

STR-DE185

SERVICE MANUAL

Ver 1.1 2003. 11

US Model
AEP Model
UK Model



SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 40 – 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.09 % total harmonic distortion from 250 milliwatts to rated output (Models of area code US only).

Amplifier section

POWER OUTPUT

Models of area code US
Rated Power Output at Stereo Mode
(8 ohms 40 Hz – 20 kHz, THD 0.09 %)
100 W + 100 W

Models of area code AEP, UK
Rated Power Output at Stereo Mode
(8 ohms 1 kHz, THD 0.7 %)
100 W + 100 W¹⁾

1) Measured under the following conditions:

Area code	Power requirements
AEP, UK	230 V AC, 50 Hz

Frequency response

CD, MD/TAPE, VIDEO 1, VIDEO 2	20 Hz – 50 kHz +0/-0.5 dB (with bass boost bypassed)
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Inputs (Analog)

CD, MD/TAPE, VIDEO 1, VIDEO 2	Sensitivity: 250 mV Impedance: 50 kilohms S/N ²⁾ : 85 dB (A, 250 mV ³⁾)
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2) INPUT SHORT.

3) Weighted network, input level.

Outputs

MD/TAPE, VIDEO 1	Voltage: 250 mV Impedance: 10 kilohms
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Bass Boost:	+8 dB at 70 Hz
Tone:	±10 dB at 100 Hz and 10 kHz

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	
Mono:	18.3 dBf, 2.2 μ V/75 ohms
Stereo:	38.3 dBf, 22.5 μ V/75 ohms
Usable sensitivity	11.2 dBf, 1 μ V/75 ohms
S/N	
Mono:	76 dB
Stereo:	70 dB
Harmonic distortion at 1 kHz	
Mono:	0.5%
Stereo:	0.8%
Separation	35 dB at 1 kHz
Frequency response	30 Hz – 15 kHz, +0.5/-2 dB
Selectivity	60 dB at 400 kHz

– Continued on next page –

FM STEREO/FM-AM RECEIVER

9-873-586-02

2003K04-1

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Home Audio Company

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SONY®

AM tuner section

Tuning range

Models of area code US

With 10-kHz tuning scale: 530 – 1710 kHz⁴⁾

With 9-kHz tuning scale: 531 – 1710 kHz⁴⁾

Models of area code AEP, UK

With 9-kHz tuning scale: 531 – 1602 kHz

Antenna	Loop antenna
Intermediate frequency	450 kHz
Usable sensitivity	50 dB/m (at 1,000 kHz or 999 kHz)
S/N	45 dB (at 50 mV/m)
Harmonic distortion	1.0 % (50 mV/m, 400 Hz)
Selectivity	
At 9 kHz:	35 dB
At 10 kHz:	40 dB

- 4) You can change the AM tuning scale to 9 kHz or 10 kHz. After tuning in any AM station, turn off the receiver. Hold down PRESET TUNING + and press I/⏏. All preset stations will be erased when you change the tuning scale. To reset the scale to 10 kHz (or 9 kHz), repeat the procedure.

General

Power requirements

Area code	Power consumption
US	120 V AC, 60 Hz
AEP, UK	230 V AC, 50/60 Hz

Power consumption

Area code	Power consumption
US	190 W
AEP, UK	210 W

Power consumption (during standby mode)

0.5 W (for models of all area code)

AC outlets

Area code	AC outlets
US	1 switched, 120 W/1A MAX
AEP, UK	1 switched, 100 W MAX

Dimensions 430 × 145 × 300 mm
(16 7/8 × 5 6/8 × 11 6/8 in.)
including projecting parts and controls

Mass (Approx.) 7.0 kg (15 lb 7 oz)

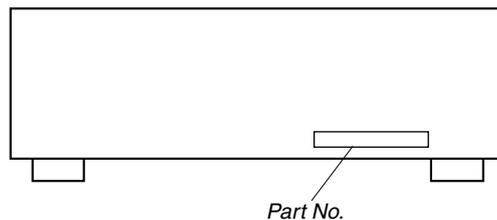
Supplied accessories

- FM wire antenna (1)
- AM loop antenna (1)
- Remote commander RM-U185 (1)
- R6 (size-AA) batteries (2)

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION

— BACK PANEL —



MODEL	PART No.
US	4-238-277-0□
AEP	4-238-277-1□
UK	4-238-277-2□

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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

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

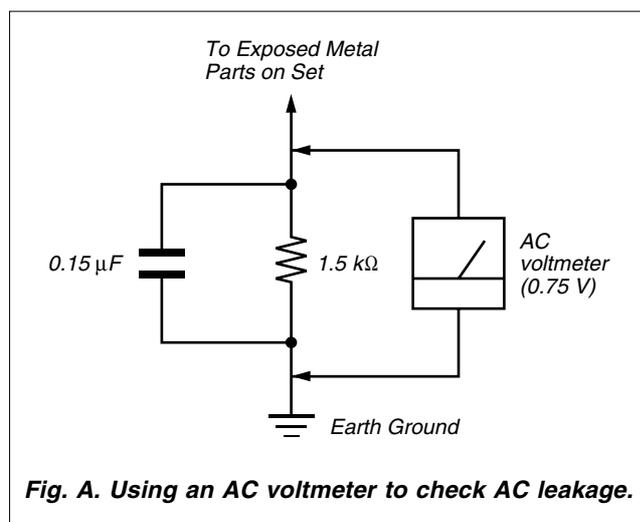


Fig. A. Using an AC voltmeter to check AC leakage.

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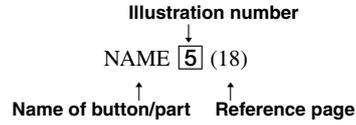
SECTION 1
GENERAL

This section is extracted from instruction manual.

List of Button Locations and Reference Pages

How to use this page

Use this page to find the location of buttons that are mentioned in the text.



Main unit

ALPHABETICAL ORDER

A - H

- AM **8** (13, 14)
- BALANCE L/R **10** (12)
- BASS +/- **21** (12)
- BASS BOOST **19** (12)
- CD **15** (8, 12)
- DIRECT **25** (13)
- DISPLAY **11** (12, 16)
- Display **9** (11-16, 18, 19)
- FM **6** (13, 14)
- FM MODE **23** (14)

I - O

- IR (receptor) **2** (4, 22)

- MASTER VOLUME **17** (12, 20)
- MD/TAPE **14** (8, 12)
- MEMORY/ENTER **24** (13, 15, 18)
- MUTING **18** (12, 20)
- NAME **5** (18)
- Numeric buttons **3** (13)

P - S

- PHONES **29** (12, 21)
- PRESET/PTY SELECT +/- (models of area code CEL, CEK) **7** (15, 16)
- PRESET TUNING +/- (models of area code U) **7** (15, 23)
- PTY (models of area code CEL, CEK) **4** (16)

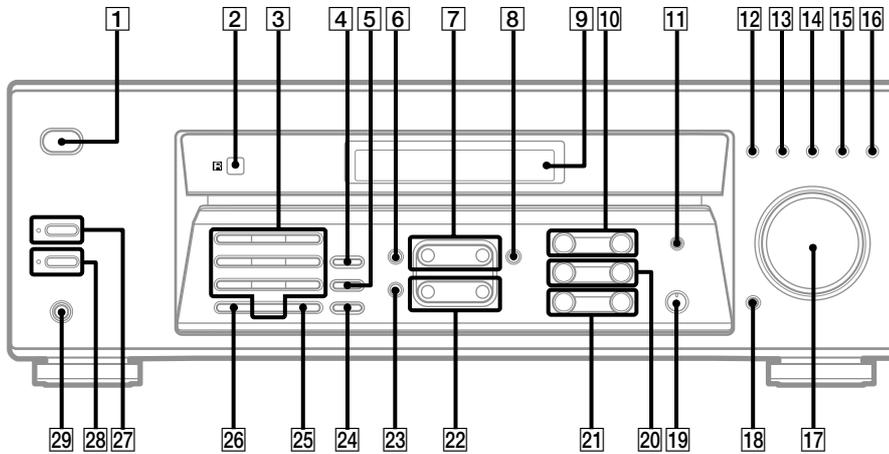
- SHIFT **26** (15)
- SLEEP (models of area code U) **4** (19)
- SPEAKERS A **27** (10, 12)
- SPEAKERS B **28** (10, 12)

T - Z

- TREBLE +/- **20** (12)
- TUNER **16** (8, 12-15, 18)
- TUNING/CHAR +/- **22** (14, 18)
- VIDEO 1 **12** (12)
- VIDEO 2 **13** (8, 12)

BUTTON DESCRIPTIONS

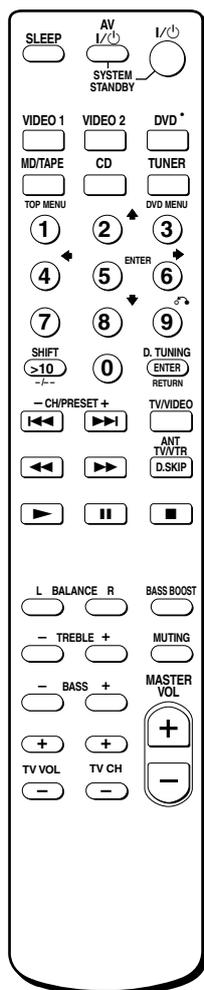
- I/⏻ (power) **1** (11, 13, 23)



List of Button Locations and Reference Pages

Remote button description

You can use the remote RM-U185 to operate the components in your system.



The tables below show the settings of each button.

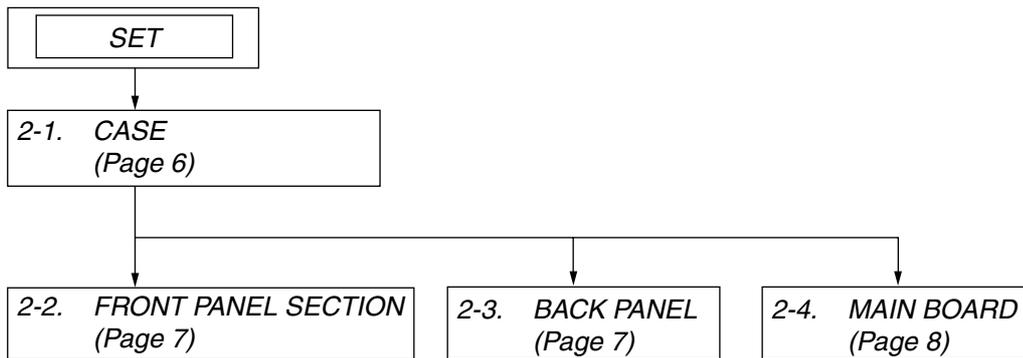
Remote Button	Operations	Function
SLEEP	Receiver	Activates the sleep function and the duration which the receiver turns off automatically.
I/O	Receiver	Turns the receiver on or off.
VIDEO 1	Receiver	To watch VCR. (VTR mode 3)
VIDEO 2	Receiver	To watch VCR. (VTR mode 1)
DVD	Receiver	To watch DVD.
MD/TAPE	Receiver	To listen to Minidisc or audio tape.
CD	Receiver	To listen to compact disc.
TUNER	Receiver	To listen to radio programs.
SHIFT	Receiver	Press repeatedly to select a memory page for presetting radio stations or tuning to preset stations.
D.TUNING	Receiver	Tuner station direct key-in-mode.
BALANCE L/R	Receiver	Adjust the balance.
BASS BOOST	Receiver	Reinforce the bass.
TREBLE +/-	Receiver	Adjust the treble tone quality.
MUTING	Receiver	Mutes the sound from the receiver.
BASS +/-	Receiver	Adjust the bass tone quality.

Note

When you press the function buttons (VIDEO 1, VIDEO 2, DVD), the input mode of the TV might not switch to the corresponding input mode that you want. In this case, press the TV/VIDEO button to switch the input mode of the TV.

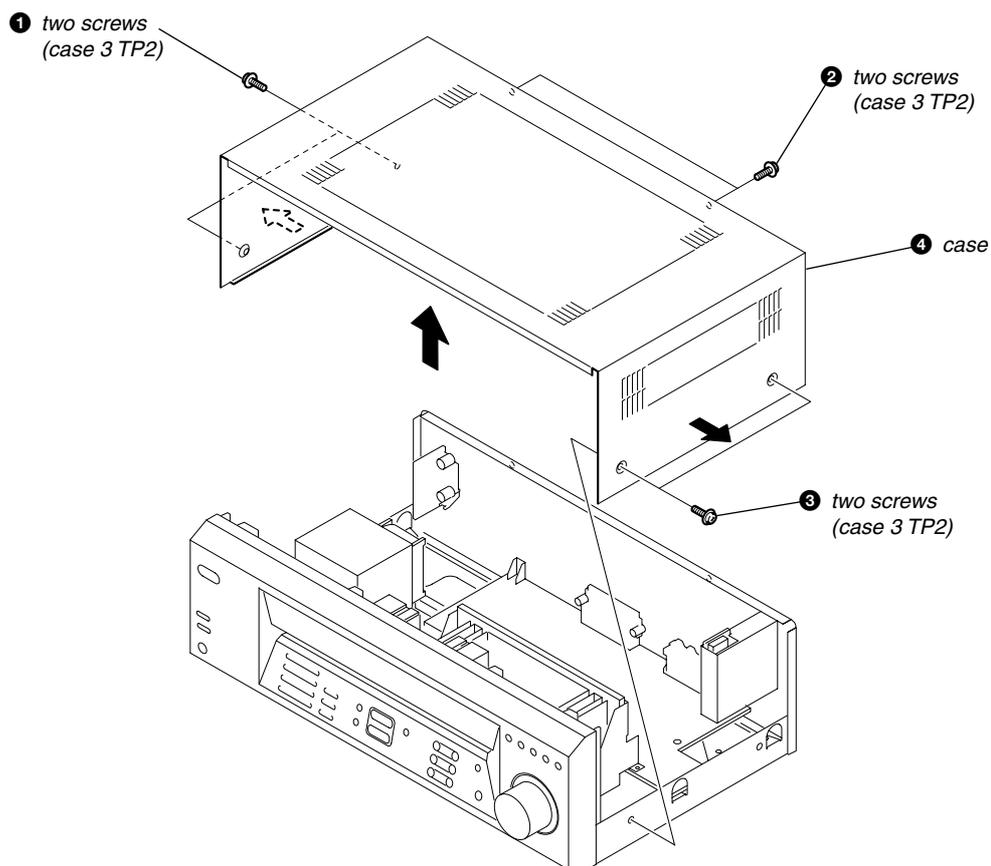
SECTION 2 DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

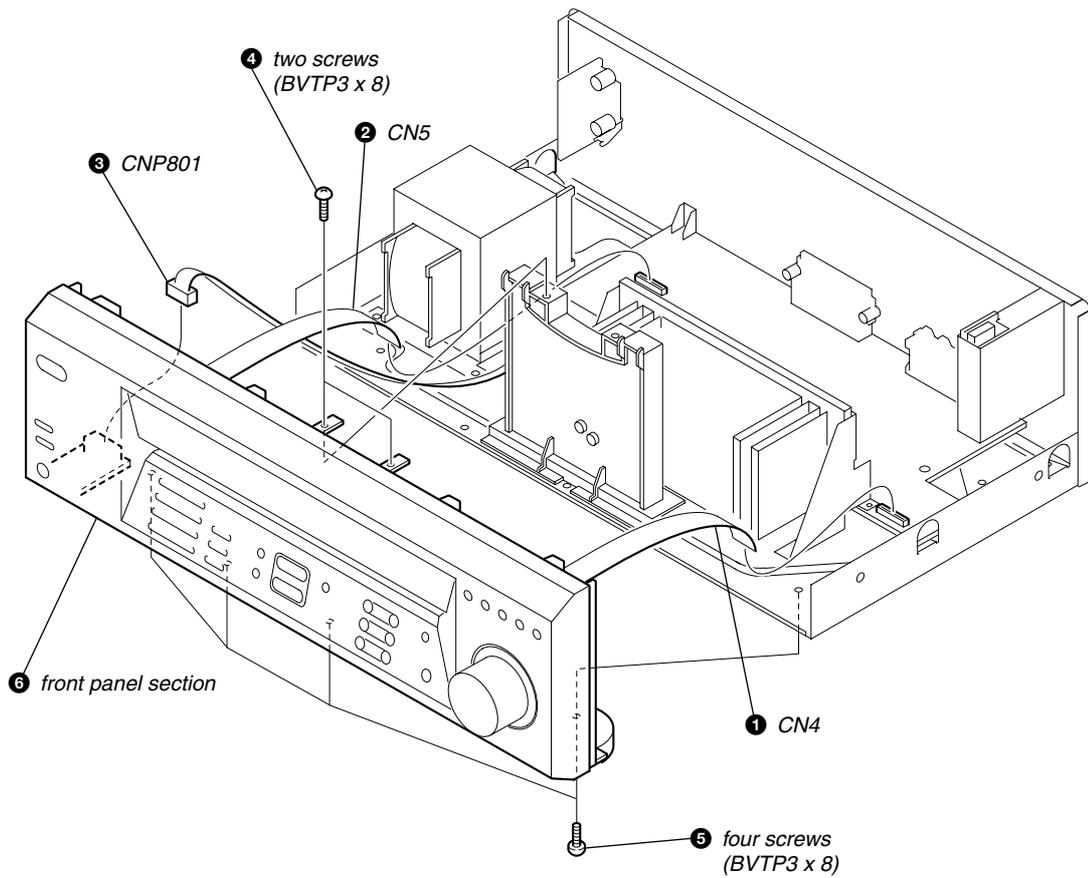


Note : Follow the disassembly procedure in the numerical order given.

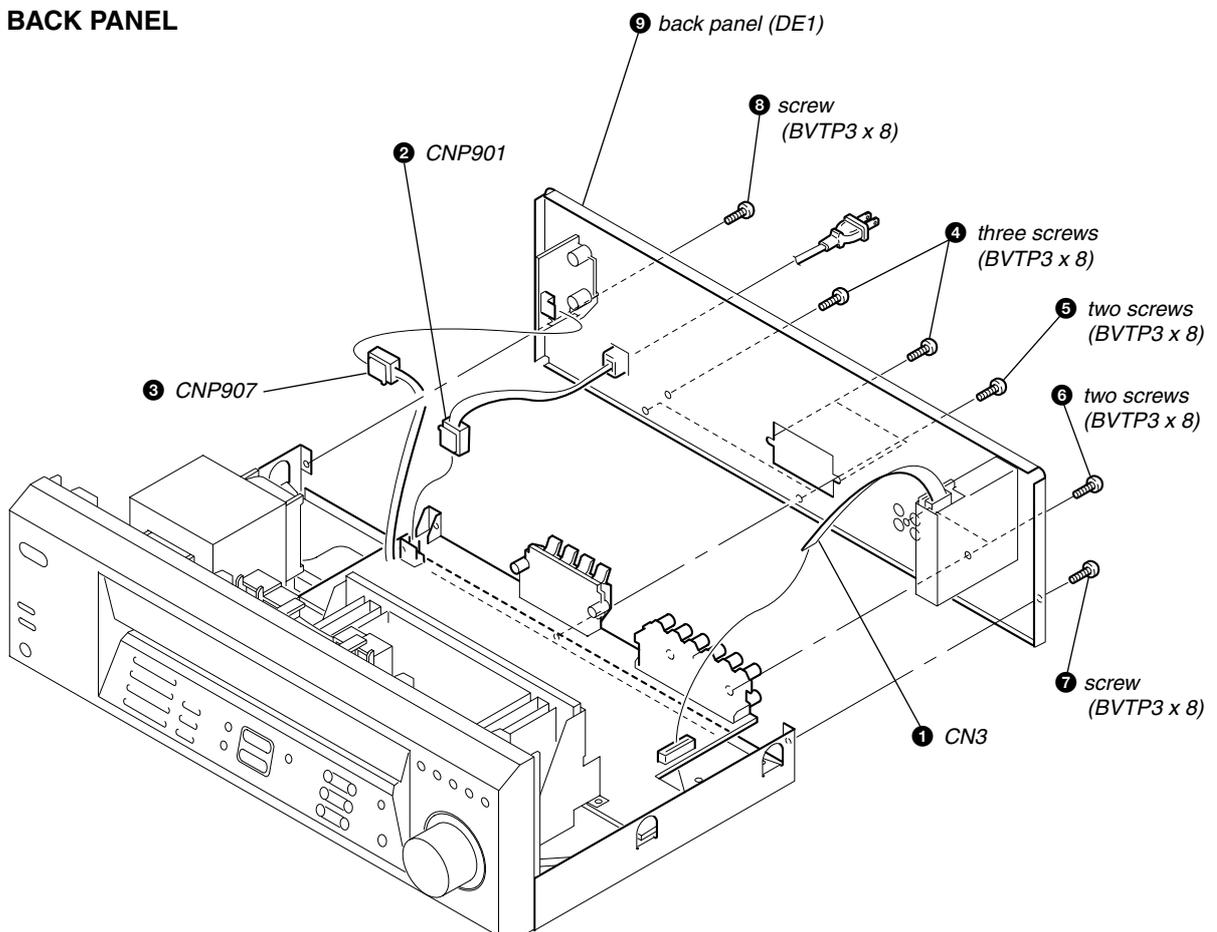
2-1. CASE



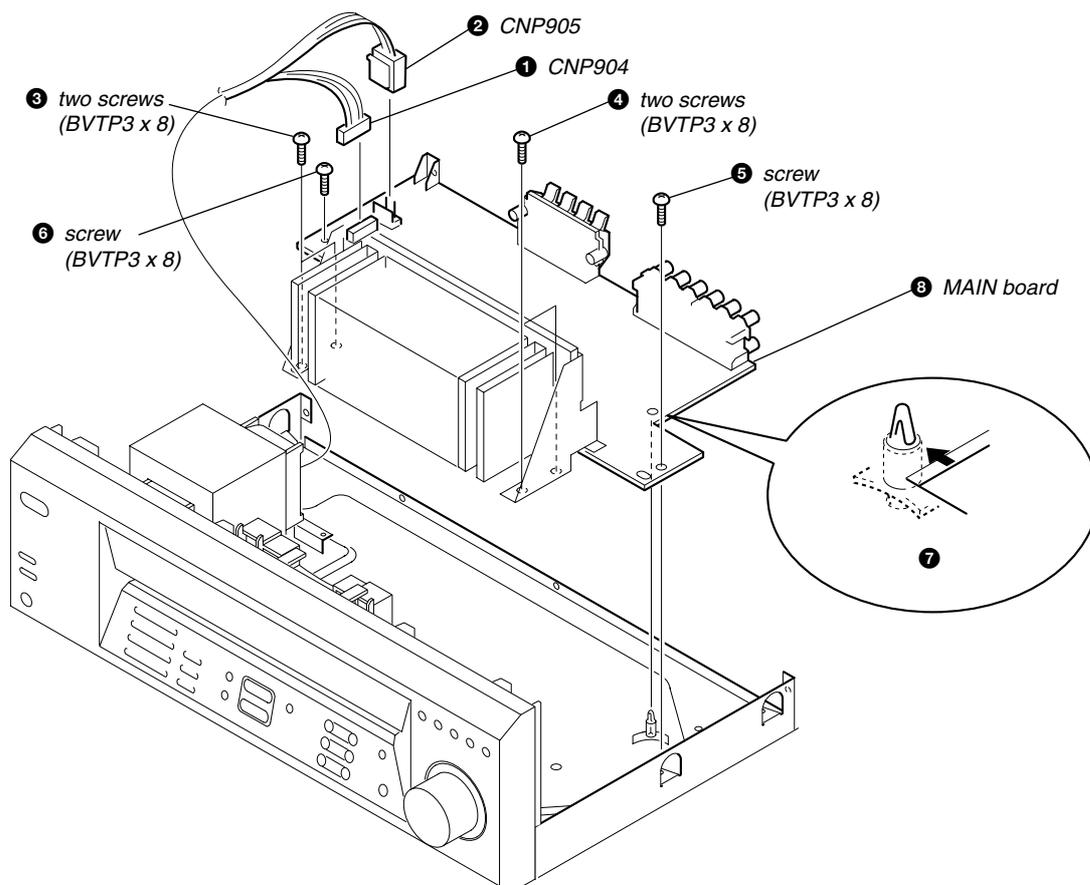
2-2. FRONT PANEL SECTION



2-3. BACK PANEL



2-4. MAIN BOARD



SECTION 3 TEST MODE

Fluorescent Indicator Tube Test Mode

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

Procedure:

1. While pressing the five function buttons of [VIDEO 1], [VIDEO 2], [MD/TAPE], [CD] and [TUNER] simultaneously, press the [I/⏻] button to turn the power ON.
2. The FL tube will illuminate in half light on. The following display will be repeated whenever the five function buttons are pressed.
 - Operation of function buttons
all light on → half light on 1 → half light on 2 → all light off
3. Press any button other than the function buttons to release the check mode.

AUTO-BETICAL Check Mode (AEP, UK models)

To auto-scanning and memories of RDS station.

Procedure:

1. While pressing the [MEMORY/ENTER] button, press the [I/⏻] button to turn the power ON.
2. The message "AUTO-BETICAL SELECT" are scrolled.

AM Tuning Interval Selection Mode (US model)

Either 9 kHz step or 10 kHz step can be selected for the AM tuning interval.

Procedure:

1. While pressing the [TUNING/CHAR +] button, press the [I/⏻] button to turn the power ON.
2. Either the message "9k STEP" or "10k STEP" appears.
3. Select the desired step.

Software Version Display Mode

The software version is displayed.

Procedure:

1. While pressing the two buttons of [SPEAKERS B] and [VIDEO 1] simultaneously, press the [I/⏻] button to turn the power ON.
2. The software version is displayed.

ex.) US model : U***
 AEP, UK model : CE***

↑ ↑
 Shift version
 Area

SECTION 4 DIAGRAMS

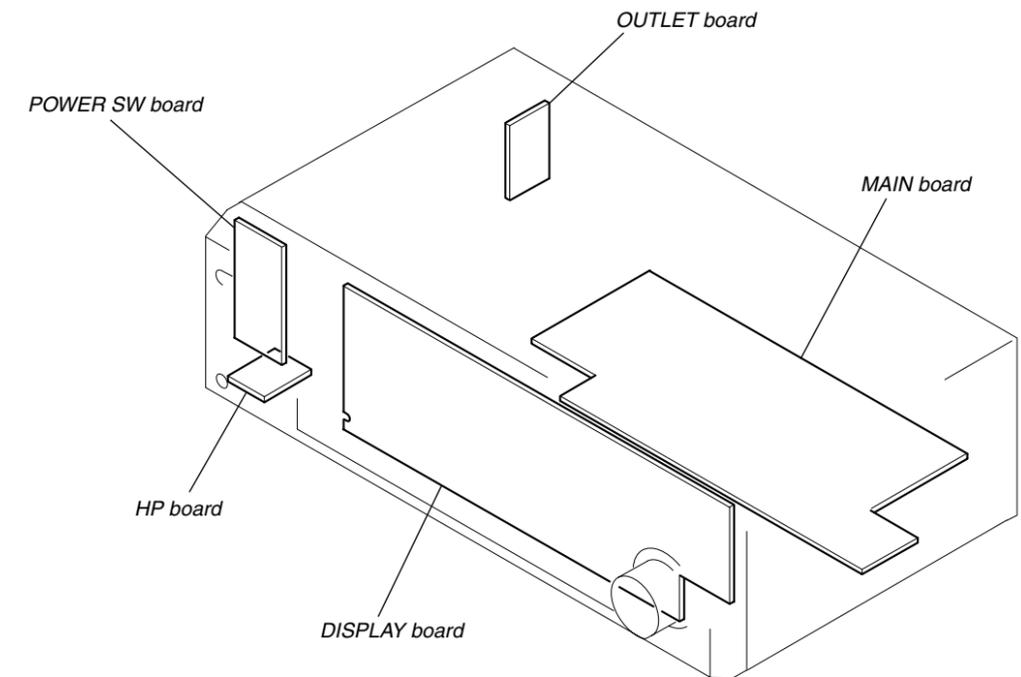
4-1. IC PIN DESCRIPTION

• IC201 μ PD78044FGF-200-3B9 (SYSTEM CONTROLLER, FL DRIVER)

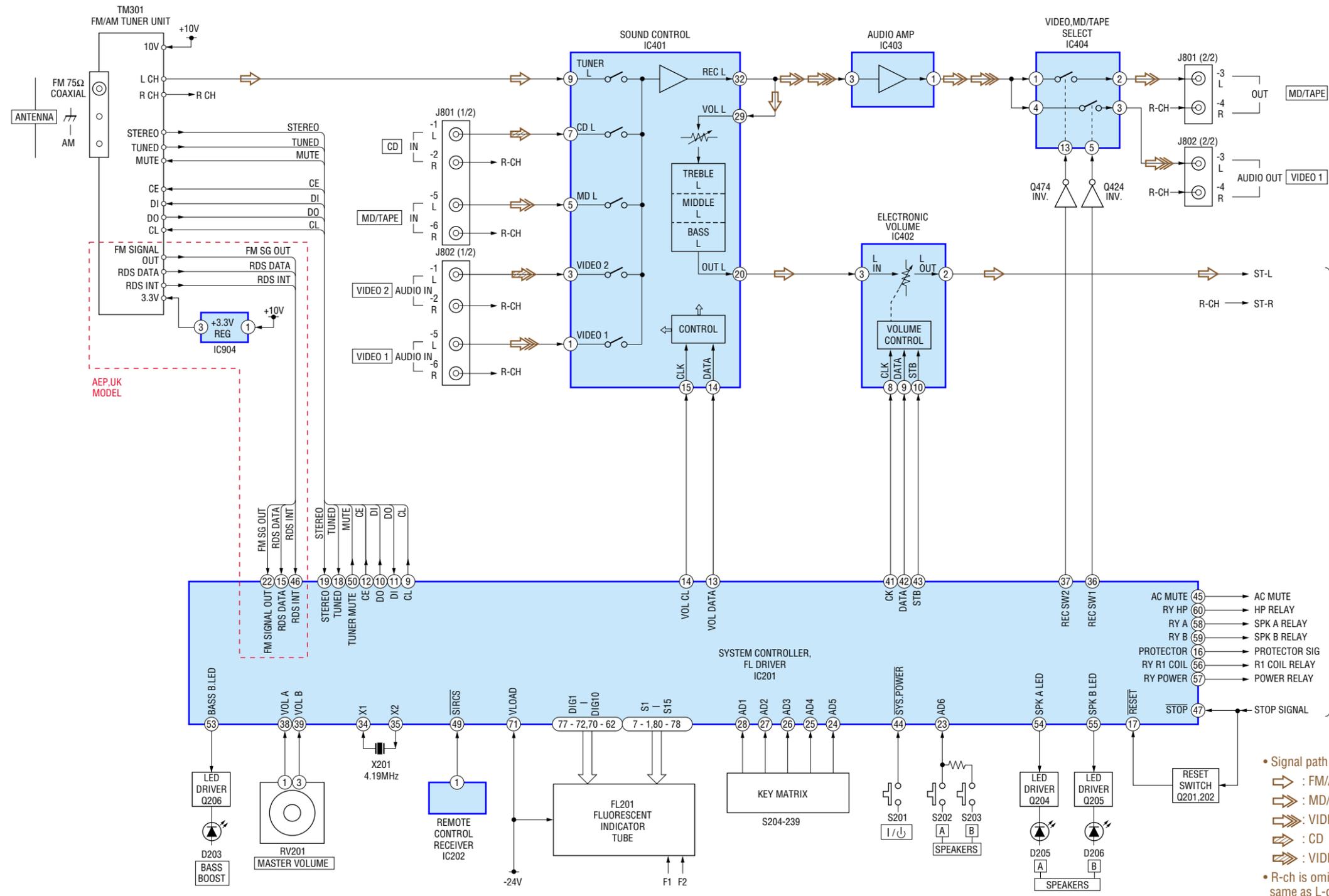
Pin No.	Pin Name	I/O	Pin Description
1 to 7	DIG7 to 1	O	Digit drive signal output to the fluorescent indicator tube (FL201).
8	+5V	—	Power supply pin (+5 V)
9	CL	O	Serial clock signal output to FM/AM tuner pack.
10	DO	O	Serial data signal output to FM/AM tuner pack.
11	DI	I	Serial data signal input from FM/AM tuner pack.
12	CE	O	Serial chip enable signal output to FM/AM tuner pack.
13	VOL DATA	O	Serial data signal output to sound control IC.
14	VOL CE	O	Serial clock signal output to sound control IC.
15	RDS DATA	I	RDS data signal input from FM/AM tuner pack. (AEP, UK model only)
16	PROTECTOR	I	Overload detection signal input
17	$\overline{\text{RESET}}$	I	Reset signal input
18	TUNED	I	TUNED indicator detection signal input from FM/AM tuner pack.
19	STEREO	I	STEREO indicator detection signal input from FM/AM tuner pack.
20	AVSS	—	Analog ground
21	VERSION	I	Destination select signal input (Fixed at H: US model, L: AEP, UK model)
22	FM SIGNAL OUT	I	FM/AM signal meter voltage detection signal input from FM/AM tuner pack. (AEP, UK model only)
23 to 28	AD6 to 1	I	Function keys signal input
29	AVDD	—	A/D converter power supply pin (+5 V)
30	AVREF	—	A/D converter reference voltage input (+5 V)
31	NC	—	Not used. (Connect to AVREF pin in this set)
32	OPEN	—	Not used. (Open)
33	GND	—	Ground
34	X1	I	Master clock input (4.19 MHz)
35	X2	O	Master clock output (4.19 MHz)
36	REC SW1	O	VIDEO 1 ON/OFF signal output
37	REC SW2	O	MD/TAPE ON/OFF signal output
38, 39	VOL A, B	I	Master volume JOG data input A, B
40	FUNC.MUTE	O	Not used. (Fixed at L in this set)
41	CK	O	Serial clock signal output to electoric volume IC.
42	DATA	O	Serial data signal output to electoric volume IC.
43	STB	O	Serial data strobe signal output to electoric volume IC.
44	$\overline{\text{SYS.POWER}}$	I	System power signal input
45	AC MUTE	O	A-Class mute signal output
46	RDS INT	I	RDS clock signal input from FM/AM tuner pack. (AEP, UK model only)
47	STOP	I	Stop signal input from reset signal generator IC.
48	VSS	—	Ground
49	$\overline{\text{SIRCS}}$	I	Sircs signal input from remote control receiver IC.
50	TUNER MUTE	O	Muting control signal output to FM/AM tuner pack.
51	NC	—	Not used. (Open)
52	+5V	—	Power supply pin (+5 V)
53	BASS B. LED	O	BASS BOOST LED drive signal output
54	SPK A LED	O	SPEAKERS A LED drive signal output
55	SPK B LED	O	SPEAKERS B LED drive signal output

Pin No.	Pin Name	I/O	Pin Description
56	RY R1 COIL	O	Power relay (12V) drive signal output
57	RY POWER	O	AC power relay (9V) drive signal output
58	RY A	O	Speakers A relay (12V) drive signal output
59	RY B	O	Speakers B relay (12V) drive signal output
60	RY HP	O	Phones relay (12V) drive signal output
61	NC	—	Not used. (Open)
62 to 70	S15 to 7	O	Segment drive signal output to the fluorescent indicator tube (FL201).
71	VLOAD	—	Power supply pin (-24 V)
72 to 77	S6 to 1	O	Segment drive signal output to the fluorescent indicator tube (FL201).
78 to 80	DIG10 to 8	O	Digit drive signal output to the fluorescent indicator tube (FL201).

4-2. CIRCUIT BOARDS LOCATION

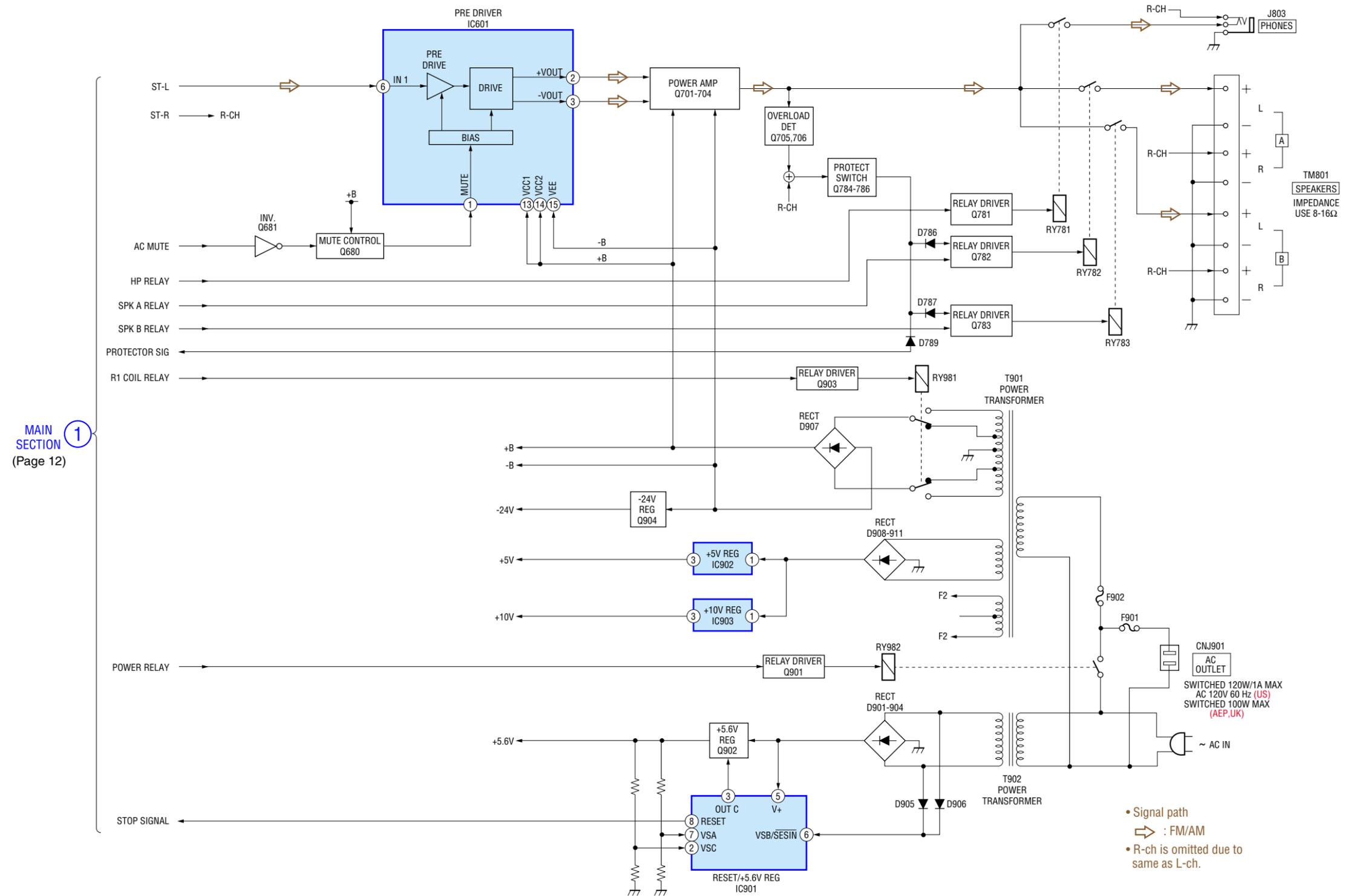


4-3. BLOCK DIAGRAM — MAIN SECTION —

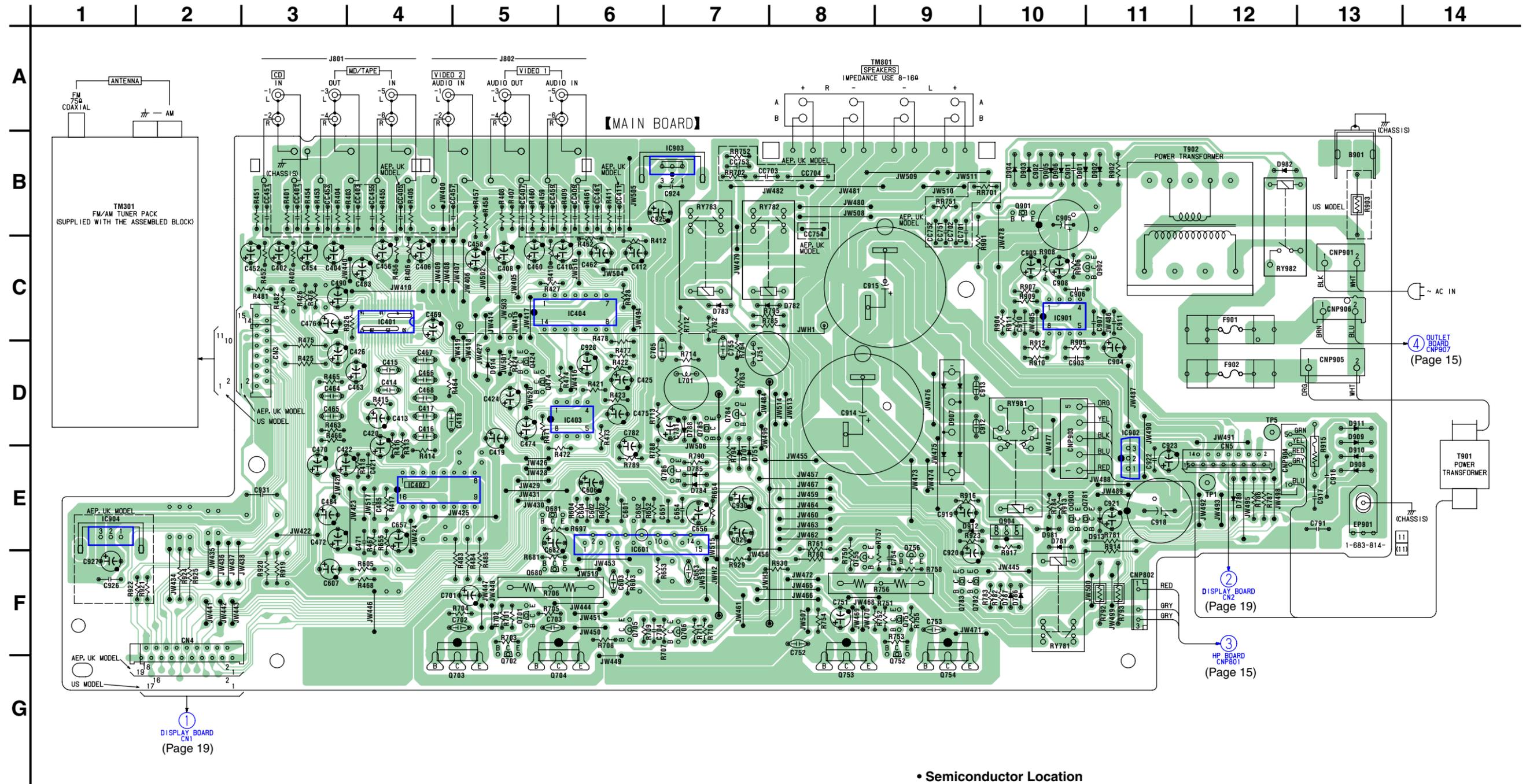


1 POWER SECTION (Page 13)

4-4. BLOCK DIAGRAM — POWER SECTION —



4-5. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 11 for Circuit Boards Location and page 15 for Common Note on Printed Wiring Boards.

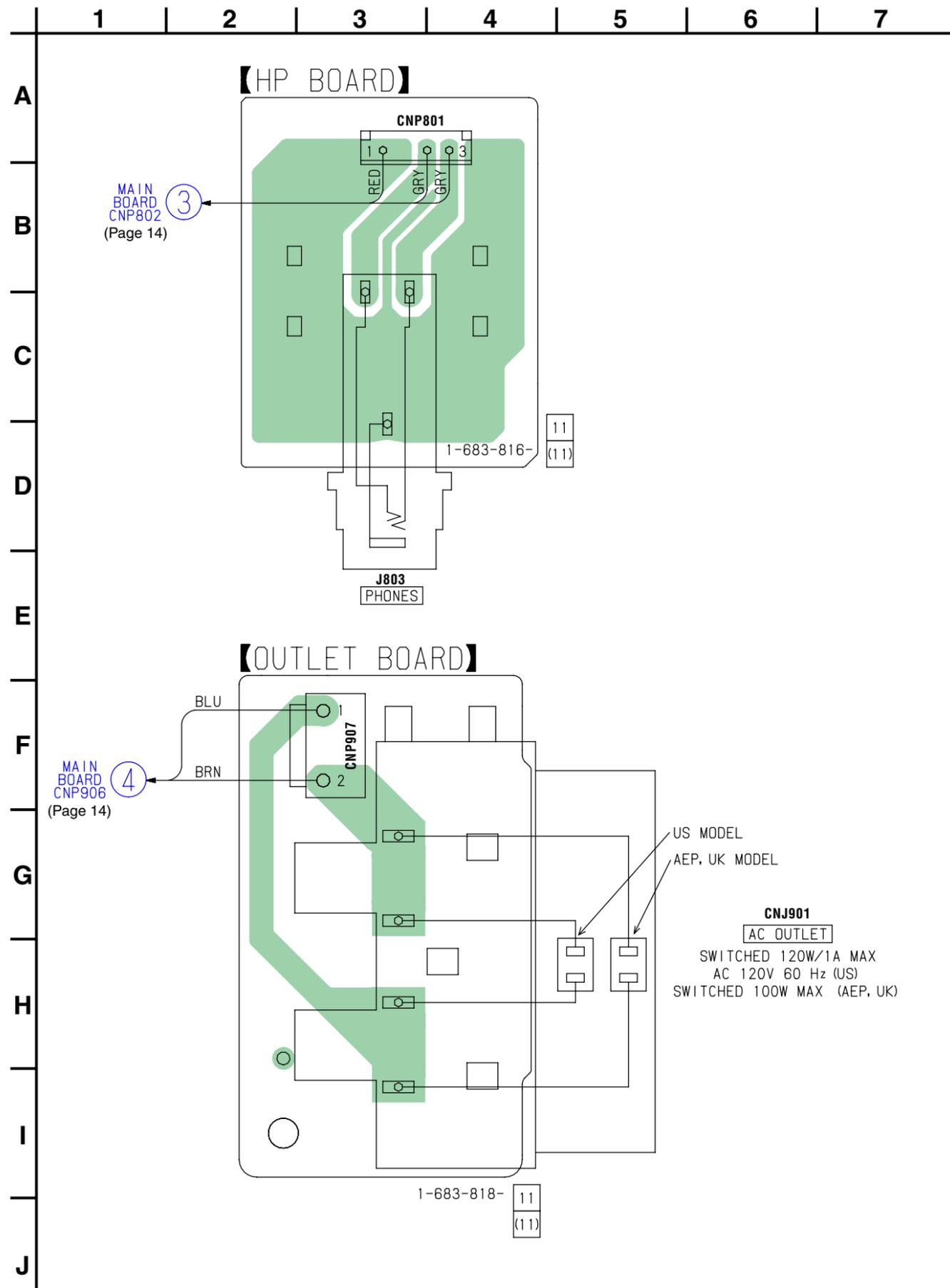


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D701	E-7	D906	B-10	IC601	E-6	Q751	G-9
D751	E-7	D907	D-9	IC901	C-10	Q752	G-9
D781	E-10	D908	E-13	IC902	D-11	Q753	G-8
D782	C-8	D909	D-13	IC903	B-7	Q754	G-9
D783	C-7	D910	E-13	(IC904)	E-1	Q755	F-8
D784	E-7	D911	D-13			Q756	E-9
D785	E-7	D912	E-9	Q424	D-5	Q781	E-10
D786	F-10	D913	E-11	Q474	D-5	Q782	F-9
D787	F-10	D914	D-5	Q680	F-5	Q783	F-9
D788	D-7	D981	E-10	Q681	E-5	Q784	D-7
D789	E-12	D982	B-12	Q701	F-5	Q785	D-7
D901	B-10			Q702	G-5	Q786	E-6
D902	B-11	IC401	C-4	Q703	G-4	Q901	B-10
D903	B-10	IC402	E-4	Q704	G-6	Q902	C-11
D904	B-10	IC403	D-6	Q705	F-6	Q903	E-10
D905	B-10	IC404	C-6	Q706	F-7	Q904	E-10

() : AEP, UK model

4-6. PRINTED WIRING BOARDS — H/P, OUTLET SECTION — • Refer to page 11 for Circuit Boards Location.



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for 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.
- Δ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

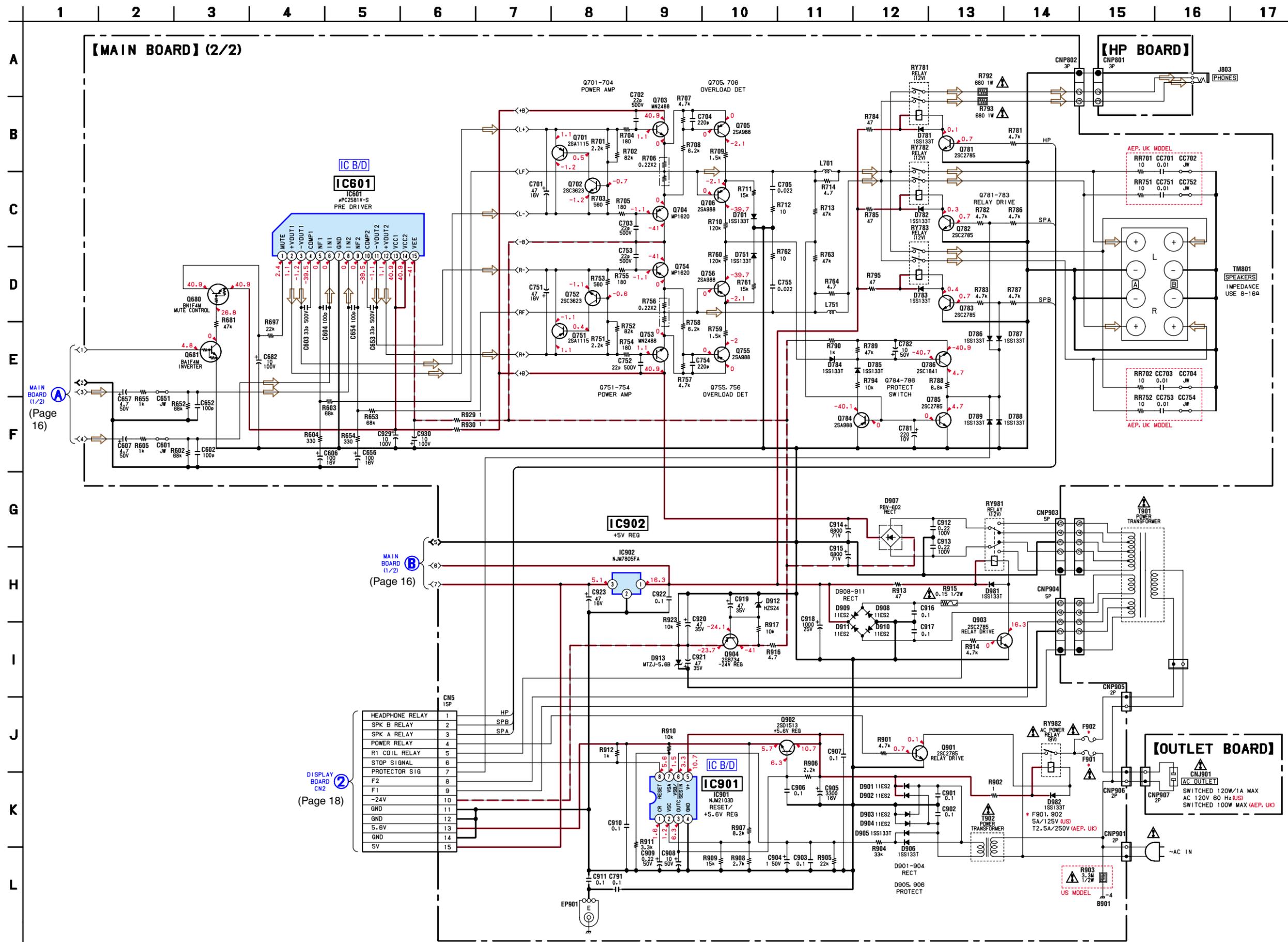
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM
- Voltages are taken with a VOM (Input impedance 10 M 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.
 - : FM/AM
 - : MD/TAPE
 - : VIDEO 1
 - : CD
 - : VIDEO 2

for printed wiring boards:

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

4-8. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 15 for Common Note on Schematic Diagram and page 20 for IC Block Diagrams.



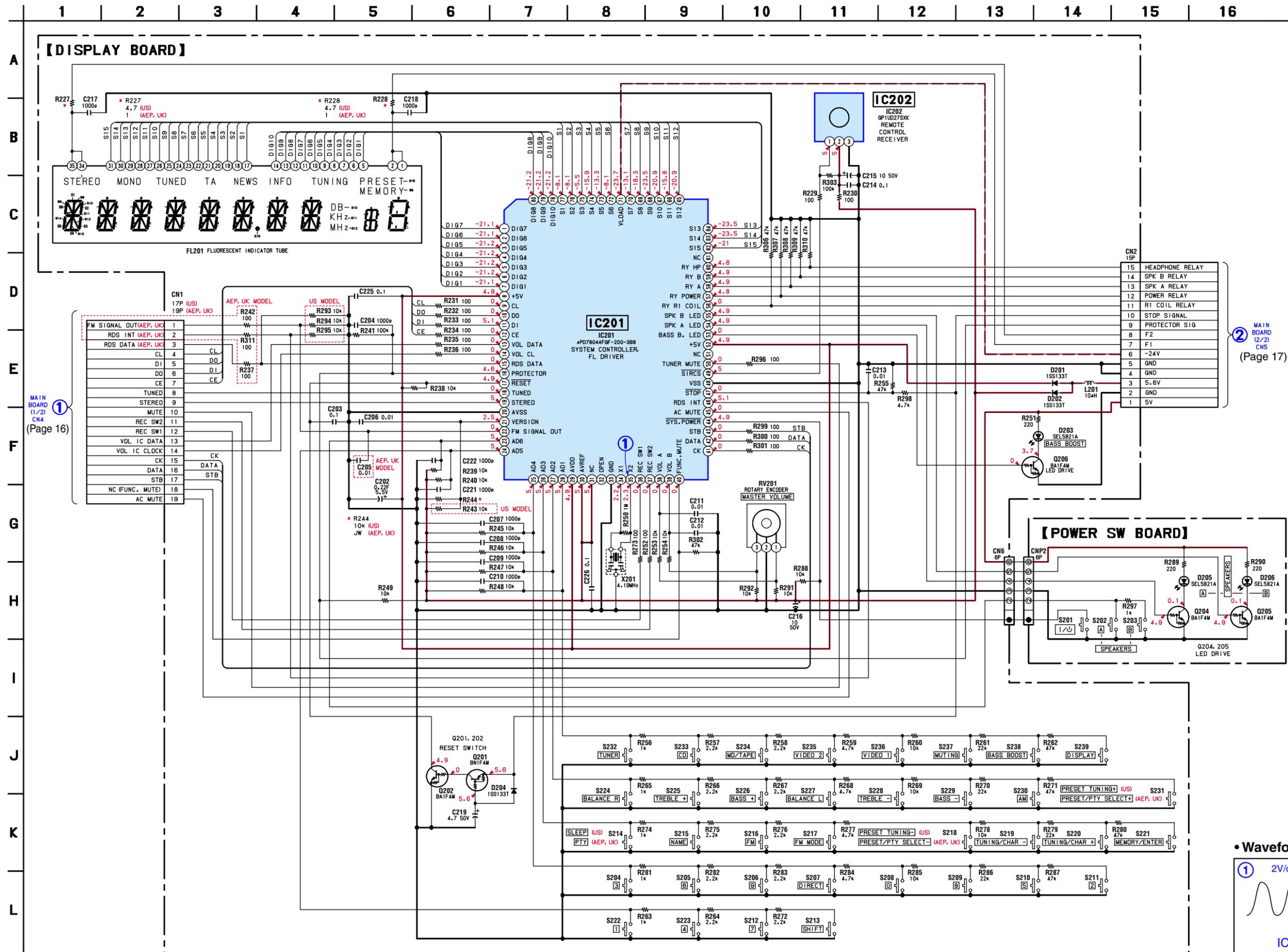
MAIN BOARD (1/2)
(Page 16)

MAIN BOARD (1/2)
(Page 16)

DISPLAY BOARD CN2
(Page 18)

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

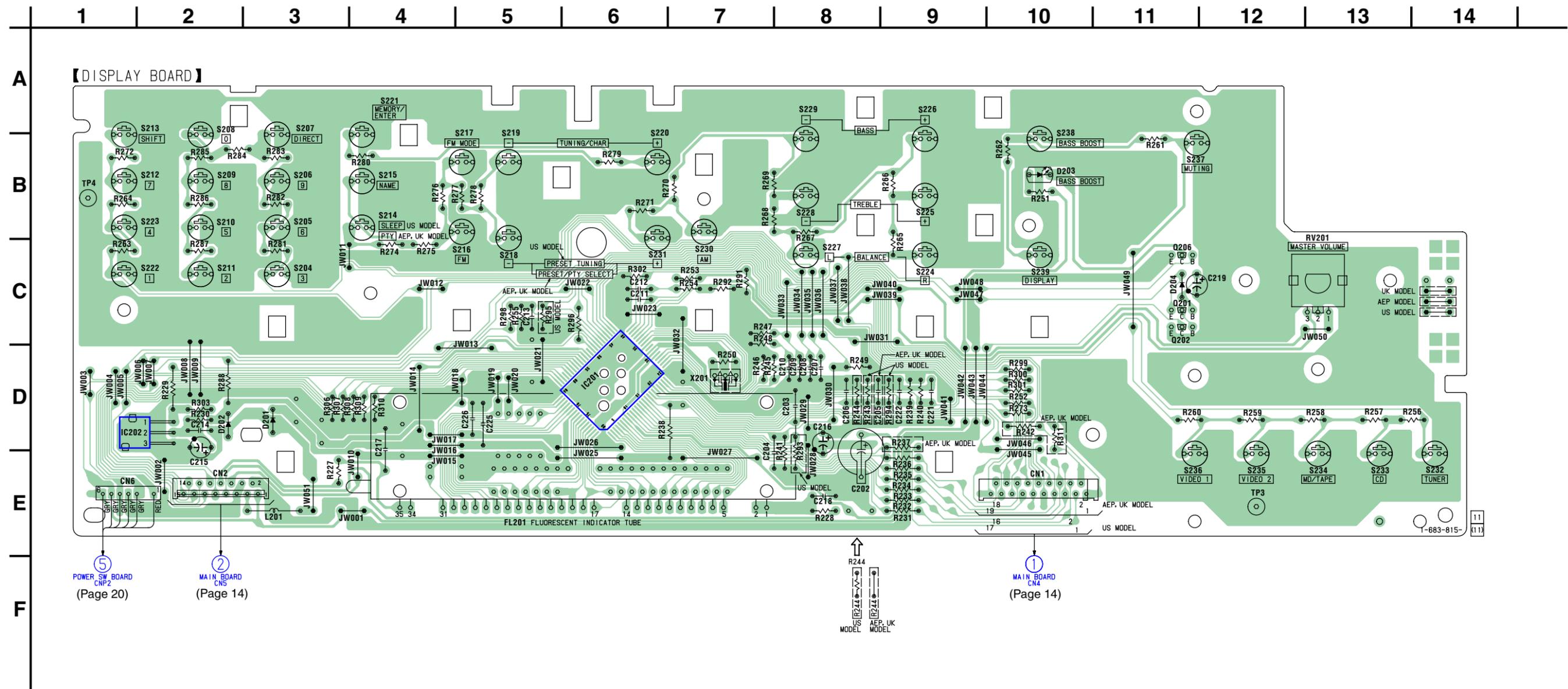
4-9. SCHEMATIC DIAGRAM — DISPLAY SECTION — • Refer to page 15 for Common Note on Schematic Diagram.



MAIN BOARD (1/2) CN4 (Page 16)

MAIN BOARD (2/2) CN5 (Page 17)

4-10. PRINTED WIRING BOARD — DISPLAY SECTION — • Refer to page 11 for Circuit Boards Location and page 15 for Common Note on Printed Wiring Boards.

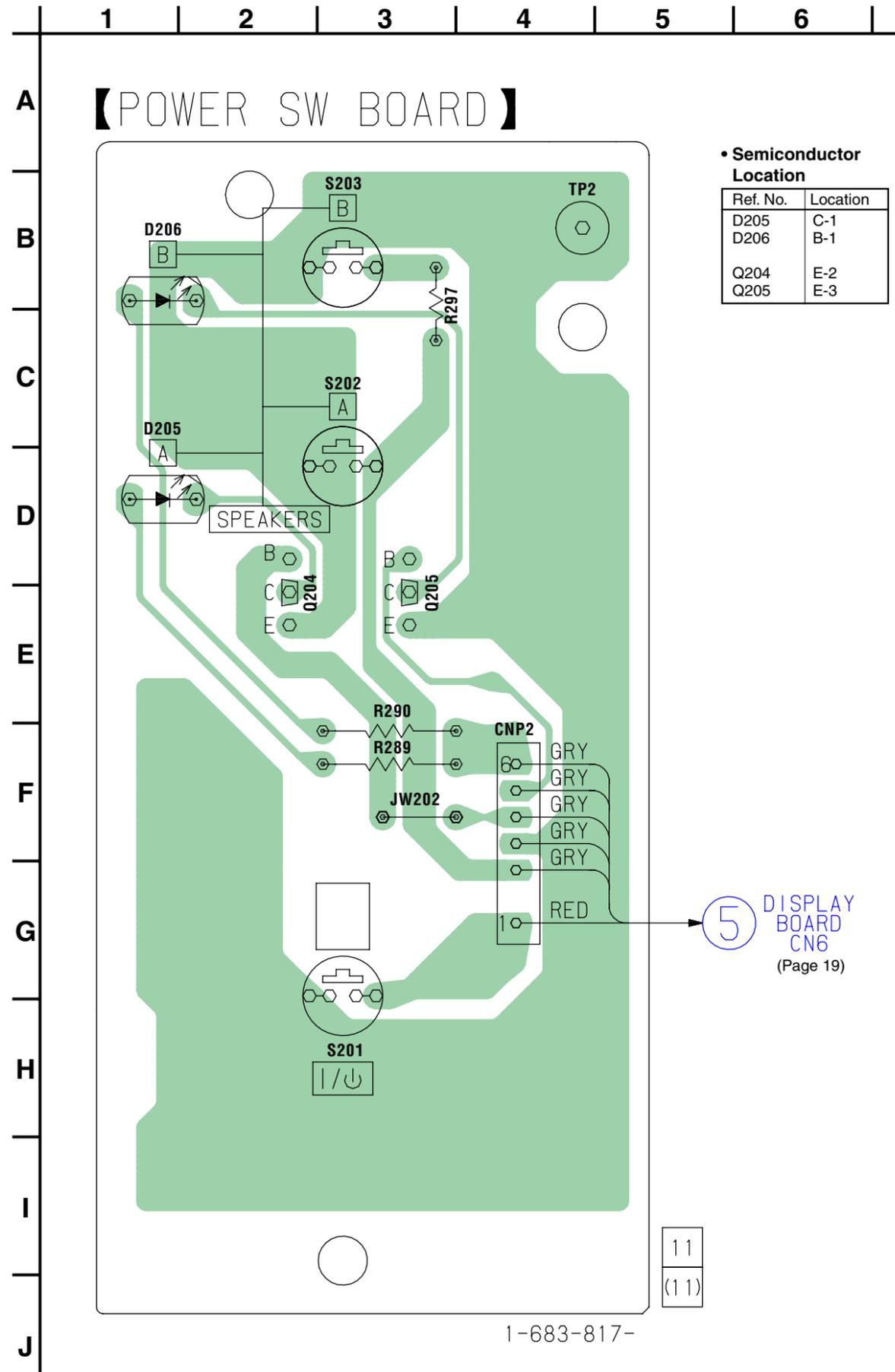


• Semiconductor Location

Ref. No.	Location
D201	D-3
D202	D-2
D203	B-10
D204	C-11
IC201	D-6
IC202	D-1
Q201	C-11
Q202	C-11
Q206	C-11

4-11. PRINTED WIRING BOARD — POWER SW SECTION —

• Refer to page 11 for Circuit Boards Location and page 15 for Common Note on Printed Wiring Boards.



• Semiconductor Location

Ref. No.	Location
D205	C-1
D206	B-1
Q204	E-2
Q205	E-3

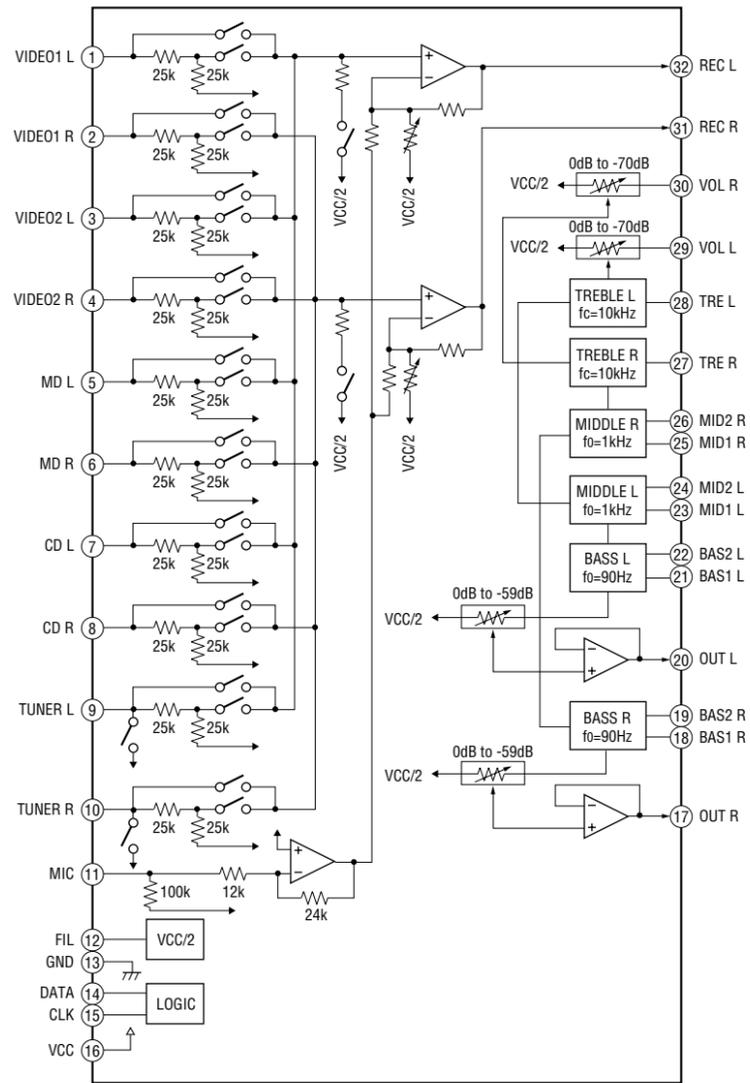
5 DISPLAY BOARD CN6 (Page 19)

11
(11)

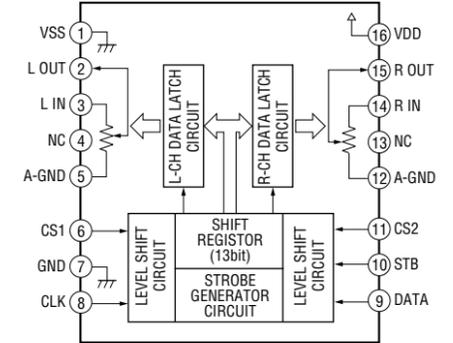
1-683-817-

• IC Block Diagrams

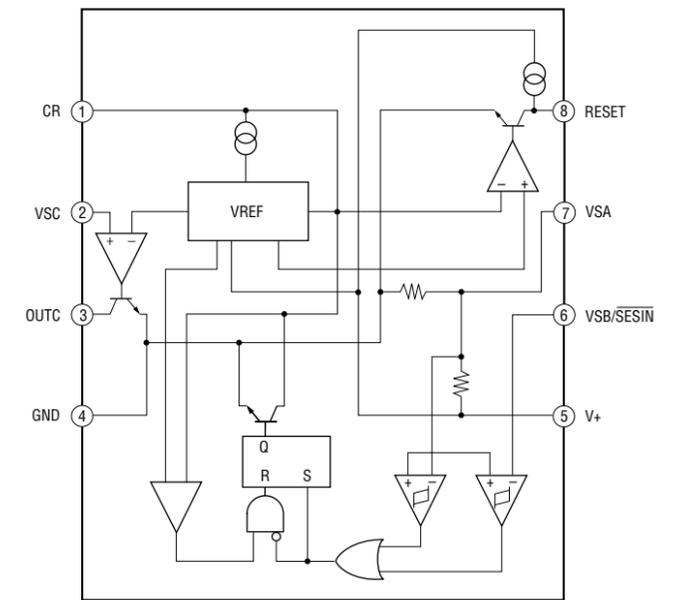
IC401 BD3861FS



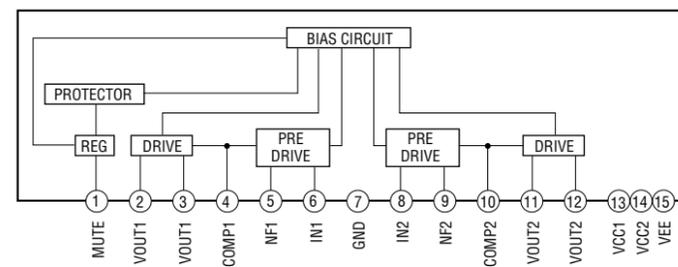
IC402 TC9299P



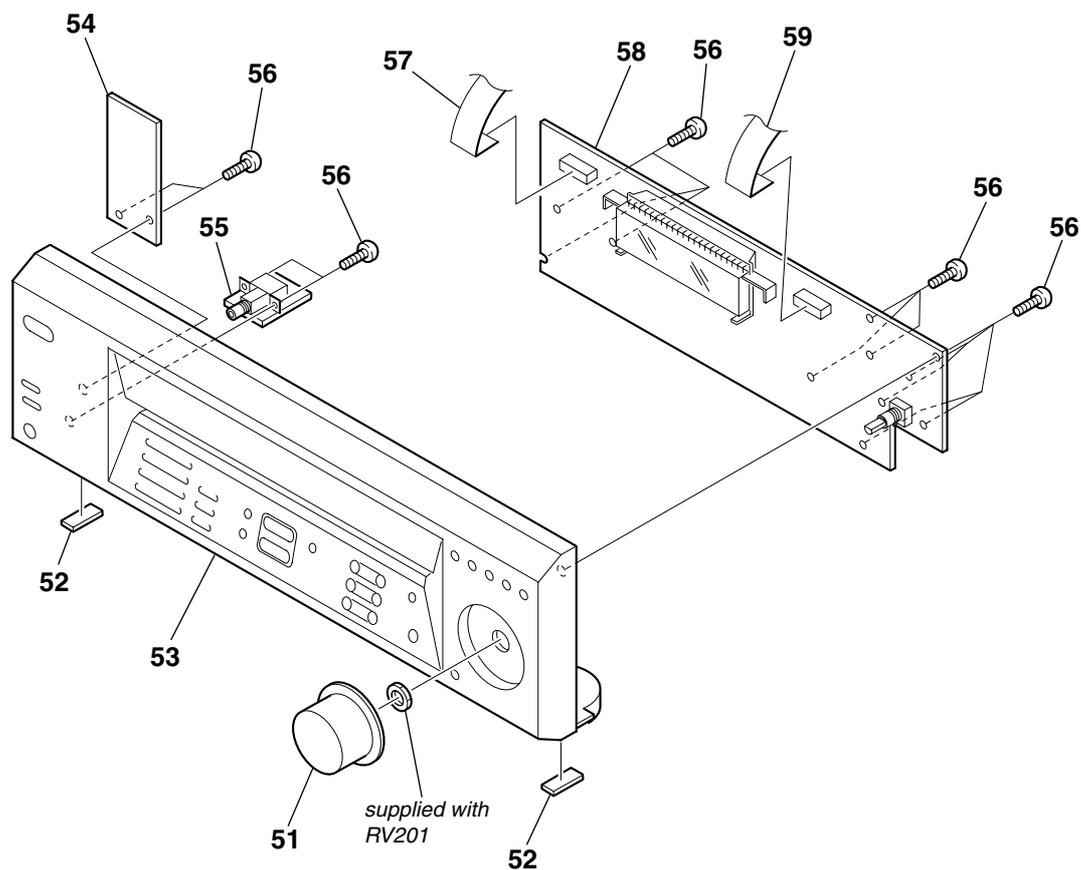
IC901 NJM2103D



IC601 μPC2581V-S

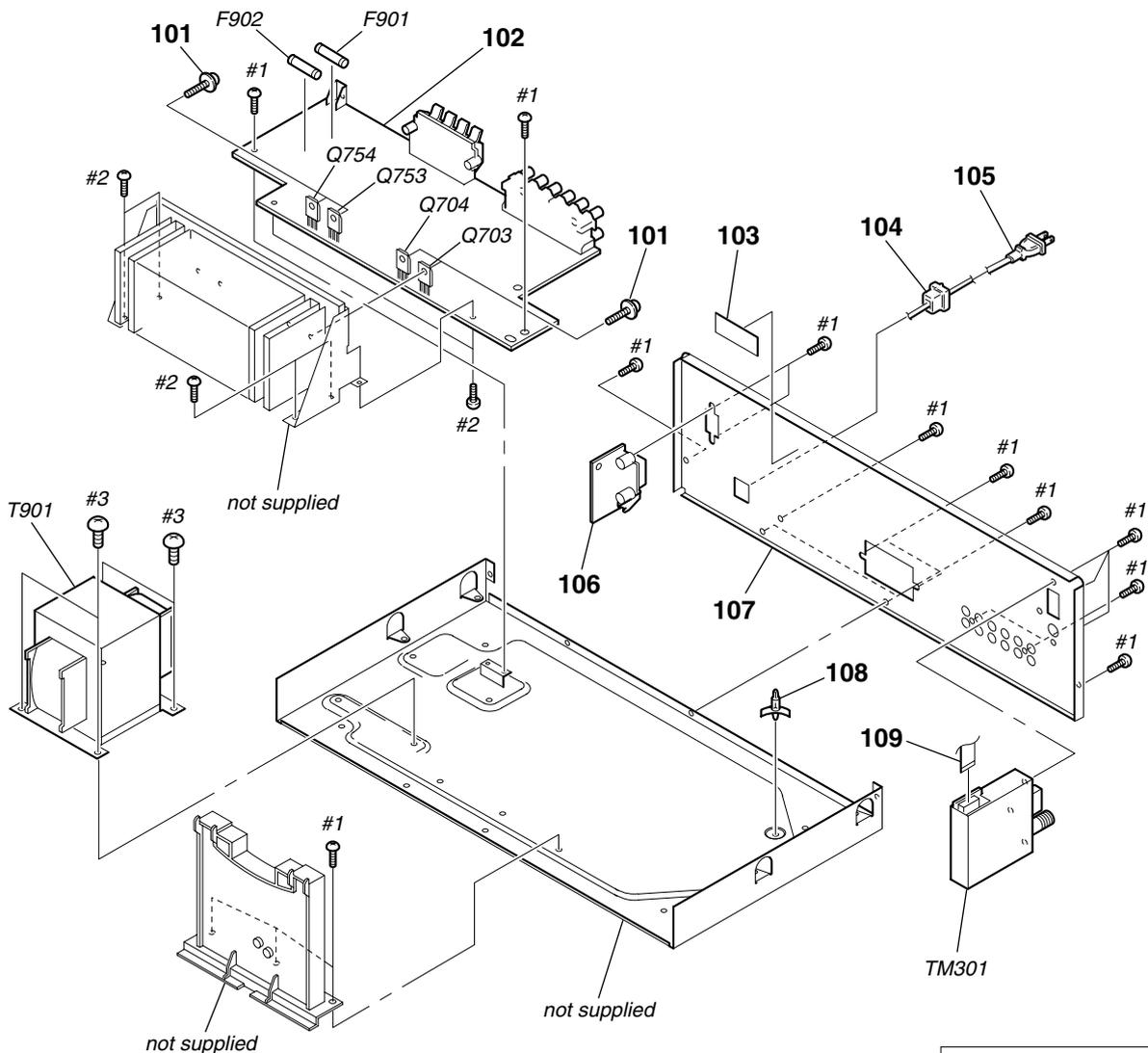


5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-232-113-01	KNOB (VOL)		56	4-951-620-01	SCREW (2.6X8), +BVTP	
52	4-921-941-01	CUSHION		57	1-765-332-11	WIRE (FLAT TYPE) (15 CORE)	
53	X-4954-453-1	PANEL ASSY, FRONT (US)		58	A-4727-878-A	DISPLAY BOARD, COMPLETE (US)	
53	X-4954-455-1	PANEL ASSY, FRONT (AEP,UK)		58	A-4727-882-A	DISPLAY BOARD, COMPLETE (AEP,UK)	
54	1-683-817-11	POWER SW BOARD		59	1-773-054-11	WIRE (FLAT TYPE) (17 CORE) (US)	
55	1-683-816-11	HP BOARD		59	1-773-125-11	WIRE (FLAT TYPE) (19 CORE) (AEP,UK)	

5-3. 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
101	3-905-609-01	SCREW (TRANSISTOR)		Δ F902	1-532-464-31	FUSE (T2.5A/250V) (AEP,UK)	
102	A-4727-875-A	MAIN BOARD, COMPLETE (US)		Δ F902	1-576-109-11	FUSE (5A/125V) (US)	
102	A-4727-881-A	MAIN BOARD, COMPLETE (AEP,UK)		Q703	8-749-010-25	TRANSISTOR MN2488-OPY-M	
* 103	3-703-044-26	LABEL, CAUTION (US)		Q704	8-749-010-26	TRANSISTOR MP1620-OPY-M	
104	3-703-244-00	BUSHING (FBS001), CORD		Q753	8-749-010-25	TRANSISTOR MN2488-OPY-M	
Δ 105	1-769-744-11	CORD, POWER (AEP,UK)		Q754	8-749-010-26	TRANSISTOR MP1620-OPY-M	
Δ 105	1-783-820-11	CORD, POWER (US)		Δ T901	1-437-625-11	TRANSFORMER, POWER (US)	
106	1-683-818-11	OUTLET BOARD		Δ T901	1-437-626-11	TRANSFORMER, POWER (AEP,UK)	
107	4-238-277-01	PANEL (DE1), BACK (US)		TM301	1-693-533-11	TUNER (FM/AM) (ANTENNA) (AEP,UK)	
107	4-238-277-11	PANEL (DE1), BACK (AEP)		TM301	1-693-534-71	TUNER (FM/AM) (ANTENNA) (US)	
107	4-238-277-21	PANEL (DE1), BACK (UK)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
108	4-924-098-01	HOLDER, PC BOARD		#2	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
109	1-769-943-11	WIRE (FLAT TYPE) (11 CORE) (US)		#3	7-685-880-09	SCREW +BVTT 4X6 (S)	
109	1-773-007-11	WIRE (FLAT TYPE) (15 CORE) (AEP,UK)					
Δ F901	1-532-464-31	FUSE (T2.5A/250V) (AEP,UK)					
Δ F901	1-576-109-11	FUSE (5A/125V) (US)					

DISPLAY

**SECTION 6
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.. : μA.. uPA.. : μPA..
uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
uF : μF
- COILS
uH : μH

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
	A-4727-878-A	DISPLAY BOARD, COMPLETE (US)	
	A-4727-882-A	DISPLAY BOARD, COMPLETE (AEP,UK)	

*	4-921-941-01	CUSHION (FL)	
	4-943-107-11	HOLDER (FL TUBE)	
		< CAPACITOR >	
C202	1-104-905-11	DOUBLE LAYERS 0.22F	5.5V
C203	1-164-159-21	CERAMIC 0.1uF	50V
C204	1-128-821-21	CERAMIC 0.001uF 5%	50V
C205	1-127-876-11	CERAMIC 0.01uF 10%	50V (AEP,UK)
C206	1-127-876-21	CERAMIC 0.01uF 10%	50V
C207	1-128-821-21	CERAMIC 0.001uF 5%	50V
C208	1-128-821-21	CERAMIC 0.001uF 5%	50V
C209	1-128-821-21	CERAMIC 0.001uF 5%	50V
C210	1-128-821-21	CERAMIC 0.001uF 5%	50V
C211	1-127-876-21	CERAMIC 0.01uF 10%	50V
C212	1-127-876-21	CERAMIC 0.01uF 10%	50V
C213	1-127-876-21	CERAMIC 0.01uF 10%	50V
C214	1-164-159-21	CERAMIC 0.1uF	50V
C215	1-126-795-11	ELECT 10uF 20%	50V
C216	1-126-795-11	ELECT 10uF 20%	50V
C217	1-128-821-21	CERAMIC 0.001uF 5%	50V
C218	1-128-821-21	CERAMIC 0.001uF 5%	50V
C219	1-126-794-11	ELECT 4.7uF 20%	50V
C221	1-128-821-21	CERAMIC 0.001uF 5%	50V
C222	1-128-821-21	CERAMIC 0.001uF 5%	50V
C225	1-164-159-21	CERAMIC 0.1uF	50V
C226	1-164-159-21	CERAMIC 0.1uF	50V
		< CONNECTOR >	
CN1	1-568-440-11	SOCKET, CONNECTOR 17P (US)	
CN1	1-569-323-11	SOCKET, CONNECTOR 19P (AEP,UK)	
CN2	1-569-321-11	SOCKET, CONNECTOR 15P	
CN6	1-779-977-11	PIN, CONNECTOR 6P	
		< DIODE >	
D201	8-719-991-33	DIODE 1SS133T-77	
D202	8-719-991-33	DIODE 1SS133T-77	
D203	8-719-046-39	LED SEL5821A-TP15 (BASS BOOST)	
D204	8-719-991-33	DIODE 1SS133T-77	

Ref. No.	Part No.	Description	Remark
		< FLUORESCENT INDICATOR >	
FL201	1-517-662-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC201	6-801-317-01	IC uPD78044FGF-200-3B9	
IC202	6-600-055-01	IC GP1UD27SXK	
		< COIL >	
L201	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q201	8-729-900-63	TRANSISTOR DTA124ES	
Q202	8-729-900-36	TRANSISTOR DTC124ES	
Q206	8-729-900-36	TRANSISTOR DTC124ES	
		< RESISTOR >	
R227	1-249-381-11	CARBON 1 5%	1/4W (AEP,UK)
R227	1-249-389-11	CARBON 4.7 5%	1/4W (US)
R228	1-249-381-11	CARBON 1 5%	1/4W (AEP,UK)
R228	1-249-389-11	CARBON 4.7 5%	1/4W (US)
R229	1-247-807-31	CARBON 100 5%	1/4W
R230	1-247-807-31	CARBON 100 5%	1/4W
R231	1-247-807-31	CARBON 100 5%	1/4W
R232	1-247-807-31	CARBON 100 5%	1/4W
R233	1-247-807-31	CARBON 100 5%	1/4W
R234	1-247-807-31	CARBON 100 5%	1/4W
R235	1-247-807-31	CARBON 100 5%	1/4W
R236	1-247-807-31	CARBON 100 5%	1/4W
R237	1-247-807-31	CARBON 100 5%	1/4W (AEP,UK)
R238	1-249-429-11	CARBON 10K 5%	1/4W
R239	1-249-429-11	CARBON 10K 5%	1/4W
R240	1-249-429-11	CARBON 10K 5%	1/4W
R241	1-249-441-11	CARBON 100K 5%	1/4W
R242	1-247-807-31	CARBON 100 5%	1/4W (AEP,UK)
R243	1-249-429-11	CARBON 10K 5%	1/4W (US)
R244	1-249-429-11	CARBON 10K 5%	1/4W (US)

STR-DE185

DISPLAY **HP** **MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
S233	1-771-410-21	SWITCH, TACTILE (CD)		C462	1-126-964-11	ELECT 10uF 20% 50V	
S234	1-771-410-21	SWITCH, TACTILE (MD/TAPE)		C463	1-126-794-11	ELECT 4.7uF 20% 50V	
S235	1-771-410-21	SWITCH, TACTILE (VIDEO 2)		C464	1-136-167-00	FILM 0.15uF 5% 50V	
S236	1-771-410-21	SWITCH, TACTILE (VIDEO 1)		C465	1-136-167-00	FILM 0.15uF 5% 50V	
S237	1-771-410-21	SWITCH, TACTILE (MUTING)		C466	1-136-169-00	FILM 0.22uF 5% 50V	
S238	1-771-410-21	SWITCH, TACTILE (BASS BOOST)		C467	1-136-169-00	FILM 0.22uF 5% 50V	
S239	1-771-410-21	SWITCH, TACTILE (DISPLAY)		C468	1-137-368-11	MYLAR 0.0047uF 5% 50V	
		< VIBRATOR >		C469	1-126-964-11	ELECT 10uF 20% 50V	
X201	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)		C470	1-126-794-11	ELECT 4.7uF 20% 50V	
*****				C471	1-164-159-21	CERAMIC 0.1uF 50V	
	1-683-816-11	HP BOARD		C472	1-126-965-11	ELECT 22uF 20% 50V	
		*****		C474	1-126-964-11	ELECT 10uF 20% 50V	
		< CONNECTOR >		C475	1-126-965-11	ELECT 22uF 20% 50V	
CNP801	1-691-765-11	PLUG (MICRO CONNECTOR) 3P		C476	1-126-964-11	ELECT 10uF 20% 50V	
		< JACK >		C483	1-126-965-11	ELECT 22uF 20% 50V	
J803	1-750-733-11	JACK (LARGE TYPE) (PHONES)		C484	1-126-964-11	ELECT 10uF 20% 50V	
*****				C485	1-164-159-21	CERAMIC 0.1uF 50V	
	A-4727-875-A	MAIN BOARD, COMPLETE (US)		C490	1-126-935-11	ELECT 470uF 20% 10V	
	A-4727-881-A	MAIN BOARD, COMPLETE (AEP,UK)		C602	1-128-809-11	CERAMIC 100PF 5% 50V	
		*****		C603	1-102-233-00	CERAMIC 33PF 10% 500V	
	1-533-223-11	HOLDER, FUSE		C604	1-128-809-11	CERAMIC 100PF 5% 50V	
	7-685-646-79	SCREW +BVTTP 3X8 TYPE2 IT-3		C606	1-126-933-11	ELECT 100uF 20% 16V	
		< CAPACITOR >		C607	1-126-794-11	ELECT 4.7uF 20% 50V	
C402	1-126-964-11	ELECT 10uF 20% 50V		C652	1-128-809-11	CERAMIC 100PF 5% 50V	
C404	1-126-964-11	ELECT 10uF 20% 50V		C653	1-102-233-00	CERAMIC 33PF 10% 500V	
C406	1-126-964-11	ELECT 10uF 20% 50V		C654	1-128-809-11	CERAMIC 100PF 5% 50V	
C408	1-126-964-11	ELECT 10uF 20% 50V		C656	1-126-933-11	ELECT 100uF 20% 16V	
C410	1-126-964-11	ELECT 10uF 20% 50V		C657	1-126-794-11	ELECT 4.7uF 20% 50V	
C412	1-126-964-11	ELECT 10uF 20% 50V		C682	1-128-582-11	ELECT 10uF 20% 100V	
C413	1-126-794-11	ELECT 4.7uF 20% 50V		C701	1-126-947-11	ELECT 47uF 20% 16V	
C414	1-136-167-00	FILM 0.15uF 5% 50V		C702	1-107-597-11	CERAMIC 22PF 10% 500V	
C415	1-136-167-00	FILM 0.15uF 5% 50V		C703	1-107-597-11	CERAMIC 22PF 10% 500V	
C416	1-136-169-00	FILM 0.22uF 5% 50V		C704	1-128-813-11	CERAMIC 220PF 5% 50V	
C417	1-136-169-00	FILM 0.22uF 5% 50V		C705	1-137-372-11	MYLAR 0.022uF 5% 50V	
C418	1-137-368-11	MYLAR 0.0047uF 5% 50V		C751	1-126-947-11	ELECT 47uF 20% 16V	
C419	1-126-964-11	ELECT 10uF 20% 50V		C752	1-107-597-11	CERAMIC 22PF 10% 500V	
C420	1-126-794-11	ELECT 4.7uF 20% 50V		C753	1-107-597-11	CERAMIC 22PF 10% 500V	
C421	1-164-159-21	CERAMIC 0.1uF 50V		C754	1-128-813-11	CERAMIC 220PF 5% 50V	
C422	1-126-965-11	ELECT 22uF 20% 50V		C755	1-137-372-11	MYLAR 0.022uF 5% 50V	
C424	1-126-964-11	ELECT 10uF 20% 50V		C781	1-126-934-11	ELECT 220uF 20% 10V	
C425	1-126-965-11	ELECT 22uF 20% 50V		C782	1-126-964-11	ELECT 10uF 20% 50V	
C426	1-126-964-11	ELECT 10uF 20% 50V		C791	1-164-159-21	CERAMIC 0.1uF 50V	
C452	1-126-964-11	ELECT 10uF 20% 50V		C901	1-164-159-21	CERAMIC 0.1uF 50V	
C454	1-126-964-11	ELECT 10uF 20% 50V		C902	1-164-159-21	CERAMIC 0.1uF 50V	
C456	1-126-964-11	ELECT 10uF 20% 50V		C903	1-164-159-21	CERAMIC 0.1uF 50V	
C458	1-126-964-11	ELECT 10uF 20% 50V		C904	1-126-960-11	ELECT 1uF 20% 50V	
C460	1-126-964-11	ELECT 10uF 20% 50V		C905	1-126-936-11	ELECT 3300uF 20% 16V	
				C906	1-164-159-21	CERAMIC 0.1uF 50V	
				C907	1-164-159-21	CERAMIC 0.1uF 50V	
				C908	1-126-964-11	ELECT 10uF 20% 50V	
				C909	1-126-957-11	ELECT 0.22uF 20% 50V	
				C910	1-164-159-21	CERAMIC 0.1uF 50V	
				C911	1-164-159-21	CERAMIC 0.1uF 50V	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC904	8-759-701-75	IC NJM7805FA (AEP,UK)		R418	1-249-433-11	CARBON 22K 5%	1/4W
		< JACK >		R421	1-249-437-11	CARBON 47K 5%	1/4W
J801	1-774-411-11	JACK, PIN 6P (CD,MD/TAPE)		R422	1-249-433-11	CARBON 22K 5%	1/4W
J802	1-793-776-12	JACK, PIN 6P (VIDEO 2,VIDEO 1)		R423	1-249-433-11	CARBON 22K 5%	1/4W
		< COIL >		R424	1-249-429-11	CARBON 10K 5%	1/4W
L701	1-422-009-13	COIL, AIR-CORE		R425	1-249-425-11	CARBON 4.7K 5%	1/4W
L751	1-422-009-13	COIL, AIR-CORE		R426	1-249-425-11	CARBON 4.7K 5%	1/4W
		< TRANSISTOR >		R427	1-249-441-11	CARBON 100K 5%	1/4W
Q424	8-729-900-36	TRANSISTOR DTC124ES		R428	1-249-441-11	CARBON 100K 5%	1/4W
Q474	8-729-900-36	TRANSISTOR DTC124ES		R451	1-249-425-11	CARBON 4.7K 5%	1/4W
Q680	8-729-900-63	TRANSISTOR DTA124ES		R452	1-249-425-11	CARBON 4.7K 5%	1/4W
Q681	8-729-900-36	TRANSISTOR DTC124ES		R453	1-249-421-11	CARBON 2.2K 5%	1/4W
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE		R454	1-249-425-11	CARBON 4.7K 5%	1/4W
Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK		R455	1-249-425-11	CARBON 4.7K 5%	1/4W
Q705	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R456	1-249-425-11	CARBON 4.7K 5%	1/4W
Q706	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R457	1-249-425-11	CARBON 4.7K 5%	1/4W
Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE		R458	1-249-425-11	CARBON 4.7K 5%	1/4W
Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK		R459	1-249-421-11	CARBON 2.2K 5%	1/4W
Q755	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R460	1-249-421-11	CARBON 2.2K 5%	1/4W
Q756	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R461	1-249-425-11	CARBON 4.7K 5%	1/4W
Q781	8-729-119-79	TRANSISTOR 2SC2785-FEK		R462	1-249-425-11	CARBON 4.7K 5%	1/4W
Q782	8-729-119-79	TRANSISTOR 2SC2785-FEK		R463	1-247-843-11	CARBON 3.3K 5%	1/4W
Q783	8-729-119-79	TRANSISTOR 2SC2785-FEK		R464	1-247-843-11	CARBON 3.3K 5%	1/4W
Q784	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R465	1-249-417-11	CARBON 1K 5%	1/4W
Q785	8-729-119-79	TRANSISTOR 2SC2785-FEK		R466	1-249-437-11	CARBON 47K 5%	1/4W
Q786	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R467	1-249-433-11	CARBON 22K 5%	1/4W
Q901	8-729-119-79	TRANSISTOR 2SC2785-FEK		R468	1-249-433-11	CARBON 22K 5%	1/4W
Q902	8-729-045-21	TRANSISTOR 2SD1513TP-LK		R471	1-249-437-11	CARBON 47K 5%	1/4W
Q903	8-729-119-79	TRANSISTOR 2SC2785-FEK		R472	1-249-433-11	CARBON 22K 5%	1/4W
Q904	8-729-140-97	TRANSISTOR 2SB734-34		R473	1-249-433-11	CARBON 22K 5%	1/4W
		< RESISTOR >		R474	1-249-429-11	CARBON 10K 5%	1/4W
R401	1-249-425-11	CARBON 4.7K 5%	1/4W	R475	1-249-425-11	CARBON 4.7K 5%	1/4W
R402	1-249-425-11	CARBON 4.7K 5%	1/4W	R476	1-249-425-11	CARBON 4.7K 5%	1/4W
R403	1-249-421-11	CARBON 2.2K 5%	1/4W	R477	1-249-441-11	CARBON 100K 5%	1/4W
R404	1-249-425-11	CARBON 4.7K 5%	1/4W	R478	1-249-441-11	CARBON 100K 5%	1/4W
R405	1-249-425-11	CARBON 4.7K 5%	1/4W	R481	1-247-807-31	CARBON 100 5%	1/4W
R406	1-249-425-11	CARBON 4.7K 5%	1/4W	R482	1-247-807-31	CARBON 100 5%	1/4W
R407	1-249-425-11	CARBON 4.7K 5%	1/4W	R483	1-247-807-31	CARBON 100 5%	1/4W
R408	1-249-425-11	CARBON 4.7K 5%	1/4W	R484	1-247-807-31	CARBON 100 5%	1/4W
R409	1-249-421-11	CARBON 2.2K 5%	1/4W	R485	1-247-807-31	CARBON 100 5%	1/4W
R410	1-249-421-11	CARBON 2.2K 5%	1/4W	R602	1-249-439-11	CARBON 68K 5%	1/4W
R411	1-249-425-11	CARBON 4.7K 5%	1/4W	R603	1-249-439-11	CARBON 68K 5%	1/4W
R412	1-249-425-11	CARBON 4.7K 5%	1/4W	R604	1-249-411-11	CARBON 330 5%	1/4W
R413	1-247-843-11	CARBON 3.3K 5%	1/4W	R605	1-249-417-11	CARBON 1K 5%	1/4W
R414	1-247-843-11	CARBON 3.3K 5%	1/4W	R652	1-249-439-11	CARBON 68K 5%	1/4W
R415	1-249-417-11	CARBON 1K 5%	1/4W	R653	1-249-439-11	CARBON 68K 5%	1/4W
R416	1-249-437-11	CARBON 47K 5%	1/4W	R654	1-249-411-11	CARBON 330 5%	1/4W
R417	1-249-433-11	CARBON 22K 5%	1/4W	R655	1-249-417-11	CARBON 1K 5%	1/4W
				R681	1-249-437-11	CARBON 47K 5%	1/4W
				R697	1-249-433-11	CARBON 22K 5%	1/4W
				R701	1-249-421-11	CARBON 2.2K 5%	1/4W
				R702	1-249-440-11	CARBON 82K 5%	1/4W
				R703	1-249-414-11	CARBON 560 5%	1/4W

MAIN	OUTLET
------	--------

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R704	1-249-408-11	CARBON	180 5% 1/4W	R914	1-249-425-11	CARBON	4.7K 5% 1/4W
R705	1-249-408-11	CARBON	180 5% 1/4W	△ R915	1-240-877-11	FUSIBLE	0.15 5% 1/2W F
R706	1-233-352-41	COMPONENT, ENCAPSULATED 0.22X2		R916	1-249-389-11	CARBON	4.7 5% 1/4W
R707	1-249-425-11	CARBON	4.7K 5% 1/4W	R917	1-249-429-11	CARBON	10K 5% 1/4W
R708	1-240-855-11	CARBON	6.2K 5% 1/4W	R919	1-249-439-11	CARBON	68K 5% 1/4W
R709	1-249-419-11	CARBON	1.5K 5% 1/4W	R920	1-249-439-11	CARBON	68K 5% 1/4W
R710	1-247-881-00	CARBON	120K 5% 1/4W	R921	1-247-807-31	CARBON	100 5% 1/4W
R711	1-249-431-11	CARBON	15K 5% 1/4W				(AEP,UK)
R712	1-249-393-11	CARBON	10 5% 1/4W	R922	1-247-807-31	CARBON	100 5% 1/4W
R713	1-249-437-11	CARBON	47K 5% 1/4W				(AEP,UK)
R714	1-249-389-11	CARBON	4.7 5% 1/4W	R923	1-249-429-11	CARBON	10K 5% 1/4W
R751	1-249-421-11	CARBON	2.2K 5% 1/4W	R924	1-247-807-31	CARBON	100 5% 1/4W
R752	1-249-440-11	CARBON	82K 5% 1/4W	R925	1-247-807-31	CARBON	100 5% 1/4W
R753	1-249-414-11	CARBON	560 5% 1/4W	R926	1-247-791-11	CARBON	22 5% 1/4W
R754	1-249-408-11	CARBON	180 5% 1/4W	R929	1-249-381-11	CARBON	1 5% 1/4W
R755	1-249-408-11	CARBON	180 5% 1/4W	R930	1-249-381-11	CARBON	1 5% 1/4W
R756	1-233-352-41	COMPONENT, ENCAPSULATED 0.22X2		RR701	1-249-393-11	CARBON	10 5% 1/4W
R757	1-249-425-11	CARBON	4.7K 5% 1/4W				(AEP,UK)
R758	1-240-855-11	CARBON	6.2K 5% 1/4W	RR702	1-249-393-11	CARBON	10 5% 1/4W
R759	1-249-419-11	CARBON	1.5K 5% 1/4W				(AEP,UK)
R760	1-247-881-00	CARBON	120K 5% 1/4W	RR751	1-249-393-11	CARBON	10 5% 1/4W
R761	1-249-431-11	CARBON	15K 5% 1/4W				(AEP,UK)
R762	1-249-393-11	CARBON	10 5% 1/4W	RR752	1-249-393-11	CARBON	10 5% 1/4W
R763	1-249-437-11	CARBON	47K 5% 1/4W				(AEP,UK)
R764	1-249-389-11	CARBON	4.7 5% 1/4W				< RELAY >
R781	1-249-425-11	CARBON	4.7K 5% 1/4W	RY781	1-755-421-11	RELAY (12V)	
R782	1-249-425-11	CARBON	4.7K 5% 1/4W	RY782	1-755-421-11	RELAY (12V)	
R783	1-249-425-11	CARBON	4.7K 5% 1/4W	RY783	1-755-421-11	RELAY (12V)	
R784	1-249-401-11	CARBON	47 5% 1/4W	RY981	1-755-013-11	RELAY (12V)	
R785	1-249-401-11	CARBON	47 5% 1/4W	△ RY982	1-755-334-11	RELAY, AC POWER (9V)	
R786	1-249-425-11	CARBON	4.7K 5% 1/4W				< TRANSFORMER >
R787	1-249-425-11	CARBON	4.7K 5% 1/4W	△ T902	1-435-435-11	TRANSFORMER, POWER (AEP,UK)	
R788	1-249-427-11	CARBON	6.8K 5% 1/4W	△ T902	1-435-436-11	TRANSFORMER, POWER (US)	
R789	1-249-437-11	CARBON	47K 5% 1/4W				< TERMINAL BOARD >
R790	1-249-417-11	CARBON	1K 5% 1/4W	TM801	1-537-376-11	TERMINAL BOARD (SPEAKERS)	
△ R792	1-215-868-00	METAL OXIDE	680 5% 1W F				*****
△ R793	1-215-868-00	METAL OXIDE	680 5% 1W F				1-683-818-11 OUTLET BOARD
R794	1-249-429-11	CARBON	10K 5% 1/4W				*****
R795	1-249-401-11	CARBON	47 5% 1/4W				< AC OUTLET >
R901	1-249-425-11	CARBON	4.7K 5% 1/4W				(US)
R902	1-249-381-11	CARBON	1 5% 1/4W	△ CNJ901	1-785-285-11	OUTLET, AC (1P) (AC OUTLET) (AEP,UK)	
△ R903	1-219-237-11	SOLID	3.3M 20% 1/2W F	△ CNJ901	1-785-834-11	OUTLET, AC (1P) (AC OUTLET) (US)	
R904	1-249-435-11	CARBON	33K 5% 1/4W				< CONNECTOR >
R905	1-249-433-11	CARBON	22K 5% 1/4W	CNP907	1-564-321-00	PIN, CONNECTOR 2P	
R906	1-249-421-11	CARBON	2.2K 5% 1/4W				*****
R907	1-249-428-11	CARBON	8.2K 5% 1/4W				
R908	1-249-422-11	CARBON	2.7K 5% 1/4W				
R909	1-249-431-11	CARBON	15K 5% 1/4W				
R910	1-249-429-11	CARBON	10K 5% 1/4W				
R911	1-247-843-11	CARBON	3.3K 5% 1/4W				
R912	1-249-417-11	CARBON	1K 5% 1/4W				
R913	1-249-401-11	CARBON	47 5% 1/4W				

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

POWER SW

Ref. No.	Part No.	Description	Remark
	1-683-817-11	POWER SW BOARD *****	
		< DIODE >	
D205	8-719-046-39	LED SEL5821A-TP15 (SPEAKERS A)	
D206	8-719-046-39	LED SEL5821A-TP15 (SPEAKERS B)	
		< TRANSISTOR >	
Q204	8-729-900-36	TRANSISTOR DTC124ES	
Q205	8-729-900-36	TRANSISTOR DTC124ES	
		< RESISTOR >	
R289	1-249-409-11	CARBON 220 5% 1/4W	
R290	1-249-409-11	CARBON 220 5% 1/4W	
R297	1-249-417-11	CARBON 1K 5% 1/4W	
		< SWITCH >	
S201	1-771-410-21	SWITCH, TACTILE (I/⏏)	
S202	1-771-410-21	SWITCH, TACTILE (SPEAKERS A)	
S203	1-771-410-21	SWITCH, TACTILE (SPEAKERS B)	

		MISCELLANEOUS *****	
57	1-765-332-11	WIRE (FLAT TYPE) (15 CORE)	
59	1-773-054-11	WIRE (FLAT TYPE) (17 CORE) (US)	
59	1-773-125-11	WIRE (FLAT TYPE) (19 CORE) (AEP,UK)	
△ 105	1-769-744-11	CORD, POWER (AEP,UK)	
△ 105	1-783-820-11	CORD, POWER (US)	
109	1-769-943-11	WIRE (FLAT TYPE) (11 CORE) (US)	
109	1-773-007-11	WIRE (FLAT TYPE) (15 CORE) (AEP,UK)	
△ F901	1-532-464-31	FUSE (T2.5A/250V) (AEP,UK)	
△ F901	1-576-109-11	FUSE (5A/125V) (US)	
△ F902	1-532-464-31	FUSE (T2.5A/250V) (AEP,UK)	
△ F902	1-576-109-11	FUSE (5A/125V) (US)	
Q703	8-749-010-25	TRANSISTOR MN2488-OPY-M	
Q704	8-749-010-26	TRANSISTOR MP1620-OPY-M	
Q753	8-749-010-25	TRANSISTOR MN2488-OPY-M	
Q754	8-749-010-26	TRANSISTOR MP1620-OPY-M	
△ T901	1-437-625-11	TRANSFORMER, POWER (US)	
△ T901	1-437-626-11	TRANSFORMER, POWER (AEP,UK)	
TM301	1-693-533-11	TUNER (FM/AM) (ANTENNA) (AEP,UK)	
TM301	1-693-534-71	TUNER (FM/AM) (ANTENNA) (US)	

Ref. No.	Part No.	Description	Remark
		ACCESSORIES *****	
	1-477-133-11	REMOTE COMMANDER (RM-U185)	
	1-501-374-11	ANTENNA, LOOP (AM)	
	1-501-594-11	ANTENNA (FM) (AEP,UK)	
△	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
	1-793-184-21	CONNECTOR (F TYPE ADAPTOR) (FM ANTENNA) (US)	
	4-228-696-01	COVER, BATTERY (for RM-U185)	
	4-238-304-11	MANUAL, INSTRUCTION (ENGLISH)	
	4-238-304-21	MANUAL, INSTRUCTION (FRENCH,DUTCH, SWEDISH,GERMAN,SPANISH, ITALIAN,POLISH) (AEP)	
	4-238-304-31	MANUAL, INSTRUCTION (DANISH,FINNISH) (AEP)	
	4-238-304-41	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	

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

STR-DE185

SONY®

SERVICE MANUAL

Ver 1.1 2003. 11

US Model
AEP Model
UK Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject : Change of Main Board and IC601

(SPM-03110)

When performing service and inspection, check the suffix of the part number of the main board.

• DISCRIMINATION

– MAIN BOARD (COMPONENT SIDE) –



MAIN Board Part No.
Former : 1-683-814-11
New : 1-686-993-11

TABLE OF CONTENTS

1. Printed Wiring Board –Main Section– 3
 2. Schematic Diagram –Main Section (1/2)– 4
 3. Schematic Diagram –Main Section (2/2)– 5
 4. Electrical Parts List 6

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

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

for schematic diagram:

- All capacitors are in μF unless otherwise noted. pF: μpF
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.
- \triangle : internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

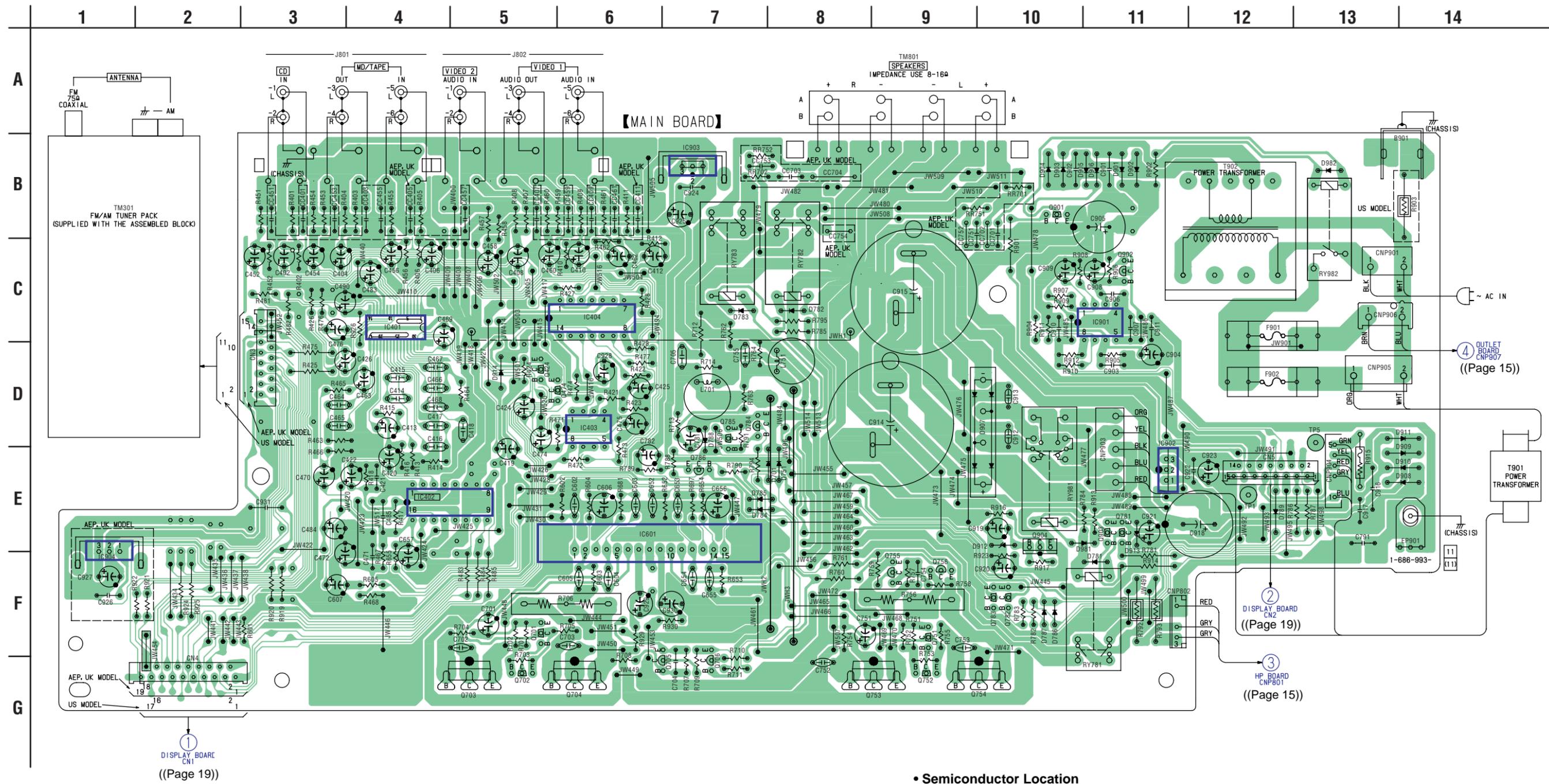
Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

-  : B+ Line.
-  : B- Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM
- Voltages are taken with a VOM (Input impedance $10\text{ M}\Omega$).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 -  : FM/AM
 -  : MD/TAPE
 -  : VIDEO 1
 -  : CD
 -  : VIDEO 2

for printed wiring boards:

-  : parts extracted from the component side.
- \triangle : internal component.
-  : Pattern from the side which enables seeing.
- () : Refer to page of Supplement-1.
- (()) : Refer to page of Service Manual.

1. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 2 for Common Note on Printed Wiring Boards.

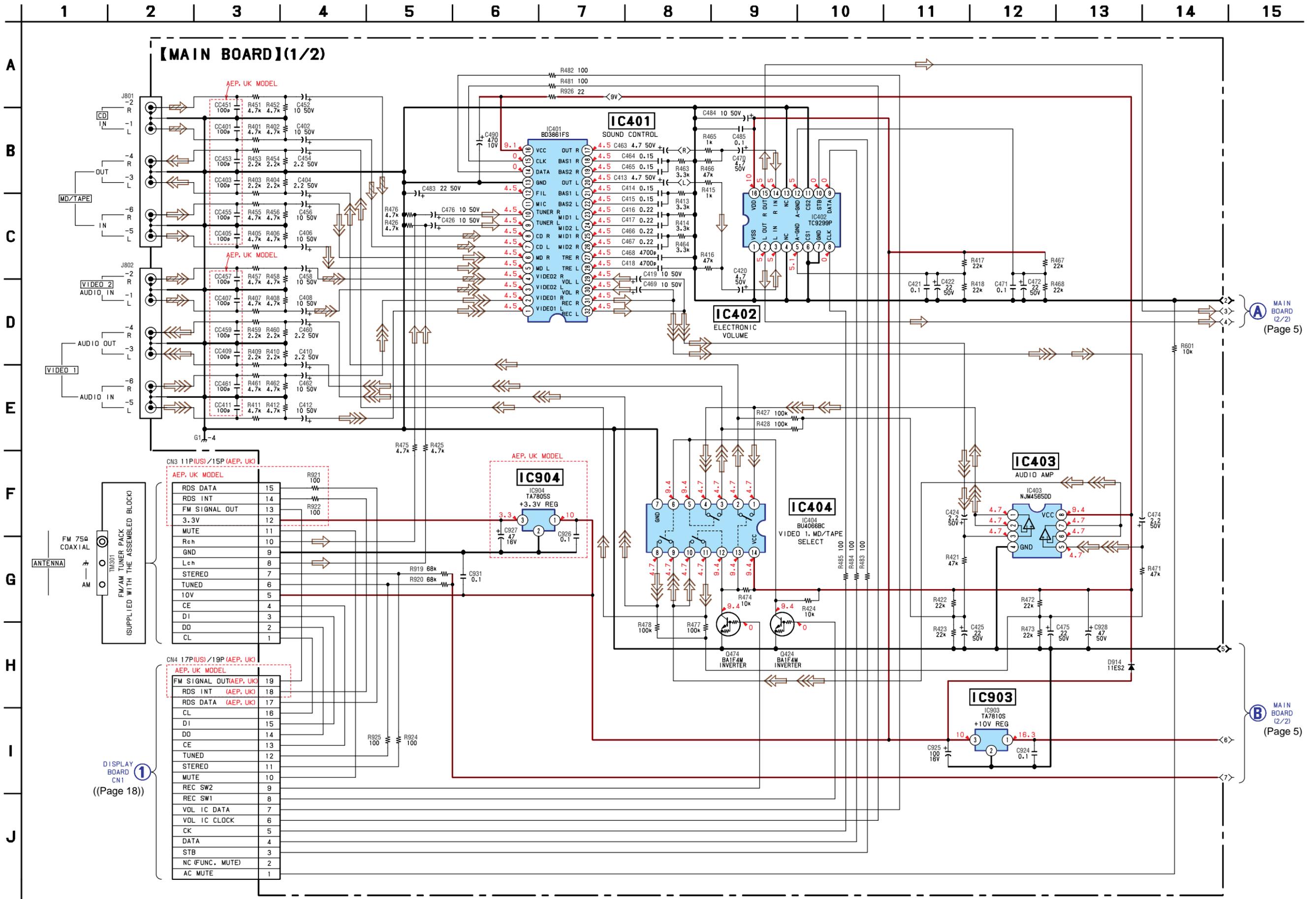


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D701	E-8	D906	B-11	IC601	E-6	Q753	G-9
D751	E-8	D907	D-10	IC901	C-10	Q754	G-10
D781	E-11	D908	E-13	IC902	E-11	Q755	F-9
D782	C-8	D909	E-13	IC903	B-7	Q756	E-9
D783	C-7	D910	E-13	(IC904)	E-1	Q781	E-10
D784	E-7	D911	E-13			Q782	F-10
D785	E-7	D912	E-10	Q424	D-5	Q783	F-10
D786	F-10	D913	E-11	Q474	D-6	Q784	D-7
D787	F-10	D914	D-5	Q701	F-5	Q785	D-7
D788	D-7	D981	E-10	Q702	G-5	Q786	E-7
D789	E-12	D982	B-13	Q703	G-5	Q901	B-10
D901	B-11			Q704	G-6	Q902	C-11
D902	B-11	IC401	C-4	Q705	G-7	Q903	E-11
D903	B-10	IC402	E-4	Q706	G-7	Q904	E-10
D904	B-10	IC403	D-6	Q751	G-9		
D905	B-11	IC404	C-6	Q752	G-9		

() : AEP, UK model

2. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 2 for Common Note on Schematic Diagram.



A MAIN BOARD (2/2) (Page 5)

B MAIN BOARD (2/2) (Page 5)

【MAIN BOARD】(1/2)

FM/AM TUNER PACK (SUPPLIED WITH THE ASSEMBLED BLOCK)

CN3 11P(US)/15P(AEP, UK)	
RDS DATA	15
RDS INT	14
FM SIGNAL OUT	13
3.3V	12
MUTE	11
Rch	10
GND	9
Lch	8
STEREO	7
TUNED	6
10V	5
CE	4
DI	3
DO	2
CL	1

CN4 17P(US)/19P(AEP, UK)

CN4 17P(US)/19P(AEP, UK)	
FM SIGNAL OUT(AEP, UK)	19
RDS INT (AEP, UK)	18
RDS DATA (AEP, UK)	17
CL	16
DI	15
DO	14
CE	13
TUNED	12
STEREO	11
MUTE	10
REC SW2	9
REC SW1	8
VOL IC DATA	7
VOL IC CLOCK	6
CK	5
DATA	4
STB	3
NC (FUNC. MUTE)	2
AC MUTE	1

DISPLAY BOARD CN1 (Page 18)

4. 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.

Ref. No.	Part No.	Description	Remark
A-4734-652-A		MAIN BOARD, COMPLETE (US)	
A-4734-684-A		MAIN BOARD, COMPLETE (AEP,UK)	

1-533-223-11		HOLDER, FUSE	
7-685-646-79		SCREW +BVTP 3X8 TYPE2 IT-3	
< CAPACITOR >			
C402	1-126-964-11	ELECT	10uF 20% 50V
C404	1-126-961-11	ELECT	2.2uF 20% 50V
C406	1-126-964-11	ELECT	10uF 20% 50V
C408	1-126-964-11	ELECT	10uF 20% 50V
C410	1-126-961-11	ELECT	2.2uF 20% 50V
C412	1-126-964-11	ELECT	10uF 20% 50V
C413	1-126-963-11	ELECT	4.7uF 20% 50V
C414	1-136-167-00	FILM	0.15uF 5% 50V
C415	1-136-167-00	FILM	0.15uF 5% 50V
C416	1-136-169-00	FILM	0.22uF 5% 50V
C417	1-136-169-00	FILM	0.22uF 5% 50V
C418	1-136-287-11	MYLAR	0.0047uF 5% 50V
C419	1-126-964-11	ELECT	10uF 20% 50V
C420	1-126-963-11	ELECT	4.7uF 20% 50V
C421	1-164-159-11	CERAMIC	0.1uF 50V
C422	1-126-965-11	ELECT	22uF 20% 50V
C424	1-126-961-11	ELECT	2.2uF 20% 50V
C425	1-126-965-11	ELECT	22uF 20% 50V
C426	1-126-964-11	ELECT	10uF 20% 50V
C452	1-126-964-11	ELECT	10uF 20% 50V
C454	1-126-961-11	ELECT	2.2uF 20% 50V
C456	1-126-964-11	ELECT	10uF 20% 50V
C458	1-126-964-11	ELECT	10uF 20% 50V
C460	1-126-961-11	ELECT	2.2uF 20% 50V
C462	1-126-964-11	ELECT	10uF 20% 50V
C463	1-126-963-11	ELECT	4.7uF 20% 50V
C464	1-136-167-00	FILM	0.15uF 5% 50V
C465	1-136-167-00	FILM	0.15uF 5% 50V
C466	1-136-169-00	FILM	0.22uF 5% 50V
C467	1-136-169-00	FILM	0.22uF 5% 50V
C468	1-136-287-11	MYLAR	0.0047uF 5% 50V
C469	1-126-964-11	ELECT	10uF 20% 50V
C470	1-126-963-11	ELECT	4.7uF 20% 50V
C471	1-164-159-11	CERAMIC	0.1uF 50V
C472	1-126-965-11	ELECT	22uF 20% 50V
C474	1-126-961-11	ELECT	2.2uF 20% 50V
C475	1-126-965-11	ELECT	22uF 20% 50V

Ref. No.	Part No.	Description	Remark
C476	1-126-964-11	ELECT	10uF 20% 50V
C483	1-126-965-11	ELECT	22uF 20% 50V
C484	1-126-964-11	ELECT	10uF 20% 50V
C485	1-164-159-11	CERAMIC	0.1uF 50V
C490	1-126-935-11	ELECT	470uF 20% 10V
C602	1-128-817-11	CERAMIC	470PF 5% 50V
C603	1-101-810-00	CERAMIC	100PF 5% 500V
C604	1-101-810-00	CERAMIC	100PF 5% 500V
C605	1-128-583-11	CERAMIC	3PF 0.25PF 500V
C606	1-126-933-11	ELECT	100uF 20% 16V
C607	1-126-963-11	ELECT	4.7uF 20% 50V
C652	1-128-817-11	CERAMIC	470PF 5% 50V
C653	1-101-810-00	CERAMIC	100PF 5% 500V
C654	1-101-810-00	CERAMIC	100PF 5% 500V
C655	1-128-583-11	CERAMIC	3PF 0.25PF 500V
C656	1-126-933-11	ELECT	100uF 20% 16V
C657	1-126-963-11	ELECT	4.7uF 20% 50V
C701	1-126-947-11	ELECT	47uF 20% 16V
C702	1-107-597-11	CERAMIC	22PF 10% 500V
C703	1-107-597-11	CERAMIC	22PF 10% 500V
C704	1-128-813-11	CERAMIC	220PF 5% 50V
C705	1-137-372-11	MYLAR	0.022uF 5% 50V
C751	1-126-947-11	ELECT	47uF 20% 16V
C752	1-107-597-11	CERAMIC	22PF 10% 500V
C753	1-107-597-11	CERAMIC	22PF 10% 500V
C754	1-128-813-11	CERAMIC	220PF 5% 50V
C755	1-137-372-11	MYLAR	0.022uF 5% 50V
C781	1-126-933-11	ELECT	100uF 20% 16V
C782	1-126-964-11	ELECT	10uF 20% 50V
C791	1-164-159-11	CERAMIC	0.1uF 50V
C901	1-164-159-11	CERAMIC	0.1uF 50V
C902	1-164-159-11	CERAMIC	0.1uF 50V
C903	1-164-159-11	CERAMIC	0.1uF 50V
C904	1-126-960-11	ELECT	1uF 20% 50V
C905	1-126-936-11	ELECT	3300uF 20% 16V
C906	1-164-159-11	CERAMIC	0.1uF 50V
C907	1-164-159-11	CERAMIC	0.1uF 50V
C908	1-126-964-11	ELECT	10uF 20% 50V
C909	1-126-957-11	ELECT	0.22uF 20% 50V
C910	1-164-159-11	CERAMIC	0.1uF 50V
C911	1-164-159-11	CERAMIC	0.1uF 50V
C912	1-135-851-11	MYLAR	0.22uF 100V
C913	1-135-851-11	MYLAR	0.22uF 100V
C914	1-165-946-11	ELECT	6800uF 20% 71V
C915	1-165-946-11	ELECT	6800uF 20% 71V

MAIN

MAIN

Ref. No.	Part No.	Description	Remark
C916	1-164-159-11	CERAMIC	0.1uF 50V
C917	1-164-159-11	CERAMIC	0.1uF 50V
C918	1-126-944-11	ELECT	3300uF 20% 25V
C919	1-126-947-11	ELECT	47uF 20% 35V
C920	1-126-947-11	ELECT	47uF 20% 35V
C921	1-126-947-11	ELECT	47uF 20% 35V
C922	1-164-159-11	CERAMIC	0.1uF 50V
C923	1-126-947-11	ELECT	47uF 20% 16V
C924	1-164-159-11	CERAMIC	0.1uF 50V
C925	1-126-933-11	ELECT	100uF 20% 16V
C926	1-164-159-11	CERAMIC	0.1uF 50V (AEP,UK)
C927	1-126-947-11	ELECT	47uF 20% 16V (AEP,UK)
C928	1-126-967-11	ELECT	47uF 20% 50V
C929	1-128-582-11	ELECT	10uF 20% 100V
C930	1-128-582-11	ELECT	10uF 20% 100V
C931	1-164-159-11	CERAMIC	0.1uF 50V
CC401	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC403	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC405	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC407	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC409	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC411	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC451	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC453	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC455	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC457	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC459	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC461	1-128-809-11	CERAMIC	100PF 5% 50V (AEP,UK)
CC701	1-127-876-11	CERAMIC	0.01uF 10% 50V (AEP,UK)
CC703	1-127-876-11	CERAMIC	0.01uF 10% 50V (AEP,UK)
CC751	1-127-876-11	CERAMIC	0.01uF 10% 50V (AEP,UK)
CC753	1-127-876-11	CERAMIC	0.01uF 10% 50V (AEP,UK)
CN3	1-569-060-11	SOCKET, CONNECTOR 11P (US)	
CN3	1-569-321-11	SOCKET, CONNECTOR 15P (AEP,UK)	
CN4	1-568-440-11	SOCKET, CONNECTOR 17P (US)	
CN4	1-569-323-11	SOCKET, CONNECTOR 19P (AEP,UK)	
CN5	1-569-321-11	SOCKET, CONNECTOR 15P	
CNP901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
* CNP903	1-564-242-00	PIN, CONNECTOR (3.96mm PITCH) 5P	
CNP904	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	
* CNP905	1-565-792-11	PIN, CONNECTOR (3.96mm PITCH) 2P	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D701	8-719-991-33	DIODE 1SS133T-77	
D751	8-719-991-33	DIODE 1SS133T-77	
D781	8-719-991-33	DIODE 1SS133T-77	
D782	8-719-991-33	DIODE 1SS133T-77	
D783	8-719-991-33	DIODE 1SS133T-77	
D784	8-719-991-33	DIODE 1SS133T-77	
D785	8-719-991-33	DIODE 1SS133T-77	
D786	8-719-991-33	DIODE 1SS133T-77	
D787	8-719-991-33	DIODE 1SS133T-77	
D788	8-719-991-33	DIODE 1SS133T-77	
D789	8-719-991-33	DIODE 1SS133T-77	
D901	6-500-522-11	DIODE 10EDB40-TA2B5	
D902	6-500-522-11	DIODE 10EDB40-TA2B5	
D903	6-500-522-11	DIODE 10EDB40-TA2B5	
D904	6-500-522-11	DIODE 10EDB40-TA2B5	
D905	8-719-991-33	DIODE 1SS133T-77	
D906	8-719-991-33	DIODE 1SS133T-77	
D907	8-719-072-05	DIODE RBV-602LF-A	
D908	6-500-522-11	DIODE 10EDB40-TA2B5	
D909	6-500-522-11	DIODE 10EDB40-TA2B5	
D910	6-500-522-11	DIODE 10EDB40-TA2B5	
D911	6-500-522-11	DIODE 10EDB40-TA2B5	
D912	8-719-936-34	DIODE HZS24LTD	
D913	8-719-109-89	DIODE RD5.6ES-B2	
D914	6-500-522-11	DIODE 10EDB40-TA2B5	
D981	8-719-991-33	DIODE 1SS133T-77	
D982	8-719-991-33	DIODE 1SS133T-77	
< EARTH TERMINAL >			
* EP901	1-537-738-21	TERMINAL, EARTH	
< IC >			
IC401	6-700-261-01	IC BD3861FS	
IC402	8-759-534-63	IC TC9299P	
IC403	8-759-636-74	IC M5218AP-22	
IC404	8-759-932-33	IC BU4066BC	
IC601	8-749-010-79	IC STK350-030	
IC901	8-759-333-83	IC NJM2103D	
IC902	8-759-231-53	IC TA7805S	
IC903	8-759-231-57	IC TA7810S	
IC904	8-759-231-53	IC TA7805S (AEP,UK)	
< JACK >			
J801	1-774-411-11	JACK, PIN 6P (CD,MD,TAPE)	
J802	1-793-776-12	JACK, PIN 6P (VIDEO1,VIDEO2)	
< COIL >			
L701	1-420-872-52	COIL, AIR-CORE	
L751	1-420-872-52	COIL, AIR-CORE	
< TRANSISTOR >			
Q424	8-729-900-36	TRANSISTOR DTC124ES	
Q474	8-729-900-36	TRANSISTOR DTC124ES	
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q705	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q706	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R466	1-249-437-11	CARBON 47K 5%	1/4W
Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE		R467	1-249-433-11	CARBON 22K 5%	1/4W
Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK		R468	1-249-433-11	CARBON 22K 5%	1/4W
Q755	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R471	1-249-437-11	CARBON 47K 5%	1/4W
Q756	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R472	1-249-433-11	CARBON 22K 5%	1/4W
Q781	8-729-119-79	TRANSISTOR 2SC2785-FEK		R473	1-249-433-11	CARBON 22K 5%	1/4W
Q782	8-729-119-79	TRANSISTOR 2SC2785-FEK		R474	1-249-429-11	CARBON 10K 5%	1/4W
Q783	8-729-119-79	TRANSISTOR 2SC2785-FEK		R475	1-249-425-11	CARBON 4.7K 5%	1/4W
Q784	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R476	1-249-425-11	CARBON 4.7K 5%	1/4W
Q785	8-729-119-79	TRANSISTOR 2SC2785-FEK		R477	1-249-441-11	CARBON 100K 5%	1/4W
Q786	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R478	1-249-441-11	CARBON 100K 5%	1/4W
Q901	8-729-119-79	TRANSISTOR 2SC2785-FEK		R481	1-247-807-31	CARBON 100 5%	1/4W
Q902	8-729-045-21	TRANSISTOR 2SD1513TP-LK		R482	1-247-807-31	CARBON 100 5%	1/4W
Q903	8-729-119-79	TRANSISTOR 2SC2785-FEK		R483	1-247-807-31	CARBON 100 5%	1/4W
Q904	8-729-140-97	TRANSISTOR 2SB734-34		R484	1-247-807-31	CARBON 100 5%	1/4W
< RESISTOR >				R485	1-247-807-31	CARBON 100 5%	1/4W
R401	1-249-425-11	CARBON 4.7K 5%	1/4W	R601	1-249-429-11	CARBON 10K 5%	1/4W
R402	1-249-425-11	CARBON 4.7K 5%	1/4W	R602	1-249-439-11	CARBON 68K 5%	1/4W
R403	1-249-421-11	CARBON 2.2K 5%	1/4W	R603	1-249-439-11	CARBON 68K 5%	1/4W
R404	1-249-421-11	CARBON 2.2K 5%	1/4W	R604	1-249-413-11	CARBON 470 5%	1/4W
R405	1-249-425-11	CARBON 4.7K 5%	1/4W	R605	1-249-417-11	CARBON 1K 5%	1/4W
R406	1-249-425-11	CARBON 4.7K 5%	1/4W	R652	1-249-439-11	CARBON 68K 5%	1/4W
R407	1-249-425-11	CARBON 4.7K 5%	1/4W	R653	1-249-439-11	CARBON 68K 5%	1/4W
R408	1-249-425-11	CARBON 4.7K 5%	1/4W	R654	1-249-413-11	CARBON 470 5%	1/4W
R409	1-249-421-11	CARBON 2.2K 5%	1/4W	R655	1-249-417-11	CARBON 1K 5%	1/4W
R410	1-249-421-11	CARBON 2.2K 5%	1/4W	R681	1-249-411-11	CARBON 330 5%	1/4W
R411	1-249-425-11	CARBON 4.7K 5%	1/4W	R697	1-249-411-11	CARBON 330 5%	1/4W
R412	1-249-425-11	CARBON 4.7K 5%	1/4W	R701	1-249-421-11	CARBON 2.2K 5%	1/4W
R413	1-247-843-11	CARBON 3.3K 5%	1/4W	R702	1-249-440-11	CARBON 82K 5%	1/4W
R414	1-247-843-11	CARBON 3.3K 5%	1/4W	R703	1-249-414-11	CARBON 560 5%	1/4W
R415	1-249-417-11	CARBON 1K 5%	1/4W	R704	1-249-408-11	CARBON 180 5%	1/4W
R416	1-249-437-11	CARBON 47K 5%	1/4W	R705	1-249-408-11	CARBON 180 5%	1/4W
R417	1-249-433-11	CARBON 22K 5%	1/4W	R706	1-234-182-11	ENCAPSULATED COMPONENT 0.22X2	
R418	1-249-433-11	CARBON 22K 5%	1/4W	R707	1-249-425-11	CARBON 4.7K 5%	1/4W
R421	1-249-437-11	CARBON 47K 5%	1/4W	R708	1-240-855-81	CARBON 6.2K 5%	1/4W
R422	1-249-433-11	CARBON 22K 5%	1/4W	R709	1-249-419-11	CARBON 1.5K 5%	1/4W
R423	1-249-433-11	CARBON 22K 5%	1/4W	R710	1-247-881-00	CARBON 120K 5%	1/4W
R424	1-249-429-11	CARBON 10K 5%	1/4W	R711	1-249-431-11	CARBON 15K 5%	1/4W
R425	1-249-425-11	CARBON 4.7K 5%	1/4W	R712	1-249-393-11	CARBON 10 5%	1/4W
R426	1-249-425-11	CARBON 4.7K 5%	1/4W	R713	1-249-437-11	CARBON 47K 5%	1/4W
R427	1-249-441-11	CARBON 100K 5%	1/4W	R714	1-249-389-11	CARBON 4.7 5%	1/4W
R428	1-249-441-11	CARBON 100K 5%	1/4W	R751	1-249-421-11	CARBON 2.2K 5%	1/4W
R451	1-249-425-11	CARBON 4.7K 5%	1/4W	R752	1-249-440-11	CARBON 82K 5%	1/4W
R452	1-249-425-11	CARBON 4.7K 5%	1/4W	R753	1-249-414-11	CARBON 560 5%	1/4W
R453	1-249-421-11	CARBON 2.2K 5%	1/4W	R754	1-249-408-11	CARBON 180 5%	1/4W
R454	1-249-421-11	CARBON 2.2K 5%	1/4W	R755	1-249-408-11	CARBON 180 5%	1/4W
R455	1-249-425-11	CARBON 4.7K 5%	1/4W	R756	1-234-182-11	ENCAPSULATED COMPONENT 0.22X2	
R456	1-249-425-11	CARBON 4.7K 5%	1/4W	R757	1-249-425-11	CARBON 4.7K 5%	1/4W
R457	1-249-425-11	CARBON 4.7K 5%	1/4W	R758	1-240-855-81	CARBON 6.2K 5%	1/4W
R458	1-249-425-11	CARBON 4.7K 5%	1/4W	R759	1-249-419-11	CARBON 1.5K 5%	1/4W
R459	1-249-421-11	CARBON 2.2K 5%	1/4W	R760	1-247-881-00	CARBON 120K 5%	1/4W
R460	1-249-421-11	CARBON 2.2K 5%	1/4W	R761	1-249-431-11	CARBON 15K 5%	1/4W
R461	1-249-425-11	CARBON 4.7K 5%	1/4W	R762	1-249-393-11	CARBON 10 5%	1/4W
R462	1-249-425-11	CARBON 4.7K 5%	1/4W	R763	1-249-437-11	CARBON 47K 5%	1/4W
R463	1-247-843-11	CARBON 3.3K 5%	1/4W	R764	1-249-389-11	CARBON 4.7 5%	1/4W
R464	1-247-843-11	CARBON 3.3K 5%	1/4W	R781	1-249-425-11	CARBON 4.7K 5%	1/4W
R465	1-249-417-11	CARBON 1K 5%	1/4W	R782	1-249-425-11	CARBON 4.7K 5%	1/4W
				R783	1-249-425-11	CARBON 4.7K 5%	1/4W

STR-DE185

MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description	Remark
R784	1-249-401-11	CARBON	47	5%	1/4W	△ T902	1-435-435-11	TRANSFORMER, POWER (AEP,UK)	
R785	1-249-401-11	CARBON	47	5%	1/4W				
R786	1-249-425-11	CARBON	4.7K	5%	1/4W			< TERMINAL BOARD >	
R787	1-249-425-11	CARBON	4.7K	5%	1/4W				
R788	1-249-427-11	CARBON	6.8K	5%	1/4W	TM801	1-537-376-11	TERMINAL BOARD (SPEAKERS)	
R789	1-249-437-11	CARBON	47K	5%	1/4W				
R790	1-249-417-11	CARBON	1K	5%	1/4W				
R791	1-249-437-11	CARBON	47K	5%	1/4W				
△ R792	1-215-868-00	METAL OXIDE	680	5%	1W	F			
△ R793	1-215-868-00	METAL OXIDE	680	5%	1W	F			
R794	1-249-429-11	CARBON	10K	5%	1/4W				
R795	1-249-401-11	CARBON	47	5%	1/4W				
R901	1-249-425-11	CARBON	4.7K	5%	1/4W				
R902	1-249-381-11	CARBON	1	5%	1/4W				
△ R903	1-219-237-11	SOLID	3.3M	20%	1/2W	F			(US)
R904	1-249-435-11	CARBON	33K	5%	1/4W				
R905	1-249-433-11	CARBON	22K	5%	1/4W				
R906	1-249-421-11	CARBON	2.2K	5%	1/4W				
R907	1-249-428-11	CARBON	8.2K	5%	1/4W				
R908	1-249-422-11	CARBON	2.7K	5%	1/4W				
R909	1-249-431-11	CARBON	15K	5%	1/4W				
R910	1-249-429-11	CARBON	10K	5%	1/4W				
R911	1-247-843-11	CARBON	3.3K	5%	1/4W				
R912	1-249-417-11	CARBON	1K	5%	1/4W				
R913	1-249-401-11	CARBON	47	5%	1/4W				
△ R915	1-240-877-11	FUSIBLE	0.15	5%	1/2W	F			
R916	1-249-389-11	CARBON	4.7	5%	1/4W				
R917	1-249-429-11	CARBON	10K	5%	1/4W				
R919	1-249-439-11	CARBON	68K	5%	1/4W				
R920	1-249-439-11	CARBON	68K	5%	1/4W				
R921	1-247-807-31	CARBON	100	5%	1/4W				(AEP,UK)
R922	1-247-807-31	CARBON	100	5%	1/4W				(AEP,UK)
R923	1-249-429-11	CARBON	10K	5%	1/4W				
R924	1-247-807-31	CARBON	100	5%	1/4W				
R925	1-247-807-31	CARBON	100	5%	1/4W				
R926	1-249-397-11	CARBON	22	5%	1/4W				
R929	1-249-381-11	CARBON	1	5%	1/4W				
R930	1-249-381-11	CARBON	1	5%	1/4W				
RR701	1-249-393-11	CARBON	10	5%	1/4W				(AEP,UK)
RR702	1-249-393-11	CARBON	10	5%	1/4W				(AEP,UK)
RR751	1-249-393-11	CARBON	10	5%	1/4W				(AEP,UK)
RR752	1-249-393-11	CARBON	10	5%	1/4W				(AEP,UK)
		< RELAY >							
RY781	1-755-421-11	RELAY (12V)							
RY782	1-755-421-11	RELAY (12V)							
RY783	1-755-421-11	RELAY (12V)							
RY981	1-755-013-11	RELAY (12V)							
△ RY982	1-755-334-11	RELAY, AC POWER (9V)							
		< TRANSFORMER >							
△ T902	1-435-281-11	TRANSFORMER, POWER (US)							

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

MEMO

