

# STR-DE225/DE325

## SERVICE MANUAL

*AEP Model*  
*Canadian Model*  
 STR-DE225/DE325  
*US Model*  
*E Model*  
*Australian Model*  
*Chinese Model*  
 STR-DE325  
*UK Model*  
 STR-DE225

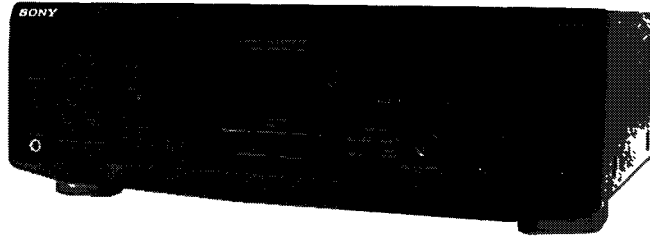


Photo : STR-DE225

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### SPECIFICATIONS

#### Amplifier section

##### Power output

**Stereo mode** (DIN 1 kHz, 4 ohms)  
 STR-DE325: 90 W + 90 W  
 STR-DE225: 40 W + 40 W  
**Surround mode** (DIN 1 kHz, 4 ohms)  
 Front: STR-DE325: 90W/ch  
 STR-DE225: 40W/ch  
 Centre: STR-DE325: 90W  
 STR-DE225: 40W  
 (only in PRO LOG IC MODE)  
 REAR: STR-DE325:  
 (DIN 1 kHz, 4ohms) 90 W  
 STR-DE225: (DIN 1 kHz,  
 4ohms) 40 W  
**5.1/DVD INPUT \* mode** Front: 90 W/ch  
 (DIN 1 kHz, 4 ohms)  
 Centre: 90 W  
 (DIN 1 kHz, 4 ohms)  
 Rear: 45 W/ch  
 (DIN 1 kHz, 8 ohms)  
 (except STR-DE225)  
**Frequency response** PHONO: RIAA(except STR-DE225)  
 equalization curve  $\pm 0.5$  dB  
 TV / LD, CD, TAPE / MD,  
 VIDEO, 5.1/DVD INPUT\*:  
 10Hz - 50kHz  $\pm 1$ dB

#### Input

	Sensitivity	Impedance	S/N (Weighting network, input level)
PHONO (STR-DE325) (MM)	2.5mV	50 kilohms	74 dB 72 dB** (A, 2.5 mV)
CD, 5.1/DVD INPUT*	200 mV		
TAPE/MD, TV/LD, VIDEO		50 kilohms	82 dB 82 dB**

#### Outputs

**TAPE/MD REC OUT:**  
 Voltage: 150 mV,  
 Impedance: 10 kilohms  
**VIDEO AUDIO OUT:**  
 Voltage: 150 mV,  
 Impedance: 10 kilohms  
**WOOFER/MIX AUDIO OUT:** Voltage: 2V  
 Impedance: 10 kilohms  
**PHONES:** Accepts low and high impedance headphones

**Muting**  
**BASS BOOST**  
**TONE**

Full mute  
 +10dB at 70 Hz  
 $\pm 8$ dB at 100 Hz and 10 kHz

#### FM tuner section

**Tuning range** 87.5 - 108.0 MHz  
**Aerial terminals** 75 ohms, unbalanced  
**Sensitivity** Mono: 18.3 dBf, 2.2 $\mu$ V /75 ohms  
 Stereo: 38.3 dBf, 22.5 $\mu$ V /75 ohms  
**Usable sensitivity S/N** 11.2 dBf, 1V /75 ohms (IHF)  
 Mono: 76 dB  
 Stereo: 70dB  
 Mono: 0.3 %  
 Stereo: 0.5 %  
**Harmonic distortion at 1 kHz**  
**Separation** 45dB at 1 kHz  
**Frequency response** 30 Hz - 15kHz  $\pm 0.5$  dB  
**Selectivity** 60 dB at 400 kHz

#### AM tuner section

**Tuning range** 531 - 1602 kHz  
**Aerial** Loop aerial  
**Usable sensitivity S/N** 50 dB/m (at 999 kHz)  
 54 dB(at 50 mV/m)  
**Harmonic distortion** 0.5%(50 mV/m, 400Hz)  
**Selectivity** 35 dB

— Continued on next page —

## FM STEREO/FM-AM RECEIVER



# SONY®

**General**

System	Tuner section; PLL quartz-locked digital synthesizer system Preamplifier section: Low-noise NF type equalizer Power amplifier section: Pure-complimentary SEPP
Power requirements	230 V AC, 50/60 Hz
Power consumption	STR-DE325: 195 W STR-DE225: 110 W
AC outlets	Switched 100 W (except for the U.K. model)
Dimensions	430 × 145 × 295 mm
Mass(Approx.)	STR-DE325: 7.4 kg STR-DE225: 6.1 kg
Supplied accessories	FM wire aerial (1) AM loop aerial (1) Remote controller (remote) (1) Size AA (R6) batteries (2) Scart adaptor (1)

Design and specifications are subject to change without notice.  
Specifications indicated are measured at 230 VAC, 50 Hz

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**SAFETY CHECK-OUT**

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

**LEAKAGE**

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

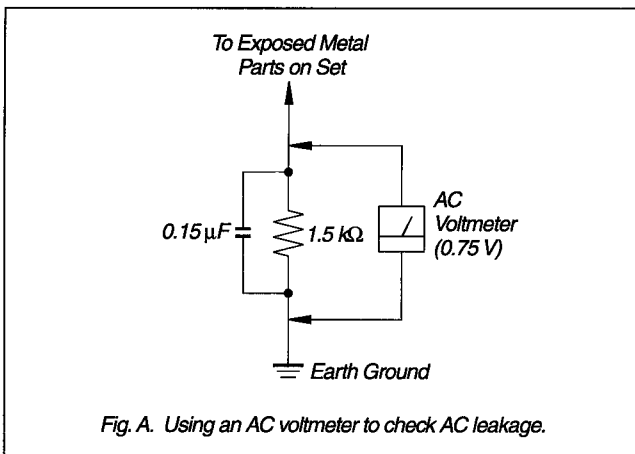


Fig. A. Using an AC voltmeter to check AC leakage.

**SAFETY-RELATED COMPONENT WARNING!!**

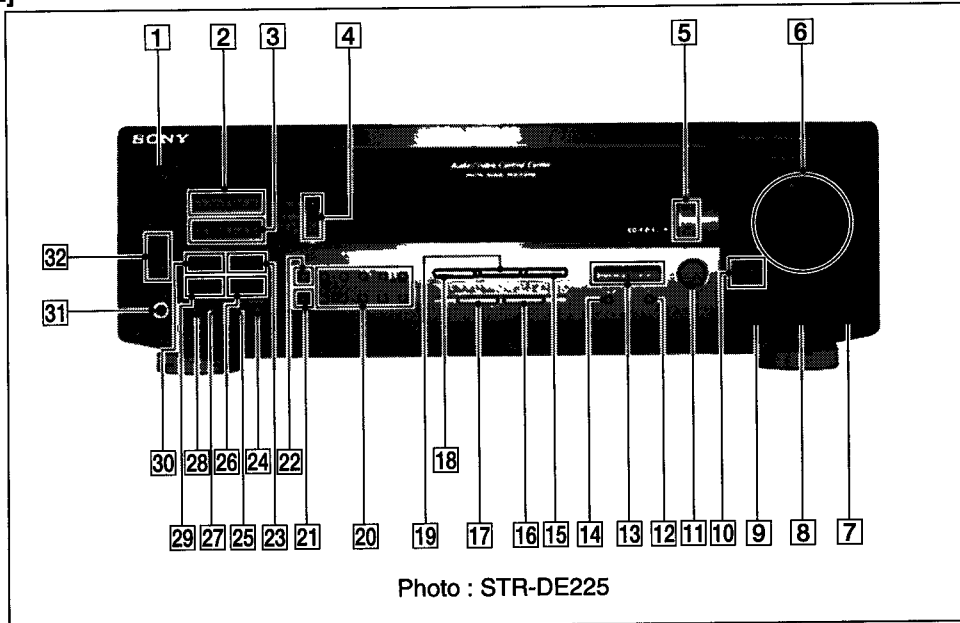
COMPONENTS IDENTIFIED BY MARK  $\Delta$  OR DOTTED LINE WITH MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

**ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!**

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\Delta$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

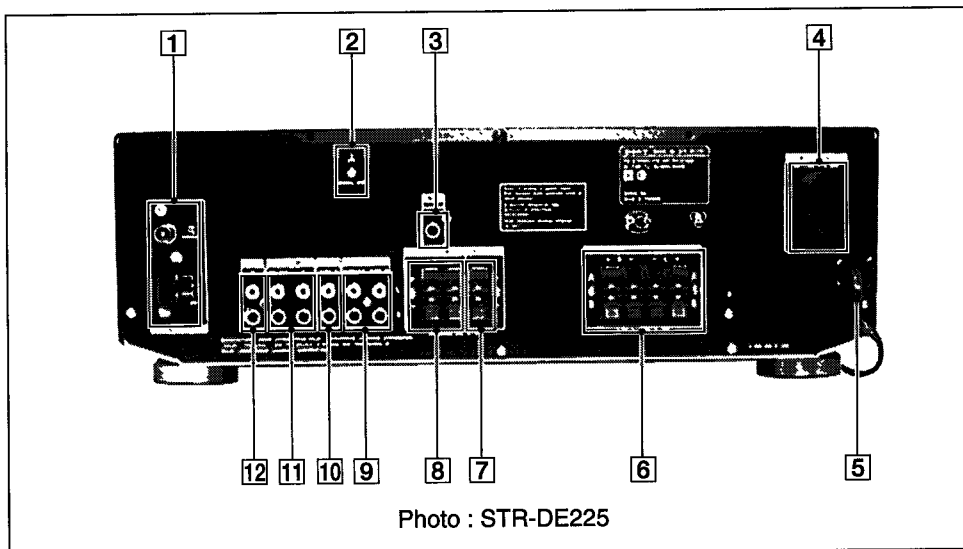
# SECTION 1 GENERAL

## LOCATION AND FUNCTION OF CONTROLS FRONT PANEL]



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 POWER switch (I/O)</li> <li>2 CENTER LEVEL +, - buttons</li> <li>3 REAR LEVEL +, - buttons</li> <li>4 PRO LOGIC, C.STUDIO, HALL indicators</li> <li>5 BASS BOOST indicator</li> <li>6 MASTER VOLUME control</li> <li>7 BALANCE control</li> <li>8 TREBLE control</li> <li>9 BASS control</li> <li>10 MUTING button/indicator</li> <li>11 SURROUND ON/OFF button</li> <li>12 BASS BOOST button</li> <li>13 SURROUND EFFECT/DELAY, MODE buttons</li> <li>14 SET UP button</li> <li>15 TAPE/MD FUNCTION button</li> <li>16 TUNER FUNCTION button</li> </ul> | <ul style="list-style-type: none"> <li>17 CD FUNCTION button</li> <li>18 VIDEO FUNCTION button</li> <li>19 TV/LD FUNCTION button</li> <li>20 Numeric buttons</li> <li>21 SHIFT button</li> <li>22 DIRECT TUNING button</li> <li>23 CHARACTER, DISPLAY buttons</li> <li>24 MEMORY button</li> <li>25 FM/AM button</li> <li>26 PRESET/CHARACTER +, - buttons</li> <li>27 FM MODE button</li> <li>28 SLEEP button</li> <li>29 TUNING/PTY SELECT +, - buttons</li> <li>30 RDS PTY, EON buttons</li> <li>31 PHONES jack</li> <li>32 SPEAKERS A, B ON/OFF buttons</li> </ul> |
|---|--|

## REAR PANEL]



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 ANTENNA (FM/AM)</li> <li>2 <math>\perp</math> SIGNAL GND</li> <li>3 MIX AUDIO OUT</li> <li>4 AC OUTLET</li> <li>5 AC power cord</li> <li>6 FRONT SPEAKERS (A/B)</li> </ul> | <ul style="list-style-type: none"> <li>7 SURROUND SPEAKERS (CENTER)</li> <li>8 SURROUND SPEAKERS (REAR)</li> <li>9 VIDEO AUDIO IN, AUDIO OUT</li> <li>10 TV/LD AUDIO IN</li> <li>11 TAPE/MD IN, REC OUT</li> <li>12 CD IN</li> </ul> |
|---|--|

## SECTION 2 TEST MODE

### INITIALIZATION MODE

\* All preset contents are cleared when this mode is activated. Use this mode before returning the product to clients upon completion of repair.

\* Procedure:

While depressing the VIDEO and the TAPE/MD buttons simultaneously, press the power [I/⏻] button to turn on the main power. The message INITIAL appears and initialization is performed.

### FLUORESCENT INDICATOR TUBE TEST MODE

\* All fluorescent segments are tested. When this test is activated, all segments turn on at the same time, then each segment turns on one after another.

\* Procedure:

While depressing the TV/LD and the BASS BOOST buttons simultaneously, press the power [I/⏻] button to turn on the main power. All segments turn on at the same time, then each segment turns on one after another. The message FINISH appears when this test is complete.

### AUTO-BETICAL CHECK MODE

\* To auto-scanning and memorise of RDS station. (RDS model only).

\* Procedure:

While depressing the MEMORY button, press the power [I/⏻] button to turn on the main power. The message AUTO BET appears and each function is selected one after another.

### AM CHANNEL STEP 9 kHz/10 kHz SELECTION MODE

\* Either the 9 kHz step or 10 kHz step can be selected for the AM channel step. (for US, CND and E models only)

\* Procedure:

Set the FUNCTION to AM. Turn off the main power. While depressing the TUNING+ button, press the power [I/⏻] button to turn on the main power. Either the message 9k STEP or 10k STEP appears. Select the desired step.

### REAR SPEAKER GAIN UP MODE

\* The rear speaker gain can be set to either NORMAL or GAIN UP.

\* Procedure:

While depressing the -SURROUND- MODE button, press the power [I/⏻] button to turn on the main power. Either the message NORMAL or GAIN UP appears. When the product enters this mode again, the other gain appears. Select the desired gain.

### SOFTWARE VERSION DISPLAY MODE

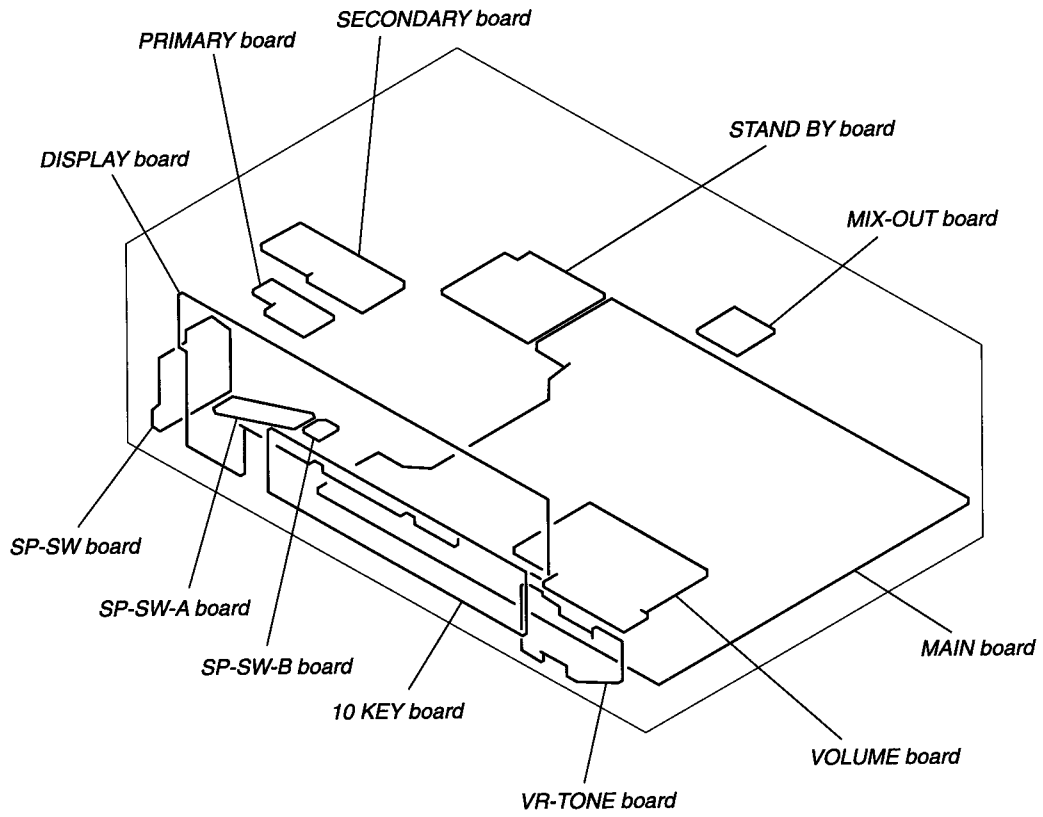
\* The software version is displayed.

\* Procedure:

While depressing the TUNER and the BASS BOOST buttons simultaneously, press the power [I/⏻] button to turn on the main power. The software version is displayed.

# SECTION 3 DIAGRAMS

## 3-1. CIRCUIT BOARDS LOCATION






**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**





(In addition to this necessary note is printed in each block.)

**For schematic diagrams.**

**Note:**





- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

<p><b>Note:</b> The components identified by mark <math>\Delta</math> or dotted line with mark <math>\Delta</math> are critical for safety. Replace only with part number specified.</p>	<p><b>Note:</b> Les composants identifiés par une marque <math>\Delta</math> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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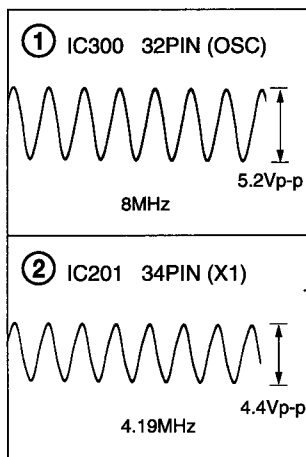
-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
No mark : FM
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
- Circled numbers refer to waveforms.
- Signal path.  
 : FM
- Abbreviation  
CND : Canadian  
EE : East European  
AUS : Australian  
CH : Chinese  
G : German  
MY : Malaysia  
SP : Singapore  
EA : Saudi Arabia

**For printed wiring boards.**

**Note:**

-  : parts extracted from the component side.
-  : Through hole.
-  : internal component.
-  : Pattern from the side which enables seeing.

**• Waveform**



### 3-11. IC PIN FUNCTION DESCRIPTION

#### • IC201 $\mu$ PD78044FGF-112-3B9

Pin No.	Pin Name	I/O	Description
1	DIG7	O	Fluorescent indicator tube drive.
2	DIG6	O	
3	DIG5	O	
4	DIG4	O	
5	DIG3	O	
6	DIG2	O	
7	DIG1	O	
8	+5V	—	Power supply (+5V).
9	S. CLK	O	System clock.
10	S. DATA	O	System data.
11	PLL. DATA	O	PLL data input from TU001.
12	S. CE (LC7288)	O	Chip enable output.
13	S. CE (LV100)	O	Chip enable output.
14	REAR-R	I	Input for model select.
15	BRIDGE	O	Protector detect output.
16	PROTECT	I	Protector detect input.
17	RESET	I	System reset terminal.
18	AUTO-STOP	I	Auto stop detect input.
19	STEREO-IN	I	Stereo detect input.
20	AVss	—	Ground.
21	SP-RY	O	Speaker relay drive.
22	SURR-RY	O	Surround Relay.
23	POWER-RY	O	Power relay drive.
24	AVss	—	Ground.
25	SIGNAL	I	A/D signal input terminal.
26	A/D3	I	A/D3 key input terminal.
27	A/D2	I	A/D2 key input terminal.
28	A/D1	I	A/D1 key input terminal.
29	AVDD	—	Power supply (+5V).
30	AV. REF	—	Reference voltage (+5V).
31	GND	—	Ground.
32	NC	—	Not used (Open).
33	Vss	—	Ground.
34	X1	I	System clock (4.19MHz).
35	X2	O	System clock (4.19MHz).
36	IC. MUTE	O	Mute drive output for $\mu$ PD2581V (IC701).
37	PROLOGIC	O	Prologic LED.
38	SIMULATED	O	CINEMA STUDIO LED.
39	HALL	O	HALL LED.
40	T. MUTE	O	Tuner mute drive output.

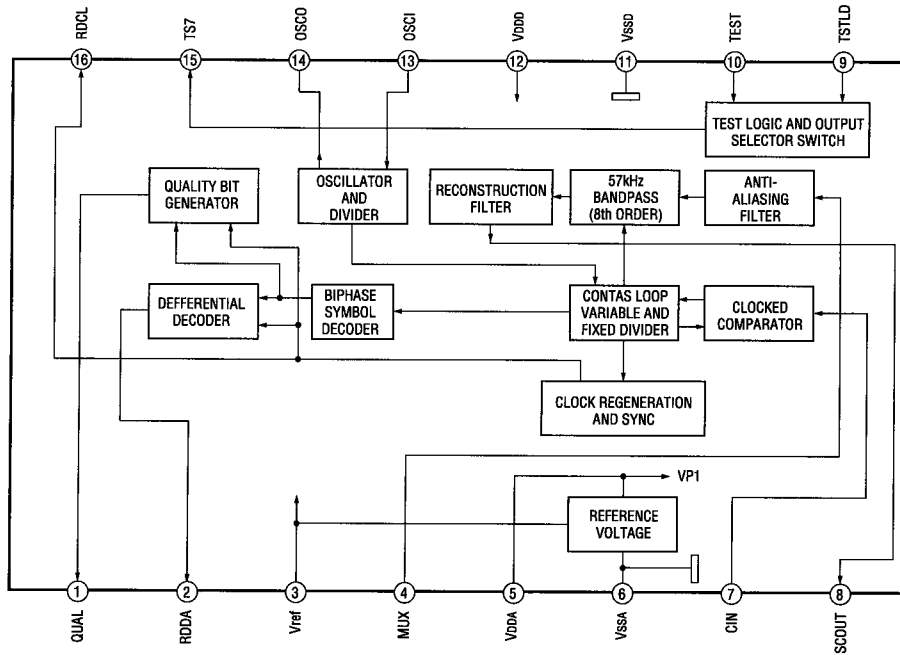
Pin No.	Pin Name	I/O	Description
41	VOLUME UP	O	Volume up.
42	VOLUME DOWN	O	Volume down.
43	$\overline{\text{STANDBY}}$	O	Standby LED drive.
44	$\overline{\text{SYS. POWER}}$	I	System power ON/OFF.
45	RDS. DATA. IN	I	RDS data input.
46	RDS. CLK. IN	I	RDS clock input.
47	$\overline{\text{STOP}}$	I	Stop signal input from NJM2103D (IC950).
48	Vss	—	Ground.
49	$\overline{\text{SIRCS}}$	I	Sircs signal input.
50	$\overline{\text{POWER SW}}$	I	Power switch input terminal.
51	5.1ch LED	—	5.1ch LED drive.
52	+5V	—	Power supply (+5V).
53	BASS BOOST	O	Bass boost LED drive.
54	FUNC. MUTE	O	Line mute drive.
55	SL MUTE	O	SL mute drive.
56	VERSION	I	Input for model select.
57	K14	I	Key in 4.
58	K13	I	Key in 3.
59	K12	I	Key in 2.
60	K11	I	Key in 1.
61	SR MUTE	O	SR mute drive.
62	S15	O	Key out 15.
63	S14	O	Key out 14.
64	S13	O	Key out 13.
65	S12	O	Key out 12.
66	S11	O	Key out 11.
67	S10	O	Key out 10.
68	S9	O	Key out 9.
69	S8	O	Key out 8.
70	S7	O	Key out 7.
71	VLOAD	—	Connect to -24V.
72	S6	O	Key out 6.
73	S5	O	Key out 5.
74	S4	O	Key out 4.
75	S3	O	Key out 3.
76	S2	O	Key out 2.
77	S1	O	Key out 1.
78	DIG10	O	Fluorescent indicator tube drive.
79	DIG9	O	
80	DIG8	O	



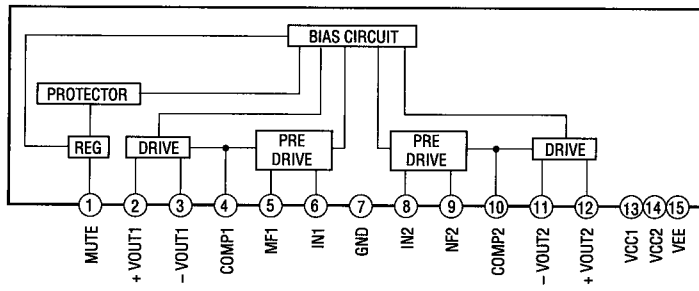
### 3-12. IC BLOCK DIAGRAMS

#### • IC BLOCK DIAGRAMS

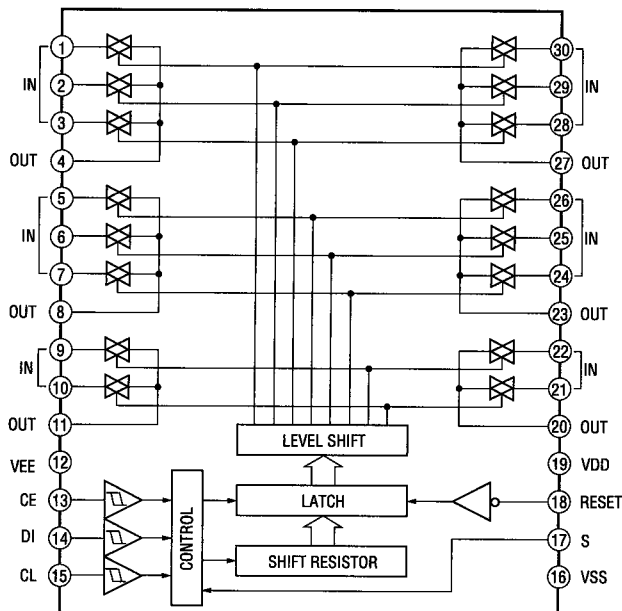
IC1 BU1922



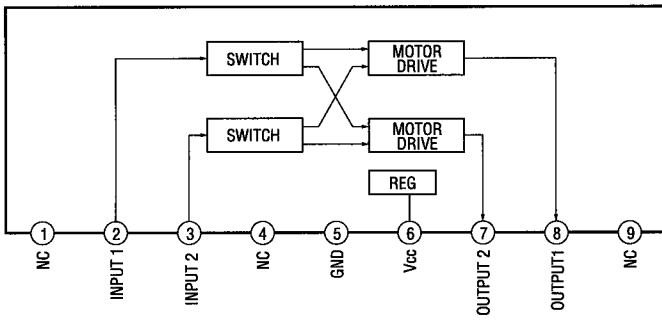
IC701 uPC2581V



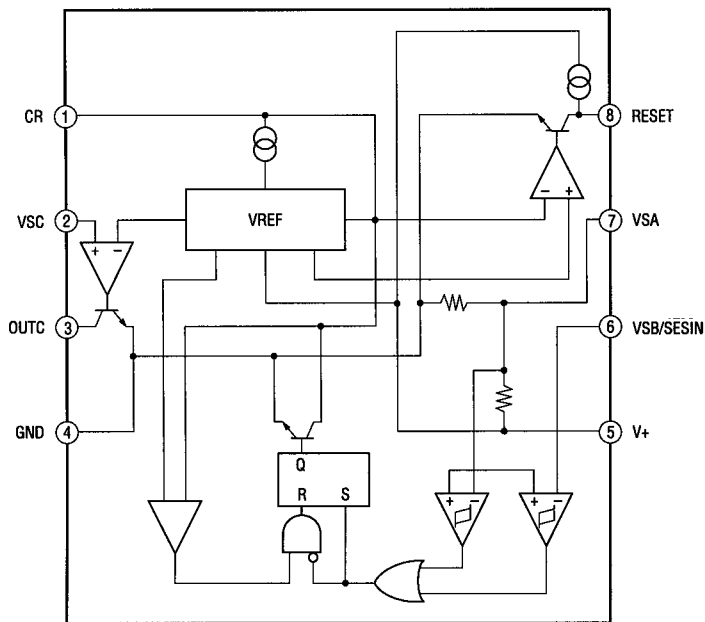
IC401, IC500 LC7822



**IC202 BA6208**



**IC950 NJM2103D**



## SECTION 4 EXPLODED VIEWS

**NOTE:**

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
 

CND : Canadian	G : German
EE : East European	MY : Malaysia
AUS : Australian	SP : Singapore
CH : Chinese	EA : Saudi Arabia

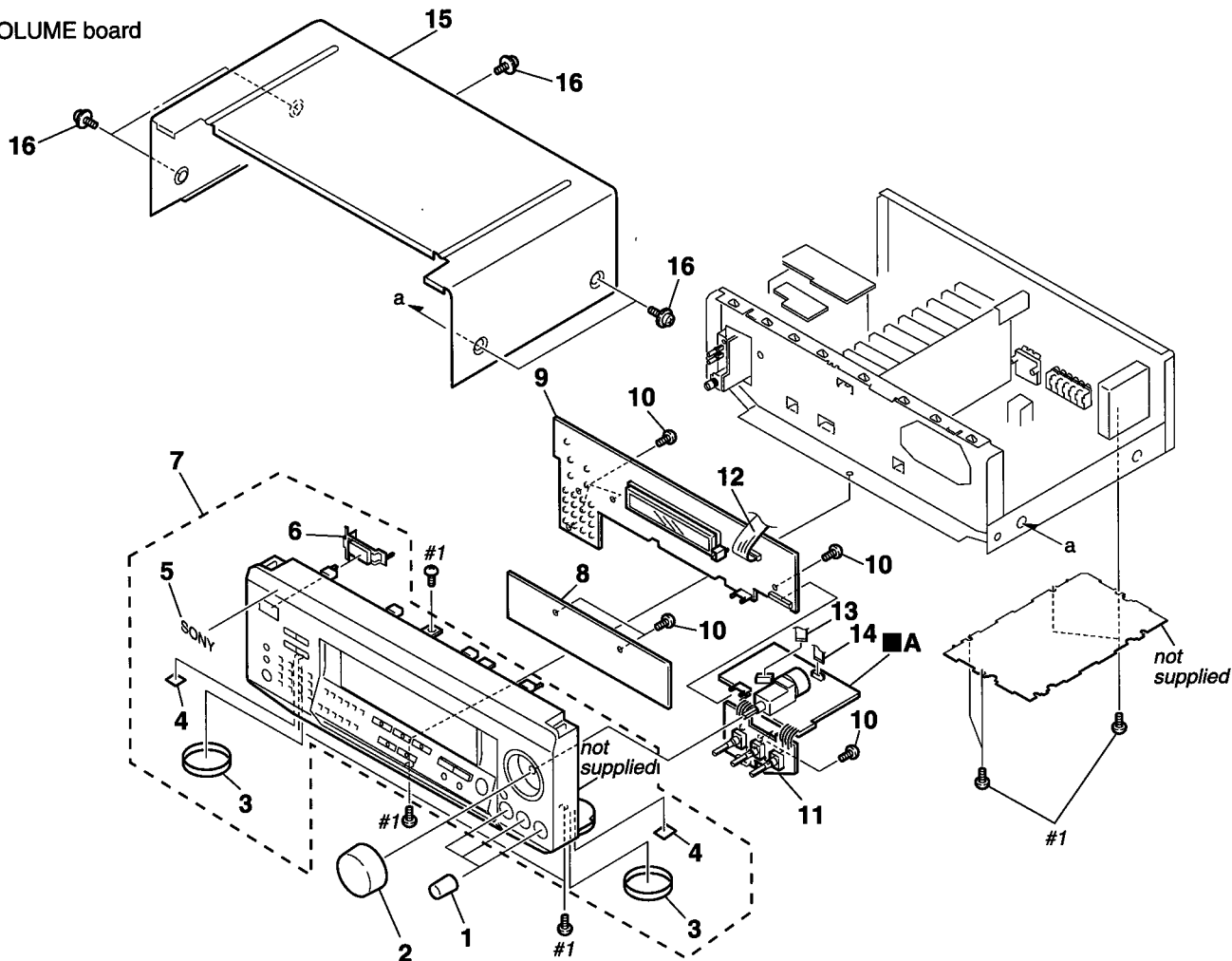
When indicating parts by reference number, please include the board name.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

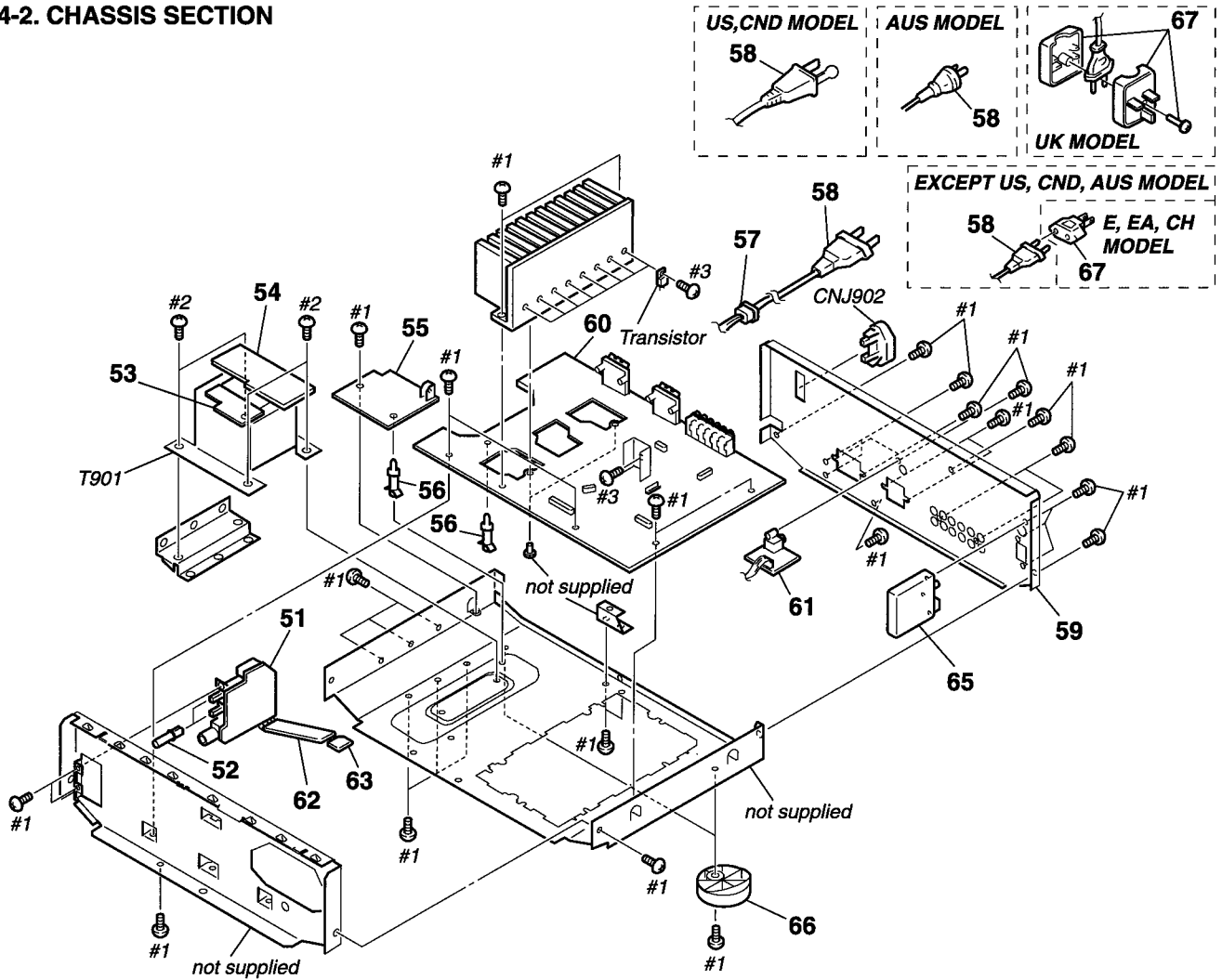
### 4-1. FRONT PANEL SECTION

■A : VOLUME board



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-998-717-01	KNOB (BAL)		* 9	A-4407-510-A	DISPLAY BOARD, COMPLETE	
2	X-4949-627-1	KNOB (VOL) ASSY				(DE225:AEP,G,EE,UK)	
3	4-977-593-11	RING (DIA. 50), ORNAMENTAL	(EXCEPT US,CND)	* 9	A-4407-515-A	DISPLAY BOARD, COMPLETE (DE325:AUS)	
4	4-977-358-11	CUSHION		* 9	A-4407-518-A	DISPLAY BOARD, COMPLETE (DE325:E,EA,CH)	
5	4-996-698-01	EMBLEM, SONY		* 9	A-4407-521-A	DISPLAY BOARD, COMPLETE (DE325:AEP,G,EE)	
6	4-998-189-01	BUTTON (P-T)		10	4-951-620-01	SCREW (2.6 x 8), +BVTP	
7	X-4949-628-1	FRONT PANEL ASSY (DE325:US,CND)		* 11	A-4407-436-A	VR-TONE BOARD, COMPLETE	(DE225:CND/DE325:EXCEPT AEP,G,EE)
7	X-4949-629-1	FRONT PANEL ASSY (DE225:CND)		* 11	A-4407-523-A	VR-TONE BOARD, COMPLETE	(DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
7	X-4949-679-1	FRONT PANEL ASSY (DE325:AUS)		12	1-782-084-11	WIRE (FLAT TYPE) (23 CORE)	
7	X-4949-680-1	FRONT PANEL ASSY (DE325:E,EA,CH,SP,MY)		13	1-782-074-11	WIRE (FLAT TYPE) (7 CORE)	
7	X-4949-681-1	FRONT PANEL ASSY (DE325:AEP,G,EE)		14	1-782-075-11	WIRE (FLAT TYPE) (9 CORE)	
7	X-4949-682-1	FRONT PANEL ASSY (DE225:AEP,G,EE,UK)		* 15	4-998-206-21	CASE (413226)	
* 8	1-669-263-11	10 KEY BOARD		16	3-710-901-11	SCREW, TAPPING	
* 9	A-4407-424-A	DISPLAY BOARD, COMPLETE (DE325:SP,MY)					
* 9	A-4407-434-A	DISPLAY BOARD, COMPLETE	(DE225:CND/DE325:US,CND)				

## 4-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* 51	1-669-270-11	SP-SW BOARD		* 60	A-4407-529-A	MAIN BOARD, COMPLETE (DE325:AEP,G,EE)	
* 52	4-951-801-03	BUTTON (S)		* 61	1-669-273-11	MIX-OUT BOARD	
* 53	1-669-267-11	PRIMARY BOARD		* 62	1-669-271-11	SP-SW-A BOARD	
* 54	1-669-268-11	SECONDARY BOARD		* 63	1-669-272-11	SP-SW-B BOARD	
* 55	1-669-266-11	STAND BY BOARD		* 64	1-669-269-11	VOL-SEL BOARD (DE325:E,EA,CH)	
* 56	4-954-051-51	HOLDER, PC BOARD		65	1-693-407-51	TUNER (US,CND)	
* 57	3-703-244-21	BUSHING (2104), CORD		65	1-693-408-31	TUNER (EXCEPT US,CND,EE)	
△ 58	1-777-071-21	CORD, POWER (EXCEPT US,CND,AUS)		65	1-693-411-31	TUNER (EE)	
△ 58	1-696-847-21	CORD, POWER (AUS)		66	X-4947-207-2	FOOT ASSY (F50150S)	
△ 58	1-783-204-11	CORD, POWER (US,CND)		66	X-4947-208-2	FOOT ASSY (F50150S)	(DE225:AEP,G,EE,UK/DE325:EXCEPT US,CND) (DE225:CND/DE325:US,CND)
* 59	4-998-208-11	BACK PANEL (E2) (DE225:CND)		△ 67	1-569-008-21	ADAPTOR, CONVERSION 2P (E,EA,CH)	
* 59	4-998-208-21	BACK PANEL (E2) (DE225:AEP,G,EE,UK)		△ 67	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
* 59	4-998-209-01	BACK PANEL (E3) (DE325:US)		△ CNJ902	1-251-416-11	OUTLET, A.C.(AUS)	
* 59	4-998-209-11	BACK PANEL (E3) (DE325:CND)		△ CNJ902	1-526-794-11	OUTLET, AC (AEP,G,EE,SP,MY)	
* 59	4-998-209-41	BACK PANEL (E3) (DE325:CH)		△ T901	1-431-264-11	TRANSFORMER, POWER (DE325:CND)	
* 59	4-998-209-21	BACK PANEL (E3) (DE325:AUS)		△ T901	1-431-793-11	TRANSFORMER, POWER (DE325:US)	
* 59	4-998-209-31	BACK PANEL (E3) (DE325:SP,MY)		△ T901	1-431-794-11	TRANSFORMER, POWER (DE325:E,EA,CH)	
* 59	4-998-209-51	BACK PANEL (E3) (DE325:E,EA)		△ T901	1-431-795-11	TRANSFORMER, POWER (DE325:SP,MY)	
* 59	4-998-209-61	BACK PANEL (E3) (DE325:AEP,G)		△ T901	1-431-796-11	TRANSFORMER, POWER (DE325:AEP,G,EE)	
* 59	4-998-209-71	BACK PANEL (E3) (DE325:EE)		△ T901	1-431-798-11	TRANSFORMER, POWER (DE225:AEP,G,EE,UK)	
* 60	A-4407-425-A	MAIN BOARD, COMPLETE (DE225:CND)		△ T901	1-431-799-11	TRANSFORMER, POWER (DE225:CND)	
* 60	A-4407-448-A	MAIN BOARD, COMPLETE (DE325:US)		△ T901	1-431-818-11	TRANSFORMER, POWER (DE325:AUS)	
* 60	A-4407-512-A	MAIN BOARD, COMPLETE (DE225:AEP,G,EE,UK)					
* 60	A-4407-514-A	MAIN BOARD, COMPLETE (DE325:CND)					
* 60	A-4407-517-A	MAIN BOARD, COMPLETE (DE325:E,EA,CH,AUS,SP,MY)					

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# SECTION 5 ELECTRICAL PARTS LIST

**DISPLAY**

**NOTE:**

When indicating parts by reference number, please include the board name.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:  
uF:  $\mu$ F
- RESISTORS  
All resistors are in ohms.  
METAL: metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- COILS  
uH:  $\mu$ H
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$ A..., uPA...,  $\mu$ PA...,  
uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,  
uPD...,  $\mu$ PD...
- Abbreviation  
CND : Canadian                    G : German  
EE : East European            MY : Malaysia  
AUS : Australian                SP : Singapore  
CH : Chinese                    EA : Saudi Arabia

• Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-4407-424-A	DISPLAY BOARD, COMPLETE (DE325:SP,MY)		D222	8-719-911-19	DIODE 1SS119 (DE325:E,EA,CH,AUS,SP,MY)	
*	A-4407-434-A	DISPLAY BOARD, COMPLETE ***** (DE225:CND/DE325:US,CND)		D223	8-719-991-33	DIODE 1SS133T-77 (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
*	A-4407-510-A	DISPLAY BOARD, COMPLETE ***** (DE225:AEP,G,EE,UK)		D223	8-719-911-19	DIODE 1SS119 (DE325:AUS)	
*	A-4407-515-A	DISPLAY BOARD, COMPLETE (DE325:AUS)		D225	8-719-991-33	DIODE 1SS133T-77 (DE225:AEP,G,EE,UK)	
*	A-4407-518-A	DISPLAY BOARD, COMPLETE (DE325:E,EA,CH)		D231	8-719-911-19	DIODE 1SS119	
*	A-4407-521-A	DISPLAY BOARD, COMPLETE (DE325:AEP,G,EE)		D235	8-719-046-39	DIODE SEL5821A-TH15 (HALL)	
*	4-921-941-01	CUSHION (FL)		D236	8-719-046-39	DIODE SEL5821A-TH15 (C.STUDIO)	
*	4-943-107-11	HOLDER (FL TUBE)		D237	8-719-046-39	DIODE SEL5821A-TH15 (PRO LOGIC)	
		< CAPACITOR >		D239	8-719-046-39	DIODE SEL5821A-TH15 (BASS BOOST)	
C201	1-104-905-11	CAPACITOR	0.22F 5.5V			< FLUORESCENT >	
C202	1-164-159-11	CERAMIC	0.1uF 50V	FL201	1-517-662-11	INDICATOR TUBE, FLUORESCENT	
C203	1-124-465-00	ELECT	0.47uF 20% 50V			< IC >	
C204	1-164-159-11	CERAMIC	0.1uF 50V	IC201	8-759-526-68	IC uPD78044FGF-112-3B9	
C205	1-162-294-31	CERAMIC	0.001uF 10% 50V	IC202	8-759-962-08	IC BA6208	
C206	1-164-159-11	CERAMIC	0.1uF 50V	IC203	8-759-332-18	IC GP1U27XB	
C207	1-126-096-11	ELECT	10uF 20% 35V			< COIL >	
C208	1-126-096-11	ELECT	10uF 20% 35V	L401	1-410-509-11	INDUCTOR 10uH	
		< CONNECTOR >				< TRANSISTOR >	
CNP205	1-779-366-11	CONNECTOR, BOARD TO BOARD 4P		Q201	8-729-900-63	TRANSISTOR DTA124ES	
CNS201	1-568-742-11	SOCKET, CONNECTOR 23P		Q202	8-729-900-36	TRANSISTOR DTC124ES	
CNS202	1-770-400-11	HOUSING, CONNECTOR(PC BOARD)7P		Q231	8-729-900-36	TRANSISTOR DTC124ES	
		< DIODE >				< RESISTOR >	
D201	8-719-911-19	DIODE 1SS119		R200	1-249-433-11	CARBON 22K 5% 1/4W	
D202	8-719-911-19	DIODE 1SS119		R201	1-247-903-00	CARBON 1M 5% 1/4W	
D203	8-719-911-19	DIODE 1SS119		R202	1-249-429-11	CARBON 10K 5% 1/4W	
D204	8-719-911-19	DIODE 1SS119		R203	1-249-429-11	CARBON 10K 5% 1/4W	
D211	8-719-911-19	DIODE 1SS119		R204	1-249-425-11	CARBON 4.7K 5% 1/4W F	
D212	8-719-911-19	DIODE 1SS119		R205	1-249-441-11	CARBON 100K 5% 1/4W	
D213	8-719-991-33	DIODE 1SS133T-77 (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R207	1-249-429-11	CARBON 10K 5% 1/4W (DE325:AEP,G,EE)	
D214	8-719-991-33	DIODE 1SS133T-77 (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R211	1-249-433-11	CARBON 22K 5% 1/4W	
D215	8-719-911-19	DIODE 1SS119		R212	1-249-433-11	CARBON 22K 5% 1/4W	
D216	8-719-911-19	DIODE 1SS119		R216	1-249-433-11	CARBON 22K 5% 1/4W	
D217	8-719-911-19	DIODE 1SS119		R221	1-247-807-31	CARBON 100 5% 1/4W	
D218	8-719-911-19	DIODE 1SS119		R222	1-247-807-31	CARBON 100 5% 1/4W	
D221	8-719-991-33	DIODE 1SS133T-77 (DE325:EE)		R223	1-247-807-31	CARBON 100 5% 1/4W	
D221	8-719-911-19	DIODE 1SS119 (DE325:SP,MY)		R224	1-247-807-31	CARBON 100 5% 1/4W	
				R225	1-247-807-31	CARBON 100 5% 1/4W	
				R226	1-249-441-11	CARBON 100K 5% 1/4W	
				R227	1-249-441-11	CARBON 100K 5% 1/4W	
				R228	1-249-406-11	CARBON 120 5% 1/4W F	
				R230	1-249-406-11	CARBON 120 5% 1/4W F	
				R231	1-249-427-11	CARBON 6.8K 5% 1/4W F	

**DISPLAY**

**MAIN**

Ref. No.	Part No.	Description	Remarks
R270	1-247-807-31	CARBON 100	5% 1/4W
R280	1-249-419-11	CARBON 1.5K	5% 1/4W F (DE325:AEP,G,EE)
R281	1-249-421-11	CARBON 2.2K	5% 1/4W F (DE225:AEP,G,EE,UK)
R282	1-247-843-11	CARBON 3.3K	5% 1/4W (DE225:AEP,G,EE,UK)
R283	1-249-427-11	CARBON 6.8K	5% 1/4W F
R284	1-249-427-11	CARBON 6.8K	5% 1/4W F
R286	1-249-437-11	CARBON 47K	5% 1/4W
RD01	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD02	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD03	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD04	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD05	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD06	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD07	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD08	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD09	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD10	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD11	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD12	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD13	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD14	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD15	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD16	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD17	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD18	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD19	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD20	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD21	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD22	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD23	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD24	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)
RD25	1-249-439-11	CARBON 68K	5% 1/4W (DE225:CND/DE325:EXCEPT AEP,G,EE)

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S200	1-762-751-11	SWITCH, TACTILE (POEWR)	
S201	1-762-751-11	SWITCH, TACTILE (CENTER LEVEL -)	
S202	1-762-751-11	SWITCH, TACTILE (CENTER LEVEL +)	
S203	1-762-751-11	SWITCH, TACTILE (REAR LEVEL -)	
S204	1-762-751-11	SWITCH, TACTILE (REAR LEVEL +)	
S205	1-762-751-11	SWITCH, TACTILE (PTY) (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
S206	1-762-751-11	SWITCH, TACTILE (EON) (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
S207	1-762-751-11	SWITCH, TACTILE (CHARACTER) (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
S208	1-762-751-11	SWITCH, TACTILE (DISPLAY) (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
S209	1-762-751-11	SWITCH, TACTILE (TUNING PTY SELECT-)	
S210	1-762-751-11	SWITCH, TACTILE (TUNING PTY SELECT+)	
S211	1-762-751-11	SWITCH, TACTILE (PRESET CHARACTER-)	
S212	1-762-751-11	SWITCH, TACTILE (PRESET CHARACTER+)	
S213	1-762-751-11	SWITCH, TACTILE (SLEEP)	
S214	1-762-751-11	SWITCH, TACTILE (FM MODE)	
S215	1-762-751-11	SWITCH, TACTILE (FM/AM)	
S216	1-762-751-11	SWITCH, TACTILE (MEMORY)	
		< VIBRATOR >	
X201	1-577-101-11	VIBRATOR, CERAMIC 4.19MHZ	
		*****	
*	A-4407-425-A	MAIN BOARD, COMPLETE (DE225:CND)	
		*****	
*	A-4407-448-A	MAIN BOARD, COMPLETE (DE325:US)	
		*****	
*	A-4407-512-A	MAIN BOARD, COMPLETE	
		*****	
		(DE225:AEP,G,EE,UK)	
*	A-4407-514-A	MAIN BOARD, COMPLETE (DE325:CND)	
		*****	
*	A-4407-517-A	MAIN BOARD, COMPLETE	
		*****	
		(DE325:E,EA,CH,AUS,SP,MY)	
*	A-4407-529-A	MAIN BOARD, COMPLETE (DE325:AEP,G,EE)	
		*****	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
	3-905-609-01	SCREW (TRANSISTOR)	
	4-812-134-00	RIVET (DIA. 3.5), NYLON	
	7-685-872-09	SCREW +BVTT 3X8 (S)	
		< CAPACITOR >	
C3	1-162-286-21	CERAMIC 220PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
C4	1-126-961-11	ELECT 2.2uF 20% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
C5	1-162-306-11	CERAMIC 0.01uF 20% 16V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
C6	1-162-291-31	CERAMIC 560PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
C7	1-102-527-11	CERAMIC 82PF 5% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
C8	1-102-852-91	CERAMIC 47PF 5% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	

Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
C9	1-126-960-11	ELECT	1uF	20%	50V	C402	1-126-962-11	ELECT	3.3uF	20%	50V
			(DE225:AEP,G,EE,UK/DE325:AEP,G,EE)								(DE325:AEP,G,EE)
C302	1-126-934-11	ELECT	220uF	20%	10V	C403	1-126-966-11	ELECT	33uF	20%	50V
C303	1-130-494-11	MYLAR	0.082uF	5%	50V						(DE325:AEP,G,EE)
C304	1-137-367-11	FILM	0.0033uF	5%	50V	C404	1-162-286-21	CERAMIC	220PF	10%	50V
C305	1-130-494-11	MYLAR	0.082uF	5%	50V						(DE325:AEP,G,EE)
C306	1-126-959-11	ELECT	0.47uF	20%	50V	C405	1-137-459-11	FILM	0.0056uF	5%	100V
C307	1-126-964-11	ELECT	10uF	20%	50V						(DE325:AEP,G,EE)
C308	1-126-964-11	ELECT	10uF	20%	50V	C406	1-164-159-11	CERAMIC	0.1uF		50V
C309	1-162-291-31	CERAMIC	560PF	10%	50V	C407	1-137-365-11	FILM	0.0015uF	5%	50V
C310	1-126-962-11	ELECT	3.3uF	20%	50V						(DE325:AEP,G,EE)
C311	1-126-961-11	ELECT	2.2uF	20%	50V	C408	1-162-294-31	CERAMIC	0.001uF	10%	50V
C312	1-126-934-11	ELECT	220uF	20%	10V	C409	1-126-962-11	ELECT	3.3uF	20%	50V
C313	1-126-934-11	ELECT	220uF	20%	10V						(DE325:AEP,G,EE)
C314	1-136-165-00	FILM	0.1uF	5%	50V	C410	1-164-159-21	CERAMIC	0.1uF		50V
C315	1-164-159-11	CERAMIC	0.1uF		50V						(DE325:AEP,G,EE)
C316	1-124-252-00	ELECT	0.33uF	20%	50V	C412	1-162-291-31	CERAMIC	560PF	10%	50V
C318	1-136-357-11	FILM	680PF	5%	50V	C413	1-164-159-11	CERAMIC	0.1uF		50V
C322	1-126-962-11	ELECT	3.3uF	20%	50V	C415	1-164-159-11	CERAMIC	0.1uF		50V
C323	1-136-173-00	FILM	0.47uF	5%	50V	C416	1-164-159-11	CERAMIC	0.1uF		50V
C324	1-126-967-11	ELECT	47uF	20%	16V	C434	1-162-286-31	CERAMIC	220PF	10%	50V
C325	1-136-165-00	FILM	0.1uF	5%	50V	C435	1-162-286-31	CERAMIC	220PF	10%	50V
C326	1-136-165-00	FILM	0.1uF	5%	50V	C451	1-162-286-21	CERAMIC	220PF	10%	50V
C327	1-126-959-11	ELECT	0.47uF	20%	50V						(DE325:AEP,G,EE)
C328	1-126-963-11	ELECT	4.7uF	20%	50V	C452	1-126-962-11	ELECT	3.3uF	20%	50V
C329	1-126-959-11	ELECT	0.47uF	20%	50V						(DE325:AEP,G,EE)
C330	1-126-963-11	ELECT	4.7uF	20%	50V	C453	1-126-966-11	ELECT	33uF	20%	50V
C331	1-124-250-11	ELECT	0.15uF	20%	50V						(DE325:AEP,G,EE)
C332	1-126-962-11	ELECT	3.3uF	20%	50V	C454	1-162-286-21	CERAMIC	220PF	10%	50V
C333	1-124-250-11	ELECT	0.15uF	20%	50V						(DE325:AEP,G,EE)
C334	1-137-372-11	FILM	0.022uF	5%	50V	C455	1-137-459-11	FILM	0.0056uF	5%	100V
											(DE325:AEP,G,EE)
C335	1-136-161-00	FILM	0.047uF	5%	50V	C457	1-137-365-11	FILM	0.0015uF	5%	50V
C336	1-126-934-11	ELECT	220uF	20%	10V						(DE325:AEP,G,EE)
C337	1-126-964-11	ELECT	10uF	20%	50V	C459	1-126-962-11	ELECT	3.3uF	20%	50V
C338	1-126-964-11	ELECT	10uF	20%	50V						(DE325:AEP,G,EE)
C339	1-126-964-11	ELECT	10uF	20%	50V	C460	1-164-159-21	CERAMIC	0.1uF		50V
											(DE325:AEP,G,EE)
C340	1-126-964-11	ELECT	10uF	20%	50V	C602	1-162-288-31	CERAMIC	330PF	10%	50V
C341	1-126-934-11	ELECT	220uF	20%	10V	C603	1-126-933-11	ELECT	100uF	20%	10V
C342	1-126-962-11	ELECT	3.3uF	20%	50V	C605	1-102-233-00	CERAMIC	33PF	10%	500V
C343	1-126-962-11	ELECT	3.3uF	20%	50V	C610	1-126-967-11	ELECT	47uF	20%	16V
C344	1-136-165-00	FILM	0.1uF	5%	50V	C611	1-137-372-11	FILM	0.022uF	5%	50V
C345	1-136-165-00	FILM	0.1uF	5%	50V	C620	1-162-286-31	CERAMIC	220PF	10%	50V
C346	1-126-959-11	ELECT	0.47uF	20%	50V	C652	1-162-282-31	CERAMIC	100PF	10%	50V
C347	1-126-963-11	ELECT	4.7uF	20%	50V	C653	1-126-933-11	ELECT	100uF	20%	10V
C348	1-126-959-11	ELECT	0.47uF	20%	50V	C655	1-102-233-00	CERAMIC	33PF	10%	500V
C349	1-126-963-11	ELECT	4.7uF	20%	50V	C660	1-126-967-11	ELECT	47uF	20%	16V
C350	1-124-250-11	ELECT	0.15uF	20%	50V	C661	1-137-372-11	FILM	0.022uF	5%	50V
C351	1-126-962-11	ELECT	3.3uF	20%	50V	C670	1-162-286-31	CERAMIC	220PF	10%	50V
C352	1-124-250-11	ELECT	0.15uF	20%	50V	C702	1-162-282-31	CERAMIC	100PF	10%	50V
C353	1-164-159-11	CERAMIC	0.1uF		50V	C703	1-126-933-11	ELECT	100uF	20%	10V
C354	1-164-159-11	CERAMIC	0.1uF		50V	C705	1-102-233-00	CERAMIC	33PF	10%	500V
C355	1-164-159-11	CERAMIC	0.1uF		50V	C710	1-126-967-11	ELECT	47uF	20%	16V
C356	1-164-159-11	CERAMIC	0.1uF		50V	C711	1-137-372-11	FILM	0.022uF	5%	50V
C357	1-164-159-11	CERAMIC	0.1uF		50V	C720	1-162-286-31	CERAMIC	220PF	10%	50V
C358	1-164-159-11	CERAMIC	0.1uF		50V	C721	1-126-934-11	ELECT	220uF	20%	10V
C359	1-126-963-11	ELECT	4.7uF	20%	50V	C722	1-126-964-11	ELECT	10uF	20%	50V
C360	1-126-963-11	ELECT	4.7uF	20%	50V						
C370	1-164-159-11	CERAMIC	0.1uF		50V						
C371	1-126-966-11	ELECT	33uF	20%	50V						
C401	1-162-286-21	CERAMIC	220PF	10%	50V						
			(DE325:AEP,G,EE)								

**MAIN**

Ref. No.	Part No.	Description	Remarks
C740	1-128-560-11	ELECT	22uF 20% 100V
C741	1-128-560-11	ELECT	22uF 20% 100V
C742	1-126-925-11	ELECT	470uF 20% 10V
C743	1-126-925-11	ELECT	470uF 20% 10V
C752	1-162-282-31	CERAMIC	100PF 10% 50V
C753	1-126-933-11	ELECT	100uF 20% 10V
C755	1-102-233-00	CERAMIC	33PF 10% 500V
C760	1-126-967-11	ELECT	47uF 20% 16V
C761	1-137-372-11	FILM	0.022uF 5% 50V
C770	1-162-286-31	CERAMIC	220PF 10% 50V
C799	1-164-159-21	CERAMIC	0.1uF 50V (DE325:AEP,G,EE)
C801	1-104-664-11	ELECT	47uF 20% 25V
C802	1-104-664-11	ELECT	47uF 20% 25V
C803	1-128-493-11	ELECT	4700uF 20% 63V (DE225)
C803	1-109-932-11	ELECT(BLOCK)	10000uF 20% 71V (DE325:US)
C803	1-107-766-11	ELECT(BLOCK)	8200uF 20% 71V (DE325:CND:AEP,G,EE)
C803	1-104-595-11	ELECT(BLOCK)	6800uF 20% 71V (DE325:E,EA,CH,AUS,SP,MY)
C804	1-128-493-11	ELECT	4700uF 20% 63V (DE225)
C804	1-109-932-11	ELECT(BLOCK)	10000uF 20% 71V (DE325:US)
C804	1-107-766-11	ELECT(BLOCK)	8200uF 20% 71V (DE325:CND:AEP,G,EE)
C804	1-104-595-11	ELECT(BLOCK)	6800uF 20% 71V (DE325:E,EA,CH,AUS,SP,MY)
C805	1-115-694-21	MYLAR	0.22uF 5% 100V (DE225:AEP,G,EE,UK/DE325:EXCEPTUS,CND)
C805	1-137-420-11	FILM	0.047uF 10% 100V (DE225:CND/DE325:US,CND)
C806	1-115-694-21	MYLAR	0.22uF 5% 100V (DE225:AEP,G,EE,UK/DE325:EXCEPT US,CND)
C806	1-137-420-11	FILM	0.047uF 10% 100V (DE225:CND/DE325:US,CND)
C807	1-104-664-11	ELECT	47uF 20% 25V
C808	1-104-664-11	ELECT	47uF 20% 25V
C809	1-126-960-11	ELECT	1uF 20% 50V
C810	1-126-960-11	ELECT	1uF 20% 50V
C811	1-126-942-61	ELECT	1000uF 20% 25V
C812	1-126-941-11	ELECT	470uF 20% 25V
C813	1-101-001-00	CERAMIC	0.001uF 50V
C814	1-101-001-00	CERAMIC	0.001uF 50V
C820	1-161-494-00	CERAMIC	0.022uF 25V
C821	1-161-494-00	CERAMIC	0.022uF 25V
C822	1-104-664-11	ELECT	47uF 20% 25V
C823	1-104-664-11	ELECT	47uF 20% 25V
C950	1-126-767-11	ELECT	1000uF 20% 16V
C951	1-164-097-11	CERAMIC	0.022uF 50V
C952	1-126-960-11	ELECT	1uF 20% 50V
C953	1-124-464-11	ELECT	0.22uF 20% 50V
C954	1-126-096-11	ELECT	10uF 20% 35V
C955	1-164-159-11	CERAMIC	0.1uF 50V
C957	1-164-159-11	CERAMIC	0.1uF 50V
CC01	1-162-282-31	CERAMIC	100PF 10% 50V (DE325:AEP,G,EE)

Ref. No.	Part No.	Description	Remarks
CC02	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC03	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC04	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC05	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC06	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC07	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC12	1-164-096-11	CERAMIC	0.01uF 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC13	1-164-096-11	CERAMIC	0.01uF 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC51	1-162-282-31	CERAMIC	100PF 10% 50V (DE325:AEP,G,EE)
CC52	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC53	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC54	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC55	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC56	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC57	1-162-282-31	CERAMIC	100PF 10% 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC62	1-164-096-11	CERAMIC	0.01uF 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
CC63	1-164-096-11	CERAMIC	0.01uF 50V (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
< CONNECTOR >			
CNP401	1-774-289-11	PIN, CONNECTOR (PC BOARD) 15P	
CNP702	1-750-388-11	PIN, CONNECTOR 5P	
CNS204	1-568-742-11	SOCKET, CONNECTOR 23P	
CNS252	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
CNS301	1-568-442-11	SOCKET, CONNECTOR 9P	
CNS701	1-568-439-11	SOCKET, CONNECTOR 7P	
CNS802	1-770-480-11	SOCKET, CONNECTOR PIN 4P	
< DIODE >			
D610	8-719-911-19	DIODE	1SS119
D710	8-719-911-19	DIODE	1SS119
D721	8-719-911-19	DIODE	1SS119
D722	8-719-911-19	DIODE	1SS119
D723	8-719-911-19	DIODE	1SS119
D724	8-719-911-19	DIODE	1SS119
D725	8-719-911-19	DIODE	1SS119
D801	8-719-986-54	DIODE	HZS24-1LTA
D802	8-719-302-38	DIODE	RBV-602-01
D804	8-719-109-85	DIODE	RD5.1ES-B2
D810	8-719-200-82	DIODE	11ES2
D811	8-719-200-82	DIODE	11ES2
D812	8-719-200-82	DIODE	11ES2
D813	8-719-200-82	DIODE	11ES2
D814	8-719-911-19	DIODE	1SS119



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
D815	8-719-911-19	DIODE 1SS119		Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D817	8-719-936-61	DIODE GL-9HY35		Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D818	8-719-911-19	DIODE 1SS119		Q703	8-749-010-25	IC MN2488-OPY-M	
D820	8-719-200-82	DIODE 11ES2		Q704	8-749-010-26	IC MP1620-OPY-M	
D821	8-719-200-82	DIODE 11ES2		Q710	8-729-620-05	TRANSISTOR 2SC2603-EF	
D822	8-719-200-82	DIODE 11ES2		Q720	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D823	8-719-200-82	DIODE 11ES2		Q721	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D901	8-719-911-19	DIODE 1SS119		Q722	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
		< TERMINAL >		Q723	8-729-620-05	TRANSISTOR 2SC2603-EF	
G200	1-537-738-21	TERMINAL, EARTH		Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE	
G201	1-537-738-21	TERMINAL, EARTH		Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK	
G202	1-537-738-21	TERMINAL, EARTH		Q753	8-749-010-25	IC MN2488-OPY-M	
G203	1-537-738-21	TERMINAL, EARTH		Q754	8-749-010-26	IC MP1620-OPY-M	
		< IC >		Q770	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
IC1	8-759-450-86	IC BU1922 (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		Q801	8-729-140-97	TRANSISTOR 2SB734-34	
IC300	8-759-527-00	IC LV1035M		Q802	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC302	8-759-636-74	IC M5218AP-22		Q808	8-729-180-92	TRANSISTOR 2SD809-K	
IC401	8-759-805-14	IC LC7822		Q809	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC402	8-759-636-74	IC M5218AP-22(DE325:AEP,G,EE)		Q951	8-729-209-15	TRANSISTOR 2SD2012	
IC701	8-759-326-52	IC uPC2581V				< RESISTOR >	
IC702	8-759-326-52	IC uPC2581V		R5	1-249-421-11	CARBON 2.2K 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
IC801	8-759-231-58	IC TA7812S		R6	1-247-807-31	CARBON 100 5% 1/4W (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
IC802	8-759-604-45	IC M5F79M12		R7	1-247-807-31	CARBON 100 5% 1/4W (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
IC950	8-759-333-83	IC NJM2103D		R298	1-249-387-11	CARBON 3.3 5% 1/4W F (DE225:CND)	
		< JACK >		R298	1-249-385-11	CARBON 2.2 5% 1/6W F (DE325:EXCEPT AEP,G,EE)	
J401	1-770-614-11	JACK, PIN 4P (PHONO/CD)(DE325:AEP,G,EE)		R298	1-249-381-11	CARBON 1 5% 1/4W F (DE325:AEP,G,EE)	
J402	1-691-887-11	JACK, PIN 6P (TAPE MD/TV/LD)		R299	1-249-387-11	CARBON 3.3 5% 1/4W F (DE225:CND)	
J403	1-580-825-11	JACK, PIN 6P (VIDEO)		R299	1-249-385-11	CARBON 2.2 5% 1/6W F (DE325:EXCEPT AEP,G,EE)	
		< COIL >		R299	1-249-381-11	CARBON 1 5% 1/4W F (DE325:AEP,G,EE)	
L1	1-410-521-11	INDUCTOR 100uH (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R300	1-247-903-00	CARBON 1M 5% 1/4W	
L301	1-410-509-11	INDUCTOR 10uH		R301	1-249-421-11	CARBON 2.2K 5% 1/4W F	
L601	1-420-872-00	COIL, AIR-CORE		R302	1-249-421-11	CARBON 2.2K 5% 1/4W F	
L651	1-420-872-00	COIL, AIR-CORE		R303	1-249-439-11	CARBON 68K 5% 1/4W	
L701	1-420-872-00	COIL, AIR-CORE		R304	1-249-438-11	CARBON 56K 5% 1/4W	
L751	1-420-872-00	COIL, AIR-CORE		R306	1-249-436-11	CARBON 39K 5% 1/4W	
		< TRANSISTOR >		R307	1-247-862-11	CARBON 20K 5% 1/4W	
Q303	8-729-141-30	TRANSISTOR 2SC3623A-LK		R308	1-249-421-11	CARBON 2.2K 5% 1/4W F	
Q304	8-729-141-30	TRANSISTOR 2SC3623A-LK		R309	1-249-421-11	CARBON 2.2K 5% 1/4W F	
Q307	8-729-141-30	TRANSISTOR 2SC3623A-LK		R342	1-249-441-11	CARBON 100K 5% 1/4W	
Q308	8-729-141-30	TRANSISTOR 2SC3623A-LK		R343	1-249-441-11	CARBON 100K 5% 1/4W	
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE		R352	1-249-441-11	CARBON 100K 5% 1/4W	
Q602	8-729-141-30	TRANSISTOR 2SC3623A-LK		R353	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q603	8-749-010-25	IC MN2488-OPY-M		R354	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q604	8-749-010-26	IC MP1620-OPY-M		R355	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q610	8-729-620-05	TRANSISTOR 2SC2603-EF		R356	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q620	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R357	1-249-441-11	CARBON 100K 5% 1/4W	
Q651	8-729-119-76	TRANSISTOR 2SA1175-HFE		R358	1-249-441-11	CARBON 100K 5% 1/4W	
Q652	8-729-141-30	TRANSISTOR 2SC3623A-LK		R359	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q653	8-749-010-25	IC MN2488-OPY-M		R360	1-247-843-11	CARBON 3.3K 5% 1/4W	
Q654	8-749-010-26	IC MP1620-OPY-M					
Q670	8-729-140-82	TRANSISTOR 2SA988-PAFAEA					

**MAIN**

Ref. No.	Part No.	Description	Remarks
R361	1-249-429-11	CARBON	10K 5% 1/4W
R362	1-249-429-11	CARBON	10K 5% 1/4W
R363	1-249-411-11	CARBON	330 5% 1/4W
R401	1-249-411-11	CARBON	330 5% 1/4W (DE325:AEP,G,EE)
R402	1-249-421-11	CARBON	2.2K 5% 1/4W F
R403	1-249-417-11	CARBON	1K 5% 1/4W F
R404	1-249-417-11	CARBON	1K 5% 1/4W F
R405	1-249-417-11	CARBON	1K 5% 1/4W F
R406	1-249-417-11	CARBON	1K 5% 1/4W F
R407	1-249-417-11	CARBON	1K 5% 1/4W F
R408	1-249-429-11	CARBON	10K 5% 1/4W
R409	1-249-437-11	CARBON	47K 5% 1/4W (DE325:AEP,G,EE)
R410	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R411	1-249-416-11	CARBON	820 5% 1/4W F (DE325:AEP,G,EE)
R412	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R413	1-249-437-11	CARBON	47K 5% 1/4W (DE325:AEP,G,EE)
R414	1-249-425-11	CARBON	4.7K 5% 1/4W F
R415	1-249-417-11	CARBON	1K 5% 1/4W F
R416	1-249-417-11	CARBON	1K 5% 1/4W F (DE325:AEP,G,EE)
R417	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R435	1-249-418-11	CARBON	1.2K 5% 1/4W F
R442	1-249-418-11	CARBON	1.2K 5% 1/4W F
R443	1-249-418-11	CARBON	1.2K 5% 1/4W F
R447	1-249-416-11	CARBON	820 5% 1/4W F
R448	1-249-429-11	CARBON	10K 5% 1/4W
R449	1-249-433-11	CARBON	22K 5% 1/4W
R451	1-249-411-11	CARBON	330 5% 1/4W (DE325:AEP,G,EE)
R452	1-249-421-11	CARBON	2.2K 5% 1/4W F
R453	1-249-417-11	CARBON	1K 5% 1/4W F
R454	1-249-417-11	CARBON	1K 5% 1/4W F
R455	1-249-417-11	CARBON	1K 5% 1/4W F
R456	1-249-417-11	CARBON	1K 5% 1/4W F
R457	1-249-417-11	CARBON	1K 5% 1/4W F
R458	1-249-429-11	CARBON	10K 5% 1/4W
R459	1-249-437-11	CARBON	47K 5% 1/4W (DE325:AEP,G,EE)
R460	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R461	1-249-416-11	CARBON	820 5% 1/4W F (DE325:AEP,G,EE)
R462	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R463	1-249-437-11	CARBON	47K 5% 1/4W (DE325:AEP,G,EE)
R465	1-249-417-11	CARBON	1K 5% 1/4W F
R466	1-249-417-11	CARBON	1K 5% 1/4W F (DE325:AEP,G,EE)
R467	1-247-897-11	CARBON	560K 5% 1/4W (DE325:AEP,G,EE)
R601	1-249-417-11	CARBON	1K 5% 1/4W F

Ref. No.	Part No.	Description	Remarks
R602	1-249-439-11	CARBON	68K 5% 1/4W
R603	1-249-416-11	CARBON	820 5% 1/4W F (DE225:AEP,G,EE,UK)
R603	1-249-414-11	CARBON	560 5% 1/4W F (DE225:CND/DE325:AEP,G,EE)
R603	1-249-412-11	CARBON	390 5% 1/4W F (DE325:US,CND)
R603	1-249-413-11	CARBON	470 5% 1/4W F (DE325:E,EA,CH,AUS,SP,MY)
R604	1-249-439-11	CARBON	68K 5% 1/4W
R605	1-249-441-11	CARBON	100K 5% 1/4W
R610	1-249-421-11	CARBON	2.2K 5% 1/4W F
R611	1-249-440-11	CARBON	82K 5% 1/4W
R613	1-249-414-11	CARBON	560 5% 1/4W F
△ R614	1-249-409-11	CARBON	220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
△ R614	1-249-408-11	CARBON	180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)
△ R615	1-249-409-11	CARBON	220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)
△ R615	1-249-408-11	CARBON	180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)
△ R616	1-233-352-21	ENCAPSULATED COMPONENT	
△ R617	1-249-393-11	CARBON	10 5% 1/4W F
R618	1-249-389-11	CARBON	4.7 5% 1/4W F
△ R619	1-249-405-11	CARBON	100 5% 1/4W F
R620	1-249-419-11	CARBON	1.5K 5% 1/4W F
R621	1-249-426-11	CARBON	5.6K 5% 1/4W (DE225/DE325:E,EA,CH,AUS,SP,MY)
R621	1-249-427-11	CARBON	6.8K 5% 1/4W F (DE325:US,CND,AEP,G,EE)
△ R622	1-249-403-11	CARBON	68 5% 1/4W F
R623	1-249-437-11	CARBON	47K 5% 1/4W
R630	1-249-426-11	CARBON	5.6K 5% 1/4W
R631	1-247-881-00	CARBON	120K 5% 1/4W (DE225:AEP,G,EE,UK)
R631	1-247-887-00	CARBON	220K 5% 1/4W (DE225:CND/DE325)
R632	1-249-426-11	CARBON	5.6K 5% 1/4W
R651	1-249-417-11	CARBON	1K 5% 1/4W F
R652	1-249-439-11	CARBON	68K 5% 1/4W
R653	1-249-416-11	CARBON	820 5% 1/4W F (DE225:AEP,G,EE,UK)
R653	1-249-414-11	CARBON	560 5% 1/4W F (DE225:CND/DE325:AEP,G,EE)
R653	1-249-412-11	CARBON	390 5% 1/4W F (DE325:US,CND)
R653	1-249-413-11	CARBON	470 5% 1/4W F (DE325:E,EA,CH,AUS,SP,MY)
R654	1-249-439-11	CARBON	68K 5% 1/4W
R655	1-249-441-11	CARBON	100K 5% 1/4W
R660	1-249-421-11	CARBON	2.2K 5% 1/4W F
R661	1-249-440-11	CARBON	82K 5% 1/4W
R663	1-249-414-11	CARBON	560 5% 1/4W F

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
△ R664	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R734	1-249-429-11	CARBON 10K 5% 1/4W	
△ R664	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)		△ R740	1-249-393-11	CARBON 10 5% 1/4W F	
△ R665	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		△ R741	1-249-393-11	CARBON 10 5% 1/4W F	
△ R665	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)		R742	1-249-425-11	CARBON 4.7K 5% 1/4W F	
△ R666	1-233-352-21	ENCAPSULATED COMPONENT		R743	1-249-425-11	CARBON 4.7K 5% 1/4W F	
△ R667	1-249-393-11	CARBON 10 5% 1/4W F		R751	1-249-417-11	CARBON 1K 5% 1/4W F	
R668	1-249-389-11	CARBON 4.7 5% 1/4W F		R752	1-249-439-11	CARBON 68K 5% 1/4W	
R670	1-249-419-11	CARBON 1.5K 5% 1/4W F		R753	1-249-416-11	CARBON 820 5% 1/4W F (DE225:AEP,G,EE,UK)	
R671	1-249-426-11	CARBON 5.6K 5% 1/4W (DE225/DE325:E,EA,CH,AUS,SP,MY)		R753	1-249-414-11	CARBON 560 5% 1/4W F (DE225:CND/DE325:AEP,G,EE)	
R671	1-249-427-11	CARBON 6.8K 5% 1/4W F (DE325:US,CND,AEP,G,EE)		R753	1-249-412-11	CARBON 390 5% 1/4W F (DE325:US,CND)	
R672	1-249-431-11	CARBON 15K 5% 1/4W		R753	1-249-413-11	CARBON 470 5% 1/4W F (DE325:E,EA,CH,AUS,SP,MY)	
R673	1-249-437-11	CARBON 47K 5% 1/4W		R754	1-249-439-11	CARBON 68K 5% 1/4W	
R701	1-249-417-11	CARBON 1K 5% 1/4W F		R755	1-249-441-11	CARBON 100K 5% 1/4W	
R702	1-249-439-11	CARBON 68K 5% 1/4W		R760	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R703	1-249-416-11	CARBON 820 5% 1/4W F (DE225:AEP,G,EE,UK)		R761	1-249-440-11	CARBON 82K 5% 1/4W	
R703	1-249-414-11	CARBON 560 5% 1/4W F (DE225:CND/DE325:AEP,G,EE)		R763	1-249-414-11	CARBON 560 5% 1/4W F	
R703	1-249-412-11	CARBON 390 5% 1/4W F (DE325:US,CND)		△ R764	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
R703	1-249-413-11	CARBON 470 5% 1/4W F (DE325:E,EA,CH,AUS,SP,MY)		△ R764	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)	
R704	1-249-439-11	CARBON 68K 5% 1/4W		△ R765	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
R705	1-249-441-11	CARBON 100K 5% 1/4W		△ R765	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)	
R710	1-249-421-11	CARBON 2.2K 5% 1/4W F		△ R766	1-233-352-21	ENCAPSULATED COMPONENT	
R711	1-249-440-11	CARBON 82K 5% 1/4W		△ R767	1-249-393-11	CARBON 10 5% 1/4W F	
R713	1-249-414-11	CARBON 560 5% 1/4W F		R768	1-249-389-11	CARBON 4.7 5% 1/4W F	
△ R714	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R770	1-249-419-11	CARBON 1.5K 5% 1/4W F	
△ R714	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)		R771	1-249-426-11	CARBON 5.6K 5% 1/4W (DE225/DE325:E,EA,CH,AUS,SP,MY)	
△ R715	1-249-409-11	CARBON 220 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)		R771	1-249-427-11	CARBON 6.8K 5% 1/4W F (DE325:US,CND,AEP,G,EE)	
△ R715	1-249-408-11	CARBON 180 5% 1/4W F (DE225:CND/DE325:EXCEPT AEP,G,EE)		R772	1-249-431-11	CARBON 15K 5% 1/4W	
△ R716	1-233-352-21	ENCAPSULATED COMPONENT		R773	1-249-437-11	CARBON 47K 5% 1/4W	
△ R717	1-249-393-11	CARBON 10 5% 1/4W F		R781	1-247-881-00	CARBON 120K 5% 1/4W (DE225:AEP,G,EE,UK)	
R718	1-249-389-11	CARBON 4.7 5% 1/4W F		R781	1-247-887-00	CARBON 220K 5% 1/4W (DE225:CND/DE325)	
△ R719	1-249-405-11	CARBON 100 5% 1/4W F		△ R803	1-249-389-11	CARBON 4.7 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:EXCEPT US,CND)	
R720	1-249-419-11	CARBON 1.5K 5% 1/4W F		△ R803	1-247-739-11	CARBON 100 5% 1/2W F (DE225:CND/DE325:US,CND)	
R721	1-249-426-11	CARBON 5.6K 5% 1/4W (DE225/DE325:E,EA,CH,AUS,SP,MY)		R804	1-249-425-11	CARBON 4.7K 5% 1/4W F (DE225:AEP,G,EE,UK)	
R721	1-249-427-11	CARBON 6.8K 5% 1/4W F (DE325:US,CND,AEP,G,EE)		R804	1-249-426-11	CARBON 5.6K 5% 1/4W (DE225:CND)	
△ R722	1-249-403-11	CARBON 68 5% 1/4W F		R804	1-249-427-11	CARBON 6.8K 5% 1/4W F (DE325:US,CND)	
R723	1-249-437-11	CARBON 47K 5% 1/4W		R804	1-249-421-11	CARBON 2.2K 5% 1/4W F (DE325:E,EA,CH,AUS,SP,MY)	
R724	1-249-425-11	CARBON 4.7K 5% 1/4W F		R821	1-249-437-11	CARBON 47K 5% 1/4W	
R725	1-249-429-11	CARBON 10K 5% 1/4W		R822	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R726	1-249-417-11	CARBON 1K 5% 1/4W F		R823	1-249-437-11	CARBON 47K 5% 1/4W	
R727	1-249-427-11	CARBON 6.8K 5% 1/4W F		R824	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R730	1-249-429-11	CARBON 10K 5% 1/4W					
R731	1-247-881-00	CARBON 120K 5% 1/4W (DE225:AEP,G,EE,UK)					
R731	1-247-887-00	CARBON 220K 5% 1/4W (DE225:CND/DE325)					

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<b>MAIN</b>	<b>MIX-OUT</b>	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>SP-SW</b>
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Ref. No.	Part No.	Description	Remarks
R825	1-249-407-11	CARBON 150 5% 1/4W F	
△ R830	1-249-405-11	CARBON 100 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:EXCEPT CND)	
△ R830	1-249-402-11	CARBON 56 5% 1/4W F (DE225:CND/DE325:CND)	
△ R831	1-249-403-11	CARBON 68 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:EXCEPT CND)	
△ R831	1-249-402-11	CARBON 56 5% 1/4W F (DE225:CND/DE325:CND)	
R950	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R951	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R952	1-249-422-11	CARBON 2.7K 5% 1/4W F	
R953	1-249-433-11	CARBON 22K 5% 1/4W	
R954	1-249-439-11	CARBON 68K 5% 1/4W	
R955	1-249-429-11	CARBON 10K 5% 1/4W	
R956	1-247-843-11	CARBON 3.3K 5% 1/4W	
R957	1-249-417-11	CARBON 1K 5% 1/4W F	
R958	1-249-401-11	CARBON 47 5% 1/4W F	
R960	1-249-431-11	CARBON 15K 5% 1/4W	
RR01	1-249-418-11	CARBON 1.2K 5% 1/4W F (DE325:AEP,G,EE)	
RR04	1-249-393-11	CARBON 10 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
RR05	1-249-393-11	CARBON 10 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
RR51	1-249-418-11	CARBON 1.2K 5% 1/4W F (DE325:AEP,G,EE)	
RR54	1-249-393-11	CARBON 10 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
RR55	1-249-393-11	CARBON 10 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
		< RELAY >	
RY601	1-515-921-11	RELAY (12V)	
RY701	1-515-921-11	RELAY (12V)	
RY801	1-755-013-11	RELAY (DE225:AEP,G,EE,UK/DE325:EXCEPT CND)	
RY851	1-755-209-11	RELAY (DE225:CND/DE325:CND)	
RY852	1-755-209-11	RELAY (DE225:CND/DE325:CND)	
		< TERMINAL >	
TM601	1-537-510-11	TERMINAL BOARD (6P)(SURR PUND SPEAKER)	
TM701	1-537-376-11	TERMINAL BOARD (FRONT SPEAKER)	
		< VIBRATOR >	
X1	1-579-900-21	VIBRATOR, CRYSTAL 4.33MHz (DE225:AEP,G,EE,UK/DE325:AEP,G,EE)	
X301	1-579-952-21	VIBRATOR, CERAMIC 8MHz (DE225:AEP,G,EE,UK)	
X301	1-579-952-11	VIBRATOR, CERAMIC 8MHz (DE225:CND/DE325)	
*****			
*	1-669-273-11	MIX-OUT BOARD *****	
		< JACK >	
J254	1-774-843-11	JACK, PIN 1P (MIX AUDIO OUT)	
*****			

Ref. No.	Part No.	Description	Remarks
*	1-669-267-11	PRIMARY BOARD *****	
	1-533-233-21	HOLDER, FUSE < CONNECTOR >	
* CNP902	1-564-321-21	PIN, CONNECTOR 2P < FUSE >	
△ F901	1-576-109-11	FUSE TIME LAG 5A/125V (DE225:CND/DE325:US,CND)	
△ F901	1-532-388-51	FUSE TIME LAG 2A/250V (DE325:E,EA,CH,AUS,SP,MY)	
△ F901	1-532-464-51	FUSE TIME LAG 2.5A/250V (DE325:AEP,G,EE)	
△ F901	1-532-503-51	FUSE TIME LAG 1.6A/250V (DE225:AEP,G,EE,UK)	
*****			
*	1-669-268-11	SECONDARY BOARD *****	
		< CONNECTOR >	
CNP801	1-764-480-11	PIN, CONNECTOR (PC BOARD) 11P < RESISTOR >	
△ R810	1-219-124-11	FUSIBLE 0.68 5% 1/4W F (DE225:CND/DE325:CND)	
△ R810	1-249-381-11	CARBON 1 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:EXCEPT CND)	
△ R811	1-219-124-11	FUSIBLE 0.68 5% 1/4W F (DE225:CND/DE325:CND)	
△ R811	1-249-381-11	CARBON 1 5% 1/4W F (DE225:AEP,G,EE,UK/DE325:EXCEPT CND)	
*****			
*	1-669-270-11	SP-SW BOARD *****	
		< CONNECTOR >	
CNP703	1-764-474-11	PIN, CONNECTOR (PC BOARD) 5P	
CNP704	1-764-473-11	PIN, CONNECTOR (PC BOARD) 3P	
CNS702	1-770-378-11	CONNECTOR, BOARD TO BOARD 5P < JACK >	
J741	1-750-733-11	JACK (LARGE TYPE)(PHONES) < RESISTOR >	
R741	1-247-753-11	CARBON 1.2K 5% 1/2W (DE225:CND/DE325)	
R741	1-260-097-11	CARBON 680 5% 1/2W (DE225:AEP,G,EE,UK)	
R742	1-247-753-11	CARBON 1.2K 5% 1/2W (DE225:CND/DE325)	
R742	1-260-097-11	CARBON 680 5% 1/2W (DE225:AEP,G,EE,UK)	
R791	1-247-753-11	CARBON 1.2K 5% 1/2W (DE225:CND/DE325)	
R791	1-260-097-11	CARBON 680 5% 1/2W (DE225:AEP,G,EE,UK)	
R792	1-247-753-11	CARBON 1.2K 5% 1/2W (DE225:CND/DE325)	
R792	1-260-097-11	CARBON 680 5% 1/2W (DE225:AEP,G,EE,UK)	

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SP-SW
SP-SW-A
SP-SW-B
STAND BY
VOL-SEL
VR-TONE

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< SWITCH >				< CONNECTOR >			
S701	1-762-319-11	SWITCH, PUSH (2 KEY)(SPEAKER A/B)		* CNP907	1-565-395-11	PIN, CONNECTOR 3P	
*****				CNP908	1-564-321-00	PIN, CONNECTOR 2P	
*	1-669-271-11	SP-SW-A BOARD		* CNP910	1-564-687-11	PIN, CONNECTOR 3P	
*****				< DIODE >			
*	1-669-272-11	SP-SW-B BOARD		D235	8-759-058-64	DIODE IC TC7S32FU(TE85R)	
*****				D236	8-759-058-64	DIODE IC TC7S32FU(TE85R)	
*	1-669-272-11	SP-SW-B BOARD		D237	8-759-058-64	DIODE IC TC7S32FU(TE85R)	
*****				D239	8-759-058-64	DIODE IC TC7S32FU(TE85R)	
*	1-669-266-11	STAND BY BOARD		< FUSE >			
*****				△ F904	1-532-388-51	FUSE TIME LAG 2A/250V	
	1-533-233-21	HOLDER, FUSE		< SWITCH >			
< JACK >				△ S901.	1-571-437-11	SWITCH, POWER VOLTAGE CHANGE	(SELECTOR)
△ CNJ902	1-251-691-11	OUTLET (AC)		*****			
(DE225:CND/DE325:US,CND,E,EA,CH)				*	A-4407-436-A	VR-TONE BOARD, COMPLETE	
< CONNECTOR >				*****			
CNP802	1-779-495-11	PLUG, CONNECTOR PIN 4P		(DE225:CND/DE325:EXCEPT AEP,G,EE)			
CNP901	1-564-321-00	PIN, CONNECTOR 2P		*	A-4407-523-A	VR-TONE BOARD, COMPLETE	
CNP903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P		*****			
(DE225:AEP,G,EE/DE325:AEP,G,AUS,EE,SP,MY)				(DE225:AEP,G,EE,UK/DE325:AEP,G,EE)			
CNP905	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P		< CAPACITOR >			
* CNP906	1-564-687-11	PIN, CONNECTOR 3P		C420	1-162-207-31	CERAMIC	22PF 5% 50V
< DIODE >				C421	1-137-440-11	FILM	0.018uF 5% 50V
D816	8-719-911-19	DIODE 1SS119		C422	1-124-463-00	ELECT	0.1uF 20% 50V
< FUSE >				C423	1-137-368-11	FILM	0.0047uF 5% 50V
△ F902	1-532-464-51	FUSE TIME LAG 2.5A/250V		C424	1-137-372-11	FILM	0.022uF 5% 50V
(DE225:AEP,G,EE,UK/DE325:AEP,G,EE,SP,MY,AUS)				C425	1-126-795-11	ELECT	10uF 20% 25V
< TERMINAL >				C426	1-126-795-11	ELECT	10uF 20% 25V
* G900	1-537-738-21	TERMINAL, EARTH		C427	1-124-252-00	ELECT	0.33uF 20% 50V
(DE225:CND/DE325:US,CND)				C428	1-130-489-00	MYLAR	0.033uF 5% 50V
< RESISTOR >				C429	1-102-973-00	CERAMIC	100PF 5% 50V
△ R901	1-202-725-00	SOLID	3.3M 10% 1/2W	C430	1-126-301-11	ELECT	1uF 20% 50V
(DE225:CND/DE325:US,CND)				C431	1-126-301-11	ELECT	1uF 20% 50V
< RELAY >				C432	1-126-795-11	ELECT	10uF 20% 25V
△ RY901	1-755-018-11	RELAY		C433	1-126-795-11	ELECT	10uF 20% 25V
< TRANSFORMER >				C470	1-162-207-31	CERAMIC	22PF 5% 50V
△ T902	1-450-361-11	TRANSFORMER, POWER		C471	1-137-440-11	FILM	0.018uF 5% 50V
(DE225:CND/DE325:US,CND)				C472	1-124-463-00	ELECT	0.1uF 20% 50V
△ T902	1-450-358-11	TRANSFORMER, POWER		C473	1-137-368-11	FILM	0.0047uF 5% 50V
(DE225:AEP,G,EE,UK/DE325:EXCEPT US,CND)				C474	1-137-372-11	FILM	0.022uF 5% 50V
*****				C475	1-126-795-11	ELECT	10uF 20% 25V
*	1-669-269-11	VOL-SEL BOARD(DE325:E,EA,CH)		C476	1-126-795-11	ELECT	10uF 20% 25V
*****				C477	1-124-252-00	ELECT	0.33uF 20% 50V
	1-533-399-31	HOLDER, FUSE		C478	1-130-489-00	MYLAR	0.033uF 5% 50V
				C479	1-102-973-00	CERAMIC	100PF 5% 50V
				C492	1-124-464-11	ELECT	0.22uF 20% 50V
				C601	1-126-163-11	ELECT	4.7uF 20% 50V
				C651	1-126-163-11	ELECT	4.7uF 20% 50V
				C701	1-126-163-11	ELECT	4.7uF 20% 50V
				C751	1-126-163-11	ELECT	4.7uF 20% 50V

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**VR-TONE**

**10 KEY**

Ref. No.	Part No.	Description	Remarks
< CONNECTOR >			
CNP202	1-770-391-11	PIN, CONNECTOR (PC BOARD) 7P	
CNS402	1-568-439-11	SOCKET, CONNECTOR 7P	
CNS403	1-568-442-11	SOCKET, CONNECTOR 9P	
< DIODE >			
D238	8-719-046-39	DIODE SEL5821A-TH15 (MUTING)	
D421	8-719-911-19	DIODE 1SS119	
< IC >			
IC404	8-759-636-74	IC M5218AP-22	
< TRANSISTOR >			
Q401	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q451	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK	
< RESISTOR >			
R229	1-249-406-11	CARBON	120 5% 1/4W F
R420	1-249-415-11	CARBON	680 5% 1/4W F
R421	1-249-430-11	CARBON	12K 5% 1/4W
R422	1-249-422-11	CARBON	2.7K 5% 1/4W F
R423	1-247-903-00	CARBON	1M 5% 1/4W
R424	1-247-903-00	CARBON	1M 5% 1/4W
R425	1-249-429-11	CARBON	10K 5% 1/4W
R426	1-249-439-11	CARBON	68K 5% 1/4W
R427	1-249-417-11	CARBON	1K 5% 1/4W F
R430	1-249-437-11	CARBON	47K 5% 1/4W
R431	1-247-843-11	CARBON	3.3K 5% 1/4W
R432	1-247-883-00	CARBON	150K 5% 1/4W
R433	1-249-427-11	CARBON	6.8K 5% 1/4W F
R434	1-249-413-11	CARBON	470 5% 1/4W F
R438	1-249-441-11	CARBON	100K 5% 1/4W
R441	1-249-441-11	CARBON	100K 5% 1/4W
R444	1-247-903-00	CARBON	1M 5% 1/4W
R464	1-247-903-00	CARBON	1M 5% 1/4W
R469	1-247-903-00	CARBON	1M 5% 1/4W
R470	1-249-415-11	CARBON	680 5% 1/4W F
R471	1-249-430-11	CARBON	12K 5% 1/4W
R472	1-249-422-11	CARBON	2.7K 5% 1/4W F
R473	1-247-903-00	CARBON	1M 5% 1/4W
R474	1-247-903-00	CARBON	1M 5% 1/4W
R475	1-249-429-11	CARBON	10K 5% 1/4W
R476	1-249-439-11	CARBON	68K 5% 1/4W
R477	1-249-417-11	CARBON	1K 5% 1/4W F
R480	1-249-437-11	CARBON	47K 5% 1/4W
R481	1-247-843-11	CARBON	3.3K 5% 1/4W
R482	1-247-883-00	CARBON	150K 5% 1/4W
R483	1-249-427-11	CARBON	6.8K 5% 1/4W F
R484	1-249-413-11	CARBON	470 5% 1/4W F
R491	1-249-441-11	CARBON	100K 5% 1/4W
R492	1-247-903-00	CARBON	1M 5% 1/4W
R494	1-247-903-00	CARBON	1M 5% 1/4W

Ref. No.	Part No.	Description	Remarks
< VARIABLE RESISTOR >			
RV404	1-225-229-11	RES, VAR, CARBON 100KX4 (MASTER VOLUME)	
RV421	1-223-362-11	RES, VAR, CARBON 100K/100K (BASS)	
RV422	1-223-363-11	RES, VAR, CARBON 125K/125K (TREBLE)	
RV423	1-225-447-11	RES, VAR, CARBON 100K/100K (BALANCE)	
< SWITCH >			
S240	1-762-751-11	SWITCH, TACTILE (MUTING)	
*****			
*	1-669-263-11	10 KEY BOARD *****	
< CONNECTOR >			
CNS205	1-770-397-11	HOUSING, CONNECTOR(PC BOARD)4P	
< RESISTOR >			
R232	1-249-411-11	CARBON	330 5% 1/4W
R233	1-249-413-11	CARBON	470 5% 1/4W F
R234	1-249-415-11	CARBON	680 5% 1/4W F
R235	1-249-417-11	CARBON	1K 5% 1/4W F
R236	1-249-419-11	CARBON	1.5K 5% 1/4W F
R237	1-249-421-11	CARBON	2.2K 5% 1/4W F
R238	1-247-843-11	CARBON	3.3K 5% 1/4W
R239	1-249-411-11	CARBON	330 5% 1/4W
R240	1-249-413-11	CARBON	470 5% 1/4W F
R241	1-249-415-11	CARBON	680 5% 1/4W F
R242	1-249-417-11	CARBON	1K 5% 1/4W F
R243	1-249-419-11	CARBON	1.5K 5% 1/4W F
R244	1-249-421-11	CARBON	2.2K 5% 1/4W F
R245	1-247-843-11	CARBON	3.3K 5% 1/4W
R246	1-249-411-11	CARBON	330 5% 1/4W
R247	1-249-413-11	CARBON	470 5% 1/4W F
R248	1-249-415-11	CARBON	680 5% 1/4W F
R249	1-249-417-11	CARBON	1K 5% 1/4W F
R250	1-249-419-11	CARBON	1.5K 5% 1/4W F
R251	1-249-421-11	CARBON	2.2K 5% 1/4W F
R252	1-247-843-11	CARBON	3.3K 5% 1/4W
< SWITCH >			
S217	1-554-303-21	SWITCH, TACTILE (EFFECT/DELAY)	
S218	1-554-303-21	SWITCH, TACTILE (SURROUND ON/OFF)	
S219	1-554-303-21	SWITCH, TACTILE (BASS BOOST)	
S220	1-554-303-21	SWITCH, TACTILE (PHONO)(DE325:AEP,G,EE)	
S221	1-554-303-21	SWITCH, TACTILE (TUNER)(DE325:AEP,G,EE)	
S222	1-554-303-21	SWITCH, TACTILE (TV/LD)	
S223	1-554-303-21	SWITCH, TACTILE (VIDEO)	
S224	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S225	1-554-303-21	SWITCH, TACTILE (6)	
S226	1-554-303-21	SWITCH, TACTILE (7)	
S227	1-554-303-21	SWITCH, TACTILE (8)	
S228	1-554-303-21	SWITCH, TACTILE (9)	
S229	1-554-303-21	SWITCH, TACTILE (0)	
S230	1-554-303-21	SWITCH, TACTILE (SET UP)	
S231	1-554-303-21	SWITCH, TACTILE (CD)(DE325:AEP,G,EE)	



