

RMR-K100

SERVICE MANUAL

US Model

Ver 1.0 2004.05



SPECIFICATIONS

Operating system:	Wired controller
LCD size:	3 inches (80 × 36 dots)
LCD type:	Reflection system (mirror type)
Power requirements:	Connect to CAV-M1000ES via CAT5 cable
Maximum external dimensions:	125 × 125 × 53mm (5 × 5 × 2 1/8 inches) (w/h/d, including projecting part and controls)
Mass:	240 g (8 oz)
Supplied accessories:	Bracket frame for KEYPAD attachment to a junction box Screw B2 × 8 for fixing KEYPAD to a Keypad mounting bracket (2) Screw M3 × 30 for Keypad mounting bracket fixing to a junction box (4) RM-KP10 IR Remote Control for the Keypad

Design and specifications are subject to change without notice.

KEYPAD

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK



Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350 °C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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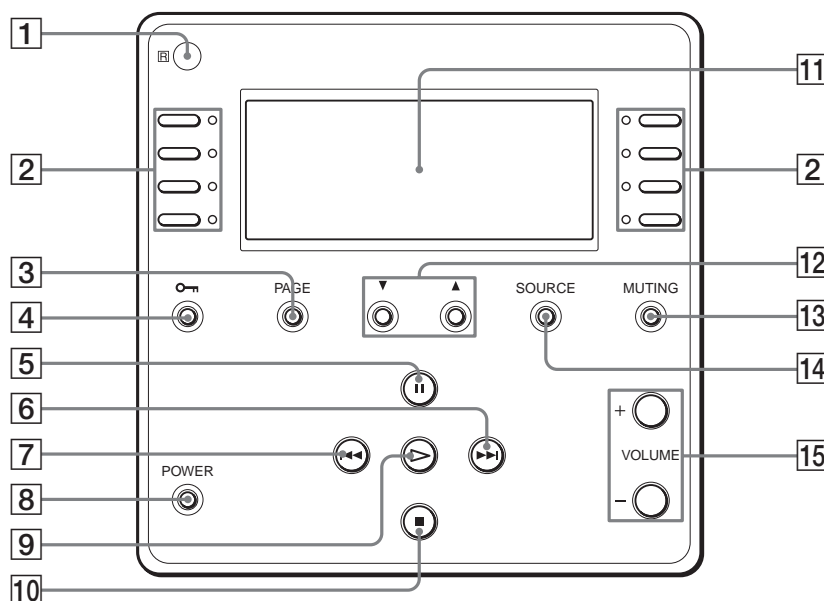
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  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.

SECTION 1 GENERAL

This section is extracted
from instruction manual.

Front panel of the Keypad



1 IR sensor

Receives IR signals from the IR Remote Control for the Keypad (supplied) to control both source components and the system.

2 SELECT

Press to select a menu on the LCD display, such as a source menu, a disc title list, etc.
The LED next to the SELECT button lights as follows on the source selection:

- green: selected in the own zone
- amber: selected and locked in the other zone.

3 PAGE

Press to return to the previous menu or to view the current status of the disc title list and the preset station list. If there is no list, only a source name will be displayed.

4 (LOCK)

Press to lock the selected source.

- amber: locked
- off: released

5 (PAUSE)

Press to pause the playback.

6

Press to advance the track/title or to select a preset station.

7

Press to go reverse the track/title or to select a preset station.

8 POWER switch

Press to turn the power of the Keypad on or off.

9 (PLAY)

Press to operate the selected source.

10 (STOP)

Press to stop playback.

11 Display window

Displays the selected source, the zone volume level, the zone and the system status, and other system status information.

12 (SCROLL UP/DOWN)

Press to scroll the LCD menu.

13 MUTING

Press to mute the speaker output in the zone.

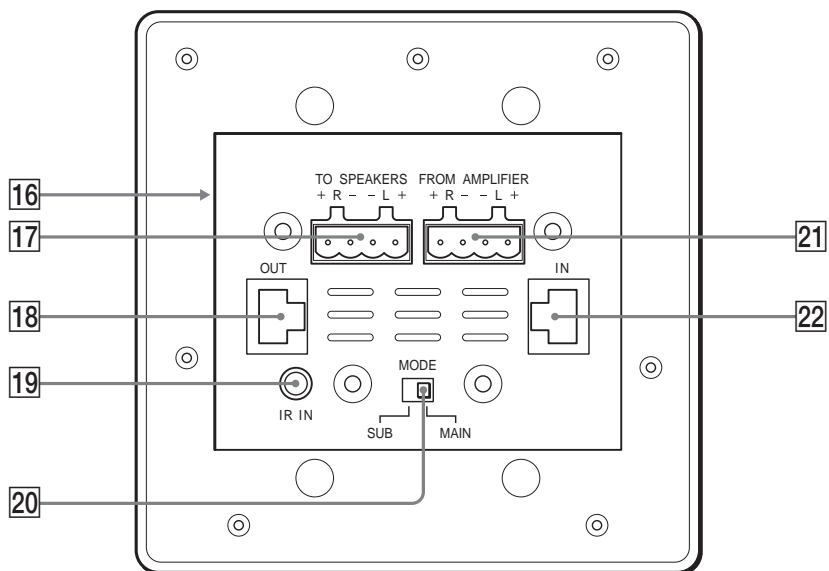
14 SOURCE

Press to return to the source components list screen.

15 VOLUME +/-

Press to adjust the volume in a zone.

Rear panel of the Keypad



16 Brightness adjustment hole (page 29)

The hole is located on the side.

Use a flathead screwdriver to adjust the brightness of the background of the display window.

17 TO SPEAKERS (page 28)

Connects speaker cords to the speakers in a zone.

18 OUT (page 28)

Connects a CAT5 straight cable to the IN jack of the subsidiary Keypad when used in a single room.

19 IR IN (page 28)

Connects an optional IR emitter so you can operate the IR Remote Control for the Keypad by pointing it at the IR sensor of the connected IR emitter.

20 MODE switch (page 28)

When using two Keypads in a single room, set this switch to SUB on the subsidiary Keypad.

21 FROM AMPLIFIER (page 28)

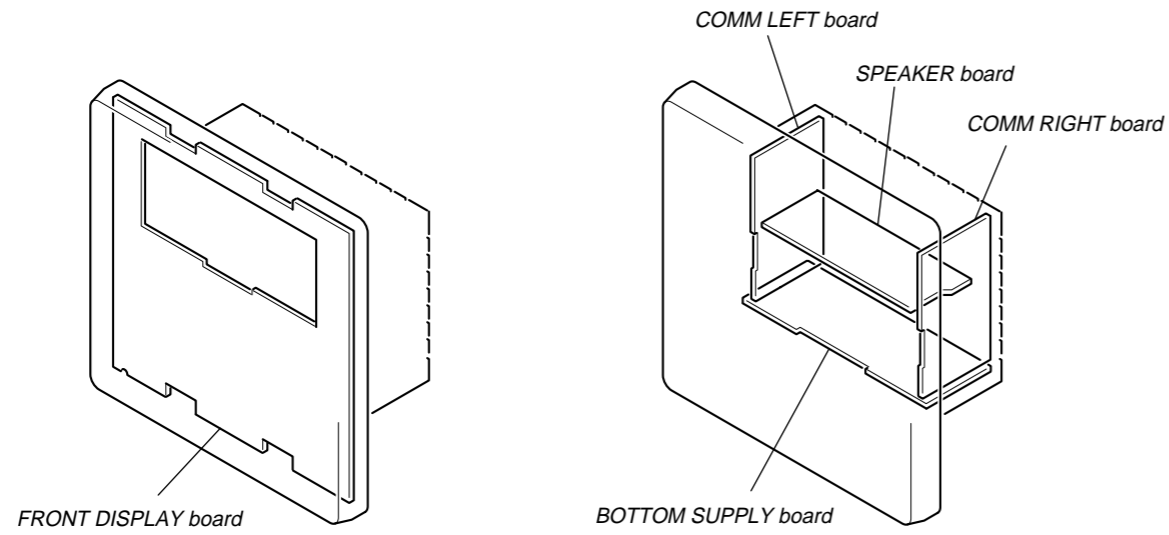
Connect speaker cords to the Main Unit.

22 IN (page 28)

Connects a CAT5 cable from the Main Unit to the main Keypad.

SECTION 2 DIAGRAMS

• Circuit Boards Location



Note on Schematic Diagram:

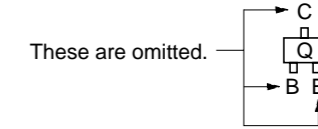
- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- : panel designation.
- — : B+ Line.
- Power voltage is dc 12 V and fed with regulated dc power supply from connector (CN500).
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : Power ON
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
⇒ : AUDIO

Note on Printed Wiring Board:

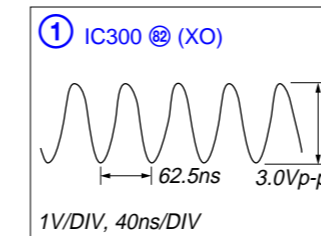
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.

Caution:
 Pattern face side: Parts on the pattern face side seen from (Side B) the pattern face are indicated.
 Parts face side: Parts on the parts face side seen from (Side A) the parts face are indicated.

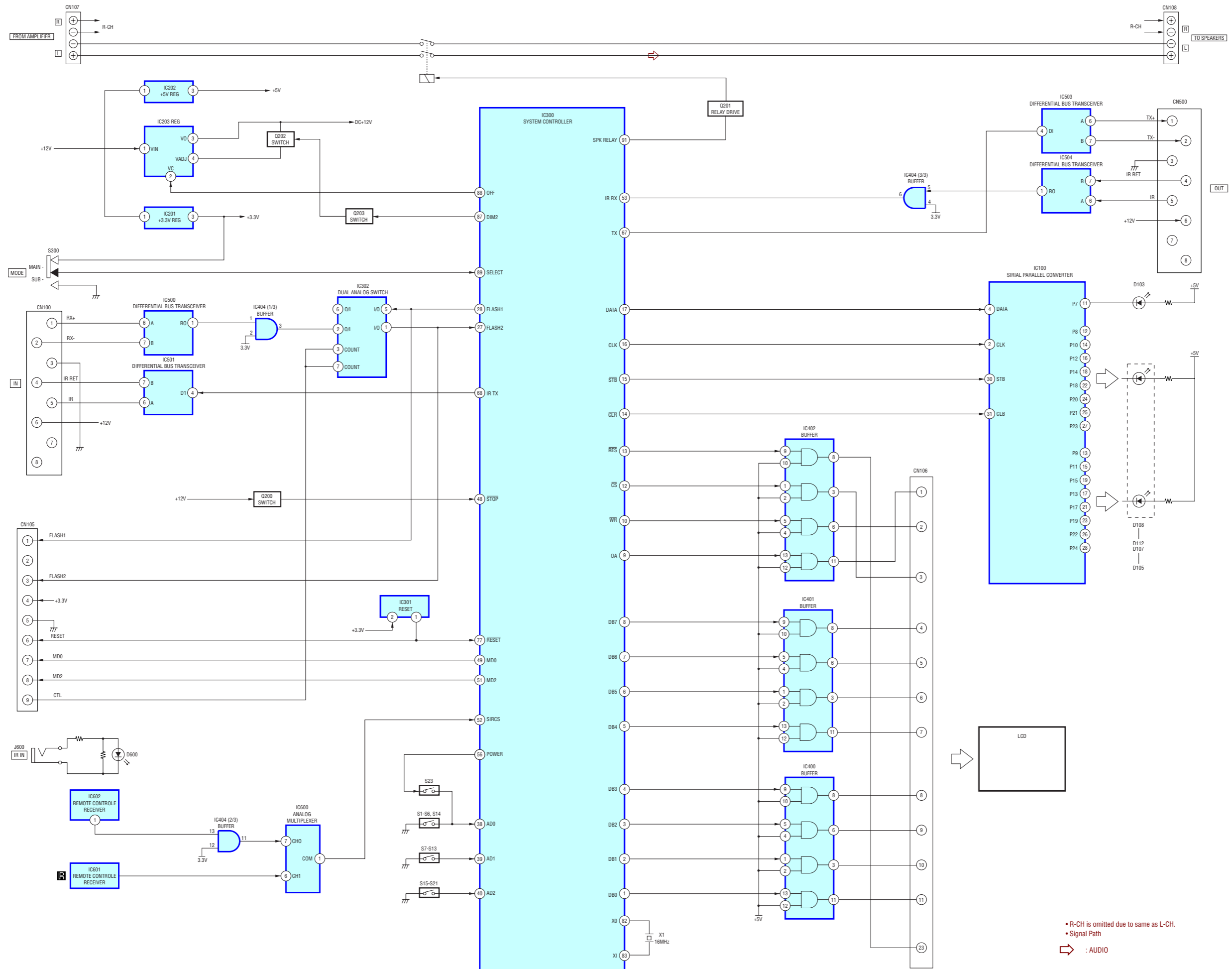
- Indication of transistor.




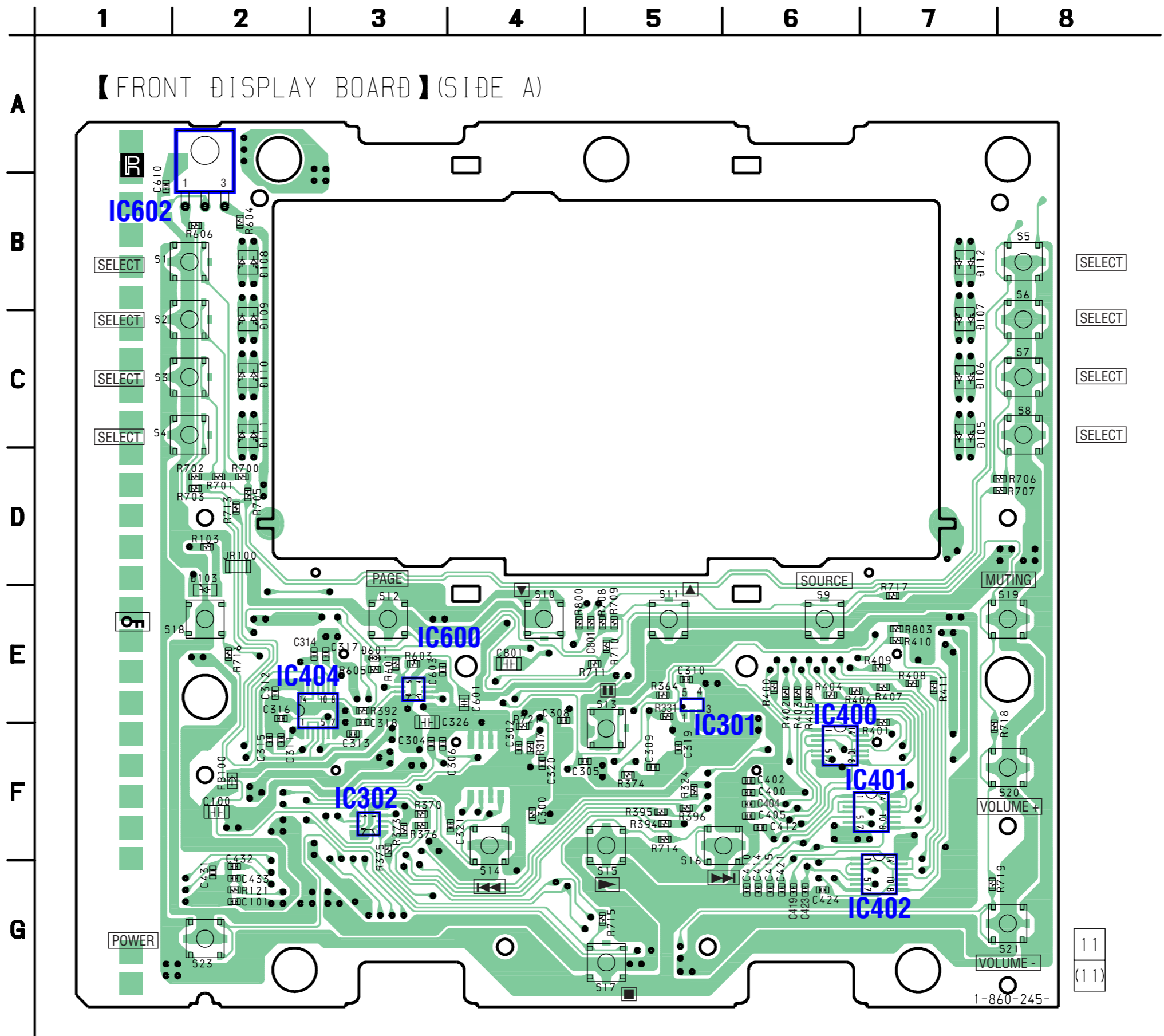
• Waveform



2-1. BLOCK DIAGRAM

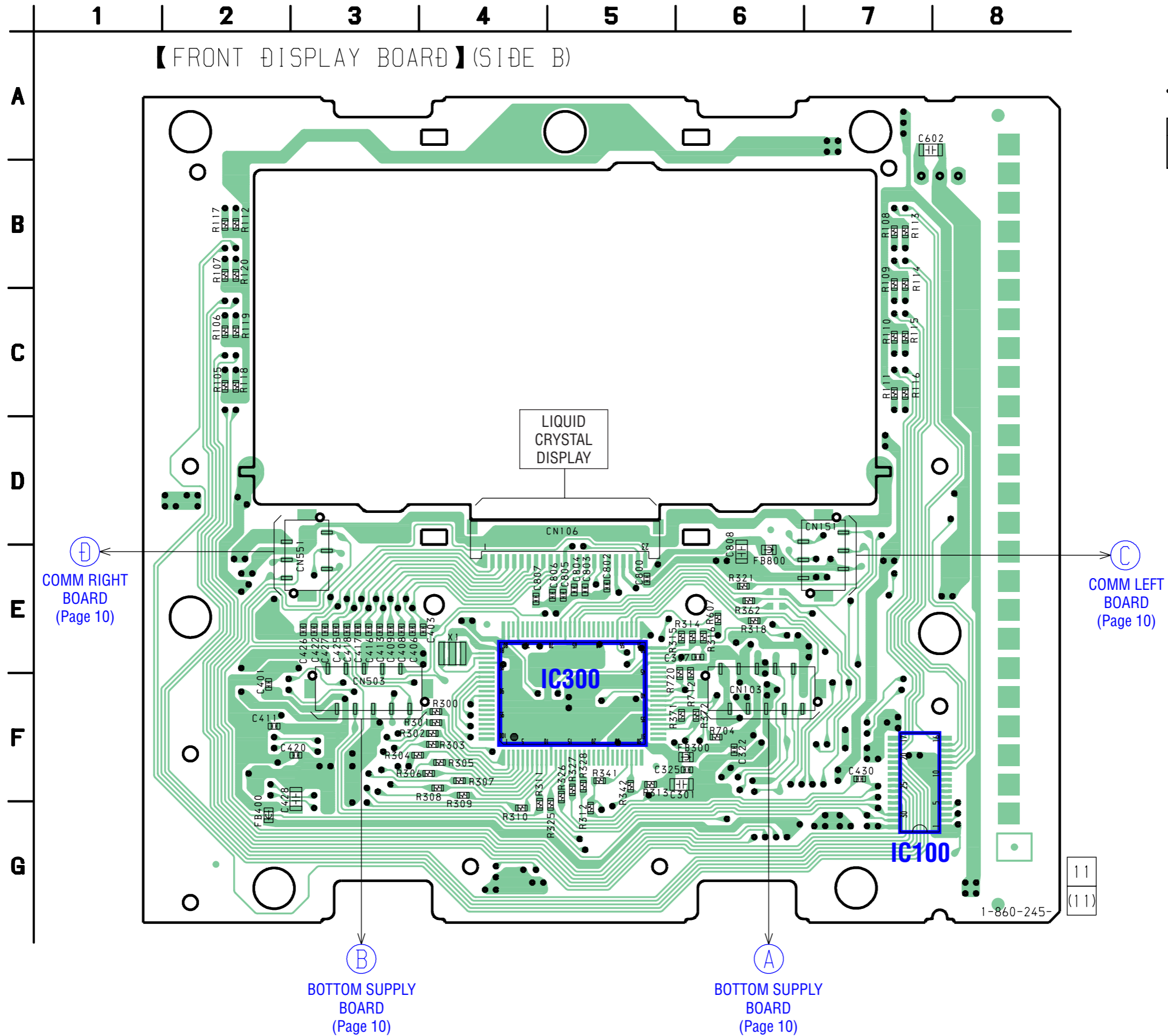


2-2. PRINTED WIRING BOARD — FRONT DISPLAY BOARD (SIDE A) — • See page 5 for Circuit Boards Location. •  : Uses unleaded solder.



• Semiconductor Location

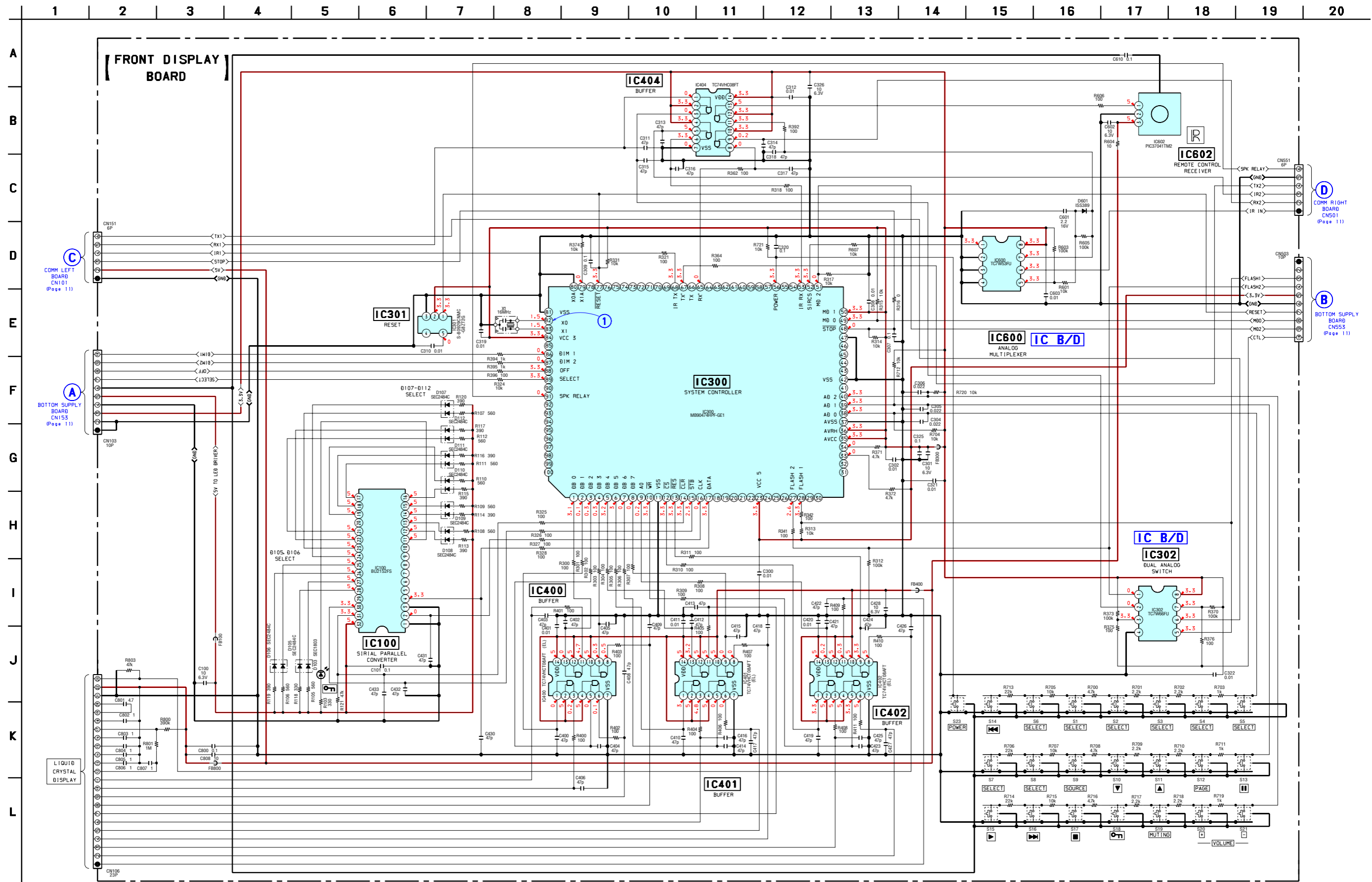
Ref. No.	Location
D103	E-2
D105	C-7
D106	C-7
D107	B-7
D108	B-2
D109	C-2
D110	C-2
D111	C-2
D112	B-2
D601	E-3
IC300	F-5
IC302	F-3
IC400	F-6
IC401	F-6
IC402	G-7
IC404	E-3
IC600	E-3
IC602	A-2




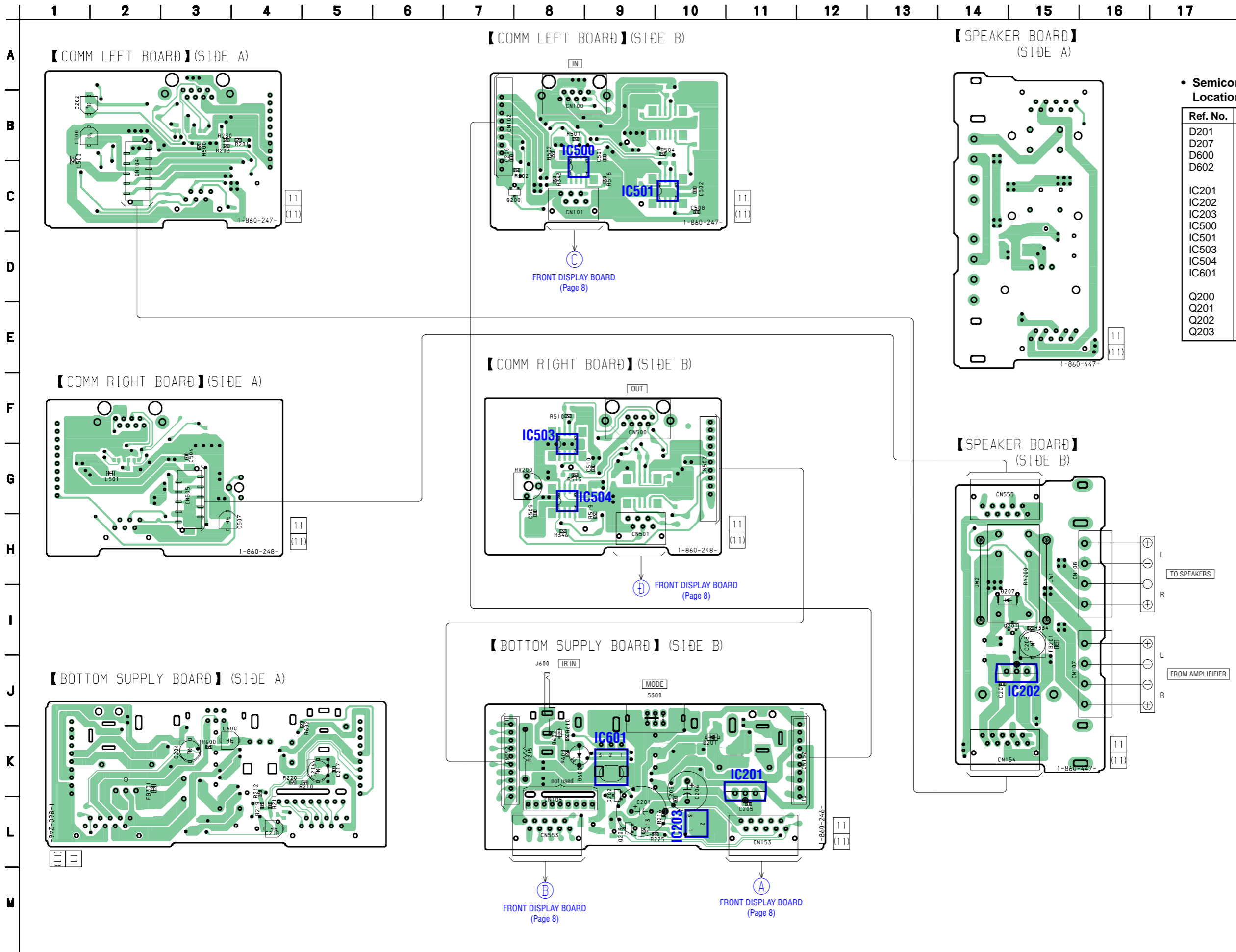
• Semiconductor Location

Ref. No.	Location
IC100	G-7
IC301	E-5

2-4. SCHEMATIC DIAGRAM — FRONT DISPLAY BOARD — • See page 12 for IC Block Diagrams. • See page 5 for Waveform.



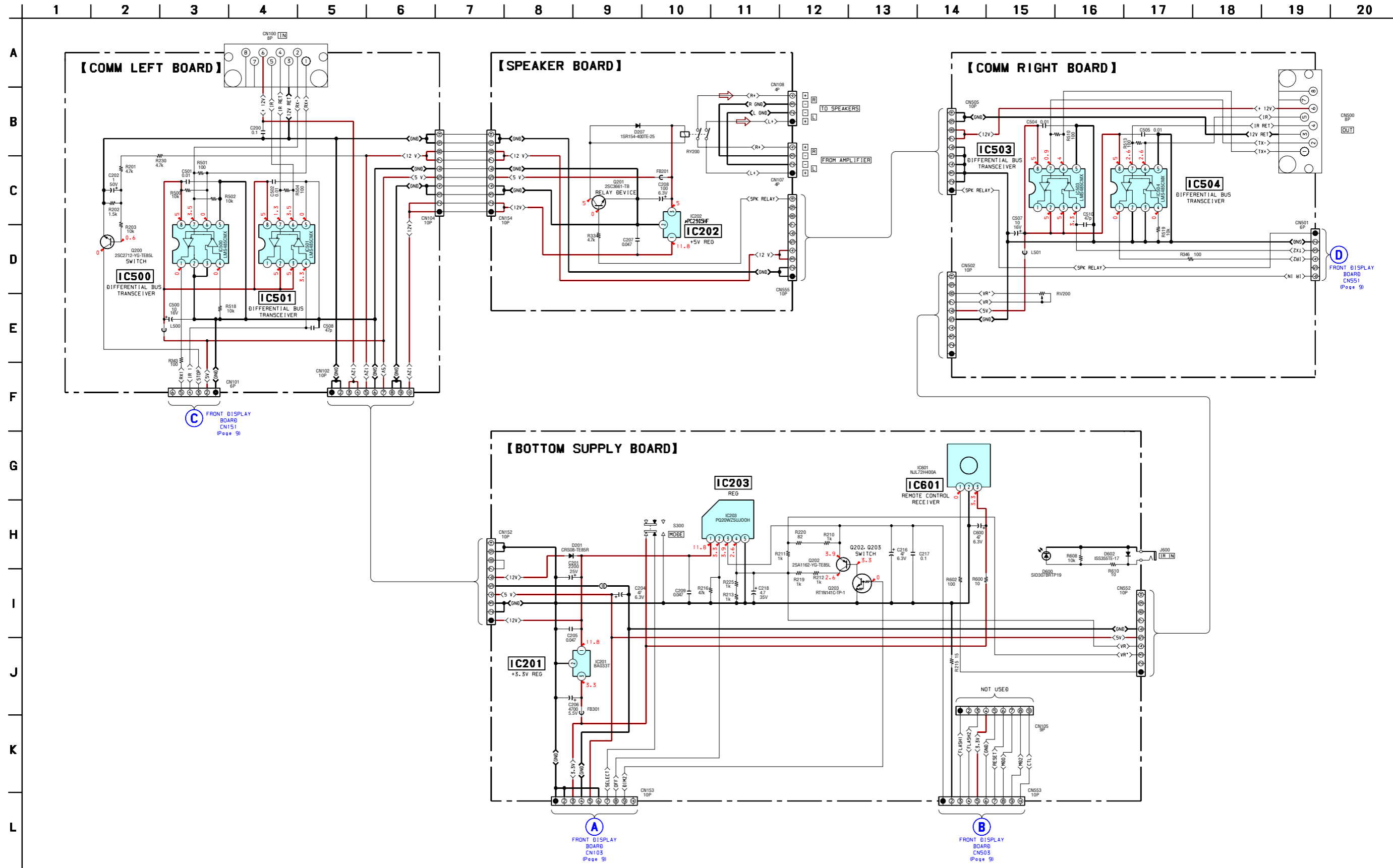
2-5. PRINTED WIRING BOARD — BOTTOM SUPPLY BOARD — • See page 5 for Circuit Boards Location. •  :Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D201	K-11
D207	I-14
D600	K-8
D602	K-8
IC201	K-11
IC202	J-15
IC203	L-10
IC500	C-8
IC501	C-10
IC503	F-8
IC504	G-8
IC601	K-9
Q200	C-8
Q201	I-15
Q202	L-9
Q203	L-9

2-6. SCHEMATIC DIAGRAM — BOTTOM SUPPLY BOARD —

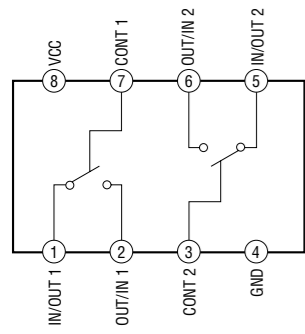


RMR-K100

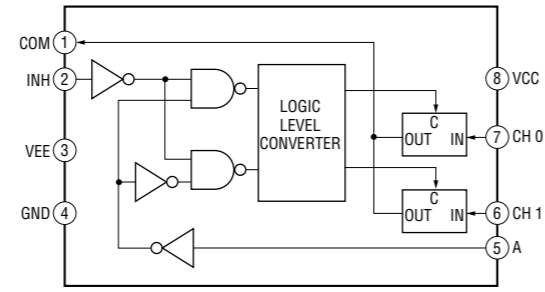
• IC Block Diagrams

– FRONT DISPLAY BOARD –

IC302 TC7W66FU



IC600 TC7W53FU

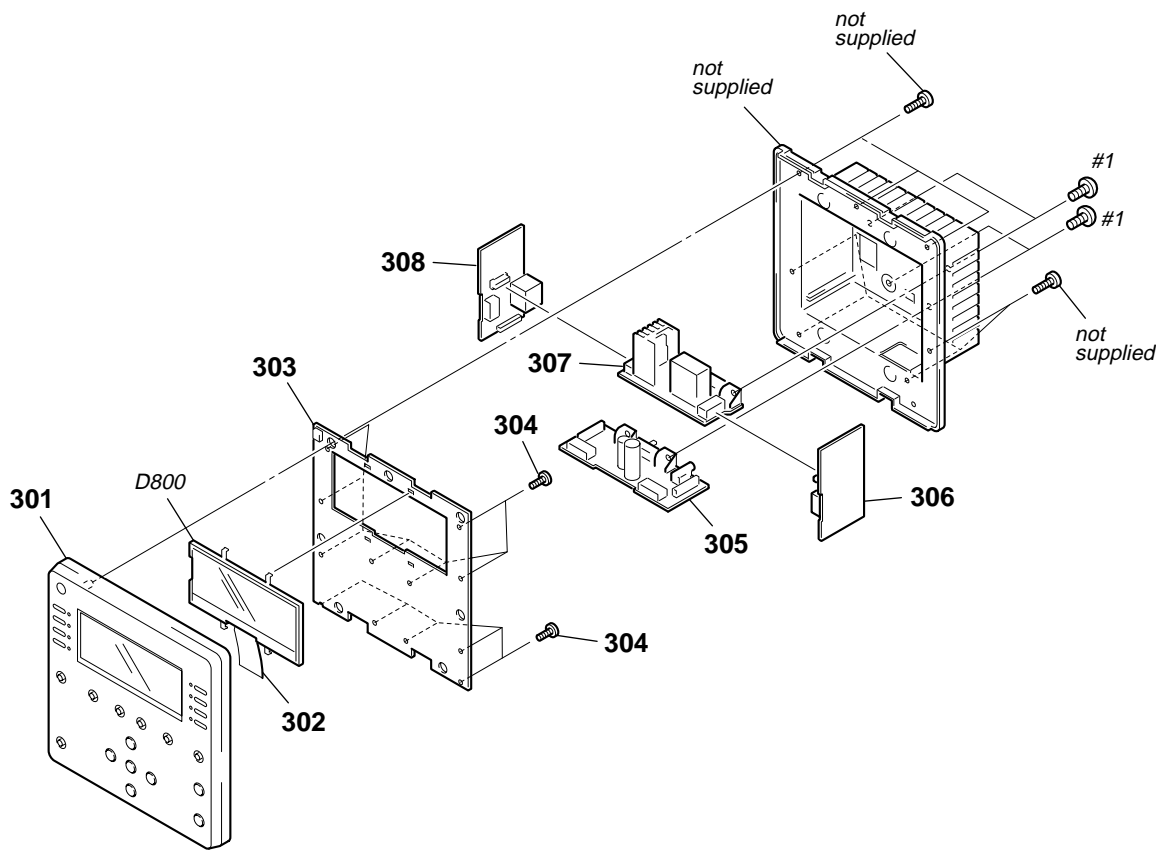


MEMO

SECTION 3 EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
301	X-4955-988-1	FRONT PANEL ASSY		306	A-4749-513-A	COMM RIGHT BOARD, COMPLETE	
302	1-817-961-11	CONNECTOR		307	A-4749-515-A	SPEAKER BOARD, COMPLETE	
303	A-4749-507-A	FRONT DISPLAY BOARD, COMPLETE		308	A-4749-511-A	COMM LEFT BOARD, COMPLETE	
304	2-067-788-11	SCREW (B1.7), TAPPING		D800	1-805-418-11	DISPLAY PANEL, LIQUID CRYSTAL	
305	A-4749-509-A	BOTTOM SUPPLY BOARD, COMPLETE		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

NOTE:

- 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.
- -XX and -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: μ F

- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal Oxide-film resistor.
F: nonflammable
- COILS
uH: μ H
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . . : μ A. . . , uPA. . . , μ PA. . .
uPB. . . : μ PB. . . , uPC. . . , μ PC. . .
uPD. . . : μ PD. . .

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-4749-509-A	BOTTOM SUPPLY BOARD, COMPLETE *****				< RESISTOR >	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3 < CAPACITOR >		R210	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C201	1-126-943-11	ELECT 2200uF 20% 25V		R211	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C204	1-126-205-11	ELECT CHIP 47uF 20% 6.3V		R212	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C205	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V		R213	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C206	1-137-920-11	ELECT 4700uF 5.5V		R215	1-215-858-00	METAL OXIDE 15 5% 1W	
C209	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V		R216	1-216-841-11	METAL CHIP 47K 5% 1/10W	
C216	1-126-205-11	ELECT CHIP 47uF 20% 6.3V		R219	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C217	1-164-156-11	CERAMIC CHIP 0.1uF 25V		R220	1-216-808-11	METAL CHIP 82 5% 1/10W	
C218	1-126-603-11	ELECT CHIP 4.7uF 20% 35V		R225	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C600	1-126-205-11	ELECT CHIP 47uF 20% 6.3V		R600	1-216-797-11	METAL CHIP 10 5% 1/10W	
		< CONNECTOR >		R602	1-216-809-11	METAL CHIP 100 5% 1/10W	
* CN105	1-565-980-11	HOUSING, CONNECTOR (PC BOARD) 9P		R608	1-216-833-11	METAL CHIP 10K 5% 1/10W	
CN152	1-766-715-21	CONNECTOR, BOARD TO BOARD 10P		R610	1-216-797-11	METAL CHIP 10 5% 1/10W	
CN153	1-817-964-11	CONNECTOR (B TO B)				< SWITCH >	
CN552	1-766-715-21	CONNECTOR, BOARD TO BOARD 10P		S300	1-762-175-11	SWITCH, SLIDE (MODE SUB/MAIN) *****	
CN553	1-817-964-11	CONNECTOR (B TO B)					
		< DIODE >		A-4749-511-A	COMM LEFT BOARD, COMPLETE *****		
D201	6-500-453-01	DIODE CRS08-TE85R				< CAPACITOR >	
D600	8-719-075-86	DIODE SID307BRTP19		C200	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
D602	8-719-988-61	DIODE 1SS355TE-17		C202	1-126-193-11	ELECT CHIP 1uF 20% 50V	
		< FERRITE BEAD >		C500	1-124-779-00	ELECT CHIP 10uF 20% 16V	
FB301	1-414-813-11	FERRITE, EMI (SMD) (2012)		C501	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
		< IC >		C502	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
IC201	8-759-445-59	IC BA033T		C508	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
IC203	6-705-132-01	IC PQ20WZ5UJ00H				< CONNECTOR >	
IC601	8-759-826-32	IC NJL72H400A		CN100	1-815-920-11	JACK, MODULAR (IN)	
		< JACK >		CN101	1-818-492-11	B TO B CONNECTOR	
J600	1-563-330-11	JACK (IR IN)		CN102	1-766-719-41	CONNECTOR, BOARD TO BOARD 10P	
		< TRANSISTOR >		CN104	1-817-963-11	CONNECTOR (B TO B)	
Q202	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L				< IC >	
Q203	8-729-027-43	TRANSISTOR RT1N141C-TP-1		IC500	6-705-128-01	IC LMS485CMX	
				IC501	6-705-128-01	IC LMS485CMX	
						< COIL >	
				L500	1-414-813-11	FERRITE, EMI (SMD) (2012)	

COMM LEFT

COMM RIGHT

FRONT DISPLAY

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
		< TRANSISTOR >									
Q200	8-729-230-49	TRANSISTOR	2SC2712-YG-TE85L			C304	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
		< RESISTOR >				C305	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C306	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
R202	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	C307	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W	C308	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R230	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C309	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
R343	1-216-809-11	METAL CHIP	100	5%	1/10W	C310	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R500	1-216-833-11	METAL CHIP	10K	5%	1/10W	C311	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R501	1-216-809-11	METAL CHIP	100	5%	1/10W	C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R502	1-216-833-11	METAL CHIP	10K	5%	1/10W	C313	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R504	1-216-809-11	METAL CHIP	100	5%	1/10W	C314	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R518	1-216-833-11	METAL CHIP	10K	5%	1/10W	C315	1-162-923-11	CERAMIC CHIP	47PF	5%	50V

A-4749-513-A	COMM RIGHT BOARD, COMPLETE										

		< CAPACITOR >				C316	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C317	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C505	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C318	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C507	1-124-779-00	ELECT CHIP	10uF	20%	16V	C319	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	C320	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >				C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
CN500	1-815-920-11	JACK, MODULAR (OUT)				C322	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
CN501	1-818-492-11	B TO B CONNECTOR				C325	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
CN502	1-766-719-41	CONNECTOR, BOARD TO BOARD 10P				C326	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
CN505	1-817-963-11	CONNECTOR (B TO B)				C400	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
		< IC >				C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
IC503	6-705-128-01	IC LMS485CMX				C402	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
IC504	6-705-128-01	IC LMS485CMX				C403	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
		< COIL >				C404	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
L501	1-414-813-11	FERRITE, EMI (SMD) (2012)				C405	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
		< RESISTOR >				C406	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R346	1-216-809-11	METAL CHIP	100	5%	1/10W	C408	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R510	1-216-809-11	METAL CHIP	100	5%	1/10W	C409	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R513	1-216-809-11	METAL CHIP	100	5%	1/10W	C410	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R519	1-216-833-11	METAL CHIP	10K	5%	1/10W	C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< VARIABLE RESISTOR >				C412	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
RV200	1-241-761-11	RES, ADJ, CARBON 1K				C413	1-162-923-11	CERAMIC CHIP	47PF	5%	50V

A-4749-507-A	FRONT DISPLAY BOARD, COMPLETE										

		< CAPACITOR >				C414	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C100	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V	C415	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C101	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C416	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C300	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C417	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C301	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V	C418	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C302	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C419	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C420	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C421	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C422	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C423	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C424	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C425	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C426	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C427	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C428	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
						C430	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C431	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C432	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C433	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C601	1-164-505-11	CERAMIC CHIP	2.2uF		16V
						C602	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
						C603	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C610	1-164-156-11	CERAMIC CHIP	0.1uF		25V

FRONT DISPLAY

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C800	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R110	1-216-818-11	METAL CHIP 560	5% 1/10W
C801	1-127-820-11	CERAMIC CHIP 4.7uF	10% 16V	R111	1-216-818-11	METAL CHIP 560	5% 1/10W
C802	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R112	1-216-818-11	METAL CHIP 560	5% 1/10W
C803	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R113	1-216-816-11	METAL CHIP 390	5% 1/10W
C804	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R114	1-216-816-11	METAL CHIP 390	5% 1/10W
C805	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R115	1-216-816-11	METAL CHIP 390	5% 1/10W
C806	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R116	1-216-816-11	METAL CHIP 390	5% 1/10W
C807	1-165-908-11	CERAMIC CHIP 1uF	10% 10V	R117	1-216-816-11	METAL CHIP 390	5% 1/10W
C808	1-127-692-11	CERAMIC CHIP 10uF	10% 6.3V	R118	1-216-816-11	METAL CHIP 390	5% 1/10W
< CONNECTOR >				R119	1-216-816-11	METAL CHIP 390	5% 1/10W
CN103	1-817-963-11	CONNECTOR (B TO B)		R120	1-216-816-11	METAL CHIP 390	5% 1/10W
CN106	1-784-834-21	CONNECTOR, FFC (LIF (NON-ZIF)) 23P		R121	1-216-841-11	METAL CHIP 47K	5% 1/10W
CN151	1-818-491-11	B TO B CONNECTOR		R300	1-216-809-11	METAL CHIP 100	5% 1/10W
CN503	1-817-963-11	CONNECTOR (B TO B)		R301	1-216-809-11	METAL CHIP 100	5% 1/10W
CN551	1-818-491-11	B TO B CONNECTOR		R302	1-216-809-11	METAL CHIP 100	5% 1/10W
< DIODE >				R303	1-216-809-11	METAL CHIP 100	5% 1/10W
D103	8-719-064-55	DIODE SEC1803C		R304	1-216-809-11	METAL CHIP 100	5% 1/10W
D105	8-719-064-56	DIODE SEC2484C		R305	1-216-809-11	METAL CHIP 100	5% 1/10W
D106	8-719-064-56	DIODE SEC2484C		R306	1-216-809-11	METAL CHIP 100	5% 1/10W
D107	8-719-064-56	DIODE SEC2484C		R307	1-216-809-11	METAL CHIP 100	5% 1/10W
D108	8-719-064-56	DIODE SEC2484C		R308	1-216-809-11	METAL CHIP 100	5% 1/10W
D109	8-719-064-56	DIODE SEC2484C		R309	1-216-809-11	METAL CHIP 100	5% 1/10W
D110	8-719-064-56	DIODE SEC2484C		R310	1-216-809-11	METAL CHIP 100	5% 1/10W
D111	8-719-064-56	DIODE SEC2484C		R311	1-216-809-11	METAL CHIP 100	5% 1/10W
D112	8-719-064-56	DIODE SEC2484C		R312	1-216-845-11	METAL CHIP 100K	5% 1/10W
D601	8-719-083-15	DIODE 1SS389 (TPL3)		R313	1-216-833-11	METAL CHIP 10K	5% 1/10W
< FERRITE BEAD >				R314	1-216-833-11	METAL CHIP 10K	5% 1/10W
FB100	1-414-813-11	FERRITE, EMI (SMD) (2012)		R315	1-216-833-11	METAL CHIP 10K	5% 1/10W
FB300	1-414-813-11	FERRITE, EMI (SMD) (2012)		R316	1-216-864-11	SHORT CHIP 0	
FB400	1-414-813-11	FERRITE, EMI (SMD) (2012)		R317	1-216-833-11	METAL CHIP 10K	5% 1/10W
FB800	1-414-813-11	FERRITE, EMI (SMD) (2012)		R318	1-216-809-11	METAL CHIP 100	5% 1/10W
< IC >				R321	1-216-809-11	METAL CHIP 100	5% 1/10W
IC100	6-701-888-01	IC BU2152FS		R324	1-216-833-11	METAL CHIP 10K	5% 1/10W
IC300	6-804-581-11	IC MB90474HPF-GE1		R325	1-216-809-11	METAL CHIP 100	5% 1/10W
IC301	6-702-913-01	IC S-80929CNMC-G8ZT2G		R326	1-216-809-11	METAL CHIP 100	5% 1/10W
IC302	8-759-488-29	IC TC7W66FU (TE12L)		R327	1-216-809-11	METAL CHIP 100	5% 1/10W
IC400	8-759-491-47	IC TC74VHCT08AFT (EL)		R328	1-216-809-11	METAL CHIP 100	5% 1/10W
IC401	8-759-491-47	IC TC74VHCT08AFT (EL)		R331	1-216-833-11	METAL CHIP 10K	5% 1/10W
IC402	8-759-491-47	IC TC74VHCT08AFT (EL)		R341	1-216-809-11	METAL CHIP 100	5% 1/10W
IC404	8-759-523-81	IC TC74VHC08FT (EL)		R342	1-216-809-11	METAL CHIP 100	5% 1/10W
IC600	8-759-564-49	IC TC7W53FU (TE12R)		R362	1-216-809-11	METAL CHIP 100	5% 1/10W
IC602	6-600-287-01	IC PIC37041TM2 (B)		R364	1-216-809-11	METAL CHIP 100	5% 1/10W
< SHORT >				R370	1-216-845-11	METAL CHIP 100K	5% 1/10W
JR100	1-216-296-11	SHORT CHIP 0		R371	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
< RESISTOR >				R372	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R103	1-216-815-11	METAL CHIP 330	5% 1/10W	R373	1-216-845-11	METAL CHIP 100K	5% 1/10W
R105	1-216-818-11	METAL CHIP 560	5% 1/10W	R374	1-216-833-11	METAL CHIP 10K	5% 1/10W
R106	1-216-818-11	METAL CHIP 560	5% 1/10W	R375	1-216-809-11	METAL CHIP 100	5% 1/10W
R107	1-216-818-11	METAL CHIP 560	5% 1/10W	R376	1-216-809-11	METAL CHIP 100	5% 1/10W
R108	1-216-818-11	METAL CHIP 560	5% 1/10W	R392	1-216-809-11	METAL CHIP 100	5% 1/10W
R109	1-216-818-11	METAL CHIP 560	5% 1/10W	R394	1-216-821-11	METAL CHIP 1K	5% 1/10W
				R395	1-216-821-11	METAL CHIP 1K	5% 1/10W
				R396	1-216-809-11	METAL CHIP 100	5% 1/10W
				R400	1-216-809-11	METAL CHIP 100	5% 1/10W
				R401	1-216-809-11	METAL CHIP 100	5% 1/10W
				R402	1-216-809-11	METAL CHIP 100	5% 1/10W
				R403	1-216-809-11	METAL CHIP 100	5% 1/10W

FRONT DISPLAY

SPEAKER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R404	1-216-809-11	METAL CHIP	100 5% 1/10W	S16	1-762-333-21	SWITCH, TACTILE (▶▶I)	
R405	1-216-809-11	METAL CHIP	100 5% 1/10W	S17	1-762-333-21	SWITCH, TACTILE (■)	
R406	1-216-809-11	METAL CHIP	100 5% 1/10W	S18	1-762-333-21	SWITCH, TACTILE (○←)	
R407	1-216-809-11	METAL CHIP	100 5% 1/10W	S19	1-762-333-21	SWITCH, TACTILE (MUTING)	
R408	1-216-809-11	METAL CHIP	100 5% 1/10W	S20	1-762-333-21	SWITCH, TACTILE (VOLUME +)	
R409	1-216-809-11	METAL CHIP	100 5% 1/10W	S21	1-762-333-21	SWITCH, TACTILE (VOLUME -)	
R410	1-216-809-11	METAL CHIP	100 5% 1/10W	S23	1-762-333-21	SWITCH, TACTILE (POWER)	
R411	1-216-809-11	METAL CHIP	100 5% 1/10W			< VIBRATOR >	
R601	1-216-833-11	METAL CHIP	10K 5% 1/10W	X1	1-767-922-11	VIBRATOR, CERAMIC 16MHz	
R603	1-216-845-11	METAL CHIP	100K 5% 1/10W			*****	
R604	1-216-797-11	METAL CHIP	10 5% 1/10W			A-4749-515-A	SPEAKER BOARD, COMPLETE
R605	1-216-845-11	METAL CHIP	100K 5% 1/10W			*****	
R606	1-216-809-11	METAL CHIP	100 5% 1/10W			7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
R607	1-216-833-11	METAL CHIP	10K 5% 1/10W				< CAPACITOR >
R700	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C207	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
R701	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	C208	1-126-206-11	ELECT CHIP 100uF 20% 6.3V	
R702	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				< CONNECTOR >
R703	1-216-821-11	METAL CHIP	1K 5% 1/10W	CN107	1-818-029-11	CONNECTOR PIN (FROM AMPLIFIER)	
R704	1-216-833-11	METAL CHIP	10K 5% 1/10W	CN108	1-818-029-11	CONNECTOR PIN (TO SPEAKERS)	
R705	1-216-833-11	METAL CHIP	10K 5% 1/10W	CN154	1-817-964-11	CONNECTOR (B TO B)	
R706	1-216-837-11	METAL CHIP	22K 5% 1/10W	CN555	1-817-964-11	CONNECTOR (B TO B)	
R707	1-216-833-11	METAL CHIP	10K 5% 1/10W				< DIODE >
R708	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	D207	8-719-053-18	DIODE 1SR154-400TE-25	
R709	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				< FERRITE BEAD >
R710	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	FB201	1-414-813-11	FERRITE, EMI (SMD) (2012)	
R711	1-216-821-11	METAL CHIP	1K 5% 1/10W				< IC >
R712	1-216-833-11	METAL CHIP	10K 5% 1/10W	IC202	8-759-647-11	IC uPC2905HF	
R713	1-216-837-11	METAL CHIP	22K 5% 1/10W				< TRANSISTOR >
R714	1-216-837-11	METAL CHIP	22K 5% 1/10W	Q201	8-729-802-80	TRANSISTOR 2SC3661-TB	
R715	1-216-833-11	METAL CHIP	10K 5% 1/10W				< RESISTOR >
R716	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R334	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R717	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				< RELAY >
R718	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	RY200	1-755-518-11	RELAY	
R719	1-216-821-11	METAL CHIP	1K 5% 1/10W			*****	
R720	1-216-833-11	METAL CHIP	10K 5% 1/10W				MISCELLANEOUS
R721	1-216-833-11	METAL CHIP	10K 5% 1/10W				*****
R800	1-216-852-11	METAL CHIP	390K 5% 1/10W	302	1-817-961-11	CONNECTOR	
R801	1-216-857-11	METAL CHIP	1M 5% 1/10W	D800	1-805-418-11	DISPLAY PANEL, LIQUID CRYSTAL	
R803	1-216-841-11	METAL CHIP	47K 5% 1/10W			*****	
		< SWITCH >					ACCESSORIES
S1	1-762-333-21	SWITCH, TACTILE (SELECT)					*****
S2	1-762-333-21	SWITCH, TACTILE (SELECT)					
S3	1-762-333-21	SWITCH, TACTILE (SELECT)					
S4	1-762-333-21	SWITCH, TACTILE (SELECT)					
S5	1-762-333-21	SWITCH, TACTILE (SELECT)					
S6	1-762-333-21	SWITCH, TACTILE (SELECT)					
S7	1-762-333-21	SWITCH, TACTILE (SELECT)					
S8	1-762-333-21	SWITCH, TACTILE (SELECT)					
S9	1-762-333-21	SWITCH, TACTILE (SOURCE)					
S10	1-762-333-21	SWITCH, TACTILE (▼)					
S11	1-762-333-21	SWITCH, TACTILE (▲)					
S12	1-762-333-21	SWITCH, TACTILE (PAGE)					
S13	1-762-333-21	SWITCH, TACTILE (■)					
S14	1-762-333-21	SWITCH, TACTILE (I◀◀)					
S15	1-762-333-21	SWITCH, TACTILE (▶▶)					
				1-478-336-11	COMMANDER, STANDARD (RM-KP10)		
				4-253-729-11	INSTRUCTION MANUAL (KP) (ENGLISH)		

