

TA-A790E

SERVICE MANUAL

*AEP Model
E Model
Australian Model
Tourist Model*



This set is the Preamplifier section in LBT-A790/A795.

SPECIFICATIONS

Audio input	Jack type	Sensitivity	Impedance
VIDEO 1/MD	Phono	435 mV	47 kohms
VIDEO 2/DAT	Phono	435 mV	47 kohms
VIDEO 3	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
VIDEO 1/MD	Phono	235 mV	2 kohms
VIDEO 2/DAT	Phono	235 mV	2 kohms
CENTER OUT	Phono		

Video input (phono jacks)
VIDEO 1/MD, VIDEO 2/DAT, VIDEO 3
1 Vp-p, 75 ohm unbalanced, sync negative

Video output (phono jacks)
VIDEO 1/MD
1 Vp-p, 75 ohm unbalanced, sync negative

VIDEO 2/DAT
1 Vp-p, 75 ohm unbalanced, sync negative

MONITOR
1 Vp-p, 75 ohm unbalanced, sync negative

Frequency response
15 Hz to 20 kHz ± 0.3 dB

Power requirements
220—230V AC, 50/60Hz
(AEP, G, IT, CIS)
240V AC, 50/60Hz (AUS)
110—120V/220—240V AC, 50/60Hz
(E, EA, MY, SP, JE)
120V AC, 60Hz (MX)

Power consumption

18 W

Mass

Approx. 3.9 kg (8 lbs 10 oz)

Dimensions

Approx. 355 x 135 x 330 mm
(14 x 5 $\frac{5}{16}$ x 13 inches)
(w/h/d, including projections)

Design and specifications are subject to change without notice.

• Abbreviations

G : German model
IT : Italian model
AUS: Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
JE : Tourist model
MX : Mexican model

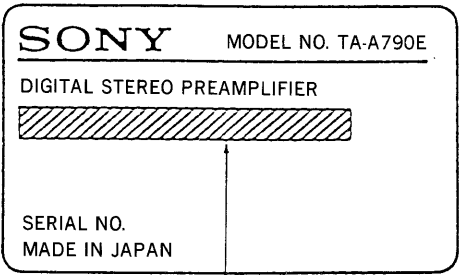
SAFETY-RELATED COMPONENT WARNING!!

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.

DIGITAL STEREO PREAMPLIFIER
SONY®

MODEL IDENTIFICATION

—Specification Label—



AEP, IT, CIS model: AC: 220V—230V~50/60Hz 18W
G model : SYSTEM LBT-A790
AC: 220V—230V~50/60Hz 18W
AUS model : AC: 240V~50/60Hz 18W
E, EA,
MY, SP, JE model : AC: 110V—120V/220V—240V~50/60Hz 18W
MX model : AC: 120V~60Hz 18W

- Abbreviations
- IT : Italian model
 - G : German model
 - AUS: Australian model
 - EA : Saudi Arabia model
 - MY : Malaysia model
 - SP : Singapore model
 - JE : Tourist model
 - MX : Mexican model

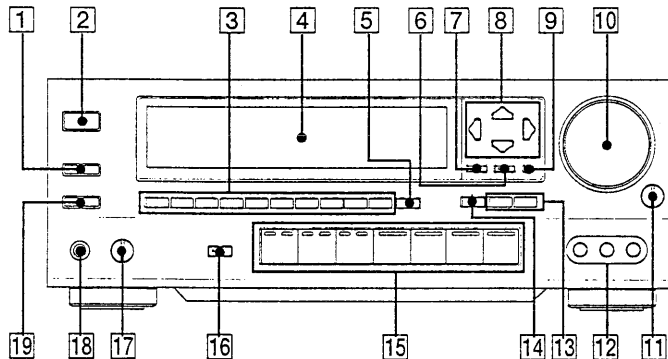
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SECTION 1 GENERAL

This section is extracted from instruction manual.

1-1. LOCATION OF CONTROLS

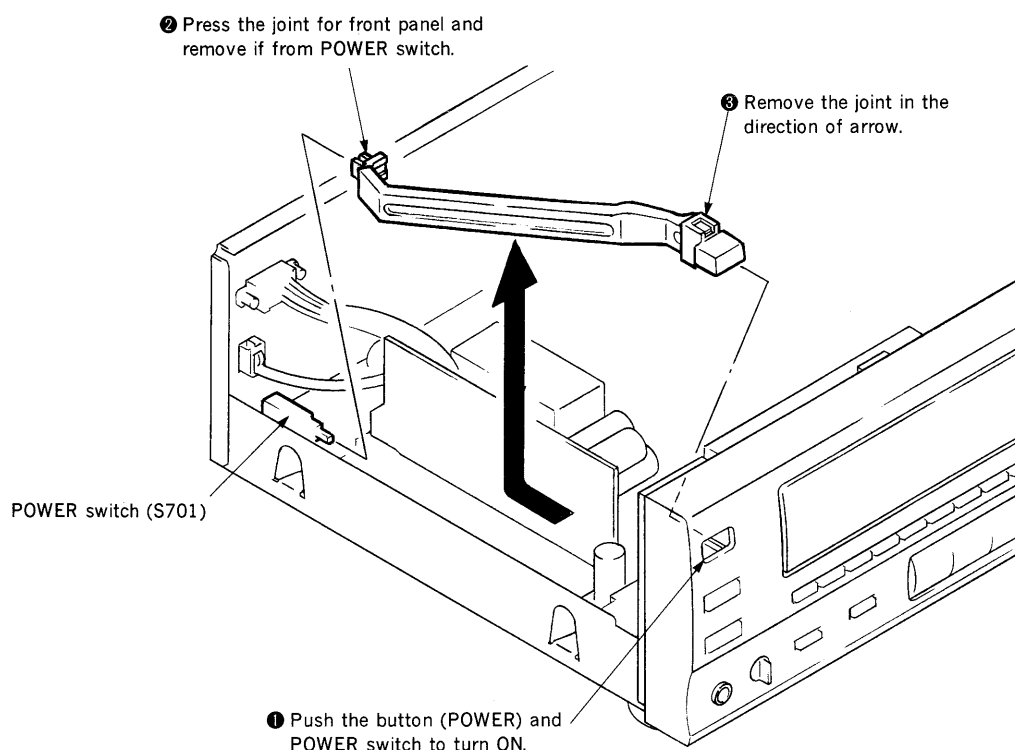


- 1 SOURCE DIRECT button and indicator (96, 110)
- 2 POWER switch (20)
- 3 Numeric buttons (96, 100, 114, 116, 118)
- 4 Display window
- 5 MEMORY button (114, 118)
- 6 ENTER button and indicator (96, 106, 108, 118)
- 7 MODE button and indicator (96, 106, 108, 118)
- 8 CURSOR CONTROL buttons (96, 106, 108, 118)
- 9 CANCEL button (106, 108)
- 10 VOLUME control (24)
- 11 BALANCE control (24, 98)
- 12 VIDEO 3 INPUT jacks (146)
- 13 DBS LEVEL and DBS FREQUENCY buttons (24)
- 14 DISPLAY button (112)
- 15 Function selectors and indicators (42)
- 16 P. FUNCTION button and indicator (144)
- 17 MIC LEVEL control (142)
- 18 HEADPHONES jack (22)
- 19 DSP MENU button and indicator (96, 100, 116)

SECTION 2 SERVICE NOTE

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

2-1. REMOVAL OF JOINT



SECTION 3 DIAGRAMS

3-1. PIN DESCRIPTIONS

● IC202 LC83015E (Digital Signal Processor)

Pin No.	Pin Name	I/O	Function
1—6	P0—P5	I/O	General purpose input/output ports (with pull-up resistor). Not used.
7	ASI	I	Audio data serial input 1 pin.
8	BCK1	I	Bit clock input pin used for ASI1 input (64fs or 32fs is applied).
9	FS384I	I	384fs or 512fs input pin. Connect to GND.
10	LRCKI	I	L/R channel identification signal input pin (“H” for Lch ; “L” for Rch). Connect to GND.
11	ASI2	I	Audio data serial input 2 pin. Connect to GND.
12	BCK2	I	Bit clock input pin for ASI2 input (64fs or 32fs is applied). Connect to GND.
13	VDD1	—	+5V power pin
14—17	TEST1—TEST4	I	Pins used for tests, normally connected to GND.
18	VSS1	—	GND pin
19	TEST5	O	Output pin used for test, normally open. Not used.
20	$\overline{\text{RAS}}$	O	$\overline{\text{RAS}}$ signal output pin used for access to external DRAM.
21	$\overline{\text{CAS}}$	O	$\overline{\text{CAS}}$ signal output pin used for access to external DRAM.
22	$\overline{\text{DWRT}}$	O	Data write signal output pin used for access to external memory.
23	$\overline{\text{DREAD}}$	O	Data read signal output pin used for access to external memory.
24	—	—	Not used.
25—32	D7—D0	I/O	Data input/output pins used for communication with external memories (D0—D3 for one DRAM ; D0—D7 for two DRAMs or SRAM or pseudo SRAM).
33	VSS2	—	GND pin
34—50	A0—A16	O	External memory address output pin.
51	VDD2	—	+5V power pin
52	OSC1	I	Oscillator input pin (connected to VDD or VSS when oscillator is not used).
53	OSC2	O	Oscillator output pin (open when oscillator is not used or external clock is used).
54	VSS3	—	GND pin
55	FS384O	O	384fs or 512fs output pin (through output of FS384I or self-run oscillating clock). Not used.
56	FS192O	O	192fs or 256fs output pin (1/2 frequency division output of FS384O).
57	FS128O	O	128fs output pin (1/3 or 1/4 frequency division output of FS384O). Not used.
58	FS64O	O	64fs or 32fs output pin (1/2 frequency division output of FS128O or through output of BCK1).
59	FS32O	O	32fs or 16fs output pin (1/2 frequency division output of FS64O). Not used.
60	LRCKO	O	1fs output pin (1/64 frequency division output of FS64O or through output of LRCKI).
61	AOWCK	O	2fs or 1fs output pin (1/32 frequency division output of FS64O). Not used.
62	ASO	O	Audio data serial output 1 pin.
63	AOTDF1	O	Audio data serial output 2 pin. Not used.
64	AOTDF2	O	Audio data serial output 3 pin.
65	SI	I	Input pin for serial data from control micro computer (8 bit data).
66	SICK	I	Input pin for serial clock for SI.
67	$\overline{\text{SIRQ}}$	I	Serial input request signal input pin.
68	$\overline{\text{SIACK}}$	O	Output pin for indicating that serial input being executed.
69	$\overline{\text{SRDY}}$	I	Input pin for ready signal indicating that serial data from control micro computer is complete.
70	SO	O	Output pin for sending serial data to control micro computer (8 bit data).
71	SOCK	I	Input pin for serial clock for SO.
72	$\overline{\text{SORQ}}$	I	Input pin for serial output request signal.
73	$\overline{\text{SOACK}}$	O	Output pin for indicating that serial output is being executed.

Pin No.	Pin Name	I/O	Function
74	VSS4	—	GND pin
75	$\overline{\text{RES}}$	I	reset pin (with pull-up resistor).
76	$\overline{\text{INT}}$	I	Interrupt request input pin (with pull-up resistor). Not used.
77	VDD3	—	+5V power pin
78	SELC	I	Select pin (with pull-down resistor) used to determine whether system clock of LS83015 is produced from FS384I (L) or from self-run oscillating clock (H).
79	$\overline{\text{SACK1}}$	I	Select pin (with pull-down resistor) used to determine whether 1/3 frequency division output of FS3840 is used (L) or 1/4 frequency division output is used (H) as FS1280.
80	$\overline{\text{SACK2}}$	I	Select pin (with pull-down resistor) used to determine whether each FS output clock is produced from FS384I, LRCKI and BCK1 (L) or from self-run oscillating clock (H).

● IC501 μ PD78014CW-057 (System Control)

Pin No.	Pin Name	I/O	Function
1	DSP $\overline{\text{SRDY}}$	O	Serial•Handshake output to LC83015E (DSP).
2	DSP SI	O	Serial•Data output to LC83015E.
3	DSP SICK	O	Serial•Clock output to LC83015E.
4	DSP $\overline{\text{SIACK}}$	I	Serial•Handshake•Acknowledge input with LC83015E.
5	DSP $\overline{\text{SIRQ}}$	O	Serial•Handshake•Request to LC83015E.
6—8	—	—	Not used.
9	LATCH2	O	Latch output to TC9270F (Rear DAC).
10	$\overline{\text{INIT}}$	O	For Reset of LC83015E, CXD2564M and TC9270F.
11	ATT	O	Serial•Data output to CDX2564M and TC9270F.
12	SHIFT	O	Serial•Clock output to CDX2564M and TC9270F.
13	LATCH1	O	Latch output to CXD2564M (Front DAC).
14	CLK	O	Serial•Clock output to LC7822 (Analog SW) and LC7535 (E-Vol).
15	DATA	O	Serial•Data output to LC7822 and LC7535.
16	CE	O	Chip•Enable output to LC7822 and LC7535.
17	VSS	—	Microcomputer•GND pin.
18—20	—	—	Not used.
21	$\overline{\text{GAIN2DB}}$	O	For Front analog•Gain adjustment. ("L" is +2dB.)
22	$\overline{\text{GAIN4DB}}$	O	For Front analog•Gain adjustment. ("L" is +4dB.)
23	$\overline{\text{GAIN8DB}}$	O	For Front analog•Gain adjustment. ("L" is +8dB.)
24	PD	O	For Offset calibration of AK5369-VP. (At POWER ON, for 200msec "H" .)
25, 26	—	—	Not used.
27	RECLEVEL	O	At increase more than 6dB for EQ on "L" , to control output voltage to deck.
28	MUTEB-R	O	Mute of surround ch selection (3-1 $\leftrightarrow$ 2-2). At mute "L" .
29	P. MUTE	O	Power-AMP mute control of Power ON/OFF. At mute "L" .
30	MUTEB-F	O	Mute (Front) of Power ON/OFF. At mute "L" .
31	—	—	Not used.
32	VSS	—	Microcomputer•GND pin.
33, 34	—	—	Not used.
35	SURR	O	Surround ch selection (3-1 "L" $\leftrightarrow$ 2-2 "H")
36	RECOB	O	At the Function is VIDEO 1 "L" , cut the output to VIDEO 1.
37	RECOA	O	At the Function is VIDEO 2 "L" , cut the output to VIDEO 2.
38	DOLBY	O	At the DOLBY PRO-LOGIC "L" , set the DOLBY B for surround output.
39—42	—	—	Not used.

Pin No.	Pin Name	I/O	Function
43	RESET	—	Microcomputer•Reset pin
44	MREQ	I	Communication request from μ PD78014CW-065.
45	SREQ	O	Acknowledge output to μ PD78014CW-065.
46	MCLK	I	Serial•Clock from μ PD78014CW-065.
47	MDATA	I	Serial•Data from μ PD78014CW-065.
48	VDD	—	Microcomputer•5V power supply pin.
49	X2	—	System clock connection pin
50	X1	—	System clock connection pin
51	IC (VPP)	—	Inner connection (Connect to GND.)
52	XT2	—	Not used.
53	P04/XT1	I	Connect to GND.
54	AVSS	—	Connect to GND.
55	INH	O	Audio•Function output (See Fig. 1.)
56	FUNCB	O	Audio•Function output (See Fig. 1.)
57	FUNCA	O	Audio•Function output (See Fig. 1.)
58	VIDEO-A	O	Visual•Function output (See Fig. 2.)
59	VIDEO-B	O	Visual•Function output (See Fig. 2.)
60	MUTEA	O	Amplifier mute pin. At mute "H" .
61, 62	—	—	Not used.
63	AVDD	—	Connect to 5V power supply.
64	AVREF	—	Connect to GND.

Pin	VIDEO 1	VIDEO 2	VIDEO 3	TAPE	CD	TUNER	PHONO
55	L	H	L	H	H	L	L
56	H	H	H	L	L	L	L
57	H	H	L	L	H	L	H

Fig. 1

Pin	VIDEO 1	VIDEO 2	VIDEO 3
58	L	H	L
59	L	L	H

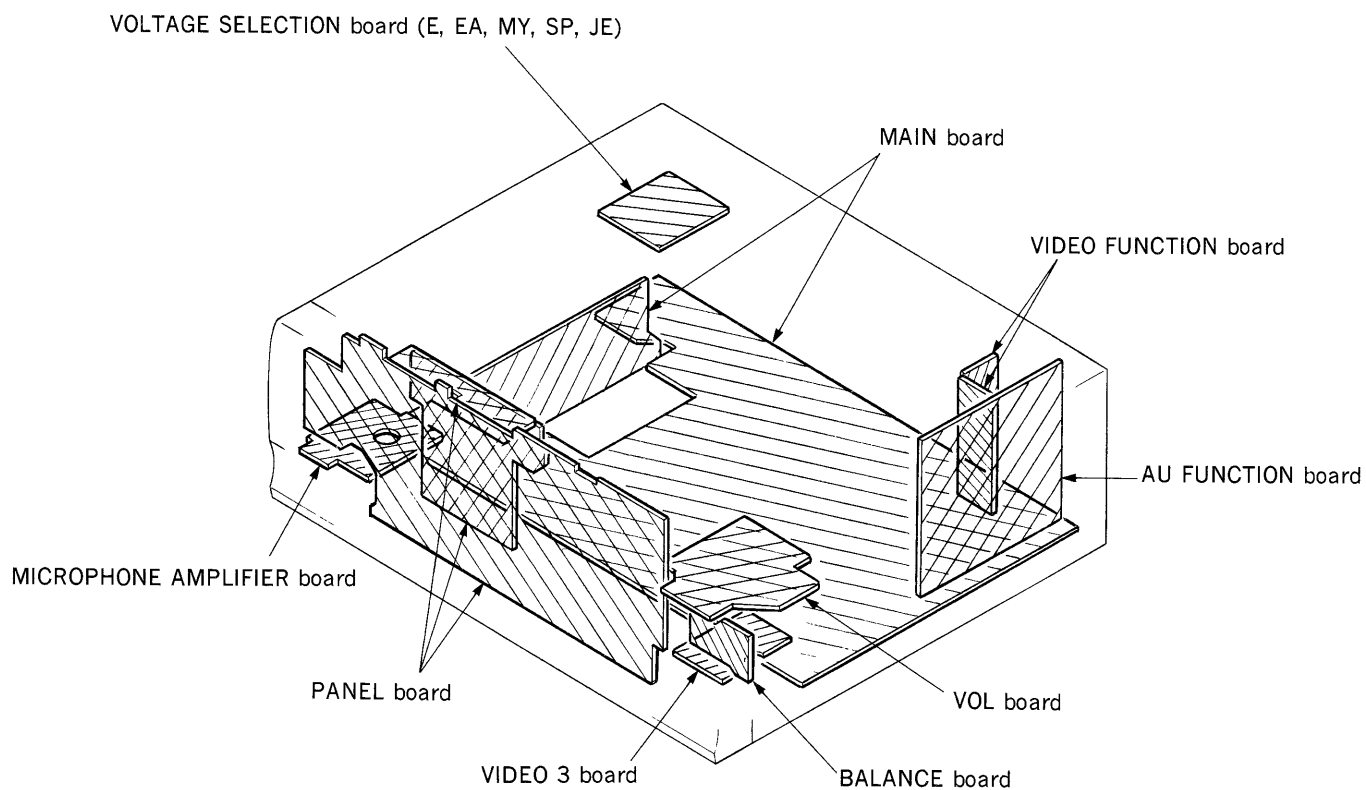
Fig. 2

● IC601 μ PD78014CW-065 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Function
1	FL LATCH	O	Latch output to TD62C950RF (FLT-driver).
2	FL DATA	O	Serial•Data output to TD62C950RF.
3	FL CLK	O	Serial•Clock output to TD62C950RF.
4	FL CLR	O	Serial•Clear output to TD62C950RF.
5	DSP SORQ	O	Serial•Handshake•Request output to LC83015E.
6	DSP SO	O	Serial•Data output to LC83015E.
7	—	—	Not used.
8	DSP SOCK	O	Serial•Clock output to LC83015E.
9	DSP SOAK	I	Serial•Handshake•Acknowledge input from LC83015E.
10	MREQ	O	Communication request to μ PD78014CW-057.
11	SREQ	I	Acknowledge input from μ PD78014CW-057.
12	MCLK	O	Serial•Clock to μ PD78014CW-057.
13	MDATA	O	Serial•Data to μ PD78014CW-057.
14—17	—	—	Connect to GND.
18	KEY-O1	O	Keyscan & LED Digit 1
19	KEY-O2	O	Keyscan & LED Digit 2
20	KEY-O3	O	Keyscan & LED Digit 3
21	KEY-O1	O	Keyscan & LED Digit 4
22	KEY-O1	O	Keyscan & LED Digit 5
23—25	—	—	Not used.
26	LED1	O	LED Scan Segment 1
27	LED2	O	LED Scan Segment 2
28	LED3	O	LED Scan Segment 3
29—31	—	—	Connect to GND.
32	VSS	—	Microcomputer•GND pin.
33	VOL LED	O	Volume LED ON/OFF.
34—40	—	—	Connect to GND.
41	AUB OUT	O	AU BUS output
42	—	—	Connect to GND.
43	RESET	I	Reset input
44	AC CUT	I	AC CUT
45	AUB IN	I	AU BUS IN
46	VOL DOWN	O	Volume Down
47	VOL UP	O	Volume Up
48	VDD	—	VDD
49	X2	—	Crystal connection pin of system clock oscillation.
50	X1	—	Crystal connection pin of system clock oscillation.
51	IC	—	Connect to GND.
52	—	—	Not used.
53, 54	—	—	Connect to GND.
55	VOL LOC	I	Volume position
56	KEY-I1	I	Keyscan IN 1
57	PEY-I2	I	Keyscan IN 2
58	KEY-I3	I	Keyscan IN 3
59	KEY-I4	I	Keyscan IN 4

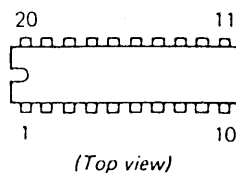
Pin No.	Pin Name	I/O	Function
60	KEY-I5	I	Keyscan IN 5
61	KEY-I6	I	Keyscan IN 6
62	KEY-I7	I	Keyscan IN 7
63	AVDD	—	VDD
64	AVREF	—	VDD (reference)

3-2. CIRCUIT BOARDS LOCATION

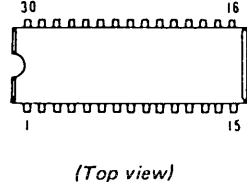


3-3. SEMICONDUCTOR LEAD LAYOUTS

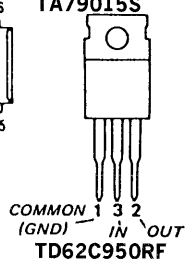
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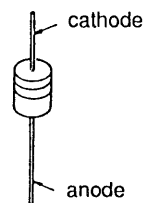
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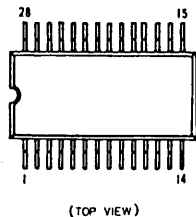
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TA79015S



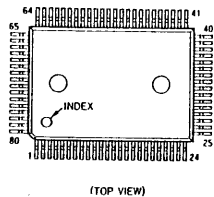
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UZL-22H



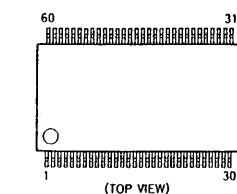
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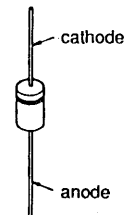
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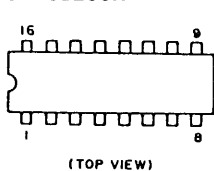
COMMON 1 3 2
(GND) IN OUT



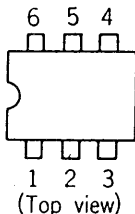
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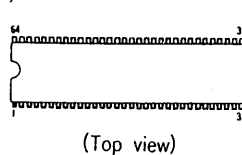
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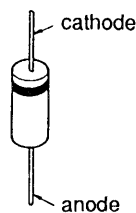
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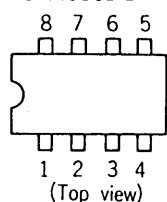
μ PD78014CW-057
 μ PD78014CW-065



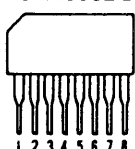
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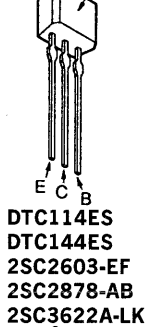
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NJM4580
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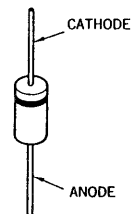
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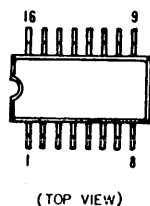
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LETTER SIDE



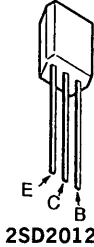
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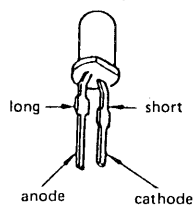
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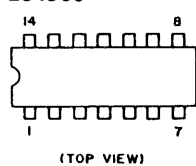
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2SC2878-AB
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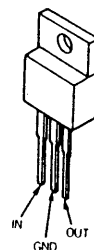
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SEL2510C-D
SEL3210S-CD



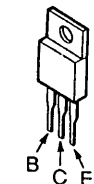
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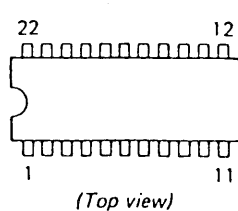
TA7805S
TA7815S



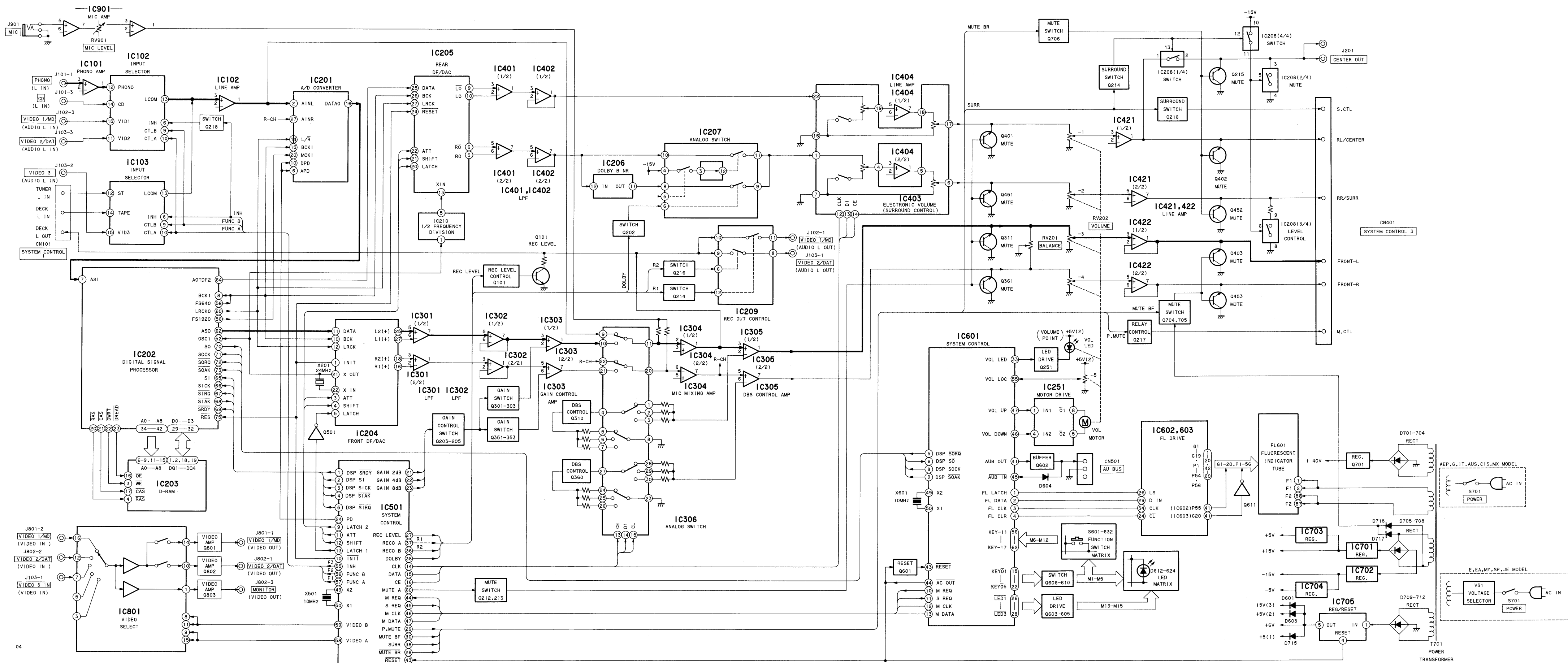
2SD2012



LC7535



3-4. BLOCK DIAGRAM

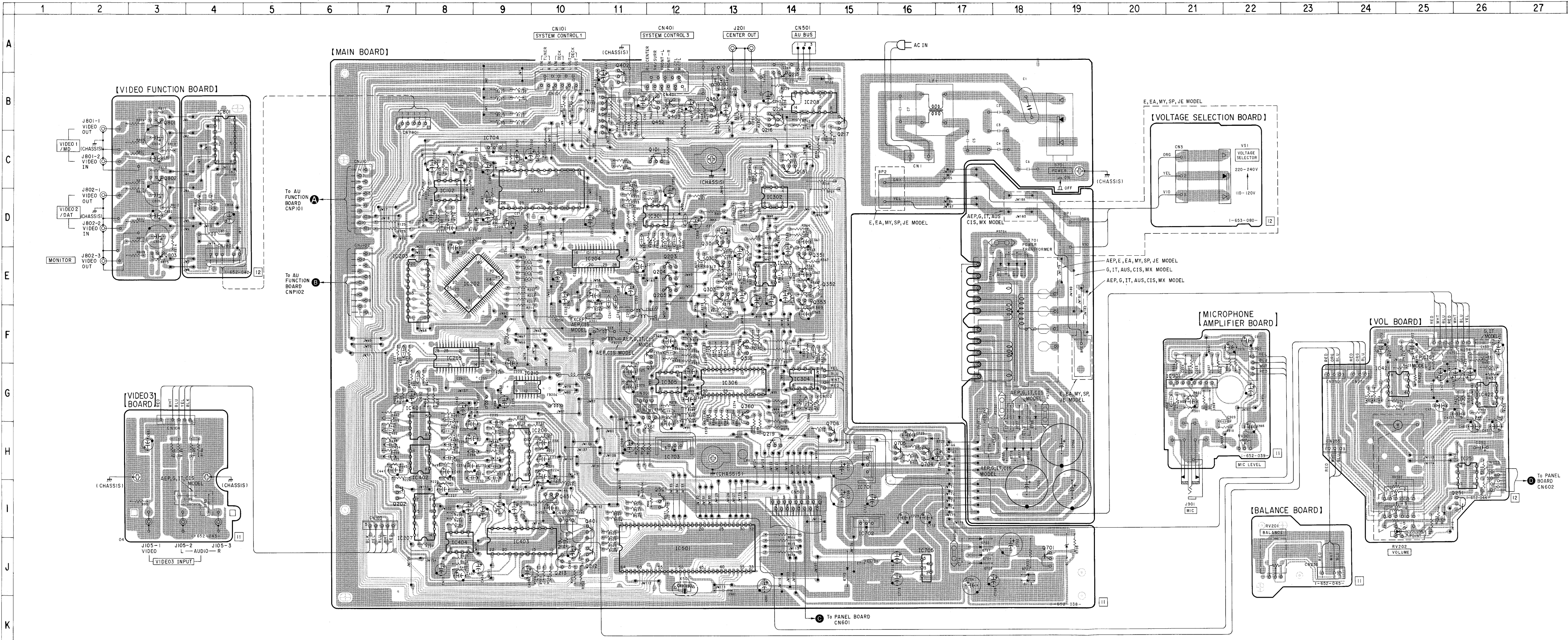


● Semiconductor Location

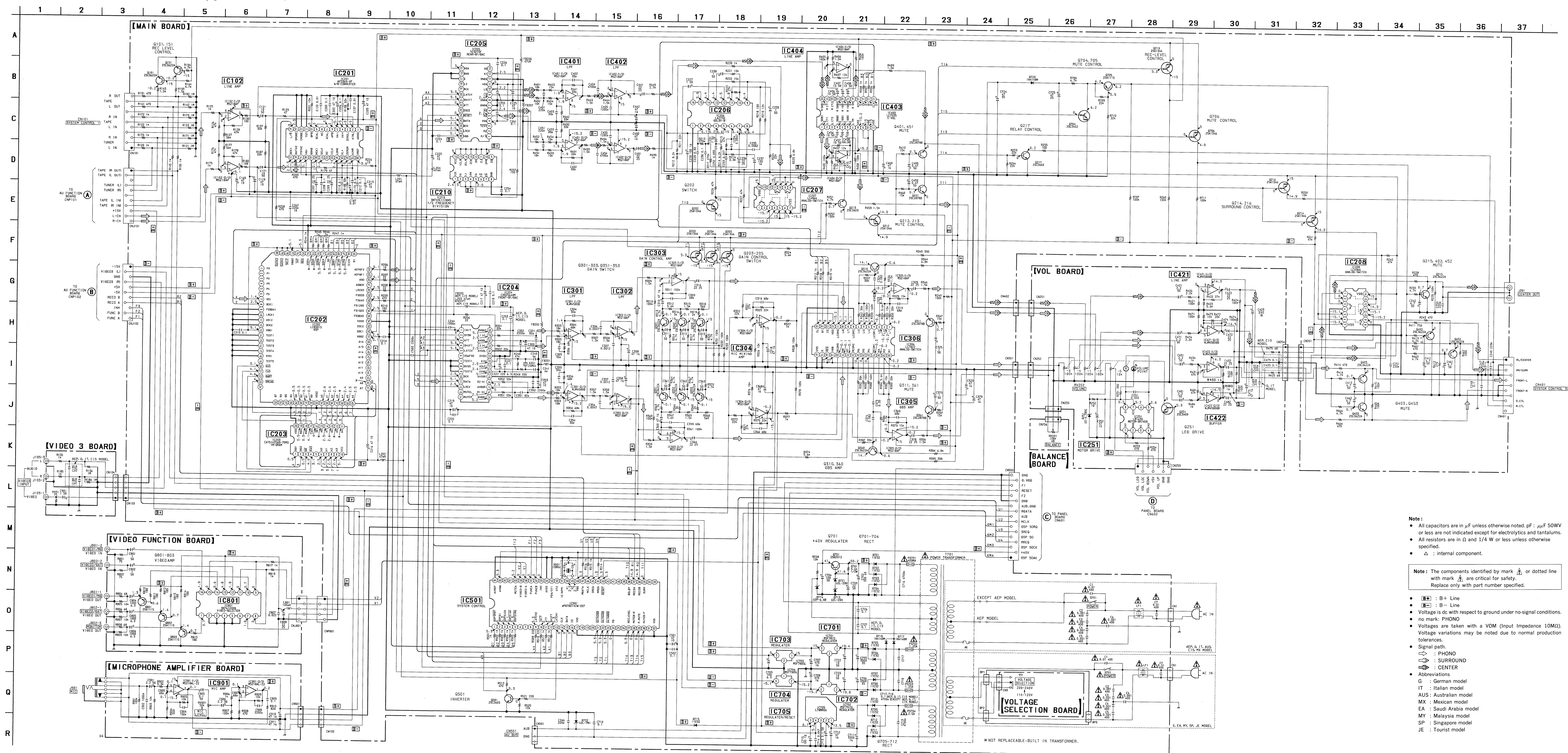
Ref. No.	Location	Ref. No.	Location
D251	I-25	IC701	H-15
D701	J-17	IC702	I-15
D702	J-17	IC703	H-12
D703	J-17	IC704	C-9
D704	J-17	IC705	J-16
D705	H-18	IC801	B-4
D706	H-18	IC901	G-21
D707	H-18		
D708	H-18	Q101	C-12
D709	E-18	Q151	C-14
D710	E-18	Q202	I-7
D711	E-18	Q203	E-12
D712	E-18	Q204	E-12
D713	J-18	Q205	E-12
D714	J-19	Q212	J-10
D715	J-15	Q213	J-10
D717	H-18	Q214	B-14
D718	H-18	Q215	B-14
D720	H-16	Q216	B-14
D721	J-18	Q217	B-15
D722	B-14	Q219	H-14
		Q251	I-25
IC102	C-8	Q301	D-13
IC201	D-10	Q302	E-13
IC202	E-8	Q303	E-13
IC203	E-7	Q310	E-13
IC204	E-10	Q311	F-11
IC205	F-8	Q351	E-14
IC206	H-9	Q352	E-14
IC207	I-7	Q353	E-14
IC208	B-14	Q360	G-13
IC210	G-9	Q361	G-11
IC251	H-26	Q401	I-10
IC301	D-11	Q402	B-11
IC302	D-14	Q403	B-12
IC303	E-14	Q451	I-10
IC304	D-14	Q452	B-12
IC305	G-12	Q453	B-13
IC306	G-13	Q501	I-12
IC401	G-7	Q701	J-11
IC402	H-7	Q704	H-16
IC403	J-9	Q705	H-16
IC404	J-8	Q706	H-15
IC421	G-24	Q801	B-3
IC422	G-26	Q802	C-3
IC501	J-12	Q803	E-3

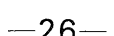
- Note:**
- : parts extracted from the component side.
 - : Pattern on the side which is seen.
 - Abbreviations
 - G : German model
 - IT : Italian model
 - AUS : Australian model
 - MX : Mexican model
 - EA : Saudi Arabia model
 - MY : Malaysia model
 - SP : Singapore model
 - JE : Tourist model

3-5. PRINTED WIRING BOARDS—MAIN SECTION— ● Refer to page 9 for Semiconductor Lead Layouts.

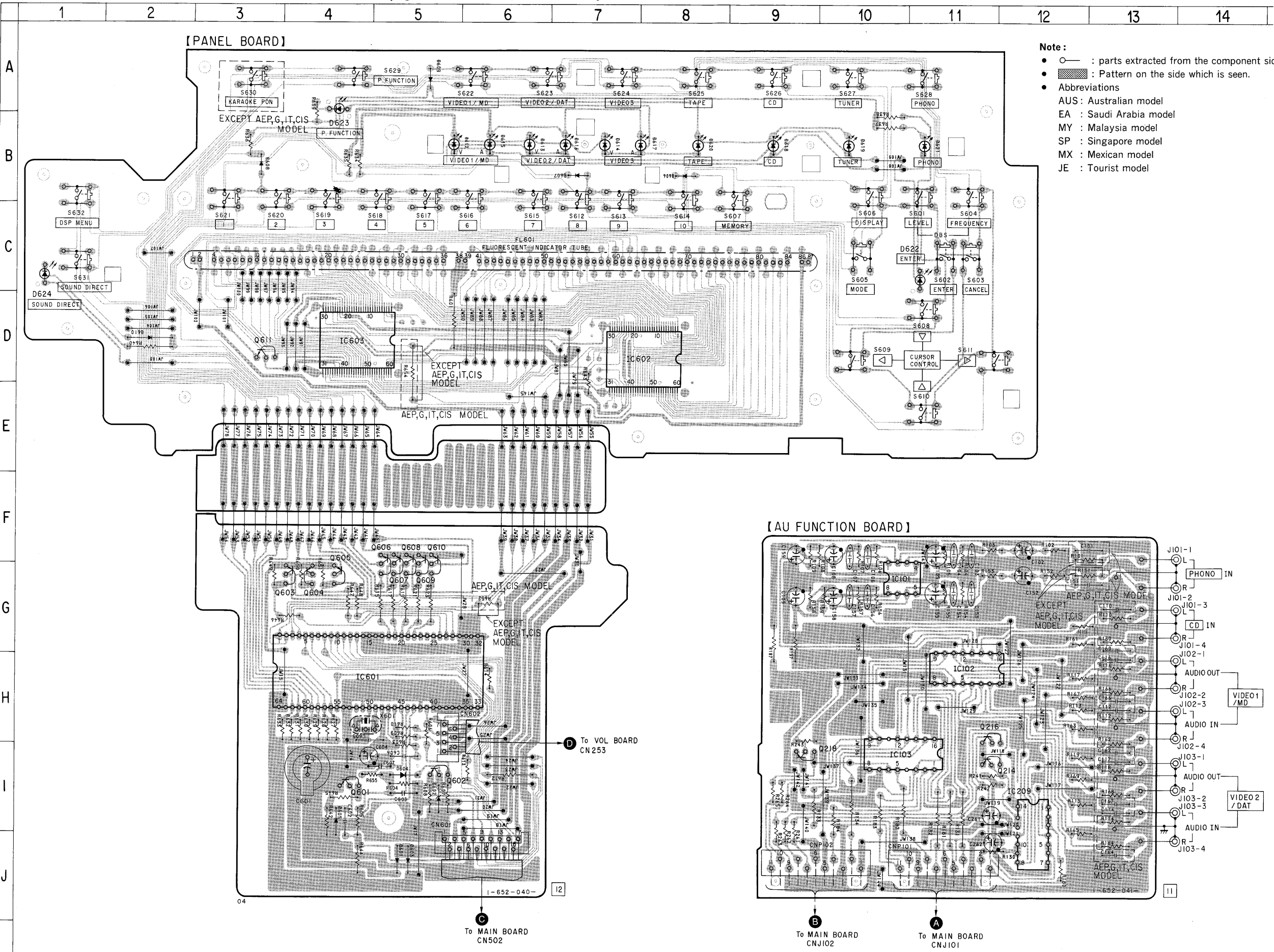


3-6. SCHEMATIC DIAGRAM—MAIN SECTION— • Refer to page 29 for IC Block Diagrams.





3-8. PRINTED WIRING BOARDS—PANEL SECTION— • Refer to page 9 for Semiconductor Lead Layouts.

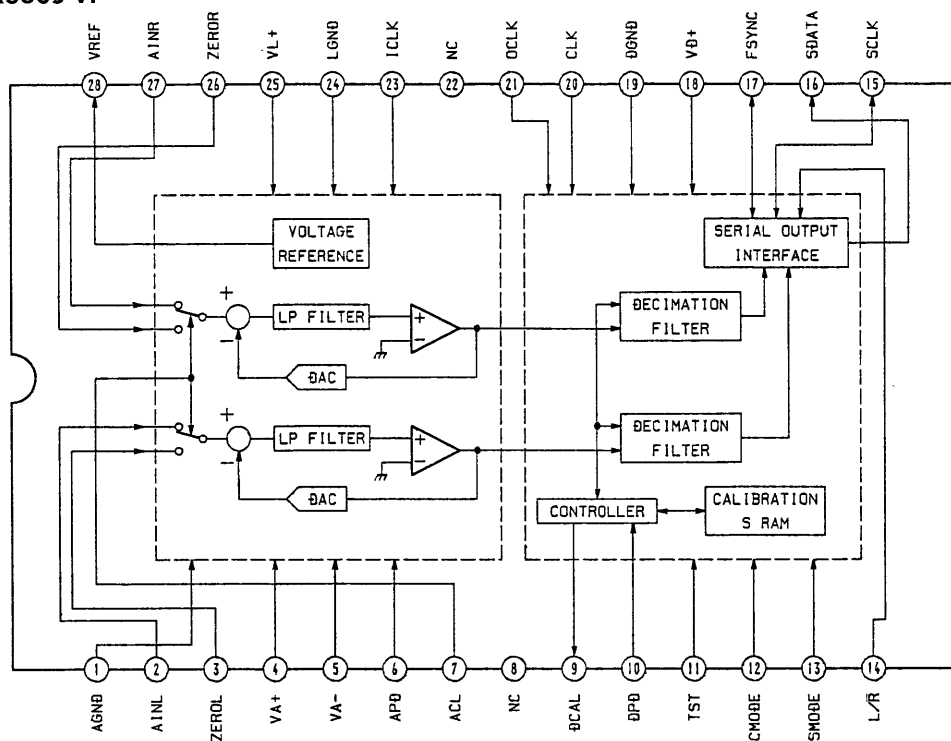


Note :
• ○ : parts extracted from the component side.
• ■ : Pattern on the side which is seen.
• Abbreviations
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
MX : Mexican model
JE : Tourist model

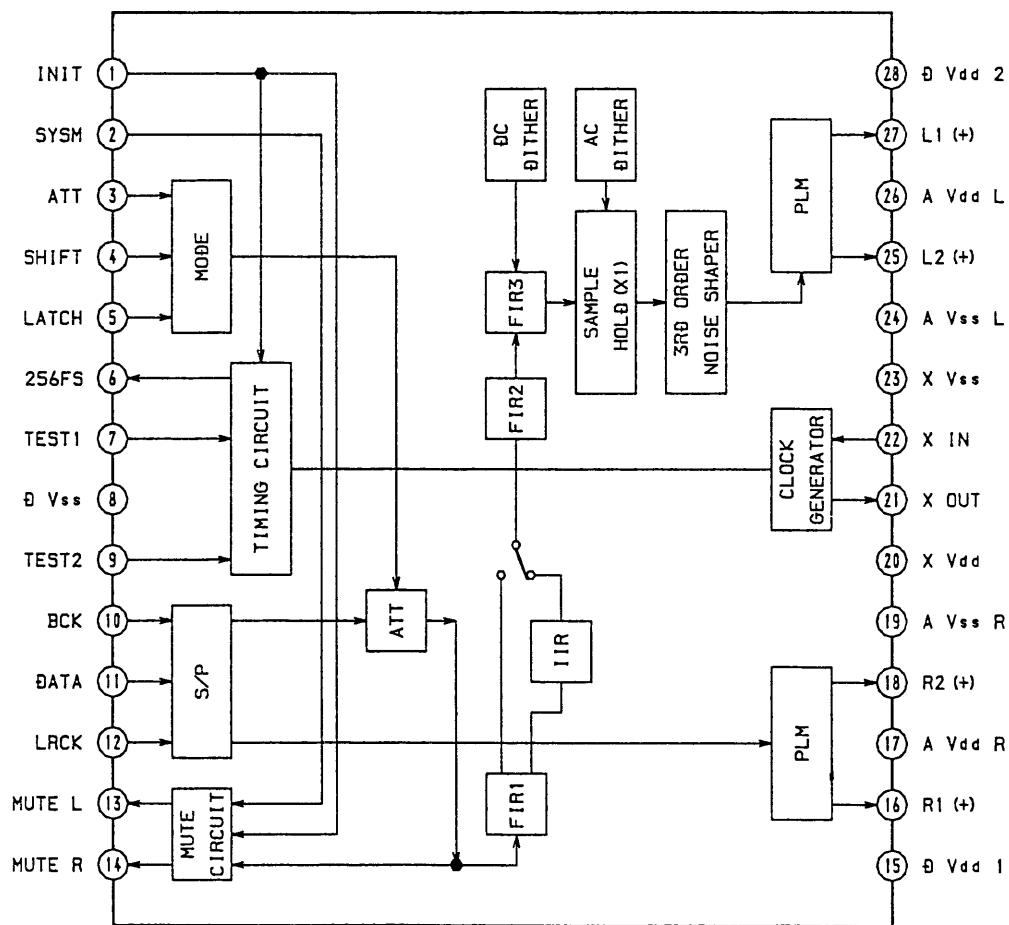
• Semiconductor Location

Ref. No.	Location
D601	J-5
D602	I-5
D603	J-5
D604	I-5
D605	I-4
D606	B-8
D607	B-7
D608	B-3
D609	A-5
D610	D-2
D612	B-5
D613	B-6
D614	B-7
D615	B-6
D616	B-7
D617	B-7
D618	B-10
D619	B-9
D620	B-8
D621	B-11
D622	C-11
D623	A-4
D624	C-1
IC101	G-10
IC102	H-11
IC103	I-10
IC209	I-12
IC601	H-4
IC602	D-7
IC603	D-4
Q214	H-11
Q216	I-11
Q218	I-9
Q601	I-4
Q602	I-5
Q603	G-4
Q604	G-4
Q605	G-4
Q606	F-5
Q607	F-5
Q608	F-5
Q609	F-5
Q610	F-5
Q611	D-3

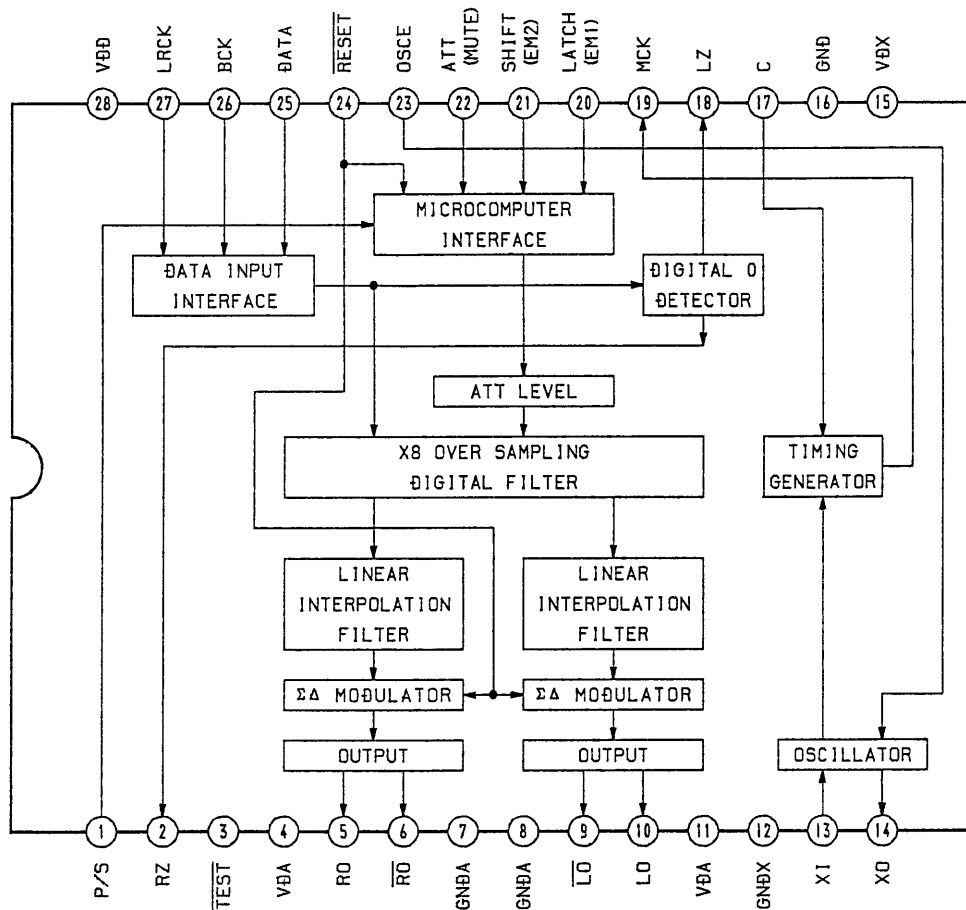
• IC Block Diagrams
IC201 AK5369-VP



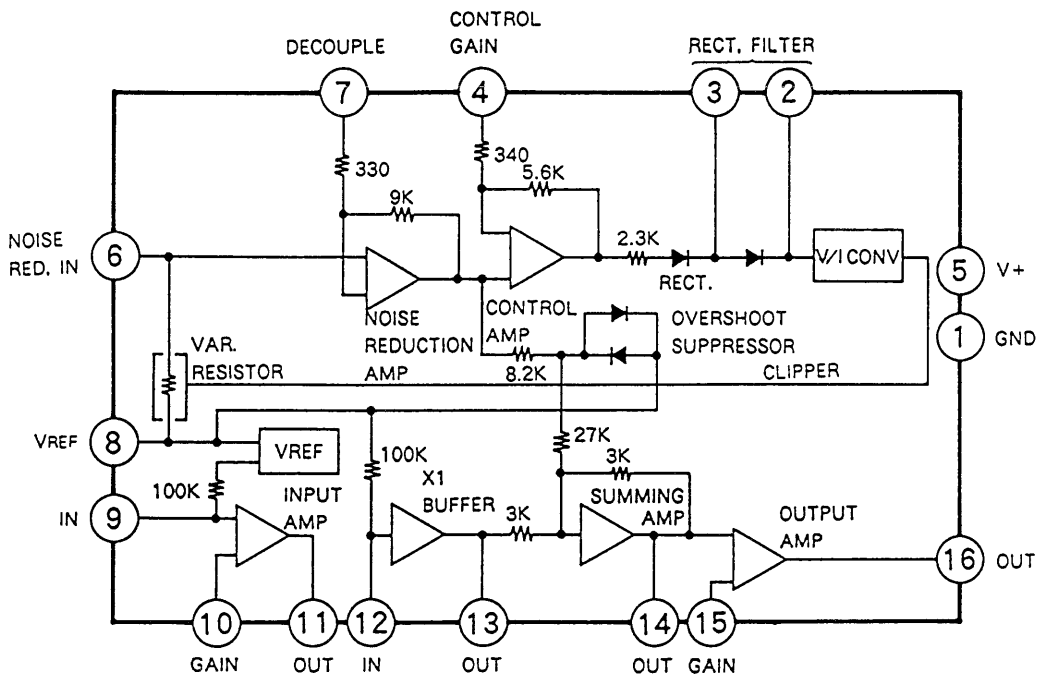
IC204 CXD2564AM



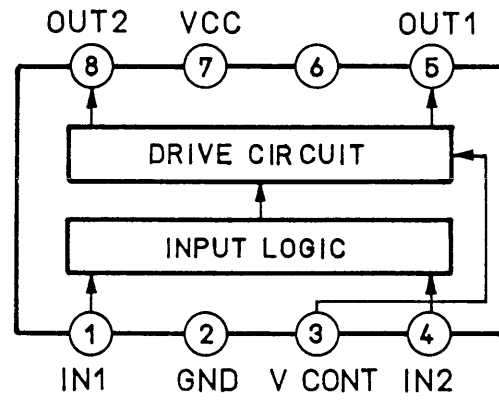
IC205 TC9270F



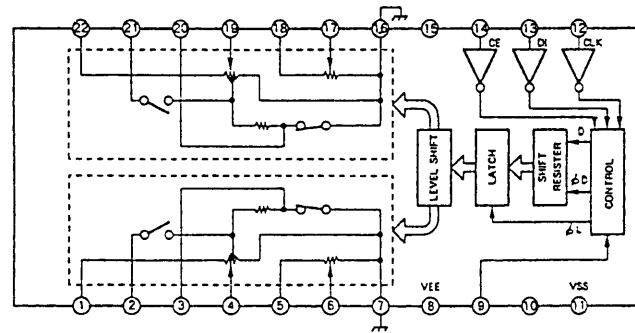
IC206 LA2730



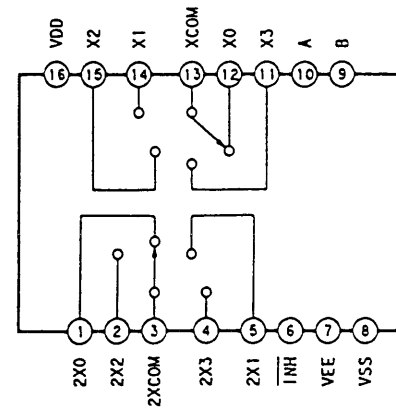
IC251 LB1639



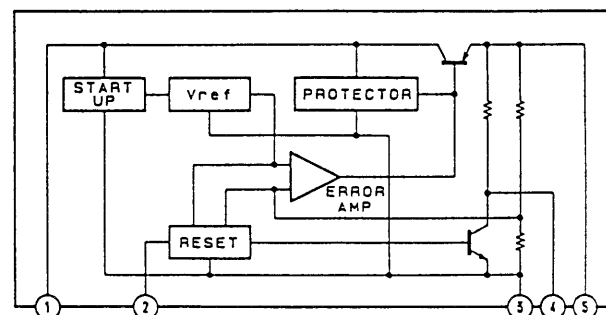
IC403 LC7535



IC102, 103 MC14052 (AU FUNCTION board)



IC705 L78MR06



[illegible]

The diagram shows a 16-pin logic device with two JK flip-flops. The pins are numbered 1 through 16. The top row of pins (16 to 9) is labeled: VCC, 1CLR, 2CLR, 2CK, 2K, 2J, 2PR, 2Q. The bottom row of pins (1 to 8) is labeled: 1CK, 1K, 1J, 1PR, 1Q, 1Q̄, 2Q̄, GND. The left flip-flop has inputs CLR (pin 15), CK (pin 1), K (pin 14), J (pin 13), and PR (pin 2). Its outputs are Q (pin 4) and Q̄ (pin 5). The right flip-flop has inputs PR (pin 10), CK (pin 6), J (pin 11), K (pin 12), and CLR (pin 7). Its outputs are Q (pin 9) and Q̄ (pin 8). The circuit is configured as a counter, with the output of one flip-flop serving as the clock for the other.

SECTION 4 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

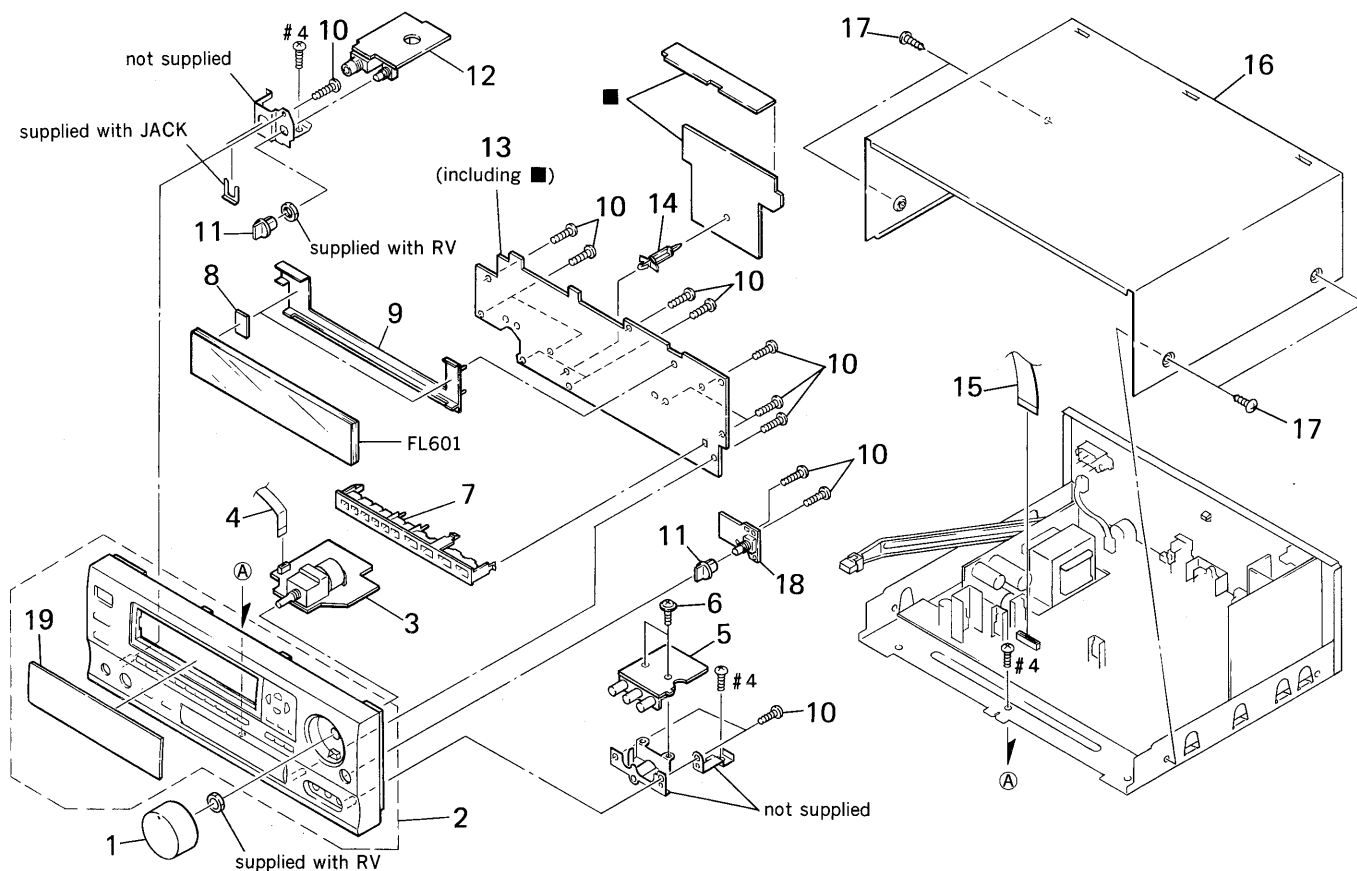
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

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

● Abbreviations

G : German model
IT : Italian model
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
MX : Mexican model
JE : Tourist model

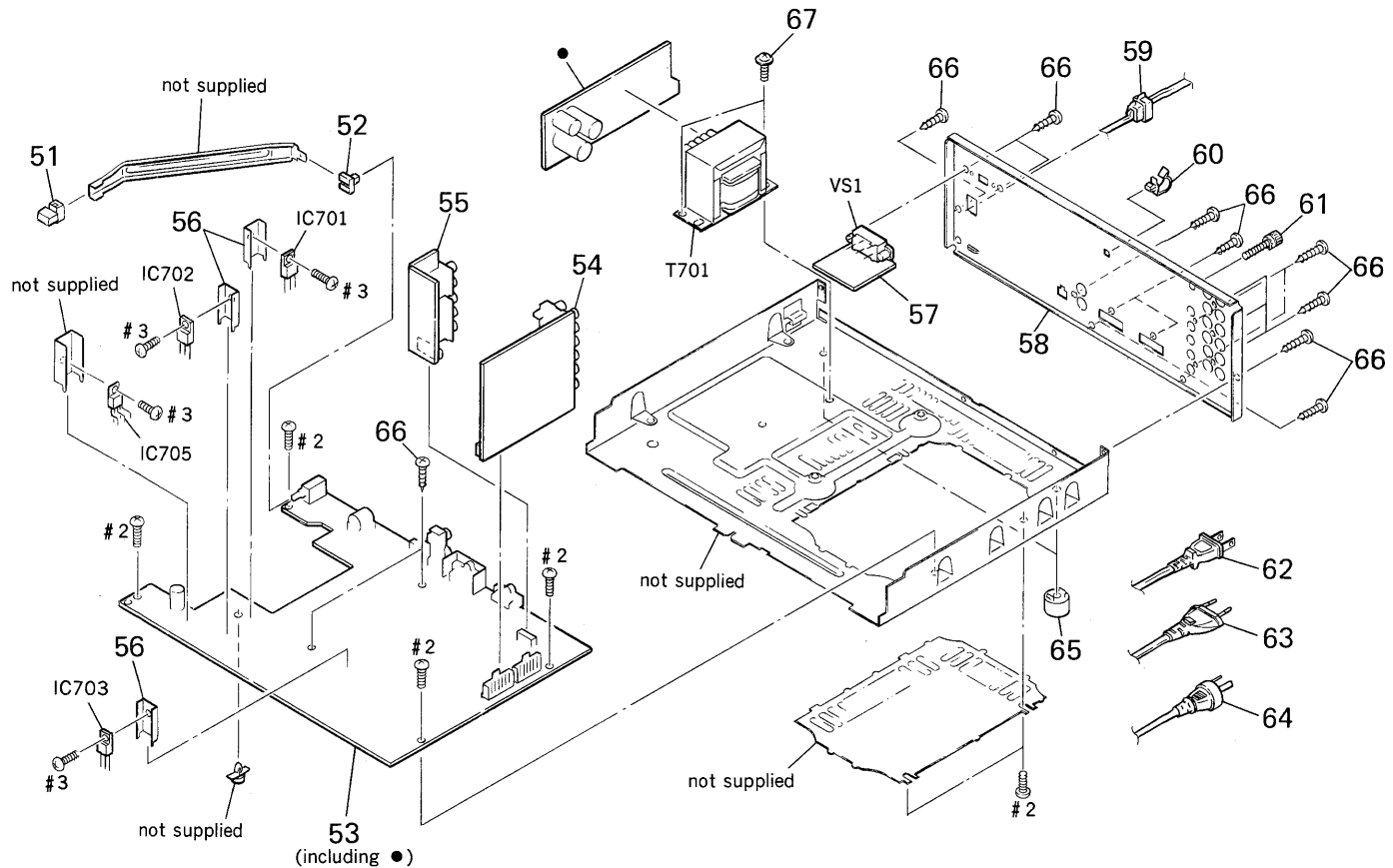
4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	X-4944-655-1	KNOB (VOL) ASSY	
2	X-4944-724-1	PANEL ASSY, FRONT (AEP, G, IT, CIS)	
2	X-4944-725-1	PANEL ASSY, FRONT (EXCEPT AEP, G, IT, CIS)	
* 3	A-4369-739-A	VOL BOARD, COMPLETE (AEP, CIS)	
* 3	A-4369-756-A	VOL BOARD, COMPLETE (G, IT)	
* 3	A-4369-759-A	VOL BOARD, COMPLETE (EXCEPT AEP, G, IT, CIS)	
4	1-690-635-11	WIRE, FLAT TYPE (7 CORE)	
* 5	1-652-043-11	VIDEO 3 BOARD	
6	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
7	4-965-240-01	HOLDER (FU), LED	
* 8	4-934-853-01	CUSHION	
9	4-965-239-01	HOLDER, FL TUBE	

Ref. No.	Part No.	Description	Remark
10	4-951-620-01	SCREW (2.6X8), +BVTP	
11	4-950-652-01	KNOB (DIA. 12), ROUND	
* 12	1-652-039-11	MICROPHONE AMPLIFIER BOARD	
* 13	A-4369-728-A	PANEL BOARD, COMPLETE (AEP, G, IT, CIS)	
* 13	A-4369-763-A	PANEL BOARD, COMPLETE (EXCEPT AEP, G, IT, CIS)	
14	4-924-098-91	HOLDER, PC BOARD	
15	1-751-486-11	WIRE (FLAT TYPE) (17 CORE)	
* 16	4-939-803-71	CASE	
17	3-363-099-01	SCREW (CASE 3 TP2)	
* 18	1-652-045-11	BALANCE BOARD	
19	4-965-238-01	WINDOW	
FL601	1-517-302-11	INDICATOR TUBE, FLUORESCENT	

4-2. CHASSIS SECTION



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

Ref. No.	Part No.	Description	Remark
	51	4-964-965-01 BUTTON (POWER)	
	52	4-866-342-00 JOINT (B), KNOB	
*	53	A-4369-726-A MAIN BOARD, COMPLETE (AEP, CIS)	
*	53	A-4369-746-A MAIN BOARD, COMPLETE (G, IT)	
*	53	A-4369-757-A MAIN BOARD, COMPLETE (AUS)	
*	53	A-4369-762-A MAIN BOARD, COMPLETE (E, EA, MY, SP, JE)	
*	53	A-4371-269-A MAIN BOARD, COMPLETE (MX)	
*	54	A-4369-736-A AU FUNCTION BOARD, COMPLETE (AEP, CIS)	
*	54	A-4369-754-A AU FUNCTION BOARD, COMPLETE (G, IT)	
*	54	A-4369-760-A AU FUNCTION BOARD, COMPLETE (EXCEPT AEP, G, IT, CIS)	
*	55	1-652-042-11 VIDEO FUNCTION BOARD	
*	56	3-309-144-21 HEAT SINK	
*	57	1-653-080-11 VOLTAGE SELECTION BOARD (E, EA, MY, SP, JE)	
*	58	4-965-243-01 PANEL (B3120), BACK (AEP)	
*	58	4-965-243-21 PANEL (B3120), BACK (G)	
*	58	4-965-243-31 PANEL (B3120), BACK (AUS)	
*	58	4-965-243-41 PANEL (B3120), BACK (E, EA, MY, SP, JE)	
*	58	4-965-243-51 PANEL (B3120), BACK (MX)	
*	58	4-965-243-61 PANEL (B3120), BACK (IT, CIS)	

Ref. No.	Part No.	Description	Remark
* 59	3-703-244-00	BUSHING (2104), CORD (AEP, G, IT, AUS, EA, MY, SP, CIS)	
* 59	3-703-571-11	BUSHING (S) (4516), CORD (E, MX, JE)	
*	60	4-949-235-01 HOOK	
	61	4-947-010-01 SCREW, FEEDER FIXED	
Δ 62	1-575-656-11	CORD, POWER (E, MX, JE)	
Δ 63	1-575-654-11	CORD, POWER (AEP, G, IT, EA, MY, SP, CIS)	
Δ 64	1-751-355-11	CORD, POWER (AUS)	
	65	4-931-169-01 FOOT	
	66	3-704-515-11 SCREW (BV/RING)	
	67	4-946-541-01 SCREW (4X8), +PWHTT	
	IC701	8-759-231-59 IC TA7815S	
	IC702	8-759-245-87 IC TA79015S	
	IC703	8-759-231-53 IC TA7805S	
	IC705	8-759-820-13 IC L78MR06	
Δ T701	1-426-724-11	TRANSFORMER, POWER (E, EA, MY, SP, MX, JE)	
Δ T701	1-426-725-11	TRANSFORMER, POWER (AEP, G, IT, AUS, CIS)	
Δ VS1	1-572-367-11	SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR) (E, EA, MY, SP, JE)	

SECTION 5 ELECTRICAL PARTS LIST

AU FUNCTION

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

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

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

- Abbreviations
G : German model
IT : Italian model
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
MX : Mexican model
JE : Tourist model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4369-736-A	AU FUNCTION BOARD, COMPLETE (AEP, CIS)		C164	1-162-286-31	CERAMIC 220PF 10% 50V	
*	A-4369-754-A	AU FUNCTION BOARD, COMPLETE (G, IT)				(AEP, G, IT, CIS)	
*	A-4369-760-A	AU FUNCTION BOARD, COMPLETE (E, AUS, EA, MY, SP, MX, JE)		C166	1-162-286-31	CERAMIC 220PF 10% 50V	
		*****				(AEP, G, IT, CIS)	
		< CAPACITOR >		C167	1-162-286-31	CERAMIC 220PF 10% 50V	
C101	1-162-286-31	CERAMIC 220PF 10% 50V				(AEP, G, IT, CIS)	
		(AEP, G, IT, CIS)		C261	1-126-022-11	ELECT 47uF 20% 16V	
C102	1-126-161-11	ELECT 2.2uF 20% 50V		C262	1-126-022-11	ELECT 47uF 20% 16V	
C103	1-164-070-11	CERAMIC 100PF 5% 50V				< CONNECTOR >	
C104	1-164-066-11	CERAMIC 68PF 5% 50V		CNP101	1-766-327-11	CONNECTOR, BOARD TO BOARD 11P	
C105	1-126-022-11	ELECT 47uF 20% 10V		CNP102	1-766-327-11	CONNECTOR, BOARD TO BOARD 11P	
		< IC >				< IC >	
C106	1-130-480-00	MYLAR 0.0056uF 5% 50V		IC101	8-759-636-74	IC M5218AP-22	
C107	1-106-347-00	MYLAR 0.0015uF 5% 200V		IC102	8-759-000-48	IC MC14052BCP	
C108	1-124-464-11	ELECT 0.22uF 20% 50V		IC103	8-759-000-48	IC MC14052BCP	
C109	1-126-022-11	ELECT 47uF 20% 10V		IC209	8-759-801-01	IC LC4966	
C110	1-162-286-31	CERAMIC 220PF 10% 50V				< JACK >	
		(AEP, G, IT, CIS)		J101	1-573-520-11	JACK, PIN 4P (PHONO/CD)	
C112	1-162-286-31	CERAMIC 220PF 10% 50V		J102	1-573-520-11	JACK, PIN 4P (VIDEO 1 MD/DAT)	
		(AEP, G, IT, CIS)		J103	1-573-520-11	JACK, PIN 4P (VIDEO 2/DAT)	
C114	1-162-286-31	CERAMIC 220PF 10% 50V				< TRANSISTOR >	
		(AEP, G, IT, CIS)		Q214	8-729-900-63	TRANSISTOR DTA124ES	
C116	1-162-286-31	CERAMIC 220PF 10% 50V		Q216	8-729-900-63	TRANSISTOR DTA124ES	
		(AEP, G, IT, CIS)		Q218	8-729-900-80	TRANSISTOR DTC114ES	
C117	1-162-286-31	CERAMIC 220PF 10% 50V				< RESISTOR >	
		(AEP, G, IT, CIS)		R101	1-249-417-11	CARBON 1K 5% 1/4W	
C151	1-162-286-31	CERAMIC 220PF 10% 50V				(AEP, G, IT, CIS)	
		(AEP, G, IT, CIS)		R102	1-249-441-11	CARBON 100K 5% 1/4W	
C152	1-126-161-11	ELECT 2.2uF 20% 50V		R103	1-249-417-11	CARBON 1K 5% 1/4W	
C153	1-164-070-11	CERAMIC 100PF 5% 50V		R104	1-249-441-11	CARBON 100K 5% 1/4W	
C154	1-164-066-11	CERAMIC 68PF 5% 50V		R105	1-249-416-11	CARBON 820 5% 1/4W	
C155	1-126-022-11	ELECT 47uF 20% 10V				< TRANSISTOR >	
C156	1-130-480-00	MYLAR 0.0056uF 5% 50V		Q214	8-729-900-63	TRANSISTOR DTA124ES	
		< IC >		Q216	8-729-900-63	TRANSISTOR DTA124ES	
C157	1-106-347-00	MYLAR 0.0015uF 5% 200V		Q218	8-729-900-80	TRANSISTOR DTC114ES	
C158	1-124-464-11	ELECT 0.22uF 20% 50V				< RESISTOR >	
C159	1-126-022-11	ELECT 47uF 20% 10V		R101	1-249-417-11	CARBON 1K 5% 1/4W	
C160	1-162-286-31	CERAMIC 220PF 10% 50V				(AEP, G, IT, CIS)	
		(AEP, G, IT, CIS)		R102	1-249-441-11	CARBON 100K 5% 1/4W	
C162	1-162-286-31	CERAMIC 220PF 10% 50V		R103	1-249-417-11	CARBON 1K 5% 1/4W	
		(AEP, G, IT, CIS)		R104	1-249-441-11	CARBON 100K 5% 1/4W	
		(AEP, G, IT, CIS)		R105	1-249-416-11	CARBON 820 5% 1/4W	
		(AEP, G, IT, CIS)		R106	1-247-897-11	CARBON 560K 5% 1/4W	
		(AEP, G, IT, CIS)		R107	1-249-437-11	CARBON 47K 5% 1/4W	
		(AEP, G, IT, CIS)		R108	1-249-441-11	CARBON 100K 5% 1/4W	
		(AEP, G, IT, CIS)		R109	1-249-417-11	CARBON 1K 5% 1/4W	
		(AEP, G, IT, CIS)		R110	1-249-425-11	CARBON 4.7K 5% 1/4W	

AU FUNCTION

BALANCE

MAIN

Ref. No.	Part No.	Description	Remark
R111	1-249-427-11	CARBON	6.8K 5% 1/4W
R112	1-249-425-11	CARBON	4.7K 5% 1/4W
R113	1-249-427-11	CARBON	6.8K 5% 1/4W
R114	1-249-425-11	CARBON	4.7K 5% 1/4W
R115	1-249-427-11	CARBON	6.8K 5% 1/4W
R116	1-249-413-11	CARBON	470 5% 1/4W
R117	1-247-903-00	CARBON	1M 5% 1/4W
R118	1-249-413-11	CARBON	470 5% 1/4W
R119	1-247-903-00	CARBON	1M 5% 1/4W
R130-134	1-247-807-31	CARBON	100 5% 1/4W
R137	1-249-403-11	CARBON	68 5% 1/4W
R151	1-249-417-11	CARBON (AEP, G, IT, CIS)	1K 5% 1/4W
R152	1-249-441-11	CARBON	100K 5% 1/4W
R153	1-249-417-11	CARBON	1K 5% 1/4W
R154	1-249-441-11	CARBON	100K 5% 1/4W
R155	1-249-416-11	CARBON	820 5% 1/4W
R156	1-247-897-11	CARBON	560K 5% 1/4W
R157	1-249-437-11	CARBON	47K 5% 1/4W
R158	1-249-441-11	CARBON	100K 5% 1/4W
R159	1-249-417-11	CARBON	1K 5% 1/4W
R160	1-249-425-11	CARBON	4.7K 5% 1/4W
R161	1-249-427-11	CARBON	6.8K 5% 1/4W
R162	1-249-425-11	CARBON	4.7K 5% 1/4W
R163	1-249-427-11	CARBON	6.8K 5% 1/4W
R164	1-249-425-11	CARBON	4.7K 5% 1/4W
R165	1-249-427-11	CARBON	6.8K 5% 1/4W
R166	1-249-413-11	CARBON	470 5% 1/4W
R167	1-247-903-00	CARBON	1M 5% 1/4W
R168	1-249-413-11	CARBON	470 5% 1/4W
R169	1-247-903-00	CARBON	1M 5% 1/4W
R180-184	1-247-807-31	CARBON	100 5% 1/4W
R187	1-249-403-11	CARBON	68 5% 1/4W
R241-243	1-249-437-11	CARBON	47K 5% 1/4W
R261-265	1-249-417-11	CARBON	1K 5% 1/4W

*	1-652-045-11	BALANCE BOARD	

< VARIABLE RESISTOR >			
RV201	1-241-385-11	RES, VAR, CARBON	100K (BALANCE)

Ref. No.	Part No.	Description	Remark
*	A-4369-726-A	MAIN BOARD, COMPLETE (AEP, CIS)	
*	A-4369-746-A	MAIN BOARD, COMPLETE (G, IT)	
*	A-4369-757-A	MAIN BOARD, COMPLETE (AUS)	
*	A-4369-762-A	MAIN BOARD, COMPLETE (E, EA, MY, SP, JE)	
*	A-4371-269-A	MAIN BOARD, COMPLETE (MX)	

*	3-309-144-21	HEAT SINK	
*	4-870-539-00	PLATE, GROUND	
	7-682-548-04	SCREW +BVT 3X8 (S)	
< TERMINAL >			
* BP2	1-560-595-00	TERMINAL (WITH BASE) (E, EA, MY, SP, JE)	
* BP3	1-560-595-00	TERMINAL (WITH BASE) (E, EA, MY, SP, JE)	
< CAPACITOR >			
△C1	1-161-744-51	CERAMIC	0.01uF 400V
△C2-6	1-161-741-00	CERAMIC	0.001uF 10% 400V
△C7	1-161-744-51	CERAMIC	0.01uF 400V
C119	1-126-022-11	ELECT	47uF 20% 10V
C120	1-136-153-00	FILM	0.01uF 5% 50V
C121	1-126-059-11	ELECT	10uF 20% 50V
C137	1-136-153-00	FILM	0.01uF 5% 50V
C169	1-126-022-11	ELECT	47uF 20% 10V
C170	1-136-153-00	FILM	0.01uF 5% 50V
C171	1-126-059-11	ELECT	10uF 20% 50V
C187	1-136-153-00	FILM	0.01uF 5% 50V
C202	1-126-022-11	ELECT	47uF 20% 10V
C203	1-164-159-11	CERAMIC	0.1uF 50V
C204	1-164-159-11	CERAMIC	0.1uF 50V
C205	1-126-022-11	ELECT	47uF 20% 10V
C207	1-126-049-11	ELECT	22uF 20% 25V
C208	1-164-159-11	CERAMIC	0.1uF 50V
C209	1-126-049-11	ELECT	22uF 20% 25V
C210	1-164-159-11	CERAMIC	0.1uF 50V
C212	1-164-159-11	CERAMIC	0.1uF 50V
C213	1-126-022-11	ELECT	47uF 20% 10V
C214	1-164-159-11	CERAMIC	0.1uF 50V
C215	1-164-159-11	CERAMIC	0.1uF 50V
C216	1-126-022-11	ELECT	47uF 20% 10V
C217	1-126-022-11	ELECT	47uF 20% 10V
C218	1-164-159-11	CERAMIC	0.1uF 50V
C219	1-126-022-11	ELECT	47uF 20% 10V
C220	1-164-159-11	CERAMIC	0.1uF 50V
C221	1-164-159-11	CERAMIC	0.1uF 50V
C222	1-124-587-11	ELECT	220uF 20% 6.3V
C223	1-126-022-11	ELECT	47uF 20% 10V
C224	1-164-159-11	CERAMIC	0.1uF 50V
C225	1-126-022-11	ELECT	47uF 20% 10V

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		
C226	1-164-159-11	CERAMIC	0. 1uF	50V	
C227	1-126-301-11	ELECT	1uF	20%	50V
C228	1-126-023-11	ELECT	100uF	20%	16V
C229	1-136-171-00	FILM	0. 33uF	5%	50V
C230	1-136-165-00	FILM	0. 1uF	5%	50V
C231	1-126-301-11	ELECT	1uF	20%	50V
C232	1-136-159-00	FILM	0. 033uF	5%	50V
C233	1-136-158-00	FILM	0. 027uF	5%	50V
C234	1-106-359-00	MYLAR	0. 0047uF	5%	200V
C235	1-130-482-00	MYLAR	0. 0082uF	5%	50V
C236	1-126-049-11	ELECT	22uF	20%	25V
C237	1-126-023-11	ELECT	100uF	20%	16V
C238	1-126-301-11	ELECT	1uF	20%	50V
C239	1-126-301-11	ELECT	1uF	20%	50V
C240	1-164-013-11	CERAMIC	4PF	0. 25PF	50V
C241	1-164-015-11	CERAMIC	6PF	0. 5PF	50V
C242	1-126-163-11	ELECT	4. 7uF	20%	50V
C244	1-162-294-31	CERAMIC	0. 001uF	10%	50V
C246-248	1-162-286-31	CERAMIC	220PF	10%	50V
C249	1-164-159-11	CERAMIC	0. 1uF		50V
C250	1-162-286-31	CERAMIC	220PF	10%	50V
C251	1-162-286-31	CERAMIC	220PF	10%	50V
C253	1-164-159-11	CERAMIC (AEP, G, IT, CIS)	0. 1uF		50V
C254	1-164-159-11	CERAMIC	0. 1uF		50V
C255	1-164-159-11	CERAMIC	0. 1uF		50V
C261	1-164-159-11	CERAMIC	0. 1uF		50V
C262	1-162-286-31	CERAMIC	220PF	10%	50V
C301	1-164-068-11	CERAMIC	82PF	5%	50V
C302	1-161-375-00	CERAMIC	0. 0022uF	20%	50V
C303	1-126-022-11	ELECT	47uF	20%	10V
C304	1-164-057-11	CERAMIC	30PF	5%	50V
C305	1-164-057-11	CERAMIC	30PF	5%	50V
C306	1-106-359-00	MYLAR	0. 0047uF	5%	200V
C307	1-130-472-00	MYLAR	0. 0012uF	5%	50V
C308	1-126-022-11	ELECT	47uF	20%	16V
C309	1-164-066-11	CERAMIC	68PF	5%	50V
C310	1-126-022-11	ELECT	47uF	20%	16V
C311-313	1-126-301-11	ELECT	1uF	20%	50V
C314	1-126-049-11	ELECT	22uF	20%	25V
C316	1-164-066-11	CERAMIC	68PF	5%	50V
C318	1-126-022-11	ELECT	47uF	20%	16V
C319	1-164-066-11	CERAMIC	68PF	5%	50V
C323	1-136-841-81	FILM	0. 39uF	5%	50V
C324	1-136-164-00	FILM	0. 082uF	5%	50V
C325	1-126-301-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C328	1-126-049-11	ELECT	22uF	20%	25V
C329	1-126-022-11	ELECT	47uF	20%	16V
C351	1-164-068-11	CERAMIC	82PF	5%	50V
C352	1-161-375-00	CERAMIC	0. 0022uF	20%	50V
C353	1-126-022-11	ELECT	47uF	20%	10V
C354	1-164-057-11	CERAMIC	30PF	5%	50V
C355	1-164-057-11	CERAMIC	30PF	5%	50V
C356	1-106-359-00	MYLAR	0. 0047uF	5%	200V
C357	1-130-472-00	MYLAR	0. 0012uF	5%	50V
C358	1-126-022-11	ELECT	47uF	20%	16V
C359	1-164-066-11	CERAMIC	68PF	5%	50V
C360	1-126-022-11	ELECT	47uF	20%	16V
C361-363	1-126-301-11	ELECT	1uF	20%	50V
C364	1-126-049-11	ELECT	22uF	20%	25V
C366	1-164-066-11	CERAMIC	68PF	5%	50V
C368	1-126-022-11	ELECT	47uF	20%	16V
C369	1-164-066-11	CERAMIC	68PF	5%	50V
C373	1-136-841-81	FILM	0. 39uF	5%	50V
C374	1-136-164-00	FILM	0. 082uF	5%	50V
C375	1-126-301-11	ELECT	1uF	20%	50V
C378	1-126-049-11	ELECT	22uF	20%	25V
C379	1-126-022-11	ELECT	47uF	20%	16V
C401	1-164-077-11	CERAMIC	220PF	10%	50V
C402	1-164-060-11	CERAMIC	39PF	5%	50V
C403	1-164-060-11	CERAMIC	39PF	5%	50V
C404	1-106-359-00	MYLAR	0. 0047uF	5%	200V
C405	1-130-472-00	MYLAR	0. 0012uF	5%	50V
C406-408	1-126-059-11	ELECT	10uF	20%	50V
C409	1-126-300-11	ELECT	0. 47uF	20%	50V
C410	1-126-022-11	ELECT	47uF	20%	16V
C411	1-126-163-11	ELECT	4. 7uF	20%	50V
C412	1-126-163-11	ELECT	4. 7uF	20%	50V
C441	1-126-049-11	ELECT	22uF	20%	25V
C442	1-126-022-11	ELECT	47uF	20%	16V
C451	1-164-077-11	CERAMIC	220PF	10%	50V
C452	1-164-060-11	CERAMIC	39PF	5%	50V
C453	1-164-060-11	CERAMIC	39PF	5%	50V
C454	1-106-359-00	MYLAR	0. 0047uF	5%	200V
C455	1-130-472-00	MYLAR	0. 0012uF	5%	50V
C456-458	1-126-059-11	ELECT	10uF	20%	50V
C459	1-126-300-11	ELECT	0. 47uF	20%	50V
C460	1-126-022-11	ELECT	47uF	20%	16V
C461	1-126-163-11	ELECT	4. 7uF	20%	50V
C462	1-126-163-11	ELECT	4. 7uF	20%	50V
C491	1-126-049-11	ELECT	22uF	20%	25V
C492	1-126-022-11	ELECT	47uF	20%	16V

MAIN

Ref. No.	Part No.	Description	Remark
C501	1-126-022-11	ELECT	47uF 20% 10V
C502	1-164-159-11	CERAMIC	0. 1uF 50V
C503	1-161-375-00	CERAMIC	0. 0022uF 20% 50V
C702	1-124-920-11	ELECT	330uF 20% 63V
C703	1-126-233-11	ELECT	22uF 20% 50V
C704	1-124-122-11	ELECT	100uF 20% 50V
C705	1-126-860-11	ELECT	3300uF 20% 35V
C706	1-126-860-11	ELECT	3300uF 20% 35V
C707	1-126-012-11	ELECT	470uF 20% 16V
C708	1-126-012-11	ELECT	470uF 20% 16V
C709	1-124-443-00	ELECT	100uF 20% 10V
C710	1-164-159-11	CERAMIC	0. 1uF 50V
C711	1-124-887-00	ELECT	3300uF 20% 16V
C712	1-126-022-11	ELECT	47uF 20% 16V
C713	1-124-463-00	ELECT	0. 1uF 20% 50V
C714	1-136-161-00	FILM	0. 047uF 5% 50V
C715	1-124-994-11	ELECT	100uF 20% 10V
C716	1-161-377-00	CERAMIC	0. 0047uF 30% 50V
C717	1-161-377-00	CERAMIC	0. 0047uF 30% 50V
		(EXCEPT AEP, G, IT, CIS)	
C717	1-164-159-11	CERAMIC	0. 1uF 50V
		(AEP, G, IT, CIS)	
C718	1-161-377-00	CERAMIC	0. 0047uF 30% 50V
		(EXCEPT AEP, G, IT, CIS)	
C718	1-164-159-11	CERAMIC	0. 1uF 50V
		(AEP, G, IT, CIS)	
C719	1-161-377-00	CERAMIC	0. 0047uF 30% 50V
C722	1-126-059-11	ELECT	10uF 20% 50V
C723	1-126-059-11	ELECT	10uF 20% 50V
C724	1-124-910-11	ELECT	47uF 20% 50V
C725	1-124-910-11	ELECT	47uF 20% 50V
C726	1-136-165-00	FILM	0. 1uF 5% 50V
		(AEP, G, IT, CIS)	
C727	1-136-165-00	FILM	0. 1uF 5% 50V
		(AEP, G, IT, CIS)	
< CONNECTOR >			
CN1	1-564-321-00	PIN, CONNECTOR 2P	
* CN2	1-564-321-21	PIN, CONNECTOR 2P (E, EA, MY, SP, JE)	
* CN101	1-566-858-41	SOCKET; CONNECTOR 11P (SYSTEM CONTROL 1)	
* CN102	1-564-507-11	PLUG, CONNECTOR 4P	
* CN103	1-564-508-11	PLUG, CONNECTOR 5P	
CN201	1-564-510-11	PLUG, CONNECTOR 7P	
* CN301	1-564-506-11	PLUG, CONNECTOR 3P	
* CN401	1-566-858-31	SOCKET, CONNECTOR 11P (SYSTEM CONTROL 3)	
* CN402	1-564-506-11	PLUG, CONNECTOR 3P	
* CN501	1-565-561-11	PIN, CONNECTOR 3P (AU BUS)	
* CN502	1-568-836-11	SOCKET, CONNECTOR 17P	
CNJ101	1-766-328-11	CONNECTOR, BOARD TO BOARD 11P	
CNJ102	1-766-328-11	CONNECTOR, BOARD TO BOARD 11P	

Ref. No.	Part No.	Description	Remark
CNP801	1-569-491-11	SOCKET, CONNECTOR 5P	
< DIODE >			
D701	8-719-200-82	DIODE	11ES2
D702	8-719-200-82	DIODE	11ES2
D703	8-719-200-82	DIODE	11ES2
D704	8-719-200-82	DIODE	11ES2
D705	8-719-200-82	DIODE	11ES2
D706	8-719-200-82	DIODE	11ES2
D707	8-719-200-82	DIODE	11ES2
D708	8-719-200-82	DIODE	11ES2
D709	8-719-200-82	DIODE	11ES2
D710	8-719-200-82	DIODE	11ES2
D711	8-719-200-82	DIODE	11ES2
D712	8-719-200-82	DIODE	11ES2
D713	8-719-002-21	DIODE	UZL-20H
D714	8-719-014-82	DIODE	UZP-6. 8B
D715	8-719-200-82	DIODE	11ES2
D717	8-719-987-63	DIODE	1N4148M
D718	8-719-987-63	DIODE	1N4148M
D720	8-719-987-63	DIODE	1N4148M
D721	8-719-002-21	DIODE	UZL-20H
D722	8-719-000-84	DIODE	UZL-7M1
< COIL >			
FB201	1-412-473-21	INDUCTOR	OUH
FB202	1-412-473-21	INDUCTOR	OUH
FB205	1-412-473-51	INDUCTOR	OUH (AEP, CIS)
FB206	1-412-473-51	INDUCTOR	OUH
FB207	1-412-473-51	INDUCTOR	OUH
< IC >			
IC102	8-759-634-51	IC	M5218AP
IC201	8-759-191-20	IC	AK5369VP
IC202	8-759-075-34	IC	LC83015
IC203	8-759-158-10	IC	CAT154256B-70RS
IC204	8-752-359-50	IC	CXD2564AM
IC205	8-759-188-07	IC	TC9270F-ELP
IC206	8-759-823-24	IC	LA2730
IC207	8-759-801-01	IC	LC4966
IC208	8-759-801-01	IC	LC4966
IC210	8-759-926-02	IC	SN74HC112ANS
IC301	8-759-711-35	IC	NJM4580D
IC302-305			
	8-759-634-51	IC	M5218AP
IC306	8-759-805-14	IC	LC7822
IC401	8-759-634-51	IC	M5218AP
IC402	8-759-634-51	IC	M5218AP
IC403	8-759-820-11	IC	LC7535

Ref. No.	Part No.	Description	Remark
IC404	8-759-634-51	IC M5218AP	
IC501	8-759-262-32	IC uPD78014CW-057	
IC701	8-759-231-59	IC TA7815S	
IC702	8-759-245-87	IC TA79015S	
IC703	8-759-231-53	IC TA7805S	
IC704	8-759-245-79	IC TA79005S	
IC705	8-759-820-13	IC L78MR06	
< JACK >			
J201	1-565-352-51	JACK, PIN 2P (MIC)	
< COIL >			
L201	1-410-517-11	INDUCTOR 47uH	
L202	1-410-517-11	INDUCTOR 47uH	
L203	1-410-517-11	INDUCTOR 47uH (EXCEPT AEP, CIS)	
L204	1-410-517-11	INDUCTOR 47uH	
< LINE FILTER >			
△LF1	1-424-117-11	FILTER, LINE	
< IC LINK >			
△PS701	1-532-835-41	LINK, IC	
△PS702	1-532-840-41	LINK, IC	
△PS703	1-532-840-41	LINK, IC	
△PS704	1-532-843-11	LINK, IC	
< TRANSISTOR >			
Q101	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q151	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q202	8-729-900-63	TRANSISTOR DTA124ES	
Q203	8-729-900-63	TRANSISTOR DTA124ES	
Q204	8-729-900-63	TRANSISTOR DTA124ES	
Q205	8-729-900-63	TRANSISTOR DTA124ES	
Q212	8-729-900-63	TRANSISTOR DTA124ES	
Q213	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q214	8-729-900-63	TRANSISTOR DTA124ES	
Q215	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q216	8-729-900-63	TRANSISTOR DTA124ES	
Q217	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q219	8-729-900-63	TRANSISTOR DTA124ES	
Q301	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q302	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q303	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q310	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q311	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q351	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q352	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q353	8-729-141-26	TRANSISTOR 2SC3622A-LK	

Ref. No.	Part No.	Description	Remark
Q360	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q361	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q401	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q402	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q403	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q451	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q452	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q453	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-209-15	TRANSISTOR 2SD2012	
Q704	8-729-900-80	TRANSISTOR DTC114ES	
Q705	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q706	8-729-900-63	TRANSISTOR DTA124ES	
< RESISTOR >			
R120	1-249-417-11	CARBON 1K 5% 1/4W	
R121	1-247-903-00	CARBON 1M 5% 1/4W	
R122	1-249-417-11	CARBON 1K 5% 1/4W	
R123	1-247-903-00	CARBON 1M 5% 1/4W	
R125	1-249-417-11	CARBON 1K 5% 1/4W	
R126	1-249-437-11	CARBON 47K 5% 1/4W	
R127	1-249-438-11	CARBON 56K 5% 1/4W	
R128	1-249-437-11	CARBON 47K 5% 1/4W	
R129	1-249-401-11	CARBON 47 5% 1/4W	
R130	1-247-807-31	CARBON 100 5% 1/4W	
R137	1-249-435-11	CARBON 33K 5% 1/4W	
R138	1-249-435-11	CARBON 33K 5% 1/4W	
R141	1-249-413-11	CARBON 470 5% 1/4W	
R142	1-247-903-00	CARBON 1M 5% 1/4W	
R143	1-249-419-11	CARBON 1.5K 5% 1/4W	
R144	1-249-425-11	CARBON 4.7K 5% 1/4W	
R145	1-249-417-11	CARBON 1K 5% 1/4W	
R170	1-249-417-11	CARBON 1K 5% 1/4W	
R171	1-247-903-00	CARBON 1M 5% 1/4W	
R172	1-249-417-11	CARBON 1K 5% 1/4W	
R173	1-247-903-00	CARBON 1M 5% 1/4W	
R175	1-249-417-11	CARBON 1K 5% 1/4W	
R176	1-249-437-11	CARBON 47K 5% 1/4W	
R177	1-249-438-11	CARBON 56K 5% 1/4W	
R178	1-249-437-11	CARBON 47K 5% 1/4W	
R179	1-249-401-11	CARBON 47 5% 1/4W	
R180	1-247-807-31	CARBON 100 5% 1/4W	
R187	1-249-435-11	CARBON 33K 5% 1/4W	
R188	1-249-435-11	CARBON 33K 5% 1/4W	
R191	1-249-413-11	CARBON 470 5% 1/4W	
R192	1-247-903-00	CARBON 1M 5% 1/4W	
R193	1-249-419-11	CARBON 1.5K 5% 1/4W	
R194	1-249-425-11	CARBON 4.7K 5% 1/4W	
R195	1-249-417-11	CARBON 1K 5% 1/4W	

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

MAIN

Ref. No.	Part No.	Description	Remark			
R201	1-249-429-11	CARBON	10K	5%	1/4W	
R203	1-249-413-11	CARBON	470	5%	1/4W	
R204	1-249-393-11	CARBON	10	5%	1/4W	
R206	1-249-393-11	CARBON	10	5%	1/4W	
R207	1-249-397-11	CARBON	22	5%	1/4W	
R208	1-249-397-11	CARBON	22	5%	1/4W	
R209	1-249-413-11	CARBON	470	5%	1/4W	
R210	1-247-807-31	CARBON	100	5%	1/4W	
R211	1-249-433-11	CARBON	22K	5%	1/4W	
R212	1-249-428-11	CARBON	8. 2K	5%	1/4W	
R213	1-247-889-00	CARBON	270K	5%	1/4W	
R214	1-247-850-11	CARBON	6. 2K	5%	1/4W	
R215	1-249-437-11	CARBON	47K	5%	1/4W	
R216	1-249-423-11	CARBON	3. 3K	5%	1/4W	
R217	1-247-889-00	CARBON	270K	5%	1/4W	
R218	1-249-408-11	CARBON	180	5%	1/4W	
R219	1-249-430-11	CARBON	12K	5%	1/4W	
R220	1-249-417-11	CARBON	1K	5%	1/4W	
R221	1-249-429-11	CARBON	10K	5%	1/4W	
R222	1-249-431-11	CARBON	15K	5%	1/4W	
R223	1-249-434-11	CARBON	27K	5%	1/4W	
R224	1-249-433-11	CARBON	22K	5%	1/4W	
R225	1-249-427-11	CARBON	6. 8K	5%	1/4W	
R226	1-249-437-11	CARBON	47K	5%	1/4W	
R227	1-249-437-11	CARBON	47K	5%	1/4W	
R228	1-249-413-11	CARBON	470	5%	1/4W	
R229	1-249-441-11	CARBON	100K	5%	1/4W	
R230	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R231-233	1-249-441-11	CARBON	100K	5%	1/4W	
R240	1-249-441-11	CARBON	100K	5%	1/4W	
R241	1-249-437-11	CARBON	47K	5%	1/4W	
R242	1-249-437-11	CARBON	47K	5%	1/4W	
R243	1-249-413-11	CARBON	470	5%	1/4W	
R244-247	1-249-417-11	CARBON	1K	5%	1/4W	
R248	1-249-437-11	CARBON	47K	5%	1/4W	
R249	1-249-411-11	CARBON	330	5%	1/4W	
R250	1-249-429-11	CARBON	10K	5%	1/4W	
R251	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R252	1-249-441-11	CARBON	100K	5%	1/4W	
R253	1-249-433-11	CARBON	22K	5%	1/4W	
R254	1-249-433-11	CARBON	22K	5%	1/4W	
R255	1-247-807-31	CARBON	100	5%	1/4W	
R256	1-249-397-11	CARBON	22	5%	1/4W	
R257	1-247-811-31	CARBON	150	5%	1/4W	
R258	1-249-413-11	CARBON	470	5%	1/4W	
R260	1-249-441-11	CARBON	100K	5%	1/4W	
R301	1-249-435-11	CARBON	33K	5%	1/4W	

Ref. No.	Part No.	Description	Remark			
R302	1-249-435-11	CARBON	33K	5%	1/4W	
R303	1-249-432-11	CARBON	18K	5%	1/4W	
R304	1-249-439-11	CARBON	68K	5%	1/4W	
R305	1-249-432-11	CARBON	18K	5%	1/4W	
R306	1-249-439-11	CARBON	68K	5%	1/4W	
R307-309	1-249-419-11	CARBON	1. 5K	5%	1/4W	
R310	1-249-441-11	CARBON	100K	5%	1/4W	
R311	1-249-441-11	CARBON	100K	5%	1/4W	
R312	1-249-426-11	CARBON	5. 6K	5%	1/4W	
R313	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R314	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R315	1-249-419-11	CARBON	1. 5K	5%	1/4W	
R316	1-247-842-11	CARBON	3K	5%	1/4W	
R317	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R318	1-249-414-11	CARBON	560	5%	1/4W	
R319	1-247-838-00	CARBON	2K	5%	1/4W	
R320	1-249-425-11	CARBON	4. 7K	5%	1/4W	
R321	1-249-434-11	CARBON	27K	5%	1/4W	
R322	1-249-433-11	CARBON	22K	5%	1/4W	
R324	1-249-426-11	CARBON	5. 6K	5%	1/4W	
R325	1-249-433-11	CARBON	22K	5%	1/4W	
R326	1-249-429-11	CARBON	10K	5%	1/4W	
R327	1-249-417-11	CARBON	1K	5%	1/4W	
R328	1-249-441-11	CARBON	100K	5%	1/4W	
R329	1-249-431-11	CARBON	15K	5%	1/4W	
R330	1-249-435-11	CARBON	33K	5%	1/4W	
R332	1-249-431-11	CARBON	15K	5%	1/4W	
R334	1-249-426-11	CARBON	5. 6K	5%	1/4W	
R336	1-249-419-11	CARBON	1. 5K	5%	1/4W	
R337	1-249-436-11	CARBON	39K	5%	1/4W	
R338	1-247-884-11	CARBON	160K	5%	1/4W	
R340	1-249-441-11	CARBON	100K	5%	1/4W	
R342	1-249-436-11	CARBON	39K	5%	1/4W	
R344	1-249-427-11	CARBON	6. 8K	5%	1/4W	
R345	1-249-412-11	CARBON	390	5%	1/4W	
R346	1-249-419-11	CARBON	1. 5K	5%	1/4W	
R347	1-249-431-11	CARBON	15K	5%	1/4W	
R351	1-249-435-11	CARBON	33K	5%	1/4W	
R352	1-249-435-11	CARBON	33K	5%	1/4W	
R353	1-249-432-11	CARBON	18K	5%	1/4W	
R354	1-249-439-11	CARBON	68K	5%	1/4W	
R355	1-249-432-11	CARBON	18K	5%	1/4W	
R356	1-249-439-11	CARBON	68K	5%	1/4W	
R357-359	1-249-419-11	CARBON	1. 5K	5%	1/4W	
R360	1-249-441-11	CARBON	100K	5%	1/4W	
R361	1-249-441-11	CARBON	100K	5%	1/4W	
R362	1-249-426-11	CARBON	5. 6K	5%	1/4W	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R363	1-249-425-11	CARBON	4.7K 5% 1/4W	R451	1-249-432-11	CARBON	18K 5% 1/4W
R364	1-249-425-11	CARBON	4.7K 5% 1/4W	R452	1-249-432-11	CARBON	18K 5% 1/4W
R365	1-249-419-11	CARBON	1.5K 5% 1/4W	R453	1-249-431-11	CARBON	15K 5% 1/4W
R366	1-247-842-11	CARBON	3K 5% 1/4W	R454	1-249-431-11	CARBON	15K 5% 1/4W
R367	1-249-425-11	CARBON	4.7K 5% 1/4W	R455	1-249-441-11	CARBON	100K 5% 1/4W
R368	1-249-414-11	CARBON	560 5% 1/4W	R456	1-249-419-11	CARBON	1.5K 5% 1/4W
R369	1-247-838-00	CARBON	2K 5% 1/4W	R457	1-249-430-11	CARBON	12K 5% 1/4W
R370	1-249-425-11	CARBON	4.7K 5% 1/4W	R458	1-249-441-11	CARBON	100K 5% 1/4W
R371	1-249-434-11	CARBON	27K 5% 1/4W	R459	1-249-419-11	CARBON	1.5K 5% 1/4W
R372	1-249-433-11	CARBON	22K 5% 1/4W	R460	1-249-431-11	CARBON	15K 5% 1/4W
R374	1-249-426-11	CARBON	5.6K 5% 1/4W	R461	1-249-413-11	CARBON	470 5% 1/4W
R375	1-249-433-11	CARBON	22K 5% 1/4W	R462	1-249-441-11	CARBON	100K 5% 1/4W
R376	1-249-429-11	CARBON	10K 5% 1/4W	R463	1-249-425-11	CARBON	4.7K 5% 1/4W
R377	1-249-417-11	CARBON	1K 5% 1/4W	R464	1-249-413-11	CARBON	470 5% 1/4W
R378	1-249-441-11	CARBON	100K 5% 1/4W	R465	1-249-441-11	CARBON	100K 5% 1/4W
R379	1-249-431-11	CARBON	15K 5% 1/4W	R466	1-249-425-11	CARBON	4.7K 5% 1/4W
R380	1-249-435-11	CARBON	33K 5% 1/4W	R491	1-249-435-11	CARBON	33K 5% 1/4W
R382	1-249-431-11	CARBON	15K 5% 1/4W	R492	1-249-435-11	CARBON	33K 5% 1/4W
R384	1-249-426-11	CARBON	5.6K 5% 1/4W	R493	1-249-419-11	CARBON	1.5K 5% 1/4W
R386	1-249-419-11	CARBON	1.5K 5% 1/4W	R494	1-249-419-11	CARBON	1.5K 5% 1/4W
R387	1-249-436-11	CARBON	39K 5% 1/4W	R495	1-249-417-11	CARBON	1K 5% 1/4W
R388	1-247-884-11	CARBON	160K 5% 1/4W	R501-508			
R390	1-249-441-11	CARBON	100K 5% 1/4W		1-249-417-11	CARBON	1K 5% 1/4W
R392	1-249-436-11	CARBON	39K 5% 1/4W	R509	1-249-409-11	CARBON	220 5% 1/4W
R394	1-249-427-11	CARBON	6.8K 5% 1/4W	R510	1-249-409-11	CARBON	220 5% 1/4W
R395	1-249-412-11	CARBON	390 5% 1/4W	R511	1-249-417-11	CARBON	1K 5% 1/4W
R396	1-249-419-11	CARBON	1.5K 5% 1/4W	R512	1-249-417-11	CARBON	1K 5% 1/4W
R397	1-249-431-11	CARBON	15K 5% 1/4W	R513	1-249-413-11	CARBON	470 5% 1/4W
R401	1-249-432-11	CARBON	18K 5% 1/4W	R514-519			
R402	1-249-432-11	CARBON	18K 5% 1/4W		1-249-417-11	CARBON	1K 5% 1/4W
R403	1-249-431-11	CARBON	15K 5% 1/4W	R520	1-249-429-11	CARBON	10K 5% 1/4W
R404	1-249-431-11	CARBON	15K 5% 1/4W	R521	1-249-409-11	CARBON	220 5% 1/4W
R405	1-249-441-11	CARBON	100K 5% 1/4W	R701	1-260-108-81	CARBON	5.6K 5% 1/2W
R406	1-249-419-11	CARBON	1.5K 5% 1/4W	R706	1-249-425-11	CARBON	4.7K 5% 1/4W
R407	1-249-430-11	CARBON	12K 5% 1/4W	R707	1-249-441-11	CARBON	100K 5% 1/4W
R408	1-249-441-11	CARBON	100K 5% 1/4W	R708	1-249-429-11	CARBON	10K 5% 1/4W
R409	1-249-419-11	CARBON	1.5K 5% 1/4W	R709	1-249-433-11	CARBON	22K 5% 1/4W
R410	1-249-431-11	CARBON	15K 5% 1/4W	R710	1-249-433-11	CARBON	22K 5% 1/4W
R411	1-247-828-11	CARBON	750 5% 1/4W	R711	1-249-441-11	CARBON	100K 5% 1/4W
R412	1-249-410-11	CARBON	270 5% 1/4W				
R413	1-249-425-11	CARBON	4.7K 5% 1/4W				
R414	1-249-413-11	CARBON	470 5% 1/4W				
R415	1-249-441-11	CARBON	100K 5% 1/4W				
R416	1-249-425-11	CARBON	4.7K 5% 1/4W				
R441	1-249-435-11	CARBON	33K 5% 1/4W				
R442	1-249-435-11	CARBON	33K 5% 1/4W				
R443	1-249-419-11	CARBON	1.5K 5% 1/4W				
R444	1-249-419-11	CARBON	1.5K 5% 1/4W				
R445	1-249-422-11	CARBON	2.7K 5% 1/4W				

< SWITCH >

△S701 1-572-716-11 SWITCH, PUSH (AC POWER) (POWER)

< VIBRATOR >

X201 1-567-970-11 VIBRATOR, CRYSTAL (24MHz)

X501 1-579-175-11 VIBRATOR, CERAMIC (10MHz)

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

MICROPHONE AMPLIFIER

PANEL

Ref. No.	Part No.	Description	Remark			
*	1-652-039-11	MICROPHONE AMPLIFIER BOARD	*****			
< CAPACITOR >						
C901	1-126-161-11	ELECT	2. 2uF	20%	50V	
C902	1-164-088-11	CERAMIC	0. 001uF		50V	
C903	1-162-219-31	CERAMIC	68PF	5%	50V	
C904	1-162-284-31	CERAMIC	150PF	10%	50V	
C905	1-124-463-00	ELECT	0. 1uF	20%	50V	
C906	1-126-161-11	ELECT	2. 2uF	20%	50V	
C907	1-162-219-31	CERAMIC	68PF	5%	50V	
C908	1-161-375-00	CERAMIC	0. 0022uF	20%	50V	
C909	1-136-165-00	FILM	0. 1uF	5%	50V	
C910	1-126-022-11	ELECT	47uF	20%	16V	
C911	1-126-022-11	ELECT	47uF	20%	16V	
< CONNECTOR >						
* CN901	1-564-519-11	PLUG, CONNECTOR 4P				
< IC >						
IC901	8-759-184-02	IC NJM2068L-D (CENTER OUT)				
< JACK >						
J901	1-507-854-00	JACK, PHONE (MIC)				
< RESISTOR >						
R901	1-249-441-11	CARBON	100K	5%	1/4W	
R902	1-249-423-11	CARBON	3. 3K	5%	1/4W	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-414-11	CARBON	560	5%	1/4W	
R905	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-249-417-11	CARBON	1K	5%	1/4W	
R907	1-249-441-11	CARBON	100K	5%	1/4W	
R908	1-249-413-11	CARBON	470	5%	1/4W	
R909	1-249-429-11	CARBON	10K	5%	1/4W	
R910	1-249-416-11	CARBON	820	5%	1/4W	
< VARIABLE RESISTOR >						
RV901	1-223-334-11	RES, VAR, CARBON 50K (MIC LEVEL)	*****			

Ref. No.	Part No.	Description	Remark		
*	A-6369-728-A	PANEL BOARD, COMPLETE (AEP, G, IT, CIS)			
*	A-4369-763-A	PANEL BOARD, COMPLETE (E, AUS, EA, MY, SP, MX, JE)			

*	4-934-853-01	CUSHION			
	4-965-239-01	HOLDER, FL TUBE			
	4-965-240-01	HOLDER (FU), LED			
< CAPACITOR >					
C601	1-104-905-11	DOUBLE LAYERS	0. 22F		5. 5V
C602	1-161-494-00	CERAMIC	0. 022uF		25V
C603	1-161-494-00	CERAMIC	0. 022uF		25V
C604	1-126-177-11	ELECT	100uF	20%	10V
C605	1-164-159-11	CERAMIC	0. 1uF		50V
C606	1-164-159-11	CERAMIC	0. 1uF		50V
C607	1-162-287-31	CERAMIC	270PF		50V
< CONNECTOR >					
* CN601	1-568-836-11	SOCKET, CONNECTOR 17P			
* CN602	1-568-826-11	SOCKET, CONNECTOR 7P			
< DIODE >					
D601	8-719-987-63	DIODE 1N4148M			
D602	8-719-000-84	DIODE UZL-7M1			
D603	8-719-987-63	DIODE 1N4148M			
D604	8-719-987-63	DIODE 1N4148M			
D605	8-719-987-63	DIODE 1N4148M			
D606	8-719-987-63	DIODE 1N4148M			
D607	8-719-987-63	DIODE 1N4148M			
D608	8-719-987-63	DIODE 1N4148M			
D609	8-719-987-63	DIODE 1N4148M			
D610	8-719-987-63	DIODE 1N4148M			
D612	8-719-303-02	LED SEL2510C-D (V-VIDEO 1/MD)			
D613	8-719-303-02	LED SEL2510C-D (V-VIDEO 2/DAT)			
D614	8-719-303-02	LED SEL2510C-D (V-VIDEO 3)			
D615	8-719-301-38	LED SEL2210S-C (A-VIDEO 1/MD)			
D616	8-719-301-38	LED SEL2210S-C (A-VIDEO 2/DAT)			
D617	8-719-301-38	LED SEL2210S-C (A-VIDEO 3)			
D618	8-719-301-38	LED SEL2210S-C (CD)			
D619	8-719-301-38	LED SEL2210S-C (TUNER)			
D620	8-719-301-38	LED SEL2210S-C (TAPE)			
D621	8-719-301-38	LED SEL2210S-C (PHONO)			
D622	8-719-301-37	LED SEL2210S-CD (ENTER)			
D623	8-719-313-69	LED SEL3210S-CD (P. FUNCTION)			
D624	8-719-313-69	LED SEL3210S-CD (SOUND DIRECT)			
< FLUORESCENT INDICATOR >					
FL601	1-517-302-11	INDICATOR TUBE, FLUORESCENT			

Ref. No.	Part No.	Description	Remark
< IC >			
IC601	8-759-262-33	IC uPD78014CW-065	
IC602	8-759-075-35	IC TD62C950RF	
IC603	8-759-075-35	IC TD62C950RF	
< TRANSISTOR >			
Q601	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q602	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q603	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q604	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q605	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q606	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q607	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q608	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q609	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q610	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q611	8-729-900-36	TRANSISTOR DTC124ES	
< RESISTOR >			
R601	1-247-864-11	CARBON 24K 5% 1/4W	
R603	1-249-429-11	CARBON 10K 5% 1/4W	
R604	1-249-429-11	CARBON 10K 5% 1/4W	
R605	1-249-417-11	CARBON 1K 5% 1/4W	
R606	1-249-425-11	CARBON 4.7K 5% 1/4W	
R607	1-249-429-11	CARBON 10K 5% 1/4W	
R608	1-249-393-11	CARBON 10 5% 1/4W	
R609	1-249-421-11	CARBON 2.2K 5% 1/4W	
R610	1-249-421-11	CARBON 2.2K 5% 1/4W	
R612-614	1-249-417-11	CARBON 1K 5% 1/4W	
R615	1-249-427-11	CARBON 6.8K 5% 1/4W	
R617	1-249-429-11	CARBON 10K 5% 1/4W	
R619	1-249-429-11	CARBON 10K 5% 1/4W	
R621	1-249-427-11	CARBON 6.8K 5% 1/4W	
R623	1-249-429-11	CARBON 10K 5% 1/4W	
R627-633	1-249-433-11	CARBON 22K 5% 1/4W	
R634	1-249-404-00	CARBON 82 5% 1/4W	
R635	1-249-408-11	CARBON 180 5% 1/4W	
R636-640	1-247-807-31	CARBON 100 5% 1/4W	
R642	1-249-433-11	CARBON 22K 5% 1/4W	
R643	1-249-429-11	CARBON 10K 5% 1/4W	
R644	1-249-417-11	CARBON 1K 5% 1/4W	
R645	1-249-433-11	CARBON 22K 5% 1/4W	
R646-648	1-249-422-11	CARBON 2.7K 5% 1/4W	
R649-651	1-249-429-11	CARBON 10K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R652	1-249-409-11	CARBON 220 5% 1/4W (AEP, G, IT, CIS)	
R654	1-249-409-11	CARBON 220 5% 1/4W (AEP, G, IT, CIS)	
R655	1-249-425-11	CARBON 4.7K 5% 1/4W	
< SWITCH >			
S601	1-554-303-21	SWITCH, TACTILE (DBS LEVEL)	
S602	1-554-303-21	SWITCH, TACTILE (ENTER)	
S603	1-554-303-21	SWITCH, TACTILE (CANCEL)	
S604	1-554-303-21	SWITCH, TACTILE (DBS FREQUENCY)	
S605	1-554-303-21	SWITCH, TACTILE (MODE)	
S606	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
S607	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S608	1-554-303-21	SWITCH, TACTILE (▽)	
S609	1-554-303-21	SWITCH, TACTILE (<)	
S610	1-554-303-21	SWITCH, TACTILE (△)	
S611	1-554-303-21	SWITCH, TACTILE (▷)	
S612	1-554-303-21	SWITCH, TACTILE (8)	
S613	1-554-303-21	SWITCH, TACTILE (9)	
S614	1-554-303-21	SWITCH, TACTILE (10)	
S615	1-554-303-21	SWITCH, TACTILE (7)	
S616	1-554-303-21	SWITCH, TACTILE (6)	
S617	1-554-303-21	SWITCH, TACTILE (5)	
S618	1-554-303-21	SWITCH, TACTILE (4)	
S619	1-554-303-21	SWITCH, TACTILE (3)	
S620	1-554-303-21	SWITCH, TACTILE (2)	
S621	1-554-303-21	SWITCH, TACTILE (1)	
S622	1-554-303-21	SWITCH, TACTILE (VIDEO 1/MD)	
S623	1-554-303-21	SWITCH, TACTILE (VIDEO 2/DAT)	
S624	1-554-303-21	SWITCH, TACTILE (VIDEO 3)	
S625	1-554-303-21	SWITCH, TACTILE (TAPE)	
S626	1-554-303-21	SWITCH, TACTILE (CD)	
S627	1-554-303-21	SWITCH, TACTILE (TUNER)	
S628	1-554-303-21	SWITCH, TACTILE (PHONO)	
S629	1-554-303-21	SWITCH, TACTILE (P. FUNCTION)	
S630	1-554-303-21	SWITCH, TACTILE (KARAOKE PON) (EXCEPT AEP, G, IT, CIS)	
S631	1-554-303-21	SWITCH, TACTILE (SOUND DIRECT)	
S632	1-554-303-21	SWITCH, TACTILE (DSP MENU)	

< VIBRATOR >

X601 1-579-175-11 VIBRATOR, CERAMIC (10MHz)

VIDEO FUNCTION

VIDEO 3

VOL

Ref. No.	Part No.	Description	Remark			
*	1-652-042-11	VIDEO FUNCTION BOARD	*****			
		< CAPACITOR >				
C801	1-126-301-11	ELECT	1uF	20%	50V	
C802	1-126-301-11	ELECT	1uF	20%	50V	
C804-806	1-124-471-00	ELECT	1000uF	20%	6.3V	
C807	1-161-494-00	CERAMIC	0.022uF		25V	
C808	1-126-049-11	ELECT	22uF	20%	25V	
		< CONNECTOR >				
* CNJ801	1-569-500-11	PIN, CONNECTOR 5P				
		< IC >				
IC801	8-759-061-95	IC	SN761200N			
		< JACK >				
J801	1-568-751-51	JACK, PIN (2P SHIELD TYPE)	(VIDEO 1/MD)			
J802	1-568-752-51	JACK, PIN (3P SHIELD TYPE)	(VIDEO 2/DAT, MONITOR)			
		< COIL >				
L801	1-410-521-11	INDUCTOR	100uH			
		< TRANSISTOR >				
Q801	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q802	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q803	8-729-119-76	TRANSISTOR	2SA1175-HFE			
		< RESISTOR >				
R801	1-247-804-11	CARBON	75	5%	1/4W	
R802	1-247-804-11	CARBON	75	5%	1/4W	
R804	1-249-403-11	CARBON	68	5%	1/4W	
R805	1-249-429-11	CARBON	10K	5%	1/4W	
R806	1-249-403-11	CARBON	68	5%	1/4W	
R807	1-249-429-11	CARBON	10K	5%	1/4W	
R808	1-249-403-11	CARBON	68	5%	1/4W	
R809	1-249-429-11	CARBON	10K	5%	1/4W	
R810-815	1-249-408-11	CARBON	180	5%	1/4W	
R817	1-249-417-11	CARBON	1K	5%	1/4W	
R819	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description	Remark			
*	1-652-043-11	VIDEO 3 BOARD *****				
		< CAPACITOR >				
C135	1-162-286-31	CERAMIC (AEP, G, IT, CIS)	220PF	10%	50V	
C185	1-162-286-31	CERAMIC (AEP, G, IT, CIS)	220PF	10%	50V	
C931	1-126-301-11	ELECT	1uF	20%	50V	
		< JACK >				
J105	1-580-174-41	JACK, PIN (3P FRONT) (VIDEO 3 INPUT)				
		< RESISTOR >				
R135	1-249-417-11	CARBON	1K	5%	1/4W	
R136	1-247-903-00	CARBON	1M	5%	1/4W	
R185	1-249-417-11	CARBON	1K	5%	1/4W	
R186	1-247-903-00	CARBON	1M	5%	1/4W	
R931	1-247-804-11	CARBON	75	5%	1/4W	

*	A-4369-739-A	VOL BOARD, COMPLETE (AEP, CIS)				
*	A-4369-756-A	VOL BOARD, COMPLETE (G, IT)				
*	A-4369-759-A	VOL BOARD, COMPLETE (E, AUS, EA, MY, SP, MX, JE)				

		< CAPACITOR >				
C251	1-161-494-00	CERAMIC	0.022uF		25V	
C252	1-126-022-11	ELECT	47uF	20%	10V	
C421	1-126-161-11	ELECT	2.2uF	20%	50V	
C422	1-126-049-11	ELECT	22uF	20%	25V	
C423	1-126-025-11	ELECT	330uF	20%	16V	
C425	1-164-159-11	CERAMIC (AEP, CIS)	0.1uF		50V	
C431	1-126-161-11	ELECT	2.2uF	20%	50V	
C432	1-126-049-11	ELECT	22uF	20%	25V	
C433	1-162-286-31	CERAMIC (G, IT)	220PF	10%	50V	
C471	1-126-161-11	ELECT	2.2uF	20%	50V	
C472	1-126-049-11	ELECT	22uF	20%	25V	
C473	1-126-022-11	ELECT	47uF	20%	16V	
C474	1-162-199-31	CERAMIC	10PF	5%	50V	
C475	1-164-159-11	CERAMIC (AEP, CIS)	0.1uF		50V	
C481	1-126-161-11	ELECT	2.2uF	20%	50V	
C482	1-126-049-11	ELECT	22uF	20%	25V	
C483	1-162-286-31	CERAMIC (G, IT)	220PF	10%	50V	

VOL	VOLTAGE SELECTION
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Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN251	1-564-506-11	PLUG, CONNECTOR 3P	
* CN252	1-564-506-11	PLUG, CONNECTOR 3P	
* CN253	1-568-826-11	SOCKET, CONNECTOR 7P	
CN254	1-564-510-11	PLUG, CONNECTOR 7P	
CN255	1-564-506-11	PLUG, CONNECTOR 3P	
< DIODE >			
D251	8-719-010-34	DIODE UZ-4. 7BSC	
< IC >			
IC251	8-759-820-62	IC LB1639	
IC421	8-759-710-59	IC NJM4580D-D	
IC422	8-759-710-59	IC NJM4580D-D	
< TRANSISTOR >			
Q251	8-729-900-36	TRANSISTOR DTC124ES	
< RESISTOR >			
R251	1-249-412-11	CARBON 390 5% 1/4W	
R252	1-249-393-11	CARBON 10 5% 1/4W	
R253	1-249-413-11	CARBON 470 5% 1/4W	
R254	1-249-413-11	CARBON 470 5% 1/4W	
R421	1-249-441-11	CARBON 100K 5% 1/4W	
R422	1-249-434-11	CARBON 27K 5% 1/4W	
R423	1-249-426-11	CARBON 5. 6K 5% 1/4W	
R424	1-249-441-11	CARBON 100K 5% 1/4W	
R425	1-249-403-11	CARBON 68 5% 1/4W	
R426	1-249-421-11	CARBON 2. 2K 5% 1/4W	
R431	1-249-437-11	CARBON 47K 5% 1/4W	
R432	1-249-441-11	CARBON 100K 5% 1/4W	
R433	1-249-417-11	CARBON 1K 5% 1/4W	
R434	1-249-417-11	CARBON 1K 5% 1/4W	
R471	1-249-441-11	CARBON 100K 5% 1/4W	
R472	1-247-862-11	CARBON 20K 5% 1/4W	
R473	1-249-429-11	CARBON 10K 5% 1/4W	
R474	1-249-441-11	CARBON 100K 5% 1/4W	
R475	1-249-403-11	CARBON 68 5% 1/4W	
R476	1-249-421-11	CARBON 2. 2K 5% 1/4W	
R481	1-249-437-11	CARBON 47K 5% 1/4W	
R482	1-249-441-11	CARBON 100K 5% 1/4W	
R483	1-249-417-11	CARBON 1K 5% 1/4W	
R484	1-249-417-11	CARBON 1K 5% 1/4W	
< VARIABLE RESISTOR >			
RV202	1-223-692-11	RES, VAR, CARBON 10K/100KX4 (VOLUME)	

Ref. No.	Part No.	Description	Remark
*	1-653-080-11	VOLTAGE SELECTION BOARD (E, EA, MY, SP, JE)	

< CONNECTOR >			
* CN3	1-564-687-11	PIN, CONNECTOR 3P (E, EA, MY, SP, JE)	
< SWITCH >			
△VS1	1-572-367-11	SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR) (E, EA, MY, SP, JE)	

MISCELLANEOUS			

4	1-690-635-11	WIRE, FLAT TYPE (7 CORE)	
15	1-751-486-11	WIRE (FLAT TYPE) (17 CORE)	
△62	1-575-656-11	CORD, POWER (E, MX, JE)	
△63	1-575-654-11	CORD, POWER (AEP, G, IT, EA, MY, SP, CIS)	
△64	1-751-355-11	CORD, POWER (AUS)	
△T701	1-426-724-11	TRANSFORMER, POWER (E, EA, MY, SP, MX, JE)	
△T701	1-426-725-11	TRANSFORMER, POWER (AEP, G, IT, AUS, CIS)	

HARDWARE LIST			

#1	7-621-849-00	SCREW (BV/RING)	
#2	7-682-547-09	SCREW +BVTT 3X6 (S)	
#3	7-682-548-04	SCREW +BVTT 3X8 (S)	
#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

ACCESSORIES & PACKING MATERIALS			

*	4-965-421-02	CUSHION	

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

TA-A790E