain" key was not found in SysConfig.mdb.	Ensure that the "PortFrupMain", "AckTimeout", and "EnableLogFrupMain" keys are all registered in SysConfig.mdb.	
13011	FFIipInput	It failed that [%1] gets the window size	The "ScallHight"/"ScallWidth" key was not registered in the registry.	Reinstall.	
13011	FFIpcInf	[%1] It failed in ConnectNamedPipe(%2).	Pipe connection was not successfully awaited. It is conceivable that the system was unstable.	Restart.	"%1": Instance name "%2": Error code

Event	Event Source	Description	Causes	Remedies	Remarks
13011	FFIpcInf	[%1] It failed in ConnectNamedPipe(%2). [Pipe:%3]	The pipe connection request was not successfully enqueued.	Restart.	
13011	FFCustomMsgBox	ActiveX Data Objects(ADO) Error. ErroNo:%1 Source:%2 Description:%3	An ADO error was detected.	Restart	
13012	FFIdPatInfoInput	It failed that [%1] gets the max length of EXAM#	The "ExaminationNoLength" key was not found in the system setup database.	Reinstall.	
13012	FFIpcInf	[%1] It failed in _beginthread(%2).	Reception thread creation was not successful. The problem is attributable to resource inadequacy or system instability.	Restart.	"%1": Instance name "%2": Error code
13012	FFIpcInf	[%1] It failed in _beginthread(%2). [Pipe:%3]	The reception thread was not successfully created. This error occurred due to insufficient resources or system instability.	Restart.	
13013	FFIdMenuChange	It failed that [%1] get the folder path to Bitmap	The "Bitmap" key was not found in Directory.ini.	Reinstall.	
13013	FFIdPatInfoInput	It failed that [%1] gets the padding type of ID#	The "IdPadding" key was not found in the system setup database.	Reinstall.	
13013	FFIdRUMainControlEx	Configration error[%1] WSAGetLastError = [%2]	SysConfig.mdb was abnormal.		
13013	FFIpcInf	[%1] It failed in ReadFile(%2).	Message reception was not successful. It is conceivable that the system was unstable.	Restart.	"%1": Instance name "%2": Error code
13013	FFIpcInf	[%1] It failed in ReadFile(%2). [Pipe:%3]	The message reception was not successfully completed. The system was unstable.	Restart.	
13014	FFIdConnectionWatch	Ack Messeage Time Out(%1).%n[%2]	The connection to the RU was closed or an error occurred in the connection.	Check the connection to the RU.	
13014	FFIdConnectionWatch-Ex	Ack Message Time Out[%1] Error Code [%2]	The connection to the RU was closed or a connection error occurred.	Restore the RU connection to normal.	
13014	FFIdMenuChange	It failed that [%1] get the bitmap to Previous Page	Id_PrevPage_U.bmp/"Id_PrevPage_D.bmp"/"Id _PrevPage_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13014	FFIdPatInfoInput	It failed that [%1] gets the padding type of EXAM#	The "ExaminationNoPadding" key was not found in the system setup database.	Reinstall.	
13014	FFIdRuMainControl	Ack Messeage Time Out[%1]	The connection to the RU was closed or an error occurred in the connection.	Check the connection to the RU.	
13014	FFIdRUMainControlEx	Ack Message Time Out[%1] WSAGetLastError = [%2]	The connection to the RU was closed or a connection error occurred.	Restore the RU connection to normal.	

Event	Event Source	Description	Causes	Remedies	Remarks
13014	FFIipInput	[%1] No RU Used	Although the FRUP option was selected, NetConfig did not have any RU connection setting. There was a conflict between the option setup and Config setup.	Check the settings.	
13014	FFIpcInf	[%1] It is a parameter error.	An illegal parameter was encountered (program defect).		"%1": Instance name
13015	FFIdMenuChange	It failed that [%1] get the bitmap to Next Page	Id_NextPage_U.bmp/"Id_NextPage_D.bmp"/"Id _NextPage_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13015	FFIdPatInfoInput	It failed that [%1] gets the multibyte flag	The "Multibyte" key was not found in the registry.	Reinstall.	
13015	FFIpcInf	"[%1] Exception Information. %2	An exception occurred (the system was unstable).	Restart.	
13016	FFIdPatInfoInput	It failed that [%1] gets the date format type	The "DateFormat" key was not found in the system setup database.	Reinstall.	
13017	FFIdConnectionWatch-Ex	RU Host Unknown Error[%1] Error Code [%2]	The RU was not properly set for the IIP.	Check the setup.	
13017	FFIdPatInfoInput	It failed that [%1] gets the connection string of strDB	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13017	FFIdRUMainControlEx	RU Host Unknown Error[%1] Error Code [%2]	The RU was not properly set for the IIP.	Check the setup.	
13018	FFIdPatInfoInput	It failed that [%1] connects to strDB	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13019	FFIdPatInfoInput	It failed that [%1] gets the connection string of sysDB	The "SysConfigDB" key was not found in Directory.ini.	Reinstall.	
13020	FFIdPatInfoInput	It failed that [%1] connects to sysDB	The connection character string was not properly registered for the "SysConfigDB" key in Directory.ini.	Reinstall.	
13020	FFIipInput	RU Error DB Connect Error in [%1]	The connection character string was not properly registered for the "RuErrorDataDB" key in Directory.ini or the RU error information database did not exist.	Reinstall.	
13021	FFIipInput	RU Error Data Get Error in [%1]	The window number sent from the RU was not found in the RU error information database.	Ensure that the RU version agrees with the RU error information database version.	
13022	FFIdPatInfoInput	It failed that [%1] gets System ID	The system setup database was damaged.	Reinstall.	
13022	FFIipInput	RU Status DB Connection String Get Error in [%1]	The connection character string was not properly registered for the "RuStatusDataDB" key in Directory.ini.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13023	FFIdPatInfoInput	%1 (%2) : Patient Information Check Error%n Item [%3]%n Error [%4]	The patient information contained illegal information.	Correct the patient information setup.	
13023	FFIipInput	RU Status DB Connect Error in [%1]	The connection character string was not properly registered for the "RuErrorDataDB" key in Directory.ini or the RU error information database did not exist.	Reinstall.	
13024	FFIdPatInfoInput	%1 (%2) : Bitmap Image Get Error%n BMP File [%3]	"Id_LocalSearch_U.bmp", "Id_LocalSearch_D.bmp", or "Id_LocalSearch_X.bmp" was not found in the path to the folder in which images were positioned.	Place "Id_LocalSearch_U.bmp", "Id_LocalSearch_D.bmp", and "Id_LocalSearch_X.bmp" in the path to the folder in which images are positioned.	
13024	FFIipInput	RU Status Data Get Error in [%1]	The window number sent from the RU was not found in the RU error information database.	Ensure that the RU version agrees with the RU error information database version.	
13025	FFIdPatInfoInput	%1 (%2) : Patient Info Get Error%n Error [%3]%n RetCode [%4]	The patient information database was damaged.	Repair the patient information database.	
13026	FFIdPatInfoInput	%1 (%2) : Patient Info Set Error%n Error [%3]%n RetCode [%4]	The patient information to be registered contained illegal information or the patient information database was damaged.	Enter correct patient information or repair the patient information database.	
13027	FFIdPatInfoInput	%1 (%2) : Patient Info Not Correspond%n RetCode [%3]%n	No matching patient information was found.		
13027	FFIipInput	%1%n%2%n%3%n%4%n %5%n%6%n%7%0	Control information	No particular remedy needs be taken.	
13030	FFIipInput	%1%n%2%n%3%n%4%n %5%n%6%n%7%0	The connection character string was not properly registered for the "RuStatusDataDB" key in Directory.ini.	Reinstall.	
13031	FFIipInput	[%s] %s (%s): Log Output Directory Get Error	The system setup database was damaged.	Reinstall.	
13032	FFIipInput	[%s] %s (%s): MCR Control Initialize Error	The card reader unit was not connected.	There are no particular problems except that the magnetic card reader is not available.	
13033	FFIipInput	[%s] %s (%s): LR button cannot be concave set	The range was changed by the Service Utility.	No particular remedy needs be taken.	
13034	FFIipInput	[%s] %s (%s): TB button cannot be concave set	The range was changed by the Service Utility.	No particular remedy needs be taken.	
13035	FFIipInput	[%s] %s (%s): TBLR button cannot be concave set	The range was changed by the Service Utility.	No particular remedy needs be taken.	
13036	FFIipInput	[%s] %s (%s): rotation button cannot be concave set	The range was changed by the Service Utility.	No particular remedy needs be taken.	

Event	Event Source	Description	Causes	Remedies	Remarks
13037	FFlipInput	[%s] %s (%s): Message Table Name Get Error	The "MsgTableName" key was not found in the system setup database.	Reinstall.	
13038	FFlipInput	[%s] %s (%s): StrDB Connection String Get Error	The "LangStrDB" key was not found in Directory.ini.	Reinstall.	
13039	FFlipInput	[%s] %s (%s): StrDB Connect Error	The connection character string was not properly registered for the "LangStrDB" key in Directory.ini.	Reinstall.	
13040	FFlipInput	[%s] %s (%s): SysDB Connection String Get Error	The "SysConfigDB" key was not found in Directory.ini.	Reinstall.	
13041	FFlipInput	[%s] %s (%s): SysDB Connect Error	The connection character string was not properly registered for the "SysConfigDB" key in Directory.ini.	Reinstall.	
13042	FFlipInput	[%s] %s (%s): ImageDB Connection Character String Get Error	The "ImageDB" key was not found in Directory.ini.	Reinstall.	
13043	FFlipInput	[%s] %s (%s): Failed ImageDB Connection	The connection character string was not properly registered for the "ImageDB" key in Directory.ini.	Reinstall.	
13044	FFlipInput	[%s] %s (%s): Failed ImageDB Open Recordset	The image database was not successfully accessed.	Reinstall.	
13045	FFlipInput	[%s] %s (%s): Failed ImageDB Close Recordset	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13046	FFlipInput	[%s] %s (%s): ImageDB Data Get Error	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13047	FFlipInput	[%s] %s (%s): ImageDB Data Set Error	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13048	FFlipInput	[%s] %s (%s): ImageDB Data Delete Error	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
13049	FFlipInput	[%s] %s (%s): Failed ImageDBFlag Connection	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13050	FFlipInput	[%s] %s (%s): Failed ImageDBFlag Close	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13051	FFlipInput	[%s] %s (%s): ImageDBFlag Data Set Error	The image database was not successfully accessed.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13052	FFlipInput	[%s] %s (%s): Failed MenuDB Initialize	The initialization process for menu database access was not successfully performed.	Reinstall.	
13053	FFlipInput	[%s] %s (%s): Menu Data in ImageDB Get Error	Menu information was not successfully acquired from the menu database.	Reinstall.	
13054	FFlipInput	[%s] %s (%s): Menu Parameter Data in ImageDB Get Error	Menu parameter information was not successfully acquired from the menu database.	Reinstall.	
13055	FFlipInput	[%s] %s (%s): Failed MenuDB Termination	The termination process for menu database access was not successfully performed.	Reinstall.	
13056	FFlipInput	[%s] %s (%s): NetDB Connection Character String Get Error	The "NetConfigDB" key was not found in Directory.ini.	Reinstall.	
13057	FFlipInput	[%s] %s (%s): Failed NetDB Connection	The connection character string was not properly registered for the "NetConfigDB" key in Directory.ini.	Reinstall.	
13058	FFlipInput	[%s] %s (%s): NetDB Data Get Error	The network setup database was damaged.	Reinstall.	
13059	FFlipInput	[%s] %s (%s): Failed Create New DICOM Data	New DICOM data was not successfully created.	Restart. If the problem frequently occurs, initialize the image database.	
13060	FFlipInput	[%s] %s (%s): DICOM Data Get Error	DICOM data was not successfully acquired.	Restart. If the problem frequently occurs, initialize the image database.	
13061	FFlipInput	[%s] %s (%s): DICOM Data Set Error	DICOM data was not successfully set up.	Restart. If the problem frequently occurs, initialize the image database.	
13062	FFlipInput	[%s] %s (%s): DICOM Data Delete Error	DICOM data was not successfully deleted.	Restart. If the problem frequently occurs, initialize the image database.	
13063	FFlipInput	[%s] %s (%s): DICOM Data Load Error	DICOM data was not successfully loaded.	Restart. If the problem frequently occurs, initialize the image database.	
13064	FFlipInput	[%s] %s (%s): DICOM Data Save Error	DICOM data was not successfully saved.	Restart. If the problem frequently occurs, initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
13065	FFlipInput	[%s] %s (%s): DICOM Data Free Error	DICOM data was not successfully freed.	Restart. If the problem frequently occurs, initialize the image database.	
13066	FFlipInput	[%s] %s (%s): Failed in Padding Acquisition[Id#]	The "IdPadding" key was not found in the system setup database.	Reinstall.	
13067	FFlipInput	[%s] %s (%s): Failed in Padding Acquisition[Exam#]	The "ExaminationNoPadding" key was not found in the system setup database.	Reinstall.	
13068	FFlipInput	[%s] %s (%s): Failed in Format Acquisition[Date Of Birth]	The "DateFormat" key was not found in the system setup database.	Reinstall.	
13069	FFlipInput	[%s] %s (%s): Cannot Access Data Base[Departmdb]	The requesting department database was not found in the path indicated by the connection character string. The requesting department table did not exist.	Reinstall.	
13070	FFlipInput	[%s] %s (%s): Displayed Item Is Not Understood[Depart List]	The "FieldDepartList" key was not found in the system setup database.	Reinstall.	
13072	FFlipInput	[%s] %s (%s): Failed in Connected String Acquisition[Depart]	The "DepartDB" key was not found in Directory.ini.	Reinstall.	
13073	FFlipInput	[%s] %s (%s): Cannot Access Data Base[Paramedicmdb]	The technician's database was not found in the path indicated by the connection character string. The technician's table did not exist.	Reinstall.	
13074	FFlipInput	[%s] %s (%s): Displayed Item Is Not Understood[Paramedic List]	The "FieldParamedicList" key was not found in the system setup database.	Reinstall.	
13076	FFlipInput	[%s] %s (%s): Failed in Connected String Acquisition[Paramedic]	The "ParamedicDB" key was not found in Directory.ini.	Reinstall.	
13077	FFlipInput	[%s] %s (%s): Failed in Window Size Acquisition	The registry was damaged.	Reinstall.	
13078	FFlipInput	[%s] %s (%s): Failed in ExposureList Erase	The "ExposureListErase" key was not found in the system setup database.	Reinstall.	
13079	FFlipInput	[%s] %s (%s): Config Directory Character String Get Error	The "Config" key was not found in Directory.ini.	Reinstall.	
13080	FFlipInput	[%s] %s (%s): ImageDBFlag Data Get Error	The image database was damaged.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
13081	FFlipInput	[%s] %s (%s): StrDB Message String Get Error	The character string database was damaged.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13082	FFIipInput	[%s] %s (%s): IP-Address(RU) Get Error	The network setup database was damaged.	Restart.	
13083	FFIipInput	[%s] %s (%s): Initialize Timeout <InImg>	The system was unstable.	Restart.	
13084	FFIipInput	[%s] %s (%s): Terminate Error <InImg>	The system was unstable.	Restart.	
13085	FFIipInput	[%s] %s (%s): Terminate Timeout <InImg>	The system was unstable.	Restart.	
13086	FFIipInput	[%s] %s (%s): Input Method Error <InImg>	The system was unstable.	Restart.	
13087	FFIipInput	[%s] %s (%s): Original Image Input Failure <InImg>	The system was unstable.	Restart.	
13088	FFIipInput	[%s] %s (%s): Image Processing Trouble <InImg>	The system was unstable.	Restart.	
13089	FFIipInput	[%s] %s (%s): Menu Read Error <IdExposureList>	The image database/information file was damaged.	Reinstall.	
13090	FFIdDepartSelect	%1 (%2) : Invalid Depart Code%n Code [%3]	Directory.ini was damaged.	Reinstall.	
13090	FFIdParamedicSelect	%1 (%2) : Invalid Paramedic Code%n Code [%3]	Directory.ini was damaged.	Reinstall.	
13091	FFIdDepartSelect	%1 (%2) : Invalid Depart Name (SBCS)%n Name (SBCS) [%3]	The database was damaged.	Reinstall.	
13091	FFIdParamedicSelect	%1 (%2) : Invalid Paramedic Name (SBCS)%n Name (SBCS) [%3]	The database was damaged.	Reinstall.	
13094	FFIipInput	[%s] %s (%s): Message Send Error <IpcInfCom>	The system was unstable.	Restart.	
13096	FFIipInput	[%s] %s (%s): Request Command Not Executed <RU>	It is conceivable that there was a problem on the RU side. (Although a command was requested, it was not executed.)	Check the RU status.	
13098	FF32LIB	FF32lib A WIN32 system library error occurred. [%1]%n%2	An error occurred when a WIN32 API was called.	Restart.	
13098	FFIipInput	[%s] %s (%s): Reconnect Error <RU>	The line was abnormal.	Check the line.	
13099	FF32LIB	FF32lib An unknown error occurred. [%1]%n%2	An exception error occurred.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
13099	FFlipInput	[%s] %s (%s): Disconnect Error <RU>	The line was abnormal.	Check the line.	
13100	FFlipInput	[%s] %s (%s): Failed in Display Group Acquisition[Initialize]	The "DisplayDataDB" key was not found in Directory.ini or the connection character string was not properly registered in the display group table.	Reinstall.	
13101	FFlipInput	[%s] %s (%s): Failed in Display Group Acquisition	The "DisplayDataDB" key was not found in Directory.ini or the connection character string was not properly registered in the display group table.	Reinstall.	
13103	FFlipInput	[%s] %s (%s): Failed in Display Menu Acquisition[Initialize]	The "DisplayDataDB" key was not found in Directory.ini.	Reinstall.	
13104	FFlipInput	[%s] %s (%s): Failed in Display Menu Acquisition[Record]	The menu database was damaged.	Reinstall.	
13108	FFlipInput	[%s] %s (%s): Failed in Exposure Menu Acquisition	The menu database was damaged.	Reinstall.	
13109	FFlipInput	[%s] %s (%s): Next Set Number Data Get Error	The registry was damaged.	Reinstall.	
13110	FFlipInput	[%s] %s (%s): Next Set Number Data Set Error	The registry was damaged.	Reinstall.	
13111	FFlipInput	[%s] %s (%s): System ID Data Get Error	The system setup database was damaged.	Reinstall.	
13112	FFlipInput	[%s] %s (%s): Auto Distribution Data Get Error	The system setup database was damaged.	Reinstall.	
13113	FFlipInput	[%s] %s (%s): Enable Selector Data Get Error	The system setup database was damaged.	Reinstall.	
13114	FFlipInput	[%s] %s (%s): Auto Menu Select Data Get Error	The system setup database was damaged.	Reinstall.	
13115	FFlipInput	[%s] %s (%s): Next Set Number Min Data Get Error	The system setup database was damaged.	Reinstall.	
13116	FFlipInput	[%s] %s (%s): Next Set Number Max Data Get Error	The system setup database was damaged.	Reinstall.	
13120	FFlipInput	[%s] %s (%s): Failed in Getting ID-Online Port#	The database was not found or the associated key did not exist.	Reinstall.	
13121	FFlipInput	[%s] %s (%s): Failed in ID-Online Device Name	The database was not found or the associated key did not exist.	Reinstall.	
13122	FFlipInput	[%s] %s (%s): RU Status DB Connection String Get Error	Directory.ini was damaged.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13123	FFlipInput	[%s] %s (%s): Failed in selectable direction	The "SelectableDirection" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13124	FFlipInput	[%s] %s (%s): Failed in Selectable Image Format Acquisition	The "SelectableFormat" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13125	FFlipInput	[%s] %s (%s): FilmMarkDB Connection String Get Error	The "FilmMarkDB" key was not found in Directory.ini.	Reinstall.	
13126	FFlipInput	[%s] %s (%s): FilmMarkDB Connect Error	The connection character string was not properly registered for the "FilmMarkDB" key in Directory.ini.	Reinstall.	
13128	FFlipInput	[%s] %s (%s): Failed in Limit Film Copy Acquisition	The "LimitFilmCopy" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13131	FFlipInput	[%s] %s (%s): Failed in Selectable EDR Mode Acquisition	The "SelectableEdrMode" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13132	FFlipInput	[%s] %s (%s): Failed in Selectable Function Acquisition	The "SelectableFunction" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13134	FFlipInput	[%s] %s (%s): Failed in Selectable EDR Mode Acquisition	The "SelectableFilingMode" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13135	FFlipInput	[%s] %s (%s): NetDB Data Get Error	The connection character string for the network setup database was not successfully acquired or the network setup database did not exist.	Reinstall.	
13136	FFlipInput	[%s] %s (%s): Failed in Enable DistributionCode Acquisition	The "EnableDistributionCode" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13137	FFlipInput	[%s] %s (%s): Failed in Enable FileString Acquisition	The "EnableFileString" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13138	FFlipInput	[%s] %s (%s): Failed in Enable Function Acquisition	The "EnableFunction" key was not found in the system setup database or its value was incorrect.	Reinstall.	
13157	FFlipInput	[%s] %s (%s): Finish Mode Get Error	The system setup database was damaged.	Reinstall.	
13158	FFlipInput	[%s] %s (%s): RU Error DB Connection String Get Error	The "RuErrorDataDB" key was not found in Directory.ini.	Reinstall.	
13159	FFlipInput	[%s] %s (%s): RU Error DB Table Name Get Error	The "MsgTableName" key was not found in the system setup database.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13160	FFlipInput	[%s] %s (%s): Call Error [RU Error CUSTOM MESSAGE BOX]	The specified ID was not registered in "RuErrorDataDB" or the custom message box was not successfully called.	Reinstall.	
13161	FFlipInput	[%s] %s (%s): Failed Display Thumbnail Image	The program was faulty or the image file was damaged.	Restart. If the problem frequently occurs, initialize the image database.	
13162	FFlipInput	[%s] %s (%s): Ip Size Unit (Inch/Metric) Get Error	The system setup database was damaged.	Reinstall.	
13165	FFlipInput	[%s] %s (%s): Image Size Code Specify Error	RU-dependent symptom.	Check the RU status.	
13166	FFlipInput	[%s] %s (%s): Pantomo Setting Get Error	The system setup database was damaged.	Repair the system setup database.	
13167	FFlipInput	[%s] %s (%s): RU Error Info Get Error	The RU error database was damaged.	Reinstall the RU software.	
13168	FFlipInput	[%s] %s (%s): RU Status Info Get Error	The RU status information database was damaged.	Reinstall the RU software.	
13177	FFlipInput	[%s] %s (%s): Default Menu Code Get Error	The system setup database was damaged.	Reinstall.	
13178	FFlipInput	[%s] %s (%s): Next Multi Frame Pair Code Data Get Error	The registry was damaged.	Reinstall.	
13179	FFlipInput	[%s] %s (%s): Next Multi Frame Pair Code Data Set Error	The registry was damaged.	Reinstall.	
13180	FFlipInput	[%s] %s (%s): Series Generation Type Data Get Error	The system setup database was damaged.	Reinstall.	
13181	FFlipInput	[%s] %s (%s): Multi Frame UID Information Get Error	The system setup database was damaged.	Reinstall.	
13182	FFlipInput	[%s] %s (%s): Failed in Getting XCON Port#	The database did not exist or the associated key was not found.	Reinstall.	
13183	FFlipInput	[%s] %s (%s): Failed in XCON Device Name	The database did not exist or the associated key was not found.	Reinstall.	
13184	FFlipInput	[%s] %s (%s): MCR Type Get Error	The system setup database was damaged.	Reinstall.	
13185	FFlipInput	[%s] %s (%s): MCR Variation Get Error	The system setup database was damaged.	Reinstall.	
13186	FFlipInput	[%s] %s (%s): Custom Card Use Get Error	The system setup database was damaged.	Reinstall.	
13187	FFlipInput	[%s] %s (%s): Font Name Get Error	The "Font" key was not found in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	

Event	Event Source	Description	Causes	Remedies	Remarks
13188	FFlipInput	[%s] %s (%s): Font Size Get Error	The "FontSizeSS"/"FontSizeS"/"FontSizeM"/ "FrontSizeL"/"FontSizeLL" key was not found in the registry.	Displayed characters can be corrupted. Reinstall the IIP as necessary.	
13189	FFlipInput	[%s] %s (%s): Multibyte Flag Get Error	The "Multibyte" key was not found in the registry.	Reinstall.	
13190	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Id#]	The "LangStrDB" key was not found in Directory.ini or the ID "30700" was not registered in the character string database.	Reinstall.	
13191	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Exam#]	The "LangStrDB" key was not found in Directory.ini or the ID "30701" was not registered in the character string database.	Reinstall.	
13192	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[SBCS Patient Name]	The "LangStrDB" key was not found in Directory.ini or the ID "30702" was not registered in the character string database.	Reinstall.	
13193	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[DBCS Patient Name]	The "LangStrDB" key was not found in Directory.ini or the ID "30703" was not registered in the character string database.	Reinstall.	
13194	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Sex]	The "LangStrDB" key was not found in Directory.ini or the ID "30704" was not registered in the character string database.	Reinstall.	
13195	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Sex M]	The "LangStrDB" key was not found in Directory.ini or the ID "30705" was not registered in the character string database.	Reinstall.	
13196	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Sex F]	The "LangStrDB" key was not found in Directory.ini or the ID "30706" was not registered in the character string database.	Reinstall.	
13197	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Sex O]	The "LangStrDB" key was not found in Directory.ini or the ID "30707" was not registered in the character string database.	Reinstall.	
13198	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Date Of Birth]	The "LangStrDB" key was not found in Directory.ini or the ID "30708" was not registered in the character string database.	Reinstall.	
13199	FFlipInput	[%s] %s (%s): Failed in Limitation No Acquisition[Id#]	The "IdLength" key was not found in the system setup database.	Reinstall.	
13200	FFlipInput	[%s] %s (%s): Failed in Limitation No Acquisition[Exam#]	The "ExaminationNoLength" key was not found in the system setup database.	Reinstall.	
13201	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Depart]	The "LangStrDB" key was not found in Directory.ini or the ID "30800" was not registered in the character string database.	Reinstall.	
13202	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Paramedic]	The "LangStrDB" key was not found in Directory.ini or the ID "30800" was not registered in the character string database.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13203	FFlipInput	[%s] %s (%s): Image Folder Path Get Error	The "Bitmap" key was not found in Directory.ini.	Reinstall.	
13204	FFlipInput	[%s] %s (%s): [Clear]Button Image Get Error	Id_Clear_U.bmp/"Id_Clear_D.bmp"/"Id_Clear_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13205	FFlipInput	[%s] %s (%s): [Ok]Button Image Get Error	Id_Ok_U.bmp/"Id_Ok_D.bmp"/"Id_Ok_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13206	FFlipInput	[%s] %s (%s): [Cancel]Button Image Get Error	Id_Cancel_U.bmp/"Id_Cancel_D.bmp"/"Id_Cancel_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13207	FFlipInput	[%s] %s (%s): [Plus]Button Image Get Error	Id_Plus_U.bmp/"Id_Plus_D.bmp"/"Id_Plus_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13208	FFlipInput	[%s] %s (%s): [Minus]Button Image Get Error	Id_Minus_U.bmp/"Id_Minus_D.bmp"/"Id_Minus_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13209	FFlipInput	[%s] %s (%s): [Next Page]Button Image Get Error	Id_NextPage_U.bmp/"Id_NextPage_D.bmp"/"Id_NextPage_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13210	FFlipInput	[%s] %s (%s): [Previous Page]Button Image Get Error	Id_PrevPage_U.bmp/"Id_PrevPage_D.bmp"/"Id_PrevPage_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13211	FFlipInput	[%s] %s (%s): RU Watch Connection Disconnected	The line was abnormal.	The program was faulty.	
13212	FFlipInput	[%s] %s (%s): No ACK Returned in RU Watch Connection	The line was abnormal.	The program was faulty.	
13213	FFlipInput	[%s] %s (%s): RU Control Connection Disconnected	The line was abnormal.	The program was faulty.	
13214	FFlipInput	[%s] %s (%s): No ACK Returned in RU Control Connection	The line was abnormal.	The program was faulty.	
13217	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Complete]	The "LangStrDB" key was not found in Directory.ini or the ID "30202" was not registered in the character string database.	Reinstall.	
13218	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[QA Unfinished]	The "LangStrDB" key was not found in Directory.ini or the ID "30201" was not registered in the character string database.	Reinstall.	
13219	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Interrupt]	The "LangStrDB" key was not found in Directory.ini or the ID "30200" was not registered in the character string database.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13220	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Cancel]	The "LangStrDB" key was not found in Directory.ini or the ID "30203" was not registered in the character string database.	Reinstall.	
13221	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[New Study]	The "LangStrDB" key was not found in Directory.ini or the ID "30500" was not registered in the character string database.	Reinstall.	
13222	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Registered]	The "LangStrDB" key was not found in Directory.ini or the ID "30501" was not registered in the character string database.	Reinstall.	
13223	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[QA Waiting]	The "LangStrDB" key was not found in Directory.ini or the ID "30502" was not registered in the character string database.	Reinstall.	
13224	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Output Waiting]	The "LangStrDB" key was not found in Directory.ini or the ID "30503" was not registered in the character string database.	Reinstall.	
13225	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Outputted]	The "LangStrDB" key was not found in Directory.ini or the ID "30504" was not registered in the character string database.	Reinstall.	
13226	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[All]	The "LangStrDB" key was not found in Directory.ini or the ID "30505" was not registered in the character string database.	Reinstall.	
13227	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Today]	The "LangStrDB" key was not found in Directory.ini or the ID "30506" was not registered in the character string database.	Reinstall.	
13228	FFlipInput	[%s] %s (%s): Failed in ImageÅ@Acquisition[Syste-m]	The "LangStrDB" key was not found in Directory.ini or the ID "30507" was not registered in the character string database.	Reinstall.	
13229	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[StudyReseve]	The "LangStrDB" key was not found in Directory.ini or the ID "30600" was not registered in the character string database.	Reinstall.	
13230	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[StudyStart]	The "LangStrDB" key was not found in Directory.ini or the ID "30601" was not registered in the character string database.	Reinstall.	
13231	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Priority]	The bmp file path/bmp file was abnormal.	Reinstall.	
13232	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[End]	The bmp file path/bmp file was abnormal.	Reinstall.	
13233	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Change]	The bmp file path/bmp file was abnormal.	Reinstall.	
13234	FFlipInput	[%s] %s (%s): [New]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13235	FFlipInput	[%s] %s (%s): [Repeat]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13236	FFlipInput	[%s] %s (%s): [Again]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13237	FFlipInput	[%s] %s (%s): [Add]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13238	FFlipInput	[%s] %s (%s): [Delete]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13239	FFlipInput	[%s] %s (%s): [Prev]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13240	FFlipInput	[%s] %s (%s): [Next]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13241	FFlipInput	[%s] %s (%s): [Monitor Mode]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13242	FFlipInput	[%s] %s (%s): [QA]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13243	FFlipInput	[%s] %s (%s): [Change]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13244	FFlipInput	[%s] %s (%s): [AP/PA]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13245	FFlipInput	[%s] %s (%s): [EDR Mode]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13246	FFlipInput	[%s] %s (%s): [Film Format]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13247	FFlipInput	[%s] %s (%s): [Detail]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13248	FFlipInput	[%s] %s (%s): [New]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13249	FFlipInput	[%s] %s (%s): [Repeat]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13250	FFlipInput	[%s] %s (%s): [Again]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13251	FFlipInput	[%s] %s (%s): [Add]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13252	FFlipInput	[%s] %s (%s): [Delete]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13253	FFlipInput	[%s] %s (%s): [Prev]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13254	FFlipInput	[%s] %s (%s): [Next]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13255	FFlipInput	[%s] %s (%s): [Monitor Mode]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13256	FFlipInput	[%s] %s (%s): [QA]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13257	FFlipInput	[%s] %s (%s): [Change]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13258	FFlipInput	[%s] %s (%s): [AP/PA]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13259	FFlipInput	[%s] %s (%s): [EDR Mode]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13260	FFlipInput	[%s] %s (%s): [Film Format]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13261	FFlipInput	[%s] %s (%s): [Detail]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13262	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[New]	The bmp file path/bmp file was abnormal.	Reinstall.	
13263	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Normal]	Id_NormalImage_U.bmp/"Id_NormalImage_ D.bmp"/"Id_NormalImage_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13264	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[LR]	Id_LR_Reverse_U.bmp/"Id_LR_Reverse_ D.bmp"/"Id_LR_Reverse_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13265	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[TB]	Id_TB_Reverse_U.bmp/"Id_TB_Reverse_ D.bmp"/"Id_TB_Reverse_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	

Event	Event Source	Description	Causes	Remedies	Remarks
13266	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[TB LR]	Id_Rotation180_U.bmp/"Id_Rotation180_ D.bmp"/"Id_Rotation180_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13267	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Rotation]	Id_Rotation90_U.bmp/"Id_Rotation90_D.bmp"/ "Id_Rotation90_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13268	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Single]	Id_Single_U.bmp/"Id_Single_D.bmp"/"Id_ Single_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13269	FFlipInput	[%s] %s (%s): Failed in Image Acquisition[Twin]	Id_Twin_U.bmp/"Id_Twin_D.bmp"/"Id_Twin_ X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13270	FFlipInput	[%s] %s (%s): An Illegal Film Mark Character Was Detected	The film mark database was damaged.	Reinstall.	
13271	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[FIX]	The "LangStrDB" key was not found in Directory.ini or the ID "33502" was not registered in the character string database.	Reinstall.	
13272	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Skfix]	The "LangStrDB" key was not found in Directory.ini or the ID "33503" was not registered in the character string database.	Reinstall.	
13273	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[SEMI-X]	The "LangStrDB" key was not found in Directory.ini or the ID "33504" was not registered in the character string database.	Reinstall.	
13274	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition [DensityAverage]	The "LangStrDB" key was not found in Directory.ini or the ID "33505" was not registered in the character string database.	Reinstall.	
13275	FFlipInput	[%s] %s (%s): [Utility]Button Image Get Error	Id_Utility_U.bmp/"Id_Utility_D.bmp"/"Id_Utility_ X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13276	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Alarm Stop]	The "LangStrDB" key was not found in Directory.ini or the ID "32700" was not registered in the character string database.	Reinstall.	
13277	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Exit]	The character string database was damaged.	Reinstall.	
13278	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[User Utility]	The character string database was damaged.	Reinstall.	
13279	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[List Setting]	The character string database was damaged.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13280	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Version]	The character string database was damaged.	Reinstall.	
13281	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[CANCEL]	The character string database was damaged.	Reinstall.	
13282	FFlipInput	[%s] %s (%s): [Clear]Button Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13283	FFlipInput	[%s] %s (%s): [Clear]Button ToolTipText Get Error	The character string database was damaged.	Reinstall.	
13284	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[CANCEL]	The "LangStrDB" key was not found in Directory.ini or the ID "35000" was not registered in the character string database.	Reinstall.	
13285	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[DUST]	The "LangStrDB" key was not found in Directory.ini or the ID "35001" was not registered in the character string database.	Reinstall.	
13286	FFlipInput	[%s] %s (%s): Tooltip Text Get Error	The character string database was damaged.	Reinstall.	
13287	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[TitleBar]	The character string database was damaged.	Reinstall.	
13288	FFlipInput	[%s] %s (%s): Failed in Caption Acquisition[Option]	The character string database was damaged.	Reinstall.	
13289	FFlipInput	[%s] %s (%s): Version Info Get Error	The registry was damaged.	Reinstall.	
13290	FFlipInput	[%s] %s (%s): Option List Get Error	The registry was damaged.	Reinstall.	
13291	FFlipInput	[%s] %s (%s): [Cassette Acceptable]Image Get Error	Id_RuProcess_I.bmp was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13292	FFlipInput	[%s] %s (%s): [Cassette Unacceptable]Image Get Error	Id_RuProcessN_I.bmp was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13293	FFlipInput	[%s] %s (%s): [Miss]Image Get Error	The bmp file path/bmp file was abnormal.	Reinstall.	
13294	FFlipInput	[%s] %s (%s): [Image Style]Button Image Get Error	Id_ApPa_U.bmp/"Id_ApPa_D.bmp"/"Id_ApPa_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13295	FFlipInput	[%s] %s (%s): [EDR]Button Image Get Error	Id_Edr_U.bmp/"Id_Edr_D.bmp"/"Id_Edr_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	

Event	Event Source	Description	Causes	Remedies	Remarks
13296	FFlipInput	[%s] %s (%s): [Function]Button Image Get Error	Id_Edr_U.bmp/"Id_Edr_D.bmp"/"Id_Edr_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13297	FFlipInput	[%s] %s (%s): [Film Count]Button Image Get Error	Id_FilmCount_U.bmp/"Id_FilmCount_D.bmp"/" Id_FilmCount_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13298	FFlipInput	[%s] %s (%s): [Ip Size]Button Image Get Error	Id_IpSize_U.bmp/"Id_IpSize_D.bmp"/"Id_ IpSize_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13299	FFlipInput	[%s] %s (%s): [Image Format]Button Image Get Error	Id_FilmFormat_U.bmp/"Id_FilmFormat_D.bmp"/ "Id_FilmFormat_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13300	FFlipInput	[%s] %s (%s): [Filing]Button Image Get Error	Id_FilingMode_U.bmp/"Id_FilingMode_D.bmp"/ "Id_FilingMode_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13301	FFlipInput	[%s] %s (%s): [Film Marke]Button Image Get Error	Id_FilmMark_U.bmp/"Id_FilmMark_D.bmp"/"Id_ FilmMark_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13302	FFlipInput	[%s] %s (%s): [Distribution Code]Button Image Get Error	Id_DistributionCode_U.bmp/"Id_DistributionCode _D.bmp"/"Id_DistributionCode_X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13303	FFlipInput	[%s] %s (%s): [CSSS]Button Image Get Error	Id_CsCs_U.bmp/"Id_CsCs_D.bmp"/"Id_CsCs_ X.bmp" was not found in the path to an image folder or the image format was illegal.	Reinstall the IIP because the button cannot be displayed normally.	
13304	FFlipInput	[%s] %s (%s): Image Data Connection Disconnected	The line was abnormal.	Check the line.	
13309	FFlipInput	[%s] %s (%s): Failed in Patient Information	The patient information contained an illegal character string.	Ensure that the patient information does not contain any illegal character string.	
13345	FFIdDepartSelect	%1 (%2) : Database Data Get Error%n Database [%3]%n Table [%4]%n Key [%5]	The database was damaged.	Reinstall.	
13345	FFIdFilmMark	%1 (%2) : Database Data Get Error%n Database [%3]%n Table [%4]%n Key [%5]	The database was damaged.	Reinstall.	
13345	FFIdMcrControl	IdMcrControl (threadMcrRead) : Database Data Get Error	The database was faulty.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13345	FFIdParamedicSelect	%1 (%2) : Database Data Get Error%n Database [%3]%n Table [%4]%n Key [%5]	The database was damaged.	Reinstall.	
13345	FFIdPatInfoInput	%1 (%2) : Database Data Get Error%n Database [%3]%n Table [%4]%n Key [%5]	The database was damaged.	Reinstall.	
13345	FFIipInput	%1 (%2) : Database Data Get Error%n Database [%3]%n Table [%4]%n Key [%5]	The database was damaged.	Reinstall.	
13346	FFIipInput	%1 (%2) : Patient Information Check Error%n Item [%3]%n Error [%4]	The patient information contained illegal information.	Correct the patient information setup.	
13347	FFIipInput	%1 (%2) : Caption Get Error%n CaptionId [%3]	The character string database was damaged.	Reinstall.	
13348	FFIdDepartSelect	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13348	FFIdFilmMark	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13348	FFIdMenuChange	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13348	FFIdParamedicSelect	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13348	FFIdPatInfoInput	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13348	FFIipInput	%1 (%2) : Registry Data Get Error%n Value [%3]	The registry was damaged.	Reinstall.	
13349	FFIdDepartSelect	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13349	FFIdFilmMark	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	
13349	FFIdMenuChange	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	
13349	FFIdParamedicSelect	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	
13349	FFIdPatInfoInput	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	
13349	FFIipInput	%1 (%2) : INI File Data Get Error%n Key [%3]	Directory.ini was damaged.	Reinstall.	
13350	FFIdFilmMark	%1 (%2) : Bitmap Image Get Error%n BMP File [%3]	The bmp file path or bmp file was abnormal.	Reinstall.	
13350	FFIdMenuChange	%1 (%2) : Bitmap Image Get Error%n BMP File [%3]	The bmp file path or bmp file was abnormal.	Reinstall.	
13350	FFIipInput	%1 (%2) : Bitmap Image Get Error%n BMP File [%3]	The bmp file path or bmp file was abnormal.	Reinstall.	
13352	FFIipInput	%1 (%2) : Dicom MWM & PPS Option Not Install	The DICOM MWM & PPS option was not installed.	Install the DICOM MWM & PPS option.	
13353	FFIipInput	%1 (%2) : Dicom MWM Option Not Install	The DICOM MWM option was not installed.	Install the DICOM MWM option.	
13362	FFIipInput	%1 (%2) : Not Entry Host Name	The host name for the local enclosure was not successfully acquired.	With the service utility, register the host information about the PPS local enclosure.	
13370	FFIipInput	%1 (%2) : PPS Request Failure [IN PROGRESS]	The equipment connection was faulty or the remote equipment power was OFF.	Retry.	
13371	FFIipInput	%1 (%2) : PPS Request Failure [COMPLETED]	The equipment connection was faulty or the remote equipment power was OFF.	Retry.	
13372	FFIipInput	%1 (%2) : PPS Request Failure [DISCONTINUED]	The equipment connection was faulty or the remote equipment power was OFF.	Retry.	
13382	FFIipInput	%1 (%2) : Study List Refresh Exception%nError [%3]		Retry.	
13386	FFIipInput	%1 (%2) : Failed in data reception%n[Online Time Out]	The serial cable was broken or the connected equipment did not respond.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
13389	FFIdDepartSelect	%1 (%2) : Database Connection Error%n Database [%3]%n	The database was damaged.	Reinstall.	
13389	FFIdFilmMark	%1 (%2) : Database Connection Error%n Database [%3]%n	The database was damaged.	Reinstall.	
13389	FFIdParamedicSelect	%1 (%2) : Database Connection Error%n Database [%3]%n	The database was damaged.	Reinstall.	
13389	FFIdPatInfoInput	%1 (%2) : Database Connection Error%n Database [%3]%n	The database was damaged.	Reinstall.	
13389	FFIipInput	%1 (%2) : Database Connection Error%n Database [%3]%	The database was damaged.	Reinstall.	
13392	FFIipInput	%1 (%2) : BCR Control Initialize Error	The barcode reader was not connected.	Connect the barcode reader.	
13420	FFIipInput	%1 (%2) : Failed in Menu Clear.%nInternal Error in Builtin [%3]	A problem occurred in the 550X unit when a cleared menu was reported.	Check the 550X unit.	
13421	FFIipInput	%1 (%2) : Menu Clear Command Time out [%3]	A timeout occurred because the 550X unit did not respond to a report about a cleared menu	Check the 550X unit (power supply, cable, etc.).	
13423	FFIipInput	%1 (%2) : Failed in Ip Shelter.%nFatal Error [%3]	A problem occurred in the 550X unit during the IP evacuation sequence.	Check the 550X unit.	
13424	FFIipInput	%1 (%2) : Failed in Ip Shelter.%nIntervention Error in Builtin [%3]	A problem occurred in the 550X unit during the IP evacuation sequence.	Check the 550X unit. Solve the problem with a UTL or the like.	
13425	FFIipInput	%1 (%2) : Failed in Ip Shelter.%nInternal Error in Builtin [%3]	A problem occurred in the 550X unit during the IP evacuation sequence.	Check the 550X unit.	
13426	FFIipInput	%1 (%2) : Ip Shelter Command Time out [%3]	A timeout occurred because the 550X unit did not respond to an IP evacuation request.	Check the 550X unit (power supply, cable, etc.)	
13428	FFIipInput	%1 (%2) : Failed in Menu Fixed.%nConnection Error to Builtin [%3]	A line abnormality was encountered.	Check the line.	
13429	FFIipInput	%1 (%2) : Failed in Menu Fixed.%nInternal Error in Builtin [%3]	A problem occurred in the 550X unit when a finalized menu was reported.	Check the 550X unit.	
13430	FFIipInput	%1 (%2) : Menu Fixed Command Time out [%3]	A timeout occurred because the 550X unit did not respond to a report about a finalized menu.	Check the 550X unit (power supply, cable, etc.).	
13432	FFIipInput	%1 (%2) : Failed in Ip Size%nConnection Error to Builtin [%3]	A line abnormality was encountered.	Check the line.	

Event	Event Source	Description	Causes	Remedies	Remarks
13435	FFlipInput	%1 (%2) : Failed in Ip Size.%nInternal Error in Builtin [%3]	A problem occurred in the 550X unit when a size notification request was issued.	Check the 550X unit.	
13436	FFlipInput	%1 (%2) : Ip Size Command Time out [%3]	A timeout occurred because the 550X unit did not respond to a size notification request.	Check the 550X unit (power supply, cable, etc.).	
13438	FFlipInput	%1 (%2) : Failed in Ip Set.%nFatal Error [%3]	A problem occurred in the 550X unit during the IP setup sequence.	Check the 550X unit.	
13439	FFlipInput	%1 (%2) : Failed in Ip Set.%nIntervention Error in Builtin [%3]	A problem occurred in the 550X unit during the IP setup sequence.	Check the 550X unit. Solve the problem with a UTL or the like.	
13440	FFlipInput	%1 (%2) : Failed in Ip Set.%nInternal Error in Builtin [%3]	A problem occurred in the 550X unit during the IP setup sequence.	Check the 550X unit.	
13441	FFlipInput	%1 (%2) : Ip Set Command Time out [%3]	A timeout occurred because the 550X unit did not respond to an IP setup request.	Check the 550X unit (power supply, cable, etc.).	
13442	FFlipInput	%1 (%2) : Ip Delete Command Time out [%3]	A timeout occurred because the 550X unit did not issue an IP deletion request.	Check the 550X unit (power supply, cable, etc.).	
13443	FFlipInput	%1 (%2) : Cannot Change Patient Info EditMode [%3]	An attempt was made to change the patient information during an image input sequence (patient information change button: inactive).	Change the information after completion of image input.	
13444	FFlipInput	%1 (%2) : Cannot End Examination ExamEndMode [%3]	An attempt was made to terminate a study during an image input sequence (study end button: inactive).	Terminate the study after completion of image input.	
13447	FFlipInput	%1 : IipInput.exe [Starts]	IipInput.exe is started (information).		
13448	FFlipInput	%1 : IipInput.exe [Normal Termination]	IipInput.exe is terminated (information).		
13449	FFlipInput	%1 : IipInput.exe [Forced Termination]	IipInput.exe is terminated (information).		
13451	FFlipInput	%1 (%2) : Failed in Get Ip Information Response.%nConnection Error to Builtin [%3]	Line error.	Check the 550X unit (power supply, cable, etc.).	
13452	FFlipInput	%1 (%2) : Get Ip Information Response Time out [%3]	A timeout occurred when an attempt was made to respond to an ID information request from the 550X unit.	Check the 550X unit (power supply, cable, etc.).	
13457	FFlipInput	%1 (%2) : Image Processing Information <InImg>	This error occurs if the image processing parameter file does not exist.		
13458	FFlipInput	%1 (%2) : Failed in Connection Between Reader and Console.%nIIP[%3]%nRU[-%4]	Setup error.	Change IIP's SysConfig setup or RU's connection style.	

Event	Event Source	Description	Causes	Remedies	Remarks
13459	FFlipInput	%1 (%2) : Wait Timeout for X-Cont Shot Result	The XCON shot result reception timeout value for built-in type exposures was found improper.	Review the XCON shot result reception timeout value for built-in type exposures.	
13462	FFlipInput	%1 (%2) : Ordering Exposure Menu Not Entry [%3]	The exposure menu received as the ordering information was not registered.	Register the exposure menu with the user utility.	
13470	FFlipInput	%1 (%2) : Exposure Menu Register Error.	The exposure menu received as the ordering information was not registered.	Register the exposure menu with the user utility.	
13471	FFlipInput	%1 (%2) : All Exposure Menu Register Error.	The exposure menu received as the ordering information was not registered	Register the exposure menu with the user utility.	
13472	FFlipInput	%1 (%2) : Selected Menu is Done. XCON Result Information is annulled. [%3]	The exposure process for the selected exposure menu was already performed. The result data received from the XCON will be discarded.	Select a menu for which an exposure process has not been performed.	
13473	FFlipInput	%1 (%2) : Menu is not Selected. XCON Result Information is annulled. [%3]	No exposure menu was selected. The result data received from the XCON will be discarded.	Select a menu for which an exposure process has not been performed.	
13474	FFlipInput	%1 (%2) : Exceeded the Limitation Value of XCON Exposure Data. [%3 = %4]	The XCON parameter was improperly set.	Reregister the XCON parameter with the user utility.	
13475	FFlipInput	%1 (%2) : Failed in Ordering Data.[RIS]	The patient exposure order information sent from the RIS was abnormal.		
13477	FFlipInput	%1 (%2) : Exposure Menu Register Error.	The exposure menu specified by the received ordering information was not registered.	Register the exposure menu with the user utility.	
13478	FFlipInput	%1 (%2) : All Exposure Menu Register Error.	The exposure menu specified by the received ordering information was not registered.	Register the exposure menu with the user utility.	
13479	FFlipInput	%1 (%2) : Failed in Examination End Command.[Ris]	The order exposure study termination signal was received from the RIS although an order exposure was not received.	Check the RIS settings.	
13480	FFlipInput	%1 (%2) : Failed in Communication with RIS. [%3]%n[%4]	The problem is attributable to a disconnected line or invalid parameter.	Check the equipment and cables.	
13483	FFlipInput	%1 (%2) : Menu is not Selected. Failed in Getting ID Information	An ID acquisition request was received from built-in type equipment although no exposure menu was selected.	Make a menu selection and then press the OK button on the built-in type Console.	
13901	IIPInputEz	%1 : Registory Value Get/Set Error%n [Key] %2%n [Exp] %3%n %4%n %5	The acquisition/setup key or registration information was abnormal.	Check the registry key.	

Event	Event Source	Description	Causes	Remedies	Remarks
13902	IIPInputEz	%1 : Database Connection Error%n [DB] %2%n [Exp] %3%n %4%n %5	This error is attributable to an abnormal character string in Directory.ini, an incorrect database file name, or a damaged database.	Check Directory.ini or database file name.	
13903	IIPInputEz	%1 : Database Data Get/Set Error%n [DB] %2%n [Table] %3%n [Field] %4%n [Exp] %5	The acquisition/setup key or database was abnormal.	Check the database table/field name.	
13903	IIPInputEz	%1 : Dicom Data Object Get/Set Error%n [Tag] %2%n [Exp] %3%n %4%n %5	The DDO acquisition/setup tag was abnormal.	Check the DDO tag.	
13904	IIPInputEz	%1 : Other Error%n [Proceedure] %2%n [ErrorCode] %3%n [Exp] %4%n %5	Unknown error.		
13998	FFIipInput	%1 (%2) : [%3]	General information event log.		
19001	FFDICOMCommit SCU	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMCommit SCU	Initialization failed. [DPC Invoke fail]	DPC thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMCommit SCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMEchoSCU	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMEchoSCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMMPPSSCU	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMMPPSSCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMMWLSCU	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMMWLSCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
19001	FFDICOMPrintSCU	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMPrintSCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMStoreSCP	Initialization failed. [DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMStoreSCP	Initialization failed. [DPC Invoke fail]	DPC thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMStoreSCP	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMStoreSCU	Initialization failed. DPM Invoke fail]	DPM thread generation was unsuccessful. The system was unstable.	Restart.	
19001	FFDICOMStoreSCU	Initialization failed. [Insufficient memory]	Instance generation was unsuccessful. The system was unstable.	Restart.	
19002	FFDICOMCommit SCU	Method Invoke failed. [PushPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMCommit SCU	Method Invoke failed. [DiscontinueRequest]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMEchoSCU	Method Invoke failed. [EchoPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMMPPSSCU	Method Invoke failed. [CreatePrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMMPPSSCU	Method Invoke failed. [SetPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMMWLSCU	Method Invoke failed. [FindPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMMWLSCU	Method Invoke failed. [CancelPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMPrintSCU	Method Invoke failed. [PrintPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMPrintSCU	Method Invoke failed. [GetPrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMPrintSCU	Method Invoke failed. [DiscontinueRequest]	A message was not successfully transmitted. The system was unstable.	Restart.	
19002	FFDICOMStoreSCU	Method Invoke failed. [StorePrc]	A message was not successfully transmitted. The system was unstable.	Restart.	
19003	FFDICOMCommit SCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	

Event	Event Source	Description	Causes	Remedies	Remarks
19003	FFDICOMEchoSCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19003	FFDICOMMPPSSCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19003	FFDICOMMWLSCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19003	FFDICOMPrintSCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19003	FFDICOMStoreSCP	File I/O failed. [Communication log file name]	An adequate disk space was not available.	Check the available disk space.	
19003	FFDICOMStoreSCP	File I/O failed. [Communication log file name]	An image-related file was not successfully accessed. The problem is attributable to a disk.	Restart. If the same symptom frequently occurs, replace the disk.	
19003	FFDICOMStoreSCP	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19003	FFDICOMStoreSCU	File I/O failed. [Communication log file name]	A communication log file was not successfully opened.	Although the communication log cannot be obtained, execution is possible.	
19900	IIPInputEz	%1 : Registory Value Get/Set Error%n [Key] %2%n [Exp] %3%n %4%n %5	The acquisition/setup key or registration information was abnormal.	Check the registry key.	
19901	IIPInputEz	%1 : Database Connection Error%n [DB] %2%n [Exp] %3%n %4%n %5	This error is attributable to an abnormal character string in Directory.ini, an incorrect database file name, or a damaged database.	Check Directory.ini or database file name.	
19902	IIPInputEz	%1 : Database Data Get/Set Error%n [DB] %2%n [Table] %3%n [Field] %4%n [Exp] %5	The acquisition/setup key or database was abnormal.	Check the database table/field name.	

Event	Event Source	Description	Causes	Remedies	Remarks
19903	IIPInputEz	%1 : Dicom Data Object Get/Set Error%n [Tag] %2%n [Exp] %3%n %4%n %5	The DDO acquisition/setup tag was abnormal.	Check the DDO tag.	
19904	IIPInputEz	%1 : Other Error%n [Proceedure] %2%n [ErrorCode] %3%n [Exp] %4%n %5	Unknown error.		
20001	FFCtrlProc	It failed in CreateProcess. It has the possibility that an executive file doesn't exist. The start treatment can't be continued. /CtrlProc:RunProc() %1	A subprocess was not successfully started up. The system was unstable or a necessary executable file was not found.	Restart. If the same symptom occurs after a restart, reinstall.	A subsystem name is placed in the "%1" position.
20002	FFCtrlProc	Process start information is unusual. The start treatment can't be continued. . /CtrlProc:RunProc()	An illegal parameter was used for process startup. It is conceivable that the contents of the process information database were wrong.	Restart. If the same symptom occurs after a restart, reinstall.	
20003	FFCtrlProc	It failed in the completion message preparation treatment. The treatment can't be continued. /CtrlProc:EndProc()	A process end request message was not successfully created. It is conceivable that the available resource was not adequate or that the system was unstable.	Restart.	
20004	FFCtrlProc	It failed in the completion message transmitting treatment. The treatment can't be continued. /CtrlProc:EndProc()	A process end request message was not successfully transmitted. It is conceivable that the transmission destination process was down or that the transmission destination was wrong.	Restart.	
20005	FFCtrlProc	It failed in the switching message preparation treatment. The treatment can't be continued. /CtrlProc:ChangeProc()	A window show/hide message was not successfully created. It is conceivable that the available resource was not adequate or that the system was unstable.	Restart.	
20006	FFCtrlProc	It failed in the switching message transmitting treatment. The treatment can't be continued. /CtrlProc:ChangeProc()	A window show/hide message was not successfully transmitted. It is conceivable that the transmission destination process was down or that the transmission destination was wrong.	Restart. If the same symptom occurs after a restart, reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
20007	FFCtrlProc	It failed in CreateProcess. It has the possibility that an executive file doesn't exist. The start treatment can't be continued. /CtrlProc:SetInitProcEnd()	A window show/hide message was not successfully transmitted. It is conceivable that the transmission destination process was down or that the transmission destination was wrong.	Restart. If the same symptom occurs after a restart, reinstall.	
20102	FFCustomMsgBox	[20102] Setup not completed.	It is conceivable that the application key was not installed.	Install the application key.	Main
20104	FFCustomMsgBox	[20104] Failed in securing system settings.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom occurs after a restart, reinstall.	Main
20104	FFIIPMAIN	It failed in the acquisition of the configration information. The initialization treatment can't be continued. /MainProcess:Main()	The configuration information was not successfully acquired. This error occurred due to an improper installation or system instability.	Restart. If the same symptom recurs, perform a reinstallation.	
20105	FFCustomMsgBox	[20105] Failed in accessing the process control database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom occurs after a restart, reinstall.	Main
20105	FFIIPMAIN	It failed in the acquisition of the process information data base. The initialization treatment can't be continued. /MainProcess:Main()	Data was not successfully acquired from the process information database. This error occurred due to an improper installation or system instability.	Restart. If the same symptom recurs, perform a reinstallation.	
20106	FFCustomMsgBox	[20106] Failed in accessing the message distribution control database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom occurs after a restart, reinstall.	Main
20106	FFIIPMAIN	It failed in opening of the message data base. The initialization treatment can't be continued. /MainProcess:Main()	The message database was not successfully opened. This error occurred due to an improper installation or system instability.	Restart. If the same symptom recurs, perform a reinstallation.	
20108	FFCustomMsgBox	[20108] Failed in process activation.	A subprocess was not successfully started up for some reason.	View the event logs around to examine the cause.	Main
20108	FFIIPMAIN	It failed in the start of the sub-process. The initialization treatment can't be continued. /MainProcess:Main()	The subprocess was not successfully started. This error occurred due to an improper installation or system instability.	Restart. If the same symptom recurs, perform a reinstallation.	
20110	FFCustomMsgBox	[20110] Failed in initialization processing.	The subprocess was not successfully started. It is conceivable that the system was unstable. This error may also occur as a consequence of the occurrence of another error.	Check for error messages and warnings issued before the occurrence of this error and then take a remedial action. Or, restart. If the same symptom recurs, perform a reinstallation.	Main

Event	Event Source	Description	Causes	Remedies	Remarks
20110	FFIIPMAIN	It failed in the start of the sub-process. The initialization treatment can't be continued. /MainProcess:m_Process-Control_OnRunProcCompl-ete()	The subprocess was not successfully started. This error occurred due to an improper installation or system instability	Restart. If the same symptom recurs, perform a reinstallation.	
20111	—	—	The MAC address could not be acquired.	Reinstall the network driver (delete it and then reinstall). Or, manually acquire the MAC address with the Service Utility' s MAC address acquisition function.	
20118	FFCustomMsgBox	[20118] Failed in process termination.	An error occurred for some reason during subprocess end processing.	No particular remedy needs be taken.	Main
20118	FFIIPMAIN	It failed in the completion of the sub-process. /MainProcess:ProcessEnd-Requirement()	The subprocess was not successfully terminated. The system was unstable.	Restart.	
20124	FFCustomMsgBox	[20124] Failed in process switchover.	A subprocess was not successfully conotrolled for some reason.	View the event logs around to examine the cause.	Main
20124	FFIIPMAIN	It failed in switching of the process. /MainProcess:xxxxx	A subprocess changeover was not successfully effected. The target subprocess was not active or the system was unstable.	Restart.	
21001	FFCustomMsgBox	[21001] Failed in connecting to the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	List
21002	FFCustomMsgBox	[21002] Failed in accessing the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	List
21003	FFCustomMsgBox	[21003] Failed in obtaining information from the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	List
21004	FFCustomMsgBox	[21004] Failed in accessing the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	Lis

Event	Event Source	Description	Causes	Remedies	Remarks
21005	FFCustomMsgBox	[21005] Failed in setting information to the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	List
21006	FFCustomMsgBox	[21006] Failed in deleting the study information.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	List
21007	FFCustomMsgBox	[21007] Failed in connecting to the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21008	FFCustomMsgBox	[21008] Failed in accessing the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21009	FFCustomMsgBox	[21009] Failed in obtaining information from the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21010	FFCustomMsgBox	[21010] Failed in connecting to the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21011	FFCustomMsgBox	[21011] Failed in accessing the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21012	FFCustomMsgBox	[21012] Failed in obtaining information from the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21013	FFCustomMsgBox	[21013] Failed in accessing the definition file.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21014	FFCustomMsgBox	[21014] Failed in opening the registry information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21015	FFCustomMsgBox	[21015] Failed in retrieving the registry information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21016	FFCustomMsgBox	[21016] Failed in writing the registry information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21017	FFCustomMsgBox	[21017] Failed in closing the registry information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	List
21018	FFCustomMsgBox	[21018] Failed in receiving message.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	List
21019	FFCustomMsgBox	[21019] Failed in canceling the output processing.	The selected image was being output or already deleted.	No particular response is required.	List
21020	FFCustomMsgBox	[21020] Failed in output.	The selected image was being output or already deleted.	No particular response is required.	List

Event	Event Source	Description	Causes	Remedies	Remarks
21021	FFCustomMsgBox	[21021] Failed in receiving the message.	The system was unstable.	No particular response is required.	List
21022	FFCustomMsgBox	[21022] Failed in initializing process for message communication.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	List
21023	FFCustomMsgBox	[21023] Failed in terminating process for message communication.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	List1
21051	FFCustomMsgBox	[21051] An unknown study was received from the RIS.	- Software version A06 or earlier was used for MWM connection. - Illegal data was contained in the study information received from the RIS.	- Upgrade the software to version A07 or later. - Check the RIS side setup information and the like.	
21052	FFMWMHelper	[MWMHelper]%1	This is an information log.	There is no particular problem with operations.	
21053	FFMWMHelper	[MWMHelper]%1	A warning condition is encountered. For details, refer to the contents of the event log.	There is no particular problem with operations.	
21054	FFMWMHelper	[MWMHelper]%1	An error occurred	Restart.	
21129	FFCustomMsgBox	[21129] The hard disk was full.	- The free hard disk space was insufficient. - The shuttering process was used with software version A07 or earlier. Or, a forced termination procedure was performed during a startup or freeze (when version A07 or earlier was used).	- Delete unnecessary images. If any images are left without being output, output them. - Upgrade the software to version A08 or later and then initialize the image database.	Main
22100	FFIIPListMoveImage	Warning. %1	A warning was issued. For details, see the contents of the event log.	There is no particular problem with operations.	
22103	FFIIPMAIN	It failed in the acquisition of the configration information. The initialization treatment can't be continued. /MainProcess:Main()	The version information was not successfully acquired. It is conceivable that the Version.env file did not exist in the specified directory or that the contents of the file were damaged.	Reinstall.	
22128	FFIIPMAIN	An error occurred in logfile backup treatment. /MainProcess:xxxxx	A log file backup was not successfully made. It is conceivable that the specified pathname was incorrect.	Reinstall. (Although there are no operational problems, various communication logs cannot be saved.)	
22200	FFIIPListMoveImage	Error. %1	An error occurred. For details, see the contents of the event log.	Since the process was aborted due to an error occurrence, it is conceivable that a data inconsistency may exist. Verify the data consistency.	
22201	FFIIPListMoveImage	Initialize Error. %1	The initialization process failed.	Restart.	
22202	FFIIPListMoveImage	FFGetString Error. %1	The FFGetString function returned an error.	Restart.	
22203	FFIIPListMoveImage	DB Connect Error. %1	The database connection was not successfully established.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
22204	FFIIPListMoveImage	DB Get Error. %	Data could not be acquired from the database.	Restart.	
22205	FFIIPListMoveImage	SetDB Error. %1	Data could not be set up for the database.	Restart.	
22206	FFIIPListMoveImage	Dicom Data Object Get Error. %1	Data could not be acquired from the Dicom Data Object.	Restart.	
22207	FFIIPListMoveImage	Dicom Data Object Set Error. %1	Data could not be set up for the Dicom Data Object.	Restart.	
22208	FFIIPListMoveImage	Dicom Data Object Set Error. %1	An exception error occurred.	Restart.	
23000	FFIIPListCustomize	RegCreateKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23000	FFIIPListSearch	RegCreateKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23000	FFMWMStudyList	RegCreateKey() returned with Error at %1. [%2]	The RegCreateKey function returned an error.	Restart.	
23000	FFStudyList, FFOutputList	RegCreateKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23000	FFIIPListMoveImage	Information. %1	Information log.	There is no particular problem with operations.	
23001	FFIIPListCustomize	RegOpenKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23001	FFIIPListSearch	RegOpenKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23001	FFMWMStudyList	RegOpenKey() returned with Error at %1. [%2]	The RegOpenKey function returned an error.	Restart.	
23001	FFMWMStudyList	RegOpenKey() returned with Error at %1. [%2]	The registry was not successfully opened (due to a program failure or system instability).	Restart.	
23001	FFStudyList, FFOutputList	RegOpenKey() returned with Error at %1.%n[%2]	This problem is attributable to an unprivileged user or installation failure.	Use the normal startup procedure or perform a reinstallation.	
23002	FFIIPListCustomize	RegCloseKey() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23002	FFIIPListSearch	RegCloseKey() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	

Event	Event Source	Description	Causes	Remedies	Remarks
23002	FFMWMStudyList	RegCloseKey() returned with Error at %1. [%2]	The RegCloseKey function returned an error.	Restart.	
23002	FFMWMStudyList	RegCloseKey() returned with Error at %1. [%2]	The registry was not successfully closed (due to a program failure or system instability).	Restart.	
23002	FFStudyList, FFOutputList	RegCloseKey() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23003	FFIIPListCustomize	RegQueryNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23003	FFIIPListSearch	RegQueryNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23003	FFMWMStudyList	RegQueryNumericValue() returned with Error at %1. [%2]	The RegQueryNumericValue function returned an error.	Restart.	
23003	FFMWMStudyList	RegQueryNumericValue() returned with Error at %1. [%2]	This error is caused by an unsuccessful data acquisition from the registry or an improper installation.	Perform a reinstallation or restart.	
23003	FFStudyList, FFOutputList	RegQueryNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23004	FFIIPListCustomize	RegSetNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23004	FFIIPListSearch	RegSetNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23004	FFMWMStudyList	RegSetNumericValue() returned with Error at %1. [%2]	The RegSetNumericValue function returned an error	Restart.	
23004	FFMWMStudyList	RegSetNumericValue() returned with Error at %1. [%2]	The data was not successfully written into the registry (due to a program failure or system instability).	Restart.	
23004	FFStudyList, FFOutputList	RegSetNumericValue() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23005	FFIIPListCustomize	FFGetString() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file.	Ensure that the Directory.ini file is normal, and then restart.	
23005	FFIIPListSearch	FFGetString() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file.	Ensure that the Directory.ini file is normal, and then restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
23005	FFMWMStudyList	FFGetString() returned with Error at %1. [%2]	The FFGetString function returned an error.	Restart.	
23005	FFMWMStudyList	FFGetString() returned with Error at %1. [%2]	The FFGetString function failed. This problem is attributable to an improper installation.	Perform a reinstallation or restart.	
23005	FFStudyList, FFOutputList	FFGetString() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file.	Ensure that the Directory.ini file is normal, and then restart.	
23006	FFIIPListCustomize	FFStrDBConnect() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file or missing LangStr.mdb file.	Ensure that the Directory.ini file is normal, and then restart. Or, check the LangStr.mdb file.	
23006	FFIIPListSearch	FFStrDBConnect() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file or missing LangStr.mdb file.	Ensure that the Directory.ini file is normal, and then restart. Or, check the LangStr.mdb file.	
23006	FFMWMStudyList	FFStrDBConnect() returned with Error at %1. [%2]	The FFStrDBConnect function failed. The problem is due to an improper installation or system instability.	Perform a reinstallation or restart.	
23006	FFMWMStudyList	FFStrDBConnect() returned with Error at %1. [%2]	The FFStrDBConnect function returned an error.	Restart.	
23006	FFStudyList, FFOutputList	FFStrDBConnect() returned with Error at %1.%n[%2]	The problem is attributable to a damaged Directory.ini file or missing LangStr.mdb file.	Ensure that the Directory.ini file is normal, and then restart. Or, check the LangStr.mdb file.	
23007	FFIIPListCustomize	FFStrDBClose() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23007	FFIIPListSearch	FFStrDBClose() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23007	FFMWMStudyList	FFStrDBClose() returned with Error at %1. [%2]	The FFStrDBClose function failed.	Restart.	
23007	FFStudyList, FFOutputList	FFStrDBClose() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23008	FFIIPListCustomize	FFStrDBReadString() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23008	FFIIPListSearch	FFStrDBReadString() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23008	FFMWMStudyList	FFStrDBReadString() returned with Error at %1. [%2]	The FFStrDBReadString function returned an error.	Restart.	
23008	FFMWMStudyList	FFStrDBReadString() returned with Error at %1. [%2]	The FFStrDBReadString function failed. The problem is attributable to an improper installation.	Perform a reinstall or restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
23008	FFStudyList, FFOutputList	FFStrDBReadString() returned with Error at %1.%n[%2]	The LangStr.mdb file was damaged.	Check the LangStr.mdb file.	
23009	FFIIPListCustomize	FFRegGetKeySZ() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23009	FFIIPListSearch	FFRegGetKeySZ() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23009	FFMWMStudyList	FFRegGetKeySZ() returned with Error at %1. [%2]	The FFRegGetKeySZ function returned an error.	Restart.	
23009	FFMWMStudyList	FFRegGetKeySZ() returned with Error at %1. [%2]	The FFRegGetKeySZ function failed. This error is attributable to an improper installation.	Perform a reinstall or restart.	
23009	FFStudyList, FFOutputList	FFRegGetKeySZ() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23010	FFIIPListCustomize	FFRegGetKeyDWORD() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23010	FFIIPListSearch	FFRegGetKeyDWORD() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
23010	FFMWMStudyList	FFRegGetKeyDWORD() returned with Error at %1. [%2]	The FFRegGetKeyDWORD function returned an error.	Restart.	
23010	FFStudyList, FFOutputList	FFRegGetKeyDWORD() returned with Error at %1.%n[%2]	The problem is attributable to an unprivileged user.	Use the normal startup procedure.	
2300A	FFMWMStudyList	FFRegGetKeyDWORD() returned with Error at %1. [%2]	The FFRegGetKeyDWORD function failed. This error is attributable to an improper IIP installation.	Perform a reinstallation or restart.	
23011	FFStudyList, FFOutputList	FFSysDBConnect() returned with Error at %1.%n[%2]	This error is attributable to a damaged Directory.ini file or missing SysConfig.mdb file.	Ensure that the Directory.ini file is normal, and then restart. Or, check the SysConfig.mdb file.	
23012	FFStudyList, FFOutputList	FFSysDBClose() returned with Error at %1.%n[%2]	This error is attributable to a damaged Directory.ini file.	Check the SysConfig.mdb file.	
23013	FFStudyList, FFOutputList	FFSysDBReadszValue() returned with Error at %1.%n[%2]	This error is attributable to a damaged Directory.ini file.	Check the SysConfig.mdb file.	
23014	FFStudyList, FFOutputList	FFSysDBReadnValue() returned with Error at %1.%n[%2]	This error is attributable to a damaged Directory.ini file.	Check the SysConfig.mdb file.	
23015	FFStudyList, FFOutputList	Failed ImageDB Connection at %1.%n[%2]	The SQL Server Service Manager starts running or necessary files are not installed.	Ensure that the SQL Server is running.	

Event	Event Source	Description	Causes	Remedies	Remarks
23016	FFStudyList, FFOutputList	Failed ImageDB Disconnection at %1.%n[%2]	The SQL Server Service Manager starts running or necessary files are not installed.	Ensure that the SQL Server is running.	
23017	FFStudyList, FFOutputList	Failed ImageDB Open Recordset at %1.%n[%2]	The SQL Server Service Manager starts running or necessary files are not installed.	Ensure that the SQL Server is running.	
23018	FFStudyList, FFOutputList	Failed ImageDB Update Recordset at %1.%n[%2]	The SQL Server Service Manager starts running or necessary files are not installed.	Ensure that the SQL Server is running.	
23019	FFStudyList, FFOutputList	Failed ImageDB Close Recordset at %1.%n[%2]	The SQL Server Service Manager starts running or necessary files are not installed.	Ensure that the SQL Server is running.	
23099	FFIIPListCustomize	An unknown error occurred.%n[%1]	An unknown error occurred.	Restart.	
23099	FFIIPListSearch	An unknown error occurred.%n[%1]	An unknown error occurred.	Restart.	
23099	FFMWMStudyList	An unknown error occurred. [%1]	An exception error occurred.	Restart.	
23099	FFMWMStudyList	An unknown error occurred. [%1]	An unknown error occurred. This error is attributable to system instability.	Restart.	
23099	FFStudyList, FFOutputList	An unknown error occurred.%n[%1]	An unknown error occurred.	Restart.	
23108	FFIIPMAIN	It failed in the start of the sub-process. The initialization treatment can't be continued. /MainProcess:Main()	A subprocess was not successfully started up. It is conceivable that installation was not properly completed or that the system was unstable.	Restart. If the same symptom occurs after a restart, reinstall.	
23118	FFIIPMAIN	It failed in the completion of the sub-process. /MainProcess:ProcessEnd-Requirement()	A subprocess was not successfully ended. It is conceivable that the system was unstable.	Restart.	
23124	FFIIPMAIN	It failed in switching of the process. /MainProcess:xxxxx	Subprocess switching was not successfully performed. It is conceivable that the target subprocess was not running or that the system was unstable.	Restart.	
24001	FFCustomMsgBox	[24001] Selected study information will be fully deleted.	This dialog box opens for confirmation only.	No particular response is required.	List
24002	FFCustomMsgBox	[24002] No items displayed.	There were no items to be displayed in the list.	Select at least one display item.	List
24003	FFCustomMsgBox	[24003] The item width is too large.	The maximum display width was exceeded by the specified value.	Enter a smaller value.	List
24004	FFCustomMsgBox	[24004] Cancels the selected output request.	This dialog box opens for confirmation only.		List

Event	Event Source	Description	Causes	Remedies	Remarks
24005	FFCustomMsgBox	[24005] The search target string "%S" was not found.	No data matched the entered search criteria.		List
29001	FFCustomMsgBox	[29001] Unexpected operational message received from the output process.	It is highly probable that the program was faulty.		List
29002	FFCustomMsgBox	[29002] Unexpected command message received from the output process.	It is highly probable that the program was faulty.		List
29107	FFIIPMAIN	It failed in the preparation of the pipe. The treatment can't be continued. /MainProcess:Main()	The pipe for inter-process communication was not successfully created. It is conceivable that the system was unstable.	Restart.	
29112	FFIIPMAIN	It failed in the indication of the routine mode transition. /MainProcess:m_ProcessControl_OnRunProcComplete()	The routine transition instruction message was not successfully issued. It is conceivable that the subprocess was not running or that the pipe was not created.	Restart. If the same symptom occurs after a restart, reinstall.	
29114	FFIIPMAIN	An unusual message was received. This message is ignored. /MainProcess:m_ProcessComControl_OnRecvNotification()	The received message was unusual. It is conceivable that the message was not registered in the message information database or that the system was unstable.	Restart. If the same symptom occurs after a restart, reinstall.	
29115	FFIIPMAIN	An unusual send cause was received. This send cause is ignored. /MainProcess:m_ProcessComControl_OnRecvNotification()	A message was received from an unknown source. It is conceivable that the transmission source was not registered in the message information database or that a wrong transmission source was selected.	Restart. If the same symptom occurs after a restart, reinstall.	
29116	FFIIPMAIN	The form of the place of the transmission isn't right. /MainProcess:SendMessage()	An unknown transmission destination was specified for the received message. It is conceivable that the transmission destination was not registered in the message information database or that a wrong transmission destination was selected.	Restart. If the same symptom occurs after a restart, reinstall.	
29117	FFIIPMAIN	It failed in the message delivery. /MainProcess:SendMessage()	A message delivery was not successful. It is conceivable that the subprocess at the transmission destination was not running.	Restart. If the same symptom occurs after a restart, reinstall.	
29119	FFIIPMAIN	It failed in the process completion notice. /MainProcess:ProcessEndAnswerMessage()	An end notice was not successfully sent to the subprocess. It is conceivable that the subprocess was not running or that the system was unstable.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
29122	FFIIPMAIN	It failed in the unusual occurrence notice. /MainProcess:ErrorNotice-Message()	An error notice was not successfully sent to the subprocess. It is conceivable that the subprocess was not running or that the system was unstable.	Restart.	
29123	FFIIPMAIN	It failed in the pipe close. /MainProcess:EndMainPro-cess()	An inter-process communication pipe was not successfully closed. It is conceivable that the system was unstable.	Restart.	
29125	FFIIPMAIN	It failed in close of the message data base. /MainProcess:xxxxx	The message database was not successfully closed. It is conceivable that the system was unstable.	Restart.	
29126	FFIIPMAIN	It failed in reading of the registry information. /MainProcess:xxxxx	Data was not successfully acquired from the registry. It is conceivable that installation was not properly completed.	Reinstall.	
29127	FFIIPMAIN	It failed in writing of the registry information. /MainProcess:xxxxx	Data was not successfully written into the registry. It is conceivable that the system was unstable.	Restart.	
29130	FFCustomMsgBox	[29130] The system is now starting up.	This dialog box opens for confirmation only. It appears when the system returns from a user utility to an application.		
30001	FFCustomMsgBox	[30001] Failed in obtaining the connection characters to the character database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30002	FFCustomMsgBox	[30002] Failed in connecting to the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30003	FFCustomMsgBox	[30003] Failed in obtaining the connection characters to the system setting database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30004	FFCustomMsgBox	[30004] Failed in connecting to the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30005	FFCustomMsgBox	[30005] Failed in obtaining the connection characters to the image database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30019	FFCustomMsgBox	[30019] Failed in obtaining the connectiion characters to the network setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30045	FFCustomMsgBox	[30045] IP address on the Image Reader not obtained.	It is conceivable that the database file was damaged or improperly set.	Restart. If the same symptom recurs, perform a reinstallation.	
30057	FFCustomMsgBox	[30057] Failed in receiving the message.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
30085	FFCustomMsgBox	[30085] Failed in obtaining the connection characters to the Image Reader status information database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30105	FFCustomMsgBox	[30105] Failed in list initialization (waiting for study).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30106	FFCustomMsgBox	[30106] Failed in list initialization (waiting for QA).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30107	FFCustomMsgBox	[30107] Failed in list initialization (waiting for output).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30108	FFCustomMsgBox	[30108] Failed in list initialization (already output).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30109	FFCustomMsgBox	[30109] Failed in list initialization (all).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30110	FFCustomMsgBox	[30110] Failed in list initialization (today).	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
30121	FFCustomMsgBox	[30121]Failed in obtaining the connection characters to the Image Reader information database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30122	FFCustomMsgBox	[30122] Failed in accessing the Image Reader information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30125	FFCustomMsgBox	[30125] Failed in obtaining the system setting information (IP size series).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30129	FFCustomMsgBox	[30129] Failed in obtaining the system setting information (Pantomography processing).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30147	FFCustomMsgBox	[30147] Failed in obtaining the system setting information (Magnetic card type).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30148	FFCustomMsgBox	[30148] Failed in obtaining the system setting information (Magnetic card type).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
30149	FFCustomMsgBox	[30149] Failed in obtaining the system setting information (Hospital card used).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30150	FFCustomMsgBox	[30150] Failed in accessing the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30151	FFCustomMsgBox	[30151] Failed in initialization processing.	- The connection to the network was not established. - Node setup was not completed for " THIS HOST (IIP)" under " Network Config" . - The system was unstable.	- Connect to the network. - Set a dummy node for " THIS HOST (IIP)" (e.g., DICOM Print). - Restart. If the same symptom recurs, perform a reinstallation.	
30152	FFCustomMsgBox	[30152] Failed in obtaining the pass information (image data folder).	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30155	FFCustomMsgBox	[30155] Failed in list initialization (waiting for study).	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
30157	FFCustomMsgBox	[30157] Database access was unsuccessful.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
30200	FFCustomMsgBox	[30200] Failed in RIS activation.	There may be a problem with the RIS module or RIS setup.	Verify the settings and then restart. If the same symptom recurs, perform a reinstallation.	
30201	FFCustomMsgBox	[30201] A communication error with RIS occurred.	There may be a problem with the RIS module or RIS setup.	Verify the settings and then restart. If the same symptom recurs, perform a reinstallation	
30202	FFCustomMsgBox	[30202] A communication error with RIS occurred.	There may be a problem with the RIS module or RIS setup.	Verify the settings and then restart. If the same symptom recurs, perform a reinstallation	
31001	FFCustomMsgBox	[31001] Failed in obtaining the registry information (font name).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31002	FFCustomMsgBox	[31002] Failed in obtaining the registry information (font size).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31003	FFCustomMsgBox	[31003] Failed in obtaining the registry information (multi-byte language information).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31004	FFCustomMsgBox	[31004] Failed in obtaining the used language in system setting.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31005	FFCustomMsgBox	[31005] Failed in obtaining the connection characters to the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31006	FFCustomMsgBox	[31006] Failed in connecting to the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31007	FFCustomMsgBox	[31007] Failed in obtaining the connection characters to the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31008	FFCustomMsgBox	[31008] Failed in connecting to the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31010	FFCustomMsgBox	[31010] Failed in connecting to the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31011	FFCustomMsgBox	[31011] Failed in acquiring information from the image database.	- The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database. - Software version A07 or earlier was used.	- Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted). - Upgrade the software to version A08 or later.	
31012	FFCustomMsgBox	[31012] Failed in accessing the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31013	FFCustomMsgBox	[31013] Failed in obtaining the information from the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31014	FFCustomMsgBox	[31014] Failed in setting information to the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31015	FFCustomMsgBox	[31015] Failed in deleting the information from the image database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
31016	FFCustomMsgBox	[31016] Failed in connecting to the flag database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31017	FFCustomMsgBox	[31017] Failed in accessing the flag database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31018	FFCustomMsgBox	[31018] Failed in setting information to the flag database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31019	FFCustomMsgBox	[31019] Failed in initialization process for menu setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31020	FFCustomMsgBox	[31020] Failed in obtaining the menu information from the menu setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31021	FFCustomMsgBox	[31021] Failed in obtaining the menu parameter information from the menu setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31022	FFCustomMsgBox	[31022] Failed in terminating the menu setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31023	FFCustomMsgBox	[31023] Failed in obtaining the connection characters to the network setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31024	FFCustomMsgBox	[31024] Failed in connecting to the network setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31025	FFCustomMsgBox	[31025] Failed in obtaining the information from the network setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31026	FFCustomMsgBox	[31026] Failed in issuing the image information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31027	FFCustomMsgBox	[31027] Failed in obtaining the image information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31028	FFCustomMsgBox	[31028] Failed in setting the image information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31029	FFCustomMsgBox	[31029] Failed in deleting the image information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31030	FFCustomMsgBox	[31030] Failed in reading the image information file.	An image-related file was not successfully accessed. The problem is attributable to a disk.	Restart. If the same symptom frequently occurs, replace the disk.	
31031	FFCustomMsgBox	[31031] Failed in writing the image information file.	An image-related file was not successfully accessed. The problem is attributable to a disk.	Restart. If the same symptom frequently occurs, replace the disk.	
31032	FFCustomMsgBox	[31032] Failed in releasing the image information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31033	FFCustomMsgBox	[31033] Failed in obtaining the caption information (ID#).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31034	FFCustomMsgBox	[31034] Failed in obtaining the caption information (study#).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31035	FFCustomMsgBox	[31035] Failed in obtaining the caption information (patient name).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31036	FFCustomMsgBox	[31036] Failed in obtaining the caption information (Kanji-patient name).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31037	FFCustomMsgBox	[31037] Failed in obtaining the caption information (sex).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31038	FFCustomMsgBox	[31038] Failed in obtaining the caption information (sex: M).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31039	FFCustomMsgBox	[31039] Failed in obtaining the caption information (sex: F).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31040	FFCustomMsgBox	[31040] Failed in obtaining the caption information (sex: O).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31041	FFCustomMsgBox	[31041] Failed in obtaining the caption information (data of birth).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31042	FFCustomMsgBox	[31042] Failed in obtaining the system setting information (ID# input character limitation).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31043	FFCustomMsgBox	'[31043] Failed in obtaining the system setting information (Study # input character limitation).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31044	FFCustomMsgBox	[31044] Failed in obtaining the system setting information (ID # pudding format).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31045	FFCustomMsgBox	[31045] Failed in obtaining the system setting information (Study # pudding format).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31047	FFCustomMsgBox	[31047] Failed in obtaining the system setting information (date of birth format).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31051	FFCustomMsgBox	[31051] Invalid character is input in ID #.	A 2-byte character, @, or other unacceptable character was contained.	Make a proper entry.	
31052	FFCustomMsgBox	[31052] Invalid character is input in Study #.	A 2-byte character, @, or other unacceptable character was contained.	Make a proper entry.	
31053	FFCustomMsgBox	[31053] Invalid character is input in patient name.	A 2-byte character, @, or other unacceptable character was contained.	Make a proper entry.	
31054	FFCustomMsgBox	[31054] Invalid character is input in kanji-patient name.	A 1-byte character or other unacceptable character was contained.	Make a proper entry.	
31055	FFCustomMsgBox	[31055] Invalid character is input in sex.	A character other than "M", "F", and "O" was contained.	Make a proper entry.	
31056	FFCustomMsgBox	[31056] Invalid format for date of birth is input.	The entry did not agree with a preselected birth date format.	Make a proper entry.	
31057	FFCustomMsgBox	[31057] Failed in accessing the requesting department database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31058	FFCustomMsgBox	[31058] Failed in obtaining the caption information (requesting dep.).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31059	FFCustomMsgBox	[31059] Failed in obtaining the item information for displaying in the requesting dep. Selection list.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31060	FFCustomMsgBox	[31060] Failed in obtaining the requesting department information.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31061	FFCustomMsgBox	[31061] Failed in obtaining the connection characters to the requesting department database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31062	FFCustomMsgBox	[31062] Failed in accessing the technician information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31063	FFCustomMsgBox	[31063] Failed in caption information (technician).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31064	FFCustomMsgBox	[31064] Failed in obtaining the item information for displaying in the technician selection list.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31065	FFCustomMsgBox	[31065] Failed in obtaining the technician information.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31066	FFCustomMsgBox	[31066] Failed in obtaining the connection characters to the technician database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31067	FFCustomMsgBox	[31067] Failed in obtaining the registry information (window size).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31068	FFCustomMsgBox	[31068] No patient information is input.	Nothing was entered in the patient information input field.	Enter at least the patient's sex.	
31069	FFCustomMsgBox	[31069] Failed in obtaining the system setting information (succeeded from exposure menu reservation list).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31070	FFCustomMsgBox	[31070] Multiple studies cannot be executed.	An attempt was made to start an examination process with more than one examination item selected from an examination waiting list.	Start an examination process with one examination item selected.	
31071	FFCustomMsgBox	[31071] No list is selected.	An attempt was made to start execution with no examination item selected.	Select at least one examination item.	
31072	FFCustomMsgBox	[31072] Invalid character is input for film annotation.	An unacceptable character was contained.	Make a proper entry.	
31074	FFCustomMsgBox	[31074] Failed in obtaining the information from the flag database.	The problem is attributable, for instance, to an inactive SQL service manager or uninitialized image database.	Check whether the SQL service manager is normally operating. If the symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
31076	FFCustomMsgBox	[31076] Failed in obtaining the button image (Clear button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31077	FFCustomMsgBox	[31077] Failed in obtaining the button image (OK button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31078	FFCustomMsgBox	[31078] Failed in obtaining the button image (Cancel button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31079	FFCustomMsgBox	[31079] Failed in obtaining the button image (increment button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31080	FFCustomMsgBox	[31080] Failed in obtaining the button image (decrement button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31081	FFCustomMsgBox	[31081] Failed in obtaining the button image (Next page button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31082	FFCustomMsgBox	[31082] Failed in obtaining the button image (previous page button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31097	FFCustomMsgBox	[31097] Failed in obtaining the information from the character database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31099	FFCustomMsgBox	[31099] An error of unknown cause occurred.	It is highly probable that the program was faulty.		
31101	FFCustomMsgBox	[31101] Failed in obtaining the pass information (log saving folder).	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31103	FFCustomMsgBox	[31103] Failed in calling up the patient information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31105	FFCustomMsgBox	[31105] Failed in terminating the image input subsystem.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31106	FFCustomMsgBox	[31106] Failed in terminating the image input subsystem.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31107	FFCustomMsgBox	[31107] Failed in image inputting process in the image input sub-system.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31108	FFCustomMsgBox	[31108] Failed in image inputting process in the image input sub-system.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31109	FFCustomMsgBox	[31109] Failed in image inputting process in the image input sub-system.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31110	FFCustomMsgBox	[31110] Failed in calling up the exposure menu.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31111	FFCustomMsgBox	[31111] Failed in study terminating process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31112	FFCustomMsgBox	[31112] Failed in image inputting process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31113	FFCustomMsgBox	[31113] Failed in image inputting process.	- Software version A07 or earlier was used. - The system was unstable.	- Upgrade the software to version A08 or later. - Restart. If the same symptom recurs, perform a reinstallation.	
31114	FFCustomMsgBox	[31114] Failed in specifying the urgent processing.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31116	FFCustomMsgBox	[31116] Communication line for monitoring the connection status with the Image Reader(%s) has broken.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31117	FFCustomMsgBox	[31117] No connection monitoring response from the Image Reader(%s).	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31118	FFCustomMsgBox	[31118] Control line with the Image Reader(%s) has broken.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31119	FFCustomMsgBox	[31119] No command response from the Image Reader(%s).	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31120	FFCustomMsgBox	[31120] Failed in Image Reader status control.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31121	FFCustomMsgBox	[31121] Command requested to the Image Reader has not been executed.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31122	FFCustomMsgBox	[31122] Failed in obtaining the information (status) from the Image Reader.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31123	FFCustomMsgBox	[31123] Failed in obtaining the information (machine code) from the Image Reader.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31124	FFCustomMsgBox	[31124] Failed in obtaining the information (FRUP version) from the Image Reader.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31125	FFCustomMsgBox	[31125] Failed in re-connecting with the Image Reader.	It is highly probable that the RU or line was faulty.	Check the RU and line.	
31126	FFCustomMsgBox	[31126] Failed in breaking connection with the Image Reader.	It is highly probable that the RU or line was faulty.	Check the RU and line.	

Event	Event Source	Description	Causes	Remedies	Remarks
31127	FFCustomMsgBox	[31127] Failed in obtaining the caption information (Study with QA completed).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31128	FFCustomMsgBox	[31128] Failed in obtaining the caption (only exposure competed).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31129	FFCustomMsgBox	[31129] Failed in obtaining the caption information (Study interrupt button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31130	FFCustomMsgBox	[31130] Failed in obtaining the caption information (Cancel button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31131	FFCustomMsgBox	[31131] Failed in obtaining the caption information (Study reception tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31132	FFCustomMsgBox	[31132] Failed in obtaining the caption information (waiting for study tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31133	FFCustomMsgBox	[31133] Failed in obtaining the caption information (waiting for QA tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31134	FFCustomMsgBox	[31134] Failed in obtaining the caption information (Waiting for output tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31135	FFCustomMsgBox	[31135] Failed in obtaining the caption information (Already output tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31136	FFCustomMsgBox	[31136] Failed in obtaining the caption information (All tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31137	FFCustomMsgBox	[31137] Failed in obtaining the caption information (Today tab).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31138	FFCustomMsgBox	[31138] Failed in obtaining the button image (System button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31139	FFCustomMsgBox	[31139] Failed in obtaining the caption information (Study reservation button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31140	FFCustomMsgBox	[31140] Failed in obtaining the caption information (Study start button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31141	FFCustomMsgBox	[31141] Patient information is illegal.	An unacceptable character was contained.	Make a proper entry.	
31142	FFCustomMsgBox	[31142] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31143	FFCustomMsgBox	[31143] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31144	FFCustomMsgBox	[31144] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31145	FFCustomMsgBox	[31145] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31146	FFCustomMsgBox	[31146] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31147	FFCustomMsgBox	[31147] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31148	FFCustomMsgBox	[31148] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31149	FFCustomMsgBox	[31149] Failed in obtaining the display group data.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31152	FFCustomMsgBox	[31152] Failed in obtaining the exposure menu information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31153	FFCustomMsgBox	[31153] Failed in obtaining the button image (Urgent button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31154	FFCustomMsgBox	[31154] Failed in obtaining the button image (Study completed button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31155	FFCustomMsgBox	[31155] Failed in obtaining the button image (Update button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31158	FFCustomMsgBox	[31158] Failed in obtaining the button image (New button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31159	FFCustomMsgBox	[31159] Failed in obtaining the button image (Repeat button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31160	FFCustomMsgBox	[31160] Failed in obtaining the button image (Re-shoot button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31161	FFCustomMsgBox	[31161] Failed in obtaining the button image (Add button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31162	FFCustomMsgBox	[31162] Failed in obtaining the button image (Delete button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31163	FFCustomMsgBox	[31163] Failed in obtaining the button image (Before scroll button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31164	FFCustomMsgBox	[31164] Failed in obtaining the button image (After Scroll button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31165	FFCustomMsgBox	[31165] Failed in obtaining the button image (Monitor mode button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31166	FFCustomMsgBox	[31166] Failed in obtaining the button image (QA button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31167	FFCustomMsgBox	[31167] Failed in obtaining the button image (Change button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31168	FFCustomMsgBox	[31168] Failed in obtaining the button image (Rotation/Inversion button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31169	FFCustomMsgBox	[31169] Failed in obtaining the button image (EDR mode button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31170	FFCustomMsgBox	[31170] Failed in obtaining the button image (Image format button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31171	FFCustomMsgBox	[31171] Failed in obtaining the button image (Change menu parameter button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31172	FFCustomMsgBox	[31172] Failed in obtaining the tool tip (New button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31173	FFCustomMsgBox	[31173] Failed in obtaining the tool tip (Repeat button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31174	FFCustomMsgBox	[31174] Failed in obtaining the tool tip (Re-shoot button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31175	FFCustomMsgBox	[31175] Failed in obtaining the tool tip (Add button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31176	FFCustomMsgBox	[31176] Failed in obtaining the tool tip (Delete button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31177	FFCustomMsgBox	[31177] Failed in obtaining the tool tip (Before scroll button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31178	FFCustomMsgBox	[31178] Failed in obtaining the tool tip (After scroll button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31179	FFCustomMsgBox	[31179] Failed in obtaining the tool tip (Monitor mode button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31180	FFCustomMsgBox	[31180] Failed in obtaining the tool tip (QA button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31181	FFCustomMsgBox	[31181] Failed in obtaining the tool tip (Change button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31182	FFCustomMsgBox	[31182] Failed in obtaining the tool tip (Rotation/Inversion button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31183	FFCustomMsgBox	[31183] Failed in obtaining the tool tip (EDR mode button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31184	FFCustomMsgBox	[31184] Failed in obtaining the tool tip (Image format button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31185	FFCustomMsgBox	[31185] Failed in obtaining the tool tip (Change menu parameter button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31186	FFCustomMsgBox	[31186] Failed in obtaining the registry information (Set No.).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31187	FFCustomMsgBox	[31187] Failed in setting the tool tip (Before scroll button).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31188	FFCustomMsgBox	[31188] Failed in obtaining the system setting information (System ID).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31189	FFCustomMsgBox	[31189] Failed in obtaining the system setting information (Auto-distribution instruction information).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31191	FFCustomMsgBox	[31191] Failed in obtaining the system setting information (Selector auto-switchover information).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31192	FFCustomMsgBox	[31192] Failed in obtaining the system setting information (Menu auto-sequence information).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31193	FFCustomMsgBox	[31193] Failed in obtaining the system setting information (Set No. minimum value information).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31194	FFCustomMsgBox	[31194] Failed in obtaining the system setting information (Set No. maximum value information).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31196	FFCustomMsgBox	[31196] Failed in obtaining the system setting information (Series information issuing method).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31197	FFCustomMsgBox	[31197] No matching work ID exists.	The contents of the image file did not agree with those of the image database.	Initialize the image database.	
31198	FFCustomMsgBox	[31198] Failed in distribution process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31201	FFIIPInImgCtrl	Data error. [Detailed error information 31201 2 items]	Abnormal data was entered from the RU or the 5000 Series equipment.	Check the RU and the 5000 Series equipment. Perform an image input process again or restart.	
31201	FFIIPInImgCtrl	Image sizecode error.	Illegal image size code when a request was issued for image input.	Check the RU and the 5000 Series equipment. Perform an image input process again or restart.	
31201	FFIIPInImgCtrl	InImgReadProc method parameter error.	Illegal image input request method parameters.	Check the RU and the 5000 Series equipment. Perform an image input process again or restart.	
31202	FFCustomMsgBox	[31202] Failed in obtaining the system setting information (Patient information online serial port No.).	It is conceivable that the database file was damaged or deleted.	Check the RU and the 5000 Series equipment. Perform an image input process again or restart.	
31202	FFIIPInImgCtrl	Initialize error. [Detailed error information 31202 14 items]	An abnormality occurred in the initialization process. The common probable causes are as follows: • Installation was not normally ended. • The parameter file was incorrect.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	Create Instance error.	Failed in creating Control Instance.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
31202	FFIIPInImgCtrl	Directory path get error.	Failed in acquiring each directory path name.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	Thread make error.(Read)	Failed in creating image input thread.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	Thread make error.(Disp)	Failed in creating image display thread.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	EDR parameter file load error.	Failed in memory loading of the EDR processing parameter file.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	Image parameter file load error.	Failed in memory loading of the image processing parameter file.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	GetMessage(THREAD_ END) error.	Failed in acquiring the image input/display thread startup completion event.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	DICOM SCP control run error.	Failed in DICOM SCP control startup.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	GetMessage(DICOM_ RUN_COMPLETE) error.	Failed in acquiring the DICOM SCP control startup completion event.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	PostThreadMessage(IMG_ END_REQ) error.	Failed in requesting for terminating image input thread.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	PostThreadMessage(DISP-_END_REQ) error.	Failed in requesting for terminating image display thread.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	GetMessage(THREAD_ COMPLETE) error.	Failed in acquiring the image input/display thread termination completion event.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	GetMessage(DICOM_END _COMPLETE) error.	Failed in acquiring the DICOM SCP control termination completion event.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31202	FFIIPInImgCtrl	DICOM SCP control (EndPrc method) error.	Failed in requesting for terminating DICOM SCP control.	Restart the system. If the same symptom occurs after a restart, perform a reinstallation and initialize the image database.	
31203	FFCustomMsgBox	[31203] Failed in obtaining the system setting information (Patient information online device name.).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31207	FFCustomMsgBox	[31207] Failed in setting the Image Reader machine code.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31208	FFCustomMsgBox	[31208] Failed in obtaining the button image (New button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31210	FFCustomMsgBox	[31210] Failed in obtaining the system setting information (Image rotation/ inversion selectable range).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31211	FFCustomMsgBox	[31211] Failed in obtaining the button image (frontal image button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31212	FFCustomMsgBox	[31212] Failed in obtaining the button image (Left-right invert button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31213	FFCustomMsgBox	[31213] Failed in obtaining the button image (Up-side-down invert button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31214	FFCustomMsgBox	[31214] Failed in obtaining the button image (180 degree rotation button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31215	FFCustomMsgBox	[31215] Failed in obtaining the button image (90 degree rotation button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31218	FFCustomMsgBox	[31218] Failed in obtaining the system setting information (Image format selectable range).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31219	FFCustomMsgBox	[31219] Failed in obtaining the button image (SINGLE button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31220	FFCustomMsgBox	[31220] Failed in obtaining the button image (TWIN button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31225	FFCustomMsgBox	[31225] Failed in obtaining the connection characters to the film annotation database.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31226	FFCustomMsgBox	[31226] Failed in connecting characters to the film annotation database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31227	FFCustomMsgBox	[31227] Failed in obtaining the information from the film annotation database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31232	FFCustomMsgBox	[31232] Failed in obtaining the system setting information (upper limit of No. of output film).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31235	FFCustomMsgBox	[31235] Failed in obtaining the caption information (CS).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31236	FFCustomMsgBox	[31236] Failed in obtaining the caption information (SS).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31241	FFCustomMsgBox	[31241] Failed in creating thumbnail images with the image input subsystem.	- Software version A06 or earlier was used to enter an image from the 5000 plus Series. - The system was unstable.	- Upgrade the software to version A07 or later. - Restart. If the same symptom recurs, perform a reinstallation.	
31242	FFCustomMsgBox	[31242] Failed in processing in image input subsystem.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31243	FFCustomMsgBox	[31243] Image format information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31244	FFCustomMsgBox	[31244] Annotation information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31245	FFCustomMsgBox	[31245] No. of output film information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31246	FFCustomMsgBox	[31246] Distribution code information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31247	FFCustomMsgBox	[31247] Image reading sensitivity is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31248	FFCustomMsgBox	[31248] Average output density is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31249	FFCustomMsgBox	[31249] EDR mode is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31250	FFCustomMsgBox	[31250] Image filing mode is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	

Event	Event Source	Description	Causes	Remedies	Remarks
31251	FFCustomMsgBox	[31251] Function mode is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31252	FFCustomMsgBox	[31252] IP logical size information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31253	FFCustomMsgBox	[31253] Contrast shift is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31254	FFCustomMsgBox	[31254] Sensitivity shift information is illegal.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31255	FFCustomMsgBox	[31255] There is a discrepancy between system setting and image information.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31256	FFCustomMsgBox	[31256] There is a discrepancy between system setting and image information.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31257	FFCustomMsgBox	[31257] There is a discrepancy between system setting and image information.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31258	FFCustomMsgBox	[31258] There is a discrepancy between system setting and image information.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31259	FFCustomMsgBox	[31259] Failed in obtaining the image invert/rotate information.	It is conceivable that the image information was damaged.	Delete the associated examination. If the same symptom frequently recurs, perform a reinstallation.	
31260	FFCustomMsgBox	[31260] Failed in setting the image format information.	A value in the image file conflicted with a system setting.	Since a standard setting will be used as a substitute to continue with the process, no particular response is required.	
31261	FFCustomMsgBox	[31261]Failed in obtaining the image format information.	It is conceivable that the image information was damaged.	Delete the associated examination. If the same symptom frequently recurs, perform a reinstallation.	
31262	FFCustomMsgBox	[31262] Film annotation is illegal.	The registered film mark contained an unacceptable character.	Correct the film mark setup with a user utility.	
31265	FFCustomMsgBox	[31265] Failed in obtaining the caption information (FIX).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31266	FFCustomMsgBox	[31266] Failed in obtaining the caption information (S value).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31267	FFCustomMsgBox	[31267] Failed in obtaining the caption information (SEMI-X).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31268	FFCustomMsgBox	[31269] Failed in obtaining the caption information (Density Ave	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31269	FFCustomMsgBox	[31268] Failed in obtaining the caption information (Density Average).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31270	FFCustomMsgBox	[31270] Input value is illegal.	The entered value contained an unacceptable character or was out of range or otherwise abnormal.	Make a proper entry.	
31272	FFCustomMsgBox	[31272] Failed in obtaining the system setting information (Function selectable range).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31273	FFCustomMsgBox	[31273] Failed in setting the function information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31274	FFCustomMsgBox	[31274] Failed in setting the No. of output film.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31277	FFCustomMsgBox	[31277] Failed in setting the contrast shift.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31278	FFCustomMsgBox	[31278] Failed in setting the sensitivity shift.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31279	FFCustomMsgBox	[31279] Failed in setting the EDR mode information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31280	FFCustomMsgBox	[31280] Failed in setting the FIX mode S value.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31281	FFCustomMsgBox	[31281] Failed in setting the SEMI-X mode average output density.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31282	FFCustomMsgBox	[31282] Failed in QA starting process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31284	FFCustomMsgBox	[31284] Failed in obtaining the system setting information (Filing mode selectable range).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31285	FFCustomMsgBox	[31285] Failed in setting the image filing information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31288	FFCustomMsgBox	[31288] Failed in obtaining the distribution destination information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31290	FFCustomMsgBox	[31290] Failed in obtaining IP logical size information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31291	FFCustomMsgBox	[31291] Failed in obtaining the system setting information (Distribution code change).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31292	FFCustomMsgBox	[31292] Failed in obtaining the system setting information (Film annotation change).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31293	FFCustomMsgBox	[31293] Failed in obtaining the system setting information (Function change).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31294	FFCustomMsgBox	[31294] Failed in terminating process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31295	FFCustomMsgBox	[31295] Failed in terminating process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31296	FFCustomMsgBox	[31296] Failed in updating the list display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31303	FFCustomMsgBox	[31303] No list (Waiting for study) is selected.	It is highly probable that the program was faulty.		
31304	FFCustomMsgBox	[31304] No list (Waiting for QA) is selected.	It is highly probable that the program was faulty.		
31305	FFCustomMsgBox	[31305]No list (Waiting for output) is selected.	It is highly probable that the program was faulty.		
31306	FFCustomMsgBox	[31306] No list (Already output) is selected.	It is highly probable that the program was faulty.		
31307	FFCustomMsgBox	[31307] No list (All) is selected.	It is highly probable that the program was faulty.		
31308	FFCustomMsgBox	[31308] No list (Today) is selected.	It is highly probable that the program was faulty.		
31309	FFCustomMsgBox	[31309] Failed in updating the list (Waiting for study) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31310	FFCustomMsgBox	[31310] Failed in updating the list (Waiting for QA) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31311	FFCustomMsgBox	[31311] Failed in updating the list (Waiting for output) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31312	FFCustomMsgBox	[31312] Failed in updating the list (Already output) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31313	FFCustomMsgBox	[31313] Failed in updating the list (All) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31314	FFCustomMsgBox	[31314] Failed in updating the list (Today) display.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31315	FFCustomMsgBox	[31315] No. of selected study is illegal. Study cannot be started.	It is highly probable that the program was faulty.		
31316	FFCustomMsgBox	[31316] Failed in study starting process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31317	FFCustomMsgBox	[31317] No. of selected studies is illegal. QA cannot be started.	It is highly probable that the program was faulty.		
31318	FFCustomMsgBox	[31318] Failed in QA starting process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31319	FFCustomMsgBox	[31319] Failed in QA starting process.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31320	FFCustomMsgBox	[31320] Failed in obtaining the system setting information (Operational mode after studying).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31321	FFCustomMsgBox	[31321] Failed in obtaining the button image (Utility button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31322	FFCustomMsgBox	[31322] Failed in obtaining the patient information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31323	FFCustomMsgBox	[31323] Date of birth could not be converted to the displaying format.	Illegal birth date information was set.	Delete the associated examination. If the same symptom recurs after deletion, perform a reinstallation.	
31324	FFCustomMsgBox	[31324] Failed in obtaining the caption information (Stop alarm button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31329	FFCustomMsgBox	[31329] Message from the Image Reader could not be displayed.	The RU software version conflicted with the message file version on the IIP side or the RU message file was damaged or otherwise abnormal.	Confirm software version and setups on the RU side.	

Event	Event Source	Description	Causes	Remedies	Remarks
31330	FFCustomMsgBox	[31330] Failed in the obtaining the caption information (System Terminating button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31331	FFCustomMsgBox	[31331] Failed in obtaining the caption information (User Utility button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31332	FFCustomMsgBox	[31332] Failed in obtaining the caption information (Study list setting button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31333	FFCustomMsgBox	[31333] Failed in obtaining the caption information (Version displaying button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31334	FFCustomMsgBox	[31334] Failed in obtaining the caption information (Cancel button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31335	FFCustomMsgBox	[31335] Failed in obtaining the button image (Clear button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31336	FFCustomMsgBox	[31336] Failed in obtaining the tool tip information (Clear button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31337	FFCustomMsgBox	[31337] Failed in displaying the thumbnail images.	The thumbnail image file was damaged, deleted, or otherwise abnormal.	There are no processing problems except for the inability to display thumbnail images. If the same symptom frequently occurs, initialize the image database.	
31339	FFCustomMsgBox	[31339] Failed in executing the dust removing process starting method of the Image Reader.	The RU is not ready for performing the method.	Check the RU.	
31340	FFCustomMsgBox	[31340] Failed in obtaining the caption information (Cancel button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31341	FFCustomMsgBox	[31341] Failed in obtaining the caption information (Cancel button).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31343	FFCustomMsgBox	[31343] Failed in inputting images.	It is conceivable that there was a problem with the RU or line.	Check the RU and line.	
31344	FFCustomMsgBox	[31344] Image size could not be detected.	It is conceivable that there was a problem with the RU.	Check the RU.	
31346	FFCustomMsgBox	[31346] Failed in obtaining the Image Reader error information.	The RU software version conflicted with the message file version on the IIP side or the RU message file was damaged or otherwise abnormal.	Check the software version and setup on the RU side.	

Event	Event Source	Description	Causes	Remedies	Remarks
31347	FFCustomMsgBox	[31347] Failed in obtaining the Image Reader status information.	The RU software version conflicted with the message file version on the IIP side or the RU message file was damaged or otherwise abnormal.	Check the software version and setup on the RU side.	
31348	FFCustomMsgBox	[31348] Failed in thumbnail image creation process.	The thumbnail image file was damaged, deleted, or otherwise abnormal.	There are no processing problems except for the inability to display thumbnail images. If the same symptom frequently occurs, initialize the image database.	
31349	FFCustomMsgBox	[31349] Failed in displaying the list (Waiting for study).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31350	FFCustomMsgBox	[31350] Failed in displaying the list (Waiting for QA).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31351	FFCustomMsgBox	[31351] Failed in displaying the list (Waiting for output).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31352	FFCustomMsgBox	[31352] Failed in displaying the list (Already output).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31353	FFCustomMsgBox	[31353] Failed in displaying the list (All).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31354	FFCustomMsgBox	[31354] Failed in displaying the list (Today).	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31355	FFCustomMsgBox	[31355] Failed in customizing the list display.	It is conceivable that the system was unstable or that the program was faulty.	If the same symptom recurs after a restart, perform a reinstallation.	
31356	FFCustomMsgBox	[31356] Failed in obtaining the system setting information (Default menu code).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31358	FFCustomMsgBox	[31358] Failed in obtaining the tool tip text.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31359	FFCustomMsgBox	[31359] Failed in obtaining the caption information (Title bar).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31360	FFCustomMsgBox	[31360] Failed in obtaining the caption information (Option label).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31361	FFCustomMsgBox	[31361] Failed in obtaining the version information.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31362	FFCustomMsgBox	[31362] Option list could not be obtained.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31363	FFCustomMsgBox	[31363] Failed in obtaining the registry information (Next multiple frame set No.).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31364	FFCustomMsgBox	[31364] Failed in setting the registry information (Next multi-frame set No.).	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31365	FFCustomMsgBox	[31365] Failed in obtaining the system setting information (Series issuing type).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31366	FFCustomMsgBox	[31366] Failed in obtaining the multi-frame UID information.	The system was unstable.	Restart. If the same symptom recurs, perform a reinstallation.	
31367	FFCustomMsgBox	[31367] Failed in obtaining the cassette insertion enabled image.	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31368	FFCustomMsgBox	[31368] Failed in obtaining the cassette insertion disabled image.	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31369	FFCustomMsgBox	[31369] Failed in obtaining the image icon (Mis-exposure).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31370	FFCustomMsgBox	[31370] Failed in obtaining the button image (Image style button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31371	FFCustomMsgBox	[31371] Failed in obtaining the button image (EDR button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31372	FFCustomMsgBox	[31372] Failed in obtaining the button image (Function button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31373	FFCustomMsgBox	[31373] Failed in obtaining the button image (No. of output film button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31374	FFCustomMsgBox	[31374] Failed in obtaining the button image (IP size button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31375	FFCustomMsgBox	[31375] Failed in obtaining the button image (Film format button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31376	FFCustomMsgBox	[31376] Failed in obtaining the button image (Filing button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31377	FFCustomMsgBox	[31377] Failed in obtaining the button image (Film annotation button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31378	FFCustomMsgBox	[31378] Failed in obtaining the button image (Distribution code button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31379	FFCustomMsgBox	[31379] Failed in obtaining the button image (CS/SS button).	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31380	FFCustomMsgBox	[31380] Failed in obtaining the system setting information (Serial port No. for connecting to XCON).	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31381	FFCustomMsgBox	[31381] Failed in obtaining the XCON device name.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31382	FFCustomMsgBox	[31382] Image data line to the Image Reader(%s) has broken.	The line was abnormal.	Check the line.	
31386	FFCustomMsgBox	[31386] Failed in obtaining the caption information.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31387	FFCustomMsgBox	[31387] Failed in reading the bit-map file.	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31388	FFCustomMsgBox	[31388] Failed in obtaining the font information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31390	FFCustomMsgBox	[31390] The information about a requesting department was illegal.	The entered information or its format was in error.		
31391	FFCustomMsgBox	[31391] The information about a paramedic was illegal.	The entered information or its format was in error.		
31392	FFCustomMsgBox	[31392] A patient information search was unsuccessful.	Nothing matched the entered patient information	Check the patient information.	
31394	FFCustomMsgBox	[31394] The line connected to the RIS was faulty.	This error is attributable to an RIS problem or RIS setup problem	Check the RIS status and RIS setup.	
31400	FFCustomMsgBox	[31400]The selected menu did not exist.	This error is attributable to an RIS problem or RIS setup problem.	Check the RIS status and RIS setup.	
31401	FFCustomMsgBox	[31401] Path information (image data folder) acquisition was not successful.	It is conceivable that the file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31402	FFCustomMsgBox	[31402] Parameter icon image acquisition was not successful.	It is conceivable that the bitmap file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
31403	FFCustomMsgBox	[31403] Caption information acquisition was not successful.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31404	FFCustomMsgBox	[31404] Failed in communicating with other connected device.	This error is attributable to a problem with the connected equipment or connection setup.	Check the connected equipment, connection setup, and others.	
31405	FFCustomMsgBox	[31405] Failed in evacuating the IP.	The connected equipment may be faulty.	Check the connected equipment.	
31406	FFCustomMsgBox	[31406] Failed in setting the IP.	The connected equipment may be faulty.	Check the connected equipment.	
31407	FFCustomMsgBox	[31407] Failed in setting the exposure size.	The connected equipment may be faulty.	Check the connected equipment.	
31408	FFCustomMsgBox	[31408] Failed in setting the reference position for exposure.	The connected equipment may be faulty.	Check the connected equipment.	
31409	FFCustomMsgBox	[31409] No response comes from other connected device.	The connected equipment may be faulty.	Check the connected equipment.	
31410	FFCustomMsgBox	[31410] There is no answer from the device that ID information is shared.	The connected equipment may be faulty.	Check the connected equipment.	
31411	FFCustomMsgBox	[31411] A Study can't register because the exposure menu registerd in IDT isn't registerd in IIP.	This error is attributable to an improperly registered menu.	Check the menu registration information.	
31412	FFCustomMsgBox	[31412] An image data line with the reader is cut off.	The connected equipment may be faulty	Check the connected equipment.	
31413	FFCustomMsgBox	[31413] There are some inconsistency in the IIP-RU connection setting of the system configuration.	The connection setup may be improper.	Check the connection setup.	
31414	FFCustomMsgBox	[31414] Failed in obtaining the caption information (RIS tab).	The database file may be damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
31415	FFCustomMsgBox	[31415] A communication error with RIS occurred.	The connected equipment may be faulty.	Check the connected equipment.	
31416	FFCustomMsgBox	[31416] Some exposure menus couldn't be registerd.	This error is attributable to an improperly set menu parameter or other setup failure.	Check the settings.	
31417	FFCustomMsgBox	[31417] An exposure menu couldn't be registerd.	This error is attributable to an improperly set menu parameter or other setup failure.	Check the settings.	

Event	Event Source	Description	Causes	Remedies	Remarks
31418	FFCustomMsgBox	[31418] Failed in the reference of the reader device	The connection setup may be faulty.	Check the connection setup.	
31419	FFCustomMsgBox	[31419] The exposure condition values to be sent to the X-ray apparatus was over the limit.	The XCON settings (limit values) were inconsistent with the exposure condition preset values for the menus.	There is no practical problem because the limit values are transferred to the XCON.	
31420	FFCustomMsgBox	[31420] A failure occurred in the communication with the RIS.	It is conceivable that the connected equipment may be faulty.	Check the connected equipment.	
32001	FFCustomMsgBox	[32001] The card type is not acceptable.	The employed card type did not agree with the card type defined by the system setup data.	Check both the system settings and employed card type.	
32001	FFIIPInImgCtrl	Initialize warning. [Detailed error information 32001 35 items]	A warning-level error occurred in an image database initialization process. The common probable causes are as follows: • An abnormality occurred when the image database was accessed. • An abnormality occurred when an information file was accessed. • An abnormality occurred when an image file was created or referenced for image file recovery. • The contents of the image database or information file were illegal. • An unrecoverable image file was encountered.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	DICOM SCP was Not found in NetConfigDB.	DICOM SCP is not defined in the NetConfigDB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	DICOM SCP control status error.	Failed in starting the DICOM SCP control.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	DDO file load error.	Failed in reading the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	DDO file save error.	Failed in storing the information file. (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
32001	FFIIPInImgCtrl	Size code was not found in DDO.	There is no size code in the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	RecordID was not found in DDO.	There is no record ID in the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	HQ file was not found in DDO.	There is no HQ image file in the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Std file was not found in DDO.	There is no standard image file name in the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Image size was not found in DDO.	There is no image size in the information file (DDO).	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Image sizecode error.	Illegal image size cede.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Std file make error.	Standard image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Thumb file make error.	Thumbnail image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	FoeEDR file make error.	Reduced image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
32001	FFIIPInImgCtrl	Moire control error.	Standard image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Thumb control error.	Thumbnail image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	ForEDR control error.	Reduced image generation processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	EDR process error.	EDR processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Jpeg control error.	JPEG processing error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	InfoFileURL was not found in ImageDB.	The InfoFileURL field cannot be found in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	InfoFile was 'EMPTY' in ImageDB.	The InfoFileURL field in the image DB is "EMPTY".	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	StdImageFileURL was not found in ImageDB.	The StdImageFileURL field cannot be found in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	ThmImageFileURL was not found in ImageDB.	The ThmImageFileURL field cannot be found in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
32001	FFIIPInImgCtrl	MaskImageFileURL was not found in ImageDB.	The MaskImageFileURL field cannot be found in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	EDRBackupFileURL was not found in ImageDB.	The EDRBackupFileURL field cannot be found in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	StdImageFileURL set error in ImageDB.	Failed in registering the standard image file name in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	ThmImageFileURL set error in ImageDB.	Failed in registering the thumbnail image file name in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	MaskImageFileURL set error in ImageDB.	Failed in registering the reduced image file name in the image DB.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	ImageDB access(get_Fields) error.	Image DB access error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	ImageDB access error.	Image DB access error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	UpdateCloseRec error.	Image DB access error.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	Create file error.	Failed in creating a file.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
32001	FFIIPInImgCtrl	File open error.	Failed in opening a file.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	File close error.	Failed in closing a file.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	File read error.	Failed in reading a file.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32001	FFIIPInImgCtrl	File write error.	Failed in writing a file.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
32002	FFCustomMsgBox	[32002] Failed in reading the card.	A simple read error occurred or the problem might have been caused by damaged contents of a card or a broken magnetic card reader.	Read the card again. If the same symptom recurs, check the contents of the card and the magnetic card reader.	
32002	FFIIPInImgCtrl	Data not found.(warning) [Detailed error information 32002 1 item]	A warning-level error was found in information file data.	Nothing in particular. (The data found abnormal was replaced by the default value to continue with the process.)	
32002	FFIIPInImgCtrl	Data not found.	There is no data in the information file (DDO).	Nothing in particular. (The data found abnormal was replaced by the default value to continue with the process.)	
32003	FFIIPInImgCtrl	Status warning. [Detailed error information 32003 1 item]	A process request was issued while an initialization or termination process was being performed.	Nothing in particular. (The process request was rejected.)	
32003	FFIIPInImgCtrl	Status error.(IDInfoChange method)	Image display request method execution timing error after ID information was changed.	Nothing in particular. (Processing requested was rejected.)	
32012	FFCustomMsgBox	[32012] Illegal information has been detected in the patient information.	The problem was caused, for instance, by an invalid character contained in the contents of the card.	Check the contents of the card.	
32015	FFCustomMsgBox	[32015] A barcode was not successfully read.	The problem was caused, for instance, by an incompatible barcode format.	Check the contents of the barcode.	
34001	FFCustomMsgBox	[34001] The same patient information has been input.	The card read was about the patient whose examination was being conducted.	This dialog box merely opens to attract the user's attention. No particular response is required.	

Event	Event Source	Description	Causes	Remedies	Remarks
34002	FFCustomMsgBox	[34002] A certain examination finished before the completion of an image read.	The last examination was ended abruptly during an image read process (due, for instance, to a power failure).		
39001	FFIIPInImgCtrl	Memory allocate error. [E1027]	Sufficient memory was not available to the system.	Restart.	
39001	FFIIPInImgCtrl	Socket recv buffer.	Failed in acquiring the socket reception buffer.	Restart.	
39001	FFIIPInImgCtrl	Pantomo work buffer.	Failed in acquiring the pantomography reading buffer.	Restart.	
39001	FFIIPInImgCtrl	ImgReadProcess memory allocate error.	Failed in memory acquisition.	Restart.	
39001	FFIIPInImgCtrl	Memory allocate error.	Failed in memory acquisition.	Restart.	
39001	FFIIPInImgCtrl	Memory Exception error.	An exception generated when acquiring memory.	Restart.	
39001	FFIIPInImgCtrl	Disp Qeue param.	Failed in acquiring an image display queue.	Restart.	
39001	FFIIPInImgCtrl	Read qeue param.	Failed in acquiring an image reading queue.	Restart.	
39001	FFIIPInImgCtrl	ReadThread main param.	Failed in acquiring image input thread parameters.	Restart.	
39001	FFIIPInImgCtrl	JpegThread main param.	Failed in acquiring JPEG compression thread parameters.	Restart.	
39001	FFIIPInImgCtrl	Image Data area.	Failed in acquiring image reading date area.	Restart.	
39001	FFIIPInImgCtrl	Image Time area.	Failed in acquiring image reading time area.	Restart.	
39001	FFIIPInImgCtrl	DICOMDataObj set data area.	Failed in acquiring information file (DDO) setup memory area.	Restart.	
39001	FFIIPInImgCtrl	EDR data.	Failed in acquiring EDR image separation processing area.	Restart.	
39001	FFIIPInImgCtrl	EDR out data.	Failed in acquiring EDR image separation processing area.	Restart.	
39001	FFIIPInImgCtrl	Disp image data.	Image display area.	Restart.	
39001	FFIIPInImgCtrl	SkGp Image area.	Failed in acquiring image area after normalization processing.	Restart.	
39001	FFIIPInImgCtrl	GammaTable(LUT) area.	Failed in acquiring the g processing table.	Restart.	
39001	FFIIPInImgCtrl	Beta param area.	Failed in acquiring the b processing parameter area.	Restart.	
39001	FFIIPInImgCtrl	DRC param area.	Failed in acquiring the DRC processing parameter area.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39001	FFIIPInImgCtrl	MFP-DRC param area.	Failed in acquiring the MFP-DRC processing parameter area.	Restart.	
39001	FFIIPInImgCtrl	MFP-USM param area.	Failed in acquiring the MFP-USM processing parameter area.	Restart.	
39001	FFRUInpImgMgr	Initialization failed. %n[%1]	The initialization process was not successfully performed.	Restart.	
39002	FFIIPInImgCtrl	Message post/get error. [Detailed error information 39002 5 items]	The system was unstable.	Restart.	
39002	FFIIPInImgCtrl	PostThreadMessage (%s) error.	Failed in (%s) message transmission while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	PostMessage error.	Failed in message transmission while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	GetMessage (%s) error.	Failed in (%s) message reception while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	GetMessage error.	Failed in message reception while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	Post/Get Message error.	Failed in message transmission/reception while in image input processing.	Restart.	
39002	FFRUInpImgMgr	Finalize Failed. %n[%1]	The finalization process was not successfully performed.	Restart.	
39003	FFIIPInImgCtrl	IIPInImg control error. [Detailed error information 39003 19 items]	An abnormality was found in the IIP input image process.	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Property = %s	Failed in setting DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Property = %s	Failed in setting DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Property = %s	Failed in viewing DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Property = %s	Failed in viewing DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Method = %s	Failed in performing the DICOM SCP control method (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Method = %s	Failed in performing the DICOM SCP control method (%s).	Restart.	
39003	FFIIPInImgCtrl	DispQeue was full.	Failed in registering an image display queue.	Restart.	
39003	FFIIPInImgCtrl	DispQeue status error.	Failed in registering an image display queue (illegal status).	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39003	FFIIPInImgCtrl	Thumbnail image disp error.	Failed in displaying a pre-reading image.	Restart.	
39003	FFIIPInImgCtrl	EDR/ID image disp error.	Failed in displaying a processed image.	Restart.	
39003	FFIIPInImgCtrl	Data not found.	The relevant menu code cannot be found in the image processing parameters.	Restart.	
39003	FFIIPInImgCtrl	Image File Path get error.	Failed in acquiring the directory path name of the image file.	Restart.	
39003	FFIIPInImgCtrl	File name set error.(%s)	Failed in setting the (%s) file name in the information file (DDO).	Restart.	
39003	FFIIPInImgCtrl	JPEG Thread error.	Failed in creating a JPEG compression thread.	Restart.	
39003	FFIIPInImgCtrl	Image process error(%s) .	Failed in starting the image processing control.	Restart.	
39003	FFIIPInImgCtrl	Input image control error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	File type error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	Img type error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	Exception error.	An exception found during input image processing.	Restart.	
39003	FFRUInpImgMgr	Invalid Status. %n[%1]	The status was invalid.	Restart.	
39004	FFIIPInImgCtrl	CR-Image control error. [Detailed error information 39004 13 items]	An abnormal end was found in an image file creation process or image display process. The problem is attributable to a disk.	Restart.	
39004	FFIIPInImgCtrl	Disp control(%s Method) error.	Image display processing error (method name: %s).	Restart.	
39004	FFIIPInImgCtrl	EDR control (%s) error.	Error occurred during EDR processing (processing ID:%s).	Restart.	
39004	FFIIPInImgCtrl	EDR process error.	Error occurred during EDR processing.	Restart.	
39004	FFIIPInImgCtrl	ForEDR control error.	Error occurred during reduced image creation processing.	Restart.	
39004	FFIIPInImgCtrl	HQ file create error.(%s)	Failed in creating an HQ image file (file ID).	Restart.	
39004	FFIIPInImgCtrl	Image Jpeg-compress error.	Error occurred during JPEG compression processing.	Restart.	
39004	FFIIPInImgCtrl	Image process error.(%s).	Failed in starting the image processing control. (Internal processing name: %s)	Restart.	
39004	FFIIPInImgCtrl	Image sizecode error.	Illegal image size code.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39004	FFIIPInImgCtrl	ImageDB/DDO access error.(%s)	Error occurred in access to the image DB or information file (DDO).	Restart.	
39004	FFIIPInImgCtrl	Jpeg control (%s) error.	Error occurred during JPEG processing (processing ID: %s).	Restart.	
39004	FFIIPInImgCtrl	Miore control error.	Error occurred during standard image creating processing.	Restart.	
39004	FFIIPInImgCtrl	SkGp control (%s) error.	Error occurred during normalization processing. (Processing ID:%s)	Restart.	
39004	FFIIPInImgCtrl	Thumbnail control error.	Error occurred during thumbnail image creating processing.	Restart.	
39004	FFRUInpImgMgr	Thread Invoke failed. %n[%1]	Thread creation was not successfully completed.	Restart.	
39005	FFIIPInImgCtrl	Pipe error. [Detailed error information 39005 1 item]	The system remains unstable.	Restart.	
39005	FFIIPInImgCtrl	Pipe create error.(%s)	Failed in creating a pipe. (Pipe type: %s)	Restart.	
39005	FFRUInpImgMgr	Socket Access Failed. %n[%1]	A socket communication error occurred.	Check the network status and then restart the system.	
39006	FFIIPInImgCtrl	File error. [Detailed error information 39006 7 items]	The system remains unstable.	Restart.	
39006	FFIIPInImgCtrl	File error.	Failed in accessing the file.	Restart.	
39006	FFIIPInImgCtrl	File error(%s).	Failed in accessing the file. (Processing type.)	Restart.	
39006	FFIIPInImgCtrl	Create file error.	Failed in file creation processing.	Restart.	
39006	FFIIPInImgCtrl	CreateFileMapping error.	Failed in file mapping processing.	Restart.	
39006	FFIIPInImgCtrl	MapViewOfFile error.	Failed in file mapping processing.	Restart.	
39006	FFIIPInImgCtrl	EDRImageFile mapping error.	Failed in mapping the reduced image file before EDR processing.	Restart.	
39006	FFIIPInImgCtrl	File mapping error.	Failed in file mapping processing.	Restart.	
39006	FFRUInpImgMgr	System Function Call Failed. %n[%1]	An error was returned by a system call (Win32 API, etc.).	Restart.	
39007	FFIIPInImgCtrl	Data not found.(error) [Detailed error information 39007 3 items]	The data in the image database or information file was abnormal.	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFIIPInImgCtrl	Data not found. / DDO Data not found.	The relevant VR cannot be found in the information file (DDO).	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39004	FFIIPInImgCtrl	Image sizecode error.	Illegal image size code.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39007	FFIIPInImgCtrl	Data not found.(%s) / DDO Data not found.(%s)	The relevant data cannot be found in the information file (DDO).	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFIIPInImgCtrl	%s GetVR error.	Failed in acquiring VR shown by %s.	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFRUInpImgMgr	Invalid Receive Data. %n[%1]	Invalid data was received from the RU.	Check the connection to the RU.	
39008	FFIIPInImgCtrl	DB access error. [Detailed error information 39008 19 items]	An abnormality occurred when a database was accessed.	Restart. If the same symptom frequently occurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB key get error.	Image DB key name acquisition error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB connect error.	Image DB connecetion error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB OpenRecordset error.	Image DB open error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Fields error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Item error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Value error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB put_Value error. Data:%s	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB SetValue error.(%s)	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB (%s) set error.	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	DICOM&ImageDB data set error.	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB UpdateRecordset error.	Image DB update error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB CloseRecordset error.	Image DB close error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB close error.	Image DB close error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB: ReceiveFlag set error.	ReceiveFlag setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB access error.	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
39008	FFIIPInImgCtrl	ImageDB access(%s) error.	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB access error.(%s)	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	SysConfig DB access error.	SysConfig DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	Net Config DB access error.	NetConfig DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgMgr	Insufficient memory. %n[%1]	The available memory was insufficient.	Restart.	
39009	FFIIPInImgCtrl	Socket access error. [Detailed error information 39009 5 items]	The problem is attributable to a disconnected RU or the like.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket error.	Error occurred during socket generation termination processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket connect error.	Error occurred during socket connection processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket close error.	Error occurred during socket disconnection processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket recv error.	Error occurred while receiving data from the socket.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket recv time out.	Timeout detected while receiving data from the socket.	Check the connection to the RU.	
39009	FFIIPInImgMgr	Create Dicom Data Object Failed. %n[%1]	Data object creation was not successfully completed.	Restart.	
39010	FFIIPInImgCtrl	DICOMDataObj data area.	An exception occurred when accessing to the information file (DDO).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. [Detailed error information 39010 5 items]	Exception handling was done.	Restart. If the same symptom frequently occurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. Property = %s	An exception occurred when setting DICOM SCP control properties (%s).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. Method = %s	An exception occurred when performing the DICOM SCP control method (%s).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. / Exception error.(%s)	An exception occurred. (Processing type.)	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	MemoryException error.	An exception occurred while acquiring memory.	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgMgr	Input Image Operation is Busy. %n[%1]	The disk was full or the connection limit was exceeded by the input request (busy state).	This is not an operating error. Wait a while and then input again.	

Event	Event Source	Description	Causes	Remedies	Remarks
39901	FFInitializingStudy	[%1] An exception error occurred(%2).	An exception error occurred.	Restart.	
39902	FFInitializingStudy	[%1] %2.	An error occurred.	Restart.	
41001	FFCustomMsgBox	[41001] The device is not ready.	No floppy disk was set in position.	Set media that is appropriate for the device.	
41002	FFCustomMsgBox	[41002] Remaining capacity is insufficient.	The file to be copied was too large to fit onto the media at the receiving end.	Switch to larger-capacity media.	
41003	FFCustomMsgBox	[41003] Destination for file copy is illegal.	An invalid pathname was specified as the file copy destination.	Check the system setup.	
41004	FFCustomMsgBox	[41004] E-mail program cannot be started.	Outlook was not properly set up	Exit IIP and then complete Outlook setup.	
41005	FFCustomMsgBox	[41005] No data cannot be written on the disk	The disk was write-protected or damaged.	Check the disk.	
39002	FFIIPInImgCtrl	GetMessage (%s) error.	Failed in (%s) message reception while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	GetMessage error.	Failed in message reception while in image input processing.	Restart.	
39002	FFIIPInImgCtrl	Post/Get Message error.	Failed in message transmission/reception while in image input processing.	Restart.	
39002	FFRUInpImgMgr	Finalize Failed. %n[%1]	The finalization process was not successfully performed.	Restart.	
39003	FFIIPInImgCtrl	IIPInImg control error. [Detailed error information 39003 19 items]	An abnormality was found in the IIP input image process.	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Property = %s	Failed in setting DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Property = %s	Failed in setting DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Property = %s	Failed in viewing DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Property = %s	Failed in viewing DICOM SCP control properties (%s).	Restart.	
39003	FFIIPInImgCtrl	Get DispatchID error. Method = %s	Failed in performing the DICOM SCP control method (%s).	Restart.	
39003	FFIIPInImgCtrl	Invoke error. Method = %s	Failed in performing the DICOM SCP control method (%s).	Restart.	
39003	FFIIPInImgCtrl	DispQeue was full.	Failed in registering an image display queue.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39003	FFIIPInImgCtrl	DispQeue status error.	Failed in registering an image display queue (illegal status).	Restart.	
39003	FFIIPInImgCtrl	Thumbnail image disp error.	Failed in displaying a pre-reading image.	Restart.	
39003	FFIIPInImgCtrl	EDR/ID image disp error.	Failed in displaying a processed image.	Restart.	
39003	FFIIPInImgCtrl	Data not found.	The relevant menu code cannot be found in the image processing parameters.	Restart.	
39003	FFIIPInImgCtrl	Image File Path get error.	Failed in acquiring the directory path name of the image file.	Restart.	
39003	FFIIPInImgCtrl	File name set error.(%s)	Failed in setting the (%s) file name in the information file (DDO).	Restart.	
39003	FFIIPInImgCtrl	JPEG Thread error.	Failed in creating a JPEG compression thread.	Restart.	
39003	FFIIPInImgCtrl	Image process error(%s) .	Failed in starting the image processing control.	Restart.	
39003	FFIIPInImgCtrl	Input image control error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	File type error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	Img type error.	Internal discrepancy found during input image processing.	Restart.	
39003	FFIIPInImgCtrl	Exception error.	An exception found during input image processing.	Restart.	
39003	FFRUInpImgMgr	Invalid Status. %n[%1]	The status was invalid.	Restart.	
39004	FFIIPInImgCtrl	CR-Image control error. [Detailed error information 39004 13 items]	An abnormal end was found in an image file creation process or image display process. The problem is attributable to a disk.	Restart.	
39004	FFIIPInImgCtrl	Disp control(%s Method) error.	Image display processing error (method name: %s).	Restart.	
39004	FFIIPInImgCtrl	EDR control (%s) error.	Error occurred during EDR processing (processing ID:%s).	Restart.	
39004	FFIIPInImgCtrl	EDR process error.	Error occurred during EDR processing.	Restart.	
39004	FFIIPInImgCtrl	ForEDR control error.	Error occurred during reduced image creation processing.	Restart.	
39004	FFIIPInImgCtrl	HQ file create error.(%s)	Failed in creating an HQ image file (file ID).	Restart.	
39004	FFIIPInImgCtrl	Image Jpeg-compress error.	Error occurred during JPEG compression processing.	Restart.	
39004	FFIIPInImgCtrl	Image process error.(%s).	Failed in starting the image processing control. (Internal processing name: %s)	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
39004	FFIIPInImgCtrl	Image sizecode error.	Illegal image size code.	Restart.	
39004	FFIIPInImgCtrl	ImageDB/DDO access error.(%s)	Error occurred in access to the image DB or information file (DDO).	Restart.	
39004	FFIIPInImgCtrl	Jpeg control (%s) error.	Error occurred during JPEG processing (processing ID: %s).	Restart.	
39004	FFIIPInImgCtrl	Miore control error.	Error occurred during standard image creating processing.	Restart.	
39004	FFIIPInImgCtrl	SkGp control (%s) error.	Error occurred during normalization processing. (Processing ID:%s)	Restart.	
39004	FFIIPInImgCtrl	Thumbnail control error.	Error occurred during thumbnail image creating processing.	Restart.	
39004	FFRUInpImgMgr	Thread Invoke failed. %n[%1]	Thread creation was not successfully completed.	Restart.	
39005	FFIIPInImgCtrl	Pipe error. [Detailed error information 39005 1 item]	The system remains unstable.	Restart.	
39005	FFIIPInImgCtrl	Pipe create error.(%s)	Failed in creating a pipe. (Pipe type: %s)	Restart.	
39005	FFRUInpImgMgr	Socket Access Failed. %n[%1]	A socket communication error occurred.	Check the network status and then restart the system.	
39006	FFIIPInImgCtrl	File error. [Detailed error information 39006 7 items]	The system remains unstable.	Restart.	
39006	FFIIPInImgCtrl	File error.	Failed in accessing the file.	Restart.	
39006	FFIIPInImgCtrl	File error(%s).	Failed in accessing the file. (Processing type.)	Restart.	
39006	FFIIPInImgCtrl	Create file error.	Failed in file creation processing.	Restart.	
39006	FFIIPInImgCtrl	CreateFileMapping error.	Failed in file mapping processing.	Restart.	
39006	FFIIPInImgCtrl	MapViewOfFile error.	Failed in file mapping processing.	Restart.	
39006	FFIIPInImgCtrl	EDRImageFile mapping error.	Failed in mapping the reduced image file before EDR processing.	Restart.	
39006	FFIIPInImgCtrl	File mapping error.	Failed in file mapping processing.	Restart.	
39006	FFRUInpImgMgr	System Function Call Failed. %n[%1]	An error was returned by a system call (Win32 API, etc.).	Restart.	
39007	FFIIPInImgCtrl	Data not found.(error) [Detailed error information 39007 3 items]	The data in the image database or information file was abnormal.	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	

Event	Event Source	Description	Causes	Remedies	Remarks
39007	FFIIPInImgCtrl	Data not found. / DDO Data not found.	The relevant VR cannot be found in the information file (DDO).	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFIIPInImgCtrl	Data not found.(%s) / DDO Data not found.(%s)	The relevant data cannot be found in the information file (DDO).	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFIIPInImgCtrl	%s GetVR error.	Failed in acquiring VR shown by %s.	Make an exposure again. If the error recurs, initialize the image database (the entire image data is then deleted).	
39007	FFRUInpImgMgr	Invalid Receive Data. %n[%1]	Invalid data was received from the RU.	Check the connection to the RU.	
39008	FFIIPInImgCtrl	DB access error. [Detailed error information 39008 19 items]	An abnormality occurred when a database was accessed.	Restart. If the same symptom frequently occurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB key get error.	Image DB key name acquisition error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB connect error.	Image DB connecetion error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB OpenRecordset error.	Image DB open error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Fields error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Item error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB get_Value error.	Image DB viewing error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB put_Value error. Data:%s	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB SetValue error.(%s)	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB (%s) set error.	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	DICOM&ImageDB data set error.	Image DB setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB UpdateRecordset error.	Image DB update error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB CloseRecordset error.	Image DB close error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB close error.	Image DB close error.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
39008	FFIIPInImgCtrl	ImageDB: ReceiveFlag set error.	ReceiveFlag setup error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB access error.	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB access(%s) error.	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	ImageDB access error.(%s)	Image DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	SysConfig DB access error.	SysConfig DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgCtrl	Net Config DB access error.	NetConfig DB access error.	Restart. If the same symptom recurs, perform a reinstallation.	
39008	FFIIPInImgMgr	Insufficient memory. %n[%1]	The available memory was insufficient.	Restart.	
39009	FFIIPInImgCtrl	Socket access error. [Detailed error information 39009 5 items]	The problem is attributable to a disconnected RU or the like.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket error.	Error occurred during socket generation termination processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket connect error.	Error occurred during socket connection processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket close error.	Error occurred during socket disconnection processing.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket recv error.	Error occurred while receiving data from the socket.	Check the connection to the RU.	
39009	FFIIPInImgCtrl	Socket recv time out.	Timeout detected while receiving data from the socket.	Check the connection to the RU.	
39009	FFIIPInImgMgr	Create Dicom Data Object Failed. %n[%1]	Data object creation was not successfully completed.	Restart.	
39010	FFIIPInImgCtrl	DICOMDataObj data area.	An exception occurred when accessing to the information file (DDO).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. [Detailed error information 39010 5 items]	Exception handling was done.	Restart. If the same symptom frequently occurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. Property = %s	An exception occurred when setting DICOM SCP control properties (%s).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. Method = %s	An exception occurred when performing the DICOM SCP control method (%s).	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgCtrl	Exception error. / Exception error.(%s)	An exception occurred. (Processing type.)	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
39010	FFIIPInImgCtrl	MemoryException error.	An exception occurred while acquiring memory.	Restart. If the same symptom recurs, perform a reinstallation.	
39010	FFIIPInImgMgr	Input Image Operation is Busy. %n[%1]	The disk was full or the connection limit was exceeded by the input request (busy state).	This is not an operating error. Wait a while and then input again.	
39901	FFInitializingStudy	[%1] An exception error occurred(%2).	An exception error occurred.	Restart.	
39902	FFInitializingStudy	[%1] %2.	An error occurred.	Restart.	
41001	FFCustomMsgBox	[41001] The device is not ready.	No floppy disk was set in position.	Set media that is appropriate for the device.	
41002	FFCustomMsgBox	[41002] Remaining capacity is insufficient.	The file to be copied was too large to fit onto the media at the receiving end.	Switch to larger-capacity media.	
41003	FFCustomMsgBox	[41003] Destination for file copy is illegal.	An invalid pathname was specified as the file copy destination.	Check the system setup.	
41004	FFCustomMsgBox	[41004] E-mail program cannot be started.	Outlook was not properly set up	Exit IIP and then complete Outlook setup.	
41005	FFCustomMsgBox	[41005] No data cannot be written on the disk	The disk was write-protected or damaged.	Check the disk.	
41106	FFCustomMsgBox	[41106] Hard Disk Full.	The hard disk was full.	Exit QA, delete unnecessary images from the list, and retry the distribution.	
41107	FFCustomMsgBo	[41107] Hard Disk Full.	The hard disk was full.	Exit QA, delete unnecessary images from the list, and retry the distribution.	
43000	FFQAManagerCom	%S	Information for development personnel.	There are operational problems.	A character string is placed in the "%S" position.
43010	FFIIPInImgCtrl	Can't Get FontSize Information.	The font size was not registered in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
43010	FFQAManagerCom	Can't Get FontSize Information.	The font size was not registered in the registry.	Reinstall the IIP because the displayed characters can be corrupted.	
43020	FFIIPInImgCtrl	Can't Get Caption Information.	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	
43060	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	
43061	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	
43062	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	
43063	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	

Event	Event Source	Description	Causes	Remedies	Remarks
43064	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The character string database did not exist or was damaged.	Reinstall the IIP because the displayed characters can be corrupted.	
43110	FFIIPInImgCtrl	Can't Access Local Configuration Data.	The language setup data was not obtained.	Reinstall the IIP because the displayed characters can be corrupted.	
43301	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The screen size was not obtained.	Reinstall the IIP because the displayed characters can be corrupted.	
43310	FFQAManagerCom	[Control: %1 , Function: %2 , Code: %3]	The language setup data was not obtained.	Reinstall the IIP because the displayed characters can be corrupted.	
44354	FFCustomMsgBox	[44354] Invalid character has been input in ID #.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44355	FFCustomMsgBox	[44355] Invalid character has been input in Study #.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44356	FFCustomMsgBox	[44356] Invalid character has been input in patient name.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44357	FFCustomMsgBox	[44357] Invalid character has been input in kanji-patient name.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44358	FFCustomMsgBox	[44358] Invalid character has been input in the sex (gender).	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44359	FFCustomMsgBox	[44359] Format of date of birth is not applicable.	The entry did not agree with the date format defined by system setup.	Make a proper entry.	
44360	FFCustomMsgBox	[44360] The same study No. already exists.	An attempt was made to enter an examination number that was already used.	Enter another number.	
44361	FFCustomMsgBox	[44361] Anatomical region has not been input.	An anatomical region name was not entered.	Make a proper entry.	
44362	FFCustomMsgBox	[44362] Invalid character has been input in the anatomical regio	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44363	FFCustomMsgBox	[44363] Invalid character has been input in the kanji-anatomical region.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44364	FFCustomMsgBox	[44364] No menu name has been input.	A menu name was not entered.	Make a proper entry.	
44365	FFCustomMsgBox	[44365] Invalid character has been input in the menu name.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	

Event	Event Source	Description	Causes	Remedies	Remarks
44366	FFCustomMsgBox	[44366] Invalid character has been input in the kanji-menu name.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44367	FFCustomMsgBox	[44367] Invalid character has been input in the film annotation characters.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44368	FFCustomMsgBox	[44368] No patient information has been input.	The patient information was not entered.	Make a proper entry.	
44369	FFCustomMsgBox	[44369] The Study ID contained an invalid character.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
44551	FFCustomMsgBox	[44551] Film format will be changed.	This window opens for confirmation only.		
50000	FFFinpSend	Memory Error.%n%1	The system was abnormal (memory allocation was not accomplished).	Restart.	
50000	FFOutImgPrc	Initialize Error.%n%1	An abnormality was encountered during initialization.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50001	FFCustomMsgBox	[50001] Failed in initialization process.	- Output option setup was not completed. - The system was unstable.	- Perform output option setup. - Restart. If the same symptom recurs, perform a reinstallation.	
50001	FFFinpSend	Dicom Data Object Load Error.%n%1	The DicomDataObject file for output was not found.	Perform a reinstallation.	
50001	FFIIPOUTPUT	Initialize Error.%n[%1]	Initialization process error. • Output control was not exercised. • The error check method was not successfully called. • A certain other program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation.	
50001	FFOutImgPrc	DB Connect Error.%n%1	An abnormality occurred in the connection to a database.	Check whether the SQL service manager is normally operating. If the same symptom occurs while the SQL service manager is normally operating, initialize the image database (the entire image data is then deleted).	
50001	Spooler	Initialize Error.%n[%1]	Initialization process error. • No output control was exercised. • An error check method call was unsuccessful. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation.	Output section container
50002	FFCustomMsgBox	[50002] Failed in output process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50002	FFFinpSend	File Open Error.%n%1	There is no output raw data file.	Reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
50002	FFIIPOUTPUT	State Change Error.%n[%1]	State transition notification process error. • The output destination was not successfully reregistered. • The state transition notification call was not successful. • An unknown program error occurred.	Restart.	
50002	FFOutImgPrc	DB Infomation Error.%n%1	The database information was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50002	Spooler	State Change Error.%n[%1]	State change notification process error. • An output destination was not successfully registered. • A state change notification call was not successful. • Other program error. • Line establishment message transmission error [not used]. • Line abnormality message transmission error [not used]	Restart.	Output section container
50003	FFCustomMsgBox	[50003] Failed in output process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50003	FFFinpSend	File Read Error.%n%1	The output raw data file is abnormal.	Reinstall.	
50003	FFIIPOUTPUT	Routine Change Error.%n[%1]	Routine change process error. • The resumption request was not successfully made.	Restart.	
50003	FFOutImgPrc	System Error.%n%1	The system was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50003	Spooler	Routine Change Error.%n[%1]	Routine change process error. • A resumption request was not successfully made.	Restart.	Output section container
50004	FFCustomMsgBox	[50004] Failed in output process.	- An exposure menu name with an apostrophe was used with software version A07 or earlier. - The system was unstable.	- Upgrade the software to version A08 or later. - Restart. If the same symptom recurs, perform a reinstallation.	
50004	FFFinpSend	FinpSend Error.%n%1	An abnormality occurred in the output sequence.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50004	FFIIPOUTPUT	Spool Error.%n[%1]	Spool process error. • The spool request call was not successfully made. • The reoutput request was not successfully made. • The study termination notification was not successfully made. • The spool request response status was invalid. • An unknown program error occurred.	Restart.	
50004	FFOutImgPrc	I/F Timing Error.%n%1	An interface abnormality was encountered.	Restart.	
50004	Spooler	Spool Error.%n[%1]	Spool process error. • A spool request call was not successfully made. • A reoutput request was not successfully made. • An examination end notification was not successful. • The spool request response state was illegal. • Other program error.	Restart.	Output section container
50005	FFCustomMsgBox	[50005] Failed in output process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50005	FFIIPOUTPUT	ExeOutput Error.%n[%1]	Forced-output process error. • The spool forced output request call was not successfully made. • The queue forced output response message was not successfully transmitted. • An unknown program error occurred.	Restart.	
50005	FFOutImgPrc	CreateFileMapping Error.%n%1	File mapping was unachievable.	Restart.	
50005	Spooler	ExeOutput Error.%n[%1]	Forced output process error. • A spool forced output request was not successfully called. • A queue forced output response message was not successfully transmitted. • Other program error.	Restart.	Output section container
50006	FFCustomMsgBox	[50006] Failed in output process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50004	FFCustomMsgBox	[50004] The output process failed.	- An exposure menu name with an apostrophe was used with software version A07 or earlier. - The system was unstable.	- Upgrade the software to version A08 or later. - Perform a restart. If the same phenomenon recurs, perform a reinstall.	
50004	FFFinpSend	FinpSend Error.%n%1	An abnormality occurred in the output sequence.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50006	FFIIPOUTPUT	Image Proc Error.%n[%1]	Image processing error. • The image processing request call was not successfully made. • The image processing setup completion call was not successfully made. • The image processing completion notification call was not successfully made. • The image processing job acquisition request was not successfully made. • An unknown program error occurred.	Restart.	
50006	FFOutImgPrc	File Open Error.%n%1	The file could not be opened.	Check the file.	
50007	FFCustomMsgBox	[50007] Failed in terminating process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50007	FFIIPOUTPUT	Output Proc Error.%n[%1]	Output processing error. • The output destination information was not successfully acquired. • The output request call was not successfully made. • The output completion notification was not successfully made. • An unknown program error occurred.	Restart.	
50007	FFOutImgPrc	File Read/Write Error.%n%1	A file write/read was unsuccessful. The problem is attributable to a disk.	If the problem frequently occurs, replace the disk or take some other remedial action.	
50007	Spooler	Terminate Error.%n[%1]	Termination process error. • Other program error.	Restart.	Output section container
50008	FFCustomMsgBox	[50008] Failed in image processing for output.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50008	FFIIPOUTPUT	Commit Proc Error.%n[%1]	Commitment processing error. • The commitment destination information was not successfully acquired. • The commitment request call was not successfully made. • The commitment completion notification was not successfully made. • An unknown program error occurred.	Restart.	
50008	FFOutImgPrc	CreateDispatch Error.%n%1	The control was not successfully initialized.	Check that the control is registered.	

Event	Event Source	Description	Causes	Remedies	Remarks
50008	Spooler	Image Proc Error.%n[%1]	Image process error. • An image process request was not successfully called. • An image process setup completion call was not successfully made. • An image process completion notification was not successfully called. • An image process job acquisition request was not successfully issued. • Other program error.	Restart.	Output section container
50009	FFCustomMsgBox	[50009] Failed in output process.	The system was unstable.	Restart. If the same symptom recurs after a restart, perform a reinstallation.	
50009	FFIIPOUTPUT	Queue Resume Error.%n[%1]	Queue resumption process error. • The queue resumption request call was not successfully made. • The queue resumption response message was not successfully transmitted. • An unknown program error occurred.	Restart.	
50009	FFOutImgPrc	Memory Get Error.%n%1	The system was abnormal (memory allocation was not achieved).	Restart.	
50009	Spooler	Output Proc Error.%n[%1]	Output process error. • Output destination information was not successfully acquired. • An output request was not successfully called. • An output completion notification was not successful. • Other program error.	Restart.	Output section container
50010	FFIIPOUTPUT	Queue Delete Error.%n[%1]	Queue deletion process error. • The queue deletion request was not successfully made. • The queue deletion response message was not successfully transmitted. • An unknown program error occurred.	Restart.	
50010	FFOutImgPrc	Memory(DDO) Get Error.%n%1	The system was abnormal (memory allocation was not achieved).	Restart.	
50010	Spooler	Queue Resume Error.%n[%1]	Queue resumption process error. • A queue resumption request was not successfully called. • A queue resumption response message was not successfully transmitted. • Other program error.	Restart.	Output section container

Event	Event Source	Description	Causes	Remedies	Remarks
50011	FFIIPOUTPUT	Unit Suspend Error.%n[%1]	Equipment output suspension process error. • The equipment output suspension request call was not successfully made. • The equipment output suspension response message was not successfully transmitted. • An unknown program error occurred.	Restart.	
50011	FFOutImgPrc	Memory(VR) Get Error.%n%1	The system was abnormal (memory allocation was not achieved).	Restart.	
50011	Spooler	Queue Delete Error.%n[%1]	Queue deletion process error. • A queue deletion request was not successfully issued. • A queue deletion response message was not successfully transmitted. • Other program error.	Restart.	Output section container
50012	FFIIPOUTPUT	Unit Resume Error.%n[%1]	Equipment output resumption error. • The equipment output resumption request call was not successfully made. • The equipment output resumption response message was not successfully transmitted. • An unknown program error occurred.	Restart.	
50012	FFOutImgPrc	Dicom Data Object Error.%n%1	Dicom Data Object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50012	Spooler	Unit Suspend Error.%n[%1]	Unit output suspension process error. • A unit output suspension request was not successfully called. • A unit output suspension response message was not successfully transmitted. • Other program error.	Restart.	Output section container
50013	FFOutImgPrc	Dicom Data Object No Data.%n%1	Dicom Data Object did not contain any data.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50013	Spooler	Unit Resume Error.%n[%1]	Unit output resumption process error. • A unit output resumption request was not successfully called. • A unit output resumption response message was not successfully transmitted. • Other program error.	Restart.	Output section container
50015	FFIIPOUTPUT	Terminate Error.%n[%1]	Termination process error. • An unknown program error occurred.	Restart	

Event	Event Source	Description	Causes	Remedies	Remarks
50020	FFOutImgPrc	Data Error.%n%1	A data abnormality was encountered.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50021	FFOutImgPrc	Output Job DB Error.%n%1	The output database was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50022	FFOutImgPrc	Memory Over.%n%1	A memory area abnormality was encountered.	Restart.	
50030	FFOutImgPrc	OutImgPrc Error.%n%1	An abnormality occurred.	Restart.	
50100	FFOutImgPrc	IFormatCom Error.%n%1	The format calculation object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50100	Spooler	Spooler Error.%n%1	Common error message. • Queue information class related message. An output job file was not successfully accessed. Output job information was not successfully accessed. Film information was not successfully acquired. information was not successfully acquired. The job status was not successfully acquired (program error). Job information was not successfully freed. • Unit information class related message. Unit information was not successfully freed. • Spooler class related message. The film count was not successfully checked. The image count/image information area was not successfully acquired. Unit information was not successfully acquired. • Other program error	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50101	FFOutImgPrc	IRawMakeCom Error.%n%1	The raw data creation object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50101	Spooler	RunProc Error.%n%1	Initialization process error. • The spooler control state was abnormal. • A spool start process was in error. • A database connection was not successfully closed. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50102	FFOutImgPrc	FFNetDB Error.%n%1	An abnormality occurred at the time of network setup data acquisition. (It is conceivable that the network setup database was abnormal.)	Restart. If the same symptom frequently occurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
50102	Spooler	OutputRegisterProc Error.%n%1	Output destination registration process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • An output destination registration request message was not successfully issued. • An output destination was not successfully registered. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50103	FFOutImgPrc	IImgJpegCtrl Error.%n%1	The decompression object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50103	Spooler	StateChangeProc Error.%n%1	Local printer/Dicom printer state change notification process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A printer state change notification message was not successfully issued. • The unit status was not successfully acquired. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50104	FFOutImgPrc	IFMImgSkGpCtrl Error.%n%1	The normalization process object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50104	Spooler	ErrorCheckProc Error.%n%1	Data integrity check process error. • The spooler control state was abnormal. • A data integrity check request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50105	FFOutImgPrc	IFMImgVRSCtrl Error.%n%1	The zoom object (VRS method) was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50105	Spooler	RestoreJob Error.%n%1	Job restoration error. • The spooler control state was abnormal. • An unprocessed job restoration request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50106	FFOutImgPrc	IRotateCom Error.%n%1	The rotation object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50106	Spooler	SpoolProc Error.%n%1	Spool process error. • The spooler control state was abnormal. • A parameter error occurred. • A spool request message was not successfully issued. • DDO file information was not successfully acquired. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50107	FFOutImgPrc	IFMImgParamCtrl Error.%n%1	The image process management parameter object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50107	Spooler	ReoutputProc Error.%n%1	Reoutput start process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A reoutput start message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50108	FFOutImgPrc	IFMImgHandCtrl Error.%n%1	The CR image process object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50108	Spooler	StudyReqEndProc Error.%n%1	Study termination request processing error. • Spooler control status error. • Illegal parameters. • Failed in issuing study termination request message. • Other program errors.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50109	FFOutImgPrc	IFMImgFCmpCtrl Error.%n%1	FCR compression (compression/decompression (Fuji's unique method)) was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50109	Spooler	ExeOutputJob Error.%n%1	Forced output request process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A forced output request message was not successfully issued. • The requested output image data did not exist. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50110	FFOutImgPrc	IDataToPrintCom Error.%n%1	Data conversion (for DICOM) was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50110	Spooler	GetImageProcJob Error.%n%1	Image processing job acquisition process error. • The spooler control state was abnormal. • An image processing job acquisition request message was not successfully issued. • Data was not databased. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50111	FFOutImgPrc	IDataToStorageCom Error.%n%1	Data conversion (for DICOM Storage) was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50111	Spooler	SetImageProcComplete Error.%n%1	Image processing completion notification process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • An image processing completion notification message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50112	FFOutImgPrc	IFMImgMoireCtrl Error.%n%1	Moire elimination was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50112	Spooler	GetOutputProcJob Error.%n%1	Output job acquisition response process error. • The spooler control state was abnormal. • An output job acquisition response message was not successfully issued. • Data was not databased. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50113	FFOutImgPrc	IFilmCharMakeCom Error.%n%1	The film annotation character generation object was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50113	Spooler	SetOutputProcComplete Error.%n%1	Output completion notification process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • An output completion notification message was not successfully issued. • Data was not databased. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50114	FFOutImgPrc	MaskProcExec Error.%n%1	The blackening process was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50114	Spooler	GetCommitProcJob Error.%n%1	Commitment job acquisition response process error. • The spooler control status was abnormal. • The commitment jog acquisition response message was not successfully issued. • The data was not found in the database. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50115	FFOutImgPrc	RecognizeProcExec Error.%n%1	The blackening automatic recognition process was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50115	Spooler	QueueResume Error.%n%1	Queue output resumption request process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A queue output resumption request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50115	Spooler	SetCommitProcComplete Error.%n%1	Commitment completion notification process error. • The spooler control status was abnormal. • An illegal parameter was encountered. • The commitment completion notification message was not successfully issued. • The queue was not found. • The data was not found in the database. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50116	FFOutImgPrc	ExecMarker Error.%n%1	The marker imbedding process was abnormal.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50116	Spooler	QueueDelete Error.%n%1	Queue deletion request process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A queue deletion request message was not successfully issued. • Output job file information was not successfully accessed. • Queue deletion was not successful. • Database access was not successful. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50117	FFOutImgPrc	ExecMarker Warning.%n%1	Information for software development personnel.	There is no problem with uperations.	
50117	FFOutImgPrc	LUTProcExec Error.%n%	An error occurred in a display gradation correction process.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
50117	Spooler	QueueResume Error.%n%1	Queue output resumption request process error. • The spooler control status was abnormal. • An illegal parameter was encountered. • The queue output resumption request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50117	Spooler	UnitSuspend Error.%n%1	Unit suspension request process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A unit suspension request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50118	FFOutImgPrc	ExecMarker Information.%n%1	Information for software development personnel.	There is no problem with uperations.	
50118	FFOutImgPrc	MPMCode Error.%n%1	An error occurred in an output information conversion process.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50118	Spooler	QueueDelete Error.%n%1	Queue deletion request process error. • The spooler control status was abnormal. • An illegal parameter was encountered. • Failed in issuing a queue deletion request message. • Failed in accessing the output job file information. • Failed in deleting the queue. • Failed in accessing the database. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50118	Spooler	UnitResume Error.%n%1	Unit resumption request process error. • The spooler control state was abnormal. • An illegal parameter was encountered. • A unit resumption request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50119	Spooler	SuspendProc Error.%n%1	Suspension request process error. • The spooler control state was abnormal. • A suspension request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler

Event	Event Source	Description	Causes	Remedies	Remarks
50119	Spooler	UnitSuspend Error.%n%1	Equipment suspension request process error. • The spooler control status was abnormal. • An illegal parameter was encountered. • The equipment suspension request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50120	Spooler	ResumeProc Error.%n%1	Resumption request process error. • The spooler control state was abnormal. • A resumption request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50120	Spooler	UnitResume Error.%n%1	Equipment resumption request process error. • The spooler control status was abnormal. • An illegal parameter was encountered. • The equipment resumption request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50121	Spooler	EndProc Error.%n%1	End request process error. • The spooler control state was abnormal. • An end request message was not successfully issued. • Other program error.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
50121	Spooler	SuspendProc Error.%n%1	Suspension request process error. • The spooler control status was abnormal. • The suspension request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50122	Spooler	ResumeProc Error.%n%1	Resumption request process error. • The spooler control status was abnormal. • The resumption request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
50123	Spooler	EndProc Error.%n%1	Termination request process error. • The spooler control status was abnormal. • The termination request message was not successfully issued. • An unknown program error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	

Event	Event Source	Description	Causes	Remedies	Remarks
51001	FFIIPOUTPUT	Initialize Warning.%n[%1]	Initialization process warning. • The output equipment execution was not successfully started. • The output equipment name (AE name/host name) was not successfully acquired (there was an inconsistency between the option and network settings). • The FFNET database was not successfully accessed	Check the network settings. If any setting is incorrect, perform a reinstallation.	
51001	Spooler	Initialize Warning.%n[%1]	Initialization process warning. • An output device execution was not successfully started. • An output device name (AE name/host name) was not successfully acquired. • FFNETDB access was unsuccessful.	Restart. If the same symptom frequently occurs, perform a reinstallation.	Output section container
51002	FFIIPOUTPUT	State Change Warning.%n[%1]	State transition notification process warning. • The response to an acquisition request was not successfully made.	Restart.	
51002	Spooler	State Change Warning.%n[%1]	State change notification process warning. • An acquisition request was not successfully answered.	Restart.	Output section container
51007	Spooler	Terminate Warning.%n[%1]	Termination process warning. • A process status flag was not successfully set. • A process termination response message was not successfully transmitted. • An abnormality occurrence notification message was not successfully transmitted. • A message box was not successfully displayed. • A spooler termination request was not successfully called. • A spooler control end request was not successfully called. • The spooler control end response state was abnormal. • An image process control end request was not successfully issued. • An output device control end request was not successfully issued. • The output device control end response state was abnormal.	Restart.	Output section container

Event	Event Source	Description	Causes	Remedies	Remarks
51015	FFIIPOUTPUT	Terminate Warning.%n[%1]	Termination process warning. • The process status flag was not successfully set. • The process termination response message was not successfully transmitted. • The abnormality occurrence notification message was not successfully transmitted. • The message box was not successfully opened. • The spooler termination request call was not successfully made. • The spooler control termination request call was not successfully made. • The spooler control termination response status was abnormal. • The image processing control termination request was not successfully made. • The output equipment control termination request was not successfully made. • The output equipment control termination response status was abnormal.	Restart.	
51501	FFCustomMsgBox	[51501] Failed in initialization processing.	An abnormality occurred during the initialization of the FINP input subsystem.	Processes other than FINP input can be performed.	
51502	FFCustomMsgBox	[51502] Descrepancy in settings.	The PRINT attribute output destination was not specified.	Specify the PRINT attribute output destination.	
52000	FFFinpSend	Warning.%n%1	Information for development personnel.	There is no problem with operations.	
52000	FFOutImgPrc	Warning.%n%1	Information for development personnel.	There is no problem with operations.	
52002	FFEifPrinter	SMCU Driver error. [%1]	An error occurred in the SMCU driver. The problem might have been caused, for instance, by data incompleteness or system instability.	Restart.	
52003	FFEifPrinter	EIFIMG Driver error. [%1]	An error occurred in the EIFIMG driver. It is conceivable that the system was unstable.	Restart.	
52004	FFEifPrinter	Received unexpected command. [%1]	An unknown command was received from the printer.	Check the log of communications with the connected printer or restart the printer/IIP.	
52006	FFEifPrinter	File Error. [%1]	The raw data file for output was not found.	Since the problem is attributable to a program error, try performing a reinstall.	

Event	Event Source	Description	Causes	Remedies	Remarks
52100	Spooler	Spooler Warning.%n%1	Common warning message. • Queue information class related message. Image information (SOPInstanceUID) was not successfully acquired. The job status was not successfully acquired. • Spooler class related message. A database connection was not successfully closed. • Illegal image display format data.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52101	Spooler	RunProc Warning.%n%1	Initialization process warning. • A character string database connection was not successfully opened.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52103	Spooler	StateChangeProc Warning.%n%1	Local printer/Dicom printer state change notification process warning. • A unit state character string was not successfully acquired.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52105	Spooler	RestoreJob Warning.%n%1	Job restoration warning. • An output job file was not successfully accessed.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52106	Spooler	SpoolProc Warning.%n%1	Spool process warning. • Unit information acquisition was not successful. • File deletion was not successful. • Queue cancellation was not successful. • Data was not successfully written into a log file.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52108	Spooler	StudyReqEndProc Warning.%n%1	Examination end request process warning. • A database was not successfully accessed. • DDO file information was not successfully acquired.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52109	Spooler	ExeOutputJob Warning.%n%1	Forced output request process warning. • DDO file information was not successfully acquired.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52110	Spooler	GetImageProcJob Warning.%n%1	Image processing job acquisition process warning. • An output unit type parameter error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler

Event	Event Source	Description	Causes	Remedies	Remarks
52112	Spooler	GetOutputProcJob Warning.%n%1	Output job acquisition response process warning. • An output unit type parameter error was encountered.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52114	Spooler	GetCommitProcJob Warning.%n%1	Commitment job acquisition response process warning. • A commitment equipment type parameter error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
52116	Spooler	QueueDelete Warning.%n%1	Queue deletion request process warning. • An image database flag was not successfully set. • The DDO file was not successfully deleted.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52117	Spooler	UnitSuspend Warning.%n%1	Unit suspension request process warning. • A unit status character string was not successfully acquired.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52118	Spooler	QueueDelete Warning.%n%1	Queue deletion request process warning. • The image database flag was not successfully set. • The DDO file was not successfully deleted.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
52118	Spooler	UnitResume Warning.%n%1	Unit resumption request process warning. • A unit status acquisition error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
52119	Spooler	UnitSuspend Warning.%n%1	Equipment suspension request process warning. • The equipment status character string was not successfully acquired.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
52120	Spooler	UnitResume Warning.%n%1	Equipment resumption request process warning. • An equipment status acquisition error occurred.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	
53000	FFFinpSend	Infomation.%n%1	Information for development personnel.	There is no problem with operations.	
53000	FFOutImgPrc	Infomation.%n%1	Information for development personnel.	There are no operational problems.	
53106	Spooler	SpoolProc Infomation.%n%1	Information in a spool process. • Unit type mismatch notification.	Restart. If the same symptom frequently occurs, perform a reinstallation and then initialize the image database.	Spooler
59001	FFEifPrinter	System call has failed. [%1]	An error returned upon a WIN32 API function call. It is conceivable that the system was unstable.	Restart.	

Event	Event Source	Description	Causes	Remedies	Remarks
59005	FFEifPrinter	Unable to setup timers. [%1]	An unknown timer event occurred. It is conceivable that the system was unstable.	Restart.	
60000	FFCustomMsgBox	[60000] Failed in accessing the database.	- An apostrophe was used for exposure menu name setup with the user utility when the employed software version was A07 or earlier. - It is conceivable that the database file is damaged or deleted.	- Upgrade the software to version A08 or later. - Restart. If the same symptom recurs, perform a reinstallation.	
60002	FFCustomMsgBox	[60002] User Utility will be terminated.	There is no alternative but to exit the program due to the occurrence of an abnormality.	Restart. If the same symptom recurs, perform a reinstallation.	
60050	FFCustomMsgBox	[60050] Failed in accessing the character string database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60051	FFCustomMsgBox	[60051] Failed in accessing the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60052	FFCustomMsgBox	[60052] Failed in obtaining the registry information.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60053	FFCustomMsgBox	[60053] Value of registry information is abnormal.	It is conceivable that the registry information was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60054	FFCustomMsgBox	[60054] Failed in obtaining the information from the character string database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60055	FFCustomMsgBox	[60055] Failed in obtaining the information from the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60080	FFCustomMsgBox	[60080] Failed in obtaining the display group information.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60081	FFCustomMsgBox	[60081] Failed in obtaining the menu information.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60100	FFCustomMsgBox	[60100] Failed in obtaining the MPM code.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60114	FFCustomMsgBox	[60114] Failed in obtaining the XCON parameter.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60183	FFCustomMsgBox	[60183] Failed in accessing the technician information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60184	FFCustomMsgBox	[60184] Failed in accessing the technician information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60185	FFCustomMsgBox	[60185] Failed in obtaining the information from the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	

Event	Event Source	Description	Causes	Remedies	Remarks
60203	FFCustomMsgBox	[60203] Failed in accessing the requesting department information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60204	FFCustomMsgBox	[60204] Failed in accessing the requesting department information database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60205	FFCustomMsgBox	[60205] Failed in obtaining the information from the system setting database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60215	FFCustomMsgBox	[60215] Failed in accessing the film annotation database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60216	FFCustomMsgBox	[60216] Failed in accessing the film annotation database.	It is conceivable that the database file was damaged or deleted.	Restart. If the same symptom recurs, perform a reinstallation.	
60260	FFCustomMsgBox	[60260] System has not been rebooted.	It is conceivable that the IIP executable file was damaged or deleted.	Reinstall.	
61060	FFCustomMsgBox	[61060] Wrong password has been input.	An incorrect password was entered.	The password is fixed at "1111".	
61082	FFCustomMsgBox	[61082] No menu has been selected.	An attempt was made to start an editing or like operation without selecting any menu.	Complete a menu selection before initiating an editing or like operation.	
61083	FFCustomMsgBox	[61083] Already registered for displaying and cannot be deleted.	The menu could not be deleted because it was registered for display.	Clear the registration for display and then delete the menu.	
61084	FFCustomMsgBox	[61084] Already registered to the study menu and cannot be deleted.	The menu could not be deleted because it was registered for the examination menu.	Remove the target menu from the examination menu in advance.	
61085	FFCustomMsgBox	[61085] No menu was registered for a certain display group.	A certain display group was empty because no menu was registered for it.	No empty display group is allowed to exist. Register one or more menus for the display group or delete the display group.	
61090	FFCustomMsgBox	[61090] Invalid character has been input in the display group name.	The entered data was abnormal due, for instance, to the inclusion of an unacceptable character.	Make a proper entry.	
61093	FFCustomMsgBox	[61093] Display group will be deleted.	This window opens for confirmation only.		
61094	FFCustomMsgBox	[61094] Display group name is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61103	FFCustomMsgBox	[61103] Same extension menu code already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61106	FFCustomMsgBox	[61106] Same ANK exposure menu name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	

Event	Event Source	Description	Causes	Remedies	Remarks
61109	FFCustomMsgBox	[61109] Same kanji-exposure menu name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61110	FFCustomMsgBox	[61110] Extension menu code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61111	FFCustomMsgBox	[61111] ANK exposure menu name is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61112	FFCustomMsgBox	[61112] Kanji-exposure menu name is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61122	FFCustomMsgBox	[61122] MPM code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61125	FFCustomMsgBox	[61125] Same film annotation already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61130	FFCustomMsgBox	[61130] Device code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61131	FFCustomMsgBox	[61131] Film-related code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61132	FFCustomMsgBox	[61132] Auto-exposure mechanism is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61142	FFCustomMsgBox	[61142] Same study menu code already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61145	FFCustomMsgBox	[61145] Same ANK study menu name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61148	FFCustomMsgBox	[61148] Same kanji-study menu name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61149	FFCustomMsgBox	[61149] No exposure menu has been selected.	An attempt was made to start an editing or like operation without selecting any menu.	Complete a menu selection before initiating an editing or like operation.	
61151	FFCustomMsgBox	[61151] Exposure menu cannot be registered.	The maximum permissible number of menu registrations was exceeded.	Delete any unnecessary menu.	
61152	FFCustomMsgBox	[61152] Same exposure menu has already been registered.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61153	FFCustomMsgBox	[61153] Study menu code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	

Event	Event Source	Description	Causes	Remedies	Remarks
61154	FFCustomMsgBox	[61154] ANK study menu code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61155	FFCustomMsgBox	[61155] Kanji-study menu code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61171	FFCustomMsgBox	[61171] No technician code has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61172	FFCustomMsgBox	[61172] Technician code is illegal.	The entered data was abnormal due, for instance, to its excessive length or the inclusion of an unacceptable character.	Make a proper entry.	
61173	FFCustomMsgBox	[61173] Invalid character has been input in the technician code.	An unacceptable character was contained.	Make a proper entry.	
61174	FFCustomMsgBox	[61174] Same technician code already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61175	FFCustomMsgBox	[61175] No ANK technician name has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61176	FFCustomMsgBox	[61176] ANK technician name is too long.	The entered data was too long.	Make a proper entry.	
61177	FFCustomMsgBox	[61177] Invalid character has been input in the ANK technician name.	An unacceptable character was contained.	Make a proper entry.	
61178	FFCustomMsgBox	[61178] Same ANK technician name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61179	FFCustomMsgBox	[61179] No kanji-technician name has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61180	FFCustomMsgBox	[61180] Kanji-technician name is too long.	The entered data was too long.	Make a proper entry.	
61181	FFCustomMsgBox	[61181] Invalid character has been input in the kanji-technician name.	An unacceptable character was contained.	Make a proper entry.	
61182	FFCustomMsgBox	[61182] Same kanji-technician name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61191	FFCustomMsgBox	[61191] No requesting department code has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61192	FFCustomMsgBox	[61192] Requesting department code is too long.	The entered data was too long.	Make a proper entry.	

Event	Event Source	Description	Causes	Remedies	Remarks
61193	FFCustomMsgBox	[61193] Invalid character has been input in the requesting department code.	An unacceptable character was contained.	Make a proper entry.	
61194	FFCustomMsgBox	[61194] Same requesting department code already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61195	FFCustomMsgBox	[61195] No ANK requesting department name has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61196	FFCustomMsgBox	[61196] ANK requesting department name is too long.	The entered data was too long.	Make a proper entry.	
61197	FFCustomMsgBox	[61197] Invalid character has been input in the ANK requesting department name.	An unacceptable character was contained.	Make a proper entry.	
61198	FFCustomMsgBox	[61198] Same ANK requesting department name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61199	FFCustomMsgBox	[61199] No kanji-requesting department name has been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61200	FFCustomMsgBox	[61200] Kanji-requesting department name is too long.	The entered data was too long.	Make a proper entry.	
61201	FFCustomMsgBox	[61201] Invalid character has been input in the Kanji-requesting department name.	The entered data value was already registered or otherwise unacceptable.	Make a proper entry.	
61202	FFCustomMsgBox	[61202] Same kanji-requesting department name already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	
61211	FFCustomMsgBox	[61211] No film annotation characters have been input.	An attempt was made to register data with an input field left blank.	Enter a value.	
61212	FFCustomMsgBox	[61212] Film annotation characters are too long.	The entered data was too long.	Make a proper entry.	
61213	FFCustomMsgBox	[61213] Invalid character has been input in the film annotation characters.	An unacceptable character was contained.	Make a proper entry.	
61214	FFCustomMsgBox	[61214] Same film annotation already exists.	The entered data value was already registered or otherwise unacceptable.	Enter another value.	

Event	Event Source	Description	Causes	Remedies	Remarks
61224	FFCustomMsgBox	[61224] Drive is not ready.	No FD was inserted into the FDD.	Insert an FD.	
61234	FFCustomMsgBox	[61234] Drive is not ready.	No FD was inserted into the FDD.	Insert an FD.	
61235	FFCustomMsgBox	[61235] Wrong disk	A wrong FD was inserted into the FDD.	Insert a correct FD.	
61236	FFCustomMsgBox	[61236] Wrong disk	A wrong FD was inserted into the FDD.	Insert a correct FD.	
64220	FFCustomMsgBox	[64220] Backup is interrupted.	This window opens for confirmation only.		
64221	FFCustomMsgBox	[64221] Backup is completed.	This window opens for confirmation only.		
64222	FFCustomMsgBox	[64222] Backup is being prepared.	This window opens for confirmation only.		
64223	FFCustomMsgBox	[64223] Insert FD.	This window opens for confirmation only.		
64230	FFCustomMsgBox	[64230] Restoring is interrupted.	This window opens for confirmation only.		
64231	FFCustomMsgBox	[64231] Restoring is completed.	This window opens for confirmation only.		
64232	FFCustomMsgBox	[64232] Being restored.	This window opens for confirmation only.		
64233	FFCustomMsgBox	[64233] Insert FD.	This window opens for confirmation only.		
64237	FFCustomMsgBox	[64237] Insert FD.	This window opens for confirmation only.		
64250	FFCustomMsgBox	[64250] Parameter Batch Updating	This window opens for confirmation only.		
94001	FFCustomMsgBox	[94001] The scanner cleaning process was completed.	This window opens for confirmation only.		
94002	FFCustomMsgBox	[94002] The scanner cleaning process could not be performed	Dust removal was unaccomplished due to a problem on the RU side.	Check the RU status.	

CR-IR346/348CL Service Manual

RI: Reinstalling the Software

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	I, II, 5, 7, 8, 9, 13-15, 22, 23, 27, 28, 33, 35, 39, 40
04/10/2001	01	Previous Chapter D “Reinstalling the Software” modified (FM2951)	All pages
05/30/2001	02	Revision for software version A02 and GX150 (FM3027)	I, II, 1, 3-5, 8, 9, 11, 13-16, 18-42, Appx A-1-8, Appx B-1-4, Appx C-1, 2, Appx D-1-6,
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1, 3, 4, 7, 12-17, 21, 22, 24-29, 31, 32, 34, 35, 37, 38, 41 Appx A-1, 4, 7, Appx C-3, 4, Appx D-1, 3, 4, 6-8
08/30/2001	03	Changes in pagination (FM3125)	18-20, 23, 30, 33, 36, 39, 40, 42-46
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 15, 34, 41, Appx A-7, Appx B-1-3, Appx D-1, 4
03/20/2002	04	Changes in pagination (FM3297)	Appx D-2, 3, 5, 6-8
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 13-16, 19-24, 26, 28, 29, 31, 32, 38, 39, 41, 45-48, 54, Appx A-1,7, Appx D-1,2,4-7, Appx E-1-4, Appx F-1-4
07/20/2002	05	Changes in pagination (FM3428)	12, 17, 18, 25, 27, 30, 33-37, 40, 42-44, 49-53, Appx D-8-10

1. Installation Flowchart

Presented below is the procedure used for installing the CL-AP from the OS. Follow the flowchart to install the CL-AP.

◆ NOTE ◆

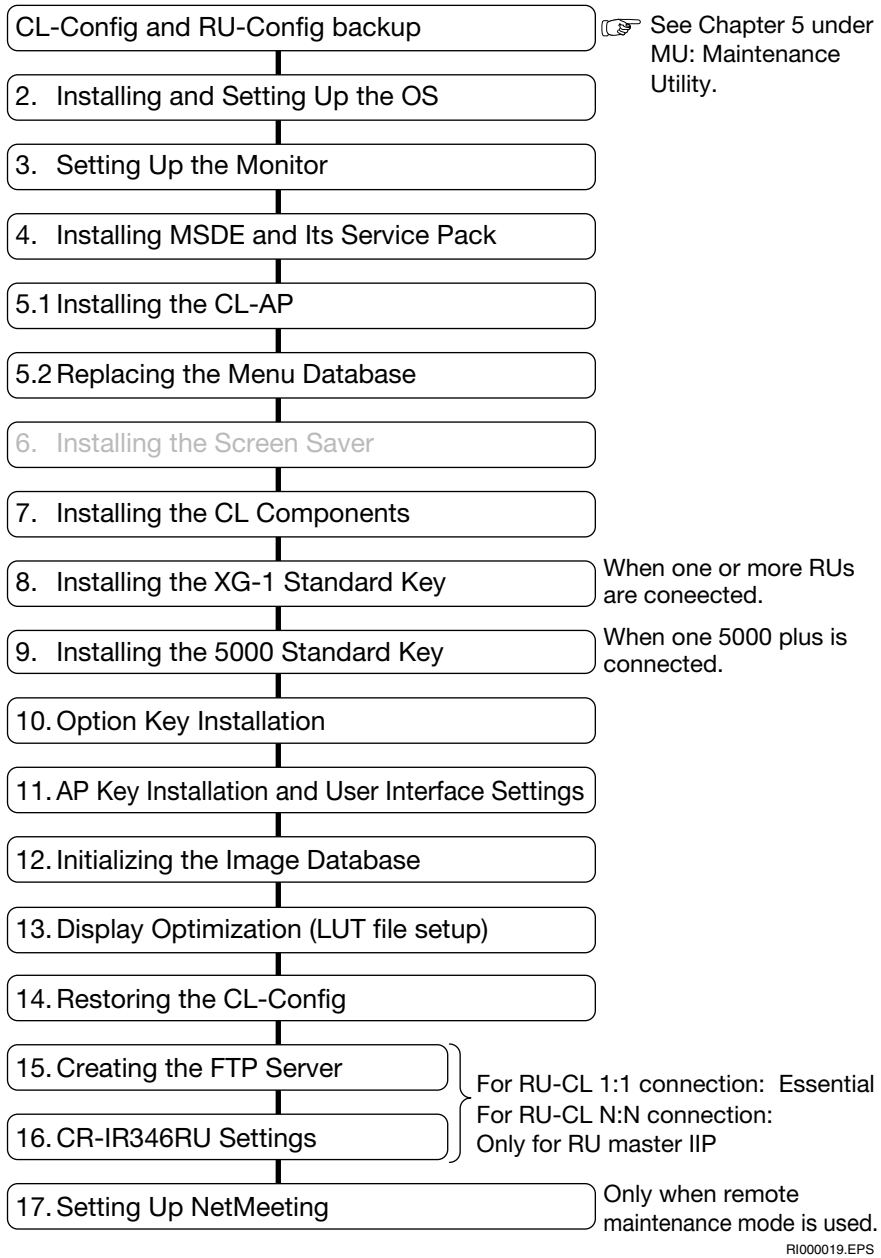
To facilitate you to understand installation workflow in this edition, the following icons are shown to the right of the title in each chapter.

RU 5000P : *Procedure that must be performed for both RU and 5000 plus connection.*

RU 5000P : *Procedure that must be performed only for RU connection.*

RU 5000P : *Procedure that must be performed only for 5000 plus connection.*

● Installation workflow



☞ For details of the RU master IIP see “6. RU-CL N:N Connection Function Overview” under “MD: Machine Description”.

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2. Installing and Setting Up the OS

RU 5000P

◆ NOTE ◆

- *Before installing the OS, note down the CL host name, IP address, subnet mask, and other relevant information. These items of information will be called for during OS installation.*
- *The "5000 plus" is abbreviated hereinafter simply "IR".*

◆ Property sheet

OS installation drive		C:\
Partition/format		C drive only (no other partitions will be created.)/NTFS
Regional settings	Name	FUJI PHOTO FILM CO., LTD
	Organization	FUJI PHOTO FILM CO., LTD
Product key		Indicated on the right-hand side of the PC main unit cover.
Computer name and password	Computer name	The default settings when shipped from factory are as follows: CR-IR346CL : CLXXXXXXXX CR-IR348CL : CRXXXXXXXX (XXXXXXXX : manufacture No.) Take notes accordingly if changed.
	Password	fcr-iip
Network settings	Protocol used	TCP/IP
	IP address	"172.16.1.20" when shipped from factory. *Take notes accordingly if changed.
	Subnet mask	"255.255.0.0" when shipped from factory. *Take notes accordingly if changed.
	Domain or work group	Used by the work group. (The group name remains the default.)
This computer's user settings (auto logon settings)	Automatically logged on user name	Administrator
	Password	fcr-iip
Monitor settings	Display color	True Color (24 or 32bits)
	Display area	1024×768 (15inch LCD/17inch CRT)
	MS-IME setting (Japanese version only)	The tool bar is stored in the task bar.

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2.1 Installing Windows 2000

This section explains about OS (Windows 2000) installation procedures.

The OS is to be installed in the following situations:

- After HDD replacement
- After an error occurrence in the OS

Items to be readied for OS installation

- Windows 2000 installation CD
  (Dell Product Recovery CD (Windows 2000) contained in the PC box.)
- Dell Resource CD
  (A CD that stores various drivers.)
- Product key
  (Indicated on the right-hand side cover of the PC main unit.)

➤ IIMPORTANT

- *Before formatting the HDD, back up necessary image data as required by the user.*
- *Back up config data (CL-Config, RU-Config) that stores various CL and RU settings, ahead of time.*
- *Use the User Utility function to back up user setup information items (check all the items).*

◆ NOTES ◆

- *OS installation procedures are described herein using a DELL OptiPlex GX110 PC and a GX150 PC models.*
  If other PC models are used, see the user manual that comes with the PC.
- *If the PC is not connected via the network, the network setup windows will not be displayed while the OS is being installed. To establish network settings, be sure to connect the PC to the network (connection to the RU) before installation work.*
- *When the HDD has been replaced, check setup details ahead of time because the HDD cannot be operated unless the PC's BIOS settings are changed accordingly.*
- *Driver software installation can be required while Windows 2000 is being installed. In such a case, install it using the Dell Resource CD.*

■ Removing the board and peripheral devices

1. Remove the PEI or PSI board if it is mounted on the PCI slots.

   ☞ For board removal procedures, see “Appendix C Removing/ Reinstalling the Board (PEI/PSI)”.

2. Disconnect all peripheral devices, such as the barcode reader and magnetic card reader, from the USB ports.

◆ NOTES ◆

- *When the OS was installed with the PEI/PSI board mounted on the PCI slots, be sure to delete the* Other devices *file from the Device Manager upon completion of OS installation.*

  ☞ *“■ Checking the PEI01A device driver” in “3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure” under “MT: Machine Troubleshooting”.*

- *If you perform the OS installation procedure while the peripheral devices are connected to the USB ports, improper drivers will be installed as is the case with the PEI and PSI boards.*

■ Network connection between the CL and the RU/IR

Unless the PC is connected properly via the network, the network setup windows will not be displayed while the OS is being installed, depending on the Windows 2000 installer specifications.

1. Use a crossing cable to connect the CL to the RU/IR or use a network cable to connect the CL to the HUB for network connection via the HUB.

2. Turn ON the power to the RU/IR.
   For network connection via the HUB, the power can be left turned OFF.

■ Collecting the computer-related information

1. Turn ON the monitor and PC power switches.
   ➔ The PC starts up.

2. Press the <F2> key when the message “F2 SETUP” appears at the upper right of the window.

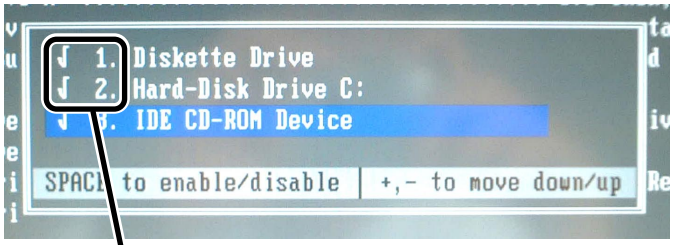
◆ NOTE ◆

If the <F> key is not pressed with the timeliness, the setup window will not open.
In such a case, restart the PC to perform step 2. again.

   ➔ The setup window opens.

3. Select “Boot Sequence” and press the <Enter> key.
   ➔ The startup drive selection dialog opens.

4. Deselect both “Diskette Drive” and “Hard-Disk Drive C:” (uncheck the “√” mark.)

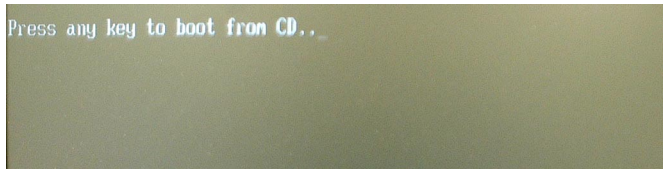


Uncheck both “Diskette Drive” and “Hard-Disk Drive C:”.
Leave “IDE CD-ROM Device” as is. 00000325.EPS

5. Insert the installation CD into the CD-ROM drive of the PC.

6. Save the setup data and restart the PC.

➔ After a while, the message “Press any key to boot from CD..” appears at the upper left corner of the window.



00000346.EPS

7. Press the <Enter> key within a 3-second period.

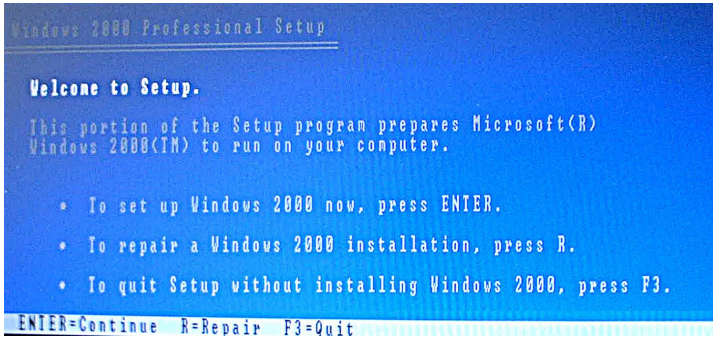
◆ ***NOTE*** ◆

If you do not press the <Enter> key within a period of about 3 seconds after the message “Press any key to boot from CD..” appears at the upper left corner of the screen, the installation CD cannot be recognized.

If such a failure occurs, restart the PC to perform step 7. again.

➔ The “Windows 2000 Professional Setup” window opens in about two minutes.

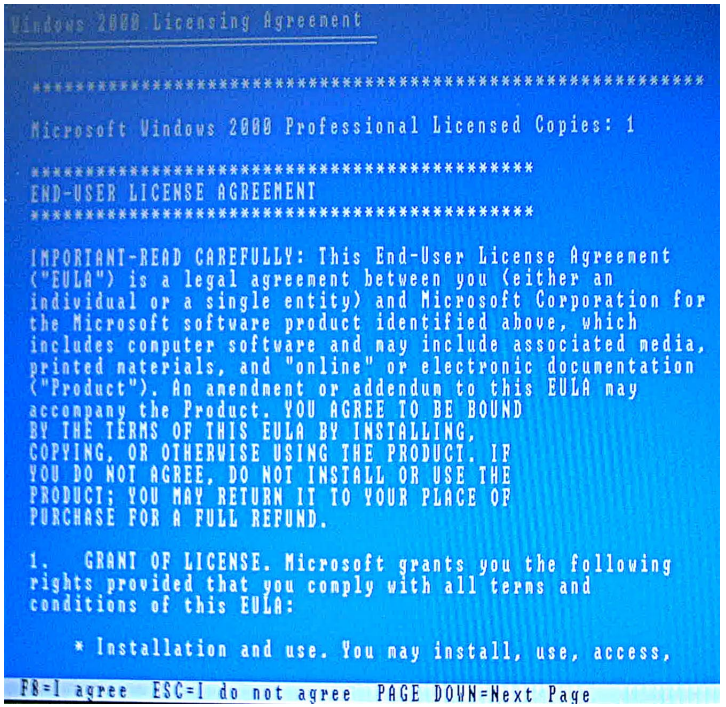
8. Press the <Enter> key.



00000302.EPS

➔ The “Windows 2000 License Agreement” window opens.

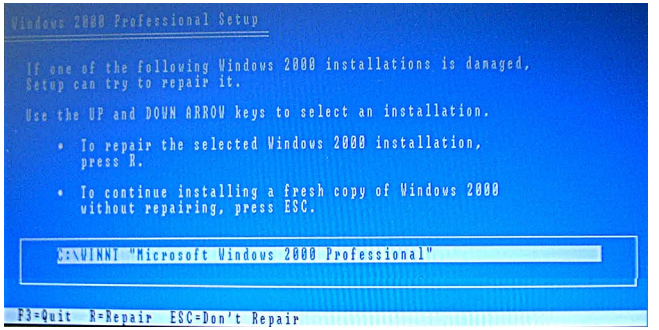
9. Press the <F8> key.



00000303.EPS

➔ A screen about Windows 2000 repairs opens in several seconds.

10. Press the <Esc> key.



00000304.EPS

➔ A window opens to prompt you to select the keyboard type.

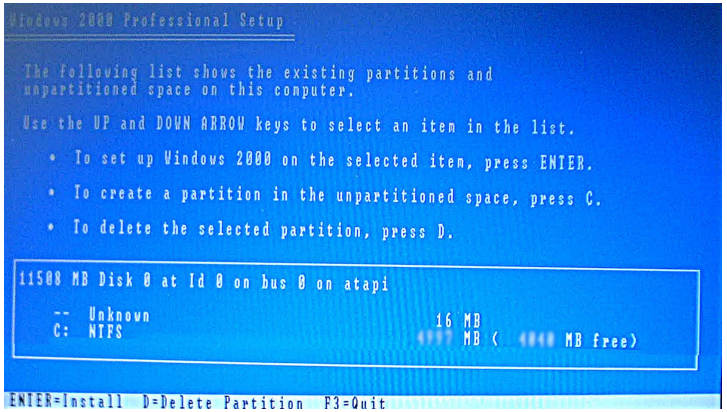
■ Deleting/formatting a partition

1. Select “C: NTFS” (or make sure that “C: NTFS” is selected) and then press the <D> key.

◆ NOTE ◆

Before deleting a partition, back up important image data and other necessary data that are stored on the .HDD.

If a partition is deleted, the entire data in that partition is lost.



00000307.EPS

◆ NOTE ◆

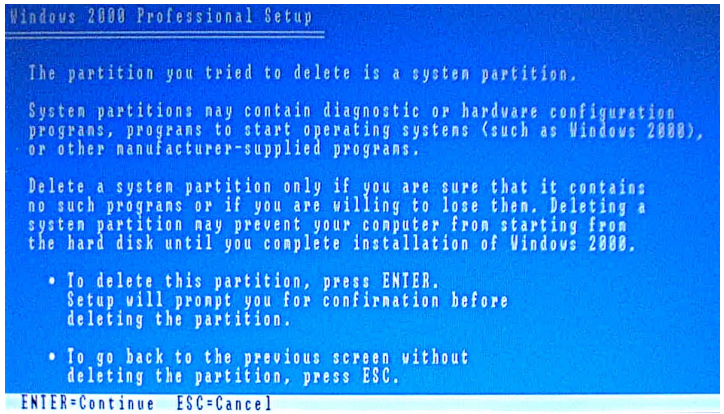
If “Unknown” partition exists on the window above, press the <L> and then <Enter> keys to delete the partition.

➔ The partition deletion confirmation screen opens.

2. Press the <Enter> key.

◆ NOTE ◆

This screen does not open when an attempt is made to format a partition in which no OS is installed.



00000308.EPS

➔ The partition deletion confirmation screen opens again.

3. Press the <L> key.



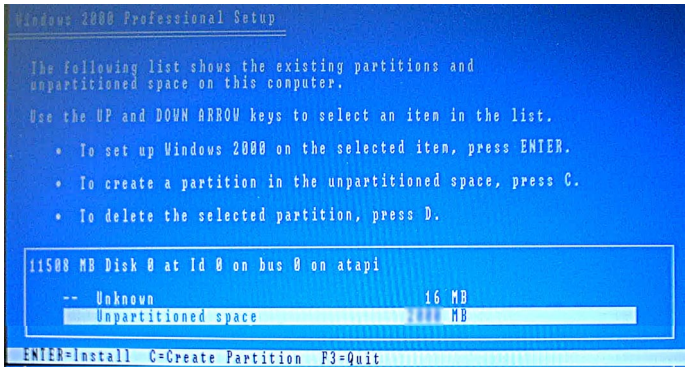
00000309.EPS

➔ After the completion of partition deletion, the partition creation screen opens.

4. Select “Unpartitioned space” (or make sure that “Unpartitioned space” is selected) and then press the <Enter> key.

➥ *REFERENCE*

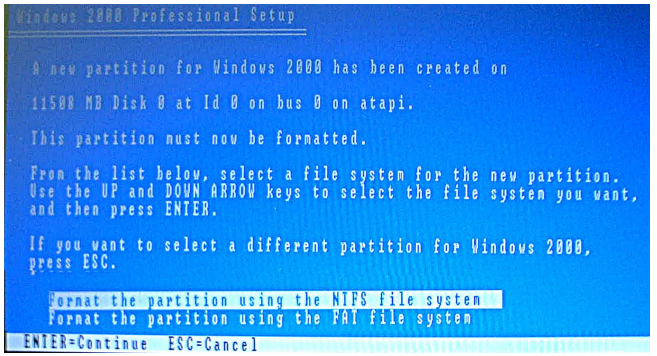
The <C> key needs not be pressed because only the C drive will be used on the CL.



00000310.EPS

➔ The format selection screen opens.

5. Verify that the “Format the partition using the NTFS file system” option is selected, and then press the <Enter> key.



00000311.EPS

➔ After formatting the HDD that takes about eight to 20 minutes depending on the HDD capacity, files will be copied from the CD-ROM to the HDD (this takes about five minutes).

➔ The PC restarts.

6. When the message “F2 SETUP” appears at the upper right corner of the window, press the <F2> key.

◆ *NOTE* ◆

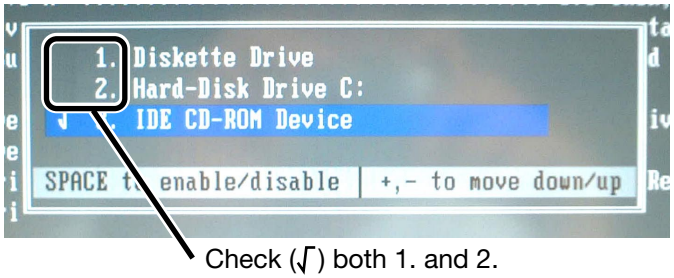
If you fail to press the <F2> key, restart the PC, wait until the message “F2 SETUP” appears at the upper right corner of the screen, and press the <F2> key.

➔ The setup window opens.

7. Select “Boot Sequence” and press the <Enter> key.

➔ The startup drive selection dialog opens.

8. Check (√) both “1. Diskette Drive” and “2. Hard-Disk Drive C:”.



00000511.EPS

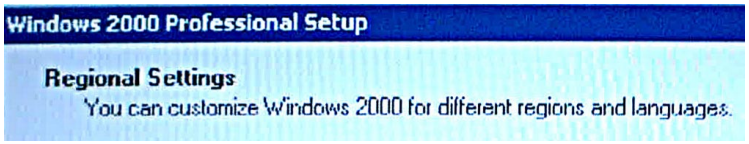
9. Save the setup data and start the PC.

10. After the installation data has been read from the HDD (this takes about three minutes), click Next > when Windows 2000 setup wizard startup window opens.

➥ ***REFERENCE***

If you do not click Next >, the system automatically switches to the “Regional Settings” window.

➔ Device driver setup processing starts, which takes about four minutes.
After the completion of device driver setup processing, the “Regional Settings” window opens.



00000315.EPS

■ Performing setup in accordance with the setup wizard

1. From the “Regional Settings” window, click Next >.

➔ The “Software Personal Setup” window opens.

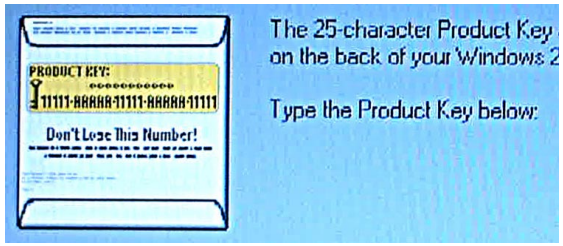
2. Enter the following settings:

❍ Enter “FUJI PHOTO FILM CO., LTD” in the Name: field.

❍ Enter “FUJI PHOTO FILM CO., LTD” in the Organization: field.

3. Click Next >.

➔ The product key input window opens.



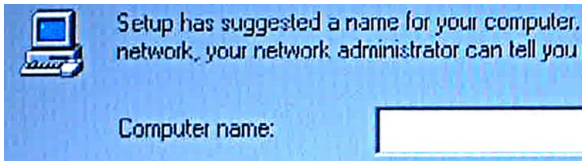
00000318.EPS

4. Enter the product key in the Product Key: field and then click Next >.

➥ ***REFERENCE***

The product key is indicated on the right-hand side cover of the PC main unit.

➔ A window opens to prompt for computer name and password input.



00000319.EPS

5. **Enter the following settings:**

❍ Enter a computer name (host name) in the Computer name: field.

The default settings are as follows.

- CR-IR346CL : CLXXXXXXXX (use upper-case characters to enter the “CL”. XXXXXXXX are for the CL serial number.)
- CR-IR348CL : CLXXXXXXXX (use upper-case characters to enter the “CR”. XXXXXXXX are for the CR serial number.)

◆ *NOTES* ◆

- *Enter the host name that was noted down before the start of OS installation.*
- *Even if you enter lower-case characters, their upper-case equivalents appear in the* Computer name: *field. Note, however, that the entered lower-case characters will be internally handled as lower-case character data.*

❍ Enter “fcr-iip” in the Administrator password: field.

❍ Enter “fcr-iip” in the Confirm password: field.

➥ *REFERENCE*

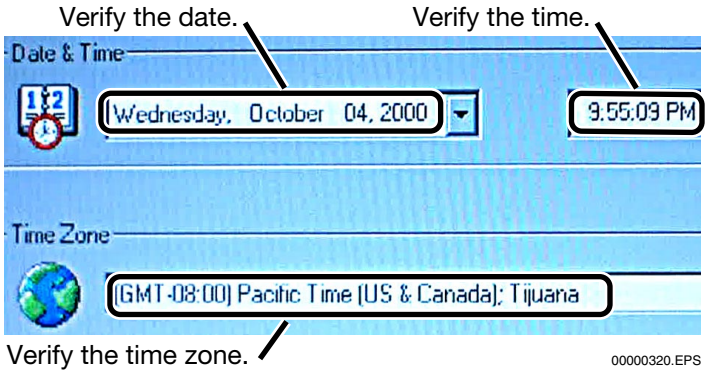
The character string entries in the [Administrator Password:] and [Confirm Password:] fields appear as asterisks (*).

6. **Click** Next > .

➔ The date/time setup window opens.

7. **Verify the date, time, and time zone, and then click** Next > .

If any wrong setting is encountered, correct it and then click Next > .



➔ The “Network Setup” window opens in several minutes.

■ Setting the network information

◆ NOTE ◆

If the PC is not connected to the network, the network setup window does not open.

1. When a network setup option selection window appears, prompting you to choose between Standard and Custom, choose Custom settings (by changing ○ to ◉), and then click Next >.

➔ The "Network Component Setup" window opens.

2. Make sure that ☑ Internet Protocol (TCP/IP) is checked. If it is not checked, put a check mark on it (by changing ☐ to ☑).

3. Select ☑ Internet Protocol (TCP/IP) (by highlighting it), and then click Properties.

➔ The Internet protocol (TCP/IP) properties window opens.

4. Choose ◉ Use the following IP address: (so that ○ changes to ◉).

➔ "IP Address" and "Subnet Mask" then appear.

➥ REFERENCE

The "IP Address" and "Subnet Mask" fields are now ready to accept your numerical value input.

5. Enter the following settings:

❍ Enter an IP address (e.g., 172.16.1.20) in the IP address: field.

❍ Enter a subnet mask (e.g., 255.255.0.0) in the Subnet mask: field.

◆ NOTE ◆

Enter the IP address and subnet mask that were noted down before the start of OS installation.

6. Click OK.

➔ You are then returned to the "Network Component Setup" window.

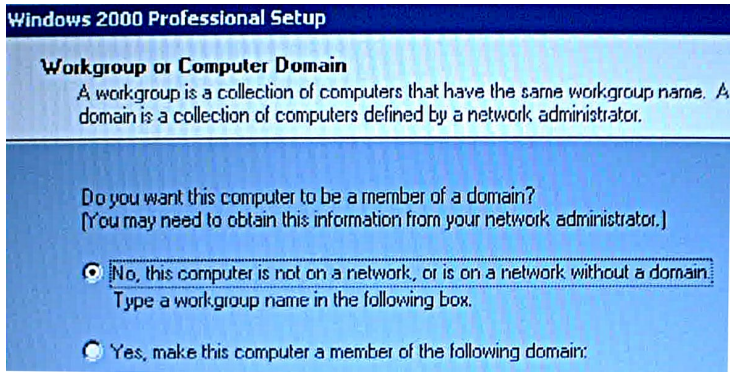
7. Click Next >. **It takes a few seconds to display the following window (computer domain setup window).**

➔ After a while, the computer domain setup window opens.

8. Verify that the 

radio button is selected (set to), and then click 

.



00000345.EPS

➥ ***REFERENCE***

Do not let the CL become a domain member.

➔ The "Completing the Windows 2000 Setup Wizard" window opens in about five minutes.

9. Remove the CD from the CD-ROM drive.

10. Click 

.

➔ The PC restarts and the "Network Identification Wizard Start" window opens.



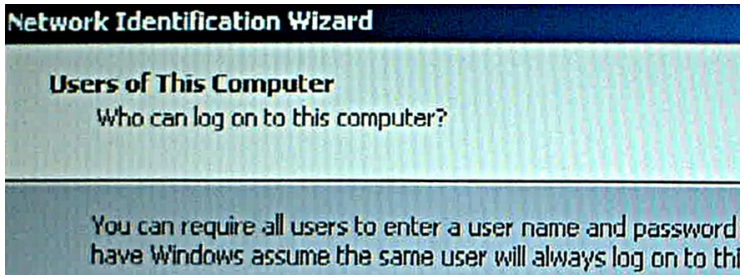
00000314.EPS

■ Setting the user to be logged on automatically

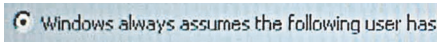
1. From the "Network Identification Wizard Start" window, click 

.

➔ A computer user setup window opens.



00000336.EPS

2. Make sure that the 

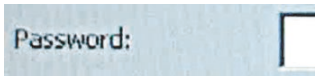
radio button is turned ON.

3. Enter the following settings:

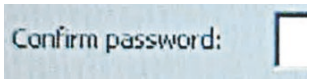
❍ Click the downward arrow mark within the 

field to change to 

.

❍ Enter "fcr-iip" in the 

field.

❍ Enter "fcr-iip" in the 

field.

➥ ***REFERENCE***

The character string entries in the [Password:] and [Confirm Password:] fields appear as asterisks (*).

4. Click 

.

➔ The "Network Identification Wizard" ends and the desktop screen appears on the display.

5. Click Finish.

➔ After a while, the “Getting Started with Windows 2000” window opens.



00000323.EPS

6. Deselect Show this screen at startup. (so that ☑ changes to ☐).

7. Click the ✕ mark at the upper right corner of the window.

➔ The system returns to the desktop screen.

OS installation is now completed.

2.2 Installing the Driver Software

For driver software installation, use the utility software on Dell ResourceCD. To do this, you must first install the utility software on the PC for the CL.

➥ *REFERENCE*

To determine what driver software needs to be installed, you can use Device Manager. To open Device Manager, perform the following steps:

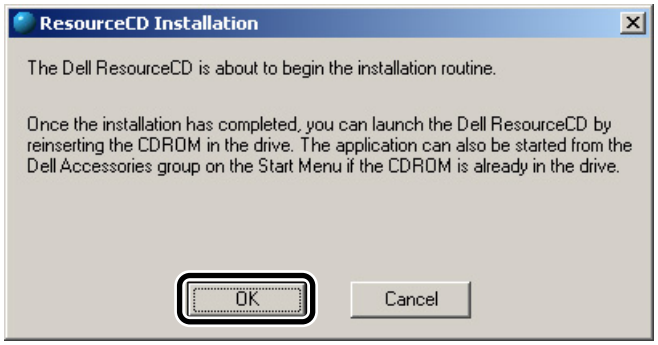
1. *Right-click the [My Computer] icon. From the pop-up menu, choose [Properties].*
   ➔ *The [System Properties] window opens.*
2. *Click the [Hardware] tab.*
3. *Click [Device Manager].*
   ➔ *Device Manager opens.*

The software for items marked "?" in Device Manager is not installed. Install the driver software for such items.

■ Installing the Dell ResourceCD utility software

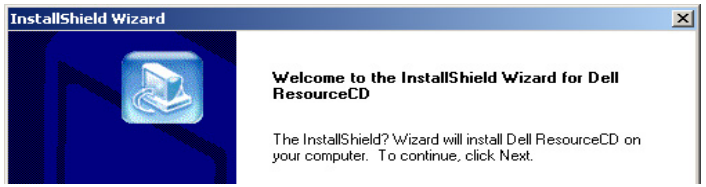
1. **Insert Dell ResourceCD, which is supplied with the PC, into the CD-ROM drive.**

2. **When the following window automatically opens, click** OK **.**



00000365.EPS

➔ A new window opens to indicate that the installation wizard is started.



00000366.EPS

3. **Click** Next > **.**

➔ The installation processing starts.

After a while, a window opens to indicate that setup is completed.

4. **Verify that** Yes, I want to restart my computer now **is chosen, and then click** Finish **.**

➔ The PC restarts.

➥ *REFERENCE*

Depending on the version of the Dell ResourceCD software, the PC needs not to be restarted.

■ Installing the driver software

For the GX150, install the following driver software.

- Video driver : Intel815
- System driver : Intel CHIP SET
- Audio driver : ADI1885

◆ NOTE ◆

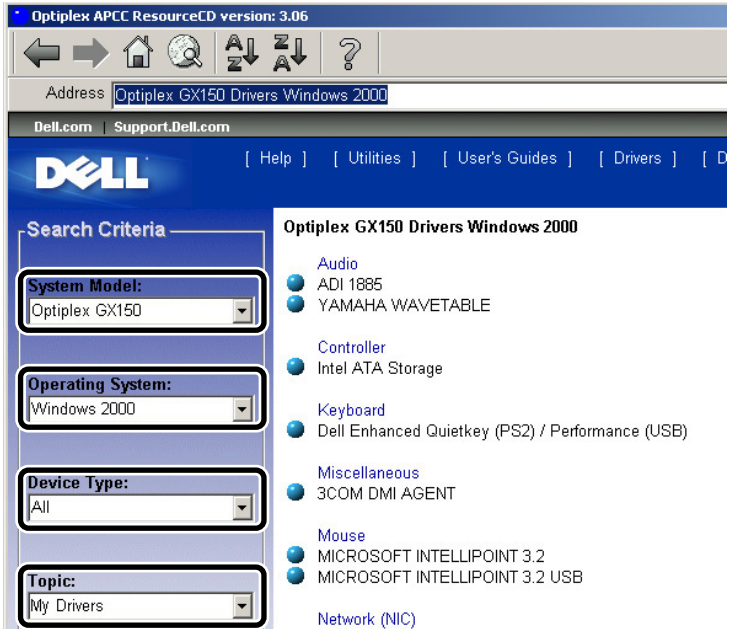
The directory paths to driver files stored on the CD-ROM may be changed by Dell without prior notice. If they are changed, contact Dell's technical support for confirmation.

1. Click Start, point to "Programs" and "Dell Accessories", and then click "Dell ResourceCD".

➔ The Dell ResourceCD utility software starts up.

2. When the following window opens, perform setup for the "Search Criteria" area under the following conditions.

- System Model = OptiPlex GX150
- Operating System = Windows 2000
- Device Type = All
- Topic = My Drivers



RI000063.EPS

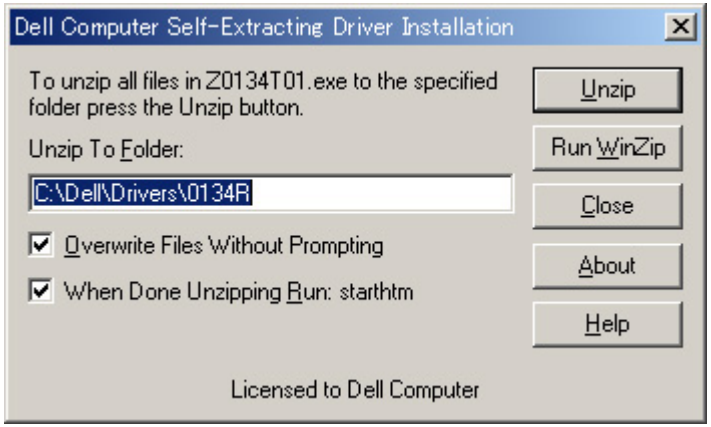
3. In the "Video" area, click "INTEL 815".

➔ "WinZip Self-Extractor" appears.

4. Click OK to decompress files.

➔ "Dell Computer Self-Extracting Driver Installation" appears.

5. Click Unzip.



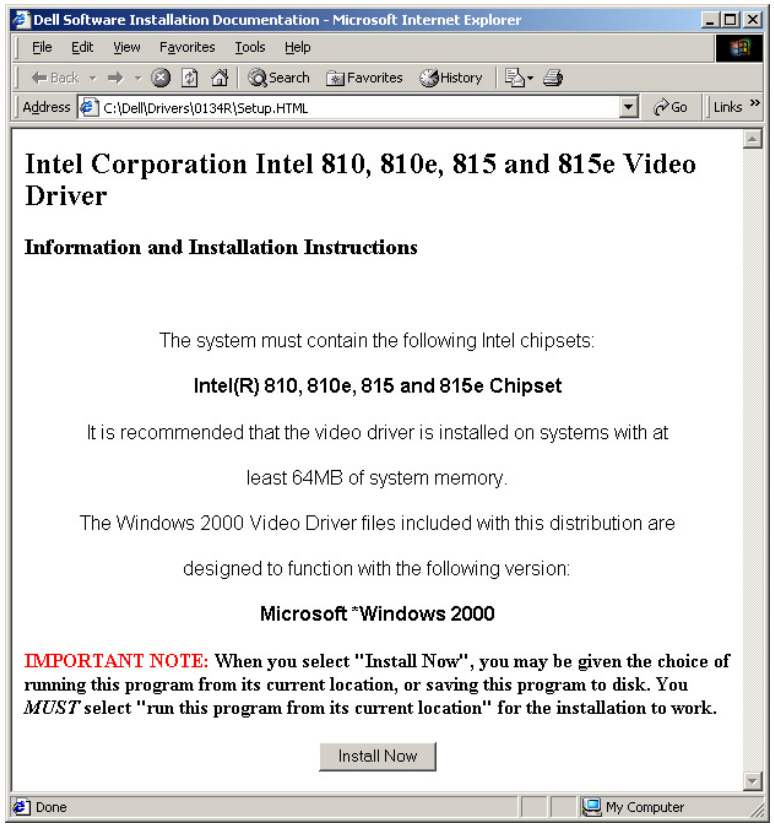
RI000064.EPS

➔ A window opens to indicate that unzipping is completed.

6. Click OK.

➔ Internet Explorer starts up.

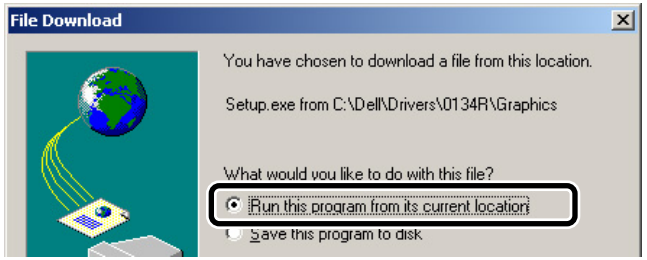
7. Scroll the screen downward until you reach its bottom, and then click Install Now.



RI000065.EPS

➔ The “File Download” window opens.

8. Choose “Run this program from its current location” and then click OK.



RI000066.EPS

➔ The “Security Warning” window opens.

9. Click Yes.

➔ The driver software installer starts running.

10. Follow the installer’s on-screen instructions to install the driver software.

11. Install the other driver software (Intel CHIP SET and ADI1885) by performing the same procedure as indicated in steps 3. through 10.

2.3 Setting the OS

Perform the following OS-related settings.

- The number of colors (“Colors”) and monitor resolution (“Screen area”)
- Refresh frequency
- Modification of the OS selection menu
- Procedure for avoiding a password input prompt when exiting the suspend mode (as necessary)
- Defining the character to be used as a decimal point

■ Setting the monitor

1. **Right-click a blank space on the desktop, and then choose “Properties” from the pop-up menu.**

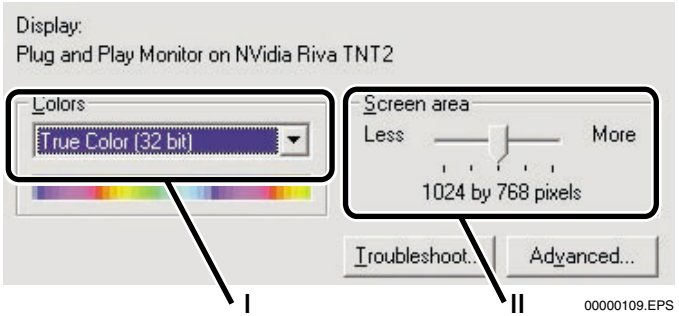
➔ The “Display Properties” window opens.



00000108.EPS

2. **Click the “Settings” tab.**

3. **Complete monitor setup as directed below.**



00000109.EPS

I. “Colors” : Choose True Color (24- or 32-bit).
II. “Screen area”: Choose 1024 × 768 pixels.

4. Click Apply.

➔ The confirmation window opens.

5. Click OK.

➔ The screen area changes and the monitor setting window opens.

6. Click Yes.

◆ *NOTE* ◆

Click Yes immediately. If it is not clicked in 15 seconds, the window returns to the previous status.

■ Setting the refresh frequency

1. In the “Settings” tab of the “Display Properties” window, click Advanced... .

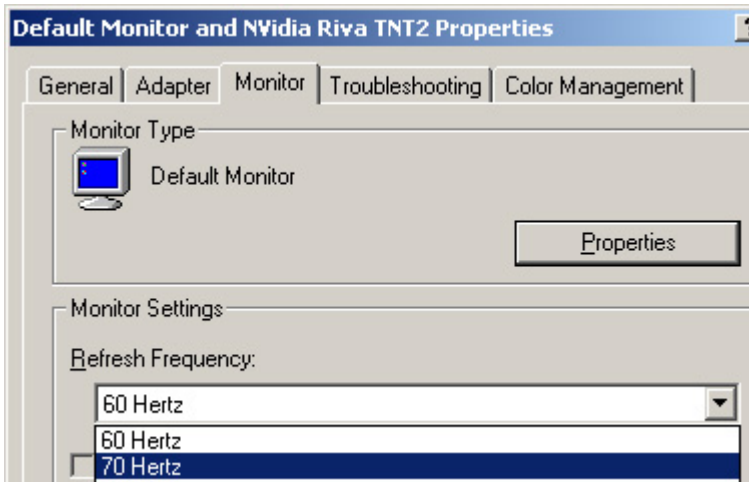
➔ The “Plug-and-Play Monitor and ... Properties” window opens.

2. Click the “Monitor” tab.

3. From the “Refresh Frequency” pull-down menu, choose “75 Hertz”.

◆ ***NOTE*** ◆

If the screen becomes disordered when a setting of 75 Hertz is chosen, change the setting to 70 Hertz.
If the screen becomes disordered even when set to 70 Hertz, change it to 60 Hertz.



RI000041.EPS

4. Click Apply .

➔ The confirmation window opens.

5. Click OK .

➔ The screen area changes and the “Monitor Setup” window opens.

6. Click OK .

◆ ***NOTE*** ◆

If you do not click OK *within 15 seconds, the system reverts the previous setting. Therefore, click it without delay.*

7. Click OK to close the “Display Properties” window.

■ Hiding the OS selection menu

When the OS is installed newly, the OS selection menu opens at OS startup. Therefore, perform the following procedure so that the OS selection menu does not open:

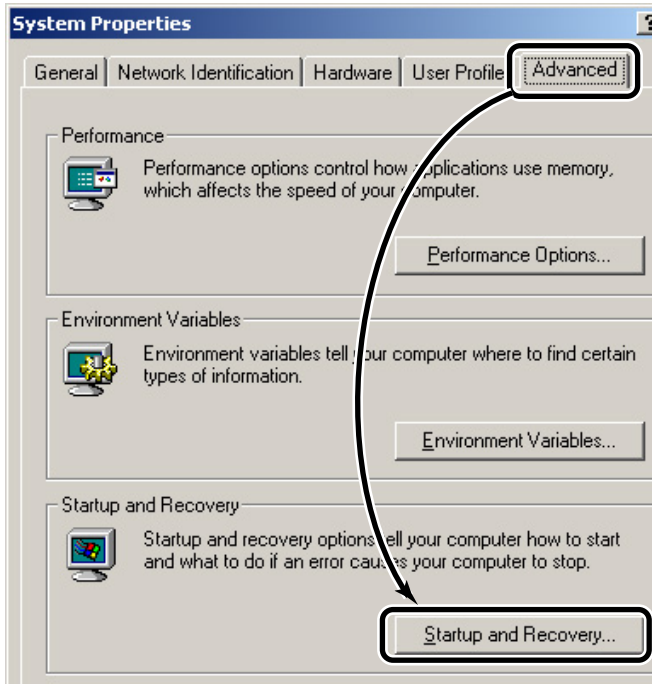
1. Click Start, point to “Settings”, and click “Control Panel”.

➔ The Control Panel opens.

2. Double-click System.

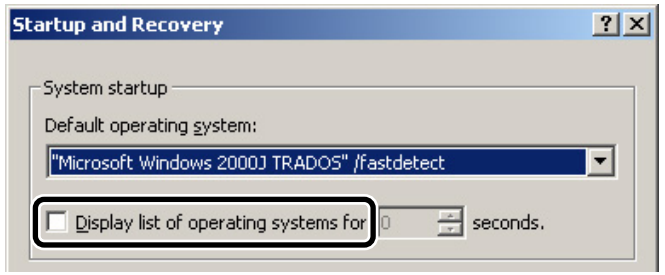
➔ The “System Properties” window opens.

3. Click the “Advanced” tab and then click Startup and Recovery....



00000124.EPS

4. Uncheck Display list of operating systems.



00000125.EPS

5. Click OK.

➔ You are returned to the “System Properties” window.

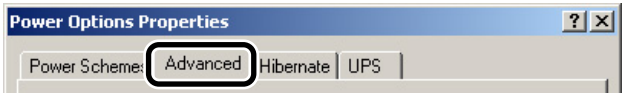
6. Click OK.

➔ You are returned to the desktop screen.

■ Procedure for avoiding a password input prompt when exiting the suspend mode

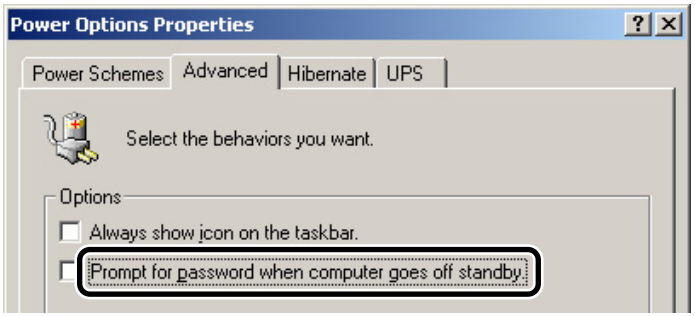
By default, the PC prompts for password input when you attempt to exit the suspend mode. Since it is conceivable that the user may inadvertently press the Suspend button on the keyboard, perform the following procedure as needed.

1. From the Start menu, point to "Settings", and then click "Control Panel".
   ➔ The Control Panel opens.
2. Double-click Power Options.
   ➔ The "Power Options Properties" window opens.
3. Click the "Advanced" tab.



RI000084.EPS

4. Uncheck Prompt for password when computer goes off standby (☑ ➔ ☐).



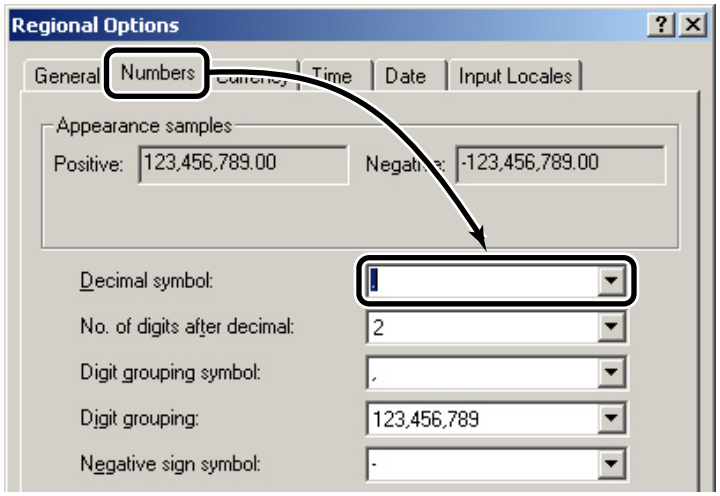
RI000083.EPS

5. Click OK and then close the Control Panel.
   ➔ You are returned to the desktop screen.

■ Defining the character to be used as a decimal point

Select "." (period) as the character to be used as a decimal point. If anything other than a period is selected, an error occurs when you select an image distribution destination with the QA function.

1. From the Start menu, point to "Settings", and then click "Control Panel".
   ➔ The Control Panel opens.
2. Double-click Regional Options.
   ➔ The "Regional Options" window opens.
3. Click the "Numbers" tab and then select "." (period) for the "Decimal symbol" field.
   If, as a result of the above selection, the same symbol is selected for the "Digit grouping symbol" field and "Decimal symbol" field, change the symbol for the "Digit grouping symbol" field.



RI000101.EPS

4. Click OK and then close the Control Panel.
   ➔ You are returned to the desktop screen.

3. Setting Up the Monitor RU 5000P

The setup procedure varies with the connected monitor.

3.1 15" Monitor with Touch Panel

Perform the following procedures to install the touch panel driver and adjust the touch panel and monitor.

■ Installing the touch panel driver and adjusting the touch panel

☞ For details on the procedures for setting up the touch-panel-attached 15" monitor, see “Appendix 1 Installing the Touch Panel Driver [Option]” in “Appx IN: Appendix to Installation”.

■ Adjusting the monitor

Adjust the monitor if it has a problem with the following performance characteristics.

- ❍ Width
- ❍ Horizontal position
- ❍ Height
- ❍ Vertical position
- ❍ Pincushion distortion
- ❍ Screen rotation

☞ For details on the adjustment procedures, refer to the documentation supplied with the monitor.

■ Adjusting the contrast and brightness

Adjust the display contrast and brightness as follows:

- ● Model 9416TD15/H2
  - ❍ Contrast : 127
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 255
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)

- ● Model 9416TD15/H2-1
  - ❍ Contrast : 65%
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 100%
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)

- ● Model L350P-TS
  - ❍ Contrast : 80%
  - ❍ Brightness : 80%
    (Press the “Enter” switch on the front of the monitor to adjust the brightness by selecting <Picture Adjustment>, then <Contrast/Brightness>.

3.2 17" CRT Monitor

Adjust the monitor as needed. No other setup procedures need be performed.

■ Adjusting the monitor

Adjust the monitor if it has a problem with the following performance characteristics.

- ❍ Width
- ❍ Horizontal position
- ❍ Height
- ❍ Vertical position
- ❍ Pincushion distortion
- ❍ Screen rotation
- ❍ Brightness
- ❍ Contrast

☞ For details on the adjustment procedures, refer to the documentation supplied with the monitor.

3.3 Super Resolution LCD Monitor SL-IC300

Install the video board driver and perform monitor setups.

☞ For detailed setup procedure of the Super Resolution LCD Monitor SL-IC300, see the SL-IC300 Service Manual.

3.4 Ikegami 1k Landscape Monitor

Install the video board driver and perform setups for adjustments of width and height on the monitor.

☞ For the procedure of video board driver installation, see “Appendix F Installing the Video Board Driver” of this chapter.

4. Installing MSDE and Its Service Pack

RU 5000P

Perform the following procedure to install MSDE (SQL7) and MSDE (SQL7SP*) and its service pack.

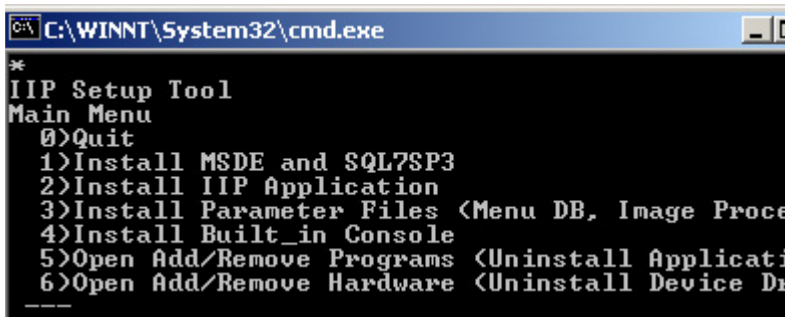
MSDE is a database that manages the images and patient information handled by the CL. If MSDE is not installed, the CL does not operate.

➥ REFERENCE

The service pack is a modification program that corrects various problems with MSDE.

1. Insert the CL-AP CD into the CD-ROM drive.

➔ The "IIP Setup Tool" main menu automatically opens.



RI000011.EPS

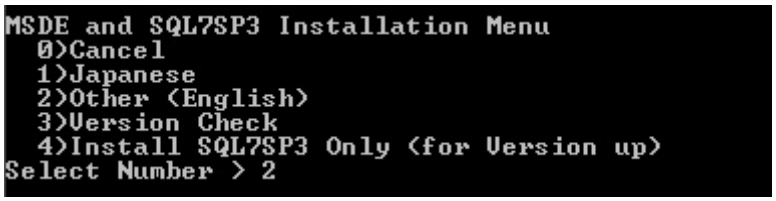
➥ REFERENCE

"IIP Setup Tool" is a utility tool that performs CL-AP installation and other tasks. This tool is stored on the CD (product name: Application software; Part No. 114Y5342001A) that is supplied with the CL as a standard accessory.

2. Enter "1" and then press the <Enter> key.

➔ The installation menu for MSDE and its service pack opens.

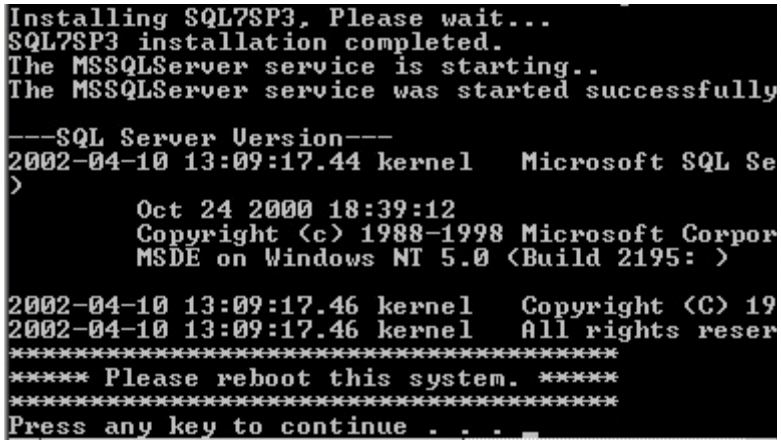
3. To install the Japanese version, enter "1". To install the English version, enter "2". Finalize your number entry by pressing the <Enter> key.



00000330.EPS

➔ As indicated in the following window illustration, the MSDE/service pack installation process progresses.

MSDE and service pack installations end in about ten minutes in total.



00000348.EPS

➥ REFERENCE

When you choose "3) Version Check", you can view the version information about MSDE and service pack.

4. **When the “Press any key to continue...” message appears, press the <Enter> key.**

➔ The command prompt will close.

5. **Restart the CL to activate MSDE.**

➔ After the CL has been started up, MSDE will be activated automatically. (The  icon appears in the task tray at the lower right.)

6. **If you wish to proceed to CL-AP installation processing, skip over the following steps 7. and 8. to go to the next page.**

7. **Enter “0” and then press the <Enter> key.**

➔ The system exits “IIP Setup Tool” and returns to the desktop screen.

8. **Remove the CD from the CD-ROM drive.**

5. Installing the CL-AP

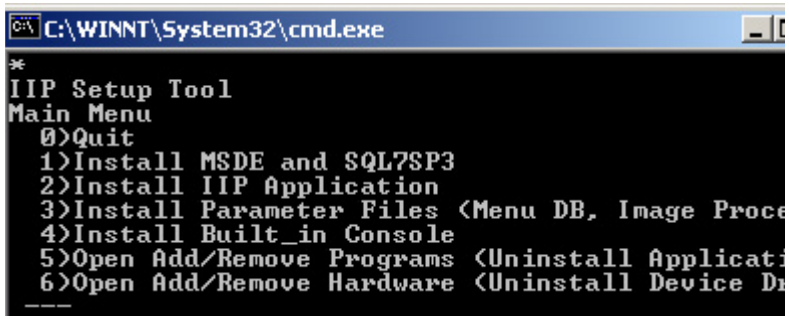
RU 5000P

Install the CL-AP and replace the menu database.
Installing the CL-AP will automatically set up the wallpaper.

5.1 Installing the CL-AP

1. Insert the CL-AP CD into the CD-ROM drive.

➔ The “IIP Setup Tool” main menu automatically opens.



RI000011.EPS

➥ ***REFERENCE***

“IIP Setup Tool” is a utility tool that performs CL-AP installation and other tasks. This tool is stored on the CD (product name: Application software; Part No. 114Y5342001A) that is supplied with the CL as a standard accessory.

2. Enter “2” and then press the <Enter> key.

➔ The installer starts running and opens the “IIP Setup/Welcome to the ...” window.



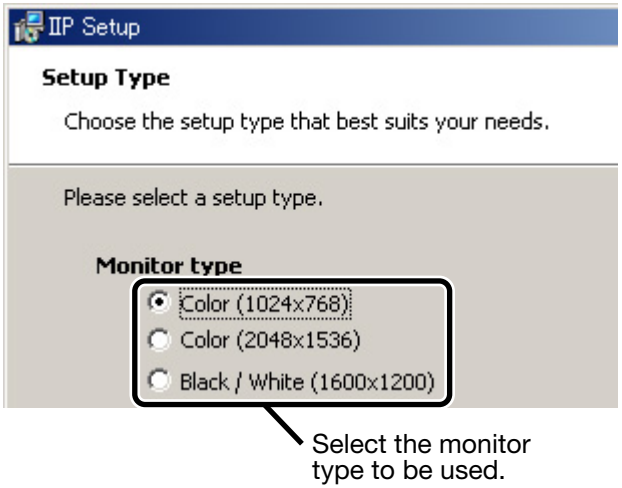
00000178.EPS

3. Click Next >.

➔ The “IIP Setup/Setup Type” window opens.

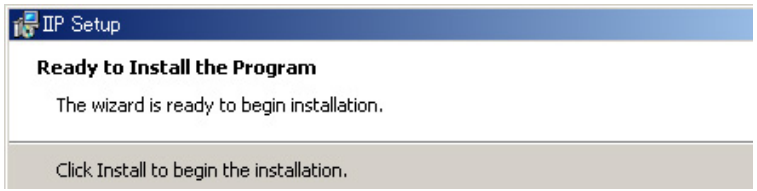
4. Select the monitor type to be used, and then click Next >.

- When the 15" monitor with the touch panel or the 17" CRT monitor is to be used, choose “Color (1024 × 768)”.
- When the high-definition LCD SL-IC300 is to be used, select “Color (2048 × 1536)”.
- When the Ikegami 1k landscape monitor is to be used, select “Black/White (1600 × 1200)”.



00000179.EPS

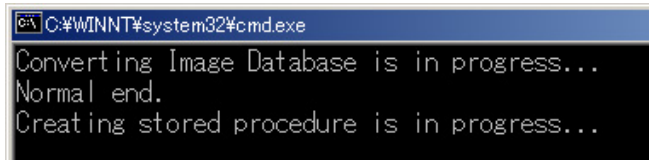
➔ The “IIP Setup/Ready to Install the Program” window opens.



00000180.EPS

5. Click Install.

➔ In a few minutes, a window like that shown below opens.



RI000026.EPS

◆ ***NOTE*** ◆

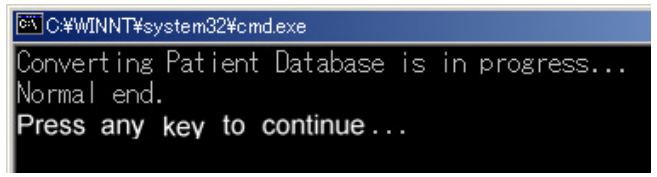
Although a message saying that "Image Database does not exist." can appear for software versions A04 or later, the CL-AP installation processing will not be affected.



RI000032.EPS

6. Press the <Enter> key.

➔ In a few seconds, a window like that shown below opens.



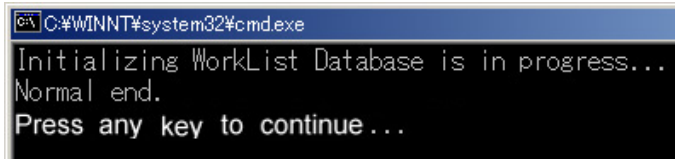
RI000027.EPS

◆ ***NOTE*** ◆

Although a message saying that "Patient Database does not exist." can appear for software versions A04 or later, the CL-AP installation processing will not be affected.

7. Press the <Enter> key.

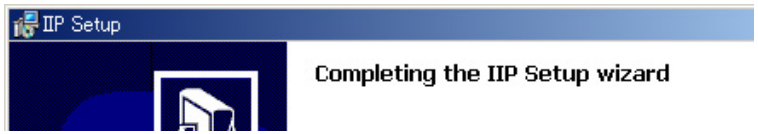
➔ In a few seconds, a window like that shown below opens.



RI000028.EPS

8. Press the <Enter> key.

➔ Upon completion of installation, the "IIP Setup/Completing the IIP..." window opens.



00000181.EPS

9. Click Finish.

➔ The system returns to the "IIP Setup Tool" main menu.

10. Turn the PC power OFF and mount the PEI or PSI board on the PC.

☞ "Appendix C Removing/Reinstalling the Board (PEI/PSI)"

◆ ***NOTE*** ◆

If the OS was being installed with the PEI/PSI board mounted on the PCI slots, use Device Manager to delete the Other devices file at this step.

☞ *"■ Checking the PEI01A device driver" in "3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure" under "MT: Machine Troubleshooting".*

11. Re-connect the USB peripheral devices (barcode reader, magnetic card reader, etc.) that have been disconnected before OS installation.

5.2 Replacing the Menu Database

To change an exposure menu to another language, the menu database must be replaced.

◆ NOTE ◆

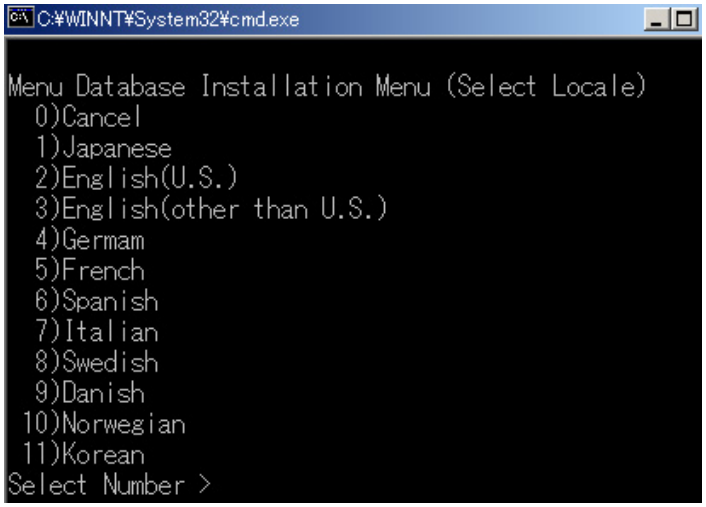
Note that exposure menu settings will revert to the default if a menu database is replaced.

1. **Enter “3” on the “IIP Setup Tool” main menu and press the <Enter> key.**

➔ A menu of languages that can be installed will appear.

◆ NOTE ◆

Languages other than Japanese and English are not supported currently.



00000506.EPS

2. **Enter the item number of the language you wish to install and press the <Enter> key.**

➔ The message saying “Menu Database Installation Completed” will be displayed, completing thus replacing the menu database.

3. **If you wish to proceed to install the CL components, skip over the following steps 4. and 5. to go to the next page.**

4. **Enter “0” and press the <Enter> key.**

➔ The system returns to the desktop screen.

5. **Remove the CD from the CD-ROM drive.**

6. Installing the Screen Saver

RU 5000P

7. Installing the CL Components

RU 5000P

Install as follows the components (files) that are necessary for activating the CL.

7.1 Built_inConsole (A02 or later)

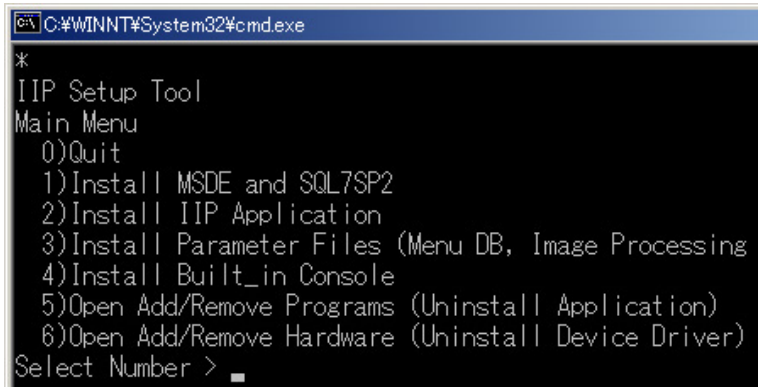
For installing the console software Built_inConsole, use the “IIP Setup Tool” on the CL-AP installation CD.

◆ *NOTE* ◆

Built_inConsole must be installed even when only the RU or 5000 cassette-type Image Reader is installed. If it is not installed, an error occurs when the CL-AP starts running.

1. **Insert the CL-AP CD into the CD-ROM drive.**

➔ The “IIP Setup Tool” main menu automatically opens.



RI000001.EPS

2. **Type in the number “4” and then press the <Enter> key.**

➔ The “Built_inConsole Setup” window opens.

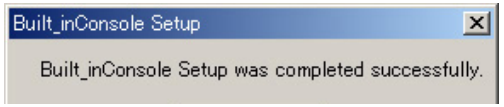
3. **Click** OK.

4. **Click** .



RI000031.EPS

➔ When the installation process ends, a message appears to indicate the completion of installation.

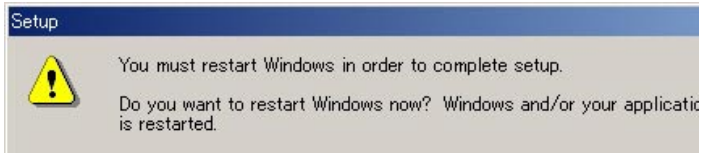


RI000029.EPS

5. **Click** OK.

➔ A dialog box appears, prompting you to restart the PC.

6. **Click** Yes.



RI000030.EPS

➔ The PC restarts.

7. **Click** OK **when the “20102” error code window is displayed after the PC has been restarted.**

7.2 FRIS Modules (A04 or later)

For the FRIS Modules, use “IIP Setup Tool” on the CL-AP installation CD.

◆ NOTE ◆

Even if the F-RIS function is not used, install the FRIS Modules. If they are not installed, an error occurs when the CL-AP starts.

1. **Start “IIP Setup Tool” and then choose “10) Install FRIS Modules”.**

➥ REFERENCE

Insert or reinsert the CD-AP CD into the CD-ROM drive. The “IIP Setup Tool” menu will then start up automatically.

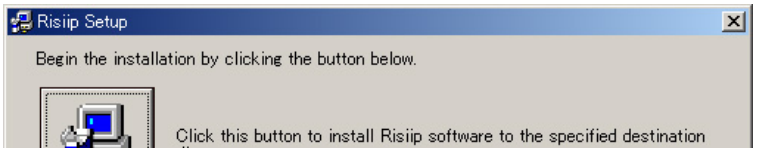
➔ The “Risiip Setup” window opens.



RI000042.EPS

2. Click OK.

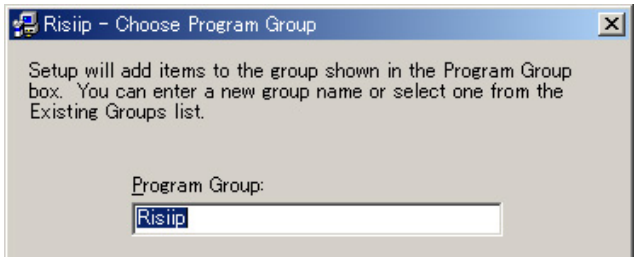
➔ A window opens, prompting you to start the installation.



RI000043.EPS

3. Click .

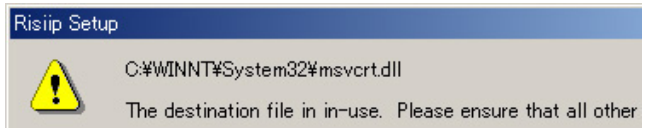
➔ The “Risiip - Choose Program Group” window opens.



RI000044.EPS

4. Click Continue.

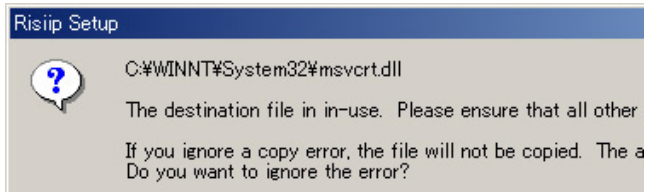
➔ The following warning window opens:



RI000045.EPS

5. Click Ignore.

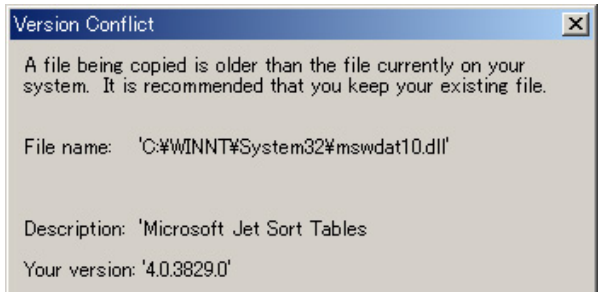
➔ The following window opens.



RI000046.EPS

6. Click Yes.

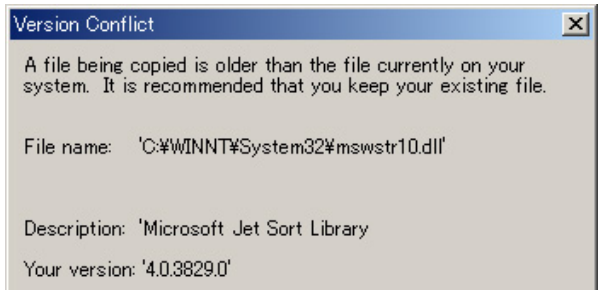
➔ The following window opens.



RI000047.EPS

7. Click Yes.

➔ The following window opens.



RI000048.EPS

8. Click Yes.

➔ A message appears to indicate that the installation is completed.



RI000049.EPS

9. Click OK.

➔ The installation process for the FRIS Modules is thus completed.

8. Installing the XG-1 Standard Key

RU 5000P

When the RU is connected, be sure to install XG-1 Standard Key by performing the procedure set forth below.

XG-1 Standard Key is stored on the CD that is supplied with the CL.

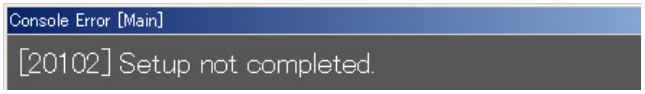
➥ REFERENCE

When XG-1 Standard Key (A01) is installed, the following functions are available.

- *RU connection*
- *HQ image transfer (image transfer from the RU only)*
- *DRC image processing*
- *TAS image processing*
- *Image magnification or full screen display on the QA window*
- *Connection to other competing PACSs*

1. **Turn ON the PC power.**

➔ An error screen like that shown below opens immediately after CL-AP startup.



00000332.EPS

➥ REFERENCE

This error screen opens when the AP key is not installed.

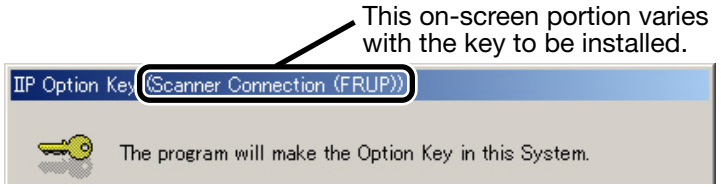
☞ *Install the AP key according to "11. AP Key Installation and User Interface Settings".*

2. **Click** OK **.**

➔ The system returns to the desktop screen.

3. **Insert the XG-1 Standard Key CD into the CD-ROM drive.**

➔ The RU connection key installation start window automatically opens.

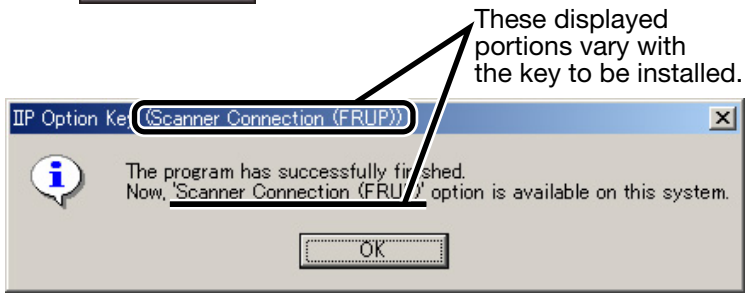


00000337.EPS

4. **Click** Continue **.**

➔ A window opens to indicate the completion of installation.

5. **Click** OK **.**



00000338.EPS

➔ The HQ image transfer key installation start window automatically opens.

6. **In the same manner as indicated in steps 4. and 5. above, consecutively install the HQ image transfer key, DRC image processing key, TAS image processing key, image magnification or full screen display key on the QA window, and other competing PACS connection key.**

7. **Remove the CD from the CD-ROM drive.**

9. Installing the 5000 Standard Key

RU 5000P

When the 5000 plus is connected, install the 5000 Standard Key.
The 5000 Standard Key is stored on the CD that is supplied with the CL.

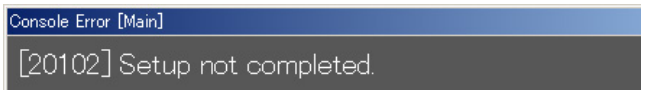
➥ REFERENCE

When the 5000 Standard Key is installed, the following functions are available:

- *5000 plus connection*
- *DRC image processing*
- *TAS image processing*
- *Image magnification or full screen display on the QA window*
- *Connection to other competing PACSs*

1. **Turn ON the PC.**

➔ The following error window opens immediately after CL-AP startup.



00000332.EPS

➥ REFERENCE

The above error window opens when the AP key is not installed.

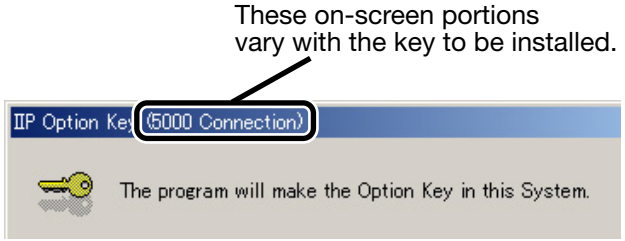
☞ *The AP key must be installed as directed in "11. AP Key Installation and User Interface Settings".*

2. **Click** OK.

➔ You are returned to the desktop screen.

3. **Insert the 5000 Standard Key CD into the CD-ROM drive.**

➔ The installation start window for the 5000 series key automatically opens.

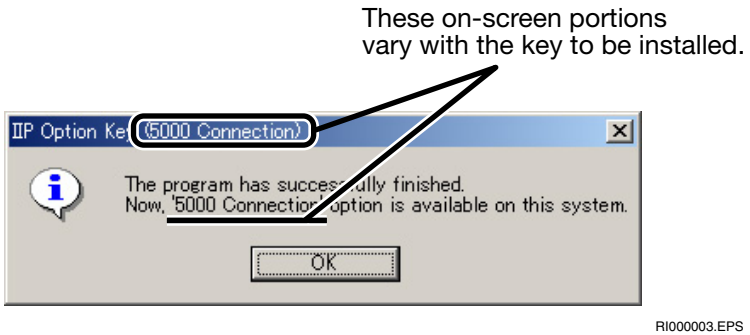


RI000002.EPS

4. **Click** Continue.

➔ A window opens to indicate the completion of installation.

5. **Click** OK.



RI000003.EPS

➔ The installation start window for the DRC image transfer key opens.

6. **In the same manner as indicated in steps 4. and 5. above, consecutively install the DRC image processing key, TAS image processing key, image magnification or full screen display on the QA window, and other competing PACS connection key.**

7. **Remove the CD from the CD-ROM drive.**

10. Option Key Installation RU 5000P

Install the same option keys that were used immediately before OS reinstallation.
Unless the option keys have been deleted by newly installing the OS or deleting the option key registry, option key reinstallation is not required.

◆ NOTE ◆

After option key installation, be sure to install the AP key. The reason is that installing the option keys disables the AP key that has been enabled.

Function	Product Code	Description
Print output	IR346 LOCAL PRINT	LP (local printer) connection
	IR346 DICOM PRINT	DICOM Print function
Image input/output	IR346 DICOM CR STORAGE	DICOM-based image transmission functions available (Also include a function to transmit unstandardized images to the QA-WS.) Options installed are as follows. • CR Storage SCU (Standard) • CR Storage SCU (Private) (“Private Unstandardized CR Storage” is included in “Private”.)
	IR346 DICOM IM PROCESSED	Functions available for processed-image transmission with DICOM Options installed are as follows.*1 • CR Storage SCU (Standard) • Processed image generation
	IR346 DMS NET-WORK IN-OUT	Function for image transfer (input/output) with FINP Options installed are as follows. • FINP output • FINP input (Supports only the reprint function.)

IN000004.EPS

Function	Product Code	Description
Image storage	CL DICOM COMMITMENT	A function assuring that an image has surely been stored in the archiver unit.*1
QA function	IR346 DELUX-QA	QA function addition*2
Image processing	IR346 MFP	MFP image processing
	CL SHUTTER-PROC	Shadow masking
	CL PEM	PEM image processing
Acquisition of patient information	CL ID ONLINE	ID Online function
	CL DICOM ORDER MWM	DICOM worklist function
	CL DICOM ID MWM	DICOM worklist function (acquiring only patient information)
	CL DICOM MPPS	DICOM PPS function*3 Basically, installed together with MWM.
	CL ORDER ONLINE	Ordering function (serial connection)
	CL ORDER ONLINE FOR TST	Ordering function (F-RIS)
Energy subtraction processing	CL ES	Energy subtraction function Make sure to install this function when XU-D1 is connected.
X-ray controller	CL X ONLINE	X-CON control function

*1 To use this option, the “IR346 DICOM CR STORAGE” option key must have been installed.

*2 When “IR346 DELUX-QA” is installed, all the QA functions are made available.
If it is not installed, only a limited number of QA functions available.

*3 This option can be used only by combining it with “CL DICOM ORDER MWM” or “CL DICOM ID MWM”.

IN000006.EPS

◆ NOTE ◆

Each option key is supplied on one dedicated CD-ROM for each product.

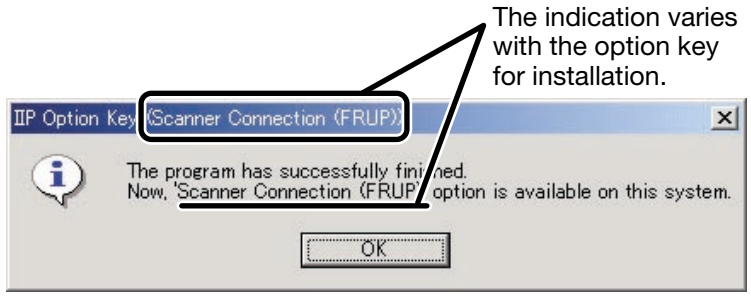
The installation procedure is described below.
The same installation procedure applies to all the option keys.

1. **Insert an option key CD into the CD-ROM drive.**

➔ The installation start window automatically opens in several seconds.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of installation.



00000455.EPS

3. **Click** OK **.**

➔ The system returns to the desktop screen.

◆ *NOTE* ◆

Depending on the option for installation, the installation start window will be displayed some times.

Perform steps 2. and 3. as well.

4. **Remove the CD from the CD-ROM drive.**

11. AP Key Installation RU 5000P

◆ NOTE ◆

Before AP key installation, be sure to install a standard key and option keys.

➥ REFERENCE

The CL is designed so that the CL-AP can be started up when registry information is generated to define the encryption key. The associated registry information is generated when the AP key is installed.

Install the AP key as follows:

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000456.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

12. Initializing the Image Database

RU 5000P

◆ NOTES ◆

- *After initial installation of the OS, be sure to initialize the image database. Starting up the CL-AP without initializing the image database will cause errors to be indicated (error codes: 50001, 20001, 30107, 30151, 20110, etc).*
- *Database can be initialized only when MSDE has been running. If MSDE is running, the icon will be displayed in the task tray at the lower right corner of the window. If it is not displayed, restart the PC.*
- *If images are accumulated on the image output queue, database cannot be initialized. It is thus necessary to delete images accumulated on the image output queue.*

☞ For the procedure to be used to delete images accumulated on the image output queue, see “8.2 Clearing the Contents of the Image Output Queue” under “MU: Maintenance Utility”.

1. **Turn ON the CL-PC power.**

➔ Windows 2000 starts up. After about one minute, the CL-AP starts running.

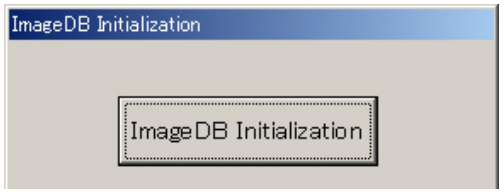
2. **Start the Service Utility.**

☞ For details on the Service Utility startup procedure, see “1. Starting/Exiting the Service Utility” in “MU: Maintenance Utility”.

➔ The main menu opens.

3. **Click [Data Base Utility].**

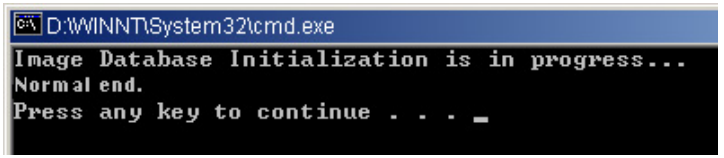
➔ The “ImageDB Initialization” window opens.



00000130.EPS

4. **Click** ImageDB Initialization **.**

➔ The command prompt window opens. After several seconds, the following message appears.



00000184.EPS

5. **Press the <Enter> key.**

➔ After about 20 seconds, the system completes image database initialization.

◆ *NOTES* ◆

If the following message appears, images included in the image database have not been initialized accordingly.

It failed in initialized DB.

Make sure that MSDE has been running and images are not accumulated on the image output queue.

- *To start up MSDE*
  ➔ *Restart the PC and make sure that the*  *icon is displayed in the task tray.*
- *When images are accumulated on the image output queue*
  ➔ *Delete images accumulated on the output queue.*

☞ *"8.2 Clearing the Contents of the Image Output Queue"*

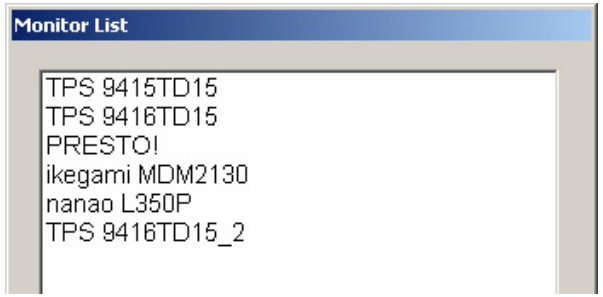
6. **The same message as that appears in step 4. above ("Press any key to continue...") will reappear here. Press the <Enter> key.**

➔ The system returns to the "ImageDB Initialization" window.

13. Display Optimization (LUT file settings)

RU 5000P

With [LUT] of the Service Utility, install an LUT file that matches the display characteristics.



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- TPS 9415 TD15 : 15" LCD monitor with a touch panel (model TPS9415TD15/G2)
- TPS 9416 TD15 : 15" LCD monitor with a touch panel (model TPS9416TD15/H2)
- PRESTO! : Super Resolution LCD Monitor SL-IC300
- ikegami MDM2130: Ikegami monitor (1k landscape type)
- nanao L350P : EIZO 15" LCD monitor with a touch panel (model L350P-TS)
- TPS 9416TD15_2 : 15" LCD monitor with a touch panel (model TPS 9416TD15/H2-1)

☞ For details, see “4. Display Optimization - LUT” in “MU: Maintenance Utility”.

14. Restoring the CL-Config RU 5000P

The following seven data are to be restored in the CL:

- SysConfig.mdb file (A00 or later)
  - System settings
  - Local printer settings
  - CSL settings
  - FINP settings
  - FRUP settings
  - QA process settings
- NetConfig.mdb file (A00 or later)
  - Connected equipment information table
  - Connection destination setup table
  - DicomPrint sort destination setup table
  - FINP compression ratio setting
  - Distribution code setting
- PN.mdb file (A00 or later)
  - PN (Person Name) settings
- McrDataFormat.mdb file (A00 or later)
  - Magnetic card format setting
- TagReplace.ini file (A02 or later)
  - Setup for DICOM tag replacement
- QACustom.mdb file (A02 or later)
  - Setup of display items on the QA window
- Selector.mdb file (A02 or later)
  - Selector setup

➤ IMPORTANT

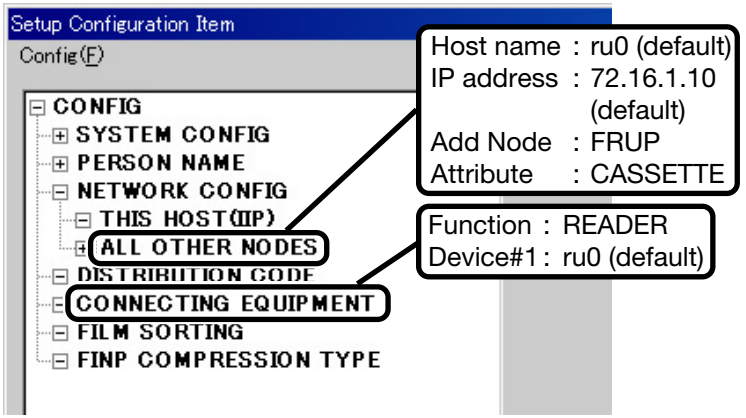
Data to be restored must be of the same software versions. Restoring data of different software versions will disable the software to be operated correctly. Note, however, that the following can be restored correctly.

• Restoring the A02 version data to A03
• Restoring the A04 or A05 version data to A06

◆ NOTES ◆

If no backup data is available, restore the config settings as follows.

❍ *Restoring the RU (one RU connection) conifg (“NETWORK CONFIG”*
• “ALL OTHER NODES” and CONNECTING EUIPMENT)



00000512.EPS

❍ ***Restoring config for connection to the RU (two or more RUs connected)***
☞ *“4.5 Setup for RU Connection” under “IN-B: Installation – Connection to Two or More RUs and 5000 plus”*

❍ ***Restoring config for connection to the 5000 plus***
☞ *“4.4 Config Setting for IR Connection” under “IN-B: Installation – Connection to Two or More RUs and 5000 plus”*

❍ ***Restoring the CL system config (for both RU and 5000 plus)***
☞ *“5.3 Setup with Service Utility” in “IN-A: Installation – One RU Connection”*
☞ *“4.2 Setup for the CL with the Service Utility” under “IN-B: Connection to One of More RUs and 5000 plus”*

❍ ***Restoring config for connection to other equipment (for both RU and 5000 plus)***
☞ *“2. Software Setup” in “OE: Connecting the CL to Other Equipment”*

❍ ***Restoring the barcode reader and magnetic card reader config (for both RU and 5000 plus)***
☞ *“Appendix 3 Connecting the Barcode Reader [Option]” and “Appendix 4 Setting Up the Magnetic Card [Option]” in “Appx IN: Appendix to Installation”*

❍ ***Setting dummy nodes***

1. Insert the FD that stores a CL-Config backup into the FDD.

2. Start the Service Utility mode.

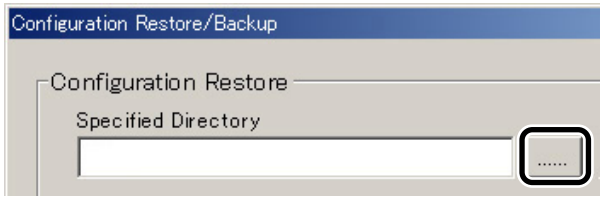
☞ For details on the Service Utility mode startup procedure, see "1. Starting/Exiting the Service Utility" in "MU: Maintenance Utility".

➔ The main menu appears.

3. Click Configuration Restore/Backup.

➔ The "Configuration Restore/Backup" window opens.

4. Click ..... in the Configuration Restore area.



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➔ The "Specified Directory" window opens.



00000350.EPS

5. Click the downward arrow mark within



, and then choose a:.

6. Click OK.

➔ You are then returned to the "Configuration Restore/Backup" window.

7. Click Restore.

8. If the two FDs are to be used for the file restore procedure, change the FD to the second one. Repeat then steps 3. though 7. above.

◆ NOTES ◆

- *Even when the restore process ends, no message appears to indicate it. While the restore process is being performed, the mouse cursor is replaced by the "⌛" mark. When the "⌛" mark changes back to the mouse cursor, it means that the restore process is ended.*

  Note, however, that the "⌛" mark appears only when the mouse cursor is positioned within the Configuration Restore/Backup window.
- *Before removing the FD, check to see that the FD drive access lamp is distinguished.*

9. Remove the FD from the FDD.

15. Creating the FTP Server RU 5000P

Perform the following procedures to prepare on the CL's HDD the FTP server to be viewed by the RU.

The FTP server can be created by installing the IIS manager.

◆ NOTE ◆

For RU-CL N:N connection (when two or more CLs are connected), create the FTP server only for the CL that will serve as the RU master -IIP.

➥ REFERENCE

- *Since the RU main unit does not have an FDD or other external interface, it is network-connected to the FTP server within the CL to fetch configuration and other data.*
- *The IIS manager is a program used for creating an FTP server and comes with the OS (Windows 2000).*

1. **Insert the Windows 2000 reinstallation CD into the CD-ROM drive.**

➥ REFERENCE

When the Dell OptiPlex GX110 is employed as the PC, use the "Dell Product Recovery CD".

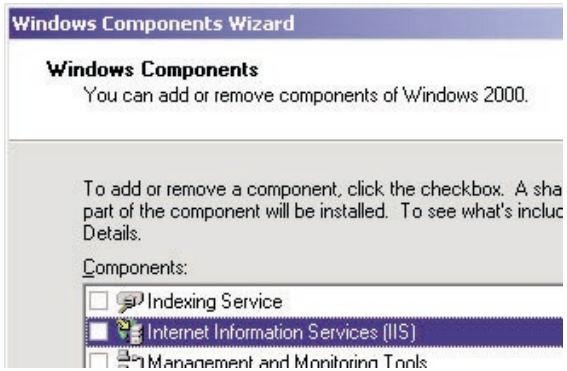
➔ The "Microsoft Windows 2000 CD" window opens.



00000140.EPS

2. Click **Install Add-On Components**.

➔ The "Windows Components Wizard" window opens.



00000141.EPS

3. Check Internet Information Services (IIS) (☐ ➔ ☑) and then click **Next >**.

➔ The installation process starts.
After several minutes, a message appears to indicate the completion of installation.

4. Click **Finish**.

➔ The system returns to the "Microsoft Windows 2000 CD" window.

5. Click **Exit**.

➔ The system returns to the desktop screen.

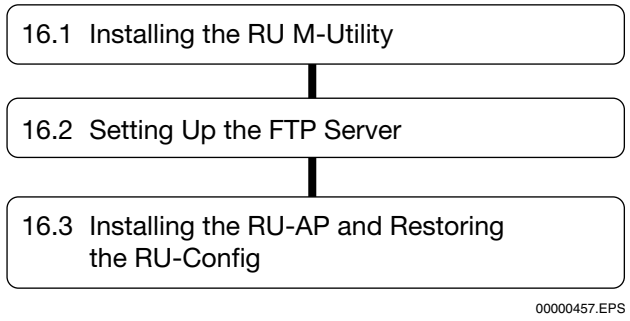
6. **Remove the CD from the CD-ROM drive.**

16. CR-IR346RU Settings RU 5000P

To perform CR-IR346RU software settings, be sure to observe the procedures shown in the flow below.

◆ NOTE ◆

For RU-CL N:N connection (when two or more CLs are connected), perform CR-IR346RU-related settings only for the CL that will serve as the RU master-IIP.



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16.1 Installing the RU M-Utility

The RU M-Utility is a utility (also referred to as the FCR TOOL) that exercises RU-AP installation, RU-Config setup, data backup, and other functions.

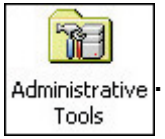
For the operations of the CL and RU, it is necessary that the RU M-Utility be installed in the CL.

☞ For the RU M-Utility installation procedure, see “5.2.1 Installing the RU M-Utility” in “IN-A: Installation – One RU Connection”.

16.2 Setting Up the FTP Server

To set up the FTP server, use the IIS manager to specify the location (directory) where the RU saves configuration and other data.

Communications between the CL and the RU will not be enabled if the location for saving the data is not specified on the directory.

1. In the "Control Panel" window, double-click 

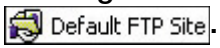
.

➔ The "Administrative Tools" window opens.

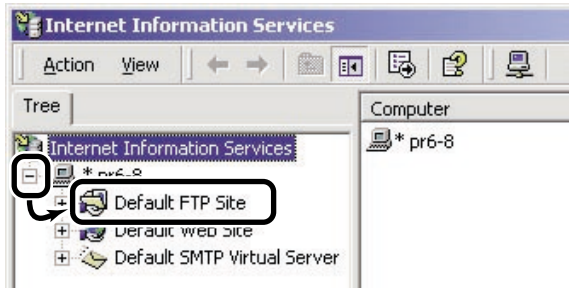
2. Double-click 

.

➔ The "Internet Information Services" window opens.

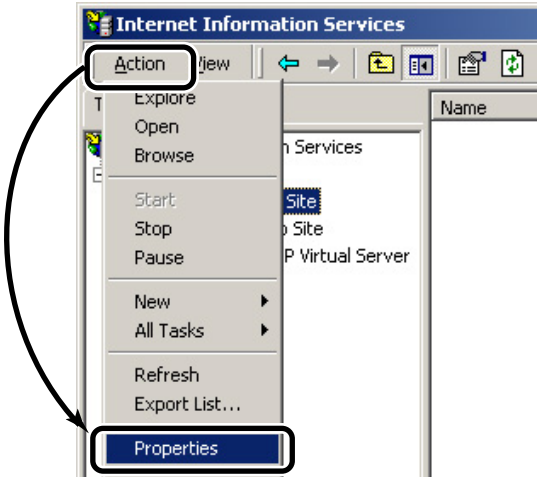
3. Click the ⊞ sign to the left of the CL's host name and then select 

.



00000151.EPS

4. From the "Action" menu, choose "Properties".



00000460.EPS

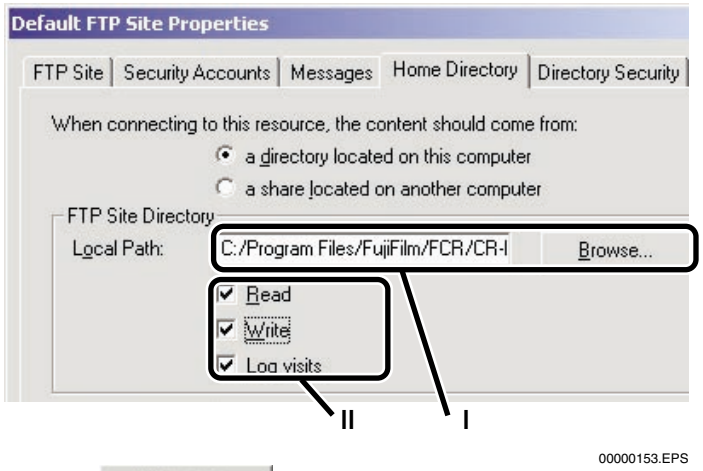
➔ The "Default FTP Site Properties" window opens.

5. Click the "Home Directory" tab.



00000152.EPS

6. **Enter settings as directed below:**



00000153.EPS

I. Click Browse... to select directory of "C:\Program Files\FujiFilm\FCR\CR-IR346".

II. Check Read, Write, Log visits (so that ☐ changes to ☑).

7. **Click Apply and then click OK.**

➔ The system returns to the "Internet Information Services" window.

8. **The next step is to check whether the FTP server is operating normally.**
From the "Start" menu, choose "Programs", "Accessories", and then "Command Prompt".

➔ The "Command Prompt" window opens.

9. **Type in "ftp 127.0.0.1" and then press the <Enter> key.**

➔ A message appears to prompt for user name input.

```
Connected to 127.0.0.1.
220 iip-1 microsoft FTP Service (Version 5.0).
User(127.0.0.1:(none)):_
```

10. **Type in "cr-ir346" and then press the <Enter> key.**

➔ A message appears to prompt for password input.

```
331 Password required for cr-ir346.
Passwaord:_
```

11. **Type in "cr-ir346" and then press the <Enter> key.**

◆ ***NOTE*** ◆

Even when you enter the password, nothing appears on the display.

➔ The following message appears when you successfully log into the FTP server:

```
230 User cr-ir346 logged in.
ftp>_
```

◆ ***NOTE*** ◆

If the above message does not appear, it means that the FTP server is not properly set up. In such an instance, perform steps 12. and 13. and then repeat the whole FTP server setup procedure beginning with step 1.

12. **Type in "bye" and then press the <Enter> key.**

13. Close the “Command Prompt” window.

➥ ***REFERENCE***
[registration of the FTP user (user name: cr-ir346)]

For the RU to access the FTP, both the login name and the password are required. For the CL operation, no such settings are required because both the login name and the password are set up automatically.

Use the procedure below to check the setup data.

1. *Click the “Users and Passwords” icon in the Control Panel.*
   ➔ *The “Users and Passwords” window opens.*
2. *Make sure that the “cr-ir346” user name has been registered to the Administrators group.*



16.3 IIS Network Virus Protection

To provide network virus protection, complete the following setup procedures for IIS.

- Suspending the Web service and SMTP server
- Disabling unnecessary accounts that can access the FTP service

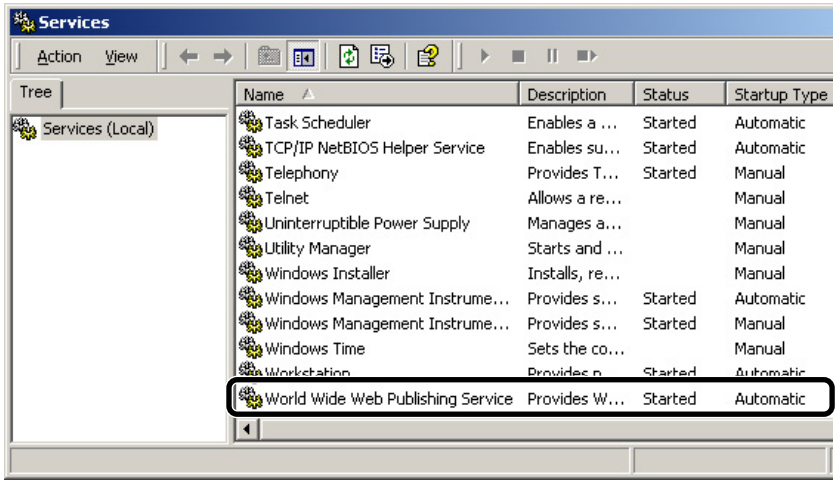
■ Suspending the Web service and SMTP server

1. Click Start, point to “Settings”, and then click “Control Panel”.

2. Double-click Administrative Tools and then Services.

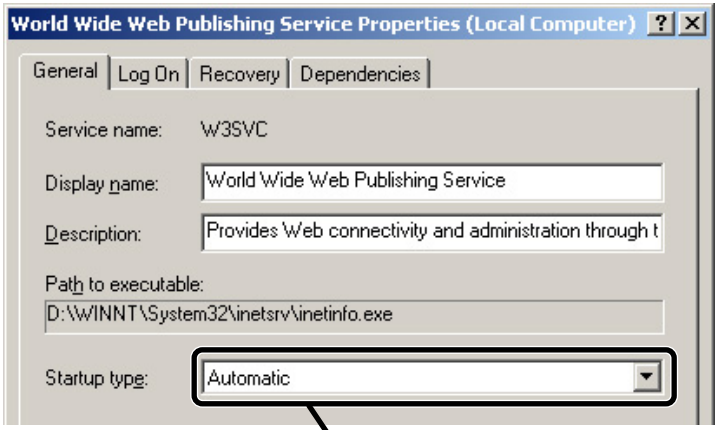
➔ The “Services” window opens.

3. Double-click the service listing named “World Wide Web Publishing Service”.



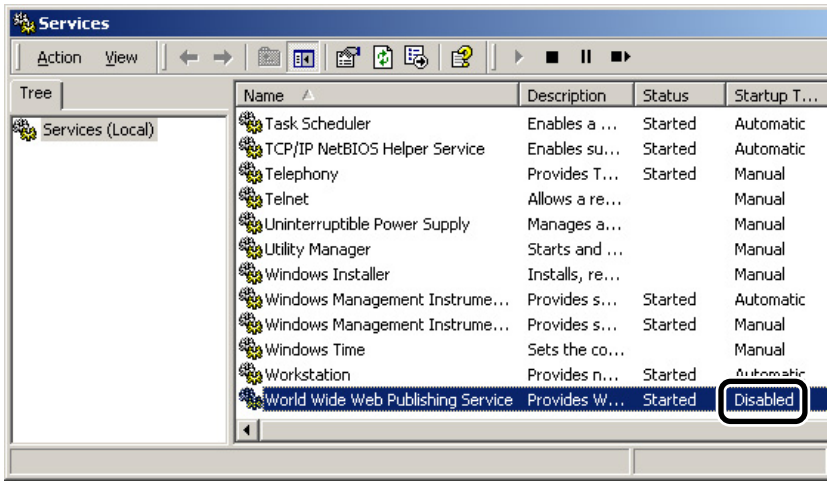
➔ The “World Wide Web Publishing Service Properties (Local Computer)” window opens.

4. From the “Startup type” pull-down menu, choose “Disabled”.

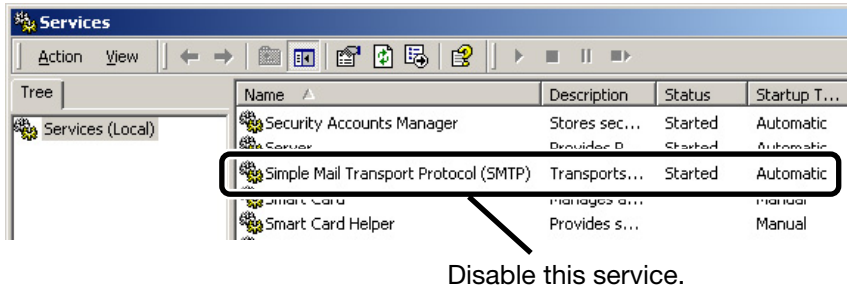


5. Click OK.

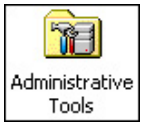
➔ The selection for the “Startup type” field changes from “Automatic” to “Disabled”.



6. In the same manner as indicated in steps 3. through 5, disable “Simple Mail Transport Protocol (SMTP)” as well.



■ Disabling unnecessary accounts that can access the FTP service

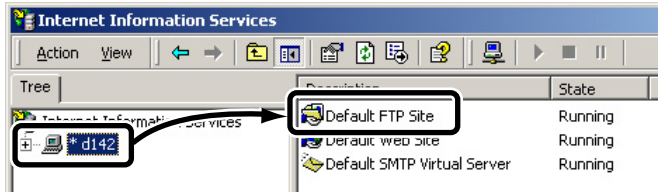
1. In the "Control Panel" window, double-click 

and then 

.

➔ The "Internet Information Services" window opens.

2. Click on the host name in the left-hand pane and then click on "Default FTP Site" in the right-hand pane.



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3. From the "Action" menu, choose "Properties".

➔ The "Default FTP Site Properties" window opens.

4. Choose the "Security Accounts" tab and then uncheck "Allow Anonymous Connections" (☑ ➔ ☐).



RI000073.EPS

5. When the confirmation dialog box opens, choose Yes.



RI000074.EPS

6. Click OK.

➔ You are then returned to the "Internet Information Services" window.

7. Close the "Internet Information Services" window and "Control Panel" window.

8. Restart the PC.

16.4 Installing the RU-AP and Restoring the RU-Config

First, install the RU-AP in the CL, and then restore the RU-Config. To do this, use the RU M-Utility and perform the procedures set forth in this section.

➤ IMPORTANT

If the CL's IP address written in the RU-Config backup is other than 172.16.1.20, you must pay due attention to the procedure that you perform immediately after RU-AP installation.

Be sure to restore the RU-Config immediately after RU-AP installation. Before restoring it, never restart the CL-AP or PC.

The FTP server's RU-Config data reverts to the default values when the RU-AP is installed. Since the RU-Config in the RU's FLASH ROM is updated to the default data if the CL-AP is started up with the FTP server RU-Config reverted to the default, the RU will result in losing track of the CL.

◆ NOTE ◆

Before installing the RU-AP, turn ON the RU power.

■ Installing the RU-AP (procedure applicable to RU-AP version A07 or later)

☞ For the RU-AP installation procedure, see "5.2.2 Installing the RU-AP" in "IN-A: Installation – One RU Connection".

■ Restoring the RU-Config

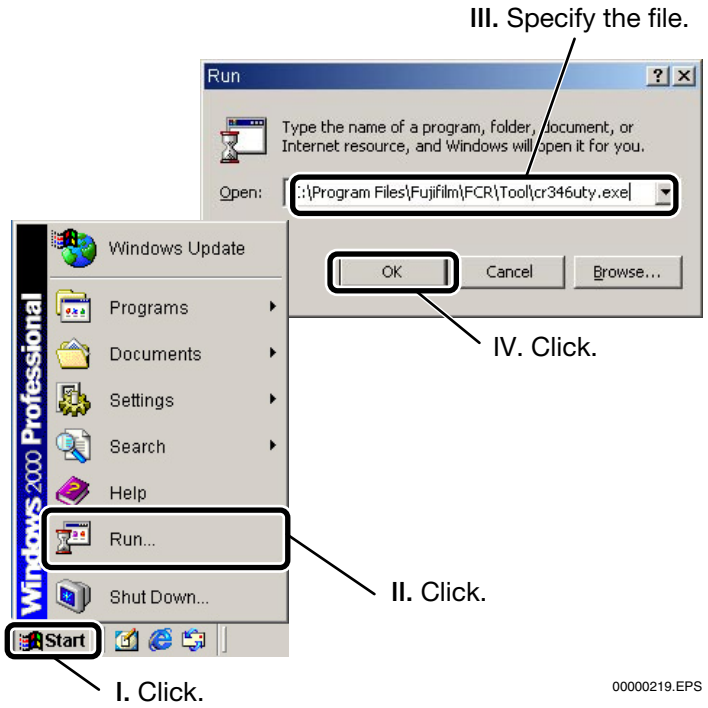
Perform the procedure set forth below to restore the RU configuration file.

➥ REFERENCE

The scanner data, which was backed up at the time of installation, need not be restored unless the FLASH ROM of the RU main unit becomes defective.

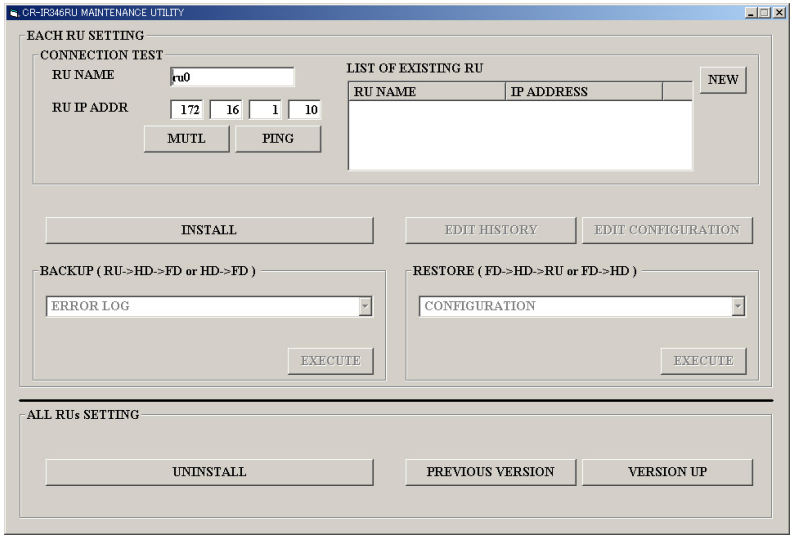
1. Have on hand the FD on which the RU-Config was backed up. Insert this FD into the FDD.

2. **Start the RU M-Utility as directed below.**



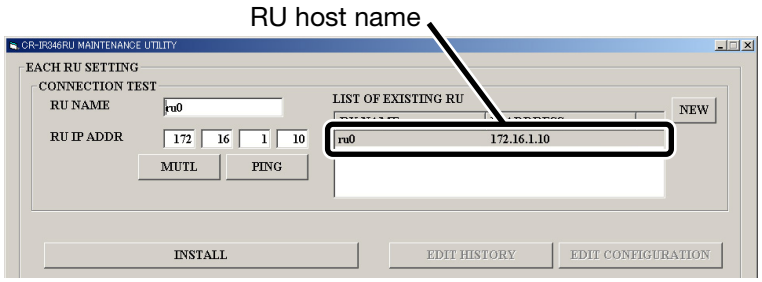
➔ The RU M-Utility main menu opens.

● Main menu window



00000215.EPS

3. **In the "LIST OF EXISTING RU" area, click the host name of the RU to be restored.**

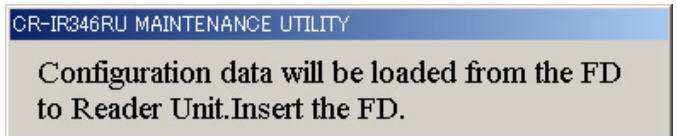


00000434.EPS

➔ The pull-down menu for the RESTORE (FD->HD->RU or FD->HD) field and the "EXECUTE" button change their color from gray to black.

4. **Note the RESTORE (FD->HD->RU or FD->HD) field to verify that CONFIGURATION is selected, and then click EXECUTE.**

➔ A confirmation window opens.



00000351.EPS

5. **Click LOAD.**

➔ The RU-Config is then restored in the FTP server. A window opens to indicate the end of the restore process.



00000352.EPS

6. **Click OK.**

➔ The system returns to the RU M-Utility main menu.

7. **Click the ✕ mark at the upper right corner of the window.**

➔ The system returns to the desktop screen.

8. **From the Start menu, select sequentially "Programs", "FujiFilm" and "FCR".**

➔ The CL-AP starts up.
The RU fetches the RU-Config in the FTP server to overwrite the RU-Config in the FLASH ROM.

➥ *REFERENCE*

No problem arises even when the RU-Config in the FLASH ROM is overwritten in the above manner.

As far as the FTP server data is the same as the data in the RU's FLASH ROM, the latter data is not overwritten. However, when the RU-Config is restored, its date is updated. That is why the contents of the FLASH ROM are updated. The RU-Config setup data used to overwrite the FLASH ROM is identical with the data that was backed up.

17. Setting Up NetMeeting [Reference]

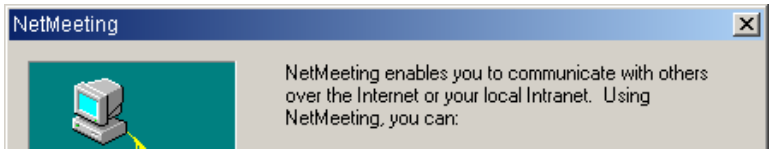
RU 5000P

To perform a remote maintenance of the CL, set up NetMeeting by performing the procedures set forth below.

■ Installing NetMeeting

1. From the "Start" menu, choose "Programs", "Accessories", "Communications", and then "NetMeeting".

➔ The "NetMeeting" window opens.

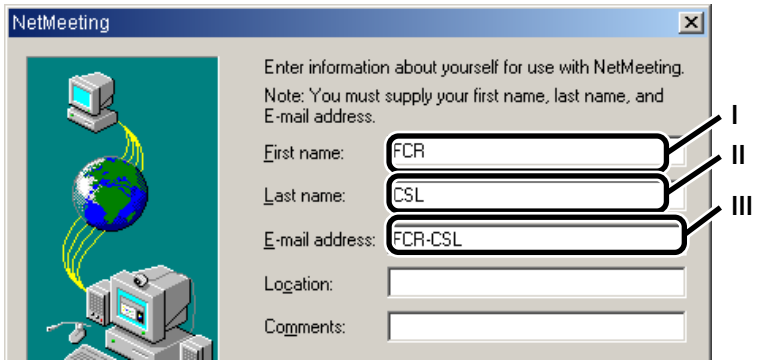


00000355.EPS

2. Click Next >.

➔ A window opens, prompting you to enter user information.

3. Enter settings as directed below.



00000356.EPS

I. Enter "FCR" in the First name: field.

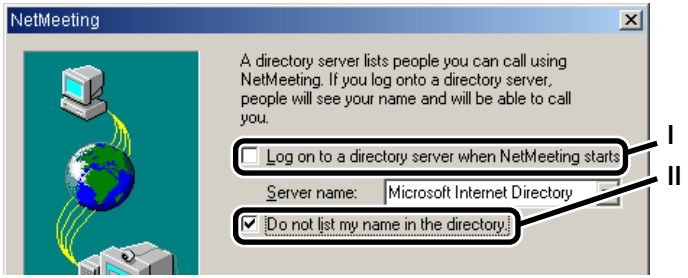
II. Enter "CSL" in the Last name: field.

III. Enter "FCR-CSL" in the E-mail address: field.

4. Click Next >.

➔ A window opens to prompt for director server setup.

5. Enter settings as directed below.



00000357.EPS

I. Deselect (so that ☑ changes to ☐).

II. Check (so that ☐ changes to ☑).

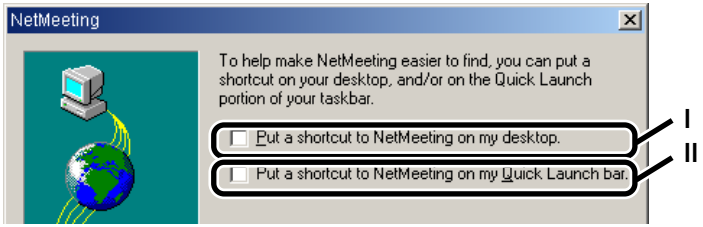
6. Click Next >.

➔ A window opens, prompting you to specify the network connection speed.

7. Click Next >.

➔ A window opens for shortcut creation.

8. Enter settings as directed below.

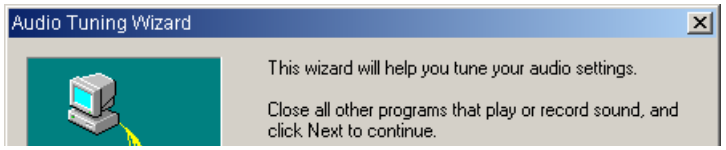


00000358.EPS

I. Deselect (so that ☑ changes to ☐).
II. Deselect (so that ☑ changes to ☐).

9. Click Next >.

➔ The "Audio Tuning Wizard" window opens.



00000359.EPS

10. Click Next >.

➔ A volume setup window opens.

11. Click Next >.

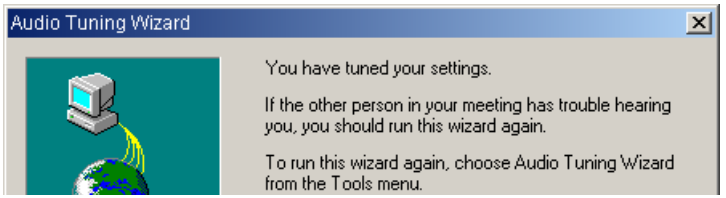
➔ A microphone setup window opens.

12. Click Next >.

➔ A message appears to indicate that no microphone is connected.

13. Click Next >.

➔ A window opens to indicate that audio setup is completed.



00000360.EPS

14. Click Finish.

➔ NetMeeting starts up in about 15 seconds.



00000361.EPS

■ Setting remote desktop sharing

1. From the “Tools” menu, choose “Remote Desktop Sharing”.

➔ The “Remote Desktop Sharing Wizard” window opens.



00000362.EPS

2. Click Next >.

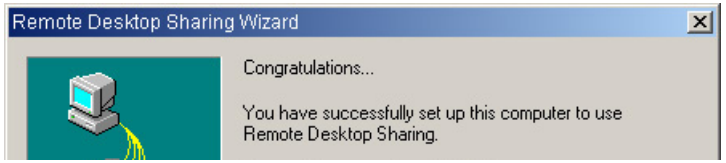
➔ A window opens to explain about the access rights to Remote Desktop Sharing.

3. Click Next >.

➔ A screen saver setup window opens.

4. Turn ON the No, I will do this later (so that changes), and then click Next >.

➔ A window opens to indicate the end of setup.



00000363.EPS

5. Click Finish.

➔ The system returns to the “NetMeeting” window.

6. From the “Call” menu, choose “Exit and Activate Remote Desktop Sharing”.

➔ The system returns to the desktop screen.

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Appendix A Uninstalling the APs

This appendix describes the procedures for uninstalling the following APs:

- CL-AP
- MSDE (SQL SP included)
- RU-AP
- RU M-UTILITY
- Option keys
- Touch panel driver
- Console software (Built_inConsole)
- FRIS Modules

1. CL-AP

1. **Double-click** 

on the desktop.

➔ The “My Computer” window opens.

2. **Double-click** 

.

➔ The “Control Panel” window opens.

3. **Double-click** 

.

➔ The “Add/Remove Programs” window opens.

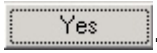
4. **Select the CL-AP (displayed as “IIP” in the window).**

➔ Your selection is then highlighted.

5. **Click** 

.

➔ A confirmation window opens.

6. **Click** 

.

➔ The uninstallation window opens.

◆ *NOTE* ◆

The message “Prepare Installation” appears here.
Note that the uninstallation process then starts, and not the installation process as the message indicates.

➔ Uninstallation ends in several seconds.

7. **Close the “Add/Remove Programs” window and Control Panel.**

2. MSDE (SQL SP Included)

1. Right-click in the task tray at the lower right corner of the desktop, and then click “MS SQL Server-Stop”.

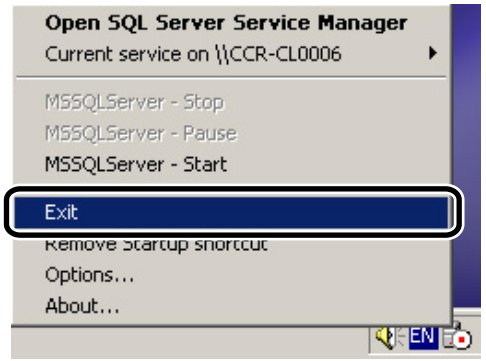


00000473.EPS

➔ The “SQL Server Service Manager” window opens.

2. Click Yes.

3. Right-click in the task tray again, and then click “Exit”.



00000474.EPS

➔ The icon disappears from the task tray.

4. Double-click My Computer on the desktop.

➔ The “My Computer” window opens.

5. Double-click Control Panel.

➔ The “Control Panel” window opens.

6. Double-click Add/Remove Programs.

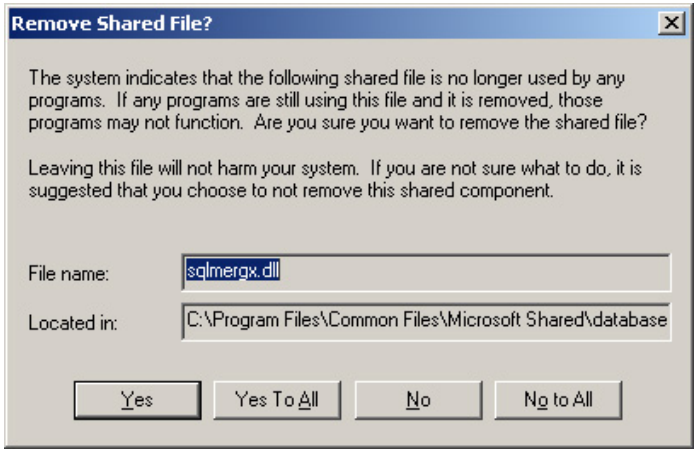
➔ The “Add/Remove Programs” window opens.

7. Select “MSDE” and then click Change/Remove.

➔ The “Confirm File Deletion” window opens.

8. Click Yes.

➔ The installation shield starts running to initiate an MSDE uninstallation.
After a while, the “Remove Shared File” window opens.



00000475.EPS

9. Click Yes To All.

➔ A confirmation window opens.

10. Click Yes.

➔ Uninstallation ends in 10 seconds.

11. Click OK.

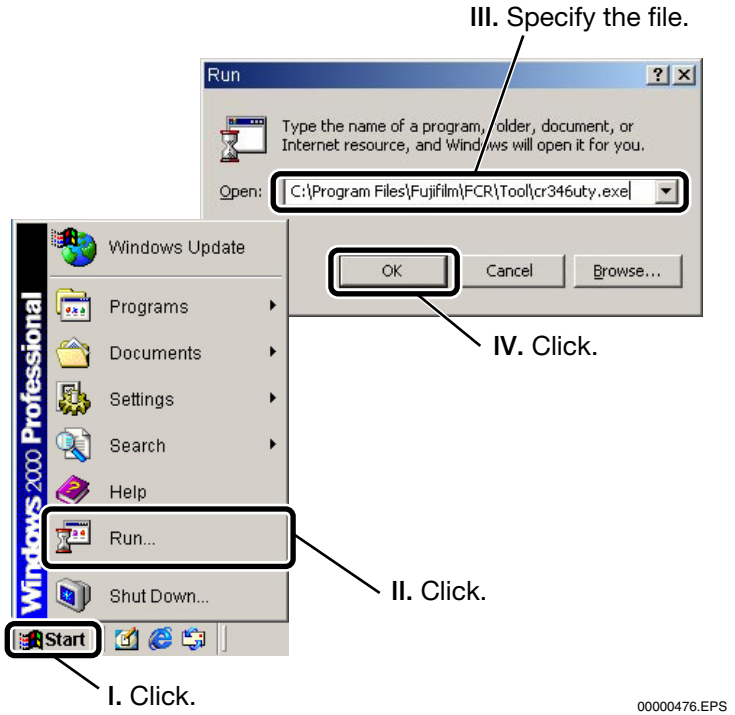
➔ You are then returned to the “Add/Remove Programs” window.

12. **Close the “Add/Remove Programs” window and Control Panel.**

3. RU-AP

To uninstall the RU-AP, use the RU M-Utility.

1. **Start the RU M-Utility as directed below:**



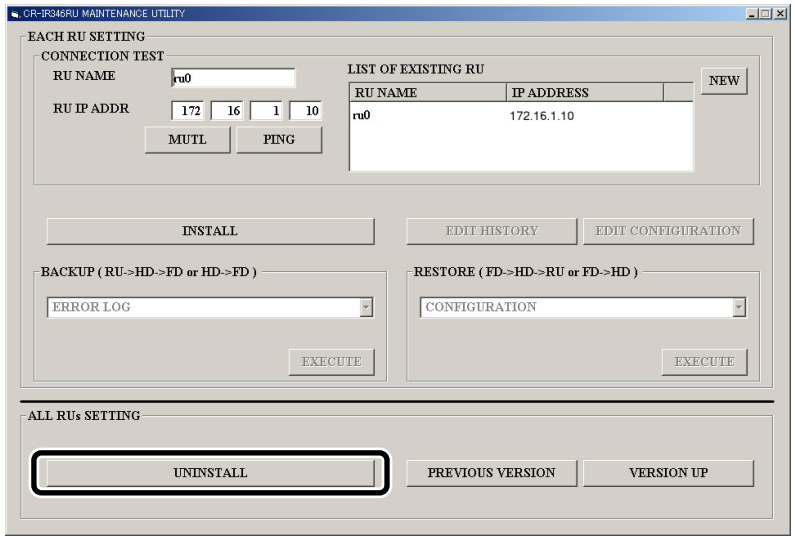
00000476.EPS

➔ The RU M-Utility main menu opens.

2. Click [UNINSTALL].

◆ ***NOTE*** ◆

All the RU-APs displayed in the "LIST OF EXISTING RU" area are uninstalled.



00000477.EPS

➔ A confirmation window (the message "Completed") appears on the display.

3. Click OK.

➔ You are then returned to the main menu.

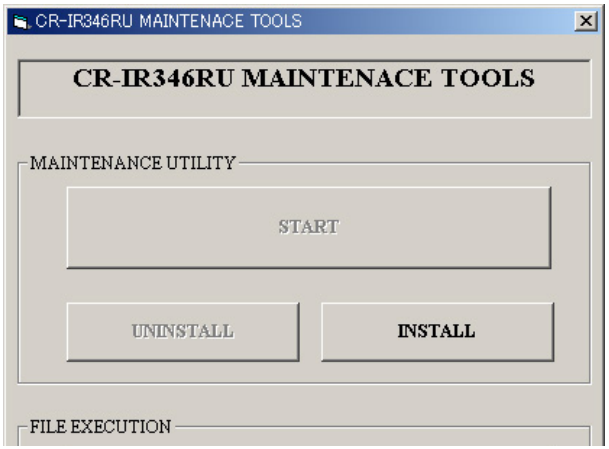
4. RU M-Utility

◆ ***NOTE*** ◆

Use the RU-CD to uninstall the RU M-Utility. Do not uninstall the RU M-Utility from "Add/Remove Programs" in Control Panel because an improper uninstallation results.

1. Insert the RU-CD into the CD-ROM drive.

➔ After a while, the "CR-IR346RU MAINTENANCE TOOLS" window opens.



00000214.EPS

2. Click UNINSTALL.

➔ After a while, the "FCR TOOL Setup" window opens.



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◆ ***NOTES*** ◆

- *Although the window says "Welcome to the FCR TOOL Setup Wizard", the setup process does not start.*
- *"FCR TOOL" is another name for "RU M-Utility".*

3. Click Next >.

➔ The "FCR TOOL Setup/Remove the Program" window opens.



00000479.EPS

4. Click Remove.

➔ The "FCR TOOL Setup/Completing the FCR TOOL Setup Wizard" window opens. Uninstallation is now completed.

5. Click Finish.

➔ You are then returned to the initial window (which automatically opened when the CD was set in position).



00000480.EPS

6. Click [EXIT].

7. Remove the CD from the CD-ROM drive.

5. Option Keys

The option key CD-ROM is required for uninstalling an option key.

◆ NOTE ◆

When uninstalling an option key, be sure to perform the following procedure. If, for instance, you directly remove an option key with Registry Editor or the like, the option name may remain in a user window although the option function is removed.

1. **Insert into the PC the CD-ROM for the option key you wish to uninstall.**

2. **The installation window opens. Press the Cancel button to close this window.**

3. **Select "Run..." box from the Start menu.**

   ➔ The "Run..." box opens.

4. **Enter the uninstallation command in the "Open (O)" box and click OK.**

   D:\option key's executable file name (xxxxxx.exe)/u

◆ NOTE ◆

In the underlined portion, enter the drive name of the CD-ROM drive.

➥ REFERENCE

- *To confirm the executable file name of an option key, you should directly view the contents of CD-ROM from Explorer or the like.*

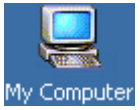
Example: Executable file names for IR346 DICOM CR STORAGE option
- *OptionDcmStandardCR.exe*
- *OptionDcmPrivateCR.exe*

- *You can click the Browse... button to select the executable file for the option key to be uninstalled.*

➔ A window opens to indicate that uninstallation is completed.

5. **Click OK.**

6. Touch Panel Driver

1. Double-click 

on the desktop.

   ➔ The “My Computer” window opens.

2. Double-click 

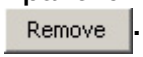
.

   ➔ The “Control Panel” window opens.

3. Double-click 

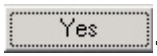
.

   ➔ The “Add/Remove Programs” window opens.

4. Select the touch panel driver (MonitorMouse for Windows 2000) and click 

.

   ➔ The confirmation window opens.

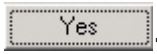
5. Click 

.

   ➔ The uninstallation start window opens.



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6. Click 

.

   ➔ When uninstallation process ends, the PC restarts.

7. Console Software (Built_inConsole)

◆ NOTE ◆

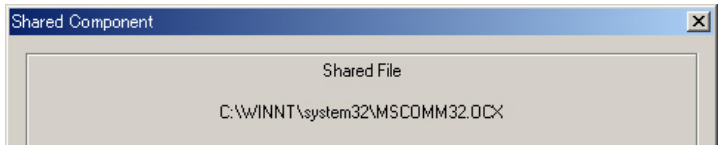
After the console software is uninstalled, be sure to reinstall the console software. The CL-AP does not start running when the console software is uninstalled.

1. Double-click 

in "Control Panel".
   ➔ The "Add/Remove Programs" window opens.

2. Select "Built_inConsole" and then click Change/Remove.
   ➔ The "Application Removal" window opens.

3. Click Yes.
   ➔ The install shield starts running and begins to uninstall the MSDE. After a while, the "Shared Component" window opens.



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4. Click Remove All.
   ➔ The uninstallation process ends and the confirmation window opens.

5. Click OK.
   ➔ You are then returned to the "Add/Remove Programs" window.

6. Close the "Add/Remove Programs" window and then the Control Panel.

Appendix B Changing the CL Host Name

◆ ***NOTE*** ◆

When changing the CL's host name, be sure to follow the sequence indicated below.

If you do not use the correct procedure to change the host name, the CL-AP may become inoperative.

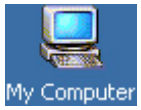
- ■ Uninstalling the MSDE
- ■ Changing the CL-PC host name
- ■ Installing the MSDE
- ■ Rebuilding the image database
- ■ Setting the Service Utility
- ■ Initializing the image database ...Use this procedure only when you wish to remove images from the HDD.
  * If you wish to retain images, do not perform this procedure.

00000481.EPS

■ Uninstalling the MSDE

☞ For the procedure for uninstalling the MSDE, see "Appendix A Uninstalling the AP's".

■ Changing the CL-PC host name

1. **Double-click** 

on the desktop.

➔ The "My Computer" window opens.

2. **Double-click** 

.

➔ The "Control Panel" window opens.

3. **Double-click** 

.

➔ The "System Properties" window opens.



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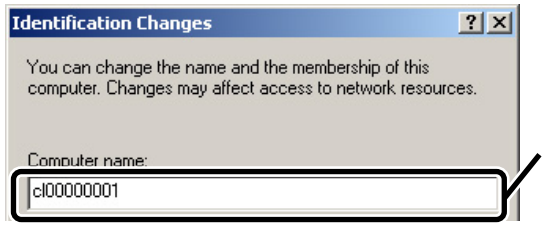
4. **Click the "Network Identification" tab.**

5. **Click** 

.

➔ The "Identification Changes" window opens.

6. Change the host name entry in the “Computer name (C)” field.



00000483.EPS

7. Click OK.

➔ The “Network Identification” window opens. (Although a message appears prompting you to restart the PC, you must restart it in step 10.)

8. Click OK.

➔ You are then returned to the “System Properties” window.

9. Click OK.

➔ A windows opens to prompt for a restart.

10. Click Yes.

➔ The PC restarts.

11. When a certain period of time elapses after PC startup, error windows open. Close all such windows.

■ Installing the MSDE

☞ For the MSDE installation procedure, see “4. Installing MSDE and Its Service Pack” in “RI: Reinstalling the Software”.

◆ NOTE ◆

When MSDE and service pack are installed, the PC is forced to restart. After a restart, the CL-AP automatically starts up; however, an error occurs because the image database is not rebuilt.
In this instance, just click [OK] to close the error window.
The system recovers from this error when you rebuild the image database.

■ Rebuilding the image database

1. Select Run... from the Start menu. Use then the Browse... key to select necessary files located in the directories below:

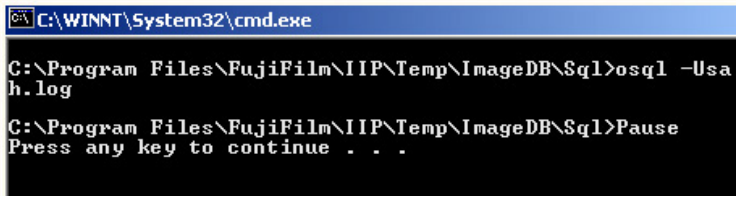
A00 version: C:\Program Files\FujiFilm\IIP\Temp\ImageDB\SQL\Attach.bat

A02 version or later: C:\Program Files\FujiFilm\IIP\Temp\AttachAll.bat

◆ NOTE ◆

Do not execute the above command from the MS-DOS prompt.

➔ The MS-DOS prompt window then opens, displaying the message “Press any key to continue ...”.



00000484.EPS

2. **Press the <Enter> key.**

➔ The MS-DOS prompt window closes. The image database is thus completely rebuilt.

This makes it possible to use again HDD images that have been available before CL host name change.

■ Setting the Service Utility

When you change the CL's host name, the Service Utility's network setup for this equipment changes to that for other connected equipment. Therefore, you have to restore the original network setup as directed below:

1. **Start the Service Utility and then click [Setup Configuration Item].**

➔ The "Setup Configuration Item" window opens.

2. **Within the tree in the left-hand area of the window, click the ⊞ mark to the left of ⊞ NETWORK CONFIG, and then click the ⊞ mark to the left of ⊞ ALL OTHER NODES.**

3. **Choose ⊞ cl00000001 (CL's previous host name).**

4. **Change the** 

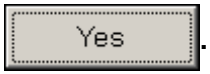
entry in the upper right corner of the window to a new host name.

5. **Click** 

.

6. **From the "Config" menu, choose "Save".**

➔ A window opens, prompting you to confirm the setup data to be saved.

7. **Click** 

.

➔ The system saves the setup data.

The original network setup is then restored.

■ Initializing the image database [as required]

◆ *NOTE* ◆

If you wish to retain images stored in the HDD, do not initialize the image database.
Initializing the image database deletes all images from the HDD.

1. **Initialize the image database with the Service Utility.**

☞ For the image database initialization procedure, see "12. Initializing the Image Database " in "RI: Reinstalling the Software".

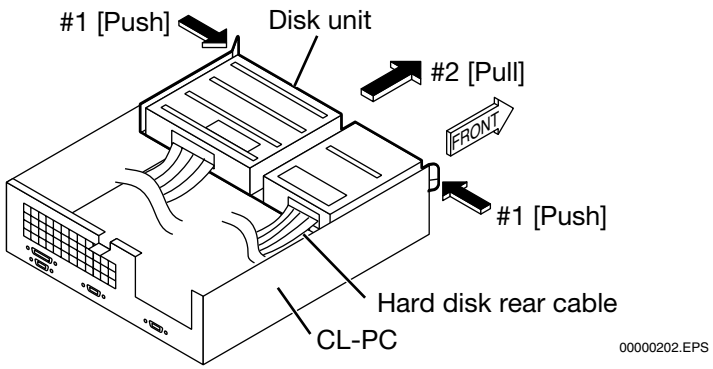
➔ The CL host name change procedure is now completed.

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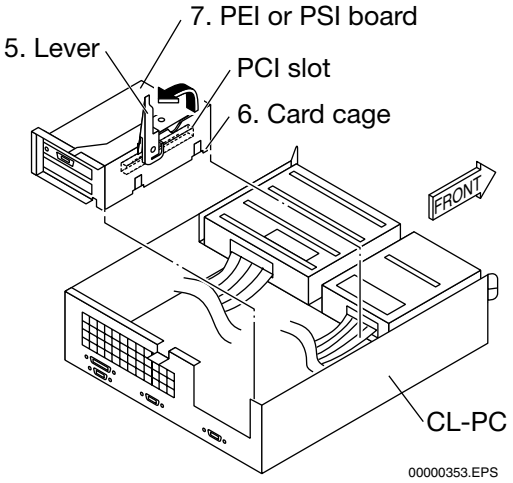
Appendix C Removing/Reinstalling the Board (PEI/PSI)

■ Removing the board (for GX110)

1. Shut down Windows 2000 and then turn OFF the CL-PC power.
2. Disconnect the CL-PC power cord from the power source.
3. Remove the CL-PC cover.
4. When the card cage is mounted, its PC board interferes with a cable behind the hard disk. A workaround is to slightly pull the disk unit on the front of the CL-PC before mounting the card cage.



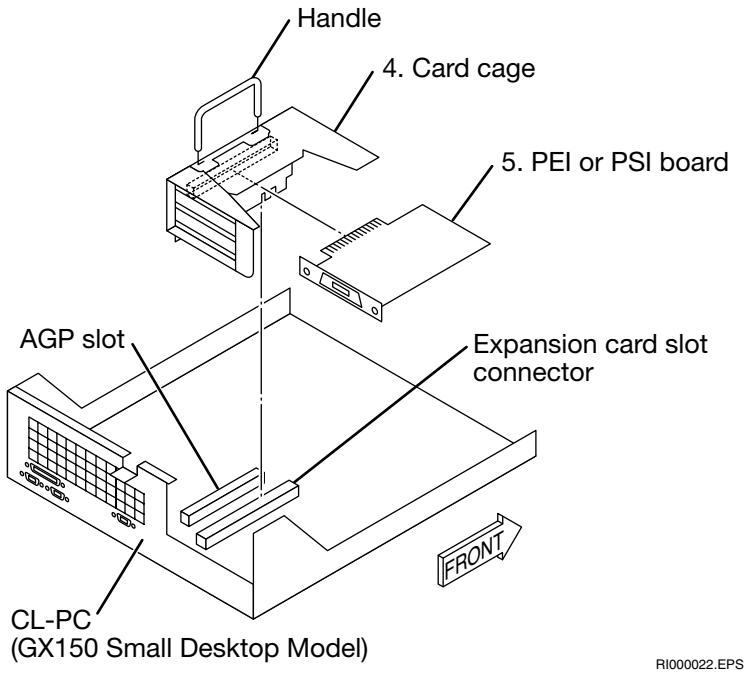
5. Raise the lever in the direction of the arrow.
6. Remove the card cage from the CL-PC.
7. Remove the PEI or PSI board from the PCI slot in the card cage.



8. Mount the card cage in the CL-PC.
9. Return the lever to its original position.
10. Restore the disk unit.
11. Connect the CL-PC power cord to the power source.
12. Mount the CL-PC cover.

■ Removing the board (for GX150)

1. Shut down Windows 2000 and then turn OFF the power to the CL-PC.
2. Disconnect the CL-PC power cord from the power source.
3. Open the CL-PC cover.
4. Hold the card cage handle and remove the card cage.
5. Remove the PEI or PSI board from a PCI slot within the card cage.



6. Mount the card cage in the CL-PC.
7. Close the CL-PC cover.
8. Connect the CL-PC power cord to the power source.

■ Reinstalling the board (for both GX110 and GX150)

Reinstall the board by reversing the removal procedure.

Appendix D Upgrading the AP

This appendix describes the CL-AP upgrade procedures.

➤ ***IMPORTANT***

Before upgrading the AP, verify that there is no exposure reservation for patients (no patients are registered in the examination queue window). Also, check that no image is left in the QA queue or output queue.

■ Procedures

Upgrade the CL-AP to version A07 by performing the following steps:

Step	Description (correlating to the subsequent titles prefixed by the ■ mark)	Upgrade type		
		A00/01→A08	A02/03→A08	A04 to A07→A08
1	■ Uninstalling the CL-AP	○	○	○
2	■ Uninstalling the old PEI board driver	○ (Only when the LP is used)		
3	■ Uninstalling the Built_in Console software		○ *4	
4	■ Uninstalling FRIS Modles			○ *2
5	■ Upgrading the MSDE Service Pack (SQL7SP3) software version			○
6	■ Installing the CL-AP	○	○	○
7	■ Installing the Built_in Console software	○ *1	○	
8	■ Installing FRIS Modules	○ *2	○ *2	○ *2
9	■ Installing the new PEI board driver	○ (Only when the LP is used)		
10	■ Setting dummy nodes	○ *3	○ *3	

*1 Pay due attention to the versions of the Built_in Console software and built-in type machine (5000 plus) software. Built_in Console software version A07 is stored on the CD-ROM for CL version A02/A03, and Built_in Console software version A08 is stored on the CD-ROM for CL version A04. The built-in type machine software versions compatible with Built_in Console version A08 are indicated below. If necessary, upgrade the built-in type main unit software.

5501: A09 5502D: A04 5501D: A05 XU-D1: A01

*2 For the use of the general practitioner interface (in Japan only), there is no need to install the FRIS Modules.

*3 When version A04 is used, an error (error code: 30151 or 20110) occurs at CL startup if no node is set for [NETWORK CONFIG] - [THIS HOST (IIP)]. If no node is set, be sure to set a dummy node. If at least one node is already set, there is no need to perform step 7.

*4 To use the CL with its software version A07, the Built_in Console software must be upgraded. Otherwise, an automation error will occur.

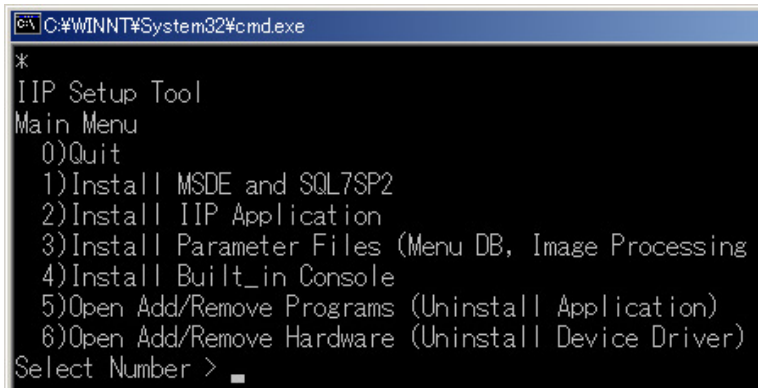
RI000051.EPS

■ Uninstalling the CL-AP

Use the IIP Setup Tool on the CL-AP CD to uninstall the CL-AP.

1. **Insert the CL-AP CD into the CD-ROM drive.**

➔ The “IIP Setup Tool” main menu automatically opens.



RI000001.EPS

2. **Type in the number “5” and then press the <Enter> key.**

➔ The “Add/Remove Programs” window opens.

3. **Select the CL-AP (IIP in the window).**

➔ The selected item is then highlighted.

4. **Click** Remove.

➔ A confirmation window opens.

5. **Click** Yes.

◆ *NOTE* ◆

The message “Prepare Installation” appears here.
Note that the uninstallation process then starts, and not the installation process as the message indicates.

➔ In about one minute, the uninstall process ends.

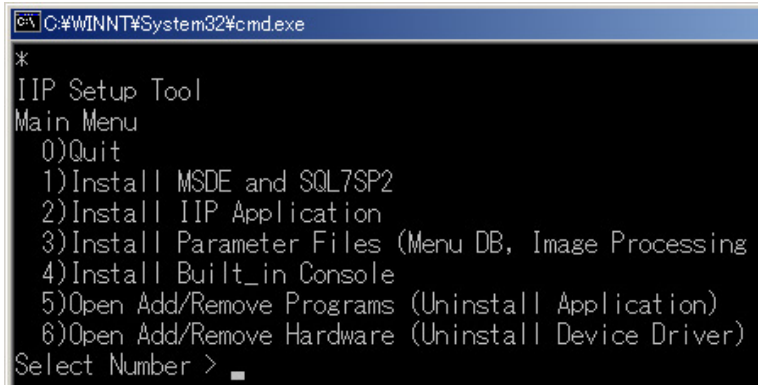
6. **Close the “Add/Remove Programs” window.**

➔ You are then returned to the “IIP Setup Tool” menu.

■ Uninstalling the old PEI board driver

Complete the following steps only when the LP is used:

1. **From the “IIP Setup Tool” menu window, type in the number “6” and then press the <Enter> key.**



RI000001.EPS

➔ The “Add/Remove Hardware Wizard” window opens.

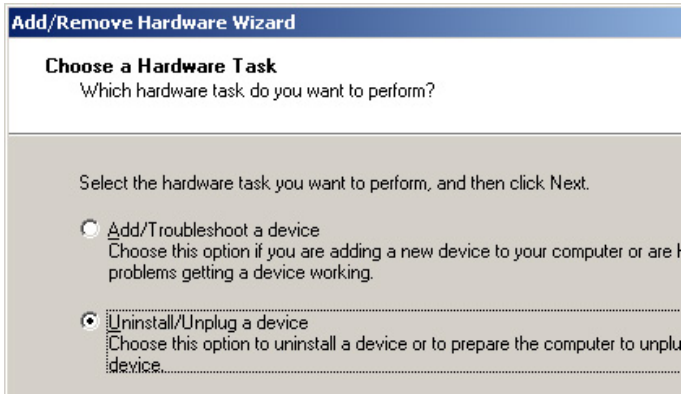


RI000012.EPS

2. Click Next >.

➔ The “Choose a Hardware Task” window opens.

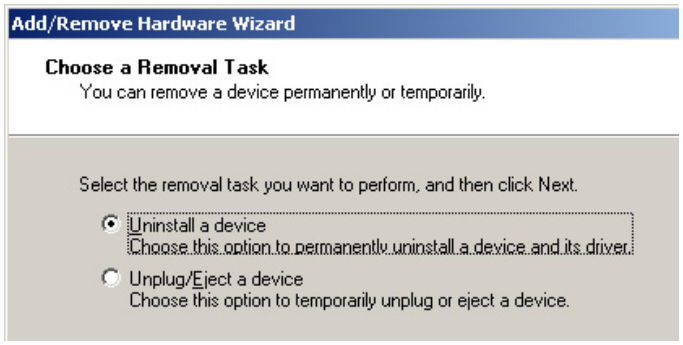
3. Choose Uninstall/Unplug a device Choose this option to uninstall a de device. and then click Next >.



RI000013.EPS

➔ The “Choose a Removal Task” window opens.

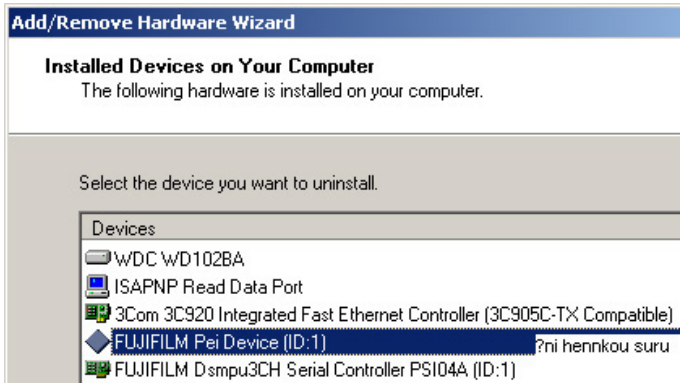
4. Verify that Uninstall a device Choose this option to permanently un is chosen, and then click Next >.



RI000014.EPS

➔ The “Installed Devices on Your Computer” window opens.

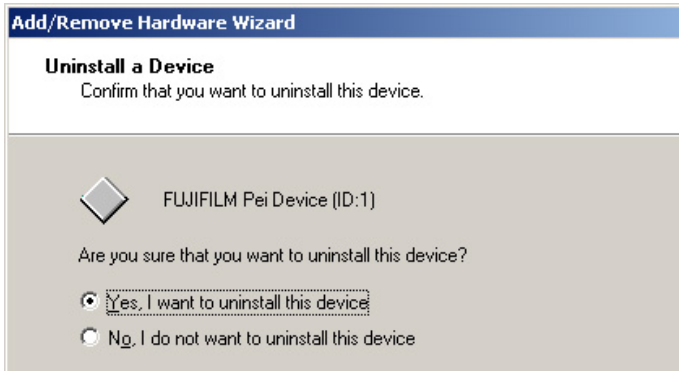
5. Choose FUJIFILM Pei Device (ID:1) and then click Next >.



RI000015.EPS

➔ The “Uninstall a Device” window opens.

6. Choose Yes, I want to uninstall this device and then click Next >.



RI000016.EPS

➔ The “Completing the Add/Remove Hardware Wizard” window opens.



RI000017.EPS

7. Click Finish.

➔ You are then returned to the “IIP Setup Tool” menu.

■ Uninstalling the Built_in Console software

◆ NOTE ◆

After the console software is uninstalled, be sure to reinstall it.
If it is left uninstalled, the CL-AP does not start up.

1. Open “Control Panel” and then double-click 

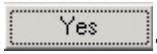
.

➔ The “Add/Remove Programs” window opens.

2. Select “Built_inConsole” and click 

.

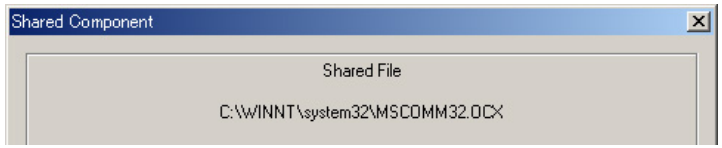
➔ The “Application Removal” window opens.

3. Click 

.

➔ InstallShield then opens to start uninstalling MSDE.

After a while, the “Shared Component” window opens.



RI000009.EPS

4. Click 

.

➔ The uninstallation process ends and then a confirmation window opens.

5. Click 

.

➔ The system returns to the “Add/Remove Programs” window.

6. Close the “Add/Remove Programs” window and then Control Panel.

■ Uninstalling FRIS Modules

1. Use the “IIP Setup Tool” menu to input “5” and press the <Enter> key.

➔ The “Add/Remove Application” window opens.

2. Select “Risiip”.

➔ “Risiip” will be displayed in reverse video.

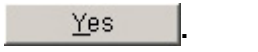
3. Click 

.

➔ The “Application Removal” window opens.



RI000075.EPS

4. Click 

.

➔ After about one minute, a window opens asking you to confirm completion of removal processing.

5. Click 

.

➔ You are returned to the “Add/Remove Application” window.

6. Exit the “Add/Remove Application” window.

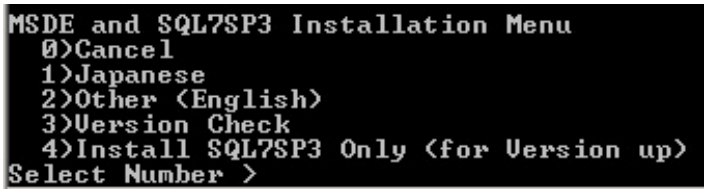
➔ You are then returned to the “IIP Setup Tool “ menu.

■ Upgrading the MSDE service pack (SQL7SP3) software version

1. Use the “IIP Setup Tool” menu to input “1” and press the <Enter> key.

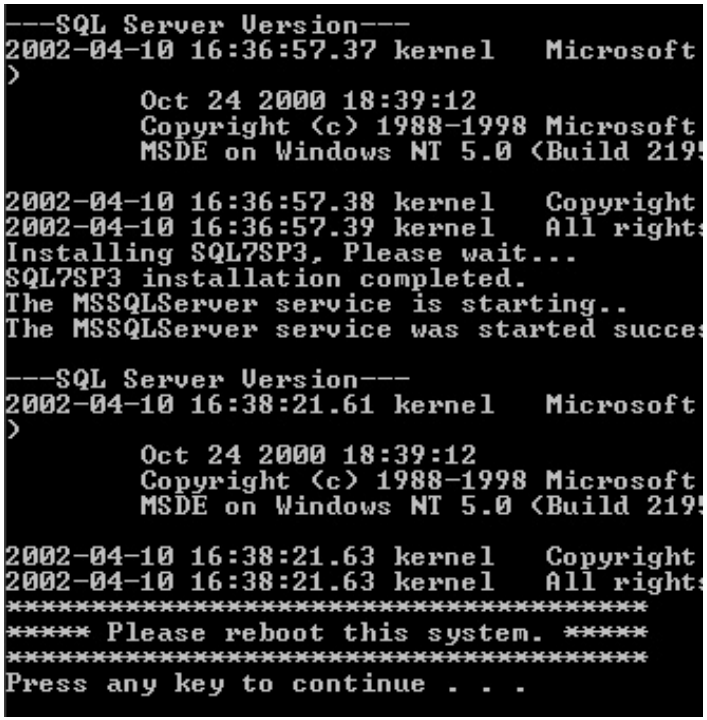
➔ The MSDE and service pack installation menu opens.

2. Input “4” and press the <Enter> key.



RI000076.EPS

➔ The service pack installation process will start. The MSDE installation process will take about ten minutes to complete. (Note that the time needed for the process will differ slightly depending on the number of images stored in the HD.)



RI000077.EPS

3. Press the <Enter> key.

➔ The “IIP Setup Tool” menu shuts down.

4. Remove the CL-AP CD from the CD-ROM drive.

5. Restart the CL to implement upgraded MSDE.

6. When the user name appears and the login window opens while the CL is being restarted, enter the password in one-byte characters.

User name : Administrator

Password : fcr-iip

■ Installing the CL-AP

1. From the IIP Setup Tool main menu, type in the number “2” and then press the <Enter> key.

➔ The installer starts running and the “IIP Setup/Welcome to the ...” window opens.



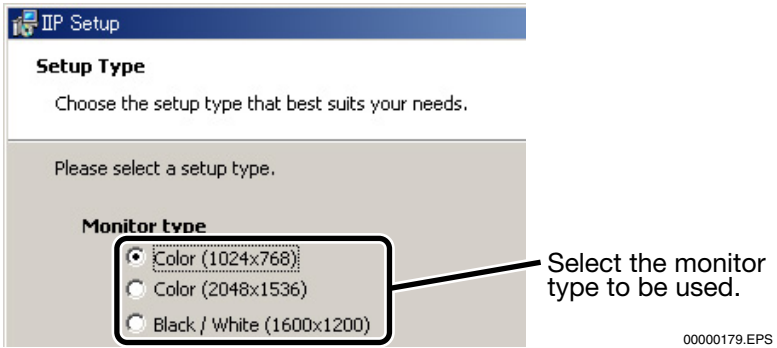
00000178.EPS

2. Click [Next >].

➔ The “IIP Setup/Setup Type” window opens.

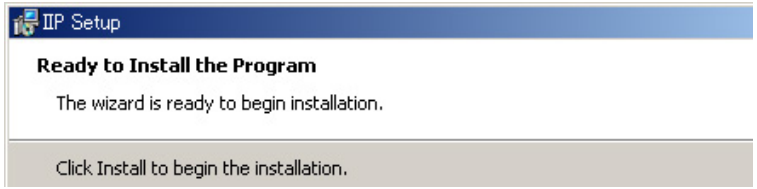
3. Select the monitor type to be used, and then click [Next >].

- When a 15" monitor with a touch panel or a 17" CRT monitor is used, choose “Color (1024 × 768)”.
- When the Super Resolution LCD Monitor SL-IC300 is used, choose “Color (2048 × 1536)”.
- When the Ikegami 1k landscape monitor is to be used, select “Black/White (1600 × 1200)”.



00000179.EPS

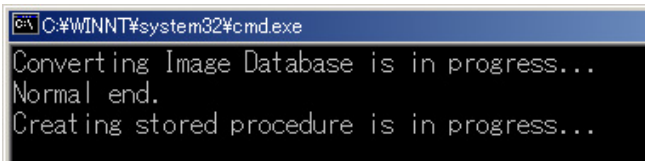
➔ The “IIP Setup/Ready to Install the Program” window opens.



00000180.EPS

4. Click [Install].

➔ The following window opens in several minutes (five to 30 minutes).



RI000026.EPS

◆ *NOTE* ◆

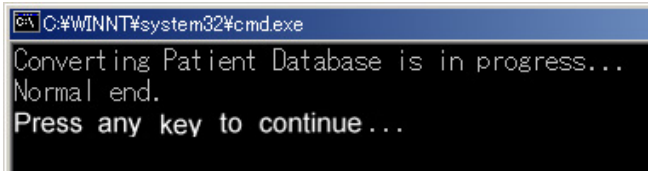
Although a message saying that “Image Database does not exist.” can appear for software versions A04 or later, the CL-AP installation processing will not be affected.



RI000032.EPS

5. Press <Enter>.

➔ The following window opens in several seconds.



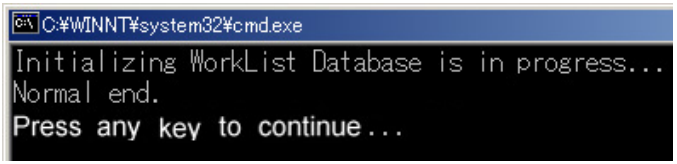
RI000027.EPS

◆ ***NOTE*** ◆

Although a message saying that "Patient Database does not exist." can appear for software versions A04 or later, the CL-AP installation processing will not be affected.

6. Press <Enter>.

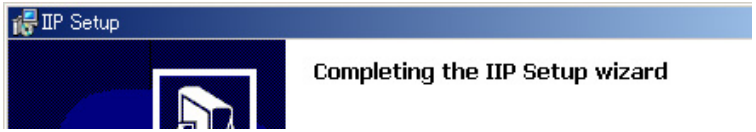
➔ The following window opens in several seconds.



RI000028.EPS

7. Press <Enter>.

➔ The installation procedure ends and the "IIP Setup/Completing the IIP ..." window opens.



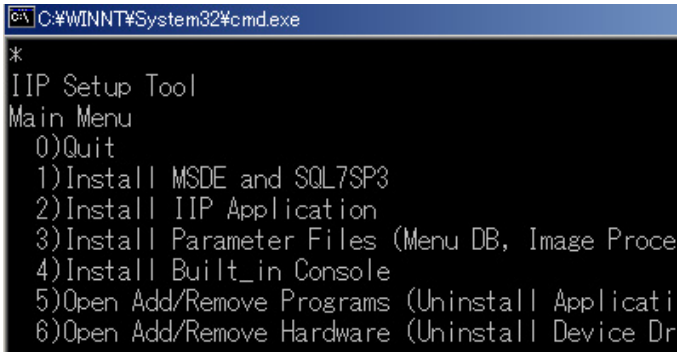
00000181.EPS

8. Click Finish.

➔ You are then returned to the "IIP Setup Tool" menu.

■ Installing the Built_in Console software

1. From the "IIP Setup Tool" menu, type in the number "4" and then press the <Enter> key.

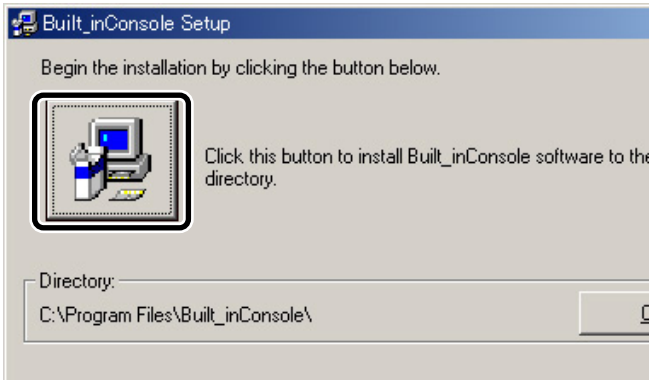


RI000011.EPS

➔ The "Built_in Console Setup" window opens.

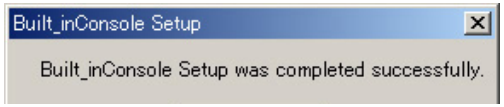
2. Click OK.

3. Click .



RI000031.EPS

➔ When the installation procedure ends, a message appears to indicate the completion of installation.



RI000029.EPS

4. Click OK.

➔ A dialog box opens, prompting you to restart the PC.

5. Remove the CD-ROM from the CD-ROM drive.

6. Click Yes.



RI000030.EPS

➔ The PC restarts.

■ Installing FRIS Modules

1. Start "IIP Setup Tool" and then choose "10) Install FRIS Modules".

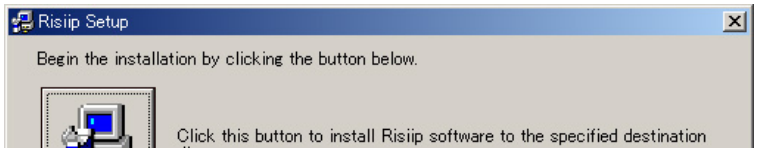
➔ The [Risiip Setup] window opens.



RI000042.EPS

2. Click OK.

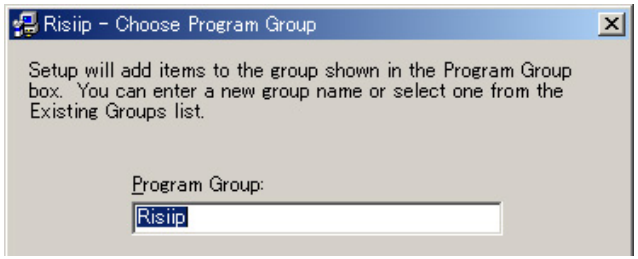
➔ A window opens, prompting you to start the installation.



RI000043.EPS

3. Click .

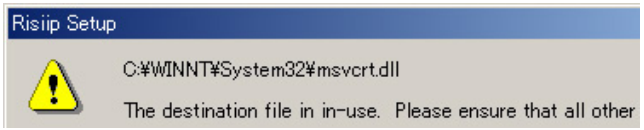
➔ The [Risiip - Choose Program Group] window opens.



RI000044.EPS

4. Click Continue.

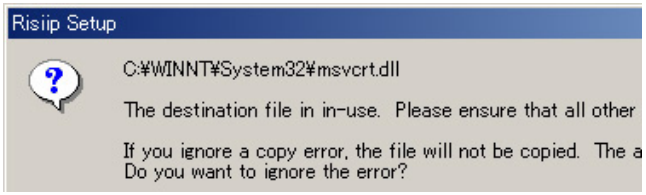
➔ The following warning window opens:



RI000045.EPS

5. Click Ignore.

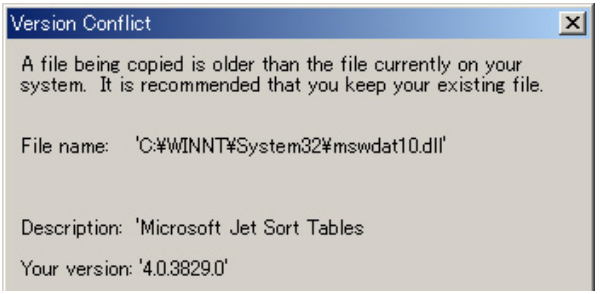
➔ The following window opens.



RI000046.EPS

6. Click Yes.

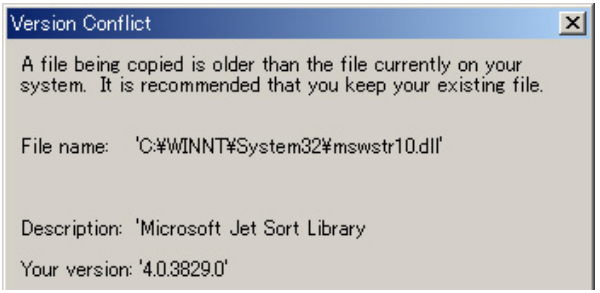
➔ The following window opens.



RI000047.EPS

7. Click Yes.

➔ The following window opens.



RI000048.EPS

8. Click Yes.

➔ A message appears to indicate that the installation is completed.



RI000049.EPS

9. Click OK.

➔ The installation process for the FRIS Modules is thus completed.

■ Installing the new PEI board driver

The new PEI board driver is automatically installed after the PC is restarted.

1. The CL-AP starts up in about two minutes after a PC restart. While the CL-AP startup process in progress, verify that the new PEI board driver is installed (the following window opens and remains displayed for several seconds during the startup process).



RI000025.EPS

2. Deliver a film output signal to the LP and verify that the LP generates a proper film output.

☞ If the LP does not generate a film output, see “3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure” under “MT: Machine Troubleshooting”.

■ Setting dummy nodes

If no nodes have been set up for “Setup Configuration Item” – “NETWORK CONFIG” – “THIS HOST(IIP)” in the Service Utility mode, the DICOM Print SCU needs to be set up as the dummy node.
It is not necessary to install the DICOM Print option key.

☞ For the setup procedure, see “2.1.4. Setup of Information on This Equipment for the DICOM Print Function” under “OE5: Connecting the CL to Other Equipment”.

Appendix E Setup for Security Enhancement

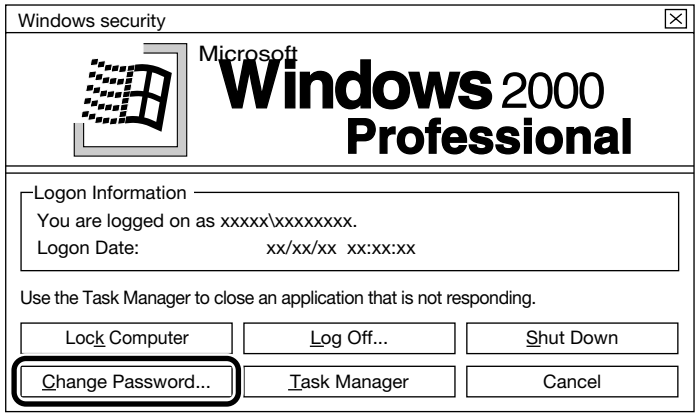
To provide CL security enhancement, complete the following three setup procedures.

- Replacing the default password with a new password
- Changing the setup so that the computer prompts for password input at logon
- Defining the minimum character count for the password

■ Replacing the default password with a new password

1. Simultaneously press the [Ctrl], [Alt], and [Delete] keys.

➔ The “Windows Security” window opens.

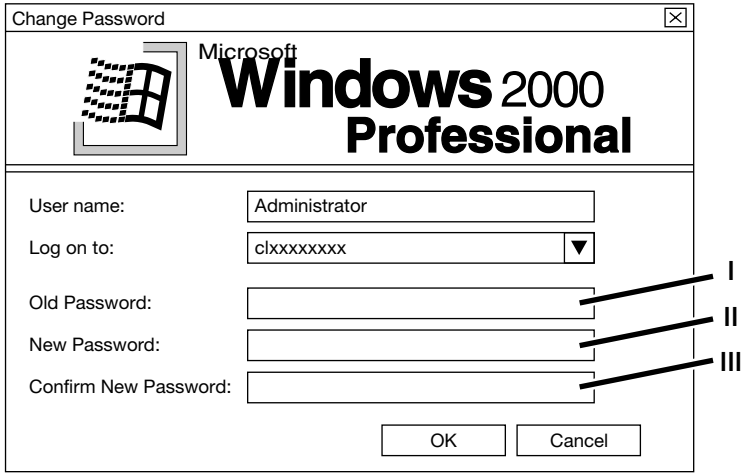


RI000078.EPS

2. Click the [Change Password...] button.

➔ The “Change Password” window opens.

3. From the “Change Password” window, perform the following setup steps.



RI000079.EPS

I. Enter the currently used password (fcr-iip by default).

II. Enter a new password consisting of no more than seven characters.

III. Enter the new password again for confirmation.

4. Click [OK].

➔ A window opens for password change confirmation.

5. Click [OK].

➔ You are then returned to the “Windows Security” window.

6. Click [Cancel].

■ Changing the setup so that the computer prompts for password input at logon

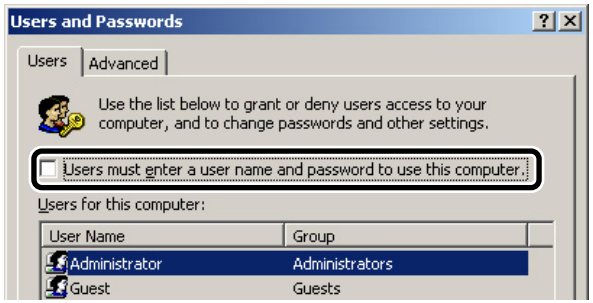
1. Click Start, point to “Settings”, and then click “Control Panel”.

   ➔ The Control Panel opens.

2. Double-click Users and Passwords.

   ➔ The “Users and Passwords” window opens.

3. Check “Users must enter a user name and password to use this computer.” (☐ ➔ ☑).



RI000080.EPS

4. Click OK.

   ➔ You are then returned to the Control Panel.

■ Defining the minimum character count for the password

1. Open “Control Panel”.

Double-click Administrative Tools and then Local Security Policy.

➔ The “Local Security Settings” window opens.



RI000081.EPS

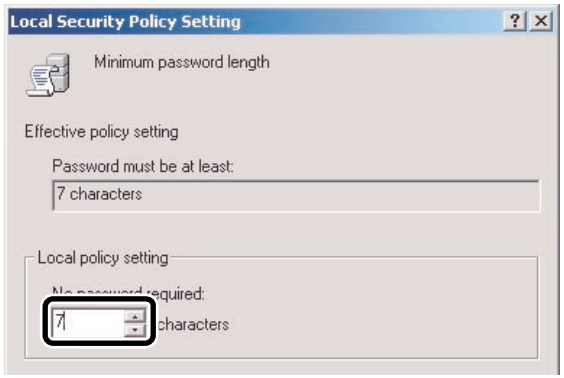
2. Click the ⊞ mark for Account Policies and then click Password Policy.

➔ The right-hand pane shows the password policy settings.

3. Double-click Minimum password length.

➔ The “Local Security Policy Setting” window opens.

4. Set the number of password characters to “7”.



RI000082.EPS

5. Click OK.

➔ You are then returned to the “Local Security Settings” window.

6. Close the “Local Security Settings” window.

7. Close the “Administrative Tools” window.

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Appendix F Installing the Video Board Driver

The installation steps for the Matrox Millennium G450 video board driver (hereinafter abbreviated to the G450 video driver) are described below:

- ■ Connecting the jig monitor
- ■ Installing the video driver
- ■ Setting the resolution

RI000092.EPS

◆ *NOTE* ◆

The G450 video driver can be installed only when the PC for the employed CR CL MA (mammography CL) accepts the G450 video board.

■ Connecting the jig monitor

Since the Ikegami MDM2130 monitor does not support the VGA mode, no screen indication can be obtained during video driver installation. Therefore, the multiscan VGA monitor (having a display resolution of 1600 × 1200 or 1280 × 1024 and a refresh frequency provided by a horizontal frequency of 75 Hz and a vertical frequency of 93 kHz) is furnished as a jig. Connect this jig to the video board connector to which the Ikegami monitor is currently connected.

■ Installing the video driver

1. Insert the “Matrox Millennium G450 CD-ROM” into the CD-ROM drive.

2. Double-click 

, 

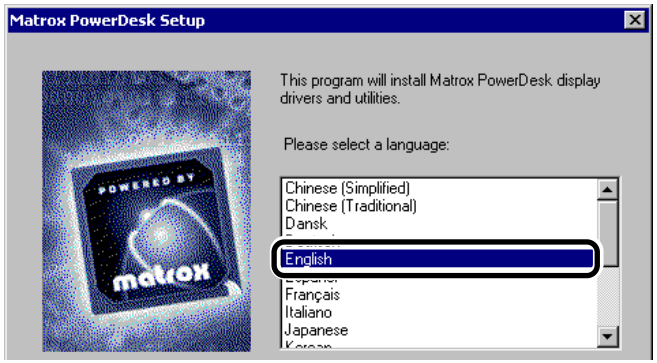
, 

, and 

in order named.

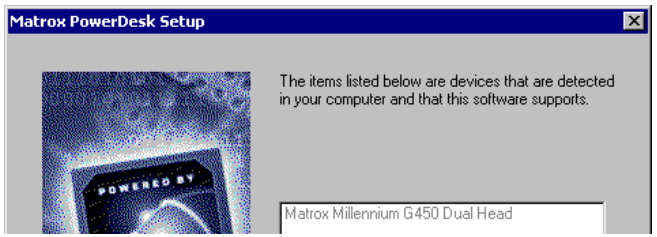
➔ The setup program starts running.

3. Select a language and then click Next >.



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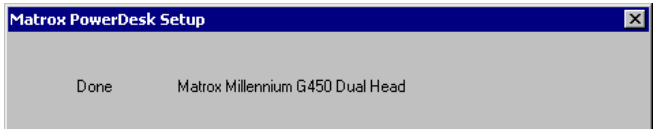
➔ A window opens to display the information about a supported device.



RI000093.EPS

4. Click Next > twice.

➔ The installation process starts.
Upon completion of installation, a window opens to indicate the end of installation.



RI000094.EPS

5. Click Next >.

➔ A window opens, prompting you to restart the PC.

6. Remove the video board driver CD-ROM from the CD-ROM drive.

7. Click Finish.

➔ The PC restarts.
When the PC is restarted, the "Log On to Windows" window opens.

8. Enter "fcr-iip" in the password field and then click OK.

◆ ***NOTE*** ◆

The "User name" field reads "Administrator" by default. Leave this user name entry unchanged because you have to log onto Windows 2000 as Administrator.

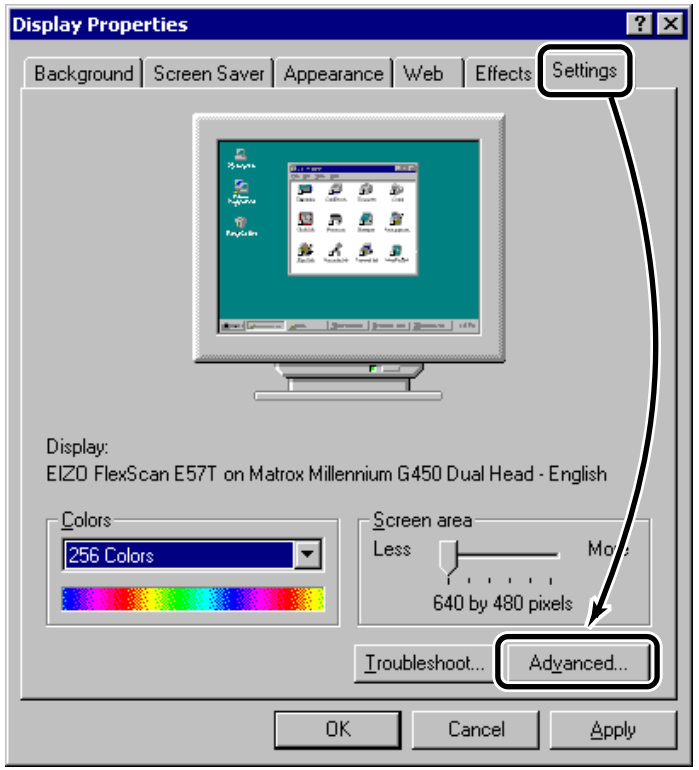
➔ The desktop screen opens.

■ Setting the resolution

1. Right-click the desktop. When the right-clicked menu opens, choose "Properties".

➔ The "Display Properties" window opens.

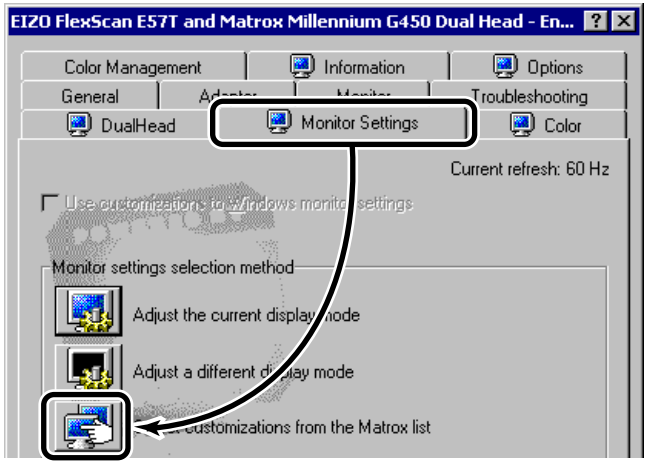
2. Choose the "Settings" tab and then click Advanced....



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➔ The Matrox G450 monitor setup window (main window) opens.

3. Choose the “Monitor Settings” tab and then click .



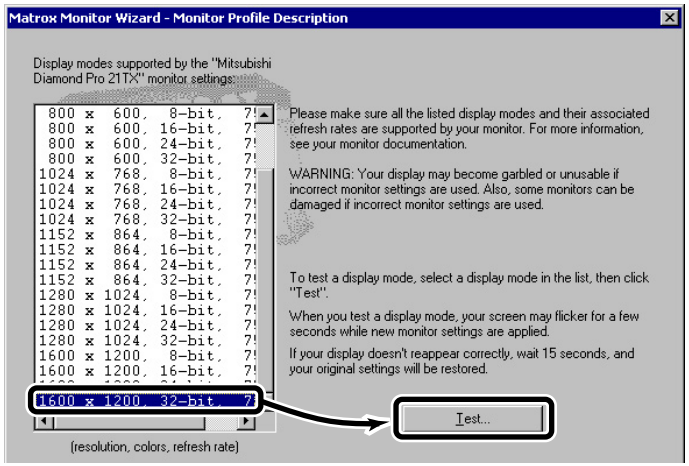
RI000087.EPS

➔ The “Matrox Monitor Wizard - Monitor List” window opens.

4. Click the ⊞ mark for Mitsubishi.

5. Choose Diamond Pro 21TX and then click Next >.

6. Choose “1600 × 1200 32-bit 75 Hz” and then click Test...



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➔ The “Matrox Power Desk” window opens.

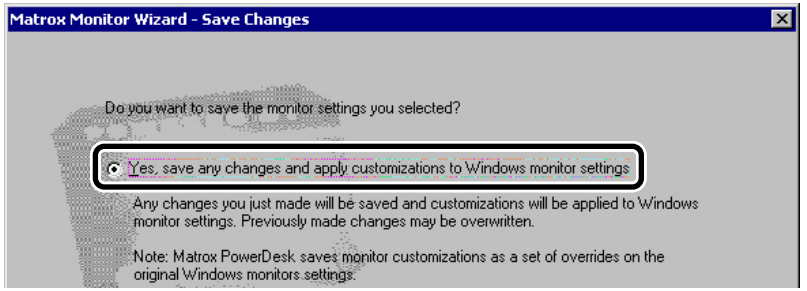
7. Click OK.

➔ You are then returned to the previous window.

8. Click Next >.

➔ The “Matrox Monitor Wizard - Save Changes” window opens.

9. Turn ON the Yes, save any changes radio button (○ ➔ ◉), and then click Finish.



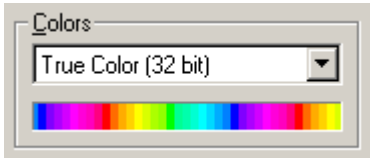
RI000096.EPS

➔ You are then returned to the main window.

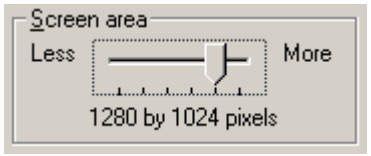
10. Click OK.

➔ You are then returned to the “Display Properties” window.

11. Perform the following monitor setup steps and then click Apply.

- 

(Colors: True Color (32-bit))

- 

(Screen area: 1280 × 1024 or 1600 × 1200 pixels)

◆ NOTE ◆

As the screen area, choose either 1280 × 1024 pixels or 1600 × 1200 pixels depending on the maximum resolution of the jig monitor. If the screen area setting exceeds the maximum resolution of the jig monitor, the jig monitor displays nothing. If such a situation occurs, disconnect the jig monitor and connect a monitor that supports the selected screen area setting.

➔ You are returned to the "Display Properties" window.

12. Click OK.

➔ The "Monitor Settings" window opens.

13. Click Yes.

➔ You are returned to the "Display Properties" window.

14. Click OK.

➔ You are then returned to the desktop screen.

15. If the Ikegami monitor is not connected, disconnect the jig monitor and then connect the Ikegami monitor.

16. If the screen area setting is not 1600 × 1200, open the "Display Properties" window and change the setting to 1600 × 1200.

◆ NOTE ◆

If a screen area setting of 1280 × 1024 pixels is selected in an earlier step in accordance with the jig monitor specifications, be sure to change the setting to 1600 × 1200 pixels after Ikegami monitor connection.
The Ikegami monitor is capable of displaying 1280 × 1024 pixels; however, it is presumed that the application software displays 1600 × 1200 pixels.

CR-IR346/348CL Service Manual

MU: Maintenance Utility

Control Sheet

Issue date	Revision number	Reason	Pages affected
05/30/2001	01	New release (FM3027)	All pages
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, III, IV, 3, 5-7, 13, 14, 16-24, 28-30, 35, 36, 39, 44
08/30/2001	03	Changes in pagination (FM3125)	15, 25-27, 31-34, 37, 38, 40-43
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 6, 7, 12-14, 1, 23, 25, 26, 30, 31,35, 44
03/20/2002	04	Changes in pagination (FM3297)	24, 27-29, 32-34, 36-42
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 1, 15, 17, 22, 25-28, 30, 31, 33, 34, 46, 48
07/20/2002	05	Changes in pagination (FM3428)	16, 18-21, 23, 24, 29, 32, 35-45, 47

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1. Starting/Exiting the Service Utility

This section explains about the procedures for starting/exiting the Service Utility, which is used as a service utility tool during CL installation and servicing.

■ Starting the Service Utility

The procedure for starting the Service Utility varies depending on whether the CL-PC power is ON or OFF.

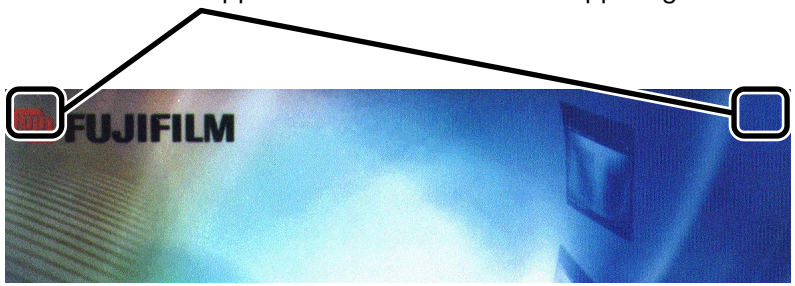
- When the PC power is OFF

1. **Turn ON the PC power.**

➔ Windows 2000 starts up. After about one minute, the CL-AP starts.

2. **When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility starts and then the “IIP Service Utility” window opens.

- When the PC power is ON

1. **Clicking “Shut Down” in the FUJIFILM menu while the CL-AP is running will display the exit window. Click OK while holding down the <Shift> key.**

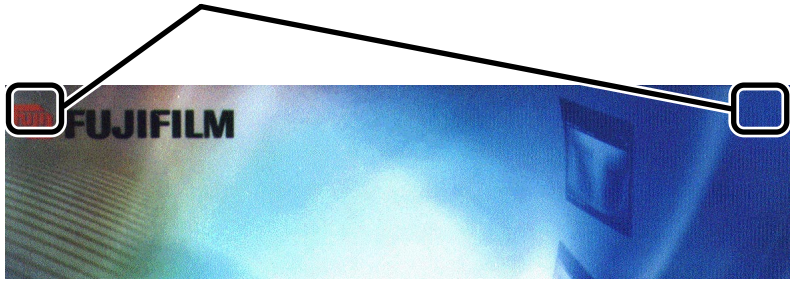
➔ The system returns to the desktop screen.

2. **From the Start menu, sequentially choose “Programs”, “Fuji Film”, and “FCR”.**

➔ The CL-AP starts in about one minute.

3. **When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.**

Click the upper left corner and then the upper right corner.

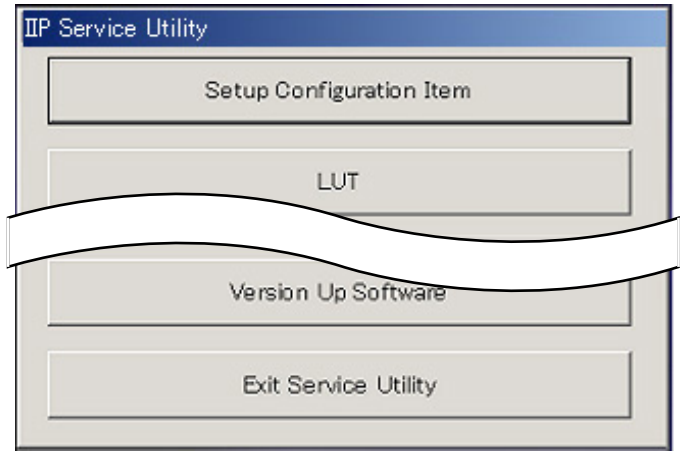


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➔ The Service Utility starts and then the “IIP Service Utility” window opens.

■ Exiting the Service Utility

1. Click [Exit Service Utility] on the “IIP Service Utility” window.

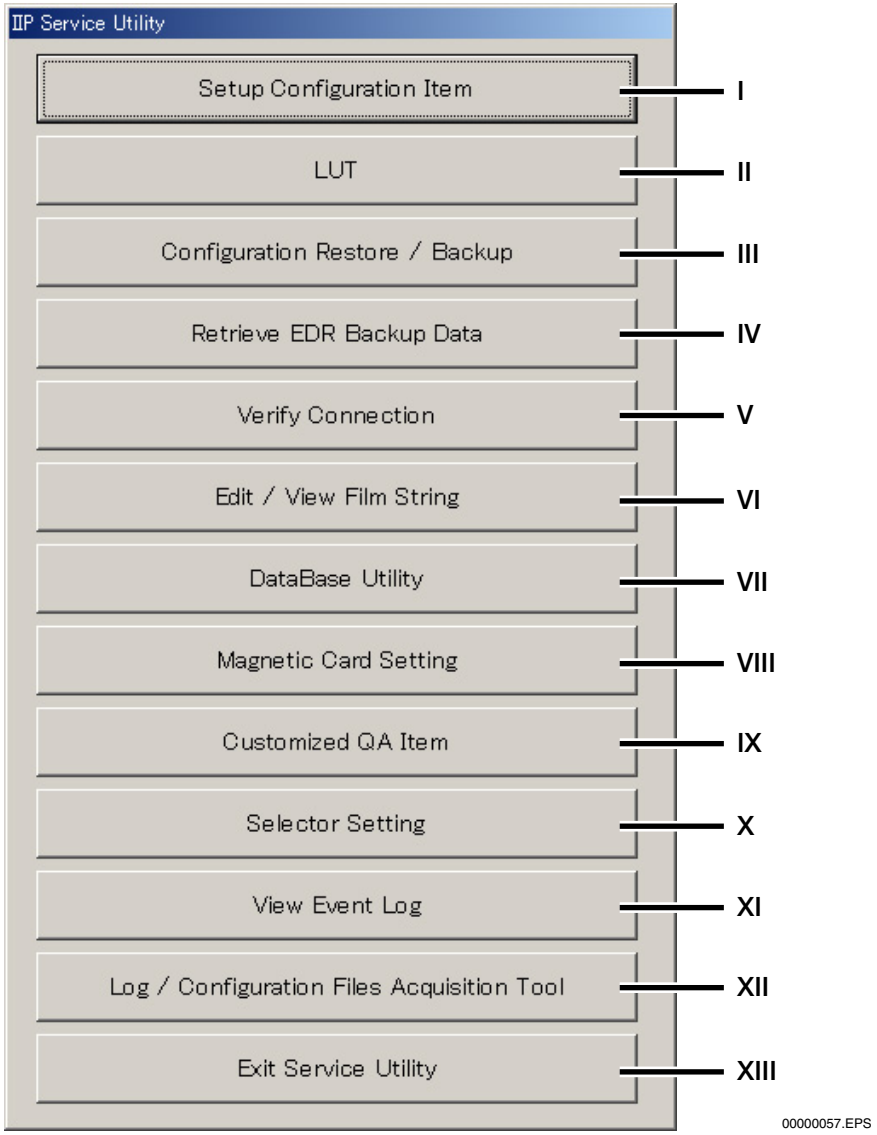


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➔ The system returns to the desktop screen.

2. Overview of Service Utility Functions

When the Service Utility starts running, the following window (hereinafter referred to as the main menu) opens.



- I. Setup Configuration Item

  This menu item is used for CL system information setup, network setup, LP setup, FINP/DICOM setup, automatic distribution code setup, and other setup purposes.
  This is the most frequently used menu item for installation.

  ☞ For details of this window, see “3. Various Config Settings - Setup Configuration Item”.

➥ *REFERENCE*

Automatic distribution code setup is performed with the Service Utility. However, attribute distribution setup is performed with a user utility. Attribute distribution setup is basically performed by the user.

- II. LUT

  This menu item is used for setup of LUT file information (a file that optimizes the window display) for the display that the CL supports.

  ☞ “4. Display Optimization – LUT”

● III. Configuration Backup/Restore

This menu item is used to back up or restore CL setup data.
The following files are backed up or restored.

❍ SysConfig.mdb file (A00 or later)

- System setup item
- LP setup item
- CSL setup item
- FINP setup item
- FRUP setup item
- QA process setup item

❍ NetConfig.mdb file (A00 or later)

- Connection device information table
- Connection destination setup table
- DicomPrint sorting destination setup table
- FINP compression ratio setup
- Distribution code setup

❍ PN.mdb file (A00 or later)

- PN setup item

❍ McrDataFormat.mdb file (A00 or later)

- Magnetic card format setup

❍ TagReplace.ini file (A02 or later)

- Setup for DICOM tag replacement

❍ QACustom.mdb file (A02 or later)

- Setup of display items on the QA window

❍ Selector.mdb file (A02 or later)

- Selector setup

☞ For the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”.

☞ For the restore procedure, see “14. Restoring the CL-Config“ under “RI: Reinstalling the Software”.

● IV. Retrieve EDR Backup Data

This menu item is used to retrieve EDR image data stored in the CL and save it on an FD or the like.

☞ For the EDR data retrieval procedure, see “6. Retrieving EDR Data – Retrieve EDR Backup Data”.

➥ *REFERENCE*

The EDR data refers to data halfway through a calculation task while EDR processing is being performed. This data is used to analyze later how EDR processing was performed actually.

● V. Verify Connection

This menu item is used to verify the connection to the RU or other connected equipment. The CL offers the following connection verification functions:

- Using the PING (connected equipment host name or IP address input required) to verify the network connection to other connected equipment
- Using connected equipment’s AE name (Application Entity Name) to verify the connection to DICOM connected equipment

☞ For details of the procedure for verifying connection to other equipment, see “7. Verifying the Connection to Other Connected Equipment - Verify Connection”.

● VI. Edit/View Film String

This menu item is used to directly edit the file named “FilmStrFmt.env” file, which defines the film annotation character format. The tool named “View Film String” can also be used to confirm on-screen film annotation characters.

◆ *NOTE* ◆

The contents of the FilmStrFmt.env file are written in Unicode. Therefore, use NotePad or other Unicode-compliant text editor for editing purposes.

☞ For details of FilmStrFmt.env file editing and View Film String usage, see “3. Editing the FilmStrFmt.env File [being now prepared])“ in “Printout Function“ under “FR1: Function-specific Reference”.

- VII. DataBase Utility
  This menu item is used to initialize image database, delete (clearing off the image output queue) accumulated images from output queue and initialize patient database.

  ☞ For details of the operation procedure, see “8. Management of Various Databases - DataBase Utility”.

- VIII. Magnetic Card Setting
  This menu item is used to set the data format for magnetic cards (hospital cards) and define ISO card read character code.

  ☞ For details of the data format, see “Appendix 4. Setting the Magnetic Card“ under “IN: Installation”.

  ☞ For details of the ISO card definition, see “9. Setting the Magnetic Card – Magnetic Card Setting”.

- IX. Customized QA Item

  This menu item is used to customize information, such as kanji patient name, patient ID, date of birth, etc., relevant to patient image displayed on the QA window.

  ☞ For details of the setup procedure, see “10. Customizing QA Items – Customized QA Item”.

- X. Selector Setting

  This menu item is used for selector setup necessary when connecting a built-in IR. This function is same as that of IDT-IV selector setup.

  ☞ For details of the setup procedure, see “11. Setting the Selector – Selector Setting”.

- XI. View Event Log
  This menu item is used to launch the Event Viewer of Windos 2000. The Event Viewer allows you to confirm errors occurring in the OS or CL-AP.

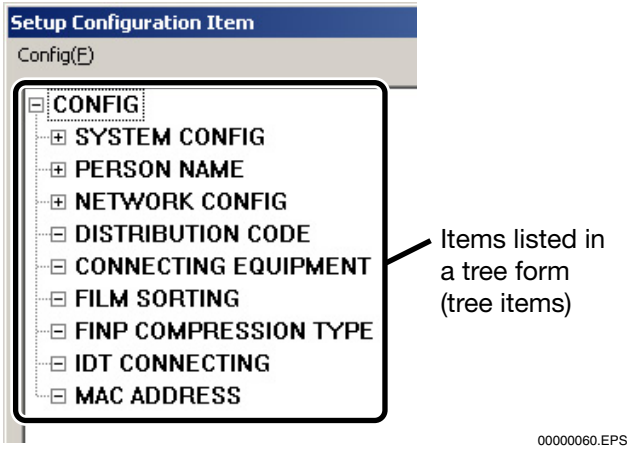
  ☞ For details of how to use the Event Viewer, see “2. Using the Event Viewer” under “MT: Machine Troubleshooting”.

- XII. Log/Config Files Acquisition Tool
  This menu item is used to compress CL log files or several setup files at a time and back them up on FDs or HD. This function is useful for looking into causes of errors that occur.

- XIII. Exit Service Utility
  This menu item is used for exiting the Service Utility mode.

3. Various Config Settings — Setup Configuration Item

When you click [Setup Configuration Item] on the main menu, the following window opens.
Various items are listed in a tree form (these items are hereinafter referred to as tree items) under “CONFIG (F)”. When you click these items, you can open windows to set detailed information for specific tree items.



The individual tree items are detailed in the following subsection.

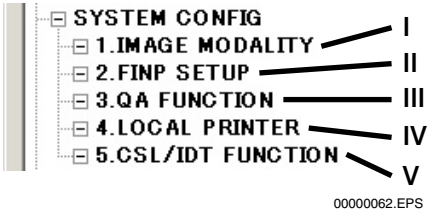
3.1 Meanings of Individual Tree Items

In the individual tree items, the following items can be set up.

- SYSTEM CONFIG
  This tree item is used to set the basic information about the CL.

  Clicking the “+” sign to the left of “SYSTEM CONFIG” displays the SYSTEM CONFIG tree items.

  The displayed items allow you to set the CL system information (I in the window illustration below), FINP basic information (II), QA functionality (III), Printout functionality (IV), and IDT or Console functionality (V).



☞ For details of “1. IMAGE MODALITY”, see “3.4 Config Details — 1. IMAGE MODALITY”.

☞ For details of “3. QA FUNCTION”, see “3.5 Config Details — 3. QA FUNCTION”.

☞ For details of “4. PRINTER”, see “2. Setups Necessary When Editing the Film Annotation Character Format” under “FR1: Function-specific Reference”.

☞ For details of “5. CSL/IDT FUNCTION”, see “3.6 Config Details — 5. CSL/IDT FUNCTION”.

- PERSON NAME

  This tree item is used to define the sequence of patient name elements and characters that delimit names.

  Clicking the “+” sign to the left of “PERSON NAME” displays the items for defining the details of PERSON NAME.

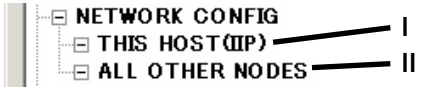
  ☞ For details on the PERSON NAME, see “3.7 Setting the Name Elements for DICOM Connection”.

- NETWORK CONFIG

  This tree item is used to set the CL/connected equipment network information and perform FINP/DICOM setup.

  Clicking the “+” sign to the left of “NETWORK CONFIG” displays the NETWORK CONFIG tree items.

  The displayed items allow you to set the CL main unit information (I in the window illustration below) and connected equipment information (II).



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- DISTRIBUTION CODE

  This tree item is used to perform automatic distribution code setup so that images can be distributed automatically to a device of HD_FILE attribute.

- CONNECTING EQUIPMENT

  This tree item is used to define the connected equipment that is connected to the CL.

- FILM SORTING

  This tree item is used to define the film sorting conditions for DICOM prints.

  ☞ For details of the FILM SORTING tree item, see “3.8 DICOM Print Film Sorting Setup”.

- FINP COMPRESSION TYPE

  This tree item is used to formulate an image compression definition of each MPM code for use in image output generation with the FINP.

  Before the use of this feature, however, the image compression setting for each MPM code needs to be turned ON from “NETWORK CONFIG”.

- IDT CONNECTING

  This tree item is used to make patient information available being shared with the CR Console (CL) and IDT-IV that are on the same network.

  ☞ See “3.9 Patient Information Sharing Function Setup”.

- MAC ADDRESS

  This tree item is used to prevent error occurrence that disables Mac Address to be acquired at CL-AP startup.

  ☞ See “3.10 Acquisition of Mac Address”

3.2 Editing the Listed Configuration Items

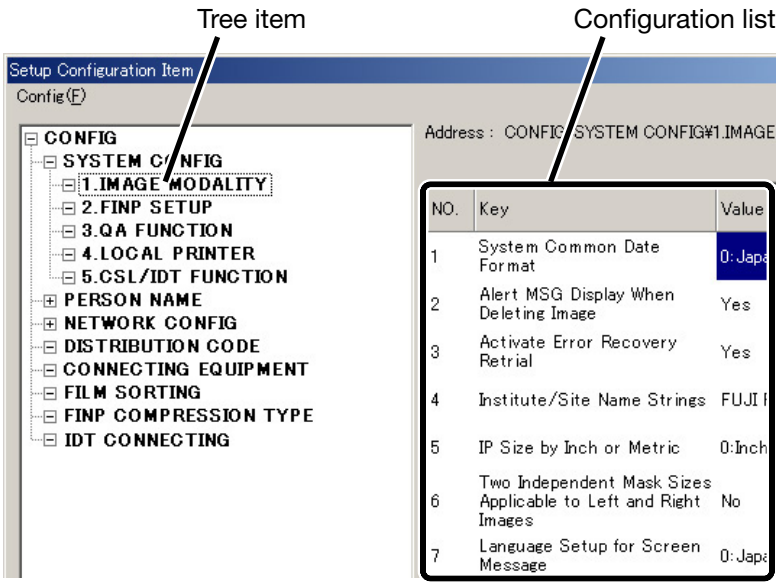
When you click a tree item in the left-hand area of the Setup Configuration Item window, a list of setup items appears in the right-hand area of the window (this list is hereinafter referred to as a configuration list).

This section explains about the procedure for editing the setup items in a configuration list.

➥ *REFERENCE*

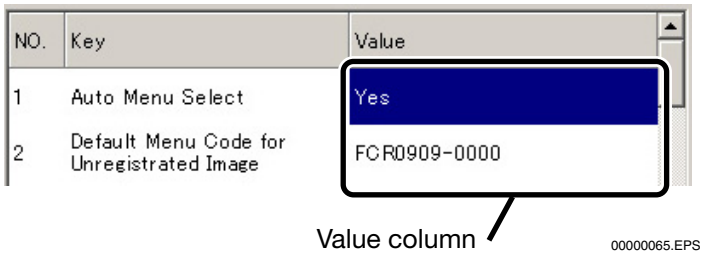
A configuration list appears when you click the following tree items:

- *Five tree items under "SYSTEM CONFIG"*
- *PERSON NAME*



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1. **Double-click the Value column to the right of a configuration item name.**



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2. **Edit a configuration item.**

- When the column you double-clicked changes to a direct input field (e.g., FUJI FILM HOSPITAL)

  I. With the mouse, select the text to be edited, and then key in new text.

- When the column you double-clicked changes to a pull-down menu (e.g., 0:Japanes date(S62.10.07))

  I. Click the downward arrow mark ( ) for the pull-down menu (e.g., 0:Japanes date(S62.10.07)), and then choose a target item from the pull-down menu.

- When the column you double-clicked changes to a field with upward and downward arrow marks (e.g., 0)

  I. Click the upward arrow mark ( ) or downward arrow mark ( ) to change the value as desired.

3.3 Saving the Configuration Data

To save the configuration data, perform either of the following procedures with the mouse or keyboard:

- Saving with the mouse

  1. **From the “Config (F)” menu, click “Save (V)”.**

  ➔ A confirmation window opens.

  2. **Click [YES].**

  ➔ The system saves the edited configuration data.

- Saving with the keyboard

  1. **Hold down the “Alt” key and press the “F” key.**

  ➔ A pull-down menu opens.

  2. **Press the “V” key.**

  ➔ A confirmation window opens.

  3. **Press the “Return” key.**

  ➔ The system saves the edited configuration data.

3.4 Config Details — 1. IMAGE MODALITY

■ IMAGE MODALITY setup items (1 to 5)

No.	Name	Selection	Meaning
1	System Common Date Format	◎ 0: Japanese date (S62.10.07) ❍ 1: ANSI long date (1987.OCT.07) ❍ 2: ANSI short date (1987.10.07) ❍ 3: American long date (OCT.07.1987) ❍ 4: American short date (0.07.1987) ❍ 5: European long date (07.OCT.1987) ❍ 6: European short date (07.10.1987	Specifying the date format to be used in medical institutions. * The date format is applicable in common to entry of the date of birth, monitor display, film output, and all other date-related representations.
2	Alert MSG Display When Deleting Image	◎ Yes After selecting [Delete], the confirmation screen for image deletion will be displayed. Pressing [OK] will delete the specified item. ❍ No After selecting [Delete], the confirmation screen for image deletion will not be displayed and the specified item deleted immediately.	Specifying whether or not to display the confirmation screen for image deletion before actually deleting an image.
3	Activate Error Recovery Retrial	◎ Yes The system continues retrial processing until the connected devices are recovered. Once recovered, it automatically continues output (including printout) of images accumulated on the output queue. ❍ No The system does not output (print) images in “standby” status unless it manually outputs (including printout) such images.	Specifying whether or not to activate retrial processing after the error occurrence.
4	Institute/Site Name Strings	A maximum of 60 one-byte character. (◎ FUJIFILM HOSPITAL)	Setting the medical institution name (in 1-byte characters). * For language setup of one-byte characters, a hospital name specified here will be printed on film. * Be sure to use 1-byte characters for entering medical institution name as they are used in the DMS system. * Make sure to enter 1-byte characters on the keyboard. * The default number of characters printed on film is 20 at a maximum.
5	IP Size by inch or Metric	◎ 0:Inch Displays 14"×14" and 14"×17" images in the inch system. ❍ 1:Metric Displays 14"×14" and 14"×17" images in the metric system.	Specifying the IP size. * Specify the IP size considering the cassette size available on the RU side.

◎: Default setting, ⋆: Note

■ IMAGE MODALITY setup items (6 to 12)

No.	Name	Selection	Meaning
6	Two independent Mask Sizes Applicable to Left and Right images	❍ Yes Sets independent RN for the right and left images. (Hipmnrl.prm is used.) ◎ No Sets the same RN for the right and left images. (Hipmenu.prm is used.)	Specifying whether or not to set up frequency processing RN independently for the right and left images on the double-image output.
7	Language Setup for Screen Message	❍ 0 : Japanese ◎ 1 : English ❍ 2 : German ❍ 3 : French ❍ 4 : Spanish ❍ 5 : Italian ❍ 6 : Swedish ❍ 7 : Finnish ❍ 8 : Danish ❍ 9 : Norwegian ❍ 10 : Korean	Specifying the language used. * There is no need to change in the Japanese version. Change the setting as necessary for the languages other than Japanese.
8	Insitute/Site Name in Two-Byte Characters	A maximum of 15 two-byte characters. (◎ 富士フイルム病院)	Specifying the kanji medical institution name. * For language setup of two-byte characters, a hospital name specified here will be printed on film. * Be sure to enter two-byte characters on the keyboard. (Using the <Alt>+< 全角/半角 > keys, the character entry mode can be made available for entering two byte characters.) * The default number of characters printed on film is 15 at a maximum.
9	UID Issuance after Modifying ID Information	❍ Yes Issues new image UID and SOP Instance UID. ◎ No Does not issue new image UID and SOP Instance UID.	Specifying whether or not to issue new image UID and SOP Instance UID when modifying the patient, study, series or image information. * Select “Yes” if you wish to identify images for each modification.
10	UID Issuance after Modifying Normalized Parameter	◎ Yes Issues new image UID and SOP Instance UID. ❍ No Does not issue new image UID and SOP Instance UID.	Specifying whether or not to issue new image UID and SOP Instance UID when modifying the conditions for normalization. * Select “Yes” if you wish to identify images for each modification.
11	UID Issuance after Modifying Image Processing Parameter	❍ Yes Issues new image UID and SOP Instance UID. ◎ No Does not issue new image UID and SOP Instance UID.	Specifying whether or not to issue new image UID and SOP Instance UID when modifying image processing parameters. * Select “Yes” if you wish to identify images for each modification.
12	UID Issuance Before Sending Processed Data	◎ Yes Issues new image UID and SOP Instance UID. ❍ No Does not issue new image UID and SOP Instance UID.	Specifying whether or not to issue new image UID and SOP Instance UID when outputting processed images.

◎: Default setting, ⁎: Note

■ IMAGE MODALITY setup items (13 to 17)

No.	Name	Selection	Meaning
13	DICOM Series Generation Logic	◎ 0: 1 Study - N series and 1 Series - 1 image Issues a number so that it has multiple series for one study and only one image for one series. ❍ 1: 1 Study - N series and 1 Series - M image Issues a number so that it has multiple series for one study and multiple images for one series. ❍ 2: 1 Study - 1 series and 1 Series - N image Issues a number so that it has only one series for one study and multiple images for one series.	Specifying the series generation logic. <Ref.> "■ Detailed explanations"
14	System Recognition ID (A to Z)	A_Z(◎A)	Setting the system ID. * Reflected on the image attributes and used for automatic study number generation. * Be sure to enter one-byte characters on the keyboard. * The system ID set up on the RU config (referred to as the image ID on the RU) will be printed on film.
15	User Utility Password Required or Not	❍ Yes Password entry is required (the password is 1111.) It is possible to enter the exposure menu parameter batch update menu with password 111111. ◎ No No password entry is required.	Specifying if password entry is required when entering the user utility mode.
16	SOP Class UID for PPS When No FILE Attribute Output	◎ 1.2.840.10008.5.1.4.1.1.1 ❍ 1.2.392.200036.9125.1.1.2	Specifying an SOP Class UID that is sent back to PPS when no other connected hosts are set up as the destinations for FILE attribute image output (for example, when a QA-WS is connected as a connected host). * Use the same UID as that used by the HI-C655 for FILE attribute output.
17	Protocol Name for PPS	◎ 0: Function Code Sets up a Code (function codes such as RT, TS, ES, etc). ❍ 1: ANK Menu Name Sets up a Menu Name (exposure menu) in alphanumerics.	Specifying a value used for setup of the "Protocol Name" for PPS.

◎: Default setting, ⋆: Note

■ IMAGE MODALITY setup items (18 to 25)

No.	Name	Selection	Meaning
18	Display Performed Procedure on Worklist Tab	❍ Yes ◎ No	Specifying whether or not to display an already performed study in the CL work list. For a study already performed, specifying NO will hide it even if its related information is sent from MWM. Basically, specify NO when the PPS function is not available.
19	Kind of Output Image (Energy Subtraction)	◎ 0: L, H, B, S ❍ 1: L, B, S ❍ 2: L, S ❍ 3: L, B ❍ 4: L, H L: Low-pressure image H: High-pressure image B: Bone image S: Soft tissue image	Specifying the combination of kinds of images to be transferred to other connected host.
20	Send 3 on 1 Format to External Device	❍ 0: Yes Transmits Images. ◎ 1: No Does not transmit images.	Specifying whether or not to transfer 3on1-format images to an externally connected host. * Item to be specified only when ES images can be received.
21	Connection Between Reader and Console	◎ 0: 1-1 1-to-1 connection ❍ 1: N-N N-to-N connection	Specifying whether the 1-to-1 or N-to-N connection is to be established for the CL and RU.
22	Long Type Character Format	❍ Yes Decreases the font sizes to increase the number of displayable characters. ◎ No Does not increase the number of displayable characters.	Specifying the font sizes of the ID number and other items for CRT display and film annotation character printing. * Note that the item to be specified for actually increasing the number of characters is separately available.
23	Tag Mapped on Study Menu at MWM Use	◎ 0040, 0100>0040, 0007	DICOM-defined tag numbers to be mapped onto a study menu for MWM use. * Be sure to enter one-byte characters on the keyboard.
24	Perform Mapping to Exposure Menu at MWM Use	◎ Yes Performs mapping. ❍ No Does not perform mapping.	Specifying whether or not to perform mapping for study and exposure menus during MWM use. If “No” is selected, only the patient information will be used to initiate a study process (the exposure menu or other data will not be transmitted).
25	Display Dialog When Failed in Mapping to Menu at MWM Use	◎ Yes Opens a warning window. ❍ No Does not open a warning window.	Specifying whether or not to open a warning window when mapping is not successfully performed for a CL study menu or exposure menu during MWM use.

◎: Default setting, ⁎: Note

■ IMAGE MODALITY setup items (26 to 29)

No.	Name	Selection	Meaning
26	Use StudyInstanceUID from RIS	◎ Yes Uses the Study Instance UID sent from the RIS. ❍ No Does not use the Study Instance UID sent from the RIS.	Specifying whether or not to use the Study Instance UID that is transmitted from the RIS.
27	StudyInstanceUID Generation Logic	❍ Type1 <company name>.2.1.<study number> ❍ Type2 <company name>.2.2<study date><modality>. <study number> ❍ Type3 <company name>.2.3.<study date><modality>. <study ID> ❍ Type4 <company name>.2.4.<study date>.<study ID>. <requesting department> ❍ Type5 <company name>.2.5.<order number> ❍ Type6 <company name>.2.6.<study date>.<order number> ❍ Type7 <company name>.2.<MAC address>.<TimeStamp>. <machine-dependent ID number>	Study Instance UID number issue type for CL internal number issuance. * If the order number does not exist or the Study Instance UID is longer than specified, the system automatically uses Type7.
28	Dicom Storage Output Connection Number	1 to 4 (◎3)	Number of connections simultaneously available for Dicom Storage output generation. * Item to be specified for the LF-C2.
29	Image Number Generation Logic	◎ 0:System ID+Serial Number Attaches a machine shipment control number. ❍ 1:Serial Number Does not attach a machine shipment control number.	Specifying whether or not to attach a machine shipment control number to the beginning of the Image Number. This number is printed on film as well.

◎: Default setting, ⁎: Note

■ IMAGE MODALITY setup item (30)

No.	Name	Selection	Meaning
30	Display Pixel Size	◎ 297	Monitor pixel size. To be changed in accordance with the monitor type. 15" touch panel LCD monitor : 297 17" CRT monitor : 316 (recommended value) SL-IC300 : 207 Ikegami CRT monitor (1k landscape-type) : 255 (recommended value) * This setting represents a constant for 100%-size image display by the QA function. * Since the CRT monitor can vary its pixel size through screen size adjustments, calculate the pixel size value as indicated below and use it as the setting. Screen width (mm) ÷ number of pixels × 1000 = pixel size Example : 360 mm ÷ 1600 pixels × 1000 = 225

◎: Default setting, *: Note

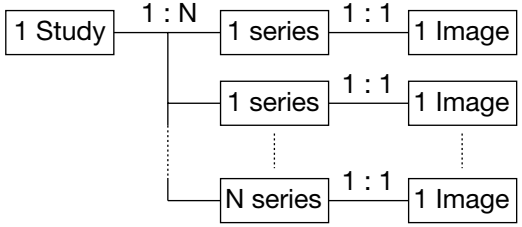
■ Detailed explanations

● “13. DICOM Series Generation Logic”

In relation to the DICOM Series Generation Logic, the following supplements explain the logic of series numbering subsequent to image a cquisition from the RU.

- **0: 1 Study-N series and 1 series-1 Image**

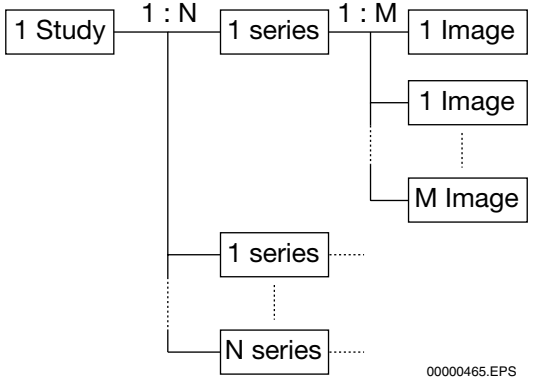
  Performs numbering in such a manner that each study has more than one series and that each series has only one image.



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- **1: 1 Study-N series and 1 series-M Image**

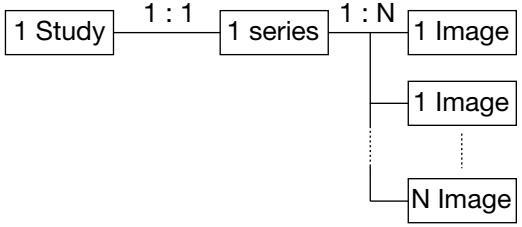
  Performs numbering in such a manner that each study has more than one series and that each series has two or more images.



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- **2: 1 Study-1 series and 1 series-N Image**

  Performs numbering in such a manner that each study has only one series and that each series has two or more images.



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3.5 Config Details — 3. QA FUNCTION

No.	Name	Selection	Meaning
1	Enable Image Proc. Pram Update Flag	❍ Yes Reflects updated image processing parameters upon flag. ◎ No Does not reflect updated image processing parameters upon flag.	Enabling updated image processing parameter flag.
2	Enable E-mail Butten	❍ Yes Used. ◎ No Not used.	Specifying whether or not to use the image transfer function via E-mail and the simplified image storage function.
3	Use Dialog for Choosing Folder to Save Jpeg Image	◎ No Does not open. ❍ Yes Opens.	Specifying whether or not to open a dialog box for specifying the destination directory when you save an image with the simplified image storage function.
4	Destination Path of JPEG File	◎ A:\	Specifying the simplified image storage destination. * Be sure to enter 1-byte characters via the keyboard.
5	Filename Format of JPEG Informatioin	◎ 0:Image Number “Image number”+”serial number”.txt ❍ 1:Type 1 “Host name”+”date”+”serial number”.txt	Filename generation rule applied to simplified image storage.

◎: Default setting, *: Note

3.6 Config Details — 5. CSL/IDT FUNCTION

■ CSL/IDT FUNCTION setup items (1 to 7)

No.	Name	Selection	Meaning
1	AutoMenuSelect	❍ No From exposure list menus of unread images, manually selects exposure menus of the image to be read the next. ◎ Yes When an image is received from the RU, automatically moves onto the next exposure menu item (at the bottom on the screen).	Specifying whether or not to automatically move onto the next exposure menu item (at the bottom on the screen) when multiple exposure menus are registered.
2	Default Expansion Menu Code for Unregistered Image	A maximum of 16 one-byte characters. (◎FCR0909-0000)	Setting the extension menu code of the exposure menu to be used as the default when it is unregistered. * This item can also be set up using the User Utility function. The item set up the last will be valid. * Make sure to enter one-byte characters on the keyboard.
3	Enable Distribution Code	◎ No The distribution code is not used. ❍ Yes The distribution code is used.	Specifying if the distribution code is used when changing exposure menu parameters.
4	Enable Film String	◎ No The film mark is not used. ❍ Yes The film mark is used.	Specifying if the film annotation characters are used when changing exposure menu parameters.
5	Enable Function Setup	◎ No The function setup is not used. ❍ Yes The function setup is used.	Specifying if the function setup is used when changing exposure menu parameters.
6	Enable Pantomography Processing	◎ No The pantomography is not used. ❍ Yes The pantomography is used to isolate an image if it is in 24×30cm (10"×12") size and a pantomography menu (MPMcode 20×4) is used.	Specifying if the pantomography (processing used to isolate a 15×30cm image from a 24×30cm (10"×12") image) is used.
7	Enable Performance Data (RIS)	❍ No The performance data is disabled. ◎ Yes The performance data is enabled.	Specifying whether the result information (film size and split exposure count) can be defined from the CL menu parameter edit dialog box at the time of ordering from the RIS.

◎: Default setting, *: Note

■ CSL/IDT FUNCTION setup items [continued] (8 to 12)

No.	Name	Selection	Meaning
8	Enable Automatic Selector Switching	◎ No Not used. ❍ Yes Used.	Specifying if the automatic selector changeover function is used.
9	Enable Requesting Dept. Name Field	❍ No The requesting department name field is not displayed. ◎ Yes The requesting department name field is displayed.	Specifying if the requesting department name field is displayed on the patient information entry screen.
10	Enable Technologist Name Field	❍ No The technologist name field is not displayed. ◎ Yes The technologist name field is displayed.	Specifying if the technologist name field is displayed on the patient information entry screen.
11	Image Rotation/Reversal Range	◎ 0: L-R reversal ❍ 1: T-B reversal ❍ 2: L-R,T-B reversal ❍ 3: L-R reversal / 90-deg,Rotation ❍ 4: L-R,T-B reversal / 90-deg,Rotation Selects a combination of L-R, T-B, 90-deg or Rotation from among 0 to 4. L-R: Right and left rotation, T-B: Top and bottom rotation, 90-deg, Rotation: 90° reversal	Specifying the range available for selection of image rotation and reversal when changing exposure menu parameters.
12	EDR Mode Setup	◎ 0: AUTO/SEMI/FIX ❍ 1: AUTO/SEMI/FIX/SEMI-X ❍ 2: AUTO/SEMI/FIX/MANUAL ❍ 3: AUTO/SEMI/FIX/SEMI-X/MANUAL Selects a combination of AUTO, SEMI, FIX, SEMI-X or MANUAL from 0 to 3. AUTO : Automatically calculates both the S and L values based on the image. SEMI : The L value is fixed. Automatically calculates the S value as per determined process. FIX : The L value is fixed. The S value is the default or manually entered. SEMI-X : The L value is fixed. Automatically calculates the S value as per determined process. Manually enters area for calculation and output density. MANUAL : For manual entry of both the S and L values.	Specifying the range available for selection of EDR mode when changing exposure menu parameters.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (13 to 16)

No.	Name	Selection	Meaning
13	Image Data Filing Mode Setup	◎ 0:OFF/ON ❍ 1:OFF/ON/ON* Selects a combination of OFF, ON or ON* from 0 and 1. OFF : Not to filing to the OD device. ON : Filing to the OD device. ON* : Filing of an HQ image to the OD device after converting it to a normal density image.	Specifying the range available for selection of filing mode when changing exposure menu parameters.
14	Function Setup	RT,TS,ES,WS,PS,TM,TX,EX,WX (◎ RT,TS,ES,WS,PS,TM) RT: Routine processing (routine exposure) TS: Temporal subtraction processing ES: Energy subtraction processing WS: Whole spine processing PS: IVP processing TM: Tomographic processing TX: Batch temporal subtraction processing EX: Batch energy subtraction processing WX: Batch whole spine processing	Specifying functions that can be selected when changing exposure menu parameters. * Enumerate functions demarcating them using one-byte commas in between. * Be sure to enter one-byte characters on the keyboard.
15	Examination No. Length	1–16(◎10)	Setting the examination No. length (1 to 16). * Set 6 or larger when 1 is set for “29. Study Number Issuance Logic Setup” and 14 or larger when 2 is set for it. * Be sure to enter one-byte characters on the keyboard. * This function also specifies the number of characters printed on film.
16	Examination No. Padding Method	◎ 0: Pad with space to the head(1234567) Right-padded with spaces to the head. ❍ 1: Pad with zero to the head (0001234567) Right-padded with zeros to the head. ❍ 2: Pad with space to the tail(1234567) Left-padded with spaces to the tail. ❍ 3: Pad with zero to the tail (1234567000) Left-padded with zeros to the tail.	Specifying the examination No. padding method. * This function also specifies right/left justification of character strings printed on film.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (17 to 22)

No.	Name	Selection	Meaning
17	Patient ID Length	1–64 (◎10)	Setting the patient ID length. * Be sure to enter one-byte characters on the keyboard. * This function also specifies the number of characters printed on film.
18	Patient ID Padding Method	◎ 0: Pad with space to the head(1234567) Right-padded with spaces to the head. ❍ 1: Pad with zero to the head (0001234567) Right-padded with zeros to the head. ❍ 2: Pad with space to the tail(1234567) Left-padded with spaces to the tail. ❍ 3: Pad with zero to the tail (1234567000) Left-padded with zeros to the tail.	Specifying the patient ID padding method. * This function also specifies right/left justification of character strings printed on film.
19	Reception No. Length	1–16 (◎5)	Setting the reception No. length. * Use this setting for Type B ID Online connection. * Be sure to enter one-byte characters on the keyboard.
20	Reception No.Padding Method	◎ 0: Pad with space to the head(1234567) Right-padded with spaces to the head. ❍ 1: Pad with zero to the head (0001234567) Right-padded with zeros to the head. ❍ 2: Pad with space to the tail(1234567) Left-padded with spaces to the tail. ❍ 3: Pad with zero to the tail (1234567000) Left-padded with zeros to the tail.	Specifying the reception No. padding method. * Use this setting for Type B ID Online connection.
21	Exposure List Erasure Setup	◎ No Does not erase. ❍ Yes Erases.	Specifying whether or not to erase the preset exposure list when entering new patient information on the examination and examination reservation screens. * This item can also be set up using the User Utility function. The item set up the last will be valid.
22	Requesting Dept. Name Field Setup	◎ 0: Code Displays the requesting department code. ❍ 1: NameSbcs Displays the requesting department name in alphanumerics. ❍ 2: NameDbcs Displays the requesting department name in kanji.	Setting the content of the menu to be displayed in the requesting department name field.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (23 to 28)

No.	Name	Selection	Meaning
23	Technician's Name Field Setup	◎ 0: Code Displays the technician's code. ❍ 1: NameSbcs Displays the technician's name in alphanumerics. ❍ 2: NameDbcs Displays the technician's name in kanji.	Setting the content of the menu to be displayed in the technician's name field.
24	Min.Set Number	1–ZZ (◎1)	Setting the minimum value for the function processing setup No. * Enter a value smaller than that specified in "25. Max. Set Number" below. * Be sure to enter one-byte characters on the keyboard.
25	Max.Set Number	1–ZZ (◎9Z)	Setting the maximum value for the function processing setup No. * Enter a value larger than that specified in "24. Min. Set Number" above. * Be sure to enter one-byte characters on the keyboard.
26	MCR Customized Card	◎ No The hospital card is not used. ❍ Yes The hospital card is used.	Specifying whether or not to use the hospital card. ☞ For details of setup, see Installation "Appendix 6 Setting Up the Magnetic Card Reader [Option]" under "Appx IN: Appendix to Installation".
27	MCR Card Type (JIS/ISO)	0: JIS 1: ISO	Specifying the magnetic card type. ☞ For details of setup, see Installation "Appendix 6 Setting Up the Magnetic Card Reader [Option]" under "Appx IN: Appendix to Installation".
28	MCR Card Format Setup	0: FUJI (JIS type, ISO type) 1: FJ01(JIS type) 2: FJ02(JIS type) 3: FJ03(JIS type) 4: FJ04(JIS type) 5: FJ05(JIS type) 6: FJ51(ISO type)	Specifying the magnetic card format setup type. ☞ For details of setup, see Installation "Appendix 6 Setting Up the Magnetic Card Reader [Option]" under "Appx IN: Appendix to Installation".

◎: Default setting, ⋆: Note

■ CSL/IDT FUNCTION setup items [continued] (29 to 37)

No.	Name	Selection	Meaning
29	Study Number Issuance Logic Setup	◎ 0: OFF ❍ 1: <System Id+Auto Increment> ❍ 2: <Date+System Id+Auto Increment> System ID: Converts A to 1, ... and Z to 26. Date: Converts in the form of yyyymmdd (year, month, day). Auto Increment: Starts with the initial value counted to be 0001 and the count is reset to the initial value if it extends over the two consecutive years.	Specifying the logic available for automatic study number (0021, 2F20) issuance mode. * Verify the setting made in “15. Examination No. length.” Make sure that 6 or larger is set when “1” has been selected and 14 or larger, when “2” has been selected. * (0021, 2F20) are the study number tag.
30	Technician's Code Length	1–2 (◎2)	Setting the technician’s code length. *Be sure to enter one-byte characters on the keyboard.
31	ID Online Acquisition Info. Code Setup	◎ 0: CP850 (DOS Latin 1) ❍ 1: CP1252 (Win Latin 1)	Specifies the code set for use in ID Online connection. ☞ For detailed code set descriptions, see “■ Detailed explanations”.
32	ID Online Serial Port No.	Enter a numerical value in accordance with the PSI board channel. (If you do not use the ID online serial port, enter "0".) (◎0)	Specifies the ID Online serial port.
33	ID Online Interface Format	◎ 0: Short ❍ 1: Long (to be selected when an extended format is in use)	Specifies the ID Online interface format.
34	ID Online/Offline Switching Timeout	Enter a numerical value (use the default setting under normal conditions). (◎10)	Specifies the online/offline switching timeout value.
35	ID Online Requesting Timeout	Enter a numerical value (use the default setting under normal conditions). (◎30)	Specifies the timeout value for information inquiry at the RIS.
36	ID Online Search Key	◎ 0: ID# ❍ 1: ID#&RECEPT# ❍ 2: ID#&EXAM# ❍ 3: ID#&RECEPT#&EXAM# A combination of patient ID number, reception number, and examination number is to be used as a search key. ID# : Patient ID number RECEPT# : Reception number EXAM# : Examination number	Specifies the type of ID Online search key.
37	ID Online Type	◎ 0: Type-A The RIS transmits information. ❍ 1: Type-B ❍ 2: Type-IDC4 The CL uses a search key to make inquiries at the RIS for the purpose of acquiring patient information.	Specifies the ID Online interface type.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (38 to 46)

No.	Name	Selection	Meaning
38	Host Name of RIS Server (Type-IDC4)	◎ One-byte character (◎ idc4)	IDC4 host name when using the ID Online function for IDC4. * Be sure to enter one-byte characters on the keyboard.
39	IP Address of RIS Server (Type-IDC4)	◎ 172.16.1.1	IDC4 IP address when using the ID Online function for IDC4. * Be sure to enter one-byte characters on the keyboard.
40	Port Number for RIS Server (Type-IDC4)	Enter a numerical value in accordance with the RIS port number. (◎13001)	IDC4 port number when using the ID Online function for IDC4. * Be sure to enter one-byte characters on the keyboard.
41	RIS Type Setup	❍ 1: S1 (NEC-Type1) NEC (for TYPE-I) ◎ 2: S2 (NEC-Type2) NEC (for TYPE II) ❍ 3: S3 (Fujitsu/Hitachi) For Fujitsu/Hitachi	RIS type when ordering (serial connection only) is intended. * Serially connected ordering is available only for version A04 or later. * Version A07 supports only “2: S2 (NEC-Type2)”.
42	Wait Time for Performed Exposure Info. from Xcon	1 to 30 (Basically not changed.) (◎3)	Specifying the wait time (in seconds) between the instant at which the ID information acquisition request is received from the built-in type machine and the instant at which the XCON exposure result information is received in situations where exposures are made by the built-in type machine with the XCON connection established.
43	Xcon Status Display Strings	◎ XCON	Image display caption when the XCON is connected. * Use a maximum of four alphanumerics to specify the caption. * Be sure to enter one-byte characters on the keyboard.
44	Xcon Serial_TX Control Port	Enter a numerical value in accordance with the PSI board channel. (Enter the value 0 if the control port is not used.) (◎0)	Performing XCON control serial port setup
45	Xcon Performed Info. Reception	❍ No Does not receive operating conditions. ◎ Yes Receives operating conditions.	Specifying whether or not to receive operating condition data.
46	Xcon Exposure Info. Transfer	❍ No Does not transfer exposure conditions. ◎ Yes Transfers exposure conditions.	Specifying whether or not to transfer exposure condition data.

◎: Default setting, ⋆: Note

■ CSL/IDT FUNCTION setup items [continued] (47 to 58)

No.	Name	Selection	Meaning
47	Xcon Exposure Info. Limit Value (Minimum KVP [kv])	◎ 28	Minimum tube voltage.
48	Xcon Exposure Info. Limit Value (Maximum KVP [kv])	◎ 110	Maximum tube voltage.
49	Xcon Exposure Info. Limit Value (Minimum X-ray Tube Current [mA])	◎ 9	Minimum tube current.
50	Xcon Exposure Info. Limit Value (Maximum X-ray Tube Current [mA])	◎ 400	Maximum tube current.
51	Xcon Exposure Info. Limit Value (Minimum Exposure Time [msec])	◎ 10	Minimum irradiation time.
52	Xcon Exposure Info. Limit Value (Maximum Exposure Time [msec])	◎ 5400	Maximum irradiation time.
53	Xcon Exposure Info. Limit Value (Minimum Reserve 1)	0 to 9999 (◎ 0)	Minimum Reserve Code 1 value to be sent to the X-CON.
54	Xcon Exposure Info. Limit Value (Maximum Reserve 1)	0 to 9999 (◎ 8000)	Maximum Reserve Code 1 value to be sent to the X-CON.
55	Distribution Code for FCR5000 Series	◎ 5000-IIP	Distribution code used for receiving images from the FCR5000 series. * Be sure to enter a maximum of eight one-byte characters on the keyboard.
56	Enable Patient Info. DB Function	❍ No Does not use the patient database function. ◎ Yes Uses the patient database function.	Specifying whether or not to use the patient database function.
57	Max. Number of Patient Info.	◎ 50000	Maximum number of patients that can be recorded to the patient database.
58	Patient's Name Format	◎ 0: Sbcs (one-byte code) ❍ 1: Dbcs (two-byte code) ❍ 2: Sbcs+Dbcs (both one- and two-byte codes are used.)	Patient name format available for Japanese domestic market only.

◎: Default setting, *: Note

■ CSL/IDT FUNCTION setup items [continued] (59 to 67)

No.	Name	Selection	Meaning
59	Enable Customize Function of Study List and Patient Info. ListDB Function	❍ No ◎ Yes	Performing setup concerning the specifications for industrial-use materials. Selecting “No” disables the study list customization and patient database list customization functions.
60	IP Info. Request Timeout (Reader:CSL=N:N)	1 to 60 (basically not changed.) (◎60)	Timeout value that prevails in the CL when the RU conducts an IP information search while the RU-CL N:N connections established.
61	Replace ALL IP Size When Receive Size Change Request from Builtin	◎ No Does not change. ❍ Yes Changes.	Specifying whether the CL applies a specified image size change to unexposed menu items in the study list upon receipt of an exposure image size change notification from the built-in type machine in situations where the RIS is connected.
62	RIS Status Display String	◎ RIS	Window display caption when the RIS is connected. * Specify by entering a maximum of four alphanumerics. * Be sure to enter one-byte characters on the keyboard.
63	RIS Serial-TX Control Port	Enter figures in accordance with the PSI board CH. (Enter 0 if this function is not used.) (◎0)	Specifying the RIS control serial port.
64	MWM RIS Trigger Port	◎ 5001 (Basically not changed.)	RIS trigger reception port number for MWM use. Enter a numerical value in accordance with the RIS trigger reception port.
65	MWM RIS Trigger Timeout	1 to 1000. (Basically not changed.) (◎10)	RIS trigger reception timeout value (sec) for MWM use.
66	MWM Execute Study Type	◎ 0:Manual Manual start. ❍ 1:Trigger Trigger-driven start. ❍ 2:Auto Automatic execution upon study reception.	Specifying the study start method for MWM use. Select an appropriate method in accordance with the RIS specifications and actual hospital operations.
67	MWM Request Exposure Dose Status	❍ Yes Makes an inquiry. ◎ No Makes no inquiry.	Specifying whether or not to inquire about X-ray radiation information at the RIS.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (68 to 75)

No.	Name	Selection	Meaning
68	MWM Exposure Menu Code Treatment	◎ 0:Normal ❍ 1:JJ1017	Exposure menu code system for MWM use. Make an appropriate selection in accordance with the RIS specifications.
69	Recept Computer Hostname	◎ ReceptComp	Receptor computer host name for receptor computer use. * Enter a name of consisting of no more than 10 alphanumeric characters. * Be sure to enter one-byte characters via the keyboard.
70	Recept Computer IP Address	◎ 172.16.1.50	Receptor computer IP address for receptor computer use.
71	Recept Computer Port Number	◎ 6000	Receptor computer port number for receptor computer use. Enter a numerical value in accordance with the receptor computer port number.
72	Recept Computer Patient Info. Format	◎ 0:A01 ❍ 1:A51	Patient information format to be acquired from the receptor computer. Select a setting in accordance with the receptor computer.
73	Recept Computer Request Timeout	1 to 60. (Basically not changed.) (◎15)	Timeout value (sec) for the response from the receptor computer.
74	Search Order of Patient Info.	❍ 0:Recept Comp. –> Local DB Receptor computer → local patient database ❍ 1:Local DB –> Recept Comp. Local patient database → receptor computer ❍ 2:Recept Comp. Only Receptor computer only ◎ 3:Local DB Only Local patient database only	Patient information search sequence during receptor computer use. The setting can also be changed with the user utility.
75	Patient ID# is Unique	❍ Yes Patient ID numbers must be unique. ◎ No Duplicate patient ID numbers can be used.	Specifying whether the patient ID numbers to be registered in the local patient database should be unique. When you register the information about a patient ID number in the patient database with “Yes” chosen, it overwrites the information having the same patient ID number.

◎: Default setting, ⁎: Note

■ CSL/IDT FUNCTION setup items [continued] (76 to 78)

No.	Name	Selection	Meaning
76	PPS Exposure Status Sequence	◎ Yes Returns the exposure status. ❍ No Does not return the exposure status.	Specifying whether the PPS should return the exposure status (such as repeat/reject of exposures) with a Private tag. To activate this setup, “Yes” must be selected for item 67 above.
77	IME Mode fo Kana Patient's Name	❍ 0:None No IME control ❍ 1:ON IME ON ❍ 2:OFF IME OFF ❍ 3:OFF-Fix IME OFF ❍ 4:Dbcs-Hiragana 2-byte hiragana characters ❍ 5:Dbcs-Katakana 2-byte katakana characters ◎ 6:Sbcs-Katakana 1-byte katakana characters ❍ 7:Dbcs-A&N 2-byte alphanumeric characters ❍ 8:Sbcs-A&N 1-byte alphanumeric characters	IME mode setup upon startup (kana patient name). * If “3: OFF-Fix” is selected, IME cannot be started.
78	IME Mode for Kanji Patient's Name	❍ 0:None No IME control ❍ 1:ON IME ON ❍ 2:OFF IME OFF ❍ 3:OFF-Fix IME OFF ◎ 4:Dbcs-Hiragana 2-byte hiragana characters ❍ 5:Dbcs-Katakana 2-byte katakana characters ❍ 6:Sbcs-Katakana 1-byte katakana characters ❍ 7:Dbcs-A&N 2-byte alphanumeric characters ❍ 8:Sbcs-A&N 1-byte alphanumeric characters	IME mode setup upon startup (kanji patient name). * If “3: OFF-Fix” is selected, IME cannot be started.

◎: Default setting, *: Note

■ Detailed explanations

● “31. ID Online Acquisition Info. Code Setup”

• CP850 : DOS Latin1

	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F
80	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
90	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	ƒ
A0	á	í	ó	ú	ñ	Ñ	ª	º	¿	®	¬	½	¼	¡	«	»
B0	▒	▒	▓	|	┤	Á	Â	À	©	╣	‖	╗	╝	¢	¥	┐
C0	└	┴	┬	├	─	┼	ã	Ã	╚	╔	╩	╦	╠	═	╬	¤
D0	ð	Ð	Ê	Ë	È	ı	Í	Î	Ï	┘	┌	█	▄	¦	Ì	▀
E0	Ó	ß	Ô	Ò	õ	Õ	µ	þ	Þ	Ú	Û	Ù	ý	Ý	¯	´
F0		±	‗	¾	¶	§	÷	¸	°	¨	·	¹	³	²	■	

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• CP1252 : Win Latin1

	80	82	83	84	85	86	87	88	89	8A	8B	8C	8E	8F
80	€		‚	ƒ	„	…	†	‡	ˆ	‰	Š	‹	Œ		Ž	
90		‘	’	“	”	•	–	—	˜	™	š	›	œ		ž	Ÿ
A0		¡	¢	£	¤	¥	¦	§	¨	©	ª	«	¬		®	¯
B0	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
C0	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
D0	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
E0	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
F0	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

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3.7 Setting the Name Elements for DICOM Connection

This appendix explains about the procedure for changing the name element sequence and delimiter.

At some institutions, a patient name is displayed on the monitor by changing the sequence of its elements. For example, the name “Fuji Taro” may be displayed as “Taro Fuji” (with the given name and family name positions interchanged).

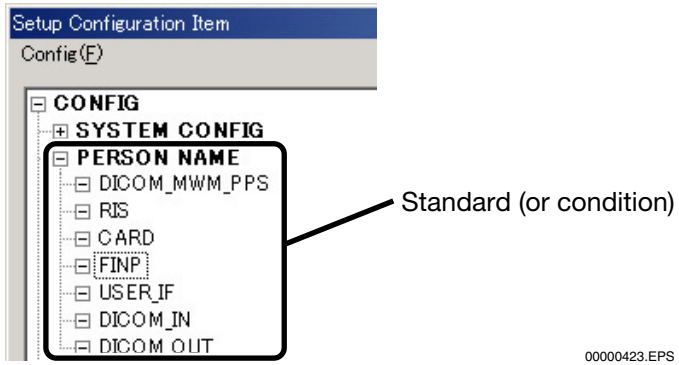
The DICOM protocol stipulates only one sequence of name elements. Therefore, it is necessary to define the relationship between the name element sequence stipulated by standards (or conditions) other than DICOM and the name element sequence stipulated by DICOM.

1. Start the Service Utility of the CL.

2. Click Setup Configuration Item.

3. Click the ⊞ sign within ⊞ PERSONNAME.

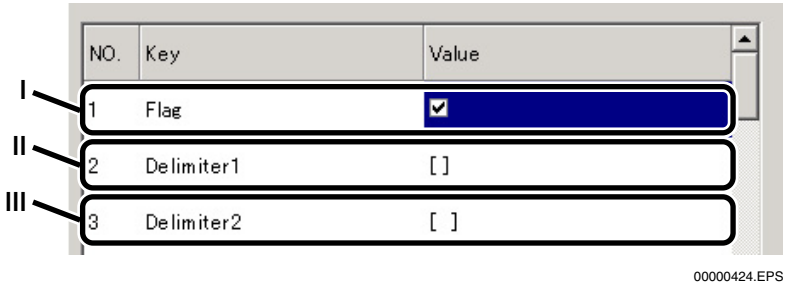
4. Select a standard (condition) (e.g., FINP).



➤ IMPORTANT

Do not change the settings for “DICOM_MWM_PPS”, “DICOM_IN”, or “DICOM_OUT”.

5. Perform the setup steps indicated below:



I. To validate this standard (condition) change, check it (☐ ➔ ☑).

II. Enter a one-byte character delimiter between name elements.

◆ NOTES ◆

- *Any one-byte characters can be used as a delimiter. However, a one-byte space (☐), hyphen (-), comma (,) or period (.) should normally be used.*
- *One or two kinds of delimiters can be defined (either can be used as a delimiter). For instance, enter “-,” if you wish to define both of hyphen and comma.*
  Input example: Element3=given, middle-family

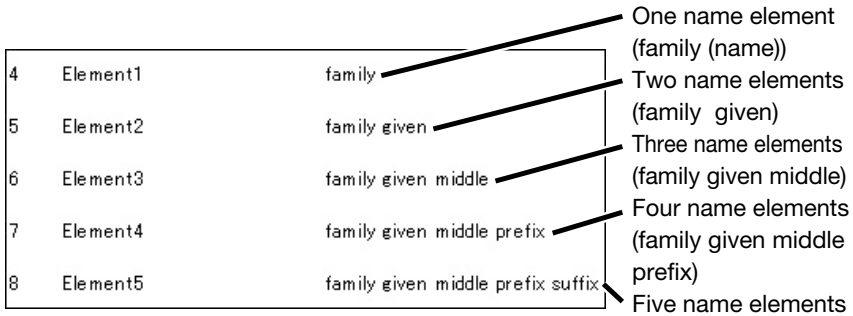
III. Enter a multi-byte character delimiter between name elements.

◆ NOTES ◆

- *Any one- or two-byte characters can be used as a delimiter. However, a two-byte space ( ) or hyphen (–) should normally be used.*
- *One or two kinds of delimiters can be defined (either can be used as a delimiter). For instance, enter “ –” if you wish to define both of two-byte space and hyphen.*
  Input example: Element3=given – middle family

6. **Set up name elements for one-byte characters.**

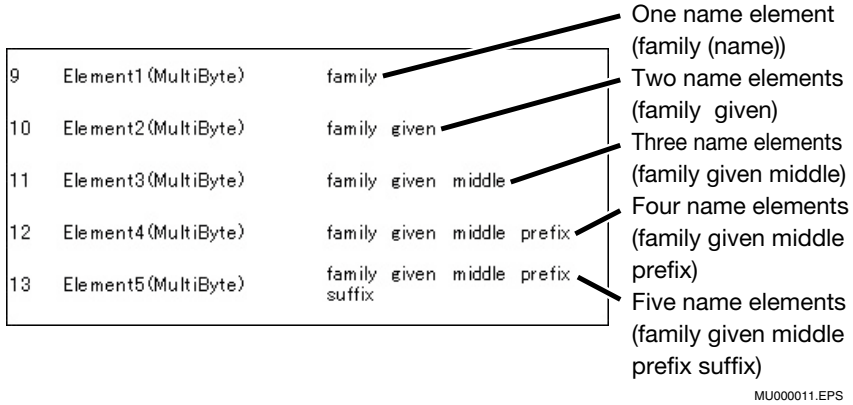
Enter name elements directly on the keyboard. To separate one name element from the other, use a delimiter defined in step 4. above.



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7. **Set up name elements for multi-byte characters.**

Enter name elements directly on the keyboard. To separate one name element from the other, use a delimiter defined in step 5. above.



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8. **Use the “Config (F)” menu to save the setup data.**

3.8 DICOM Print Film Sorting Setup

//Being now prepared.//

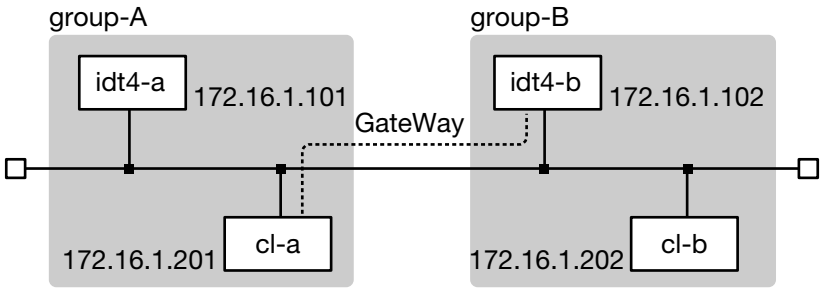
3.9 Patient Information Sharing Function Setup

The patient information sharing function is exercised to share the patient information between two or more CL and IDT-IV units existing in the same network.

In compliance with an ID inquiry (IP barcode) coming from the Image Reader, the relevant CL will acquire requested ID information from any IDT-IV or CL even when that CL has no such information.

When the IDT-IV and CL units are interconnected as shown below, the patient information sharing function is set up to enable the units (e.g., idt4-a and cl-a) to share the patient information.

◆Connection example



00000549.EPS

The setup procedure is described below:

1. Start the CL's Service Utility.

2. Click [Setup Configuration Item].

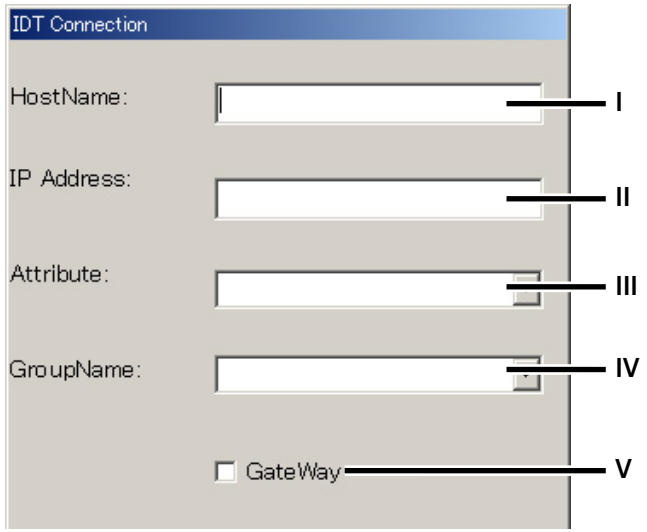
3. Click ⊟ IDT CONNECTING.

➔ The right-hand area of the window changes to the "CONFIG\IDT CONNECTING" window.

4. Click New.

➔ The "IDT Connection" window opens.

5. Enter settings as directed below:



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I. Enter the host name.

II. Enter the IP address.

III. Select a machine attribute.

IV. Specify the group name.

◆ ***NOTE*** ◆

When you specify the group name for the first time, the GroupName field contains no entry. Therefore, enter a group name from the keyboard.

V. When you define the machine as a gateway, check ☐ GateWay.

◆ ***NOTE*** ◆

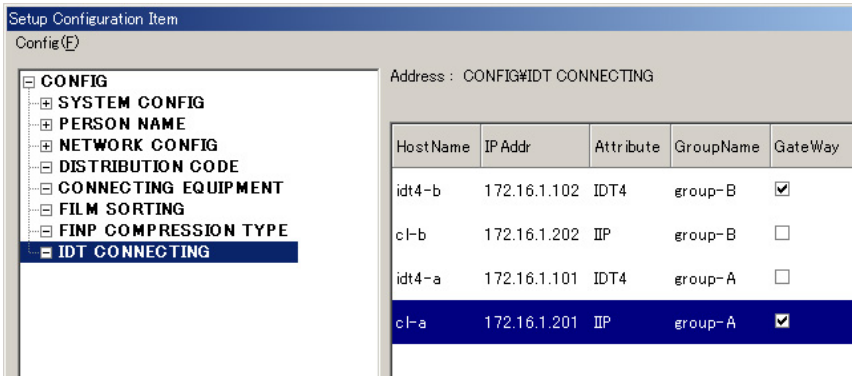
When the patient information is to be shared by groups, it is necessary to define one unit of each group as the gateway (check ☐ GateWay).

6. Click OK.

7. **To set up another machine, repeat steps 4. through 6.**

8. **With the “Config (F)” menu, save the setup data.**

The window shown below indicates the results that are obtained when the equipment is set up as indicated in the connection example at the beginning of this section.



00000556.EPS

3.10 MAC Address Manual Input

When the MAC address cannot automatically be acquired, this utility is used to make a manual entry and let the CL recognize it.

◆ *NOTE* ◆

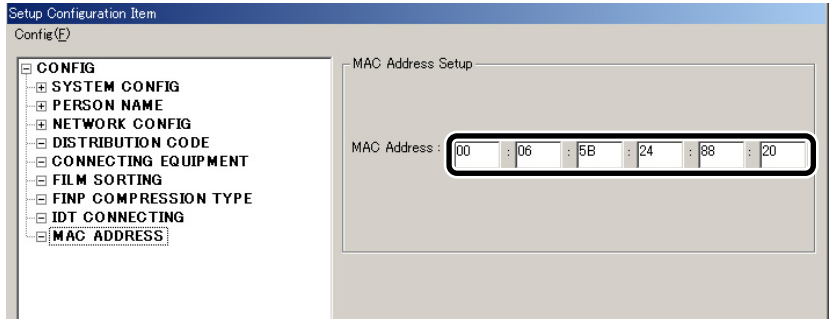
If the MAC address is not acquired, the CL-AP does not start up (Error 20110 or 20111 occurs).

When the following window opens and indicates that the values in the MAC address fields are all 0s, it means that the MAC address is not automatically acquired.
In such an instance, enter a 12-digit value (00:50:DA:C4:D5:8D when only one CL unit is used). The next time the CL starts up, it recognizes the entered value as the MAC address so that the CL-AP starts running.

If two or more CL units are used, make the following entries. For each CL unit addition, increment the last two-digit value by one (in hexadecimal notation).

- 2nd unit : 00 : 50 : DA : C4 : D5 : 8E
- 3rd unit : 00 : 50 : DA : C4 : D5 : 8F
- 4th unit : 00 : 50 : DA : C4 : D5 : 90

.
.
.



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4. Display Optimization — LUT

Install an LUT file that matches the display characteristics.

➥ ***REFERENCE***

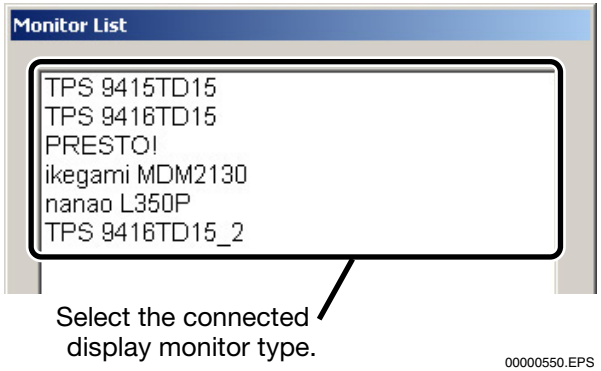
The LUT file is used to adjust luminance values measured on an image displayed on the monitor.

1. **Start the CL's Service Utility.**

2. **Click [LUT].**

➔ The "Monitor List" window opens.

3. **Select the connected display and then click** OK.



- TPS 9415 TD15 : 15" LCD monitor with a touch panel (model TPS9415TD15/G2)
- TPS 9416 TD15 : 15" LCD monitor with a touch panel (model TPS9416TD15/H2)
- PRESTO! : Super Resolution LCD Monitor SL-IC300
- ikegami MDM2130 : Ikegami 1k landscape monitor
- nanao L350P : EIZO 15" LCD monitor with a touch panel (model L350P-TS)
- TPS 9416TD15_2 : 15" LCD monitor with a touch panel (model TPS 9416TD15/H2-1)

➔ The selected display is then optimized (the contents of the LUT file in the "LUT" folder overwrites those of the "ctrlutl.env" file in the "Config" folder).

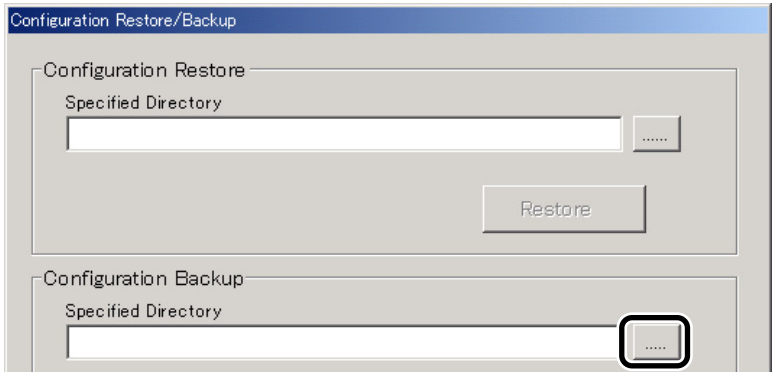
5. Restoring/Backing Up the Configuration File — Configuration Restore/Backup

☞ For details of procedures used for restoring the config file, see “14. Restoring the CL-Config” in “RI: Reinstalling the Software”.

1. Click [Configuration Restore/Backup] on the main menu.

➔ The configuration Restore/Backup window opens.

2. Click [...] for the Configuration Backup area.



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➔ A window opens, prompting you to specify the save destination.

3. Click the downward arrow mark ( ) within c: in the “Drive:” box to select the drive onto which the configuration file is to be saved.

➔ The “Directory:” box shows the directory structure of the selected drive.

➥ *REFERENCE*

If drive “a” is selected, a message appears to prompt for the insertion of an FD.

4. Select a save destination directory and then click OK.

➔ The system returns to the Configuration Restore/Backup window.

5. Click Backup.

➔ After about one minute, a message appears prompting you to change the FD.

6. Insert the second FD into the FD drive.

◆ *NOTE* ◆

Even when the save process ends, no message appears to indicate it. While the save process is being performed, the mouse cursor is replaced by the “ ” mark. When the “ ” mark changes back to the mouse cursor, it means that the save process is ended.

Note, however, that the “ ” mark appears only when the mouse cursor is positioned within the Configuration Restore/Backup window.

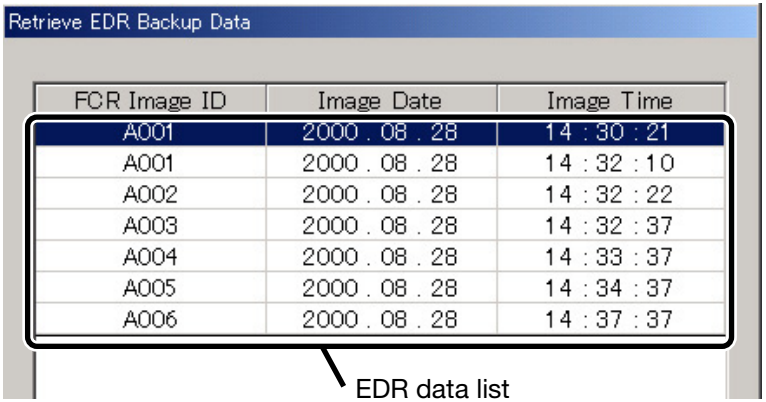
7. Click Cancel.

➔ The system returns to the main menu.

6. Retrieving EDR Data — Retrieve EDR Backup Data

1. **Click [Retrieve EDR Backup Data] on the main menu.**

➔ A list of EDR data appears.



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➥ ***REFERENCE***

No EDR data appears immediately after installation.
EDR data listings do not appear until images are transferred to the CL.

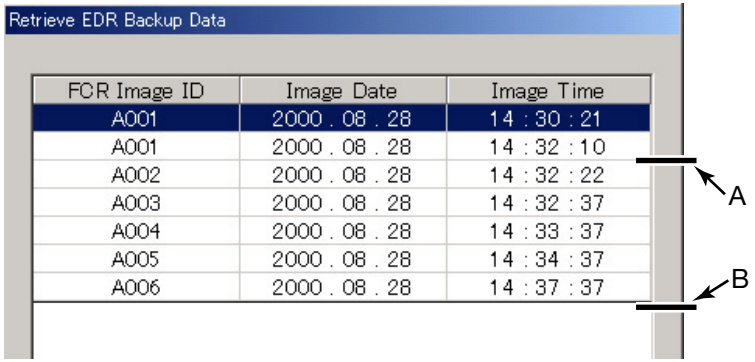
2. **Select one or more EDR data.**

- When selecting only one piece of EDR data

  I. Select an EDR data item by clicking it.

  ➔ The selected item becomes highlighted.

- When selecting two or more contiguous EDR data (selecting all data between “A” and “B” in the window illustration below)



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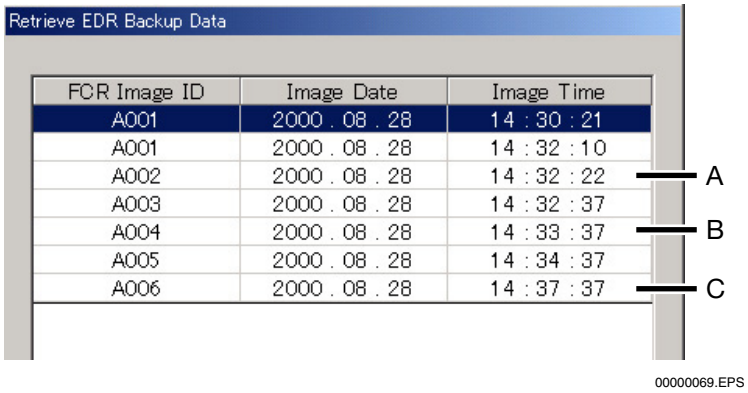
I. Click the first item of a set of contiguous data (“A002” in the above window illustration).

➔ The selected item becomes highlighted.

II. Hold down the “Shift” key and click the last item (“A006” in the above window illustration) of the contiguous data set.

➔ All the items from the first to the last become highlighted.

- When selecting two or more noncontiguous EDR data



00000069.EPS

I. Click the first item to be selected ("A002" in the above window illustration).

➔ The selected item becomes highlighted.

II. Hold down the "Ctrl" key and click the second item to be selected ("A004" in the above window illustration).

➔ The second item becomes highlighted as well.

III. Hold down the "Ctrl" key and click the third item to be selected ("A006" in the above window illustration).

➔ The third item becomes highlighted as well.

IV. To select any additional item, repeat step III.

➥ *REFERENCE*

Even if highlighted items are hidden when the window scrolls, they are retained as selected items.

3. **Click** Save **.**

➔ A window opens, prompting you to specify the save destination.

4. **Click the downward arrow mark ( ) within** c: **in the "Drive" box to select the drive onto which the EDR data is to be saved.**

➔ The left-hand area of the window shows the directory structure of the selected drive.

5. **Select the save destination directory and then click** OK **.**

➥ *REFERENCE*

If drive "a" is selected, a message appears to prompt for the insertion of an FD.

➔ When the save process ends, the system returns to the Retrieve EDR Backup Data window.

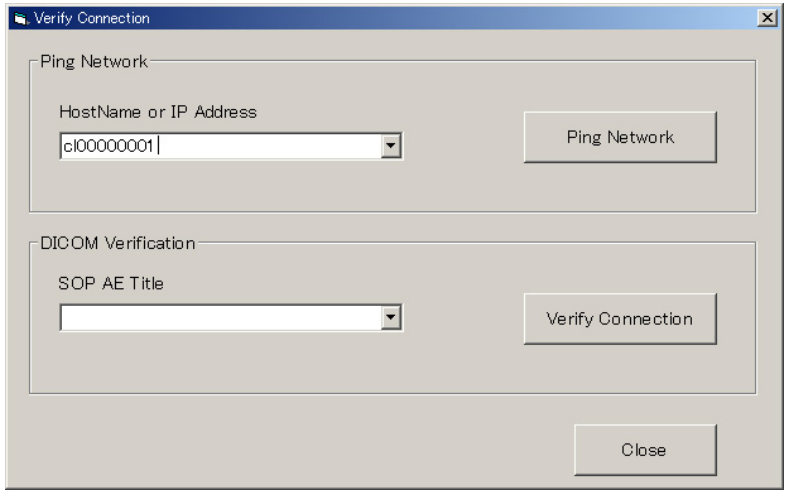
6. **Click** Cancel **.**

➔ The system returns to the main menu.

7. Verifying the Connection to Other Connected Equipment — Verify Connection

1. **Click [Verify Connection] on the main menu.**

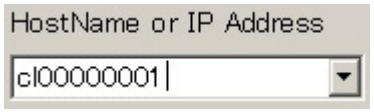
➔ The “Verify Connection” window opens.



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2. **Verify the Ping or DICOM connection as directed below:**

● Verifying the connection with the Ping

I. In the 

field, enter the host name or IP address of the equipment to be subjected to connection verification.

➥ *REFERENCE*

Clicking the downward arrow mark  *within*  *lists the host names of equipment registered in the Service Utility.*

II. Click 

.

➔ The command prompt window opens.

III. Verify the connection.

The connection is normal when the following message is displayed four times within the command prompt window.

Reply from 172.16.1.20: bytes=32 time<10ms TTL=128

➥ *REFERENCE*

Values for “time<10ms” and “TTL=128” in the message above vary depending on the network status. Connection remains normal even though such values vary.

IV. Close the command prompt window.

➔ The system returns to the “Verify Connection” window.

- Verifying the DICOM equipment connection

◆ NOTE ◆

To verify connections between DICOM equipment units, it is necessary that both this equipment and other connected equipment must support Service Class for the Verification function.

☞ For details of the setup procedure, see “CL+HI-C655/QA-WS (DICOM CR Storage)” in “OE3: Connecting the CL to Other Equipment.

I. Click the downward arrow mark within



to specify the AE name of the DICOM equipment to be subjected to connection verification.

II. Click 

.

III. Verify the connection.
When the window below opens, the connection is OK.



00000246.EPS

3. **Click** 

.

➔ The system returns to the main menu.

8. Management of Various Databases — DataBase Utility

This section describes the procedures for initializing the image database, deleting the queued output images (clearing the contents of the image output queue), and initializing the patient database.

8.1 Initializing the Image Database

◆ *NOTES* ◆

- *When the OS is installed newly, be sure to initialize the image database. If you start up the CL-AP without initializing the image database, an error window opens (error code: 50001, 20001, 30107, 30151, 20110, etc.).*
- *If the MSDE is not running, database initialization cannot be effected. While the MSDE is running, the "" icon is displayed in the task tray at the lower right corner of the screen. If the icon is not displayed, restart the PC.*
- *If the image output queue is not empty, database initialization cannot be effected. Delete the images from the image output queue.*

☞ For the procedure for deleting the images from the image output queue, see "8.2 Clearing the Contents of the Image Output Queue".

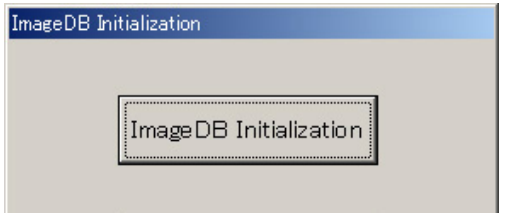
1. Start the Service Utility.

☞ For the Service Utility startup procedure, see "1. Starting/ Exiting the Service Utility".

➔ The main menu opens.

2. Click [DataBase Utility].

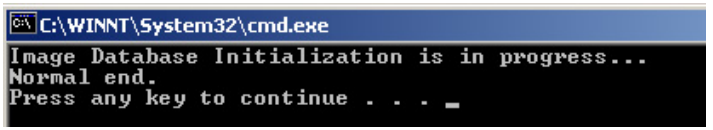
➔ The "ImageDB Initialization" window opens.



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3. Click ImageDB Initialization.

➔ The command prompt window opens to display the following message:



00000184.EPS

4. Press the <Enter> key.

➔ The image database initialization process ends in about 20 seconds.

◆ ***NOTES*** ◆

When the following message appears, the image database is not initialized.

It failed in initialized DB.

Check that the MSDE is running and that no image is placed on the image output queue.

- *To start the MSDE*
  ➔ *Restart the PC. Verify that the*  *icon is displayed in the task tray.*
- *If the image output queue is not empty*
  ➔ *Delete the images from the image output queue*
  ☞ *For the procedure for deleting the images from the image output queue, see "8.2. Clearing the Contents of the Image Output Queue".*

5. When the message "Press any key to continue" appears again, press the <Enter> key.

➔ You are then returned to the "ImageDB Initialization" window.

8.2 Clearing the Contents of the Image Output Queue

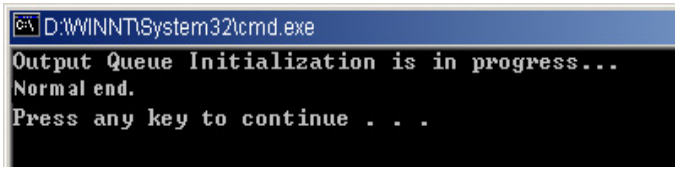
1. Start the Service Utility.

2. Click [DataBase Utility].

➔ The "DataBase Utility" window opens.

3. Click Clear Output Queue.

➔ The command prompt window opens to display the following message:



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4. Press the <Enter> key.

➔ The images are then deleted from the output queue and you are returned to the "DataBase Utility" window.

5. Click Cancel.

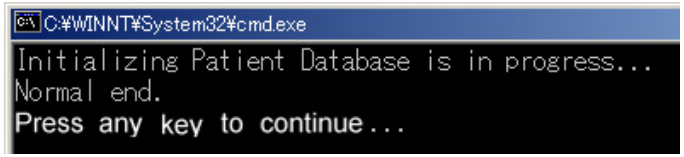
➔ You are then returned to the main menu.

8.3 Initializing the Patient Database

1. **Start the Service Utility.**

2. **Click [DataBase Utility].**
   ➔ The “DataBase Utility” window opens.

3. **Click** PatientDB Initialization.
   ➔ The command prompt window opens to display the following message:



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4. **Press the <Enter> key.**
   ➔ The patient database is then initialized and you are returned to the “DataBase Utility” window.

5. **Click** Cancel.
   ➔ You are then returned to the main menu.

9. Setting the Magnetic Card — Magnetic Card Setting

9.1 Setting the Hospital Card Data Format

☞ For detailed descriptions of the data format setup procedure, see "Appendix 4. Setting the Magnetic Card", under "Appx IN: Appendix to Installation".

9.2 Defining the ISO Card Character Read Code

When using an ISO type magnetic card, special characters need to be set up as follows, as required.

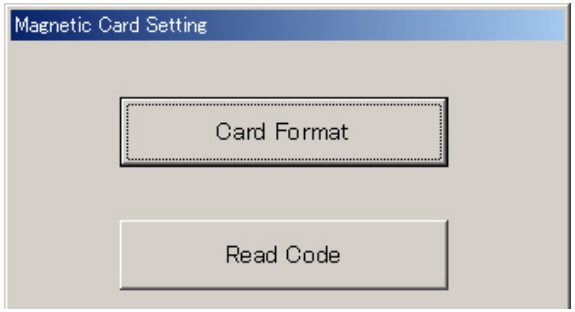
◆ NOTE ◆

This function will not basically be used in Japan.

1. **Start up the CL's Service Utility mode.**

2. **Click [Magnetic Card Setting].**

   ➔ The "Magnetic Card Setting" window opens.



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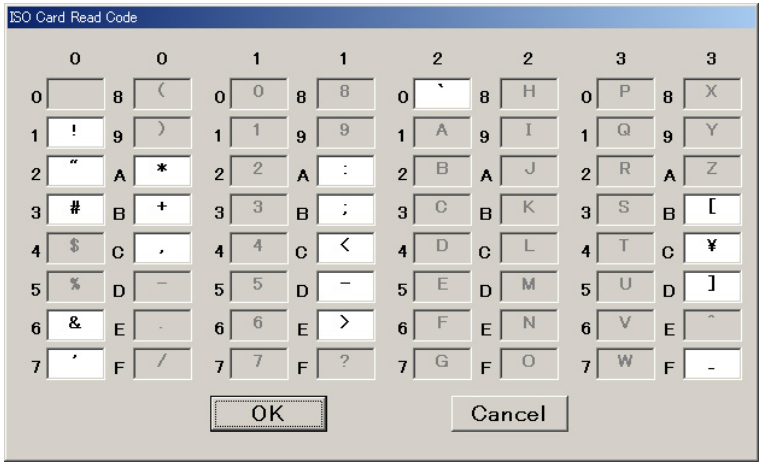
3. **Click [Read Code].**

   ➔ The "ISO Card Read Code" window opens.

4. **Edit special characters.**

◆ NOTES ◆

- *Characters on the gray background cannot be edited.*
- *Be sure to enter one-byte characters.*
- *The default setting is complied with ISO7811-6.*



MU000007.EPS

➥ REFERENCE

To delete an entered character, enter a one-byte space.

5. **Click** OK.

   ➔ You are returned to the "Magnetic Card Setting" window.

6. **Click [Cancel].**

   ➔ You are returned to the main menu.

10. Customizing the QA Items — Customized QA Item

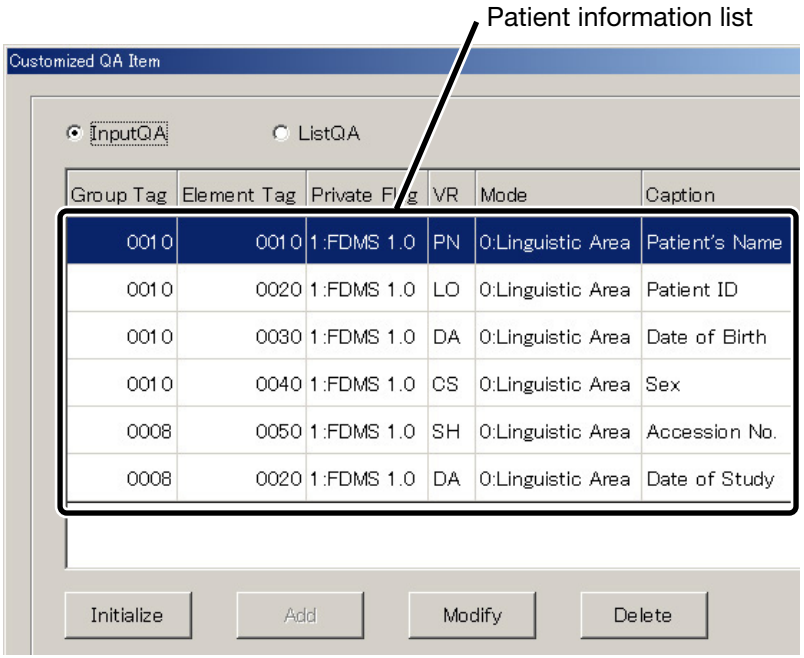
This section describes the procedures for customizing (adding, modifying, or deleting) the following six QA items of patient information, which appear in the QA window:

- Kanji Patient Name
- Patient ID
- Date of Birth
- Sex
- Accession No.
- Date of Study

1. **Start the Service Utility.**

2. **Click [Customized QA Item].**

➔ The patient information list appears.



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- Modifying QA items

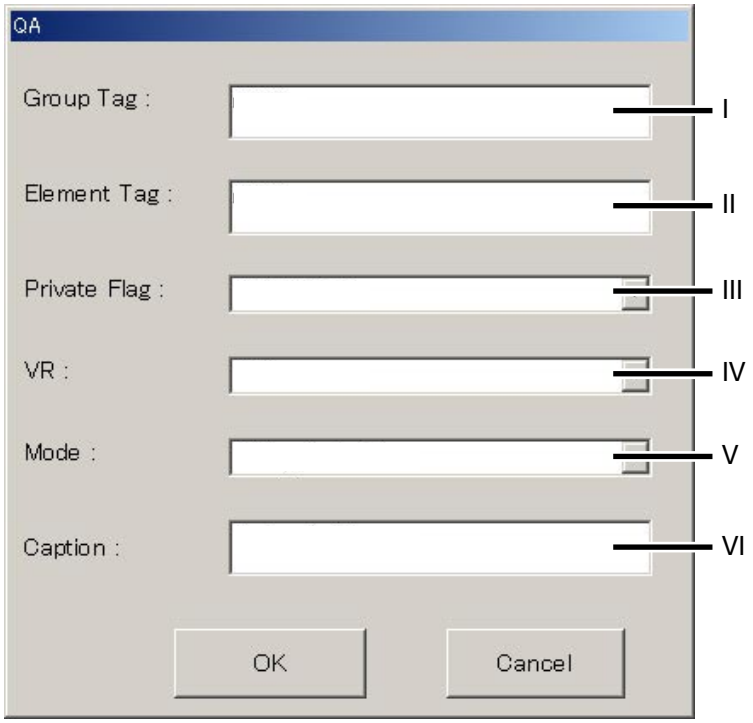
1. **Choose** InputQA **or** ListQA **and then click** Modify.

➔ The "QA" window opens.

➥ *REFERENCE*

"InputQA" opens the QA window that can be used during a stuudy.
"ListQA" opens the QA window that can be used after completion of a study.

2. **Customize QA items I through VI.**



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I. Group number (If this field is left blank, the patient information is hidden.)
II. Element number (If this field is left blank, the patient information is hidden.)
III. Private creator flag

IV. VR

V. Acceptable input character type

0 : Linguistic Area (the language selection is complied with)
1 : Single-byte (ANK)
2 : Ideographic (kanji)
3 : Phonetic (change to katakana)

➥ *REFERENCE*

The V. selection can be made only when "PN" is selected for "VR".

VI. Display caption name

3. **Click** OK **.**

➔ You are then returned to the "Customized QA Item" window.

● Deleting patient information

1. **Choose** InputQA **or** ListQA **, select the item to be deleted from the patient information list, and then click** Delete **.**

➔ The "Close Configuration" window opens.

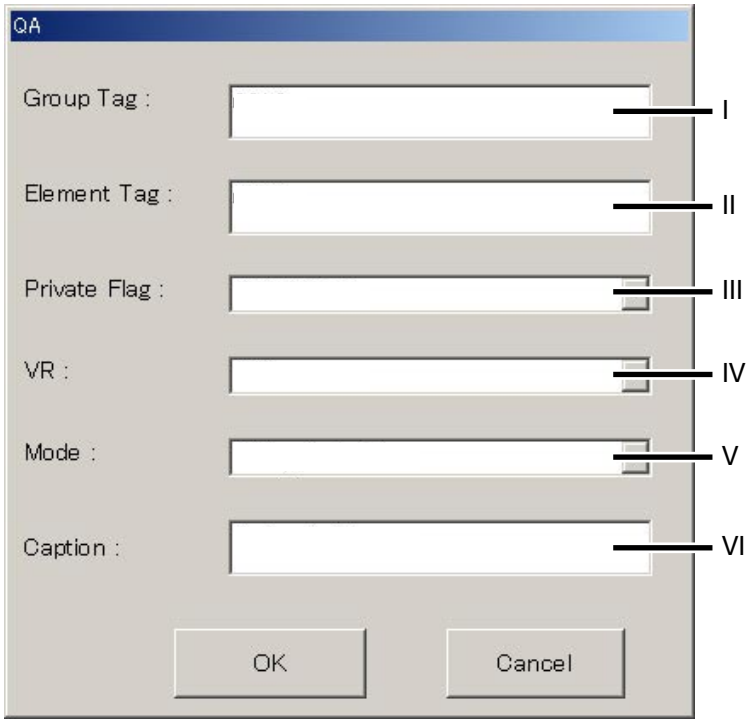
2. **Click** Yes **.**

➔ The patient information is then deleted.

● Adding patient information

1. **Choose** InputQA **or** ListQA **, select the item to be added to the patient information list, and then click** Add **.**

➔ The "QA" window opens.



2. **Make QA data entries and then click** OK **.**

For details on the QA items, see under "● Modifying QA items".

➔ You are then returned to the "Customized QA Item" window.

● Restoring the QA items to the default settings

1. **Click** Initialize **.**

➔ The contents of "InputQA" and "ListQA" both revert to their default values (with deleted ones restored).

11. Setting the Selectors — Selector Setting

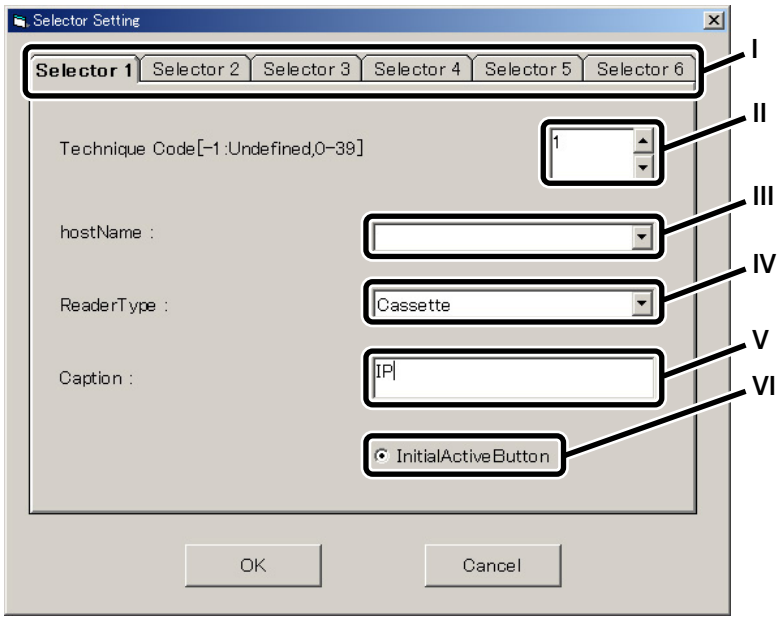
This section describes the procedure for setting the selectors.

1. Start the CL's Service Utility.

2. Click [Selector Setting].

➔ The "Selector Setting" window opens.

3. Perform the following setup steps:



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I. Choose a selector tab.

II. Set the Technique Code paying attention not to set the same code with other selectors.

III. Select a device to be added to the selector (use the host name for selection).

IV. Make a ReaderType selection. To revert to "Cassette", choose a blank from the pull-down menu of the "hostName:" field.

V. Enter the character string (consisting of up to five characters) to be displayed on the selector button.

VI. To restore the currently edited selector to the status that prevailed at CL startup, turn this radio button ON.

4. Click OK.

➔ You are then returned to the main menu.

◆ NOTE ◆

If the host name for the 5501 plus, 5502 plus, or other built-in type equipment is changed in situations where "5501" or "5502" is selected as "Reader Type", you must perform the "hostName" setup procedure again. If you do not observe this precaution, an error (code: 31099) occurs at CL-AP startup.

12. Collecting the Log and Configuration Files — Log/Configuration Files Acquisition Tool

This section describes the procedure for copying the CL's log and configuration files to an FD or HD.

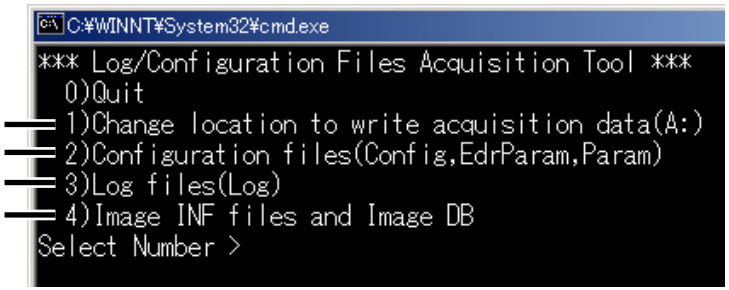
◆ ***NOTE*** ◆

This function is useful when asking the software design section for error analysis.
To ask for error analysis, be sure to collect and submit log files and setup files.

1. **Start the CL's Service Utility.**

2. **Click [Log/Configuration Files Acquisition Tool].**

➔ A command prompt window opens.



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I. Specifies the file copy destination (drive A by default).
II. Copies the configuration files.
III. Copies the log files.
IV. Copies the files related to the image information and image database.

◆ ***NOTE*** ◆

If you intend to execute step II, III, or IV without executing step I (with drive A selected as the copy destination), be sure to insert an FD into the FDD beforehand.

3. **Click ✕ at the upper right corner of the command prompt window.**

➔ The system returns you to the main menu.

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CR-IR346/348CL Service Manual

FR: Function-specific Reference

FR consists of the following:

FR1 Print Output Function
FR2 DICOM Tag Mapping Function
FR3 Creating/Deleting Markers
FR4 Using the DICOM Log Mode
FR5 Display Gradation Correction Setup
FR6 DICOM Tag Editing Function (for Siemens)

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	Pages I, II, 1-3, 5-9, 14-17
04/10/2001	01	Previous Chapter F “Function-specific Reference” modified (FM2951)	All pages
05/30/2001	02	Revision for software version A02 (FM3027)	I, II, 1–1-16, 18, 20-22, 2–1, 2
05/30/2001	02	Changes in pagination (FM3027)	1–17, 19
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1–1, 6-11, 13-16, 18, 19, 22, 2-1
08/30/2001	03	Changes in pagination (FM3125)	1–20, 21
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 1–7, 2–1, 3–1-4, 4–1-4
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 1–1, 17-19, 21-38, 2–2, 5–1, 2, 6–1, 2

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Print Output Function

Presented herein are the settings necessary for enabling the print output function.

◆ ***NOTE*** ◆

The "CR-IR346/348CL" and the "Local Printer" are abbreviated hereafter "CL" and "LP", respectively.

■ Setup necessary when connecting the LP

Describes various setup items for the sorter or printer type (New or Old) for when using the LP.

☞ See "1. Setup Necessary When Connecting the LP".

■ Setup necessary when editing the film annotation character format

Describes various setup items for the film annotation character format.

☞ See "2. Setup Necessary When Editing the Film Annotation Character Format".

■ Film annotation character setup (direct FilmStrFmt editing)

Describes the film annotation character setup procedure defined for each FMT No.

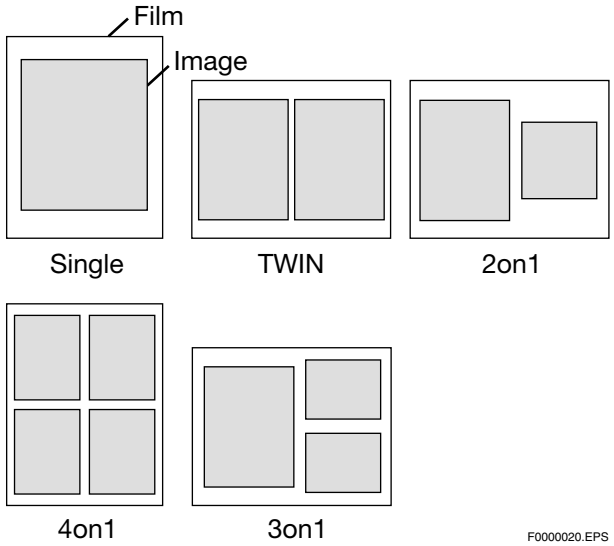
☞ See "3. Film Annotation Character Setup (Direct FilmStrFmt Editing)".

■ Setting the DICOM Print output conditions

☞ See "4. Setting the DICOM Print Output Conditions".

■ Print formats

The CL supports the following formats : Single, Twin, 2on1, 4on1 and 3on1 (only for energy subtraction images).



Single : One image is allotted on film.

Twin : Two same images are allotted on film.
Each of the images are subjected to different image processing.

2on1 : Two different images are allotted on film.

4on1 : Four different images are allotted on film.

3on1 : Three different images are allotted on film (only when printing energy subtraction images).

➥ ***REFERENCE***

When the image size is larger than the area available for printing an image on film, the image size will be reduced automatically to the area available for image printing.

1. Setup Necessary When Connecting the LP

Setup items necessary when connecting the LP are listed below.
Set up the items listed below in “Setup Configuration Item” - “SYSTEM CONFIG” - “4. PRINETR” of the Service Utility mode.

Table Config list when connecting the LP (1/2)

No.	Name	Selection	Meaning
1	Pixel Clock Rate Changeover	◎ 10 Basically select this item. ❍ 20 Select when the LP i/f cable exceeds 60m in length.	Specifying the image transfer speed. (Pixel Clock Rage [*0.1µsec/pixel])
2	Enable Magnify Print	❍ Yes Magnifies. ◎ No Does not magnify.	Specifying whether or not to magnify and print a 35×43cm/14”×17” · 35×35cm/14”×14” standard image on a 35×43cm film in the one-image format. * Basically select “No”. To select “Yes”, a permission is required from the service maintenance headquarters.
3	Film Sorting Info. Setup	◎ 0: None ❍ 1: Space(2)+Dep.code (8) ❍ 2: Dep.Code(4)+MenuName(6) ❍ 3: Dep.Code(4)+FilmChar1(6) ❍ 4: FCRImageID(1)+Space(9) ❍ 5: Space(4)+MPMcode(4)+Space(2) ❍ 6: Space(4)+FilmChar1(6) ❍ 7: Dep.Code(4)+MPMcode(4)+Space(2) Space: Space Dep.Code: Requesting department in alphanumerics MenuName: Menu name in one-byte characters FilmChar1: Film mark FCRImageID: Image ID (ID on the film annotation characters) MPMcode: MPM code	Specifying the film sorting type when a sorter is used for the FM-DPL printer. * Do not specify 3 and 6 when the HIC655 and QA-WS are used.

◎: Default setting, *: Note

Table Config list when connecting the LP (2/2)

No.	Name	Selection	Meaning
4	Menu Name Start Position on Film	0_16 (◎0)	When 2, 3 or 6 is selected for "3 Film Sorting Info. Setup" above, six characters of the Menu Name (20 characters) or FilmChar (ten characters) will be used. This item is to specify which portion of the area is selected and used. For example, if 0 is specified, six characters from the top will be used. If 2 is specified, six characters counting from the third character will be used. * The portion of "setup value + six characters" that exceeds the area of each item will be spaces. * When FilmChar is used, an error occurs if ten or more is specified for the number of characters.
5	Unique ID for Film Sorting Condition	◎ 0: Space ❍ 1: ID#	Specifying the unique ID for film sorting condition. * Do not specify 1 when the HIC655 and QA-WS are used.
6	Printer Interface Type (Old/New)	❍ 0: Old Select when using a CR-LP414N/FL-IM2636N or FM-IM3543N/FL-IM3543MN printer. ◎ 1: New Select when using a printer other than the above.	Specifying the printer i/f type.
7	Film Size Available in Printer	◎ 0: 2636 (26×36cm) ❍ 1: 3543 (35×43cm/14×17inch) ❍ 2: 3535 (35×35cm/14×14inch)	Specifying the film size used on the printer side. * This setting is effective only when "0:Old" was selected when the previous i/f printer has been connected ("Printer Interface Type (Old/New)").
8	Film Base Color (Blue/Clear)	◎ 0: Blue ❍ 1: Clear	Specifying the film base color used on the printer side. * This setting is effective only when "0:Old" was selected when the previous i/f printer has been connected ("Printer Interface Type (Old/New)").
9	Printer Buffer Size	◎ 0: Single ❍ 1: Double	Specifying the buffer size used on the printer side. * This setting is effective only when "0:Old" was selected when the previous i/f printer has been connected ("Printer Interface Type (Old/New)").

◎: Default setting, ⋆: Note

◆ *NOTE* ◆

Items after 10 are used when editing the film annotation character format, which are thus described in "2. Setup Necessary When Editing the Film Annotation Character Format".

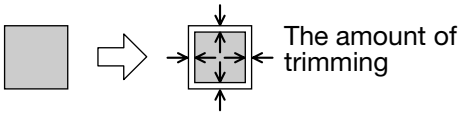
2. Setup Necessary When Editing the Film Annotation Character Format

2.1 Setup Items Table

Setup items necessary when editing the film annotation character format are listed below.
Set up the items listed below in “Setup Configuration Item” - “SYSTEM CONFIG” - “4. PRINETR” of the Service Utility mode.

■ Setup Items Table

Table Film annotation character format config list (1/8)

No.	Name	Selection	Meaning
10	Black Margin Setup on Film Edge	◎ 0: Margin depend on image ID (default: Transparent) Transparent or black depending on the image information. Transparent unless specified by the image information. ❍ 1: Margin depend on image ID (default: Black) Transparent or black depending on the image information. Black unless specified by the image information. ❍ 2: Transparent Margin (Fix) Always transparent. ❍ 3: Black Margin (Fix) Always black.	Specifying the film margin type.
11	Trimming Range [mm]	0_25 (◎0)  	Specifying the amount of trimming in mm (for other than mammography). * Be sure to enter one-byte characters on the key board.
12	Trimming Range for Mammography [mm]	0_25 (◎0)	Specifying the amount of trimming in mm (for mammography). * Be sure to enter one-byte characters on the key board.

◎: Default setting, *: Note

Table Film annotation character format config list (2/8)

No.	Name	Selection	Meaning
13	Print Barcode	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to output on film the IP no. read by the RU's barcode reader.
14	Print EDR Mode	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to output on film the setup data in EDR mode. * "A" for AUTO, "S" for SEMI, "F" for FIX and "S" for SEMI-X will be printed on film.
15	Pring Image Process Condition	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print image processing conditions on film.
16	Pring L, S, CS, SS Condition	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print L, S, and CS/SS values on film.
17	Print Shot Time	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print the date of exposure on film. * Other than Japanese version, "EXP:" will be printed as the title to the top (on the left side) of the date of exposure.
18	Print Set Process	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print the routine or group information on film. * Film printout example: RT-01, TS 1 01
19	Print Engineer ID	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print the technician's code information on film
20	Print Menu Name	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print the exposure menu name on film.
21	Print Compression Rate	❍ Yes: Outputs. ◎ No: Does not output.	Specifying whether or not to print image data compression code information on film. * On the Japanese version, "compression ratio:" will be printed as the title on the left side of the image data compression code information. "CC:" will be printed for other than the Japanese version.

◎: Default setting, *: Note

Table Film annotation character format config list (3/8)

No.	Name	Selection	Meaning
22	Print Energy-Subtraction Parameter	◎ Yes: Outputs. ❍ No: Does not output.	Specifying whether or not to print energy subtraction processing parameter information on film.
23	Print Image Frame (3543 film: 14×17, 14×14, 18×43/2025 film: 8×10, 18×24 Single Format)	❍ Yes: Printed with image frame. ◎ No: Printed with no image frame.	Specifying whether or not to add image frame when printing a 35×43cm/14"×17", 35×35cm/14"×14" or 18×43cm image on a 35×43cm film in the single format or printing an 18×24cm/8"×10" image on an 8"×10" film in the single format. * Unless the output format is properly positioned, the image format will not be displayed.
24	Print Image Frame (3543 film: 18×43 LR/2on1 Format)	❍ Yes: Printed with image frame. ◎ No: Printed with no image frame.	Specifying whether or not to add image frame when printing an 18x43cm image on a 35×43cm film in the LR or 2on1 format. * Unless the output format is properly positioned, the image format will not be displayed.
25	Print Image Frame (3543 film: 14×17, 18×43, 8×10 4on1 Format)	❍ Yes: Printed with image frame. ◎ No: Printed with no image frame.	Specifying whether or not to add image frame when printing a 25×43cm/14"×17", 18x43cm or 18×24cm/ 8"×10" image on a 35×43cm film in the 4on1 format.
26	Print Image Frame (3543 film: Energy-Substraction 3on1 Format)	◎ No: Does not generate outputs. ❍ Yes:Generates outputs.	Specifying whether or not to attach an image border to images that are printed on 14"×17" size film in energy-subtraction 3on1 format.
27	Print Image Frame (2636 film: 18×24, 24×30/2025 film:18×24 Single Mammography Format)	◎ No: Does not generate outputs. ❍ Yes:Generates outputs.	Specifying whether or not to attach an image border to 18×24 cm or 24×30 cm size images that are printed on 26×36 cm size film in the single mammography format or to 18×24cm size images that are printed on 8"×10" size film in the single mammography format.
28	Print Image Frame (2636 film: 18×24 2on1 100% Format)	◎ No: Does not generate outputs. ❍ Yes:Generates outputs.	Specifying whether or not to attach an image border to 18×24 cm size images that are printed on 26×36 cm size film in 2on1 (100%) format.

◎: Default setting, ⁎: Note

Table Film annotation character format config list (4/8)

No.	Name	Selection	Meaning
29	No Print Scale (User Definition Rules)	[Dialog setup] (?3??) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying whether or not to print the reading scale. * This setup is effective only when "Printed with image frame" is selected. * This setup can be selected also for each MPM code. A maximum of 8 MPM codes can be specified (a wild card can be used).
30	Representation of Age	◎ Age: Displayed by the age. Other than the Japanese ver.: E.g.) 25Y, 1Y8M, 1Y10D, 13D ❍ Date of Birth: Displayed by the date of birth. Other than the Japanese ver.: E.g.) "DATE B" is printed.	Specifying the age representation format. * Use "1. Image Modality" - "1. System Common Date Format" for the DATE representation format.
31	Print Reverse Mark	❍ 0: None Does not print. ❍ 1: R-reverse Image not rotated: Does not display. Image rotated: "Я" is displayed. ◎ 2: AP or PA Image not rotated: "AP" is displayed. Image rotated: "PA" is displayed.	Specifying whether or not to output the right-and-left image rotation mark.
32	Print 3543, 2025 Film Character Field (14×17-Single/4on1, 18×43-LR/2on1/4on1, 8×10-4on1, 8×10/10×24-Single Format)	❍ 0: None Does not output film. ❍ 1: Only area 1 Only film annotation character area 1 is displayed. ❍ 2: Only area 2 Only film annotation character area 2 is displayed. ◎ 3: Both Both areas1 and 2 are displayed.	Specifying the film annotation character area display format when outputting a 35×43cm or 20×25cm film in the following patterns. ❍14"×17" • 35×43cm/14"×17" image in the single or 4on1 format • 18×43cm image in the TWIN, 2on1 or 4on1 format • 18×24cm/8"×10" image in the 4on1 format ❍8"×10" • 18×24cm/8"×10" image in the single format ☞ See "■ Film annotation character areas 1 and 2".
33	Print Film Char 2/Examination number	◎ 0: Film char 2 Film annotation character 2 (exposure stand information) is output. ❍ 1: Examination Number The examination number is output.	Specifying whether to output film annotation character 2 (exposure stand information) or the examination number.
34	Size Selection of 3543 Film Character (Single Format)	◎ 0: Standard ❍ 1: Large	Specifying the film annotation character and area sizes when outputting a 35×43cm/14"×17" image on a 14"×17" film in the single format.

◎: Default setting, ⁎: Note

Table Film annotation character format config list (5/8)

No.	Name	Selection	Meaning
35	3543 Film Character Field Position & Rotation (14×17 Image)	[Dialog setup] (◎0010) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing a 35×43cm/14"×17" image in the single or 4on1 format on a 35×43cm film. * This setup is effective for all exposure menus. To specify this setup individually for each MPM code, use the No. 39 setup. ☞ See "■ Film annotation character areas 1 and 2".
36	3543 Film Character Field Position & Rotation (17×14 Image)	[Dialog setup] (◎1131) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing a 43×35cm/17"×14" image in the single or 4on1 format on a 35×43cm film. * This setup is effective for all exposure menus. To specify this setup individually for each MPM code, use the No. 40 setup. ☞ See "■ Film annotation character areas 1 and 2".
37	3543 Film Character Field Position & Rotation (18×43 Image)	[Dialog setup] (◎0010) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing an 18×43cm image in the LR, 2on1 or 4on1 format on a 35×43cm film. * This setup is effective for all exposure menus. To specify this setup individually for each MPM code, use the No. 41 setup. ☞ See "■ Film annotation character areas 1 and 2".
38	3543, 2025 Film Character Field Position & Rotation (3543 Film: 8×10-4on1, 2025 Film: 8×10-Single)	[Dialog setup] (◎0010) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing an 18×24cm/8"×10" image in the 4on1 format on a 35×43cm film or printing an 18×24cm/8"×10" image in the single format on a 20×25cm film. * This setup is effective for all exposure menus. To specify this setup individually for each MPM code, use the No. 42 setup. ☞ See "■ Film annotation character areas 1 and 2".
39	2025 (Landscape) Film Character Field Position & Rotation (8×10, 18×24-Single)	[Dialog setup] (◎1131) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing a 90°-rotated 8"×10"/18×24cm image on an 18×24cm film in the single format. ☞ See "■ Film annotation character areas 1 and 2".

◎: Default setting, *: Note

Table Film annotation character format config list (6/8)

No.	Name	Selection	Meaning
40	Film Character Field position & rotation (User Definition Rules 1)	[Dialog setup] (◎No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing a 35×43cm/14"×17" image in the single or 4on1 format on a 35×43cm film. * Setup is necessary for each MPM code. (A maximum of 8 MPM codes can be selected. A wild card cannot be used.) * This setup data prevails over that in No. 35. ☞ See "■ Film annotation character areas 1 and 2".
41	Film Character Field position & rotation (User Definition Rules 2)	[Dialog setup] (◎No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing a 43×35cm/17"×14" image in the single or 4on1 format on a 35×43cm film. * Setup is necessary for each MPM code. (A maximum of 8 MPM codes can be selected. A wild card cannot be used.) * This setup data prevails over that in No. 36. ☞ See "■ Film annotation character areas 1 and 2".
42	Film Character Field position & rotation (User Definition Rules 3)	[Dialog setup] (◎No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing an 18×43cm image in the LR, 2on1 or 4on1 format on a 35×43cm film. * Setup is necessary for each MPM code. (A maximum of 8 MPM codes can be selected. A wild card cannot be used.) * This setup data prevails over that in No. 37. ☞ See "■ Film annotation character areas 1 and 2".
43	Film Character Field position & rotation (User Definition Rules 4)	[Dialog setup] (◎No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when printing an 18×24cm/8"×10" image in the 4on1 format on a 35×43cm film * Setup is necessary for each MPM code. (A maximum of 8 MPM codes can be selected. A wild card cannot be used.) * This setup data prevails over that in No. 38. ☞ See "■ Film annotation character areas 1 and 2".

◎: Default setting, *: Note

Table Film annotation character format config list (7/8)

No.	Name	Selection	Meaning
44	Film Character Field position & rotation (User Definition Rules5)	[Dialog setup] (◎ No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when an image overlaps the film annotation character area. ☞ See "■ Film annotation character areas 1 and 2".
45	Film Character Field position & rotation (User Definition Rules6)	[Dialog setup] (◎ No setup available.) ☞ The setup procedure is described in "■ Details of [dialog setup]".	Specifying the position and rotation of film annotation character areas 1 and 2 when an image overlaps the film annotation character area. ☞ See "■ Film annotation character areas 1 and 2".
46	Image Area Move to the Top of 3543 Film	❍ Yes: Moves to the top of the film. ◎ No: Does not move.	Specifying the image output position when printing a 15x30cm, 35×35cm/14"×14" or 43×43cm/17"×17" image in the single format on a 35×43cm film.
47	Patient's Name Length on Film	0 - 64 (◎ 20)	Specifying the maximum patient name length in one-byte characters when printing it on film. * If a number larger than 20, the default, is specified, the film annotation character area cannot possibly hold other information items.
48	Patient's Name Length on Film (Multibyte)	0 - 64 (◎ 10)	Specifying the maximum kanji patient name length in two-byte characters when printing it on film. * If a number larger than 10, the default, is specified, the film annotation character area cannot possibly hold other information items.
49	Patient's Name Justify on Film	◎ 0: Left : Left-padding. ❍ 1: Right : Right-padding.	Specifying whether to select right- or left-padding for printing patient name on film.

◎: Default setting, *: Note

◆ *NOTE* ◆

The patient name, exposure menu, requesting department, as well as the patient ID and examination number need setups for both maximum length displayed and right-/left-padding.
These two items should be set up according to "Setup Configuration Item" – "SYSTEM CONFIG" – "5. IDT/CSL FUNCTION" in Nos.15 to 18.

☞ *"3.6 Config Details — 5. CLS/IDT FUNCTION" under "MU: Maintenance Utility"*

Table Film annotation character format config list (8/8)

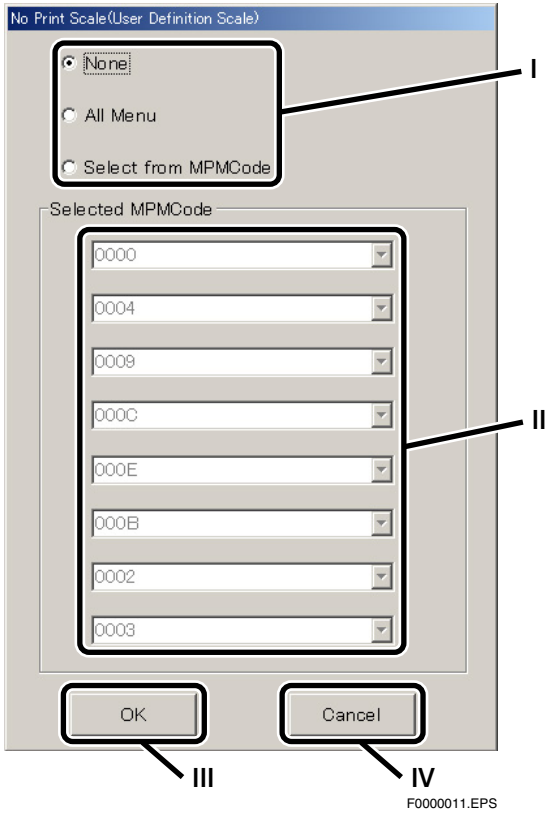
No.	Name	Selection	Meaning
50	Menu Name Length on Film	0 - 64 (◎ 20)	Specifying the maximum exposure menu name length in one-byte characters when printing it on film. * If a number larger than 20, the default, is specified, the film annotation character area cannot possibly hold other information items.
51	Menu Name Length on Film (Multibyte)	0 - 64 (◎ 16)	Specifying the maximum kanji exposure menu name length in two-byte characters when printing it on film. * If a number larger than 16, the default, is specified, the film annotation character area cannot possibly hold other information items.
52	Menu Name Justify on Film	◎ 0: Left : Left-padding. ❍ 1: Right : Right-padding.	Specifying whether to select right- or left-padding for printing exposure menu name on film.
53	Department Name Length on Film	0 - 64 (◎ 8)	Specifying the maximum requesting department name length in one-byte characters when printing it on film. * If a number larger than 8, the default, is specified, the film annotation character area cannot possibly hold other information items.
54	Department Name Length on Film (Multibyte)	0 - 16 (◎ 4)	Specifying the maximum requesting department name length in two-byte characters when printing it on film. * If a number larger than 4, the default, is specified, the film annotation character area cannot possibly hold other information items.
55	Department Name Justify on Film	◎ 0: Left : Left-padding. ❍ 1: Right : Right-padding.	Specifying whether to select right- or left-padding for printing the requesting department name on film.
56	Enable Auto Edit Function of Film String Format File	◎ Yes: Enables. ❍ No: Does not enable.	Specifying whether or not to enable the automatic character format generation function for Nos. 2 and 10 to 56.
57	Gap between Image Edge and Film Edge (Mammography Format) [× 0.1mm]	0 - 50 (◎ 0)	Specifying gap between images. * Be sure to enter one-byte codes from the keyboard. ☞ "■ Specifying the gap between mammograms"

◎: Default setting, ⁎: Note

■ Details of [dialog setup]

● Setup of “29. No Print Scale (User Definition Rules)”

Double-clicking the No. 26 “Value” column will open the following dialog.



F0000011.EPS

I. To add no reading scale, select “None” (default). To add reading scale to all films, select “All Menu”, and “Select from MPMcode” for adding reading scale only to images of certain MPM code.

II. Enter the image’s MPM code on the keyboard or select it from the pull-down menu.
Be sure to set up if “Select from MPMcode” is selected in step I. above. Specifying using a wild card is also possible, such as “?0??” (“?” is an arbitrary one-digit alphanumeric from 0 to F.)

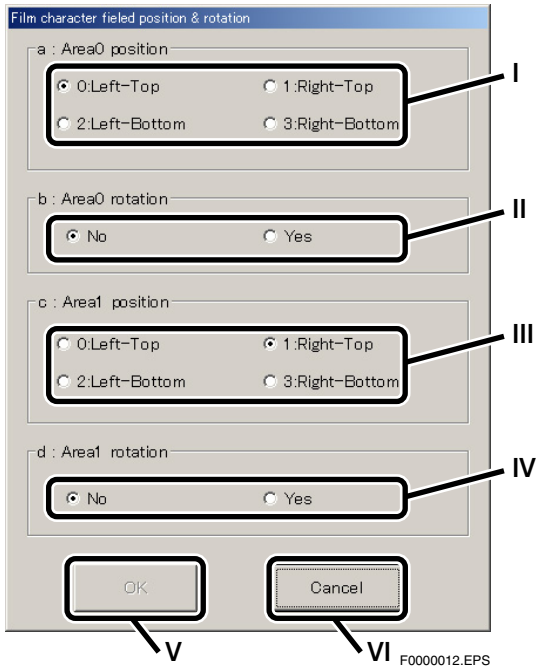
III. Click if data set up in I. and II. above are correct.
The system returns to the previous window and any of the following will be displayed in the “Value” column.

- None: No reading scale is added.
- All Menu: Reading scale is added to all menus.
- Four-digit number: MPM code of the image the reading scale is added to.

IV. Click to cancel the setup data to be saved.

● Setup of “35 to 39. XXXX Film Character Field Position & Rotation (3543 Film:8×10-4on1, 2025 Film:8×10-Single)”

Double-clicking the “Value” column of Nos. 35 to 39 will open the following dialog.



F0000012.EPS

I. Specifies the film annotation character area 1 display position.

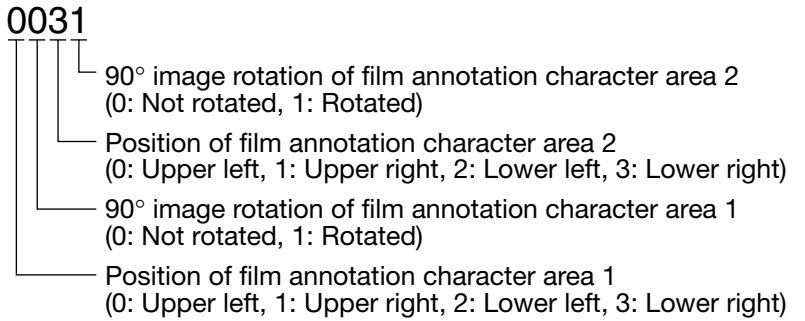
II. Specifies the 90° image rotation (counterclockwise) of film annotation character area 1.

III. Specifies the film annotation character area 2 display position.

IV. Specifies the 90° image rotation (counterclockwise) of film annotation character area 2.

☞ For details of the film annotation character area, see “■ Film annotation character areas 1 and 2”.

V. Click if data set up in I. to IV. above are correct.
The system returns to the previous window and a four-digit number will be displayed in the “Value” column. The meaning of such four-digit number is as follows.

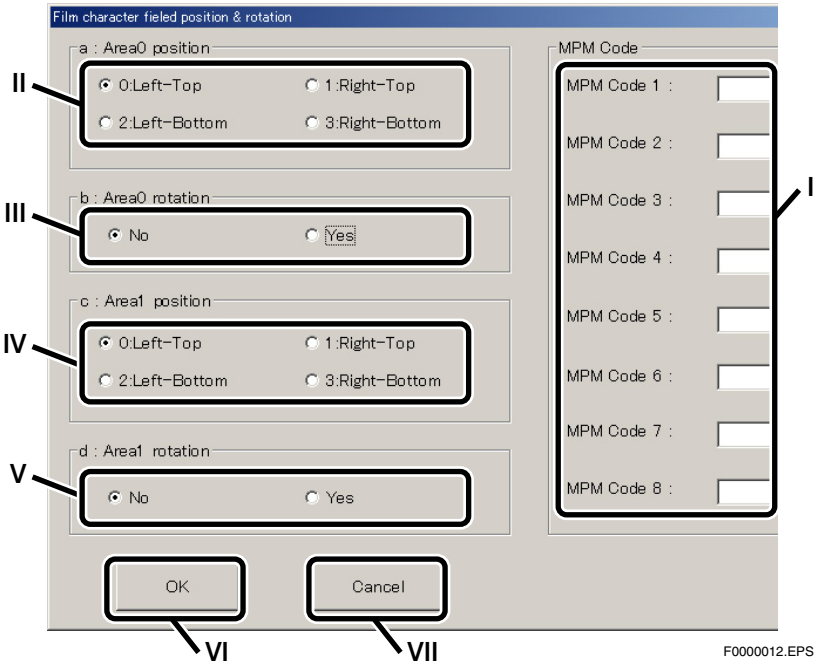


F0000014.EPS

VI. Click to cancel the setup data to be saved.

● “40 to 45. Film Character Field Position & Rotation (User Definition Rules)”

Double-clicking the “Value” column of Nos. 39 to 42 will open the following dialog.



F0000012.EPS

I. Enter on the keyboard the MPM code of the image the film annotation character area of which is changed or select it from the pull-down menu.
Specifying using a wild card is not allowed.

II. Specify the film annotation character area 1 display position.

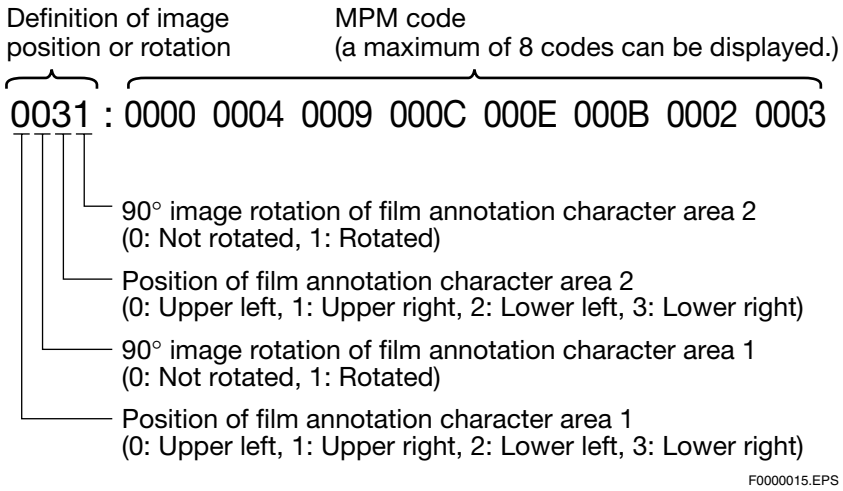
III. Specify the 90° image rotation (counterclockwise) of film annotation character area 1.

IV. Specify the film annotation character area 2 display position.

V. Specify the 90° image rotation (counterclockwise) of film annotation character area 2.

☞ For details of the film annotation character area, see “■ Film annotation character areas 1 and 2”.

IV. Click if data set up in I. to V. above is correct.
The system returns to the previous window and a character string appears in the “Value” column to indicate the content of the setup data.



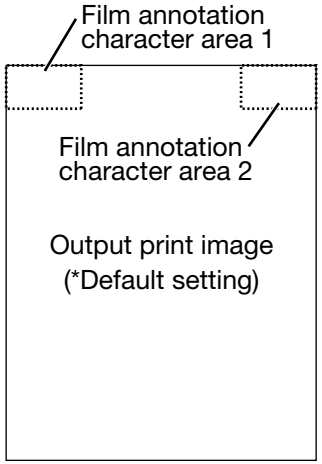
F0000015.EPS

VII. Click to cancel the setup data to be saved.

■ Film annotation character areas 1 and 2

Following is the description of film annotation character areas 1 and 2 that can be specified in Nos. 32 and 35 to 45, whether to display it and the positional and rotational movement.

If an image is printed on a 14"×17" film as set by the default, the film annotation characters are displayed at both the upper right and left of the image. Areas where those characters are displayed are the film annotation character areas.
The upper-left area is area “1” and that at the upper right is area “2”.



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● Whether to display the film annotation character areas

Select whether or not to display film annotation character areas 1 and/or 2 using the function in “32. Print 3543, 2025 Film Character Field (14×17- Single/4on1, 18×43-LR/2on1/4on1, 8×10-4on1)”.

❍ 0: None
Neither film annotation character area 1 nor 2 are printed on film.

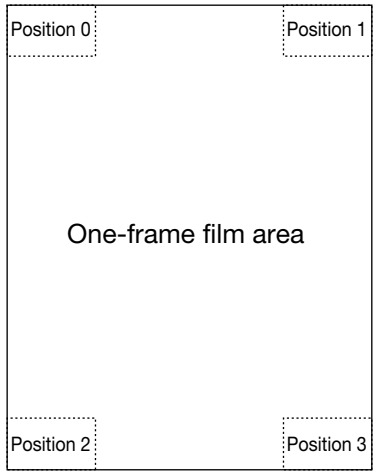
❍ 1: Only area 1
Only film annotation character area 1 is printed on film.

❍ 2: Only area 2
Only film annotation character area 2 is printed on film.

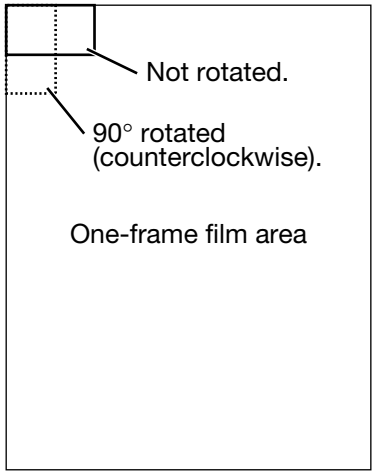
❍ 3: Both (default)
Both of the film annotation character areas are printed on film.

● Positional and rotational movement of the film annotation character areas

Specify the positional and rotational movement of the film annotation character areas in “35 to 45. 3543 Film Character Field Position & Rotation (XXXXX)”.



Definition of positional movement



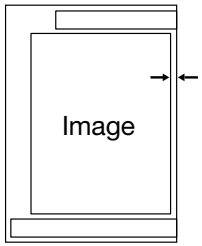
Definition of rotational movement

F0000009.EPS

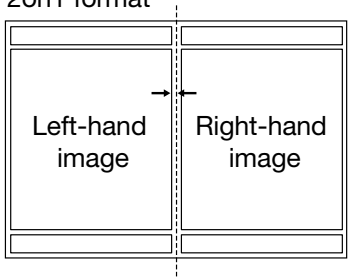
■ Specifying the gap between mammograms

Note the following details when you specify the gap between mammograms as directed in “57 Gap between Image Edge and Film Edge (Mammography Format) [× 0.1 mm]”.

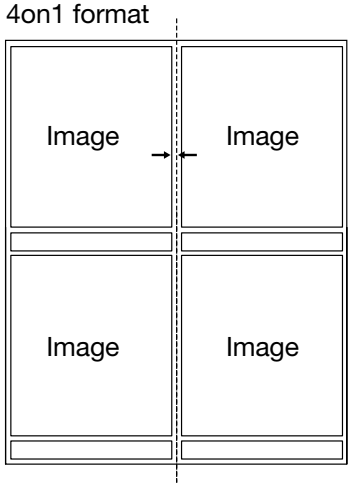
Single format



2on1 format



4on1 format



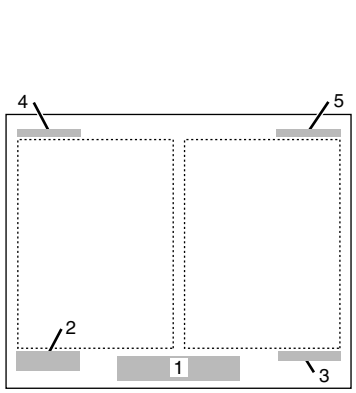
Setting range:
0 to 50 mm
(variable in 0.1 mm units)

F0000047.EPS

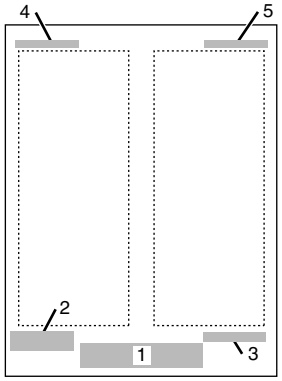
■ 26×36cm, 35×43cm/14"×17" and 8"×10" film printout patterns [Reference]

Illustrated below are the film printout patterns of the 26×36cm, 35×43cm/14"×17" and 8"×10"films.

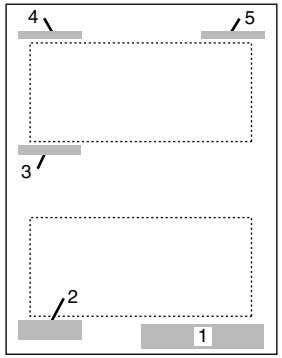
● 26×36cm film



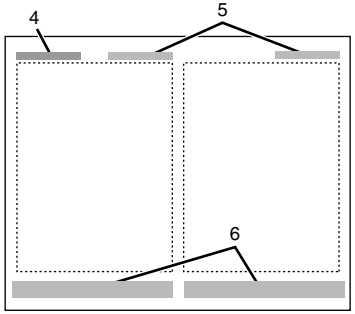
Routine TWIN



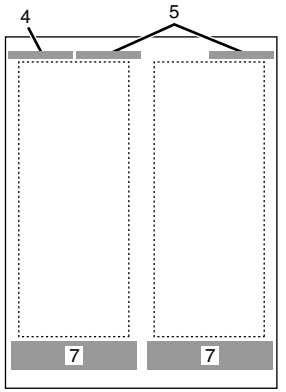
1843 TWIN



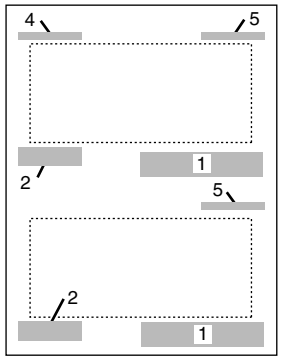
Pantomography TWIN



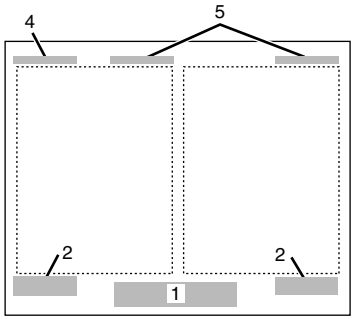
2on1 (different patients and sizes)



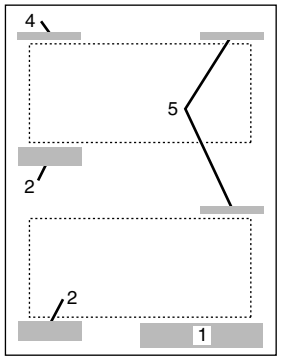
18×43cm 2on1 (different patients)



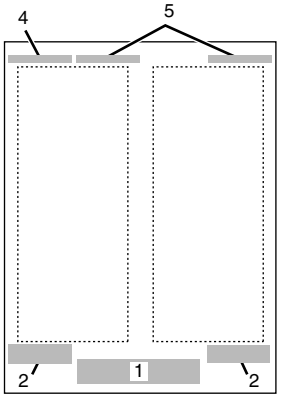
Pantomography 2on1 (different patients)



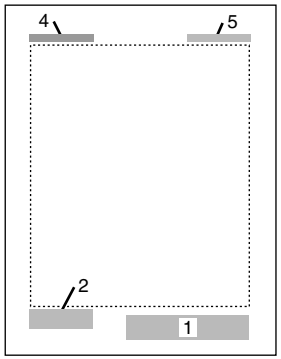
2on1 (same patient)



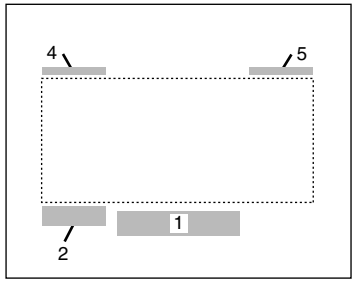
Pantomography 2on1 (same patient)



18×43cm 2on1 (same patient)



Routine Single



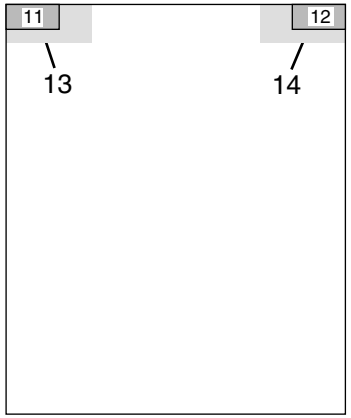
Pantomography Single

- Legends (items are according to the FMT Nos.) -

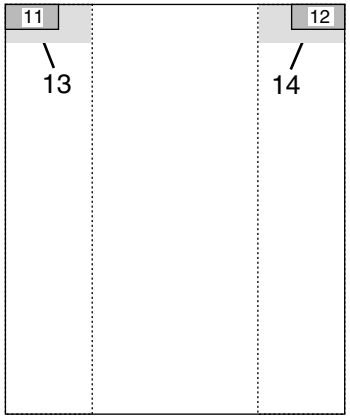
1 : Patient information area
2 : Image processing parameter area
3 : Image processing parameter area
4 : Hospital name area
5 : Area for barcode, MPM code, etc.
6 : Patient/image processing parameter area
7 : Patient/image processing parameter area

F0000018.EPS

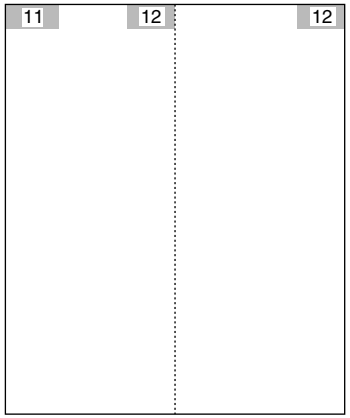
● 35×43cm film



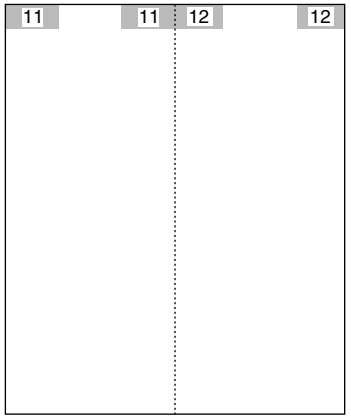
35×43cm/14"x17" Single



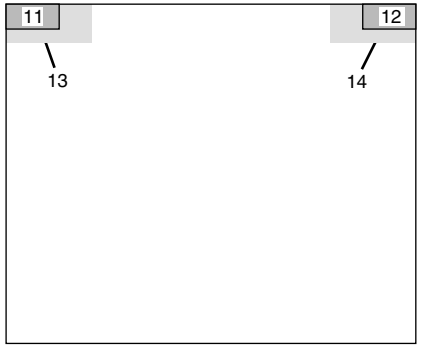
18×43cm Single



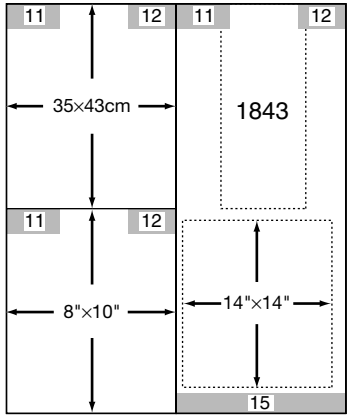
18×43cm TWIN, 2on1
(same patient)



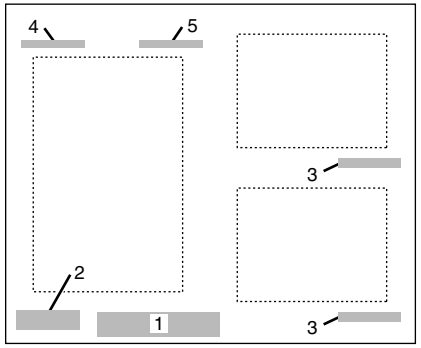
18×43cm TWIN, 2on1
(different patients)



43×35cm/17"×14" Single



Different images 4on1 (example)



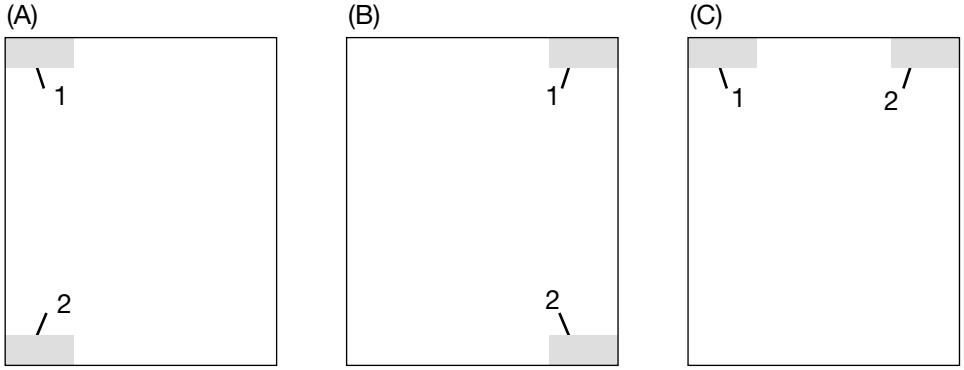
3on1

- Legends (items are according to the FMT Nos.) -

1 : Patient information area
2 : Image processing parameter area
3 : Image processing parameter area
4 : Hospital name area
5 : Area for barcode, MPM code, etc.
11 : Area 13 but reduced
12 : Area 14 but reduced
13 : Patient information area
14 : Image processing parameter area
15 : Patient information/image processing parameter area

F0000019.EPS

● 20×25cm film



18×24cm (HR) Single　18×24cm (HR) Single　18×24cm/8×10inch (ST) Single

For exposure menus other than mammography, images will be delivered in the (C) format.
For “right breast (DSR)” (MPM code: 0317) mammographic exposure menus, images will be delivered in the (A) format.
For other than “right breast (DSR)” (MPM code: 0317) mammographic exposure menus, images will be delivered in the (B) format.

- Legends (items are according to the FMT Nos.) -

1: Patient information area
2: Image processing parameter area

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➥ *REFERENCE*

With the LP (FM-DP L) in which the 26×36cm, 35×43cm and 20×25cm films can be used together, film sizes to be output change alternately as per conditions shows below.

- *35×43cm and 14"×14" (HQ image) size images in Single output* ➔ *35×43cm film*
- *Images of all sizes (both standard and HQ images) in 4on1 output* ➔ *35×43cm film*
- *8"×10"/18×24cm size images in Single output* ➔ *20×25cm film*
- *Other than the above* ➔ *26×36cm film*

2.2 Precautions of the Film Annotation Character Format

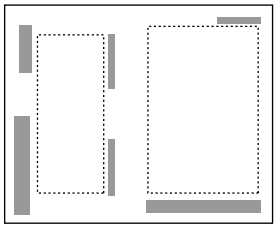
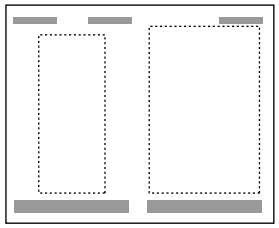
The tables below present precautions (differences between the CL and the FCR 5000 Series) to be observed when setting up a film annotation character format using the LP.

Table Differences between the CL and the FCR 5000 Series (1/2)

Item	FCR 5000 Series	CL
14"×14" film size	Can be used.	Cannot be used.
Character quality/position	Standard fonts cannot be changed.	Can be changed by directly editing the FilmStrFmt.env file. Character quality varies depending on the font used. The character display position can also be different from that used in the FCR 5000 Series.
Age display format	The age counted in the number of months and days can be specified in their maximum digit number.	The age counted in the number of months and days is fixed as follows: (Age in days : Max. 30 days) (Age in months: Max. 7 months)
Date display format	The date display format is possible in the Japanese era (“昭40.05.15”).	Only “S40.05.15” is available. (“S” cannot be represented by a kanji character.)
Film annotation character area size change for 14"×17" 100%-size image.	Both “Standard” and “Large” can be specified separately by for the area size.	Fixed to the two types : “Standard” and “Large”.
Energy subtraction/PEM parameter display	Either of the following three options can be selected: 1) Neither of them are displayed, 2) Only energy subtraction is displayed, 3) PEMparameters are displayed.	In addition to FCR 5000 Series selections, display of both energy subtraction and PEM parameters can be set up. [Currently not supported.]

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Table Differences between the CL and the FCR 5000 Series (2/2)

Item	FCR 5000 Series	CL
Film annotation characters 2	To display film annotation characters 2, technician’s code (GJ) display must be set up.	Not dependent, different from the FCR 5000 Series. Each item can be set up for whether to display or hide individually.
Whether the FINP 110 is available	To use the FINP110 for obtaining ID information, the Config file is used for making the maximum number of characters displayable longer for the patient ID, patient name, menu name, requesting department, and study number. Specified numbers of characters are applied, and an arbitrary value cannot be specified for each item.	Whether the FINP110 is used or not, the maximum number of characters displayable can be specified individually for the patient ID, menu name, requesting department, and study number. (However, if exceeding the preset length, the portion that exceeds will be cut off.)
Requesting department name display position in the 2on1 format	Top of the image.	Lower-left area of the image.
Film annotation character display position on the 2on1 format output of an image that includes pantomograph.	Film annotation characters were used to be output as follows with the FCR 5000 Series. 	A function to rotate some film annotation characters 90° is not supported. 

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3. Film Annotation Character Setup (Direct FilmStrFmt Editing)

This section describes the film annotation character setup procedure for FMT numbers, which are indicated under "■ 26×36cm, 35×43cm/14"×17" and 8"×10" film printout patterns [Reference]" in "2.1 Setup Items Table".

Film annotation character setup is performed by directly editing the contents of the FilmStrFmt file.

➤ *IMPORTANT*

When directly editing the contents of the FilmStrFmt file, be sure to select "No" as the configuration setting for No. 56 (Enable Auto Edit Function of Film String Format File) in "1. Setup Necessary When Connecting the LP".
If you directly edit the contents of the file while the setting is left ON, the Service Utility may restore the previous contents of the FilmStrFmt file. Therefore, when editing the FilmStrFmt file, follow the steps indicated below.

1. *If you intend to edit the printer-related configuration settings with the Service Utility, do it first.*
2. *Complete an editing procedure with the Service Utility (only the configuration settings related to the printer), save the results, and then change the No. 56 setting to "No".*
3. *Finally, edit the contents of the FilmStrFmt file.*

Once the FilmStrFmt file is directly edited, you should avoid performing setup with the Service Utility.

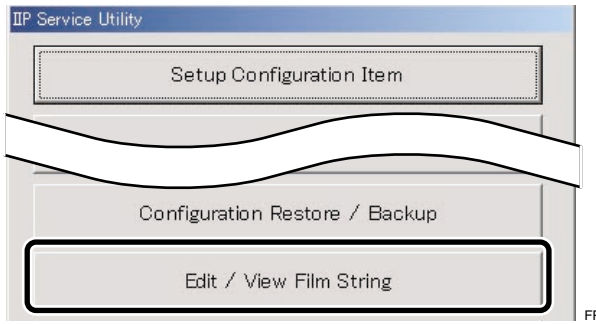
After the FilmStrFmt file is edited, you should keep a record of the applied changes within the FilmStrFmt file in the form of a comment.

3.1 Procedure for Directly Editing the FilmStrFmt File

1. **Start the Service Utility mode.**

☞ For the Service Utility startup procedure, see "1. Starting/Exiting the Service Utility" in "MU: Maintenance Utility".

2. **Click "Edit/View Film String".**



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➔ The "Edit/View Film String" window opens.

3. **Click** Edit Film String **.**

➔ Notepad opens.

4. **Edit the file in the format described later ("3.2 FilmStrFmt File Description Format" and subsequent sections).**

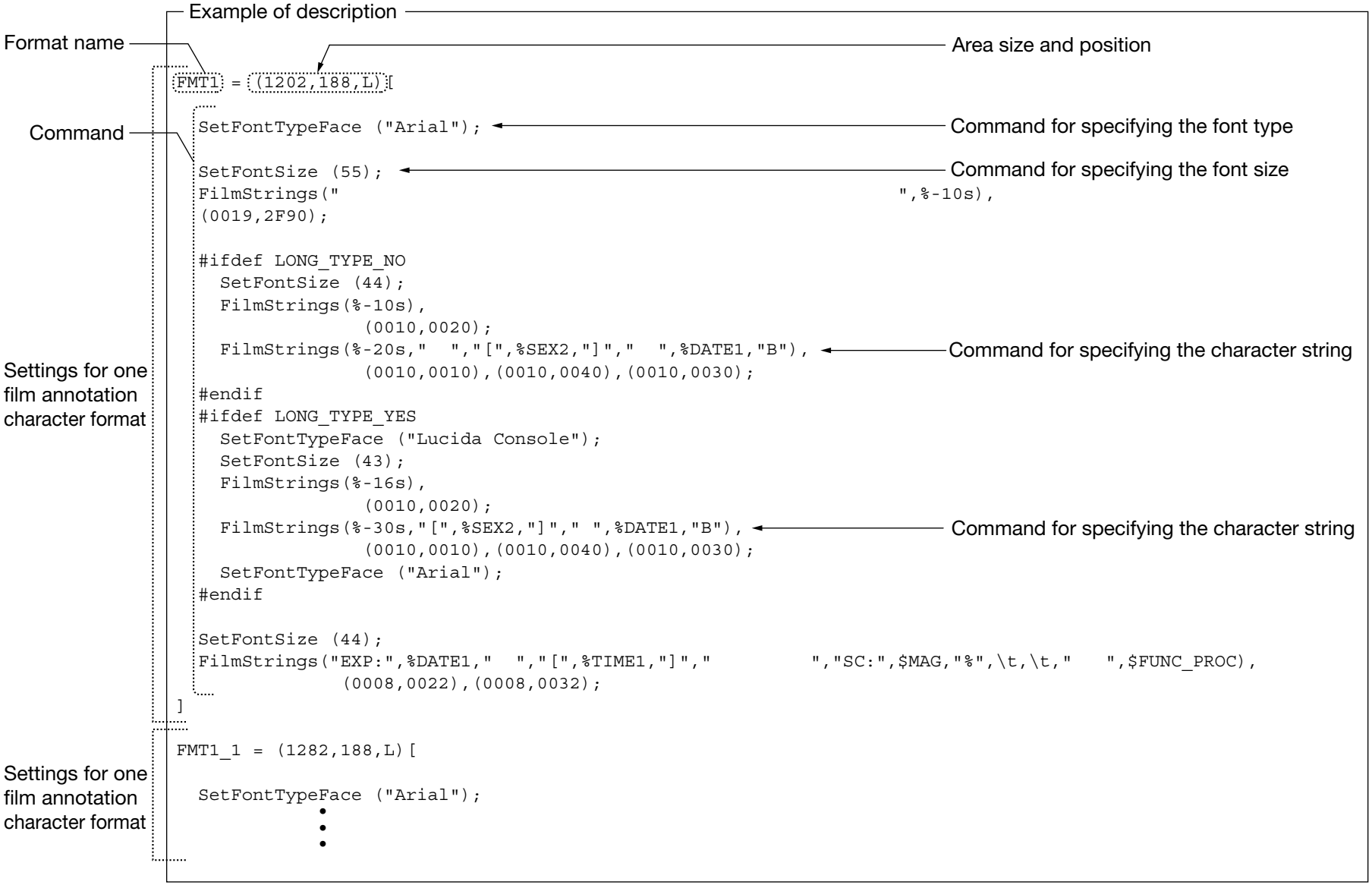
5. **Save the FilmStrFmt file and then close Notepad (Notepad.exe).**

◆ *NOTES* ◆

- *The FilmStrFmt file uses "Unicode" characters. Therefore, be sure to use Notepad and save the edited file in Unicode format.*
- *The backup function of the Service Utility does not back up the FilmStrFmt file. Perform a manual backup/restore procedure by, for instance, selecting the FilmStrFmt file directly and saving it on an FD or like media.*
- *If the application software version is upgraded together with the FilmStrFmt file, do not restore the FilmStrFmt file that is backed up on an FD or like media. Locate the new version of FilmStrFmt file that is installed upon a software upgrade and edit it according to the backed up file as needed.*

3.2 FilmStrFmt File Description Format

Following is the FilmStrFmt file description format.



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Following are the details of each setting.

● Format name

Describes the name of the format. Do not change the description for the CL.

➥ *REFERENCE*

The ImageSize.env file stored in the "C:\Program Files\FujiFilm\IIP\Config" folder defines which format should be used by an output film.

● Area size and position

Specify the area size and position between parentheses to the right of the format name, connecting them with each other using an equal sign (=).

X-size, Y-size, position

Item	Description
X-size	Specifying the width of the film annotation character display area (0<X-size<4280pixel)
Y-size	Specifying the height of the film annotation character display area (0<Y-size<4280pixel)
Position	Specifying the position of characters in the film annotation character display area (C: centering, R: right padding, L: left padding)

● Command

Describes the command for setting film annotation character format. Here, command format is similar to a programming language.

These commands relate to fonts and character strings.

☞ For details, see "3.3 Changing the Film Annotation Characters".

❍ Font specifying commands

Font specification	Command
Font type specification	SetFontTypeFace
Font size specification	SetFontSize
Font style specification	SetFontStyle

❍ Character string specifying commands

Output character string specification	Command
Line spacing specification	LineSpacing
Output format and attribute specification	FilmStrings

■ Cautions in editing the FilmStrFmt file

Following are the cautions to observe when editing the FilmStrFmt file.

- "#" at the top of a line indicates a comment line.
- Unnecessary spaces, tabs and line changes will be disregarded.
- Describe commands by the use of ";" between them.

◆ *NOTE* ◆

Because FilmStrFmt is a Unicode-formatted text file, a Unicode-formatted NotePad included in the OS is necessary for file editing.

3.3 Changing the Film Annotation Characters

■ Specifying the font type

Use the “SetFontTypeFace” command to specify the font type. This command will be effective from the line describing “SetFontTypeFace” to the line that directly precedes another “SetFontTypeFace” description.

◆ NOTE ◆

Because no default values are available for font type, make sure to specify values for each film annotation character format.

- SetFontTypeFace description format

  SetFontTypeFace (“font name”);

  Enclose a True-Type font name between quotation marks (“ ”).

  Any of the fonts that are available when Windows 2000 is installed can be specified.

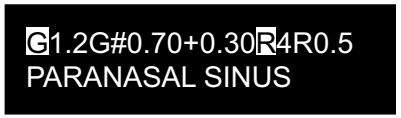
- SetFontTypeFace description examples
  - Specifying MS Gothic

    SetFontTypeFace(“MS Gothic”);

  - Specifying Times New Roman

    SetFontTypeFace(“TimesNewRoman”);

- SetFontTypeFace printout examples
  - “Arial” specified



FR000016.EPS

  - “TimesNewRoman” specified



FR000017.EPS

■ Specifying the font size

Use the “SetFontSize” command to specify the font size. This command will be effective from the line describing “SetFontSize” to the line that directly precedes another “SetFontSize” description.

◆ NOTE ◆

Because no default values are available for font size, make sure to specify values for each film annotation character format.

- SetFontSize description format

  SetFontSize (font size);

  Specify a font size using values expressed in terms of pixels.

- SetFontSize description examples
  - Specifying the font size to be 20 pixels

    SetFontSize(20);

  - Specifying the font size to be 40 pixels

    SetFontSize(40);

● SetFontSize printout examples

• Font size specified as 20 pixels



FR000018.EPS

• Font size specified as 40 pixels



FR000019.EPS

■ Specifying the font style

Use the “SetFontStyle” command to specify the font style.

This command will be effective from the line describing “SetFontStyle” to the line that directly precedes another “SetFontStyle” description.

● SetFontStyle description format

SetFontStyle (font style);

Select either of the following.
- Bold : BOLD
- Italic : ITALIC

When selecting the two font styles at the same time, use “|” to delimit them (ex.: BOLD|ITALIC).

◆ *NOTE* ◆

Specifying “ITALIC” for characters displayed in reverse video can make it look like they are missing in parts. “ITALIC” is thus disabled for reverse-video characters.

● SetFontStyle description examples

• Bold specified
SetFontStyle (BOLD);

• Specifying bold and italic at the same time
SetFontStyle (BOLD|ITALIC) ;

● SetFontStyle printout examples

• Bold specified



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• Bold and italic specified



FR000021.EPS

■ Specifying the line spacing

Specify line spacing with the “LineSpacing” command.

● LineSpacing description format

LineSpacing (line spacing);

Use an integer between 1 and 400 (in terms of pixels) to specify line spacing for film annotation characters.

● LineSpacing description examples

• Specifying line spacing of 5 pixels

LineSpacing(5);

• Specifying line spacing of 50 pixels

LineSpacing(50);

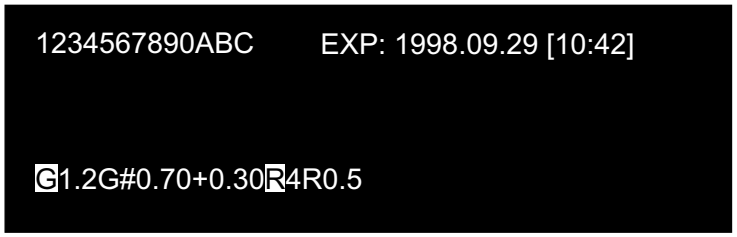
● LineSpacing printout examples

• Line spacing of 5 pixels specified



FR000024.EPS

• Line spacing of 50 pixels specified



FR000025.EPS

■ Specifying print format and attributes

Use the “FilmStrings” command to specify character strings.

● FilmStrings description format

FilmStrings(format descriptor1, format descriptor2,···),(attribute descriptor1),(attribute descriptor2)···;

• Format descriptor “n”

Specifies the “format descriptor” that shows the format in which character strings are printed out. A maximum of 512 descriptors can be specified. However, the maximum total length of all character strings represented by the format descriptor is 256 characters.

☞ For details, see “3.4 Format Descriptor”.

• Attribute descriptor “n”

Specifies the “attribute descriptor” that shows an attribute to be printed out as a character string. Basically, one attribute descriptor is given per format descriptor. The attribute descriptor is a tag number that represents the attribute to be printed out.

It is not necessary to specify the attribute descriptor when the format descriptor is attribute-specific.

☞ For details, see “3.5 Attribute Descriptor”.

● FilmStrings description examples

❍ Printing out patient and exposure information

The patient and exposure information indicated below are printed out.

- Patient name : Character string of variable length, up to 20 characters
- Sex : “[“+M or F+”]”
- Patient ID : Character string of variable length, up to 15 characters
- Date of birth : YYYY.MM.DD + “B”
- Date of examination : Character string of variable length, up to 15 characters
- Date of exposure : “EXP”+ YYYY.MM.DD
- Time of exposure : “[“+HH:MM+”]”

```
FilmStrings(“”,%*20s,“[“,%SEX2,”]”),(0010,0010),(0010,0040);
FilmStrings(“”,%*15s,““,%DATE1,”B”),(0010,0020),(0010,0030);
FilmStrings(“”,%*15s),(0008,0050);
FilmStrings(“EXP:”,%DATE1,“[“,%TIME1,”]”),
                    (0008,0020),(0008,0030)
```

❍ Printing out image processing parameters

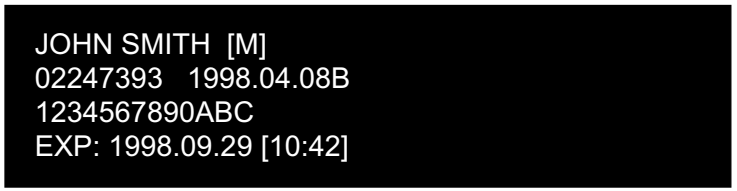
The following image processing parameters are printed out.

- Gradation processing parameters : G + GA + GT + “#” + GC + GS
- Frequency processing parameters : R + RN + RT + RE
- Latitude (L value) : L + latitude
- System sensitivity (S value) : S + system sensitivity
- Corrections (gradation and density) : C + gradation correction + density correction
- Image magnif./reduc. rate : “SCALE:” + percentage

```
FilmStrings(“ ”,$IMG_PROC);
FilmStrings(“ “,$L,$S,$CS_SS,” “,SCALE:”,$MAG,“%”);
```

● FilmStrings printout examples

- Patient and exposure information printout



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- Image processing parameters printout



FR000027.EPS

3.4 Format Descriptors

Described herein are the format descriptor types and content presented in “3.3 Changing the Film Annotation Characters ■ Specifying print format and attributes.”

Three format descriptor types are available. The first character of each format descriptor identifies the type.

First character	Descriptor type
\	Character string control descriptor
%	Character string style descriptor
$	Attribute-specific format descriptor

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◆ *REFERENCE* ◆

The C language command “printf” format-specified method has been adopted basically for the format descriptor that specifies the character string print format.
However, the “printf” method has been expanded to make the following items available.

- *Special print character formats, including characters in reverse video*
- *Some VR-specific patterns, including date format*
- *Information not assigned tag numbers, such as film image magnification/reduction*
- *Handling of a multiple number of attributes in a group (such as image processing parameters)*

Format descriptors not required by the “printf” method have been deleted.

■ Character string control descriptor (\)

Shown below are format descriptors that control character strings.

Descriptor	Meaning
\t	Inserts tabs. Each tab is equivalent to 80 pixels.
\r	Displays the characters that follow in reverse video, which will be effective until “\r” is specified again.

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■ Character string style descriptor (%)

This format descriptor indicates that the character string style is composed as follows.

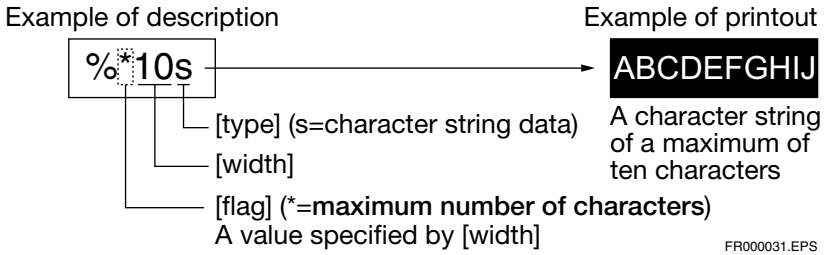
%[flag][width][type]

- [flag]

  Shows the information necessary for controlling character string length. Can be omitted. If [flag] has been specified, [width] must also be specified.

Flag description	Meaning
-	Outputs character strings padded from the left. This is effective only when fixed length has been specified using [width]. If it has not, character strings will be output padded from the right.
*	Shows that the character string length specified by [width] consists of a maximum number of characters. If the length of the character string to be output is longer than that specified by [width], it will be output as specified by [width]. If the length of the character string to be output is shorter than that specified by [width], it will be output as it actually is.

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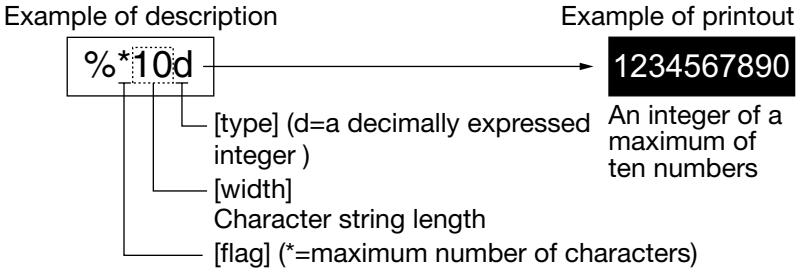
FR000031.EPS

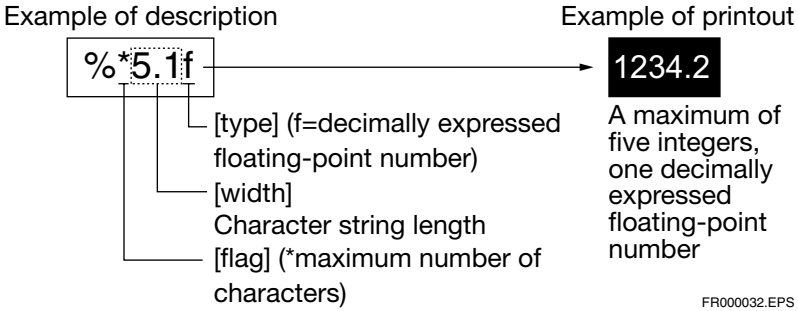
- [width]

  Shows the character string length. When "*" has been specified for [flag], this indicates the maximum character string length. When it has not, it indicates the fixed length.

  Only when "f" has been specified for [type] the "a.b" style specification will be effective, where "a" indicates the number of digits (of an integer) and "b" the number of decimal places.

  In this case, "a" can be omitted. Omitting "a" will not determine the number of digits while determining only the number of decimal places. When "f" has been specified for [type], it will not be possible to omit only "b." Specifying 0 for "b" will cause an error.





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● [type]

Shows the type of character string notation. This cannot be omitted. Two types are available: the standard type supported by C language and a special type added exclusively for film annotation characters.

The standard type uses small letters to annotates character strings and the special type uses large alphanumerics. Numbers cannot be used at the beginning of character strings.

The table below shows character strings annotation types.
In the table, attributes other than those listed in the "Attribute VR" column (UN and SQ) cannot be output as film annotation characters.

❍ Standard type

Annotatio type	Attribute VR	Note
d	OB,OW,SL,SS, UL,US	Outputs binary data in decimal form. Image data and overlay data cannot be selected.
x	AT,OB,OW,SL, SS,UL,US	Outputs binary data in hexadecimal form. Letters will be output in capitals.
f	FL,FD	Outputs binary data in floating-decimal-point form.
s	AE,AS,CS,DS, DT,IS,LO,LT, PN,SH,ST,UI	Outputs character string data. Character strings of a maximum length of 256 characters can be output.

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❍ Special type

Annotation type	Attribute VR	Note
DATEn	DA	Outputs various date display patterns in accordance with the values specified by “n.” Patterns are as follows. DATE1 : 1998.12.13 DATE2 : 1998.DEC.13 DATE3 : 12.13.1998 DATE4 : DEC.13.1998 DATE5 : 13.12.1998 DATE6 : 13.DEC.1998 DATE7 : H1.01.13 DATE8 : ㍻1.01.13
TIMEn	TM	Outputs various time display patterns in accordance with the values specified by “n.” This setting is valid only for information for which “Attribute VR” has been set to “TM.” Patterns are as follows. TIME1 : 10:51 TIME2 : 10:51:20 TIME3 : AM 10:51
AGEn	DA (date of birth only)	Outputs various age display patterns in accordance with the values specified by “n.” This setting is valid only for information on date of birth. Patterns are as follows. AGE1: 25 years, 1 year and 8 months, 1 month and 10 days, 13 days AGE2: 25Y, 1Y8M, 1M10D, 13D Output format will differ with the relevant age, as follows. 0 years to 0 years and 1 month or under : ** days 0 years and 1 month up to 1 year : ** months 1 to 8 years : ** years and ** months 8 years or over :** years
SEXn	CS (sex only)	Outputs sex display patterns in accordance with the values specified by “n.” This setting is valid only for information on sex. Patterns are as follows. SEX1: Male, female, (for others, 1 space) SEX2: M, F, O (for others, 1 space)

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■ Attribute-specific format descriptor ($)

The attribute-specific format descriptor is used for outputting a multiple number of attributes in groups or for outputting information that has not been assigned tag numbers.

The attribute-specific format descriptor requires no attribute descriptors (the tag numbers shown below).

The table below presents attribute-specific format descriptors.

● Table of attribute-specific format descriptors (1/2)

Descriptor	Information displayed	Sample character format	Note
$IMG_PROC	Image processing parameter	Outputs image processing parameters (G,R,O,D,U,H,P). Parameter output will depend on the image processing parameter formats described hereafter.	Processing parameters for any processing that is not subjected to in view of processing path will not be output.
$GAMMA	Gradation processing parameter	G 1.0G#1.6-0.20	–
$BETA	Frequency processing parameter	R 4R0.5	Parameters will not be output during multi-frequency processing (MFP).
$1DUSM	1D-USM processing parameter	O 3V1.0	Parameters will not be output if this process is not performed.
$DRC	DRC processing parameter	D 2A0.8	Parameters will not be output if this process is not performed.
$H_USM	MFP-USM processing parameter	U FA0.8	Parameters will not be output if this process is not performed.
$H_DRC	MFP-DRC processing parameter	H FA0.8	Parameters will not be output if this process is not performed.
$PEM	PEM processing parameter	P ABC1.5	Parameters will not be output if this process is not performed.

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● Table of attribute-specific format descriptors (2/2)

Descriptor	Information displayed	Sample character format	Note
$MOD	Image processing parameter change mark	*	Parameters will be output only when they have been changed.
$CS_SS	Term of correction	C *1.0/1.5	For both gradation correction and density correction, parameters are output converted to character strings.
$FCR_ID	FCR image ID	A 001	Can be output by changing the image number.
$AP_PA1	Right-and-left reversal mark (1/2)	Я	Can be output only when image is reversed.
$AP_PA2	Right-and-left reversal mark (2/2)	AP (PA)	“PA” will be output when reversed and “AP” when not reversed.
$IP_NUM	IP number	0412657	Outputs the number without “a” before it and “c” after it.
$MAG _RATE	Image magnif. rate	67	Can be output only when the image size requested has been set.
$FUNC _PROC	Pair processing information	RT-01 is for image processing type RT. ES 01 02-01 is for an image processing type other than RT.	Image processing type (0019,2F40) Set numbers (0021,2F30) Image numbers in the set (0021,2F40) Pair processing information numbers (0021.2F50)
$ES	Energy subtraction information	T AGGH @	Can be output only when all four energy subtraction parameters are within the range of A to T. Energy subtraction parameters (50F1, 2F06) Result of subtraction registration (50F1, 2F07) Normal : Does not add @. Abnormal : Adds @.
$L	L value	L 2.0	–
$S	S value	S 20000	–

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3.5 Attribute Descriptors

Described next are the specific types and contents of the attribute descriptors discussed in “3.3 Changing the Film Annotation Characters ■ Specifying print format and attributes.”

The attribute descriptor is information used to specify several kinds of attributes to be printed out as film annotation characters.
One attribute descriptor can be described for each format descriptor.
The attribute descriptor represents a tag number for the attribute to be printed out.

■ Attribute descriptor description format

Following is the attribute descriptor description format.

(gggg,eeee)

- gggg : Group number. Fixed four digits in hexadecimal form.
- eeee : Element number. Fixed four digits in hexadecimal form.

■ Attribute descriptor description cautions

- Parentheses “( )” are required when describing a tag number.
- Use a comma (“,”) between attributes .
- Use a comma (“,”) between a group and an element.
- If the specified tag is not available, use one half-size space.
- For the patient’s name, create a character string after delimitation conversion.
- When printing out a kanji character string, remove the ESC sequence and then create the string.
- Handle control characters within LT and ST as spaces.
- For a tag for which VM is 1 or more, only the head information will be printed out. However, information for the character string will be printed out including the “\” that represents delimitation.

■ Attributes that can be printed out using the CL

Tables below show attributes that can be output using the CL's DICOM Print function.

● Attributes that can be printed out using the CL and its attribute descriptors (1/4)

	Attribute	Annotation	Film annotation characters	Format descriptor	Attribute descriptor
1	Hospital (institution) name	kanji	富士フイルム病院	%s	(0009, 2F80)
		ANK	FUJI HOSPITAL	%s	(0008, 0080)
2	IP no.	The "a" and "c" are deleted.	04012657	$IP_NUM	(0018, 1004)
3	EDR mode		A, S, F, M	$EDR_MODE	(0019, 2F50)
	Menu code		0900	%s	(0018, 1401)
4	System ID	A to Z	A 001	$FCR_ID	-
	Image no.	Decimal under 3 digits			
5	Image proc. conditions			$IMG_PROC	-
	Gradation proc.	γ-identifying characters GA, GT, GC, GS	G .0G#1.6-0.20	$GAMMA	-
	Frequency proc.	β-identifying characters RN, RT, RE	R 4R0.5	$BETA	-
	1D-USM	1D-USM identification characters ORN, ORD, ORE	O 3V1.0	$1DUSM	-
	DRC	DRC identification characters DRN, DRT, DRE	D 2A0.8	$DRC	-
	MFP-USM	MFP-USM identification characters HRN, HRT, HRE	U FA0.8	$H-USM	-
	MFP-DRC	MFP-DRC identification characters HDN, HDT, HDE	H FA0.8	$H_DRC	-
	PEM proc.	PEM proc. parameter characters PRN, α edge, α calc, PRE	P ABC1.5	$PEM	-
	Image proc. condition change mark		*	$MOD	-

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● Attributes that can be printed out using the CL and its attribute descriptors (2/4)

	Attribute	Annotation	Film annotation characters	Format descriptor	Attribute descriptor
6	Exposure menu name	kanji	胸部概観	%s	(0018, 1400)
		ANK	CHEST GENERAL	%s	(0019, 2F32)
7	Normalization conditions + correction term			-	-
	Latitude	Latitude identification character Latitude	L 2.0	$L	-
	System sensitivity	System sensitivity identification character System sensitivity	S 20000	$S	-
	Correction term	Correction term identification character, gradation correction,	C *1.0/1.5	$CS_SS	-
8	Department name	kanji	放射線科	%s	(0032, 1033)
		ANK	SURGERY1	%s	(0009, 2F92)
9	Radiographer code		NT	%s	(0019, 2F60)
	Exposure stand information		100kv10mAs	%s	(0019, 2F90)
10	Patient ID		1010181139	%s	(0010, 0020)
11	Patient name	kanji	富士太郎	%s	(0011, 2F10)
		ANK	FUJI TARO	%s	(0010, 0010)
12	Examination no.	Accession Number	1234567890ABC	%s	(0008, 0050)

FR000038.EPS

● Attributes that can be printed out using the CL and its attribute descriptors (3/4)

	Attribute	Annotation	Film annotation characters	Format descriptor	Attribute descriptor
13	Date of exposure		撮影日... EXP: ..	"撮影日:" "EXP:"	-
		ANSI short format	1998.12.13	%DATE1	(0008, 0020)
		ANSI long format	1998.DEC.13	%DATE2	
		American short format	12.13.1998	%DATE3	
		American long format	DEC.13.1998	%DATE4	
		European short format	13.12.1998	%DATE5	
		European long format	13.DEC.1998	%DATE6	
		Japanese date format	H10.12.13	%DATE7	
		Japanese date (kanji) format	平 10.12.13	%DATE8	
14	Sex: kanji	kanji	[男] or [女]	%SEX1	(0010, 0040)
	Sex: ANK	Alphabet	[M] or [F]	%SEX2	(0010, 0040)
15	Age	Y, YM, MD, D		-	-
		kanji	25才, 1才8ヶ月, 1ヶ月10日, 13日	%AGE1	(0010, 0030)
		Alphanumerics	25Y, 1Y8M 1M10D, 13D	%AGE2	
	Date of birth	YYYY.MM.DD生	1989.12.13生	%DATEn, "生"	
		YYYY.MM.DDB	1989.12.13B	%DATEn, "B"	

FR000039.EPS

● Attributes that can be printed out using the CL and its attribute descriptors (4/4)

	Attribute	Annotation	Film annotation characters	Format descriptor	Attribute descriptor
16	Pair proc	Proc. type, pair no., IP and IL	ES01 02-01	$FUNC_PROC	
	Routine proc.	Indicates the routine and serial routine processing nos.	RT-01		
17	Time of exposure	Hour and minute	[10:51]	“[“ ,%TIME1, ”]”	(0008, 0030)
18	Film mark	Film annotation characters1	P→A	%s	(0019, 2F91)
19	Magnif./reduc. rate		縮率 : 100%	“縮率 :” $MAG, “%”	-
			SCALE : 100%	“SCALE:”, $MAG, “%”	-
20	Patient name (2)	ふりがな	ﾌｼﾞ ﾀﾛｳ	-	-
21	Data compression code		圧縮 : 22	“圧縮 :’,%	(0029, 2F50)
			CC : 22	“CC:”,%s	(0029, 2F50)
22	Energy subtraction	Energy subtraction parameter table identification characters Ta, Tb, Tc, Td, and failure flag (only when there is a failure)	T ACGH @	$ES	
23	Right-and-left reversal mark		R, AP (PA)	$AP_PA1 or $AP_PA2	

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To print out attributes other than those listed above, set the relative tag number of the attribute specified in the Conformance Statement.

☞ Conformance Statement

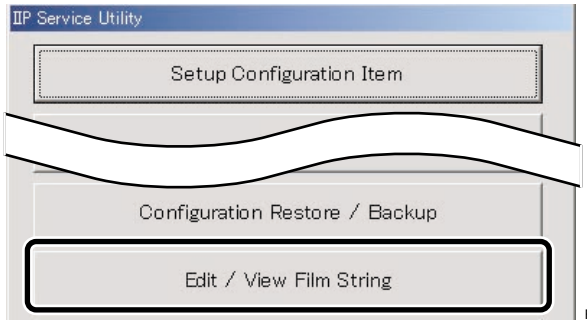
3.6 Film Annotation Character Verification Procedure

With the Service Utility, you can verify the FilmStrFmt file editing results. The procedure is described below.

1. **Start the Service Utility mode.**

☞ For the Service Utility startup procedure, see “1. Starting/ Exiting the Service Utility” in “MU: Maintenance Utility”.

2. **Click “Edit/View Film String”.**



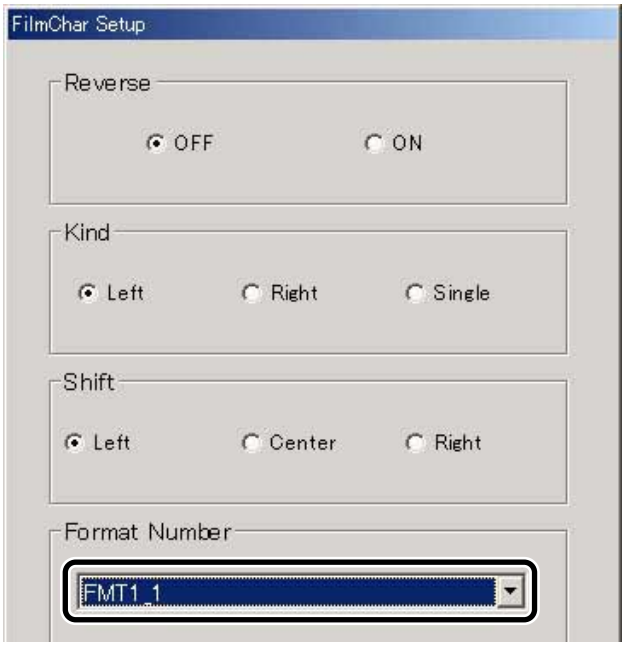
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➔ The “Edit/View Film String” window opens.

3. **Click** View Film String **.**

➔ The “FilmChar Setup” window opens.

4. **From the “Format Number” pull-down menu, choose the name of the film annotation character format you want to verify. Leave the other settings as they are.**



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5. **Click** OK **.**

➔ The “Edit/View Film String” window shows a film annotation character string.

6. **To verify the other film annotation character formats, repeat steps 3. through 5.**

4. Setting the DICOM Print Output Conditions

The DICOM Print output condition setup data are detailed below.

Item	Option	Meaning	Remarks
Media type (Media Type)	BLUE FILM	Film having a blue background	Routine setting.
	CLEAR FILM	Film having a transparent background	
	PAPER	Paper	
Film output destination (Film Destination)	MAGAZINE	Magazine	
	PROCESSOR	Processor	When the output destination is FN-PS
	BIN_I	Printer trays	
Film size (Film Size ID)	8IN×10IN	8"×10"	
	11IN×14IN	26×36 cm	
	14IN×17IN	14"×17"	
Image interpolation method (Mag Type)	REPLICATE	Replicate method	
	BILINEAR	Bilinear method	
	CUBIC	Cubic method	Routine setting
	NONE	No interpolation	
Image smoothing method (Smoothing Type)	A character string	A character string	This setting takes effect only when “CUBIC” is selected as the image interpolation method. As “a character string”, write the character string that is defined under “Conformance Statement” for the output destination printer. If the output destination is FN-PS, leave this column blank.
Identification key (Recognition Code)	REQ-SRV	Requesting department	Information for identifying the BIN number that is used to specify the film output destination (printer trays) (character string: information matching the information attached to image data)
	DEV-CODE	Image generation device (machine shipment control identification code)	
	MPM	MPM code	
	BODY-PART	Exposure anatomical region	
	NONE	No setting	
Default BIN number (Default BIN Number)	BIN-number-indicating number		BIN number for printing images without matching collation values
10-bit image output (10Bits Stored Supported)	Checked	Generates outputs.	Under normal conditions, the "Generates outputs" option should be selected.
	Unchecked	Does not generate outputs.	
Requested Image Size (2020, 0030)	SUPPORTED	Transfers an image size request tag.	Select “SUPPORTED” if you wish to output images to a FujiFilm printer.
	UNSUPPORTED	Does not transfer an image size request tag.	

DICOM Tag Mapping Function

When generating image outputs using the DICOM CR STORAGE function, you can edit (copy, move, delete, or initialize) the tag information (image information). To edit the tag information, open the setup file (TagReplace.ini) and write desired data in the file. The procedure is described below:

◆ *NOTE* ◆

Do not use the TagReplace.ini file, which is used by any other equipment (such as the QA-WS), for the CL. Due to different file storage format adopted, an error will result.

1. **Open the "C:\Program Files\FujiFilm\IIP\Config" folder.**

2. **Open the TagReplace.ini file with Notepad (Notepad.exe).**

   ➥ *REFERENCE*

   By default, nothing is written in the TagReplace.ini file.

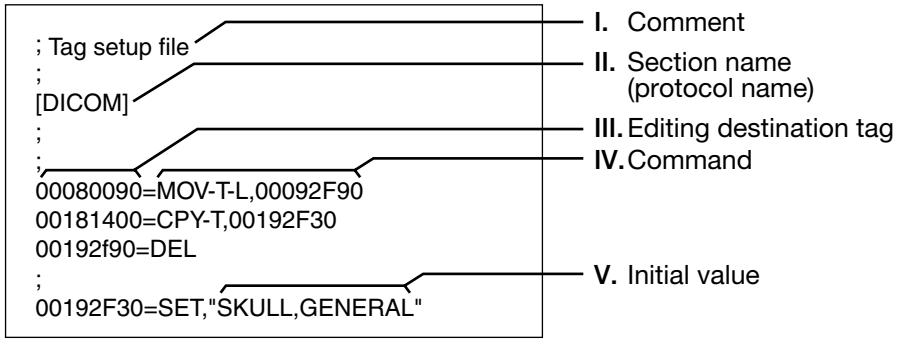
3. **Write desired tag information in the file in accordance with the format described later.**

   ➥ *REFERENCE*

   As the editing target tag VR, only "character strings" are supported. If a tag VR entry in the setup file is not a character string, an error dialog box opens at CL startup.

4. **Save the TagReplace.ini file in UNICODE format and then close Notepad (Notepad.exe).**

■ TagReplace.ini file format



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I. Comment
Lines beginning with a semicolon (;) are commented out.

II. Section name (protocol name)
As the section name, the protocol name targeted for tag information editing must be written within square brackets ([ ]). Version A02 supports DICOM only.

III. Editing destination tag
Write the group number/element number of the editing destination tag information (enter a string of eight characters at all times).

IV. Command
Write a tag information editing command. See the table that is presented later.

V. Initial value
Write a character string in VR-compliant format to specify the initial value for a tag information element.

The following commands are available:

Command	Description	
CPY	Process	Copies an element from another tag.
	Format	Editing-destination-tag=CPY[-T],editing-source-tag -T : Performs an element copy operation after deleting spaces from the beginning and end of the source tag element. If, for instance, the source tag = "ΔΔABΔCΔ", the command copies "ABΔC" (Δ : space).
MOV	Process	Moves an element from another tag.
	Format	Editing-destination-tag=MOV[-T][-L],source-tag -L : Performs a move operation after setting the source tag element length to zero. -T : Performs an element move operation after deleting spaces from the beginning and end of the source tag element. If, for instance, the source tag = "ΔΔABΔCΔ", the command moves "ABΔC" (Δ : space).
DEL	Process	Deletes an element.
	Format	Editing-destination-tag=DEL[-L] -L : Sets the element length of the editing destination tag to zero.
SET	Process	Sets a fixed initial value for the element.
	Format	Editing-destination-tag=SET, "initial-value"

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◆ NOTES ◆

- *When writing the TagReplace.ini file, set data in compliance with DICOM VR. Also, exercise care to avoid internal data inconsistency.*
- *Even if the editing destination tag differs from the source tag in VR, the editing process is performed as far as they are both in character string form. Note, however, that even if the character string length is over the limit specified by the editing destination tag VR, the tag information is set as is without being checked.*
- *The editing process will not be performed if the associated tag or element and initial value do not exist on the source side.*
- *For the detailed information about Fuji's Private tags, see "DICOM Conformance Statement".*

Creating/Deleting Markers

By default, the CL allows you to use 83 different markers that are frequently used at institutions. However, some institutions might want to use some other markers or delete infrequently used markers from the list.

This section explains about the procedures for creating new markers and deleting markers.

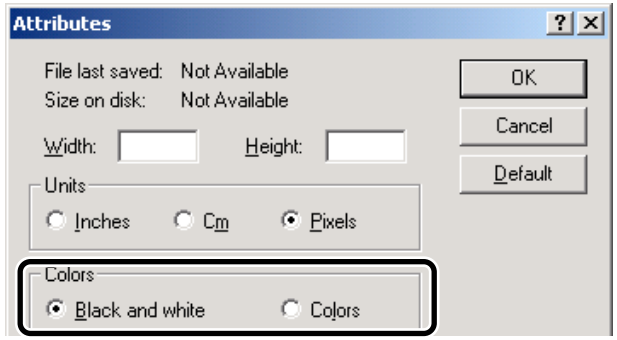
■ Creating markers

New markers can be created with “Paint”, which is a standard application supplied with the OS. When creating a marker, launch Paint and perform the following procedure.

- Image format

  Only the monochrome format of Windows BMP can be used.

  From Paint’s “Image” menu, choose “Attributes”. In the “Attributes” window, choose “Black and white” from the “Colors” area.



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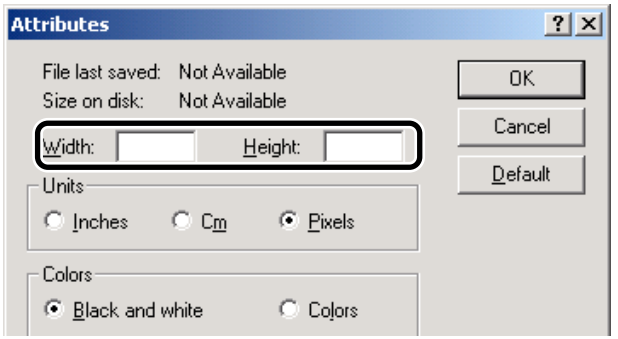
- File name

  The file name must consist of an alphanumeric character string and extension (.bmp).
  When the CL-AP lists markers, they are arranged in the order determined by their file names.

- Minimum/maximum size

  The marker size range is from 50 pixels × 50 pixels to 1000 pixels × 1000 pixels (which corresponds to an actual dimensional range of 0.5 mm × 0.5 mm to 100 mm × 100 mm).

  From Paint’s “Image” menu, choose “Attributes”. In the “Attributes” window, specify the size by entering values in the “Width” and “Height” input fields.



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- Actual size

  One BMP pixel corresponds to an actual size value of 0.1 mm. To create a 25 mm marker, use Paint to create 250-pixel data.

  Example) BMP : 100 pixels × 100 pixels
  Actual size : 10 mm × 10 mm

- Marker data storage location

  You can use a created marker when its file is stored in the following folder.

  The folder can store up to 128 data. Since 83 data are initially stored, you can additionally store up to 45 data if the initially stored data is left undeleted.

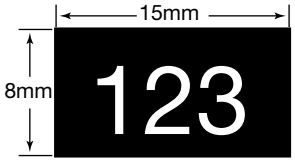
  C:\Program Files\Fujifilm\IIP\MarkerBmp

- Marker retention after an application upgrade

  Even if you upgrade the application, created markers are retained.

■ Marker creation example [Reference]

The procedure for creating a marker is described below. The procedure presumes that the following marker is to be created:



File Name : 123.bmp

1. Click Start, point to “Programs” and “Accessories”, and then click “Paint”.

➔ Paint then opens.

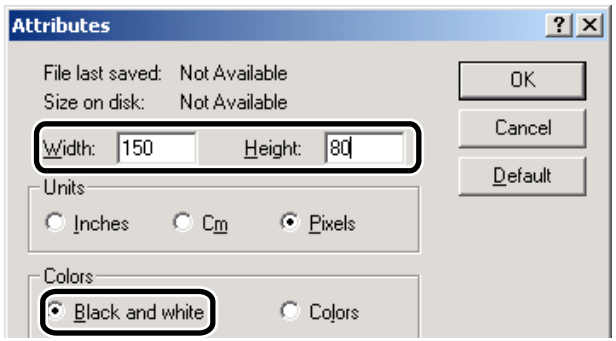
2. From the “Image” menu, choose “Attributes”.

➔ The “Attributes” window then opens.

3. In the “Width” and “Height” fields, enter “150” and “80”, respectively. Turn ON the “Black and white” radio button in the “Colors” area.

◆ *NOTE* ◆

Be sure that “Pixels” is selected in the “Units” area.



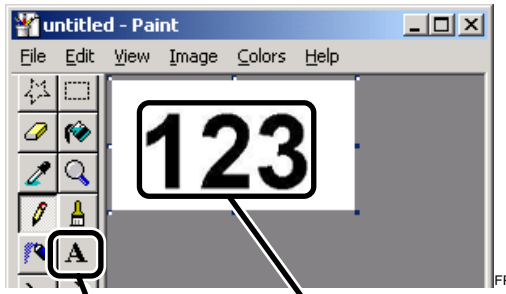
FR000003.EPS

4. Click OK.

5. With “Text tool”, enter text.

◆ *NOTE* ◆

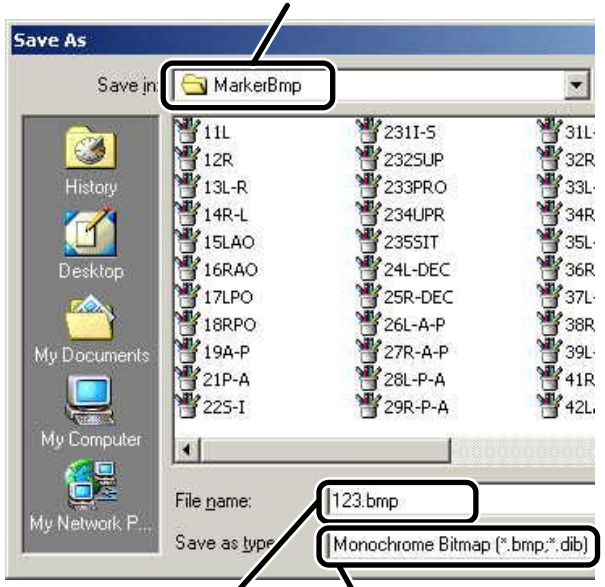
Enter text in black (against a white background of BMP data). In a CL-AP window, the white portion of BMP data becomes the background with the text (marker) displayed in black.



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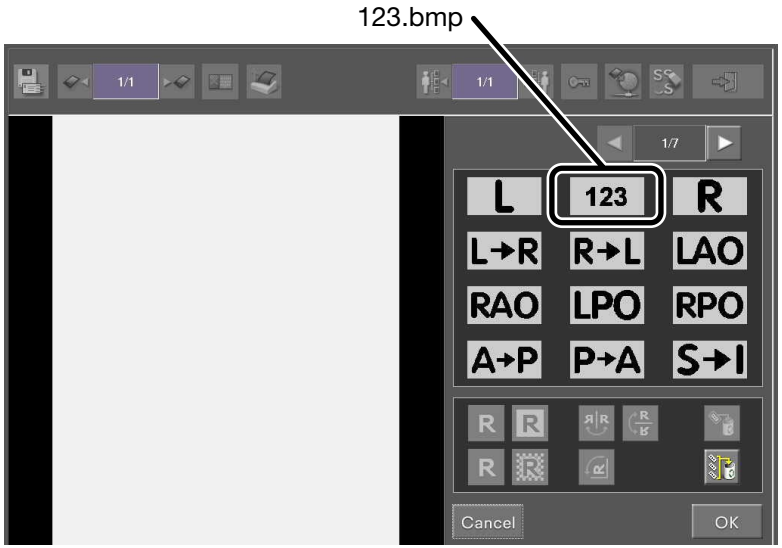
6. Perform the following steps to save the created BMP data in the predetermined folder (C:\Program Files\Fujifilm\IIP\MarkerBmp).

1. Choose “C:\Program Files\Fujifilm\IIP\MarkerBmp”



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7. **Launch the CL-AP. Verify that "123.bmp" is displayed in the marker list.**



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■ Deleting markers

Move the associated BMP data in the following folder to Recycle Bin or another folder.

C:\Program Files\Fujifilm\IIP\MarkerBmp

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Using the DICOM Log Mode

The DICOM log is a record of communications with DICOM-connected equipment. Under normal conditions, the log files record associations only. However, you can record detailed descriptions of communications by changing the DICOM Log Mode. This mode change is called a DICOM Log Mode change.

The log files record the numbers of DICOM tags, the information attached to DICOM tags, the time of communication with connected equipment, and other relevant information.

■ Changing the DICOM Log Mode

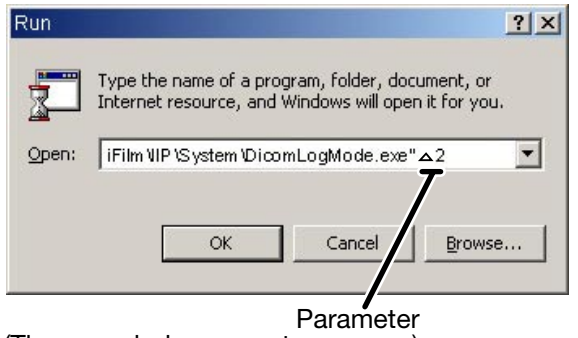
1. From the Start menu, choose "Run...", and then click Browse...

2. Select the DicomLogMode.exe file in the following directory:

C:\Program Files\FujiFilm\IIP\System\DicomLogMode.exe

3. Enter the parameter value 0, 1, or 2 as shown below. The meanings of the modes selected by these parameters are explained below:

- 0: Records nothing.
- 1: Records associations only (default).
- 2: Records detailed information as well.



(The ▵ symbol represents a space.)

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4. Click OK.

➔ A confirmation window opens, notifying you that the DICOM Mode is changed.



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5. Click OK.

➔ The confirmation window closes.

◆ *NOTE* ◆

After completion of a DICOM Log Mode change and log file verification, be sure to return the mode selection to 1.

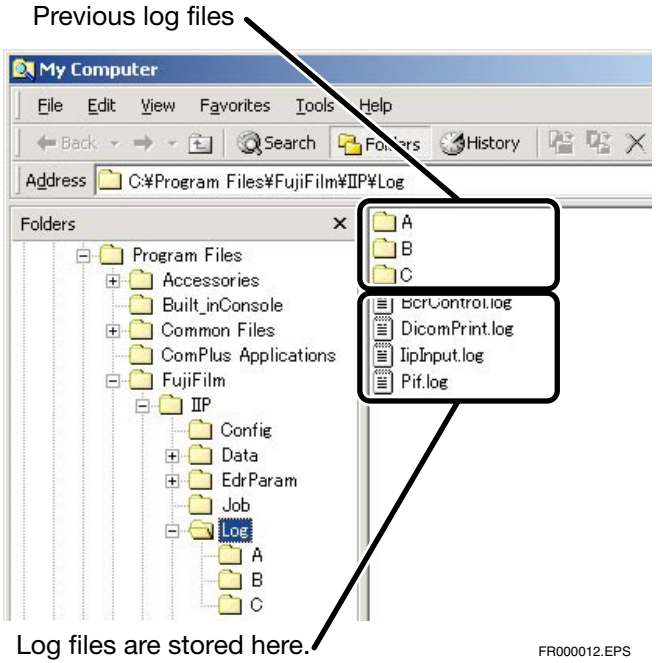
■ Log file storage locations and types

1. **Open the directory (C:\Program Files\FujiFilm\IIP\Log) in which the DICOM log files are stored.**

2. **Use a text editor (Notepad) to open the DICOM log files. The following DICOM log files are used:**

- DICOMMWLSCU.log: Log of MWM and PPS function related information
- DicomPrint.log: Log of DICOM Print function related information

//For the other log files, adjustments are being made.//

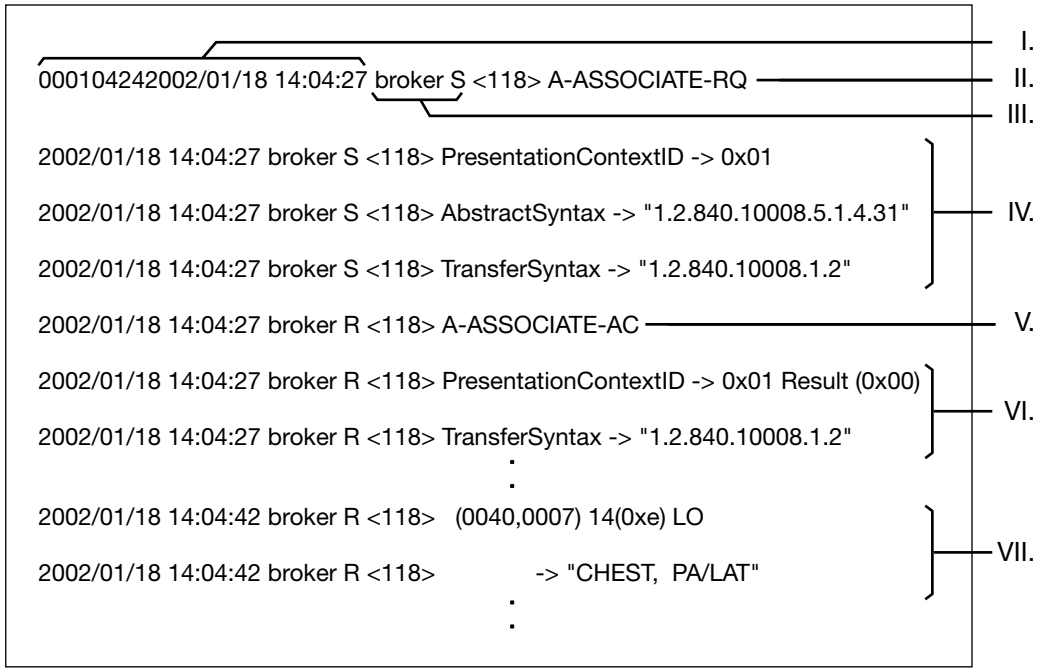


➥ *REFERENCE*

Previous log files are stored in folders named "A", "B", "C", and so on. The log files saved directly under the "Log" folder are those which were generated when the application was last started. When the application is started again, a new folder is created (e.g., folder "D") and the log files saved directly under the "Log" folder are moved to the new folder.

■ Details of log files

The log file shown below is used in log mode 2 (detail mode) to record MWM-related communications.



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I. Date and time of a data transmission by CL or other connected equipment
II. CL association
III. Information about the transmitter (broker S = CL, broker R = other connected equipment)
IV. Detailed information (transmitted by CL)
V. Connected equipment association
VI. Detailed information (transmitted by connected equipment)
VII. Tag information

➥ *REFERENCE*

The data to be recorded varies with selected log mode.
Mode 1 records the logged data about associations only (only the second and fifth lines in the above figure). Mode 2 records the entire logged data.
Mode 0 records nothing.

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Display Gradation Correction Setup

The display gradation correction setup procedure is performed to optimize the appearance of images displayed on the viewer of a competing manufacturer. The data entered by performing this procedure works when the CL transmits images to the viewer of a competing manufacturer.
This section explains about the LUT file handling and Service Utility setup procedures to be performed for gradation correction purposes.

◆ *NOTE* ◆

For optimization of viewability, it is necessary to use a LUT file that is created with Fuji' s CRT-QC gradation correction tool for use with the viewer of a competing manufacturer. Therefore, create such a LUT file beforehand.

☞ For the LUT file creation procedure, see under "FCR Diagnostic Image Display Gradation Correction Procedure" in the CRT-QC Service Manual.

■ Handling the LUT file

Have on hand the LUT file that is created with Fuji's CRT-QC gradation correction tool for use with the viewer of a competing manufacturer. Copy this file to the CL's specified folder and change its name.

Copy destination: C:\Program Files\FujiFilm\IIP\CrtLut folder
Filename : "SCP AE name"+.lut (e.g., ViewerA.lut)

◆ *NOTE* ◆

For Siemens' viewer, use the LUT file (siemens.lut) that is stored in the following folder on the CL's PC.

C:\Program Files\FujiFilm\IIP\CrtLut\siemens.lut

Be sure to change the filename (to "SCP AE name"+.lut).

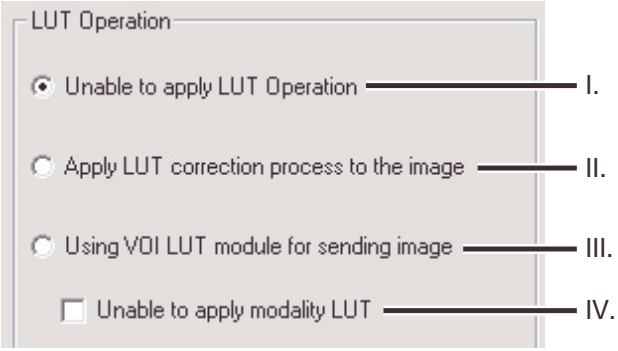
■ Setup procedure

With the Service Utility, perform gradation correction setup as directed below.

1. Start the Service Utility mode and open the gradation correction setup window (LUT Operation).

☞ For the procedure for opening the setup window, see "2.1.5 Registration of Information on Other Connected Equipment for the DICOM CR Storage Function" under "CL + Other (DICOM CR Storage: Transfer of Processed Images)" in "OE4: Connecting the CL to Other Equipment".

2. **In the setup window (LUT Operation area for DICOM Setup), select a LUT transmission type.**



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I. Choose this option when outgoing images are not to be subjected to gradation correction.

II. Choose this option when outgoing images are to be subjected to gradation correction (inverse transform LUT process) and transmitted as DICOM-processed images.

◆ *NOTE* ◆

Option II. is selectable only when the processed image transmission option key is installed in the CL and DICOM CR Storage setup is completed for processed image transmission.

III. Choose this option when DICOM tag information (VOILUT module/0028,3010) is to be added to outgoing images so that they are subjected to gradation correction (inverse transform LUT process) at the connected equipment.

IV. Choose this option when the connected equipment used is manufactured by Siemens. By default, this option is hidden. To show this option, perform the procedure indicated in the next step.

3. **<u>If the connected equipment used is manufactured by Siemens</u>, check** ☐ Unable to apply modality LUT (☐ → ☑).

This option is hidden by default. To check this option, you must first set the system to show it. The procedure is described below.

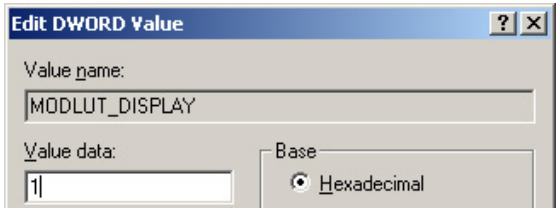
I. Exit the Service Utility mode.

II. Open Registry Editor (Regedit).

III. In the “HKEY_LOCAL_MACHINE\Software\FujiFilm\IIP” folder, create a DWORD value named “MODLUT_DISPLAY”.

IV. Double-click MODLUT_DISPLAY.
➔ The “Edit DWORD Value” dialog box opens.

V. Enter “1” in the “Value data” field.



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VI. Click OK.
➔ You are then returned to the “Registry Editor” window.

VII. Close Registry Editor (Regedit).

VIII. Start the Service Utility mode and open the aforementioned setup window (LUT Operation area for DICOM Setup).

IX. Locate ☐ Unable to apply modality LUT in the window.

X. Check this option (☐ → ☑).

4. **Save the setup data and then exit the Service Utility mode.**

DICOM Tag Editing Function (for Siemens)

A character string can be embedded in a tag in accordance with an input image MPM code. To do this, open the setup file (TagLookup.ini) and describe an MPM code for character string embedding and the tag into which a character string is to be embedded.
The procedure is described below.

1. **Open the "C:\Program Files\FujiFilm\IIP\Config" folder.**

2. **With Notepad (Notepad), open the TagLookup.ini file.**

➥ ***REFERENCE***

By default, nothing is written in the TagLookup.ini file.

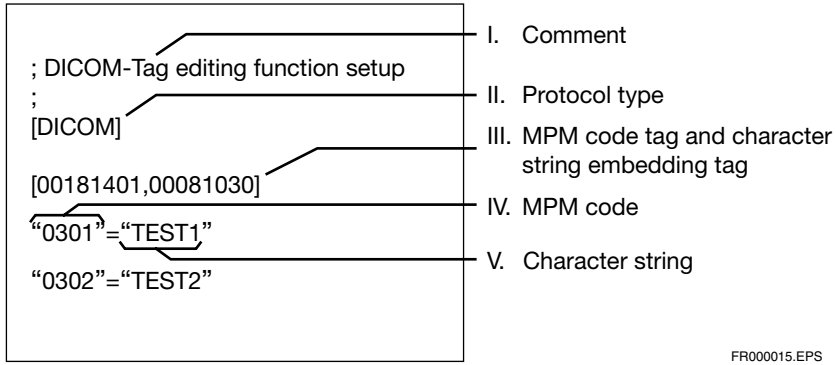
3. **Write the settings in the file in compliance with the format explained later.**

4. **Save the TagLookup.ini file in text format and then close Notepad (Notepad).**

◆ ***NOTES*** ◆

- *The TagLookup.ini file uses "Unicode" characters. Therefore, be sure to use Notepad as an editor and save the edited file in Unicode format.*
- *The backup function of Service Utility version A08 does not back up the TagLookup.ini file. Perform a manual backup/restore procedure by, for instance, selecting the TagLookup.ini file directly and saving it on an FD or like media.*

■ TagLookup.ini file format



I. Comment
Lines beginning with a semicolon (;) is handled as a comment.

II. Protocol type
The name of the protocol to be edited must be written within square brackets ([ ]). Version A08 supports DICOM only.

III. MPM code tag and character string embedding tag
Describe an MPM code tag (fixed at 00181401) on the left-hand side. Describe a character string embedding tag on the right-hand side. Separate these two entries with a comma (,).

IV. MPM code
Describe an MPM code for character string embedding. You can describe one or more MPM codes.

V. Character string
Describe the character string to be embedded in the tag. Be sure to enclose the character string in double-quotation marks ("").

When an image having MPM code "0301" is entered in situations where the settings indicated in the above example are used, an output will be generated with the character string "TEST1" embedded in the 00081030 tag (Study Description).

◆ ***NOTE*** ◆

For the detailed information about Fuji Private tags, see "DICOM Conformance Statement".

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CR-IR346/348CL Service Manual

SP: Service Parts

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	Pages I, II, 1, 6, 8, 10, 13, 15, 16
04/10/2001	01	Previous Chapter C “Error Information/Service Parts” divided and modified (FM2951)	All pages
05/30/2001	02	Revision (FM3027)	I, II, 3, 4
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 3, 4
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 4

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1. Service Parts List

1.1 How to Use Service Parts List

■ RANK

❍ Parts handling ID symbols used to identify the parts requiring special operation

The ID symbols are assigned to applicable parts. Parts without the R mark are replaced and handled in a regular manner.

Symbol	Description
R	Repairable parts
Q, T	Symbol for overseas use only

❍ Export regulation mark

This + mark is assigned to the parts subject to Export regulations. Parts without the + mark are not subject to Export regulations.

Symbol	Description
+	Parts subject to Export regulations

❍ Fault rankings used for estimating the recommended stock quality

All parts are assigned a symbol letter from A to E.

Symbol	Description
A	Consumable parts or parts that will be replaced at short intervals
B	Parts that may become faulty accidentally and have a relatively high failure rate
C	Parts that have a sufficiently long MTBF, but are expected to have a high failure rate
D	Parts that have a sufficiently long MTBF, but are expected to become faulty
E	Parts that are necessary for fault analysis or parts that may be needed in case of faults such as man-induced damage

❍ RANK column description

The symbols for Fault Ranking, Parts Handling, and Export regulation are assigned in order named. Thus, one to three letters are put in the RANK column.

■ REF. NO.

A number for indicating each part in the Service Parts Exploded Views.

■ PART NUMBER

A code number that is unique to each part. The rightmost letter of the code number has the following meaning.

❍ For hardware

The letter denotes the version number of a part. If parts have different version numbers, they are upward-compatible.

❍ For software

The letter denotes the software specifications.

■ PART NAME

This represents the general name of a part.

■ QTY.

QTY. represents the quantity of parts used in a unit or assembly.

■ REMARKS

Unique name of a part or its relevant information or note is described in this column.

■ SERIAL NUMBER

The units may contain different parts depending on their shipment control number. SERIAL NUMBER indicates the shipment control number to which the parts are applicable. If this column is blank, the parts are applicable to all the relevant units.

■ Recommended quantity of spare parts

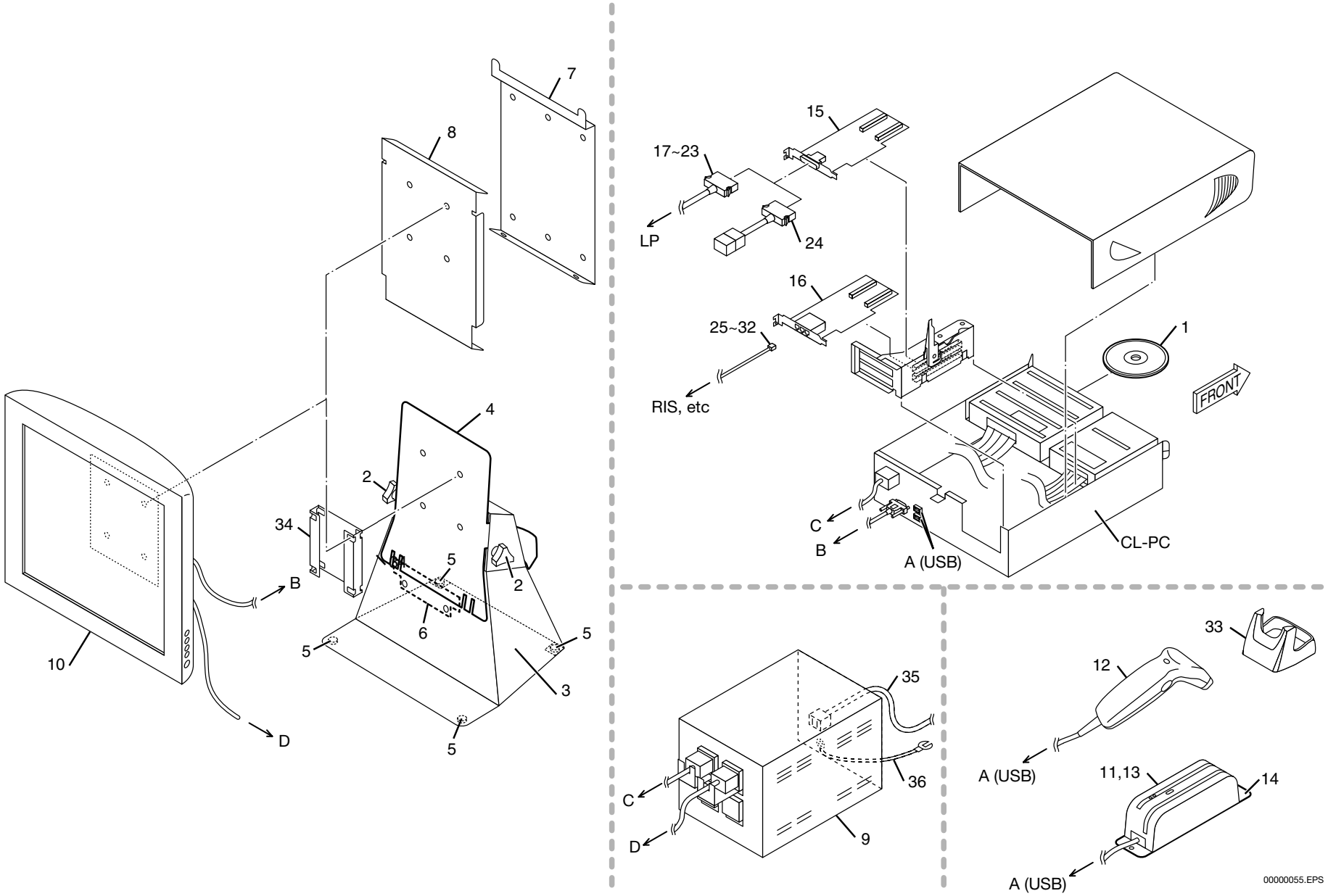
It is recommended as a rough guide to hold in stock a specified quantity of parts according to the rank (A to E) assigned to the parts. Parts to be replaced at periodic intervals must be held in stock separately.
Adjust the quantity of parts stock depending on the number of working units (N) as prescribed below.
Q: Quantity used in a single system

❍ N = 1
Rank A = 1 + Q x 0.3
Rank C = 1 + Q x 0.05
Rank D = 1 + Q x 0.02

❍ 2 ≤ N ≤ 10
Rank A = 2 + N x Q x 0.3
Rank C = 2 + N x Q x 0.05
Rank D = 1 + N x Q x 0.02

❍ 11 ≤ N ≤ 300
Rank A = 3 + N x Q x 0.3
Rank C = 3 + N x Q x 0.05
Rank D = 2 + N x Q x 0.02

1.2 Service Parts List



RANK	REF.	PART NUMBER	PART NAME	QTY.	REMARKS	SERIAL NUMBER
E	1	114Y5342001A	Software	1	Main unit software	
E	2	340N0205	Knob	2	For LCD stand	
E	3	357N1405	Table	1	For LCD stand	
E	4	357N1406	Table	1	For LCD stand	
D	5	367N0021	Rubber foot	4	For LCD stand	
E	6	401N0811	Retaining plate	1	For LCD stand	
E	7	357N1428	Table	1	For wall-mounting LCD	
E	8	357N1429	Table	1	For wall-mounting LCD	
D	9.1	813Y0142A/B	Power supply	1	CR-IR346CL Insulating transformer (only for units used in Japan)	
D	9.2	813Y0145A/B	Power supply	1	CR-IR348CL Insulating transformer (only for units used in Japan)	
CR	10.1	849N0067A	Monitor display	1	LCD (9415TD15/G2)	Functional repair
CR	10.2	849Y0094/A	Monitor display	1	LCD (9416TD15/H2 or 9416 TD15/H2-1)	Functional repair
CR	10.3	849Y0095	Monitor display	1	LCD (L350P-TS (black))	Functional repair
D	11	852N0022A	Image Reader	1	MCR-JIS	
D	12	852N0023A	Image Reader	1	BCR	
D	13	852N0024A	Image Reader	1	MCR-ISO	
E	14	357N1408	Table	1	For wall-mounting MCR	
CR	15	113Y1405A	PEI01A	1	E-i/f serial board	
CR	16	113Y1502A	PSI04A	1	Serial i/f board	
E	17	136Y5869A	FCR i/f Cable	1	5m	
E	18	136Y5870A	FCR i/f Cable	1	15m	
E	19	136Y5871A	FCR i/f Cable	1	30m	
E	20	136Y5872A	FCR i/f Cable	1	45m	
E	21	136Y5873A	FCR i/f Cable	1	60m	
E	22	136Y5874A	FCR i/f Cable	1	100m	
E	23	136Y5875A	FCR i/f Cable	1	150m	
E	24	136Y5868A	Conversion cable	1	1.2m	
E	25	136Y5757	Cable	1	CL - RIS OP-09/VH-05 RIS terminal 3m (D-sub 9pin)	
E	26	136Y5758	Cable	1	CL - RIS OP-09/VH-06 RIS terminal 5m (D-sub 9pin)	
E	27	136Y5759	Cable	1	CL - RIS OP-09/VH-07 RIS terminal 10m (D-sub 9pin)	
E	28	136Y5760	Cable	1	CL - RIS OP-09/VH-08 RIS terminal 15m (D-sub 9pin)	
E	29	136Y5761	Cable	1	CL - RIS/X-ray OP-09/VH-01 3m for RIS terminal/X-ray equipment connection (D-sub 25pin)	
E	30	136Y5522	Cable	1	CL - RIS/X-ray OP-09/VH-02 5m for RIS terminal/X-ray equipment connection (D-sub 25pin)	
E	31	136Y5523	Cable	1	CL - RIS/X-ray OP-09/VH-03 10m for RIS terminal/X-ray equipment connection (D-sub 25pin)	
E	32	136Y5524	Cable	1	CL - RIS/X-ray OP-09/VH-04 15m for RIS terminal/X-ray equipment connection (D-sub 25pin)	
E	33	357S0024	Rack	1	For the BCR	
E	34	347N1785	Bracket	1	Spacer (exclusively for 9416TD15/H2-F)	
E	35	136Y8551	Cable	1	Hospital grade (only for units used in Japan), 136Y8550+fastener	
E	36	136Y8546	Cable	1	Hospital-grade option (only for units used in Japan)	

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CR-IR346CL Service Manual

IN-A: Installation – One RU Connection

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	Pages I, II, i, ii, 2~5, 8~10, 12, 13, 15, 17~24, 26~28, 30~35, 37~42, 46~50, 52~54, A1-1~4, A2-1, A3-1, A3-3, A4-1, A4-2, A4-7, A5-2~4, A6-1~3, A7-1, A7-3, A7-4, A8-1~8, A9-1~4, A10-1~4
12/10/2000	00	Changes in pagination (FM2950)	Pages 6~7, 11, 14, 16, 25, 29, 36, 43~45, 51, 55, 56
04/10/2001	01	Previous Chapter A “Installation” modified (FM2951)	All pages
05/30/2001	02	Revision for software version A02 and GX150 (FM3027)	I, II, IN-A1~50, Appx IN2-3, Appx IN3-1~Appx IN7-4
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1, 3, 6, 12-16, 18-20, 22, 24, 28, 29, 31, 35, 36, 43, 45, App IN1-1, App IN2-2, App IN3-1, App IN4-2, 3, 6, App IN5-3, 4, 6, App IN6-1~4, App IN7-1~6, App IN8-1~4, App IN9-1, 2
08/30/2001	03	Changes in pagination (FM3125)	23, App IN1-2, 3
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, III, IV, 2, 4, 7, 19, 22-30, 35, 36, 41, 42, App IN1-1, App IN2-1~3, App IN3-1, App IN4-2, App IN5-1~3, 6, App IN8-1~6, App IN9-3, 4
03/20/2002	04	Changes in pagination (FM3297)	20, 31-34, 37-40, 43-48, App IN1-2
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 2, 6, 8, 10, 12, 16-19, 21-24, 30, 34, 48
07/20/2002	05	Changes in pagination (FM3428)	13-15, 20, 25-29, 31-33, 35-47

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1. CL Installation Conditions

This section states the PC (controller: DELL OptiPlex GX150) installation conditions.

◆ ***NOTES*** ◆

Listed below are the abbreviations adopted in this chapter.

- *Application : AP*
- *Local printer : LP*
- *CR-IR346CL : CL*
- *CR-IR346RU : RU*
- *CL config data : CL-Config*
- *RU config data : RU-Config*

For the dimensions and weights of the monitor and peripherals, see the respective manuals that are supplied with them.

1.1 Dimensions and Weight

- Dimensions (width × height × depth)
  390 × 108 × 431 (mm)
- Weight
  Approx. 9.5 kg

1.2 Temperature and Humidity

Condition	Temperature	Humidity
Operating	10°C to 35°C	20% to 80% RH (non-condensing)
Non-operating	-40°C to 65°C	20% to 80% RH (non-condensing)

1.3 Places of Installation

■ Environmental conditions

Avoid installing the machine at the following places:

- Places where the temperature changes drastically
- Places near heaters or other heat sources
- Places where the machine is likely to be wet or submerged
- Places where the machine is likely to come into contact with any corrosive gas
- Dusty or dirty places
- Places where the machine is subjected to constant vibration or shock
- Places where the machine is subjected to excessive vibration or shock
- Places exposed to direct sunlight

Also, be sure that the monitor is not installed at the following places:

- Places where the monitor is surrounded, such as in a rack case
- Places whether the display surface is exposed to direct sunlight
- Places near a transformer, another monitor, a power line, or a 0.02 Gauss or more of AC magnetic field

1.4 Power Requirements

Power voltage/capacity	Remarks
100 VAC / approx. 0.11 kVA	Supplied from a 100 VAC wall outlet
Phase:	Single phase
Power frequency:	50/60 Hz
Grounding:	Ground resistance: 100Ω or less

2. Starting/Exiting the Service Utility

This section explains about the procedures for starting/exiting the Service Utility, which is used as a service utility tool during CL installation.

■ Startup procedure

The procedure for starting the Service Utility varies depending on whether the CL-PC power is ON or OFF.

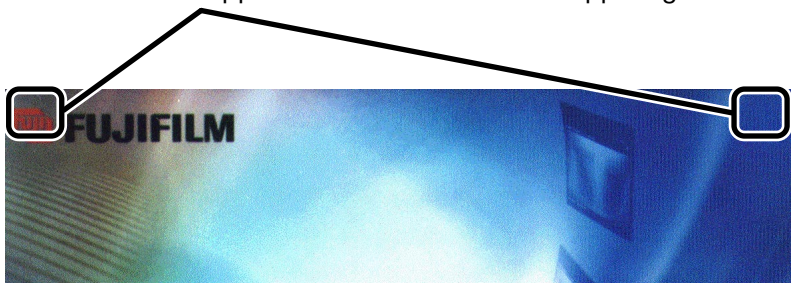
- When the PC power is OFF

1. **Turn ON the PC power.**

➔ Windows 2000 starts up. After about one minute, the CL-AP starts.

2. **When the initial window opens, sequentially click its upper left and upper right corners within a few seconds.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility starts and then the “IIP Service Utility” window opens.

- When the PC power is ON

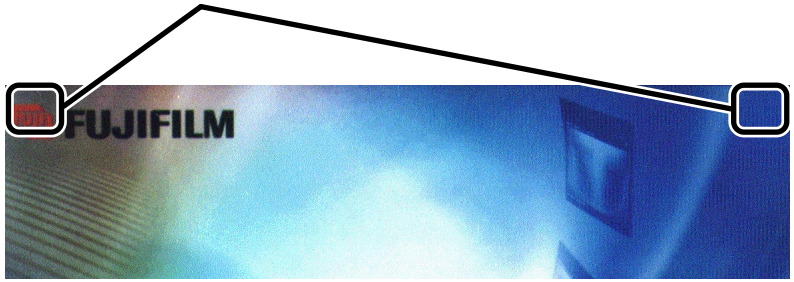
1. **Clicking “Shut Down” in the FUJIFILM menu while the CL-AP is running will display the exit window. Click OK while holding down the <Shift> key.**

2. **From the Start menu, sequentially choose “Programs”, “Fuji Film”, and “FCR”.**

➔ The CL-AP starts in about one minute.

3. **When the initial window opens, sequentially click its upper left and upper right corners within a few seconds.**

Click the upper left corner and then the upper right corner.

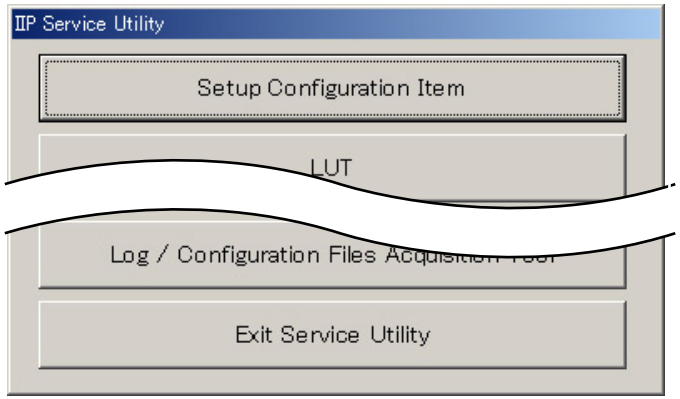


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➔ The Service Utility starts and then the “IIP Service Utility” window opens.

■ Exit procedure

1. **Click [Exit Service Utility] on the "IIP Service Utility" window.**



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➔ The system returns to the desktop screen.

3. Installation Procedure Overview

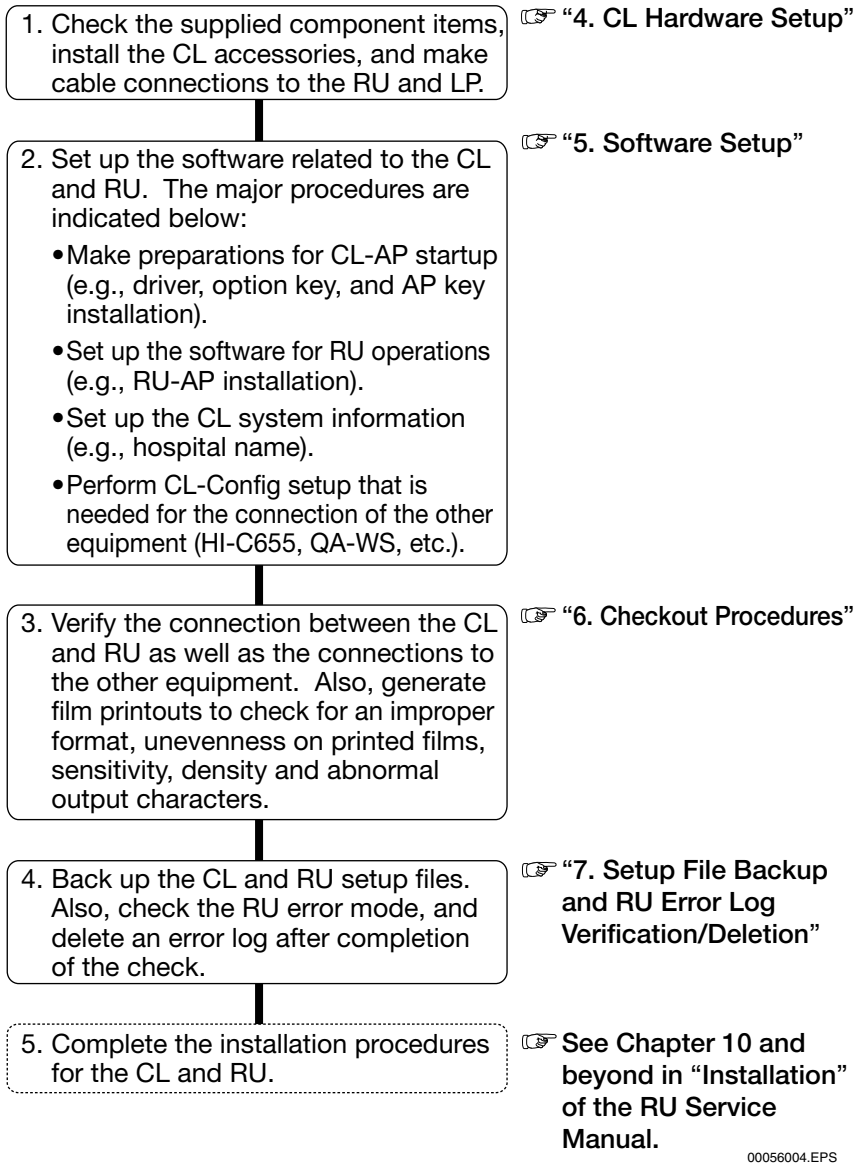
➤ *IMPORTANT*

Be sure that the following equipment is completely installed and set up.

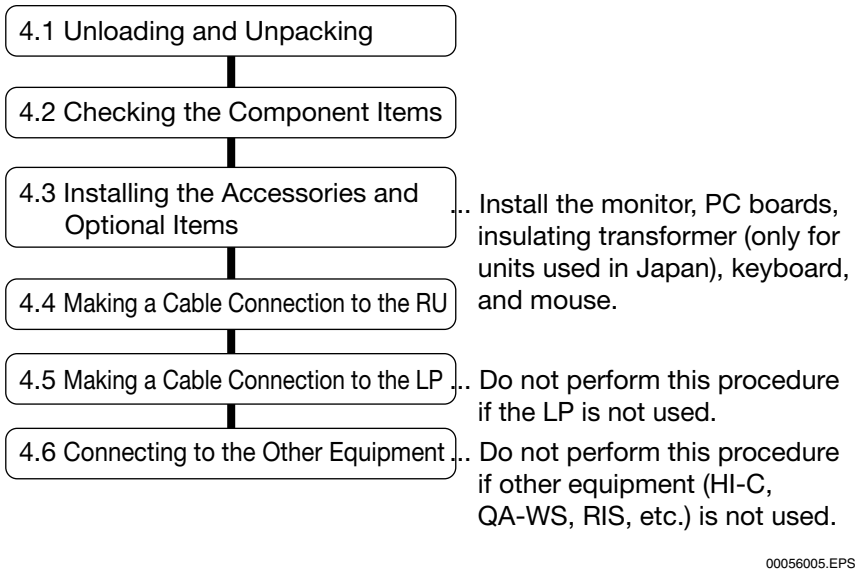
- *CR-IR346RU*
  ☞ *See Chapters 1 to 8 of "Installation" of the RU Service Manual.*
- *Other equipment (LP, FN-PS551, HI-C655, RIS, etc.)*
  ☞ *See the installation instructions set forth in the respective service manuals.*

➤ *IMPORTANT*

- *Have on hand a CD-R disk that stores the CL's AP key (114Y5342002A), which is distributed for use in servicing.*
- *Use the AP key of version A00 or later.*



4. CL Hardware Setup



4.1 Unloading and Unpacking

Remove the following items from the packing box.

- PC (controller: DELL OptiPlex GX150)
- Monitor
- Insulating transformer (only for units used in Japan)
- Others (options, etc.)

◆◆ CAUTIONS ◆◆

When unloading, transferring, and unpacking the machine, observe the following precautions:

- ***Do not subject the machine to vibration or shock.***
  If the machine is unduly vibrated or shocked while it is unloaded or transferred, it may become damaged or defective.
- ***Avoid moisture condensation inside the machine.***
  If the machine is subjected to a drastic temperature change when it is transferred or unpacked, moisture condensation may occur inside the machine. If you turn ON the machine while moisture is condensed on its inner surface, the machine may become defective. To avoid such a problem, be sure to allow the machine to stand at a room temperature for a period of 1 hour or longer and then turn ON the power.

4.2 Checking the Component Items

Check that the following component items are fully supplied.

■ PC box

(Product code : IR 346 CL A⋆-A⋆⋆)

- PC
- Keyboard
- Mouse
- Power cable
- CL-AP (CD-ROM)
- XG-1 Standard Key Software (CD-ROM)

☞ For details of the component items, see the documentation supplied with the PC.

■ Monitor box

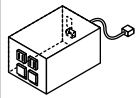
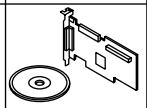
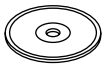
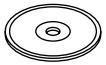
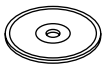
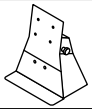
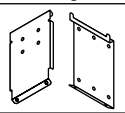
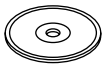
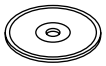
(Product code : IR 346 DISPLAY LCD (15" monitor with the touch panel) or IR 346 DISPLAY CRT 17 IN (17" CRT monitor))

- Monitor
- Monitor cable
- Serial cable (only for the 15" monitor with the touch panel)
- Touch panel driver CD (only for the 15" monitor with the touch panel)

☞ For details on the component items, see the documentation supplied with the monitor.

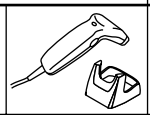
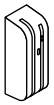
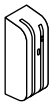
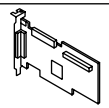
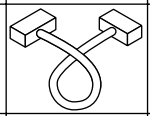
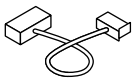
☞ When a Super Resolution LCD Monitor SL-IC300 is used, see the SL-IC 300 Service Manual to check the component parts.

■ Others (separately packed items, options, etc.)

Description		Product abbreviation	Qty.	Remarks*1
CL insulation power box kit (only for units used in Japan)		IR 346 INSULATION BOX	1	
Local print key CD E-i/f board (PEI01A)		IR 346 LOCAL PRINT	1 each	B, O
DICOM print key CD		IR 346 DICOM PRINT	1	B, O
FINP input/output key CD		IR 346 DMS NET-WORK IN-OUT	1	B, O
DICOM CR STORAGE (standard/private) key CD		IR 346 DICOM CR STORAGE	1	B, O
LCD display stand*2		IR 346 LCD STAND	1	O
LCD display wall-mounting bracket		IR 346 LCD BRACKET	1	O
MFP key CD		IR 346 MFP	1	O
Processed-image output key CD		IR 346 DICOM IM PROCESSED	1	O

*1 B: Variation; O: Option
*2 Not required if the monitor type used is EIZO L350P-TS.

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Description		Product abbreviation	Qty.	Remarks*2
Barcode reader (with a rack)		IR 346 BARCODE	1 each	O
Magnetic card reader (JIS)		IR 346 MCR JIS	1	O
Magnetic card reader (ISO)		IR 346 MCR ISO	1	O
Magnetic card reader wall-mounting kit		IR 346 MCR BRACKET	1	O
Serial interface board (PSI04A)		IDT-4 IF BD FOR PCI	1	O
Cable for direct printer connection		ODF/PS IF CABLE nM*1	1	O
E-i/f conversion cable (1.2 m)		MF-PS 667/DMS IF CBL	1	O

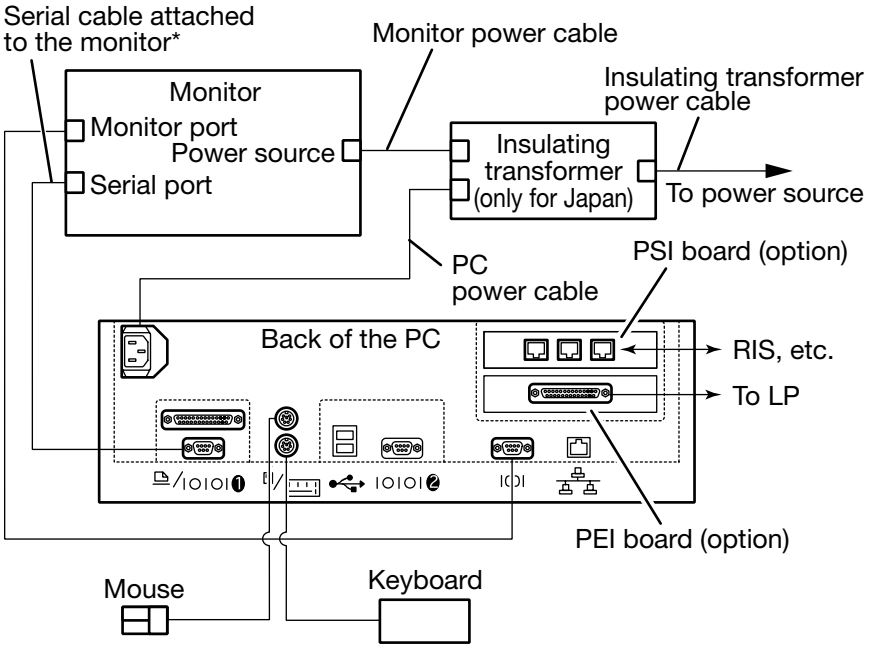
*1 n: Cable length
*2 O: Option

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4.3 Installing the Accessories and Optional Items

Connect the boards (options), insulating transformer (only for units used in Japan), keyboard, mouse and monitor to the PC as illustrated below:

● For GX110



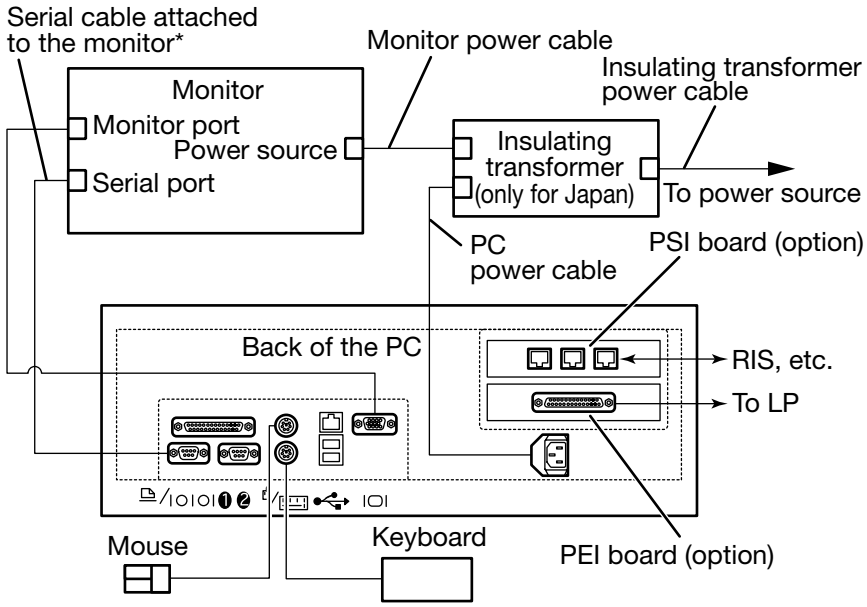
* Only when the 15" monitor with the touch panel is used.

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◆ ***NOTE*** ◆

Of the two serial ports provided on the PC, be sure to use the No.1 serial port ( ).

● For GX150



* Only when the 15" monitor with the touch panel is used.

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◆ ***NOTE*** ◆

Use the first serial port of the two that are provided on the PC.

4.3.1 PC Boards

To attach optional boards, observe the procedures described herein.

- PEI board (optional)
- PSI board (optional)

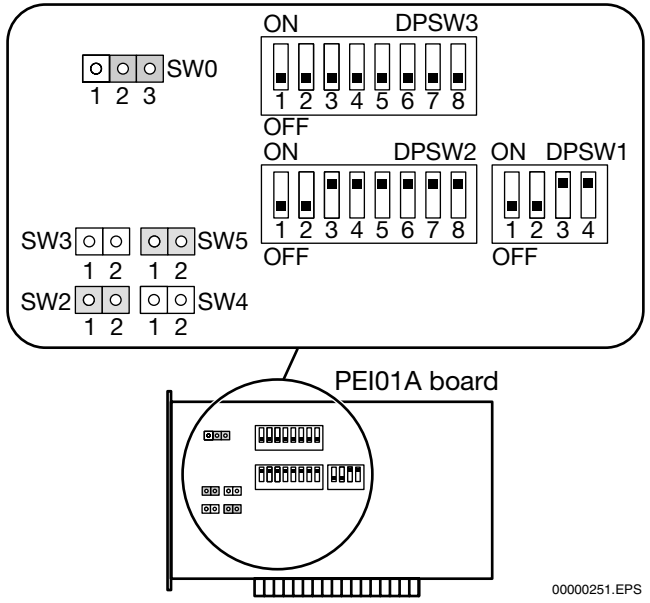
☞ For how to verify setup of and attach the PSI board, see "1. Hardware Setup", under "CL + RIS/IDC4 (ID Online)" in "OE7: Connection between CL and Other Equipment".

1. Check that the switches on the PEI board are properly set. If their settings are incorrect, correct them accordingly.

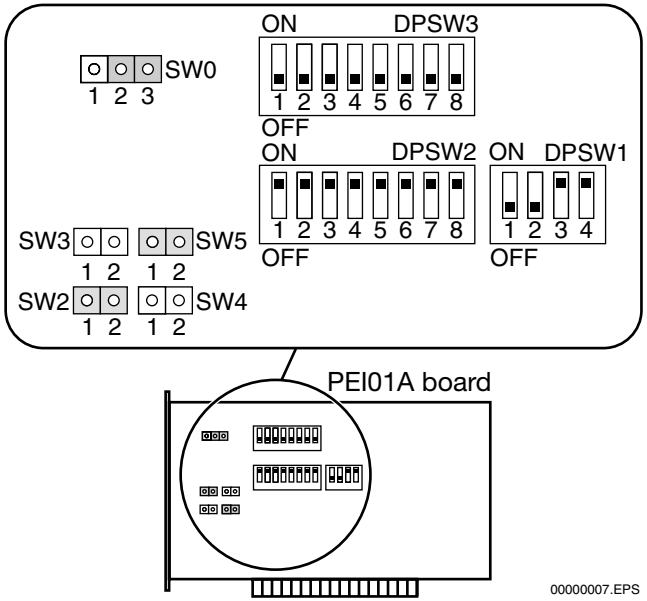
◆ *NOTE* ◆

When no remote signal is to be sent to the printer, turn OFF all the DPSW1 switches.

- When connecting the CR-LP414N/FL-IM2636N or FL-IM3543N/FL-IM3543MN
  - DPSW1 1 and 2: OFF; 3 and 4: ON
  - DPSW2 1 and 2: OFF; 3 to 8: ON
  - DPSW3 1 to 8: OFF
  - SW0 2 and 3 short-circuited.
  - SW2 and SW5 1 and 2 short-circuited.
  - SW3 and SW4 Jumpers removed.



- When connecting printers other than those mentioned on the left side
  - DPSW1 1 and 2: OFF; 3 and 4: ON
  - DPSW2 1 to 8: ON
  - DPSW3 1 to 8: OFF
  - SW0 2 and 3 short-circuited.
  - SW2 and SW5 1 and 2 short-circuited.
  - SW3 and SW4 Jumpers removed.

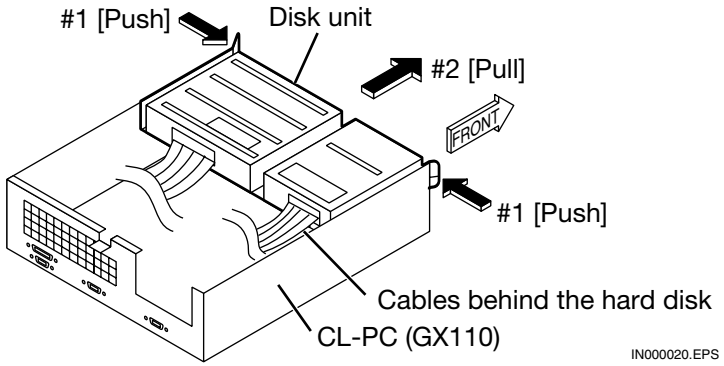


2. Mount a PEI board in a PCI slot.

- For GX110

I. Remove the CL-PC cover.

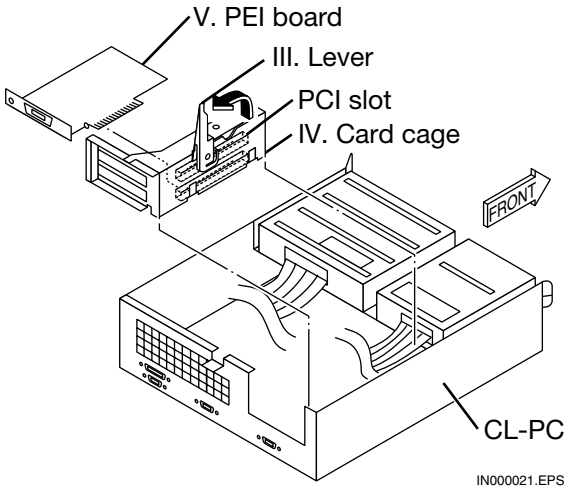
II. When the card cage is removed, its PC board interferes with a cable behind the hard disk. A workaround is to slightly pull the disk unit on the front of the CL-PC toward you before removing the card cage.



III. Raise the lever as illustrated by the arrow.

IV. Remove the card cage.

V. Mount a PEI board in the lower PCI slot.



VI. Mount the card cage in the CL-PC.

VII. Restore the disk unit.

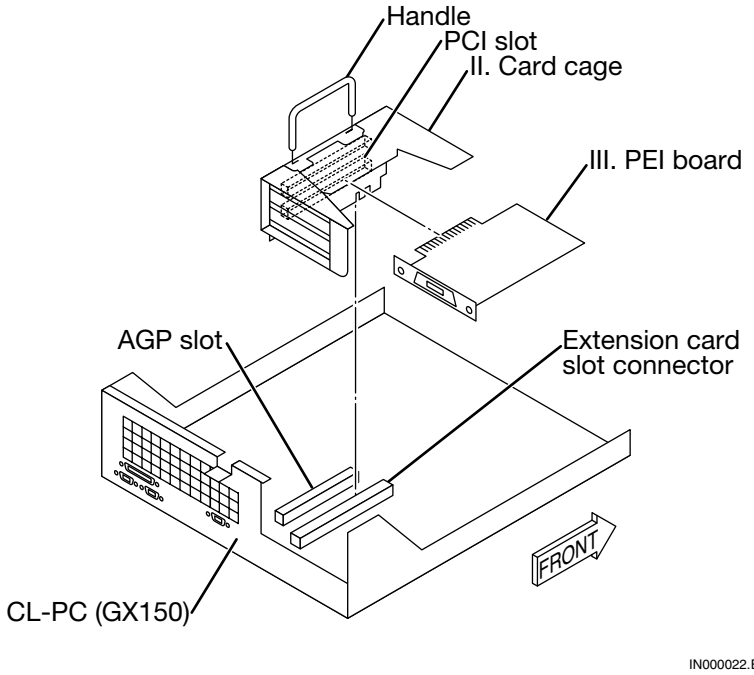
VIII. Reinstall the CL-PC cover.

- For GX150

I. Open the CL-PC cover.

II. Holding the card cage handle, remove the card cage.

III. Mount a PEI board in the lower PCI slot.



IV. Mount the card cage on the CL-PC.

V. Close the CL-PC cover.

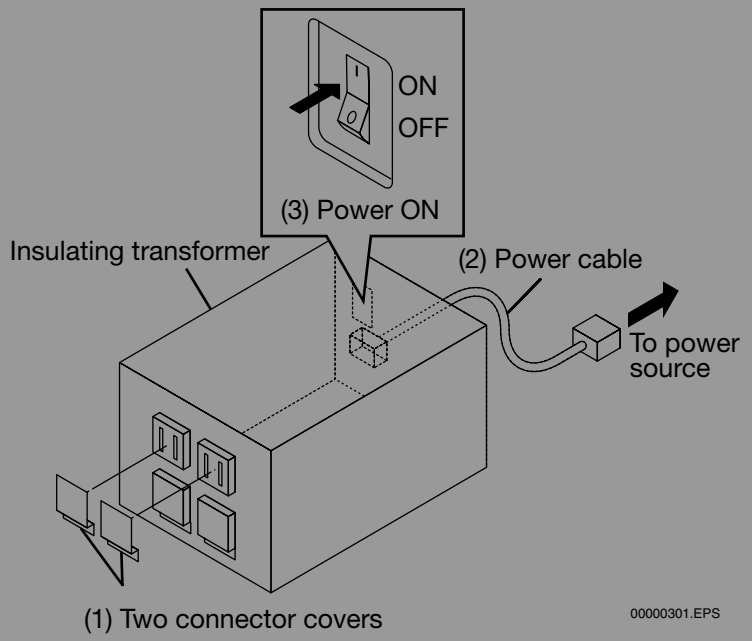
4.3.2 Insulating Transformer (procedures required only for units used in Japan)

◆ NOTE ◆

Ensure that the power cables connected to the insulating transformer are for the CL and monitor only.

2. Connect the power cable between the insulating transformer and power source.

3. Turn ON the insulating transformer.



4.3.3 Keyboard, Mouse, and Power Cable

- Procedures followed by equipment used abroad

1. Connect the keyboard, mouse, and power cable to the PC.

☞ For details on the connection procedures, see the documentation supplied with the PC.

2. Connect the power cable to the power source.

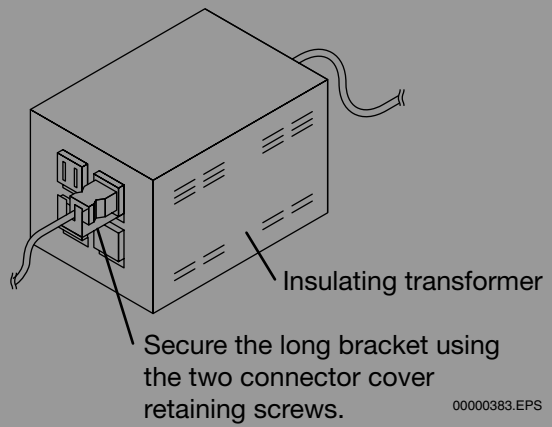
- Procedures followed by equipment used in Japan

1. Connect the keyboard, mouse, and power cable to the PC.

☞ For details on the connection procedures, see the documentation supplied with the PC.

2. Connect the power cable to the insulating transformer.

3. Use the long bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.



➥ REFERENCE

To secure cables, eight brackets (four each of long and short ones) are attached to the insulating transformer.

4.3.4 Monitor

The following monitors can be connected.
The connection procedure varies with the monitor type.

- 15" monitor with the touch panel
- 17" CRT monitor
- Super Resolution LCD Monitor SL-IC300

☞ For the connection procedure of the Super Resolution LCD Monitor SL-IC300, see the SL-IC300 Service Manual.

■ For the 15" monitor with the touch panel

The work procedures will differ depending on the installation method adopted of the monitor.

➥ *REFERENCE*

If the monitor type used is EIZO's L350P-TS, it is stable enough even without optional rack for actual operations. Thus, it is not necessary now for you to mount optional rack.

❍ Installation method 1

To continue to use the monitor rack, perform step 1. thereafter.

❍ Installation method 2

To replace the monitor with a wall-mounting type monitor, replace first the bracket with a wall-mounting type (option). Perform then step 1. thereafter.

☞ When using the wall-mounting bracket, see "Appendix 7 Attaching the Monitor Wall-Mounting Bracket [Option]" to replace the monitor rack.

1. Connect the monitor cable and serial cable to the PC.

☞ For details on cable connections, see the documentation supplied with the monitor.

● Procedures followed by equipment used abroad

◆ *NOTE* ◆

Prior to connection of the power cable, connect the serial cable between PC and monitor.
If the power cable is connected before serial cable connection, the touch panel driver may not be installed.

2. Connect the power cable between the monitor and power source.

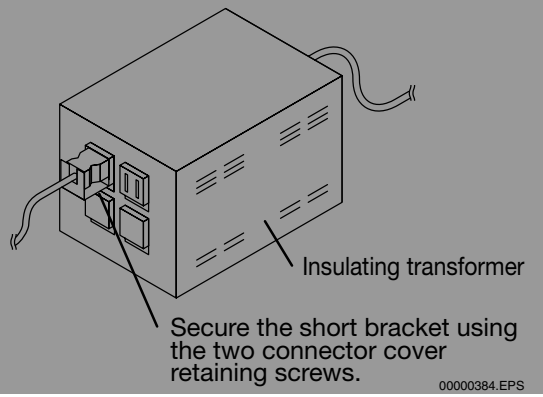
● Procedures followed by equipment used in Japan

◆ *NOTE* ◆

Prior to connection of the power cable, connect the serial cable between PC and monitor.
If the power cable is connected before serial cable connection, the touch panel driver may not be installed.

2. Connect the monitor power cable to the insulating transformer.

3. Use the short bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.



■ For the 17" CRT monitor

1. **Connect the monitor cable between the PC and monitor.**

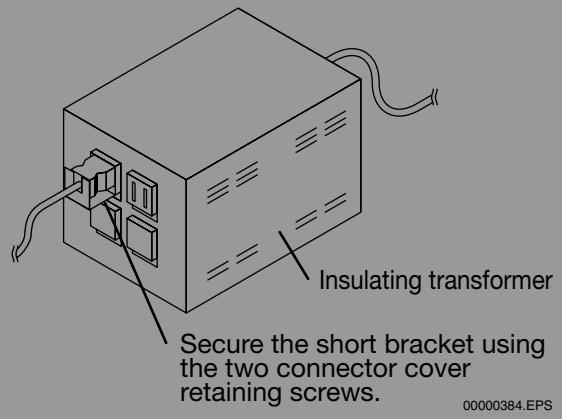
- Procedures followed by equipment used abroad

2. **Connect the power cable between the monitor and power source.**

- Procedures followed by equipment used in Japan

2. **Connect the power cable between the PC and insulating transformer.**

3. **Use the short bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.**

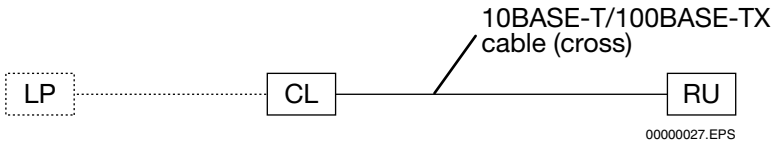


4.4 Making a Cable Connection to the RU

Connect a network cable between the RU and CL.

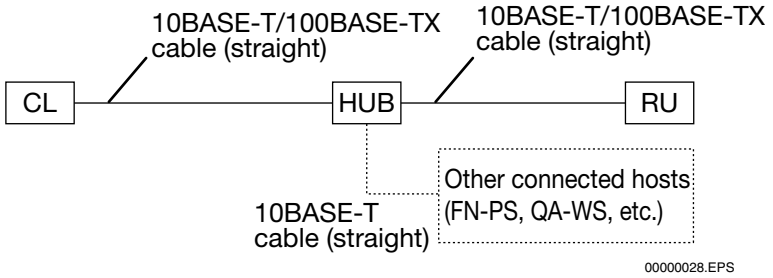
- For the stand-alone type (independent type) RU operation

  Connect a 10BASE-T/100BASE-TX (cross) cable between the RU and CL.



- For the network type RU operation

  With 10BASE-T 100BASE-TX (straight) cables, connect the RU to the CL via a hub.



◆ NOTE ◆

• Even if the CL and RU will eventually be incorporated into the network of a hospital for operation, connect the CL and RU while they are independent of the network (not incorporated into the hospital's network).

• Do not connect the telephone line to the CL and RU network connectors.

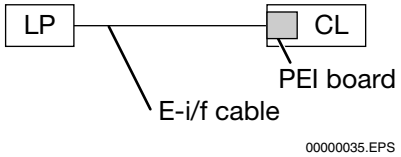
• The IEC950/UL1950-conformed cable is available for this equipment.

➥ REFERENCE

The RU cable connector is located on the lower-left on the rear of the RU main unit.

4.5 Making a Cable Connection to the LP

When using an E-i/f LP, connect an E-i/f cable between the LP and CL.



4.6 Connecting to the Other Equipment

Connect the following equipment to the CL.

- HI-C654/HI-C655/QA-WS/ODF (FINP connection)

  ☞ See “1. Hardware Setup”, under “CL + HI-C/QA-WS/OD-F (FINP : Image Input/Output)” in “OE2: Connecting the CL to Other Equipment”.

- HI-C655/QA-WS/Synapse server/Yokogawa server (only for units used in Japan) (DICOM connection)

  ☞ See “1. Hardware Setup”, under “CL + HI-C655/QA-WS (DICOM CR Storage)” in “OE3: Connecting the CL to Other Equipment”.

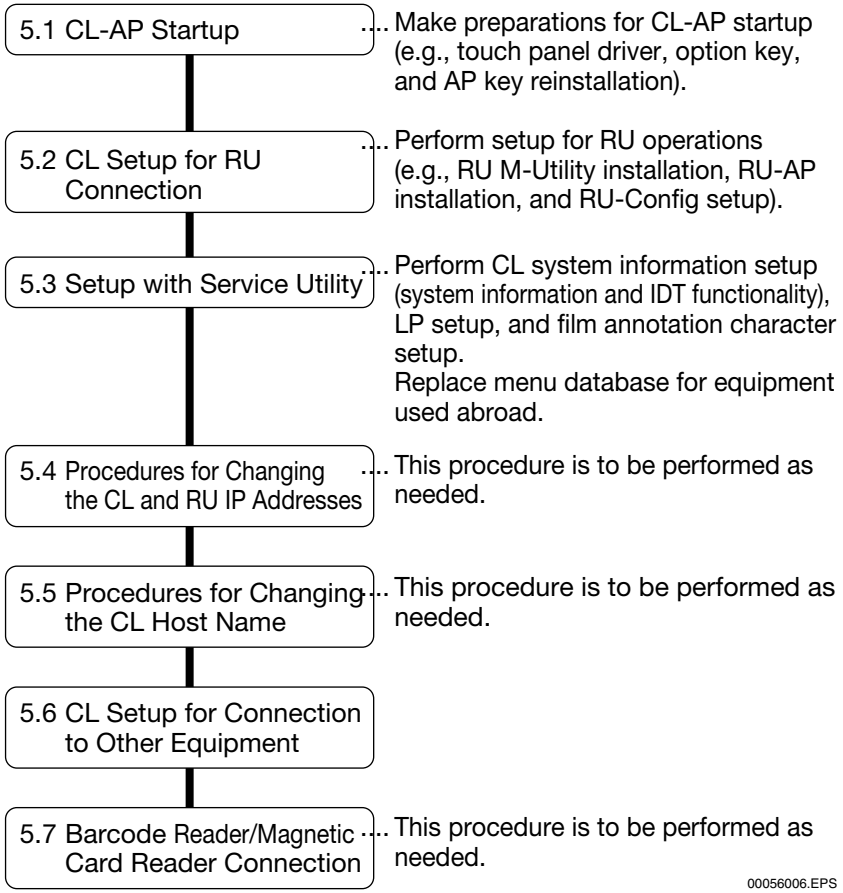
- Other manufacturer’s equipment (DICOM CR Storage connection)

  ☞ See “1. Hardware Setup”, under “CL+Other (DICOM CR Storage: transfer of processed images)” in “OE4: Connecting the CL to Other Equipment”.

- DRYPIX, FM-DP L (DICOM Print)

  ☞ See “1. Hardware Setup”, under “CL + FN-PS551/DRYPIX/FM-DP L (DICOM Print)” in “OE5: Connecting the CL to Other Equipment”.

5. Software Setup



5.1 CL-AP Startup

The following procedures must be performed for CL-AP startup:

- OS startup
- OS setups
- Touch panel driver installation
- Option key installation
- AP key reinstallation
- CL-AP startup verification

➥ *REFERENCE*

The following OS setup and software installation steps are completed at factory prior to shipment:

● *CL setup steps*

- *CL IP address (172.16.1.20)*
- *Subnet mask (255.255.0.0)*
- *CL host name (CLxxxxxxxx: 8 lowest digits of a manufacturer's serial number in the xxxxxxxx position)*
- *Administrator password setup (fcr-iip)*
- *Display setup (screen saver, screen resolution, etc.)*
- *MS-IME setup (only for units used in Japan)*
- *CL-AP (MSDE and SQL included) installation*
- *XG-1 Standard Key Software installation*
- *AP key installation*
- *Image database initialization*

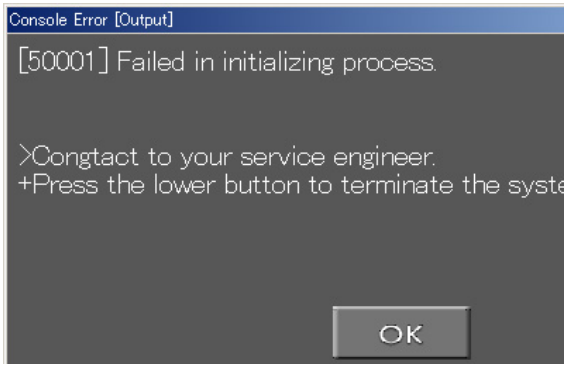
● *RU setup steps*

- *FTP server configuration and setup*
- *RU information registration for CL-Config (host name, IP address, and connected equipment information)*

5.1.1 OS Startup

1. Turn ON the PC power.

➔ The following error display opens 10 seconds after CL-AP startup.



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➤ *IMPORTANT*

The above error display opens because an output system (print or image transfer) option key has not been installed/set up when the equipment was newly installed.

☞ *For error details, see "3.4 Precautions to be Observed During the Use of Output Options" under "MT: Machine Troubleshooting".*

2. Click OK.

➔ The error display opens again in about 20 seconds.



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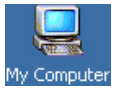
3. Click OK.

➔ The system returns to the desktop screen.

5.1.2 OS Setups

Perform the following OS-related setups.
- Setting the date, time and time zone.
- Defining the character to be used as a decimal point [applicable only to part of the area where the English software is used.]

■ Setting the date, time, and time zone

1. Double-click 

on the desktop.

➔ The "My Computer" window opens.

2. Double-click 

.

➔ The "Control Panel" window opens.

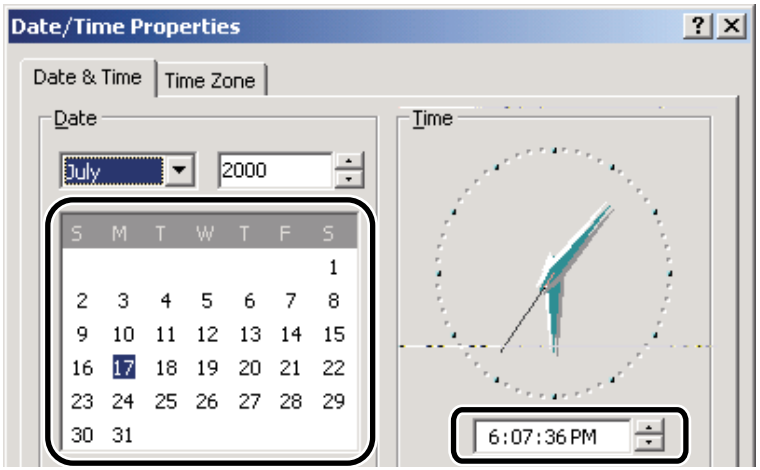
3. Double-click 

.

➔ The "Date/Time Properties" window opens.

4. Verify the date and time.

If the date and time indicated are incorrect, correct them accordingly and then click Apply.



00000115.EPS

5. Click Time Zone.

6. Verify the time zone setting.

If the setting is wrong, correct it and then click Apply.



00000117.EPS

7. Click OK.

➔ The system returns to the desktop screen.

8. Close the “Control Panel” window.

■ Defining the character to be used as a decimal point

Select “.” (period) as the character to be sued as a decimal point.
If anything other than a period is selected, an error occurs when you select an image distribution destination with the QA function.
This setup is applicable only to part of the area where the English software is used.

☞ For details of the setup procedure, see “■ Defining the character to be used as a decimal point” in “2.3 Setting the OS” under “RI: Reinstalling the Software”.

5.1.3 Touch Panel Driver Installation [Skip this procedure if the 15" monitor with a touch panel is provided.]

When the 15" monitor with the touch panel is going to be used, it is necessary to install the touch panel driver and adjust the touch panel.

■ Installing the driver

1. Insert the driver CD-ROM into the CD-ROM drive.

☞ To install the touch panel driver using the FD, see “Appendix 1 Installing the Touch Panel Driver [Option]”.

- For the previous-version CD-ROM

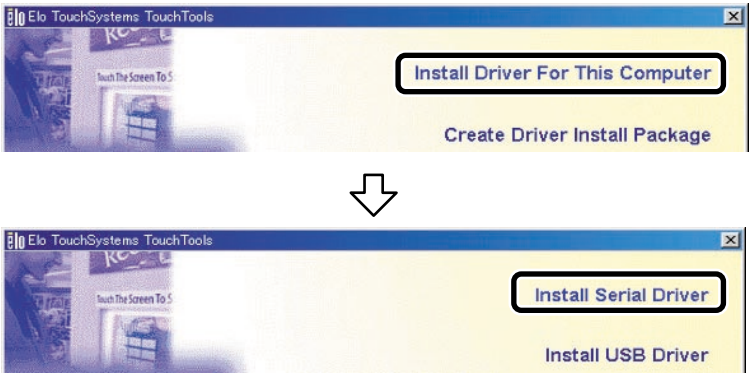
When the CD-ROM is inserted into the CD-ROM drive, a window like that shown below opens automatically. Click “Install MonitorMouse for Windows 2000”.



IN000105.EPS

- For the new-version CD-ROM

When the CD-ROM is inserted into the CD-ROM drive, a window like that shown below opens automatically. Click “Install Drive For This Computer”. Click then “Install Serial Driver” on another window that opens.



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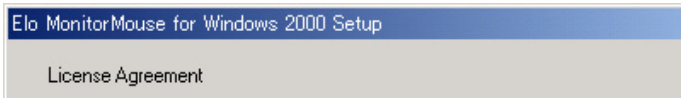
➔ After a while, the “Elo MonitorMouse for Windows 2000 Setup” window opens.



IN000104.EPS

2. Click Next >.

➔ The license agreement window opens.



00000412.EPS

3. Click Yes.

➔ The port selection window opens.



00000413.EPS

◆ ***NOTE*** ◆

An error will occur if the serial cable of the LCD display provided with a touch panel is connected to serial port No. 2.

4. Click Next >.

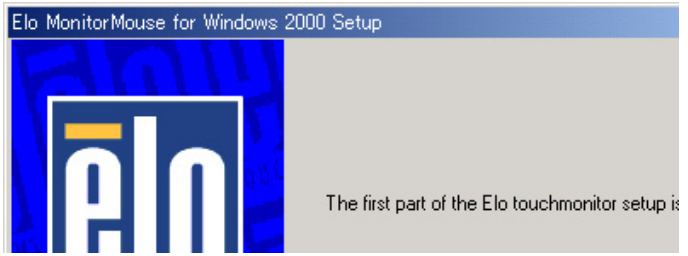
➔ The “Digital Signature Not Found” window opens in several seconds.



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5. Click Yes.

➔ In about one minute, a window opens to indicate the completion of installation.



00000418.EPS

6. Click Finish.

➔ The “Updating System Settings” window opens.

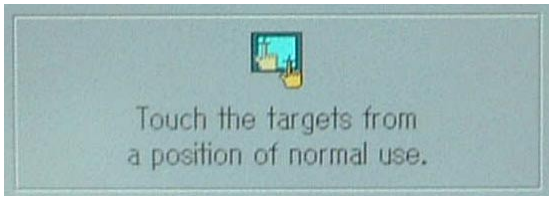
7. **Remove the CD-ROM from the PC’s drive.**

8. Click Yes.

➔ The PC restarts. The touch panel adjustment window will then opens automatically.

◆ ***NOTE*** ◆

Start adjusting the touch panel as soon as the window below has opened, otherwise it will close with the touch panel left unadjusted.



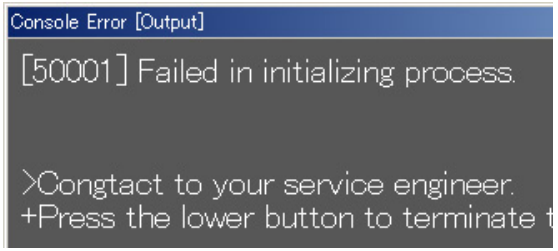
00000422.EPS

■ Adjusting the touch panel

◆ ***NOTE*** ◆

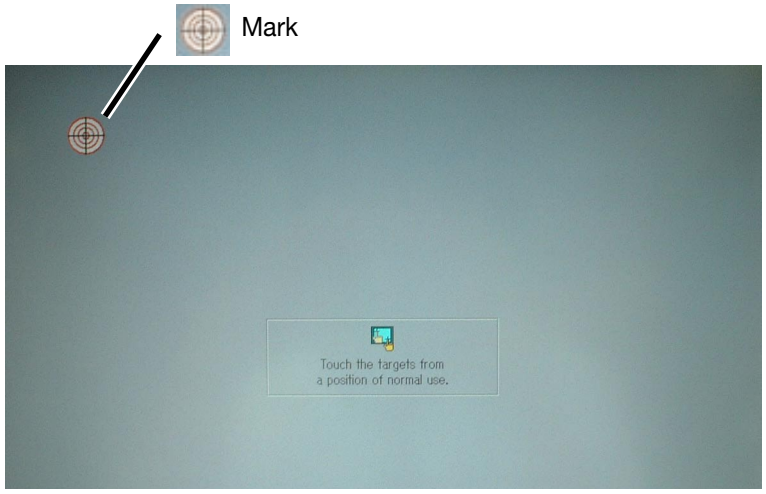
The following window may suddenly open during the touch panel adjustment process. It does not indicate any touch panel adjustment problem.

Click OK *to close the window and then continue with the touch panel adjustment process.*



00000321.EPS

1. With your finger, gently touch the mark at the upper left of the window.



00000227.EPS

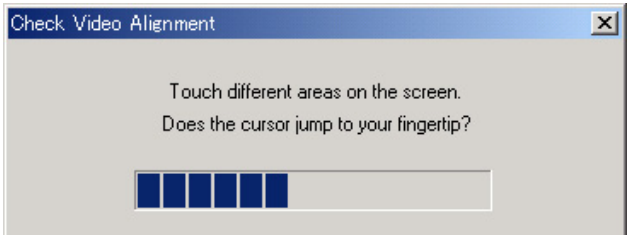
➔ The mark moves to the lower right of the window. (A beep will sound.)

2. Touch the mark gently with your finger.

➔ The mark moves to the upper right of the window.

3. Gently touch the mark again with your finger.

➔ The "Check Video Alignment" window opens.



00000316.EPS

4. Click Yes.

◆ ***NOTE*** ◆

Click Yes *within a period of 30 seconds. Failure to click* Yes *within a 30-second period invalidates the previous adjustments made.*

➔ The "Elo TouchSystems Setup" window opens.

5. Deselect ☑ View Elo Touchscreen control panel. (☑ → ☐) and then click Finish.

➔ The system returns to the desktop screen.

◆ ***NOTE*** ◆

If a window opens to prompt FD insertion, click Cancel.

☞ To set up other functions (e.g. for silencing the alarm sound) of the touch panel, see the documentation for the touch panel driver.

■ Adjusting the contrast and brightness

Adjust the display contrast and brightness as follows.

- Model 9416TD15/H2
  - ❍ Contrast : 127
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 255
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)
- Model 9416TD15/H2-1
  - ❍ Contrast : 65%
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 100%
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)
- Model L350P-TS
  - ❍ Contrast : 80%
  - ❍ Brightness : 80%
    (Press the “Enter” switch on the front of the monitor to adjust the brightness by selecting <Picture Adjustment>, then <Contrast Brightness>.)

5.1.4 Procedure for Avoiding a Password Input Prompt When Exiting the Suspend Mode

By default, the PC prompts for password input when you attempt to exit the suspend mode. Since it is conceivable that the user may inadvertently press the Suspend button on the keyboard, perform the following procedure as needed.

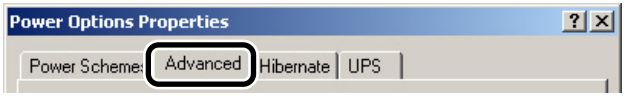
1. **From the Start menu, point to “Settings”, and then click “Control Panel”.**

➔ The Control Panel opens.

2. **Double-click Power Options.**

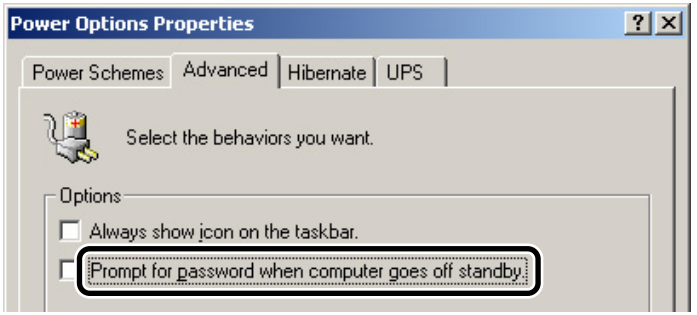
➔ The “Power Options Properties” window opens.

3. **Click the “Advanced” tab.**



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4. **Uncheck** Prompt for password when computer goes off standby. **(☑ ➔ ☐).**



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5. **Click** OK **and then close the Control Panel.**

➔ You are returned to the desktop screen.

5.1.5 Option Key Installation

The following option keys are available. Install necessary option keys in compliance with the CL installation specifications.

➤ IMPORTANT

Either the image input/output function or print output option key must be installed.

If it is not installed, an error display (error code: 50001) will be indicated during CL-AP startup, resulting thus in disabling the CL-AP to be started up.
Moreover, when the "IR346 DICOM CR STORAGE" or "IR346 DICOM PRINT" option key has been installed, be sure to perform config settings that result from Storage or DICOM Print. (This is because an error would occur if only optional key is installed.)

The 50001 error display will be indicated if an output system (for print or image output) option key has not been installed/set up properly.

☞ *For error details, see "3.4 Precautions to be Observed During the Use of Output Options" under "MT: Troubleshooting".*

Function	Product Abbreviation	Description
Print output	IR346 LOCAL PRINT	LP (local printer) connection
	IR346 DICOM PRINT	DICOM Print function
Image input/output	IR346 DICOM *2 CR STORAGE	DICOM-based image transmission functions available (Also include a function to transmit unstandardized images to the QA-WS.) Options installed are as follows. • CR Storage SCU (Standard) • CR Storage SCU (Private) ("Private Unstandardized CR Storage" is included in "Private".)
	IR346 DICOM IM PROCESSED	Functions available for processed-image transmission with DICOM The option installed is as follows.*1 • Processed image generation
	IR346 DMS NET-WORK IN-OUT	Function for image transfer (input/output) with FINP Options installed are as follows. • FINP output • FINP input (Supports only the reprint function.)
Image processing	IR346 MFP	MFP image processing

*1 To use this option, the "IR346 DICOM CR STORAGE" option key must have been installed.

*2 You need not to install this option key because it has been installed if the 15" monitor with a touch panel is provided (applicable only for Japan).

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➥ REFERENCE

Each option key is supplied on one dedicated CD-ROM for each product.

The installation procedure is described below.
The same installation procedure applies to all the option keys.

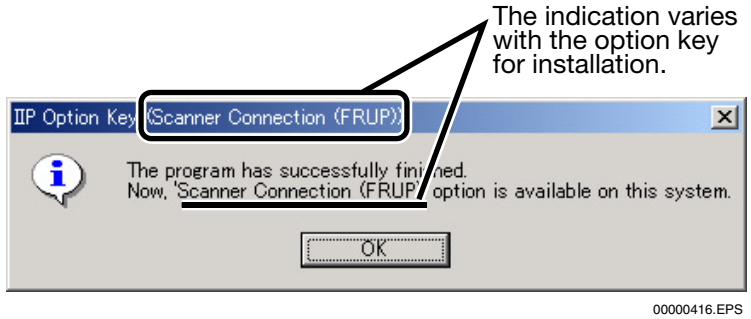
☞ For the option key uninstallation procedure, see “Appendix A Uninstalling the APs” under “RI: Reinstalling the Software”.

1. **Insert an option key CD into the CD-ROM drive.**

➔ The installation start window automatically opens in several seconds.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

◆ ***NOTE*** ◆

Depending on the option for installation, the installation start window will be displayed some times. Perform steps 2. and 3. as well.

4. **Remove the CD from the CD-ROM drive.**

5. **To install other option key, change the CD and repeat steps 2 through 4.**

5.1.6 AP Key Installation

◆ ***NOTE*** ◆

Install the AP key after all option keys have been installed.
This is because once an option key has been installed, the AP key is invalidated requiring thus the AP key to be reinstalled.

➥ ***REFERENCE***

The CL is designed so that the CL-AP can be started up when registry information is generated to define the encryption key.
The associated registry information is generated when the AP key is installed.

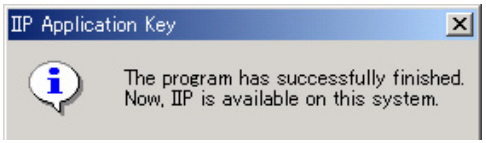
Install the AP key as follows:

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

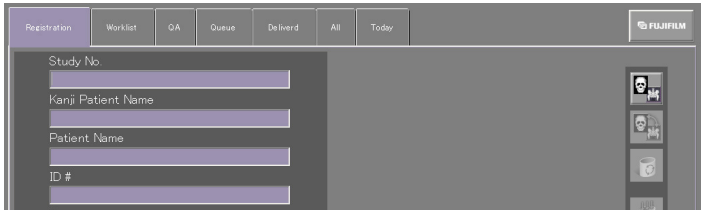
4. **Remove the CD from the CD-ROM drive.**

5.1.7 CL Startup Verification

Verify the normal startup of the CL.

1. From the Start menu, select "Programs", "Fuji Film", and then "FCR".

➔ The CL opening window appears on the display. After about one minute, the CL-AP starts up.



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◆ NOTE ◆

If the above window does not open or an error display appears, note the displayed error code and the applicable remedy, and then make necessary corrections to achieve AP startup.

☞ *See "1. Error Code Table" in "MT: Machine Troubleshooting".*

2. Click Shut Down in the FUJIFILM menu.

➔ The exit window opens.

3. Hold down the <Shift> key and click OK.

➔ The CL-AP exits and the system returns to the desktop screen.

➥ REFERENCE

To shut down the CL-AP only, click [Shut Down] and then [OK] while holding down the [Shift] key.

5.2 CL Setup for RU Connection

The CL is shipped from factory without installing the RU-AP (the RU is installed with the RU-AP). It is thus necessary to install the RU-AP in the CL. To operate the RU, the RU-AP data, etc. must have been installed in the CL.

For installation of the RU-AP, the use of the RU M-Utility is required. The RU M-Utility is a utility (also referred to as the FCR TOOL) that implements RU-AP installation, Config backup and other functions. Since also the RU M-Utility is not installed in the CL prior to shipment, it needs to be installed upon equipment installation.

➥ REFERENCE

The RU-AP and RU M-Utility are included in the CD provided with the RU.

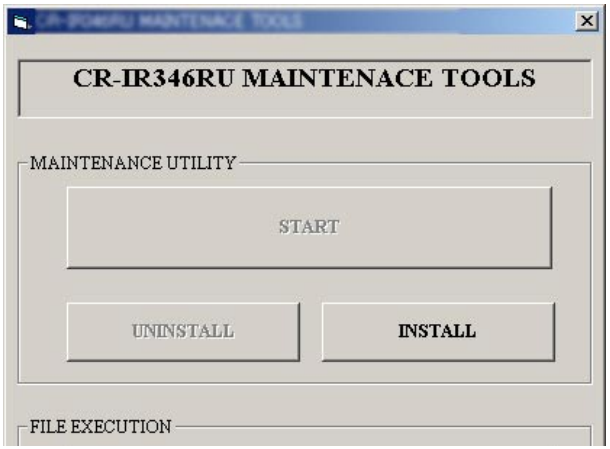
5.2.1 Installing the RU M-Utility

◆ *NOTES* ◆

- *The RU M-Utility installation procedure is described herein on the assumption that the RU application CD-ROM version A07 or later is used for the RU M-Utility (PC-MUTL hereinafter) that is to be installed as follows. A different installation procedure will be required if a version earlier than that mentioned above is used.*
- *Make sure to start the procedure below with the CL-AP quit accordingly.*

1. **Have on hand the CD that is supplied with the RU. Insert this CD into the CD-ROM drive.**

➔ After a while, the following window opens.



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2. Click **INSTALL**.

➔ The RU M-Utility installation start window opens.



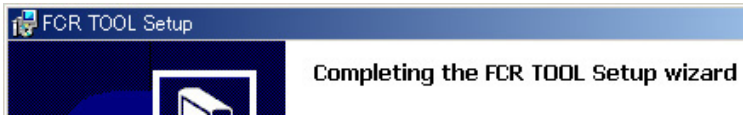
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3. Click **Next >**.

➔ The “FCR TOOL Setup/Read to Install...” window opens.

4. Click **Install**.

➔ After the completion of installation, the “FCR TOOL Setup/ Completing the...” window opens.



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5. Click **Finish**.

➔ The system returns to the “CR-IR 346RU MAINTENANCE TOOLS” window.

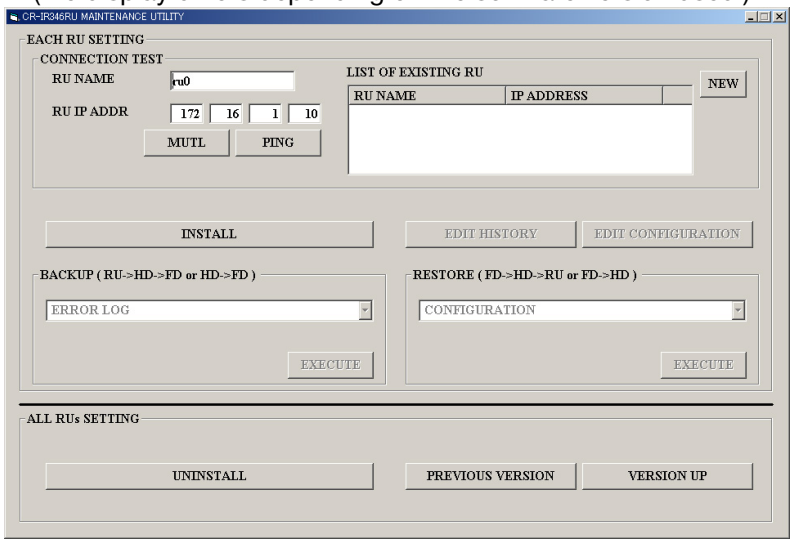


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6. Click **START**.

➔ The “CR-IR 346RU MAINTENANCE UTILITY” main menu window opens.

● Main menu window
(the display differs depending on the software version used.)



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5.2.2 Installing the RU-AP

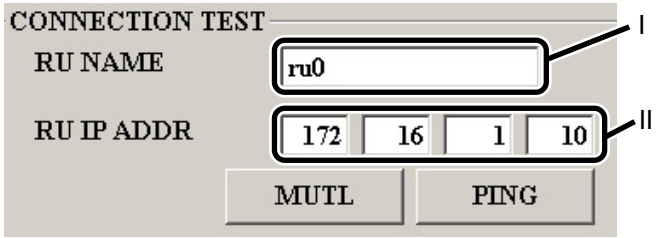
Verify the network connection between the CL and RU, and then install the RU AP in the CL's FTP server.

■ Verifying the network connection between the CL and RU

◆ *NOTES* ◆

- *Make sure that the RU power cable is connected to the breaker and the breaker is turned ON.*
- *Exit all running applications (particularly Explorer) other than the RU M-Utility.*

1. From the main menu, perform the following checks.



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I. Check that the RU host name (ru0) is entered.
II. Check that the RU IP address (172.16.1.10) is entered.

◆ *NOTES* ◆

- *Never change the IP address.*
- *The host name entered here serves as the actual RU host name (it is written in the FLASH ROM as the RU host name).*

2. Click PING.

➔ The process for checking the connection to the RU starts.

3. Verify the network connection to the RU.

The connection is normal if the following message appears four times.

Reply from 172.16.1.10: bytes=32 time<10ms TTL=128

➥ *REFERENCE*

Values for "time<10ms" and "TTL=128" in the message above vary depending on the network status. Connection remains normal even though such values vary.

➥ *REFERENCE*

If the connection to the RU cannot be verified, it is conceivable that the following causes may exist:

- *Improper cable connections → Check the cable connections again.*
- *RU or CL network board problem → Restart the system.*
- *Other*

If you still cannot verify the connection, you can restore the network connection by initializing RU memory to forcibly return the IP address stored in the RU main unit to the default.

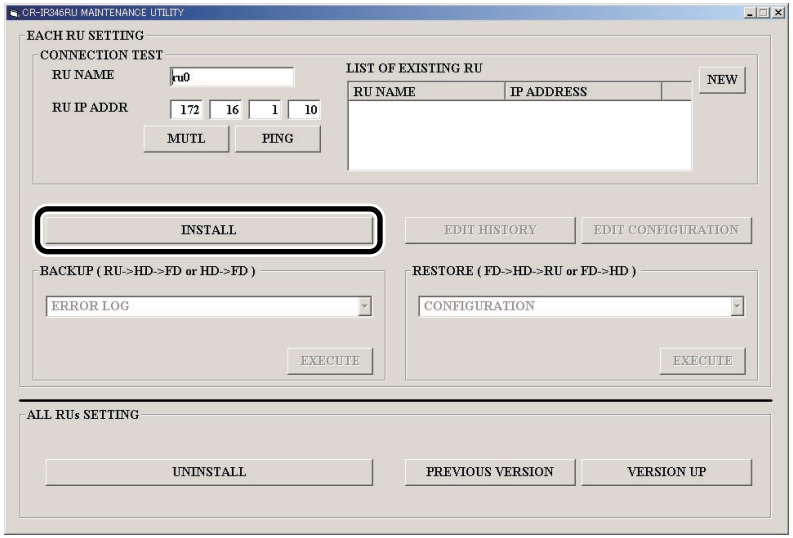
☞ *For details of the procedure to restore the network connection to the CL by initializing memory, see "3.1 CL/RU Connection Recovery Procedure to be Performed upon RU Memory Initialization under "MT: Machine Troubleshooting".*

4. Click the ✕ mark at the upper right corner of the command prompt window.

➔ The system returns to the main menu.

■ Installing the RU-AP

● Main menu window



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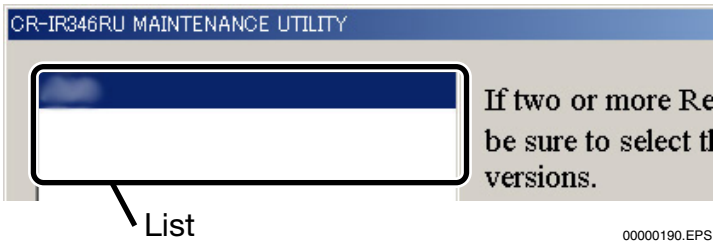
1. Click “INSTALL” on the main menu.

➔ The “Insert the CD-ROM into a drive” window opens.

2. Since the CD carrying the RU-AP is already inserted into the CD-ROM drive, just click OK.

➔ The RU-AP version selection window opens.

3. Select the RU-AP version from the list, and then click OK.



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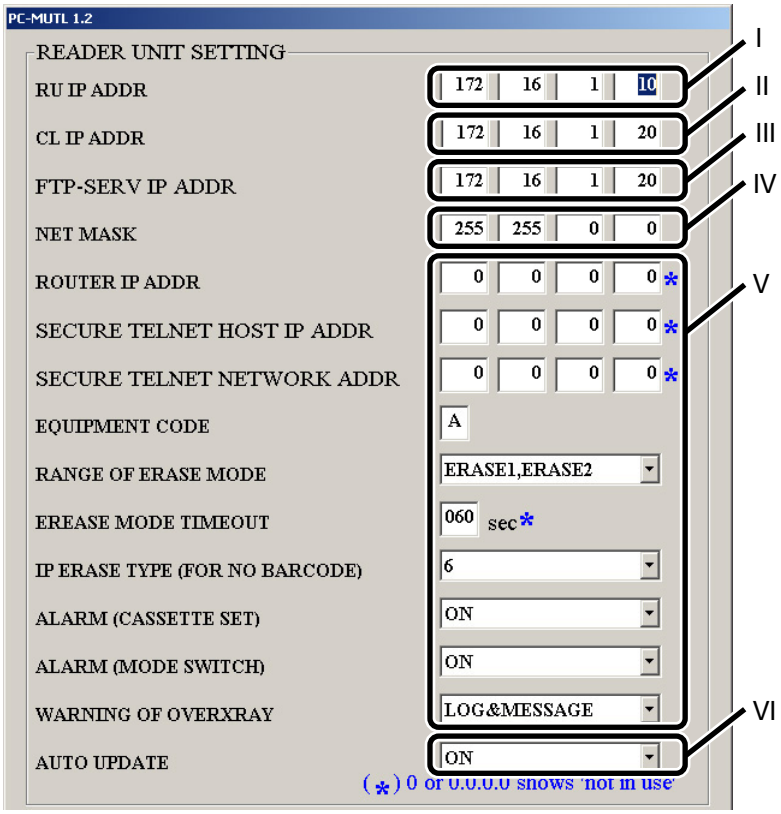
➔ The “READER UNIT SETTING” window opens.

4. Complete the following setup steps:

◆ *NOTE* ◆

The data set up as follows will be written on the RU-Config file and then installed in the RU together with the RU-AP.

☞ *For the procedure used when changing the setup data after installation, see “Appendix 2 Setting the RU Config”.*



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I. Verify that the entry is 172.16.1.10.
II. Verify that the entry is 172.16.1.20.
III. Verify that the entry is 172.16.1.20.
IV. Verify that the entry is 255.255.0.0.
V. Change setup data listed in the table on the right as necessary.

Config Setup Item	Setup Range	Default	Remarks
ROUTER IP ADDR	IP address setup range	0.0.0.0	Route address (Do not change the setup.)
SECURE TELNET HOST IP ADDR	IP address setup range	0.0.0.0	IP address available for the TELNET.
SECURE TELNET NETWORK ADDR	IP address setup range	0.0.0.0	Range of the IP address available for the TELNET.
EQUIPMENT CODE	A–Z	A	Machine serial ID code of the RU. (This code is printed on film.)
RANGE OF ERASE MODE	• ERASE 1 • ERASE 1, ERASE 2	ERASE 1	Specifies the erasure mode range. ERASE 1: Primary erasure can be selected. ERASE 1, ERASE 2: Both primary and secondary erasures can be selected.
ERASE MODE TIMEOUT	0 to 999 (sec)	060	Erase mode timeout setting.
IP ERASE TYPE (FOR NO BARCODE)	• 5, 6 • 6	6	Setup needed if no barcode reader is used. 5, 6: Types V and VI mixed. 6 : Type VI
ALARM (CASSETTE SET)	• ON • OFF	ON	Sets alarm ON/OFF when cassette is inserted. ON : Alarm sounds. OFF: Alarm does not sound
ALARM (MODE SWITCH)	• ON • OFF	ON	Sets alarm ON/OFF when erasure processing is selected. ON : Alarm sounds. OFF: Alarm does not sound.
WARNING OF OVERXRAY	• LOG & MESSAGE • LOG • NONE	LOG & MESSAGE	Selects X-ray over-exposure IP warning method. LOG & MESSAGE: Warning by log and message. LOG : Warning by log. NONE: No warning issued .

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VI. Select “OFF”. (Only for the overseas edition.)

➥ *REFERENCE*

The AUTO UPDATE function will automatically have the RU download RU data from the FTP server if there is a discrepancy between CL FTP server data and RU FLASH ROM data.

☞ *See “5.2 Mechanism of RU-AP/RU Config AUTO UPDATE” in “MD: Machine Description”.*

5. Click SET.

➔ RU-AP installation will start. (It completes within a few minutes.)

◆◆ *CAUTION* ◆◆
(Applicable only for RU-AP version A07 or later.)

The RU panel will be illuminated during the RU-AP installation process. Never turn OFF the power to the RU or press the reset switch at this time, otherwise the RU CPU board can be damaged.

◆ *NOTE* ◆

Do not operate the CL-AP and RU-UTILITY while RU-AP installation is being performed.

6. **After completion of RU-AP installation, click OK when “Completed” is displayed on the window.**

➔ You are then returned to the main menu.

7. **Click the ✕ mark at the upper right corner of the window.**

➔ The system returns to the “CR-IR346RU MAINTENANCE TOOLS” window.

8. Click EXIT.

➔ The system returns to the desktop screen.

9. Remove the CD from the drive.

◆ ***NOTE*** ◆

(Applicable only for RU-AP version A06 or earlier.)

If the RU-AP version installed is A06 or earlier, be sure to start the CL-AP to have the FTP server RU data be downloaded to the RU FLASH ROM.

5.3 Setup with Service Utility

Use the Service Utility to set up the following items:

- CL system information
- IDT functionality
- LP information (required only when an LP is connected)
- Menu database replacement (required only for equipment used abroad)

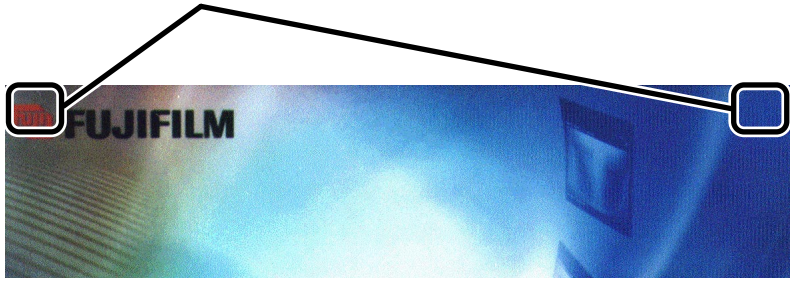
5.3.1 Starting the Service Utility

1. Click Start and then sequentially choose "Programs", "Fuji Film", and "FCR".

➔ The CL-AP starts up.

2. Within a few seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.

Click the upper left corner and then the upper right corner.



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➔ The Service Utility starts. The “IIP Service Utility” window opens.



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➥ ***REFERENCE***

If you cannot complete step 2 from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility.

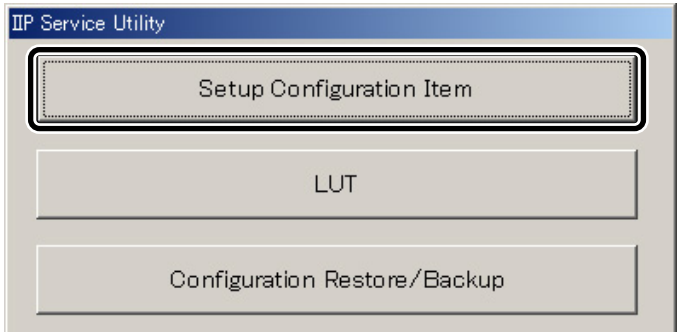
1. *To exit the AP, choose “Shut Down” .*
2. *Click* OK *while holding down the <Shift> key.*
3. *From the* Start *menu, sequentially choose “Programs”, “Fuji Film”, and “FCR”.*
4. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

5.3.2 CL System Information Setup

Complete setup concerning CL system information and IDT functionality as directed in this section.

■ Setting the system information

1. From the “IIP Service Utility” window, click [Setup Configuration Item].



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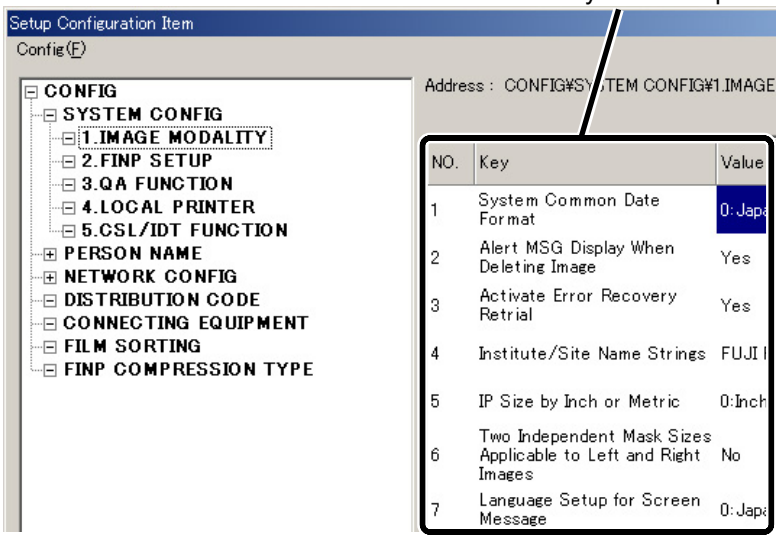
➔ The “Setup Configuration Item” window opens.

2. Click the ⊞ sign within ⊟ SYSTEM CONFIG in the “Setup Configuration Item” window.

3. Click 1.IMAGE MODALITY.

➔ The CL system information setup items appear.

Items for CL system setup



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4. Enter setup data as directed below.

❍ Make a date format selection by double-clicking

0: Japanes date (S62.10.07) for 1 System Common Date Format.

- 0: Japanese date (S62.10.07) [Default]
- 1: ANSI long date (1987.OCT.07)
- 2: ANSI short date (1987.10.07)
- 3: American long date (OCT.07.1987)
- 4: American short date (10.07.1987)
- 5: European long date (07.OCT.1987)
- 6: European short date (07.10.1987)

◆ NOTE ◆

Use "System Common Date Format" to specify the date format. If you change the date format, the following items of information are changed to match the newly selected format.

- *Date output on film*
- *Format for birth date input*
- *Date displayed by CL-AP*
- *Other date indications*

❍ Make a hospital name entry (one-byte characters) by double-clicking FUJI FILM HOSPITAL for 4 Institute/Site Name Strings.

◆ NOTE ◆

Use "Institute/Site Name Strings" to enter a hospital name string of one-byte characters for use in the CL system.

The default hospital name is "FUJI FILM HOSPITAL". Change this entry to a hospital name string of one-byte characters as defined by a specific hospital.

You can enter a string of up to 60 characters.

❍ Set the IP size unit system (inch or metric) for 5 IP Size by Inch or Metric.

◆ NOTE ◆

Set the IP size unit system (inch or metric) that the RU can handle.

❍ Use 7 Language Setup for Screen Message to specify the language to be used.

- 0: Japanese
- 1: English
- 2: German
- 3: French
- 4: Spanish
- 5: Italian
- 6: Swedish
- 7: Finnish
- 8: Danish
- 9: Norwegian
- 10: Korean

❍ Double-click 富士フイルム病院 for 8 Institute/Site Name in Two-Byte Characters to enter a hospital name (consisting of two-byte characters).

◆ NOTE ◆

Use "Institute/Site Name in Two-Byte Characters" to enter a hospital name string of two-byte characters for use in the CL system.
The default hospital name is "富士フイルム病院 ". Change this entry to a hospital name string of two-byte characters as defined by a specific hospital.
You can enter a string of up to 15 two-byte characters.

5. Change the other items of system information as needed.

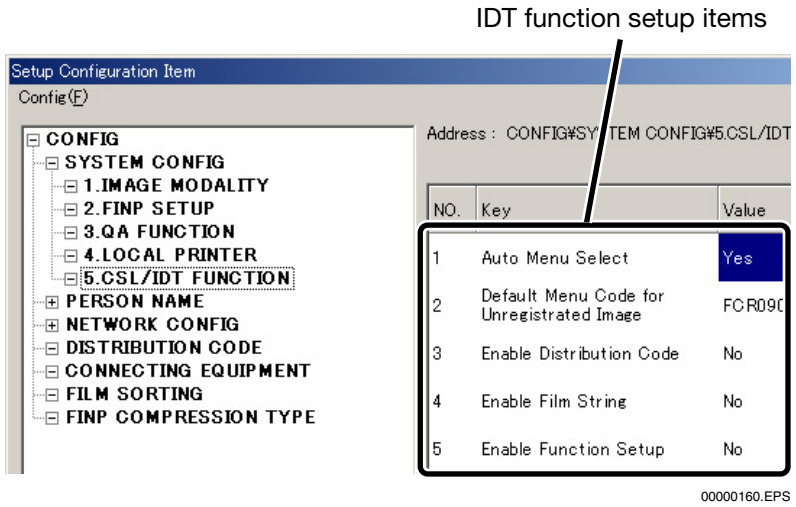
Item number	Description
2	Confirmation window display for examination list deletion
3	Setup of a process to be performed after an abnormality occurrence
6	2in1 format with no masking
14	System ID
15	Password use for user utility access

☞ For details on individual setup items, see "3.4 Config Details-1. IMAGE MODALITY" under "MU: Maintenance Utility".

■ Setting the IDT functionality

1. From the "Setup Configuration Item" window, click 5.CSL/IDT FUNCTION.

➔ The IDT function setup items appear in the right-hand area of the window.



2. Edit the IDT functionality setup as needed.

☞ For details on individual setup items, see "3.6 Config Details-5. CSL/IDT FUNCTION" under "MU: Maintenance Utility".

3. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

4. Click Yes.

➔ The system saves the setup data.

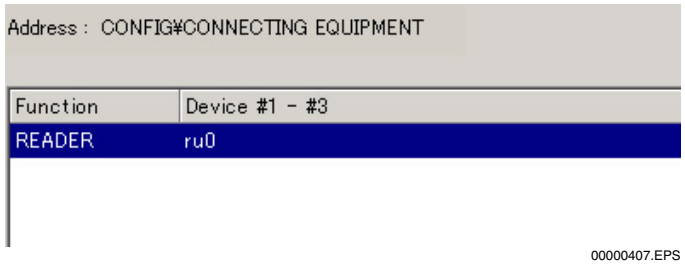
5.3.3 Setting the LP Information

When the LP is connected to the CL, perform the "■ Registering the LP" procedure below.

■ Registering the LP

1. From the "Setup Configuration Item" window, click ⊟ CONNECTING EQUIPMENT.

➔ A list of registered equipment appears in the right-hand area of the window.



2. Click New.

➔ The "FTP CONNECTION" window opens.

3. Perform the following setup steps.

❍ Click the downward arrow mark in the Function : field and select the function (PRINT) of the connected device.

❍ Click the downward arrow mark in the Equipment #1 : field and specify the device (LOCAL).

➥ ***REFERENCE***

If the LP option key is not installed, you cannot choose "LOCAL".

4. Click OK.

➔ You are returned to the "Setup Configuration Item" window.

5. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

6. Click Yes.

➔ The system saves the setup data.

■ Changing the LP system information

If the following printer use is intended, change the LP system information.

❍ When the following old-type printers are used.
CR-LP414N/IM2636N, FL-IM3543N/FL-IM3543MN

❍ When the cable connecting the printer to the CL exceeds 60 m in length.

❍ When the film sort function is to be used.

1. From the "Setup Configuration Item" window, click ⊟ 4. PRINTER.

➔ The LP configuration setup items appear in the right-hand area of the window.

2. Change the LP system information.

☞ For details on individual setup items, see "1. Setup Necessary When Connecting the LP" under "Print Output Function" in "FR1: Function-specific Reference".

3. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

4. Click Yes.

➔ The system saves the setup data.

■ Setting the film annotation character format

Use the following procedures to change the image information output on film, film annotation character format and presence/absence of image frame.

➥ *REFERENCE*

The film annotation character format printed as set by the default is basically the same as that printed by the FCR 5000 series.

☞ *Differences observed between the CL and FCR 5000 series with regard to film output are described in "2.2 Precautions of the Film Annotation Character Format", under "Print Output Function" in "FR1: Function-specific Reference".*

1. From the "Setup Configuration Item" window, click ⊟ 4. PRINTER.

➔ The LP configuration setup items appear in the right-hand area of the window.

2. Set the film annotation character format.

☞ For details on the setup procedure and setup items, see "2. Setup Necessary When Editing the Film Annotation Character Format", under "Print Output Function" in "FR1: Function-specific Reference".

3. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

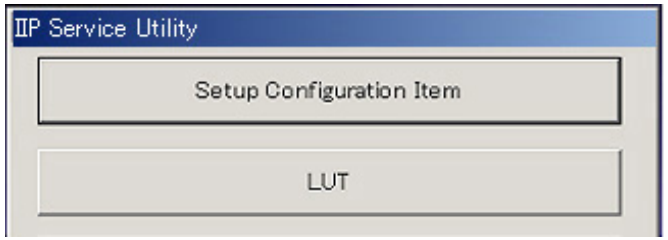
4. Click Yes.

➔ The system saves the setup data.

5.3.4 Optimizing the Monitor Display

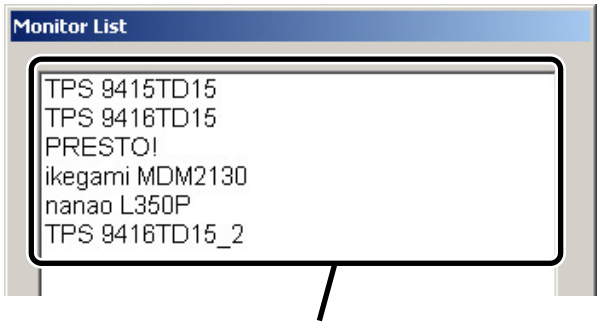
Set the LUT file as follows to optimize the image display of the monitor that is being used.

1. Click [LUT] on the "IIP Service Utility" window.



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2. Select the name of the display monitor that is actually being used and click OK.



Select the connected display monitor type.

IN000031.EPS

- TPS 9415 TD15 : 15" LCD monitor with a touch panel (model TPS9415TD15/G2)
- TPS 9416 TD15 : 15" LCD monitor with a touch panel (model TPS9416TD15/H2)
- PRESTO! : Super Resolution LCD Monitor SL-IC300
- ikegami MDM2130 : Ikegami 1k landscape monitor
- nanao L350P : EIZO 15" LCD monitor with a touch panel (model L350P-TS)
- TPS 9416TD15_2 : 15" LCD monitor with a touch panel (model TPS 9416TD15/H2-1)

➔ You are returned to the "IIP Service Utility" window.

5.3.5 Exiting the Service Utility

1. From the “Setup Configuration Item” window, choose “Close (C)” on the “Config (F)” menu.

➔ The “IIP Service Utility” window opens.

2. Click Exit Service Utility .

➔ The system returns to the desktop screen.

5.3.6 Changing the Menu Database (for non-Japanese versions only)

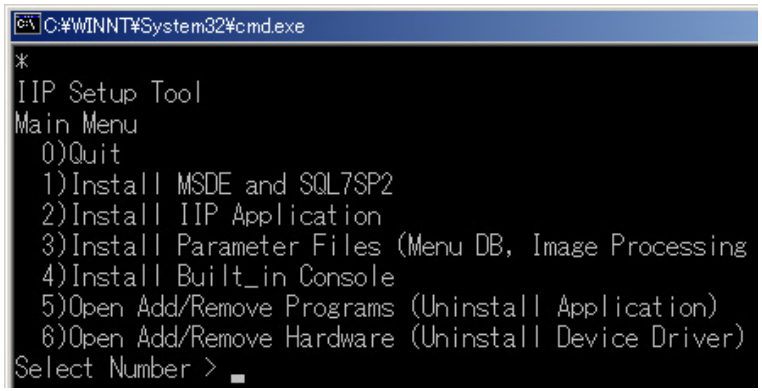
To change the exposure menu to a different language version, it is necessary to change the menu database.
Languages that the A07 version software supports are as follows.

- Japanese
- English
- English (other than U.S.)

The default language setting is “English (other than U.S.)” (only for CL units to be shipped outside Japan). If a setting of “English (other than U.S.)” is to be continuously used, there is no need to change the menu database.

1. Insert the CL-AP CD into the CD-ROM drive.

➔ The “IIP Setup Tool” main menu automatically opens.



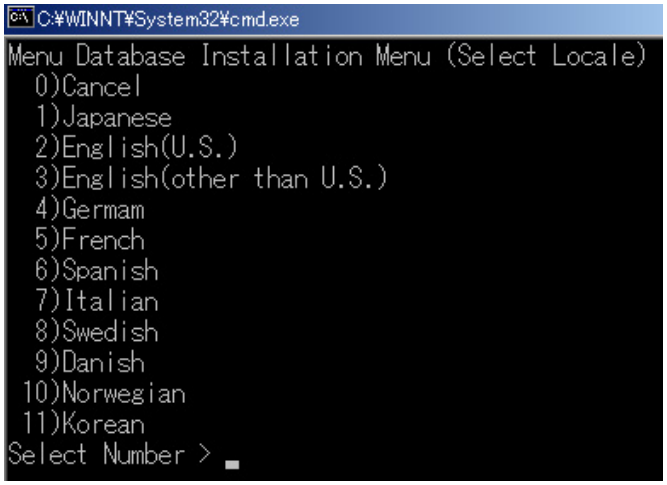
IN000032.EPS

➥ *REFERENCE*

The “IIP Setup Tool” is a utility tool that is used, for instance, to install the CL-AP. This tool is stored on the CD (product name: Application software; part number: 114Y5342001A) that is supplied as a standard accessory for the CL.

2. Enter “3” and then press the <Enter> key.

➔ The language list appears.



00000463.EPS

3. Enter the number of the language to be installed, and then press the <Enter> key.

➔ Several message lines appear during installation. Upon completion of installation, the message “Menu Database installation completed.” appears.

➔ The menu database change procedure is now completed.

4. When an item other than “1) Japanese” has been selected, the three menus, “Cassette”, “Built_in” (for standing position) and “Built_in” (for decubitus position), will be displayed. Select any according to the connected device.

5. Enter “0” and then press the <Enter> key.

➔ The “IIP Setup Tool” exits, returning you to the desktop screen.

6. Remove the CD from the CD-ROM drive.

5.4 Procedures for Changing the CL and RU IP Addresses

This section explains about the procedures for changing the IP addresses for the CL and RU. The IP addresses need to be changed in the following cases.

Case 1: When changing the CL/RU network configuration from the stand-alone type to the network type.

Case 2: When the CL and RU IP addresses need to be changed for hospital network management purposes.

☞ To change the IP address, see “Appendix 5 Procedures for Changing the CL and RU IP Addresses.”

5.5 Procedures for Changing the CL Host Name

Procedures observed when the CL host name is changed follow.

☞ See “Appendix B Changing the CL Host Name” under “RI: Reinstalling the Software”.

5.6 CL Setup for Connection to Other Equipment

This section explains about the software setup procedures to be performed when connecting the following equipment to the CL.

- HI-C654/HI-C655/QA-WS/ODF (FINP connection)

  ☞ See “2. Software Setup”, under “CL + HI-C/QA-WS/OD-F (FINP : Image Input/Output)” in “OE2: Connecting the CL to Other Equipment”.

- HI-C655/QA-WS/Synapse server (DICOM connection)

  ☞ See “2. Software Setup”, under “CL + HI-C655/QA-WS (DICOM CR Storage)” in “OE3: Connecting the CL to Other Equipment”.

- Other manufacturer’s equipment (DICOM CR Storage connection)

  ☞ See “2. Software Setup”, under “CL+Other (DICOM CR Storage: transfer of processed images)” in “OE4: Connecting the CL to Other Equipment”.

- DRYPIX, FM-DP L (DICOM Print)

  ☞ See “2. Software Setup”, under “DRYPIX/FM-DP L (DICOM Print)” in “OE5: Connecting the CL to Other Equipment”.

5.7 Barcode Reader/Magnetic Card Reader Connection

When using the barcode reader or magnetic card reader, perform the following connection and setup.

- Barcode reader connection and setup

  ☞ For details on the connection, see “Appendix 3 Connecting the Barcode Reader [Option].”

- Magnetic card reader connection and setup

  ☞ For details on the connection, see “Appendix 4 Setting Up the Magnetic Card [Option].”

6. Checkout Procedures

6.1 Checking the Connection between the CL and RU

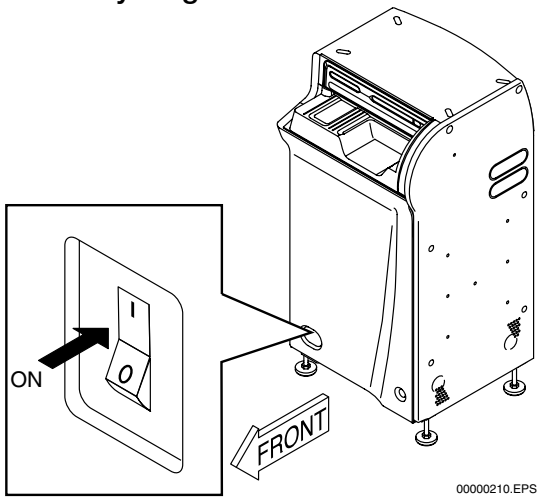
6.2 Checking the Connection between the CL and Other Equipment

6.3 Checking the Output Image ... For output image verification, check for an improper format, image irregularities, and an incorrect film annotation character format.

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6.1 Checking the Connection between the CL and RU

1. **Turn ON the RU power. If it is already ON, you do not have to do anything here.**



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2. **From the Start menu, sequentially choose "Programs", "Fuji Film", and "FCR".**

➔ The CL-AP starts up in about one minute.

➔ After a while, the RU initialization process begins.
The CL-AP window shows a message to indicate that the RU is being initialized.

◆ ***NOTE*** ◆

This message will not appear if the RU has been started up before the CL-AP.



An RU initialization message is displayed.

00000198.EPS

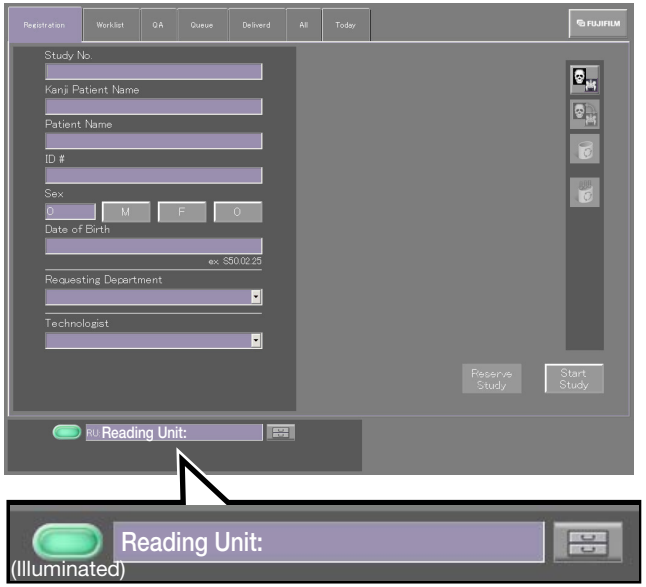
➔ When the RU initialization process ends, the CL-AP window reads "Reading Unit:".

3. From the CL user window (Registration), set patient data and exposure menu, and then click Start Study.

☞ For details on the patient data input procedure, see the CL Operation Manual, "FCR XG-1 CR-IR346CL."

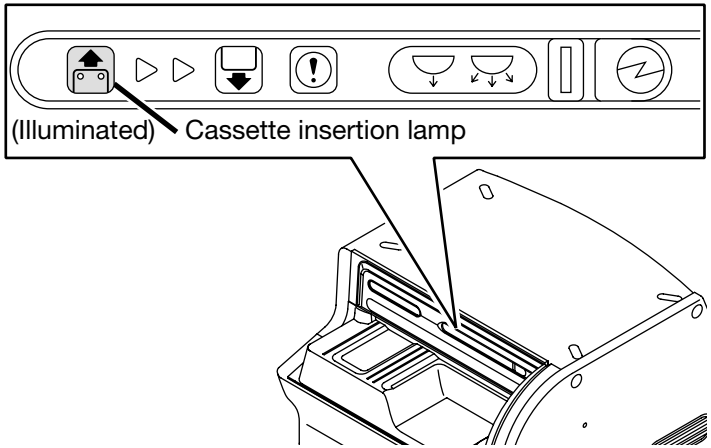
➔ Both the CL-AP window lamp and the RU panel's cassette insertion lamp go on.

● CL window



00000209.EPS

● RU panel



00000207.EPS

4. Set a cassette in the cassette setting unit.

➔ When a certain period of time elapses after the start of an IP read process, the read image appears on the CL monitor.



00000200.EPS

6.2 Checking the Connection between the CL and Other Equipment

Check the connection to the following equipment.

- HI-C654/HI-C655/QA-WS/ODF (FINP connection)

  ☞ See “3. Verifying the Connection”, under “CL + HI-C/QA-WS/OD-F (FINP : Image Input/Output)” in “OE2: Connecting the CL to Other Equipment”.

- HI-C655/QA-WS/Synapse server/Yokogawa server (only for units used in Japan) (DICOM connection)

  ☞ See “3. Verifying the Connection”, under “CL + HI-C655/QA-WS (DICOM CR Storage)” in “OE3: Connecting the CL to Other Equipment”.

- Other manufacturer’s equipment (DICOM CR Storage connection)

  ☞ See “3. Verifying the Connection”, under “CL+Other (DICOM CR Storage: transfer of processed images)” in “OE4: Connecting the CL to Other Equipment”.

- DRYPIX, FM-DP L (DICOM Print)

  ☞ See “3. Verifying the Connection”, under “DRYPIX/FM-DP L (DICOM Print)” in “OE5: Connecting the CL to Other Equipment”.

6.3 Checking the Output Image

Run the following checks on the output image.
- Format check
- Irregularity, sensitivity and density checks
- Film annotation character format

■ Preparations

1. **Have on the hand the IP to be used. Subject this IP to primary erasure.**

☞ For details on the primary erasure procedure, see “2.4 Performing the Image Erasure Process Only (Primary Erasure)”, in the RU Operation Manual.

◆ NOTES ◆

• Check the output image with all IP sizes that are used in the hospital.
• Use the Type VI IPs.
• Make sure that no important image data (e.g., patient images) is exposed on the IPs to be checked.

2. **Expose the IP to 1 mR of radiation.**

➥ REFERENCE

If the IPs cannot exactly be exposed to 1 mR of radiation, use the following IP exposure conditions as a guide. Note, however, that the following conditions are used as a guide for standard IP setup.

Distance : 1.8 m
Voltage : 80 kV
Current : 50 mA
Time : 0.013 sec

3. **Select “Sensitivity” from “Test” as the exposure menu.**

4. **Set a cassette in the cassette setting unit.**

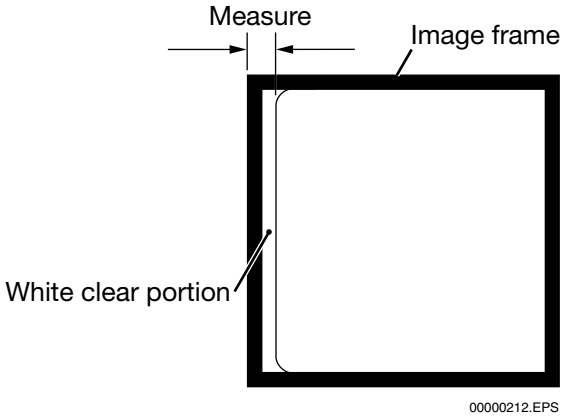
➔ The image is read and transferred to the CL.

5. **Click**  **at the upper right corner of the CL window.**

➔ The image printout process starts.

■ Checking the format

1. **Check that the white clear portion of the resulting output film does not exceed 2 mm in width (when an 100% image output is generated).**



◆ *NOTE* ◆

If the image is not generated at a magnification setting of 100%, calculate as follows to check the white clear portion.

$$\left[2 \times \frac{\text{reduction ratio*}}{100}\right] \text{mm}$$

* The reduction ratio is printed at the bottom of a film output image.

☞ If any abnormality is encountered, see “Troubleshooting” of the RU Service Manual.

■ Checking irregularities

1. **Check that the output film and the image displayed on the CL monitor are both free from peculiar irregularities.**

☞ If any abnormality is found, see “Troubleshooting” of the RU Service Manual.

2. **Check that the system sensitivity value and film density value displayed on the output film are approximately 200 and 1.2, respectively.**

☞ If any abnormality is found, see "Troubleshooting" of the RU Service Manual.

■ Checking the film annotation character format

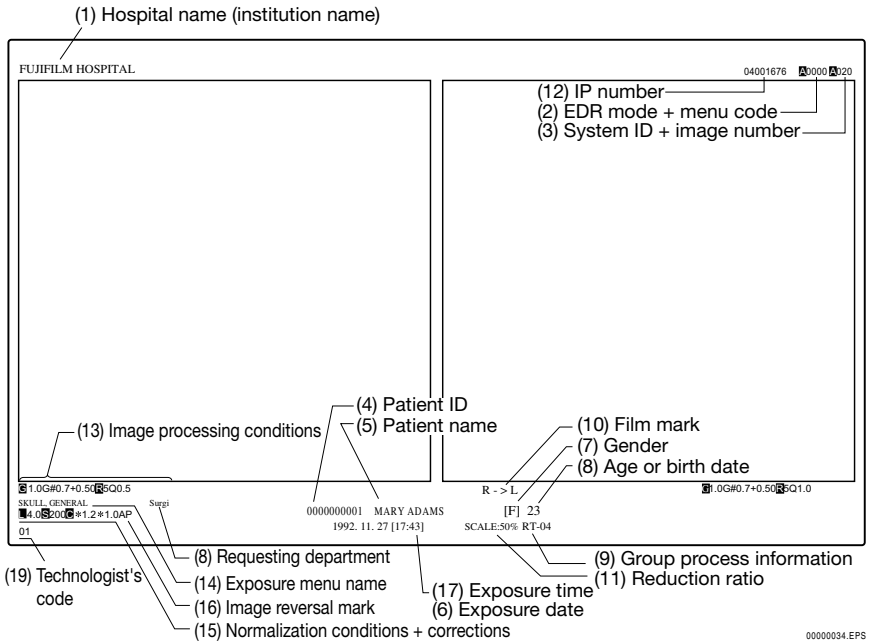
1. **Check to see that the film annotation character format information entered from the CL is properly printed out onto the film.**

Also, check for blurred, chipped, or otherwise abnormal character printings.

➥ *REFERENCE*

The example in the figure below represents a printout that would be generated when the default film annotation character format is used (image size: 35 × 35cm (14" × 14"); print format: TWIN).

When the default settings are used, character strings (1) through (19) are printed out.



☞ If any abnormality is found, see "Print Output Function" in Function-Specific Reference Guide.

■ Exiting the CL-AP

1. **Click** 

.

➔ A menu opens.

2. **Hold down the <Shift> key and click** 

.

➔ The CL-AP exits returning you to the desktop screen.

➥ *REFERENCE*

If you click [Shut Down] without holding down the <Shift> key, both the CL-AP and Windows shut down.

7. Setup File Backup and RU Error Log Verification/Deletion

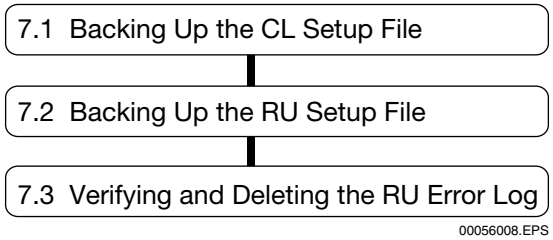
This section explains about the procedures for backing up the CL and RU setup files and verifying/deleting the RU error log.

When making backups, have the following items on hand.

• Three DOS-V formatted FDs (one for the RU and two for the CL)

◆ *NOTE* ◆

Never turn OFF the CL or RU power during a backup process. If the power turns OFF, the machine may fail to start up.



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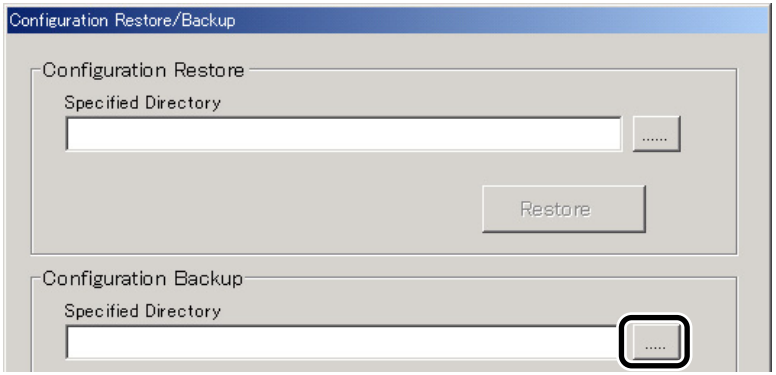
7.1 Backing Up the CL Setup File

1. **Insert an FD into the FDD.**

2. **Start the Service Utility and then click [Configuration Restore/Backup] (the second item from the top).**

➔ The “Configuration Restore/Backup” window opens.

3. **Click [.....] in the [Configuration Backup] area.**



00000417.EPS

➔ A window opens, prompting you to select a storage directory.

4. **Click the downward arrow mark for c:, and then choose a:.**

5. **Click OK.**

➔ You are then returned to the “Configuration Restore/Backup” window.

6. Click Backup.

➔ The setup file backup process begins. In about one minute, a message appears prompting you to replace the FD.

7. Insert the second FD into the FDD.

◆ *NOTE* ◆

- *No message appears to indicate the end of the backup process.*
- *During the backup process, the mouse cursor changes to the mark. You may understand that the backup process is completed when the mark changes back to the mouse cursor. The mark does not appear unless the mouse cursor is positioned in the Configuration Restore/Backup window.*
- *Before removing the FD, verify that the FDD access lamp is extinguished.*

8. Remove the FD from the FDD.

9. Click Cancel.

➔ The system returns to the "IIP Service Utility" window.

10. Click [Exit Service Utility].

➔ The system returns to the desktop screen.

7.2 Backing Up the RU Setup File

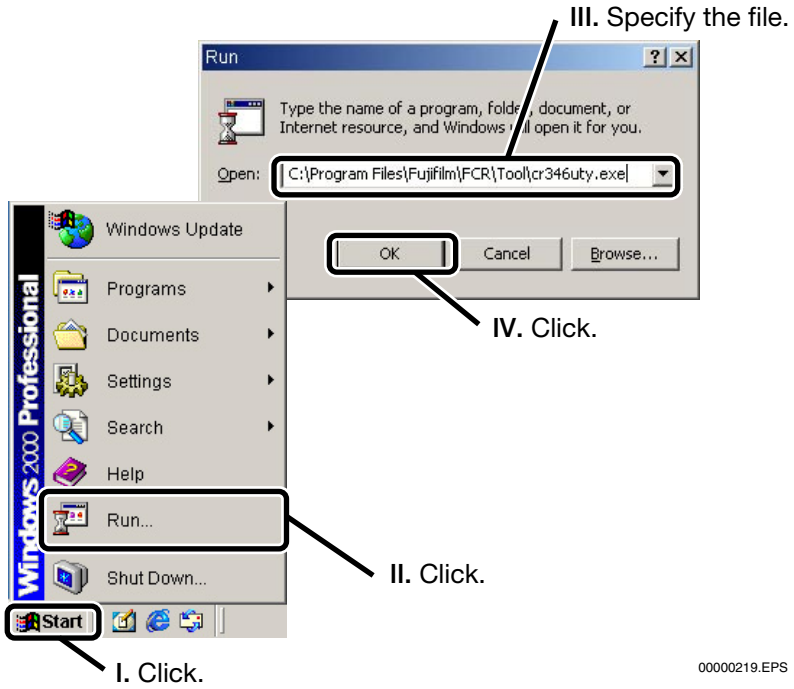
This section explains about the procedure for making an FD backup by saving the RU machine-specific data onto an FD after the completion of setup.

◆ *NOTE* ◆

The machine is supplied with an FD that stores machine shipment control data. Do not use this FD for making a backup. This FD contains data that can only be measured at factory. If such data is lost, it cannot be restored at site.

1. Insert an FD into the CL-PC's FDD.

2. Start the RU M-Utility by performing the steps indicated below.



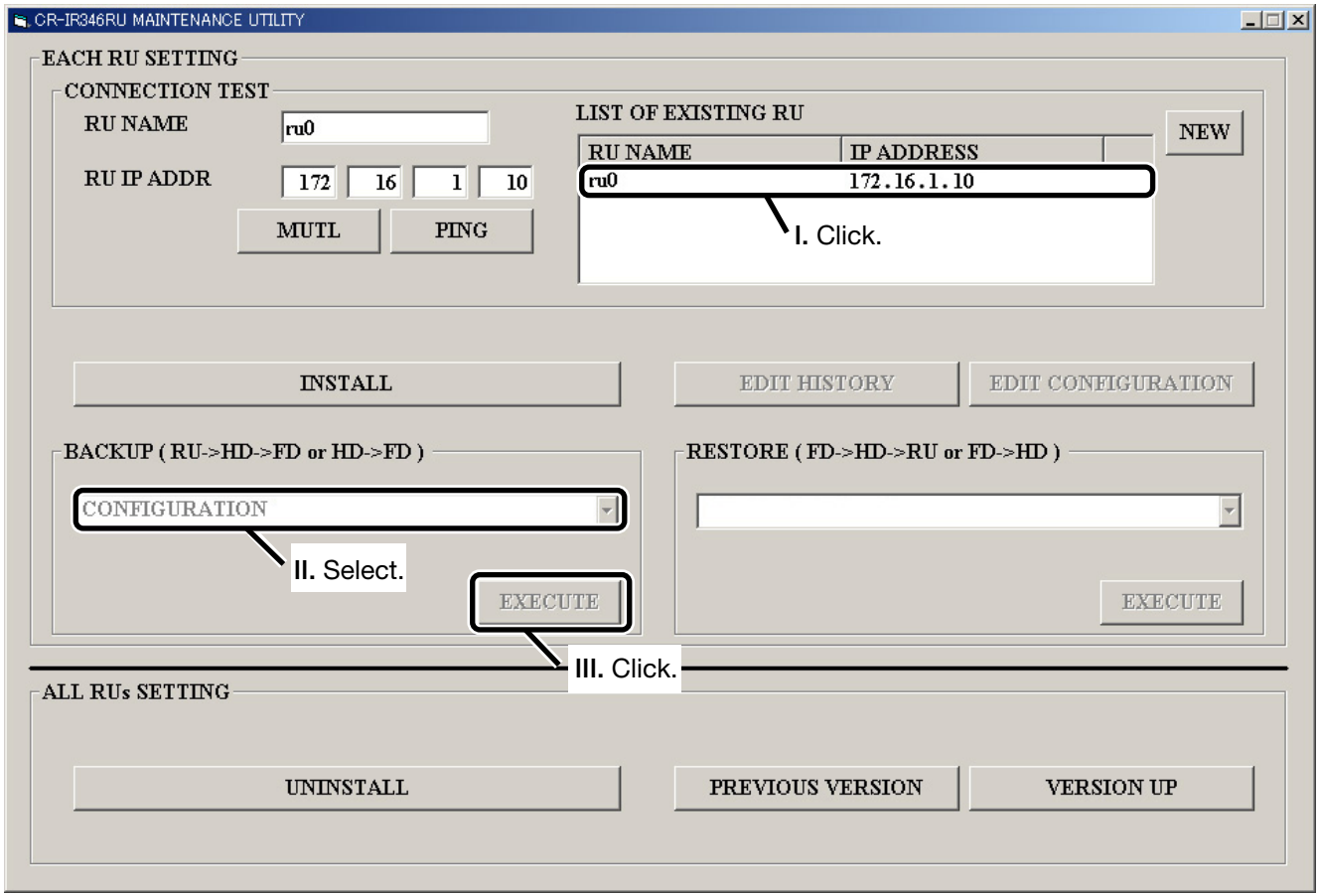
➔ The RU M-Utility starts.

3. From [LIST OF EXISTING RU], select a target RU for backup.

4. From the [BACKUP (RU → HD → FD or HD → FD)] area, back up the following data.

- CONFIGURATION
- SCN ALL DATA

● CONFIGURATION data backup example



00000220.EPS

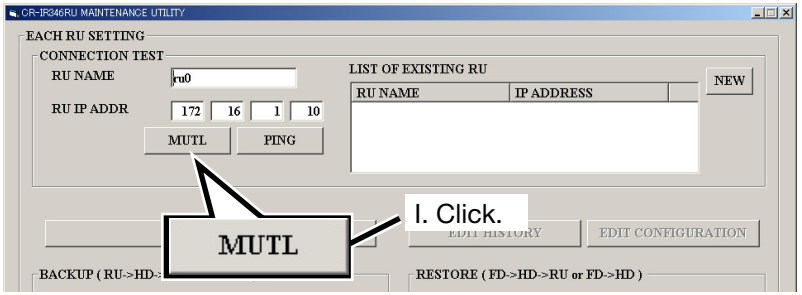
➥ ***REFERENCE***

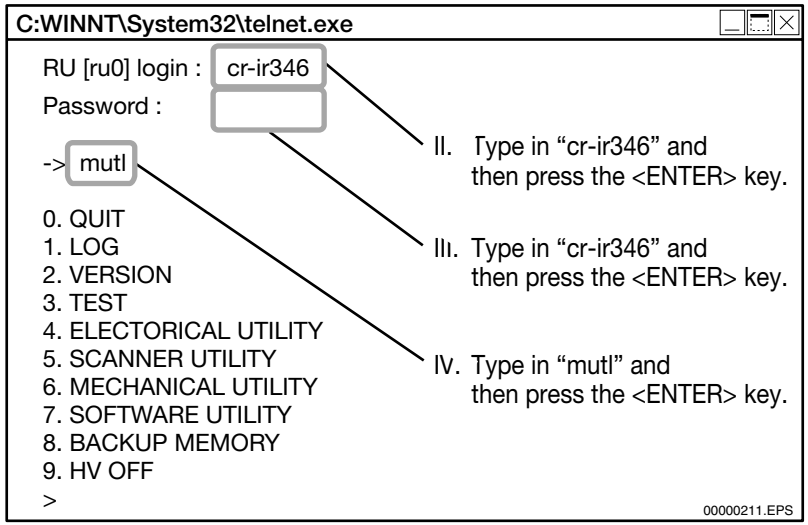
During SCN ALL DATA backup processing, the RU produces a beep sound.

7.3 Verifying and Deleting the RU Error Log

7.3.1 Verifying the RU Error Log

1. From the main menu of the RU M-Utility, perform the steps indicated below.





◆ NOTE ◆

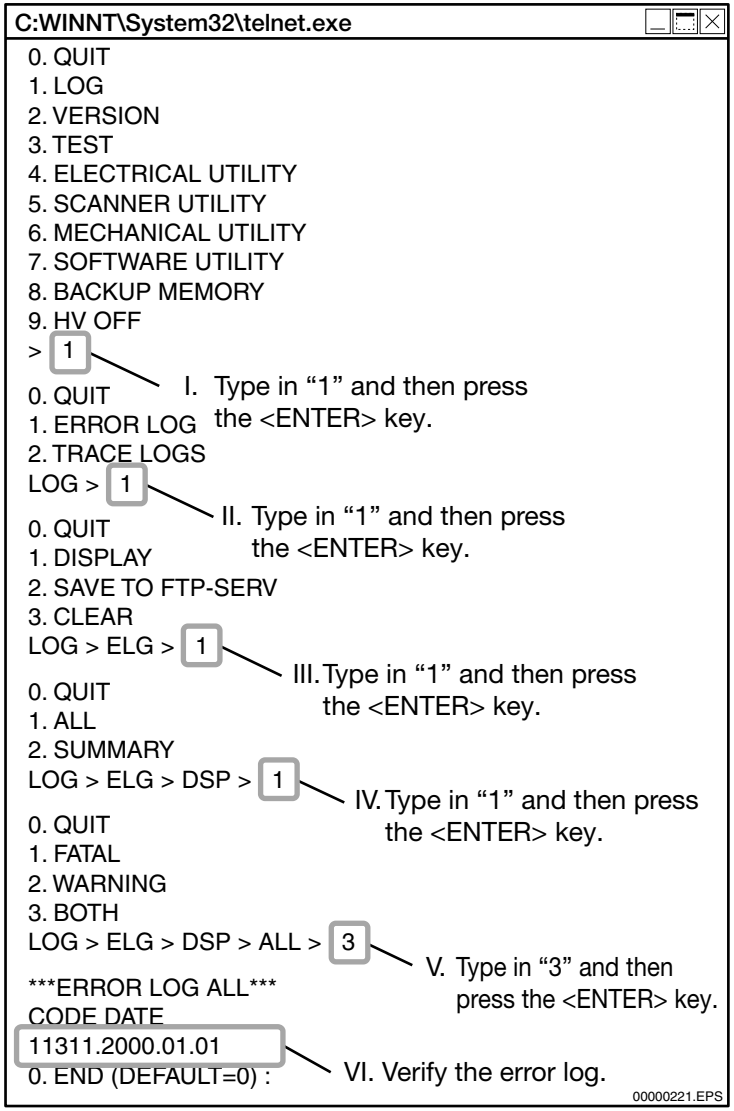
Be quick to operate II. and III. above.The operation will be canceled if the <Enter> key is not pressed in a certain period of time. If canceled, repeat step II. thereafter.

2. After selecting an error log as directed below, verify it.

➥ REFERENCE

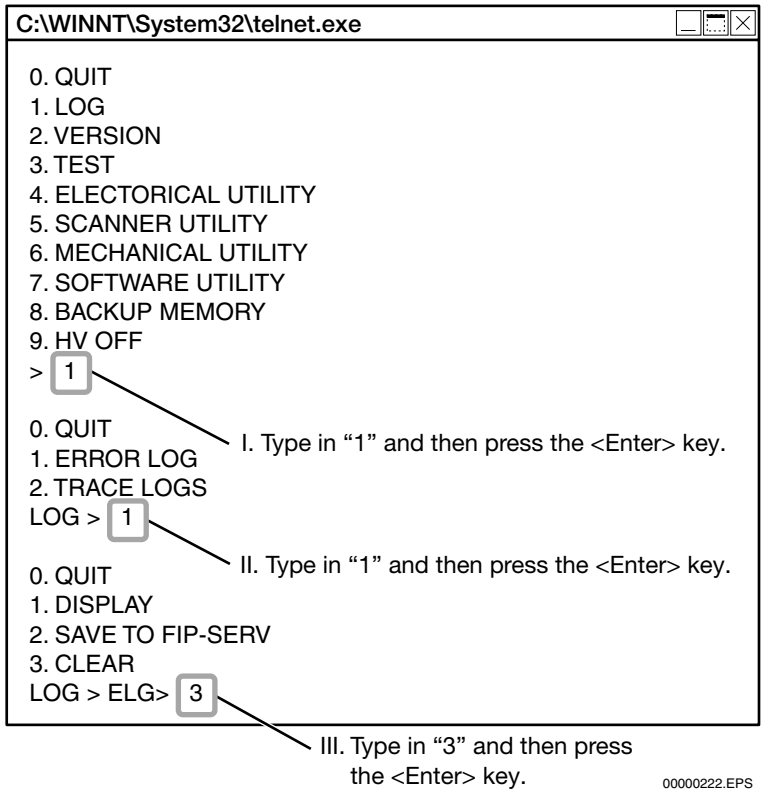
If the error log does not exist, the following message appears:

```
THE LOG IS EMPTY.
RESULT:OK
```

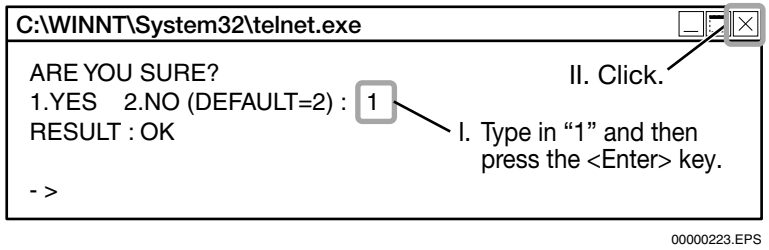


7.3.2 Deleting the RU Error Log

1. **Start the RU M-Utility. Delete the error log as directed below.**



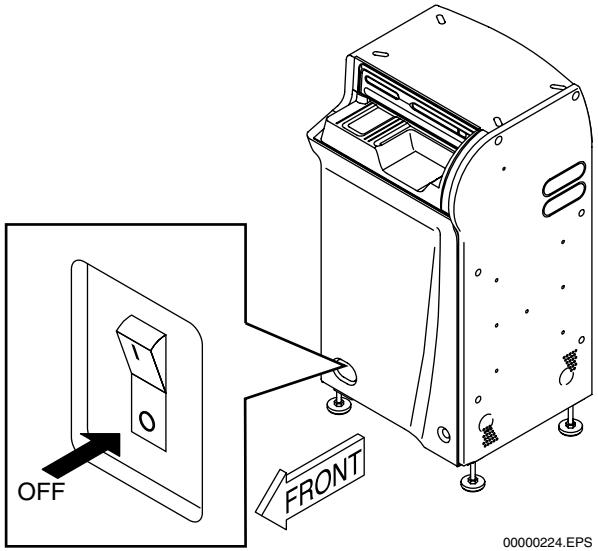
2. **Exit the M-Utility.**



7.4 Turning OFF the CL and RU

1. **Shut down the CL system.**

2. **Turn OFF the RU power.**



Next ▸▸

Continue to perform the procedures set forth in Chapter 10, Final Installation, in “Installation” of the RU Service Manual.

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CR-IR348CL Service Manual

IN-B: Installation – Connection to Two or More RUs and 5000 plus

Control Sheet

Issue date	Revision number	Reason	Pages affected
05/30/2001	02	New release (FM3027)	All pages
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1-6, 9-17, 19, 20, 23-28, 31-50
08/30/2001	03	Changes in pagination (FM3125)	18
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, III, IV, 5, 12, 13, 16, 19, 20, 23, 26-28, 32-34, 38, 40-48
07/20/2002	05	Revision for software version A08 (FM3428)	I, II, 4, 6, 7, 9, 10, 12, 14, 15, 17-21, 23, 24, 40
07/20/2002	05	Changes in pagination (FM3428)	11, 13, 16, 22, 25-39, 41-46

1. CL Installation Conditions

☞ For the PC (controller: DELL Optiplex GX150) installation conditions required, see “1. CL Installation Conditions” under “IN-A: Installation - One RU Connection”.

- Dimensions and weight
- Temperature and humidity
- Environmental conditions
- Power supply conditions

◆ *NOTE* ◆

Listed below are the abbreviations adopted in this chapter.

• Application	*: AP*
• Local printer	*: LP*
• CR-IR346CL	*: CL*
• CR-IR346RU	*: RU*
• 5000 plus	*: IR*
• CL config data	*: CL-Config*

2. Installation Procedure Overview

➤ *IMPORTANT*

Make sure that the RU and IR (5000/5000R/5000MA/5501/5501D/XU-D1/5502D) hardware has completely been installed and set up.

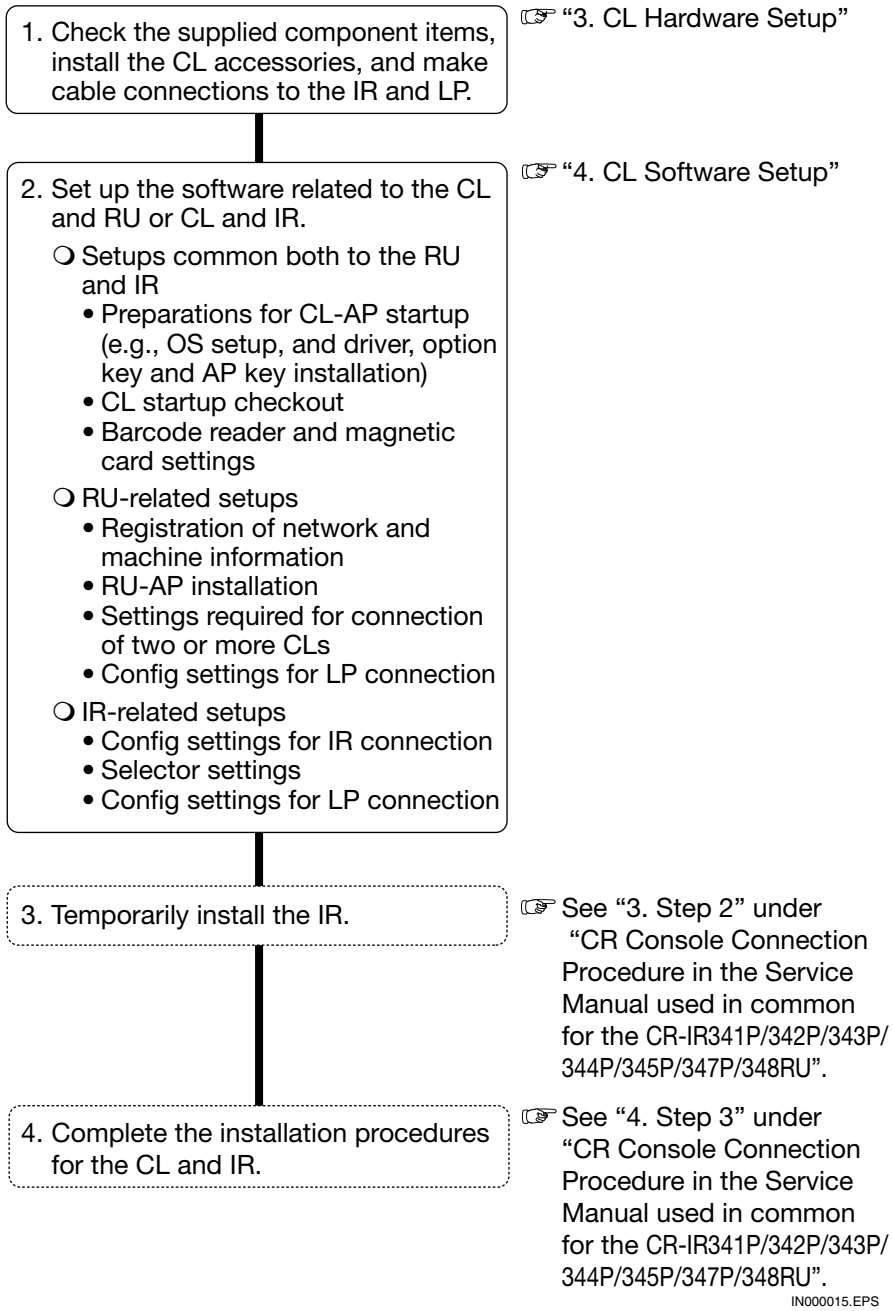
☞ *For the RU:*
See "Chapters 1 to 8 under IN: Installation" of the RU Service Manual.

☞ *For 5000/5000R/5501/5501D/XU-D1/5502D:*
See "Chapters 5 and 6 under IN: Installation" of the respective Service Manuals.

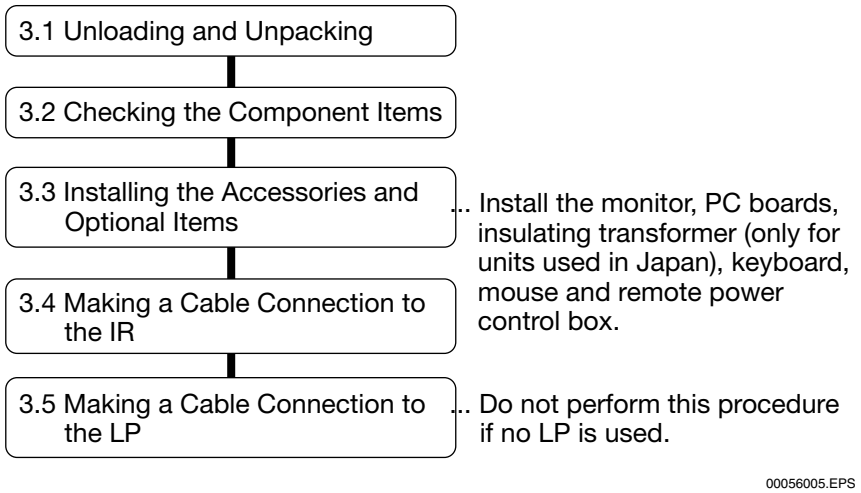
☞ *For 5000MA:*
See "Chapters 2 through 20 under IN: Installation" of the 5000MA Service Manual.

➤ *IMPORTANT*

- *Have on hand a CD-ROM that stores the CL's AP key (114Y5342002A), which is distributed for use in servicing.*
- *Be sure to use the AP key of version A00 or later.*



3. CL Hardware Setup



3.1 Unloading and Unpacking

Remove the following items from the packing box.

- PC (controller: DELL OptiPlex GX150)
- Monitor
- Insulating transformer (only for units used in Japan)
- Others (options, etc.)

◆◆ CAUTIONS ◆◆

When unloading, transferring, and unpacking the machine, observe the following precautions:

- ***Do not subject the machine to vibration or shock.***
  If the machine is unduly vibrated or shocked while it is unloaded or transferred, it may become damaged or defective.
- ***Avoid moisture condensation inside the machine.***
  If the machine is subjected to a drastic temperature change when it is transferred or unpacked, moisture condensation may occur inside the machine. If you turn ON the machine while moisture is condensed on its inner surface, the machine may become defective. To avoid such a problem, be sure to allow the machine to stand at a room temperature for a period of 1 hour or longer and then turn ON the power.

3.2 Checking the Component Items

Check that the following component items are fully supplied.

■ PC box

(Product code : IR 348 CL A*-A**)

- PC
- Keyboard
- Mouse
- Power cable
- CL-AP (CD-ROM)
- Standard Key Software (One or two CD-ROMs)

☞ For details of the component items, see the documentation supplied with the PC.

■ Monitor box

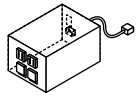
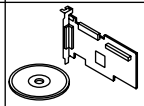
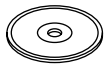
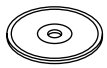
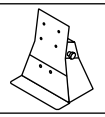
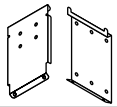
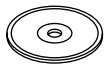
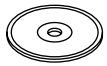
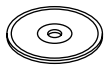
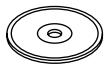
(Product code : IR 346 DISPLAY LCD (15" monitor with the touch panel) or CL DISPLAY CRT 17 IN A (17" CRT monitor))

- Monitor
- Monitor cable
- Serial cable (only for the 15" monitor with the touch panel)
- Touch panel driver CD or FD (only for the 15" monitor with the touch panel)

☞ For details on the component items, see the documentation supplied with the monitor.

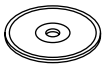
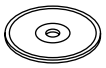
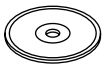
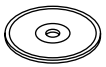
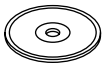
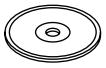
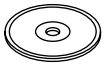
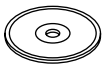
☞ When a Super Resolution LCD Monitor SL-IC300 or an Ikegami 1k landscape monitor is used, see the respective manual to check the component items.

■ Others (separately packed items, options, etc.)

Description		Product Code	Qty.	Remarks*
CL insulation power box kit (only for units used in Japan)		IR 348 INSULATION BOX	1	
Local print key CD E-i/f board (PEI01A)		IR 346 LOCAL PRINT	1 each	B, O
DICOM print key CD		IR 346 DICOM PRINT	1	B, O
FINP input/output key CD		IR 346 DMS NET-WORK IN-OUT	1	B, O
DICOM CR STORAGE (standard/private) key CD		IR 346 DICOM CR STORAGE	1	B, O
LCD display stand		IR 346 LCD STAND	1	O
LCD display wall-mounting bracket		IR 346 LCD BRACKET	1	O
MFP key CD		IR 346 MFP	1	O
Detail QA key CD		IR 346 DELUX-QA	1	O
Processed-image output key CD		IR 346 DICOM IM PROCESSED	1	O
Patient information online key CD		IR 346 ID ONLINE	1	O

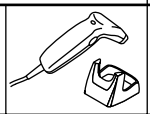
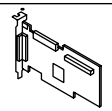
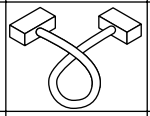
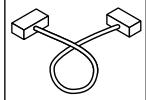
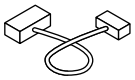
* B: Variation; O: Option

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Description		Product Code	Qty.	Remarks*
DICOM worklist (MWM) key CD		CL DICOM ORDER MWM	1	O
DICOM worklist (MWM) key CD (patient information only)		CL DICOM ID MWM	1	O
DICOM PPS key CD		CL DICOM MPPS	1	O
DICOM Commitment Push key CD		CL DICOM COMMITMENT	1	O
Shadow-masking CD key		CL SHUTTER-PROC	1	O
Energy subtraction processing key CD		CL ES	1	O
Ordering key CD (serial connection)		CL ORDER ONLINE	1	O
Ordering key CD (F-RIS)		CL ORDER ONLINE FOR TST	1	O
PEM image processing key CD		CL PEM	1	O
X-CON control key		CL X ONLINE	1	O

* O: Option

IN000002.EPS

Description		Product Code	Qty.	Remarks*2
Barcode reader (with a rack)		IR 346 BARCODE	1	O
Magnetic card reader (JIS)		IR 346 MCR JIS	1	O
Magnetic card reader (ISO)		IR 346 MCR ISO	1	O
Magnetic card reader wall-mounting kit		IR 346 MCR BRACKET	1	O
Serial interface board (PSI04A)		IDT-4 IF BD FOR PCI	1	O
Cable for direct printer connection		ODF/PS IF CABLE nM*1	1	O
RS232C cable for connection to other manufacturer's RIS terminal or X-ray apparatus		IDT3/4 ONLINE 9S-CBL nM*1 IDT3/4 ONLINE 25P-CBL nM*1	1	O
E-i/f conversion cable (1.2 m)		MF-PS 667/DMS IF CBL	1	O

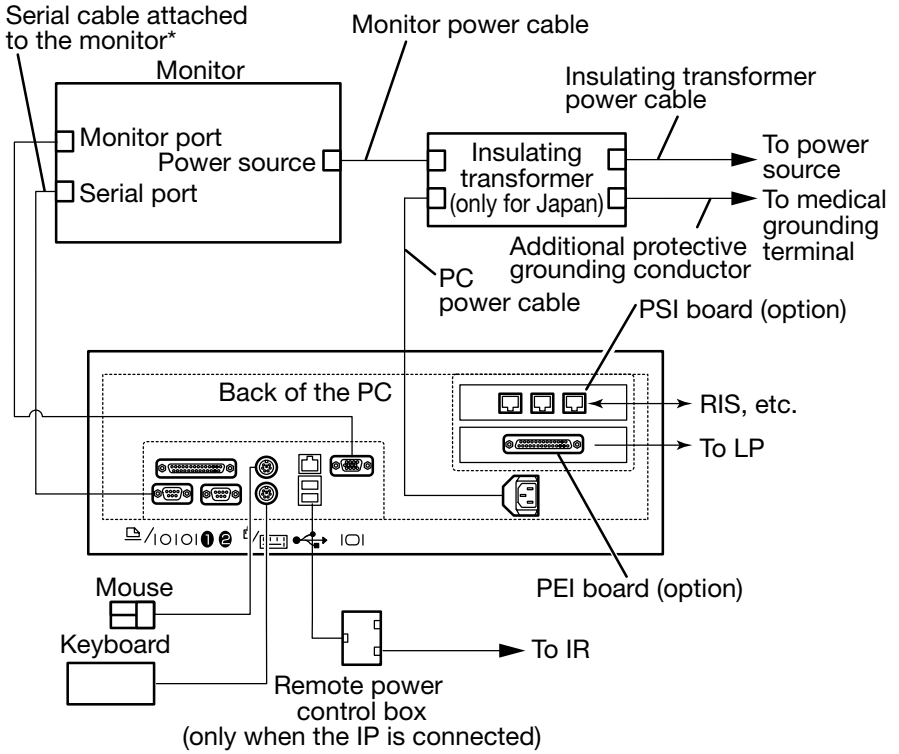
*1 n: Cable length
*2 O: Option

00000041.EPS

3.3 Installing the Accessories and Optional Items

Connect the following accessories and optional items to the PC (GX150), as illustrated below.

- PC boards (option)
- Insulating transformer (only for units used in Japan)
- Keyboard and mouse
- Monitor
- Remote power control box (only when the IR is connected), provided as an IR accessary



* Only when the 15" monitor with the touch panel is used.

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◆ NOTE ◆

Of the two serial ports provided on the PC, be sure to use the No.1 serial port (❶).

3.3.1 PC Boards

To attach optional boards, observe the procedures described herein.

- PEI board (optional)
- PSI board (optional)

☞ For how to verify setup of and attach the PSI board, see "1. Hardware Setup", under "CL + RIS/IDC4 (ID Online)" in "OE7: Connection between CL and Other Equipment".

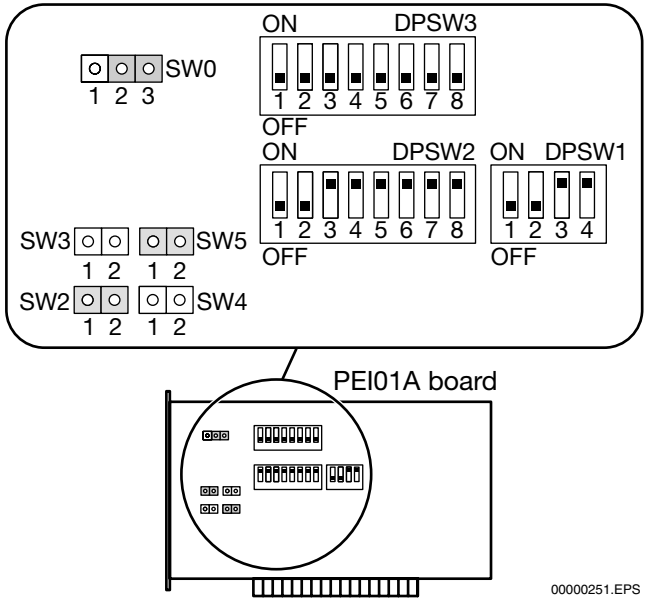
1. Check that the switches on the PEI board are properly set. If their settings are incorrect, correct them accordingly.

◆ NOTE ◆

When no remote signal is to be sent to the printer, turn OFF all the DPSW1 switches.

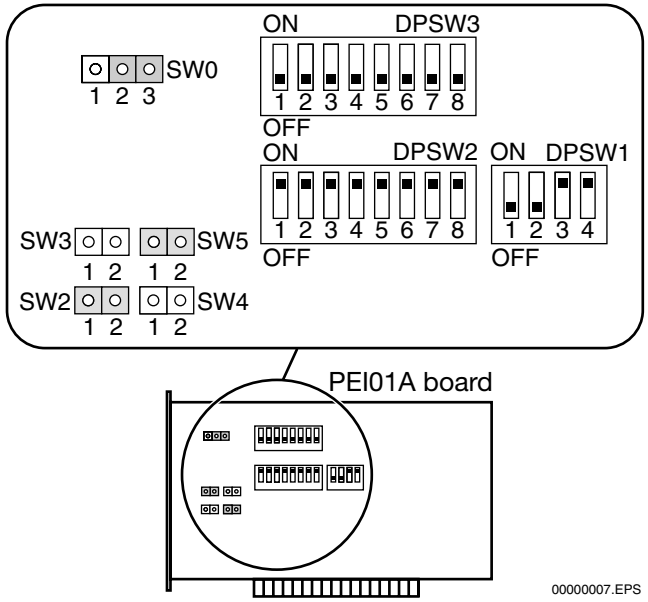
● When connecting the CR-LP414N/FL-IM2636N or FL-IM3543N/ FL-IM3543MN

• DPSW1	1 and 2: OFF; 3 and 4: ON	• SW0	2 and 3 short-circuited.
• DPSW2	1 and 2: OFF; 3 to 8: ON	• SW2 and SW5	1 and 2 short-circuited.
• DPSW3	1 to 8: OFF	• SW3 and SW4	Jumpers removed.



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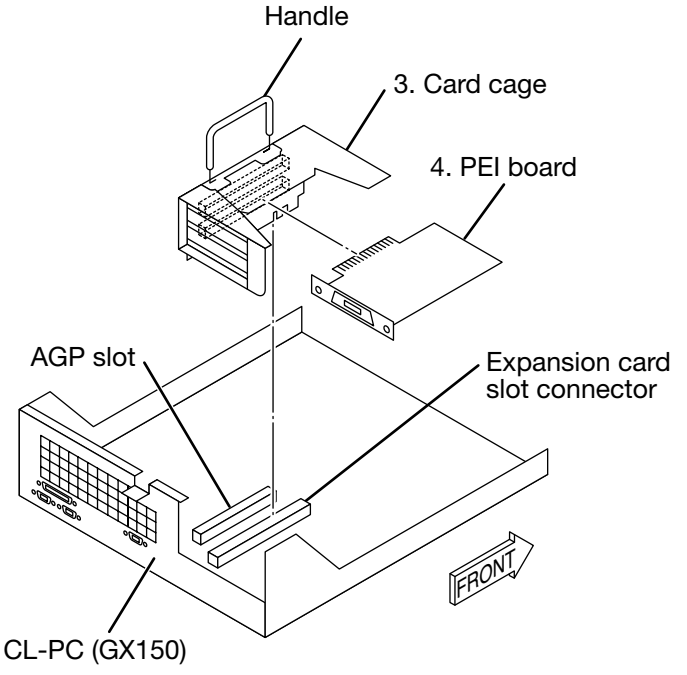
- When connecting printers other than those mentioned on the left side
  - DPSW1 1 and 2: OFF; 3 and 4: ON
  - DPSW2 1 to 8: ON
  - DPSW3 1 to 8: OFF
  - SW0 2 and 3 short-circuited.
  - SW2 and SW5 1 and 2 short-circuited.
  - SW3 and SW4 Jumpers removed.



2. **Open the CL-PC cover.**

3. **Remove the card cage while holding the card cage handle.**

4. **Mount a PEI board in the lower PCI slot.**



5. **Mount the card cage in the CL-PC.**

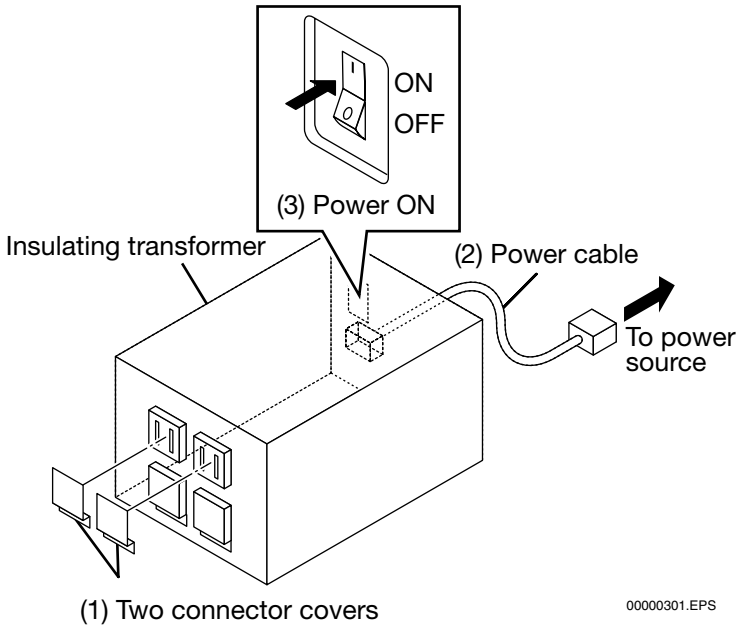
6. **Close the CL-PC cover.**

3.3.2 Insulating Transformer (procedures required only for units used in Japan)

◆ *NOTE* ◆

Ensure that the power cables connected to the insulating transformer are for the CL and monitor only.

1. Remove the two connector covers from the insulating transformer.
2. Connect the power cable between the insulating transformer and power source.
3. Turn ON the insulating transformer.



3.3.3 Keyboard, Mouse, and Power Cable

- Procedures followed by equipment used abroad

1. Connect the keyboard, mouse, and power cable to the PC.

   ☞ For details on the connection procedures, see the documentation supplied with the PC.

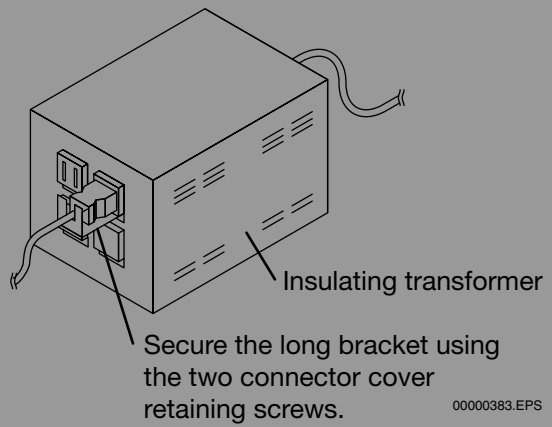
2. Connect the power cable to the power source.

- Procedures followed by equipment used in Japan

1. Connect the keyboard, mouse, and power cable to the PC.

   ☞ For details on the connection procedures, see the documentation supplied with the PC.

2. Connect the power cable to the insulating transformer.
3. Use the long bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.



➥ *REFERENCE*

To secure cables, eight brackets (four each of long and short ones) are attached to the insulating transformer.

3.3.4 Monitor

The following monitors can be connected.
Note that the connection procedure varies with the monitor type.

- 15" monitor with the touch panel
- 17" CRT monitor
- Ikegami 1K landscape monitor
- Super Resolution LCD Monitor SL-IC300

☞ For the connection procedure of the Super Resolution LCD Monitor SL-IC300, see the SL-IC300 manual.

■ For the 15" monitor with the touch panel

The work procedures will differ depending on the installation method adopted of the monitor.

➥ *REFERENCE*

If the monitor type used is EIZO's L350P-TS, it is stable enough even without optional rack for actual operations. Thus, it is not necessary now for you to mount optional rack.

❍ Installation method 1

To continue to use the monitor rack, perform step 1. thereafter.

❍ Installation method 2

To replace the monitor with a wall-mounting type monitor, replace first the bracket with a wall-mounting type (option). Perform then step 1. thereafter.

☞ When using the wall-mounting bracket, see "Appendix 7 Attaching the Monitor Wall-Mounting Bracket [Option]" to replace the monitor rack.

1. **Connect the monitor cable and serial cable to the PC.**

☞ For details on cable connections, see the documentation supplied with the monitor.

● Procedures followed by equipment used abroad

◆ *NOTE* ◆

Prior to connection of the power cable, connect the serial cable between PC and monitor.
If the power cable is connected before serial cable connection, the touch panel driver may not be installed.

2. **Connect the power cable between the monitor and power source.**

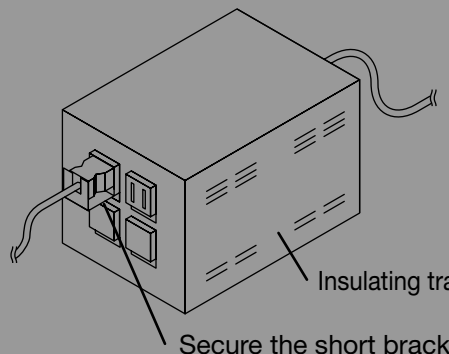
● Procedures followed by equipment used in Japan

◆ *NOTE* ◆

Prior to connection of the power cable, connect the serial cable between PC and monitor.
If the power cable is connected before serial cable connection, the touch panel driver may not be installed.

2. **Connect the monitor power cable to the insulating transformer.**

3. **Use the short bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.**



■ For the 17" CRT monitor

1. Connect the monitor cable between the PC and monitor.

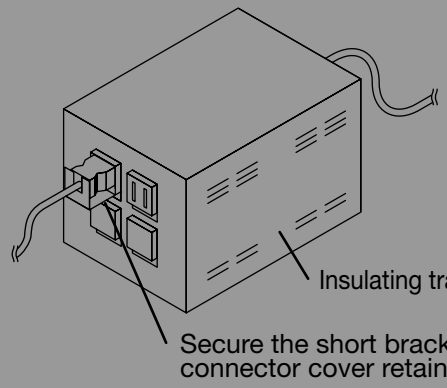
● Procedures followed by equipment used abroad

2. Connect the power cable between the monitor and power source.

● Procedures followed by equipment used in Japan

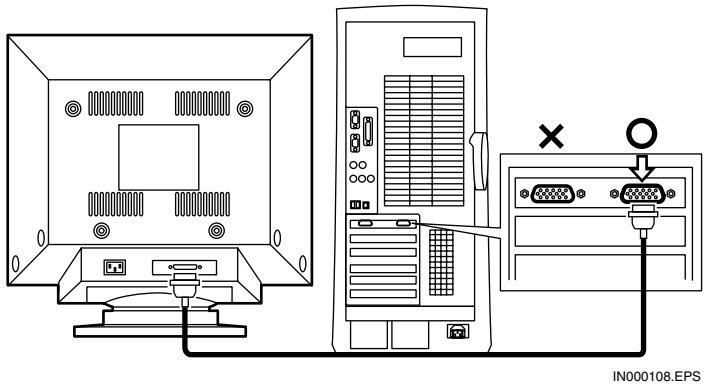
2. Connect the power cable between the PC and insulating transformer.

3. Use the short bracket to secure that the power cable is not disconnected accidentally from the insulating transformer.



■ For the Ikegami 1k landscape monitor

1. Use a monitor cable to connect the monitor to the PC.



● Procedure followed by equipment used abroad

2. Use a power cable to connect the power source to the monitor.

3.3.5 Remote Power Control Box (only when the IR is connected)

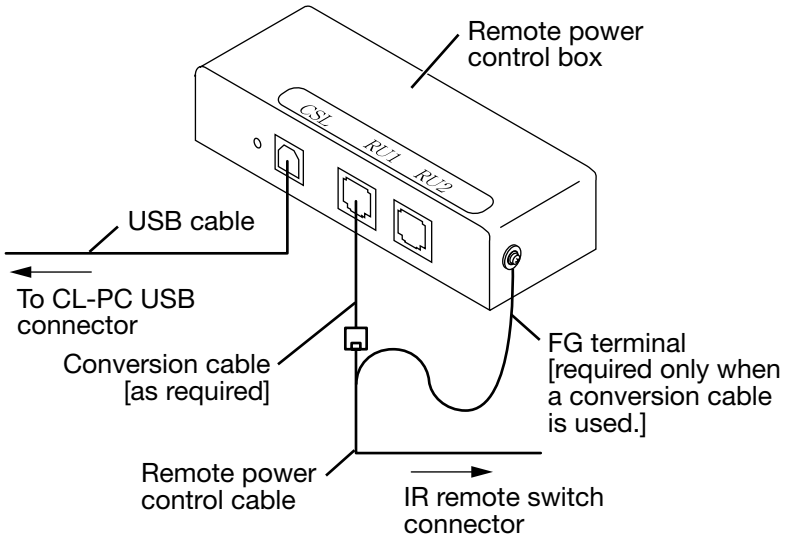
1. Use a USB cable to connect the CL to the remote power control box.

2. Use an optional remote power control cable to connect the remote power control box to the IR.

◆ *NOTE* ◆

To use the following remote power control cable for the master IDT741, a conversion cable is required.

- *IDT-IV-to-FCR5000 connect signal cable REM CBL *M FOR IDT MAIN D*



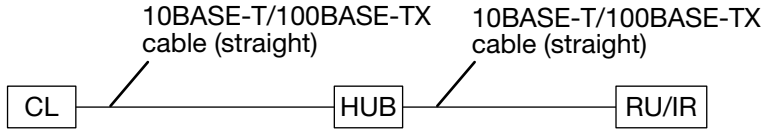
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3. To connect another IR, use an RU2 connector.

3.4 Making a Cable Connection to the RU or IR

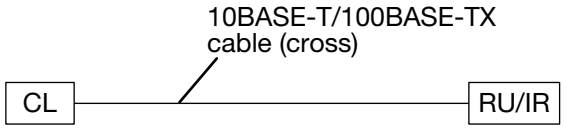
Connect a network cable between the IR and CL.
When using a HUB, use a straight cable, and when directly connecting the CL to the IR without HUB, use a cross cable.

- For connection using a straight cable



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- For connection using a cross cable



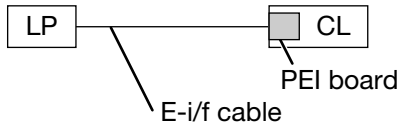
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◆ *NOTES* ◆

- *Be sure to use an STP shield-type cable for connection to the IR.*
- *Even if the CL and IR will eventually be incorporated into the network of a hospital for operation, connect the CL and IR while they are independent of the network (not incorporated into the hospital's network).*
- *Do not connect the telephone line to the CL and IR network connectors.*
- *The IEC950/UL1950-conformed cable is available for this equipment.*

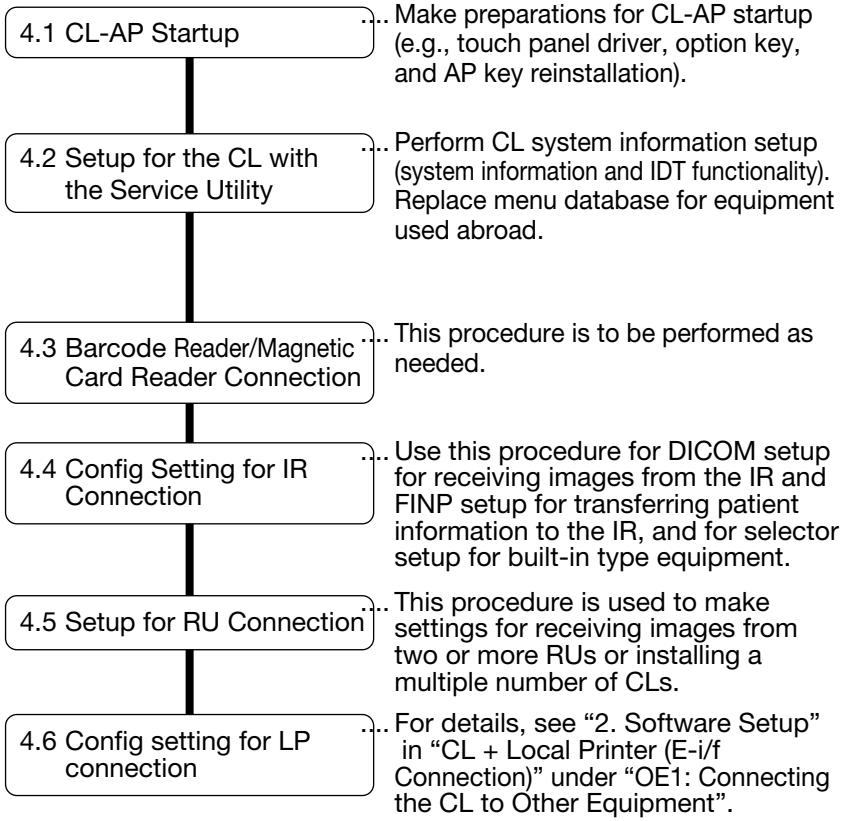
3.5 Making a Cable Connection to the LP

When using an E-i/f LP, connect an E-i/f cable between the LP and CL.



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4. CL Software Setup



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4.1 CL-AP Startup

The following procedures must be performed for CL-AP startup:

- OS startup
- OS setups
- Date, time, and time zone verification
- Touch panel driver installation
- Option key installation
- AP key reinstallation
- CL-AP startup verification

➥ *REFERENCE*

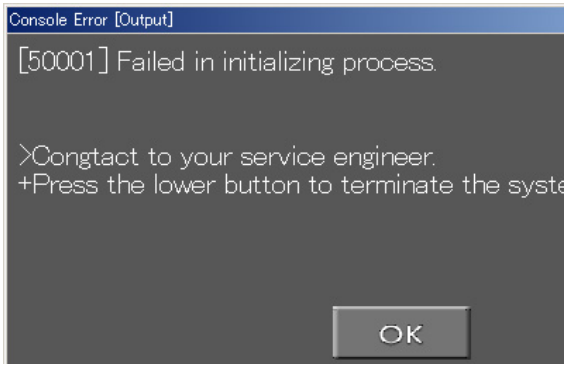
The following CL-PC setups and software installation steps are completed at factory prior to shipment:

- *CL IP address (172.16.1.20)*
- *Subnet mask (255.255.0.0)*
- *CL host name (CRxxxxxxxx: 8 lowest digits of a manufacturer’s serial number in the xxxxxxxx position)*
- *Administrator password setup (fcr-iip)*
- *Display setup (screen saver, screen resolution, etc.)*
- *MS-IME setup (only for units used in Japan)*
- *CL-AP (MSDE and SQL included) installation*
- *Standard Key Software installation*
- *AP key installation*
- *Image database initialization*

4.1.1 OS Startup

1. Turn ON the PC power.

➔ The following error display opens 10 seconds after CL-AP startup.



00000421.EPS

➤ *IMPORTANT*

The above error display opens because an output system (print or image transfer) option key has not been installed/set up when the equipment was newly installed.

☞ *For error details, see "3.4 Precautions to be Observed During the Use of Output Options" under, "MT: Machine Troubleshooting".*

2. Click OK.

➔ The error display opens again in about 20 seconds.



00000216.EPS

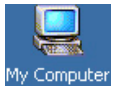
3. Click OK.

➔ The system returns to the desktop screen.

4.1.2 OS Setups

Perform the following OS-related setups.
- Setting the date, time and time zone.
- Defining the character to be used as a decimal point [applicable only to part of the area where the English software is used.]

■ Setting the date, time, and time zone

1. Double-click 

on the desktop.

➔ The "My Computer" window opens.

2. Double-click 

.

➔ The "Control Panel" window opens.

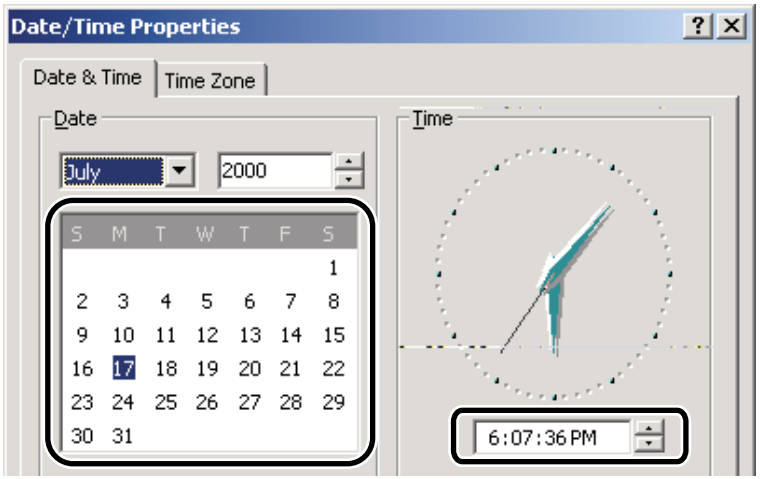
3. Double-click 

.

➔ The "Date/Time Properties" window opens.

4. Verify the date and time.

If the date and time indicated are incorrect, correct them accordingly and then click Apply.



00000115.EPS

5. Click Time Zone.

6. Verify the time zone setting.

If the setting is wrong, correct it and then click Apply.



00000117.EPS

7. Click OK.

➔ The system returns to the desktop screen.

8. Close the "Control Panel" window.

■ Defining the character to be used as a decimal point

Select "." (period) as the character to be sued as a decimal point.
If anything other than a period is selected, an error occurs when you select an image distribution destination with the QA function.
This setup is applicable only to part of the area where the English software is used.

☞ For details of the setup procedure, see "■ Defining the character to be used as a decimal point" in "2.3 Setting the OS" under "RI: Reinstalling the Software".

4.1.3 Touch Panel Driver Installation [Skip this procedure if the 15" monitor with a touch panel is provided.]

When the 15" monitor with the touch panel is going to be used, it is necessary to install the touch panel driver and adjust the touch panel.

■ Installing the driver

1. Insert the driver CD-ROM into the CD-ROM drive.

☞ To install the touch panel driver using the FD, see "Appendix 1 Installing the Touch Panel Driver [Option]".

- For the previous-version CD-ROM

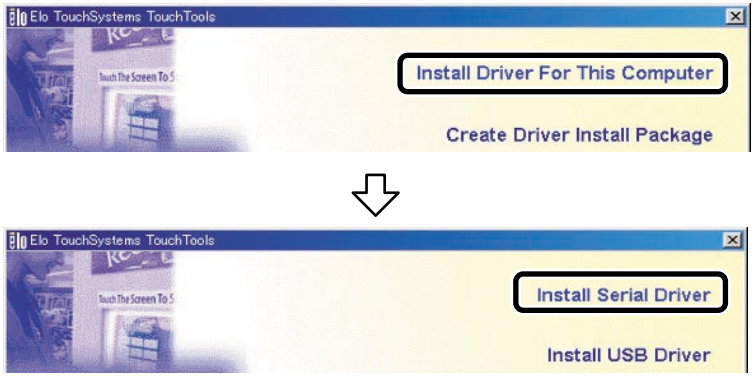
When the CD-ROM is inserted into the CD-ROM drive, a window like that shown below opens automatically. Click "Install MonitorMouse for Windows 2000".



IN000102.EPS

- For the new-version CD-ROM

When the CD-ROM is inserted into the CD-ROM drive, a window like that shown below opens automatically. Click "Install Drive For This Computer". Click then "Install Serial Driver" on another window that opens.



IN000103.EPS

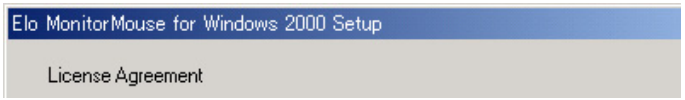
➔ After a while, the “Elo MonitorMouse for Windows 2000 Setup” window opens.



IN000107.EPS

2. Click Next >.

➔ The license agreement window opens.



00000412.EPS

3. Click Yes.

➔ The port selection window opens.



00000413.EPS

◆ ***NOTE*** ◆

An error will occur if the serial cable of the LCD display provided with a touch panel is connected to serial port No. 2.

4. Click Next >.

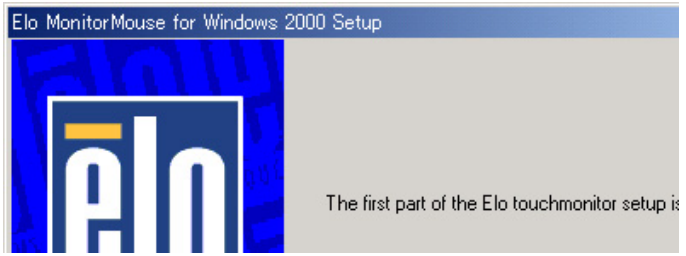
➔ The “Digital Signature Not Found” window opens in several seconds.



00000415.EPS

5. Click Yes.

➔ In about one minute, a window opens to indicate the completion of installation.



00000418.EPS

6. Click Finish.

➔ The “Updating System Settings” window opens.

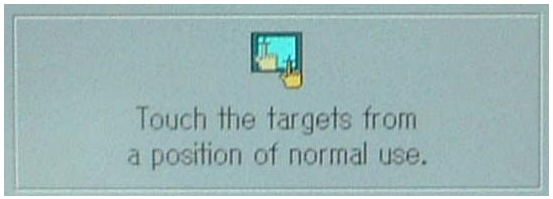
7. Remove the CD-ROM from the PC’s drive.

8. Click Yes.

➔ The PC restarts. The touch panel adjustment window will then opens automatically.

◆ ***NOTE*** ◆

Start adjusting the touch panel as soon as the window below has opened, otherwise it will close with the touch panel left unadjusted.



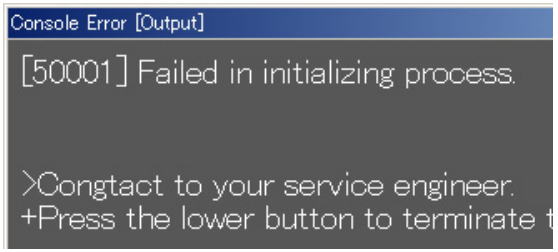
00000422.EPS

■ Adjusting the touch panel

◆ ***NOTE*** ◆

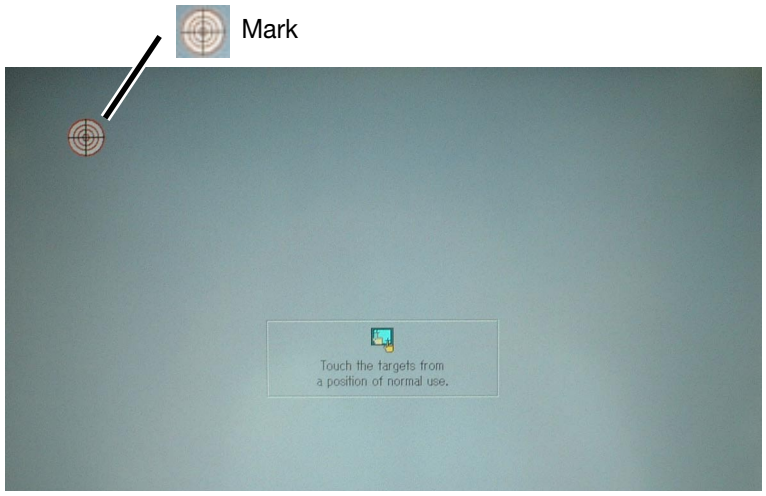
The following window may suddenly open during the touch panel adjustment process. It does not indicate any touch panel adjustment problem.

Click OK *to close the window and then continue with the touch panel adjustment process.*



00000321.EPS

1. With your finger, gently touch the mark at the upper left of the window.



00000227.EPS

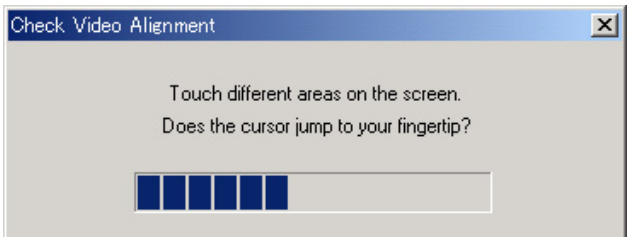
➔ The mark moves to the lower right of the window. (A beep will sound.)

2. Touch the mark gently with your finger.

➔ The mark moves to the upper right of the window.

3. Gently touch the mark again with your finger.

➔ The "Check Video Alignment" window opens.



00000316.EPS

4. Click Yes.

◆ ***NOTE*** ◆

Click Yes *within a period of 30 seconds. Failure to click* Yes *within a 30-second period invalidates the previous adjustments made.*

➔ The "Elo TouchSystems Setup" window opens.

5. Deselect ☑ View Elo Touchscreen control panel. (☑ ➔ ☐) and then click Finish.

➔ The system returns to the desktop screen.

◆ ***NOTE*** ◆

If a window opens to prompt FD insertion, click Cancel.

☞ To set up other functions (e.g. for silencing the alarm sound) of the touch panel, see the documentation for the touch panel driver.

■ Adjusting the contrast and brightness

Adjust the display contrast and brightness as follows.

- Model 9416TD15/H2
  - ❍ Contrast : 127
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 255
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)

- Model 9416TD/H2-1
  - ❍ Contrast : 65%
    (Press the “Menu” switch on the right-hand side of the monitor to adjust the contrast with Page1.)
  - ❍ Brightness : 100%
    (Press the ▲ or ▼ button on the right-hand side of the monitor while the “Main Menu” is not displayed on the screen.)

- Model L350P-TS
  - ❍ Contrast : 80%
  - ❍ Brightness : 80%
    (Press the “Enter” switch on the front of the monitor to adjust the brightness by selecting <Picture Adjustment>, then <Contrast Brightness>.)

4.1.4 Procedure for Avoiding a Password Input Prompt When Exiting the Suspend Mode

By default, the PC prompts for password input when you attempt to exit the suspend mode. Since it is conceivable that the user may inadvertently press the Suspend button on the keyboard, perform the following procedure as needed.

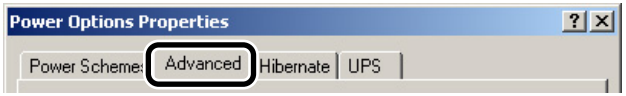
1. From the Start menu, point to “Settings”, and then click “Control Panel”.

➔ The Control Panel opens.

2. Double-click Power Options.

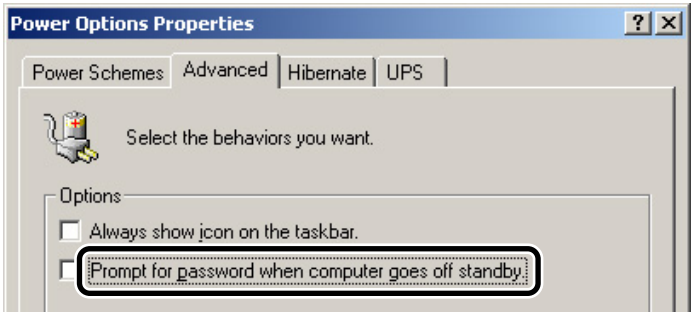
➔ The “Power Options Properties” window opens.

3. Click the “Advanced” tab.



IN000110.EPS

4. Uncheck Prompt for password when computer goes off standby. (☑ ➔ ☐).



IN000109.EPS

5. Click OK and then close the Control Panel.

➔ You are returned to the desktop screen.

4.1.5 Option Key Installation

The following option keys are available. Install necessary option keys in compliance with the CL installation specifications.

➤ *IMPORTANT*

Either the image input/output function or print output option key must be installed.

If it is not installed, an error display (error code: 50001) will be indicated during CL-AP startup, resulting thus in disabling the CL-AP to be started up. Moreover, when the "IR346 DICOM CR STORAGE" and "IR346 DICOM PRINT" option keys have been installed, be sure to perform config settings as well.

The 50001 error display will be indicated if an output system (for print or image output) option key has not been installed/set up properly.

☞ *For error details, see "3.4 Precautions to be Observed During the Use of Output Options" under "MT: Machine Troubleshooting".*

Function	Product Code	Description
Print output	IR346 LOCAL PRINT	LP (local printer) connection
	IR346 DICOM PRINT	DICOM Print function
Image input/output	IR346 DICOM *4 CR STORAGE	DICOM-based image transmission functions available (Also include a function to transmit unstandardized images to the QA-WS.) Options installed are as follows. • CR Storage SCU (Standard) • CR Storage SCU (Private) ("Private Unstandardized CR Storage" is included in "Private".)
	IR346 DICOM IM PROCESSED	Functions available for processed-image transmission with DICOM The option installed is as follows. • CR Storage SCU (Standard) • Processed image generation
	IR346 DMS NET-WORK IN-OUT	Function for image transfer (input/output) with FINP Options installed are as follows. • FINP output • FINP input (Supports only the reprint function.)

IN000004.EPS

Function	Product Code	Description
Image storage	CL DICOM COMMITMENT	A function assuring that an image has surely been stored in the archiver unit.*1
QA function	IR346 DELUX-QA	QA function addition*2*4
Image processing	IR346 MFP	MFP image processing
	CL SHUTTER-PROC	Shadow masking
	CL PEM	PEM image processing
Acquisition of patient information	CL ID ONLINE	ID Online function
	CL DICOM ORDER MWM	DICOM worklist function
	CL DICOM ID MWM	DICOM worklist function (acquiring only patient information)
	CL DICOM MPPS	DICOM PPS function*3
	CL ORDER ONLINE	Ordering function (serial connection)
	CL ORDER ONLINE FOR TST	Ordering function (F-RIS)
Energy subtraction processing	CL ES	Energy subtraction function Make sure to install this function when XU-D1 is connected.
X-RAY Controller	CL X ONLINE	X-CON control function

*1 To use this option, the "IR346 DICOM CR STORAGE" option key must have been installed.

*2 When "IR346 DELUX-QA" is installed, all the QA functions are made available.
If it is not installed, only a limited number of QA functions available.

*3 This option can be used only by combining it with "CL DICOM ORDER MWM" or "CL DICOM ID MWM".

*4 You need not to install this option key because it has been installed if the 15" monitor with a touch panel is provided (applicable only for Japan).

IN000006.EPS

➥ *REFERENCE*

Each option key is supplied on one dedicated CD-ROM for each product.

The installation procedure is described below.
The same installation procedure applies to all the option keys.

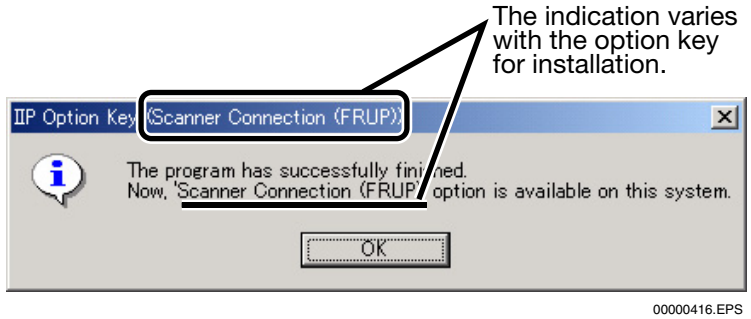
☞ For the option key uninstallation procedure, see “Appendix A Uninstalling the APs” under “RI: Reinstalling the Software”.

1. **Insert an option key CD into the CD-ROM drive.**

➔ The installation start window automatically opens in several seconds.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000416.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

◆ ***NOTE*** ◆

Depending on the option for installation, the installation start window will be displayed some times. Perform steps 2. and 3. as well.

4. **Remove the CD from the CD-ROM drive.**

5. **To install other optional keys, replace the CD and repeat steps 2. to 4. above.**

4.1.6 AP Key Installation

◆ ***NOTE*** ◆

Install the AP key after all optional keys have been installed accordingly. This is because once an optional key is installed, the AP key becomes invalidated requiring thus the AP key to be reinstalled.

➥ ***REFERENCE***

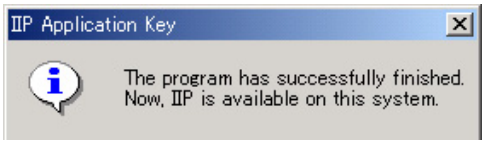
The CL is designed so that the CL-AP can be started up when registry information is generated to define the encryption key.
The associated registry information is generated when the AP key is installed.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000419.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

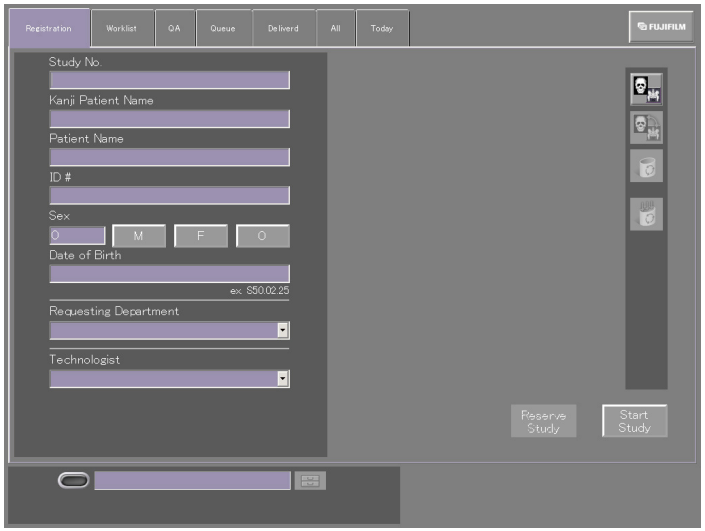
4. **Remove the CD from the CD-ROM drive.**

4.1.7 CL Startup Verification

Verify the normal startup of the CL.
After the completion of startup verification, exit the AP.

1. From the Start menu, select “Programs”, “Fuji Film”, and then “FCR”.

➔ The CL opening window appears on the display. After about one minute, the CL-AP starts up.



00000195.EPS

◆ NOTE ◆

If the above window does not open or an error display appears, note the displayed error code and the applicable remedy, and then make necessary corrections to achieve AP startup.

☞ *See “1. Error Code Table” in “MT: Machine Troubleshooting”.*

2. Click Shut Down in the FUJIFILM menu.

➔ The exit window opens.

3. Hold down the <Shift> key and click OK.

➔ The CL-AP exits and the system returns to the desktop screen.

➥ *REFERENCE*

To shut down the CL-AP only, click [Shut Down] and then [OK] while holding down the <Shift> key.

4.2 Setup for the CL with the Service Utility

Use the Service Utility to set up the following items for the CL.

- CL system information
- IDT functionality
- Menu database replacement (required only for equipment used abroad)

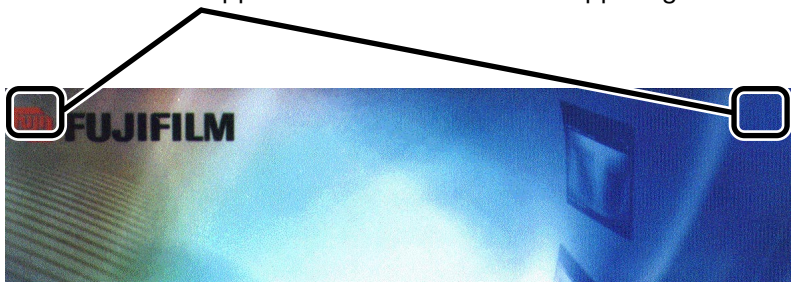
4.2.1 Starting the Service Utility

1. **Click Start and then sequentially choose "Programs", "Fuji Film", and "FCR".**

➔ The CL-AP starts up.

2. **Within a few seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



00000118.EPS

➔ The Service Utility starts. The "IIP Service Utility" window opens.



00000403.EPS

➥ *REFERENCE*

If you cannot complete step 2 from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

1. *To exit the AP, choose "Shut Down" from the FUJIFILM menu.*
2. *Click OK while holding down the <Shift> key.*
3. *From the Start menu, sequentially choose "Programs", "Fuji Film", and "FCR".*
4. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

4.2.2 CL System Information Setup

Complete setup concerning CL system information and IDT functionality as directed in this section.

■ Setting the system information

1. From the "IIP Service Utility" window, click [Setup Configuration Item].

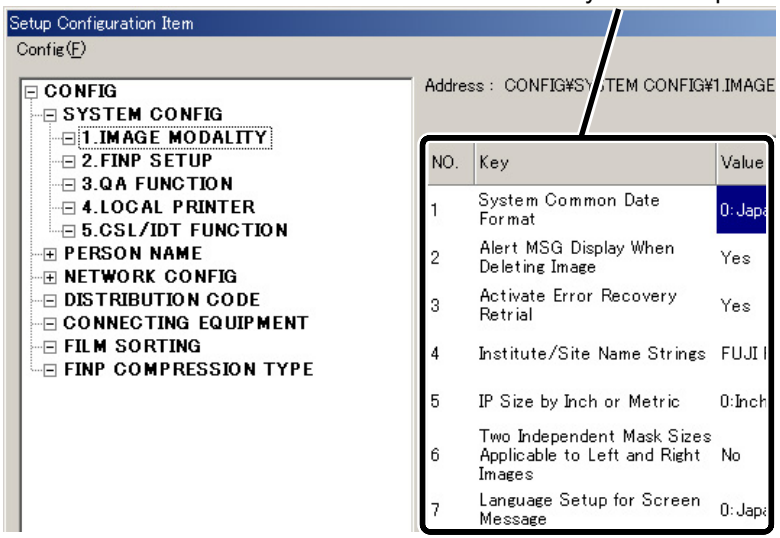
➔ The "Setup Configuration Item" window opens.

2. Click the ⊞ sign within ⊟ SYSTEM CONFIG in the "Setup Configuration Item" window.

3. Click ⊟ 1.IMAGE MODALITY.

➔ The CL system information setup items appear.

Items for CL system setup



00000132.EPS

4. Enter setup data as directed below:

❍ Make a date format selection by double-clicking

0:Japanes date(S62.10.07) for 1 System Common Date Format.

- 0: FJapanese date (S62.10.07) [Default]
- 1: FANSI long date (1987.OCT.07)
- 2: FANSI short date (1987.10.07)
- 3: FAmerican long date (OCT.07.1987)
- 4: FAmerican short date (10.07.1987)
- 5: FEuropean long date (07.OCT.1987)
- 6: FEuropean short date (07.10.1987)

◆ *NOTE* ◆

Use "System Common Date Format" to specify the date format. If you change the date format, the following items of information are changed to match the newly selected format.

- *Date output on film*
- *Format for birth date input*
- *Date displayed by CL-AP*
- *Other date indications*

❍ Make a hospital name entry (one-byte characters) by double-clicking

FUJI FILM HOSPITAL for 4 Institute/Site Name Strings.

◆ *NOTE* ◆

Use "Institute/Site Name Strings" to enter a hospital name string of one-byte characters for use in the CL system.

The default hospital name is "FUJI FILM HOSPITAL". Change this entry to a hospital name string of one-byte characters as defined by a specific hospital.

You can enter a string of up to 60 characters.

❍ Set the IP size unit system (inch or metric) for 5.CSL/IDT FUNCTION.

◆ *NOTE* ◆

Select this key to specify whether to display 35×43cm (14"×17") and 35×35cm (14"×14") images in the inch or metric system.

❍ Use [7 Language Setup for Screen Message] to specify the language to be used.

- 0: Japanese [Default]
- 1: English
- 2: German
- 3: French
- 4: Spanish
- 5: Italian
- 6: Swedish
- 7: Finnish
- 8: Danish
- 9: Norwegian
- 10: Korean

❍ Double-click [FUJI FILM HOSPITAL] for [8 Institute/Site Name in Two-Byte Characters] to enter a hospital name (consisting of two-byte characters).

◆ *NOTE* ◆

Use "Institute/Site Name in Two-Byte Characters" to enter a hospital name string of two-byte characters for use in the CL system.
The default hospital name is "富士フイルム病院 ". Change this entry to a hospital name string of two-byte characters as defined by a specific hospital.
You can enter a string of up to 15 two-byte characters.

❍ For connection to an RU (not necessary for the 5000plus series), make sure that the setting for [21 Connection Between Reader and Console] is [1:N-N].

❍ Set up the monitor pixel size for [30 Display Pixel Size].

- 15" LCD monitor with a touch panel : 297
- SL-IC300 : 207
- CRT monitor
  (17" Ikegami CRT monitor) : Calculate the pixel size using the expression below.

Monitor width (mm) ÷ number of pixels × 1000 = pixel size

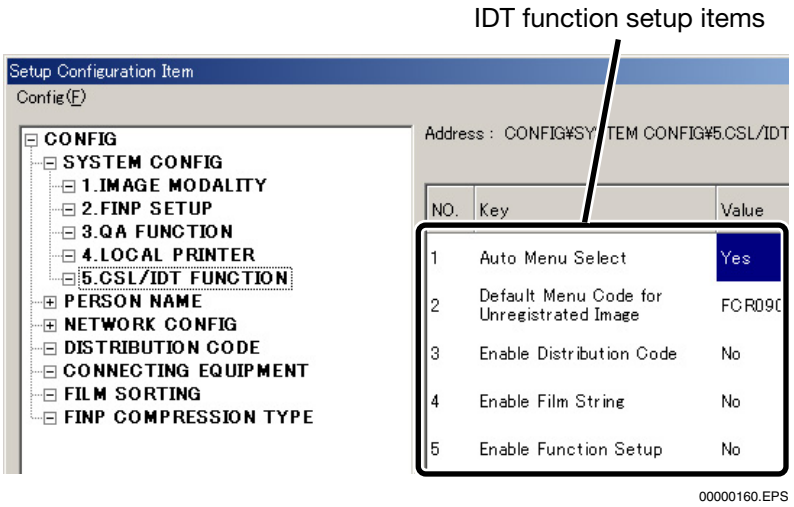
5. Change the other items of system information as needed.

☞ For details of other setup items, see "3.4 Config Details — 1. IMAGE MODALITY" under "MU: Maintenance Utility".

■ Setting the IDT functionality

1. From the "Setup Configuration Item" window, click [5.CSL/IDT FUNCTION].

➔ The IDT function setup items appear in the right-hand area of the window.



00000160.EPS

2. Edit the IDT functionality setup as needed.

☞ For details of the setup items, see "3.6 Config Details — 5. CSL/IDT FUNCTION" under "MU: Maintenance Utility".

3. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

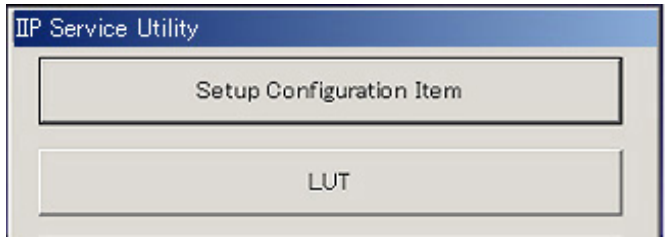
4. Click [Yes].

➔ The system saves the setup data.

4.2.3 Optimizing the Monitor Display

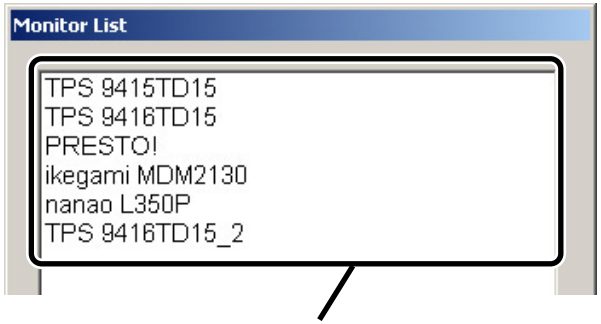
Set the LUT file as follows to optimize the image display of the monitor that is being used.

1. **Click [LUT] on the "IIP Service Utility" window.**



IN000030.EPS

2. **Select the name of the display monitor that is actually being used and click** OK **.**



Select the connected display monitor type.

IN000031.EPS

- TPS 9415 TD15 : 15" LCD monitor with a touch panel (model TPS9415TD15/G2)
- TPS 9416 TD15 : 15" LCD monitor with a touch panel (model TPS9416TD15/H2)
- PRESTO! : Super Resolution LCD Monitor SL-IC300
- ikegami MDM2130 : Ikegami 1k landscape monitor
- nanao L350P : EIZO 15" LCD monitor with a touch panel (model L350P-TS)
- TPS 9416TD15_2 : 15" LCD monitor with a touch panel (model TPS 9416TD15/H2-1)

➔ You are returned to the “IIP Service Utility” window.

4.2.4 Changing the Menu Database (for non-Japanese versions only)

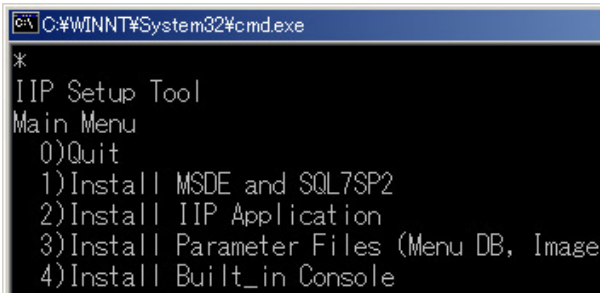
To change the exposure menu to a different language version, it is necessary to change the menu database. Languages that the A07 version software supports are as follows.

- Japanese
- English
- English (other than U.S.)

The default language setting is “English (other than U.S.)” (only for CL units to be shipped outside Japan). If a setting of “English (other than U.S.)” is to be continuously used, there is no need to perform the procedure described in this section.

1. **Insert the CL-AP CD into the CD-ROM drive.**

➔ The “IIP Setup Tool” main menu automatically opens.



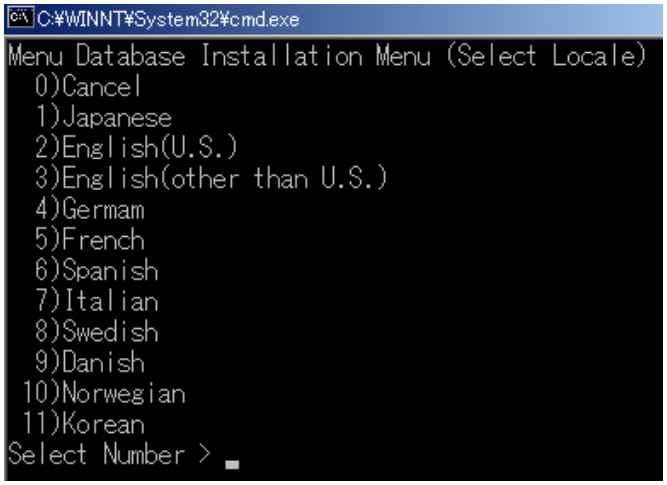
IN000018.EPS

➥ ***REFERENCE***

The “IIP Setup Tool” is a utility tool that is used, for instance, to install the CL-AP. This tool is stored on the CD (product name: Application software; part number: 114Y5342001A) that is supplied as a standard accessory for the CL.

2. **Enter “3” and then press the <Enter> key.**

➔ The language list appears.



00000463.EPS

3. **Enter the number of the language to be installed, and then press the <Enter> key.**

➔ Several message lines appear during installation. Upon completion of installation, the message “Menu Database installation completed.” appears.

➔ The menu database change procedure is now completed.

4. **When an item other than “1) Japanese” has been selected, the three menus, “Cassette”, “Built_in” (for standing position) and “Built_in” (for decubitus position), will be displayed. Select any according to the connected device.**

5. **Enter “0” and then press the <Enter> key.**

➔ The “IIP Setup Tool” exits, returning you to the desktop screen.

6. **Remove the CD from the CD-ROM drive.**

4.3 Barcode Reader/Magnetic Card Reader Connection

When using the barcode reader or magnetic card reader, perform the following connection and setup.

- Barcode reader connection and setup

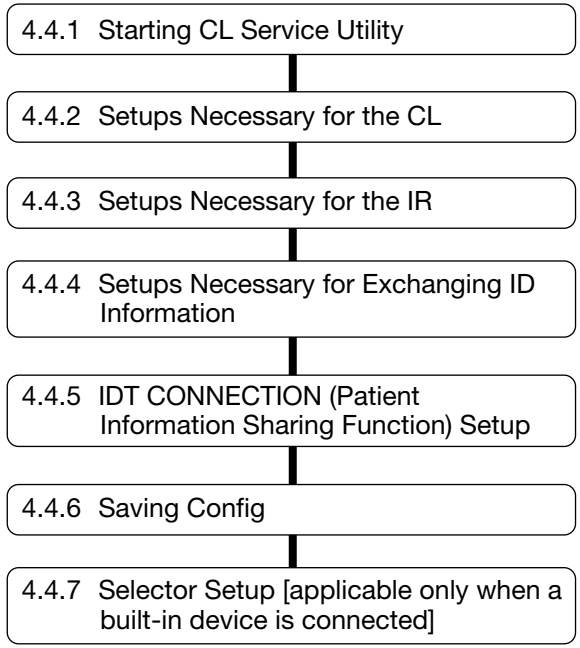
  ☞ For details on the connection, see "Appendix 3 Connecting the Barcode Reader [Option]."

- Magnetic card reader connection and setup

  ☞ For details on the connection, see "Appendix 4 Setting Up the Magnetic Card [Option]."

4.4 Config Settings for IR Connection

Explained below are the CL setup procedures to be followed when transferring images from the IR to the CL.



IN000052.EPS

4.4.1 Starting CL Service Utility

1. Start up the CL Service Utility mode.

☞ See “1. Starting/Exiting the Service Utility” under “MU: Maintenance Utility”.

4.4.2 Setups Necessary for the CL

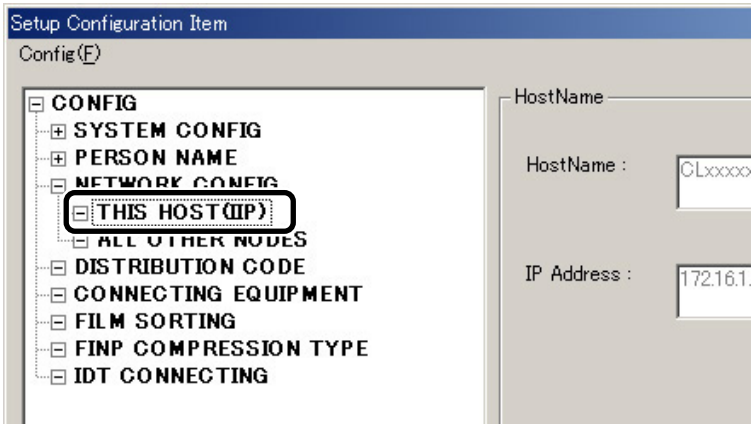
1. Click the “Setup Configuration Item” button.



00000403.EPS

➔ The “Setup Configuration Item” window opens.

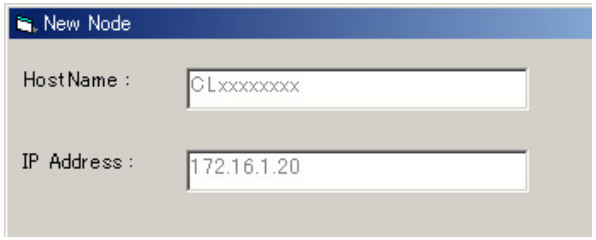
2. Click NETWORK CONFIG — THIS HOST(IIP).



IN000056.EPS

3. Click New.

➔ The [New Node] window opens.

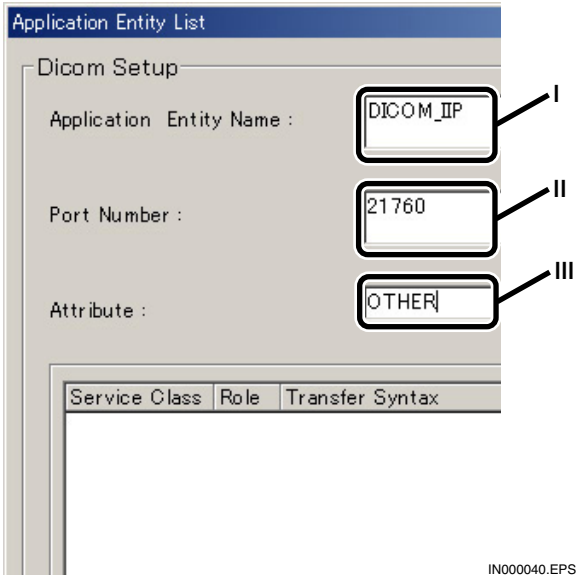


IN000039.EPS

4. Select DICOM of the “Add Node” box and click OK.

➔ The “Application Entity List” window opens.

5. Make the following settings on the “Application Entity List” window.



I. Enter the CL Application Entity Name (DICOM_IIP).
II. Enter the CL Port Number (21760).
III. Select “OTHER”.

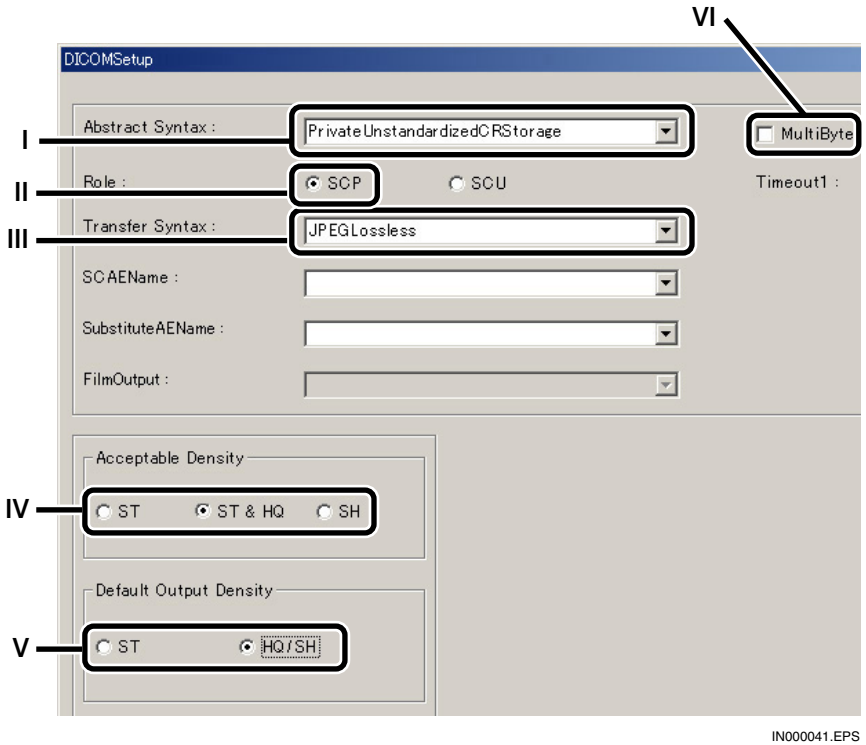
6. Click New.

➔ The “DICOMSetup” window opens.

➥ *REFERENCE*

“DICOM_IIP” and “21760” are the 5000 series defaults values set when it is shipped from factory.

7. Make the following settings on the “DICOMSetup” window.



I. Select “PrivateUnstandardizedCRStorage”.
II. Select “SCP”.
III. Select “JPEG Lossless”.
IV. Select “ST&HQ”. Select “SH” when the 5000MA is connected.
V. Select “HQ/SH”.
VI. To handle two-byte characters, check here.

8. Click OK.

➔ You are returned to the “Application Entity List” window.

9. Click OK.

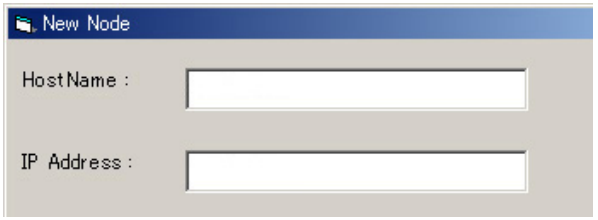
➔ You are returned to the “Setup Configuration Item” window.

4.4.3 Setups Necessary for the IR

1. Click ⊟ NETWORK CONFIG — ⊟ ALL OTHER NODES on the "Setup Configuration Item" window.

2. Click New.

➔ The "New Node" window opens.



IN000042.EPS

3. Enter the IR host name (fcr5501-n) in the HostName : field and the IR IP address (172.116.0.2) in the IP Address : field, respectively.

◆ ***NOTE*** ◆

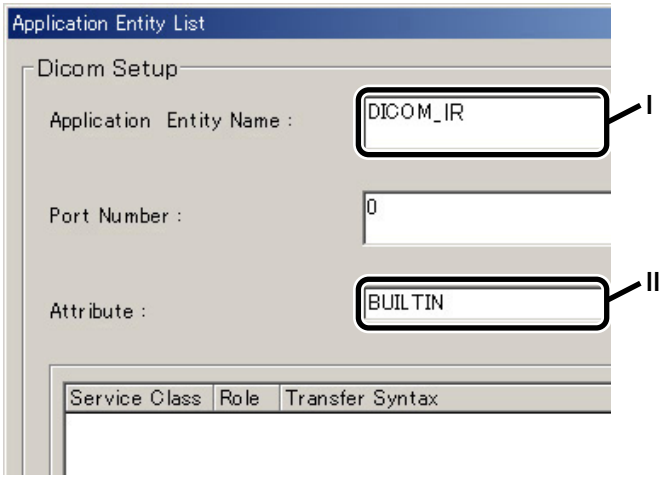
The default host name for each IR is as follows:

5000/5000R/5000MA/ :fcr5000-n
5501/5501D/5502D/XU-D1 :fcr5501-n

4. Select ◉ DICOM in the "Add Node" box and click OK.

➔ The "Application Entity List" window opens.

5. Make the following settings on the "Application Entity List" window.



IN000081.EPS

I. Enter the IR Application Entity Name (DICOM_IR).
II. Select "BUILTIN" or "CASSETTE".
5000/5000R/5000MA : CASSETTE
5501/5501D/XU-D1/5502D : BUILTIN

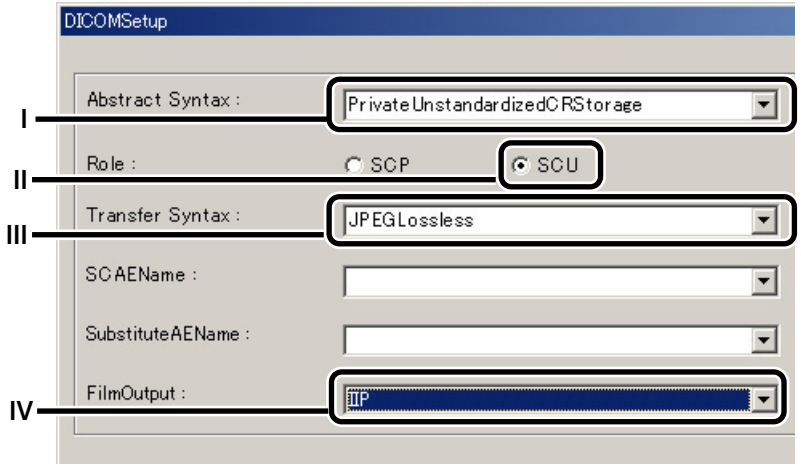
◆ ***NOTE*** ◆

The default Application Entity Name for each IR is "DICOM_IR".

6. Click New.

➔ The "DICOMSetup" window opens.

7. Makes the following settings on the “DICOMSetup” window.



00000014.EPS

I. Select “PrivateUnstandardizedCRStorage”.
II. Select “SCU”.
III. Select “JPEG Lossless”.
IV. Select a destination for film output.
Select “IIP” when connecting an LP to the CL and “FCR5000” when connecting an LP to the IR.

◆ ***NOTES*** ◆

- *When the XU-D1 is connected, do not select “FCR5000” in the “FilmOutput” box because the XU-D1 does not support LP output.*
- *When “IIP” has been selected for IV, with an LP connected also to the 5000 plus, make config settings (EQUIP file) for the 5000 plus PRINT function set to “Local_R”.*

8. Click OK.
➔ The “Application Entity List” window opens.

9. Click OK.
➔ You are returned to the “Setup Configuration Item” window.

4.4.4 Setups Necessary for Exchanging ID Information

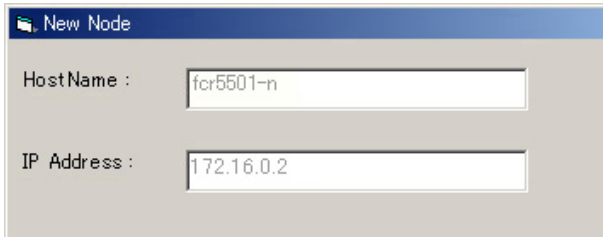
◆ ***NOTE*** ◆

These setups can be omitted for the cassette-type IR. When omitted, FINP110 will interacts between IR and CL.

1. Click NETWORK CONFIG — ALL OTHER NODES — fcr5501-n (host name of other connected equipment) on the “Setup Configuration Item” window.

2. Click New.
➔ The [New Node] window opens.

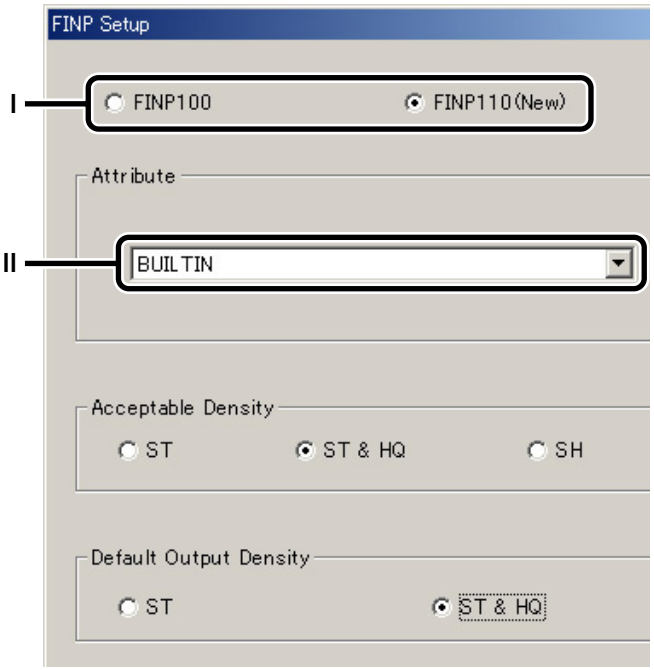
3. Make sure that FINP has been selected in the “Add Node” box. Click OK.



IN000045.EPS

➔ The “FINP Setup” window opens.

4. **Makes the following settings on the “FINP Setup” window.**



IN000046.EPS

I. Select FINP110(New).

II. Select “BUILTIN” or “CASSETTE”.
5000/5000R/5000MA : CASSETTE
5501/5501D/5502D/XU-D1 : BUILTIN

5. **Click** OK.

➔ You are returned to the “Setup Configuration Item” window.

4.4.5 IDT CONNECTION (Patient Information Sharing Function) Setup

When two or more CLs are connected in the same system, make settings so that the patient information can be shared by all CLs connected.

☞ For the procedure used for patient information sharing function setup, see “3.9 Patient Information Sharing Function Setup” under “MU: Maintenance Utility”.

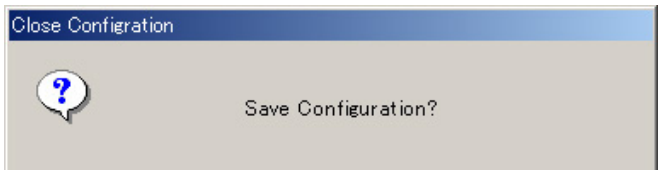
4.4.6 Saving Config

1. **Select “Save” from the “Config (F)” menu of the “Setup Configuration Item” window.**



IN000047.EPS

➔ The “Close Configuration” window opens.



IN000048.EPS

2. **Click** Yes.

➔ The setup data will be saved.

3. **Select “Close” from the “Config(F)” menu.**

➔ You are returned to the Service Utility mode window.

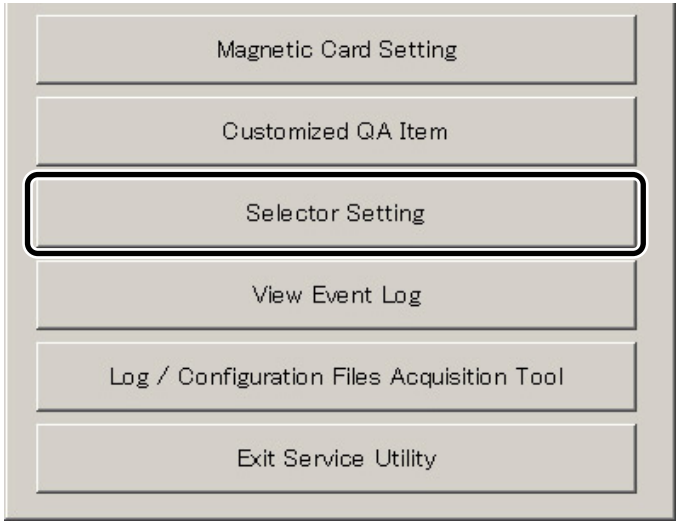
4.4.7 Selector Setup (applicable only when a built-in device is connected)

To connect a built-in device to the CL, register it to the selector. When connecting a cassette device, it needs not be registered because it has been registered as the default.

◆ *NOTE* ◆

One or two built-in devices and 16 at maximum of each of RU and 5000 cassette-type devices can be connected respectively to the CL.

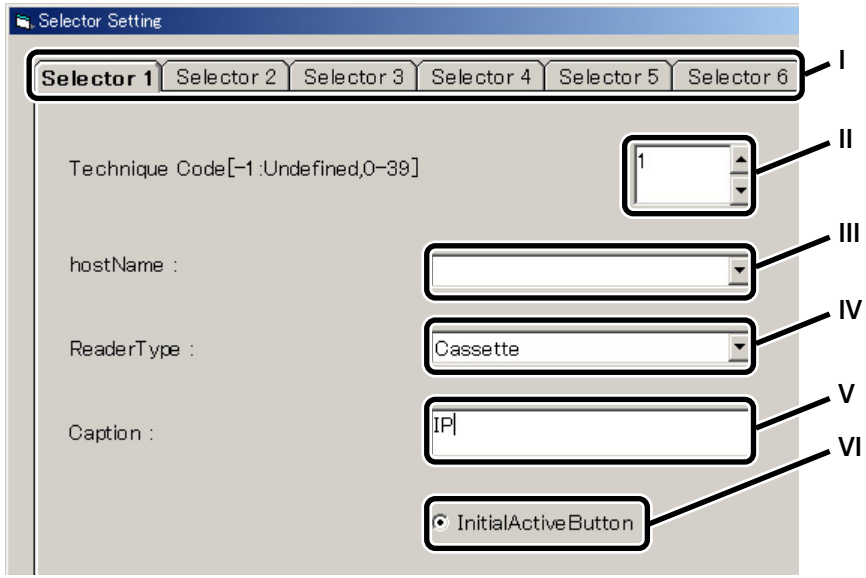
1. **Click the “Selector Setting” button on the “Service Utility” window.**



IN000049.EPS

➔ The “Selector Setting” window opens.

2. **Make the following selector settings.**



IN000050.EPS

I. Select an unregistered “Selector” tab.
As the default, a cassette device is registered to the “Selector1” tab.

II. Set the Technique Code paying attention not to set the same code with other selectors.

III. Select a device to be added to the selector (use the host name for selection).

IV. Select the Reader Type.
- 5501/5501D/XU-D1 : 5501
- 5502D : 5502
- To restore “Cassette”, select the blank from the pull-down menu of the “hostName” box.

V. Enter a maximum of five one-byte characters in the selector button.

VI. To restore the initially selected status when the CL was started, from the selector that is now being edited, turn the radio button ON.

3. **If no cassette device (including CR-IR346RU) is connected, delete as follows the cassette device registered to the selector as the default.**

1. Select the “Selector1” tab.
2. Change the Technique Code to “-1”.

4. Click OK.

➔ You are returned to the Service Utility mode window.

5. Click the “Exit Service Utility” button.

➔ The Service Utility mode will exit and you are returned to the desktop screen.

➥ ***REFERENCE***

The window shown below represents an example of user display where one each of cassette device and built-in device have been set in the selector.



4.4.8 Settings for Transfer of Image Processing Parameters (only for A02 and A03)

Use the procedure described below to perform network settings necessary for transferring image processing parameters from the CL to the IR.
With software versions A02 and A03, image processing parameters are handled via the CPU90E board. For this reason, be sure to connect a network cable to the CPU90E board.
With software version A04, image processing parameters are handled via the CPU90F board making it unnecessary to perform settings at this step.

➥ ***REFERENCE***

Image processing parameter transfer refers to a user utility function that is responsible for matching the CL image processing parameters with those for the IR. With this function, you can overwrite the IR image processing parameter data with the CL image processing parameter data.

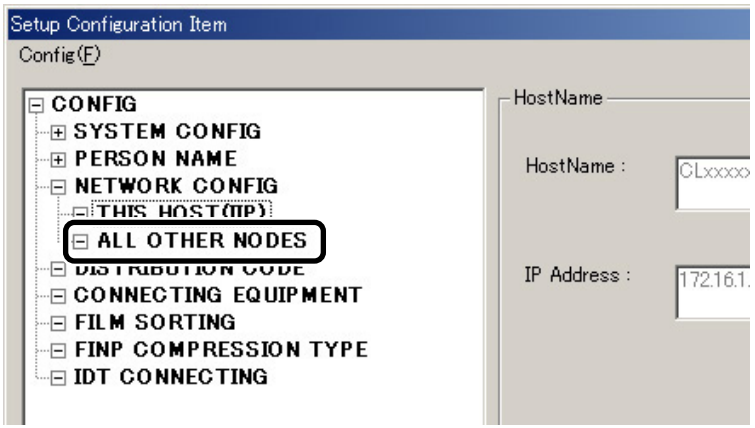
■ Setups necessary for the CL

“NETWORK CONFIG” — “THIS HOST (IIP)” settings have already been made in 4.4.2.

■ Setups necessary for the IR

Set the CPU90E board information as follows.

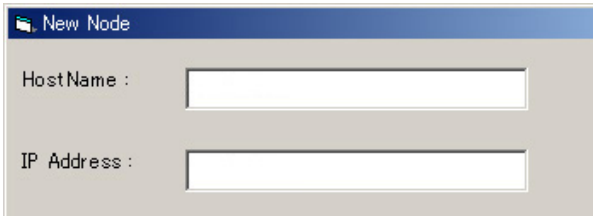
1. Click [⊟ NETWORK CONFIG] — [⊟ ALL OTHER NODES] on the "Setup Configuration Item" window.



IN000038.EPS

2. Click [New].

➔ The "New Node" window opens.



IN000042.EPS

3. Enter the CPU90E board host name in [HostName :] and the IP address (e.g.: 172.16.01) of the IR CPU90E board in [IP Address :].

◆ *NOTE* ◆ (*NOTE)

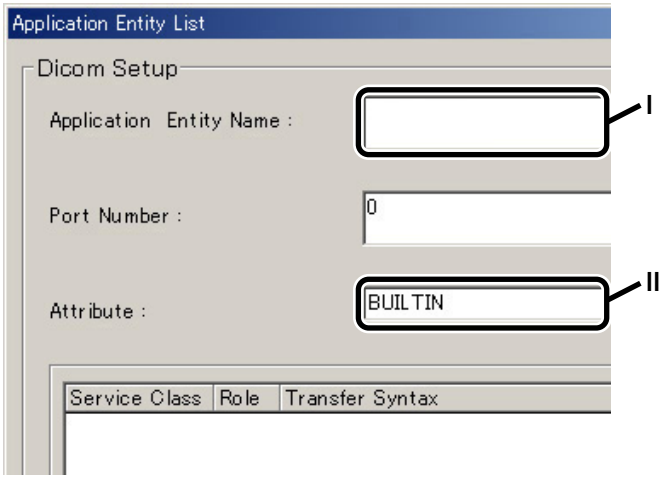
The default CPU90E board host name for each IR is as follows.

5000: fcr5000	*5000R: fcr5000*	*5000MA: fcr5000*
5501: fcr5501	*XU-D1: fcr55es*	*5502D: fcr5501*

4. Select [DICOM] in the "Add Node" box and click [OK].

➔ The "Application Entity List" window opens.

5. Make the following settings on the "Application Entity List" window.



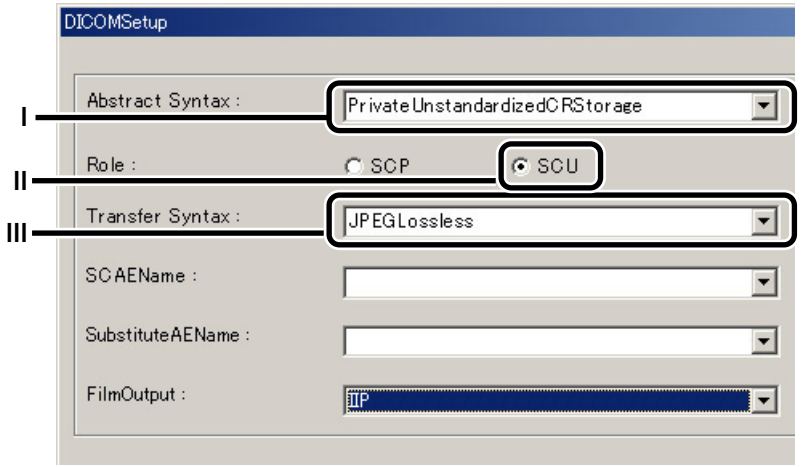
IN000053.EPS

I. Enter the CPU90E board Application Entity Name.
II. Select "BUILTIN" or "CASSETTE".
5000/5000R/5000MA : CASSETTE
5501/5501D/5502D/XU-D1 : BUILTIN

6. Click New.

➔ The “DICOMSetup” window opens.

7. Make the following settings on the “DICOMSetup” window.



IN000054.EPS

I. Select “PrivateUnstandardizedCRStorage”.
II. Select “SCU”.
III. Select “JPEG Lossless”.

8. Click OK.

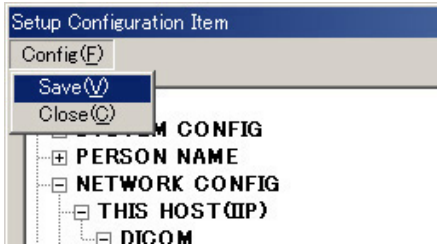
➔ You are returned to the “Application Entity List” window.

9. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

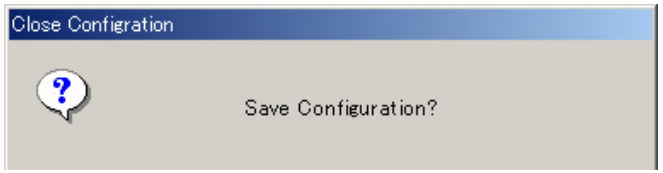
■ Saving Config and exiting the Service Utility mode

1. Select “Save” from the “Config (F)” menu of the “Setup Configuration Item” window.



IN000047.EPS

➔ The “Close Configuration” window opens.



IN000048.EPS

2. Click Yes.

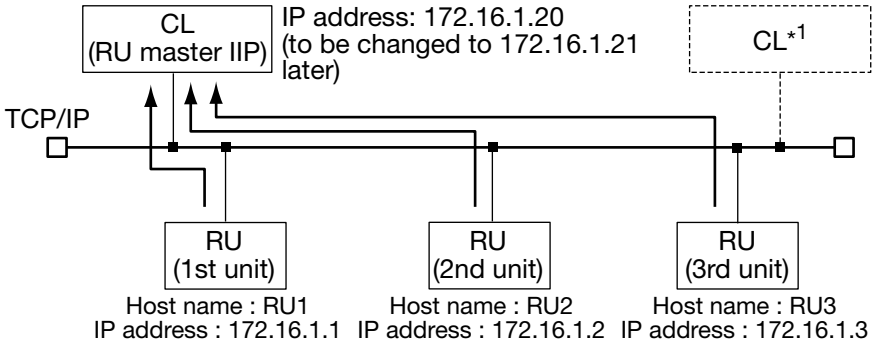
➔ The setup data will be saved.

3. Select “Close” from the “Config (F)” menu.

➔ You are returned to the Service Utility mode window.

4.5 Setup for RU Connection

This section shows how to set up the CL that serves as the RU master IIP and permits two or more RU units to transfer images to the CL. The subsequent explanations are given on the presumption that three RU units are connected to one CL unit.



*1 CL that does not serve as the RU master IIP (to be added in section 4.5.7).

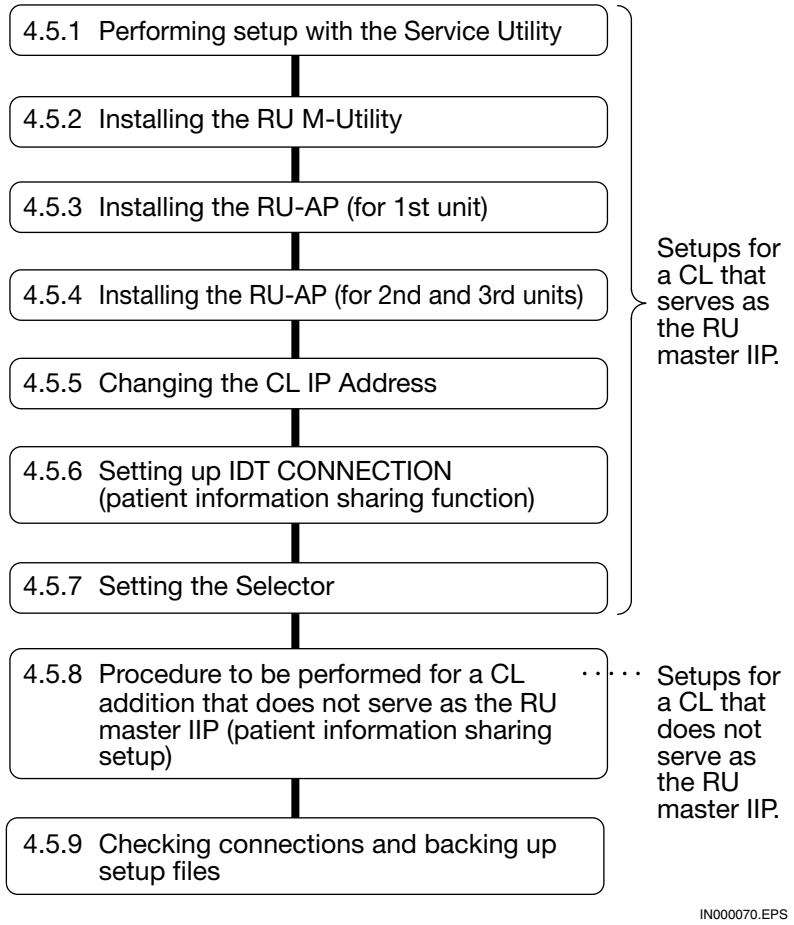
IN000069.EPS

➥ *REFERENCE*

You must perform an extremely complicated procedure to set up the CL as the RU master IIP for the connection of multiple RU units. It is therefore recommended that you read the function descriptions in the following reference sections in advance:

☞ *See "5 Relationship between RU (CR-IR346RU) and CL", and "6 RU-CL N:N Connection Function Overview" under "MD: Machine Description".*

For RU connection setup, perform the following steps:



IN000070.EPS

4.5.1 Performing setup with the Service Utility

Register the network information and equipment information (CONNECTING EQUIPMENT) about the three RU units with the CL's Service Utility.

■ Registering the network information

1. Start the Service Utility.

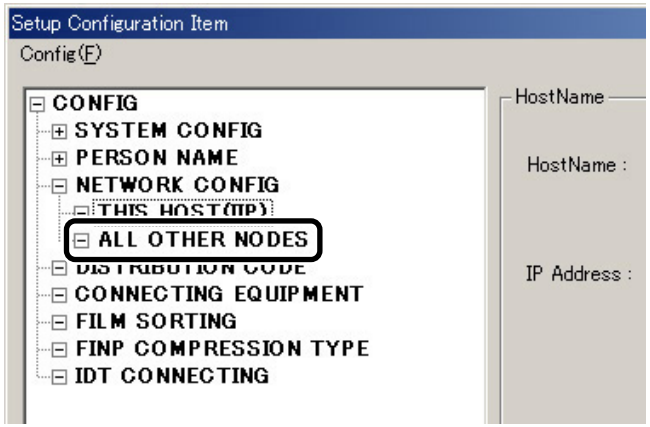
☞ See "1 Starting/Exiting the Service Utility" under "MU: Maintenance Utility".



00000403.EPS

2. Click [Setup Configuration Item].

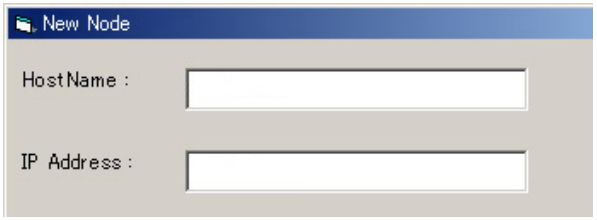
3. Click NETWORK CONFIG and then click ALL OTHER NODES.



IN000071.EPS

4. Click New.

➔ The "New Node" window opens.

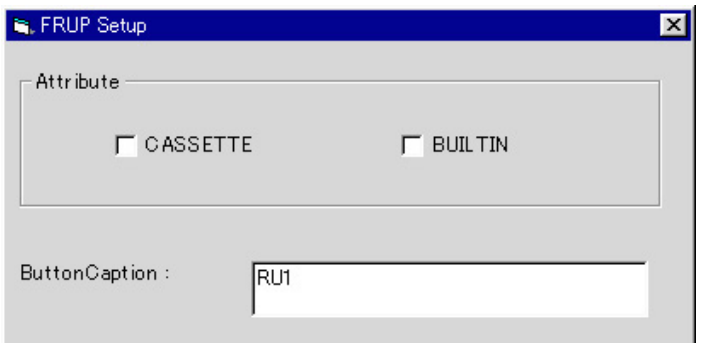


IN000042.EPS

5. In the HostName : field, enter the host name of the first RU unit (RU1). In the IP Address : field, enter the IP address (172.16.1.1).

6. Choose FRUP in the [Add Node] area and then click OK.

➔ The [FRUP setup] window opens.



IN000082.EPS

7. Check CASSETTE in the [Attribute] area (☐ ➔ ☑).

8. In the ButtonCaption : field, enter “RU1”.

➥ ***REFERENCE***

The character string entered in this step appears in the user’s operation windows. It need not be the same as the host name.

9. Click OK.

➔ The network information registration is completed for the first RU unit.

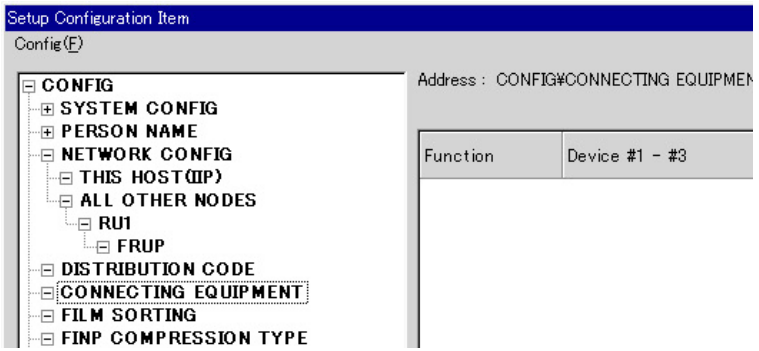
10. **Register the network information about the second and third RU units by performing steps 3. through 9.**

❍ Network information about the second RU unit
- Host name : RU2
- IP address : 172.16.1.2
- Button Caption: RU2

❍ Network information about the third RU unit
- Host name : RU3
- IP address : 172.16.1.3
- Button Caption: RU3

■ Registering the equipment information (CONNECTING EQUIPMENT)

1. In the [Setup Configuration Item] window, click ⊟ CONNECTING EQUIPMENT.

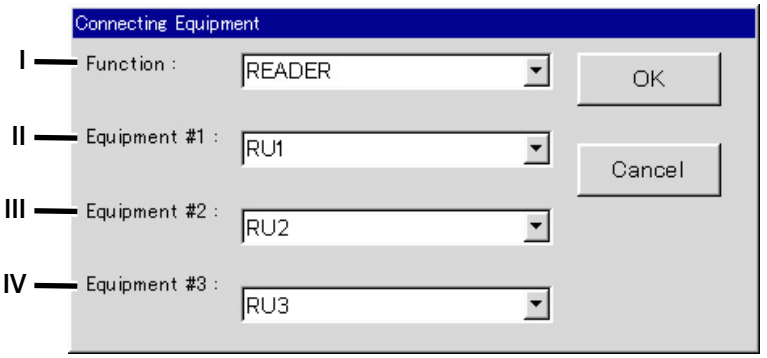


IN000083.EPS

2. Click New.

➔ The [Connecting Equipment] window opens.

3. **Register the equipment information as di‡cted below:**



IN000072.EPS

I. Choose “READER”.
II. Choose “RU1”.
III. Choose “RU2”.
IV. Choose “RU3”.

4. Click OK.

➔ The equipment information registration is now completed. The system returns you to the [Setup Configuration Item] window.

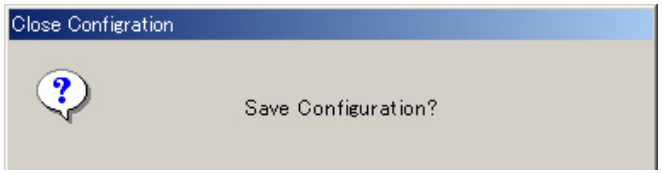
■ Saving the configuration data and exiting the Service Utility

1. From the [Config (F)] menu in the [Setup Configuration Item] window, choose [Save].



IN000047.EPS

➔ A window opens, asking whether you want to save the configuration data.



IN000048.EPS

2. Click [Yes].

➔ The system saves your setup data entries.

3. From the [Config (F)] menu, choose [Close].

➔ The system returns you to the Service Utility window.

4. Exit the Service Utility.

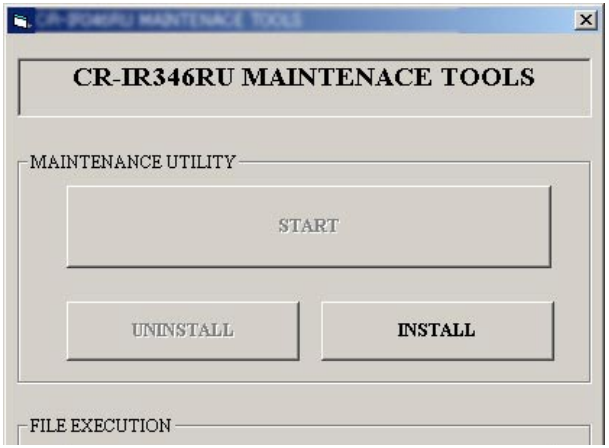
4.5.2 Installing the RU M-Utility

◆ *NOTES* ◆

- *The RU M-Utility installation procedure is described herein on the assumption that the RU application CD-ROM version A07 or later is used for the RU M-Utility (PC-MUTL hereinafter) that is to be installed as follows. A different installation procedure will be required if a version earlier than that mentioned above is used.*
- *Make sure to start the procedure below with the CL-AP quit accordingly.*

1. Have on hand the CD that is supplied with the RU. Insert this CD into the CD-ROM drive.

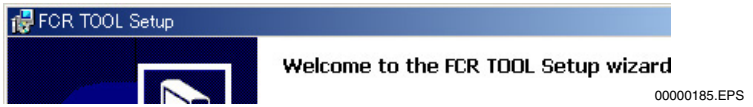
➔ After a while, the following window opens:



00000214.EPS

2. Click [INSTALL].

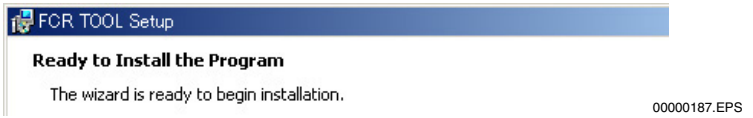
➔ The RU M-Utility installation start window opens.



00000185.EPS

3. Click [Next >].

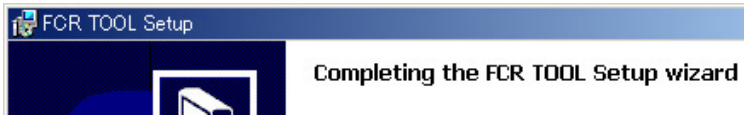
➔ The [FCR TOOL Setup/Ready to Install...] window opens.



00000187.EPS

4. Click Install.

➔ When the installation terminates, the [FCR TOOL Setup/Completing the ...] window opens.



00000188.EPS

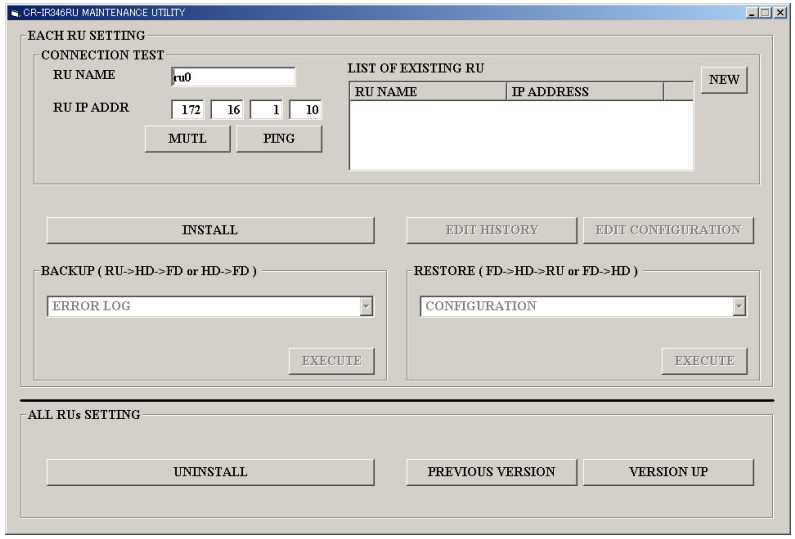
5. Click Finish.

➔ The system returns you to the [CR-IR 346RU MAINTENANCE TOOLS] window.

6. Click START.

➔ The [CR-IR 346RU MAINTENANCE UTILITY] main menu window opens.

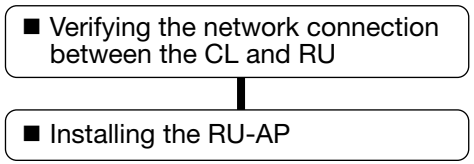
● Main menu window
(the display differs depending on the software version used.)



00000215.EPS

4.5.3 Installing the RU-AP (for 1st unit)

Install the RU-AP for the first RU unit as directed below:



IN000097.EPS

■ Verifying the network connection between the CL and RU

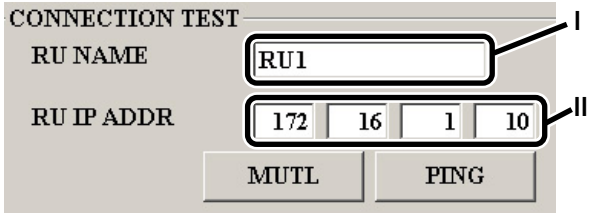
Before installing the RU-AP, check that the CL and RU are network-connected. The RU is factory preset to an IP address of 172.16.1.10.

◆ *NOTES* ◆

- *Make sure that the power cables of all the three RU units are connected to the circuit breaker.*
- *Perform the procedure below with the CL-AP shut down accordingly.*
- *Exit all APs (particularly Windows Explorer) other than the RU M-Utility.*

1. **Turn ON only the first RU unit. Leave the second and third units OFF.**

2. **With the main menu, conduct the following check:**



00000426.EPS

I. Enter the RU host name (RU1).
II. Check that “172.16.1.10” is entered.

◆ *NOTES* ◆

- *Since the host name entry made in step I. above becomes the formal RU host name, be sure to enter a correct host name here.*
- *Do not change “RU IP ADDR” to a setting other than “172.16.1.10”.*

☞ *For the RU host name change procedure, see “Appendix 8 Changing the RU Host Name”.*

3. Click PING.

➔ The system beings to check for the connection to the RU.

4. **Verify the network connection to the RU.**

The connection is normal if the following message appears four times:

Reply from 172.16.1.10: bytes=32 time<10ms TTL=128

➥ *REFERENCE*

The "time<10ms" and "TTL=128" portions of the above message vary with the network status. Even when their values vary, the connection is normal as far as the message appears four times.

◆ *NOTE* ◆

Be sure to verify the network connection. If you install the RU-AP without completing the proper network verification procedure, an error occurs when the RU restarts.

➥ *REFERENCE*

If the connection to the RU cannot be verified, check whether the following causes exist:

- *Cable connection ➔ Check again.*
- *RU or CL network board ➔ Restart.*
- *Other*

If you still cannot verify the connection, initialize the RU memory so as to return the IP address recorded in the RU main unit to the default value, and reestablish the network connection.

☞ *For details on the procedure for initializing the memory to reestablish the network connection to the CL, see "3.1 CL/RU Connection Recovery Procedure to be Performed upon RU Memory Initialization" under "MT: Machine Troubleshooting".*

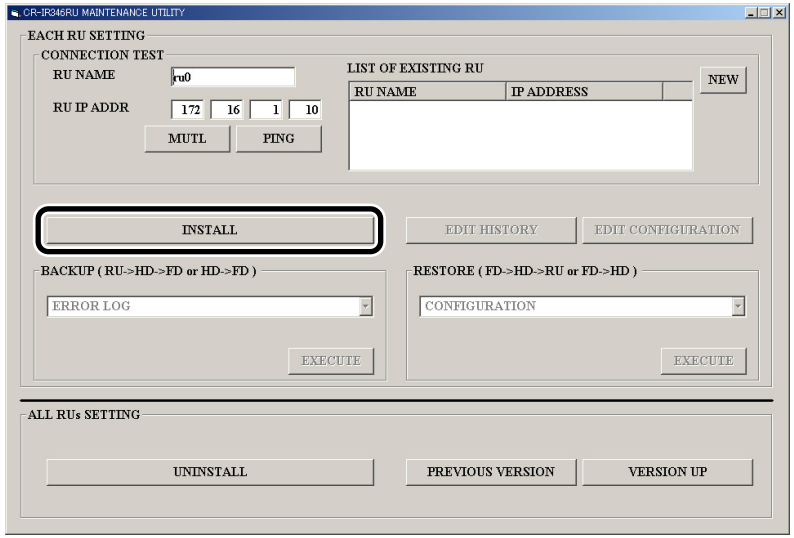
5. **Click ✕ at the upper right corner of the command prompt window.**

➔ The system returns you to the main menu.

■ Installing the RU-AP

Install the RU-AP on the first RU unit as directed below:

● Main menu window



00000502.EPS

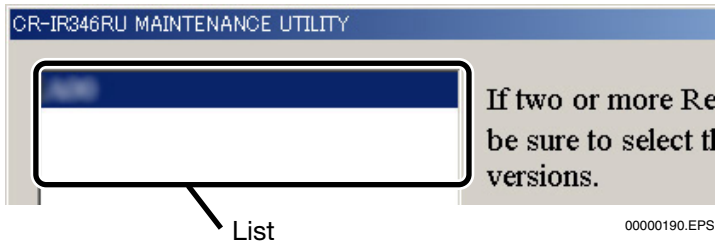
1. **In the main menu window, click [INSTALL].**

➔ The [Insert the CD-ROM into a drive] window opens.

2. **Since the CD containing the RU-AP is already inserted into the CD-ROM drive, just click** OK.

➔ The RU-AP version selection window opens.

3. **Select an RU-AP version (A05 or later) from the list and then click** OK.



00000190.EPS

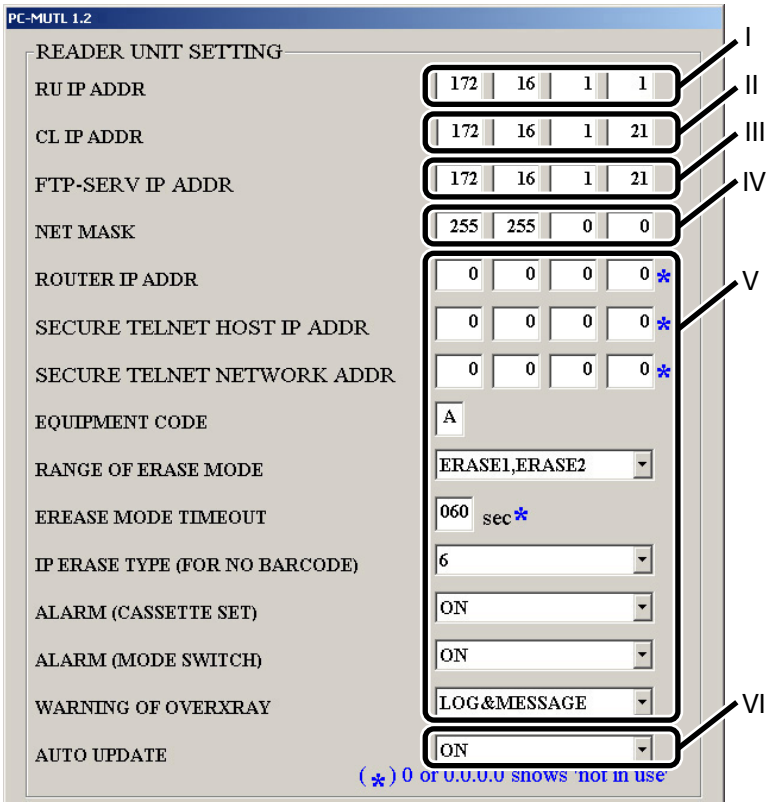
➔ The [READER UNIT SETTING] window opens.

4. Perform the following setup steps:

◆ ***NOTE*** ◆

The data set up as follows will be written on the RU-Config file and then installed in the RU together with the RU-AP.

☞ *For the procedure used when changing the setup data after installation, see "Appendix 2 Setting the RU Config".*



IN000063.EPS

I. Enter the formal IP address of the first RU unit (172.16.1.1 in the above setup example).

II. Enter the IP address of the CL (172.16.1.21 in the above setup example). Because the installation procedure hereafter can be simplified, enter 172.16.1.21 (changed IP address), instead of 172.16.1.20.

III. Enter the same IP address as CL IP ADDR (172.16.1.21).

IV. Enter the subnet mask (255.255.0.0 in the above setup example).

V. If necessary, change the settings indicated in the table below:

Config Setup Item	Setup Range	Default	Remarks
ROUTER IP ADDR	IP address setup range	0.0.0.0	Route address (Do not change the setup.)
SECURE TELNET HOST IP ADDR	IP address setup range	0.0.0.0	IP address available for the TELNET.
SECURE TELNET NETWORK ADDR	IP address setup range	0.0.0.0	Range of the IP address available for the TELNET.
EQUIPMENT CODE	A–Z	A	Machine serial ID code of the RU. (This code is printed on film.)
RANGE OF ERASE MODE	• ERASE 1 • ERASE 1, ERASE 2	ERASE 1	Specifies the erasure mode range. ERASE 1: Primary erasure can be selected. ERASE 1, ERASE 2: Both primary and secondary erasures can be selected.
ERASE MODE TIMEOUT	0 to 999 (sec)	060	Erase mode timeout setting.
IP ERASE TYPE (FOR NO BARCODE)	• 5, 6 • 6	6	Setup needed if no barcode reader is used. 5, 6: Types V and VI mixed. 6 : Type VI
ALARM (CASSETTE SET)	• ON • OFF	ON	Sets alarm ON/OFF when cassette is inserted. ON : Alarm sounds. OFF: Alarm does not sound
ALARM (MODE SWITCH)	• ON • OFF	ON	Sets alarm ON/OFF when erasure processing is selected. ON : Alarm sounds. OFF: Alarm does not sound.
WARNING OF OVERXRAY	• LOG & MESSAGE • LOG • NONE	LOG & MESSAGE	Selects X-ray over-exposure IP warning method. LOG & MESSAGE: Warning by log and message. LOG : Warning by log. NONE: No warning issued .

IN000074.EPS

VI. Select “OFF”. (Only for the overseas edition.)

➥ *REFERENCE*

The AUTO UPDATE function will automatically have the RU download RU data from the FTP server if there is a discrepancy between CL FTP server data and RU FLASH ROM data.

☞ *See “5.2 Mechanism of RU-AP/RU Config AUTO UPDATE” in “MD: Machine Description”.*

5. Click SET.

➔ RU-AP installation will start. (It completes within a few minutes.)

◆◆ *CAUTION* ◆◆
(Applicable only for RU-AP version A07 or later.)

The RU panel will be illuminated during the RU-AP installation process. Never turn OFF the power to the RU or press the reset switch at this time, otherwise the RU CPU board can be damaged.

◆ *NOTE* ◆

Do not operate the CL-AP and RU-UTILITY while RU-AP installation is being performed.

6. OK.

➔ The system returns you to the main menu.

7. Turn OFF the power to the first RU unit.

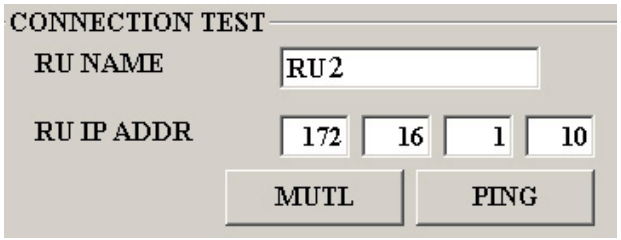
4.5.4 Installing the RU-AP (for 2nd and 3rd units)

For the second RU unit, install the RU-AP as directed below. For the third unit, perform the same installation procedure as for the second unit.

1. Check to see that the first RU unit has been turned OFF and then turn ON the second RU unit.

Leave the third RU unit OFF.

2. In the same manner as for the first unit, verify the network connection to the second RU unit.



* For the third RU unit, enter “RU3” in the RU NAME box.

00000611.EPS

➥ *REFERENCE*

The second RU unit is factory preset to the same IP address (172.16.1.10) as for the first RU unit. Use this IP address for verification purposes.

3. In the main menu window, click [INSTALL]. Install the RU-AP on the second RU unit in the same manner as for the first RU unit.

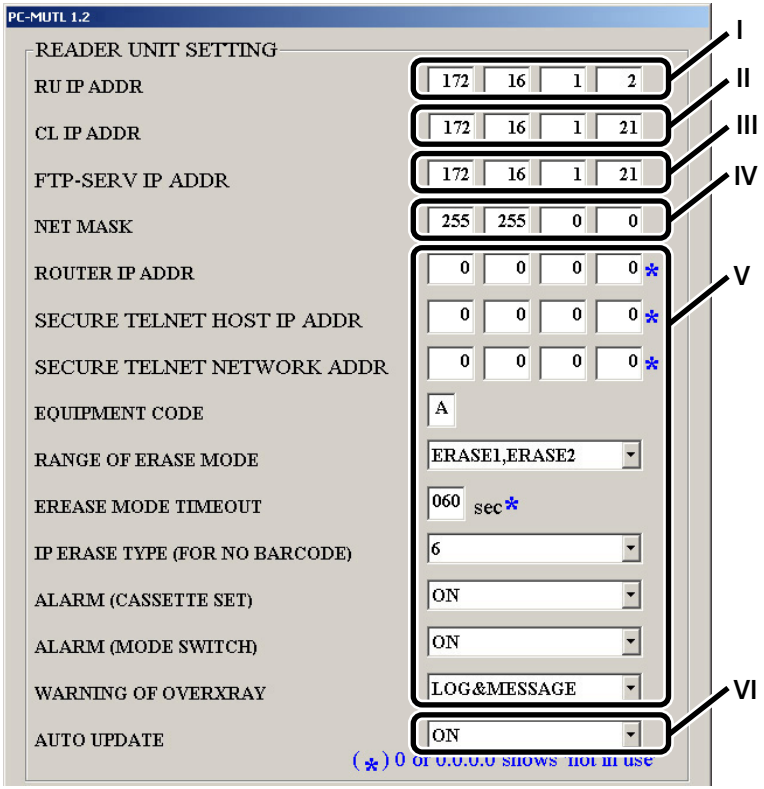
◆◆ *CAUTION* ◆◆
(Applicable only for RU-AP version A07 or later.)

The RU panel will be illuminated during the RU-AP installation process. Never turn OFF the power to the RU or press the reset switch at this time, otherwise the RU CPU board can be damaged.

➥ *REFERENCE*

In the [READER UNIT SETTING] window, perform setup for the second RU unit as indicated below. (Enter data I through IV as shown below. Edit data V as needed. For box VI, select ON for Japan and OFF for overseas.)

— READER UNIT SETTING window —



IN000075.EPS

4. Install the RU-AP on the third RU unit in the same manner as for the second unit.

5. Exit the RU M-Utility mode.

◆ *NOTE* ◆

(Applicable only for RU-AP version A06 or earlier.)

If the RU-AP version installed is A06 or earlier, be sure to start the CL-AP to have the FTP server RU data de downloaded to the RU FLASH ROM.

4.5.5 Changing the CL IP Address

Change the CL main unit's IP address from 172.16.1.20 to 172.16.1.21.

☞ For the change procedure, see "Appendix 9 Changing the CL IP Address".

◆ *NOTE* ◆

When changing the IP address, pay due attention to the netmask settings. You might have to change the netmask size depending on the IP address to be set up.

4.5.6 Setting Up IDT CONNECTION (patient information sharing function)

Set up IDT CONNECTION in the Service Utility mode.

◆ *NOTE* ◆

Be sure to set up IDT CONNECTION even if only one CL is connected in the same system, otherwise images will not be transferred from the RU to the CL, resulting thus in an error occurrence (error code: 31418).

☞ For the IDT CONNECTION setup procedure, see "3.9 Patient Information Sharing Function Setup" under "MU: Maintenance Utility".

4.5.7 Setting the Selector

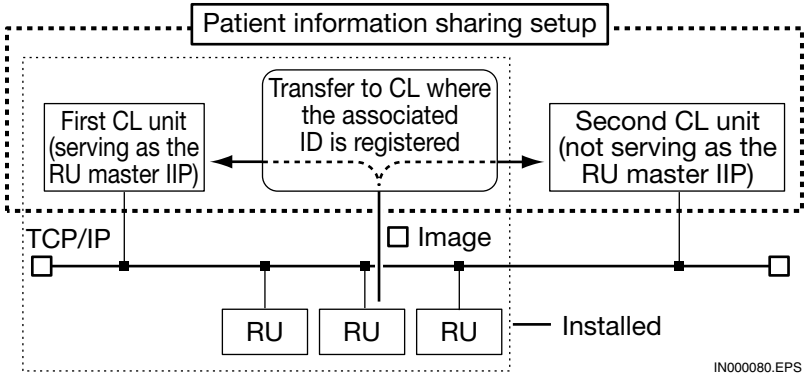
If the selector has been set to OFF with respect to the RU, perform setup so as to permit cassette equipment use.

☞ For the selector setup procedure, see "11 Setting the Selectors - Selector Setting" in "MU: Maintenance Utility".

4.5.8 Procedure to be Performed for a CL Addition That does not Serve as the RU Master IIP (patient information sharing setup)

CL units not serving as the RU master IIP can receive images from the RU as far as the setup procedure for sharing patient information with the RU master IIP is completed.

☞ For details on patient information sharing setup, see “3.9 Patient Information Sharing Function Setup” under “MU: Maintenance Utility”.



◆ NOTES ◆

- *When a CL not serving as the RU master IIP is to be added, the RU and RU master IIP CL should be installed in advance.*
- *The RU master IIP is a CL unit that uses the FTP server to manage the RU information (RU-AP, RU-Config, etc.).*
  When the N:N connection is to be established for the CL and RU, the CL units need to be set up either as the RU master IIP or as the CL not serving as the RU master IIP.
  For CL units serving as the RU master IIP, various setup procedures for RU information management need to be completed. For CL units not serving as the RU master IIP, however, only the patient information sharing setup procedure needs to be performed as shown in the above illustration.
- *Patient information sharing setup must be performed for both CL units serving as the RU master IIP and CL units not serving as the RU master IIP. If the setup is not completed for CL units serving as the RU master IIP, image transfers from the RU will not be delivered to them.*
- *CL units serving as RU master IIP units may receive images from RU units that the CL units do not manage. Therefore, the RU master IIP units perform patient information sharing setup with respect to each other.*

4.5.9 Checking Connections and Backing Up Setup Files

- Connection checkout
  - Connection between CL and RU
  - Connection with other equipment units
  - Output image checkout (film printout)

- Setup file backup
  - CL setup file
  - RU setup file (RU master IIP only)
  - RU error log checkout and deletion (RU master IIP only)

☞ For details of each item, see “6. Checkout Procedures” and “7. Setup File Backup and RU Error Log Verification /Deletion” under “IN-A: Installation – One RU Connection”.

4.6 Config Settings for LP Connection

Set the config used when connecting an LP to the CL.

☞ See “2. Software Setup” in “CL + Local Printer (E-i/f)”under “OE1: Connecting the CL to Other Connected Equipment”.

CR-IR348CL Service Manual

Appx IN: Installation – Appendix

Control Sheet

Issue date	Revision number	Reason	Pages affected
07/20/2002	05	Revision for software version A08 (FM3428)	I-IV, 3-1, 3-3, 4-2, 4-3, 7-1, 7-6

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Appendix 1 Installing the Touch Panel Driver [Option]

This appendix shows the touch panel driver installation and adjustment procedures to be performed when using the 15" monitor with the touch panel.

■ Installing the driver

◆ *NOTE* ◆

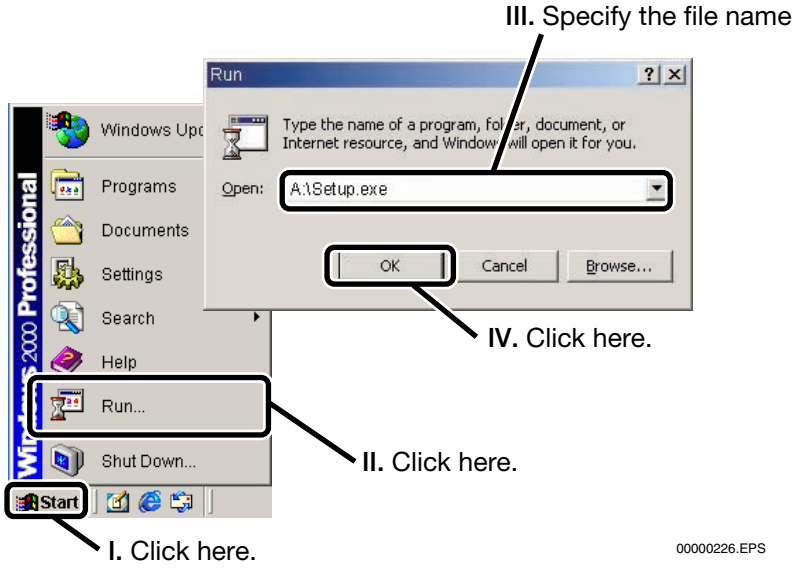
Be sure to install the Windows 2000 driver.

1. Insert the driver media (FD or CD) into a drive of the PC.

2. Start up an installation file.

● When using the FD

Start up as follows.



00000226.EPS

● When using the CD-ROM (previous version)

The window shown below opens when the CD-ROM is inserted into the drive.

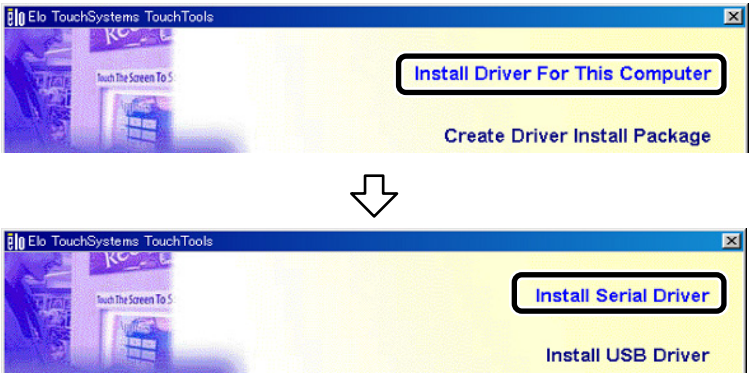
Click **Install MonitorMouse for Windows 2000**.



IN000084.EPS

● When using the CD-ROM (new version)

When you insert the CD-ROM into its drive, the following window automatically opens. Click “Install Driver for This Computer”. When the next window opens, click “Install Serial Driver”.



IN000095.EPS

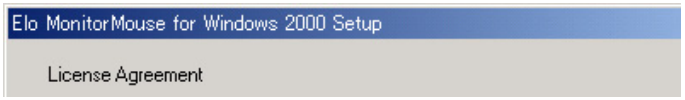
➔ The “Elo MonitorMouse for Windows 2000 Setup” window opens in several seconds.



00000411.EPS

3. Click [Next >].

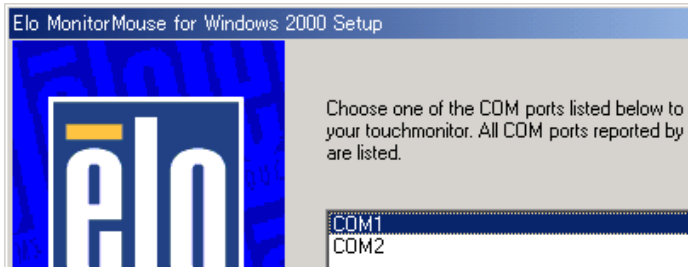
➔ The license agreement window opens.



00000412.EPS

4. Click [Yes].

➔ The port selection window opens.



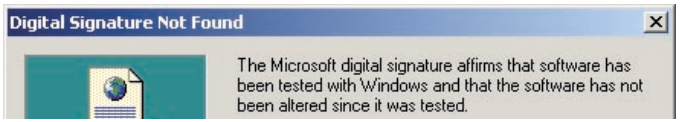
00000413.EPS

◆ ***NOTE*** ◆

Select the same COM port number as that of the serial port connected to the PC.

5. Click [Next >].

➔ The “Digital Signature Not Found” window opens in several seconds.



00000415.EPS

6. Click [Yes].

➔ In about one minute, a window opens to indicate the completion of installation.



00000418.EPS

7. Click [Finish].

➔ The “Updating System Settings” window opens.

8. Remove the medium from the PC’s drive.

◆ ***NOTE*** ◆

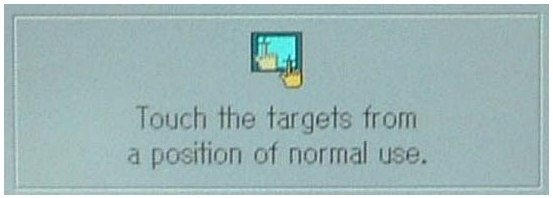
If the employed medium is an FD, be sure to remove it from its drive. If it is left in the drive, the OS does not start up.

9. Click [Yes].

➔ The PC restarts and then automatically opens the touch panel adjustment window.

◆ ***NOTE*** ◆

Start adjusting the touch panel as soon as the window below has opened, otherwise it will close with the touch panel left unadjusted.



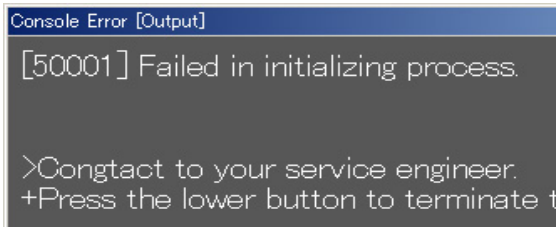
00000422.EPS

■ Adjusting the touch panel

◆ ***NOTE*** ◆

The following window may suddenly open during the touch panel adjustment process. It does not indicate any touch panel adjustment problem.

Click OK *to close the window and then continue with the touch panel adjustment process.*



00000321.EPS

1. **With your finger, gently touch the mark at the upper left area of the window.**

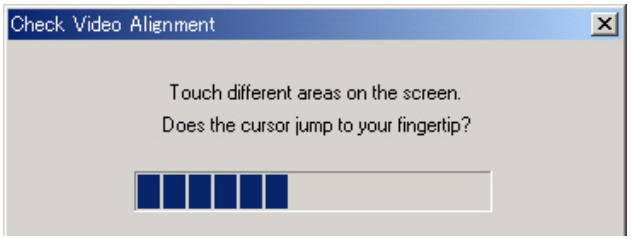
➔ The mark moves to the lower right area of the window. (A beep will sound.)

2. **Touch the mark gently with your finger.**

➔ The mark moves to the upper right area of the window.

3. **Gently touch the mark again with your finger.**

➔ The "Check Video Alignment" window opens.



00000316.EPS

4. **Click** Yes.

◆ ***NOTE*** ◆

Click Yes *within a period of 30 seconds. Failure to click* Yes *within a 30-second period invalidates the previous adjustments made.*

➔ The "Elo TouchSystems Setup" window opens.

5. **Deselect** ☑ View Elo Touchscreen control panel. **(☑ → ☐) and then click** Finish.

➔ The system returns to the desktop screen.

◆ ***NOTE*** ◆

If a window opens to prompt for FD insertion, click Cancel.

☞ To set up other functions (e.g. for silencing the alarm sound) of the touch panel, see the documentation for the touch panel driver.

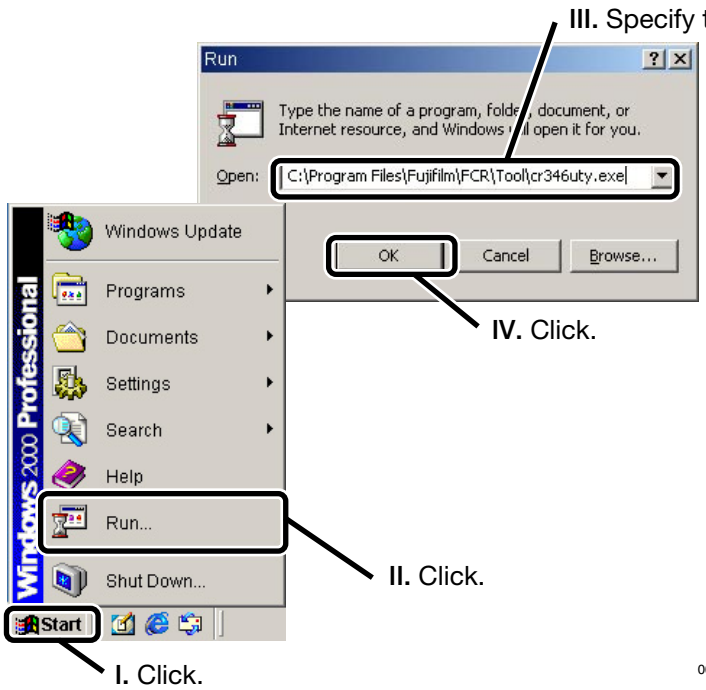
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Appendix 2 Setting the RU-Config

◆ *NOTE* ◆

- *Verify that Explorer or other application is not running. If any applications are running, exit them.*
- *Before proceeding to perform the procedure set forth below, exit the CL-AP.*
- *RU M-Utility is used for RU-Config setup. However, the setup procedure varies with the employed RU M-Utility version. When the employed version is 1.2 or later (when RU M-Utility is installed from RU application CD-ROM version A07 or later), you only have to perform steps 1. through 6.*
  However, if the employed RU M-Utility version is 1.1 or earlier (when RU M-Utility is installed from RU application CD-ROM version A06 or earlier), you have to perform all steps.

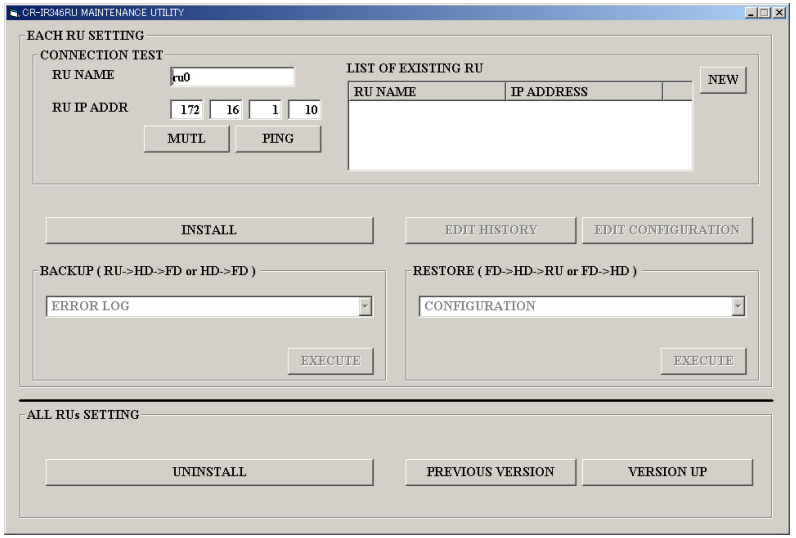
1. **Start the RU M-Utility as directed below:**



00000219.EPS

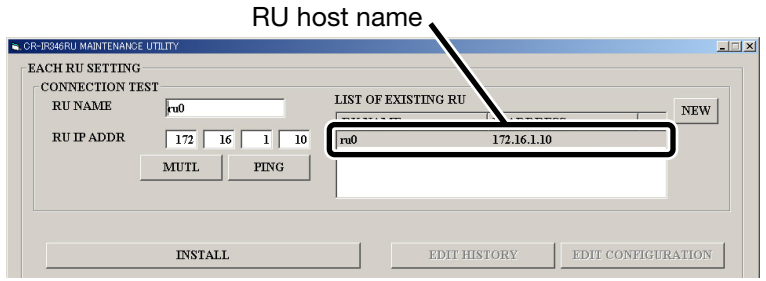
➔ The RU M-Utility main menu opens.

● Main menu window
(the display differs depending on the software version used.)



00000215.EPS

2. **From the “LIST OF EXISTING RU” area, click the host name of the RU whose configuration file is to be set.**



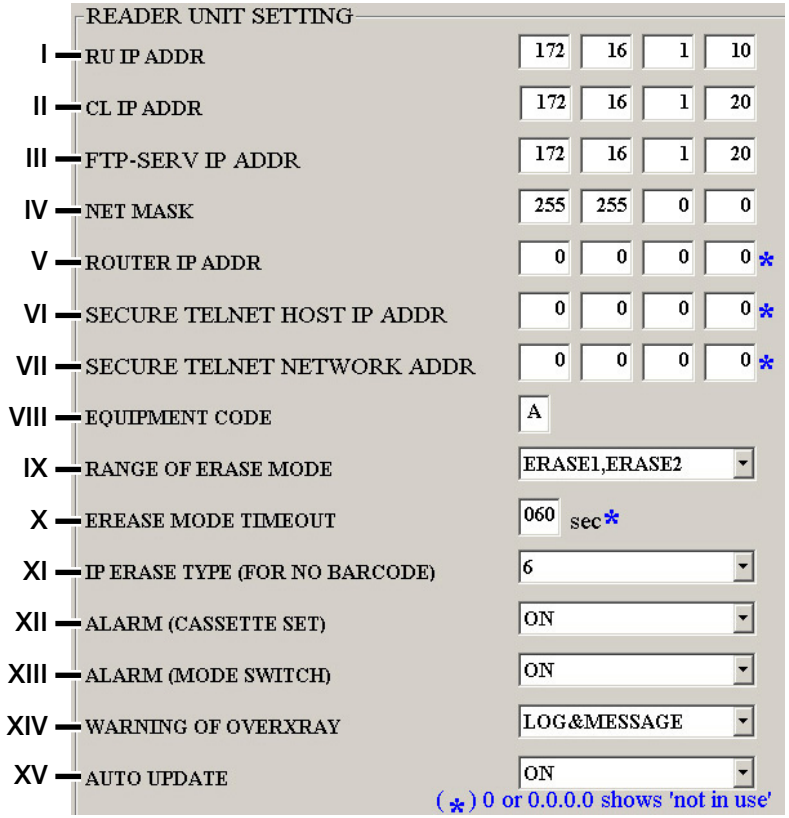
00000434.EPS

➔ The text color of the “EDIT CONFIGURATION” button changes from gray to black.

3. Click EDIT CONFIGURATION.

➔ The “READER UNIT SETTING” window opens.

4. See the table entitled “RU configuration setting list” and change the RU-Config settings.



IN000086.EPS

Table RU configuration setting list

No.	Config Setup Item	Setup Range	Default	Remarks
I	RU IP ADDR	IP address setup range	IP address set up when the RU-AP is installed.	IP address of the RU.
II	CL IP ADDR	IP address setup range	IP address set up when the RU-AP is installed.	IP address of the HOST (CL).
III	FTP-SERV IP ADDR	Subnet mask setup range	IP address that is set up during RU-AP installation will be the default.	FTP server IP address
IV	NET MASK	Subnet mask specification range	255.255.0.0	Subnet mask
V	ROUTER IP ADDR	IP address setup range	0.0.0.0	Route address (Do not change the setup.)
VI	SECURE TELNET HOST IP ADDR	IP address setup range	0.0.0.0	IP address available for the TELNET
VII	SECURE TELNET NETWORK ADDR	IP address setup range	0.0.0.0	Range of the IP address available for the TELNET
VIII	EQUIPMENT CODE	A–Z	A	Machine serial ID code of the RU. (This code is printed on film.)
IX	RANGE OF ERASE MODE	• ERASE 1 • ERASE 1, ERASE 2	ERASE 1	Specifies the erasure mode range. ERASE 1: Primary erasure can be selected. ERASE 1, ERASE 2: Both primary and secondary erasures can be selected.
X	ERASE MODE TIMEOUT	0 to 999 (sec)	060	Erase mode timeout setting
XI	IP ERASE TYPE (FOR NO BARCODE)	• 5, 6 • 6	6	Setup needed if no barcode reader is used. 5, 6 : Types V and VI mixed. 6 : Type VI
XII	ALARM (CASSETTE SET)	• ON • OFF	ON	Sets alarm ON/OFF when cassette is inserted. ON : Alarm sounds. OFF : Alarm does not sound
XIII	ALARM (MODE SWITCH)	• ON • OFF	ON	Sets alarm ON/OFF when erasure processing is selected. ON : Alarm sounds. OFF : Alarm does not sound.
XIV	WARNING OF OVER-XRAY	• LOG & MESSAGE • LOG • NONE	LOG & MESSAGE	Selects X-ray over-exposure IP warning method. LOG & MESSAGE: Warning by log and message. LOG : Warning by log. NONE : No warning issued.
XIV	AUTO UPDATE (A07 or later)	• ON • OFF	ON	Have the RU automatically download RU data from the FTP server if there is a discrepancy between CL FTP server data and RU FLASH ROM data.

IN000087.EPS

00000010.EPS

5. Click SET.

➔ RU-Config installation will start.

◆◆ *CAUTION* ◆◆

(Applicable only for RU M-Utility version 1.2 or later.)

Never turn OFF the power to the RU or press the reset switch while the RU panel is illuminated for the RU-Config installation process, because the RU's CPU board can be damaged.

6. Click the ✕ mark at the upper right corner of the window.

➔ The system returns to the desktop screen.

● Perform steps hereinafter only when the RU M-Utility version used is 1.1 or earlier.

7. From the Start menu, sequentially choose "Programs", "Fuji Film", and then "FCR".

➔ The CL-AP starts up in about one minute.

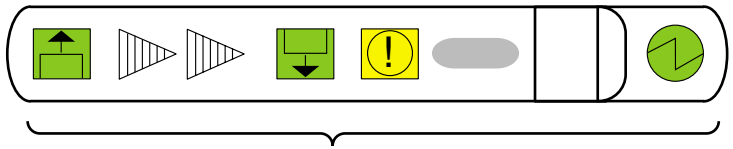
8. Start the RU (by turning the power ON).

➔ After a while, all the LEDs on the RU panel come on, and the CL monitor shows a message to indicate that the RU-Config is being updated.

◆◆ *CAUTION* ◆◆

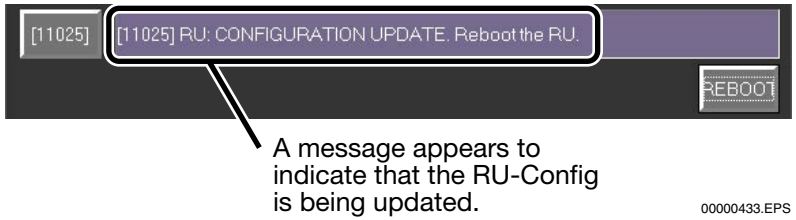
Never turn OFF the power to the RU or press the reset switch while the RU panel is illuminated, because the RU's CPU board can be damaged.

● RU



All the LEDs on the RU panel come on. 00000196.EPS

●CL



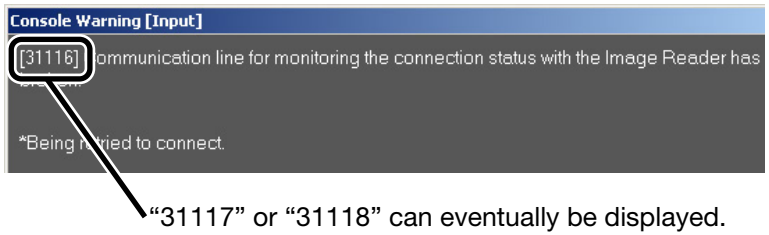
00000433.EPS

➔ The RU-Config update process ends.

9. Click REBOOT on the CL monitor.

➔ The RU system restarts, making the updated RU-Config settings effective.

After several seconds, the "Console Warning" window opens.



00000601.EPS

◆ *NOTE* ◆

Do nothing and wait for a while.
The "Console Warning" window will disappear.

➔ The RU initialization message appears. The RU becomes available in about one minute.

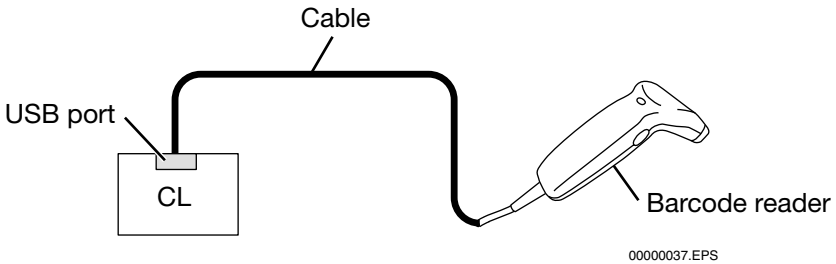
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Appendix 3 Connecting the Barcode Reader [Option]

This appendix explains about the procedures for connecting and setting up the barcode reader.

1. Connecting the Barcode Reader to the CL

Connect the barcode reader to the USB port on either the front or back of the PC. When the PC is used placing it horizontally, connect the barcode reader to the left-side port for front connection and to the bottom port for back connection.



◆ *NOTES* ◆

- *After the barcode reader has been connected to the CL, be sure to restart the OS. Although a window opens immediately after reader connection to indicate that driver software installation has been completed, you cannot immediately use the reader because it is not recognized by the CL-AP yet.*
- *Because the CL system barcode reader sound needs to be produced only when a barcode is read successfully, it has been designed so that the PC itself produces a sound. For this reason, the sound produced by the barcode reader, not only when a barcode is read successfully but also when it is read unsuccessfully, is disabled for machines when they are shipped from factory. When it is necessary that the barcode reader produces a sound for some reason, make the setup accordingly by reading the barcode described in the section below.*

➔ The barcode reader driver is then automatically set to make the barcode reader operative.

2. Performing Setup for IP Barcode Use

Just connecting the barcode reader to the PC will set up the driver automatically making thus it available.

3. Setup for Type B ID Online Operations

Just connecting the barcode reader to the PC will set up the driver automatically making thus it available.

BLANK PAGE

<Silencing the buzzer>

1 Setup started



Sounding the buzzer three times

2 All default settings (*)



3



U.S. English (101 series)

4



Transferring a/b/c/d

5



Transfer permitted

6



Continuous reading mode

7



Buzzer disabled

8 Setup completed



Sounding the buzzer three times

<Sounding the buzzer>

1 Setup started



Sounding the buzzer three times

2 All default settings (*)



3



U.S. English (101 series)

4



Transferring a/b/c/d

5



Transfer permitted

6



Continuous reading mode

7 Setup completed



Sounding the buzzer three times

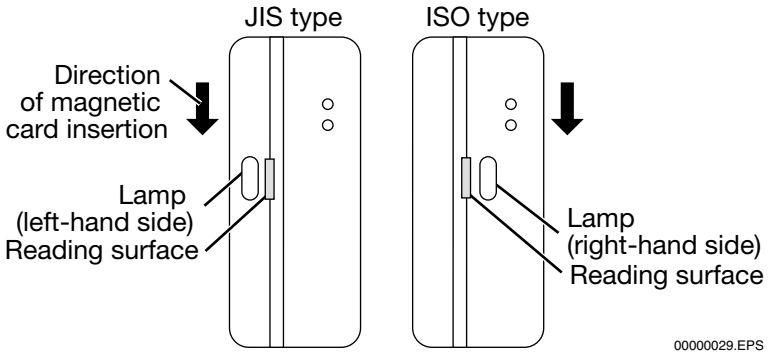
Appendix 4 Setting Up the Magnetic Card [Option]

◆ NOTE ◆

When using a JIS type reader, use a JIS type magnetic card.
When using an ISO type reader, use an ISO type magnetic card.

The magnetic card reader (hereinafter abbreviated as the reader) connection and setup procedures are described herein.

Two types of readers can be connected to the CL: JIS type and ISO type. The choice between these two types depends on the user's operating environment.



1. Installing the Wall-mounting Bracket

When installing the wall-mounting bracket for use with the reader, perform the following steps.

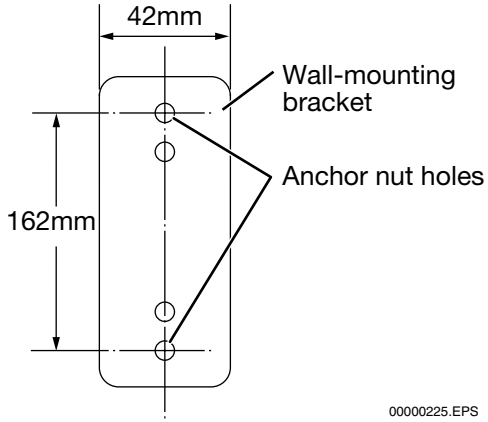
➤ IIMPORTANT

When installing the wall-mounting bracket, ensure that the concrete strength of the wall is not less than 210 kgf/cm^2. If the concrete strength is inadequate, the required amount of mounting strength will not be obtained. Be sure to check the concrete strength in advance.

1. **Determine the mounting position of the wall-mounting bracket. Mark the center of each of the two wall-mounting bracket mounting holes for anchor nut installation.**

◆ NOTE ◆

Be sure that the employed anchor nuts conform to the wall conditions (use the supplied anchor nuts).

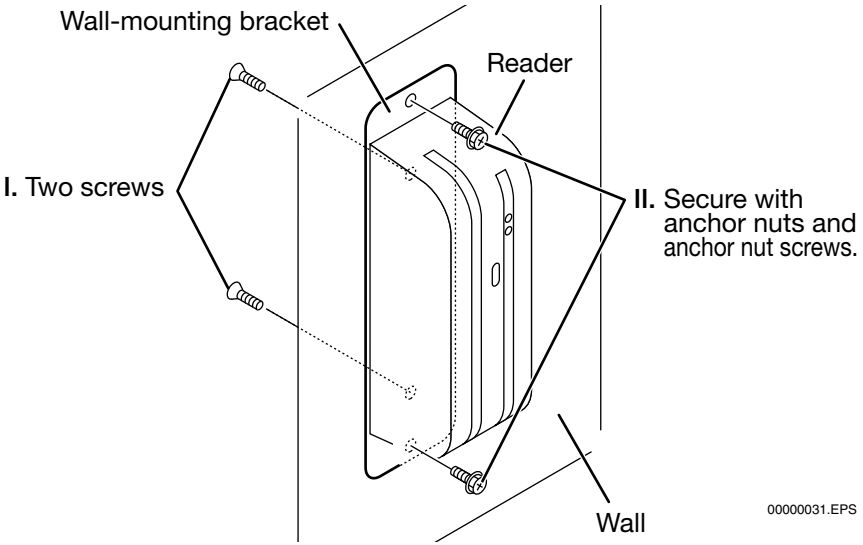


2. **Drill holes (7.5 mm in diameter and 25 mm in depth) at the marked positions and drive two anchor nuts into the holes.**

3. **Install the wall-mounting bracket as directed below:**

I. With two screws, attach the wall-mounting bracket to the bottom surface of the reader.

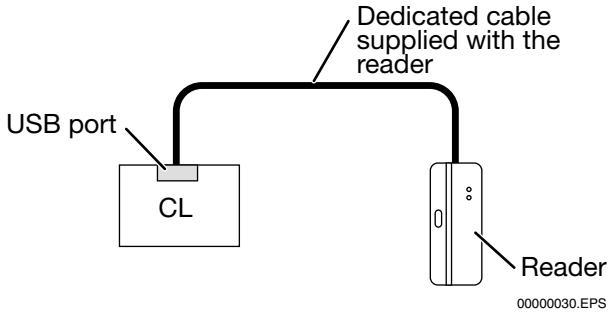
II. With the anchor nuts and their screws, fasten the wall-mounting bracket to the wall.



2. Connecting the CL to the Reader

Connect the reader to the USB port on the back of the PC.

1. **Use the cable supplied with the barcode reader to connect the USB port that is on the front or back of the CL to the reader. When the PC is used placing it horizontally, connect the barcode reader to the right-side port for front connection and to the top port for back connection.**



➔ The reader driver will be set up automatically, becoming thus ready for use.

◆ *NOTE* ◆

After the barcode reader has been connected to the CL, be sure to restart the OS. Although a window opens immediately after reader connection to indicate that driver software installation has been completed, you cannot immediately use the reader because it is not recognized by the CL-AP yet.

3. Setting the Reader and Magnetic Card

Perform the following procedures to set the reader type and magnetic card type.

■ Setting the reader type

1. Start the Service Utility mode of the CL.

☞ For details on the startup procedure, see "1. Starting/Exiting the Service Utility" under "MU: Maintenance Utility".

2. Click [Setup Configuration Item] in the "Service Utility" window.

➔ The "Setup Configuration Item" window opens.

3. Click the ⊞ sign within [⊟ SYSTEM CONFIG].

4. Click [5.CSL/IDT FUNCTION].

➔ The IDT functionality and magnetic card setup items appear in the right-hand area of the window.

5. With [27 MCR Card Type (JIS/ISO)], set the reader type.

■ Setting the magnetic card type

● When using a magnetic card reader in Fuji format

1. From [28 MCR Crad Format Setup], select a magnetic card type.

ISO magnetic card	JIS magnetic card
· 0: FUJI [default] · 6: FJ51	· 0: FUJI [default] · 1: FJ01 · 2: FJ02 · 3: FJ03 · 4: FJ04 · 5: FJ05

☞ For detailed format descriptions, see "5. ID Card Data Format. [Reference]"

➥ *REFERENCE*

Even if "Yes" is set for [26 MCR Customized Card], a magnetic card in Fuji format can be used (recognized by the system code).

2. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

3. Click [Yes].

➔ The system saves the setup data.

4. From the "Config (F)" menu, choose "Close".

➔ The system returns to the "IIP Service Utility" window.

5. Click [Exit Service Utility].

➔ The system returns to the desktop screen.

● When using a hospital card (in a hospital's unique format)

1. From the "Setup Configuration Item" window, change the [26 MCR Customized Card] setting to "Yes".

2. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

3. Click [Yes].

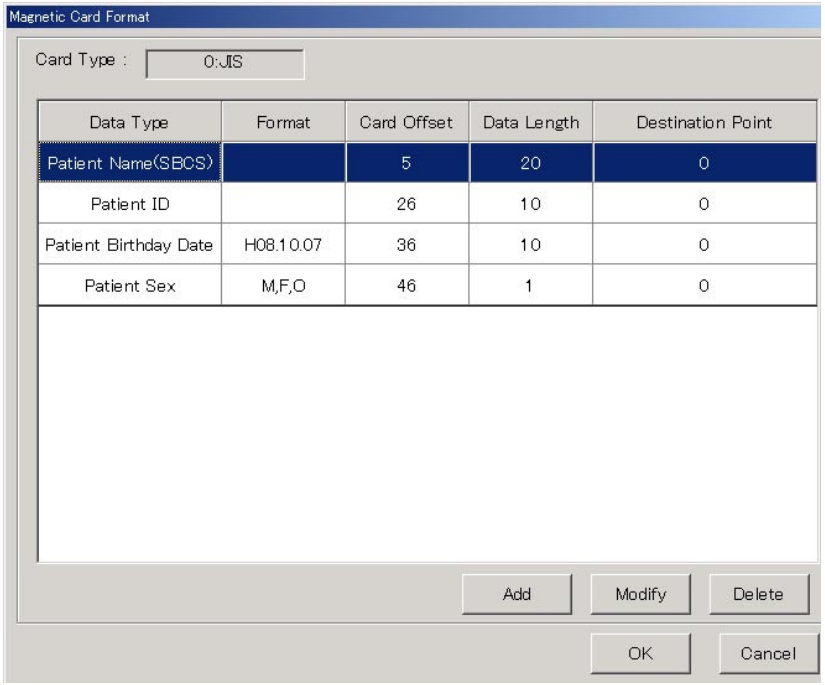
➔ The system saves the setup data.

4. From the "Config (F)" menu, choose "Close".

➔ The system returns to the "IIP Service Utility" window.

5. Click Magnetic Card Setting.

➔ The "Magnetic Card Format" window opens.



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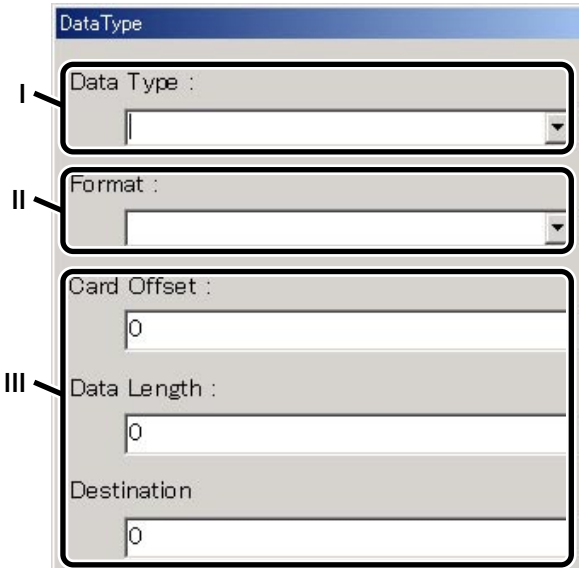
6. To add a new item, click Add.

➥ *REFERENCE*

- *When changing an item setting, select an item and then click* Modify.
- *To delete an existing setup item, select it and then click* Delete.

➔ The "Data Type" window opens.

7. **In accordance with the magnetic card data format used in the hospital, set "Data Type", "Format", "Card Offset", "Data Length", and "Destination".**



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☞ For detailed data format descriptions, see Section "5, ID Card Data Format."

I. Click the downward arrow mark to select a Data Type setting.

II. Click the downward arrow mark to select a Format setting.

◆ *NOTE* ◆

Selectable only when "Patient Sex", "Patient Birth Date", or "Year or Month of Patient Birth Date" is selected as a Data Type setting.

III. Enter the Card Offset, Data Length , and Destination (storage offset) settings.

- **Card Offset**

  Specify the data start position on the card.

  Setup must be performed with the position next to “STX” (the character “F” when the FUJI card is used) regarded as “0”.
  Do not select the “SI/SO” or “Kanji IN/OUT” code portion as the start position.

- **Data Length**

  Enter the number of characters existing before the card offset position to specify the length of the data to be read.
  Ensure that the data length does not include the “SI/SO” or “Kanji IN/OUT” code portion.

  For kanji data, use an even number to specify the data length.

◆ *NOTE* ◆

Be sure that the patient ID number, examination number, and accession number data lengths do not exceed the effective number of digits specified for the “SYSTEM CONFIG “ – ” CSL/IDT FUNCTION” examination number character string length, patient ID character string length, and accession number character string length. If such a limit is exceeded, an error occurs.

Also, note that the padding process is performed as defined by “CSL/IDT FUNCTION” of “SYSTEM CONFIG” when the effective number of digits is not reached.

➥ *REFFERENCE*

The data length cannot be specified for the following data types.
- *Patient Birthday Date (Day)*
- *Patient Birthday Date (Month)*
- *Patient Birthday Date (Year)*
- *Patient Birthday Date*
- *Patient Sex*

- **Destination (storage offset)**

  Specify the location at which the read data is to be stored.

  If, for instance, a setting of 2 is entered, the third character and thereafter will be stored.
  A setting of 0 should normally be used.

8. Click OK.

➔ The system returns to the “Magnetic Card Format” window.
If the entered settings are incorrect, an error message appears.
If an error message appears, repeat steps 7-I and beyond.

9. **To add any other item, repeat steps 6. through 8.**

10. Click OK.

➔ The system returns to the “IIP Service Utility” window.

11. Click Exit Service Utility.

➔ The system returns to the desktop screen.

4. Hospital Card Data Format Setup Example [Reference]

This section explains about the setup procedure to be performed when using the magnetic card reader to load the following JIS-format-defined hospital card data into the CL.

As a patient ID number (10-digit), a 5-digit number consisting of the third to seventh digits is used.

■ Hospital card information and detailed format descriptions

- Patient name (16-digit 1-byte code katakana)
- Sex (1-digit)
- Patient ID number (10-digit)
- Birth date (4-digit year/2-digit month/2-digit day of the month)
- Alphanumeric department name (10-digit)
- Kanji name (7-digit 2-byte code kanji)

The hospital card records the items of information shown at left in descending order.

Detailed format description

Digit	1	2	3	4	5	6	~	15	16	17	18	19	20	21	22	~	29	30
Content	STX	SO/SI	Patient name (1-byte code katakana, 16-digit)									SO/SI	Sex (1-digit)	Patient ID number (10-digit)				

Digit	31	32	33	34	35	36	37	38	39	40	41	42	43	44	~	47	48	49	50
Content	Birth date										Alphanumeric department name (10-digit)								
	Year (4-digit)				•	Month (2-digit)		•	Day of the month (2-digit)										

(The symbol "•" is a period.)

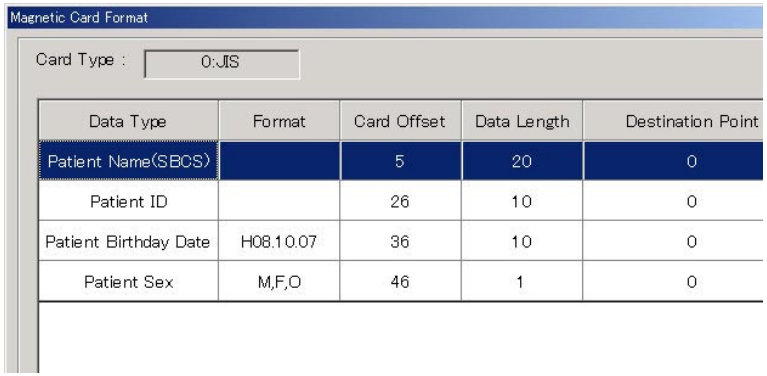
Digit	51	52	53	54	55	56	57	58	59	~	64	65	66	67	68	69	70	71	72
Content	ESC	$	B	SI	Kanji name (14-digit)											Undefined (2-digit)		ETX	LRC

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■ Setup procedure

1. **Start the CL service utility and then click [Magnetic Card Setting] – [Card Format].**

➔The "Magnetic Card Format" window opens.



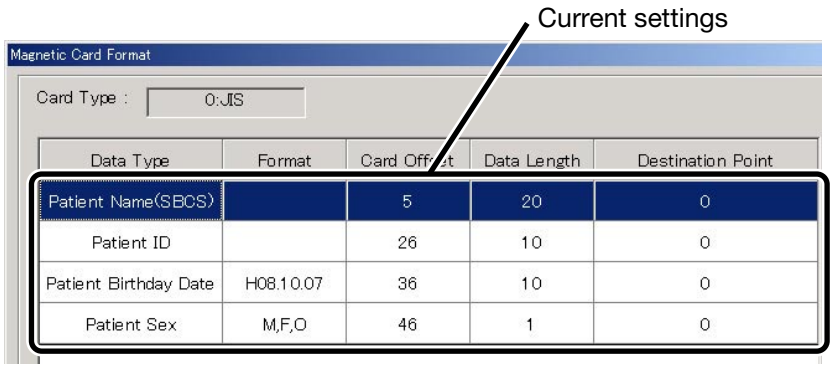
00000467.EPS

2. **Since the hospital card is JIS-formatted, verify that "0: JIS" is entered in the** Card Type : 0:JIS **field.**

If the entry is not "0: JIS", change it to the JIS format.

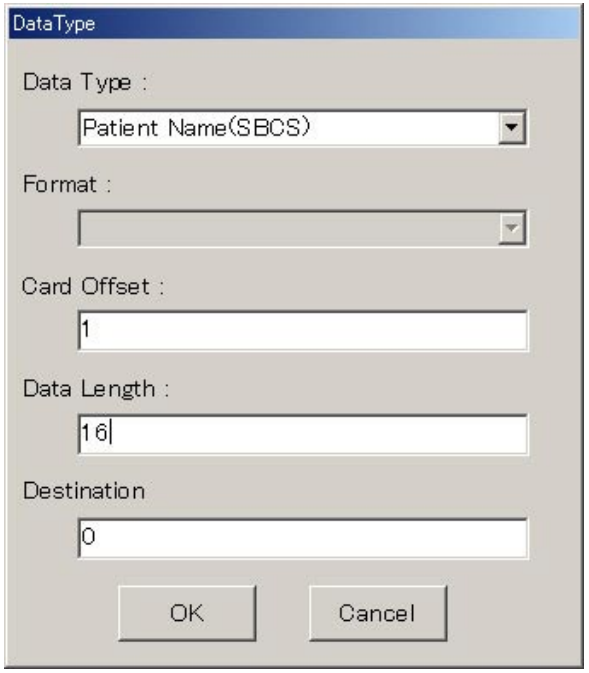
☞ See "3. Setting the Reader and Magnetic Card".

3. With Delete, clear all the current settings.



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4. Click Add and perform "Patient Name" setup as indicated in the window shown below:

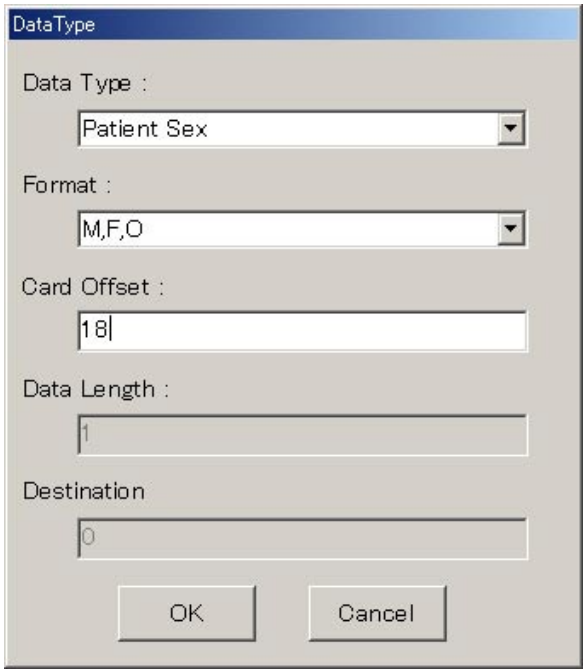


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◆ NOTES ◆

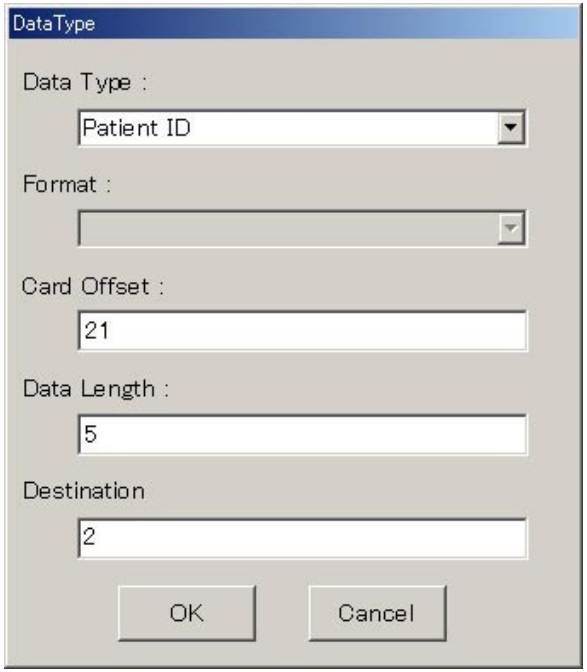
- *When performing patient name setup for 1-byte code katakana (Japanese language version), choose "Patient Name (SBCS)". Choosing "Patient Name (SBCS)" automatically adds the "SI/SO" code to both ends of data.*
- *Since the code next to "STX" is regarded as "0" for counting purposes, enter "1" in the "Card Offset" field.*

5. Click Add and perform "Sex" setup as indicated in the window shown below:



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6. Click Add and perform "Patient ID" number setup as indicated in the window shown below:



00000271.EPS

◆ NOTE ◆

Since the third to seventh digits of a hospital card patient ID number are to be loaded, pay due attention to the "Card Offset", "Data Length", and "Destination" settings.

❍ *Card Offset*
Since the patient ID number data begins with the 21st digit and does not use the two highest digits, enter "21".

❍ *Data Length*
Since five digits are to be used, enter "5".

❍ *Destination*
Since data loading begins with the third digit of the patient ID area, enter "2".

Card Offset	18	19	20	21	22	23	24	25	26	27	28	29
Digit	20	21	22	23	24	25	26	27	28	29	30	31
Content	Sex (1-digit)	1	1	5	2	4	4	9	3	5	1	Birth date/ year (4-digit)
		Patient ID number (10-digit)										
		Not used		Data to be loaded into CL					Not used			

FT100309.EPS

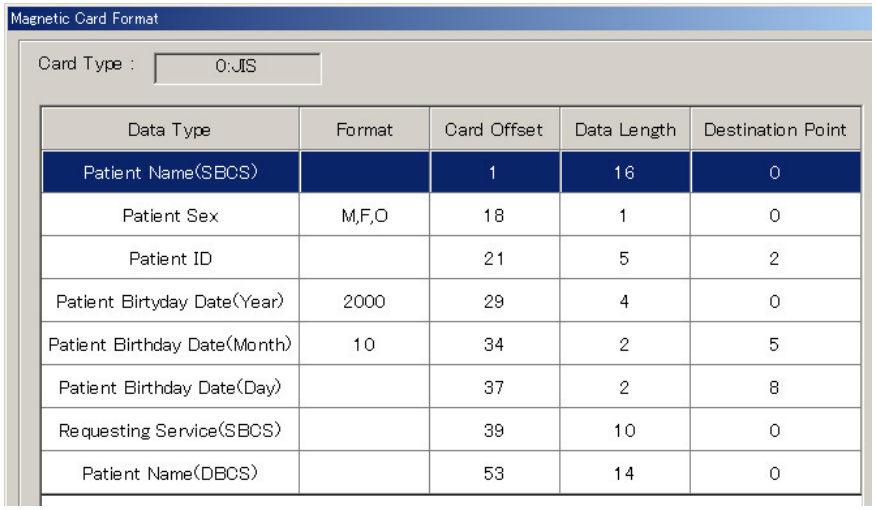
7. **Set the remaining items in accordance with the following table:**

	Date Type	Format	Card Offset	Data Length	Destination
Birth date/ year (4)	Patient Birthday Date(Year)	2000	29	4	0*
Birth date/ month (2)	Patient Birthday Date(Month)	10	34	2	5*
Birth date/ day of the month (2)	Patient Birthday Date(Date)	—	37	2*	8*
Alphanumeric department name (10)	Requesting Service (SBCS)	—	39	10	0
Kanji name (14)	Patient Name (SBCS)	—	53	14	0

Settings marked * cannot be changed.

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➔ The resultant settings are shown below:



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8. **In the "Magnetic Card Format" window, click** OK **.**

➔ You are then returned to the "IIP Service Utility" window.

5. ID Card Data Format [Reference]

Two types of data formats are available for the ID card: JIS-II type and JIS-I type (ISO). The system codes are defined as follows depending on how the area of Extended Specification is used.

- JIS-II type: FUJI, FJ01, FJ02, FJ03, FJ04, FJ05
- JIS-I type (ISO): FUJI, FJ51

■ JIS-II Type

● Fuji Standard Format (FUJI)

It is Fuji Photo Film's standard format, whose system code is FUJI. Since undefined regions cannot be used, they must be filled with space (20H).
Note that kanji characters cannot be used for patient names.

Digit	1	2	3	4	5	6	7	8	9	—	24	25	26	27
Content	STX	System code (FUJI)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	—	36	37	38	39	40	41	42	43	44	45	46	47	48
Content	Number (10 digits)					Birth date										Sex
						Year			•	Month		•	Day			Male/Female (M) (F)

("•" denotes a period.)

Digit	49	50	51	52	53	54	55	56	57	58	—	69	70	71	72
Content	Undefined (22 digits) (space: 20H)													ETX	LRC

FT100300.EPS

● Extended Format (FJ01)

To use Kanji characters for the patient name, use the Extended Format. Its system code is FJ01.

Digit	1	2	3	4	5	6	7	8	9	—	24	25	26	27
Content	STX	System code (FJ01)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	—	36	37	38	39	40	41	42	43	44	45	46	47	48
Content	Number (10 digits)					Birth date										Sex
						Year			•	Month		•	Day			Male/Female (M) (F)

("•" denotes a period.)

Digit	49	50	51	52	53	54	55	56	57	58	—	69	70	71	72
Content	Distribution code (4 lower digits)				ESC	$	B	SI	Name in Kanji (14 digits)					ETX	LRC

FT100301.EPS

● Extended Format (FJ02)

To use the department name in alphanumeric characters and distribution code, use the Extended Format. Its system code is FJ02.

Digit	1	2	3	4	5	6	7	8	9	—	24	25	26	27
Content	STX	System code (FJ02)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	—	36	37	38	39	40	41	42	43	44	45	46	47	48
Content	Number (10 digits)					Birth date										Sex
						Year			•	Month		•	Day			Male/Female (M) (F)

("•" denotes a period.)

Digit	49	50	—	55	56	57	58	—	63	64	65	—	69	70	71	72
Content	Alphanumeric department name (8 digits)					Distribution code (8 digits)					Undefined (6 digits)				ETX	LRC

FT100302.EPS

● Extended Format (FJ03)

To use the test number and alphanumeric department name, use the Extended Format. Its system code is FJ03.

Digit	1	2	3	4	5	6	7	8	9	—	24	25	26	27
Content	STX	System code (FJ03)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	—	36	37	38	39	40	41	42	43	44	45	46	47	48
Content	Number (10 digits)					Birth date										Sex
						Year			•	Month		•	Day			Male/Female (M) (F)

("•" denotes a period.)

Digit	49	50	—	55	56	57	58	—	65	66	67	68	69	70	71	72
Content	Alphanumeric department name (8 digits)					Examination number (10 digits)					Undefined (4 digits)				ETX	LRC

FT100303.EPS

● Extended Format (FJ04)

To use the distribution code and test number, use the Extended Format. Its system code is FJ04.

Digit	1	2	3	4	5	6	7	8	9	–	24	25	26	27
Content	STX	System code (FJ04)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	–	36	37	38	39	40	41	42	43	44	45	46	47	48
Content	Number (10 digits)					Birth date										Sex
						Year				•	Month		•	Day		Male/Female (M) (F)

("•" denotes a period.)

Digit	49	50	–	55	56	57	58	–	65	66	67	68	69	70	71	72
Content	Distribution code (8 digits)					Examination number (10 digits)					Undefined (4 digits)				ETX	LRC

FT100304.EPS

● Extended format (FJ05)

Use this extended format when using English or kanji department names. The system code is FJ05.

Digit	1	2	3	4	5	6	7	8	9	–	24	25	26	27
Content	STX	System code (FJ05)				SO/SI	Patient name (20 digits)							SO/SI

Digit	28	29	–	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Content	Number (10 digits)					Birth date										Sex	SO/SI
						Year			•	Month		•	Day			Male/ Female (M) (F)	

("•" denotes a period.)

Digit	50	51	–	56	57	58	59	60	61	62	63	64	–	69	70	71	72
Content	Alphanumeric department name (8 digits)					SO/SI	ESC	$	B	B	Department name in Kanji (8 digits)					ETX	LRC

FT100307.EPS

■ JIS-I Type (ISO)

● Fuji Standard (ISO) Format

A standard-specification card that is not particularly specified should comply with this format. This format is supported by all FCR systems.

Digit	1	2	3	4	5	6	7	8	9	—	25	26	27	28
Content	STX	F	System code (FUJI)				Space	Patient name (20 digits)						Space

Digit	29	30	—	37	38	39	40	41	42	43	44	45	46	47	48	49
Content	Number (10 digits)					Birth date										Sex
						Year				•	Month		•	Day		Male/Female (M) (F)

Digit	50	51	52	—	76	77	78	79
Content	Undefined (28 digits)						ETX	LRC

FT100305.EPS

● Extended Format (FJ51)

In the ISO specification format, to use the alphanumeric department name, distribution code, test number, use the Extended Format. Its system code is FJ51.

Digit	1	2	3	4	5	6	7	8	9	—	25	26	27	28
Content	STX	System code (FJ51)					Space	Patient name (20 digits)						Space

Digit	29	30	—	37	38	39	40	41	42	43	44	45	46	47	48	49
Content	Number (10 digits)					Birth date										Sex
						Year				•	Month		•	Day		Male/Female (M) (F)

Digit	50	51	—	56	57	58	59	—	64	65	66	67	—	74	75	76	77	78	79
Content	Alphanumeric department name (8 digits)					Distribution code (8 digits)					Examination number (10 digits)					Space (2 digits)		ETX	LRC

FT100306.EPS

■ Data Definition

◆ NOTES ◆

❍ *Exercise care not to confuse the JIS and ISO cards, since they contain different character codes.*

❍ *Undefined regions in the recorded information must be filled with space code (JIS: 20H/ISO: 00H) if:*

- *Some of the information to be recorded into the ID card cannot be entered; and*
- *The number of characters actually entered is smaller than the number of characters specified in this specification.*

● STX: Start Code

This code indicates the start of text that has been written.

● System Code: Identification Code

Four-character code that identifies whether the ID card is for FCR use or not.

Identification code	Format type
FUJI	Standard format
FU** (*: numeral)	Extension format
Other	Hospital individual format

00000033.EPS

● SI/SO: Extended Code

◆ NOTE ◆

This code exists only in JIS.

SI and SO are used in pair as a special character to extend graphic characters.

- From SI to next SO: Graphic characters for alphabets
- From SO to next SI: Graphic characters for Katakana

● Patient Name

- For JIS
  This indicates a patient name by not greater than 20 Roman characters or Katakana graphic characters, excluding @ and *. To switch between alphabet and Katakana modes, use SI/SO code.

  Any SI/SO code of not greater than 20 characters of the patient name is substituted by space code (20H) and handled as part of the 20-character patient name.

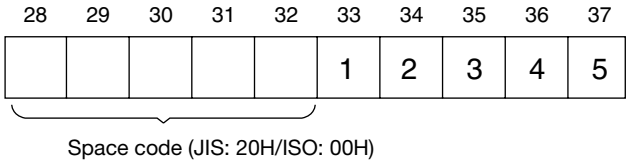
- For ISO
  This indicates a patient name by not greater than 20 Roman characters or Roman special characters, excluding @ and *.

  For Roman special characters, set MAG CARD of the IDT management information to 1, and set Roman special character codes and characters used in “Setting Character Code for Reading ISO Card.”

● Number: Patient Number

This indicates a patient number for identifying the patient by graphic characters in alphabetic mode, excluding @ and *.

If the patient number falls short of ten digits, enter characters from the right-most location, and fill the rest with space code (JIS: 20H/ISO: 00H).

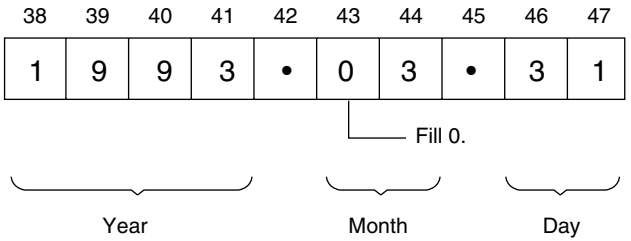


● Birth Date: Patient Birth Date

This indicates the patient's birth date in the dominical year.

- Year : Four digits from 0 to 9.
- Month : Two digits from 0 to 9.
- Day : Two digits from 0 to 9.

If the number of digits for the birth date falls short of its effective number of digits, enter numbers from the right-most location, and fill the rest with zero (JIS: 30H/ISO: 10H).



◆ *NOTE* ◆

"•" in the 42th and 45th digits denotes a period (JIS:2EH/ISO:0EH).

● Sex: Patient Sex

The sex of a patient is denoted by one alphabetic character.

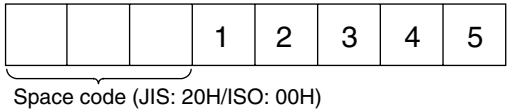
- Male: M
- Female: F

- Distribution Code (8 digits)

  The distribution code is used to set a destination of image data transfer. If the distribution code falls short of eight digits, enter characters from the right-most location, and fill the rest with space code (JIS: 20H/ISO: 00H).

  Correspondence between the transfer destination and distribution code value may be set arbitrarily by the user.

  When this code is not used, fill it with space code (JIS: 20H/ISO: 00H).

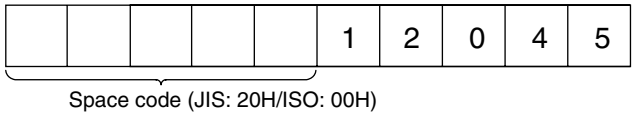


- Examination Number (10 digits)

  The examination number represents the data transferred mainly from the hospital information system to identify the distinction between examinations conducted. If the examination number falls short of ten digits, enter characters from the right-most location, and fill the rest with space code (JIS: 20H/ISO: 00H).

  This code is not used for control purposes.

  When this code is not used, fill it with space code (JIS: 20H/ISO: 00H).



- ETX: End Code

  This code indicates the end of text.

- LRC: LRC Code

  LRC denotes a horizontal redundancy code for a horizontal parity check bit of information characters recorded.

  Horizontal parity check is performed from the start code to the end code.

Appendix 5 Procedures for Changing the CL and RU IP Addresses

This appendix explains about the procedures for changing the CL and RU IP addresses.

The IP addresses need to be changed in the following cases:

Case 1: When changing the CL/RU network configuration from the stand-alone type to the network type

Case 2: When the CL and RU IP addresses need to be changed for hospital network management purposes

1. Incorporating into the Network

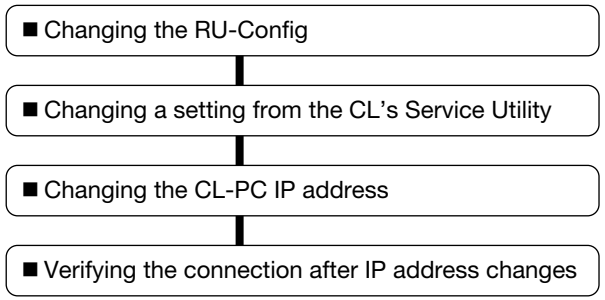
In compliance with the hospital network specifications, connect the CL and RU network cables to the hospital's network.

2. Changing the Software Settings

Change the IP addresses for the CL and RU as summarized herein:

RU IP address : 172.16.1.10 → 200.150.100.50
CL IP address : 172.16.1.20 → 200.150.100.10

To perform necessary procedures, observe the workflow below:



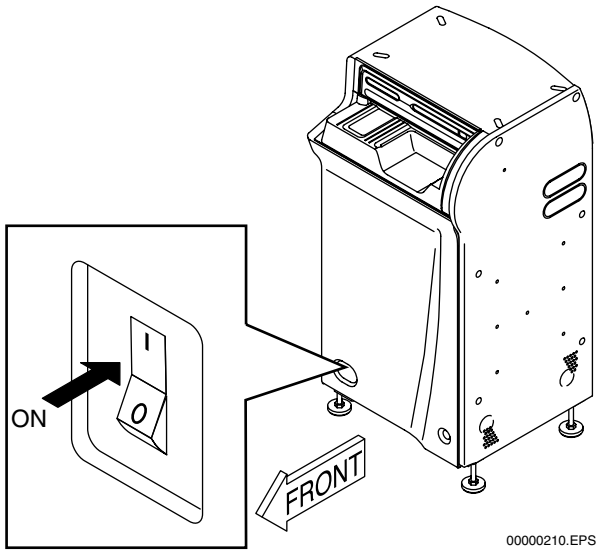
IN000096.EPS

■ Changing the RU-Config

◆ *NOTES* ◆

- *Before proceeding to perform the procedure set forth below, exit the CL-AP.*
- *RU M-Utility is used for RU-Config setup. However, the setup procedure varies with the employed RU M-Utility version. When the employed version is 1.2 or later (when RU M-Utility is installed from RU application CD-ROM version A07 or later), you only have to perform steps 1. through 7.*
  However, if the employed RU M-Utility version is 1.1 or earlier (when RU M-Utility is installed from RU application CD-ROM version A06 or earlier), you have to perform all steps.

1. **Turn ON the RU power.**

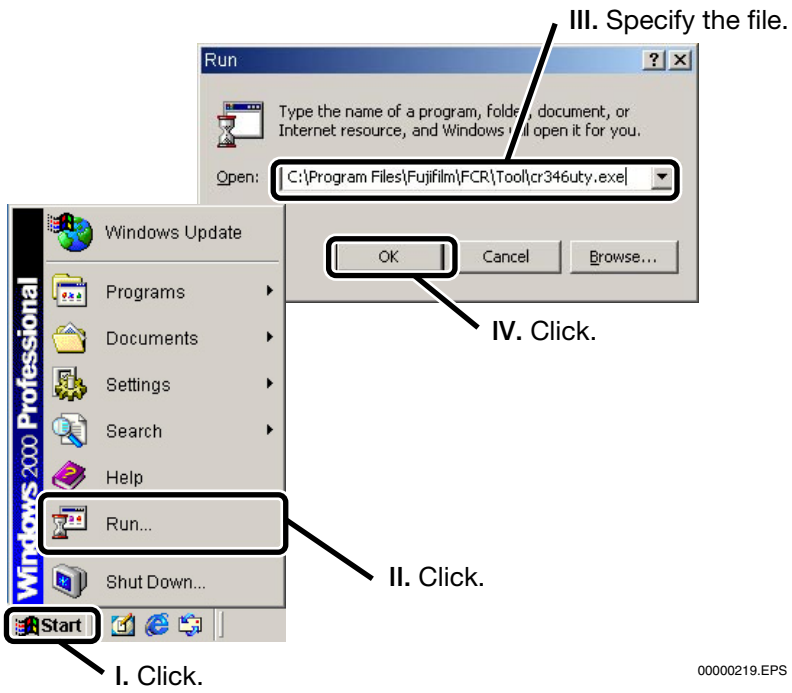


00000210.EPS

2. Start the RU M-Utility as directed below:

◆ ***NOTE*** ◆

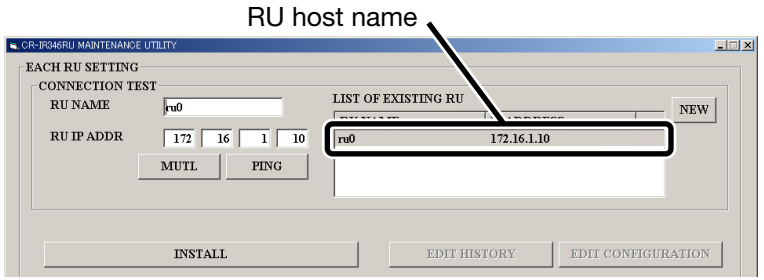
AP such as the Explorer should have not been started. If already started, shut it down.



00000219.EPS

➔ The RU M-Utility main menu opens.

3. From the "LIST OF EXISTING RU" area, click the host name of the RU whose configuration file is to be set.



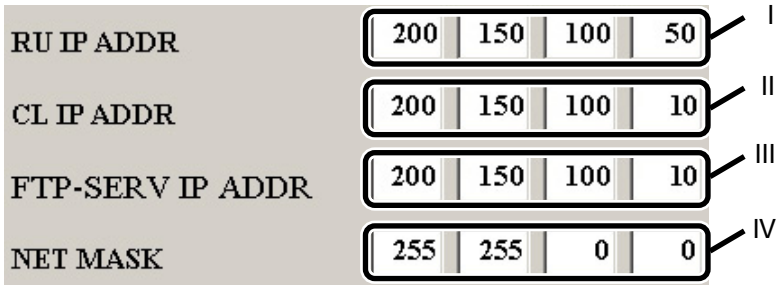
00000434.EPS

➔ The text color of the "EDIT CONFIGURATION" button changes from gray to black.

4. Click EDIT CONFIGURATION.

➔ The "READER UNIT SETTING" window opens.

5. Perform the following setup steps:



00000429.EPS

I. Enter a new RU IP address (e.g., 200.150.100.50).

II. Enter a new CL IP address (e.g., 200.150.100.10).

III. Enter the FTP server IP address that is the same as that for the CL (e.g., 200.150.100.10).

IV. Enter a net mask.

6. Click SET.

➔ RU-Config installation will start.

◆◆ CAUTION ◆◆

(Applicable only for RU M-Utility version 1.2 or later.)

Never turn OFF the power to the RU or press the reset switch while the RU panel is illuminated for the RU-Config installation process, because the RU's CPU board can be damaged.

7. Click the ✕ mark at the upper right corner of the window.

➔ The system returns to the desktop screen.

● Perform steps hereinafter (up to step 12.) only when the RU M-Utility version used is 1.1 or earlier.

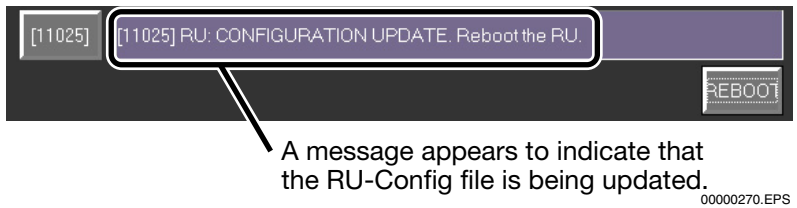
8. From the Start menu, sequentially choose "Programs", "Fuji Film", and then "FCR".

◆◆ CAUTION ◆◆

Never turn OFF the power to the RU or press the reset switch while the RU panel is illuminated, because the RU's CPU board can be damaged.

➔ The CL-AP starts up in about one minute.
The RU-Config file in the RU FLASH ROM will be updated.
(The RU LED lights and a beep sounds.)

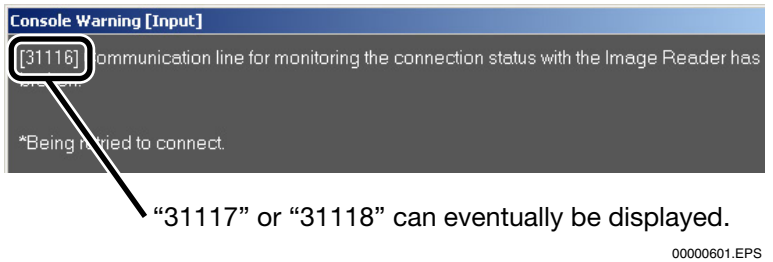
➔ The CL monitor displays a message indicating that the RU-Config file is being updated.



00000270.EPS

9. Click REBOOT on the CL monitor.

➔ The error window opens in a few seconds.



00000601.EPS

10. Click OK.

11. Click FUJIFILM.

➔ A menu opens.

12. Hold down the <Shift> key and click Shut Down.

➔ The CL-AP exits and the system returns to the desktop screen.

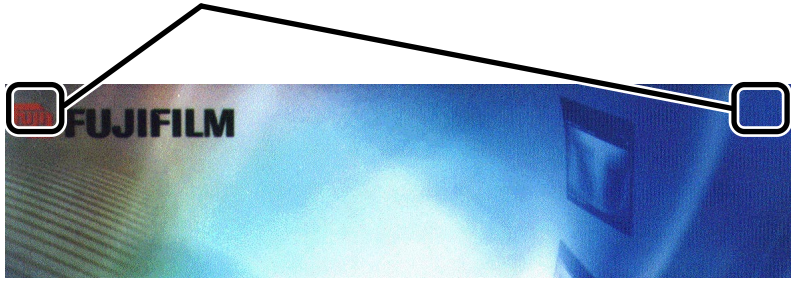
■ Changing a setting from the CL's Service Utility

1. Click Start and then sequentially choose "Programs", "Fuji Film", and "FCR".

➔ The CL-AP starts up.

2. Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.

Click the upper left corner and then the upper right corner.



00000118.EPS

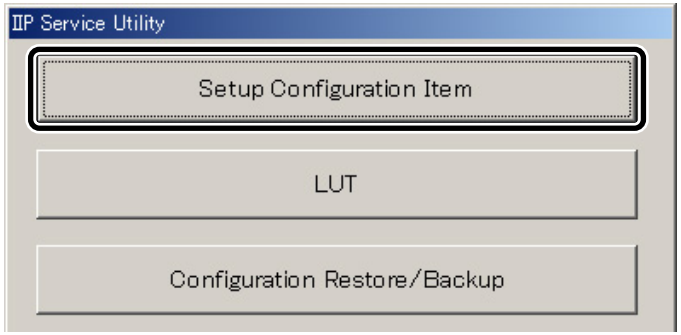
➔ The Service Utility starts. The "IIP Service Utility" window opens.

➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

1. *To exit the AP, hold down the <Shift> key and choose "Shut Down" on the [FUJIFILM] menu.*
2. *From the "Start" menu, sequentially choose "Programs", "FUJIFILM", and "FCR".*
3. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

3. Click [Setup Configuration Item].



00000159.EPS

➔ The "Setup Configuration Item" window opens.

4. Click the ⊞ sign within ⊞ NETWORK CONFIG.

5. Click the ⊞ sign within ⊞ ALL OTHER NODES and then select ⊞ ru0.

➔ The "HostName" window opens in the right-hand area of the window.

6. Enter a new RU IP address (e.g., 200.150.100.50) in the



field.

7. Click Apply.

8. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

9. Click Yes.

➔ The system saves the setup data.

10. From the “Config (F)” menu, choose “Close”.

➔ The system returns to the “IIP Service Utility” window.

11. Click [Exit Service Utility].

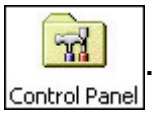
➔ The system returns to the desktop screen.

■ Changing the CL-PC IP address

1. Double-click 

on the desktop.

➔ The “My Computer” window opens.

2. Double-click 

.

➔ The “Control Panel” window opens.

3. Double-click 

.

➔ The “Network and Dial-up connection” window opens.

4. Double-click 

.

➔ The “Local Area Connection” window opens.

➥ *REFERENCE*

On Windows 2000, the “Local Area Connection” icon may not appear on the display if your PC is not connected to other equipment (RU) with a network cable.

5. Click 

.

➔ The “Local Area Connection Properties” window opens.

6. Choose 

and then click 

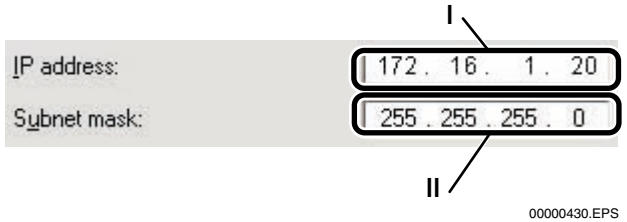
.

➔ The “Internet Protocol (TCP/IP) Properties” window opens.

7. Choose 

.

8. Perform the following setup steps:



I. Enter a new CL IP address (e.g., 200.150.100.10).
II. Enter a subnet mask.

9. Click 

.

➔ You are returned to the “Local Area Connection Properties” window.

10. Click 

.

➔ The system returns to the desktop screen.

➥ *REFERENCE*

When a window appears prompting you to restart the system, click [Yes].

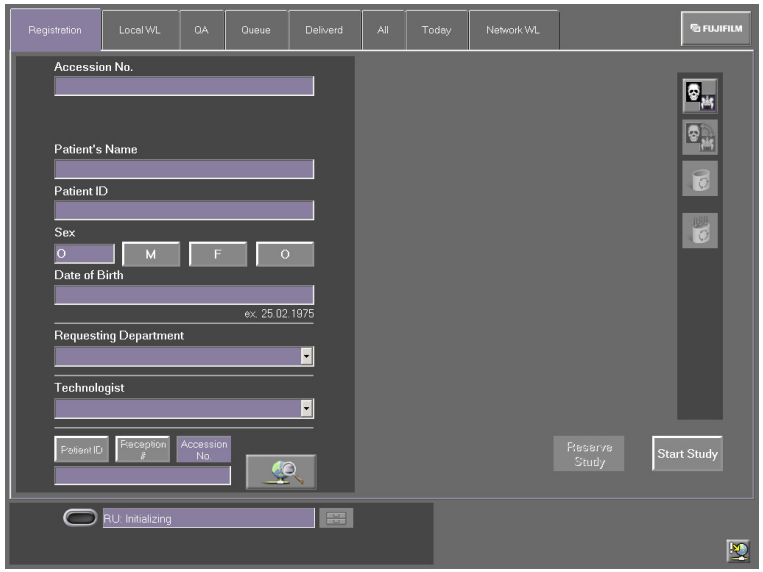
Once the OS has started, the CL-AP will start up automatically.

■ Verifying the connection after IP address changes

1. Click Start and then sequentially choose “Programs”, “Fuji Film”, and “FCR”.

➔ The CL-AP starts up in about one minute.

The RU initialization message appears on the CL monitor. The RU becomes available in about one minute.



00000195.EPS

➥ *REFERENCE*

If the RU initialization message does not appear on the CL’s monitor, restart both the CL and RU.

2. From the CL user window (Registration), set patient data and exposure menu, and then click Start Study.

➔ Both the CL-AP window lamp and the RU panel’s cassette insertion lamp go on.

3. Set the cassette in the RU’s cassette setting unit and make sure that images are transferred to the CL.

➥ *REFERENCE*

Be sure not to incorrectly enter an IP address for “NETWORK CONFIG” – “ALL OTHER NODES” – “ru0” settings, otherwise an image transfer error will be indicated.

4. Click at the upper right corner of the window.

5. Click FUJIFILM.

➔ A menu opens.

6. Hold down the <Shift> key and click Shut Down.

➔ The CL-AP exits and the system returns to the desktop screen.

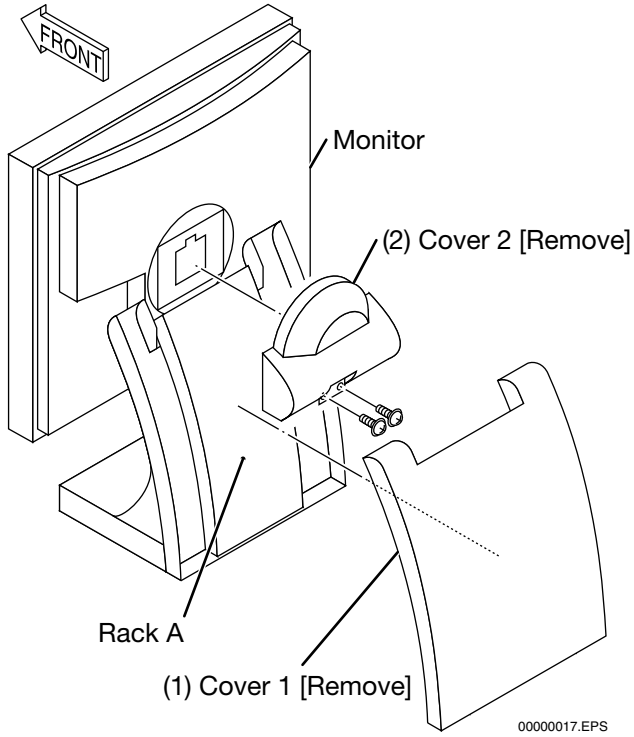
Appendix 6 Installing the Monitor Rack [Option]

Use the following procedure when replacing the rack for the touch-panel-attached 15” monitor with the optional rack.
Note that the procedure for rack replacement differs depending on the monitor type (model).

■ For TPS9415TD15

1. Position the monitor as shown below. Remove cover 1 from rack A.

2. Remove cover 2.



3. Put the monitor face down as shown. Remove the mounting screws from rack A.

◆ ***NOTE*** ◆

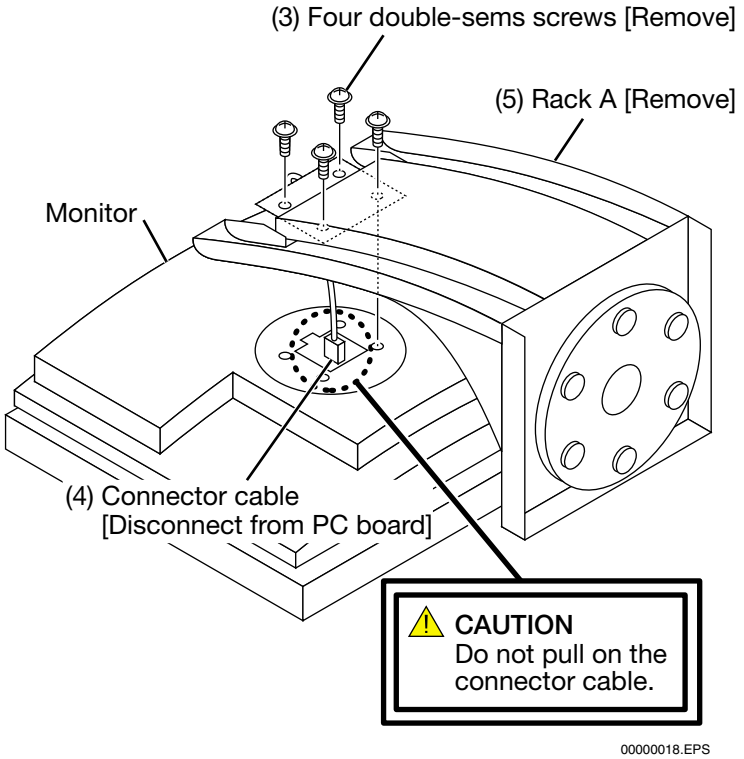
Check for foreign matter beneath the monitor surface. Observe this precaution to avoid damaging the monitor.

4. Disconnect the connector cable from the PC board.

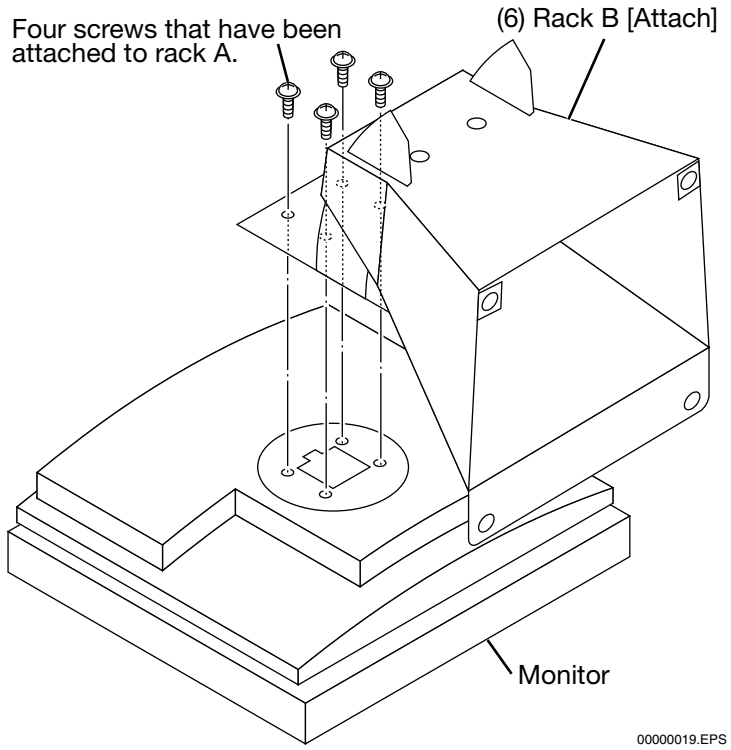
◆ ***NOTE*** ◆

Remove rack A while exercising care not to pull on the connector cable. Failure to observe this precaution may cause damage to the PC board.

5. Remove rack A.



6. **Attach rack B to the monitor.**

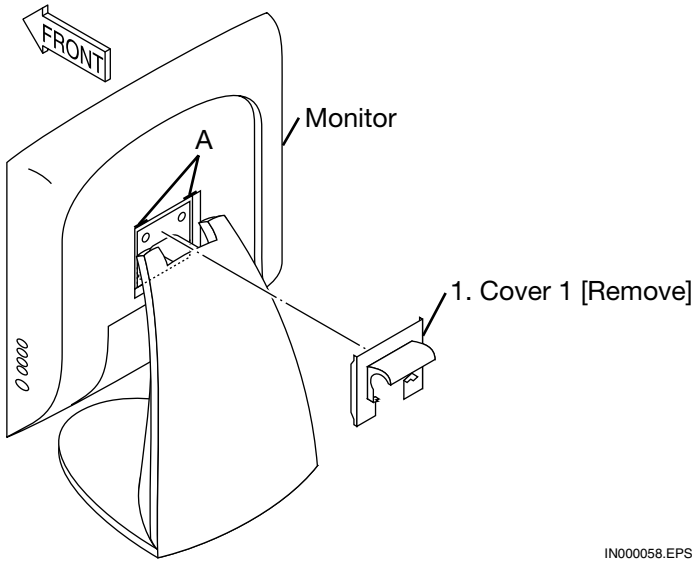


■ For TPS9416TD15

1. **Position the monitor as shown below and remove cover 1.**

◆ *NOTE* ◆

Putting a screwdriver in the clearance of cover 1 (position A) will enable you to remove it easily.



2. Put the monitor face down as shown. Remove the mounting screws from rack A.

◆ ***NOTE*** ◆

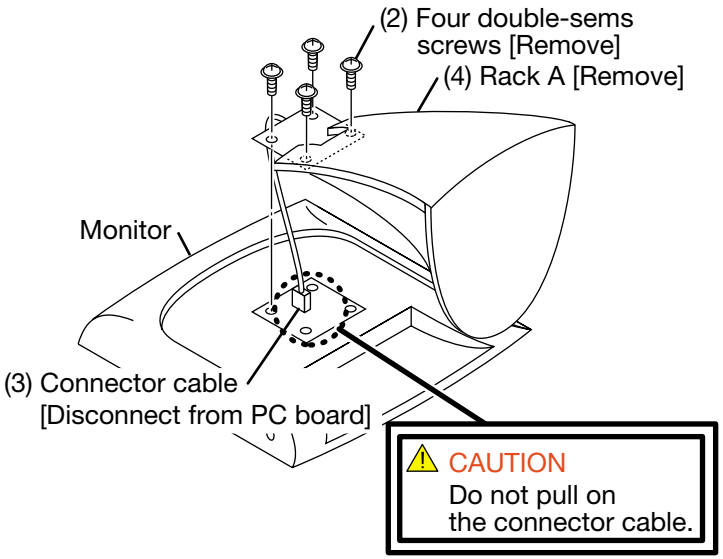
Check for foreign matter beneath the monitor surface. Observe this precaution to avoid damaging the monitor.

3. Disconnect the connector cable from the PC board.

◆ ***NOTE*** ◆

Remove rack A while exercising care not to pull on the connector cable. Failure to observe this precaution may cause damage to the PC board.

4. Remove rack A.

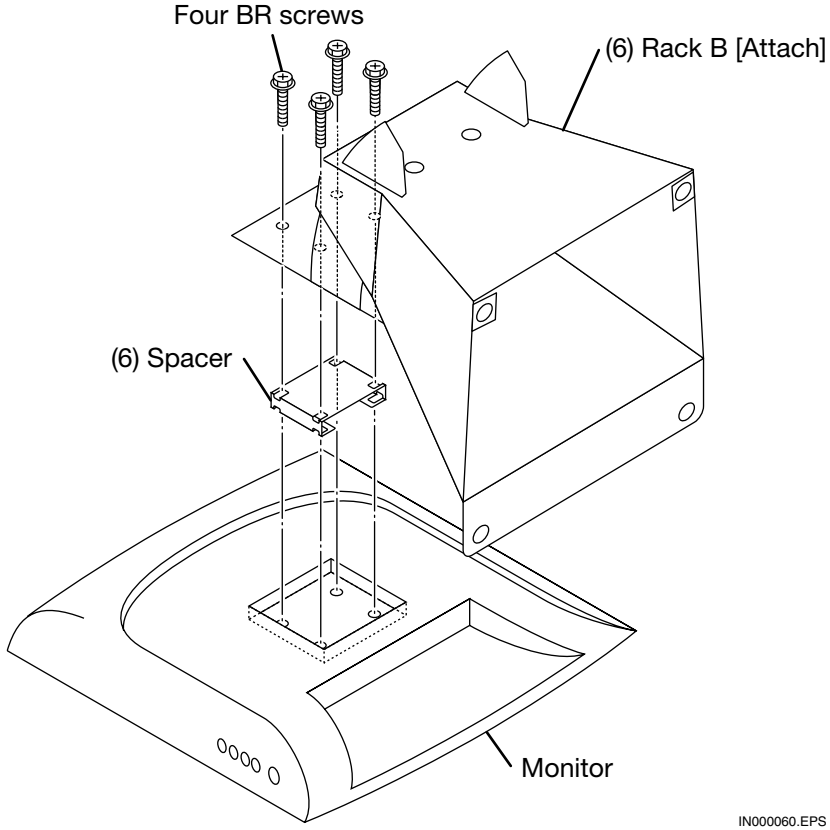


5. Connect the power cable, serial cable and monitor cable to the monitor.

◆ ***NOTE*** ◆

Be sure to connect the cables and then attach rack B.

6. Attach the spacer and rack B to the monitor (fasten the spacer together with rack B).



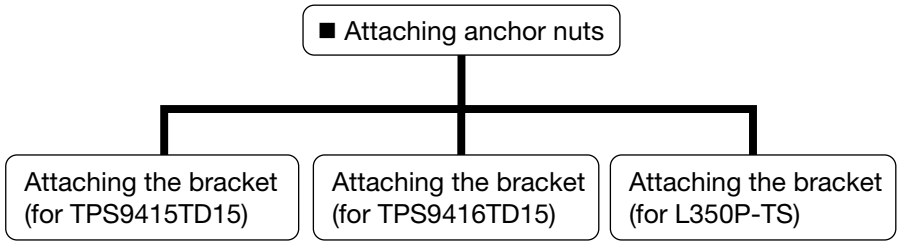
7. Connect the monitor cable and serial cable to the PC.

☞ For details of cable connection, see the Service Manual that comes with the monitor.

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Appendix 7 Attaching the Monitor Wall-Mounting Bracket [Option]

The attachment procedure to be observed differs as follows depending on the monitor type (model).



■ Attaching anchor nuts

➤ *IMPORTANT*

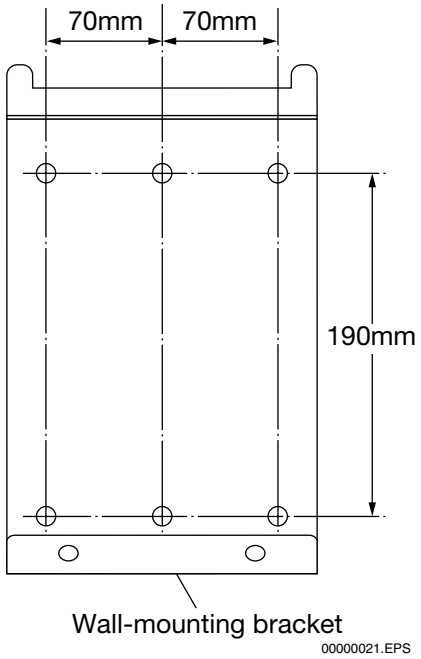
Ensure that the concrete strength of the wall on which the wall-mounting bracket is to be mounted is not less than 210 kgf/cm^2.

If the concrete strength is inadequate, the required amount of mounting strength will not be obtained. Be sure to check the concrete strength in advance.

1. **Determine the wall-mounting bracket attaching position. Mark the center of each of the four wall-mounting bracket attaching holes for anchor nut installation.**

◆ *NOTE* ◆

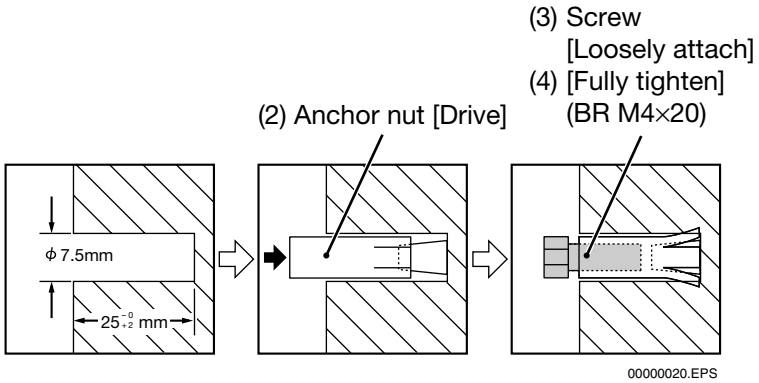
Be sure that the employed anchor nuts conform to the wall conditions (use the supplied anchor nuts).



2. Drill holes (7.5 mm in diameter and 25 mm in depth) at the marked positions and drive four anchor nuts into the holes.

3. Loosely attach four screws (BR M4×20) to the anchor nuts.

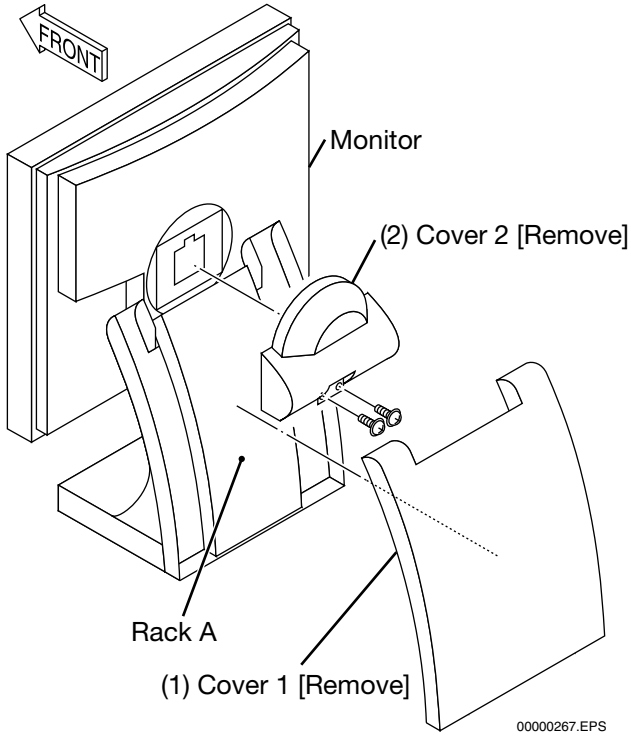
4. Hook the wall-mounting bracket on the loosely retained screws and then tighten those screws.



■ Attaching the bracket (for TPS9415TD15)

1. Position the monitor as shown below. Remove cover 1 from rack A.

2. Remove cover 2.



3. Put the monitor face down as shown. Remove the mounting screws from rack A.

◆ ***NOTE*** ◆

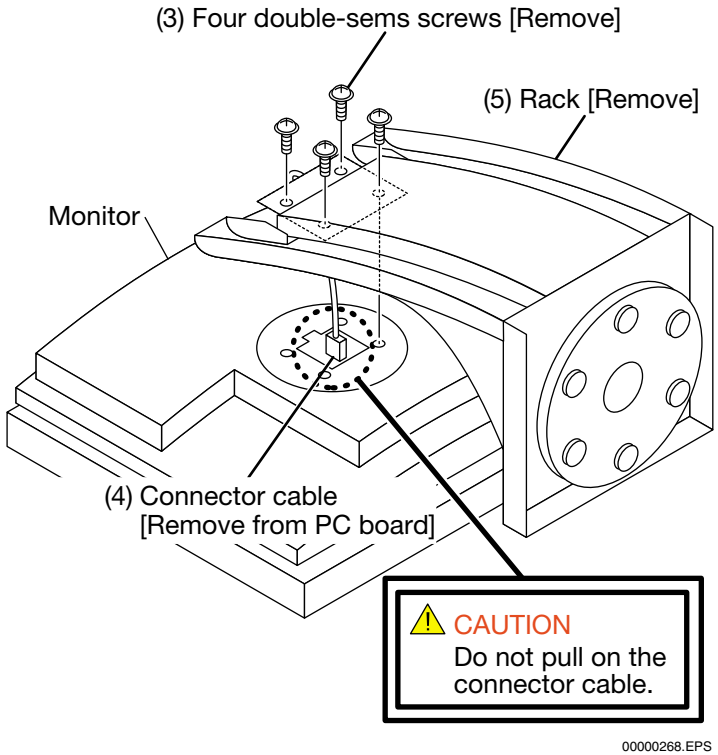
Check for foreign matter beneath the monitor surface. Observe this precaution to avoid damaging the monitor.

4. Disconnect the connector cable from the PC board.

◆ ***NOTE*** ◆

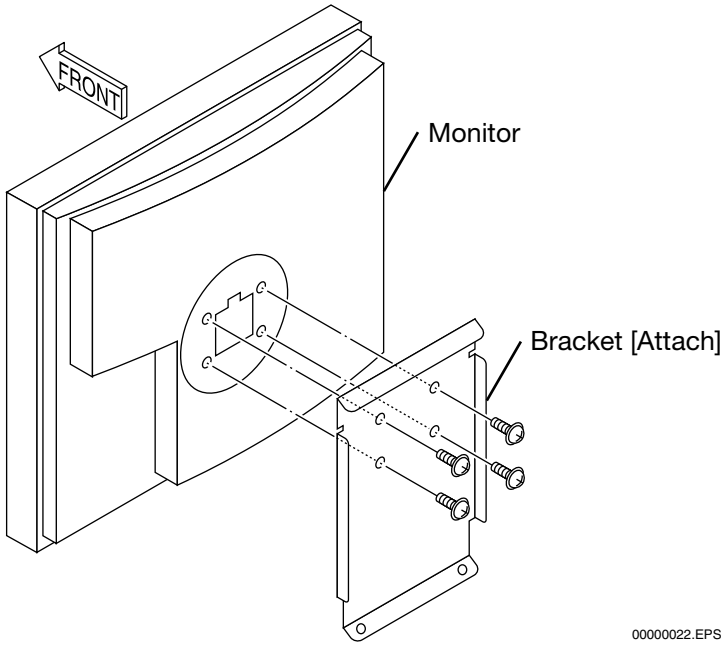
Remove rack while exercising care not to pull on the connector cable. Failure to observe this precaution may cause damage to the PC board.

5. Remove the rack.



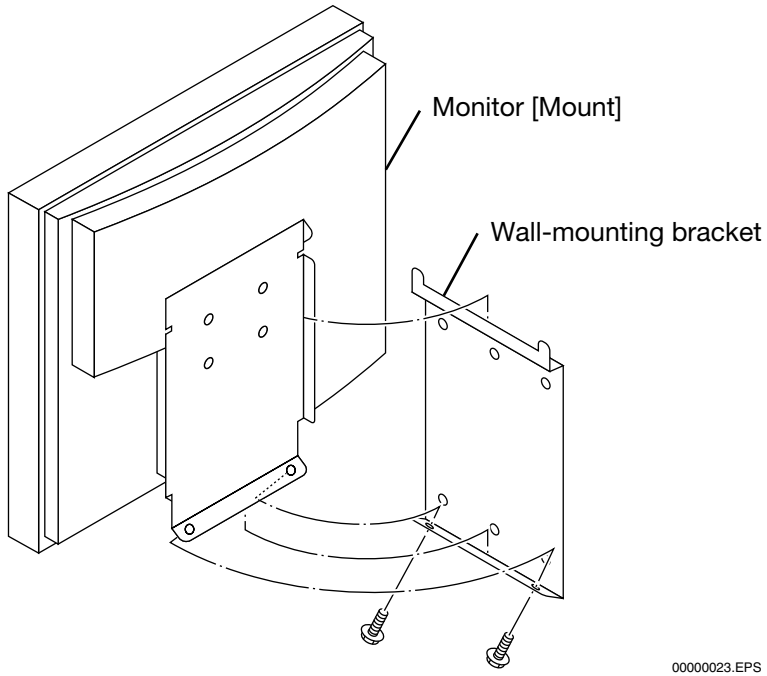
00000268.EPS

6. Attach the bracket to the bottom of the monitor.



00000022.EPS

7. **Mount the monitor on the wall-mounting bracket.**

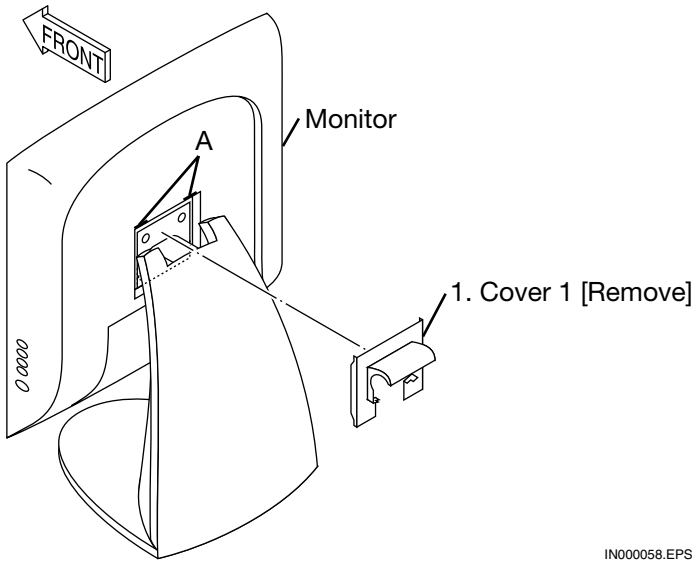


■ Attaching the bracket (for TPS9416TD15)

1. **Position the monitor as shown below and remove cover 1.**

◆ *NOTE* ◆

Putting a screwdriver in the clearance of cover 1 (position A) will enable you to remove it easily.



2. Put the monitor face down as shown. Remove the mounting screws from rack A.

◆ ***NOTE*** ◆

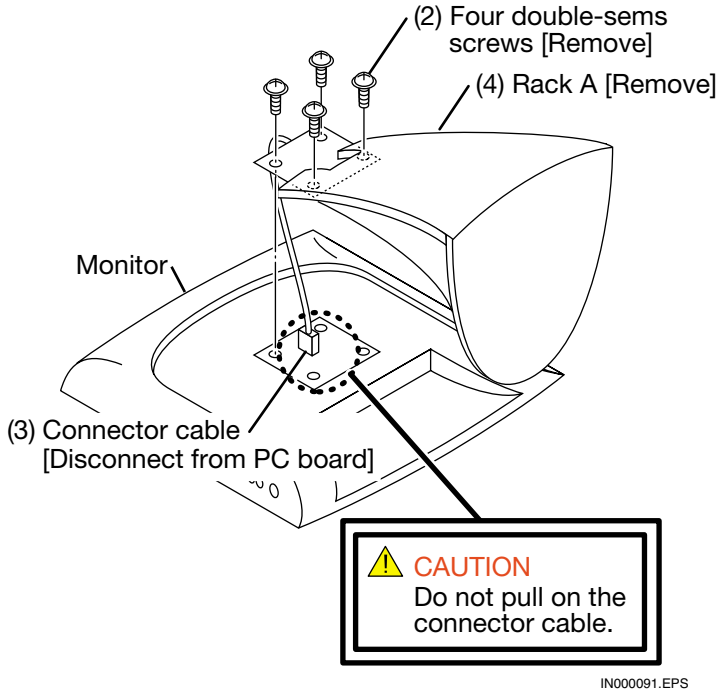
Check for foreign matter beneath the monitor surface. Observe this precaution to avoid damaging the monitor.

3. Disconnect the connector cable from the PC board.

◆ ***NOTE*** ◆

Remove rack A while exercising care not to pull on the connector cable. Failure to observe this precaution may cause damage to the PC board.

4. Remove rack A.



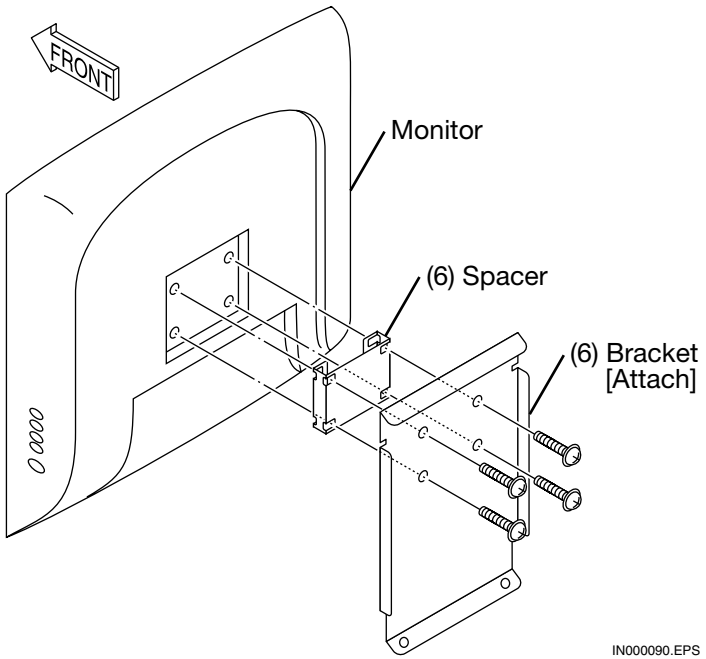
IN000091.EPS

5. Connect the power cable, serial cable and monitor cable to the monitor.

◆ ***NOTE*** ◆

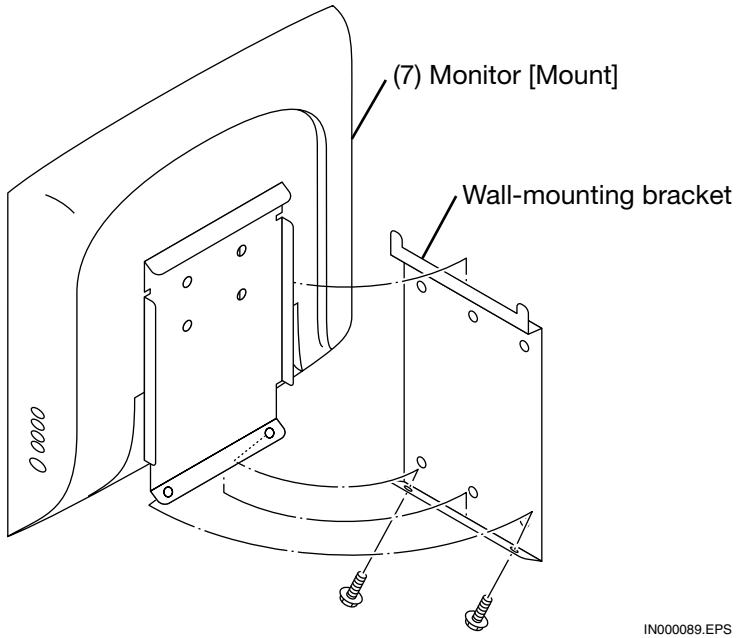
Be sure to connect the cables and then attach rack B.

6. Attach the spacer and bracket to the monitor (fasten the spacer together with the bracket).



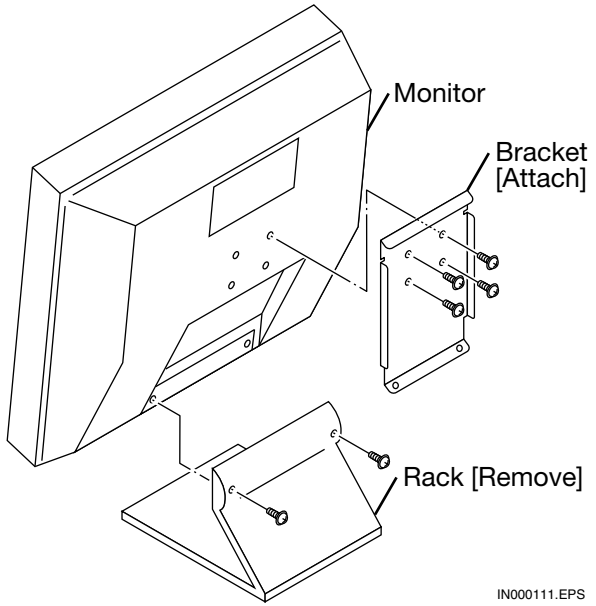
IN000090.EPS

7. **Mount the monitor on the wall-mounting bracket.**

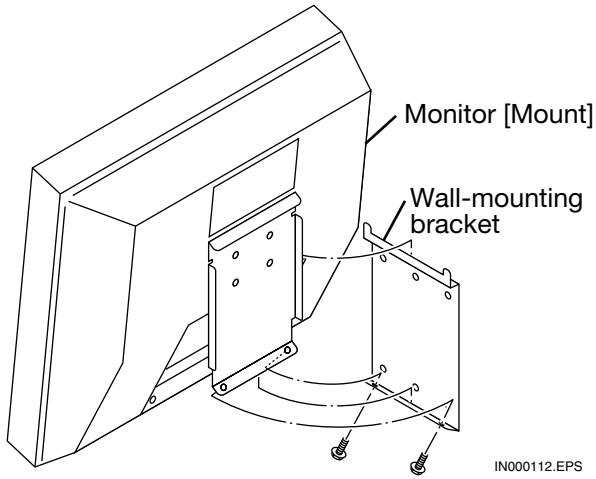


■ Attaching the bracket (for L350P-TS)

1. **Position the monitor as shown below and remove the rack. Attach then the bracket to the monitor.**



2. **Mount the monitor on the wall-mounting bracket.**



Appendix 8 Changing the RU Host Name

RU M-Utility is used to change the RU's host name. However, the change procedure varies with the employed RU M-Utility version. When the employed version is 1.1 or earlier (when RU M-Utility is installed from RU application CD-ROM version A06 or earlier), perform the procedure set forth under "1. When Version 1.1 or Earlier Is Used". When the employed RU M-Utility version is 1.2 or later, perform the procedure set forth under "2. When Version 1.2 or Later Is Used".

The use of RU M-Utility version 1.2 or later makes it easier to effect a host name change. It is therefore recommended that you upgrade RU M-Utility if RU application CD-ROM version A07 or later is available.

➥ *REFERENCE*

To upgrade RU M-Utility, first uninstall it and then install its new version.

☞ *For the RU M-Utility uninstallation procedure, see "Appendix A Uninstalling the APs" in "RI: Reinstalling the Software" .*

☞ *For the RU M-Utility installation procedure, see "5.2.1 Installing the RU M-Utility" in "IN-A: Installation – One RU Connection" .*

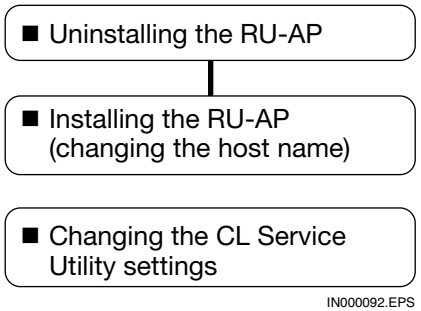
1. When Version 1.1 or Earlier Is Used

The RU host name cannot be changed with a tool such as the RU M-UTILITY. For this reason, change it accordingly by reinstalling the RU-AP.

◆ *NOTE* ◆

Before performing the procedures described herein, be sure to take note of all the registered RU config information, particularly IP address and sub-net mask, for the following reason.
When reinstalling the RU-AP, it is necessary to uninstall the RU-AP that has been installed. While this processing is being performed, the RU config data is deleted (only data stored in the FTP server is deleted).

Change the host name according to the flow below.



■ Uninstalling the RU-AP

☞ See "3. RU-AP" in "Appendix A Uninstalling the APs" under "RI: Reinstalling the Software".

◆ *NOTE* ◆

Note that, even if two or more RUs have been registered to the RU M-UTILITY, just a single operation uninstalls all those RUs registered. In such a case, all those RUs must be set up anew. Thus, you have to surely jot down information on each of those RUs.

■ Installing the RU-AP (changing the host name)

◆ NOTE ◆

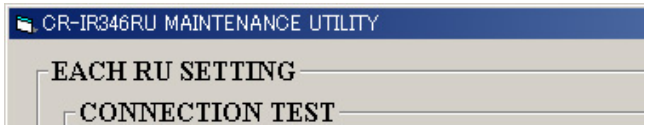
Make sure to exit all applications, particularly the Explorer or CL-AP.

1. Insert into the CD-ROM drive the RU-CD supplied with the RU.

➔ After a while, the "CR-IR346RU MAINTENANCE TOOLS" window opens.

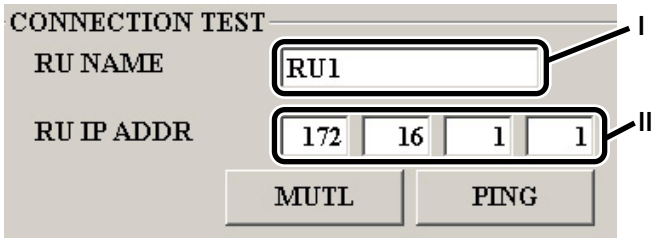
2. Click [START].

➔ The RU M-UTILITY main menu appears.



00000414.EPS

3. Enter the RU host name to be changed and the RU IP address.



00000426.EPS

I. Enter the RU host name (host name you wish to change).

II. Enter the RU IP address (IP address taken note of before starting the procedure).

◆ NOTE ◆

The host name entered at step I. above will be taken as the RU's correct host name. Be sure to enter the correct host name at this step.

4. Click PING.

➔ Connection to the RU will then be verified.

5. Verify network connection to the RU.
If the following message appears four times, connection to the RU has been established accordingly.

Reply from 172.16.1.10: bytes=32 time<10ms TTL=128

➥ REFERENCE

Values "time<10ms" and "TTL=128" appearing in the message above can be different depending on the network status. Even if different values appear in it, network connection has been established normally.

◆ NOTE ◆

Before proceeding to steps hereafter, make sure that there are no problems with the network connection. An error will occur when starting up the CL if you proceed to steps hereafter without establishing network connection properly.

6. Click the ☒ mark at the upper right corner of the command prompt window.

➔ You are returned to the main menu.

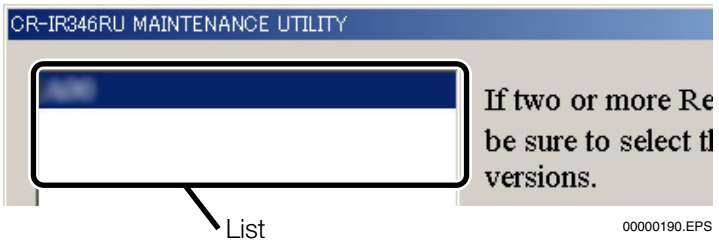
7. Click [INSTALL] in the main menu.

➔ The "Insert the CD-ROM into a drive" window opens.

8. Click OK.

➔ A window prompting you to select the RU-AP version opens.

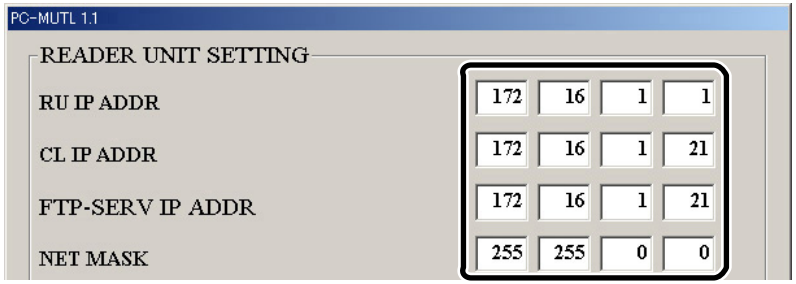
9. Select the RU-AP version from the list and click OK.



00000190.EPS

➔ The "READER UNIT SETTING" window opens.

10. Set up config information items that have been taken note of before starting the procedure.



IN000093.EPS

11. Click SET.

➔ After the completion of RU-AP installation, "Completed" will appear on the screen.

12. Click OK.

➔ You are returned to the main menu.

13. Click the ✕ mark at the upper right corner of the window.

➔ The system returns to the desktop window.

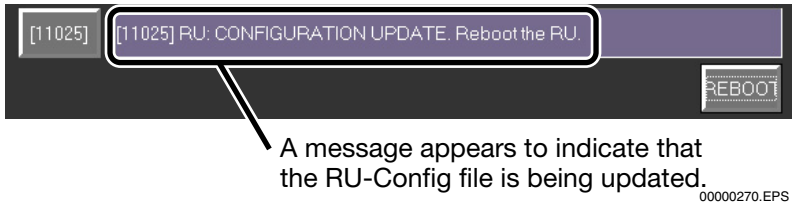
14. From the Start menu, sequentially choose "Programs", "Fuji Film", and then "FCR".

◆◆ *CAUTION* ◆◆

Never turn OFF the power to the RU or press the reset switch while the RU panel is illuminated, because the RU's CPU board can be damaged.

➔ The CL-AP starts up in about one minute.
The RU-Config file in the RU FLASH ROM will be updated.
(The RU LED lights and a beep sounds.)

➔ The CL monitor displays a message indicating that the RU-Config file is being updated.



00000270.EPS

15. Click REBOOT on the CL monitor.

➔ The error window opens in a few seconds.



00000601.EPS

16. Click OK.

17. Click FUJIFILM.

➔ A menu opens.

18. Hold down the <Shift> key and click Shut Down.

➔ The CL-AP exits and the system returns to the desktop screen.

This completes to change the RU host name.

■ Changing the CL Service Utility settings

1. Start the Service Utility and then click [Setup Configuration Item].

   ➔ The “Setup Configuration” window opens.

2. Within the tree in the left-hand area of the window, click the ⊞ mark to the left of ⊟ NETWORK CONFIG, and then click the ⊞ mark to the left of ⊟ ALL OTHER NODES.

3. Choose ⊞ ru0 (the RU’s previously selected host name).

4. Change the 

entry in the upper right corner of the window to a new RU host name (RU1).

5. Click 

.

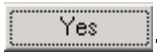
6. From the tree in the left-hand area of the window, choose ⊟ CONNECTING EQUIPMENT, and then set the RU under “READER” Function in the right-hand area of the window to “RU1 (new host name)”.

7. Click 

.

8. From the “Config” menu, choose “Save”.

   ➔ A window opens, prompting you to confirm the setup data to be saved.

9. Click 

.

   ➔ The system saves the setup data.

The original network setup is then restored.

2. When Version 1.2 or Later Is Used

◆ *NOTES* ◆

- *Verify that Explorer or other application is not running. If any applications are running, exit them.*
- *Before proceeding to perform the procedure set forth below, exit the CL-AP.*

Perform the steps in the following workflow:

■ Changing the RU host name

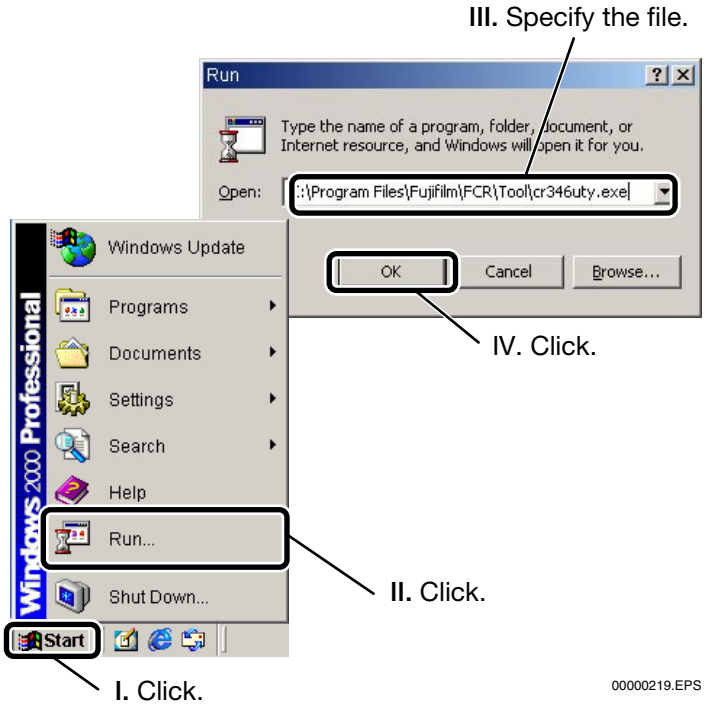
↓

■ Changing the CL Service Utility settings

IN000101.EPS

■ Changing the RU host name

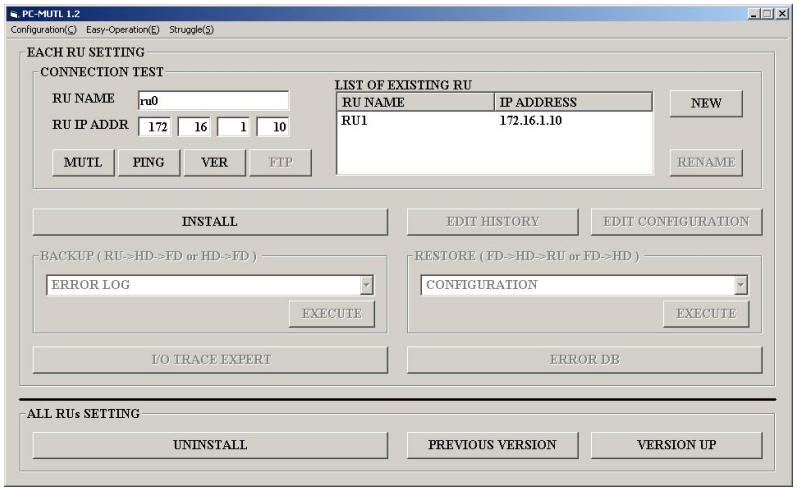
1. **Perform the following steps to start RU M-Utility.**



00000219.EPS

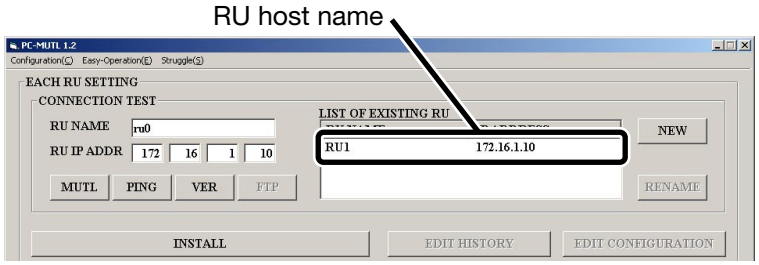
➔ The RU M-Utility main menu opens.

● Main menu window



00000612.EPS

2. **In the "LIST OF EXISTING RU" area, click the host name of the RU unit whose configuration file is to be set up.**



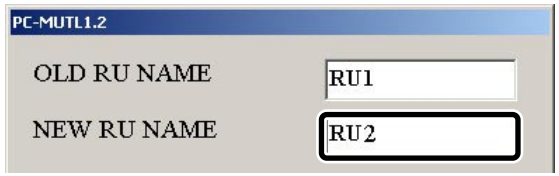
00000613.EPS

➔ The "EDIT CONFIGURATION" button text color changes from gray to black.

3. **Click** RENAME.

➔ A window opens to prompt for a host name change.

4. Enter a new host name in the "NEW RU NAME" field.



00000614.EPS

5. Click SET.

➔ The RU host name is then changed.

◆◆ CAUTION ◆◆

The RU panel will be illuminated while the RU host name is being changed. Never turn OFF the power to the RU or press the reset switch during such a change process because the RU's CPU board can be damaged.

6. Click ✕ in the upper right corner of the window.

➔ You are then returned to the desktop screen.

■ Changing the CL Service Utility settings

1. Start the Service Utility and then click [Setup Configuration Item].

➔ The "Setup Configuration" window opens.

2. Within the tree in the left-hand area of the window, click the ⊞ mark to the left of ⊟ NETWORK CONFIG, and then click the ⊞ mark to the left of ⊟ ALL OTHER NODES.

3. Choose ⊞ ru0 (the RU's previously selected host name).

4. Change the HostName : ru0 entry in the upper right corner of the window to a new RU host name (RU1).

5. Click Apply.

6. From the tree in the left-hand area of the window, choose ⊟ CONNECTING EQUIPMENT, and then set the RU under "READER" Function in the right-hand area of the window to "RU1 (new host name)".

7. Click Apply.

8. From the "Config" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

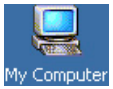
9. Click Yes.

➔ The system saves the setup data.

The original network setup is then restored.

Appendix 9 Changing the CL IP Address

To connect a multiple number of CLs within the same network, the CL IP address must be changed from the default setup value (172.16.1.20) to another.
In addition, the sub-net mask must also be changed from the default setup value (255.255.0.0) to another, for which the procedures described below should be followed.

1. Double-click 

on the desktop. Sequentially select 

, 

and then 

.

➔ The “Local Area Connection” window opens.

2. Click 

.

➔ The “Local Area Connection Properties” window opens.

3. Select 

and then click 

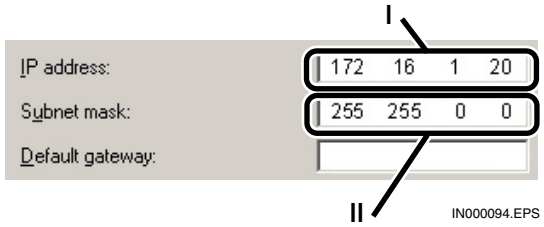
.

➔ The “Internet Protocol (TCP/IP) Properties” window opens.

4. Select 

.

5. Change the IP address and sub-net mask.



I. IP address
II. Sub-net mask

6. Click 

.

➔ You are returned to the “Local Area Connection Properties” window.

7. Click 

.

➔ You are returned to the desktop screen.

➥ *REFERENCE*

When a window appears prompting you to restart the system, click [Yes]. Once the OS has started, the CL-AP will start up automatically.

This completes to change the CL IP address and sub-net mask.

CR-IR346/348CL Service Manual

OE: Connecting the CL to Other Equipment

OE consists of the following:

OE1 CL+Local Printer (E-i/f Connection)
OE2 CL+HI-C/QA-WS/OD-F (FINP: Image Input/Output)
OE3 CL+HI-C655/QA-WS (DICOM CR Storage)
OE4 CL+Other (DICOM CR Storage: Transfer of Processed Images)
OE5 CL+FN-PS551/DRYPIX/FM-DP L (DICOM Print)
OE6 CL+FN-PS551 or 5000 Series (FINP: Print Output)
OE7 CL+RIS/IDC4 (ID Online)
OE8 CL+RIS (DICOM MWM/DICOM PPS)
OE9 CL+Archiver (Storage Commitment Push)
OE10 CL+QA-WS (Transfer of Energy Subtraction Images)
OE11 CL+RIS (Ordering) [simplified]
OE12 CL+X-Ray Controller (Serial Connection)
OE13 CL+RIS (Ordering - Serial Connection)
OE14 CL+Sanyo Receptor Computer/Electronic Patient Record System [Not available for overseas users]

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	I, II, i, ii, B1-1–10, B2-1–15, B3-1–16
12/10/2000	00	Changes in pagination (FM2950)	B2-16
4/10/2001	01	Previous Chapter B “Connecting the CL to Other Equipment” modified (OE1–3) and new release (OE4–7) (FM2951)	All pages
05/30/2001	02	Revision for software version A02 (FM3027)	I, II, 1-1, 1-4–8, 1-13, 2-2–9, 2-11, 2-12, 2-14–16, 3-2–18, 4-2–18, 5-1–14, 5-16, 5-17, 6-1–6-9, 6-11–14, 7-1, 7-2, 7-4–15, 8-1–10-17
05/30/2001	02	Changes in pagination (FM3027)	2-13
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 1-1, 1-9, 1-10, 2-3, 2-14, 2-15, 2-17, 2-18, 3-3, 3-16, 3-17, 4-3, 4-16, 4-17, 5-1, 5-2, 5-6, 5-11, 5-12, 5-14, 5-16, 6-1–4, 6-6, 6-8, 6-11–13, 7-8–12, 8-1, 8-14, 10-1–3, 10-14, 11-1, 11-2, 12-1–12
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 2-9, 2-10, 3-1, 3-2, 3-8, 3-10, 3-11, 4-1, 4-10, 4-11, 5-1, 5-6–8, 5-10–12, 6-1, 8-1, 8-4, 8-10, 8-13–15, 8-18
03/20/2002	04	Changes in pagination (FM3297)	8-2, 8-16, 8-17, 9-10, 9-11
07/20/2002	05	Revision for software version A08 (FM3428)	I-IV, 1-1, 3-9, 3-11, 3-12, 4-9, 4-11, 5-11, 8-2, 8-3, 8-13–8-16, 8-18, 9-10, 14-1, 14-2
07/20/2002	05	Changes in pagination (FM3428)	3-13, 8-1, 8-17, 8-19, 8-20, 9-11, 9-12

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CL+Local Printer (E-i/f Connection)

The setup procedures set forth below are used for printing images onto E-i/f-connected printers from the CR-IR346CL.

◆ NOTE ◆

The "CR-IR 346CL" and the "Local Print" are abbreviated hereafter "CL" and "LP", respectively.

■ Before setup

● CL requirements

- The CL main unit must have been set up accordingly.
- Software version required : A00 or later.
- The LP option key (IR 346 LOCAL PRINT) is required.

➥ REFERENCE

If the PEI board is not mounted when the LP option key is installed, the CL-AP does not run.

☞ *For details, see "3.2 Typical Procedure for Achieving Recovery from an LP (Local Printer) Printout Generation Failure" under "MT: Troubleshooting".*

● Printer requirements

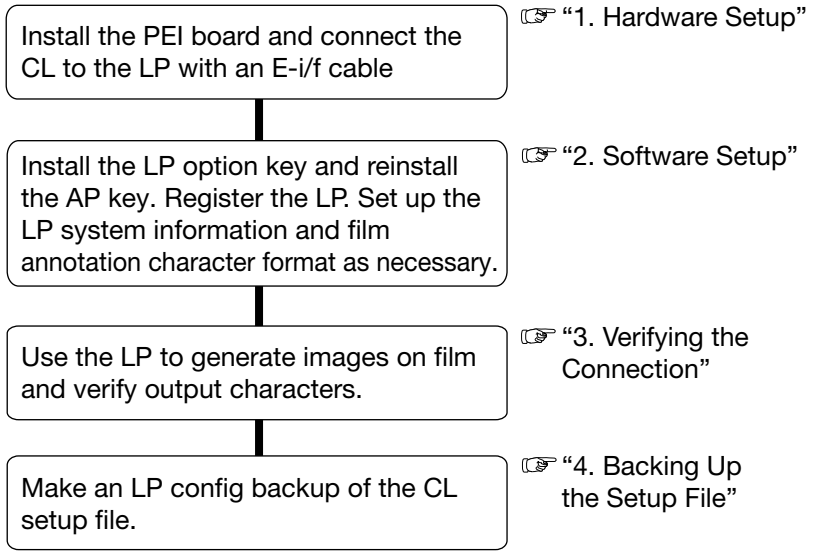
The printer main unit setup procedure must have been completed.
The connections to the following models are supported.

- CR-LP414N/FL-IM2636N (A05 or later)
- FL-IM3543N/FL-IM3543MN (A06 or later)
- CR-LP415/FL-IM2636II (A06 or later)
- CR-LP416/FL-IM3543II (A06 or later)
- CR-LP417/CR-LP418/FL-IM D/FL-IM DM (A10 or later)
- CR-DP T (C08 or later)
- CR-DP 3543T (C03 or later)
- CR-DP L (B00 or later)

◆ NOTES ◆

- *The CR-LP414, FL-IM3543, and FL-IM3543M are not supported.*
- *Even when the printer prints images onto the CR-DP T or CR-DP3543T, the print process is performed so that the printer resolution is 10 lines/mm. As is the case with the FCR5000 Series, the printer enlarges the print image to 7/6 the original size.*
- *The CR-DP L printers support printout generation at a resolution of 20 lines/mm.*

■ Overall work flow



1. Hardware Setup

For the CL and printer, the following hardware setup procedures must be completed:

1.1 Installing the PEI Board ... Installing the PEI board on the CL-PC's PCI bus slot

1.2 Connecting the Cable ... Connecting the E-i/f cable between the CL and printer

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1.1 Installing the PEI Board

◆ ***NOTE*** ◆

Before installing the PEI board, make sure that the CL-AP is installed.

The PEI01A driver is properly recognized only when the CL-AP is installed.

1. **Shut down the CL and then turn OFF the CL-PC power.**

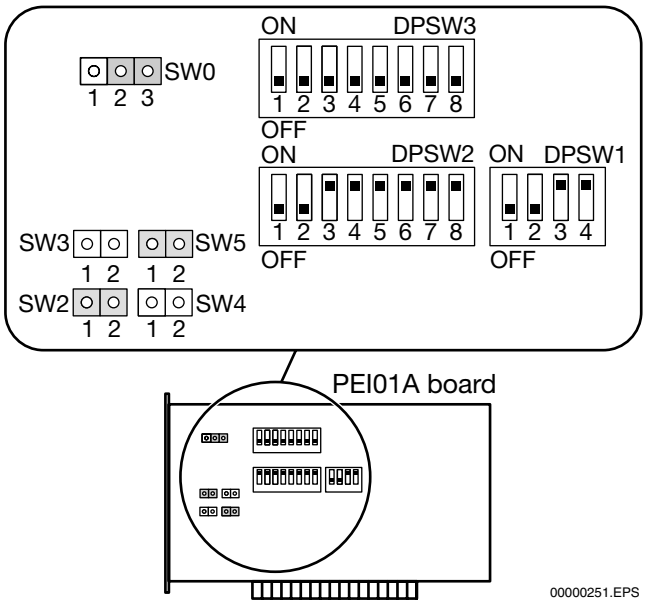
2. **Disconnect the power cable from the CL-PC.**

3. **Verify that the switches on the PEI board are properly set. If their settings are incorrect, correct them accordingly.**

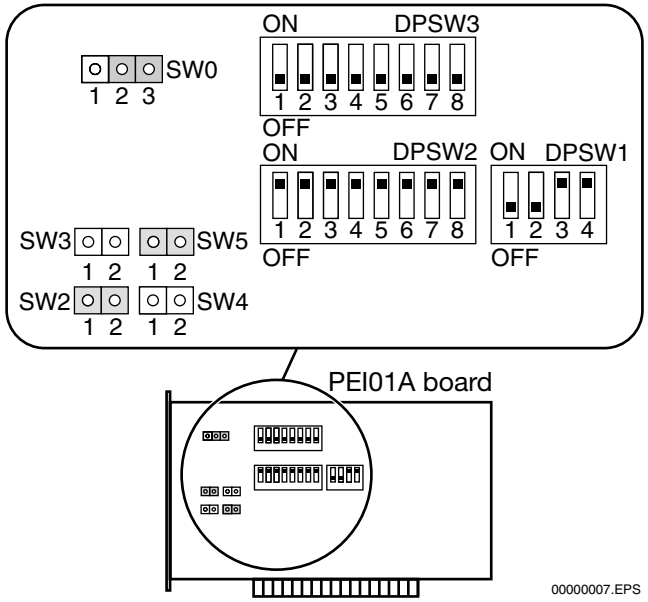
◆ ***NOTE*** ◆

When no remote signal is to be sent to the printer, turn OFF all the DPSW1 switches.

- When connecting the CR-LP414N/FL-IM2636N or FL-IM3543N/ FL-IM3543MN
  - DPSW1 1 and 2: OFF; 3 and 4: ON
  - DPSW2 1 and 2: OFF; 3 to 8: ON
  - DPSW3 1 to 8: OFF
  - SW0 2 and 3 short-circuited.
  - SW2 and SW5 1 and 2short-circuited.
  - SW3 and SW4 Jumpers removed.



- Settings for models other than those listed above
  - DPSW1 1 and 2: OFF; 3 and 4: ON
  - DPSW2 1 to 8: ON
  - DPSW3 1 to 8: OFF
  - SW0 2 and 3 short-circuited.
  - SW2 and SW5 1 and 2 short-circuited.
  - SW3 and SW4 Jumpers removed.

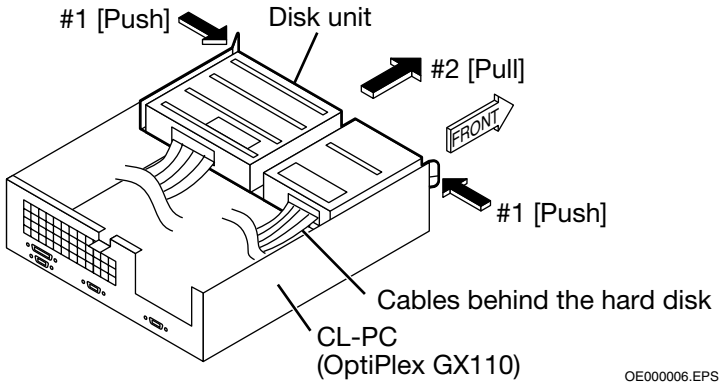


4. Mount a PEI board in a PCI slot.

- For GX110

I. Remove the CL-PC cover.

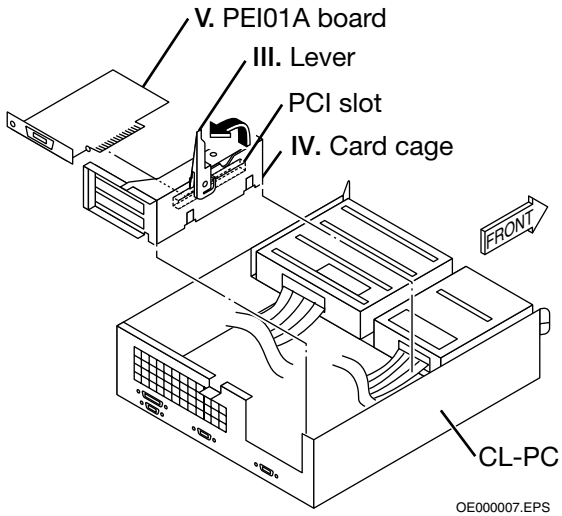
II. When the card cage is removed, its PC board interferes with a cable behind the hard disk. A workaround is to slightly pull the disk unit on the front of the CL-PC toward you before removing the card cage.



III. Raise the lever as illustrated by the arrow.

IV. Remove the card cage.

V. Mount a PEI board in a PCI slot within the card cage.



VI. Mount the card cage in the CL-PC.

VII. Restore the disk unit.

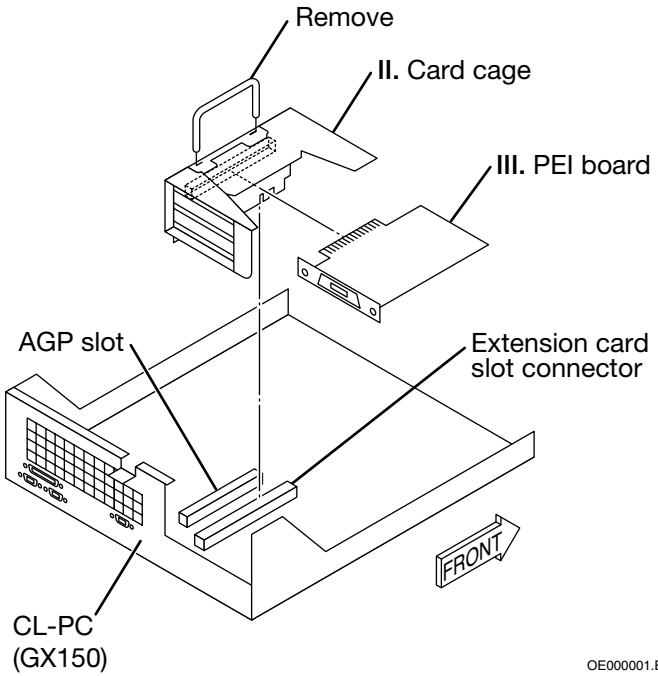
VIII. Reinstall the CL-PC cover.

- For GX150

I. Open the CL-PC cover.

II. Holding the card cage handle, remove the card cage.

III. Mount a PEI board in an empty PCI slot.

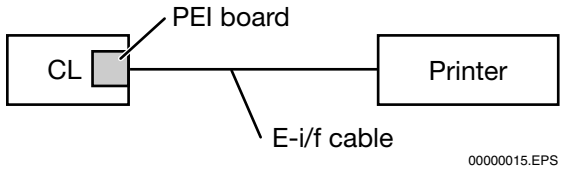


IV. Mount the card cage on the CL-PC.

V. Close the CL-PC cover.

1.2 Connecting the Cable

With the E-i/f cable that is supplied with the CL, connect the CL to the printer.



2. Software Setup

This section describes the procedures for software setup.
Set up grayed-out items as required. All other items must be set up.

2.1 CL software setup
- 2.1.1 Installing the LP Option Key
- 2.1.2 Reinstalling the AP Key
- 2.1.3 Starting the Service Utility
- 2.1.4 Registering the Printer for Automatic Image Printout When a Study is Completed – CONNECTING EQUIPMENT
- 2.1.5 Setting the System Information for CL/LP Connection
- 2.1.6 Setting the Film Annotation Character Format
- 2.1.7 Exiting the Service Utility

... Install the LP option key
reinstall the AP key.
Register the printers.
Set up the LP system information and film annotation character format as necessary.

2.2 Printer Main Unit Setup

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2.1 CL Software Setup

2.1.1 Installing the LP Option Key

To use the LP, the IR346 LOCAL PRINT option key is needed.

1. **Insert the optional key CD into a CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of LP option key installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.2 Reinstalling the AP Key

If the option key is installed, be sure to reinstall the AP key.

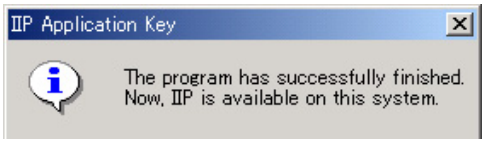
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.3 Starting the Service Utility

1. **Turn ON the CL power.**

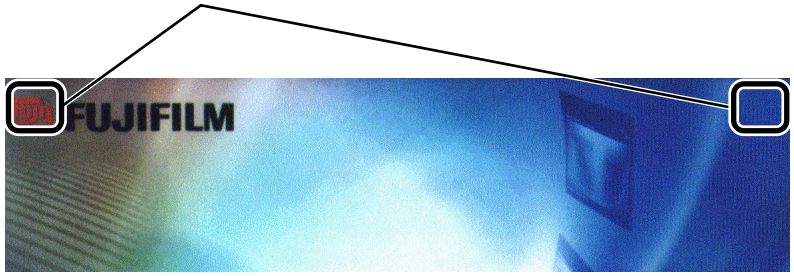
➔ Windows 2000 starts up and then the CL-AP starts running in about one minute.

➥ *REFERENCE*

If the AP or Windows 2000 is already running, start the Service Utility as directed under REFERENCE in step 2. below.

2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts and then the “IIP Service Utility” window opens.



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➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

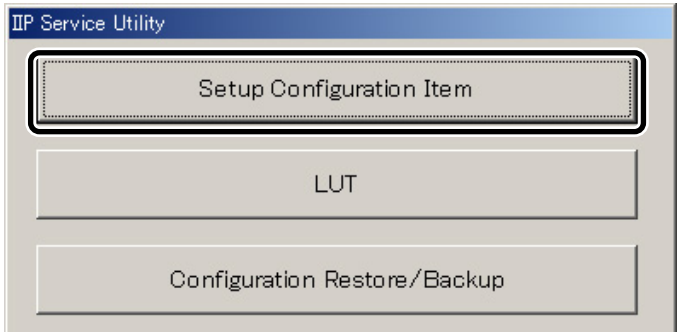
1. *To exit the AP, hold down the <Shift> key and choose “Shut Down” on the* FUJIFILM *menu.*
2. *From the “Start” menu, sequentially choose “Programs”, “Fuji Film”, and “FCR”.*
3. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

2.1.4 Registering the Printer for Automatic Image Printout When a Study is Completed – CONNECTING EQUIPMENT

Described herein is the procedure used for registering the printer for automatic image printout when a study is completed.

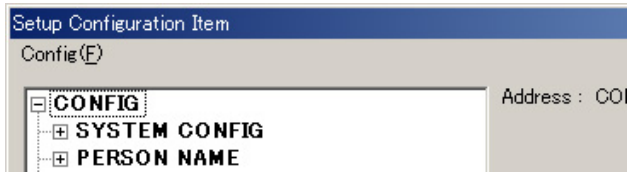
For a printer that outputs prints only through the QA operation, no registration is required at this step.

1. From the “IIP Service Utility” window, click [Setup Configuration Item].



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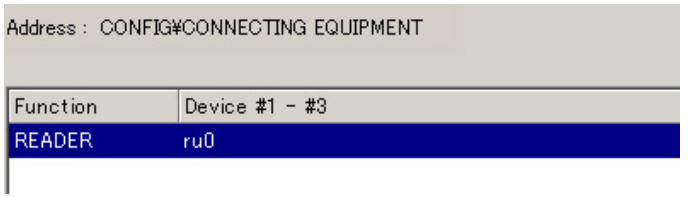
➔ The “Setup Configuration Item” window opens.



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2. Click CONNECTING EQUIPMENT.

➔ A list of registered equipment appears in the right-hand area of the window.



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3. Click [New].

➔ The “FTP CONNECTION” window opens.

4. Perform the following setup steps:

❍ Click the downward arrow mark ▼ in the [Function :] field and select the function (PRINT) of the connected device.

❍ Click the downward arrow mark ▼ in the [Equipment #1 :] field and select the device (LOCAL).

◆ *NOTE* ◆

If the LP option key is not installed, you cannot choose “LOCAL”.

5. Click [OK].

➔ You are returned to the “Setup Configuration Item” window.

6. From the “Config (F)” menu, choose “Save”.

➔ A window opens, prompting you to confirm the setup data to be saved.

7. Click [Yes].

➔ The system saves the setup data.

2.1.5 Setting the System Information for CL/LP Connection

If the following printer use is intended, change the LP system information.

❍ When an old-type printer is to be used
CR-LP414N/FL-IM2636N, FL-IM3543N/FL-IM3543MN

❍ When the cable connecting the printer to the CL exceeds 60m

❍ When the film sort function is to be used

1. From the “Setup Configuration Item” window, click the ⊞ sign for [⊞ SYSTEM CONFIG].

2. Click [⊟ 4.PRINTER].

➔ The LP configuration setup items appear in the right-hand area of the window.

3. Enter the following settings as needed:

◆ *NOTE* ◆

Setup items 1 through 9 refer to the LP-related system information. Items 10 thereafter are for the film annotation character format.

☞ For details on individual setup items, see “1. Setup Necessary When Connecting the LP”, under “Print Output Function” in “FR1: Function-specific Reference”.

4. From the “Config (F)” menu, choose “Save”.

➔ A window opens, prompting you to confirm the setup data to be saved.

5. Click [Yes].

➔ The system saves the setup data.

2.1.6 Setting the Film Annotation Character Format

Perform the following film annotation character format setup procedure, for instance, to specify the image information to be printed out onto film, the annotation character format, and the use of an image-frame.

➥ *REFERENCE*

The default film annotation character format for print output is basically the same as for printouts generated by the FCR 5000 Series.

☞ *Film output differences between the CL and the 5000 Series are stated in "2.2 Precautions of the Film Annotation Character Format" under "Print Output Function" in "FR1: Function-specific Reference".*

1. **From the "Setup Configuration Item" window, click the sign within ⊞ SYSTEM CONFIG.**

2. **Click ⊟ 4.PRINTER.**

➔ The LP configuration setup items appear in the right-hand area of the window.

3. **Set the film annotation character format.**

☞ For details on the setup procedure, see "2. Setup Necessary When Editing the Film Annotation Character Format", under "Print Output Function" in "FR1: Function-specific Reference".

4. **From the "Config (F)" menu, choose "Save".**

➔ A window opens, prompting you to confirm the setup data to be saved.

5. **Click [Yes].**

➔ The system saves the setup data.

2.1.7 Exiting the Service Utility

1. **From the "Setup Configuration Item" window, choose "Close" on the "Config (F)" menu.**

➔ The system returns to the "IIP Service Utility" window.

2. **Click [Exit Service Utility].**

➔ The system returns to the desktop screen.

2.2 Printer Main Unit Setup

Set up the printer main unit software to ensure that images fed from the CL can be printed out.

☞ When other connected equipment is the FM-DPL, FM-DP3543 or FM-DP2636, see “System Settings” in “Installation (IN)” and Chapter C under “Setting to Work”.

☞ For other printers, see the Service Manual that comes with each printer.

3. Verifying the Connection

This section describes the procedures for printing images onto the printer from the CL for film annotation character format verification purposes.

3.1 Starting the CL-AP

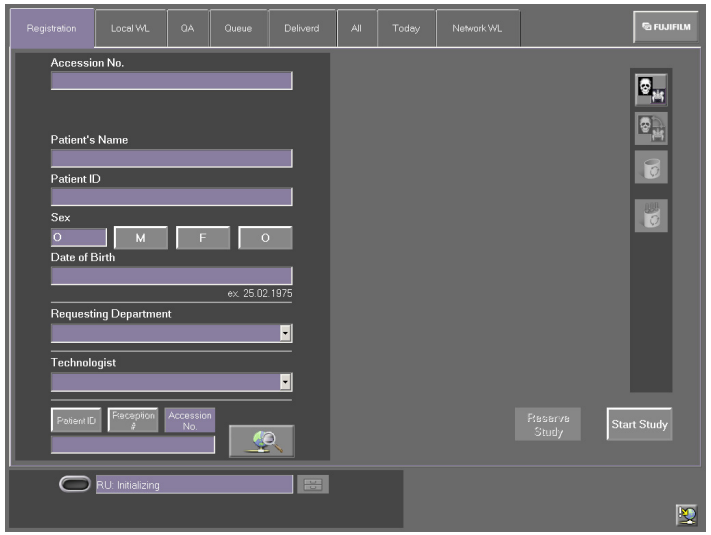
3.2 Verifying the Film Annotation Character Format

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3.1 Starting the CL-AP

1. From the Start menu, sequentially select “Programs”, “Fuji Film”, and then “FCR”.

➔ The CL opening window appears on the display.
After about one minute, the CL-AP reception window opens.



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3.2 Verifying the Film Annotation Character Format

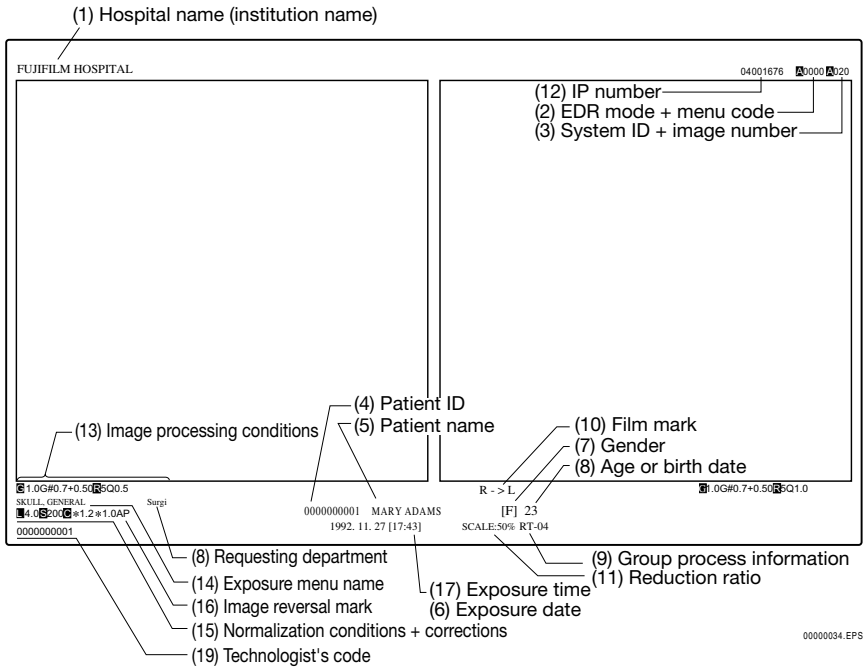
1. Print out a read image.

☞ For details on the print output procedure, see “FCR XG-1 CR-IR346CL” in the CL Operation Manual.

2. Check whether the film annotation character format information entered from the CL is properly printed out onto the film. Also, check for blurred, chipped, or otherwise abnormal character printings.

➥ *REFERENCE*

The example in the figure below represents a printout that would be generated when the default film annotation character format is used (image size: 35 × 35cm (14" × 14"); print format: TWIN). When the default settings are used, character strings (1) through (19) are printed out.



☞ If any abnormality is found, see “Print Output Function” under “FR1: Function-specific Reference”.

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

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CL+HI-C/QA-WS/OD-F (FINP: Image Input/Output)

This chapter describes the setup procedures for image input/output using the FINP between the CR-IR346CL and other connected equipment.

◆ *NOTE* ◆

The "CR-IR346CL" and the "HI-C655/HI-C654/QA-WS/OD-F614/624" are abbreviated hereafter "CL" and "other connected equipment", respectively.

■ Prior to setup

● CL requirements

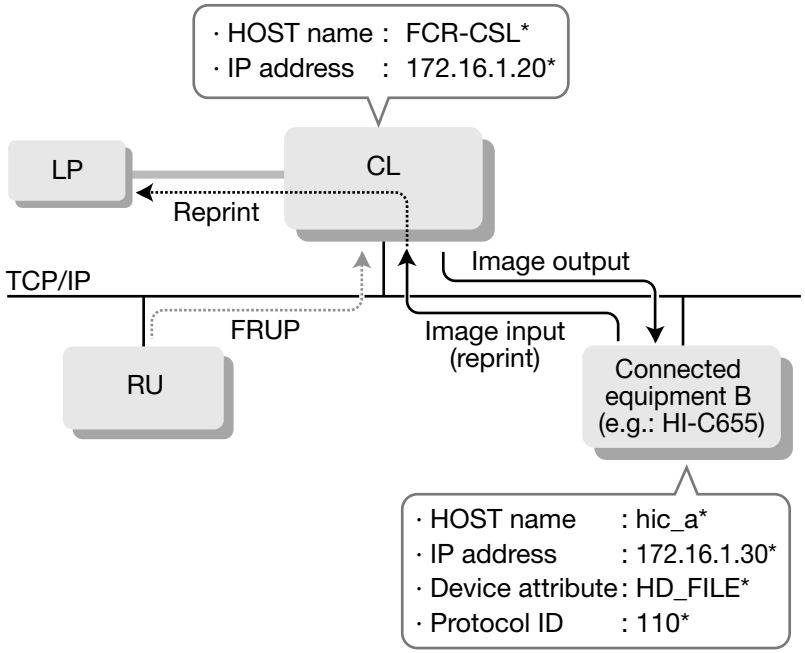
- The CL main unit must have been set up accordingly.
- Software version required: A00 or later
- The FINP image input/output option key (IR346 DMS NET-WORK IN-OUT) is necessary.

● Other connected equipment

- The main units of other connected equipment must have been set up accordingly.
- Following are the equipment connectable to the CL and the protocol software versions available.

Equipment	FINP100	FINP110	Software Version
HI-C654	❍	×	A13 or later
HI-C655	❍	❍	A07 or later
QA-WS	❍	❍	A03 or later
OD-F614	❍	❍	A11/Z02 or later
OD-F624	❍	❍	A11/Z02 or later
CR-IR346CL	❍	❍	A00 or later

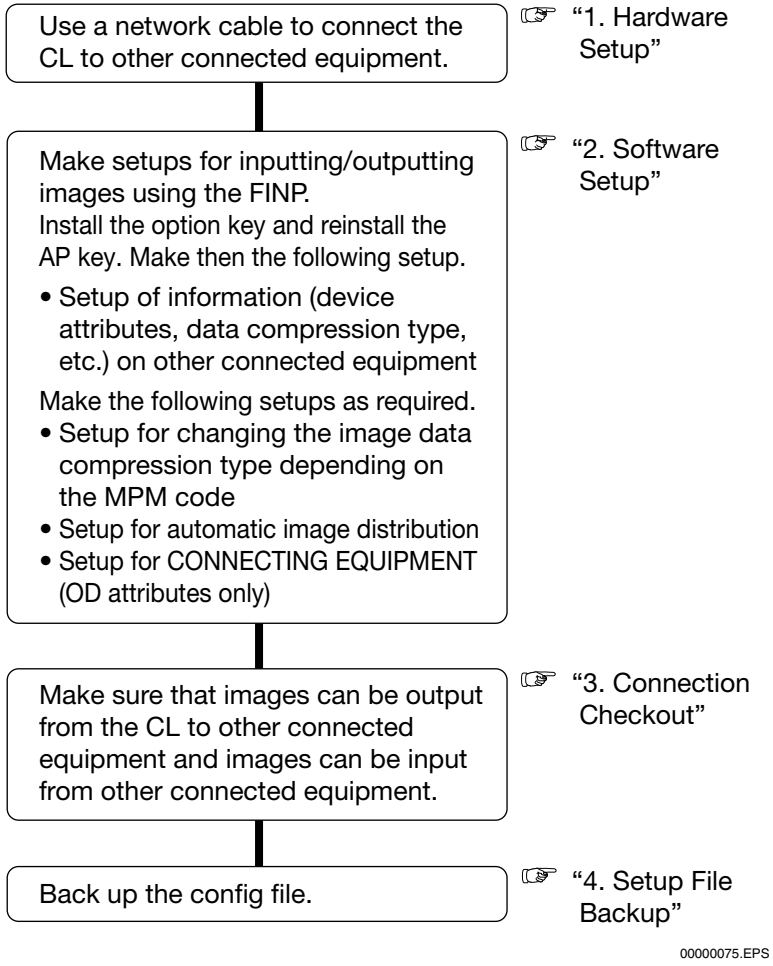
■ Connection/setup example



Items marked with "*" constitute setup examples, which need be changed depending on the equipment or network environment.

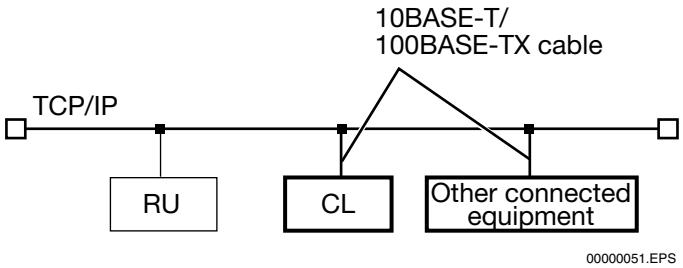
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■ Overall operation flow



1. Hardware Setup

Connect the CL to other equipment via network as illustrated below.

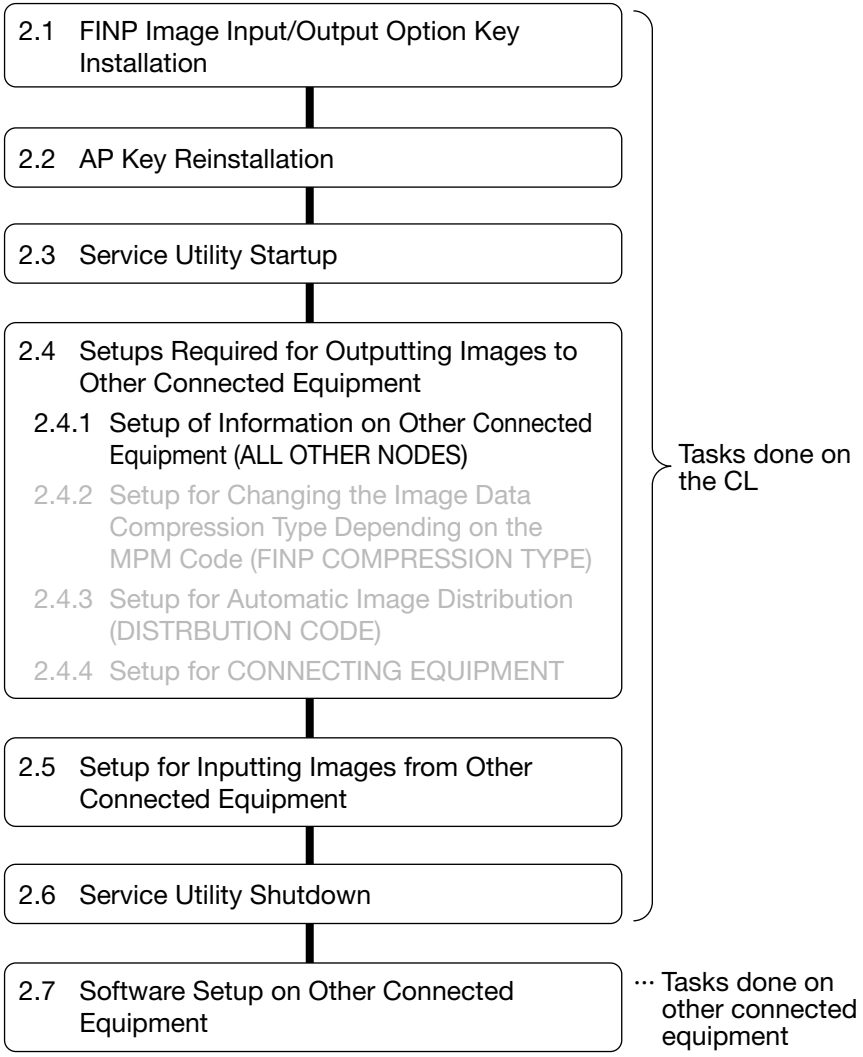


◆ *NOTES* ◆

- *Do not connect the telephone line to the network connectors of the CL and other connected equipment.*
- *The IEC950/UL1950-conformed cable is available for this equipment.*

2. Software Setup

Follow the procedures below to set up software for the CL and other connected equipment.
Set up the items shown in gray as required. Be sure to set up all other items.



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2.1 FINP Image Input/Output Option Key Installation

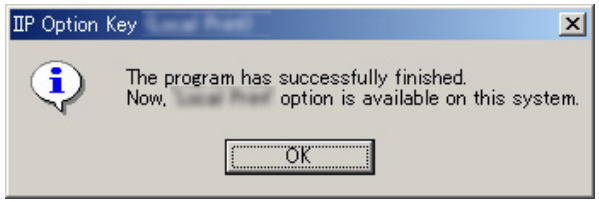
To input/output images using the FINP, the IR346 DMS NET-WORK IN-OUT option key is needed.

1. **Insert the option key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The installation start window opens again.

4. **Click** Continue.

➔ A window opens to indicate the completion of installation.

5. **Click** OK.

➔ The system return to the desktop screen.

6. **Remove the CD from the CD-ROM drive.**

➥ *REFERENCE*

The installation start window opens twice because the two kinds of keys, for image input and output, are stored on the FINP image input/output option key CD.

2.2 AP Key Reinstallation

If the option key is installed, be sure to reinstall the AP key.

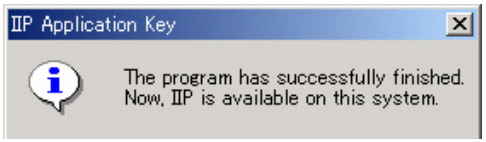
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.3 Service Utility Startup

1. **Turn ON the CL power.**

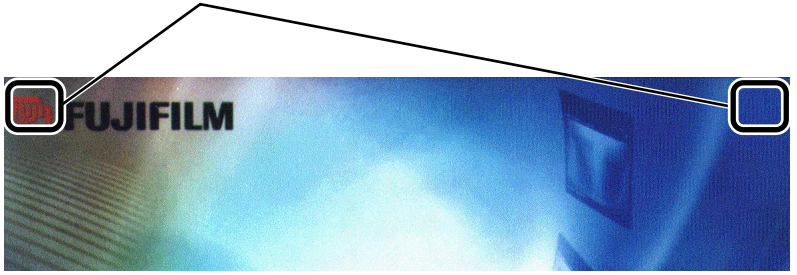
➔ In about one minute after Windows 2000 is started up, the CL-AP launches itself.

➥ *REFERENCE*

If the AP or Windows 2000 is already running, start the Service Utility mode as directed under REFERENCE in step 2. below.

2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



00000118.EPS

➔ The Service Utility mode starts. The “IIP Service Utility” window opens.



00000403.EPS

➥ *REFERENCE*

If you cannot complete step 2. above from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility mode.

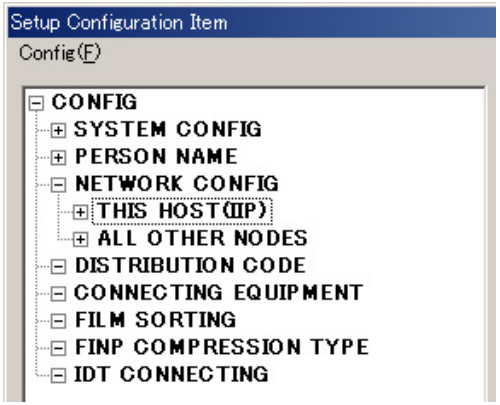
1. To exit the AP, hold down the <Shift> key and select [Shut Down] on the FUJIFILM *menu.*

2. From the “Start” menu, sequentially select “Programs”, “Fuji Film”, and “FCR”.

3. When the initial window opens, click the upper left corner and then the upper right corner within a period of 5 seconds.

3. Click [Setup Configuration Item].

➔ The “Setup Cofiguration Item” window opens.

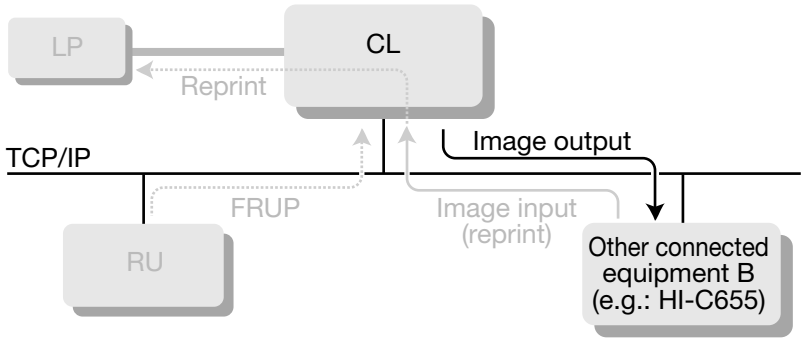


00000077.EPS

2.4 Setups Required for Outputting Images to Other Connected Equipment

Described herein are the setup procedures to be observed when outputting images to other connected equipment.

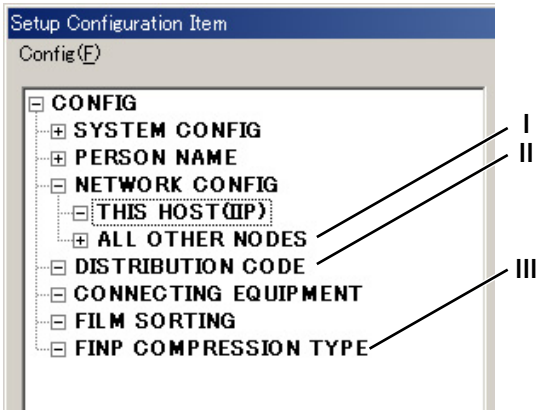
■ Connection example



00000079.EPS

■ Setup overview

Service Utility “Setup Configuration Setup Item” window



00000054.EPS

- Setup of information on other connected equipment (I on the window display)
  - Host name and IP address of other connected equipment
  - Selection of protocol used (FINP) by other connected equipment
  - Setup of the protocol ID (FINP100/110) of other connected equipment
  - Setup of attribute of other connected equipment
  - Setups for handling HQ images and image compression type

- Setup for automatic image distribution (II on the window display)

  This setup is needed for automatically transferring images sent by the RU.

- Setup for changing the image data compression type depending on the MPM code (III on the window display)

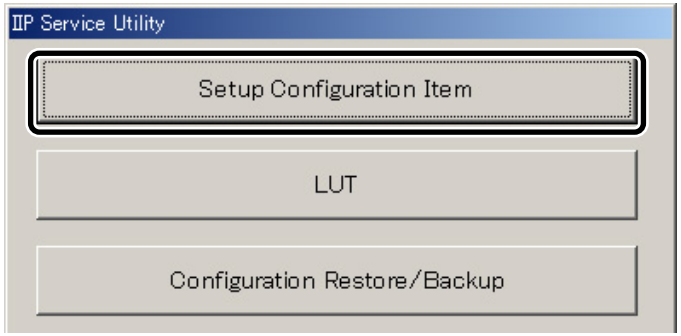
  Perform this setup only when transferring images by changing the data compression type depending on the MPM code.

◆ *NOTE* ◆

To enable this setup, the Depend on MPM Code *field must have been activated before setting the image data compression type (ALL OTHER NODES).*

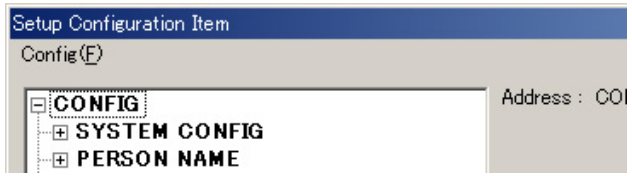
2.4.1 Setup of Information on Other Connected Equipment (ALL OTHER NODES)

1. Click [Setup Configuration Item] of the “IIP Service Utility” window.



00000131.EPS

➔ The “Setup Configuration Item” window opens.



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2. Click the ⊞ mark of the ⊞ NETWORK CONFIG field.

3. Select ⊞ ALL OTHER NODES and click NEW.

➔ The “New Node” window opens.



00000436.EPS

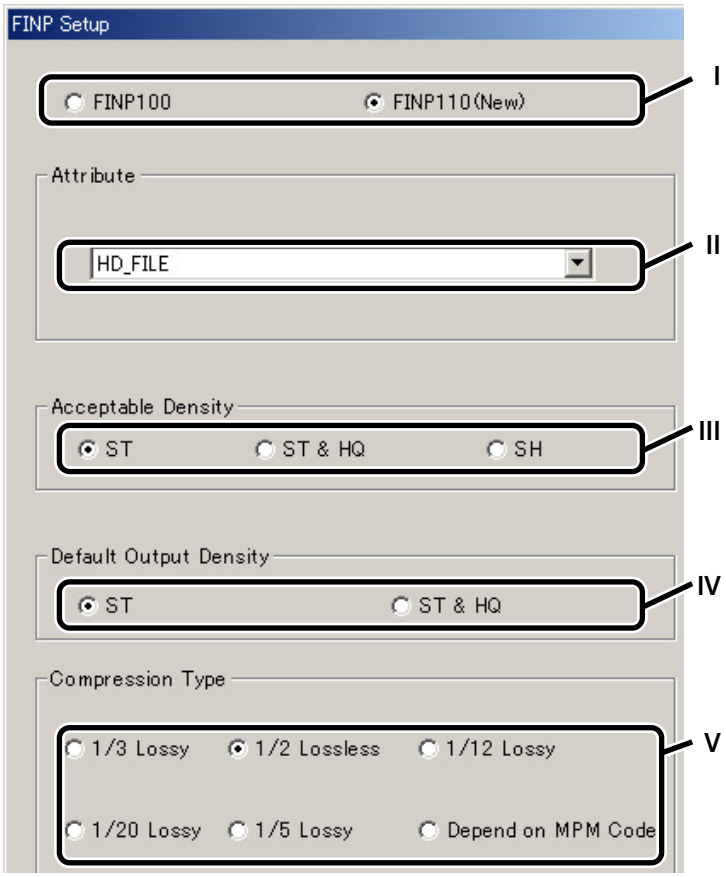
4. Enter the host name (e.g.: “hic_a”) of other connected equipment in Host Name : .

5. Enter the IP address (e.g.: “172.16.1.30”) of other connected equipment in IP Address : .

6. Make sure that FINP is selected in the Add Node column.

7. Click OK.
➔ The “FINP Setup” window opens.

8. Set information of other connected equipment as follows.



00000437.EPS

I. Select the protocol ID (e.g.: FINP110(New)) supported by other connected equipment.

☞ For the protocol ID that each equipment unit supports, see “■ Prior to setup”.

II. Select the device attribute (e.g.: HD_FILE) of other connected equipment.

- Select “PRINT” for the IR system.
- Select “HD_FILE” for the HI-C/QA-WS system.
- Select “OD_FILE” for the ODF system.
- Select “OTHER” for the CL.

III. Select ST & HQ if other connected equipment can receive HQ images and SH if it can receive mammographic images as well.

IV. Select ST & HQ if other connected equipment can transfer HQ images.

V. Select the image data compression type used for image transfer. Select Depend on MPM Code when transferring images by changing the data compression type depending on the MPM code.

◆ NOTE ◆

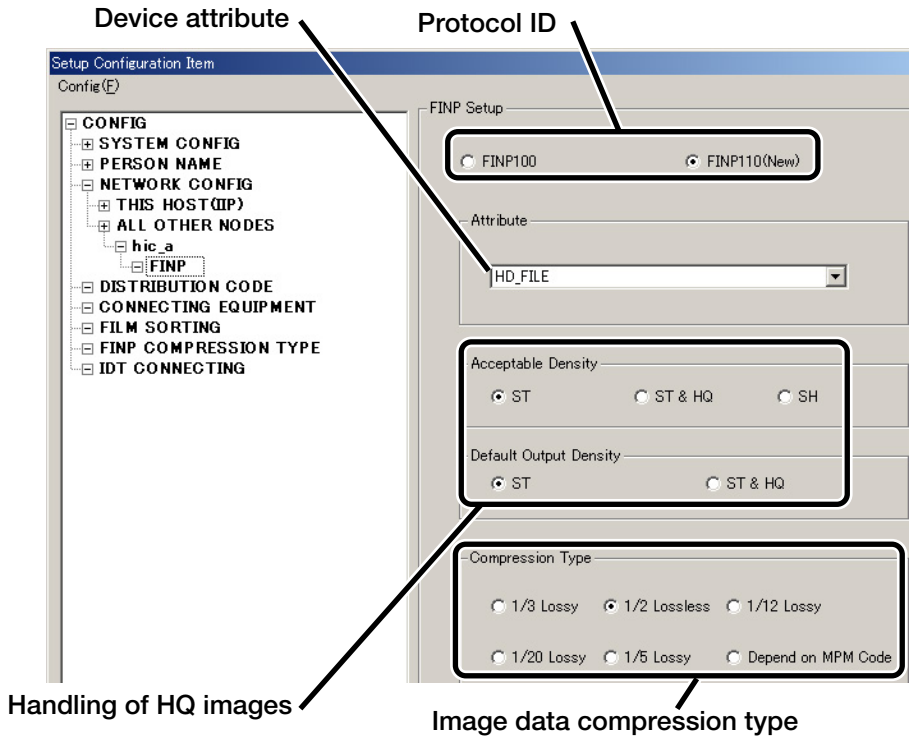
The archiver (ODF and LF-C1) also has the same image compression ratio setting as indicated in step V.
Note that the setting selected here (at the CL) takes effect and not the the setting selected for the ODF or LF-C1.

9. Click OK.

➔ The system returns to the "Setup Configuration Item" window.

➥ REFERENCE

- *Items just have been set up will appear on the right-side area of the "Setup Configuration Item" window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply.
- *If the* Delete *key is pressed, currently selected items are deleted.*



10. Select "Save" from the "Config (F)" menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

11. Click Yes.

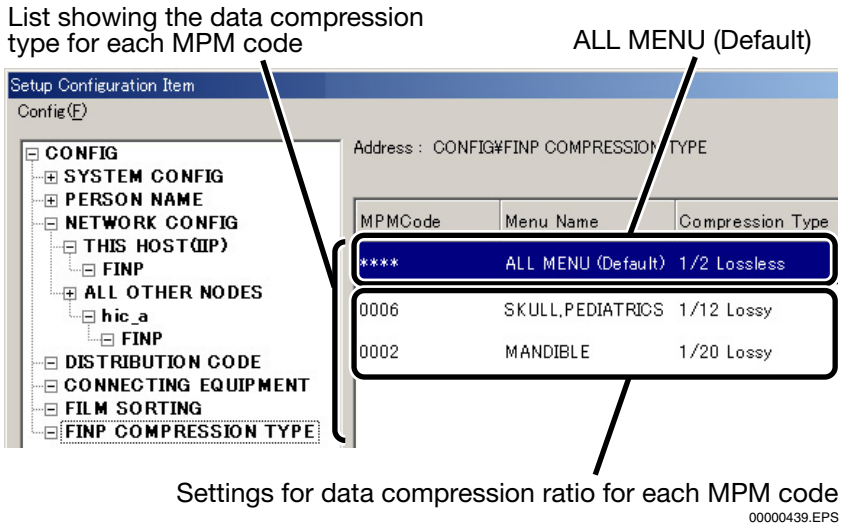
➔ The system saves the setup data.

2.4.2 Setup for Changing the Image Data Compression Type Depending on the MPM Code (FINP COMPRESSION TYPE)

Perform the following settings only when ◉ Depend on MPM Code is selected for the image data compression type in "ALL OTHER NODES".

1. Select ⊟ FINP COMPRESSION TYPE of the "Setup Configuration Item" window.

➔ A list showing the data compression type for each MPM code will be displayed on the right-side area of the window.



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◆ NOTE ◆

ALL MENU (Default) provides a compression ratio setting that applies to all MPM codes.

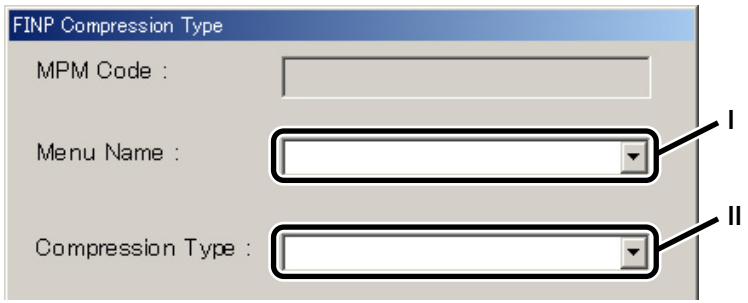
FINP COMPRESSION TYPE first determines a compression ratio for all MPM codes and then determines the compression ratio for each MPM code.

The compression ratio settings for individual MPM codes take precedence. If there are no settings for individual MPM codes, the ALL MENU (Default) setting applies.

2. Click NEW.

➔ The "FINP Compression Type" window opens.

3. Set I and II on the display as follows.



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I. Select the exposure menu name.

➥ REFERENCE

The MPM code that is for the exposure menu selected will be displayed in the "MPM Code" column. Using the User Utility, the user thus can view which MPM code is for the exposure menu selected.

II. Select the image data compression type.

4. Click OK.

➔ The system returns to the "Setup Configuration Item" window. The MPM code set as above and the image data compression type for the code will appear on the right side of this window.

5. To set image data compression types for other MPM codes, repeat steps 2. to 4.

6. Select "Save" from the "Config (F)" menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

7. Click Yes.

➔ The system saves the setup data.

2.4.3 Setup for Automatic Image Distribution (DISTRIBUTION CODE)

For an automatic image distribution to equipment of HD_FILE attribute, set up DISTRIBUTION CODE.

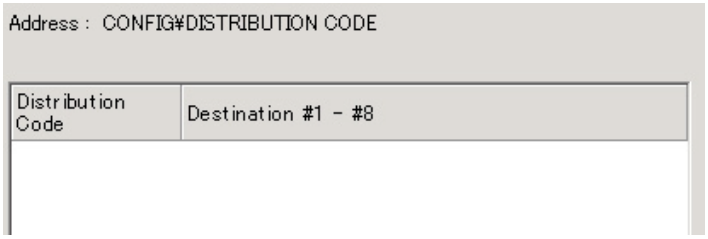
◆ *NOTE* ◆

For an automatic image distribution processing, be sure to change to "Yes" ahead of time the setting (item 3 of "SYSTEM CONFIG"➔ "5.CSL/IDT FUNCTION") under "Enable Distribution Code Setup" of the Service Utility function.

☞ For an automatic distribution to equipment of OD_FILE attribute, perform the procedure described in "2.4.4 Setup for CONNECTING EQUIPMENT".

1. **Click ⊟ DISTRIBUTION CODE of the "Setup Configuration Item" window.**

➔ A list showing the destination equipment for automatic image distribution will be displayed on the right-side area of the window.



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2. **Click New.**

➔ The "Distribution Code" window opens.

3. **Make settings as follows.**

❍ Enter an 8-digit distribution code, for example 12345678, in the Distribution Code : field.

❍ Click the downward arrow of the Destination node #1 : field to select the host name of the equipment the image data is to be transferred to (e.g.: "hic_a").

4. **Click OK.**

➔ The system returns to the "Setup Configuration Item" window.

5. **Select "Save" from the "Config (F)" menu.**

➔ A window opens, prompting you to confirm the setup data to be saved.

6. **Click Yes.**

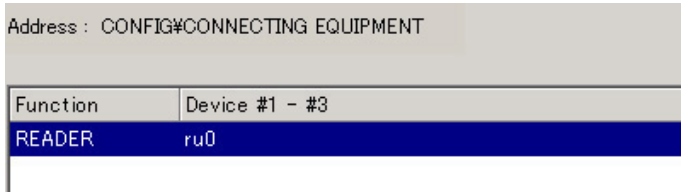
➔ The system saves the setup data.

2.4.4 Setup for CONNECTING EQUIPMENT

To automatically transfer images to the ODF, set up CONNECTING EQUIPNET as directed below.

1. Click ⊟ CONNECTING EQUIPMENT on the "Setup Configuration Item" window.

➔ A list of registered equipment units appears on the right side of the window.



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2. Click New.

➔ The "CONNECTING EQUIPMENT" window opens.

3. Make the following settings.

❍ Click the downward arrow within Function : and select function (OD_FILE) of the connected equipment.

◆ NOTE ◆

With software version A00, "HD_FILE" can be selected in the "Function" box. However, even though "HD_FILE" has been selected, no images will be transferred to equipment of "HD_FILE" attribute automatically. It is thus necessary to make setup for DISTRIBUTION CODE if you wish to transfer images of "HD_FILE" attribute automatically.

☞ *"2.4.3 Setup for Automatic Image Distribution (DISTRIBUTION CODE)"*

❍ Click the downward arrow within Equipment #1 : and select equipment (ODF host name).

4. Click OK.

➔ You are returned to the "Setup Configuration Item" window.

5. Select "Save" from the "Config (F)" menu.

➔ A window opens prompting you to confirm the setup data.

6. Click Yes.

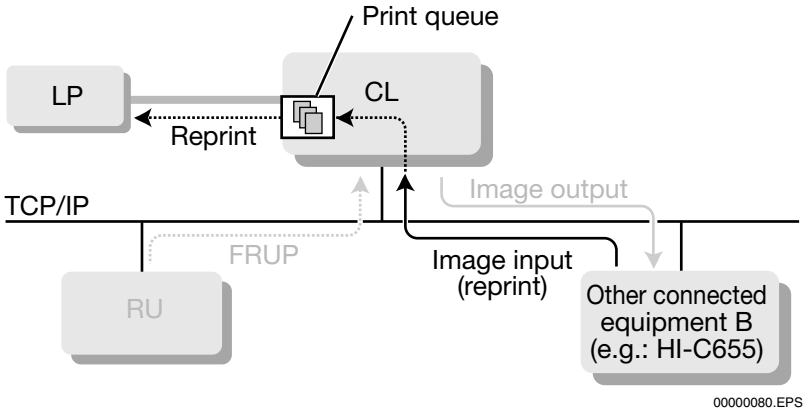
➔ The setup data will then be saved.

2.5 Setup for Inputting Images from Other Connected Equipment

No particular settings are required on the CL.

➥ REFERENCE

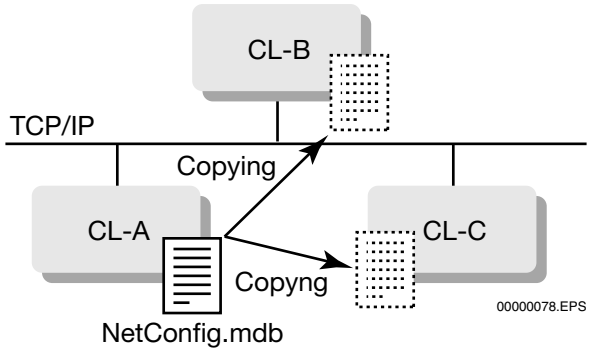
Images input from other connected equipment are stored directly on the CL print queue. Note that in the list displayed with the "All" or "Today" tab on the CL user window, you cannot check images input from other conected equipment.



◆ NOTES ◆

[only when other connected equipment is the CL]

If a multiple number of CL units are network-connected, it is designed that the system omits some of setups for those CL units by copying the setup file (NetConfig.mdb) of one CL unit onto another CL unit connected via the same network.



To input/output FINP images between among CL units, you would better for the reason said above to perform setups for image data input using the FINP, procedures for which are explained as follows.

1. *Select "NETWORK CONFIG" - "THIS HOST (IIP)" on the "Setup Configuration Item" window and click [NEW].*
2. *The "New Node" window appears. Click [OK]. The "FINP Setup" window opens.*
3. *Set up the same content as for other connected equipment (e.g.: "NETWORK CONFIG" - "ALL OTHER NODES" - "CL-A" - "FINP" settings for the CL-B in Service Utility mode, shown in the connection diagram above).*

2.6 Service Utility Shutdown

1. **Select “Close” from the “Config” menu of the “Setup Configuration Item” window.**

   ➔ The system return to the “IIP Service Utility” window.

2. **Click [Exit Service Utility].**

   ➔ The system return to the desktop screen.

2.7 Software Setup on Other Connected Equipment

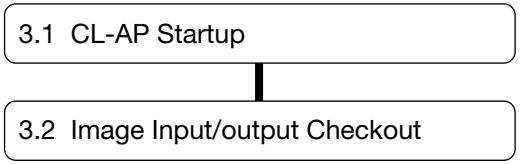
Set up the following items so that other connected equipment can receive images from the CL.

- CL host name setup
- CL IP address setup

☞ For host name and IP address setup procedures, see the relative Service Manuals.

3. Connection Checkout

After the CL-AP is started up, make sure that images can be transferred from the CL to other connected equipment.

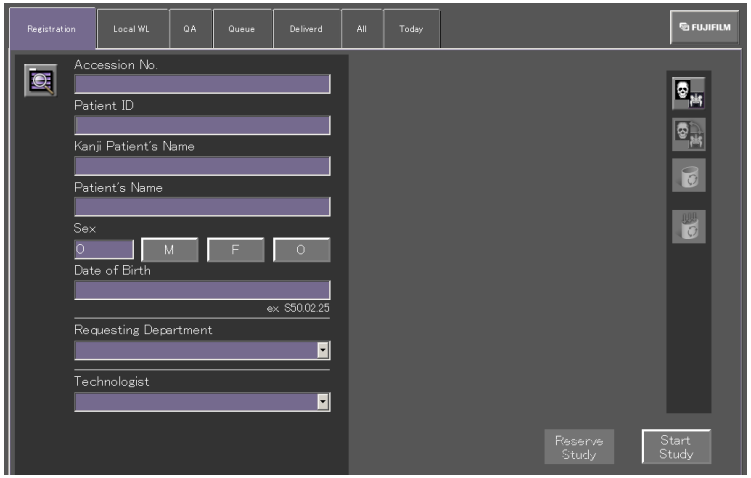


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3.1 CL-AP Startup

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window opens.
In about one minute, the CL-AP reception window opens.



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3.2 Image Input/output Checkout

■ Output checkout

Transfer images from the CL to other connected equipment.

1. **Select an image for checkout, then transfer it to other connected equipment.**

☞ For details of the procedures for the checkout transfer, see the CL Operation Manual.

2. **Make sure that the image has actually been transferred to other connected equipment.**

☞ For details of the procedures for checking transferred images, see the operation manual attached to each equipment.

■ Input checkout

Transfer images from other connected equipment to the CL.

1. **Transfer an image from other connected equipment to the CL.**

☞ For details of the procedures for checking transferred images, see the operation manual attached to each equipment.

2. **Make sure that the names of the images transferred from other connected equipment appear on the CL print queue list. To display the print queue list, click the “Queue” tab on the CL user window.**

3. **Make sure that the LP, if connected, outputs the image thus transferred properly.**

4. Setup File Backup

Back up the CL setup file.

Have the following item ready for use for this purpose:

• Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+HI-C655/QA-WS (DICOM CR Storage)

Presented below are the procedures used for transferring images from the CL-IR346CL to the HI-C655 (or QA-WS) using the DICOM CR Storage feature.

Also described are the setup procedures for transferring pre-standardized images to the QA-WS.

◆ ***NOTE*** ◆

The "CR-IR346CL" and the "HI-C655 (or QA-WS)" are abbreviated hereafter "CL" and "other connected equipment", respectively.

The CL supports the following DICOM CR Storage functions, overview of which is shown below.

❍ **CR Storage SCU**
An image transfer function using the DICOM.

❍ **CR Storage SCU Private (Private Unstandardized CR Storage)**
An image transfer function using the DICOM, which makes it possible to add FUJI's own private information to images for transfer.

Private Unstandardized CR Storage is a function that enables transfer of images not subjected to standardization processing using the DICOM. This function is available only with JPEG Lossless.

This function can be used when, for example, the QA-WS that is capable of receiving images not subjected to standardization processing is connected to the CL.

■ Prior to setup

● CL requirements

- The CL main unit must have been set up accordingly.
- Software version required: A00 or later
- Option keys are needed.

Key Name	Functions Supported
IR346 DICOM CR STORAGE key	CR Storage SCU Standard CR Storage SCU Private (Includes Private Unstandardized CR Storage.)

● Requirements of other connected equipment

Other connected equipment must have been set up accordingly.

❍ When other connected equipment is the HI-C655

- Software version required: A07 or later
- DICOM Storage option key (Standard/Private)

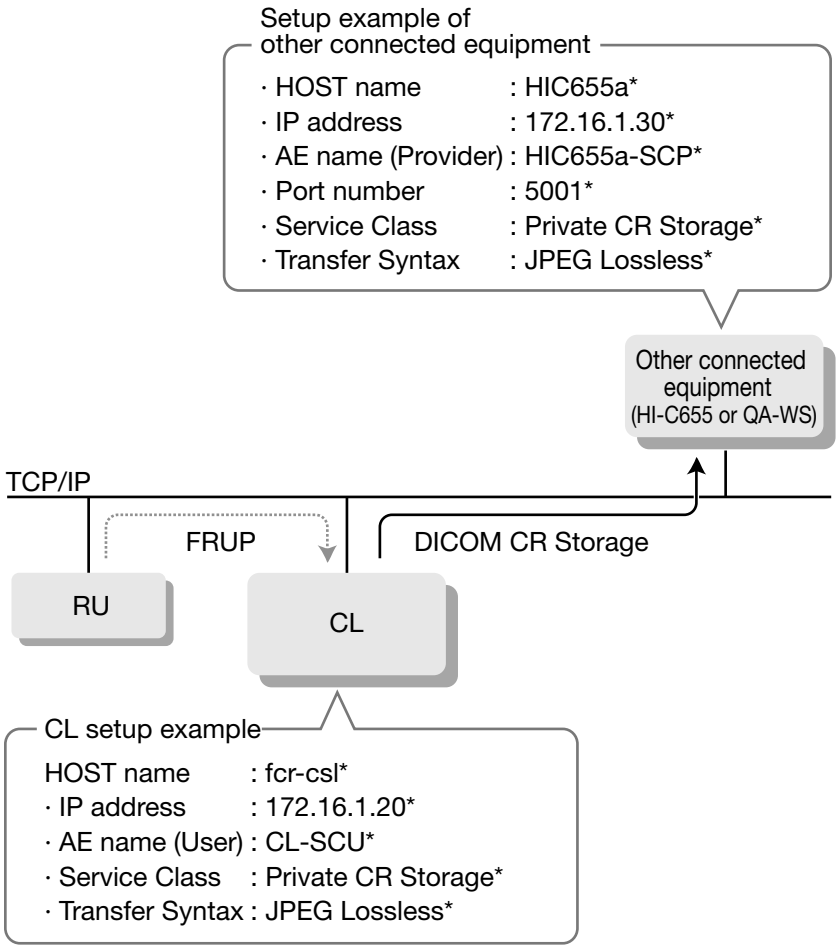
❍ When other connected equipment is the QA-WS

- Software version required: A04 or later
- DICOM Storage option key (Standard/Private)

❍ Yokogawa server

❍ Synapse server

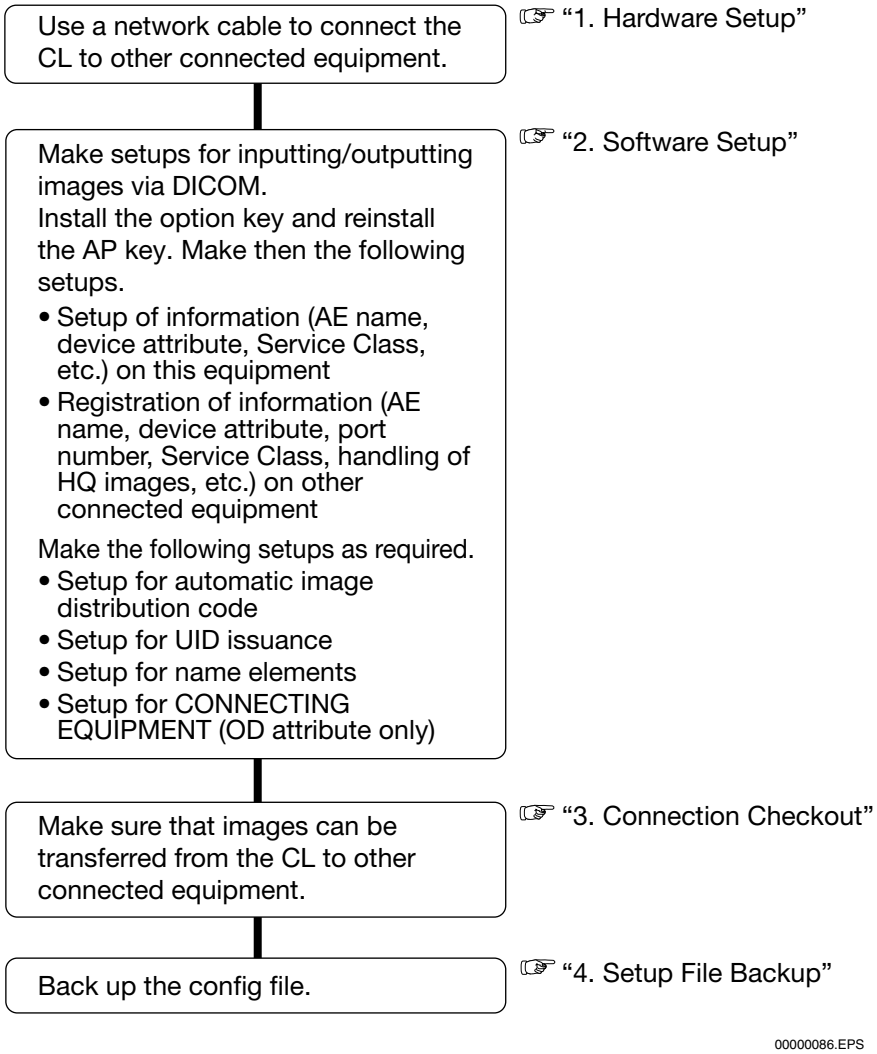
■ Connection/setup example



Items marked with "*" constitute setup examples, which need be changed depending on the equipment or network environment.

00000401.EPS

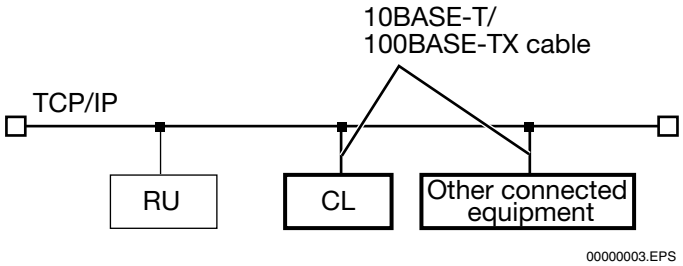
■ Overall operation flow



00000086.EPS

1. Hardware Setup

Connect the CL to other connected equipment via network as illustrated below.

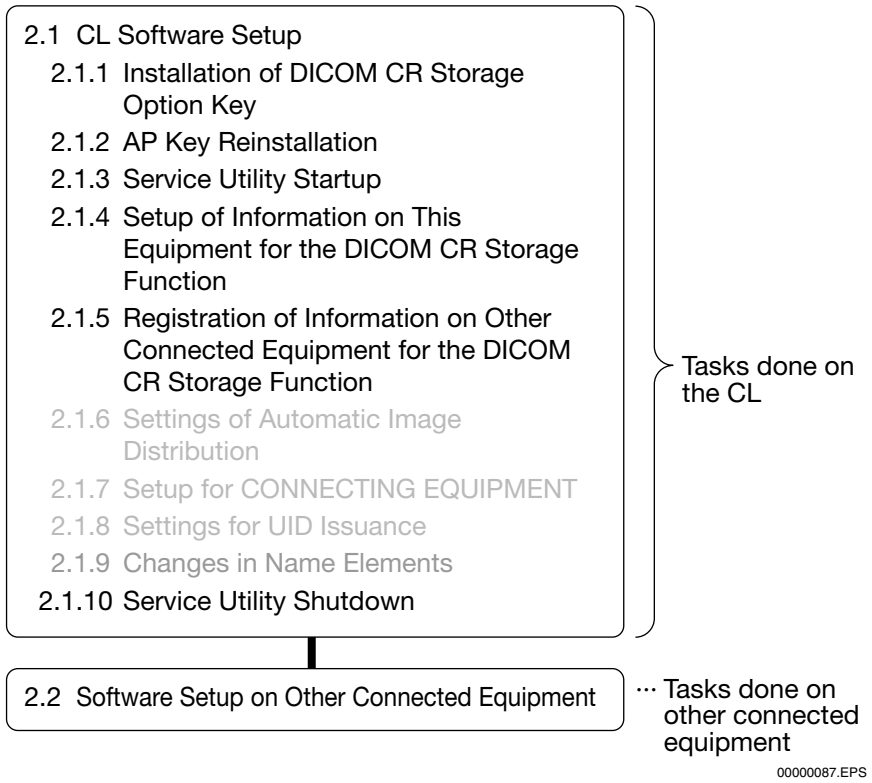


◆ *NOTES* ◆

- *Do not connect the telephone line to the network connectors of the CL and other connected equipment.*
- *The IEC950/UL1950-conformed cable is available for this equipment (CL/HI-C655/QA-WS).*

2. Software Setup

Set up software for the CL and other connected equipment.
Set up the items shown in gray as required. Be sure to set up all other items.



2.1 CL Software Setup

2.1.1 Installation of DICOM CR Storage Option Key

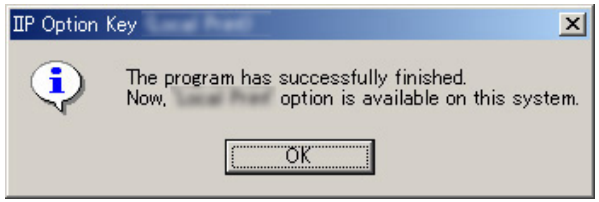
To activate the DICOM CR Storage function, the IR346 DICOM CR STORAGE option key is needed.

1. **Insert the option key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of installation.



00000085.EPS

3. **Click** OK **.**

➔ The installation start window opens again.

4. **Click** Continue **same as in steps 2 and 3, then click** OK **.**

➔ The system returns to the desktop screen.

5. **Remove the CD from the CD-ROM drive.**

➥ ***REFERENCE***

The installation start window opens twice because the two kinds of keys, Standard and Private are stored on the DICOM CR Storage option key CD.

2.1.2 AP Key Reinstallation

If the option key is installed, be sure to reinstall the AP key.

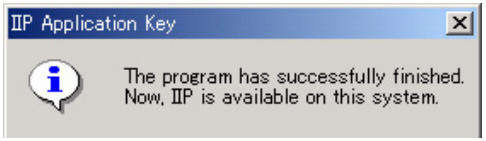
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000419.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.3 Service Utility Startup

1. **Turn ON the CL power.**

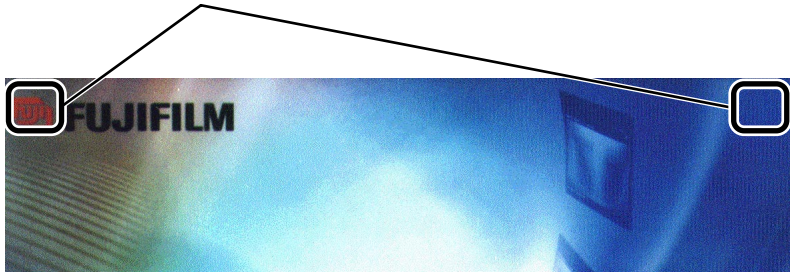
➔ In about one minute after Windows 2000 is started, the CL-AP launches itself.

➥ *REFERENCE*

If the AP or Windows 2000 is already running, start the Service Utility mode as directed under REFERENCE in step 2 below.

2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts. The “IIP Service Utility” window opens.



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➥ *RFERENCE*

If you cannot complete step 2 above from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility mode.

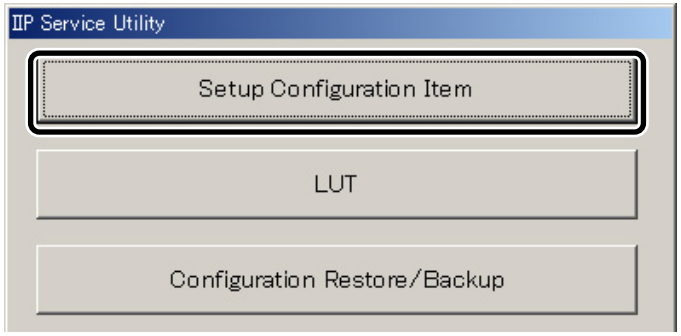
1. *To exit the AP, hold down the <Shift> key and select “Shut Down” on the* FUJIFILM *menu.*
2. *From the “Start” menu, sequentially select “Programs”, “Fuji Film”, and “FCR”.*
3. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

2.1.4 Setup of Information on This Equipment for the DICOM CR Storage Function

Make settings for the following information items of this equipment.

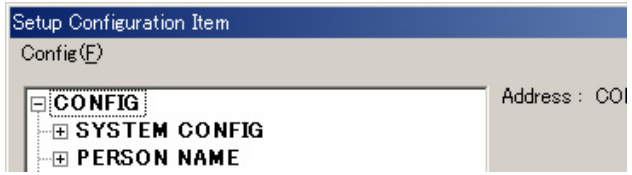
- Host name and IP address of this equipment
- AE name (Application Entity Name) and device attribute of this equipment
- Service Class, Role, Transfer Syntax
- Other (timeout settings, etc.)

1. **Click [Setup Configuration Item] of the “IIP Service Utility” window.**



00000131.EPS

➔ The “Setup Configuration Item” window opens.



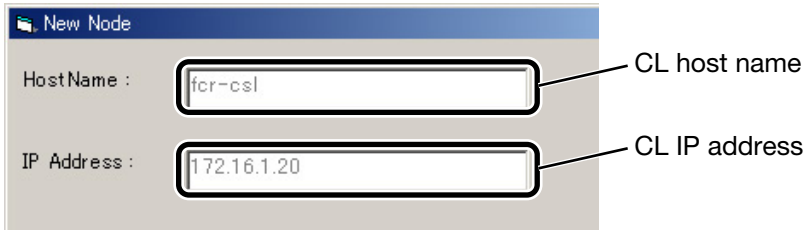
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2. **Click the ⊞ mark of the ⊞ NETWORK CONFIG field.**

3. **Select ⊟ THIS HOST(IIP) and click New.**

➔ The “New Node” window opens.

4. Make sure that the CL host name and IP address are displayed.

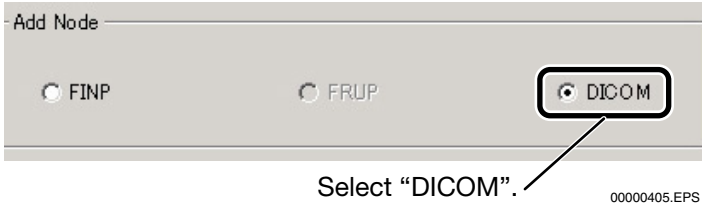


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◆ ***NOTE*** ◆

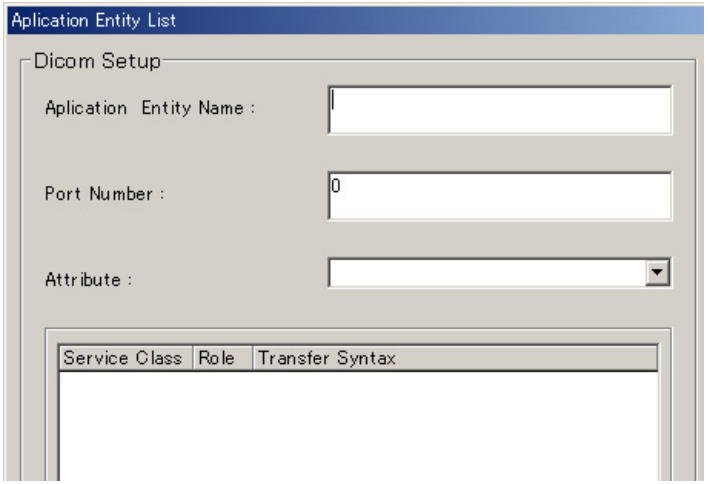
The IP address will not be displayed properly unless the CL is connected to a network.

5. Select "DICOM" and click OK.



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➔ The "Application Entity List" window opens.



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6. Make the following settings.

❍ Enter the AE name that is the SCU for the CL (e.g.: "CL-SCU") in the Aplication Entity Name : field.

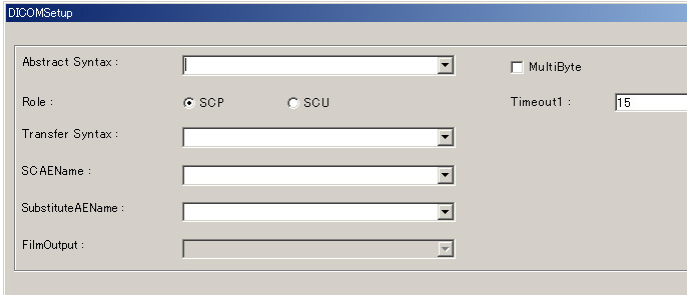
❍ Click downward arrow in the Attribute : field to select the device attribute (OTHER).

◆ ***NOTE*** ◆

- *To set the SCU AE on the CL, select "OTHER" for the device attribute for the time being.*
- *There is no need to set the port number in* Port Number : 0 *When selecting SCU as the Role, the set port number will be disregarded even if it is set.*

7. Click New.

➔ The "DICOMSetup" window opens.



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8. Click downward arrow in the Abstract Syntax : field to select Service Class (e.g.: “Private CR Storage”).

- CR Image Storage
- Private CR Storage
- Private Unstandardized CR Storage
- Verification

➥ ***REFERENCE***

- *If a Service Class that includes “Private CR Storage” is selected, items that need not be set will be hidden on the “DICOM Setup” window.*
- *“Verification” is the Service Class used to verify connection between DICOM equipment units. For verifying connection, “Verification” must be selected.*

☞ *For details of verification of connection, see “7. Verifying the Connection to Other Connected Equipment – Verify Connection” in “MU: Maintenance Utility”.*

9. To set up the AE that is the User, select SCU (SCU) for the Role.

➥ ***REFERENCE***

If “SCU” is selected, items that need not be set will be hidden on the “DICOM Setup” window.

10. Click downward arrow in the Transfer Syntax : field to select the Transfer Syntax (e.g.: “JPEG Lossless”).

Service Class	Transfer Syntax Supported (Selected)		
	ImplictVR LittleEndian	ExplictVR LittleEndian	JPEG Lossless
●CR Image Storage ●Private CR Storage	○	○	○
Private Unstandardized CR Storage	×	×	○
Verification	○	×	×

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11. Set the DICOM inter-message timeout value Timeout1 : 15 as necessary.
Timeout2 : 300 needs not be set. Even if set, it will be disregarded.

➥ ***REFERENCE***

- *It is not necessary to check* MultiByte *.*
  Even if checked, it will be disregarded if the Role set in step 9. above is the SCU.
- Timeout2 : 300 *will be displayed only for software version A00.*

12. Click OK.

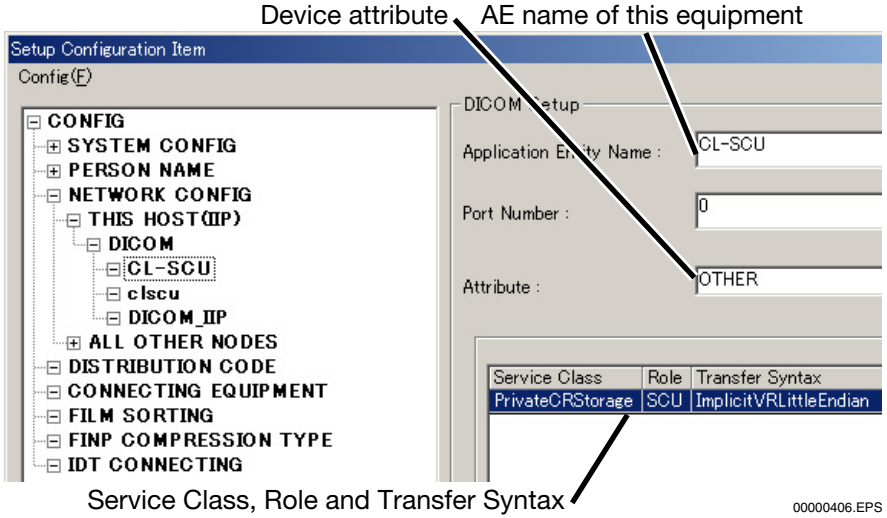
➔ The system returns to the “Application Entity List” window.

13. Click OK.

➔ The system returns to the “Setup Configuration Item” window.

➥ ***REFERENCE***

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window.A displayed item can be changed. Whenever it is changed, never fail to click* Apply.
- *If the* Delete *key is clicked, currently selected items are deleted.*



14. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

15. Click Yes.

➔ The system saves the setup data.

2.1.5 Registration of Information on Other Connected Equipment for the DICOM CR Storage Function

Register the following information items of other connected equipment.

- Host name and IP address of other connected equipment
- AE name (Application Entity Name), port number, and device attribute of other connected equipment
- Service Class, Role, Transfer Syntax
- Setups for gradation correction
- Other (usage of two-byte characters, settings for data conversion from HQ to standard image, etc.)

1. Select ⊞ ALL OTHER NODES of the “Setup Configuration Item” window and click New.

➔ The “New Node” window opens.

2. Make the following settings.

❍ Enter the Host name (e.g.: “HCI655a”) in the Host Name : field.

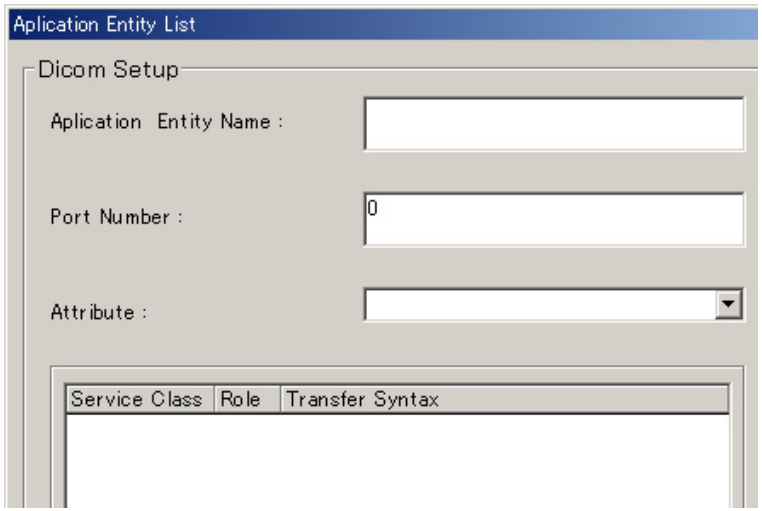
❍ Enter the IP address (e.g.: “172.16.1.30”) in the IP Address : field.

❍ Select “DICOM”.



3. Click OK.

➔ The "Application Entity List" window opens for setup of information on other connected equipment.



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4. Make the following settings.

◆ NOTE ◆

Do not select two or more Service Class settings for a single Application Entity (e.g., CR Image Storage and Private CR Storage). Further, do not select two or more Transfer Syntax settings for a single Service Class (e.g., JPEG Lossless and Implicit VR Little Endian).
Even if you select two or more settings, only the first one takes effect.

❍ Enter the AE name of other connected equipment (e.g.: "HCI655a-SCP") in the Aplication Entity Name : field.

◆ NOTES ◆

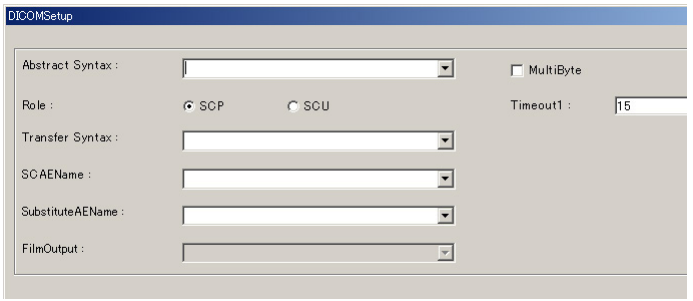
- *Never fail to enter the SCP AE name.*
- *Be sure to enter the upper- or lower-case characters correctly.*

❍ Enter the Port number of other connected equipment (e.g.: "5001") in the Port Number : 0 field.

❍ Click downward arrow of the Attribute : field and select device attribute of other connected equipment ("HD_FILE" for the HI-C655 and QA-WS and OD_FILE for the ODF).

5. Click New.

➔ The "DICOMSetup" window opens.



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6. Click downward arrow of the Abstract Syntax : field and select Service Class (e.g.: "Private CR Storage").

- CR Image Storage
- Private CR Storage
- Private Unstandardized CR Storage
- Verification

➥ REFERENCE

- *If "Private CR Storage" is selected, items that need not be set will be hidden on the "DICOM Setup" window.*
- *"Verification" is the Service Class used to verify connection between DICOM equipment units. For verifying connection, "Verification" must be selected.*

7. Because the AE of other connected equipment is the Provider, make sure that SCP (SCP) is selected for the Role.

8. Click downward arrow in the Transfer Syntax : field to select Transfer Syntax (e.g.: "JPEG Lossless").

Service Class	Transfer Syntax Supported (Selected)		
	ImplictVR LittleEndian	ExplictVR LittleEndian	JPEG Lossless
●CR Image Storage ●Private CR Storage	○	○	○
Private Unstandardized CR Storage	×	×	○
Verification	○	×	×

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◆ NOTE ◆

Be sure to select the same Transfer Syntax as that selected for this equipment.

9. Change the following settings as required.

❍ Setting of Acceptable Density: ST / ST & HQ / ST & HQ & SH

ST : Select if other connected equipment cannot receive HQ images.

ST & HQ : Select if other connected equipment can receive HQ images.

ST & HQ & SH : Select if the other connected equipment can receive 20 lines/mm mammographic images as well.

❍ Setting of Default Output Density: ST / HQ / SH

ST : Select when transferring standard images only.

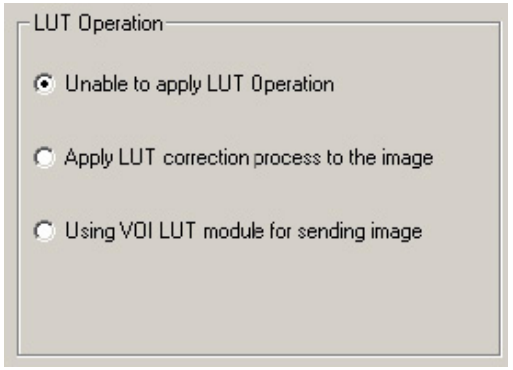
HQ/SH : Select when transferring HQ or 20 lines/mm mammographic images.

10. Make sure that NONE(N) within the Image Processing field is checked (NONE(N) / PROC).

◆ NOTES ◆

- *if the "IR346 DICOM IM PROCESSED" option key has not been installed, the "Image Processing" function will be disregarded even though "PROC" is selected (the result will be as if "NONE" has been selected).*
- *For software version A02 or later, it will be grayed out if option key is not installed.*

11. Make setups for gradation correction as required.



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◆ NOTE ◆

Setups are possible for gradation correction only when "CR Image Storage" or "Private CR Storage" is selected for the Service Class. Note that setups are not possible when "Private Unstandardized CR Storage" is selected.

➔ For setup details, see "Display Gradation Correction Setup" under "FR5: Function-specific Reference".

12. To handle two-byte characters, check the ☐ MultiByte box (☐ to ☑).

➥ ***REFERENCE***

- Timeout1 : 15 *and* Timeout2 : 300 *need not be checked. Even if checked, they will be disregarded.*
- Timeout2 : 300 *will be displayed only for software version A00.*

13. Click OK.

➔ The system returns to the “Application Entity List” window.

14. Click OK.

➔ The system returns to the “Setup Configuration Item” window.

15. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

16. Click Yes.

➔ The system saves the setup data.

2.1.6 Settings of Automatic Image Distribution

For an automatic image distribution to equipment of HD_FILE attribute, set up DISTRIBUTION CODE.

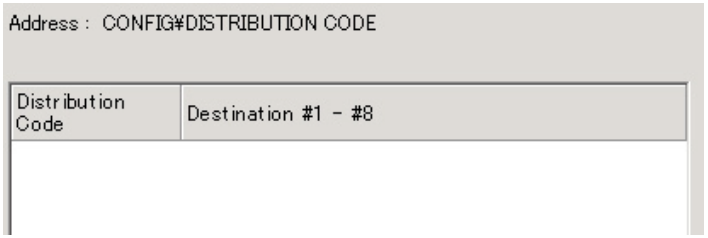
◆ ***NOTE*** ◆

For an automatic image distribution processing, be sure to change to “Yes” ahead of time the setting (item 3 of “SYSTEM CONFIG”➔ “5.CSL/IDT FUNCTION”) under “Enable Distribution Code Setup” of the Service Utility function.

☞ For an automatic distribution to equipment of OD_FILE attribute, perform the procedure described in “2.1.7 Setup for CONNECTING EQUIPMENT”.

1. Click ⊟ DISTRIBUTION CODE of the “Setup Configuration Item” window.

➔ A list of destination equipment for automatic image distribution appears on the right-side area of the window.



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2. Click New.

➔ The “Distribution Code” window opens.

3. **Make the following settings.**

❍ Enter an 8-digit distribution code (e.g.: 12345678) in Distribution Code : .

❍ Click downward arrow of Destination node #1 : to select equipment's host or AE name ("HIC655a-SCP" as in the ■ Setup example).

4. **Click** OK.

➔ The system returns to the "Setup Configuration Item" window.

5. **Select "Save" from the "Config (F)" menu.**

➔ A window opens, prompting you to confirm the setup data to be saved.

6. **Click** Yes.

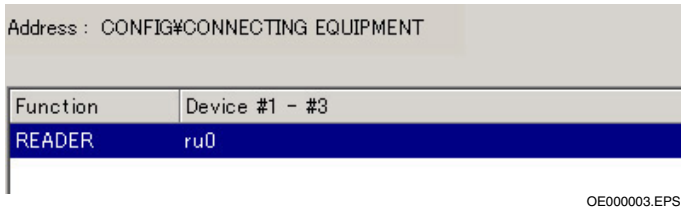
➔ The system saves the setup data.

2.1.7 Setup for CONNECTING EQUIPMENT

To automatically transfer images to the ODF, set up CONNECTING EQUIPNET as directed below.

1. **Click ⊟ CONNECTING EQUIPMENT on the "Setup Configuration Item" window.**

➔ A list of registered equipment units appears on the right side of the window.



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2. **Click** New.

➔ The "CONNECTING EQUIPMENT" window opens.

3. **Make the following settings.**

❍ Click the downward arrow within Function : and select function (OD_FILE) of the connected equipment.

◆ *NOTE* ◆

With software version A00, "HD_FILE" can be selected in the "Function" box. However, even though "HD_FILE" has been selected, no images will be transferred to equipment of "HD_FILE" attribute automatically. It is thus necessary to make setup for DISTRIBUTION CODE if you wish to transfer images of "HD_FILE" attribute automatically.

☞ *"2.4.3 Setup for Automatic Image Distribution (DISTRIBUTION CODE)"*

❍ Click the downward arrow within Equipment #1 : and select equipment (ODF host name).

4. **Click** OK.

➔ You are returned to the "Setup Configuration Item" window.

5. **Select "Save" from the "Config (F)" menu.**

➔ A window opens prompting you to confirm the setup data.

6. **Click** Yes.

➔ The setup data will then be saved.

2.1.8 Settings for UID Issuance

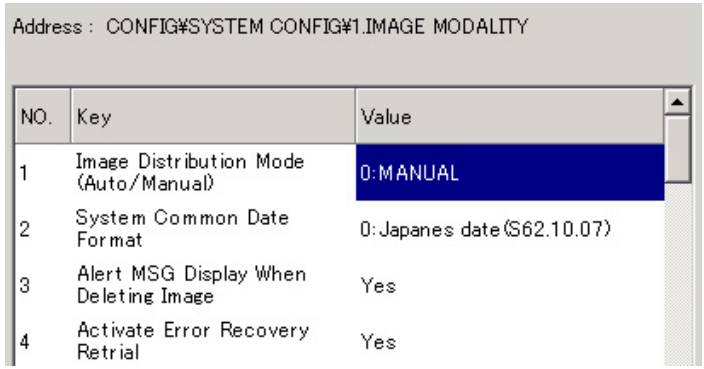
Use the procedure below if the UID issuance method needs be changed depending on the specifications of other connected equipment which the image is transferred to.

For default settings, see Table: List of UID settings.

1. **Click the ⊞ mark of ⊞ SYSTEM CONFIG of the "Setup Configuration Item" window.**

2. **Click ⊟ 1.IMAGE MODALITY.**

➔ The content of the setup items for the CL system information appears on the right-side area of the window.



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3. **Make UID issuance settings as follows.**

Table List of UID setting

No.	Name	Selection	Meaning
9	UID Issuance after Modifying ID Information	❍ YES Issues a new UID. ◎ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when any ID information is modified on the CL.
10	UID Issuance after Modifying Normalized Parameter	◎ YES Issues a new UID. ❍ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when image normalization conditions are modified on the CL.
11	UID Issuance after Modifying Image Processing Parameter	❍ YES Issues a new UID. ◎ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when image processing conditions are modified on the CL.
12	UID Issuance Before Sending Processed Data	◎ YES Issues a new UID. ❍ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when outputting processed images from the CL.
13	DICOM Series Generation Logic	◎ 0: 1 Study - N series and 1 Series - 1 image Issues a number so that it has multiple series for one study and only one image for one series. ❍ 0: 1 Study - N series and 1 Series - M image Issues a number so that it has multiple series for one study and multiple images for one series. ❍ 0: 1 Study - 1 series and 1 Series - N image Issues a number so that it has only one series for one study and multiple images for one series.	Setup of Series Instance UID issuance logic. <Ref.> See "3.4 Config Details – 1. IMAGE MODALITY" under "MU: Maintenance Utility".

◎: Default setting

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4. **Select “Save” from the “Config (F)” menu.**

➔ A window opens, prompting you to confirm the setup data to be saved.

5. **Click** Yes **.**

➔ The system saves the setup data.

2.1.9 Changing the Name Elements

☞ See “3.7 Setting the Name Elements for DICOM Connection” under “MU: Maintenance Utility”.

2.1.10 Service Utility Shutdown

1. **Select “Close” from the “Config (F)” menu.**

➔ The system returns to the “IIP Service Utility” window.

2. **Click [Exit Service Utility].**

➔ The system returns to the desktop screen.

2.2 Software Setup on Other Connected Equipment

Set up DICOM CR Storage in accordance with the software specifications of other connected equipment so that it can receive images from the CL.

- For the HI-C655

  ☞ See “5.3.1 Setup Using hic655a” under Installation of the HI-C655 Service Manual when other connected equipment is the HI-C655.

- For the QA-WS

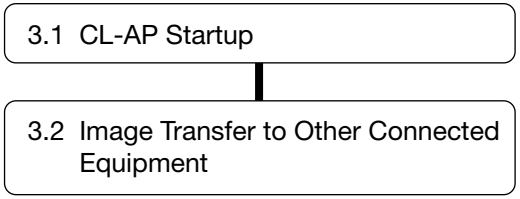
  ☞ See “5.3.1 Settings on QA-WS” under Installation of the QA-WS Service Manual.

- Other devices

  ☞ See DICOM-related descriptions included in the manual of each device.

3. Connection Checkout

After the CL-AP is started, makes sure that images can be transferred from the CL to other connected equipment.

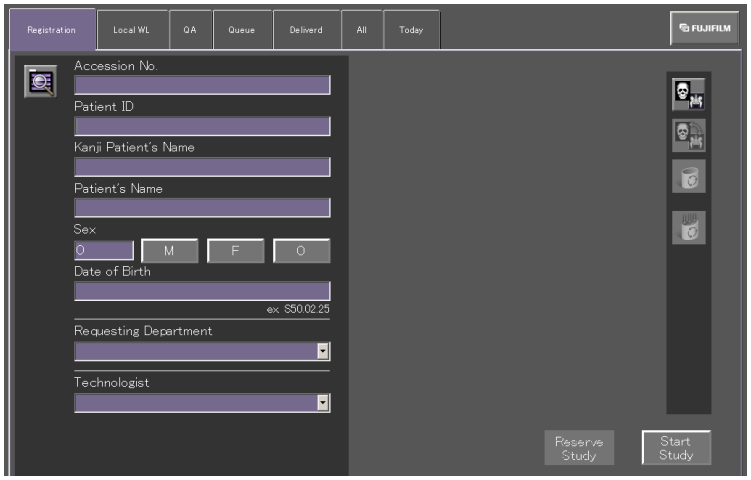


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3.1 CL-AP Startup

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window opens.
In about one minute, the CL-AP reception window opens.



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3.2 Image Transfer to Other Connected Equipment

Transfer images accumulated in the CL to other connected equipment.

1. **Select an image for transfer, then transfer it to other connected equipment.**

☞ For details of the image transfer procedures, see the CL Operation Manual.

2. **Make sure that the image has actually been transferred to other connected equipment.**

☞ For details of the transferred image checking procedures, see the operation manual attached to each equipment.

4. Setup File Backup

Back up the CL setup file.

Have the following item ready for use for file backup:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+Other (DICOM CR Storage: Transfer of Processed Images)

Described herein is the procedure for transferring processed images (Standard Image) from the CR-IR346CL to other connected equipment using the DICOM CR Storage Standard function.

◆ *NOTE* ◆

The "CR-IR346CL" and the image transmission equipment are abbreviated hereafter "CL" and other connected equipment, respectively.

■ Prior to setup

● CL requirements

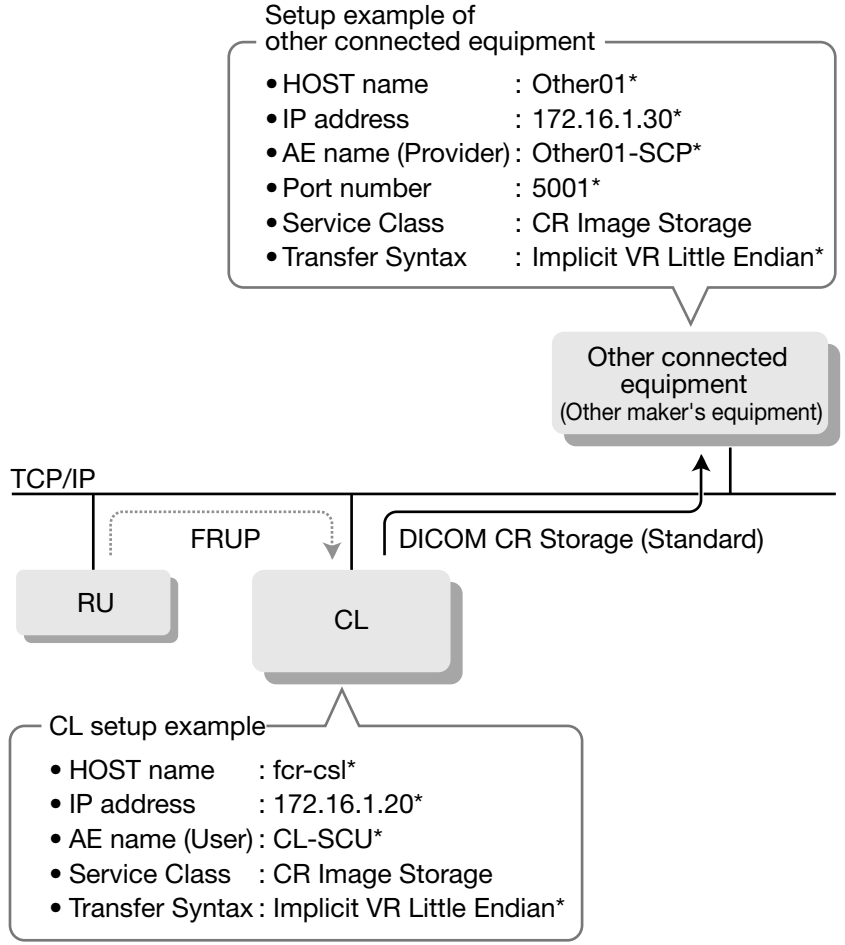
- The CL main unit must have been set up accordingly.
- Software version required: A00 or later
- Option keys are needed.

Key Name	Functions Supported
IR346 DICOM IM PROCESSED key	Generation of CR Storage SCU Standard processed images

● Requirements of other connected equipment

- Other connected equipment must have been set up accordingly.
- The DICOM CR Storage (SCP) Service Class must be supported.

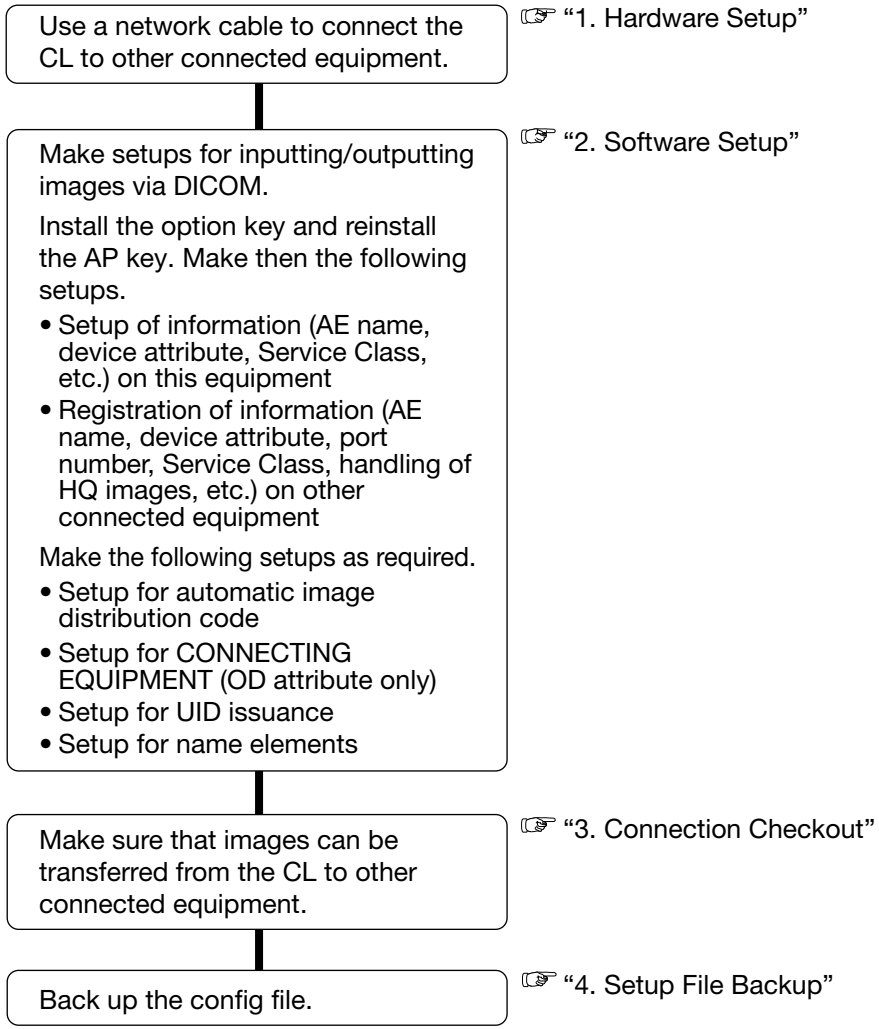
■ Connection/setup example



Items marked with "*" constitute setup examples, which need be changed depending on the equipment or network environment.

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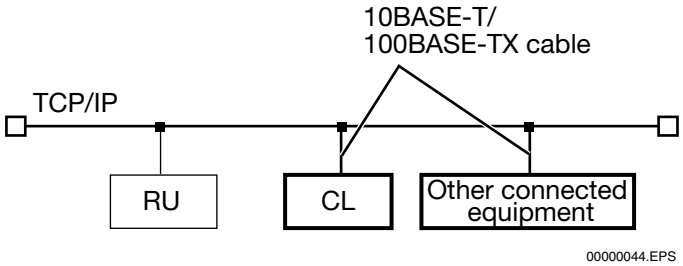
■ Overall operation flow



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1. Hardware Setup

Connect the CL to other connected equipment via network as illustrated below.

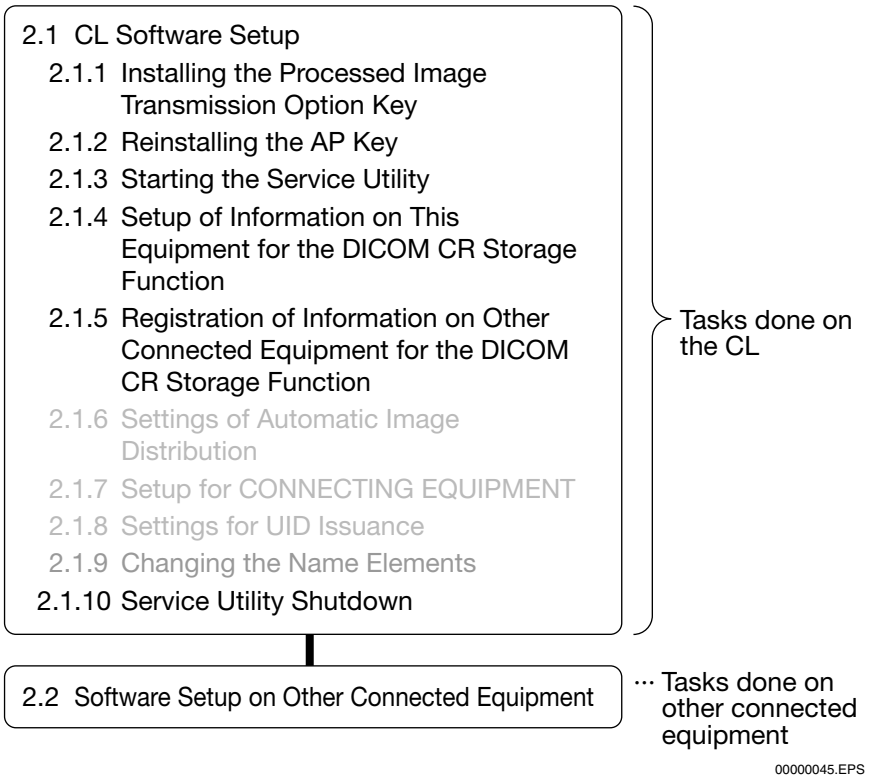


◆ *NOTES* ◆

- *Do not connect the telephone line to the network connectors of the CL and other connected equipment.*
- *The IEC950/UL1950-conformed cable is available for the CL.*

2. Software Setup

Set up software for the CL and other connected equipment.
Set up the items shown in gray as required. Be sure to set up all other items.



2.1 CL Software Setup

2.1.1 Installing the Processed Image Transmission Option Key

To activate the processed image transmission function, the IR346 DICOM IM PROCESSED option key is needed.

◆ *REFERENCE* ◆

To use the IR346 DICOM IM PROCESSED function, the IR346 DICOM CR STORAGE option key must have been installed accordingly.

☞ *If the IR346 DICOM CR STORAGE option key has not been installed, see "10. Option Key Installation" under "RI: Reinstalling the Software" to install it.*

1. **Insert the optional key CD into a CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of LP option key installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.2 Reinstalling the AP Key

If the option key is installed, be sure to reinstall the AP key.

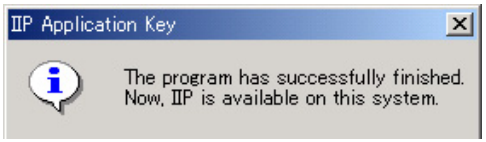
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.3 Starting the Service Utility

1. **Turn ON the CL power.**

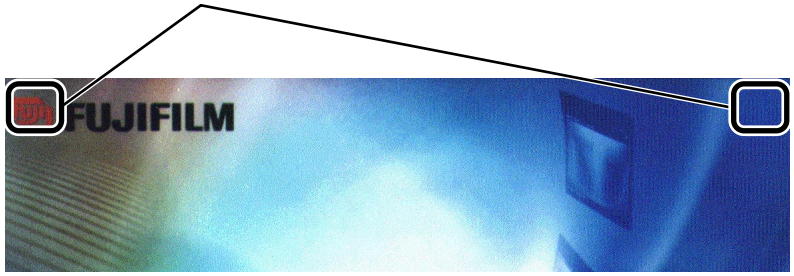
➔ Windows 2000 starts up and then the CL-AP starts running in about one minute.

➥ *REFERENCE*

If the AP or Windows 2000 is already running, start the Service Utility as directed under REFERENCE in step 2. below.

2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts and then the “IIP Service Utility” window opens.



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➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

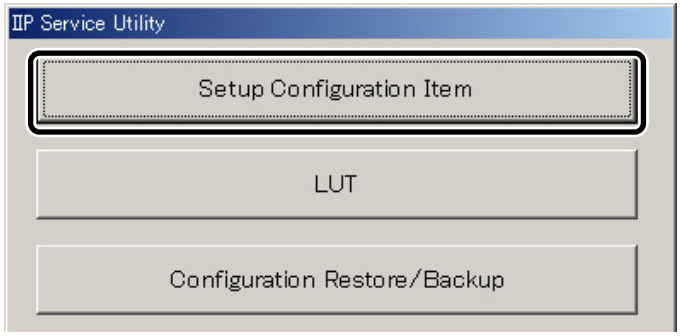
1. *To exit the AP, hold down the <Shift> key and choose “Shut Down” on the* FUJIFILM *menu.*
2. *From “Start” menu, sequentially choose “Programs”, “Fuji Film”, and “FCR”.*
3. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

2.1.4 Setup of Information on This Equipment for the DICOM CR Storage Function

Make settings for the following information items of this equipment.

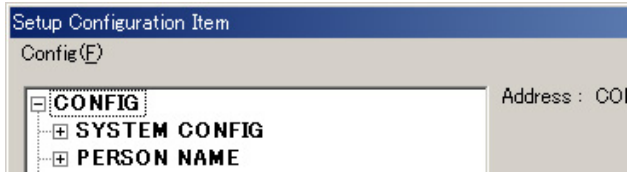
- Host name and IP address of this equipment
- AE name (Application Entity Name) and device attribute of this equipment
- Service Class, Role, Transfer Syntax
- Other (timeout settings, etc.)

1. **Click [Setup Configuration Item] of the “IIP Service Utility” window.**



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➔ The “Setup Configuration Item” window opens.



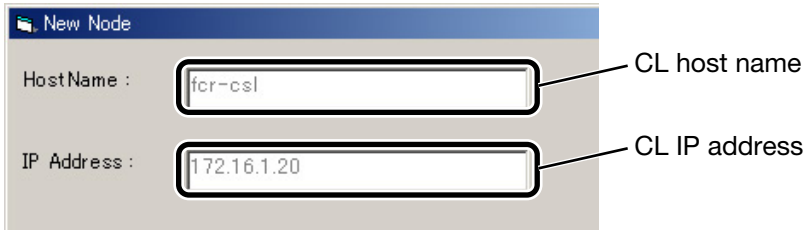
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2. **Click the ⊞ mark of the ⊞ NETWORK CONFIG field.**

3. **Select ⊟ THIS HOST(IIP) and click New.**

➔ The “New Node” window opens.

4. Make sure that the CL host name and IP address are displayed.

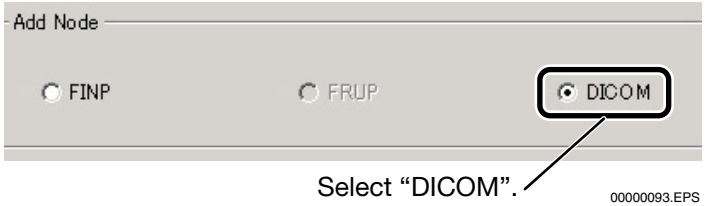


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◆ ***NOTE*** ◆

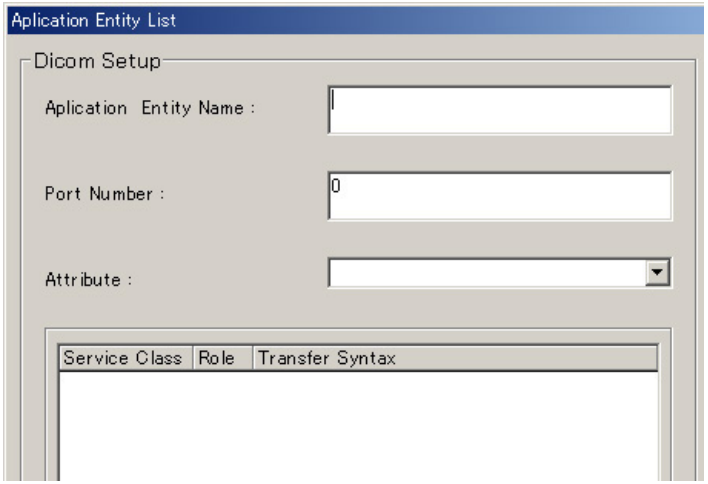
The IP address will not be displayed properly unless the CL is connected to a network.

5. Select "DICOM" and click OK.



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➔ The "Application Entity List" window opens.



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6. Make the following settings.

❍ Enter the AE name that is the SCU for the CL (e.g.: "CL-SCU") in the Aplication Entity Name : field.

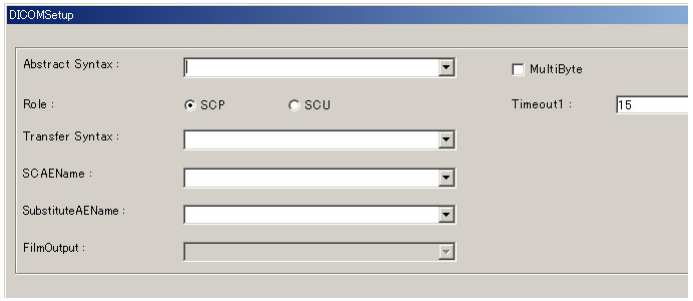
❍ Click downward arrow in the Attribute : field to select the device attribute (OTHER).

◆ ***NOTE*** ◆

- *To set the SCU AE on the CL, select "OTHER" for the device attribute for the time being.*
- *There is no need to set the port number in* Port Number : 0 *When selecting SCU as the Role, the set port number will be disregarded even if it is set.*

7. Click New.

➔ The "DICOMSetup" window opens.



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8. Click downward arrow in the Abstract Syntax : field to select Service Class (e.g.: “CR Image Storage”).

➥ ***REFERENCE***

- *If “CR Image Storage” is selected, items that need not be set will be hidden on the “DICOM Setup” window.*
- *“Verification” is the Service Class used to verify connection between DICOM equipment units. For verifying connection, “Verification” must be selected.*

☞ *For details of verification of connection, see “7. Verifying the Connection to Other Connected Equipment – Verify Connection” in “MU: Maintenance Utility”.*

9. To set up the AE that is the User, select SCU (SCU) for the Role.

➥ ***REFERENCE***

If “SCU” is selected, items that need not be set will be hidden on the “DICOM Setup” window.

10. Click downward arrow in the Transfer Syntax : field to select the Transfer Syntax (e.g.: “ImplicitVRLittleEndian”).

Service Class	Transfer Syntax Supported (Selected)		
	ImplictVR LittleEndian	ExplictVR LittleEndian	JPEG Lossless
CR Image Storage	○	○	○
Verification	○	×	×

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11. Set the DICOM inter-message timeout value Timeout1 : 15 as necessary.

Timeout2 : 300 needs not be set. Even if set, it will be disregarded.

➥ ***REFERENCE***

- *It is not necessary to check MultiByte. Even if checked, it will be disregarded if the Role set in step 9. above is the SCU.*
- Timeout2 : 300 *will be displayed only for software version A00.*

12. Click OK.

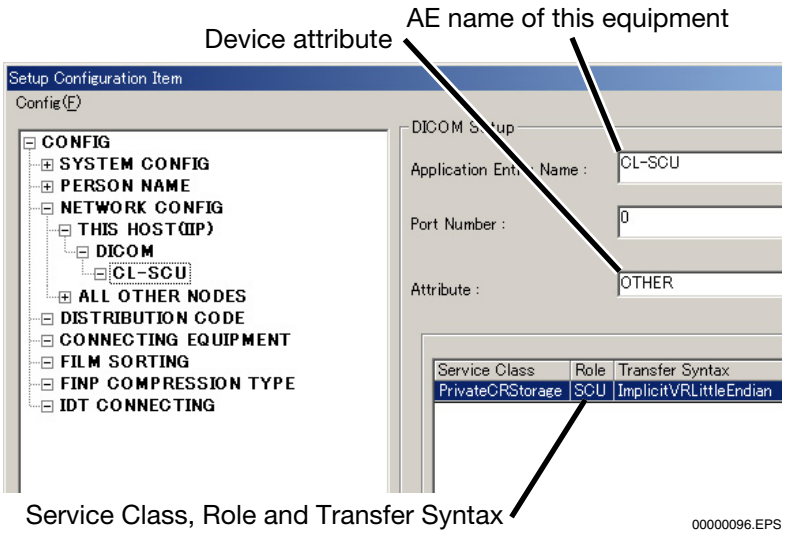
➔ The system returns to the “Application Entity List” window.

13. Click OK.

➔ The system returns to the “Setup Configuration Item” window.

➥ ***REFERENCE***

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply.
- *If the* Delete *key is clicked, currently selected items are deleted.*



14. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

15. Click Yes.

➔ The system saves the setup data.

2.1.5 Registration of Information on Other Connected Equipment for the DICOM CR Storage Function

Register the following information items of other connected equipment.

- Host name and IP address of other connected equipment
- AE name (Application Entity Name), port number, and device attribute of other connected equipment
- Service Class, Role, Transfer Syntax
- Setups for gradation correction
- Other (usage of two-byte characters, settings for data conversion from HQ to standard image, etc.)

1. Select ⊞ ALL OTHER NODES of the “Setup Configuration Item” window and click New.

➔ The “New Node” window opens.

2. Make the following settings.

❍ Enter the Host name (e.g.: “Other01”) in the Host Name : field.

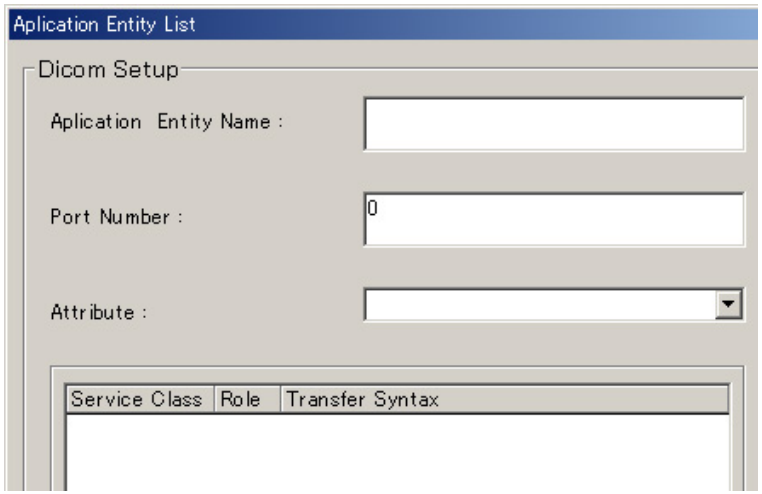
❍ Enter the IP address (e.g.: “172.16.1.30”) in the IP Address : field.

❍ Select “DICOM”.



3. Click OK.

➔ The "Application Entity List" window opens for setup of information on other connected equipment.



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4. Make the following settings.

◆ *NOTE* ◆

Do not select two or more Service Class settings for a single Application Entity (e.g., CR Image Storage and Private CR Storage). Further, do not select two or more Transfer Syntax settings for a single Service Class (e.g., JPEG Lossless and Implicit VR Little Endian).
Even if you select two or more settings, only the first one takes effect.

❍ Enter the AE name of other connected equipment (e.g.: "Other01-SCP") in the Aplication Entity Name : field.

◆ *NOTES* ◆

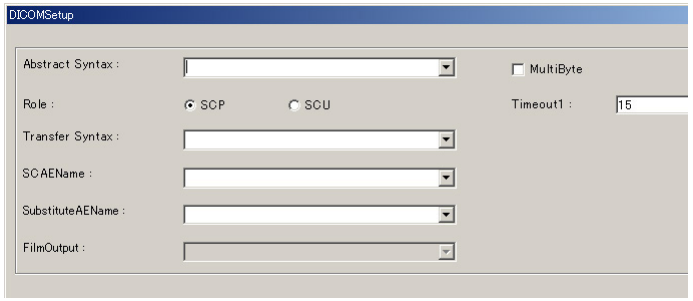
- *Never fail to enter the SCP AE name.*
- *Be sure to enter the upper- or lower-case characters correctly.*

❍ Enter the Port number of other connected equipment (e.g.: "5001") in the Port Number : 0 field.

❍ Click downward arrow of the Attribute : field and select device attribute of other connected equipment ("HD_FILE").

5. Click New.

➔ The "DICOMSetup" window opens.



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6. Click the downward arrow mark in the Abstract Syntax : field and select the "CR Image Storage" function.

➥ *REFERENCE*

- *If "CR Image Storage" is selected, items that need not be set will be hidden on the "DICOM Setup" window.*
- *"Verification" is the Service Class used to verify connection between DICOM equipment units. For verifying connection, "Verification" must be selected.*

7. Because the AE of other connected equipment is the Provider, make sure that SCP (SCP) is selected for the Role.

8. Click downward arrow ▼ in the Transfer Syntax : field to select Transfer Syntax (e.g.: "ImplicitVRLittleEndian").

Service Class	Transfer Syntax Supported (Selected)		
	ImplictVR LittleEndian	ExplictVR LittleEndian	JPEG Lossless
CR Image Storage	○	○	○
Verification	○	×	×

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◆ NOTE ◆

Be sure to select the same Transfer Syntax as that selected for this equipment.

9. Change the following settings as required.

❍ Setting of Acceptable Density: ST / ST & HQ / ST & HQ & SH

ST : Select if other connected equipment cannot receive HQ images.
ST & HQ : Select if other connected equipment can receive HQ images.
ST & HQ & SH : Select if the other connected equipment can receive 20 lines/mm mammographic images as well.

❍ Setting of Default Output Density: ST / HQ / SH

ST : Select when transferring standard images only.
HQ/SH : Select when transferring HQ or 20 lines/mm mammographic images.

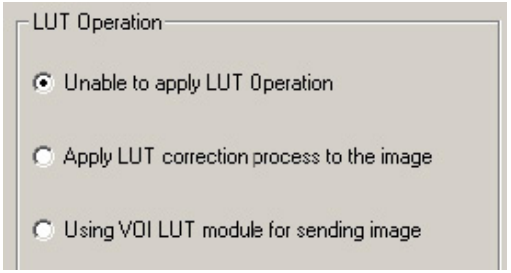
10. Select PROC (○ → ◉) within the Image Processing: NONE(N) / PROC field.

11. To handle two-byte characters, check the MultiByte box (☐ to ☑).

➥ REFERENCE

- Timeout1 : 15 *and* Timeout2 : 300 *need not be checked. Even if checked, they will be disregarded.*
- Timeout2 : 300 *will be displayed only for software version A00.*

12. Make setups for gradation correction as required.



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➔ For setup details, see "Display Gradation Correction Setup" under "FR5: Function-specific Reference".

13. Click OK.

➔ The system returns to the "Application Entity List" window.

14. Click OK.

➔ The system returns to the "Setup Configuration Item" window.

15. Select "Save" from the "Config (F)" menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

16. Click Yes.

➔ The system saves the setup data.

2.1.6 Settings of Automatic Image Distribution (DISTRIBUTION CODE)

For an automatic image distribution to equipment of HD_FILE attribute, set up DISTRIBUTION CODE.

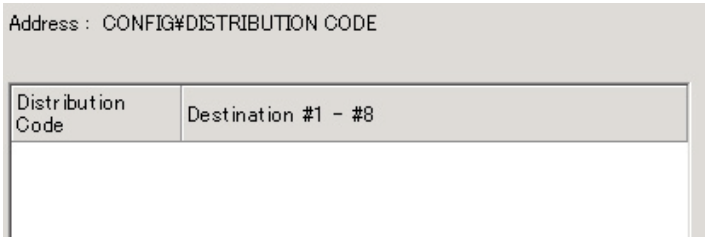
◆ NOTE ◆

For an automatic image distribution processing, be sure to change to "Yes" ahead of time the setting (item 3 of "SYSTEM CONFIG"➔ "5.CSL/IDT FUNCTION") under "Enable Distribution Code Setup" of the Service Utility function.

☞ For an automatic distribution to equipment of OD_FILE attribute, perform the procedure described in "2.4.4 Setup for CONNECTING EQUIPMENT".

1. **Click ⊟ DISTRIBUTION CODE of the "Setup Configuration Item" window.**

➔ A list of destination equipment for automatic image distribution appears on the right-side area of the window.

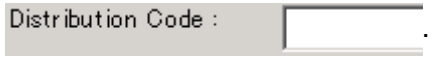


2. **Click** New **.**

➔ The "Distribution Code" window opens.

3. **Make the following settings.**

❍ Enter an 8-digit distribution code (e.g.: 12345678) in



.

❍ Click downward arrow ▼ of



to select equipment's host or AE name (e.g.: "Other01-SCP").

4. **Click** OK **.**

➔ The system returns to the "Setup Configuration Item" window.

5. **Select "Save" from the "Config (F)" menu.**

➔ A window opens, prompting you to confirm the setup data to be saved.

6. **Click** Yes **.**

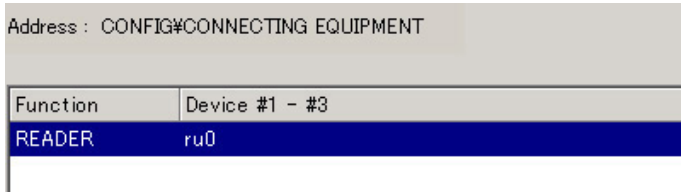
➔ The system saves the setup data.

2.1.7 Setup for CONNECTING EQUIPMENT

To automatically transfer images to the ODF, set up CONNECTING EQUIPNET as directed below.

1. Click ⊟ CONNECTING EQUIPMENT on the "Setup Configuration Item" window.

➔ A list of registered equipment units appears on the right side of the window.



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2. Click New.

➔ The "CONNECTING EQUIPMENT" window opens.

3. Make the following settings.

❍ Click the downward arrow within Function : and select function (OD_FILE) of the connected equipment.

◆ NOTE ◆

With software version A00, "HD_FILE" can be selected in the "Function" box. However, even though "HD_FILE" has been selected, no images will be transferred to equipment of "HD_FILE" attribute automatically. It is thus necessary to make setup for DISTRIBUTION CODE if you wish to transfer images of "HD_FILE" attribute automatically.

☞ *"2.4.3 Setup for Automatic Image Distribution (DISTRIBUTION CODE)"*

❍ Click the downward arrow within Equipment #1 : and select equipment (ODF host name).

4. Click OK.

➔ You are returned to the "Setup Configuration Item" window.

5. Select "Save" from the "Config (F)" menu.

➔ A window opens prompting you to confirm the setup data.

6. Click Yes.

➔ The setup data will then be saved.

2.1.8 Settings for UID Issuance

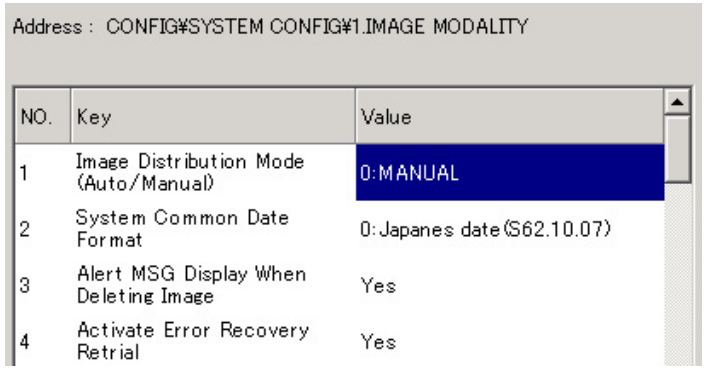
Use the procedure below if the UID issuance method needs be changed depending on the specifications of other connected equipment which the image is transferred to.

For default settings, see Table: List of UID settings.

1. **Click the ⊞ mark of ⊞ SYSTEM CONFIG of the "Setup Configuration Item" window.**

2. **Click ⊟ 1.IMAGE MODALITY.**

➔ The content of the setup items for the CL system information appears on the right-side area of the window.



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3. **Make UID issuance settings as follows.**

Table List of UID setting

No.	Name	Selection	Meaning
9	UID Issuance after Modifying ID Information	❍ YES Issues a new UID. ◎ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when any ID information is modified on the CL.
10	UID Issuance after Modifying Normalized Parameter	◎ YES Issues a new UID. ❍ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when image normalization conditions are modified on the CL.
11	UID Issuance after Modifying Image Processing Parameter	❍ YES Issues a new UID. ◎ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when image processing conditions are modified on the CL.
12	UID Issuance Before Sending Processed Data	◎ YES Issues a new UID. ❍ NO Does not issue a new UID.	Whether or not to issue a new image UID or SOP Instance UID when outputting processed images from the CL.
13	DICOM Series Generation Logic	◎ 0: 1 Study - N series and 1 Series - 1 image Issues a number so that it has multiple series for one study and only one image for one series. ❍ 0: 1 Study - N series and 1 Series - M image Issues a number so that it has multiple series for one study and multiple images for one series. ❍ 0: 1 Study - 1 series and 1 Series - N image Issues a number so that it has only one series for one study and multiple images for one series.	Setup of Series Instance UID issuance logic. <Ref.> See "3.4 Config Details – 1. IMAGE MODALITY" under "MU: Maintenance Utility".

◎: Default setting

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4. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

5. Click Yes.

➔ The system saves the setup data.

2.1.9 Changing the Name Elements

☞ See “3.7 Setting the Name Elements for DICOM Connection” under “MU: Maintenance Utility”.

2.1.10 Service Utility Shutdown

1. Select “Close” from the “Config(F)” menu.

➔ The system returns to the “IIP Service Utility” window.

2. Click [Exit Service Utility].

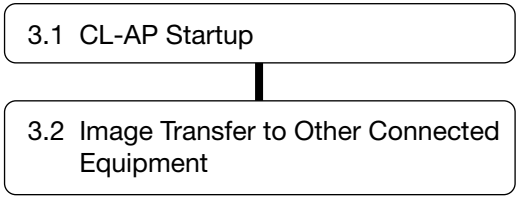
➔ The system returns to the desktop screen.

2.2 Software Setup on Other Connected Equipment

Set up DICOM CR Storage in accordance with the software specifications of other connected equipment so that it can receive images from the CL.

3. Connection Checkout

After the CL-AP is started, makes sure that images can be transferred from the CL to other connected equipment.

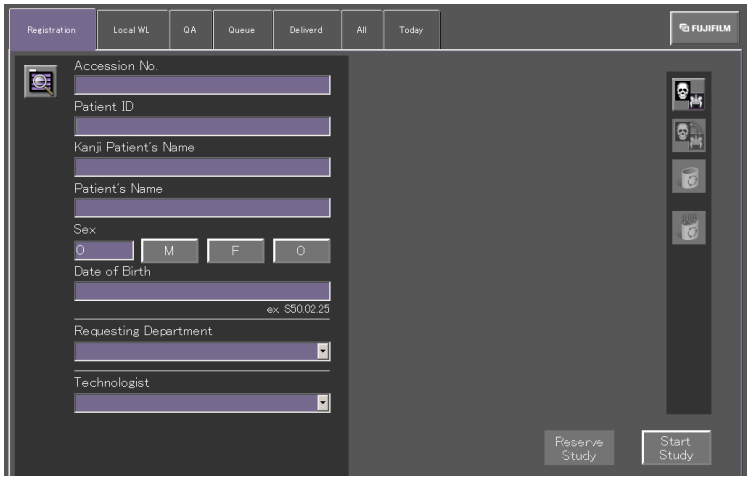


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3.1 CL-AP Startup

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window opens.
In about one minute, the CL-AP reception window opens.



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3.2 Image Transfer to Other Connected Equipment

Transfer images accumulated in the CL to other connected equipment.

1. **Select an image for transfer, then transfer it to other connected equipment.**

☞ For details of the image transfer procedures, see the CL Operation Manual.

2. **Make sure that the image has actually been transferred to other connected equipment.**

☞ For details of the transferred image checking procedures, see the operation manual attached to each equipment.

4. Setup File Backup

Back up the CL setup file.

Have the following item ready for use for file backup:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+FN-PS551/DRYPIX/FM-DP L (DICOM Print)

Described below are setup procedures used for printing images onto the FN-PS551, DRYPIX or FM-DP L from the CR-IR346CL using the DICOM Print function.

◆ NOTE ◆

The "CR-IR346CL" is abbreviated hereafter simply "CL". The "FN-PS551" and "DRYPIX" or "FM-DP L" are abbreviated "other connected equipment."

■ Before setup

● CL requirements

- The CL main unit must have been set up accordingly.
- Software version required: A00 or later.
- The option key is required.

Key Name	Function Supported
IR346 DICOM Print key	Basic Grayscale Print (SCU)

● Requirements of other connected equipment

❍ FN-PS551

- Other connected equipment must have been set up accordingly.
- Software version required: A04 or later.

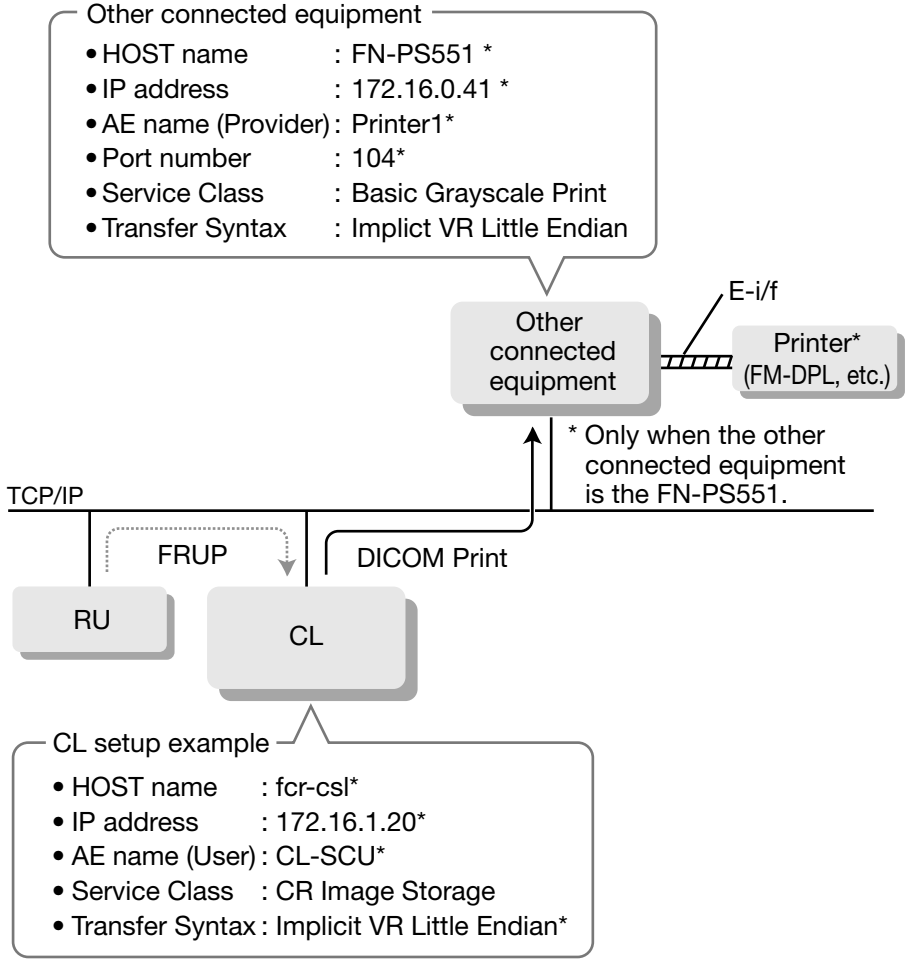
❍ DRYPIX

- Other connected equipment main unit must have been set up accordingly.
- Software version required : A00 or later.

❍ FM-DP L

- Other connected equipment main unit must have been set up accordingly.
- Software version required: B03 or later.
- A network board (LAN90A) is required.

■ Connection/setup example



Items marked with "*" constitute setup examples, which need to be changed depending on the equipment or network environment.

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➥ REFERENCE

The default DRYPIX user AE name is "FCR-CSL".

■ Overall operation flow

Use a network cable to connect the CL to other connected equipment. If other connected equipment is the FN-PS551, use an E-i/f cable to connect it to the printer.

☞ "1. Hardware Setup"

Make setups for printing images onto other connected equipment using the DICOM Print function.

Install the option key and reinstall the AP key. Make then the following setups.

- Setup of information (AE name, device attribute, Service Class, etc.) on this equipment
- Setup of information (AE name, device attribute, port number, Service Class, DICOM Print output conditions, handling of HQ images, etc.) on other connected equipment

Make the following setups as required.

- Registration of a printer for automatic image printout after the completion of a study
- Setup for film annotation character output format
- Setup for name components

☞ "2. Software Setup"

Make sure that images can be transferred from the CL to other connected equipment and printed correctly from it.

☞ "3. Connection Checkout"

Back up the config file.

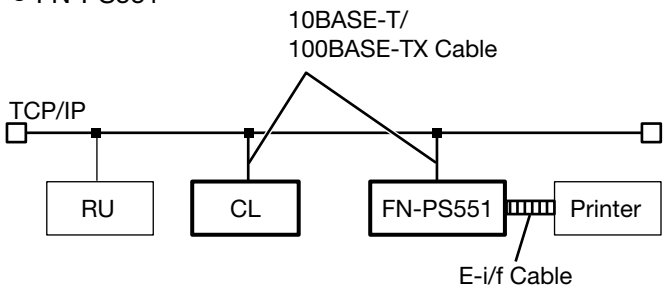
☞ "4. Setup File Backup"

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1. Hardware Setup

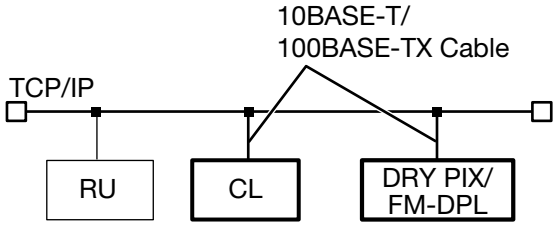
Connect the CL to other connected equipment via network as illustrated below.

● FN-PS551



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● DRYPIX or FM-DP L



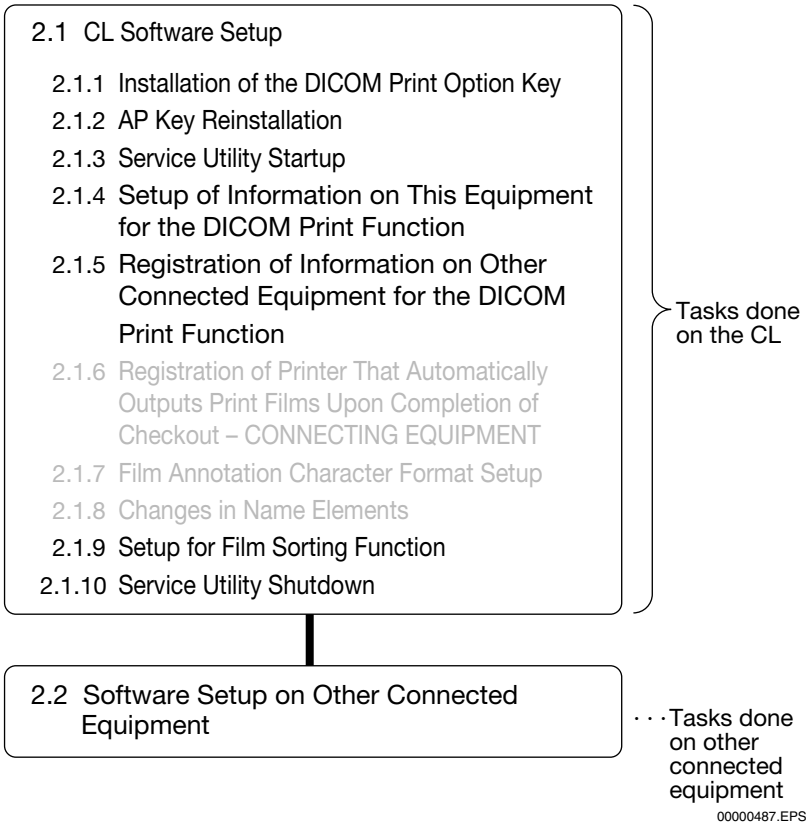
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◆ *NOTES* ◆

- *Do not connect the telephone line to the network connectors of the CL and other connected equipment.*
- *The IEC950/UL1950-conformed cable is available for these equipment units (CR-IR346CL, FN-PS551, DRYPIX, FM-DP L).*

2. Software Setup

Set up software for the CL and other connected equipment.
Set up the items in gray as required. Be sure to set up all other items.



2.1 CL Software Setup

2.1.1 Installation of the DICOM Print Option Key

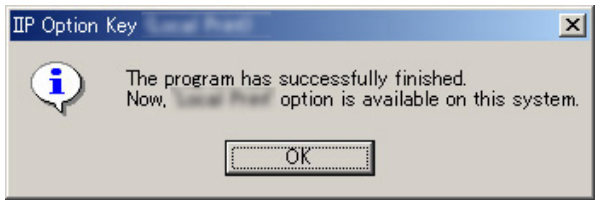
To activate the DICOM Print function on other connected equipment, the IR346 DICOM PRINT option key is needed.

1. **Insert the optional key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of option key installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.2 AP Key Reinstallation

If the option key is installed, be sure to reinstall the AP key.

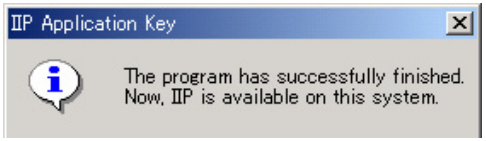
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.3 Service Utility Startup

1. **Turn ON the CL power.**

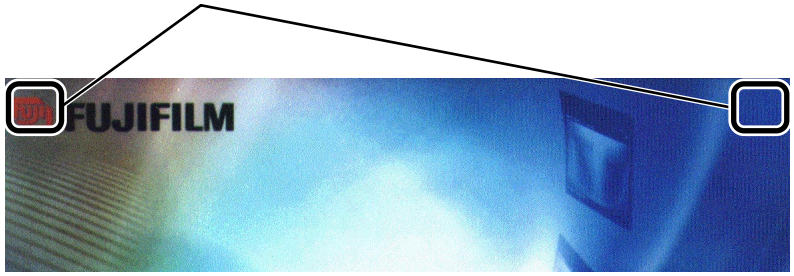
➔ Windows 2000 starts up and then the CL-AP starts running in about one minute.

➥ *REFERENCE*

If the AP or Windows 2000 is already running, start the Service Utility as directed under REFERENCE in step 2. below.

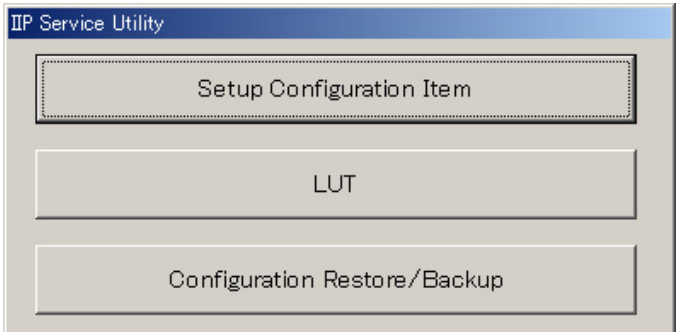
2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts and then the “IIP Service Utility” window opens.



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➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

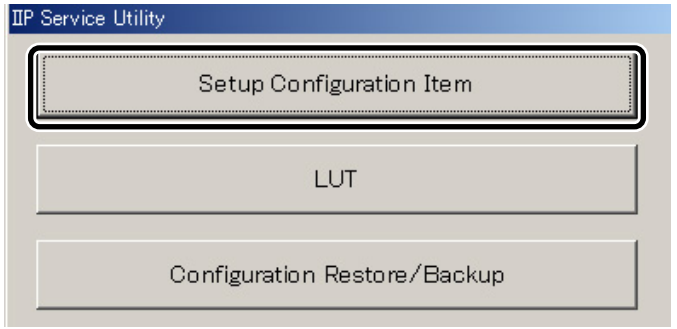
1. *To exit the AP, hold down the <Shift> key and choose "Shut Down" on the* FUJIFILM *menu.*
2. *From the "Start" menu, sequentially choose "Programs", "Fuji Film", and "FCR".*
3. *When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.*

2.1.4 Setup of Information on This Equipment for the DICOM Print Function

Makes settings for the following information items of this equipment.

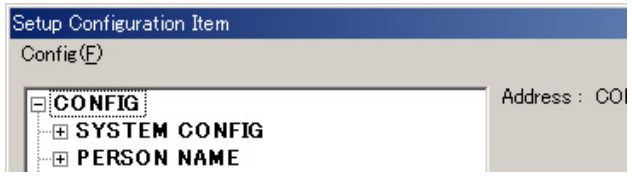
- Host name and IP address of this equipment
- AE name (Application Entity Name) and device attribute of this equipment
- Service Class, Role, Transfer Syntax
- Other (timeout settings, etc.)

1. **Click [Setup Configuration Item] of the "IIP Service Utility" window.**



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➔ The "Setup Configuration Item" window opens.



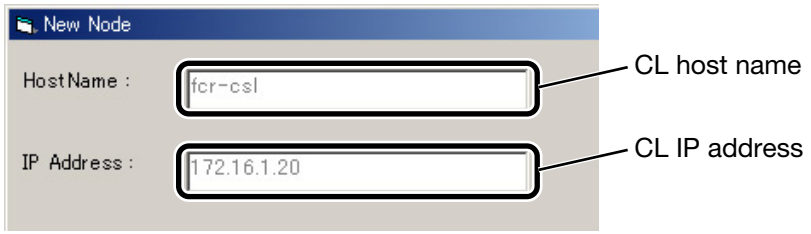
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2. **Click the ⊞ mark of the ⊞ NETWORK CONFIG field.**

3. **Select ⊟ THIS HOST(IIP) and click New.**

➔ The "New Node" window opens.

4. Make sure that the CL host name and IP address are displayed.



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◆ NOTE ◆

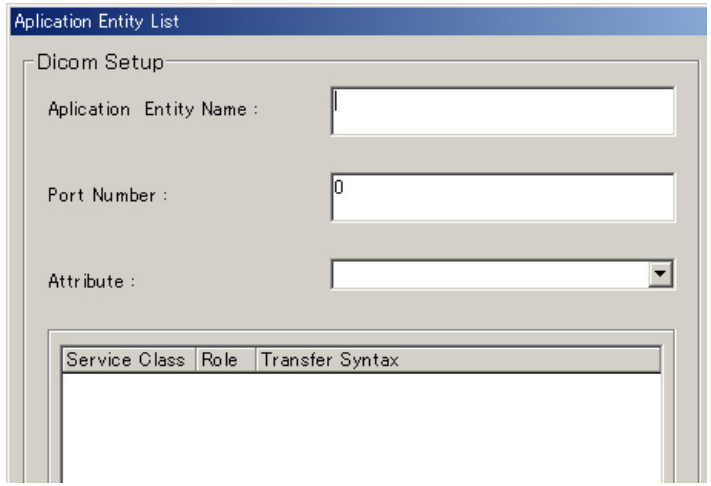
The IP address will not be displayed properly unless the CL is connected to a network.

5. Select "DICOM" and click OK.



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➔ The "Application Entity List" window opens.



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6. Make the following settings.

❍ Enter the AE name that is the SCU for the CL (e.g.: "CL-SCU") in the Aplication Entity Name : field.

➥ REFERENCE

When the connected equipment is DRYPIX or FM-DP L, enter "FCR-CSL". As the AE name of the connected equipment (SCU), "FCR-CSL" has been set for DRYPIX and FM-DP L.

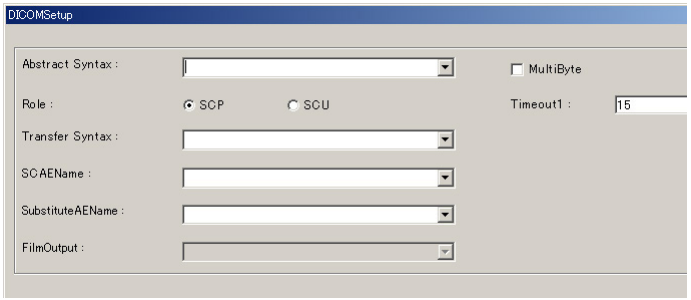
❍ Click downward arrow in the Attribute : field to select the device attribute (OTHER).

◆ NOTES ◆

- *To set the SCU AE on the CL, select "OTHER" for the device attribute for the time being.*
- *There is no need to set the port number in* Port Number : 0 *When selecting SCU as the Role, the set port number will be disregarded even if it is set.*

7. Click New.

➔ The “DICOMSetup” window opens.



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8. Click downward arrow in the Abstract Syntax : field to select Service Class (e.g.: “Basic Grayscale Print”).

➥ ***REFERENCE***

“Verification” is the Service Class used to verify connection between DICOM equipment units. For verifying connection, “Verification” must be selected.

☞ *For details of verification of connection, see “7. Verifying the Connection to Other Connected Equipment – Verify Connection” under “MU: Maintenance Utility”.*

9. To set up the AE that is the User, select SCU (SCU) for the Role.

➥ ***REFERENCE***

If “SCU” is selected, items that need not be set will be hidden on the “DICOM Setup” window.

10. Set the DICOM inter-message timeout value Timeout1 : 15 as necessary.

Timeout2 : 300 needs not be set. Even if set, it will be disregarded.

➥ ***REFERENCE***

It is not necessary to check MultiByte.

Even if checked, it will be disregarded if the Role set in step 9. above is the SCU.

11. Click OK.

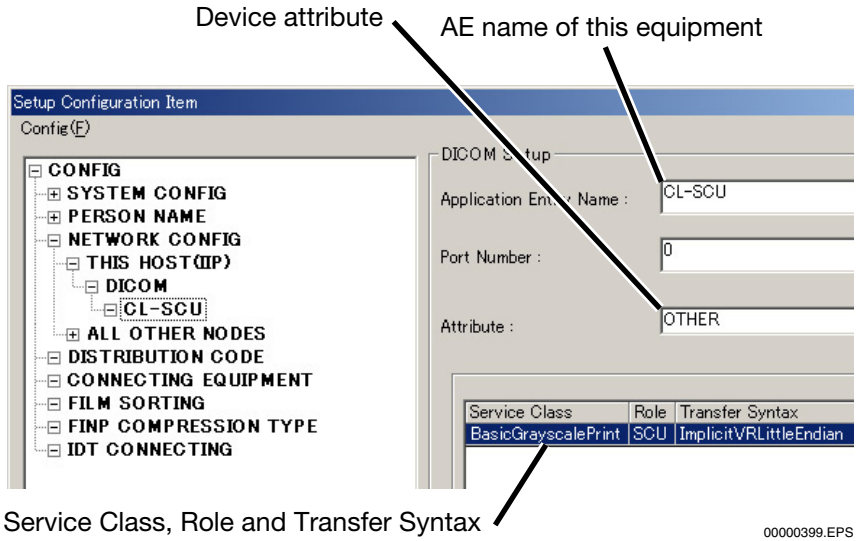
➔ The system returns to the “Application Entity List” window.

12. Click OK.

➔ The system returns to the “Setup Configuration Item” window.

➥ ***REFERENCE***

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window.A displayed item can be changed. Whenever it is changed, never fail to click* Apply.
- *If the* Delete *key is clicked, currently selected items are deleted.*



13. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

14. Click Yes.

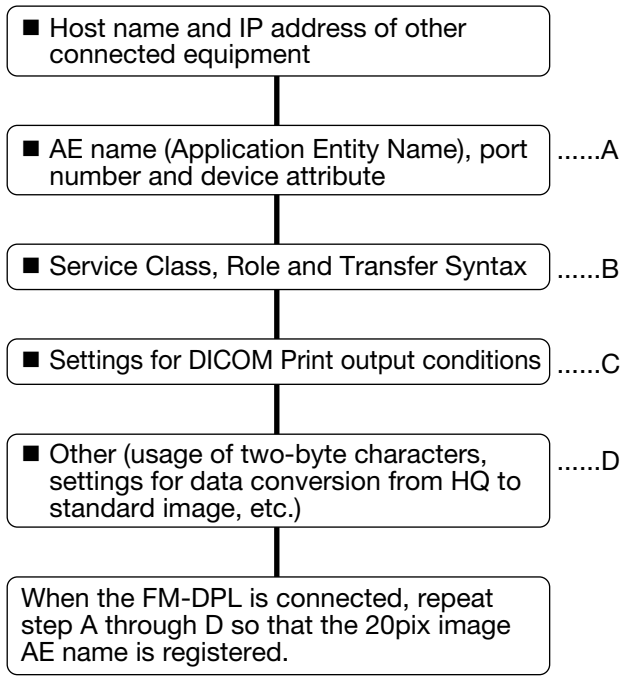
➔ The system saves the setup data.

2.1.5 Registration of Information on Other Connected Equipment for the DICOM Print Function

Register the following information items of other connected equipment.

- Host name and IP address of other connected equipment
- AE name (Application Entity Name), port number, and device attribute of other connected equipment
- Service Class, Role, Transfer Syntax
- Settings for DICOM Print output conditions
- Other (usage of two-byte characters, settings for data conversion from HQ to standard image, etc.)

Register the necessary information items according to the flow shown below.
Note that the setup procedure when the FM-DPL is connected will differ from that used for other devices.



■ Host name and IP address of other connected equipment

1. Select ⊞ ALL OTHER NODES of the "Setup Configuration Item" window and click New.

➔ The "New Node" window opens.

2. Make the following settings.

❍ Enter the Host name (e.g.: "FN-PS551") in the HostName : field.

❍ Enter the IP address (e.g.: "172.16.0.41") in the IP Address : field.

❍ Select "DICOM".



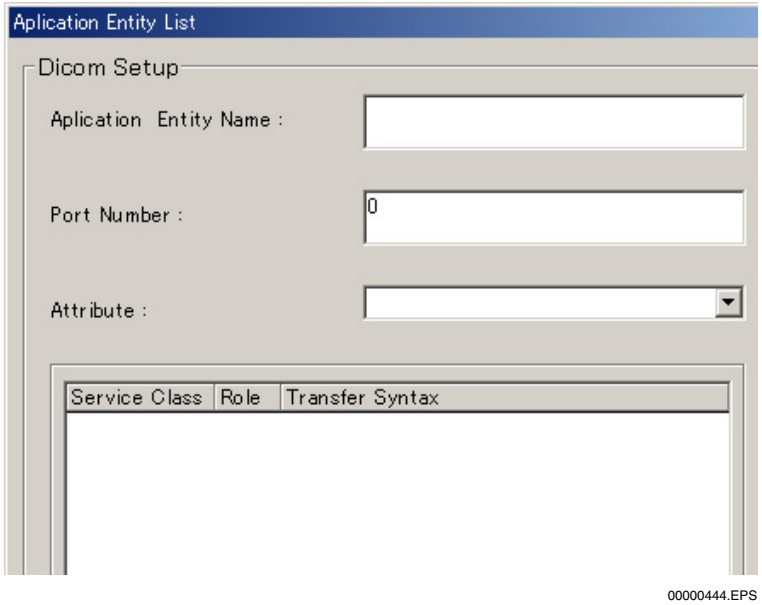
➥ *REFERENCE*

Set as follows when the DRYPIX or FM-DP L is connected.

- *Host name: fujiprinter (default)*
- *IP address: 172.16.1.30 (default)*

3. Click OK.

➔ The "Application Entity List" window opens for setup of information on other connected equipment.



■ AE name (Application Entity Name), port number, and device attribute of other connected equipment

1. **Make the following settings on the “Application Entity List” window.**

❍ Enter the AE name of other connected equipment (e.g.: “Printer1”) in the Aplication Entity Name : field.

◆ NOTE ◆

Be sure to enter the upper- or lower-case characters correctly.

❍ Enter the Port number of other connected equipment (e.g.: “104”) in the Port Number : 0 field.

❍ Click downward arrow of the Attribute : field and select device attribute of other connected equipment (“PRINT”).

➥ REFERENCE

Set as follows when the DRYPIX or FM-DPL is connected.

❍ *DRYPIX*
- *Application Entity Name : DRYPIX (default)*
- *Port number : 17238 (default)*
- *Device attribute : PRINT*

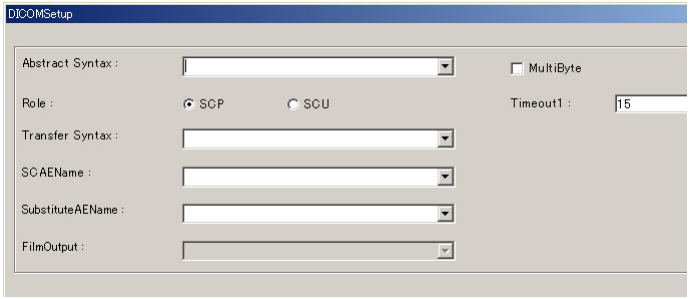
❍ *FM-DPL*
- *Application Entity Name : FM-DP L (for 10pix images)*Note FM-DP LD (for 20pix images)*Note*
- *Port number : 17238 (for both 10pix and 20pix images)*Note*
- *Device attribute : PRINT*

*(*Note) Because these setting values are not the FM-DP L defaults, be sure to set them in accordance with the FM-DP L values.*

To output 10pixels/mm and 20pixels/mm images mixed, make settings for an Application Entity Name available for 20pixels images.

2. **Click** New **.**

➔ The “DICOMSetup” window opens.



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■ Service Class, Role, Transfer Syntax

1. Click downward arrow ▼ of the Abstract Syntax : field and select Service Class (e.g.: “Basic Grayscale Print”).

➥ *REFERENCE*

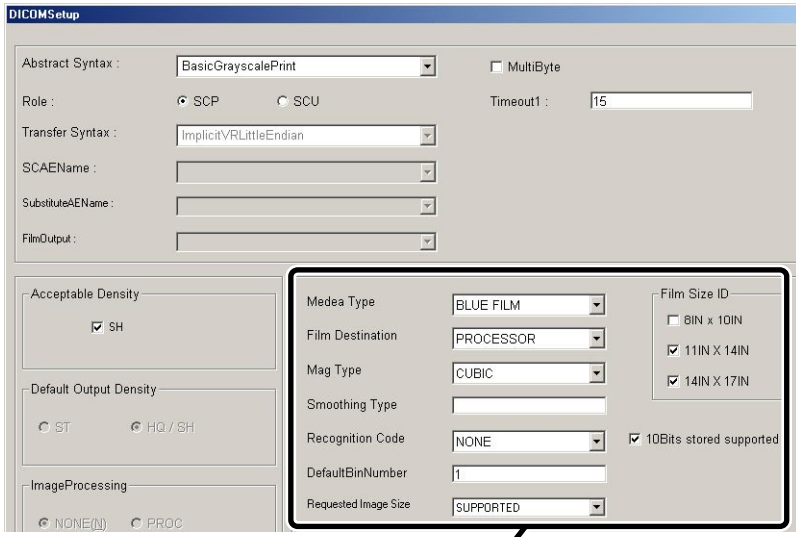
“Verification” is the Service Class used to verify connection between DICOM equipment units. For verifying connection, “Verification” must be selected.

☞ *For details of connection checkout, see “7. Verifying the Connection to Other Connected Equipment – Verify Connection” under “MU: Maintenance Utility.*

2. Because the AE of the FN-PS551 is the Provider, make sure that ◉ SCP (SCP) is selected for the Role.

■ Settings for DICOM Print output conditions

1. Make necessary settings for the following DICOM Print output conditions.
Set them as shown in the table below if the other connected equipment is the FN-PS551, DRYPIX or FM-DP L.



DICOM Print output conditions

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- Media Type — BLUE FILM (Default)
- Film Destination — PROCESSOR (Default)
- Mag Type — CUBIC (Default[*2])
- Smoothing Type — Blank (Default)
- Recognition Coed — NONE (Default)
- Default Bin Number — 1 (Default)
- Film Size ID — (Change as needed.)[*1]
- Requested Image Size — SUPPORTED (Default)
- 10 Bits Stored Supported — Use check mark. (Default)

[*1] Set this item in accordance with the film size available on the printer.

[*2] For software version A00, “BILINEAR” is the default.

☞ For details of settings for the DICOM Print output conditions, see “4. DICOM Print Output Conditions” under “Print Output Function” of “FR1: Function-specific Reference”.

■ **Other (usage of two-byte characters, settings for data conversion from HQ to standard image, etc.)**

1. Check SH (to) of "Acceptable Density" if other connected equipment can receive mammographic images (20pixel/mm) as well.

◆ ***NOTES*** ◆

- *To enable transfer of 20pixel/mm images, an Application Entity for output of 20pixel/mm images needs be set up in other connected equipment such as FM-DP L.*
- *When the connected equipment is FM-DP L, perform setup on the image output channel so that 20pixel/mm images can be transferred.*

2. To handle two-byte characters, check the MultiByte box (to).

➥ ***REFERENCE***

Timeout1 : 15 *and* Timeout2 : 300 *need not be checked. Even if checked, they will be disregarded.*

3. Click OK.

➔ The system returns to the "Application Entity List" window.

4. Click OK.

➔ The system returns to the "Setup Configuration Item" window.

5. Select "Save" from the "Config (F)" menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

6. Click Yes.

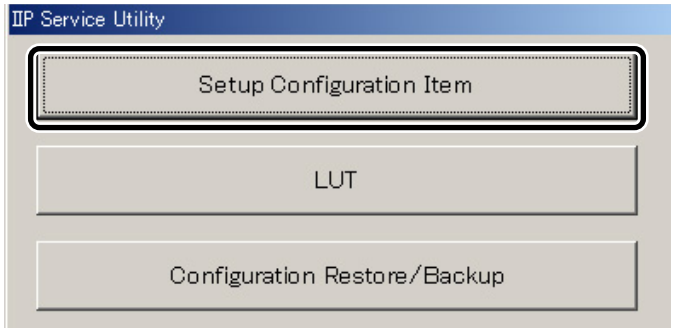
➔ The system saves the setup data.

2.1.6 Registration of Printer That Automatically Outputs Print Films Upon Completion of Checkout – CONNECTING EQUIPMENT

Use this procedure to register a printer that automatically outputs print films upon completion of checkout.

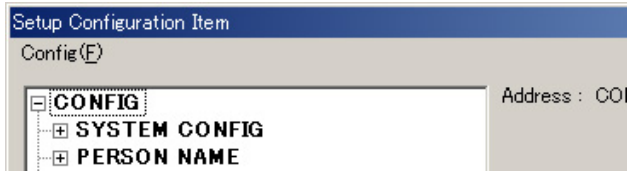
A printer that outputs print films only via the QA operation needs not to be registered here.

1. From the "IIP Service Utility" window, click [Setup Configuration Item].



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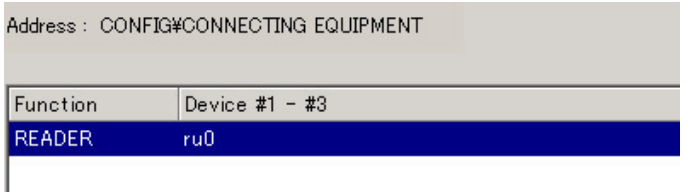
➔ The "Setup Configuration Item" window opens.



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2. Click CONNECTING EQUIPMENT.

➔ A list of registered equipment appears in the right-hand area of the window.



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3. Click [New].

➔ The “CONNECTING EQUIPMENT” window opens.

4. **Perform the following setup steps:**

❍ Click the downward arrow mark in the [Function :] field and select the function (PRINT) of the connected device.

❍ Click the downward arrow mark in the [Equipment #1 :] field and select the AE name (e.g.: Printer1) of the FN-PS551.

5. Click [OK].

➔ You are returned to the “Setup Configuration Item” window.

6. **From the “Config (F)” menu, choose “Save”.**

➔ A window opens, prompting you to confirm the setup data to be saved.

7. Click [Yes].

➔ The system saves the setup data.

2.1.7 Film Annotation Character Format Setup

Perform the following film annotation character format setup procedure, for instance, to specify the image information to be printed out onto film, the annotation character format, and the use of an image-frame.

➥ *REFERENCE*

The default film annotation character format for print output is basically the same as for printouts generated by the FCR 5000 Series.

☞ *Film output differences between the CL and the 5000 Series are stated in “2.2 Precautions of the Film Annotation Character Format” under “Print Output Function” in “FR1: Function-specific Reference”.*

1. **From the “Setup Configuration Item” window, click the ⊞ sign within the [⊞ SYSTEM CONFIG] field.**

2. Click [⊟ 4.LOCAL PRINTER].

➔ The LP configuration setup items appear in the right-hand area of the window.

3. **Set the film annotation character format.**

☞ For details on the setup procedure, see “2. Setup Necessary When Editing the Film Annotation Character Format”, under “Print Output Function” in “FR1: Function-specific Reference”.

4. **From the “Config (F)” menu, choose “Save”.**

➔ A window opens, prompting you to confirm the setup data to be saved.

5. Click [Yes].

➔ The system saves the setup data.

2.1.8 Changes in Name Elements

When the DICOM is connected, change patient name elements as necessary.

☞ See “3.7 Setting the Patient Name Elements When the DICOM is Connected” in “MU: Maintenance Utility”.

2.1.9 Setup for Film Sorting Function

Film sorting conditions must be set up for the printer that supports the film sorting function.

☞ “3.8 Setup for DICOM Print Film Sorting” under “MU: Maintenance Utility”. //Being now prepared.//

2.1.10 Service Utility Shutdown

1. **Select “Close” from the “Config(F)” menu.**

   ➔ The system returns to the “IIP Service Utility” window.

2. **Click [Exit Service Utility].**

   ➔ The system returns to the desktop screen.

2.2 Software Setup for Other Connected Equipment

Set up the DICOM Print function as follows so that other connected equipment can receive images coming from the CL.

- FN-PS551

  ☞ See “7. Service Utility” in the Maintenance section of the FN-PS551 Service Manual.

- DRYPIX

  ☞ See “8.1 Network Connection (DICOM)” in “IN: Installation” of the DRYPIX Service Manual.

- FM-DP L

  ☞

3. Verifying the Connection

This section describes the procedures for printing images onto the printer from the CL for film annotation character format verification purposes.

3.1 Starting the CL-AP

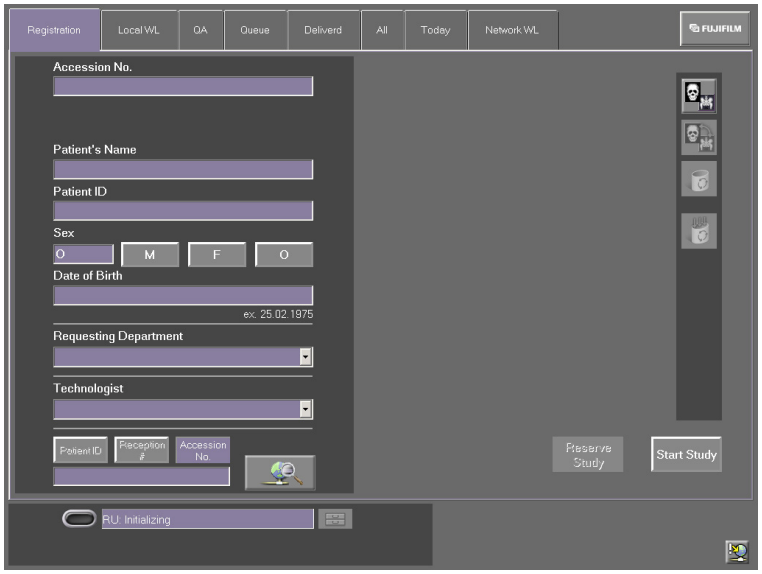
3.2 Verifying the Film Annotation Character Format

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3.1 Starting the CL-AP

1. **From the Start menu, sequentially select “Programs”, “Fuji Film”, and then “FCR”.**

➔ The CL opening window appears on the display.
After about one minute, the CL-AP reception window opens.



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3.2 Verifying the Film Annotation Character Format

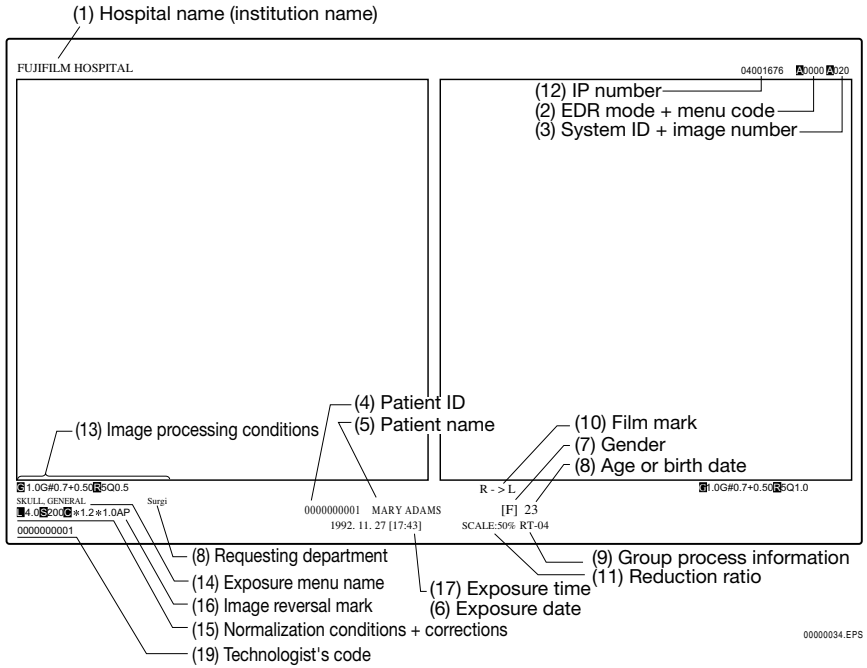
1. **Print out a read image.**
When the FM-DP L is connected, print both 10pix- and 20pix-images.

☞ For details on the print output procedure,
see “FCR XG-1 CR-IR346CL” in the CL Operation Manual.

2. **Check whether the film annotation character format information entered from the CL is properly printed out onto the film. Also, check for blurred, chipped, or otherwise abnormal character printings.**

➥ *REFERENCE*

The example in the figure below represents a printout that would be generated when the default film annotation character format is used (image size: 35 × 35cm (14"× 14"); print format: TWIN). When the default settings are used, character strings (1) through (19) are printed out.



☞ If any abnormality is found, see “Print Output Function” under “FR1: Function-specific Reference”.

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

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CL+FN-PS551 or 5000 Series (FINP: Print Output)

This chapter presents the procedure for printing images using the FINP via the FN-PS551 or 5000 series.

➤ *IMPORTANT*

When using the FINP, the film character format specified will be printed out in accordance with the film format file defined in the FN-PS551 or 5000 series. Have the film character format be set up on the FN-PS551 or 5000 series.

Note that a film character format set up on the CL will not be enabled.

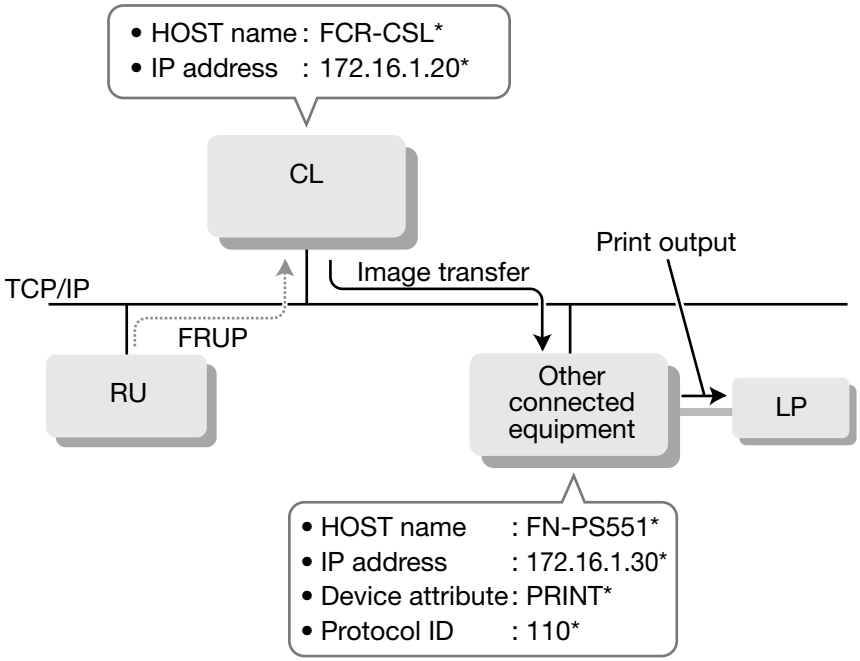
◆ *NOTE* ◆

The "CR-IR346CL" and "FN-PS 551" or "5000 series" are abbreviated hereafter simply "CL" and "other connected equipment", respectively.

■ Prior to setup

- CL requirements
  - The CL main unit must have been set up accordingly.
  - Software version required: A00 or later
  - The FINP image input/output option key (IR346 DMS NET-WORK IN-OUT) is necessary.
- FN-PS551 requirements
  - The FN-PS551 main unit must have been set up accordingly.
  - Software version required: A04 or later.
- 5000 series requirements
  - The 5000 series main unit must have been set up accordingly.

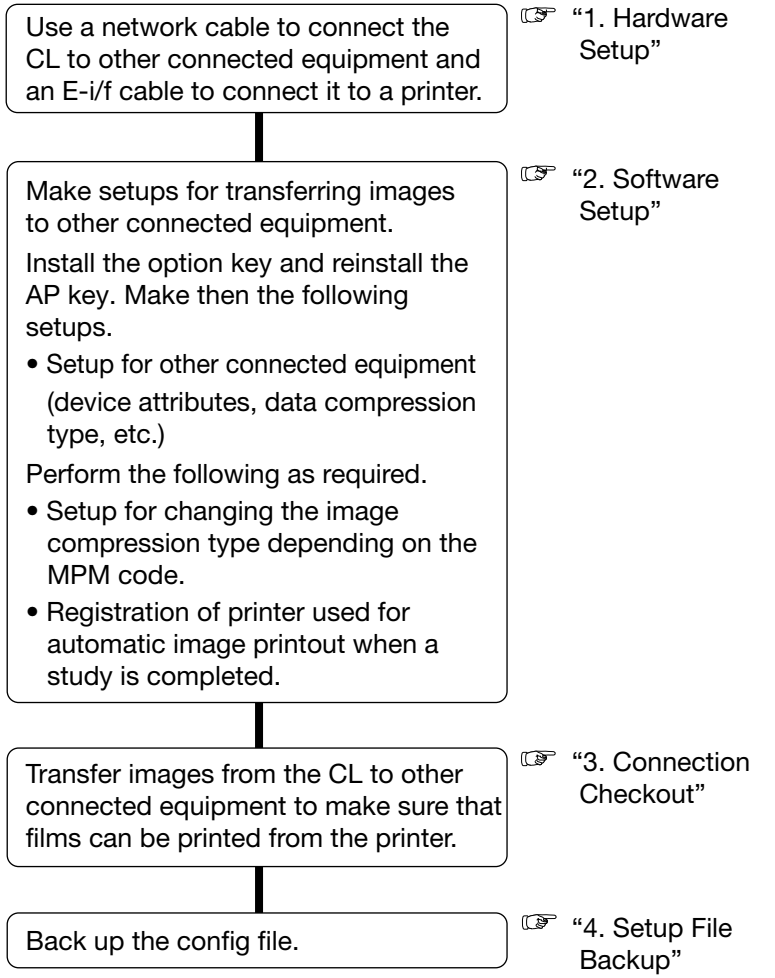
■ Connection/setup example



Items marked with "*" constitute setup examples, which need be changed depending on the equipment or network environment.

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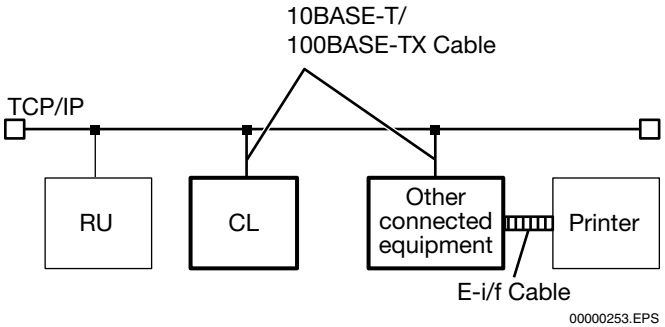
■ Overall operation flow



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1. Hardware Setup

Connect the CL to other connected equipment via network as illustrated below.

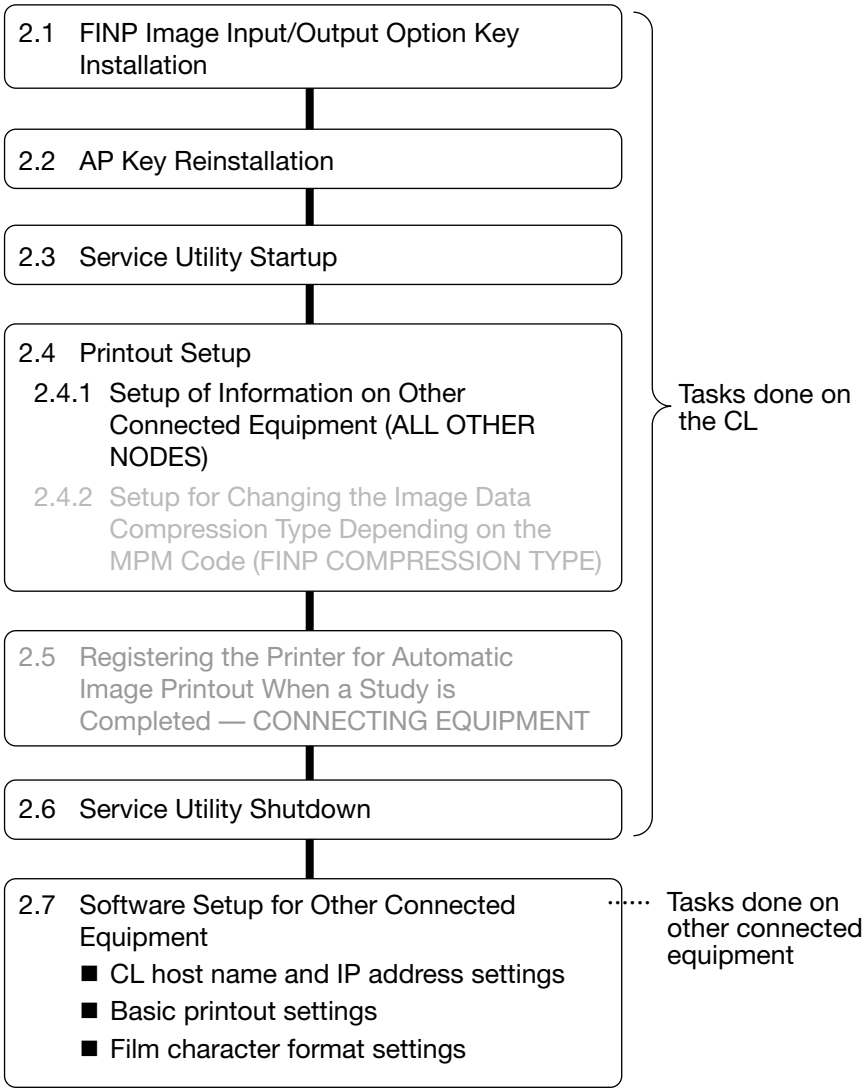


◆ *NOTES* ◆

- *Do not connect the telephone line to the network connectors of the CL and other connected equipment.*
- *The IEC950/UL1950-conformed cable is available for these equipment units (CR-IR346CL, FN-PS-551).*

2. Software Setup

Set up software for the CL and other connected equipment.
Set up the items shown in gray as required. Be sure to set up all other items.



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2.1 FINP Image Input/Output Option Key Installation

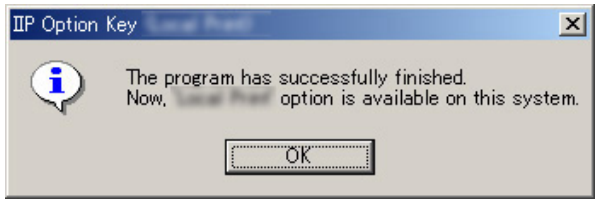
To transfer images to other connected equipment using the FINP, the IR346 DMS NET-WORK IN-OUT option key is needed.

1. **Insert the option key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The installation start window opens again.

4. **Click** Continue.

➔ A window opens to indicate the completion of installation.

5. **Click** OK.

➔ The system return to the desktop screen.

6. **Remove the CD from the CD-ROM drive.**

➥ *REFERENCE*

The installation start window opens twice because the two kinds of keys, for image input and output, are stored on the FINP image input/output option key CD.

2.2 AP Key Reinstallation

If the option key is installed, be sure to reinstall the AP key.

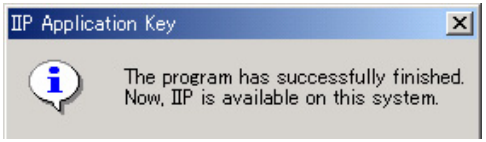
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000419.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.3 Service Utility Startup

1. **Turn ON the CL power.**

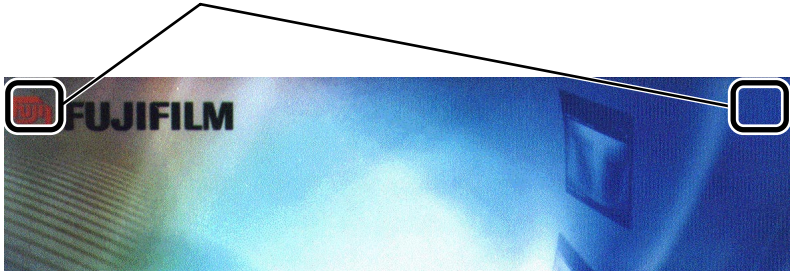
➔ In about one minute after Windows 2000 is started up, the CL-AP launches itself.

➥ ***REFERENCE***

If the AP or Windows 2000 is already running, start the Service Utility mode as directed under REFERENCE in step 2. below.

2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



00000118.EPS

➔ The Service Utility mode starts. The “IIP Service Utility” window opens.



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➥ ***REFERENCE***

If you cannot complete step 2. above from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility mode.

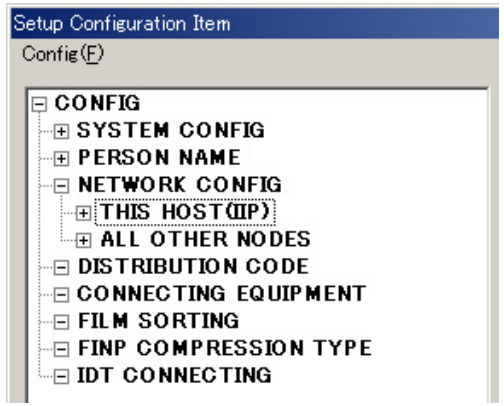
1. To exit the AP, hold down the <Shift> key and select [Shut Down] on the FUJIFILM *menu.*

2. From the “Start” menu, sequentially select “Programs”, “Fuji Film”, and “FCR”.

3. When the initial window opens, click the upper left corner and then the upper right corner within a period of 5 seconds.

3. Click [Setup Configuration Item].

➔ The “Setup Cofiguration Item” window opens.



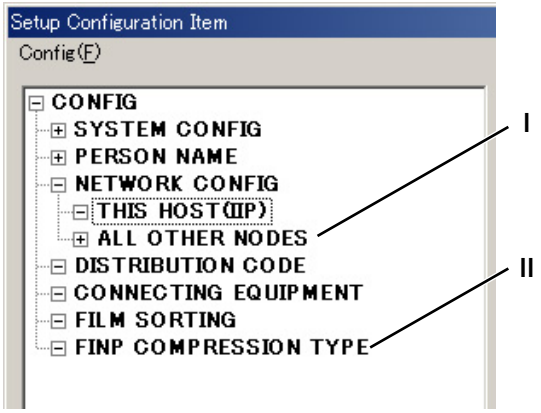
00000077.EPS

2.4 Printout Setup

Set up the printout function as follows for other connected equipment.

■ Setup overview

Service Utility “Setup Configuration Setup Item” window



00000054.EPS

- Setup of information on other connected equipment (I on the window display)
  - Host name and IP address of other connected equipment
  - Selection of protocol used (FINP) by other connected equipment
  - Setup of the protocol ID (FINP100/110) of other connected equipment
  - Setup of attribute of other connected equipment
  - Setups for handling HQ images and image compression type

- Setup for changing the image data compression type depending on the MPM code (II on the window display)

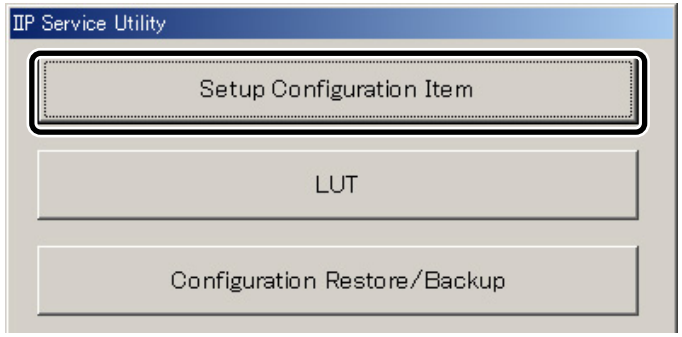
  Perform this setup only when transferring images by changing the data compression type depending on the MPM code.

◆ ***NOTE*** ◆

To enable this setup, the Depend on MPM Code *field must have been activated before setting the image data compression type (ALL OTHER NODES).*

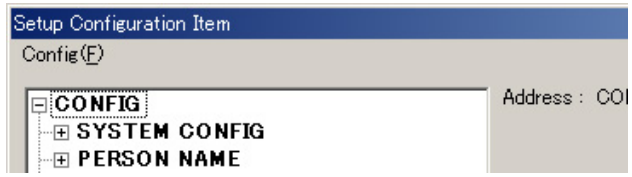
2.4.1 Setup of Information on Other Connected Equipment (ALL OTHER NODES)

1. Click [Setup Configuration Item] of the “IIP Service Utility” window.



00000131.EPS

➔ The “Setup Configuration Item” window opens.



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2. Click the ⊞ mark of the ⊞ NETWORK CONFIG field.

3. Select ⊞ ALL OTHER NODES and click NEW.

➔ The “New Node” window opens.



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4. Enter the host name (e.g.: “FN-PS551”) of other connected equipment in Host Name : .

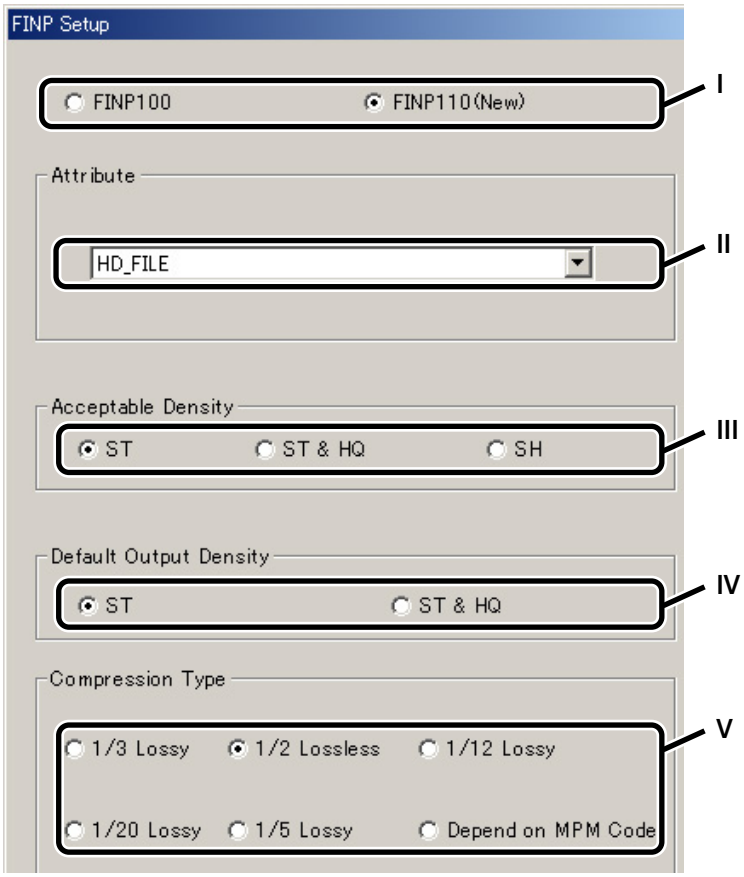
5. Enter the IP address (e.g.: “172.16.1.30”) of other connected equipment in IP Address : .

6. Make sure that FINP is selected in the Add Node column.

7. Click OK.

➔ The “FINP Setup” window opens.

8. **Set information of other connected equipment as follows.**



00000437.EPS

I. Select the protocol ID (FINP110(New)) that other connected equipment supports.

II. Select the device attribute (PRINT) for other connected equipment.

➥ *REFERENCE*

• Select "PRINT" for the 5000 series and FN-PS551.
• Select "HD_FILE" for the HI-C/QA-WS system.
• Select "OD_FILE" for the ODF system.
• Select "OTHER" for the CL.

III. Select ST & HQ if other connected equipment can receive HQ images.
Select SH if it can receive mammographic images as well.

IV. Select ST & HQ when transferring HQ images to other connected equipment.

V. Select the image data compression type used for transferring images to other connected equipment.

Select Depend on MPM Code when transferring images by changing the data compression type depending on the MPM code.

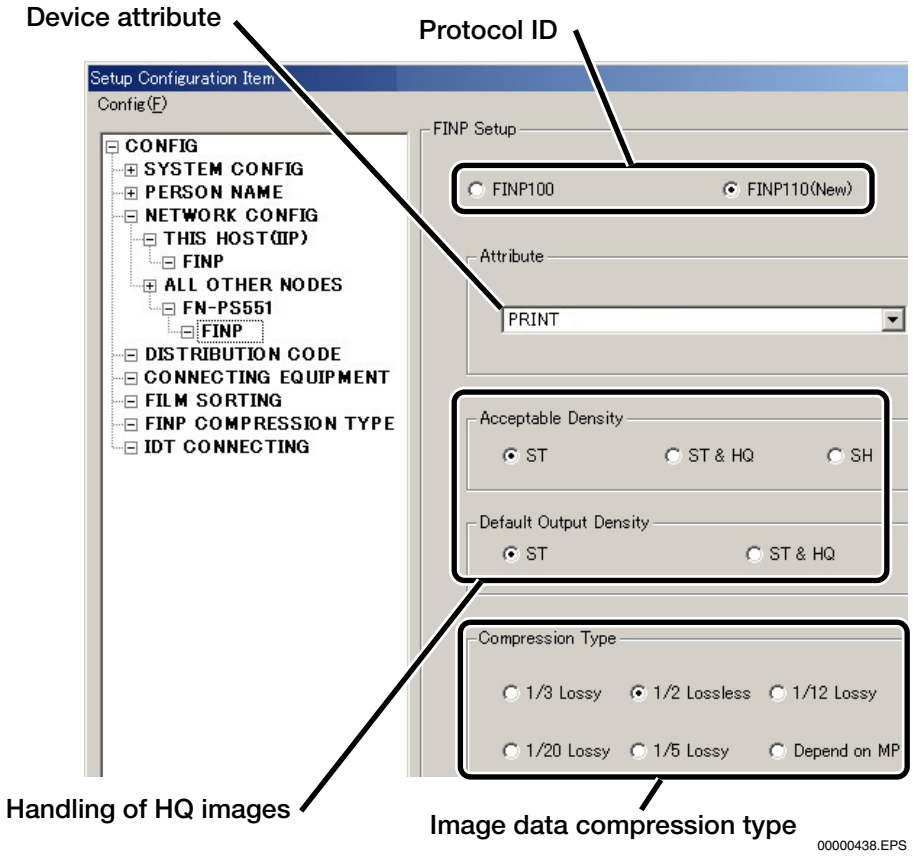
☞ See "2.4.2 Setup for Changing the Image Data Compression Type Depending on the MPM Code (FINP COMPRESSION TYPE)".

9. Click OK.

➔ The system returns to the “Setup Configuration Item” window.

➥ *REFERENCE*

- *Items just have been set up will appear on the right-side area of the “Setup Configuration Item” window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply.
- *If the* Delete *key is pressed, currently selected items are deleted.*



10. Select “Save” from the “Config (F)” menu.

➔ A window opens, prompting you to confirm the setup data to be saved.

11. Click Yes.

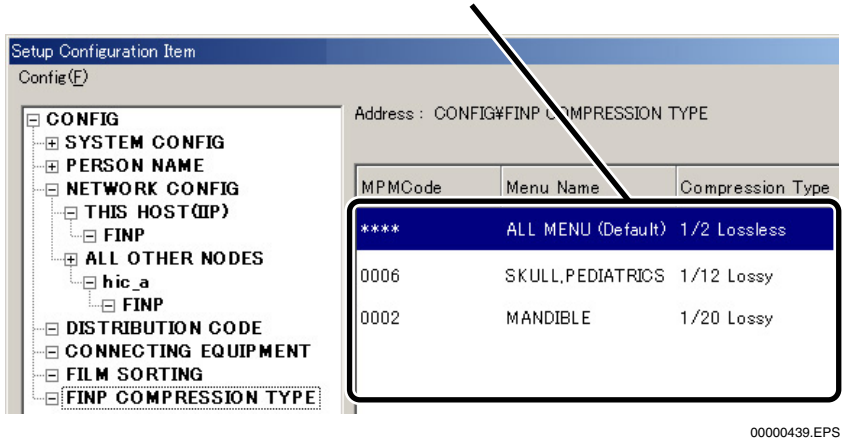
➔ The system saves the setup data.

2.4.2 Setup for Changing the Image Data Compression Type Depending on the MPM Code (FINP COMPRESSION TYPE)

Perform the following settings only when ◉ Depend on MPM Code is selected for the image data compression type in "ALL OTHER NODES".

1. Select ⊟ FINP COMPRESSION TYPE of the "**Setup Configuration Item**" window.

➔ A list showing the data compression type for each MPM code will be displayed on the right-side area of the window.

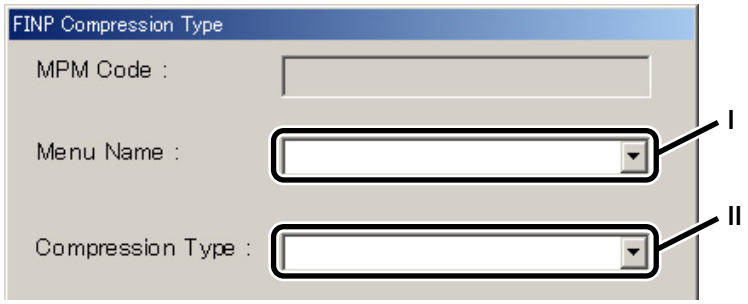


00000439.EPS

2. Click NEW.

➔ The "FINP Compression Type" window opens.

3. Set I. and II. on the display as follows.



00000440.EPS

I. Select the exposure menu name.

➥ *REFERENCE*

The MPM code that is for the exposure menu selected will be displayed in the "MPM Code" column. Using the User Utility, the user thus can view which MPM code is for the exposure menu selected.

II. Select the image data compression type.

4. Click OK.

➔ The system returns to the "Setup Configuration Item" window. The MPM code set as above and the image data compression type for the code will appear on the right side of this window.

5. To set image data compression types for other MPM codes, repeat steps 2. to 4.

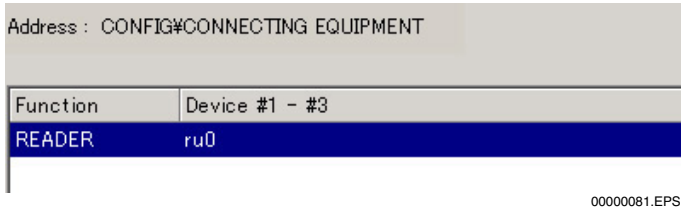
2.5 Registering the Printer for Automatic Image Printout When a Study is Completed – CONNECTING EQUIPMENT

Described herein is the procedure used for registering the printer for automatic image printout when a study is completed.

For a printer that outputs prints only through the QA operation, no registration is required at this step.

1. Click ⊟ CONNECTING EQUIPMENT on the "Setup Configuration Item" window.

➔ A list of registered equipment appears in the right-hand area of the window.



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2. Click New.

➔ The "CONNECTING EQUIPMENT" window opens.

3. Perform the following setup steps:

❍ Click the downward arrow mark in the Function : field and select the function (PRINT) of the connected device.

❍ Click the downward arrow mark in the Equipment #1 : field and select the host name (e.g.: "FN-PS551") of other connected equipment.

4. Click OK.

➔ You are returned to the "Setup Configuration Item" window.

5. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

6. Click Yes.

➔ The system saves the setup data.

2.6 Service Utility Shutdown

1. **Select “Close” from the “Config” menu of the “Setup Configuration Item” window.**

   ➔ The system return to the “IIP Service Utility” window.

2. **Click [Exit Service Utility].**

   ➔ The system return to the desktop screen.

2.7 Software Setup for Other Connected Equipment

Make the following settings on other connected equipment.

- FN-PS 551
  - CL host name and IP address settings
  - Basic printout settings
  - Film character format settings

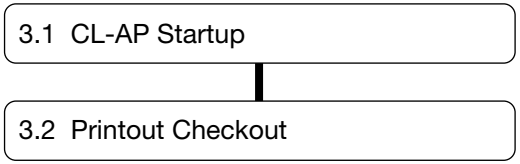
☞ See “7. Service Utility” in the Maintenance section of the FN-PS551 Service Manual.

- 5000 series
  - EQUIPMENT (EQUIP file) settings
  - HOST ADDRESS (HOST file) settings
  - Film annotation character format (PRINT file) settings

☞ See “MU: Maintenance Utility” of the 5000 series Service Manuals.

3. Connection Checkout

After the CL-AP has been started up, make sure that images can be transferred from the CL to the FN-PS551.

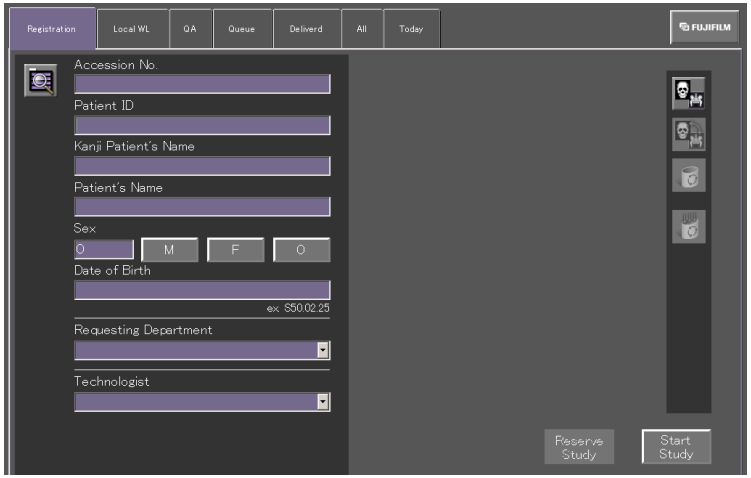


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3.1 CL-AP Startup

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window opens.
In about one minute, the CL-AP reception window opens.



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3.2 Printout Checkout

Transfer images from the CL to other connected equipment to make sure that films can be printed from the printer.

1. **Print out a read image.**

☞ For details on the print output procedure, see “FCR XG-1 CR-IR346CL” in the CL Operation Manual.

2. **Make sure that the output queue of other connected equipment displays images transferred from the CL.**

3. **When prints are output to the printer, make sure that those printouts are as per the film character format that has been set up on other connected equipment.**

Also, check for blurred, chipped, or otherwise abnormal character printings.

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+RIS/IDC4 (ID Online)

Presented herein is the procedure used for setup of the ID Online function that acquires patient information from the RIS.

◆ ***NOTE*** ◆

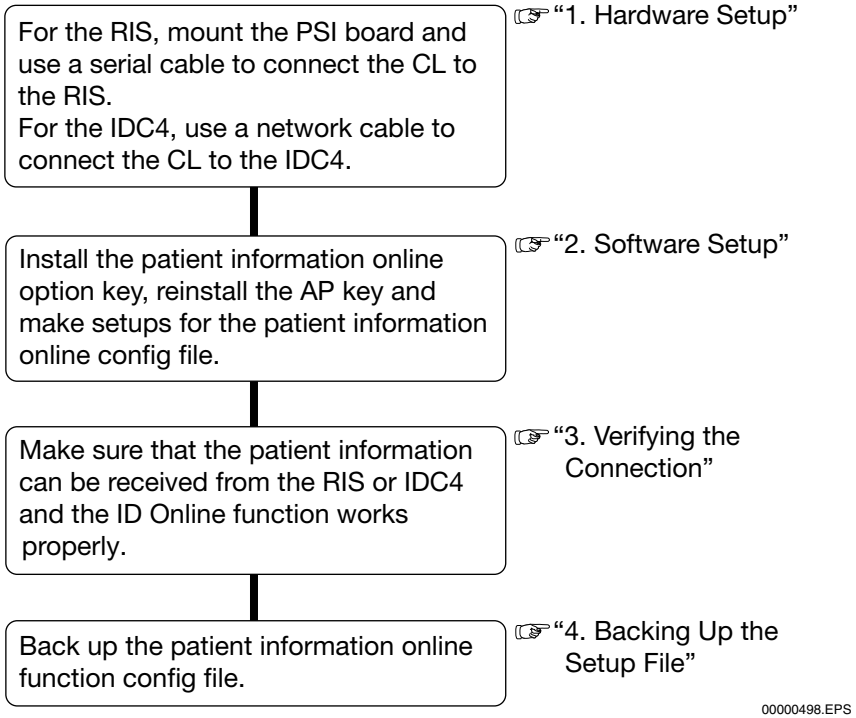
- *The connection system will differ with each other for RIS and IDC4.*
- *The "CR-IR346CL" is abbreviated hereafter simply "CL".*

■ Before setup

● CL requirements

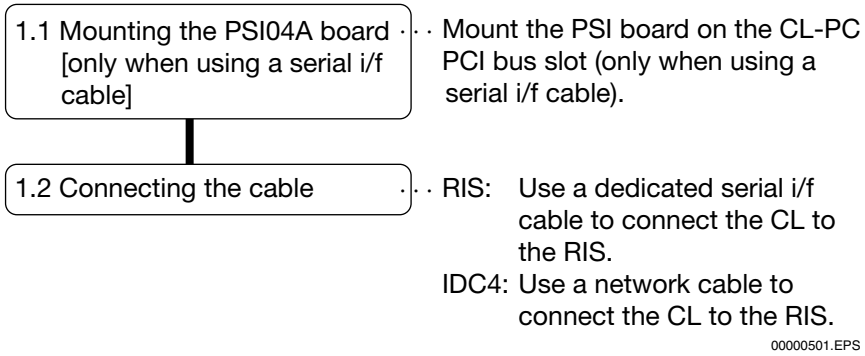
- The CL main unit must have been set up accordingly.
- Software version required: A00 or later.
- The patient information online option key (IR346 ID ONLINE) is needed.

■ Overall operation flow



1. Hardware Setup

Set up hardware as follows for the CL and RIS.



1.1 Mounting the PSI04A Board [only when using a serial i/f cable]

◆ *NOTE* ◆

Make sure that the CL-AP has been installed before mounting the PSI board.

The PSI serial i/f board driver will not be recognized correctly unless the CL-AP has been installed.

1. **Shut down the CL and turn OFF the power to the CL-PC.**

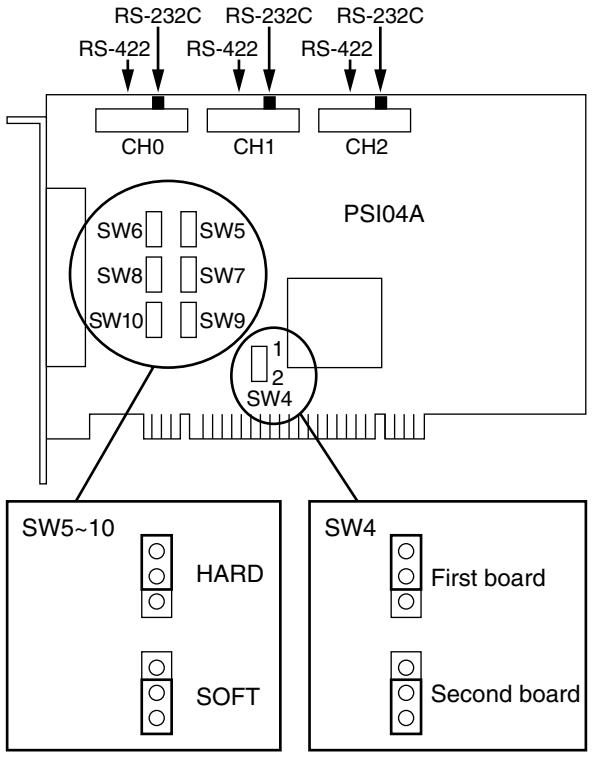
2. **Disconnect the power cable from the CL-PC.**

3. **Make sure that the PSI04A board is set up as illustrated below. Use CH0, CH1 or CH2 to select RS-422 or RS-232C.**

CH0, CH1 and CH2 may be used for the following connectors.

- First board
  CH0: CH-A CH1: CH-B CH2: CH-C
- Second board
  CH0: CH-D CH1: CH-E CH2: CH-F

When setting CH0, CH1 and CH2, confirm the interface (RS-422 or RS-232C) between connected devices.



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	Function	Settings	Remarks
SW5	Selection whether to output CH0 remote power control signal (at master status) as is as a contact signal or to control with the register	Setup for output of contact signal as is: Hardware Register control : Software	This function is enabled regardless of whether CH0, CH1 and CH2 are set for RS422 or RS232C. Setup for output of contact signal as is: Outputs power supply status to the no. 8 pin of CN1 as a contact signal (same as for CN2 and CN3). Register control setting: Contact signal that is output to the no. 8 pin of CN1 can be changed by changing register setting values (same as for CN2 and CN3).
SW7	Selection whether to output CH1 remote power control signal (at master status) as is as a contact signal or to control with the register.		
SW9	Selection whether to output CH2 remote power control signal (at master status) as is as a contact signal or to control with the register.		

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	Function	Settings	Remarks
SW6	Selection whether to transmit remote power control signal (at slave status) from CH0 to CN4 or to handle it as an interruption.	Output to CN4 : Hardware Interruption : Software	This function is enabled only when CH0, CH1 and CH2 are set for RS422. When set for RS232C, there will be no output to CN4. Setup for output to CN4: Outputs contact signals from outside to the CN4 no. 1 pin. Only the IDT-IV uses CN4. Setup for interruption: As contact signals changes, interruptions will result in the hosts. The register makes it possible to check which CH is ON or OFF. No. 1 pin of CN4 is Open for interruption settings.
SW8	Selection whether to transmit remote power control signal (at slave status) from CH1 to CN4 or to handle it as an interruption.		
SW10	Selection whether to transmit remote power control signal (at slave status) from CH2 to CN4 or to handle it as an interruption.		

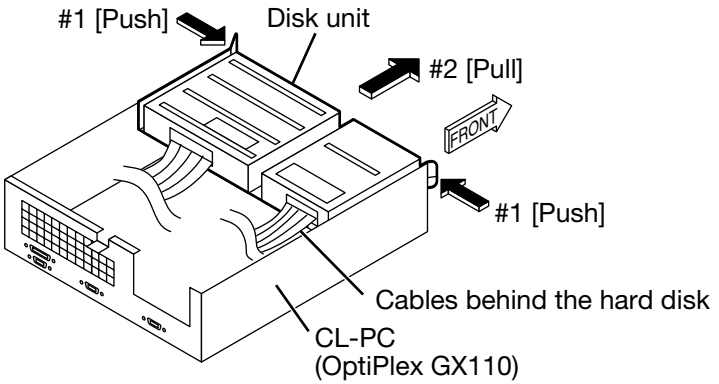
00000490.EPS

4. Mount a PSI board in the PCI slot.

- For GX110

I. Remove the CL-PC cover.

II. When the card cage is removed, its PC board interferes with a cable behind the hard disk. A workaround is to slightly pull the disk unit on the front of the CL-PC toward you before removing the card cage.

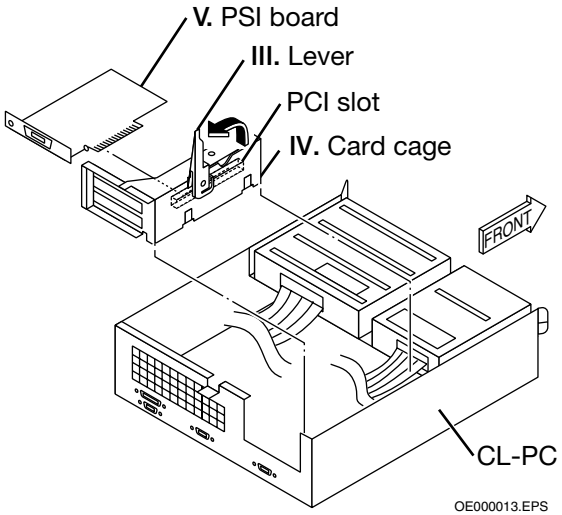


OE000006.EPS

III. Raise the lever as illustrated by the arrow.

IV. Remove the card cage.

V. Mount a PEI board in a PCI slot within the card cage.



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VI. Mount the card cage in the CL-PC.

VII. Restore the disk unit.

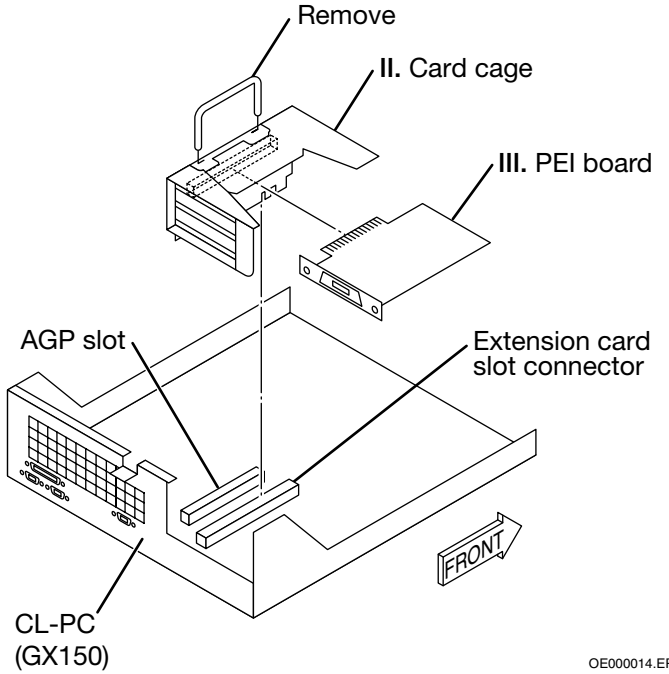
VIII. Reinstall the CL-PC cover.

- For GX150

I. Open the CL-PC cover.

II. Holding the card cage handle, remove the card cage.

III. Mount a PEI board in an empty PCI slot.



OE000014.EPS

IV. Mount the card cage on the CL-PC.

V. Close the CL-PC cover.

5. **Connect the power cable to the PC to start up the CL-PC.**

➔ Within about one minute after Windows 2000 has been started up, the CL-AP will start up. While the CL-AP is being started up, the PSI board driver will be downloaded.

◆ *NOTE* ◆

The PSI board driver will be set up automatically after the CL-AP has been started up.

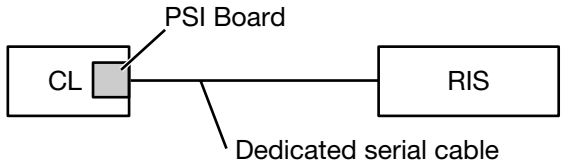
6. **While holding down the <Shift> key, select "Shut Down" in the FUJIFILM menu.**

➔ The system returns to the desktop screen.

1.2 Connecting the Cable

- RIS (serial i/f cable)

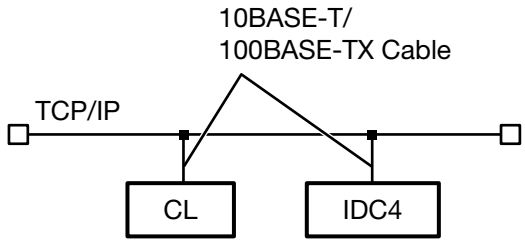
  Use a dedicated serial cable to connect the CL to the RIS.



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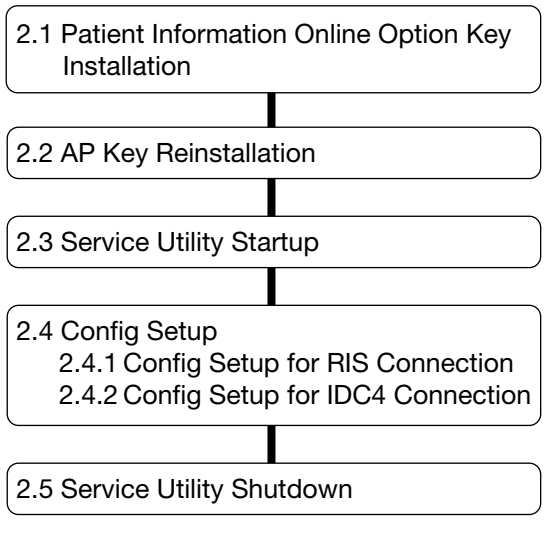
- IDC4

  Use a network cable to connect the CL to the IDC4.



OE000008.EPS

2. Software Setup



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2.1 Patient Information Online Option Key Installation

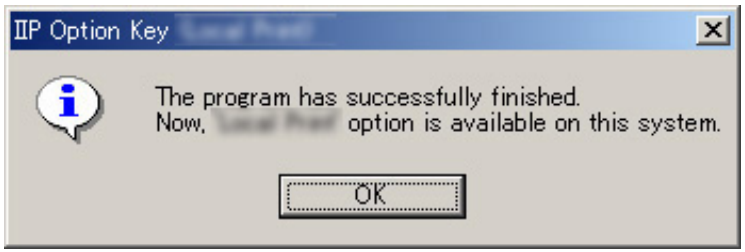
To use the ID Online function, the IR346 ID ONLINE option key is needed.

1. **Insert the optional key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of option key installation.



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3. **Click** OK **.**

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.2 AP Key Reinstallation

If the option key is installed, be sure to reinstall the AP key.

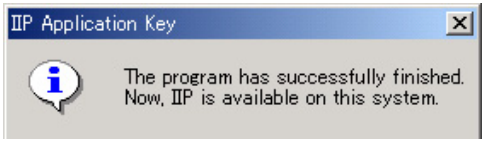
Use the AP key CD (114Y5342002A: Version A00 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

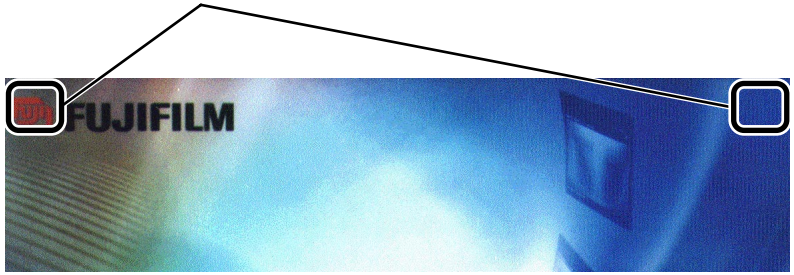
2.3 Service Utility Startup

1. **From the** Start **menu, sequentially select "Programs", "Fuji Film", and then "FCR".**

➔ The CL-AP will start up.

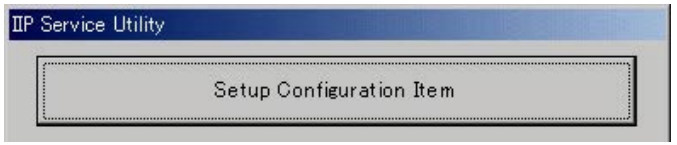
2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts and then the "IIP Service Utility" window opens.



00000403.EPS

➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

1. To exit the AP, hold down the <Shift> key and choose "Shut Down" on the FUJIFILM *menu.*

2. From the "Start" menu, sequentially choose "Programs", "Fuji Film", and "FCR".

3. When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.

2.4 Config Setup

Set up the following config items for the ID Online function.
Setting items will differ with each other for the RIS and IDC-IV.

RIS → "2.4.1 Config Setup for RIS Connection"
IDC4 → "2.4.2 Config Setup for IDC4 Connection"

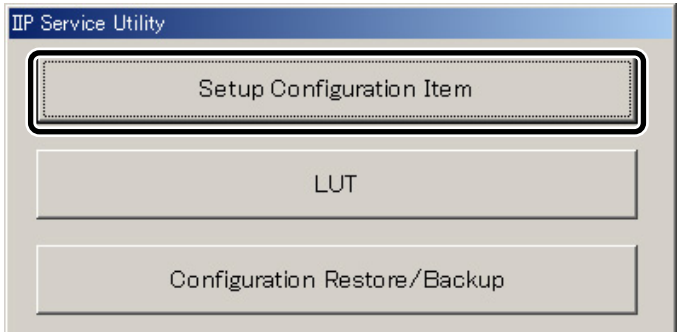
Config Item		Remarks	RIS	IDC4
31	Code set used	CP850(DOSLatin1)/ CP1252(WINLatin1)	○	○
32	Serial port number	No. of the CH to be inserted into the PSI board connector	○	
33	i/f format	Short/Long format	○	○
34 35	Various timeout values	No changes are required for settings.	△	△
36	Search key type	ID No./Reception No./Accession No. (only when TypeB or Type-IDC4 is set for the i/f type.)	△	○
37	i/f type	TypeA/TypeB/Type-IDC4	○	○
38	IDC4 host name	idc4 (default)		○
39	IDC4 IP address	172.16.11 (default)		○
40	IDC4 port number	13001 (default)		○

○: Essential △: As required

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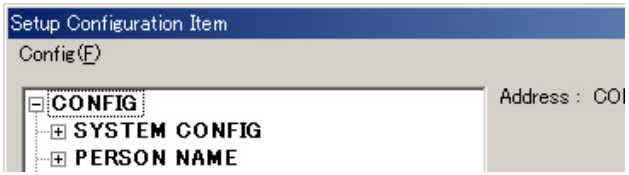
2.4.1 Config Setup for RIS Connection

1. **Click [Setup Configuration Item] of the "IIP Service Utility" window.**



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➔ The "Setup Configuration Item" window opens.

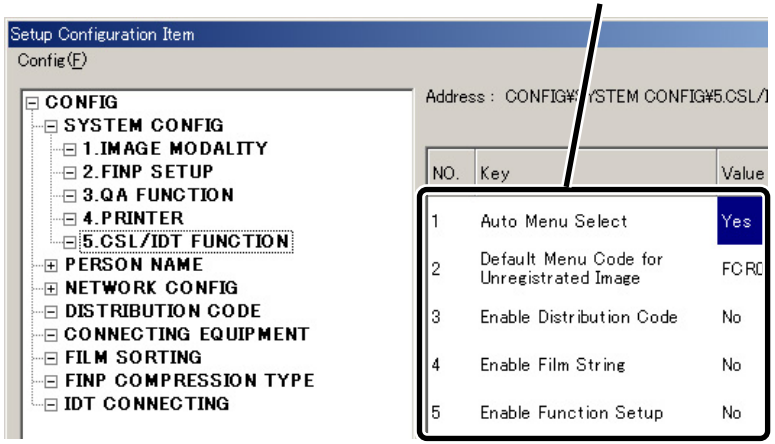


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2. Click 5.CSL/IDT FUNCTION.

➔ A list of IDT/Console function setup items appear in the right-hand area of the window.

IDT/Console function setup items



00000160.EPS

3. Select for 31 ID Online Acquisition Info. Code Setup a Latin font code set to be used for ID online connection.

☞ For details of the code set, see "■ Detailed explanations" in "3.6 Config Details – 5. CSL/IDT FUNCTION" under "MU: Maintenance Utility".

4. In accordance with the PSI board CH No., set up a serial port number for 32 ID Online Serial Port No..

5. To use extended format for the i/f format, change setting for 33 ID Online Search Key to "1.Long".

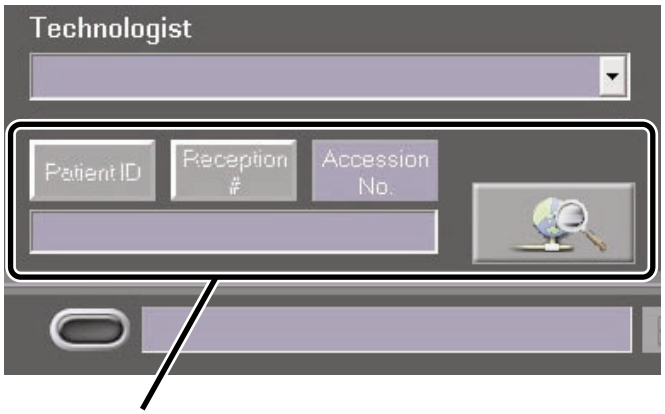
6. Select i/f type for 37 ID Online Type.

➥ *REFERENCE*

Type-A : Used when transferring ID information from the RIS (no queries will be made by the CL).

Type-B : Used when making queries by the CL with the search key to acquire ID information that corresponds to the search key from the RIS.

◆CL user window (accession reception)



If "Type-B" is selected, the search key entry box appears.
If "Type-A" is selected, the entry box does not appear.

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7. When “Type-B” has been selected in step 6. above, select 36 ID Online Search Key for the search key type used.

◆ NOTE ◆

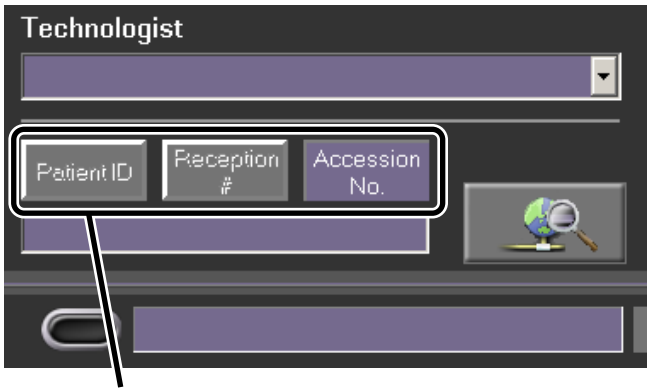
For the Latin font, either DOS Latin1 or WIN Latin1 code set will be used.

For the code set used, follow the settings in step 3.

➥ REFERENCE

0 : ID#	*ID No. only*
1 : ID#&RECEPT#	*ID No. and Reception No.*
2 : ID#&EXAM#	*ID No. and Accession No.*
3 : ID#&RECEPT#&RECEPT#	*ID No., Reception No., Accession No.*

◆CL user window (accession reception)



Search key
(This window represents an example when “3:ID#&RECEPT#&RECEPT#” has been selected.)

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8. Select “Save” from the “Config” menu.

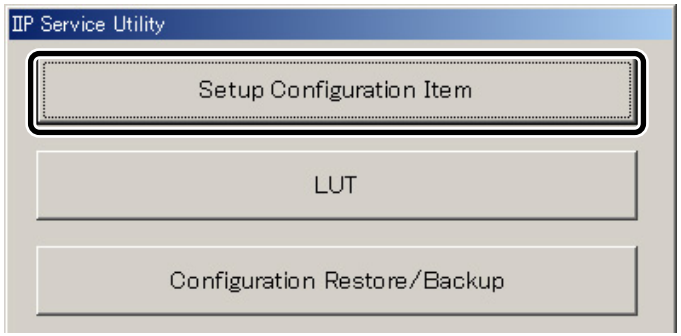
➔ A window opens, prompting you to confirm the setup data to be saved.

9. Click Yes.

➔ The system saves the setup data.

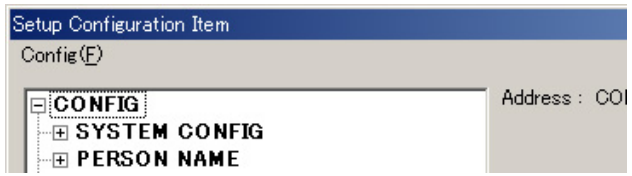
2.4.2 Config Setup IDC4 Connection

1. On the “IIP Service Utility” window, click [Setup Configuration Item].



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➔ The “Setup Configuration Item” window opens.

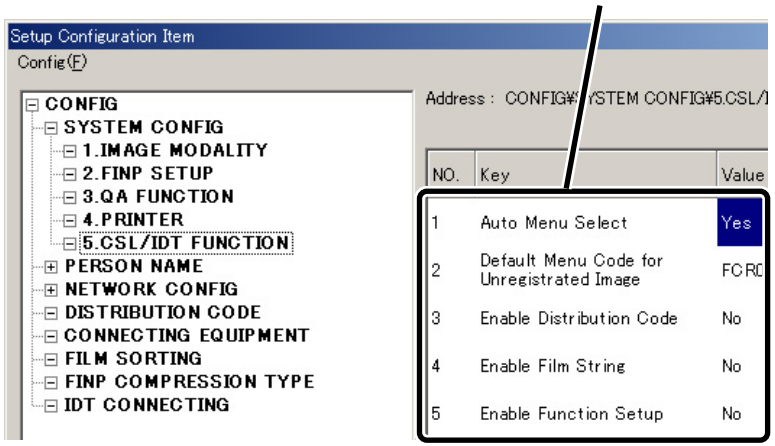


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2. Click 5.CSL/IDT FUNCTION.

➔ The IDT/console function setup items appear in the right-hand area of the window.

IDT/Console function setup items



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3. With 31 ID Online Acquisition Info. Code Setup, select a Latin font code set for ID online connection.

☞ For detailed code set descriptions, see "■ Detailed explanations" in "3.6 Config Details – 5. CSL/IDT FUNCTION", under "MU: Maintenance Utility".

4. When using an extended format as the interface format, change the 33 ID Online Search Key setting to "1. Long".

5. Change the 37 ID Online Type setting to 2:Type-IDC4.

6. With 36 ID Online Search Key, select a key type for search (search key).

◆ *NOTE* ◆

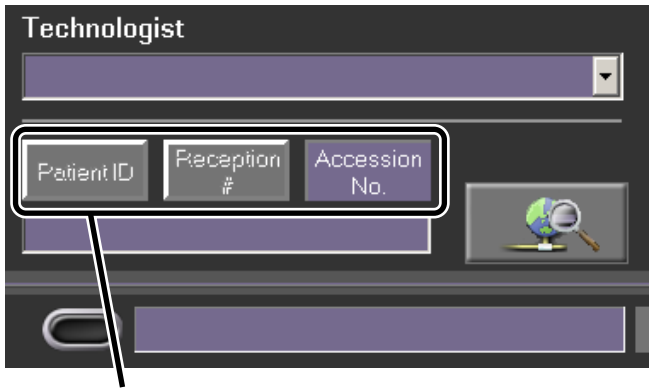
For the Latin font, either DOS Latin1 or WIN Latin1 code set will be used.

For the code set used, follow the settings in step 3.

➥ *REFERENCE*

0 : ID#	*ID No. only*
1 : ID#&RECEPT#	*ID No. and Reception No.*
2 : ID#&EXAM#	*ID No. and Accession No.*
3 : ID#&RECEPT#&RECEPT#	*ID No., Reception No., Accession No.*

◆CL user window (accession reception)



Search key
(This window represents an example when "3:ID#&RECEPT#&RECEPT#" has been selected.)

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7. In the 38 Host Name of RIS Server (Type-IDC4) field, enter the IDC4 host name.

8. In the 39 IP Address of RIS Server (Type-IDC4) field, enter the IDC4 IP address.

9. In the 40 Port Number for RIS Server (Type-IDC4) field, enter the IDC4 port number.

10. From the "Config (F)" menu, choose "Save".

➔ A window opens, prompting you to confirm the setup data to be saved.

11. Click Yes.

➔ The system saves the entered setup data.

2.5 Service Utility Shutdown

1. Select "Close" from the "Config" menu of the "Setup Configuration Item" window.

➔ The system returns to the "IIP Service Utility" window.

2. Click "Exit Service Utility".

➔ The system returns to the desktop screen.

3. Verifying the Connection

Receive patient information from the RIS to verify the CL connection.

3.1 Starting the CL-AP

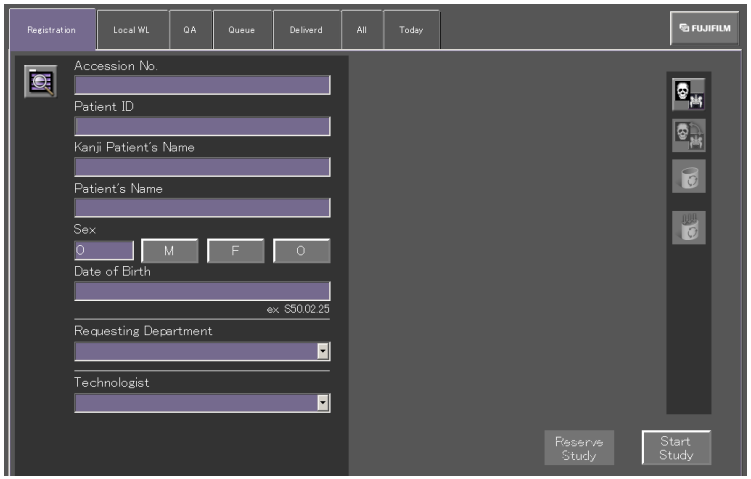
3.2 Patient Information Reception Checkout
■ Type-A setup checkout procedure
■ Type-B/Type-IDC4 setup checkout procedure

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3.1 Starting the CL-AP

1. From the Start menu, sequentially select “Programs”, “Fuji Film”, and then “FCR”.

➔ The CL opening window appears on the display.
After about one minute, the CL-AP reception window opens.



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3.2 Patient Information Reception Checkout

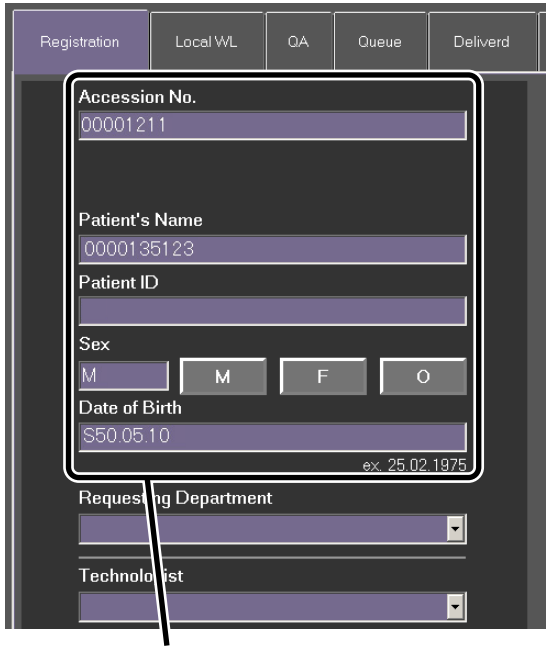
Shown below are the procedures used for connection checkout of Type-A, Type-B and Type-IDC4 interface setups.

■ Type-A setup checkout procedure

1. Enter patient information on the RIS.

➔ The patient information entered will be transferred to the CL automatically.

2. Check to see that the patient information items appear on the CL study registration display.



Patient information transferred from the RIS

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■ Type-B/Type-IDC4 setup checkout procedure

1. **Enter the Accession No. on the CL study registration display and click**  **.**

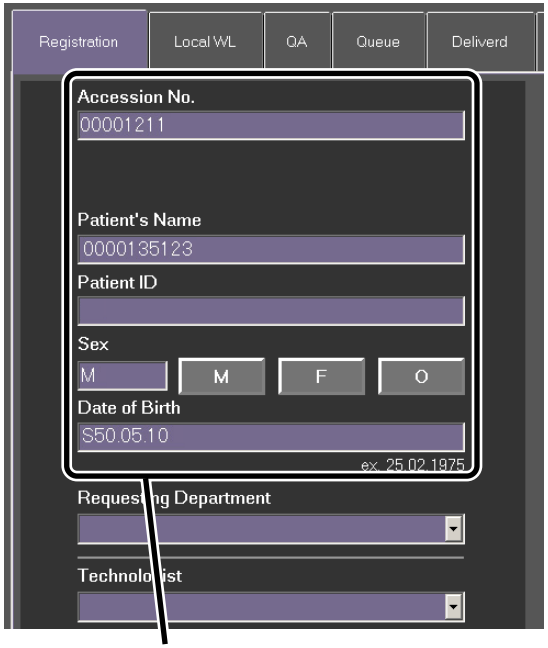


Select the Accession No. key type and enter the Accession No.

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➔ Target patient information will be searched for on the RIS or IDC4.

2. **If patient information that is for the Accession No. entered is detected on the RIS or IDC4, it will appear on the CL study registration display.**



Patient information transferred from the RIS

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◆ *NOTE* ◆

If the target patient information is not found on the RIS or IDC4, a message will appear to indicate that no such information has been registered to the RIS.

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

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CL+RIS (DICOM MWM/DICOM PPS)

This chapter describes the DICOM MWM and DICOM PPS setup procedures.

❍ MWM

Abbreviation of the “Modality Worklist Management” function, which enables the CL to receive via networks patient information or exposure menu registered to the RIS and view it on the study reception window.

The CL offers two kinds of MWM: MWM(ORDER) that receives both patient information and exposure menu and MWM (ID) that receives only patient information.

❍ PPS

Abbreviation of the “Performed Procedure Step” function, which is responsible for sending patient's actual measurement values determined on the CL back to the RIS.

Basically, the PPS function is used combined with MWM. Note however that the RIS does not support the PPS function depending on the model. For this reason, the CL offers the MWM and PPS functions individually.

◆ *NOTE* ◆

The “CR-IR346CL” is abbreviated hereafter simply “CL”.

■ Prior to setup

● CL requirements

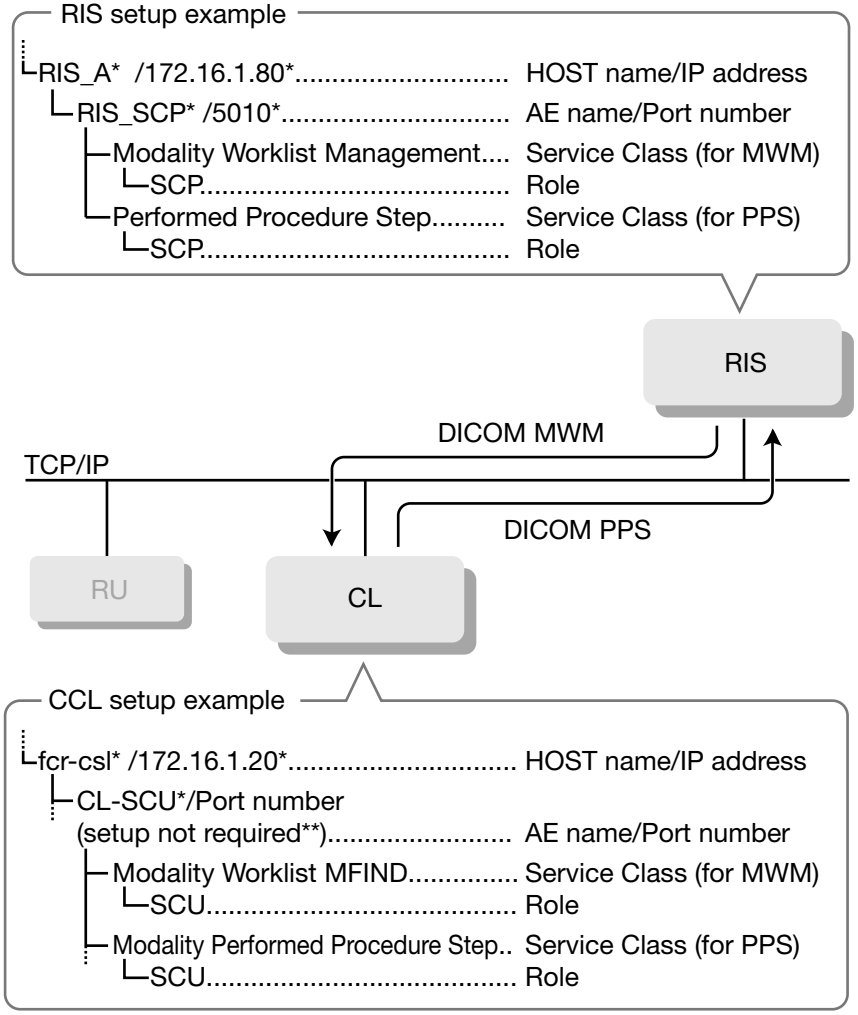
- The CL main unit must have been set up accordingly.
- Software version required: A02 or later.
- The following option keys are needed.

Key Name	Functions Supported
a. CL DICOM ORDER MWM key*	Modality Worklist Management (patient information and exposure menu)
b. CL DICOM ID MWM key*	Modality Worklist Management (only patient information)
c. CL DICOM PPS key	Performed Procedure Step

* Variation

■ Connection/setup examples

The following connection/setup examples are used in this chapter to describe the setup procedure.

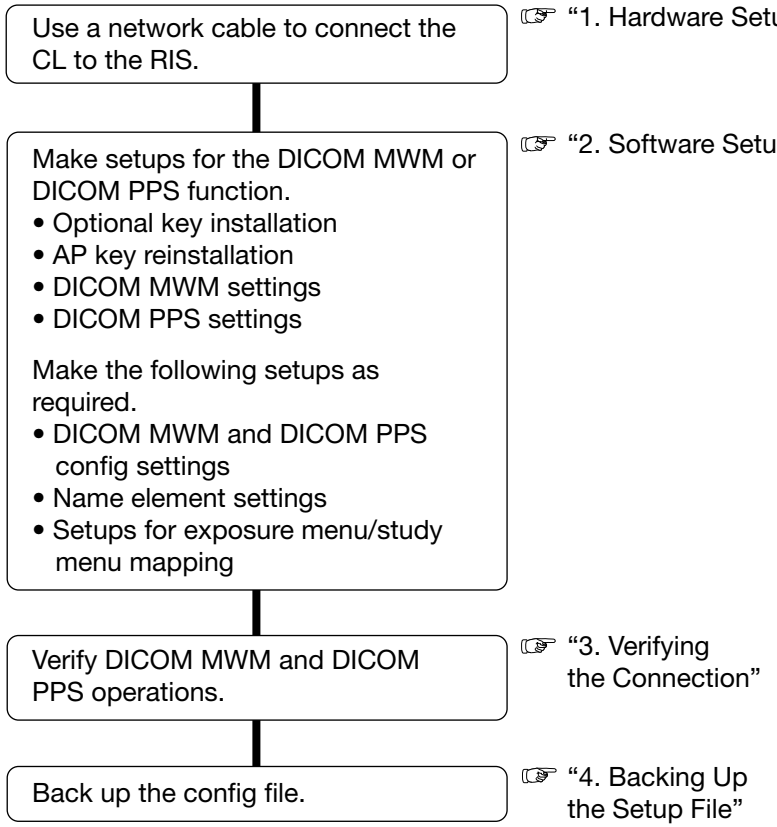


* Setup examples that need be changed depending on the equipment or network environment.

** Port number needs not be set up for the Service Class when the Role is SCU.

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■ Overall operation flow



■ MWM/PPS config setting information [reference]

When performing DICOM MWM or DICOM PPS setup, you might have to perform config setup procedures (IMAGE MODALITY and CSL/IDT FUNCTION) in addition to a normal DICOM connection setup procedure depending on the specifications for the RIS to be connected. Details are given below.

☞ For detailed setup procedure, see "2.5 MWM/PPS Config Setup".

● When the employed RIS does not support the PPS (or makes the PPS inoperative)

Select "No" for IMAGE MODALITY No. 18 (Display Performed Procedure on Worklist Tab). Select "Yes" if the PPS is supported.

When the PPS function is not used, the information about the end of study cannot be returned to the RIS. Therefore, the data about patients who have gone through a study process remains in the CL worklist. This config setting is used to avoid this situation. When "No" is selected as the config setting, the data about patients who have gone through a study process will be deleted from the CL worklist.

● When the employed RIS is manufactured by T company

When T's RIS is used, consult with the hospital administrator to determine whether or not to enable the following config settings.

❍ Setting the method of inquiring at the RIS
The CL acquires patient information in accordance with a trigger signal from the RIS.

❍ Setting the compliance with the JJ1017 guideline in Japan
The following three items of information will be displayed within the exposure menu information sequence.

First information item : Exposure technique (Plain, Contrast, etc.)
Second information item : Exposure region (Head, Chest, etc.)
Third information item : Direction of exposure (Frontal, Lateral, etc.)

- When the employed RIS is capable of inquiring about radiation condition information

  When RIS is capable of inquiring about radiation condition information, additional MWM inquiry items can be set. These items should be enabled or disabled in accordance with actual operations at the hospital.
  The following additional items can be set.

  • Exposure dose sequence
  • Radiation mode
  • X-ray generator tube voltage [kV] to be used
  • X-ray tube current [µA]
  • X-ray exposure time [ms]
  • Label on the filter placed in the X-ray beam
  • X-ray absorption filter material

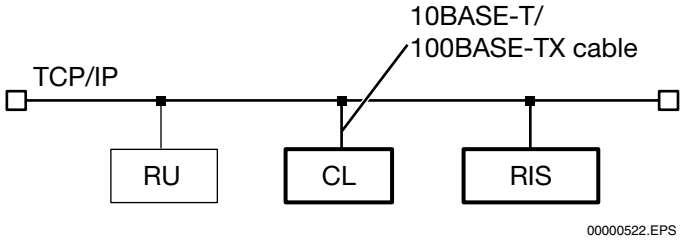
- When the employed RIS is capable of acquiring exposure status information through a private tag

  When the RIS is capable of acquiring exposure status information through a private tag, additional PPS items can be set. These items should be enabled or disabled in accordance with actual operations at the hospital.
  The following additional items can be set.

  • Exposure status sequence
  • Number of split exposures
  • Exposure status

1. Hardware Setup

Connect the CL to the RIS via networks as illustrated below.

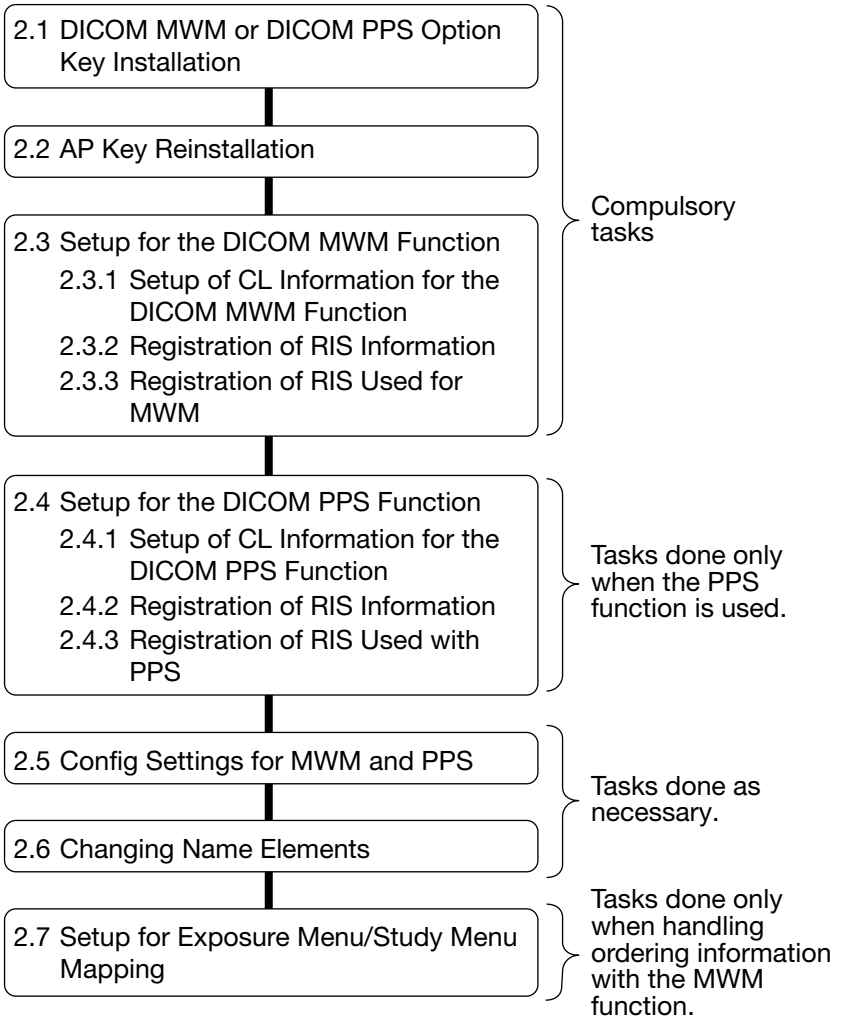


◆ *NOTES* ◆

• Do not connect the telephone line to the CL network connectors.
• The IEC950/UL 1950-conformed cable is available for the CL.

2. Software Setup

Set up software for the CL as follows.



2.1 DICOM MWM or DICOM PPS Option Key Installation

◆ ***NOTE*** ◆

Install either MWM (ORDER) or MWM (ID) option key.

1. **Insert the DICOM MWM option key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of installation.

3. **Click** OK **.**

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM dive.**

5. **When using the DICOM PPS function, insert the optional DICOM PPS key CD to install it following the procedure described in steps 2. to 4. above.**

2.2 AP Key Reinstallation

If an option key is installed, be sure to reinstall the AP key.

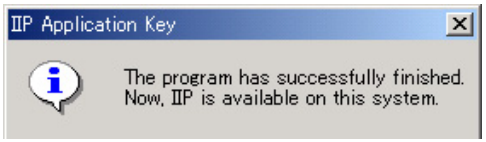
Described below is the procedure to be followed to reinstall the AP key using the AP key CD (114Y5342002A: Version A00 or later).

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.3 Setup for the DICOM MWM Function

Set up CL and RIS information for the DICOM MWM function.

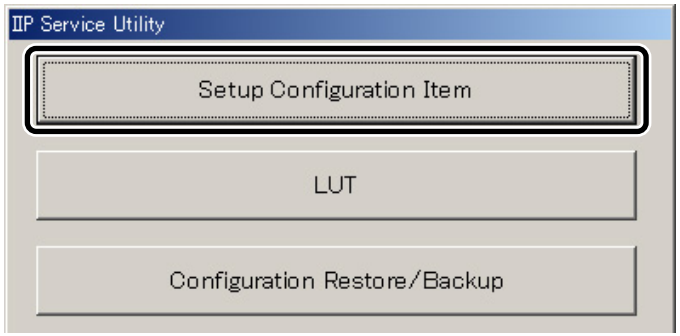
2.3.1 Setup of CL Information for the DICOM MWM Function

The items listed below must be set up following the procedure described herein using “NETWORK CONFIG” and “THIS HOST (IIP)” of Service Utility mode.

- CL’s AE name (Application Entity Name)
- CL’s device attribute (OTHER)
- Service Class and Role
- Other (timeout setting)

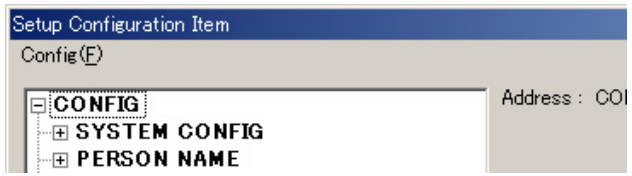
1. **Start Service Utility mode and click [Setup Configuration Item] window.**

☞ For how to start Service Utility mode, see “1. Starting and Quitting Service Utility” under “MU: Maintenance Utility”.



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➔ The “Setup Configuration Item” window opens.



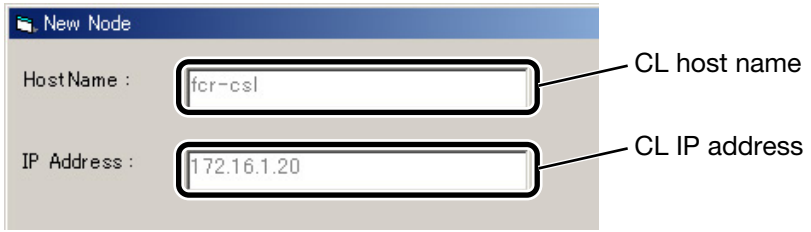
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2. Click the ⊞ mark of the ⊞ NETWORK CONFIG field.

3. Select ⊟ THIS HOST(IP) and click New.

➔ The “New Node” window opens.

4. Make sure that the CL host name and IP address are displayed.

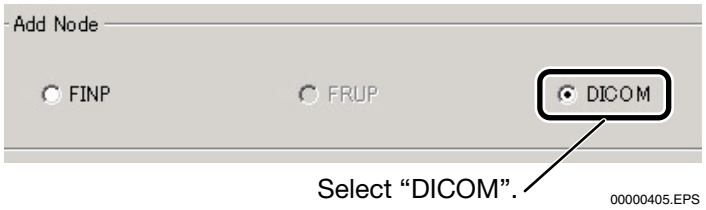


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◆ NOTE ◆

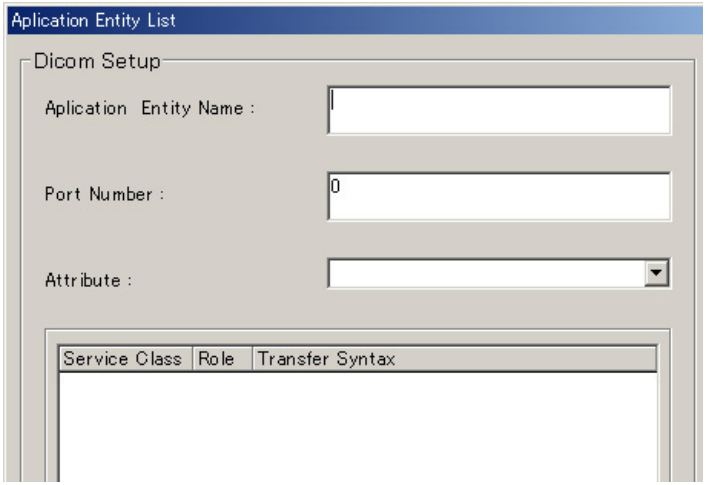
The IP address will not be displayed properly unless the CL is connected to a network.

5. Select “DICOM” and click OK.



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➔ The “Application Entity List” window opens.



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6. Make the following settings.

❍ Enter the AE name (e.g. CL-SCU) that is the SCU for the CL in the Aplication Entity Name : field.

❍ Click downward arrow in the Attribute : field to select device attribute (OTHER).

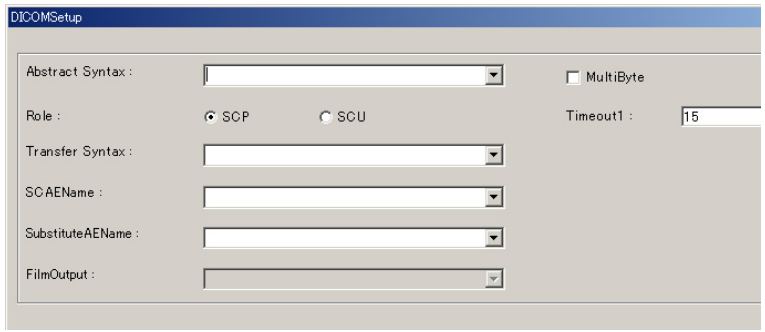
◆ NOTES ◆

- *To set the SCU AE on the CL, select “OTHER” for the device attribute for the time being.*
- *There is no need to set the Port number in the* Port Number : 0 *(Port number) field.*

When selecting SCU as the Role, the Port number will be disregarded even if it is set.

7. Click New.

➔ The “DICOMSetup” window opens.



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8. Click downward arrow in the Abstract Syntax : field to select Service Class (Modality Worklist MFIND).

➥ REFERENCE

“Verification” is the Service Class used to verify connection between DICOM equipment units. For verifying connection, “Verification” must have been set.

☞ *For details of verification of connection, see “7. Verifying the Connection to Other Connected Equipment - Verify Connection” under “MU: Maintenance Utility”.*

9. To set up the AE that is the User, select SCU (SCU) for the Role.

10. Set the DICOM inter-message timeout value Timeout1 : 15 as necessary.

➥ REFERENCE

You need not to check MultiByte.

Even if checked, it will be disregarded if the Role set in step 9, above is the SCU.

11. Click OK.

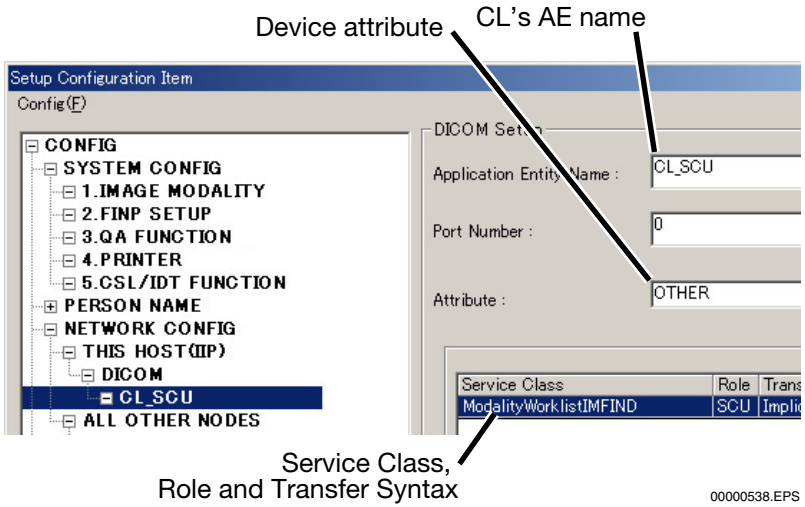
➔ The system return to the “Application Entity List” window.

12. Click OK

➔ The system returns to the “Setup Configuration” window.

➥ REFERENCE

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply.



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- *If the* Delete *key is clicked, currently selected items will be deleted.*

2.3.2 Registration of RIS Information

The items listed below must be registered following the procedure described herein using “NETWORK CONFIG” and “ALL OTHER NODES” of Service Utility mode.

- RIS host name and IP address
- RIS AE name (Application Entity Name) and Port number
- RIS device attribute (OTHER)
- Service Class and Role
- Other (usage of two-byte characters, etc.)

1. Select ⊞ ALL OTHER NODES of the “Setup Configuration Item” window and click New.

➔ The “New Node” window opens.

2. Makes the following settings.

❍ Enter the Host name (e.g. RIS_A) in the Host Name : field.

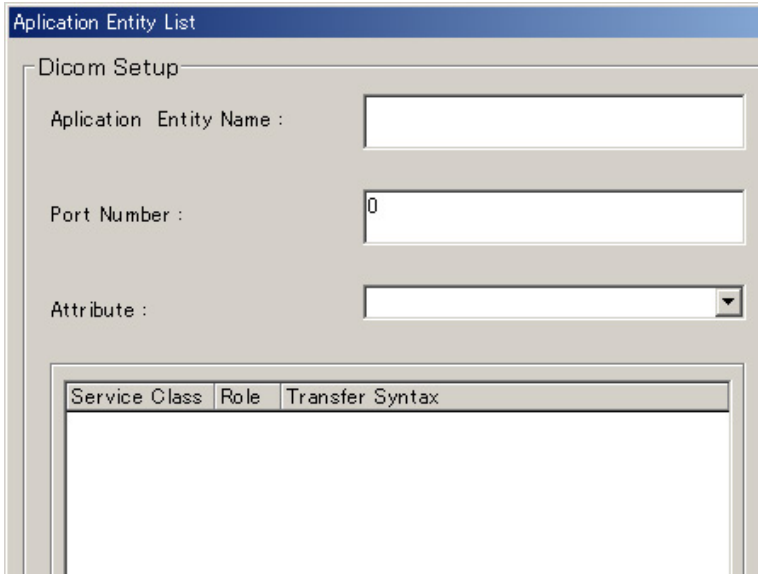
❍ Enter the IP address (e.g. 172.16.1.80) in the IP Address : field.

❍ Select “DICOM”.



3. Click OK.

➔ The “Application Entity List” window opens for setup of RIS information.



4. Make the following settings.

❍ Enter the RIS AE name (e.g. RIS_SCP) in the Aplication Entity Name : field.

◆ ***NOTES*** ◆

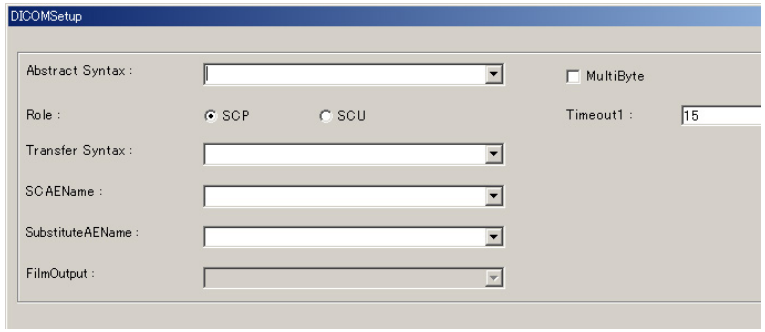
• Never fail to enter the SCP AE name.
• Be sure to enter the upper- or lower-case characters correctly.

❍ Enter the RIS Port number (e.g. 5010) in the Port Number : 0 filed.

❍ Click downward arrow in the Attribute : field to select RIS device attribute (OTHER).

5. Click New.

➔ The "DICOMSetup" window opens.



00000533.EPS

6. Click downward arrow in the Abstract Syntax : field to select Service Class (Modality Worklist MFIND).

7. Because the RIS AE is the Provider, make sure that SCP (SCP) is selected for the Role.

8. To handle two-byte characters, check the MultiByte box (☐ ➔ ☑).

➥ ***REFERENCE***

Timeout1 : 15 *needs not be set. Even if set, it will be disregarded.*

9. Click OK.

➔ The system returns to the "Application Entity List" window.

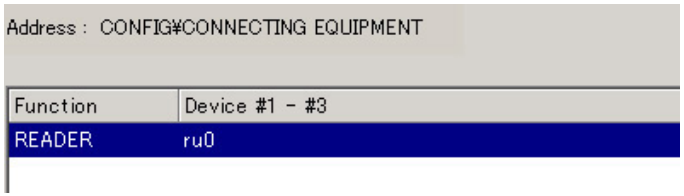
10. Click OK.

➔ The system returns to the "Setup Configuration Item" window.

2.3.3 Registration of RIS Used for MWM

1. Click ⊟ CONNECTING EQUIPMENT of the "Setup Configuration Item" window.

➔ A list of connecting equipment units appears on the right-side area of the window.



00000081.EPS

2. Click New.

➔ The "Connecting Equipment" window opens.

3. Make the following settings.

❍ Click downward arrow in the Function : field to select function (MWM) of the connecting equipment.

❍ Click downward arrow in the Equipment #1 : field to select AE name (e.g. RIS_SCP).

4. Click OK.

➔ The system returns to the "Setup Configuration Item" window.

5. Use the "Config (F)" menu to save the setup data.

2.4 Setup for the DICOM PPS Function

Set up CL and RIS information for the DICOM PPS function.

◆ NOTE ◆

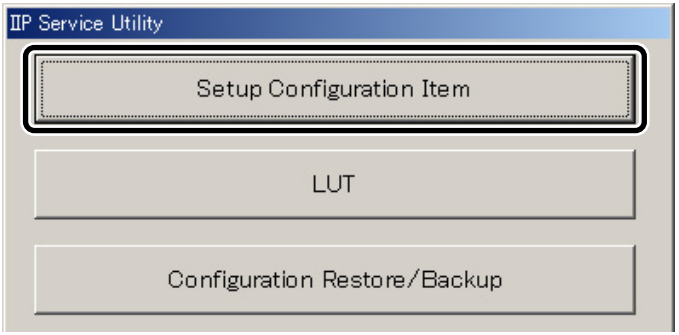
Do not perform settings for the DICOM PPS function if the optional DICOM PPS key has not been installed. Otherwise, an error (30151 or 20110) will occur.

2.4.1 Setup of CL Information for the DICOM PPS Function

Following are the items to be set according to the procedure described herein. Use Service Utility "NETWORK CONFIG" — "THIS HOST (IIP)" for setup purposes.

- CL's AE name and device attribute [Already set in 2.3]
- Service Class and Role
- Other (timeout setting)

1. **Click [Setup Configuration Item] of the "IIP Service Utility" window.**



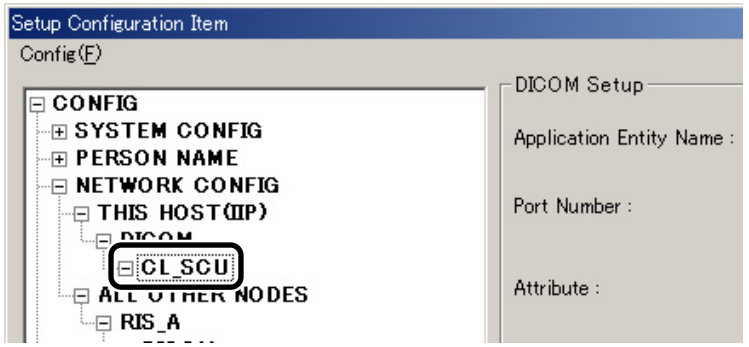
00000131.EPS

➔ The "Setup Configuration Item" window opens.



00000404.EPS

2. **Select NETWORK CONFIG — THIS HOST(IIP) — DICOM — CL_SCU (CL's AE name).**

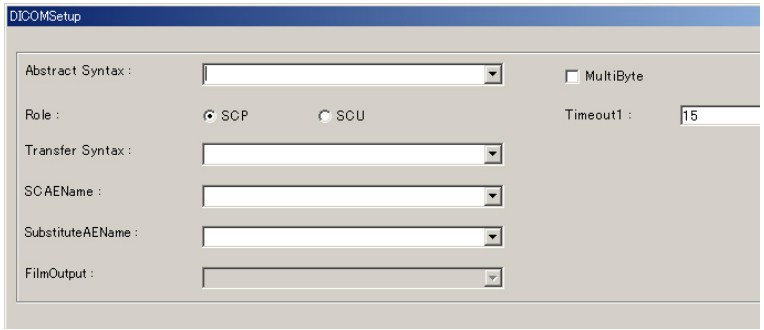


00000539.EPS

➔ The right-hand side of the window will change to the "DICOMSetup" window.

3. **Click** New **.**

➔ The "DICOMSetup" window opens.



00000533.EPS

4. Click downward arrow in the Abstract Syntax : field to select Service Class (Modality Performed Procedure Step).

➥ ***REFERENCE***

"Verification" is the Service Class used to verify connection between DICOM equipment units. For verifying connection, "Verification" must have been set.

☞ *For details of verification of connection, see "7. Verifying the Connection to Other Connected Equipment — Verify Connection" under "MU: Maintenance Utility".*

5. To set up the AE that is the User, select SCU (SCU) for the Role.

➥ ***REFERENCE***

When setting up "SCU", items in the "DICOMSetup" window that need not be set will be hidden.

6. Set the DICOM inter-message timeout value (Timeout1 : 15) as necessary.

➥ ***REFERENCE***

You need not to check MultiByte *.*
Even if checked, it will be disregarded if the Role set in step 5, above is the SCU.

7. Click OK .

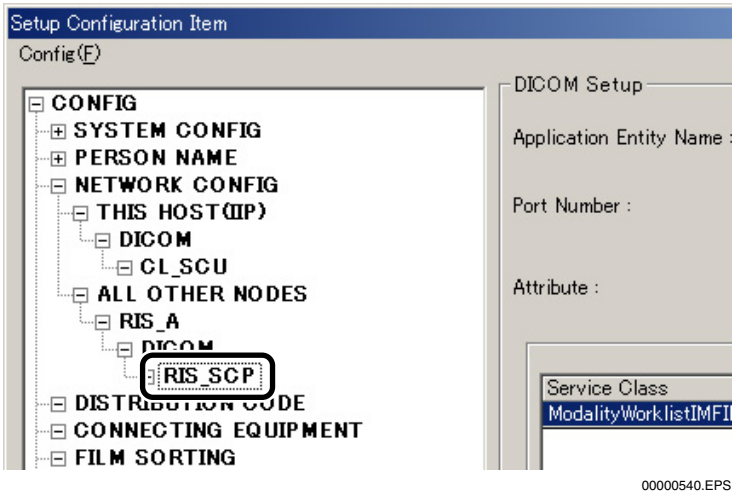
➔ You are returned to the "Setup Configuration Item" window.

2.4.2 Registration of RIS Information

Following are the items to be set according to the procedure described herein. Use Service Utility "NETWORK CONFIG" — "ALL OTHER NODES" for setup purposes.

- RIS host name and IP address [Already set in 2.3]
- RIS AE name, port number and device attribute [Already set in 2.3]
- Service Class and Role
- Other (usage of two-byte characters)

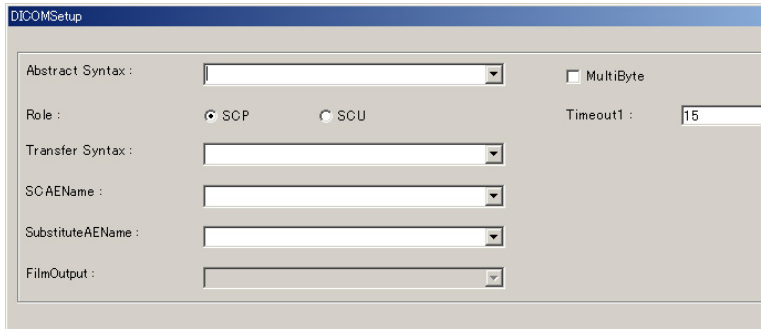
1. Select ⊞ NETWORK CONFIG — ⊞ ALL OTHER NODES — ⊟ RIS_A (RIS host name) — ⊟ DICOM — ⊟ RIS_SCP (RIS AE name) in the "Setup Configuration Item" window.



➔ The right-hand side of the window will change to the "DICOMSetup" window.

2. Click New.

➔ The “DICOMSetup” window opens.



00000533.EPS

3. Click downward arrow in the Abstract Syntax : field to select Service Class (Modality Performed Procedure Step).

4. Make sure that SCP (SCP) has been selected for the Role because the RIS AE is the Provider.

5. To handle two-byte characters, check MultiByte.

➥ ***REFERENCE***

You need not to set Timeout1 : 15 .
Even if set, it will be disregarded.

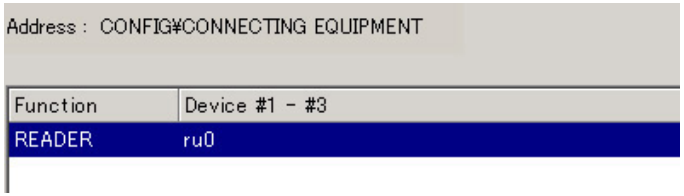
6. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

2.4.3 Registration of RIS Used with PPS

1. Click CONNECTING EQUIPMENT on the “Setup Configuration Item” window.

➔ A list of registered equipment appears in the right-side area of the window.



00000081.EPS

2. Click New.

➔ The “Connection Equipment” window opens.

3. Perform the following setup steps.

❍ Click downward arrow in the Function : field and select the function (PPS) of the connected device.

❍ Click downward arrow in the Equipment #1 : field and select the AE name (e.g.: RIS_SCP).

4. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

5. Use the “Config (F)” menu to save the setup data.

2.5 MWM/PPS Config Setup

Perform the following config setup procedures, which are related to the MWM or PPS.

- General settings for MWM/PPS
- Setting the method of inquiring at the RIS
- Setting the additional MWM inquiry items
- Setting the compliance with the JJ1017 guideline in Japan
- Setting the additional PPS items to be returned to the RIS

2.5.1 General Settings for MWM/PPS

1. **From the "Setup Configuration Item" window, choose ⊟ SYSTEM CONFIG, then ⊟ 1.IMAGE MODALITY.**

➔ The display shows the setup items about CL system information.

2. **Make the following config settings.**

Item number	Config name	Description
16	SOP Class UID for PPS When No FILE Attribute Output	SOP Class UID to be returned to the PPS when the OD_FILE attribute output destination is not registered at the CL.
17	Protocol Name for PPS	Value to be set for the protocol name of the PPS.
18	Display Performed Procedure on Worklist Tab	This item is used to specify whether the CL worklist should display completed studies. Even if the MWM sends information about completed studies, they will not be displayed when "No" is selected as the setting. Select "No" when the PPS function cannot be used.

OE000073.EPS

3. **Choose ⊟ SYSTEM CONFIG, then 5.CSL/IDT FUNCTION.**

➔ Setups items related with the IDT functions appear on the right-hand side of the window.

4. **Make the following config settings.**

Item number	Config name	Description
15	Examination No. Length (Character string length of the examination no.)	These items are used to change the character string length in accordance with RIS settings.
17	Patient ID Length (Character string length of the patient ID)	
22	Requesting Dept Name Field Setup (Setups for the menu contents to be displayed in the Requesting Department field.)	This item selects Sbcs or Dbcs in accordance with RIS settings.

OE000083.EPS

5. **Use the "Config" menu to save the edited data.**

2.5.2 Setting the Method of Inquiring at the RIS

■ Function overview

There are the following three methods of making patient information inquiries at the RIS.

- Trigger signal from the RIS
- Update procedure to be performed at the CL - 1
- Update procedure to be performed at the CL - 2

● Trigger signal from the RIS

When the CL receives a trigger signal from the RIS, the CL makes inquires at the RIS to acquire patient information. An automatic transition occurs to switch from the worklist tab window to the study start window only when one piece of study information is acquired.

◆ *NOTES* ◆

- *Trigger signal setup is to be performed only when the connection to T company's equipment is established.*
- *When two or more pieces of study information are received at a time, the display does not automatically switch to the study start window but the study information remains within the worklist tab.*
- *The RIS trigger signal is accepted only when the CL's worklist tab is selected. If the RIS transmits the trigger signal while a tab other than the worklist tab is selected, a timeout occurs at the RIS.*

● Update procedure to be performed at the CL - 1

A procedure is performed at the CL to acquire information that is registered at the RIS. Inquiries can be automatically made at fixed intervals (user-selectable).

● Update procedure to be performed at the CL - 2

A procedure is performed at the CL to acquire information that is registered at the RIS. Inquiries can be automatically made at fixed intervals (user-selectable). An automatic transition occurs to switch from the worklist tab window to the study start window only when one piece of study information is acquired.

■ Setup procedure

1. From the "Setup Configuration Item" window, choose ⊟ SYSTEM CONFIG, then 5.CSL/IDT FUNCTION.

➔ The display shows the setup items about CL system information.

2. With config item No. 66, select an inquiry method, and then set RIS information for items No. 64 and 65.

Item number	Config name	Description
64	MWM RIS Trigger Port	RIS trigger reception port number for MWM use. Enter a numerical value in accordance with the RIS trigger reception port.
65	MWM RIS Trigger Timeout	RIS trigger reception timeout value (sec) for MWM use.
66	MWM Execute Study Type	Study start method for MWM use. Select a method in accordance with the RIS specifications and actual hospital operations. 0: Manual (default) Update procedure to be performed at the CL. 1: Trigger RIS trigger signal. 2: Auto Update procedure to be performed at the CL (automatic window transition).

OE000074.EPS

3. Use the "Config" menu to save the edited data.

2.5.3 Setting Additional MWM Inquiry Items

■ Function overview

As MWM inquiry items, the following information about radiation conditions can be added. When the PPS is supported, the same information as listed below will be returned to the RIS.

Description	DICOM Tag	Meaning
Exposure Dose Sequence	0040,030E	Exposure dose sequence.
>Radiation Mode	0018,115A	Radiation mode.
>KVp	0018,0060	X-ray generator tube voltage [kV] to be used.
>X-ray Tube Current in µA	0018,8151	X-ray tube current [µA].
>Exposure Time	0018,1150	X-ray exposure time [ms].
>Filter Type	0018,1160	Label on the filter placed in the X-ray beam.
>Filter Material	0018,7050	X-ray absorption filter material.

OE000075.EPS

■ Setup procedure

1. From the "Setup Configuration Item" window, choose ⊟ SYSTEM CONFIG, then 5.CSL/IDT FUNCTION.
   ➔ The display shows the setup items about CL system information.

2. Select "Yes" for the following config setting.

Item number	Config name	Description
67	MWM Request Exposure Dose Status	This item specifies whether or not to inquire about X-ray radiation information at the RIS. Yes : Makes inquiries. No (default) : Does not make inquiries.

OE000076.EPS

3. Use the "Config" menu to save the edited data.

2.5.4 Setting the Compliance with the JJ1017 Guideline

■ Function overview

When JJ1017 compliance setup is performed, the following three items of information are used within the exposure menu information sequence to decide on the exposure menu.

First information item : Exposure technique (Plain, Contrast, etc.)
Second information item : Exposure region (Head, Chest, etc.)
Third information item : Direction of exposure (Frontal, Lateral, etc.)

◆ *NOTE* ◆

Setup is to be performed only for the connection to the equipment manufactured by T company.

➥ *REFERENCE*

At the CL, three values of the codes [(0040,0008)>(0008,0100)] fed from the RIS are sequentially concatenated and used as an extended menu code. If, for instance, three menus are fed, a total of nine codes exist. Sets of three items of information are sequentially concatenated, beginning with the leading one, and used as an extended menu code.

■ Setup procedure

1. From the "Setup Configuration Item" window, choose ⊟ SYSTEM CONFIG, then 5.CSL/IDT FUNCTION.
   ➔ The display shows the setup items about CL system information.

2. Select "1: JJ1017" for the following config setting.

Item number	Config name	Description
68	MWM Exposure Menu Code Treatment	Exposure menu code system for MWM use. This item is used to specify the setting in accordance with the RIS specifications. 0: Normal (default) 1: JJ1017

OE000077.EPS

3. Use the "Config" menu to save the edited data.

2.5.5 Setting the Additional PPS Items to be Returned to the RIS

■ Function overview

The information about exposure status can be added as the PPS information to be returned to the RIS.
A private tag is used to return the information.

Description	DICOM Tag	Meaning
Exposure Status Sequence	0019,XXA1	Exposure status sequence.
>Division Count	>0019,XX71	Number of split exposures.
>Exposure Status	>0019,XXA1	Exposure status (NORMAL: Normal exposure; MISS: Improperly exposed image).
>Exposure Kind	>0019,XXA2	Exposure kind (NORMAL: Normal; ADD: Additional; AGAIN: Reexposure).

OE000080.EPS

■ Setup procedure

1. From the “Setup Configuration Item” window, choose ⊟ SYSTEM CONFIG, then 5.CSL/IDT FUNCTION.
   ➔ The display shows the setup items about CL system information.

2. Select “Yes” for the following config setting.

Item number	Config name	Description
76	PPS Exposure Status Sequence	Specifies whether the PPS should use a private tag to return the information about exposure status (improperly exposed image, reexposure, etc.). Yes : Returns the information about exposure status. No (default) : Does not return the information about exposure status.

OE000081.EPS

3. Use the “Config” menu to save the edited data.

2.6 Changing Name Elements

☞ See “3.7 Setting Name Elements When DICOM is Connected” under “MU: Maintenance Utility”.

2.7 Setup for Exposure Menu/Study Menu Mapping

■ Tag mapping

When transmitting order information to the CL for MWM purposes, it is necessary to standardize the exposure and study menu tag information for the RIS and CL.

More specifically, you must complete the following steps.

- Verify the DICOM tag number that contains RIS ordering information.
- Ensure that the RIS ordering information and CL exposure menu/ study menu agree in extended menu codes (this can be accomplished by rewriting the menu codes as needed with the CL’s user utility).

➥ *REFERENCE*

The CL performs exposure menu mapping in accordance with a tag number (0040,0008)>(0008,0100) transmitted from the RIS. Study menu mapping is performed when no exposure menu tag number is transmitted from the RIS.

The study menu mapping tag numbers transmitted from the RIS vary from one RIS manufacturer to another. Therefore, Service Utility must be used to set such tag numbers for the CL.
Service Utility’s initial setting is (0040,0100)>(0040,0007).

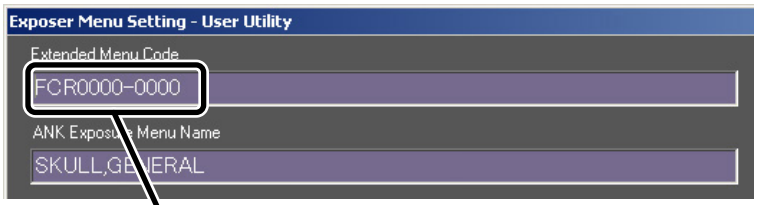
For most of the RIS manufacturers in Japan, the initial setting (0040,0100)>(0040,0007) can be used as is. For most of overseas RIS manufacturers, however, the initial setting needs to be changed.

☞ *For details on setup, see under “■ Tag mapping config setup”.*

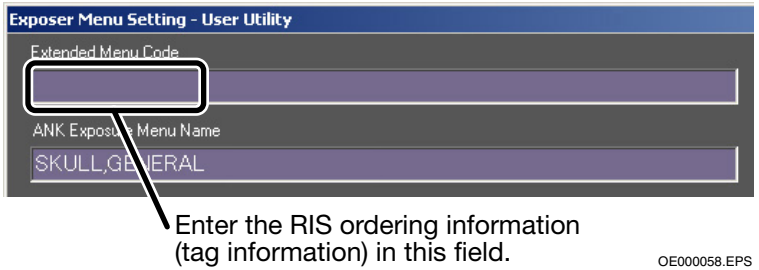
The following examples describe the procedures for mapping the exposure menu or study menu defined by the RIS.

❍ Exposure menu

Ensure that the ordering information defined by the DICOM tag ((0040,0008)>(0008,0100)) of the RIS agrees with the extended menu code of CL exposure menu.

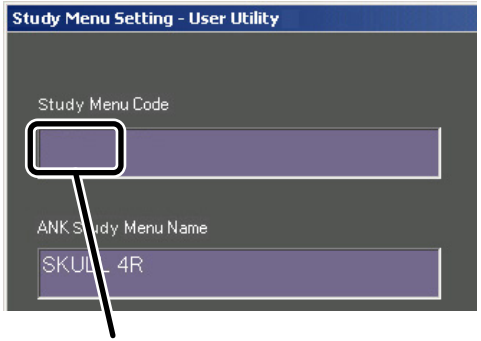


If the menu defined by the RIS is not registered in the CL, create a new exposure menu and then enter the RIS ordering information related to the exposure menu into the CL extended menu code field.



❍ Study menu

Since no study menu is registered in the CL, create a new study menu and then enter the RIS ordering information related to the study menu.



Enter the RIS ordering information (tag information) in this field. OE000057.EPS

➥ *REFERENCE*

The actual tag information (indicating whether mapping is properly completed) exchanged between the RIS and CL can be confirmed by viewing the log files that are generated when the DICOM Log Mode is enabled.

☞ *For details on the DICOM Log Mode, see "FR4: Using the DICOM Log Mode" under "FR: Function-specific Reference".*

■ Tag mapping config setup

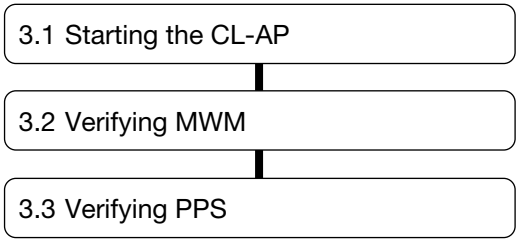
Set the following configuration data (IMAGE MODALITY) as needed:

Item number	Config name	Description
23	Tag Mapped on Study Menu at MWM Use	DICOM-defined tag numbers to be mapped onto a study menu. The default setups are 0040, 0100>0040 and 0007.
24	Perform Mapping to Exposure Menu at MWM Use	Specifies whether or not to perform study menu/exposure menu mapping. If "No" is selected, only the patient information will be used to initiate a study process. The default setup is to perform mapping.
25	Display Dialog When Failed in Mapping to Menu at MWM Use	Specifies whether or not to open a warning window when mapping is not successfully performed for a CL study menu or exposure menu. The default is to open a warning window.

OE000040.EPS

3. Verifying the Connection

After the CL-AP has been started up, verify MWM and PPS operations.

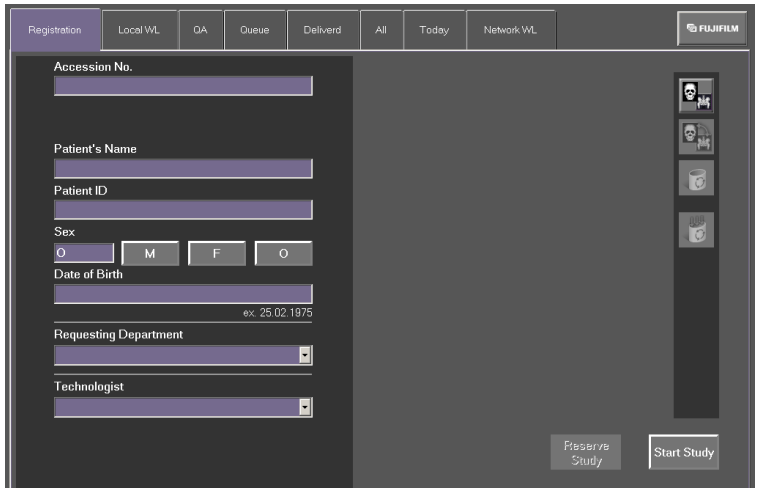


00000530.EPS

3.1 Starting the CL-AP

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window opens.
After about one minute, the CL-AP reception window opens.



OE000016.EPS

3.2 Verifying MWM

Check to see that the patient information registered to the RIS appears in the MWM worklist.

Patient information registered to the RIS appears here.



OE000015.EPS

3.3 Verifying PPS

Make sure that the patient information of the study completed has been sent back to the RIS.

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand.

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+Archiver (Storage Commitment Push)

This chapter describes the setup procedure for the Storage Commitment Push function on images to be transferred using DICOM CR Storage (Standard).

The DICOM Commitment Push function is to assure that images transferred have been stored in the archiver.

Images stored in the CL will not be deleted before a message comes from the archiver indicating that it has stored them accordingly.

◆ *NOTE* ◆

The "CR-IR346CL" will be abbreviated hereinafter simply "CL".

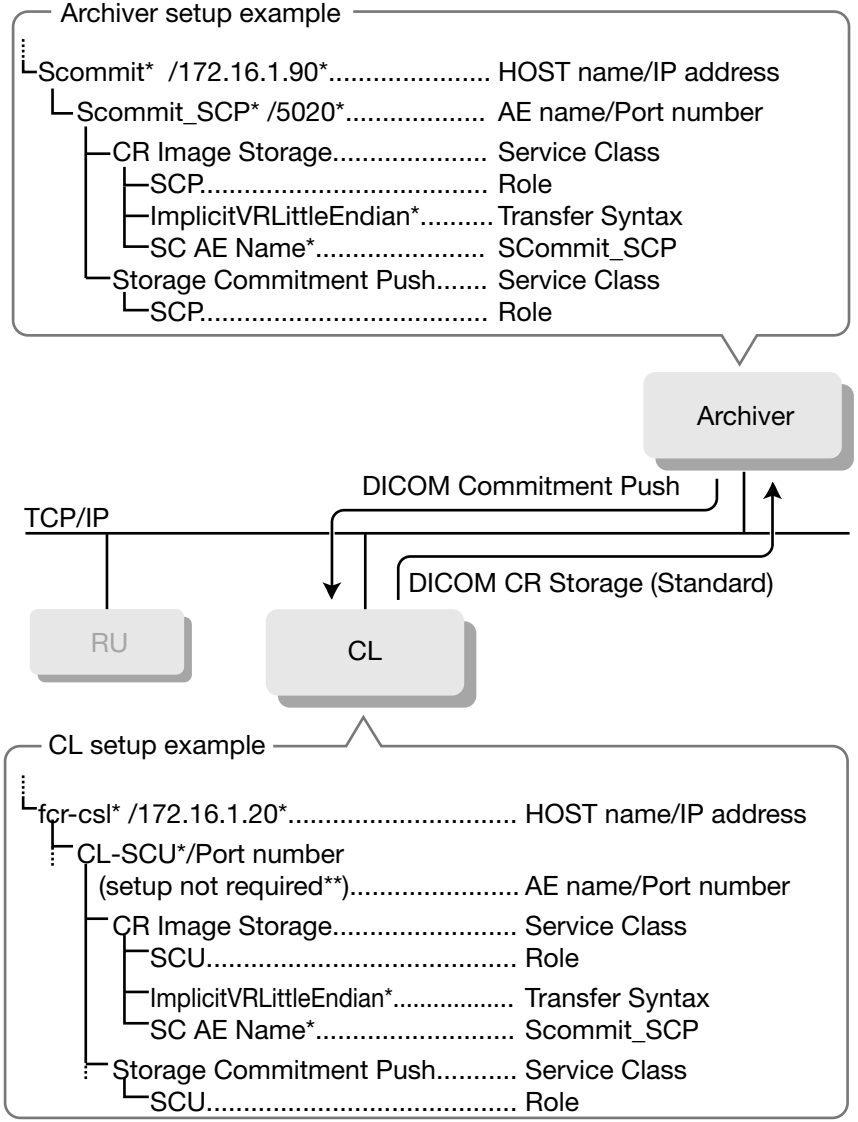
■ Prior to setup

- CL requirements
  - The CL main unit must have been set up.
  - Software version required: A01 or later.
  - Install the option key below.

Key Name	Functions Supported
IR346 DICOM COMMITMENT key	CR Storage SCU Standard Storage Commitment Push

■ Connection/setup example

This chapter describes the setup procedure using the connection/setup examples shown below.

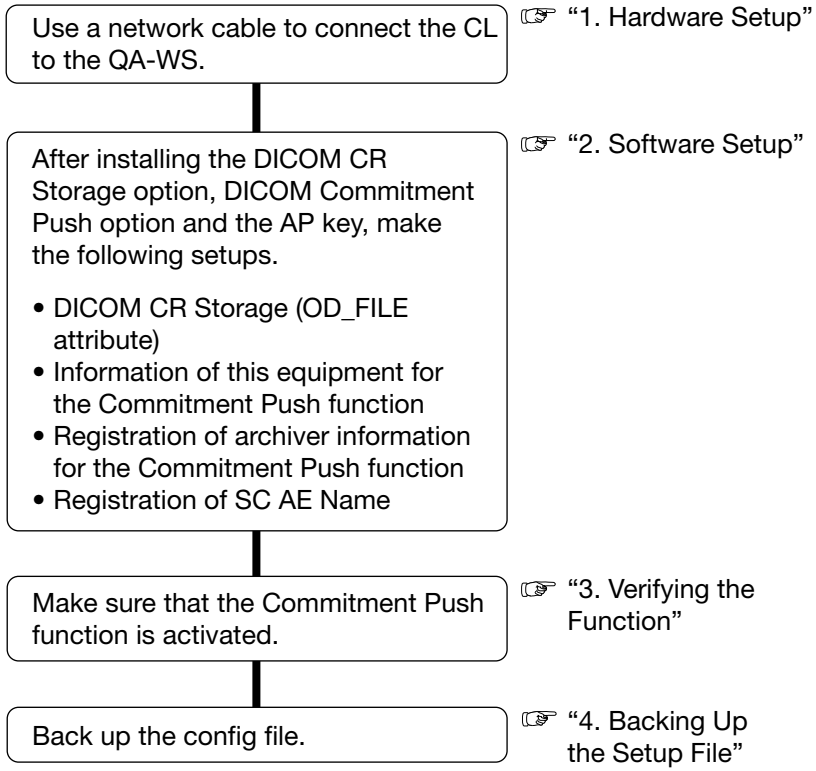


* Setup examples that need be changed depending on the equipment or network environment.

** Port number needs not be set up for the Service Class when the Role is SCU.

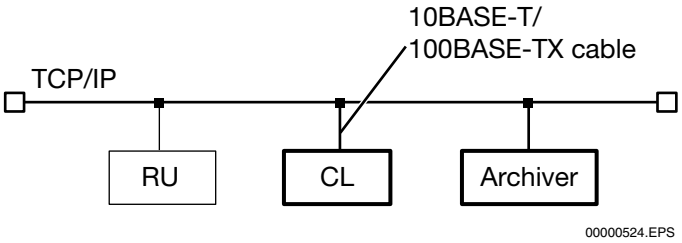
00000523.EPS

■ Overall operation flow



1. Hardware Setup

Connect the CL to the archiver via networks, as illustrated below.

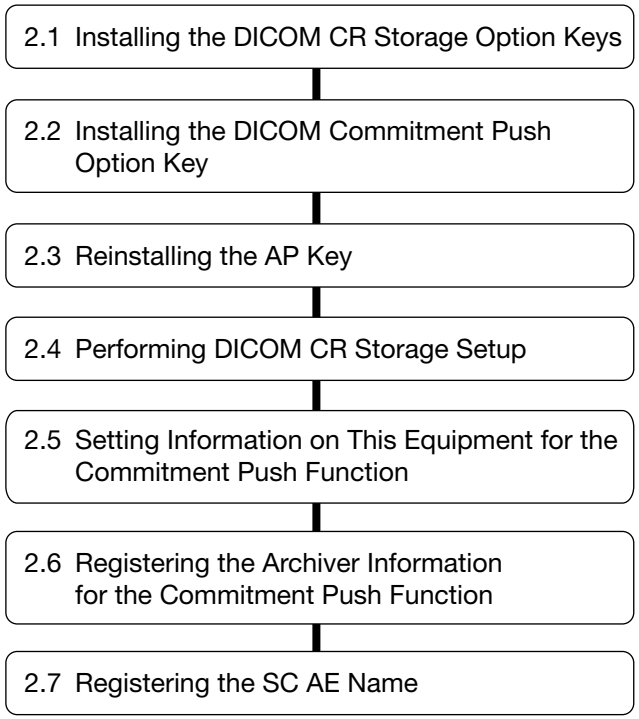


◆ *NOTES* ◆

- *Do not connect the telephone line to the CL network connectors.*
- *The IEC950/UL 1950-conformed cable is available for the CL.*

2. Software Setup

Set up the CL software by performing the following steps:



00000542.EPS

2.1 Installing the DICOM CR Storage Option Keys

◆ NOTE ◆

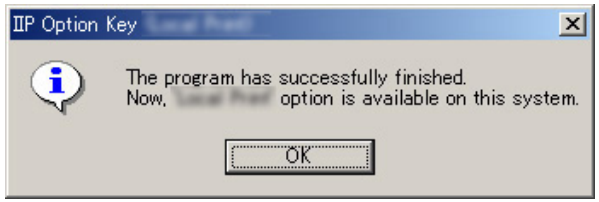
Before installing the DICOM Commitment Push option key, install the DICOM CR Storage option keys.

1. **Insert the option key CD into the CD-ROM drive.**

➔ After several seconds, the installation start window automatically opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of installation.



00000085.EPS

3. **Click** OK **.**

➔ The installation start window opens again.

4. **In the same manner as indicated in steps 2 and 3, click** Continue **and then click** OK **.**

➔ You are then returned to the desktop screen.

5. **Remove the CD from the CD-ROM drive.**

➥ REFERENCE

The DICOM CR Storage option key CD stores two keys (Standard and Private). That is why the installation start window opens twice.

2.2 Installing the DICOM Commitment Push Option Key

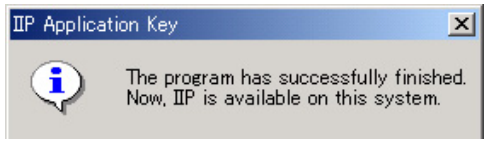
1. **Insert the option key CD into the CD-ROM drive.**
   ➔ After several seconds, the installation start window automatically opens.
2. **Click** Continue.
   ➔ A window opens to indicate the completion of installation.
3. **Click** OK.
   ➔ The installation start window opens again.
4. **Remove the CD from the CD-ROM drive.**

2.3 Reinstalling the AP Key

After option key installation, be sure to reinstall the AP key.

Use the AP key CD (114Y5342002A, Version A01 or later) to reinstall the AP key. The procedure is described below:

1. **Insert the AP key CD into the CD-ROM drive.**
   ➔ After a while, the installation start window automatically opens.
2. **Click** Continue.
   ➔ A window opens to indicate the completion of installation.



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3. **Click** OK.
   ➔ The system returns to the desktop screen.
4. **Remove the CD from the CD-ROM drive.**

2.4 Performing DICOM CR Storage Setup

◆ *NOTE* ◆

Before using Storage Commitment Push, complete DICOM CR Storage setup for the archiver.

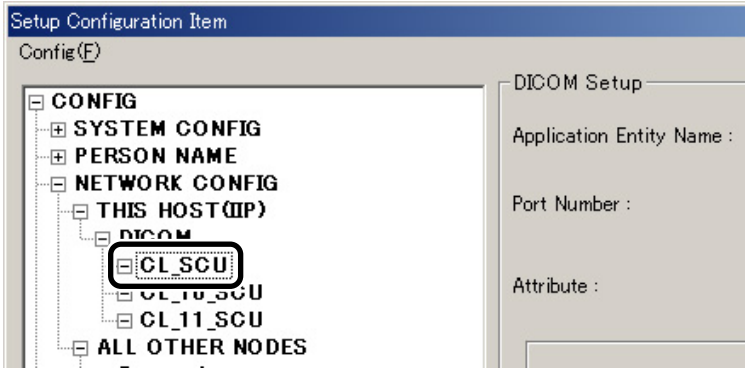
☞ For details on DICOM CR Storage setup, see “2.1.4 Setup for Information on This Equipment for the DICOM CR Storage Function”, and subsequent sections under “CL + HI-C655/QA-WS (DICOM CR Storage)” in “Connecting the CL to Other Equipment (OE3)”.

2.5 Setting Information on This Equipment for the Commitment Push Function

The following information items are to be set up by performing the procedure described in this section. This setup is performed in relation to the application entity on this equipment that is defined as directed in 2.4.

- Service Class, Role, and Transfer Syntax
- Other (timeout setting, etc.)

1. **On the “Setup Configuration Item” window, sequentially choose ⊞ NETWORK CONFIG, ⊟ THIS HOST(IP), ⊟ DICOM and ⊟ CL_SCU (DICOM CR Storage AE name).**

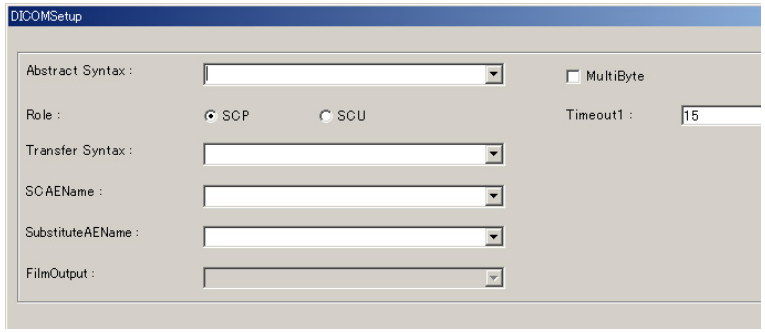


00000543.EPS

➔ The “DICOM Setup” window opens within the right-hand area of the current window.

2. Click New (positioned slightly below the center of the window).

➔ The “DICOMSetup” window opens.



00000533.EPS

3. Click the downward arrow mark for the Abstract Syntax : field and select “Service Class (StorageCommitmentPush)”.

4. Since the AE for “User” is to be set, choose SCU as the Role.

5. Adjust the Timeout1 : 15 setting (timeout value for the intervals between DICOM messages) as needed.

➥ REFERENCE

You do not have to check MultiByte .
Even if it is checked, it will be disregarded even if “SCU” is chosen as the Role in step 4 above.

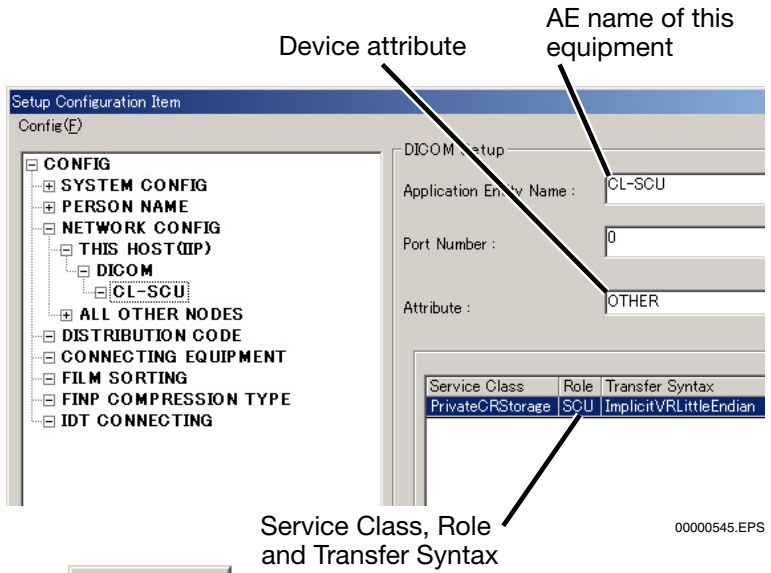
6. Click OK .

➔ You are then returned to the "Setup Configuration Item" window.

7. With the “Config (F)” menu, save the entered setup data.

➥ REFERENCE

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply .



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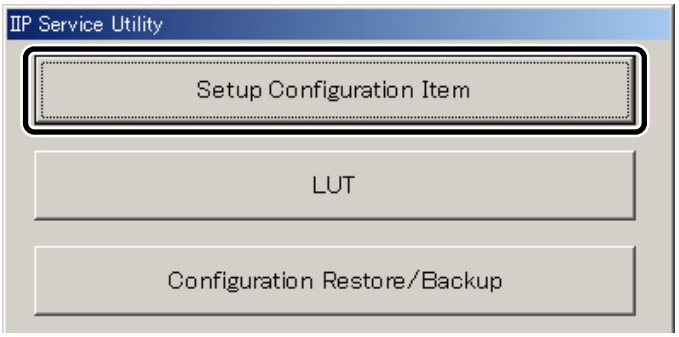
- *If the* Delete *key is clicked, currently selected items will be deleted.*

2.6 Registering the Archiver Information for the Commitment Push Function

The following information items are to be set up by performing the procedure described in this section. This setup is performed in relation to the archiver's application entity that is defined as directed in 2.4.

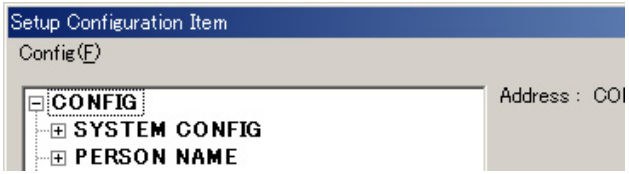
- Service Class, Role, and Transfer Syntax
- Other (2-byte character handling, setting for conversion from HQ images to standard images, etc.)

1. **On the "IIP Service Utility" window, click [Setup Configuration Item].**



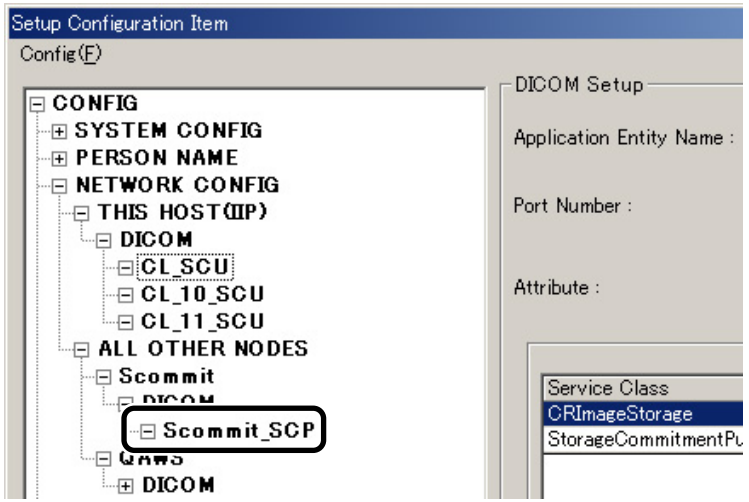
00000131.EPS

➔ The "Setup Configuration Item" window opens.



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2. **Sequentially choose [⊞ NETWORK CONFIG], [⊞ ALL OTHER NODES], [⊟ Scommit] (archiver's host name), [⊟ DICOM] and [⊟ Scommit_SCP] (AE name for DICOM CR Storage).**

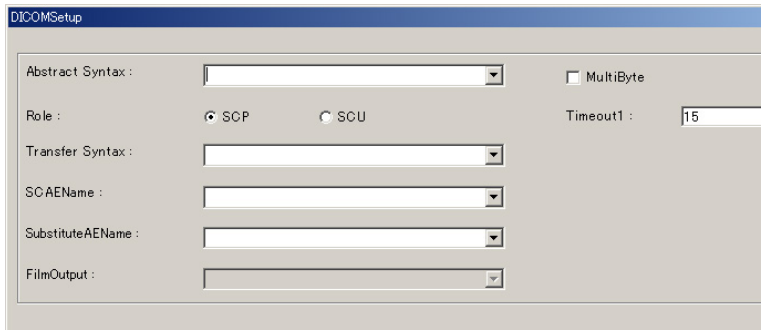


00000544.EPS

➔ The "DICOM Setup" window appears within the right-hand area of the current window.

3. Click New (positioned slightly below the center of the window).

➔ The “DICOMSetup” window opens.



00000533.EPS

4. Click the downward arrow mark ( ) for the Abstract Syntax : field and select “Service Class (StorageCommitmentPush)”.

5. Since the AE of the connected equipment is “Provider”, verify that SCP is chosen as the Role.

6. When handling 2-byte characters, check MultiByte (☐ ➔ ☑).

7. Enter an appropriate value in the Timeout1 : 15 field. Association control varies with the entered value as summarized below:

- **When value 0 is entered:**
  Uses an association other than that transmitted from the CL to wait for the connected equipment’s response.
- **When a value other than 0 is entered:**
  Uses the association transmitted from the CL to wait for the connected equipment’s response before the entered time elapses. After the entered time has elapsed, however, another association is used to wait for the connected equipment’s response.

8. Click OK.

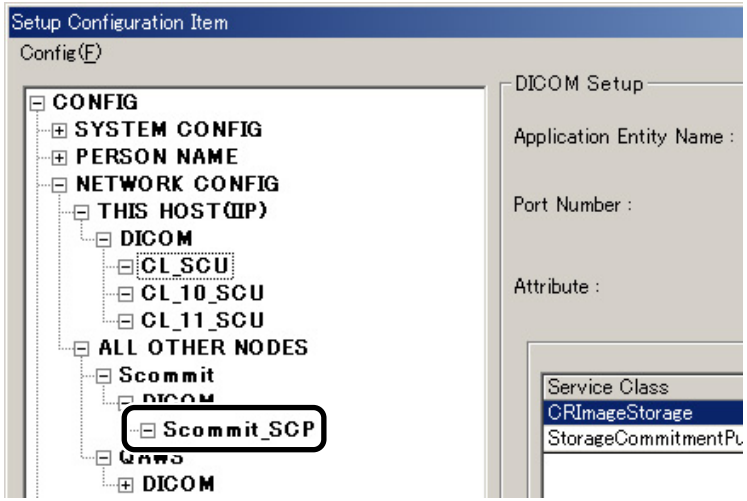
➔ You are then returned to the “Setup Configuration Item” window.

9. With the “Config (F)” menu, save the entered setup data.

2.7 Registering the SC AE Name

Perform the following procedure to register DICOM CR Storage (OD attribute) as the target of Commitment Push.

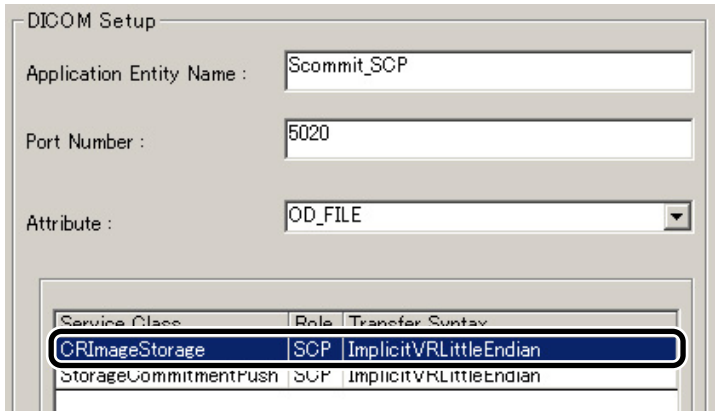
1. On the “Setup Configuration Item” window, sequentially choose ⊞ NETWORK CONFIG, ⊞ ALL OTHER NODES, ⊟ Scommit (archiver’s host name), ⊟ DICOM and ⊟ Scommit_SCP (AE name of DICOM CR Storage).



00000544.EPS

➔ The “DICOM Setup” window opens within the right-hand area of the current window.

2. From the list in the lower right corner of the window, select “CR Image Storage” for the Service Class and then click Modify.



00000548.EPS

➔ The “DICOMSetup” window opens.

3. Click the downward arrow mark (▼) for the SCAEName : field and select the AE name of Commitment Push for the archiver (e.g.: Scommit_SCP).

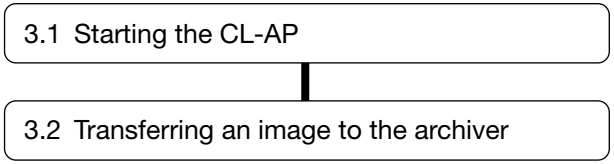
4. Click OK.

➔ You are then returned to the “Setup Configuration Item” window.

5. Use the “Config (F)” menu to save the entered setup data.

3. Verifying the Function

Perform the following steps to start the CL-AP to verify Commitment Push function:

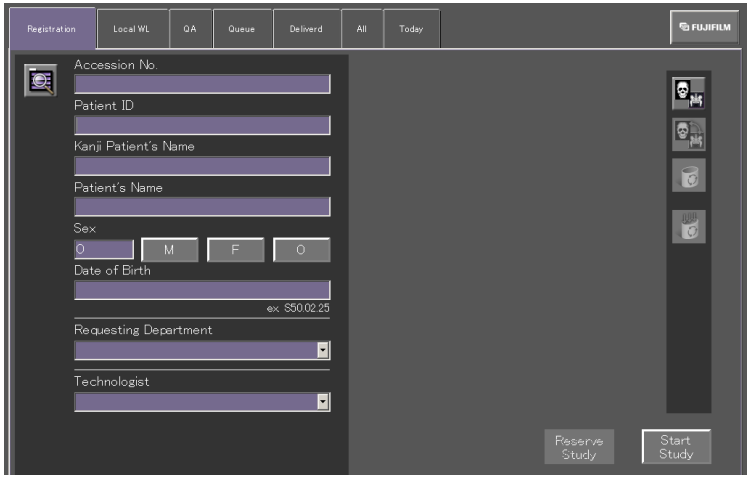


00000546.EPS

3.1 Starting the CL-AP

1. **From the Start menu, choose “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window appears on the display.
After about one minute, the CL-AP reception window opens.



OE000017.EPS

3.2 Transferring an Image to the Archiver

Perform the following steps to transfer an image stored in the CL to the archiver and verify that the Commitment Push function properly works.

1. **Select the image to be transferred, and then transfer it to the archiver.**

2. **Check whether the CL displays a message to indicate the image has been stored in the archiver device.**

Also, perform a deletion procedure in relation to an image that is not transferred to the archiver to verify that the image remains undeleted.

☞ For detailed descriptions of the image transfer and image deletion procedures, see the CL Operation Manual.

4. Backing Up the Setup File

Back up the CL setup file.

For backup, furnish the following items:

- Two DOS/V-formatted FDs.

☞ For details of the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+QA-WS (Transfer of Energy Subtraction Images)

Described herein is the procedure used when transferring energy subtraction (“ES” hereinafter) images to the QA-WS.
To transfer ES images, the two Application Entities, one for the transfer of raw data (unstandardized images) and the other for the transfer of standardized images, must be set up.

◆ ***NOTE*** ◆

ES images can be transferred only via DICOM, and not via FINP.

◆ ***NOTE*** ◆

The “CR-IR348CL” is abbreviated hereinafter simply “CL”.

➥ ***REFERENCE***

The ES image consists of the following four types.
• Low-pressure image (L image)
• High-pressure image (H image)
• Bone image (B image)
• Soft tissue image (S image)

The low-pressure and high-pressure images are raw data (unstandardized images).
The bone and soft tissue images are standardized images generated from low-pressure and high-pressure images.

■ Prior to setup

● CL requirements

- The CL main unit must have been set up being incorporated into the 5000 plus (CR-IR348CL) system.
- Software version required: A02 or later
- Install the following option keys.

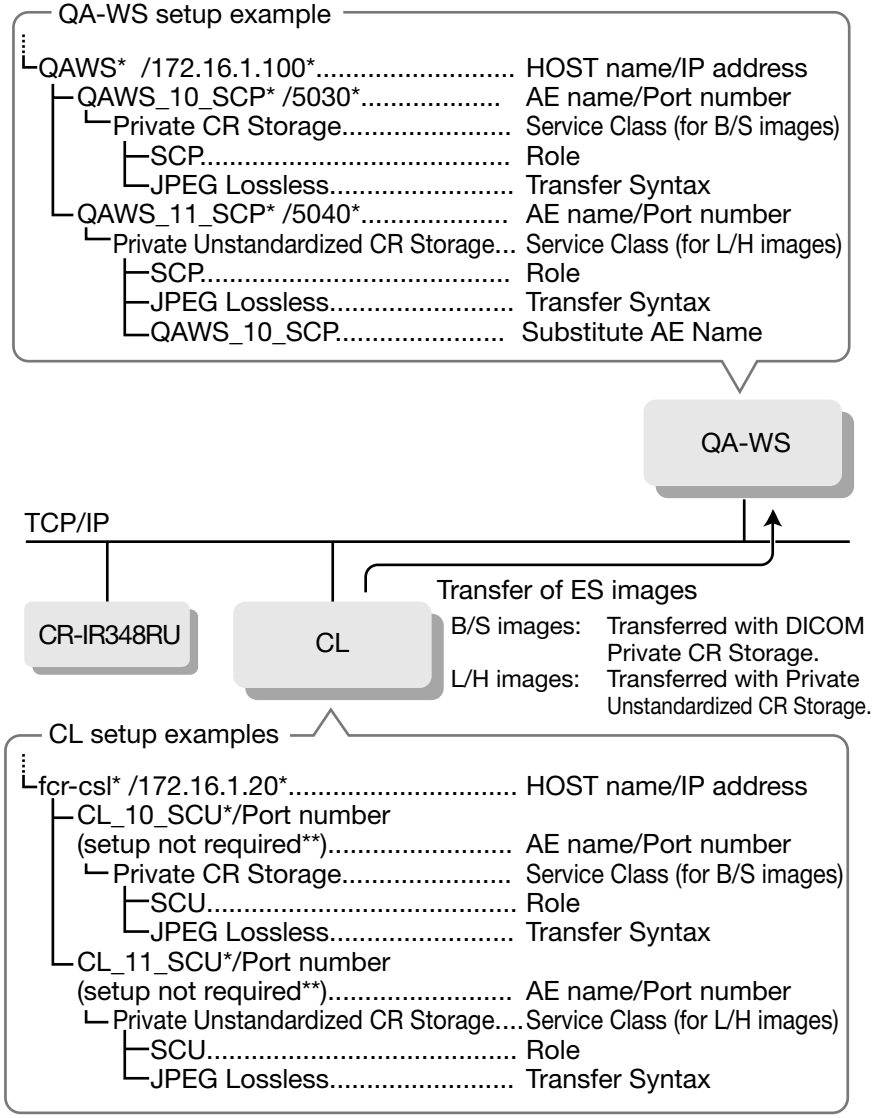
Key Name	Functions Supported
IR346 DICOM CR STORAGE Key	CR Storage SCU Standard CR Storage SCU Standard (includes Private Unstandardized CR Storage.)
CL ES	ES image processing function

● QA-WS requirements

- Software version required : A04 or later
- Install the DICOM Storage option key. (Standard/Private)

■ Connection/setup examples

The following connection/setup examples are used in this chapter to describe the setup procedure.

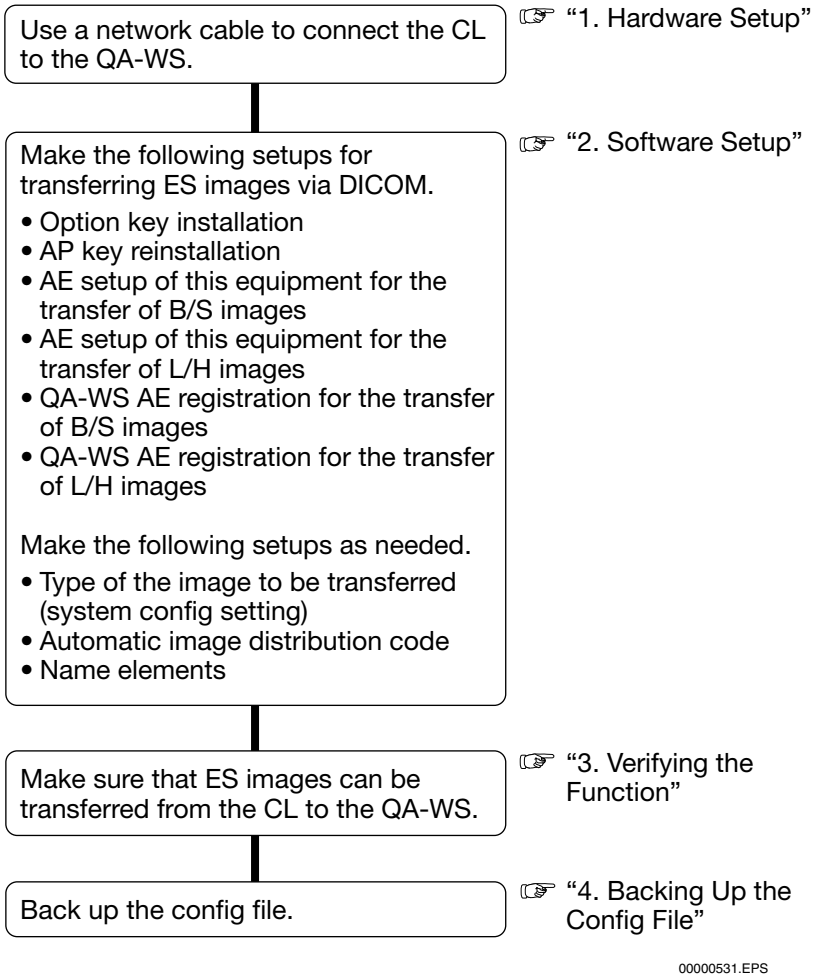


* Setup examples that need be changed depending on the equipment or network environment.

** Port number needs not be set up for the Service Class when the Role is SCU.

00000527.EPS

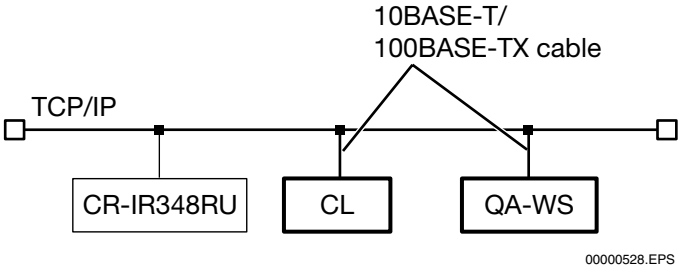
■ Overall operation flow



00000531.EPS

1. Hardware Setup

Connect the CL to the QA-WS via networks, as illustrated below.

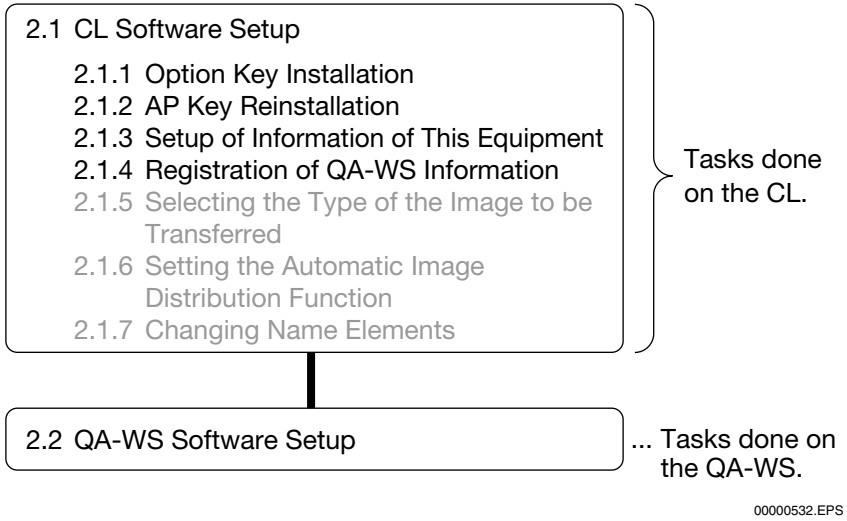


◆ *NOTE* ◆

- *Do not connect the telephone line to the CL and QA-WS network connectors.*
- *The IEC950/UL1950-conformed cable is available for the CL and QA-WS.*

2. Software Setup

Set up software for the CL and QA-WS as follows.
Grayed-out items are those to be set up as necessary. Set up all other items.



2.1 CL Software Setup

2.1.1 Option Key Installation

The option key of the following two types is installed according to the procedure presented below.

- IR346 DICOM CR STORAGE (Standard/Private)
- CL ES (ES image processing function)

1. **Insert the IR346 DICOM CR STORAGE option key into the CD-ROM drive.**

➔ Within a few seconds, the installation start window opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of the installation processing.

3. **Click** OK **.**

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

➥ ***REFERENECE***

The installation start window opens twice because the two kinds of keys, Standard and Private, are stored on the IR346 DICOM CR STORAGE option key CD.

5. **Repeat steps 2. and 3. above to install the CL ES option key.**

2.1.2 AP Key Reinstallation

If the option keys are installed, be sure to reinstall the AP key.

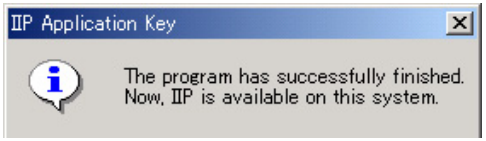
Use the AP key CD (114Y5342002A: Version A00) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



00000419.EPS

3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.1.3 Setup of Information of This Equipment

For the transfer of B/S and L/H images, set up information of this equipment using Service Utility “NETWORK CONFIG” and “THIS HOST (IIP)”.

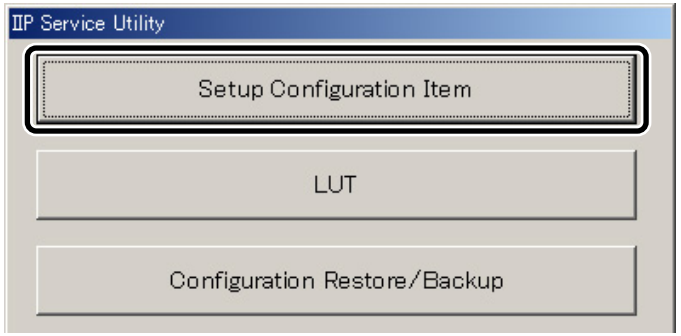
■ Setup for the transfer of B/S images

The procedure explained herein involves setups of the following items.

- AE name of this equipment for the transfer of B/S images (Application Entity Name)
- Device attribute of this equipment (OTHER)
- Service Class and Role
- Other (timeout setting, etc.)

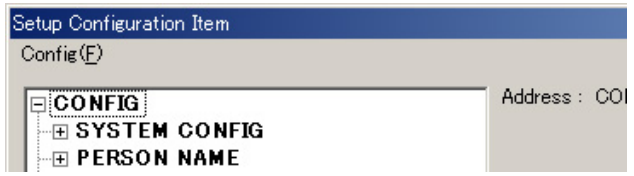
1. **Start up the Service Utility mode and click [Setup Configuration Item].**

☞ For how to start up the Service Utility mode, see “1. Starting/Exiting the Service Utility” under “MU: Maintenance Utility”.



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➔ The “Setup Configuration Item” window opens.



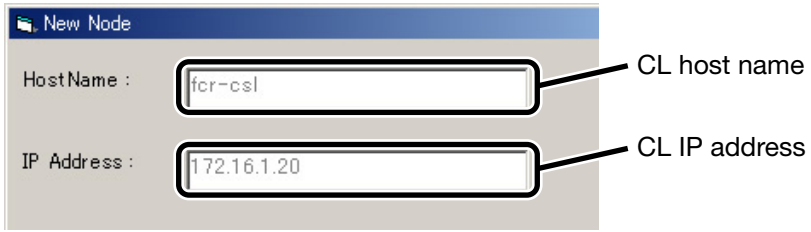
00000404.EPS

2. Click the ⊞ sign within ⊞ NETWORK CONFIG.

3. Select ⊟ THIS HOST(IP) and click New.

➔ The “New Node” window opens.

4. Check to see that the CL host name and IP address are displayed.

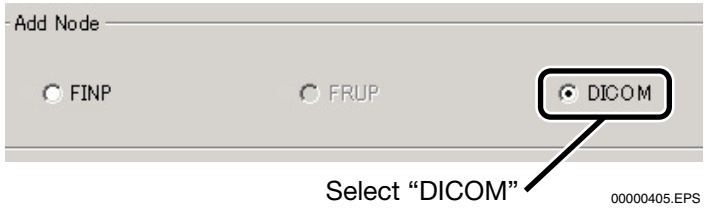


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◆ ***NOTE*** ◆

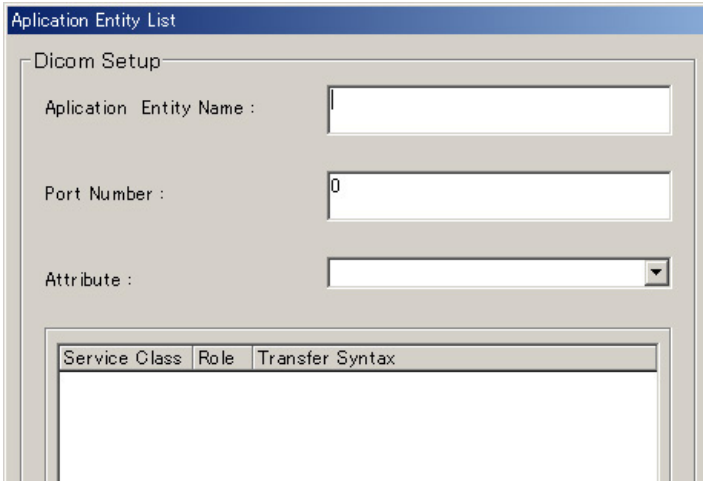
Unless the CL is network-conne
cted, the IP address will not be displayed correctly.

5. Select “DICOM” and click OK.



00000405.EPS

➔ The “Application Entity List” window opens.



00000442.EPS

6. Make settings as follows.

❍ For the transfer of B/S images, enter the AE name that is the SCU for the CL (e.g.: CL_10_SCU) in the Aplication Entity Name : field.

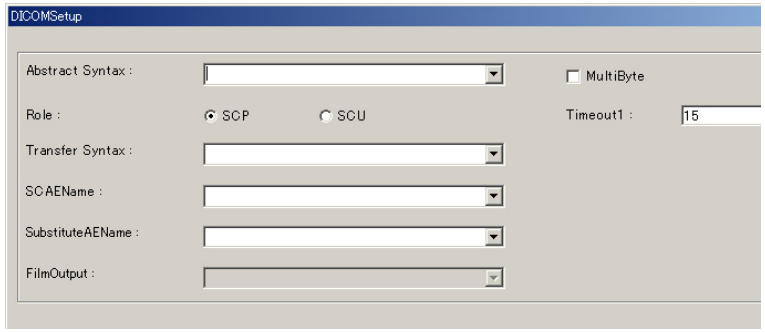
❍ Click the downward arrow in the Attribute : field to select the device attribute (OTHER).

◆ ***NOTE*** ◆

You need not to set Port Number : 0 *(Port number).*
Even if SCU is selected for the Role, it will be disregarded.

7. Click New.

➔ The "DICOMSetup" window opens.



00000533.EPS

8. Click the downward arrow in the Abstract Syntax : field and select the Service Class (Private CR Storage).

➥ ***REFERENCE***

"Verification" is the Service Class used to verify connection between DICOM equipment units. For verifying connection, "Verification" must be selected.

☞ *For details of verification of connection, see "7. Verifying the Connection to Other Connected Equipment – Verify Connection" under "MU: Maintenance Utility".*

9. To set up the AE that is the User, select SCU (SCU) for the Role.

➥ ***REFERENCE***

If "SCU" is selected, items that need not be set will be hidden on the "DICOMSetup" window.

10. Click the downward arrow in the Transfer Syntax : field and select the Transfer Syntax (JPEG Lossless).

◆ ***NOTE*** ◆

For the transfer of ES images, only the JPEG Lossless Transfer Syntax will be supported.

11. Set Timeout1 : 15 (DICOM inter-message timeout value) as necessary.

➥ ***REFERENCE***

MultiByte *needs not be checked.*
Even if checked, it will be disregarded. (It is effective only when SCP is specified for the Role.)

12. Click OK.

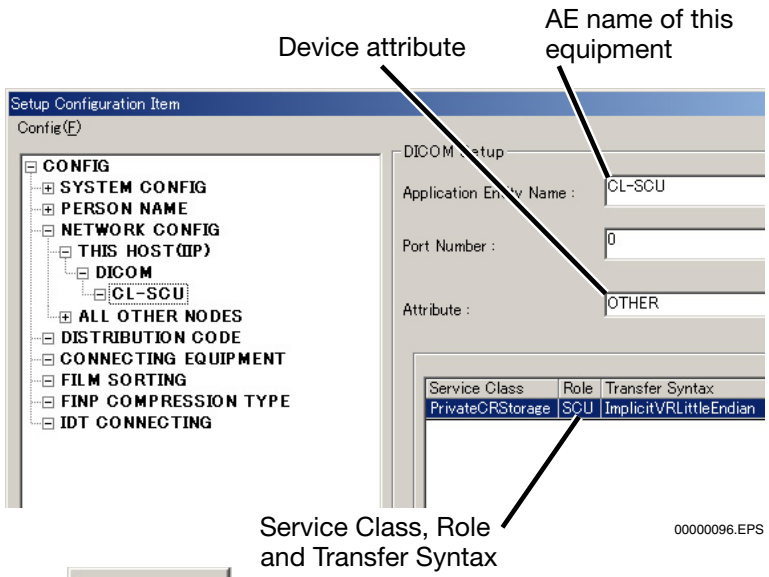
➔ You are returned to the “Application Entity List” window.

13. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

➥ ***REFERENCE***

- *Items just have been set will appear on the right-side area of the “Setup Configuration Item” window. A displayed item can be changed. Whenever it is changed, never fail to click* Apply.



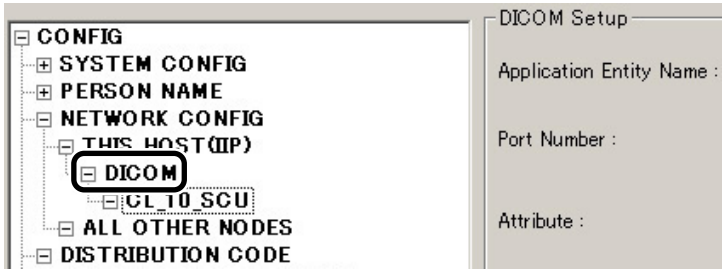
- *If the* Delete *key is clicked, currently selected items will be deleted.*

■ Setup for the transfer of L/H images

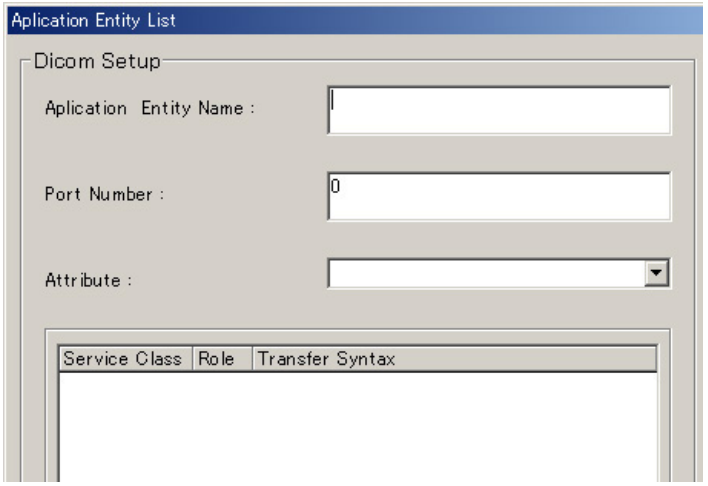
The procedure explained herein involves setups of the following items.

- AE name of this equipment for the transfer of L/H images (Application Entity Name)
- Device attribute of this equipment (OTHER)
- Service Class and Role
- Other (timeout setting, etc.)

1. Select ⊟ DICOM on the “Setup Configuration Item” window and click New.



➔ The “Application Entity List” window opens.



2. **Make settings as follows.**

❍ For the transfer of L/H images, enter the AE name that is the SCU for the CL (e.g.: CL_11_SCU) in the

Aplication Entity Name : field.

❍ Click the downward arrow in the

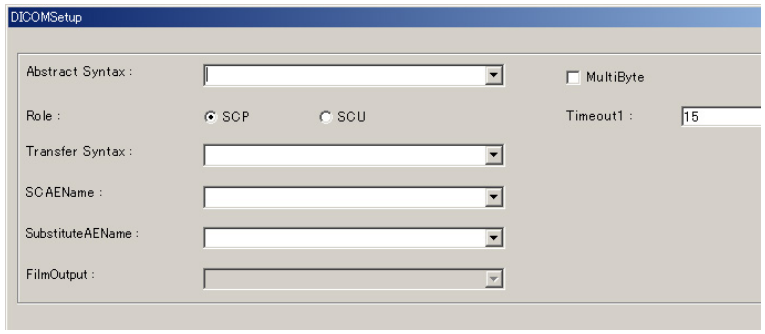
Attribute : field to select the device attribute (OTHER).

◆ NOTE ◆

You need not to set Port Number : 0 *(Port number). Even if SCU is selected for the Role, it will be disregarded.*

3. **Click** New **.**

➔ The "DICOMSetup" window opens.



00000533.EPS

4. **Click the downward arrow in the** Abstract Syntax : **field and select the Service Class (Private Unstandardized CR Storage).**

5. **To set up the AE that is the User, select** SCU **(SCU) for the Role.**

➥ *REFERENCE*

If "SCU" is selected, items that need not be set will be hidden on the "DICOMSetup" window.

6. **Click the downward arrow in the** Transfer Syntax : **field and select the Transfer Syntax (JPEG Lossless).**

◆ NOTE ◆

For the transfer of ES images, only the JPEG Lossless Transfer Syntax is supported.

7. **Set** Timeout1 : 15 **(DICOM inter-message timeout value) as necessary.**

➥ *REFERENCE*

MultiByte *needs not be checked. Even if set, it will be disregarded. (It is effective only when SCP is specified for the Role.)*

8. **Click** OK **.**

➔ You are returned to the "Application Entity List" window.

9. **Click** OK **.**

➔ You are returned to the "Setup Configuration Item" window.

2.1.4 Registration of QA-WS Information

Follow the procedure described herein to register QA-WS information that is used for the transfer of both B/S and L/H images.
Register QA-WS information using “NETWORK CONFIG” and “ALL OTHER NODES” in the Service Utility mode.

■ Setup for the transfer of B/S images

The procedure explained herein is used to set up the following items.

- QA-WS Host name and IP address
- QA-WS AE name (Application Entity Name) and Port number for the transfer of B/S images
- QA-WS device attribute (HD_FILE)
- Service Class and Role
- Other (handling of two-byte characters, setting for conversion from HQ image to standard image, etc.)

1. Select ⊞ ALL OTHER NODES on the “Setup Configuration Item” window and click New.

➔ The “New Node” window opens.

2. Make the following settings.

❍ Enter the Host name (e.g.: QAWS) in the HostName : field.

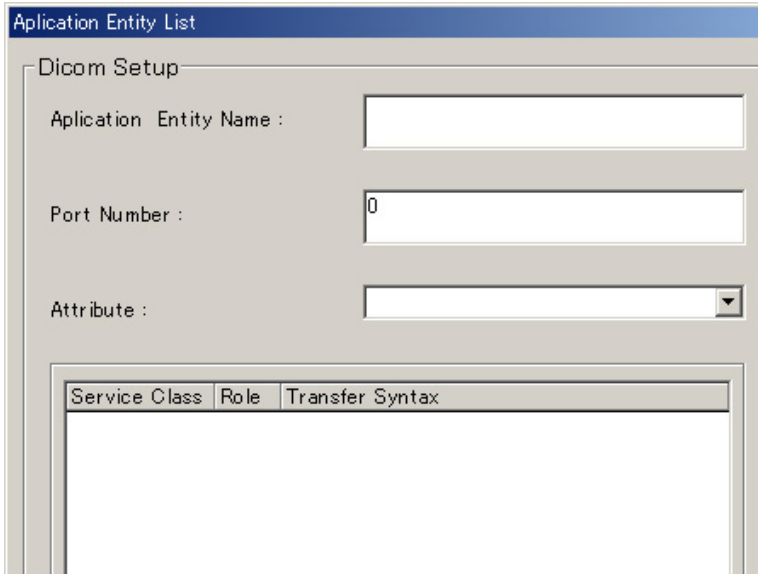
❍ Enter the IP address (e.g.: 172.16.1.100) in the IP Address : field.

❍ Select “DICOM”.



3. Click OK.

➔ The “Application Entity List” window opens.



4. Make the following settings.

❍ Enter the QA-WS AE name (e.g.: QAWS_10_SCP) in the Aplication Entity Name : field.

◆ ***NOTE*** ◆

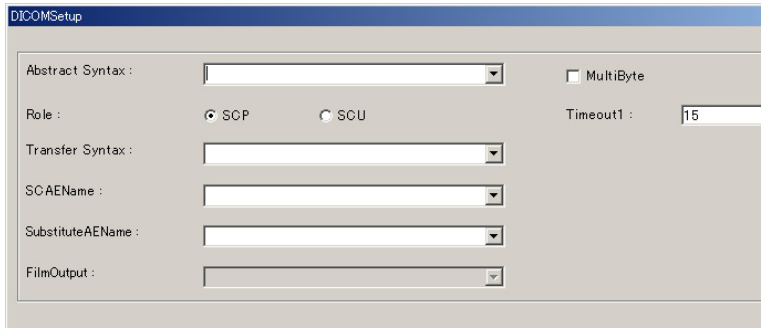
• Never fail to enter the SCP AE name.
• Be sure to enter the upper- or lower-case characters correctly.

❍ Enter the QA-WS Port number (e.g.: 5030) in the Port Number : 0 field.

❍ Click the downward arrow of the Attribute : field and select the QA-WS device attribute (HD_FILE).

5. Click New.

➔ The “DICOMSetup” window opens.



00000533.EPS

6. Click the downward arrow of the Abstract Syntax : field and select the Service Class (Private CR Storage).

7. Check to see that SCP (SCP) has been selected for the Role because the QA-WS AE is Provider.

8. Click the downward arrow of the Transfer Syntax : field and select the Transfer Syntax (JPEG Lossless).

◆ ***NOTE*** ◆

For the transfer of ES images, only the JPEG Lossless Transfer Syntax is supported.

9. Change the following settings as required.

❍ Setting of Acceptable Density: ST / ST & HQ / ST & HQ & SH

ST: Select if the QA-WS cannot receive HQ images.

ST & HQ: Select if the QA-WS can receive HQ images.

SH: Do not select because this is for mammographic images.

❍ Setting of Default Output Density: ST / HQ / SH

ST: Select when transferring standard images only.

ST & HQ: Select when transferring both standard and HQ images.

10. Select NONE(N) in the Image Processing: NONE(N) / PROC field.

11. To handle two-byte characters, check the MultiByte box (to).

➥ ***REFERENCE***

Timeout1 : 15 *needs not be checked.*

Even if checked, it will be disregarded.

12. Click OK.

➔ You are returned to the “Application Entity List” window.

13. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

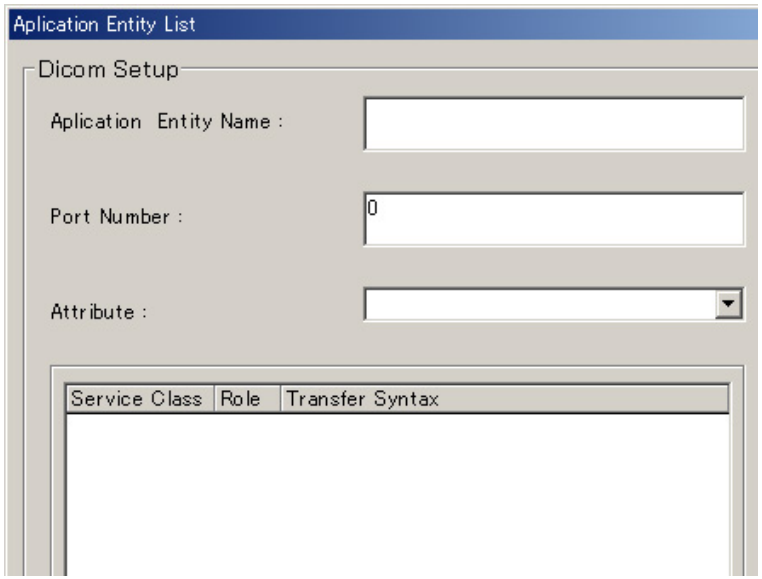
■ Setup for the transfer of L/H images

The procedure explained herein is used to set up the following items.

- QA-WS Host name and IP address [already set as per the procedure described above]
- QA-WS AE name (Application Entity Name) and Port number for the transfer of L/H images
- QA-WS device attribute (HD_FILE)
- Service Class and Role
- Other (handling of two-byte characters, setting for conversion from HQ image to standard image, etc.)

1. Sequentially select ⊞ NETWORK CONFIG, ⊞ ALL OTHER NODES, ⊟ QAWS (QA-WS Host name) and ⊟ DICOM on the "Setup Configuration Item" window and then click New.

➔ The "Application Entity List" window opens.



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2. Make the following settings.

❍ Enter the QA-WS AE name (e.g.: QAWS_11_SCP) in the Aplication Entity Name : field.

◆ NOTES ◆

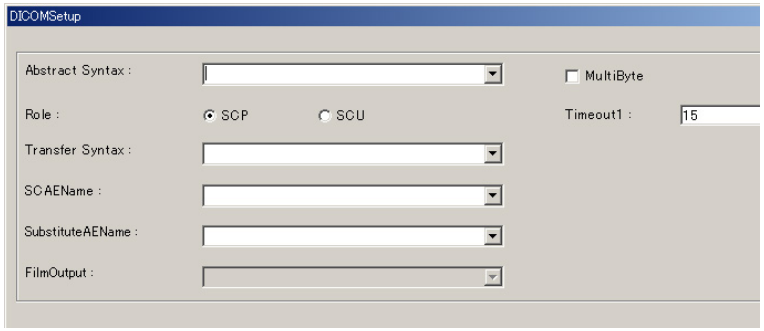
• Never fail to enter the SCP AE name.
• Be sure to enter the upper- or lower-case characters correctly.

❍ Enter the QA-WS Port number (e.g.: 5040) in the Port Number : 0 field.

❍ Click the downward arrow of the Attribute : field and select the QA-WS device attribute (HD_FILE).

3. Click New.

➔ The "DICOMSetup" window opens.



00000533.EPS

4. Click the downward arrow of the Abstract Syntax : and select the Service Class (Private Unstandardized CR Storage).

5. Check to see that SCP (SCP) has been selected for the Role because the QA-WS AE is Provider.

6. Click the downward arrow of the Transfer Syntax : field and select the Transfer Syntax (JPEG Lossless).

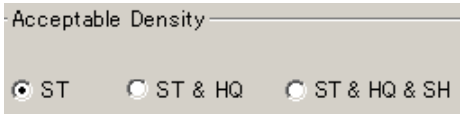
◆ NOTE ◆

For the transfer of ES images, only the JPEG Lossless Transfer Syntax is supported.

7. Click the downward arrow of the SubstituteAEName : field and select the AE name (e.g.: QAWS_10_SCP) used for the transfer of B/S images.

8. Change the following settings as required.

❍ Setting of



ST: Select if the QA-WS cannot receive HQ images.

ST & HQ: Select if the QA-WS can receive HQ images.

SH: Do not select because this is for mammographic images.

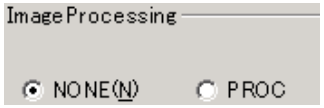
❍ Setting of



ST: Select when transferring standard images only.

ST & HQ: Select when transferring both standard and HQ images.

9. Select NONE(N) in the



field.

10. To handle two-byte characters, check the MultiByte box (to).

➥ REFERENCE

Timeout1 : 15 *needs not be checked.*

Even if checked, it will be disregarded.

11. Click OK.

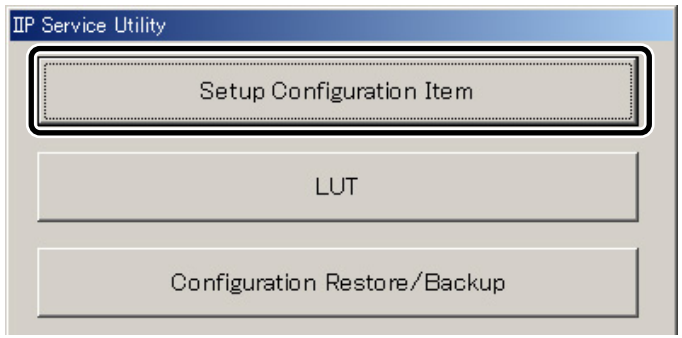
➔ You are returned to the “Application Entity List” window.

12. Click OK.

➔ You are returned to the “Setup Configuration Item” window.

2.1.5 Selecting the Type of the Image to be Transferred

1. Click [Setup Configuration Item] on the "IIP Service Utility" window.



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➔ The "Setup Configuration Item" window opens.

2. Select ⊟ SYSTEM CONFIG and then ⊟ 1.IMAGE MODALITY on the "Setup Configuration Item" window.

3. Double-click 0:L,H,B,S of

19 Kind of Output Image (Energy Subtraction)

to select the combination of types of images to be transferred to the QA-WS.

➥ REFERENCE

The following combinations are available.
0.L,H,B,S: L/H/B/S images
1.L,B,S: L/B/S images
2.L,S: L/S images
3.L,B: L/B images
4.L,H: L/H images

4. When a setup item is changed, save it using the [Config] menu.

2.1.6 Setting the Automatic Image Distribution Function

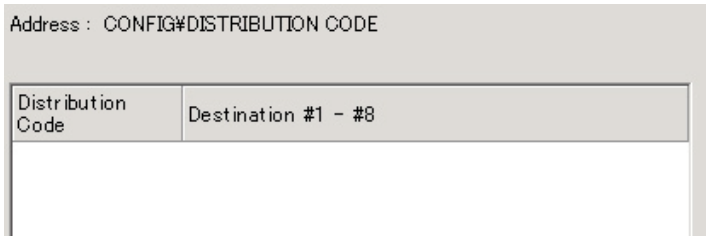
To automatically transfer images coming from the CR-IR348RU, set the automatic image distribution function.

◆ NOTE ◆

To enable the automatic image distribution function, set "Enable Distribution Code Setup" ("SYSTEM CONFIG" and then item No. 3 of "5. CSL/IDT FUCNTION") in Service Utility to "Yes".

1. Click ⊟ DISTRIBUTION CODE on the "Setup Configuration Item" window.

➔ A list of devices to which images are distributed will appear on the right-hand side on the window.



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2. Click New.

➔ The "Distribution Code" window opens.

3. Make the following settings.

❍ Enter an 8-digit distribution code (e.g.: 12345678) in the Distribution Code : field.

❍ Click the downward arrow in the Destination node #1 : field and select the equipment AE name (e.g.: QAWS_10_SCP).

4. Click OK to save the setup data.

2.1.7 Changing Name Elements

☞ “3.7 Setting Name Elements When DICOM is Connected” under “MU: Maintenance Utility”.

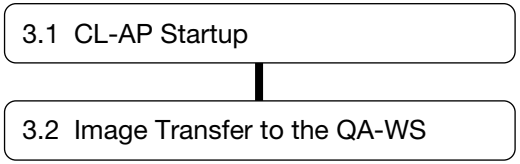
2.2 QA-WS Software Setup

Set up DICOM CR Storage so that the QA-WS can receive images coming from the CL.

☞ See “XXXXXXXX” in “Maintenance” of the QA-WS Service Manual.

3. Verifying the Function

Start up the CL-AP and then make sure that images can be transferred from the CL to the QA-WS.

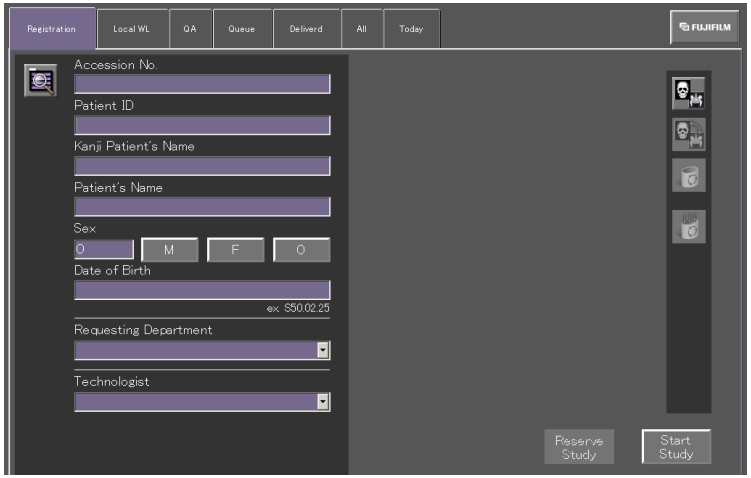


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3.1 CL-AP Startup

1. **From the Start menu, sequentially select “Programs”, “Fuji Film” and “FCR”.**

➔ The CL opening window appears on the display.
After about one minute, the CL-AP reception window opens.



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3.2 Image Transfer to the QA-WS

Transfer ES images that have been read on the 5501ES to the QA-WS.

1. **Register exposure menus for ES images and perform image reading on the FCR5501ES.**

2. **Select images transferred from the FCR5501ES and send thus selected images to the QA-WS.**

☞ For details of the procedure used for transferring images to the QA-WS, see “FCR XG-1 CR-IR346CL” of the CL Operation Manual.

3. **Make sure on the QA-WS side that images have been transferred correctly.**

4. Backing Up the Setup File

Back up the CL setup file.

Have the following ready to use for backup.

- Two DOS/V-formatted FDs

☞ For details of the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup” under “MU: Maintenance Utility”.

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CL + RIS (Ordering) [simplified]

Presented below is the procedure for setting up the ordering function used to obtain ordering information from the RIS.

◆ ***NOTE*** ◆

Only serial interface supports ordering from the RIS.

■ Setups necessary for RIS ordering

//Being now prepared.//

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CL+X-Ray Controller (Serial Connection)

Described below is the procedure used for CL+X-Ray Controller (X-CON hereinafter) connection.

■ Prior to setup

● CL requirements

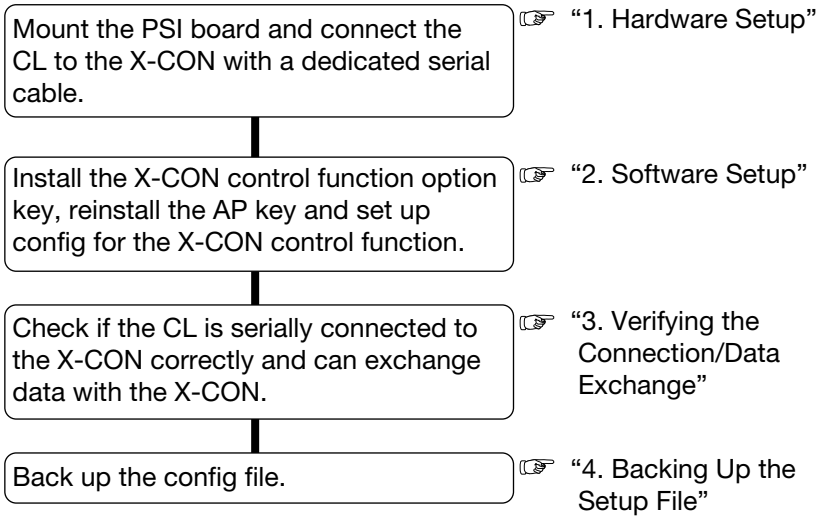
- The CL main unit must have been set up accordingly.
- Software version required: A04 or later
- The X-CON control function option key (CL X ONLINE) is required.

● X-CON

- The connected host main unit must have been set up accordingly.
- X-CON supported by the CL are as follows:

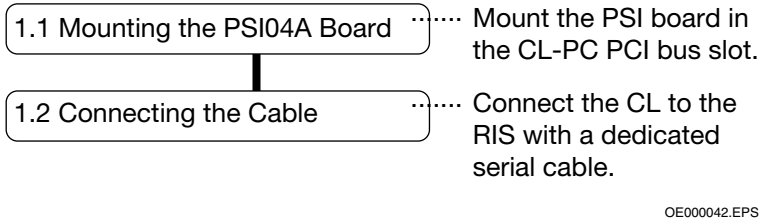
Maker	Product Name
Toshiba	
Shimadzu	
Hitachi	
Philips	
Siemens	

■ Overall operation flow



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1. Hardware Setup



1.1 Mounting the PSI04A Board

◆ ***NOTE*** ◆

Before mounting the PSI board, make sure that the CL-AP has been installed.
If the CL-AP has not been installed, the PSI board (serial interface board) driver will not be recognized correctly.

1. **Shut down the CL and turn OFF the power to the CL-PC.**

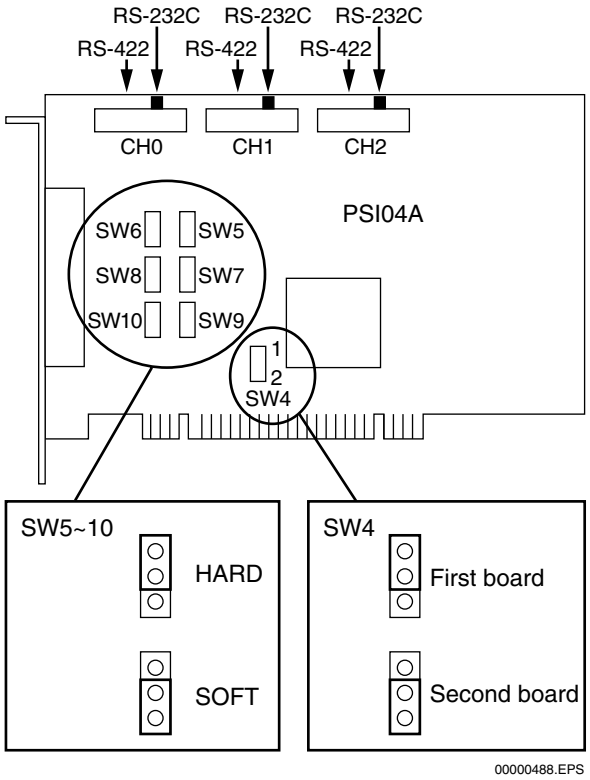
2. **Disconnect the power cable from the CL-PC.**

3. **Make sure that the PSI board is set up as illustrated below. Use CH0, CH1 or CH2 to select RS-422 or RS-232C.**

CH0, CH1 and CH2 may be used for the following connectors.

- First board
  CH0: CH-A CH1: CH-B CH2: CH-C
- Second board
  CH0: CH-D CH1: CH-E CH2: CH-F

When setting CH0, CH1 and CH2, confirm the interface (RS-422 or RS-232C) between connected devices.



	Function	Settings	Remarks
SW5	Selection whether to output CH0 remote power control signal (at master status) as is as a contact signal or to control with the register	Setup for output of contact signal as is: Hardware Register control : Software	This function is enabled regardless of whether CH0, CH1 and CH2 are set for RS422 or RS232C. Setup for output of contact signal as is: Outputs power supply status to the no. 8 pin of CN1 as a contact signal (same as for CN2 and CN3). Register control setting: Contact signal that is output to the no. 8 pin of CN1 can be changed by changing register setting values (same as for CN2 and CN3).
SW7	Selection whether to output CH1 remote power control signal (at master status) as is as a contact signal or to control with the register.		
SW9	Selection whether to output CH2 remote power control signal (at master status) as is as a contact signal or to control with the register.		

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	Function	Settings	Remarks
SW6	Selection whether to transmit remote power control signal (at slave status) from CH0 to CN4 or to handle it as an interruption.	Output to CN4 : Hardware Interruption : Software	This function is enabled only when CH0, CH1 and CH2 are set for RS422. When set for RS232C, there will be no output to CN4. Setup for output to CN4: Outputs contact signals from outside to the CN4 no. 1 pin. Only the IDT-IV uses CN4. Setup for interruption: As contact signals changes, interruptions will result in the hosts. The register makes it possible to check which CH is ON or OFF. No. 1 pin of CN4 is Open for interruption settings.
SW8	Selection whether to transmit remote power control signal (at slave status) from CH1 to CN4 or to handle it as an interruption.		
SW10	Selection whether to transmit remote power control signal (at slave status) from CH2 to CN4 or to handle it as an interruption.		

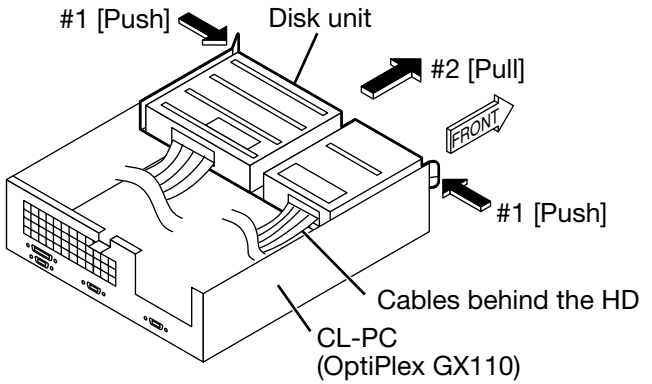
00000490.EPS

4. Mount a PSI board in the PCI slot.

- For GX110

I. Remove the CL-PC cover.

II. When the card cage is mounted, the PSI board interferes with a cable behind the HD. A workaround is to slightly pull the disk unit on the front of the CL-PC toward you before mounting the card cage.

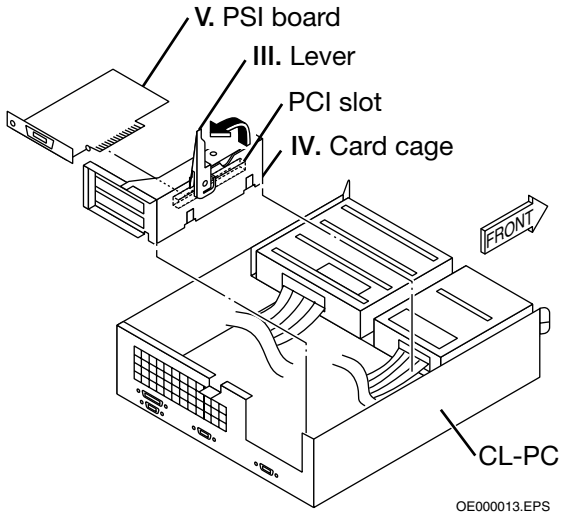


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III. Raise the lever as illustrated by the arrow.

IV. Remove the card cage.

V. Mount a PSI board in a PCI slot within the card cage.



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VI. Mount the card cage in the CL-PC.

VII. Restore the disk unit.

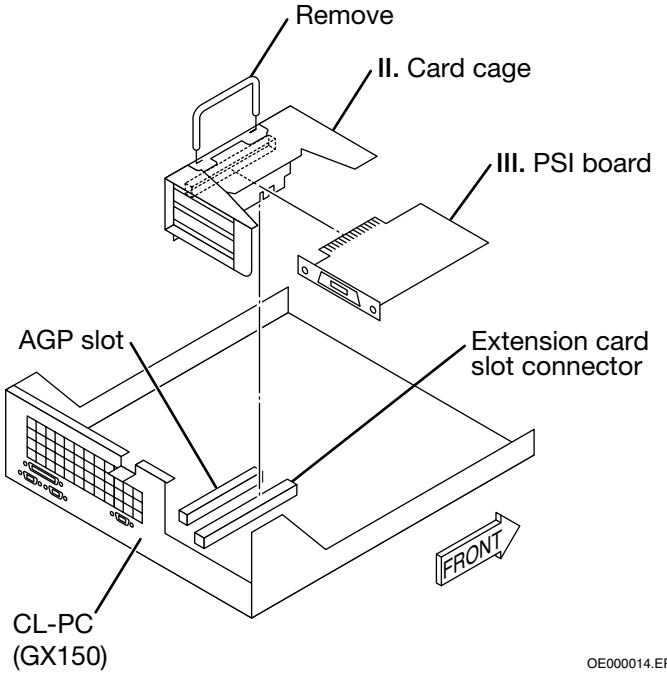
VIII. Reinstall the CL-PC cover.

- For GX150

I. Open the CL-PC cover.

II. Holding the card cage handle, remove the card cage.

III. Mount a PSI board in an empty PCI slot.



IV. Mount the card cage on the CL-PC.

V. Close the CL-PC cover.

5. **Connect the power cable to the PC to start up the CL-PC.**

➔ Within about one minute after Windows 2000 has been started up, the CL-AP will start up. While the CL-AP is being started up, the PSI board driver will be downloaded.

◆ *NOTE* ◆

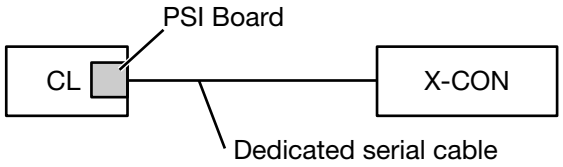
The PSI board driver will be set up automatically after the CL-AP has been started up.

6. **While holding down the <Shift> key, select "Shut Down" in the FUJIFILM menu.**

➔ The system returns to the desktop screen.

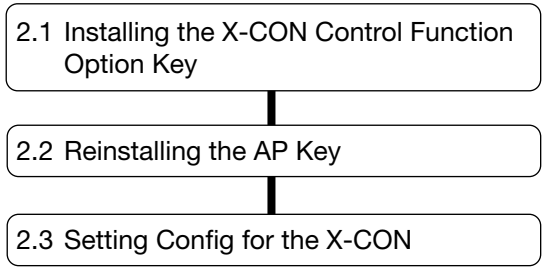
1.2 Connecting the Cable

Use a dedicated serial cable to connect the CL to the X-CON.



OE000043.EPS

2. Software Setup



OE000044.EPS

2.1 Installing the X-CON Control Function Option Key

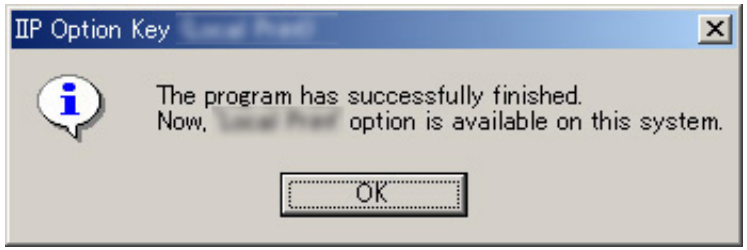
To use the X-CON, the CL X ONLINE option key is needed.

1. **Insert the option key CD into the CD-ROM drive.**

➔ After a while, the installation start window opens.

2. **Click** Continue.

➔ A window opens to indicate the completion of installation.



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3. **Click** OK.

➔ You are then returned to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

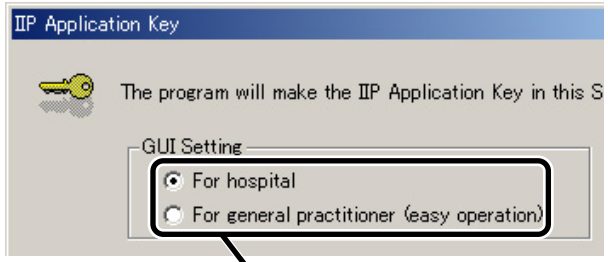
2.2 Reinstalling the AP Key

If an option key is installed, be sure to reinstall the AP key.
Described below is the procedure to be followed to reinstall the AP key using the AP key CD (114Y5342002A: Version A01 or later).

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window opens.

2. **Click** Continue.



Either is grayed out (unselectable).

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➥ ***REFERENCE***

- *For hospital : Hospital interface*
- *For general practitioner (easy operation) : General practitioner interface*

➔ A window opens to indicate the completion of installation.

3. **Click** OK.

➔ You are then returned to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

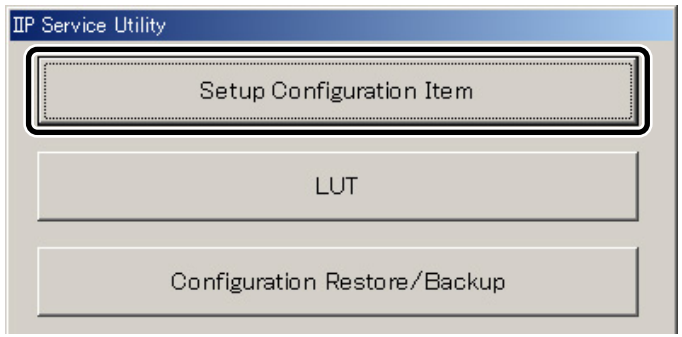
2.3 Setting Config for the X-CON

Set up the following X-CON-related config items.

1. **Start the Service Utility mode.**

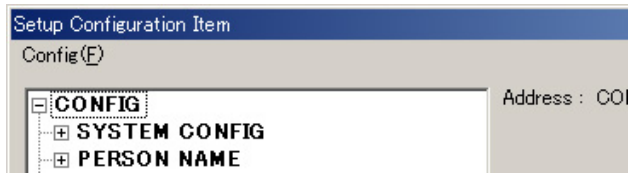
☞ For how to start the Service Utility mode, see “1. Starting/ Exiting the Service Utility” under “MU: Maintenance Utility”.

2. **Click [Setup Configuration Item].**



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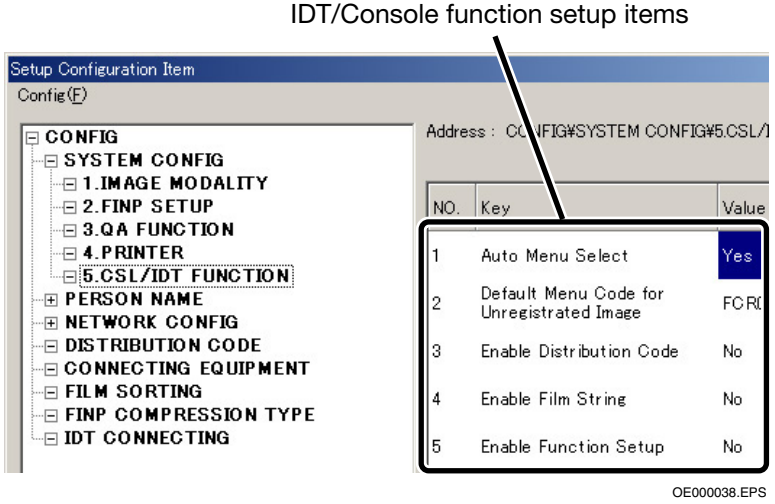
➔ The [Setup Configuration Item] window opens.



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3. **Click 5.CSL/IDT FUNCTION.**

➔ The IDT/Console function setup items will be displayed on the right-hand side of the window.



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4. **Set up the following X-CON-related config items.**

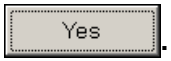
Item	Config Item	Remarks	
42	Timeout value	Setup not required to change.	△
43	Image display caption	Default: XCON	○
44	PSI board serial port number	Number of CH to be inserted into the PSI board connector	○
45	Operating condition reception setting	Default: Receives.	○
46	Exposure condition transmission setting	Default: Not to transmit.	○
47	Minimum tube voltage	Default: 28kV	○
48	Maximum tube voltage	Default: 110kV	○
49	Minimum tube current	Default: 9mA	○
50	Maximum tube current	Default: 400mA	○
51	Minimum irradiation time	Default: 10msec	○
52	Maximum irradiation time	Default: 5400msec	○

○: Essential △: Changed as required.

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5. **Select “Save” from the “Config (F)” menu.**

➔ A window opens, prompting you to confirm the setup data to be saved.

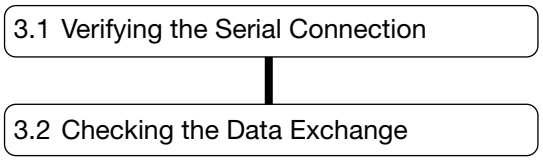
6. **Click** 

.

➔ The setup data will be saved.

3. Verifying the Connection/Data Exchange

After starting up the CL-AP, check if the CL is serially connected to the X-CON correctly and can exchange data with the X-CON.

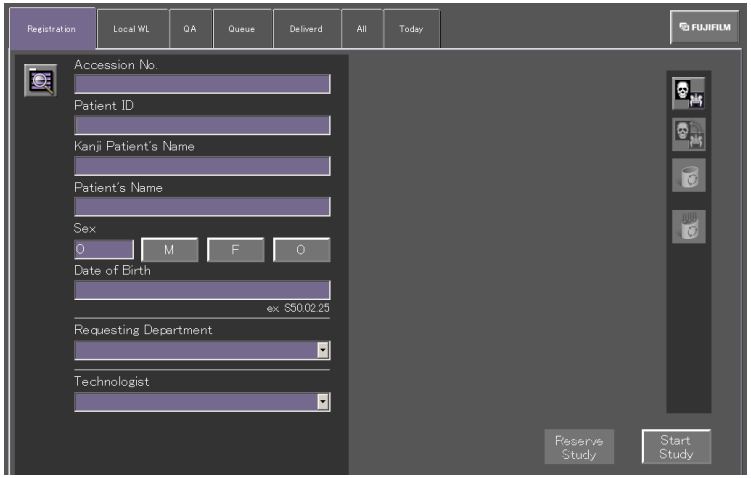


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3.1 Verifying the Serial Connection

1. **From the Start menu, sequentially select "Programs", "Fuji Film" and "FCR".**

➔ The CL opening window opens.
After about one minute, the CL-AP reception window opens.



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2. **Make sure that characters (default: XCON) indicating that the CL has been serially connected to the XCON are displayed at the bottom of the window.**

When the CL is serially connected to the XCON normally, "XCON" displayed on the window will be highlighted in white on the purple background.
If serial connection between the CL and the XCON is not recognized for any reason, "XCON" will not be highlighted remaining thus in white on the gray background.

3.2 Checking the Data Exchange

Check to see that data can be exchanged with the X-CON as per config settings (CSL/IDT FUNCTION).

❍ If "45. Xcon Performed Info. Reception" in Config "CSL/IDT FUNCTION" is enabled:

X-CON's actual values, such as tube voltage, tube current and irradiation time, will be transferred to the RIS via the CL, after the completion of exposures (the values can also be verified on film).

❍ If "46. Xcon Exposure Info. Transfer" in Config "CSL/IDT FUNCTION" is enabled:

Setup items of the exposure menu, such as tube voltage, tube current and irradiation time, will be reflected on the X-CON during exposures.

◆ *NOTE* ◆

To check if data is exchanged properly during exposures using a cassette, shot X-rays with targeted exposure menus selected accordingly, and then register the IP barcode.

4. Backing Up the Setup File

Back up the CL setup file.
Have the following ready to use for backup.

- Two DOS/V-formatted FDs

☞ For detailed backup procedures, see "5. Restoring/Backing Up the Configuration File - Configuration Restore/Backup" under "MU: Maintenance Utility".

5. X-CON Specifications [Reference]

Item \ Model	DHF-155H (S)	UD150B/B-10 HLZ110 (Tomography)	SUPER 50 CP	Polydros50S	KXO-80F KXO-50F
Communication I/F spec. **Common for semi-duplex and start/stop system.** **According to JIS X-5002.**	RS232C 4800BPS Start: 1bit Data: 8bits Parity: 1bit (even) Stop: 1bit D-sub25p male straight (provided by the maker)	UD150B: RS232C HLZ110: RS422 4800BPS Start: 1bit Data: 8bits Parity: 1bit (even) Stop: 1bit UD150B: D-sub25p male cross (provided by Fuji) HLZ110: D-sub25p male cross (provided by the maker)	RS232C 4800BPS Start: 1bit Data: 8bits Parity: 1bit (even) Stop: 1bit D-sub25p male cross (the same cable as the maker's will be provided by Fuji)	RS232C 4800BPS Start: 1bit Data: 8bits Parity: 1bit (even) Stop: 1bit D-sub25p male cross (provided by Fuji)	RS232C 4800BPS Start: 1bit Data: 8bits Parity: 1bit (even) Stop: 1bit D-sub25p male cross (provided by Fuji)
Function	CL → X-ray exposure conditions setup kVmAms X-ray exposure conditions → actual CL exposure results kVmAms	CL → X-ray exposure conditions setup kVmAms X-ray exposure conditions → actual CL exposure results kVmAms	CL → X-ray exposure conditions setup APR code X-ray exposure conditions → actual CL exposure results kVmAms	CL →X-ray exposure conditions setup Mode selection code X-ray exposure conditions → actual CL exposure results kVmAms	CL → X-ray exposure conditions setup kVmAms X-ray exposure conditions → actual CL exposure results kVmAms KXO 50F is only for X-ray exposure conditions setup → CL
X-ray tube/ technique code	X-ray tube: Fixed at 0. (Select according to the technique.) Techniques 1 to 8 1: General exposure 2: Bucky - 1 3: Bucky - 2 4: AUX1 5: Tomography 6: Spot 7: Continuous exposure 8: AUX2	X-ray tube: Fixed at 0. (Select according to the technique.) Techniques 1 to 5 (8 at max.) 1: Spot 2: Bucky - 1 3: Bucky - 2 4: General exposure 5: Tomography	X-ray tube: Fixed at 0. (Select according to the technique.) Techniques 1 to 9 Reserved	Fixed at 0. Manually selected by the controller.	CL→ X-ray is not effective. Only X-ray→ CL is effective. 00: BUCKY1 01: BUCKY2 02: GEN1/BKY3 03: GEN2 04: TOMO WO.APR 05: TOMO WITH APR 06: MAMMO 07: SPOT 08: SPOT-ATR 09: ANGIO 10: ANGIO WITH KVR
Exposure/ perspective flag	Without perspective flag: Fixed at 0.				
Film-related code	Invalid 00000000				
Maker/model code	11: DHF-155H 10: CR-250 (Perspective/tomography)	01: UD150B 00: HLZ110	30	40	20
Tube voltage (kV)	20~150	20~150	Invalid 0 X-ray→ actual CL result is effective.	Invalid 0 X-ray→ actual CL result is effective.	20~150
Irradiation time (ms)	1~8000	1~8000			3~9999
Tube current (mA)	10~630,1250	10~1000			10~1000 20, 50, 100, 160, 200, 250: Small focus 320, 400, 500, 640, 800: Large focus
ID code	1 to 64, techniques (512 programs in total)	0	1 to 16 or 1 to 32	1~7	0
Reserved 1	mAs mode: 5 to 8000 If mAs mode is not used (normal): 0	0	0	0	0
Reserved 2	Focus size specified 0: Small focus 1000: Large focus	Focus size specified 0: Small focus 1000: Large focus	0	0	0
Film sensitivity	2: Standard	0: Standard	0: Standard	0	0
Detection field	1~4	1~4	1~4		
Film density	3: ± 0 standard	4: ± 0 standard	4: ± 0 standard		

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CL+RIS (Ordering - Serial Connection)

Presented below is the procedure for setting up the ordering function used to obtain patient information and exposure menus from the RIS.

■ Prior to setup

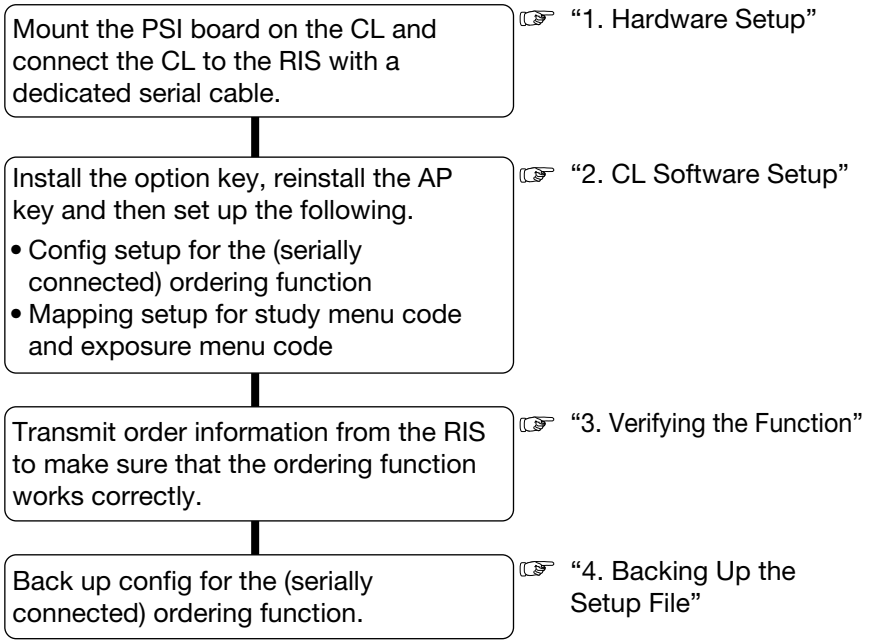
● CL requirements

- The CL main unit must have been set up accordingly.
- Software version required: A07 or later
- The (serially connected) ordering option key (CL ORDER ONLINE#) is required.

● RIS

- The RIS main unit must have been set up accordingly.
- Only NEC-Type2 (NEC TYPE II) RIS is supported.

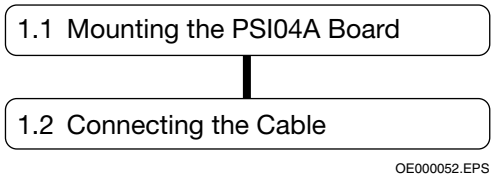
■ Overall operation flow



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1. Hardware Setup

Set up hardware for the CL and RIS as follows.



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1.1 Mounting the PSI04A Board

◆ ***NOTE*** ◆

Before mounting the PSI board, make sure that the CL-AP has been installed accordingly.

The PSI serial i/f board driver cannot be recognized correctly unless the CL-AP has been installed.

1. **Shut down the CL and turn OFF the power to the CL-PC.**

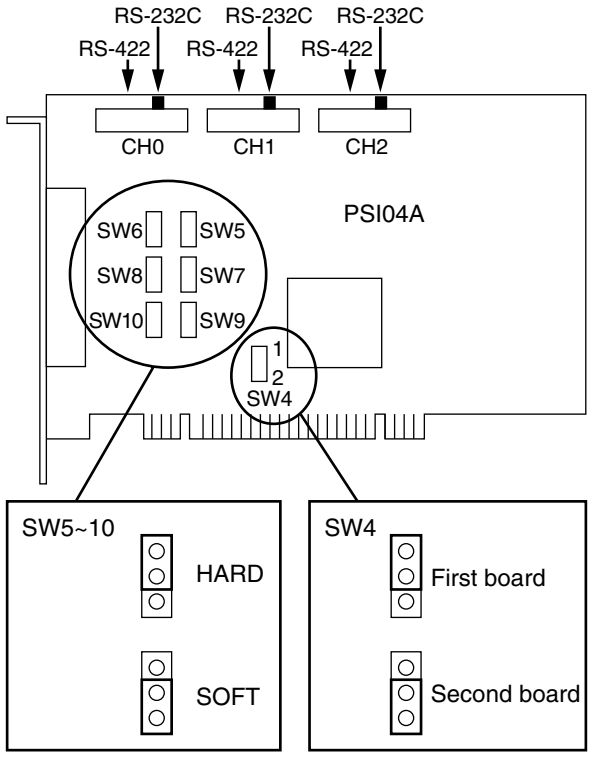
2. **Disconnect the power cable from the CL-PC.**

3. **Make sure that the PSI04A board is set up as illustrated below. Use CH0, CH1 or CH2 to select RS-422 or RS-232C.**

CH0, CH1 and CH2 may be used for the following connectors.

- First board
  CH0: CH-A CH1: CH-B CH2: CH-C
- Second board
  CH0: CH-D CH1: CH-E CH2: CH-F

When setting CH0, CH1 and CH2, confirm the interface (RS-422 or RS-232C) between connected devices.



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	Function	Settings	Remarks
SW5	Selection whether to output CH0 remote power control signal (at master status) as is as a contact signal or to control with the register	Setup for output of contact signal as is: Hardware Register control : Software	This function is enabled regardless of whether CH0, CH1 and CH2 are set for RS422 or RS232C. Setup for output of contact signal as is: Outputs power supply status to the no. 8 pin of CN1 as a contact signal (same as for CN2 and CN3). Register control setting: Contact signal that is output to the no. 8 pin of CN1 can be changed by changing register setting values (same as for CN2 and CN3).
SW7	Selection whether to output CH1 remote power control signal (at master status) as is as a contact signal or to control with the register.		
SW9	Selection whether to output CH2 remote power control signal (at master status) as is as a contact signal or to control with the register.		

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	Function	Settings	Remarks
SW6	Selection whether to transmit remote power control signal (at slave status) from CH0 to CN4 or to handle it as an interruption.	Output to CN4 : Hardware Interruption : Software	This function is enabled only when CH0, CH1 and CH2 are set for RS422. When set for RS232C, there will be no output to CN4. Setup for output to CN4: Outputs contact signals from outside to the CN4 no. 1 pin. Only the IDT-IV uses CN4. Setup for interruption: As contact signals changes, interruptions will result in the hosts. The register makes it possible to check which CH is ON or OFF. No. 1 pin of CN4 is Open for interruption settings.
SW8	Selection whether to transmit remote power control signal (at slave status) from CH1 to CN4 or to handle it as an interruption.		
SW10	Selection whether to transmit remote power control signal (at slave status) from CH2 to CN4 or to handle it as an interruption.		

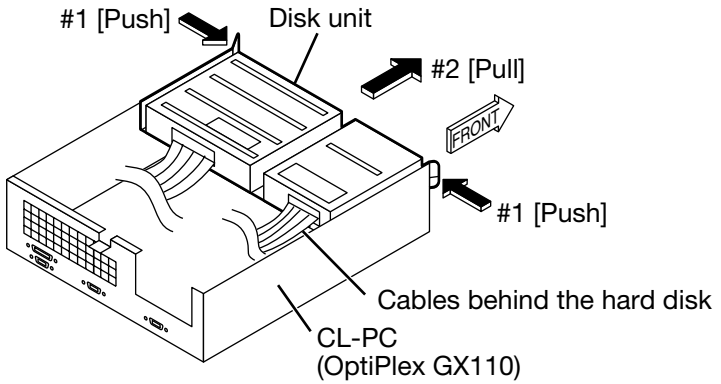
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4. Mount a PSI board in the PCI slot.

- For GX110

I. Remove the CL-PC cover.

II. When the card cage is mounted, its PC board interferes with a cable behind the hard disk. A workaround is to slightly pull the disk unit on the front of the CL-PC toward you before removing the card cage.

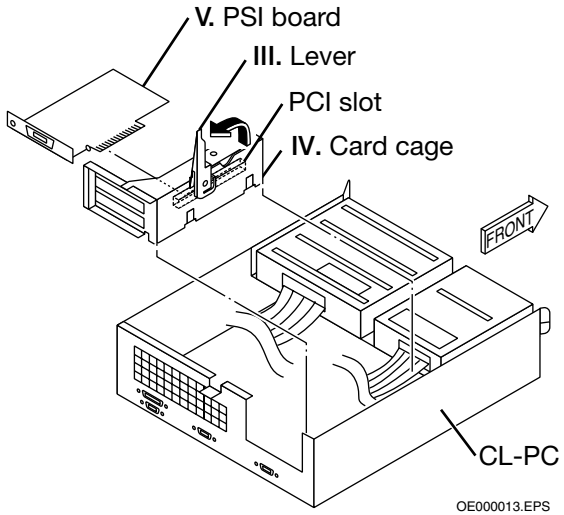


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III. Raise the lever as illustrated by the arrow.

IV. Remove the card cage.

V. Mount a PSI board in a PCI slot within the card cage.



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VI. Mount the card cage in the CL-PC.

VII. Restore the disk unit.

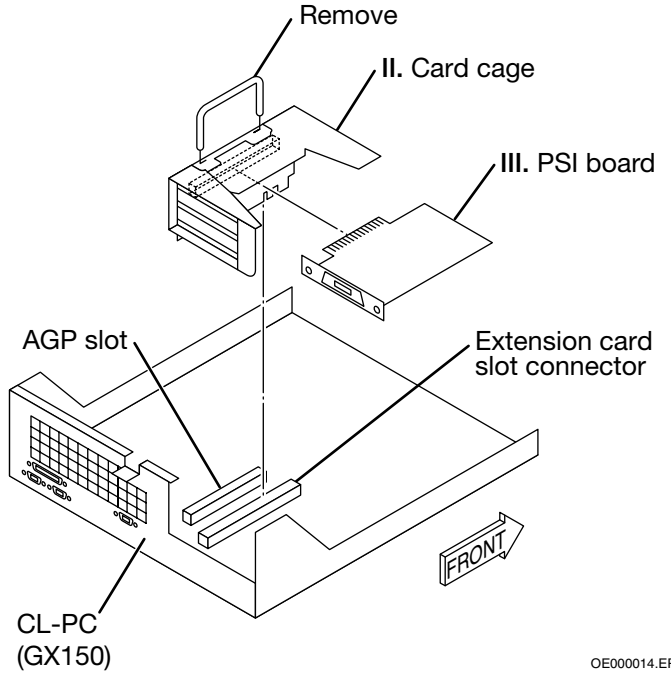
VIII. Reinstall the CL-PC cover.

- For GX150

I. Open the CL-PC cover.

II. Holding the card cage handle, remove the card cage.

III. Mount a PSI board in an empty PCI slot.



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IV. Mount the card cage on the CL-PC.

V. Close the CL-PC cover.

5. Connect the power cable to the PC to start up the CL-PC.

➔ Within about one minute after Windows 2000 has been started up, the CL-AP will start up. While the CL-AP is being started up, the PSI board driver will be downloaded.

◆ ***NOTE*** ◆

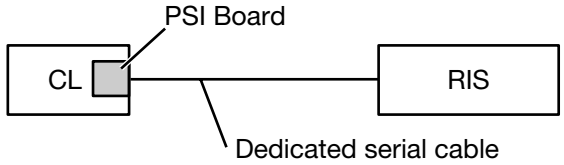
The PSI board driver will be set up automatically after the CL-AP has been started up.

6. While holding down the <Shift> key, select “Shut Down” in the FUJIFILM menu.

➔ The system returns to the desktop screen.

1.2 Connecting the Cable

Use a dedicated serial cable to connect the CL to the RIS.



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◆ ***NOTE*** ◆

The serial cable can be connected to any of the three connectors (CH0 to CH2) provided that the config settings match those for the Service Utility. The config setup procedure is described in “2.4 Config Setup”.

2. CL Software Setup

2.1 Ordering (Serial Connection) Option Key Installation
2.2 AP Key Reinstallation
2.3 Service Utility Startup
2.4 Config Setup
2.5 Service Utility Shutdown
2.6 Setup for Exposure Menu/Study Menu Mapping Setups

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2.1 Ordering (Serial Connection) Option Key Installation

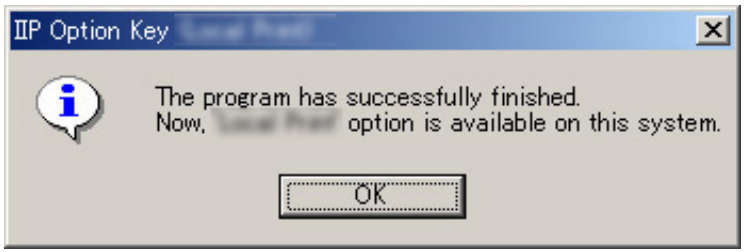
To use the ordering function (serial connection), the CL ORDER ONLINE# option key is needed.

1. **Insert the optional key CD into the CD-ROM drive.**

➔ Within several seconds, the installation start window opens.

2. **Click** Continue **.**

➔ A window opens to indicate the completion of option key installation.



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3. **Click** OK **.**

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

2.2 AP Key Reinstallation

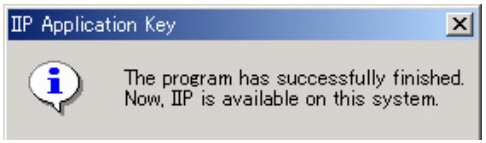
If the option key is installed, be sure to reinstall the AP key.

Use the AP key CD (114Y5342002A: Version A01 or later) to reinstall the AP key. The reinstallation procedure is shown below.

1. **Insert the AP key CD into the CD-ROM drive.**

➔ After a while, the installation start window automatically opens.

2. **Click** Continue.



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➔ A window opens to indicate the completion of option key installation.

3. **Click** OK.

➔ The system returns to the desktop screen.

4. **Remove the CD from the CD-ROM drive.**

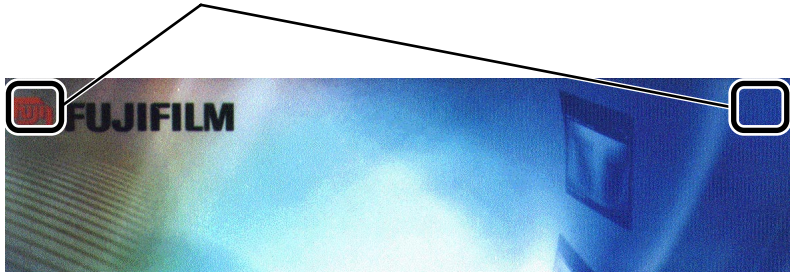
2.3 Service Utility Startup

1. **From the** Start **menu, sequentially select "Programs", "Fuji Film", and then "FCR".**

➔ The CL-AP will start up.

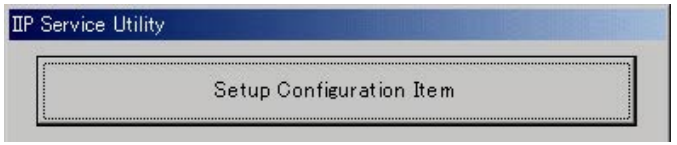
2. **Within a period of 5 seconds after the initial window opens, sequentially click the upper left and upper right corners of the window.**

Click the upper left corner and then the upper right corner.



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➔ The Service Utility mode starts and then the "IIP Service Utility" window opens.



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➥ *REFERENCE*

If you cannot complete step 2. from the initial window within a 5-second period and allow the AP to start up, perform the following steps to start the Service Utility:

1. To exit the AP, hold down the <Shift> key and choose "Shut Down" on the FUJIFILM *menu.*

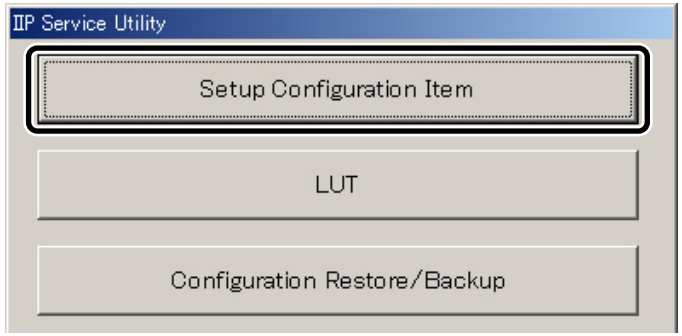
2. From the "Start" menu, sequentially choose "Programs", "Fuji Film", and "FCR".

3. When the initial window opens, sequentially click its upper left and upper right corners within a period of 5 seconds.

2.4 Config Setup

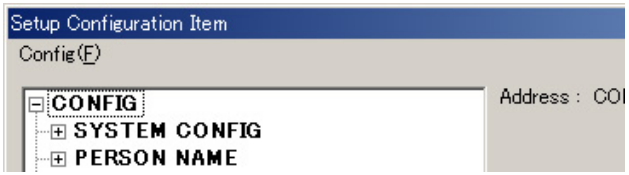
To perform configuration setup for ordering (serial connection), use the following procedure:

1. **In the "IIP Service Utility" window, click** Setup Configuration Item **.**



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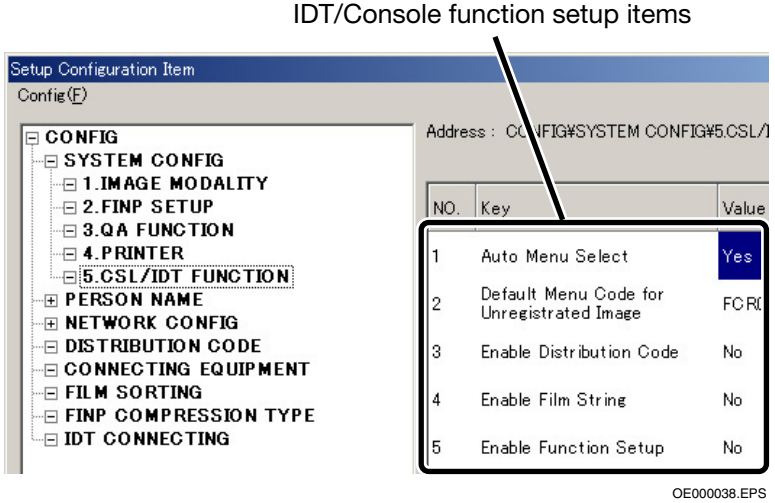
➔ The "Setup Configuration Item" window opens.



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2. **Click** 5.CSL/IDT FUNCTION **.**

➔ A list of IDT/Console function setup items appear in the right-hand area of the window.



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3. **Define the following configuration items for ordering (serial connection):**

Config item		Remarks	
41	RIS type setup	Be sure to choose NEC-Type2.	○
60	On-screen display caption	On-screen display caption for RIS connection	△
61	Serial port number	Channel number for PSI board connector connection • Choose "1" when CH0 is connected. • Choose "2" when CH1 is connected. • Choose "3" when CH2 is connected.	○

○: Mandatory △: Optional

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4. **From the "Config" menu, choose "Save".**

➔ A window opens, prompting you to confirm the setup data to be saved.

5. **Click** Yes **.**

➔ The system saves the setup data.

2.5 Service Utility Shutdown

1. **Select “close” from the “Config” menu of the “Setup Configuration Item” window.**

   ➔ You are then returned to the “IIP Service Utility” window.

2. **Click “Exit Service Utility”.**

   ➔ You are then returned to the desktop screen.

2.6 Setup for Exposure Menu/Study Menu Mapping

Before transmitting RIS order information to the CL, it is necessary to coordinate the exposure and study menu tag numbers for the RIS and CL.
More specifically, you have to complete the following steps:

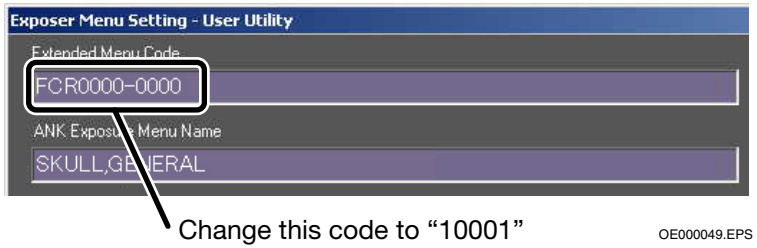
- **Ensuring that the RIS exposure code is in agreement with the CL exposure menu's extended menu code**
- **Ensuring that the RIS order code is in agreement with the CL study menu's study menu code**

If, for instance, a certain RIS order code is 00001 and this order code contains exposure codes 10001 and 10002, perform setup for the CL study menu and exposure menu as directed below:

1. **Launch the CL’s User Utility.**

2. **Open the exposure menu editing window.**

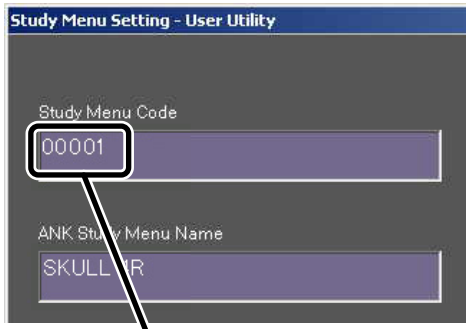
3. **Create an exposure menu for the RIS exposure code (10001). The following example is for changing the extended menu code for an exposure menu from FCR0000-0000 to 10001.**



4. **In the same manner as explained in step 3 above, register an exposure menu for exposure code 10002.**

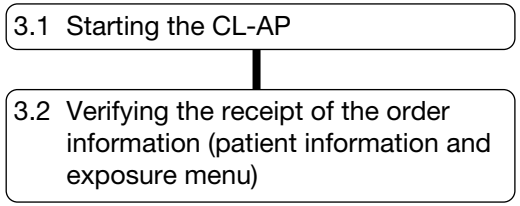
5. Create a new study menu. Register the exposure menus, which were registered in steps 3 and 4, with the newly created study menu.

6. Enter an order code (00001) for the study menu code for the study menu that was created in step 5 above.



3. Verifying the Connection

Receive order information from the RIS.

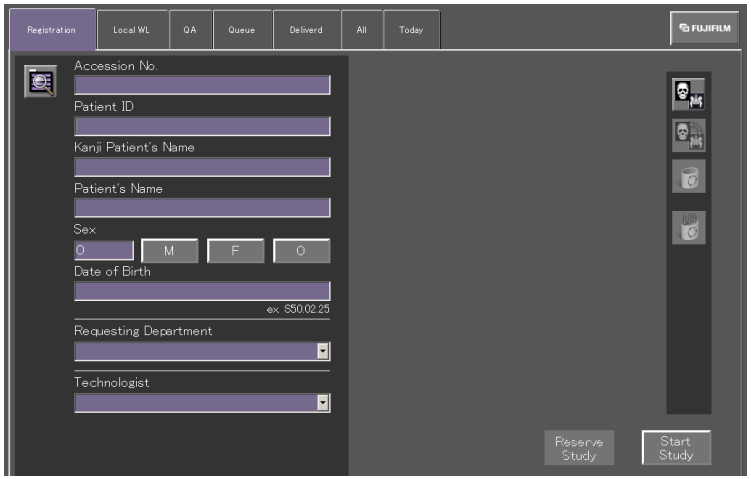


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3.1 Starting the CL-AP

1. **Click Start, point to "Programs" and "Fuji Film", and then click "FCR".**

➔ The CL's opening window opens.
After about one minute, the CL-AP reception window opens.



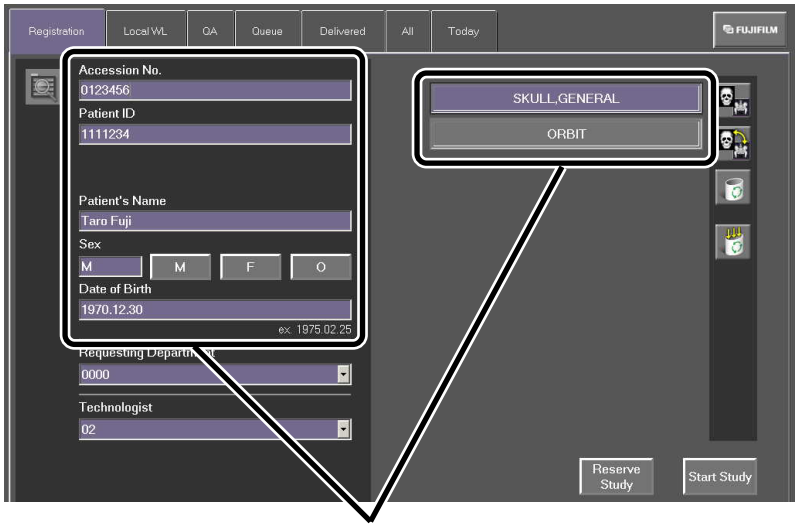
OE000017.EPS

3.2 Verifying the Receipt of the Order Information (Patient Information and Exposure Menu)

1. **At the RIS, enter patient information and exposure menu.**

➔ The patient information and exposure menu are then automatically transferred to the CL as the order information.

2. **Verify that the order information is displayed in the CL's study reception window.**



Order information transferred from the RIS

OE000054.EPS

4. Backing Up the Setup File

Make a backup of the CL setup file.

For making a backup, have the following item on hand:

- Two DOS/V-formatted FDs.

☞ For details on the backup procedure, see “5. Restoring/Backing Up the Configuration File – Configuration Restore/Backup”, under “MU: Maintenance Utility”.

CL+Sanyo Receptor Computer/Electronic Patient Record System [Not available for overseas users]

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