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TA-EX70

SERVICE MANUAL

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AEP Model
UK Model
E Model



TA-EX70 is the amplifier section in MHC-EX70AV.

Photo : E model

SPECIFICATIONS

(AEP, UK, Italian, German models)

DIN power output

FRONT:	50 W + 50 W (6 ohms, at 1 kHz, DIN)
CENTER:	25 W (6 ohms, at 1 kHz, DIN)
REAR:	15 W + 15 W (8 ohms, at 1 kHz, DIN)

Continuous RMS power output

FRONT:	65 W + 65 W (6 ohms, at 1 kHz, 10% THD)
CENTER:	35 W (6 ohms, at 1 kHz, 10% THD)
REAR:	23 W + 23 W (8 ohms, at 1 kHz, 10% THD)

Music power output

FRONT:	105 W + 105 W (6 ohms, at 1 kHz, 10% THD)
CENTER:	45 W (6 ohms, at 1 kHz, 10% THD)
REAR:	25 W + 25 W (8 ohms, at 1 kHz, 10% THD)

(E, Saudi Arabia, Hong Kong, Malaysia, Singapore, Thailand models)

Continuous RMS power output

FRONT SPEAKER:	60 W + 60 W (6 ohms at 1 kHz, 5% THD)
CENTER SPEAKER:	30 W (6 ohms at 1 kHz, 5% THD)
REAR SPEAKER:	20 W + 20 W (8 ohms at 1 kHz, 5% THD)

Input	Jack type	Sensitivity	Impedance
CD	Phono	450 mV	47 kilohms
MD	Phono	450 mV	47 kilohms
TUNER	Phono	250 mV	47 kilohms
VIDEO1	Phono	250 mV	47 kilohms
VIDEO2	Phono	250 mV	47 kilohms
TAPE	Phono	250 mV	47 kilohms
Output	Jack type	Voltage	Impedance
MD	Phono	250 mV	1 kilohm
VIDEO1	Phono	250 mV	1 kilohm
TAPE	Phono	250 mV	1 kilohm
PHONES	Stereo phone	—	Accepts headphones of 8 ohms or more

MONITOR OUT (phono jack):
1 V_{p-p}/75 ohms

FRONT SPEAKER:
accepts speakers of 6 to 16 ohms

CENTER SPEAKER:
accepts speakers of 6 to 16 ohms

REAR SPEAKER:
accepts speakers of 8 to 16 ohms

Dimensions

Approx. 280 x 122.5 x 290 mm
(11 1/8 x 4 7/8 x 11 1/2 in) (w/h/d)
incl. projecting parts and controls

Mass

(AEP, UK, Italian, German models)
Approx. 6.3 kg
(13 lb 14 oz)

(E, Saudi Arabia, Hong Kong, Malaysia, Singapore, Thailand models)

Approx. 5.6 kg

General

Power requirements

(AEP, UK, Italian, German models)
220 - 230 V AC,
50/60 Hz

(Thailand model)
220 V AC, 50/60 Hz

(E, Saudi Arabia, Hong Kong, Malaysia, Singapore models)

110 - 120 V or
220 - 240 V AC,
50/60 Hz
Adjustable with the
voltage selector

Power consumption

210 W (system)

Design and specifications are subject to
change without notice.



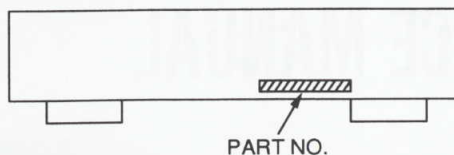
AV CENTER AMPLIFIER
SONY®

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MODEL IDENTIFICATION

— BACK PANEL —

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MODEL	PART NO.
AEP model	4-978-973-0□
German model	4-978-973-1□
Italian model	4-978-973-2□
UK model	4-978-973-3□
E, Malaysia, Singapore model	4-978-973-4□
Hong Kong model	4-978-973-5□
Saudi Arabia model	4-978-973-6□
Thailand model	4-978-973-7□

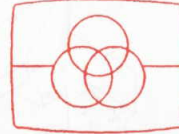
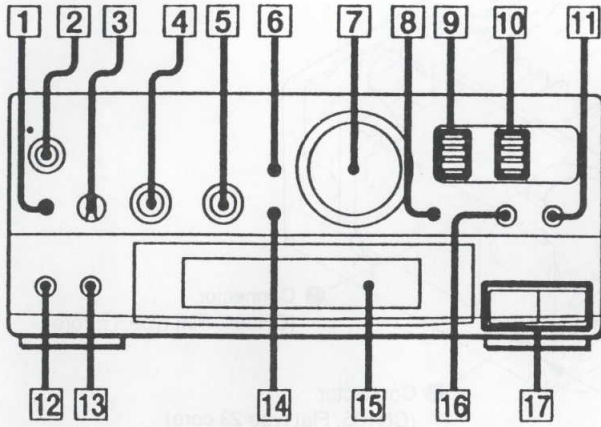
SAFETY-RELATED COMPONENT WARNING !!

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

SECTION 1 GENERAL

This section is extracted from instruction manual.

Index to Parts and Controls



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- 1** Remote sensor
- 2** SYSTEM POWER switch and ON/STANDBY indicator (7)
The indicator remains lit as long as the AC power cord is connected to a wall outlet.
- 3** MIC LEVEL control (25)
(E, EA, HK, SP, MY, TH models)
- 4** BASS control (18)
- 5** TREBLE control (18)
- 6** KARAOKE PON button* (25)
(E, EA, HK, SP, MY, TH models)
- 7** VOLUME control (5, 7, 18, 23)
- 8** SOURCE DIRECT button* (18, 22)
- 9** PRO LOGIC MODE indicators (21)
- 10** DSP MENU indicators (19)
- 11** DSP MODE button (19)
- 12** PHONES jack (18, 26)
- 13** MIX MIC jack (25, 26)
(E, EA, HK, SP, MY, TH models)
- 14** MUTING button* (18)
- 15** Display window
- 16** DOLBY PRO LOGIC button (21, 22)
- 17** FUNCTION buttons
(13, 17, 21, 22, 25, 26)
VIDEO (21, 25, 26)
AUDIO (13, 17, 22, 25, 26)

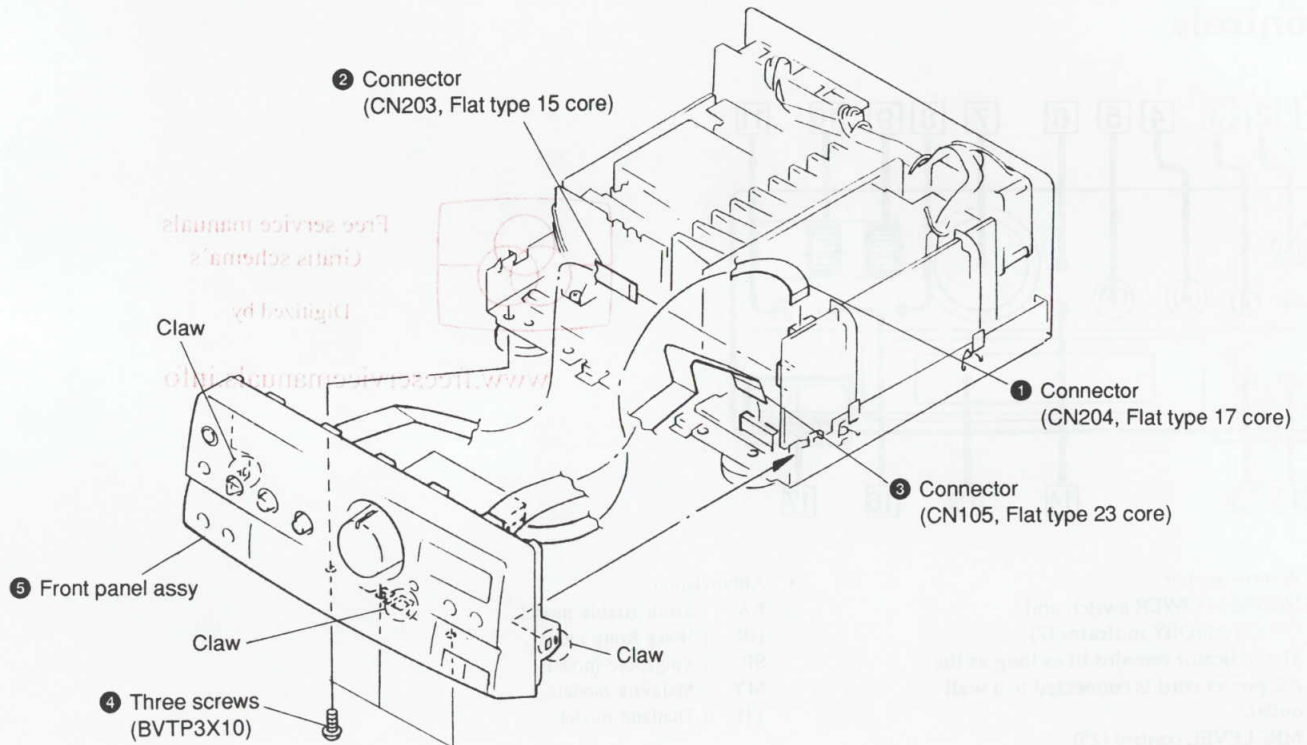
- Abbreviation
- EA : Saudi Arabia model.
- HK : Hong Kong model.
- SP : Singapore model.
- MY : Malaysia model.
- TH : Thailand model.

SECTION 2

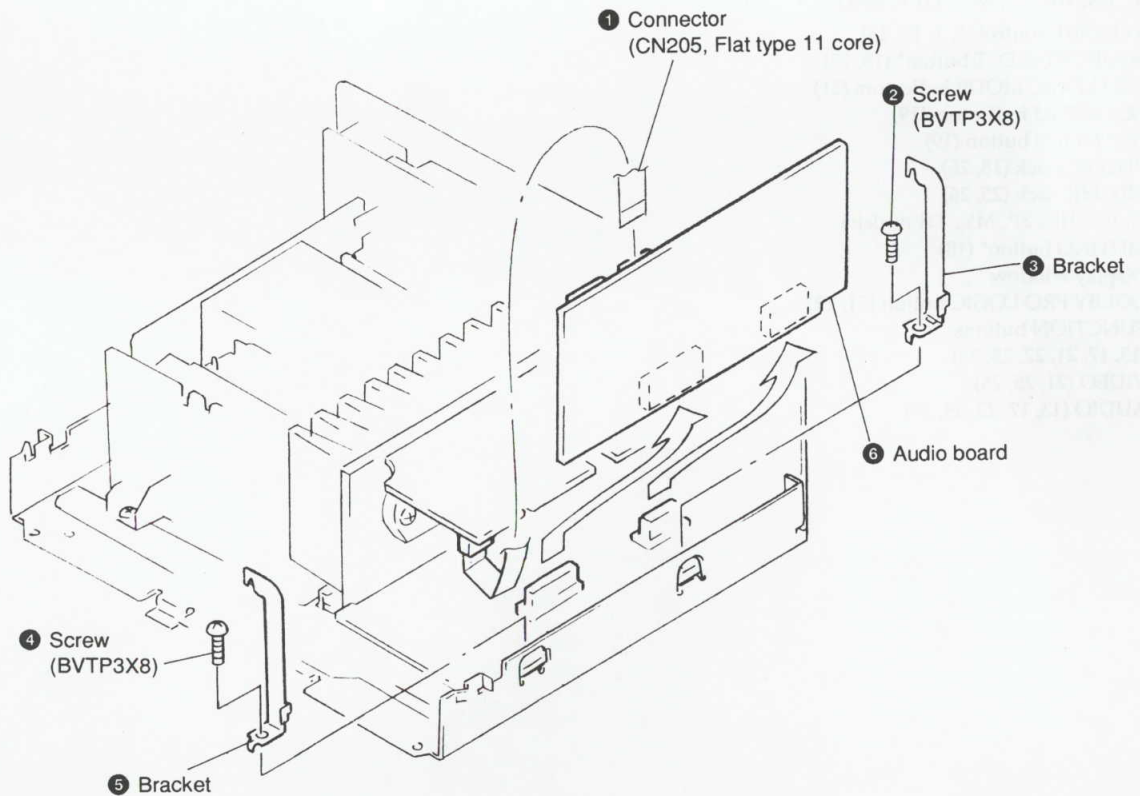
DISASSEMBLY

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

2-1. FRONT PANEL ASSY

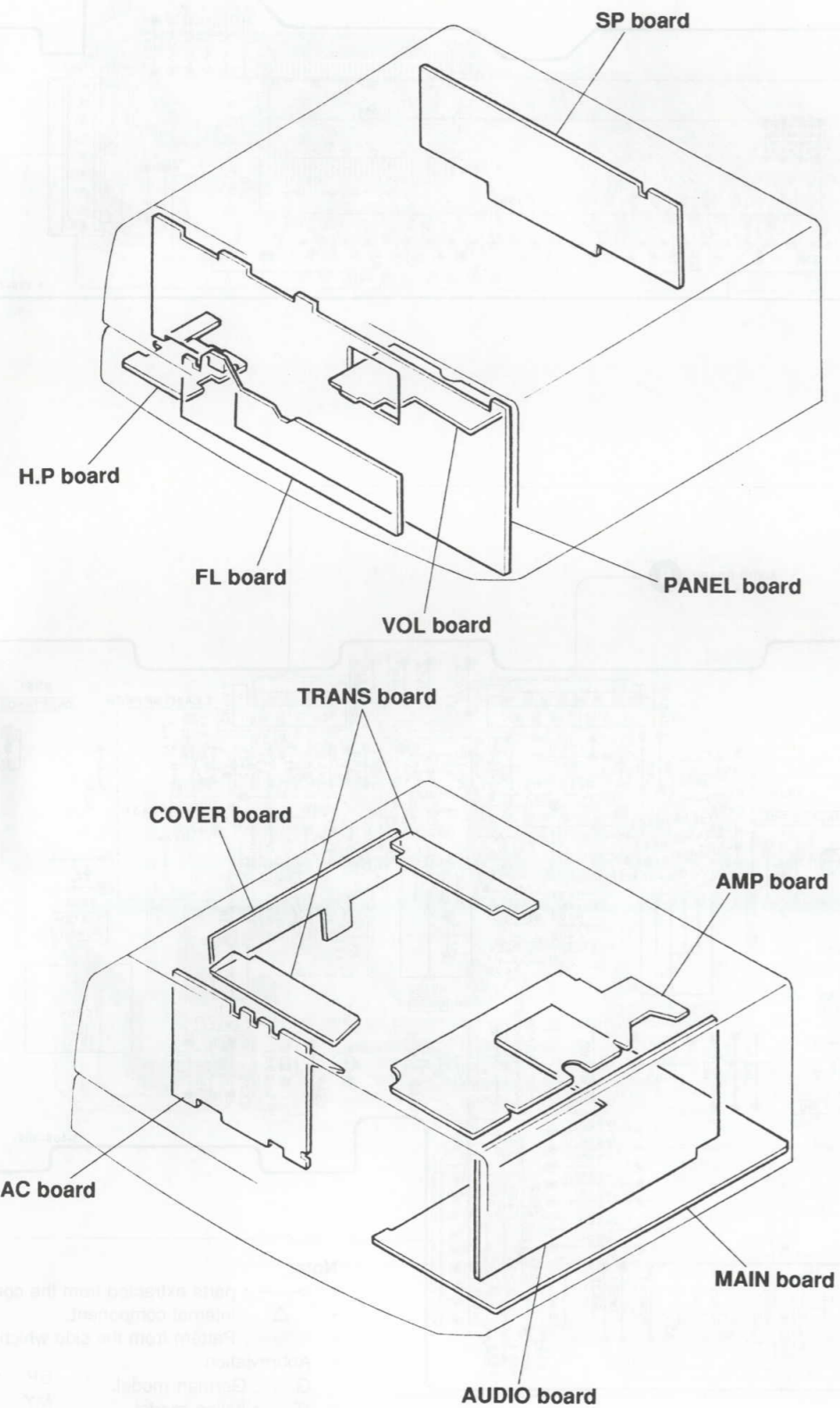


2-2. AUDIO BOARD



**SECTION 3
DIAGRAMS**

3-1. CIRCUIT BOARDS LOCATION



3-2. IC PIN FUNCTION

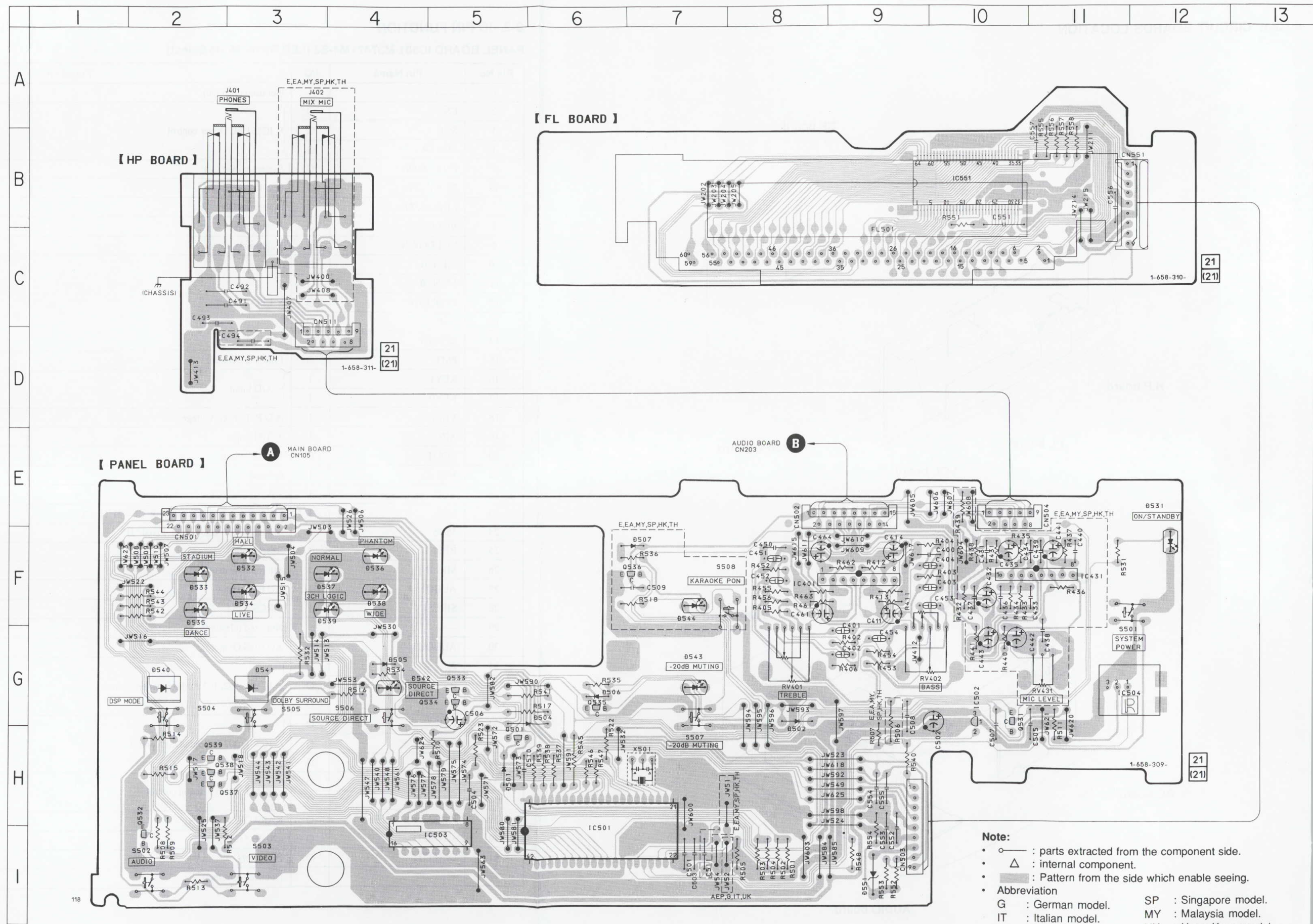
PANEL BOARD IC501 M37471M4-S3 (LED Drive, Mode Select)

Pin No.	Pin Name	I/O	Function
1	—	—	Not used (Ground)
2	\overline{CS}	O	IC551 FL Driver control
3	SCK	O	
4	SDATA	O	
5	POWER ON	O	
6	SP RY ON	O	Speaker relay ON
7	LINEMUTE	O	Line mute ON
8	VOLUP	O	Volume up
9	VOLDOWN	O	Volume down
10	MENU1	O	LED Control
11	MENU0	O	
12	PROLOGIC	O	
13	DSP	O	
14	EFFECT	O	
15	PMT	O	Line mute control
16	KEY1	I	A/D input
17	KEY0	I	
18	VREF	I	A/D Reference Voltage
19	XIN	I	X'TAL input
20	XOUT	O	X'TAL output
21	VSS	I	Ground
22	VCC	I	+5V
23	E/\overline{CE}	I	Destination identification input. CE="H", E="L"
24	$65/75$	I	Model identification input. Fixed "H"
25	\overline{RESET}	I	Reset input
26	MIC IN	I	Microphone detect input
27	AUBIN	I	AU BUS Input
28	SIRCSIN	I	SIRCS Input
29	—	—	Not used (Ground)
30	AUBOUT	O	AU BUS Output
31	A	O	IC101, 102, 103 Audio function control
32	B	O	
33	C	O	
34	CLK	O	IC301, 302 Prologic/DSP control
35	DATA	O	
36	ENBL	O	
37	$\overline{V1}$	O	IC181 Video function control
38	$\overline{V2}$	O	
39	KARAOKE	O	KARAOKE PON ON
40	-20MUTE	O	-20 dB Muting ON
41	DIRECT	O	Direct ON
42	—	—	Not used (Ground)

3-3. PRINTED WIRING BOARD — PANEL SECTION —
• See page 5 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D501	H-5
D502	G-8
D504	G-6
D505	G-4
D506	G-6
D507	F-7
D531	F-12
D532	F-3
D533	F-2
D534	F-3
D535	F-2
D536	F-4
D537	F-3
D538	F-4
D539	F-3
D540	G-2
D541	G-3
D542	G-4
D543	G-7
D544	F-7
D551	I-9
IC401	F-9
IC431	F-11
IC501	I-6
IC502	G-10
IC503	I-5
IC504	G-11
IC551	B-10
Q501	H-5
Q531	G-10
Q532	I-2
Q533	G-5
Q534	G-5
Q535	G-6
Q536	F-7
Q537	H-2
Q538	H-2
Q539	H-2



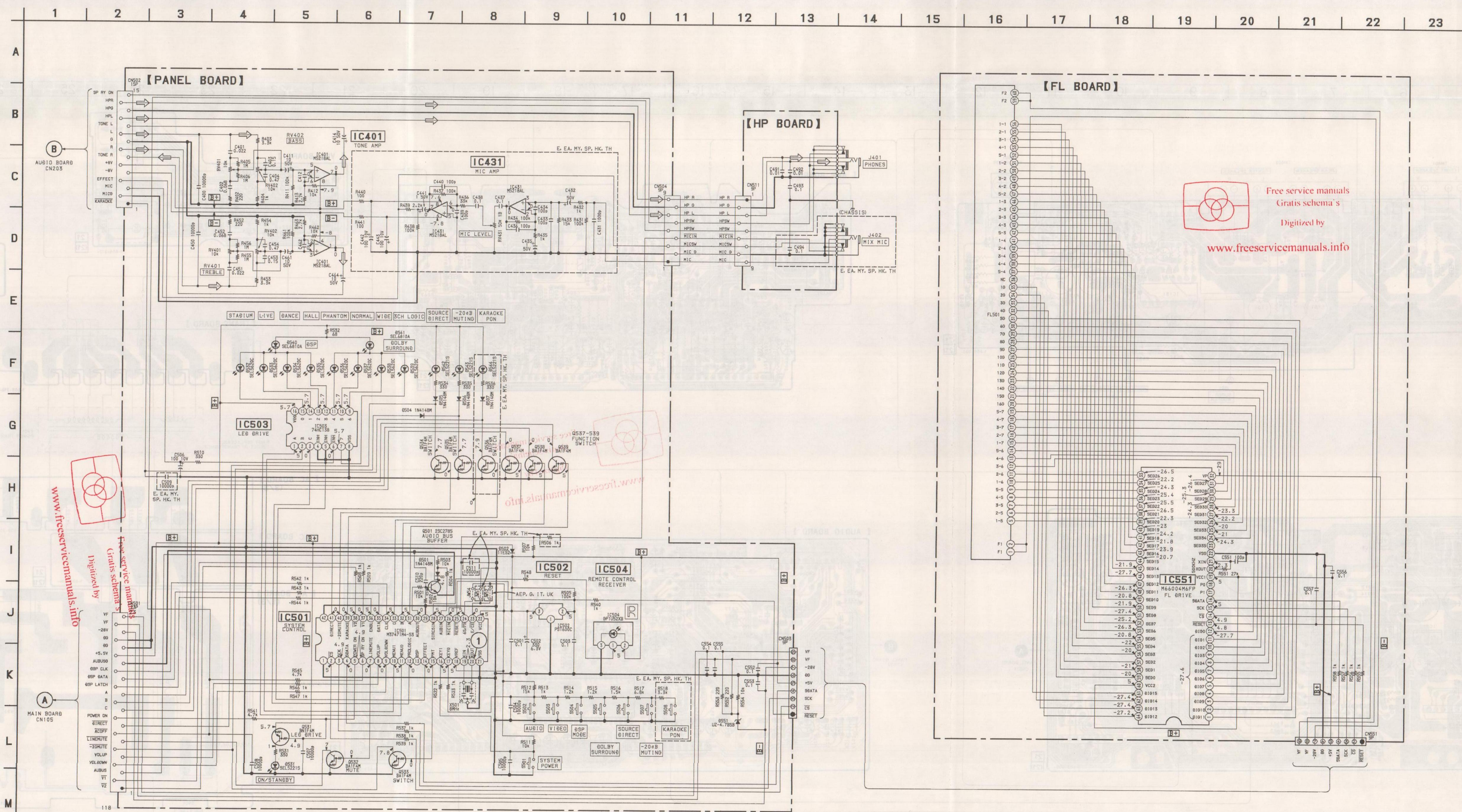
Note:

- : parts extracted from the component side.
- △ : internal component.
- ▭ : Pattern from the side which enable seeing.

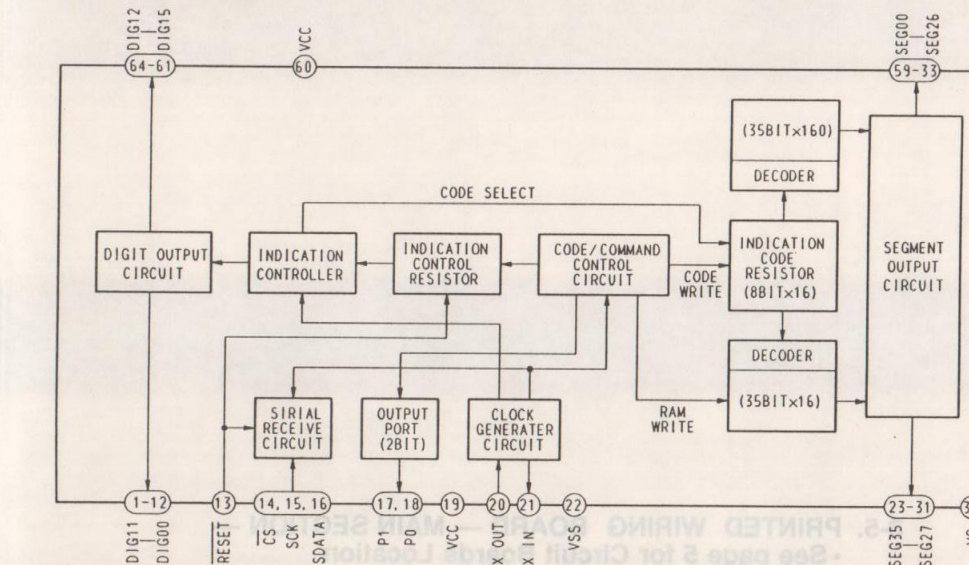
Abbreviation

G : German model.	SP : Singapore model.
IT : Italian model.	MY : Malaysia model.
EA : Saudi Arabia model.	HK : Hong Kong model.
	TH : Thailand model.

4. SCHEMATIC DIAGRAM — PANEL SECTION —
- See page 6 for IC Pin Function. (IC501)



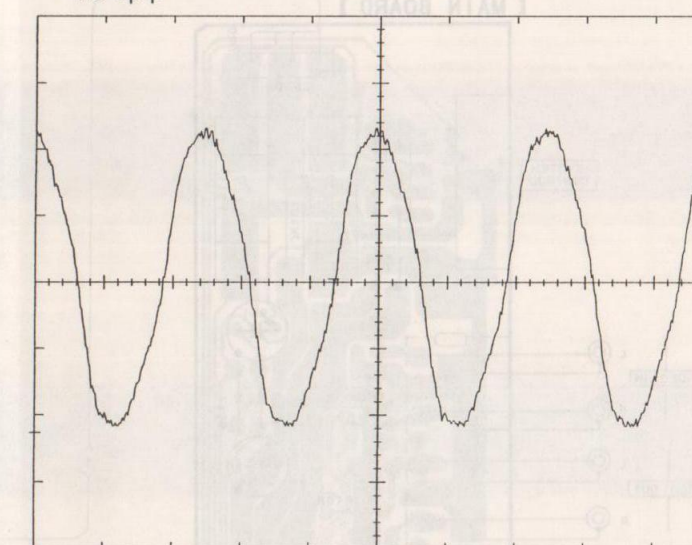
• IC Block Diagram
IC551 M66004M6FP



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• Waveform

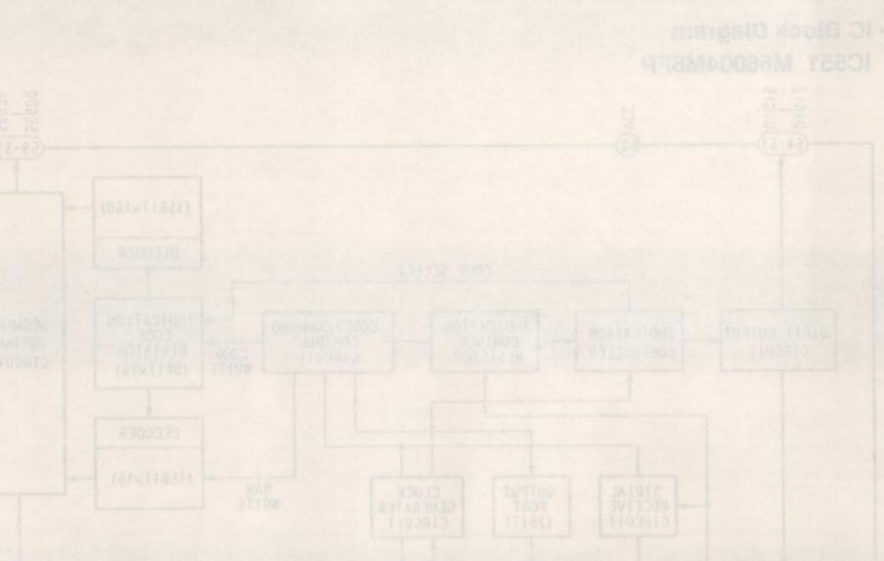
① IC501 @ pin 8 MHz 4.5 Vp-p



Note:

- All capacitors are in μF unless otherwise noted. pF - μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- Δ : internal component.
- \square : panel designation.
- \square : B+ Line
- \square : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : TUNER MODE
- Voltagess 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.
- Circled numbers refer to waveforms.
- Signal path.
- \rightarrow : FM
- Abbreviation
- G : German model.
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- EA : Saudi Arabia model.
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- HK : Hong Kong model.
- TH : Thailand model.

Location	Part No.	Location	Part No.
1-1	1000	1-1	1000
1-2	1000	1-2	1000
1-3	1000	1-3	1000
1-4	1000	1-4	1000
1-5	1000	1-5	1000
1-6	1000	1-6	1000
1-7	1000	1-7	1000
1-8	1000	1-8	1000
1-9	1000	1-9	1000
1-10	1000	1-10	1000
1-11	1000	1-11	1000
1-12	1000	1-12	1000
1-13	1000	1-13	1000
1-14	1000	1-14	1000
1-15	1000	1-15	1000
1-16	1000	1-16	1000
1-17	1000	1-17	1000
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1-33	1000	1-33	1000
1-34	1000	1-34	1000
1-35	1000	1-35	1000
1-36	1000	1-36	1000
1-37	1000	1-37	1000
1-38	1000	1-38	1000
1-39	1000	1-39	1000
1-40	1000	1-40	1000
1-41	1000	1-41	1000
1-42	1000	1-42	1000
1-43	1000	1-43	1000
1-44	1000	1-44	1000
1-45	1000	1-45	1000
1-46	1000	1-46	1000
1-47	1000	1-47	1000
1-48	1000	1-48	1000
1-49	1000	1-49	1000
1-50	1000	1-50	1000
1-51	1000	1-51	1000
1-52	1000	1-52	1000
1-53	1000	1-53	1000
1-54	1000	1-54	1000
1-55	1000	1-55	1000
1-56	1000	1-56	1000
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1-70	1000	1-70	1000
1-71	1000	1-71	1000
1-72	1000	1-72	1000
1-73	1000	1-73	1000
1-74	1000	1-74	1000
1-75	1000	1-75	1000
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1-78	1000	1-78	1000
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1-80	1000	1-80	1000
1-81	1000	1-81	1000
1-82	1000	1-82	1000
1-83	1000	1-83	1000
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1-95	1000	1-95	1000
1-96	1000	1-96	1000
1-97	1000	1-97	1000
1-98	1000	1-98	1000
1-99	1000	1-99	1000
1-100	1000	1-100	1000



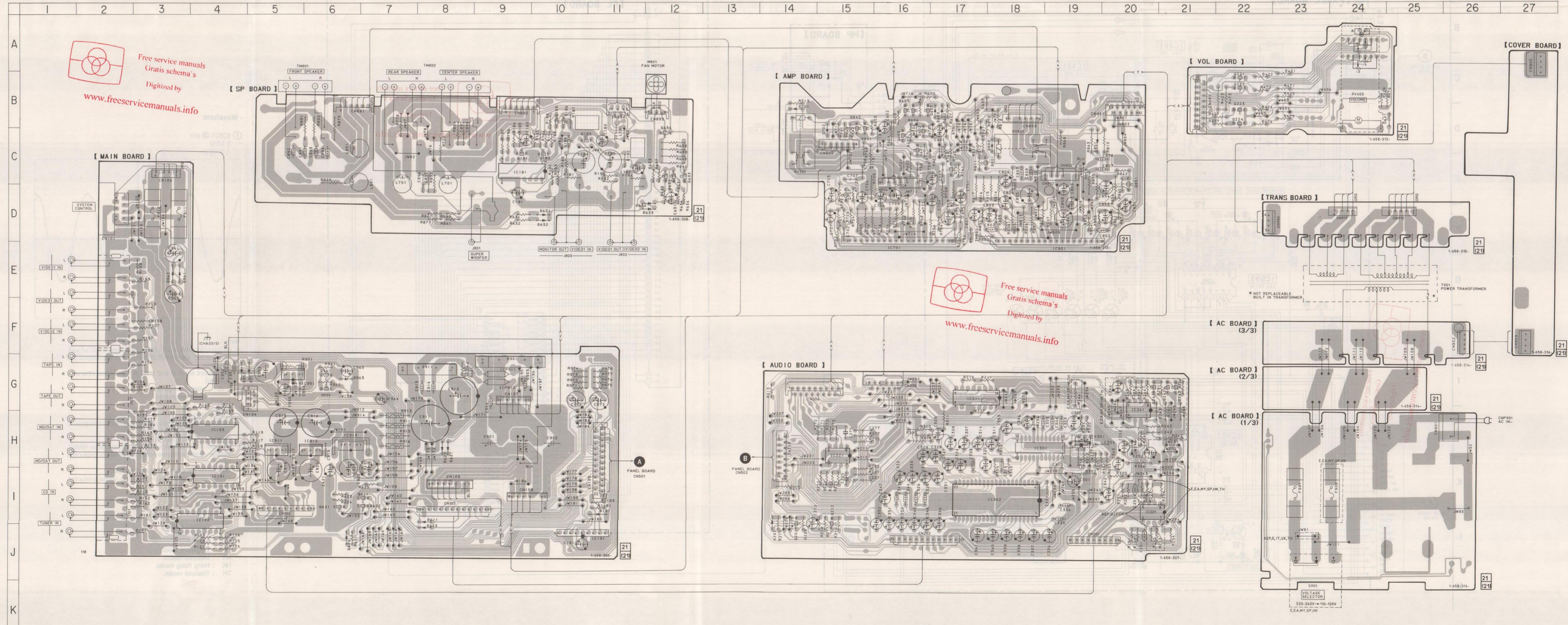
3-5. PRINTED WIRING BOARD — MAIN SECTION —
• See page 5 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D191	I-11	IC911	H-5
D202	J-14	IC912	H-6
D601	C-16	IC913	H-6
D602	B-17	IC951	G-5
D603	B-17		
D611	J-8	Q181	C-9
D621	H-8	Q182	C-10
D622	H-8	Q183	C-10
D623	J-8	Q184	C-10
D624	J-6	Q185	C-10
D631	D-10	Q186	C-10
D632	D-10	Q201	J-14
D633	D-12	Q212	J-15
D634	D-12	Q221	B-22
D701	B-14	Q222	B-22
D702	C-15	Q223	B-22
D751	C-17	Q224	C-22
D801	C-17	Q241	G-20
D802	C-18	Q242	G-21
D851	C-19	Q243	G-21
D901	G-9	Q601	C-16
D911	G-8	Q602	C-16
D951	G-5	Q603	C-16
D952	G-4	Q605	B-16
D961	E-3	Q606	B-16
D962	E-3	Q607	B-16
D963	G-6	Q611	I-7
		Q621	I-6
		Q622	I-7
IC101	I-4	Q631	D-12
IC102	J-4	Q632	D-12
IC103	H-4	Q633	D-12
IC181	C-9	Q634	C-12
IC191	J-10	Q701	D-15
IC201	I-20	Q751	C-17
IC211	G-17	Q801	C-17
IC221	H-15	Q802	C-15
IC241	H-20	Q841	C-15
IC301	H-18	Q842	C-15
IC302	I-18	Q851	D-20
IC701	E-16	Q826	G-6
IC801	E-19	Q961	G-6

Note:

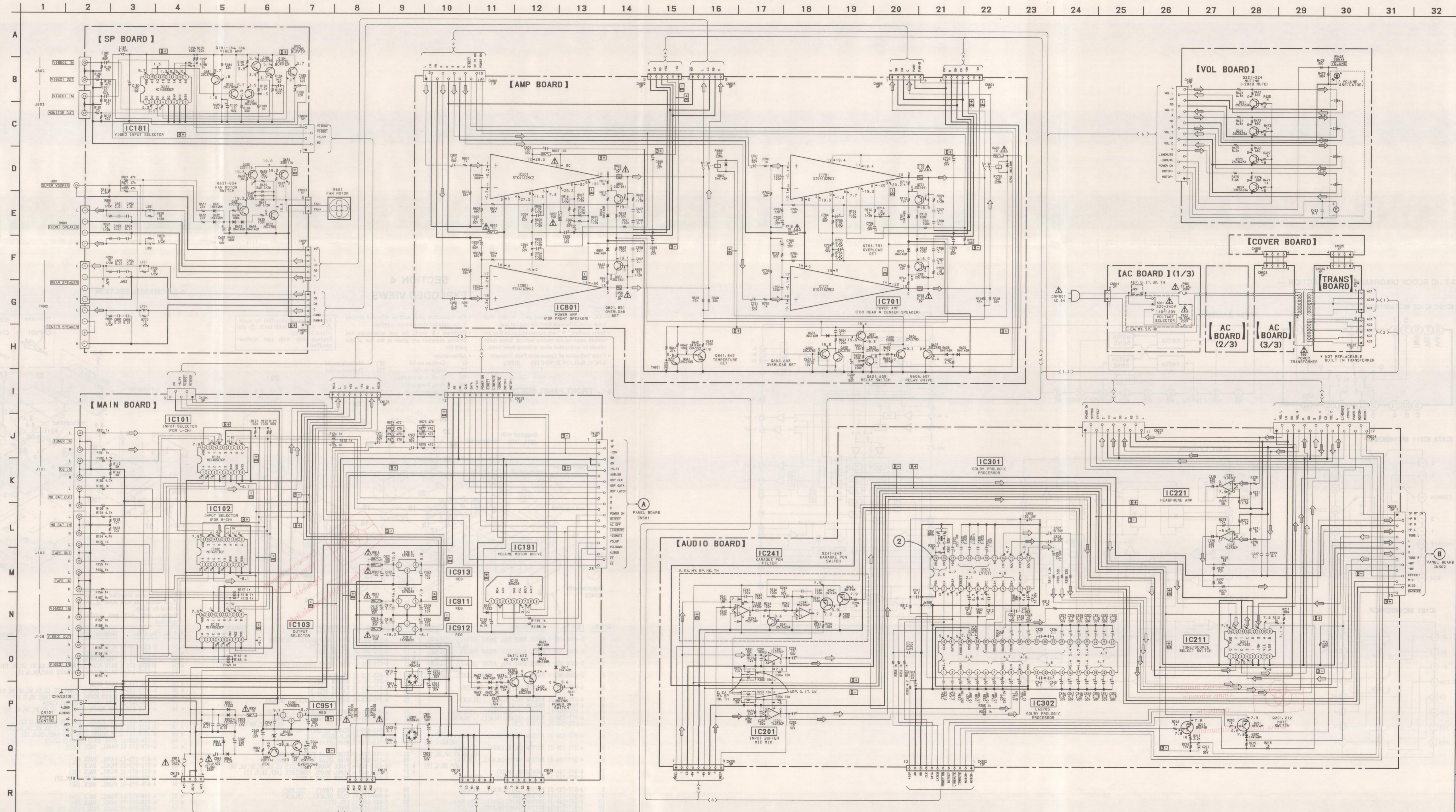
- : parts extracted from the component side.
- △ : internal component.
- : Pattern from the side which enable seeing.
- Abbreviation
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3-6. SCHEMATIC DIAGRAM — MAIN SECTION —
• See page 21 for IC Block Diagrams.



SECTION 5 ELECTRICAL PARTS LIST

AC **AMP**

NOTE:

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 name.

- 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.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- CAPACITORS
uF : μ F
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- COILS
uH : μ H
- Abbreviation
G : German model
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-658-314-21	AC BOARD *****		C758	1-164-159-11	CERAMIC	0. 1uF
	1-533-223-11	HOLDER, FUSE < CONNECTOR >		C759	1-126-965-11	ELECT	22uF 20% 50V
CN901	1-564-321-00	PIN, CONNECTOR 2P		C801	1-126-961-11	ELECT	2. 2uF 20% 50V
CN902	1-770-011-41	CONNECTOR, BOARD TO BOARD 4P < FUSE >		C802	1-164-070-11	CERAMIC	100PF 5% 50V
Δ F901	1-532-259-00	FUSE, TIME LAG (1. 6A, 250V)		C803	1-124-910-11	ELECT	47uF 20% 50V
Δ F902	1-532-237-00	FUSE, TIME LAG (3. 15A, 250V) (E, EA, MY, SP, HK)		C804	1-124-910-11	ELECT	47uF 20% 50V
		< SWITCH >		C805	1-124-122-11	ELECT	100uF 20% 50V
Δ S901	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, EA, MY, SP, HK)		C806	1-126-965-11	ELECT	22uF 20% 50V

*	A-4378-841-A	AMP BOARD, COMPLETE (AEP, G, IT, UK) *****		C807	1-136-165-00	FILM	0. 1uF 5% 50V
*	A-4378-832-A	AMP BOARD, COMPLETE (E, EA, MY, SP, HK, TH) ***** < CAPACITOR >		C808	1-136-165-00	FILM	0. 1uF 5% 50V
C601	1-124-443-00	ELECT	100uF 20% 10V	C809	1-126-965-11	ELECT	22uF 20% 50V
C602	1-124-907-11	ELECT	10uF 20% 50V	C851	1-126-961-11	ELECT	2. 2uF 20% 50V
C603	1-162-294-31	CERAMIC	0. 001uF 10% 50V	C852	1-164-070-11	CERAMIC	100PF 5% 50V
C604	1-164-159-11	CERAMIC	0. 1uF 50V	C853	1-124-910-11	ELECT	47uF 20% 50V
C701	1-126-961-11	ELECT	2. 2uF 20% 50V	C854	1-124-910-11	ELECT	47uF 20% 50V
C702	1-162-282-31	CERAMIC	100PF 10% 50V	C855	1-124-122-11	ELECT	100uF 20% 50V
C703	1-124-910-11	ELECT	47uF 20% 50V	C857	1-136-165-00	FILM	0. 1uF 5% 50V
C704	1-126-965-11	ELECT	22uF 20% 50V	C858	1-136-165-00	FILM	0. 1uF 5% 50V
C706	1-126-965-11	ELECT	22uF 20% 50V	C859	1-126-965-11	ELECT	22uF 20% 50V
C707	1-164-159-11	CERAMIC	0. 1uF 50V			< CONNECTOR >	
C708	1-164-159-11	CERAMIC	0. 1uF 50V	* CN801	1-568-830-11	SOCKET, CONNECTOR 11P	
C709	1-126-965-11	ELECT	22uF 20% 50V	CN803	1-770-965-11	PIN, CONNECTOR (PCB) (V TYPE)5P	
C751	1-126-961-11	ELECT	2. 2uF 20% 50V	CN805	1-764-329-11	PIN, CONNECTOR (PCB) (V TYPE)6P	
C752	1-162-282-31	CERAMIC	100PF 10% 50V			< DIODE >	
C753	1-124-910-11	ELECT	47uF 20% 50V	D601	8-719-987-63	DIODE	1N4148M
C754	1-126-965-11	ELECT	22uF 20% 50V	D602	8-719-987-63	DIODE	1N4148M
C757	1-164-159-11	CERAMIC	0. 1uF 50V	D603	8-719-987-63	DIODE	1N4148M
				D701	8-719-987-63	DIODE	1N4148M
				D702	8-719-987-63	DIODE	1N4148M
				D751	8-719-987-63	DIODE	1N4148M
				D801	8-719-987-63	DIODE	1N4148M
				D802	8-719-987-63	DIODE	1N4148M
				D851	8-719-987-63	DIODE	1N4148M
						< IC >	
				IC701	8-749-920-13	IC	STK-4132MK2
				IC801	8-749-900-24	IC	STK-4162MK2
						< TRANSISTOR >	
				Q601	8-729-900-63	TRANSISTOR	DTA124ES

AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q602	8-729-119-78	TRANSISTOR	2SC2785-HFE	R801	1-249-417-11	CARBON	1K 5% 1/4W
Q603	8-729-119-78	TRANSISTOR	2SC2785-HFE	R802	1-249-438-11	CARBON	56K 5% 1/4W
Q605	8-729-119-78	TRANSISTOR	2SC2785-HFE	R803	1-249-415-11	CARBON	680 5% 1/4W
Q606	8-729-119-78	TRANSISTOR	2SC2785-HFE				
Q607	8-729-119-78	TRANSISTOR	2SC2785-HFE	R804	1-249-438-11	CARBON	56K 5% 1/4W
Q701	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	R805	1-260-103-11	CARBON	2.2K 5% 1/2W
Q751	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	R806	1-260-103-11	CARBON	2.2K 5% 1/2W
Q801	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	△R807	1-212-881-11	FUSIBLE	100 5% 1/4W F
Q841	8-729-119-78	TRANSISTOR	2SC2785-HFE	△R808	1-217-151-00	RES, METAL PLATE	0.22 F
Q842	8-729-900-36	TRANSISTOR	DTC124ES	R809	1-260-076-11	CARBON	10 5% 1/2W
Q851	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	△R810	1-212-857-00	FUSIBLE	10 5% 1/4W F
< RESISTOR >				R811	1-249-417-11	CARBON	1K 5% 1/4W
△R600	1-212-857-00	FUSIBLE	10 5% 1/4W F	R812	1-249-431-11	CARBON	15K 5% 1/4W
R602	1-249-441-11	CARBON	100K 5% 1/4W	R813	1-249-441-11	CARBON	100K 5% 1/4W
R603	1-249-441-11	CARBON	100K 5% 1/4W	R814	1-260-103-11	CARBON	2.2K 5% 1/2W
R604	1-249-429-11	CARBON	10K 5% 1/4W	R815	1-260-103-11	CARBON	2.2K 5% 1/2W
R605	1-249-425-11	CARBON	4.7K 5% 1/4W	R816	1-260-103-11	CARBON	2.2K 5% 1/2W
R606	1-249-441-11	CARBON	100K 5% 1/4W	R817	1-260-103-11	CARBON	2.2K 5% 1/2W
R607	1-249-425-11	CARBON	4.7K 5% 1/4W	R818	1-249-437-11	CARBON	47K 5% 1/4W
R608	1-249-441-11	CARBON	100K 5% 1/4W	R821	1-249-441-11	CARBON	100K 5% 1/4W
R701	1-249-417-11	CARBON	1K 5% 1/4W	R841	1-249-434-11	CARBON	27K 5% 1/4W
R702	1-249-438-11	CARBON	56K 5% 1/4W	R842	1-249-441-11	CARBON	100K 5% 1/4W
R703	1-249-411-11	CARBON	330 5% 1/4W	R843	1-249-441-11	CARBON	100K 5% 1/4W
R704	1-249-438-11	CARBON	56K 5% 1/4W	R851	1-249-417-11	CARBON	1K 5% 1/4W
R705	1-260-103-11	CARBON	2.2K 5% 1/2W	R852	1-249-438-11	CARBON	56K 5% 1/4W
R706	1-260-103-11	CARBON	2.2K 5% 1/2W	R853	1-249-415-11	CARBON	680 5% 1/4W
△R708	1-217-151-00	RES, METAL PLATE	0.22 F	R854	1-249-438-11	CARBON	56K 5% 1/4W
R709	1-260-076-11	CARBON	10 5% 1/2W	R855	1-260-103-11	CARBON	2.2K 5% 1/2W
△R710	1-212-857-00	FUSIBLE	10 5% 1/4W F	R856	1-260-103-11	CARBON	2.2K 5% 1/2W
R711	1-249-417-11	CARBON	1K 5% 1/4W	△R857	1-212-881-11	FUSIBLE	100 5% 1/4W F
R712	1-249-431-11	CARBON	15K 5% 1/4W	△R858	1-217-151-00	RES, METAL PLATE	0.22 F
R713	1-249-441-11	CARBON	100K 5% 1/4W	R859	1-260-076-11	CARBON	10 5% 1/2W
R714	1-260-099-11	CARBON	1K 5% 1/2W	R861	1-249-417-11	CARBON	1K 5% 1/4W
R716	1-260-099-11	CARBON	1K 5% 1/2W	R862	1-249-431-11	CARBON	15K 5% 1/4W
R718	1-249-437-11	CARBON	47K 5% 1/4W	R863	1-249-441-11	CARBON	100K 5% 1/4W
R721	1-249-441-11	CARBON	100K 5% 1/4W	R868	1-249-438-11	CARBON	56K 5% 1/4W
R722	1-249-441-11	CARBON	100K 5% 1/4W	< RELAY >			
R751	1-249-417-11	CARBON	1K 5% 1/4W	RY701	1-515-920-11	RELAY (24V)	
R752	1-249-438-11	CARBON	56K 5% 1/4W	RY801	1-515-920-11	RELAY (24V)	
R753	1-249-411-11	CARBON	330 5% 1/4W	< THERMISTOR >			
R754	1-249-438-11	CARBON	56K 5% 1/4W	TH801	1-807-796-11	THERMISTOR	
R755	1-260-103-11	CARBON	2.2K 5% 1/2W	*****			
R756	1-260-103-11	CARBON	2.2K 5% 1/2W				
△R758	1-217-151-00	RES, METAL PLATE	0.22 F				
R759	1-260-076-11	CARBON	10 5% 1/2W				
R761	1-249-417-11	CARBON	1K 5% 1/4W				
R762	1-249-431-11	CARBON	15K 5% 1/4W				
R763	1-249-441-11	CARBON	100K 5% 1/4W				
R768	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.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4378-846-A	AUDIO BOARD, COMPLETE (AEP, G, IT, UK) *****		C333	1-124-250-11	ELECT	0.15uF 20% 50V
				C334	1-136-157-00	FILM	0.022uF 5% 50V
				C335	1-136-161-00	FILM	0.047uF 5% 50V
*	A-4378-835-A	AUDIO BOARD, COMPLETE (E, EA, MY, SP, HK, TH) *****		C336	1-104-666-11	ELECT	220uF 20% 10V
				C337	1-124-907-11	ELECT	10uF 20% 50V
		< CAPACITOR >		C338	1-124-907-11	ELECT	10uF 20% 50V
C201	1-164-070-11	CERAMIC	100PF 5% 50V	C339	1-124-907-11	ELECT	10uF 20% 50V
C202	1-124-907-11	ELECT	10uF 20% 50V	C340	1-124-907-11	ELECT	10uF 20% 50V
C212	1-124-907-11	ELECT	10uF 20% 50V	C341	1-104-666-11	ELECT	220uF 20% 10V
C225	1-115-499-91	ELECT	220uF 20% 10V	C342	1-124-907-11	ELECT	10uF 20% 50V
C227	1-164-159-11	CERAMIC	0.1uF 50V	C343	1-124-907-11	ELECT	10uF 20% 50V
C242	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	C344	1-136-165-00	FILM	0.1uF 5% 50V
C243	1-162-600-11	CERAMIC	0.0047uF 20% 16V (E, EA, MY, SP, HK, TH)	C345	1-136-165-00	FILM	0.1uF 5% 50V
C244	1-124-907-11	ELECT	10uF 20% 50V (E, EA, MY, SP, HK, TH)	C346	1-124-465-00	ELECT	0.47uF 20% 50V
C246	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	C347	1-126-963-11	ELECT	4.7uF 20% 50V
C251	1-164-070-11	CERAMIC	100PF 5% 50V	C348	1-124-465-00	ELECT	0.47uF 20% 50V
C252	1-124-907-11	ELECT	10uF 20% 50V	C349	1-126-963-11	ELECT	4.7uF 20% 50V
C275	1-115-499-91	ELECT	220uF 20% 10V	C350	1-124-250-11	ELECT	0.15uF 20% 50V
C277	1-164-159-11	CERAMIC	0.1uF 50V	C351	1-126-962-11	ELECT	3.3uF 20% 50V
C300	1-162-286-31	CERAMIC	220PF 10% 50V	C352	1-124-250-11	ELECT	0.15uF 20% 50V
C301	1-124-443-00	ELECT	100uF 20% 10V	C353	1-124-443-00	ELECT	100uF 20% 10V
C302	1-104-666-11	ELECT	220uF 20% 10V			< CONNECTOR >	
C303	1-136-159-00	FILM	0.033uF 5% 50V	CN201	1-770-728-11	CONNECTOR, BOARD TO BOARD 9P	
C304	1-130-473-00	MYLAR	0.0015uF 5% 50V	CN202	1-770-731-11	CONNECTOR, BOARD TO BOARD 12P	
C305	1-136-159-00	FILM	0.033uF 5% 50V	* CN203	1-568-834-11	SOCKET, CONNECTOR 15P	
C306	1-124-903-11	ELECT	1uF 20% 50V	CN204	1-568-860-11	SOCKET, CONNECTOR 17P	
C307	1-124-907-11	ELECT	10uF 20% 50V	* CN205	1-568-854-11	SOCKET, CONNECTOR 11P	
C308	1-124-907-11	ELECT	10uF 20% 50V			< DIODE >	
C309	1-124-907-11	ELECT	10uF 20% 50V	D202	8-719-987-63	DIODE 1N4148M	
C310	1-164-159-11	CERAMIC	0.1uF 50V			< IC >	
C311	1-126-961-11	ELECT	2.2uF 20% 50V	IC201	8-759-910-83	IC TL072ACP	
C312	1-164-159-11	CERAMIC	0.1uF 50V	IC211	8-759-000-48	IC MC14052BCP	
C313	1-136-159-00	FILM	0.033uF 5% 50V	IC221	8-759-910-83	IC TL072ACP	
C314	1-124-907-11	ELECT	10uF 20% 50V	IC241	8-759-634-51	IC M5218AP (E, EA, MY, SP, HK, TH)	
C321	1-162-292-31	CERAMIC	680PF 10% 50V	IC301	8-759-168-98	IC LV1010N	
C322	1-124-907-11	ELECT	10uF 20% 50V	IC302	8-759-248-74	IC LA2785	
C323	1-136-173-00	FILM	0.47uF 5% 50V			< TRANSISTOR >	
C324	1-124-477-11	ELECT	47uF 20% 25V	Q201	8-729-900-63	TRANSISTOR DTA124ES	
C325	1-136-165-00	FILM	0.1uF 5% 50V	Q212	8-729-900-63	TRANSISTOR DTA124ES	
C326	1-136-165-00	FILM	0.1uF 5% 50V	Q241	8-729-141-30	TRANSISTOR 2SC3623A-LK (E, EA, MY, SP, HK, T	
C327	1-124-465-00	ELECT	0.47uF 20% 50V	Q242	8-729-900-63	TRANSISTOR DTA124ES (E, EA, MY, SP, HK, TH)	
C328	1-126-963-11	ELECT	4.7uF 20% 50V	Q243	8-729-900-63	TRANSISTOR DTA124ES (E, EA, MY, SP, HK, TH)	
C329	1-124-465-00	ELECT	0.47uF 20% 50V			< RESISTOR >	
C330	1-126-963-11	ELECT	4.7uF 20% 50V	R200	1-249-417-11	CARBON 1K 5% 1/4W	
C331	1-124-250-11	ELECT	0.15uF 20% 50V	R201	1-249-429-11	CARBON 10K 5% 1/4W	
C332	1-126-962-11	ELECT	3.3uF 20% 50V				

AUDIO COVER FL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R202	1-249-430-11	CARBON	12K 5% 1/4W	R293	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)
R203	1-249-429-11	CARBON	10K 5% 1/4W (E, EA, MY, SP, HK, TH)	R294	1-249-417-11	CARBON	1K 5% 1/4W (E, EA, MY, SP, HK, TH)
R204	1-249-430-11	CARBON	12K 5% 1/4W	R300	1-247-903-00	CARBON	1M 5% 1/4W
R205	1-249-429-11	CARBON	10K 5% 1/4W (AEP, G, IT, UK)	R301	1-249-411-11	CARBON	330 5% 1/4W
R211	1-249-441-11	CARBON	100K 5% 1/4W	R302	1-249-436-11	CARBON	39K 5% 1/4W
R212	1-249-417-11	CARBON	1K 5% 1/4W	R303	1-249-436-11	CARBON	39K 5% 1/4W
R213	1-249-417-11	CARBON	1K 5% 1/4W	R304	1-249-432-11	CARBON	18K 5% 1/4W
R214	1-249-441-11	CARBON	100K 5% 1/4W	R305	1-249-417-11	CARBON	1K 5% 1/4W
R215	1-249-429-11	CARBON	10K 5% 1/4W	R306	1-249-417-11	CARBON	1K 5% 1/4W
R216	1-249-417-11	CARBON	1K 5% 1/4W	R307	1-249-389-11	CARBON	4.7 5% 1/4W
R217	1-249-421-11	CARBON	2.2K 5% 1/4W	R308	1-249-411-11	CARBON	330 5% 1/4W
R218	1-249-429-11	CARBON	10K 5% 1/4W	R309	1-249-411-11	CARBON	330 5% 1/4W
R220	1-249-417-11	CARBON	1K 5% 1/4W	R310	1-249-418-11	CARBON	1.2K 5% 1/4W
R221	1-247-903-00	CARBON	1M 5% 1/4W	R311	1-249-418-11	CARBON	1.2K 5% 1/4W
R222	1-249-419-11	CARBON	1.5K 5% 1/4W	R312	1-249-417-11	CARBON	1K 5% 1/4W
R223	1-249-429-11	CARBON	10K 5% 1/4W	R351	1-249-417-11	CARBON	1K 5% 1/4W
R225	1-249-399-11	CARBON	33 5% 1/4W	R352	1-249-417-11	CARBON	1K 5% 1/4W
R227	1-249-429-11	CARBON	10K 5% 1/4W	R353	1-249-417-11	CARBON	1K 5% 1/4W
R241	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	< VIBRATOR >			
R242	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	X301	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	
R243	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	*****			
R244	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	*	1-658-316-21	COVER BOARD	
R245	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	*****			
R246	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	< CONNECTOR >			
R247	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	CN903	1-770-010-21	CONNECTOR, BOARD TO BOARD 4P	
R251	1-249-429-11	CARBON	10K 5% 1/4W	CN905	1-770-010-21	CONNECTOR, BOARD TO BOARD 4P	
R252	1-249-430-11	CARBON	12K 5% 1/4W	*****			
R253	1-249-429-11	CARBON	10K 5% 1/4W (E, EA, MY, SP, HK, TH)	*	1-658-310-21	FL BOARD	
R254	1-249-430-11	CARBON	12K 5% 1/4W	*****			
R255	1-249-429-11	CARBON	10K 5% 1/4W (AEP, G, IT, UK)	*	4-979-799-01	HOLDER (FL)	
R270	1-249-417-11	CARBON	1K 5% 1/4W	< CAPACITOR >			
R271	1-247-903-00	CARBON	1M 5% 1/4W	C551	1-162-282-31	CERAMIC	100PF 10% 50V
R272	1-249-419-11	CARBON	1.5K 5% 1/4W	C556	1-164-159-11	CERAMIC	0.1uF 50V
R273	1-249-429-11	CARBON	10K 5% 1/4W	C557	1-164-159-11	CERAMIC	0.1uF 50V
R275	1-249-399-11	CARBON	33 5% 1/4W	< CONNECTOR >			
R277	1-249-429-11	CARBON	10K 5% 1/4W	CN551	1-562-088-00	SOCKET, CONNECTOR 9P	
R291	1-249-429-11	CARBON	10K 5% 1/4W (E, EA, MY, SP, HK, TH)	< FLUORESCENT INDICATOR >			
R292	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	FL501	1-517-367-11	INDICATOR TUBE, FLUORESCENT	

Ref.No.	Part No.	Description	Remark
		< IC >	
IC551	8-759-261-63	IC M66004M6FP (R)	
		< RESISTOR >	
R551	1-249-434-11	CARBON 27K 5% 1/4W	
R555	1-249-417-11	CARBON 1K 5% 1/4W	
R556	1-249-417-11	CARBON 1K 5% 1/4W	
R557	1-249-417-11	CARBON 1K 5% 1/4W	
R558	1-249-417-11	CARBON 1K 5% 1/4W	

*	1-658-311-21	H. P BOARD	

		< CAPACITOR >	
C491	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C492	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C493	1-164-159-11	CERAMIC 0.1uF 50V	
C494	1-164-159-11	CERAMIC 0.1uF 50V	
		(E, EA, MY, SP, HK, TH)	
		< CONNECTOR >	
* CN511	1-568-828-11	SOCKET, CONNECTOR 9P	
		< JACK >	
J401	1-770-226-11	JACK (LARGE TYPE) (PHONES)	
J402	1-770-226-11	JACK (LARGE TYPE) (MIX MIC)	
		(E, EA, MY, SP, HK, TH)	

*	A-4378-845-A	MAIN BOARD, COMPLETE (AEP, G, IT, UK)	

*	A-4378-834-A	MAIN BOARD, COMPLETE (E, EA, MY, SP, HK, TH)	

	1-533-223-11	HOLDER, FUSE	
	3-309-144-21	HEAT SINK	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
		< CAPACITOR >	
C191	1-124-442-00	ELECT 330uF 20% 6.3V	
C621	1-126-963-11	ELECT 4.7uF 20% 50V	
C901	1-126-138-11	ELECT 4700uF 20% 50V	
C902	1-126-138-11	ELECT 4700uF 20% 50V	
C903	1-136-165-00	FILM 0.1uF 5% 50V	
C904	1-136-165-00	FILM 0.1uF 5% 50V	
C911	1-124-618-11	ELECT 2200uF 20% 35V	
C912	1-124-618-11	ELECT 2200uF 20% 35V	
C913	1-136-165-00	FILM 0.1uF 5% 50V	
C914	1-136-165-00	FILM 0.1uF 5% 50V	

Ref.No.	Part No.	Description	Remark
C915	1-126-972-11	ELECT 1000uF 20% 35V	
C916	1-126-972-11	ELECT 1000uF 20% 35V	
C917	1-164-159-11	CERAMIC 0.1uF 50V	
C918	1-164-159-11	CERAMIC 0.1uF 50V	
C919	1-124-472-11	ELECT 470uF 20% 10V	
C920	1-124-472-11	ELECT 470uF 20% 10V	
C921	1-124-122-11	ELECT 100uF 20% 50V	
C922	1-164-159-11	CERAMIC 0.1uF 50V	
C923	1-124-472-11	ELECT 470uF 20% 10V	
C951	1-136-153-00	FILM 0.01uF 5% 50V	
C952	1-136-153-00	FILM 0.01uF 5% 50V	
C953	1-126-942-61	ELECT 1000uF 20% 16V	
C954	1-164-159-11	CERAMIC 0.1uF 50V	
C955	1-124-442-00	ELECT 330uF 20% 6.3V	
C961	1-124-122-11	ELECT 100uF 20% 50V	
C962	1-124-122-11	ELECT 100uF 20% 50V	
C963	1-124-907-11	ELECT 10uF 20% 50V	
C964	1-124-907-11	ELECT 10uF 20% 50V	
C971	1-124-122-11	ELECT 100uF 20% 50V	
C972	1-124-122-11	ELECT 100uF 20% 50V	
		< CONNECTOR >	
CN101	1-770-158-21	HOUSING, CONNECTOR 7P (SYSTEM CONTROL)	
CN102	1-770-724-11	CONNECTOR, BOARD TO BOARD 9P	
* CN103	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
* CN104	1-568-824-11	SOCKET, CONNECTOR 5P	
* CN105	1-568-839-11	SOCKET, CONNECTOR 23P	
CN106	1-764-327-11	PIN, CONNECTOR (PCB) (V TYPE) 4P	
CN107	1-764-328-61	PIN, CONNECTOR (PCB) (V TYPE) 5P	
CN108	1-770-965-21	PIN, CONNECTOR (PCB) (V TYPE) 5P	
CN109	1-770-966-11	PIN, CONNECTOR (PCB) (V TYPE) 6P	
		< DIODE >	
D191	8-719-024-99	DIODE 11ES2-NTA2B	
D611	8-719-987-63	DIODE 1N4148M	
D621	8-719-987-63	DIODE 1N4148M	
D622	8-719-987-63	DIODE 1N4148M	
D623	8-719-987-63	DIODE 1N4148M	
D624	8-719-987-63	DIODE 1N4148M	
D901	8-719-510-68	DIODE D5SBA20F01	
D911	8-719-025-03	DIODE RBA-402-SL	
D951	8-719-024-99	DIODE 11ES2-NTA2B	
D952	8-719-024-99	DIODE 11ES2-NTA2B	
D961	8-719-024-99	DIODE 11ES2-NTA2B	
D962	8-719-024-99	DIODE 11ES2-NTA2B	
D963	8-719-934-23	DIODE HZS30-3L	
		< FUSE >	
△F911	1-532-203-00	FUSE, TIME LAG (2A, 250V)	
△F912	1-532-203-00	FUSE, TIME LAG (2A, 250V)	

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

MAIN PANEL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< IC >							
IC101	8-759-000-47	IC MC14051BCP		R153	1-249-417-11	CARBON 1K 5% 1/4W	
IC102	8-759-000-47	IC MC14051BCP		R154	1-249-425-11	CARBON 4.7K 5% 1/4W	
IC103	8-759-000-48	IC MC14052BCP		R155	1-249-417-11	CARBON 1K 5% 1/4W	
IC191	8-759-962-08	IC BA6208		R156	1-249-417-11	CARBON 1K 5% 1/4W	
IC911	8-759-231-55	IC TA7808S		R157	1-249-417-11	CARBON 1K 5% 1/4W	
IC912	8-759-245-81	IC TA79008S		R158	1-249-417-11	CARBON 1K 5% 1/4W	
IC913	8-759-231-57	IC TA7810S		R159	1-249-417-11	CARBON 1K 5% 1/4W	
IC951	8-759-158-62	IC TA78057S		R162	1-249-429-11	CARBON 10K 5% 1/4W	
< IC LINK >							
△ICP911	1-532-986-31	LINK, IC (10A)		R163	1-249-429-11	CARBON 10K 5% 1/4W	
△ICP912	1-532-986-31	LINK, IC (10A)		R167	1-249-417-11	CARBON 1K 5% 1/4W	
< JACK >							
J101	1-770-015-11	JACK, PIN 6P(TUNER IN, CD IN, MD/DAT OUT)		R168	1-249-417-11	CARBON 1K 5% 1/4W	
J102	1-770-015-11	JACK, PIN6P(MD/DAT IN, TAPE OUT, TAPE IN)		R169	1-249-417-11	CARBON 1K 5% 1/4W	
J103	1-770-015-11	JACK, PIN 6P (VIDEO2 IN, VIDEO1 OUT, VIDEO1 IN)		R611	1-249-417-11	CARBON 1K 5% 1/4W	
< TRANSISTOR >							
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE		R621	1-249-429-11	CARBON 10K 5% 1/4W	
Q621	8-729-119-78	TRANSISTOR 2SC2785-HFE		R622	1-249-429-11	CARBON 10K 5% 1/4W	
Q622	8-729-900-36	TRANSISTOR DTC124ES		R623	1-249-429-11	CARBON 10K 5% 1/4W	
Q926	8-729-119-76	TRANSISTOR 2SA1175-HFE		R624	1-249-429-11	CARBON 10K 5% 1/4W	
Q961	8-729-118-00	TRANSISTOR 2SB1116-L		R625	1-249-441-11	CARBON 100K 5% 1/4W	
< RESISTOR >							
R101	1-249-417-11	CARBON 1K 5% 1/4W		△R911	1-212-881-11	FUSIBLE 100 5% 1/4W F	
R102	1-249-425-11	CARBON 4.7K 5% 1/4W		△R913	1-212-881-11	FUSIBLE 100 5% 1/4W F	
R103	1-249-417-11	CARBON 1K 5% 1/4W		△R915	1-212-881-11	FUSIBLE 100 5% 1/4W F	
R104	1-249-425-11	CARBON 4.7K 5% 1/4W		△R916	1-212-881-11	FUSIBLE 100 5% 1/4W F	
R105	1-249-417-11	CARBON 1K 5% 1/4W		△R951	1-212-857-00	FUSIBLE 10 5% 1/4W F	
R106	1-249-417-11	CARBON 1K 5% 1/4W		R961	1-249-429-11	CARBON 10K 5% 1/4W	
R107	1-249-417-11	CARBON 1K 5% 1/4W		R962	1-249-397-11	CARBON 22 5% 1/4W	
R108	1-249-417-11	CARBON 1K 5% 1/4W		R971	1-249-413-11	CARBON 470 5% 1/4W	
R109	1-249-417-11	CARBON 1K 5% 1/4W		R972	1-249-413-11	CARBON 470 5% 1/4W	
R112	1-249-429-11	CARBON 10K 5% 1/4W		R973	1-249-413-11	CARBON 470 5% 1/4W	
R113	1-249-429-11	CARBON 10K 5% 1/4W		R974	1-249-413-11	CARBON 470 5% 1/4W	
R117	1-249-417-11	CARBON 1K 5% 1/4W		R975	1-249-413-11	CARBON 470 5% 1/4W	
R118	1-249-417-11	CARBON 1K 5% 1/4W		R976	1-249-413-11	CARBON 470 5% 1/4W	
R119	1-249-417-11	CARBON 1K 5% 1/4W		R977	1-249-413-11	CARBON 470 5% 1/4W	
R121	1-249-441-11	CARBON 100K 5% 1/4W		R978	1-249-413-11	CARBON 470 5% 1/4W	
R122	1-249-441-11	CARBON 100K 5% 1/4W		R1191	1-249-417-11	CARBON 1K 5% 1/4W	
R123	1-249-441-11	CARBON 100K 5% 1/4W		R1193	1-249-417-11	CARBON 1K 5% 1/4W	
R124	1-249-417-11	CARBON 1K 5% 1/4W		*****			
R125	1-249-417-11	CARBON 1K 5% 1/4W		*	A-4378-837-A PANEL BOARD, COMPLETE (AEP, G, IT, UK)		
R126	1-249-417-11	CARBON 1K 5% 1/4W		*****			
R151	1-249-417-11	CARBON 1K 5% 1/4W		*	A-4378-829-A PANEL BOARD, COMPLETE (E, EA, MY, SP, HK, TH)		
R152	1-249-425-11	CARBON 4.7K 5% 1/4W		*****			
< CAPACITOR >							
C400	1-162-306-11	CERAMIC 0.01uF 30% 16V		C400	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C401	1-136-157-00	FILM 0.022uF 5% 50V		C401	1-136-157-00	FILM 0.022uF 5% 50V	
C402	1-136-163-00	FILM 0.068uF 5% 50V		C402	1-136-163-00	FILM 0.068uF 5% 50V	
C403	1-136-167-00	FILM 0.15uF 5% 50V		C403	1-136-167-00	FILM 0.15uF 5% 50V	
C404	1-136-173-00	FILM 0.47uF 5% 50V		C404	1-136-173-00	FILM 0.47uF 5% 50V	
C411	1-124-907-11	ELECT 10uF 20% 50V		C411	1-124-907-11	ELECT 10uF 20% 50V	

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

PANEL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C414	1-124-907-11	ELECT	10uF 20% 50V			< CONNECTOR >	
C431	1-162-294-31	CERAMIC	0.001uF 10% 50V (E, EA, MY, SP, HK, TH)	* CN501	1-568-839-11	SOCKET, CONNECTOR 23P	
C432	1-126-301-11	ELECT	1uF 20% 50V (E, EA, MY, SP, HK, TH)	* CN502	1-568-834-11	SOCKET, CONNECTOR 15P	
C433	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	CN503	1-573-379-11	PIN, CONNECTOR 9P	
				* CN504	1-568-828-11	SOCKET, CONNECTOR 9P	
						< DIODE >	
C434	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	D501	8-719-987-63	DIODE 1N4148M	
C435	1-126-301-11	ELECT	1uF 20% 50V (E, EA, MY, SP, HK, TH)	D502	8-719-024-99	DIODE 11ES2-NTA2B	
C436	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	D504	8-719-987-63	DIODE 1N4148M	
C437	1-164-159-11	CERAMIC	0.1uF 50V (E, EA, MY, SP, HK, TH)	D505	8-719-987-63	DIODE 1N4148M	
C438	1-164-159-11	CERAMIC	0.1uF 50V (E, EA, MY, SP, HK, TH)	D506	8-719-987-63	DIODE 1N4148M	
C439	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	D507	8-719-987-63	DIODE 1N4148M (E, EA, MY, SP, HK, TH)	
C440	1-162-282-31	CERAMIC	100PF 10% 50V (E, EA, MY, SP, HK, TH)	D531	8-719-046-44	DIODE SEL5221S (ON/STANDBY)	
C441	1-126-301-11	ELECT	1uF 20% 50V (E, EA, MY, SP, HK, TH)	D532	8-719-046-70	DIODE SEL5620C (STADIUM)	
C442	1-124-443-00	ELECT	100uF 20% 10V (E, EA, MY, SP, HK, TH)	D533	8-719-046-70	DIODE SEL5620C (LIVE)	
C443	1-124-443-00	ELECT	100uF 20% 10V (E, EA, MY, SP, HK, TH)	D534	8-719-046-70	DIODE SEL5620C (DANCE)	
C450	1-162-306-11	CERAMIC	0.01uF 30% 16V	D535	8-719-046-70	DIODE SEL5620C (HALL)	
C451	1-136-157-00	FILM	0.022uF 5% 50V	D536	8-719-046-70	DIODE SEL5620C (PHANTOM)	
C452	1-136-163-00	FILM	0.068uF 5% 50V	D537	8-719-046-70	DIODE SEL5620C (NORMAL)	
C453	1-136-167-00	FILM	0.15uF 5% 50V	D538	8-719-046-70	DIODE SEL5620C (WIDE)	
C454	1-136-173-00	FILM	0.47uF 5% 50V	D539	8-719-046-70	DIODE SEL5620C (3CH LOGIC)	
C461	1-124-907-11	ELECT	10uF 20% 50V	D540	8-719-301-49	DIODE SEL2810A (DSP MODE)	
C464	1-124-907-11	ELECT	10uF 20% 50V	D541	8-719-301-49	DIODE SEL2810A (DOLBY SURROUND)	
C501	1-164-159-11	CERAMIC	0.1uF 50V	D542	8-719-046-44	DIODE SEL5221S (SOURCE DIRECT)	
C502	1-124-442-00	ELECT	330uF 20% 6.3V	D543	8-719-046-44	DIODE SEL5221S (-20dB MUTING)	
C503	1-164-159-11	CERAMIC	0.1uF 50V	D544	8-719-046-44	DIODE SEL5221S (KARAOKE PON) (E, EA, MY, SP, HK, TH)	
C504	1-162-306-11	CERAMIC	0.01uF 30% 16V	D551	8-719-010-33	DIODE UZ-4.7BSB	
C505	1-162-306-11	CERAMIC	0.01uF 30% 16V			< IC >	
C506	1-124-443-00	ELECT	100uF 20% 10V	IC401	8-759-634-50	IC M5218AL	
C507	1-162-306-11	CERAMIC	0.01uF 30% 16V	IC431	8-759-634-50	IC M5218AL (E, EA, MY, SP, HK, TH)	
C508	1-162-306-11	CERAMIC	0.01uF 30% 16V	IC501	8-759-386-86	IC M37471M4-S3	
C509	1-162-306-11	CERAMIC	0.01uF 30% 16V (E, EA, MY, SP, HK, TH)	IC502	8-759-165-80	IC PST600C-T	
C510	1-162-286-31	CERAMIC	220PF 10% 50V	IC503	8-759-917-43	IC SN74HC138AN	
C511	1-162-306-11	CERAMIC	0.01uF 30% 16V (E, EA, MY, SP, HK, TH)	IC504	8-749-920-83	IC GP1U52XB (R)	
C552	1-164-159-11	CERAMIC	0.1uF 50V			< TRANSISTOR >	
C553	1-164-159-11	CERAMIC	0.1uF 50V	Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C554	1-164-159-11	CERAMIC	0.1uF 50V	Q531	8-729-900-63	TRANSISTOR DTA124ES	
C555	1-164-159-11	CERAMIC	0.1uF 50V	Q532	8-729-900-36	TRANSISTOR DTC124ES	
				Q533	8-729-900-36	TRANSISTOR DTC124ES	
				Q534	8-729-900-36	TRANSISTOR DTC124ES	
				Q535	8-729-900-36	TRANSISTOR DTC124ES	
				Q536	8-729-900-36	TRANSISTOR DTC124ES (E, EA, MY, SP, HK, TH)	
				Q537	8-729-900-36	TRANSISTOR DTC124ES	
				Q538	8-729-900-36	TRANSISTOR DTC124ES	
				Q539	8-729-900-36	TRANSISTOR DTC124ES	

PANEL

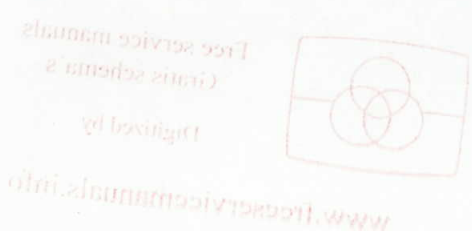
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RESISTOR >							
R402	1-249-409-11	CARBON	220 5% 1/4W	R513	1-249-417-11	CARBON	1K 5% 1/4W
R403	1-249-423-11	CARBON	3.3K 5% 1/4W	R514	1-249-418-11	CARBON	1.2K 5% 1/4W
R404	1-249-417-11	CARBON	1K 5% 1/4W	R515	1-249-418-11	CARBON	1.2K 5% 1/4W
R405	1-247-903-00	CARBON	1M 5% 1/4W	R516	1-249-419-11	CARBON	1.5K 5% 1/4W
R406	1-247-903-00	CARBON	1M 5% 1/4W	R517	1-249-427-11	CARBON	6.8K 5% 1/4W
				R518	1-249-423-11	CARBON	3.3K 5% 1/4W (E, EA, MY, SP, HK, TH)
R411	1-249-441-11	CARBON	100K 5% 1/4W	R522	1-249-417-11	CARBON	1K 5% 1/4W
R412	1-249-429-11	CARBON	10K 5% 1/4W	R523	1-249-417-11	CARBON	1K 5% 1/4W
R413	1-249-422-11	CARBON	2.7K 5% 1/4W	R531	1-249-411-11	CARBON	330 5% 1/4W
R431	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	R532	1-249-403-11	CARBON	68 5% 1/4W
R432	1-249-417-11	CARBON	1K 5% 1/4W (E, EA, MY, SP, HK, TH)	R534	1-249-411-11	CARBON	330 5% 1/4W
R433	1-249-431-11	CARBON	15K 5% 1/4W (E, EA, MY, SP, HK, TH)	R535	1-249-411-11	CARBON	330 5% 1/4W
R434	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	R536	1-249-411-11	CARBON	330 5% 1/4W (E, EA, MY, SP, HK, TH)
R435	1-249-417-11	CARBON	1K 5% 1/4W (E, EA, MY, SP, HK, TH)	R537	1-249-417-11	CARBON	1K 5% 1/4W
R436	1-249-435-11	CARBON	33K 5% 1/4W (E, EA, MY, SP, HK, TH)	R538	1-249-417-11	CARBON	1K 5% 1/4W
R437	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	R539	1-249-417-11	CARBON	1K 5% 1/4W
R438	1-249-441-11	CARBON	100K 5% 1/4W (E, EA, MY, SP, HK, TH)	R540	1-249-417-11	CARBON	1K 5% 1/4W
R439	1-249-421-11	CARBON	2.2K 5% 1/4W (E, EA, MY, SP, HK, TH)	R541	1-249-425-11	CARBON	4.7K 5% 1/4W
R440	1-247-807-31	CARBON	100 5% 1/4W (E, EA, MY, SP, HK, TH)	R542	1-249-417-11	CARBON	1K 5% 1/4W
R441	1-247-807-31	CARBON	100 5% 1/4W (E, EA, MY, SP, HK, TH)	R543	1-249-417-11	CARBON	1K 5% 1/4W
R452	1-249-409-11	CARBON	220 5% 1/4W	R544	1-249-417-11	CARBON	1K 5% 1/4W
R453	1-249-423-11	CARBON	3.3K 5% 1/4W	R545	1-249-425-11	CARBON	4.7K 5% 1/4W
R454	1-249-417-11	CARBON	1K 5% 1/4W	R546	1-249-417-11	CARBON	1K 5% 1/4W
R455	1-247-903-00	CARBON	1M 5% 1/4W	R547	1-249-417-11	CARBON	1K 5% 1/4W
R456	1-247-903-00	CARBON	1M 5% 1/4W	R548	1-249-417-11	CARBON	1K 5% 1/4W
R461	1-249-441-11	CARBON	100K 5% 1/4W	R552	1-249-409-11	CARBON	220 5% 1/4W
R462	1-249-429-11	CARBON	10K 5% 1/4W	R553	1-249-409-11	CARBON	220 5% 1/4W
R463	1-249-422-11	CARBON	2.7K 5% 1/4W	R554	1-249-429-11	CARBON	10K 5% 1/4W
R501	1-249-429-11	CARBON	10K 5% 1/4W	< VARIABLE RESISTOR >			
R502	1-249-429-11	CARBON	10K 5% 1/4W	RV401	1-223-810-11	RES, VAR, CARBON 10K/10K (TREBLE)	
R503	1-249-429-11	CARBON	10K 5% 1/4W	RV402	1-223-810-11	RES, VAR, CARBON 10K/10K (BASS)	
R504	1-249-417-11	CARBON	1K 5% 1/4W	RV431	1-223-974-11	RES, VAR, CARBON 50K (MIC LEVEL)	(E, EA, MY, SP, HK, TH)
R505	1-249-441-11	CARBON	100K 5% 1/4W	< SWITCH >			
R506	1-249-417-11	CARBON	1K 5% 1/4W (E, EA, MY, SP, HK, TH)	S501	1-554-303-21	SWITCH, TACTILE (SYSTEM POWER)	
R507	1-249-429-11	CARBON	10K 5% 1/4W	S502	1-554-303-21	SWITCH, TACTILE (AUDIO)	
R508	1-249-417-11	CARBON	1K 5% 1/4W	S503	1-554-303-21	SWITCH, TACTILE (VIDEO)	
R509	1-249-417-11	CARBON	1K 5% 1/4W	S504	1-554-303-21	SWITCH, TACTILE (DSP MODE)	
R510	1-249-411-11	CARBON	330 5% 1/4W	S505	1-554-303-21	SWITCH, TACTILE (DOLBY SURROUND)	
R511	1-249-429-11	CARBON	10K 5% 1/4W	S506	1-554-303-21	SWITCH, TACTILE (SOURCE DIRECT)	
R512	1-249-431-11	CARBON	15K 5% 1/4W	S507	1-554-303-21	SWITCH, TACTILE (-20dB MUTING)	
				S508	1-554-303-21	SWITCH, TACTILE (KARAOKE PON)	(E, EA, MY, SP, HK, TH)
				< VIBRATOR >			
				X501	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	

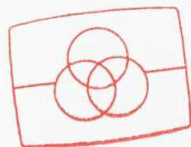
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*****				L751	1-420-872-00	COIL, AIR-CORE	
*	A-4378-847-A	SP BOARD, COMPLETE (AEP, G, IT, UK)		L801	1-420-872-00	COIL, AIR-CORE	
*****				L851	1-420-872-00	COIL, AIR-CORE	
				< TRANSISTOR >			
*	A-4378-836-A	SP BOARD, COMPLETE (E, EA, MY, SP, HK, TH)		Q181	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*****				Q182	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q183	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q184	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q185	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q186	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C180	1-124-443-00	ELECT 100uF 20% 10V		Q631	8-729-900-63	TRANSISTOR DTA124ES	
C181	1-124-907-11	ELECT 10uF 20% 50V		Q632	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C182	1-124-907-11	ELECT 10uF 20% 50V		Q633	8-729-118-00	TRANSISTOR 2SB1116-L	
C183	1-124-907-11	ELECT 10uF 20% 50V		Q634	8-729-118-00	TRANSISTOR 2SB1116-L	
C184	1-126-941-11	ELECT 470uF 20% 16V		< RESISTOR >			
C185	1-126-941-11	ELECT 470uF 20% 16V		R181	1-247-804-11	CARBON 75 5% 1/4W	
C631	1-124-907-11	ELECT 10uF 20% 50V		R182	1-247-804-11	CARBON 75 5% 1/4W	
C891	1-136-153-00	FILM 0.01uF 5% 50V		R183	1-249-409-11	CARBON 220 5% 1/4W	
				R184	1-249-433-11	CARBON 22K 5% 1/4W	
C892	1-136-153-00	FILM 0.01uF 5% 50V	(AEP, G, IT, UK)	R185	1-249-429-11	CARBON 10K 5% 1/4W	
C893	1-136-153-00	FILM 0.01uF 5% 50V	(AEP, G, IT, UK)	R186	1-249-411-11	CARBON 330 5% 1/4W	
C894	1-136-153-00	FILM 0.01uF 5% 50V	(AEP, G, IT, UK)	R187	1-249-421-11	CARBON 2.2K 5% 1/4W	
C895	1-162-306-11	CERAMIC 0.01uF 30% 16V		R188	1-249-418-11	CARBON 1.2K 5% 1/4W	
C896	1-162-306-11	CERAMIC 0.01uF 30% 16V		R189	1-249-417-11	CARBON 1K 5% 1/4W	
C897	1-162-306-11	CERAMIC 0.01uF 30% 16V		R190	1-249-409-11	CARBON 220 5% 1/4W	
C898	1-162-306-11	CERAMIC 0.01uF 30% 16V		R191	1-247-804-11	CARBON 75 5% 1/4W	
< CONNECTOR >				R192	1-247-804-11	CARBON 75 5% 1/4W	
* CN891	1-564-521-11	PLUG, CONNECTOR 6P		R193	1-249-413-11	CARBON 470 5% 1/4W	
* CN892	1-564-521-11	PLUG, CONNECTOR 6P		R194	1-249-413-11	CARBON 470 5% 1/4W	
* CN893	1-564-518-11	PLUG, CONNECTOR 3P		R195	1-249-441-11	CARBON 100K 5% 1/4W	
* CN894	1-568-848-11	SOCKET, CONNECTOR 5P		R196	1-249-441-11	CARBON 100K 5% 1/4W	
< DIODE >				R197	1-249-417-11	CARBON 1K 5% 1/4W	
D631	8-719-987-63	DIODE 1N4148M		R198	1-249-417-11	CARBON 1K 5% 1/4W	
D632	8-719-987-63	DIODE 1N4148M		R631	1-249-433-11	CARBON 22K 5% 1/4W	
D633	8-719-987-63	DIODE 1N4148M		R632	1-249-433-11	CARBON 22K 5% 1/4W	
D634	8-719-987-63	DIODE 1N4148M		R633	1-249-441-11	CARBON 100K 5% 1/4W	
< IC >				R634	1-249-441-11	CARBON 100K 5% 1/4W	
IC181	8-759-140-53	IC uPD4053BC		R635	1-249-441-11	CARBON 100K 5% 1/4W	
< JACK >				R636	1-249-429-11	CARBON 10K 5% 1/4W	
J801	1-569-662-11	JACK, PIN 1P (SUPER WOOFER)		R637	1-249-429-11	CARBON 10K 5% 1/4W	
J802	1-565-934-11	JACK, PIN 2P (VIDEO2 IN, VIDEO1 OUT)		R638	1-260-096-11	CARBON 560 5% 1/2W	
J803	1-565-934-11	JACK, PIN 2P (VIDEO1 IN, MONITOR OUT)		R639	1-260-096-11	CARBON 560 5% 1/2W	
< COIL >				R640	1-260-096-11	CARBON 560 5% 1/2W	
L181	1-408-405-00	INDUCTOR 4.7uH		R641	1-260-096-11	CARBON 560 5% 1/2W	
L701	1-420-872-00	COIL, AIR-CORE		R720	1-260-076-11	CARBON 10 5% 1/2W	
				R770	1-260-076-11	CARBON 10 5% 1/2W	
				R820	1-260-076-11	CARBON 10 5% 1/2W	
				R821	1-249-437-11	CARBON 47K 5% 1/4W	
				R841	1-249-421-11	CARBON 2.2K 5% 1/4W	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
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 HARDWARE LIST

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|----|--------------|-----------------------------|--|
| #1 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S | |
| #2 | 7-682-548-04 | SCREW +BVTT 3X8 (S) | |
| #3 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 N-S | |
| #4 | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3 | |





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