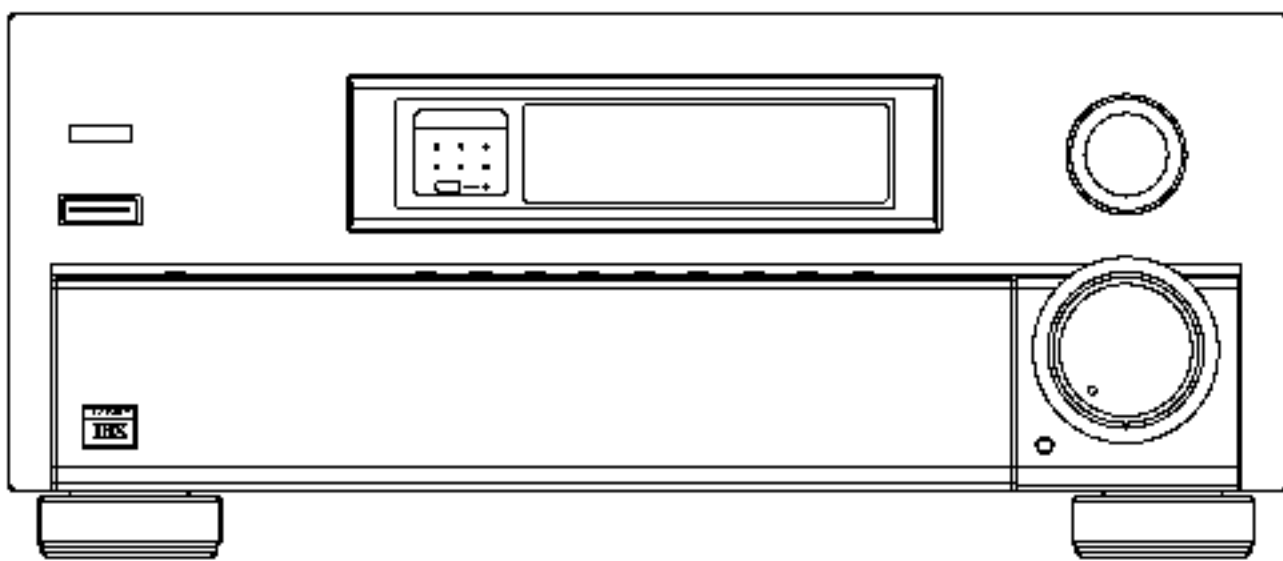


Service Manual



ORDER NO.
RRV 1 8 1 4

AUDIO/VIDEO STEREO AMPLIFIER VSA-E06

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.
	VSA-E06		
HY	O	AC220 – 230V	AC240V, *
HV	O	AC230V	AC240V, *

* : Alter the wiring of the Power-supply block at the primary winding of Power-transformer referring to the "Line Voltage Selection" described in Service Manual.

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O.Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

1. SAFETY INFORMATION

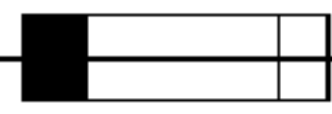
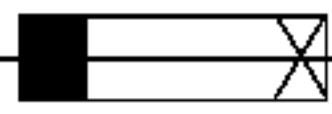
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly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

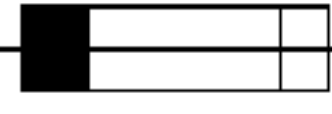
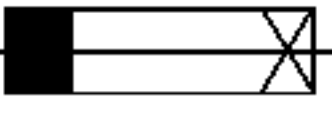
NOTICE

(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.

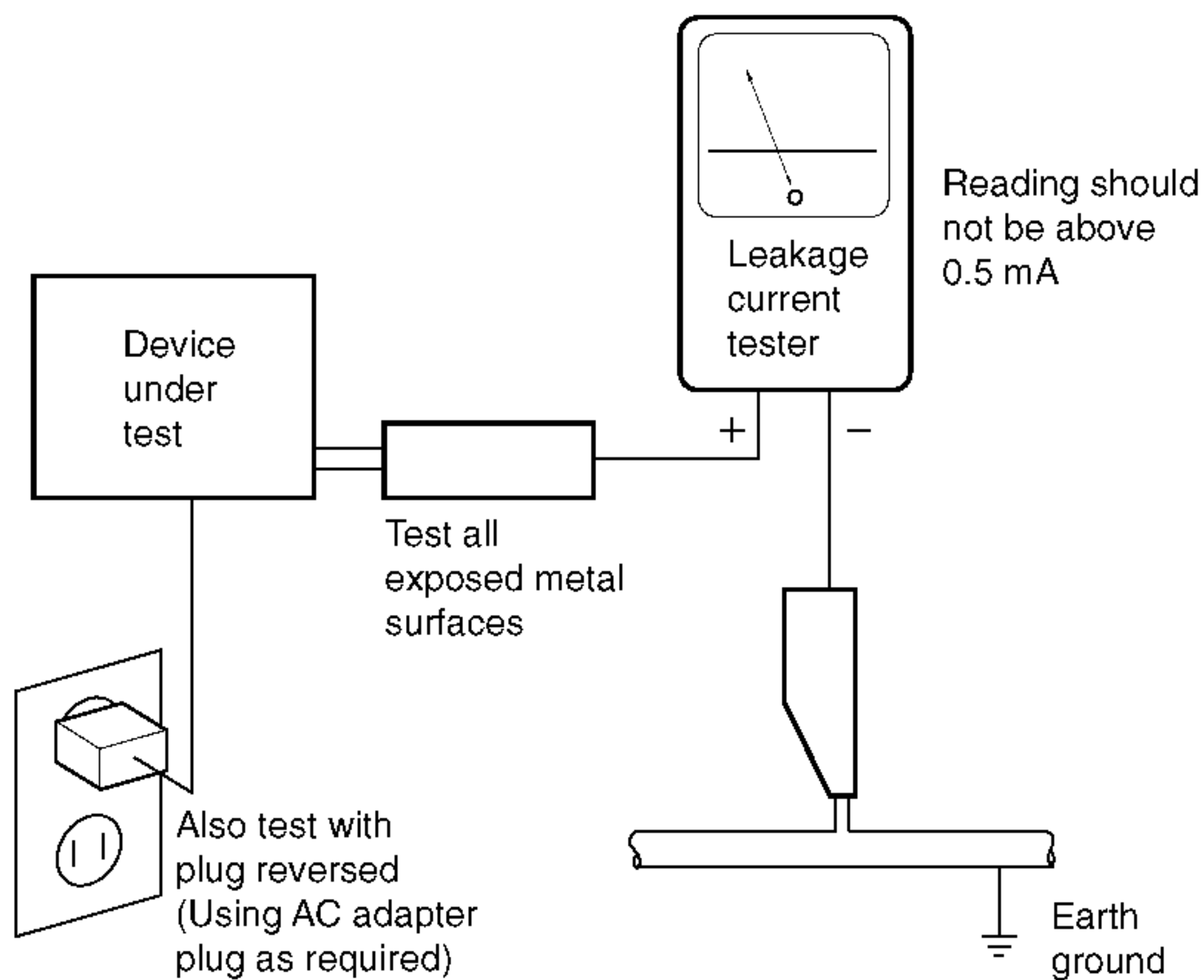
(FOR USA MODEL ONLY)

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 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



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.

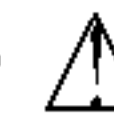
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

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.

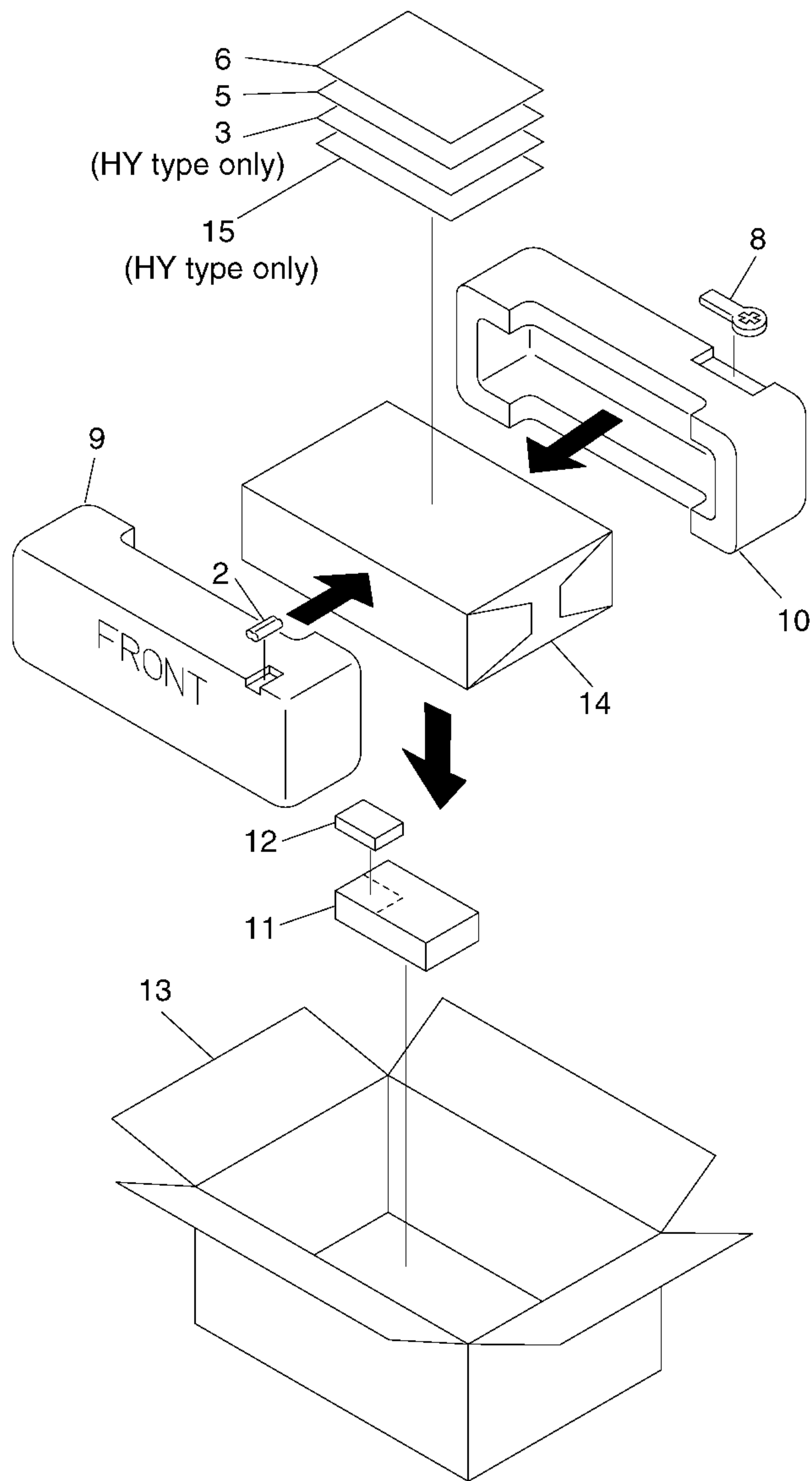
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

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.
- Screws adjacent to  mark on product are used for disassembly.

2.1 PACKING



(1) PARTS LIST

Mark	No.	Description	Parts No.
NSP	1		
	2	Alkaline Dry Cell Batteries (LR6, AA)	AEX1007
	3	Operating Instructions	See Contrast table (2)
	4		
	5	Operating Instructions (English)	ARB7123
NSP	6	Warranty Card	ARY7008
	7		
	8	Remote Control Unit (CU-AV014)	AXD7149
	9	Front Pad	AHA7167
	10	Rear Pad	AHA7168
	11	Sub Pad A	AHA7171
	12	Sub Pad B	AHA7172
	13	Packing Case	AHD7471
	14	Packing Sheet	RHC1023
	15	Operating Instructions	See Contrast table (2)

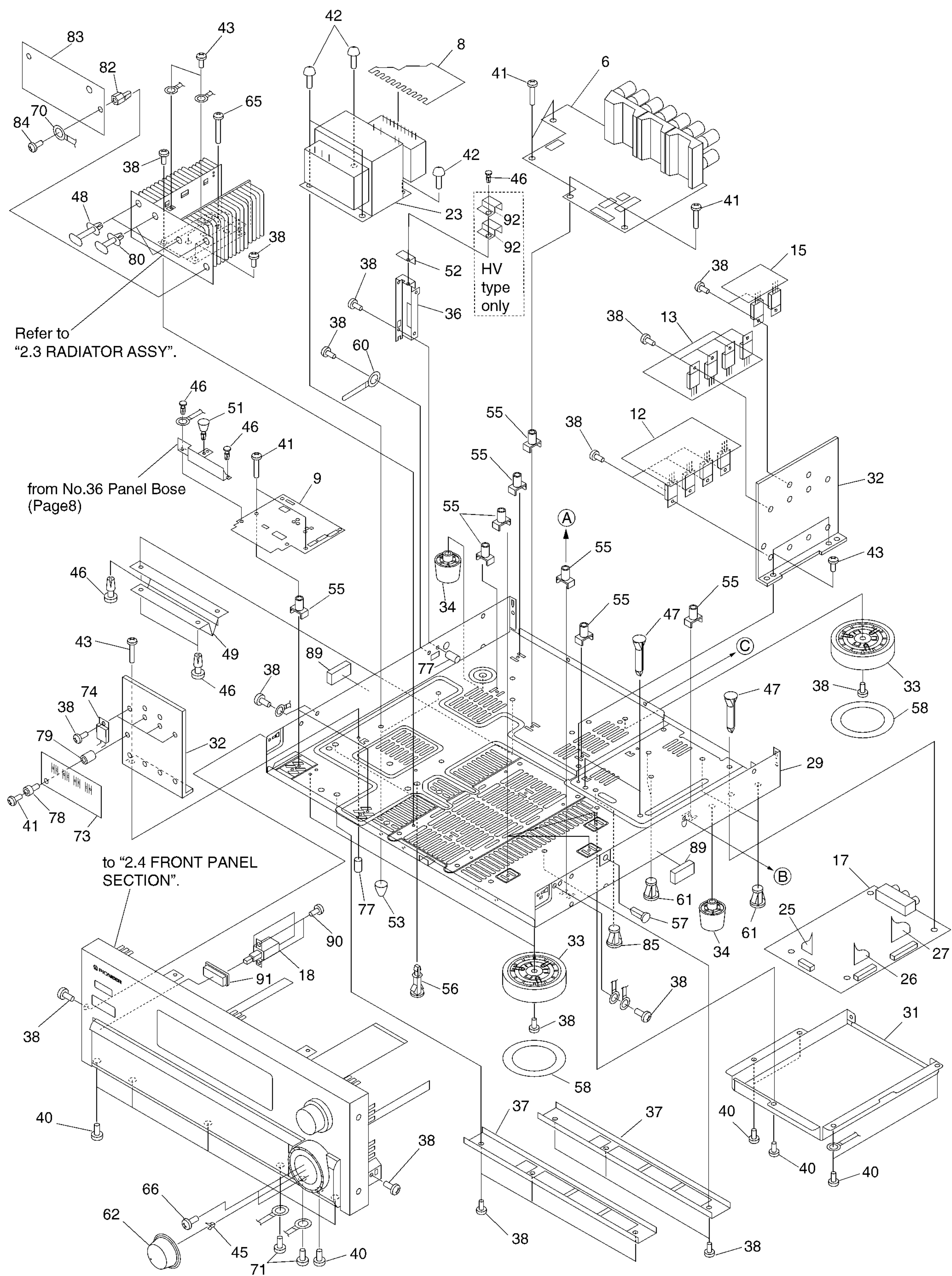
(2) CONTRAST TABLE

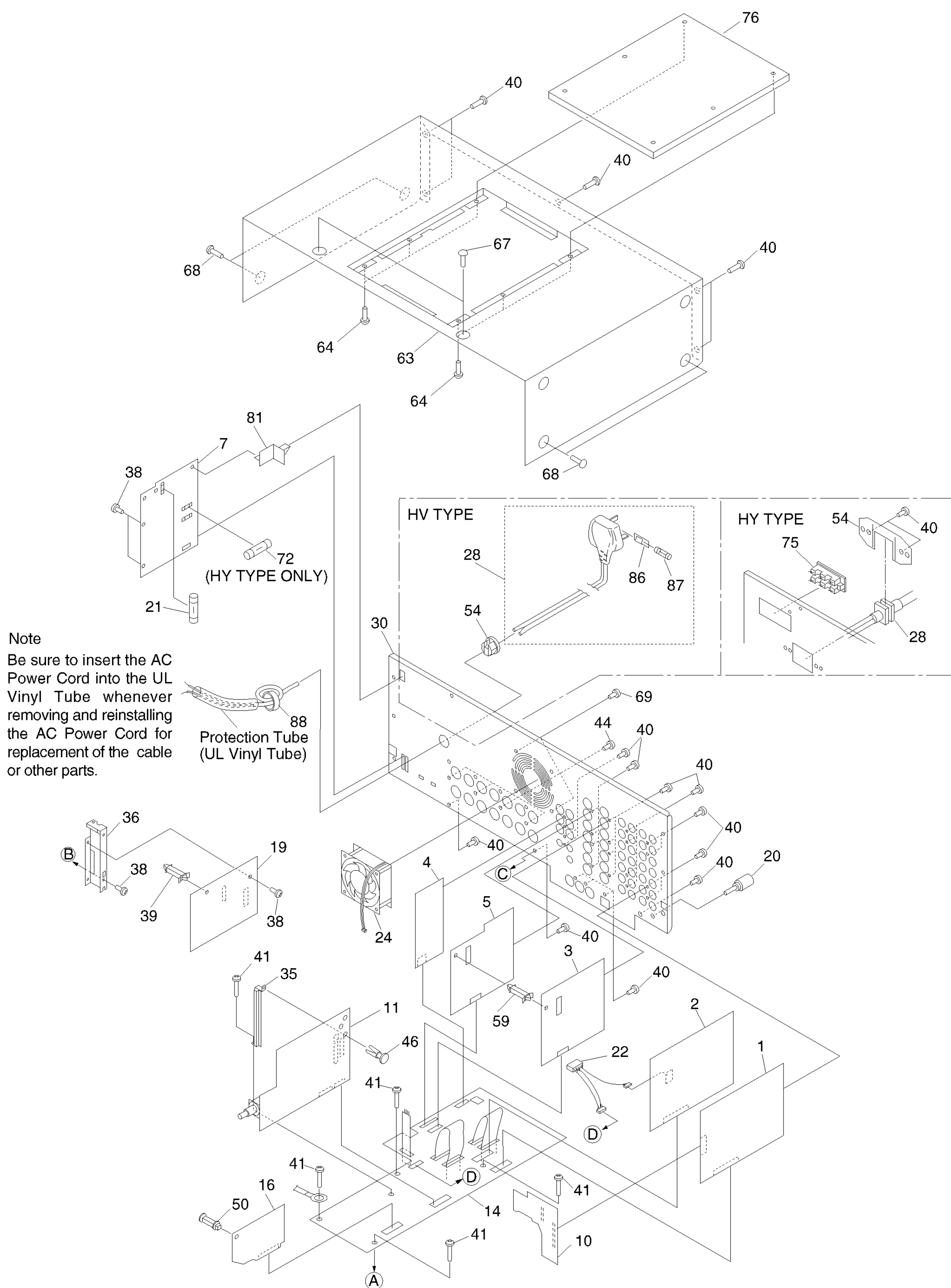
HV and HY types have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.		Remarks
			HY TYPE	HV TYPE	
	3	Operating Instructions (French/German/Italian)	ARE7117	Not used	
	15	Operating Instructions (Dutch/Swedish/Spanish/Portuguese)	ARE7121	Not used	

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2.2 EXTERIOR





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(1) PARTS LIST

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
NSP	1	AUDIO ASSY	AWZ8764	NSP	46	Rivet	AEC – 441
	2	AUDIO/VIDEO ASSY	AWZ8767		47	PCB Holder	AEC7073
	3	VIDEO ASSY	AWZ8770		48	Card Spacer	REC1156
	4	PRE–OUT & SR ASSY	AWZ8775		49	Barrier	AEC7089
	5	S–VIDEO ASSY	AWZ8771		50	Mini Card Spacer	AEC7092
NSP	6	SP TERMINAL ASSY	AWZ8789	NSP	51	T Type Push Rivet	AEC7093
	7	PRIMARY ASSY	See Contrast table (2)		52	Barrier	AEC7095
	8	TRANS TERMINAL ASSY	AWZ8800		53	Stud Cover	AEC7096
	9	POWER SUPPLY ASSY	AWZ8847		54	AC Cord Spacer	See Contrast table (2)
	10	CONNECTION ASSY	AWZ8732		55	PCB Mould	AMR1525
NSP	11	MASTER VR ASSY	AWZ8034	NSP	56	Locking Card Spacer	DEC1908
	12	REGULATOR (1) ASSY	AWZ8735		57	Card Spacer	DNK2769
	13	REGULATOR (2) ASSY	AWZ8871		58	Stopper	PNM1134
	14	E VR ASSY	AWZ8033		59	PCB Holder	REC1258
	15	REGULATOR (3) ASSY	AWZ8819		60	Binder	RNE1277
NSP	16	V–AMP ASSY	AWZ8874	NSP	61	PC Support	VEC1749
	17	DOLBY DIGITAL ASSY	AWX7038		62	Volume Knob	AAB7144
	18	POWER SW ASSY	AWZ8731		63	Bonnet	ANE7176
	19	LIMITTER ASSY	AWK7406		64	Screw	BBZ26P080FMC
	20	Terminal Screw	AKE – 031		65	Screw	BBZ30P300FMC
△	21	FU1 Fuse (T4A)	AEK – 514	NSP	66	Screw	BMT30P080FZK
NSP	22	8P Shielded Cable	ADX1941		67	Screw	BBT30P080FNI
△	23	T1 Power Transformer	ATS7178		68	Screw	FBT40P080FNI
△	24	Fan Motor	AXM7012		69	Screw	IBZ30P100FCC
NSP	25	Jumper Wire	D15A10–200–2651		70	Cord With Plug (J39)	DE015VF0
NSP	26	Jumper Wire 11P	D20PYY1115E	NSP	71	Screw	BBZ30P080FZK
NSP	27	Jumper Wire 15P	D20PYY1515E		72	FU3 Fuse (T1A)	See Contrast table (2)
△	28	AC Power Cord	See Contrast table (2)		73	DIODE ASSY	AWZ8838
NSP	29	Chassis	ANA7061		74	D1 – D4 Fast Recovery Diode	F10KF20
NSP	30	Rear Panel	See Contrast table (2)		75	AC Socket 3 – P	See Contrast table (2)
NSP	31	Bottom Plate	ANF7006	NSP	76	Top Cover	AME7371
NSP	32	Sub Heat Sink	ANH7055		77	Stud Cover	AEC7105
	33	Insulator	PNW2020		78	Bush	AEC1293
	34	Foot	REC1263		79	Bush	AEC1602
	35	PCB Holder	ANG1807		80	PCB Spacer	AEC7108
NSP	36	Assy Holder	ANG7121		81	PCB Hinge	AEC7094
	37	Sub Flame	ANG7138		82	Card Spacer	AEC7098
	38	Screw	ABA – 298		83	Shield Plate	ANK7033
	39	PCB Holder	PNW2100		84	Screw	BBZ30P050FMC
	40	Screw (Steel)	ABA1006		85	Cord Spacer	AEC7111
	41	Screw	ABA1018	△	86	Fuse Holder	See Contrast table (2)
	42	Screw (Steel)	ABA1053	△	87	Fuse (5A)	See Contrast table (2)
	43	Screw	ABA1054	△	88	Ferrite Core (L1)	ATX7001
	44	Screw (Steel)	ABA1208	NSP	89	Spacer	AEB1254
	45	Adjust Spring	ABK7013		90	Screw	BPZ30P080FMC
					91	Power Button B	AAD7389
					92	Barrier	See Contrast table (2)

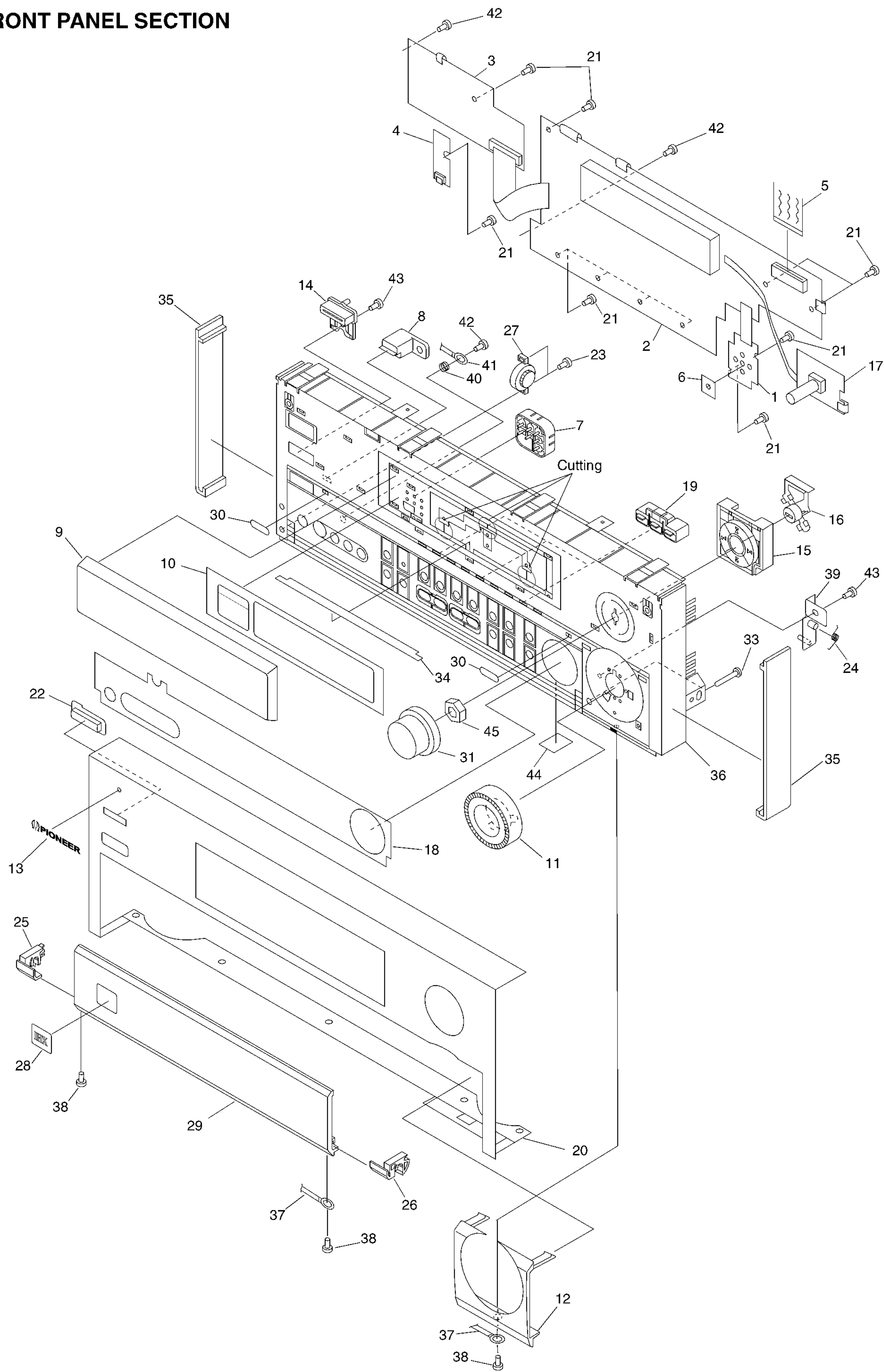
(2) CONTRAST TABLE

HV and HY types have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.		Remarks
			HY TYPE	HV TYPE	
△	7	PRIMARY ASSY	AWZ8791	AWZ8873	
	28	AC Power Cord	ADG1139	VDG1062	
	30	Rear Panel	ANC7580	ANC7584	
△	54	AC Cord Spacer	ANG1153	AEP – 113	
△	72	FU3 Fuse (T1A)	AEK – 508	Not used	
△	75	AC Socket 3-P	AKP – 502	Not used	
△	86	Fuse Holder	Not used	VKR1003	
△	87	Fuse (5A)	Not used	PEK1003	
	92	Barrier	Not used	AEC7118	

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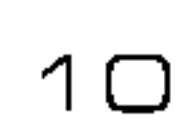
2.4 FRONT PANEL SECTION



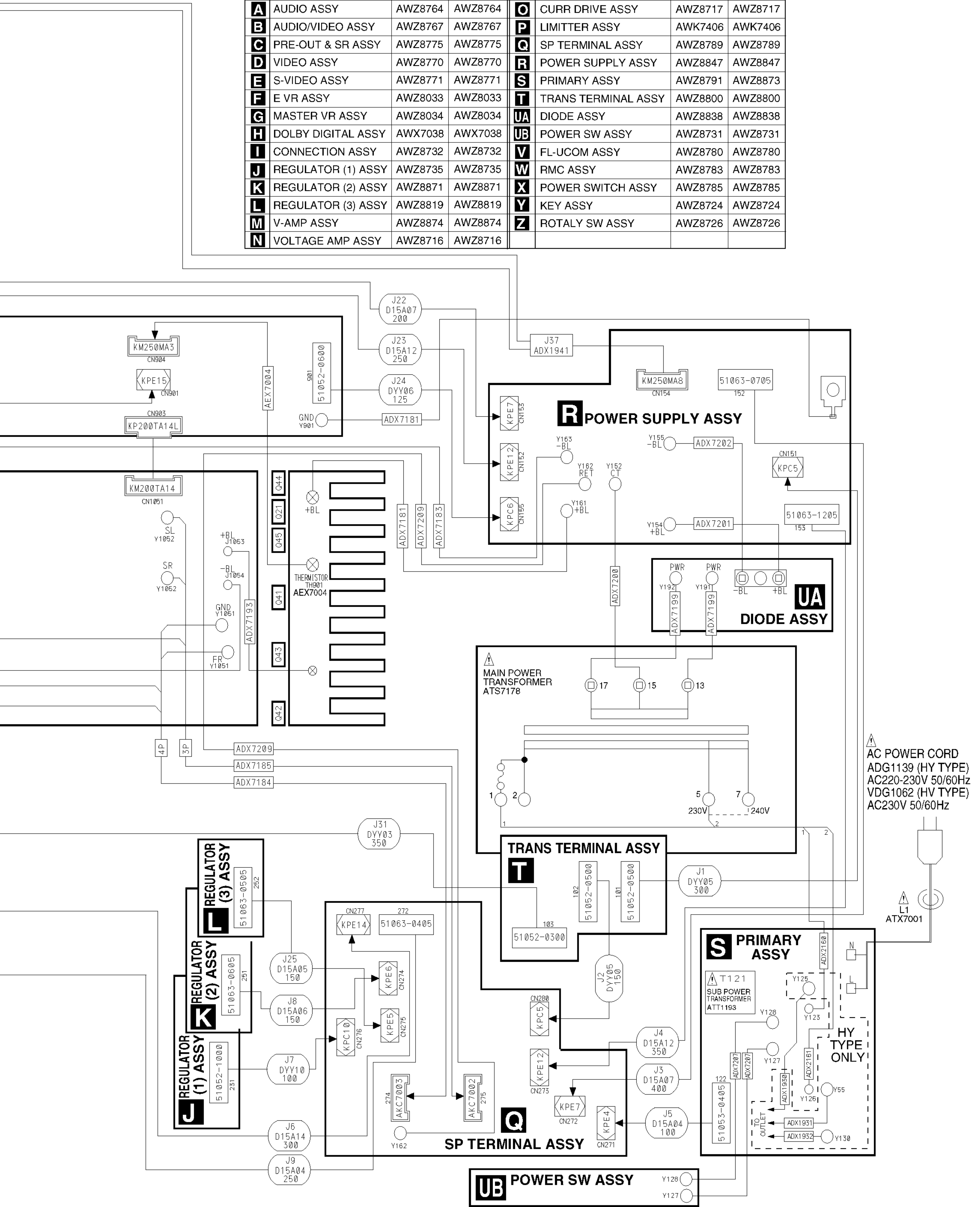
• PARTS LIST

Mark	No.	Description	Parts No.
NSP	1	KEY ASSY	AWZ8724
	2	FL-UCOM ASSY	AWZ8780
NSP	3	RMC ASSY	AWZ8783
NSP	4	POWER SWITCH ASSY	AWZ8785
	5	FFC 29P	ADD7060
	6	Himelon Sheet	AED7019
	7	LED Lens	AAK7377
	8	Standby Lens	AAK7378
	9	Display Panel	AAK7426
	10	FL Filter	AAK7425
	11	Volume Ring	AAK7433
	12	Sub Panel	ANB7101
	13	Name Plate	VAM1051
	14	Power Button A	AAD7388
	15	5-Action Button	AAD7390
	16	Enter Button	AAD7432
NSP	17	ROTALY SW ASSY	AWZ8726
	18	AL Plate	AAH7006
	19	Function Lens	AAK7427
	20	Front Panel	ANB7099
	21	Screw	BPZ30P080FMC
	22	Remocon Window	AAK7432
	23	Screw	BPZ20P080FMC
	24	Spring	ABH7151
	25	Door Hinge L	AMR7182
	26	Door Hinge R	AMR7183
	27	Damper	AXA7053
	28	THX Badge	AAM7006
	29	Door Panel	ANB7100
	30	Door Cushion	AEB7082
	31	Volume Knob S	AAB7128
	32		
	33	Eject Button	AAD7393
	34	PVC Sheet	AEC7107
	35	Side Panel	AAH7005
NSP	36	Panel Base	AMB7445
	37	Cord With Plug	ADH7016
	38	Screw	ABA – 298
NSP	39	Eject Assy	ANG7142
	40	Spring	ABH7115
NSP	41	Cord With Plug	DE020VF0
	42	Screw With Washer	ABA1005
	43	Screw	IPZ30P080FMC
	44	PVC Sheet	AEC7109
	45	Nut	NK70FCU

3.1 OVERALL CONNECTION DIAGRAM

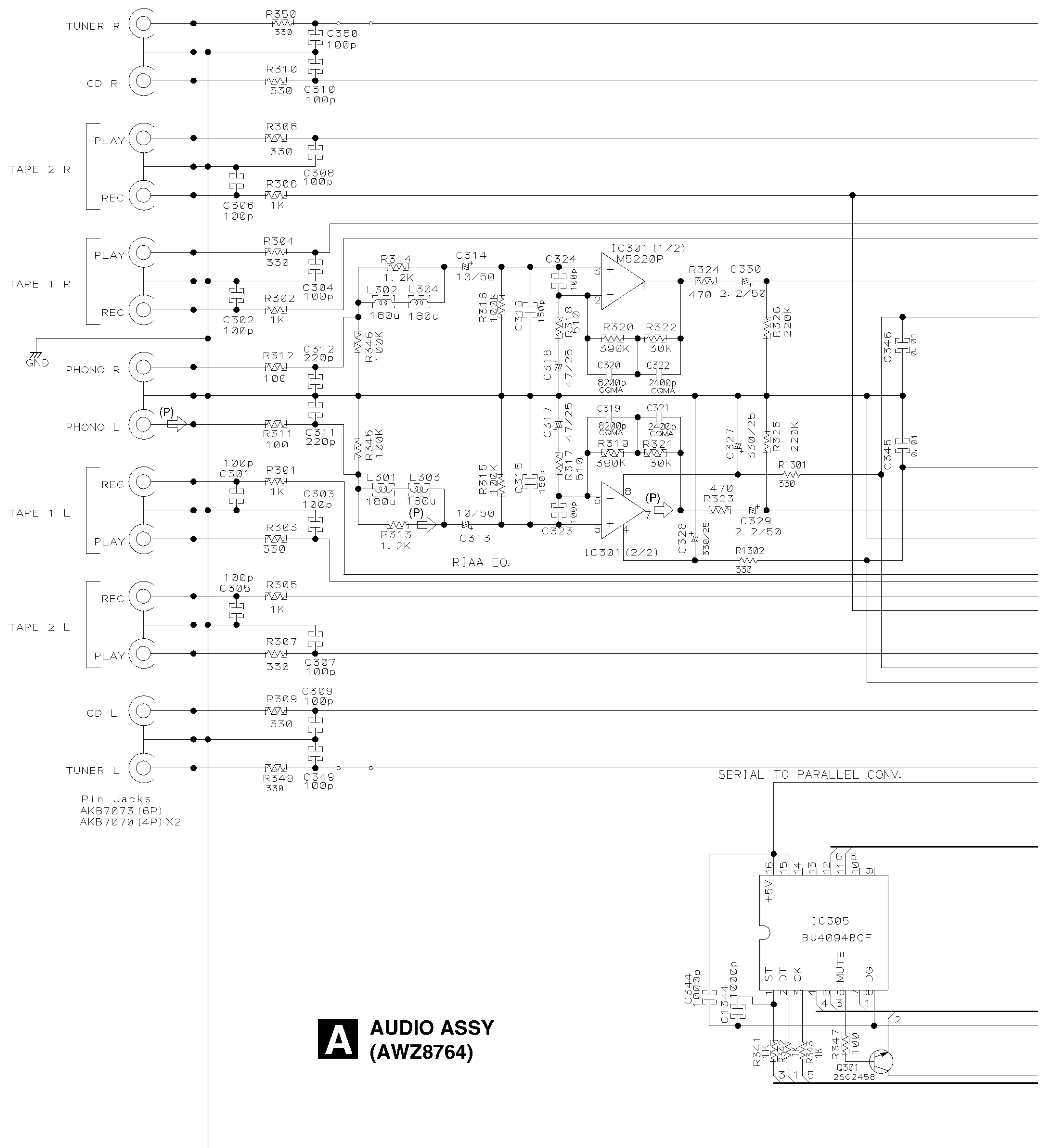


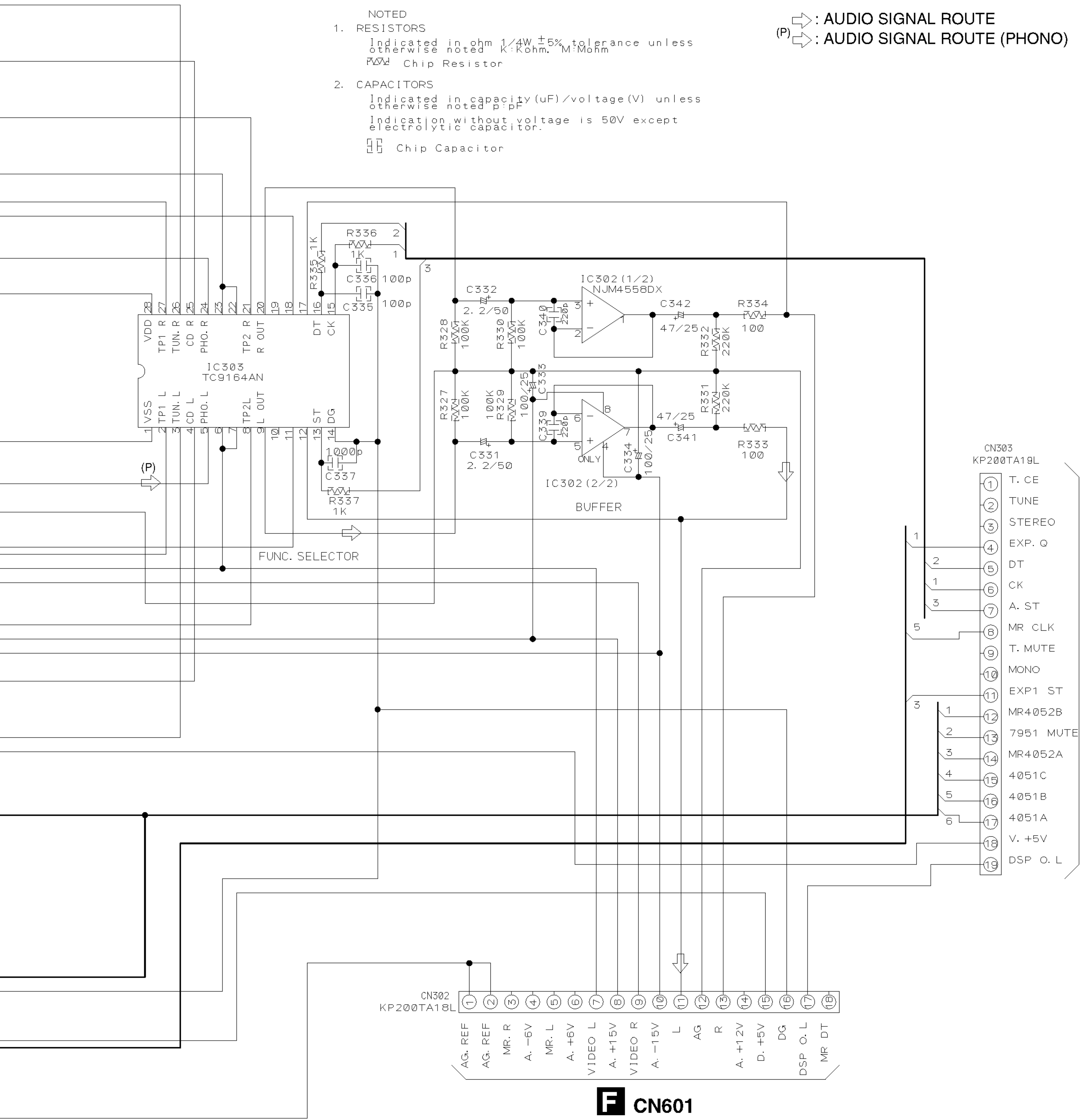
		HY TYPE	HV TYPE			HY TYPE	HV TYPE
A	AUDIO ASSY	AWZ8764	AWZ8764	O	CURR DRIVE ASSY	AWZ8717	AWZ8717
B	AUDIO/VIDEO ASSY	AWZ8767	AWZ8767	P	LIMITTER ASSY	AWK7406	AWK7406
C	PRE-OUT & SR ASSY	AWZ8775	AWZ8775	Q	SP TERMINAL ASSY	AWZ8789	AWZ8789
D	VIDEO ASSY	AWZ8770	AWZ8770	R	POWER SUPPLY ASSY	AWZ8847	AWZ8847
E	S-VIDEO ASSY	AWZ8771	AWZ8771	S	PRIMARY ASSY	AWZ8791	AWZ8873
F	E VR ASSY	AWZ8033	AWZ8033	T	TRANS TERMINAL ASSY	AWZ8800	AWZ8800
G	MASTER VR ASSY	AWZ8034	AWZ8034	UA	DIODE ASSY	AWZ8838	AWZ8838
H	DOLBY DIGITAL ASSY	AWX7038	AWX7038	UB	POWER SW ASSY	AWZ8731	AWZ8731
I	CONNECTION ASSY	AWZ8732	AWZ8732	V	FL-UCOM ASSY	AWZ8780	AWZ8780
J	REGULATOR (1) ASSY	AWZ8735	AWZ8735	W	RMC ASSY	AWZ8783	AWZ8783
K	REGULATOR (2) ASSY	AWZ8871	AWZ8871	X	POWER SWITCH ASSY	AWZ8785	AWZ8785
L	REGULATOR (3) ASSY	AWZ8819	AWZ8819	Y	KEY ASSY	AWZ8724	AWZ8724
M	V-AMP ASSY	AWZ8874	AWZ8874	Z	ROTALY SW ASSY	AWZ8726	AWZ8726
N	VOLTAGE AMP ASSY	AWZ8716	AWZ8716				



VSA-E06

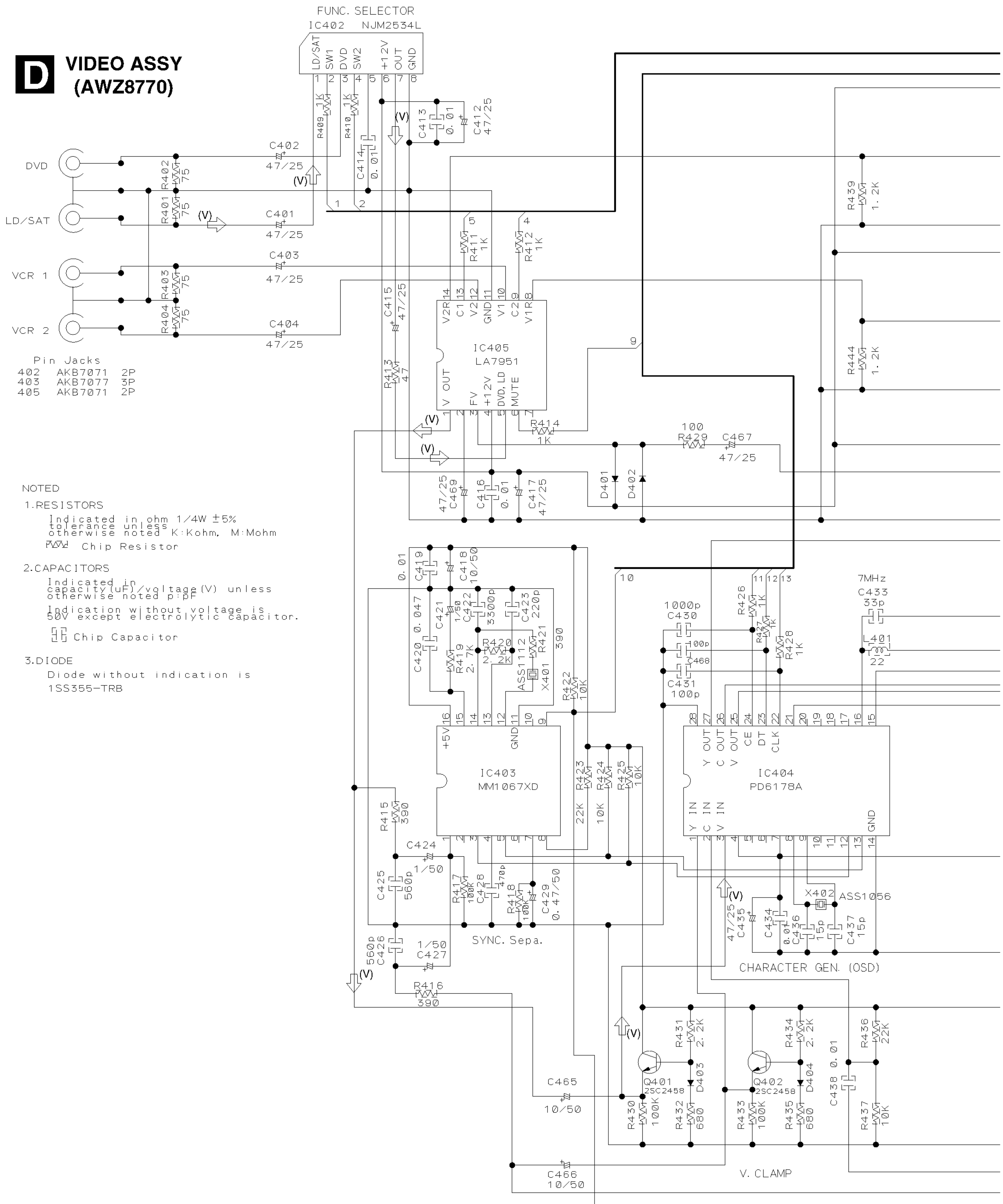
3.2 AUDIO ASSY



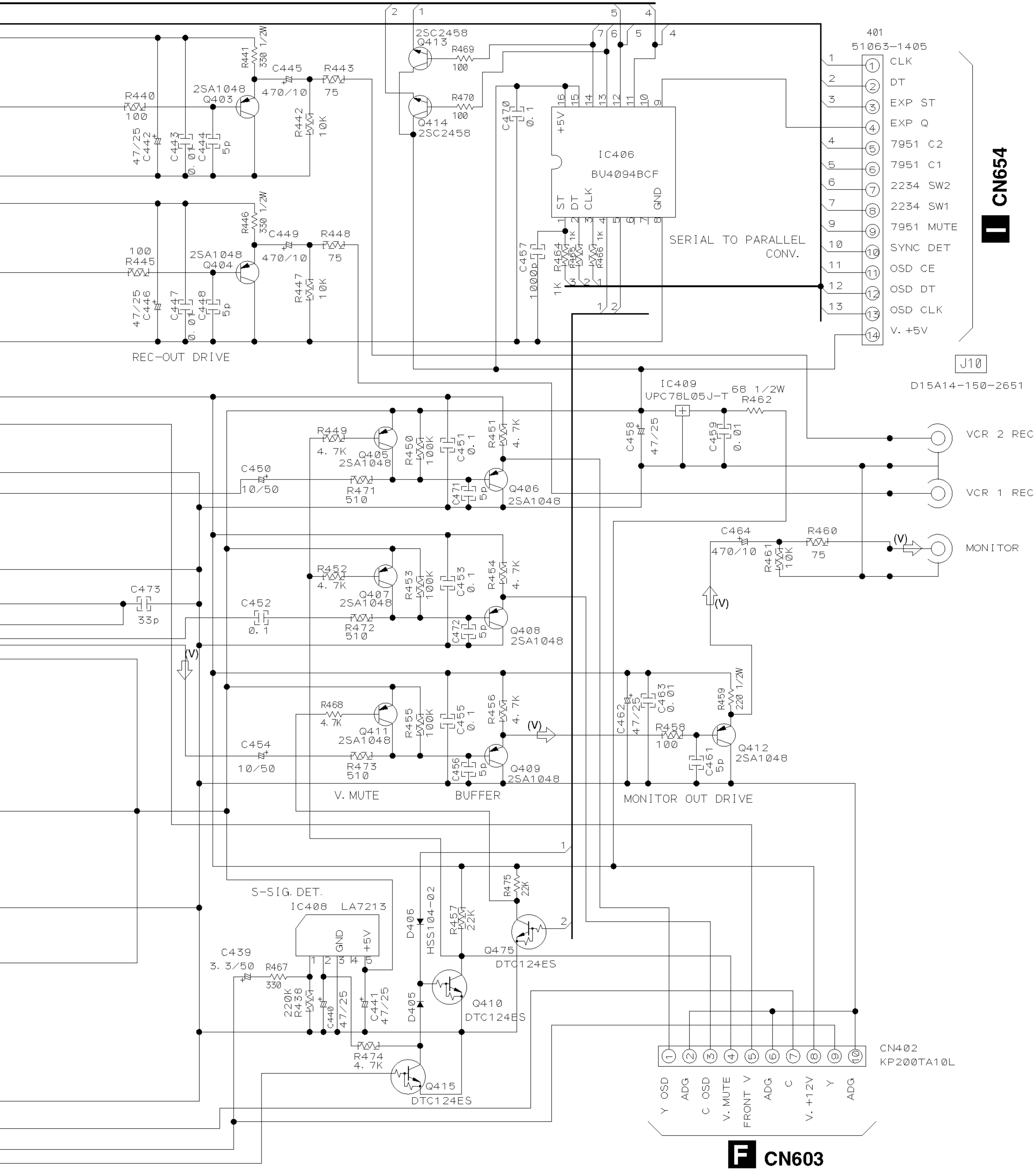


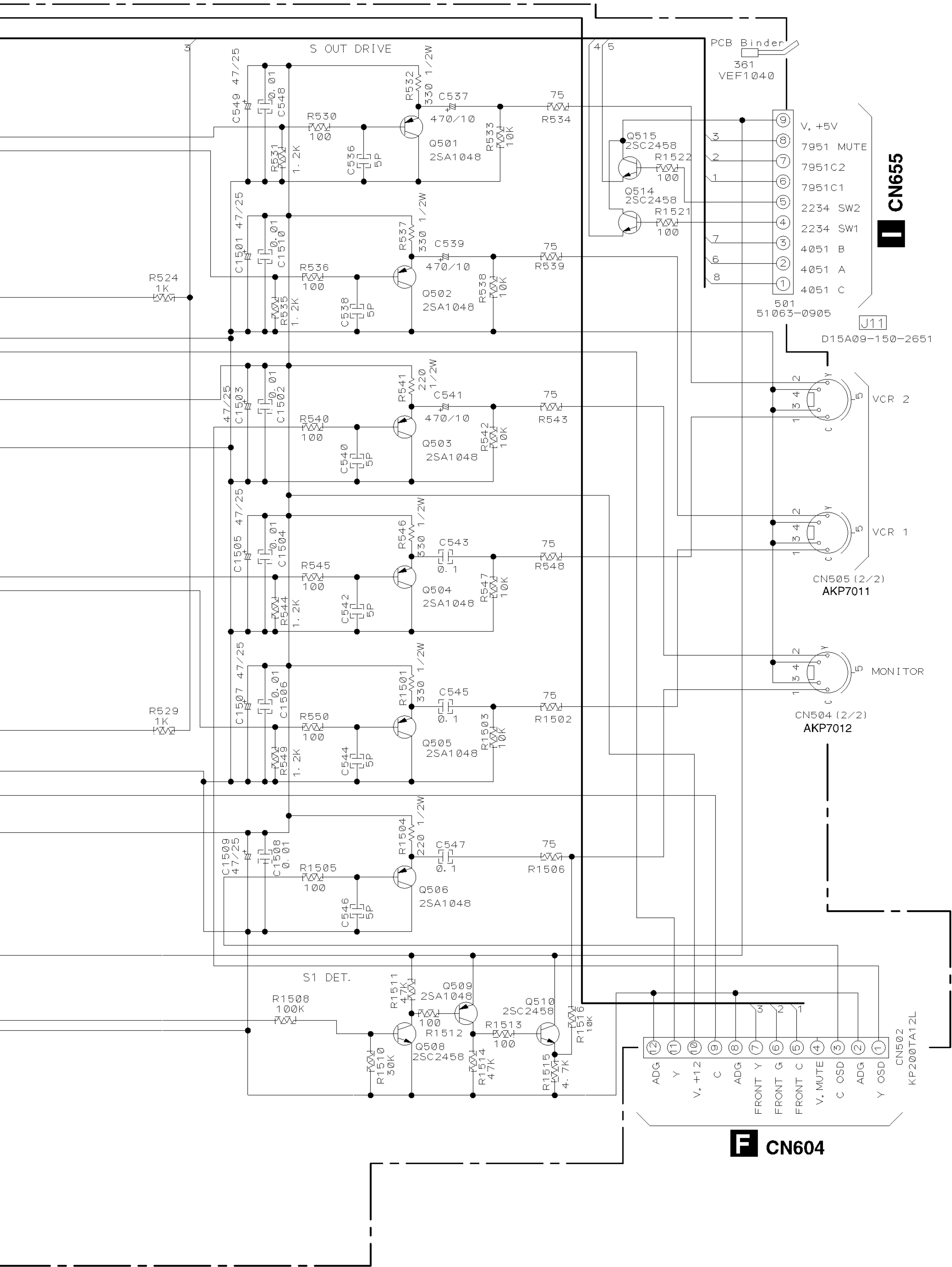
B

3.4 VIDEO ASSY



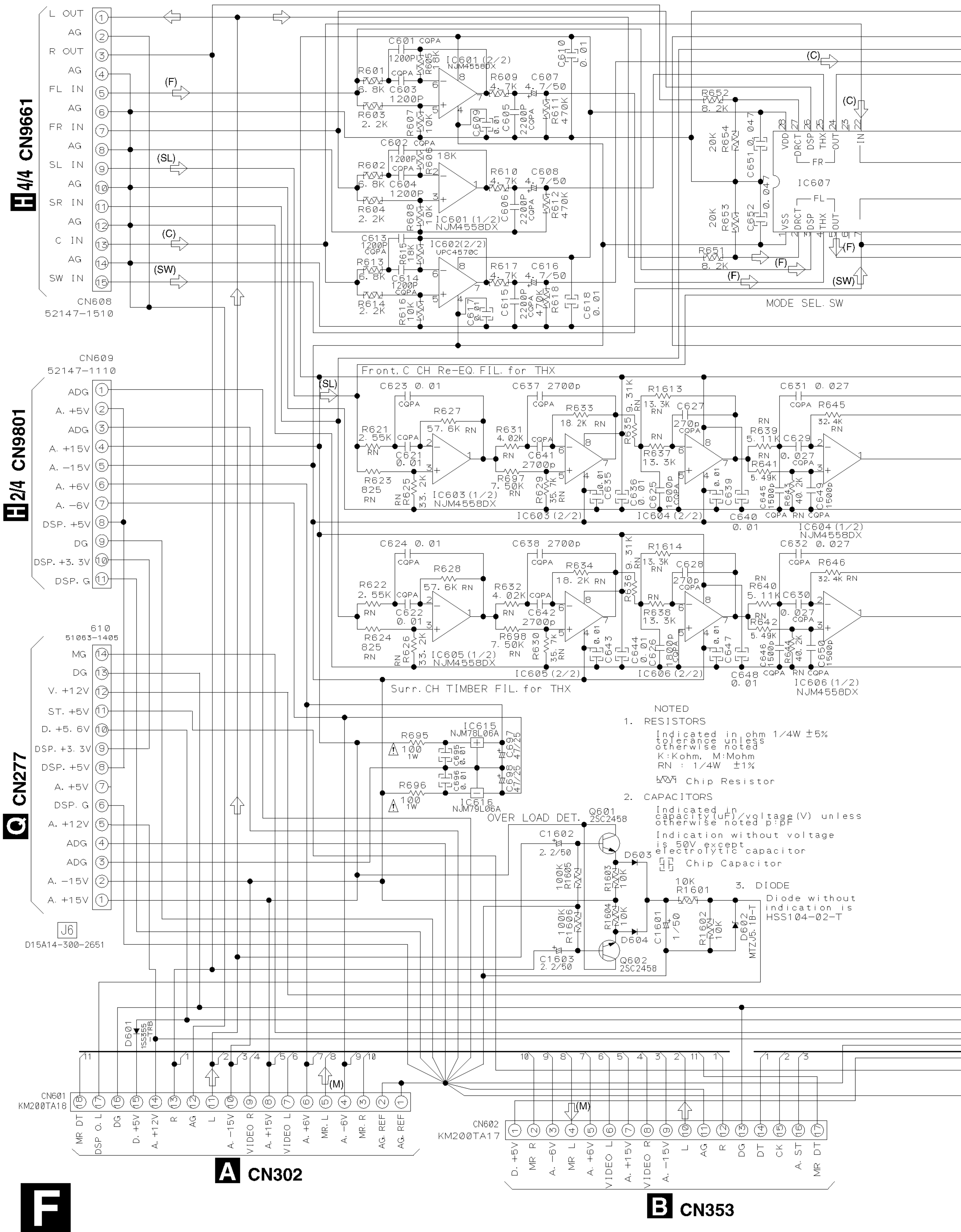
(V) : VIDEO SIGNAL ROUTE

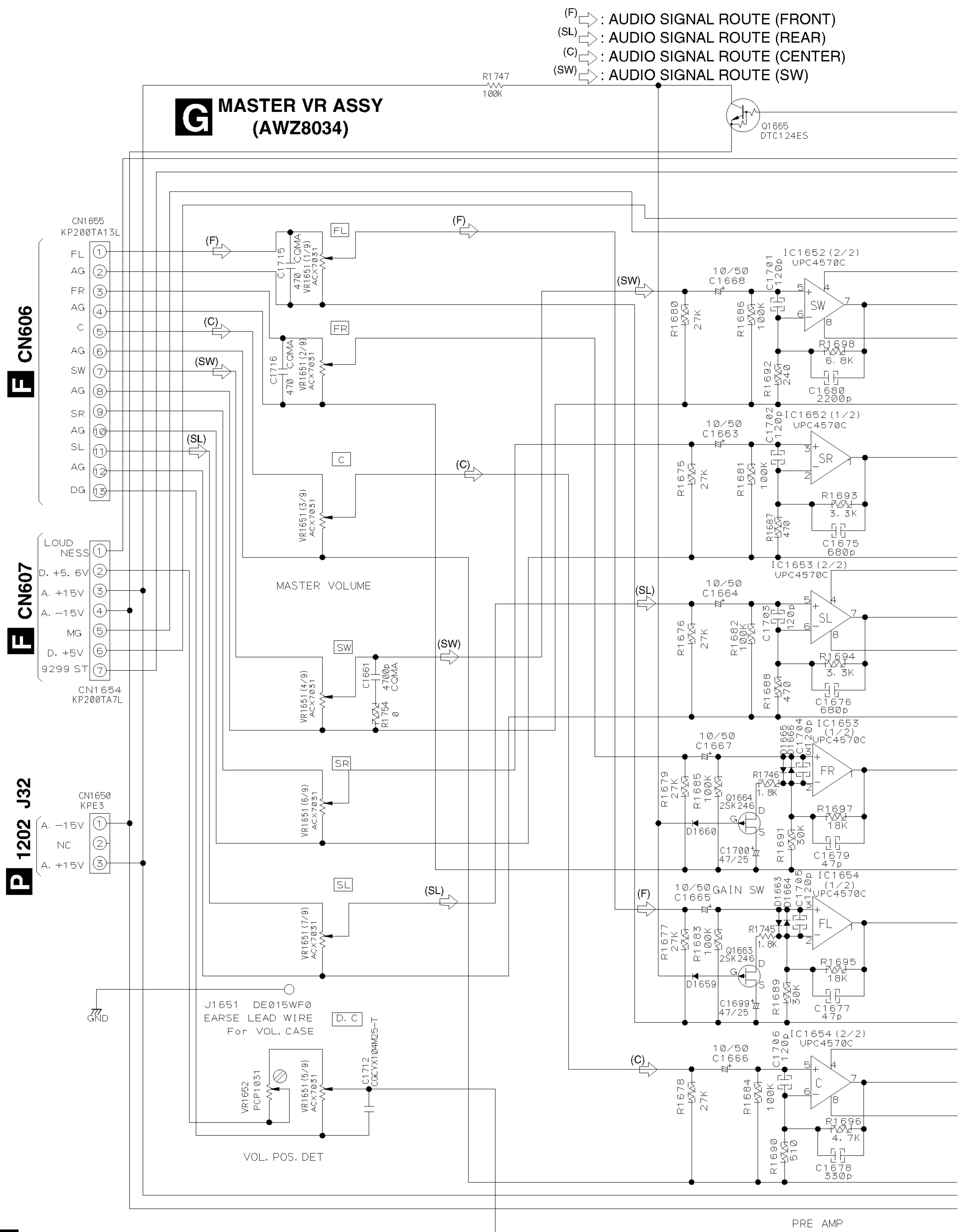




VSA-E06

3.6 E VR ASSY

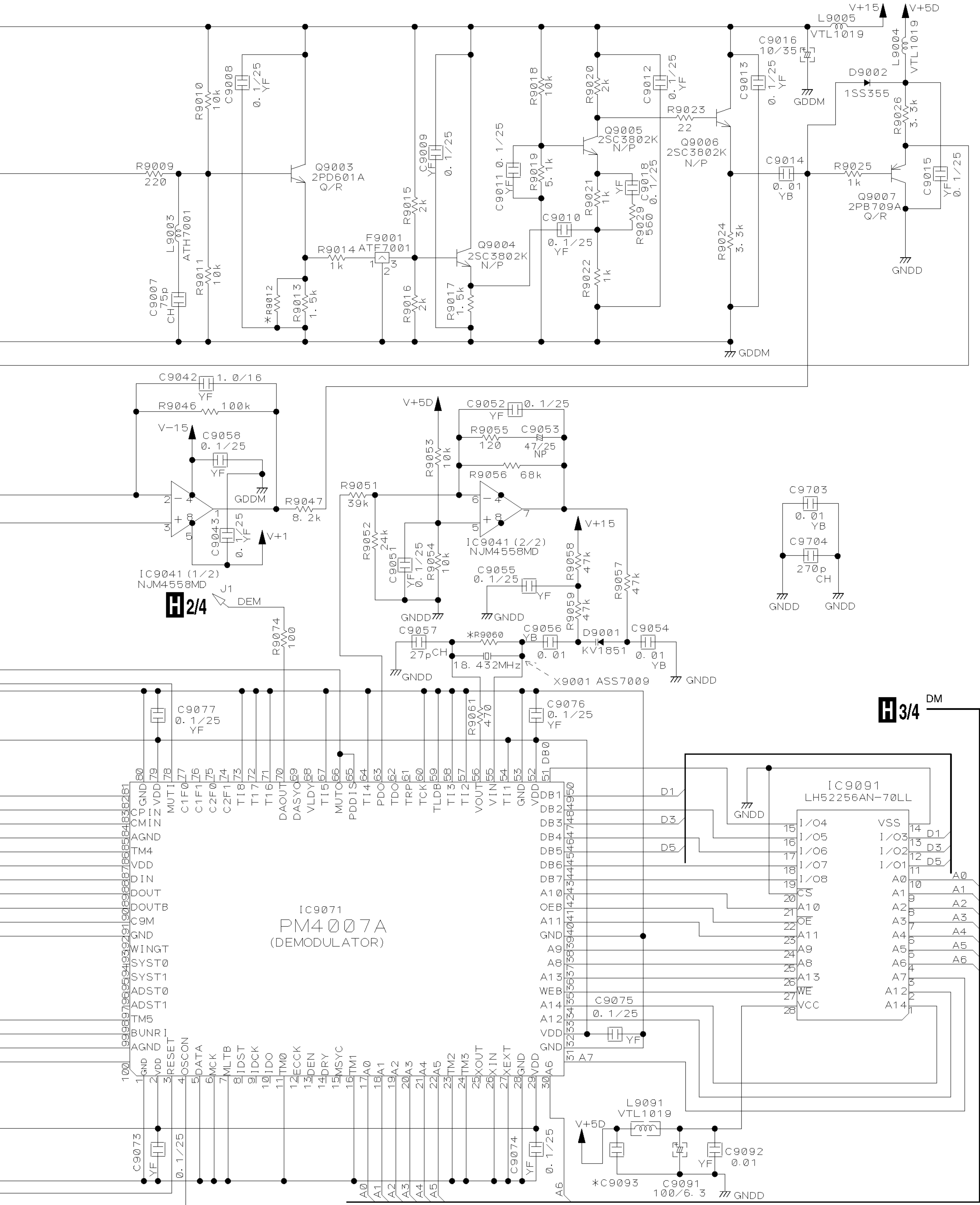




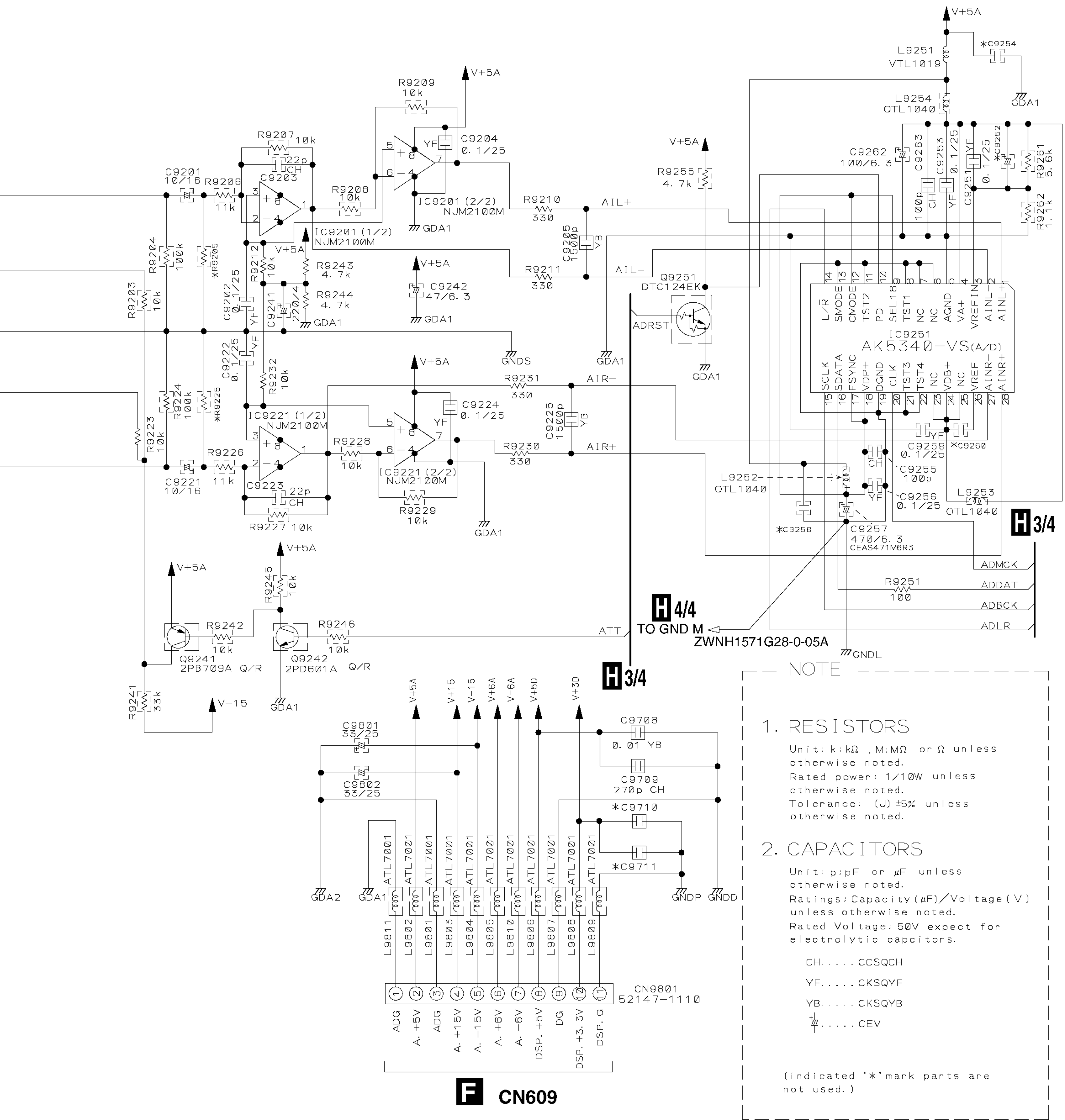


H 1/4









H 3/4 DOLBY DIGITAL ASSY
(AWX7038)

H 2/4
H 4/4

NOTE

1. RESISTORS

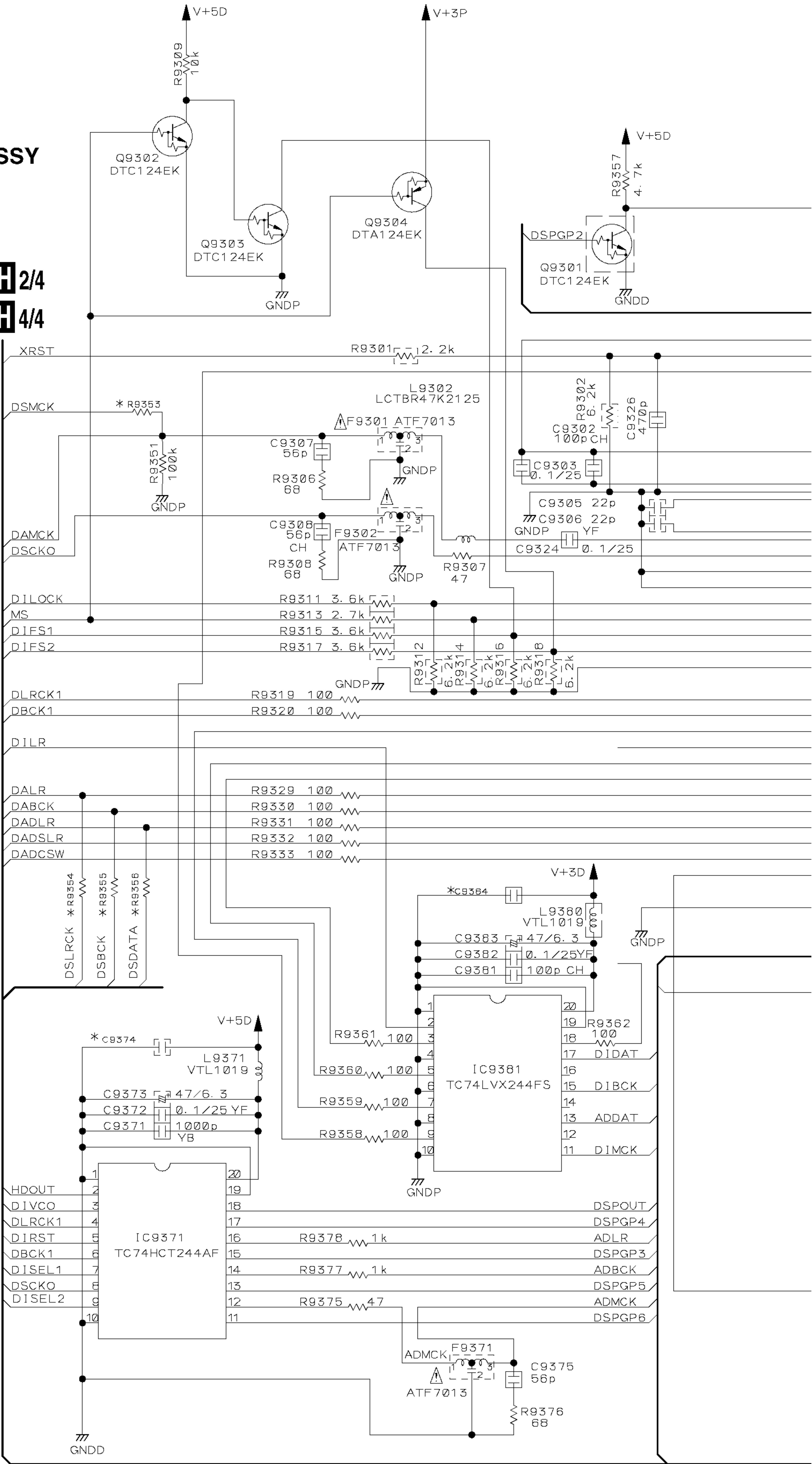
Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

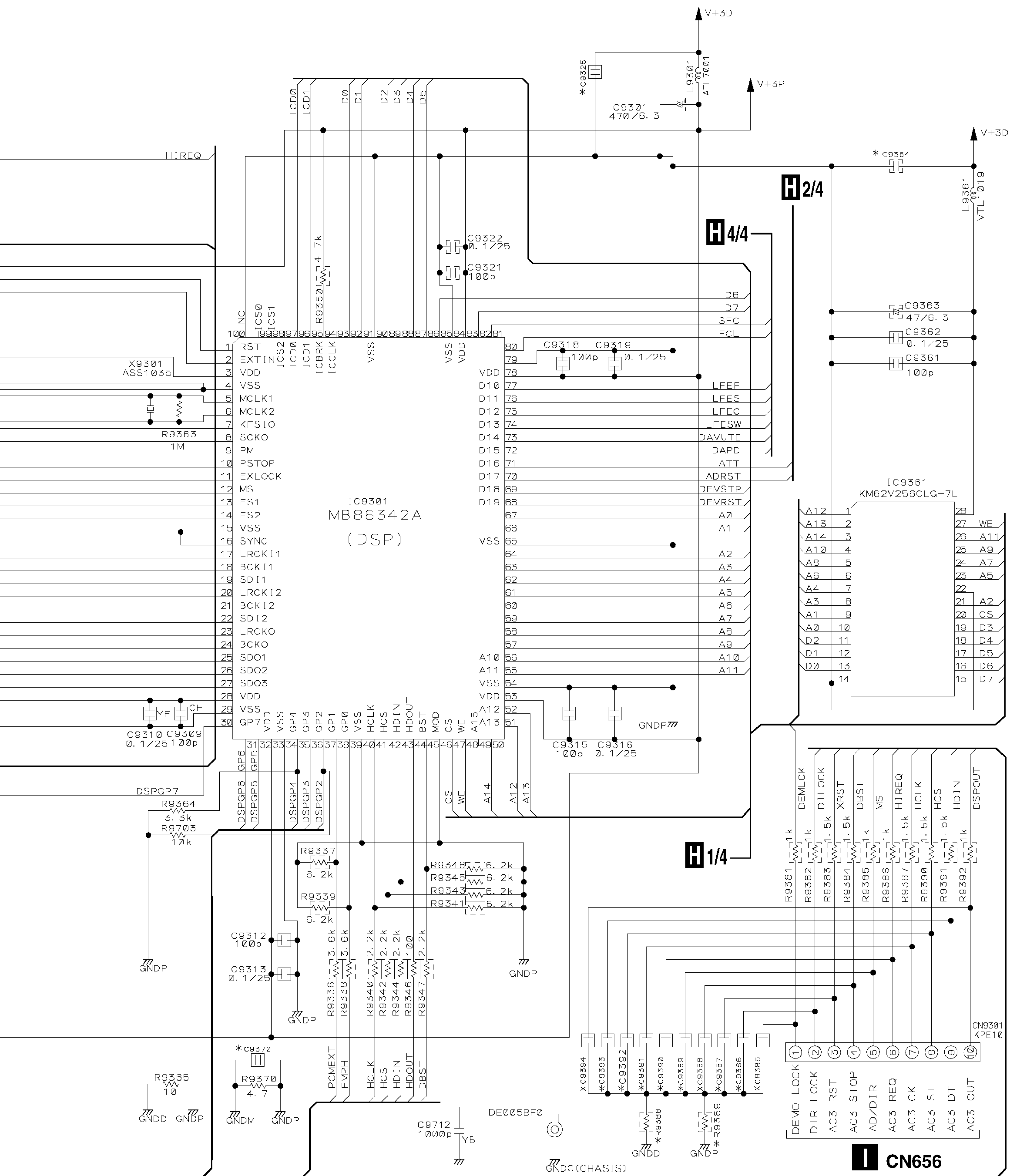
2. CAPACITORS

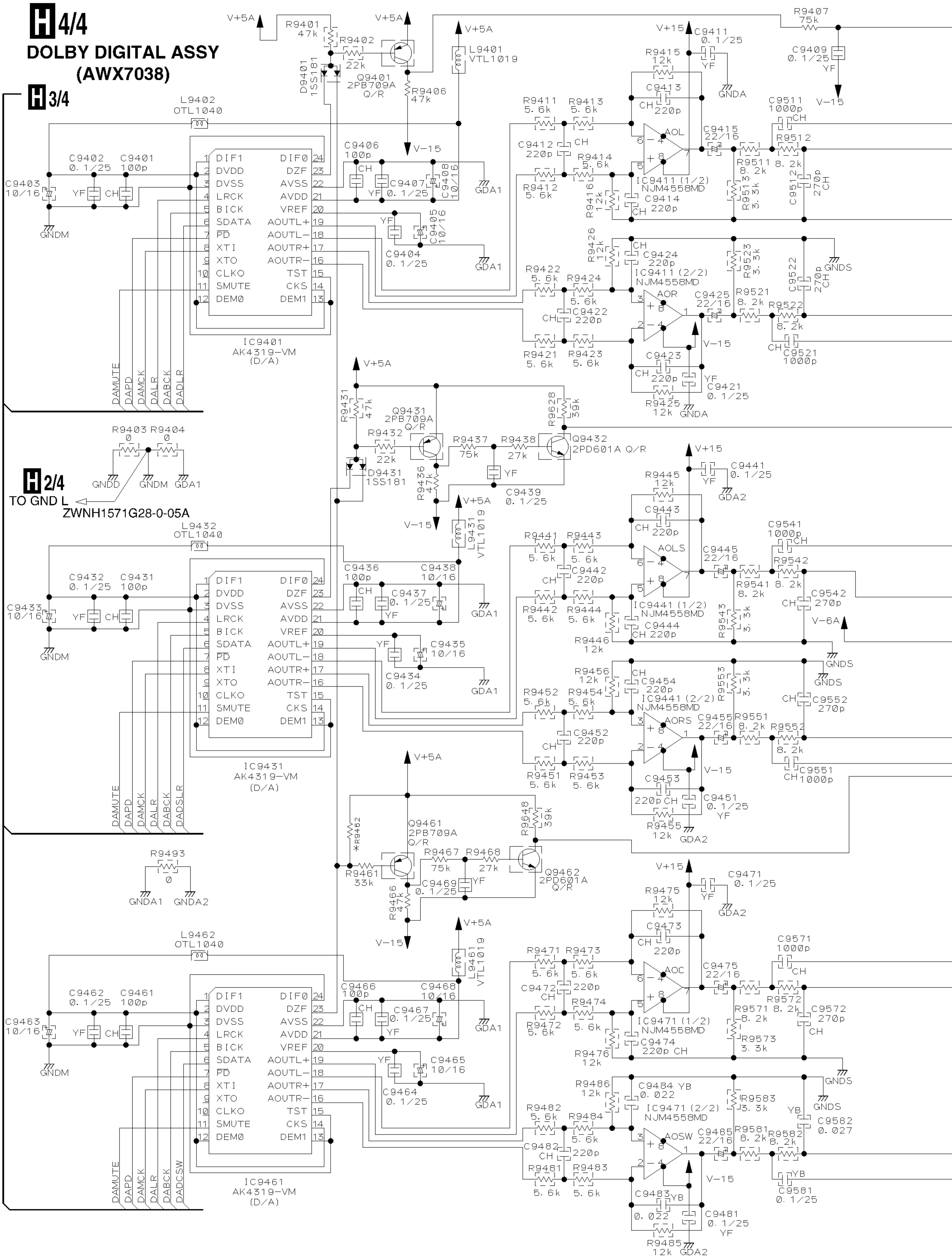
Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.

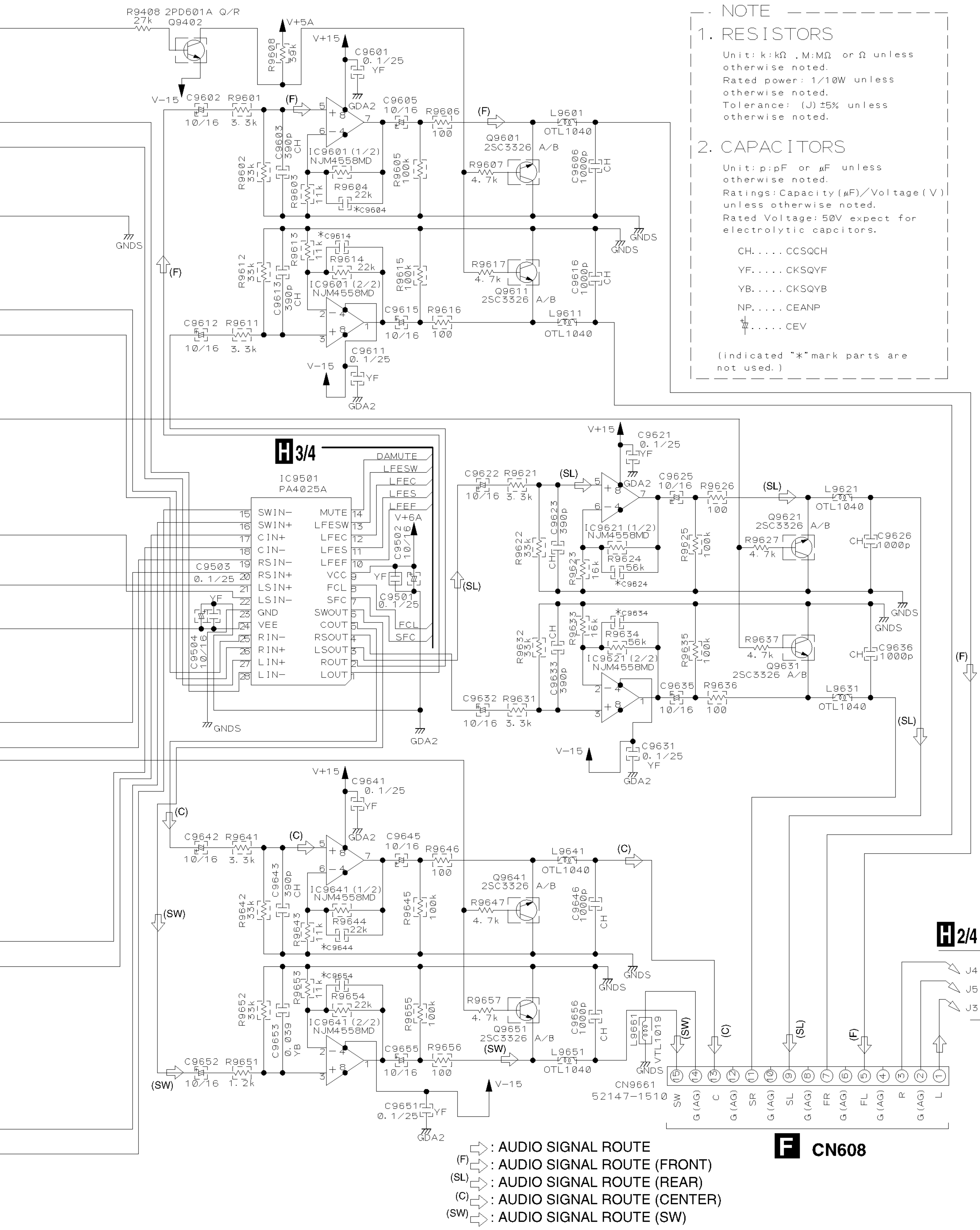
CH. CCSQCH
YF. CKSQYF
YB. CKSQYB
NP. CEANP
+Z. CEV

(indicated "*" mark parts are not used.)

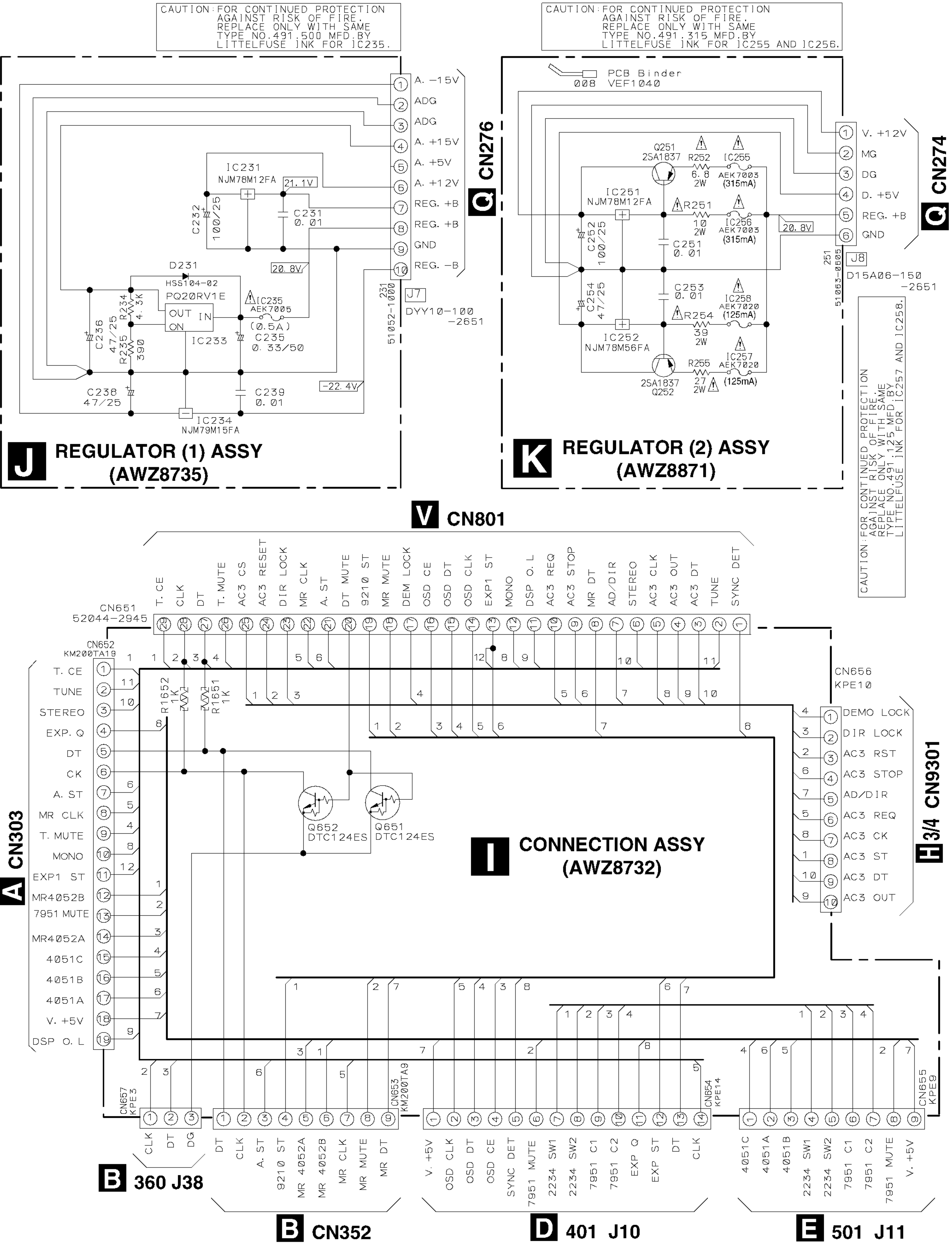








3.9 CONNECTION ASSY, REGULATOR(1) ASSY, REGULATOR(2) ASSY, REGULATOR(3) ASSY AND V-AMP ASSY



1. RESISTORS

 Chip Resistor

Ⓣ RFA

Indicated in capacity (uF) /voltage (V) unless
otherwise noted p:pF

Indication without voltage is 50V except electrolytic capacitor

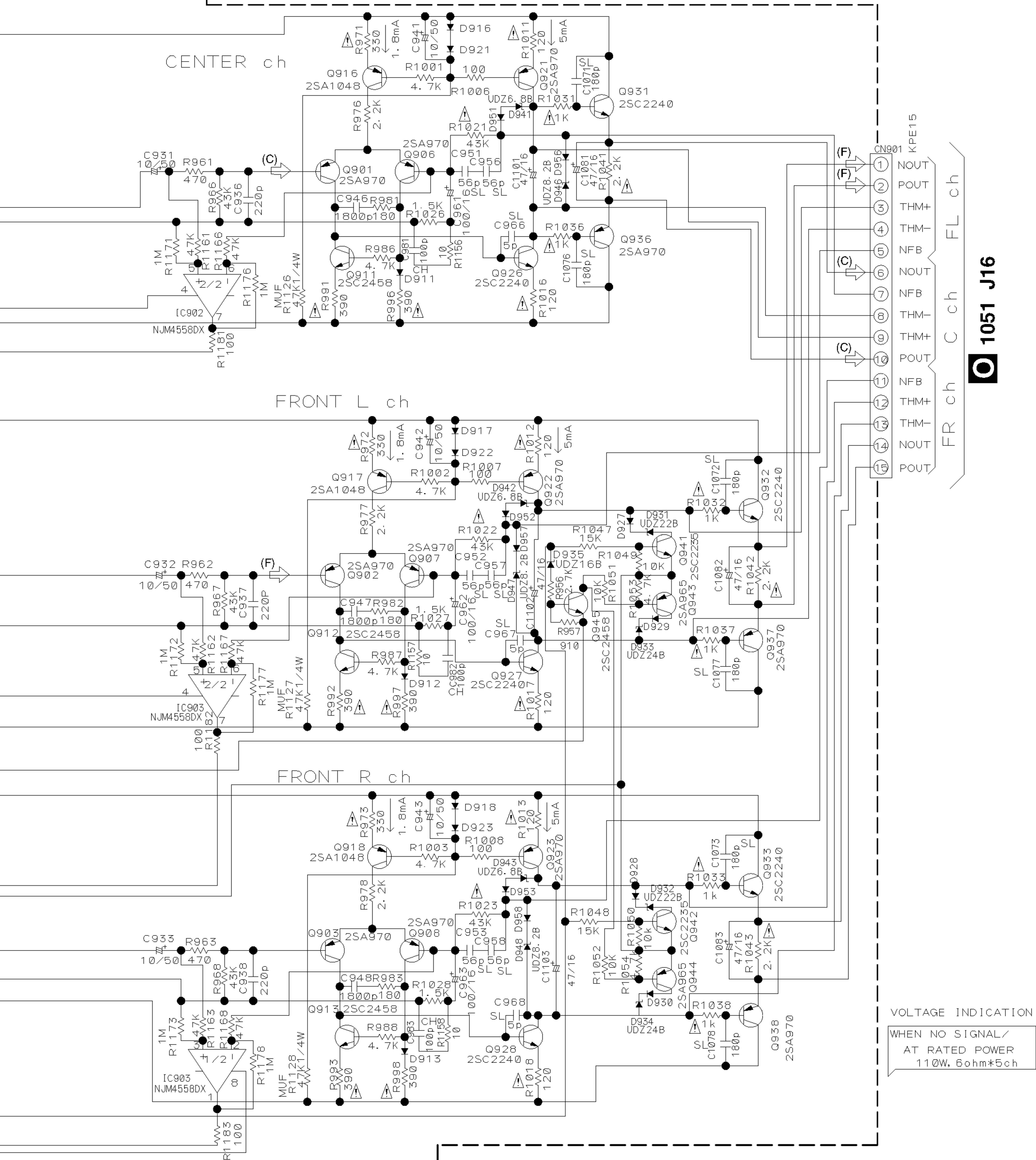
 Chip Capacitor

Diode without indicated is
1SS355-TRB



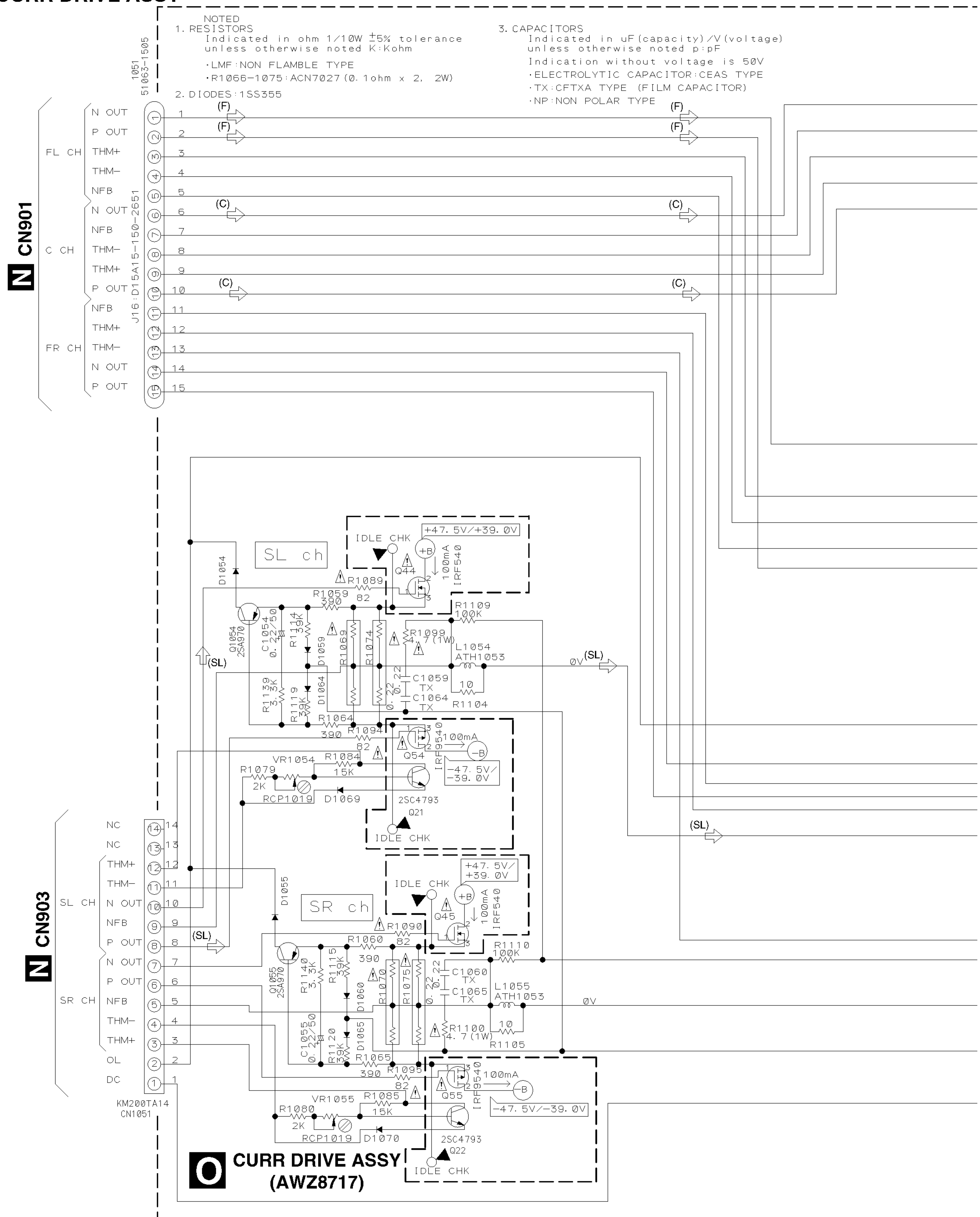


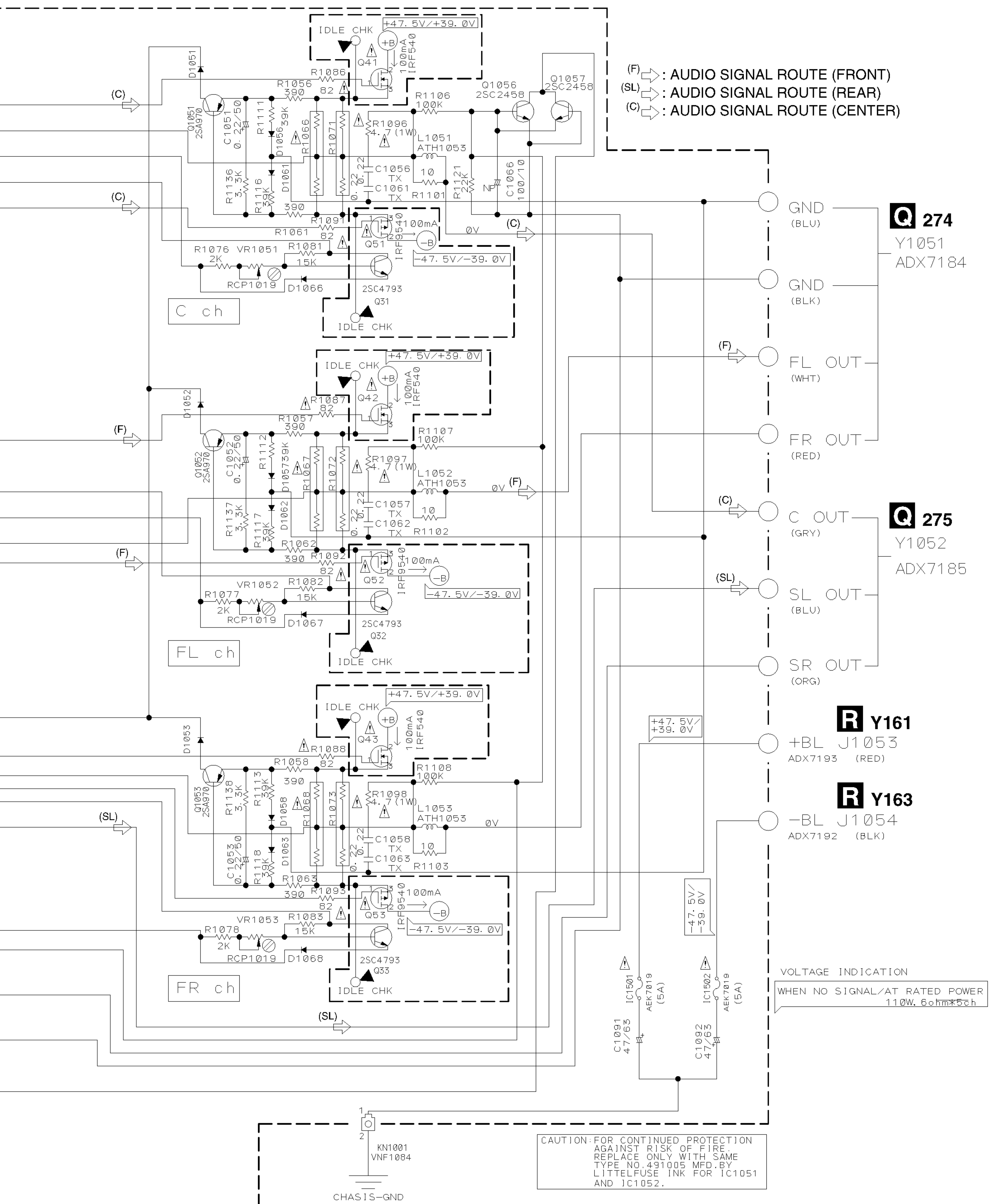
- NOTED
1. RESISTORS
Indicated in ohm 1/10W 5% tolerance unless otherwise noted K:Kohm
·LMF:NON FLAMBLE TYPE
2. CAPACITORS
Indicated in uF(capacity)/V(voltage) unless otherwise noted p:pF
Indication without voltage is 50V
·NO MARK NON ELECTOLYTIC CAPACITOR:CKSQYB TYPE
·NO MARK ELECTROLYTIC CAPACITOR:CEJA TYPE
·SL:CCCSL (500V) TYPE
·CH:CCSQCH TYPE
·AS:CEAS TYPE
·YF:CKSQYF TYPE
3. DIODES:1SS355



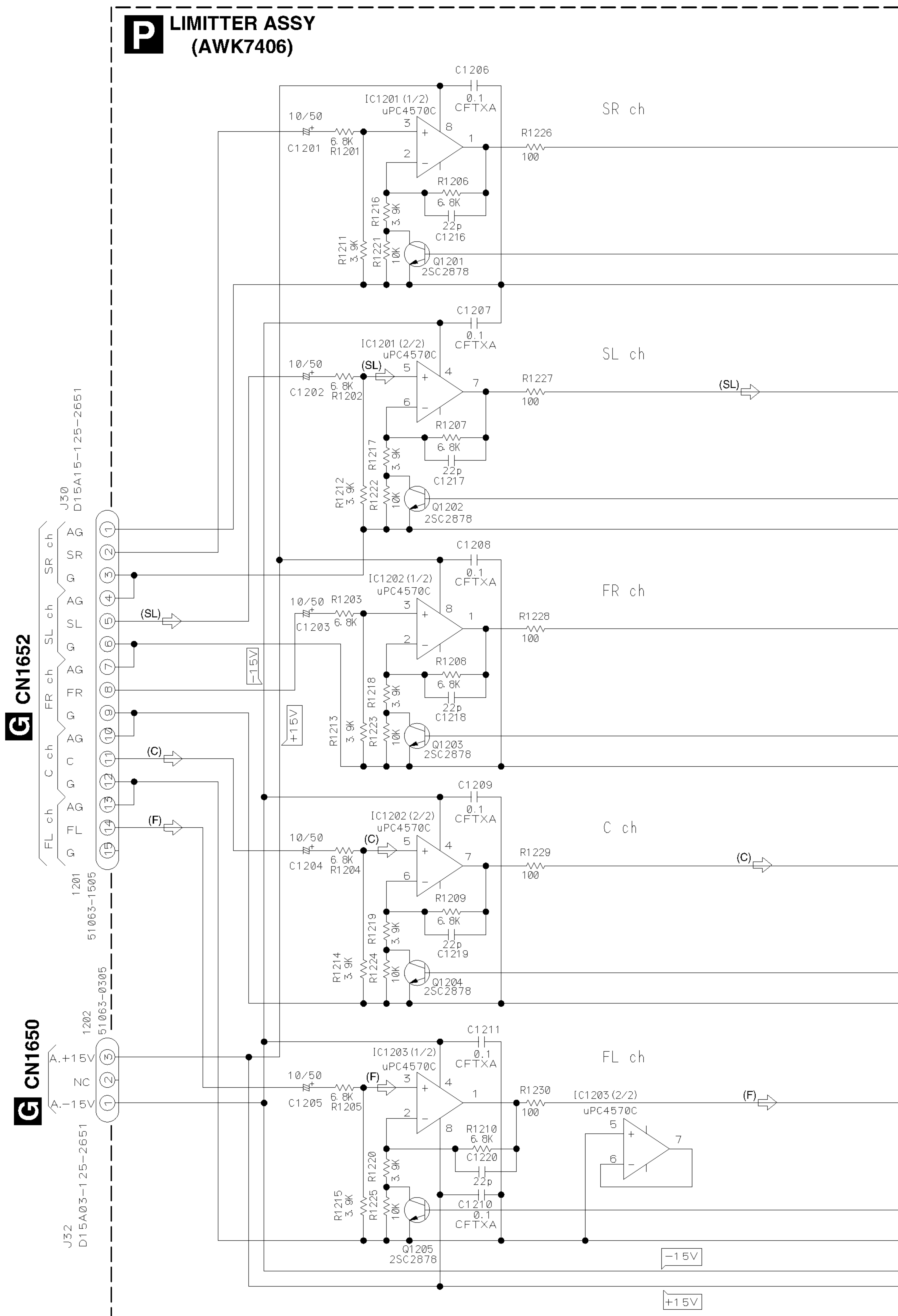
- (F) ➡ : AUDIO SIGNAL ROUTE (FRONT)
(SL) ➡ : AUDIO SIGNAL ROUTE (REAR)
(C) ➡ : AUDIO SIGNAL ROUTE (CENTER)

3.11 CURR DRIVE ASSY



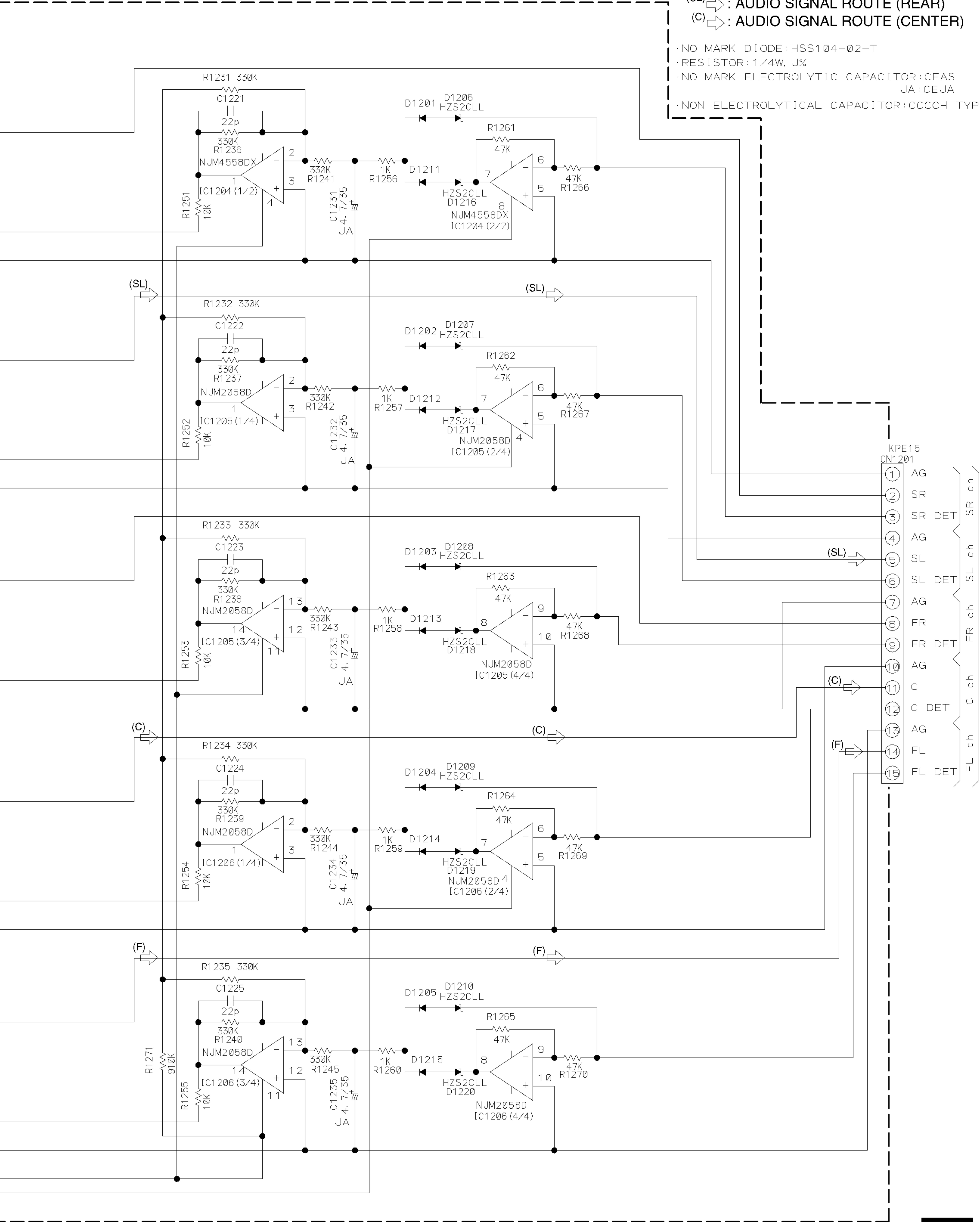


P LIMITTER ASSY
(AWK7406)



(F) ➡ : AUDIO SIGNAL ROUTE (FRONT)
(SL) ➡ : AUDIO SIGNAL ROUTE (REAR)
(C) ➡ : AUDIO SIGNAL ROUTE (CENTER)

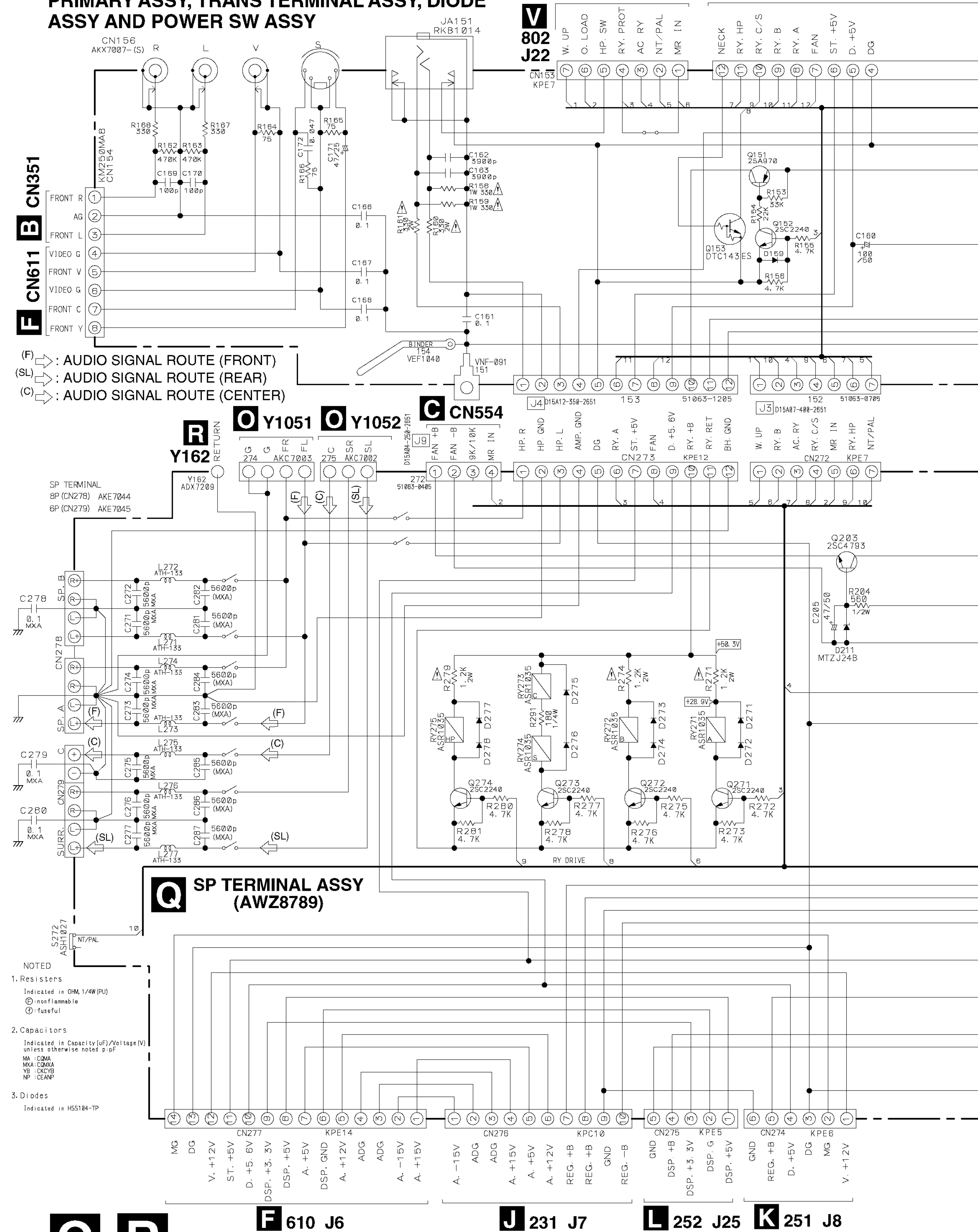
- NO MARK DIODE : HSS104-02-T
- RESISTOR : 1/4W, J%
- NO MARK ELECTROLYTIC CAPACITOR : CEAS
JA : CEJA
- NON ELECTROLYTICAL CAPACITOR : CCCCH TYPE



N 903 J14

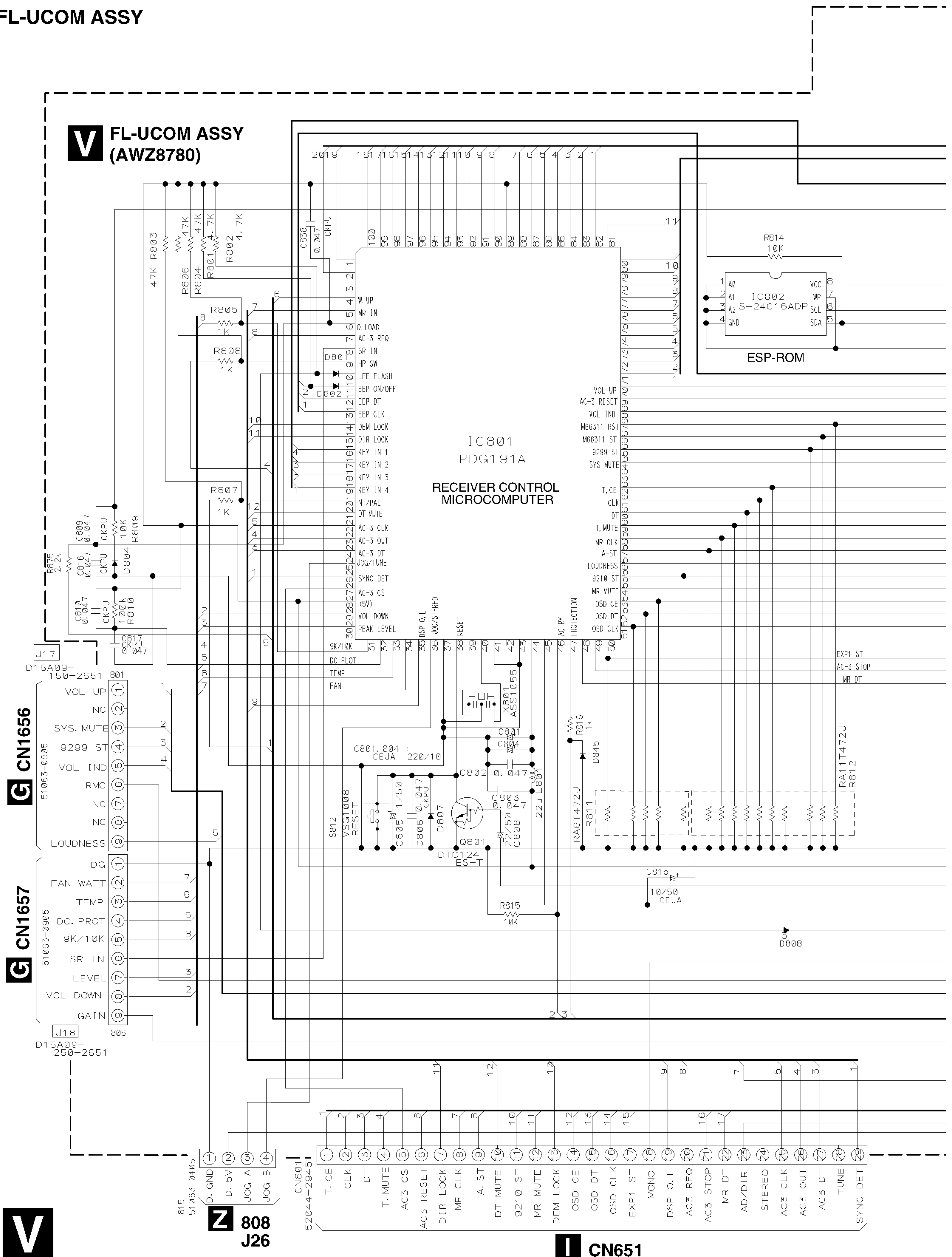
VSA-E06

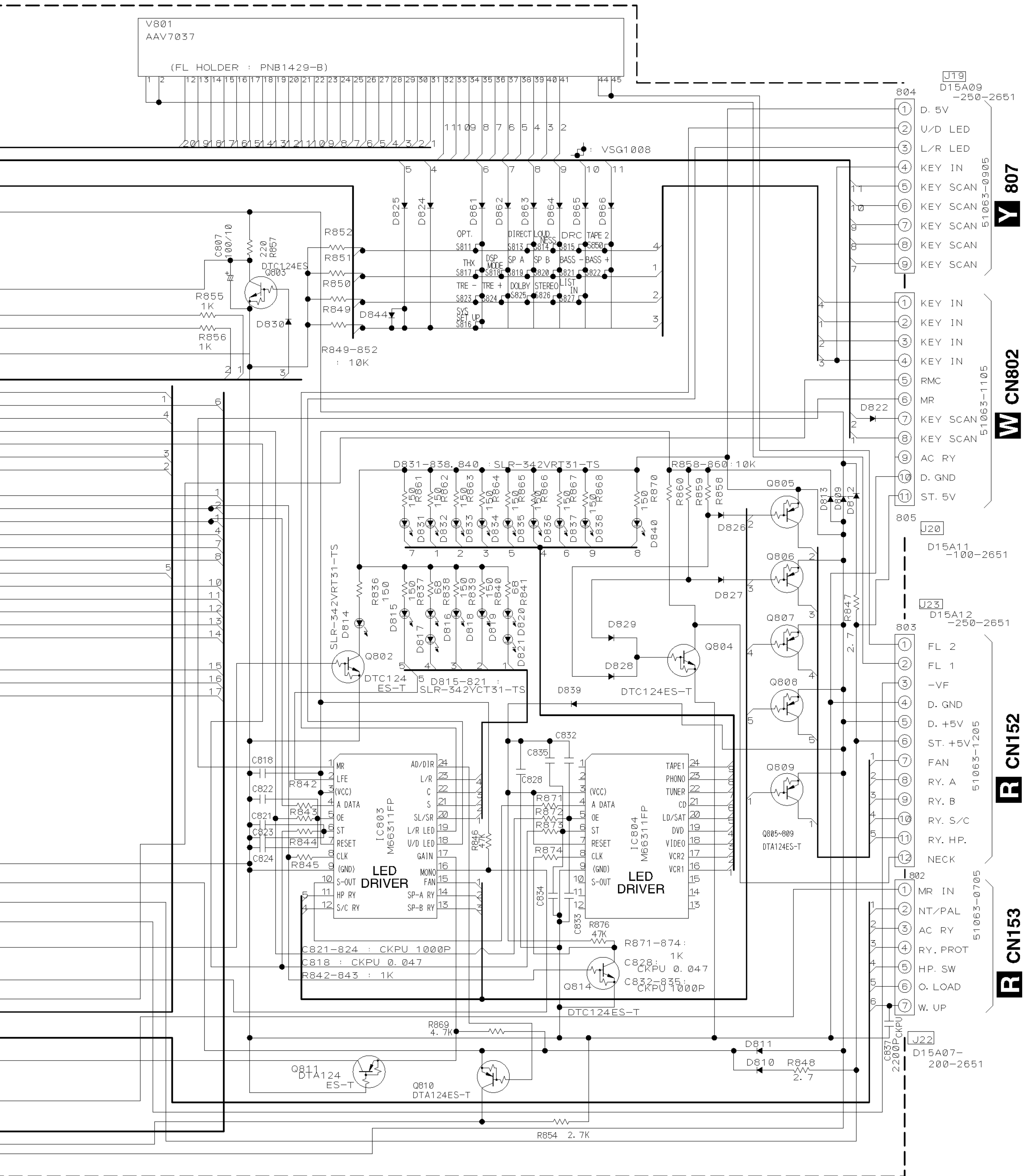
3.13 SP TERMINAL ASSY, POWER SUPPLY ASSY, PRIMARY ASSY, TRANS TERMINAL ASSY, DIODE ASSY AND POWER SW ASSY





42





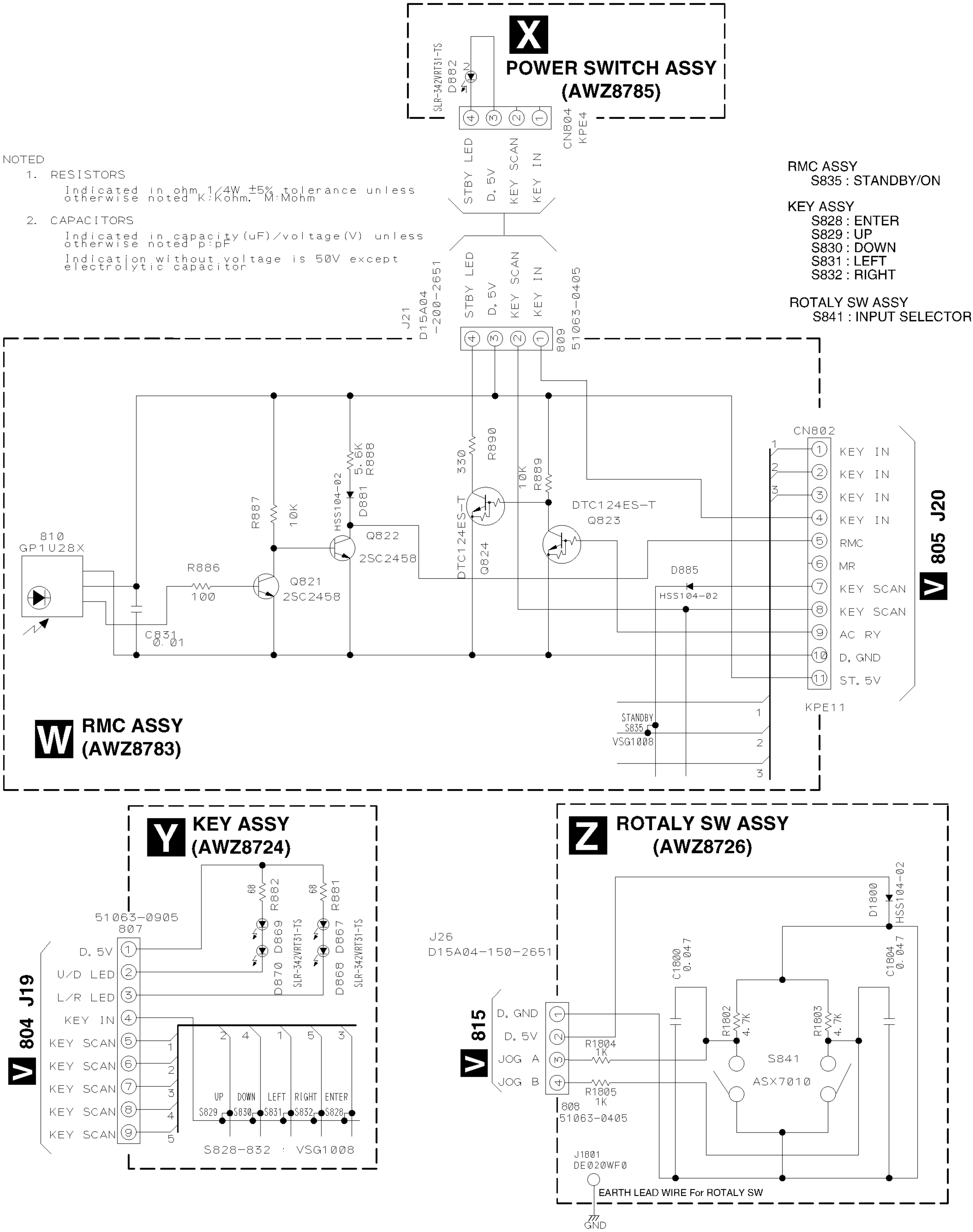
NOTED
1. RESISTORS
Indicated in ohm, 1/4w ±5% tolerance unless
otherwise noted K:Kohm, M:Mohm
2. CAPACITORS
Indicated in capacity (uF)/voltage (V) unless
otherwise noted p:pF
Indication without voltage is 50V except
electrolytic capacitor
3. DIODE
HSS104-02-

FL U-COM ASSY

- | | | |
|-------------------|-----------------|----------------|
| S811 : OPTICAL | S817 : THX | S823 : TRE - |
| S812 : RESET | S818 : DSP MODE | S824 : TRE + |
| S813 : DIRECT | S819 : SP A | S825 : DOLBY |
| S814 : LOUDNESS | S820 : SP B | S826 : STEREO |
| S815 : DRC | S821 : BASS - | S827 : LIST IN |
| S816 : SYS SET UP | S822 : BASS + | S850 : TAPE2 |



3.15 RMC ASSY, POWER SWITCH ASSY, KEY ASSY AND ROTALY SW ASSY



4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS

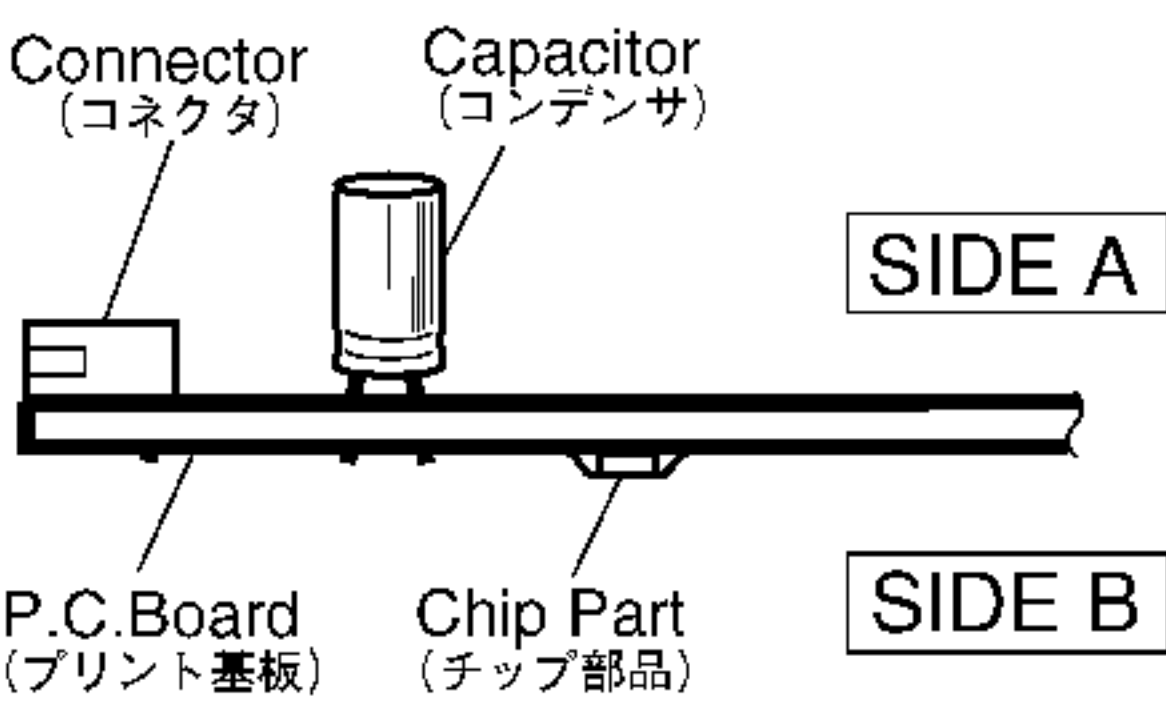
1. Part numbers in PCB diagrams match those in the schematic diagrams.

2. A comparison between the main parts of PCB and schematic diagrams is shown below.
3. The parts mounted on this PCB include all necessary parts for several destination.

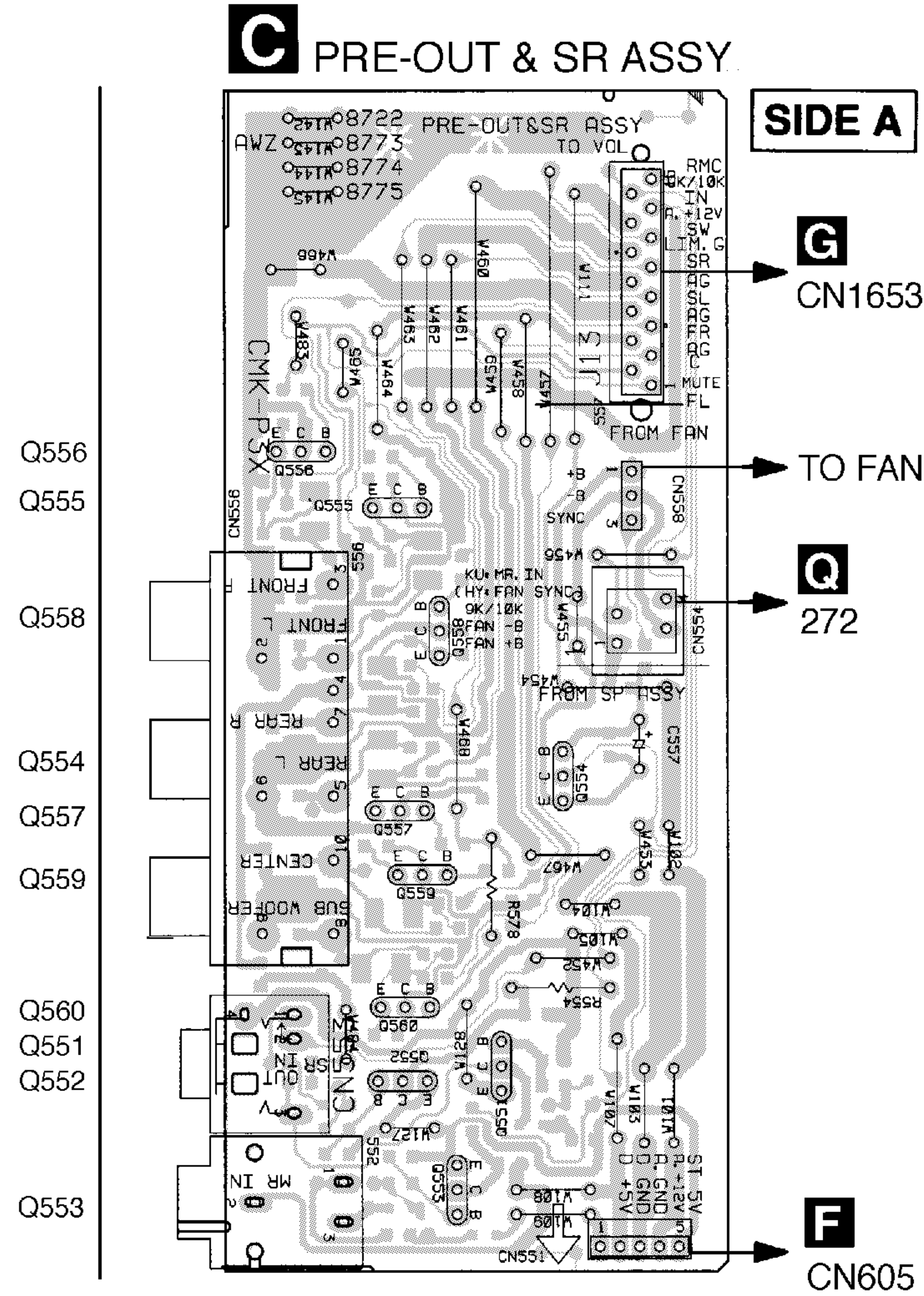
For further information for respective destinations, be sure to check with the schematic diagram.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

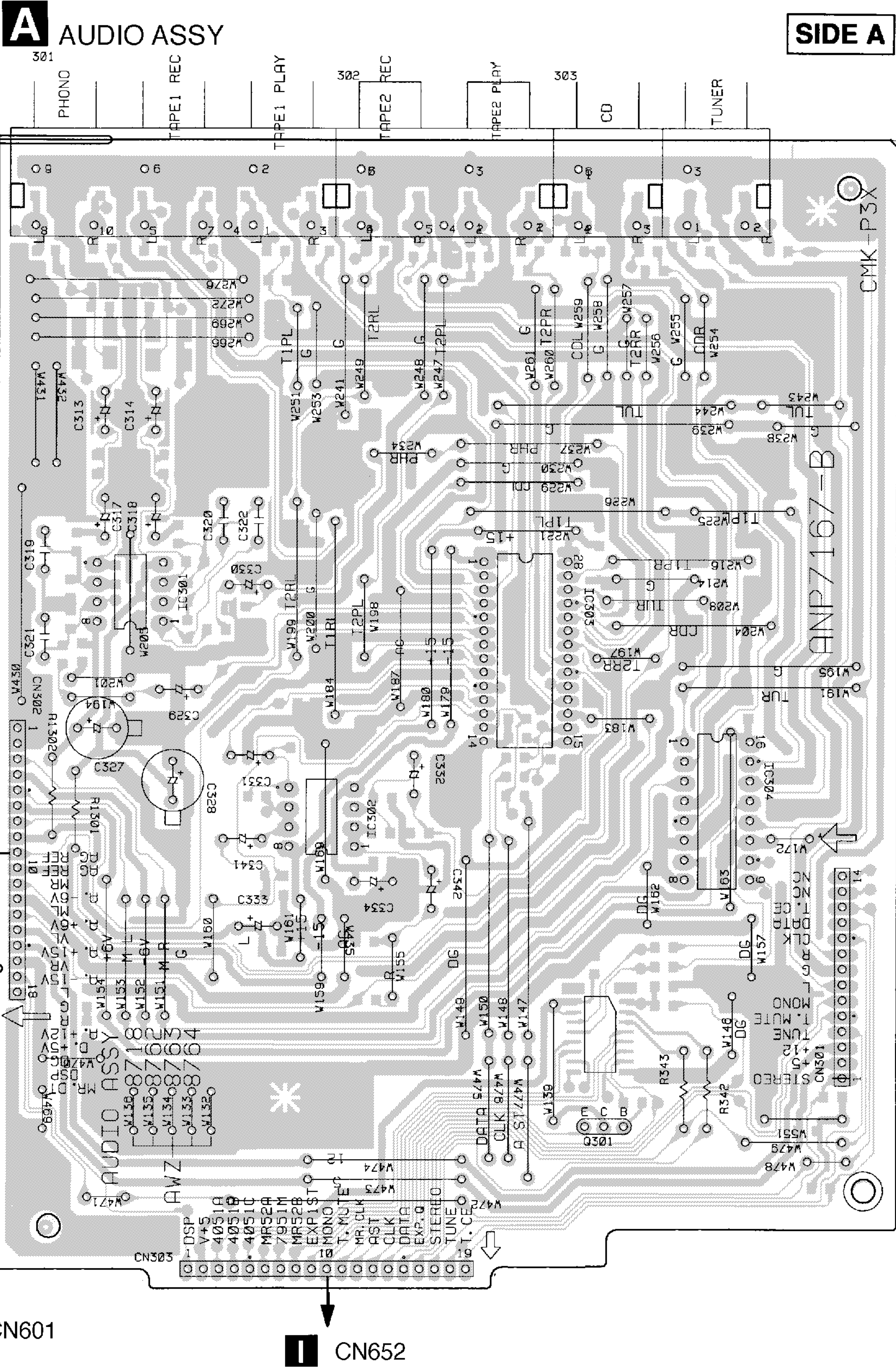
4. Viewpoint of PCB diagrams

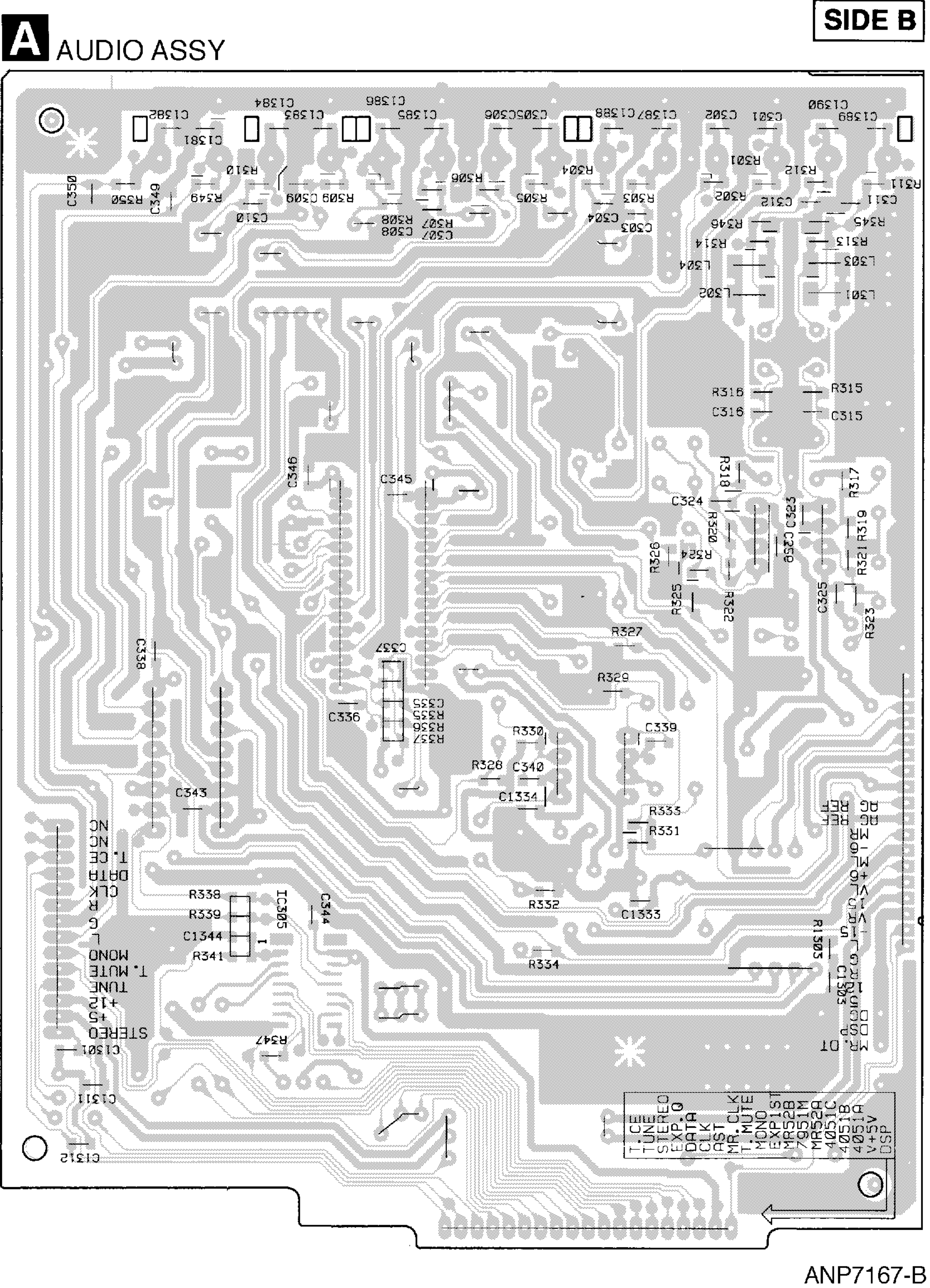


4.1 PRE-OUT & SR ASSY



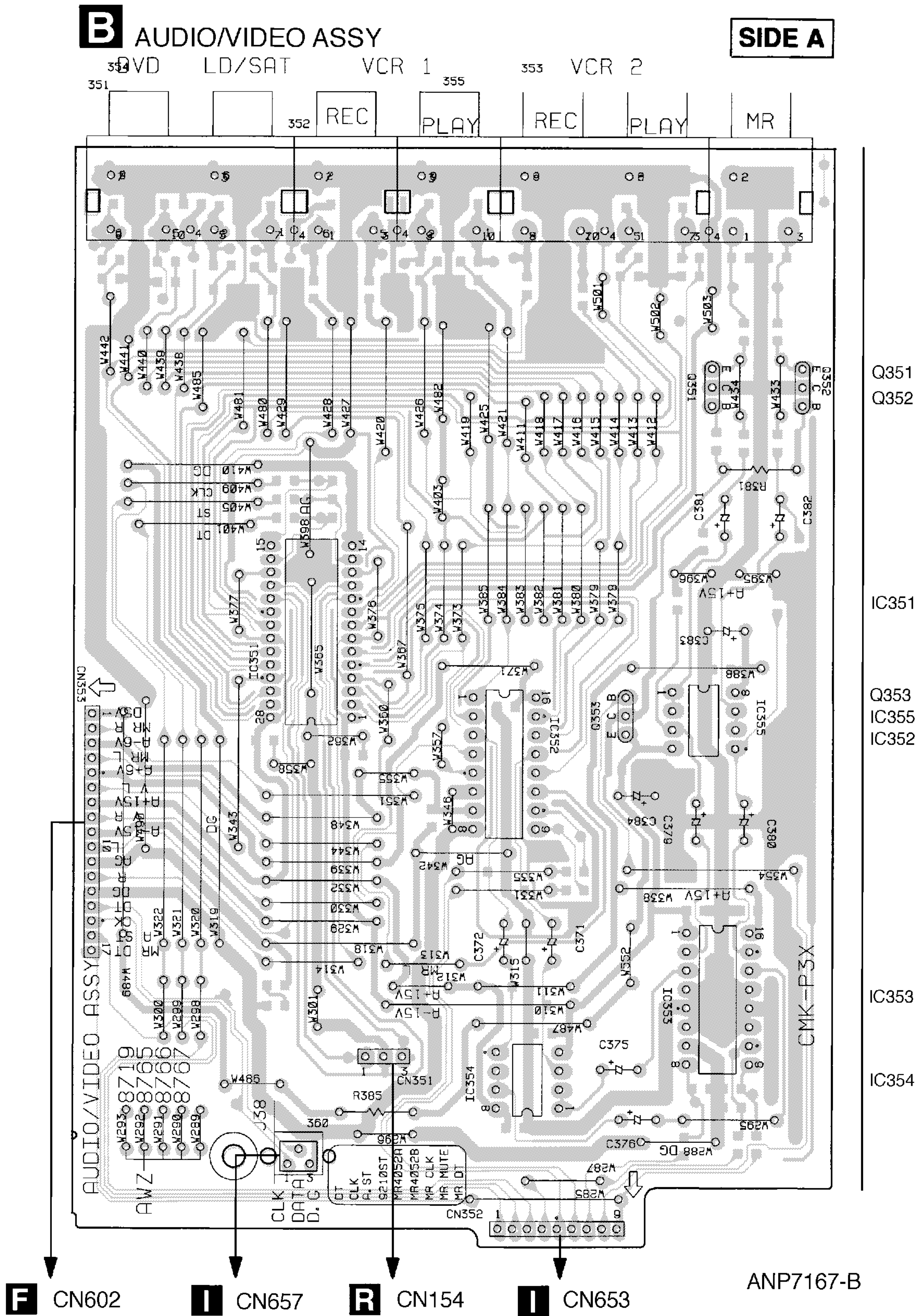
4.2 AUDIO ASSY

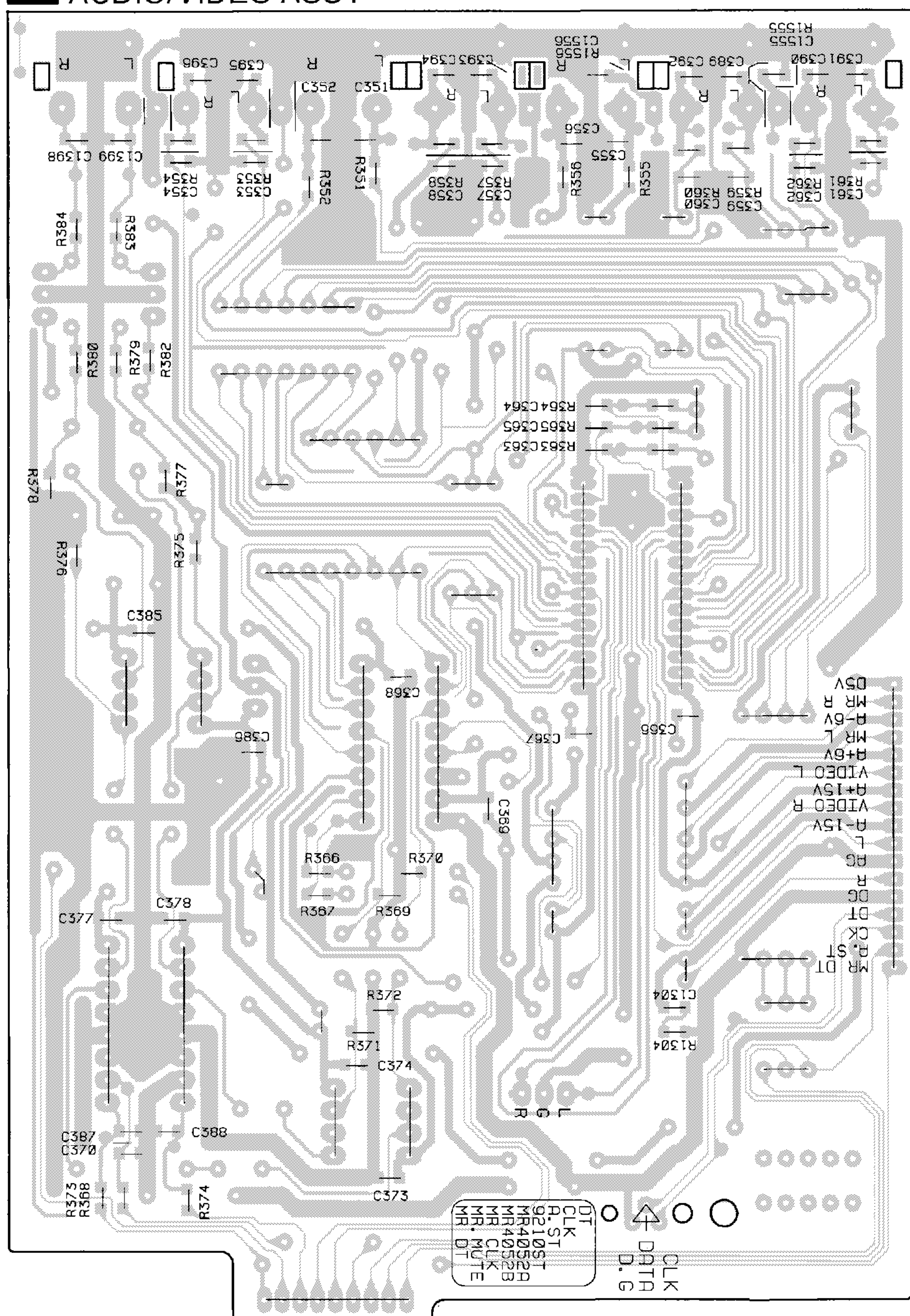




IC305

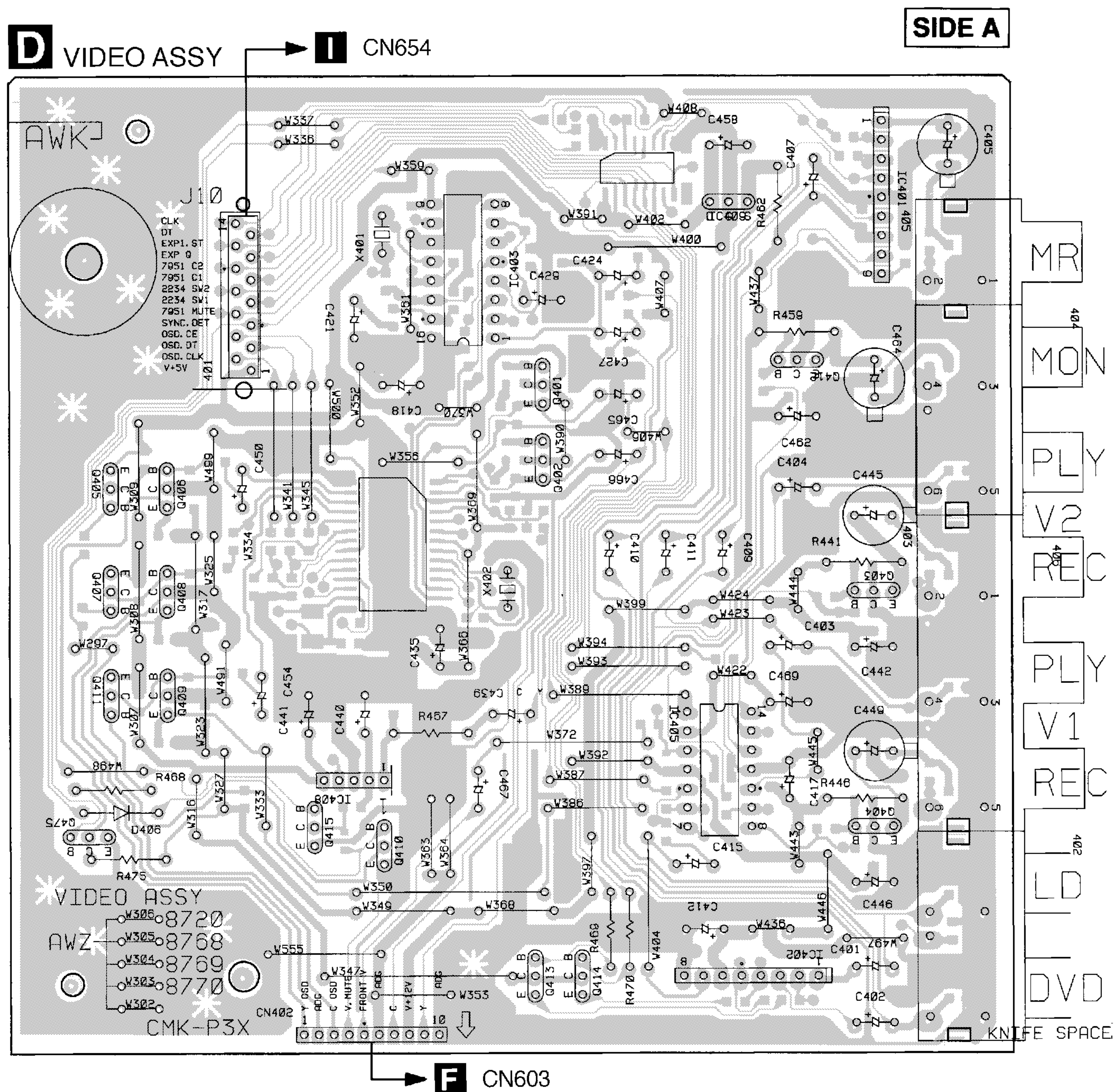
4.3 AUDIO/VIDEO ASSY



B AUDIO/VIDEO ASSY**SIDE B**

ANP7167-B

4.4 VIDEO ASSY

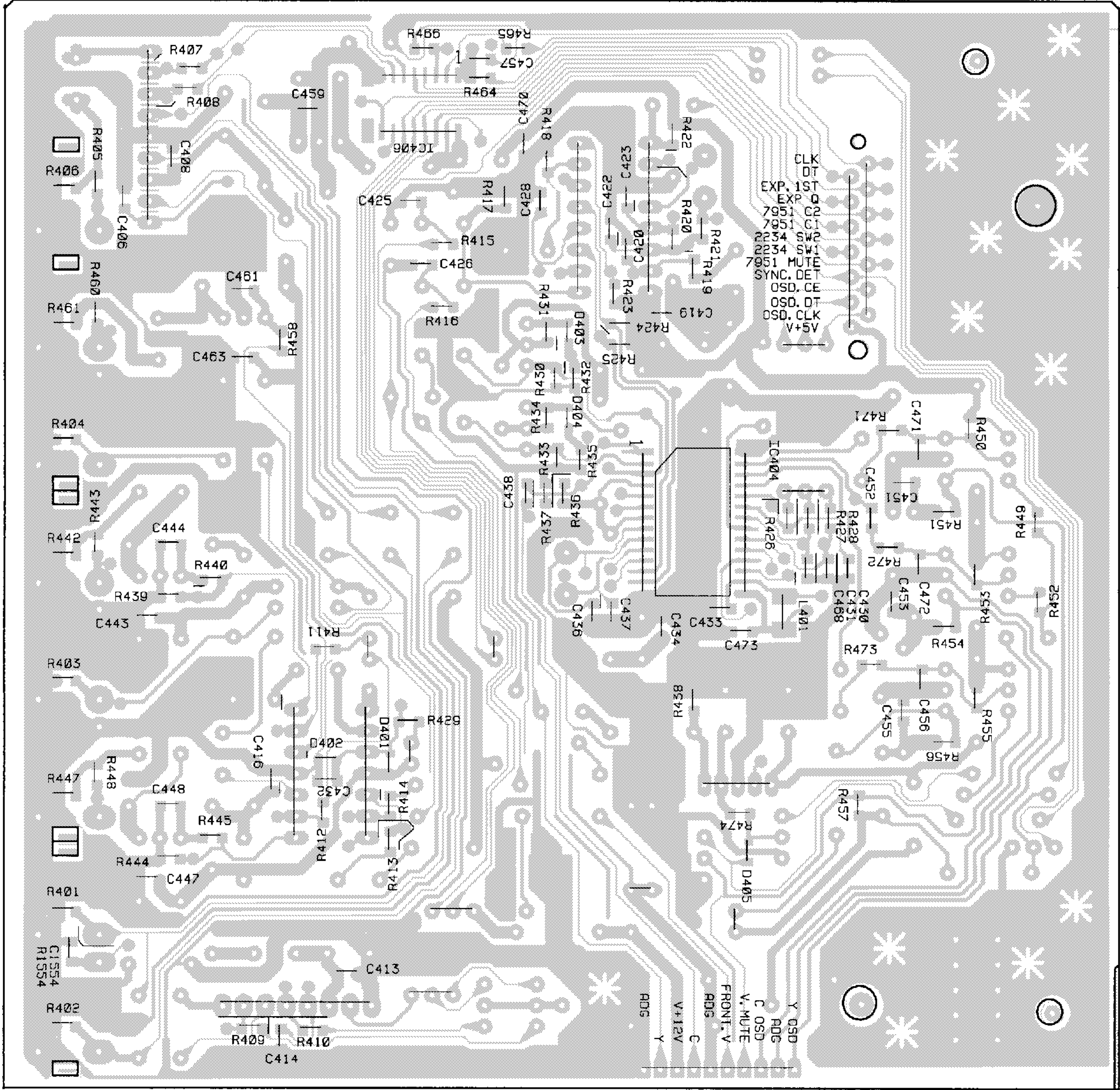


Q405 Q406	Q415 IC408	IC403	Q401	IC409	Q412 IC401
Q407 Q408	Q410		Q402	IC405	Q403
Q411 Q409			Q413	IC402	Q404
Q475			Q414		

ANP7167-B

D VIDEO ASSY

SIDE B

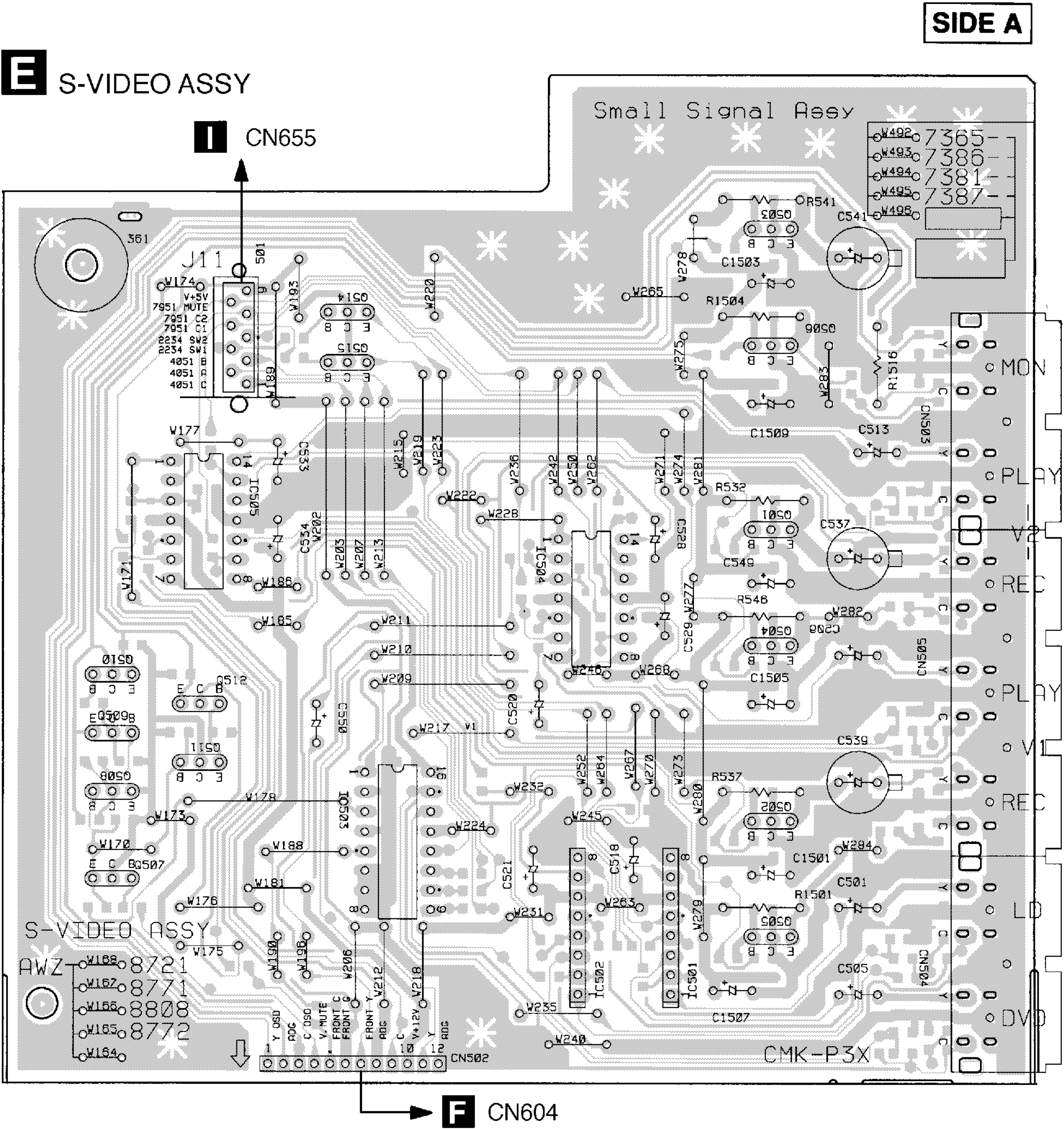


IC406

IC404

ANP7167-B

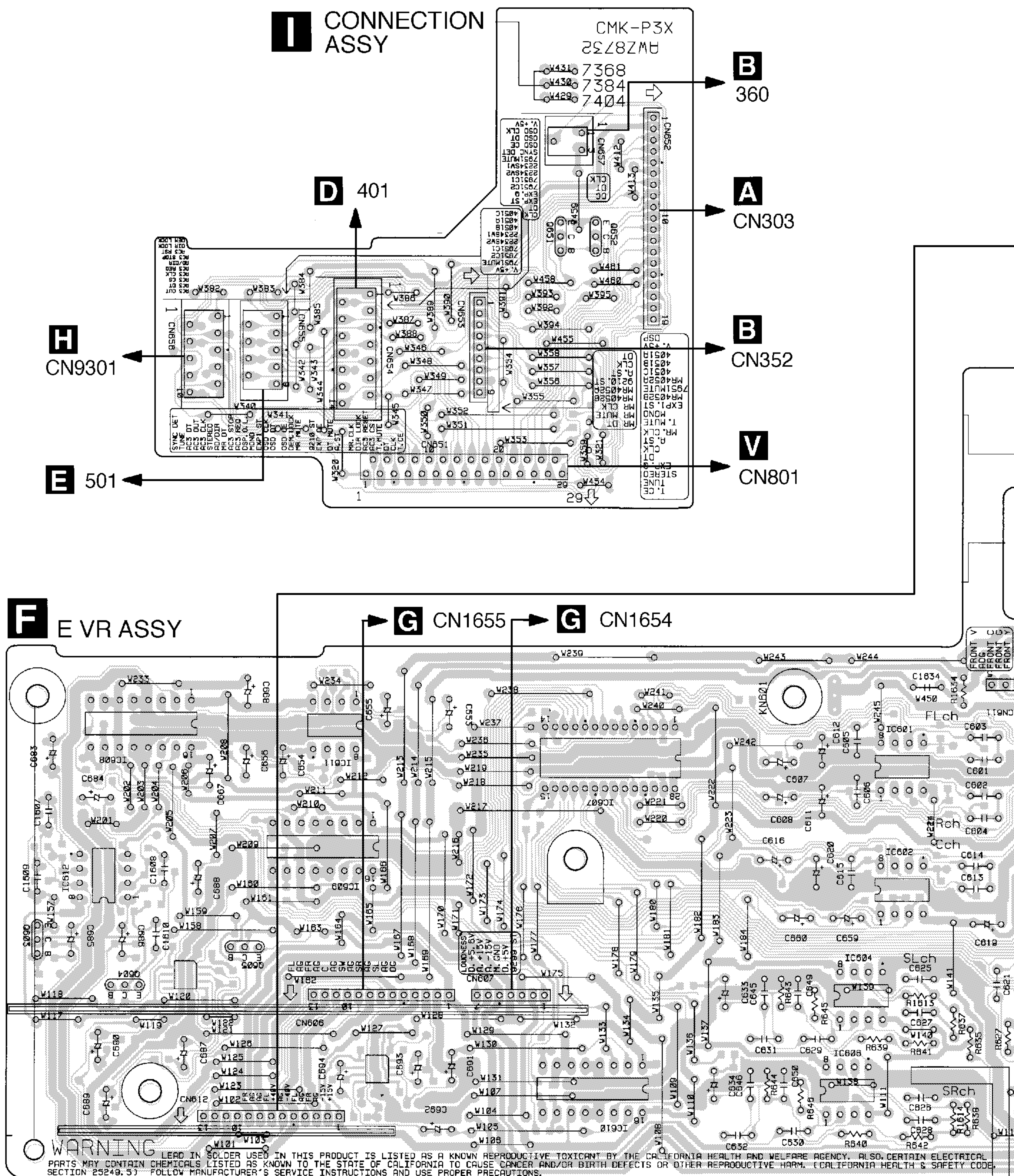
4.5 S-VIDEO ASSY



Q510 IC505	Q514	IC504	IC501	Q503 Q504
Q509 Q512	Q515	IC502		Q506 Q502
Q508 Q511	IC503			Q501 Q505
Q507				

ANP7167-B

4.6 E VR ASSY, CONNECTION ASSY, REGULATOR(3) ASSY AND V-AMP ASSY



Q603 IC612 IC608
Q604

Q605	IC611
	IC609

IC607
IC610

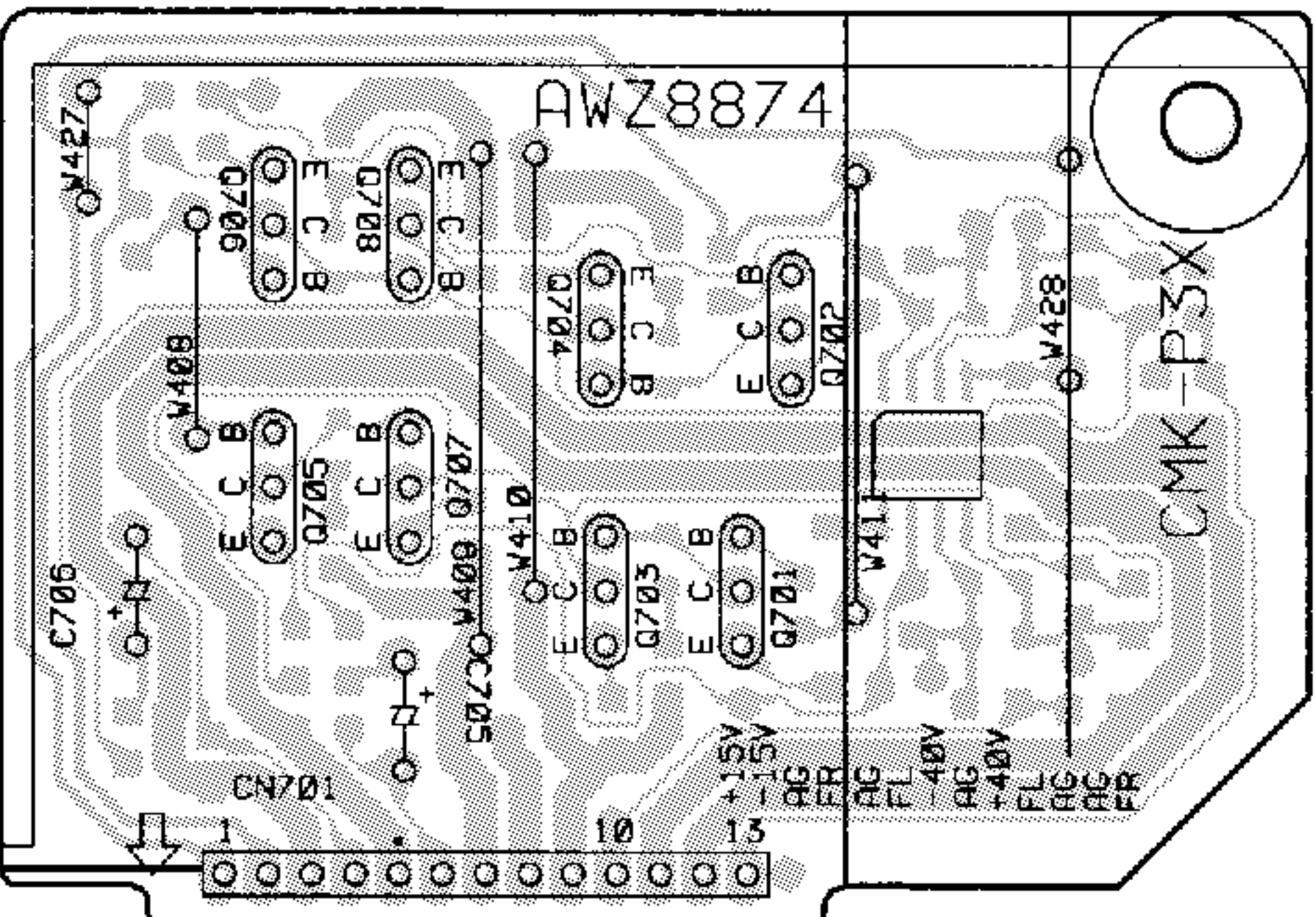
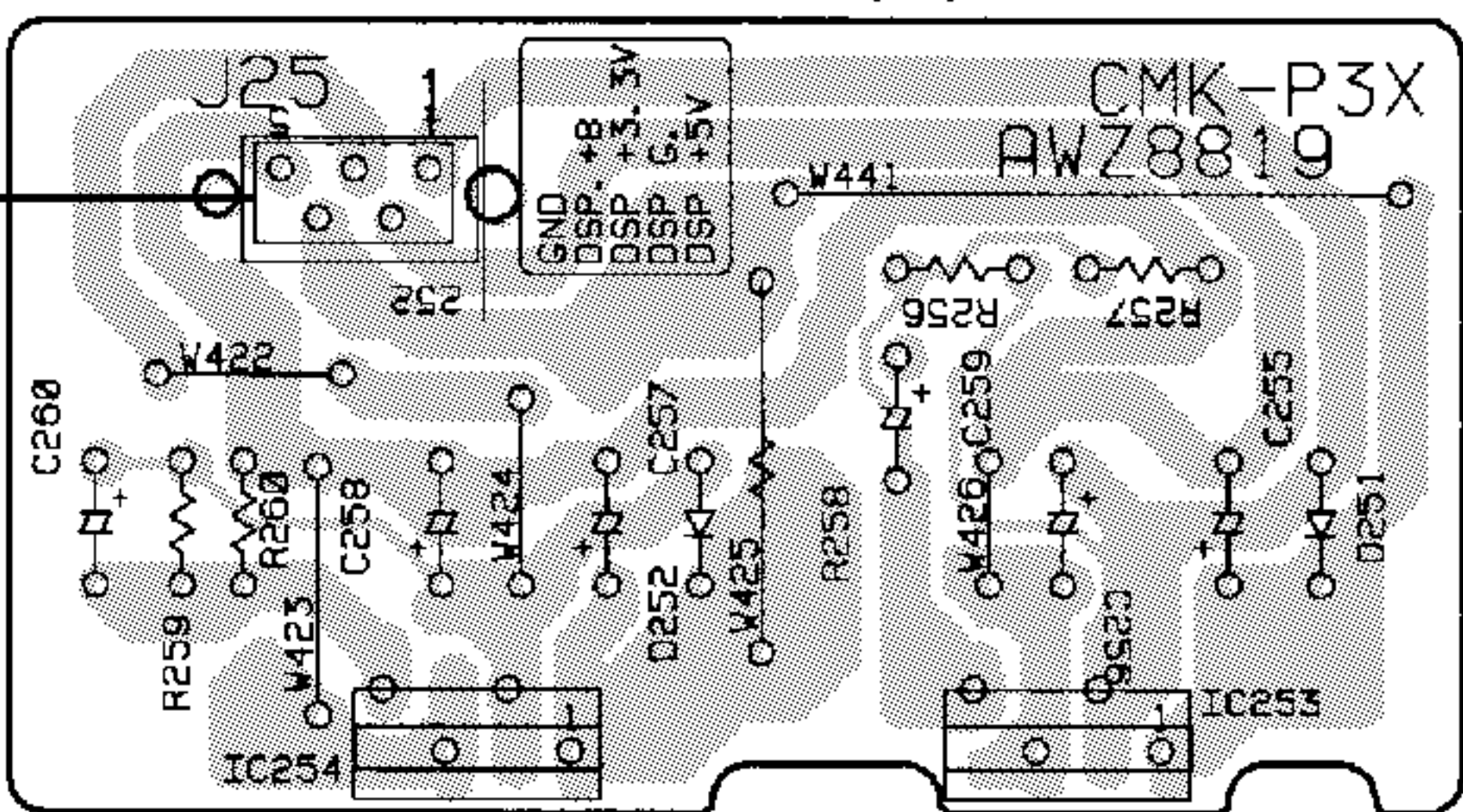
IC604	IC601
IC606	IC602

SIDE A

L REGULATOR(3) ASSY

M V-AMP ASSY

Q CN275



Q706
Q708
Q704
Q702
Q705
Q707
Q703
Q701

T 103

R CN154

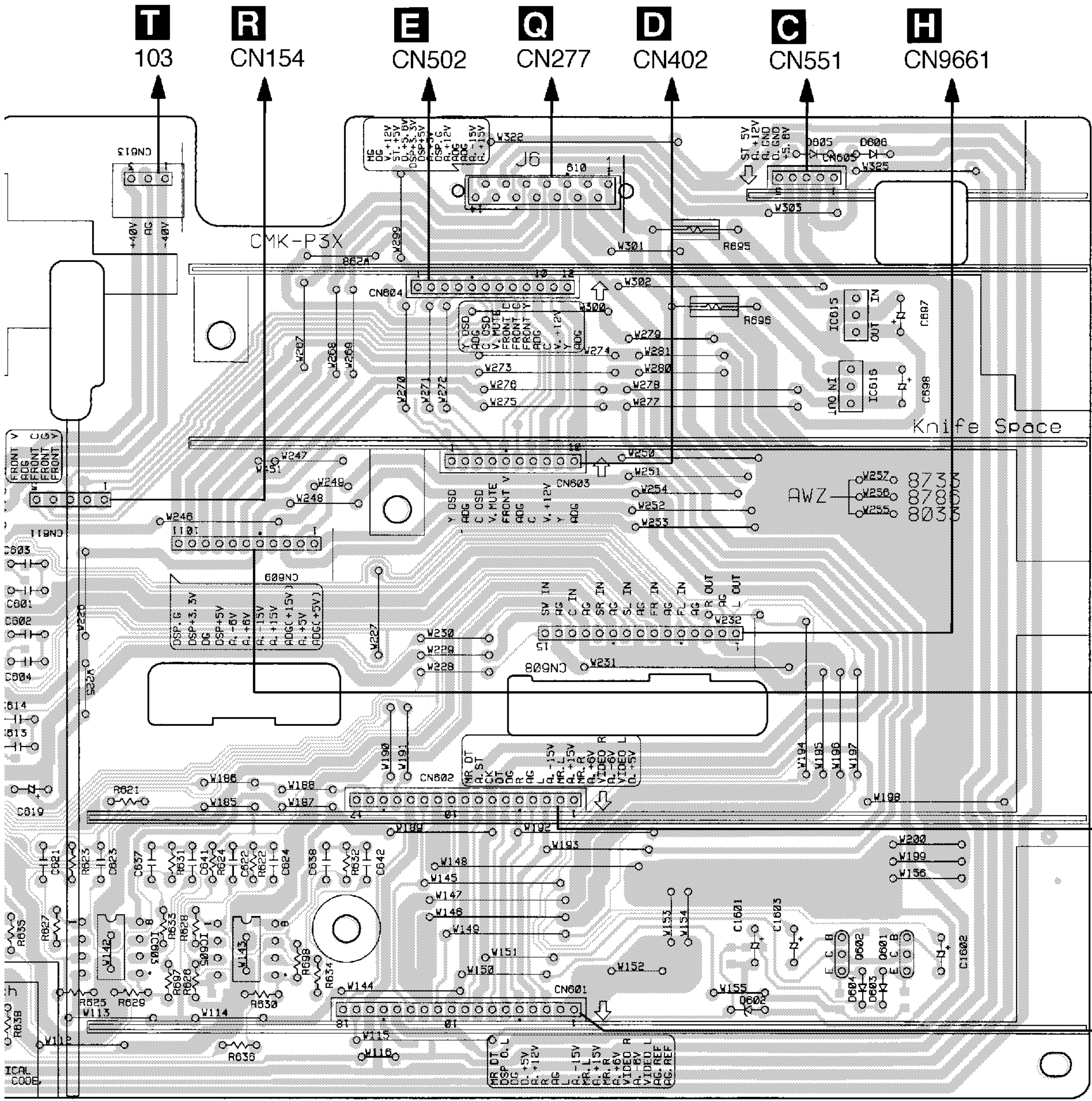
E CN502

Q CN277

D CN402

C CN551

H CN9661



H CN9801

B CN353

A CN302

IC603

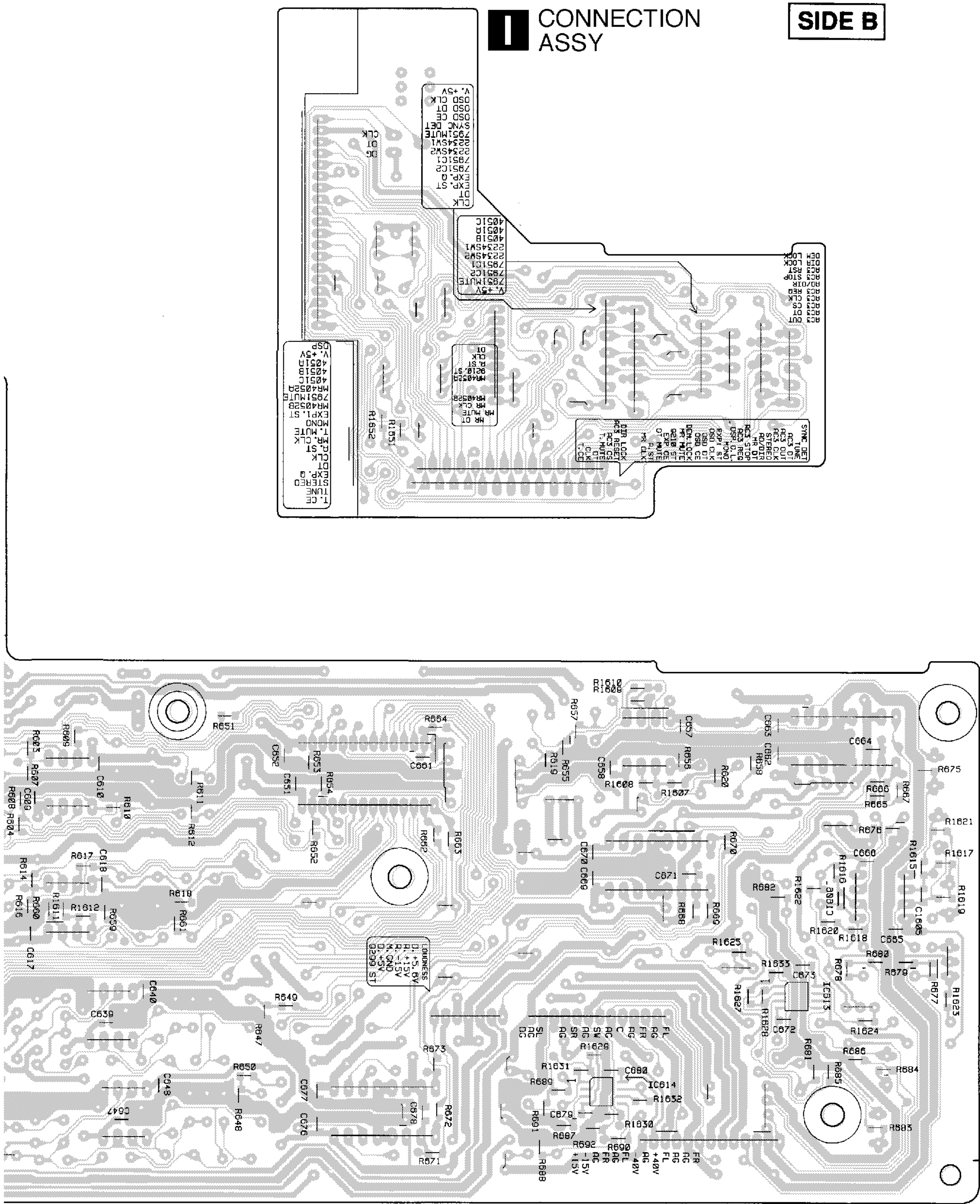
IC605

IC615 IC616
Q602 Q601

ANP7168-B

F L M

[illegible]

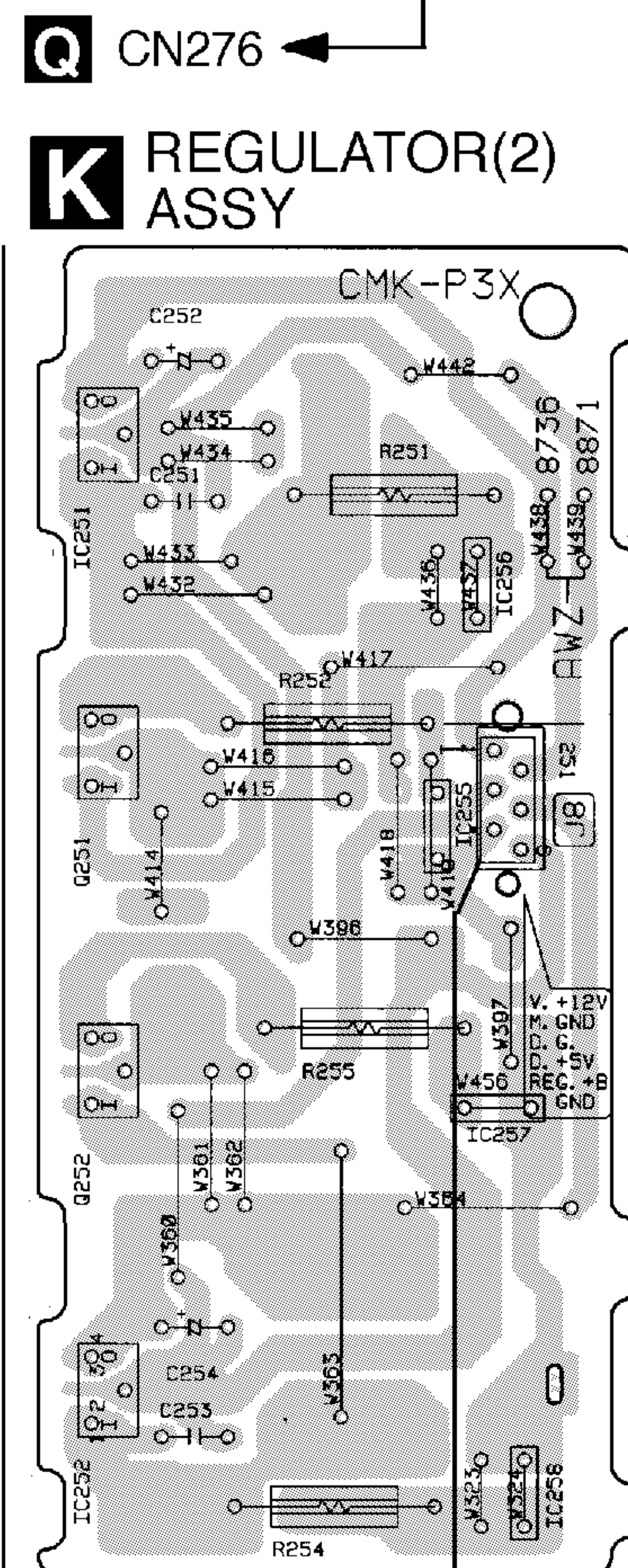
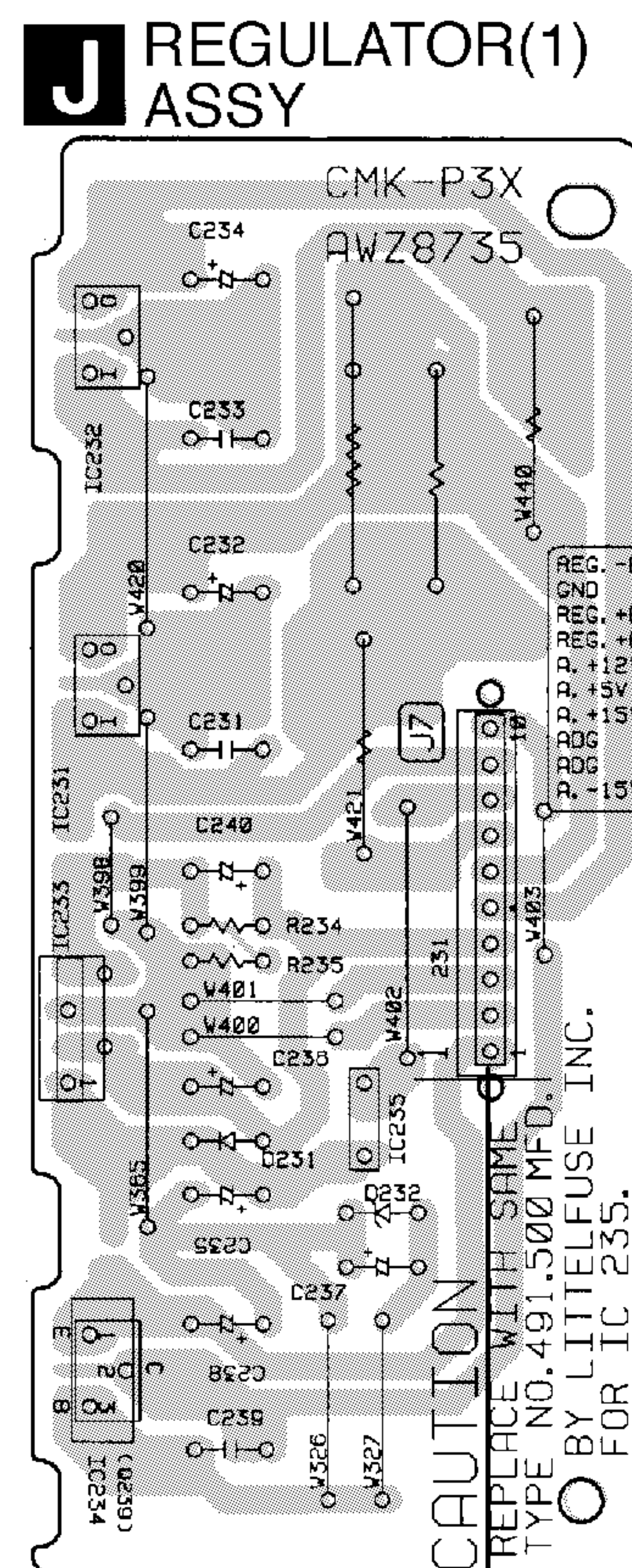
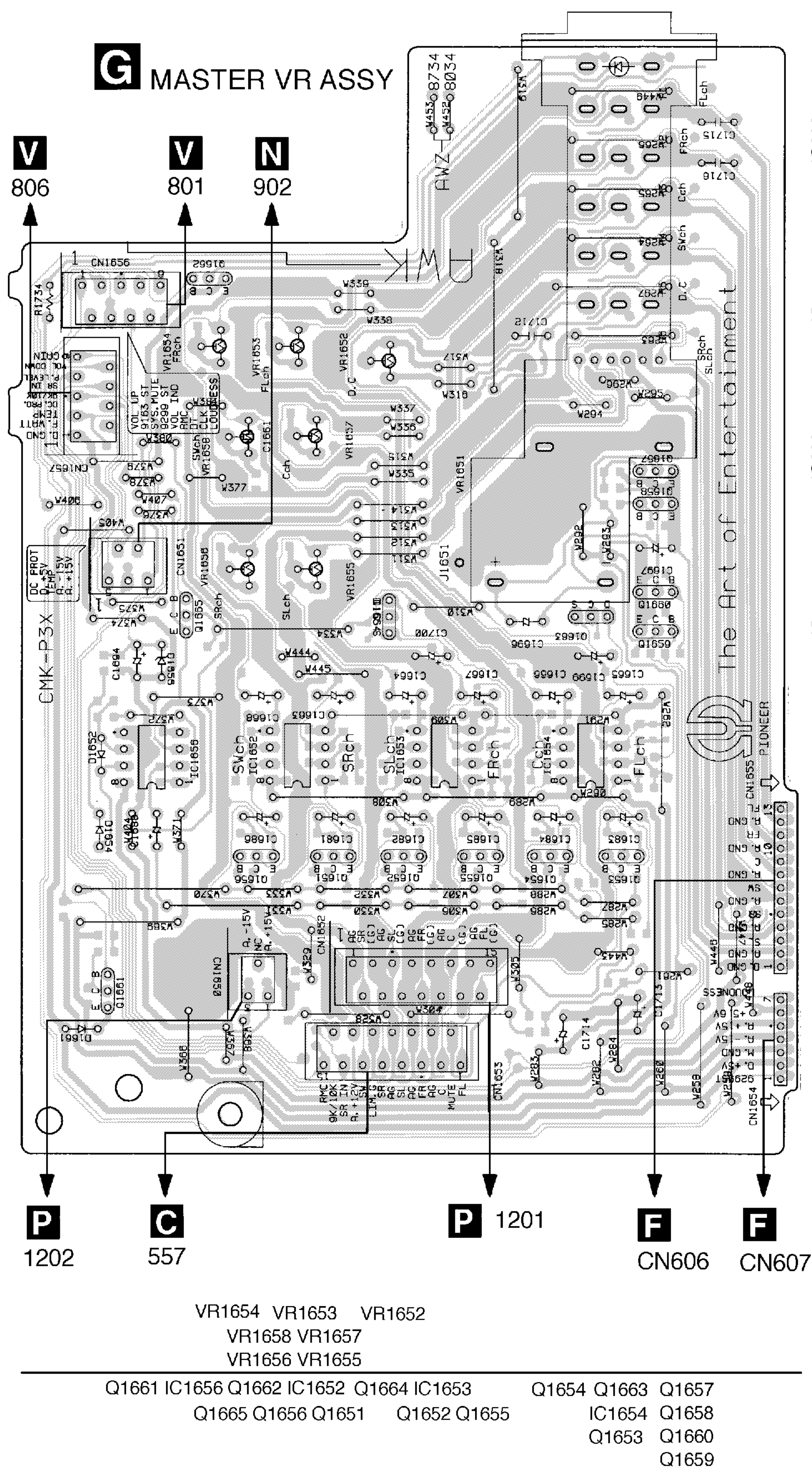


IC614

IC613

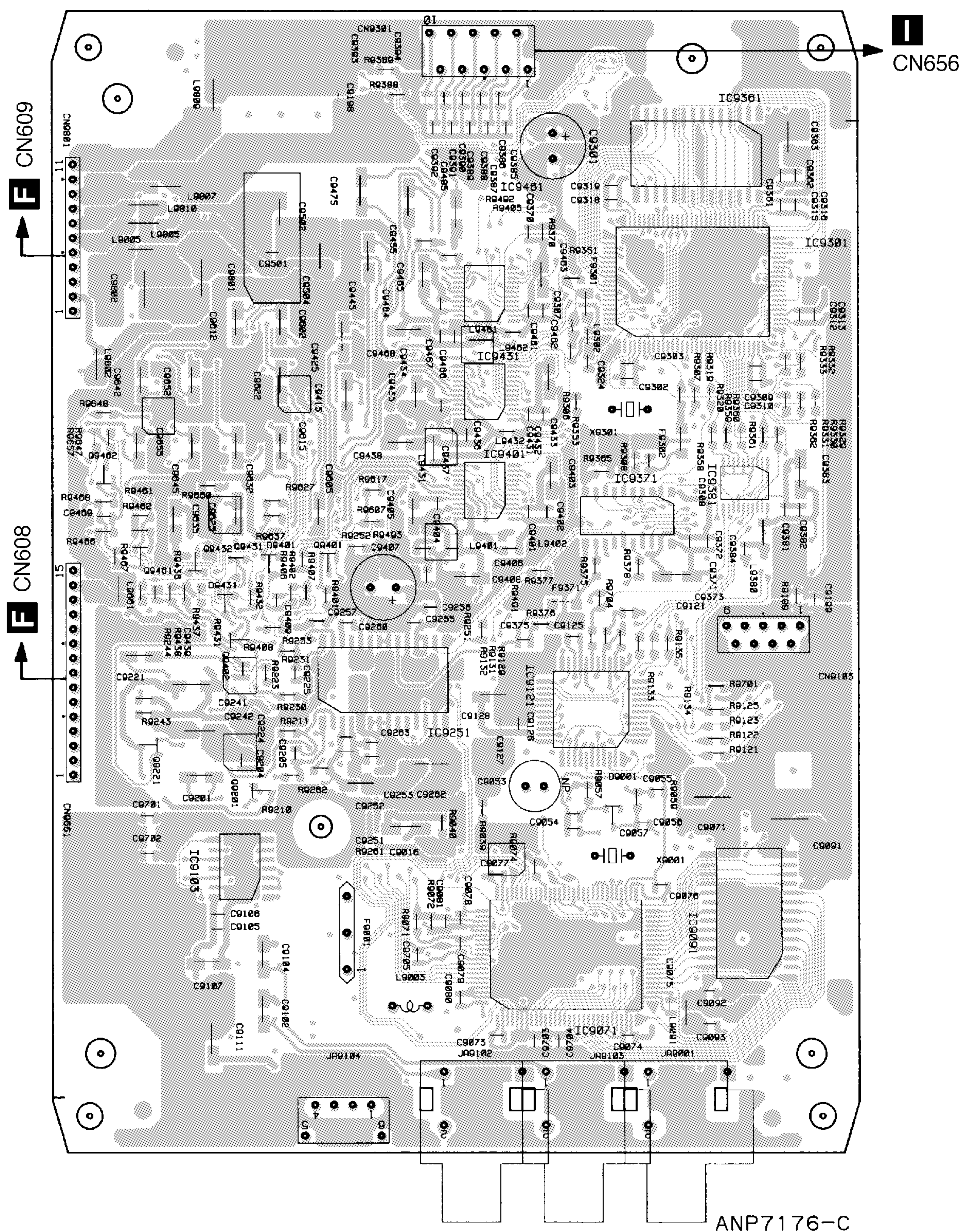
ANP7168-B

4.7 MASTER VR ASSY, REGULATOR(1) ASSY AND REGULATOR(2) ASSY

SIDE A

ANP7168-B

Q CN274 

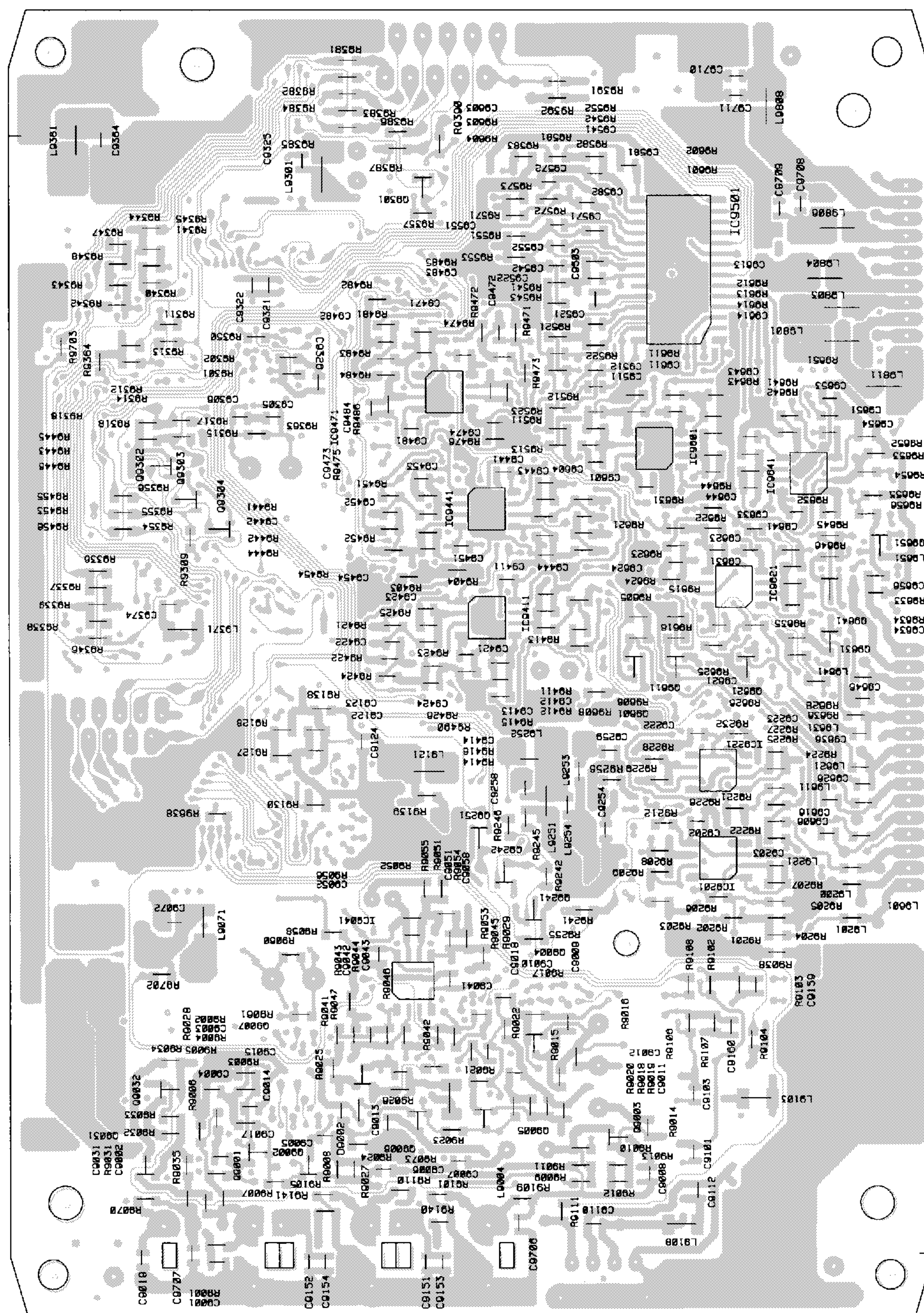
SIDE A

Q9462	Q9431	Q9401	IC9461	IC9371	IC9361
Q9461	Q9402	IC9251	IC9431	IC9121	IC9301
Q9221	Q9201		IC9401	IC9071	IC9381
Q9432	IC9103				IC9091



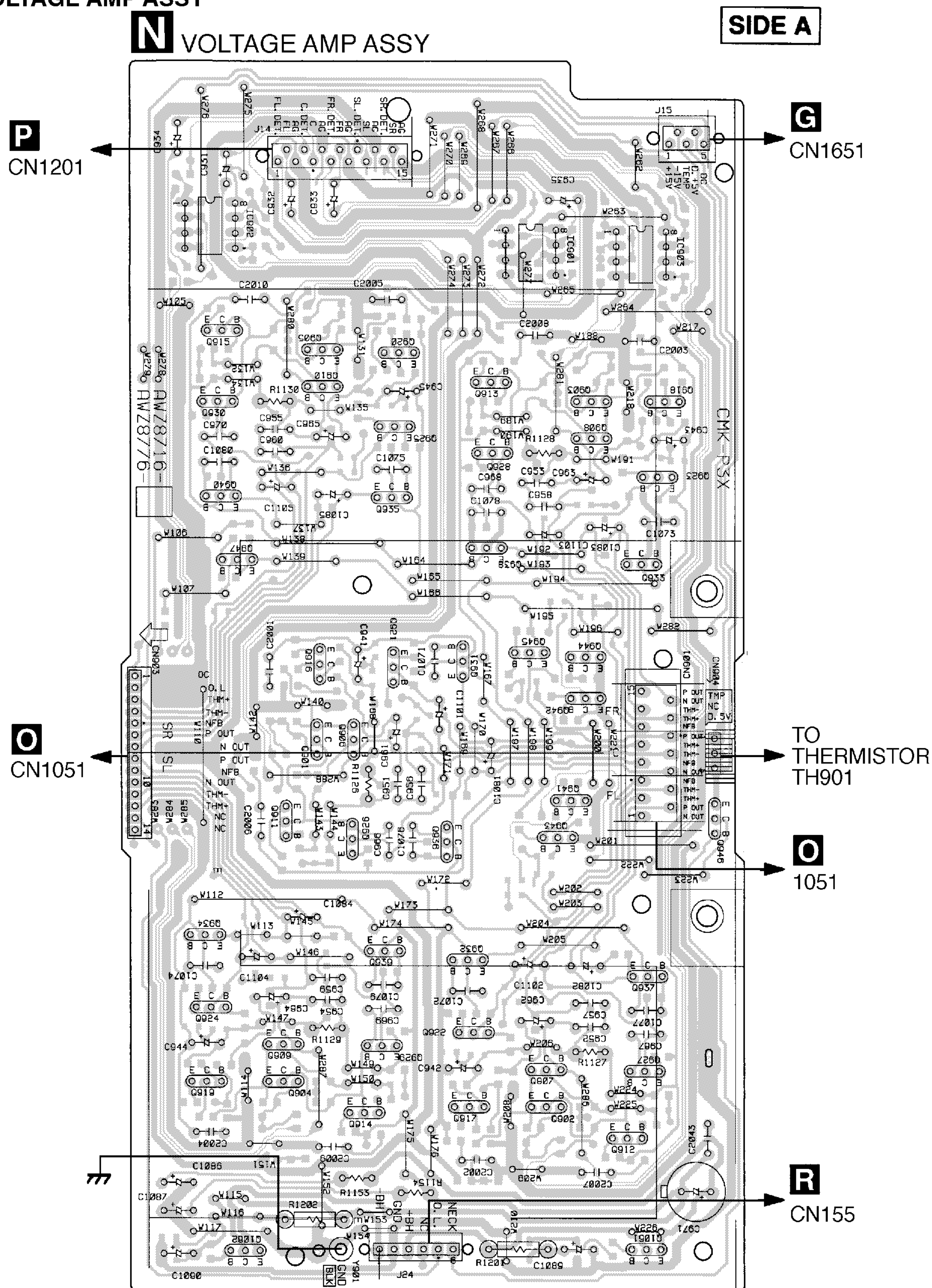


DOLBY DIGITAL ASSY



Q9302	Q9304	IC9471	IC9441	IC9501	IC9621	IC9641
Q9303	Q9002	IC9041	IC9411	IC9601	Q9621	Q9651
Q9032		Q9006	Q9251	Q9601	IC9221	Q9641
Q9031		Q9301	Q9242	Q9611	IC9201	Q9631
		Q9005	Q9241	Q9003		
			Q9004			

4.9 VOLTAGE AMP ASSY



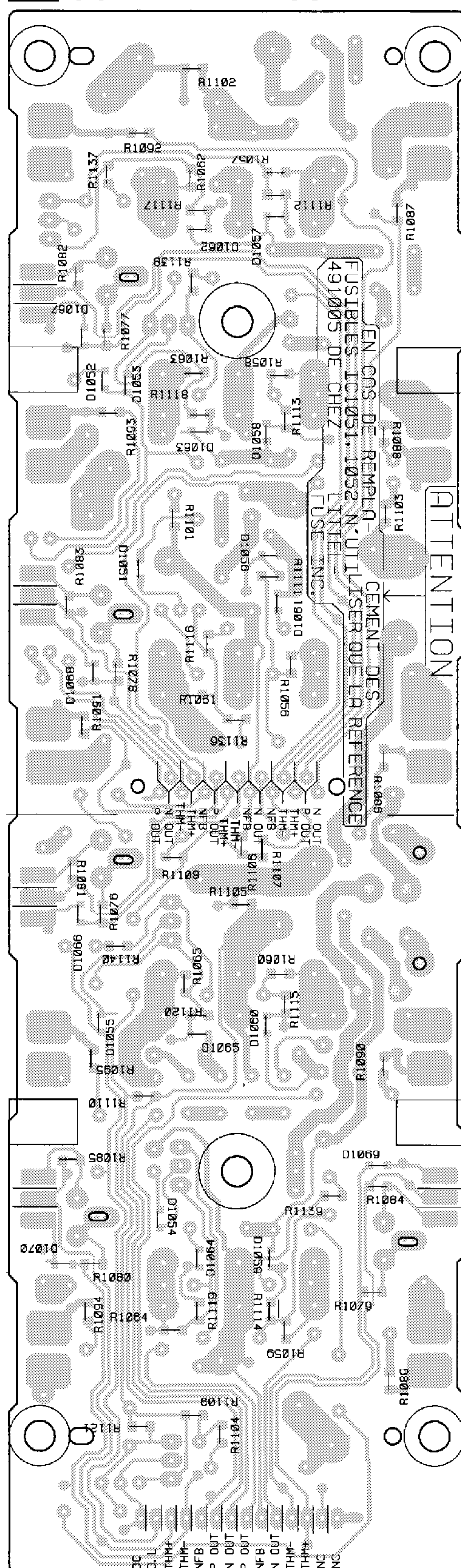
IC902	Q915	Q911	Q905	Q920	Q931	Q913	IC901	Q903	IC903	Q946
Q934	Q930	Q909	Q910	Q925	Q936	Q928	Q945	Q908	Q918	
Q924	Q940	Q904	Q916	Q935	Q932	Q938	Q907	Q944	Q923	
Q919	Q947	Q901		Q921	Q922		Q902	Q942	Q933	
	Q1062	Q906		Q939	Q917			Q941	Q937	
		Q926		Q929				Q943	Q927	
		Q914						Q912	Q1061	

ANP7171-B

O



O CURR DRIVE ASSY

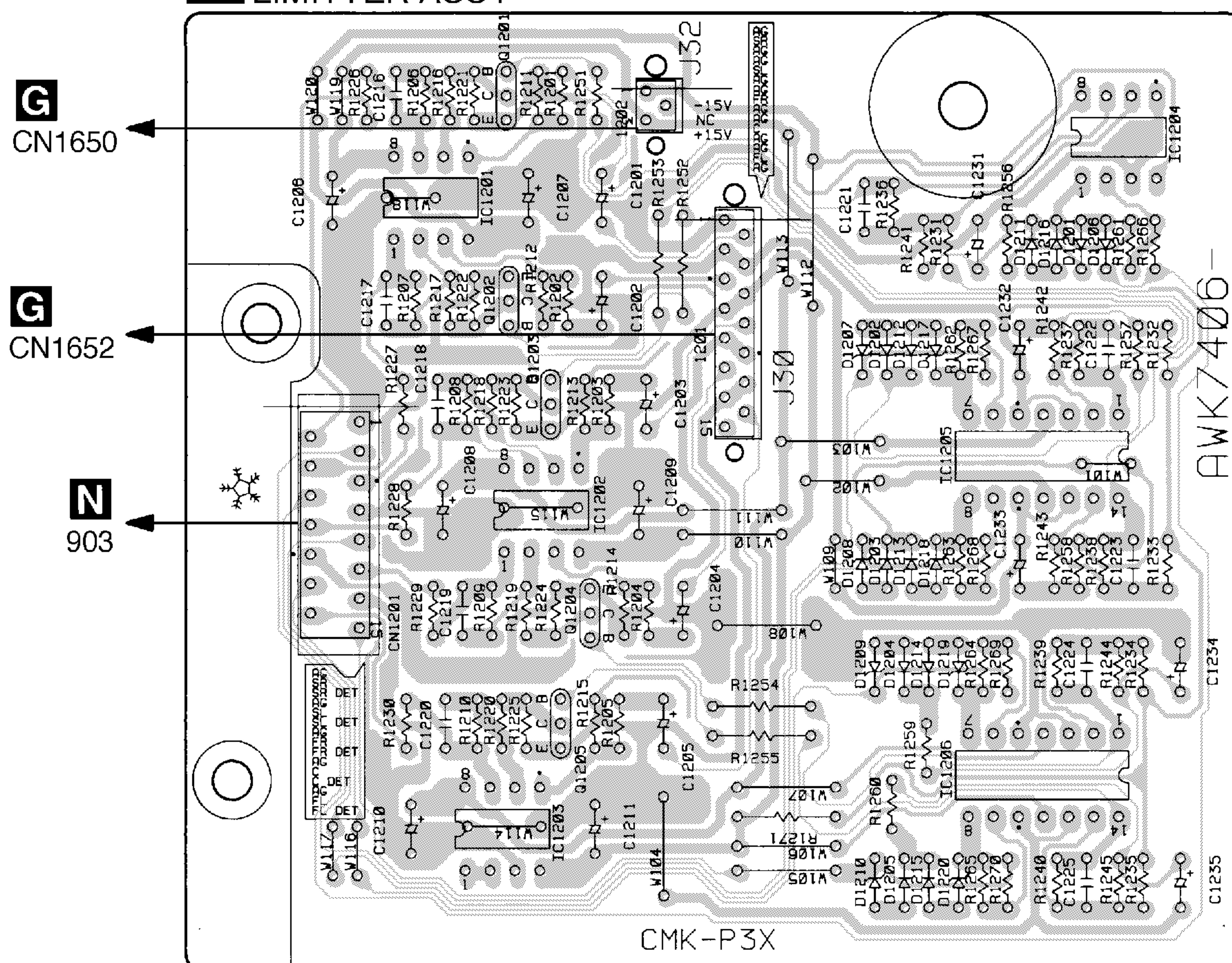
SIDE B

ANP7171-B

4.11 LIMITTER ASSY AND TRANS TERMINAL ASSY

SIDE A

P LIMITTER ASSY

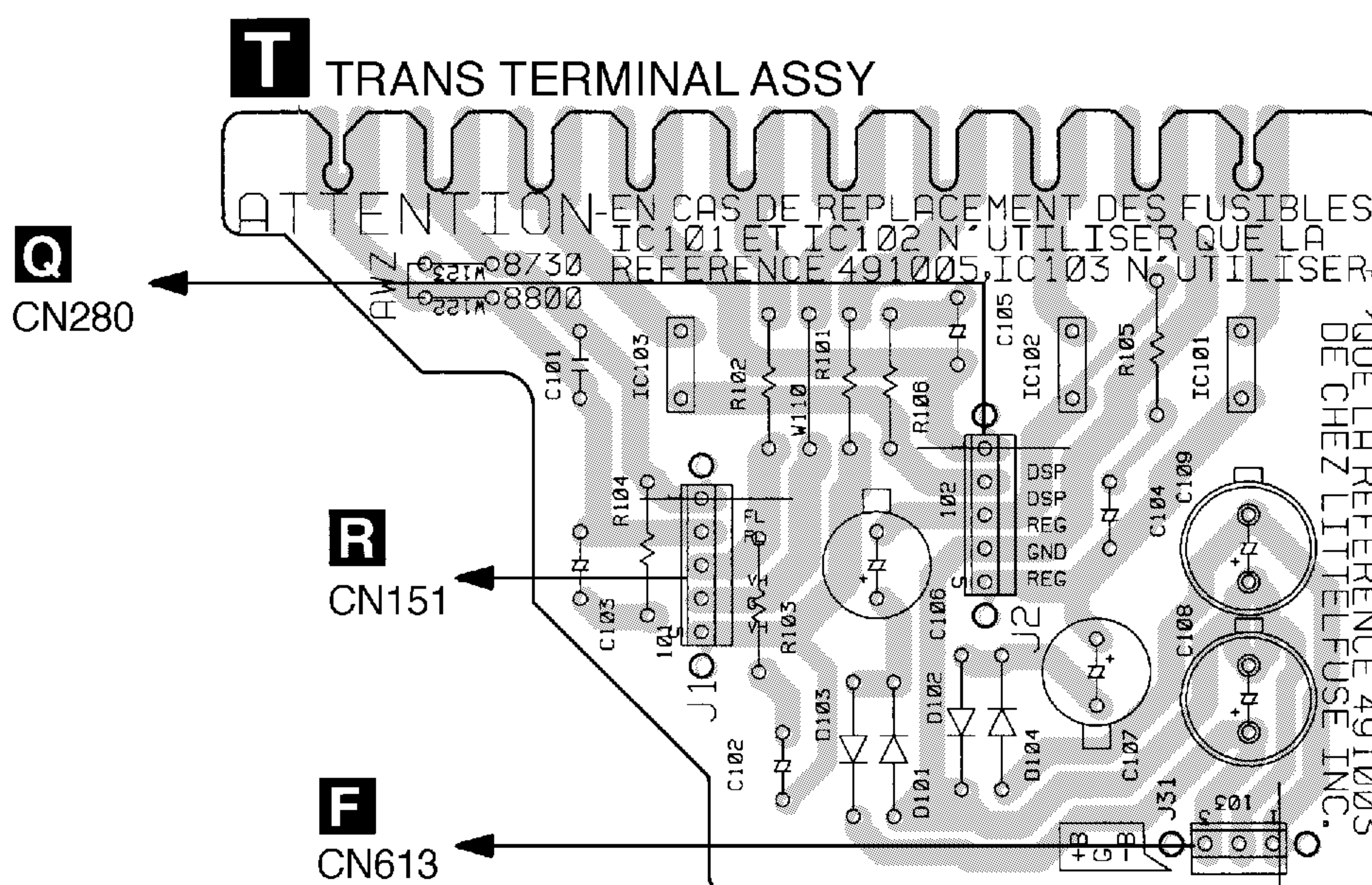


IC1201 Q1201 Q1203
Q1202 IC1202
IC1203 Q1204
Q1205

IC1205 IC1204
IC1206

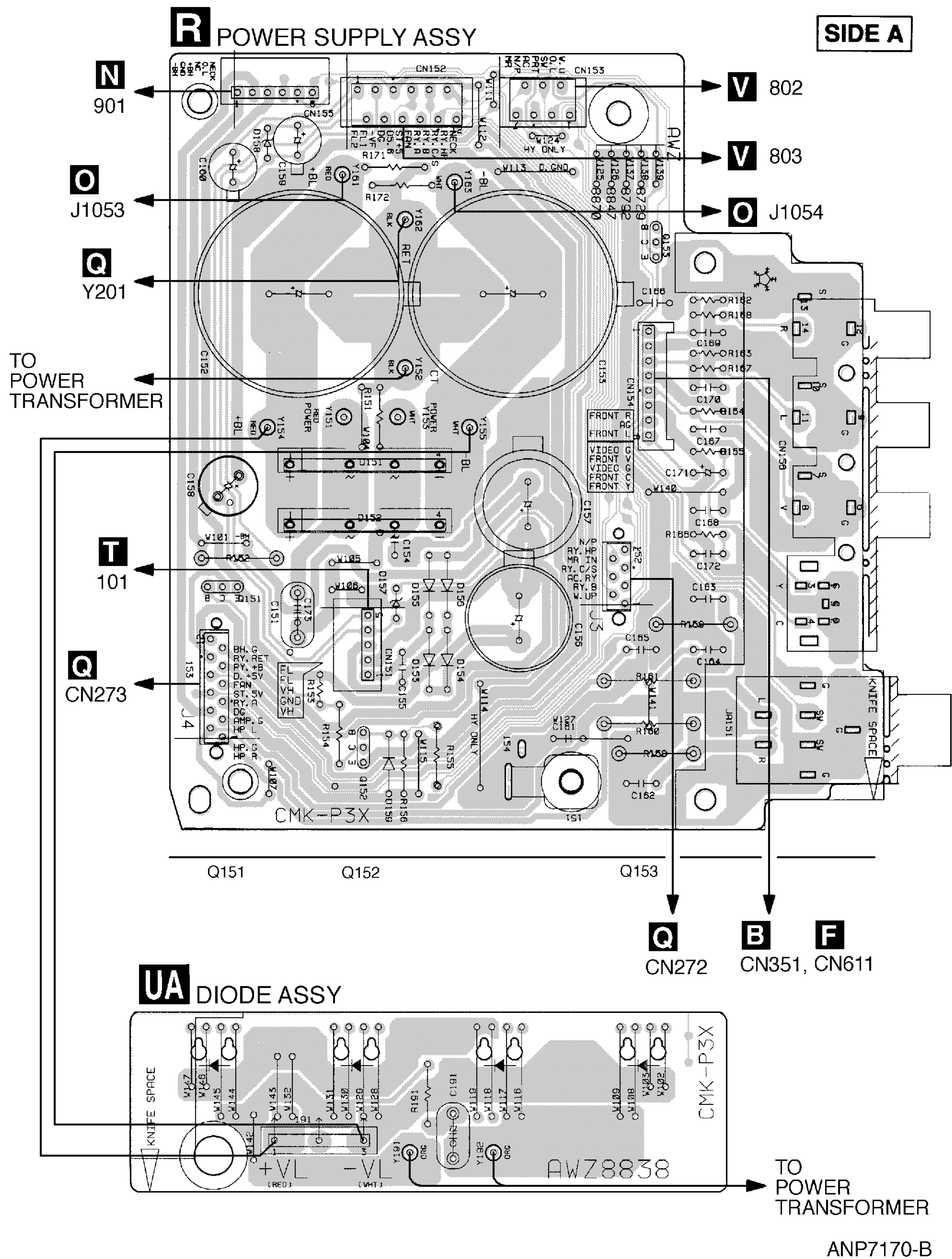
ANP7182-A

T TRANS TERMINAL ASSY



ANP7170-B

4.13 POWER SUPPLY ASSY AND DIODE ASSY

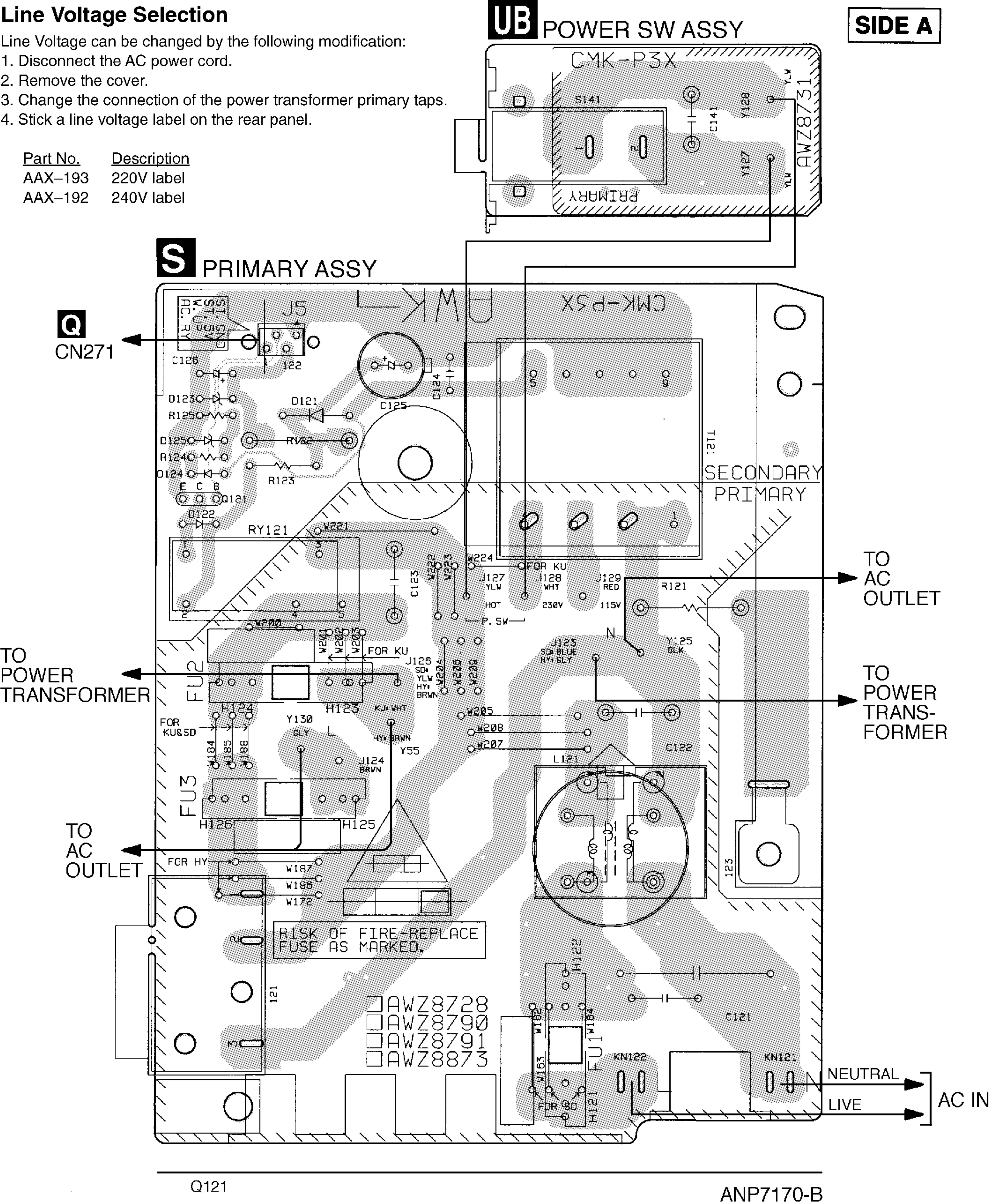


4.14 PRIMARY ASSY AND POWER SW ASSY

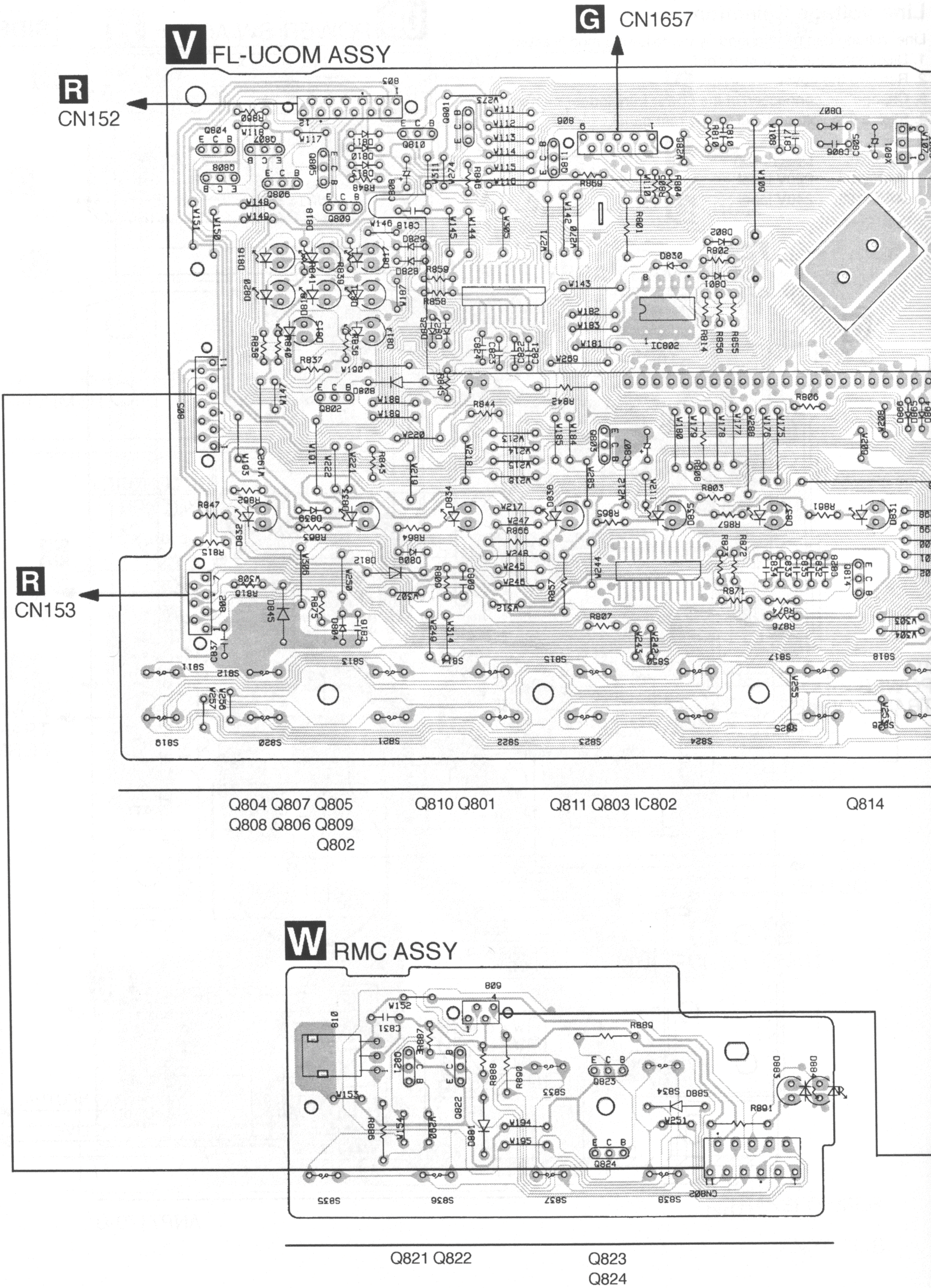
Line Voltage Selection

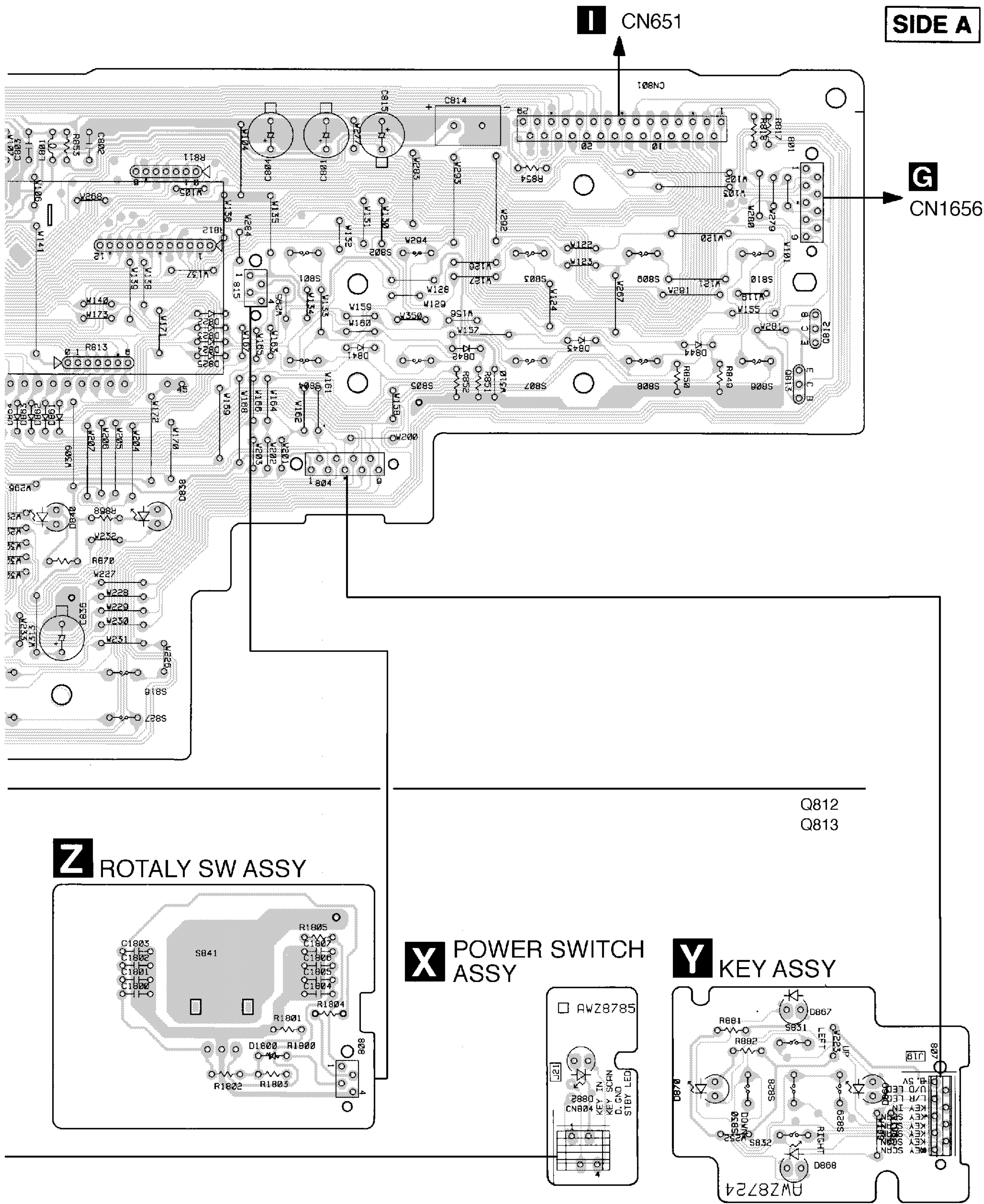
- Line Voltage can be changed by the following modification:
- 1. Disconnect the AC power cord.
 - 2. Remove the cover.
 - 3. Change the connection of the power transformer primary taps.
 - 4. Stick a line voltage label on the rear panel.

Part No.	Description
AAX-193	220V label
AAX-192	240V label

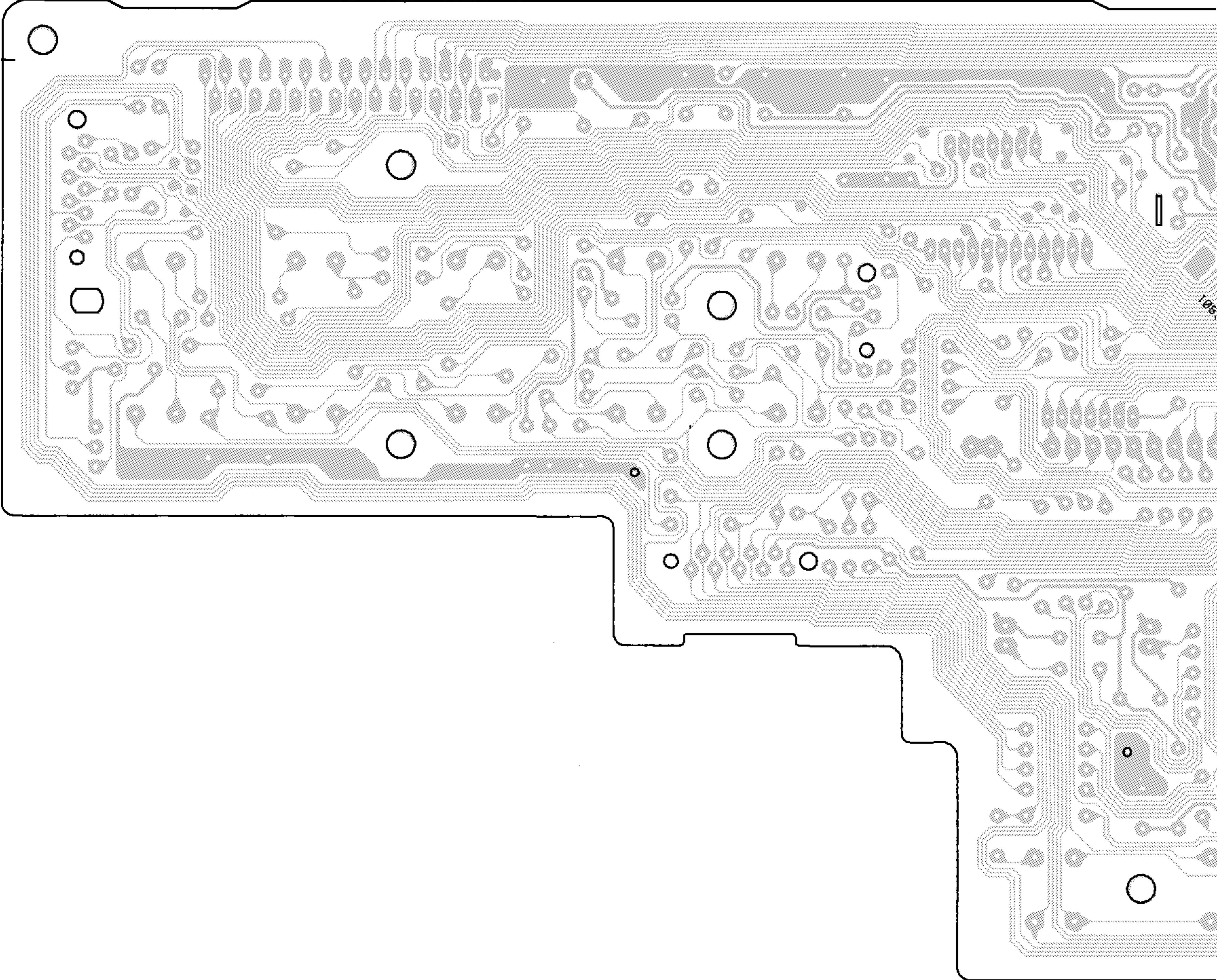


4.15 FL-UCOM ASSY, RMC ASSY, POWER SWITCH ASSY, KEY ASSY AND ROTALY SW ASSY

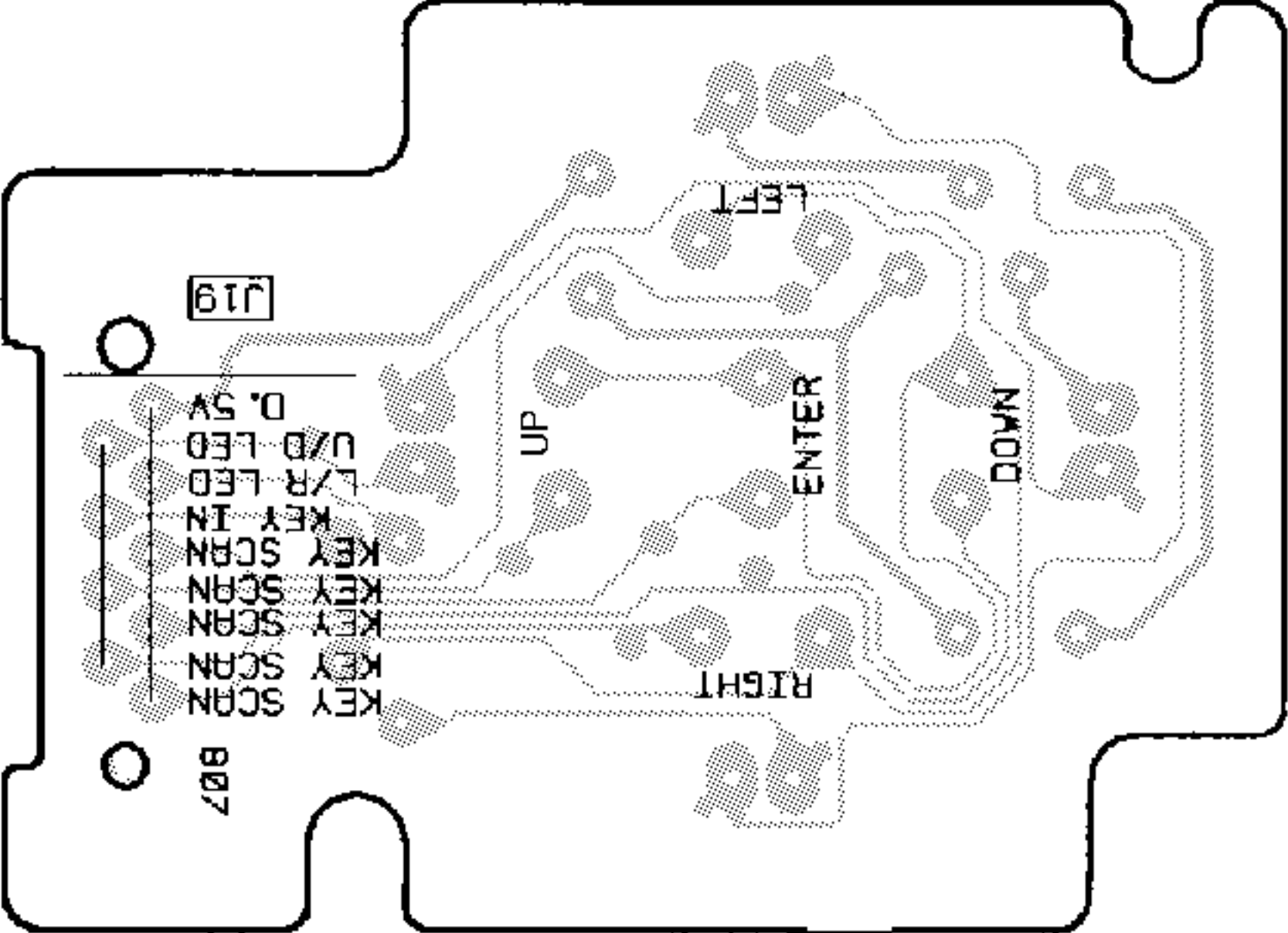




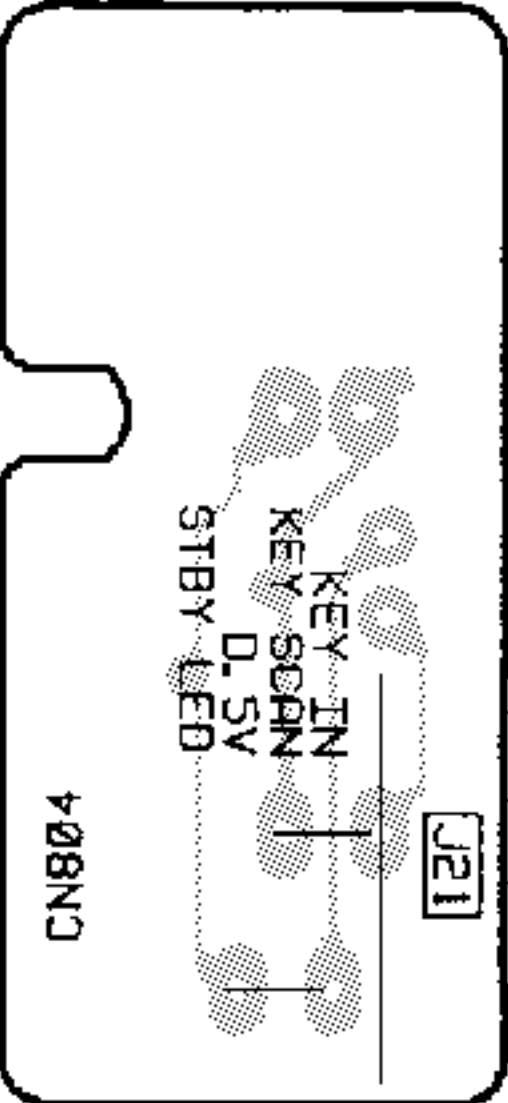
V FL-UCOM ASSY



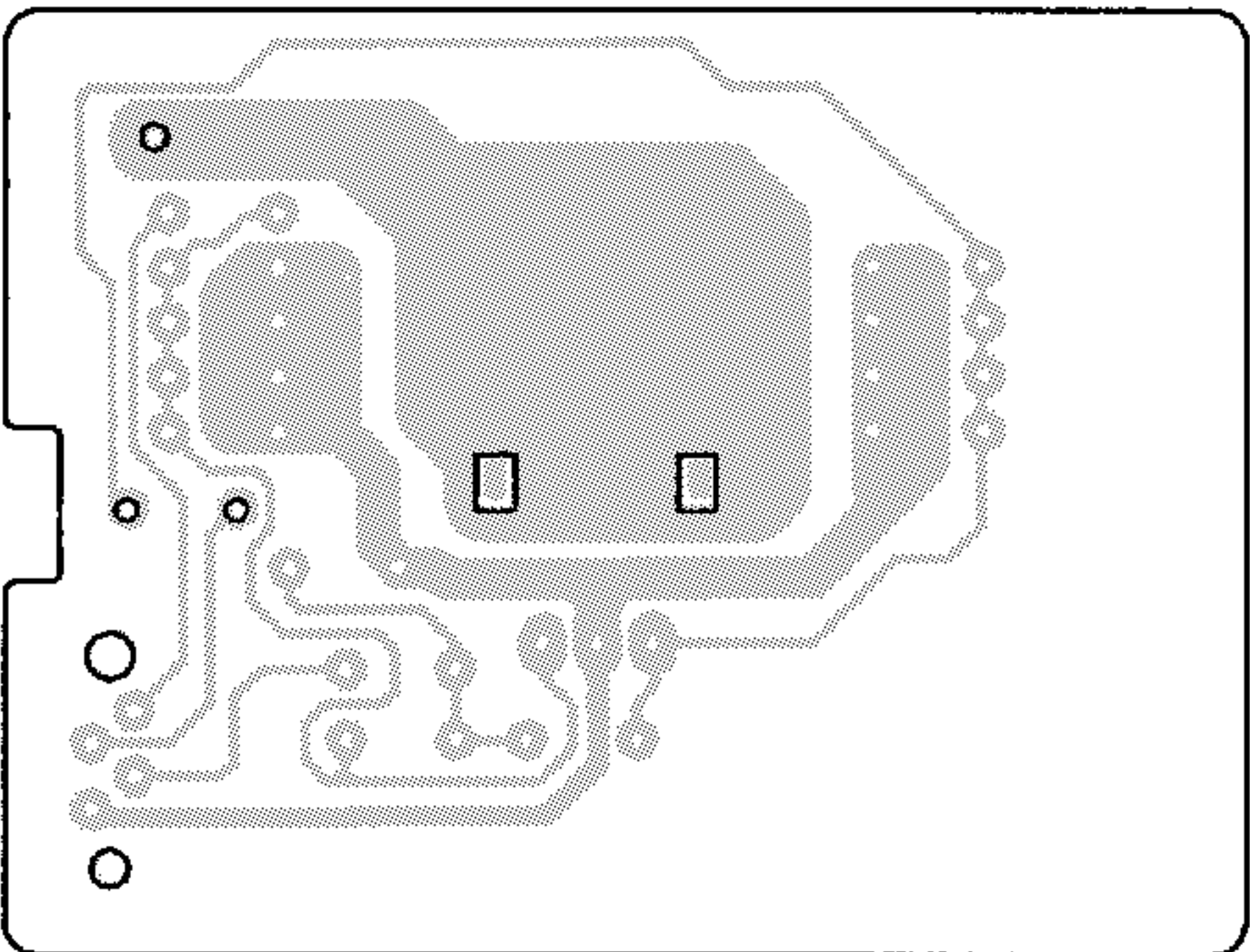
Y KEY ASSY



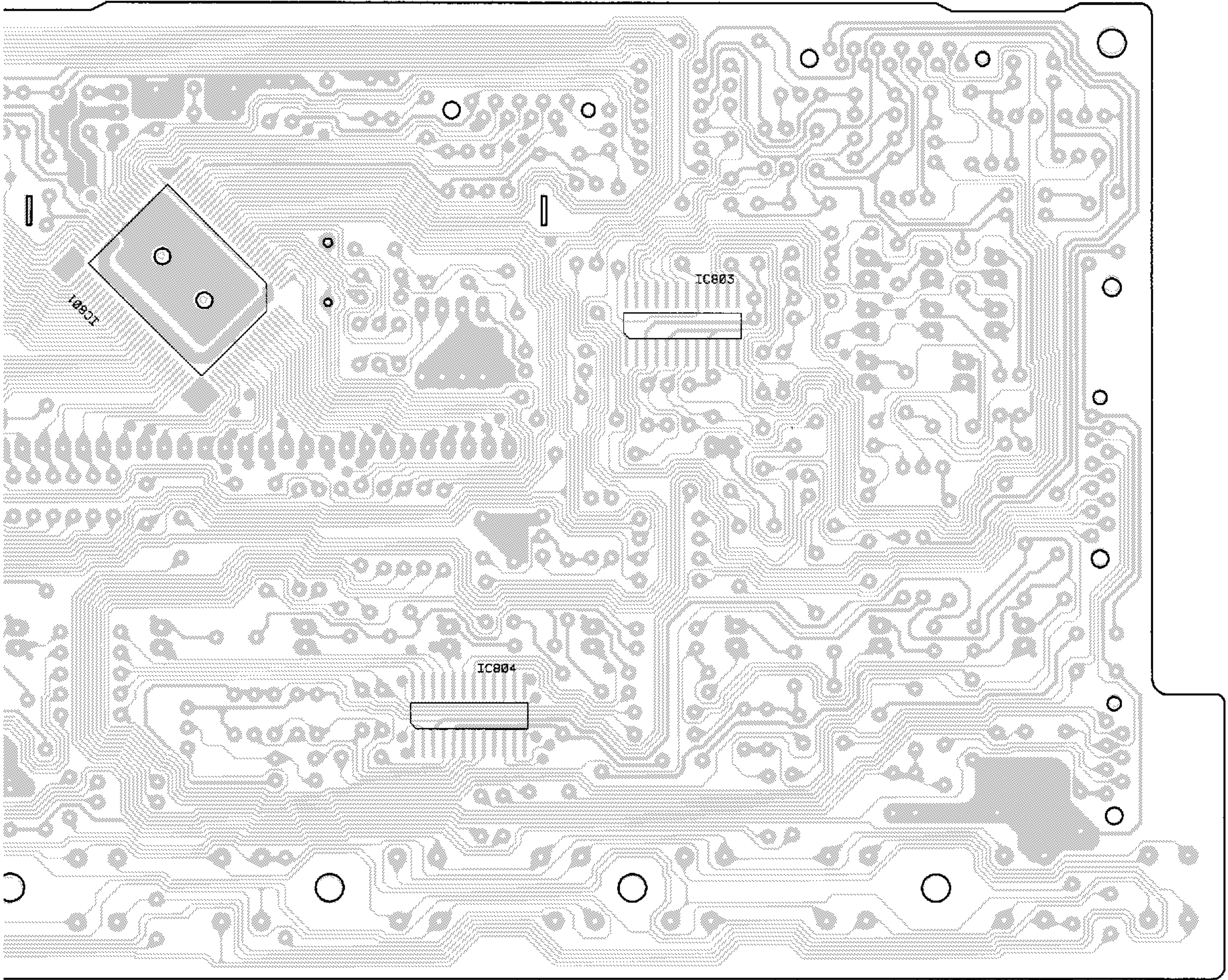
X POWER SWITCH ASSY



Z ROTARY SW ASSY



SIDE B

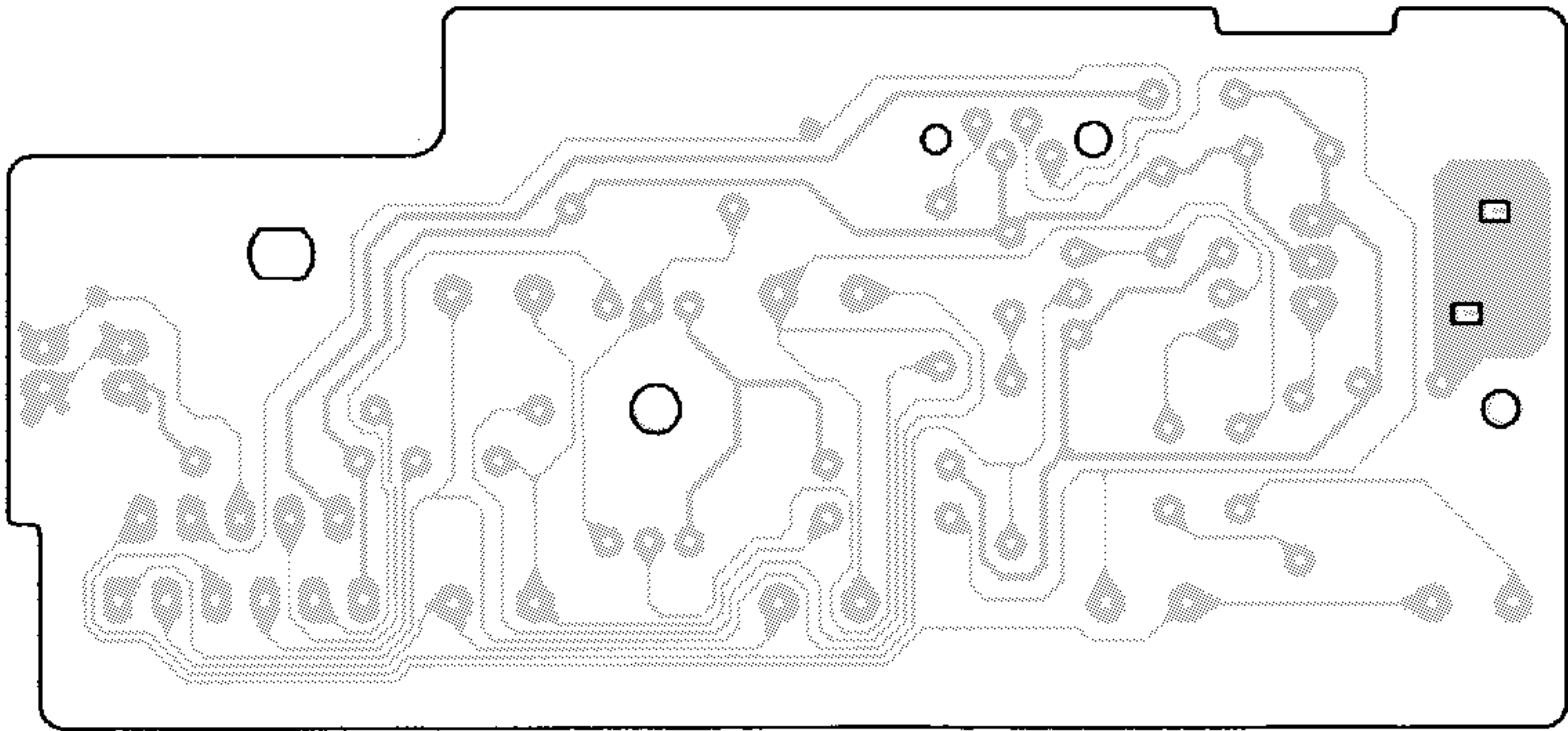


IC801

IC804

IC803

W RMC ASSY



ANP7169-B

5. 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.
• 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	→	56 × 10 ⁱ	→	561	RD1/4PU	561J
47k Ω	→	47 × 10 ³	→	473	RD1/4PU	473J
0.5 Ω	→	R50			RN2H	R50K
1 Ω	→	1R0			RS1P	1R0K

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

5.62k Ω	→	562 × 10 ⁱ	→	5621	RN1/4PC	5621F
----------------	---	-----------------------	---	------------	---------	-------

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.		Remarks
		HY TYPE	HV TYPE	
NSP	POWER AMP ASSY	AWK7364	AWK7364	
	└ VOLTAGE AMP ASSY	AWZ8716	AWZ8716	
	└ CURR DRIVE ASSY	AWZ8717	AWZ8717	
NSP	SMALL SIG. ASSY	AWK7387	AWK7387	
	└ AUDIO ASSY	AWZ8764	AWZ8764	
	└ AUDIO/VIDEO ASSY	AWZ8767	AWZ8767	
	└ VIDEO ASSY	AWZ8770	AWZ8770	
	└ S-VIDEO ASSY	AWZ8771	AWZ8771	
	└ PRE-OUT & SR ASSY	AWZ8775	AWZ8775	
NSP	CONTROL ASSY	AWK7389	AWK7389	
NSP	└ KEY ASSY	AWZ8724	AWZ8724	
NSP	└ ROTARY SW ASSY	AWZ8726	AWZ8726	
	└ FL-UCOM ASSY	AWZ8780	AWZ8780	
NSP	└ RMC ASSY	AWZ8783	AWZ8783	
NSP	└ POWER SWITCH ASSY	AWZ8785	AWZ8785	
NSP	POWER SUPPLY ASSY	AWK7390	AWK7407	
	└ POWER SW ASSY	AWZ8731	AWZ8731	
	└ SP TERMINAL ASSY	AWZ8789	AWZ8789	
	└ PRIMARY ASSY	AWZ8791	AWZ8873	
	└ TRANS TERMINAL ASSY	AWZ8800	AWZ8800	
NSP	└ DIODE ASSY	AWZ8838	AWZ8838	
	└ POWER SUPPLY ASSY	AWZ8847	AWZ8847	
NSP	CONNECTION ASSY	AWK7404	AWK7404	
	└ E VR ASSY	AWZ8033	AWZ8033	
	└ MASTER VR ASSY	AWZ8034	AWZ8034	
NSP	└ CONNECTION ASSY	AWZ8732	AWZ8732	
	└ REGULATOR (1) ASSY	AWZ8735	AWZ8735	
NSP	└ REGULATOR (3) ASSY	AWZ8819	AWZ8819	
	└ REGULATOR (2) ASSY	AWZ8871	AWZ8871	
	└ V-AMP ASSY	AWZ8874	AWZ8874	
	LIMITTER ASSY	AWK7406	AWK7406	
	DOLBY DIGITAL ASSY	AWX7038	AWX7038	

■ CONTRAST OF PCB ASSEMBLIES

PRIMARY ASSY

AWZ8873 and AWZ8791 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ8791	AWZ8873	
	H125, H126 Holder	RKR1003	Not used	

■ PCB PARTS LIST FOR HY TYPE

Mark	No.	Description	Parts No.
N VOLTAGE AMP ASSY			
SEMICONDUCTORS			
	IC901 – IC903		NJM4558DX
	Q916 – Q920		2SA1048
	Q1062, Q943, Q944		2SA965
	Q901 – Q910, Q921 – Q925		2SA970
	Q936 – Q940		2SA970
	Q1061, Q941, Q942		2SC2235
	Q926 – Q935, Q947		2SC2240
	Q911 – Q915, Q945		2SC2458
	Q946		DTA124ES
	D911 – D925, D927 – D930		1SS355
	D951 – D960		1SS355
	D935		UDZ16B
	D931, D932, D938, D939		UDZ22B
	D933, D934, D936, D937		UDZ24B
	D941 – D945		UDZ6.8B
	D946 – D950		UDZ8.2B
CAPACITORS			
	C1071 – C1080		CCCSL181K2H
	C951 – C960		CCCSL560K2H
	C966 – C970		CCCSL5R0C2H
	C981 – C985		CCSQCH101J50
	C1089, C1090		CEAS101M50
	C971		CEAS470M2A
	C931 – C935, C941 – C945		CEJA100M50
	C961 – C965		CEJA101M16
	C1086, C1087		CEJA1R0M50
	C1081 – C1085, C1101 – C1105		CEJA470M16
	C946 – C950		CKSQYB182K50
	C936 – C940		CKSQYB221K50
	C976 – C980		CKSQYB222K50
	C1088		CKSQYF223Z50
RESISTORS			
	R1201, R1202		RD1/4LMF472J
	R1126 – R1130		RD1/4MUF473J
	R1153, R1154		RD1/4MUF4R7J
	Other Resistors		RS1/10S□□□J

Mark	No.	Description	Parts No.
OTHERS			
	901	CABLE HOLDER(6P)	51052–0600
	902	CABLE HOLDER(5P)	51063–0505
	903	CABLE HOLDER(15P)	51063–1505
	CN904	PLUG 3–P	KM250MA3
	CN903	14P SOCKET	KP200TA14L
	CN901	CONNECTOR(15P) PCB BINDER	KPE15 VEF1040
O CURR DRIVE ASSY			
SEMICONDUCTORS			
	IC1051, IC1052 (5A/125V)		AEK7019
	Q1051 – Q1055		2SA970
	Q1056, Q1057		2SC2458
	D1051 – D1070		1SS355
COILS AND FILTERS			
	L1051 – L1055 (1.5μH)		ATH1053
CAPACITORS			
	C1066		CEANP101M10
	C1091, C1092		CEAS470M63
	C1051 – C1055		CEASR22M50
	C1056 – C1065		CFTXA224J50
RESISTORS			
	R1066 – R1075 (0.1Ω/2W)		ACN7027
	R1096 – R1100		RS1LMF4R7J
	VR1051–VR1055 (2.2kΩ/0.1W)		RCP1019
	Other Resistors		RS1/10S□□□J
OTHERS			
	1051	CABLE HOLDER(15P)	51063–1505
	CN1051	14P PLUG	KM200TA14
	KN1001	EARTH METAL FITTING	VNF1084
A AUDIO ASSY			
SEMICONDUCTORS			
	IC305		BU4094BCF
	IC301		M5220P
	IC302		NJM4558DX
	IC303		TC9164AN
	Q301		2SC2458

VSA-E06

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	L301	– L304	LCTA181J3225
CAPACITORS			
	C301	– C310, C323, C324	CCSQCH101J50
	C335, C336, C349, C350		CCSQCH101J50
	C1344, C337, C344		CCSQCH102J50
	C315, C316		CCSQCH151J50
	C311, C312, C339, C340		CCSQCH221J50
	C313, C314		CEAS100M50
	C333, C334		CEAS101M25
	C329	– C332	CEAS2R2M50
	C327, C328		CEAS331M25
	C317, C318, C341, C342		CEAS470M25
	C345, C346		CKSQYB103K50
	C321, C322		CQMA242J50
	C319, C320		CQMA822J50
RESISTORS			
	R342, R343		RD1/4PU102J
	R1301, R1302		RD1/4PU331J
	Other Resistors		RS1/10S□□□J

OTHERS

302, 303	PIN JACK(4P)	AKB7070
301	PIN JACK(6P)	AKB7073
CN302	18P SOCKET	KP200TA18L
CN303	19P SOCKET	KP200TA19L

B AUDIO/VIDEO ASSY

SEMICONDUCTORS

IC351	TC9162AN
-------	----------

CAPACITORS

C351	– C364	CCSQCH101J50
C365		CCSQCH102J50
C366, C367		CKSQYB103K50

RESISTORS

All Resistors	RS1/10S□□□J
---------------	-------------

OTHERS

360	CABLE HOLDER(3P)	51063 – 0305
351, 352	PIN JACK(6P)	AKB7073
J38	JUMPER WIRE	D15A03–100–2651
CN351	PLUG 3 – P	KM250MA3
CN353	17P SOCKET	KP200TA17L

CN352	9P SOCKET	KP200TA9L
-------	-----------	-----------

D VIDEO ASSY

SEMICONDUCTORS

IC406	BU4094BCF
IC408	LA7213
IC405	LA7951
IC403	MM1067XD
IC402	NJM2534L

Mark	No.	Description	Parts No.
	IC404		PD6178A
	IC409		UPC78L05J
	Q403	– Q409, Q411, Q412	2SA1048
	Q401, Q402, Q413, Q414		2SC2458
	Q410, Q415, Q475		DTC124ES
	D401	– D405	1SS355
	D406		HSS104 – 02

COILS AND FILTERS

L401	LCTA220J3225
------	--------------

CAPACITORS

C431, C468	CCSQCH101J50
C430, C457	CCSQCH102J50
C436, C437	CCSQCH150J50
C423	CCSQCH221J50
C433, C473	CCSQCH330J50

C428	CCSQCH471J50
C425, C426	CCSQCH561J50
C444, C448, C456, C461	CCSQCH5R0C50
C471, C472	CCSQCH5R0C50
C418, C450, C454, C465, C466	CEAS100M50

C421, C424, C427	CEAS1R0M50
C439	CEAS3R3M50
C401 – C404, C412, C415, C417	CEAS470M25
C435, C440 – C442, C446, C458	CEAS470M25
C462, C467, C469	CEAS470M25

C445, C449, C464	CEAS471M10
C429	CEASR47M50
C413, C414, C416, C419, C434	CKSQYB103K50
C438, C443, C447, C459, C463	CKSQYB103K50
C451 – C453, C455, C470	CKSQYB104K25

C422	CKSQYB332K50
C420	CKSQYB473K50

RESISTORS

R459	RD1/2PM221J
R441, R446	RD1/2PM331J
R462	RD1/2PM680J
R469, R470	RD1/4PU101J
R475	RD1/4PU223J

R467	RD1/4PU331J
R468	RD1/4PU472J

Other Resistors	RS1/10S□□□J
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OTHERS

401	CABLE HOLDER(14P)	51063 – 1405
402, 405	PIN JACK(2P)	AKB7071
403	3P RCA PINJACK	AKB7077
X402	CRYSTAL RESONATOR	ASS1056
X401	CERAMIC RESONATOR (503kHz)	ASS1112

CN402	10P SOCKET	KP200TA10L
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Mark	No.	Description	Parts No.
E S-VIDEO ASSY			
SEMICONDUCTORS			
	IC504, IC505		LA7951
	IC501, IC502		NJM2534L
	IC503		TC4051BP
	Q501 – Q506, Q509		2SA1048
	Q508, Q510, Q514, Q515		2SC2458
	D501 – D504		1SS355
CAPACITORS			
	C536, C538, C540, C542, C544		CCSQCH5R0C50
	C546		CCSQCH5R0C50
	C1501, C1503, C1505, C1507, C1509		CEAS470M25
	C501, C505, C509, C513, C518		CEAS470M25
	C520, C521, C528, C529		CEAS470M25
	C533, C534, C549, C550		CEAS470M25
	C537, C539, C541		CEAS471M10
	C1502, C1504, C1506, C1508, C1510		CKSQYB103K50
	C504, C508, C512, C516, C517		CKSQYB103K50
	C519, C522, C523, C525, C526		CKSQYB103K50
	C530, C535, C548		CKSQYB103K50
	C502, C506, C511, C515, C524		CKSQYB104K25
	C531, C543, C545, C547		CKSQYB104K25
	C503, C507, C510, C514		CKSQYB473K50
RESISTORS			
	R1504, R541		RD1/2PM221J
	R1501, R532, R537, R546		RD1/2PM331J
	R1516		RD1/4PU103J
	Other Resistors		RS1/10S□□□J
OTHERS			
	501	CABLE HOLDER(9P)	51063 – 0905
	CN505	SOCKET	AKP7011
	CN503, CN504	SOCKET	AKP7012
	CN502	12P SOCKET	KP200TA12L
	361	PCB BINDER	VEF1040
C PRE-OUT & SR ASSY			
SEMICONDUCTORS			
	Q552		2SA1048
	Q551		2SC2458
	Q555 – Q560		2SC2878
	Q554		DTC124ES
	D551, D554, D555		1SS355
COILS AND FILTERS			
	L551 – L556		LCTA221J3225
CAPACITORS			
	C551 – C556, C558		CCSQCH101J50
	C557		CEAS101M25
RESISTORS			
	R554		RD1/4PU102J
	R578		RD1/4PU103J
	Other Resistors		RS1/10S□□□J

Mark	No.	Description	Parts No.
OTHERS			
	557	CABLE HOLDER(15P)	51063 – 1505
	556	PIN JACK(6P)	AKB7088
	CN553	JACK	AKN1006
	CN558	PLUG 3–P	KM250MA3
	CN551	5P SOCKET	KP200TA5L
	CN554	CONNECTOR(4P)	KPE4
Y KEY ASSY			
SEMICONDUCTORS			
	D867 – D870		SLR–342VRT31
SWITCHES AND RELAYS			
	S828 – S832		VSG1008
RESISTORS			
	All Resistors		RD1/4PU□□□J
OTHERS			
	807	CABLE HOLDER(9P)	51063 – 0905
Z ROTARY SW ASSY			
SEMICONDUCTORS			
	D1800		HSS104 – 02
SWITCHES AND RELAYS			
	S841		ASX7010
CAPACITORS			
	C1800, C1804		CKPUYF473Z16
RESISTORS			
	All Resistors		RD1/4PU□□□J
OTHERS			
	808	CABLE HOLDER(4P)	51063 – 0405
V FL-UCOM ASSY			
SEMICONDUCTORS			
	IC803, IC804		M66311FP
	IC801		PDG191A
	IC802		S–24C16ADP
	Q805 – Q811		DTA124ES
	Q801 – Q804, Q814		DTC124ES
	D801, D802, D804, D807 – D813		HSS104 – 02
	D822, D824 – D830, D839		HSS104 – 02
	D844, D845, D861 – D866		HSS104 – 02
	D814, D831 – D838, D840		SLR – 342VRT31
	D815 – D821		SLR – 342YCT31
COILS AND FILTERS			
	L801		LAU220J
SWITCHES AND RELAYS			
	S811 – S827, S850		VSG1008

VSA-E06

Mark	No.	Description	Parts No.
CAPACITORS			
	C807		CEAS101M10
	C805		CEAS1R0M50
	C808		CEAS220M50
	C815		CEJA100M50
	C801, C804		CEJA221M10
	C802, C803		CKCYF473Z50
	C821 – C824, C832 – C835		CKPUYB102K50
	C806, C809, C810, C816 – C818		CKPUYF473Z16
	C828, C838		CKPUYF473Z16
	C837		CKPUYX222M16
RESISTORS			
	R812		RA11T472J
	R811		RA6T472J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	815	CABLE HOLDER(4P)	51063 – 0405
	802	CABLE HOLDER(7P)	51063 – 0705
	801, 804, 806	CABLE HOLDER(9P)	51063 – 0905
	805	CABLE HOLDER(11P)	51063 – 1105
	803	CABLE HOLDER(12P)	51063 – 1205
	CN801	29P CONNECTOR	52044 – 2945
	V801	FL TUBE	AAV7037
	X801	CERAMIC RESONATOR (7.70MHz)	ASS1055
W RMC ASSY			
SEMICONDUCTORS			
	Q821, Q822		2SC2458
	Q823, Q824		DTC124ES
	D881, D885		HSS104 – 02
SWITCHES AND RELAYS			
	S835		VSG1008
CAPACITORS			
	C831		CKCYF103Z50
RESISTORS			
		All Resistors	RD1/4PU□□□J
OTHERS			
	809	CABLE HOLDER(4P)	51063 – 0405
	810	REMOTE RECEIVER UNIT	GPIU28X
	CN802	CONNECTOR(11P)	KPE11
X POWER SWITCH ASSY			
SEMICONDUCTORS			
	D882		SLR – 342VRT31
OTHERS			
	CN804	CONNECTOR(4P)	KPE4
UB POWER SW ASSY			
SWITCHES AND RELAYS			
	S141		ASG1035
CAPACITORS			
	C141	(3300pF/250V)	ACG7017

Mark	No.	Description	Parts No.
OTHERS			
	Y127, Y128	BOARDIN READ WIRE	ADX7207
Q SP TERMINAL ASSY			
SEMICONDUCTORS			
	Q271 – Q274		2SC2240
	Q203		2SC4793
	Q201		DTA124ES
	Q202		DTC143ES
	D201, D202		D3SBA20(B)
	D271 – D278		HSS104 – 02
	D211		MTZJ24B
	D203, D204		S5688G
COILS AND FILTERS			
	L271 – L277	(1μH)	ATH–133
SWITCHES AND RELAYS			
	S272		ASH1027
	RY271 – RY275		ASR1035
CAPACITORS			
	C202, C204		CEAS222M25
	C205		CEAS470M50
	C203		CEAS472M16
	C201		CEAS472M25
	C271 – C277		CQMXA562J2A
	C278 – C280		CQMXA104J2A
	C281 – C287		CQMXA562J2A
RESISTORS			
	R204		RD1/2PM561J
	R291		RD1/4PM181J
	R271, R274, R279		RS2LMF122J
	R201, R202		RS2LMF470J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	272	CABLE HOLDER(4P)	51063 – 0405
	CN278	SPEAKER TERMINAL 8 – P	AKE7044
	CN279	SPEAKER TERMINAL 6 – P	AKE7045
	CN276	CONNECTOR(10P)	KPC10
	CN280	CONNECTOR(5P)	KPC5
	CN273	CONNECTOR(12P)	KPE12
	CN277	CONNECTOR(14P)	KPE14
	CN271	CONNECTOR(4P)	KPE4
	CN275	CONNECTOR(5P)	KPE5
	CN274	CONNECTOR(6P)	KPE6
	CN272	CONNECTOR(7P)	KPE7
S PRIMARY ASSY			
SEMICONDUCTORS			
	Q121		DTC143ES
	D122, D124		HSS104 – 02
	D125		MTZJ5.1A
	D123		MTZJ5.6A
	D121		S5688G

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	L121	(0.8μH/250V)	ATF – 151
TRANSFORMERS			
△	T121		ATT1193
SWITCHES AND RELAYS			
△	RY121		ASR1027
CAPACITORS			
△	C121 – C123	(10000pF/250V)	ACG7020
	C125		CEAS102M16
	C126		CEAS470M25
	C124		CKCYF103Z50
RESISTORS			
	R123		RD1/2PM270J
	R122		RS2LMF121J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	122	CABLE HOLDER(4P)	51063 – 0405
	H121, H122, H125, H126	HOLDER	RKR1003
T TRANS TERMINAL ASSY			
SEMICONDUCTORS			
	IC103	(3A, 125V)	AEK7015
	IC101, IC102	(5A, 125V)	AEK7019
	D101 – D104		S5688G
CAPACITORS			
	C103	(1μF/100V)	ACH1237
	C106, C107		CEAS221M25
	C108, C109		CEAS221M50
	C101		CGCYX104M25
RESISTORS			
		All Resistors	RD1/4PM□□□J
OTHERS			
	103	CABLE HOLDER(3P)	51052 – 0300
	101, 102	CABLE HOLDER(5P)	51052 – 0500
UA DIODE ASSY			
CAPACITORS			
	C191		CQMA473K2E
RESISTORS			
		All Resistors	RD1/4PM□□□J
R POWER SUPPLY ASSY			
SEMICONDUCTORS			
	Q151		2SA970
	Q152		2SC2240
	Q153		DTC143ES
	D159		HSS104 – 02
	D157		MTZJ24B
	D158		MTZJ6.8A
	D153 – D156		S5688G

Mark	No.	Description	Parts No.
CAPACITORS			
	C155	(0.01μF/150V)	ACG1005
	C152, C153	(22000μF/56V)	ACH7068
	C169, C170		CCCSL101J50
	C159		CEAS101M25
	C160		CEAS101M50
	C157		CEAS102M63
	C158		CEAS221M50
	C171		CEAS470M25
	C161, C166 – C168		CGCYX104M25
	C172		CGCYX473M25
	C162, C163		CKCYB392K50
	C154		CQMXA222J2A
	C156	(2200μF/63V)	RCH1144
RESISTORS			
	R171, R172		RD1/2PM682J
	R151		RD1/4PM100J
	R152		RS1LMF152J
	R158, R159		RS1LMF331J
	R160, R161		RS2LMF331J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	152	CABLE HOLDER(7P)	51063 – 0705
	153	CABLE HOLDER(12P)	51063 – 1205
	CN156	PIN JACK(4P)	AKX7007
	CN154	PLUG 8–P	KM250MA8
	CN151	CONNECTOR(5P)	KPC5
	CN155	JUMPER CONNECTOR	KPC6
	CN152	CONNECTOR(12P)	KPE12
	CN153	CONNECTOR(7P)	KPE7
	JA151	HEADPHONE JACK	RKB1014
	151	GROUND PLATE	VNF – 091
	154	PCB BINDER	VEF1040
F E VR ASSY			
SEMICONDUCTORS			
	IC601, IC603 – IC606		NJM4558DX
	IC615		NJM78L06A
	IC616		NJM79L06A
	IC607		TC9163AN
	IC608 – IC610		TC9299P
	IC602, IC611, IC612		UPC4570C
	IC613, IC614		UPC4570G2
	Q601, Q602		2SC2458
	Q603, Q604		2SC2878
	Q605		DTA124ES
	D601		1SS355
	D603 – D606		HSS104 – 02
	D602		MTZJ5.1B
CAPACITORS			
	C667, C668		CEAS101M25
	C1601		CEAS1R0M50
	C1602, C1603		CEAS2R2M50
	C697, C698		CEAS470M25
	C607, C608, C616, C633, C634		CEAS4R7M50

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Mark	No.	Description	Parts No.
	C653 – C656, C659, C660		CEAS4R7M50
	C683 – C694		CEAS4R7M50
	C661, C664, C671, C678		CKSQYB102K50
	C609, C610, C617, C618		CKSQYB103K50
	C635, C636, C639, C640		CKSQYB103K50
	C643, C644, C647, C648		CKSQYB103K50
	C657, C658, C665, C666		CKSQYB103K50
	C672, C673, C679, C680		CKSQYB103K50
	C695, C696		CKSQYB103K50
	C1605, C1606		CKSQYB152K50
	C651, C652, C662, C663		CKSQYF473Z50
	C669, C670, C676, C677		CKSQYF473Z50
	C1607, C1608		CQMA104J50
	C1609, C1610		CQMA332J50
	C621 – C624		CQPA103G2A
	C601 – C604, C613, C614		CQPA122G2A
	C645, C646, C649, C650		CQPA152G2A
	C625, C626		CQPA182G2A
	C605, C606, C615		CQPA222G2A
	C627, C628		CQPA271G2A
	C637, C638, C641, C642		CQPA272G2A
	C629 – C632		CQPA273G2A

RESISTORS

R1634	RD1/4PU100J
R1613, R1614, R637, R638	RN1/4PC1332F
R633, R634	RN1/4PC1822F
R621, R622	RN1/4PC2551F
R645, R646	RN1/4PC3242F
R625, R626	RN1/4PC3322F
R629, R630	RN1/4PC3572F
R631, R632	RN1/4PC4021F
R643, R644	RN1/4PC4022F
R639, R640	RN1/4PC5111F
R641, R642	RN1/4PC5491F
R627, R628	RN1/4PC5762F
R697, R698	RN1/4PC7501F
R623, R624	RN1/4PC8250F
R635, R636	RN1/4PC9311F
R607, R608, R616	RS1/10S1002F
R605, R606, R615	RS1/10S1802F
R603, R604, R614	RS1/10S2201F
R609, R610, R617	RS1/10S4701F
R601, R602, R613	RS1/10S6801F
R695, R696	RS1LMF101J
Other Resistors	RS1/10S□□□J

OTHERS

610	CABLE HOLDER(14P)	51063–1405
CN609	11PJUMPER CONNECTOR	52147–1110
CN608	15PJUMPER CONNECTOR	52147–1510
CN603	10P PLUG	KM200TA10
CN604	12P PLUG	KM200TA12

Mark	No.	Description	Parts No.
	CN606, CN612	13P PLUG	KM200TA13
	CN602	17P PLUG	KM200TA17
	CN601	18P PLUG	KM200TA18
	CN605	5P PLUG	KM200TA5
	CN607	7P PLUG	KM200TA7
	CN611	PLUG 5 – P	KM250MA5
	CN613	JUMPER CONNECTOR 3 – P	KPC3
	KN601	EARTH METAL FITTING	VNF1084

 MASTER VR ASSY

SEMICONDUCTORS

IC1656	NJM4558DX
IC1652 – IC1654	UPC4570C
Q1657, Q1658	2SA1115
Q1659, Q1660	2SC2603
Q1651 – Q1656	2SC2878
Q1663, Q1664	2SK246
Q1661	DTA124ES
Q1662, Q1665	DTC124ES
D1659, D1660, D1663 – D1666	1SS355
D1652, D1654, D1661	HSS104 – 02
D1656	MTZJ5.1A

CAPACITORS

C1701 – C1706	CCSQCH121J50
C1678	CCSQCH331J50
C1677, C1679	CCSQCH470J50
C1675, C1676	CCSQCH681J50
C1696	CEANP100M16
C1694	CEAS100M25
C1663 – C1668, C1681 – C1685	CEAS100M50
C1697	CEAS220M50
C1699, C1700	CEAS470M25
C1686	CEAS470M50
C1720	CEAS471M6R3
C1688	CEAS4R7M50
C1712	CGCYX104M25
C1690, C1692	CKSQYB103K50
C1669 – C1674	CKSQYB104K25
C1680	CKSQYB222K50
C1695	CKSQYF104Z50
C1715, C1716	CQMA471J50
C1661	CQMA472J50

RESISTORS

R1734		RD1/4PU331J
VR1651	(50kΩ–A5×4+100kΩ–B+50)	ACX7031
VR1652	(47kΩ/0.1W)	PCP1031
	Other Resistors	RS1/10S□□□J

OTHERS

CN1655	13P SOCKET	KP200TA13L
CN1654	7P SOCKET	KP200TA7L
CN1652, CN1653	CONNECTOR(15P)	KPE15
CN1650	CONNECTOR(3P)	KPE3
CN1651	CONNECTOR(5P)	KPE5
CN1656, CN1657	CONNECTOR(9P)	KPE9

Mark	No.	Description	Parts No.
I CONNECTION ASSY			
SEMICONDUCTORS			
	Q651, Q652		DTC124ES
RESISTORS			
		All Resistors	RS1/10S□□□J
OTHERS			
	CN651	29P CONNECTOR	52044 – 2945
	CN652	19P PLUG	KM200TA19
	CN653	9P PLUG	KM200TA9
	CN656	CONNECTOR(10P)	KPE10
	CN654	CONNECTOR(14P)	KPE14
	CN657	CONNECTOR(3P)	KPE3
	CN655	CONNECTOR(9P)	KPE9
J REGULATOR (1) ASSY			
SEMICONDUCTORS			
△	IC235	(500mA/125V)	AEK7005
	IC231		NJM78M12FA
	IC234		NJM79M15FA
	IC233		PQ20RV1E
	D231		HSS104 – 02
CAPACITORS			
	C232		CEAS101M25
	C236, C238		CEAS470M25
	C235		CEASR33M50
	C231, C239		CKCYB103K50
RESISTORS			
		All Resistors	RD1/4PU□□□J
OTHERS			
	231	CABLE HOLDER(10P)	51052 – 1000
L REGULATOR (3) ASSY			
SEMICONDUCTORS			
	IC253, IC254		PQ20RV1E
	D251, D252		HSS104 – 02
CAPACITORS			
	C256, C258		CEAS470M25
	C255, C257		CEASR33M50
RESISTORS			
	R259		RN1/4PC8200F
	R260		RN1/4PC4700F
		Other Resistors	RD1/4PU□□□J
OTHERS			
	252	CABLE HOLDER(5P)	51063 – 0505
K REGULATOR (2) ASSY			
SEMICONDUCTORS			
	IC255, IC256	(315mA/125V)	AEK7003
	IC257, IC258	(125mA/125V)	AEK7020
	IC251		NJM78M12FA
	IC252		NJM78M56FA
	Q251, Q252		2SA1837

Mark	No.	Description	Parts No.
CAPACITORS			
	C252		CEAS101M25
	C254		CEAS470M25
	C251, C253		CKCYB103K50
RESISTORS			
	R251		RS2LMF100J
	R255		RS2LMF270J
	R254		RS2LMF390J
	R252		RS2LMF6R8J
OTHERS			
	251	CABLE HOLDER(6P)	51063 – 0605
	8	PCB BINDER	VEF1040
M V-AMP ASSY			
SEMICONDUCTORS			
	IC701		UPC4570G2
	Q703 – Q706		2SA970
	Q701, Q702, Q707, Q708		2SC2240
	D701 – D708		1SS355
CAPACITORS			
	C701, C702		CCSQCH221J50
	C703, C704		CCSQCH470J50
	C705, C706		CEAS4R7M50
	C707, C708, C710, C711		CKSQYB103K50
RESISTORS			
		All Resistors	RS1/10S□□□J
OTHERS			
	CN701	13P SOCKET	KP200TA13L
P LIMITTER ASSY			
SEMICONDUCTORS			
	IC1205, IC1206		NJM2058D
	IC1204		NJM4558DX
	IC1201–IC1203		UPC4570C
	Q1201 – Q1205		2SC2878
	D1201 – D1205, D1211 – D1215		HSS104 – 02
	D1206 – D1210, D1216 – D1220		HZS2CLL
CAPACITORS			
	C1216 – C1225		CCCCH220J50
	C1201 – C1205		CEAS100M50
	C1231 – C1235		CEJA4R7M35
	C1206 – C1211		CFTXA104J50
RESISTORS			
		All Resistors	RD1/4PU□□□J
OTHERS			
	1202	CABLE HOLDER(3P)	51063 – 0305
	1201	CABLE HOLDER(15P)	51063 – 1505
	CN1201	CONNECTOR(15P)	KPE15

Mark	No.	Description	Parts No.
	DOLBY DIGITAL ASSY		
	SEMICONDUCTORS		
	IC9401, IC9431, IC9461	AK4319 – VM	
	IC9251	AK5340 – VS	
	IC9121	CD0004AF	
	IC9361	KM62V256CLG – 7L	
	IC9091	LH52256AN – 70LL	
	IC9301	MB86342A	
	IC9201, IC9221	NJM2100M	
	IC9041, IC9411, IC9441, IC9471, IC9601	NJM4558MD	
	IC9621, IC9641	NJM4558MD	
	IC9501	PA4025A	
	IC9071	PM4007A	
	IC9371	TC74HCT244AF	
	IC9103	TC74HCU04AF	
	IC9381	TC74LVX244FS	
	Q9007, Q9241, Q9401, Q9431, Q9461	2PB709A	
	Q9003, Q9031, Q9032, Q9242, Q9402	2PD601A	
	Q9432, Q9462	2PD601A	
	Q9201, Q9221, Q9601, Q9611, Q9621	2SC3326	
	Q9631, Q9641, Q9651	2SC3326	
	Q9001, Q9002, Q9004 – Q9006	2SC3802K	
	Q9304	DTA124EK	
	Q9251, Q9301 – Q9303	DTC124EK	
	D9401, D9431	1SS181	
	D9002	1SS355	
	D9001	KV1851	
COILS AND FILTERS	F9001 (2.88MHz)	ATF7001	
	F9301, F9302, F9371	ATF7013	
	L9003 (68µH)	ATH7001	
	L9301, L9801 – L9811	ATL7001	
	L9302	LCTBR47K2125	
	L9200, L9201, L9221, L9252 – L9254	OTL1040	
	L9402, L9432, L9462, L9601, L9611	OTL1040	
	L9621, L9631, L9641, L9651	OTL1040	
	L9004, L9005, L9071, L9091, L9103	VTL1019	
	L9108, L9121, L9251, L9361, L9371	VTL1019	
	L9380, L9401, L9431, L9461, L9661	VTL1019	
CAPACITORS	C9105, C9122, C9126, C9159, C9160	CCSQCH101J50	
	C9255, C9263, C9302, C9309, C9312	CCSQCH101J50	
	C9315, C9318, C9321, C9361, C9381	CCSQCH101J50	
	C9401, C9406, C9431, C9436, C9461	CCSQCH101J50	
	C9466	CCSQCH101J50	
	C9511, C9521, C9541, C9551, C9571	CCSQCH102J50	
	C9606, C9616, C9626, C9636, C9646	CCSQCH102J50	
	C9656	CCSQCH102J50	
	C9125, C9203, C9223, C9305, C9306	CCSQCH220J50	
	C9412 – C9414, C9422 – C9424	CCSQCH221J50	
	C9442 – C9444, C9452 – C9454	CCSQCH221J50	
	C9472 – C9474, C9482	CCSQCH221J50	
	C9057	CCSQCH270J50	
	C9151, C9152, C9512, C9522, C9542	CCSQCH271J50	
	C9552, C9572, C9702, C9704, C9709	CCSQCH271J50	

Mark	No.	Description	Parts No.
	C9603, C9613, C9623, C9633, C9643	CCSQCH391J50	
	C9705	CCSQCH470J50	
	C9326	CCSQCH471J50	
	C9307, C9308, C9375	CCSQCH560J50	
	C9007	CCSQCH750J50	
	C9053	CEANP470M25	
	C9257, C9301	CEAS471M6R3	
	C9107, C9128, C9201, C9221, C9403	CEV100M16	
	C9405, C9408, C9433, C9435, C9438	CEV100M16	
	C9463, C9465, C9468, C9502, C9504	CEV100M16	
	C9602, C9605, C9612, C9615, C9622	CEV100M16	
	C9625, C9632, C9635, C9642, C9645	CEV100M16	
	C9652, C9655	CEV100M16	
	C9016	CEV100M35	
	C9071, C9091, C9262	CEV101M6R3	
	C9415, C9425, C9445, C9455, C9475	CEV220M16	
	C9485	CEV220M16	
	C9241	CEV221M4	
	C9801, C9802	CEV330M25	
	C9111, C9242, C9363, C9373, C9383	CEV470M6R3	
	C9712	CKCYB102K50	
	C9031, C9371	CKSQYB102K50	
	C9014, C9054, C9056, C9092, C9101	CKSQYB103K50	
	C9103, C9701, C9703, C9706 – C9708	CKSQYB103K50	
	C9121, C9153, C9154, C9581	CKSQYB104K25	
	C9205, C9225	CKSQYB152K50	
	C9483, C9484	CKSQYB223K50	
	C9582	CKSQYB273K50	
	C9653	CKSQYB393K50	
	C9001 – C9006, C9008 – C9013, C9015	CKSQYF104Z25	
	C9017, C9018, C9043, C9051, C9052	CKSQYF104Z25	
	C9055, C9058, C9073 – C9081, C9106	CKSQYF104Z25	
	C9110, C9123, C9127, C9202, C9204	CKSQYF104Z25	
	C9222, C9224, C9251, C9253, C9256	CKSQYF104Z25	
	C9259, C9303, C9310, C9313, C9316	CKSQYF104Z25	
	C9319, C9322, C9324, C9362, C9372	CKSQYF104Z25	
	C9382, C9402, C9404, C9407, C9409	CKSQYF104Z25	
	C9411, C9421, C9432, C9434, C9437	CKSQYF104Z25	
	C9439, C9441, C9451, C9462, C9464	CKSQYF104Z25	
	C9467, C9469, C9471, C9481, C9501	CKSQYF104Z25	
	C9503, C9601, C9611, C9621, C9631	CKSQYF104Z25	
	C9641, C9651	CKSQYF104Z25	
	C9041, C9042	CKSQYF105Z16	
RESISTORS	All Resistors	RS1/10S□□□□J	
OTHERS	CN9801	11PJUMPER CONNECTOR	52147 – 1110
	CN9661	15PJUMPER CONNECTOR	52147 – 1510
	JA9000	PIN JACK(3P)	AKB7092
		DOLBY DIGITAL PCB	ANP7176
	X9301	CRYSTAL RESONATOR (18.432MHz)	ASS1035
	X9001	CRYSTAL FOR VCXO (18.432MHz)	ASS7009
	CN9301	CONNECTOR(10P)	KPE10
	JA9104	OPTICAL RECEIV MOD.	TORX176

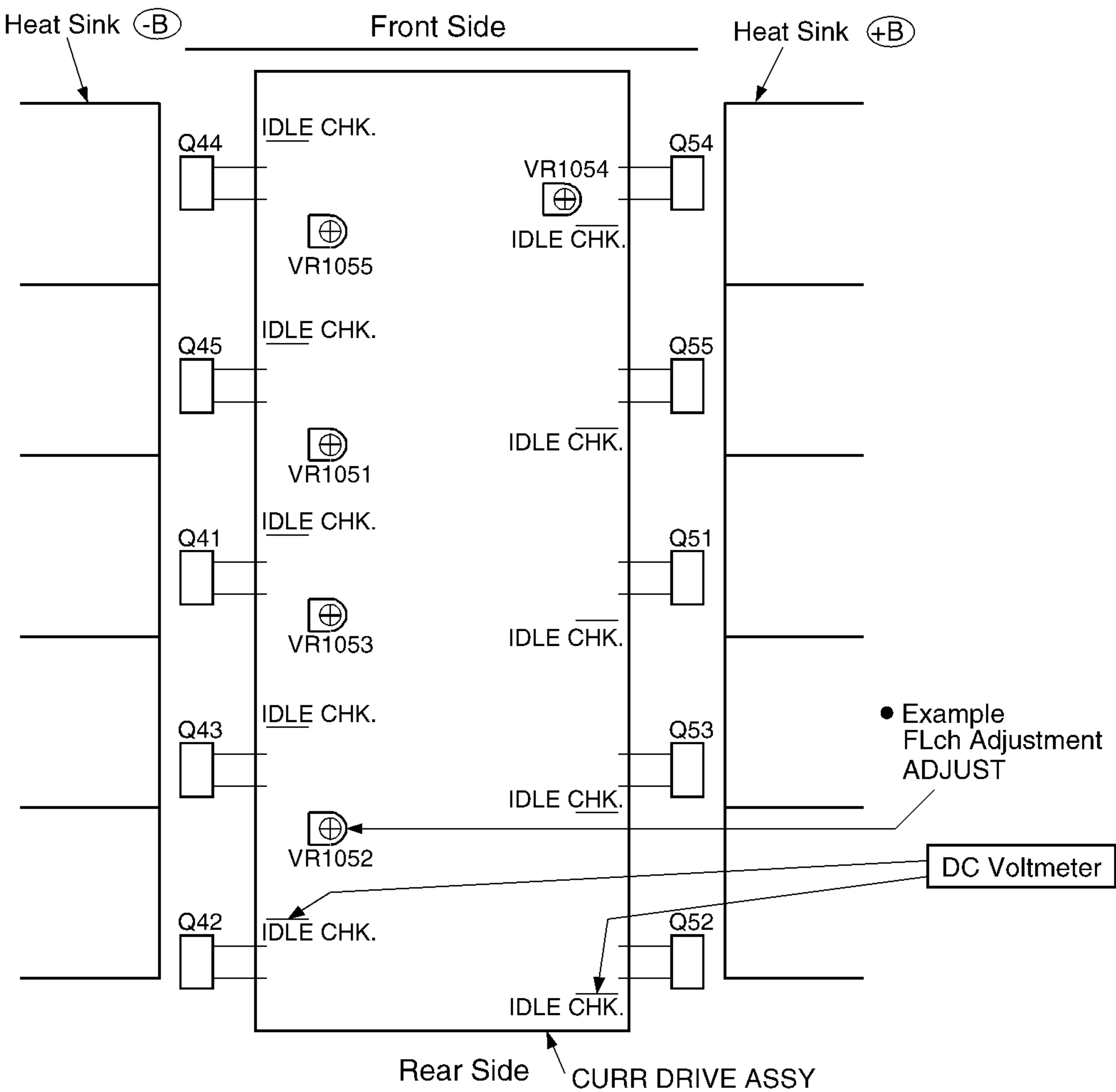
6. ADJUSTMENT

6.1 IDLE CURRENT ADJUSTMENT

- CAUTION : Heatsinks' DC level is equal to +B or -B.
Don't touch them or you will be electricary shocked.

1. Decrease the level of the Adjustment Variable resistor (VR) for the channel to be adjusted.(⊕) Turn counterclockwise.)
2. Set the power switch to ON.
3. While looking at voltage of the adjustment point shown below, gradually turn the Adjustment VR toward the right. Stop at 20mV.
4. Ages for ten minutes.
5. Readjust the voltage to 10 ± 1 mV after ten minutes. Adjustment is completed.

ADJUSTMENT ch	ADJUSTMENT VR	ADJUSTMENT POINT
FLch	VR1052	Voltage between IDLE CHK. of Q42 and Q52, the terminal with a silk mark.
FRch	VR1053	Voltage between IDLE CHK. of Q43 and Q53, the terminal with a silk mark.
Cch	VR1051	Voltage between IDLE CHK. of Q41 and Q51, the terminal with a silk mark.
SRch	VR1055	Voltage between IDLE CHK. of Q45 and Q55, the terminal with a silk mark.
SLch	VR1054	Voltage between IDLE CHK. of Q44 and Q54, the terminal with a silk mark.



7. GENERAL INFORMATION

7.1 PARTS

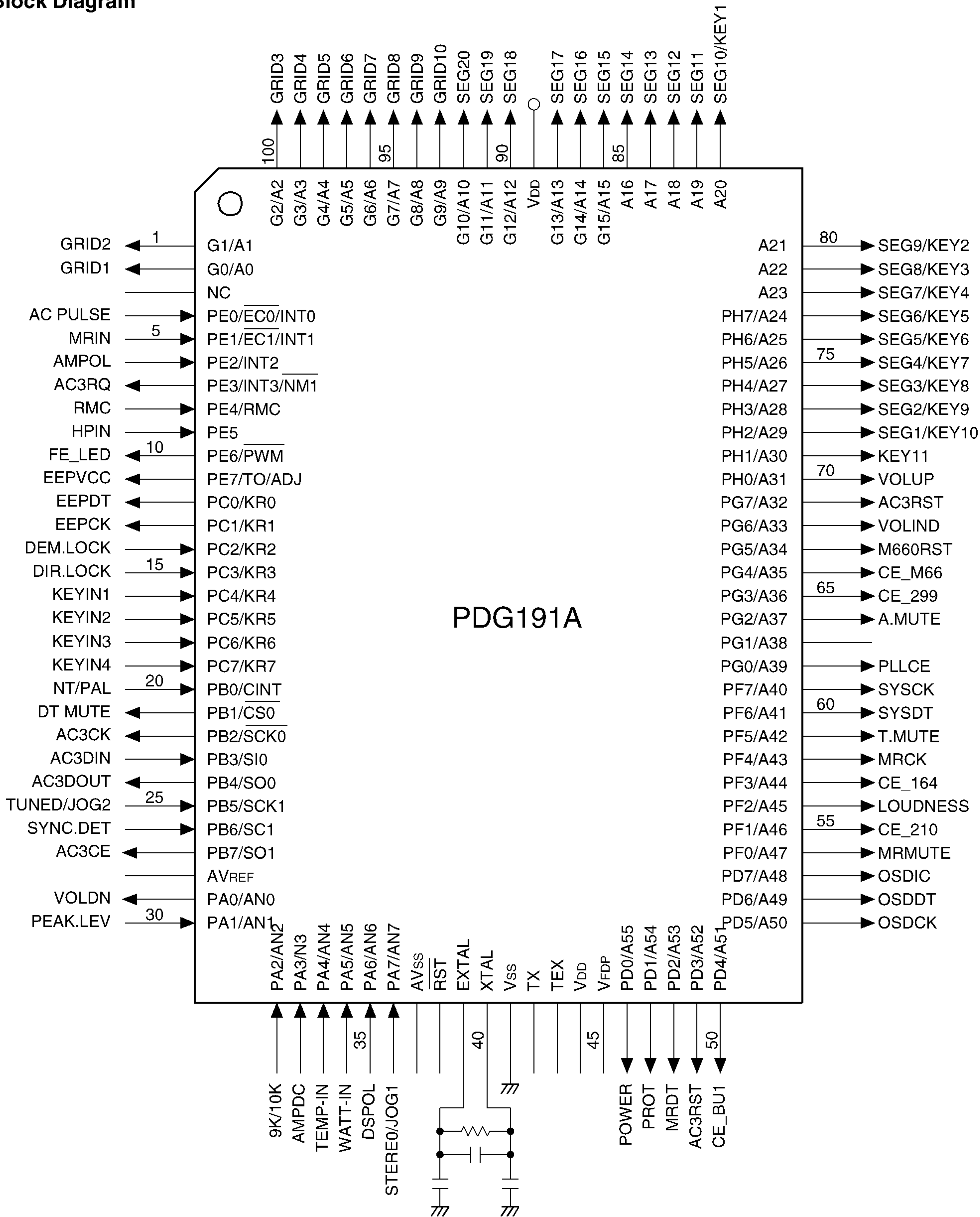
7.1.1 IC

■ PDG191A (FL-UCOM ASSY : IC801)

● RECEIVER CONTROL μ-COM

● Block Diagram

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



● Pin Function

No.	Name		I/O	Function
1	G11	G1/A1	O	FL grid output 2.
2	G12	G0/A0	O	FL grid output 1.
3	NC	NC	-	5V.
4	WAKEUP	PE0/EC0/INT0	I	AC pulse input.
5	MRIN	PE1/EC1/INT1	I	Sub room remote control input.
6	AMP OVERLOAD	PE2/INT2	I	AMP overload detect A/D input.
7	AC3REQ	PE3/INT3/NMI	I	Requests communications to the microprocessor in the main unit from AC3. (L: Request for communication)
8	RMS	PE4/RMC	I	Remote control input.
9	HPIN	PE5	I	Headphone connect detect. H : connect
10	LFE LED	PE6/PWM	O	LED lights up during playback of AC3 or partial playback of LEF.
11	EEPVCC	PE7/TO/ADJ	O	
12	EEPDT	PC0/KR0	O	Data for communications with EEPROM.
13	EEPCK	PC1/KR1	O	Clock for communications with EEPROM.
14	DEM.LOCK	PC2/KR2	I	Inputs “L” when demodulator IC is locked to RF signal.
15	DIR.LOCK	PC3/KR3	I	Inputs “L” when DIR is locked to digital input signal.
16	KEYIN1	PC4/KR4	I	KEY scan input 1.
17	KEYIN2	PC5/KR5	I	KEY scan input 2.
18	KEYIN3	PC6/KR6	I	KEY scan input 3.
19	KEYIN4	PC7/KR7	I	KEY scan input 4.
20	NT/PAL	PB0/CINT	I	NTSC/PAL switching. (L : PAL)
21	91620N	PB1/CS0	O	Sets to “H” when data are transferred to TC9162 (2).
22	AC3CK	PB2/SCK0	O	Clock for communications of AC3 microcomputer.
23	AC3DIN	PB3/SI0	I	Data in for communications of AC3 microcomputer.
24	AC3DOUT	PB4/SO0	O	Data out for communications of AC3 microcomputer.
25	TUNED/JOG2	PB5/SCK1	I	TUNER : TUNER input. (L : TUNED)/JOG2 : Port data input
26	SYNC.DEC	PB6/SC1	I	Detection of synchronizing signal (L: Signal detected)
27	AC3CE	PB7/SO1	O	Chip selection for communications with AC3 IC module.
28	AVREF	AVREF	-	5V.
29	VOLDOWN	PA0/AN0	O	Master Volume (electrically operated) DOWN output.
30	PEAK.LEV	PA1/AN1	I	
31	9K/10K	PA2/AN2	I	Switching frequency steps of the tuner. (AM L : 9K H : 10K, FM L : 50K H : 100K)
32	AMP DC DETECT	PA3/AN3	I	Detection of AMP power error, A/D input.
33	TEMP-IN	PA4/AN4	I	Fan temperature input, A/D input.
34	WATT-IN	PA5/AN5	I	Fan wattage input, A/D input.
35	DSP OVERLOAD	PA6/AN6	I	DSP overload detect. A/D input.
36	JOG1/STEREO	PA7/AN7	I	JOG1 : Port data input/TUNER: Stereo input (L: Receiving broadcasting in stereo).
37	GND	AVSS	-	GND.
38	RST	RST	I	Reset.
39	EXTAL	EXTAL	-	Oscillator 8MHz.
40	XTAL	XTAL	-	Oscillator 8MHz.
41	GND	VSS	-	GND.
42	TX	TX	O	Open.
43	TEX	TEX	I	GND.
44	VDD	VDD	-	5V.
45	VFDP	VFDP	-	-30V.
46	POWER	PD0/A55	O	AC relay ON/OFF.
47	PROT	PD1/A54	O	Protection relay ON/OFF.
48	MRDT	PD2/A53	O	Data for IC. BU4094, TC9210, LM7001 (TUNER) control.
49	AC3STP	PD3/A52	O	Stops crystal oscillation of IC module for AC3 and internal PLL oscillation.
50	CE BUI	PD4/A51	O	Strobe output for extended IC BU4094 (1).

No.	Name		I/O	Function
51	OSD CK	PD5/A50	O	Clock for communications with OSD IC.
52	OSD DT	PD6/A49	O	Data for communications with OSD IC.
53	OSD CE	PD7/A48	O	Chip selection for communications with OSD IC.
54	MRMUTE	PF0/A47	O	Mute for sub room.
55	CE 210	PF1/A46	O	Strobe output for TC9210.
56	LOUDNESS	PF2/A45	O	LOUDNESS ON/OFF, during operation : H
57	CE 164	PF3/A44	O	Strobe output for TC9162 and TC9164.
58	MRCK	PF4/A43	O	Clock for IC. BU4094, TC9210, LM7001 (TUNER) control.
59	T.MUTE	PF5/A42	O	Tuner mute ON/OFF.
60	SYSDT	PF6/A41	O	Data for IC. TC system, M66311 control.
61	SYSCK	PF7/A40	O	Clock for IC. TC system, M66311 control.
62	PLLCE	PG0/A39	O	Chip selection for tuner IC.
63	CE 163	PG1/A38	O	Strobe output for TC9163.
64	AMUTE	PG2/A37	O	Audio mute ON/OFF.
65	CE 299	PG3/A36	O	Strobe output for TC9299.
66	CE M66	PG4/A35	O	Strobe output for M66311.
67	M660RST	PG5/A34	O	IC output enable signal for M66311 (H: Enabled).
68	VOLIND	PG6/A33	O	Volume IND. control.
69	AC3RST	PG7/A32	O	IC module reset output for AC3.
70	VOLUP	PH0/A31	O	Master Volume (electrically operated) UP output.
71	KEY11	PH1/A30	O	KEY scan output 11.
72	SEG1/KEY10	PH2/A29	O	Segment output 1/KEY scan output 10.
73	SEG2/KEY9	PH3/A28	O	Segment output 2/KEY scan output 9.
74	SEG3/KEY8	PH4/A27	O	Segment output 3/KEY scan output 8.
75	SEG4/KEY7	PH5/A26	O	Segment output 4/KEY scan output 7.
76	SEG5/KEY6	PH6/A25	O	Segment output 5/KEY scan output 6.
77	SEG6/KEY5	PH7/A24	O	Segment output 6/KEY scan output 5.
78	SEG7/KEY4	A23	O	Segment output 7/KEY scan output 4.
79	SEG8/KEY3	A22	O	Segment output 8/KEY scan output 3.
80	SEG9/KEY2	A21	O	Segment output 9/KEY scan output 2.
81	SEG10/KEY1	A20	O	Segment output 10/KEY scan output 1.
82	SEG11	A19	O	Segment output 11.
83	SEG12	A18	O	Segment output 12.
84	SEG13	A17	O	Segment output 13.
85	SEG14	A16	O	Segment output 14.
86	SEG15	G15/A15	O	Segment output 15.
87	SEG16	G14/A14	O	Segment output 16.
88	SEG17	G13/A13	O	Segment output 17.
89	VDD	VDD	-	5V
90	SEG18	G12/A12	O	Segment output 18.
91	SEG19	G11/A11	O	Segment output 19.
92	SEG20	G10/A10	O	Segment output 20.
93	G10	G9/A9	O	Timing output 10.
94	G9	G8/A8	O	Timing output 9.
95	G8	G7/A7	O	Timing output 8.
96	G7	G6/A6	O	Timing output 7.
97	G6	G5/A5	O	Timing output 6.
98	G5	G4/A4	O	Timing output 5.
99	G4	G3/A3	O	Timing output 4.
100	G3	G2/A2	O	Timing output 3.

■ M66311FP (FL-UCOM ASSY : IC803)

● LED DRIVER

● Pin Function

No.	Name	Function
1	MR IND.	LED lights up when Multiroom mode is ON. L : LED lights up.
2	LEF IND.	LED lights up if LFE component is detected during decoding of AC3 signal. “L”: LED lights up.
3	Vcc	Power supply +5V.
4	DATA	Data line for communications with microcomputer.
5	OE	Output enable/disable signal, L : Fixed to “L” (output enabled).
6	LATCH	Strobe line for communications with microcomputer.
7	RESET	Reset input. Temporarily sets to “L” when the power switch is set to ON. After that, fixed to “H”.
8	CLOCK	Clock line for communications with microcomputer.
9	GND	GND.
10		Fixed to “H”.
11	HP RY.	Headphone relay. H : relay ON
12	S/C RY.	R/C relay. H : relay ON
13	Speaker B RY.	Speaker B relay. H : relay ON
14	Speaker A RY.	Speaker A relay. H : relay ON
15	FAN	FAN control. H : ON
16	MPX	Tuner (FM) MONO output. H : MONO output
17	Stereo ON/OFF	Stereo ON/OFF H : Stereo ON
18	↑ ↓	LED lights up when Up and Down arrow keys are enabled. L : LED lights up.
19	←→	LED lights up when Right and Left arrow keys are enabled. L : LED lights up.
20	SL/SR	LED lights up if AC3 signal from the rear system L/R is received. L : LED lights up.
21	S	LED lights up if AC3 signal from the rear system (monaural) is received. L : LED lights up.
22	C	LED lights up if AC3 signal from the center system is received. L : LED lights up.
23	L/R	LED lights up if AC3 signal from the front system L/R is received. L : LED lights up.
24	ADDIR	Switching MS Port. H : Analog input, L : Other than analog input

* Output is port output of M66311 (Set data to “L” when port output is to be set to “H”).

■ M66311FP (FL-UCOM ASSY : IC804)

● LED DRIVER

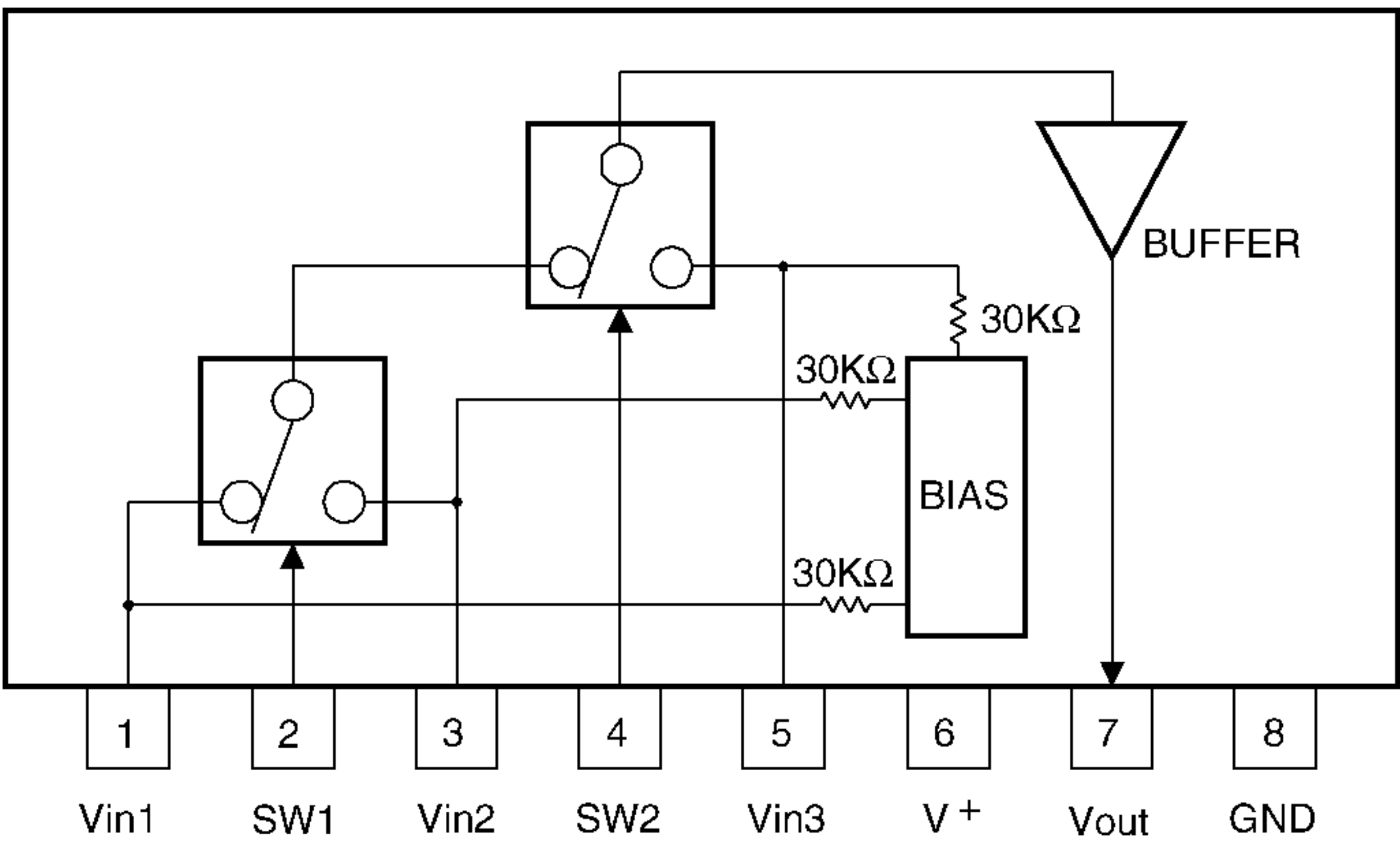
● Pin Function

No.	Name	Function
1		Not used. Open
2		Not used. Open
3	Vcc	Power supply +5V.
4	DATA	Data line for communications with microcomputer.
5	OE	Output enable/disable signal, L : Fixed to “L” (output enabled).
6	LATCH	Strobe line for communications with microcomputer.
7	RESET	Reset input. Temporarily sets to “L” when the power switch is set to ON. After that, fixed to “H”.
8	CLOCK	Clock line for communications with microcomputer.
9	GND	GND
10		Fixed to “H”.
11		Not used. Open
12		Not used. Open
13		Not used. Open
14		Not used. Open
15		Not used. Open
16	VCR1 IND.	LED lights up when function is VCR1. L : LED lights up.
17	VCR2 IND.	LED lights up when function is VCR2. L : LED lights up.
18	VIDEO IND.	LED lights up when function is VIDEO. L : LED lights up.
19	DVD IND.	LED lights up when function is DVD. L : LED lights up.
20	LD IND.	LED lights up when function is LD. L : LED lights up.
21	CD IND.	LED lights up when function is CD. L : LED lights up.
22	TUNER IND.	LED lights up when function is TUNER. L : LED lights up.
23	PHONO IND.	LED lights up when function is PHONO. L : LED lights up.
24	TAPE1 IND.	LED lights up when function is TAPE1. L : LED lights up.

* Output is from M66311.

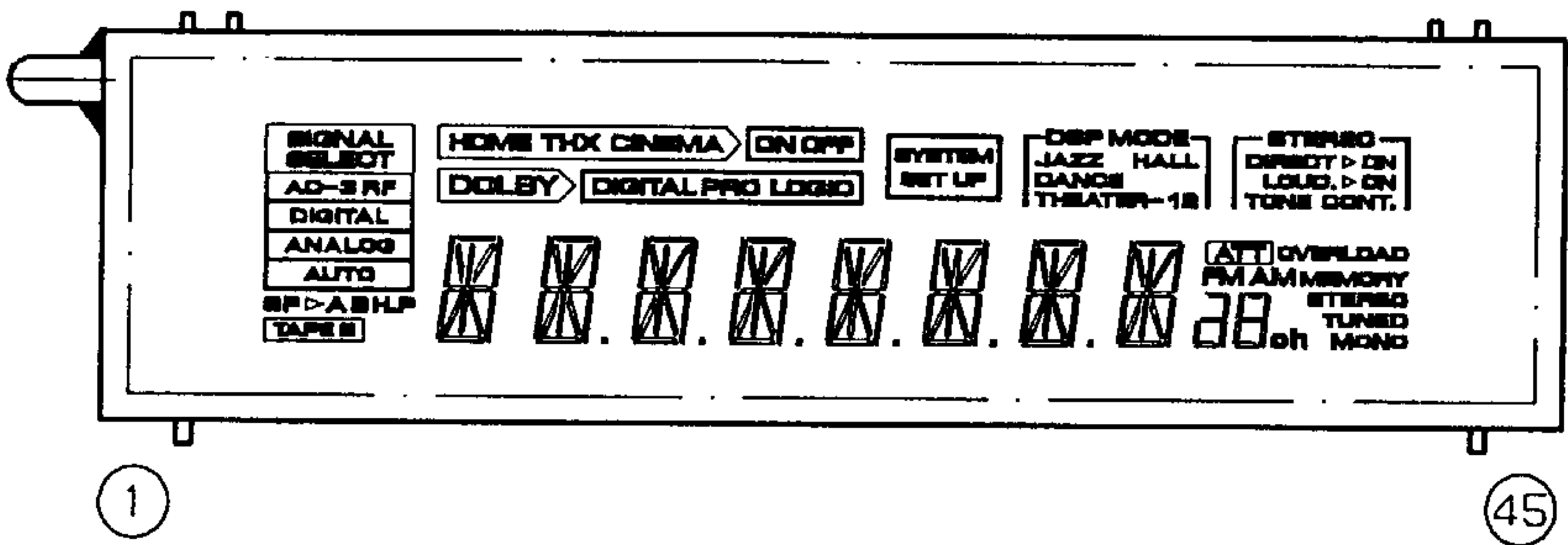
VSA-E06

- NJM2534L (VIDEO ASSY : IC402, S-VIDEO ASSY : IC501, IC502)
- 3 Input Single Video Switch
- Block Diagram



7.1.2 DISPLAY

- AAV7037 (FL-UCOM ASSY:V801)
- FL Tube

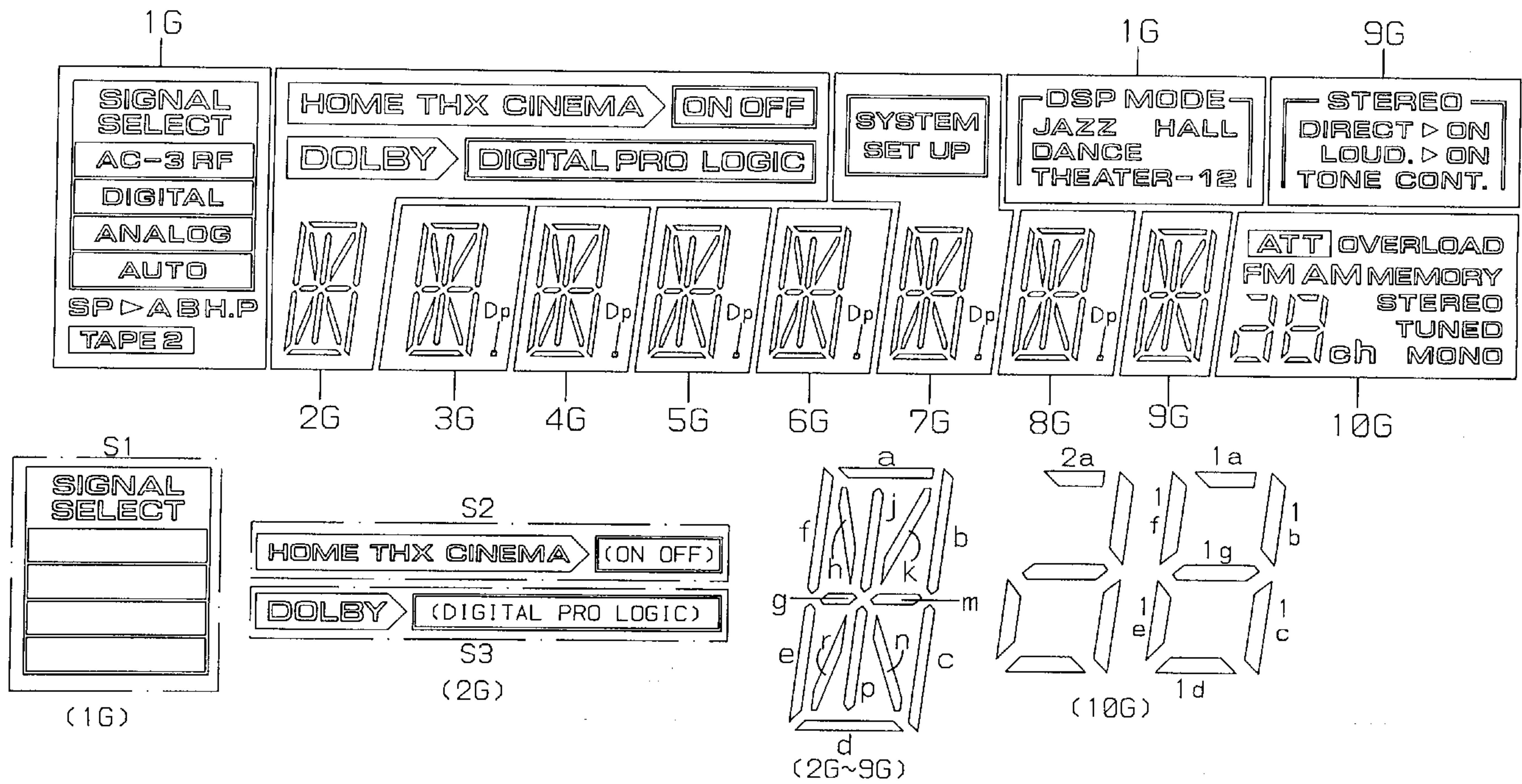


● Pin Assignment

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		
CONNECTION	F1	F1	N1	N1	N1	N1	N1	N1	N1	N1	N1	N1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

NOTE 1) F1,F2 --- Filament
2) NP ----- No pin
3) NX ----- No extend pin
4) DL ----- Datum Line
5) 1G~10G --- Grid

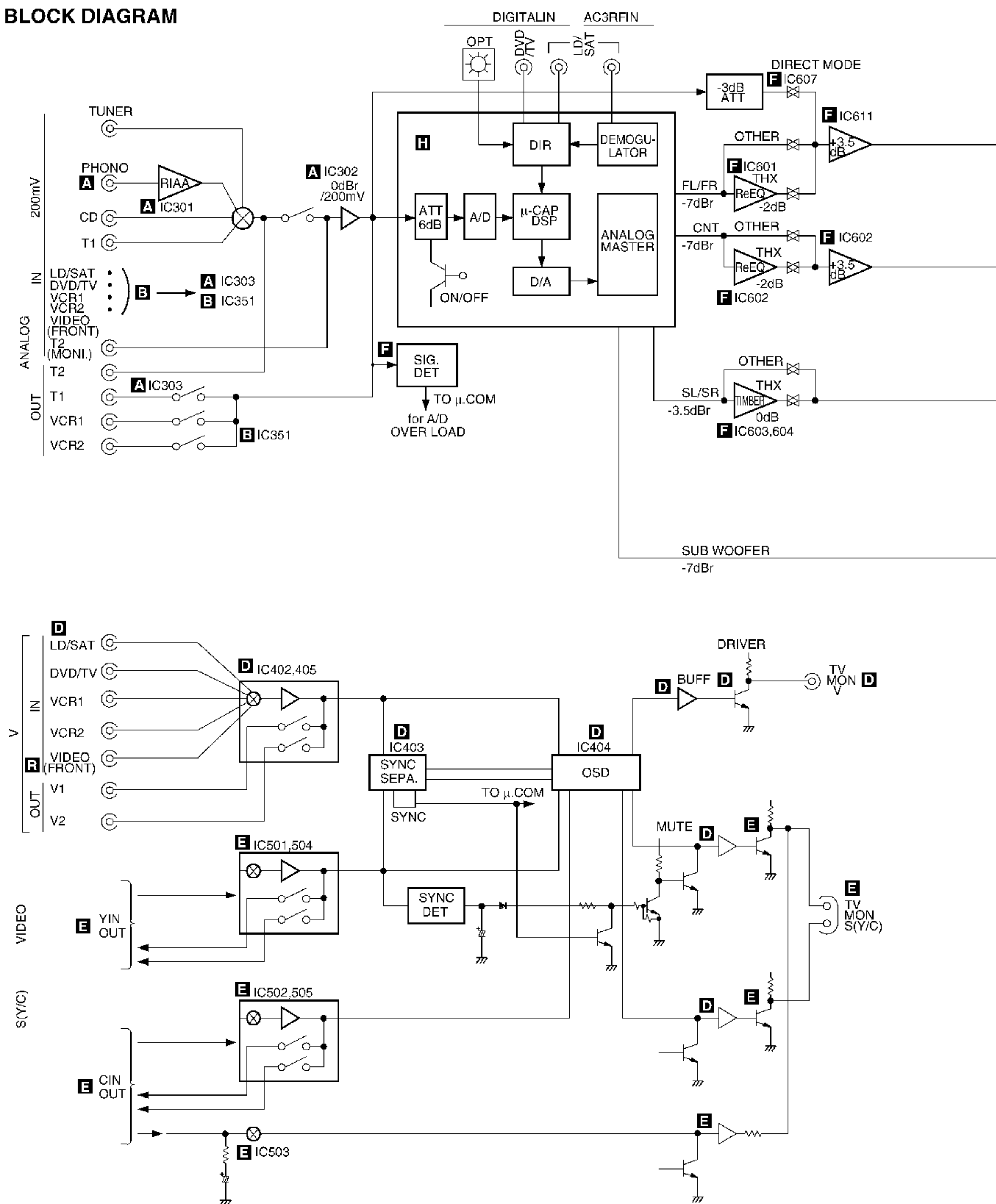
● Grid Assignment

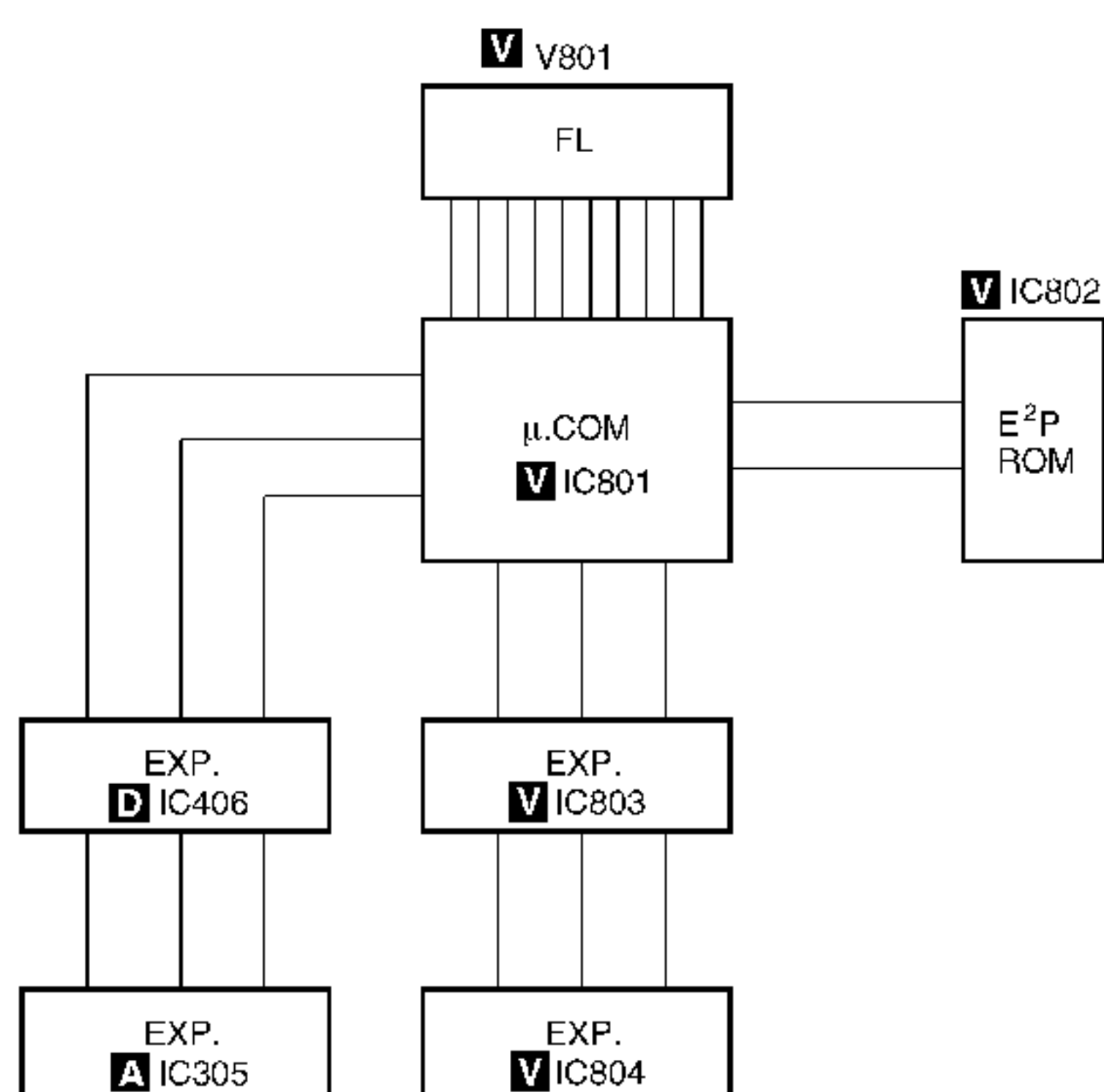
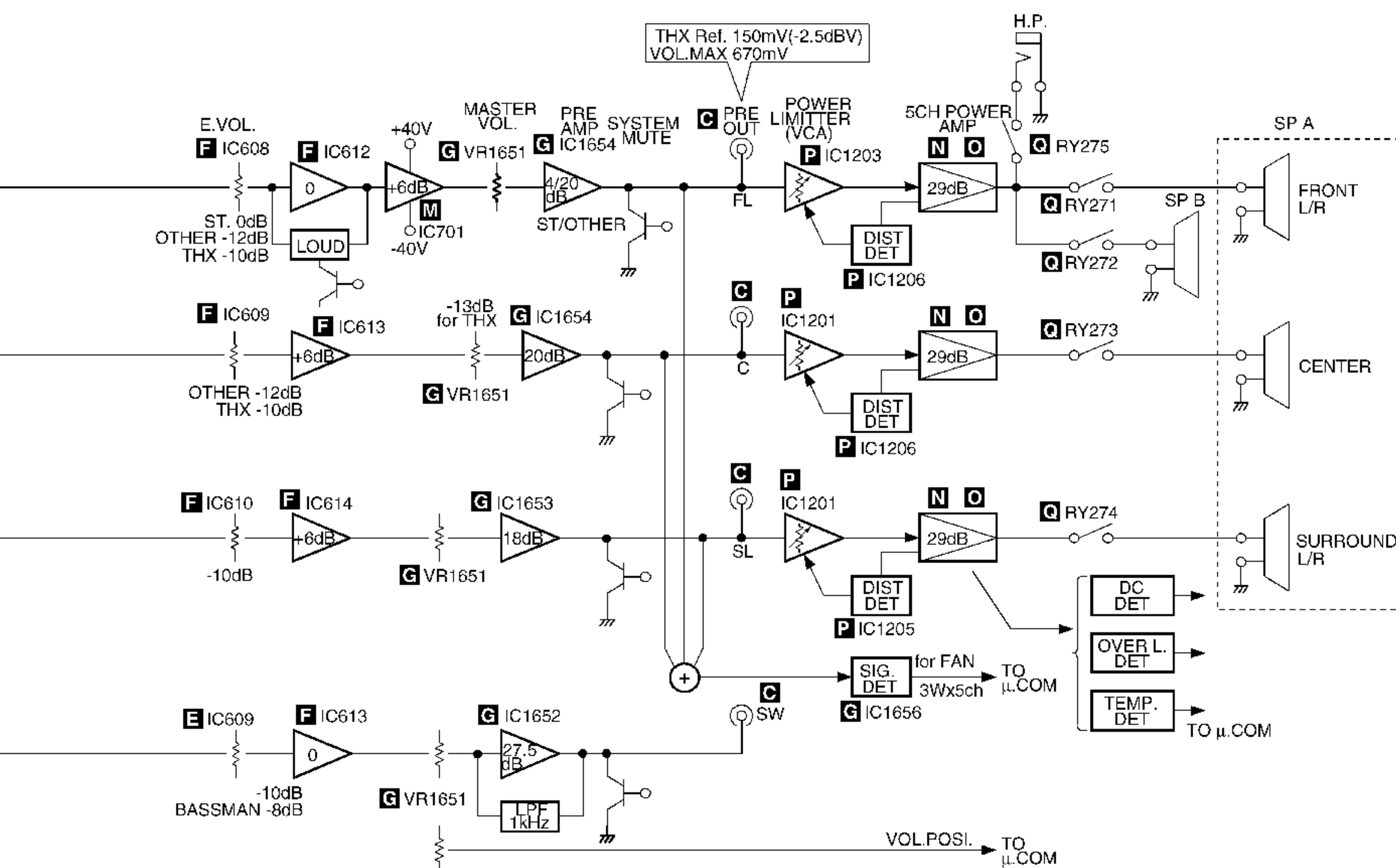


● Anode Connection

	1G	2G	3G~6G	7G	8G	9G	10G
P1	TAPE 2	a	a	a	a	a	1a
P2	SP▷	j	j	j	j	j	1b
P3	A	k	k	k	k	k	1f
P4	B	h	h	h	h	h	1g
P5	H.P	b	b	b	b	b	1c
P6	AUTO	f	f	f	f	f	1e
P7	ANALOG	g	g	g	g	g	1d
P8	DIGITAL	m	m	m	m	m	2a, 2d, 2g
P9	AC-3 RF	c	c	c	c	c	2b
P10	S1	e	e	e	e	e	2c
P11	DSP MODE	n	n	n	n	n	2e
P12	JAZZ	r	r	r	r	r	MONO
P13	HALL	p	p	p	p	p	TUNED
P14	DANCE	d	d	d	d	d	STEREO
P15	THEATER-	S2	Dp	Dp	Dp	STEREO	MEMORY
P16	1	ON	-	SYSTEM SET UP	-	DIRECT▷	AM
P17	2	OFF	-	-	-	ON (上)	FM
P18	-	S3	-	-	-	LOUD.▷	ch
P19	-	PRO LOGIC	-	-	-	ON (下)	ATT
P20	-	DIGITAL	-	-	-	TONE CONT.	OVERLOAD

7.2 BLOCK DIAGRAM

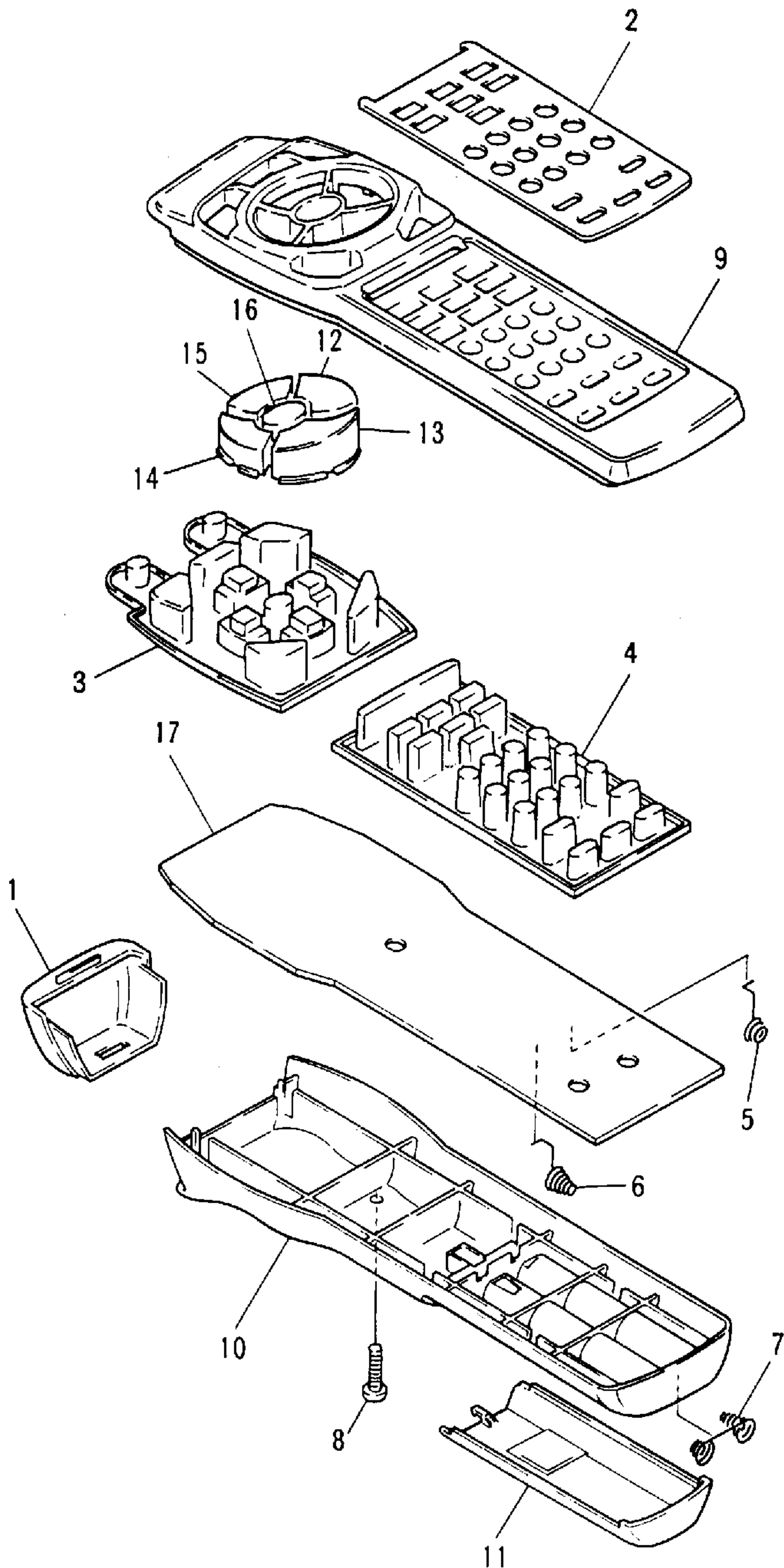




7.3 REMOTE CONTROL UNIT [CU-AV014 (AXD7149)]

7.3.1 EXPLODED VIEWS AND PARTS LIST

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.
• Screws adjacent to  mark on product are used for disassembly.

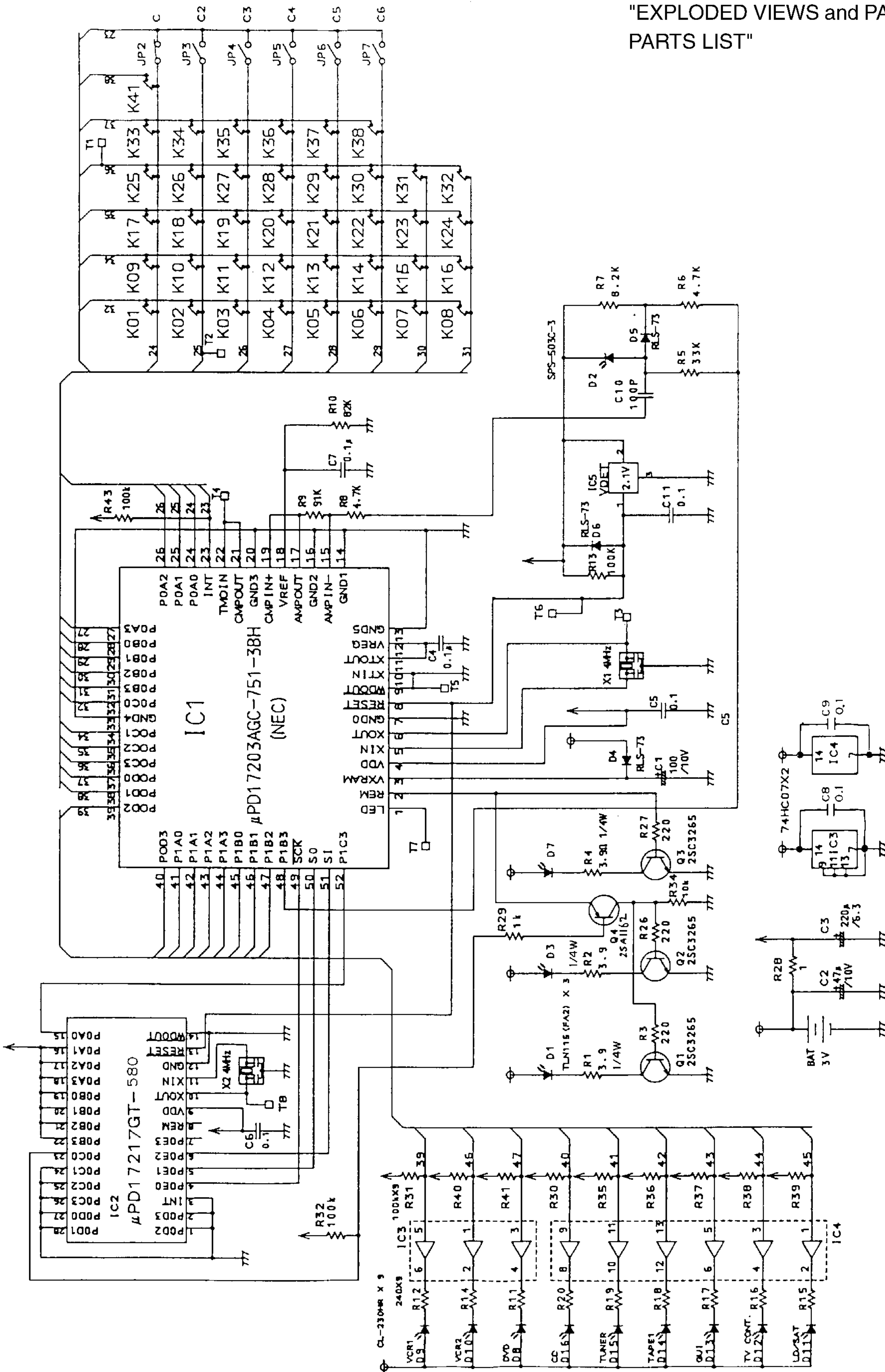


■ Parts List

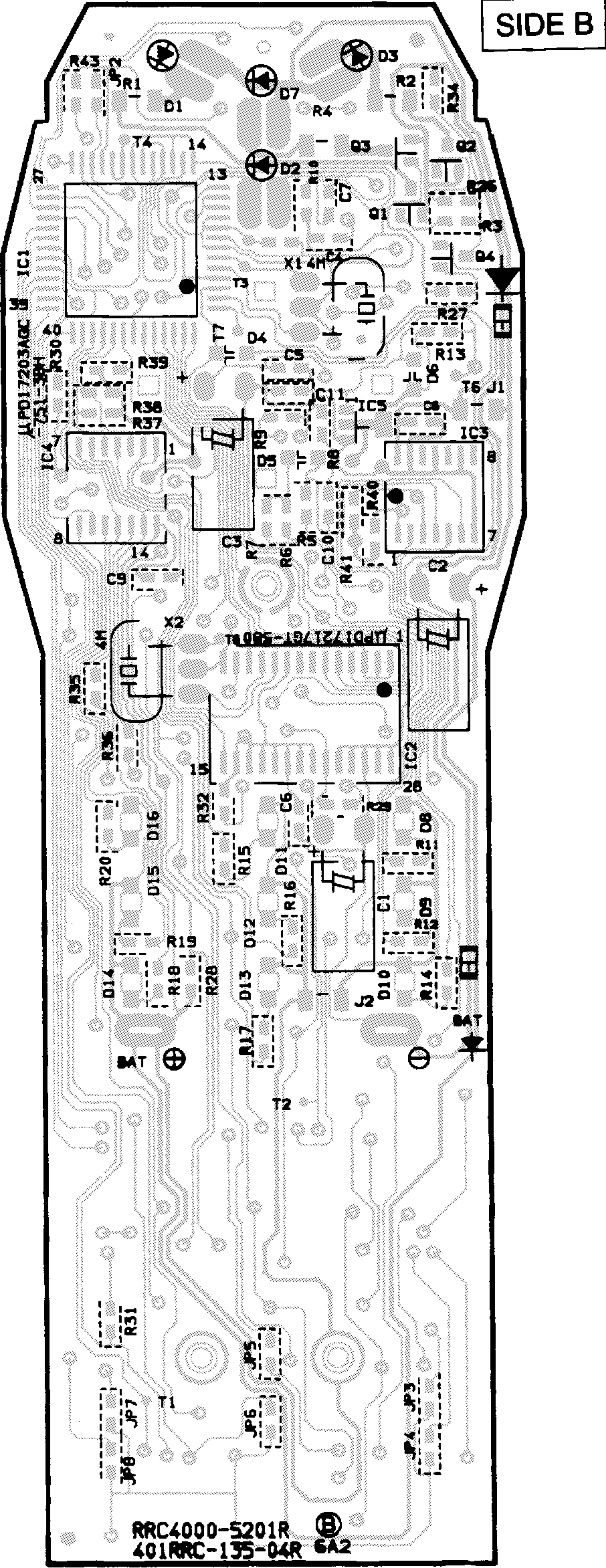
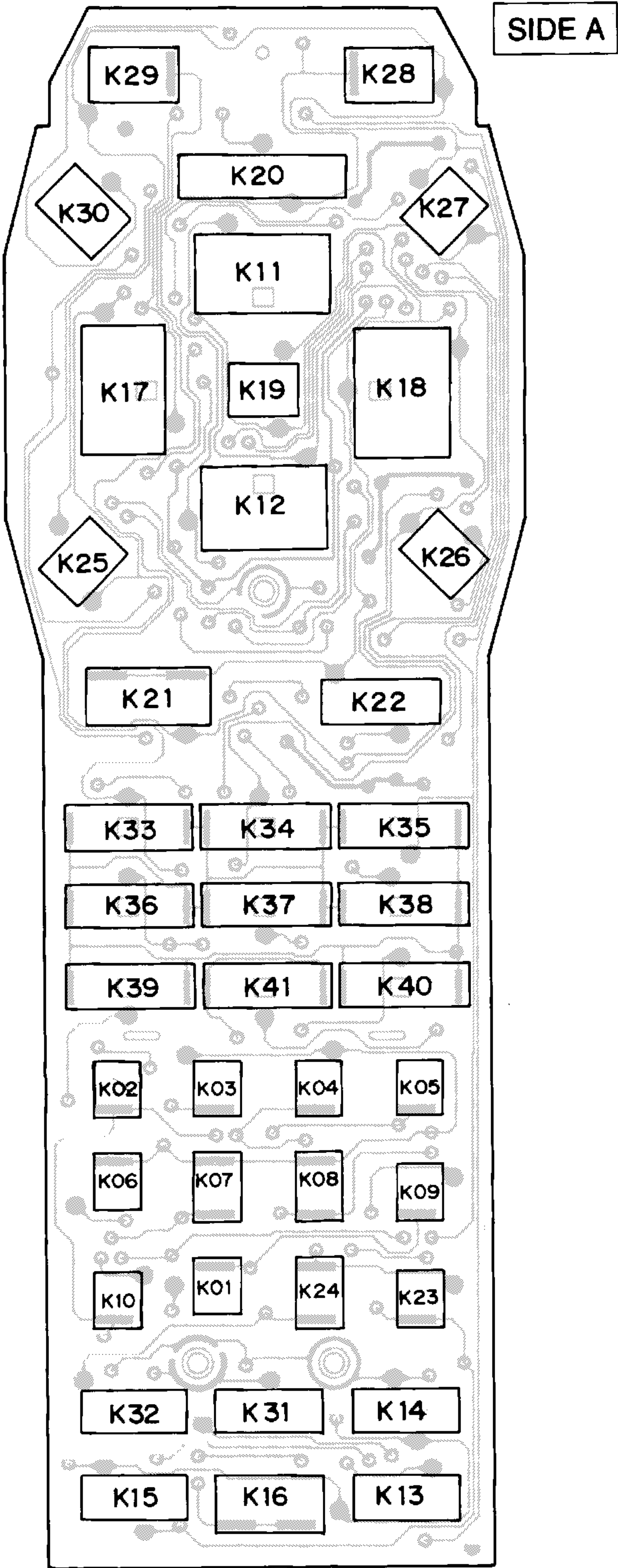
Mark	No.	Description	Parts No.
	1	Filter	AZA7152
	2	Name Plate	AZA7266
	3	Rubber Sheet (A)	AZA7267
	4	Rubber Sheet (B)	AZA7268
	5	Spring (+)	AZB7049
	6	Spring (-)	AZB7050
	7	Spring	AZB7051
	8	Screw	AZB7052
	9	Remo-con Case (A)	AZN7690
	10	Remo-con Case (B)	AZN7691
	11	Battery Cover	AZN7692
	12	Main Key (FF)	AZN7693
	13	Main Key (STOP)	AZN7694
	14	Main Key (REV)	AZN7695
	15	Main Key (PAUSE)	AZN7696
	16	Main Key (PLAY)	AZN7697
NSP	17	PCB	AZW7243

7.3.2 SCHEMATIC AND PCB DIAGRAM

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"



- SWITCHES
- K01 : 10 (0)
 - K02 : 1
 - K03 : 2
 - K04 : 3
 - K05 : 4
 - K06 : 5
 - K07 : 6
 - K08 : 7
 - K09 : 8
 - K10 : 9
 - K11 : ▲
 - K12 : ▼
 - K13 : SET UP
 - K14 : MODE CHK
 - K15 : MULTI OPE.
 - K16 : SYS. OFF
 - K17 : ▲
 - K18 : ▼
 - K19 : ▼ ENT.
 - K20 : POWER
 - K21 : ▲ CH-
 - K22 : ▼ CH+
 - K23 : 12 (DISC)
 - K24 : 11 (+10)
 - K25 : VOL.-
 - K26 : VOL.+
 - K27 : TV FUNC.
 - K28 : TV POWER
 - K29 : AMP POW.
 - K30 : MUTING
 - K31 : LIST
 - K32 : FUNCTION
 - K33 : DVD
 - K34 : LD/SAT
 - K35 : CD
 - K36 : VCR1
 - K37 : TV CONT.
 - K38 : TUNER
 - K41 : SURROUND



7.3.3 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.
 - 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 × 10 ¹	→	561	RD1/4PU	561J
47kΩ	→	47 × 10 ³	→	473	RD1/4PU	473J
0.5Ω	→	R50			RN2H	R50K
1Ω	→	1R0			RS1P	1R0K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10¹ → 5621 RN1/4PC5621F

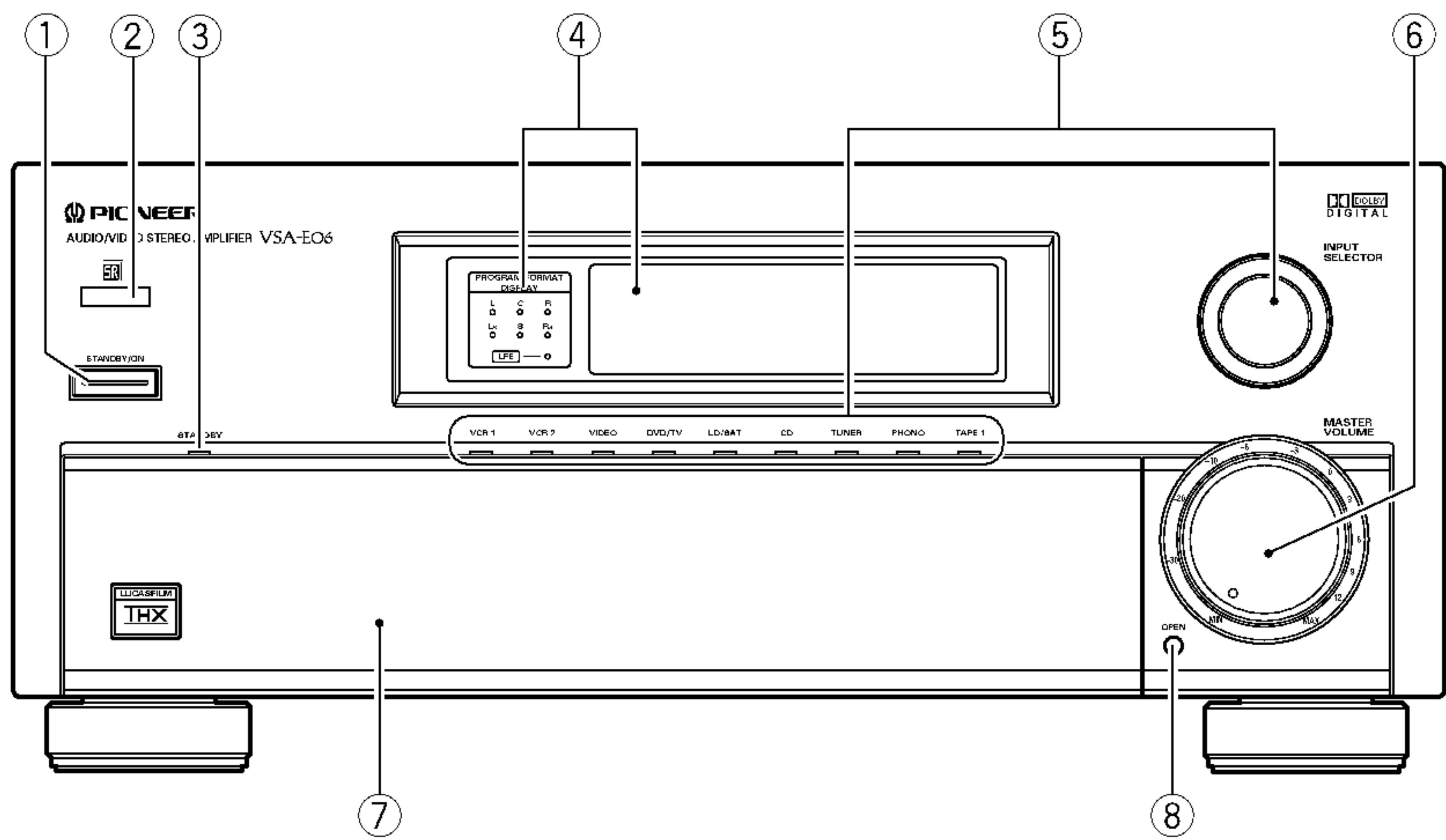
Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1		AZC7275
	IC2		AZC7274
	IC3, IC4		TC74HC07AF
	IC5		RH5VA21AA
	Q4 – Q6		2SA1037
	Q1 – Q3		2SC3265
	D1, D3, D7		SE1003 – C
	D2		SPS – 503C – 3
	D8 – D20 LED		CL – 230HR – CD
	D4 – D6		RLS – 73
CAPACITORS			
	C2		CEAS470M10
	C4 – C7, C11		CKSQYB104K25
	C3		CEAS221M10
	C1		CEAS101M6R3
	C8 – C10		CCSQCH100J50
RESISTORS			
	R2001, R2002		RS1/8S0R0J
	R1, R2 ,R4		RS1/8S3R9J
	Other Resistors		RS1/10S□□□J
OTHERS			
	X1, X2	RESONATOR (4MHz)	KBR – 4.0M

8. PANEL FACILITIES AND SPECIFICATIONS

NAMES OF PARTS

* The size of characters shown in the figure may differ from that on the actual product.

Front panel



1 STANDBY/ON switch

This is the switch for electric power. Before operating the unit, set the MAIN POWER switch inside the 7 door panel to the ON position. If it is OFF, this STANDBY/ON switch does not function.

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

[Timer ON/OFF is possible]
When the unit is switched ON, ON/OFF control can be performed by means of an optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

2 Remote sensor

3 STANDBY indicator
The STANDBY indicator lights when the power is set to STANDBY, and goes out when set to ON.

4 Displays

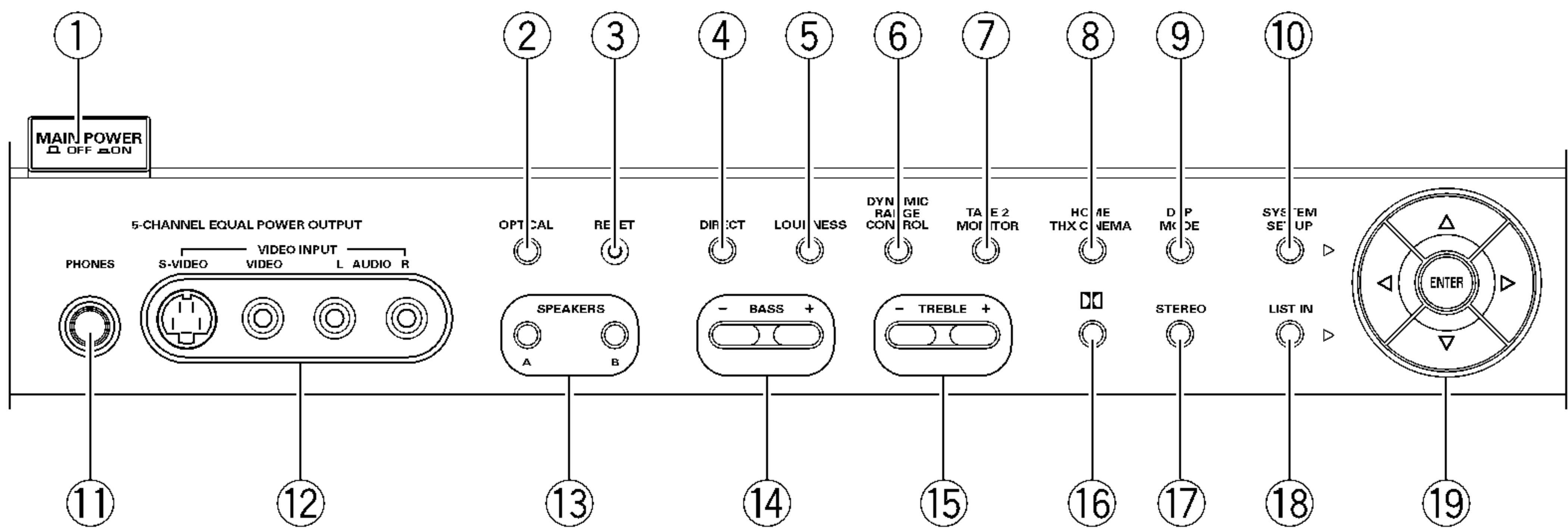
5 INPUT SELECTOR knob and indicators

6 MASTER VOLUME knob

7 Door panel

8 Door panel OPEN button

Inside the door panel



1 MAIN POWER switch

This is the switch for electric power.
After completing the connection of the power cord, set the switch to ON.

2 OPTICAL button

3 RESET button

4 DIRECT button*NOTE
Use to playback sound without going through the tone control circuits. This button operates in stereo mode only.

⑤ **LOUDNESS button***NOTE

Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily. This button operates in stereo mode only.

⑥ **DYNAMIC RANGE CONTROL button**

This equalizes the sound to let you hear subtle sounds even when listening at low volume levels. You can only use this function during DOLBY DIGITAL operation.

⑦ **TAPE 2 MONITOR button**⑧ **HOME THX CINEMA button**⑨ **DSP MODE button***NOTE⑩ **SYSTEM SET UP button**⑪ **PHONES jack (Headphone terminal)**

During Dolby Digital operation, remember that LFE channel sound from the sub woofer is still output even if you connect the headphone plug.

⑫ **Video input terminals**

Connect to a video camera, etc.

⑬ **SPEAKERS A, B buttons**

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

⑭ **BASS (-, +) buttons***NOTE

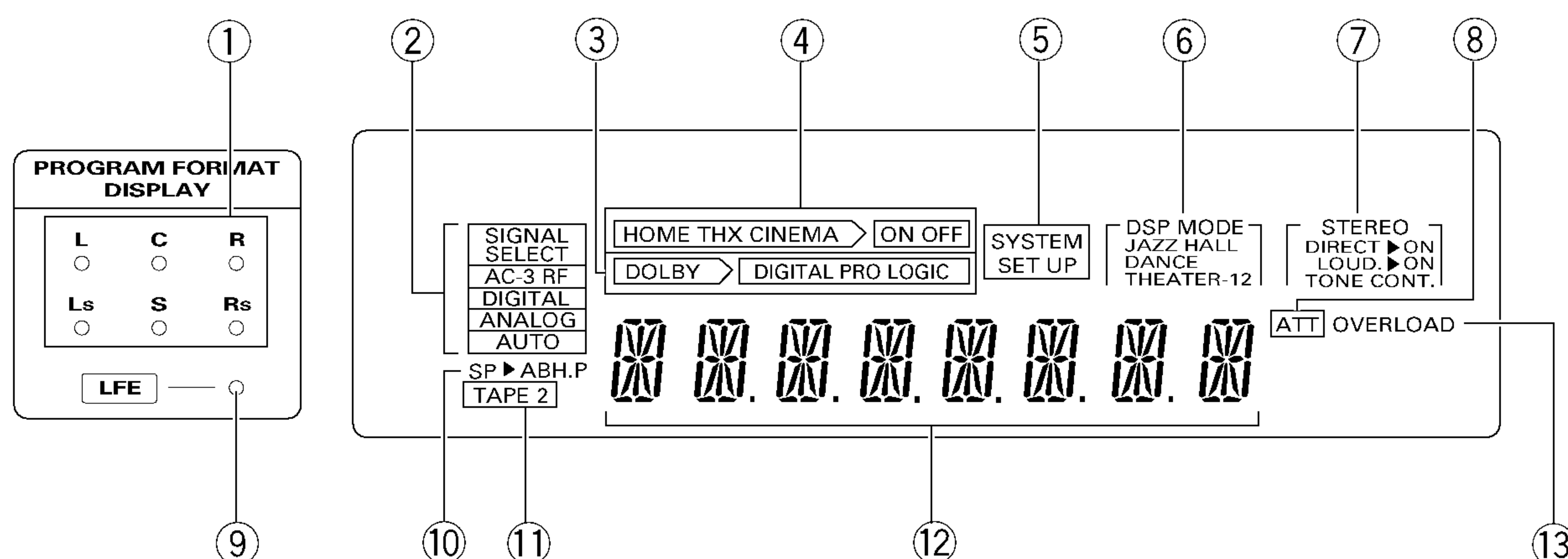
Use to adjust tone. These buttons operate in stereo mode only.

⑮ **TREBLE (-, +) buttons***NOTE

Use to adjust tone. These buttons operate in stereo mode only.

⑯ **[Icon] button**⑰ **STEREO button**⑱ **LIST IN button**⑲ **Select/Adjust buttons***** NOTE:**

These operation buttons do not function during AC-3 input.

Display① **PROGRAM FORMAT display**

When playing back in the Dolby Digital (AC-3) mode, the indicator of the channels set for the playback source lights.

② **SIGNAL SELECT indicators**

The input signal format currently selected will light.

③ **DOLBY DIGITAL and PRO LOGIC indicators**

"DOLBY" lights when the Dolby Surround mode is ON. There are two Dolby Surround modes - Dolby Digital (AC-3) and Dolby Pro Logic. "DOLBY" and "DIGITAL" light during Dolby Digital, and "DOLBY" and "PRO LOGIC" light when played back in Dolby Pro Logic.

④ **HOME THX CINEMA mode indicators**

Light when HOME THX CINEMA mode is selected.

⑤ **SYSTEM SET UP indicator**

Lights when SYSTEM SET UP mode is selected.

⑥ **DSP MODE indicators**

Light when DSP MODE is selected.

⑦ **STEREO indicators**

Light when STEREO mode is selected.

⑧ **ATT indicator**

Lights when INPUT ATT is ON.

⑨ **LFE indicator**

[LFE] lights when the LFE (Low Frequency Effects) channel is set for the playback source with Dolby Digital. The LFE indicator also lights when LFE signals are input.

⑩ **Speakers A, B, H.P indicators**

The indicator of the speaker system (A, B) selected will light. "H.P" lights when using a headphone.

When you use headphones, both SPEAKERS A and B will switch OFF.

⑪ **TAPE 2 indicator**

Lights when TAPE 2 MONITOR is ON.

⑫ **CHARACTER display**⑬ **OVERLOAD indicator**

This lights when analog signal input level is excessive.

When it flashes, switch ATT ON using the remote control to reduce the strength of the input signal.

CONNECTING PRODUCTS

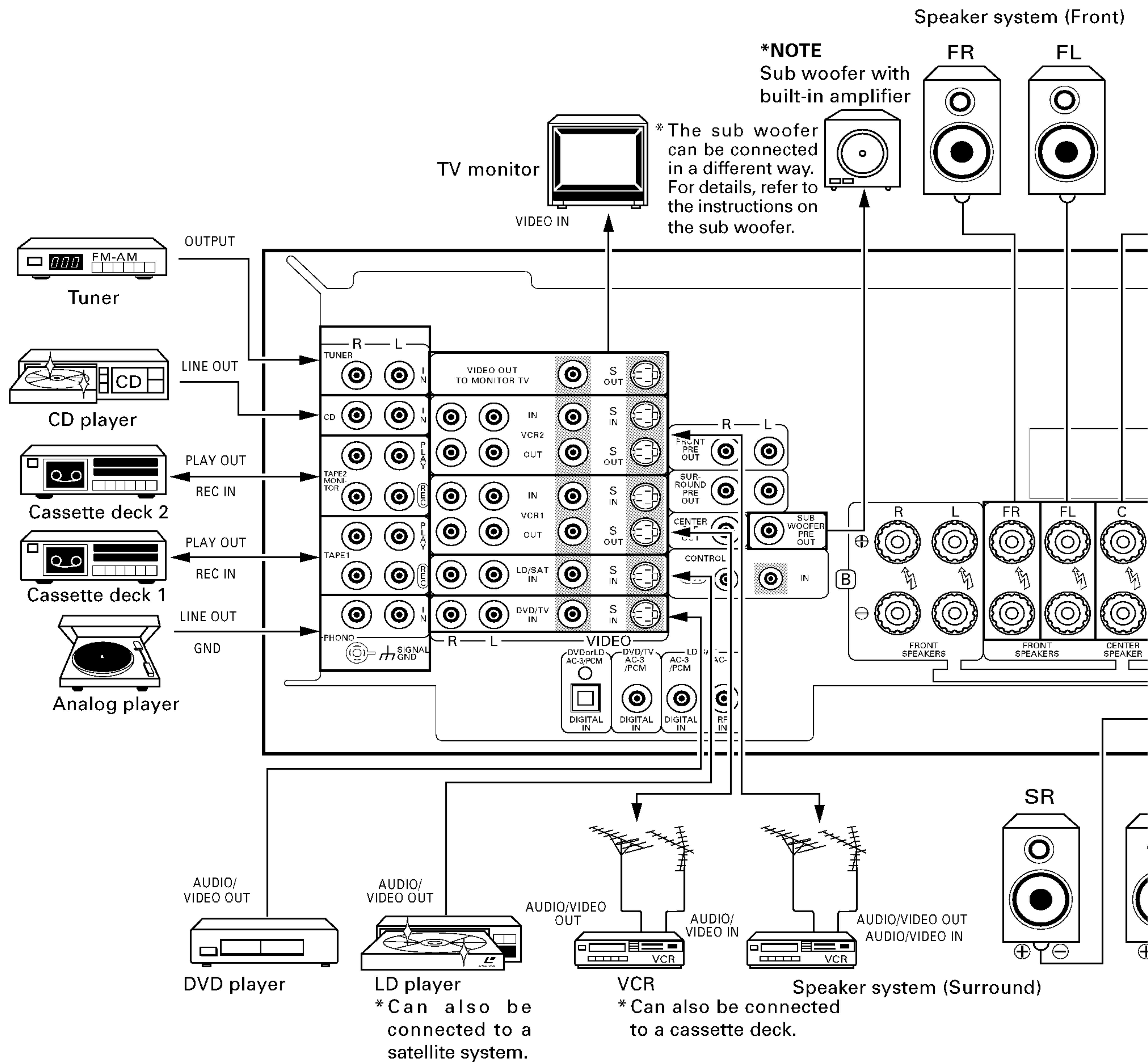
* The size of characters and terminal positions in the figures may differ from those on the actual product.

*** NOTE:**
If you set the PLAYBACK MODE to STEREO, and set the FRONT channel to "Large" during SPEAKER SETTING, no signal is output from the SUB WOOFER PRE OUT terminal.
However, during AC-3 input, a signal is output when the LFE indicator is lit.

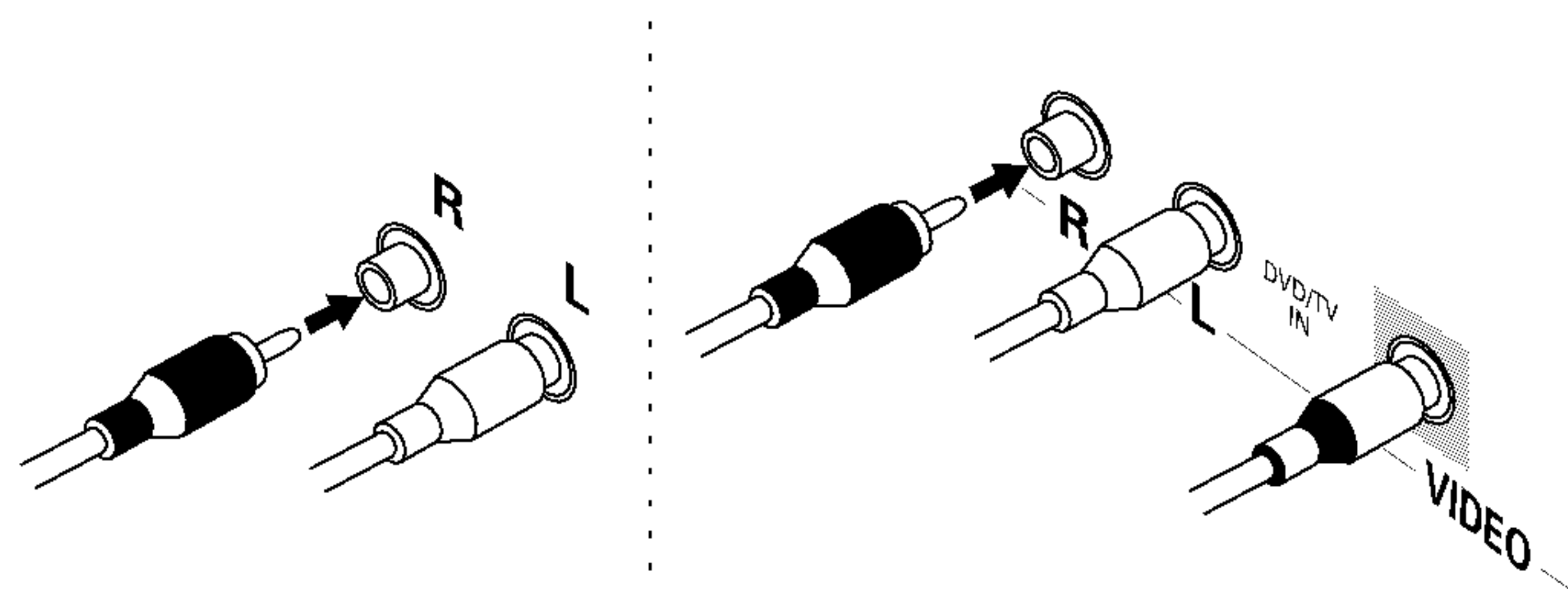
When connecting or changing products, be sure to turn OFF the POWER switch, and disconnect the power cord from the wall outlet.

POWER-CORD CAUTION
Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

Illustration shows U.K. model.



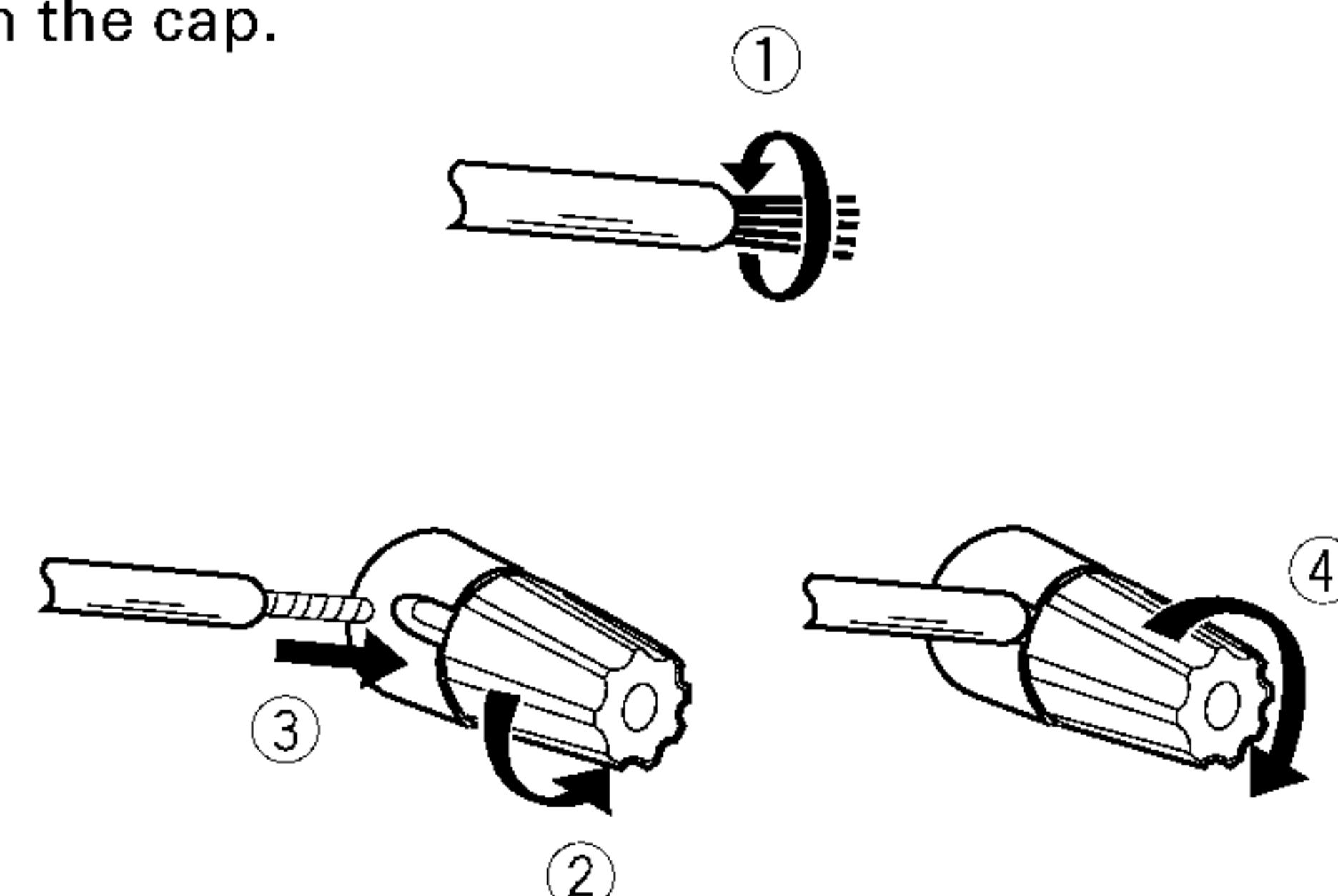
Input/output plugs



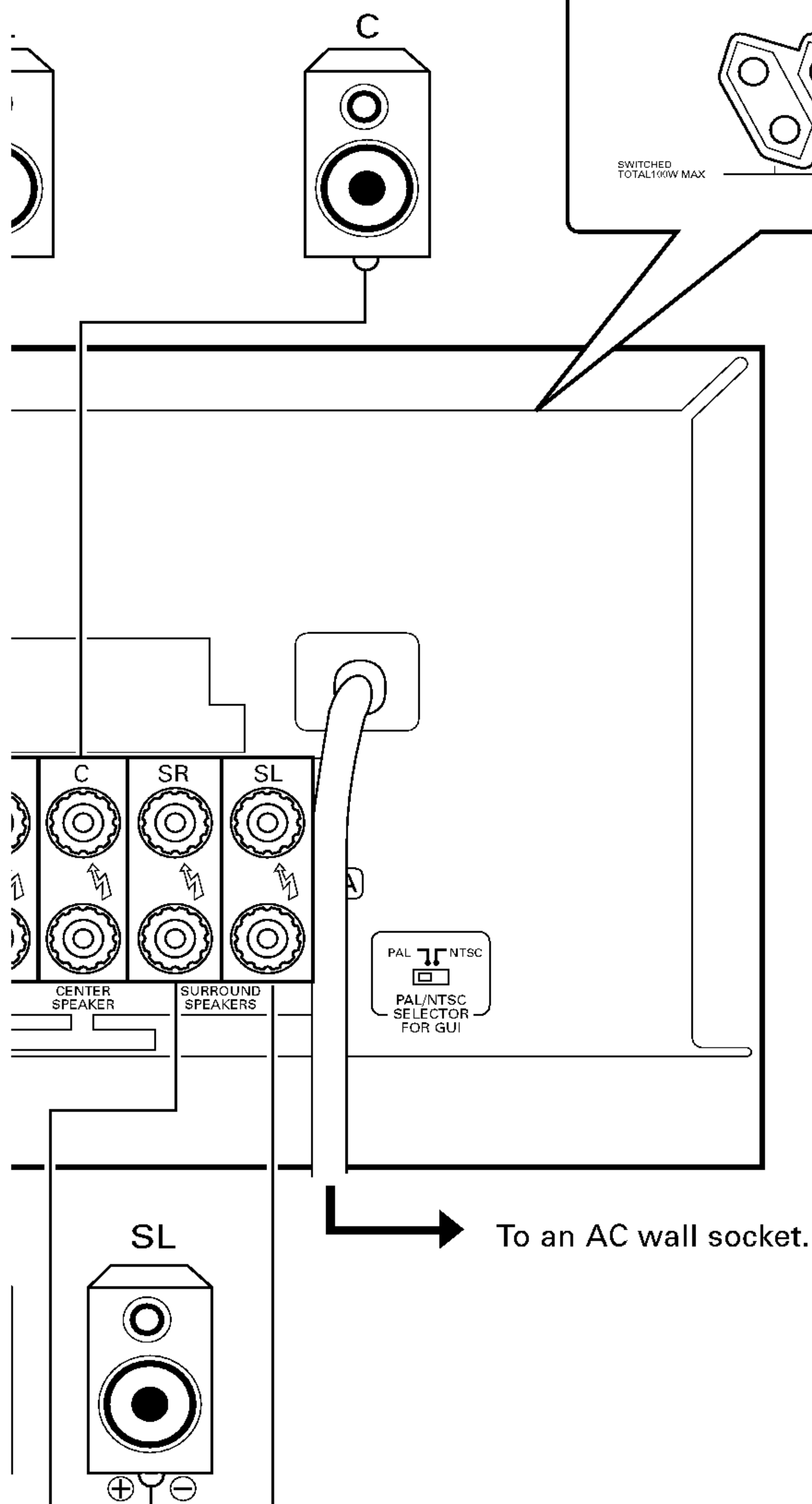
Connect the white plug to L, red plug to R and yellow plug to VIDEO. Be sure to insert completely.

Speaker terminal

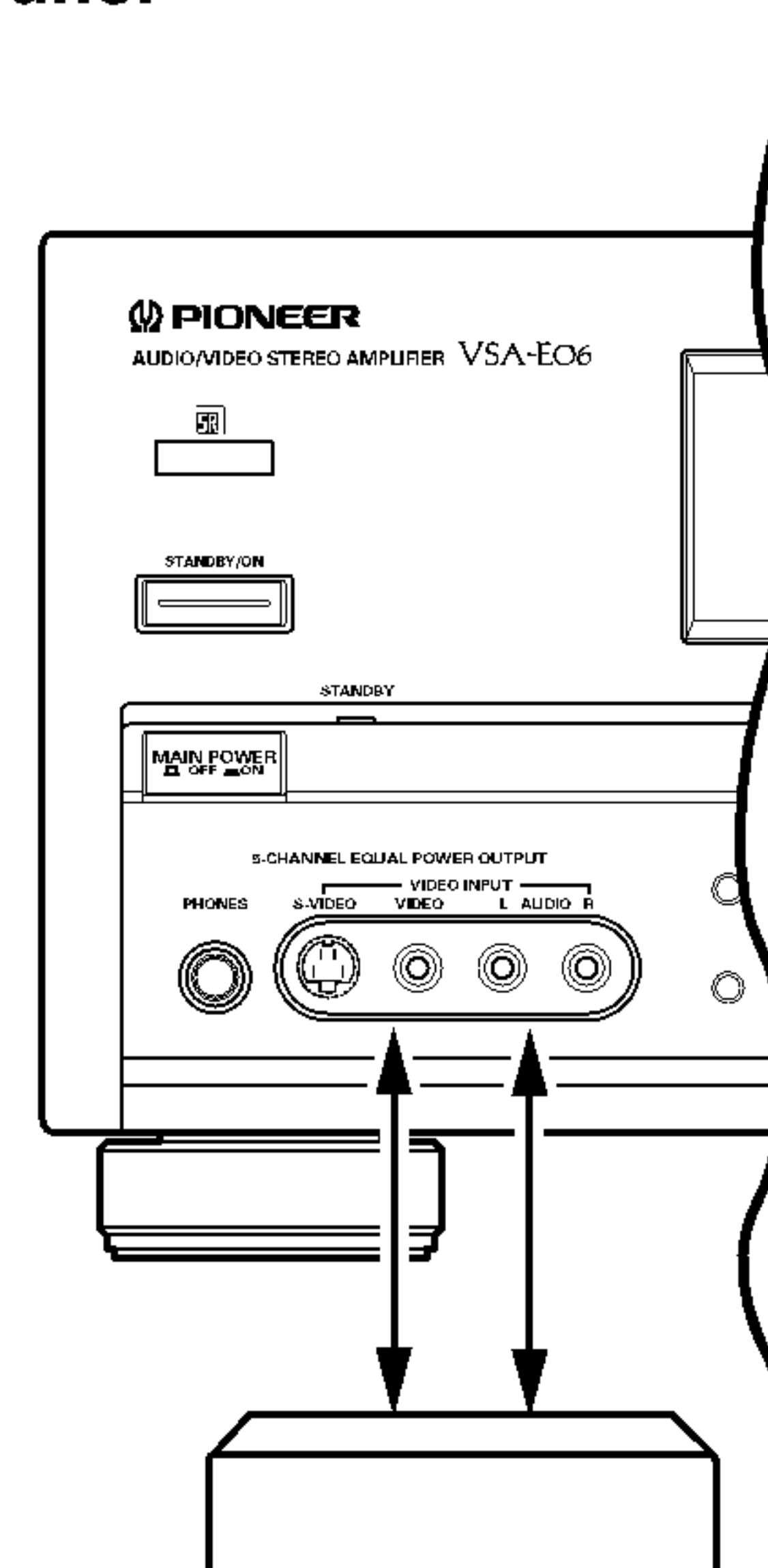
- ① Twist the wire tip.
- ② Loosen the cap.
- ③ Insert the wire.
- ④ Tighten the cap.



Speaker system (Center)



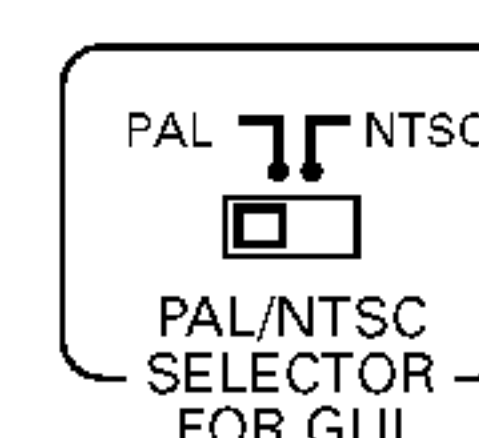
Front Panel



Video products such as a video camera, etc.
Set the INPUT SELECTOR to VIDEO before using.

PAL/NTSC switch

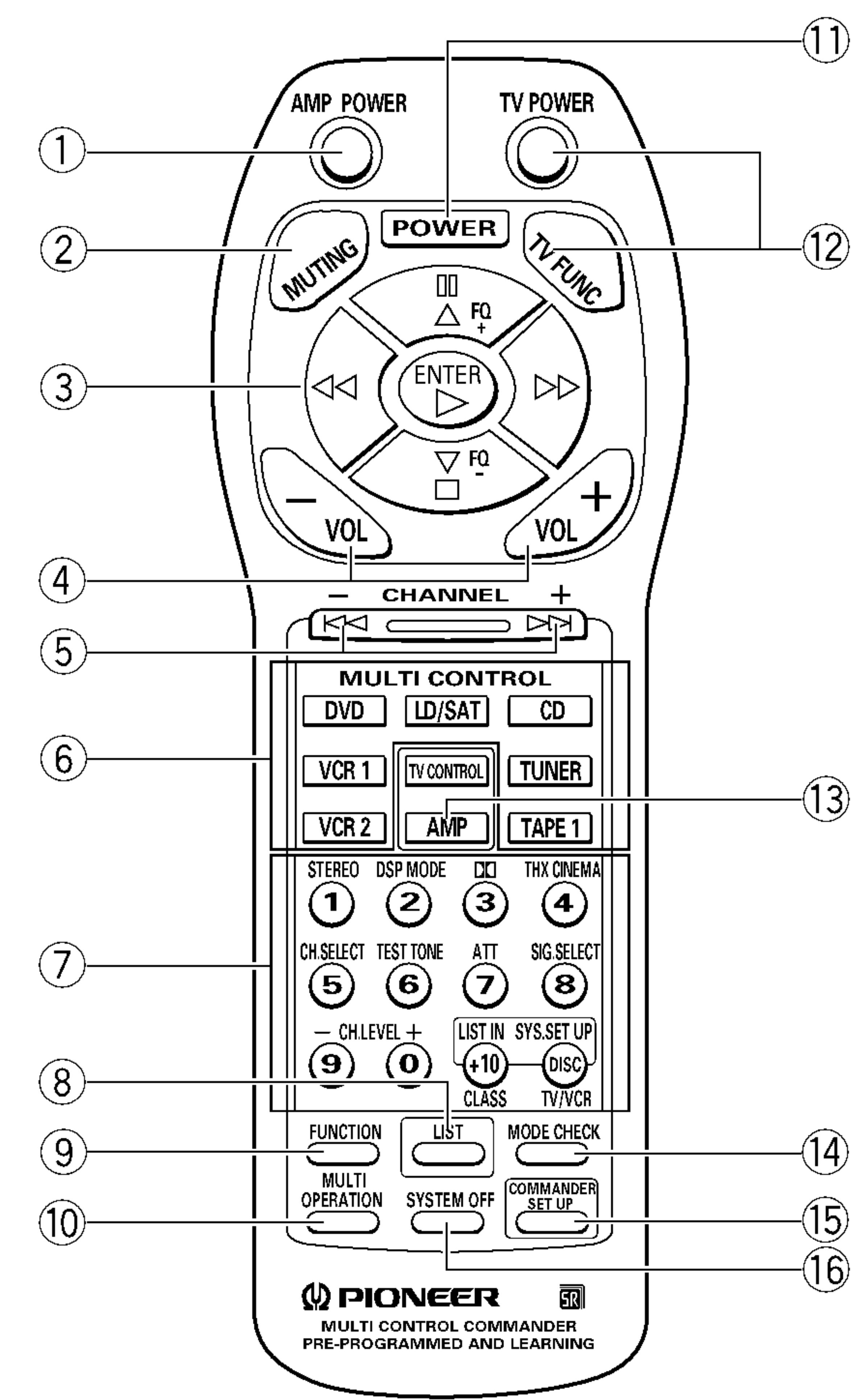
This unit uses the TV screen to operate the system. Set the PAL/NTSC switch to match your TV's color system. The screen will be unclear if the color system does not match.



memo

- Use nominal impedance of 6 Ω to 16 Ω for the speaker system.
 - Sound is output from speakers connected to FR, FL, C, SR, or SL terminals if the SPEAKERS A button on the front panel is set to ON.
- If you want sound from speakers connected to the R and L terminals, set the SPEAKERS B button to ON.

Remote control unit



① **AMP (Amplifier) POWER button**

② **MUTING button**
Press to mute the volume.

③ **[When set to AMP (OPERATIONS)]**
△, ▽, ◀, ▶, ENTER (Select/Adjust) buttons.
[When set to other than AMP (OPERATIONS)]
⏏ (Pause), □ (Stop), ◀◀ (Rewind), ▶▶ (Fast Forward), ▶ (Play) buttons.
⏏, □ operate as FQ + (Frequency up) and FQ - (Frequency down) buttons in TUNER function.

④ **VOL (-, +) buttons**

⑤ **[TV, VCR Operations]**
Selects the TV broadcast channel.
[CD, LD, DVD operations]
◀◀, ▶▶ (Chapter/Track Search) buttons.
[TUNER operations]
Station up/down buttons.

⑥ **MULTI CONTROL function buttons**
Use to set and operate the MULTI CONTROL buttons, and switch the function.
TV CONTROL: Press to operate TV.

⑦ **Number/Amplifier setting buttons**
[When setting AMP (operations)]
STEREO: Switches the STEREO mode.
DSP MODE: Switches the DSP surround effects. The DSP MODE does not function while a Dolby Digital (AC-3) program source is being played back.
⏏ : Switches the Dolby Surround mode.
THX CINEMA: Switches the THX mode.
CH. SELECT: Selects the speaker that you want to adjust.
TEST TONE: When turned ON (while in SYSTEM SET UP mode), volume balance adjustment signals are output in turn from each of the speakers and can be adjusted.
ATT: Operates at ANALOG signal input. When turned ON when the sound is unstable due to excessive input levels, the input signal level drops so that the sound becomes easier to listen to.
SIG. SELECT: Selects an input signal in the LD, DVD function.
CH. LEVEL: Adjusts the volume level of the speaker selected with the CH. SELECT.
LIST IN: Enters the LIST input menu in the CD function.
SYS. SET UP: Enters the SYSTEM SET UP mode.

[TUNER operations]
Number buttons: Use for setting the frequency value when the station call is selected or during direct access.
CLASS: Switches the CLASS number.
[VCR operations]
TV/VCR: Switches between TV and VCR.
[CD Operations]
DISC: Use to select a DISC number.

⑧ **LIST button**
Displays the LIST menu when CD is selected with the INPUT SELECTOR.

⑨ **FUNCTION button**
Switches the function.

⑩ **MULTI OPERATION button**
Use to set the multi operation.

⑪ **POWER button**
Turns ON/OFF the power of products other than this unit.

⑫ **TV buttons**

⑬ **AMP button**
Press when using this button in amplifier setting mode.

⑭ **MODE CHECK button**

⑮ **COMMANDER SET UP button**
Use to control and learn operations of other manufacturers' products, and set multi operation functions.

⑯ **SYSTEM OFF button**
Use to turn OFF the power of all products connected to the main unit.

SPECIFICATIONS

Amplifier section

Continuous power output (DIN, 2 channels driven)*
Stereo (1 kHz, T.H.D. 1 %, 6 Ω) 110 W + 110 W
Continuous power output (DIN, 2 channels driven)*
Stereo (20 Hz – 20,000 Hz, T.H.D. 0.09 %, 6 Ω) 100 W + 100 W
Continuous power output (DIN, 5 channels driven)
Surround
Front 100 W + 100 W (1 kHz, 1 %, 6 Ω)
Center 100 W (1 kHz, 1 %, 6 Ω)
Rear 100 W + 100 W (1 kHz, 1 %, 6 Ω)
Total Harmonic Distortion (both channels driven)*
Stereo (20 Hz– 20,000 Hz, 6 Ω, 100 W OUTPUT) 0.09 %
Dynamic Power (2 Ω/4 Ω/8 Ω) 270 W/150 W/85 W

● Above specifications are for when power supply is 230 V.

Input (Sensitivity/Impedance)
PHONO MM 3.8 mV/47 kΩ
CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
DVD/TV, VIDEO 275 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 ±0.3 dB
CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
DVD/TV, VIDEO 5 Hz to 100,000 Hz ± 0.3 dB**
Output (Level/Impedance)
TAPE 1 REC, TAPE 2 REC, VCR 1 OUT,
VCR 2 OUT 275 mV/2.2 kΩ
Tone Control
BASS ±6 dB (100 Hz)
TREBLE ±6 dB (15 kHz)
LOUDNESS +4 dB (100 Hz)
+2.5 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO MM 80 dB**
CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
DVD/TV, VIDEO 97 dB**
Signal-to-Noise Ratio
[DIN (Continuous rated power output/50 mW)]
PHONO MM 70/64 dB**
CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
DVD/TV, VIDEO 90/65 dB**

* Measured by Audio Spectrum Analyzer.
** DIRECT button is ON.

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VIDEO Section (S jack)

Input (Sensitivity/Impedance)
VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT
Luminance signal (Y) 1 Vp-p/75 Ω
Chrominance signal (C) 0.268 Vp-p/75 Ω
Output (Level/Impedance)
VCR 1, VCR 2, MONITOR
Luminance signal (Y) 1 Vp-p/75 Ω
Chrominance signal (C) 0.268 Vp-p/75 Ω
Frequency Response
VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT
Luminance signal (Y) 5 Hz to 10 MHz ± 0.3 dB
Signal-to-Noise Ratio
Luminance signal (Y) 55 dB
Cross Talk (3.58 MHz) 55 dB

VIDEO Section (Composite)

Input (Sensitivity/Impedance)
VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR 1, VCR 2, MONITOR TV 1 Vp-p/75 Ω
Frequency Response
VCR 1, VCR 2, LD/SAT, DVD/TV,
VIDEO → MONITOR 5 Hz to 10 MHz ± 0.3 dB
Signal-to-Noise Ratio 55 dB
Cross Talk 55 dB

Miscellaneous

Power Requirements AC 220 – 230 Volts, 50/60 Hz
Power Consumption 1200 W
In Standby Condition 6 W
AC OUTLETS (European model only)
SWITCHED x 2 TOTAL 100 W MAX
SWITCHED x 1 100 W MAX
Dimensions 420 (W) x 177 (H) x 449 (D) mm
Weight (without package) 15.4 kg

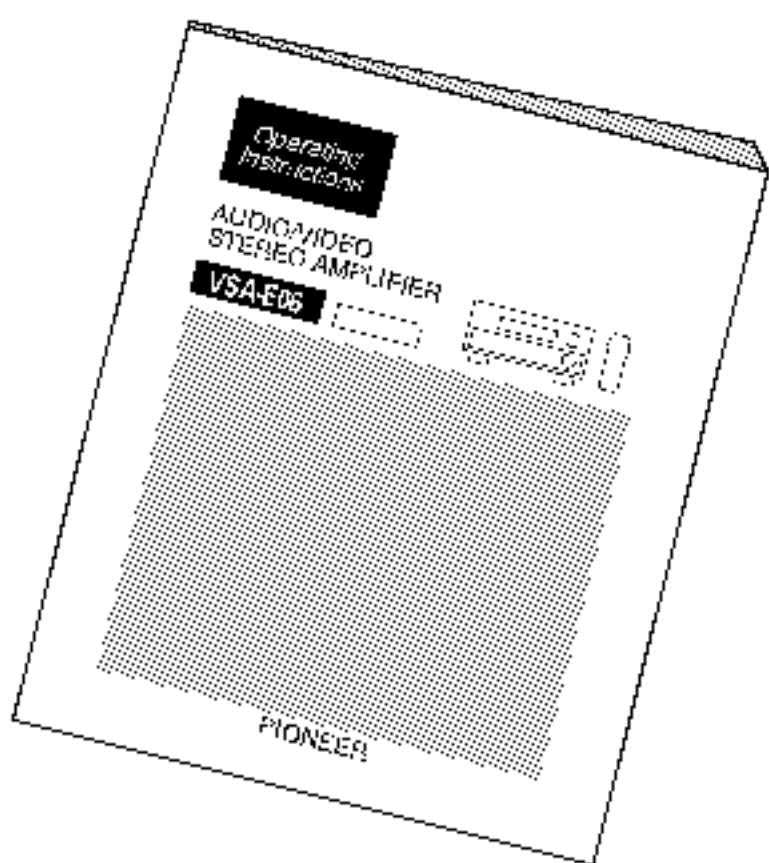
Furnished Parts

Dry cell batteries (AA/LR6, Alkaline) 2
Remote control unit 1
Operating Instructions 1

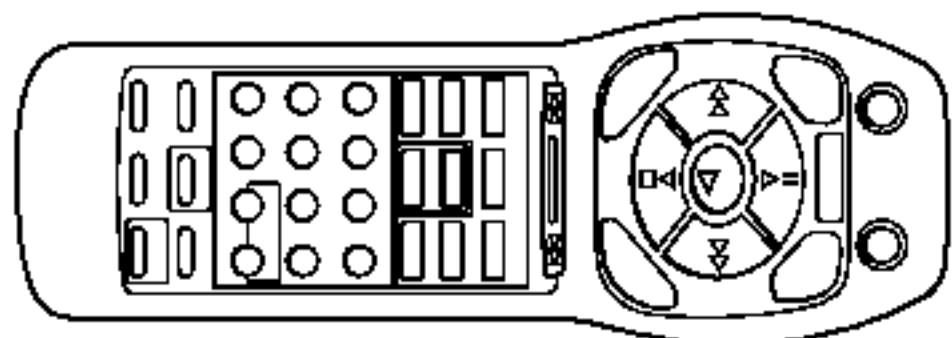
NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

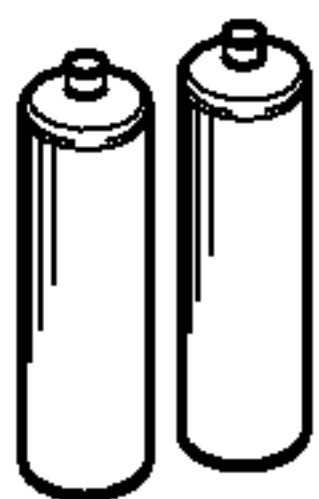
- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners,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



● Operating Instructions



● Remote control unit



● Alkaline dry cell batteries (AA/LR6) x 2