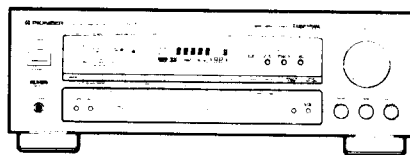


Service Manual



ORDER NO.
ARP2855

AUDIO/VIDEO STEREO RECEIVER

VSX-D503S

VSX-D513S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	The voltage can be converted by the following method.
	VSX-D503S	VSX-D513S		
KU	○	—	AC120V	—
KUXJ	○	—	AC120V	—
KC	—	—	AC120V	—
KCXJ	—	—	AC120V	—
SD	○	—	AC110V/120-127V/220V/240V	With the voltage selector
SDXJ	○	—	AC110V/120-127V/220V/240V	With the voltage selector

- For the following: VSX-D503S/KUXJ and SDXJ; VSX-D513S/KCXJ, refer to page 66.
- The " S " at the end of the model number indicates that a programmable remote control unit is supplied.

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2. EXPLODED VIEWS, PACKING AND PARTS LIST	3	9. REMOTE CONTROL UNIT [CU-VSX084 (AXD1385)] [CU-VSX082 (AXD1384)]	56
3. SCHEMATIC AND PCB CONNECTION DIAGRAMS	7	10. FOR VSX-D503S/KUXJ, SDXJ AND VSX-D513S/KCXJ TYPES	66
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6. DISASSEMBLY	52		
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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

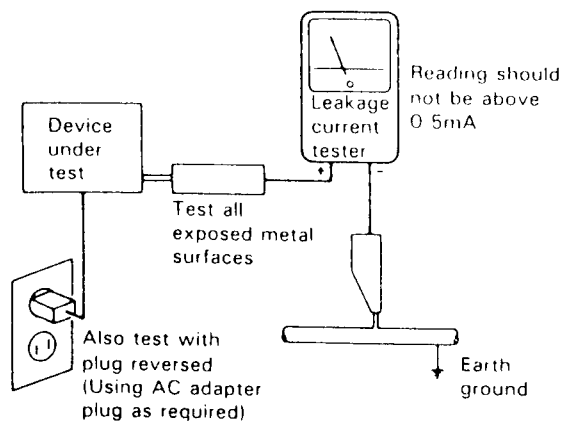
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "☉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

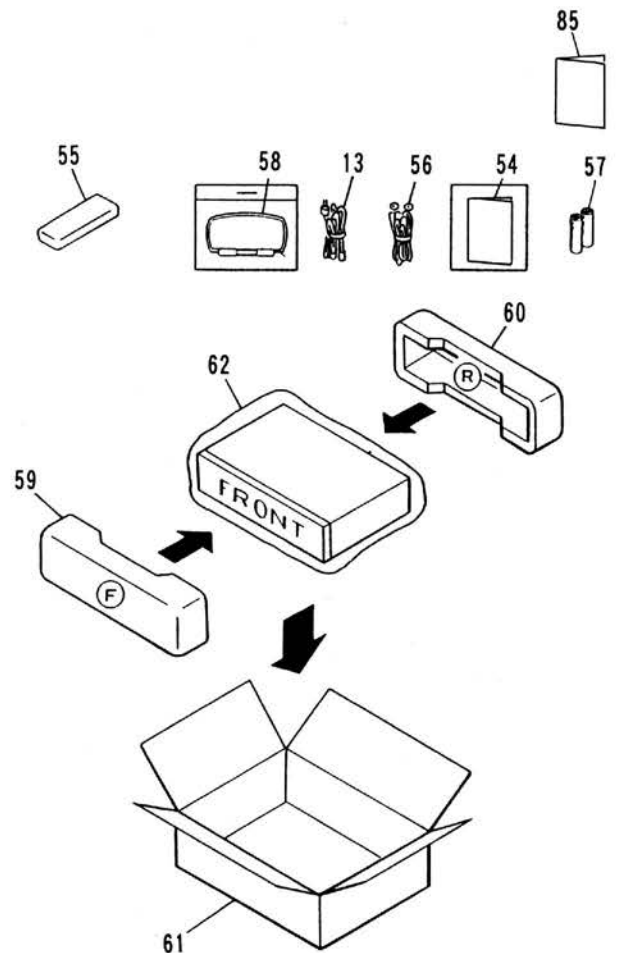
Parts List of Exterior and Packing

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
Δ	1	TRANSISTOR (Q3)	2SA1302		36	NUT	NK90FUC
Δ	2	TRANSISTOR (Q4)	2SA1302		37	FRONT PANEL (PLS) (Except VSX-D513S/KC)	AMB2228
Δ	3	TRANSISTOR (Q6)	2SA1302		37	FRONT PANEL (PLS) (For VSX-D513S/KC)	AMB2486
Δ	4	POWER TRANSISTOR (Q8)	2SA1803		38	DISPLAY PANEL (PLS)	AAK2561
Δ	5	TRANSISTOR (Q1)	2SC3281		39	SASH (PLS)	AAK2445
					40	SELF-LIGHT BUTTON	AAD2538
Δ	6	TRANSISTOR (Q2)	2SC3281				
Δ	7	TRANSISTOR (Q5)	2SC3281	Δ	41	CERAMIC CAPACITOR (C1)	CKDYX104M25
Δ	8	POWER TRANSISTOR (Q7)	2SC4688		42	SASH S (PLS)	AAP1368
Δ	9	POWER TRANSFORMER (T1) (Except VSX-D503S/SD)	ATS1519		43	NAME PLATE	PAM1608
Δ	9	POWER TRANSFORMER (T1) (For VSX-D503S/SD)	ATS1520	NSP	44	LED LENS	PNW2019
Δ	10	FUSE (4A/125V, FU3)	AEK-125		45	ROUND KNOB L (PLS)	AAB1340
Δ	11	FUSE (4A/125V, FU4)	AEK-125		46	ROUND KNOB M (PLS)	AAB1341
Δ	12	FUSE (8A/125V, FU1) (Except VSX-D503S/SD)	AEK1002		47	FUNCTION BUTTON (PLS)	AAD2412
Δ	12	FUSE (4A/125V, FU1) (For VSX-D503S/SD)	AEK-125		48	HINGE BUTTON A (PLS)	AAD2536
Δ	13	AC POWER CORD (Except VSX-D503S/SD)	ADG1126		49	HINGE BUTTON B (PLS)	AAD2537
Δ	13	AC POWER CORD (For VSX-D503S/SD)	ADG1129		50	SPEAKER BUTTON (PLS)	AAD2416
NSP	14	CHASSIS (MTL)	ANA1212		51	TACT BUTTON (PLS)	AAD2417
	15	REAR PANEL (MTL) (Except VSX-D503S/SD)	ANC2166		52	POWER KNOB	AAD2418
	15	REAR PANEL (MTL) (For VSX-D503S/SD)	ANC2167		53	BONNET CASE (MTL)	ANE1431
NSP	16	HEAT SINK	ANH1460		54	OPERATING INSTRUCTIONS (English) (Except VSX-D513S/KC)	ARB1465
	17	LEG ASSY	AMR2633		54	OPERATING INSTRUCTIONS (English and French) (For VSX-D513S/KC)	ARE1298
	18	VOLUME HOLDER (MTL)	ANG1901		55	REMOTE CONTROL UNIT (CU-VSX084) (Except VSX-D513S/KC)	AXD1385
	19	NYLON BINDER	AEC-093		55	REMOTE CONTROL UNIT (CU-VSX082) (For VSX-D513S/KC)	AXD1384
NSP	20	PCB SUPPORT	AEC1013				
NSP	21	PCB HOLDER	AEC1097				
	22	SHEET	AEE1014	NSP	56	FM ANTENNA	ADH1017
	23	.....			57	BATTERY (LR03, AAA) (Except VSX-D513S/KC)	AEX1006
NSP	24	PCB MOULD	AMR1525	NSP	57	BATTERY (LR6, AA) (For VSX-D513S/KC)	AEX1007
NSP	25	PCB MOULD	AMR2115		58	LOOP ANTENNA (L8041)	ATB1009
	26				59	FRONT PAD (PS)	AHA2029
	27	SCREW	ABA-298		60	REAR PAD (PS)	AHA2030
	28	SCREW	ABA1018				
	29	SCREW	ABA1024		61	PACKING CASE (For VSX-D503S/KU)	AHD2744
	30	SCREW (STEEL)	ABA1053		61	PACKING CASE (For VSX-D503S/SD)	AHD2746
	31	SCREW	ABA1147		61	PACKING CASE (For VSX-D513S/KC)	AHD2745
	32	SCREW	ABA1082		62	PACKING SHEET	AHG1016
	33	SCREW	BBZ30P080FZK				
	34	SCREW	BCZ30P080FMC				
	35	SCREW	BPZ26P080FMC				

VSX-D503S, VSX-D513S

Mark	No.	Description	Parts No.
	63	.....	
	64	MOTHER ASSY (Except VSX-D503S/SD)	AWZ5372
	64	MOTHER ASSY (For VSX-D503S/SD)	AWZ5441
	65	FRONT ASSY (Except VSX-D503S/SD)	AWZ5371
	65	FRONT ASSY (For VSX-D503S/SD)	AWZ5440
	66	REG. ASSY	AWZ5373
	67	FUNC ASSY	AWZ5379
	68	POWER. AMP ASSY	AWZ5378
	69	VIDEO ASSY	AWZ5381
	70	VOL ASSY	AWZ5383
	71	TONE ASSY	AWZ5382
	72	R, C. SP ASSY	AWZ5374
	73	FM/AM TUNER MODULE	AXQ1012
	74	H. PHNE, SP. SW ASSY	AWZ5384
	75	TRANS ASSY (Except VSX-D503S/KU)	AWZ5380
	75	TRANS ASSY (For VSX-D503S/KU)	AWZ5720
	76	DOLBY PROLOGIC • SFC MODULE	AXQ1022
	77	.....	
⚠	78	VOLTAGE SELECTOR (S1) (VSX-D503S/SD only)	AKX-507
⚠	79	VOLTAGE SELECTOR (S2) (VSX-D503S/SD only)	AKX1004
	80	65 LABEL (VSX-D503S/KU only)	ORW1069
⚠	81	FUSE (4A/125V, FU2) (VSX-D503S/SD only)	AEK-125
NSP	82	FUSE HOLDER (VSX-D503S/SD only)	AKR1005
	83	SCREW (VSX-D503S/SD only)	ABA1009
	84	.....	
	85	OPERATING INSTRUCTIONS (Chinese and Spanish) (VSX-D503S/SD only)	ARC1452
	86	.....	
	87	LEAD WIRE (J13)	ADX1915
	88	SCREW	ABA1054

● Packing



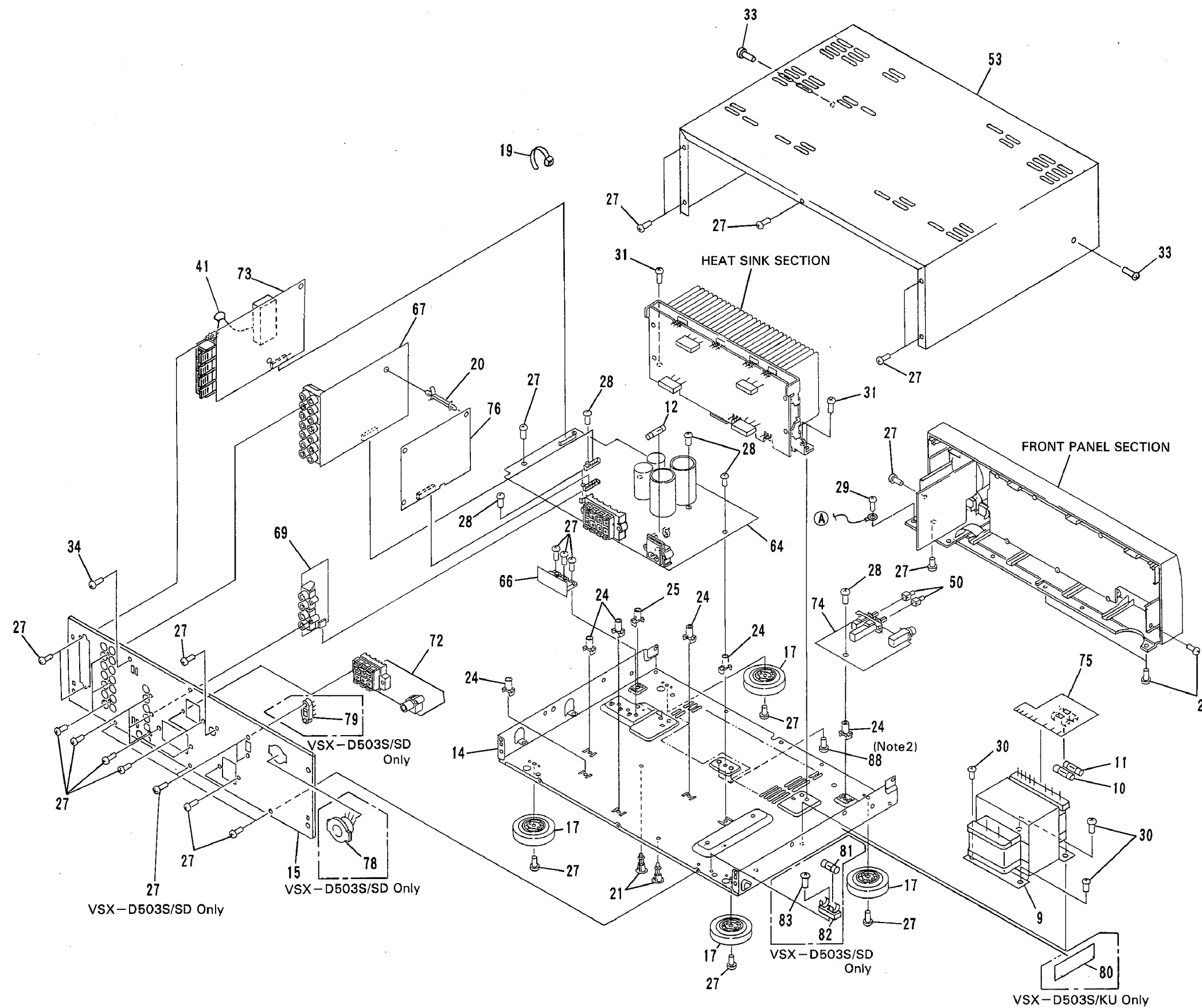
● Exterior

A

B

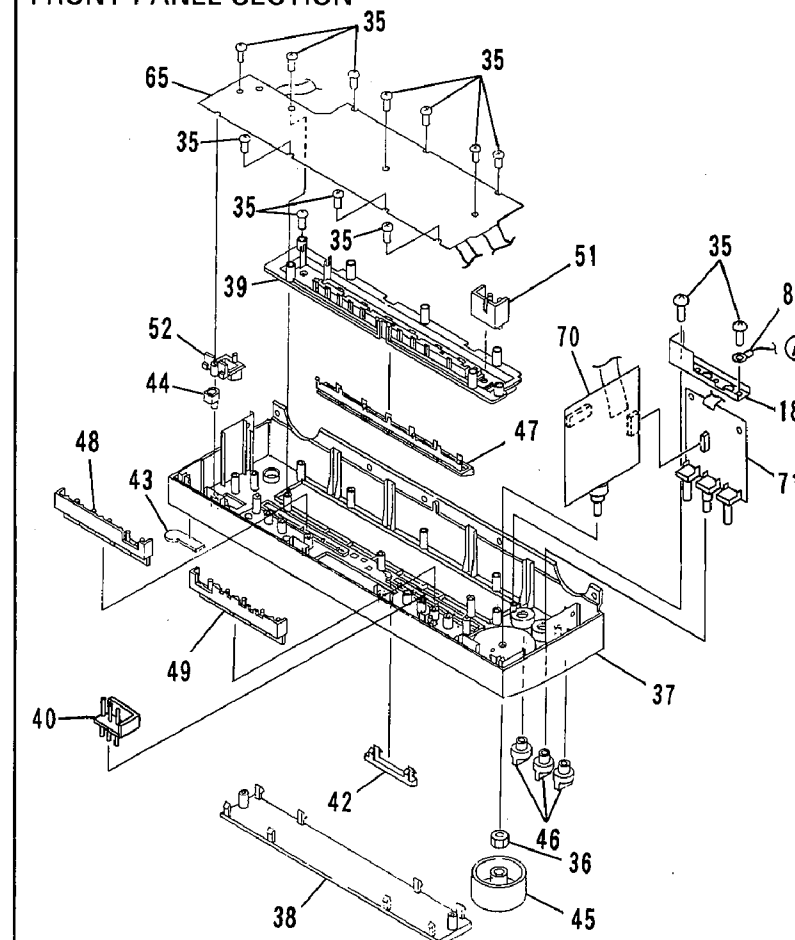
C

D

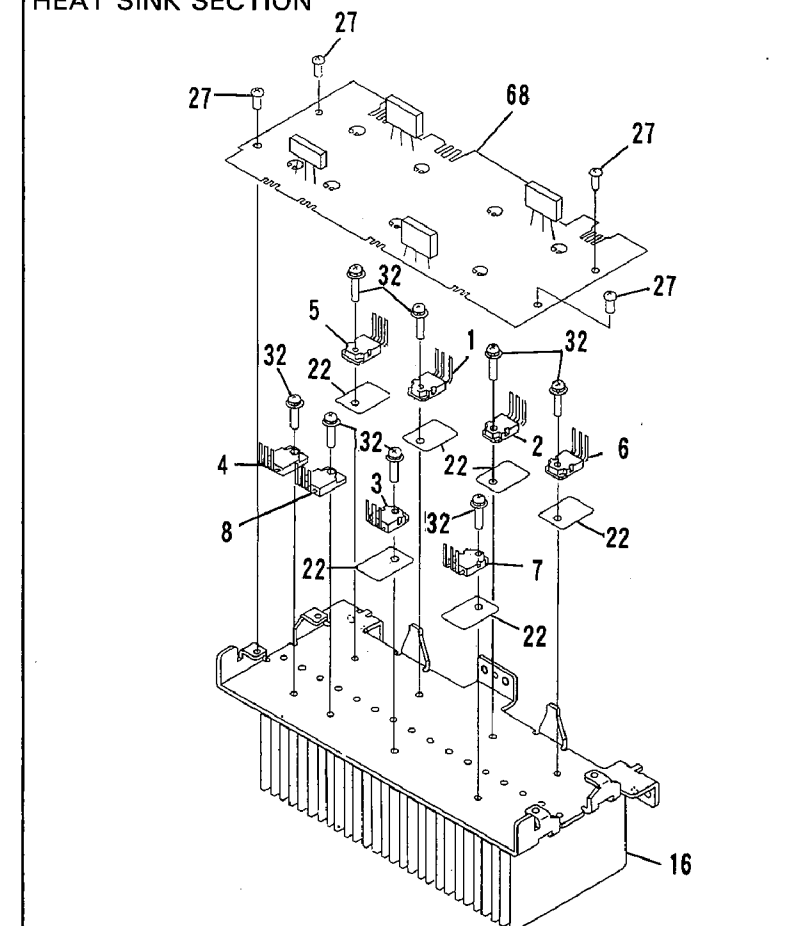


Note 1 : Screws adjacent to ▼ mark on the product are used for disassembly.
Note 2 : Used for heat sink.

FRONT PANEL SECTION

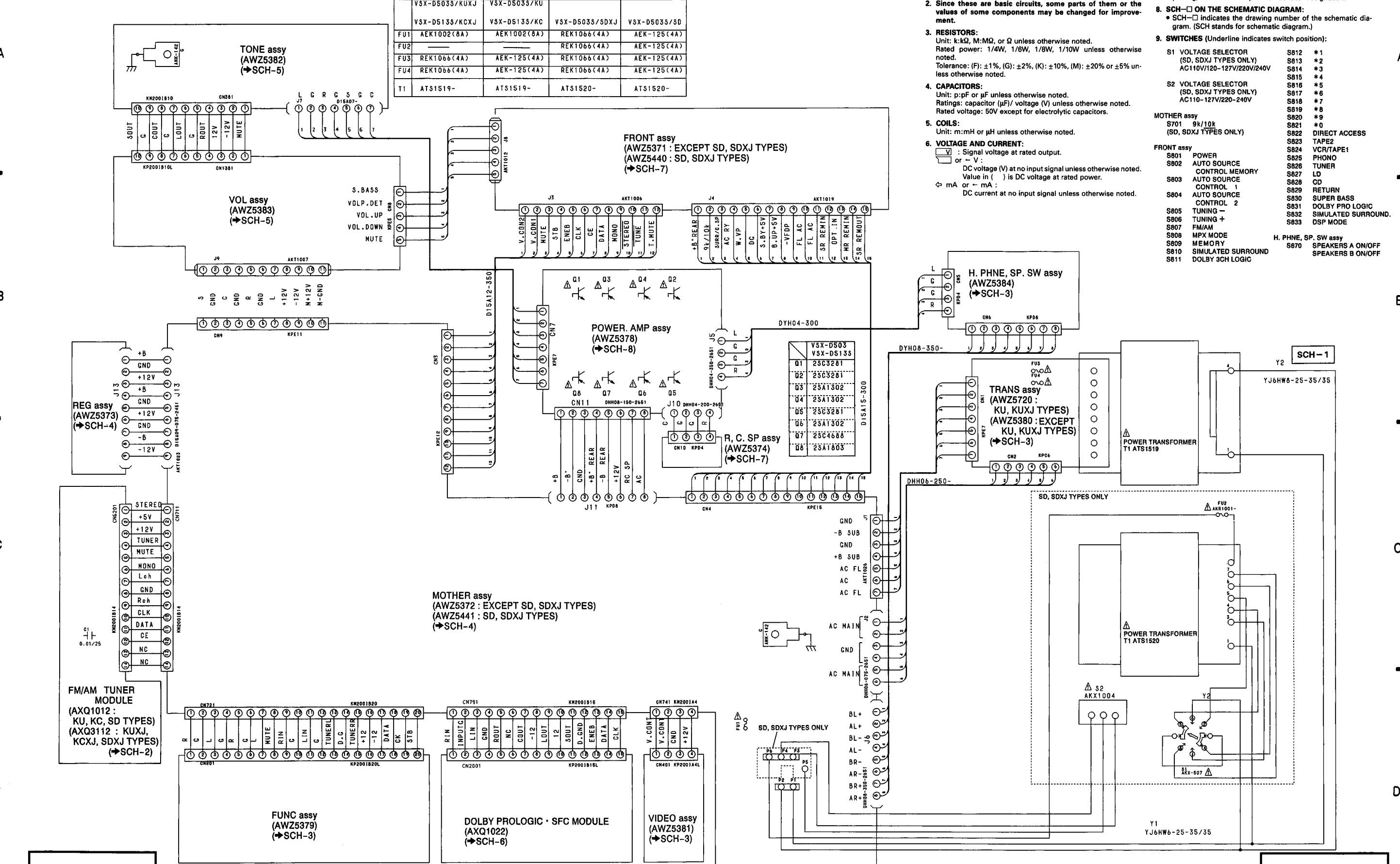


HEAT SINK SECTION



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM



SCH-1

OVERALL SCHEMATIC DIAGRAM

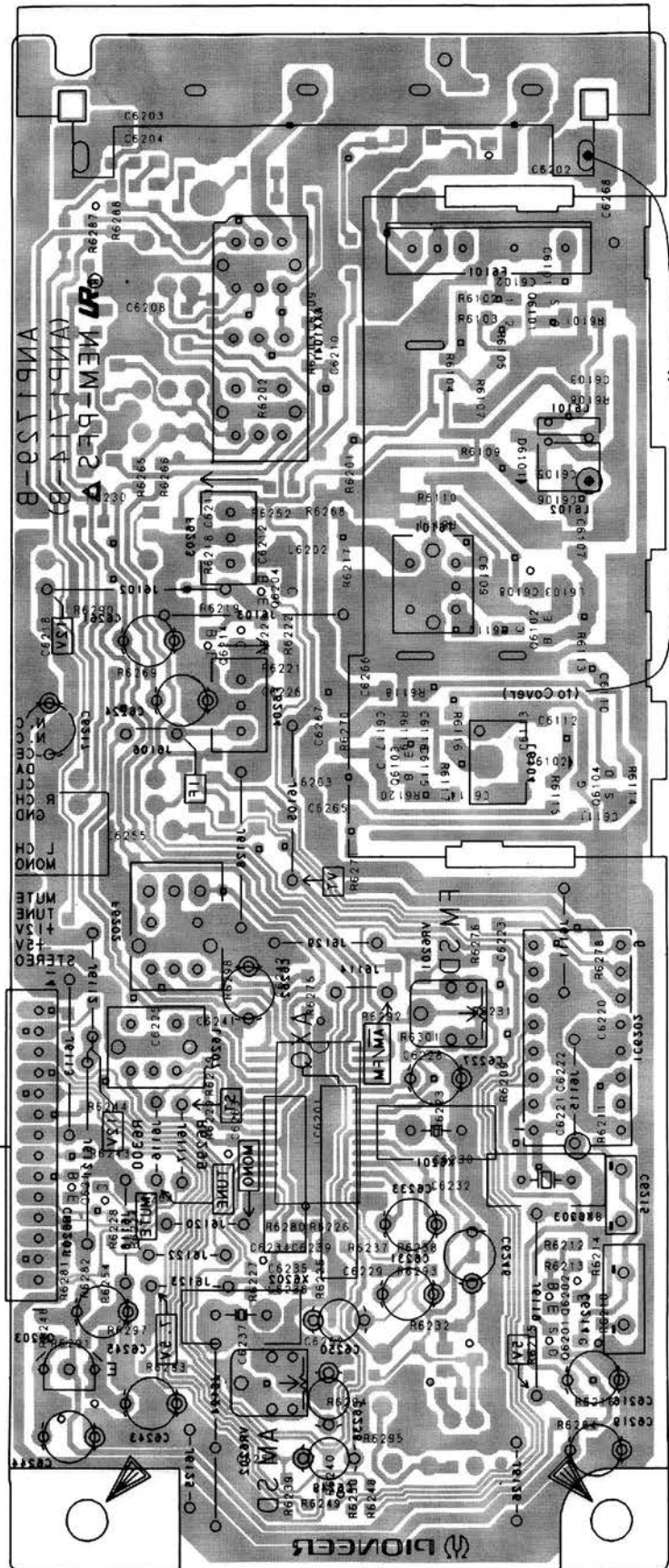
SCH-1

OVERALL SCHEMATIC DIAGRAM

3.5 FM/AM TUNER MODULE

FM
ANTENNA
TERMINAL
FM/AM TUNER MODULE

MA
ANTENNA
TERMINAL



TO MOTHER Assy CN11

● This diagram is viewed from the foil side.

A B C D

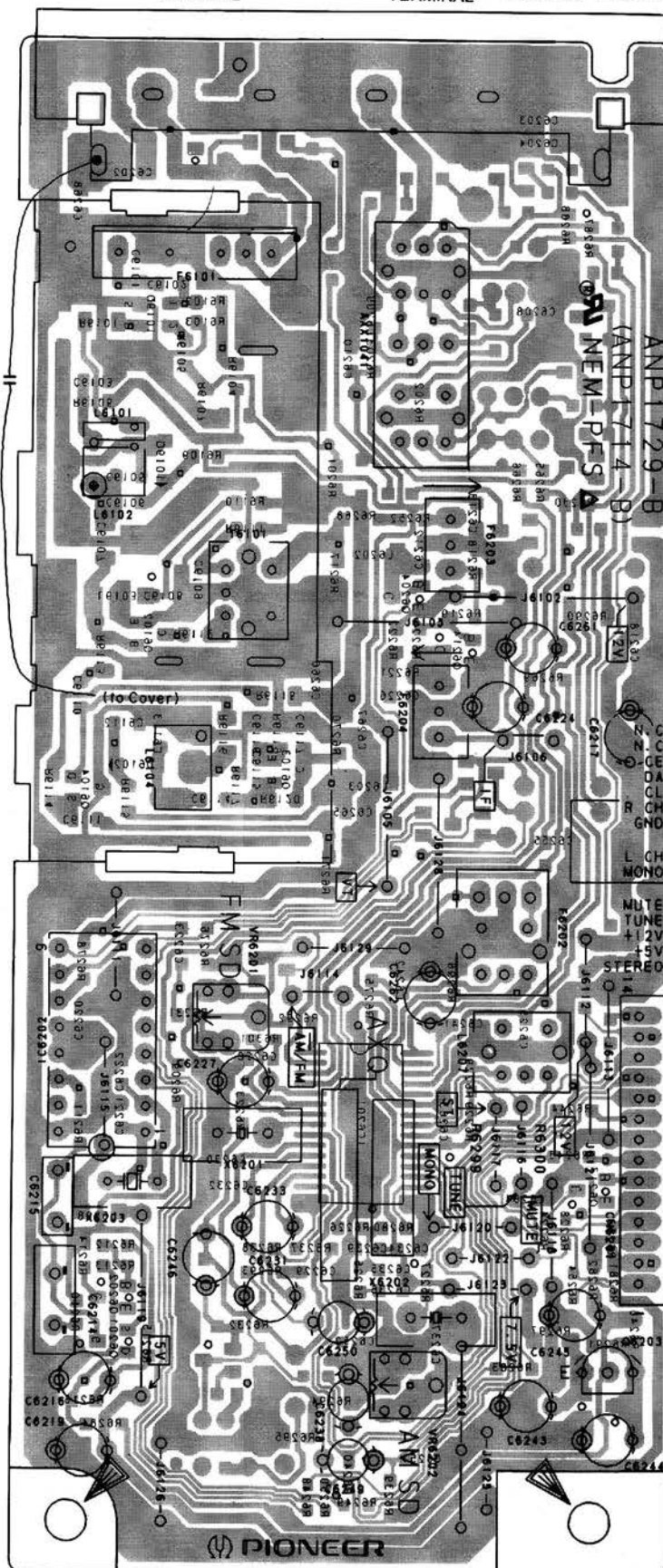
Q6101 Q6214 Q6103 Q6104 Q6204 Q6102 Q6217 Q6202 Q6201 Q6203

VSX-D5032, VSX-D5132

3.2 FM/AM TUNER MODULE

AM
ANTENNA
TERMINALFM
ANTENNA
TERMINAL

FM/AM TUNER MODULE



NOTE FOR PCB DIAGRAMS:

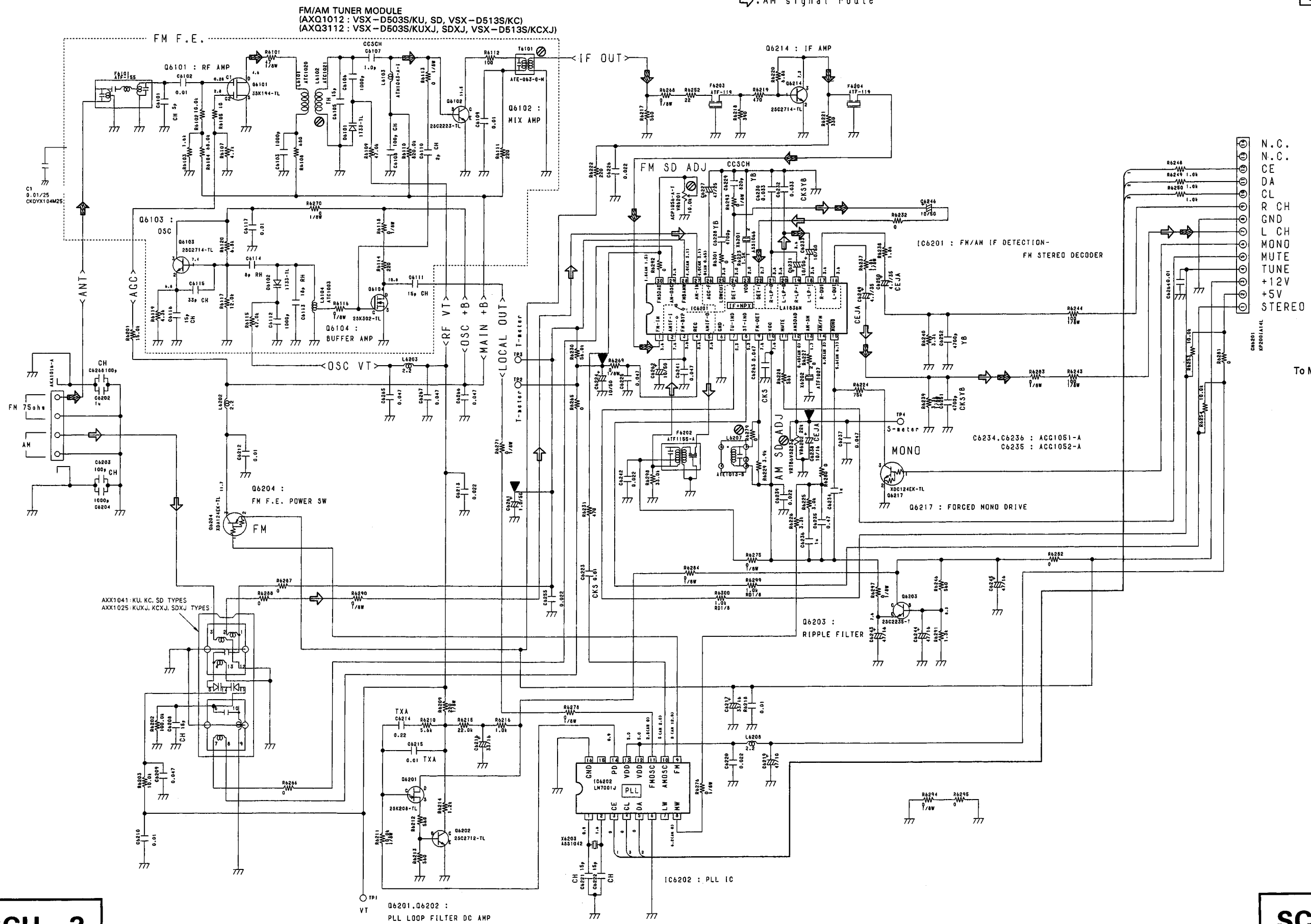
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or C shows the emitter.
4. The diode terminal marked with ⊕ or C shows cathode side.
5. The capacitor terminal marked with ⊕ or C shows negative terminal.

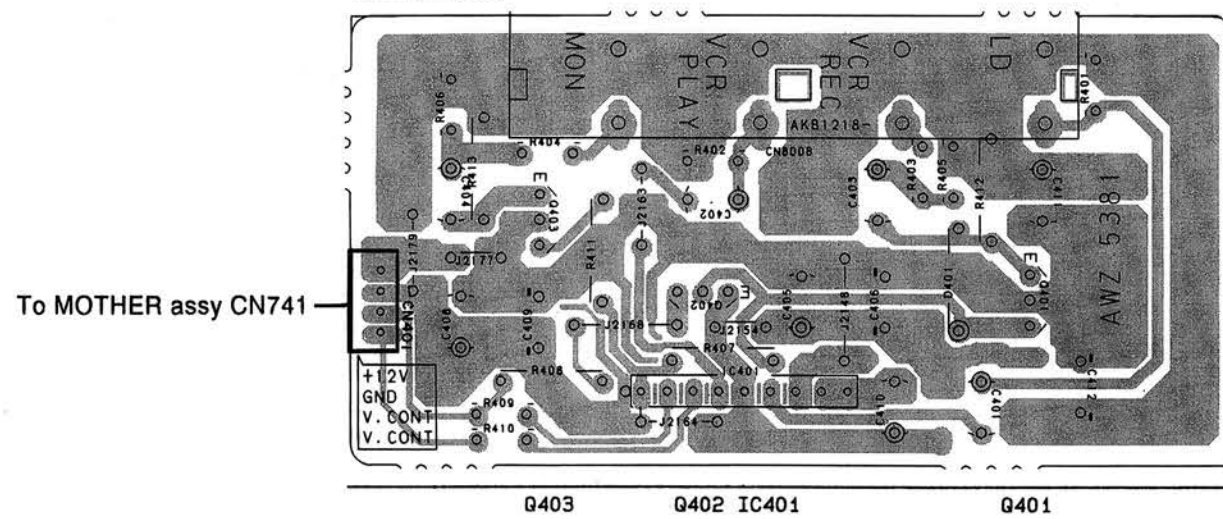
To MOTHER assy CN711

- This diagram is viewed from the mounted parts side.



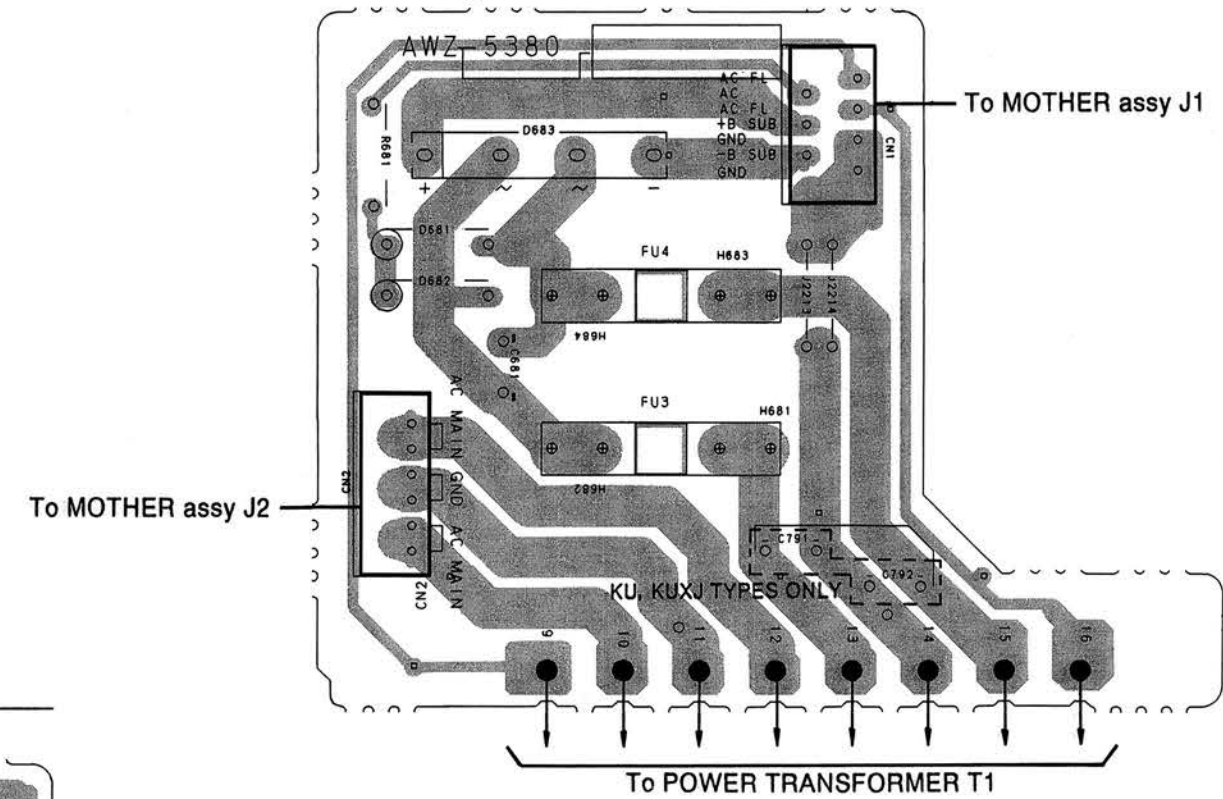
SCH-2

VIDEO assy

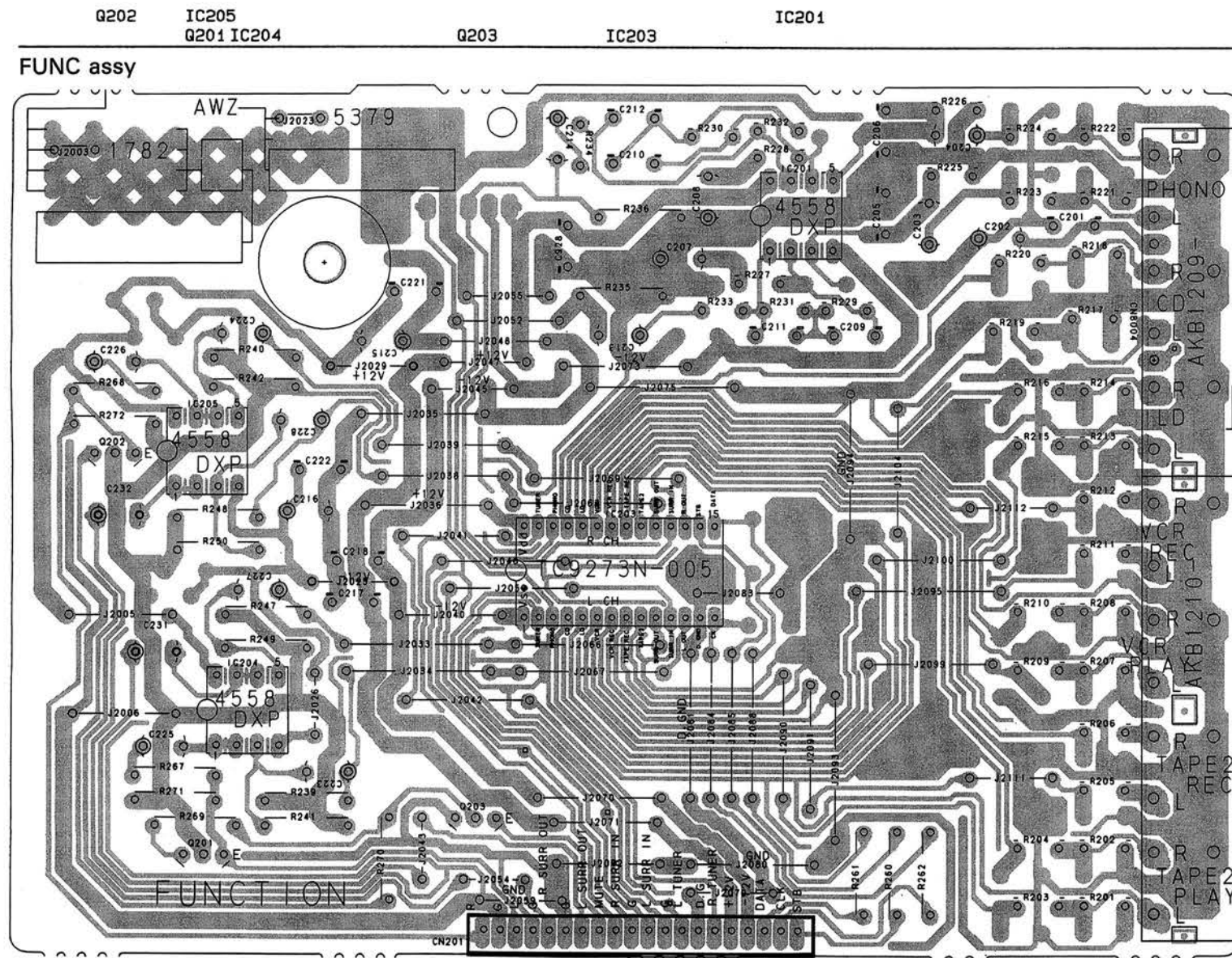
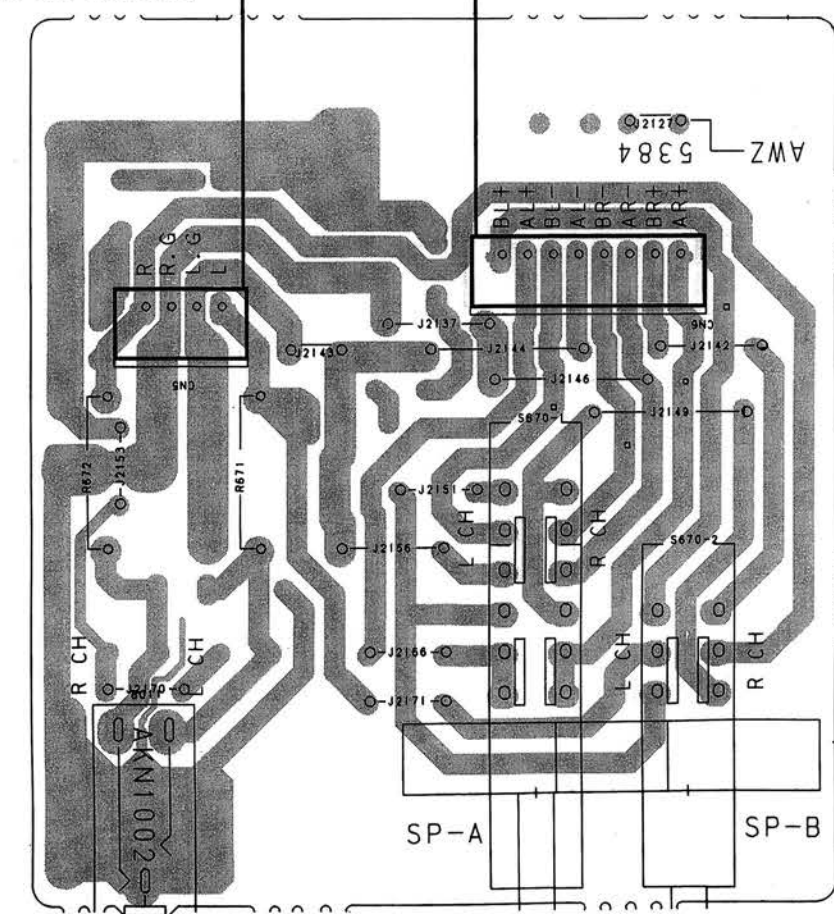


• This diagram is viewed from the mounted parts side.

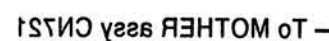
TRANS assy



H. PHNE, SP. SW assy

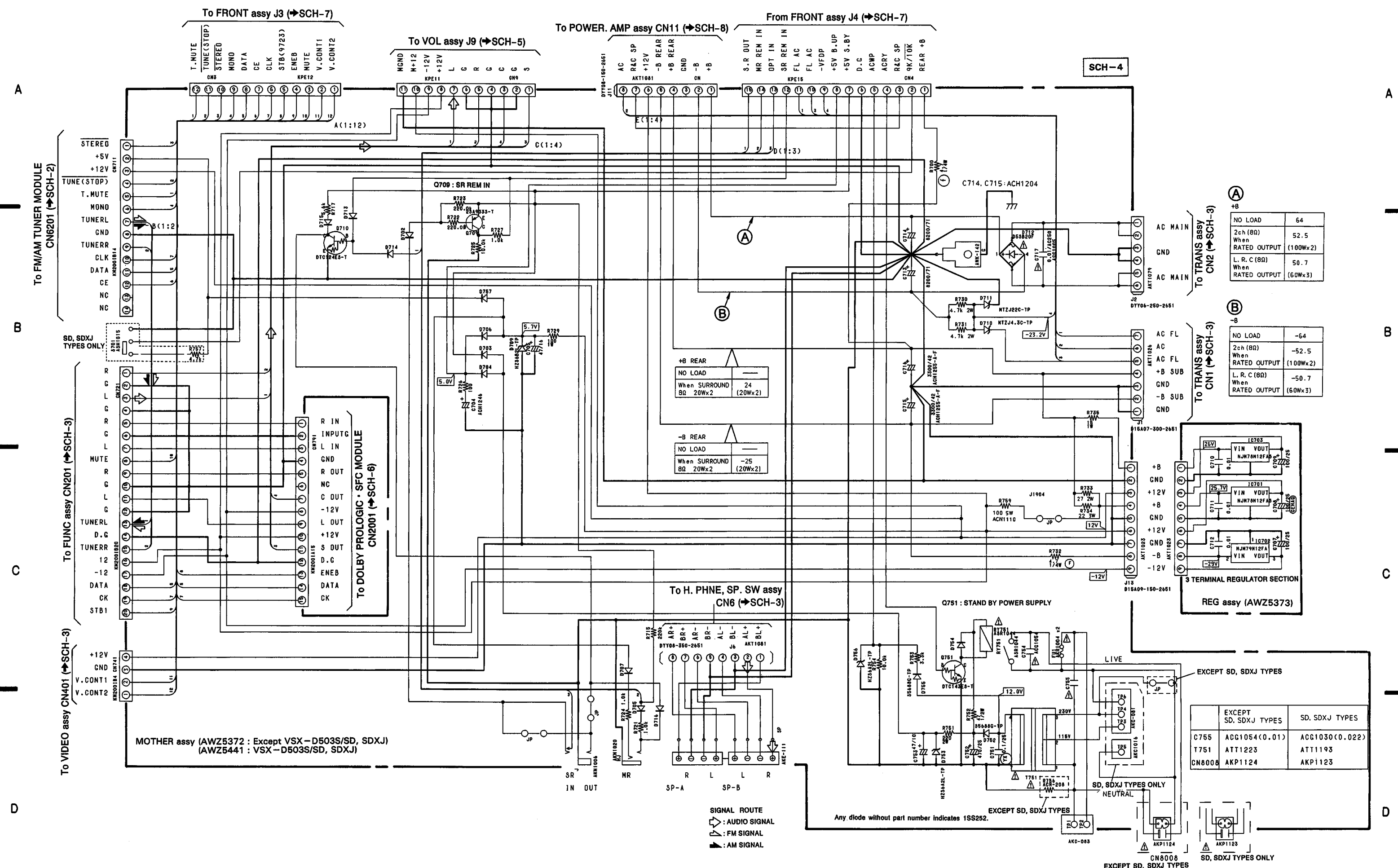


To MOTHER assy CN721



— To FUNC assy CN201





(A)

NO LOAD	64
2ch (8Ω) When RATED OUTPUT (100Wx2)	52.5
L. R. C (8Ω) When RATED OUTPUT (60Wx3)	50.7

(B)

NO LOAD	-64
2ch (8Ω) When RATED OUTPUT (100Wx2)	-52.5
L. R. C (8Ω) When RATED OUTPUT (60Wx3)	-50.7

	EXCEPT SD, SDXJ TYPES	SD, SDXJ TYPES
C755	ACG1054(0.01)	ACG1030(0.022)
T751	ATT1223	ATT1193
CN8008	AKP1124	AKP1123

SCH-4

MOTHER ASSY,
REG ASSY

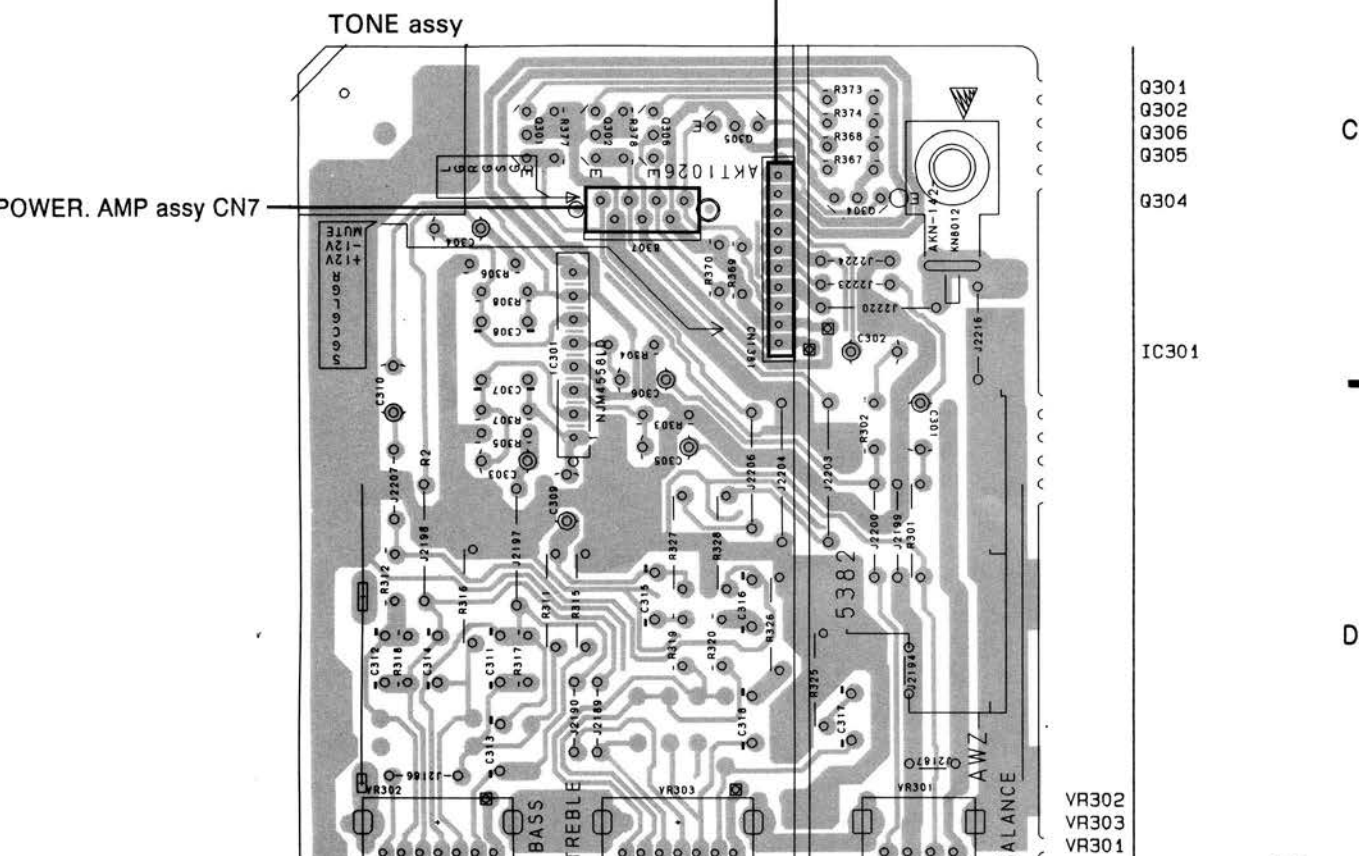
SCH-4

MOTHER ASSY,
REG ASSY

A



C



● This diagram is viewed from the foil side.

IC381 A

IC385

Q381

IC304

B

C

D

IC301

Q301
Q305
Q306
Q302

3

5

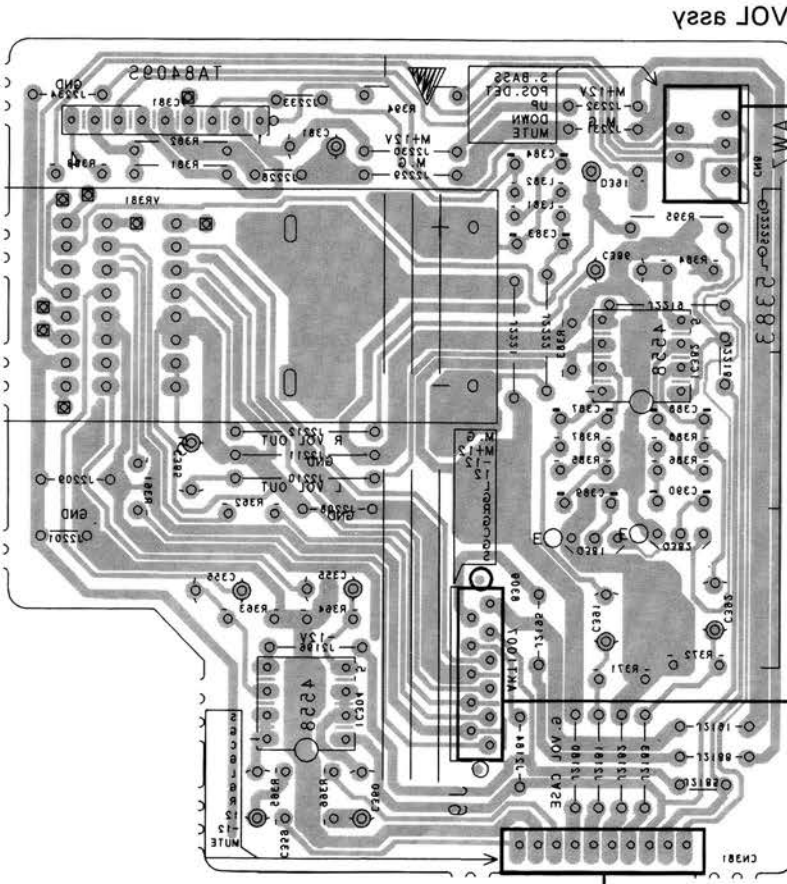
1

A

B

C

D



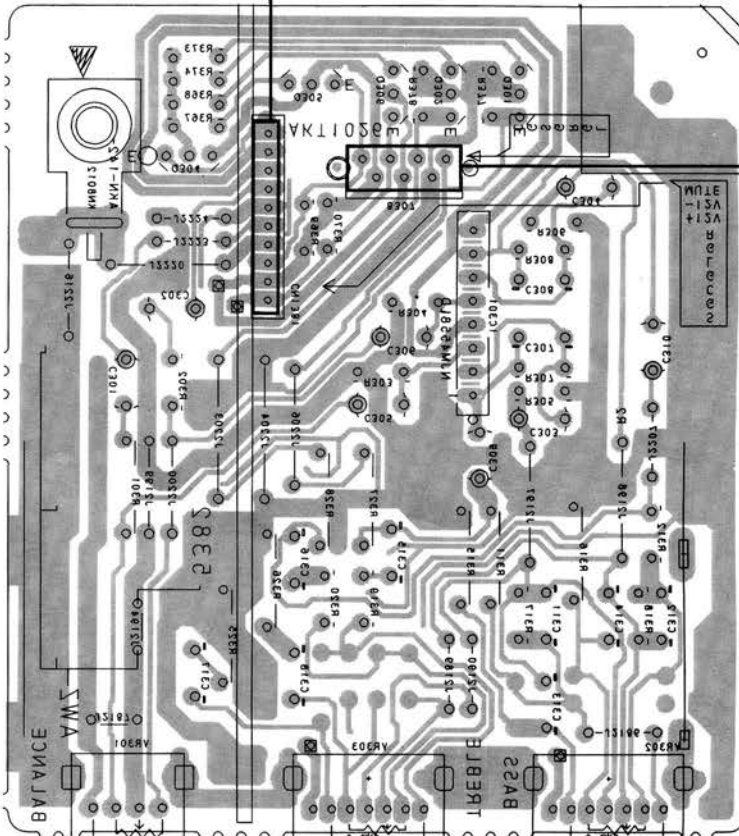
VOL assy

To FRONT assy 18

To MOTHER assy C19

TO NE assy

To POWER AMP assy C12



28

3.6 DOLBY PROLOGIC • SFC MODULE

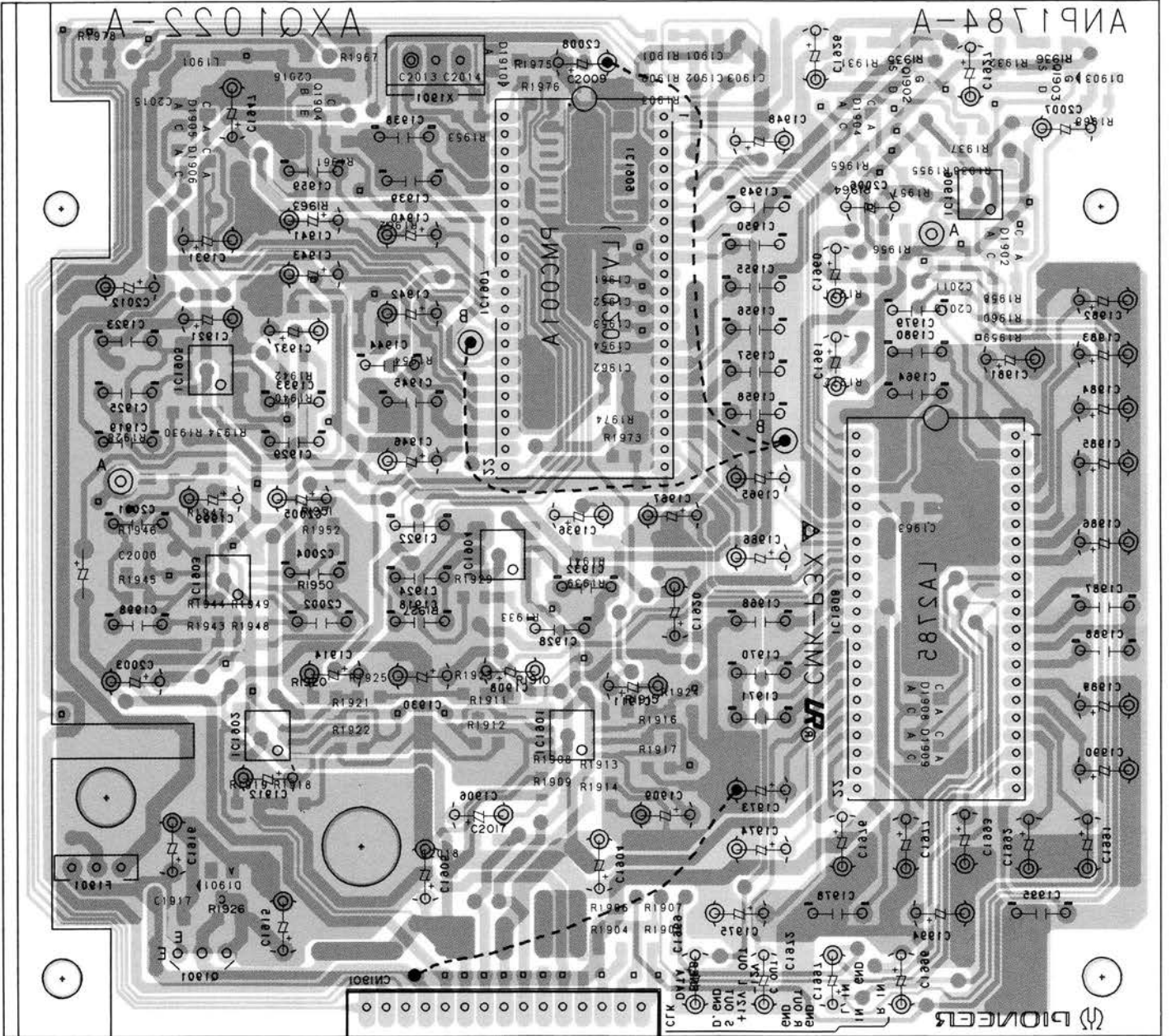
A

IC1A05 IC1A03 Q1A04 IC1A02

IC1A01 IC1A04 IC1A02 IC1A01

IC1A08 Q1A03 IC1A08 Q1A05

DOLBY PROLOGIC • SFC MODULE



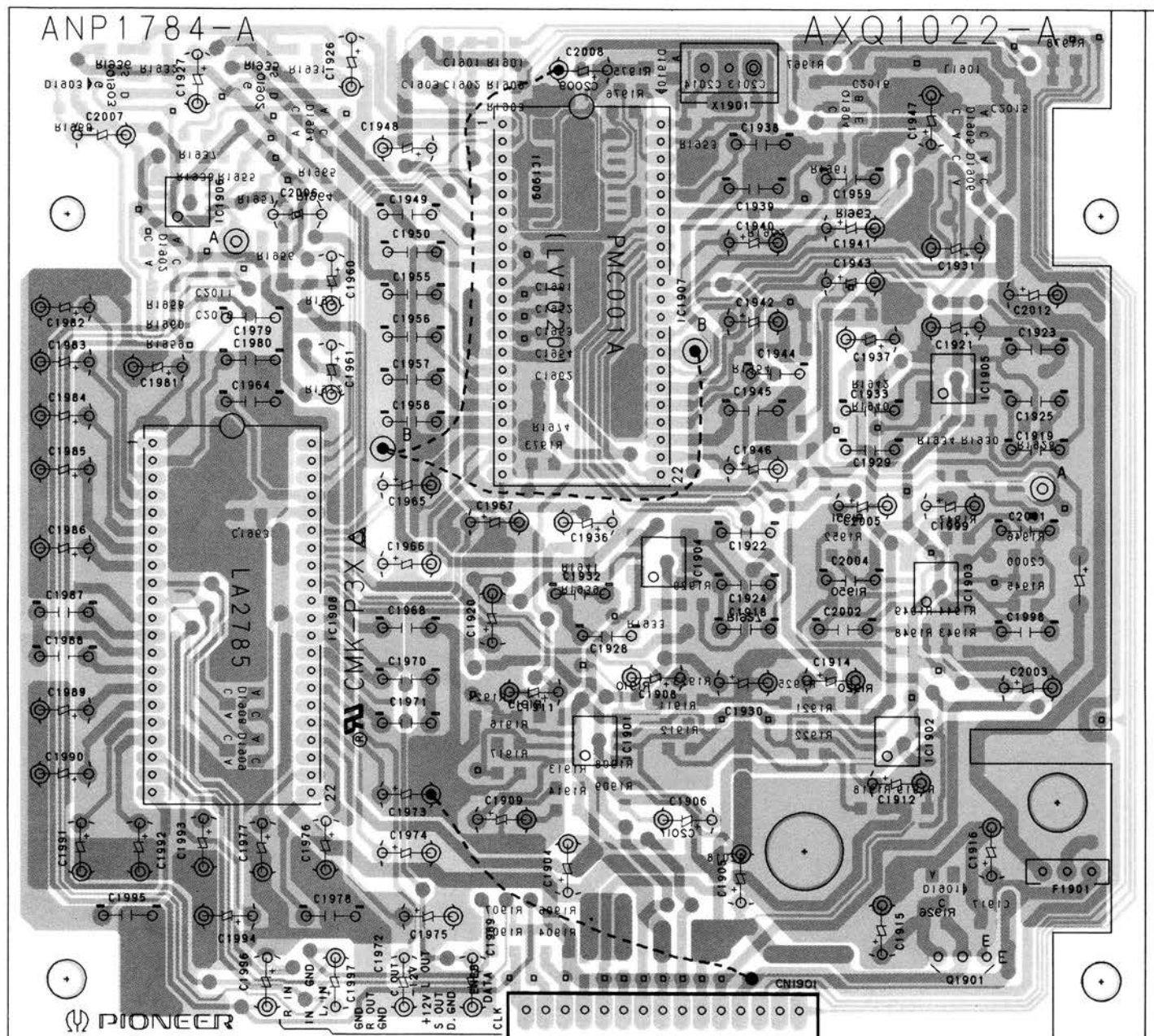
TO MOTHER BOARD

- This diagram is viewed from the gray colored foil side.
- This PCB is double side.

3.6 DOLBY PROLOGIC • SFC MODULE

Q1903 IC1906 Q1902
IC1908IC1909 IC1907
IC1901 IC1904Q1904 IC1905
IC1902 IC1903 Q1901

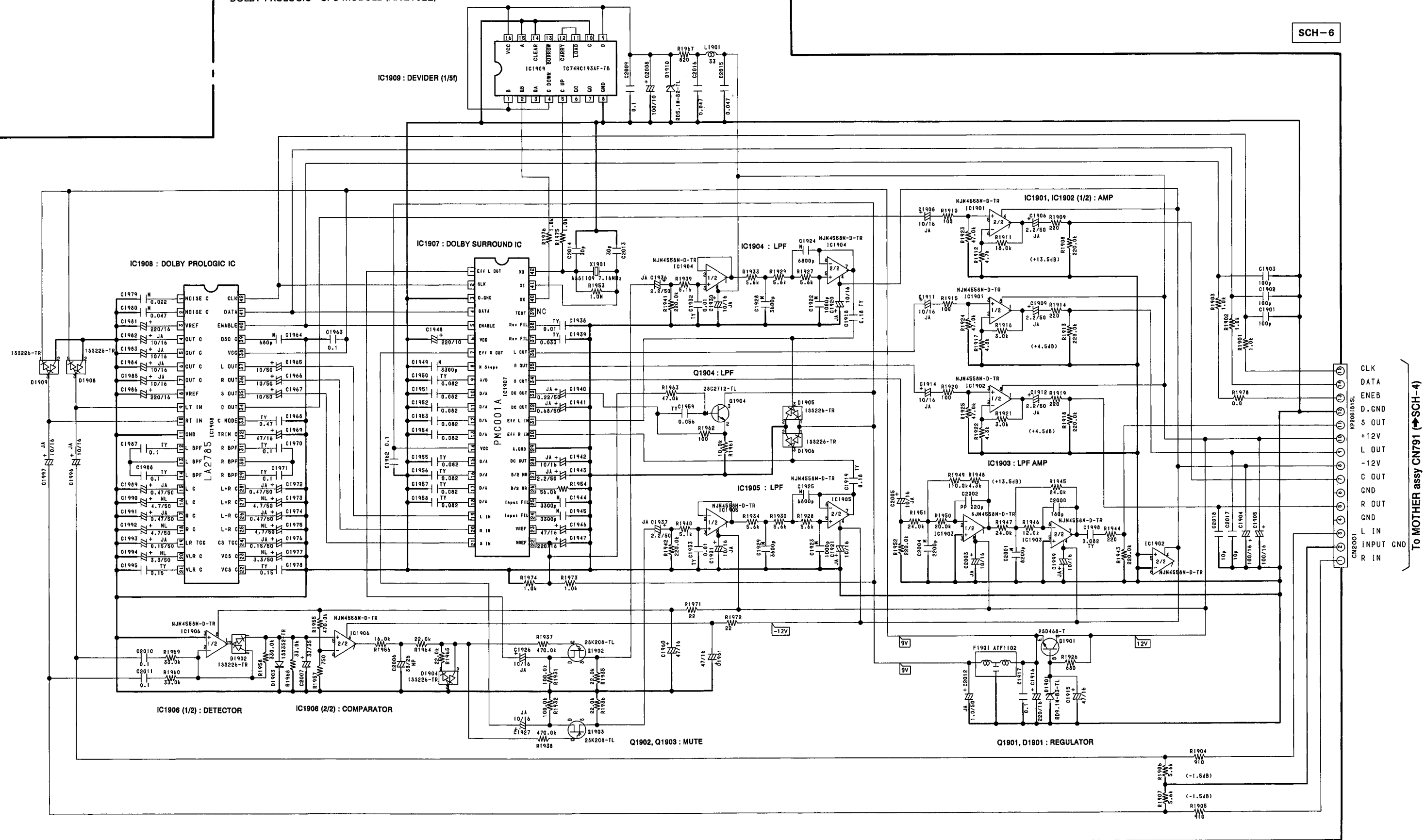
DOLBY PROLOGIC • SFC MODULE



- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.

DOLBY PROLOGIC • SFC MODULE (AXQ1022)

SCH-6



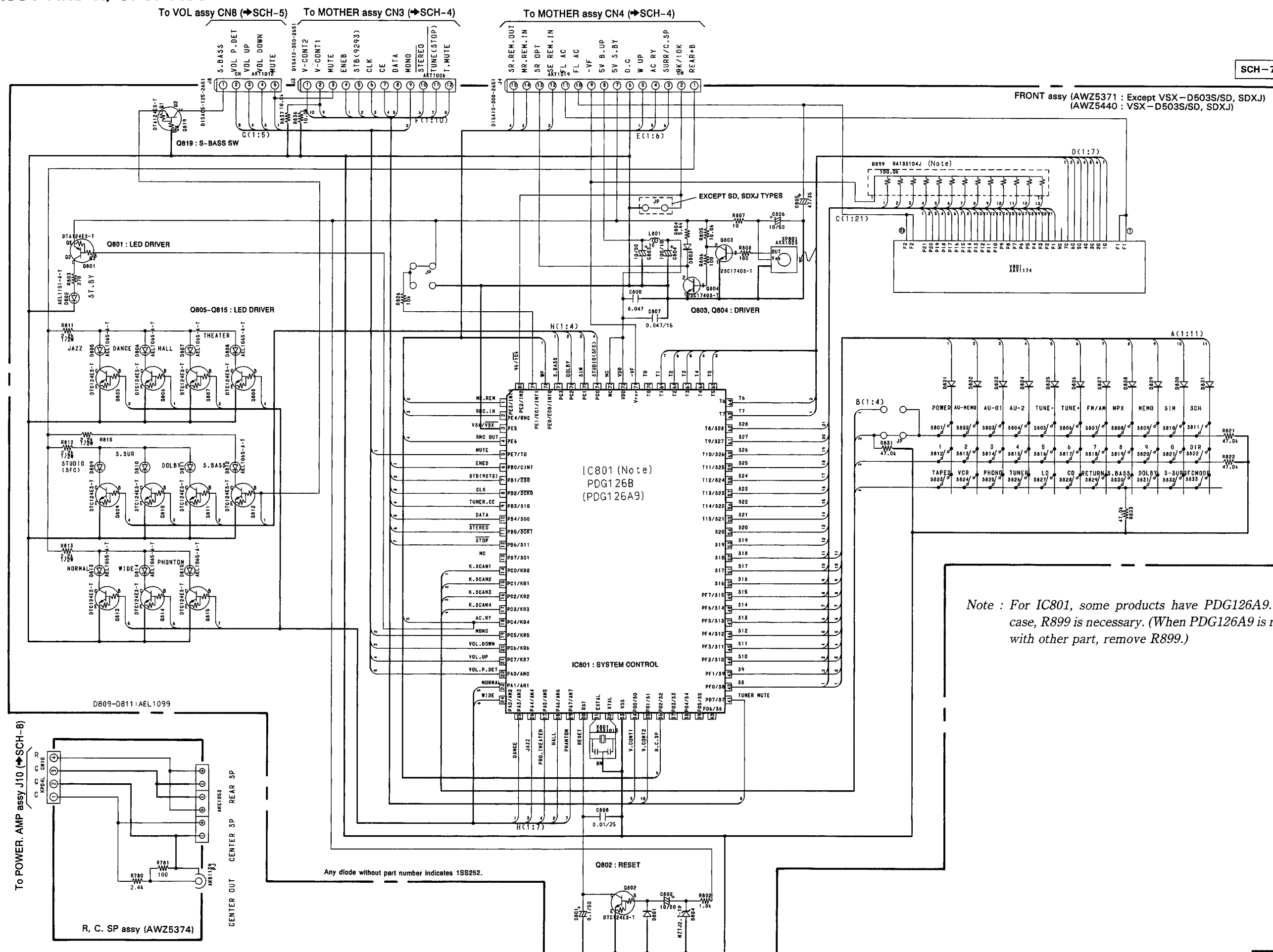
SCH-6

DOLBY PROLOGIC • SFC MODULE

SCH-6

DOLBY PROLOGIC • SFC MODULE

3.7 FRONT ASSY AND R. C. SP ASSY



SCH-7

FRONT ASSY,
R. C. SP ASSYFRONT ASSY,
R. C. SP ASSY

SCH-7

A

A



C

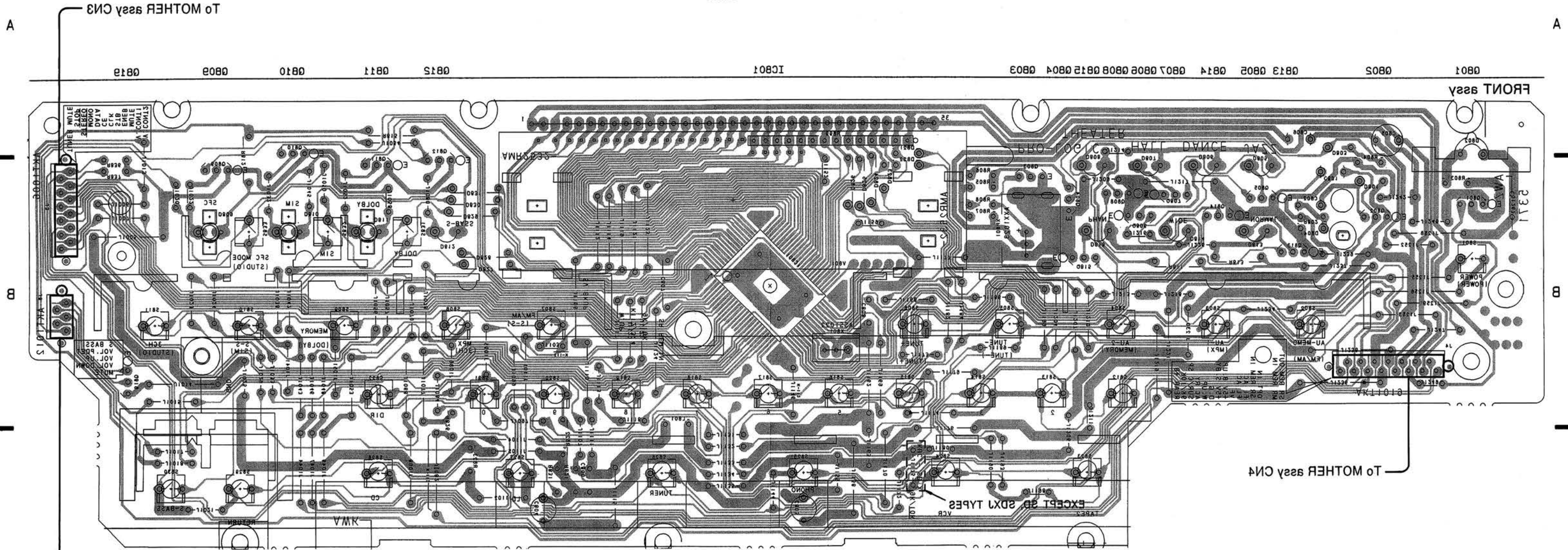
9

D

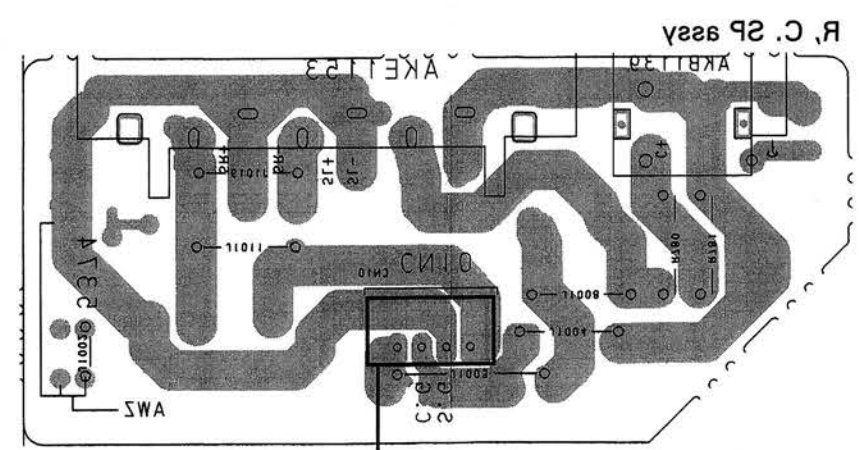


— To POWER. AMP assy J10

• This diagram is viewed from the foil side.



Note : Concerning R899, refer to "Note" on page 34.

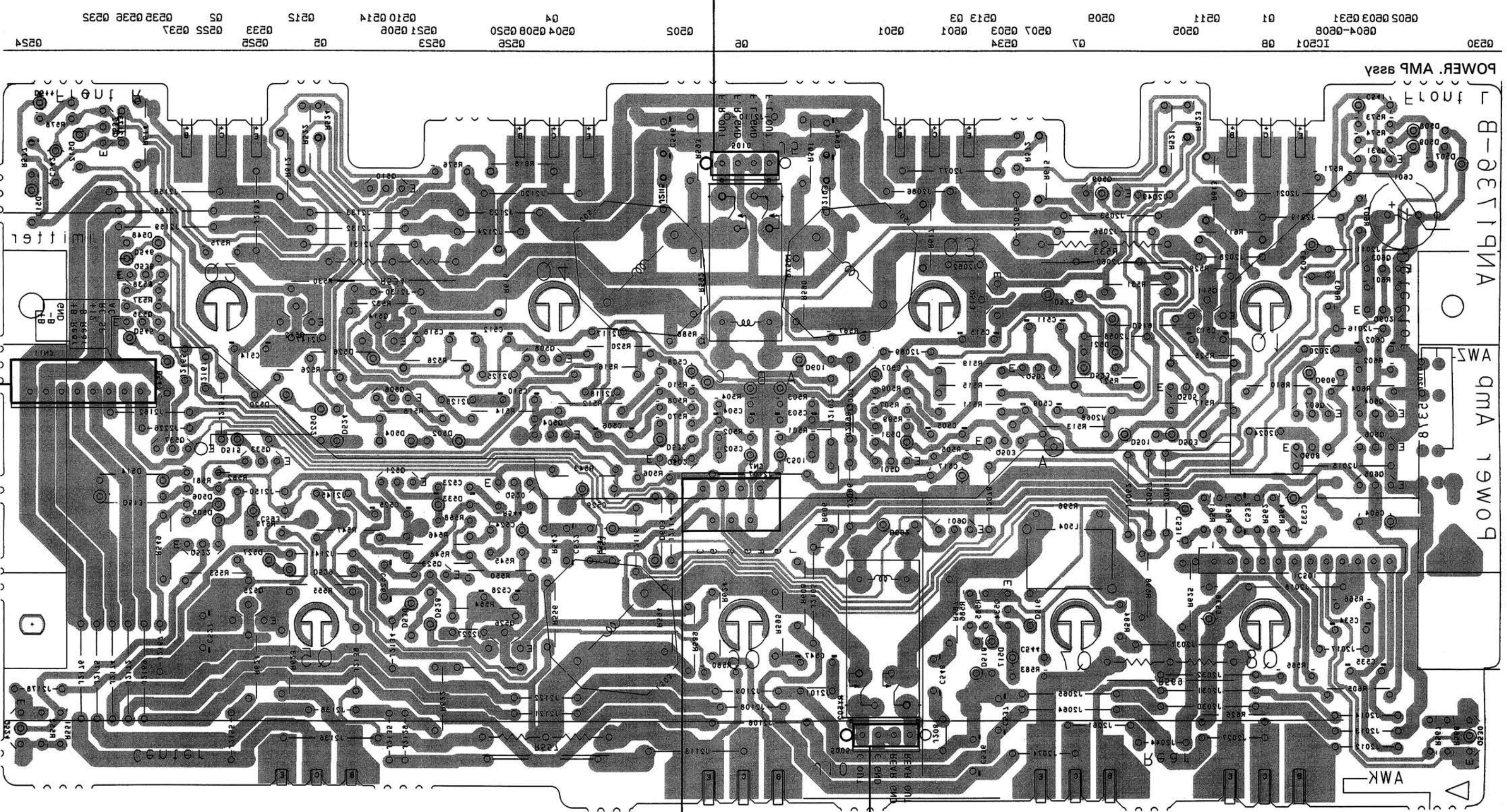


To POWER AMP assy J10

● This diagram is viewed from the foil side.

To H. PHONE, SP. SW assy CN2

To MOTHER assy J11

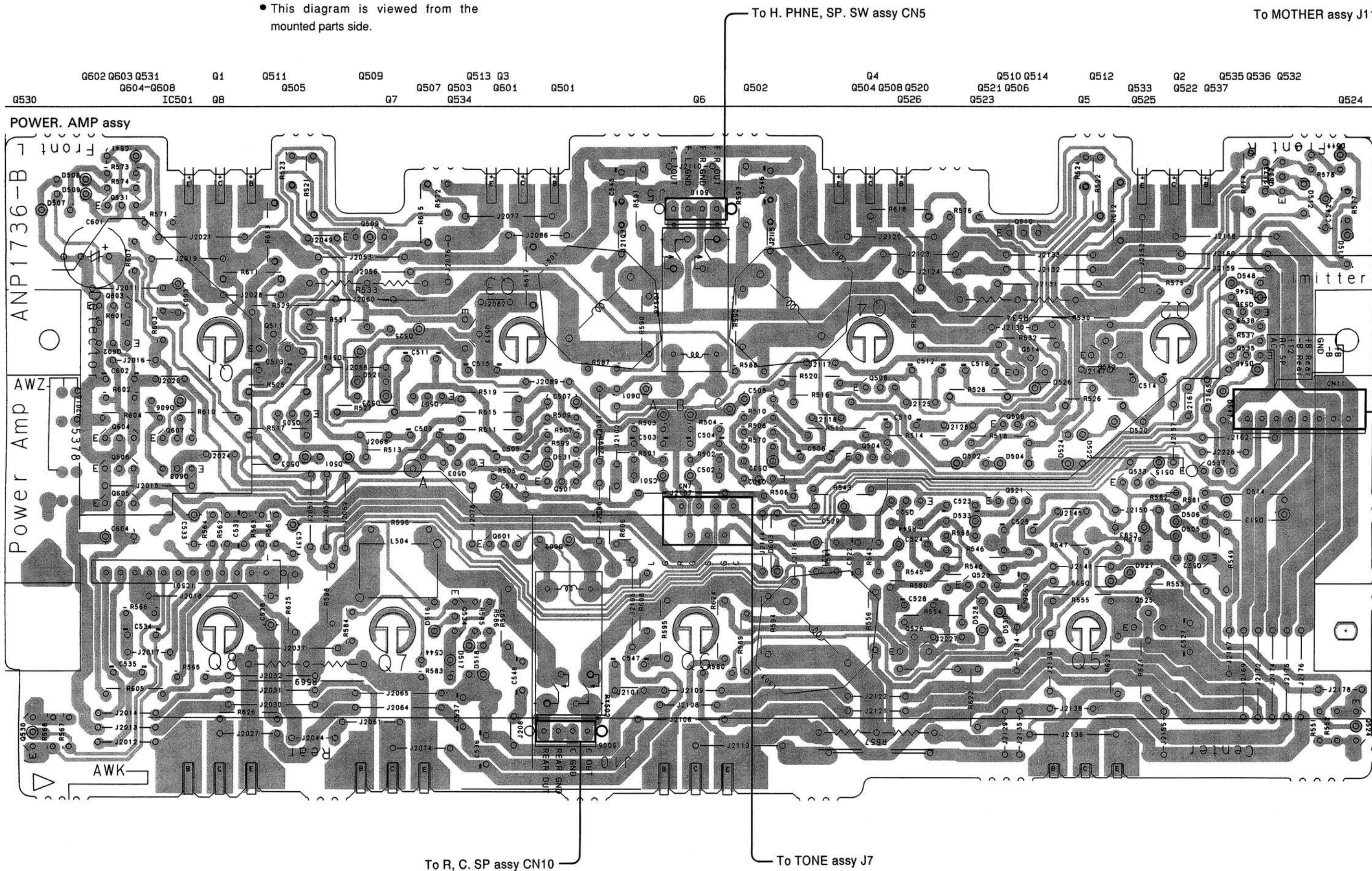


To TONE assy J2

To R. C. SP assy CN10

3.8 POWER. AMP ASSY

• This diagram is viewed from the mounted parts side.



POWER. AMP assy (AWZ5378)

SCH-8

Lch POWER AMP

Rch POWER AMP

D521-D524, D529, D530: HZS36-2L

Q5, Q6, Q520-Q526, Q533: CENTER POWER AMP

IC501, Q7, Q8, Q530, Q534: REAR POWER AMP

Q605, Q606: AC DETECTOR

Over Load

SIGNAL ROUTE
▶: AUDIO SIGNAL

Any diode without part number indicates 1SS252.

Front Lout
Front L GND
Front R GND
Front RoutJ5 DYY04-300-2651
AKT1077To H. PHNE, SP. SW assy
CN5 (▶SCH-3)+B
-B
GND
+B*(Rear)
-B(Rear)
+12V
R&C Speaker (from u-com)
ACCenter Out
Center GND
Rear GND
Rear outJ10 DYY04-200-2651
AKT1077

To R, C, SP assy CN10 (▶SCH-7)

To MOTHER assy J11 (▶SCH-4)

SCH-8

POWER. AMP ASSY

SCH-8

POWER. AMP ASSY

4. PCB PARTS LIST

NOTES :

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “ $\odot$ ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 RD1/8PM [5] [6] [1] J

47k Ω $\rightarrow$ 47 $\times$ 10³ $\rightarrow$ 473 RD1/4PS

4	7	3
---	---	---

 J

 $0.5\Omega \rightarrow 0R5 \dots\dots\dots RN2H \boxed{0} \boxed{R} \boxed{5} \boxed{K}$
$$1\Omega \rightarrow 010 \dots\dots\dots RS1P \begin{array}{|c|} \hline 0 \\ \hline \end{array} \begin{array}{|c|} \hline 1 \\ \hline \end{array} \begin{array}{|c|} \hline 0 \\ \hline \end{array} K$$

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62\text{k}\Omega \rightarrow 562 \times 10^1 \rightarrow 5621 \dots\dots\dots \text{RM1/4PC} \boxed{5} \boxed{6} \boxed{2} \boxed{1} F$

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES							
NSP	MAIN	ASSY (Except VSX—D503S/SD)	AWK1779		D805—808	LED (RED)	AEL1065
NSP	MAIN	ASSY (For VSX—D503S/SD)	AWK1806		D809—811	LED (RED)	AEL1099
	FRONT	ASSY	AWZ5371		D812—815	LED (RED)	AEL1065
		(Except VSX—D503S/SD)			D821—831	DIODE	1SS252
	FRONT	ASSY	AWZ5440	SWITCHES			
		(For VSX—D503S/SD)			S801—833	SWITCH	ASG1029
	MOTHER	ASSY	AWZ5372	COIL			
		(Except VSX—D503S/SD)			L801	AXIAL INDUCTOR	LAU100K
	MOTHER	ASSY	AWZ5441	CAPACITORS			
		(For VSX—D503S/SD)			C800	CERAMIC CAPACITOR	CKPUYF473Z16
	REG.	ASSY	AWZ5373		C801	ELECT. CAPACITOR	CEAS0R1M50
	R, C. SP	ASSY	AWZ5374		C802, 803	ELECT. CAPACITOR	CEAS100M50
NSP	AMP/FUNC	ASSY (For VSX—D503S/KU)	AWK1780		C804	ELECT. CAPACITOR	CEAS101M10
NSP	AMP/FUNC	ASSY	AWK1864		C805	ELECT. CAPACITOR	CEAS470M35
		(Except VSX—D503S/KU)			C806	ELECT. CAPACITOR	CEAS100M50
	POWER. AMP	ASSY	AWZ5378		C807	CERAMIC CAPACITOR	CKPUYF473Z16
	FUNC	ASSY	AWZ5379		C808	CERAMIC CAPACITOR	CKCYF103Z50
	TRANS	ASSY	AWZ5720	RESISTORS			
		(For VSX—D503S/KU)			R811, 812	CARBON FILM RESISTOR	RD1/2PM222J
	TRANS	ASSY	AWZ5380		R813, 815	CARBON FILM RESISTOR	RD1/2PM222J
		(Except VSX—D503S/KU)			(R899)	RESISTOR ARRAY	RA13S104J) Note
	VIDEO	ASSY	AWZ5381			Other Resistors	RD1/8PM□□□□
	TONE	ASSY	AWZ5382	OTHERS			
	VOL	ASSY	AWZ5383		V801	REMOTE RECEIVER UNIT	AXX1023
	H. PHNE, SP. SW	ASSY	AWZ5384		X801	LED HOLDER (PLS)	AMR2632
	FM/AM TUNER	MODULE	AXQ1012			FL TUBE	AAV1174
	DOLBY PROLOGIC • SFC	MODULE	AXQ1022			CRYSTAL RESONATOR	ASS1015

For AWZ5371 and AWZ5440:
Although AWZ5371 and AWZ5440 are different in part

*For AWZ5371 and AWZ5440:
Although AWZ5371 and AWZ5440 are different in part
number, they consist of the same service parts.*

FRONT ASSY

SEMICONDUCTORS

IC801	CONTROL MCU	PDG126B (PDG126A9) Note
Q801	TRANSISTOR	DTA124ES
Q802	TRANSISTOR	DTC124ES
Q803, 804	TRANSISTOR	2SC1740S
Q805—815	TRANSISTOR	DTC124ES
Q819	TRANSISTOR	DTA124ES
D801	DIODE	1SS252
D802	LED (RED)	AEL1151
D803	DIODE	1SS252
D804	ZENER DIODE	MTZ12.7

MOTHER ASSY

SEMICONDUCTORS

Q709	TRANSISTOR	2SA933S
Q710	TRANSISTOR	DTC124ES
Q751	TRANSISTOR	DTC143ES
D702-707	DIODE	1SS252
D709	ZENER DIODE	HZS6B2L
D710	ZENER DIODE	MTZJ4.3C
D711	ZENER DIODE	MTZJ22C
D712	DIODE	D5SB20F
D713-716	DIODE	1SS252
D752	DIODE	S5688G

Note: Concerning IC801 and R899, refer to page 34.

Mark	No.	Description	Parts No.
	D753	ZENER DIODE	HZS6A2L
	D754	DIODE	1SS252
	D755	DIODE	S5688G
	D756	ZENER DIODE	HZS6A2L
	D757	DIODE	1SS252
SWITCH			
	S701	SWITCH (VSX - D503S/SD only)	ASH1015
RELAY			
△	RY751	RELAY	ASR1044
TRANSFORMER			
△	T751	POWER TRANSFORMER (Except VSX - D503S/SD)	ATT1223
△	T751	POWER TRANSFORMER (For VSX - D503S/SD)	ATT1193
CAPACITORS			
	C704	CAPACITOR	ACH1246
	C705	ELECT. CAPACITOR	CEAS470M16
	C713, 714	ELECT. CAPACITOR (8200/71)	ACH1204
	C715, 716	CEA (3300/42V)	ACH1255
△	C717	CKA (0.01/AC250V)	ACG1005
	C751	CERAMIC CAPACITOR	CKCYX104M25
	C752	ELECT. CAPACITOR	CEAS471M25
	C753	ELECT. CAPACITOR	CEAS470M10
△	C754	CKA (0.01/AC400V)	ACG1054
△	C755	CKA (0.01/AC400V) (Except VSX - D503S/SD)	ACG1054
△	C755	CKA (0.022/AC400V) (For VSX - D503S/SD)	ACG1030
RESISTORS			
	R700	FUSIBLE RESISTOR	RFA1/4PS4R7J
	R729	METAL OXIDE RESISTOR	RS1LMF101J
	R730, 731	METAL OXIDE RESISTOR	RS2LMF472J
	R732	CARBON FILM RESISTOR	RD1/4PMF4R7J
	R733	METAL OXIDE RESISTOR	RS2LMF270J
	R734	METAL OXIDE RESISTOR	RS3LMF220J
	R735	METAL OXIDE RESISTOR	RS1LMF150J
	R751	METAL OXIDE RESISTOR	RS2LMF221J
	R752	CARBON FILM RESISTOR	RD1/2PM470J
△	R756	RESISTOR (2.2M, 1/2W) (Except VSX - D503S/SD)	ACN - 208
	R757	CARBON FILM RESISTOR (VSX - D503S/SD only)	RD1/8PM472J
	R759	RESISTOR (100, 5W) Other Resistors	ACN1110 RD1/8PM□□□J
OTHERS			
		CABLE HOLDER (6P)	AKT1079
		CABLE HOLDER (8P)	AKT1081
		CABLE HOLDER (8P)	AKT1081
		SPEAKER TERMINAL 8-P JACK	AKE - 111 AKN1020
	CN3	CONNECTOR (12P)	KPE12
	CN4	CONNECTOR (15P)	KPE15
	CN711	14P PLUG	KM200IB14
	CN721	20P PLUG	KM200IB20
	CN741	4P PLUG	KM200IB4
	CN791	15P PLUG	KM200IB15
	CN8005	JACK	AKN1006
△	CN8008	AC INLET (1P) (Except VSX - D503S/SD)	AKP1124
△	CN8008	AC INLET (1P) WITH OUTLET (For VSX - D503S/SD)	AKP1124
	CN9	CONNECTOR (11P)	KPE11

Mark	No.	Description	Parts No.
REG. ASSY			
SEMICONDUCTORS			
	IC701	REGULATOR IC	NJM78M12FAS
	IC702	REGULATOR IC	NJM79M12FA
	IC703	REGULATOR IC	NJM78M12FAS
CAPACITORS			
	C707	ELECT. CAPACITOR	CEAS101M25
	C708	ELECT. CAPACITOR	CEHAQ101M25
	C709	ELECT. CAPACITOR	CEAS101M25
	C710 - 712	CERAMIC CAPACITOR	CKCYF103Z50
R, C. SP ASSY			
RESISTORS			
	R780	CARBON FILM RESISTOR	RD1/8PM242J
	R781	CARBON FILM RESISTOR	RD1/8PM101J
OTHERS			
	CN780	PIN JACK 1-P	AKB1139
	CN781	SPEAKER TERMINAL 6-P	AKE1053
POWER. AMP ASSY			
SEMICONDUCTORS			
	IC501	PRE-DRIVER-IC	UPC1270H
	Q501 - 504	TRANSISTOR	2SA992
	Q505, 506	TRANSISTOR	2SA1145
	Q507, 508	TRANSISTOR	2SC2705
	Q509, 510	TRANSISTOR	2SC1740S
	Q511, 512	TRANSISTOR	2SC4793
	Q513, 514	TRANSISTOR	2SA1837
	Q514	TRANSISTOR	2SA1837
	Q520, 521	TRANSISTOR	2SA992
	Q522	TRANSISTOR	2SA1145
	Q523	TRANSISTOR	2SC2705
	Q524	TRANSISTOR	2SC1740S
	Q525	TRANSISTOR	2SC4793
	Q526	TRANSISTOR	2SA1837
	Q530	TRANSISTOR	2SC1740S
	Q531 - 533	TRANSISTOR	2SC2240
	Q534	TRANSISTOR	2SC1740S
	Q535, 536	TRANSISTOR	2SC3327
	Q537	TRANSISTOR	DTA143ES
	Q601	TRANSISTOR	DTC143ES
	Q602, 603	TRANSISTOR	2SC1740S
	Q604	TRANSISTOR	2SA933S
	Q605, 606	TRANSISTOR	DTC124ES
	Q607	TRANSISTOR	2SC2240
	Q608	TRANSISTOR	2SC1740S
	D501 - 520	DIODE	1SS252
	D521 - 524	ZENER DIODE	HZS36 - 2L
	D525 - 528	DIODE	1SS252
	D529, 530	ZENER DIODE	HZS36 - 2L
	D531 - 533	DIODE	1SS252
	D545 - 548	ZENER DIODE	MTZJ20
	D601 - 603	DIODE	1SS252
	D606	ZENER DIODE	HZS12AL
RELAYS			
	RY501, 502	RELAY	ASR - 112
COILS			
	L501 - 503	COIL	ATH1004
	L504	COIL	ATH1011

Mark	No.	Description	Parts No.
CAPACITORS			
C501, 502		ELECT. CAPACITOR	CEAS4R7M50
C503, 504		CERAMIC CAPACITOR	CKCYB102K50
C505, 506		CERAMIC CAPACITOR	CKCYB681K50
C507, 508		ELECT. CAPACITOR	CEAS220M16
C509, 510		CERAMIC CAPACITOR	CCCSL220K500
C511, 512		CERAMIC CAPACITOR	CCCSL050C500
C513-516		CERAMIC CAPACITOR	CCCSL101K500
C517		ELECT. CAPACITOR	CEAS101M16
C521		ELECT. CAPACITOR	CEAS4R7M50
C522		CERAMIC CAPACITOR	CKCYB102K50
C523		CERAMIC CAPACITOR	CKCYB681K50
C524		ELECT. CAPACITOR	CEAS220M16
C525		CERAMIC CAPACITOR	CCCSL220K500
C526		CERAMIC CAPACITOR	CCCSL050C500
C527, 528		CERAMIC CAPACITOR	CCCSL101K500
C529		ELECT. CAPACITOR	CEAS101M16
C531		ELECT. CAPACITOR	CEHAQ2R2M50
C532		CERAMIC CAPACITOR	CKCYB102K50
C533		ELECT. CAPACITOR	CEHAQ101M10
C534		CERAMIC CAPACITOR	CCCSL270J50
C535		PLASTIC FILM CAPACITOR	CQMA333J50
C536, 537		CERAMIC CAPACITOR	CKCYF103Z50
C538		ELECT. CAPACITOR	CEHAQ100M2A
C541, 542		ELECT. CAPACITOR	CEAS2R2M50
C544		ELECT. CAPACITOR	CEAS2R2M50
C545-548		AUDIO FILM CAPACITOR	CFTYA473J50
C593		ELECT. CAPACITOR	CEAS2R2M50
C601		ELECT. CAPACITOR	CEAS471M16
C602		CERAMIC CAPACITOR	CKCYX103M25
C603		ELECT. CAPACITOR	CEAS101M16
C604		ELECT. CAPACITOR	CEHAQ470M50
RESISTORS			
R511, 512		CARBON FILM RESISTOR	RD1/4PM162J
R513, 514		CARBON FILM RESISTOR	RD1/4PM473J
R515, 516		CARBON FILM RESISTOR	RD1/4PM104J
R517, 518		CARBON FILM RESISTOR	RD1/4PMF680J
R519, 520		FUSIBLE RESISTOR	RFA1/4PS101J
R525, 526		FUSIBLE RESISTOR	RFA1/4PS101J
R527, 528		FUSIBLE RESISTOR	RFA1/4PS101J
R529-532		CARBON FILM RESISTOR	RD1/4PMF101J
R533, 534		RESISTOR (0.33, 5W)	ACN-139
R546		CARBON FILM RESISTOR	RD1/4PM301J
R547		CARBON FILM RESISTOR	RD1/4PM473J
R548		CARBON FILM RESISTOR	RD1/4PM104J
R549		CARBON FILM RESISTOR	RD1/4PMF680J
R550, 553		FUSIBLE RESISTOR	RFA1/4PS101J
R554		FUSIBLE RESISTOR	RFA1/4PS101J
R555, 556		CARBON FILM RESISTOR	RD1/4PMF101J
R557		RESISTOR (0.33, 5W)	ACN-139
R569		RESISTOR (0.22, 2W)	ACN-131
R590-597		CARBON FILM RESISTOR	RD1/4PMF100J
R606, 608		CARBON FILM RESISTOR	RD1/4PMF101J
R611, 612		FUSIBLE RESISTOR	RFA1/4PS4R7J
R613-616		CARBON FILM RESISTOR	RD1/4PMF4R7J
R617, 618		FUSIBLE RESISTOR	RFA1/4PS4R7J
R621, 622		FUSIBLE RESISTOR	RFA1/4PS4R7J
R623, 624		CARBON FILM RESISTOR	RD1/4PMF4R7J
R625, 626		FUSIBLE RESISTOR	RFA1/4PS4R7J
		Other Resistors	RD1/8PM□□□J
OTHERS			
CN7		CABLE HOLDER (4P) CONNECTOR (7P)	AKT1077 KPE7

Mark	No.	Description	Parts No.
FUNC ASSY			
SEMICONDUCTORS			
IC201		OP-AMP IC	NJM4558DXP
IC203		ANALOG SWITCH IC	TC9273N-005
IC204, 205		OP-AMP IC	NJM4558DXP
Q201, 202		TRANSISTOR	2SC2878
Q203		TRANSISTOR	DTA143ES
CAPACITORS			
C201		CERAMIC CAPACITOR	CKCYF103Z50
C202		ELECT. CAPACITOR	CEAS101M50
C203, 204		ELECT. CAPACITOR	CEAS100M50
C205, 206		CERAMIC CAPACITOR	CCCSL221J50
C207, 208		ELECT. CAPACITOR	CEAS101M16
C209, 210		PLASTIC FILM CAPACITOR	CQMA822J50
C211, 212		PLASTIC FILM CAPACITOR	CQMA242J50
C213, 214		ELECT. CAPACITOR	CEAS2R2M50
C215, 216		ELECT. CAPACITOR	CEAS100M50
C217, 218		CERAMIC CAPACITOR	CKCYB102K50
C221, 222		CERAMIC CAPACITOR	CKCYF103Z50
C223, 224		ELECT. CAPACITOR	CEAS2R2M50
C225, 226		ELECT. CAPACITOR	CEAS4R7M50
C227, 228		ELECT. CAPACITOR	CEAS2R2M50
C231, 232		ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
		All Resistors	RD1/8PM□□□J
OTHERS			
CN201		20P SOCKET	KP200IB20L
CN8004		PIN JACK (6P)	AKB1209
CN8005		PIN JACK (8P)	AKB1210
TRANS ASSY			
SEMICONDUCTORS			
D681, 682		DIODE	S5688G
D683		DIODE	D3SBA20 (A)
CAPACITORS			
C681		CKA (0.01/AC250V)	ACG1005
C791, 792		CKA (VSX-D503S/KU only)	CQMA333K250
RESISTORS			
R681		FUSIBLE RESISTOR	RFA1/4PS220J
OTHERS			
CN1		CONNECTOR (7P)	KPE7
VIDEO ASSY			
SEMICONDUCTORS			
IC401		VIDEO SEITCH	LA7952
Q401		TRANSISTOR	2SC1740S
Q402		TRANSISTOR	2SC2878
Q403		TRANSISTOR	2SC1740S
D401		DIODE	1SS252
CAPACITORS			
C401, 402		ELECT. CAPACITOR	CEAS4R7M50
C403, 404		ELECT. CAPACITOR	CEAS471M16
C405		ELECT. CAPACITOR	CEAS101M16
C406		CERAMIC CAPACITOR	CKCYF473Z50
C408		ELECT. CAPACITOR	CEAS101M16
C409		CERAMIC CAPACITOR	CKCYF473Z50
C410		ELECT. CAPACITOR	CEAS470M16
C411		ELECT. CAPACITOR	CEAS101M16
C412		CERAMIC CAPACITOR	CKCYF473Z50

Mark	No.	Description	Parts No.
RESISTORS			
	R407, 411	CARBON FILM RESISTOR	RD1/4PM151J
	R412, 413	CARBON FILM RESISTOR	RD1/2PM271J
		Other Resistors	RD1/8PM□□□J
OTHERS			
	CN401	4P SOCKET	KP200IB4L
	CN8008	PIN JACK (4P)	AKB1218
TONE ASSY			
SEMICONDUCTORS			
	IC301	OP-AMP IC	NJM4558LD
	Q301, 302	TRANSISTOR	2SC2878
	Q304	TRANSISTOR	DTA143ES
	Q305, 306	TRANSISTOR	2SC2878
CAPACITORS			
	C301, 302	ELECT. CAPACITOR	CEAS4R7M50
	C303, 304	ELECT. CAPACITOR	CEAS010M50
	C305, 306	ELECT. CAPACITOR	CEAS2R2M50
	C307, 308	CERAMIC CAPACITOR	CCCSL220J50
	C309, 310	ELECT. CAPACITOR	CEAS100M50
	C311, 312	AUDIO FILM CAPACITOR	CFTYA103J50
	C313, 314	AUDIO FILM CAPACITOR	CFTYA393J50
	C315, 316	PLASTIC FILM CAPACITOR	CQMA272J50
	C317, 318	AUDIO FILM CAPACITOR	CFTYA103J50
RESISTORS			
	VR301	VARIABLE RESISTOR (500kΩ)	ACS1091
	VR302, 303	VARIABLE RESISTOR (100kΩ)	ACS1044
		Other Resistors	RD1/8PM□□□J
OTHERS			
	CN1381	SHIELD CASE (MTL) 10P PLUG	ANK1250 KM200IB10
VOL ASSY			
SEMICONDUCTORS			
	IC304	OP-AMP IC	NJM4558DXP
	IC381	MECHANISM DRIVER IC	TA8409S
	IC382	OP-AMP IC	NJM4558DXP
	Q381, 382	TRANSISTOR	DTC143ES
	D391	ZENER DIODE	MTZJ5.1A
COILS			
	L381, 382	AXIAL INDUCTOR	LAU220K
CAPACITORS			
	C355, 356	ELECT. CAPACITOR	CEAS4R7M50
	C359, 360	ELECT. CAPACITOR	CEAS4R7M50
	C381	ELECT. CAPACITOR	CEAS470M16
	C383, 384	CERAMIC CAPACITOR	CKCYF473Z50
	C385, 386	ELECT. CAPACITOR	CEAS2R2M50
	C387, 388	AUDIO FILM CAPACITOR	CFTYA153J50
	C389, 390	AUDIO FILM CAPACITOR	CFTYA823J50
	C391, 392	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
	VR381	VARIABLE RESISTOR (100kΩ)	ACX1093
		Other Resistors	RD1/8PM□□□J
OTHERS			
	CN381	10P SOCKET	KP200IB10L
	CN8	CONNECTOR (5P)	KPE5

Mark	No.	Description	Parts No.
H. PHNE, SP. SW ASSY			
SWITCH			
	S670	PUSH SWITCH	SUL6LYXS
RESISTORS			
	R671, 672	METAL OXIDE RESISTOR	RS2LMF331J
OTHERS			
		JACK	AKN1002
FM/AM TUNER MODULE			
SEMICONDUCTORS			
	IC6201	AM/FM +MPX IC	LA1836M
	IC6202	PLL IC	LM7001J
	Q6101	DUAL GATE-FETA (CHIP)	3SK194
	Q6102	TRANSISTOR	2SC2223
	Q6103	TRANSISTOR	2SC2714
	Q6104	MOS-FET	2SK302
	Q6201	NCH-FET (SMD)	2SK208
	Q6202	TRANSISTOR	2SC2712
	Q6203	TRANSISTOR	2SC2235
	Q6204	TRANSISTOR	XDA124EK
	Q6214	TRANSISTOR	2SC2714
	Q6217	TRANSISTOR	XDC124EK
	D6101, 6102	VARI-CAP DIODE	1T33
COILS AND TRANSFORMER			
	F6101	CERAMIC FILTER	ATF-155
	F6202	AM CERAMIC FILTER	ATF1155
	F6203, 6204	CERAMIC FILTER	ATF-119
	L6101	COIL	ATC1020
	L6102	COIL	ATC1021
	L6103	TIP COIL	ATH1043
	L6104	COIL	ATC1003
	L6202, 6203	CHIP COIL	LCTA2R2J3225
	L6207	FM DETECTION COIL	ATE1013-B
	L6208	CHIP COIL	LCTA2R2J3225
	T6101	FM IF TRANS.	ATE-063
CAPACITORS			
	C6101	CHIP CAPACITOR	CCSQCH050C50
	C6102	CERAMIC CAPACITOR	CKSQYB103K50
	C6103	CHIP CAPACITOR	CKSQYB102K50
	C6105	CHIP CAPACITOR	CCSQTH150J50
	C6106	CHIP CAPACITOR	CKSQYB102K50
	C6107	CHIP CPAPCITOR	CCSCH010C50
	C6108	CHIP CAPACITOR	CCSQCH101J50
	C6109	CERAMIC CAPACITOR	CKSQYB103K50
	C6110	CHIP CAPACITOR	CCSQCH020C50
	C6111	CHIP CERAMIC C.	CCSQCH150J50
	C6112	CHIP CAPACITOR	CKSQYB102K50
	C6113	CHIP CAPACITOR	CCSQRH180J50
	C6114	CHIP CAPACITOR	CCSQRH080D50
	C6115	CHIP CAPACITOR	CCSQCH330J50
	C6116	CHIP CERAMIC C.	CCSQCH150J50
	C6117	CERAMIC CAPACITOR	CKSQYB103K50
	C6202	CERAMIC CAPACITOR	ACG1051
	C6203	CHIP CAPACITOR	CCSQCH101J50
	C6204	CHIP CAPACITOR	CKSQYB102K50
	C6208	CHIP CERAMIC C.	CCSQCH150J50
	C6209	CERAMIC CAPACITOR	CKSQYB473K50
	C6210	CERAMIC CAPACITOR	CKSQYB103K50
	C6212	CHIP CAPACITOR	CKSQYF103Z50
	C6213	CHIP CAPACITOR	CKSQYB223K50
	C6214	AUDIO FILM CAPACITOR	CFTXA224J50

Mark	No.	Description	Parts No.
	C6215	AUDIO FILM CAPACITOR	CFTXA103J50
	C6216, 6217	ELECT. CAPACITOR	CEAS330M16
	C6218	CHIP CAPACITOR	CKSQYF103Z50
	C6219	ELECT. CAPACITOR	CEAS470M10
	C6220	CHIP CAPACITOR	CKSQYF223Z50
	C6221, 6222	CHIP CERAMIC C.	CCSQCH150J50
	C6223	CHIP CAPACITOR	CKSYF103Z50
	C6224	ELECT. CAPACITOR	CEAS100M50
	C6225	CERAMIC CAPACITOR	CKSQYF473Z50
	C6226	CHIP CAPACITOR	CKSQYF223Z50
	C6227	ELECT. CAPACITOR	CEAS470M25
	C6228	CERAMIC CAPACITOR	CKSQYB472K50
	C6229	CERAMIC CHIP C.	CCSCH821J50
	C6230	CERAMIC CAPACITOR	CKSQYB333K50
	C6231	ELECT. CAPACITOR	CEAS100M50
	C6232	CERAMIC CAPACITOR	CKSYB333K50
	C6233	ELECT. CAPACITOR	CEAS100M50
	C6234	CERAMIC CAPACITOR	ACG1051
	C6235	CERAMIC CAPACITOR	ACG1052
	C6236	CERAMIC CAPACITOR	ACG1051
	C6237	CERAMIC CAPACITOR	CKSQYB473K50
	C6238	ELECT. CAPACITOR	CEJA100M16
	C6239	CHIP CAPACITOR	CKSQYF223Z50
	C6241	CERAMIC CAPACITOR	CKSQYF473Z50
	C6242	CHIP CAPACITOR	CKSQYF223Z50
	C6243–C6245	ELECT. CAPACITOR	CEAS470M16
	C6246	ELECT. CAPACITOR	CEAS100M50
	C6249, 6250	ELECT. CAPACITOR	CEJA4R7M35
	C6251	CHIP CAPACITOR	CKSYB472K50
	C6252	CERAMIC CAPACITOR	CKSQYB472K50
	C6255	CHIP CAPACITOR	CKSQYF223Z50
	C6261	ELECT. CAPACITOR	CEAS010M50
	C6262	ELECT. CAPACITOR	CEAS100M50
	C6263	CHIP CAPACITOR	CKSYF473Z50
	C6264	CERAMIC CAPACITOR	CKSQYB103K50
	C6265	CERAMIC CAPACITOR	CKSQYB473K50
	C6266	CERAMIC CAPACITOR	CKSQYF473Z50
	C6267	CERAMIC CAPACITOR	CKSQYB473K50
	C6268	CHIP CAPACITOR	CCSQCH101J50
RESISTORS			
	VR6201	VARIABLE RESISTOR (10kΩ)	ACP1056
	VR6202	VARIABLE RESISTOR (22kΩ)	VRTB6VS223
	R6101	CHIP RESISTOR	RS1/8S470J
	R6113, 6116	CHIP RESISTOR	RS1/8S000J
	R6118	CHIP RESISTOR	RS1/8S000J
	R6209	CHIP RESISTOR	RS1/8S221J
	R6211	CHIP RESISTOR	RS1/8S103J
	R6237	CHIP RESISTOR	RS1/8S182J
	R6239	CHIP RESISTOR	RS1/8S332J
	R6243, 6244	CHIP RESISTOR	RS1/8S101J
	R6268–6271	CHIP RESISTOR	RS1/8S000J
	R6275, 6276	CHIP RESISTOR	RS1/8S000J
	R6278, 6283	CHIP RESISTOR	RS1/8S000J
	R6284, 6290	CHIP RESISTOR	RS1/8S000J
	R6293, 6294	CHIP RESISTOR	RS1/8S000J
	R6297	CHIP RESISTOR	RS1/8S000J
	R6299, 6300	CARBON FILM RESISTOR	RD1/8PM102J
		Other Resistors	RS1/10S□□□J

Mark	No.	Description	Parts No.
OTHERS			
	BN6201	AM RF TUNING BLOCK	AXX1041
	X6201	TERMINAL 4–P	AKA1016
	X6202	CRYSTAL RESONATOR	ASS1066
	X6203	CERAMIC RESONATOR	ATF1027
		CRYSTAL RESONATOR	ASS1042
DOLBY PROLOGIC • SFC MODULE SEMICONDUCTORS			
	IC1901–1906	OP–AMP IC	NJM4558M–D
	IC1907	DOLBY SURROUND IC	PMC001A
	IC1908	DOLBY PROLOGIC IC	LA2785
	IC1909	LOGIC IC	TC74HC193AF
	Q1901	TRANSISTOR	2SD468
	Q1902, 1903	NCH–FET(SMD)	2SK208
	Q1904	TRANSISTOR (SMD)	2SC2712
	D1901	ZENER DIODE (SMD)	RD9.1M–B3
	D1902	DIODE (SMD)	1SS226
	D1903	DIODE (SMD)	1SS352
	D1904–1906	DIODE (SMD)	1SS226
	D1908, 1909	DIODE (SMD)	1SS226
	D1910	ZENER DIODE (SMD)	RD5.1M–B2
COILS			
	F1901	FILTER	ATF1102
	L1901	CHIP COIL	LCTA330J3225
CAPACITORS			
	C1901–1903	CHIP CAPACITOR	CCSQCH101J50
	C1904, 1905	ELECT. CAPACITOR	CEAS101M16
	C1906	ELECT. CAPACITOR	CEJA2R2M50
	C1908	ELECT. CAPACITOR	CEJA100M16
	C1909	ELECT. CAPACITOR	CEJA2R2M50
	C1911	ELECT. CAPACITOR	CEJA100M16
	C1912	ELECT. CAPACITOR	CEJA2R2M50
	C1914	ELECT. CAPACITOR	CEJA100M16
	C1915	ELECT. CAPACITOR	CEAS470M16
	C1916	ELECT. CAPACITOR	CEAS221M16
	C1917	CERAMIC CAPACITOR	CKSQYB104K25
	C1918, 1919	AUDIO FILM CAPACITOR	CFTYA184J50
	C1920, 1921	ELECT. CAPACITOR	CEJA100M16
	C1922, 1923	PLASTIC FILM CAPACITOR	CQMA102J50
	C1924, 1925	PLASTIC FILM CAPACITOR	CQMA682J50
	C1926, 1927	ELECT. CAPACITOR	CEJA100M16
	C1928, 1929	PLASTIC FILM CAPACITOR	CQMA362J50
	C1930, 1931	ELECT. CAPACITOR	CEJA100M16
	C1932, 1933	AUDIO FILM CAPACITOR	CFTYA103J50
	C1936, 1937	ELECT. CAPACITOR	CEJA2R2M50
	C1938	AUDIO FILM CAPACITOR	CFTYA103J50
	C1939	AUDIO FILM CAPACITOR	CFTYA333J50
	C1940	ELECT. CAPACITOR	CEJAR22M50
	C1941	ELECT. CAPACITOR	CEJAR68M50
	C1942	ELECT. CAPACITOR	CEJA100M16
	C1943	ELECT. CAPACITOR	CEJA2R2M50
	C1944, 1945	PLASTIC FILM CAPACITOR	CQMA332J50
	C1946	ELECT. CAPACITOR	CEAS470M16
	C1947	ELECT. CAPACITOR	CEAS221M16
	C1948	ELECT. CAPACITOR	CEAS221M10
	C1949	PLASTIC FILM CAPACITOR	CQMA332J50
	C1950	AUDIO FILM CAPACITOR	CFTYA823J50
	C1951–1954	CERAMIC CAPACITOR	ACG1050
	C1955–1958	AUDIO FILM CAPACITOR	CFTYA823J50
	C1959	AUDIO FILM CAPACITOR	CFTYA563J50

VSX-D503S, VSX-D513S

Mark	No.	Description	Parts No.
	C1960, 1961	ELECT. CAPACITOR	CEAS470M16
	C1962, 1963	CERAMIC CAPACITOR	CKSQYB104K25
	C1964	PLASTIC FILM CAPACITOR	CQMA681J50
	C1965-1967	ELECT. CAPACITOR	CEAS100M50
	C1968	AUDIO FILM CAPACITOR	CFTYA474J50
	C1969	ELECT. CAPACITOR	CEAS470M16
	C1970, 1971	AUDIO FILM CAPACITOR	CFTYA104J50
	C1972	ELECT. CAPACITOR	CEJAR47M50
	C1973	ELECT. CAPACITOR	CEANL4R7M50
	C1974	ELECT. CAPACITOR	CEJAR47M50
	C1975	ELECT. CAPACITOR	CEANL4R7M50
	C1976	ELECT. CAPACITOR	CEJAR15M50
	C1977	ELECT. CAPACITOR	CEANL3R3M50
	C1978	AUDIO FILM CAPACITOR	CFTYA154J50
	C1979	PLASTIC FILM CAPACITOR	CQMA223J50
	C1980	PLASTIC FILM CAPACITOR	CQMA473J50
	C1981	ELECT. CAPACITOR	CEAS221M16
	C1982-1985	ELECT. CAPACITOR	CEJA100M16
	C1986	ELECT. CAPACITOR	CEAS221M16
	C1987, 1988	AUDIO FILM CAPACITOR	CFTYA104J50
	C1989	ELECT. CAPACITOR	CEJAR47M50
	C1990	ELECT. CAPACITOR	CEANL4R7M50
	C1991	ELECT. CAPACITOR	CEJAR47M50
	C1992	ELECT. CAPACITOR	CEANL4R7M50
	C1993	ELECT. CAPACITOR	CEJAR15M50
	C1994	ELECT. CAPACITOR	CEANL3R3M50
	C1995	AUDIO FILM CAPACITOR	CFTYA154J50
	C1996, 1997	ELECT. CAPACITOR	CEJA100M16
	C1998	AUDIO FILM CAPACITOR	CFTYA823J50
	C1999	ELECT. CAPACITOR	CEJA100M16
	C2000	CHIP CAPACITOR	CCSQCH181J50
	C2001	PLASTIC FILM CAPACITOR	CQMA822J50
	C2002	PL. PROPYtene CAPACITOR	CQPA221J100
	C2003	ELECT. CAPACITOR	CEJA100M16
	C2004	PLASTIC FILM CAPACITOR	CQMA222J50
	C2005	ELECT. CAPACITOR	CEJA100M16
	C2006	ELECT. CAPACITOR	CEANP330M25
	C2007	ELECT. CAPACITOR	CEAS330M35
	C2008	ELECT. CAPACITOR	CEAS101M10
	C2009-2011	CERAMIC CAPACITOR	CKSQYB104K25
	C2012	ELECT. CAPACITOR	CEJA010M50
	C2013	CHIP CERAMIC C.	CCSQCH300J50
	C2014	CHIP CERAMIC C.	CCSQCH300J50
	C2015, 2016	CERAMIC CAPACITOR	CKSQYB473K25
	C2017, 2018	CHIP CAPACITOR	CCSQCH100D50

RESISTORS

All Resistors RS1/10S□□□J

OTHERS

X1901	CERAMIC RESONATOR	ASS1109
CN2001	15P SOCKET	KP2001B15L

5. ADJUSTMENTS

ADJUSTMENT OF THE FM TUNER SECTION

- Set the FM/AM selector to FM BAND.
- Connect the wiring as shown in the Fig.1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment	
		Frequency (MHz)	Level (dB μ V)		Adjustment Location	Specifications
1	Center adjustment	98	80	98.0MHz	L6207	Adjust so that DC voltage between the IC6201-pin4 and pin 28(or⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front-end sensitivity adjustment	98	Low input (0 to 30)	98.0MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201- pin12 and GND(or⊕ lead of C6238 and GND) becomes maximum level.
3	TUNED IND. Lighting level	98	15 (±2dB)	98.0MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

ADJUSTMENT OF MW TUNER SECTION

- Set the FM/AM selector to AM(MW)BAND.
- Connect the wiring as shown in the Fig.1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment	
		Frequency (kHz)	Level (dB μ V/m)		Adjustment Location	Specifications
1	TUNED IND. Lighting level	999 *1	47(±2dB)	999kHz *1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

*1 : For the area using 10kHz step, frequencies should be 1000kHz.

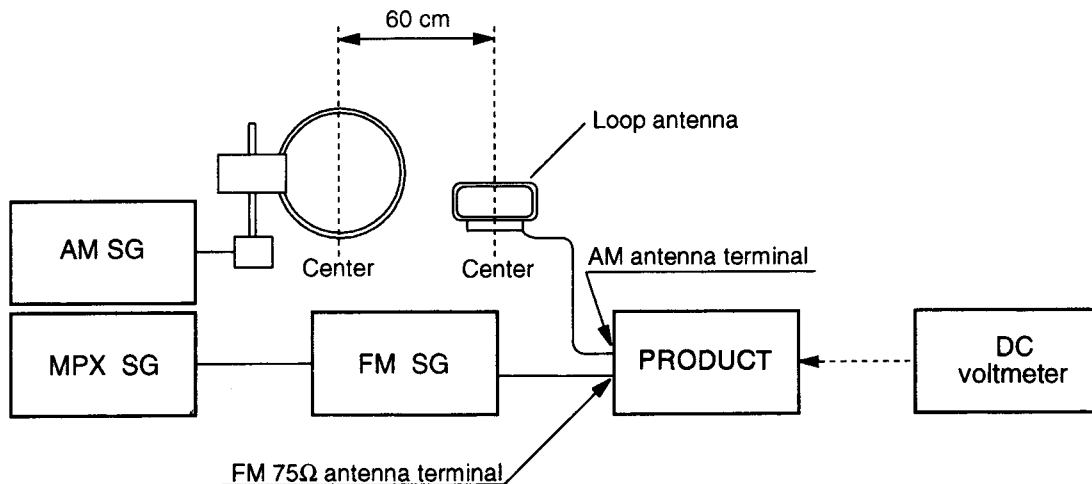


Fig. 1 AM and FM adjustment wiring diagram

FM/AM TUNER MODULE

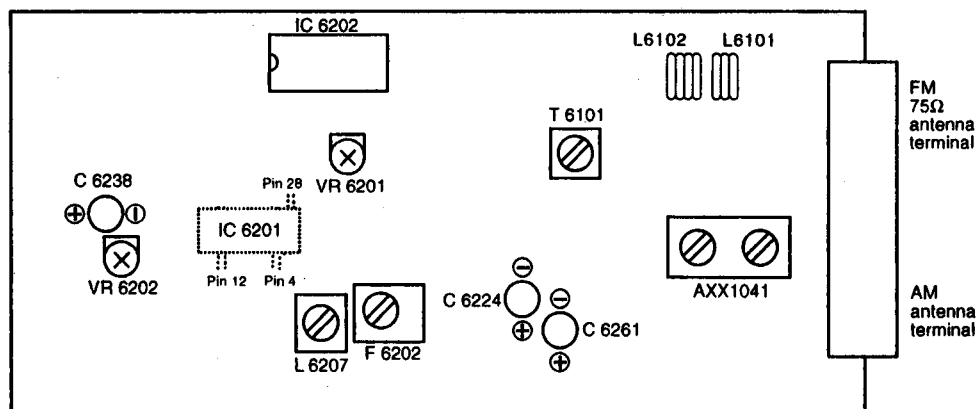


Fig. 2 Adjustment location

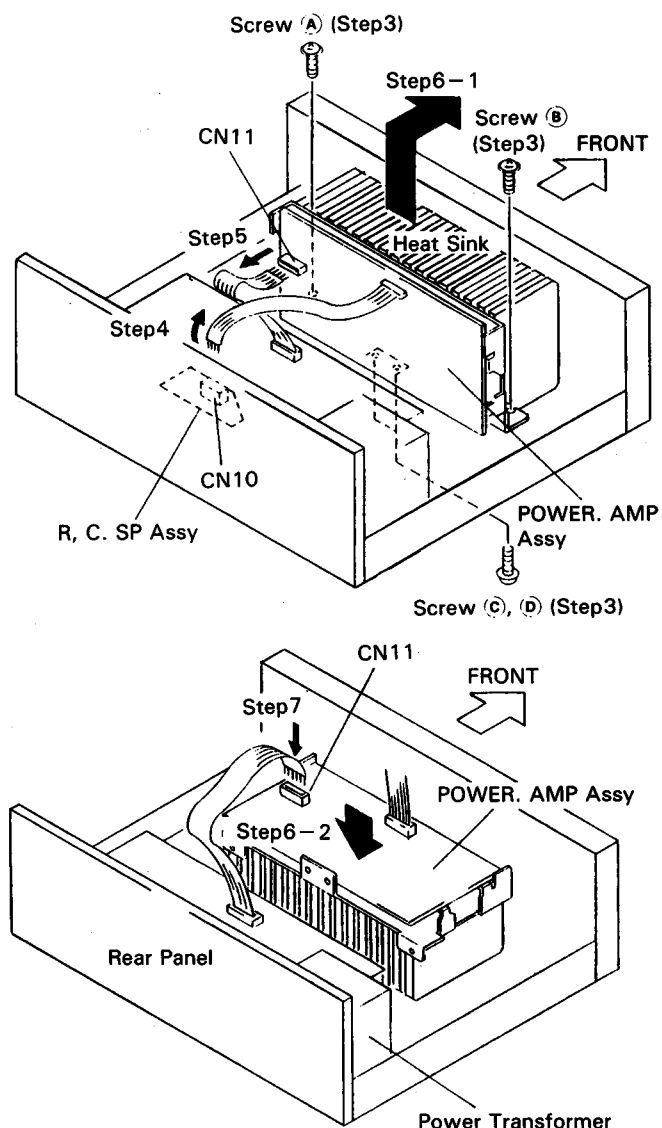
6. DISASSEMBLY

● POWER. AMP ASSY

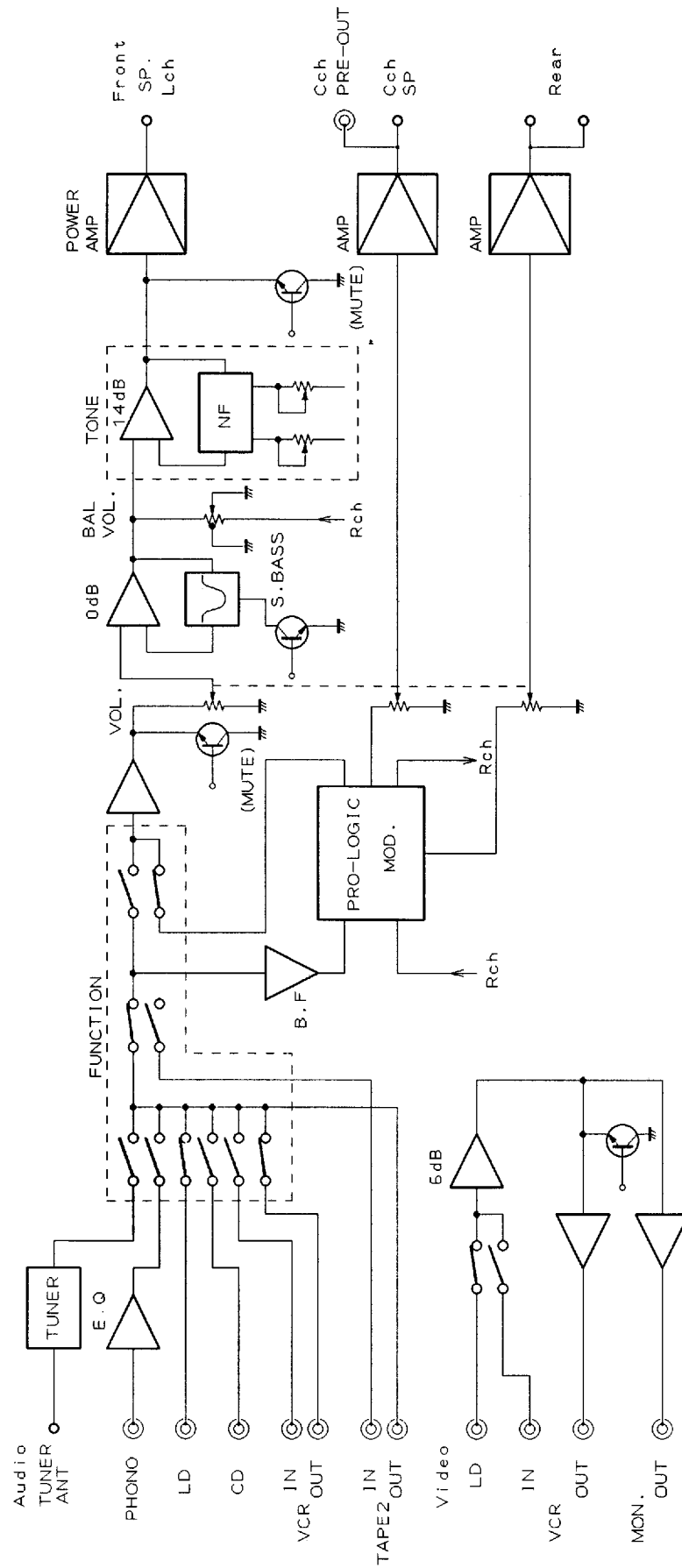
- Step1. Disconnect the AC power cord.
- Step2. Remove the bonnet case.
- Step3. Remove the screws (A) through (D), which fasten the heat sink of the POWER. AMP assembly.
- Step4. Disconnect the cable from CN10 of the R. C. SP assembly.
- Step5. Disconnect the cable from CN11 of the POWER. AMP assembly by raising the assembly slightly.
- Step6. Continue to raise the assembly and rotate it so that the fins of the heat sink face the bottom. Then return the assembly to its original position. (Avoid shorting the assembly by inserting insulation sheets or the like between the assembly and other assemblies.)
- Step7. Re-connect the cable to CN11.

Note :

It is not necessary to re-connect the cable to CN10 of the R; C. SP assembly to check the POWER. AMP assembly.



7. BLOCK DIAGRAM

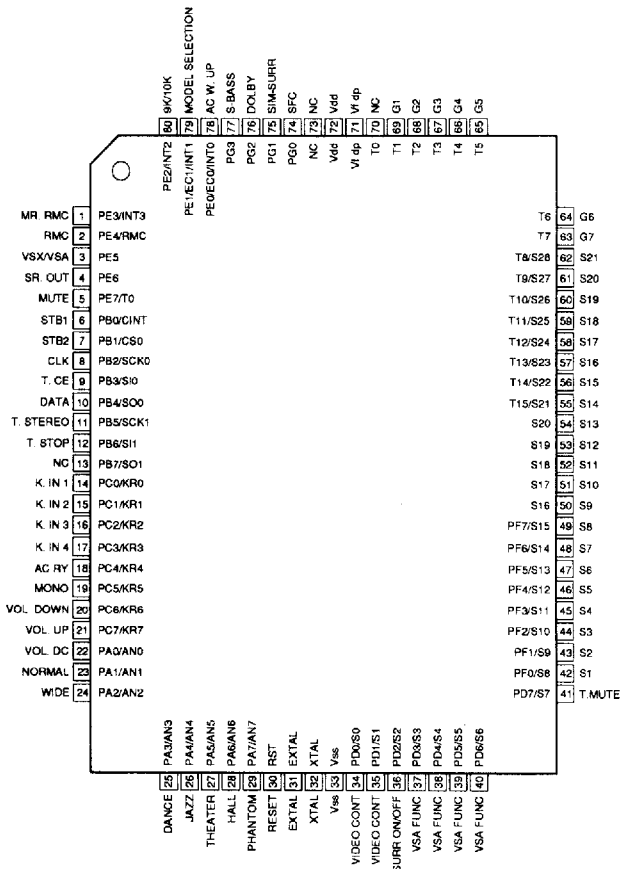


8. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG126B (IC801) Digital Delay

● Block diagram



● Pin Function

No	Pin name	I/O	Function	ACTIVE
1	PE3/INT3 MR. RMC	I	Remote control unit signal input from sub-room	L
2	PE4/RMC RMC	I	Remote control unit signal input	H
3	PE5 VSX/VSA	I	VSX/VSA, VSP select (L/H)	
4	PE6 SR. OUT	O	SR output from Remote control signal	H
5	PE7/T0 MUTE	O	MUTE	H
6	PB0/CINT STB1	O	CE (LA2785, LV1010, LV1020) output for SURROUND IC	L
7	PB1/CS0 STB2	O	STROBE output for function IC	H
8	PB2/SCK0 CLK	O	CLOCK output	
9	PB3/SIO T. CE	O	PLL IC (LLM7001) CE	H
10	PB4/SO0 DATA	O	DATA output	
11	PB5/SCK1 T. STEREO	I	TUNER STEREO ON/OFF	L
12	PB6/SI1 T. STOP	I	TUNED input	L
13	PB7/SO1 NC		NC	
14	PC0/KR0 K. IN 1	I	KEY scan input 1	H
15	PC1/KR1 K. IN 2	I	KEY scan input 2	H
16	PC2/KR2 K. IN 3	I	KEY scan input 3	H
17	PC3/KR3 K. IN 4	I	KEY scan input 4	H
18	PC4/KR4 AC RY	O	AC relay output	H
19	PC5/KR5 MONO	O	FM MONO	H
20	PC6/KR6 VOL. DOWN	O	VOLUME DOWN	H

21	PC7/KR7 VOL. UP	O	VOLUME UP	H
22	PA0/AN0 VOL. DC	I	VOLUME position selection	
23	PA1/AN1 NORMAL	O	CENTER MODE display (NORMAL)	H
24	PA2/AN2 WIDE	O	CENTER MODE display (WIDE)	H
25	PA3/AN3 DANCE	O	VSX : SFC MODE display (DANCE) VSA, VSP : SURR MODE display (3CH LOGIC)	H
26	PA4/AN4 JAZZ	O	SFC MODE display (JAZZ)	H
27	PA5/AN5 THEATER	O	VSX : SFC MODE display (THATER) VSA, VSP : MONO OUT MUTE	H L
28	PA6/AN6 HALL	O	SFC MODE display (HALL)	H
29	PA7/AN7 PHANTOM	O	CENTER MODE display (PHANTOM)	H
30	RST RESET	I	RESET input	
31	EXTAL EXTAL	I	oscillator 8MHz	
32	XTAL XTAL	O		
33	Vss Vss		GND	
34	PD0/S0 VIDEO CONT	O	VIDEO CONTROL	
35	PD1/S1 VIDEO CONT	O	VIDEO CONTROL	
36	PD2/S2 SURR ON/OFF	O	SURROUND ON/OFF	H
37	PD3/S3 VSA FUNC	O	VSA, VSP FUNCTION (INH A)	H
38	PD4/S4 VSA FUNC	O	VSA, VSP FUNCTION (INH V)	H
39	PD5/S5 VSA FUNC	O	VSA, VSP FUNCTION (A)	H
40	PD6/S6 VSA FUNC	O	VSA, VSP FUNCTION (B)	H
41	PD7/S7 T. MUTE	O	VSX : mute for TUNER VSA, VSP : -20dB MUTE	H
42	PF0/S8 S1/ K. OUT1	O	FL segment output1/KEY scan output1	H
43	PF1/S9 S2/ K. OUT2	O	FL segment output2/KEY scan output2	H
44	PF2/S10 S3/K. OUT3	O	FL segment output3/KEY scan output3	H
45	PF3/S11 S4/K. OUT4	O	FL segment output4/KEY scan output4	H
46	PF4/S12 S5/K. OUT5	O	FL segment output5/KEY scan output5	H
47	PF5/S13 S6/K. OUT6	O	FL segment output6/KEY scan output6	H
48	PF6/S14 S7/K. OUT7	O	FL segment output7/KEY scan output7	H
49	PF7/S15 S8/K. OUT8	O	FL segment output8/KEY scan output8	H
50	S16 S9/K. OUT9	O	FL segment output9/KEY scan output9	H

51	S17 S10/K. OUT10	O	FL segment output10/KEY scan output10	H
52	S18 S11/K. OUT11	O	FL segment output11/KEY scan output11	H
53	S19 S12/K. OUT12	O	FL segment output12/KEY scan output12 (VSA, VSP)	H
54	S20 S13/K. OUT13	O	FL segment output13/KEY scan output13 (VSA, VSP)	H
55	T15/S21 S14	O	FL segment output14	H
56	T14/S22 S15	O	FL segment output15	H
57	T13/S23 S16	O	FL segment output16	H
58	T12/S24 S17	O	FL segment output17	H
59	T11/S25 S18	O	FL segment output18	H
60	T10/S26 S19	O	FL segment output19	H
61	T9/S27 S20	O	FL segment output20	H
62	T8/S28 S21	O	FL segment output21	H
63	T7 G7	O	FL grid output7	H
64	T6 G6	O	FL grid output6	H
65	T5 G5	O	FL grid output5	H
66	T4 G4	O	FL grid output4	H
67	T3 G3	O	FL grid output3	H
68	T2 G2	O	FL grid output2	H
69	T1 G1	O	FL grid output1	H
70	T0 NC		NC	
71	Vf dp Vf dp		Power supply for FL	
72	Vdd Vdd		Power supply +5V	
73	NC NC		+5V	
74	PG0 SFC	O	K-112 : SURR MODE display (SFC) other than K-112 : SURR MODE display (STUDIO)	H
75	PG1 SIM-SURR	O	SURR MODE display (SUMULATED SURROUND)	H
76	PG2 DOLBY	O	SURR MODE display (DOLBY PRO LOGIC)	H
77	PG3 S-BASS	O	VSX : S-BASS ON/OFF VSA, VSP : LOUDNESS ON/OFF	H
78	PE0/EC0/INT0 AC W. UP	I	AC pulse input	
79	PE1/EC1/INT1 MODEL SELECTION	I	VSX : K-112/K-113, K-114 selection (H/L) VSA, VSP : K-119/K-152 selection (L/H)	
80	PE2/INT2 9K/10K	I	VSX : 9K/10K selection (H/L) VSA, VSP : EX/J selection (L/H)	

9. REMOTE CONTROL UNIT [CU – VSX084 (AXD1385)] [CU – VSX082 (AXD1384)]

9.1 FOR CU – VSX084 (AXD1385)

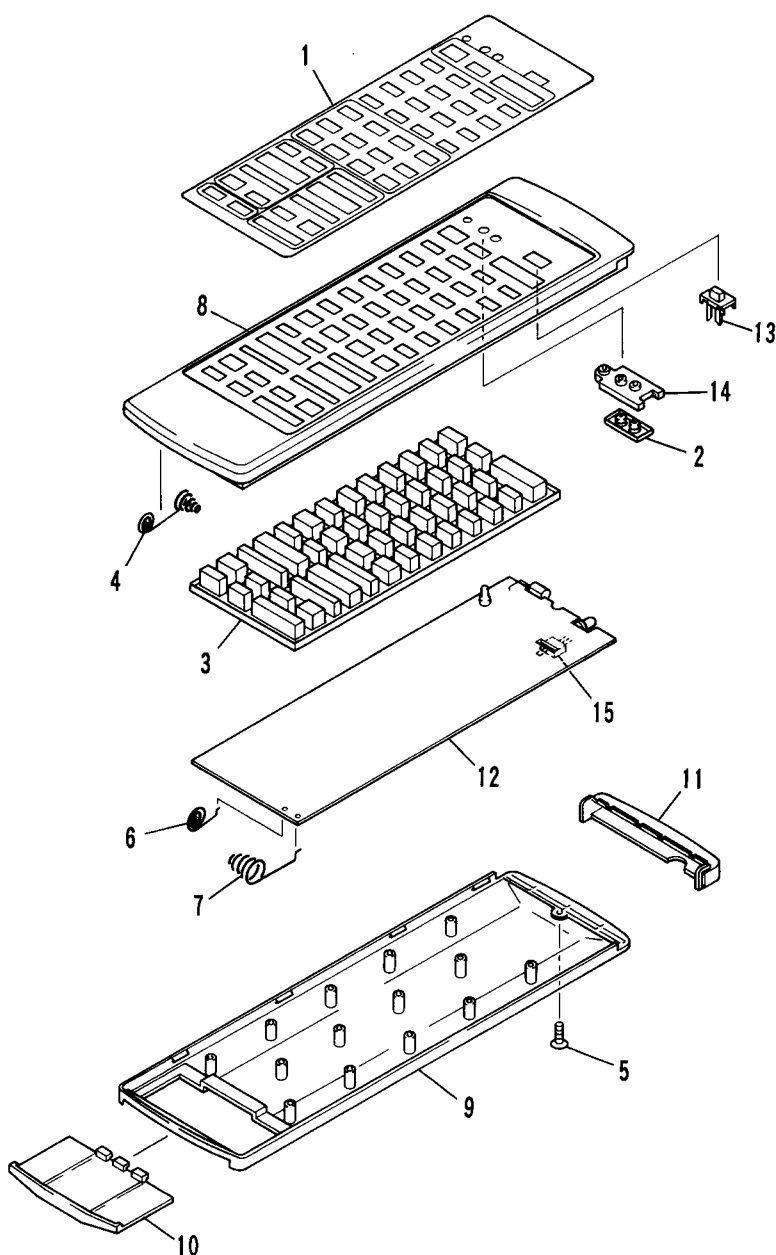
■ EXPLODED VIEW AND PARTS LIST

NOTES :

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “ $\odot$ ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List

Mark	No.	Description	Parts No.
	1	PLATE	AZA1984
	2	RUBBER SHEET (A) (S102)	AZA1985
	3	RUBBER SHEET (B) (S103)	AZA1986
	4	TERMINAL	AZB1334
	5	SCREW	AZB1335
	6	TERMINAL (A)	AZB1379
	7	TERMINAL (B)	AZB1380
	8	CASE (A)	AZN2254
	9	CASE (B)	AZN2255
	10	BATTERY COVER	AZN2256
	11	FILTER	AZN2257
NSP	12	P. C. BOARD	AZN2258
	13	KNOB (VIDEO/AUDIO)	AZN2259
	14	FRAME	AZN2260
	15	SLIDE SW (S101)	AZS1134



PCB PARTS LIST

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω $\rightarrow$ 56 $\times$ 10¹ $\rightarrow$ 561 RD1/8PM $\begin{matrix} 5 & 6 & 1 \\ \hline \end{matrix}$ J

47k Ω $\rightarrow$ 47 $\times$ 10³ $\rightarrow$ 473 RD1/4PS $\begin{matrix} 4 & 7 & 3 \\ \hline \end{matrix}$ J

0.5 Ω $\rightarrow$ 0R5 RN2H $\begin{matrix} 0 & R & 5 \\ \hline \end{matrix}$ K

1 Ω $\rightarrow$ 010 RS1P $\begin{matrix} 0 & 1 & 0 \\ \hline \end{matrix}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ 562 $\times$ 10¹ $\rightarrow$ 5621 RM1/4PC $\begin{matrix} 5 & 6 & 2 & 1 \\ \hline \end{matrix}$ F

Mark No.	Description	Parts No.
SEMICONDUCTORS		
IC1	μ -COM	AZC1841
IC2	IC	PST9121N
Q1	CHIP TRANSISTOR	2SC3265
D1	LED	SE303A-C
D2	CHIP DIODE	RLS73
D3	DIODE	SPS-503C-3
D4, 5	CHIP DIODE	RLS73
D6	LED	SLC-22VR
CAPACITORS		
C1	ELECT. CAPACITOR	CEAS221M25
C2	ELECT. CAPACITOR	CEAS101M10
C3	ELECT. CAPACITOR	CEAS0R1M50
C4, 5	CERAMIC CAPACITOR	CCDSL330J50
C6	ELECT. CAPACITOR	CEAS101M10
C7	CERAMIC CAPACITOR	CCDSL101J50
C8	ELECT. CAPACITOR	CEAS0R1M50
RESISTORS		
R1	CARBON FILM RESISTOR	RD1/4PM020J
	Other resistors	RD1/8PM $\begin{matrix} \square & \square & \square \\ \hline \end{matrix}$ J
OTHERS		
X1	RESONATOR	FCR4.0MC3

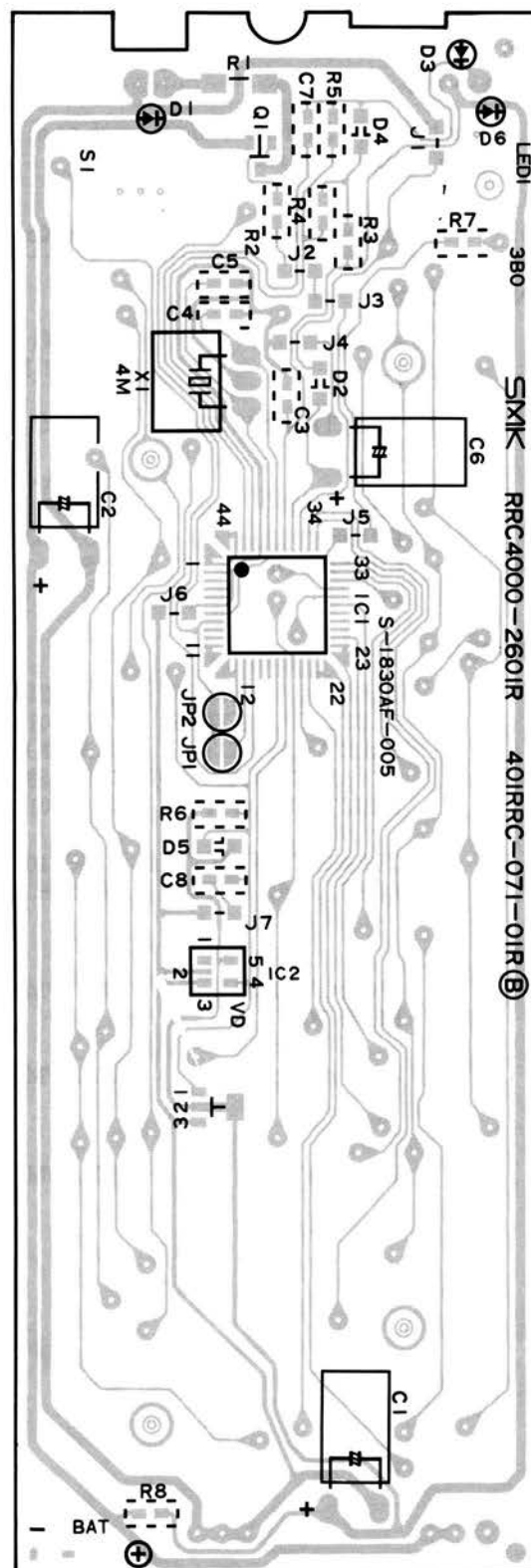
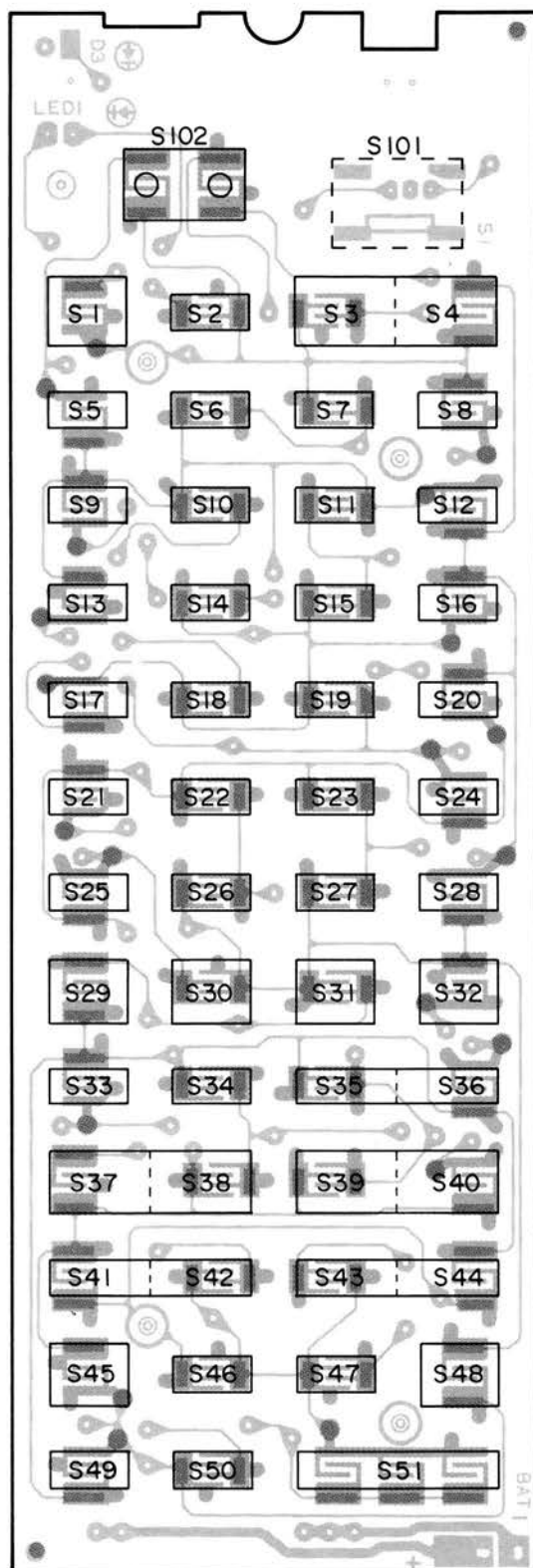
PCB PATTERN

⎓ : Indicates a chip resistor.

⎓ : Indicates a chip capacitor.

—| : Indicates a chip transistor.

⊕ : Indicates a chip diode.



SCHEMATIC DIAGRAM

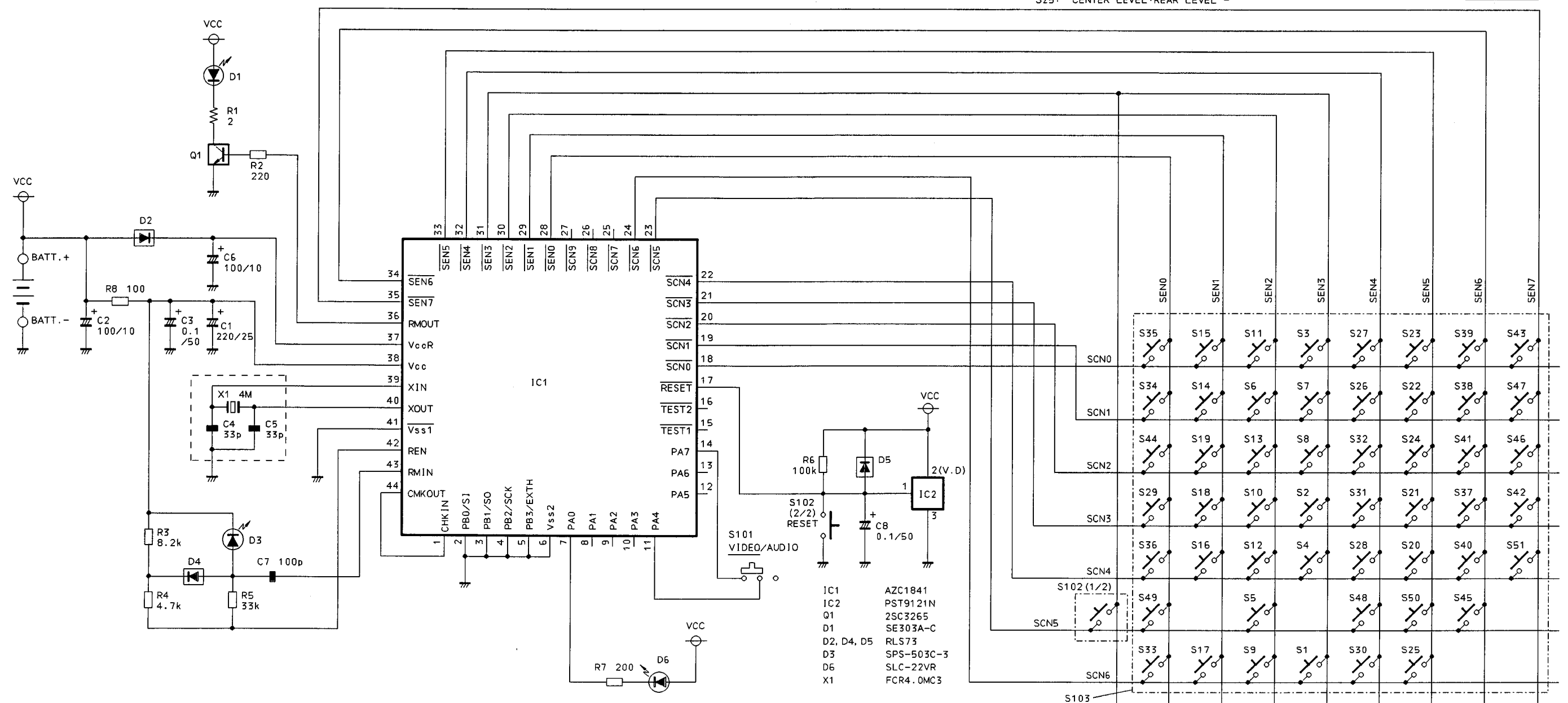
NOTE FOR SCHEMATIC DIAGRAMS (Type 2A)

- 1. When ordering service parts, be sure to refer to "PARTS LIST OF EXPLODED VIEWS" or "PCB PARTS LIST".
- 2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
- 3. RESISTORS:
Unit: k: kΩ, M: MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
- 4. CAPACITORS:
Unit: p: pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.
- 5. COILS:
Unit: m: mH or μH unless otherwise noted.
- 6. VOLTAGE AND CURRENT:
or - V :
DC voltage (V) at no input signal unless otherwise noted.
mA or - mA :
DC current at no input signal unless otherwise noted.
- 7. OTHERS:
 - ⊙ or ● : Adjusting point.
 - ⊖ : Measurement point.
 - The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- 8. SCH-□ ON THE SCHEMATIC DIAGRAM:
 - SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

- | | |
|--------------------------------|----------------------------------|
| S101: AUDIO/VIDEO | S26: CENTER LEVEL-REAR LEVEL + |
| S102: LEARN-RESET | S27: EFFECT LEVEL - |
| S1: RECEIVER POWER | S28: EFFECT LEVEL + |
| S2: MUTE | S29: FUNCTION |
| S3: MASTER VOLUME - | S30: TAPE2 MONITOR |
| S4: MASTER VOLUME + | S31: DIRECT V. SEL |
| S5: TV POWER | S32: SLEEP RETURN |
| S6: 1 | S33: DISC SELECT - (DISC SIDE A) |
| S7: 2 | S34: DISC SELECT + (DISC SIDE B) |
| S8: 3 | S35: DECK I (VCR CH -) |
| S9: BAND TV FUNC | S36: DECK II (VCR CH +) |
| S10: 4 | S37: CD/LD |
| S11: 5 | S38: TAPE/VCR |
| S12: 6 | S39: TAPE/VCR |
| S13: 0/10 | S40: TAPE/VCR |
| S14: 7 | S41: CD/LD |
| S15: 8 | S42: TAPE/VCR |
| S16: 9 | S43: TAPE/VCR |
| S17: FREQUENCY TV VOLUME - | S44: POWER CD/LD |
| S18: FREQUENCY TV VOLUME + | S45: POWER TAPE/VCR |
| S19: STATION TV CHANNEL - | S46: ASC1 |
| S20: STATION TV CHANNEL + | S47: ASC2 |
| S21: SURR MODE | S48: TAPE SELECT TV/VCR |
| S22: 3CH LOGIC | S49: TAPE SELECT TV/VCR |
| S23: TEST TONE | S50: TAPE SELECT TV/VCR |
| S24: CENTER MODE (DELAY TIME) | S51: TAPE SELECT TV/VCR |
| S25: CENTER LEVEL-REAR LEVEL - | |

- NOTE
- : Indicates a chip resistor.
 - ⊕ : Indicates a chip capacitor.
 - : Indicates a chip transistor.
 - : Indicates a chip diode.



9.2 FOR CU-VSX082 (AXD1384)

SCHEMATIC DIAGRAM

NOTE)

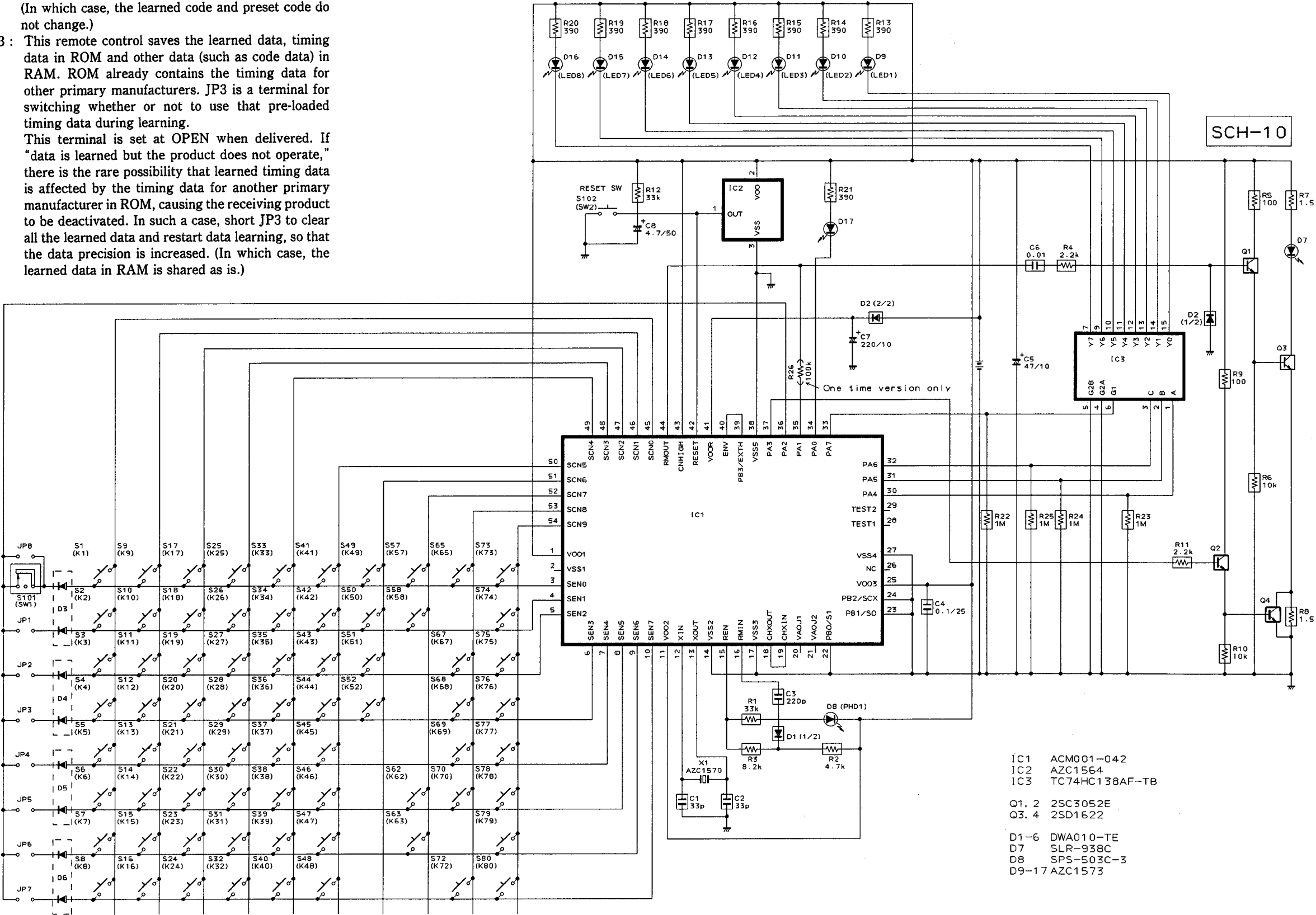
JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.

This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

NOTE

- Indicates a chip resistor.
- Indicates a chip capacitor.
- Indicates a chip transistor.
- Indicates a chip diode.



SWITCHES

- S101: CENT. BAL. / REAR REAR BAL.
- S102: RESET
- S1: VCR1
- S2: VCR2
- S3: LD
- S4: TV
- S5: CD
- S6: TUNER
- S7: DECK 1
- S8: DECK 2
- S9: DAT
- S10: MODE CHECK
- S11: LEARN
- S12: EDIT
- S13: MULTI COMMAND
- S14: M. CLEAR
- S15: POWER
- S16: REC
- S17: REC
- S18: (SEARCH)
- S19: (SEARCH)
- S20: (SEARCH)
- S21: (SEARCH)
- S22: (SEARCH)
- S23: (SEARCH)
- S24: (SEARCH)
- S25: TV/VCR (+10)
- S26: SELECT (DISP)
- S27: TV FUNC (BAND)
- S28: 1
- S29: 2
- S30: 3
- S31: 4
- S32: 5
- S33: 6
- S34: 7
- S35: 8
- S36: 9
- S37: 10/0
- S38: 11/PGM
- S39: 12/CLEAR
- S40: TV VOL/DISC SEL +
- S41: TV VOL/DISC SEL -
- S42: FREQ/CH (A)
- S43: FREQ/CH (V)
- S44: RECEIVER POWER
- S45: AUTO SOURCE CONTROL 1
- S46: AUTO SOURCE CONTROL 2
- S47: SLEEP
- S48: VCR/TAPE1
- S49: PHONO
- S50: TUNER
- S51: LD
- S52: CD
- S53: TAPE2 MONITOR
- S54: RETURN
- S55: S. BASS
- S56: SIMULATED STEREO
- S57: TEST TONE
- S58: MUTE
- S59: SURR MODE
- S60: 3CH LOGIC
- S61: CENTER MODE
- S62: REAR LEVEL +
- S63: CENTER LEVEL +
- S64: EFFECT LEVEL +
- S65: REAR LEVEL -
- S66: CENTER LEVEL -
- S67: DELAY TIME
- S68: EFFECT LEVEL -
- S69: MASTER VOLUME +
- S70: MASTER VOLUME -

PCB PATTERN

-  : Indicates a chip resistor.
 A  : Indicates a chip capacitor.
 : Indicates a chip transistor.
 : Indicates a chip diode.

A

B

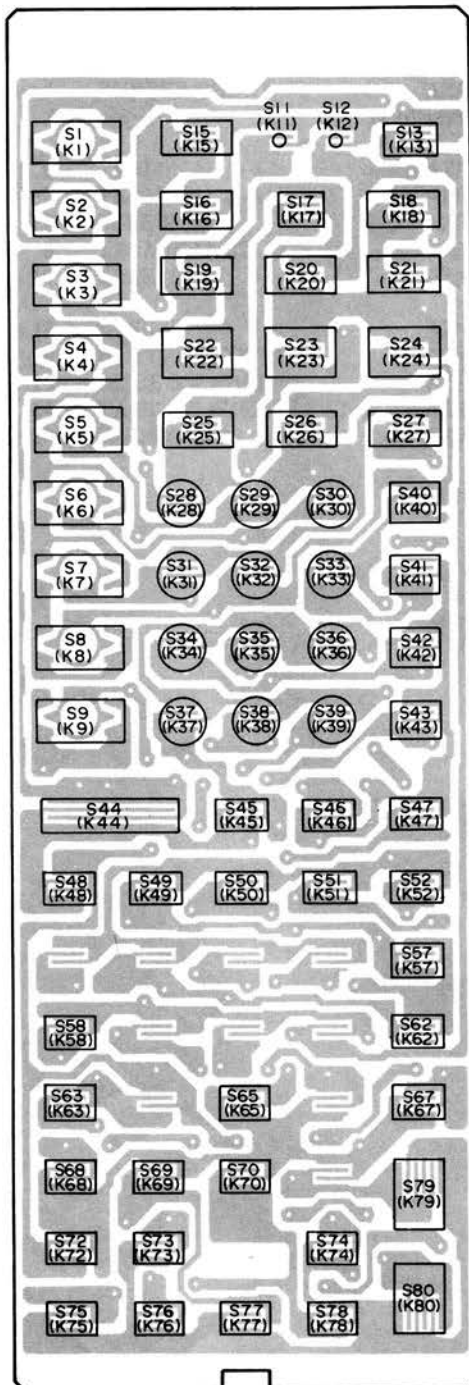
B

C

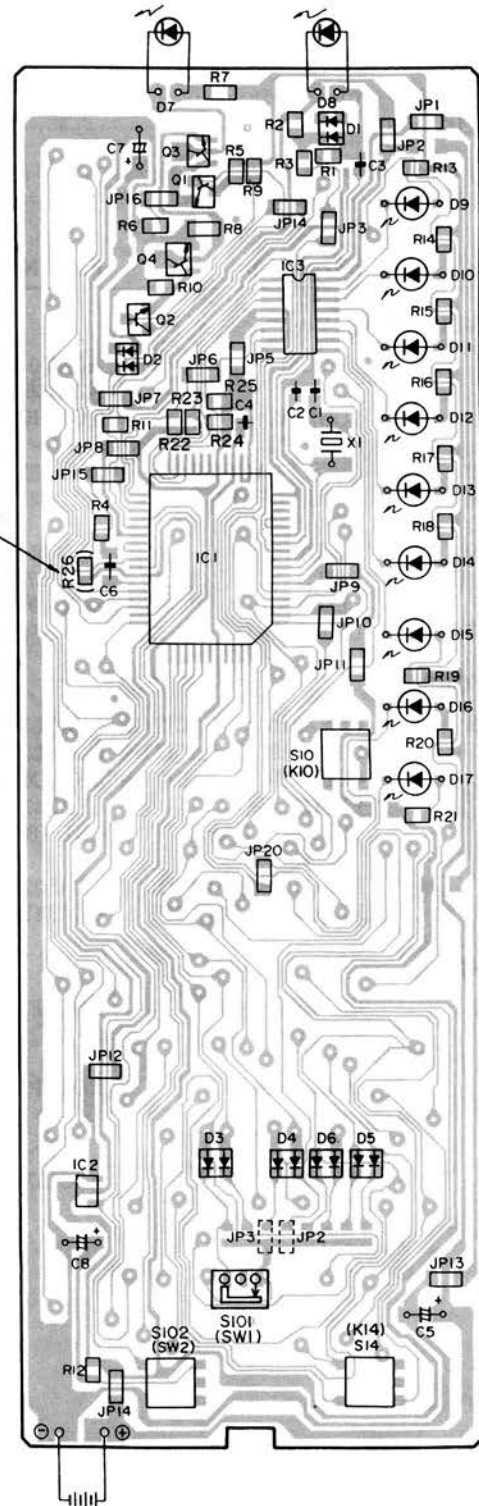
C

D

D



One time version only



PCB PARTS LIST

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω $\rightarrow$ 56 $\times$ 10¹ $\rightarrow$ 561 RD1/8PM $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix}$ J

47k Ω $\rightarrow$ 47 $\times$ 10³ $\rightarrow$ 473 RD1/4PS $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix}$ J

0.5 Ω $\rightarrow$ 0R5 RN2H $\begin{bmatrix} 0 & R & 5 \end{bmatrix}$ K

1 Ω $\rightarrow$ 010 RS1P $\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ 562 $\times$ 10¹ $\rightarrow$ 5621 RM1/4PC $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix}$ F

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

SEMICONDUCTORS

IC1	μ -COM	ACM001-042
IC2	IC	AZC1564
IC3	LOGIC IC	TC74HC138AF-TB
Q1, 2	CHIP TRANSISTOR	2SC3052E
Q3, 4	TRANSISTOR	2SD1622
D1-6	DIODE	DWA010-TE
D9-17	LED	AZC1573
D7	LED	SLR-938C
D8	DIODE	SPS-503C-3

CAPACITORS

C1, 2	CERAMIC CAPACITOR	CCDSL330J50
C3	CERAMIC CAPACITOR	CCDSL221J50
C4	CERAMIC CAPACITOR	CKDYX104M25
C5	ELECT. CAPACITOR	CEAS470M10
C6	CERAMIC CAPACITOR	CKDYB103K50
C7	ELECT. CAPACITOR	CEAS221M10
C8	ELECT. CAPACITOR	CEAS4R7M50

RESISTORS

R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
	Other resistors	RD1/8PM $\begin{bmatrix} \square & \square & \square \end{bmatrix}$ J

OTHERS

X1	RESONATOR	AZC1570
----	-----------	---------

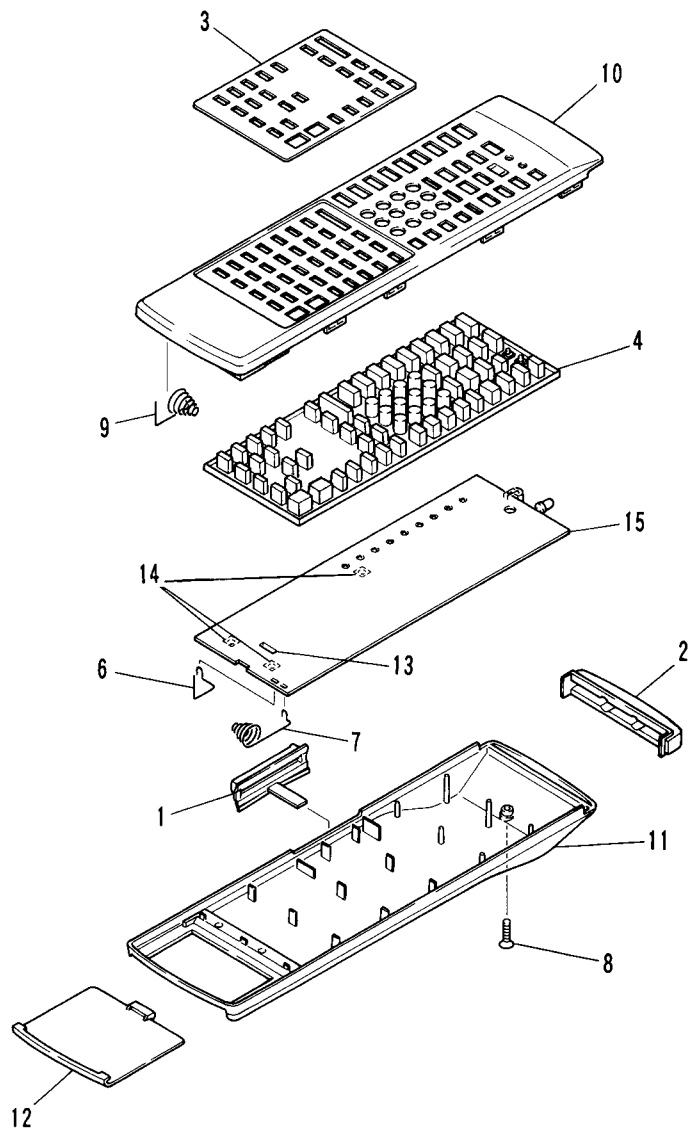
EXPLODED VIEW AND PARTS LIST

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE	AZA1980
	4	RUBBER SHEET	AZA1981
	5	.....	
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (-)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2253
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW (S101)	AZS1132
	14	TACT SW (S102, S10, S14)	AZS1133
NSP	15	P. C. BOARD	AZW1130



10. FOR VSX – D503/KUXJ, SDXJ AND VSX – D513S/KCXJ TYPES

NOTES :

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The △ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “☉” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

10.1 FOR VSX – D503S/KUXJ

■ CONTRAST OF MISCELLANEOUS PARTS

VSX – D503S/KUXJ and KU have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX – D503S/KU	VSX – D503S/KUXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	
△	FU3, FU4 (4A/125V)	AEK – 125	REK1066	
△	AC power cord	ADG1126	ADG1152	
	Binder	AEC – 093	.....	
NSP	Binder	.....	Z09 – 057	Corresponds to AEC – 093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	.....	
	PCB mold	.....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	.....	
	PCB mold	.....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2744	AHD2675	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	.....	AHG1217	

FM/AM TUNER MODULE

AXQ3112 and AXQ1012 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AXQ1012	AXQ3112	
	AM RF tuning block	AXX1041	AXX1025	

10.2 FOR VSX – D503S/SDXJ

■ CONTRAST OF MISCELLANEOUS PARTS

VSX – D503S/SDXJ and SD have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX – D503S/SD	VSX – D503S/SDXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	*1
△	FU1 – FU4 (4A/125V)	AEK – 125	REK1066	
	Binder	AEC – 093	.....	
NSP	Binder	.....	Z09 – 057	Corresponds to AEC – 093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	.....	
	PCB mold	.....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	.....	
	PCB mold	.....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2746	AHD2677	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	.....	AHG1217	

*1 : Concerning the differences between AXQ1012 and AXQ3112, refer to page 66.

10.3 FOR VSX – D513S/KCXJ

■ CONTRAST OF MISCELLANEOUS PARTS

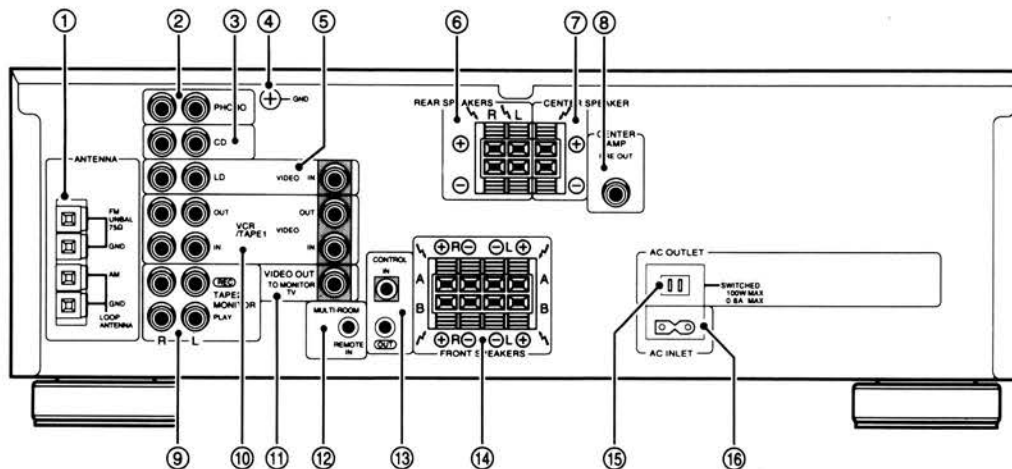
VSX – D513S/KCXJ and KC have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX – D513S/KC	VSX – D513S/KCXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	*1
△	FU3, FU4 (4A/125V)	AEK – 125	REK1066	
	Binder	AEC – 093	.....	
NSP	Binder	.....	Z09 – 057	Corresponds to AEC – 093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	.....	
	PCB mold	.....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	.....	
	PCB mold	.....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2745	AHD2676	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	.....	AHG1217	

*1 : Concerning the differences between AXQ1012 and AXQ3112, refer to page 66.

11. PANEL FACILITIES

- Illustration shows U.S. model.



① **FM/AM ANTENNA** terminals

Connect to FM and AM antennas.

② PHONO input jacks

Connect to the output cables from a turntable.

③ CD input jacks

Connect to the output jacks of a compact disc player.

④ GND terminal

Connect the turntable ground lead to this terminal.
Loosen the screw, connect the ground lead, and then tighten the screw.

⑤ LD input jacks

Connect to an LD player's output jacks (audio, video).

⑥ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

Use speakers with impedance of 8 Ω to 16 Ω .

⑦ CENTER SPEAKER terminals

Connect the center speaker to these terminals.
Use center speakers with impedance of $8\ \Omega$ to $16\ \Omega$.

⑧ CENTER AMP PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

⑨ **TAPE 2 MONITOR jacks**

Connect to audio components such as a second cassette deck or graphic equalizer.

⑩ **VCR/TAPE 1 jacks**

Connect to the first cassette deck or to a VCR. With a VCR, also connect the video jacks.

⑪ **VIDEO OUT (TO MONITOR TV) jack**

Connect to a monitor TV.

⑫ MULTI-ROOM REMOTE IN jack

Connect to the separately sold MR-100 Multi-Room remote control unit.

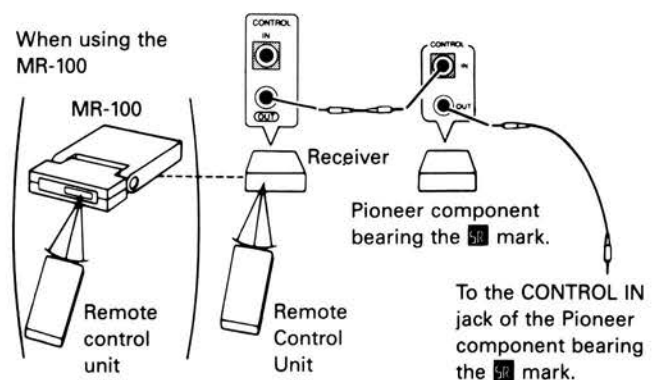
⑬ CONTROL IN/OUT jacks

IN : Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

OUT : Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.



⑭ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.

B: Connect to the second set of speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other. Use speakers with impedance of $8\ \Omega$ to $16\ \Omega$.

⑮ AC OUTLET jack

[SWITCHED 100 W (0.8 A) MAX]

Power supplied through this outlet is turned on and off by the receiver's POWER switch. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

NOTE:

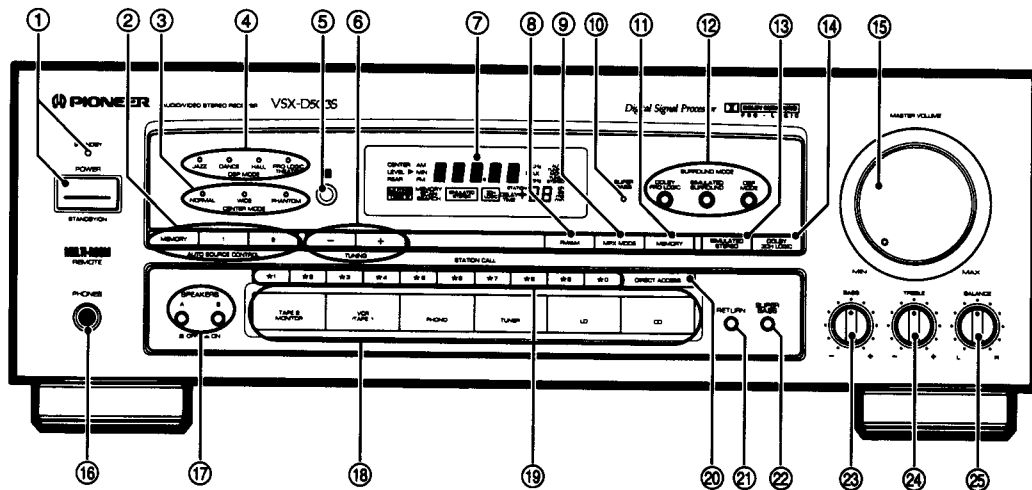
- This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.
 - Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk.
- This can cause the receiver to malfunction.

CAUTION:

DO NOT CONNECT MONITOR OR TV SET.

⑮ AC INLET jack

Connect the supplied power cord here.



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 6 seconds.

② AUTO SOURCE CONTROL buttons

1, 2 buttons:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:

Use when memorizing settings to a 1, 2 button.

③ CENTER MODE indicators

④ DSP MODE indicators

⑤ Remote sensor window

⑥ TUNING buttons

+: Performs tuning from the currently displayed station frequency in ascending frequency order.

-: Performs tuning in order of descending frequencies.

⑦ Display section

⑧ FM/AM button

Use this to switch between FM and AM frequency band reception.

⑨ MPX MODE button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:

Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:

Use if the signal is weak and there is too much noise when receiving an FM stereo broadcast. Reception becomes monaural, but noise is reduced.

NOTE:

This button has no effect on reception of AM broadcasts.

⑩ SUPER BASS indicator

Lights when SUPER BASS is ON.

⑪ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.

⑫ SURROUND MODE buttons

⑬ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, AM or TV broadcasts). "SIMULATED STEREO" appears on the display section.

NOTE:

This effect is not produced through the rear speakers.

⑭ DOLBY 3CH LOGIC button

This switches on and off the DOLBY 3CH LOGIC. When set to the on position, "3CH LOGIC" is displayed.

⑮ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑯ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑰ SPEAKERS buttons (A, B) ■ OFF ■ ON

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑱ Input selector buttons

TAPE 2 MONITOR

: Press when performing playback on a second cassette deck and when monitoring recording.

VCR/TAPE 1 : Press when performing playback on a VCR unit or cassette deck.

PHONO : Press when playing records on a turntable.

TUNER : Press when listening to radio broadcasts.

LD : Press when performing playback on an LD player.

CD : Press when playing compact discs on a CD player.

⑲ STATION CALL buttons

Up to 30 FM or AM stations can be preset at random.

These buttons are used to preset and recall desired broadcasting stations, FM AUTO/MONO mode.

⑳ DIRECT ACCESS tuning button

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.

㉑ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR Off
- SURROUND MODE Off
- MUTING Off
- FUNCTION TUNER

Returns you to the last station you were receiving. When reception is not possible, auto tuning (UP) starts from that frequency.

NOTE:

If no sound is output after the RETURN button is pressed, make sure that SPEAKERS buttons are turned on.

㉒ SUPER BASS button

Switch ON when you want to boost bass. The SUPER BASS indicator lights.

㉓ BASS control

Use to adjust the low-frequency level.

Turn clockwise to boost bass, and counterclockwise to attenuate bass.

㉔ TREBLE control

Use to adjust the high-frequency level.

Turn clockwise to boost treble, and counterclockwise to attenuate treble.

㉕ BALANCE control

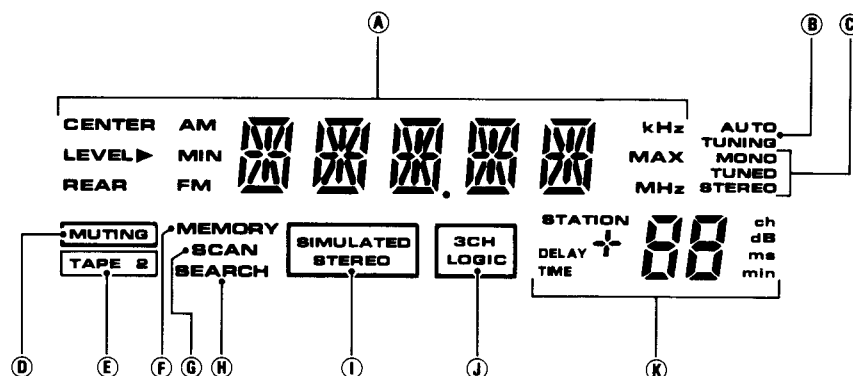
Use to adjust the sound volume balance between left and right speakers.

L: Decrease the sound on the right side.

R: Decrease the sound on the left side.

Usually, left and right volume levels should be the same.

DISPLAY SECTION



Ⓐ Character/Level display

- Displays function, frequency, and "SLEEP".
- It also displays the level settings during adjustment. During level display, MIN and MAX light.

Ⓑ AUTO TUNING indicator

Lights up when in the auto tuning mode.

Ⓒ Tuning indicator

- TUNED** : Lights up when a station is tuned in during TUNER operation.
- MONO** : Lights up when the FM MONO mode is selected with the MPX MODE button.
- STEREO** : Lights up when a stereo FM broadcast is being received.

Ⓓ MUTING indicator

Flashes when MUTING is ON.

Ⓔ TAPE 2 indicator

Lights up when the input selector is set to TAPE 2 MONITOR ON.

Ⓕ MEMORY indicator

When presetting stations, this lights when the MEMORY button is pressed.

Ⓖ SCAN indicator

Lights up during memory scan operation.

NOTE:

Memory scan cannot be operated in this unit.

Ⓗ SEARCH indicator

Lights during Return mode operation.

Ⓛ SIMULATED STEREO indicator

Ⓜ DOLBY 3CH LOGIC indicator

Ⓚ STATION/DELAY TIME/LEVEL/SLEEP TIME display

- Indicates the channel (ch) selected with the STATION CALL buttons.
- Indicates delay time (ms) when using SIMULATED SURROUND or DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).

12. SPECIFICATIONS

Amplifier section

Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output (in Stereo Mode)	
Front	110 W + 110 W (20 Hz to 20 kHz, 0.09 %, 8 Ω)
Continuous Power Output (When using SURROUND MODE)	
Rear only driven	20 W + 20 W (1 kHz, 0.8 %, 8 Ω)
Front and Center driven	
Front	75 W + 75 W (1 kHz, 0.8 %, 8 Ω)
Center (Only with DOLBY PRO LOGIC SURROUND)	75 W (1 kHz, 0.8 %, 8 Ω)
Dynamic Power (2 Ω/ 4 Ω/8 Ω)	265 W/240 W/170 W
Input (Sensitivity/Impedance)	
PHONO MM	2.8 mV/47 kΩ
CD, VCR/TAPE 1, TAPE 2, LD	200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)**	
PHONO MM	100 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ± 0.5 dB
CD, VCR/TAPE 1, TAPE 2, LD	10 Hz to 100,000 Hz ± 0.5 dB
Output (Level/Impedance)	
VCR/TAPE 1 REC, TAPE 2 REC	200 mV/2.2 kΩ
Tone Control	
BASS	± 8 dB (100 Hz)
TREBLE	± 8 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	72 dB
CD, VCR/TAPE 1, TAPE 2, LD	96 dB
Signal-to-Noise Ratio (EIA, at 1 W 1kHz)	
PHONO MM	75 dB
CD, VCR/TAPE 1, TAPE 2, LD	79 dB

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.

** Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)	
VCR/TAPE 1, LD	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR/TAPE 1, MONITOR	1 Vp-p/75 Ω
Frequency Response	
VCR/TAPE 1, LD → MONITOR	5 Hz to 10 MHz ± 0.5 dB
Signal-to-Noise Ratio	55 dB
Cross Talk	55 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 11.2 dBf, IHF (1.0 μV/75 Ω)
50 dB Quieting Sensitivity	Mono: 16.8 dBf
	Stereo: 38.6 dBf
Signal-to-Noise Ratio	Mono: 73 dB (at 85 dBf)
	Stereo: 70 dB (at 85 dBf)
Distortion	Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity	60 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz ± 1 dB
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	
U.S. model	530 kHz to 1,700 kHz
Multi-voltage model	531 kHz to 1,602 kHz (9 kHz step)
	530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna)	350 μV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	
U.S. model	AC 120 V, 60 Hz
Multi-voltage model	AC 110/120-127/220/240 V, 50/60 Hz
Power Consumption	
U.S. model	270 W
Multi-voltage model	870 W
Dimensions	420 (W) x 147 (H) x 349 (D) mm
Weight (without package)	
U.S. model	9.2 kg
Multi-voltage model	9.3 kg

Furnished Parts

FM Antenna	1
AM Loop Antenna	1
Dry Cell Batteries	
size "AAA" (IEC LR03/AM-4)	2
Remote Control Unit	1
Operating Instructions	1
Power Cord	1

NOTE:

Specifications and the design are subject to possible modifications without notice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.