

AV RECEIVER/AV AMPLIFIER RX-V3200/DSP-AX3200

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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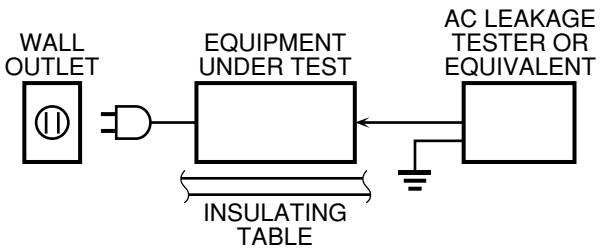


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This Service Manual uses recycled paper.



■ TO SERVICE PERSONNEL

1. Critical Components Information
Components having special characteristics are marked  and must be replaced with parts having specifications equal to those originally installed.
 2. Leakage Current Measurement (For 120V Models Only)
When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.
- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



“CAUTION”

“F311: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 10A, 250V FUSE.”

“F312: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 5A, 125V FUSE.”

CAUTION

F311: REPLACE WITH SAME TYPE 10A, 250V FUSE.

F312: REPLACE WITH SAME TYPE 5A, 125V FUSE.

ATTENTION

F311: UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE 10A, 250V.

F312: UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE 5A, 125V.

WARNING: CHEMICAL CONTENT NOTICE!

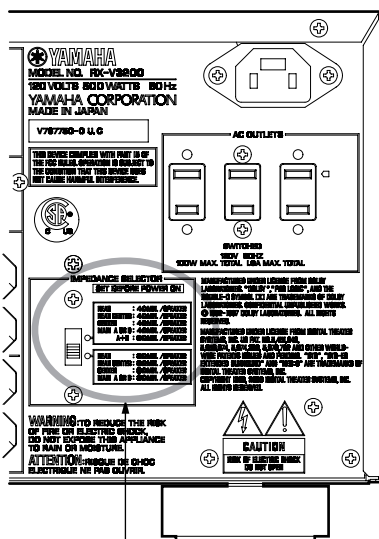
The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ IMPEDANCE SELECTOR

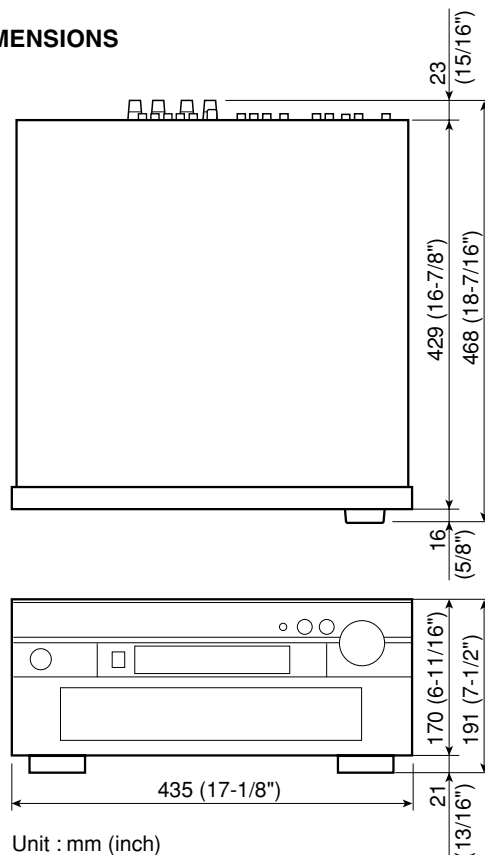


IMPEDANCE SELECTOR

WARNING:

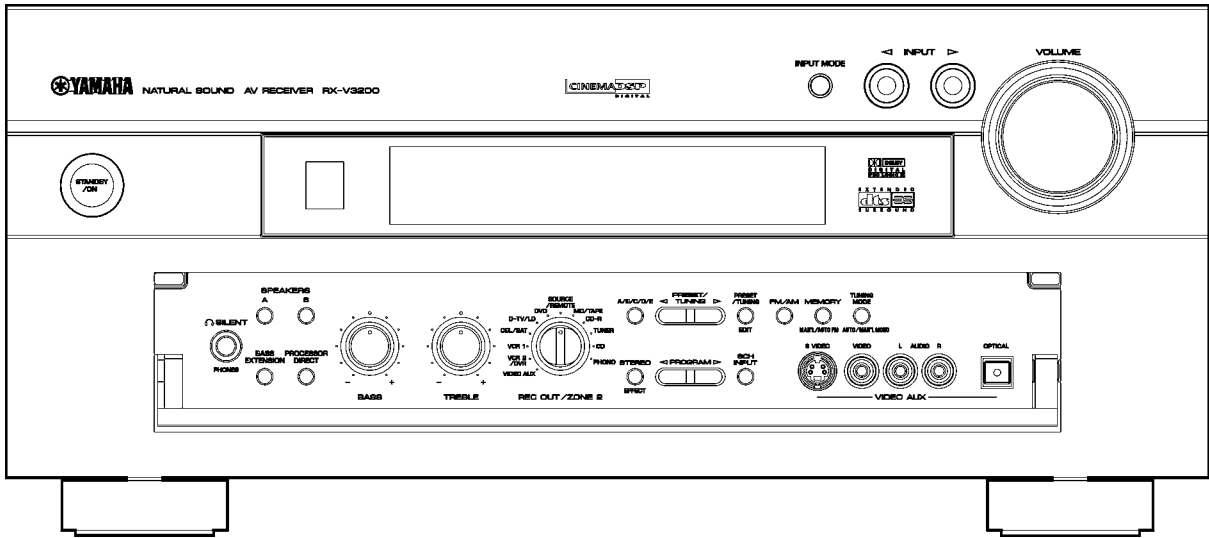
Do not change the IMPEDANCE SELECTOR switch setting while the power to this unit is on, otherwise this unit may be damaged.

• DIMENSIONS

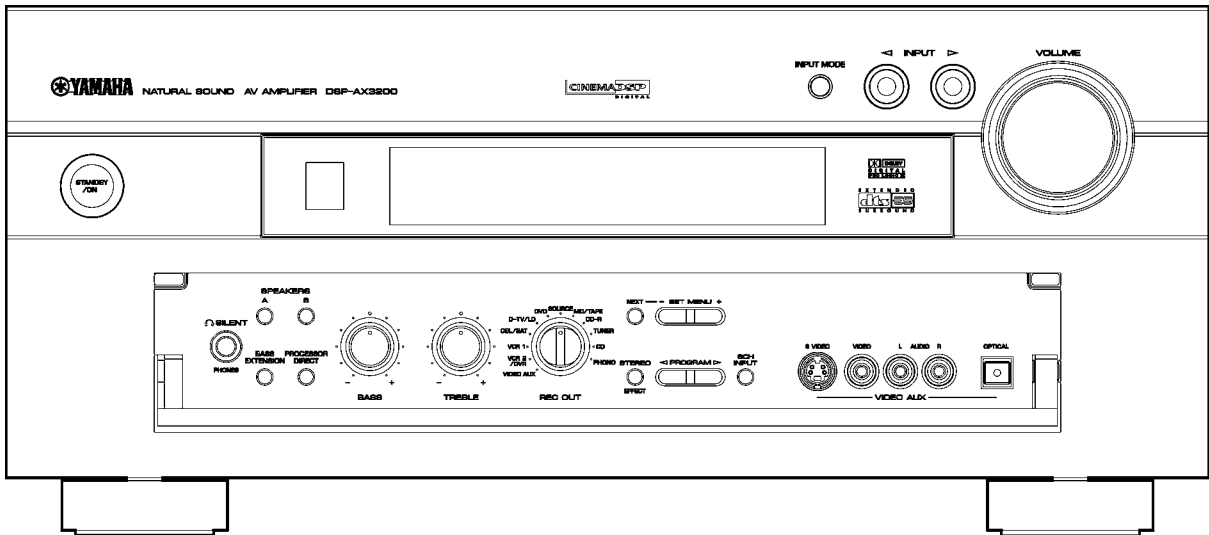


FRONT PANELS

RX-V3200 (U, C, A, R, T models)

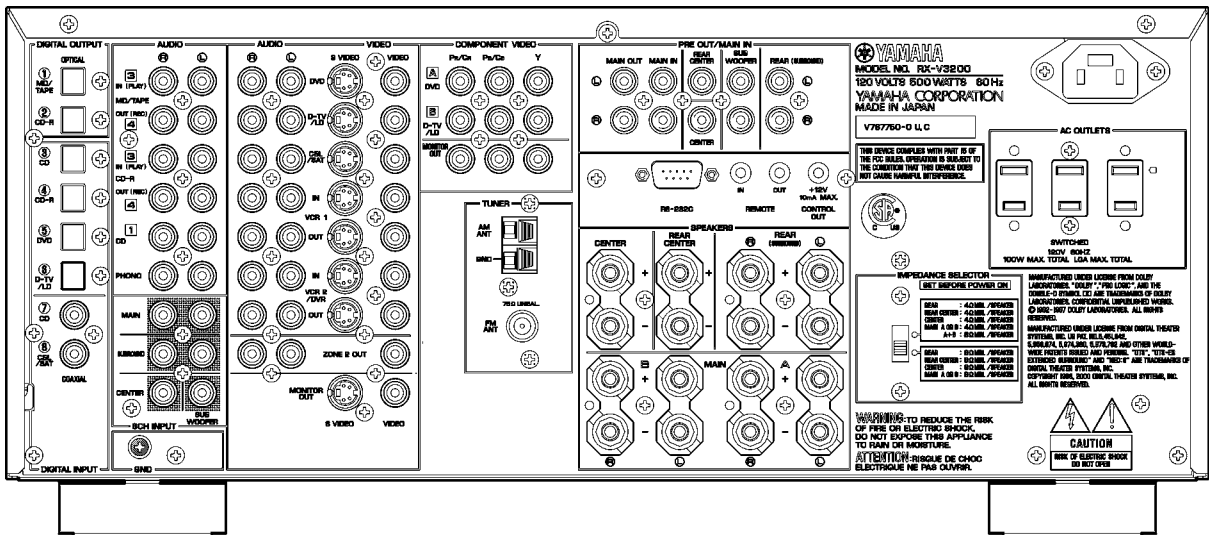


DSP-AX3200 (B, G models)

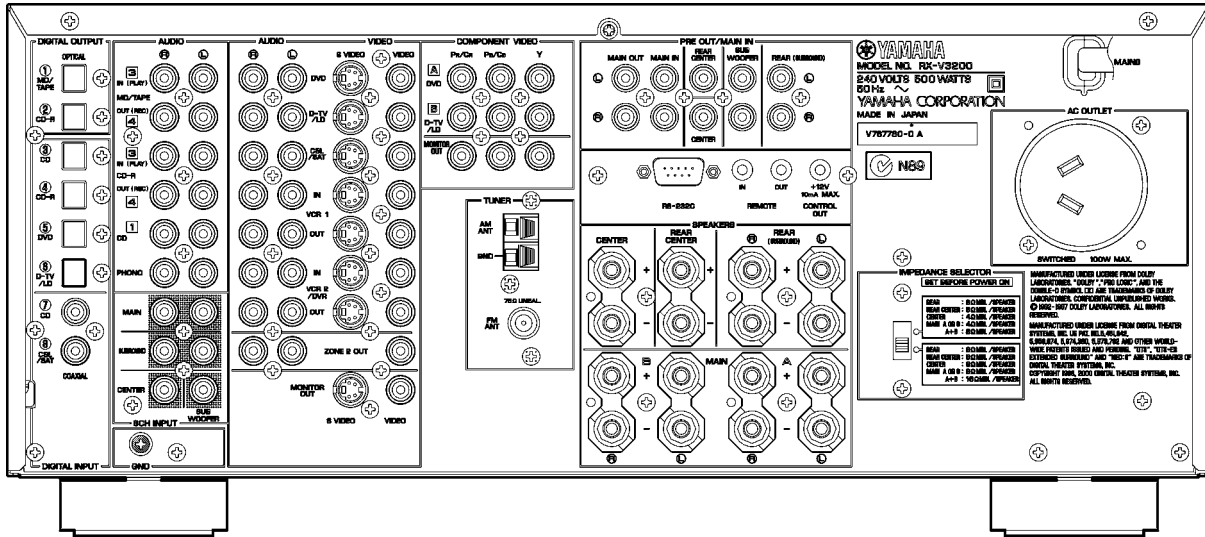


REAR PANELS

RX-V3200 (U, C models)

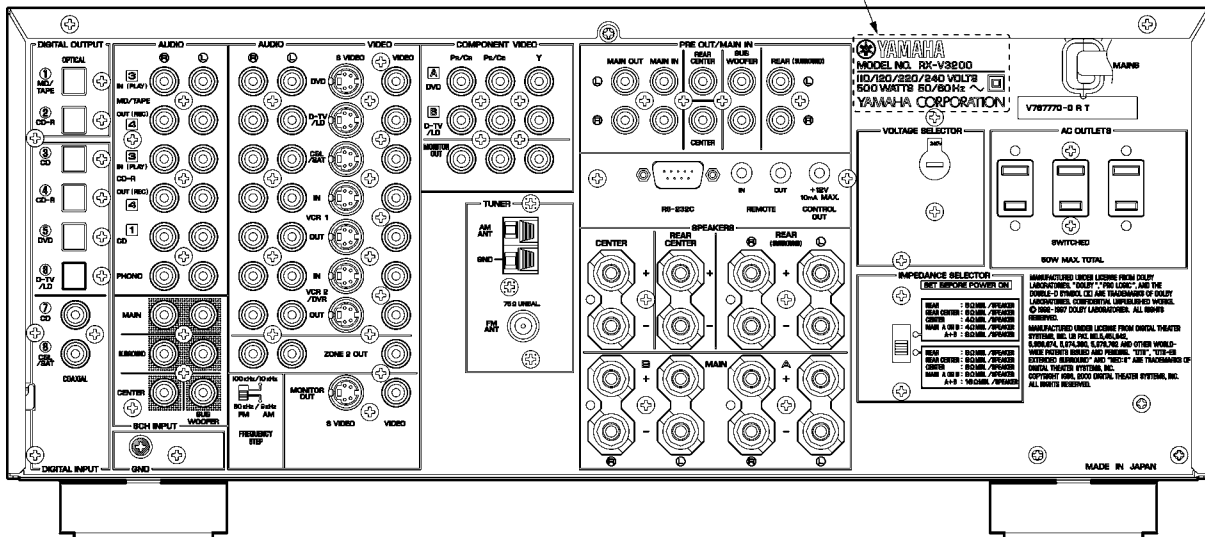


RX-V3200 (A model)

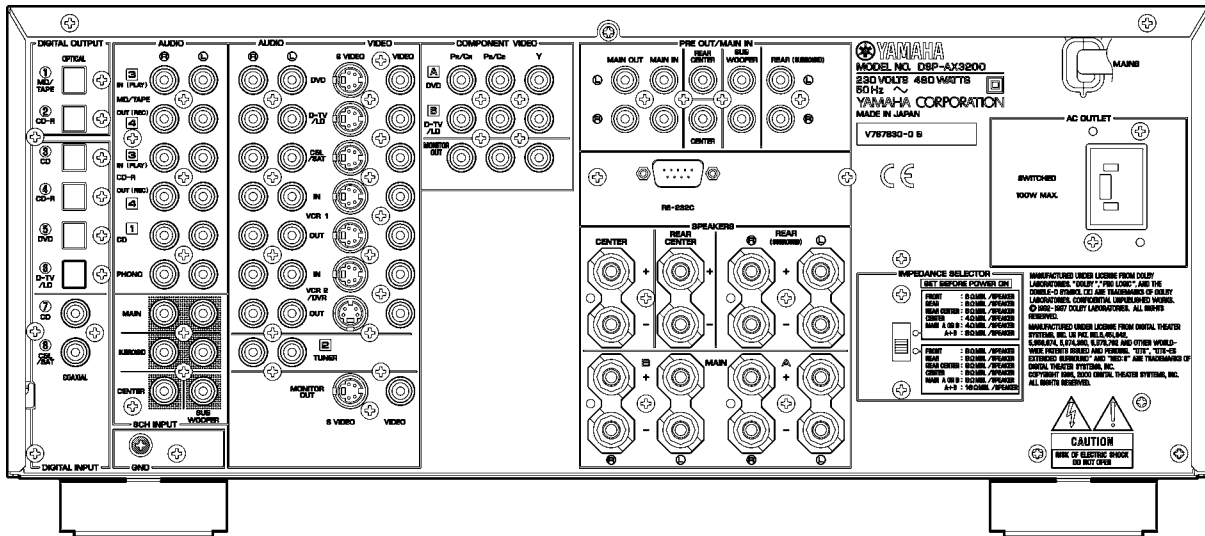


RX-V3200 (R, T models)

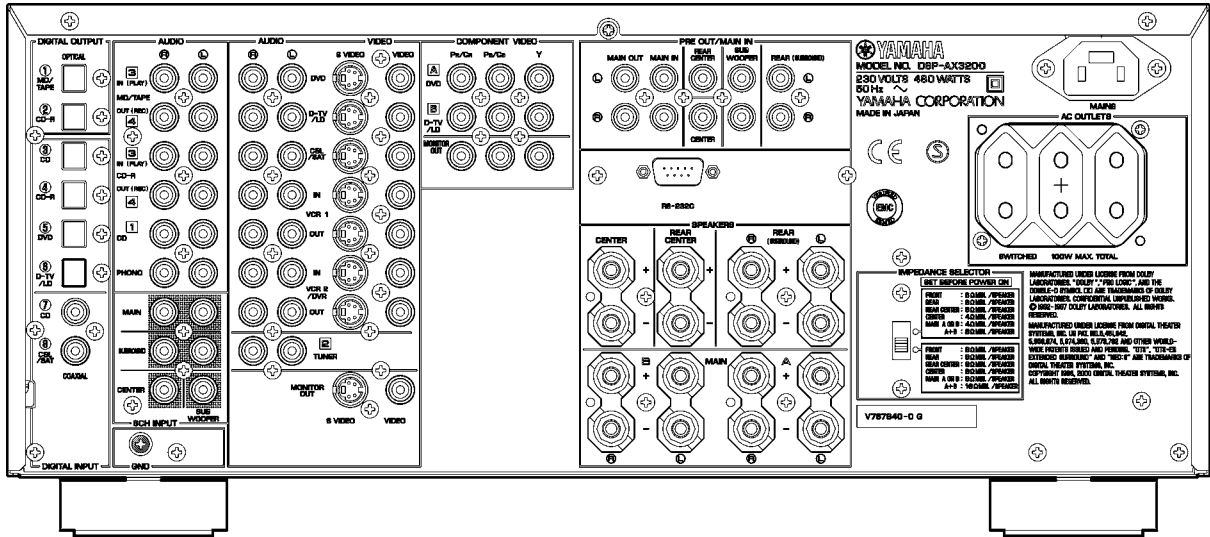
R model



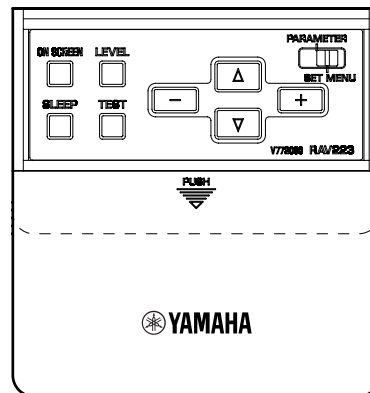
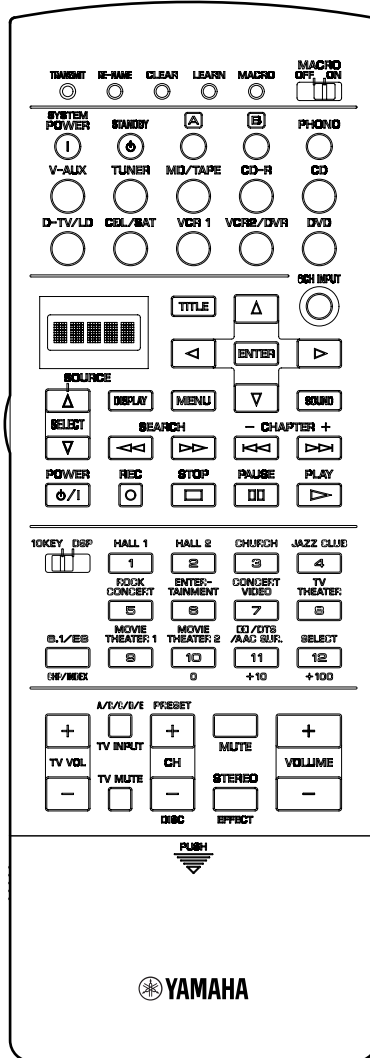
DSP-AX3200 (B model)



DSP-AX3200 (G model)



■ REMOTE CONTROL TRANSMITTER



■ SPECIFICATIONS

■ Audio Section

Minimum RMS Output Power (Power Amp. Section) (20 Hz to 20 kHz, 0.02% THD, 8 ohms)	
MAIN L/R	120W + 120W
CENTER	120W
REAR L/R/C	120W + 120W + 120W
Maximum Power (EIAJ) [R, T models] (1 kHz, 10% THD, 8 ohms)	
MAIN L/R	165W + 165W
CENTER	165W
REAR L/R/C	165W + 165W + 165W
Dynamic Power Per Channel (IHF) MAIN L/R (8/6/4/2 ohms)	
	145/180/240/330W
DIN Standard Output Power Per Channel [B, G models] (1 kHz, 0.7% THD, 4 ohms)	
MAIN L/R	180W + 180W
CENTER	180W
REAR L/R/C	180W + 180W + 180W
Dynamic Headroom [U, C, R, T models] (8 ohms)	
	0.82 dB
IEC Power [B, G models] MAIN L/R (1 kHz, 0.02% THD, 8 ohms)	
	120W + 120W
Power Band Width MAIN L/R (0.08% THD, 60W/8 ohms)	
	10 Hz to 50 kHz
Damping Factor MAIN L/R (20 Hz to 20 kHz, SPEAKER-A, 8 ohms) ...	
	200 or more
Input Sensitivity / Input Impedance	
PHONO (MM)	2.5 mV / 47 k-ohms
CD, etc.	150 mV / 47 k-ohms
EXT. DECODER	
MAIN L/R	150 mV / 47 k-ohms
CENTER, SURROUND L/R, SUBWOOFER ...	150 mV / 40 k-ohms
MAIN IN	1V / 47 k-ohms
Maximum Input Signal Level	
PHONO (MM) (1 kHz, 0.1% THD)	100 mV
CD, etc. (1 kHz, 0.5% THD, EFFECT ON)	2.2 V
Output Level / Output Impedance	
REC OUT	150 mV / 0.9 k-ohms
PRE OUT (MAIN L/R, CENTER, REAR L/R/C)	1.0 V / 1.2 k-ohms
PRE OUT (SUB WOOFER, EFFECT OFF, MAIN Small) ...	4.0 V / 1.2 k-ohms
ZONE2 OUT [U, C, A, R, T models]	150 mV / 1.2 k-ohms
Headphone Jack Rated Output / Impedance 1 kHz, 40 mV, 8 ohms	
	150 mV / 100 ohms
Frequency Response	
CD, etc. to MAIN L/R (10 Hz to 100 kHz)	0/-3 dB
MAIN IN to MAIN L/R (5 Hz to 100 kHz)	0/-3 dB
RIAA Equalization Deviation PHONO (MM) (20 Hz to 20 kHz)	
	0±0.5 dB
Total Harmonic Distortion (20 Hz to 20 kHz)	
PHONO (MM) to REC OUT (1V)	0.02% or less
CD, etc. (EFFECT OFF) to PRE OUT MAIN L/R (1V)	0.02% or less
CD, etc. (EFFECT OFF) to SP OUT MAIN L/R (60W / 8 ohms) ...	0.02% or less
MAIN IN to SP OUT MAIN L/R (60W / 8 ohms)	0.008% or less
Signal to Noise Ratio (IHF-A network) (Input shorted)	
PHONO (MM) to SP OUT (5 mV)	
[U, C, R, T models]	86 dB or more
[A, B, G models]	81 dB or more
CD, etc. (EFFECT OFF) to SP OUT	
150 mV	96 dB or more
250 mV	100 dB or more
Residual Noise (IHF-A network) MAIN L/R SP OUT	
	150 µV or less
Channel Separation (EFFECT OFF)	
PHONO (Input shorted, 1 kHz/10 kHz)	60 dB or more/55 dB or more
CD, etc. (Input 5.1 k-ohms shorted, 1 kHz/10 kHz) ...	60 dB or more/45 dB or more
Tone Control Characteristics	
Bass: Boost/Cut	±10 dB (50 Hz)
Turnover Frequency	350 Hz
Treble: Boost/Cut	±10 dB (20 kHz)
Turnover Frequency	3.5 kHz
Filter Characteristics	
MAIN L/R, CENTER, Rear L/R/C Small (H.P.F.) ..	90 Hz, 12 dB/oct.
SUBWOOFER (L.P.F.)	90 Hz, 18 dB/oct.
Bass Extension MAIN L/R, 60 Hz	
	+6 dB

■ Video Section

Video Signal Type	
[U, C models]	NTSC
[R, T models]	NTSC or PAL
[A, B, G models]	PAL
Video Signal Level	
	1 Vp-p / 75 ohms

S-Video Signal Level

Y	1 Vp-p / 75 ohms
C	0.286 Vp-p / 75 ohms

Component Signal Level

Y	1 Vp-p / 75 ohms
Cb/Cr	0.7 Vp-p / 75 ohms

Maximum Input Level

.....	1.5 Vp-p
-------	----------

Signal to Noise Ratio

.....	50 dB or more
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Monitor Out Frequency Response

Component Video Signal, S-Video Signal ...	5 Hz to 10 MHz, -3 dB
Component Video Signal	DC to 60 MHz, -3 dB

■ FM Section

Tuning Range

[U, C models]	87.5 to 107.9 MHz
[A model]	87.50 to 108.00 MHz
[R, T models]	87.5 to 108.0 / 87.50 to 108.00 MHz

50 dB Quieting Sensitivity (IHF) [U, C, A, R, T models]

(100% Mod)	
Mono	2.0 µV (17.3 dBf)
Stereo	25 µV (39.2 dBf)

Usable Sensitivity (IHF) [U, C, A, R, T models]

Mono	1.0 µV (11.2 dBf)
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Selectivity [U, C, A, R, T models]

at 400 kHz	70 dB
------------------	-------

Signal to Noise Ratio (IHF) [U, C, A, R, T models]

Mono / Stereo	76 dB / 70 dB
---------------------	---------------

Harmonic Distortion [U, C, A, R, T models]

(1 kHz)	
Mono/Stereo	0.2 / 0.3 %

Stereo Separation [U, C, A, R, T models]

1 kHz	45 dB
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Frequency Response [U, C, A, R, T models]

20 Hz to 15 kHz	+0.5 / -2 dB
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Antenna Input [U, C, A, R, T models]

.....	75 ohms unbalanced
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■ AM Section

Tuning Range

[U, C models]	530 to 1,710 kHz
[A model]	531 to 1,611 kHz
[R, T models]	530 to 1,710 / 531 to 1,611 kHz

Usable Sensitivity [U, C, A, R, T models]

.....	300 µV/m
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Antenna [U, C, A, R, T models]

.....	Loop Antenna
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■ General

Power Supply

[U, C models]	AC 120 V, 60 Hz
[A model]	AC 240 V, 50 Hz
[B, G models]	AC 230 V, 50 Hz
[R model]	AC 110/120/220/240 V, 50/60 Hz
[T model]	AC 220 V, 50 Hz

Power Consumption

[U, C models]	500 W / 640 VA
[A, B, G, R, T models]	500 W

Standby Power Consumption (reference data)

[U, C, A, B, G models]	1.2 W
[R, T models] AC 220V, 50Hz	1.5 W

Maximum Power Consumption [R model]

6 ch Drive, 10% THD	1000 W
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AC Outlets

3 switched outlets	
[U, C models]	100W max., total
[B, G models]	100W max., total
[R, T models]	50W max., total
1 switched outlet	
[A model]	100W max.

Dimensions (W x H x D)

.....	435 x 191 x 468 mm (17-1/8" x 7-1/2" x 18-7/16")
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Weight

.....	21.0 kg (46 lbs. 5 oz.)
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Finish

RX-V3200	Gold color (U, C, R, T) models
	Black color (U, C, R, A) models
DSP-AX3200	Black color (B, G) models
	Titanium color (G) model

Accessories

Remote control transmitter, Alkaline batteries, Indoor FM antenna	
[U, C, A, R, T models], AM loop antenna [U, C, A, R, T models],	
Power cord [U, C, G models]	

* Specifications are subject to change without notice due to product improvements.

U U.S.A. model
 A Australian model
 G European model
 T Chinese model

C Canadian model
 B British model
 R General model



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 Digital Theater Systems, Inc.

• Set Menu Table

No.	SET MENU	PRESET VALUE	SETTING RANGES
1.	SPEAKER SET		
1A	CENTER SPEAKER	LARGE	LARGE, SMALL, NONE
1B	MAIN SPEAKER	LARGE	LARGE, SMALL
1C	REAR L/R SPEAKER	LARGE	LARGE, SMALL, NONE
1D	REAR CENTER SPEAKER	LARGE	LARGE, SMALL, NONE
1E	LFE/BASS OUT	BOTH	SUBWOOFER, MAIN, BOTH
1F	MAIN LEVEL	NORMAL	NORMAL, -10dB
2.	LOW FREQ. TEST	TEST TONE : OFF OUTPUT : MAIN L/R FREQ. : 88Hz	OFF, ON MAIN L/R, L, C, R, RS, RC, LS, SWFR 35Hz/ ... /88Hz/ ... /WIDE
3.	L/R BALANCE	CENTER	L, ... , CENTER, ... , R (40 steps)
4.	HP TONE CONTROL	HP BASS : 0dB HP TREBLE : 0dB	-6dB — +3dB (1dB step) -6dB — +3dB (1dB step)
5.	CENTER GRAPHIC EQ.	100Hz : 0dB 300Hz : 0dB 1kHz : 0dB 3kHz : 0dB 10kHz : 0dB	-6dB — +6dB (1dB step) -6dB — +6dB (1dB step) -6dB — +6dB (1dB step) -6dB — +6dB (1dB step) -6dB — +6dB (1dB step)
6.	INPUT RENAME	DVD (Currently selected input)	
7.	I/O ASSIGNING		
7A	COMPONENT VIDEO INPUT 1	[A] : DVD	DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX
	COMPONENT VIDEO INPUT 2	[B] : D-TV/LD	DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX
7B	OPTICAL OUT 1	(1) : MD/TAPE	DVD, MD/TAPE, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX, PHONO, CD, CD-R
	OPTICAL OUT 2	(2) : CD-R	DVD, MD/TAPE, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX, PHONO, CD, CD-R
7C	OPTICAL IN 1	(3) : CD	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, PHONO
	OPTICAL IN 2	(4) : CD-R	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, PHONO
	OPTICAL IN 3	(5) : DVD	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, PHONO
	OPTICAL IN 4	(6) : D-TV/LD	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, PHONO
7D	COAXIAL IN 1	(7) : CD	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX, PHONO
	COAXIAL IN 2	(8) : CBL/SAT	CD, CD-R, MD/TAPE, DVD, D-TV/LD, CABLE, SAT, VCR1, VCR2/DVR, V-AUX, PHONO
8.	INPUT MODE	AUTO	AUTO/LAST
9.	PARAMETER INITIALIZE	PARAMETER INITIALIZE	The number key of the remote controller is pushed and initialized.
10.	LFE LEVEL	SPEAKER : 0dB HEADPHONE : 0dB	-2dB — 0dB (1dB step) -2dB — 0dB (1dB step)
11.	DYNAMIC RANGE	SP DYNAMIC RANGE : MAX HP DYNAMIC RANGE : MAX	MAX, STD, MIN MAX, STD, MIN
12.	SPEAKER DELAY TIME	CENTER : 0ms REAR CENTER : 3ms	0ms — 5ms (1ms step) 0ms — 30ms (1ms step)
13.	DISPLAY SET	BLUE BACK : AUTO OSD SHIFT : 0 DIMMER : 0	AUTO/OFF -5 — +5 (1 step) -4 — 0 (1 step)
14.	MEMORY GUARD	OFF	ON/OFF
15.	DUAL MONO	MAIN	MAIN, SUB, ALL

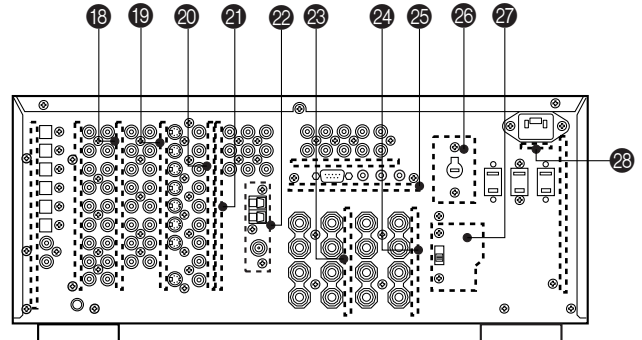
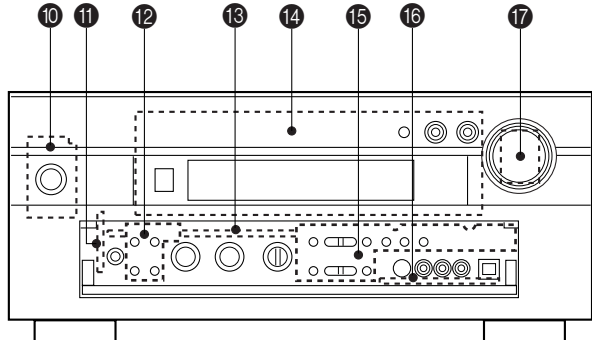
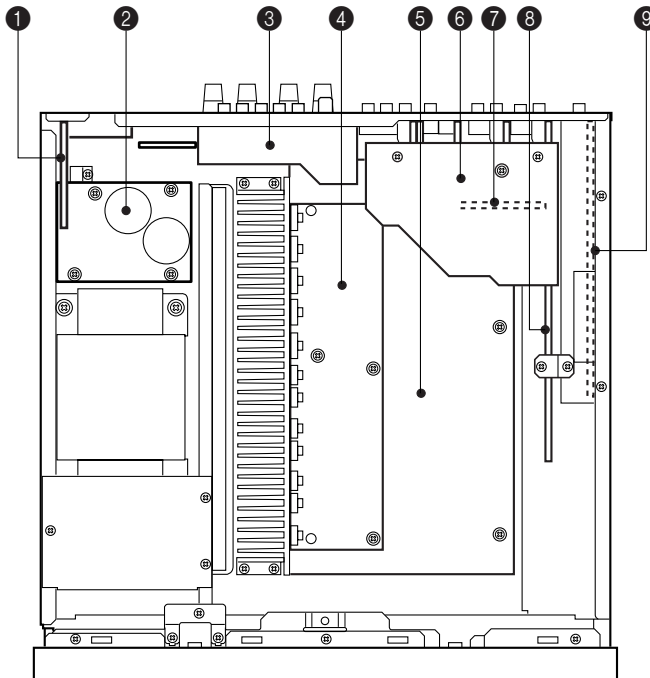
• The variable range of the parameter (Min/Max/Step)

Parameter name	Pro Logic	Pro Logic II Movie	Pro Logic II Music	Neo:6	2ch	DD/dts/AAC	6.1/ES	Unit
(P.) INIT. DLY	-	-	-	-	1/99/1	1/99/1	1/99/1	ms
(P.) ROOM SIZE	-	-	-	-	0.1/2.0/0.1	0.1/2.0/0.1	0.1/2.0/0.1	-
(P.) LIVENESS	-	-	-	-	0/10/1	0/10/1	0/10/1	-
S. DELAY	-	-	-	-	-	0/15/1	0/15/1	ms
S. INIT. DLY	10/25/1	10/25/1	0/15/1	0/30/1	0/49/1	0/49/1	0/49/1	ms
S. ROOM. SIZE	-	-	-	-	0.1/2.0/0.1	0.1/2.0/0.1	0.1/2.0/0.1	-
S. LIVENESS	-	-	-	-	0/10/1	0/10/1	0/10/1	-
RC. INT.DLY	-	-	-	-	-	-	1/49/1	ms
RC. ROOM, SIZE	-	-	-	-	-	-	0.1/2.0/0.1	-
RC. LIVENESS	-	-	-	-	-	-	0/10/1	-
REV. TIME	-	-	-	-	1.0/5.0/0.1	1.0/5.0/0.1	1.0/5.0/0.1	s
REV. DELAY	-	-	-	-	0/250/1	0/250/1	0/250/1	ms
REV. LEVEL	-	-	-	-	0/100/1	0/100/1	0/100/1	%
Panorama	-	OFF	OFF/ON	-	-	-	-	-
Dimension	-	0 (STD)	-3/+3/1	-	-	-	-	-
C Width	-	0	0/7/1	-	-	-	-	-

6ch Stereo Parameter		Unit
CT. LEVEL	0/100/1	%
RL. LEVEL	0/100/1	%
RC. LEVEL	0/100/1	%
RR. LEVEL	0/100/1	%

INTERNAL VIEW

- ① POWER (2) P.C.B.
- ② MAIN (2) P.C.B.
- ③ POWER (3) P.C.B.
- ④ POWER (1) P.C.B.
- ⑤ MAIN (1) P.C.B.
- ⑥ VIDEO (5) P.C.B.
- ⑦ VIDEO (7) P.C.B.
- ⑧ FUNCTION P.C.B.
- ⑨ DSP P.C.B.
- ⑩ OPERATION (3) P.C.B.
- ⑪ OPERATION (8) P.C.B.
- ⑫ OPERATION (5) P.C.B.
- ⑬ OPERATION (2) P.C.B.
- ⑭ OPERATION (1) P.C.B.
- ⑮ OPERATION (6) P.C.B.
- ⑯ OPERATION (4) P.C.B.
- ⑰ OPERATION (7) P.C.B.
- ⑱ VIDEO (6) P.C.B.
- ⑲ VIDEO (1) P.C.B.
- ⑳ VIDEO (2) P.C.B.
- ㉑ VIDEO (4) P.C.B.
- ㉒ TUNER (RX-V3200 only)
- ㉓ MAIN (5) P.C.B.
- ㉔ MAIN (4) P.C.B.
- ㉕ POWER (4) P.C.B.
- ㉖ POWER (6) P.C.B. (R, T models only)
- ㉗ MAIN (3) P.C.B.
- ㉘ POWER (5) P.C.B.



■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

Disconnect the power cord from the AC outlet.

1. Removal of Top Cover

a. Remove 2 screws (①), 4 screws (②) and 2 screws (③).
(Fig. 1)

b. Slide the Top Cover rearward to remove it. (Fig. 1)

2. Removal of Bottom Cover

Remove 14 screws (④) and then remove the Bottom Cover. (Fig. 1)

3. Removal of Front Panel

a. Remove 4 push rivets (⑤) and then remove the Side Plates. (Fig. 1)

b. Remove 3 screws (⑥) and 1 screw (⑦), and then remove the Front Panel. (Fig. 1)

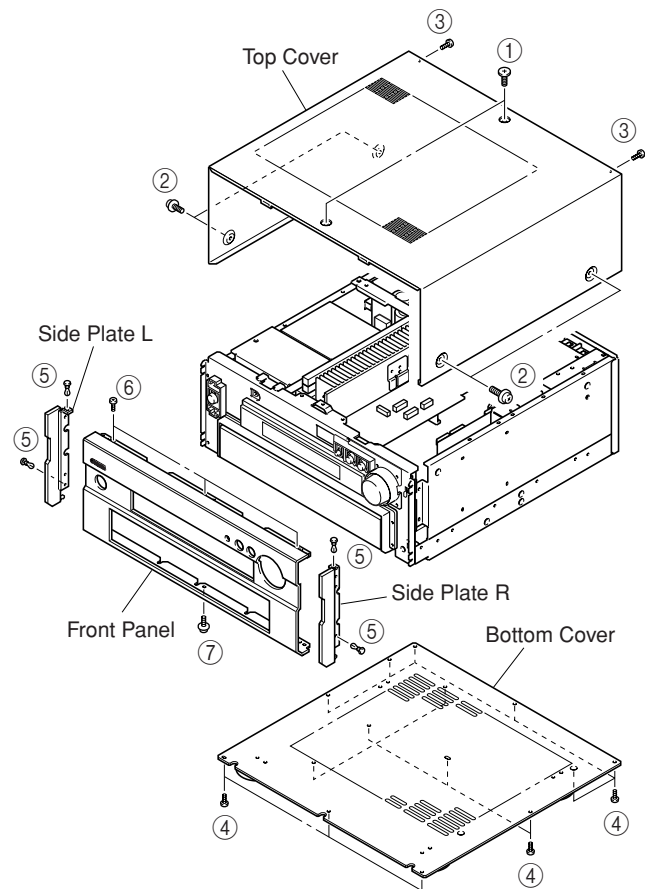


Fig. 1

4. Removal of Sub Chassis

Remove 4 screws (⑧) and 6 screws (⑨), and then remove the Sub Chassis. (Fig. 2)

5. Removal of DSP P.C.B.

a. Remove 2 knobs (⑩) and 1 knob (⑪). (Fig. 2)

b. Remove 4 screws (⑫) and then remove the Button Case Upper. (Fig. 2)

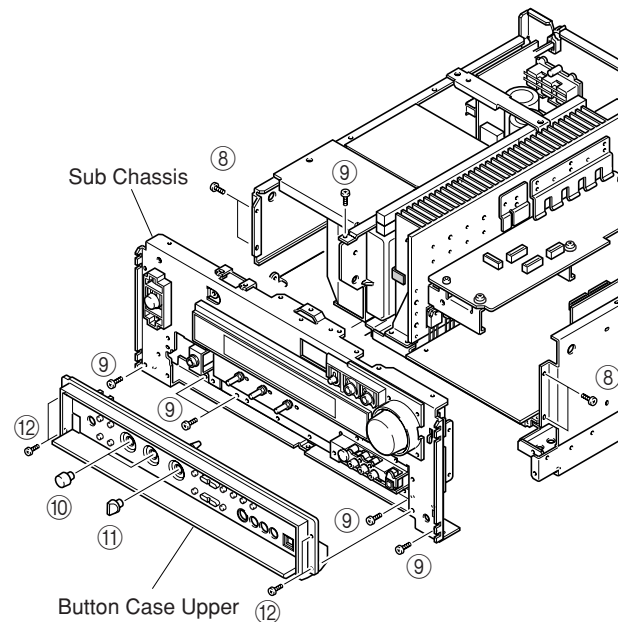


Fig. 2

6. Removal of DSP P.C.B.

- a. Remove 10 screws (13) and then remove the Bracket. (Fig. 3)
- b. Remove 2 screws (14) and then remove the Support. (Fig. 3)
- c. Remove 1 screw (15). (Fig. 3)
- d. Remove 9 screw (16). (Fig. 4)
- e. Remove the DSP P.C.B.. (Fig. 3)

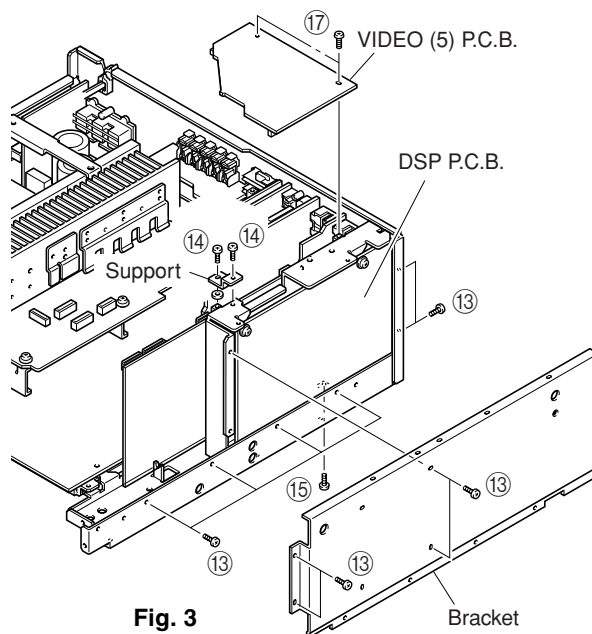


Fig. 3

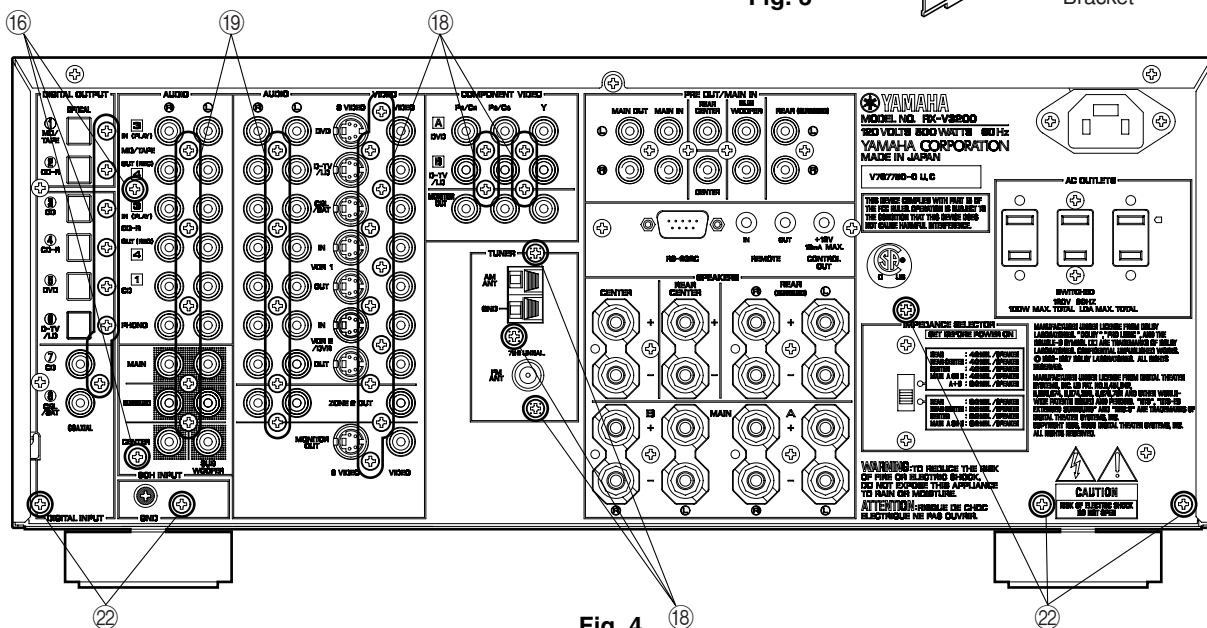


Fig. 4

8. Removal of VIDEO (1), VIDEO (2), VIDEO (4) and VIDEO (8) P.C.B.s and Tuner*1

- a. Remove 17 screws (18). (Fig. 4) (DSP-AX3200: 14 screws)
- b. Remove VIDEO (1), VIDEO (2), VIDEO (4) and VIDEO (8) P.C.B.s and the Tuner*1. (Fig. 5)

*1: RX-V3200 only

When checking the P.C.B.:

- Put the rubber sheet and a cloth over the equipment. Then place the P.C.B. upside down on the cloth and check it. (Fig. 5)
- Connect VIDEO (5) and FUNCTION P.C.B.s by using the extension cable (AAX30610) for the P.C.B. check. (Fig. 5)
- Reconnect all cables (connectors) that have been disconnected.
- The P.C.B. removed from the rear panel does not work because its grounding is loose. Be sure to connect the ground of each P.C.B. to the chassis or GND with a jumper wire or the like.

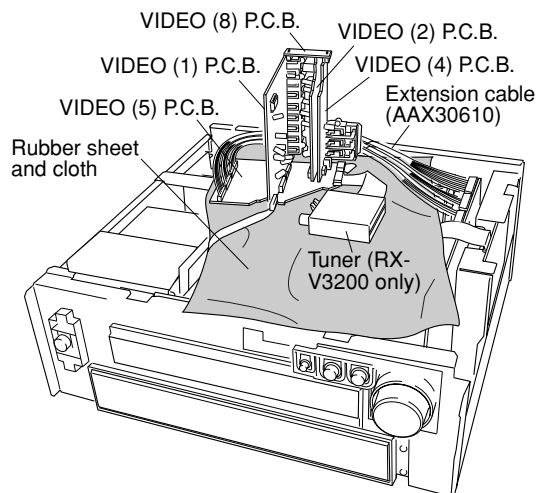


Fig. 5

9. Removal of VIDEO (6), VIDEO (7), and FUNCTION P.C.B.s

- a. Remove CB359, CB360, CB503, CB505, CB509 and CB936. (Fig. 6)
- b. Remove 10 screws (19). (Fig. 4)
- c. Remove VIDEO (6), VIDEO (7), and FUNCTION P.C.B.s. (Fig. 7)

When checking the P.C.B.:

- Put the rubber sheet and a cloth over the equipment. Then place the P.C.B. upside down on the cloth and check it. (Fig. 7)
- Connect VIDEO (5) and FUNCTION P.C.B.s by using the extension cable (AAX30610) for the P.C.B. check. (Fig. 7)
- Reconnect all cables (connectors) that have been disconnected.
- The P.C.B. removed from the rear panel does not work because its grounding is loose. Be sure to connect the ground of each P.C.B. to the chassis or GND with a jumper wire or the like.

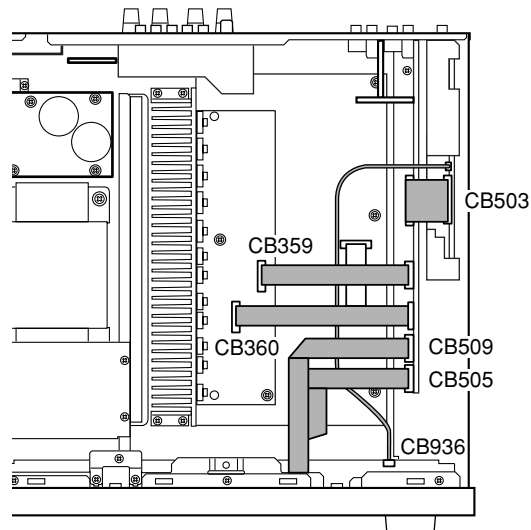


Fig. 6

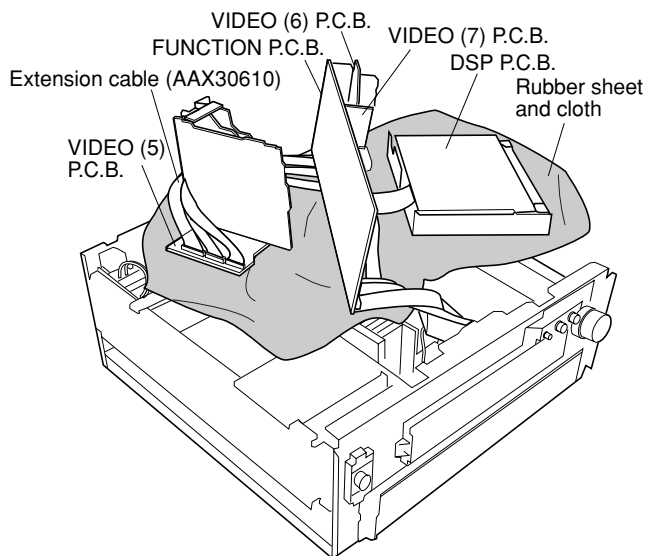


Fig. 7

10. Removal of MAIN (2) P.C.B.

- a. Remove 2 screws (20) and 1 screw (21)*2. (Fig. 8)
- b. Remove 5 screws (22) and then remove the Rear Panel. (Fig. 4)
- c. Remove 2 screws (23) and then remove the Support R. (Fig. 8)
- d. Remove 4 screws (24) and then remove the MAIN (2) P.C.B.. (Fig. 8)

*2: R, T models only

11. Removal of POWER (1) P.C.B.

- a. Remove 5 screws (25) and then remove the Support. (Fig. 8)
- b. Remove 3 screws (26) and then remove the POWER (1) P.C.B.. (Fig. 8)

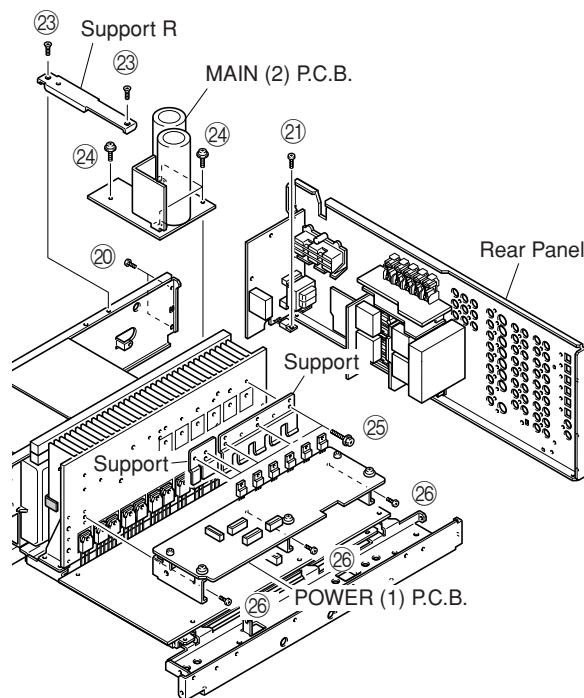


Fig. 8

■ SELF DIAGNOSIS FUNCTION (DIAG)

There are 18 DIAG menu items, each of which has sub-menu items. Listed in the table below are menu items and sub-menu items.

No	DIAG menu	sub-menu
1	YSS938 1. ANALOG BYPASS	1. ANALOG BYPASS
		2. YSS 0dB
		3. YSS FULL BIT
2	YSS-CS 2. YSS-CS 0dB	1. YSS-CS 0dB
		2. YSS-CS FULL BIT
3	CS-YSS 3. CS-YSS 0dB	1. CS-YSS 0dB
		2. CS-YSS FULL BIT
4	CS49329 4. CS 0dB	1. CS49329 0dB
		2. CS49329 FULL BIT
5	HP ROUTE 5. HP 0dB	1. HP 0dB
		2. HP FULL BIT
6	RAM THROUGH 6. RAM 0dB	1. RAM 0dB
		2. MAIN ATT
7	DOLBY PRO LOGIC 7. PRO LOGIC I	1. PRO LOGIC I
		2. PRO LOGIC II
		3. NEO: 6
8	SPEAKER SET 8. MAIN: SML 0dB	1. MAIN: SMALL 0dB
		2. MAIN: LARGE -10dB
		3. CENTER: NONE
		4. LFE/BASS: MAIN
		5. FRONT MIX: 5ch
		6. REAR C: MUTE
		7. REAR L/R: MUTE
9	EFFECT OFF/ DISPLAY CHECK 9. VFD CHECK	1. VFD CHECK (Initial display)
		2. VFD DISP OFF (All segments OFF)
		3. VFD DISP ALL (All segments ON 100%)
		4. VFD DIMMER (All segments ON 50%)
		5. CHECKED PATTERN (ON in lattice)
10	MANUAL TEST 10 TEST ALL	1. TEST ALL
		2. TEST MAIN L
		3. TEST CENTER
		4. TEST MAIN R
		5. TEST REAR R
		6. TEST REAR CENTER
		7. TEST REAR L
		8. TEST LFE
11	RS-232C 11 TxRxData: XX	1. TX DATA
		2. HARD FLOW
12	FACTORY PRESET 12 PRESET INHI	1. PRESET INHIBIT (memory initialization inhibited)
		2. PRESET RESERVED (memory initialized)
13	AD DATA CHECK /FAN TEST DC:007 PS:025	1. DC/PS (protection)
		2. THM/FAN OUT
		3. REC-OUT
		4. IMP SW/POWER LIMIT
		5. K0/K1 (panel key)
		6. FAN DRIVE TEST: HIGH
		7. FAN DRIVE TEST: MID
		8. FAN DRIVE TEST: LOW

No	DIAG menu	sub-menu
14	IF STATUS IS1:440308C000	1. IS 1
		2. IS 2
		3. IS 3
		4. CS 1
		5. CS 2
		6. CS 3
		7. CS 4
		8. CS 5
		9. BY1
		10. BY2
		11. BY3
		12. BY4
		13. BC1
		14. BC2
		15. BC3
		16. BC4
		17. BC5
		18. YS1
		19. YS2
		20. YS3
		21. CS
		22. MTT
15	DSP RAM CHECK YSS Bus: NoEr	1. YSS938 BUS CHECK
		2. PLD/SRAM BUS CHECK
16	CS DL CODE RDV: X	1. ROM DATA VERSION
		2. TOC AREA 0
		3. TOC AREA 1
		4. TOC AREA 2
		5. TOC AREA 3
		6. TOC AREA 4
		7. TOC AREA 5
		8. SUM CHECK AREA 0
		9. SUM CHECK AREA 1
		10. SUM CHECK AREA 2
		11. SUM CHECK AREA 3
		12. SUM CHECK AREA 4
		13. SUM CHECK AREA 5
17	SOFT SW 17.SW :PCB	1. SW MODE
		2. MODEL SETTING
		3. TUNER DESTINATION
		4. TUNER EXIST
		5. RDS EXIST
		6. ZONE 2 EXIST
		7. VIDEO FORMAT
18	ROM VERSION/CHECK SUM/ PORT VER. XXXXXXXX	1. VERSION
		2. SUM ALL/PROGRAM
		3. SUM 232C/MAKER
		4. PORT
		5. AAC PORT

• Starting DIAG

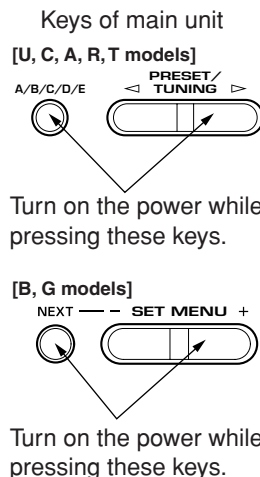
Press the “STANDBY/ON key while pressing those two keys indicated in the figure on the right.

• Starting DIAG in the protection cancel mode

If the protection function works and causes hindrance to trouble diagnosis, cancel the protection function as described below, and it will be possible to enter the DIAG mode. (The protection functions other than the excess current detect function will be disabled.)

Press the “STANDBY/ON key while pressing those two keys indicated in the figure on the right. At this time, keep pressing those two keys for 3 seconds or longer.

In this mode, the “SLEEP” segment of the FL display of the main unit flashes to indicate that the mode is DIAG mode with the protection functions disabled.



CAUTION!

Using this product with the protection function disabled may cause damage to itself. Use special care for this point when using this mode.

• Canceling DIAG

[1] Before canceling DIAG, execute setting for PRESET of DIAG menu No.12 (Memory initialization inhibited or Memory initialized).

* In order to keep the user memory stored, be sure to select PRESET INHI (Memory initialization inhibited).

[2] Turn off the power by pressing the “STANDBY/ON” key of the main unit or the “STANDBY” key of the remote controller.

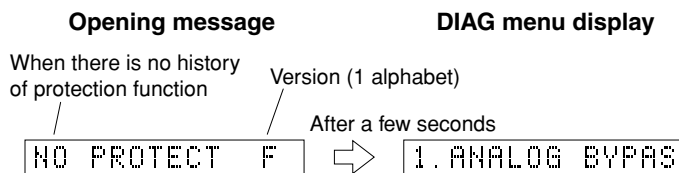
• Display provided when DIAG started

When the monitor is connected, DIAGNOSTIC MENU appears on its screen as shown in the figure. (It remains on display until DIAG is cancelled.)

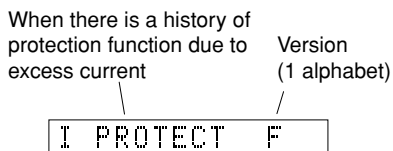
DIAGNOSTIC MENU	
1. DSP THR	10. MAN LTEST
2. YSS-CS	11. RS232C
3. CS-YSS	12. PRESET
4. CS49329	13. AD/FAN
5. HP ROUTE	14. STATUS
6. RAM THR	15. DSP RAM
7. PRO LOGIC	16. CS DL COD
8. SP SET	17. SOFT SW
9. VFD CHECK	18. VER/SUM/P

The FL display of the main unit displays the protection function history data and the version (1 alphabet) and the DIAG menu (sub-menu (ANALOG BYPASS) of DIAG menu No.1 YSS938) a few seconds later.

When there is no history of protection function:



When there is a history of protection function:



Cause: An excessive current flowed through the power amplifier.

Supplementary information: As current of the power transistor is detected, the abnormal channel can be identified by checking the current detect transistor.

Turning on the power without correcting the abnormality will cause the protection function to work immediately and the power supply will instantly be shut off.

When there is a history of protection function due to abnormal voltage in the power supply section

PS PRT:000 F

Voltage display in %

Version
(1 alphabet)

Cause: The voltage in the power supply section is abnormal.

Supplementary information: The abnormal voltage is displayed in % based on 5V as 100%.

Turning on the power without correcting the abnormality will cause the protection function to work 1 second later and the power supply will be shut off.

When there is a history of protection function due to abnormal DC output

DC PRT:000 F

Voltage display in %

Version
(1 alphabet)

Cause: DC output of the power amplifier is abnormal.

Supplementary information: The abnormal voltage is displayed in % based on 5V as 100%.

Turning on the power without correcting the abnormality will cause the protection function to work 3 seconds later and the power supply will be shut off.

When there is a history of protection function due to excessive heat sink temperature

TMP PRT:000 F

Voltage display in %

Version
(1 alphabet)

Cause: The temperature of the heat sink is excessive.

Supplementary information: The abnormal voltage is displayed in % based on 5V as 500%.

Turning on the power without correcting the abnormality will cause the protection function to work 1 second later and the power supply will be shut off.

- * Additional causes of protection can be due to loose connections, associated components, CPU, etc.
- * For the protection voltage value, refer to DIAG menu No.10 described later.

• History of protection function

When the protection function has worked, its history is stored in memory with a backup. Even if no abnormality is noted while servicing the unit, an abnormality which has occurred previously can be defined as long as the backup data has been stored.

The history of the protection function is cleared when DIAG is cancelled by selecting PRESET RESERVED (Memory initialized) of DIAG menu No.10 or when the backup data is erased.

• Display during menu operation

During the DIAG operation, the menu list described in the section of the startup screen appears on the superimposed screen and the function at work is indicated on the FL indicator. The contents displayed during the function operation are described in the later section on details of functions.

• Operation procedure of DIAG menu and SUB-MENU

There are 18 MENU items, each of which has some SUB-MENU items.

DIAG menu selection

Main unit [U, C, A, R, T models]: Select the menu using ▷ (Forward) and ◁ (Reverse) keys of PRESET/TUNING located in the sealing panel.

Main unit [B,G models]: Select the menu using + (Forward) and - (Reverse) keys of SET MENU located in the sealing panel.

Remote control unit: Select the menu using Δ (Forward) and ∇ (Reverse) keys.

SUB-MENU selection

Main unit: Select the sub-menu using ▷ (Forward) and ◁ (Reverse) keys of PROGRAM located in the sealing panel.

Remote control unit: Select the sub-menu using + (Forward) and - (Reverse) keys.

[U, C, A, R, T models]

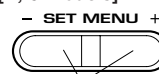


DIAG menu selection



SUB-MENU selection

[B, G models]



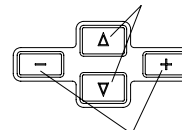
DIAG menu selection



SUB-MENU selection

[REMOTE CONTROL]

Use these keys for
DIAG menu selection.



Use these keys for
SUB-MENU selection.

• Functions in DIAG mode

In addition to the DIAG menu items, functions as listed below are available.

- Input selection, 6CH input
- Center/Rear/Rear Center/Sub-woofer level adjustment
- Muting
- Speaker relay A/B
- Power on/off
- Master volume

* Functions related to the tuner and the set menu are not available.

* It is possible to confirm Menu No.14 IF STATUS while keeping the signal process (operation status) of each DIAG menu by using the input mode key of the main unit.

• Initial settings used to start DIAG

The following initial settings are used when starting DIAG.

When DIAG is canceled, these settings are restored to those before starting DIAG.

- Master volume: -40dB
- Input: DVD (6CH INPUT OFF)
- Effect level: 0dB
- Audio mute: OFF
- Speaker relay A/B: ON
- Speaker setting: LARGE / BASS OUT = BOTH
- DIAG menu: YSS938 (1. ANALOG BYPASS)

• **Details of DIAG menu**

With full-bit output specified in some modes, it is possible to execute 0dBFS output without head margin in each channel.

1. YSS938

This function is for YSS938 only. Main DSP of YSS938 is selected for MAIN L/R output.

Using the sub-menu, it is possible to select the analog bypass, 0dB output level or full-bit output.

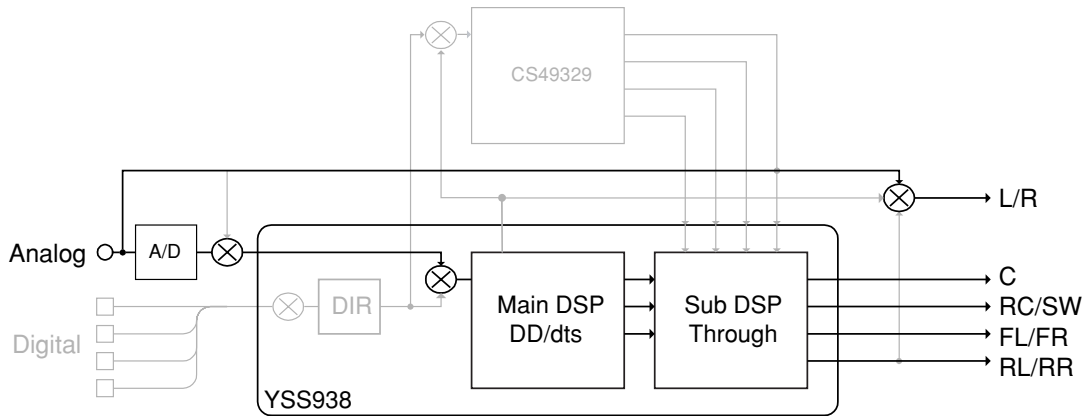
ANALOG BYPASS

1. ANALOG BYPASS

- The signal is output through the signal path as shown below.
- The signal for L/R is output as it is without passing through the DSP section.

Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV



YSS 0dB

1. YSS 0dB

- The signal is output including the head margin.

Head margin:

Main L/R: 0dBFS, Center: -6dBFS, Rear Center: -3dBFS, FL/FR: -6dBFS, RL/RR: -12dBFS, SWFR: Add L/R signal at -20dBFS.

Reference data (PRE OUT)

INPUT: DVD ANALOG

SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

YSS FULL BIT

1. YSS FULL BIT

- The signal is output in digital full bit without including the head margin.

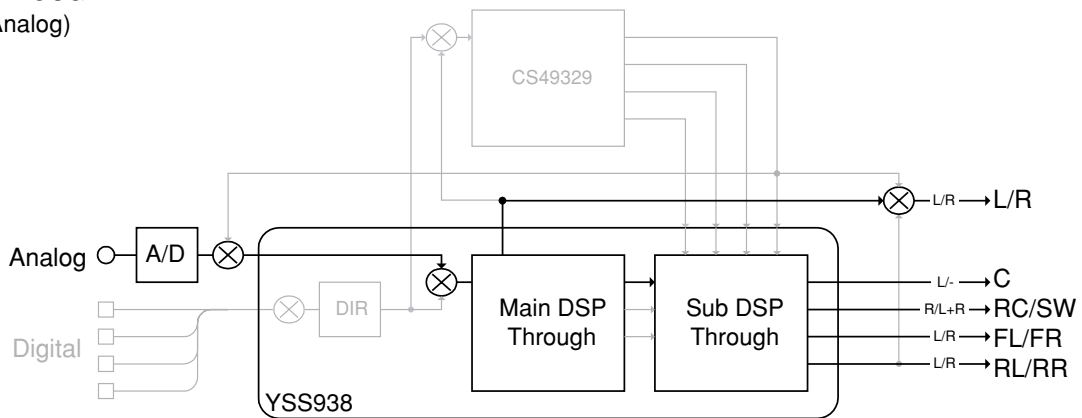
Reference data (PRE OUT)

INPUT: DVD ANALOG

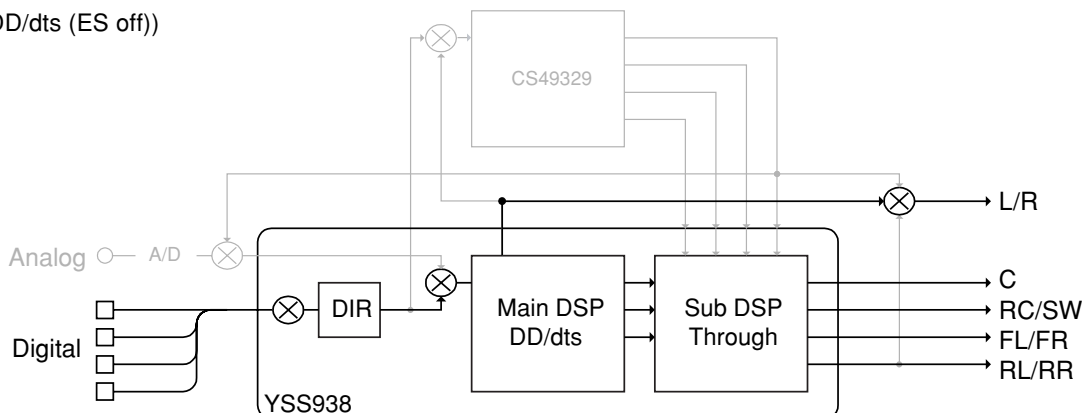
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-8.0 dBV	-11.5 dBV	-2.5 dBV	-2.0 dBV

DSP THROUGH ~
YSS (Analog)



DSP THROUGH ~
YSS (DD/dts (ES off))



2. YSS-CS

8 channels are made usable by CS49329. The signal enters YSS938 through the Sub DSP passage and then undergoes through-output.

CS49329 is selected for the Main L/R output. Using the sub-menu, it is possible to select full bit output at 0dB output level.

YSS-CS 0dB

2. YSS-CS 0dB

- The signal is output including the head margin.

Head margin:

Main L/R: -18dBFS, Center: -6dBFS, Rear Center: -3dBFS, FL/FR: -6dBFS,
RL/RR: -18dBFS, SWFR: Add L/R signal at -20dBFS.

Reference data (PRE OUT)

INPUT: DVD ANALOG

SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

YSS-CS FULL BIT

2. YSS-CS F BIT

- The signal is output in digital full bit without including the head margin.

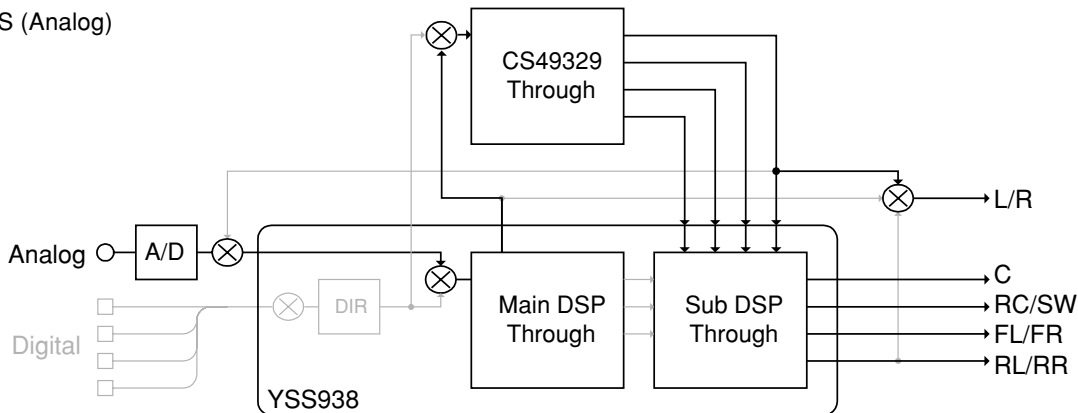
Reference data (PRE OUT)

INPUT: DVD ANALOG

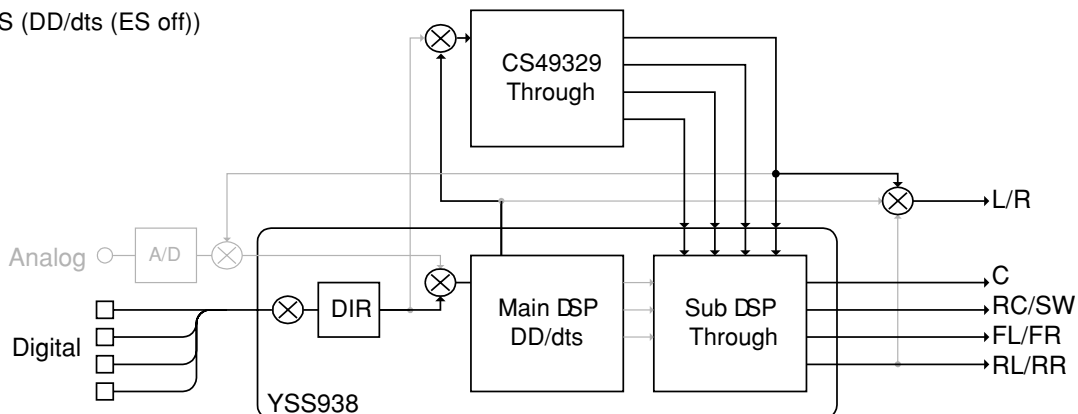
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-8.0 dBV	-11.5 dBV	-2.5 dBV	-2.0 dBV

DSP THROUGH ~
YSS-CS (Analog)



DSP THROUGH ~
YSS-CS (DD/dts (ES off))



3. CS-YSS

8 channels are made usable by CS49329. The signal enters YSS938 through the Sub DSP passage and then undergoes through-output.

YSS938 Main DSP is selected for the Main L/R output. Using the sub-menu, it is possible to select full bit output at 0dB output level.

CS-YSS 0dB

3. CS-YSS 0dB

- The signal is output including the head margin.

Head margin:

Main L/R: -18dBFS, Center: -6dBFS, Rear Center: -3dBFS, FL/FR: -6dBFS, RL/RR: -18dBFS, SWFR: Add L/R signal at -20dBFS.

Reference data (PRE OUT)

INPUT: DVD ANALOG

SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

CS-YSS FULL BIT

3. CS-YSS F BIT

- The signal is output in digital full bit without including the head margin.

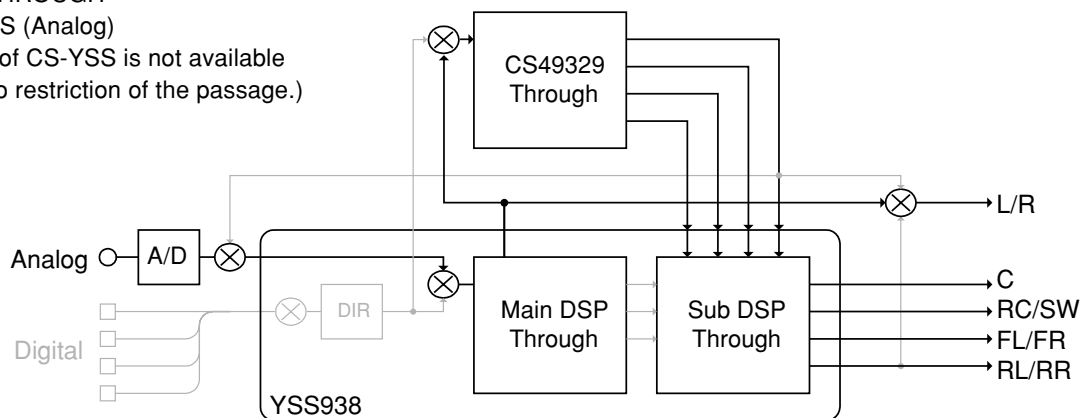
Reference data (PRE OUT)

INPUT: DVD ANALOG

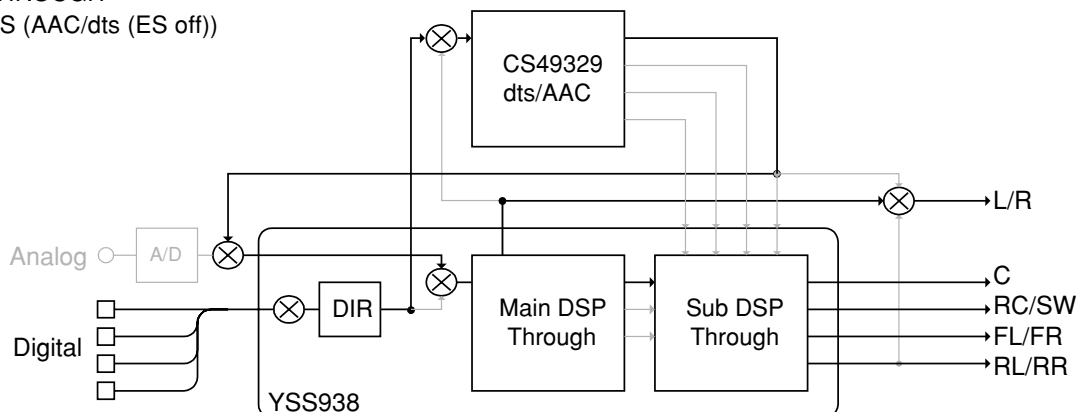
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-8.0 dBV	-11.5 dBV	-2.5 dBV	-2.0 dBV

DSP THROUGH ~
CS-YSS (Analog)
(Use of CS-YSS is not available
due to restriction of the passage.)



DSP THROUGH ~
CS-YSS (AAC/dts (ES off))



4. CS49329

8 channels are made usable by CS49329. The signal enters YSS938 through the Sub DSP passage and then undergoes through-output.

CS49329 is selected for the Main L/R output. Using the sub-menu, it is possible to select full bit output at 0dB output level.

* As a 3dB margin of CS is always effective for RC when decoding dts ES, even when the output in full bit is specified, the RC output remains up to 0dBFS when 0dBFS is inputted to LS/RS.

CS49329 0dB

4. CS 0dB

- The signal is output including the head margin.

Head margin:

Main L/R: -18dBFS, Center: -6dBFS, Rear Center: -3dBFS, FL/FR: -6dBFS, RL/RR: -18dBFS, SWFR: Add L/R signal at -20dBFS.

Reference data (PRE OUT)

INPUT: DVD ANALOG

SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

CS49329 FULL BIT

4. CS FULL BIT

- The signal is output in digital full bit without including the head margin.

Reference data (PRE OUT)

INPUT: DVD ANALOG

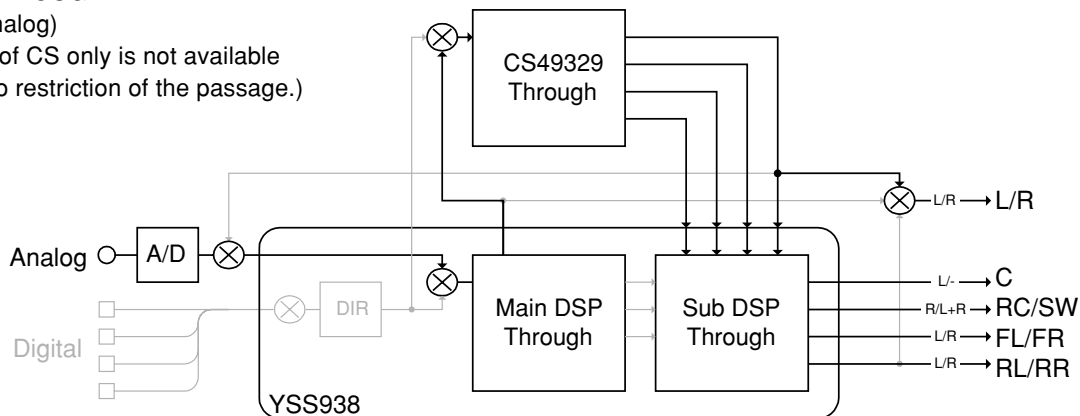
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-8.0 dBV	-11.5 dBV	-2.5 dBV	-2.0 dBV

DSP THROUGH ~

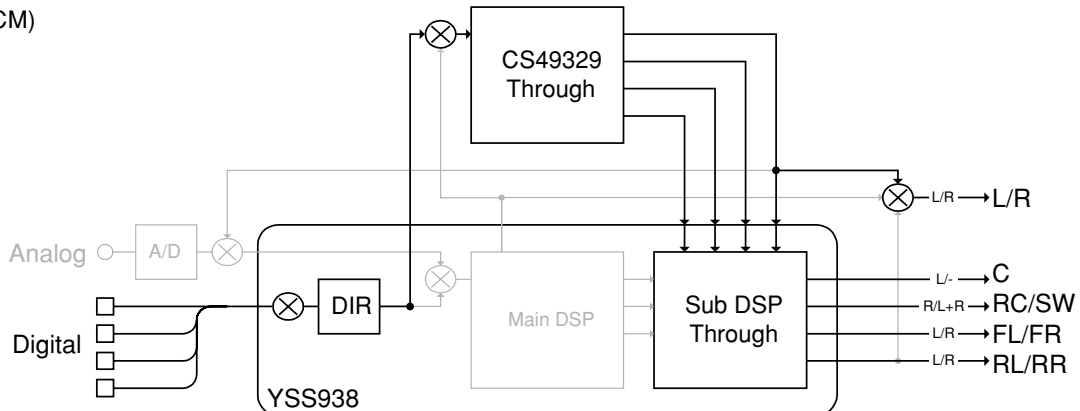
CS (Analog)

(Use of CS only is not available due to restriction of the passage.)

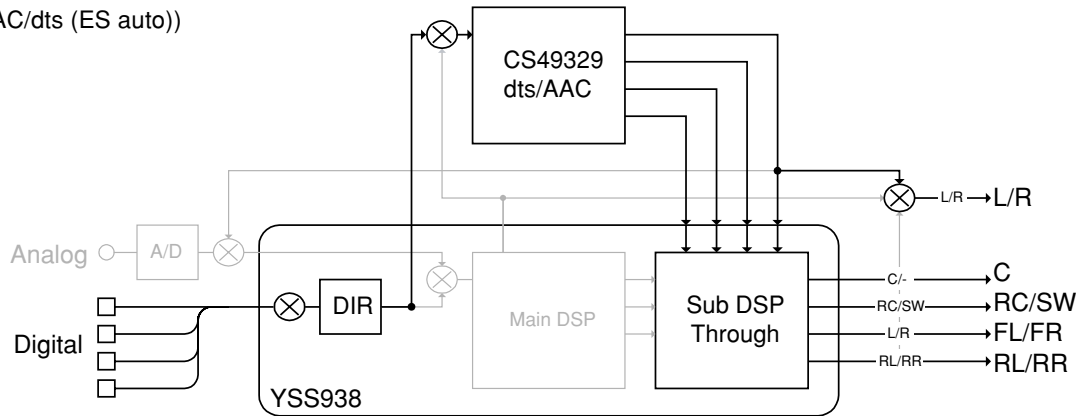


DSP THROUGH ~

CS (PCM)



DSP THROUGH ~
CS (AAC/dts (ES auto))



5. HP ROUTE

This function is for YSS938 only. Sub DSP SDOB3 of YSS938 is selected for MAIN L/R output. Using the sub-menu, it is possible to select the full-bit output at 0dB output level.

HP 0dB

5. HP 0dB

- The signal is output including the head margin.
Head margin:

Main L/R: -18dBFS, Center: -6dBFS, Rear Center: -3dBFS, FL/FR: -6dBFS, RL/RR: -18dBFS, SWFR: Add L/R signal at -20dBFS.

Reference data (PRE OUT)
INPUT: DVD ANALOG
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-∞	-∞	-∞	-∞

HP FULL BIT

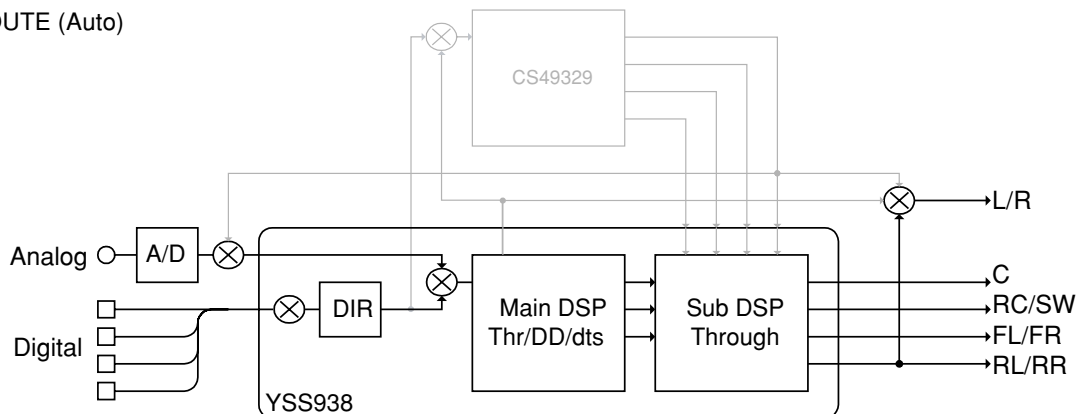
5. HP FULL BIT

- The signal is output in digital full bit without including the head margin.

Reference data (PRE OUT)
INPUT: DVD ANALOG
SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -20 dB	-6.0 dBV	-∞	-∞	-∞	-∞

DSP THROUGH ~
HP ROUTE (Auto)



6. RAM THROUGH

This function is for YSS938 only. Main L/R signal is output through Main DSP of YSS938. CT/RC, RL/RR and FL/FR signals are output through Sub DSP - DRAM. Using the sub-menu, it is possible to select the full-bit output at 0dB output level.

RAM 0dB

6. RAM 0dB

Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-14.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

MAIN ATT

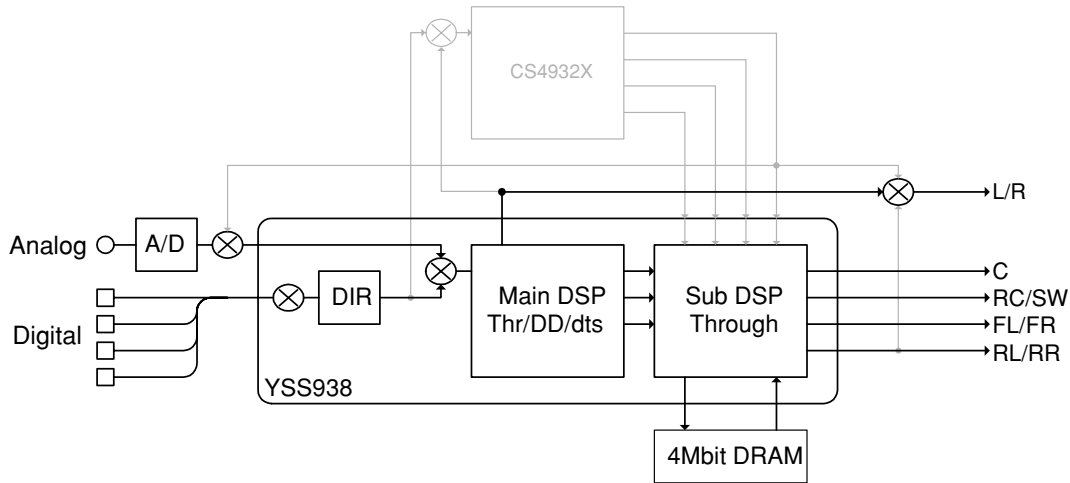
6. MAIN ATT

- MAIN -9dB

Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Both ch, -20 dBV, volume -10 dB	-23.0 dBV	-14.0 dBV	-14.0 dBV	-2.5 dBV	-14.0 dBV

RAM THROUGH ~
 (Auto)



7. DOLBY PRO LOGIC [YSS938]

PRO LOGIC I

7. PRO LOGIC I

Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Each ch, -20 dBV, volume -10 dB	-14.0 dBV	-∞	-∞	-∞	-∞
Both ch, -20 dBV, volume -10 dB	-∞	-11.0 dBV	-∞	-∞	-∞
Both ch, -20 dBV (reverse phase), volume -10 dB	-∞	-∞	-∞	-∞	-14.0 dBV

PRO LOGIC II

7. PRO LOGIC II

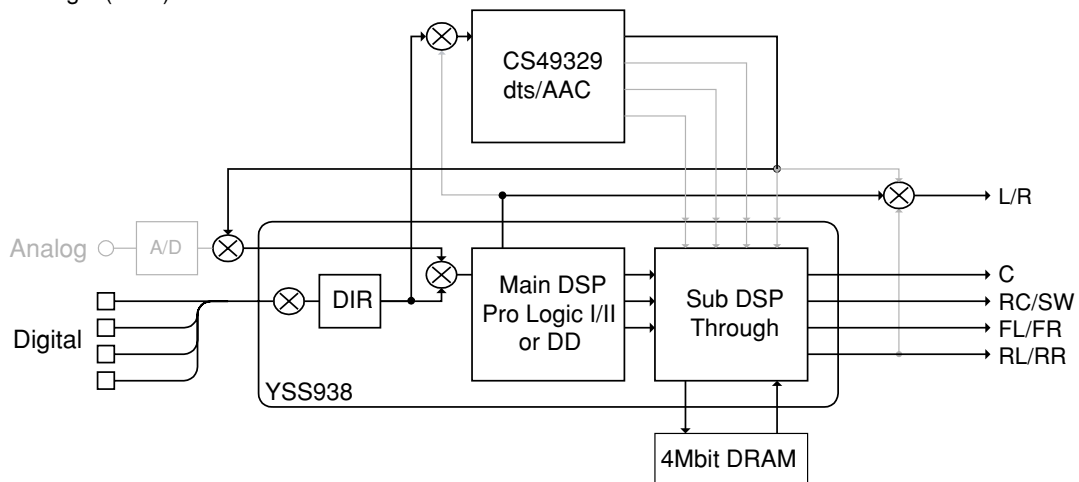
Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Each ch, -20 dBV, volume -10 dB	-14.0 dBV	-∞	-∞	-∞	-∞
Both ch, -20 dBV, volume -10 dB	-∞	-11.0 dBV	-∞	-∞	-∞
Both ch, -20 dBV (reverse phase), volume -10 dB	-∞	-∞	-∞	-∞	-14.0 dBV

The L/C/R/RL/RR signals undergo the Pro-Logic processing and C/RL/RR signals are output through Sub DSP-DRAM. Main DSP is selected for MAIN L/R output.

Using the sub-menu, it is possible to select PRO LOGIC I, II (Movie). The Auto Input Balance function is always off. When dts/AAC input is used, the signal is decoded by CS49329 and the L/R signal undergoes the Pro-Logic processing. When the Dolby Digital Multi input is used, the function is the same as in the Dolby Digital Normal mode. The LFE signal is not output when decoding in the PRO LOGIC I, II mode.

Dolby Pro Logic (Auto)



Neo:6

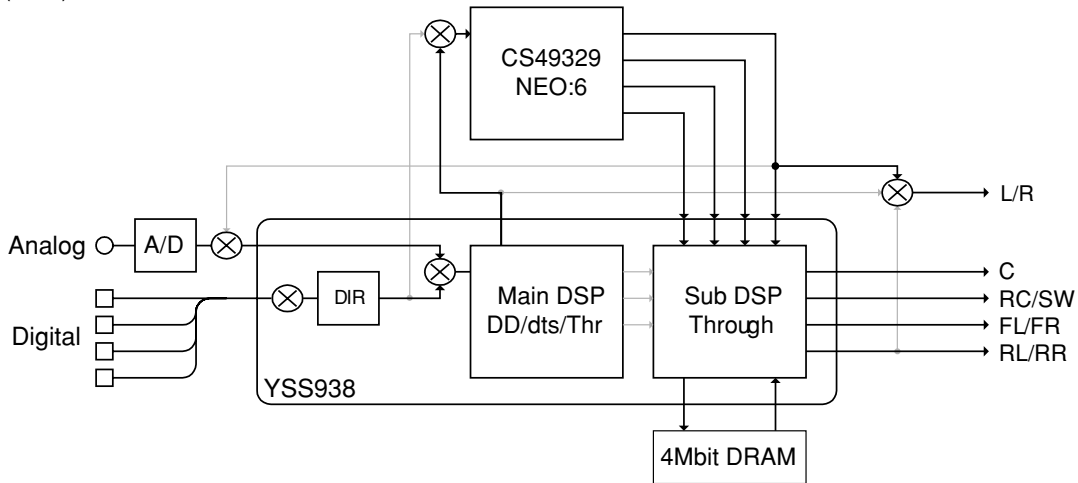
7. Neo:6

Reference data (PRE OUT)
 INPUT: DVD ANALOG
 SWFR: 50Hz, Others: 1kHz

Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
Each ch, -20 dBV, volume -10 dB	-14.0 dBV	-∞	-∞	-∞	-∞
Both ch, -20 dBV, volume -10 dB	-∞	-11.0 dBV	-∞	-∞	-∞
Both ch, -20 dBV (reverse phase), volume -10 dB	-∞	-∞	-∞	-∞	-14.0 dBV

L/C/R/RL/RC/RR signals are NEO:6 processed by CS49329 and C/RL/RC/RR signals are output through Sub DSP-DRAM. CS49329 is selected for the MAIN L/R output. The NEO:6 mode is fixed to Cinema 6ch.
 When DD/dts input is used, the signal is decoded by YSS-938 and then L/R signal is NEO:6 processed by CS49329.
 When AAC input is used, the signal is muted. When NEO:6 decoding is used, the LFE signal is not output.

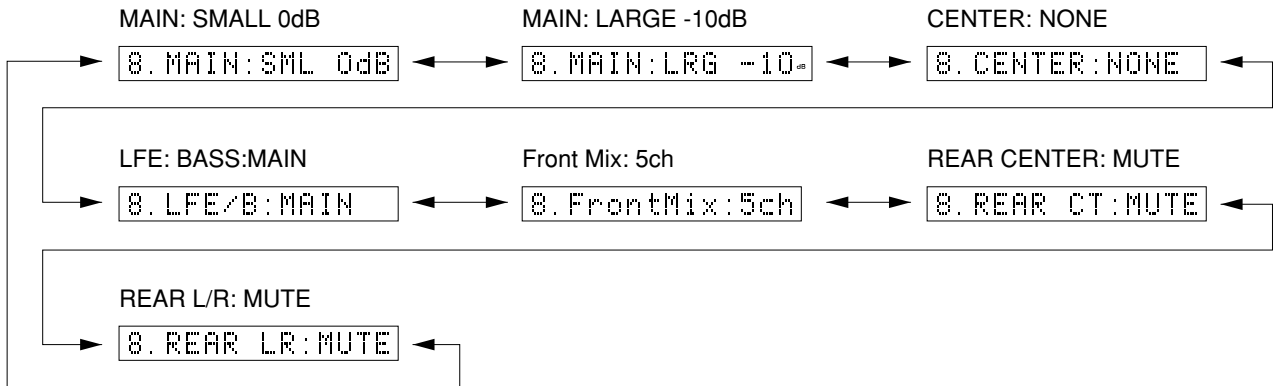
NEO:6 (Auto)



8. SPEAKERS SET

The input signal is automatically identified in the order of dts → DOLBY DIGITAL → AAC → PCM → Analog.

There are seven sub-menu items as follows. The signals output from the DSP block are the same as 1. YSS938: YSS 0dB.



The analog switch settings for each sub-menu are as shown in the table below.

Sub-menu		CENTER SP	REAR SP	MAIN SP	MAIN LEVEL	LFE/BASS
1	MAIN: SMALL 0dB	LARGE	LARGE	SMALL	0dB	SWFR
2	MAIN: LARGE -10dB	LARGE	LARGE	LARGE	-10dB	BOTH
3	CENTER: NONE	NONE	LARGE	LARGE	0dB	BOTH
4	LFE/BASS: MAIN	SMALL	SMALL	LARGE	0dB	MAIN
5	FRONT MIX: 5CH	LARGE	LARGE	LARGE	0dB	BOTH
6	REAR CENTER: MUTE	LARGE	LARGE	LARGE	0dB	BOTH
7	REAR L/R: MUTE	LARGE	LARGE	LARGE	0dB	BOTH

LARGE: This mode is used with a speaker with high bass reproduction performance (a large unit). Full bandwidth signals are output.

SMALL: This mode is used with a speaker with low bass reproduction performance (a small unit). The signals of 90Hz or less are mixed into the channel specified by LFE/BASS.

NONE: This mode is used with no center speaker. The center content is reduced by 3dB and distributed to MAIN L/R.

Reference data (PRE OUT)

INPUT: DVD ANALOG (Both ch)

VOLUME: -10 dB

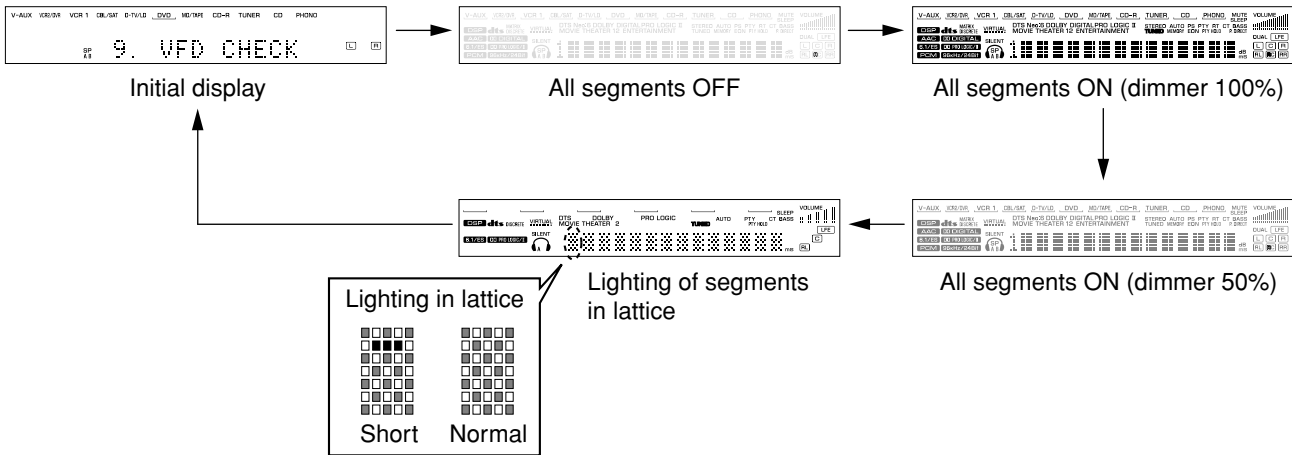
Sub-menu		Condition	MAIN L/R	CENTER	REAR C	SWFR	RL/RR
1	MAIN: SMALL 0dB	1kHz/90Hz, -20 dBV	-14.0/-17.0 dBV	-14.0 dBV	-14.0 dBV	-5.2 dBV	-14.0 dBV
2	MAIN: LARGE -10dB	1kHz, -20 dBV	-24.0 dBV	-14.0 dBV	-14.0 dBV	-5.2 dBV	-14.0 dBV
3	CENTER: NONE	1kHz, -20 dBV	-17.5 dBV	-∞	-14.0 dBV	-5.2 dBV	-14.0 dBV
4	LFE/BASS: MAIN	50Hz, -20 dBV	-12.5 dBV	-17.0 dBV (90Hz)	-14.0 dBV	-∞	-17.0 dBV (90Hz)
5	FRONT MIX: 5CH	1kHz, -20 dBV	-20.0 dBV	-14.0 dBV	-14.0 dBV	-5.2 dBV	-14.0 dBV
6	REAR CENTER: MUTE	1kHz, -20 dBV	-14.0 dBV	-14.0 dBV	-∞	-5.2 dBV	-14.0 dBV
7	REAR L/R: MUTE	1kHz, -20 dBV	-14.0 dBV	-14.0 dBV	-14.0 dBV	-5.2 dBV	-∞

9. DISPLAY CHECK

This program is used to check the FL display section. The display condition varies as shown below according to the sub-menu operation. The signals are processed using EFFECT OFF (The L/R signal is output using ANALOG MAIN BYPASS.)

The video signal internal/external synchronization switching is controlled by the microprocessor. When the initial message is displayed and all the FL segments light up, it is switched to the internal synchronization but other than that it is forced to the external synchronization setting.

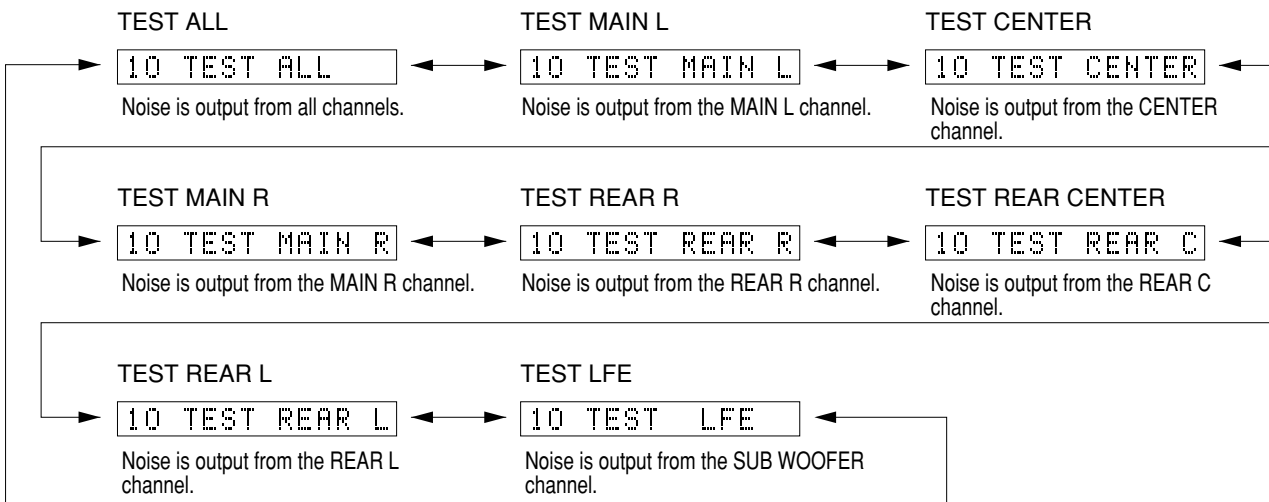
Also, except for the initial display, 128 pictographs for checking the OSD driver are used for the video signal output display.



Segment conditions of the FL driver and the FL tube are checked by turning ON and OFF all segments. Next, the operation of the FL driver is checked by using the dimmer control. Then a short between segments next to each other is checked by turning ON and OFF all segments alternately (in lattice). (In the above example, the segments in the second row from the top are shorted.)

10. MANUAL TEST

The noise generator with a built-in DSP outputs the test noise through the channels specified by the sub-menu. The noise frequency for LFE is 35 to 250 Hz. Other than that, the center frequency is 800Hz.



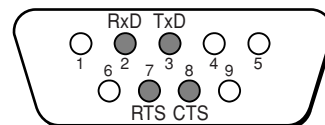
11. RS-232C

This menu is used to check transmission of the data and the flow port of the hardware.

With the power turned off, short between pins No.2 (RxD) and No.3 (TxD) and between pins No.7 (RTS) and No.8 (CTS) of the RS-232C terminal. (Be sure to turn off the power when shorting pins.)

Start DIAG and select the menu.

There are two sub-menu items.



ii TxRxData:XX

TxD/RxD DATA

The sub-menu is used to check transmission of the test data. "OK" appears when the data is transmitted properly and "NG" when it is not.

In this mode, NULL command transmission is continued after the test command is transmitted.

ii HardFlow:XX

HARD FLOW

This sub-menu is used to check operation of the flow port of the hardware. "OK" appears when the check result is satisfactory and "NG" when it is not.

12. FACTORY PRESET

This menu is used to reserve and inhibit initialization of the back-up RAM. The signals are processed using EFFECT OFF. (The L/R signal is output using ANALOG MAIN BYPASS.)

12 PRESET INHI



12 PRESET RSRV

PRESET INHIBIT (Initialization inhibited)

RAM initialization is not executed. Select this sub-menu to protect the values set by the user.

PRESET RESERVED (Initialization reserved)

Initialization of the back-up RAM is reserved. (Actually, initialization is executed the next time that the power is turned on.) Select this sub-menu to reset to the original factory settings or to reset the RAM.

CAUTION: Before setting to the PRESET RESERVED, write down the existing preset memory content of the Tuner in a table as shown below. (This is because setting to the PRESET RESERVED will cause the user memory content to be erased.)

Preset group	P1	P2	P3	P4	P5	P6	P7	P8
A								
B								
C								
D								
E								

• PRESET STATIONS

STATION		FM FACTORY PRESET DATA (MHz)	
PAGE	NO.	U, C	R, T, A
A/C/E	1	87.5	87.5
	2	90.1	90.1
	3	95.1	95.1
	4	98.1	98.1
	5	107.9	108.0
	6	88.1	88.1
	7	106.1	106.1
	8	107.9	108.0

STATION		AM FACTORY PRESET DATA (kHz)	
PAGE	NO.	U, C, R, T	A
B/D	1	630	630
	2	1080	1080
	3	1440	1440
	4	530	531
	5	1710	1611
	6	900	900
	7	1350	1350
	8	1400	1404

13. AD DATA CHECK/FAN TEST

This menu is used to display the A/D conversion value of the main CPU which detects panel keys of the main unit and protection functions in % using the sub-menu. (Reference voltage 5V as 100%) During signal processing, the condition before execution is maintained.

When K0/K1 menu is selected, keys become non-operable due to detection of the values of all keys. However, it is possible to advance to the next sub-menu by turning the VOLUME of the main unit. When using this function, note that turning the VOLUME more than 1 click would cause the volume value to change.

* The figures in the diagram are given as reference only.

DC/PS (protection detection)

DC:007 PS:025

DC: DC detect protection value (Normal value: 1 to 13)

PS: Power supply voltage protection value (Normal value: 21 to 31)

* If DC or PS is out of the normal value range, the protection function works to turn off the power.

THM/FAN OUT (temperature detection/fan drive level)

THM:086 Fan.../...

THM: 500% display of the voltage based on the temperature detected value. Reference voltage : 5V

(Normal value: U, C models 51 to 169

Others models 41 to 151)

Fan: Current fan drive level on the left and the past fan drive level history on the right.

Display	H	M	L
Fan drive level	HIGH	MID	LOW

REC-OUT (Select position)

REC-OUT:186

[Table 1]

Display	REC OUT Select
0+2	CD-R
15±2	CBL/SAT
30±2	PHONO
44±2	V-AUX
60±2	MD/TAPE
76±2	D-TV/LD
92±2	PHONO
122±2	TUNER
137±2	VCR1
153±2	CD
170±2	VCR2/DVR
186±2	SOURCE
202±2	DVD

IMP SW/POWER LIMIT (Impedance/power limiter detection)

IMP:8 PL:009

IMP: 8 or 4 ohm impedance switch setting

PL: Power limiter detection value

The voltage of No.135 pin of IC520 is expressed with 5V/256 used as reference.

K0/K1 (Panel key of main unit)

K0:100 K1:100

A/D of the key fails to function properly when the standard value is deviated by ±4%. In this case, check the constant of partial pressure resistor, solder condition, etc. Refer to table 2.

[Table 2]

Display	K0	K1
00+2	PRESET/TUNING ▷	—
10±2	◁ PRESET/TUNING	INPUT ▷
20±2	PRESET/TUNING	◁ INPUT
30±2	FM/AM	INPUT MODE
40±2	MEMORY	SPEAKERS A
50±2	TUNING MODE	SPEAKERS B
60±2	RDS MODE	EFFECT
70±2	RDS EON	PROGRAM ▷
80±2	PTY MODE	◁ PROGRAM
90±2	PTY START	A/B/C/D/E
100	KEY OFF	KEY OFF

FAN DRIVE TEST

FAN TEST:HIGH HIGH

FAN DRIVE TEST

FAN TEST:MID MID

FAN DRIVE TEST

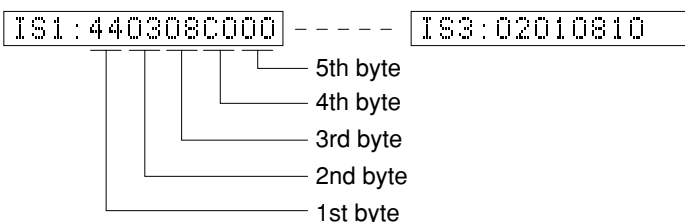
FAN TEST:LOW LOW

14. IF STATUS (Input function status)

Using the sub-menu, the status data is displayed one after another in the hexadecimal notation. During signal processing, the status before execution of this menu is maintained.

* Numeric values in the figure example are for reference.

IS1-3 (Internal status) • Indicates the status information of the microprocessor.



<1st byte> Digital input/output setting value

Upper 4 bits: REC OUT selected/lower 4 bits: INPUT selected

Numeric value	Selection	Numeric value	Selection
0	NONE	4	OPT D (DVD)
1	OPT A (V-AUX)	6	OPT F (D-TV/LD)
2	OPT B (CD)	8	COAX A (CD)
3	OPT C (CD-R)	9	COAX B (CBL/SAT)

<2nd byte> Fs information of reproduction signal

Display	00	01	02	03	04	05	06	0A	0B	0C	0D
Fs (kHz)	Analog	32	44.1	48	64	88.2	96	Unknown NRM	Unknown DBL	Unknown QUAD	Not defined

<3rd byte> Audio code mode information of reproduction signal

Display	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D
Audio Code	MULTI MONO	1+1	1/0	2/0	3/0	2/1	3/1	2/2	3/2	2/3	3/3	OVER 6.1	MULTI PCE	Unknown

<4th byte> Format information of reproduction signal

*1: Analog processing used for digital reproduction is not possible because of a commercial bit or 4-ch audio reason.

Display	Signal format
00	Analog (Unlock)
01	Incorrect digital (*1)
10	PCM Audio
20	Digital Data
21	IEC1937 Data
22	None PCM
23	Unknown
50	dts
51	Red dts
54	dts-ES MATRIX
58	dts-ES DISCRETE
5C	dts-ES (Both flag)
60	AAC
C0	Dolby Digital
C1	D.D. Karaoke
C4	D.D.6.1 (D.D.EX)

<5th byte> Signal processing status information

*2: With digital signals other than 32kHz, 44.1kHz and 48kHz, through processing method is used for reproducible signals.

bit7	MUTE request	bit3	—
bit6	Red dts flashing	bit2	Through & bypass (*2)
bit5	6.1ch. field being processed	bit1	—
bit4	FULL MUTE (ON: 1)	bit0	dts analog mute

CS1-5: Indicates channel status information of the input signal (IEC60958).

CS1:0299000200 - - - - - CS5:00000000

BY1-4: Indicates information of the bit stream included in the DOLBY DIGITAL signal.

BY1:1E40E1301B - - - - - BY4:01FFFFFF

BC1-4: Indicates information of the bit stream included in the dts signal.

BC1:000070FFFF - - - - - BC5:C4

YS1-3: Indicates device status information of YSS938 (IC514). * The numeric value in the figure is an example for reference.

YS1:FED2004F97

YS2:0101418000

YS3:1A41803D

Byte No.	Function
1	YSS MUTE Reg
2	YSS MODE Reg
3	YSS IPORT BIT 7-0
4	YSS IPORT BIT 14-8
5	YSS OPORT

Byte No.	Function
1	IEC 1937 Preamble Pc
2	Data Stream Reg
3	Status Reg
4	YSS ZERO Reg
5	MIREG

Byte No.	Function
1	DIR Status
2	DIR fs
3	DIR fs count
4	YSS ZEROBF

CS: CS49329 Unsolicited Messages (AUTODETECT_RESPONSE)

CS :000001

MTT: Mute Trigger

MTT:0020000007

Byte No.	Function
1	Mute condition
2	Factor of the last mute
3	Error count of YSS938-FSCNT
4	Mute count by YSS938-FSCNT
5	Error factor of down load of CS49329

15. DSP RAM CHECK

This menu is used to self-diagnose whether or not the bus connection for the YSS938 and the external RAM is made properly.

During signal processing, the status before execution of this menu is maintained.

The address bus and the data bus are checked and the connection condition is displayed.

When no error is detected, "NoEr" appears on display.

YSS938 Bus Check

YSS Bus:NoEr

Display	Description
WAIT	Bus is being checked.
NoEr	No error detected.
DATA	Data bus shorted or open.
RSCS	/RAS or /CAS shorted, or open.
ADDR	Address bus shorted or open.

PLD/SRAM BUS CHECK

CS Bus: NoEr

Display	Description
WAIT	Bus is being checked.
NoEr	No error detected.
DATA	Data bus shorted or open. (XX: 00-07)
ADDR	Address bus shorted or open. (XX: 00-0E)

16. CS DL CODE

This menu is used to display the data version, TOC information and sum calculated value of the flash ROM for CS49329.

ROM DATA VERSION: Displays the data version of the Flash ROM for CS49329.

RDV: X

TOC AREA 0-5: Displays the TOC information.

TA0: 0502629A ----- TA5: FFFFFFFF

SUM CHECK AREA 0-5: Displays the sum calculated value.

SA0: 984E984E ----- SA5: FFFFFFFF

17. SOFT SW

This menu is used to switch the function settings on P.C.B. through the software so as to activate the product.

The protection function follows the P.C.B. settings. When connected to AC or in the maker preset state, the unit is initialized to the P.C. B. setting. Display of each function after initialization varies depending on settings on P.C.B. The operation mode can be changed by selecting the sub-menu and then using the EFFECT key. With SOF selected for the SW mode, the settings become effective.

SW MODE: PCB or SOFT can be selected.

17. SW : PCB

MODEL SETTING: V1200, V2200, V3200 or AX3200 can be selected.

17. MODEL: V3200

TUNER DESTINATION: J, UC, ATKG or R can be selected.

17. DEST : UC

TUNER EXIST: NOT or EXIST can be selected.

17. TUNER: EXIST

RDS EXIST: NOT or EXIST can be selected.

17. RDS : NOT

ZONE 2 EXIST: NOT or EXIST can be selected.

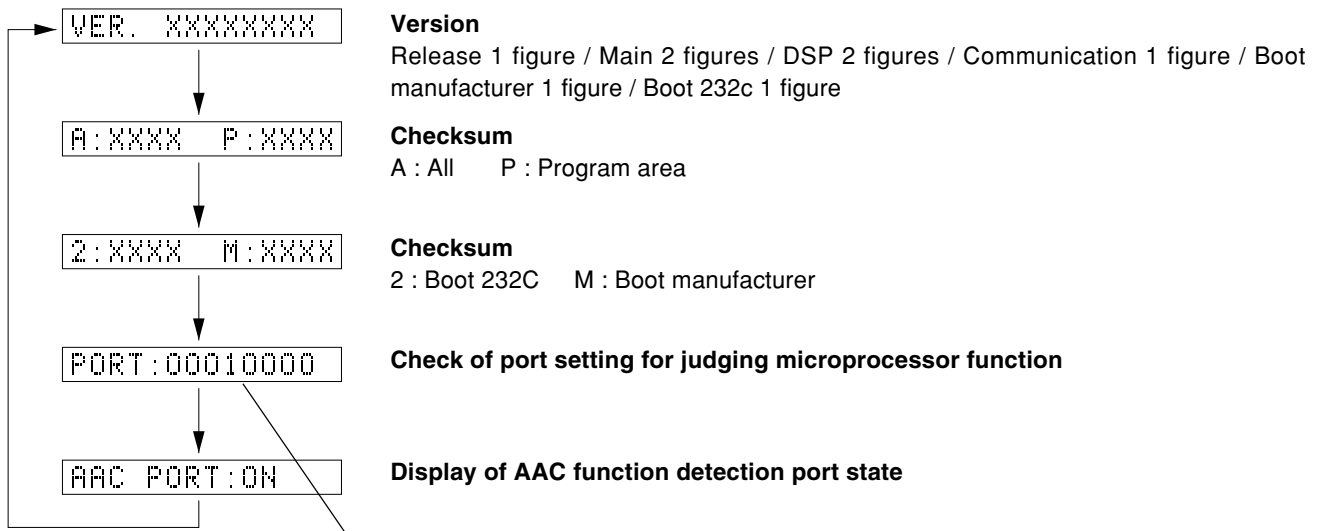
17. ZONE2: NOT

VIDEO FORMAT: NTSC or PAL can be selected.

17. VIDEO: NTSC

18. MICROPROCESSOR INFORMATION

The version, checksum and the port specified by the microprocessor are displayed. The signal is processed using EFFECT OFF. The checksum is obtained by adding the data at every 16 bits for each program area and expressing the result as a 4-figure hexadecimal data.



Version
 Release 1 figure / Main 2 figures / DSP 2 figures / Communication 1 figure / Boot manufacturer 1 figure / Boot 232c 1 figure

Checksum
 A : All P : Program area

Checksum
 2 : Boot 232C M : Boot manufacturer

Check of port setting for judging microprocessor function

Display of AAC function detection port state

“PORT:0 0 0 0 0 0 0”
 bit 7 6 5 4 3 2 1 0

- Model type 0 (*1)
- Model type 1 (*1)
- Tuner mode 0 (*2)
- Tuner mode 1 (*2)
- Tuner with (1) / without (0)
- RDS with (1) / without (0)
- ZONE2 with (1) / without (0)
- VIDEO format: PAL (1) / NTSC (0)

*1 (Model type)

Type 0	Type 1	Model type
0	0	V1200
1	0	V2200
0	1	V3200
1	1	AX3200

*2 (Tuner mode)

Tuner mode 0	Tuner mode 1	Tuner frequency
0	0	AM: 531-1611kHz/9kHz FM: 76.0-90.0MHz/100kHz
0	1	AM: 531-1611kHz/9kHz FM: 87.5-108.0MHz/50kHz
1	0	AM: 530-1710kHz/10kHz FM: 87.5-107.9MHz/200kHz
1	1	R destination, Port6: LOW AM: 530-1710kHz/10kHz FM: 87.5-108.0MHz/100kHz HIGH AM: 531-1611kHz/9kHz FM: 87.5-108.0MHz/50kHz

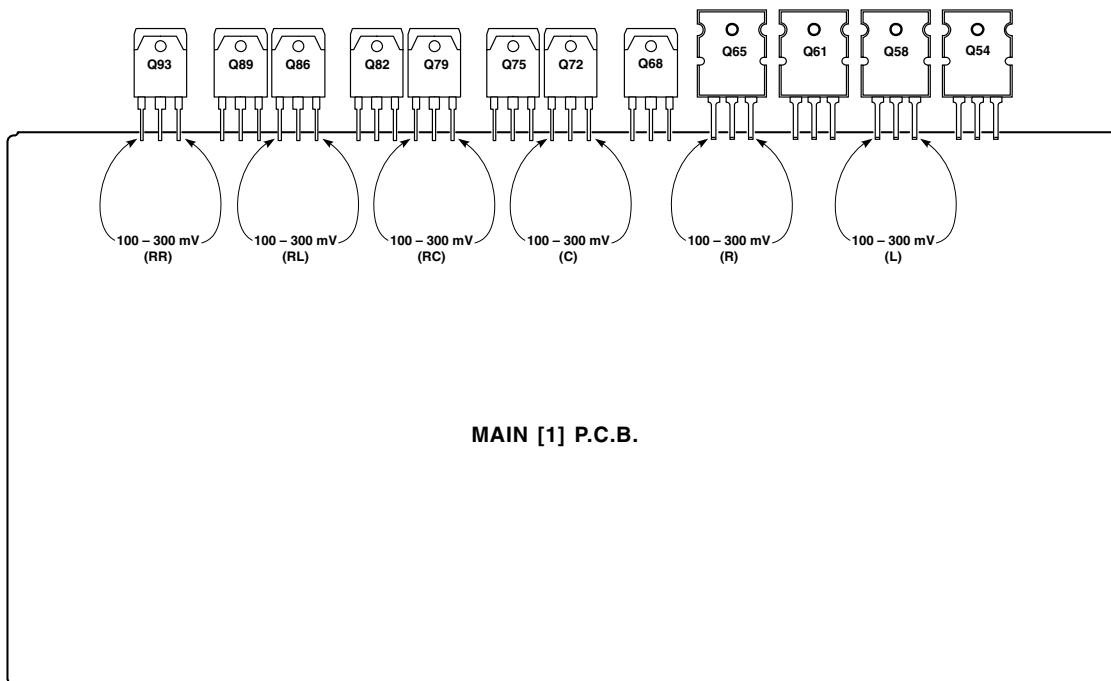
■ AMP CHECK

● Confirmation of Idling Current

- 1) No signal applied.
- 2) Non-loaded condition.
- 3) Aging is 10 minutes

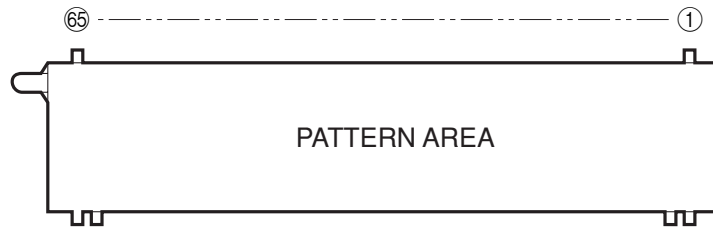
Item	Test Point	Rating (DC)
MAIN L	Q58 Base – Emitter (MAIN [1] P.C.B.)	100mV~300mV
MAIN R	Q65 Base – Emitter (MAIN [1] P.C.B.)	
CENTER	Q72 Base – Emitter (MAIN [1] P.C.B.)	
REAR CT	Q79 Base – Emitter (MAIN [1] P.C.B.)	
REAR L	Q86 Base – Emitter (MAIN [1] P.C.B.)	
REAR R	Q93 Base – Emitter (MAIN [1] P.C.B.)	

● Test Point



■ DISPLAY DATA

● V901 : 16-BT-91GK (V7683200)



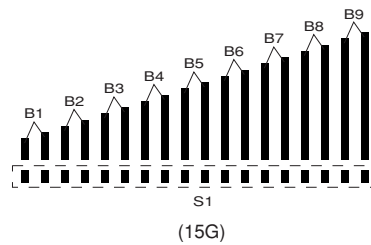
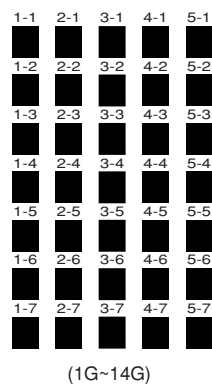
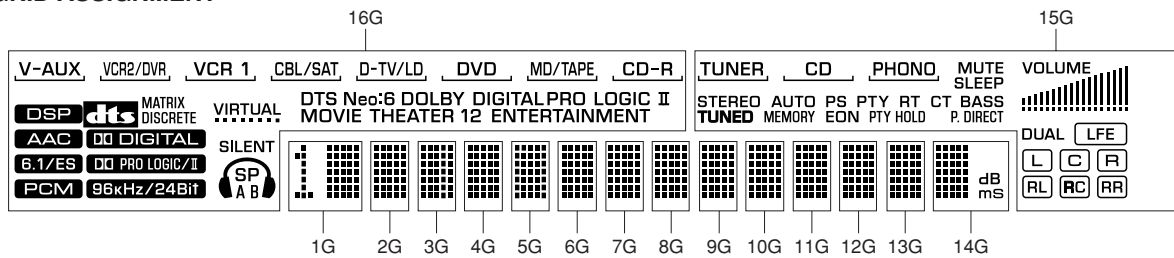
● PIN CONNECTION

Pin No.	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
Connection	F2	F2	NP	NP	P37	P36	P35	P34	P33	P32	P31	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9


Pin No.	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Connection	P8	P7	P6	P5	P4	P3	P2	P1	NC	NC	NC	NC	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F1	F1

Note : 1) F1, F2 Filament 2) NP No pin 3) NC No connection (NC pin should be electrically open on the PC board.)
 4) DL Datum Line 5) 1G ~ 16G Grid 6) Field of vision is a minimum of 29° from the lower side.

● GRID ASSIGNMENT



● ANODE CONNECTION

	16G	15G	14G	13G~2G	1G
P1	S2	S2	1-1	1-1	1-1
P2	<u>V-AUX</u>	<u>TUNER</u>	2-1	2-1	2-1
P3	<u>VCR2/DVR</u>	<u>CD</u>	3-1	3-1	3-1
P4	<u>VCR 1</u>	<u>PHONO</u>	4-1	4-1	4-1
P5	<u>CBL/SAT</u>	STEREO	5-1	5-1	5-1
P6	<u>D-TV/LD</u>	TUNED	1-2	1-2	1-2
P7	<u>DVD</u>	MEMORY	2-2	2-2	2-2
P8	<u>MD/TAPE</u>	AUTO	3-2	3-2	3-2
P9	<u>CD-R</u>	PS	4-2	4-2	4-2
P10	DTS	PTY	5-2	5-2	5-2
P11	Neo:6	RT	1-3	1-3	1-3
P12	DOLBY	CT	2-3	2-3	2-3
P13	DIGITAL	EON	3-3	3-3	3-3
P14	PRO LOGIC	PTY HOLD	4-3	4-3	4-3
P15	II	MUTE	5-3	5-3	5-3
P16	MOVIE THEATER	BASS	1-4	1-4	1-4
P17	1	P. DIRECT	2-4	2-4	2-4
P18	2	VOLUME	3-4	3-4	3-4
P19	ENTERTAINMENT	S1	4-4	4-4	4-4
P20	DSP	B1	5-4	5-4	5-4
P21	AAC	B2	1-5	1-5	1-5
P22	6.1/ES	B3	2-5	2-5	2-5
P23	PCM	B4	3-5	3-5	3-5
P24	dtc	B5	4-5	4-5	4-5
P25	MATRIX	B6	5-5	5-5	5-5
P26	DISCRETE	B7	1-6	1-6	1-6
P27	DD DIGITAL	B8	2-6	2-6	2-6
P28	DD PRO LOGIC/II	B9	3-6	3-6	3-6
P29	96kHz/24Bit	DUAL	4-6	4-6	4-6
P30	VIRTUAL	LFE	5-6	5-6	5-6
P31	SILENT	L	1-7	1-7	1-7
P32		C	2-7	2-7	2-7
P33	SP	R	3-7	3-7	3-7
P34	A	RL	4-7	4-7	4-7
P35	B	RC	5-7	5-7	5-7
P36	–	RR	dB	–	T1
P37	–	SLEEP	mS	–	–

IC514 : YSS938-F

Pin Description

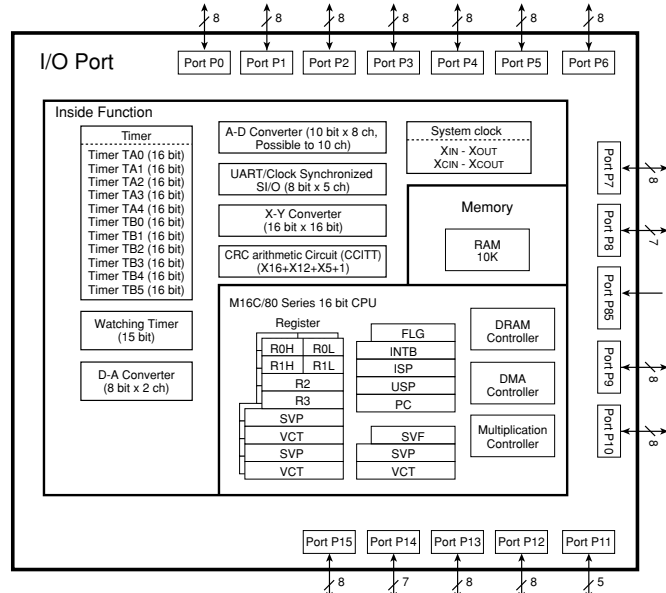
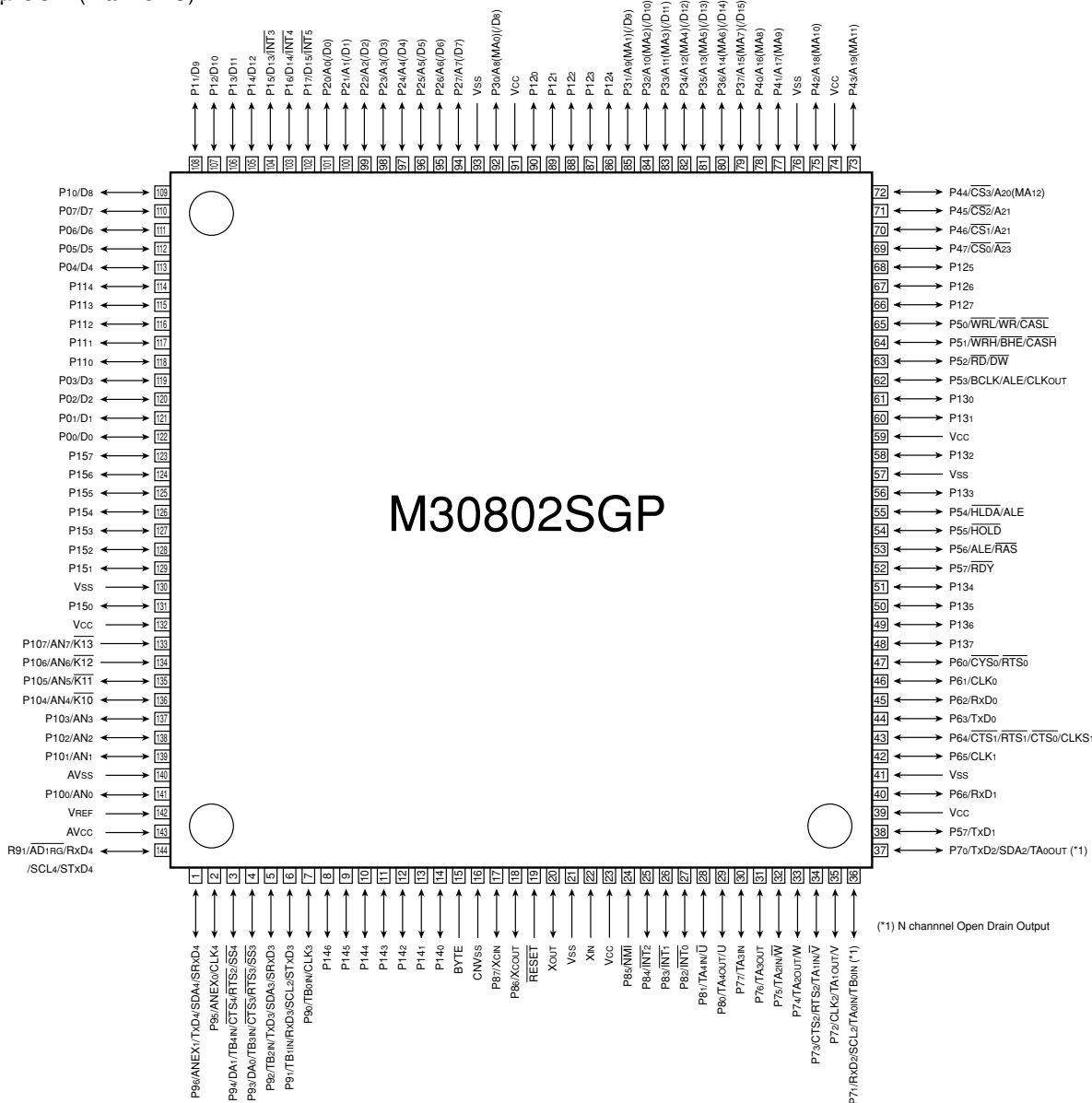
No.	Name	I/O	Function
1	XO	O	Crystal oscillator connecting terminal
2	XI	I	Crystal oscillator connecting terminal (24.576MHz)
3	SEL11	I+	Built-in selector input 1 (AXD)
4	SEL10	I+	Built-in selector input 0 (GND)
5	SELOA	O+	Built-in selector output A (ISEL)
6	SELOB	O+	Built-in selector output B (RSEL)
7	TESTMS	I+	Test terminal (unconnected)
8	TESTXEN	I+	Test terminal (unconnected)
9	IPORT0	I+	General purpose input terminal (CXDTA)
10	IPORT1	I+	General purpose input terminal (CXDTB)
11	IPORT2	I+	General purpose input terminal
12	IPORT3	I+	General purpose input terminal
13	IPORT4	I+	General purpose input terminal
14	DDIN0	Is	DIR: Digital audio interface data input terminal 0 (ISEL)
15	DDIN1	Is	DIR: Digital audio interface data input terminal 1/General purpose input terminal (Pull down)
16	DDIN2	Is	DIR: Digital audio interface data input terminal 2/General purpose input terminal (Pull down)
17	DDIN3	Is	DIR: Digital audio interface data input terminal 3/General purpose input terminal (Pull down)
18	VSS		Ground terminal
19	CPO	A	PLL filter connecting terminal
20	AVDD		+3.3V power terminal (for DIR)
21	DIRPCO	A	DIR: PLL filter connecting terminal
22	DIRPRO	A	DIR: PLL filter connecting terminal
23	AVSS		Ground terminal (for DIR)
24	TESTBRK	I+	Test terminal (unconnected)
25	TESTR1	I+	PLL initialization signal input terminal for DSP (/ICD)
26	TESTR2	I+	Test terminal (unconnected)
27	VDD1		+3.3V power terminal (for terminal section)
28	SDWCKI0	I+	Word clock input terminal for SDIA, SDOA, SDIB, SDOB interface (Unconnected)
29	SDBCKI0	I+	Bit clock input terminal for SDIA, SDOA, SDIB, SDOB interface (Unconnected)
30	/SDBCK0	O	DIRBCK or SDBCKI0 invert clock output terminal (Unconnected)
31	IPORT8	I+	IPINT general purpose input terminal
32	IPORT9	I+	IPINT general purpose input terminal
33	IPORT10	I+	IPINT general purpose input terminal (NONPCM)
34	IPORT11	I+	IPINT general purpose input terminal (NONPCM)
35	SDIA	I	AC-3/DTS bit stream (or PCM) data input terminal to Main DSP (SDIA)
36	SDOA2	O	PCM output terminal from Main DSP (C/LFE output) (Unconnected)
37	SDOA1	O	PCM output terminal from Main DSP (LS/RS output) (Unconnected)
38	SDOA0	O	PCM output terminal from Main DSP (L/R output)
39	SDIB3	I+	PCM input terminal 3 to Sub DSP
40	SDIB2	I+	PCM input terminal 2 to Sub DSP
41	SDIB1	I+	PCM input terminal 1 to Sub DSP
42	SDIB0	I+	PCM input terminal 0 to Sub DSP
43	VSS		Ground terminal
44	VDD2		+2.5V power terminal (for internal circuit)
45	IPORT12	I+	IPINT general purpose input terminal (MUTE)
46	IPORT13	I+	IPINT general purpose input terminal (DIRINT)
47	IPORT14	I+	IPINT general purpose input terminal (Unconnected)
48	DIRSDO	O	AC-3/DTS bit stream (or PCM) data output terminal from DIR
49	DIRWCK	O	DIR: Serial data word clock (fs) output terminal (WCK)
50	DIRBCK	O	DIR: Serial data bit clock (64fs) output terminal (BCK)
51	DIRMCK	O	DIR: Serial data master clock (256fs or 128fs) output terminal (MCK)
52	ERR/BS	O	DIR: Data error detect output/block start output terminal (Unconnected)
53	SYNC/U	O	DIR: Serial data synchronous timing output/user data output terminal (Unconnected)
54	FS128/C	O	DIR: Serial data master clock 128fs output/channel status output terminal (Unconnected)
55	DBL/V	O	DIR: Double rate clock output/validity flag output terminal (DBL)

No.	Name	I/O	Function
56	SDWCK11	I+	Word clock input terminal for SDIB, SDOB interface (Unconnected)
57	SDBCK11	I+	Bit clock input terminal for SDIB, SDOB interface (Unconnected)
58	VSS		Ground terminal
59	SDOB3	O	PCM output terminal from Sub DSP
60	SDOB2	O	PCM output terminal from Sub DSP
61	SDOB1	O	PCM output terminal from Sub DSP
62	SDOB0	O	PCM output terminal from Sub DSP
63	VDD1		+3.3V power terminal (for terminal section)
64	ZEROBF3R	O+	SDOB3 Rch zero flag output terminal (ZF3R)
65	ZEROBF3L	O+	SDOB3 Lch zero flag output terminal (ZF3L)
66	ZEROBF2R	O+	SDOB2 Rch zero flag output terminal (ZF2R)
67	ZEROBF2L	O+	SDOB2 Lch zero flag output terminal (ZF2L)
68	OPORT0	O	General purpose output terminal (/RINH1)
69	OPORT1	O	General purpose output terminal (/RINH2)
70	OPORT2	O	General purpose output terminal (/ICCDC)
71	OPORT3	O	General purpose output terminal (DFS)
72	OPORT4	O	General purpose output terminal (ZSEL0)
73	OPORT5	O	General purpose output terminal (ZSEL1)
74	OPORT6	O	General purpose output terminal (/ICCS)
75	OPORT7	O	General purpose output terminal
76	VSS		Ground terminal
77	VDD2		+2.5V power terminal (for internal circuit)
78	RAMD0	I+/O	Sub DSP: External memory data terminal 0
79	RAMD1	I+/O	Sub DSP: External memory data terminal 1
80	RAMD2	I+/O	Sub DSP: External memory data terminal 2
81	RAMD3	I+/O	Sub DSP: External memory data terminal 3
82	ZEROBF1R	O+	SDOB1 Rch zero flag output terminal (ZF1R)
83	ZEROBF1L	O+	SDOB1 Lch zero flag output terminal (ZF1L)
84	ZEROBF0R	O+	SDOB0 Rch zero flag output terminal (ZF0R)
85	ZEROBF0L	O+	SDOB0 Lch zero flag output terminal (ZF0L)
86	RAMD4	I+/O	Sub DSP: External memory data terminal 4
87	RAMD5	I+/O	Sub DSP: External memory data terminal 5
88	RAMD6	I+/O	Sub DSP: External memory data terminal 6
89	RAMD7	I+/O	Sub DSP: External memory data terminal 7
90	VSS		Ground terminal
91	VDD1		+3.3V power terminal (for terminal section)
92	RAMD8	I+/O	Sub DSP: External memory data terminal 8
93	RAMD9	I+/O	Sub DSP: External memory data terminal 9
94	RAMD10	I+/O	Sub DSP: External memory data terminal 10
95	RAMD11	I+/O	Sub DSP: External memory data terminal 11
96	RAMD12	I+/O	Sub DSP: External memory data terminal 12
97	RAMD13	I+/O	Sub DSP: External memory data terminal 13
98	RAMD14	I+/O	Sub DSP: External memory data terminal 14
99	RAMD15	I+/O	Sub DSP: External memory data terminal 15
100	CASN	O	Sub DSP: Column address strobe output terminal for external DRAM
101	RAMWEN	O	Sub DSP: Write enable terminal for external memory
102	RAMOEN	O	Sub DSP: Output enable terminal for external memory
103	RASN	O	Sub DSP: Low address strobe output terminal for external DRAM
104	VSS		Ground terminal
105	VDD1		+3.3V power terminal (for terminal section)
106	RAMA8	O	Sub DSP: External memory address terminal 8
107	RAMA7	O	Sub DSP: External memory address terminal 7
108	RAMA0	O	Sub DSP: External memory address terminal 0
109	RAMA6	O	Sub DSP: External memory address terminal 6
110	RAMA1	O	Sub DSP: External memory address terminal 1

No.	Name	I/O	Function
111	RAMA5	O	Sub DSP: External memory address terminal 5
112	RAMA2	O	Sub DSP: External memory address terminal 2
113	SELI13	I+	Built-in selector input 13 (Unconnected)
114	SELI12	I+	Built-in selector input 12
115	SELI11	I+	Built-in selector input 11 (Unconnected)
116	SELI10	I+	Built-in selector input 10 (Unconnected)
117	SELI9	I+	Built-in selector input 9 (CXB)
118	RAMA4	O	Sub DSP: External memory address terminal 4
119	RAMA3	O	Sub DSP: External memory address terminal 3
120	RAMA9	O	Sub DSP: External memory address terminal 9 (Unconnected)
121	RAMA10	O	Sub DSP: External memory address terminal 10 (Unconnected)
122	RAMA11	O	Sub DSP: External memory address terminal 11 (Unconnected)
123	VSS		Ground terminal
124	VDD2		+2.5V power terminal (for internal circuit)
125	SELI8	I+	Built-in selector input 8 (CXA)
126	SELI7	I+	Built-in selector input 7 (GND)
127	SELI6	I+	Built-in selector input 6 (OPTF)
128	SELI5	I+	Built-in selector input 5 (Unconnected)
129	RAMA12	O	Sub DSP: External memory address terminal 12 (Unconnected)
130	RAMA13	O	Sub DSP: External memory address terminal 13 (Unconnected)
131	RAMA14	O	Sub DSP: External memory address terminal 14 (Unconnected)
132	RAMA15	O	Sub DSP: External memory address terminal 15 (Unconnected)
133	RAMA16	O	Sub DSP: External memory address terminal 16 (Unconnected)
134	RAMA17	O	Sub DSP: External memory address terminal 17 (Unconnected)
135	OVFB/END	O	Sub DSP: Overflow/program end detect terminal (Unconnected)
136	ZEROFLG	O	Main DSP: Zero flag output terminal (Unconnected)
137	VSS		Ground terminal
138	NONPCM	O	Main DSP: Non-PCM data detect terminal
139	DTSDATA	O	Main DSP: DTS data detect terminal (Unconnected)
140	AC3DATA	O	Main DSP: AC3 data detect terminal (Unconnected)
141	MUTE	O	Main DSP: Auto mute detect terminal
142	KARAOKE	O	Main DSP: AC3 KARAOKE data detect terminal (Unconnected)
143	VDD1	+3.3V	power terminal (for terminal section)
144	SURENC	O	Main DSP: AC-3 2/0 mode Dolby surround encode input detect terminal (Unconnected)
145	CRC	O	Main DSP: AC3 CRC error detect terminal (Unconnected)
146	/LOCK	O	DIR: PLL lock detect terminal (Unconnected)
147	DIRINT	O	DIR: Interrupt output terminal
148	/CS	Is	Microprocessor interface chip select input terminal (CSY)
149	SO	Ot	Microprocessor interface data output terminal
150	SI	Is	Microprocessor interface data input terminal (SDM)
151	SCK	Is	Microprocessor interface clock input terminal (SCKY)
152	/IC	Is	Initial clear input terminal (/ICD)
153	IPINT	O+	Interrupt output terminal by IPORT 8-14
154	SELI4	I+	Built-in selector input 4 (OPTD)
155	VSS		Ground terminal
156	SELI3	I+	Built-in selector input 3 (OPTC)
157	SELI2	I+	Built-in selector input 2 (OPTB)
158	TESTXI	I	Test terminal (should be always connected to VSS)
159	TESTXO	O	Test terminal (Unconnected)
160	VDD2	+2.5V	power terminal (for internal circuit)

Is: Schmidt trigger input terminal
I+: Input terminal with pull-up resistor
O: Digital output terminal
Ot: 3-state digital output terminal
A: Analog terminal

IC520 : M30802SGP
16bit μ-COM (Main CPU)



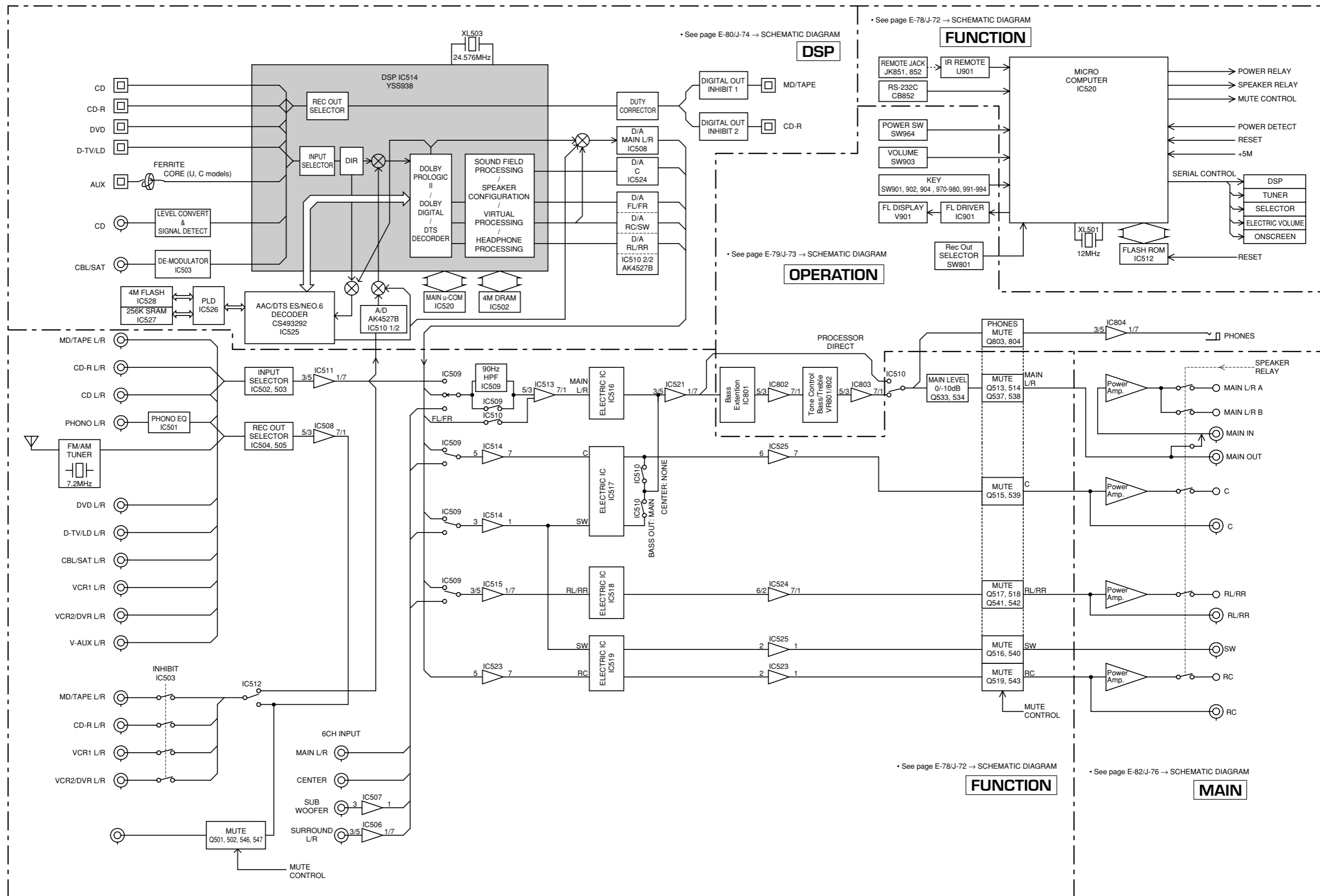
IC520 : M30802SGP

Pin Description

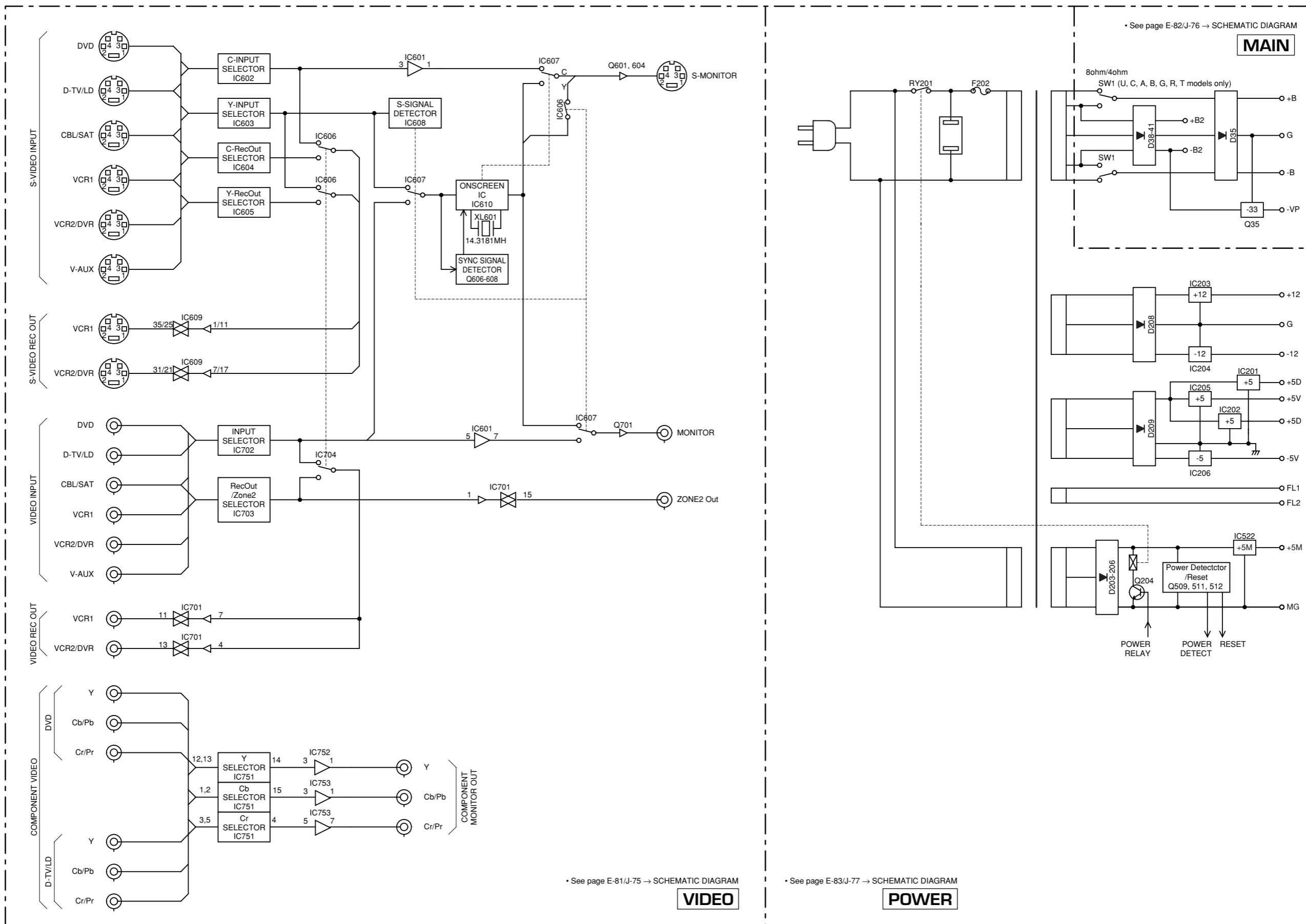
No.	Port No.	Function name	I/O	Detail of function	Power ON	Power OFF	Backup
1	P96	TXDR	SO	232C TX DATA / YDC TX DATA	O	OL	OL
2	P95	RTS	SCK	232C RTS / YDC CLOCK	I/O	OL	OL
3	P94	CTS	I	232C CTS	I	I	OL
4	P93	FAN	DA/O	FAN CONTROL	I	I	OL
5	P92	SDTN	SO	NON AUDIO TX DATA	SO	OL	OL
6	P91	RXRDS	SI	RDS RX DATA / FREQ SW (R VER)	SI	I	OL
7	P90	SCKN	SCK	NON AUDIO SERIAL CLOCK	SCK	OL	OL
8	P146		O		O	OL	OL
9	P145	CEBU	O/I (PU)	BU2092 CE / ZONE2 FUNCTION	I/O	I/OL	OL
10	P144	/FLR	O	FL IC RESET	O	OL	OL
11	P143	CEM0	I/O	FL1 CE / MODEL DETECT 0	I/O	I/OL	OL
12	P142	CEM1	I	MODEL DETECT 1	I	I	OL
13	P141	RDSE	O/I (PU)	RDS CE / RDS FUNCTION	I/O	I/OL	OL
14	P140	CES	O/I (PU)	OSD CE / NTSC / PAL FORMAT	I/O	I/OL	OL
15	BYTE	BYTE	VSS	16 BIT DATA BUS: Vss	Vss	Vss	Vss
16	CNVss	CNVss	VCC		Vcc	Vcc	Vcc
17	P87	BT232C	I (PU)	232C BOOT SIG. / 6CH INPUT KEY	I	I	OL
18	P86	BTYDC	I	YDC BOOT SIGNAL	I	I	OL
19	RESET	RESET	I	RESET	-	-	-
20	XOUT	XOUT	OPEN	CLOCK OUT	-	-	-
21	VSS	VSS	VSS	GROUND	-	-	-
22	XIN	XIN	12MHz	CLOCK IN	-	-	-
23	VCC	VCC	VCC	+5V	-	-	-
24	P85	NMI		Un-use	-	-	-
25	P84	REM1	INT (LoEdge)	REMOTE CONTROL PULSE	I	I	OL
26	P83	PSW	INT (LoEdge)	POWER SW	I	I	OL
27	P82	PDET	INT (LoEdge)	POWER DETECT	I	I	I
28	P81	VSY	Lo Edge	VERTICAL SYNC PULSE	I	I	OL
29	P80	/ICD	O	IC DSP IC	O	OL	OL
30	P77	RXDR	Double Edge	232C RX DATA	I	I	OL
31	P76	DMT	O	DIGITAL FULL MUTE	O	OL	OL
32	P75	INT938	Lo Edge	YSS938 IPINT	I	I	OL
33	P74	DMTR	O	DIGITAL FULL MUTE REAR L/R	O	OL	OL
34	P73	CEP	I/O	PLL IC CE / TUNER STEP 1	I/O	I/OL	OL
35	P72	SCKP	I/O	PLL IC CLOCK / TUNER STEP 0	I/O	I/OL	OL
36	P71	RDTP	ASI	PLL IC RX DATA	I	I	OL
37	P70	SDTP	I/ASO	PLL IC TX DATA (PU) / TUNER	I/O	OL	OL
38	P67	SDM	SO	DSP IC TX DATA	SO	OL	OL
39	VCC	VCC	VCC	+5V			
40	P66	SDD	SI	DSP IC RX DATA	SI	I	OL
41	VSS	VSS	VSS	GND			
42	P65	SCK	SCK	DSP IC CLOCK	SCK	OL	OL
43	P64	/CSY	I/O	YSS938 CE	I/O	OL	OL
44	P63	CTEV	O	EVOL TX DATA	SO	OL	OL
45	P62	CEEV	O	EVOL CE	O	OL	OL
46	P61	CKEV	SCK	EVOL CLOCK	SCK	OL	OL
47	P60	/CSCS	I/O	CS493X CS	I/O	OL	OL
48	P137	/CSPLD	O	DIGITAL EXT. CONTROL IC CE	O	OL	OL
49	P136	VRB	I	VOLUME ROTARY B	I	I	OL
50	P135	VRA	I	VOLUME ROTARY A	I	I	OL
51	P134	PRI	I	I PROTECTION	I	I	I
52	P57						HI
53	P56		OPEN				HI
54	P55		Vcc				HI
55	P54			OPEN			HI
56	P133	/BEC	O	BASS EXTENTION CONTROL	O	OL	OL
57	VSS	VSS	VSS	GND			
58	P132	/Z2MT	O	ZONE 2 MUTE	O	OL	OL
59	VCC	VCC	VCC	+5V			
60	P131	/HPMT	O	HEADPHONE MUTE	O	OL	OL
61	P130	/MATT	O	MAIN -3dB	O	OL	OL
62	P53		OPEN				HI
63	P52			OE			HI
64	P51						HI
65	P50			WE			HI
66	P127	/FMFS	O	FULL MUTE SWL / SWR / SW MONO	O	OL	OL
67	P126	/FMTC	O	FULL MUTE CENTER	O	OL	OL
68	P125	/FMTC	O	FULL MUTE MAIN L / R, RL / RC / RR	O	OL	OL
69	P47			EXT. ROM ADDRESS BUS			KEEP
70	P46		OPEN	EXT. ROM ADDRESS BUS			KEEP
71	P45		OPEN	EXT. ROM ADDRESS BUS			KEEP
72	P44		OPEN	EXT. ROM ADDRESS BUS			KEEP
73	P43		OPEN	EXT. ROM ADDRESS BUS			KEEP
74	VCC	VCC	VCC	+5V			
75	P42		OPEN	EXT. ROM ADDRESS BUS			KEEP

No.	Port No.	Function name	I/O	Detail of function	Power ON	Power OFF	Backup
76	VSS	VSS	VSS	GND			
77	P41	A17		EXT. ROM ADDRESS BUS			KEEP
78	P40	A16		EXT. ROM ADDRESS BUS			KEEP
79	P37	A15		EXT. ROM ADDRESS BUS			KEEP
80	P36	A14		EXT. ROM ADDRESS BUS			KEEP
81	P35	A13		EXT. ROM ADDRESS BUS			KEEP
82	P34	A12		EXT. ROM ADDRESS BUS			KEEP
83	P33	A11		EXT. ROM ADDRESS BUS			KEEP
84	P32	A10		EXT. ROM ADDRESS BUS			KEEP
85	P31	A9		EXT. ROM ADDRESS BUS			KEEP
86	P124	SCKA	SCK	AUDIO IC CLOCK	O	OL	OL
87	P123	SDTA	SO	AUDIO IC TX DATA	O	OL	OL
88	P122	CEL	O	SANYO IC CE	O	OL	OL
89	P121	RIMA	O	POWER LIMITER A	O	OL	OL
90	P120	RIMB	O	POWER LIMITER B	O	OL	OL
91	VCC	VCC	VCC	+5V			
92	P30	A8		EXT. ROM ADDRESS BUS			KEEP
93	VSS	VSS	VSS	GND			
94	P27	A7		EXT. ROM ADDRESS BUS			KEEP
95	P26	A6		EXT. ROM ADDRESS BUS			KEEP
96	P25	A5		EXT. ROM ADDRESS BUS			KEEP
97	P24	A4		EXT. ROM ADDRESS BUS			KEEP
98	P23	A3		EXT. ROM ADDRESS BUS			KEEP
99	P22	A2		EXT. ROM ADDRESS BUS			KEEP
100	P21	A1		EXT. ROM ADDRESS BUS			KEEP
101	P20	A0		EXT. ROM ADDRESS BUS			KEEP
102	P17	D15		EXT. ROM DATA BUS			KEEP
103	P16	D14		EXT. ROM DATA BUS			KEEP
104	P15	D13		EXT. ROM DATA BUS			KEEP
105	P14	D12		EXT. ROM DATA BUS			KEEP
106	P13	D11		EXT. ROM DATA BUS			KEEP
107	P12	D10		EXT. ROM DATA BUS			KEEP
108	P11	D9		EXT. ROM DATA BUS			KEEP
109	P10	D8		EXT. ROM DATA BUS			KEEP
110	P07	D7		EXT. ROM DATA BUS			KEEP
111	P06	D6		EXT. ROM DATA BUS			KEEP
112	P05	D5		EXT. ROM DATA BUS			KEEP
113	P04	D4		EXT. ROM DATA BUS			KEEP
114	P114	/MLV	O	MAIN LEVEL	O	OL	OL
115	P113	PRY	O	POWER RELAY	O	OL	OL
116	P112	SPE	O	SP RELAY EFFECT	O	OL	OL
117	P111	SPB	O	SP RELAY B	O	OL	OL
118	P110	SPA	O	SP RELAY A	O	OL	OL
119	P03	D3		EXT. ROM DATA BUS			KEEP
120	P02	D2		EXT. ROM DATA BUS			KEEP
121	P01	D1		EXT. ROM DATA BUS			KEEP
122	P00	D0		EXT. ROM DATA BUS			KEEP
123	P157	DCTRG	O	DC TRIGGER CONTROL	O	OL	OL
124	P156	CSINT	I(IPU)/O	CS-DSP INT / ABOOT	I/O	OL	OL
125	P155	BSW	I(IPU)	BASS EXT SW	I	I	OL
126	P154	PSW	I(IPU)	PR. DIRECT SW	I	I	OL
127	P153	/HP	I(IPU)	HEADPHONE DETECT	I	I	OL
128	P152	TMT	O	TUNER MUTE	O	OL	OL
129	P151	/TUNED	I(IPU)	TUNING METER	I	I	OL
130	VSS	VSS	VSS	GND			
131	P150	/ST	I(IPU)	TUNER STEREO	I	I	OL
132	VCC	VCC	VCC	+5V			
133	P107	RMV	AD	Un-use (DETECT PL TYPE)	I	I	I
134	P106	REC	AD	REC OUT SELECTOR	I	I	I
135	P105	PREMT	AD	POWER LIMITER DETECT	I	I	I
136	P104	ADKEY1	AD	KEY SW LINE 1	I	I	I
137	P103	ADKEY0	AD	KEY SW LINE 0	I	I	I
138	P102	THM	AD	TEMPERATURE DETECTION	I	I	I
139	P101	PRD	AD	DC PROTECTION	I	I	I
140	AVSS	AVSS	VSS	AD GND	VSS	VSS	VSS
141	P100	PRV	AD	PS PROTECTION	I	I	I
142	VREF	VREF	VCC	AD REFERENCE	VCC	VCC	VCC
143	AVCC	AVCC	VCC	AD V	VCC	VCC	VCC
144	P97	RXDR	SI	232C / YDC RX DATA	I	I	OL

■ BLOCK DIAGRAM (1/2)



■ BLOCK DIAGRAM (2/2)



PRINTED CIRCUIT BOARD (Foil side)

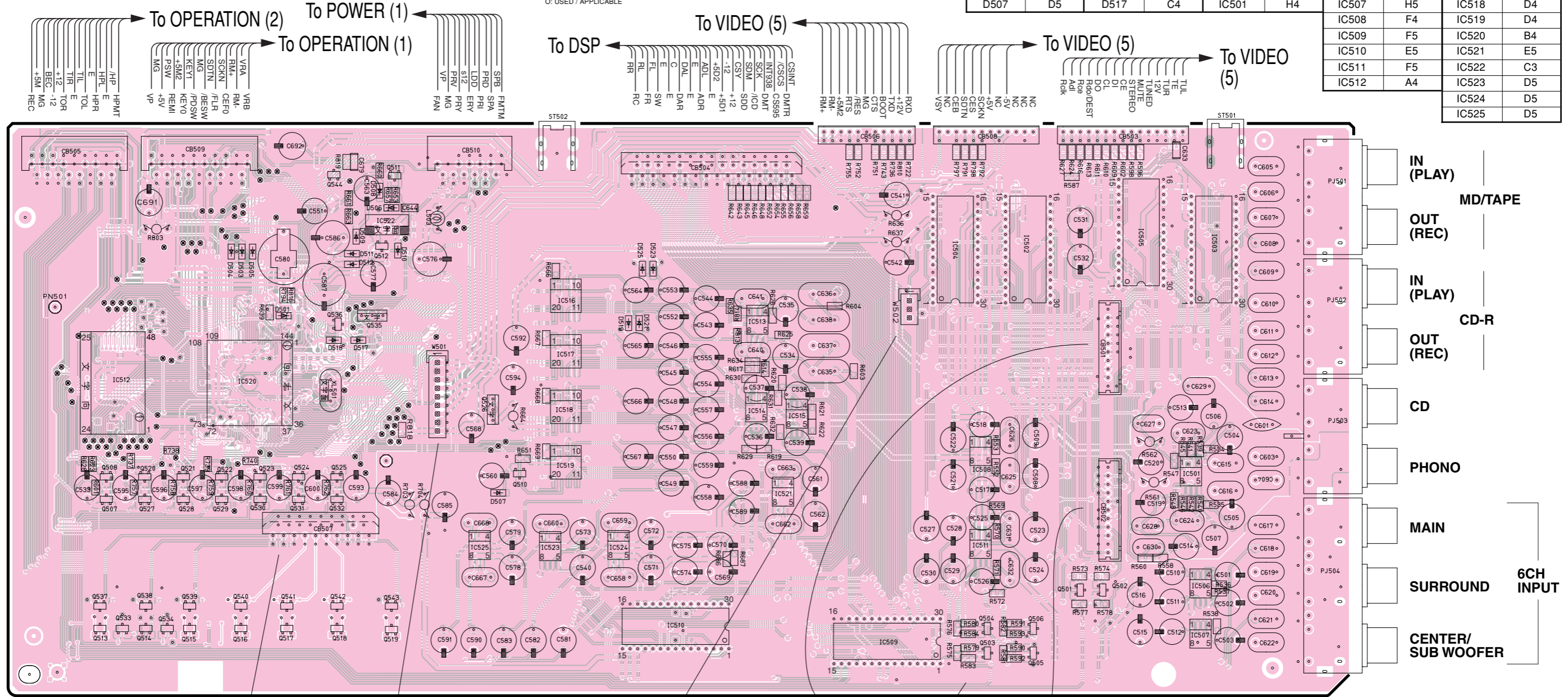
FUNCTION P. C. B. (Lead Type Device)

Circuit No.	J	U, C	R, T	A	BG
C517, 518, 533, 563, 564	X	O	O	O	X
C603, 604	X	X	X	O	O
C666, 671, 676, 678	X	O	X	O	O
D517, 518	X	O	O	O	X
J505, 506	O	X	X	X	O
Q501, 502, 507, 508, 535, 536, 546, 547	X	O	O	O	X
R573, 574, 577, 578, 594, 601, 623, 665, 671, 710, 763, 809, 823-826	X	O	O	O	X
R587, 662	X	X	O	X	X
R672, 806, 818	O	X	X	X	O

X: NOT USED
O: USED / APPLICABLE

Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D501	B4	D508	C3	D518	C4	IC502	G3	IC513	E4
D503	B3	D509	C3	D519	D4	IC503	H3	IC514	E4
D504	B3	D510	C3	D521	D4	IC504	F3	IC515	E4
D505	B3	D511	C3	D523	E3	IC505	G3	IC516	D3
D506	C3	D512	C3	D525	D3	IC506	H5	IC517	D4
D507	D5	D517	C4	IC501	H4	IC507	H5	IC518	D4
						IC508	F4	IC519	D4
						IC509	F5	IC520	B4
						IC510	E5	IC521	E5
						IC511	F5	IC522	C3
						IC512	A4	IC523	D5
								IC524	D5
								IC525	D5



Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
Q501	G5	Q513	A5	Q524	B4	Q535	C4
Q502	G5	Q514	B5	Q525	C4	Q536	C4
Q503	G5	Q515	B5	Q526	D4	Q537	A5
Q504	G5	Q516	B5	Q527	B5	Q538	B5
Q505	G5	Q517	B5	Q528	B5	Q539	B5
Q506	G5	Q518	C5	Q529	B5	Q540	B5
Q507	A5	Q519	C5	Q530	B5	Q541	B5
Q508	A4	Q520	B4	Q531	B5	Q542	C5
Q510	D4	Q521	B4	Q532	C5	Q543	C5
Q511	C3	Q522	B4	Q533	A5	Q544	C3
Q512	C3	Q523	B4	Q534	B5		

PRINTED CIRCUIT BOARD (Foil side)

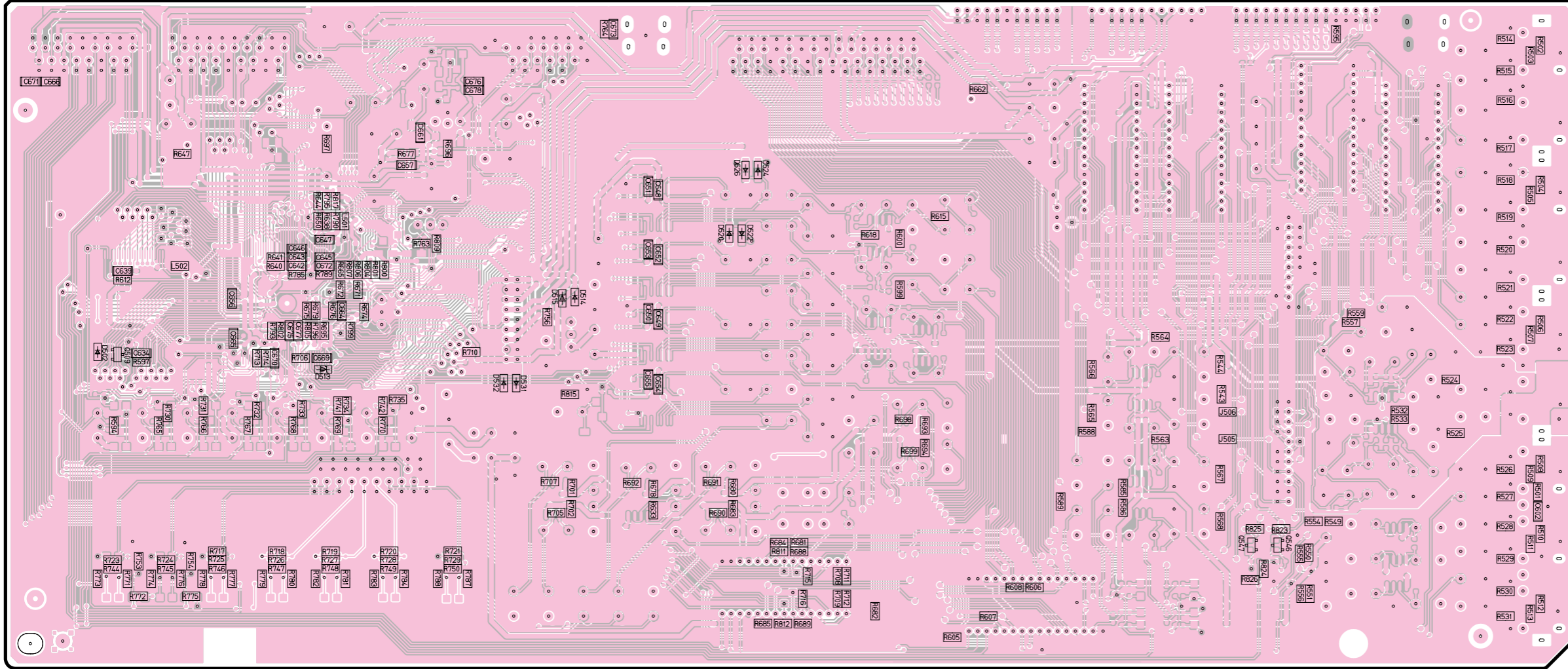
FUNCTION P. C. B. (Surface Mount Device)

Circuit No.	J	U, C	R, T	A	BG
C517, 518, 533, 563, 564	X	O	O	O	X
C603, 604	X	X	X	O	O
C666, 671, 676, 678	X	O	X	O	O
D517, 518	X	O	O	O	X
J505, 506	O	X	X	X	O
Q501, 502, 507, 508, 535, 536, 546, 547	X	O	O	O	X
R573, 574, 577, 578, 594, 601, 623, 665, 671, 710, 763, 809, 823-826	X	O	O	O	X
R587, 662	X	X	O	X	X
R672, 806, 818	O	X	X	X	O

X: NOT USED
O: USED / APPLICABLE

• Semiconductor Location

Ref. No.	Location
D502	A4
D513	B4
D514	D4
D515	D4
D522	E4
D524	E3
D526	E3
D531	C4
D532	C4
Q509	A4
Q546	G5
Q547	G5



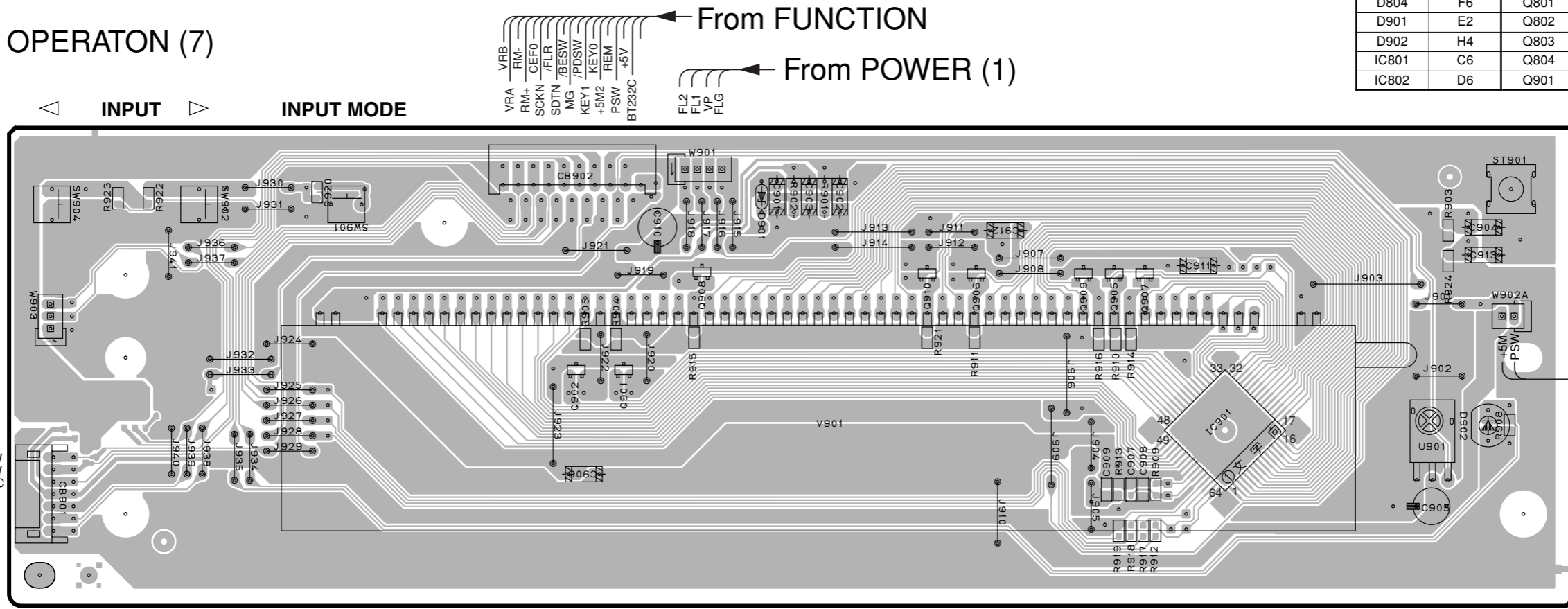
1 ■ PRINTED CIRCUIT BOARD (Foil side)

OPERATION (1) P. C. B. (Lead Type Device)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D801	B6	IC803	E6	Q902	D3
D802	B6	IC804	F6	Q905	G3
D803	F7	IC901	G4	Q906	F3
D804	F6	Q801	B6	Q907	G3
D901	E2	Q802	B6	Q908	E3
D902	H4	Q803	F6	Q909	G3
IC801	C6	Q804	F6	Q910	F3
IC802	D6	Q901	D3		

From OPERATON (7)

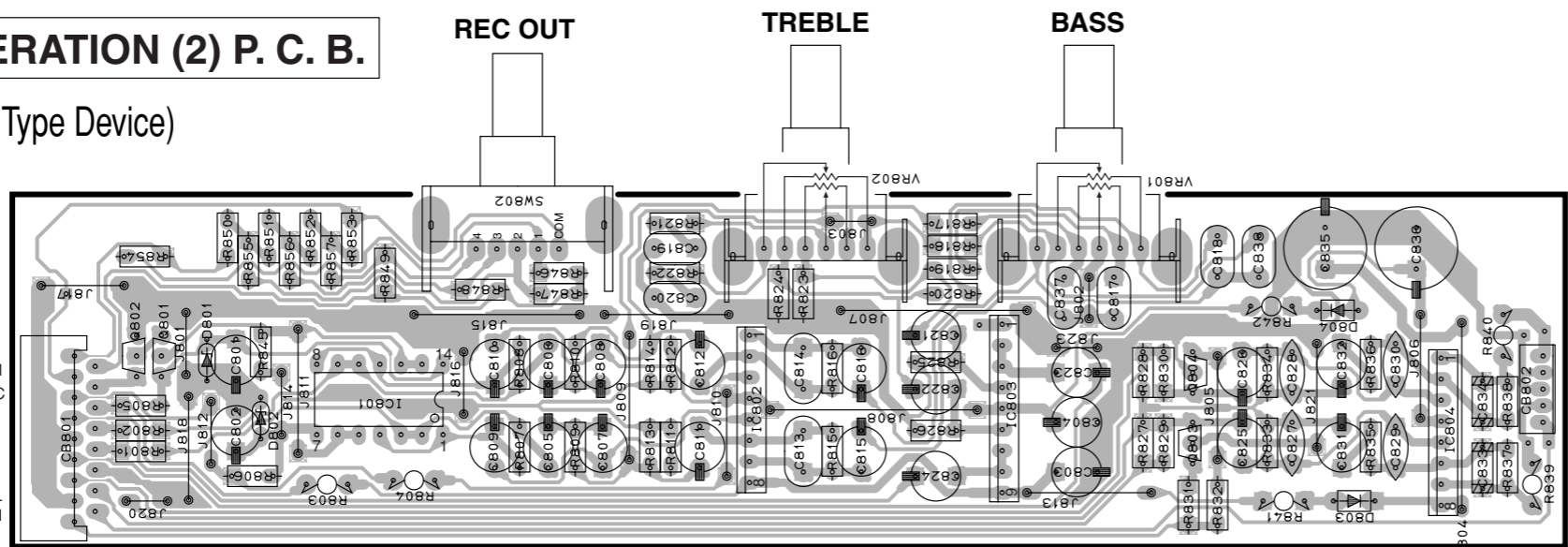


From FUNCTION
 From POWER (1)

To OPERATON (6)

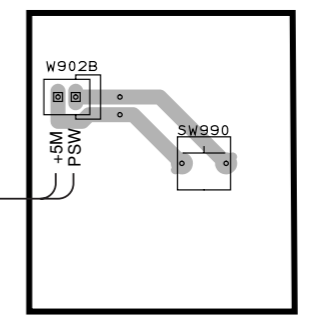
OPERATION (2) P. C. B. (Lead Type Device)

REC OUT TREBLE BASS



OPERATION (3) P. C. B. (Lead Type Device)

(Lead Type Device)



STANDBY/ON

HPR
HPE
HPL
HPI

To OPERATON (8)

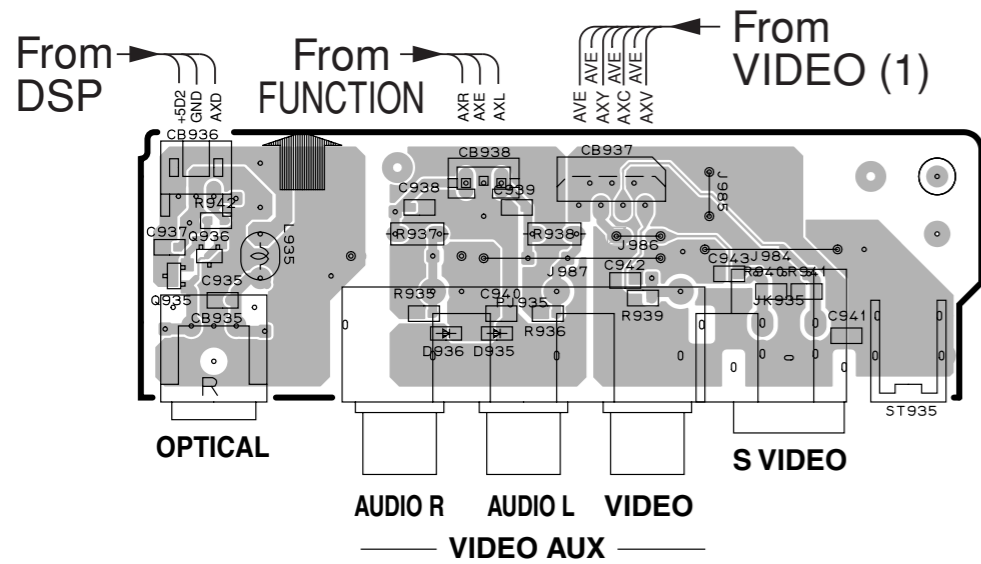
From FUNCTION

Circuit No.	J, B, G	U, C, A, R, T
D902	X	O
R908	X	O

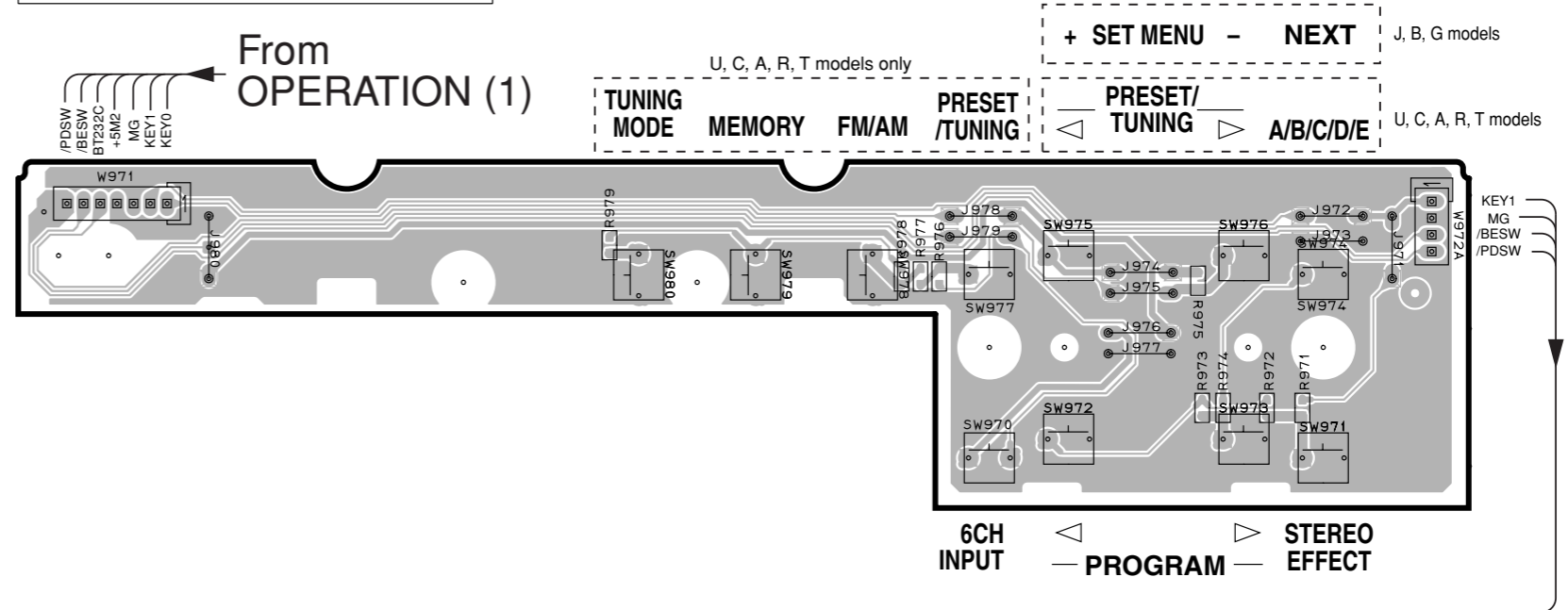
X: NOT USED
O: USED / APPLICABLE

1 ■ PRINTED CIRCUIT BOARD (Foil side)

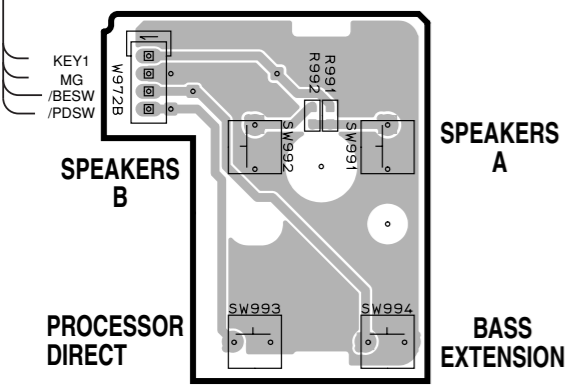
OPERATION (4) P. C. B. (Lead Type Device)



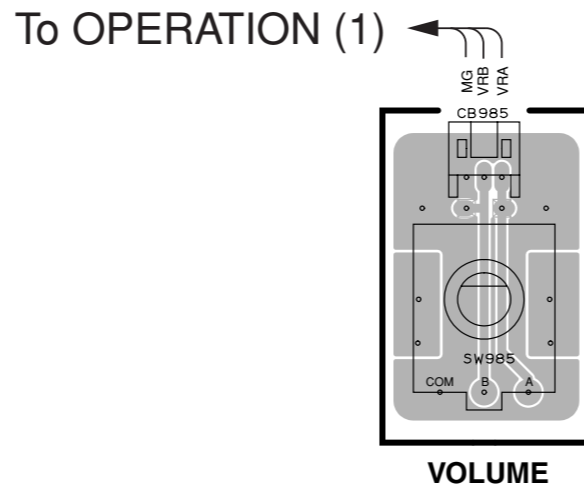
OPERATION (6) P. C. B. (Lead Type Device)



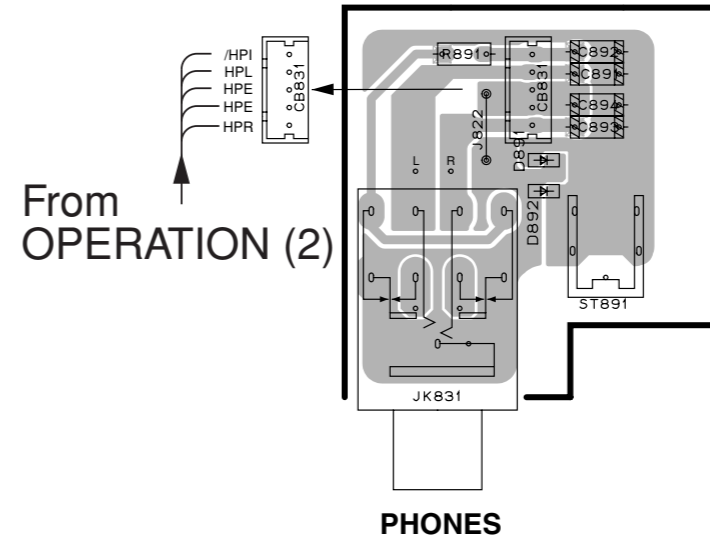
OPERATION (5) P. C. B. (Lead Type Device)



OPERATION (7) P. C. B. (Lead Type Device)



OPERATION (8) P. C. B. (Lead Type Device)



• Semiconductor Location

Ref. No.	Location
D891	H5
D892	H5
D935	B3
D936	B3
Q935	A3
Q936	A3

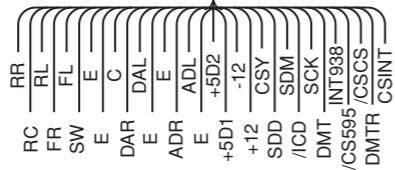
Circuit No.	J, B, G	U, C, A, R, T
R976-979	X	O
SW977-980	X	O

X: NOT USED
O: USED / APPLICABLE

PRINTED CIRCUIT BOARD (Foil side)

DSP P. C. B. (Lead Type Device)

From FUNCTION

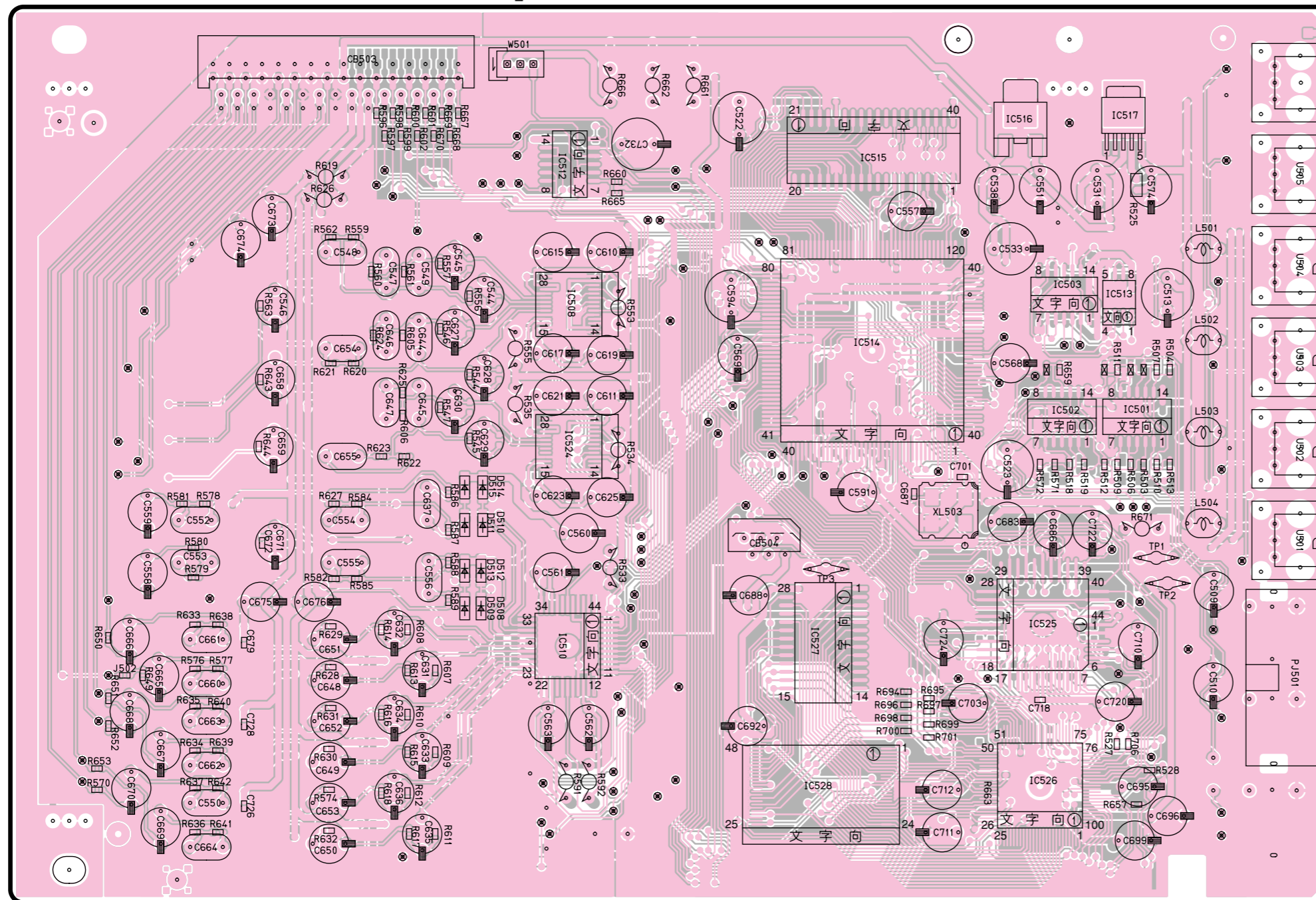


To OPERATION (4)



Semiconductor Location

Ref. No.	Location
D508	C6
D509	C6
D510	C5
D511	C5
D512	C5
D513	C5
D514	C5
D515	C5
IC501	F5
IC502	F5
IC503	F4
IC508	D4
IC510	D6
IC512	D3
IC513	F4
IC514	E4
IC515	E3
IC516	F3
IC517	F3
IC524	D5
IC525	F6
IC526	F7
IC527	E6
IC528	E7



MD/
TAPE
DIGITAL
OUTPUT

CD-R

CD

CD-R

DVD

DIGITAL
INPUT

D-TV
/LD

CD

CBL
/SAT

Circuit No.	J	U, C, R, T, A, B, G
R688	X	O

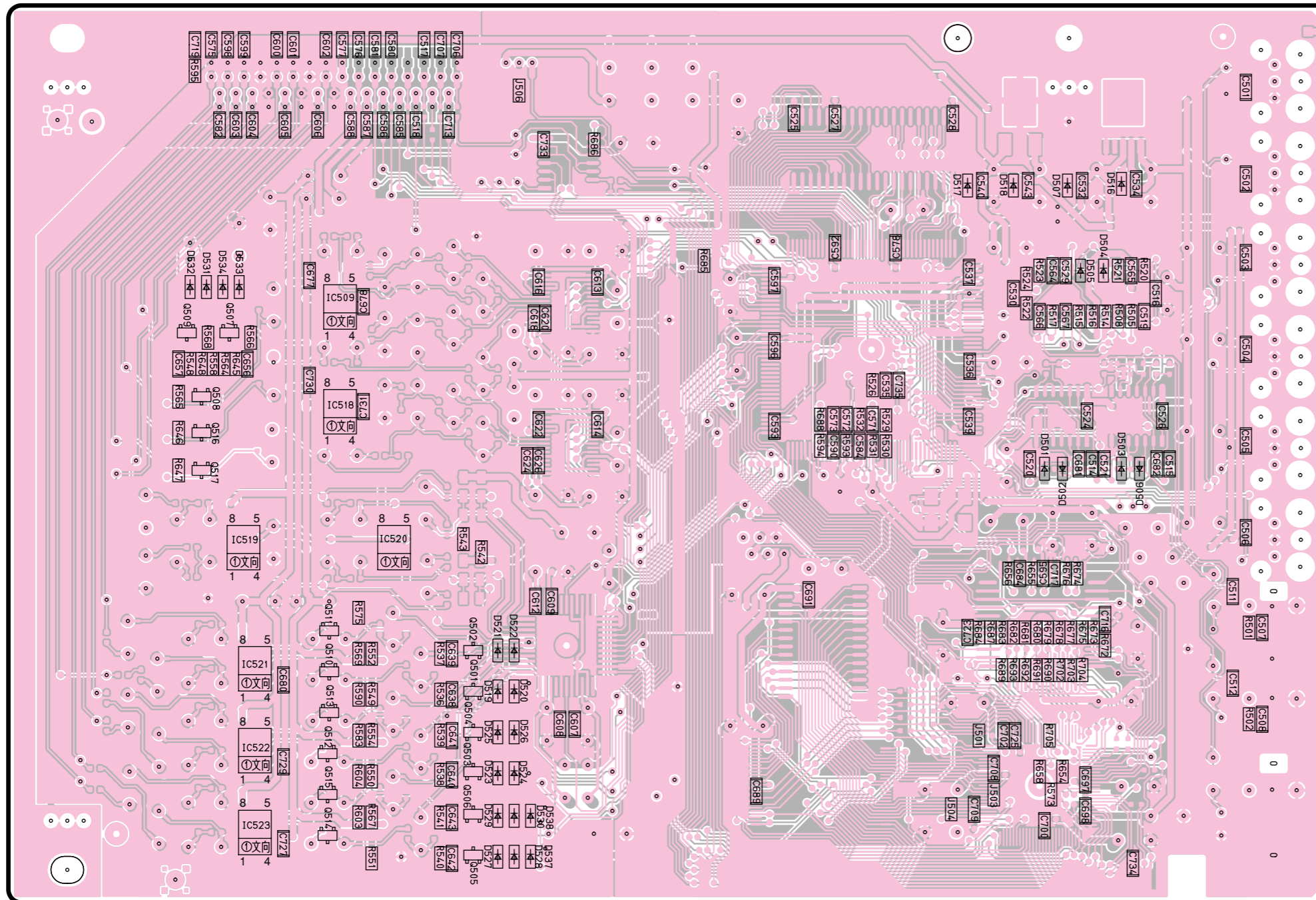
X: NOT USED
O: USED / APPLICABLE

PRINTED CIRCUIT BOARD (Foil side)

• Semiconductor Location

Ref. No.	Location
D501	G5
D502	G5
D503	G5
D504	G4
D505	G4
D506	G5
D507	G4
D516	G4
D517	F4
D518	F4
D519	D6
D520	D6
D521	D6
D522	D6
D523	D6
D524	D6
D525	D6
D527	D7
D528	D7
D529	D7
D530	D7
D531	B4
D532	B4
D533	C4
D534	B4
D537	D7
D538	D7
IC509	C4
IC518	C5
IC519	C5
IC520	C5
IC521	C6
IC522	C6
IC523	C7
Q501	D6
Q502	D6
Q503	D6
Q504	D6
Q505	D7
Q506	D7
Q507	B4
Q508	B5
Q509	B4
Q510	C6
Q511	C6
Q512	C6
Q513	C6
Q514	C7
Q515	C7
Q516	B5
Q517	B5

DSP P. C. B. (Surface Mount Device)



Circuit No.	J	U, C, R, T, A, B, G
R688	X	O

X: NOT USED
O: USED / APPLICABLE

1 ■ PRINTED CIRCUIT BOARD (Foil side)

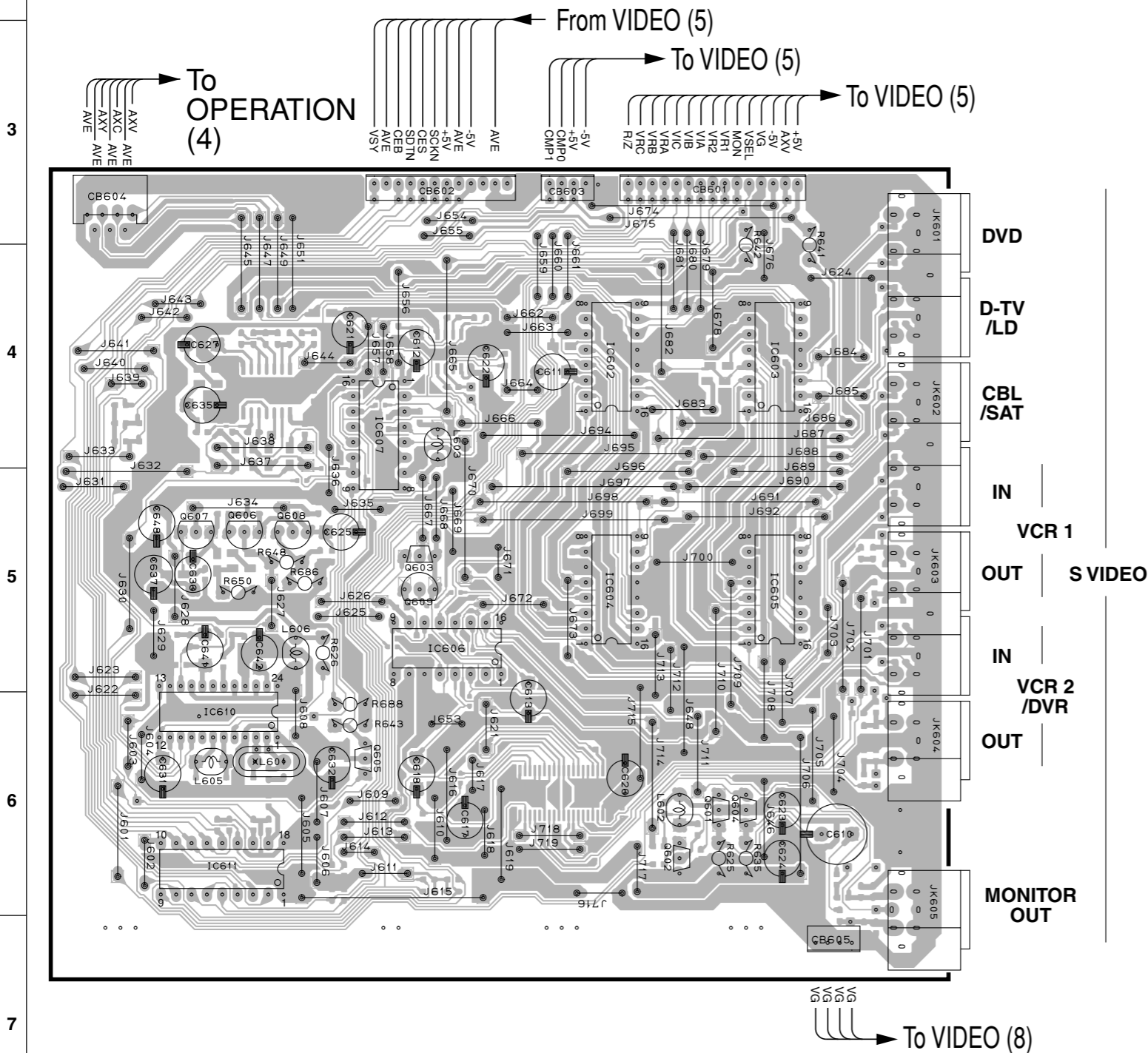
Circuit No.	J	U, C	R, T	A	B, G
C653	O	X	X	X	O
IC606	X	O	O	O	X
J741, 742	O	X	X	X	O
Q609	O	X	X	X	O
R674	X	O	O	O	O
R675, 684	O	X	X	X	O
R681	X	X	X	O	O
R682	O	O	O	X	X
R683	X	O	O	O	X

X: NOT USED
O: USED / APPLICABLE

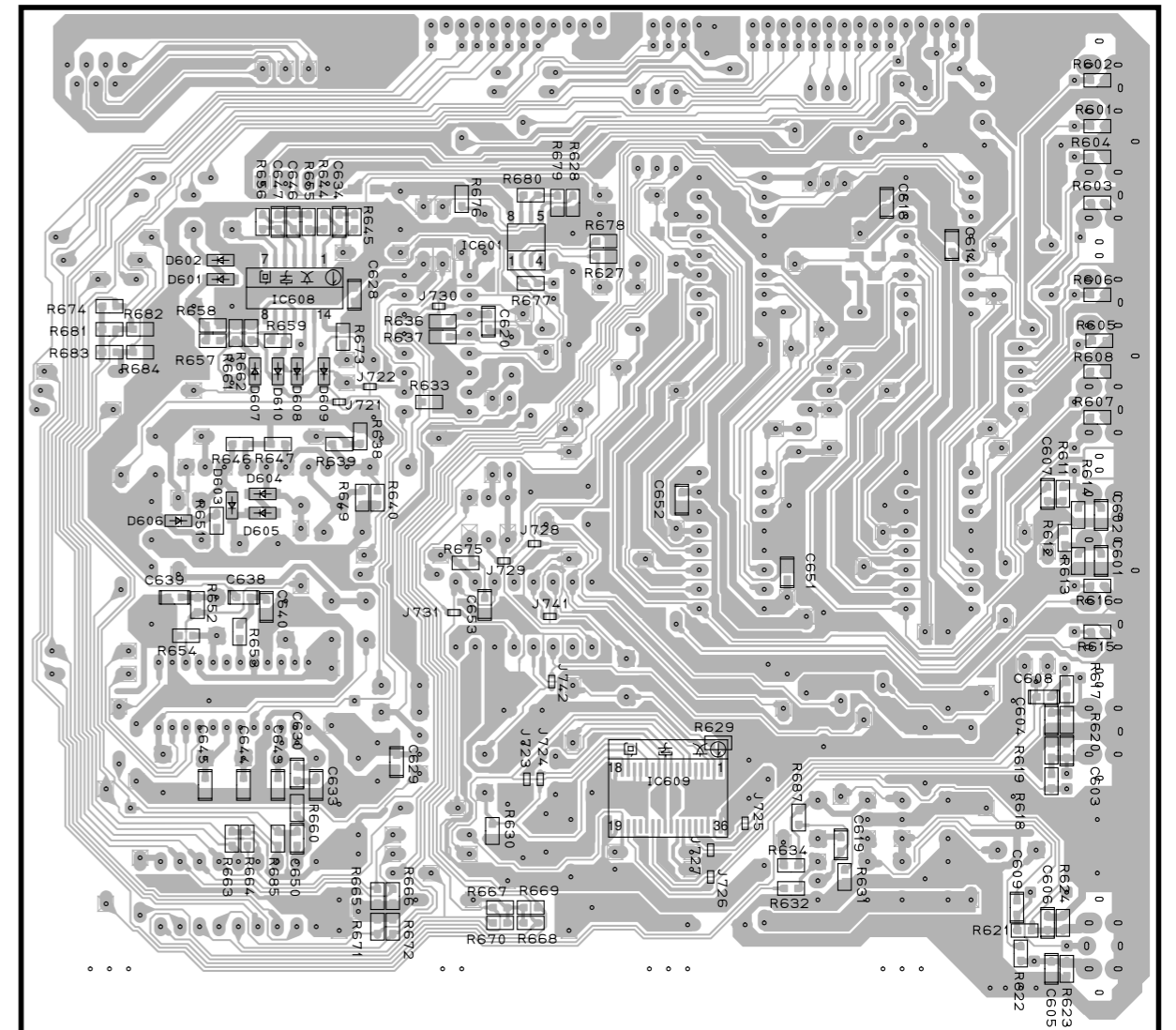
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D601	G4	IC606	C5
D602	G4	IC607	B4
D603	G5	IC608	G4
D604	G5	IC609	H6
D605	G5	IC610	B6
D606	F5	IC611	B6
D607	G4	Q601	D6
D608	G4	Q602	D6
D609	G4	Q603	B5
D610	G4	Q604	D6
IC601	H4	Q605	B6
IC602	C4	Q606	B5
IC603	D4	Q607	A5
IC604	C5	Q608	B5
IC605	D5	Q609	B5

2 VIDEO (1) P. C. B. (Lead Type Device)

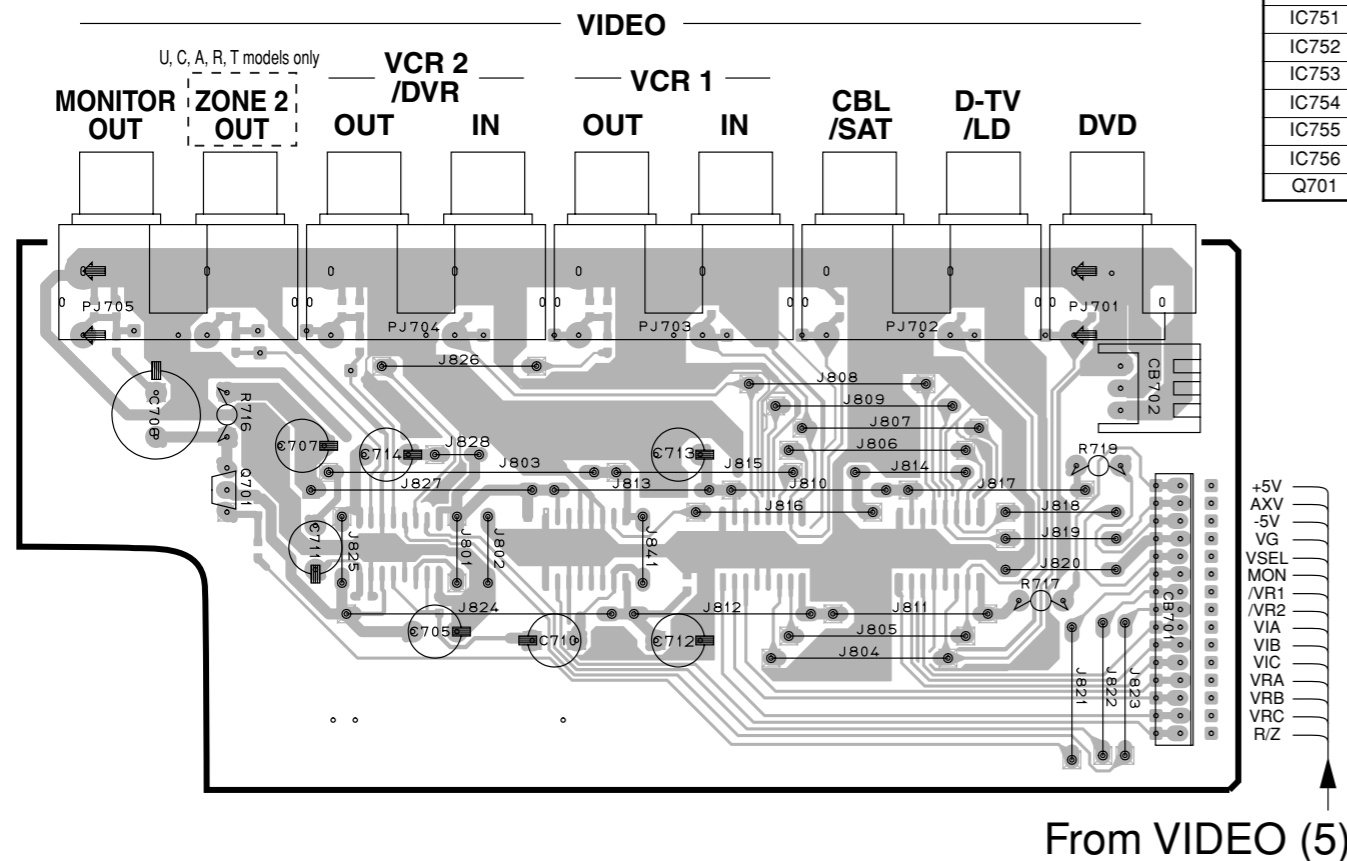


VIDEO (1) P. C. B. (Surface Mount Device)

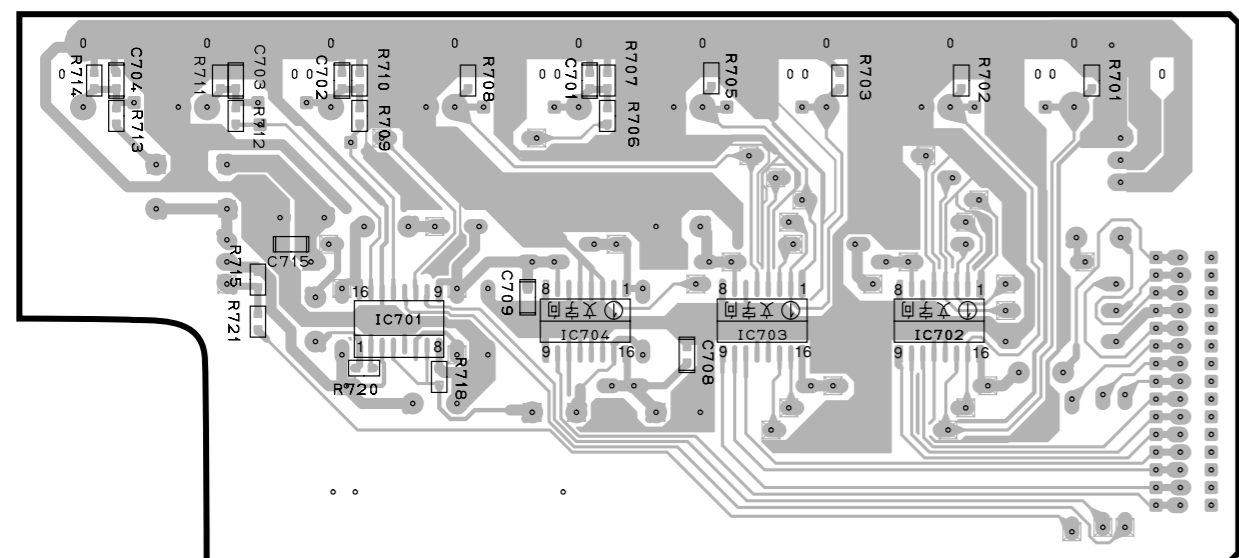


PRINTED CIRCUIT BOARD (Foil side)

VIDEO (2) P. C. B. (Lead Type Device)



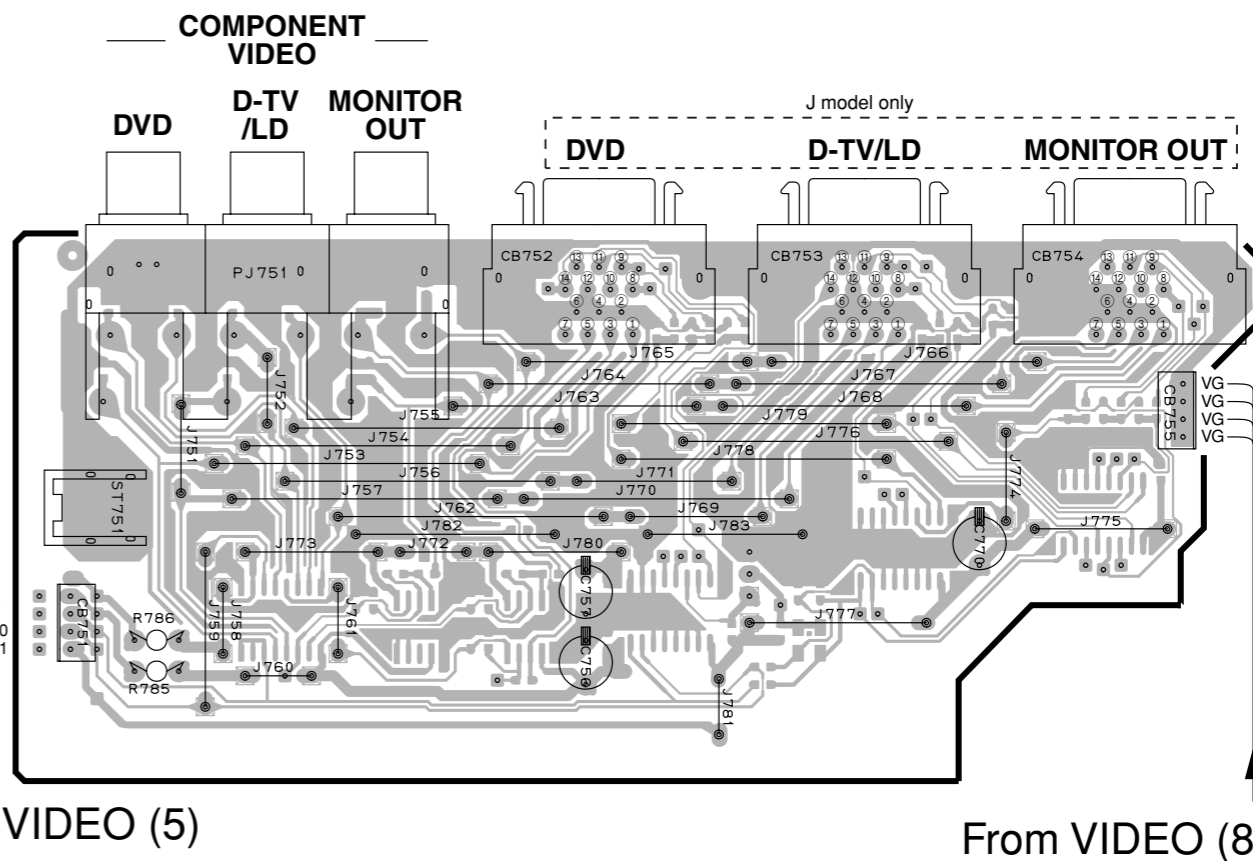
VIDEO (2) P. C. B. (Surface Mount Device)



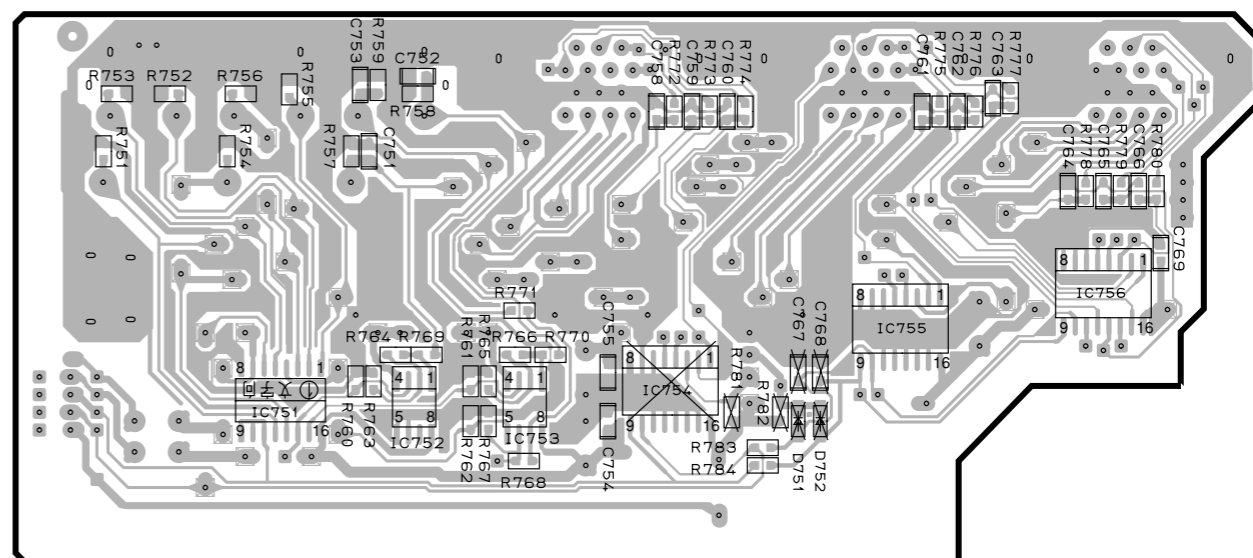
• Semiconductor Location

Ref. No.	Location
D751	H6
D752	H6
IC701	B6
IC702	D6
IC703	C6
IC704	C6
IC751	G6
IC752	G6
IC753	C6
IC754	H6
IC755	I6
IC756	I6
Q701	A3

VIDEO (4) P. C. B. (Lead Type Device)



VIDEO (4) P. C. B. (Surface Mount Device)



Circuit No.	J	U, C	R, T	A	B, G
C703, 711	X	O	O	O	X
C758-770	O	X	X	X	X
CB752-754	O	X	X	X	X
D751, 752	O	X	X	X	X
IC704	X	O	O	O	X
IC754-756	O	X	X	X	X
JB41	O	X	X	X	O
R711, 712	X	O	O	O	X
R772-784	O	X	X	X	X

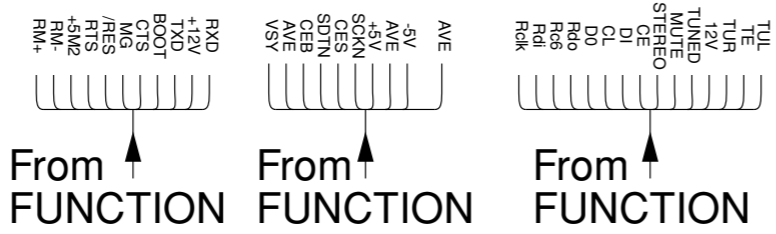
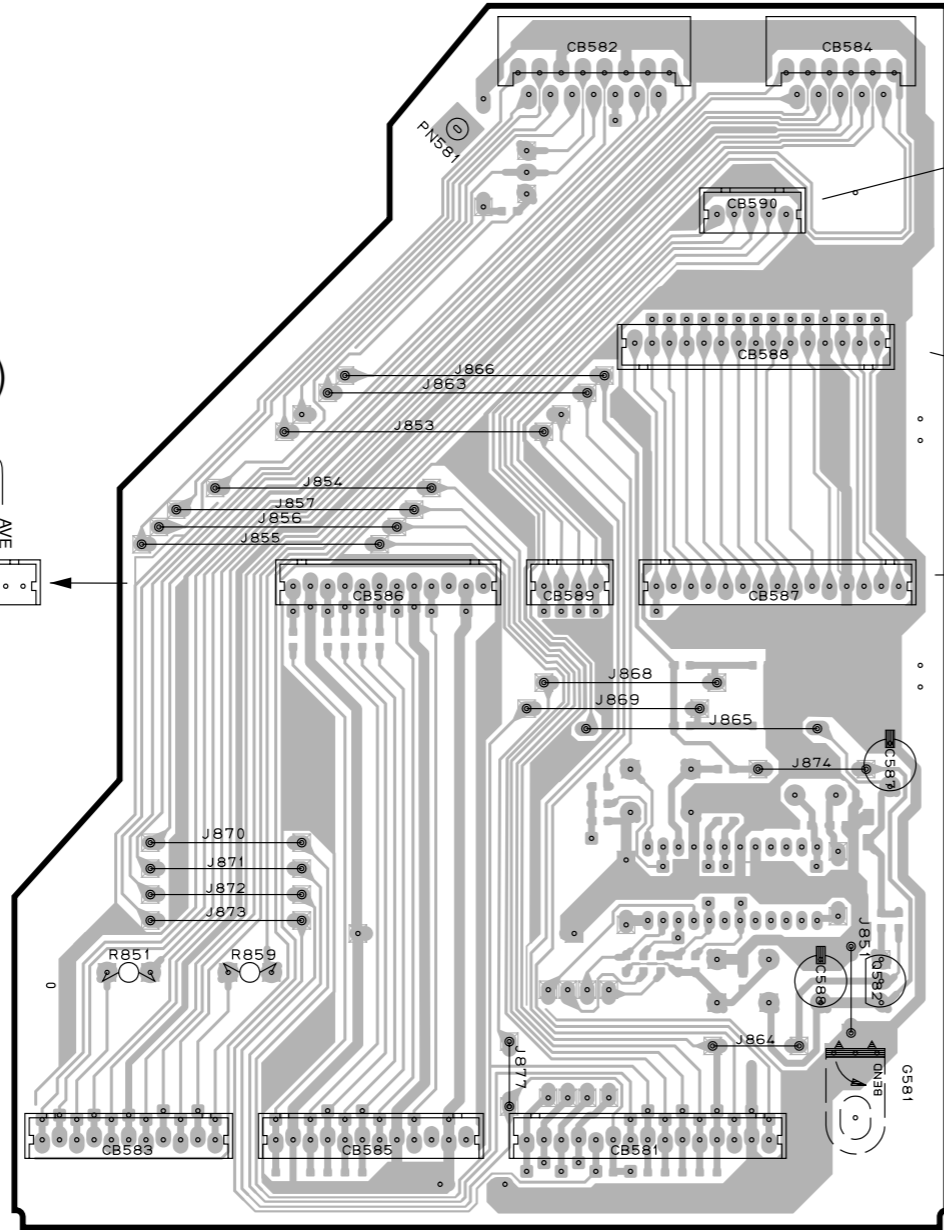
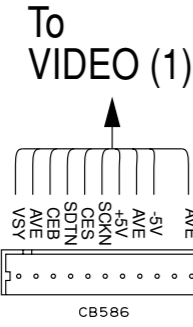
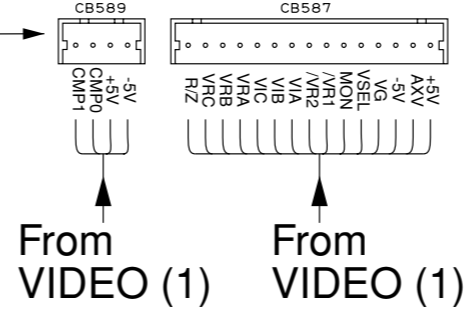
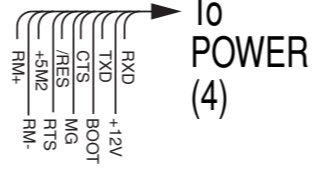
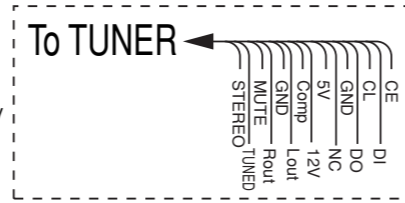
X: NOT USED
O: USED / APPLICABLE

Production of the parts marked with "x" has been discontinued starting with November production of 2001.
×マークの付いた部品は、2001年11月生産分より廃止されています。

PRINTED CIRCUIT BOARD (Foil side)

VIDEO (5) P. C. B. (Lead Type Device)

U, C, A, R, T models only



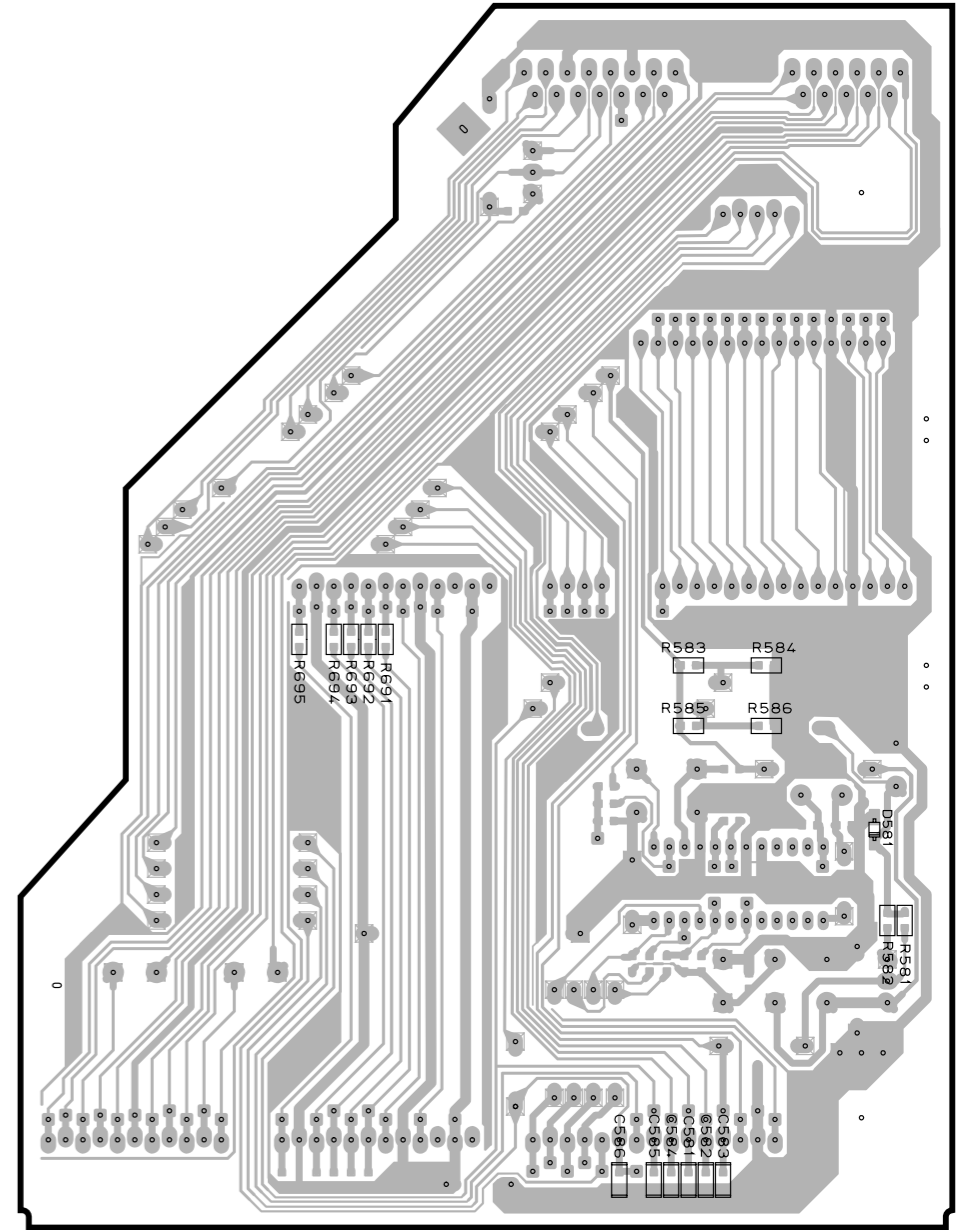
Semiconductor Location

Ref. No.	Location
D581	J5
Q582	E6

Circuit No.	J	U, C	R, T	A	B, G
CB582	X	O	O	O	X
R583	X	O	O	X	X
R584	O	X	X	O	O
R585	X	X	O	O	O
R586	O	O	X	X	X
R589	X	O	O	O	X

X: NOT USED
O: USED / APPLICABLE

VIDEO (5) P. C. B. (Surface Mount Device)

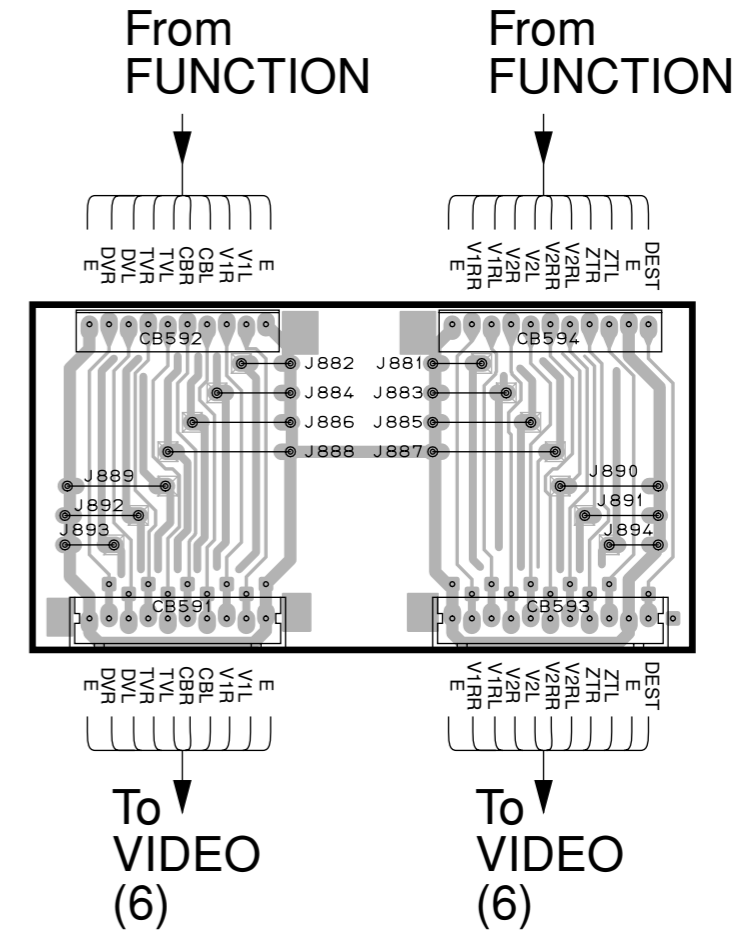
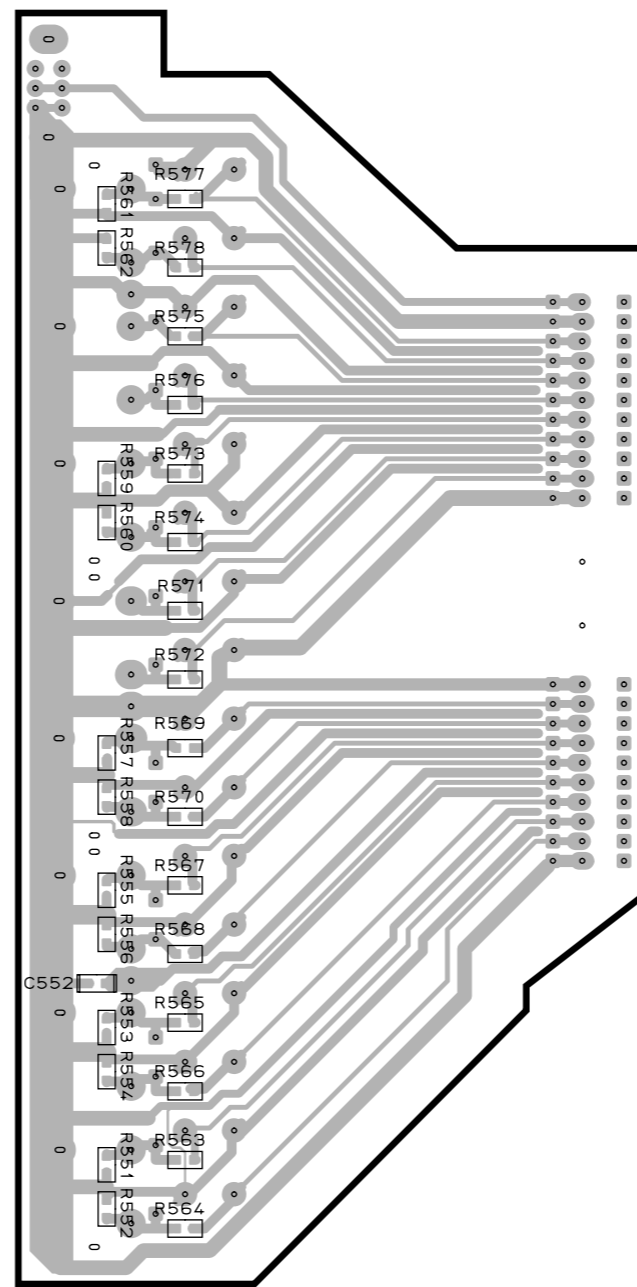
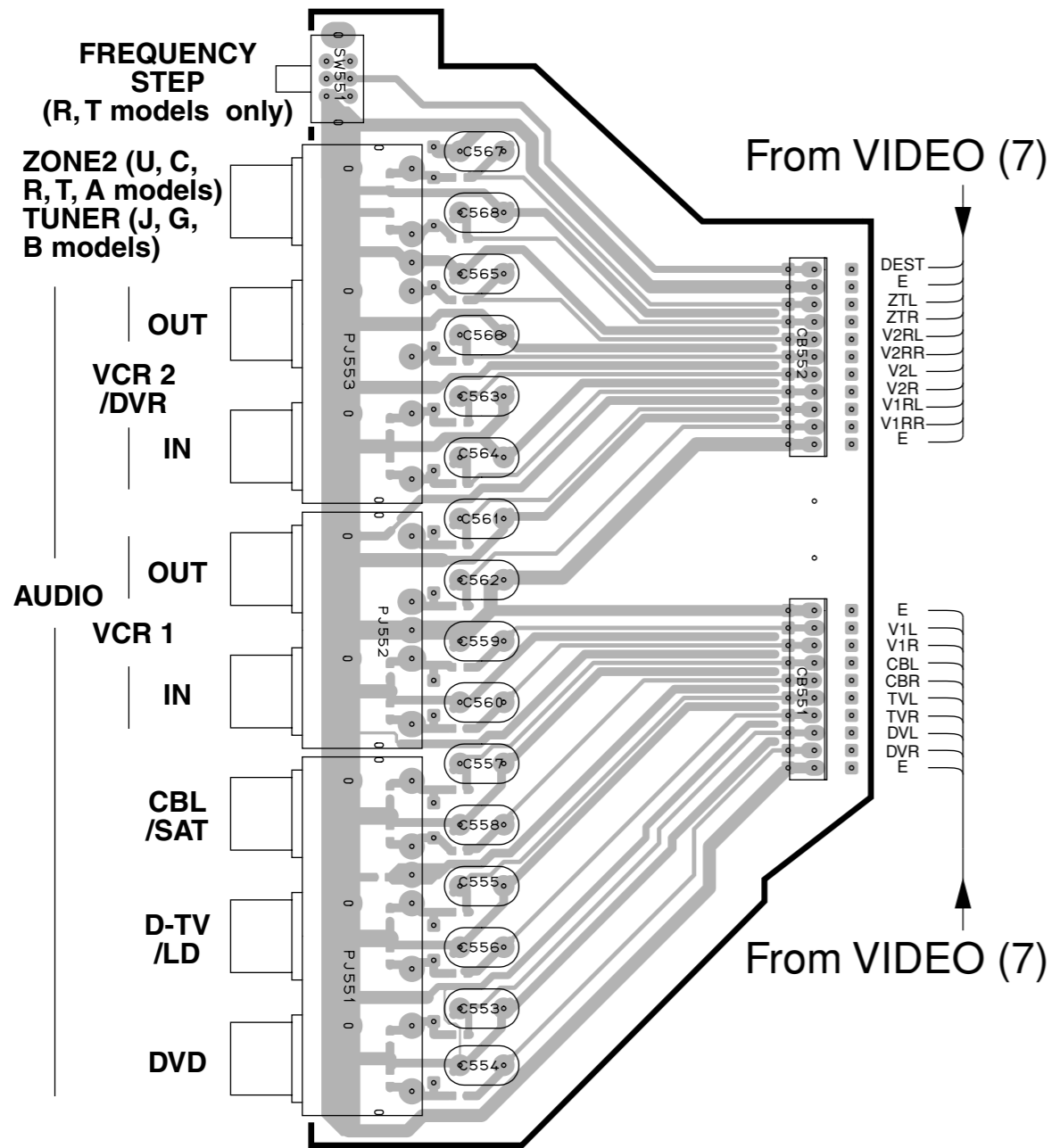


PRINTED CIRCUIT BOARD (Foil side)

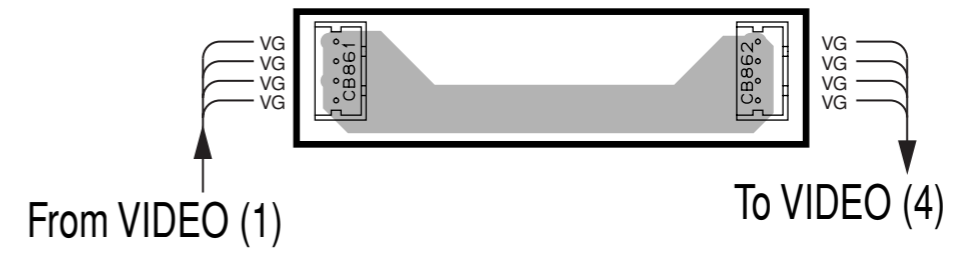
VIDEO (6) P. C. B. (Lead Type Device)

VIDEO (6) P. C. B. (Surface Mount Device)

VIDEO (7) P. C. B. (Lead Type Device)



VIDEO (8) P. C. B. (Lead Type Device)



Circuit No.	J	U, C	R, T	A	B, G
SW551	X	X	O	X	X

X: NOT USED
 O: USED / APPLICABLE

1

PRINTED CIRCUIT BOARD (Foil side)

Semiconductor Location

MAIN (1) P. C. B. (Lead Type Device)

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D1	E4	D6	B3	D11	B5	D16	F5	D21	G5	D26	I5	D31	B3	D36	F3	D41	F3	D46	I3	D56	E4	D67	D4	D72	B4	D77	J5						
D2	E5	D7	C3	D12	C5	D17	F5	D22	H5	D27	I4	D32	A3	D37	F3	D42	H3	D47	H3	D57	E4	D68	C4	D73	I6	D78	J4						
D3	E5	D8	I4	D13	C5	D18	G5	D23	H4	D28	I4	D33	A3	D38	E4	D43	H3	D48	F4	D58	G4	D69	B4	D74	J6	D79	I5						
D4	D5	D9	B5	D14	C4	D19	G5	D24	H5	D29	I4	D34	C3	D39	G3	D44	G4	D49	E4	D59	H4	D70	F4	D75	I6	D80	I4						
D5	J3	D10	B5	D15	F5	D20	G4	D25	H5	D30	B3	D35	B4	D40	G3	D45	I2	D50	D4	D60	I4	D71	C4	D76	I6								

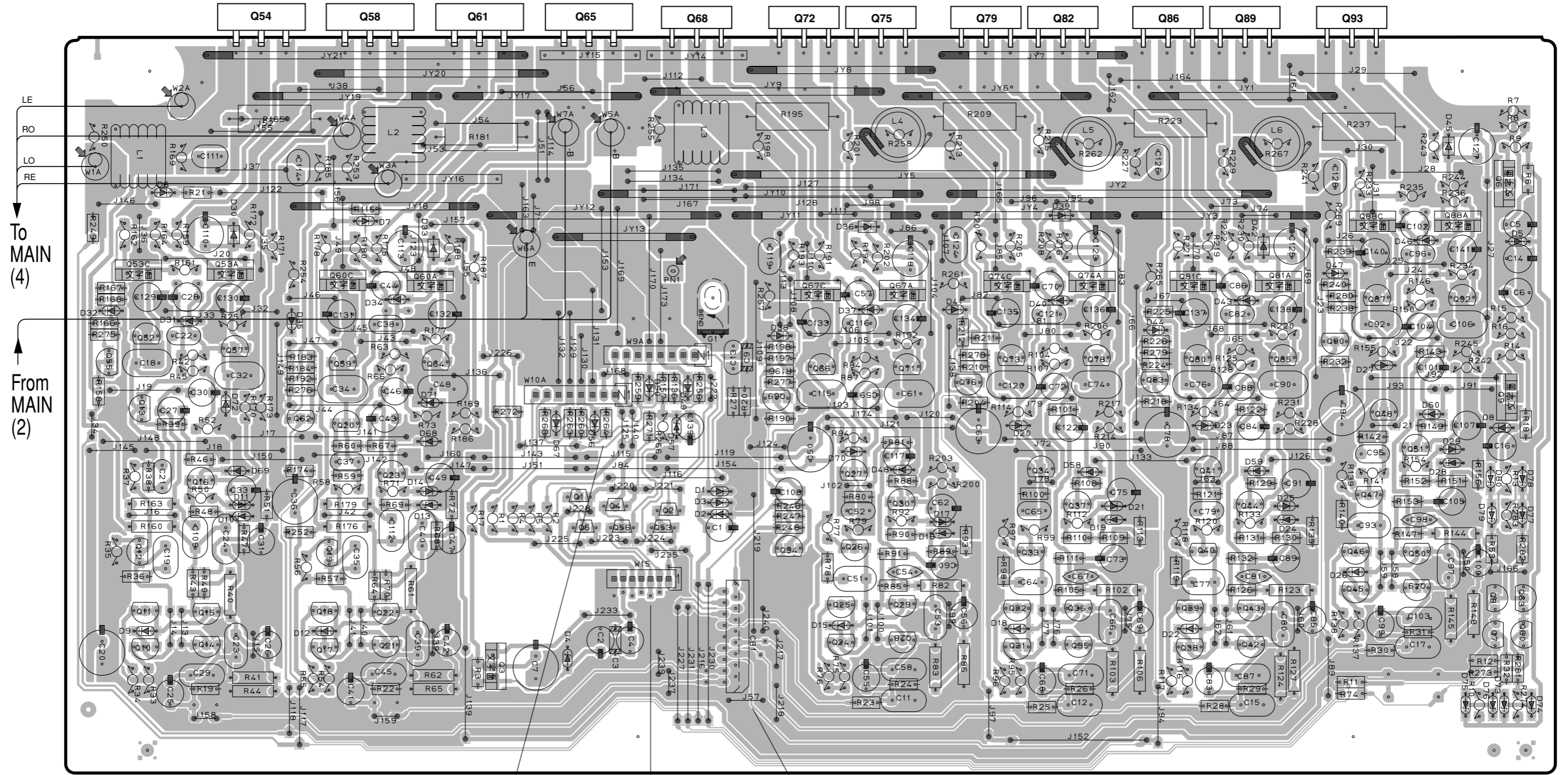
2

3

4

5

6



To MAIN (4)

From MAIN (2)

To MAIN (5)

To MAIN (4)

From POWER (1)

From POWER (1)

Semiconductor Location

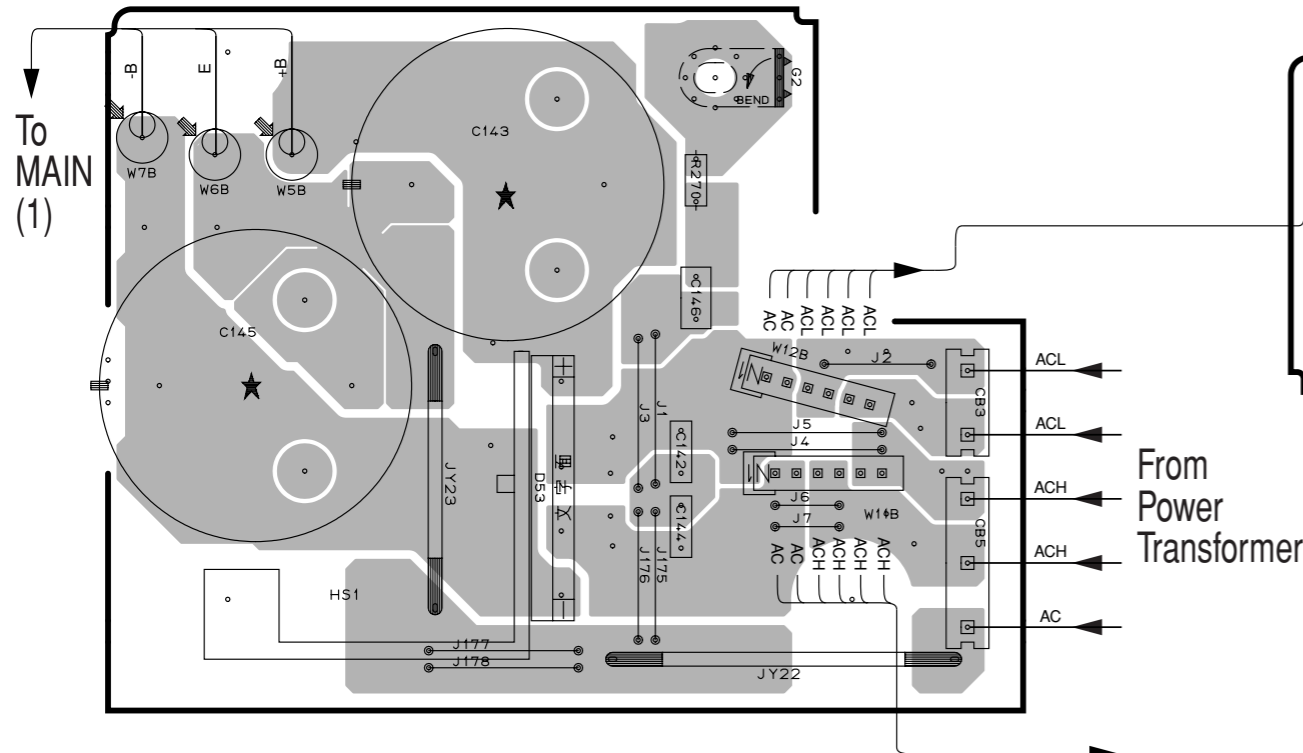
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
Q1	D4	Q12	B5	Q23	C4	Q34	G4	Q45	I5	Q54	B2	Q63	J5	Q74A	G3	Q85	H4																
Q2	E5	Q13	A4	Q24	F5	Q35	G5	Q46	I5	Q55	A4	Q64	C4	Q74C	G3	Q86	H2																
Q3	D5	Q14	B5	Q25	F5	Q36	G5	Q47	I4	Q56	D5	Q65	E4	Q75	F2	Q87	I3																
Q4	D5	Q15	B5	Q26	F5	Q37	G5	Q48	I4	Q57	B4	Q66	D2	Q76	F4	Q88A	I3																
Q5	D5	Q16	B4	Q27	F4	Q38	H5	Q49	I5	Q58	C2	Q67A	F3	Q78	G4	Q88C	I3																
Q6	I3	Q17	C5	Q28	F4	Q39	H5	Q50	I5	Q59	C4	Q67C	E3	Q79	F2	Q89	H2																
Q7	I5	Q18	C5	Q29	F5	Q40	H5	Q51	I4	Q60	J5	Q68	E2	Q80	H4	Q90	H4																
Q8	I5	Q19	C5	Q30	F4	Q41	H4	Q52	B4	Q60A	C3	Q69	E4	Q81A	H3	Q92	I3																
Q9	J4	Q20	C4	Q31	G5	Q42	H5	Q53	E5	Q60C	C3	Q71	F4	Q81C	H3	Q93	I2																
Q10	B5	Q21	C5	Q32	G5	Q43	H5	Q53A	B3	Q61	C2	Q72	E2	Q82	G2	Q94	E5																
Q11	B5	Q22	C5	Q33	G5	Q44	H4	Q53C	A3	Q62	B4	Q73	G4	Q83	G4																		

Circuit No.	J	U, C	R, T, A, B, G
C9	X	X	O
D73-80	X	O	O
R20	X	X	O

X: NOT USED
O: USED / APPLICABLE

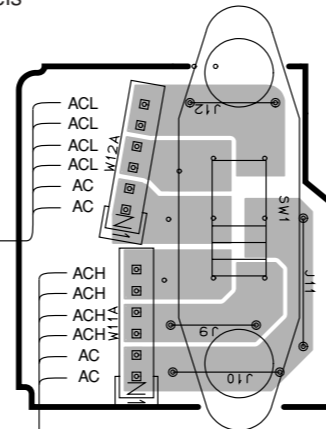
PRINTED CIRCUIT BOARD (Foil side)

MAIN (2) P. C. B. (Lead Type Device)

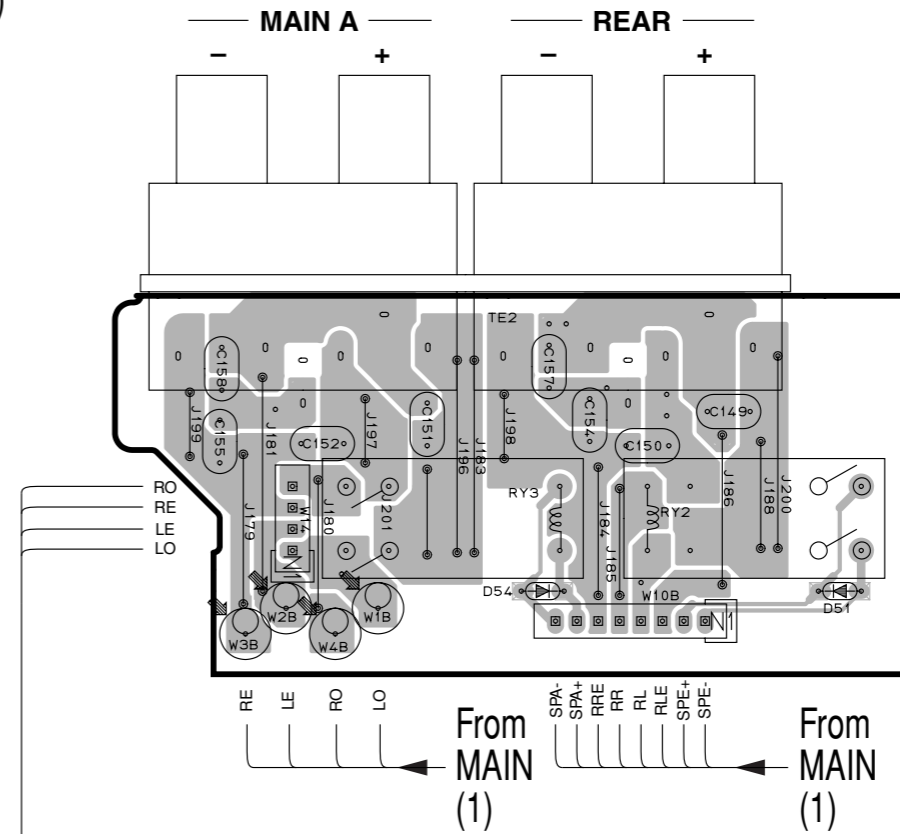


MAIN (3) P. C. B. (Lead Type Device)

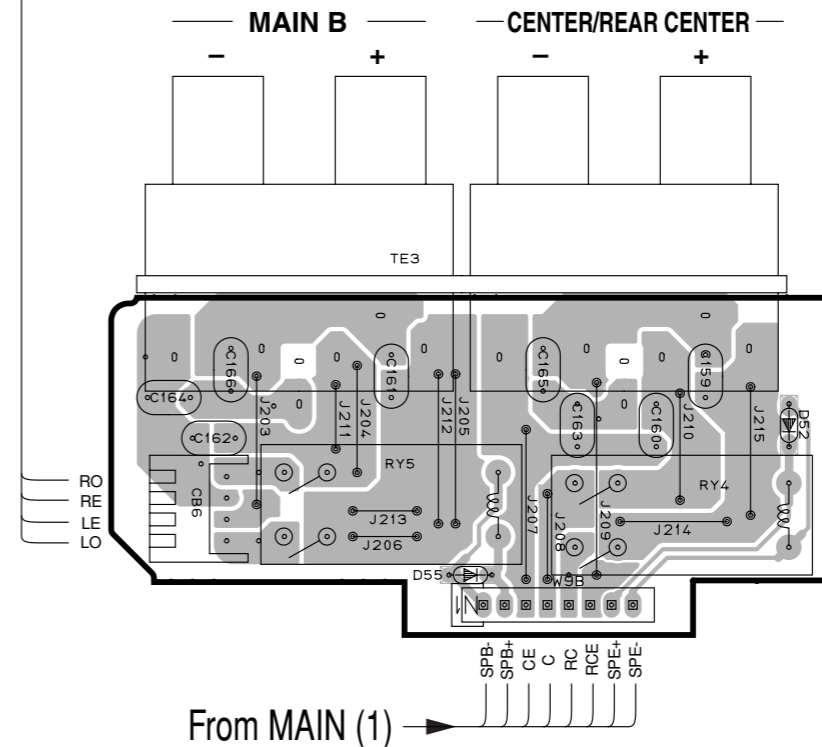
U, C, A, B, G, R, T models



MAIN (4) P. C. B. (Lead Type Device)



MAIN (5) P. C. B. (Lead Type Device)



Semiconductor Location

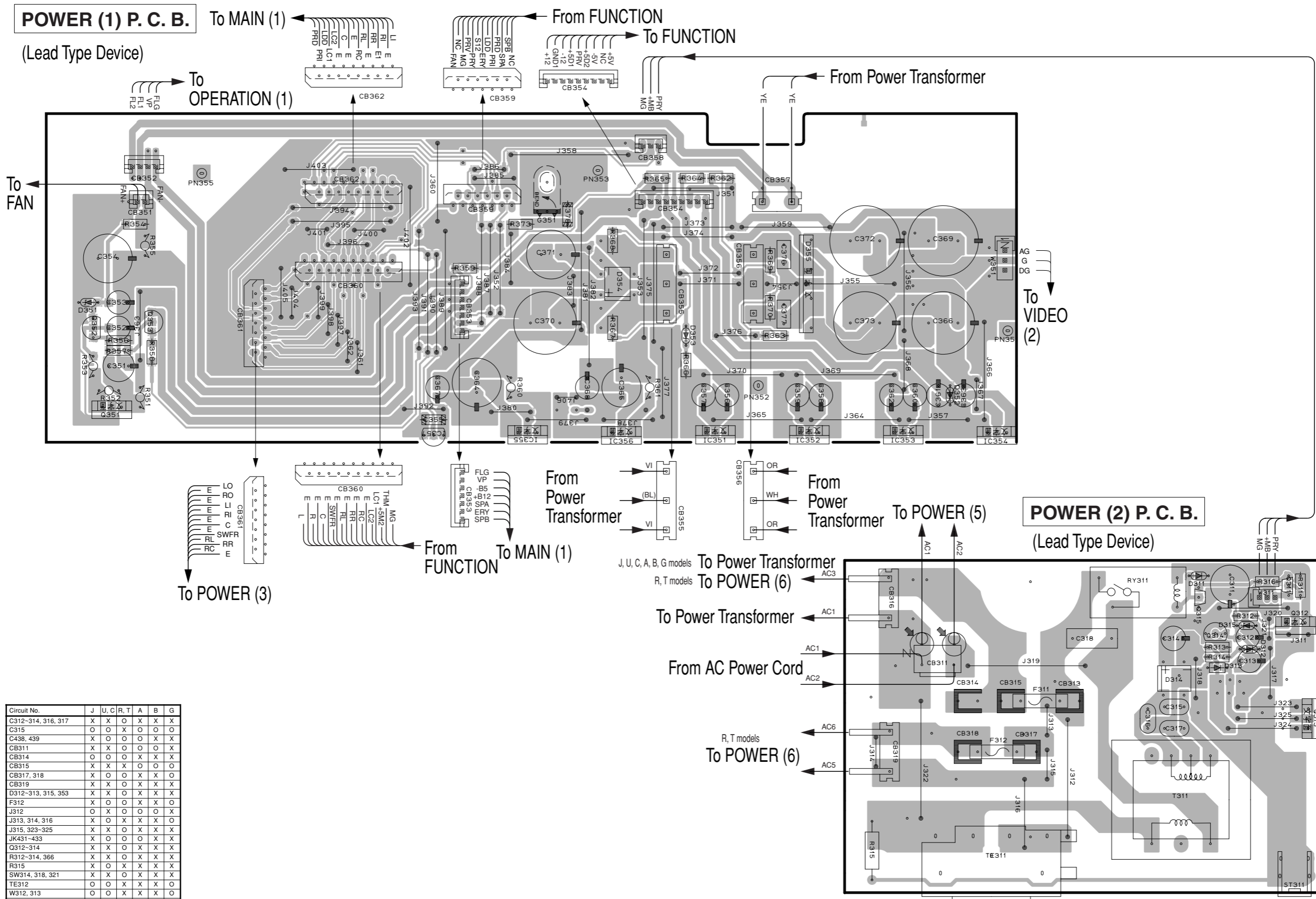
Circuit No.	J	U, C	R, T, A, B, G
C149-152, 154, 155, 157-166	X	X	O
CB3	X	O	O
J4-7	O	X	X
SW1	X	O	O
W11, 12	X	O	O

Ref. No.	Location
D51	I3
D52	I6
D53	C3
D54	H3
D55	H7

• Semiconductor Location

Ref. No.	Location
D311	H5
D312	H5
D313	H5
D314	H6
D315	I5
D351	A3
D352	G4
D353	E3
D354	E3
D355	F3
IC351	E4
IC352	F4
IC353	F4
IC354	G4
IC355	D4
IC356	E4
IC357	C4
Q311	I5
Q312	I5
Q313	I6
Q314	H5
Q315	H5
Q351	A4
Q352	A3
Q353	B3

■ PRINTED CIRCUIT BOARD (Foil side)



Circuit No.	J	U	C	R	T	A	B	G
C312-314, 316, 317	X	X	O	X	X	X	X	X
C315	O	O	X	O	O	O	O	O
C438, 439	X	O	O	O	X	X	X	X
CB311	X	X	O	O	O	X	X	X
CB314	O	O	O	X	X	X	X	X
CB315	X	X	X	O	O	O	O	O
CB317, 318	X	O	O	X	X	O	X	O
CB319	X	X	O	X	X	X	X	X
D312-313, 315, 353	X	X	O	X	X	X	X	X
F312	X	O	O	X	X	O	X	O
J312	O	X	O	O	O	O	X	X
J313, 314, 316	X	O	X	X	X	O	O	O
J315, 323-325	X	X	O	X	X	X	X	X
JK431-433	X	O	O	O	O	X	X	X
Q312-314	X	X	O	X	X	X	X	X
R312-314, 366	X	X	O	X	X	X	X	X
R315	X	O	X	X	X	X	X	X
SW314, 318, 321	X	X	O	X	X	X	X	X
TE312	O	O	X	X	X	O	O	O
W312, 313	O	O	X	X	X	O	O	O
W315A-315F	X	X	O	X	X	X	X	X

X: NOT USED
O: USED / APPLICABLE

PRINTED CIRCUIT BOARD (Foil side)

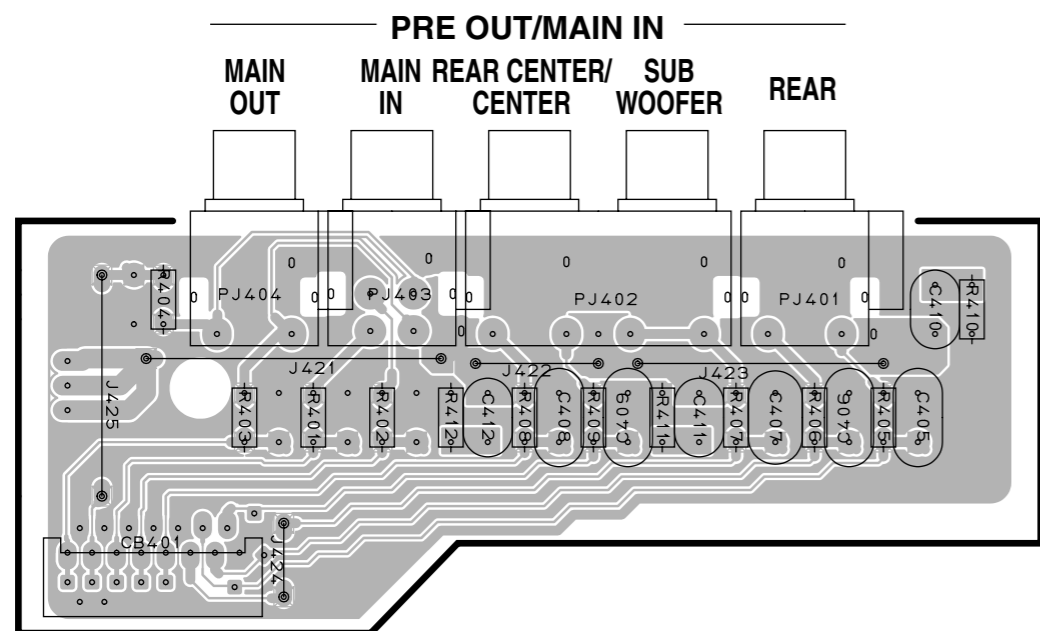
• Semiconductor Location

Ref. No.	Location
D431	C6
IC431	C5

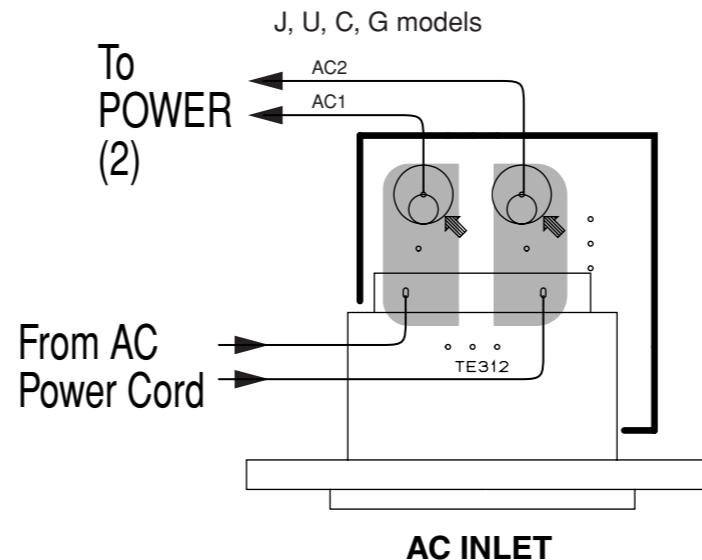
Circuit No.	J	U	C	R	T	A	B	G
C438, 439	X	O	O	O	O	X	X	
D353	X	X	O	X	X	X	X	
D431	X	O	O	O	O	X	X	
J311	O	O	X	O	O	O	O	
JK431-433	X	O	O	O	O	X	X	
R366	X	X	O	X	X	X	X	
SW311, 314, 318, 321	X	X	O	X	X	X	X	
TE312	O	O	X	X	X	O		
W312, 313	O	O	X	X	X	O		
W315A-315F	X	X	O	X	X	X	X	

X: NOT USED
O: USED / APPLICABLE

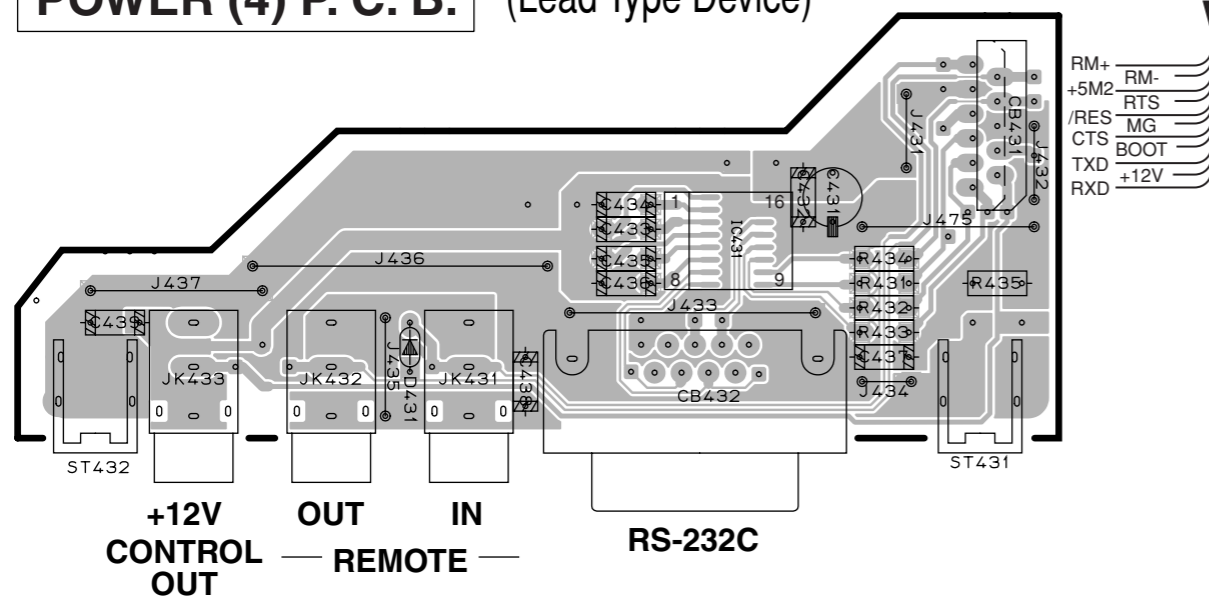
POWER (3) P. C. B. (Lead Type Device)



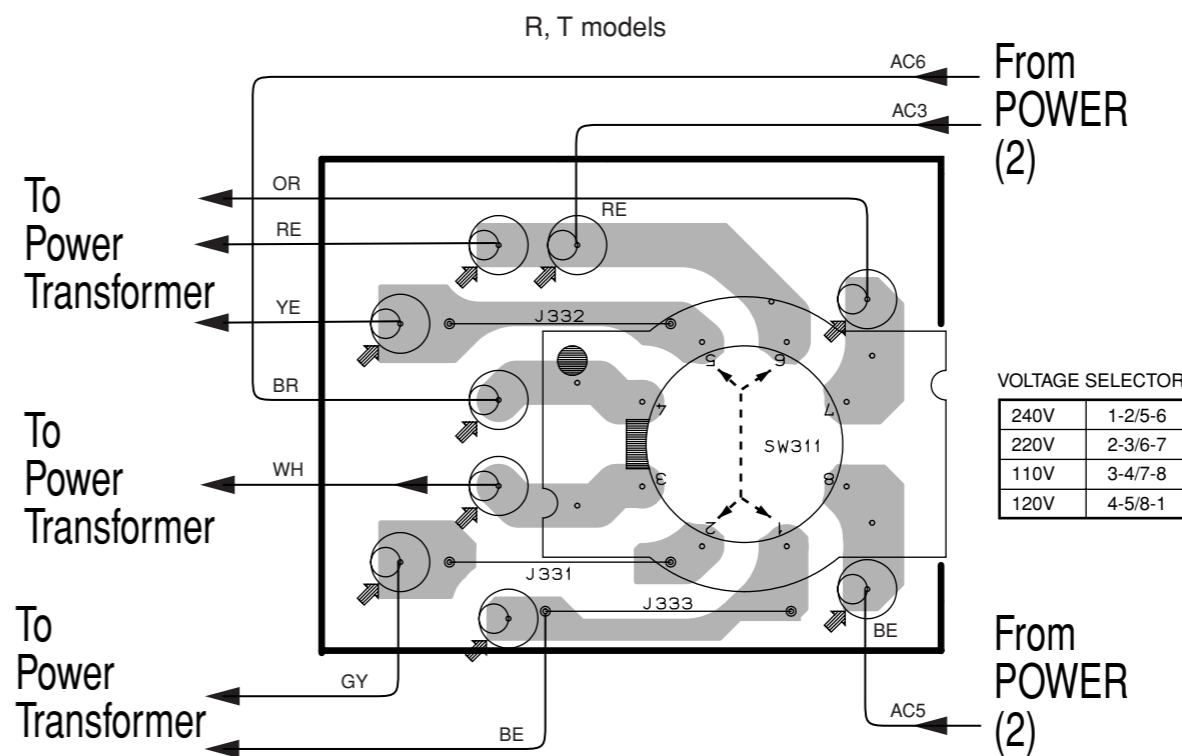
POWER (5) P. C. B. (Lead Type Device)



POWER (4) P. C. B. (Lead Type Device)

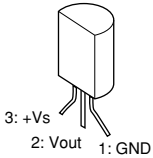
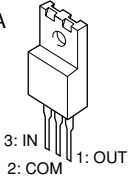
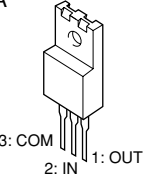
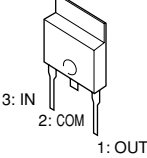
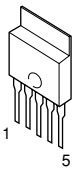
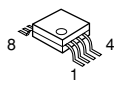
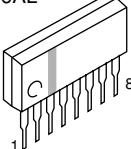
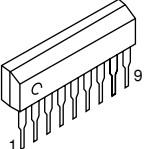
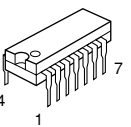
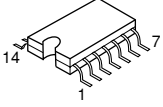
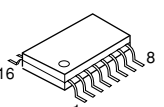
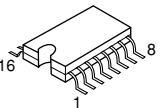
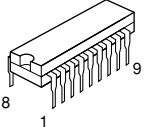
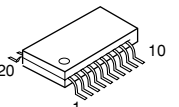
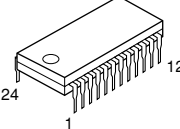
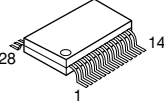
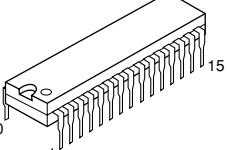
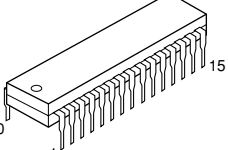
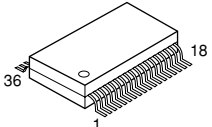
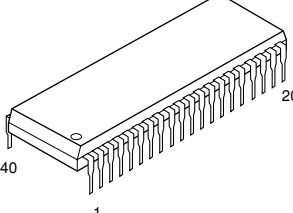
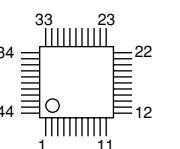

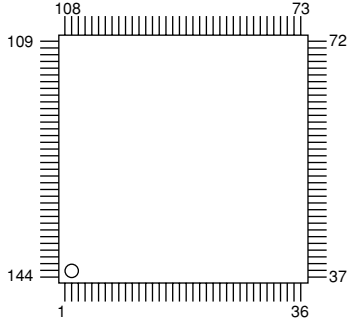
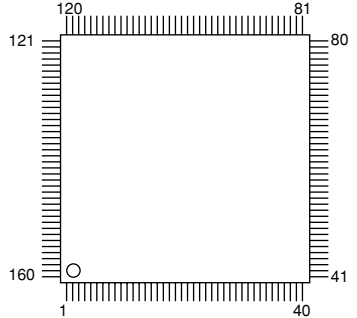


POWER (6) P. C. B. (Lead Type Device)

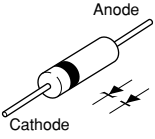
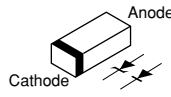
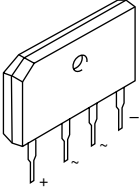
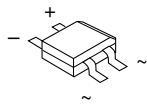


PIN CONNECTION DIAGRAM

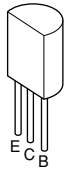
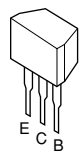
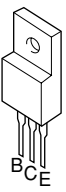
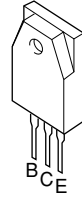
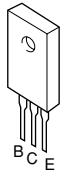

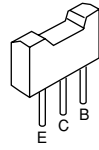
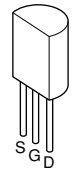
• ICs

<p>LM61CIZ</p>  <p>3: +Vs 2: Vout 1: GND</p>	<p>NJM7805FA NJM7812FA NJM78M05FA</p>  <p>3: IN 2: COM 1: OUT</p>	<p>NJM79M05FA NJM79M12FA</p>  <p>3: COM 2: IN 1: OUT</p>	<p>μPC29M33T-E1</p>  <p>3: IN 2: COM 1: OUT</p>	<p>PQ025EZ5MZP</p>  <p>1 5</p>
<p>NJM2068MD NJM2904M OPA2652U TK15420M μPC4570G2</p>  <p>8 1 4</p>	<p>NJM2068LD NJM4556AL</p>  <p>8 1</p>	<p>μPC4570HA</p>  <p>9 1</p>	<p>BU4066BC</p>  <p>14 1 7</p>	<p>TC74HCT00AF TC74HCT08AF TC74HCU04AF</p>  <p>14 1 7</p>
<p>LA7108M ADM202JRN-REEL7</p>  <p>16 1 8</p>	<p>MM74HC4051N MM74HC4051SJX MM74HC4053N MM74HC4053SJX</p>  <p>16 1 8</p>	<p>BU2092</p>  <p>18 1 9</p>	<p>YAC520-EE2</p>  <p>20 1 10</p>	
<p>LC74781-9798</p>  <p>24 1 12</p>	<p>AK4393-VF-E2 CY62256LL</p>  <p>28 1 14</p>	<p>LC78211 LC78213</p>  <p>30 1 15</p>	<p>LC78212</p>  <p>30 1 15</p>	
<p>LA7109</p>  <p>36 1 18</p>	<p>MSM514260C-60JS</p>  <p>40 1 20</p>	<p>AK4527BVQ</p>  <p>33 23 34 22 44 1 11 12</p>	<p>MX29F400BTC-70</p>  <p>25 24 48 1</p>	
<p>M30802SGP</p>  <p>108 73 109 72 144 1 36 37</p>		<p>YSS938F</p>  <p>120 81 121 80 160 1 40 41</p>		

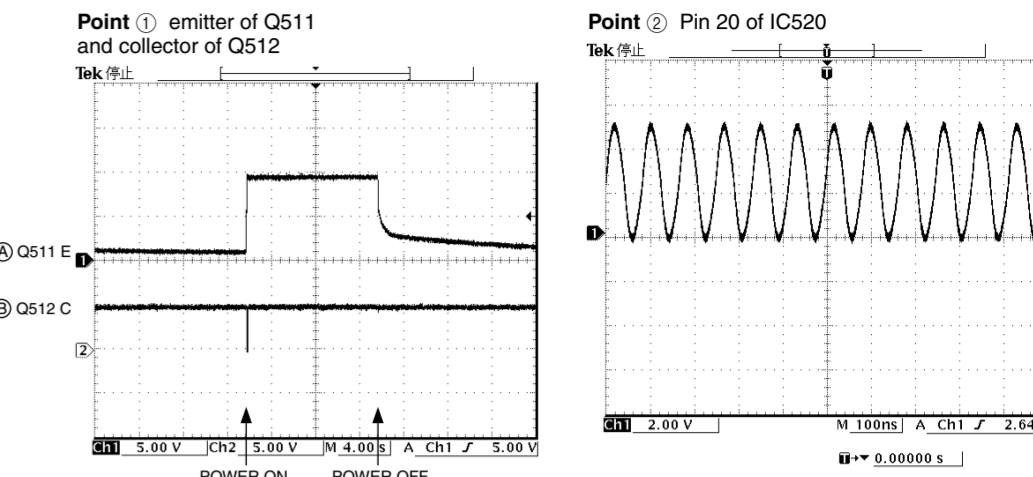
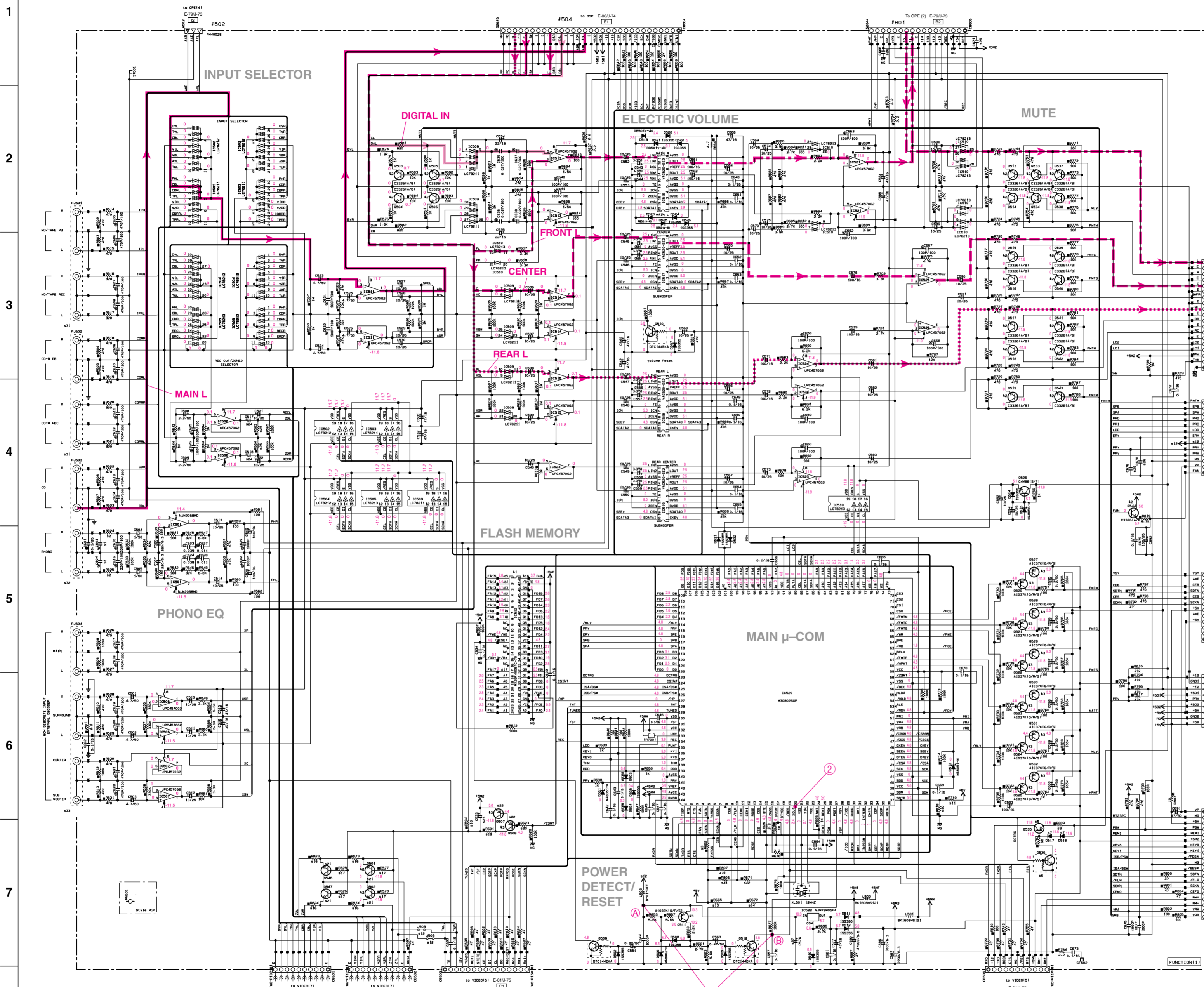
• Diodes

<p>1SR139 1SS133 HZS7B2TD MA185</p>	<p>MTZJ4.7C MTZJ9.1A MTZJ11.0B MTZJ12.0A MTZJ12.0B MTZJ15.0B MTZJ18.0C MTZJ22.0B MTZJ24.0B MTZJ24.0C MTZJ33.0D</p>		<p>1SS355 1SS380 MA8051-M MA8056-M MA8062-H RB501V-40 UDZS5.6BTE-17</p>	
<p>D3SBA20 D15XB20</p> 	<p>S1NB20</p> 			

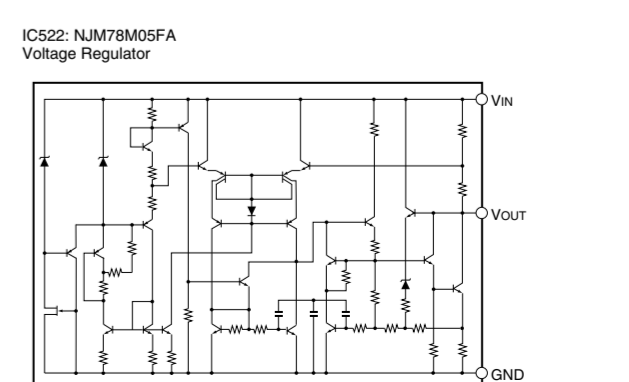
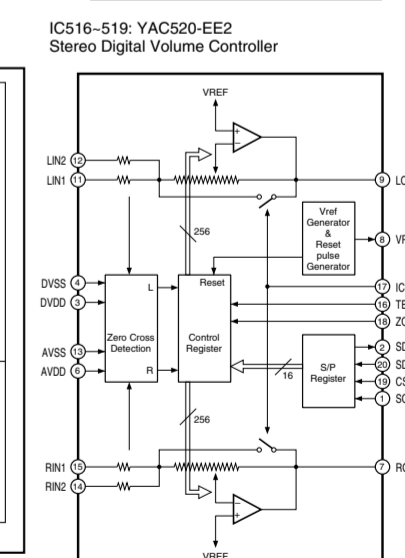
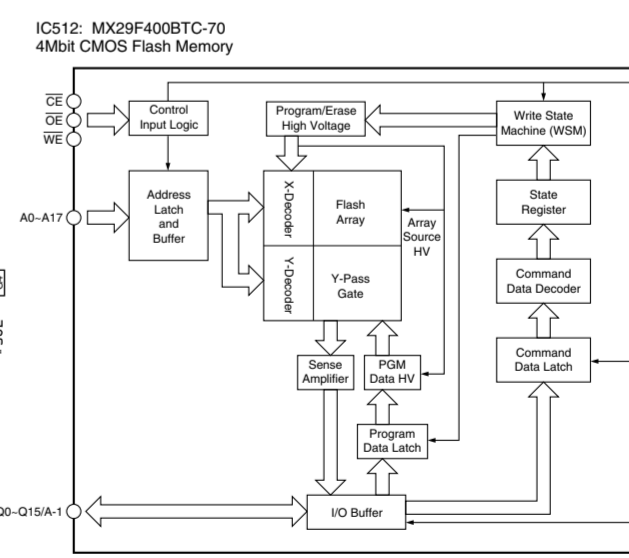
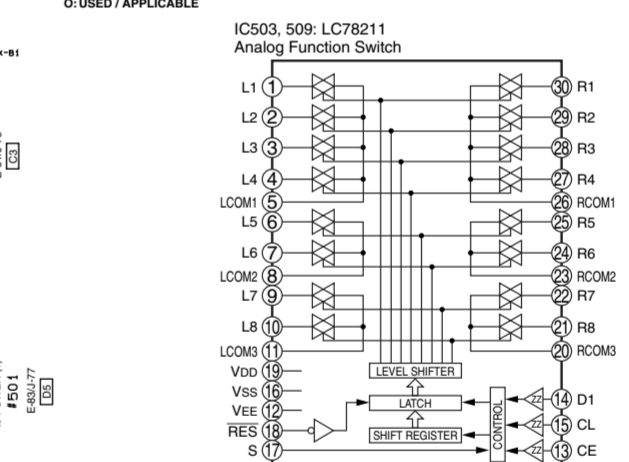
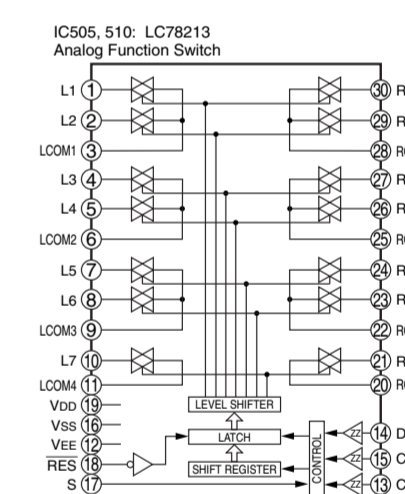
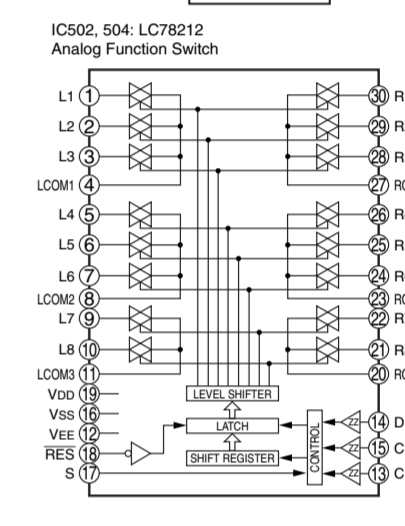
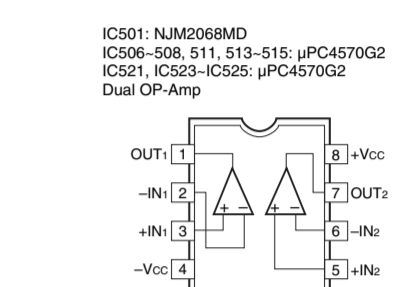
• Transistors

<p>2SA893A 2SA970 2SA1015 2SA1145 2SC535 2SC1815 2SC1890A 2SC2240 2SC2705 2SC2878 DTA123JS DTC143XS</p> 	<p>2SC1740S 2SD1915F DTA144ES DTC114ES DTC144ES</p> 	<p>2SA1837 2SB1375 2SB1565 2SC4793 2SD2396</p> 	<p>2SC5358</p> 
<p>2SC5200</p> 	<p>2SA1037K 2SC2412K 2SC3326 DTA144EKA DTC144EKA</p> 	<p>2SA1708 2SC4488</p> 	<p>2SK246</p> 

SCHEMATIC DIAGRAM (FUNCTION)



IC Part No.	U-C	BLT	U-C	BLT	Comment
1 IC501	IC501	IC501	IC501	IC501	IC501
2 IC502	IC502	IC502	IC502	IC502	IC502
3 IC503	IC503	IC503	IC503	IC503	IC503
4 IC504	IC504	IC504	IC504	IC504	IC504
5 IC505	IC505	IC505	IC505	IC505	IC505
6 IC506	IC506	IC506	IC506	IC506	IC506
7 IC507	IC507	IC507	IC507	IC507	IC507
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9 IC509	IC509	IC509	IC509	IC509	IC509
10 IC510	IC510	IC510	IC510	IC510	IC510
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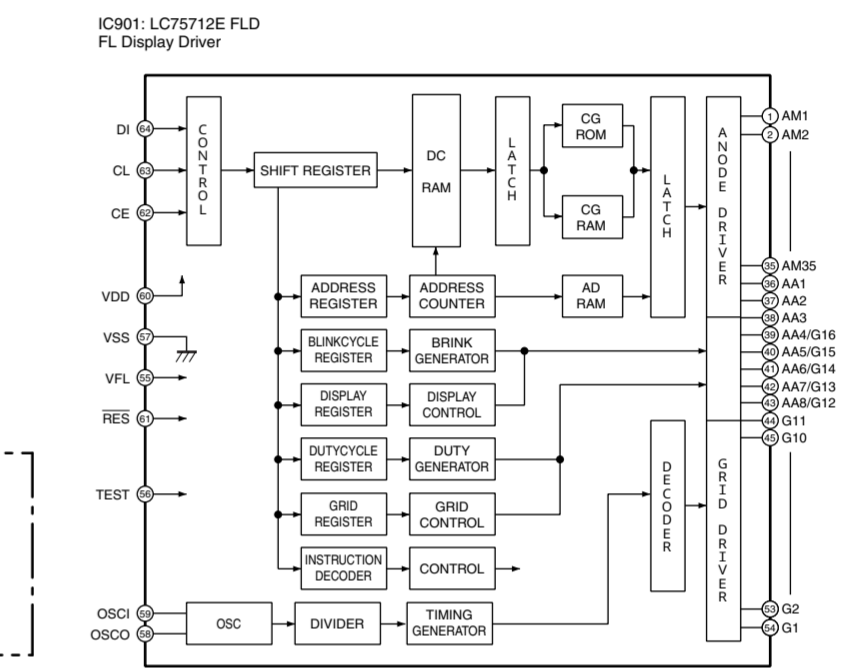
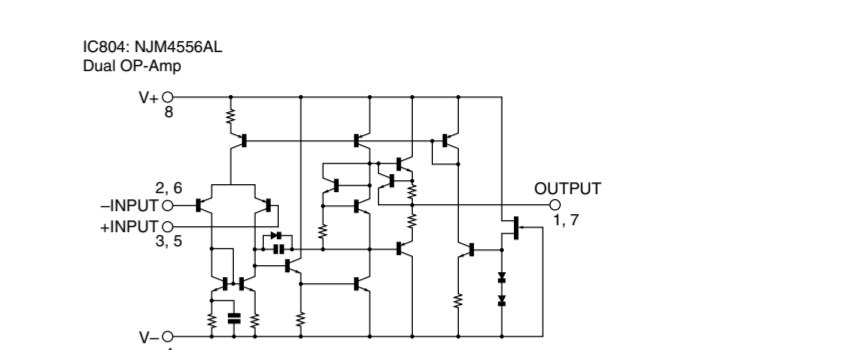
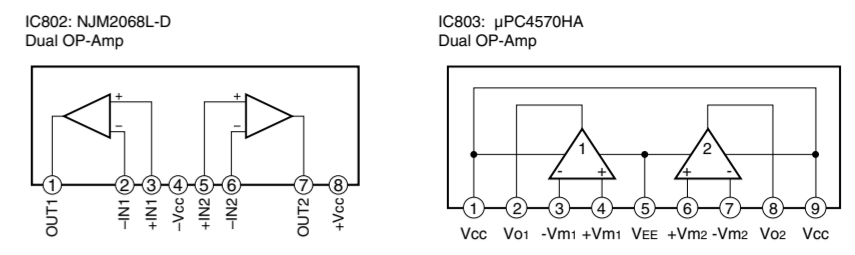
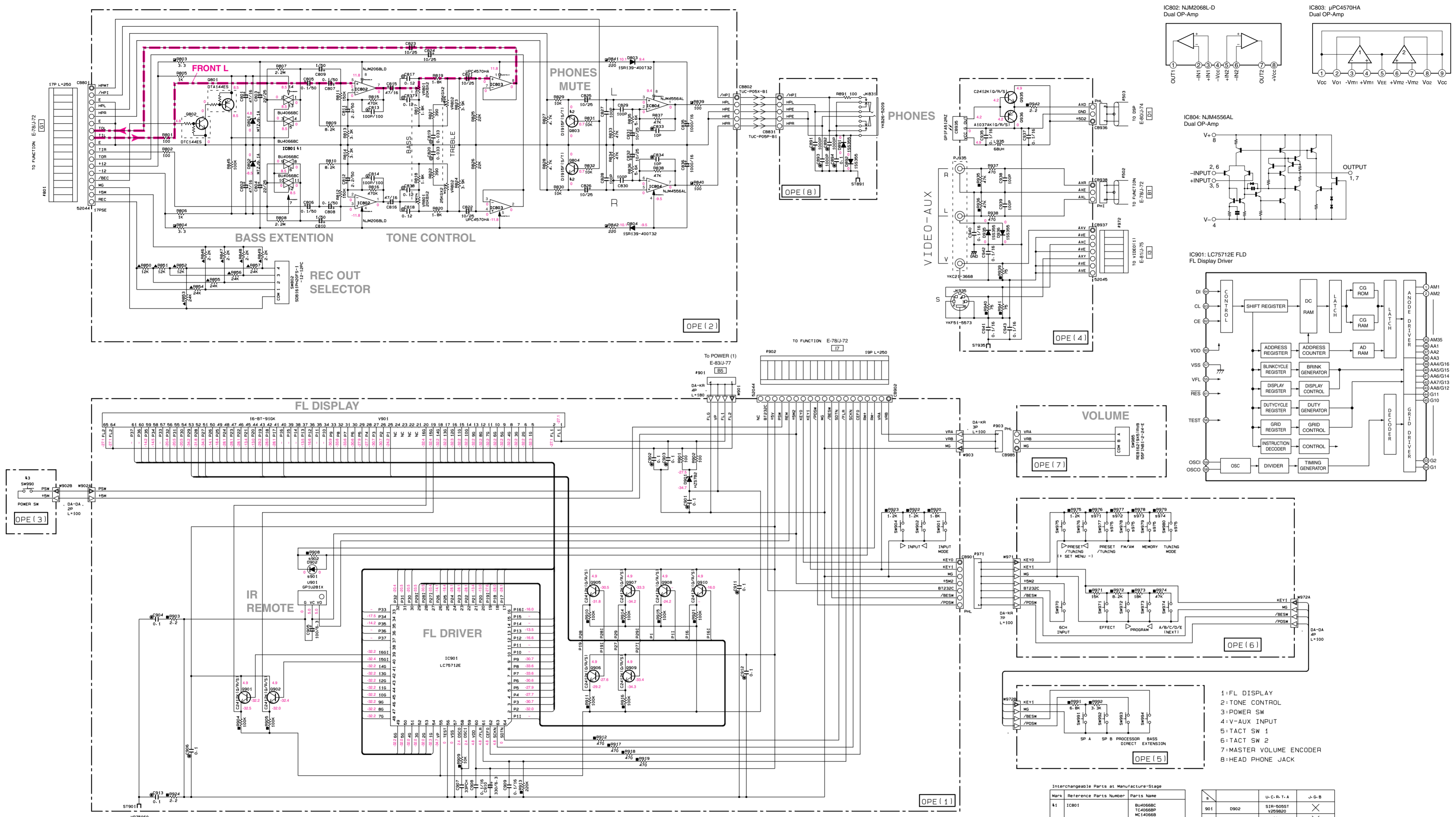


NOTICE (model 1)
Interchangeable Parts at Manufacture Stage

REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK ELECTROLYTIC CAPACITOR	① TANTALUM CAPACITOR	NO MARK CARBON FILM RESISTOR (P=8)	① CARBON FILM RESISTOR (P=10)
NO MARK CERAMIC CAPACITOR	② CERAMIC SUBSTRATE CAPACITOR	② METAL OXIDE FILM RESISTOR	② METAL OXIDE FILM RESISTOR
NO MARK POLYESTER FILM CAPACITOR	③ POLYESTER FILM CAPACITOR	③ METAL PLATE RESISTOR	③ METAL PLATE RESISTOR
NO MARK POLYPROPYLENE FILM CAPACITOR	④ POLYPROPYLENE FILM CAPACITOR	④ FIRE PROOF CARBON FILM RESISTOR	④ FIRE PROOF CARBON FILM RESISTOR
NO MARK MICA CAPACITOR	⑤ MICA CAPACITOR	⑤ ELEMENT HOLED RESISTOR	⑤ ELEMENT HOLED RESISTOR
NO MARK POLYPROPYLENE FILM CAPACITOR	⑥ POLYPROPYLENE FILM CAPACITOR	⑥ SEMI-VARIABLE RESISTOR	⑥ SEMI-VARIABLE RESISTOR
NO MARK CERAMIC CAPACITOR	⑦ CERAMIC CAPACITOR	⑦ CHIP RESISTOR	⑦ CHIP RESISTOR

- All voltages are measured with a 10M Ω DC electric volt meter.
- Components having special characteristics are marked with a triangle and must be replaced with parts having specifications equal to those originally installed.
- Schematic diagram is subject to change without notice.
- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- △印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

RX-V3200/DSP-AX3200
SCHEMATIC DIAGRAM (OPERATION)



- 1: FL DISPLAY
- 2: TONE CONTROL
- 3: POWER SW
- 4: V-AUX INPUT
- 5: TACT SW 1
- 6: TACT SW 2
- 7: MASTER VOLUME ENCODER
- 8: HEAD PHONE JACK

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
k1	IC801	BU4066BC TC4066BP MC14066B
k2	0B03-B04	2SD1919F15/11 2SC2878A/B1
k3		
k4		

U-C.R.1-4	J-G-B		
901	0902	S1R-50951 V259920	×
902	R908	10K RD35710	×
971	R976	1.2K RD35512	×
972	R977	1.8K RD35518	×
973	R978	2.7K RD35527	×
974	R979	3.3K RD35533	×
975	SW977-980		○

×: NOT USED
 ○: USED / APPLICABLE

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
⊡	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊙	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

NOTICE (model)
 (J)..... JAPANESE
 (U)..... U.S.A
 (C)..... CANADIAN
 (R)..... GENERAL
 (A)..... AUSTRALIAN
 (B)..... BRITISH
 (G)..... EUROPEAN
 (T)..... CHINA
 (L)..... SINGAPORE

★ All voltages are measured with a 10M Ω DC electric volt meter.
 ★ Components having special characteristics are marked (1), and must be replaced with parts having specifications equal to those originally installed.
 ★ Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10M Ω の電圧計で測定したものです。
 ● (1)印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
 ● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

CAPACITOR

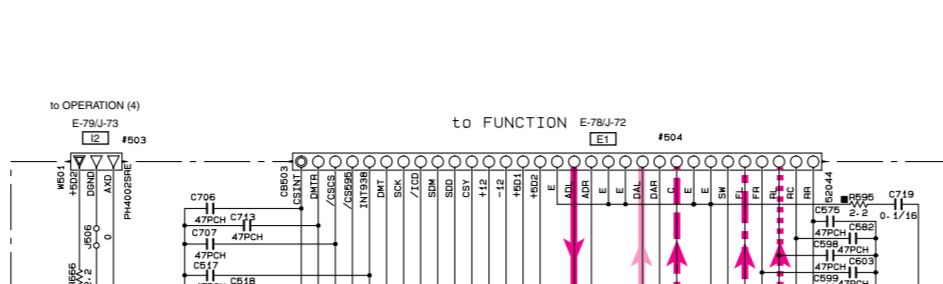
REMARKS	PARTS NAME
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⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
⊖	POLYESTER FILM CAPACITOR
⊕	POLYSTYRENE FILM CAPACITOR
○	MICA CAPACITOR
⊖	POLYPROPYLENE FILM CAPACITOR
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR
⊖	POLYPHENYLENE SULFIDE FILM CAPACITOR

SCHEMATIC DIAGRAM (DSP)

REMARKS	PARTS NAME	RESISTOR
NO MARK	CARBON FILM RESISTOR (P=10)	1
△	METAL OXIDE FILM RESISTOR	2
□	METAL FILM RESISTOR	3
◇	METAL PLATE RESISTOR	4
○	FINE PITCH CARBON FILM RESISTOR	5
○	CEMENT MOLDED RESISTOR	6
○	SEMI VARIABLE RESISTOR	7
○	CHIP RESISTOR	8

REMARKS	PARTS NAME	CAPACITOR
NO MARK	ELECTROLYTIC CAPACITOR	9
○	TANTALUM CAPACITOR	10
○	CERAMIC TUBULAR CAPACITOR	11
○	POLYESTER FILM CAPACITOR	12
○	POLYPROPYLENE FILM CAPACITOR	13
○	MICA CAPACITOR	14
○	POLYPROPYLENE FILM CAPACITOR	15
○	SEMICONDUCTIVE CERAMIC CAPACITOR	16
○	POLYPHENYLENE SULFIDE FILM CAPACITOR	17

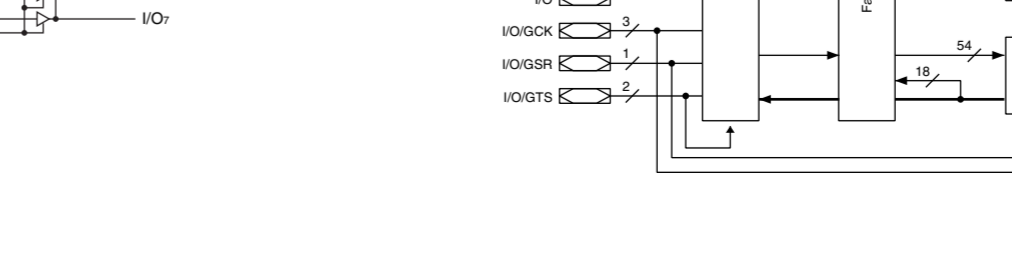
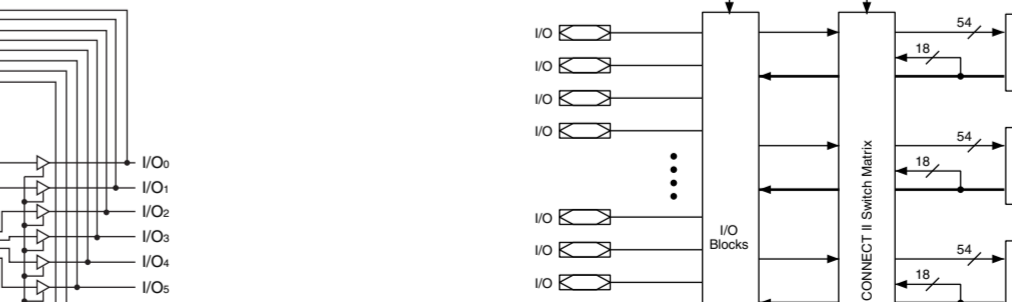
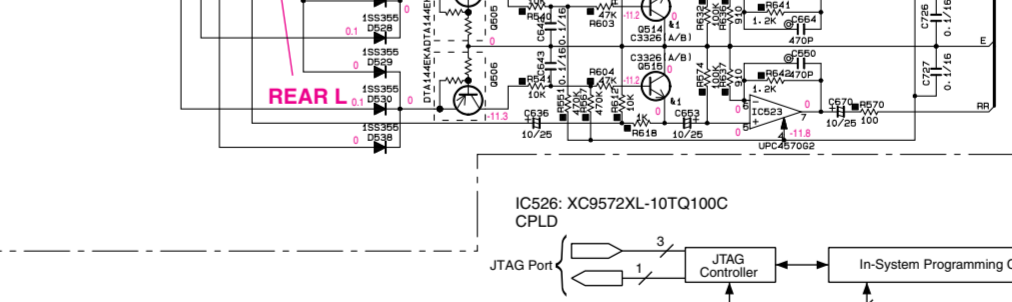
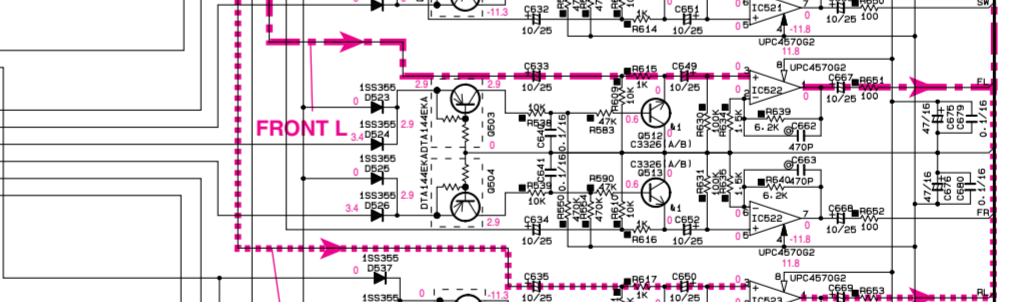
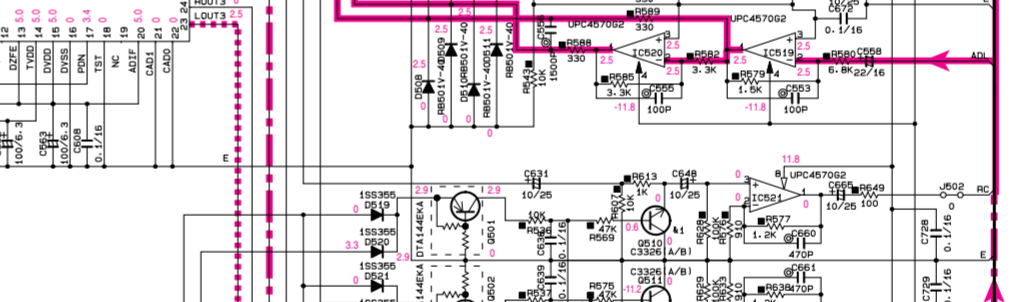
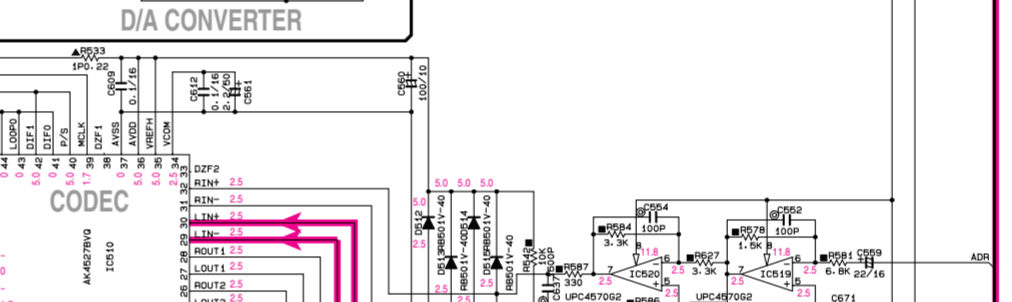
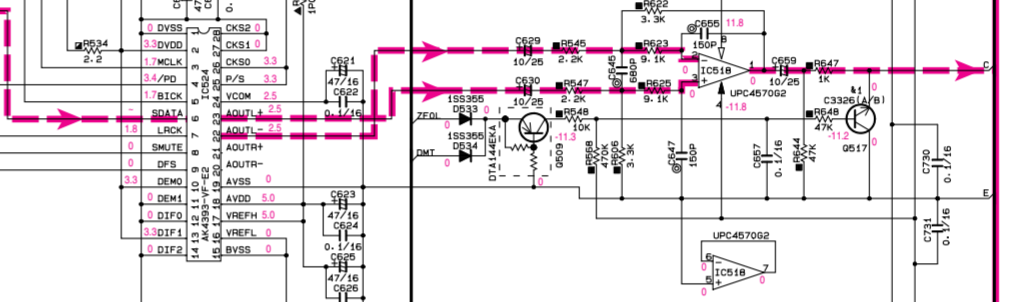
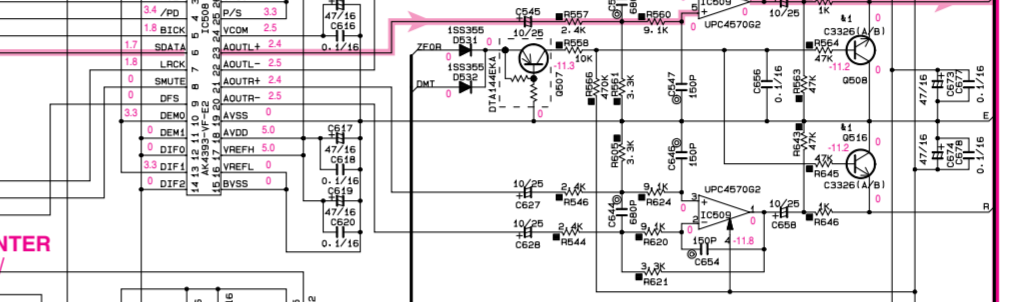
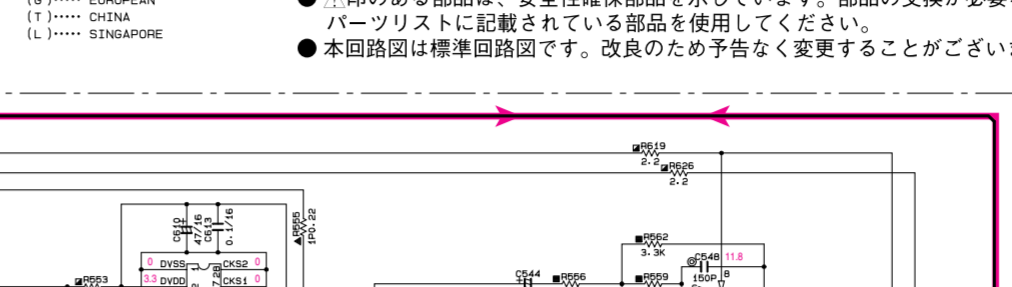
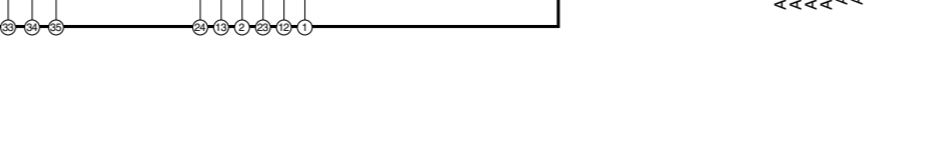
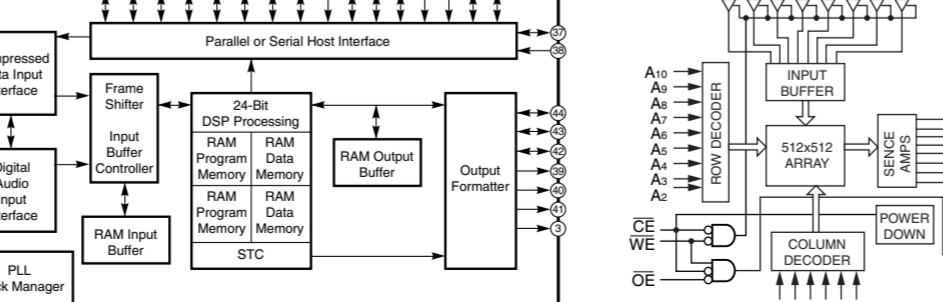
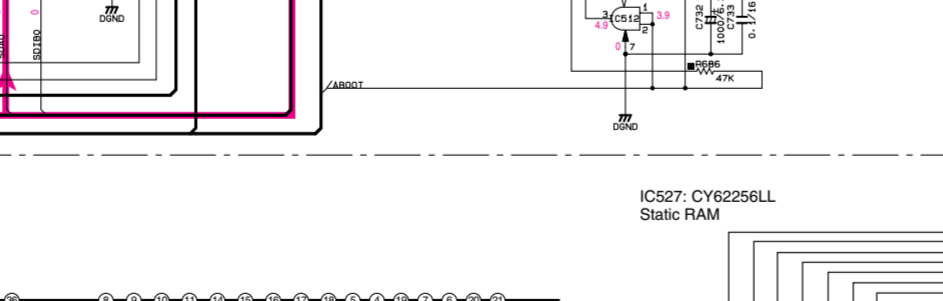
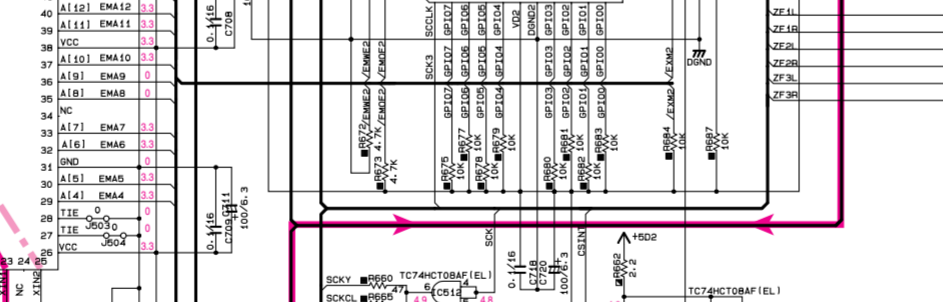
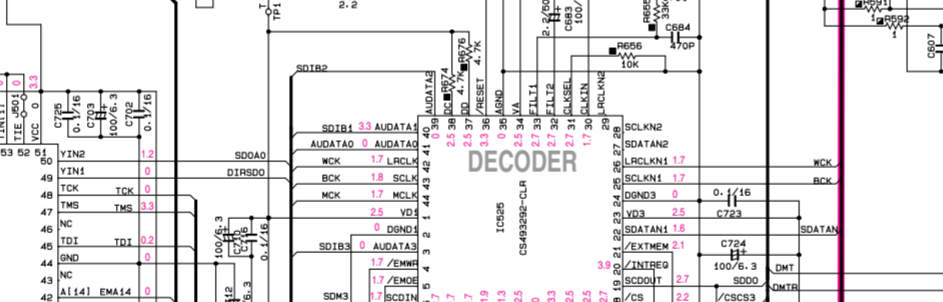
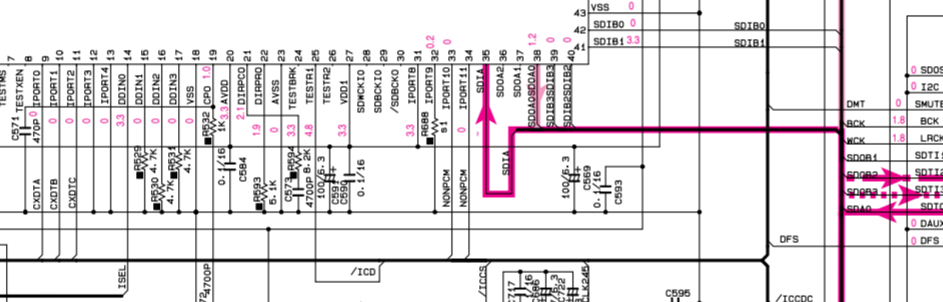
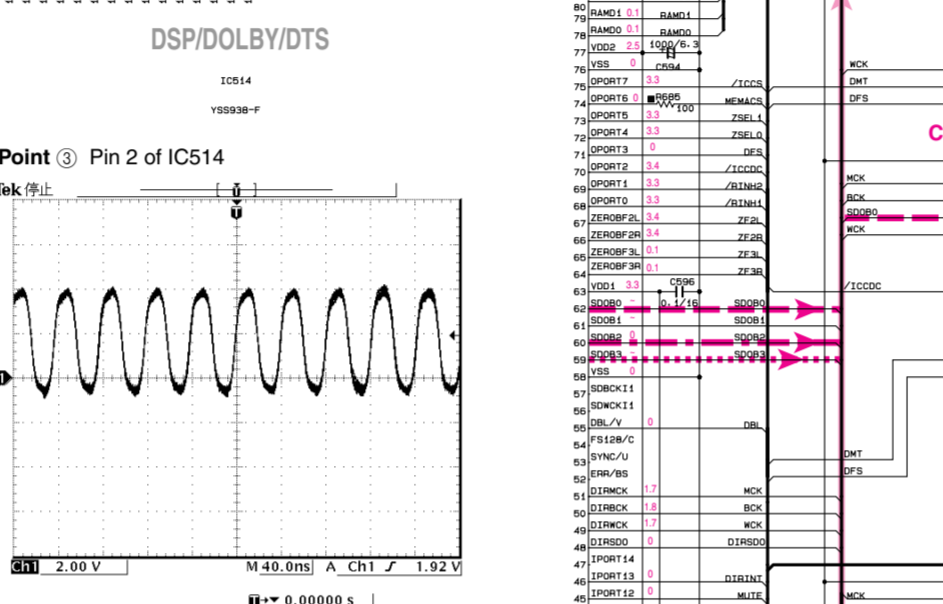
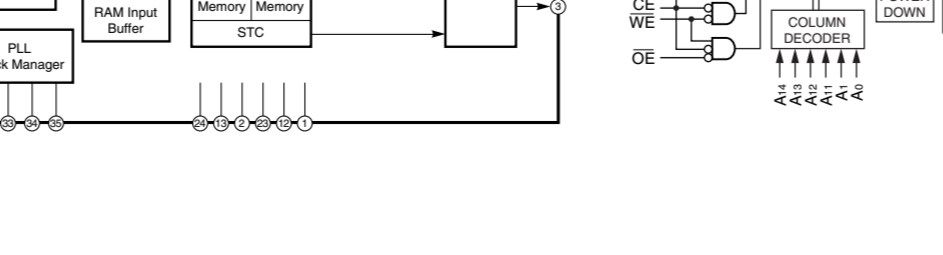
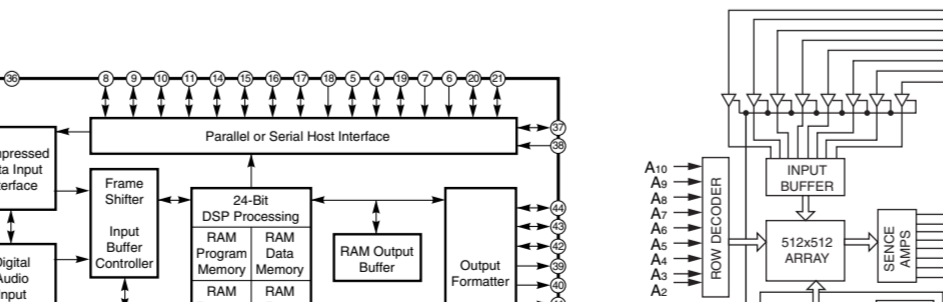
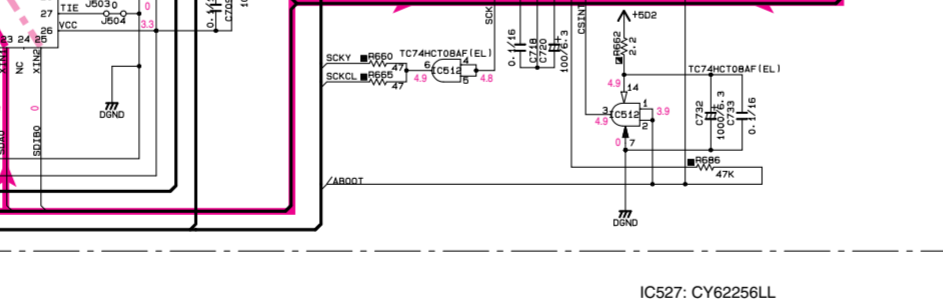
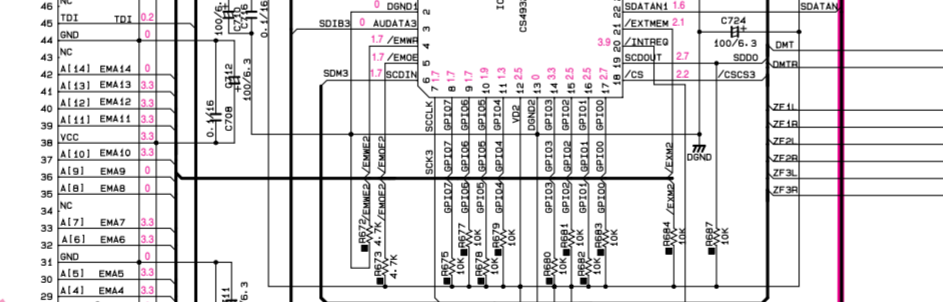
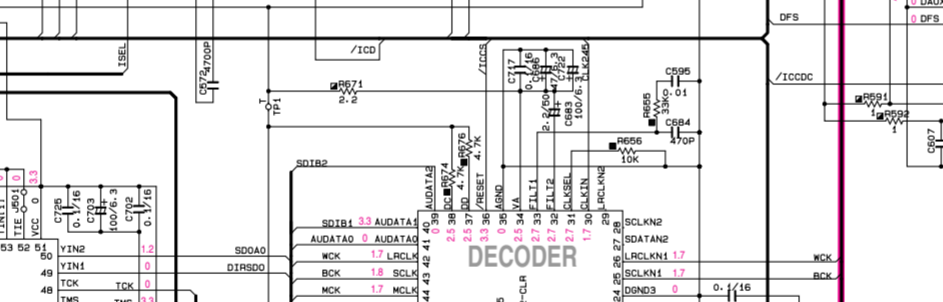
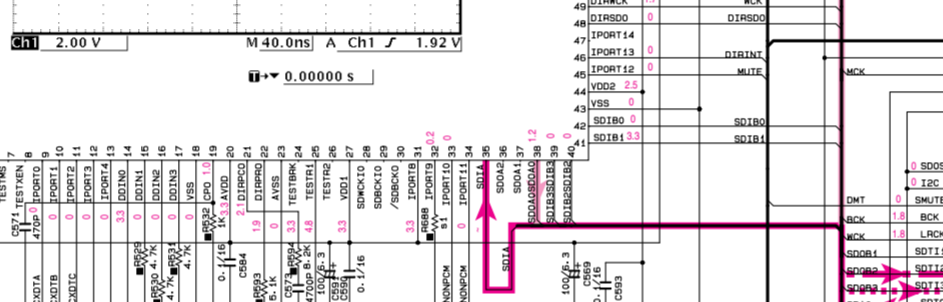
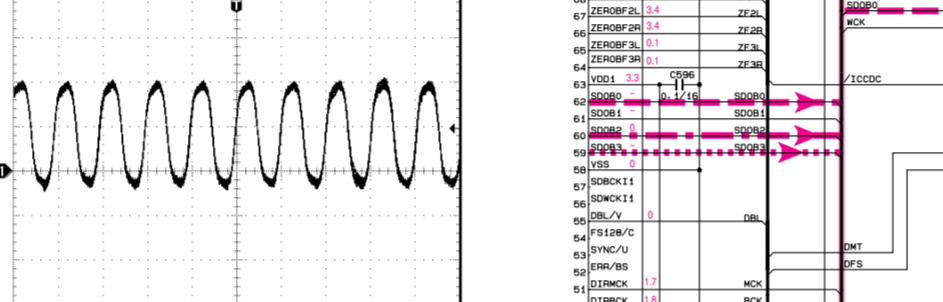
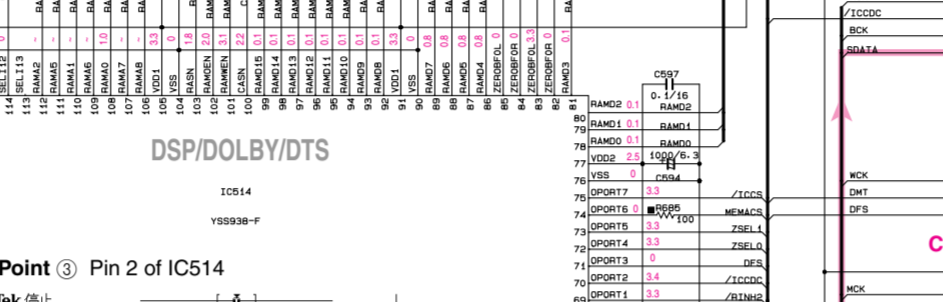
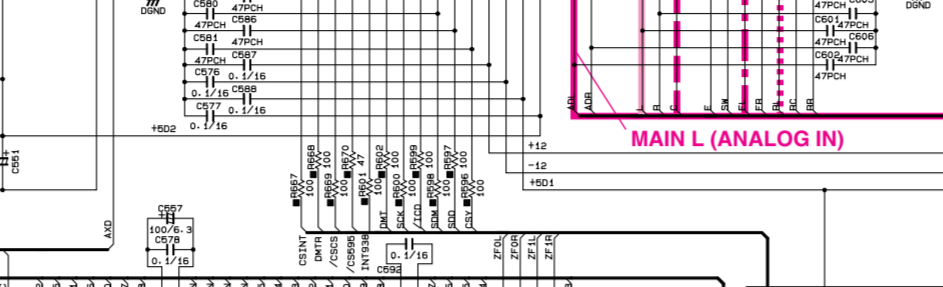
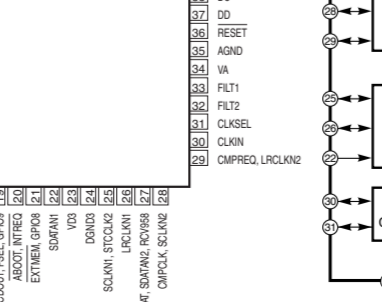
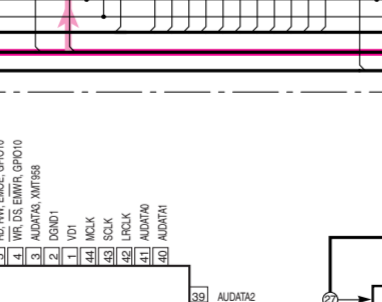
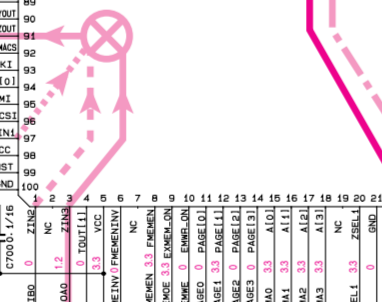
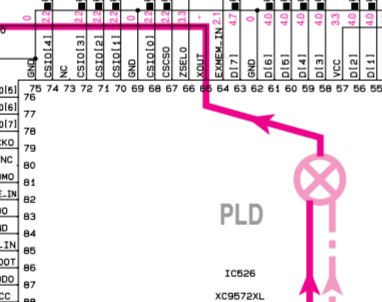
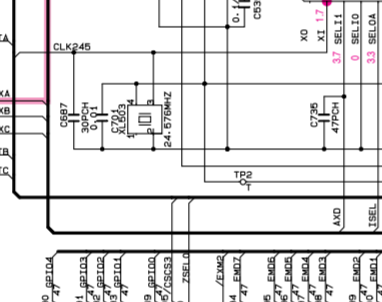
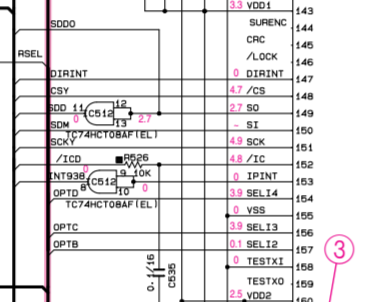
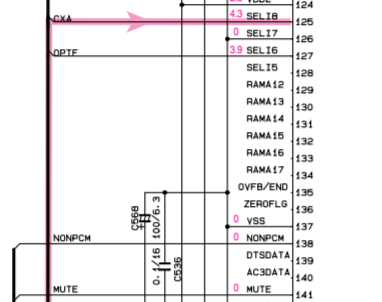
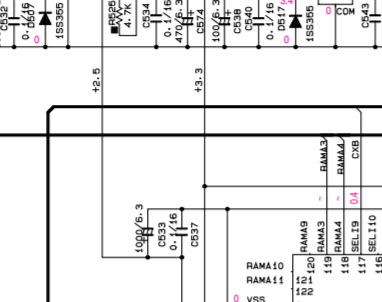
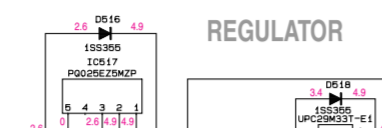
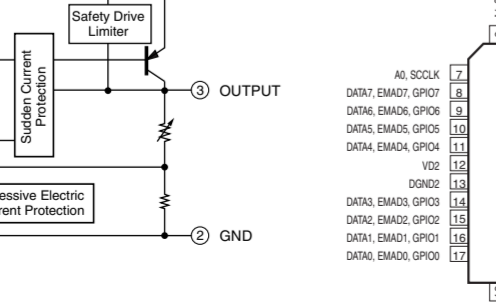
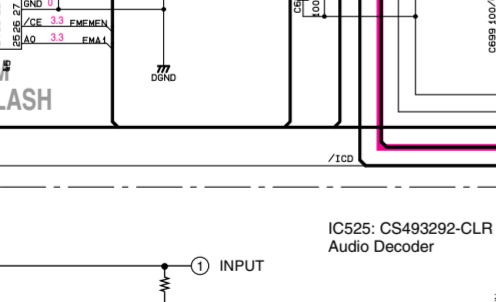
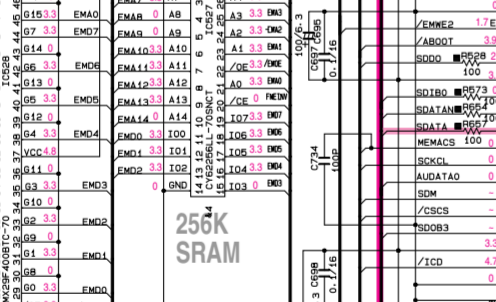
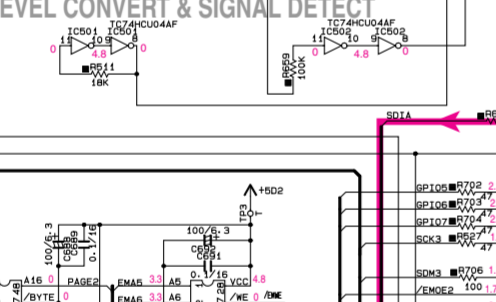
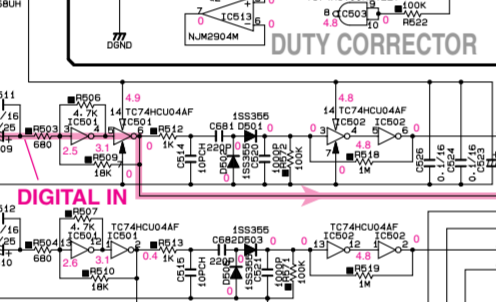
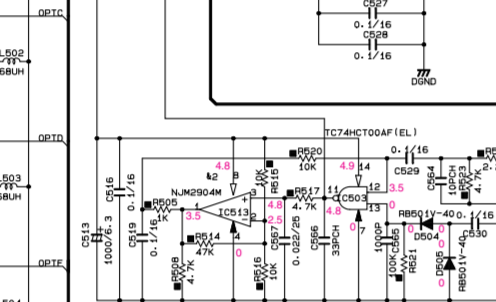
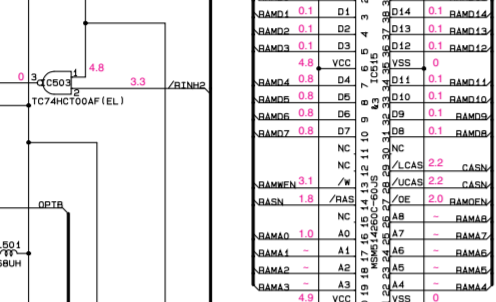
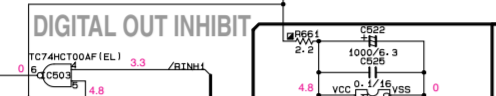
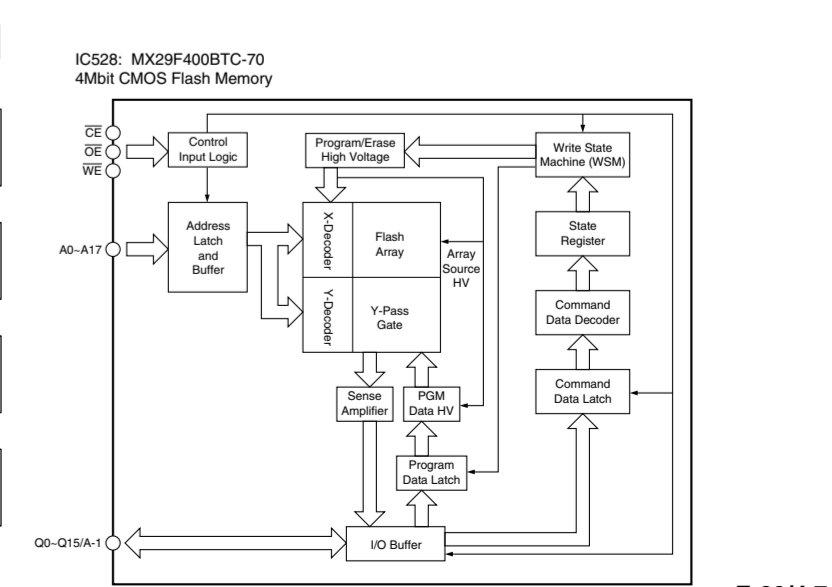
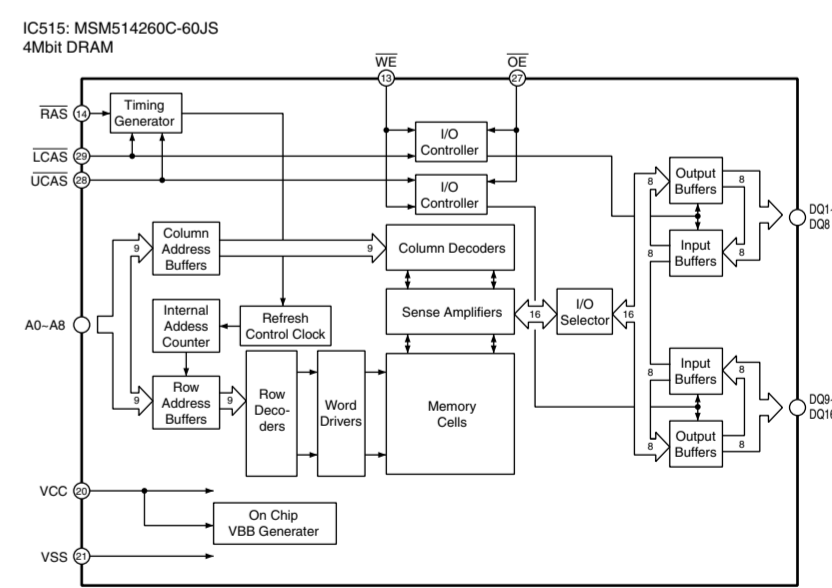
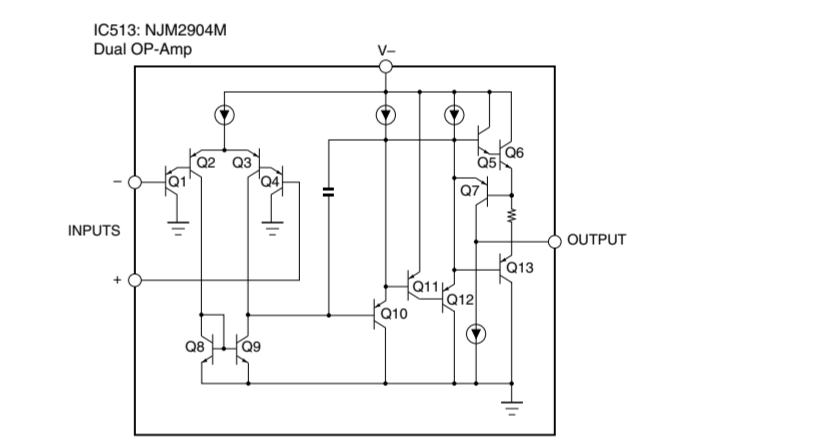
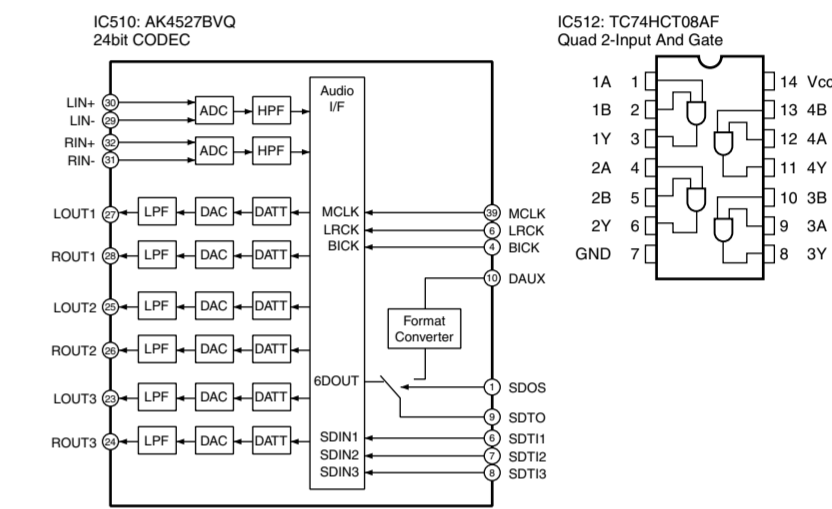
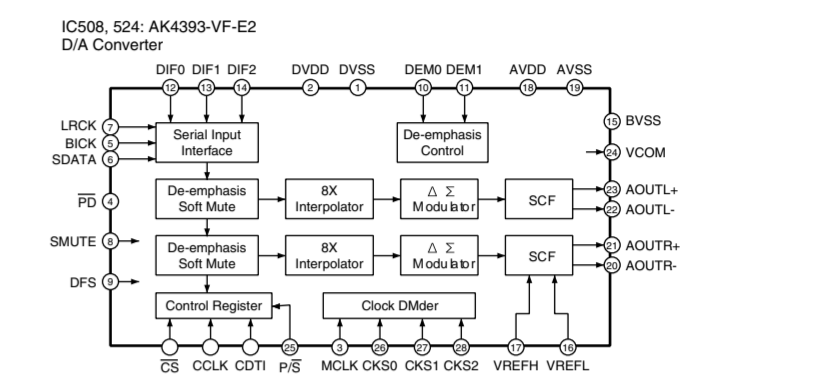
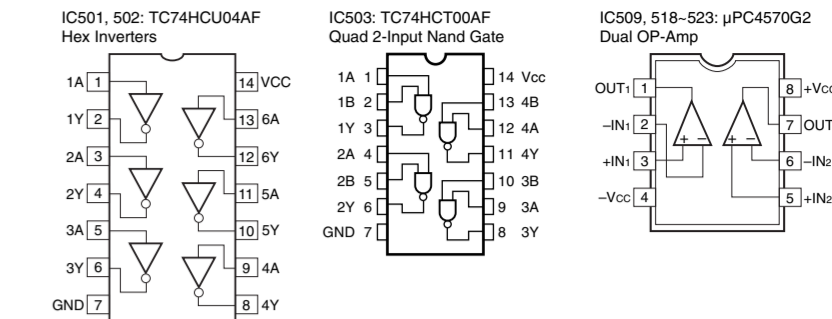
Mark	Reference Parts Number	Part's Name
41	6008-810-917	SPC3281A/F1 SPC3281B/F1
42	IC013	NUM2004M NUM2004M
43	IC015	WM014260C-60JS WM014260C-60JS S144016-60JA
44	IC027	CY5206LL-70NCT UCP40000-70L CNS4507009SR
45	IC028	W42979-TOLL-TEL0 W42979-TOLL-TEL0 MEM049-400C-70PFTN



NOTICE (model)

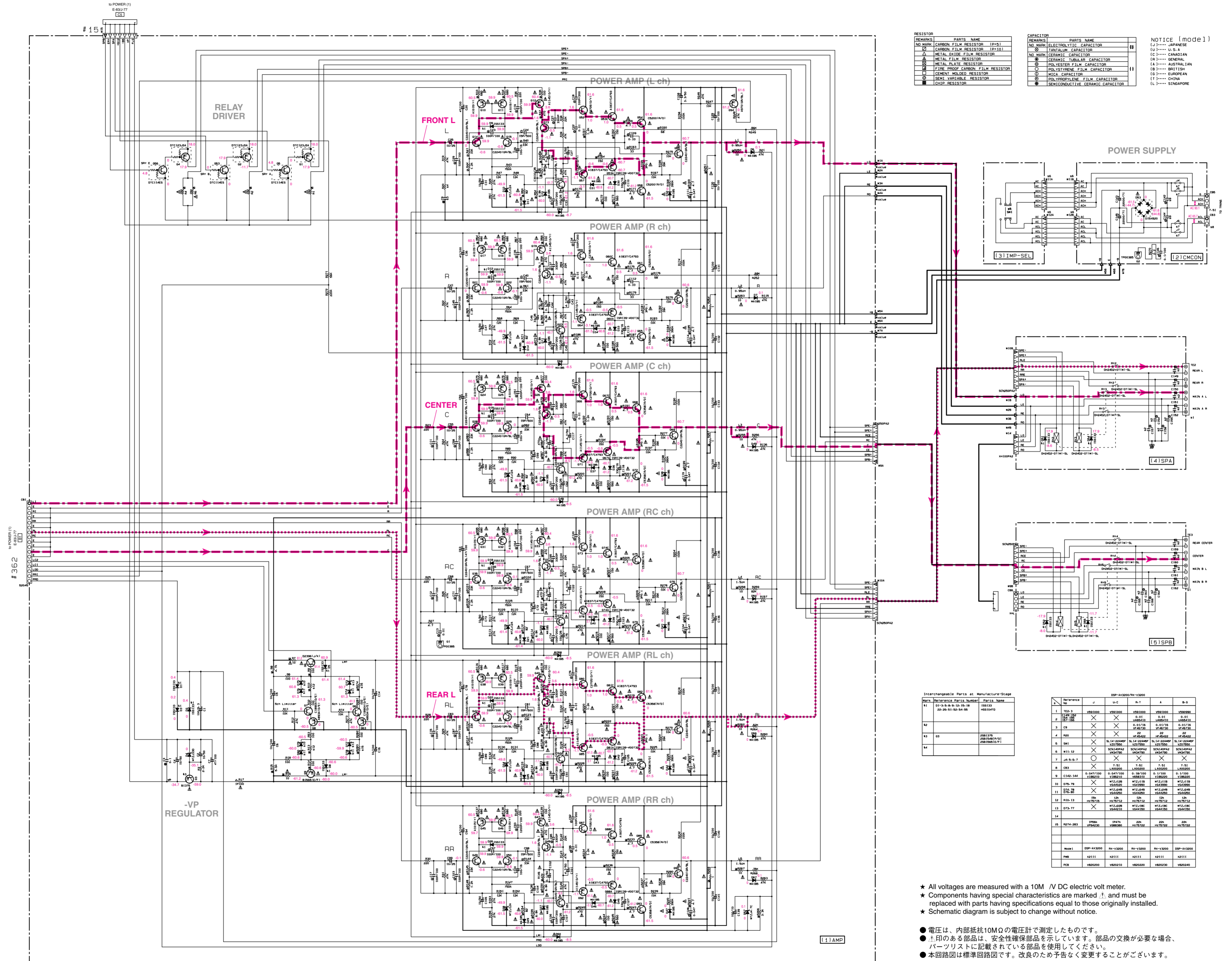
- (J)..... JAPANESE
- (U)..... U.S.A
- (C)..... CANADIAN
- (R)..... GENERAL
- (A)..... AUSTRALIAN
- (B)..... BRITISH
- (G)..... EUROPEAN
- (T)..... CHINA
- (L)..... SINGAPORE

- All voltages are measured with a 10M Ω DC electric volt meter.
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SCHEMATIC DIAGRAM (MAIN)

1
2
3
4
5
6
7
8
9



RESISTOR		CAPACITOR		NOTICE (model)
REMARKS	PARTS NAME	REMARKS	PARTS NAME	
①	CARBON FILM RESISTOR (P=5)	①	ELECTROLYTIC CAPACITOR	(J)..... JAPANESE
②	CARBON FILM RESISTOR (P=10)	②	TANTALUM CAPACITOR	(U)..... U.S.A
③	METAL OXIDE FILM RESISTOR	③	CERAMIC CAPACITOR	(C)..... CANADIAN
④	METAL FILM RESISTOR	④	POLYESTER FILM CAPACITOR	(R)..... GENERAL
⑤	METAL PLATE RESISTOR	⑤	POLYPROPYLENE FILM CAPACITOR	(A)..... AUSTRALIAN
⑥	FINE PITCH CARBON FILM RESISTOR	⑥	MICA CAPACITOR	(B)..... BRITISH
⑦	CEMENT MOLDED RESISTOR	⑦	SEMICONDUCTIVE CERAMIC CAPACITOR	(G)..... EUROPEAN
⑧	SEMI-VARIABLE RESISTOR			(T)..... CHINA
⑨	CHIP RESISTOR			(L)..... SINGAPORE

Interchangeable Parts at Manufacture Stage

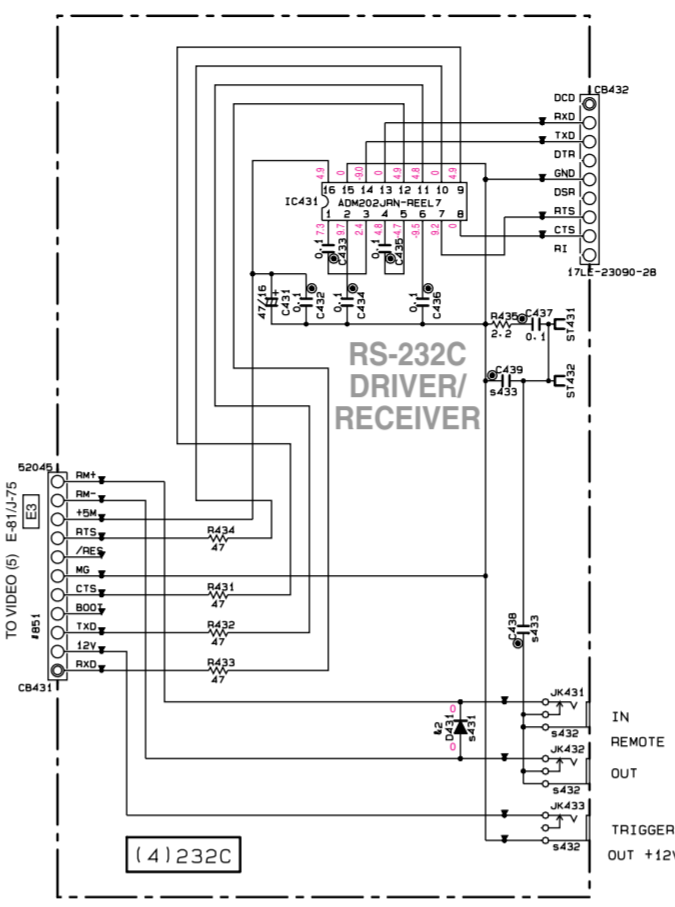
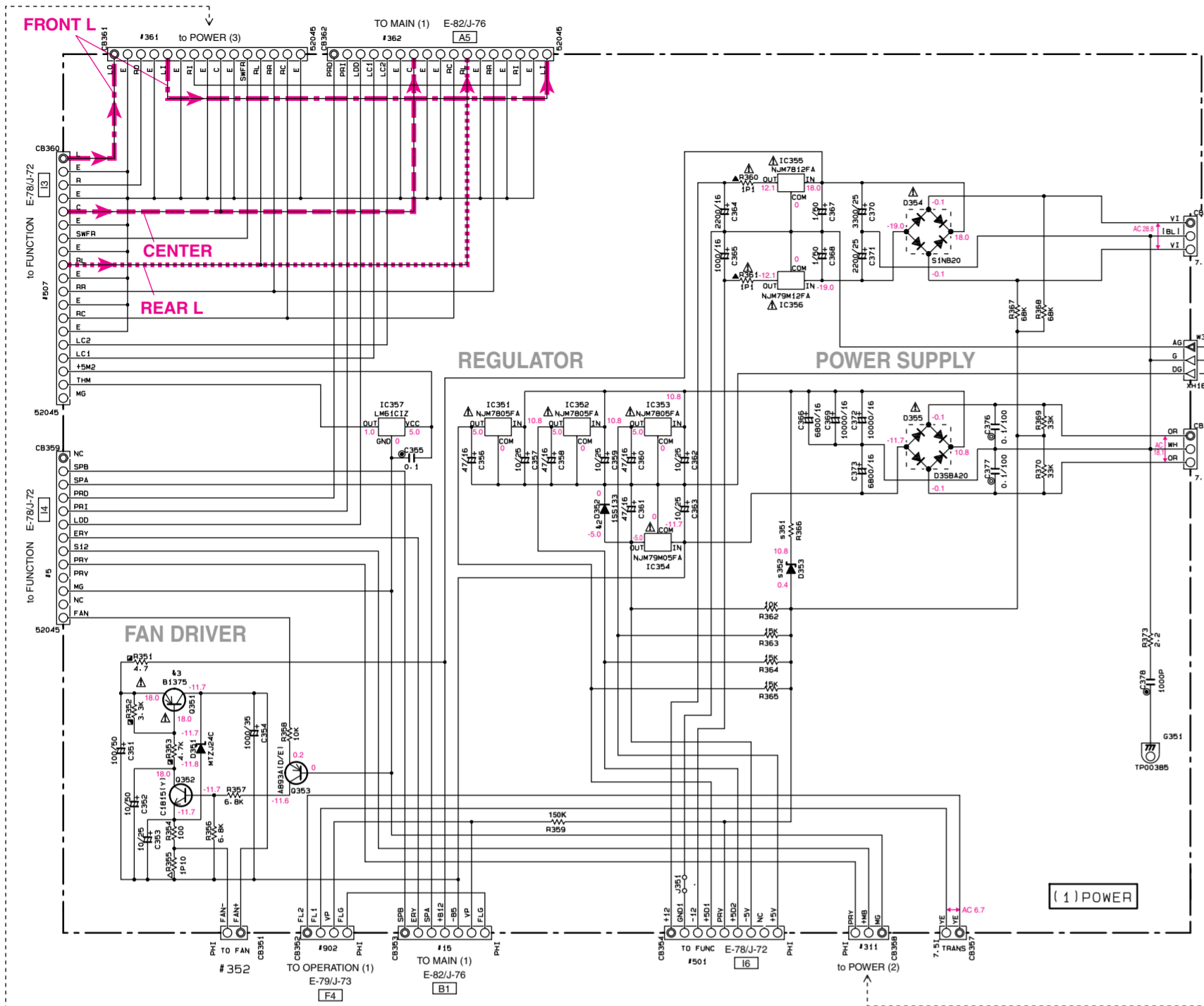
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	22-26-51-52-54-56	H510410
42		
43		
44		

Reference	J	U-C	A	B-G
1	TE2-3	VS21000	VS21000	VS20990
2	TE2-100	VS21000	VS21000	VS20990
3	CR	VS21000	VS21000	VS20990
4	R00	VS21000	VS21000	VS20990
5	S81	SL14-2240P	SL14-2240P	SL14-2240P
6	W11-12	SCH140P2	SCH140P2	SCH140P2
7	J4-D-6-7	VS21000	VS21000	VS20990
8	CR3	VS21000	VS21000	VS20990
9	C140-144	0-547/100	0-547/100	0-547/100
10	016-76	VS21000	VS21000	VS20990
11	016-20	VS21000	VS21000	VS20990
12	W10-13	VS21000	VS21000	VS20990
13	073-77	VS21000	VS21000	VS20990
14				
15	R27A-283	VS21000	VS21000	VS20990

- * All voltages are measured with a 10M Ω DC electric volt meter.
- * Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- * Schematic diagram is subject to change without notice.

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- Δ 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがあります。

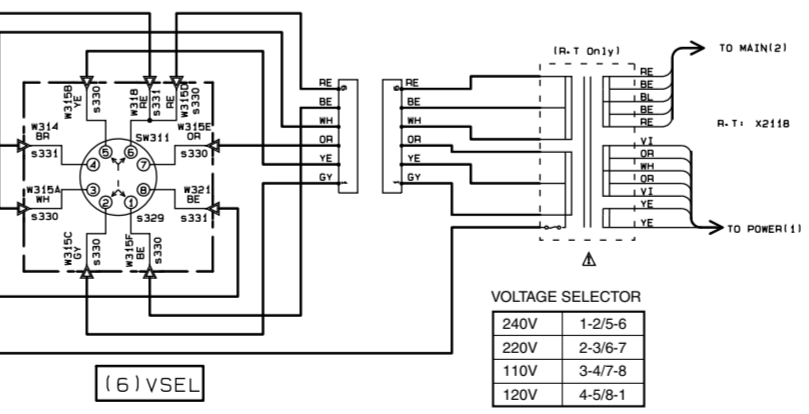
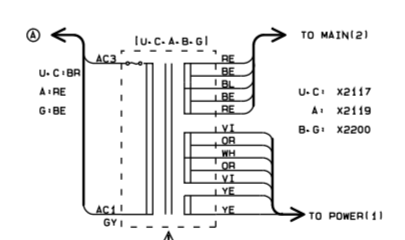
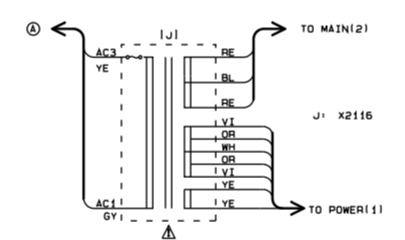
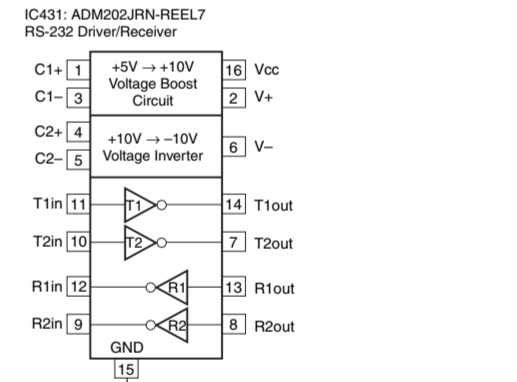
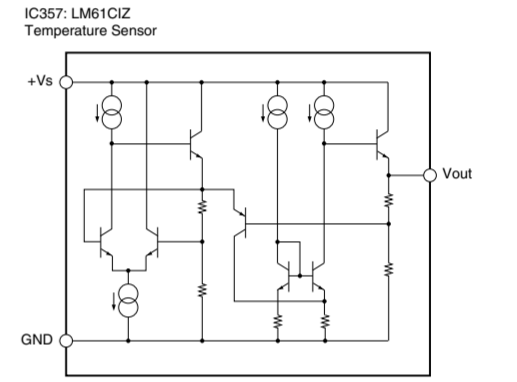
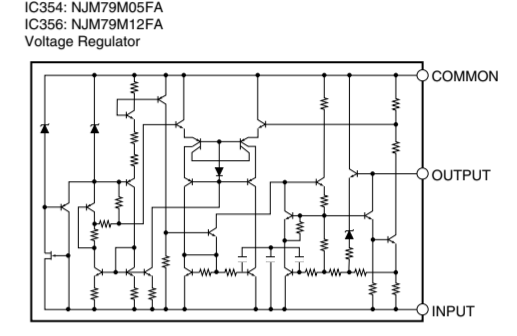
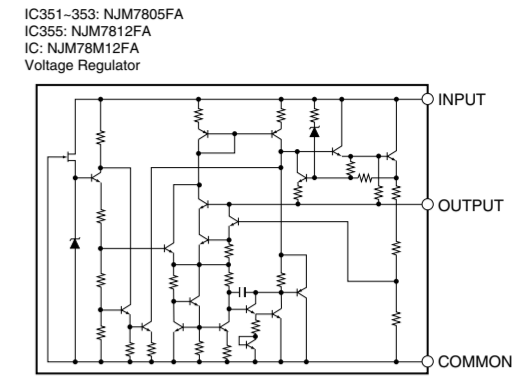
RX-V3200/DSP-AX3200
SCHEMATIC DIAGRAM (POWER)



Interchangeable Parts Table

Mark	Reference Parts Number	Parts Name
K1	0315	25C174051R/S1 25C26031E/F1 25C3311A1G/R/S1
K2	0311-312-352-431	15S133 H5S10470
K3	0351	25B1375 25B1461P/01 25B15651E/F1
K4		
K5		

Reference No	DSP-AX3200	Rx-V3200	Rx-V3200	Rx-V3200	DSP-AX3200	DSP-AX3200
	J	C	A	B	A	B
311	C312	X	X	U14710 10/50	X	X
312	C313	X	X	U116710 10/50	X	X
313	C314	X	X	U119710 10/100	X	X
314	C316-317	X	X	V171670 0.01	X	X
315	D312	X	X	1F00460 15S133	X	X
316	D313	X	X	V08410 1S113P-40013	X	X
317	D315	X	X	V043990 K212118	X	X
318	D312-313	X	X	V081080 D23961J/F1	X	X
319	D314	X	X	V110820 K2461V1	X	X
320	R312-314	X	X	VF45010 100	X	X
321	R313	X	X	VF45710 10K	X	X
322						
323	CB319	X	X	LA00241 10	X	X
324	J312	X	X		X	X
325	J311	X	X		X	X
326	J315	X	X		X	X
327	J313-314-316	X	X		X	X
328	C315	V171670 0.01	V171670 0.01	V171670 0.01	V171670 0.01	V171670 0.01
329	SW311	X	X	W118230 K118233	X	X
330	*315A-F	X	X	PWR CON ASSY V08440	X	X
331	*314-318-321	X	X	PWR WIRE KIT V08450	X	X
332	CB311	X	X	V087990	V087990	V087990
333	CB314	V599610	V599610	V599610	VP20650	VP20650
334	CB313	V599610	V599610	VP20650	VP20650	VP20650
335	CB315	X	X	VP20650	VP20650	VP20650
336	CB317-318	X	X	VP20650	VP20650	VP20650
337	F311	K800149 10A250V	K800139 10A250V	K800078 10A250V	K800078 10A250V	K800078 10A250V
338	F312	V582300 5A125V	V582300 5A125V	K800078 10A250V	X	X
339	T311	X2227	X2228	X2229	X2230	X2231
340	T311	V11880 52-7651-212	V11880 52-7651-212	V086790 16S-08-11V	V191500 52-7731-210	V054330 52-7731-210
341	R315	X	X	V03300 1/2W, 2W	X	X
342	T312	V066100 M1908-G	V066100 M1908-G	X	X	X
343	*312-313	V056850	V056850	X	X	X
344	J323-325	X	X	VF45010 1K	X	X
351	R366	X	X		X	X
352	D353	X	X	V044080 W12158	X	X
401	PJ401	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950
402	PJ402	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950
403	PJ403	LP86521-3315 LP86521-3310	LP86521-3310 LP86521-3310	LP86521-3310 LP86521-3310	LP86521-3310 LP86521-3310	LP86521-3310 LP86521-3310
404	PJ404	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950	V027950 V027950
431	D431	1F00460 15S133	1F00460 15S133	1F00460 15S133	X	X
432	K431-433	X	X	VJ72680 LV0001-0600	VJ72680 LV0001-0600	VJ72680 LV0001-0600
433	C436-439	X	X	VF46730 0.01	VF46730 0.01	VF46730 0.01
Mode1	DSP-AX3200	Rx-V3200	Rx-V3200	Rx-V3200	DSP-AX3200	DSP-AX3200
PWB	X2104	X2105	X2106	X2107	X2107	X2107
PCB	V820300	V820310	V820320	V820330	V820340	V820350



CAPACITOR

REMARKS	PARTS NAME	UNIT
NO MARK	ELECTROLYTIC CAPACITOR	F
⊗	TANTALUM CAPACITOR	F
⊙	CERAMIC CAPACITOR	F
⊕	CERAMIC TUBULAR CAPACITOR	F
⊖	POLYESTER FILM CAPACITOR	F
⊗	POLYSTYRENE FILM CAPACITOR	F
⊙	MICA CAPACITOR	F
⊕	POLYPROPYLENE FILM CAPACITOR	F
⊖	SEMICONDUCTIVE CERAMIC CAPACITOR	F
⊗	POLYBENZYLENE SULFIDE FILM CAPACITOR	F

RESISTOR

REMARKS	PARTS NAME	UNIT
NO MARK	CARBON FILM RESISTOR (P=5)	Ω
⊗	CARBON FILM RESISTOR (P=10)	Ω
⊕	METAL OXIDE FILM RESISTOR	Ω
⊖	METAL FILM RESISTOR	Ω
⊙	METAL PLATE RESISTOR	Ω
⊗	FIRE PROOF CARBON FILM RESISTOR	Ω
⊕	CEMENT MOLDED RESISTOR	Ω
⊖	SEMI-VARIABLE RESISTOR	Ω
⊗	CHIP RESISTOR	Ω

NOTICE (mode1)
 (J)..... JAPANESE
 (U)..... U.S.A
 (C)..... CANADIAN
 (R)..... GENERAL
 (A)..... AUSTRALIAN
 (B)..... BRITISH
 (G)..... EUROPEAN
 (T)..... CHINA
 (L)..... SINGAPORE

★ All voltages are measured with a 10M Ω DC electric volt meter.
 ★ Components having special characteristics are marked ⊕ and must be replaced with parts having specifications equal to those originally installed.
 ★ Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10MΩの電圧計で測定したものです。
 ● ⊕印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
 ● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

PARTS LIST

■ ELECTRICAL PARTS

■ WARNING

Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.

- Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the parts No. of the carbon resistors, refer to last page.

ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS:

C.A.EL.CHP	: CHIP ALUMI.ELECTROLYTIC CAP	L.EMIT	: LIGHT EMITTING MODULE
C.CE	: CERAMIC CAP	LED.DSPLY	: LED DISPLAY
C.CE.ARRAY	: CERAMIC CAP ARRAY	LED.INFRD	: LED,INFRARED
C.CE.CHP	: CHIP CERAMIC CAP	MODUL.RF	: MODULATOR,RF
C.CE.ML	: MULTILAYER CERAMIC CAP	PHOT.CPL	: PHOTO COUPLER
C.CE.M.CHP	: CHIP MULTILAYER CERAMIC CAP	PHOT.INTR	: PHOTO INTERRUPTER
C.CE.SAFTY	: RECOGNIZED CERAMIC CAP	PHOT.RFLCT	: PHOTO REFLECTOR
C.CE.TUBLR	: CERAMIC TUBULAR CAP	PIN.TEST	: PIN,TEST POINT
C.CE.SMI	: SEMI CONDUCTIVE CERAMIC CAP	PLST.RIVET	: PLASTIC RIVET
C.EL	: ELECTROLYTIC CAP	R.ARRAY	: RESISTOR ARRAY
C.MICA	: MICA CAP	R.CAR.	: CARBON RESISTOR
C.ML.FLM	: MULTILAYER FILM CAP	R.CAR.CHP	: CHIP RESISTOR
C.MP	: METALLIZED PAPER CAP	R.CAR.FP	: FLAME PROOF CARBON RESISTOR
C.MYLAR	: MYLAR FILM CAP	R.FUS	: FUSABLE RESISTOR
C.MYLAR.ML	: MULTILAYER MYLAR FILM CAP	R.MTL.CHP	: CHIP METAL FILM RESISTOR
C.PAPER	: PAPER CAPACITOR	R.MTL.FLM	: METAL FILM RESISTOR
C.PLS	: POLYSTYRENE FILM CAP	R.MTL.OXD	: METAL OXIDE FILM RESISTOR
C.POL	: POLYESTER FILM CAP	R.MTL.PLAT	: METAL PLATE RESISTOR
C.POLY	: POLYETHYLENE FILM CAP	RSNR.CE	: CERAMIC RESONATOR
C.PP	: POLYPROPYLENE FILM CAP	RSNR.CRYS	: CRYSTAL RESONATOR
C.TNTL	: TANTALUM CAP	R.TW.CEM	: TWIN CEMENT FIXED RESISTOR
C.TNTL.CHP	: CHIP TANTALUM CAP	R.WW	: WIRE WOUND RESISTOR
C.TRIM	: TRIMMER CAP	SCR.BND.HD	: BIND HEAD B-TITE SCREW
CN	: CONNECTOR	SCR.BW.HD	: BW HEAD TAPPING SCREW
CN.BS.PIN	: CONNECTOR,BASE PIN	SCR.CUP	: CUP TITE SCREW
CN.CANNON	: CONNECTOR,CANNON	SCR.TERM	: SCREW TERMINAL
CN.DIN	: CONNECTOR,DIN	SCR.TR	: SCREW,TRANSISTOR
CN.FLAT	: CONNECTOR,FLAT CABLE	SUPRT.PCB	: SUPPORT,P.C.B.
CN.POST	: CONNECTOR,BASE POST	SURG.PRTCT	: SURGE PROTECTOR
COIL.MX.AM	: COIL,AM MIX	SW.TACT	: TACT SWITCH
COIL.AT.FM	: COIL,FM ANTENNA	SW.LEAF	: LEAF SWITCH
COIL.DT.FM	: COIL,FM DETECT	SW.LEVER	: LEVER SWITCH
COIL.MX.FM	: COIL,FM MIX	SW.MICRO	: MICRO SWITCH
COIL.OUTPT	: OUTPUT COIL	SW.PUSH	: PUSH SWITCH
DIOD.ARRAY	: DIODE ARRAY	SW.RT.ENC	: ROTARY ENCODER
DIODE.BRG	: DIODE BRIDGE	SW.RT.MTR	: ROTARY SWITCH WITH MOTOR
DIODE.CHP	: CHIP DIODE	SW.RT	: ROTARY SWITCH
DIODE.SHOT	: SCHOTTKY BARRIER DIODE	SW.SLIDE	: SLIDE SWITCH
DIODE.VAR	: VARACTOR DIODE	TERM.SP	: SPEAKER TERMINAL
DIOD.Z.CHP	: CHIP ZENER DIODE	TERM.WRAP	: WRAPPING TERMINAL
DIODE.ZENR	: ZENER DIODE	THRMST.CHP	: CHIP THERMISTOR
DSCR.CE	: CERAMIC DISCRIMINATOR	TR.CHP	: CHIP TRANSISTOR
FER.BEAD	: FERRITE BEADS	TR.DGT	: DIGITAL TRANSISTOR
FER.CORE	: FERRITE CORE	TR.DGT.CHP	: CHIP DIGITAL TRANSISTOR
FET.CHP	: CHIP FET	TRANS	: TRANSFORMER
FL.DSPLY	: FLUORESCENT DISPLAY	TRANS.PULS	: PULSE TRANSFORMER
FLTR.CE	: CERAMIC FILTER	TRANS.PWR	: POWER TRANSFORMER ASS'Y
FLTR.COMB	: COMB FILTER MODULE	TUNER.AM	: TUNER PACK,AM
FLTR.LC.RF	: LC FILTER,EMI	TUNER.FM	: TUNER PACK,FM
GND.MTL	: GROUND PLATE	TUNER.PK	: FRONT-END TUNER PACK
GND.TERM	: GROUND TERMINAL	VR	: ROTARY POTENTIOMETER
HOLDER.FUS	: FUSE HOLDER	VR.MTR	: POTENTIOMETER WITH MOTOR
IC.PRTCT	: IC PROTECTOR	VR.SW	: POTENTIOMETER WITH ROTARY SW
JUMPER.CN	: JUMPER CONNECTOR	VR.SLIDE	: SLIDE POTENTIOMETER
JUMPER.TST	: JUMPER,TEST POINT	VR.TRIM	: TRIMMER POTENTIOMETER
L.DTCT	: LIGHT DETECTING MODULE		

Note) Those parts marked with “#” are not included in the P.C.B. ass'y.

P.C.B. FUNCTION

Schm Ref.	PART NO.	Description	Markets
	V8201100	P.C.B.	UC
	V8201200	P.C.B.	RT
	V8201300	P.C.B.	A
	V8201400	P.C.B.	BG
CB501	V7826000	CN	10P TE TUC SERIES
CB502	V7826100	CN	11P TE TUC SERIES
CB503	V7828200	SOCKET	15P TE TUC SERIES
CB504	VQ048000	CN.BS.PIN	31P
CB505	VF982300	CN.BS.PIN	17P
CB506	V7827800	SOCKET	11P TE TUC SERIES
CB507	VQ047400	CN.BS.PIN	19P
CB508	V7827900	SOCKET	12P TE TUC SERIES
CB509	VQ044900	CN.BS.PIN	19P
CB510	VQ044600	CN.BS.PIN	13P
C501	UU166470	C.EL	4.7uF 50V
C502	UU166470	C.EL	4.7uF 50V
C503	UU166470	C.EL	4.7uF 50V
C504	UU166100	C.EL	1uF 50V
C505	UU166100	C.EL	1uF 50V
C506	UU118220	C.EL	220uF 6.3V
C507	UU118220	C.EL	220uF 6.3V
C508	UU166220	C.EL	2.2uF 50V
C509	UU166220	C.EL	2.2uF 50V
C510	UU147100	C.EL	10uF 25V
C511	UU147100	C.EL	10uF 25V
C512	UU147100	C.EL	10uF 25V
C513	UU147100	C.EL	10uF 25V
C514	UU147100	C.EL	10uF 25V
C515	UU137470	C.EL	47uF 16V
C516	UU137470	C.EL	47uF 16V
C517	UU147100	C.EL	10uF 25V
C518	UU147100	C.EL	10uF 25V
C519	UU138100	C.EL	100uF 16V
C520	UU138100	C.EL	100uF 16V
C521	UU147100	C.EL	10uF 25V
C522	UU147100	C.EL	10uF 25V
C523	UU166470	C.EL	4.7uF 50V
C524	UU166470	C.EL	4.7uF 50V
C525	UU166470	C.EL	4.7uF 50V
C526	UU166470	C.EL	4.7uF 50V
C527	UU147100	C.EL	10uF 25V
C528	UU147100	C.EL	10uF 25V
C529	UU147100	C.EL	10uF 25V
C530	UU147100	C.EL	10uF 25V
C531	UU137470	C.EL	47uF 16V
C532	UU137470	C.EL	47uF 16V
C533	UU166100	C.EL	1uF 50V
C534	UU137220	C.EL	22uF 16V
C535	UU137220	C.EL	22uF 16V
C536	UU147100	C.EL	10uF 25V
C537	UU147100	C.EL	10uF 25V
C538	UU147100	C.EL	10uF 25V
C539	UU147100	C.EL	10uF 25V
C540	UU147100	C.EL	10uF 25V
C541	UU137470	C.EL	47uF 16V
C542	UU137470	C.EL	47uF 16V
C543	UU166330	C.EL	3.3uF 50V
C544	UU166330	C.EL	3.3uF 50V
C545	UU147100	C.EL	10uF 25V
C546	UU147100	C.EL	10uF 25V
C547	UU147100	C.EL	10uF 25V
C548	UU147100	C.EL	10uF 25V
C549	UU147100	C.EL	10uF 25V

Schm Ref.	PART NO.	Description	Markets
C550	UU147100	C.EL	10uF 25V
C551	UR865220	C.EL	0.22uF 50V
C552	UU147100	C.EL	10uF 25V
C553	UU147100	C.EL	10uF 25V
C554	UU166330	C.EL	3.3uF 50V
C555	UU166330	C.EL	3.3uF 50V
C556	UU166330	C.EL	3.3uF 50V
C557	UU166330	C.EL	3.3uF 50V
C558	UU166330	C.EL	3.3uF 50V
C559	UU166330	C.EL	3.3uF 50V
C560	UU147100	C.EL	10uF 25V
C561	UU138100	C.EL	100uF 16V
C562	UU138100	C.EL	100uF 16V
C563	UR865470	C.EL	0.47uF 50V
C564	UU147100	C.EL	10uF 25V
C565	UU147100	C.EL	10uF 25V
C566	UU147100	C.EL	10uF 25V
C567	UU147100	C.EL	10uF 25V
C568	UU137470	C.EL	47uF 16V
C569	UU147100	C.EL	10uF 25V
C570	UU147100	C.EL	10uF 25V
C571	UU138100	C.EL	100uF 16V
C572	UU138100	C.EL	100uF 16V
C573	UU147100	C.EL	10uF 25V
C574	UU147100	C.EL	10uF 25V
C575	UU147100	C.EL	10uF 25V
C576	UR848100	C.EL	100uF 25V
C576	UR848220	C.EL	220uF 25V
C577	UU137470	C.EL	47uF 16V
C578	UU138100	C.EL	100uF 16V
C579	UU138100	C.EL	100uF 16V
C580	VU545000	C.EL	47000uF 5.5V
C581	UU147100	C.EL	10uF 25V
C582	UU147100	C.EL	10uF 25V
C583	UU147100	C.EL	10uF 25V
C584	UU137470	C.EL	47uF 16V
C585	UU137470	C.EL	47uF 16V
C586	UR819100	C.EL	1000uF 6.3V
C587	UR819220	C.EL	2200uF 6.3V
C588	UU147100	C.EL	10uF 25V
C589	UU147100	C.EL	10uF 25V
C590	UU147100	C.EL	10uF 25V
C591	UU147100	C.EL	10uF 25V
C592	UU147100	C.EL	10uF 25V
C593	UU138100	C.EL	100uF 16V
C594	UU147100	C.EL	10uF 25V
C595	UU166220	C.EL	2.2uF 50V
C596	UU166220	C.EL	2.2uF 50V
C597	UU166220	C.EL	2.2uF 50V
C598	UU166220	C.EL	2.2uF 50V
C599	UU166220	C.EL	2.2uF 50V
C600	UU166220	C.EL	2.2uF 50V
C601	VC694800	C.CE.SMI	0.1uF 25V
C602	US135100	C.CE.CHP	0.1uF 16V
C603	UP652220	C.POL	220pF 100V
C604	UP652220	C.POL	220pF 100V
C605	UP652470	C.POL	470pF 100V
C606	UP652470	C.POL	470pF 100V
C607	UP652470	C.POL	470pF 100V
C608	UP652470	C.POL	470pF 100V
C609	UP652470	C.POL	470pF 100V
C610	UP652470	C.POL	470pF 100V
C611	UP652470	C.POL	470pF 100V

UCABG
RT

ABG
ABG

* New Parts

* New Parts

P.C.B. FUNCTION

Schm Ref.	PART NO.	Description	Markets	Schm Ref.	PART NO.	Description	Markets
C612	UP652470	C. POL 470pF 100V		C676	US135100	C. CE. CHP 0.1uF 16V	UCABG
C613	UP652470	C. POL 470pF 100V		C677	US063100	C. CE. M. CHP 1000pF 50V	
C614	UP652470	C. POL 470pF 100V		C678	US135100	C. CE. CHP 0.1uF 16V	UCABG
C615	UP652220	C. POL 220pF 100V		C679	US135100	C. CE. CHP 0.1uF 16V	
C616	UP652220	C. POL 220pF 100V		C691	UR867470	C. EL 47uF 50V	
C617	UP652470	C. POL 470pF 100V		C692	UR848100	C. EL 100uF 25V	
C618	UP652470	C. POL 470pF 100V		D501	VU992600	D1ODE. ZENR MA8051-M 5.1V	
C619	UP652470	C. POL 470pF 100V		D502	VT332900	D1ODE 1SS355	
C620	UP652470	C. POL 470pF 100V		D503	VT332900	D1ODE 1SS355	
C621	UP652470	C. POL 470pF 100V		D504	VT332900	D1ODE 1SS355	
C622	UP652470	C. POL 470pF 100V		D505	VT332900	D1ODE 1SS355	
C623	UA654390	C. MYLAR 0.039uF 50V		D506	VU993500	D1ODE. ZENR MA8062-H 6.4V	
C624	UA654390	C. MYLAR 0.039uF 50V		D507	VT332900	D1ODE 1SS355	
C625	UP652100	C. POL 100pF 100V		D508	VT332900	D1ODE 1SS355	
C626	UP652100	C. POL 100pF 100V		D509	VT332900	D1ODE 1SS355	
C627	UA654110	C. MYLAR 0.011uF 50V		D510	VT332900	D1ODE 1SS355	
C628	UA654110	C. MYLAR 0.011uF 50V		D511	VV833200	D1ODE 1SS380	
C629	UA653100	C. MYLAR 1000pF 50V		D512	VT332900	D1ODE 1SS355	
C630	UA653100	C. MYLAR 1000pF 50V		D513	VU992600	D1ODE. ZENR MA8051-M 5.1V	
C631	UP652100	C. POL 100pF 100V		D514	VT332900	D1ODE 1SS355	
C632	UP652100	C. POL 100pF 100V		D515	VU993000	D1ODE. ZENR MA8056-M 5.6V	
C633	US135100	C. CE. CHP 0.1uF 16V		D517	VT332900	D1ODE 1SS355	UCRTA
C634	US135100	C. CE. CHP 0.1uF 16V		D518	VT332900	D1ODE 1SS355	UCRTA
C635	UP654270	C. POL 0.027uF 100V		D519	VV220700	D1ODE. SHOT RB501V-40	
C636	UP654270	C. POL 0.027uF 100V		D520	VT332900	D1ODE 1SS355	
C637	UP654270	C. POL 0.027uF 100V		D521	VV220700	D1ODE. SHOT RB501V-40	
C638	UP654270	C. POL 0.027uF 100V		D522	VT332900	D1ODE 1SS355	
C639	US135100	C. CE. CHP 0.1uF 16V		D523	VV220700	D1ODE. SHOT RB501V-40	
C640	UP652100	C. POL 100pF 100V		D524	VT332900	D1ODE 1SS355	
C641	UP652100	C. POL 100pF 100V		D525	VV220700	D1ODE. SHOT RB501V-40	
C642	US135100	C. CE. CHP 0.1uF 16V		D526	VT332900	D1ODE 1SS355	
C643	US135100	C. CE. CHP 0.1uF 16V		D531	VT332900	D1ODE 1SS355	
C644	US063100	C. CE. M. CHP 1000pF 50V		D532	VT332900	D1ODE 1SS355	
C645	US135100	C. CE. CHP 0.1uF 16V		IC501	XJ553A00	IC NJM2068MD	
C646	US135100	C. CE. CHP 0.1uF 16V		IC502	XP895A00	IC LC78212	
C647	US135100	C. CE. CHP 0.1uF 16V		IC503	XP894A00	IC LC78211	
C648	US135100	C. CE. CHP 0.1uF 16V		IC504	XP895A00	IC LC78212	
C649	US135100	C. CE. CHP 0.1uF 16V		IC505	XP896A00	IC LC78213	
C650	US135100	C. CE. CHP 0.1uF 16V		IC506	XF291A00	IC uPC4570G2	
C651	US135100	C. CE. CHP 0.1uF 16V		IC507	XF291A00	IC uPC4570G2	
C652	US135100	C. CE. CHP 0.1uF 16V		IC508	XF291A00	IC uPC4570G2	
C653	US135100	C. CE. CHP 0.1uF 16V		IC509	XP894A00	IC LC78211	
C654	US135100	C. CE. CHP 0.1uF 16V		IC510	XP896A00	IC LC78213	
C655	US135100	C. CE. CHP 0.1uF 16V		IC511	XF291A00	IC uPC4570G2	
C656	US135100	C. CE. CHP 0.1uF 16V		IC512	X0671A00	IC MX29F400BTC-70	
C657	US135100	C. CE. CHP 0.1uF 16V		IC513	XF291A00	IC uPC4570G2	
C658	UP652100	C. POL 100pF 100V		IC514	XF291A00	IC uPC4570G2	
C659	UP652100	C. POL 100pF 100V		IC515	XF291A00	IC uPC4570G2	
C660	UP652100	C. POL 100pF 100V		IC516	XZ545A00	IC YAC520-EE2	
C661	US135100	C. CE. CHP 0.1uF 16V		IC517	XZ545A00	IC YAC520-EE2	
C662	UP652100	C. POL 100pF 100V		IC518	XZ545A00	IC YAC520-EE2	
C663	UP652100	C. POL 100pF 100V		IC519	XZ545A00	IC YAC520-EE2	
C664	US135100	C. CE. CHP 0.1uF 16V		IC520	XY892A00	IC. CPU M30802SGP CPU	
C665	US135100	C. CE. CHP 0.1uF 16V		IC521	XF291A00	IC uPC4570G2	
C666	US135100	C. CE. CHP 0.1uF 16V	UCABG	IC522	XJ604A00	IC NJM78M05FA	
C667	UP652100	C. POL 100pF 100V		IC523	XF291A00	IC uPC4570G2	
C668	UP652100	C. POL 100pF 100V		IC524	XF291A00	IC uPC4570G2	
C669	US135100	C. CE. CHP 0.1uF 16V		IC525	XF291A00	IC uPC4570G2	
C670	US135100	C. CE. CHP 0.1uF 16V		L501	VY656400	COIL. CHP 120uH	
C671	US135100	C. CE. CHP 0.1uF 16V	UCABG	L502	VY656400	COIL. CHP 120uH	
C672	US135100	C. CE. CHP 0.1uF 16V		L503	VE795500	FER. BEAD B-01-RTF	
C673	US135100	C. CE. CHP 0.1uF 16V		PJ501	V3855600	JACK. PIN 4P	
C675	US063100	C. CE. M. CHP 1000pF 50V		PJ502	V3855600	JACK. PIN 4P	

* New Parts

* New Parts

P.C.B. FUNCTION & P.C.B. OPERATION

Schm Ref.	PART NO.	Description	Markets
PJ503	V4198900	JACK .PIN	4P
PJ504	V4199200	JACK .PIN	6P
PN501	V3750200	PIN	L=70
Q501	VD303700	TR	2SC3326 A,B
Q502	VD303700	TR	2SC3326 A,B
Q503	VD303700	TR	2SC3326 A,B
Q504	VD303700	TR	2SC3326 A,B
Q505	VD303700	TR	2SC3326 A,B
Q506	VD303700	TR	2SC3326 A,B
Q507	iA103700	TR .CHP	2SA1037 Q,R,S
Q508	iA103700	TR .CHP	2SA1037 Q,R,S
Q509	VV655700	TR .DGT	DTC144EKA
Q510	VV655700	TR .DGT	DTC144EKA
Q511	iA103700	TR .CHP	2SA1037 Q,R,S
Q512	VV655700	TR .DGT	DTC144EKA
Q513	VD303700	TR	2SC3326 A,B
Q514	VD303700	TR	2SC3326 A,B
Q515	VD303700	TR	2SC3326 A,B
Q516	VD303700	TR	2SC3326 A,B
Q517	VD303700	TR	2SC3326 A,B
Q518	VD303700	TR	2SC3326 A,B
Q519	VD303700	TR	2SC3326 A,B
Q520	iA103700	TR .CHP	2SA1037 Q,R,S
Q521	iA103700	TR .CHP	2SA1037 Q,R,S
Q522	iA103700	TR .CHP	2SA1037 Q,R,S
Q523	iA103700	TR .CHP	2SA1037 Q,R,S
Q524	iA103700	TR .CHP	2SA1037 Q,R,S
Q525	iA103700	TR .CHP	2SA1037 Q,R,S
Q526	VP872700	TR	2SC4488 S,T
Q527	iA103700	TR .CHP	2SA1037 Q,R,S
Q528	iA103700	TR .CHP	2SA1037 Q,R,S
Q529	iA103700	TR .CHP	2SA1037 Q,R,S
Q530	iA103700	TR .CHP	2SA1037 Q,R,S
Q531	iA103700	TR .CHP	2SA1037 Q,R,S
Q532	iA103700	TR .CHP	2SA1037 Q,R,S
Q533	VD303700	TR	2SC3326 A,B
Q534	VD303700	TR	2SC3326 A,B
Q535	VP872600	TR	2SA1708 S,T
Q536	VV655700	TR .DGT	DTC144EKA
Q537	VD303700	TR	2SC3326 A,B
Q538	VD303700	TR	2SC3326 A,B
Q539	VD303700	TR	2SC3326 A,B
Q540	VD303700	TR	2SC3326 A,B
Q541	VD303700	TR	2SC3326 A,B
Q542	VD303700	TR	2SC3326 A,B
Q543	VD303700	TR	2SC3326 A,B
Q544	VD303700	TR	2SC3326 A,B
Q546	VD303700	TR	2SC3326 A,B
Q547	VD303700	TR	2SC3326 A,B
R561	HV755100	R .CAR .FP	100 1/4W
R562	HV755100	R .CAR .FP	100 1/4W
R636	HV753220	R .CAR .FP	2.2 1/4W
R637	HV753220	R .CAR .FP	2.2 1/4W
R664	HV753470	R .CAR .FP	4.7 1/4W
R703	HV753220	R .CAR .FP	2.2 1/4W
R704	HV753220	R .CAR .FP	2.2 1/4W
R803	HV754100	R .CAR .FP	10 1/4W
ST501	BB071360	SCR .TERM	8.3x13
ST502	BB071360	SCR .TERM	8.3x13
XL501	V4738900	RSNR .CE	12MHz

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Schm Ref.	PART NO.	Description	Markets
	V8202600	P .C .B .	OPERATION
	V8202700	P .C .B .	OPERATION
CB801	VF982300	CN .BS .PIN	17P
CB802	V7827200	SOCKET	5P TE TUC SERIES
CB831	V7825500	CN	5P TE TUC SERIES
CB901	VB858600	CN .BS .PIN	7P
CB902	VQ044900	CN .BS .PIN	19P
CB935	V7680700	CN .PHOT .SN	1P GP1FA512RZ
CB936	VB858200	CN .BS .PIN	3P
CB937	VQ047100	CN .BS .PIN	7P
CB938	VB389900	CN .BS .PIN	3P
CB985	VB858200	CN .BS .PIN	3P
C801	UU137470	C .EL	47uF 16V
C802	UU137470	C .EL	47uF 16V
C803	UU147220	C .EL	22uF 25V
C804	UU147220	C .EL	22uF 25V
C805	UU165100	C .EL	0.1uF 50V
C806	UU165100	C .EL	0.1uF 50V
C807	UU165100	C .EL	0.1uF 50V
C808	UU165100	C .EL	0.1uF 50V
C809	UU166100	C .EL	1uF 50V
C810	UU166100	C .EL	1uF 50V
C811	UU166220	C .EL	2.2uF 50V
C812	UU166220	C .EL	2.2uF 50V
C813	UP652100	C .POL	100pF 100V
C814	UP652100	C .POL	100pF 100V
C815	UU137470	C .EL	47uF 16V
C816	UU137470	C .EL	47uF 16V
C817	VR168400	C .MYLAR .ML	ECQ-V1H124JL3
C818	VR168400	C .MYLAR .ML	ECQ-V1H124JL3
C819	UA654330	C .MYLAR	0.033uF 50V
C820	UA654330	C .MYLAR	0.033uF 50V
C821	UU147100	C .EL	10uF 25V
C822	UU147100	C .EL	10uF 25V
C823	UU147100	C .EL	10uF 25V
C824	UU147100	C .EL	10uF 25V
C825	UU147100	C .EL	10uF 25V
C826	UU147100	C .EL	10uF 25V
C827	FG652100	C .CE	100pF 50V
C828	FG652100	C .CE	100pF 50V
C829	FG652100	C .CE	100pF 50V
C830	FG652100	C .CE	100pF 50V
C831	UU147100	C .EL	10uF 25V
C832	UU147100	C .EL	10uF 25V
C833	VF466600	C .CE .TUBLR	10pF 50V
C834	VF466600	C .CE .TUBLR	10pF 50V
C835	UU139100	C .EL	1000uF 16V
C836	UU139100	C .EL	1000uF 16V
C837	VR168400	C .MYLAR .ML	ECQ-V1H124JL3
C838	VR168400	C .MYLAR .ML	ECQ-V1H124JL3
C891	VF467000	C .CE .TUBLR	1000pF 50V
C892	VF467000	C .CE .TUBLR	1000pF 50V
C893	VF467000	C .CE .TUBLR	1000pF 50V
C894	VJ599100	C .CE .TUBLR	0.1uF 50V
C901	VJ599100	C .CE .TUBLR	0.1uF 50V
C902	VJ599100	C .CE .TUBLR	0.1uF 50V
C903	VJ599100	C .CE .TUBLR	0.1uF 50V
C904	VJ599100	C .CE .TUBLR	0.1uF 50V
C905	UU118100	C .EL	100uF 6.3V
C906	VJ599100	C .CE .TUBLR	0.1uF 50V
C907	US061330	C .CE .M .CHP	33pF 50V
C908	US135100	C .CE .CHP	0.1uF 16V
C909	US135100	C .CE .CHP	0.1uF 16V

* New Parts

* New Parts

P.C.B. OPERATION & P.C.B. DSP

Schm Ref.	PART NO.	Description	Markets
C910	UU118330	C. EL	330uF 6.3V
C911	VJ599100	C. CE. TUBLR	0.1uF 50V
C912	VJ599100	C. CE. TUBLR	0.1uF 50V
C913	VJ599100	C. CE. TUBLR	0.1uF 50V
C935	US135100	C. CE. CHP	0.1uF 16V
C937	US135100	C. CE. CHP	0.1uF 16V
C938	US062100	C. CE. M. CHP	100pF 50V
C939	US062100	C. CE. M. CHP	100pF 50V
C940	US135100	C. CE. CHP	0.1uF 16V
C941	US135100	C. CE. CHP	0.1uF 16V
C942	US135100	C. CE. CHP	0.1uF 16V
C943	US135100	C. CE. CHP	0.1uF 16V
D801	VG439100	DIODE .ZENR	MTZJ9. 1A 9.1V
D802	VG439100	DIODE .ZENR	MTZJ9. 1A 9.1V
D803	VU264100	DIODE	1SR139-400
D804	VU264100	DIODE	1SR139-400
D891	VT332900	DIODE	1SS355
D892	VT332900	DIODE	1SS355
D901	VM974700	DIODE .ZENR	HZS7B2TD 7.0V
D902	V2598200	LED	S1R-505ST
D935	VT332900	DIODE	1SS355
D936	VT332900	DIODE	1SS355
IC801	XU834A00	IC	BU4066BC
IC802	XM356A00	IC	NJM2068LD
IC803	XB247A00	IC	uPC4570HA
IC804	XP844A00	IC	NJM4556AL
IC901	XV160A00	IC	LC75712E FLD
JK831	V4164400	JACK .PHONE	YKB21-5209
JK935	V2589500	CN	1P
L935	V2726500	COIL	68uH
PJ935	VS868400	JACK .PIN	3P
Q801	VG721700	TR .DGT	DTA144ES
Q802	VG722000	TR .DGT	DTC144ES
Q803	VK432900	TR	2SD1915F S,T
Q804	VK432900	TR	2SD1915F S,T
Q901	VV556400	TR	2SC2412K Q,R,S
Q902	VV556400	TR	2SC2412K Q,R,S
Q905	VV556400	TR	2SC2412K Q,R,S
Q906	VV556400	TR	2SC2412K Q,R,S
Q907	VV556400	TR	2SC2412K Q,R,S
Q908	VV556400	TR	2SC2412K Q,R,S
Q909	VV556400	TR	2SC2412K Q,R,S
Q910	VV556400	TR	2SC2412K Q,R,S
Q935	VV556400	TR	2SC2412K Q,R,S
Q936	VV556500	TR	2SA1037K Q,R,S
R803	HV753330	R. CAR. FP	3.3 1/4W
R804	HV753330	R. CAR. FP	3.3 1/4W
R839	HV755100	R. CAR. FP	100 1/4W
R840	HV755100	R. CAR. FP	100 1/4W
R841	HV755220	R. CAR. FP	220 1/4W
R842	HV755220	R. CAR. FP	220 1/4W
R846	VP439800	R. MTL. FLM	2.2K 1/4W F
R847	VP439800	R. MTL. FLM	2.2K 1/4W F
R848	VP439800	R. MTL. FLM	2.2K 1/4W F
R849	VP439800	R. MTL. FLM	2.2K 1/4W F
R850	VP441600	R. MTL. FLM	12K 1/4W
R851	VP441600	R. MTL. FLM	12K 1/4W
R852	VP441600	R. MTL. FLM	12K 1/4W
R853	VP442300	R. MTL. FLM	24K 1/4W F
R854	VP442300	R. MTL. FLM	24K 1/4W F
R855	VP442300	R. MTL. FLM	24K 1/4W F
R856	VP442300	R. MTL. FLM	24K 1/4W F
R857	VP442300	R. MTL. FLM	24K 1/4W F

* New Parts

Schm Ref.	PART NO.	Description	Markets
ST891	BB071360	SCR. TERM	8.3x13
ST901	VP750600	SCR. TERM	MEP1700
ST935	BB071360	SCR. TERM	8.3x13
SW802	V6154000	SW. RT. ENC	SDB161PH20FS-1-4
SW901	V4757100	SW. TACT	EVQ11A
SW902	V4757100	SW. TACT	EVQ11A
SW904	V4757100	SW. TACT	EVQ11A
SW970	V4757100	SW. TACT	EVQ11A
SW971	V4757100	SW. TACT	EVQ11A
SW972	V4757100	SW. TACT	EVQ11A
SW973	V4757100	SW. TACT	EVQ11A
SW974	V4757100	SW. TACT	EVQ11A
SW975	V4757100	SW. TACT	EVQ11A
SW976	V4757100	SW. TACT	EVQ11A
SW977	V4757100	SW. TACT	EVQ11A
SW978	V4757100	SW. TACT	EVQ11A
SW979	V4757100	SW. TACT	EVQ11A
SW980	V4757100	SW. TACT	EVQ11A
SW985	V6886700	SW. RT. ENC	REB162(9X5)RVB55
SW990	V4757100	SW. TACT	EVQ11A
SW991	V4757100	SW. TACT	EVQ11A
SW992	V4757100	SW. TACT	EVQ11A
SW993	V4757100	SW. TACT	EVQ11A
SW994	V4757100	SW. TACT	EVQ11A
U901	VZ411100	L. DTCT	GP1U281X
V901	V7683200	FL. DSPLY	16-BT-91GK
VR801	VP741800	VR	B20K
VR802	VP741900	VR	G25K
	V6007000	SHEET	
	V8140500	SPACER	5.6/10/32
	V8200600	P. C. B.	DSP
CB503	VQ046000	CN. BS. PIN	31P
CB504	VQ047000	CN. BS. PIN	6P
C501	US135100	C. CE. CHP	0.1uF 16V
C502	US135100	C. CE. CHP	0.1uF 16V
C503	US135100	C. CE. CHP	0.1uF 16V
C504	US135100	C. CE. CHP	0.1uF 16V
C505	US135100	C. CE. CHP	0.1uF 16V
C506	US135100	C. CE. CHP	0.1uF 16V
C507	US061220	C. CE. M. CHP	22pF 50V
C508	US061220	C. CE. M. CHP	22pF 50V
C509	UR847220	C. EL	22uF 25V
C510	UR847220	C. EL	22uF 25V
C511	US135100	C. CE. CHP	0.1uF 16V
C512	US135100	C. CE. CHP	0.1uF 16V
C513	UR819100	C. EL	1000uF 6.3V
C514	US061100	C. CE. M. CHP	10pF 50V
C515	US061100	C. CE. M. CHP	10pF 50V
C516	US135100	C. CE. CHP	0.1uF 16V
C517	US061470	C. CE. M. CHP	47pF 50V
C518	US061470	C. CE. M. CHP	47pF 50V
C519	US135100	C. CE. CHP	0.1uF 16V
C520	US063100	C. CE. M. CHP	1000pF 50V
C521	US063100	C. CE. M. CHP	1000pF 50V
C522	UR819100	C. EL	1000uF 6.3V
C523	UR819100	C. EL	1000uF 6.3V
C524	US135100	C. CE. CHP	0.1uF 16V
C525	US135100	C. CE. CHP	0.1uF 16V
C526	US135100	C. CE. CHP	0.1uF 16V
C527	US135100	C. CE. CHP	0.1uF 16V

* New Parts

P.C.B. DSP

Schm Ref.	PART NO.	Description	Markets
C528	US135100	C.CE.CHP 0.1uF 16V	
C529	US135100	C.CE.CHP 0.1uF 16V	
C530	US135100	C.CE.CHP 0.1uF 16V	
C531	UR819100	C.EL 1000uF 6.3V	
C532	US135100	C.CE.CHP 0.1uF 16V	
C533	UR819100	C.EL 1000uF 6.3V	
C534	US135100	C.CE.CHP 0.1uF 16V	
C535	US135100	C.CE.CHP 0.1uF 16V	
C536	US135100	C.CE.CHP 0.1uF 16V	
C537	US135100	C.CE.CHP 0.1uF 16V	
C538	UR818100	C.EL 100uF 6.3V	
C539	US135100	C.CE.CHP 0.1uF 16V	
C540	US135100	C.CE.CHP 0.1uF 16V	
C543	US135100	C.CE.CHP 0.1uF 16V	
C544	UU147100	C.EL 10uF 25V	
C545	UU147100	C.EL 10uF 25V	
C546	UU147100	C.EL 10uF 25V	
C547	V3888000	C.MYLAR 150pF 50V	
C548	V3888000	C.MYLAR 150pF 50V	
C549	Vi715300	C.MYLAR 680pF 50V	
C550	Vi715100	C.MYLAR 470pF 50V	
C551	UR818470	C.EL 470uF 6.3V	
C552	UA652100	C.MYLAR 100pF 50V	
C553	UA652100	C.MYLAR 100pF 50V	
C554	UA652100	C.MYLAR 100pF 50V	
C555	UA652100	C.MYLAR 100pF 50V	
C556	UA653150	C.MYLAR 1500pF 50V	
C557	UR818100	C.EL 100uF 6.3V	
C558	UU137220	C.EL 22uF 16V	
C559	UU137220	C.EL 22uF 16V	
C560	UU128100	C.EL 100uF 10V	
C561	UU166220	C.EL 2.2uF 50V	
C562	UU118100	C.EL 100uF 6.3V	
C563	UU118100	C.EL 100uF 6.3V	
C564	US061100	C.CE.M.CHP 10pF 50V	
C565	US063100	C.CE.M.CHP 1000pF 50V	
C566	US061330	C.CE.M.CHP 33pF 50V	
C567	US044220	C.CE.M.CHP 0.022uF 25V	
C568	UR818100	C.EL 100uF 6.3V	
C569	UR818100	C.EL 100uF 6.3V	
C571	US062470	C.CE.M.CHP 470pF 50V	
C572	US063470	C.CE.CHP 4700pF 50V	
C573	US063470	C.CE.CHP 4700pF 50V	
C574	UR818470	C.EL 470uF 6.3V	
C575	US061470	C.CE.M.CHP 47pF 50V	
C576	US135100	C.CE.CHP 0.1uF 16V	
C577	US135100	C.CE.CHP 0.1uF 16V	
C578	US135100	C.CE.CHP 0.1uF 16V	
C580	US061470	C.CE.M.CHP 47pF 50V	
C581	US061470	C.CE.M.CHP 47pF 50V	
C582	US061470	C.CE.M.CHP 47pF 50V	
C584	US135100	C.CE.CHP 0.1uF 16V	
C585	US061470	C.CE.M.CHP 47pF 50V	
C586	US061470	C.CE.M.CHP 47pF 50V	
C587	US135100	C.CE.CHP 0.1uF 16V	
C588	US135100	C.CE.CHP 0.1uF 16V	
C590	US135100	C.CE.CHP 0.1uF 16V	
C591	UR818100	C.EL 100uF 6.3V	
C592	US135100	C.CE.CHP 0.1uF 16V	
C593	US135100	C.CE.CHP 0.1uF 16V	
C594	UR819100	C.EL 1000uF 6.3V	
C595	US064100	C.CE.M.CHP 0.01uF 50V	
C596	US135100	C.CE.CHP 0.1uF 16V	

* New Parts

Schm Ref.	PART NO.	Description	Markets
C597	US135100	C.CE.CHP 0.1uF 16V	
C598	US061470	C.CE.M.CHP 47pF 50V	
C599	US061470	C.CE.M.CHP 47pF 50V	
C600	US061470	C.CE.M.CHP 47pF 50V	
C601	US061470	C.CE.M.CHP 47pF 50V	
C602	US061470	C.CE.M.CHP 47pF 50V	
C603	US061470	C.CE.M.CHP 47pF 50V	
C604	US061470	C.CE.M.CHP 47pF 50V	
C605	US061470	C.CE.M.CHP 47pF 50V	
C606	US061470	C.CE.M.CHP 47pF 50V	
C607	US135100	C.CE.CHP 0.1uF 16V	
C608	US135100	C.CE.CHP 0.1uF 16V	
C609	US135100	C.CE.CHP 0.1uF 16V	
C610	UU137470	C.EL 47uF 16V	
C611	UU137470	C.EL 47uF 16V	
C612	US135100	C.CE.CHP 0.1uF 16V	
C613	US135100	C.CE.CHP 0.1uF 16V	
C614	US135100	C.CE.CHP 0.1uF 16V	
C615	UU137470	C.EL 47uF 16V	
C616	US135100	C.CE.CHP 0.1uF 16V	
C617	UU137470	C.EL 47uF 16V	
C618	US135100	C.CE.CHP 0.1uF 16V	
C619	UU137470	C.EL 47uF 16V	
C620	US135100	C.CE.CHP 0.1uF 16V	
C621	UU137470	C.EL 47uF 16V	
C622	US135100	C.CE.CHP 0.1uF 16V	
C623	UU137470	C.EL 47uF 16V	
C624	US135100	C.CE.CHP 0.1uF 16V	
C625	UU137470	C.EL 47uF 16V	
C626	US135100	C.CE.CHP 0.1uF 16V	
C627	UU147100	C.EL 10uF 25V	
C628	UU147100	C.EL 10uF 25V	
C629	UU147100	C.EL 10uF 25V	
C630	UU147100	C.EL 10uF 25V	
C631	UU147100	C.EL 10uF 25V	
C632	UU147100	C.EL 10uF 25V	
C633	UU147100	C.EL 10uF 25V	
C634	UU147100	C.EL 10uF 25V	
C635	UU147100	C.EL 10uF 25V	
C636	UU147100	C.EL 10uF 25V	
C637	UA653150	C.MYLAR 1500pF 50V	
C638	US135100	C.CE.CHP 0.1uF 16V	
C639	US135100	C.CE.CHP 0.1uF 16V	
C640	US135100	C.CE.CHP 0.1uF 16V	
C641	US135100	C.CE.CHP 0.1uF 16V	
C642	US135100	C.CE.CHP 0.1uF 16V	
C643	US135100	C.CE.CHP 0.1uF 16V	
C644	Vi715300	C.MYLAR 680pF 50V	
C645	Vi715300	C.MYLAR 680pF 50V	
C646	V3888000	C.MYLAR 150pF 50V	
C647	V3888000	C.MYLAR 150pF 50V	
C648	UU147100	C.EL 10uF 25V	
C649	UU147100	C.EL 10uF 25V	
C650	UU147100	C.EL 10uF 25V	
C651	UU147100	C.EL 10uF 25V	
C652	UU147100	C.EL 10uF 25V	
C653	UU147100	C.EL 10uF 25V	
C654	V3888000	C.MYLAR 150pF 50V	
C655	V3888000	C.MYLAR 150pF 50V	
C656	US135100	C.CE.CHP 0.1uF 16V	
C657	US135100	C.CE.CHP 0.1uF 16V	
C658	UU147100	C.EL 10uF 25V	
C659	UU147100	C.EL 10uF 25V	

* New Parts

P.C.B. DSP

Schm Ref.	PART NO.	Description	Markets
C660	Vi715100	C.MYLAR 470pF 50V	
C661	Vi715100	C.MYLAR 470pF 50V	
C662	Vi715100	C.MYLAR 470pF 50V	
C663	Vi715100	C.MYLAR 470pF 50V	
C664	Vi715100	C.MYLAR 470pF 50V	
C665	UU147100	C.EL 10uF 25V	
C666	UU147100	C.EL 10uF 25V	
C667	UU147100	C.EL 10uF 25V	
C668	UU147100	C.EL 10uF 25V	
C669	UU147100	C.EL 10uF 25V	
C670	UU147100	C.EL 10uF 25V	
C671	UU147100	C.EL 10uF 25V	
C672	US135100	C.CE.CHP 0.1uF 16V	
C673	UU137470	C.EL 47uF 16V	
C674	UU137470	C.EL 47uF 16V	
C675	UU137470	C.EL 47uF 16V	
C676	UU137470	C.EL 47uF 16V	
C677	US135100	C.CE.CHP 0.1uF 16V	
C678	US135100	C.CE.CHP 0.1uF 16V	
C679	US135100	C.CE.CHP 0.1uF 16V	
C680	US135100	C.CE.CHP 0.1uF 16V	
C681	US062220	C.CE.CHP 220pF 50V	
C682	US062220	C.CE.CHP 220pF 50V	
C683	UR866220	C.EL 2.2uF 50V	
C684	US062470	C.CE.M.CHP 470pF 50V	
C686	UR817470	C.EL 47uF 6.3V	
C687	US061300	C.CE.M.CHP 30pF 50V	
C688	UR818100	C.EL 100uF 6.3V	
C689	US135100	C.CE.CHP 0.1uF 16V	
C691	US135100	C.CE.CHP 0.1uF 16V	
C692	UR818100	C.EL 100uF 6.3V	
C695	UR818100	C.EL 100uF 6.3V	
C696	UR818100	C.EL 100uF 6.3V	
C697	US135100	C.CE.CHP 0.1uF 16V	
C698	US135100	C.CE.CHP 0.1uF 16V	
C699	UR818100	C.EL 100uF 6.3V	
C700	US135100	C.CE.CHP 0.1uF 16V	
C701	US064100	C.CE.M.CHP 0.01uF 50V	
C702	US135100	C.CE.CHP 0.1uF 16V	
C703	UR818100	C.EL 100uF 6.3V	
C706	US061470	C.CE.M.CHP 47pF 50V	
C707	US061470	C.CE.M.CHP 47pF 50V	
C708	US135100	C.CE.CHP 0.1uF 16V	
C709	US135100	C.CE.CHP 0.1uF 16V	
C710	UR818100	C.EL 100uF 6.3V	
C711	UR818100	C.EL 100uF 6.3V	
C712	UR818100	C.EL 100uF 6.3V	
C713	US061470	C.CE.M.CHP 47pF 50V	
C716	US135100	C.CE.CHP 0.1uF 16V	
C717	US135100	C.CE.CHP 0.1uF 16V	
C718	US135100	C.CE.CHP 0.1uF 16V	
C719	US135100	C.CE.CHP 0.1uF 16V	
C720	UR818100	C.EL 100uF 6.3V	
C722	UR818100	C.EL 100uF 6.3V	
C723	US135100	C.CE.CHP 0.1uF 16V	
C724	UR818100	C.EL 100uF 6.3V	
C725	US135100	C.CE.CHP 0.1uF 16V	
C726	US135100	C.CE.CHP 0.1uF 16V	
C727	US135100	C.CE.CHP 0.1uF 16V	
C728	US135100	C.CE.CHP 0.1uF 16V	
C729	US135100	C.CE.CHP 0.1uF 16V	
C730	US135100	C.CE.CHP 0.1uF 16V	
C731	US135100	C.CE.CHP 0.1uF 16V	

* New Parts

Schm Ref.	PART NO.	Description	Markets
C732	UR819100	C.EL 1000uF 6.3V	
C733	US135100	C.CE.CHP 0.1uF 16V	
C734	US062100	C.CE.M.CHP 100pF 50V	
C735	US061470	C.CE.M.CHP 47pF 50V	
D501	VT332900	D1ODE 1SS355	
D502	VT332900	D1ODE 1SS355	
D503	VT332900	D1ODE 1SS355	
D504	VV220700	D1ODE.SHOT RB501V-40	
D505	VV220700	D1ODE.SHOT RB501V-40	
D506	VT332900	D1ODE 1SS355	
D507	VT332900	D1ODE 1SS355	
D508	VV220700	D1ODE.SHOT RB501V-40	
D509	VV220700	D1ODE.SHOT RB501V-40	
D510	VV220700	D1ODE.SHOT RB501V-40	
D511	VV220700	D1ODE.SHOT RB501V-40	
D512	VV220700	D1ODE.SHOT RB501V-40	
D513	VV220700	D1ODE.SHOT RB501V-40	
D514	VV220700	D1ODE.SHOT RB501V-40	
D515	VV220700	D1ODE.SHOT RB501V-40	
D516	VT332900	D1ODE 1SS355	
D517	VT332900	D1ODE 1SS355	
D518	VT332900	D1ODE 1SS355	
D519	VT332900	D1ODE 1SS355	
D520	VT332900	D1ODE 1SS355	
D521	VT332900	D1ODE 1SS355	
D522	VT332900	D1ODE 1SS355	
D523	VT332900	D1ODE 1SS355	
D524	VT332900	D1ODE 1SS355	
D525	VT332900	D1ODE 1SS355	
D526	VT332900	D1ODE 1SS355	
D527	VT332900	D1ODE 1SS355	
D528	VT332900	D1ODE 1SS355	
D529	VT332900	D1ODE 1SS355	
D530	VT332900	D1ODE 1SS355	
D531	VT332900	D1ODE 1SS355	
D532	VT332900	D1ODE 1SS355	
D533	VT332900	D1ODE 1SS355	
D534	VT332900	D1ODE 1SS355	
D537	VT332900	D1ODE 1SS355	
D538	VT332900	D1ODE 1SS355	
IC501	XD660A00	IC TC74HCU04AF-TP1	
IC502	XD660A00	IC TC74HCU04AF-TP1	
IC503	XY120A00	IC TC74HCT00AF(EL) NA	
IC508	XW029A00	IC AK4393-VF-E2	
IC509	XF291A00	IC uPC4570G2	
IC510	XO237A00	IC AK4527BVQ	
IC512	XZ012A00	IC TC74HCT08AF(EL)	
IC513	XR038A00	IC NJM2904M OP AMP	
IC514	XO238A00	IC YSS938-F	
IC515	XV077A00	IC MSM514260C-60JS	
IC516	XU965A00	IC uPC29M33T-E1 3.3V	
IC517	XZ003A00	IC PQ025EZ5MZP 2.5V	
IC518	XF291A00	IC uPC4570G2	
IC519	XF291A00	IC uPC4570G2	
IC520	XF291A00	IC uPC4570G2	
IC521	XF291A00	IC uPC4570G2	
IC522	XF291A00	IC uPC4570G2	
IC523	XF291A00	IC uPC4570G2	
IC524	XW029A00	IC AK4393-VF-E2	
IC525	XO594A00	IC CS493292-CLR	
IC526	XO318C00	IC XC9572XL-10TQ100C	
IC527	XW433A00	IC CY62256LL-70SNCT	
IC528	XO669A00	IC MX29F400BTC-70	

* New Parts

P.C.B. DSP & P.C.B. VIDEO

Schm Ref.	PART NO.	Description	Markets
L501	V2726500	COIL 68uH	
L502	V2726500	COIL 68uH	
L503	V2726500	COIL 68uH	
L504	V2726500	COIL 68uH	
PJ501	V5715300	JACK.PIN 2P OR/OR	
Q501	VV655300	TR.DGT DTA144EKA	
Q502	VV655300	TR.DGT DTA144EKA	
Q503	VV655300	TR.DGT DTA144EKA	
Q504	VV655300	TR.DGT DTA144EKA	
Q505	VV655300	TR.DGT DTA144EKA	
Q506	VV655300	TR.DGT DTA144EKA	
Q507	VV655300	TR.DGT DTA144EKA	
Q508	VD303700	TR 2SC3326 A,B	
Q509	VV655300	TR.DGT DTA144EKA	
Q510	VD303700	TR 2SC3326 A,B	
Q511	VD303700	TR 2SC3326 A,B	
Q512	VD303700	TR 2SC3326 A,B	
Q513	VD303700	TR 2SC3326 A,B	
Q514	VD303700	TR 2SC3326 A,B	
Q515	VD303700	TR 2SC3326 A,B	
Q516	VD303700	TR 2SC3326 A,B	
Q517	VD303700	TR 2SC3326 A,B	
R533	VU224000	R.MTL.FLM 0.22 1W J	
R534	HV753220	R.CAR.FP 2.2 1/4W	
R535	VU224000	R.MTL.FLM 0.22 1W J	
R553	HV753220	R.CAR.FP 2.2 1/4W	
R555	VU224000	R.MTL.FLM 0.22 1W J	
R591	HV753100	R.CAR.FP 1 1/4W	
R592	HV753100	R.CAR.FP 1 1/4W	
R619	HV753220	R.CAR.FP 2.2 1/4W	
R626	HV753220	R.CAR.FP 2.2 1/4W	
R661	HV753220	R.CAR.FP 2.2 1/4W	
R662	HV753220	R.CAR.FP 2.2 1/4W	
R666	HV753220	R.CAR.FP 2.2 1/4W	
R671	HV753220	R.CAR.FP 2.2 1/4W	
TP1	VL448600	JUMPER.TST	
TP2	VL448600	JUMPER.TST	
TP3	VL448600	JUMPER.TST	
U501	V7680700	CN.PHOT.SN 1P GP1FA512RZ	
U502	V7680700	CN.PHOT.SN 1P GP1FA512RZ	
U503	V7680700	CN.PHOT.SN 1P GP1FA512RZ	
U504	V7680700	CN.PHOT.SN 1P GP1FA512RZ	
U505	V7680800	CN.PHOT.SN 1P GP1FA512TZ	
U506	V7680800	CN.PHOT.SN 1P GP1FA512TZ	
XL503	V6931900	RESONATOR 24.576MHz DS0751SV	
*	V8201600	P.C.B. VIDEO	UC
*	V8201700	P.C.B. VIDEO	RT
*	V8201800	P.C.B. VIDEO	A
*	V8201900	P.C.B. VIDEO	BG
CB551	V7827700	SOCKET 10P TE TUC SERIES	
CB552	V7827800	SOCKET 11P TE TUC SERIES	
CB581	V7826500	CN 15P TE TUC SERIES	
CB582	VM929900	CN.BS.PIN 15P	UCRTA
CB583	V7826100	CN 11P TE TUC SERIES	
CB584	VQ044500	CN.BS.PIN 11P	
CB585	V7826200	CN 12P TE TUC SERIES	
CB586	V7826200	CN 12P TE TUC SERIES	
CB587	V7826500	CN 15P TE TUC SERIES	
CB588	V7826500	CN 15P TE TUC SERIES	
CB589	V7825400	CN 4P TE TUC SERIES	

* New Parts

Schm Ref.	PART NO.	Description	Markets
CB590	V7825500	CN 5P TE TUC SERIES	
CB591	V7826000	CN 10P TE TUC SERIES	
CB592	V7827700	SOCKET 10P TE TUC SERIES	
CB593	V7826100	CN 11P TE TUC SERIES	
CB594	V7827800	SOCKET 11P TE TUC SERIES	
CB601	V7828200	SOCKET 15P TE TUC SERIES	
CB602	V7827900	SOCKET 12P TE TUC SERIES	
CB603	V7827100	SOCKET 4P TE TUC SERIES	
CB604	VQ044300	CN.BS.PIN 7P	
CB605	V7827100	SOCKET 4P TE TUC SERIES	
CB701	V7828200	SOCKET 15P TE TUC SERIES	
CB702	LB919030	CN.BS.PIN 3P	
CB751	V7827200	SOCKET 5P TE TUC SERIES	
CB755	V7827100	SOCKET 4P TE TUC SERIES	
CB861	V7825400	CN 4P TE TUC SERIES	
CB862	V7825400	CN 4P TE TUC SERIES	
C552	US135100	C.CE.CHP 0.1uF 16V	
C553	UA652470	C.MYLAR 470pF 50V	
C554	UA652470	C.MYLAR 470pF 50V	
C555	UA652470	C.MYLAR 470pF 50V	
C556	UA652470	C.MYLAR 470pF 50V	
C557	UA652470	C.MYLAR 470pF 50V	
C558	UA652470	C.MYLAR 470pF 50V	
C559	UA652470	C.MYLAR 470pF 50V	
C560	UA652470	C.MYLAR 470pF 50V	
C561	UA652470	C.MYLAR 470pF 50V	
C562	UA652470	C.MYLAR 470pF 50V	
C563	UA652470	C.MYLAR 470pF 50V	
C564	UA652470	C.MYLAR 470pF 50V	
C565	UA652470	C.MYLAR 470pF 50V	
C566	UA652470	C.MYLAR 470pF 50V	
C567	UA652470	C.MYLAR 470pF 50V	
C568	UA652470	C.MYLAR 470pF 50V	
C581	US063100	C.CE.M.CHP 1000pF 50V	
C582	US063100	C.CE.M.CHP 1000pF 50V	
C583	US064100	C.CE.M.CHP 0.01uF 50V	
C584	US063100	C.CE.M.CHP 1000pF 50V	
C585	US063100	C.CE.M.CHP 1000pF 50V	
C586	US062100	C.CE.M.CHP 100pF 50V	
C587	UR866220	C.EL 2.2uF 50V	
C588	UR837470	C.EL 47uF 16V	
C601	US062100	C.CE.M.CHP 100pF 50V	
C602	US062100	C.CE.M.CHP 100pF 50V	
C603	US062100	C.CE.M.CHP 100pF 50V	
C604	US062100	C.CE.M.CHP 100pF 50V	
C605	US062100	C.CE.M.CHP 100pF 50V	
C606	US062100	C.CE.M.CHP 100pF 50V	
C607	US135100	C.CE.CHP 0.1uF 16V	
C608	US135100	C.CE.CHP 0.1uF 16V	
C609	US135100	C.CE.CHP 0.1uF 16V	
C610	UR829100	C.EL 1000uF 10V	
C611	UR837470	C.EL 47uF 16V	
C612	UM397470	C.EL 47uF 16V	
C613	UR837100	C.EL 10uF 16V	
C614	US135100	C.CE.CHP 0.1uF 16V	
C616	US135100	C.CE.CHP 0.1uF 16V	
C617	UR818220	C.EL 220uF 6.3V	
C618	UR837470	C.EL 47uF 16V	
C619	US062820	C.CE.CHP 820pF 50V	ABG
C619	US063150	C.CE.M.CHP 1500pF 50V	UCRT
C620	US062270	C.CE.M.CHP 270pF 50V	ABG
C620	US062390	C.CE.CHP 390P 50V	UCRT
C621	UM397470	C.EL 47uF 16V	

* New Parts

P.C.B. VIDEO

Schm Ref.	PART NO.	Description	Markets	Schm Ref.	PART NO.	Description	Markets
C622	UR837470	C. EL	47uF 16V	D610	VT332900	DIODE	1SS355
C623	UR837470	C. EL	47uF 16V	D751	VT332900	DIODE	1SS355
C624	UR837470	C. EL	47uF 16V	D752	VT332900	DIODE	1SS355
C625	UM397100	C. EL	10uF 16V	G581	VR463400	TERM. GND	D3.5
C626	UR818220	C. EL	220uF 6.3V	IC601	XW939A00	IC	TK15420M VIDEO AMP
C627	UR837100	C. EL	10uF 16V	IC602	XZ830A00	IC	MM74HC4051N MULT I
C628	US135100	C. CE. CHP	0.1uF 16V	IC603	XZ830A00	IC	MM74HC4051N MULT I
C629	US135100	C. CE. CHP	0.1uF 16V	IC604	XZ830A00	IC	MM74HC4051N MULT I
C630	US060800	C. CE. CHP	8pF 50V	IC605	XZ830A00	IC	MM74HC4051N MULT I
C631	UR837470	C. EL	47uF 16V	IC606	X2093A00	IC	MM74HC4053N MULT I
C632	UR837470	C. EL	47uF 16V	IC607	X2093A00	IC	MM74HC4053N MULT I
C633	US061330	C. CE. M. CHP	33pF 50V	IC608	XD598A00	IC	TC74HCU04AFEL INV
C634	US064100	C. CE. M. CHP	0.01uF 50V	IC609	XY443A00	IC	LA7109 6CH
C635	UR837470	C. EL	47uF 16V	IC610	XZ060A00	IC	LC74781-9798
C636	UR866470	C. EL	4.7uF 50V	IC611	XW416A00	IC	BU2092 SER/PAR
C637	UR818330	C. EL	330uF 6.3V	IC701	XW911A00	IC	LA7108M VIDEO AMP
C638	US135100	C. CE. CHP	0.1uF 16V	IC702	XY550A00	IC	MM74HC4051SJX
C639	US063120	C. CE. M. CHP	1200pF 50V	IC703	XY550A00	IC	MM74HC4051SJX
C640	US062470	C. CE. M. CHP	470pF 50V	IC704	XY877A00	IC	MM74HC4053SJX
C641	UR866100	C. EL	1uF 50V	IC751	XY877A00	IC	MM74HC4053SJX
C642	UR866100	C. EL	1uF 50V	IC752	X0428A00	IC	OPA2652U OP AMP
C643	US060700	C. CE. CHP	7pF 50V	IC753	X0428A00	IC	OPA2652U OP AMP
C644	US061240	C. CE. CHP	24pF 50V	JK601	VP113600	CN. DIN	2P
C645	US061240	C. CE. CHP	24pF 50V	JK602	VP113600	CN. DIN	2P
C646	US062220	C. CE. CHP	220pF 50V	JK603	VP113600	CN. DIN	2P
C647	US062120	C. CE. CHP	120pF 50V	JK604	VU245200	CN. DIN	1P
C648	UR837470	C. EL	47uF 16V	JK605	VQ960400	CN. DIN	1P
C650	US135100	C. CE. CHP	0.1uF 16V	L602	V3233700	COIL	1.5uH
C651	US135100	C. CE. CHP	0.1uF 16V	L603	V6236000	COIL	4.7uH
C652	US135100	C. CE. CHP	0.1uF 16V	L605	V2726100	COIL	33uH
C653	US062470	C. CE. M. CHP	470pF 50V	L606	VK267500	COIL	220uH
C701	US062100	C. CE. M. CHP	100pF 50V	PJ551	V3856100	JACK. PIN	6P
C702	US062100	C. CE. M. CHP	100pF 50V	PJ552	VJ696300	JACK. PIN	4P
C703	US062100	C. CE. M. CHP	100pF 50V	PJ553	V3856100	JACK. PIN	6P
C704	US062100	C. CE. M. CHP	100pF 50V	PJ701	VN134600	JACK. PIN	1P
C705	UR837470	C. EL	47uF 16V	PJ702	VR110100	JACK. PIN	2P
C706	UR829100	C. EL	1000uF 10V	PJ703	VR110100	JACK. PIN	2P
C707	UR837470	C. EL	47uF 16V	PJ704	VR110100	JACK. PIN	2P
C708	US135100	C. CE. CHP	0.1uF 16V	PJ704	VR110100	JACK. PIN	2P
C709	US135100	C. CE. CHP	0.1uF 16V	PJ705	VN134600	JACK. PIN	1P
C710	UR837470	C. EL	47uF 16V	PJ705	VR110100	JACK. PIN	2P
C711	UR837470	C. EL	47uF 16V	PJ751	V8143900	JACK. PIN	SHIELD YKC21-4348
C712	UR837470	C. EL	47uF 16V	PN581	V3750200	PIN	L=70
C713	UR837470	C. EL	47uF 16V	Q582	iC181510	TR	2SC1815 Y
C714	UR837470	C. EL	47uF 16V	Q601	iC174020	TR	2SC1740S R,S
C715	US135100	C. CE. CHP	0.1uF 16V	Q602	VK432900	TR	2SD1915F S,T
C751	US061240	C. CE. CHP	24pF 50V	Q603	VD678700	TR. DGT	DTC114ES
C752	US061240	C. CE. CHP	24pF 50V	Q604	iC174020	TR	2SC1740S R,S
C753	US061240	C. CE. CHP	24pF 50V	Q605	iC174020	TR	2SC1740S R,S
C754	US135100	C. CE. CHP	0.1uF 16V	Q606	iA101510	TR	2SA1015 Y
C755	US135100	C. CE. CHP	0.1uF 16V	Q607	iC224030	TR	2SC2240 GR,BL
C756	UR837470	C. EL	47uF 16V	Q608	iC053540	TR	2SC535 A,B,C
C757	UR837470	C. EL	47uF 16V	Q609	iC287820	TR	2SC2878 A,B
D581	VU172000	DIODE. ZENR	UDZS5.6BTE-17 5.6V	Q701	iC174020	TR	2SC1740S R,S
D601	VT332900	DIODE	1SS355	Q751	iC174020	TR	2SC1740S R,S
D602	VT332900	DIODE	1SS355	R625	HV755330	R. CAR. FP	330 1/4W
D603	VT332900	DIODE	1SS355	R626	HV753220	R. CAR. FP	2.2 1/4W
D604	VT332900	DIODE	1SS355	R635	HV755470	R. CAR. FP	470 1/4W
D605	VT332900	DIODE	1SS355	R641	HV753100	R. CAR. FP	1 1/4W
D606	VT332900	DIODE	1SS355	R642	HV753100	R. CAR. FP	1 1/4W
D607	VT332900	DIODE	1SS355	R643	HV755470	R. CAR. FP	470 1/4W
D608	VT332900	DIODE	1SS355	R648	HV755470	R. CAR. FP	470 1/4W
D609	VT332900	DIODE	1SS355	R650	HV755470	R. CAR. FP	470 1/4W

* New Parts

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P.C.B. VIDEO & P.C.B. MAIN

Schm Ref.	PART NO.	Description	Markets
R686	HV755470	R. CAR. FP 470 1/4W	
R688	HV753470	R. CAR. FP 4.7 1/4W	
R716	HV755270	R. CAR. FP 270 1/4W	
R717	HV753220	R. CAR. FP 2.2 1/4W	
R719	HV753220	R. CAR. FP 2.2 1/4W	
R785	HV753220	R. CAR. FP 2.2 1/4W	
R786	HV753220	R. CAR. FP 2.2 1/4W	
R851	HV754470	R. CAR. FP 47 1/4W	
R859	HV755120	R. CAR. FP 120 1/4W	UCRTA
ST751	BB071360	SCR. TERM 8.3x13	
SW551	V4770200	SW. SLIDE S5AA22-B	RT
XL601	VV949800	RSNR. CRYST 14.31818MHz	UCRT
XL601	VV949900	RSNR. CRYST 17.734475MHz	ABG
	V8202100	P. C. B. MAIN	UC
	V8202200	P. C. B. MAIN	RT
	V8202300	P. C. B. MAIN	A
	V8202400	P. C. B. MAIN	BG
CB1	VM973500	CN. BS. PIN 17P	
CB3	LA002000	TERM. WRAP 2P	
CB5	LA002320	TERM. WRAP 3P	
CB6	LB919040	CN. BS. PIN 4P	
C1	UU118100	C. EL 100uF 6.3V	
C2	UU167100	C. EL 10uF 50V	
C3	VJ599100	C. CE. TUBLR 0.1uF 50V	
C4	UU167100	C. EL 10uF 50V	
C5	UU197100	C. EL 10uF 100V	
C6	UU197100	C. EL 10uF 100V	
C7	UU197470	C. EL 47uF 100V	
C9	VF467300	C. CE. TUBLR 0.01uF 16V	RTABG
C11	UT652100	C. PP 100pF 100V	
C12	UT652100	C. PP 100pF 100V	
C13	UA654100	C. MYLAR 0.01uF 50V	
C14	UU197100	C. EL 10uF 100V	
C15	UT652100	C. PP 100pF 100V	
C16	UU197100	C. EL 10uF 100V	
C17	UT652100	C. PP 100pF 100V	
C18	VK533900	C. PP 100pF 200V	
C19	UT823120	C. PP 1200pF 100V	
C20	UU197470	C. EL 47uF 100V	
C21	UA653330	C. MYLAR 3300pF 50V	
C22	UA654100	C. MYLAR 0.01uF 50V	
C23	UT652100	C. PP 100pF 100V	
C24	FU451150	C. MICA 15pF 500V	
C25	UU147100	C. EL 10uF 25V	
C26	UU138100	C. EL 100uF 16V	
C27	UU166470	C. EL 4.7uF 50V	
C28	UU165100	C. EL 0.1uF 50V	
C29	UT652100	C. PP 100pF 100V	
C30	UU157330	C. EL 33uF 35V	
C31	UU167100	C. EL 10uF 50V	
C32	VK533900	C. PP 100pF 200V	
C33	UU148100	C. EL 100uF 25V	
C34	VK533900	C. PP 100pF 200V	
C35	UT823120	C. PP 1200P 100V	
C36	UU197470	C. EL 47uF 100V	
C37	UA653330	C. MYLAR 3300pF 50V	
C38	UA654100	C. MYLAR 0.01uF 50V	
C39	UT652100	C. PP 100pF 100V	
C40	FU451150	C. MICA 15pF 500V	
C41	UU147100	C. EL 10uF 25V	

Schm Ref.	PART NO.	Description	Markets
C42	UU138100	C. EL 100uF 16V	
C43	UU166470	C. EL 4.7uF 50V	
C44	UU165100	C. EL 0.1uF 50V	
C45	UT652100	C. PP 100pF 100V	
C46	UU157330	C. EL 33uF 35V	
C47	UU167100	C. EL 10uF 50V	
C48	VK533900	C. PP 100pF 200V	
C49	UU148100	C. EL 100uF 25V	
C50	UU197470	C. EL 47uF 100V	
C51	UT823120	C. PP 1200pF 100V	
C52	UA653330	C. MYLAR 3300pF 50V	
C53	UT652100	C. PP 100pF 100V	
C54	VR516400	C. CE 15pF 500V	
C55	UU147100	C. EL 10uF 25V	
C56	UU138100	C. EL 100uF 16V	
C57	UU165100	C. EL 0.1uF 50V	
C58	UT652100	C. PP 100pF 100V	
C59	UU157330	C. EL 33uF 35V	
C60	UU167100	C. EL 10uF 50V	
C61	VK533900	C. PP 100pF 200V	
C62	UU148100	C. EL 100uF 25V	
C63	UU197470	C. EL 47uF 100V	
C64	UT823120	C. PP 1200pF 100V	
C65	UA653330	C. MYLAR 3300pF 50V	
C66	UT652100	C. PP 100pF 100V	
C67	VR516400	C. CE 15pF 500V	
C68	UU147100	C. EL 10uF 25V	
C69	UU138100	C. EL 100uF 16V	
C70	UU165100	C. EL 0.1uF 50V	
C71	UT652100	C. PP 100pF 100V	
C72	UU157330	C. EL 33uF 35V	
C73	UU167100	C. EL 10uF 50V	
C74	VK533900	C. PP 100pF 200V	
C75	UU148100	C. EL 100uF 25V	
C76	VK533900	C. PP 100pF 200V	
C77	UT823120	C. PP 1200pF 100V	
C78	UU197470	C. EL 47uF 100V	
C79	UA653330	C. MYLAR 3300pF 50V	
C80	UT652100	C. PP 100pF 100V	
C81	VR516400	C. CE 15pF 500V	
C82	UA654100	C. MYLAR 0.01uF 50V	
C83	UU147100	C. EL 10uF 25V	
C84	UU166470	C. EL 4.7uF 50V	
C85	UU138100	C. EL 100uF 16V	
C86	UU165100	C. EL 0.1uF 50V	
C87	UT652100	C. PP 100pF 100V	
C88	UU157330	C. EL 33uF 35V	
C89	UU167100	C. EL 10uF 50V	
C90	VK533900	C. PP 100pF 200V	
C91	UU148100	C. EL 100uF 25V	
C92	VK533900	C. PP 100pF 200V	
C93	UT823120	C. PP 1200pF 100V	
C94	UU197470	C. EL 47uF 100V	
C95	UA653330	C. MYLAR 3300pF 50V	
C96	UA654100	C. MYLAR 0.01uF 50V	
C97	UT652100	C. PP 100pF 100V	
C98	VR516400	C. CE 15pF 500V	
C99	UU147100	C. EL 10uF 25V	
C100	UU138100	C. EL 100uF 16V	
C101	UU166470	C. EL 4.7uF 50V	
C102	UU165100	C. EL 0.1uF 50V	
C103	UT652100	C. PP 100pF 100V	
C104	UU157330	C. EL 33uF 35V	

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P.C.B. MAIN

Schm Ref.	PART NO.	Description	Markets	Schm Ref.	PART NO.	Description	Markets		
C105	UU167100	C.EL	10uF 50V		C166	UA654100	C.MYLAR	0.01uF 50V	
C106	VK533900	C.PP	100pF 200V		D1	iF004600	DIODE	1SS133	
C107	UU148100	C.EL	100uF 25V		D2	iF004600	DIODE	1SS133	
C108	UU166330	C.EL	3.3uF 50V		D3	iF004600	DIODE	1SS133	
C109	VR169000	C.MYLAR.ML	ECQ-V1H334JL3		D4	VG443900	DIODE.ZENR	MTZJ33D 33V	
C110	UU138330	C.EL	330uF 16V		D5	iF004600	DIODE	1SS133	
C111	UA654470	C.MYLAR	0.047uF 50V		D6	VC398400	DIODE	MA185	
C112	VR169000	C.MYLAR.ML	ECQ-V1H334JL3		D7	VC398400	DIODE	MA185	
C113	UU138330	C.EL	330uF 16V		D8	iF004600	DIODE	1SS133	
C114	UA654470	C.MYLAR	0.047uF 50V		D9	iF004600	DIODE	1SS133	
C115	VK533900	C.PP	100pF 200V		D10	VG440100	DIODE.ZENR	MTZJ12A 12V	
C116	UA654100	C.MYLAR	0.01uF 50V	▲	D11	VC398400	DIODE	MA185	
C117	UU166470	C.EL	4.7uF 50V		D12	iF004600	DIODE	1SS133	
C118	UU138330	C.EL	330uF 16V		D13	VG440100	DIODE.ZENR	MTZJ12A 12V	
C119	UA654470	C.MYLAR	0.047uF 50V	▲	D14	VC398400	DIODE	MA185	
C120	VK533900	C.PP	100pF 200V		D15	iF004600	DIODE	1SS133	
C121	UA654100	C.MYLAR	0.01uF 50V		D16	VG440100	DIODE.ZENR	MTZJ12A 12V	
C122	UU166470	C.EL	4.7uF 50V	▲	D17	VC398400	DIODE	MA185	
C123	UU138330	C.EL	330uF 16V		D18	iF004600	DIODE	1SS133	
C124	UA654470	C.MYLAR	0.047uF 50V		D19	VG440100	DIODE.ZENR	MTZJ12A 12V	
C125	UU138330	C.EL	330uF 16V	▲	D20	VC398400	DIODE	MA185	
C126	UA654470	C.MYLAR	0.047uF 50V	▲	D21	VC398400	DIODE	MA185	
C127	UU138330	C.EL	330uF 16V		D22	iF004600	DIODE	1SS133	
C128	UA654470	C.MYLAR	0.047uF 50V	▲	D23	VC398400	DIODE	MA185	
C129	UU197100	C.EL	10uF 100V		D24	VG440100	DIODE.ZENR	MTZJ12A 12V	
C130	UU197100	C.EL	10uF 100V	▲	D25	VC398400	DIODE	MA185	
C131	UU197100	C.EL	10uF 100V		D26	iF004600	DIODE	1SS133	
C132	UU197100	C.EL	10uF 100V	▲	D27	VC398400	DIODE	MA185	
C133	UU197100	C.EL	10uF 100V		D28	VG440100	DIODE.ZENR	MTZJ12A 12V	
C134	UU197100	C.EL	10uF 100V	▲	D29	VC398400	DIODE	MA185	
C135	UU197100	C.EL	10uF 100V	▲	D30	VU264100	DIODE	1SR139-400	
C136	UU197100	C.EL	10uF 100V	▲	D31	VC398400	DIODE	MA185	
C137	UU197100	C.EL	10uF 100V	▲	D32	VC398400	DIODE	MA185	
C138	UU197100	C.EL	10uF 100V	▲	D33	VU264100	DIODE	1SR139-400	
C139	UU128100	C.EL	100uF 10V	▲	D34	VC398400	DIODE	MA185	
C140	UU197100	C.EL	10uF 100V	▲	D35	VC398400	DIODE	MA185	
C141	UU197100	C.EL	10uF 100V	▲	D36	VU264100	DIODE	1SR139-400	
C142	V6583100	C.POL	0.18uF 100V	RT	▲	D37	VC398400	DIODE	MA185
C142	Vi862100	C.POL.MTL	0.047uF 100V	UC	▲	D38	VC398400	DIODE	MA185
C142	Vi862200	C.POLY	0.1uF 100V	ABG	▲	D39	VU264100	DIODE	1SR139-400
C143	V6512400	C.EL	22000uF 71V		▲	D40	VC398400	DIODE	MA185
C144	V6583100	C.POL	0.18uF 100V	RT	▲	D41	VC398400	DIODE	MA185
C144	Vi862100	C.POL.MTL	0.047uF 100V	UC	▲	D42	VU264100	DIODE	1SR139-400
C144	Vi862200	C.POLY	0.1uF 100V	ABG	▲	D43	VC398400	DIODE	MA185
C144	Vi862200	C.POLY	0.1uF 100V		▲	D44	VC398400	DIODE	MA185
C145	V6512400	C.EL	22000uF 71V		▲	D45	VU264100	DIODE	1SR139-400
C146	Vi862200	C.POLY	0.1uF 100V		▲	D46	VC398400	DIODE	MA185
C149	UA654100	C.MYLAR	0.01uF 50V	RTABG	▲	D47	VC398400	DIODE	MA185
C150	UA654100	C.MYLAR	0.01uF 50V	RTABG		D48	VC398400	DIODE	MA185
C151	UA654100	C.MYLAR	0.01uF 50V	RTABG		D49	VC398400	DIODE	MA185
C152	UA654100	C.MYLAR	0.01uF 50V	RTABG		D50	VC398400	DIODE	MA185
C154	UA654100	C.MYLAR	0.01uF 50V	RTABG		D51	iF004600	DIODE	1SS133
C155	UA654100	C.MYLAR	0.01uF 50V	RTABG		D52	iF004600	DIODE	1SS133
C157	UA654100	C.MYLAR	0.01uF 50V	RTABG	▲	D53	VZ755200	DIODE.BRG	D15XB20 15A 200V
C158	UA654100	C.MYLAR	0.01uF 50V	RTABG		D54	iF004600	DIODE	1SS133
C159	UA654100	C.MYLAR	0.01uF 50V	RTABG		D55	iF004600	DIODE	1SS133
C160	UA654100	C.MYLAR	0.01uF 50V	RTABG		D56	VC398400	DIODE	MA185
C161	UA654100	C.MYLAR	0.01uF 50V	RTABG		D57	VG437200	DIODE.ZENR	MTZJ4.7C 4.7V
C162	UA654100	C.MYLAR	0.01uF 50V	RTABG	▲	D58	VC398400	DIODE	MA185
C163	UA654100	C.MYLAR	0.01uF 50V	RTABG	▲	D59	VC398400	DIODE	MA185
C164	UA654100	C.MYLAR	0.01uF 50V	RTABG	▲	D60	VC398400	DIODE	MA185
C165	UA654100	C.MYLAR	0.01uF 50V	RTABG		D67	VC398400	DIODE	MA185
C166	UA654100	C.MYLAR	0.01uF 50V	RTABG		D68	VC398400	DIODE	MA185

* New Parts

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P.C.B. MAIN

Schm Ref.	PART NO.	Description	Markets
D69	VC398400	DIODE	MA185
D70	VC398400	DIODE	MA185
D71	VC398400	DIODE	MA185
D72	VC398400	DIODE	MA185
* D73	VG441500	DIODE .ZENR	MTZJ18C 18V RTABG
D73	VG442100	DIODE .ZENR	MTZJ22B 22V UC
D74	VG442500	DIODE .ZENR	MTZJ24B 24V
D75	VG439900	DIODE .ZENR	MTZJ11B 11V RTABG
D75	VG440200	DIODE .ZENR	MTZJ12B 12V UC
* D76	VG442500	DIODE .ZENR	MTZJ24B 24V RTABG
D77	VG441500	DIODE .ZENR	MTZJ18C 18V UC
D77	VG442100	DIODE .ZENR	MTZJ22B 22V UC
D78	VG442500	DIODE .ZENR	MTZJ24B 24V
D79	VG439900	DIODE .ZENR	MTZJ11B 11V RTABG
D79	VG440200	DIODE .ZENR	MTZJ12B 12V UC
D80	VG442500	DIODE .ZENR	MTZJ24B 24V
G1	VR463400	TERM. GND	D3. 5
G2	VR463400	TERM. GND	D3. 5
L1	VC664100	COIL	0. 95uH
L2	VC664100	COIL	0. 95uH
L3	VC664100	COIL	0. 95uH
L4	GD900470	COIL	1. 5uH
L5	GD900470	COIL	1. 5uH
L6	GD900470	COIL	1. 5uH
PN1	V3750100	PIN	L=50
Q1	VL542700	TR. DGT	DTA123JS
Q2	VL542700	TR. DGT	DTA123JS
△ Q3	V6678600	TR	2SB1375
Q4	VL542700	TR. DGT	DTA123JS
Q5	VD678700	TR. DGT	DTC114ES
△ Q6	VR510800	TR	2SD2396 J,K
Q7	VP883100	TR	2SC1890A D,E
Q8	VP883000	TR	2SA893A D,E
△ Q9	VS883300	TR	2SB1565 E,F
△ Q10	iA101510	TR	2SA1015 Y
△ Q11	iA101510	TR	2SA1015 Y
△ Q12	VE198700	TR	2SA1145 O,Y
△ Q13	iC224030	TR	2SC2240 GR,BL
△ Q14	iC224030	TR	2SC2240 GR,BL
△ Q15	iC224030	TR	2SC2240 GR,BL
△ Q16	iC224030	TR	2SC2240 GR,BL
△ Q17	iA101510	TR	2SA1015 Y
△ Q18	iA101510	TR	2SA1015 Y
△ Q19	VE198700	TR	2SA1145 O,Y
△ Q20	iC224030	TR	2SC2240 GR,BL
△ Q21	iC224030	TR	2SC2240 GR,BL
△ Q22	iC224030	TR	2SC2240 GR,BL
△ Q23	iC224030	TR	2SC2240 GR,BL
△ Q24	iA101510	TR	2SA1015 Y
△ Q25	iA101510	TR	2SA1015 Y
△ Q26	VE198700	TR	2SA1145 O,Y
△ Q27	iC224030	TR	2SC2240 GR,BL
△ Q28	iC224030	TR	2SC2240 GR,BL
△ Q29	iC224030	TR	2SC2240 GR,BL
△ Q30	iC224030	TR	2SC2240 GR,BL
△ Q31	iA101510	TR	2SA1015 Y
△ Q32	iA101510	TR	2SA1015 Y
△ Q33	VE198700	TR	2SA1145 O,Y
△ Q34	iC224030	TR	2SC2240 GR,BL
△ Q35	iC224030	TR	2SC2240 GR,BL
△ Q36	iC224030	TR	2SC2240 GR,BL
△ Q37	iC224030	TR	2SC2240 GR,BL
△ Q38	iA101510	TR	2SA1015 Y

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Schm Ref.	PART NO.	Description	Markets
△ Q39	iA101510	TR	2SA1015 Y
△ Q40	VE198700	TR	2SA1145 O,Y
△ Q41	iC224030	TR	2SC2240 GR,BL
△ Q42	iC224030	TR	2SC2240 GR,BL
△ Q43	iC224030	TR	2SC2240 GR,BL
△ Q44	iC224030	TR	2SC2240 GR,BL
△ Q45	iA101510	TR	2SA1015 Y
△ Q46	iA101510	TR	2SA1015 Y
△ Q47	VE198700	TR	2SA1145 O,Y
△ Q48	iC224030	TR	2SC2240 GR,BL
△ Q49	iC224030	TR	2SC2240 GR,BL
△ Q50	iC224030	TR	2SC2240 GR,BL
△ Q51	iC224030	TR	2SC2240 GR,BL
△ Q52	VE198800	TR	2SC2705 O,Y
Q53	VD678700	TR. DGT	DTC114ES
△ Q53A	iX632610	TR	2SA1837 O,Y
△ Q53C	iX632620	TR	2SC4793 O,Y
# Q54	VY705000	TR	2SC5200 R,O
△ Q55	iC224030	TR	2SC2240 GR,BL
Q56	VD678700	TR. DGT	DTC114ES
△ Q57	VE198700	TR	2SA1145 O,Y
# Q58	VY705000	TR	2SC5200 R,O
△ Q59	VE198800	TR	2SC2705 O,Y
Q60	VP883100	TR	2SC1890A D,E
△ Q60A	iX632610	TR	2SA1837 O,Y
△ Q60C	iX632620	TR	2SC4793 O,Y
# Q61	VY705000	TR	2SC5200 R,O
△ Q62	iC224030	TR	2SC2240 GR,BL
Q63	VP883000	TR	2SA893A D,E
△ Q64	VE198700	TR	2SA1145 O,Y
# Q65	VY705000	TR	2SC5200 R,O
△ Q66	VE198800	TR	2SC2705 O,Y
△ Q67A	iX632610	TR	2SA1837 O,Y
△ Q67C	iX632620	TR	2SC4793 O,Y
# Q68	V6063900	TR	2SC5358 O,R
△ Q69	iC224030	TR	2SC2240 GR,BL
△ Q71	VE198700	TR	2SA1145 O,Y
# Q72	V6063900	TR	2SC5358 O,R
△ Q73	VE198800	TR	2SC2705 O,Y
△ Q74A	iX632610	TR	2SA1837 O,Y
△ Q74C	iX632620	TR	2SC4793 O,Y
# Q75	V6063900	TR	2SC5358 O,R
△ Q76	iC224030	TR	2SC2240 GR,BL
△ Q78	VE198700	TR	2SA1145 O,Y
# Q79	V6063900	TR	2SC5358 O,R
△ Q80	VE198800	TR	2SC2705 O,Y
△ Q81A	iX632610	TR	2SA1837 O,Y
△ Q81C	iX632620	TR	2SC4793 O,Y
# Q82	V6063900	TR	2SC5358 O,R
△ Q83	iC224030	TR	2SC2240 GR,BL
△ Q85	VE198700	TR	2SA1145 O,Y
# Q86	V6063900	TR	2SC5358 O,R
△ Q87	VE198800	TR	2SC2705 O,Y
△ Q88A	iX632610	TR	2SA1837 O,Y
△ Q88C	iX632620	TR	2SC4793 O,Y
# Q89	V6063900	TR	2SC5358 O,R
△ Q90	iC224030	TR	2SC2240 GR,BL
△ Q92	VE198700	TR	2SA1145 O,Y
# Q93	V6063900	TR	2SC5358 O,R
△ Q94	iA097030	TR	2SA970 GR,BL
△ R1	HV755150	R. CAR. FP	150 1/4W
△ R2	HV755150	R. CAR. FP	150 1/4W
△ R4	HV755150	R. CAR. FP	150 1/4W

*: New Parts

Note) Those parts marked with "#" are not included in the P.C.B. ass'y.

P.C.B. MAIN & P.C.B. POWER

Schm Ref.	PART NO.	Description	Markets
▲ R5	HV755150	R. CAR. FP 150 1/4W	
▲ R7	HV754100	R. CAR. FP 10 1/4W	
R8	HV756470	R. CAR. FP 4.7K 1/4W	
R9	HV755100	R. CAR. FP 100 1/4W	
* R10	HV757120	R. CAR. FP 12K 1/4W	
* R13	HV757120	R. CAR. FP 12K 1/4W	
R14	HV755100	R. CAR. FP 100 1/4W	
R15	HV756560	R. CAR. FP 5.6K 1/4W	
▲ R16	HV754100	R. CAR. FP 10 1/4W	
▲ R17	VP940400	R. MTL. OXD 100 1W	
▲ R33	HV755680	R. CAR. FP 680 1/4W	
▲ R34	HV755680	R. CAR. FP 680 1/4W	
▲ R35	HV755100	R. CAR. FP 100 1/4W	
▲ R37	HV755470	R. CAR. FP 470 1/4W	
▲ R42	HV755470	R. CAR. FP 470 1/4W	
▲ R45	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R50	HV754820	R. CAR. FP 82 1/4W	
▲ R52	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R54	HV755680	R. CAR. FP 680 1/4W	
▲ R55	HV755680	R. CAR. FP 680 1/4W	
▲ R56	HV755100	R. CAR. FP 100 1/4W	
▲ R58	HV755470	R. CAR. FP 470 1/4W	
▲ R63	HV755470	R. CAR. FP 470 1/4W	
▲ R66	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R71	HV754820	R. CAR. FP 82 1/4W	
▲ R73	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R75	HV755680	R. CAR. FP 680 1/4W	
▲ R76	HV755680	R. CAR. FP 680 1/4W	
▲ R77	HV755100	R. CAR. FP 100 1/4W	
▲ R79	HV755470	R. CAR. FP 470 1/4W	
▲ R84	HV755470	R. CAR. FP 470 1/4W	
▲ R87	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R92	HV754820	R. CAR. FP 82 1/4W	
▲ R94	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R95	HV755680	R. CAR. FP 680 1/4W	
▲ R96	HV755680	R. CAR. FP 680 1/4W	
▲ R97	HV755100	R. CAR. FP 100 1/4W	
▲ R99	HV755470	R. CAR. FP 470 1/4W	
▲ R104	HV755470	R. CAR. FP 470 1/4W	
▲ R107	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R112	HV754820	R. CAR. FP 82 1/4W	
▲ R114	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R116	HV755680	R. CAR. FP 680 1/4W	
▲ R117	HV755680	R. CAR. FP 680 1/4W	
▲ R118	HV755100	R. CAR. FP 100 1/4W	
▲ R120	HV755470	R. CAR. FP 470 1/4W	
▲ R125	HV755470	R. CAR. FP 470 1/4W	
▲ R128	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R133	HV754820	R. CAR. FP 82 1/4W	
▲ R134	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R137	HV755680	R. CAR. FP 680 1/4W	
▲ R138	HV755680	R. CAR. FP 680 1/4W	
▲ R139	HV755100	R. CAR. FP 100 1/4W	
▲ R141	HV755470	R. CAR. FP 470 1/4W	
▲ R146	HV755470	R. CAR. FP 470 1/4W	
▲ R150	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R154	HV754820	R. CAR. FP 82 1/4W	
▲ R155	HV756680	R. CAR. FP 6.8K 1/4W	
▲ R159	HV753470	R. CAR. FP 4.7 1/4W	
▲ R161	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R162	HV755150	R. CAR. FP 150 1/4W	
▲ R164	HV755150	R. CAR. FP 150 1/4W	
▲ R165	VR412900	R. MTL. OXD 0.1 3W	

* New Parts

Schm Ref.	PART NO.	Description	Markets
▲ R169	HV753470	R. CAR. FP 4.7 1/4W	
▲ R170	HV755470	R. CAR. FP 470 1/4W	
▲ R171	HV753470	R. CAR. FP 4.7 1/4W	
▲ R172	HV755100	R. CAR. FP 100 1/4W	
▲ R173	HV755560	R. CAR. FP 560 1/4W	
▲ R175	HV753470	R. CAR. FP 4.7 1/4W	
▲ R177	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R178	HV755150	R. CAR. FP 150 1/4W	
▲ R180	HV755150	R. CAR. FP 150 1/4W	
▲ R181	VR412900	R. MTL. OXD 0.1 3W	
▲ R185	HV753470	R. CAR. FP 4.7 1/4W	
▲ R186	HV755470	R. CAR. FP 470 1/4W	
▲ R187	HV753470	R. CAR. FP 4.7 1/4W	
▲ R188	HV755100	R. CAR. FP 100 1/4W	
▲ R189	HV755560	R. CAR. FP 560 1/4W	
▲ R191	HV753470	R. CAR. FP 4.7 1/4W	
▲ R192	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R193	HV755150	R. CAR. FP 150 1/4W	
▲ R194	HV755150	R. CAR. FP 150 1/4W	
▲ R195	VR412900	R. MTL. OXD 0.1 3W	
▲ R199	HV753470	R. CAR. FP 4.7 1/4W	
▲ R200	HV755470	R. CAR. FP 470 1/4W	
▲ R201	HV753470	R. CAR. FP 4.7 1/4W	
▲ R202	HV755100	R. CAR. FP 100 1/4W	
▲ R203	HV755560	R. CAR. FP 560 1/4W	
▲ R205	HV753470	R. CAR. FP 4.7 1/4W	
▲ R206	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R207	HV755150	R. CAR. FP 150 1/4W	
▲ R208	HV755150	R. CAR. FP 150 1/4W	
▲ R209	VR412900	R. MTL. OXD 0.1 3W	
▲ R213	HV753470	R. CAR. FP 4.7 1/4W	
▲ R214	HV755470	R. CAR. FP 470 1/4W	
▲ R215	HV753470	R. CAR. FP 4.7 1/4W	
▲ R216	HV755100	R. CAR. FP 100 1/4W	
▲ R217	HV755560	R. CAR. FP 560 1/4W	
▲ R219	HV753470	R. CAR. FP 4.7 1/4W	
▲ R220	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R221	HV755150	R. CAR. FP 150 1/4W	
▲ R222	HV755150	R. CAR. FP 150 1/4W	
▲ R223	VR412900	R. MTL. OXD 0.1 3W	
▲ R227	HV753470	R. CAR. FP 4.7 1/4W	
▲ R228	HV755470	R. CAR. FP 470 1/4W	
▲ R229	HV753470	R. CAR. FP 4.7 1/4W	
▲ R230	HV755100	R. CAR. FP 100 1/4W	
▲ R231	HV755560	R. CAR. FP 560 1/4W	
▲ R233	HV753470	R. CAR. FP 4.7 1/4W	
▲ R234	HV756120	R. CAR. FP 1.2K 1/4W	
▲ R235	HV755150	R. CAR. FP 150 1/4W	
▲ R236	HV755150	R. CAR. FP 150 1/4W	
▲ R237	VR412900	R. MTL. OXD 0.1 3W	
▲ R241	HV753470	R. CAR. FP 4.7 1/4W	
▲ R242	HV755470	R. CAR. FP 470 1/4W	
▲ R243	HV753470	R. CAR. FP 4.7 1/4W	
▲ R244	HV755100	R. CAR. FP 100 1/4W	
▲ R245	HV755560	R. CAR. FP 560 1/4W	
▲ R250	HV754100	R. CAR. FP 10 1/4W	
▲ R251	HV753100	R. CAR. FP 1 1/4W	
▲ R253	HV754100	R. CAR. FP 10 1/4W	
▲ R254	HV753100	R. CAR. FP 1 1/4W	
▲ R255	HV754100	R. CAR. FP 10 1/4W	
▲ R257	HV753100	R. CAR. FP 1 1/4W	
▲ R258	HV754100	R. CAR. FP 10 1/4W	
▲ R261	HV753100	R. CAR. FP 1 1/4W	

* New Parts

P.C.B. MAIN & P.C.B. POWER

Schm Ref.	PART NO.	Description	Markets
R262	HV754100	R. CAR. FP 10 1/4W	
R265	HV753100	R. CAR. FP 1 1/4W	
R266	HV756330	R. CAR. FP 3.3K 1/4W	
R267	HV754100	R. CAR. FP 10 1/4W	
R269	HV753100	R. CAR. FP 1 1/4W	
R274	HV757220	R. CAR. FP 22K 1/4W	RTABG
R274	VQ883800	R. MTL. OXD 47K 1W	UC
R283	HV757220	R. CAR. FP 22K 1/4W	RTABG
R283	VQ883800	R. MTL. OXD 47K 1W	UC
RY2	V6322600	RELAY DC DH24D2-OT(M)-SL	
RY3	V6322600	RELAY DC DH24D2-OT(M)-SL	
RY4	V6322600	RELAY DC DH24D2-OT(M)-SL	
RY5	V6322600	RELAY DC DH24D2-OT(M)-SL	
SW1	VZ075500	SW. SLIDE SL14-22AM5F	
TE2	V5909900	TERM. SP 8P LTS0810	BG
TE2	V5910000	TERM. SP 8P LTS0810	UCRTA
TE3	V5909900	TERM. SP 8P LTS0810	BG
TE3	V5910000	TERM. SP 8P LTS0810	UCRTA
	VK697600	SCR. BND. HD 3x10 SP MFZN2Y	
	V8203100	P. C. B. POWER	UC
	V8203200	P. C. B. POWER	RT
	V8203300	P. C. B. POWER	A
	V8203400	P. C. B. POWER	B
	V8203500	P. C. B. POWER	G
CB311	VG879900	CN. BS. PIN 2P	RTAB
CB313	VP206500	HOLDER. FUS EYF-52BCT	ABG
CB313	VS996100	HOLDER. FUS EYF64BC	UCRT
CB314	VS996100	HOLDER. FUS EYF64BC	UCRT
CB315	VP206500	HOLDER. FUS EYF-52BCT	ABG
CB316	LA002410	TERM. WRAP 2P	
CB317	VP206500	HOLDER. FUS EYF-52BCT	UCRTG
CB318	VP206500	HOLDER. FUS EYF-52BCT	UCRTG
CB318	VP206500	HOLDER. FUS EYF-52BCT	
CB319	LA002410	TERM. WRAP 2P	RT
CB351	VD004500	CN. BS. PIN 2P	
CB352	VD004700	CN. BS. PIN 4P	
CB353	VD005000	CN. BS. PIN 7P	
CB354	VD005200	CN. BS. PIN 9P	
CB355	LA002320	TERM. WRAP 3P	
CB356	LA002320	TERM. WRAP 3P	
CB357	LA002000	TERM. WRAP 2P	
CB358	VD004600	CN. BS. PIN 3P	
CB359	VM923600	CN. BS. PIN 13P	
CB360	VQ047400	CN. BS. PIN 19P	
CB361	VM859600	CN. BS. PIN 15P	
CB362	VM973500	CN. BS. PIN 17P	
CB401	VM929900	CN. BS. PIN 15P	
CB431	VM859500	CN. BS. PIN 11P	
CB432	V3768800	SOCKET 17LE-23090-28	
C311	UU148470	C. EL 470uF 25V	
C312	UU147100	C. EL 10uF 25V	RT
C313	UU167100	C. EL 10uF 50V	RT
C314	UU197100	C. EL 10uF 100V	RT
C315	Vi716700	C. MYLAR 0.01uF 50V	UCABG
C316	Vi716700	C. MYLAR 0.01uF 50V	RT
C317	Vi716700	C. MYLAR 0.01uF 50V	RT
C318	V6185300	C. CE. SAFTY 0.01uF 275V	
C351	UU168100	C. EL 100uF 50V	
C352	UU167100	C. EL 10uF 50V	
C353	UU147100	C. EL 10uF 25V	

* New Parts

Schm Ref.	PART NO.	Description	Markets
C354	UR759100	C. EL 1000uF 35V	
C355	VJ599100	C. CE. TUBLR 0.1uF 50V	
C356	V7887400	C. EL 47uF 16V	
C357	V7887600	C. EL 10uF 25V	
C358	V7887400	C. EL 47uF 16V	
C359	V7887600	C. EL 10uF 25V	
C360	V7887400	C. EL 47uF 16V	
C361	V7887400	C. EL 47uF 16V	
C362	V7887600	C. EL 10uF 25V	
C363	V7887600	C. EL 10uF 25V	
C364	V8563300	C. EL 2200uF 16V	
C365	V7887500	C. EL 1000uF 16V	
C366	UU139680	C. EL 6800uF 16V	
C367	V7887800	C. EL 1uF 50V	
C368	V7887800	C. EL 1uF 50V	
C369	UU13A100	C. EL 10000uF 16V	
C370	V7887700	C. EL 3300uF 25V	
C371	VL232300	C. EL 2200uF 25V	
C372	UU13A100	C. EL 10000uF 16V	
C373	UU139680	C. EL 6800uF 16V	
C376	Vi862200	C. POLY 0.1uF 100V	
C377	Vi862200	C. POLY 0.1uF 100V	
C378	VF467000	C. CE. TUBLR 1000pF 50V	
C405	UT652100	C. PP 100pF 100V	
C406	UT652100	C. PP 100pF 100V	
C407	VR169200	C. MYLAR. ML ECQ-V1H474JL3	
C408	UT652100	C. PP 100pF 100V	
C409	UT652100	C. PP 100pF 100V	
C410	UA655100	C. MYLAR 0.1uF 50V	
C411	UA655100	C. MYLAR 0.1uF 50V	
C412	UA655100	C. MYLAR 0.1uF 50V	
C431	UU137470	C. EL 47uF 16V	
C432	VJ599100	C. CE. TUBLR 0.1uF 50V	
C433	VJ599100	C. CE. TUBLR 0.1uF 50V	
C434	VJ599100	C. CE. TUBLR 0.1uF 50V	
C435	VJ599100	C. CE. TUBLR 0.1uF 50V	
C436	VJ599100	C. CE. TUBLR 0.1uF 50V	
C437	VJ599100	C. CE. TUBLR 0.1uF 50V	
C438	VF467300	C. CE. TUBLR 0.01uF 16V	UCRTA
C439	VF467300	C. CE. TUBLR 0.01uF 16V	UCRTA
D311	iF004600	DIODE 1SS133	
D312	iF004600	DIODE 1SS133	RT
D313	VU264100	DIODE 1SR139-400	RT
D314	VR253700	DIODE. BRG S1NB20 1A 200V	
D315	VG439900	DIODE. ZENR MTZJ11B 11V	RT
D351	VG442600	DIODE. ZENR MTZJ24C 24V	
D352	iF004600	DIODE 1SS133	
D353	VG440800	DIODE. ZENR MTZJ15B 15V	RT
D354	VR253700	DIODE. BRG S1NB20 1A 200V	
D355	VN011300	DIODE. BRG D3SBA20 4A 200V	
D431	iF004600	DIODE 1SS133	UCRTA
F311	KB000780	FUSE T5.0A 250V	ABG
F311	KB001390	FUSE 10A 250V	UCRT
F312	KB000780	FUSE T5.0A 250V	RT
F312	VS823000	FUSE T5.0A 125V	UC
F312	VT942900	FUSE TH2.5A 250V	G
G351	VR463400	TERM. GND D3.5	
IC351	XJ607A00	IC NJM7805FA 5V	
IC352	XJ607A00	IC NJM7805FA 5V	
IC353	XJ607A00	IC NJM7805FA 5V	
IC354	XE436A00	IC NJM79M05FA	
IC355	XJ608A00	IC NJM7812FA	
IC356	XD343A00	IC NJM79M12FA	

* New Parts

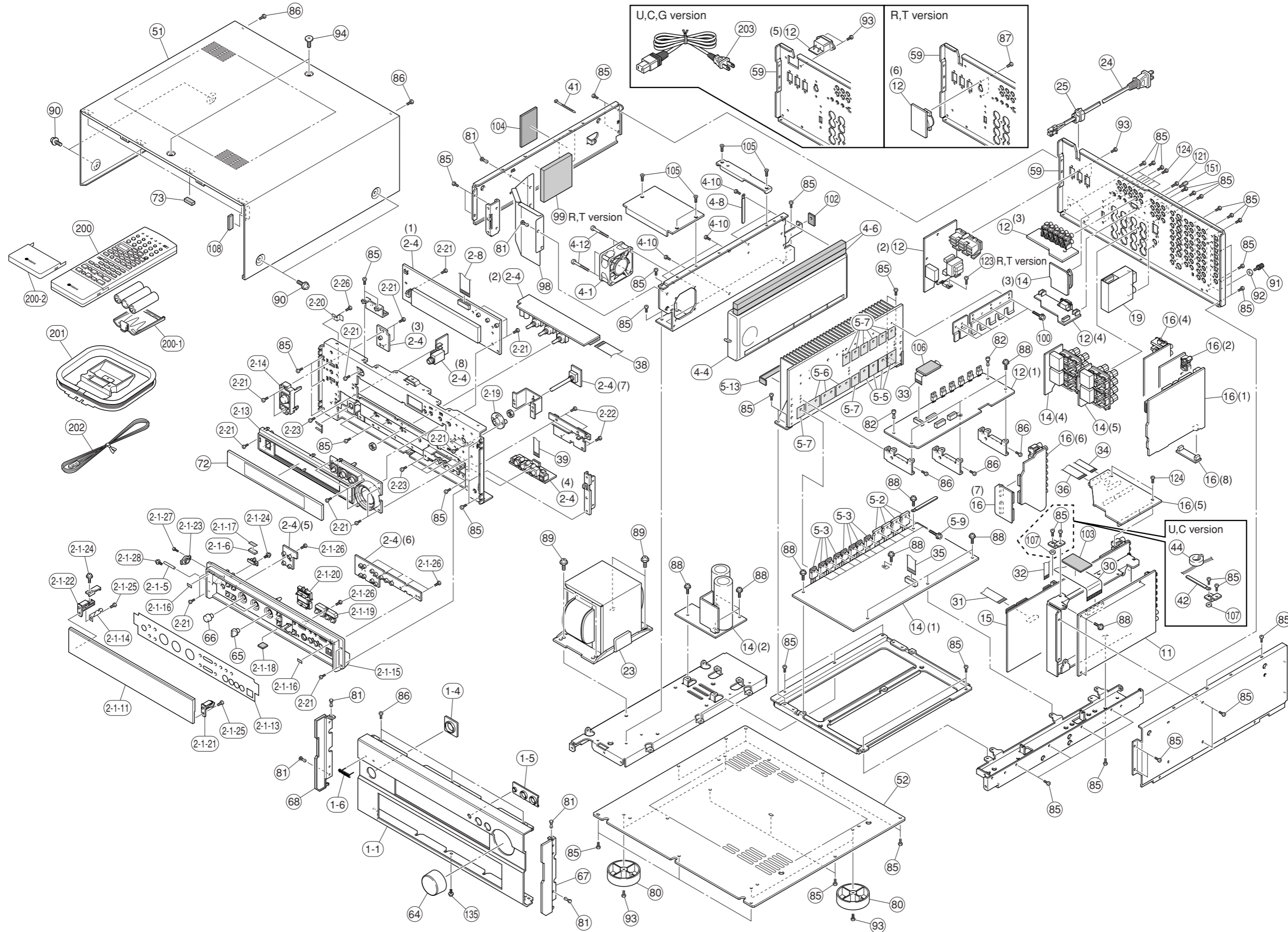
P.C.B. POWER & Chip Resistors

Schm Ref.	PART NO.	Description	Markets	Schm Ref.	PART NO.	Description	Markets
IC357	X0515A00	IC		RD350000	R. CAR. CHP	0	1/10W
IC431	XW863A00	IC		RD353220	R. CAR. CHP	2.2	1/10W
JK431	VJ726800	JACK.MNI	UCRTA	RD354330	R. CAR. CHP	33	1/10W
JK432	VJ726800	JACK.MNI	UCRTA	RD354470	R. CAR. CHP	47	1/10W
JK433	VJ726800	JACK.MNI	UCRTA	RD354750	R. CAR. CHP	75	1/10W
* PJ401	VQ551200	JACK.PIN		RD354820	R. CAR. CHP	82	1/10W
PJ402	VJ249500	JACK.PIN		RD355100	R. CAR. CHP	100	1/10W
* PJ403	V8179700	JACK.PIN		RD355150	R. CAR. CHP	150	1/10W
PJ404	VJ695600	JACK.PIN		RD355220	R. CAR. CHP	220	1/10W
PN351	V3750200	PIN		RD355330	R. CAR. CHP	330	1/10W
PN352	V3750200	PIN		RD355390	R. CAR. CHP	390	1/10W
PN353	V3750200	PIN		RD355470	R. CAR. CHP	470	1/10W
PN355	V3750200	PIN		RD355680	R. CAR. CHP	680	1/10W
Q311	VD488500	TR.DGT		RD355820	R. CAR. CHP	820	1/10W
⚠ Q312	VR510800	TR	RT	RD355910	R. CAR. CHP	910	1/16W
⚠ Q313	VR510800	TR	RT	RD356100	R. CAR. CHP	1K	1/10W
Q314	iE102620	FET	RT	RD356120	R. CAR. CHP	1.2K	1/10W
Q315	iC174020	TR		RD356150	R. CAR. CHP	1.5K	1/10W
⚠ Q351	V6678600	TR		RD356180	R. CAR. CHP	1.8K	1/10W
Q352	iC181510	TR		RD356220	R. CAR. CHP	2.2K	1/10W
Q353	VP883000	TR		RD356240	R. CAR. CHP	2.4K	1/10W
R315	V67300000	R. CAR.	UC	RD356270	R. CAR. CHP	2.7K	1/10W
⚠ R351	HV753470	R. CAR.FP		RD356330	R. CAR. CHP	3.3K	1/10W
R352	HV756330	R. CAR.FP		RD356390	R. CAR. CHP	3.9K	1/10W
R353	HV756470	R. CAR.FP		RD356470	R. CAR. CHP	4.7K	1/10W
R355	VP939800	R.MTL.OXD		RD356510	R. CAR. CHP	5.1K	1/10W
⚠ R360	VP939500	R.MTL.FLM		RD356560	R. CAR. CHP	5.6K	1/10W
⚠ R361	VP939500	R.MTL.FLM		RD356620	R. CAR. CHP	6.2K	1/10W
⚠ RY311	V6434900	RELAY		RD356680	R. CAR. CHP	6.8K	1/10W
ST311	BB071360	SCR. TERM		RD356820	R. CAR. CHP	8.2K	1/10W
ST431	BB071360	SCR. TERM		RD356910	R. CAR. CHP	9.1K	1/10W
ST432	BB071360	SCR. TERM		RD357100	R. CAR. CHP	10K	1/10W
SW311	V7182300	VOLT. SELECT	RT	RD357120	R. CAR. CHP	12K	1/10W
⚠ T311	XZ228A00	TRANS.PWR	UC	RD357150	R. CAR. CHP	15K	1/10W
⚠ T311	XZ229A00	TRANS.PWR	RT	RD357180	R. CAR. CHP	18K	1/10W
⚠ T311	XZ230A00	TRANS.PWR	A	RD357330	R. CAR. CHP	33K	1/10W
⚠ T311	XZ231A00	TRANS.PWR	BG	RD357470	R. CAR. CHP	47K	1/10W
TE311	VV118800	OUTLET.AC	UC	RD357560	R. CAR. CHP	56K	1/10W
TE311	V5867900	AC OUTLET	RT	RD357820	R. CAR. CHP	82K	1/10W
TE311	VT915000	OUTLET.AC	A	RD358100	R. CAR. CHP	100K	1/10W
TE311	VU543300	OUTLET.AC	B	RD358220	R. CAR. CHP	220K	1/10W
TE311	VV119000	OUTLET.AC	G	RD358330	R. CAR. CHP	330K	1/10W
TE312	V6561200	AC INLET	UCG	RD358470	R. CAR. CHP	470K	1/10W
				RD358680	R. CAR. CHP	680K	1/10W
				RD359100	R. CAR. CHP	1M	1/10W
				RD359220	R. CAR. CHP	2.2M	1/10W

* New Parts

* New Parts

















1 ■EXPLODED VIEW



MECHANICAL PARTS

Ref. No.	PART NO.	Description	Remarks	Markets	
*	1-1	V7678900	FRONT PANEL	RXV3200GD	
*	1-1	V7678800	FRONT PANEL	RXV3200BL	
*	1-1	V7679100	FRONT PANEL	DSPAX3200BL	
*	1-1	V7679300	FRONT PANEL	DSPAX3200TI	
	1-4	V6003900	ESCUTCHEON/POWER	GD	
	1-4	V6003800	ESCUTCHEON/POWER	BL	
	1-4	V6004000	ESCUTCHEON/POWER	TI	
	1-5	V6004200	ESCUTCHEON/INPUT	GD	
	1-5	V6004100	ESCUTCHEON/INPUT	BL	
	1-5	V6004300	ESCUTCHEON/INPUT	TI	
	1-6	V6004900	EMBLEM	GD	
	1-6	V6004800	EMBLEM	BL, TI	
	2-1-5	VZ621800	SHAFT	AA	
	2-1-6	VZ621900	MAGNET		
*	2-1-11	V7991100	PANEL, LID	GD	
*	2-1-11	V7991000	PANEL, LID	BL	
*	2-1-11	V7991200	PANEL, LID	TI	
*	2-1-13	V7991400	PLATE, SP	RXV3200GD	
*	2-1-13	V7991300	PLATE, SP	RXV3200BL	
*	2-1-13	V7991500	PLATE, SP	DSPAX3200BL	
*	2-1-13	V7991700	PLATE, SP	DSPAX3200TI	
*	2-1-14	V8622500	EARTH PLATE		
	2-1-15	V6068500	SUB PANEL CASE	GD	
	2-1-15	V6068400	SUB PANEL CASE	BL	
	2-1-15	V6095500	SUB PANEL	TI	
	2-1-16	V2048500	CUSHION, LID	GD	
	2-1-16	VT062900	CUSHION, LID	BL	
	2-1-16	VU182300	CUSHION, LID	TI	
	2-1-17	V6996800	SPACER		
	2-1-18	VH625500	DAMPER		
	2-1-19	V6069600	BUTTON/TU	GD	
	2-1-19	V6069400	BUTTON/TU	BL	
*	2-1-20	V8027600	BUTTON/S	GD	
*	2-1-20	V8027500	BUTTON/S	BL	
*	2-1-20	V8027700	BUTTON/S	TI	
	2-1-21	V0050300	STOPPER	HINGE	GD
	2-1-21	VJ888100	STOPPER	HINGE	BL
	2-1-21	VZ830400	STOPPER	HINGE	TI
	2-1-22	V0047400	HINGE/MG		GD
	2-1-22	VZ629400	HINGE/MG		BL
	2-1-22	VZ629500	HINGE/MG		TI
	2-1-23	VZ830300	DAMPER/GEAR	15G	
	2-1-24	VQ541700	PW HEAD B-TITE SCREW	3x8-8 MFC2	
	2-1-25	EG330360	BIND HEAD SCREW	3x6 MFZN2BL	
	2-1-26	EP600190	BIND HEAD B-TITE SCREW	3x8 MFZN2BL	
	2-1-27	VG893800	BIND HEAD P-TITE SCREW	2x6 MFZN2BL	
	2-1-28	VE529700	PW HEAD B-TITE SCREW	3x6-8 MFC2BL	
*	2-4	V8202600	P.C.B. ASS'Y	OPERATION	BG
*	2-4	V8202700	P.C.B. ASS'Y	OPERATION	UCRTA
*	2-8	MF119250	FLEXIBLE FLAT CABLE	19P 250mm P=1.25	
*	2-13	V7992200	BUTTON CASE UPPER	GD	
*	2-13	V7992100	BUTTON CASE UPPER	BL	
*	2-13	V7992300	BUTTON CASE UPPER	TI	



* New Parts

Ref. No.	PART NO.	Description	Remarks	Markets
* 2-14	V7992500	BUTTON/POWER	GD	
* 2-14	V7992400	BUTTON/POWER	BL	
* 2-14	V7992600	BUTTON/POWER	TI	
2-19	V6071000	SUPPORT	SHAFT	
* 2-20	V8622800	EARTH PLATE		
2-21	EP600190	BIND HEAD B-TITE SCREW	3x8 MFZN2BL	
2-22	EP600130	BIND HEAD B-TITE SCREW	3x6 MFZN2Y	
2-23	VN413300	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2BL	
2-26	V6012500	BIND HEAD B-TITE SCREW	3x8 MFN133	
4-1	V3316600	DC BRUSHLESS FAN	2410ML-05W-B40-T14	
4-4	VV713600	BRACKET	F	
4-6	VZ012900	CUSHION, FAN		
4-8	CB502030	BINDING TIE	S-75B	
4-10	EP630220	BIND HEAD P-TITE SCREW	3x8 MFZN2BL	
4-12	VV220300	BIND HEAD B-TITE SCREW	3x30 MFZN2BL	
5-2	VY705000	TRANSISTOR	2SC5200 R,0	
5-3	V6063900	TRANSISTOR	2SC5358 0,R	
5-5	VK196000	SHEET	22x29	
5-6	V6492000	RADIATION SHEET	BFG-20ADH-6 24x36	
5-7	VK195900	SHEET	19x24	
5-9	VK173200	SCREW, TRANSISTOR	3x15 SP MFC2	
5-13	VU195800	DAMPER, FIN		
* 11	V8200600	P.C.B. ASS'Y	DSP	
*  12	V8203100	P.C.B. ASS'Y	POWER	UC
*  12	V8203200	P.C.B. ASS'Y	POWER	RT
*  12	V8203300	P.C.B. ASS'Y	POWER	A
*  12	V8203400	P.C.B. ASS'Y	POWER	B
*  12	V8203500	P.C.B. ASS'Y	POWER	G
*  14	V8202100	P.C.B. ASS'Y	MAIN	UC
*  14	V8202200	P.C.B. ASS'Y	MAIN	RT
*  14	V8202300	P.C.B. ASS'Y	MAIN	A
*  14	V8202400	P.C.B. ASS'Y	MAIN	BG
* 15	V8201100	P.C.B. ASS'Y	FUNCTION	UC
* 15	V8201200	P.C.B. ASS'Y	FUNCTION	RT
* 15	V8201300	P.C.B. ASS'Y	FUNCTION	A
* 15	V8201400	P.C.B. ASS'Y	FUNCTION	BG
* 16	V8201600	P.C.B. ASS'Y	VIDEO	UC
* 16	V8201700	P.C.B. ASS'Y	VIDEO	RT
* 16	V8201800	P.C.B. ASS'Y	VIDEO	A
* 16	V8201900	P.C.B. ASS'Y	VIDEO	BG
19	V7424300	AM/FM TUNER	FAE350-A10F	UCRT
19	V7424400	AM/FM TUNER	FAE404-E10F	A
*  23	X2117A00	POWER TRANSFORMER		UC
*  23	X2118A00	POWER TRANSFORMER		RT
*  23	X2119A00	POWER TRANSFORMER		A
*  23	X2120A00	POWER TRANSFORMER		BG
 24	VP418300	POWER CORD ASS'Y		A
 24	VV437300	POWER CORD ASS'Y		B
 24	VZ542500	POWER CORD ASS'Y		RT
25	V2438700	CORD STOPPER	10P1	ABRT
30	MF131100	FLEXIBLE FLAT CABLE	31P 100mm	
* 31	MF119180	FLEXIBLE FLAT CABLE	19P 180mm P=1.25	

* New Parts

Ref. No.	PART NO.	Description	Remarks	Markets
*	32	MF113160 FLEXIBLE FLAT CABLE	13P 160mm P=1.25	
*	33	V8227900 S FLEXIBLE FLAT CABLE	15P 250mm P=1.25	
	34	MF111100 FLEXIBLE FLAT CABLE	11P 100mm	
	35	MF117200 FLEXIBLE FLAT CABLE	17P 200mm	
	36	MF115100 FLEXIBLE FLAT CABLE C&C	15P 100mm	UCRTA
	38	MF117250 FLEXIBLE FLAT CABLE	17P 250mm	
*	39	V8228000 S FLEXIBLE FLAT CABLE	7P 350mm P=1.25	
	41	CB069250 BINDING TIE	BK-1	
	42	CB040540 BINDING TIE	S-72B	UC
	44	Vi491100 FERRITE CORE	BP53RB19012080M	UC
	51	V6404800 TOP COVER		GD
	51	VZ617400 TOP COVER		BL
	51	VZ617500 TOP COVER		TI
	52	VJ893400 BOTTOM COVER		
*	59	V7677500 REAR PANEL		UC
*	59	V7677700 REAR PANEL		RT
*	59	V7677800 REAR PANEL		A
*	59	V7678300 REAR PANEL		B
*	59	V7678400 REAR PANEL		G
	64	V6068100 KNOB/D43		GD
	64	V6068000 KNOB/D43		BL
	64	V6077800 KNOB/D43		TI
	65	V6001700 KNOB/D15		GD
	65	V6001600 KNOB/D15		BL
	65	V6001800 KNOB/D15		TI
	66	V6069900 KNOB/D15		GD
	66	V6069800 KNOB/D15		BL
	66	V6078400 KNOB/D15		TI
*	67	V7992800 PLATE, SIDE	R	GD
*	67	V7992700 PLATE, SIDE	R	BL
*	67	V7992900 PLATE, SIDE	R	TI
*	68	V7993100 PLATE, SIDE	L	GD
*	68	V7993000 PLATE, SIDE	L	BL
*	68	V7993200 PLATE, SIDE	L	TI
*	72	V7993300 SHEET, WINDOW		
	73	VE222600 CUSHION		
	80	V0042500 LEG	D60xH21	GD
	80	VS025000 LEG	D60xH21	BL, TI
	81	CB068880 PLASTIC RIVET	No. 1027	
	82	CB605620 PLASTIC RIVET	No. 1781	
	85	VN413300 BIND HEAD BONDING B-T. SCREW	3x8 MFZN2BL	
	86	EP600190 BIND HEAD B-TITE SCREW	3x8 MFZN2BL	
	87	EG330360 BIND HEAD SCREW	3x6 MFZN2BL	RT
	88	VQ541700 PW HEAD B-TITE SCREW	3x8-8 MFC2	
	89	VK625000 CUP S-TITE SCREW	5x10-12 MFZN2Y	
	90	VD069600 PW HEAD S-TITE SCREW	4x8-10 MFN133	GD
	90	21991500 PW HEAD S-TITE SCREW	4x8-10 MFC2BL	BL
	90	VH313200 BW HEAD S-TITE SCREW	4x8-10 MFN13BL	TI
	91	AA627310 GROUND TERMINAL		
	92	03765560 PLAIN WASHER	3.6x10x0.8 MFN133	
	93	EP600250 BIND HEAD B-TITE SCREW	3x8 MFZN2Y	
	94	VZ893000 DECORATED SCREW S-TIGHT	4x8-10 MFN133	GD

* New Parts

Ref. No.	PART NO.	Description	Remarks	Markets
94	VK522000	SPECIAL SCREW S-TITE	4x8-10 MFC2BL	BL TI
94	VK522100	SPECIAL SCREW S-TITE	4x8-10 MFC2BL	
98	VY980100	PLATE, FAN COVER		RT
99	VQ199500	DAMPER	TRANSF	
100	VK173200	SCREW, TRANSISTOR	3x15 SP MFC2	
102	V6983800	SPACER/T05		
103	VQ758300	CUSHION, L		
104	V6276700	CUSHION, FCB		
105	VB072700	FLAT HEAD S-TITE SCREW	3x8 MFZN2BL	
* 106	V8456700	CUSHION/M		
* 107	V8459400	SPACER		
* 108	V8524900	DAMPER		
121	VY731200	BONDING HEAD TAPPING SCREW	3x10 MFN133	RT
123	VK697600	BIND HEAD B-TITE SCREW	3x10 SP MFZN2Y	
124	EP600530	BIND HEAD S-TITE SCREW	3x8 MFZN2BL	
135	EL300690	PW HEAD P-TITE SCREW	3x8-8 MFC2BL	
151	V3768900	SCREW, LOCK	17L-003C41	
		ACCESSORIES		
* 200	V7720000	REMOTE CONTROL TRANSMITTER	RAV223	RRC4001-0002LM
200-1	AAX12830	LID	103RRC-170-01R	103RRC-170-01R
200-2	AAX13420	SLIDE COVER	103RRC-171-01R	103RRC-171-01R
201	VQ307400	AM LOOP ANTENNA	81-653-645-110	UCRTA UCRT
202	V6267000	ANTENNA, FM	1.4m 1pc	
202	VG850700	ANTENNA, FM	1.4m 1pc	A UC G
*  203	V6545800	POWER CORD ASS'Y	INLET 2.0m	
*  203	V6545900	POWER CORD ASS'Y BATTERY(ALKALINE DRY)	INLET 2.0m 1.5V LR6(3S)AG	

* New Parts

Parts List for Carbon Resistors

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ35 3100	HF85 3100	10 kΩ	HF45 7100	HF45 7100
1.8 Ω	HJ35 3180	*	11 kΩ	HF45 7110	HF45 7110
2.2 Ω	HJ35 3220	HF85 3220	12 kΩ	HJ35 7120	HF85 7120
3.3 Ω	HJ35 3330	HF85 3330	13 kΩ	HF45 7130	HF45 7130
4.7 Ω	HJ35 3470	HF85 3470	15 kΩ	HF45 7150	HF45 7150
5.6 Ω	HJ35 3560	HF85 3560	18 kΩ	HF45 7180	HF45 7180
10 Ω	HF45 4100	HF45 4100	22 kΩ	HF45 7220	HF45 7220
15 Ω	HJ35 4150	HF85 4150	24 kΩ	HF45 7240	HF45 7240
22 Ω	HF45 4220	HF45 4220	27 kΩ	HJ35 7270	HF85 7270
27 Ω	HJ35 4270	HF85 4270	30 kΩ	HF45 7300	HF45 7300
33 Ω	HF45 4330	HF45 4330	33 kΩ	HF45 7330	HF45 7330
39 Ω	HJ35 4470	HF85 4390	36 kΩ	HF45 7360	HF45 7360
47 Ω	HF45 4470	HF45 4470	39 kΩ	HF45 7390	HF45 7390
56 Ω	HF45 4560	HF45 4560	47 kΩ	HF45 7470	HF45 7470
68 Ω	HF45 4680	HF45 4680	51 kΩ	HF45 7510	HF45 7510
75 Ω	HF45 4750	HF45 4750	56 kΩ	HF45 7560	HF45 7560
82 Ω	HF45 4820	HF45 4820	62 kΩ	HF45 7620	HF45 7620
91 Ω	HF45 4910	HF45 4910	68 kΩ	HF45 7680	HF45 7680
100 Ω	HF45 5100	HF45 5100	82 kΩ	HF45 7820	HF45 7820
110 Ω	HJ35 5110	HF85 5110	91 kΩ	HF45 7910	HF45 7910
120 Ω	HF45 5120	HF45 5120	100 kΩ	HF45 8100	HF45 8100
150 Ω	HF45 5150	HF45 5150	110 kΩ	HF45 8110	HF45 8110
160 Ω	HJ35 5160	*	120 kΩ	HF45 8120	HF45 8120
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	HJ35 9120	*
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	HJ35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	HJ35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	HJ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	HJ35 9330	HF85 9330
2.0 kΩ	HJ35 6200	HF85 6200	3.9 MΩ	HJ35 9390	*
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	HJ35 9470	HF85 9470
2.4 kΩ	HJ35 6240	HF85 6240			
2.7 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300			
3.3 kΩ	HF45 6330	HF45 6330			
3.6 kΩ	HJ35 6360	HF85 6360			
3.9 kΩ	HF45 6390	HF45 6390			
4.7 kΩ	HF45 6470	HF45 6470			
5.1 kΩ	HF45 6510	HF45 6510			
5.6 kΩ	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
8.2 kΩ	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			

1/4W Type

HJ35 ○○○○
10mm

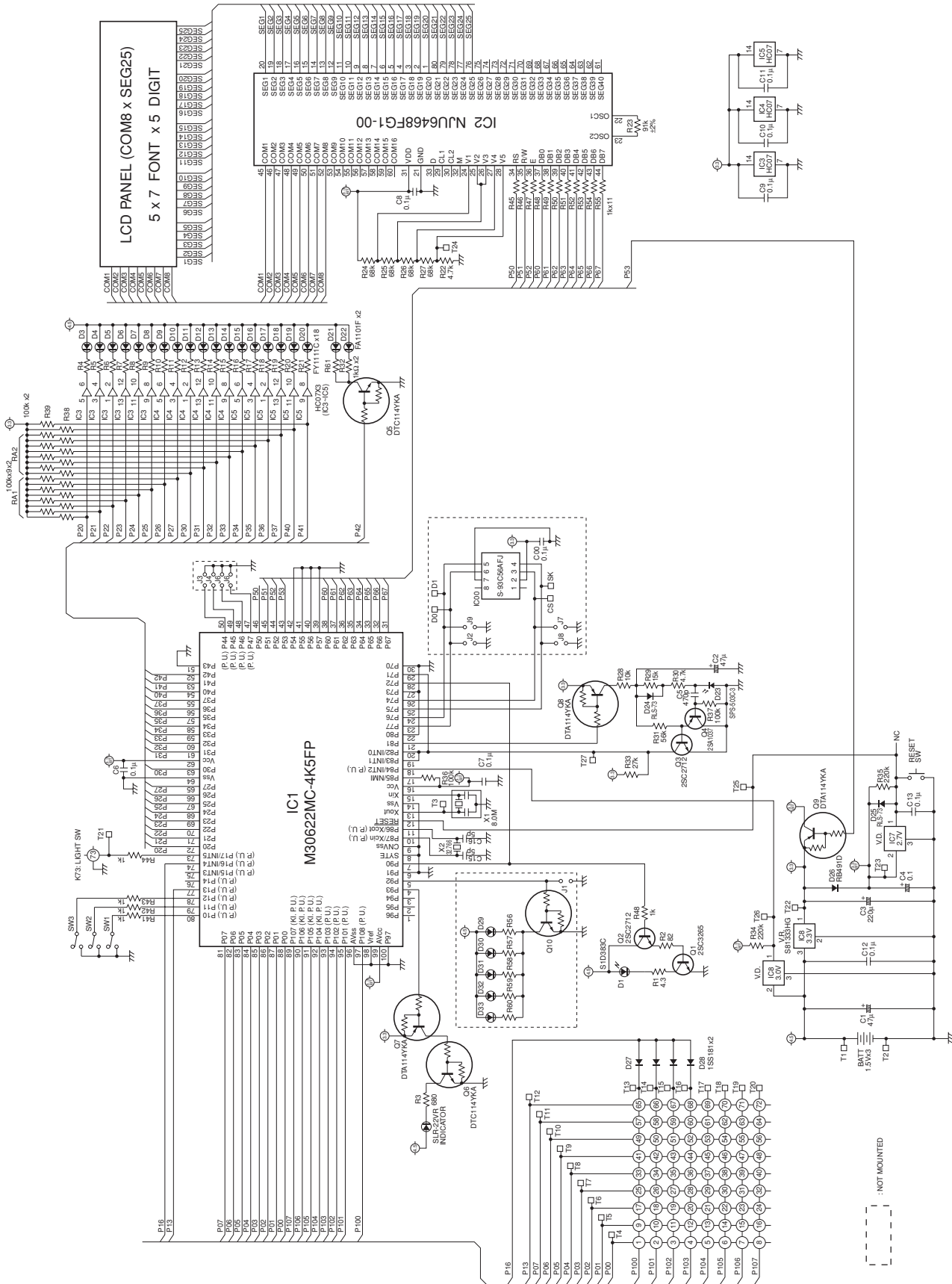
1/6W Type

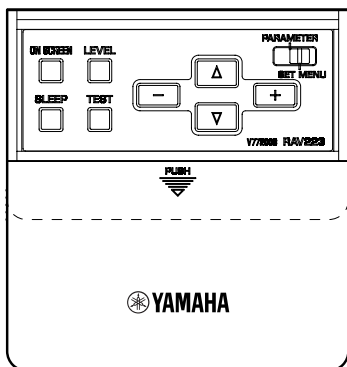
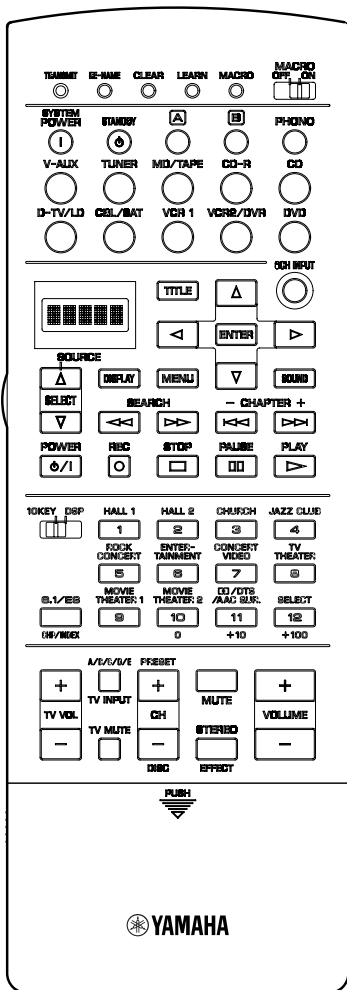
HF85 ○○○○
5mm

* : Not available

REMOTE CONTROL TRANSMITTER

SCHEMATIC DIAGRAM





Initial Code

Key No.	Key Name	YPC	DSP *1	Zone2 *2
1	—	—	—	—
2	RE-NAME	—	—	—
3	CLEAR	—	—	—
4	LEARN	—	—	—
5	MACRO	—	—	—
6	POWER on	*7A-1D	7D-90	*7A-1D
7	STANDBY	7A-1E	7D-91	7A-1E
8	A	—	—	—
9	B	—	—	—
10	PHONO	7A-14	7D-88	7A-D0
11	V-AUX	7A-55	7D-8A	7A-D8
12	TUNER	7A-16	7D-89	7A-D2
13	MD/TAPE	7A-18	7D-8B	7A-D3
14	CD-R	7A-19	7D-99	7A-D4
15	CD	7A-15	7D-87	7A-D1
16	D-TV/LD	7A-54	7D-84	7A-D9
17	CBL/SAT	7A-13	7D-82	7A-CC
18	VCR1	7A-0F	7D-81	7A-D6
19	VCR2/DVR	7A-13	7D-82	7A-D7
20	DVD	7A-C1	7D-97	7A-CD
21	EXT. DEC.	7A-87	7D-8C	7A-87

*1; These code are transmitted when "DSP" is set-up as AMP library.
 *2; These code are transmitted when "ZONE2" is chosen with Select key.
 CAUTION) This is displayed as a possible selection when the AMP library is set in ZONE 2.
 *; Transmitting Code of K6, "7A-1D"
 Full word transmitted twice.

Any device not listed on this table has no initial code.

*1; AMPライブラリーをDSPに設定することで送信されます。
 *2; SelectキーによりZONE2を選択することで送信されます。
 注意) AMPライブラリーをZONE2に設定した場合に選択肢として表示されます。
 *; K6送信コード"7A-1D"について
 ワード部が2回送信されます。

本表に記載なきデバイスの初期コードはありません。

Key No.	Key Name	Device					10 key					
		DVD (K20)	CD-R (K14)	CD (K15)	MD/TAPE (K13)	TUNER (K12)	A (K8)	PRG1	PRG2	PRG3	PRG4	
22	Up	→	→	→	→	→	7C-B4	—	—	—	—	—
23	TITLE	→	→	→	→	→	7C-B1	—	—	—	—	—
24	Left	→	→	→	→	→	7C-B5	—	—	—	—	—
25	ENTER	→	→	→	→	→	7C-B8	—	—	—	—	—
26	Right	→	→	→	→	→	7C-B6	—	—	—	—	—
27	SOUND	→	→	→	→	→	7C-AD	—	—	—	—	7C-12
28	Down	→	→	→	→	→	7C-B3	—	—	—	—	—
29	MENU	→	→	→	→	→	7C-B2	—	—	—	—	—
30	DISPLAY	→	→	→	→	→	7C-A6	7F-9E	79-0A	79-A5	—	7C-13
31	REW	→	→	→	→	→	7C-86	7F-88	7A-0D	79-AC	—	7C-06
32	FF	→	→	→	→	→	7C-87	7F-89	7A-0C	79-AD	—	7C-07
33	CHP/SKIP -	→	→	→	→	→	7C-89	7F-86	7A-0B	79-AB	—	7C-02
34	CHP/SKIP +	→	→	→	→	→	7C-8A	7F-87	7A-0A	79-AE	—	7C-03
35	PLAY	→	→	→	→	→	7C-82	7F-82	7A-08	79-A8	—	7C-05
36	PAUSE	→	→	→	→	→	7C-83	7F-83	7A-09	79-A9	—	7C-5A
37	STOP	→	→	→	→	→	7C-85	7F-84	7A-09	79-AA	—	7C-5B
38	REC	→	→	→	→	→	7C-B7	—	79-AF	—	—	—
39	POWER	→	→	→	→	→	—	—	—	—	—	—
40	SELECT down	→	→	→	→	→	—	—	—	—	—	—
41	SELECT up	→	→	→	→	→	—	—	—	—	—	—
42	PRG1	7A-88	7D-D0	7A-88	7C-94	7F-91	79-11	79-85	7A-E5	7C-17	—	—
43	PRG2	7A-89	7D-D1	7A-89	7C-95	7F-92	79-12	79-86	7A-E6	7C-18	—	—
44	PRG3	7A-8A	7D-D2	7A-8A	7C-96	7F-93	79-13	79-87	7A-E7	7C-19	—	—
45	PRG4	7A-8B	7D-D3	7A-8B	7C-97	7F-94	79-14	79-88	7A-E8	7C-1A	—	—
46	PRG5	7A-8C	7D-D4	7A-8C	7C-98	7F-95	79-15	79-89	7A-E9	7C-1B	—	—
47	PRG6	7A-8D	7D-D5	7A-8D	7C-99	7F-96	79-16	79-8A	7A-EA	7C-1C	—	—
48	PRG7	7A-8E	7D-D6	7A-8E	7C-9A	7F-97	79-17	79-8B	7A-EB	7C-1D	—	—
49	PRG8	7A-8F	7D-D7	7A-8F	7C-9B	7F-98	79-18	79-8C	7A-EC	7C-1E	—	—
50	PRG9	7A-90	7D-D8	7A-90	7C-9C	7F-99	79-19	79-8D	7A-E1	7C-1F	—	—
51	PRG10	7A-91	7D-D9	7A-91	7C-93	7F-90	79-10	79-8E	7A-E2	7C-16	—	—
52	PRG11	7A-92	7D-DA	7A-92	7C-9D	7F-9A	79-1A	79-8F	7A-E3	7C-5D	—	—
53	PRG12	7A-93	7D-DB	7A-96	7C-9F	7F-8C	79-0D	—	7A-E4	7C-5E	—	—
54	Extra	7A-97	7D-DF	7A-97	7C-9E	7F-8A	79-0B	—	7A-E0	7C-15	—	—
55	TV VOL up	→	→	→	→	→	→	→	→	→	→	→
56	TV VOL down	→	→	→	→	→	→	→	→	→	→	→
57	TV INPUT	→	→	→	→	→	→	→	→	7A-12	→	→
58	TV MUTE	→	→	→	→	→	→	→	→	→	→	→
59	CH up	→	→	→	7C-8B	→	7A-4F	→	7A-10	→	→	→
60	CH down	→	→	→	7C-8A	→	7A-50	→	7A-11	→	→	→
61	MUTE	7A-1C	7D-94	7A-DC	→	→	→	→	→	→	→	→
62	EFFECT	7A-56	7D-C1	7A-56	→	→	→	→	→	→	→	→
63	VOLUME up	7A-1A	7D-8D	7A-DA	→	→	→	→	→	→	→	→
64	VOLUME down	7A-1B	7D-8E	7A-DB	→	→	→	→	→	→	→	→
65	ON SCREEN	Parameter 7A-C2	Set Menu 7D-C2	Parameter 7A-C2	→	→	→	→	→	→	→	→
66	SLEEP	Parameter 7A-57	Set Menu 7D-93	Parameter 7A-57	→	→	→	→	→	→	→	→
67	LEVEL	Parameter 7A-86	Set Menu 7D-95	Parameter 7A-86	→	→	→	→	→	→	→	→
68	TEST	Parameter 7A-85	Set Menu 7D-CA	Parameter 7A-85	→	→	→	→	→	→	→	→
69	LEFT	7A-C7	7A-9F	7D-C7	7D-9F	7A-C7	7A-9F	→	→	→	→	→
70	UP	7A-C5	7A-9D	7D-C5	7D-9D	7A-C5	7A-9D	→	→	→	→	→
71	DOWN	7A-C4	7A-9C	7D-C4	7D-9C	7A-C4	7A-9C	→	→	→	→	→
72	RIGHT	7A-C6	7A-9E	7D-C6	7D-9E	7A-C6	7A-9E	→	→	→	→	→

Initial Macro setup

Key No.	Key Name	1	2	3	4-10
6	POWER on	K6	K39 TV	—	—
7	STANDBY	K7	—	—	—
8	A	K6	K8	—	—
9	B	K6	K9	—	—
10	PHONO	K6	K10	—	—
11	V-AUX	K6	K11	—	—
12	TUNER	K6	K12	—	—
13	MD/TAPE	K6	K13	K35 MD	—
14	CD-R	K6	K14	K35 CD-R	—
15	CD	K6	K15	K35 CD	—
16	D-TV/LD	K6	K16	—	—
17	CBL/SAT	K6	K17	—	—
18	VCR1	K6	K18	K35 VCR1	—
19	VCR2/DVR	K6	K19	K35 VCR2	—
20	DVD	K6	K20	K35 DVD	—

RX-V3200/DSP-AX3200

