

TA-SV7AV

SERVICE MANUAL

E Model

Ver 1.0 2001.06



TA-SV7AV is the Amplifier section in MHC-SV7AV.

SPECIFICATIONS

Amplifier section

The following measured at AC 120, 220, 230 – 240 V, 50/60 Hz

Front Speaker:

DIN power output (rated) 95 + 95 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
120 + 120 watts
(6 ohms at 1 kHz, 10% THD)

Center Speaker:

DIN power output (rated) 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 watts
(8 ohms at 1 kHz, 10% THD)

Rear Speaker:

DIN power output (rated) 30 + 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 + 40 watts
(8 ohms at 1 kHz, 10% THD)

Inputs

VIDEO (AUDIO) IN: voltage 250 mV,
(phono jacks) impedance 47 kilohms
MD IN: voltage 450 mV,
(phono jacks) impedance 47 kilohms
OPTICAL IN:
(Square optical connector jacks, rear panel)
wavelength 700 nm
MIC 1/2: sensitivity 1 mV,
(phone jack) impedance 10 kilohms

Outputs

MD OUT: voltage 250 mV
(phono jacks) impedance 1 kilohms
VIDEO OUT: max. output level
(phono jack) 1 Vp-p, unbalanced, Sync
negative, load impedance
75 ohms

S-VIDEO OUT:
(4-pin/mini-DIN jack)

Y: 1 Vp-p, unbalanced,
Sync negative,
C: 0.286Vp-p,
load impedance 75 ohms
accepts headphones of
8 ohms or more
FRONT SPEAKER:
accepts impedance of 6 to
16 ohms
REAR SPEAKER:
accepts impedance of 8 to
16 ohms
CENTER SPEAKER:
accepts impedance of 8 to
16 ohms
SUB WOOFER OUT:
Voltage 1 V,
impedance 1 kilohms

PHONES:

(stereo mini jack)

FRONT SPEAKER:

REAR SPEAKER:

CENTER SPEAKER:

SUB WOOFER OUT:

General

Power requirements

Thailand model: 220 V AC, 50/60 Hz
Other models: 120 V, 220 V or
230 – 240 V AC,
50/60 Hz
Adjustable with voltage
selector

Power consumption

300 watts

Dimensions (w/h/d)

Approx. 280 x 128 x 350 mm

Mass

Approx. 7.7 kg

Design and specifications are subject to change without notice.

AMPLIFIER

9-873-154-01
2001F0500-1
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Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

SONY®

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle 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.

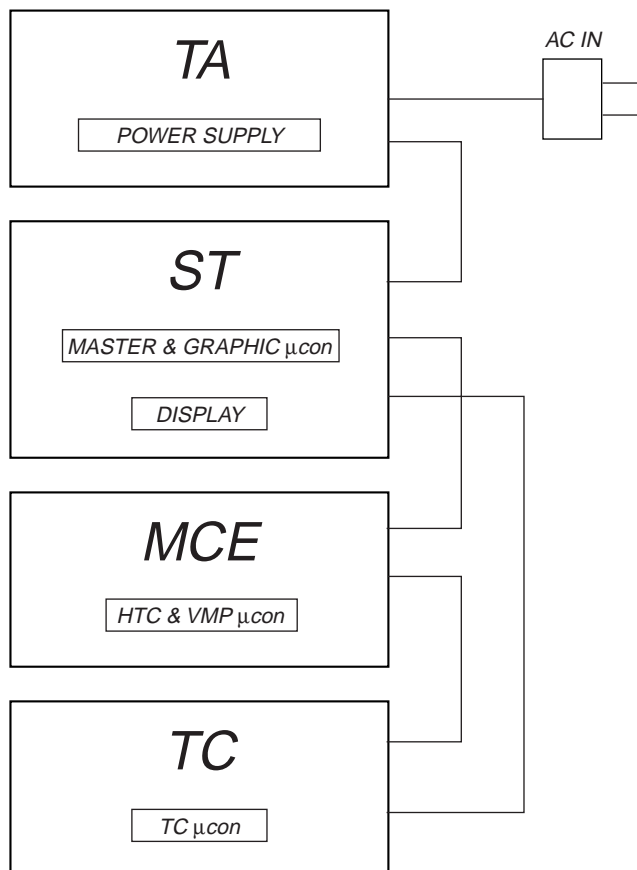
SECTION 1 SERVICING NOTES

This set is a component of the MHC-SV7AV.
The MHC-SV7AV system configuration is as shown below, and therefore it does not operate normally unless all four components are connected.

In performing the repair, connect all components with the system cables.

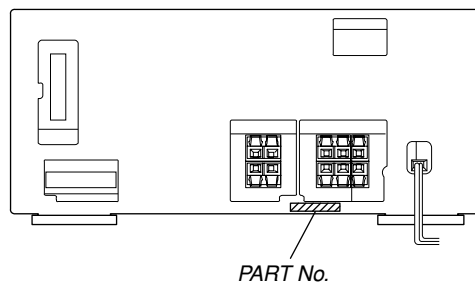
Note: The precaution to the users is described on the label stuck on the back panel (Video CD player) and in the troubleshooting section in the Operation Manual.

System Configuration:



MODEL IDENTIFICATION

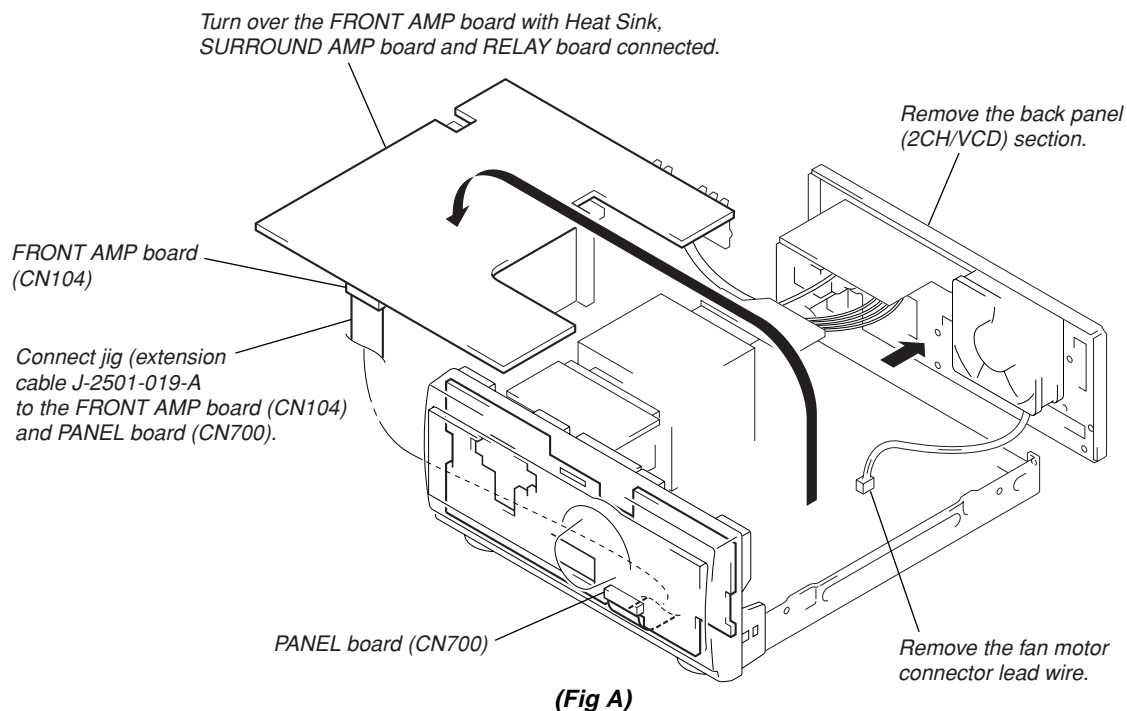
- Back Panel -



Model	PART No.
Singapore model	4-233-558-2□
Saudi Arabia model	4-233-558-3□
Thailand model	4-233-558-4□

FRONT AMP BOARD SERVICE POSITION

In checking the FRONT AMP board, prepare jig (extension cable J-2501-019-A: 1.25 mm Pitch, 25 core, Length 300 mm)
(Fig A)

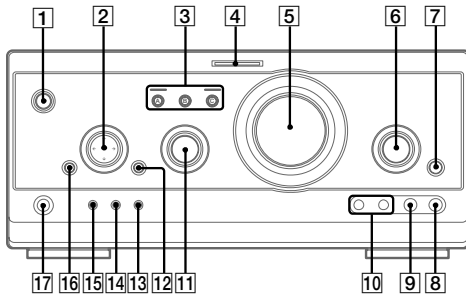


Parts Identification

The items are arranged in alphabetical order.
Refer to the pages indicated in parentheses () for details.

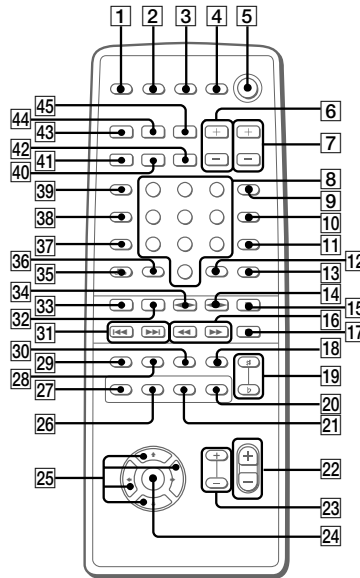
Main unit

A/V amplifier



- CINEMA STUDIO A-C **3** (9, 28)
- DIGITAL **7** (36, 40)
- ECHO LEVEL **8** (33)
- ENTER/+/↔/←/→ **2** (11, 13, 15, 17, 21, 25, 26, 30-33, 35)
- EQ **12** (31)
- EQ ON/OFF **13** (10, 32)
- FILE SELECT **11** (27, 28, 32)
- FUNCTION **6** (10, 14-17, 24, 25, 34, 36)
- MIC 1/2 jacks **10** (33)
- MIC LEVEL **9** (33)
- MULTI CHANNEL DECODING indicator **4** (29)
- PHONES jack **17**
- PICTURE EFFECT **15** (21)
- SET UP **14** (11, 13, 30, 32, 33)
- SUR **16** (30)
- VOLUME **5**
- I/⏻ (power) **1** (9, 10, 22, 40)

Remote Control



- CHECK **13** (17)
- CLEAR **12** (17, 19)
- CLOCK/TIMER SELECT **3** (26, 35)
- CLOCK/TIMER SET **2** (13, 25, 34)
- DBFB **37** (27)
- DIGITAL **40** (36, 40)
- DISPLAY **43** (13, 18, 33, 40)
- D.SKIP **9** (14, 16, 20, 21)
- ENTER **24** (11, 13, 15, 17, 21, 22, 25, 26, 30-33, 35)
- EQ **26** (31)
- EQ ON/OFF **21** (32)
- FILE SELECT +/- **23** (27, 28, 32)
- FUNCTION **39** (10, 14-17, 24, 25, 34, 36)
- GROOVE **38** (27)
- KARAOKE PON **18** (33)
- KEY CONTROL #/b **19** (33)
- MD **42** (36)
- Numeric buttons **8** (15, 16, 19, 20, 21)
- ON SCREEN **28** (18)
- PICTURE EFFECT **29** (21)
- PRESET +/-, PREV/NEXT **31** (14, 15, 20, 22)
- REPEAT **10** (15, 16)
- RETURN **35** (15)
- PLAY MODE **11** (14, 16, 17, 25)
- SELECT CD **32** (14-17, 19, 21)
- SET UP **20** (11, 13, 30, 32, 33)
- SLEEP **1** (34)
- SPECIAL MENU **30** (19, 20, 21)
- SPECTRUM ANALYZER **44** (33)
- SUR **27** (30)
- TAPE A **34** (23)
- TAPE B **14** (23, 24)
- TUNER/BAND **33** (22)
- TUNING +/- **16** (22)
- TV CH +/- **7** (10)
- TV VOL +/- **6** (10)
- TV I/⏻ **4** (10)
- TV/VIDEO **45** (10)
- VIDEO **41** (36)
- VOL +/- **22**


BUTTON DESCRIPTIONS

- I/⏻ (power) **5**
- ⏸ (pause) **17**
- (stop) **15**
- ⏮/⏭ (go back/go forward) **31**
- ⏪/⏩ (rewind/fast forward) **16**
- ↕/↔/←/→ **25**
- >10 **36**

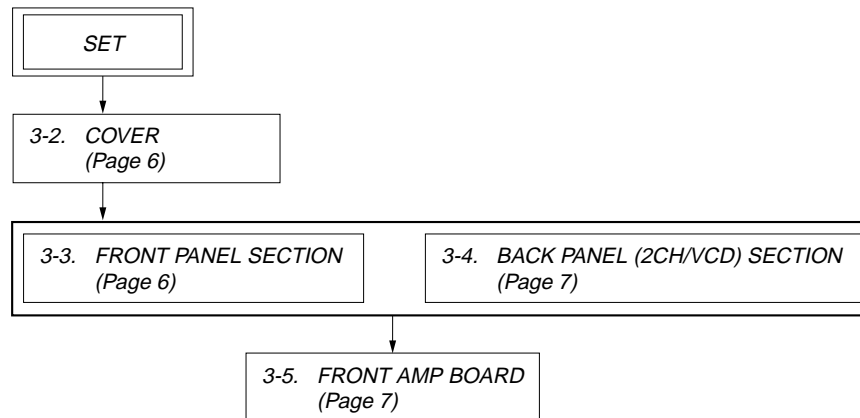
SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

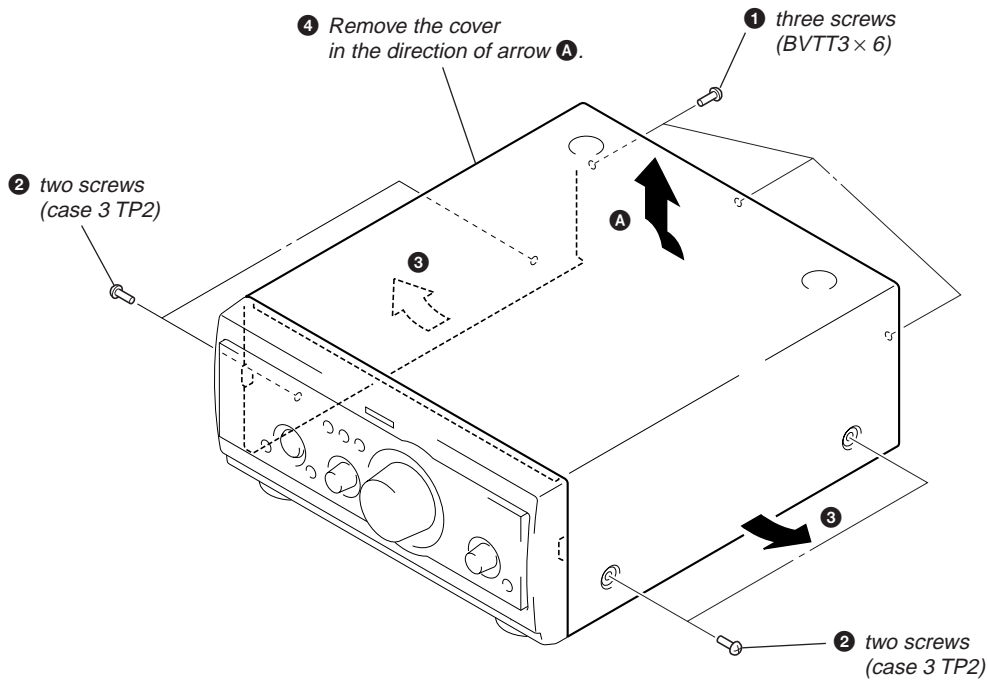
Note 1: The process described in  can be performed in any order.

Note 2: Without completing the process described in , the next process can not be performed.

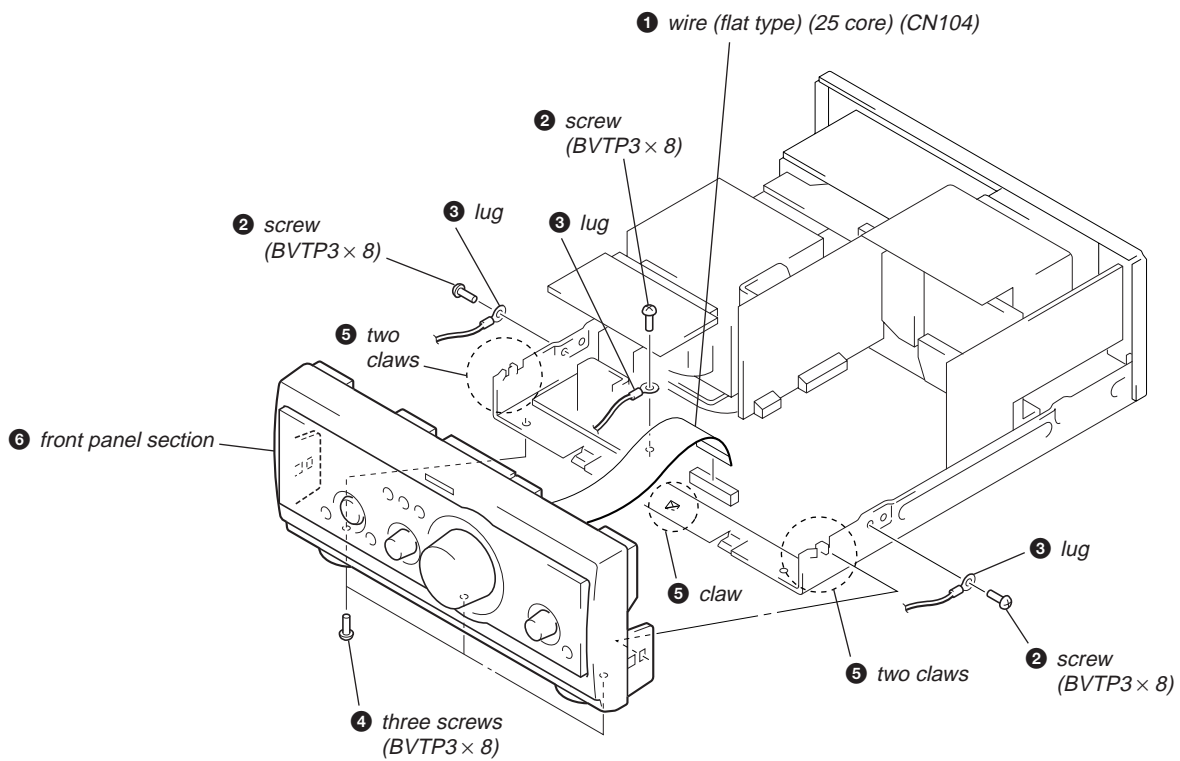


Note: Follow the disassembly procedure in the numerical order given.

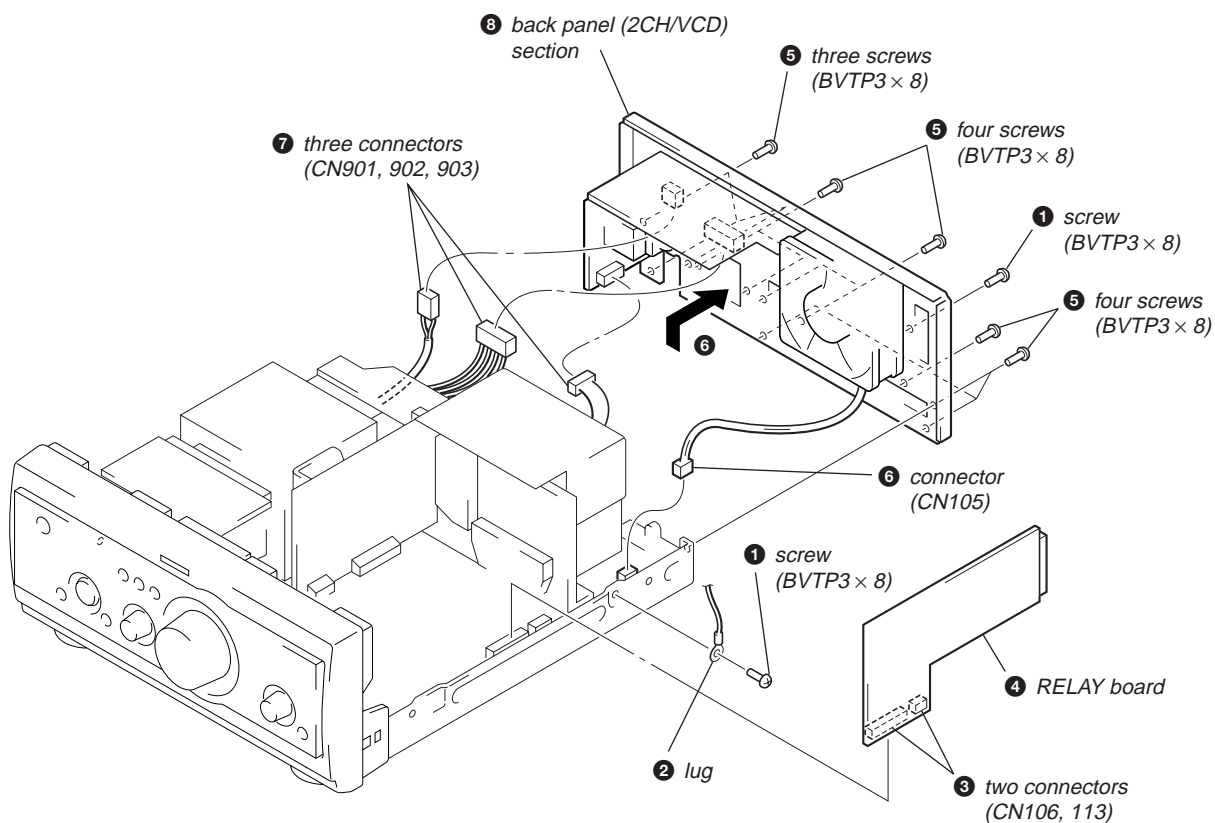
3-2. COVER



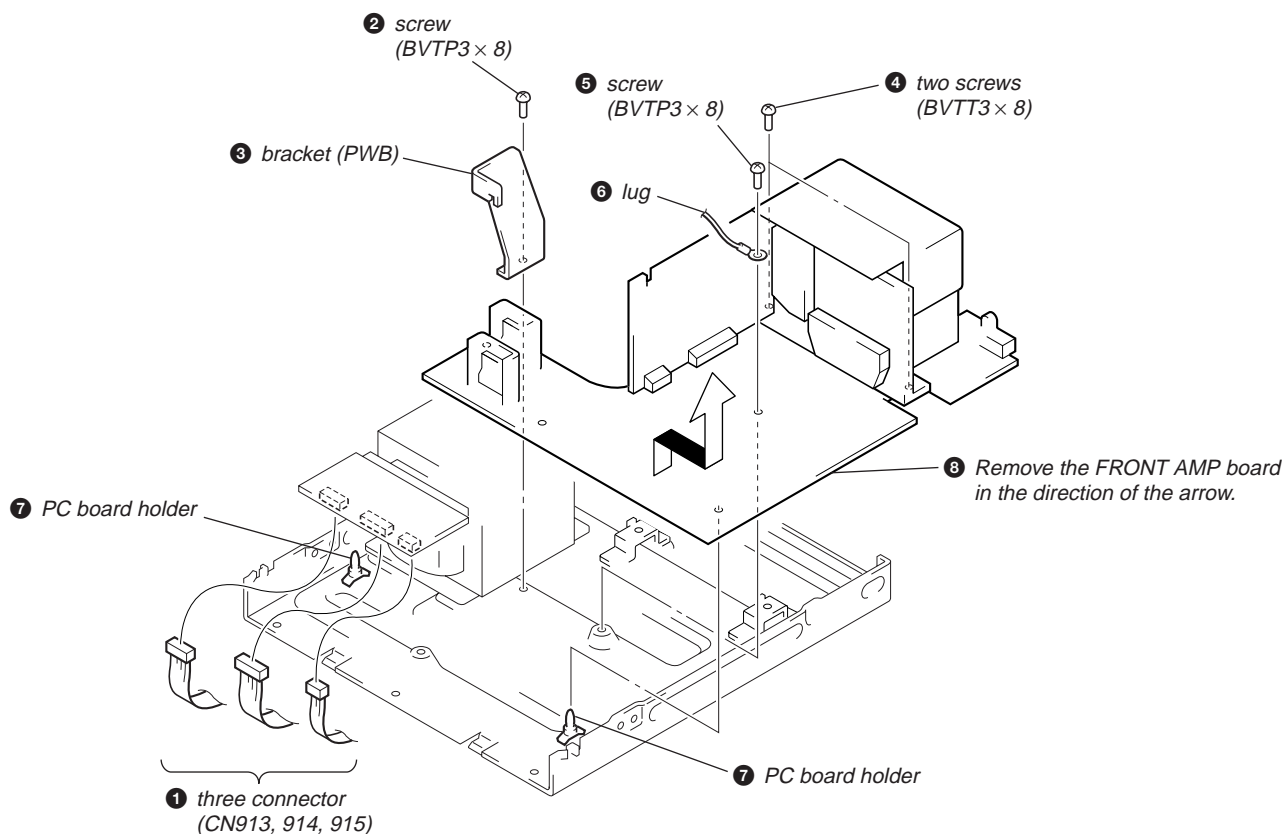
3-3. FRONT PANEL SECTION



3-4. BACK PANEL (2CH/VCD) SECTION



3-5. FRONT AMP BOARD



SECTION 4 TEST MODE

Note: Use following buttons in the test mode.
 no mark : Button of amplifier unit (TA-SV7AV)
 *1 : Button of tuner unit (ST-SV7)
 *2 : Button of CD unit (MCE-SV7)

[MC Test Mode]

Enter the MC Test Mode

1. Press the **I/⏻** button to turn the power on.
2. While pressing the both **[STEREO/MONO]** *1 and **[CINEMA STUDIO C]** buttons, press the **[CINEMA STUDIO A]** button.
3. "GROOVE" indication blinks on the fluorescent indicator tube in the midst of MC test mode.
4. This mode has two modes (mode 1/mode 2).
5. To change the modes, press three buttons in the same manner as entering this mode (step 2). Each time the step 2 operation is repeated, it changes modes alternately.
6. To distinguish the mode, turn the **[VOLUME]** knob clockwise or counterclockwise. Then display is shown as follows.

Mode 1: only "MIN" or "MAX"
Mode 2: "MIN", "1 to 30" or "MAX"

AMP Test Mode

In the AMP test mode, it operates as follows.

- **[VOLUME]** knob is turned, it changes display as follows.
 Counterclockwise : VOLUME MIN
 Clockwise : VOLUME MAX
- **[FILE SELECT]** knob is turned, it changes speaker output mode as follows.

Display of each mode:

Mode No.	Display	
1	L: L	R: R
2	L: SL	R: SR
3	L: LSLC	R: RSRW
4	L: LSLC	R: RSRW
5	L: C	R: W

Details of each mode:

- Mode 1 :** L-CH: front L-CH
 R-CH: front R-CH
- Mode 2 :** L-CH: rear L-CH
 R-CH: rear R-CH
- Mode 3 :** L-CH: front L-CH, rear L-CH, center
 R-CH: front R-CH, rear R-CH, sub woofer
 (no LFE, "EQ" indication does not light up on the fluorescent indicator tube of tuner unit)
- Mode 4 :** L-CH: front L-CH, rear L-CH, center
 R-CH: front R-CH, rear R-CH, sub woofer
 (LFE on, "EQ" indication lights up on the fluorescent indicator tube of tuner unit)
- Mode 5 :** L-CH: center
 R-CH: sub woofer

Releasing the MC Test Mode

To release from this mode, press the **I/⏻** button or disconnect the power cord.

[GC Test Mode]

Enter the GC Test Mode

Procedure 1:

1. Press the **I/⏻** button to turn the power on.
2. While pressing the both **[STEREO/MONO]** *1 and **[CINEMA STUDIO C]** buttons, press the **[CLOCK/TIMER]** *1 button.
3. LEDs and fluorescent indicator tube are all turned on of all units.

Procedure 2:

1. Press the **I/⏻** button to turn the power on.
2. While pressing the both **[PLAY MODE]** *2 and **[■]** *2 buttons, press the **[▲]** (DISC 1) *2 button.
3. LEDs and fluorescent indicator tube are all turned on of all units.

Version Display Mode

Procedure:

1. Enter the GC test mode.
2. Each time the **[TUNER MEMORY]** *1 or **[DISC 1]** *2 button is pressed, microcomputer or mechanism deck version is displayed of each unit.
3. Press the **[TUNING +]** *1 or **[DISC 3]** *2 button to detail is displayed the version.

Key Check Mode

Procedure:

1. Enter the GC test mode.
2. Press the **[TUNING -]** *1 or **[DISC 2]** *2 button to set the key check mode.
3. In the key check mode, the fluorescent indicator tube displays "K 0 J 0 V 0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
 "J" value increases like 1, 2, 3 ... if turn the **[FILE SELECT]** knob clockwise, or it decreases like 0, 9, 8 ... if turn the JOG dial counterclockwise.
 "V" value increases like 1, 2, 3 ... if turn the **[VOLUME]** knob clockwise, or it decreases like 0, 9, 8 ... if turn the JOG dial counterclockwise.

Releasing the GC Test Mode

To release from this mode, press three buttons in the same manner as entering this mode or disconnect the power cord.

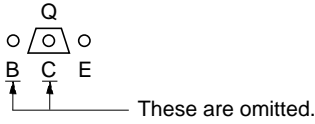
MEMO

SECTION 5 DIAGRAMS

5-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

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



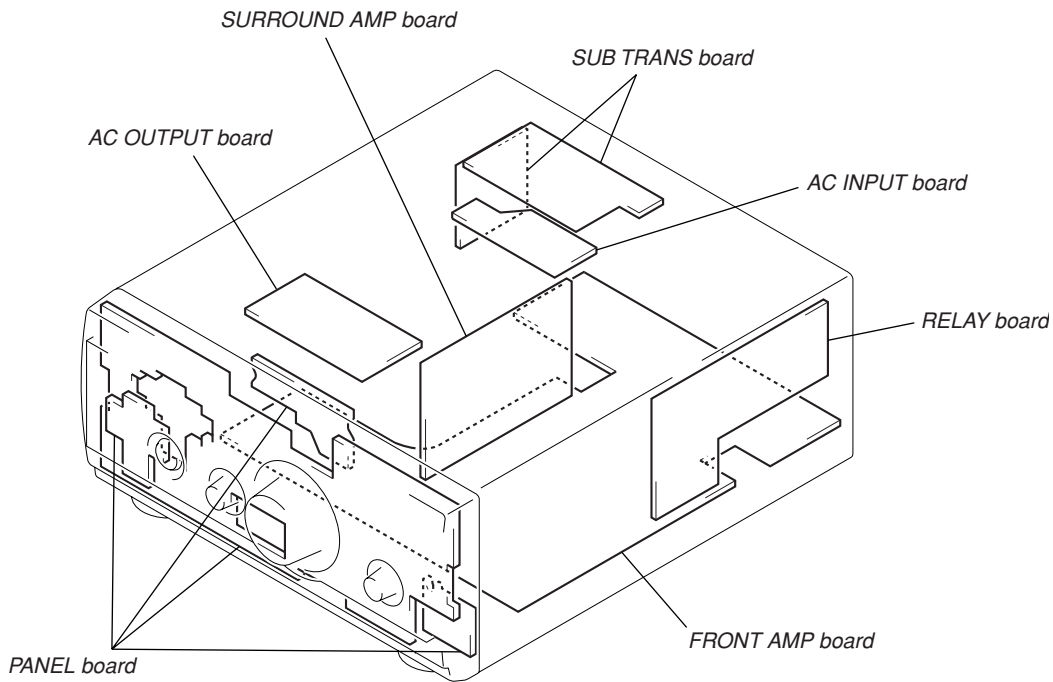
Note on Schematic Diagram:

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

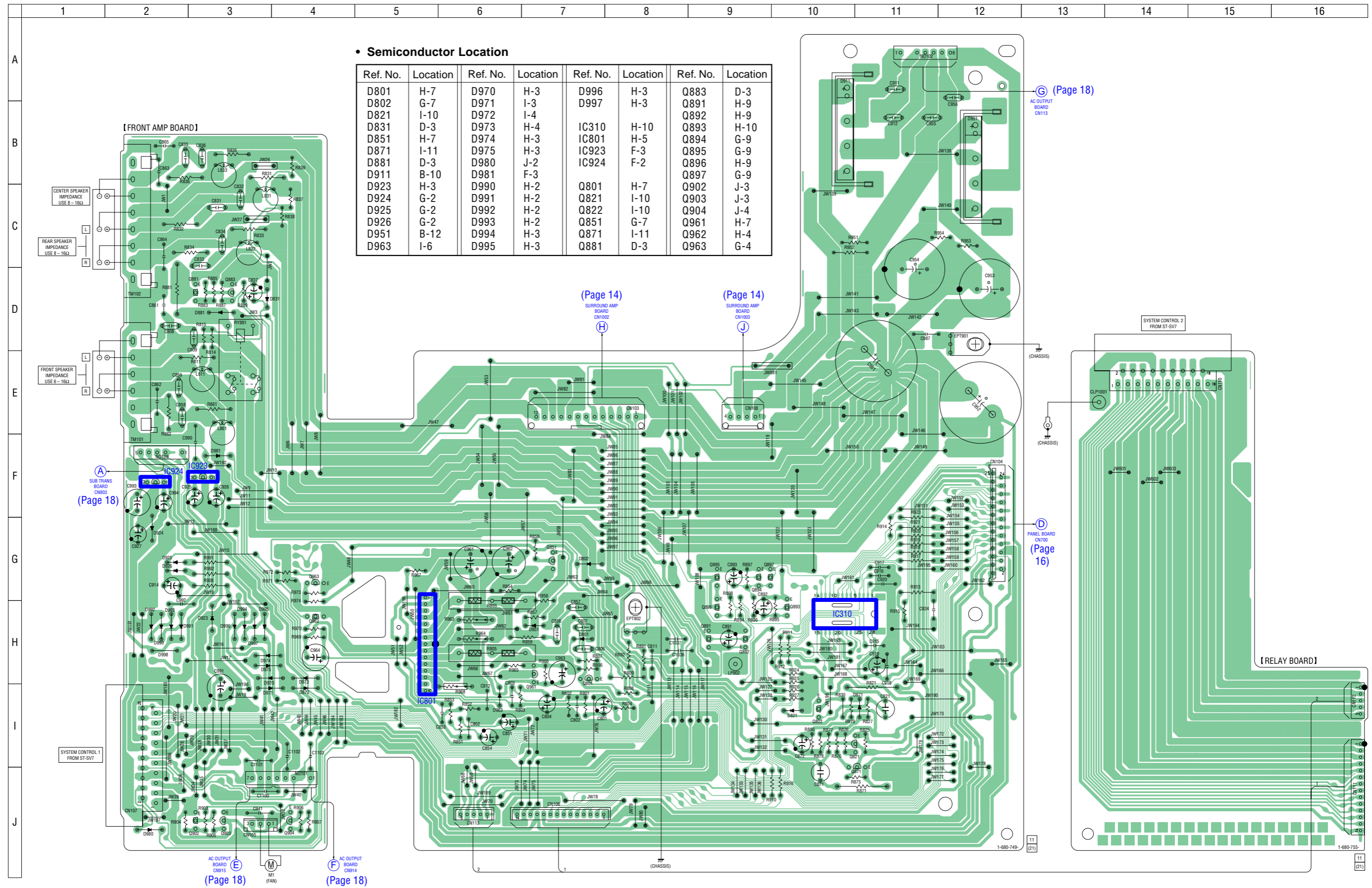
Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltages are dc with respect to ground under no-signal conditions.
- no mark : Power on
- Voltages are taken with a VOM (Input impedance $10\text{ M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- : AUDIO
- : MIC
- Abbreviation
 - EA : Saudi Arabia model
 - SP : Singapore model
 - TH : Thailand model

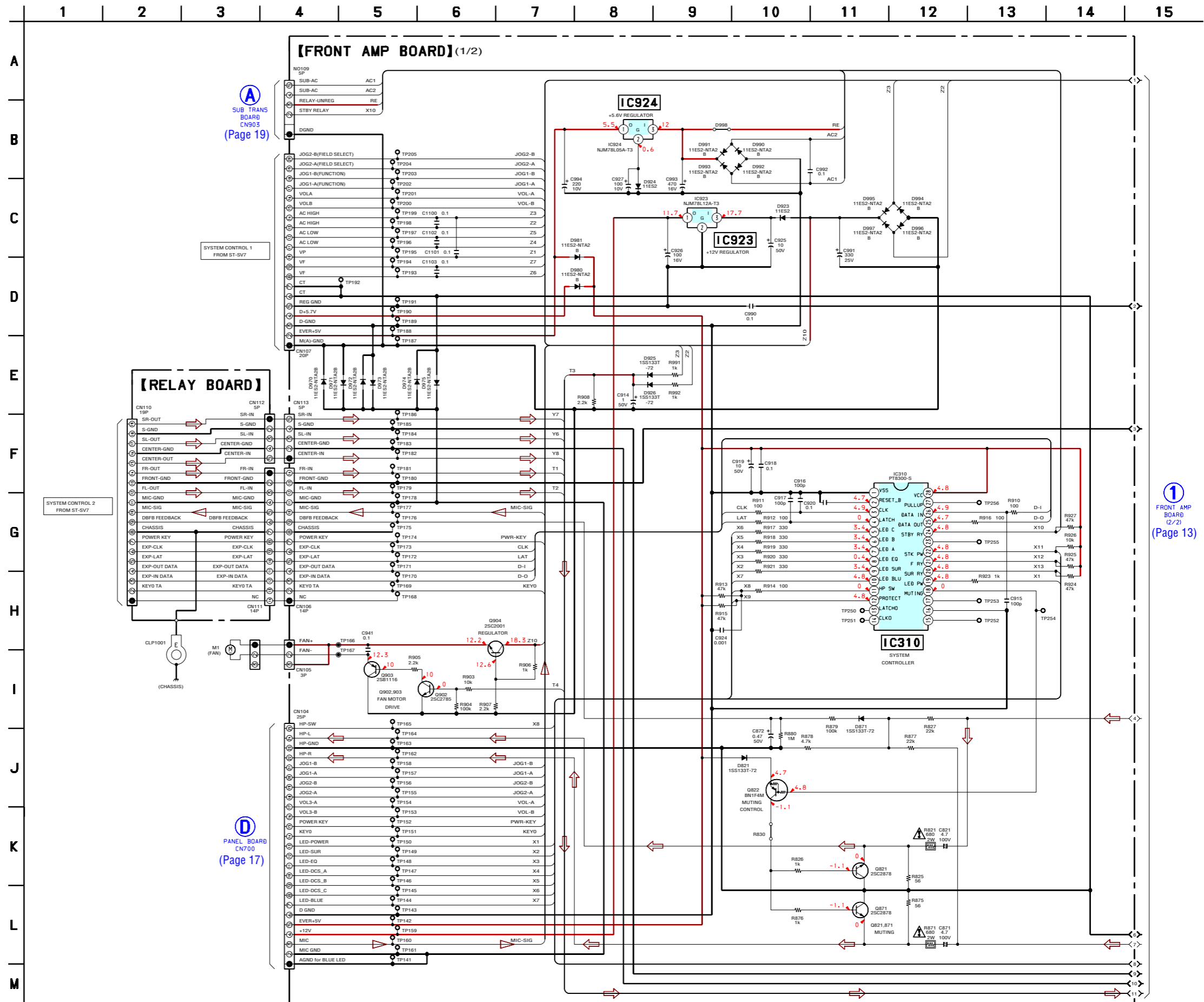
• **Circuit Boards Location**



5-2. PRINTED WIRING BOARDS – FRONT AMP Section – • See page 10 for Circuit Boards Location.



5-3. SCHEMATIC DIAGRAM – FRONT AMP Section (1/2) –



A
SUB TRANS BOARD
CN903
(Page 19)

SYSTEM CONTROL 1
FROM ST-SV7

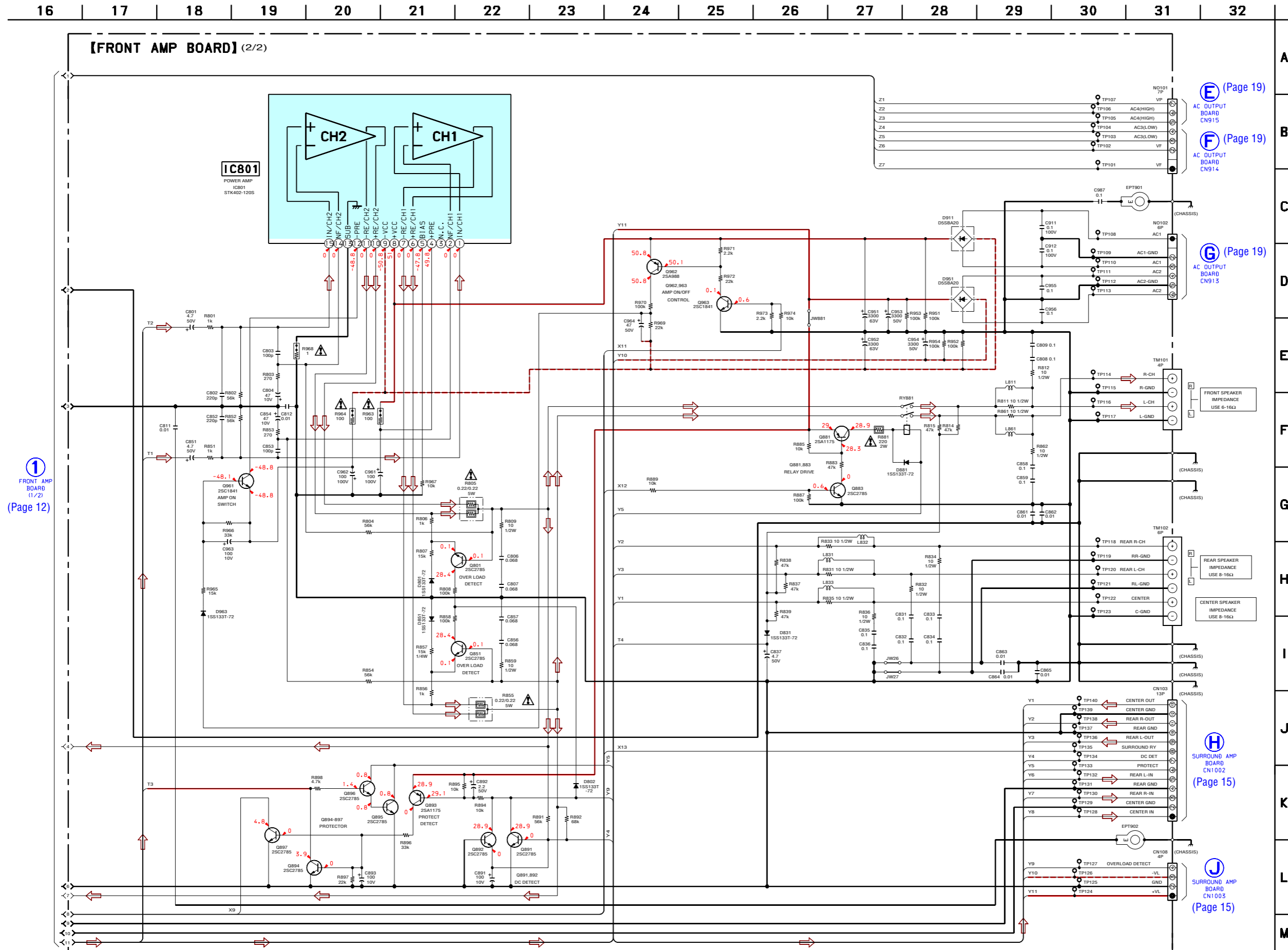
[RELAY BOARD]

SYSTEM CONTROL 2
FROM ST-SV7

D
PANEL BOARD
CN700
(Page 17)

1
FRONT AMP BOARD
(2/2)
(Page 13)

5-4. SCHEMATIC DIAGRAM – FRONT AMP Section (2/2) –



1 FRONT AMP BOARD (1/2) (Page 12)

E (Page 19)

F (Page 19)

G (Page 19)

H (Page 15)

J (Page 15)

L (Page 15)

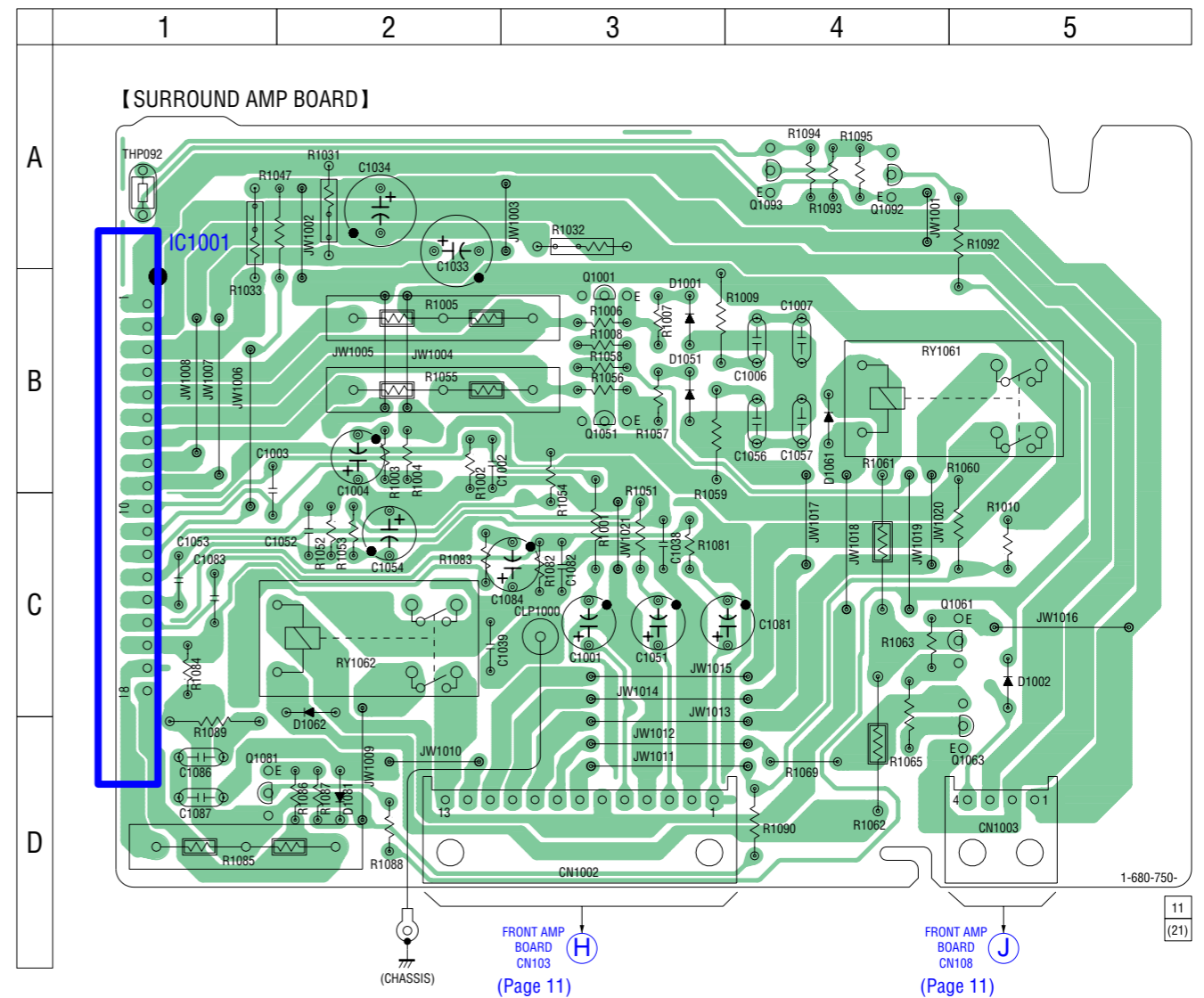
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

5-5. IC PIN FUNCTION DESCRIPTION

• FRONT AMP BOARD IC310 PT8300-S (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal
2	RESET_B	I	Reset signal input terminal Not used
3	CLK	I	Serial data transfer clock signal input from the tuner unit (ST-SV7)
4	LATCH	I	Serial data latch pulse input from the tuner unit (ST-SV7)
5	LED C	O	LED drive signal output of the CINEMA STUDIO C indicator (D706) “L”: LED on
6	LED B	O	LED drive signal output of the CINEMA STUDIO B indicator (D705) “L”: LED on
7	LED A	O	LED drive signal output of the CINEMA STUDIO A indicator (D704) “L”: LED on
8	LED EQ	O	LED drive signal output of the EQ indicator (D703) “L”: LED on
9	LED SUR	O	LED drive signal output of the SUR indicator (D702) “L”: LED on
10	LED BLU	O	LED drive signal output of the MULTI CHANNEL DECODING indicator (D781) “L”: LED on
11	HP SW	I	Headphone detection signal input terminal “H”: headphone on
12	PROTECT	I	Over load detection signal input for speaker output “L”: over load
13	LATCHO	O	Serial data latch pulse output terminal Not used (open)
14	CLKO	O	Serial data transfer clock signal output terminal Not used (open)
15	—	—	Not used (open)
16	—	—	Not used (fixed at “L”)
17	—	—	Not used (open)
18	MUTING	O	Muting on/off control signal output terminal “L”: muting
19	LED PW	O	LED drive signal output of the I/⏸ indicator (D701) “L”: LED on
20	SUR RY	O	Relay drive signal output for the surround speaker (rear and center) protection “H”: on
21	FRY	O	Relay drive signal output for the front speaker protection “H”: on
22	STK PW	O	Power amplifier on/off selection signal output terminal “L”: standby, “H”: on
23	—	—	Not used (open)
24	STBY RY	O	Standby relay drive signal output terminal “L”: standby, “H”: power on
25	DATA OUT	O	Serial data output to the tuner unit (ST-SV7)
26	DATA IN	I	Serial data input from the tuner unit (ST-SV7)
27	PULLUP	—	Not used (open)
28	VCC	—	Power supply terminal (+5V)

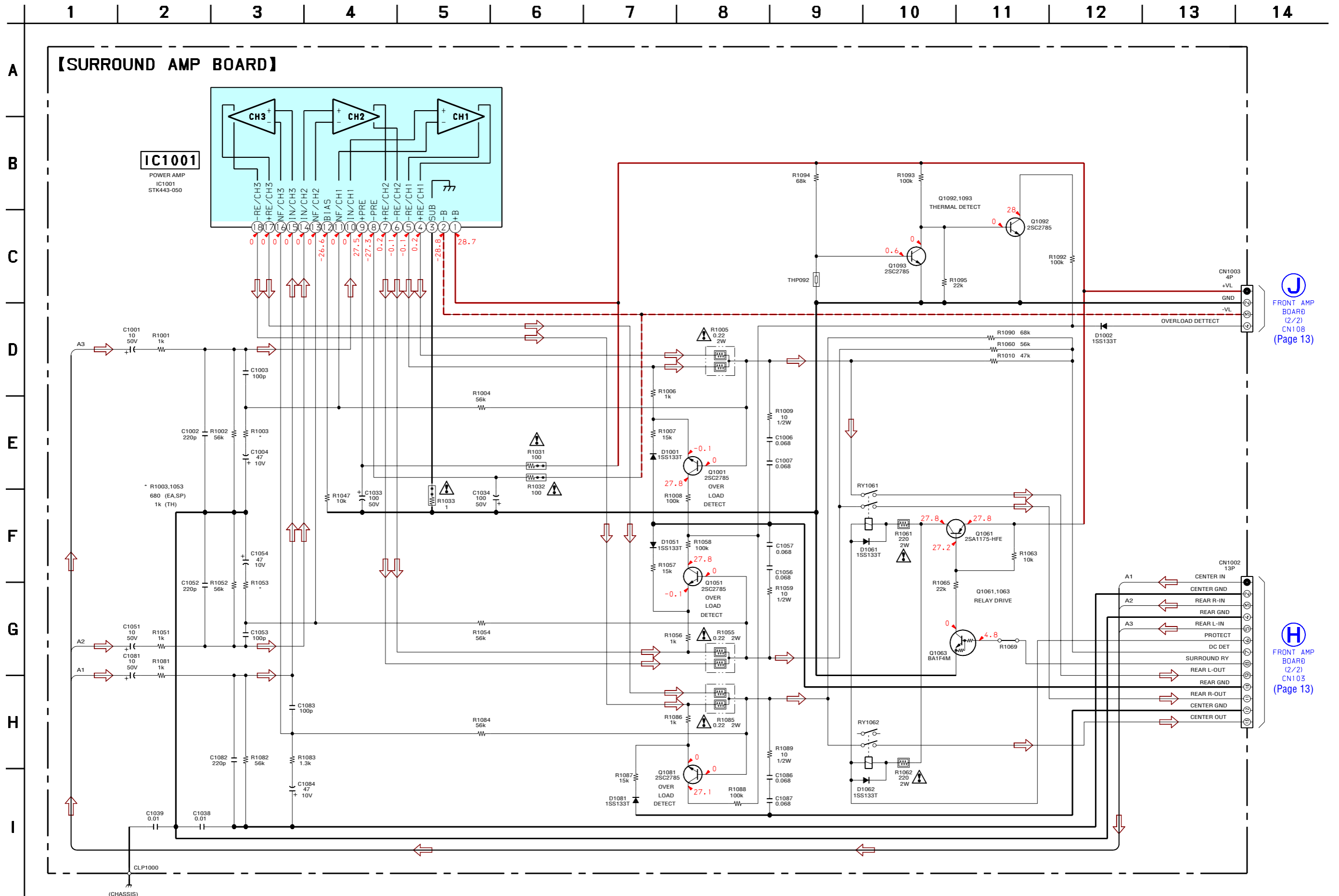
5-6. PRINTED WIRING BOARD – SURROUND AMP Section – • See page 10 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D1001	B-3
D1002	C-5
D1051	B-3
D1061	B-4
D1062	C-2
D1081	D-2
IC1001	B-1
Q1001	B-3
Q1051	B-3
Q1061	C-5
Q1063	D-5
Q1081	D-1
Q1092	A-4
Q1093	A-4

5-7. SCHEMATIC DIAGRAM – SURROUND AMP Section –

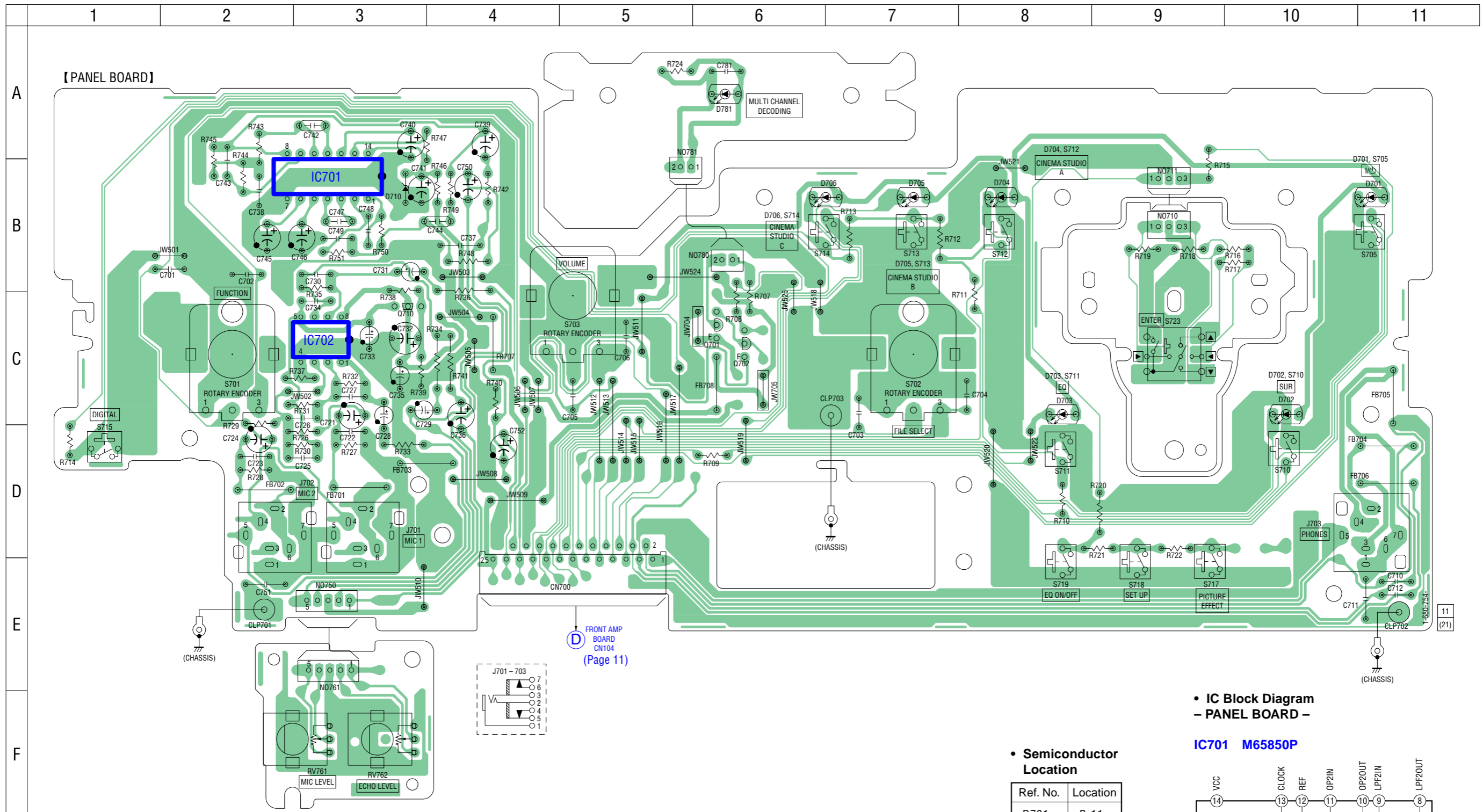


J
FRONT AMP BOARD (2/2)
CN108
(Page 13)

H
FRONT AMP BOARD (2/2)
CN103
(Page 13)

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

5-8. PRINTED WIRING BOARDS – CONTROL Section – • See page 10 for Circuit Boards Location.

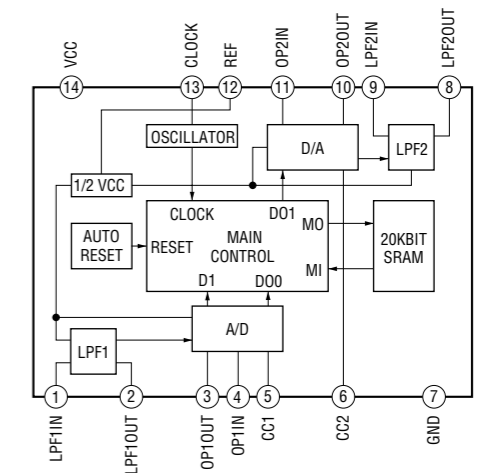


• IC Block Diagram
– PANEL BOARD –

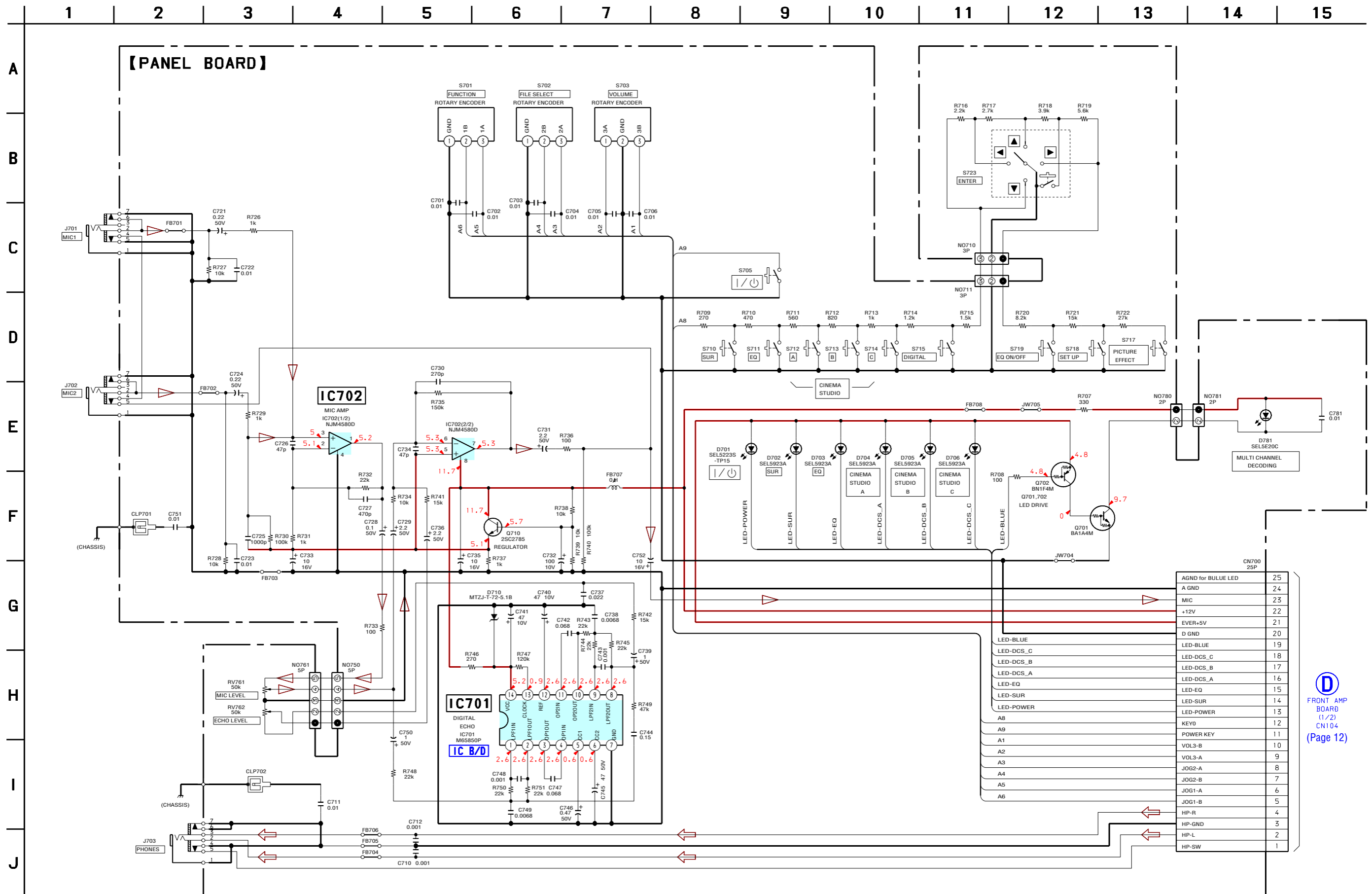
IC701 M65850P

• Semiconductor Location

Ref. No.	Location
D701	B-11
D702	C-10
D703	C-8
D704	B-8
D705	B-7
D706	B-6
D710	B-3
D781	A-6
IC701	B-3
IC702	C-3
Q701	C-6
Q702	C-6
Q710	C-3



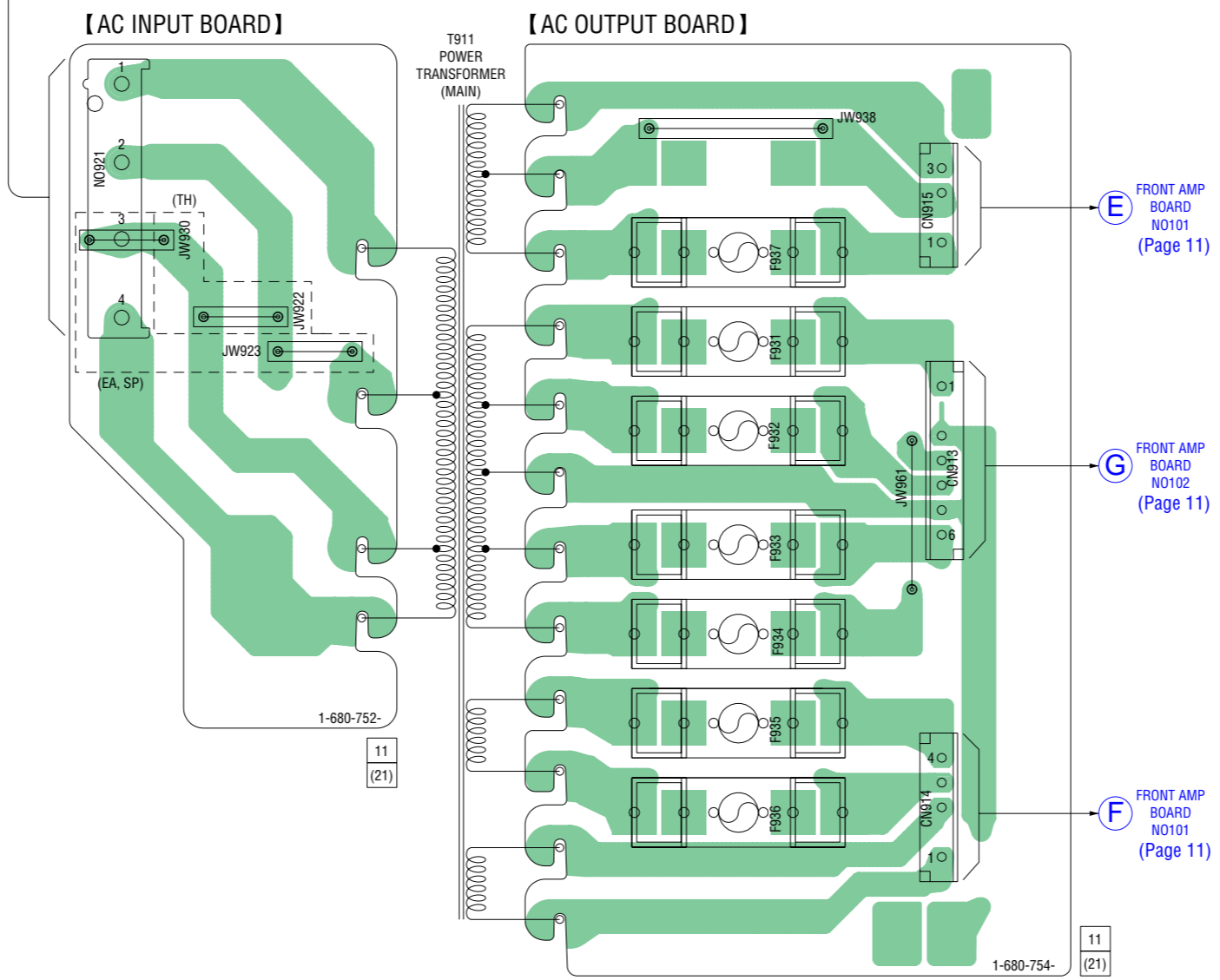
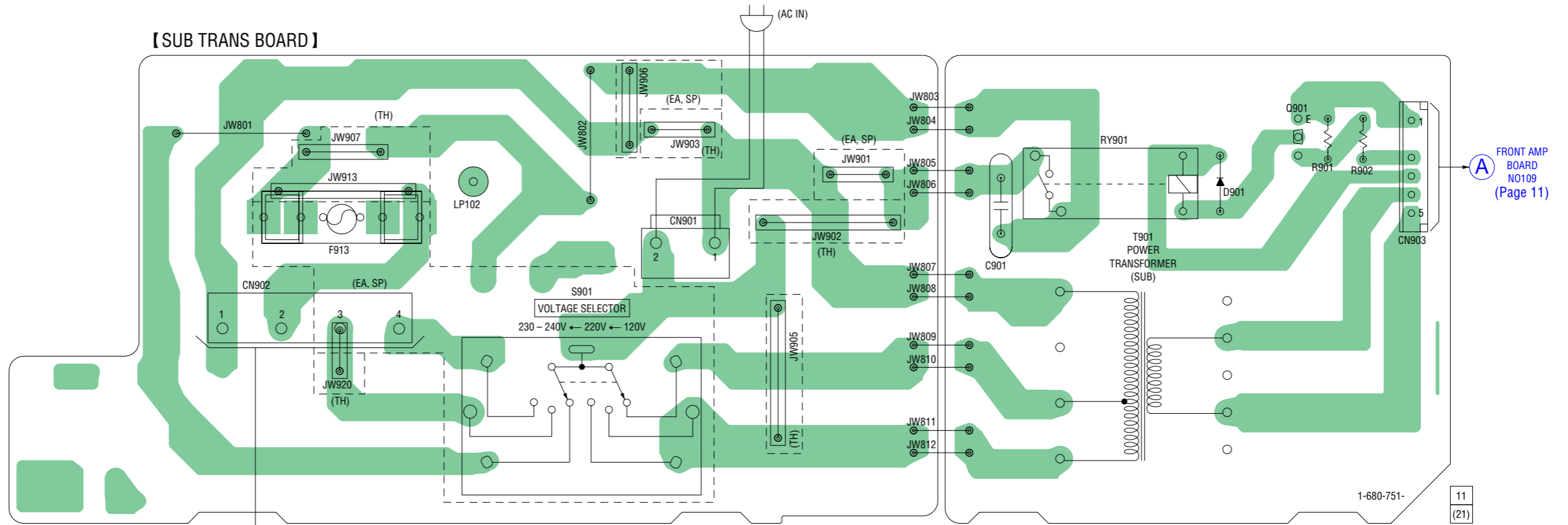
5-9. SCHEMATIC DIAGRAM – CONTROL Section – • See page 16 for IC Block Diagram.



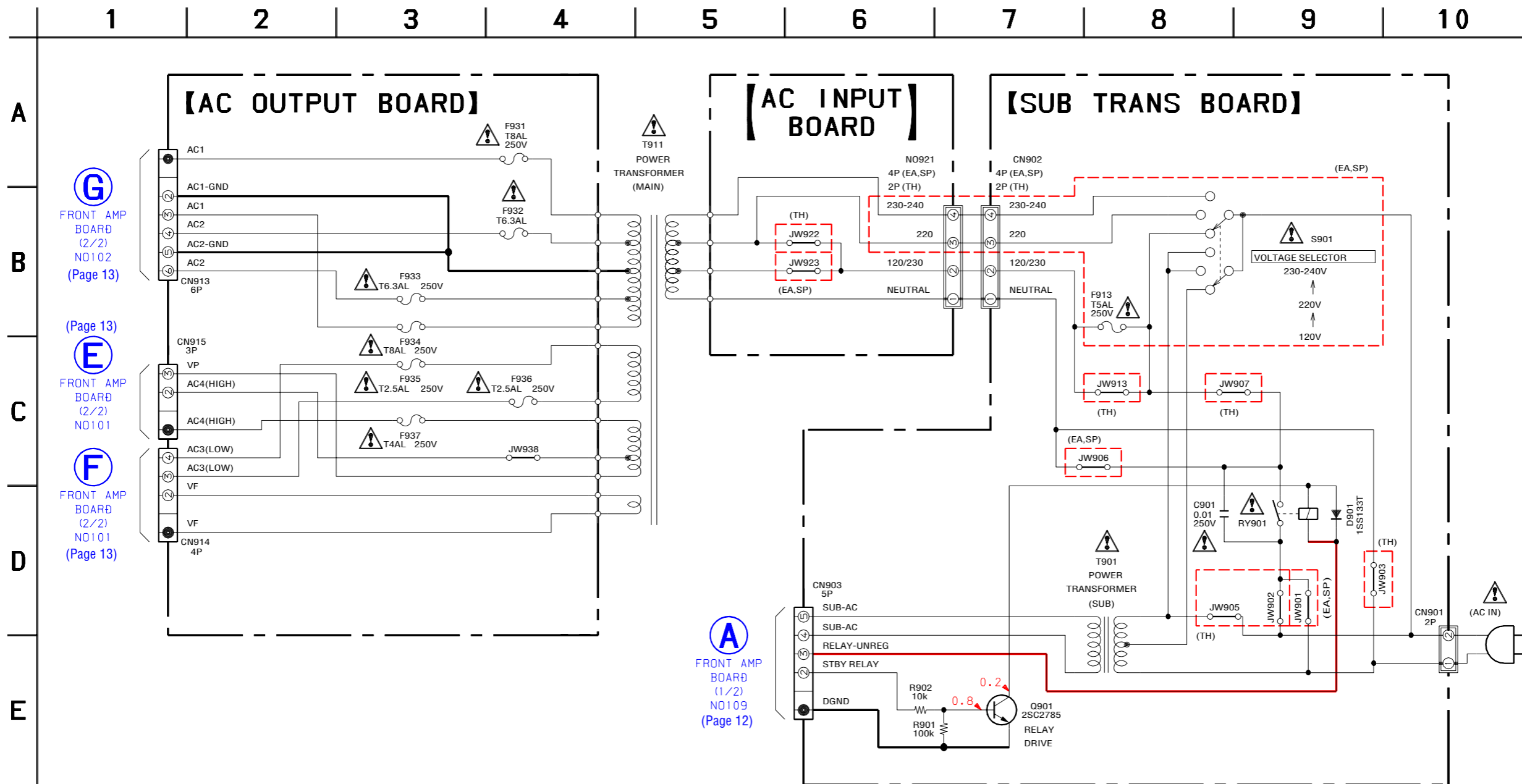
AGND for BULUE LED	25
A GND	24
MIC	23
+12V	22
EVER+5V	21
D GND	20
LED-BLUE	19
LED-DCS_C	18
LED-DCS_B	17
LED-DCS_A	16
LED-EQ	15
LED-SUR	14
LED-POWER	13
A8	12
A9	11
A1	10
A2	9
A3	8
A4	7
A5	6
A6	5
HP-R	4
HP-GND	3
HP-L	2
HP-SW	1

D
FRONT AMP BOARD
(1/2)
CN104
(Page 12)

5-10. PRINTED WIRING BOARDS – POWER Section – • See page 10 for Circuit Boards Location.



5-11. SCHEMATIC DIAGRAM – POWER Section –



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

**SECTION 6
EXPLODED VIEWS**

NOTE:

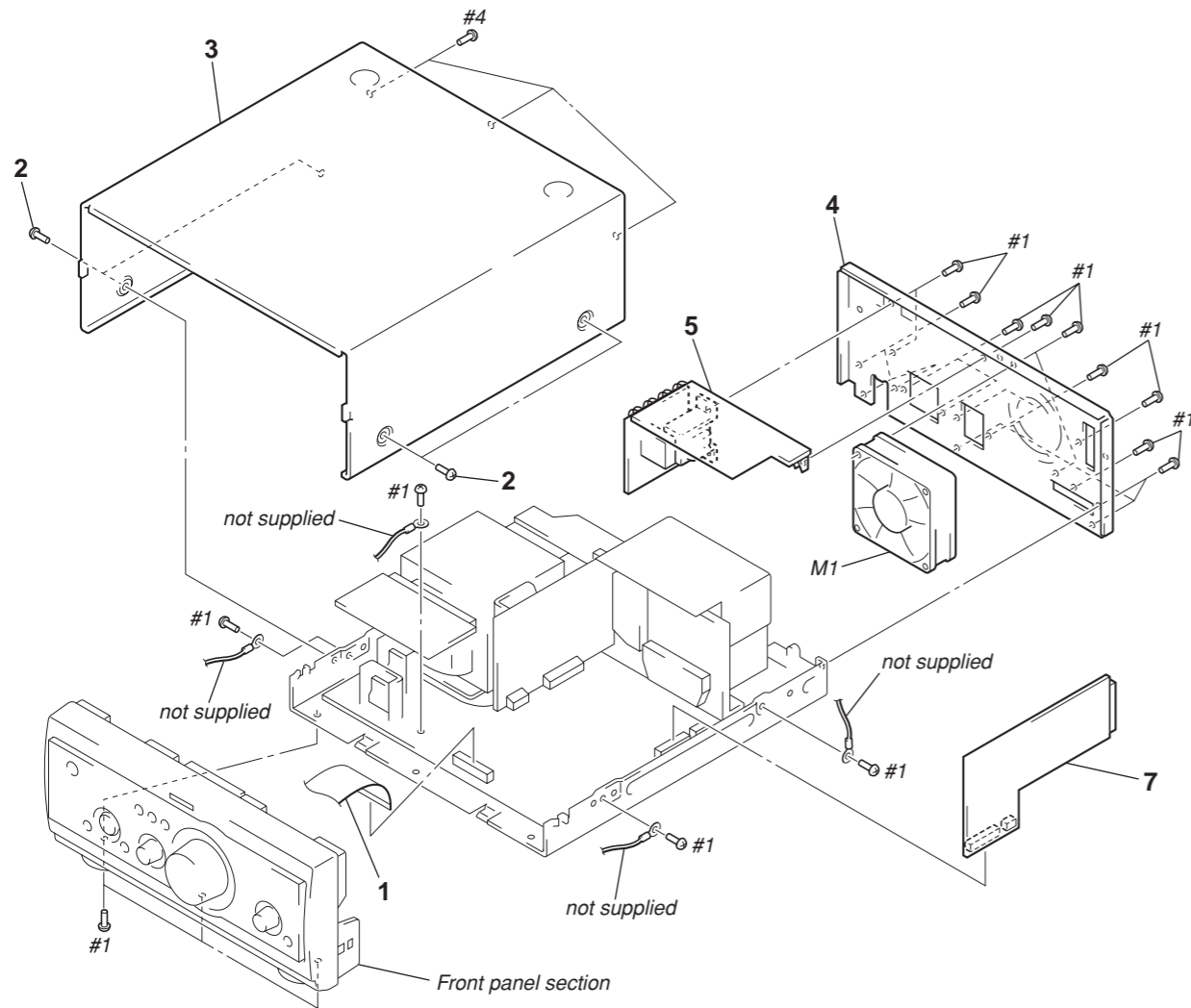
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color

- 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.
- Hardware (# mark) list is given in the last of the electrical parts list.

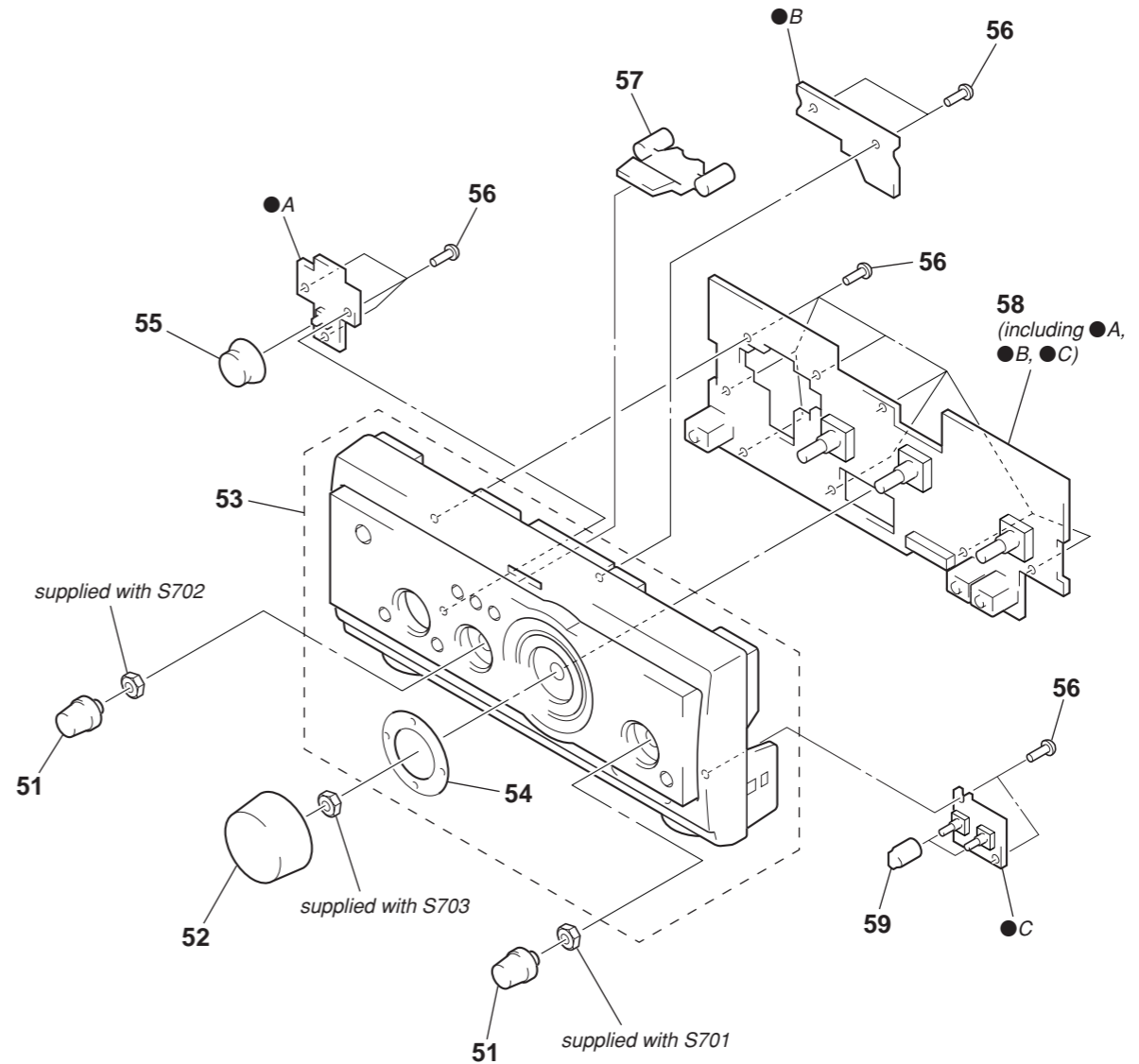
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- Abbreviation
EA : Saudi Arabia model
SP : Singapore model
TH : Thailand model

6-1. COVER SECTION



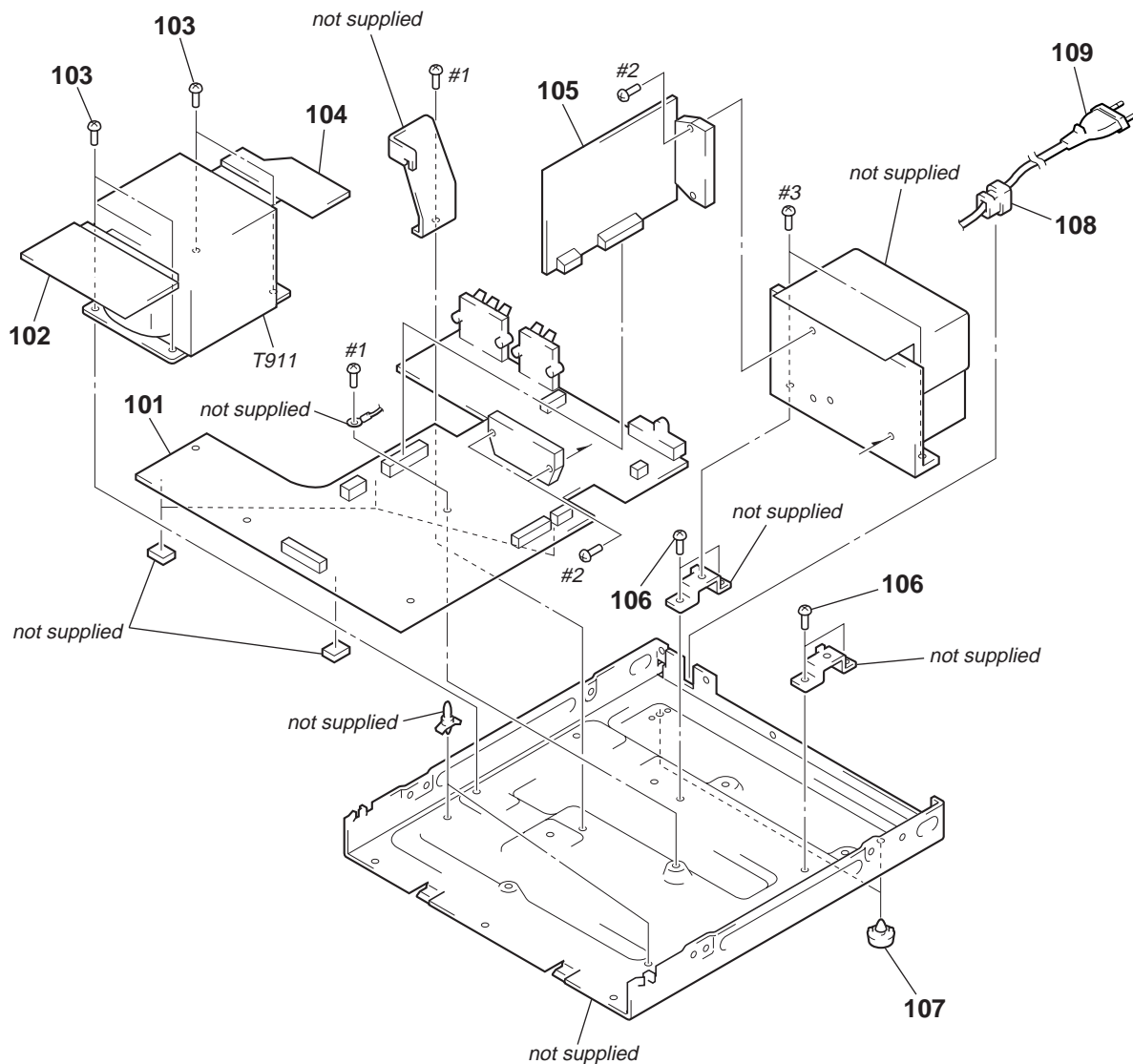
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	1-773-210-11	WIRE (FLAT TYPE) (25 CORE)		4	4-233-558-41	PANEL (2CH/VCD), BACK (TH)	
2	3-363-099-21	SCREW (CASE 3 TP2)		5	1-680-751-11	SUB TRANS BOARD	
3	4-232-336-11	COVER		7	1-680-755-11	RELAY BOARD	
4	4-233-558-21	PANEL (2CH/VCD), BACK (SP)		M1	1-763-072-11	FAN, D. C.	
4	4-233-558-31	PANEL (2CH/VCD), BACK (EA)					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-232-342-01	KNOB (FUNC)		56	4-951-620-01	SCREW (2.6X8), +BVTP	
52	4-232-338-01	KNOB (VOL)		57	4-232-344-01	INDICATOR (BLUE)	
53	X-4953-680-1	PANEL ASSY, FRONT		58	A-4275-755-A	PANEL BOARD, COMPLETE (EA, SP)	
54	4-232-341-01	SHEET (VOL)		58	A-4726-288-A	PANEL BOARD, COMPLETE (TH)	
55	4-232-343-01	BUTTON (ENTER)		59	4-232-340-01	KNOB (MIC)	

6-3. CHASSIS SECTION



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	A-2007-899-A	FRONT AMP BOARD, COMPLETE (EA, SP)		106	3-970-608-01	SUMITITE (B3), +BV	
101	A-4726-279-A	FRONT AMP BOARD, COMPLETE (TH)		107	4-965-822-01	FOOT	
102	1-680-753-11	AC OUTPUT BOARD		* 108	3-703-244-00	BUSHING (2104), CORD (EA, SP)	
103	4-900-386-01	SCREW		108	3-703-571-11	BUSHING (S) (4516), CORD (TH)	
104	1-680-752-11	AC INPUT BOARD		\triangle 109	1-777-071-81	CORD, POWER (EA, SP)	
105	A-2007-897-A	SURROUND AMP BOARD, COMPLETE (EA, SP)		\triangle 109	1-791-901-11	CORD, POWER (TH)	
105	A-4726-276-A	SURROUND AMP BOARD, COMPLETE (TH)		\triangle T911	1-435-935-11	TRANSFORMER, POWER	

SECTION 7
ELECTRICAL PARTS LIST

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.

- Abbreviation
EA : Saudi Arabia model
SP : Singapore model
TH : Thailand model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	1-680-752-11	AC INPUT BOARD *****		C834	1-136-165-00	FILM 0.1uF 5% 50V	
*****				C835	1-136-165-00	FILM 0.1uF 5% 50V	
	1-680-753-11	AC OUTPUT BOARD *****		C836	1-136-165-00	FILM 0.1uF 5% 50V	
	1-533-217-41	HOLDER, FUSE < CONNECTOR >		C837	1-126-963-11	ELECT 4.7uF 20% 50V	
CN913	1-691-768-11	PLUG (MICRO CONNECTOR) 6P		C851	1-126-963-11	ELECT 4.7uF 20% 50V	
CN914	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		C852	1-162-286-31	CERAMIC 220PF 10% 50V	
CN915	1-691-765-11	PLUG (MICRO CONNECTOR) 3P < FUSE >		C853	1-162-282-31	CERAMIC 100PF 10% 50V	
Δ F931	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)		C854	1-126-947-11	ELECT 47uF 20% 10V	
Δ F932	1-533-473-11	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)		C856	1-136-495-11	FILM 0.068uF 5% 50V	
Δ F933	1-533-473-11	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)		C857	1-136-495-11	FILM 0.068uF 5% 50V	
Δ F934	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)		C858	1-136-165-00	FILM 0.1uF 5% 50V	
Δ F935	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)		C859	1-136-165-00	FILM 0.1uF 5% 50V	
Δ F936	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)		C861	1-162-306-11	CERAMIC 0.01uF 30% 16V	
Δ F937	1-533-471-11	FUSE, GLASS TUBE (DIA. 5) (T4AL/250V) *****		C862	1-162-306-11	CERAMIC 0.01uF 30% 16V	
A-2007-899-A	FRONT AMP BOARD, COMPLETE (EA, SP)			C863	1-162-306-11	CERAMIC 0.01uF 30% 16V	
A-4726-279-A	FRONT AMP BOARD, COMPLETE (TH) *****			C864	1-162-306-11	CERAMIC 0.01uF 30% 16V	
7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S < CAPACITOR >			C865	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C801	1-126-963-11	ELECT 4.7uF 20% 50V		C871	1-107-721-11	ELECT 4.7uF 20% 100V	
C802	1-162-286-31	CERAMIC 220PF 10% 50V		C872	1-126-959-11	ELECT 0.47uF 20% 50V	
C803	1-162-282-31	CERAMIC 100PF 10% 50V		C891	1-104-665-11	ELECT 100uF 20% 10V	
C804	1-126-947-11	ELECT 47uF 20% 10V		C892	1-126-961-11	ELECT 2.2uF 20% 50V	
C806	1-136-495-11	FILM 0.068uF 5% 50V		C893	1-104-665-11	ELECT 100uF 20% 10V	
C807	1-136-495-11	FILM 0.068uF 5% 50V		C911	1-130-777-00	MYLAR 0.1uF 5% 100V	
C808	1-136-165-00	FILM 0.1uF 5% 50V		C912	1-130-777-00	MYLAR 0.1uF 5% 100V	
C809	1-136-165-00	FILM 0.1uF 5% 50V		C914	1-115-871-11	ELECT 1uF 20% 50V	
C811	1-162-306-11	CERAMIC 0.01uF 30% 16V		C915	1-162-282-31	CERAMIC 100PF 10% 50V	
C812	1-162-306-11	CERAMIC 0.01uF 30% 16V		C916	1-162-282-31	CERAMIC 100PF 10% 50V	
C821	1-107-721-11	ELECT 4.7uF 20% 100V		C917	1-162-282-31	CERAMIC 100PF 10% 50V	
C831	1-136-165-00	FILM 0.1uF 5% 50V		C918	1-164-159-11	CERAMIC 0.1uF 50V	
C832	1-136-165-00	FILM 0.1uF 5% 50V		C919	1-126-964-11	ELECT 10uF 20% 50V	
C833	1-136-165-00	FILM 0.1uF 5% 50V		C920	1-164-159-11	CERAMIC 0.1uF 50V	
				C924	1-162-294-31	CERAMIC 0.001uF 10% 50V	
				C925	1-126-795-11	ELECT 10uF 20% 50V	
				C926	1-126-382-11	ELECT 100uF 20% 16V	
				C927	1-104-665-11	ELECT 100uF 20% 10V	
				C941	1-164-159-11	CERAMIC 0.1uF 50V	
				C951	1-135-516-11	ELECT 3300uF 20% 63V	
				C952	1-135-516-11	ELECT 3300uF 20% 63V	
				C953	1-135-515-11	ELECT 3300uF 20% 50V	
				C954	1-135-515-11	ELECT 3300uF 20% 50V	
				C955	1-136-165-00	FILM 0.1uF 5% 50V	
				C956	1-136-165-00	FILM 0.1uF 5% 50V	
				C961	1-128-563-11	ELECT 100uF 20% 100V	

FRONT AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C962	1-128-563-11	ELECT	100uF 20% 100V			< GROUND TERMINAL >	
C963	1-104-665-11	ELECT	100uF 20% 10V				
C964	1-119-943-91	ELECT	47uF 20% 50V				
C987	1-164-159-11	CERAMIC	0.1uF 50V				
C990	1-164-159-11	CERAMIC	0.1uF 50V			< IC >	
C991	1-126-940-11	ELECT	330uF 20% 25V				
C992	1-113-342-11	CERAMIC	0.1uF 50V	IC310	6-800-467-01	IC PT8300-S	
C993	1-126-935-11	ELECT	470uF 20% 16V	IC801	8-749-016-96	IC STK402-120S	
C994	1-126-176-11	ELECT	220uF 20% 10V	IC923	8-759-595-88	IC NJM78L12A-T3	
C1100	1-164-159-11	CERAMIC	0.1uF 50V	IC924	8-759-708-05	IC NJM78L05A-T3	
C1101	1-164-159-11	CERAMIC	0.1uF 50V			< COIL >	
C1102	1-164-159-11	CERAMIC	0.1uF 50V				
C1103	1-164-159-11	CERAMIC	0.1uF 50V	L811	1-420-872-00	COIL, AIR-CORE	
		< CONNECTOR >		L831	1-420-872-00	COIL, AIR-CORE	
CN103	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P		L832	1-420-872-00	COIL, AIR-CORE	
CN104	1-784-786-11	CONNECTOR, FFC 25P		L833	1-420-872-00	COIL, AIR-CORE	
CN105	1-564-506-11	PLUG, CONNECTOR 3P		L861	1-420-872-00	COIL, AIR-CORE	
CN106	1-573-846-11	CONNECTOR, BOARD TO BOARD 14P				< TRANSISTOR >	
CN107	1-794-498-21	SOCKET, CONNECTOR 20P (SYSTEM CONTROL 1 FROM ST-SV7)		Q801	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
CN108	1-770-721-11	CONNECTOR, BOARD TO BOARD 4P		Q821	8-729-231-55	TRANSISTOR	2SC2878AB-TPE2
CN113	1-770-594-21	CONNECTOR, BOARD TO BOARD 5P		Q822	8-729-900-63	TRANSISTOR	BN1F4M-TP
		< DIODE >		Q851	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D801	8-719-911-19	DIODE 1SS133T-72		Q871	8-729-231-55	TRANSISTOR	2SC2878AB-TPE2
D802	8-719-911-19	DIODE 1SS133T-72					
D821	8-719-911-19	DIODE 1SS133T-72		Q881	8-729-119-76	TRANSISTOR	2SA1175TP-HFE
D831	8-719-911-19	DIODE 1SS133T-72		Q883	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D851	8-719-911-19	DIODE 1SS133T-72		Q891	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D871	8-719-911-19	DIODE 1SS133T-72		Q892	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D881	8-719-911-19	DIODE 1SS133T-72		Q893	8-729-119-76	TRANSISTOR	2SA1175TP-HFE
D911	8-719-510-68	DIODE D5SBA204101		Q894	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D923	8-719-024-99	DIODE 11ES2-NTA2B		Q895	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D924	8-719-024-99	DIODE 11ES2-NTA2B		Q896	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D925	8-719-911-19	DIODE 1SS133T-72		Q897	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D926	8-719-911-19	DIODE 1SS133T-72		Q902	8-729-119-78	TRANSISTOR	2SC2785TP-HFE
D951	8-719-510-68	DIODE D5SBA204101		Q903	8-729-140-04	TRANSISTOR	2SB1116-TP-LK
D963	8-719-911-19	DIODE 1SS133T-72		Q904	8-729-142-46	TRANSISTOR	2SC2001TP-LK
D970	8-719-024-99	DIODE 11ES2-NTA2B		Q961	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA
D971	8-719-024-99	DIODE 11ES2-NTA2B		Q962	8-729-140-82	TRANSISTOR	2SA988TP-PAFAEA
D972	8-719-024-99	DIODE 11ES2-NTA2B		Q963	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA
D973	8-719-024-99	DIODE 11ES2-NTA2B				< RESISTOR >	
D974	8-719-024-99	DIODE 11ES2-NTA2B		R801	1-249-417-11	CARBON	1K 5% 1/4W
D975	8-719-024-99	DIODE 11ES2-NTA2B		R802	1-249-438-11	CARBON	56K 5% 1/4W
D980	8-719-024-99	DIODE 11ES2-NTA2B		R803	1-249-410-11	CARBON	270 5% 1/4W
D981	8-719-024-99	DIODE 11ES2-NTA2B		R804	1-249-438-11	CARBON	56K 5% 1/4W
D981	8-719-024-99	DIODE 11ES2-NTA2B		△ R805	1-234-499-21	ENCAPSULATED COMPONENT	0.22 5W
D990	8-719-024-99	DIODE 11ES2-NTA2B		R806	1-249-417-11	CARBON	1K 5% 1/4W
D991	8-719-024-99	DIODE 11ES2-NTA2B		R807	1-249-431-11	CARBON	15K 5% 1/4W
D992	8-719-024-99	DIODE 11ES2-NTA2B		R808	1-249-441-11	CARBON	100K 5% 1/4W
D993	8-719-024-99	DIODE 11ES2-NTA2B		R809	1-260-076-11	CARBON	10 5% 1/2W
D994	8-719-024-99	DIODE 11ES2-NTA2B		R811	1-260-076-11	CARBON	10 5% 1/2W
D995	8-719-024-99	DIODE 11ES2-NTA2B		R812	1-260-076-11	CARBON	10 5% 1/2W
D996	8-719-024-99	DIODE 11ES2-NTA2B		R814	1-249-437-11	CARBON	47K 5% 1/4W
D997	8-719-024-99	DIODE 11ES2-NTA2B		R815	1-249-437-11	CARBON	47K 5% 1/4W
				△ R821	1-215-891-11	METAL OXIDE	680 5% 2W F
				R825	1-249-402-11	CARBON	56 5% 1/4W
				R826	1-249-417-11	CARBON	1K 5% 1/4W
				R827	1-249-433-11	CARBON	22K 5% 1/4W
				R831	1-260-076-11	CARBON	10 5% 1/2W

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

TA-SV7AV

FRONT AMP	PANEL
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Ref. No.	Part No.	Description	Remark
R832	1-260-076-11	CARBON 10 5%	1/2W
R833	1-260-076-11	CARBON 10 5%	1/2W
R834	1-260-076-11	CARBON 10 5%	1/2W
R835	1-260-076-11	CARBON 10 5%	1/2W
R836	1-260-076-11	CARBON 10 5%	1/2W
R837	1-249-437-11	CARBON 47K 5%	1/4W
R838	1-249-437-11	CARBON 47K 5%	1/4W
R839	1-249-437-11	CARBON 47K 5%	1/4W
R851	1-249-417-11	CARBON 1K 5%	1/4W
R852	1-249-438-11	CARBON 56K 5%	1/4W
R853	1-249-410-11	CARBON 270 5%	1/4W
R854	1-249-438-11	CARBON 56K 5%	1/4W
△ R855	1-234-499-21	ENCAPSULATED COMPONENT 0.22	5W
R856	1-249-417-11	CARBON 1K 5%	1/4W
R857	1-249-431-11	CARBON 15K 5%	1/4W
R858	1-249-441-11	CARBON 100K 5%	1/4W
R859	1-260-076-11	CARBON 10 5%	1/2W
R861	1-260-076-11	CARBON 10 5%	1/2W
R862	1-260-076-11	CARBON 10 5%	1/2W
△ R871	1-215-891-11	METAL OXIDE 680 5%	2W F
R875	1-249-402-11	CARBON 56 5%	1/4W
R876	1-249-417-11	CARBON 1K 5%	1/4W
R877	1-249-433-11	CARBON 22K 5%	1/4W
R878	1-249-425-11	CARBON 4.7K 5%	1/4W
R879	1-249-441-11	CARBON 100K 5%	1/4W
R880	1-247-903-00	CARBON 1M 5%	1/4W
△ R881	1-215-888-00	METAL OXIDE 220 5%	2W F
R883	1-249-437-11	CARBON 47K 5%	1/4W
R885	1-249-429-11	CARBON 10K 5%	1/4W
R887	1-249-441-11	CARBON 100K 5%	1/4W
R889	1-249-429-11	CARBON 10K 5%	1/4W
R891	1-249-438-11	CARBON 56K 5%	1/4W
R892	1-249-439-11	CARBON 68K 5%	1/4W
R894	1-249-429-11	CARBON 10K 5%	1/4W
R895	1-249-429-11	CARBON 10K 5%	1/4W
R896	1-249-435-11	CARBON 33K 5%	1/4W
R897	1-249-433-11	CARBON 22K 5%	1/4W
R898	1-249-425-11	CARBON 4.7K 5%	1/4W
R903	1-249-429-11	CARBON 10K 5%	1/4W
R904	1-249-441-11	CARBON 100K 5%	1/4W
R905	1-249-421-11	CARBON 2.2K 5%	1/4W
R906	1-249-417-11	CARBON 1K 5%	1/4W
R907	1-249-421-11	CARBON 2.2K 5%	1/4W
R908	1-249-421-11	CARBON 2.2K 5%	1/4W
R910	1-247-807-31	CARBON 100 5%	1/4W
R911	1-247-807-31	CARBON 100 5%	1/4W
R912	1-247-807-31	CARBON 100 5%	1/4W
R913	1-249-437-11	CARBON 47K 5%	1/4W
R914	1-247-807-31	CARBON 100 5%	1/4W
R915	1-249-437-11	CARBON 47K 5%	1/4W
R916	1-247-807-31	CARBON 100 5%	1/4W
R917	1-249-411-11	CARBON 330 5%	1/4W
R918	1-249-411-11	CARBON 330 5%	1/4W
R919	1-249-411-11	CARBON 330 5%	1/4W
R920	1-249-411-11	CARBON 330 5%	1/4W
R921	1-249-411-11	CARBON 330 5%	1/4W
R923	1-249-417-11	CARBON 1K 5%	1/4W

Ref. No.	Part No.	Description	Remark
R924	1-249-437-11	CARBON 47K 5%	1/4W
R925	1-249-437-11	CARBON 47K 5%	1/4W
R926	1-249-429-11	CARBON 10K 5%	1/4W
R927	1-249-437-11	CARBON 47K 5%	1/4W
R951	1-249-441-11	CARBON 100K 5%	1/4W
R952	1-249-441-11	CARBON 100K 5%	1/4W
R953	1-249-441-11	CARBON 100K 5%	1/4W
R954	1-249-441-11	CARBON 100K 5%	1/4W
△ R963	1-212-881-11	FUSIBLE 100 5%	1/4W F
△ R964	1-212-881-11	FUSIBLE 100 5%	1/4W F
R965	1-249-431-11	CARBON 15K 5%	1/4W
R966	1-249-435-11	CARBON 33K 5%	1/4W
R967	1-249-429-11	CARBON 10K 5%	1/4W
△ R968	1-202-972-61	FUSIBLE 1 5%	1/4W F
R969	1-249-433-11	CARBON 22K 5%	1/4W
R970	1-249-441-11	CARBON 100K 5%	1/4W
R971	1-249-421-11	CARBON 2.2K 5%	1/4W
R972	1-249-433-11	CARBON 22K 5%	1/4W
R973	1-249-421-11	CARBON 2.2K 5%	1/4W
R974	1-249-429-11	CARBON 10K 5%	1/4W
R991	1-249-417-11	CARBON 1K 5%	1/4W
R992	1-249-417-11	CARBON 1K 5%	1/4W
< RELAY >			
RY881	1-515-920-11	RELAY	
< TERMINAL >			
TM101	1-694-677-12	TERMINAL BOARD (4P) (FRONT SPEAKER IMPEDANCE USE 6-16Ω)	
TM102	1-694-674-12	TERMINAL BOARD (6P) (REAR/CENTER SPEAKER IMPEDANCE USE 8-16Ω)	

A-4725-755-A PANEL BOARD, COMPLETE (EA, SP)			
A-4726-288-A PANEL BOARD, COMPLETE (TH)			

< CAPACITOR >			
C701	1-162-306-11	CERAMIC 0.01uF 30%	16V
C702	1-162-306-11	CERAMIC 0.01uF 30%	16V
C703	1-162-306-11	CERAMIC 0.01uF 30%	16V
C704	1-162-306-11	CERAMIC 0.01uF 30%	16V
C705	1-162-306-11	CERAMIC 0.01uF 30%	16V
C706	1-162-306-11	CERAMIC 0.01uF 30%	16V
C710	1-162-294-31	CERAMIC 0.001uF 10%	50V
C711	1-162-306-11	CERAMIC 0.01uF 30%	16V
C712	1-162-294-31	CERAMIC 0.001uF 10%	50V
C721	1-115-868-11	ELECT 0.22uF 20%	50V
C722	1-162-306-11	CERAMIC 0.01uF 30%	16V
C723	1-162-306-11	CERAMIC 0.01uF 30%	16V
C724	1-115-868-11	ELECT 0.22uF 20%	50V
C725	1-162-294-31	CERAMIC 0.001uF 10%	50V
C726	1-162-215-31	CERAMIC 47PF 5%	50V
C727	1-162-290-31	CERAMIC 470PF 10%	50V
C728	1-115-867-11	ELECT 0.1uF 20%	50V
C729	1-115-872-11	ELECT 2.2uF 20%	50V
C730	1-162-287-31	CERAMIC 270PF 10%	50V
C731	1-115-872-11	ELECT 2.2uF 20%	50V

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

PANEL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C732	1-126-382-11	ELECT	100uF 20% 10V	R708	1-247-807-31	CARBON 100 5%	1/4W
C733	1-126-791-11	ELECT	10uF 20% 16V	R709	1-249-410-11	CARBON 270 5%	1/4W
C734	1-162-215-31	CERAMIC	47PF 5% 50V	R710	1-249-413-11	CARBON 470 5%	1/4W
C735	1-126-791-11	ELECT	10uF 20% 16V	R711	1-249-414-11	CARBON 560 5%	1/4W
C736	1-115-872-11	ELECT	2.2uF 20% 50V	R712	1-249-416-11	CARBON 820 5%	1/4W
C737	1-161-494-00	CERAMIC	0.022uF 25V	R713	1-249-417-11	CARBON 1K 5%	1/4W
C738	1-162-305-11	CERAMIC	0.0068uF 30% 16V	R714	1-249-418-11	CARBON 1.2K 5%	1/4W
C739	1-115-871-11	ELECT	1uF 20% 50V	R715	1-249-419-11	CARBON 1.5K 5%	1/4W
C740	1-126-785-11	ELECT	47uF 20% 10V	R716	1-249-421-11	CARBON 2.2K 5%	1/4W
C741	1-126-785-11	ELECT	47uF 20% 10V	R717	1-249-422-11	CARBON 2.7K 5%	1/4W
C742	1-136-495-11	FILM	0.068uF 5% 50V	R718	1-249-424-11	CARBON 3.9K 5%	1/4W
C743	1-162-294-31	CERAMIC	0.001uF 10% 50V	R719	1-249-426-11	CARBON 5.6K 5%	1/4W
C744	1-136-167-00	FILM	0.15uF 5% 50V	R720	1-249-428-11	CARBON 8.2K 5%	1/4W
C745	1-115-870-11	ELECT	0.47uF 20% 50V	R721	1-249-431-11	CARBON 15K 5%	1/4W
C746	1-115-870-11	ELECT	0.47uF 20% 50V	R722	1-249-434-11	CARBON 27K 5%	1/4W
C747	1-136-495-11	FILM	0.068uF 5% 50V	R726	1-249-417-11	CARBON 1K 5%	1/4W
C748	1-162-294-31	CERAMIC	0.001uF 10% 50V	R727	1-249-429-11	CARBON 10K 5%	1/4W
C749	1-162-305-11	CERAMIC	0.0068uF 30% 16V	R728	1-249-429-11	CARBON 10K 5%	1/4W
C750	1-115-871-11	ELECT	1uF 20% 50V	R729	1-249-417-11	CARBON 1K 5%	1/4W
C751	1-162-306-11	CERAMIC	0.01uF 30% 16V	R730	1-249-441-11	CARBON 100K 5%	1/4W
C752	1-126-791-11	ELECT	10uF 20% 16V	R731	1-249-417-11	CARBON 1K 5%	1/4W
C781	1-162-306-11	CERAMIC	0.01uF 30% 16V	R732	1-249-433-11	CARBON 22K 5%	1/4W
		< CONNECTOR >		R733	1-247-807-31	CARBON 100 5%	1/4W
				R734	1-249-429-11	CARBON 10K 5%	1/4W
CN700	1-784-747-11	CONNECTOR, FFC 25P		R735	1-247-883-00	CARBON 150K 5%	1/4W
		< DIODE >		R736	1-247-807-31	CARBON 100 5%	1/4W
D701	8-719-058-04	LED SEL5223S-TP15 (I/⊂)		R737	1-249-417-11	CARBON 1K 5%	1/4W
D702	8-719-057-97	LED SEL5923A-TP15 (SUR)		R738	1-249-429-11	CARBON 10K 5%	1/4W
D703	8-719-057-97	LED SEL5923A-TP15 (EQ)		R739	1-249-429-11	CARBON 10K 5%	1/4W
D704	8-719-057-97	LED SEL5923A-TP15 (CINEMA STUDIO A)		R740	1-249-441-11	CARBON 100K 5%	1/4W
D705	8-719-057-97	LED SEL5923A-TP15 (CINEMA STUDIO B)		R741	1-249-431-11	CARBON 15K 5%	1/4W
D706	8-719-057-97	LED SEL5923A-TP15 (CINEMA STUDIO C)		R742	1-249-431-11	CARBON 15K 5%	1/4W
D710	8-719-109-85	DIODE MTZJ-T-72-5.1B		R743	1-249-433-11	CARBON 22K 5%	1/4W
D781	8-719-084-07	LED SEL5E20CTP15 (MULTI CHANNEL DECODING)		R744	1-249-433-11	CARBON 22K 5%	1/4W
		< COIL >		R745	1-249-433-11	CARBON 22K 5%	1/4W
FB707	1-412-473-21	INDUCTOR 0uH		R746	1-249-410-11	CARBON 270 5%	1/4W
		< IC >		R747	1-247-881-00	CARBON 120K 5%	1/4W
IC701	8-759-450-96	IC M65850P		R748	1-249-433-11	CARBON 22K 5%	1/4W
IC702	8-759-167-88	IC NJM4565D		R749	1-249-437-11	CARBON 47K 5%	1/4W
		< JACK >		R750	1-249-433-11	CARBON 22K 5%	1/4W
J701	1-691-293-21	JACK (MIC 1)		R751	1-249-433-11	CARBON 22K 5%	1/4W
J702	1-691-293-21	JACK (MIC 2)				< VARIABLE RESISTOR >	
J703	1-691-293-21	JACK (PHONES)		RV761	1-225-739-11	RES, VAR CARBON 50K (MIC LEVEL)	
		< TRANSISTOR >		RV762	1-225-739-11	RES, VAR CARBON 50K (ECHO LEVEL)	
Q701	8-729-900-80	TRANSISTOR BA1A4M-TP				< SWITCH >	
Q702	8-729-900-63	TRANSISTOR BN1F4M-TP		S701	1-473-534-11	ENCODER, ROTARY (FUNCTION)	
Q710	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		S702	1-473-534-11	ENCODER, ROTARY (FILE SELECT)	
Q901	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		S703	1-473-392-11	ENCODER, ROTARY (VOLUME)	
		< RESISTOR >		S705	1-771-410-21	SWITCH, TACTILE (I/⊂)	
R707	1-249-411-11	CARBON 330 5%	1/4W	S710	1-771-410-21	SWITCH, TACTILE (SUR)	
				S711	1-771-410-21	SWITCH, TACTILE (EQ)	
				S712	1-771-410-21	SWITCH, TACTILE (CINEMA STUDIO A)	
				S713	1-771-410-21	SWITCH, TACTILE (CINEMA STUDIO B)	
				S714	1-771-410-21	SWITCH, TACTILE (CINEMA STUDIO C)	
				S715	1-771-410-21	SWITCH, TACTILE (DIGITAL)	

SURROUND AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R1009	1-260-076-11	CARBON	10 5% 1/2W			***** HARDWARE LIST *****	
R1010	1-249-437-11	CARBON	47K 5% 1/4W				
△ R1031	1-212-881-11	FUSIBLE	100 5% 1/4W F	#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
△ R1032	1-212-881-11	FUSIBLE	100 5% 1/4W F	#2	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
△ R1033	1-202-972-61	FUSIBLE	1 5% 1/4W F	#3	7-685-872-09	SCREW +BVTT 3X8 (S)	
R1047	1-249-429-11	CARBON	10K 5% 1/4W	#4	7-685-871-01	SCREW +BVTT 3X6 (S)	

R1051	1-249-417-11	CARBON	1K 5% 1/4W			ACCESSORIES & PACKING MATERIALS	
R1052	1-249-438-11	CARBON	56K 5% 1/4W			*****	
R1053	1-249-415-11	CARBON	680 5% 1/4W (EA, SP)				
R1053	1-249-417-11	CARBON	1K 5% 1/4W (TH)	△	1-569-088-21	ADAPTOR, CONVERSION (EA, SP)	
R1054	1-249-438-11	CARBON	56K 5% 1/4W				
△ R1055	1-233-352-41	ENCAPSULATED COMPONENT	0.22 2W				
R1056	1-249-417-11	CARBON	1K 5% 1/4W				
R1057	1-249-431-11	CARBON	15K 5% 1/4W				
R1058	1-249-441-11	CARBON	100K 5% 1/4W				
R1059	1-260-076-11	CARBON	10 5% 1/2W				
R1060	1-249-438-11	CARBON	56K 5% 1/4W				
△ R1061	1-215-888-00	METAL OXIDE	220 5% 2W F				
△ R1062	1-215-888-00	METAL OXIDE	220 5% 2W F				
R1063	1-249-429-11	CARBON	10K 5% 1/4W				
R1065	1-249-433-11	CARBON	22K 5% 1/4W				
R1081	1-249-417-11	CARBON	1K 5% 1/4W				
R1082	1-249-438-11	CARBON	56K 5% 1/4W				
R1083	1-247-834-11	CARBON	1.3K 5% 1/4W				
R1084	1-249-438-11	CARBON	56K 5% 1/4W				
△ R1085	1-233-352-41	ENCAPSULATED COMPONENT	0.22 2W				
R1086	1-249-417-11	CARBON	1K 5% 1/4W				
R1087	1-249-431-11	CARBON	15K 5% 1/4W				
R1088	1-249-441-11	CARBON	100K 5% 1/4W				
R1089	1-260-076-11	CARBON	10 5% 1/2W				
R1090	1-249-439-11	CARBON	68K 5% 1/4W				
R1092	1-249-441-11	CARBON	100K 5% 1/4W				
R1093	1-249-441-11	CARBON	100K 5% 1/4W				
R1094	1-249-439-11	CARBON	68K 5% 1/4W				
R1095	1-249-433-11	CARBON	22K 5% 1/4W				
< RELAY >							
RY1061	1-515-920-11	RELAY (24V)					
RY1062	1-515-920-11	RELAY (24V)					
< THERMISTOR (POSITIVE) >							
THP092	1-807-796-11	THERMISTOR					

MISCELLANEOUS *****							
1	1-773-210-11	WIRE (FLAT TYPE) (25 CORE)					
△ 109	1-777-071-81	CORD, POWER (EA, SP)					
△ 109	1-791-901-11	CORD, POWER (TH)					
M1	1-763-072-11	FAN, D. C.					
△ T911	1-435-935-11	TRANSFORMER, POWER					

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

