

TA-VE150

SERVICE MANUAL

AEP Model
UK Model



This amplifier has the Dolby Surround system.
Manufactured under license from Dolby Laboratories Licensing Corporation.
“Dolby”, the double-D symbol  and “Pro Logic” are trademarks of Dolby Laboratories Licensing Corporation.

SPECIFICATIONS

Amplifier section

Power output

Stereo mode (DIN 1 kHz, 8 ohms)
25 W + 25 W

Surround mode (DIN 1 kHz, 8 ohms)
Front: 25 W/ch
Centre: 25 W
Rear: 25 W/ch

5.1 CH INPUT/DVD mode (DIN 1 kHz, 8 ohms)
Front: 25 W/ch
Centre: 25 W
Rear: 25 W/ch

Frequency response TV, VIDEO, DVD-2CH,
5.1 CH INPUT/DVD:
20 Hz-50 kHz $\pm$ 1 dB

Inputs

	Sensitivity Impedance S/N (weighting network, input level)		
TV, VIDEO, DVD-2CH, 5.1 CH INPUT/DVD	200 mV	50 kilohms	82 dB* (A, 150 mV)

*'78 IHF

Outputs

VIDEO (AUDIO OUT):
Voltage 200 mV,
Impedance 10 kilohms
WOOFER/AUDIO OUT:
Voltage: 2 V
Impedance: 1 kilohms

Muting

Full mute

BASS BOOST

+9 dB at 70 Hz

General

Power requirements 230 V AC, 50/60 Hz

Power consumption 115 W

Dimensions 430 $\times$ 274 $\times$ 64.5 mm

Mass (Approx.) 5.4 kg

Supplied accessories 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.

INTEGRATED AV AMPLIFIER

SONY®



TABLE OF CONTENTS

1. GENERAL	3
2. DISASSEMBLY	4
3. TEST MODE	5
4. DIAGRAMS	6
4-1. Notes for Printed Wiring Board and Schematic Diagram	7
4-2. Printed Wiring Board – MAIN Section –	11
4-3. Schematic Diagram – MAIN Section (1/2) –	13
4-4. Schematic Diagram – MAIN Section (2/2) –	15
4-5. Printed Wiring Boards – PANEL Section –	17
4-6. Schematic Diagram – PANEL Section –	19
4-7. Printed Wiring Boards – POWER Section –	21
4-8. Schematic Diagram – POWER Section –	23
4-9. IC Pin Function Description	25
5. EXPLODED VIEWS	27
6. ELECTRICAL PARTS LIST	29

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.

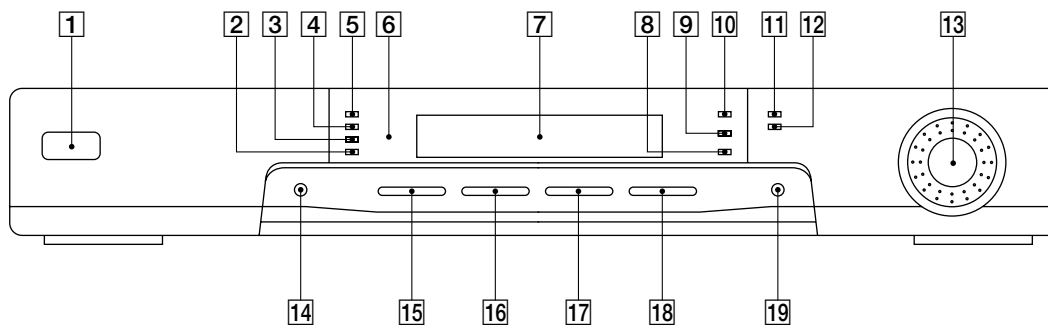
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY A  MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS 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

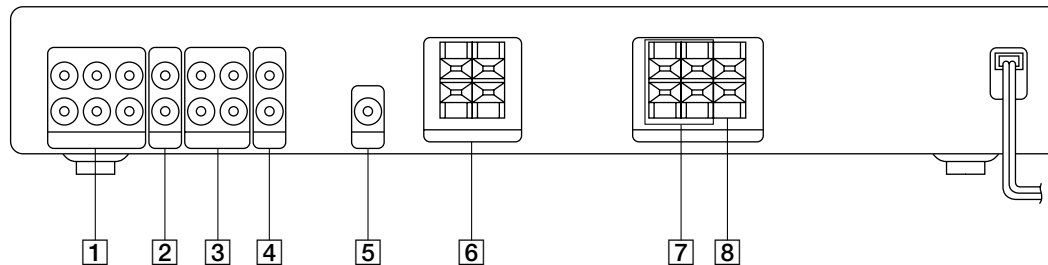
Location of controls

— Front view —



- | | |
|-------------------------------|------------------------------------|
| 1 I /⏻ button | 11 BASS BOOST indicator |
| 2 3 STEREO indicator | 12 MUTING indicator |
| 3 NORMAL indicator | 13 MASTER VOLUME dial |
| 4 WIDE indicator | 14 CENTER MODE button |
| 5 PHANTOM indicator | 15 TV button |
| 6 Remote sensor | 16 VIDEO button |
| 7 Display window | 17 DVD, 2 CH button |
| 8 SIMULATED indicator | 18 5.1 CH INPUT, DVD button |
| 9 C. STUDIO indicator | 19 SURROUND MODE button |
| 10 PRO LOGIC indicator | |

— Rear view —

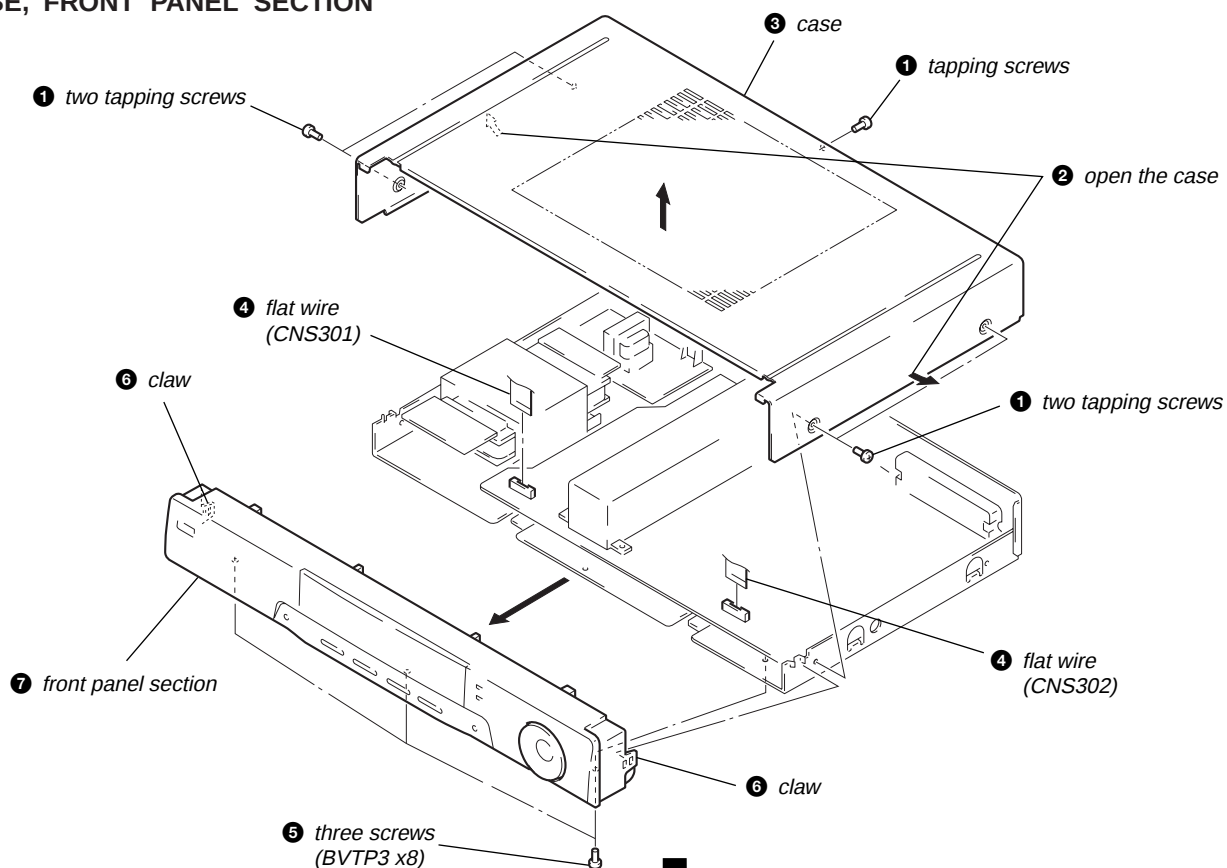


- | | |
|---------------------------------|-----------------------------------|
| 1 5.1 CH INPUT/DVD jacks | 5 WOOFER jack |
| 2 DVD 2 CH jacks | 6 FRONT SPEAKERS terminals |
| 3 VIDEO jacks | 7 REAR SPEAKERS terminals |
| 4 TV jacks | 8 CENTER SPEAKER terminals |

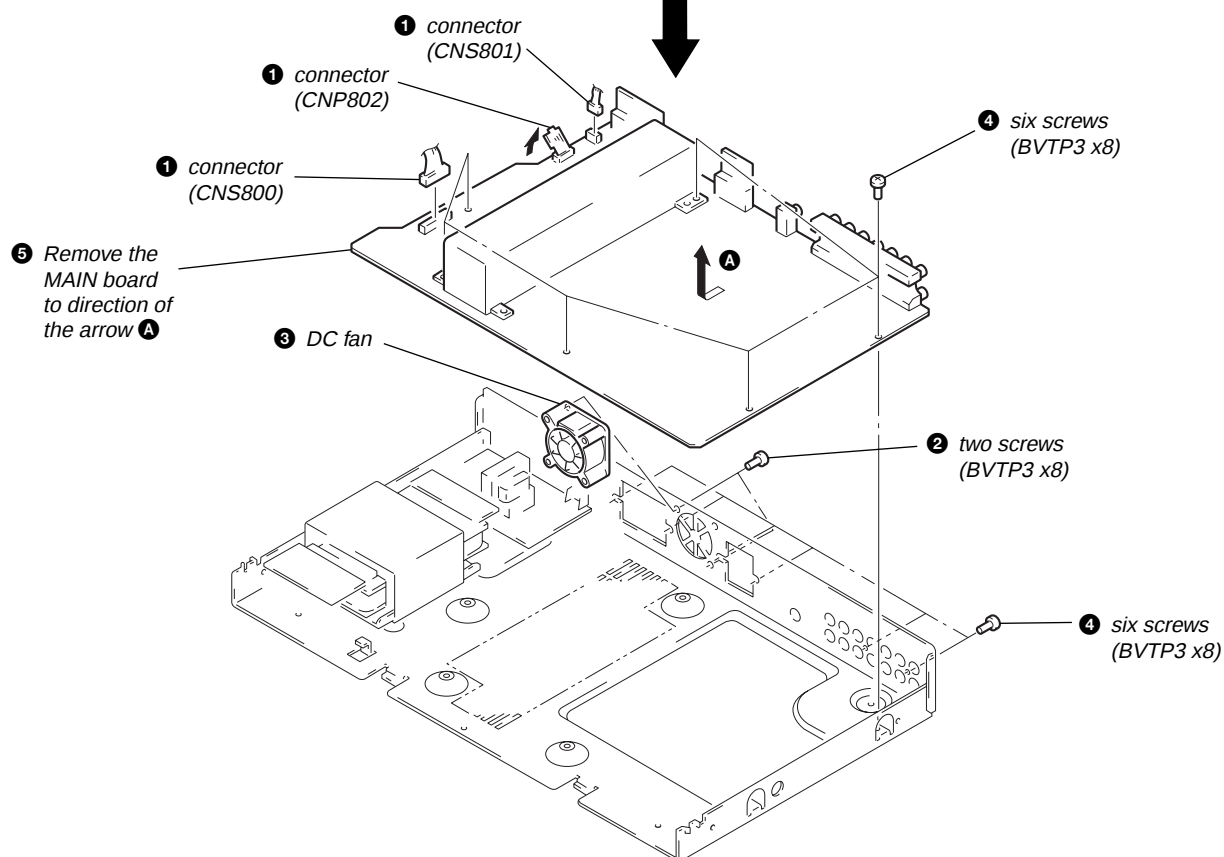
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

CASE, FRONT PANEL SECTION



MAIN BOARD



SECTION 3

TEST MODE

This equipment is provided with a test mode built in the micro-computer. The contents are described in the following.

[Initial Mode]

1. Press **[I/⏻]** button while pressing both **[VIDEO]** and **[5.1CH INPUT, DVD]** buttons simultaneously.
2. “INITIAL” is displayed on the fluorescent indicator tube, and the status of the unit is set in the following.
 - All Memory is clear.
 - Center, rear level set to 0.
 - Center mode set to Phantom.
 - DBFB clear.
 - Muting clear.
 - Volume level set to min.

[Factory Mode]

1. Press **[I/⏻]** button while pressing three buttons of **[TV]**, **[DVD, 2CH]**, and **[5.1CH INPUT, DVD]** simultaneously.
2. Factory setting same as initial except center mode set to normal using jog can set to volume max or min directly.

[FL Check Mode]

1. Press **[I/⏻]** button while both **[CENTER MODE]** and **[VIDEO]** buttons simultaneously.
2. Fluorescent indicator tube and LED are checked, “FINISH” is displayed and the status of the unit is set back in normal condition.

[Gain Up Mode]

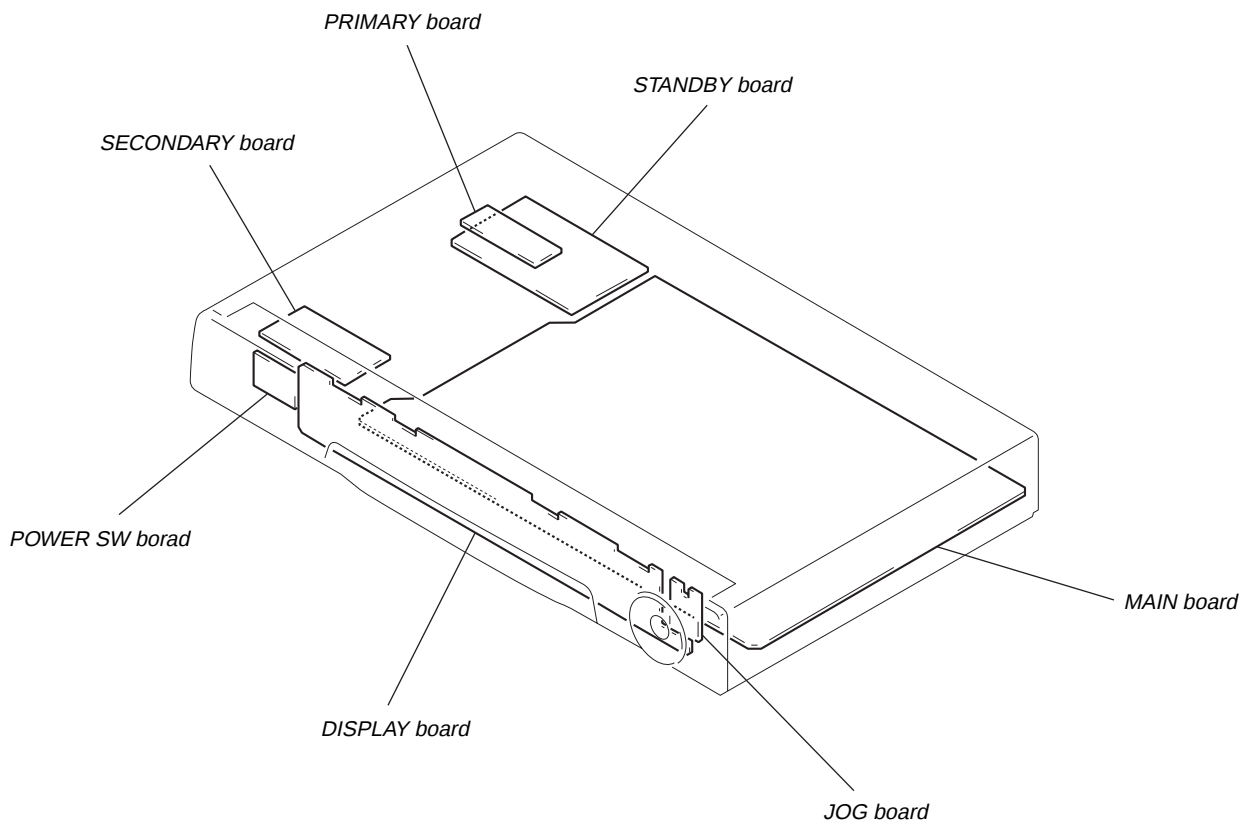
1. Press **[I/⏻]** button while pressing **[SURROUND MODE]** button.
2. “GAIN UP” is displayed on the fluorescent indicator tube and the rear is gained up 3 dB.
3. To exit from this mode, press two buttons in the same manner as step1.
“NORMAL” is displayed on the fluorescent indicator tube and the status of the unit is set back in normal condition.

[Version Mode]

1. Press **[I/⏻]** button while pressing both **[CENTER MODE]** and **[SURROUND MODE]** buttons simultaneously.
2. Version of its destination is displayed on the fluorescent indicator tube.

SECTION 4 DIAGRAMS

- Circuit Boards Location



4-1. NOTES FOR PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

Note on Schematic Diagram:

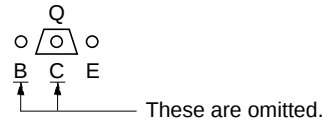
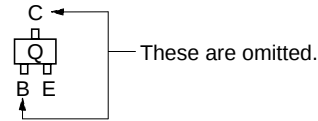
- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- $\triangle$: internal component.
-  : nonflammable resistor.
-  : panel designation.

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

-  : B+ Line.
-  : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : VIDEO
- Voltages are taken with a VOM (Input impedance $10\text{ M}\Omega$).
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.
-  : FRONT/AUDIO IN
-  : REAR
-  : CENTER
-  : WOOFER

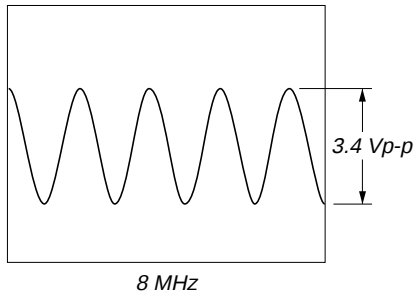
Note on Printed Wiring Board:

-  : parts extracted from the component side.
-  : parts mounted on the conductor side.
-  : Pattern from the side which enables seeing.
- Indication of transistor.



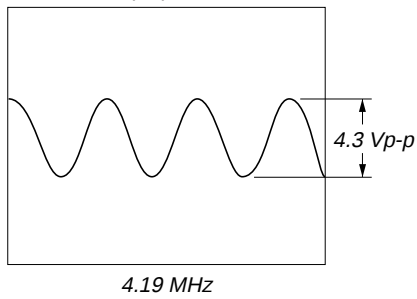
- Waveforms
- MAIN Board –

❶ IC300 ③① (OSC)



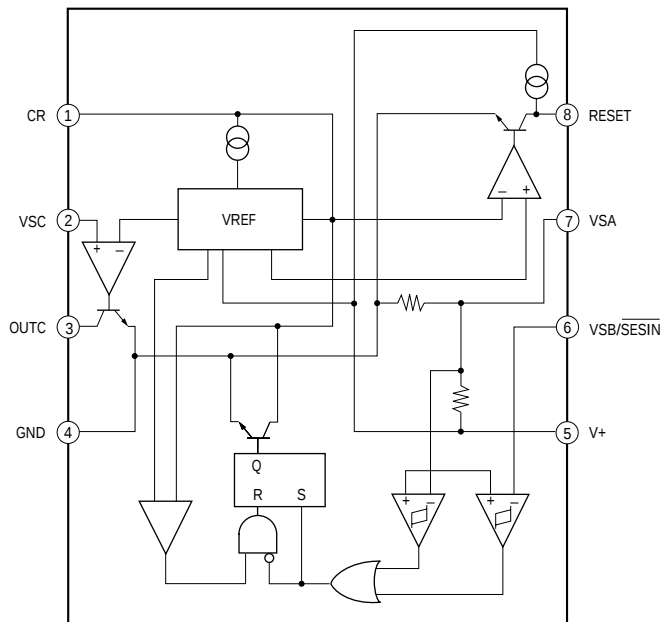
- DISPLAY Board –

❶ IC201 ③④ (X1)



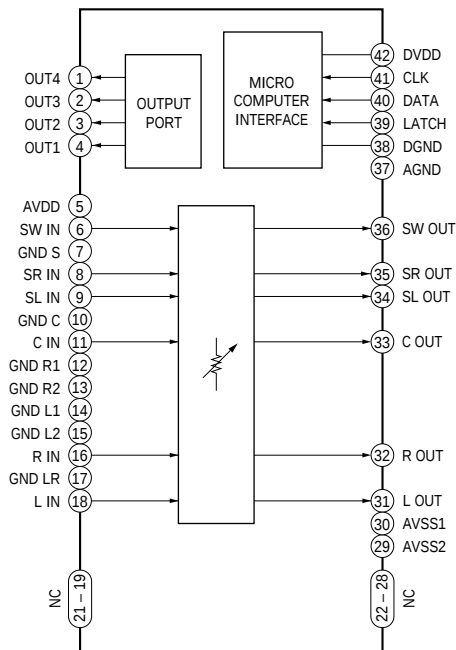
• IC Block Diagrams
– STANDBY Board –

IC950 NJM2103D

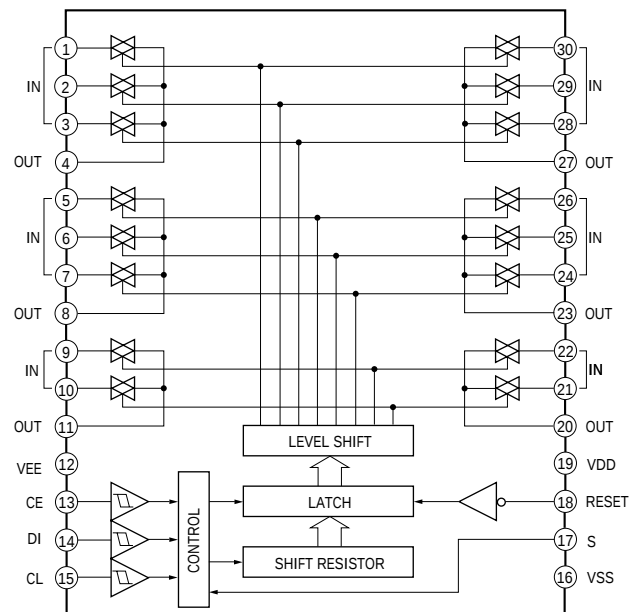


– MAIN Board –

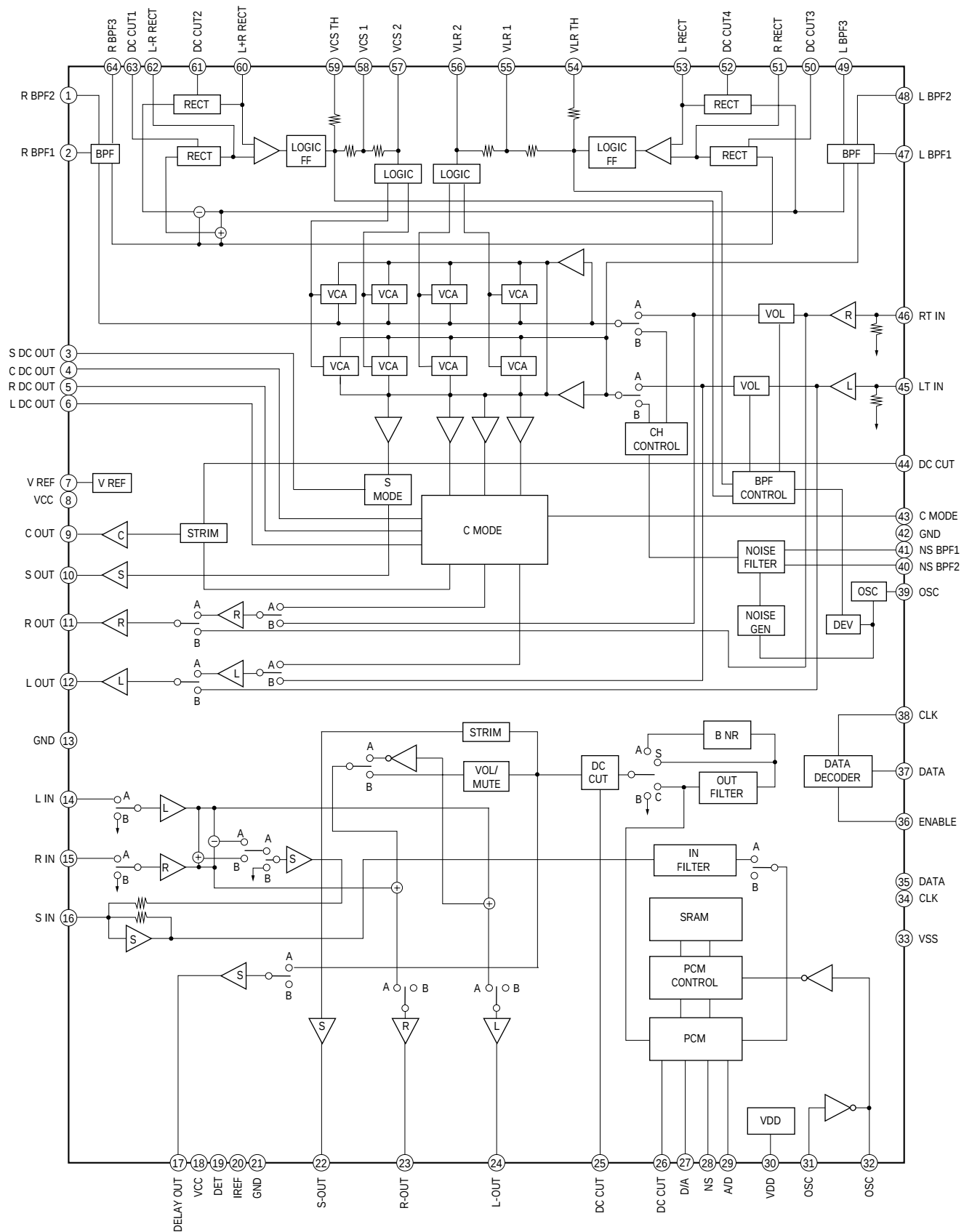
IC100 M62447SP



IC500 LC7822



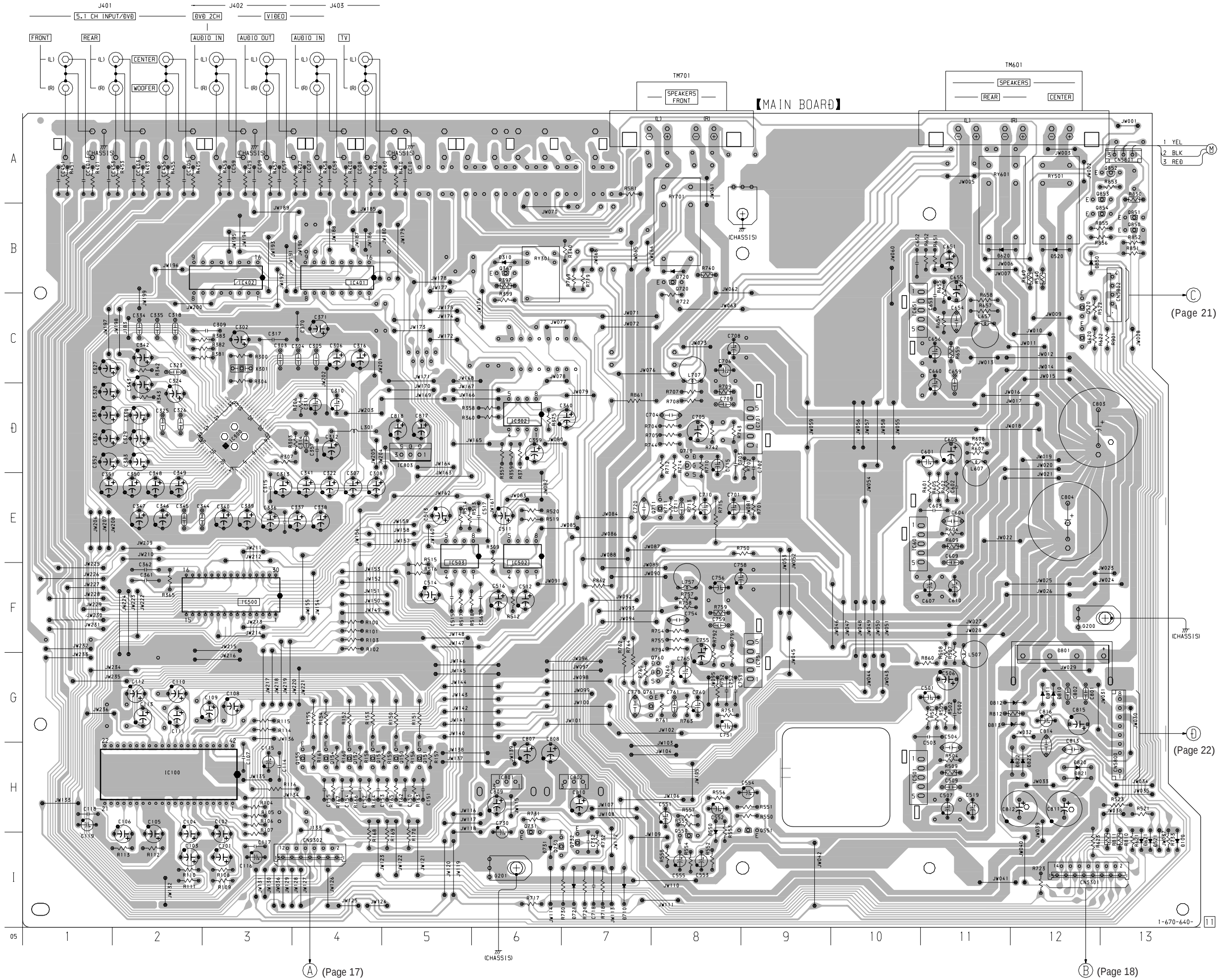
IC300 LV1035M



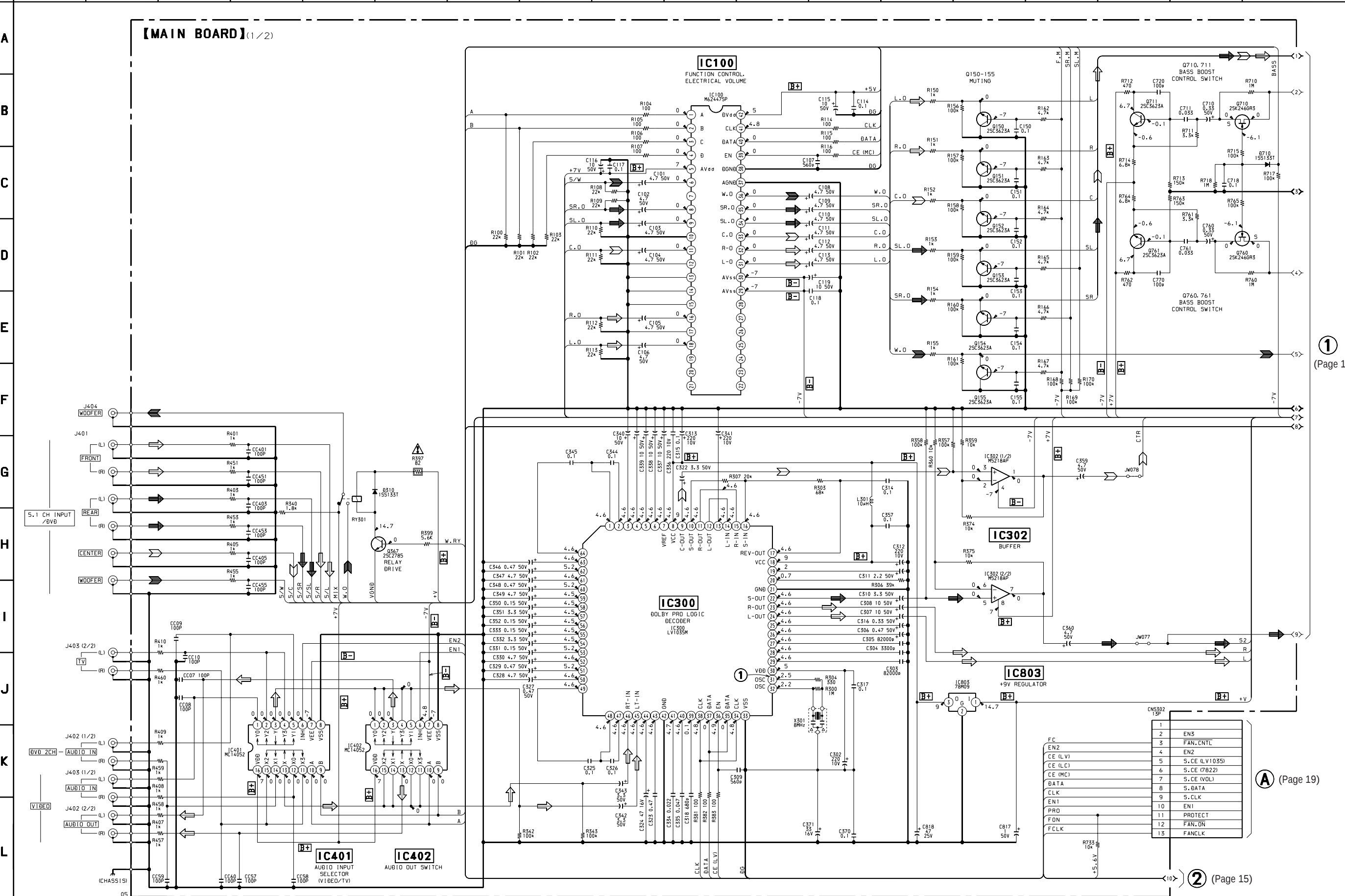
4-2. PRINTED WIRING BOARD – MAIN Section – • See page 6 for Circuit Boards Location.

• Semiconductor Location

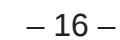
Ref. No.	Location
D100	I-13
D310	B-6
D520	B-12
D521	I-13
D550	H-8
D620	B-11
D621	I-13
D710	I-7
D720	B-8
D721	I-7
D731	I-6
D801	G-12
D810	G-12
D811	G-12
D812	G-12
D813	G-12
D820	H-12
D821	H-12
D822	H-12
D823	H-12
D850	B-12
IC100	H-2
IC300	D-3
IC302	D-6
IC401	B-4
IC402	B-3
IC500	F-3
IC501	H-10
IC502	E-6
IC503	E-5
IC601	E-10
IC651	C-10
IC701	D-9
IC751	G-9
IC801	H-6
IC802	H-7
IC803	D-5
Q150	H-5
Q151	H-5
Q152	H-4
Q153	H-4
Q154	H-4
Q155	H-4
Q367	B-6
Q520	C-12
Q550	I-8
Q551	H-9
Q620	C-12
Q710	D-8
Q711	E-8
Q720	B-8
Q730	I-6
Q731	H-6
Q732	I-7
Q760	G-8
Q761	G-7
Q850	B-13
Q851	B-13
Q852	A-13
Q853	A-13
Q854	B-13



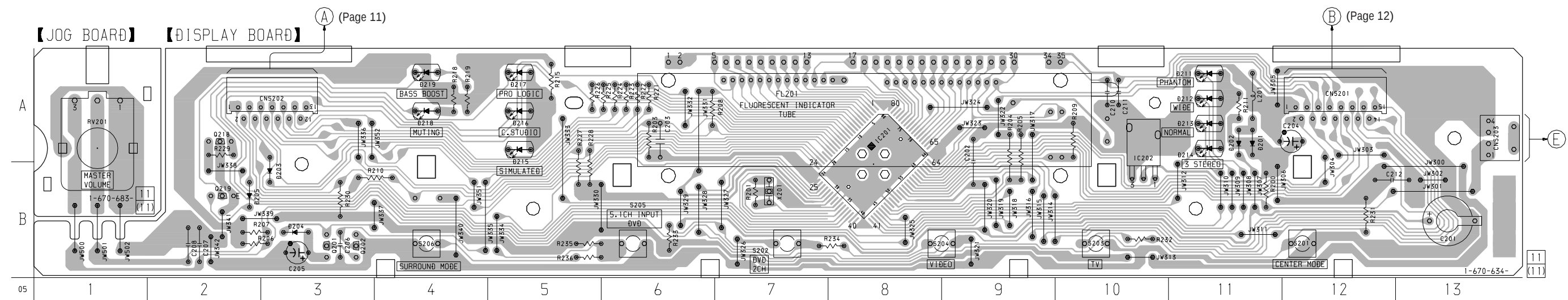
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----

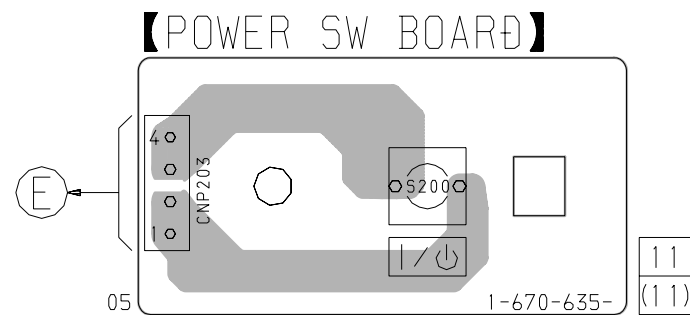


4-5. PRINTED WIRING BOARDS – PANEL Section – • See page 6 for Circuit Boards Location.

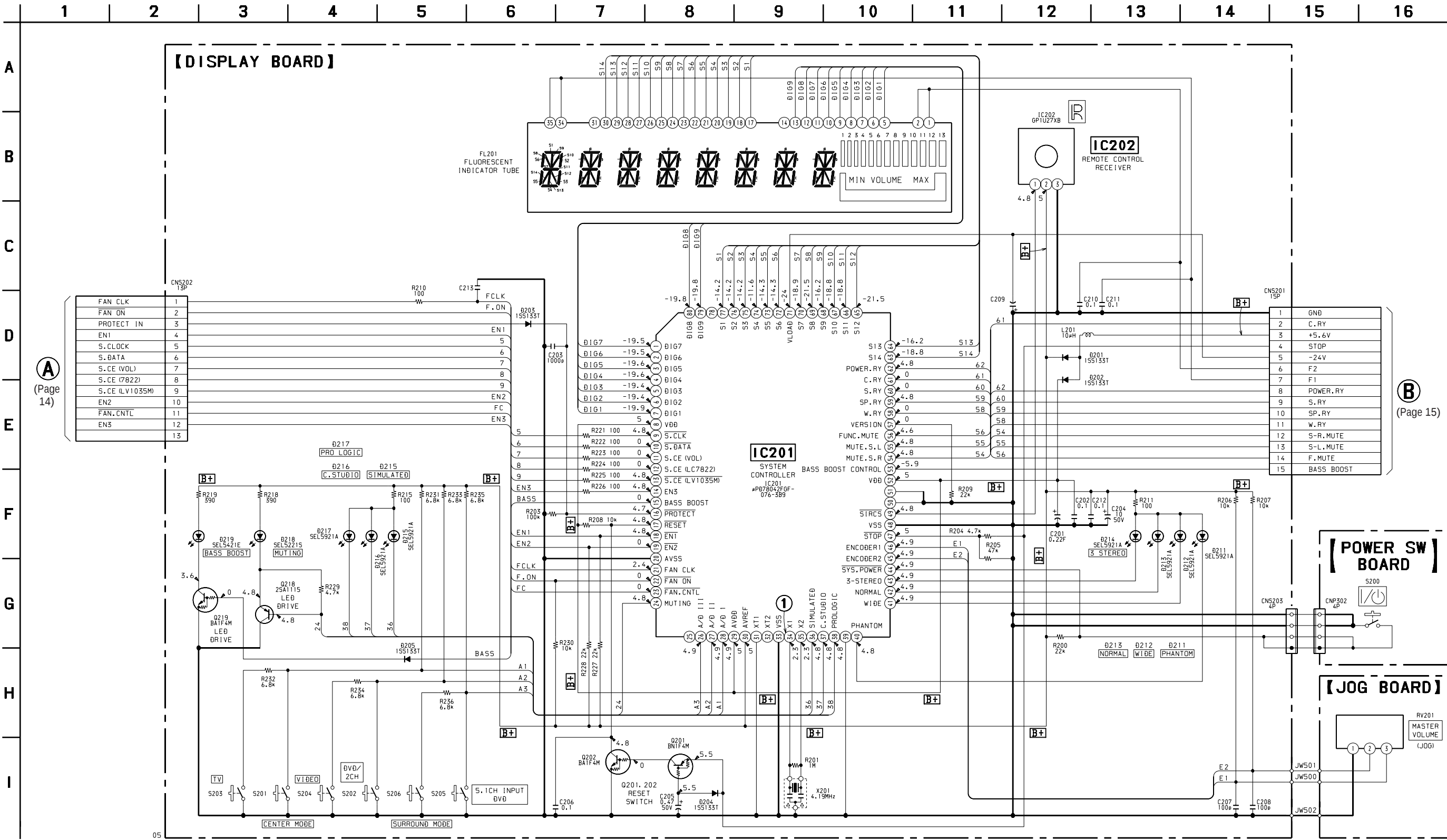


- **Semiconductor Location**

Ref. No.	Location
D201	A-11
D202	A-11
D203	B-3
D204	B-3
D205	B-2
D211	A-11
D212	A-11
D213	A-11
D214	A-11
D215	A-5
D216	A-5
D217	A-5
D218	A-4
D219	A-4
IC201	A-8
IC202	A-10
Q201	B-3
Q202	B-3
Q218	A-2
Q219	B-2



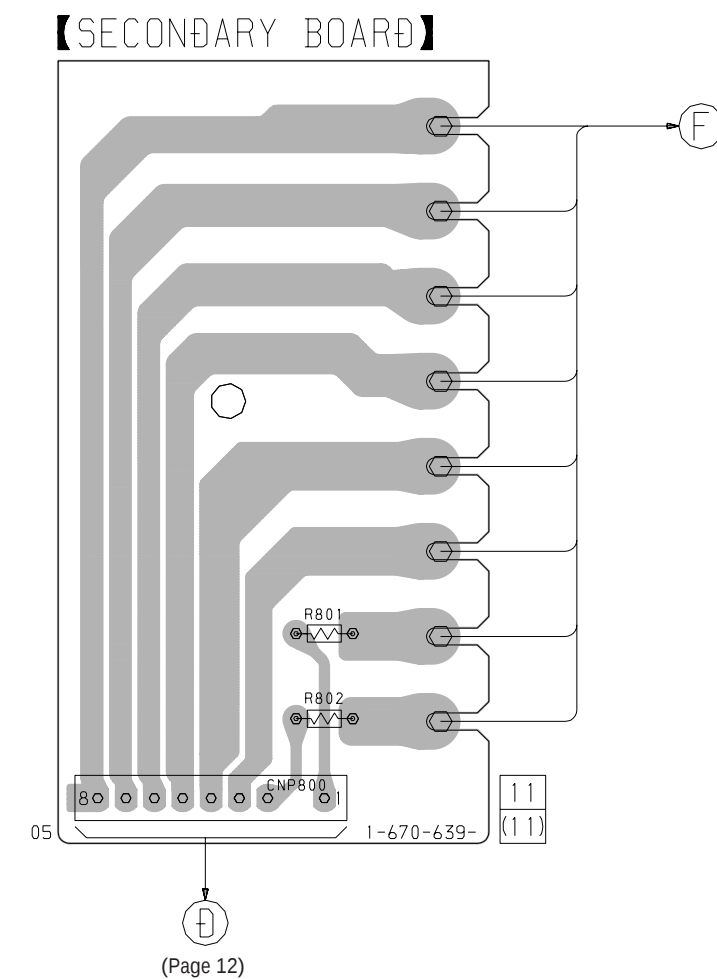
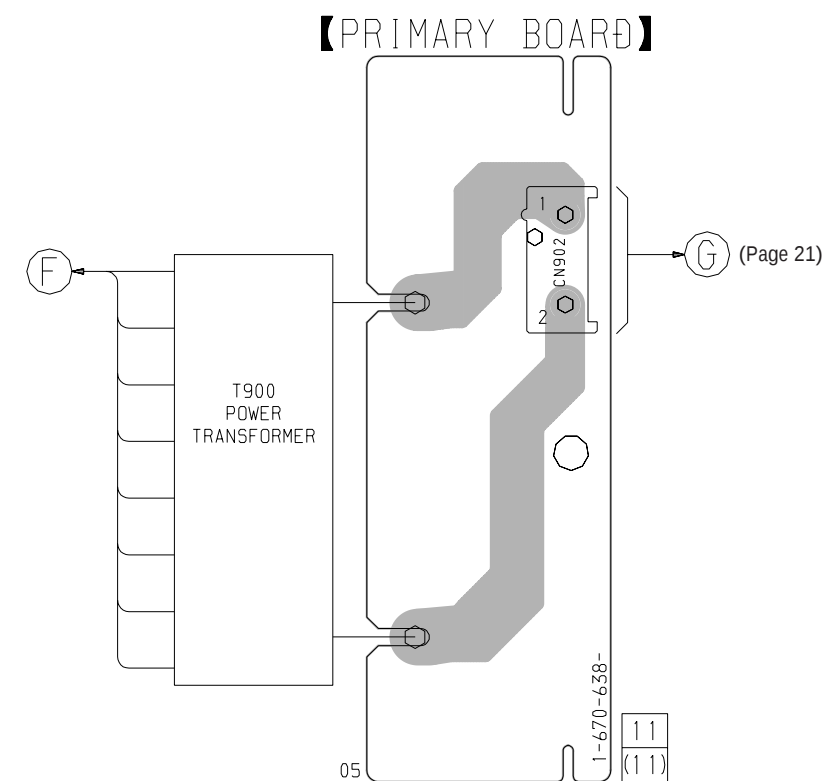
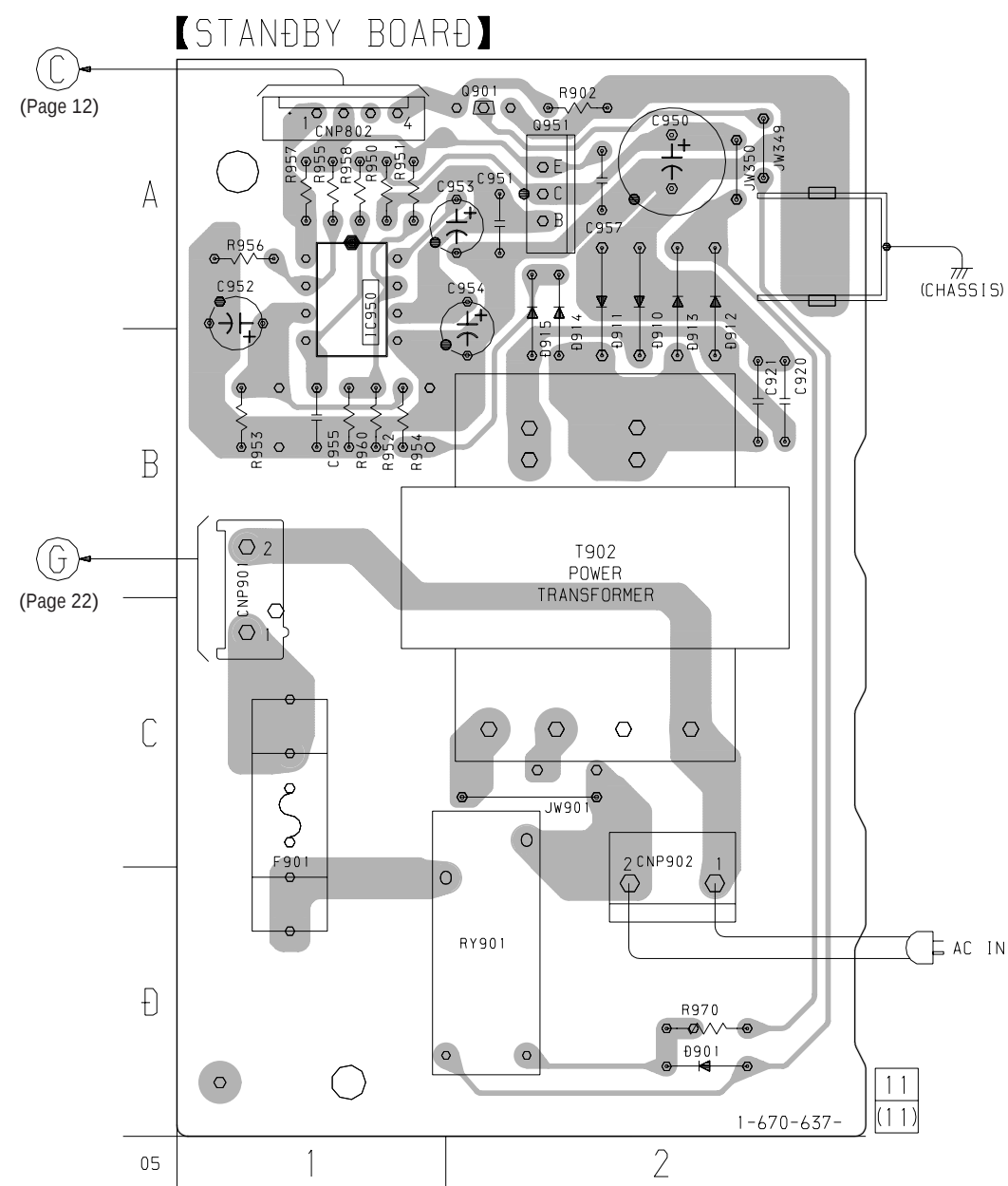
4-6. SCHEMATIC DIAGRAM – PANEL Section – • See page 8 for Waveform.



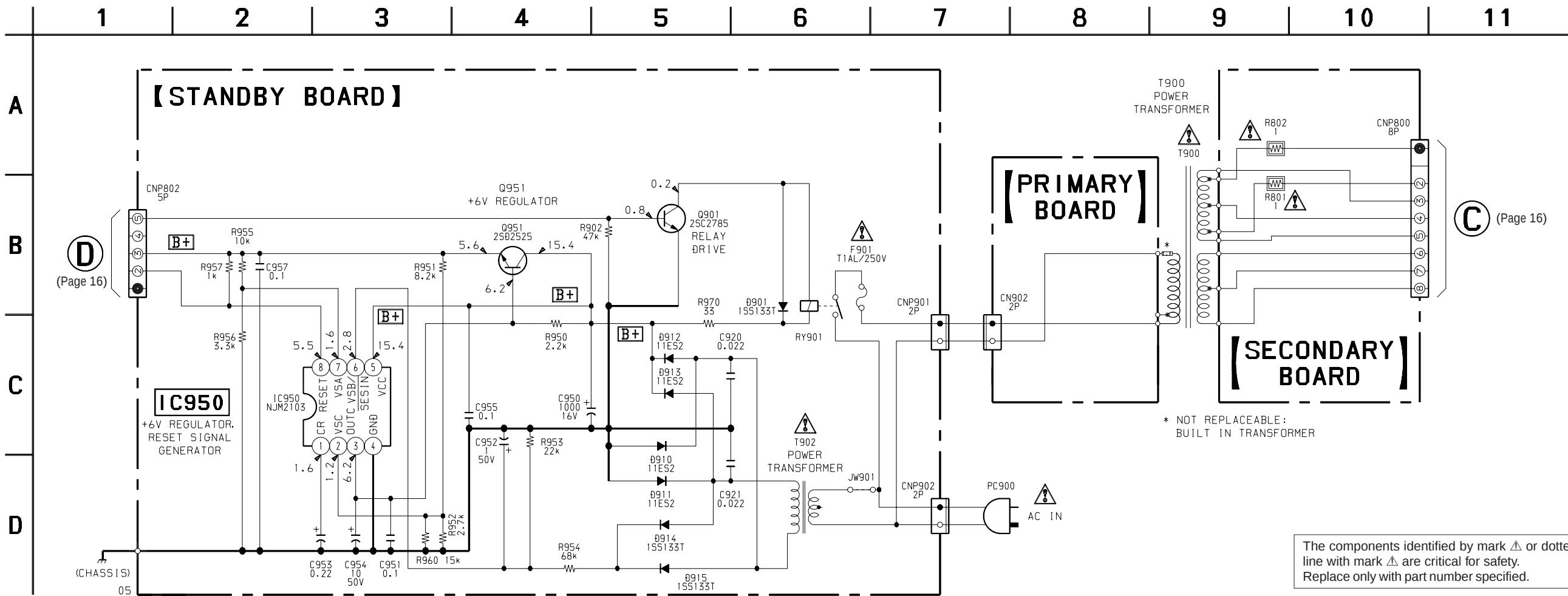
4-7. PRINTED WIRING BOARDS – POWER Section – • See page 6 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D901	D-2
D910	A-2
D911	A-2
D912	A-2
D913	A-2
D914	A-2
D915	A-2
IC950	A-1
Q901	A-2
Q951	A-2



4-8. SCHEMATIC DIAGRAM – POWER Section – • See page 9 for IC Block Diagram.



4-9. IC PIN FUNCTION DESCRIPTION

• DISPLAY BOARD IC201 μ PD78042FGF-076-3B9 (SYSTEM CONTROLLER, FL/LED DRIVER, KEY CONTROL)

Pin No.	Pin Name	I/O	Function
1 to 7	DIG7 to DIG1	O	Grid drive signal output to the fluorescent indicator tube (FL201)
8	VDD	—	Power supply terminal (+5V)
9	$\overline{\text{S. CLK}}$	O	Serial data transfer clock signal output to the M62447SP (IC100), LV1035M (IC300) and LC7822 (IC500)
10	$\overline{\text{S. DATA}}$	O	Serial data output to the M62447SP (IC100), LV1035M (IC300) and LC7822 (IC500)
11	S. CE (VOL)	O	Chip enable signal output to the M62447SP (IC100) “H” active
12	S. CE (LC7822)	O	Chip enable signal output to the LC7822 (IC500) “H” active
13	$\overline{\text{S. CE (LV1035M)}}$	O	Chip enable signal output to the LV1035M (IC300) “H” active
14	EN3	O	Enable signal output terminal “L” active Not used
15	BASS BOOST	O	LED drive signal output of the BASS BOOST LED (D219) “H”: LED on
16	$\overline{\text{PROTECT}}$	I	Overload protection input terminal
17	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator circuit “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
18	$\overline{\text{EN1}}$	O	Enable signal output to the function switch (IC402) “L” active
19	$\overline{\text{EN2}}$	O	Enable signal output to the function switch (IC401) “L” active
20	AVSS	—	Ground terminal (for A/D converter)
21	FAN CLK	I	Fan motor clock signal input terminal
22	$\overline{\text{FAN ON}}$	I	Fan on signal input for the fan motor drive
23	$\overline{\text{FAN. CNTL}}$	O	Fan motor control signal output terminal “L”: fan motor on
24	MUTING	O	LED drive signal output of the MUTING LED (D218) “H”: LED on
25	—	I	Not used (open)
26	A/D III	I	Key input terminal (A/D input) S205, 206 (5.1 IN, SURROUND MODE keys input)
27	A/D II	I	Key input terminal (A/D input) S202, 204 (VIDEO, DVD keys input)
28	A/D I	I	Key input terminal (A/D input) S201, 203 (CENTER MODE, TV keys input)
29	AVDD	—	Power supply terminal (+5V) (for A/D converter)
30	AVREF	I	Reference voltage (+5V) input terminal (for A/D converter)
31	XT1	I	Sub system clock input terminal Not used (fixed at “L”)
32	XT2	O	Sub system clock output terminal Not used (open)
33	VSS	—	Ground terminal
34	X1	I	Main system clock input terminal (4.19 MHz)
35	X2	O	Main system clock output terminal (4.19 MHz)
36	SIMULATED	O	LED drive signal output of the SIMULATED LED (D215) “L”: LED on
37	C. STUDIO	O	LED drive signal output of the C.STUDIO LED (D216) “L”: LED on
38	PROLOGIC	O	LED drive signal output of the PROLOGIC LED (D217) “L”: LED on
39	—	I	Not used (fixed at “L”)
40	PHANTOM	O	LED drive signal output of the PHANTOM LED (D211) “L”: LED on
41	WIDE	O	LED drive signal output of the WIDE LED (D212) “L”: LED on
42	NORMAL	O	LED drive signal output of the NORMAL LED (D213) “L”: LED on
43	3-STEREO	O	LED drive signal output of the 3 STEREO LED (D214) “L”: LED on
44	$\overline{\text{SYS. POWER}}$	I	System power on/off switch (S200 I/Ⓞ) input terminal
45	ENCODER 2	I	Jog dial pulse input from the rotary encoder (RV201 MASTER VOLUME)
46	ENCODER 1	I	Jog dial pulse input from the rotary encoder (RV201 MASTER VOLUME)
47	$\overline{\text{STOP}}$	I	Power down detection signal input from the NJM2103D (IC950) “L”: power down
48	VSS	—	Ground terminal
49	$\overline{\text{SIRCS}}$	I	Sircs signal input from the remote control receiver (IC202)
50, 51	—	I	Not used (fixed at “L”)

Pin No.	Pin Name	I/O	Function
52	VDD	—	Power supply terminal (+5V)
53	BASS BOOST CONTROL	O	Bass boost on/off control signal output for the DBFB circuit “H”: bass boost on
54	MUTE. S. R	O	Line muting on/off control signal output for the rear speaker right channel signal “H”: muting on
55	MUTE. S. L	O	Line muting on/off control signal output for the rear speaker left channel signal “H”: muting on
56	FUNC. MUTE	O	Line muting on/off control signal output for the front and center speakers signal “H”: muting on
57	VERSION	I	Setting terminal for the version (fixed at “L” in this set)
58	W. RY	O	Woofer on/off relay drive signal output terminal “H”: relay on
59	SP. RY	O	Front speaker on/off relay drive signal output terminal (for protect) “H”: relay on
60	S. RY	O	Rear speaker on/off relay drive signal output terminal (for protect) “H”: relay on
61	C. RY	O	Center speaker on/off relay drive signal output terminal (for protect) “H”: relay on
62	POWER. RY	O	Power on/off relay drive signal output terminal “H”: relay on (power on)
63 to 70	S14 to S7	O	Segment drive signal output to the fluorescent indicator tube (FL201)
71	VLOAD	—	Power supply terminal (–24V) (for FL drive)
72 to 77	S6 to S1	O	Segment drive signal output to the fluorescent indicator tube (FL201)
78	—	O	Not used (open)
79, 80	DIG9, DIG8	O	Grid drive signal output to the fluorescent indicator tube (FL201)

SECTION 5

EXPLODED VIEWS

NOTE:

- XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

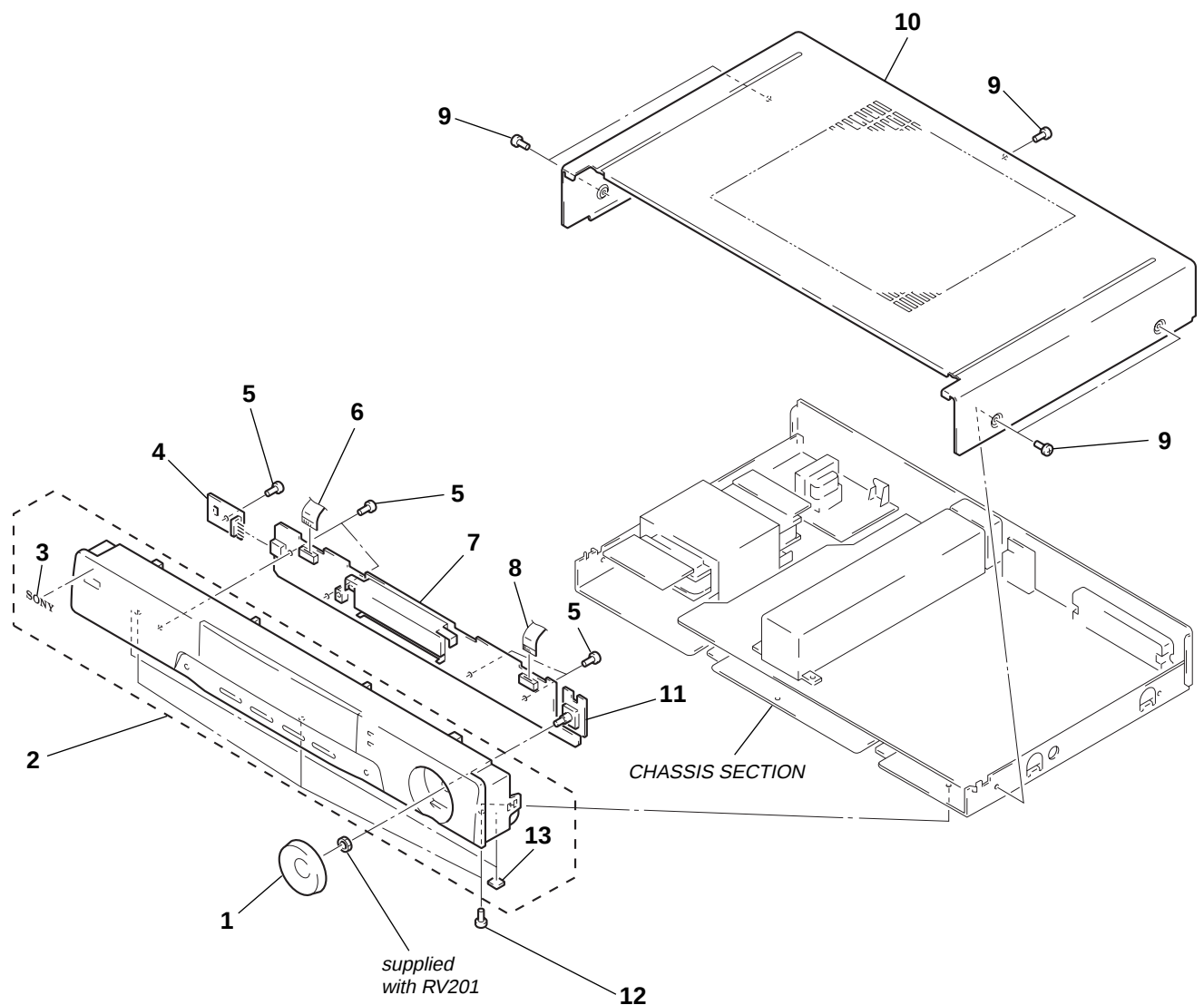
↑
Parts Color

↑
Cabinet's Color

- 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.
- Accessories and packing materials are given in the last of the electrical parts list.

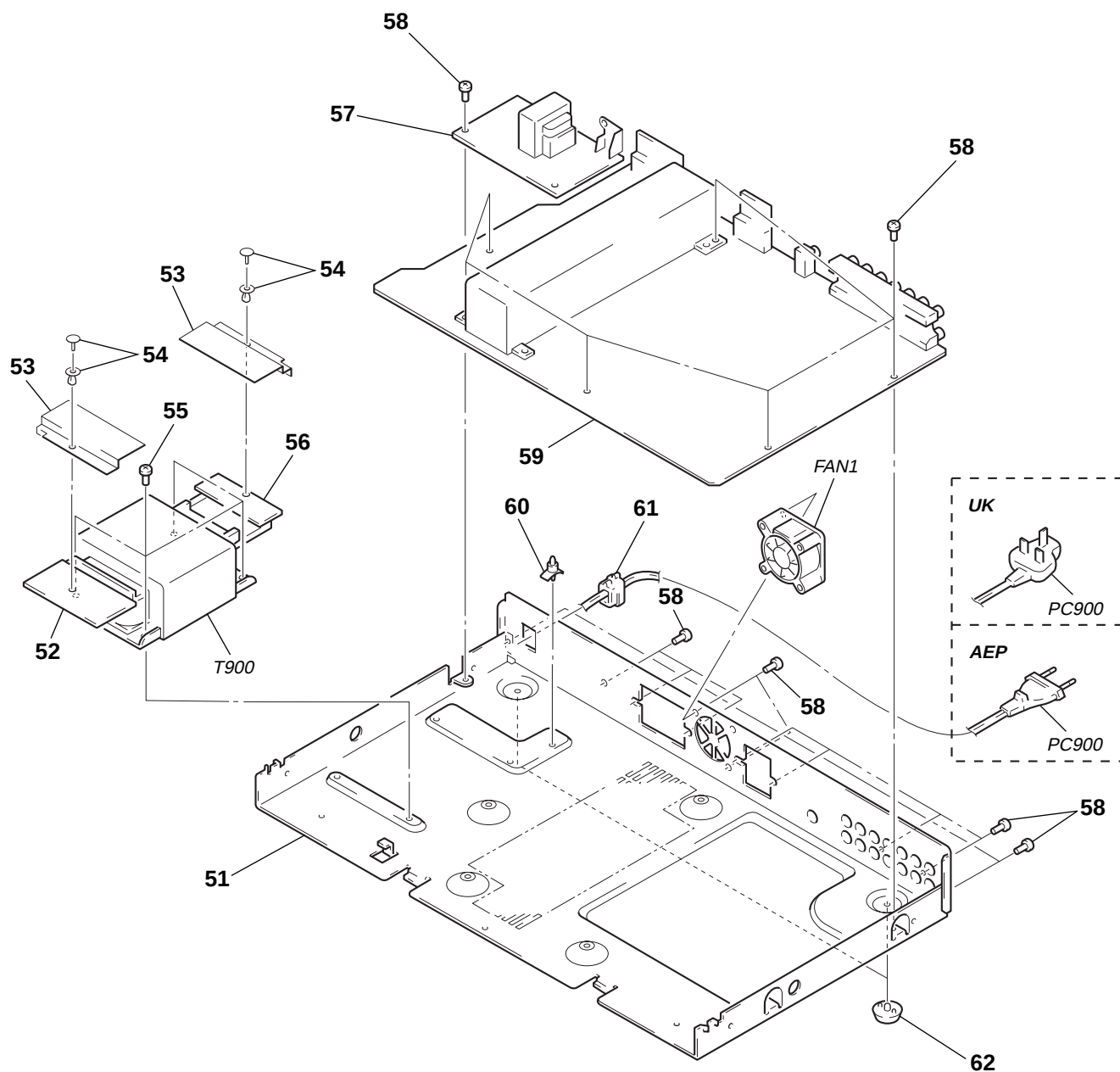
The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

(1) CASE, FRONT PANEL SECTION



<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>
1	4-211-178-01	KNOB (VOL)		8	1-769-973-11	WIRE (FLAT TYPE) (13 CORE)	
2	X-4950-243-1	FRONT PANEL ASSY		9	3-710-901-11	SCREW, TAPPING	
3	3-008-600-11	EMBLEM (5-AR), SONY		* 10	4-211-182-01	CASE	
* 4	1-670-635-11	POWER SW BOARD		* 11	1-670-683-11	JOG BOARD	
5	4-951-620-01	SCREW (2.6X8), +BVTP		12	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
6	1-777-353-11	WIRE (FLAT TYPE) (15 CORE)		13	4-977-358-11	CUSHION	
* 7	A-4414-849-A	DISPLAY BOARD, COMPLETE					

(2) CHASSIS SECTION



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	4-211-183-01	CHASSIS PANEL		* 59	A-4414-854-A	MAIN BOARD, COMPLETE	
* 52	1-670-639-11	SECONDARY BOARD		* 60	4-924-098-21	HOLDER, PC BOARD	
53	4-212-070-01	INSULATOR (PT)		* 61	3-703-244-00	BUSHING (2104), CORD	
54	3-531-576-11	RIVET		62	4-965-822-01	FOOT	
55	7-685-880-09	SCREW +BVTT 4X6 (S)		FAN1	1-763-137-11	FAN, DC	
* 56	1-670-638-11	PRIMARY BOARD		Δ PC900	1-751-520-11	CORD, POWER (UK)	
* 57	A-4414-851-A	STANDBY BOARD, COMPLETE		Δ PC900	1-777-071-21	CORD, POWER (AEP)	
58	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		Δ T900	1-431-979-11	TRANSFORMER, POWER	

SECTION 6 ELECTRICAL PARTS LIST

DISPLAY

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.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- CAPACITORS
uF: μ F
- COILS
uH: μ H

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4414-849-A	DISPLAY BOARD, COMPLETE *****				< IC >	
				IC201	8-759-546-41	IC uPD78042FGF-076-3B9	
*	4-921-941-01	CUSHION (FL)		IC202	8-759-332-18	IC GP1U27XB	
*	4-943-107-11	HOLDER (FL TUBE)				< COIL >	
		< CAPACITOR >		L201	1-410-509-11	INDUCTOR 10uH	
C201	1-125-486-11	DOUBLE LAYERS 0.22F	5.5V			< TRANSISTOR >	
C202	1-164-159-11	CERAMIC 0.1uF	50V				
C203	1-162-294-31	CERAMIC 0.001uF 10%	50V	Q201	8-729-900-63	TRANSISTOR DTA124ES	
C204	1-124-261-00	ELECT 10uF 20%	50V	Q202	8-729-900-36	TRANSISTOR DTC124ES	
C205	1-124-465-00	ELECT 0.47uF 20%	50V	Q218	8-729-119-76	TRANSISTOR 2SA1175-HFE	
				Q219	8-729-900-36	TRANSISTOR DTC124ES	
C206	1-164-159-11	CERAMIC 0.1uF	50V			< RESISTOR >	
C207	1-162-282-31	CERAMIC 100PF 10%	50V	R200	1-249-433-11	CARBON 22K 5% 1/4W	
C208	1-162-282-31	CERAMIC 100PF 10%	50V	R201	1-247-903-00	CARBON 1M 5% 1/4W	
C210	1-164-159-11	CERAMIC 0.1uF	50V	R203	1-249-441-11	CARBON 100K 5% 1/4W	
C211	1-164-159-11	CERAMIC 0.1uF	50V	R204	1-249-425-11	CARBON 4.7K 5% 1/4W	
				R205	1-249-437-11	CARBON 47K 5% 1/4W	
C212	1-164-159-11	CERAMIC 0.1uF	50V				
		< CONNECTOR >		R206	1-249-429-11	CARBON 10K 5% 1/4W	
* CNS201	1-569-306-11	SOCKET, CONNECTOR (L TYRE) 15P		R207	1-249-429-11	CARBON 10K 5% 1/4W	
CNS202	1-568-444-11	SOCKET, CONNECTOR 13P		R208	1-249-429-11	CARBON 10K 5% 1/4W	
* CNS203	1-565-480-11	CONNECTOR, BOARD TO BOARD 4P		R209	1-249-433-11	CARBON 22K 5% 1/4W	
		< DIODE >		R210	1-247-807-31	CARBON 100 5% 1/4W	
D201	8-719-911-19	DIODE 1SS119		R211	1-247-807-31	CARBON 100 5% 1/4W	
D202	8-719-911-19	DIODE 1SS119		R215	1-247-807-31	CARBON 100 5% 1/4W	
D203	8-719-911-19	DIODE 1SS119		R218	1-249-412-11	CARBON 390 5% 1/4W	
D204	8-719-911-19	DIODE 1SS119		R219	1-249-412-11	CARBON 390 5% 1/4W	
D205	8-719-911-19	DIODE 1SS119		R221	1-247-807-31	CARBON 100 5% 1/4W	
				R222	1-247-807-31	CARBON 100 5% 1/4W	
D211	8-719-046-36	LED SEL5921A-TP15 (PHANTOM)		R223	1-247-807-31	CARBON 100 5% 1/4W	
D212	8-719-046-36	LED SEL5921A-TP15 (WIDE)		R224	1-247-807-31	CARBON 100 5% 1/4W	
D213	8-719-046-36	LED SEL5921A-TP15 (NORMAL)		R225	1-247-807-31	CARBON 100 5% 1/4W	
D214	8-719-046-36	LED SEL5921A-TP15 (3 STEREO)		R226	1-247-807-31	CARBON 100 5% 1/4W	
D215	8-719-046-36	LED SEL5921A-TH15 (SIMULATED)					
D216	8-719-046-36	LED SEL5921A-TH15 (C. STUDIO)		R227	1-249-433-11	CARBON 22K 5% 1/4W	
D217	8-719-046-36	LED SEL5921A-TH15 (PRO LOGIC)		R228	1-249-433-11	CARBON 22K 5% 1/4W	
D218	8-719-046-44	LED SEL5221S (MUTING)		R229	1-249-425-11	CARBON 4.7K 5% 1/4W	
D219	8-719-046-43	LED SEL5421E-TP15 (BASS BOOST)		R230	1-249-429-11	CARBON 10K 5% 1/4W	
		< FLUORESCENT INDICATOR TUBE >		R231	1-249-427-11	CARBON 6.8K 5% 1/4W	
FL201	1-517-786-11	INDICATOR TUBE, FLUORESCENT		R232	1-249-427-11	CARBON 6.8K 5% 1/4W	
				R233	1-249-427-11	CARBON 6.8K 5% 1/4W	
				R234	1-249-427-11	CARBON 6.8K 5% 1/4W	
				R235	1-249-427-11	CARBON 6.8K 5% 1/4W	

DISPLAY

JOG

MAIN

Ref. No.	Part No.	Description	Remark		
R236	1-249-427-11	CARBON	6.8K	5%	1/4W
< SWITCH >					
S201	1-762-875-21	SWITCH, KEYBOARD (CENTER MODE)			
S202	1-762-875-21	SWITCH, KEYBOARD (DVD, 2CH)			
S203	1-762-875-21	SWITCH, KEYBOARD (TV)			
S204	1-762-875-21	SWITCH, KEYBOARD (VIDEO)			
S205	1-762-875-21	SWITCH, KEYBOARD (5.1CH INPUT, DVD)			
S206	1-762-875-21	SWITCH, KEYBOARD (SURROUND MODE)			
< VIBRATOR >					
X201	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)			

*	1-670-683-11	JOG BOARD			

< ROTARY ENCODER >					
RV201	1-475-886-11	ENCODER, ROTARY (MASTER VOLUME)			

*	A-4414-854-A	MAIN BOARD, COMPLETE			

	4-812-134-00	RIVET (DIA. 3.5), NYLON			
	7-685-872-09	SCREW +BVTT 3X8 (S)			
< CAPACITOR >					
C101	1-126-163-11	ELECT	4.7uF	20%	50V
C102	1-126-163-11	ELECT	4.7uF	20%	50V
C103	1-126-163-11	ELECT	4.7uF	20%	50V
C104	1-126-163-11	ELECT	4.7uF	20%	50V
C105	1-126-163-11	ELECT	4.7uF	20%	50V
C106	1-126-163-11	ELECT	4.7uF	20%	50V
C107	1-162-291-31	CERAMIC	560PF	10%	50V
C108	1-126-163-11	ELECT	4.7uF	20%	50V
C109	1-126-163-11	ELECT	4.7uF	20%	50V
C110	1-126-163-11	ELECT	4.7uF	20%	50V
C111	1-126-163-11	ELECT	4.7uF	20%	50V
C112	1-126-163-11	ELECT	4.7uF	20%	50V
C113	1-126-163-11	ELECT	4.7uF	20%	50V
C114	1-164-159-11	CERAMIC	0.1uF		50V
C115	1-126-964-11	ELECT	10uF	20%	50V
C116	1-126-964-11	ELECT	10uF	20%	50V
C117	1-164-159-11	CERAMIC	0.1uF		50V
C118	1-164-159-11	CERAMIC	0.1uF		50V
C119	1-126-964-11	ELECT	10uF	20%	50V
C150	1-164-159-11	CERAMIC	0.1uF		50V
C151	1-164-159-11	CERAMIC	0.1uF		50V
C152	1-164-159-11	CERAMIC	0.1uF		50V
C153	1-164-159-11	CERAMIC	0.1uF		50V
C154	1-164-159-11	CERAMIC	0.1uF		50V
C155	1-164-159-11	CERAMIC	0.1uF		50V
C302	1-126-934-11	ELECT	220uF	20%	10V
C303	1-130-494-11	MYLAR	0.082uF	5%	50V
C304	1-137-367-11	FILM	0.0033uF	5%	50V
C305	1-130-494-11	MYLAR	0.082uF	5%	50V
C306	1-126-959-11	ELECT	0.47uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C307	1-126-964-11	ELECT	10uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-162-291-31	CERAMIC	560PF	10%	50V
C310	1-126-962-11	ELECT	3.3uF	20%	50V
C311	1-126-961-11	ELECT	2.2uF	20%	50V
C312	1-126-934-11	ELECT	220uF	20%	10V
C313	1-126-934-11	ELECT	220uF	20%	10V
C314	1-136-165-00	FILM	0.1uF	5%	50V
C315	1-164-159-11	CERAMIC	0.1uF		50V
C316	1-124-252-00	ELECT	0.33uF	20%	50V
C317	1-164-159-11	CERAMIC	0.1uF		50V
C318	1-136-357-11	FILM	680PF	5%	50V
C322	1-126-962-11	ELECT	3.3uF	20%	50V
C323	1-136-173-00	FILM	0.47uF	5%	50V
C324	1-104-664-11	ELECT	47uF	20%	16V
C325	1-136-165-00	FILM	0.1uF	5%	50V
C326	1-136-165-00	FILM	0.1uF	5%	50V
C327	1-126-959-11	ELECT	0.47uF	20%	50V
C328	1-126-163-11	ELECT	4.7uF	20%	50V
C329	1-126-959-11	ELECT	0.47uF	20%	50V
C330	1-126-163-11	ELECT	4.7uF	20%	50V
C331	1-124-250-11	ELECT	0.15uF	20%	50V
C332	1-126-962-11	ELECT	3.3uF	20%	50V
C333	1-124-250-11	ELECT	0.15uF	20%	50V
C334	1-137-372-11	FILM	0.022uF	5%	50V
C335	1-136-161-00	FILM	0.047uF	5%	50V
C336	1-126-934-11	ELECT	220uF	20%	10V
C337	1-126-964-11	ELECT	10uF	20%	50V
C338	1-126-964-11	ELECT	10uF	20%	50V
C339	1-126-964-11	ELECT	10uF	20%	50V
C340	1-126-964-11	ELECT	10uF	20%	50V
C341	1-126-934-11	ELECT	220uF	20%	10V
C342	1-126-962-11	ELECT	3.3uF	20%	50V
C343	1-126-962-11	ELECT	3.3uF	20%	50V
C344	1-136-165-00	FILM	0.1uF	5%	50V
C345	1-136-165-00	FILM	0.1uF	5%	50V
C346	1-126-959-11	ELECT	0.47uF	20%	50V
C347	1-126-163-11	ELECT	4.7uF	20%	50V
C348	1-126-959-11	ELECT	0.47uF	20%	50V
C349	1-126-163-11	ELECT	4.7uF	20%	50V
C350	1-124-250-11	ELECT	0.15uF	20%	50V
C351	1-126-962-11	ELECT	3.3uF	20%	50V
C352	1-124-250-11	ELECT	0.15uF	20%	50V
C357	1-164-159-11	CERAMIC	0.1uF		50V
C359	1-126-163-11	ELECT	4.7uF	20%	50V
C360	1-126-163-11	ELECT	4.7uF	20%	50V
C361	1-164-159-11	CERAMIC	0.1uF		50V
C362	1-162-294-31	CERAMIC	0.001uF	10%	50V
C370	1-164-159-11	CERAMIC	0.1uF		50V
C371	1-126-966-11	ELECT	33uF	20%	16V
C501	1-126-163-11	ELECT	4.7uF	20%	50V
C502	1-162-282-31	CERAMIC	100PF	10%	50V
C503	1-162-282-31	CERAMIC	100PF	10%	50V
C504	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V
C506	1-104-665-11	ELECT	100uF	20%	16V
C507	1-126-160-11	ELECT	1uF	20%	50V
C509	1-137-372-11	FILM	0.022uF	5%	50V
C511	1-126-163-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C512	1-126-163-11	ELECT	4.7uF	20%	50V		C802	1-136-169-00	FILM	0.22uF	5%	50V	
C513	1-126-163-11	ELECT	4.7uF	20%	50V		C803	1-126-256-11	ELECT	4700uF	20%	35V	
							C804	1-126-256-11	ELECT	4700uF	20%	35V	
C514	1-126-160-11	ELECT	1uF	20%	50V		C807	1-104-664-11	ELECT	47uF	20%	25V	
C515	1-164-159-11	CERAMIC	0.1uF		50V		C808	1-104-664-11	ELECT	47uF	20%	25V	
C516	1-126-163-11	ELECT	4.7uF	20%	50V								
C517	1-162-193-31	CERAMIC	3.3PF	10%	50V		C809	1-126-160-11	ELECT	1uF	20%	50V	
C519	1-126-160-11	ELECT	1uF	20%	50V		C810	1-126-160-11	ELECT	1uF	20%	50V	
							C811	1-126-942-61	ELECT	1000uF	20%	25V	
C551	1-126-163-11	ELECT	4.7uF	20%	50V		C812	1-126-941-11	ELECT	470uF	20%	25V	
C552	1-126-163-11	ELECT	4.7uF	20%	50V		C813	1-101-001-00	CERAMIC	0.001uF		50V	
C553	1-126-160-11	ELECT	1uF	20%	50V								
C554	1-126-163-11	ELECT	4.7uF	20%	50V		C814	1-101-001-00	CERAMIC	0.001uF		50V	
C555	1-126-160-11	ELECT	1uF	20%	50V		C815	1-126-949-11	ELECT	220uF	20%	35V	
							C816	1-126-967-11	ELECT	47uF	20%	50V	
C567	1-162-193-31	CERAMIC	3.3PF	10%	50V		C817	1-126-160-11	ELECT	1uF	20%	50V	
C601	1-126-163-11	ELECT	4.7uF	20%	50V		C818	1-104-664-11	ELECT	47uF	20%	25V	
C602	1-162-282-31	CERAMIC	100PF	10%	50V								
C603	1-162-282-31	CERAMIC	100PF	10%	50V		CC07	1-162-282-31	CERAMIC	100PF	10%	50V	
C604	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V		CC08	1-162-282-31	CERAMIC	100PF	10%	50V	
							CC09	1-162-282-31	CERAMIC	100PF	10%	50V	
C605	1-104-665-11	ELECT	100uF	20%	16V		CC10	1-162-282-31	CERAMIC	100PF	10%	50V	
C607	1-126-160-11	ELECT	1uF	20%	50V		CC57	1-162-282-31	CERAMIC	100PF	10%	50V	
C609	1-137-372-11	FILM	0.022uF	5%	50V								
C610	1-126-160-11	ELECT	1uF	20%	50V		CC58	1-162-282-31	CERAMIC	100PF	10%	50V	
C651	1-126-163-11	ELECT	4.7uF	20%	50V		CC59	1-162-282-31	CERAMIC	100PF	10%	50V	
							CC60	1-162-282-31	CERAMIC	100PF	10%	50V	
C652	1-162-282-31	CERAMIC	100PF	10%	50V		CC401	1-162-282-31	CERAMIC	100PF	10%	50V	
C653	1-162-282-31	CERAMIC	100PF	10%	50V		CC403	1-162-282-31	CERAMIC	100PF	10%	50V	
C654	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V								
C655	1-104-665-11	ELECT	100uF	20%	16V		CC405	1-162-282-31	CERAMIC	100PF	10%	50V	
C656	1-126-160-11	ELECT	1uF	20%	50V		CC451	1-162-282-31	CERAMIC	100PF	0%	50V	
							CC453	1-162-282-31	CERAMIC	100PF	10%	50V	
C659	1-137-372-11	FILM	0.022uF	5%	50V		CC455	1-162-282-31	CERAMIC	100PF	10%	50V	
C660	1-126-160-11	ELECT	1uF	20%	50V								
C701	1-126-163-11	ELECT	4.7uF	20%	50V		< CONNECTOR >						
C702	1-162-282-31	CERAMIC	100PF	10%	50V		CNS301	1-569-321-11	SOCKET, CONNECTOR 15P				
C703	1-162-282-31	CERAMIC	100PF	10%	50V		CNS302	1-568-443-11	SOCKET, CONNECTOR 13P				
							CNS800	1-691-770-11	PLUG (MICRO CONNECTOR) 8P				
C704	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V		CNS801	1-564-506-11	PLUG, CONNECTOR 3P				
C705	1-104-665-11	ELECT	100uF	20%	16V		CNS802	1-770-479-11	PLUG,CONNECTOR PIN(PC BOARD)4P				
C706	1-126-160-11	ELECT	1uF	20%	50V								
C708	1-126-160-11	ELECT	1uF	20%	50V		< DIODE >						
C709	1-137-372-11	FILM	0.022uF	5%	50V		D100	8-719-911-19	DIODE 1SS119				
							D310	8-719-911-19	DIODE 1SS119				
C710	1-124-252-00	ELECT	0.33uF	20%	50V		D520	8-719-911-19	DIODE 1SS119				
C711	1-136-159-00	FILM	0.033uF	5%	50V		D521	8-719-911-19	DIODE 1SS119				
C715	1-104-664-11	ELECT	47uF	20%	16V		D550	8-719-911-19	DIODE 1SS119				
C718	1-164-159-11	CERAMIC	0.1uF		50V								
C720	1-102-973-00	CERAMIC	100PF	5%	50V		D620	8-719-911-19	DIODE 1SS119				
							D621	8-719-911-19	DIODE 1SS119				
C730	1-126-934-11	ELECT	220uF	20%	10V		D710	8-719-911-19	DIODE 1SS119				
C732	1-164-159-11	CERAMIC	0.1uF		50V		D720	8-719-911-19	DIODE 1SS119				
C751	1-126-163-11	ELECT	4.7uF	20%	50V		D721	8-719-911-19	DIODE 1SS119				
C752	1-162-282-31	CERAMIC	100PF	10%	50V								
C753	1-162-282-31	CERAMIC	100PF	10%	50V		D731	8-719-911-19	DIODE 1SS119				
							D801	8-719-028-23	DIODE D3SBA20-4101				
C754	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V		D810	8-719-024-99	DIODE 11ES2-NTA2B				
C755	1-104-665-11	ELECT	100uF	20%	16V		D811	8-719-024-99	DIODE 11ES2-NTA2B				
C756	1-126-160-11	ELECT	1uF	20%	50V		D812	8-719-986-54	DIODE HZS24-1LTA				
C758	1-126-160-11	ELECT	1uF	20%	50V								
C759	1-137-372-11	FILM	0.022uF	5%	50V		D813	8-719-109-85	DIODE RD5.1ES-B2				
							D820	8-719-024-99	DIODE 11ES2-NTA2B				
C760	1-124-252-00	ELECT	0.33uF	20%	50V		D821	8-719-024-99	DIODE 11ES2-NTA2B				
C761	1-136-159-00	FILM	0.033uF	5%	50V		D822	8-719-024-99	DIODE 11ES2-NTA2B				
C765	1-104-664-11	ELECT	47uF	20%	16V		D823	8-719-024-99	DIODE 11ES2-NTA2B				
C770	1-102-973-00	CERAMIC	100PF	5%	50V								
C801	1-136-169-00	FILM	0.22uF	5%	50V								

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D850	8-719-911-19	DIODE 1SS119		Q760	8-729-202-67	FET 2SK246-GR3	
		< EARTH TERMINAL >		Q761	8-729-141-30	TRANSISTOR 2SC3623A-LK	
* G200	1-537-738-21	TERMINAL, EARTH		Q850	8-729-141-30	TRANSISTOR 2SC3623A-LK	
* G201	1-537-738-21	TERMINAL, EARTH					
* G202	1-537-738-21	TERMINAL, EARTH		Q851	8-729-900-63	TRANSISTOR DTA124ES	
		< IC >		Q852	8-729-116-81	TRANSISTOR 2SD1616	
IC100	8-759-537-31	IC M62447SP		Q853	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC300	8-759-527-00	IC LV1035M		Q854	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC302	8-759-636-74	IC M5218AP-22				< RESISTOR >	
IC401	8-759-000-48	IC MC14052BCP		R100	1-249-433-11	CARBON 22K 5% 1/4W	
IC402	8-759-000-48	IC MC14052BCP		R101	1-249-433-11	CARBON 22K 5% 1/4W	
IC500	8-759-545-64	IC LC78212		R102	1-249-433-11	CARBON 22K 5% 1/4W	
IC501	8-759-502-33	IC SI18752		R103	1-249-433-11	CARBON 22K 5% 1/4W	
IC502	8-759-636-74	IC M5218AP-22		R104	1-247-807-31	CARBON 100 5% 1/4W	
IC503	8-759-636-74	IC M5218AP-22		R105	1-247-807-31	CARBON 100 5% 1/4W	
IC601	8-759-502-33	IC SI18752		R106	1-247-807-31	CARBON 100 5% 1/4W	
IC651	8-759-502-33	IC SI18752		R107	1-247-807-31	CARBON 100 5% 1/4W	
IC701	8-759-502-33	IC SI18752		R108	1-249-433-11	CARBON 22K 5% 1/4W	
IC751	8-759-502-33	IC SI18752		R109	1-249-433-11	CARBON 22K 5% 1/4W	
IC801	8-759-605-00	IC M5F78M07L		R110	1-249-433-11	CARBON 22K 5% 1/4W	
IC802	8-759-604-95	IC M5F79M07L		R111	1-249-433-11	CARBON 22K 5% 1/4W	
IC803	8-759-701-59	IC NJM78M09FA		R112	1-249-433-11	CARBON 22K 5% 1/4W	
		< JACK >		R113	1-249-433-11	CARBON 22K 5% 1/4W	
J401	1-779-381-11	JACK, PIN 6P (5.1 CH INPUT/DVD)		R114	1-247-807-31	CARBON 100 5% 1/4W	
J402	1-770-614-11	JACK, PIN 4P (VIDEO, DVD 2CH)		R115	1-247-807-31	CARBON 100 5% 1/4W	
J403	1-770-613-11	JACK, PIN 4P (TV)		R116	1-247-807-31	CARBON 100 5% 1/4W	
J404	1-774-843-11	JACK, PIN 1P (WOOFER)		R150	1-249-417-11	CARBON 1K 5% 1/4W	
		< COIL >		R151	1-249-417-11	CARBON 1K 5% 1/4W	
L301	1-410-509-11	INDUCTOR 10uH		R152	1-249-417-11	CARBON 1K 5% 1/4W	
L507	1-420-872-00	COIL, AIR-CORE		R153	1-249-417-11	CARBON 1K 5% 1/4W	
L607	1-420-872-00	COIL, AIR-CORE		R154	1-249-417-11	CARBON 1K 5% 1/4W	
L657	1-420-872-00	COIL, AIR-CORE		R155	1-249-417-11	CARBON 1K 5% 1/4W	
L707	1-420-872-00	COIL, AIR-CORE		R156	1-249-441-11	CARBON 100K 5% 1/4W	
L757	1-420-872-00	COIL, AIR-CORE		R157	1-249-441-11	CARBON 100K 5% 1/4W	
		< TRANSISTOR >		R158	1-249-441-11	CARBON 100K 5% 1/4W	
Q150	8-729-141-30	TRANSISTOR 2SC3623A-LK		R159	1-249-441-11	CARBON 100K 5% 1/4W	
Q151	8-729-141-30	TRANSISTOR 2SC3623A-LK		R160	1-249-441-11	CARBON 100K 5% 1/4W	
Q152	8-729-141-30	TRANSISTOR 2SC3623A-LK		R161	1-249-441-11	CARBON 100K 5% 1/4W	
Q153	8-729-141-30	TRANSISTOR 2SC3623A-LK		R162	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q154	8-729-141-30	TRANSISTOR 2SC3623A-LK		R163	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q155	8-729-141-30	TRANSISTOR 2SC3623A-LK		R164	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q367	8-729-119-78	TRANSISTOR 2SC2785-HFE		R165	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q520	8-729-119-78	TRANSISTOR 2SC2785-HFE		R166	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q550	8-729-119-78	TRANSISTOR 2SC2785-HFE		R167	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q551	8-729-119-78	TRANSISTOR 2SC2785-HFE		R168	1-249-441-11	CARBON 100K 5% 1/4W	
Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE		R169	1-249-441-11	CARBON 100K 5% 1/4W	
Q710	8-729-202-67	FET 2SK246-GR3		R170	1-249-441-11	CARBON 100K 5% 1/4W	
Q711	8-729-141-30	TRANSISTOR 2SC3623A-LK		R300	1-247-903-00	CARBON 1M 5% 1/4W	
Q720	8-729-119-78	TRANSISTOR 2SC2785-HFE		R303	1-249-439-11	CARBON 68K 5% 1/4W	
Q730	8-729-119-78	TRANSISTOR 2SC2785-HFE		R304	1-249-411-11	CARBON 330 5% 1/4W	
Q731	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R306	1-249-436-11	CARBON 39K 5% 1/4W	
Q732	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R307	1-247-862-11	CARBON 20K 5% 1/4W	
				R309	1-249-421-11	CARBON 2.2K 5% 1/4W	
				R340	1-249-420-11	CARBON 1.8K 5% 1/4W	
				R342	1-249-441-11	CARBON 100K 5% 1/4W	
				R343	1-249-441-11	CARBON 100K 5% 1/4W	
				R357	1-249-441-11	CARBON 100K 5% 1/4W	
				R358	1-249-441-11	CARBON 100K 5% 1/4W	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R359	1-249-429-11	CARBON	10K 5% 1/4W	R605	1-247-828-11	CARBON	750 5% 1/4W
R360	1-249-429-11	CARBON	10K 5% 1/4W	R607	1-249-389-11	CARBON	4.7 5% 1/4W
R365	1-249-425-11	CARBON	4.7K 5% 1/4W	R608	1-249-437-11	CARBON	47K 5% 1/4W
R374	1-249-429-11	CARBON	10K 5% 1/4W	△ R609	1-249-393-11	CARBON	10 5% 1/4W F
R375	1-249-429-11	CARBON	10K 5% 1/4W	R621	1-249-426-11	CARBON	5.6K 5% 1/4W
R381	1-247-807-31	CARBON	100 5% 1/4W	R622	1-249-426-11	CARBON	5.6K 5% 1/4W
R382	1-247-807-31	CARBON	100 5% 1/4W	R623	1-249-433-11	CARBON	22K 5% 1/4W
R383	1-247-807-31	CARBON	100 5% 1/4W	△ R640	1-249-399-11	CARBON	33 5% 1/4W F
△ R397	1-249-404-00	CARBON	82 5% 1/4W F	R651	1-249-417-11	CARBON	1K 5% 1/4W
R399	1-249-426-11	CARBON	5.6K 5% 1/4W	R652	1-249-438-11	CARBON	56K 5% 1/4W
R401	1-249-417-11	CARBON	1K 5% 1/4W	R654	1-249-438-11	CARBON	56K 5% 1/4W
R403	1-249-417-11	CARBON	1K 5% 1/4W	R655	1-247-828-11	CARBON	750 5% 1/4W
R405	1-249-417-11	CARBON	1K 5% 1/4W	R657	1-249-389-11	CARBON	4.7 5% 1/4W
R407	1-249-417-11	CARBON	1K 5% 1/4W	R658	1-249-439-11	CARBON	68K 5% 1/4W
R408	1-249-417-11	CARBON	1K 5% 1/4W	△ R659	1-249-393-11	CARBON	10 5% 1/4W F
R409	1-249-417-11	CARBON	1K 5% 1/4W	R701	1-249-417-11	CARBON	1K 5% 1/4W
R410	1-249-417-11	CARBON	1K 5% 1/4W	R702	1-249-438-11	CARBON	56K 5% 1/4W
R451	1-249-417-11	CARBON	1K 5% 1/4W	R704	1-249-437-11	CARBON	47K 5% 1/4W
R453	1-249-417-11	CARBON	1K 5% 1/4W	R705	1-249-416-11	CARBON	820 5% 1/4W
R455	1-249-417-11	CARBON	1K 5% 1/4W	R707	1-249-389-11	CARBON	4.7 5% 1/4W
R457	1-249-417-11	CARBON	1K 5% 1/4W	R708	1-249-437-11	CARBON	47K 5% 1/4W
R458	1-249-417-11	CARBON	1K 5% 1/4W	△ R709	1-249-393-11	CARBON	10 5% 1/4W F
R459	1-249-417-11	CARBON	1K 5% 1/4W	R710	1-247-903-00	CARBON	1M 5% 1/4W
R460	1-249-417-11	CARBON	1K 5% 1/4W	R711	1-247-843-11	CARBON	3.3K 5% 1/4W
R501	1-249-417-11	CARBON	1K 5% 1/4W	R712	1-249-413-11	CARBON	470 5% 1/4W
R502	1-249-438-11	CARBON	56K 5% 1/4W	R713	1-247-883-00	CARBON	150K 5% 1/4W
R504	1-249-438-11	CARBON	56K 5% 1/4W	R714	1-249-427-11	CARBON	6.8K 5% 1/4W
R505	1-247-828-11	CARBON	750 5% 1/4W	R715	1-249-441-11	CARBON	100K 5% 1/4W
R507	1-249-389-11	CARBON	4.7 5% 1/4W	R717	1-249-441-11	CARBON	100K 5% 1/4W
R508	1-249-437-11	CARBON	47K 5% 1/4W	R718	1-247-903-00	CARBON	1M 5% 1/4W
△ R509	1-249-393-11	CARBON	10 5% 1/4W F	R719	1-249-433-11	CARBON	22K 5% 1/4W
R512	1-249-441-11	CARBON	100K 5% 1/4W	R721	1-249-426-11	CARBON	5.6K 5% 1/4W
R513	1-249-429-11	CARBON	10K 5% 1/4W	R722	1-249-426-11	CARBON	5.6K 5% 1/4W
R514	1-249-429-11	CARBON	10K 5% 1/4W	R723	1-249-433-11	CARBON	22K 5% 1/4W
R515	1-249-419-11	CARBON	1.5K 5% 1/4W	R730	1-249-427-11	CARBON	6.8K 5% 1/4W
R516	1-249-419-11	CARBON	1.5K 5% 1/4W	R731	1-249-429-11	CARBON	10K 5% 1/4W
R517	1-249-429-11	CARBON	10K 5% 1/4W	R732	1-249-435-11	CARBON	33K 5% 1/4W
R518	1-249-429-11	CARBON	10K 5% 1/4W	R733	1-249-429-11	CARBON	10K 5% 1/4W
R519	1-249-429-11	CARBON	10K 5% 1/4W	△ R740	1-249-399-11	CARBON	33 5% 1/4W F
R520	1-249-416-11	CARBON	820 5% 1/4W	R742	1-249-433-11	CARBON	22K 5% 1/4W
R521	1-249-426-11	CARBON	5.6K 5% 1/4W	R743	1-249-435-11	CARBON	33K 5% 1/4W
R522	1-249-426-11	CARBON	5.6K 5% 1/4W	R744	1-249-429-11	CARBON	10K 5% 1/4W
R523	1-249-433-11	CARBON	22K 5% 1/4W	R750	1-249-417-11	CARBON	1K 5% 1/4W
△ R540	1-249-399-11	CARBON	33 5% 1/4W F	R751	1-249-417-11	CARBON	1K 5% 1/4W
R550	1-249-429-11	CARBON	10K 5% 1/4W	R752	1-249-438-11	CARBON	56K 5% 1/4W
R551	1-249-441-11	CARBON	100K 5% 1/4W	R754	1-249-437-11	CARBON	47K 5% 1/4W
R552	1-249-441-11	CARBON	100K 5% 1/4W	R755	1-249-416-11	CARBON	820 5% 1/4W
R553	1-249-441-11	CARBON	100K 5% 1/4W	R757	1-249-389-11	CARBON	4.7 5% 1/4W
R554	1-249-416-11	CARBON	820 5% 1/4W	R758	1-249-439-11	CARBON	68K 5% 1/4W
R555	1-249-425-11	CARBON	4.7K 5% 1/4W	△ R759	1-249-393-11	CARBON	10 5% 1/4W F
R556	1-249-439-11	CARBON	68K 5% 1/4W	R760	1-247-903-00	CARBON	1M 5% 1/4W
R557	1-247-887-00	CARBON	220K 5% 1/4W	R761	1-247-843-11	CARBON	3.3K 5% 1/4W
R558	1-249-441-11	CARBON	100K 5% 1/4W	R762	1-249-413-11	CARBON	470 5% 1/4W
R581	1-249-433-11	CARBON	22K 5% 1/4W	R763	1-247-883-00	CARBON	150K 5% 1/4W
R601	1-249-417-11	CARBON	1K 5% 1/4W	R764	1-249-427-11	CARBON	6.8K 5% 1/4W
R602	1-249-438-11	CARBON	56K 5% 1/4W	R765	1-249-441-11	CARBON	100K 5% 1/4W
R604	1-249-438-11	CARBON	56K 5% 1/4W	R769	1-249-433-11	CARBON	22K 5% 1/4W
				R792	1-249-433-11	CARBON	22K 5% 1/4W

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

MAIN	POWER SW	PRIMARY	SECONDARY	STANDBY
------	----------	---------	-----------	---------

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R793	1-249-435-11	CARBON	33K	5%	1/4W	< CAPACITOR >					
R794	1-249-429-11	CARBON	10K	5%	1/4W	C920	1-161-494-00	CERAMIC	0.022uF	25V	
△R810	1-249-386-11	CARBON	2.7	5%	1/6W F	C921	1-161-494-00	CERAMIC	0.022uF	25V	
△R811	1-249-386-11	CARBON	2.7	5%	1/6W F	C950	1-126-767-11	ELECT	1000uF	20% 16V	
△R812	1-249-413-11	CARBON	470	5%	1/4W F	C951	1-164-159-11	CERAMIC	0.1uF	50V	
△R850	1-249-401-11	CARBON	47	5%	1/4W F	C952	1-126-960-11	ELECT	1uF	20% 50V	
R851	1-249-429-11	CARBON	10K	5%	1/4W	C953	1-124-464-11	ELECT	0.22uF	20% 50V	
R852	1-249-429-11	CARBON	10K	5%	1/4W	C954	1-126-964-11	ELECT	10uF	20% 50V	
R853	1-249-421-11	CARBON	2.2K	5%	1/4W	C955	1-164-159-11	CERAMIC	0.1uF	50V	
R855	1-249-441-11	CARBON	100K	5%	1/4W	C957	1-164-159-11	CERAMIC	0.1uF	50V	
R856	1-249-425-11	CARBON	4.7K	5%	1/4W	< CONNECTOR >					
R860	1-249-434-11	CARBON	27K	5%	1/4W	CNP802 1-770-480-11 SOCKET, CONNECTOR PIN 4P CNP902 1-564-321-00 PIN, CONNECTOR 2P					
R861	1-249-434-11	CARBON	27K	5%	1/4W						
R862	1-249-434-11	CARBON	27K	5%	1/4W	< DIODE >					
R901	1-249-425-11	CARBON	4.7K	5%	1/4W	D901	8-719-911-19	DIODE	1SS119		
< RELAY >						D910	8-719-024-99	DIODE	11ES2-NTA2B		
RY301	1-755-267-11	RELAY				D911	8-719-024-99	DIODE	11ES2-NTA2B		
RY501	1-515-921-11	RELAY (12V)				D912	8-719-024-99	DIODE	11ES2-NTA2B		
RY601	1-515-921-11	RELAY (12V)				D913	8-719-024-99	DIODE	11ES2-NTA2B		
RY701	1-515-921-11	RELAY (12V)				D914	8-719-911-19	DIODE	1SS119		
< TERMINAL >						D915	8-719-911-19	DIODE	1SS119		
TM601	1-537-510-11	TERMINAL BOARD (SPEAKER) (6P) (SPEAKERS, CENTER/REAR)				< FUSE >					
TM701	1-537-240-11	TERMINAL BOARD (CHECKER PIN) (SPEAKERS, FRONT)				△F901	1-532-463-51	FUSE, TIME LAG (T1AL/250V)			
< VIBRATOR >						< IC >					
X301	1-579-952-11	VIBRATOR, CERAMIC (8MHz)				IC950	8-759-333-83	IC	NJM2103D		
*****						< TRANSISTOR >					
*	1-670-635-11	POWER SW BOARD				Q901	8-729-119-78	TRANSISTOR	2SC2785-HFE		
*****						Q951	8-729-026-68	TRANSISTOR	2SD2525 (TP)		
< CONNECTOR >						< RESISTOR >					
* CNP203	1-565-295-11	PLUG, CONNECTOR 4P				R902	1-249-437-11	CARBON	47K	5% 1/4W	
< SWITCH >						R950	1-249-421-11	CARBON	2.2K	5% 1/4W	
S200	1-762-875-21	SWITCH, KEYBOARD (I/⏏)				R951	1-249-428-11	CARBON	8.2K	5% 1/4W	
*****						R952	1-249-422-11	CARBON	2.7K	5% 1/4W	
*	1-670-638-11	PRIMARY BOARD				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	
*	1-670-639-11	SECONDARY BOARD				R956	1-247-843-11	CARBON	3.3K	5% 1/4W	
*****						R957	1-249-417-11	CARBON	1K	5% 1/4W	
< RESISTOR >						R960	1-249-431-11	CARBON	15K	5% 1/4W	
△R801	1-249-381-11	CARBON	1	5%	1/4W F	R970	1-249-399-11	CARBON	33	5% 1/4W	
△R802	1-249-381-11	CARBON	1	5%	1/4W F	< RELAY >					
*****						RY901	1-755-018-11	RELAY			
< TRANSFORMER >						< TRANSFORMER >					
*	A-4414-851-A	STANDBY BOARD, COMPLETE				△T902	1-450-358-11	TRANSFORMER, POWER			
*****						*****					
	1-533-293-11	FUSE HOLDER									

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

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	

6	1-777-353-11	WIRE (FLAT TYPE) (15 CORE)	
8	1-769-973-11	WIRE (FLAT TYPE) (13 CORE)	
FAN1	1-763-137-11	FAN, DC	
△PC900	1-751-520-11	CORD, POWER (UK)	
△PC900	1-777-071-21	CORD, POWER (AEP)	
△T900	1-431-979-11	TRANSFORMER, POWER	

ACCESSORIES & PACKING MATERIALS

1-475-042-11	ADAPTOR (EURO SCART ADAPTOR)
1-475-808-11	REMOTE COMMANDER (RM-U150)
3-864-251-11	INSTRUCTION MANUAL
	(ENGLISH, FRENCH, DUTCH, SWEDISH) (AEP)
3-864-251-21	INSTRUCTION MANUAL (GERMAN, SPANISH,
	ITALIAN, PORTUGUESE) (AEP)
3-864-251-31	INSTRUCTION MANUAL (ENGLISH) (UK)
4-981-643-01	COVER, BATTERY (for RM-U150)

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

