

TA-A70/D707

SERVICE MANUAL

*E Model
Australian Model
Tourist Model*

TA-A70

*AEP Model
UK Model*

TA-D707



This set is the Amplifier section in LBT-A70/A70CD/A70CDM/D707/D707CD.

This photo is TA-A70.

SPECIFICATIONS

Continuous RMS power output

80 W + 80 W
(6 ohms, at 1 kHz, 5% THD)
70 W + 70 W
(6 ohms, DIN, 1 kHz)

Music power output

120 W + 120 W
(6 ohms, at 1 kHz, 10% THD)

Audio input

	Jack type	Sensitivity	Impedance
VIDEO1	Phono	245 mV	47 kohms
VIDEO2	Phono	245 mV	47 kohms
VIDEO3	Phono	245 mV	47 kohms
PHONO(MM)	Phono	3.3 mV	47 kohms
MIC	Phone	1 mV	10 kohms

Audio output

	Jack type	Voltage	Impedance
VIDEO1	Phono	200 mV	2 kohms
VIDEO2	Phono	200 mV	2 kohms
SPEAKER	—	Accepts speakers of 6 to 16 ohms	
SURROUND SPEAKER	Phono	Accepts speakers of 8 to 16 (A70) or 16 (D707) ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Video input (phono jack)

VIDEO1, VIDEO2, VIDEO3 1 Vp-p, 75Ω unbalanced, sync negative

Video output (phono jack)

VIDEO1, VIDEO2 1 Vp-p, 75Ω unbalanced, sync negative

MONITOR

1 Vp-p, 75Ω unbalanced, sync negative

Frequency response

A70 :
15Hz to 50kHz ± 0.5 dB
D707 :
10Hz to 50kHz ± 0.5 dB

Power requirements

A70 :
120V/220V/240V AC, adjustable with the voltage selector, 50/60Hz
AEP, G, IT model :
220V—230V AC, 50/60Hz
UK model :
240V AC, 50/60Hz

Power consumption

A70 : 200W

D707 : 420W

AC outlet

1 unswitched, 100 W max.

Weight

Approx. 6.8 kg (15 lb)

Dimensions

Approx. 355 x 132 x 320 mm
(14 x 5 $\frac{1}{4}$ x 12 $\frac{5}{8}$ inches)
(w/h/d, including projections)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

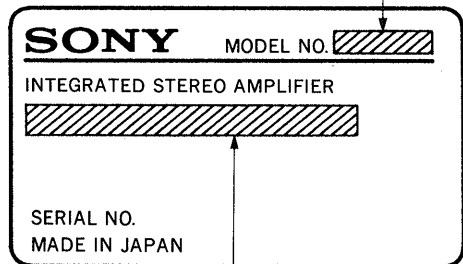
COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

INTEGRATED STEREO AMPLIFIER
SONY®

MODEL IDENTIFICATION

—Specification Label—

E, TR, EA, AUS model: TA-A70
 AEP, UK, G, IT model: TA-D707



AEP, IT model : AC: 220V—230V~50/60Hz
 UK model : AC: 240V~50/60Hz
 G model : SYSTEM LBT-D707
 AC: 220V—230V~50/60Hz
 E, TR, EA, AUS model: AC: 120V/220V/240V~50/60Hz 200W

- TR : Tourist model
- EA : Saudi Arabia model
- AUS: Australian model
- G : Germany model
- IT : Italian model

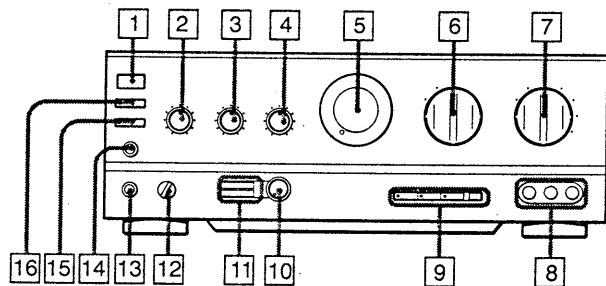
TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		
1-1.	Location of Controls	2
2. SERVICE NOTES		
2-1.	Removal of Fan Case	3
2-2.	Removal of Joint	3
3. DISASSEMBLY		
3-1.	Case	4
3-2.	Front Panel Assy	4
3-3.	Panel Board	4
3-4.	Back Panel, Fan Case Assy	5
3-5.	Joint	5
3-6.	Main Board	5
4. DIAGRAMS		
4-1.	Block Diagram	6
4-2.	Circuit Boards Location	9
4-3.	Printed Wiring Boards	10
4-4.	Schematic Diagram	15
4-5.	Semiconductor Lead Layouts	20
4-6.	Pins Description of IC701 (μ PD75106CW-195)	24
5. EXPLODED VIEWS		
5-1.	Cabinet Section	26
5-2.	Chassis Section	27
6. ELECTRICAL PARTS LIST		28

**SECTION 1
 GENERAL**

This section is extracted from instruction manual.

1-1. LOCATION OF CONTROLS



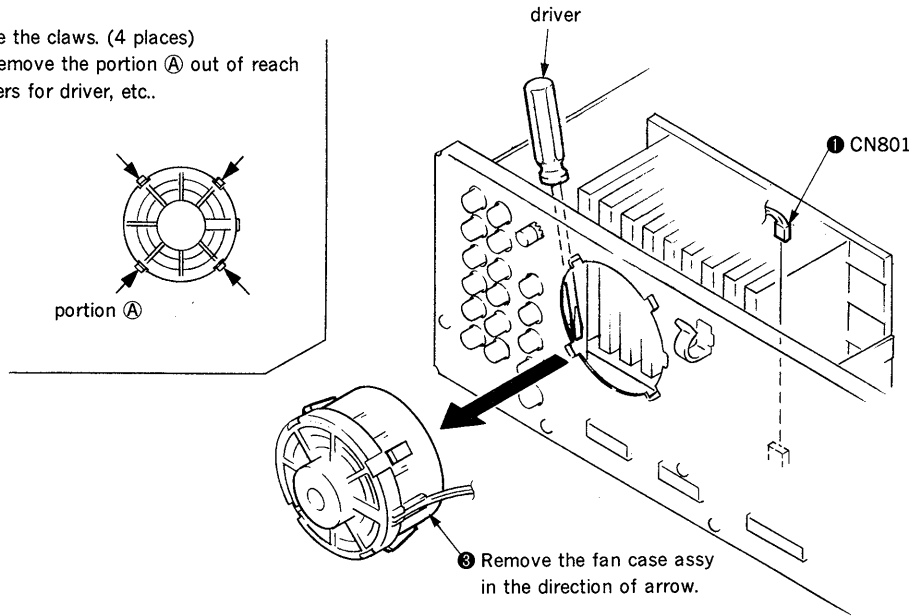
- 1 POWER switch (8)
- 2 BASS control (9)
- 3 TREBLE control (9)
- 4 BALANCE control (9)
- 5 VOLUME control and indicator (9)
- 6 VIDEO FUNCTION selector and indicator (66)
- 7 AUDIO FUNCTION selector and indicator (33, 66)
- 8 VIDEO 3 INPUT jacks (7)
- 9 PROGRAM FUNCTION buttons (65)
 Numeric buttons (1 - 3) and indicators
 SET button
- 10 BASS SYNTHESIZER LEVEL control (9)
- 11 BASS SYNTHESIZER button and indicator (9)
- 12 MIC (microphone) LEVEL control (33)
- 13 MIC (microphone) jack (33)
- 14 HEADPHONES jack (9)
- 15 EQ REC button and indicator (22)
- 16 CD DIRECT button and indicator (9)

SECTION 2 SERVICE NOTES

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

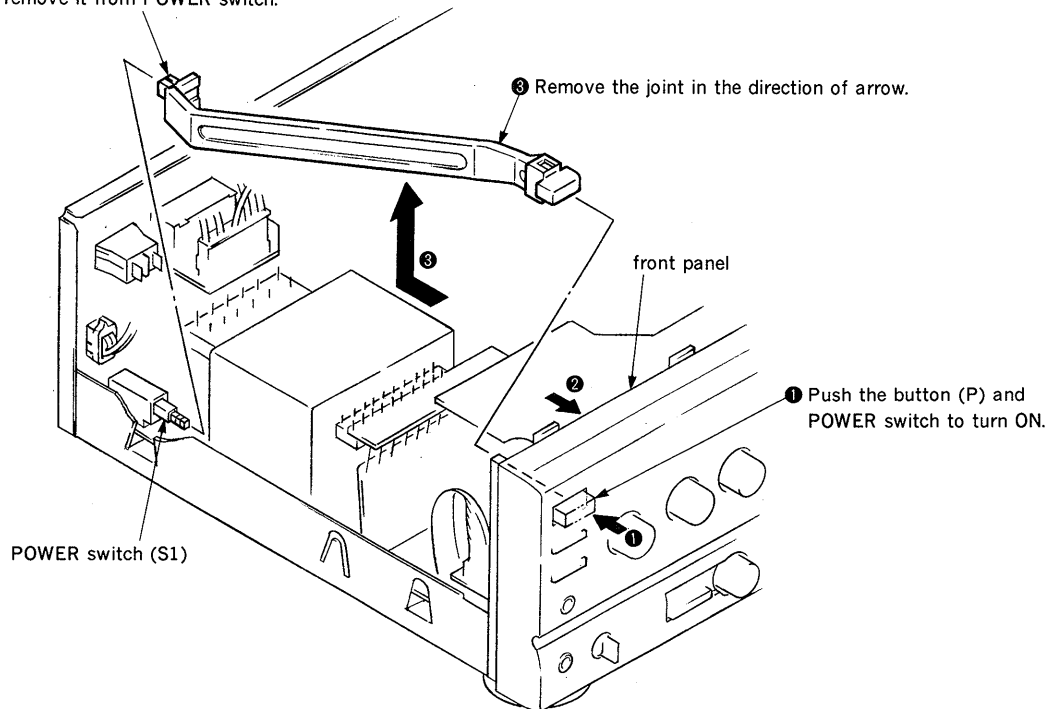
2-1. REMOVAL OF FAN CASE

- ② Remove the claws. (4 places)
Then, remove the portion ① out of reach of fingers for driver, etc..



2-2. REMOVAL OF JOINT

- ② Press the joint for front panel and remove it from POWER switch.

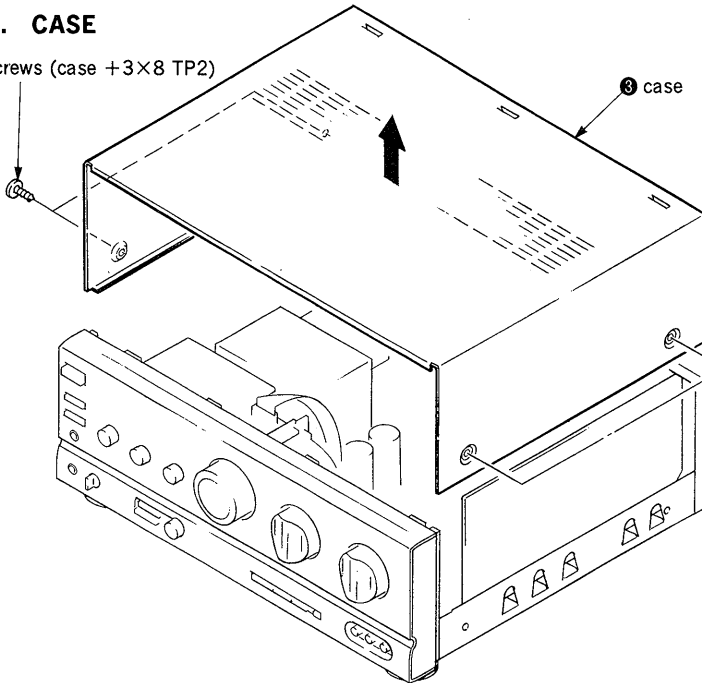


SECTION 3 DISASSEMBLY

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

3-1. CASE

① screws (case + 3×8 TP2)

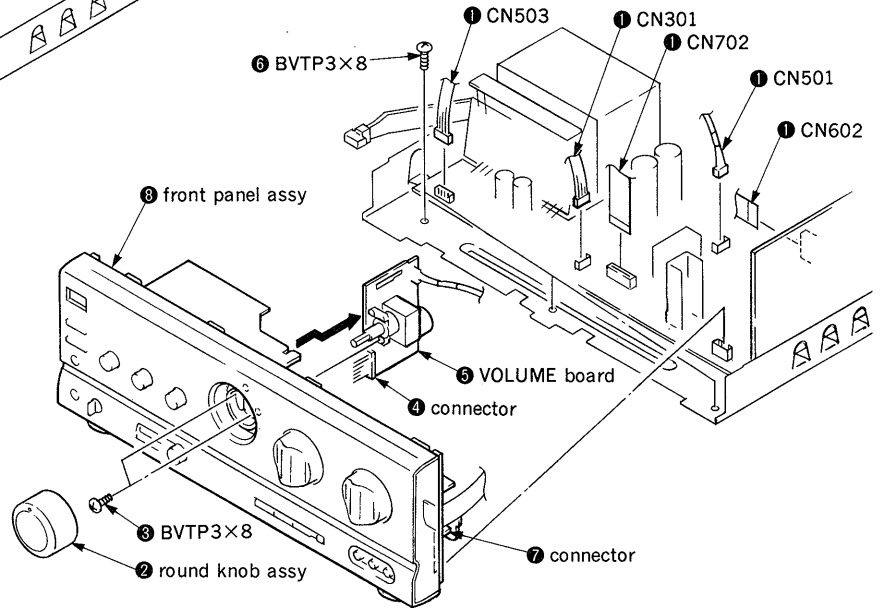


② case

② screws (case + 3×8 TP2)

3-2. FRONT PANEL ASSY

① Remove the connectors.



① CN503

① CN301

① CN702

① CN501

① CN602

⑥ BVTP3×8

③ front panel assy

⑤ VOLUME board

④ connector

③ BVTP3×8

② round knob assy

⑦ connector

3-3. PANEL BOARD

⑤ BVTP2.6×8

⑥ MICROPHONE
AMPLIFIER board

⑦ BVTP2.6×8

⑦ BVTP2.6×8

⑧ MAIN board

⑨ BVTP2.6×8

⑩ VIDEO 3 board

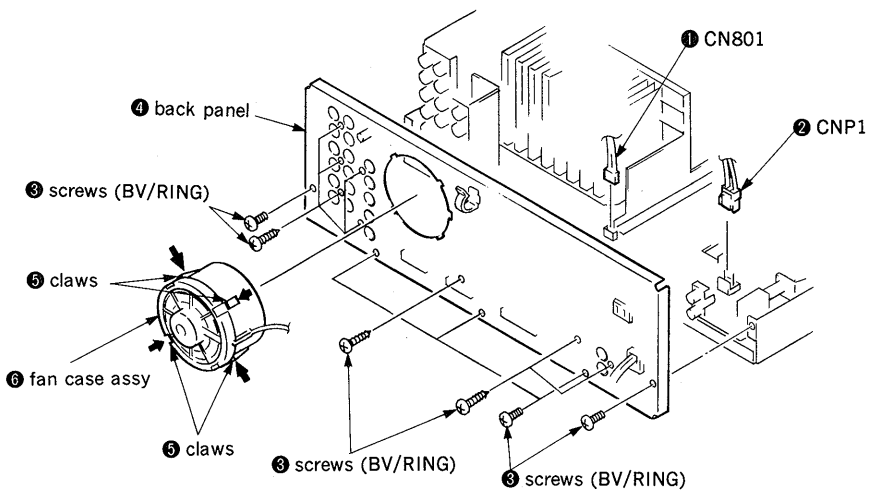
① round knob
(DIA. 12)

② round knob (DIA. 16)

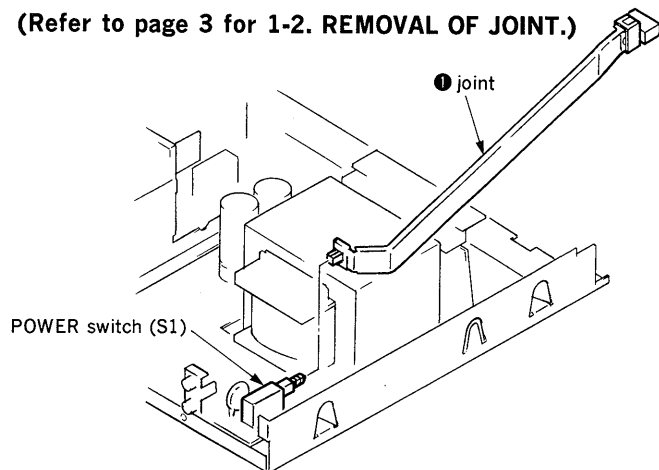
③ round knob assy

④ BVTP3×8

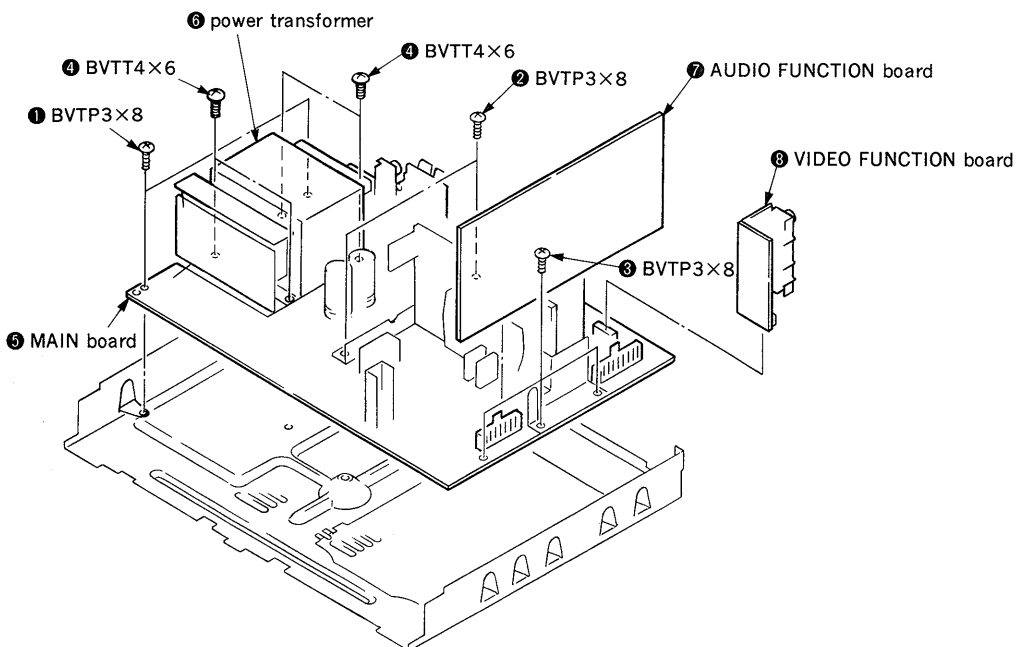
3-4. BACK PANEL, FAN CASE ASSY
 (Refer to page 3 for 1-1. REMOVAL OF FAN CASE ASSY.)



3-5. JOINT
 (Refer to page 3 for 1-2. REMOVAL OF JOINT.)

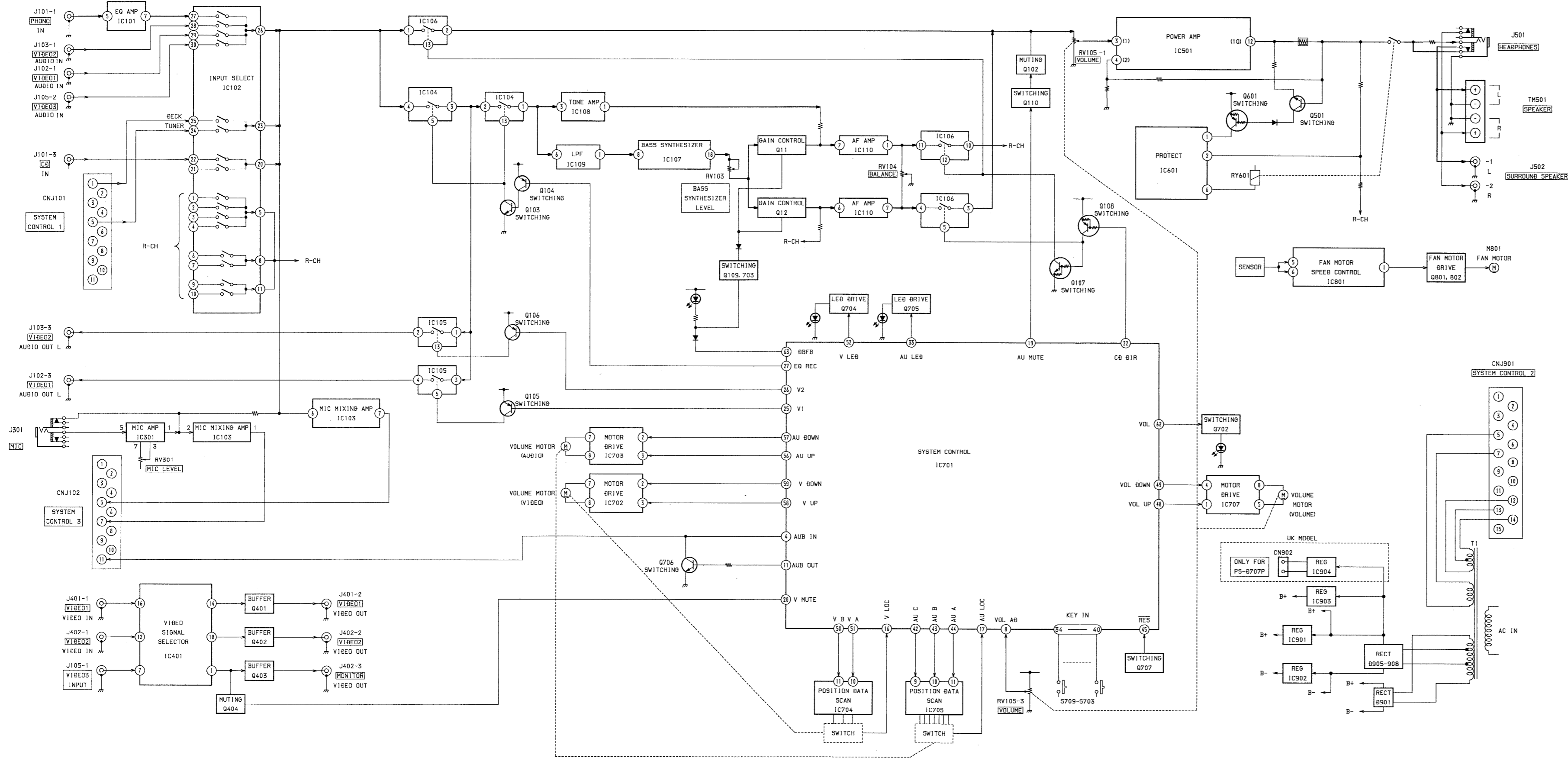


3-6. MAIN BOARD

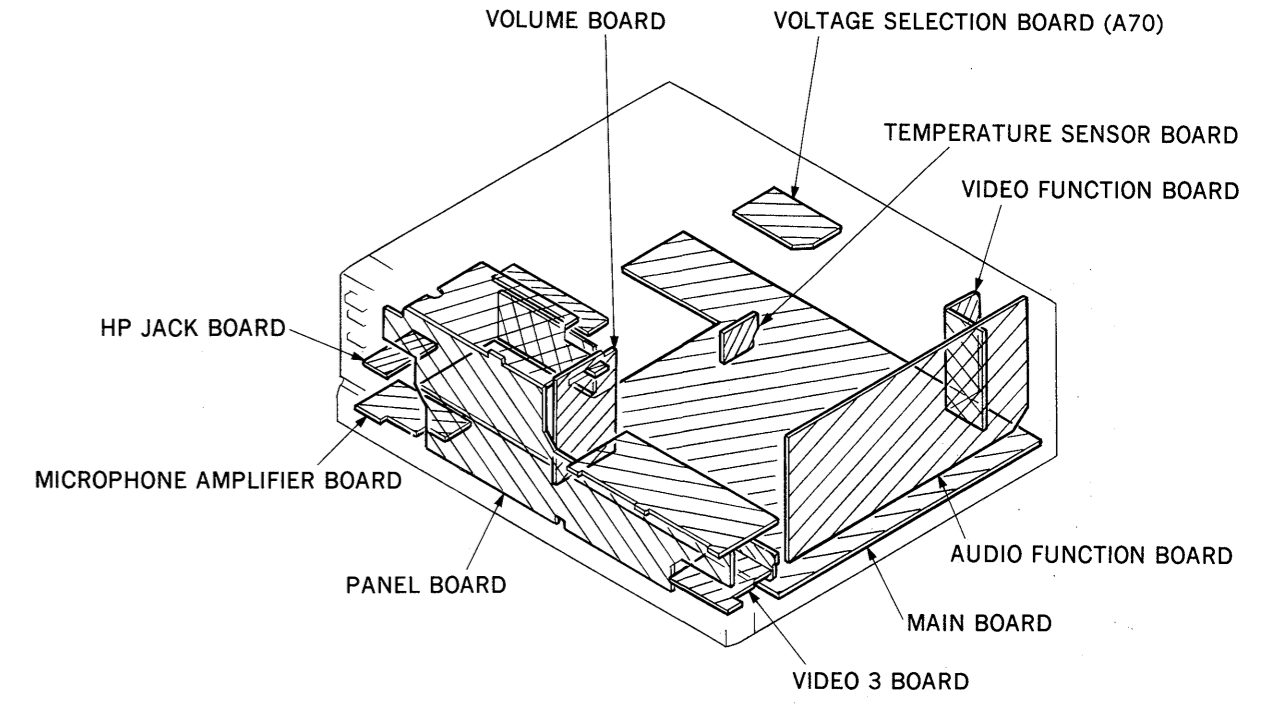


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. CIRCUIT BOARDS LOCATION



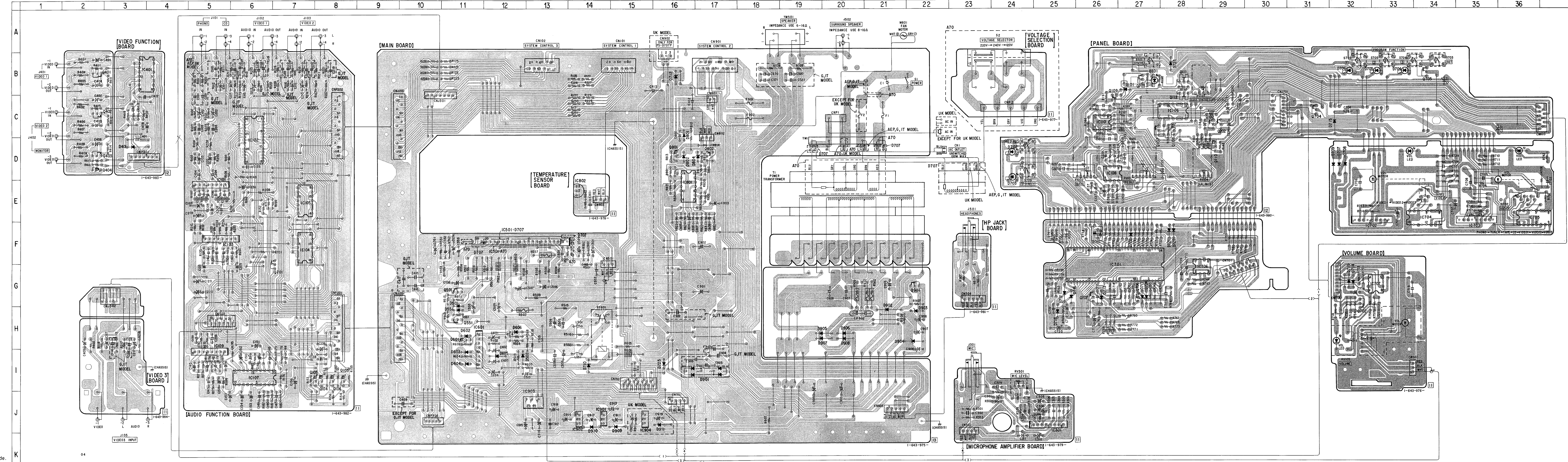
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	B-27	IC301	J-25
D401	D-3	IC401	B-3
D501	H-11	IC501	F-12
D502	I-12	IC601	H-11
D551	H-11	IC701	G-26
D602	H-11	IC702	F-32
D603	I-11	IC703	F-35
D604	I-11	IC704	E-34
D605	I-12	IC705	E-36
D606	H-12	IC706	G-28
D701	B-27	IC707	G-32
D702	D-24	IC801	E-16
D703	E-24	IC802	E-14
D704	B-33	IC901	J-14
D705	B-32	IC902	J-14
D706	B-32	IC903	J-13
D707	D-32	IC904(*1)	J-15
D708	D-32		
D709	D-31	Q102	C-29
D710	I-14	Q103	I-7
D711	G-27	Q104	I-8
D712	B-16	Q105	I-8
D713	G-26	Q106	I-8
D714	G-32	Q107	C-27
D715	C-31	Q108	C-28
D716	G-25	Q109	C-26
D717	G-25	Q110	D-29
D718	H-25	Q111	B-28
D719	G-32	Q112	C-28
D720	F-28	Q202	C-29
D721	F-28	Q401	B-2
D722	F-27	Q402	C-2
D723	B-28	Q403	D-2
D724	G-27	Q404	D-2
D725	I-16	Q501	G-11
D801	D-16	Q551	H-11
D802	D-16	Q601	H-11
D804	D-16	Q701	G-6
D901	I-17	Q702	H-32
D902	H-21	Q703	B-27
D903	H-22	Q704	C-31
D904	H-21	Q705	B-34
D905	H-19	Q706	G-27
D906	H-20	Q707	G-26
D907	H-19	Q801	D-16
D908	H-20	Q802	D-17
D909	J-15	Q901	G-22
D910	J-14		
D911(*1)	J-16		
IC101	E-5		
IC102	D-6		
IC103	F-5		
IC104	F-7		
IC105	E-7		
IC106	C-28		
IC107	I-6		
IC108	D-26		
IC109	I-5		
IC110	C-26		

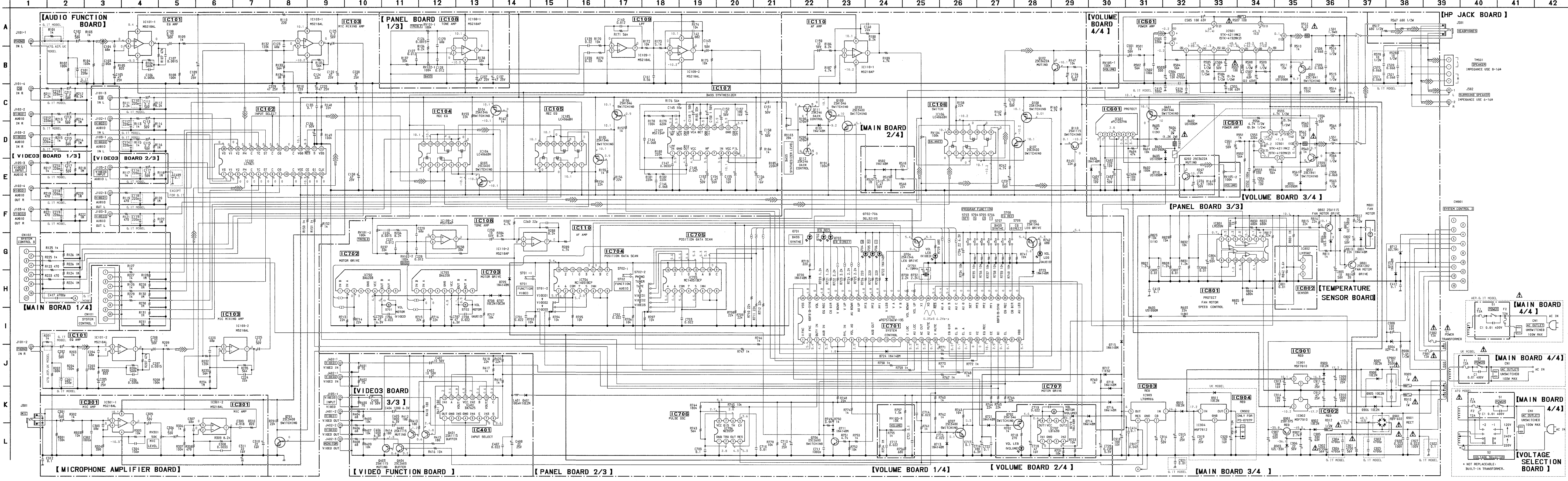
*1: Use on UK model.

Note:
 ● — : parts extracted from the component side.
 ● G : Germany model
 IT : Italian model

4-3. PRINTED WIRING BOARDS • Refer to page 20 for Semiconductor Lead Layouts.



4.4. SCHEMATIC DIAGRAM • Refer to page 22 for IC Block Diagrams.

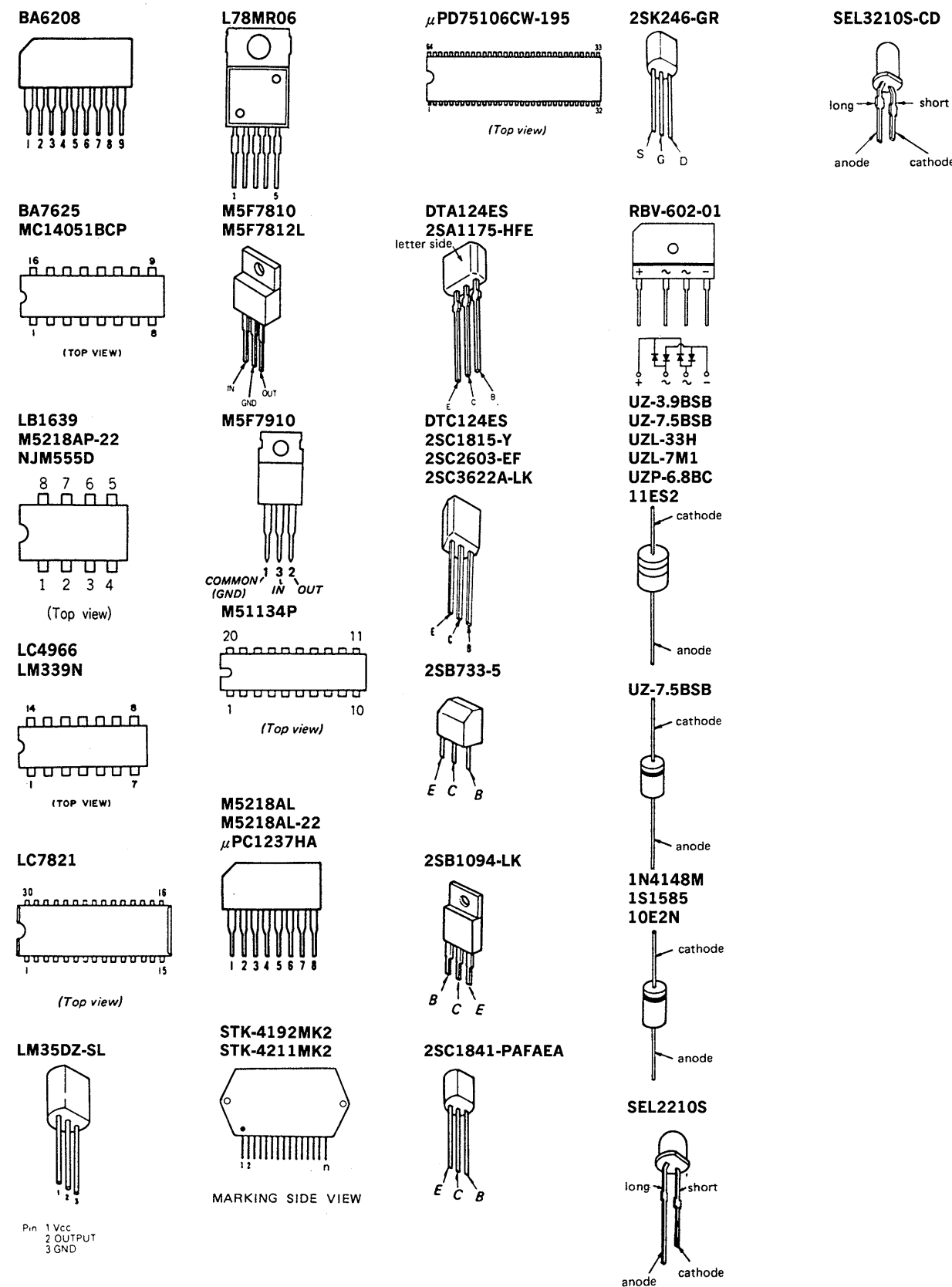


- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$
 - 50V or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - \triangle : internal component.
 - \square : nonflammable resistor.
 - --- : fusible resistor.

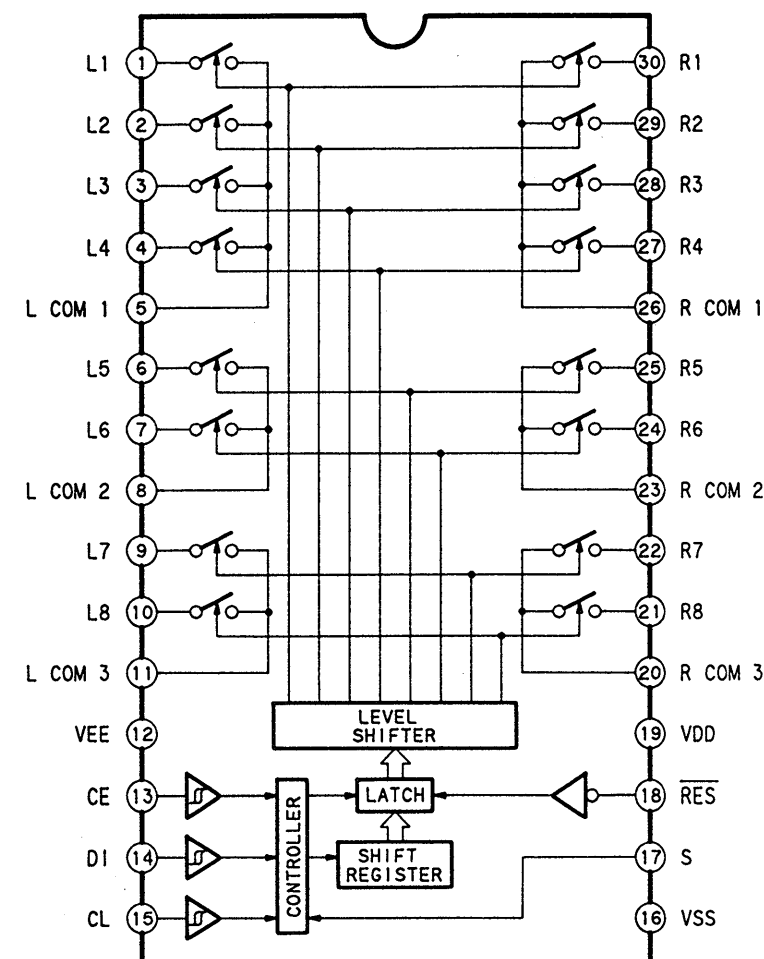
Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

- : B+ Line
- : B- Line
- : Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark: POWER ON.
- : Voltages are taken with a VOM (Input Impedance 10M Ω). 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.
- Signal path.
- : Germany model
- IT: Italian model

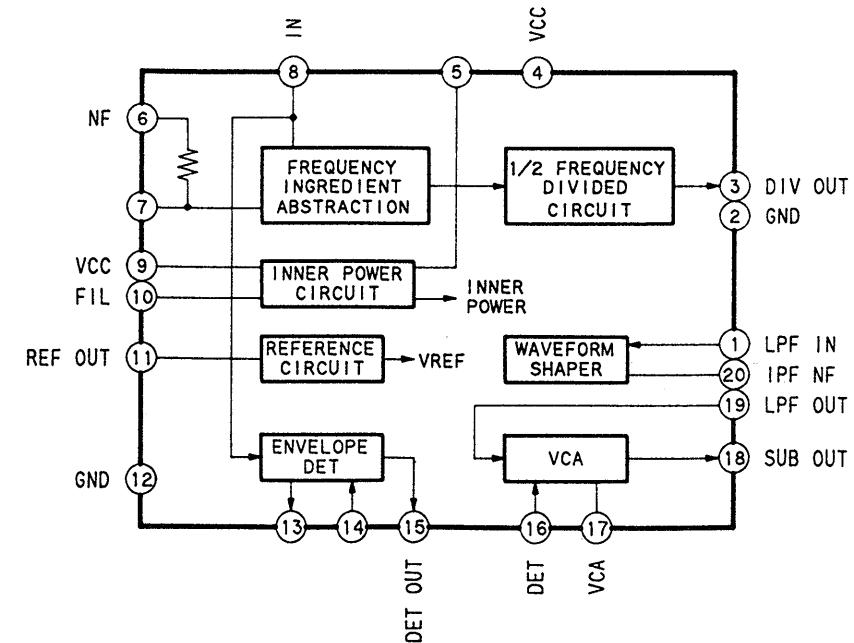
4-5. SEMICONDUCTOR LEAD LAYOUTS



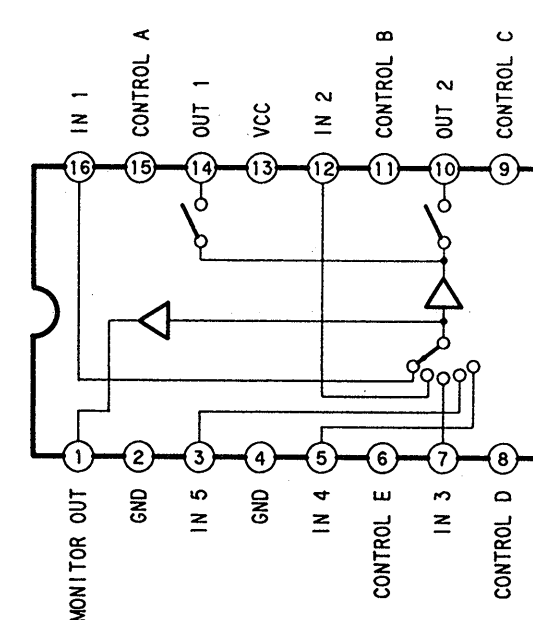
IC Block Diagrams
IC102 LC7821



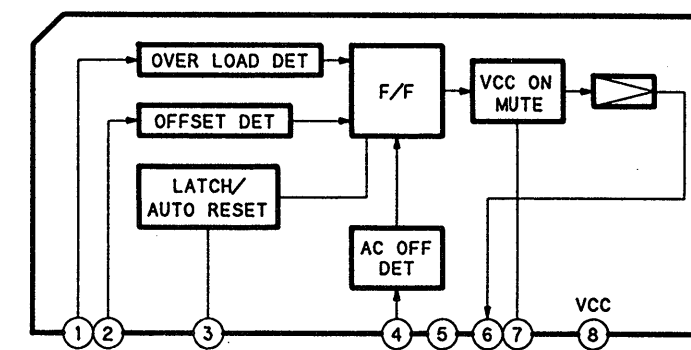
IC107 M51134P



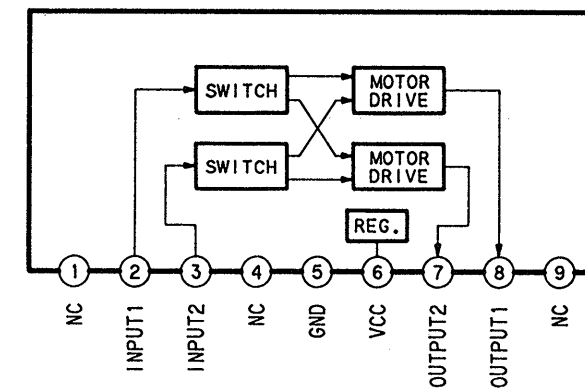
IC401 BA7625



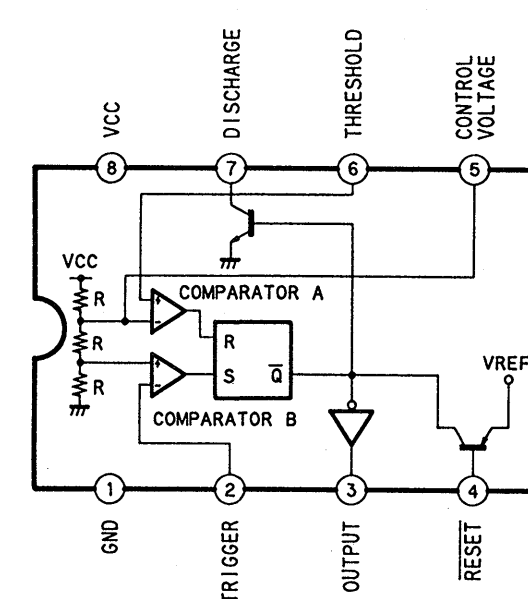
IC601 μ PC1237HA



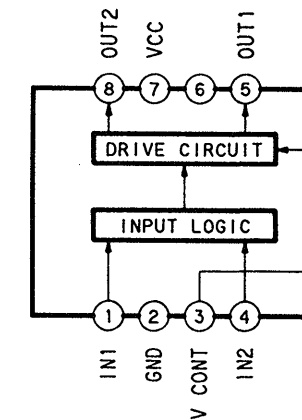
IC702, 703 BA6208



IC706 NE555P



IC707 LB1639



4-6. PINS DESCRIPTION OF IC701 (μ PD75106CW-195)

Pin No.	Pin Name	I/O	Pin Description
1	V FNC	I	Video rotary function encode pulse input (INT3)
2	AU FNC	I	Audio rotary function encode pulse input (INT2)
3	DUTY IN	I	Rotary switch rotation control duty pulse input (INT1)
4	AUB IN	I	AU BUS IN (INT0)
5	NC	I	N. C (Connect to pin ⑦)
6	NC	I	N. C (Connect to pin ⑦)
7	RYL IN	I	Relay IN
8	VOL AD	I	Volume position detect
9	NC	I	N. C (GND)
10	NC	I	N. C (GND)
11	AUB OUT	O	AU BUS OUT
12	NC	O	N. C
13	NC	O	N. C
14	NC	O	N. C
15	NC	I	N. C (GND)
16	V LOC	I	Video rotary function position pulse input
17	AU LOC	I	Audio rotary function position pulse input
18	AC CUT	I	AC CUT
19	AU MUTE	O	Mute
20	V MUTE	O	Video mute
21	NC	O	N. C
22	CD DIR	O	CD DIRECT ON/OFF
23	CL B	O	Video input select control B
24	CL A	O	Video input select control A
25	V1	O	Video REC output control 1
26	V2	O	Video REC output control 0
27	EQ REC	O	EQ REC ON/OFF
28	CE	O	LC7821 CE (LATCH)
29	DI	O	LC7821 DI (DATA)
30	CL	O	LC7821 CL (CLOCK)
31	NC	—	N. C
32	VDD	—	Power supply (+5.5V)
33	AU LED	O	FUNCTION AUDIO LED
34	CD DIR	I	CD DIRECT key input
35	EQ REC	I	EQ REC key input
36	B-SYN	I	BASS SYNTHESIS key input
37	PF1	I	PROGRAM FUNCTION 1 key input
38	PF2	I	PROGRAM FUNCTION 2 key input
39	PF3	I	PROGRAM FUNCTION 3 key input
40	SET	I	PROGRAM FUNCTION SET key input
41	AU D	O	Audio function position detect MC14051 select signal D
42	AU C	O	Audio function position detect MC14051 select signal C
43	AU B	O	Audio function position detect MC14051 select signal B
44	AU A	O	Audio function position detect MC14051 select signal A

Pin No.	Pin Name	I/O	Pin Description
45	RES	I	Reset
46	XO	—	X'tal (System clock oscillation)
47	XI	—	X'tal (System clock oscillation)
48	VOL UP	O	Volume UP output (Right turn)
49	VOL DOWN	O	Volume DOWN output (Left turn)
50	V B	O	Video function position detect MC14051 select signal B
51	V A	O	Video function position detect MC14051 select signal A
52	V LED	O	FUNCTION VIDEO LED
53	PF1	O	PROGRAM FUNCTION 1 LED
54	PF2	O	PROGRAM FUNCTION 2 LED
55	PF3	O	PROGRAM FUNCTION 3 LED
56	AU UP	O	Audio rotary function switch UP output
57	AU DOWN	O	Audio rotary function switch DOWN output
58	V UP	O	Video rotary function switch UP output
59	V DOWN	O	Video rotary function switch DOWN output
60	CD DIR	O	CD DIRECT LED
61	EQ REC	O	EQ REC LED
62	VOL	O	VOLUME LED
63	B-SYN	O	BASS SYNTHESIS ON/OFF & LED
64	VSS	—	GND

SECTION 5 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- -XX and -X mean standardized parts, so they may have some difference from the original one.

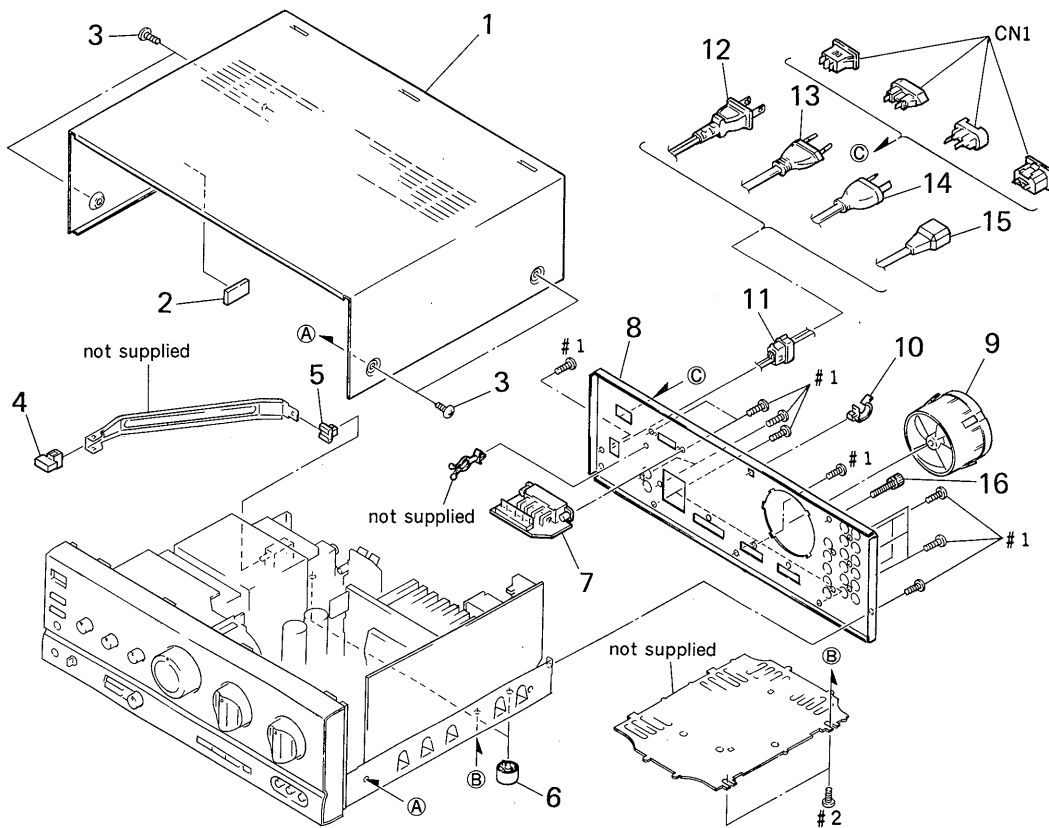
● Color Indication of Appearance Parts
 Example :
 KNOB, BALANCE (WHITE)... (RED)
 ↑ ↑
 Parts Color Cabinet's Color

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

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

- IT : Italian model
- G : Germany model
- TR : Tourist model
- EA : Saudi Arabia model
- AUS: Australian model

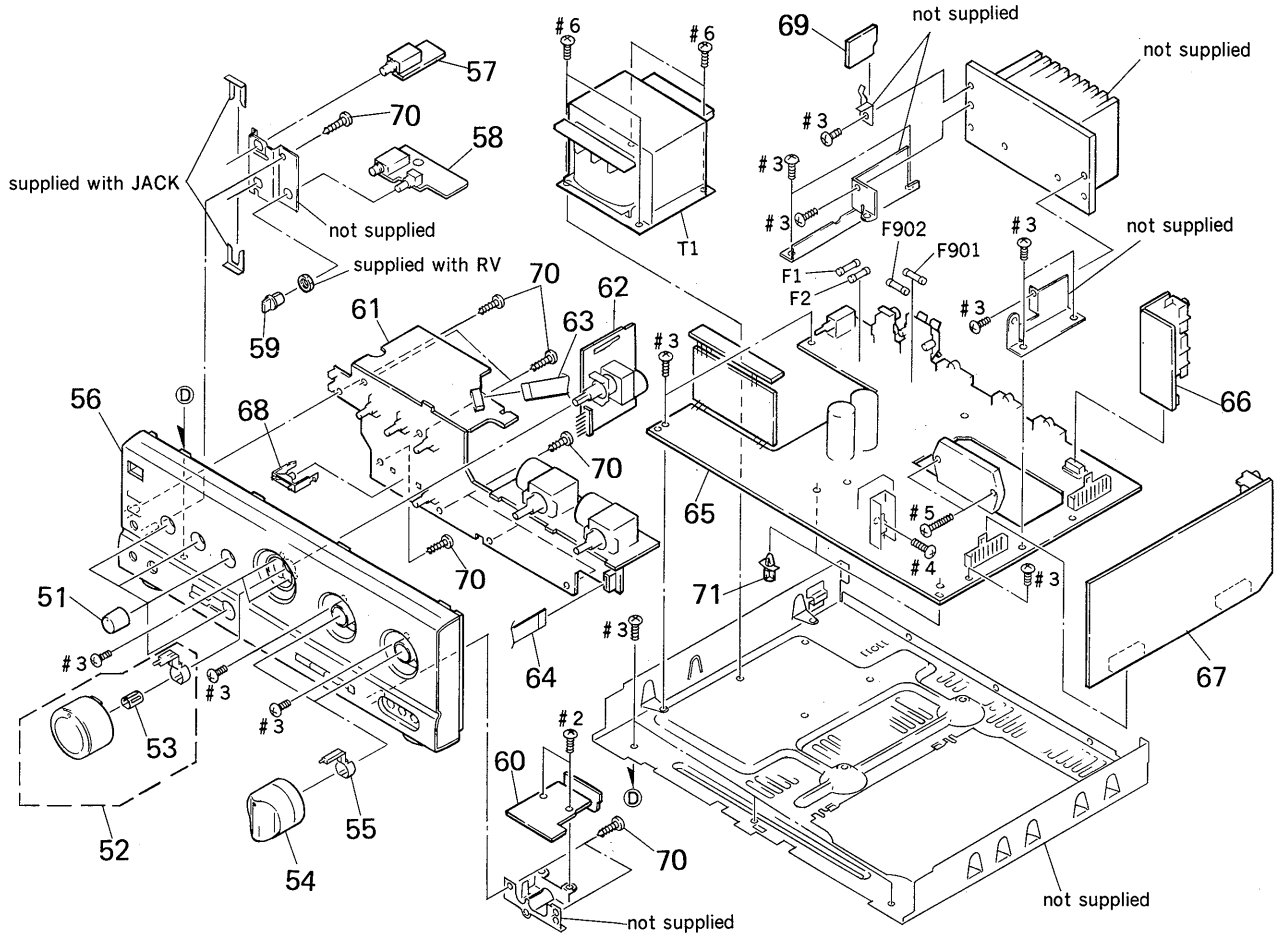
5-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
* 1	4-944-980-01	CASE (IT)	
* 1	4-944-980-21	CASE (AEP, UK, G, A70)	
* 2	4-911-047-01	VIBRATION CONTROL (D)	
3	3-363-099-01	SCREW (CASE +3X8 TP2)	
4	4-942-061-01	BUTTON (P) (IT)	
4	4-942-061-11	BUTTON (P) (AEP, UK, G, A70)	
5	4-866-342-00	JOINT (B), KNOB	
6	4-931-169-01	FOOT	
* 7	1-643-977-11	VOLTAGE SELECTION BOARD (A70)	
* 8	4-953-072-11	PANEL, BACK (AEP)	
* 8	4-953-072-21	PANEL, BACK (UK)	
* 8	4-953-072-31	PANEL, BACK (G)	
* 8	4-953-072-41	PANEL, BACK (IT)	
* 8	4-953-072-51	PANEL, BACK (E, TR)	
* 8	4-953-072-61	PANEL, BACK (EA)	
* 8	4-953-072-71	PANEL, BACK (AUS)	

Ref. No.	Part No.	Description	Remark
9	X-4942-029-1	CASE ASSY, FAN	
* 10	4-949-235-01	HOOK	
* 11	3-703-244-00	BUSHING (2104), CORD (D707, EA)	
* 11	3-703-571-11	BUSHING (S) (4516), CORD (E, AUS, TR)	
\triangle 12	1-575-656-11	CORD, POWER (E, TR)	
\triangle 13	1-575-651-11	CORD, POWER (AEP, G, IT, EA)	
\triangle 14	1-690-056-11	CORD, POWER (AUS)	
\triangle 15	1-575-669-21	CORD, POWER (UK)	
16	4-947-010-01	SCREW, FEEDER FIXED	
\triangle CN1	1-526-751-00	OUTLET, AC (AC OUTLET) (UK)	
\triangle CN1	1-526-794-11	OUTLET, AC (AC OUTLET) (AEP, G, IT, EA)	
\triangle CN1	1-526-882-00	OUTLET, AC (AC OUTLET) (E, TR)	
\triangle CN1	1-540-196-11	OUTLET, AC (AC OUTLET) (AUS)	

5-2. CHASSIS SECTION



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

Ref. No.	Part No.	Description	Remark
51	4-950-651-01	KNOB (DIA. 16), ROUND (IT)	
51	4-950-651-11	KNOB (DIA. 16), ROUND (AEP, UK, G, A70)	
52	X-4942-417-1	KNOB ASSY, ROUND (IT)	
52	X-4942-418-1	KNOB ASSY, ROUND (AEP, UK, G, A70)	
53	3-703-466-00	SPRING (6600)	
54	4-953-073-01	KNOB (DIA. 34) (AEP, UK, G, A70)	
54	4-953-073-11	KNOB (DIA. 34) (IT)	
55	4-953-064-01	INDICATOR (F)	
56	X-4942-766-1	PANEL ASSY, FRONT (AEP, UK, G)	
56	X-4942-767-1	PANEL ASSY, FRONT (IT)	
56	X-4942-768-1	PANEL ASSY, FRONT (A70)	
* 57	1-643-981-11	HP JACK BOARD	
* 58	1-643-979-11	MICROPHONE AMPLIFIER BOARD	
59	4-950-652-01	KNOB (DIA. 12), ROUND (IT)	
59	4-950-652-11	KNOB (DIA. 12), ROUND (AEP, UK, G, A70)	
* 60	1-643-984-11	VIDEO 3 BOARD	
* 61	A-4347-735-A	PANEL BOARD, COMPLETE	
* 62	1-643-976-11	VOLUME BOARD	
63	1-575-903-11	WIRE, FLAT TYPE (15 CORE)	

Ref. No.	Part No.	Description	Remark
64	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
* 65	A-4347-731-A	MAIN BOARD, COMPLETE (AEP)	
* 65	A-4347-742-A	MAIN BOARD, COMPLETE (UK)	
* 65	A-4347-743-A	MAIN BOARD, COMPLETE (G, IT)	
* 65	A-4347-747-A	MAIN BOARD, COMPLETE (A70)	
* 66	A-4347-738-A	VIDEO FUNCTION BOARD, COMPLETE	
* 67	A-4347-737-A	AUDIO FUNCTION BOARD, COMPLETE (AEP, UK, A70)	
* 67	A-4347-744-A	AUDIO FUNCTION BOARD, COMPLETE (G, IT)	
68	4-953-063-01	HOLDER, LED	
* 69	1-643-978-11	TEMPERATURE SENSOR BOARD	
70	4-951-620-01	SCREW (2. 6X8), +BVTP	
* 71	4-912-181-21	SUPPORT, PC	
△F1	1-532-203-00	FUSE, TIME-LAG (T2A)	
△F2	1-532-203-00	FUSE, TIME-LAG (T2A) (AEP, G, IT, A70)	
△F901	1-532-203-00	FUSE, TIME-LAG (T2A)	
△F902	1-532-203-00	FUSE, TIME-LAG (T2A)	
△T1	1-450-913-11	TRANSFORMER, POWER (D707)	
△T1	1-450-914-11	TRANSFORMER, POWER (A70)	

SECTION 6 ELECTRICAL PARTS LIST

AUDIO FUNCTION

HP JACK

PANEL

VIDEO FUNCTION

VIDEO 3

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- 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.

- G : Germany model
- IT : Italian model
- EA : Saudi Arabia model
- AUS: Australian model
- TR : Tourist model

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

Ref. No.	Part No.	Description	Remark
*	A-4347-737-A	AUDIO FUNCTION BOARD, COMPLETE (AEP, UK, A70)	
*	A-4347-744-A	AUDIO FUNCTION BOARD, COMPLETE (G, IT)	
*	1-643-981-11	HP JACK BOARD	
*	A-4347-735-A	PANEL BOARD, COMPLETE	
*	A-4347-738-A	VIDEO FUNCTION BOARD, COMPLETE	
*	1-643-984-11	VIDEO 3 BOARD	
	4-953-063-01	HOLDER, LED	
		< CAPACITOR >	
C101	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C102	1-124-257-00	ELECT 2.2uF	20% 50V
C103	1-164-070-11	CERAMIC 100PF	5% 50V
C104	1-164-066-11	CERAMIC 68PF	5% 50V
C105	1-124-910-11	ELECT 47uF	20% 50V
C106	1-130-480-00	MYLAR 0.0056uF	5% 50V
C107	1-130-473-00	MYLAR 0.0015uF	5% 50V
C108	1-124-464-11	ELECT 0.22uF	20% 50V
C109	1-124-910-11	ELECT 47uF	20% 50V
C110	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C111	1-124-257-00	ELECT 2.2uF	20% 50V
C112	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C113	1-126-161-11	ELECT 2.2uF	20% 50V
C114	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C115	1-126-161-11	ELECT 2.2uF	20% 50V
C116	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C117	1-126-161-11	ELECT 2.2uF	20% 50V
C118	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C119	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C120	1-124-910-11	ELECT 47uF	20% 50V
C123	1-164-066-11	CERAMIC 68PF	5% 50V
C124	1-164-054-11	CERAMIC 22PF	5% 50V
C125	1-126-161-11	ELECT 2.2uF	20% 50V
C126	1-130-473-00	MYLAR 0.0015uF	5% 50V
C127	1-130-484-00	MYLAR 0.012uF	5% 50V

Ref. No.	Part No.	Description	Remark
C128	1-130-484-00	MYLAR 0.012uF	5% 50V
C129	1-162-219-31	CERAMIC 68PF	5% 50V
C131	1-126-161-11	ELECT 2.2uF	20% 50V
C134	1-124-465-00	ELECT 0.47uF	20% 50V
C135	1-164-159-11	CERAMIC 0.1uF	50V
C136	1-126-301-11	ELECT 1uF	20% 50V
C137	1-124-910-11	ELECT 47uF	20% 50V
C138	1-124-910-11	ELECT 47uF	20% 50V
C139	1-136-169-00	FILM 0.22uF	5% 50V
C140	1-136-154-00	FILM 0.012uF	5% 50V
C141	1-136-174-00	FILM 0.56uF	5% 50V
C142	1-136-164-00	FILM 0.082uF	5% 50V
C143	1-126-301-11	ELECT 1uF	20% 50V
C144	1-136-163-00	FILM 0.068uF	5% 50V
C145	1-164-046-11	CERAMIC 10PF	0.5PF 50V
C146	1-136-163-00	FILM 0.068uF	5% 50V
C147	1-130-477-00	MYLAR 0.0033uF	5% 50V
C148	1-136-161-00	FILM 0.047uF	5% 50V
C149	1-126-301-11	ELECT 1uF	20% 50V
C150	1-126-301-11	ELECT 1uF	20% 50V
C151	1-126-301-11	ELECT 1uF	20% 50V
C152	1-126-059-11	ELECT 10uF	20% 50V
C153	1-126-163-11	ELECT 4.7uF	20% 50V
C154	1-126-300-11	ELECT 0.47uF	20% 50V
C155	1-126-023-11	ELECT 100uF	20% 16V
C156	1-126-022-11	ELECT 47uF	20% 16V
C157	1-126-023-11	ELECT 100uF	20% 16V
C158	1-126-059-11	ELECT 10uF	20% 50V
C159	1-126-059-11	ELECT 10uF	20% 50V
C160	1-162-207-31	CERAMIC 22PF	5% 50V
C201	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)
C202	1-124-257-00	ELECT 2.2uF	20% 50V
C203	1-164-070-11	CERAMIC 100PF	5% 50V
C204	1-164-066-11	CERAMIC 68PF	5% 50V
C205	1-124-910-11	ELECT 47uF	20% 50V
C206	1-130-480-00	MYLAR 0.0056uF	5% 50V
C207	1-130-473-00	MYLAR 0.0015uF	5% 50V
C208	1-124-464-11	ELECT 0.22uF	20% 50V
C209	1-124-910-11	ELECT 47uF	20% 50V
C210	1-162-286-31	CERAMIC 220PF	10% 50V (G, IT)

AUDIO FUNCTION

HP JACK

PANEL

VIDEO FUNCTION

VIDEO 3

Ref. No.	Part No.	Description			Remark
C211	1-124-257-00	ELECT	2. 2uF	20%	50V
C212	1-162-286-31	CERAMIC	220PF	10%	50V (G, IT)
C213	1-126-161-11	ELECT	2. 2uF	20%	50V
C214	1-162-286-31	CERAMIC	220PF	10%	50V (G, IT)
C215	1-126-161-11	ELECT	2. 2uF	20%	50V
C216	1-162-286-31	CERAMIC	220PF	10%	50V (G, IT)
C217	1-126-161-11	ELECT	2. 2uF	20%	50V
C218	1-162-286-31	CERAMIC	220PF	10%	50V (G, IT)
C219	1-162-286-31	CERAMIC	220PF	10%	50V (G, IT)
C220	1-124-910-11	ELECT	47uF	20%	50V
C223	1-164-066-11	CERAMIC	68PF	5%	50V
C224	1-164-054-11	CERAMIC	22PF	5%	50V
C225	1-126-161-11	ELECT	2. 2uF	20%	50V
C226	1-130-473-00	MYLAR	0. 0015uF	5%	50V
C227	1-130-484-00	MYLAR	0. 012uF	5%	50V
C228	1-130-484-00	MYLAR	0. 012uF	5%	50V
C229	1-162-219-31	CERAMIC	68PF	5%	50V
C231	1-126-161-11	ELECT	2. 2uF	20%	50V
C234	1-124-465-00	ELECT	0. 47uF	20%	50V
C237	1-124-910-11	ELECT	47uF	20%	50V
C238	1-124-910-11	ELECT	47uF	20%	50V
C239	1-136-169-00	FILM	0. 22uF	5%	50V
C259	1-126-059-11	ELECT	10uF	20%	50V
C260	1-162-207-31	CERAMIC	22PF	5%	50V
C401	1-126-059-11	ELECT	10uF	20%	50V
C402	1-126-059-11	ELECT	10uF	20%	50V
C403	1-126-059-11	ELECT	10uF	20%	50V
C404	1-124-471-00	ELECT	1000uF	20%	6. 3V
C405	1-124-471-00	ELECT	1000uF	20%	6. 3V
C406	1-124-471-00	ELECT	1000uF	20%	6. 3V
C407	1-161-494-00	CERAMIC	0. 022uF		25V
C408	1-126-049-11	ELECT	22uF	20%	25V
C701	1-161-494-00	CERAMIC	0. 022uF		25V
C702	1-161-494-00	CERAMIC	0. 022uF		25V
C703	1-161-494-00	CERAMIC	0. 022uF		25V
C704	1-124-638-11	ELECT	22uF	20%	10V
C705	1-126-154-11	ELECT	47uF	20%	6. 3V
C706	1-161-494-00	CERAMIC	0. 022uF		25V
C707	1-126-154-11	ELECT	47uF	20%	6. 3V
C708	1-161-494-00	CERAMIC	0. 022uF		25V
C709	1-164-159-11	CERAMIC	0. 1uF		50V
C710	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C711	1-162-294-31	CERAMIC	0. 001uF	10%	50V
C713	1-126-096-11	ELECT	10uF	20%	35V
C714	1-161-494-00	CERAMIC	0. 022uF		25V
C715	1-161-494-00	CERAMIC	0. 022uF		25V
C716	1-126-177-11	ELECT	100uF	20%	10V
C717	1-164-159-11	CERAMIC	0. 1uF		50V
C720	1-125-486-11	DOUBLE LAYERS	0. 22F		5. 5V

Ref. No.	Part No.	Description		Remark
C722	1-164-159-11	CERAMIC	0. 1uF	50V
		< VIBRATOR >		
CF701	1-577-359-21	VIBRATOR, CERAMIC (4. 19MHz)		
		< CONNECTOR >		
* CN504	1-564-508-11	PLUG, CONNECTOR 5P		
* CN602	1-568-830-11	SOCKET, CONNECTOR 11P		
* CN603	1-568-830-11	SOCKET, CONNECTOR 11P		
* CN701	1-568-834-11	SOCKET, CONNECTOR 15P		
		< CONNECTOR >		
* CNJ302	1-565-970-11	SOCKET, CONNECTOR(PC BOARD) 5P		
* CNJ701	1-565-980-11	HOUSING, CONNECTOR(PC BOARD) 9P		
		< CONNECTOR >		
* CNP201	1-691-632-11	CONNECTOR, BOARD TO BOARD 15P		
* CNP202	1-691-632-11	CONNECTOR, BOARD TO BOARD 15P		
* CNP301	1-569-502-11	PIN, CONNECTOR 7P		
		< DIODE >		
D101	8-719-987-63	DIODE	1N4148M	
D401	8-719-200-77	DIODE	10E2N	
D701	8-719-301-39	LED	SEL2210S (BASS SYNTHE)	
D702	8-719-313-69	LED	SEL3210S-CD (EQ REC)	
D703	8-719-313-69	LED	SEL3210S-CD (CD DIRECT)	
D704	8-719-313-69	LED	SEL3210S-CD (3)	
D705	8-719-313-69	LED	SEL3210S-CD (2)	
D706	8-719-313-69	LED	SEL3210S-CD (1)	
D707	8-719-200-77	DIODE	10E2N	
D708	8-719-200-77	DIODE	10E2N	
D709	8-719-987-63	DIODE	1N4148M	
D711	8-719-987-63	DIODE	1N4148M	
D713	8-719-987-63	DIODE	1N4148M	
D715	8-719-987-63	DIODE	1N4148M	
D716	8-719-987-63	DIODE	1N4148M	
D717	8-719-200-82	DIODE	11ES2	
D718	8-719-987-63	DIODE	1N4148M	
D720	8-719-987-63	DIODE	1N4148M	
D721	8-719-987-63	DIODE	1N4148M	
D722	8-719-987-63	DIODE	1N4148M	
D723	8-719-987-63	DIODE	1N4148M	
D724	8-719-987-63	DIODE	1N4148M	
		< IC >		
IC101	8-759-636-73	IC	M5218AL-22	
IC102	8-759-805-13	IC	LC7821	
IC103	8-759-634-50	IC	M5218AL	

AUDIO FUNCTION

HP JACK

PANEL

VIDEO FUNCTION

VIDEO 3

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC104	8-759-801-01	IC LC4966		Q706	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC105	8-759-801-01	IC LC4966		Q707	8-729-900-36	TRANSISTOR DTC124ES	
IC106	8-759-801-01	IC LC4966				< RESISTOR >	
IC107	8-759-043-16	IC M51134P					
IC108	8-759-636-74	IC M5218AP-22		R101	1-249-417-11	CARBON 1K 5% 1/4W (G, IT)	
IC109	8-759-634-50	IC M5218AL		R102	1-249-441-11	CARBON 100K 5% 1/4W	
IC110	8-759-636-74	IC M5218AP-22		R103	1-249-417-11	CARBON 1K 5% 1/4W	
IC401	8-759-991-77	IC BA7625		R104	1-249-441-11	CARBON 100K 5% 1/4W	
IC701	8-759-154-91	IC uPD75106CW-195		R105	1-249-416-11	CARBON 820 5% 1/4W	
IC702	8-759-962-08	IC BA6208					
IC703	8-759-962-08	IC BA6208		R106	1-247-897-11	CARBON 560K 5% 1/4W	
IC704	8-759-000-47	IC MC14051BCP		R107	1-249-437-11	CARBON 47K 5% 1/4W	
IC705	8-759-000-47	IC MC14051BCP		R108	1-249-441-11	CARBON 100K 5% 1/4W	
IC706	8-759-991-02	IC NE555P		R109	1-249-417-11	CARBON 1K 5% 1/4W	
		< JACK >		R110	1-249-409-11	CARBON 220 5% 1/4W	
J101	1-565-258-11	JACK, PIN 4P (PHONO IN, CD IN)		R111	1-249-421-11	CARBON 2.2K 5% 1/4W	
J102	1-565-258-11	JACK, PIN 4P (VIDEO 1)		R112	1-249-428-11	CARBON 8.2K 5% 1/4W	
J103	1-565-258-11	JACK, PIN 4P (VIDEO 2)		R113	1-249-417-11	CARBON 1K 5% 1/4W	
J105	1-580-174-41	JACK, PIN (3P FRONT) (VIDEO 3 INPUT)		R114	1-247-903-00	CARBON 1M 5% 1/4W	
J401	1-565-319-11	JACK, PIN 2P (VIDEO 1)		R115	1-249-417-11	CARBON 1K 5% 1/4W	
J402	1-565-351-61	JACK, PIN 3P (VIDEO 2, MONITOR)					
J501	1-507-854-00	JACK, PHONE (HEADPHONES)		R116	1-247-903-00	CARBON 1M 5% 1/4W	
		< COIL >		R117	1-249-417-11	CARBON 1K 5% 1/4W	
L401	1-410-521-11	INDUCTOR 100uH		R118	1-247-903-00	CARBON 1M 5% 1/4W	
		< TRANSISTOR >		R119	1-249-413-11	CARBON 470 5% 1/4W	
Q102	8-729-141-26	TRANSISTOR 2SC3622A-LK		R120	1-247-903-00	CARBON 1M 5% 1/4W	
Q103	8-729-900-36	TRANSISTOR DTC124ES					
Q104	8-729-900-63	TRANSISTOR DTA124ES		R121	1-249-413-11	CARBON 470 5% 1/4W	
Q105	8-729-900-63	TRANSISTOR DTA124ES		R122	1-247-903-00	CARBON 1M 5% 1/4W	
Q106	8-729-900-63	TRANSISTOR DTA124ES		R132	1-249-442-11	CARBON 120K 5% 1/4W	
Q107	8-729-900-36	TRANSISTOR DTC124ES		R133	1-249-438-11	CARBON 56K 5% 1/4W	
Q108	8-729-900-63	TRANSISTOR DTA124ES		R134	1-247-903-00	CARBON 1M 5% 1/4W	
Q109	8-729-900-63	TRANSISTOR DTA124ES					
Q110	8-729-119-76	TRANSISTOR 2SA1175-HFE		R135	1-249-438-11	CARBON 56K 5% 1/4W	
Q111	8-729-224-62	TRANSISTOR 2SK246-GR		R136	1-249-428-11	CARBON 8.2K 5% 1/4W	
Q112	8-729-224-62	TRANSISTOR 2SK246-GR		R137	1-249-435-11	CARBON 33K 5% 1/4W	
Q202	8-729-141-26	TRANSISTOR 2SC3622A-LK		R138	1-249-435-11	CARBON 33K 5% 1/4W	
Q401	8-729-119-76	TRANSISTOR 2SA1175-HFE		R142	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q402	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q403	8-729-119-76	TRANSISTOR 2SA1175-HFE		R143	1-249-433-11	CARBON 22K 5% 1/4W	
Q404	8-729-620-05	TRANSISTOR 2SC2603-EF		R147	1-249-429-11	CARBON 10K 5% 1/4W	
Q701	8-729-900-36	TRANSISTOR DTC124ES		R148	1-249-433-11	CARBON 22K 5% 1/4W	
Q703	8-729-900-36	TRANSISTOR DTC124ES		R149	1-249-441-11	CARBON 100K 5% 1/4W	
Q704	8-729-900-63	TRANSISTOR DTA124ES		R150	1-249-417-11	CARBON 1K 5% 1/4W	
Q705	8-729-900-63	TRANSISTOR DTA124ES					
				R151	1-249-417-11	CARBON 1K 5% 1/4W	
				R152	1-249-417-11	CARBON 1K 5% 1/4W	
				R153	1-249-433-11	CARBON 22K 5% 1/4W	
				R154	1-249-433-11	CARBON 22K 5% 1/4W	
				R155	1-249-417-11	CARBON 1K 5% 1/4W	
				R156	1-249-433-11	CARBON 22K 5% 1/4W	
				R157	1-249-417-11	CARBON 1K 5% 1/4W	
				R158	1-249-433-11	CARBON 22K 5% 1/4W	
				R160	1-249-425-11	CARBON 4.7K 5% 1/4W	
				R161	1-249-441-11	CARBON 100K 5% 1/4W	

AUDIO FUNCTION

HP JACK

PANEL

VIDEO FUNCTION

VIDEO 3

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R162	1-249-417-11	CARBON	1K	5%	1/4W	R237	1-249-435-11	CARBON	33K	5%	1/4W
R170	1-249-429-11	CARBON	10K	5%	1/4W	R238	1-249-435-11	CARBON	33K	5%	1/4W
R171	1-249-438-11	CARBON	56K	5%	1/4W	R242	1-249-425-11	CARBON	4.7K	5%	1/4W
R172	1-249-429-11	CARBON	10K	5%	1/4W	R247	1-249-429-11	CARBON	10K	5%	1/4W
R173	1-247-848-11	CARBON	5.1K	5%	1/4W	R270	1-249-429-11	CARBON	10K	5%	1/4W
R174	1-249-429-11	CARBON	10K	5%	1/4W	R286	1-249-428-11	CARBON	8.2K	5%	1/4W
R175	1-249-429-11	CARBON	10K	5%	1/4W	R287	1-249-425-11	CARBON	4.7K	5%	1/4W
R176	1-249-438-11	CARBON	56K	5%	1/4W	R288	1-249-428-11	CARBON	8.2K	5%	1/4W
R178	1-249-441-11	CARBON	100K	5%	1/4W	R289	1-249-425-11	CARBON	4.7K	5%	1/4W
R179	1-247-898-11	CARBON	620K	5%	1/4W	R290	1-247-895-00	CARBON	470K	5%	1/4W
R180	1-247-887-00	CARBON	220K	5%	1/4W	R401	1-247-804-11	CARBON	75	5%	1/4W
R181	1-247-887-00	CARBON	220K	5%	1/4W	R402	1-247-804-11	CARBON	75	5%	1/4W
R182	1-247-887-00	CARBON	220K	5%	1/4W	R403	1-247-804-11	CARBON	75	5%	1/4W
R183	1-249-435-11	CARBON	33K	5%	1/4W	R404	1-249-403-11	CARBON	68	5%	1/4W
R184	1-249-417-11	CARBON	1K	5%	1/4W	R405	1-249-429-11	CARBON	10K	5%	1/4W
R185	1-247-887-00	CARBON	220K	5%	1/4W	R406	1-249-403-11	CARBON	68	5%	1/4W
R186	1-249-428-11	CARBON	8.2K	5%	1/4W	R407	1-249-429-11	CARBON	10K	5%	1/4W
R187	1-249-425-11	CARBON	4.7K	5%	1/4W	R408	1-249-403-11	CARBON	68	5%	1/4W
R188	1-249-428-11	CARBON	8.2K	5%	1/4W	R409	1-249-429-11	CARBON	10K	5%	1/4W
R189	1-249-425-11	CARBON	4.7K	5%	1/4W	R410	1-249-408-11	CARBON	180	5%	1/4W
R190	1-247-895-00	CARBON	470K	5%	1/4W	R411	1-249-408-11	CARBON	180	5%	1/4W
R191	1-249-441-11	CARBON	100K	5%	1/4W	R412	1-249-408-11	CARBON	180	5%	1/4W
R201	1-249-417-11	CARBON	1K	5%	1/4W (G, IT)	R413	1-249-408-11	CARBON	180	5%	1/4W
R202	1-249-441-11	CARBON	100K	5%	1/4W	R414	1-249-408-11	CARBON	180	5%	1/4W
R203	1-249-417-11	CARBON	1K	5%	1/4W	R415	1-249-408-11	CARBON	180	5%	1/4W
R204	1-249-441-11	CARBON	100K	5%	1/4W	R416	1-249-429-11	CARBON	10K	5%	1/4W
R205	1-249-416-11	CARBON	820	5%	1/4W	R417	1-249-417-11	CARBON	1K	5%	1/4W
R206	1-247-897-11	CARBON	560K	5%	1/4W	R418	1-249-433-11	CARBON	22K	5%	1/4W
R207	1-249-437-11	CARBON	47K	5%	1/4W	R419	1-249-417-11	CARBON	1K	5%	1/4W
R208	1-249-441-11	CARBON	100K	5%	1/4W	R420	1-249-433-11	CARBON	22K	5%	1/4W
R209	1-249-417-11	CARBON	1K	5%	1/4W	R517	1-247-750-11	CARBON	680	5%	1/2W
R210	1-249-409-11	CARBON	220	5%	1/4W	R567	1-247-750-11	CARBON	680	5%	1/2W
R211	1-249-421-11	CARBON	2.2K	5%	1/4W	R701	1-249-433-11	CARBON	22K	5%	1/4W
R212	1-249-428-11	CARBON	8.2K	5%	1/4W	R703	1-249-429-11	CARBON	10K	5%	1/4W
R213	1-249-417-11	CARBON	1K	5%	1/4W	R704	1-249-429-11	CARBON	10K	5%	1/4W
R214	1-247-903-00	CARBON	1M	5%	1/4W	R705	1-249-429-11	CARBON	10K	5%	1/4W
R215	1-249-417-11	CARBON	1K	5%	1/4W	R706	1-249-429-11	CARBON	10K	5%	1/4W
R216	1-247-903-00	CARBON	1M	5%	1/4W	R707	1-249-429-11	CARBON	10K	5%	1/4W
R217	1-249-417-11	CARBON	1K	5%	1/4W	R708	1-249-433-11	CARBON	22K	5%	1/4W
R218	1-247-903-00	CARBON	1M	5%	1/4W	R709	1-249-433-11	CARBON	22K	5%	1/4W
R219	1-249-413-11	CARBON	470	5%	1/4W	R710	1-249-433-11	CARBON	22K	5%	1/4W
R220	1-247-903-00	CARBON	1M	5%	1/4W	R711	1-249-433-11	CARBON	22K	5%	1/4W
R221	1-249-413-11	CARBON	470	5%	1/4W	R712	1-249-433-11	CARBON	22K	5%	1/4W
R222	1-247-903-00	CARBON	1M	5%	1/4W	R713	1-249-433-11	CARBON	22K	5%	1/4W
R232	1-249-442-11	CARBON	120K	5%	1/4W	R714	1-249-433-11	CARBON	22K	5%	1/4W
R233	1-249-438-11	CARBON	56K	5%	1/4W	R715	1-249-433-11	CARBON	22K	5%	1/4W
R234	1-247-903-00	CARBON	1M	5%	1/4W	R716	1-249-433-11	CARBON	22K	5%	1/4W
R235	1-249-438-11	CARBON	56K	5%	1/4W	R717	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-428-11	CARBON	8.2K	5%	1/4W	R719	1-249-409-11	CARBON	220	5%	1/4W

AUDIO FUNCTION

HP JACK

PANEL

VIDEO FUNCTION

VIDEO 3

MAIN

MICROPHONE AMPLIFIER

TEMPERATURE SENSOR

VOLUME

Ref. No.	Part No.	Description	Remark
R720	1-249-418-11	CARBON	1.2K 5% 1/4W
R721	1-249-418-11	CARBON	1.2K 5% 1/4W
R722	1-249-421-11	CARBON	2.2K 5% 1/4W
R723	1-249-421-11	CARBON	2.2K 5% 1/4W
R724	1-249-421-11	CARBON	2.2K 5% 1/4W
R725	1-249-421-11	CARBON	2.2K 5% 1/4W
R726	1-249-409-11	CARBON	220 5% 1/4W
R727	1-249-409-11	CARBON	220 5% 1/4W
R728	1-249-409-11	CARBON	220 5% 1/4W
R729	1-249-415-11	CARBON	680 5% 1/4W
R730	1-249-421-11	CARBON	2.2K 5% 1/4W
R732	1-249-421-11	CARBON	2.2K 5% 1/4W
R734	1-249-429-11	CARBON	10K 5% 1/4W
R735	1-249-429-11	CARBON	10K 5% 1/4W
R736	1-249-429-11	CARBON	10K 5% 1/4W
R737	1-249-429-11	CARBON	10K 5% 1/4W
R738	1-249-429-11	CARBON	10K 5% 1/4W
R739	1-249-429-11	CARBON	10K 5% 1/4W
R740	1-249-429-11	CARBON	10K 5% 1/4W
R741	1-249-429-11	CARBON	10K 5% 1/4W
R742	1-249-415-11	CARBON	680 5% 1/4W
R743	1-249-438-11	CARBON	56K 5% 1/4W
R744	1-247-885-00	CARBON	180K 5% 1/4W
R745	1-249-429-11	CARBON	10K 5% 1/4W
R746	1-249-417-11	CARBON	1K 5% 1/4W
R747	1-249-417-11	CARBON	1K 5% 1/4W
R748	1-249-433-11	CARBON	22K 5% 1/4W
R749	1-249-424-11	CARBON	3.9K 5% 1/4W
R750	1-249-417-11	CARBON	1K 5% 1/4W
R751	1-249-425-11	CARBON	4.7K 5% 1/4W
R752	1-249-429-11	CARBON	10K 5% 1/4W
R753	1-249-417-11	CARBON	1K 5% 1/4W
R758	1-249-417-11	CARBON	1K 5% 1/4W
R759	1-249-417-11	CARBON	1K 5% 1/4W
R760	1-249-417-11	CARBON	1K 5% 1/4W
R761	1-249-417-11	CARBON	1K 5% 1/4W
R762	1-249-417-11	CARBON	1K 5% 1/4W
R763	1-249-429-11	CARBON	10K 5% 1/4W
R764	1-249-433-11	CARBON	22K 5% 1/4W
R765	1-249-433-11	CARBON	22K 5% 1/4W
R766	1-249-433-11	CARBON	22K 5% 1/4W
R767	1-249-417-11	CARBON	1K 5% 1/4W
R768	1-249-417-11	CARBON	1K 5% 1/4W
R769	1-249-417-11	CARBON	1K 5% 1/4W
R770	1-249-429-11	CARBON	10K 5% 1/4W
R771	1-249-417-11	CARBON	1K 5% 1/4W
R772	1-249-417-11	CARBON	1K 5% 1/4W
R773	1-249-417-11	CARBON	1K 5% 1/4W
R774	1-249-417-11	CARBON	1K 5% 1/4W

Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >			
RV101	1-238-978-11	RES, VAR, CARBON 100KX2 (TREBLE)	
RV102	1-238-978-11	RES, VAR, CARBON 100KX2 (BASS)	
RV103	1-241-879-11	RES, VAR, CARBON 20K (BASS SYNTHESIZER LEVEL)	
RV104	1-238-459-11	RES, VAR, CARBON 100K (BALANCE)	
< SWITCH >			
S701	1-572-733-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION VIDEO)	
S702	1-572-732-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION AUDIO)	
S703	1-554-303-21	SWITCH, TACTILE (PROGRAM FUNCTION SET)	
S704	1-554-303-21	SWITCH, TACTILE (PROGRAM FUNCTION 3)	
S705	1-554-303-21	SWITCH, TACTILE (PROGRAM FUNCTION 2)	
S706	1-554-303-21	SWITCH, TACTILE (PROGRAM FUNCTION 1)	
S707	1-554-303-21	SWITCH, TACTILE (BASS SYNTH)	
S708	1-554-303-21	SWITCH, TACTILE (EQ REC)	
S709	1-554-303-21	SWITCH, TACTILE (CD DIRECT)	

*	A-4347-731-A	MAIN BOARD, COMPLETE (AEP)	
*	A-4347-742-A	MAIN BOARD, COMPLETE (UK)	
*	A-4347-743-A	MAIN BOARD, COMPLETE (G, IT)	
*	A-4347-747-A	MAIN BOARD, COMPLETE (A70)	

*	1-643-979-11	MICROPHONE AMPLIFIER BOARD *****	
*	1-643-978-11	TEMPERATURE SENSOR BOARD *****	
*	1-643-976-11	VOLUME BOARD *****	
*	1-533-213-31	HOLDER, FUSE	
*	4-942-204-01	PLATE, GROUND	
	7-682-548-04	SCREW +BVT 3X8 (S)	
< CAPACITOR >			
△C1	1-161-744-00	CERAMIC	0.01uF 400V
C301	1-124-257-00	ELECT	2.2uF 20% 50V
C302	1-162-294-31	CERAMIC	0.001uF 10% 50V
C303	1-162-219-31	CERAMIC	68PF 5% 50V
C304	1-162-284-31	CERAMIC	150PF 10% 50V
C305	1-124-463-00	ELECT	0.1uF 20% 50V
C306	1-124-257-00	ELECT	2.2uF 20% 50V
C307	1-162-219-31	CERAMIC	68PF 5% 50V
C308	1-161-885-11	CERAMIC	0.0033uF 20% 50V
C309	1-130-474-00	MYLAR	0.018uF 5% 50V
C310	1-124-234-00	ELECT	22uF 20% 16V
C311	1-124-234-00	ELECT	22uF 20% 16V
C312	1-164-159-11	CERAMIC	0.1uF 50V

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

MAIN

MICROPHONE AMPLIFIER

TEMPERATURE SENSOR

VOLUME

Ref. No.	Part No.	Description		Remark
C409	1-164-159-11	CERAMIC (AEP, UK, A70)	0.1uF	50V
C412	1-164-159-11	CERAMIC	0.1uF	50V
C413	1-164-159-11	CERAMIC	0.1uF	50V
C414	1-164-159-11	CERAMIC	0.1uF	50V
C415	1-162-288-31	CERAMIC	330PF	10% 50V (G, IT)
C416	1-162-288-31	CERAMIC	330PF	10% 50V (G, IT)
C417	1-161-377-00	CERAMIC	0.0047uF	20% 50V (G, IT)
C501	1-126-059-11	ELECT	10uF	20% 50V
C502	1-162-282-31	CERAMIC	100PF	10% 50V
C503	1-162-286-31	CERAMIC	220PF	10% 50V
C504	1-126-101-11	ELECT	100uF	20% 16V
C505	1-124-572-11	ELECT	100uF	20% 63V
C506	1-124-910-11	ELECT	47uF	20% 50V
C507	1-124-916-11	ELECT	22uF	20% 63V (D707)
C507	1-126-059-11	ELECT	10uF	20% 63V (A70)
C508	1-130-493-00	MYLAR	0.068uF	5% 50V
C509	1-130-493-00	MYLAR	0.068uF	5% 50V
C510	1-126-300-11	ELECT	0.47uF	20% 50V
C520	1-136-163-00	FILM	0.068uF	5% 50V (G, IT)
C521	1-136-163-00	FILM	0.068uF	5% 50V (G, IT)
C551	1-126-059-11	ELECT	10uF	20% 50V
C552	1-162-282-31	CERAMIC	100PF	10% 50V
C553	1-162-286-31	CERAMIC	220PF	10% 50V
C554	1-126-101-11	ELECT	100uF	20% 16V
C555	1-124-572-11	ELECT	100uF	20% 63V
C556	1-124-910-11	ELECT	47uF	20% 50V
C557	1-161-047-00	CERAMIC	0.0047uF	25V
C558	1-130-493-00	MYLAR	0.068uF	5% 50V
C559	1-130-493-00	MYLAR	0.068uF	5% 50V
C570	1-136-163-00	FILM	0.068uF	5% 50V (G, IT)
C571	1-136-163-00	FILM	0.068uF	5% 50V (G, IT)
C601	1-126-101-11	ELECT	100uF	20% 16V
C602	1-126-101-11	ELECT	100uF	20% 16V
C603	1-126-163-11	ELECT	4.7uF	20% 50V
C604	1-124-994-11	ELECT	100uF	20% 10V
C712	1-161-494-00	CERAMIC	0.022uF	25V
C718	1-126-022-11	ELECT	47uF	20% 16V
C719	1-161-494-00	CERAMIC	0.022uF	25V
C721	1-164-159-11	CERAMIC	0.1uF	50V
C801	1-161-379-00	CERAMIC	0.01uF	20% 25V
C802	1-126-059-11	ELECT	10uF	20% 50V
C803	1-126-059-11	ELECT	10uF	20% 50V
C804	1-126-059-11	ELECT	10uF	20% 50V
C805	1-161-379-00	CERAMIC	0.01uF	20% 25V
C807	1-161-379-00	CERAMIC	0.01uF	20% 25V
C808	1-161-379-00	CERAMIC	0.01uF	20% 25V
△C901	1-126-258-11	ELECT	4700uF	20% 56V
△C902	1-126-258-11	ELECT	4700uF	20% 56V

Ref. No.	Part No.	Description		Remark
C903	1-161-377-00	CERAMIC	0.0047uF	20% 50V (G, IT)
C904	1-161-377-00	CERAMIC	0.0047uF	20% 50V (G, IT)
C905	1-124-920-11	ELECT	330uF	20% 63V
C906	1-126-233-11	ELECT	22uF	20% 50V
C907	1-124-122-11	ELECT	100uF	20% 50V
C908	1-124-994-11	ELECT	100uF	20% 10V
C909	1-126-027-11	ELECT	1000uF	20% 25V
C910	1-126-027-11	ELECT	1000uF	20% 25V
C911	1-124-910-11	ELECT	47uF	20% 50V
C912	1-124-910-11	ELECT	47uF	20% 50V
C913	1-126-023-11	ELECT	100uF	20% 16V
C914	1-126-023-11	ELECT	100uF	20% 16V
C915	1-124-910-11	ELECT	47uF	20% 50V
C916	1-124-463-00	ELECT	0.1uF	20% 50V
C917	1-130-491-00	MYLAR	0.047uF	5% 50V
C918	1-126-177-11	ELECT	100uF	20% 10V
C919	1-124-910-11	ELECT	47uF	20% 50V (UK)
C920	1-126-023-11	ELECT	100uF	20% 16V (UK)
C922	1-164-159-11	CERAMIC	0.1uF	50V (G, IT)
C925	1-161-377-00	CERAMIC	0.0047uF	20% 50V (G, IT)
C926	1-161-377-00	CERAMIC	0.0047uF	20% 50V (G, IT)
△C927	1-106-375-12	MYLAR	0.022uF	5% 200V
△C928	1-106-375-12	MYLAR	0.022uF	5% 200V

< CONNECTOR >

- * CN101 1-566-858-41 SOCKET, CONNECTOR 11P (SYSTEM CONTROL 1)
- * CN102 1-566-858-31 SOCKET, CONNECTOR 11P (SYSTEM CONTROL 3)
- * CN301 1-564-507-11 PLUG, CONNECTOR 4P
- * CN302 1-564-507-11 PLUG, CONNECTOR 4P
- * CN501 1-564-506-11 PLUG, CONNECTOR 3P

- * CN502 1-564-506-11 PLUG, CONNECTOR 3P
- * CN503 1-564-508-11 PLUG, CONNECTOR 5P
- * CN702 1-568-834-11 SOCKET, CONNECTOR 15P
- * CN801 1-564-505-11 PLUG, CONNECTOR 2P
- * CN802 1-564-506-11 PLUG, CONNECTOR 3P
- * CN803 1-564-506-11 PLUG, CONNECTOR 3P
- * CN901 1-566-859-11 SOCKET, CONNECTOR 15P (SYSTEM CONTROL 2)
- * CN902 1-566-210-11 PIN, CONNECTOR 3P (ONLY FOR PS-D707P)
(UK)

< CONNECTOR >

- * CNJ201 1-691-616-11 CONNECTOR, BOARD TO BOARD 15P
- * CNJ202 1-691-616-11 CONNECTOR, BOARD TO BOARD 15P
- * CNJ301 1-569-493-11 SOCKET, CONNECTOR 7P

< CONNECTOR >

- * CNP1 1-564-321-00 PIN, CONNECTOR 2P
- * CNP302 1-565-967-11 PIN, CONNECTOR (PC BOARD) 5P
- * CNP701 1-568-454-11 PIN, CONNECTOR (PC BOARD) 9P

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

MAIN

MICROPHONE AMPLIFIER

TEMPERATURE SENSOR

VOLUME

Ref. No.	Part No.	Description	Remark
< COMPOSITION CIRCUIT BLOCK >			
△CP902	1-102-394-11	CERAMIC	0.01uFX2 250V
< DIODE >			
D501	8-719-815-85	DIODE	1S1585
D502	8-719-987-63	DIODE	1N4148M
D551	8-719-815-85	DIODE	1S1585
D602	8-719-815-85	DIODE	1S1585
D603	8-719-815-85	DIODE	1S1585
D604	8-719-815-85	DIODE	1S1585
D605	8-719-815-85	DIODE	1S1585
D606	8-719-987-63	DIODE	1N4148M
D710	8-719-815-85	DIODE	1S1585
D712	8-719-000-84	DIODE	UZL-7M1
D714	8-719-987-63	DIODE	1N4148M
D719	8-719-987-63	DIODE	1N4148M
D725	8-719-987-63	DIODE	1N4148M
D801	8-719-987-63	DIODE	1N4148M
D802	8-719-010-54	DIODE	UZ-7.5BSB
D804	8-719-010-26	DIODE	UZ-3.9BSB
△D901	8-719-302-38	DIODE	RBV-602-01
D902	8-719-200-77	DIODE	10E2N
D903	8-719-002-67	DIODE	UZL-33H
D904	8-719-014-88	DIODE	UZP-6.8BC
D905	8-719-200-77	DIODE	10E2N
D906	8-719-200-77	DIODE	10E2N
D907	8-719-200-77	DIODE	10E2N
D908	8-719-200-77	DIODE	10E2N
D909	8-719-200-77	DIODE	10E2N
D910	8-719-200-77	DIODE	10E2N
D911	8-719-200-77	DIODE	10E2N (UK)
< IC >			
IC301	8-759-636-73	IC	M5218AL-22
IC501	8-749-900-78	IC	STK-4192MK2 (D707)
IC501	8-749-921-04	IC	STK-4211MK2 (A70)
IC601	8-759-111-68	IC	uPC1237HA
IC707	8-759-820-62	IC	LB1639
IC801	8-759-984-03	IC	LM339N
IC802	8-759-512-73	IC	LM35DZ-SL
IC901	8-759-604-32	IC	M5F7810
IC902	8-759-604-50	IC	M5F7910
IC903	8-759-820-13	IC	L78MR06
IC904	8-759-231-58	IC	TA7812S (UK)
< JACK >			
J301	1-507-854-00	JACK, PHONE (MIC)	

Ref. No.	Part No.	Description	Remark
J502	1-565-352-11	JACK, PIN 2P (SURROUND SPEAKER)	
< COIL >			
L501	1-420-872-00	COIL, AIR CORE	1.9mH
L551	1-420-872-00	COIL, AIR CORE	1.9mH
< TRANSISTOR >			
Q501	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q551	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q601	8-729-900-63	TRANSISTOR	DTA124ES
Q702	8-729-900-63	TRANSISTOR	DTA124ES
Q801	8-729-140-93	TRANSISTOR	2SB733-34
Q802	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q901	8-729-141-83	TRANSISTOR	2SB1094-LK
< RESISTOR >			
R123	1-249-413-11	CARBON	470 5% 1/4W
R124	1-247-903-00	CARBON	1M 5% 1/4W
R125	1-249-417-11	CARBON	1K 5% 1/4W
R126	1-247-903-00	CARBON	1M 5% 1/4W
R127	1-249-417-11	CARBON	1K 5% 1/4W
R128	1-247-903-00	CARBON	1M 5% 1/4W
R129	1-249-417-11	CARBON	1K 5% 1/4W
R130	1-247-903-00	CARBON	1M 5% 1/4W
R131	1-247-903-00	CARBON	1M 5% 1/4W
R223	1-249-413-11	CARBON	470 5% 1/4W
R224	1-247-903-00	CARBON	1M 5% 1/4W
R225	1-249-417-11	CARBON	1K 5% 1/4W
R226	1-247-903-00	CARBON	1M 5% 1/4W
R227	1-249-417-11	CARBON	1K 5% 1/4W
R228	1-247-903-00	CARBON	1M 5% 1/4W
R229	1-249-417-11	CARBON	1K 5% 1/4W
R230	1-247-903-00	CARBON	1M 5% 1/4W
R231	1-247-903-00	CARBON	1M 5% 1/4W
R301	1-249-441-11	CARBON	100K 5% 1/4W
R302	1-249-417-11	CARBON	1K 5% 1/4W
R303	1-249-429-11	CARBON	10K 5% 1/4W
R304	1-249-412-11	CARBON	390 5% 1/4W
R305	1-249-429-11	CARBON	10K 5% 1/4W
R306	1-249-417-11	CARBON	1K 5% 1/4W
R307	1-249-441-11	CARBON	100K 5% 1/4W
R308	1-249-413-11	CARBON	470 5% 1/4W
R309	1-249-428-11	CARBON	8.2K 5% 1/4W
R310	1-249-416-11	CARBON	820 5% 1/4W
R501	1-249-417-11	CARBON	1K 5% 1/4W
R502	1-249-438-11	CARBON	56K 5% 1/4W
R503	1-249-412-11	CARBON	330 5% 1/4W
R504	1-249-438-11	CARBON	56K 5% 1/4W

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

MAIN

MICROPHONE AMPLIFIER

TEMPERATURE SENSOR

VOLUME

Ref. No.	Part No.	Description		Remark
R505	1-247-758-11	CARBON	3.3K 5%	1/2W (D707)
R505	1-247-760-11	CARBON	4.7K 5%	1/2W (A70)
R506	1-247-758-11	CARBON	3.3K 5%	1/2W (D707)
R506	1-247-760-11	CARBON	4.7K 5%	1/2W (A70)
△R507	1-212-881-11	FUSIBLE	100 5%	1/4W F
R508	1-247-752-11	CARBON	1K 5%	1/2W
R509	1-247-752-11	CARBON	1K 5%	1/2W
R510	1-249-417-11	CARBON	1K 5%	1/4W
R511	1-249-431-11	CARBON	15K 5%	1/4W
△R512	1-217-156-00	RES, METAL PLATE	0.22	5W
R513	1-249-441-11	CARBON	100K 5%	1/4W
R514	1-249-438-11	CARBON	56K 5%	1/4W
R515	1-247-727-11	CARBON	10 5%	1/2W
R516	1-247-727-11	CARBON	10 5%	1/2W
R518	1-249-433-11	CARBON	22K 5%	1/4W
R519	1-249-428-11	CARBON	8.2K 5%	1/4W
R520	1-247-903-00	CARBON	1M 5%	1/4W
R528	1-247-727-11	CARBON	10 5%	1/2W (G, IT)
R551	1-249-417-11	CARBON	1K 5%	1/4W
R552	1-249-438-11	CARBON	56K 5%	1/4W
R553	1-249-412-11	CARBON	330 5%	1/4W
R554	1-249-438-11	CARBON	56K 5%	1/4W
R555	1-247-758-11	CARBON	3.3K 5%	1/2W (D707)
R555	1-247-760-11	CARBON	4.7K 5%	1/2W (A70)
R556	1-247-758-11	CARBON	3.3K 5%	1/2W (D707)
R556	1-247-760-11	CARBON	4.7K 5%	1/2W (A70)
△R557	1-212-881-11	FUSIBLE	100 5%	1/4W F
R560	1-249-417-11	CARBON	1K 5%	1/4W
R561	1-249-431-11	CARBON	15K 5%	1/4W
△R562	1-217-156-00	RES, METAL PLATE	0.22	5W
R563	1-249-441-11	CARBON	100K 5%	1/4W
R564	1-249-437-11	CARBON	47K 5%	1/4W
R565	1-247-727-11	CARBON	10 5%	1/2W
R566	1-247-727-11	CARBON	10 5%	1/2W
R568	1-249-433-11	CARBON	22K 5%	1/4W
R578	1-247-727-11	CARBON	10 5%	1/2W (G, IT)
R601	1-249-429-11	CARBON	10K 5%	1/4W
R602	1-249-441-11	CARBON	100K 5%	1/4W
R603	1-249-432-11	CARBON	18K 5%	1/4W (D707)
R603	1-249-433-11	CARBON	22K 5%	1/4W (A70)
R604	1-249-437-11	CARBON	47K 5%	1/4W
R605	1-249-430-11	CARBON	12K 5%	1/4W (D707)
R605	1-249-431-11	CARBON	15K 5%	1/4W (A70)
△R606	1-216-457-00	METAL OXIDE (D707)	1.2K 5%	2W F
△R606	1-215-893-11	METAL OXIDE (A70)	1.5K 5%	2W F
R702	1-249-417-11	CARBON	1K 5%	1/4W
R718	1-249-410-11	CARBON	270 5%	1/4W

Ref. No.	Part No.	Description		Remark
R731	1-249-429-11	CARBON	10K 5%	1/4W
R733	1-249-429-11	CARBON	10K 5%	1/4W
R754	1-247-903-00	CARBON	1M 5%	1/4W
R755	1-249-417-11	CARBON	1K 5%	1/4W
R756	1-249-415-11	CARBON	680 5%	1/4W
R757	1-249-419-11	CARBON	1.5K 5%	1/4W
R801	1-247-903-00	CARBON	1M 5%	1/4W
R804	1-249-417-11	CARBON	1K 5%	1/4W
R811	1-249-417-11	CARBON	1K 5%	1/4W
R812	1-247-731-11	CARBON	22 5%	1/2W
R813	1-249-433-11	CARBON	22K 5%	1/4W
R814	1-249-400-11	CARBON	39 5%	1/4W
R815	1-249-433-11	CARBON	22K 5%	1/4W
R816	1-249-433-11	CARBON	22K 5%	1/4W
R817	1-249-433-11	CARBON	22K 5%	1/4W
R822	1-249-418-11	CARBON	1.2K 5%	1/4W
R823	1-247-856-00	CARBON	11K 5%	1/4W (D707)
R823	1-249-429-11	CARBON	10K 5%	1/4W (A70)
R824	1-247-899-11	CARBON	680K 5%	1/4W
R828	1-249-418-11	CARBON	1.2K 5%	1/4W
R829	1-249-431-11	CARBON	15K 5%	1/4W
R830	1-247-899-11	CARBON	680K 5%	1/4W
R831	1-249-418-11	CARBON	1.2K 5%	1/4W
R832	1-249-432-11	CARBON	18K 5%	1/4W
R833	1-247-899-11	CARBON	680K 5%	1/4W
R835	1-249-417-11	CARBON	1K 5%	1/4W
R842	1-249-426-11	CARBON	5.6K 5%	1/4W
R907	1-249-422-11	CARBON	2.7K 5%	1/4W
R908	1-247-761-11	CARBON	5.6K 5%	1/2W
△R909	1-217-469-00	FUSIBLE	1 5%	1W F
△R910	1-217-469-00	FUSIBLE	1 5%	1W F
R911	1-249-429-11	CARBON	10K 5%	1/4W (UK)
△R912	1-212-934-00	FUSIBLE	1 5%	1/2W F

< VARIABLE RESISTOR >

RV105 1-241-695-11 RES, VAR, CARBON 10K/100K/100K (VOLUME)
 RV301 1-241-317-11 RES, VAR, CARBON 50K (MIC LEVEL)

< RELAY >

RY601 1-515-765-11 RELAY

< SWITCH >

S1 1-554-920-51 SWITCH, PUSH (AC POWER) (1 KEY) (POWER)

< TERMINAL >

* TM1 1-535-142-00 BASE POST 19MM (10MM PITCH) 5P
 TMS01 1-537-240-11 TERMINAL BOARD (CHECKER PIN) (SPEAKER)

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

VOLTAGE SELECTION

Ref. No.	Part No.	Description	Remark
*	1-643-977-11	VOLTAGE SELECTION BOARD (A70) *****	
		< CONNECTOR >	
* CNP2	1-573-565-11	PIN, CONNECTOR 5P (A70) < SWITCH >	
△S2	1-572-009-11	SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (A70) *****	
		MISCELLANEOUS *****	
△12	1-575-656-11	CORD, POWER (E, TR)	
△13	1-575-651-11	CORD, POWER (AEP, G, IT, EA)	
△14	1-690-056-11	CORD, POWER (AUS)	
△15	1-575-669-21	CORD, POWER (UK)	
63	1-575-903-11	WIRE, FLAT TYPE (15 CORE)	
64	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
△CN1	1-526-751-00	OUTLET, AC (AC OUTLET) (UK)	
△CN1	1-526-794-11	OUTLET, AC (AC OUTLET) (AEP, G, IT, EA)	
△CN1	1-526-882-00	OUTLET, AC (AC OUTLET) (E, TR)	
△CN1	1-540-196-11	OUTLET, AC (AC OUTLET) (AUS)	
△F1	1-532-203-00	FUSE, TIME-LAG (T2A)	
△F2	1-532-203-00	FUSE, TIME-LAG (T2A) (AEP, G, IT, A70)	
△F901	1-532-203-00	FUSE, TIME-LAG (T2A)	
△F902	1-532-203-00	FUSE, TIME-LAG (T2A)	
△T1	1-450-913-11	TRANSFORMER, POWER (D707)	
△T1	1-450-914-11	TRANSFORMER, POWER (A70)	

		***** HARDWARE LIST *****	
#1	7-621-849-00	SCREW (BV/RING)	
#2	7-682-547-04	SCREW +BVTT 3X6 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2	
#4	7-682-548-04	SCREW +BVTT 3X8 (S)	
#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2	
#6	7-682-560-04	SCREW +BVTT 4X6 (S)	

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