

Service Manual

ORDER NO.
RRV2567

AUDIO/VIDEO MULTI-CHANNEL AMPLIFIER

VSA-AX10 VSX-AX10

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-AX10	VSX-AX10		
HY	○	—	AC220-230V	
SDLBPW	—	○	AC110/120-127V/220V/230-240V	With the voltage selector

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Remarks
VSX-49TX/KU/CA	RRV2523	

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1. CONTRAST OF MISCELLANEOUS PARTS

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.

● Screws adjacent to $\blacktriangledown$ mark on product are used for disassembly.

● Reference Nos. indicate the pages and Nos. in the service manual for the base model.

● 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 $\rightarrow$ $56 \times 10^1 \rightarrow$ 561 RD1/4PU **561J**

47k $\rightarrow$ $47 \times 10^3 \rightarrow$ 473 RD1/4PU **473J**

0.5 $\rightarrow$ R50 RN2H **R50K**

1 $\rightarrow$ 1R0 RS1P **1R0K**

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

5.62k $\rightarrow$ $562 \times 10^1 \rightarrow$ 5621 RN1/4PC **5621F**

■ CONTRAST OF TABLE

VSX-49TX/KU/CA, VSA-AX10/HY and VSX-AX10/SDLBPW are constructed the same except for the following:

Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			VSX-49TX /KU/CA	VSA-AX10 /HY	VSX-AX10 /SDLBPW	
P7- 1	NSP	PCB ASSEMBLIES VR & MOTHER ASSY └ MOTHER ASSY	AWM7562 AWX7890	AWM7567 AWX7895	AWM7564 AWX7892	
	NSP	PS & SP ASSY └ SP (B) ASSY └ AC PRIMARY ASSY └ SP (A) ASSY └ POSISTER (L) ASSY └ POSISTER (R) ASSY └ VOLTAGE SEL ASSY └ POSISTER(MT) ASSY	AWK7712 AWX7852 AWX7834 AWX7848 AWX7844 AWX7846 Not used Not used	AWK7717 AWX7856 AWX7837 AWX7850 AWX7845 AWX7847 Not used AWX8061	AWM7714 AWX7854 AWX7835 AWX7850 AWX7845 AWX7847 AWX7842 AWX8061	No. 1 No. 2
P9- 2 P9- 3 P9- 4 P11- 6 P11- 7	NSP	VIDEO ASSY └ V-CONVERT ASSY └ COMPONENT ASSY └ COMPOSITE ASSY └ A/V I/O ASSY	AWQ7010 AWX7952 AWX7953 AWX7942 AWX7938	AWQ7012 AWX7951 AWX7955 AWX7944 AWX7940	AWQ7012 AWX7951 AWX7955 AWX7944 AWX7940	
P9- 6 P9- 7 P9- 9 P9-10	NSP	A/D & CONTROL ASSY └ ANALOG IN & A/D ASSY └ DISPLAY ASSY	AWM7558 AWX7878 AWX7864	AWM7560 AWX7880 AWX7866	AWM7659 AWX7873 AWX7866	
P9-12 P13- 1	NSP	FM/AM TUNER Module	AXQ7237	Not used	AXQ7238	
P3- 1 P3- 2 P3- 3 P3- 4 P3- 7	$\triangle$	PACKING SECTION AC Power Cord FM Wire Antenna AM Loop Antenna Remote Control Unit Operating Instructions (English)	ADG7061 ADH7010 ATB7009 AXD7295 ARB7249	ADG7062 Not used Not used AXD7296 AHA7252	ADG7065 ADH7010 ATB7009 AXD7298 AHA7251	
		Operating Instructions(German) Operating Instructions(French) Operating Instructions(Dutch) Operating Instructions(Spanish) Operating Instructions(Chinese)	Not used Not used Not used Not used Not used	ARC7345 ARC7346 ARC7348 Not used Not used	Not used Not used Not used ARC7344 ARC7343	No. 3 No. 4 No. 5 No. 6 No. 7
P3- 9 P3-14	NSP	Warranty Card Packing Case Caution 220V Label AC Plug Adapter	ARY1026 AHD8029 Not used Not used	ARY7022 AHD8027 Not used Not used	Not used AHD8030 ARR1003 AKX7011	No. 8 No. 9 Accessories

Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			VSX-49TX /KU/CA	VSA-AX10 /HY	VSX-AX10 /SDLBPW	
		EXTERIOR SECTION				
P5- 1	NSP	Top Plate	ANE7298	ANE7300	ANE7299	
P5- 2		Side Alum	AAH7081	AAH7080	AAH7093	
P5- 6	NSP	Energy Star Label	AAH7876	Not used	Not used	
P5-12		Screw	FBT40T080FZK	RBA1099	RBA1099	
P5-22		DTS License Label	ARW7148	Not used	Not used	
P5-23		Screw	BBZ30P080FCC	IBZ30T080FCC	IBZ30T080FCC	
P5-24		65 Label	ARW7050	Not used	Not used	
P5-25		Screw	BBT30P100FCC	ABA1050	ABA1050	
P5-27	NSP	FUSE Cauton Label	VRW-548	Not used	Not used	No.10
		Edge guard	Not used	Not used	PEC1010	
		Side Alum	Not used	AAH7094	AAH7093	No.11
		J4001 (2P)	ADX7369	ADX7407	ADX7407	No.12
		CN4005	Not used	B2P-VH	B2P-VH	No.13
		CHASSIS SECTION				
P7-12	⚠	Power Transformer (T1)	ATS7320	ATS7322	Not used	
P7-12	⚠	Power Transformer (AC110V/120-127V/220V/240V)	Not used	Not used	ATS7323	
P7-29	NSP	Fan Holder	ANG7373	ANG7371	ANG7371	
P7-59	⚠	Fuse (FU4 : 4A/125V)	VEK1023	REK1027 (T3.15A/L250V)	REK1027 (T3.15A/L250V)	
P7-60	⚠	Fuse (FU5-FU8 : 2A/125V)	VEK1019	REK1025 (T2.0A/L250V)	REK1025 (T2.0A/L250V)	
P7-76	⚠	Fuse (FU9,FU10 : 1A/125V)	VEK1014	REK1021 (T800mA/250V)	REK1021 (T800mA/250V)	
		Fan Motor	Not used	AXM7018	AXM7018	No.14
		REAR PANEL SECTION				
P9-13		Rear Panel	ANC8036	ANC8034	ANC8037	
P9-20	⚠	Fuse (FU1)	AEK-306 (12A/125v)	REK-108 (T6.3A/L250v)	AEK7071 (T10A/L250v)	
P9-23		J22 FFC (13P)	ADD7333	Not used	ADD7333	
P9-24		Speaker Sheet	AAK7959	AAK7963	AAK7963	
	⚠	Fuse (FU2,FU3 : T6.3A/250V)	Not used	Not used	REK-108	No.15
	⚠	Voitage Selector	Not used	Not used	AKX-507	No.16
		HEAT SINK SECTION				
P11- 8		Heat Sink L	ANH7155	ANH7148	ANH7148	
P11- 9		Heat Sink R	ANH7156	ANH7162	ANH7162	
		FRONT PANEL SECTION				
P13-11		Front Panel	ANB7269	ANB7267	ANB7270	
P13-12		Name Plate	PAN1376	VAM1124	PAN1377	
P13-13		Rotary Knob L	AAA7018	AAA7017	AAA7016	
P13-15		Rotary Knob S	AAA7015	AAA7014	AAA7013	
P13-17		Panel Base L	AMB7788	AMB7787	AMB7786	
P13-18		Panel Base R	AMB7791	AMB7790	AMB7789	
P13- 19		POWER Button	AAD7440	AAD7645	AAD7485	
P13-20		POWER Button M	AAD7442	AAD7646	AAD7491	
P13-26		Door Pane	ANB7273	ANB7272	ANB7271	
P13-27		Door Cushion	AED7051	AED7050	AED9014	
P13-28		Door Plate	AAH7077	AAH7075	AAH7078	
P13-29		FL Lens	AAK7934	AAK7933	AAK7933	
P13-30		Inner Panel	AAH7087	AAH7085	AAH7088	
P13-34		Panel Base C	AMB7785	AMB7784	AMB7783	

VSA-AX10, VSX-AX10

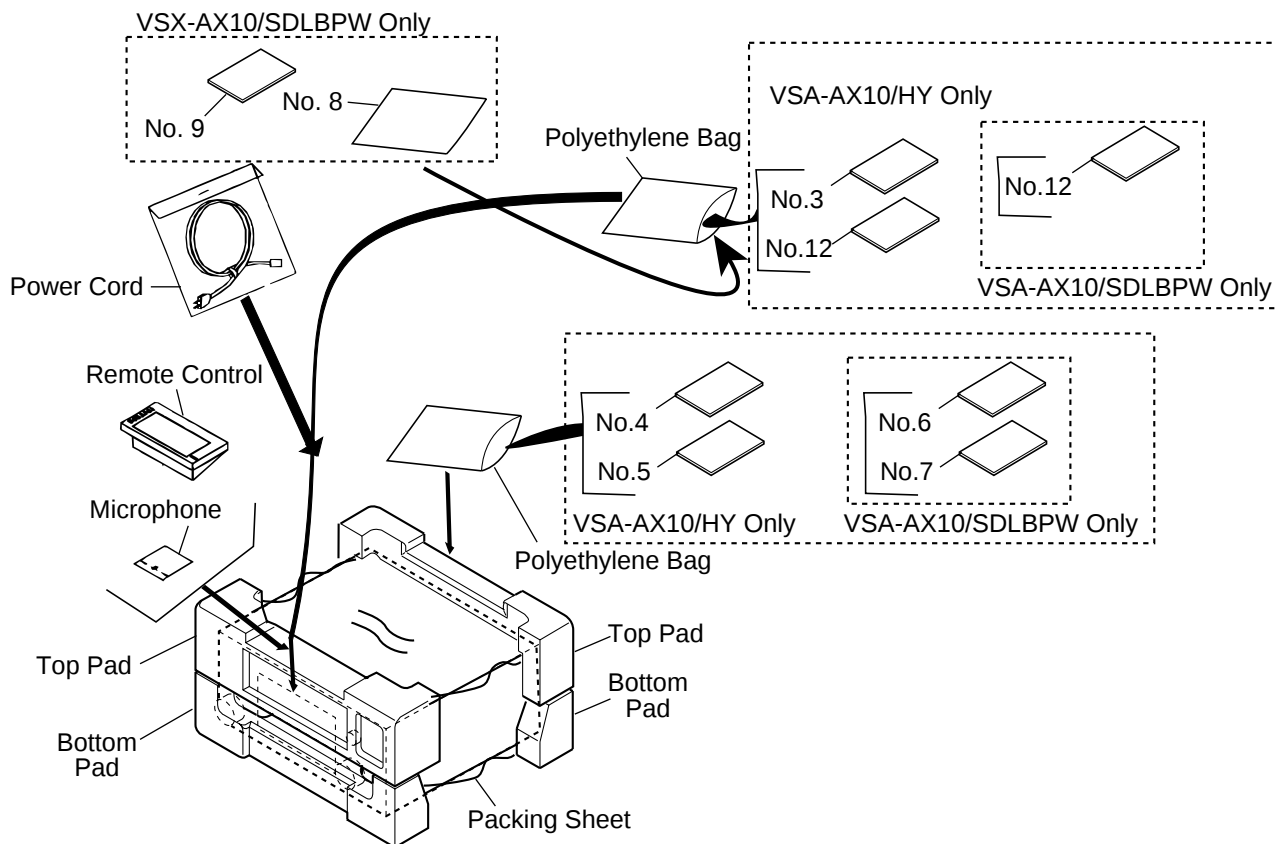
Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			VSX-49TX /KU/CA	VSA-AX10 /HY	VSX-AX10 /SDLBPW	
		FRONT PANEL SECTION				
		Panel Spacer left S	Not used	AMR7408	AMR7415	No.17
		Panel Spacer right S	Not used	AMR7409	AMR7416	No.18
		Panel Spacer left L	Not used	AMR7411	AMR7417	No.19
		Panel Spacer right L	Not used	AMR7412	AMR7418	No.20
		REMOTE CONTROL SECTION				
P161- 2		PCB ASSY	AZC7299	AZC7299	AZC7300	
P161-13		Seal A	AZA7415	AZA7417	AZA7420	
P161-14		Seal B	AZA7416	AZA7418	AZA7420	
P161-16		Case A	AZN7783	AZN7885	AZN7795	
P161-17		Name Plate	AZA7406	AZA7407	AZA7409	
P161-21		Case B	AZN7784	102RRC24401R	AZN7796	
P161-23		Pen Holder	AZN7786	AZN7798	AZN7798	
P161-26		Battery Cover	AZN7785	103RRC14701R	AZN7797	
P161-32		Slide Knob	AZA7347	Not used	AZA7365	
P161-36		Key Top A	AZA7345	302RRC09901R	AZA7363	
P161-37		Key Top B	AZA7346	302RRC10001R	AZA7364	
P161-39		Rubber Sheet B	AZA7349	Not used	AZA7371	
P161-40		Rubber Sheet C	AZA7411	AZA7414	AZA7411	

Notes : ●The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.

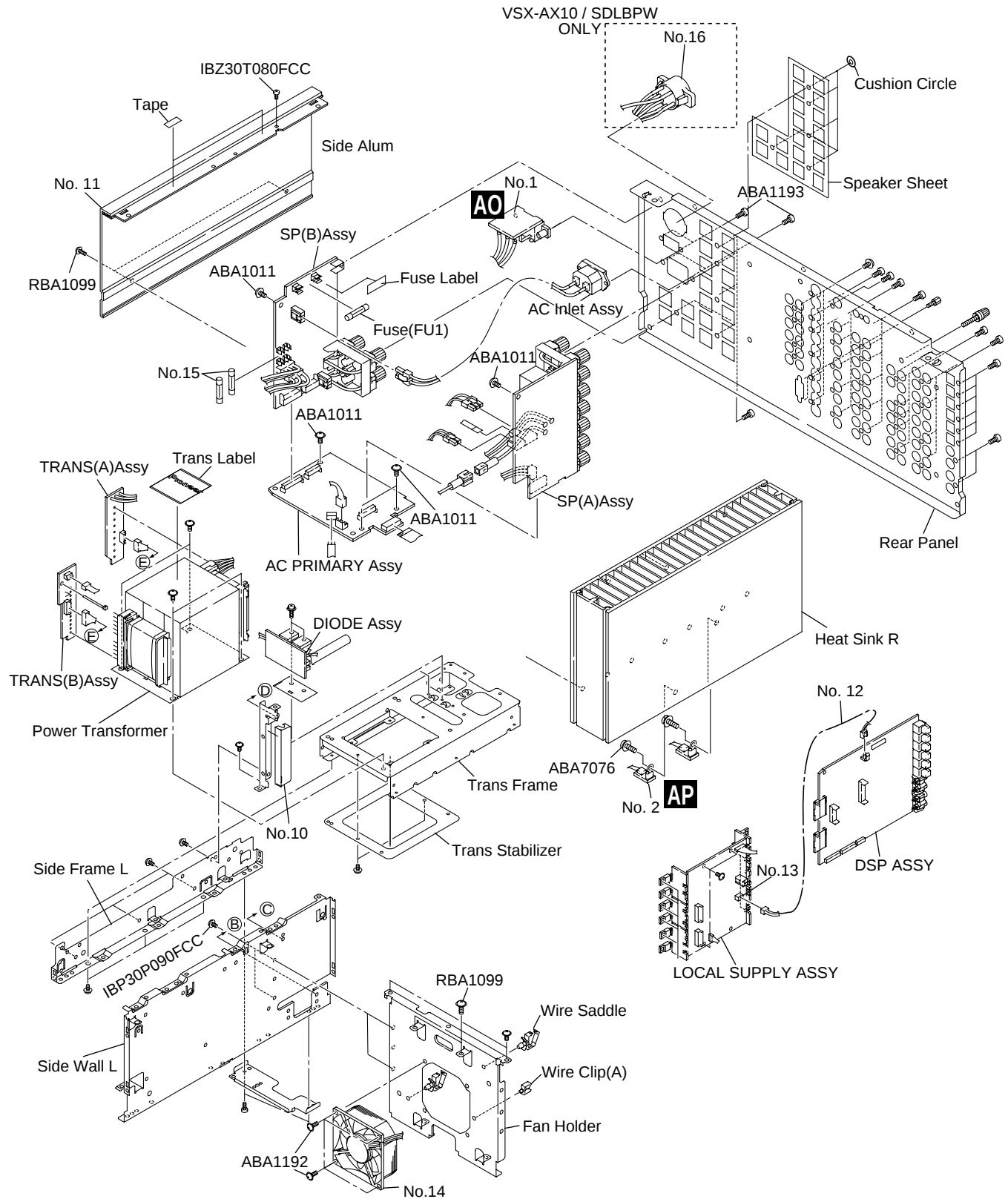
● For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES”, “2. PCB CONNECTION DIAGRAM” and “3. SCHEMATIC DIAGRAM”.

EXPLODED VIEWS

PACKING SECTION

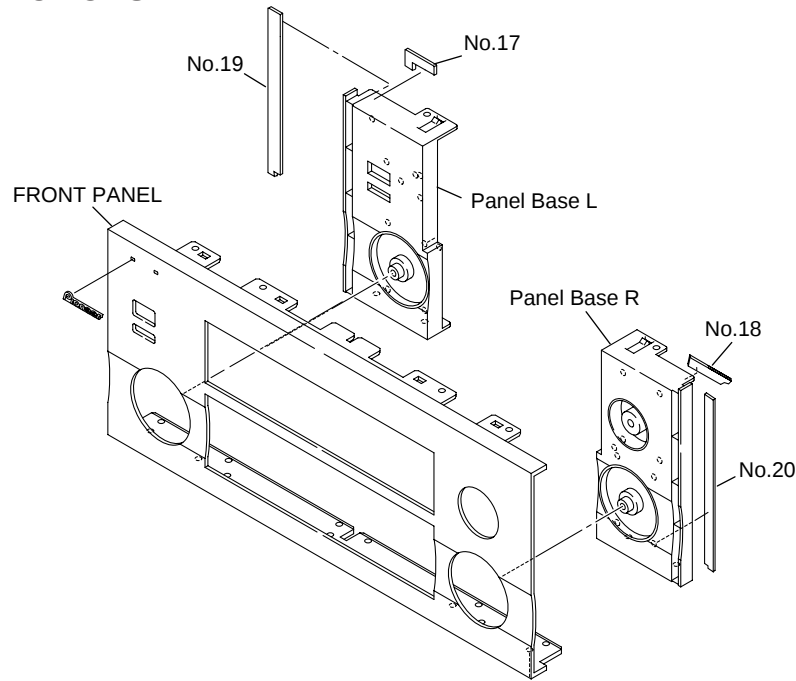


● EXTERIOR SECTIONS



VSA-AX10, VSX-AX10

FRONT PANEL SECTIONS



CONTRAST OF PCB ASSEMBLIES

FM/AM TUNER Module

AXQ7238 and AXQ7237 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AXQ7237	AXQ7238	
	C216, C217	CKSRYB153K50	CKSRYB123K50	

AV I/O ASSY

AWX7940 and AWX7938 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7938	AWX7940	
	IC2051	UPC4570C	Not used	
	IC2052	M62429FP	Not used	
	Q2051	HN1C03F(AB)	Not used	
	D2051	UDZS5.6B	Not used	
	C2051, C2052, C2059, C2060	CEJQ1R0M50	Not used	
	C2053, C2054, C2063, C2064	CCSRCH101J50	Not used	
	C2061, C2065, C2066	CEJQ100M16	Not used	
	C2069	CKSRYB103K50	Not used	
	R2051, R2052, R9069	RS1/16S474J	RS1/16S0R0J	
	R2053, R2054	RS1/16S221J	Not used	
	R2055, R2056	RS1/16S474J	Not used	
	R2057, R2058	RS1/16S220J	Not used	
	R2061, R2062	RS1/16S472J	Not used	
	R2063, R2064, R2069, R2070, R2073, R2074	RS1/16S103J	Not used	
	R2065	RD1/2LMF561J	Not used	
	R2067, R2068, R2071, R2072, R2075, R2076	RS1/16S102J	Not used	
	JA2051	DKB1045	Not used	

CF COMPOSITE ASSY

AWX7944 and AWX7942 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7942	AWX7944	
	IC2107 C2159, C2160, C2161 C2164 R2163, R2164, R2165 R2169 2105 2P PIN JACK JA2106 1P PIN JACK	TC74HC4051AFT CKSRYB103K50 CCSRCH181J50 RS1/16S102J RS1/16S750J AKB7076 Not used	Not used Not used Not used Not used Not used Not used AKB7142	

EF V-CONVERT ASSY

AWX7952 and AWX7951 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7952	AWX7951	
	IC2861 Q2855, Q2856 Q2857, Q2905 C2947, C2949, C2974 C2950 C2948, C2951- C2953, C2955, C2961- C2965 C2980 C2954 C2956, C2957 C2958- C2960 C2975 C2988 L2855 L2858 R2868 R2909 R2910- R2914, R2938, R2939 R2915 R2916, R2948 R2936, R2937 R2941, R2942 X2851	Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used LAU330J Not used RS1/16S911J Not used Not used Not used Not used RS1/16S0R0J Not used ASS1091	TA8772AN 2SC4081(RS) UN5212 CKSRYB103K50 CEAT470M10 CKSRYB104K16 CKSRYB104K16 CEAT100M50 CKSRYB474K10 CEAT1R0M50 CEAT101M10 CCSRCH100D50 LAU270J LAU100J RS1/16S821J RS1/16S103J RS1/16S102J RS1/16S362J RS1/16S473J Not used RS1/16S153J ASS1092	

F COMPONENT ASSY

AWX7955 and AWX7953 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWX7953	AWX7955	
	D2501 R2572 J2504	1SS355 RS1/16S102J AKN7014	Not used Not used Not used	

VSA-AX10, VSX-AX10

LF ANALOG IN&A/D ASSY

AWX7880, AWX7873 and AWX7878 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		AWX7878	AWX7880	AWX7873	
	IC3901 D3901, D3902 D3401 C3951, C3952 C3953, C3954	BU4052BCF UDZS6.2B Not used CEAT100M50 CKSRYB473K50	Not used Not used RB501V-40 Not used Not used	Not used Not used Not used Not used Not used	
	R3533, R3534 R3543, R3544 R3555, R3556 R3951, R3952 R3955- R3957	Not used Not used RS1/16S105J RS1/16S472J RS1/16S221	RS1/16S105J RS1/16S221J Not used Not used Not used	Not used Not used Not used Not used Not used	
	R3958, R3959 JA3502 2P PIN JACK	RS1/16S0R0J Not used	Not used DKB1045	Not used Not used	

MF DISPLAY ASSY

AWX7866 and AWX7864 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWX7864	AWX7866	
	IC3061 Q3003 Q3063 D3029 D3062- D3064, D3066	TC74HC4053AFT UN5212 RN2903 SLI-343DUW(STU) 1SS355	Not used Not used Not used Not used Not used	
	C3063 R3029 R3063 R3065, R3069 R3066	CKSRYB153K50 RS1/16S561J RS1/16S223J RS1/16S103J RS1/16S392J	Not used Not used Not used Not used Not used	
	R3078	Not used	RS1/16S0R0J	

ABF AC PRIMARY ASSY

AWX7837, AWX7835 and AWX7834 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		AWX7834	AWX7837	AWX7835	
	Q1105 Q1106 D1107 D1108 R1107	Not used Not used Not used Not used RS1/16S104J	2SC2412K(QR) DTA124EK UDZ2.7B 1SS355 RS1/16S473J	2SC2412K(QR) DTA124EK UDZ2.7B 1SS355 RS1/16S473J	
⚠	R1118, R1119 R1120 R1121 T1101 CN1106	RS1/16S0R0J Not used Not used ATT7043 Not used	Not used RS1/16S0R0J RS1/16S183J ATT7040 B02B-XASK-1	Not used RS1/16S0R0J RS1/16S183J ATT7041 B02B-XASK-1	

R_F MOTHER ASSY

AWX7895, AWX7892 and AWX7890 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		AWX7890	AWX7895	AWX7892	
	Q5805	2SC5174P	Not used	2SC5174P	
	Q5806	RN4903	Not used	RN4903	
	Q5809	UN5112	Not used	Not used	
	Q5811	Not used	RN4903	RN4903	
	Q5812	Not used	RN1903	RN1903	
	Q5813	Not used	2SC5174P	2SC5174P	
	Q5814	Not used	2SA1932P	2SA1932P	
	D5801	UDZ11B	Not used	UDZ11B	
	D5808	Not used	UDZ36B	UDZ36B	
	D5809, D5816	Not used	UDZ12B	UDZ12B	
	D5810, D5812	Not used	1SS355	1SS355	
	D5811	Not used	UDZS5.1B	UDZS5.1B	
	D5813, D5818	Not used	UDZ15B	UDZ15B	
	C5801, C5802	CEJQ1R0M50	Not used	CEJQ1R0M50	
	C5818	CEJQ100M16	Not used	CEJQ100M16	
	C5819	CEAT101M16	Not used	CEAT101M16	
	C5820	CKSRYB104K16	Not used	CKSRYB104K16	
	C5851, C5854	Not used	CEAT100M50	CEAT100M50	
	C5852, C5853	Not used	CKSRYB103K50	CKSRYB103K50	
	C5858	CKSRYB103K50	Not used	Not used	
	L5802	ATL7002	Not used	ATL7002	
	R5814-R5818, R5820, R5821	RS1/16S0R0J	Not used	RS1/16S0R0J	
	R5891, R5893- R5897	RS1/16S0R0J	Not used	Not used	
	R5829	RS1/16S222J	Not used	RS1/16S222J	
	R5830	RS1/16S473J	Not used	RS1/16S473J	
	R5842	Not used	RS1/16S104J	RS1/16S104J	
	R5843, R5844	Not used	RS1/16S394J	RS1/16S394J	
	R5845, R5848	Not used	RS1/16S101J	RS1/16S101J	
	R5846, R5849	Not used	RS1/16S471J	RS1/16S471J	
	R5854	Not used	Not used	RS1/16S103J	
	R5855	RS1/16S103J	Not used	Not used	
	R5857	Not used	RS1/16S103J	RS1/16S103J	
	R5862	RS1/16S102J	Not used	Not used	
	R5864	RS1/16S104J	Not used	Not used	
	R5819, R5899, R5935	RS1/16S101J	Not used	RS1/16S101J	
	R5932	RS1/16S154J	Not used	Not used	
	CN5802	52045-1345	Not used	52045-1345	
	CN5826	Not used	KM250MA3	KM250MA3	

VSA-AX10, VSX-AX10

AJ F SP (B) ASSY

AWX7856, AWX7854 and AWX7852 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		AWX7852	AWX7856	AWX7854	
⚠	Q1002	DTC124EK	Not used	Not used	
	D1003, D1004	1SS355	Not used	Not used	
	R1001, R1002	ACN7104	Not used	Not used	
	R1003	RCN1080	Not used	Not used	
	R1005, R1006	RS1/16S220J	RS1/16S0R0J	RS1/16S0R0J	
	R1108	Not used	Not used	RS1/16S473J	
	CN1004 1P AC OUTLET	AKP1033	AKP1034	Not used	
	CN1003	RKP1834	AKP7006	Not used	
	CN1006 4P SPEAKER TERMINAL	AKE7076	XKE3019	XKE3019	
	H1001, H1002 FUSE HOLDER	AKR1007	Not used	AKR1007	
	H1007, H1008 FUSE CLIP	Not used	AKR1004	Not used	
	H1003- H1006 FUSE CLIP	Not used	Not used	AKR1004	
	RY1001	ASR7022	ASR7016	ASR7022	
	RY1002	ASR7016	Not used	Not used	
	J1001 3P BOARD IN WIRE	Not used	Not used	ADX7357	
	J1002 3P BOARD IN WIRE	Not used	Not used	ADX7389	

AD AP (A) ASSY

AWX7850 and AWX7848 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7848	AWX7850	
	R1213, R1214	Not used	RS1LMF471J	
	CN1201 6P SPEAKER TERMINAL	AKE7075	AKE7061	
	CN1202 8P SPEAKER TERMINAL	AKE7074	AKE7059	

AG POSISTER (L) ASSY

AWX7845 and AWX7844 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWX7844	AWX7845	
	TH1901 POSISTOR	AEX7006	AEX7007	

AH POSISTER (R) ASSY

AWX7847 and AWX7846 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWX7846	AWX7847	
	TH1902 POSISTOR	AEX7006	AEX7007	

PCB PARTS LIST

Mark	No.	Description	Part No.
------	-----	-------------	----------

A0 VOLTAGE SEL ASSY

SWITCHES

△	S1401	VOLTAGE SELECTOR	AKX1033
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AP POSISTER(MT) ASSY

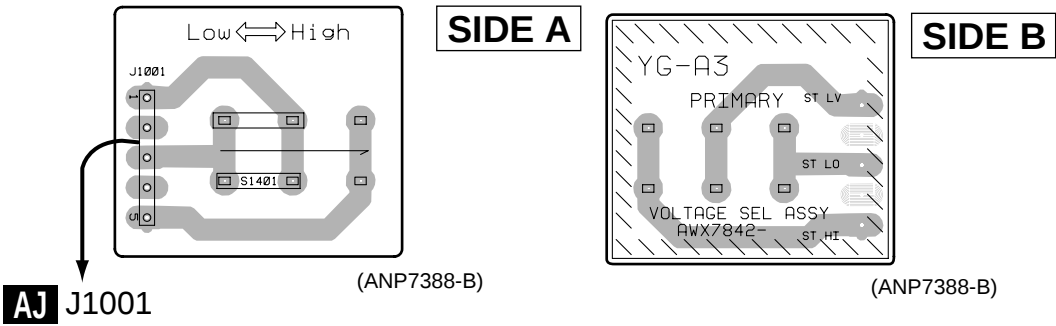
OTHERS

	CN1905	2P CONNECTOR ASSY	ADX7365
△	TH1903	POSISTOR	AEX7006

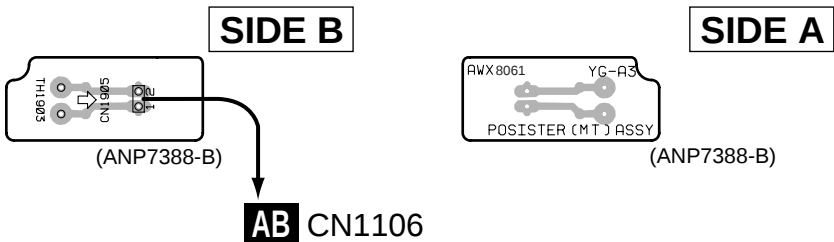
2. PCB CONNECTION DIAGRAM

2.1 VOLTAGE SEL. and POSISTER(MT) ASSYS

A0 VOLTAGE SEL. ASSY



AP POSISTER(MT) ASSY



VSA-AX10, VSX-AX10

● Line Voltage Selection

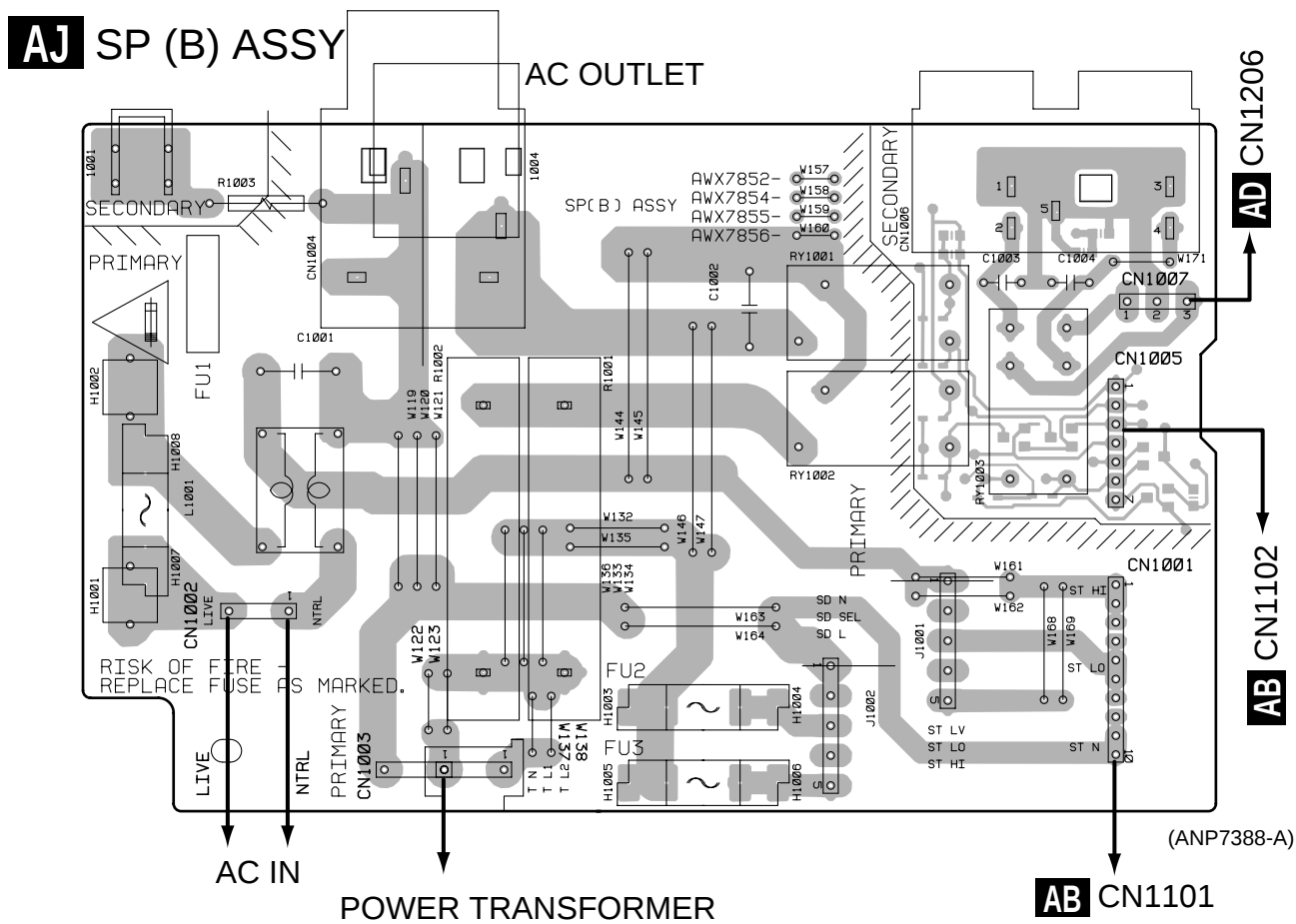
Line Voltage can be changed by the following modification:

- 1. Disconnect the AC power cord.
- 2. Remove the cover.
- 3. Change the connection wire from SP (B) ASSY (W122,W123 and W137,W138) to POWER TRANSFORMER as follows.

Voltage	Jumper No. of SP(B) ASSY
230V	W122,W123 Elimination
240V	W137,W138 Addition

- 4. Stick a line voltage label on the rear panel.

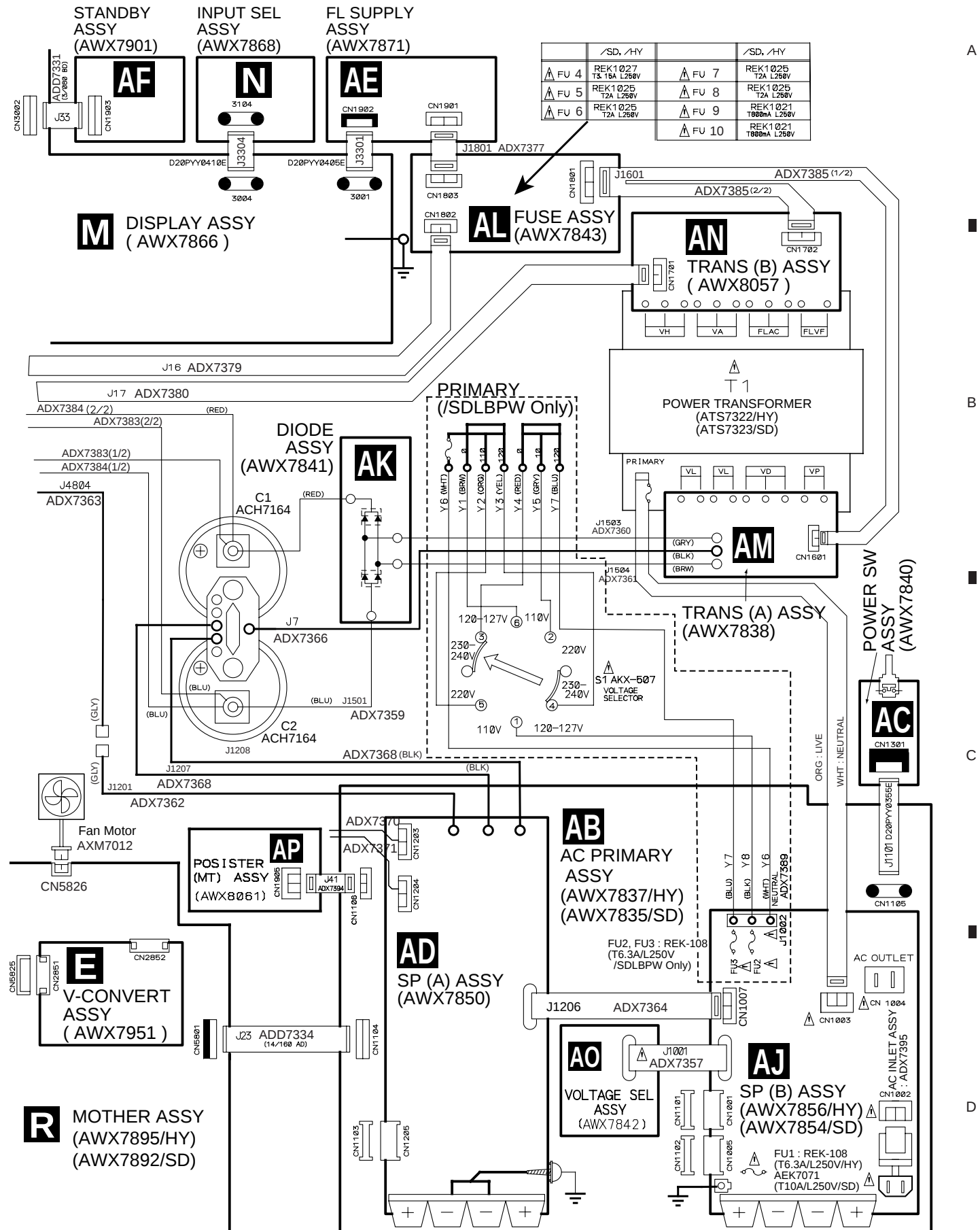
Description	Part No.
220V label	AAX-193
240V label	AAX-192



AJ

3. SCHEMATIC DIAGRAM

3.1 OVERALL WIRING DIAGRAM



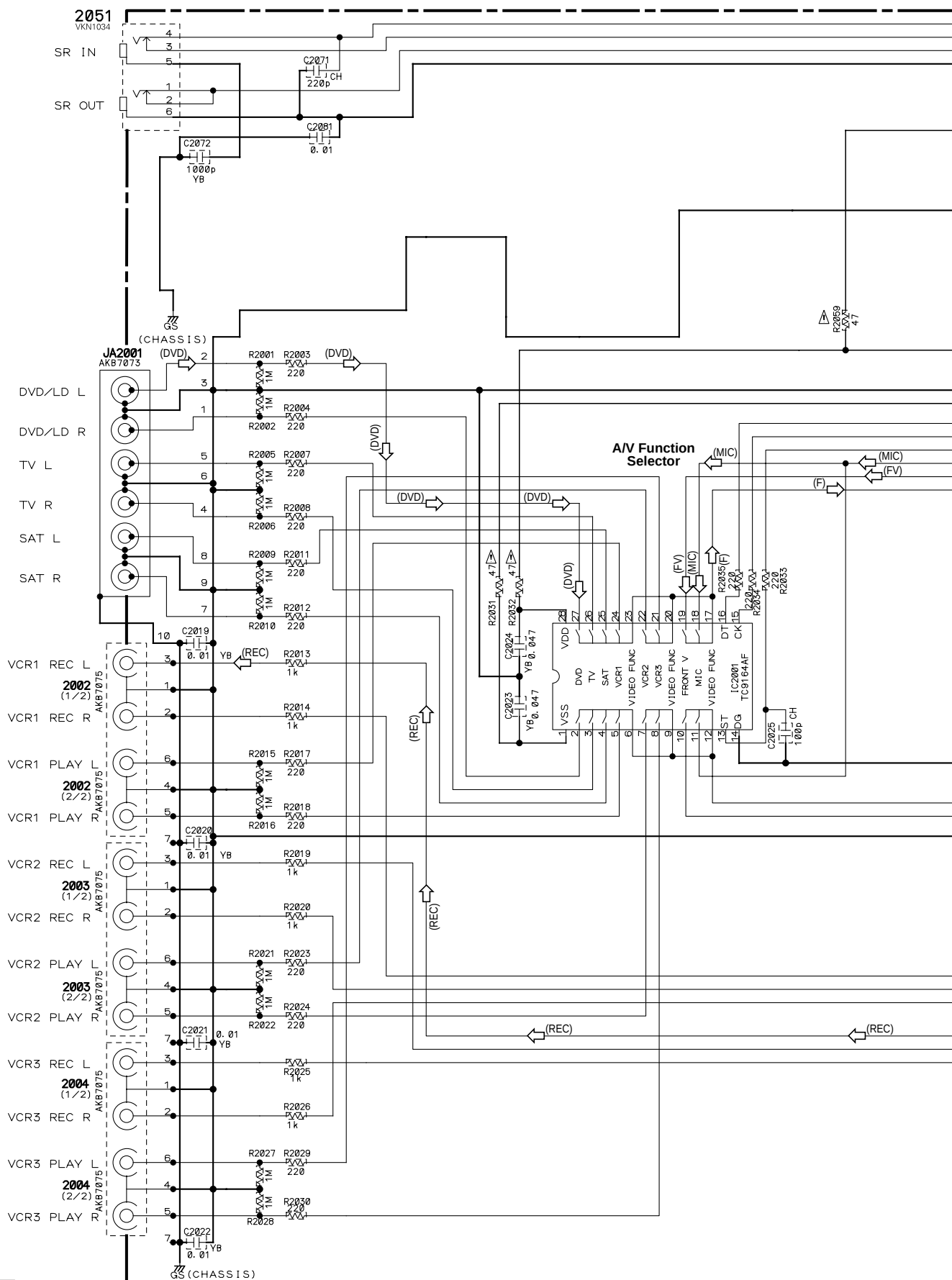
3.2 A/V I/O ASSY

A

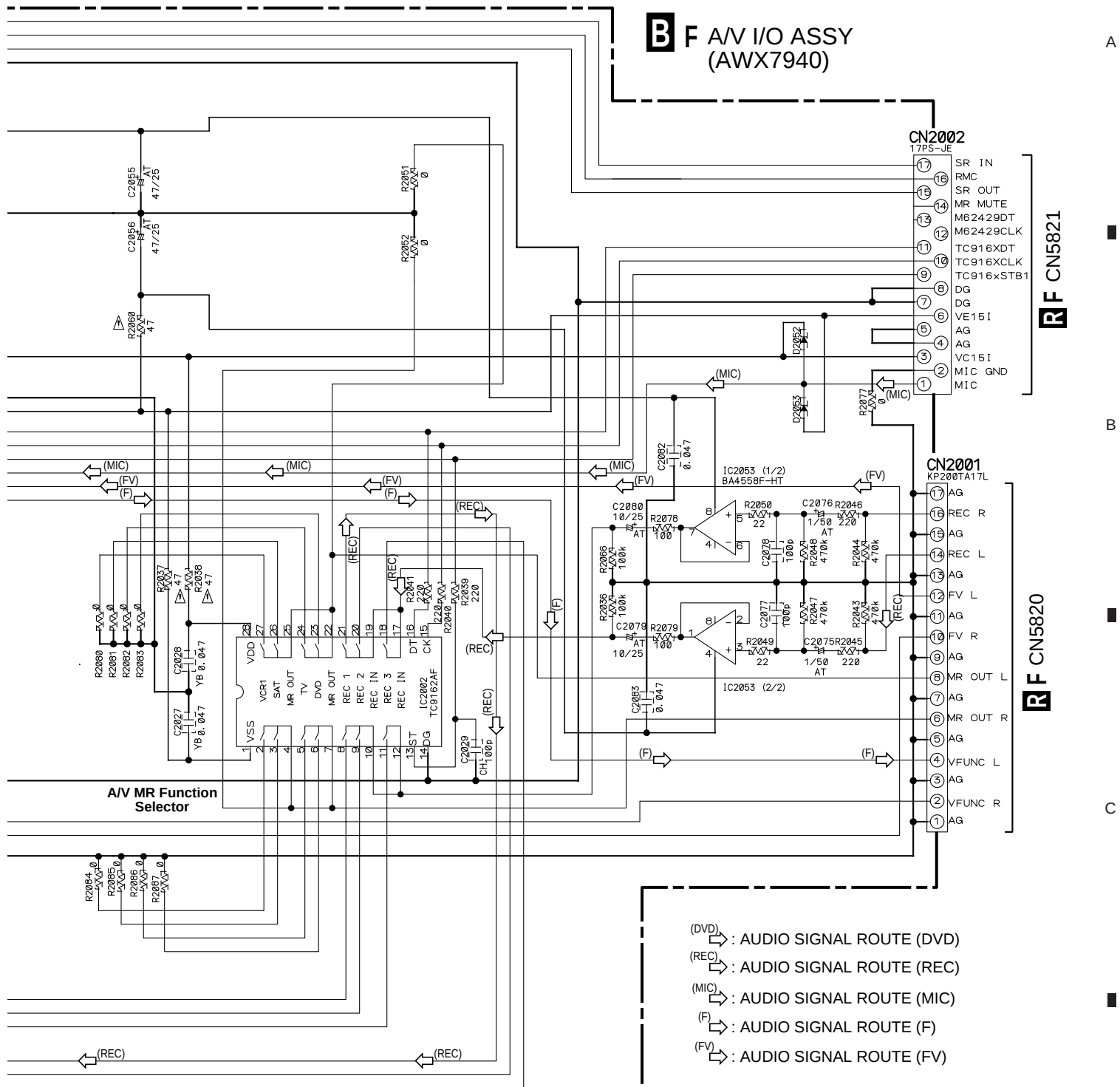
B

C

D



B F AV I/O ASSY (AWX7940)

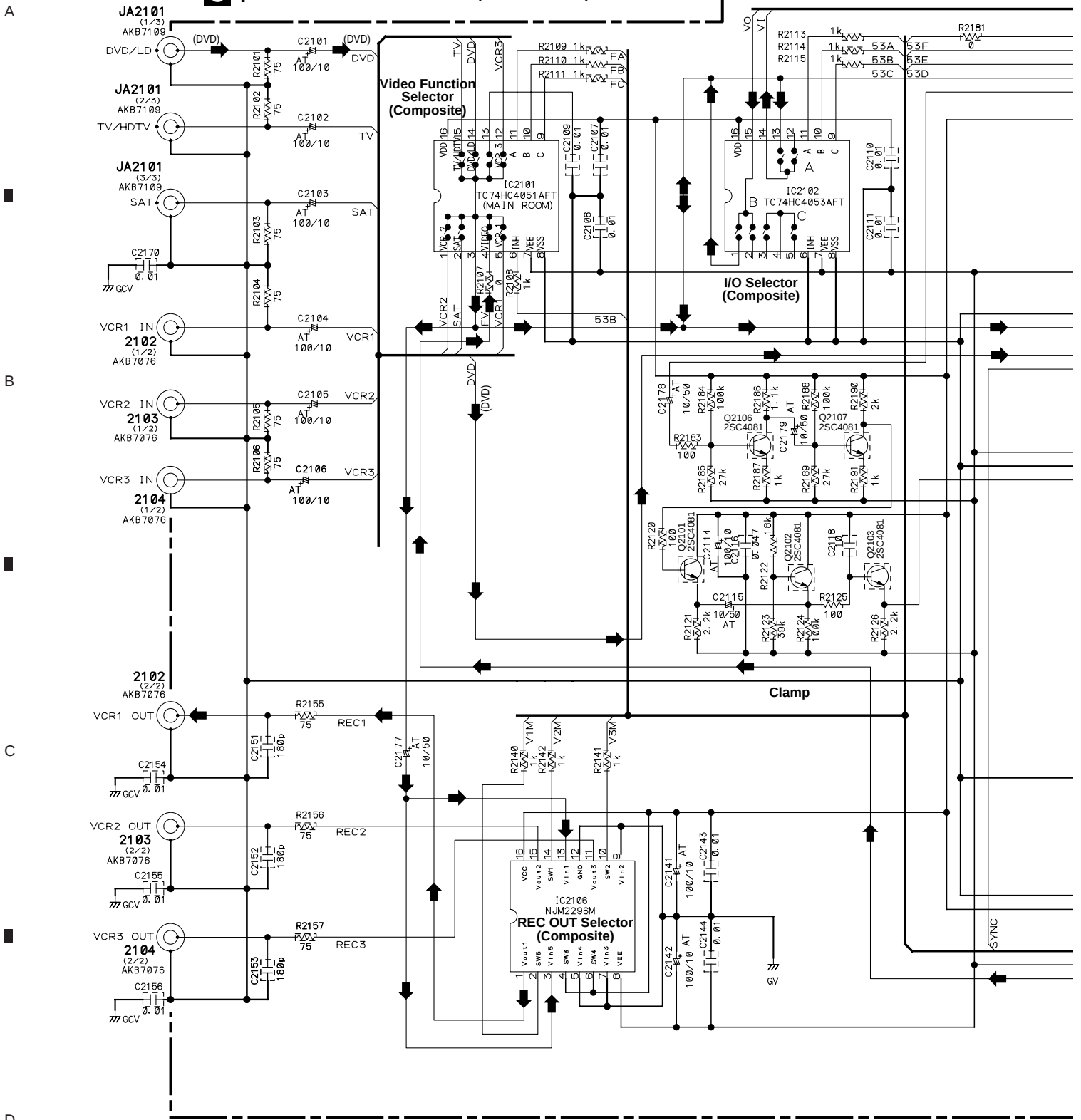


NOTES

- RESISTORS
Unit: k-kΩ M-MΩ or unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.
- CAPACITORS
Unit: p-pF or μF unless otherwise noted.
Ratings: Capacity (μF) / Voltage (V)
unless otherwise noted.
Rated Voltage: 50V except for electrolytic capacitors.
AT : CEAT, JQ : CEJQ
- DIODES
Indicated in 1SS355.

3.3 COMPOSITE ASSY

CF COMPOSITE ASSY (AWX7944)

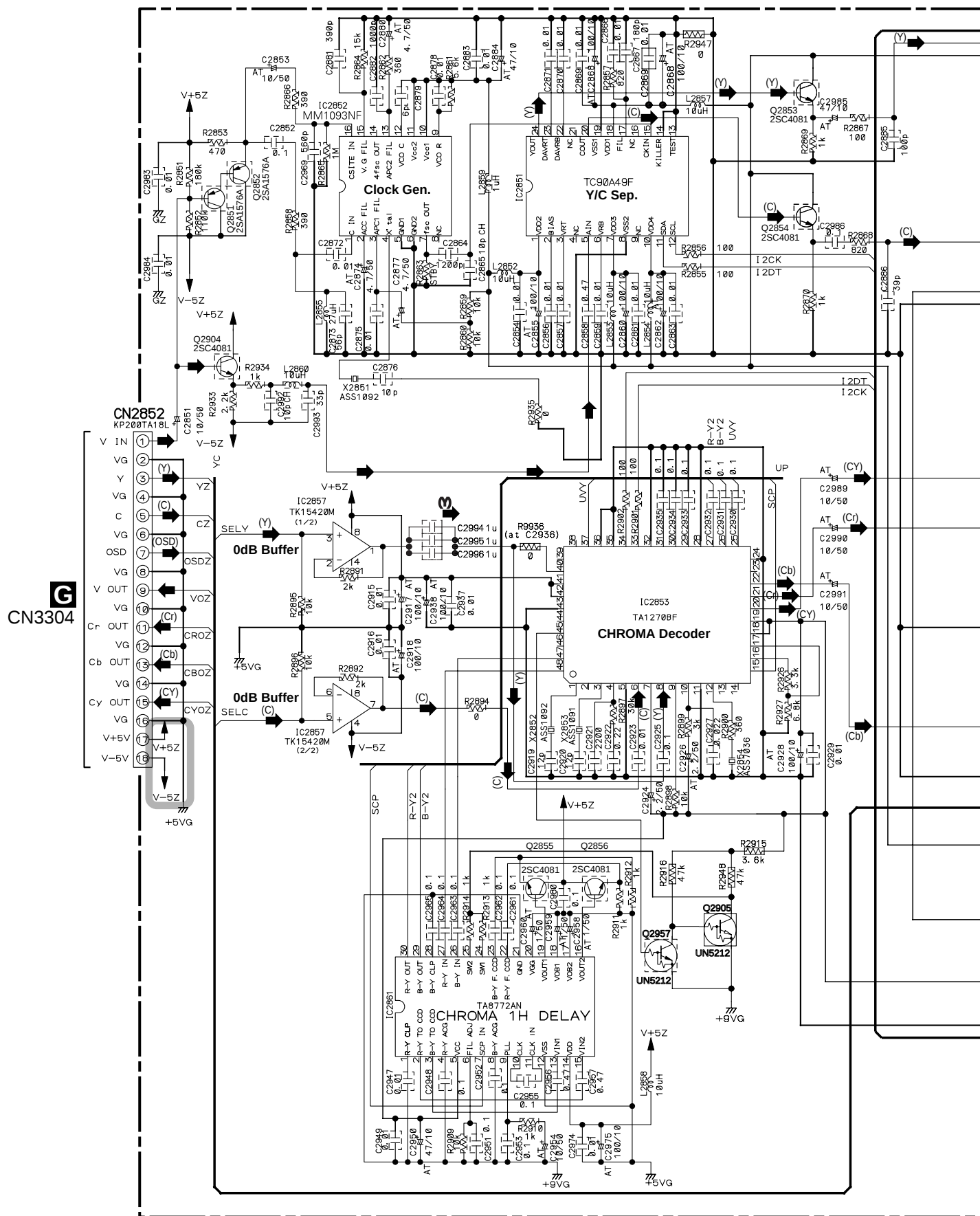


B

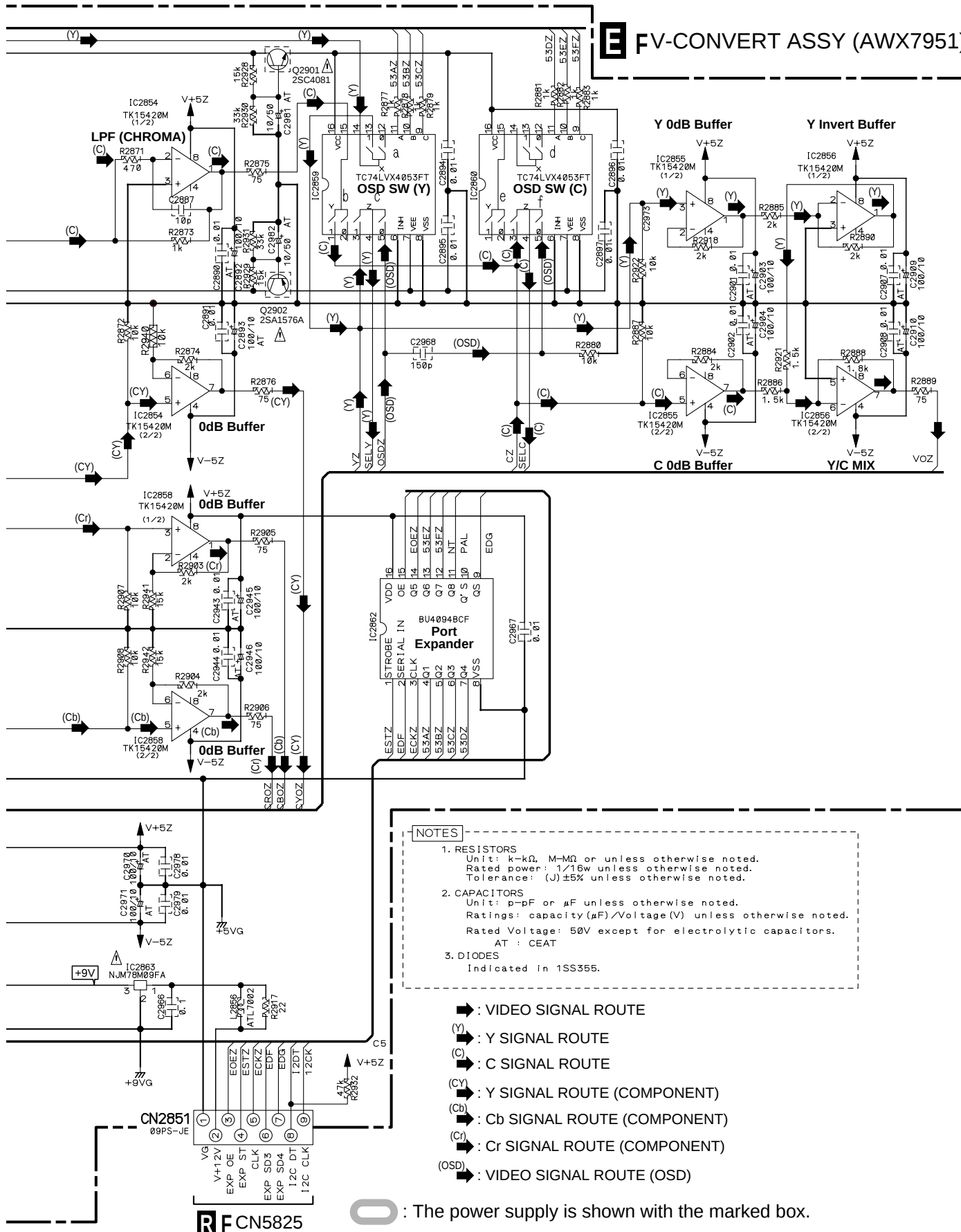


D

3.4 V-CONVERT ASSY



FV-CONVERT ASSY (AWX7951)

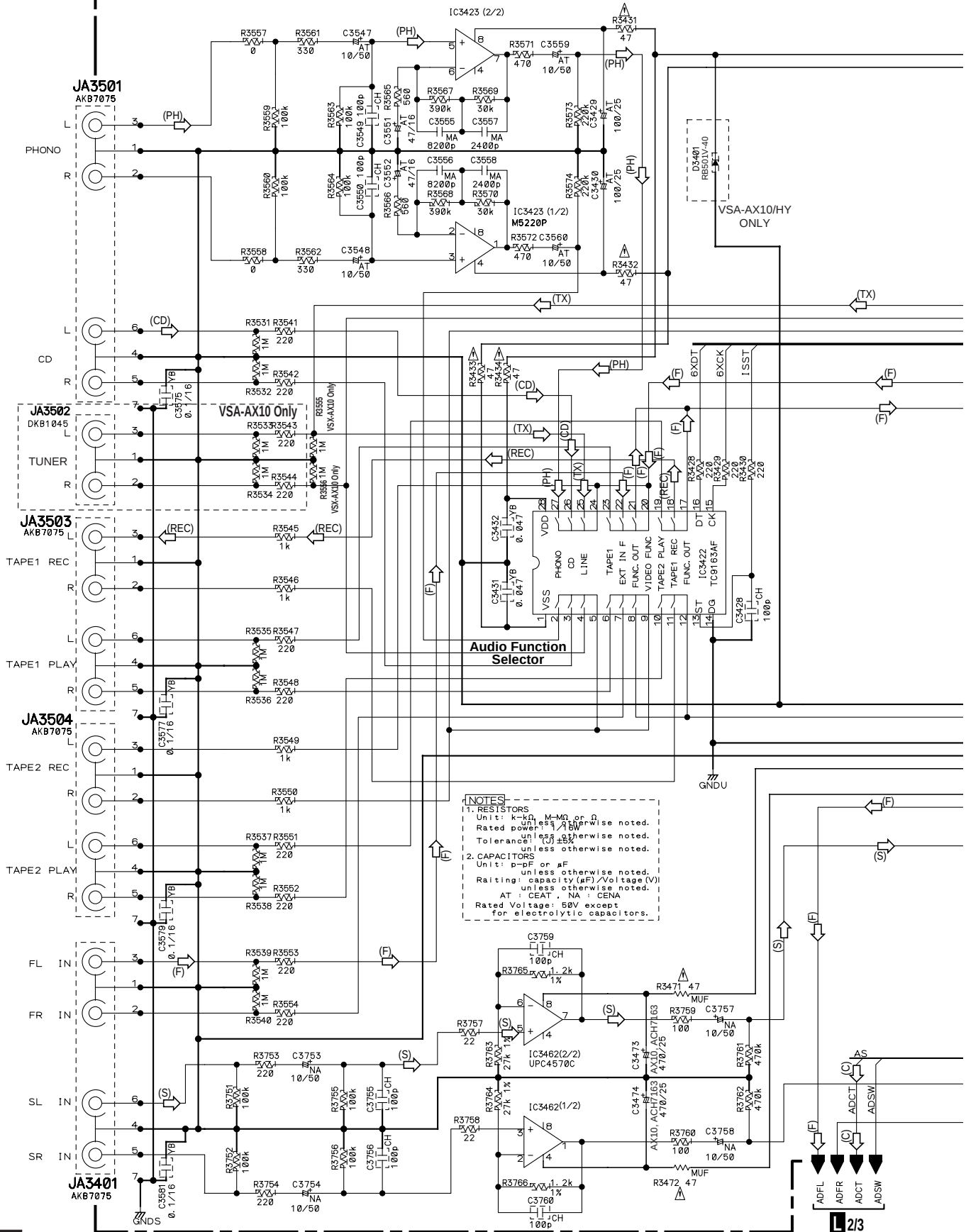


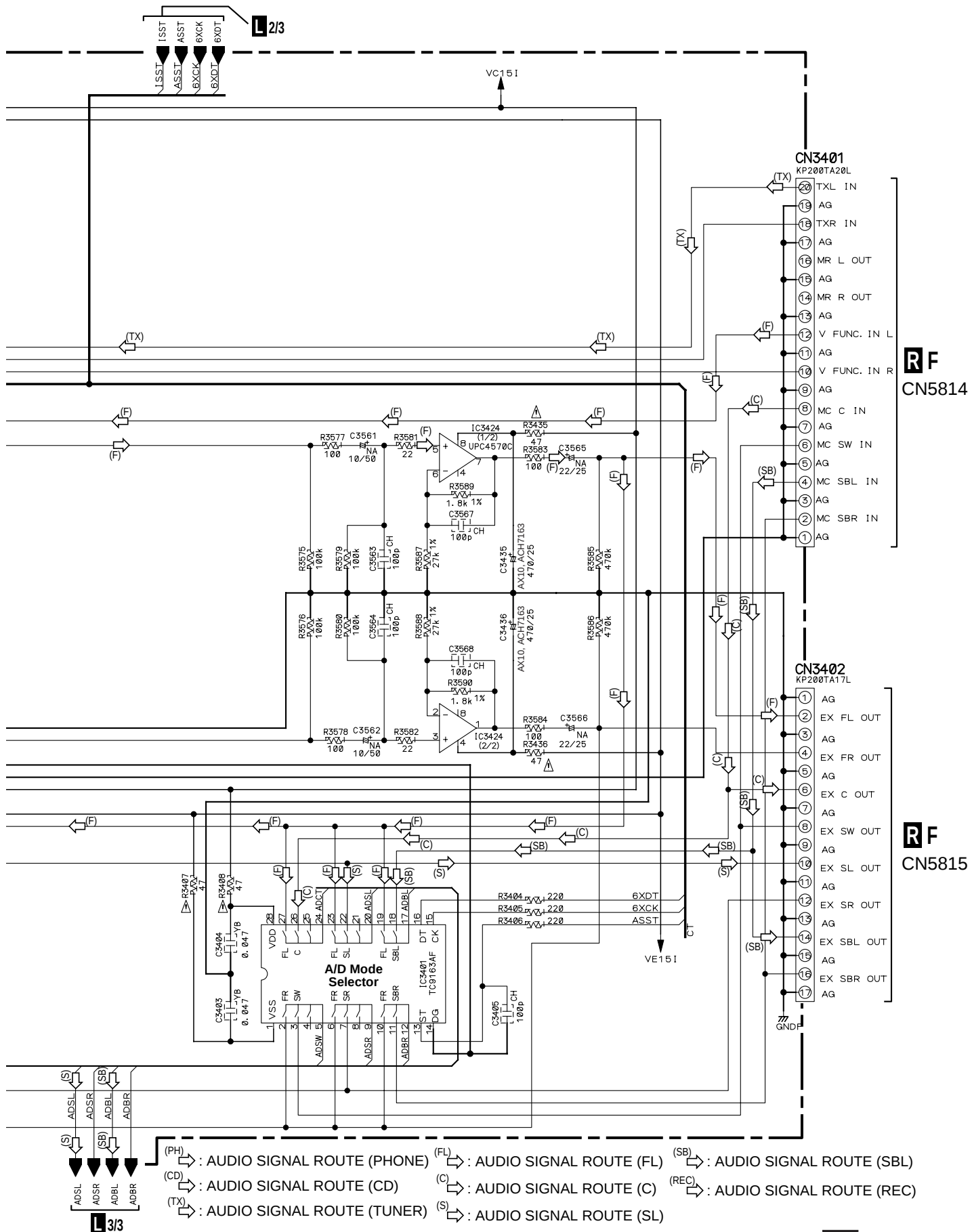
RF CN5825

O: The power supply is shown with the marked box.

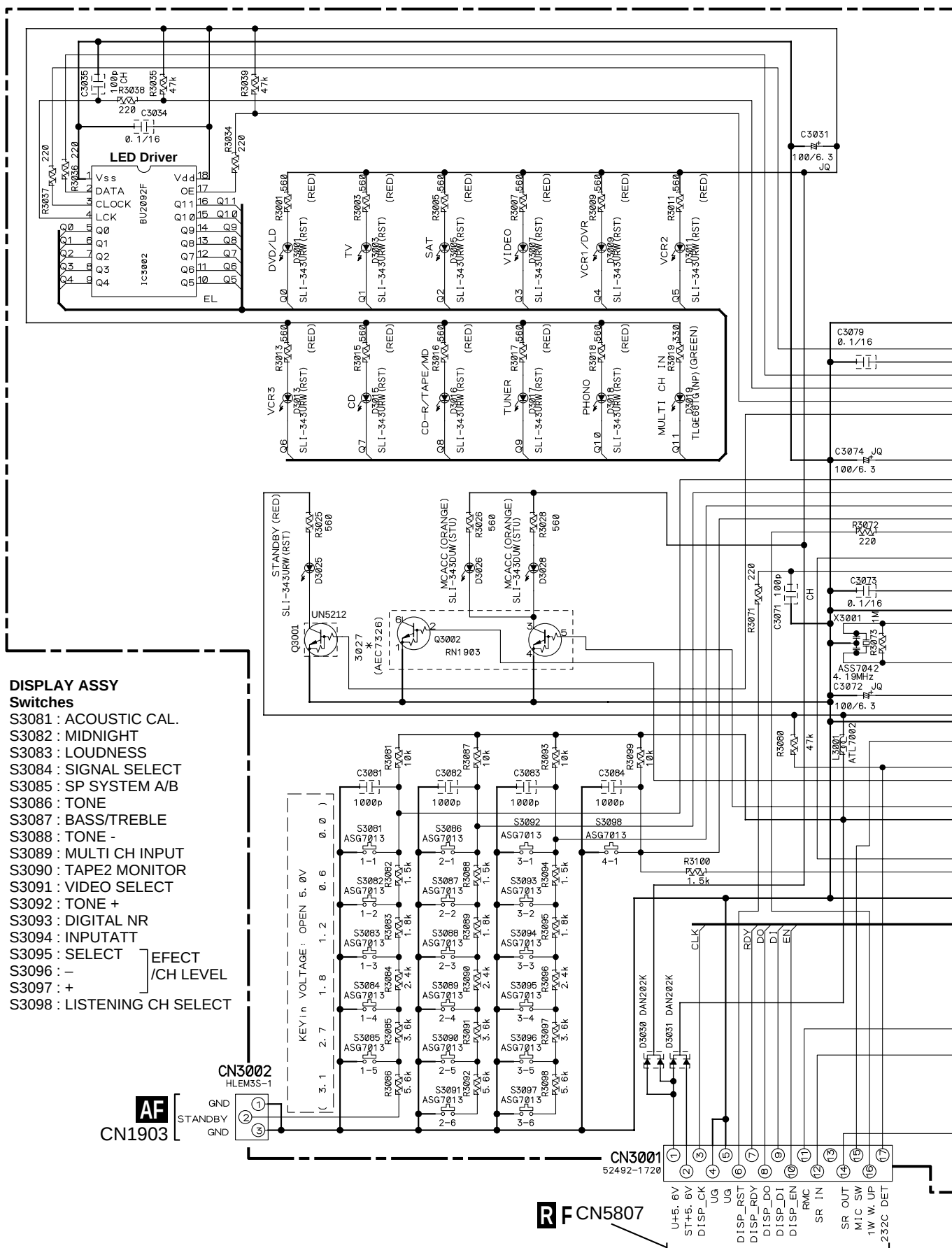
3.5 ANALOG IN & A/D ASSY (1/3)

L 1/3 F ANALOG IN & A/D ASSY (VSA-AX10 : AWX7880)
(VSX-AX10 : AWX7873)

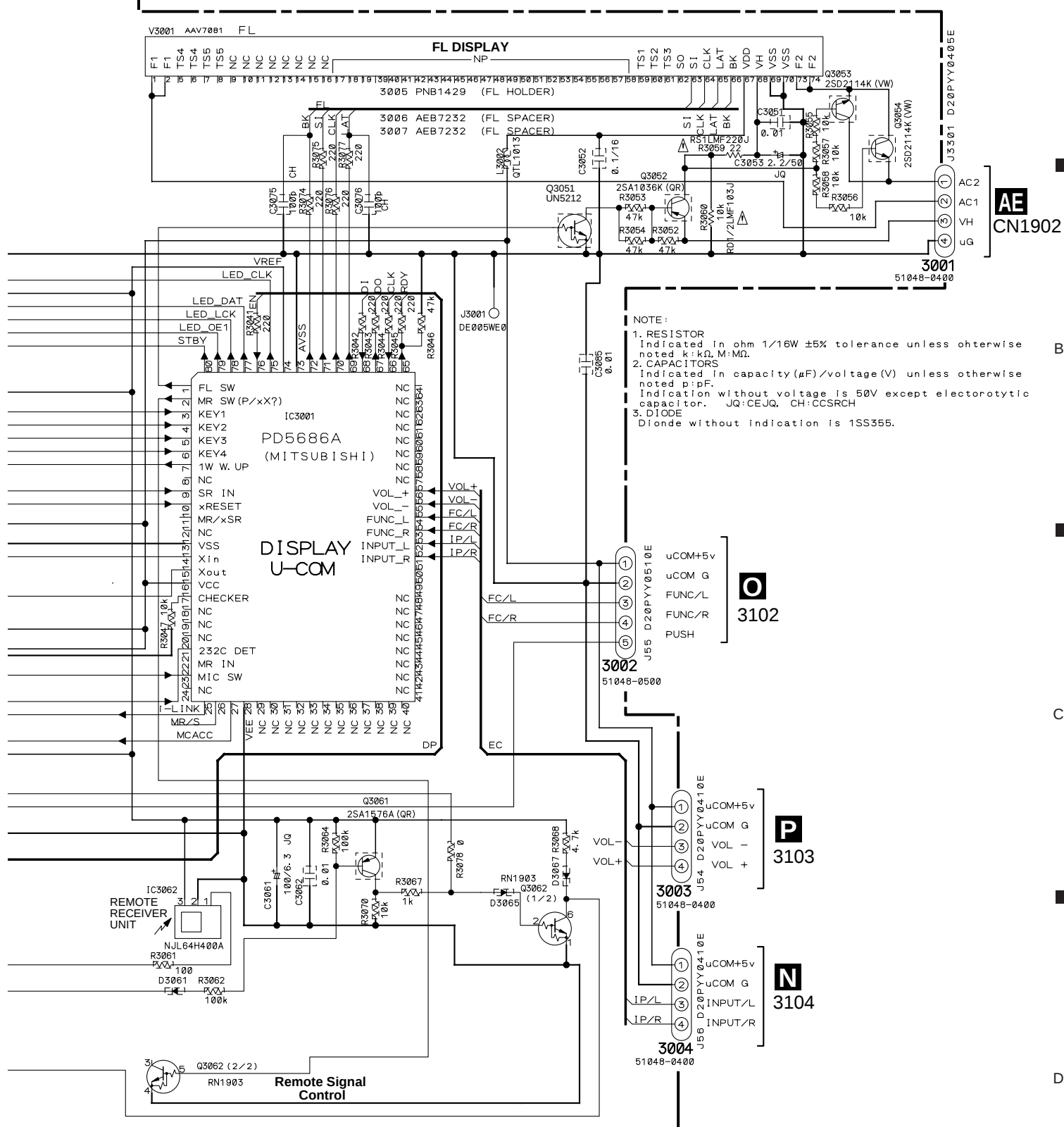




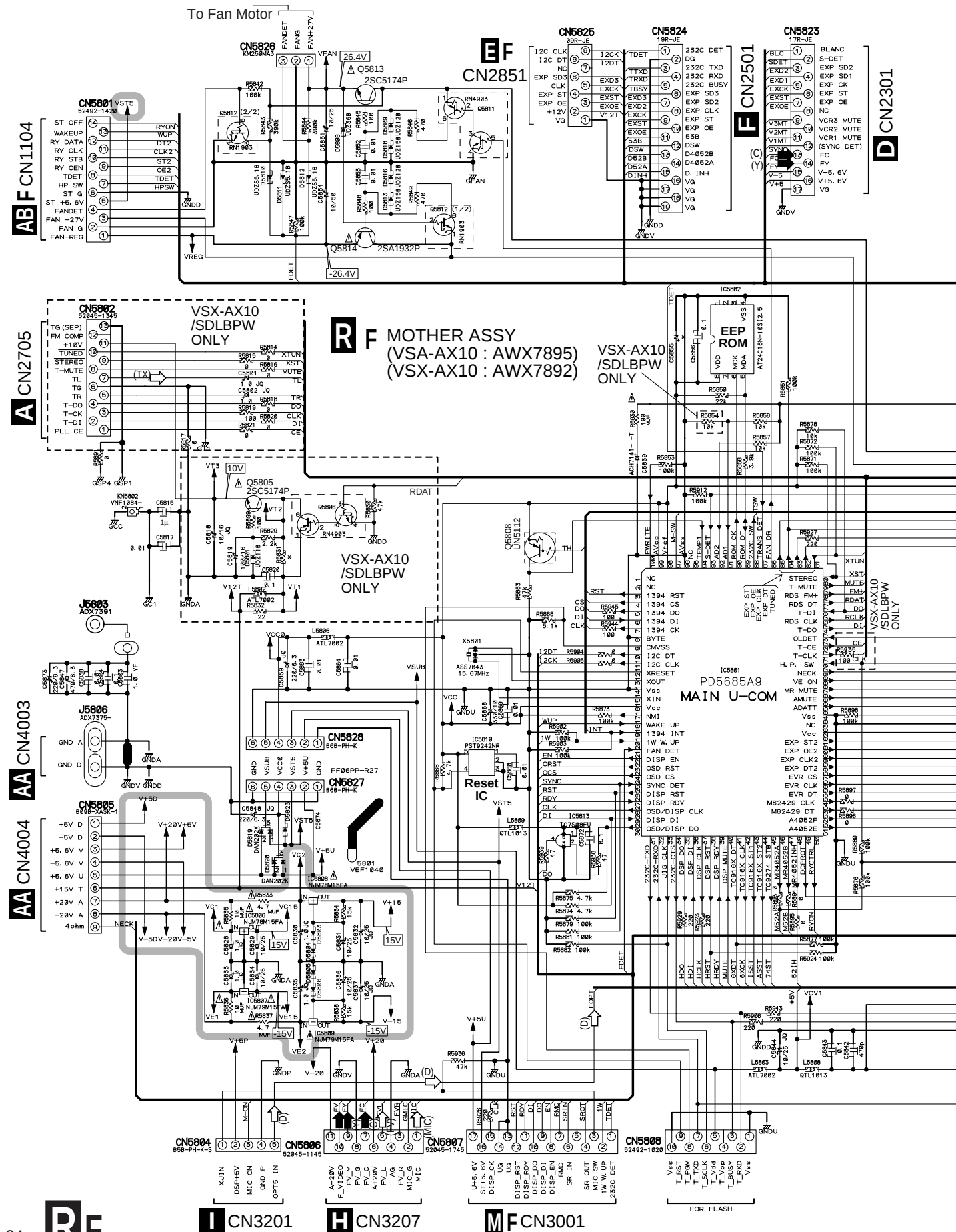
3.6 DISPLAY ASSY

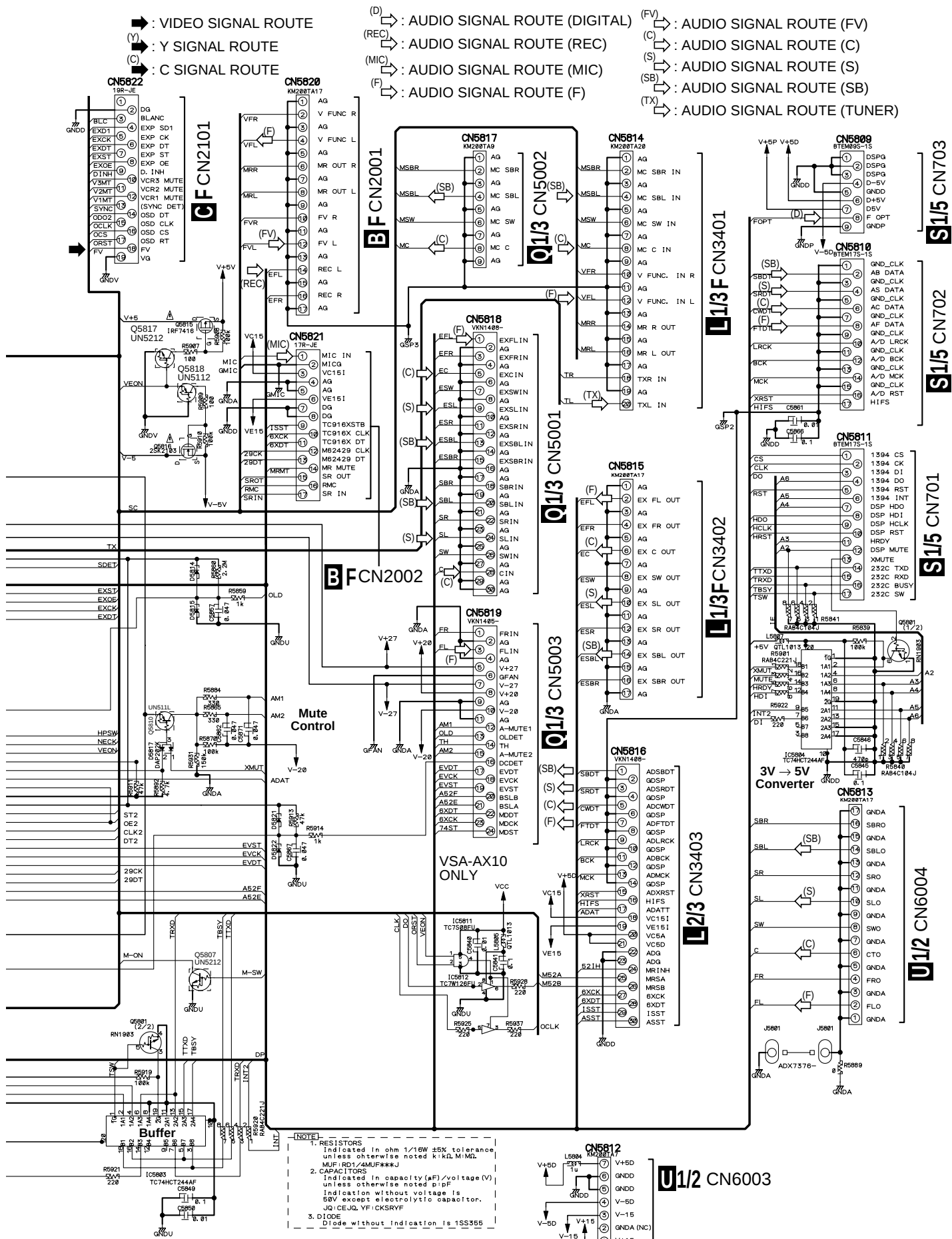


MF DISPLAY ASSY (AWX7866)

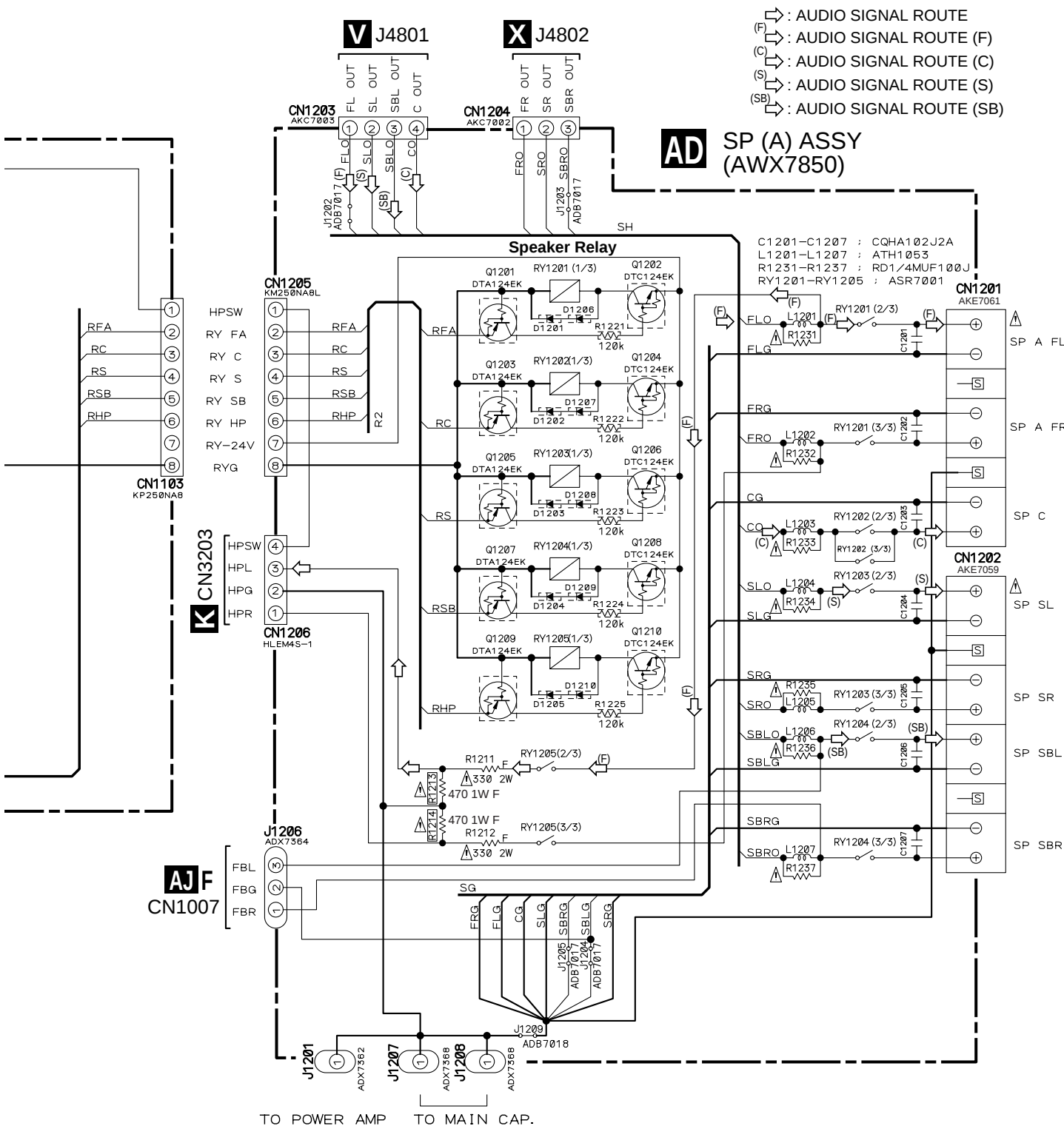


3.7 MOTHER ASSY



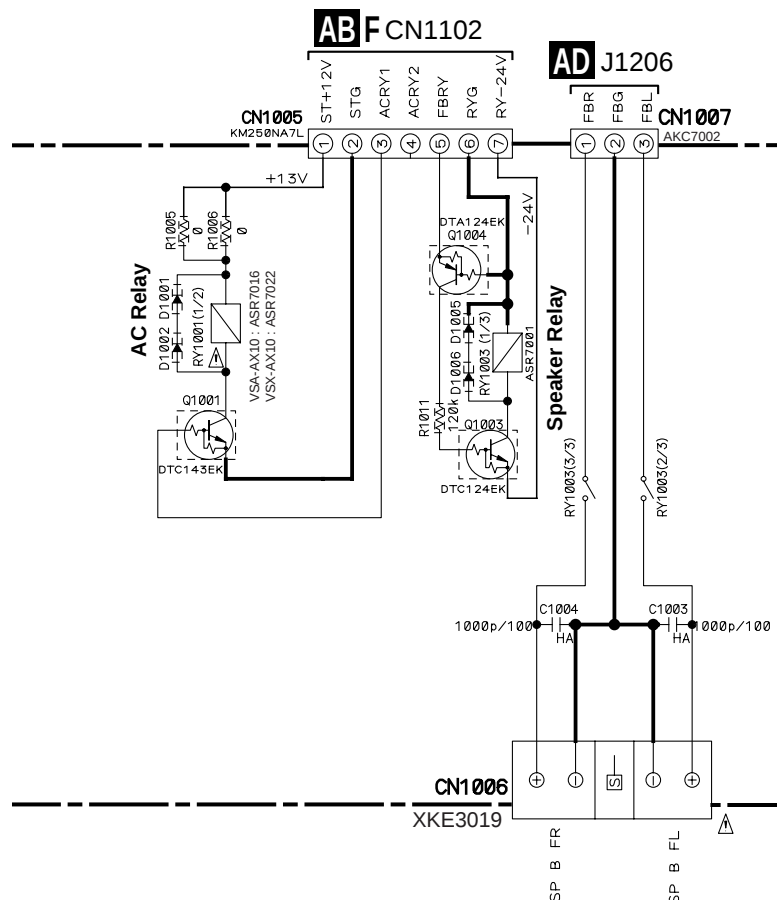


○ : The power supply is shown with the marked box.



• NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.



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.

NOTES

1. RESISTORS
INDICATED IN Ohm 1/16W $\pm 5\%$ TOLERANCE UNLESS NOTED K:KOhm M:MOhm
2. CAPACITORS
INDICATED IN CAPACITY (μ F) / VOLTAGE (V) UNLESS OTHERWISE NOTED p:pF
INDICATED WITHOUT VOLTAGE IS 50V EXCEPT
3. DIODES
NO MARK DIODES ARE 1SS355
4. VOLTAGE
INDICATED IN DC VOLTAGE

Δ MUF RD1/8MUF***J

Δ MMF RD1/2MMF***J

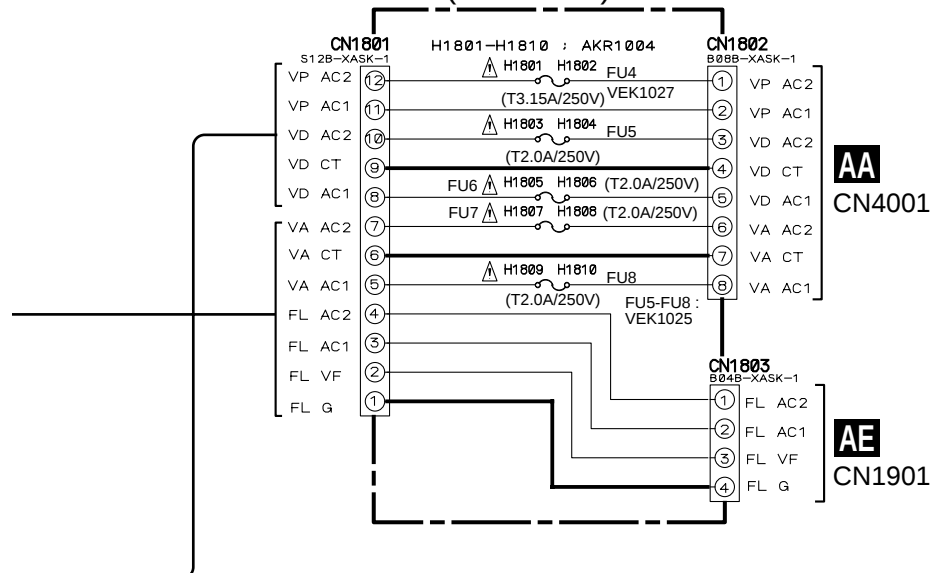
Δ TY CFTYA***J50

Δ HA CQHA***J**

Δ CEAT***M**

Δ JQ CEJQ***M**

AL FUSE ASSY
(AWX7843)



AA
CN4001

AE
CN1901

4. REMOTE CONTROL UNIT [AXD7296&AXD7298]

4.1 CONTRAST OF MISCELLANEOUS PARTS

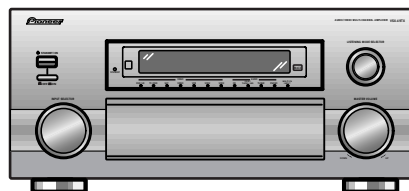
- NOTES :
- Parts marked by “ NSP ” are generally unavailable because they are not in our Master Spare Parts List.
 - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screw adjacent to ▼ mark on the product are used for disassembly.
 - Reference Nos. indicate the pages and Nos. in the service manual for the base model.

■ CONTRAST TABLE

AXD7295, AXD7296 and AXD7298 are constructed the same except for the following:

Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			AXD7295	AXD7296	AXD7298	
P161- 2		PCB Assy	AZC7299	AZC7299	AZC7300	
P161-13		Seal A	AZA7415	AZA7417	AZA7421	
P161-14		Seal B	AZA7416	AZA7418	AZA7420	
P161-16		Case A	AZN7783	AZN7885	AZN7795	
P161-17		Name Plate	AZA7406	AZA7407	AZA7409	
P161-21		Case B	AZN7784	102RRC24401R	AZN7796	
P161-23		Pen Holder	AZN7786	AZN7798	AZN7798	
P161-26		Battery Cover	AZN7785	103RRC14701R	AZN7797	
P161-32		Slide Knob	AZA7347	Not used	Not used	
P161-36		Key Top A	AZA7345	302RRC09901R	AZA7363	
P161-37		Key Top B	AZA7346	302RRC10001R	AZA7364	
P161-39		Rubber Sheet B	AZA7349	Not used	AZA7371	
P161-40		Rubber Sheet C	AZA7411	AZA7414	AZA7411	

Service Manual



ORDER NO.
RRV2523

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-49TX

VSX-47TX

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

Type	Model		Power Requirement	Remarks
	VSX-49TX	VSX-47TX		
KU/CA	○	○	AC120V	

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PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.

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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

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

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.

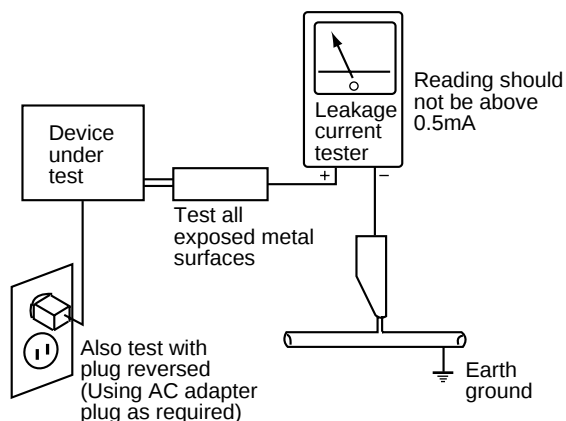
(FOR USA MODEL ONLY)

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.

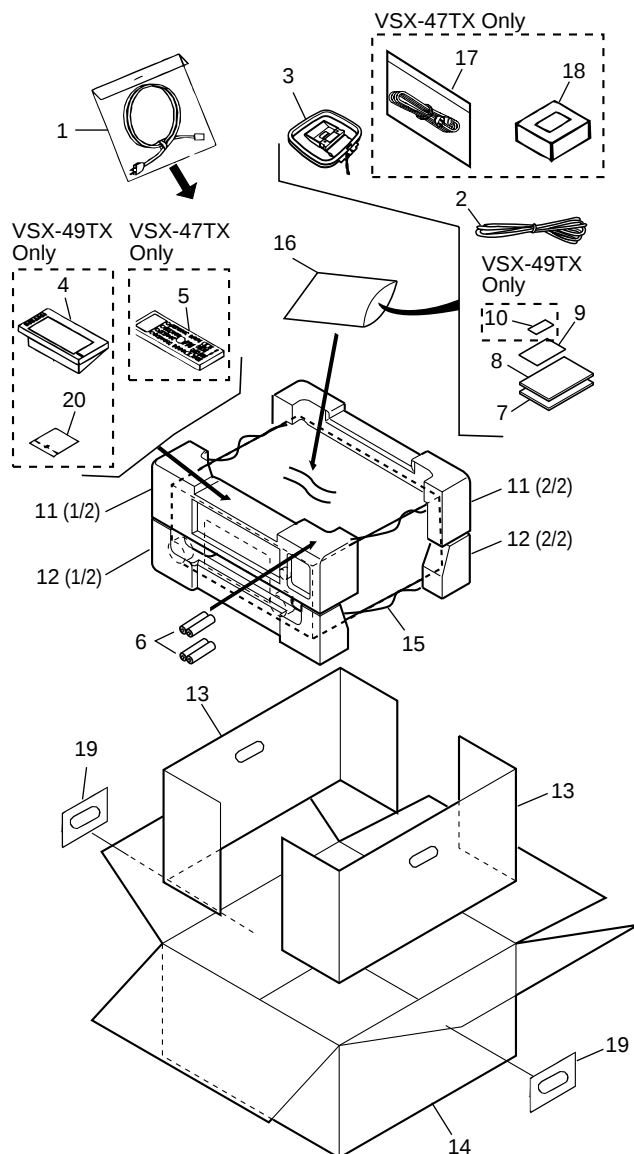
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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 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.
 ● Screws adjacent to ▼ mark on the product are used for disassembly.

2.1 PACKING



(1) PACKING PARTS LIST

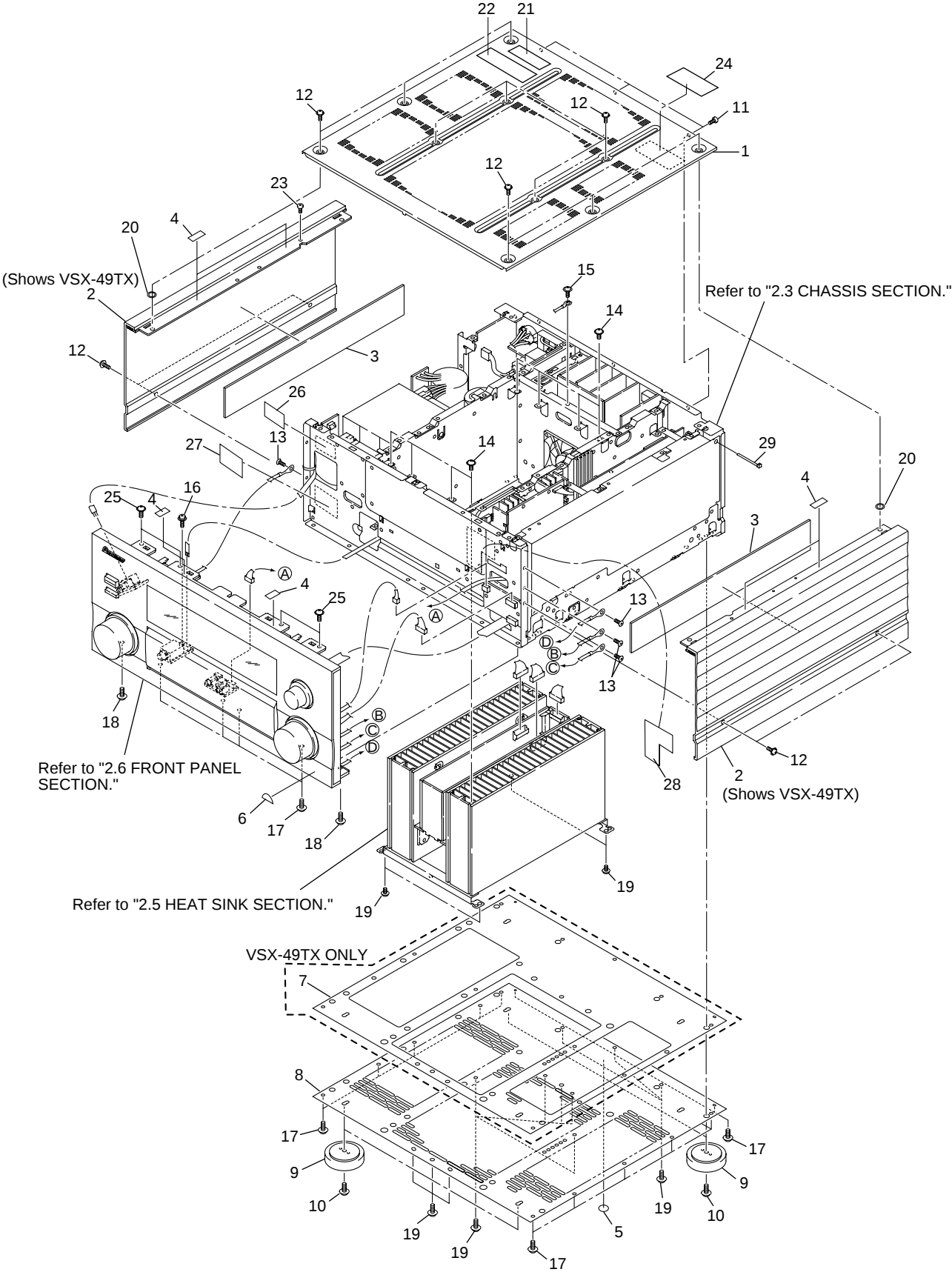
Mark	No.	Description	Part No.
Δ	1	Power Cord	ADG7052
	2	FM Wire Antenna	ADH7010
	3	AM Loop Antenna	ATB7009
	4	Remote Control Unit AX10KU	See Contrast table (2)
	5	Remote Control Unit 47TXKU	See Contrast table (2)
	6	Alkaline Dry Cell Battery (LR6, AA)	VEM1021(2pcs.)
	7	Operating Instructions (English)	See Contrast table (2)
NSP	8	Caution Sheet SP, E	ARM7056
	9	Warranty Card EL	ARY1026
	10	Cushion for Remote	See Contrast table (2)
	11	Top Pad	AHA7362
	12	Bottom Pad	AHA7363
	13	Spacer	AHB7057
	14	Packing Case	See Contrast table (2)
NSP	15	Packing Sheet	DHL1022
	16	Polyethylene Bag (0.03 × 230 × 340)	Z21-038
	17	Remote Control Cable	See Contrast table (2)
	18	Remote Control Stand	See Contrast table (2)
	19	Handle Cover	AHX7034
	20	Microphone	See Contrast table (2)

(2) CONTRAST TABLE

VSX-49TX/KU/CA and VSX-47TX/KU/CA constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	4	Remote Control Unit AX10KU	AXD7295	Not used	
	5	Remote Control Unit 47TX/KU	Not used	AXD7299	
	7	Operating Instruction (English)	ARB7249	ARB7250	
	10	Cushion for Remote	AXG7080	Not used	
	14	Packing Case	AHD8029	AHD8028	
	17	Remote Control Cable	Not used	ADE7083	
	18	Remote Control Stand	Not used	AEB7243	
	20	Microphone	APM7001	Not used	

2.2 EXTERIOR SECTION



(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Top Plate BK	ANE7282
	2	Side Alum BK	See Contrast table (2)
	2	Side Plate BK	See Contrast table (2)
NSP	3	Side Panel Sheet	See Contrast table (2)
NSP	3	Side Panel Sheet S	See Contrast table (2)
NSP	4	Tape	See Contrast table (2)
	5	UL Caution Card	AAX-313
NSP	6	Energy Star Label	AAX7876
NSP	7	Bottom Plate B	See Contrast table (2)
NSP	8	Bottom Plate A	ANF7029
	9	Insulator Assy	See Contrast table (2)
	9	Insulator	See Contrast table (2)
	10	Screw	ABA1054
	11	Screw	BBT30P060FCC
	12	Screw	FBT40P080FZK
	13	Screw	ABA7079
	14	Screw	RBA1099
	15	Screw	VBA1056
	16	Screw	ABA1011
	17	Screw	ABA1050
	18	Screw	ABA1193
	19	Screw	IBZ30P090FCC
	20	Washer	See Contrast table (2)
	21	Coution Label	See Contrast table (2)
	22	DTS License Label	See Contrast table (2)
	23	Screw	BBZ30P080FCC
	24	65 Label	ARW7050
	25	Screw	BBT30P100FCC
	26	ICP Coution Label	ARW7151
	27	FUSE Coution Label	VRW-548
	28	ICP Coution Label	ARW7150
	29	Binder	ZCA-BK1

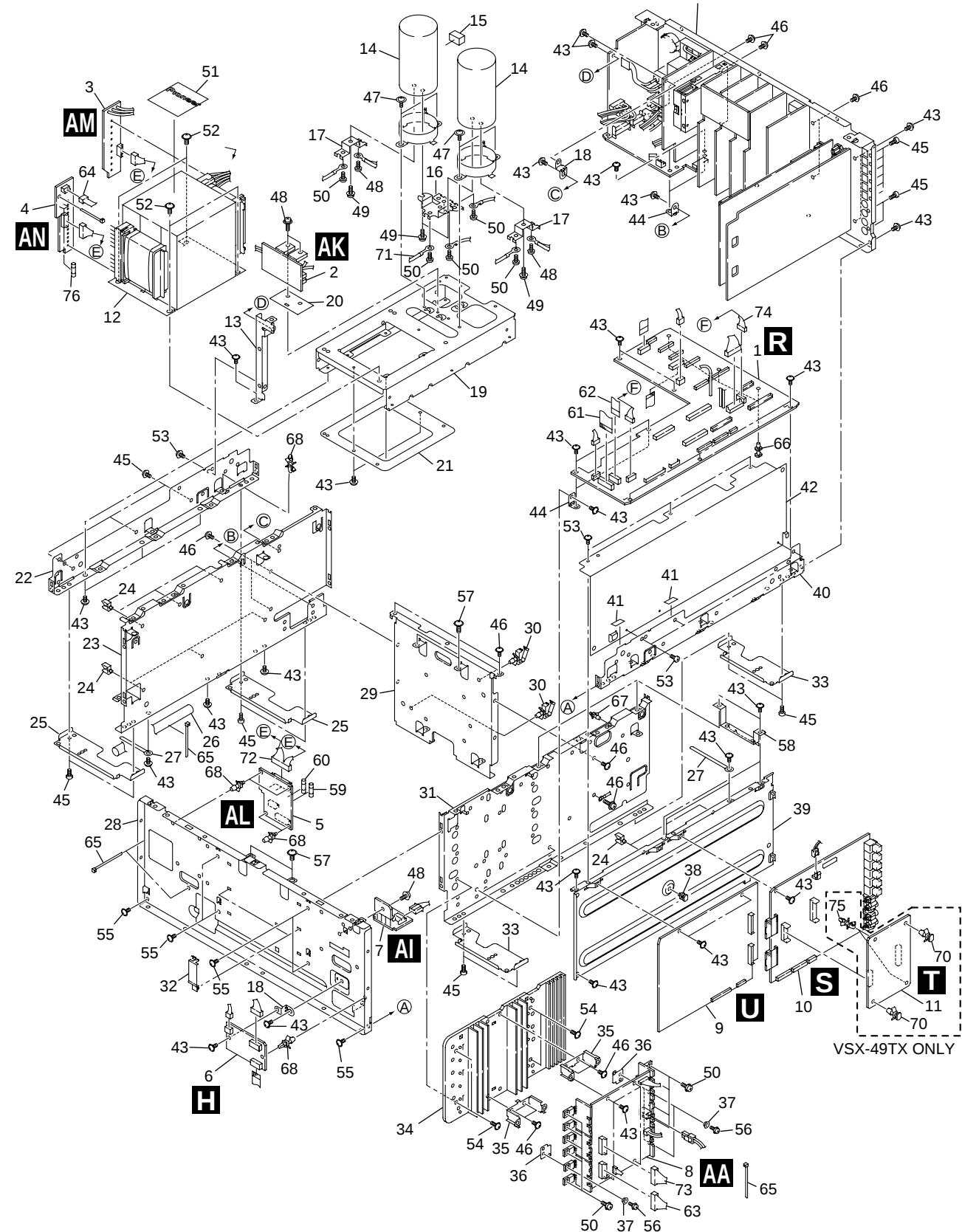
(2) CONTRAST TABLE

VSX-49TX/KU/CA and VSX-47TX/KU/CA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
NSP	2	Side Alum BK	AAH7081	Not used	
	2	Side Plate BK	Not used	ANE7279	
	3	Side Panel Sheet	AMR7284	Not used	
NSP	3	Side panel Sheet S	Not used	AMR7384	
NSP	4	Tape	PNM1249	Not used	
NSP	7	Bottom Plate B	ANF7030	Not used	
	9	Insulator Assy	VXA2368	Not used	
	9	Insulator	Not used	PNW2766	
	20	Washer	Not used	ABE7008	
	21	Caution Label	ARW7036	Not used	
	22	DTS License Label	ARW7148	Not used	

2.3 CHASSIS SECTION

Refer to "2.4 REAR PANEL SECTION".



(1) CHASSIS SECTION PARTS LIST

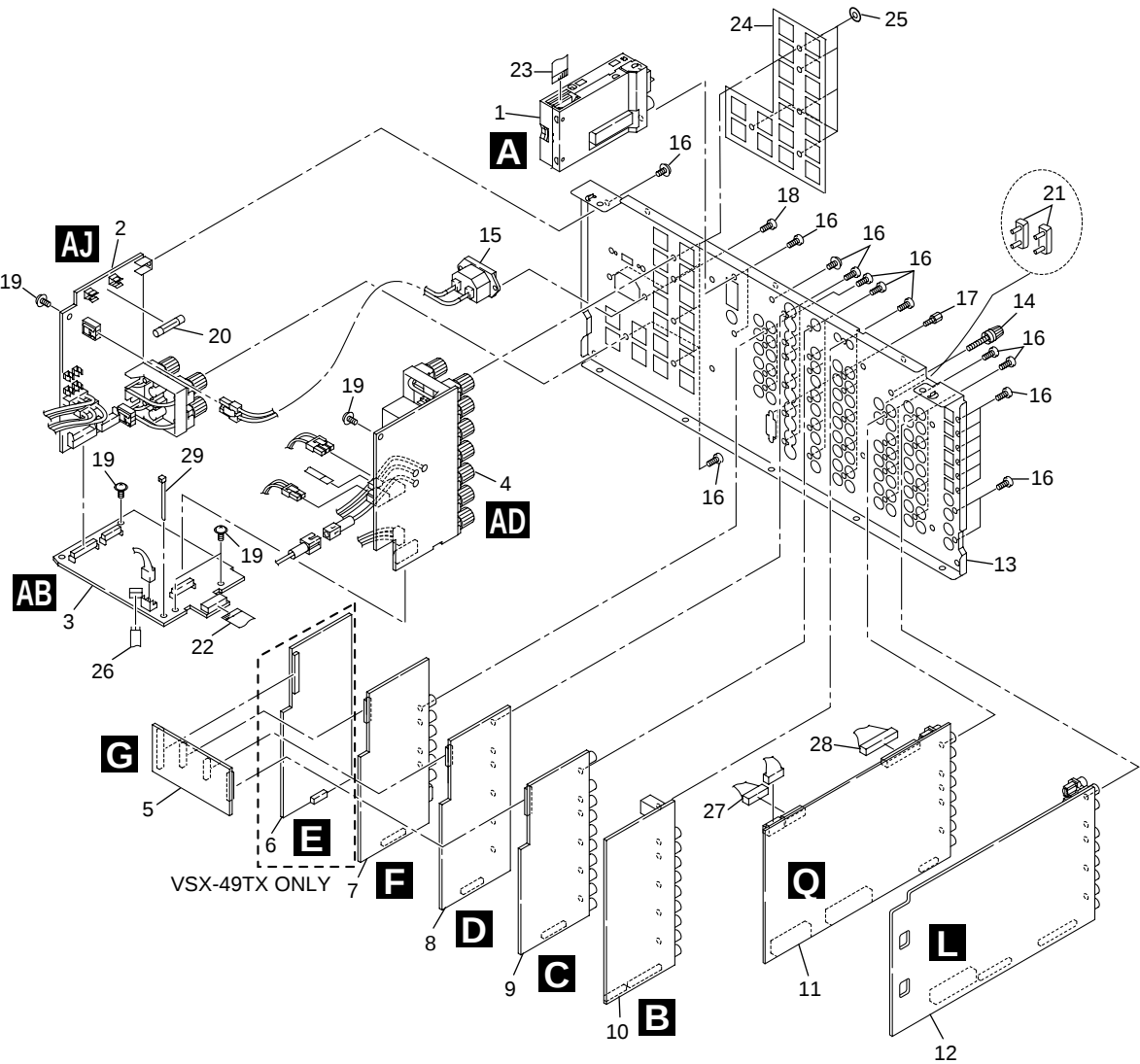
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	MOTHER Assy	See Contrast tabel (2)	NSP	41	Tape	PNM1249
	2	DIODE Assy	AWX7841	NSP	42	Shield Case B	See Contrast table (2)
	3	TRANS (A) Assy	AWX7838		43	Screw	ABA1011
	4	TRANS (B) Assy	AWX8057	NSP	44	PCB Holder C	ANG7389
	5	FUSE Assy	AWX7843		45	Screw	BBZ30P080FCC
	6	MIC AMP Assy	AWX7872		46	Screw	IBP30P090FCC
	7	DSP DIODE Assy	AWX7958		47	Screw	VBA1056
	8	LOCAL SUPPLY Assy	AWX7887		48	Screw	ABA1082
	9	DAC10 Assy	See Contrast table (2)		49	Screw	BMH40P080FMC
	9	DAC8 Assy	See Contrast table (2)		50	Screw	ABA7076
	10	DSP Assy	See Contrast table (2)		51	Trans Label	AAX7897
	11	DSP3 Assy	See Contrast table (2)		52	Screw	ABA1014
△	12	Power Transformer (T1)	ATS7320		53	Screw	BBT30P060FCC
NSP	13	PCB Holder B	ANG7388		54	Screw	ABA1050
	14	Capacitor (C1, C2)	ACH7164		55	Screw	ABA1192
	15	Rubber Spacer	AEB7244		56	Screw	ABA7084
NSP	16	Earth Plate	ANG7381		57	Screw	RBA1099
NSP	17	Joint Plate	ANG7382	NSP	58	PCB Frame B	ANG7386
NSP	18	PCB Base	RNE1849	△	59	Fuse (FU4, 4A)	VEK1023
	19	Trans Frame	ANA7137	△	60	Fuse (FU5-FU8, 2A)	VEK1019
	20	Sheet	AEE7043		61	J29 FFC (17P) (MOTHER CN5807 – DISPLAY CN3001)	ADD7329
NSP	21	Trans Stabilizer	ANG7378		62	J30 FFC (11P) (MOTHER CN5806 – MIC AMP CN3207)	ADD7337
NSP	22	Side Frame L	See Contrast table (2)		63	J16 8P Connector Assy (LOCAL SUPPLY CN4001 – FUSE CN1802)	ADX7379
NSP	23	Side Wall L	See Contrast table (2)		64	J17 3P Connector Assy (LOCAL SUPPLY CN4002 – TRANS(B) CN1701)	ADX7380
NSP	24	Wire Clip (A)	VEC1355		65	Binder	ZCA-BK1
NSP	25	Insulator Frame B	ANG7377		66	Card Spacer	REC1156
	26	Glass Tube	ADN7006		67	PCB Holder	PNW2100
	27	Cord Holder	RNH1005		68	Locking Card Spacer	VEC2234
	28	Panel Stay	See Contrast table (2)		69	Screw	ABA7017
NSP	29	Fan Holder B	See Contrast table (2)		70	PC Support	DEC1772
NSP	30	Wire Saddle	DEC1450		71	Oval head Terminal wire	ADX7366
NSP	31	Side Wall R	See Contrast table (2)		72	J1601 5P,7P Parallel wire	ADX7385
NSP	32	Flat Cable Clamp	AEC7376		73	J5805 9P Connector Assy (Local Supply CN4004–Mother CN5805)	ADX7378
NSP	33	Insulator Frame A	ANG7376		74	5802 Crimp Connector Assy (Mother CN5827–Mother CN5828)	PF06PP-R27
NSP	34	Sub Heat Sink	ANH7154		75	PCB Spacer	VEC1508
NSP	35	PCB Holder D	ANG7392	△	76	Fuse (FU9-FU10, 1A)	VEK1014
	36	Mica Sheet S	AEE7042				
	37	Bushing 26	AEC7128				
NSP	38	PCB Spacer	AEC7156				
NSP	39	Shield Case A	See Contrast table (2)				
NSP	40	Side Frame R	See Contrast table (2)				

(2) CONTRAST TABLE

VSX-49TX/KU/CA and VSX-47TX/KU/CA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	1	MOTHER Assy	AWX7890	AWX7891	
	9	DAC10 Assy	AWK7725	Not used	
	9	DAC8 Assy	Not used	AWK7726	
	10	DSP Assy	AWK7719	AWK7720	
	11	DSP3 Assy	AWK7727	Not used	
NSP	22	Side Frame L	ANA7133	ANA7134	
NSP	23	Side Wall L	AND7041	AND7042	
	28	Panel Stay	AND7045	AND7046	
NSP	29	Fan Holder	ANG7373	ANG7374	
NSP	31	Side Wall R	AND7043	AND7044	
NSP	39	Shield Case A	ANK7093	ANK7094	
NSP	40	Side Frame R	ANA7135	ANA7136	
NSP	42	Shield Case B	ANK7095	ANK7096	

2.4 REAR PANEL SECTION



(1) REAR PANEL SECTION PARTS LIST

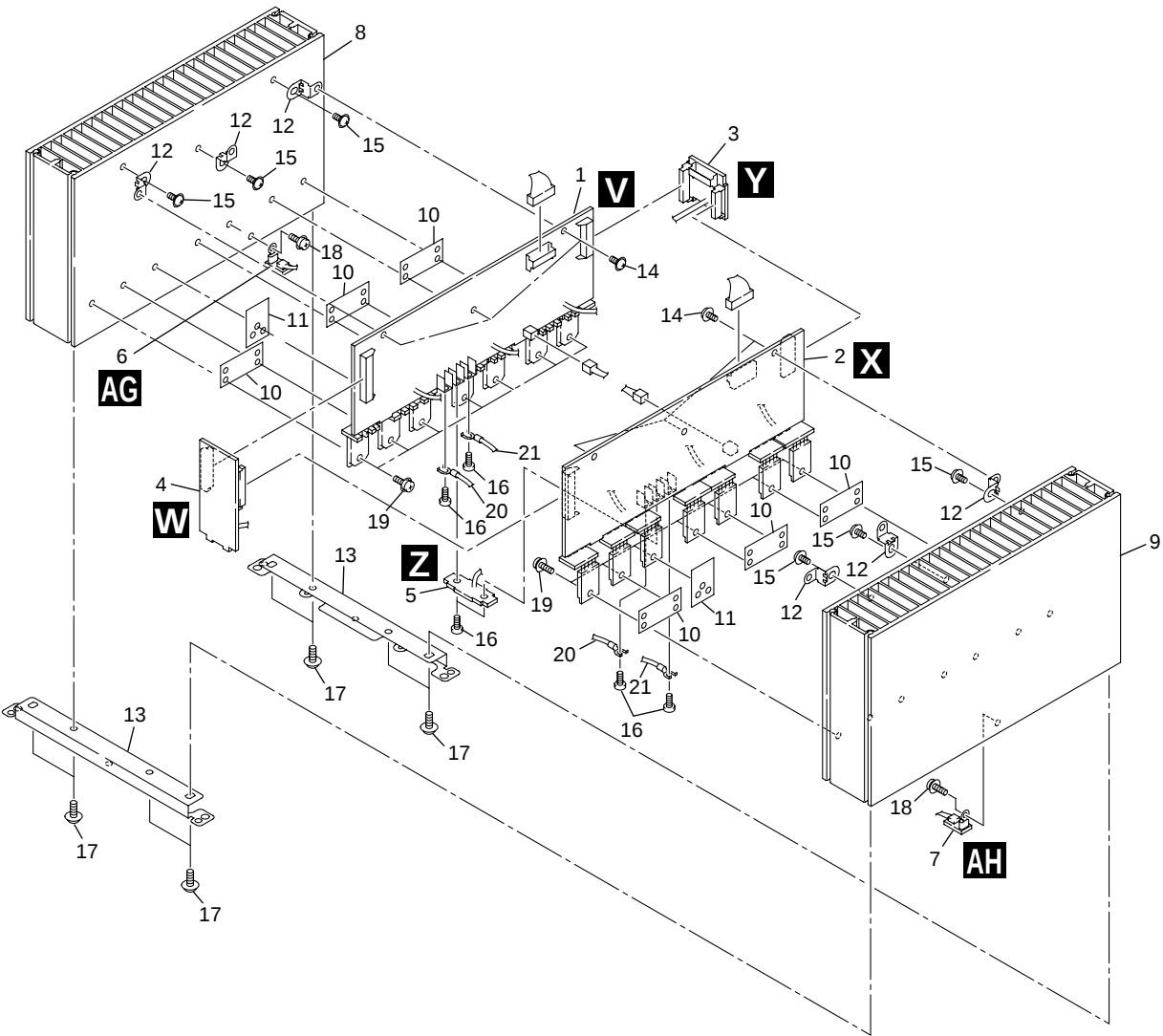
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	FM/AM TUNER Module	AXQ7237		24	Speaker Sheet 49	AAK7959
	2	SP (B) Assy	AWX7852		25	Cushion Circle	AED7052
	3	AC PRIMARY Assy	AWX7834		26	Jumper Wire 3P (AC Primary CN1105 – Power SW CN1301)	D20PYY0365E
	4	SP (A) Assy	AWX7848		27	J5001 8P Connector Assy (VR&PRE OUT CN5005 – Power AMP(BR) CN4811)	ADX7382
	5	VIDEO CONNECT Assy	See Contrast table (2)		28	J5002 14P Connector Assy (VR&PRE OUT CN5006 – Power AMP(L) CN4801 and Power AMP(R) CN4802)	ADX7381
	6	V-CONVERT Assy	See Contrast table (2)		29	Binder	ZCA-BK1
	7	COMPONENT Assy	See Contrast table (2)				
	8	S-VIDEO Assy	See Contrast table (2)				
	9	COMPOSITE Assy	See Contrast table (2)				
	10	AV I/O Assy	See Contrast table (2)				
	11	VR & PRE OUT Assy	See Contrast table (2)				
	12	ANALOG IN & A/D Assy	See Contrast table (2)				
	13	Rear Panel	See Contrast table (2)				
	14	Screw with Terminal	AKE-031				
	15	AC Inlet Assy	VKP2251				
	16	Screw	BBZ30P080FCC				
	17	Hexagonal Screw	ABA7078				
	18	Screw	ABA1193				
	19	Screw	ABA1011				
△	20	Fuse (FU1, 12A/125V)	AEK-306				
	21	Short Pin Plug	AKM7005				
	22	J23 FFC (14P) (SP(A) CN1104 – MOTHER CN5801)	ADD7334				
	23	J22 FFC (13P) (TUNER CN2705 – MOTHER CN5802)	ADD7333				

(2) CONTRAST TABLE

VSX-49TX/KU/CA and VSX-47TX/KU/CA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	5	VIDEO CONNECT Assy	AWX7876	AWX7877	
	6	V-CONVERT Assy	AWX7952	Not used	
	7	COMPONENT Assy	AWX7953	AWX7954	
	8	S-VIDEO Assy	AWX7948	AWX7949	
	9	COMPOSITE Assy	AWX7942	AWX7943	
	10	AV I/O Assy	AWX7938	AWX7939	
	11	VR & PRE OUT Assy	AWX7888	AWX7917	
	12	ANALOG IN & A/D Assy	AWX7878	AWX7879	
	13	Rear Panel	ANC8036	ANC8035	

2.5 HEAT SINK SECTION



● HEAT SINK SECTION PARTS LIST

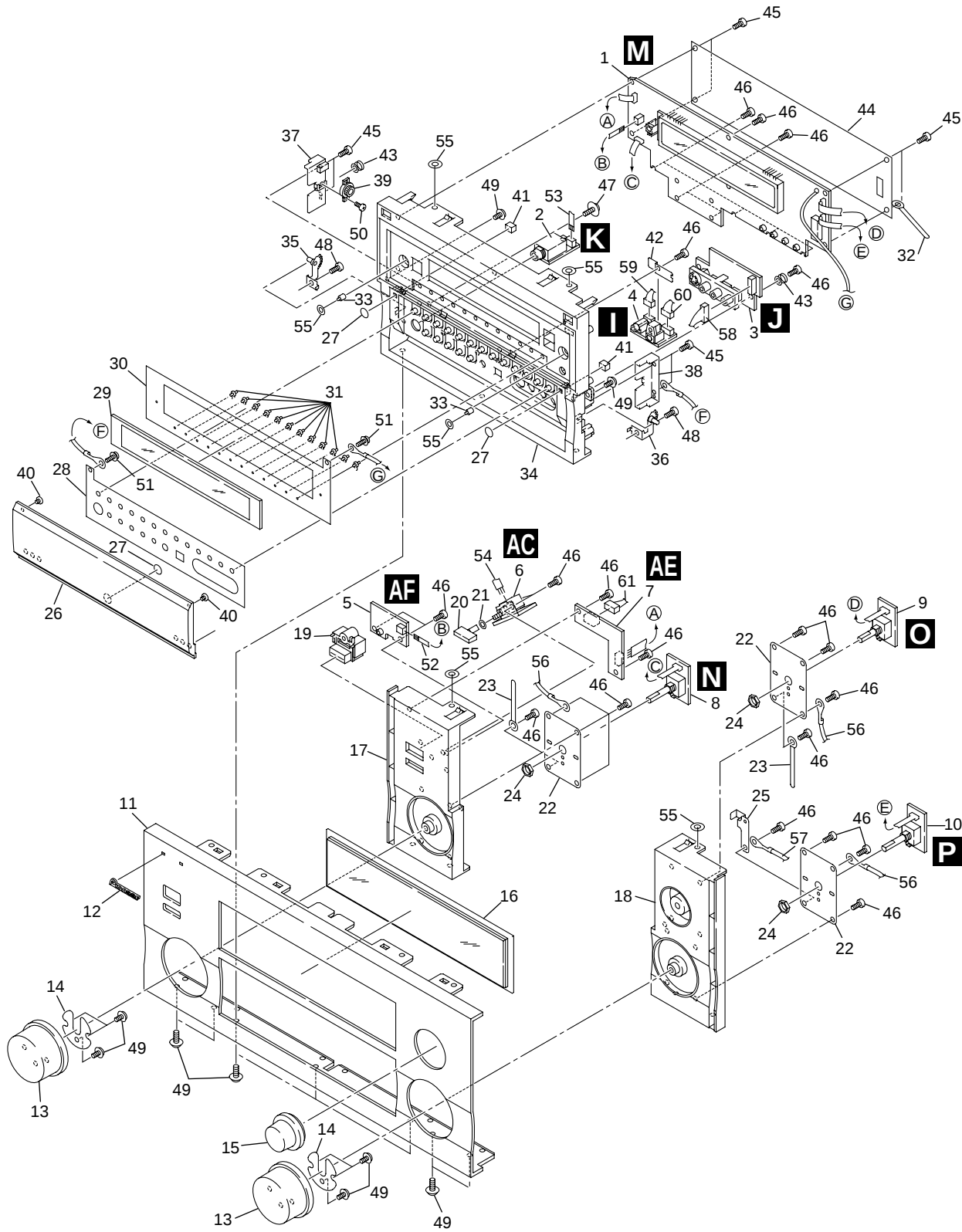
Mark	No.	Description	Part No.
	1	POWER AMP (L) Assy	AWX7882
	2	POWER AMP (R) Assy	AWX7883
	3	POWER AMP (BR) Assy	AWX7885
	4	POWER AMP (C) Assy	AWX7884
	5	POWER AMP (G) Assy	AWX7886
	6	POSISTER (L) Assy	AWX7844
	7	POSISTER (R) Assy	AWX7846
	8	Heat Sink L	See Contrast table (2)
	9	Heat Sink R	See Contrast table (2)
	10	Mica Sheet L	AEE7045
	11	Mica Sheet M	AEE7046
NSP	12	PCB Holder A	ANG7387
NSP	13	Heat Sink Holder	ANG7375
	14	Screw	ABA1011
	15	Screw	IBP30P090FCC
	16	Screw	BMZ30P060FCU
	17	Screw	RBA1099
	18	Screw	ABA7076
	19	Screw	ABA7083
	20	Over head Terminal wire(RED)	ADX7383
	21	Over head Terminal wire(BLUE)	ADX7384

(2) CONTRAST TABLE

VSX-49TX/KU/CA and VSX-47TX/KU/CA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	8	Heat Sink L	ANH7155	ANH7148	
	9	Heat Sink R	ANH7156	ANB7149	

2.6 FRONT PANEL SECTION



(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	DISPLAY Assy	See Contrast table (2)	NSP	36	Door Hinge R	ANG7380
	2	HEADPHONE Assy	AWX7874		37	Door Holder L	AMR7373
	3	FRONT A/V Assy	AWX7902		38	Door Holder R	AMR7374
	4	MIC & OPT Assy	AWX7875		39	Damper Assy	AXA7108
	5	STANDBY Assy	AWX7901		40	Screw	ABA7074
	6	POWER SW Assy	AWX7840		41	Magnet	AMF7004
	7	FL SUPPLY Assy	AWX7871	NSP	42	Input Holder	ANG7384
	8	INPUT SEL Assy	AWX7868	NSP	43	Earth Spring	ABH7208
	9	MULTI JOG Assy	AWX7869		44	Shield Plate D	AMR7390
	10	VOL Assy	AWX7870		45	Screw	BBZ30P100FZK
	11	Front Panel	See Contrast table (2)		46	Screw	BBZ30P080FCC
	12	Pioneer Badge	PAN1376		47	Screw	ABA7053
	13	Rotary Knob L BK	AAA7018		48	Screw	BBT30P060FCC
	14	Plate	ANG7198		49	Screw	ABA1050
	15	Rotary Knob S BK	AAA7015		50	Screw	BBZ20P060FMC
	16	Display Panel	AAK7932		51	Screw	ABA7076
	17	Panel Base L BK	AMB7788		52	J33 FFC (3P)	ADD7331
	18	Panel Base R BK	AMB7791			(DISPLAY CN3002 – STANDBY CN1903)	
	19	Power Button	AAD7440		53	J35 FFC (4P)	ADD7332
	20	Power Button M	AAD7442			(SP(A) CN1206 – HEADPHONE CN3203)	
	21	Washer	ABF7008		54	J1101 Parallel Wire 3P	D20PYY0365E
NSP	22	VR Stabilizer	ANG7383			(POWER SW CN1301 – AC PRIMARY CN1105)	
	23	Cord Holder	RNH1005		55	Fiber Washer	VEC1254
	24	Nut	NK90FCU	NSP	56	Earth Metal Fitting	DE007VC0
NSP	25	Earth Spring	ABK7031	NSP	57	Earth Metal Fitting	DE012VF0
	26	Door Panel BK	ANB7273		58	J32 8P Connector Assy	ADX7390
NSP	27	Door Cushion BK	AED7051			(Front A/V CN3204 – MIC AMP CN3206)	
	28	Door Plate	AAH7077		59	J99 4P Connector Assy	ADX7387
	29	FL Lens	AAK7934			(MIC & OPT CN3202 – MIC AMP CN3205)	
	30	Inner Panel	See Contrast table (2)		60	J31 5P Connector Assy	ADX7386
	31	LED Lens	AAK7931			(MIC & OPT CN3201 – Mother CN5804)	
	32	Cord Clamper	RNH-184		61	J1801 4P Connector Assy	ADX7377
	33	LED Lens	PNW2019			(FL Supply CN1901 – FUSE CN1803)	
	34	Panel Base C BK	AMB7785				
NSP	35	Door Hinge L	ANG7379				

(2) CONTRAST TABLE

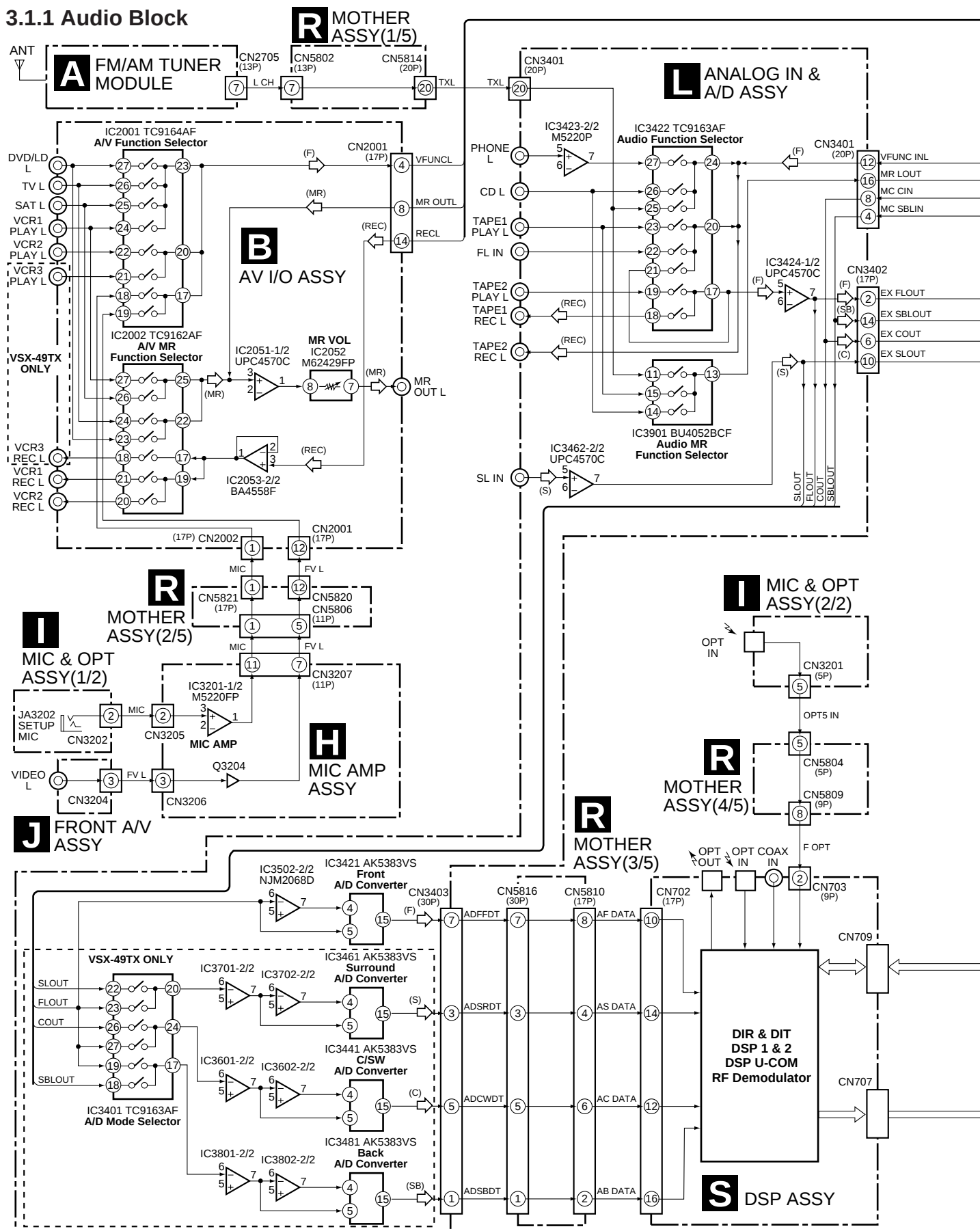
VSX-49TX/KU/CA and VSX-47TX/KU/CA are constructed the same except for the following :

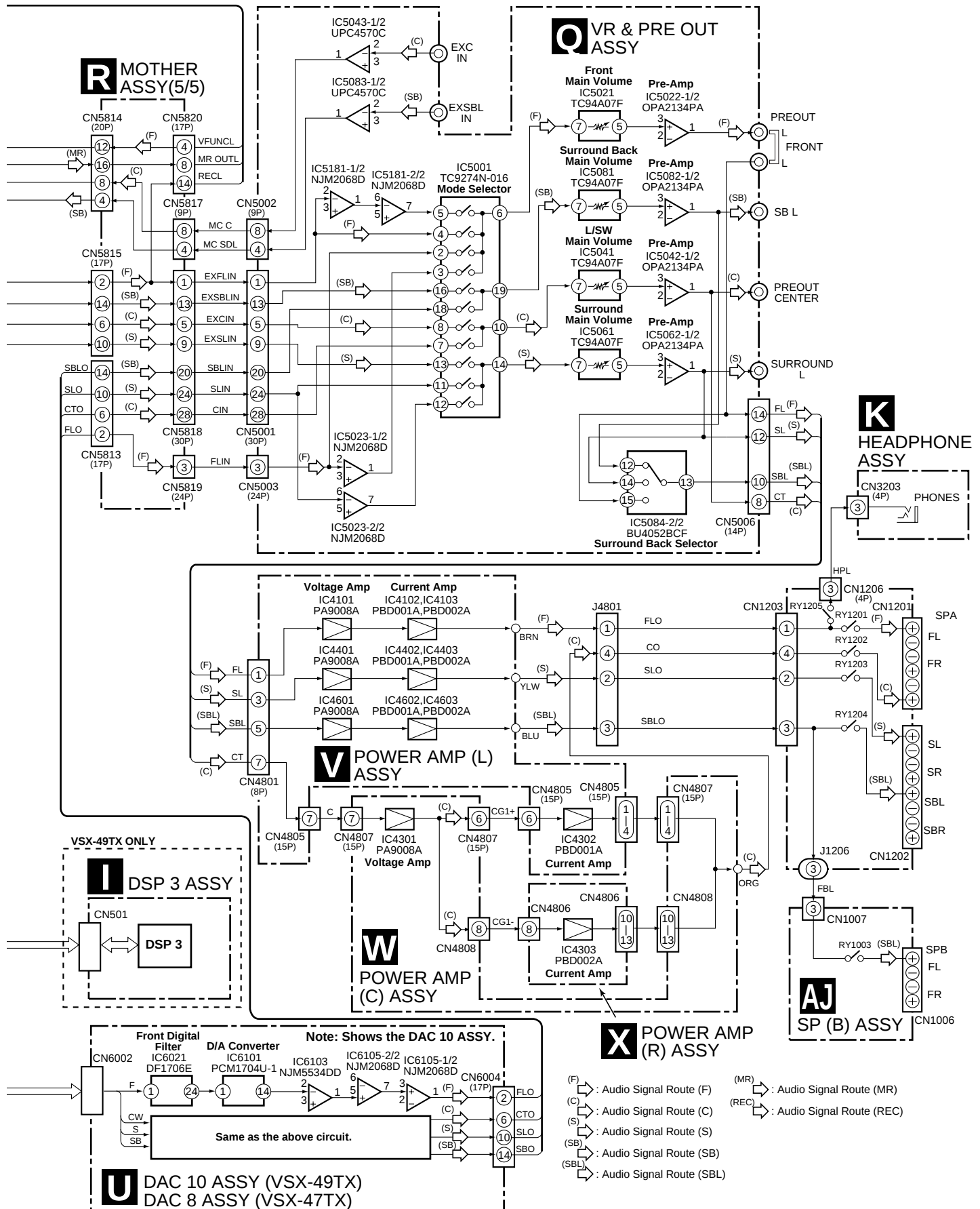
Mark	No.	Symbol and Description	Part No.		Remarks
			VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	1	DISPLAY Assy	AWX7864	AWX7865	
	11	Front Panel	ANB7269	ANB7268	
	30	Inner Panel	AAH7087	AAH7086	

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

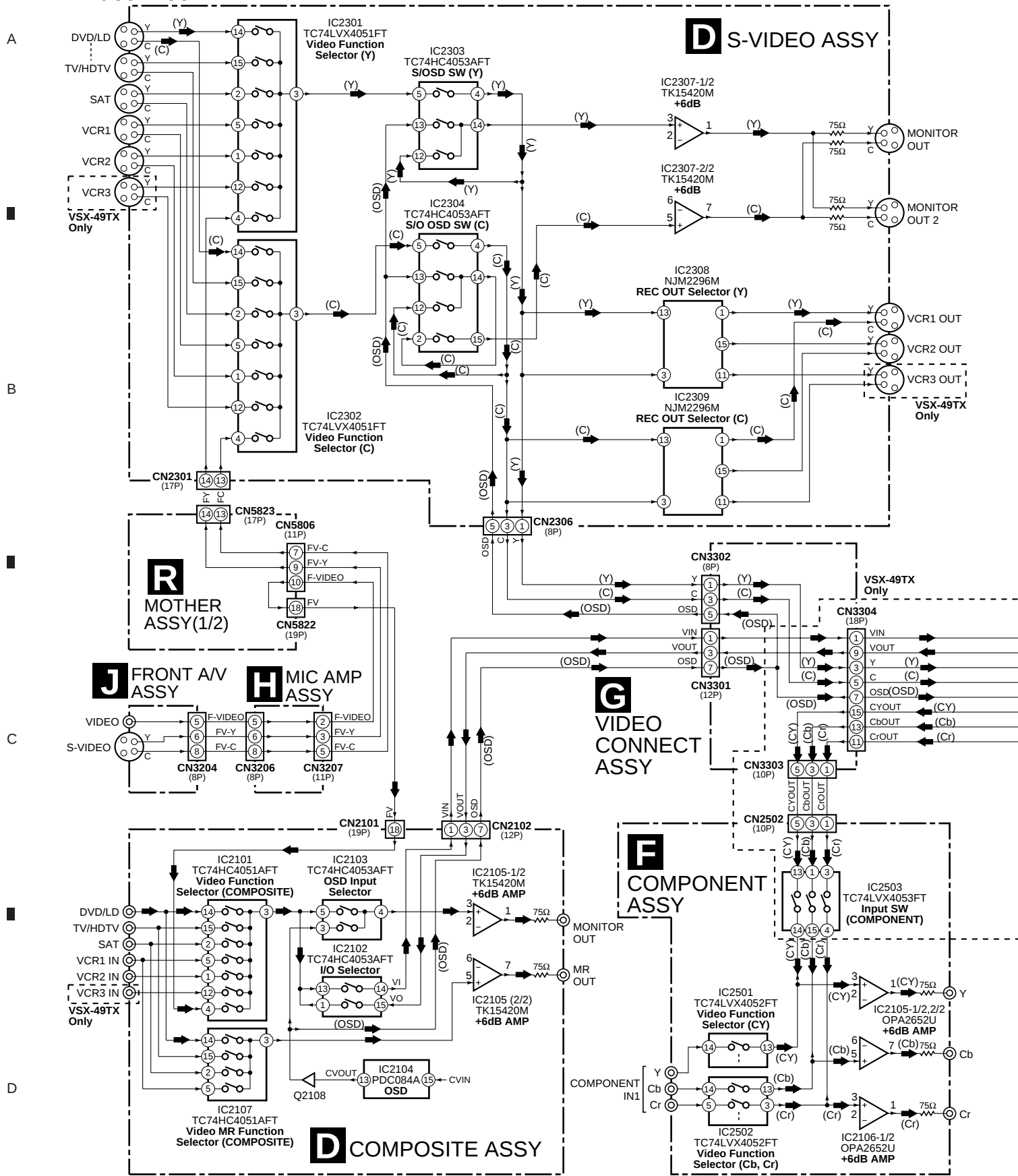
3.1.1 Audio Block



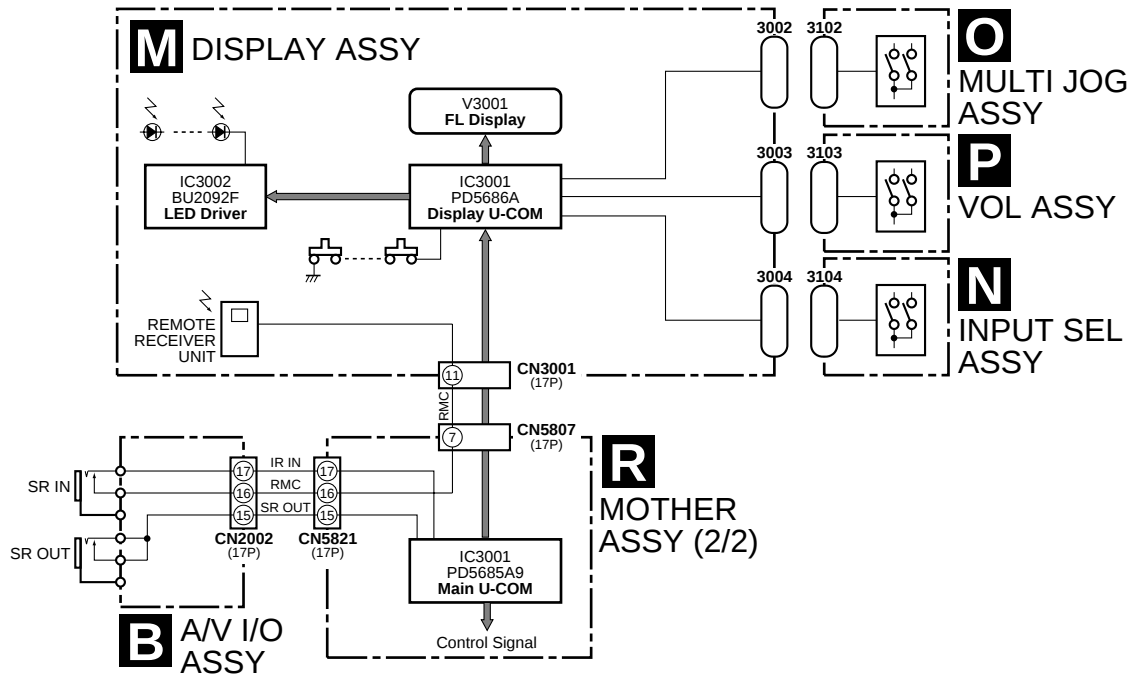


3.1.2 Video and Display Blocks

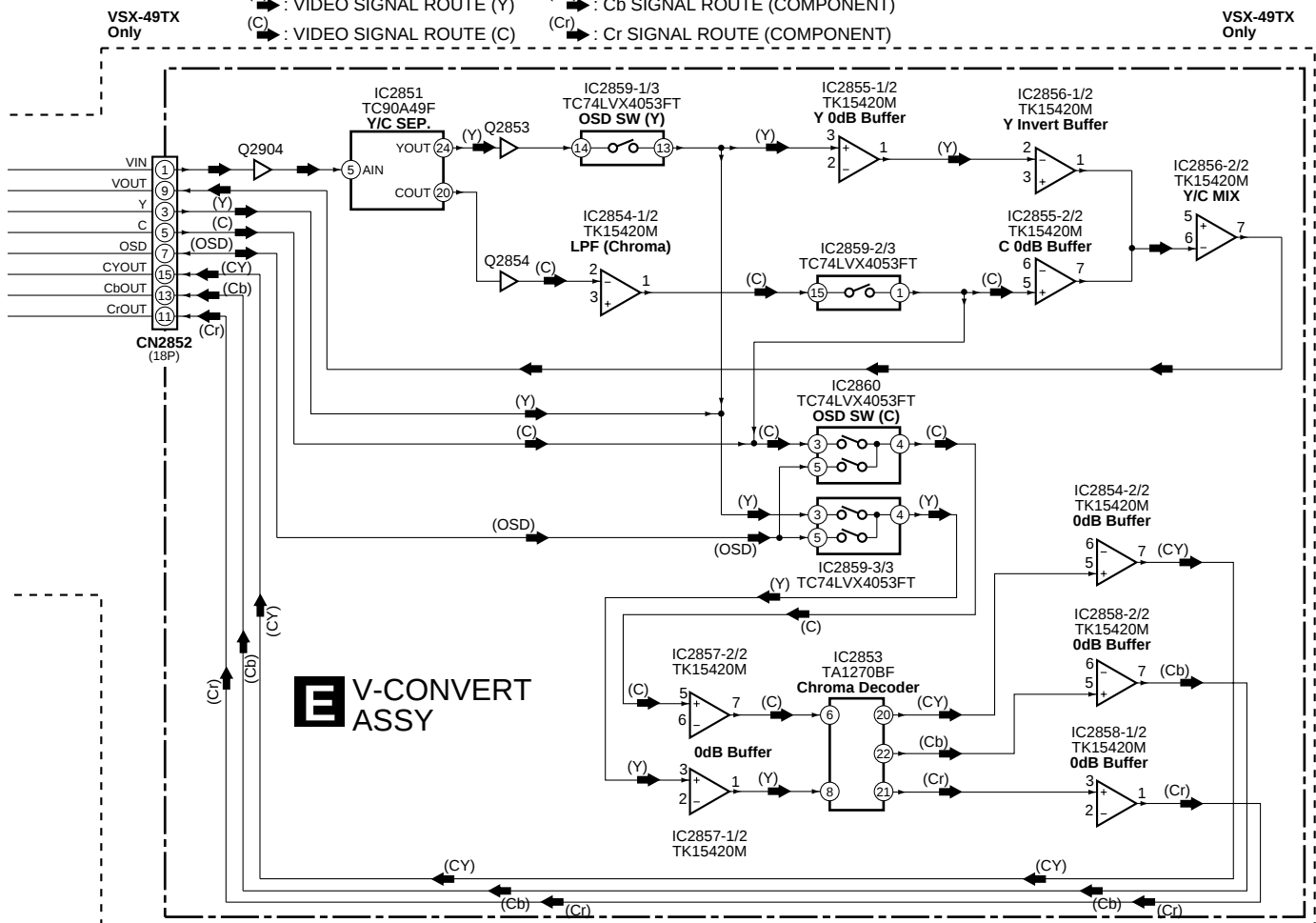
• Video Block



• Display Block

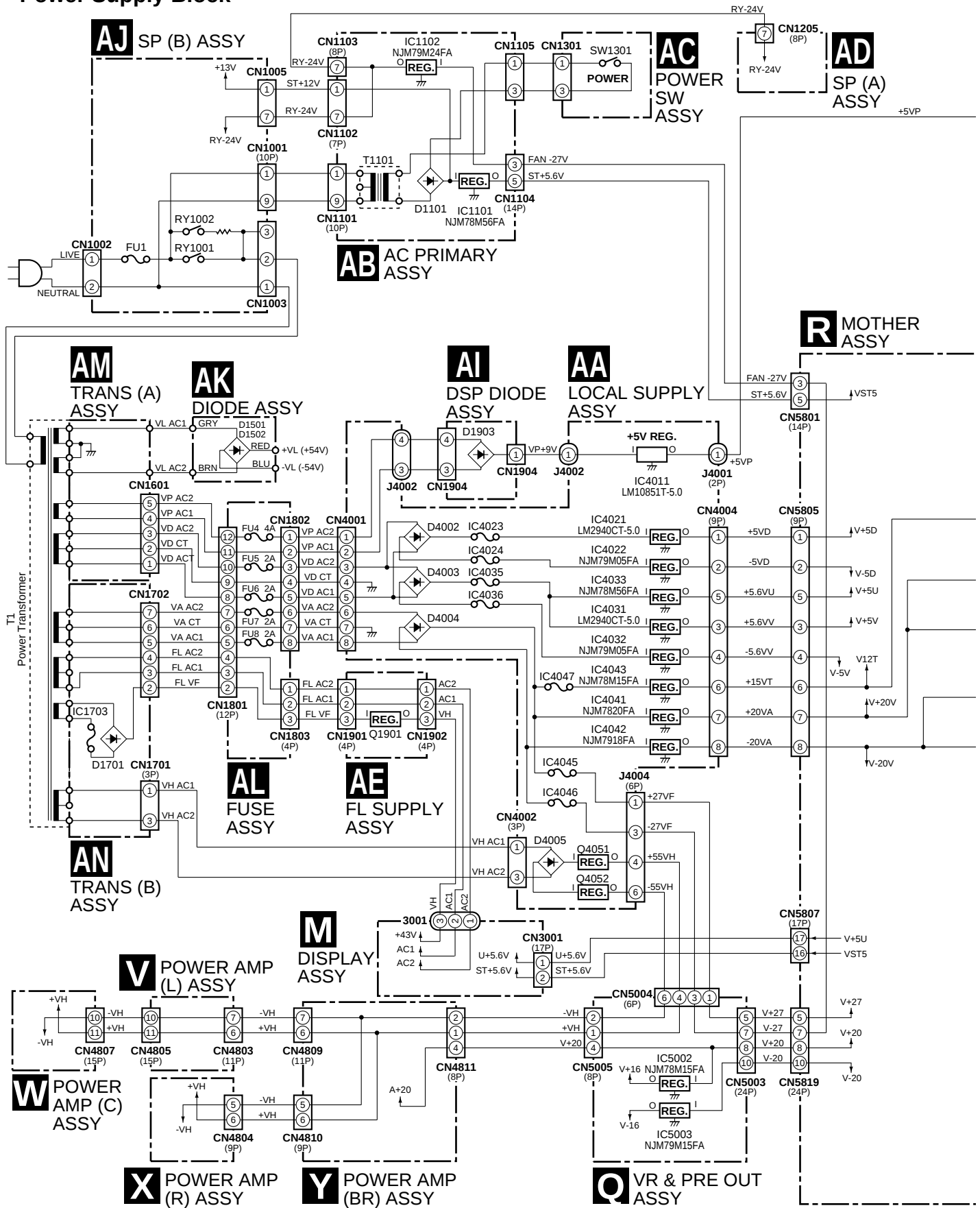


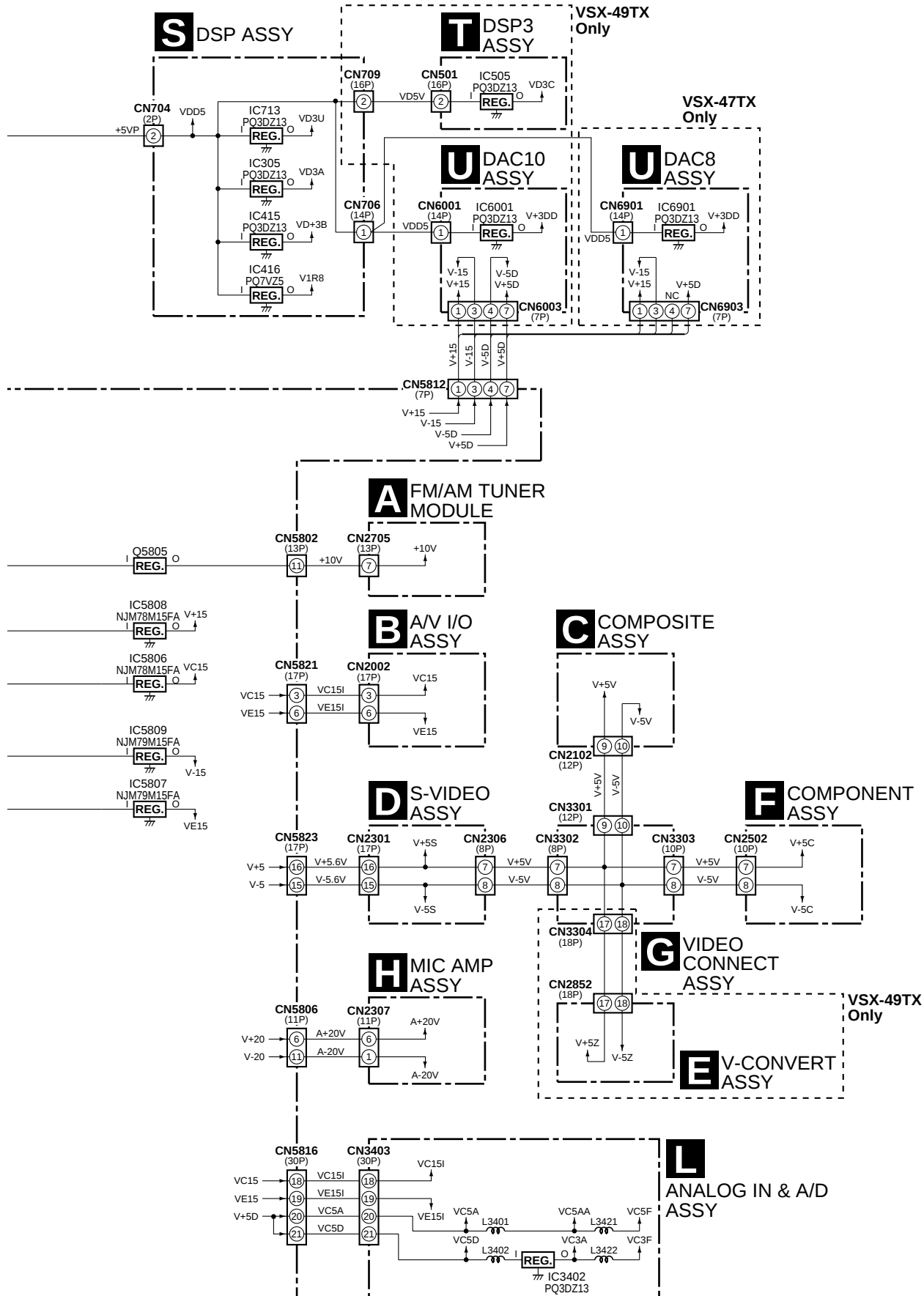
(Y) : VIDEO SIGNAL ROUTE (Y)
 (C) : VIDEO SIGNAL ROUTE (C)
 (CY) : Y SIGNAL ROUTE (COMPONENT)
 (Cb) : Cb SIGNAL ROUTE (COMPONENT)
 (Cr) : Cr SIGNAL ROUTE (COMPONENT)
 (OSD) : VIDEO SIGNAL ROUTE (OSD)



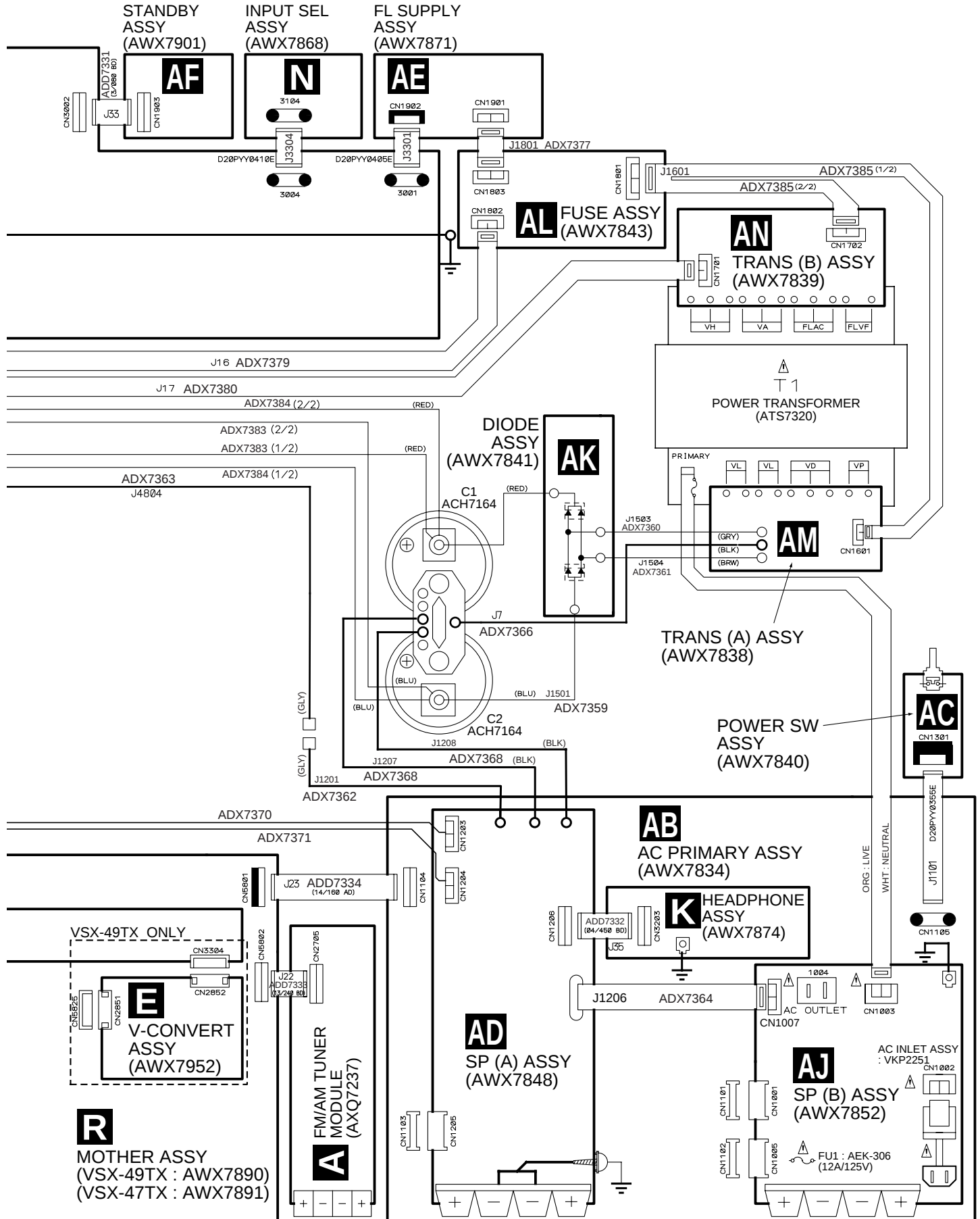
3.1.3 Power Supply Block

• Power Supply Block



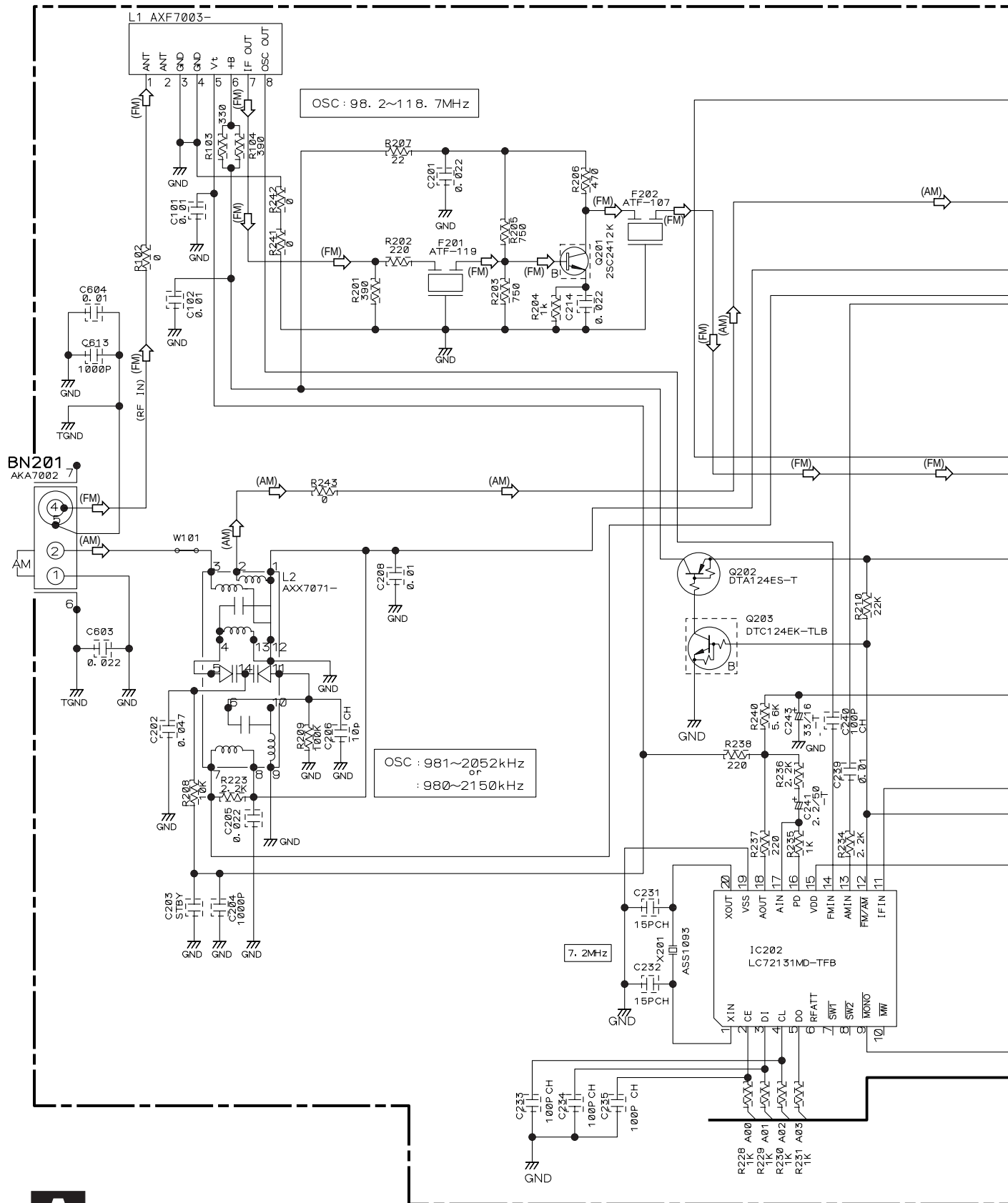


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

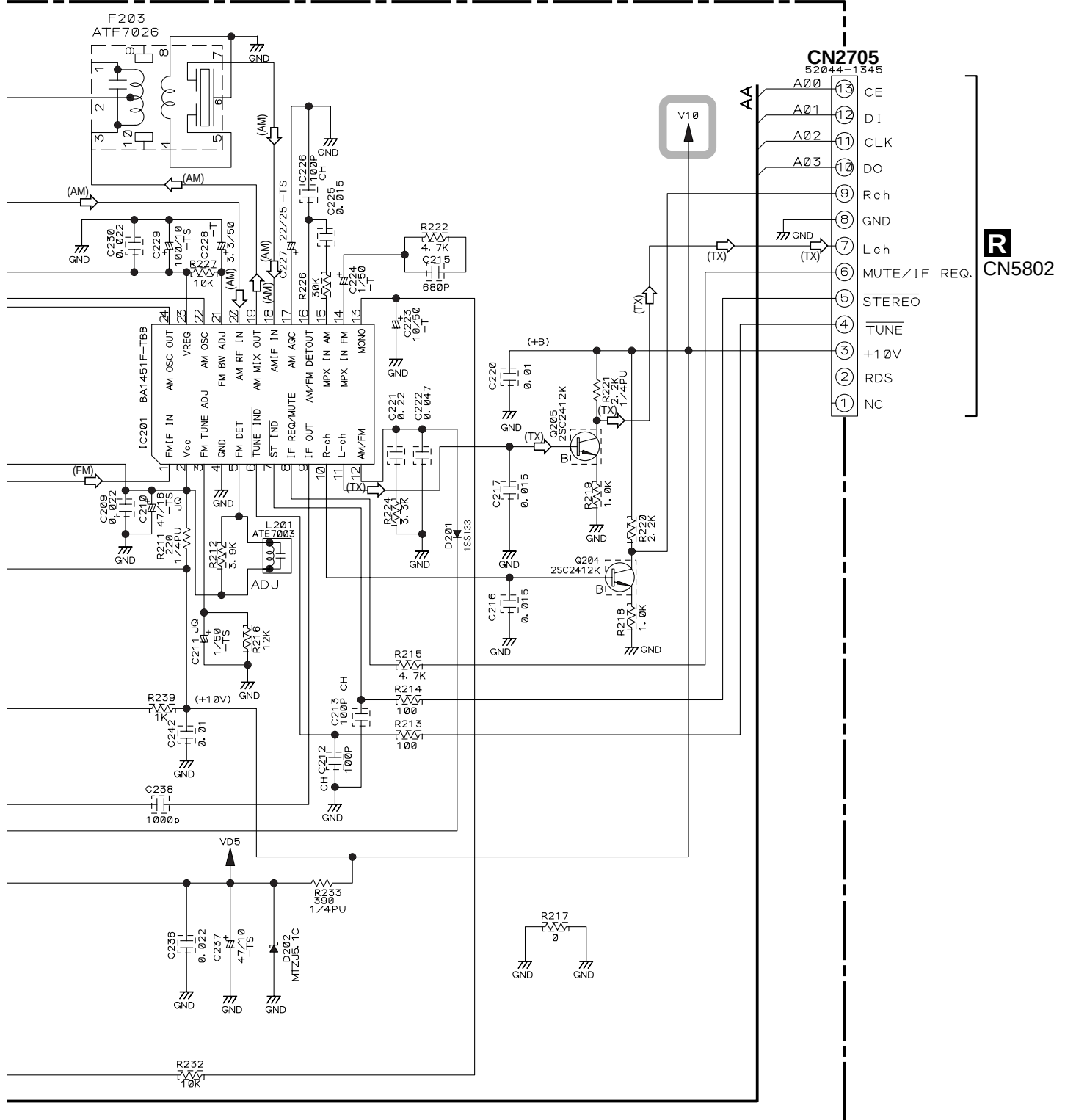


3.3 FM/AM TUNER MODULE

FM/AM TUNER MODULE (AXQ7237)



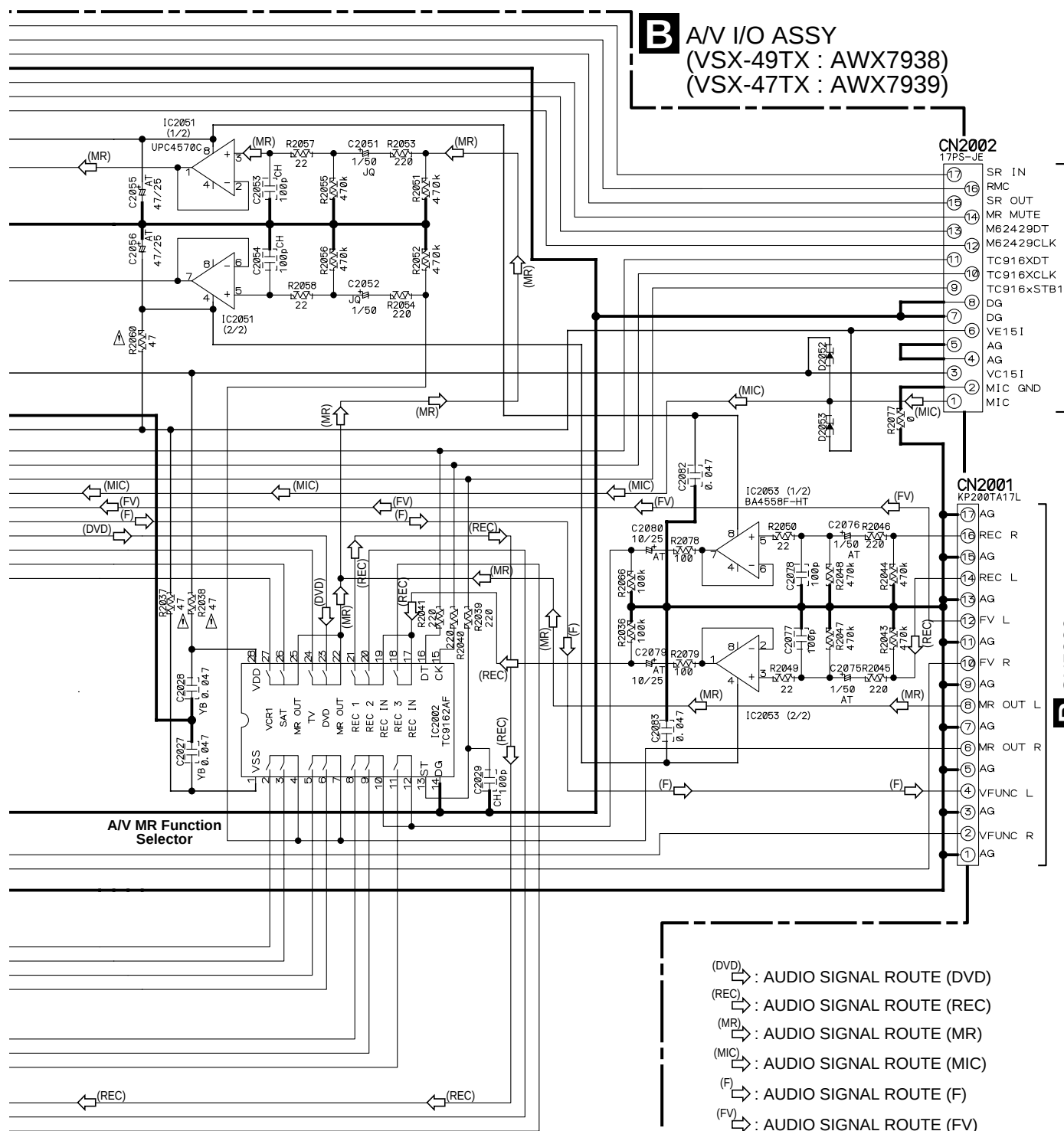
(TX) : AUDIO SIGNAL ROUTE (TUNER)
 (AM) : AM SIGNAL ROUTE
 (FM) : FM SIGNAL ROUTE



 : The power supply is shown with the marked box.



B AV I/O ASSY (VSX-49TX : AWX7938) (VSX-47TX : AWX7939)

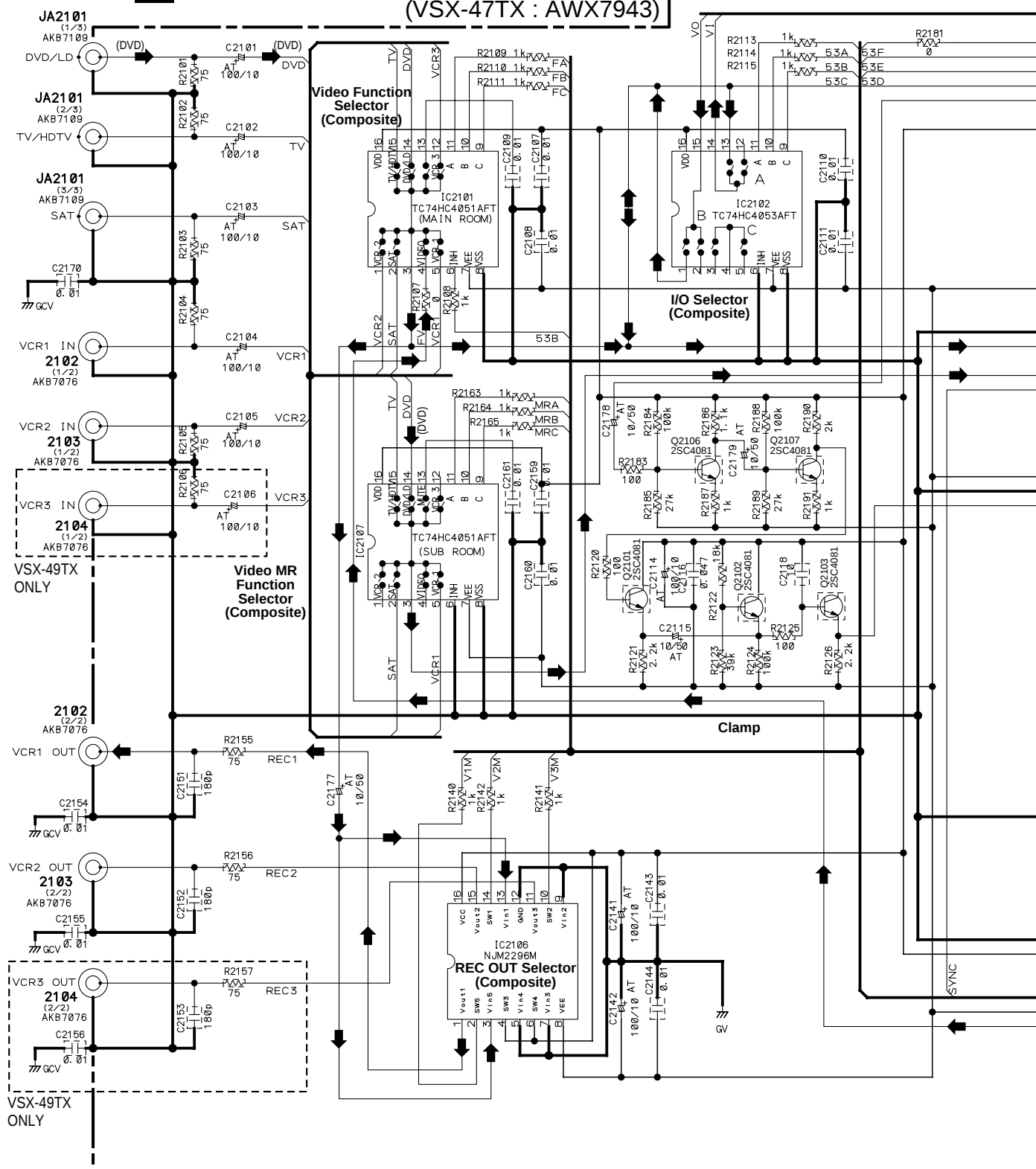


NOTES

1. RESISTORS
Unit: k-kΩ M-MΩ or unless otherwise noted.
Rated power: 1/16W 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 except for electrolytic capacitors.
AT : CEAT, JQ : CEJQ
3. DIODES
Indicated in 1SS355.

3.5 COMPOSITE ASSY

C COMPOSITE ASSY (VSX-49TX : AWX7942)
(VSX-47TX : AWX7943)



○ : The power supply is shown with the marked box.

(DVD) : VIDEO SIGNAL ROUTE (DVD)

(V) : VIDEO SIGNAL ROUTE

(OSD) : VIDEO SIGNAL ROUTE (OSD)

V+5V

MONITOR OUT

2105
(1/2)
AKB7076

MONI OUT

2105
(2/2)
AKB7076

MR OUT

CN2102
KP200TA12L

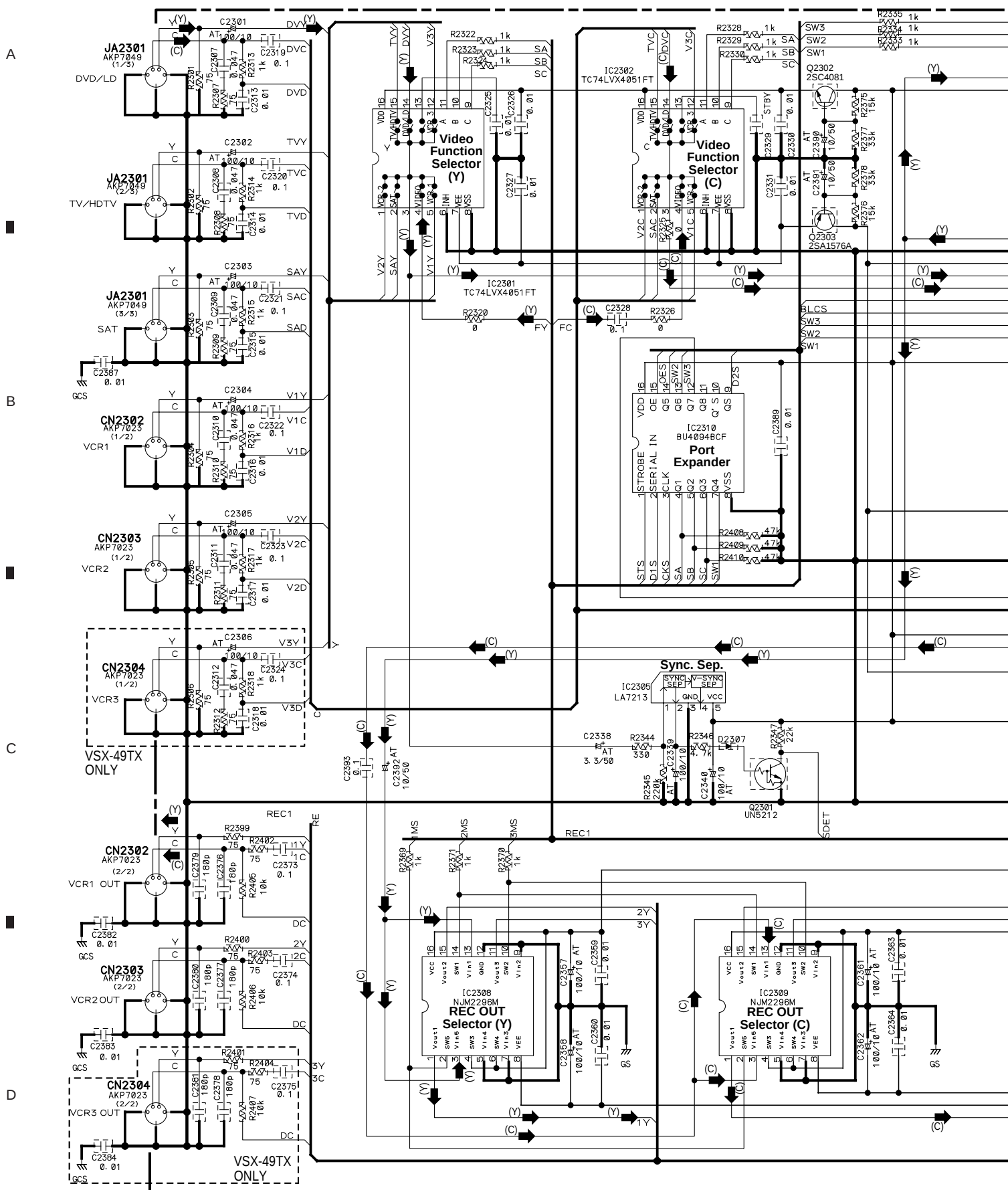
V IN
VG
V OUT
VG
Y
VG
OSD
VG
V+5V
V-5V
MR G
MR IN

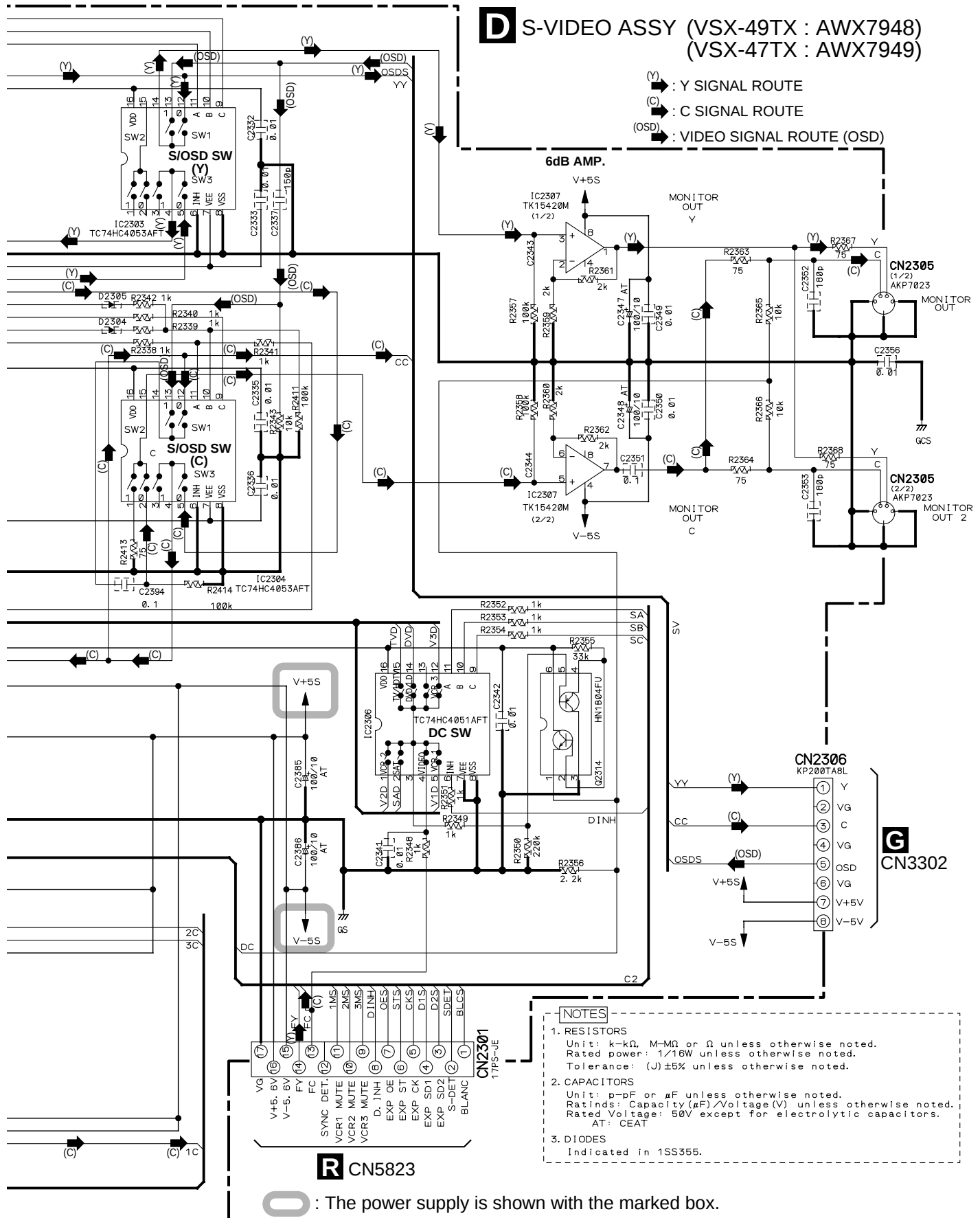
G CN3301

NOTES

1. RESISTORS
Unit: k-k Ω , M-M Ω or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) $\pm 5\%$ unless otherwise noted.
2. CAPACITORS
Unit: p-pF or μ F unless otherwise noted.
Rating: Capacity (μ F)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V except for electrolytic capacitors.
AT : CEAT
3. DIODES
Indicated in 1SS355.

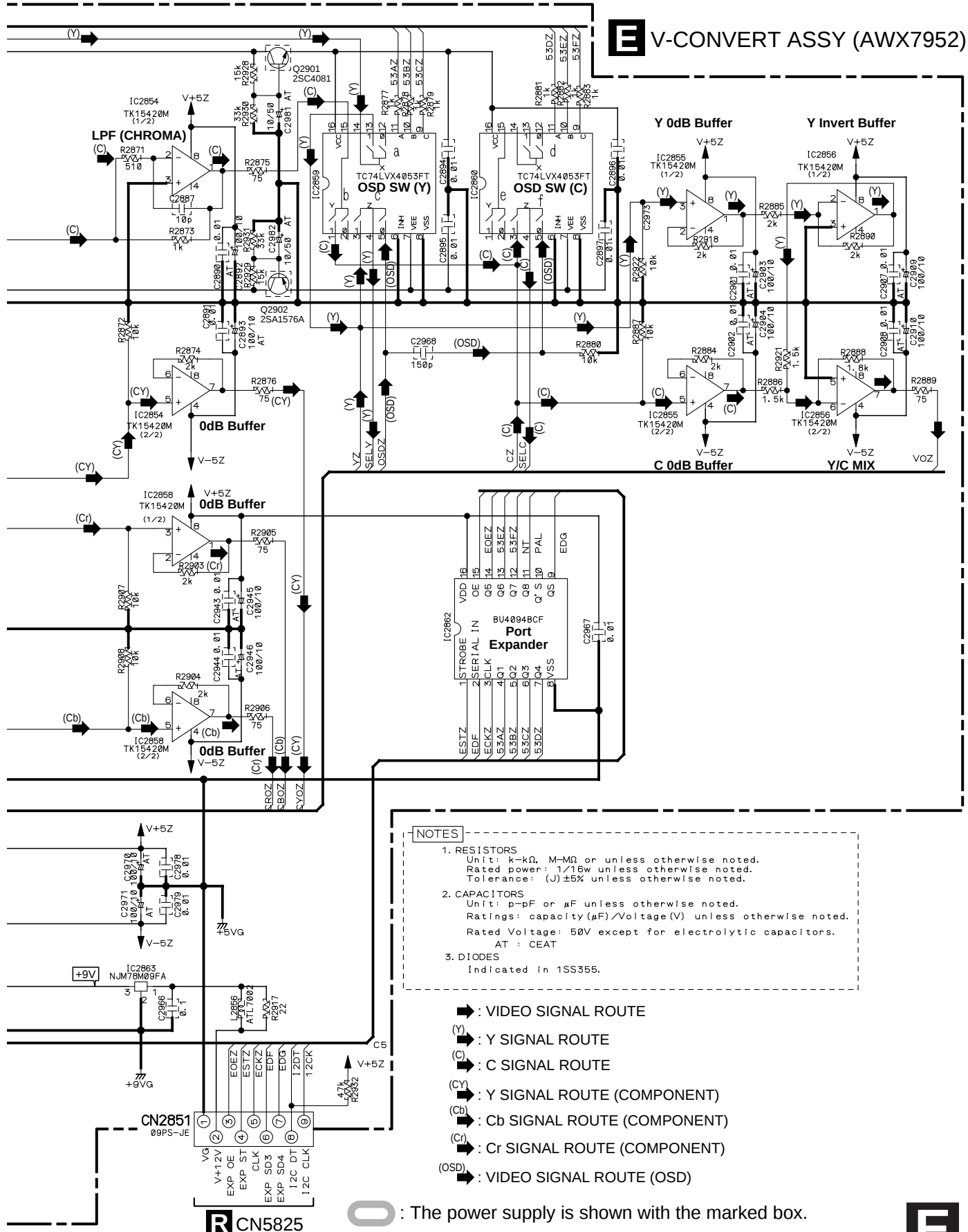
3.6 S-VIDEO ASSY





30





A

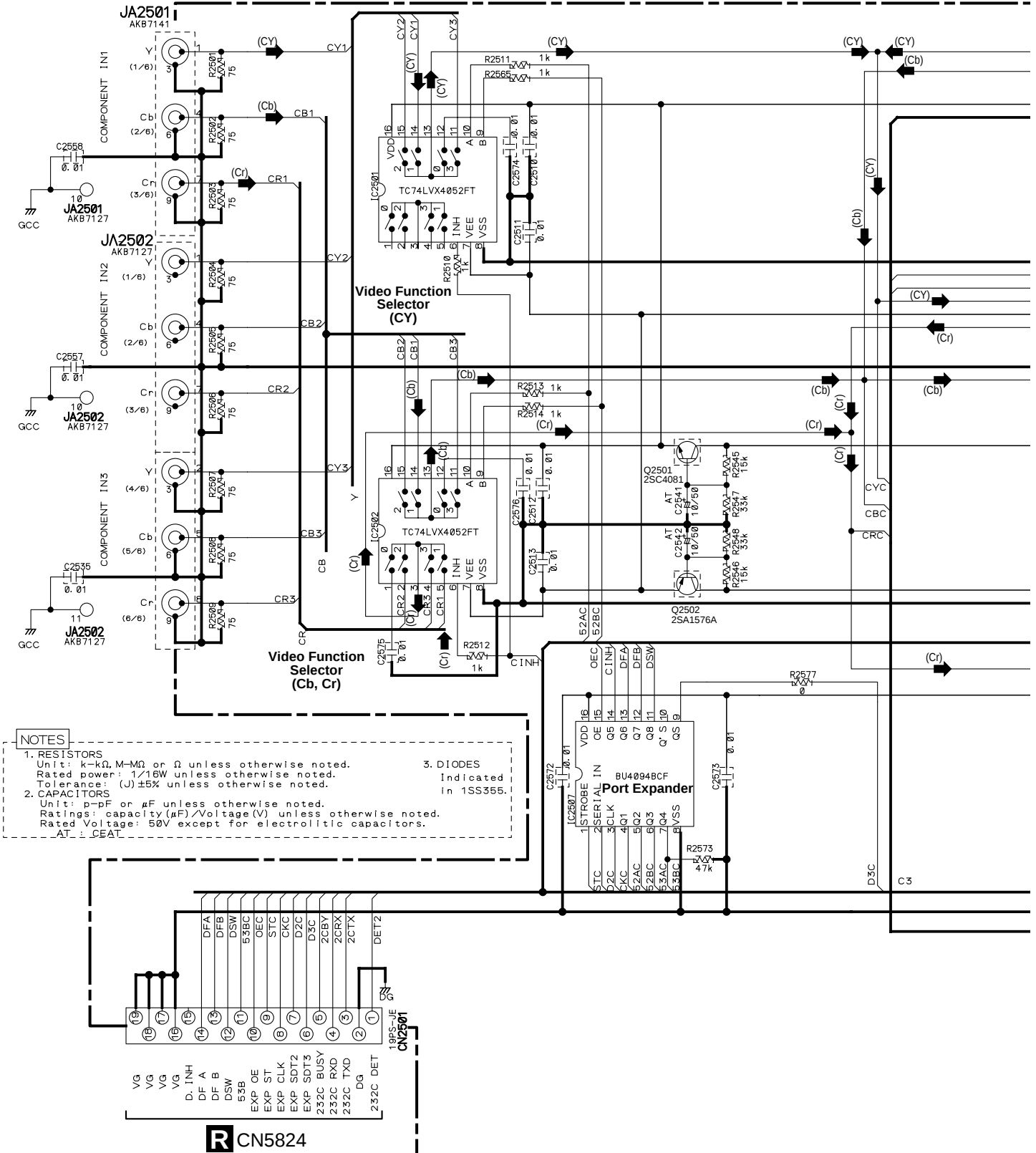
B

C

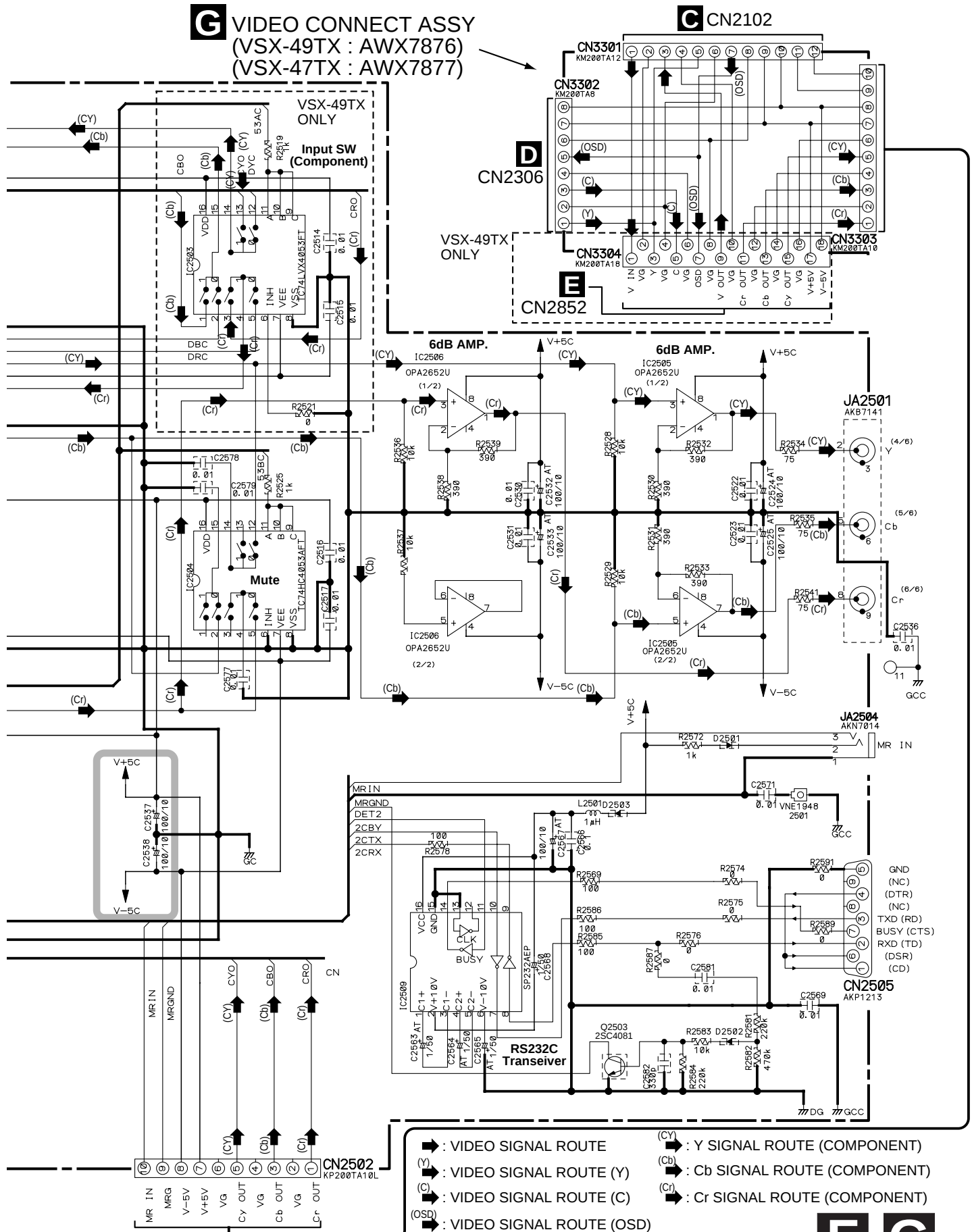
D

3.8 COMPONENT and VIDEO CONNECT ASSYS

F COMPONENT ASSY (VSX-49TX : AWX7953)
(VSX-47TX : AWX7954)



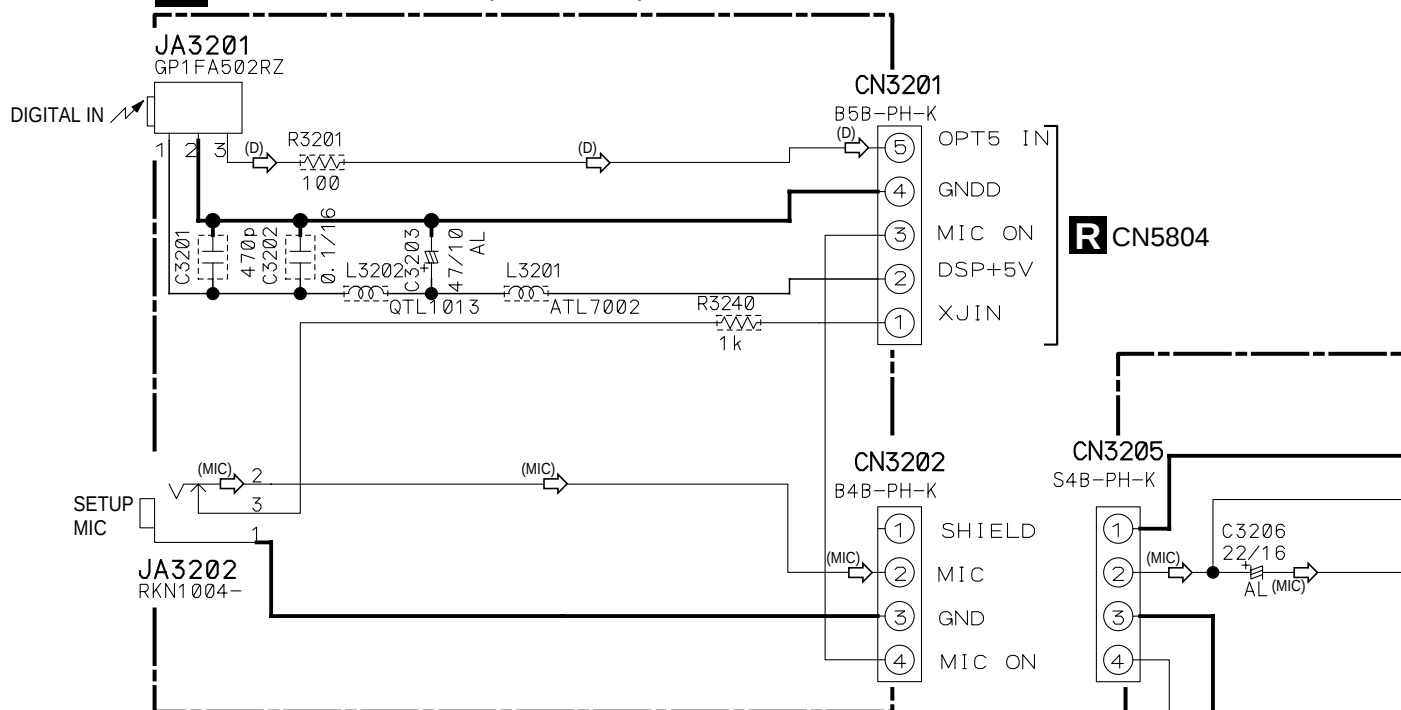
O : The power supply is shown with the marked box.



3.9 MIC AMP, MIC & OPT, FRONT A/V and HEADPHONE ASSYS

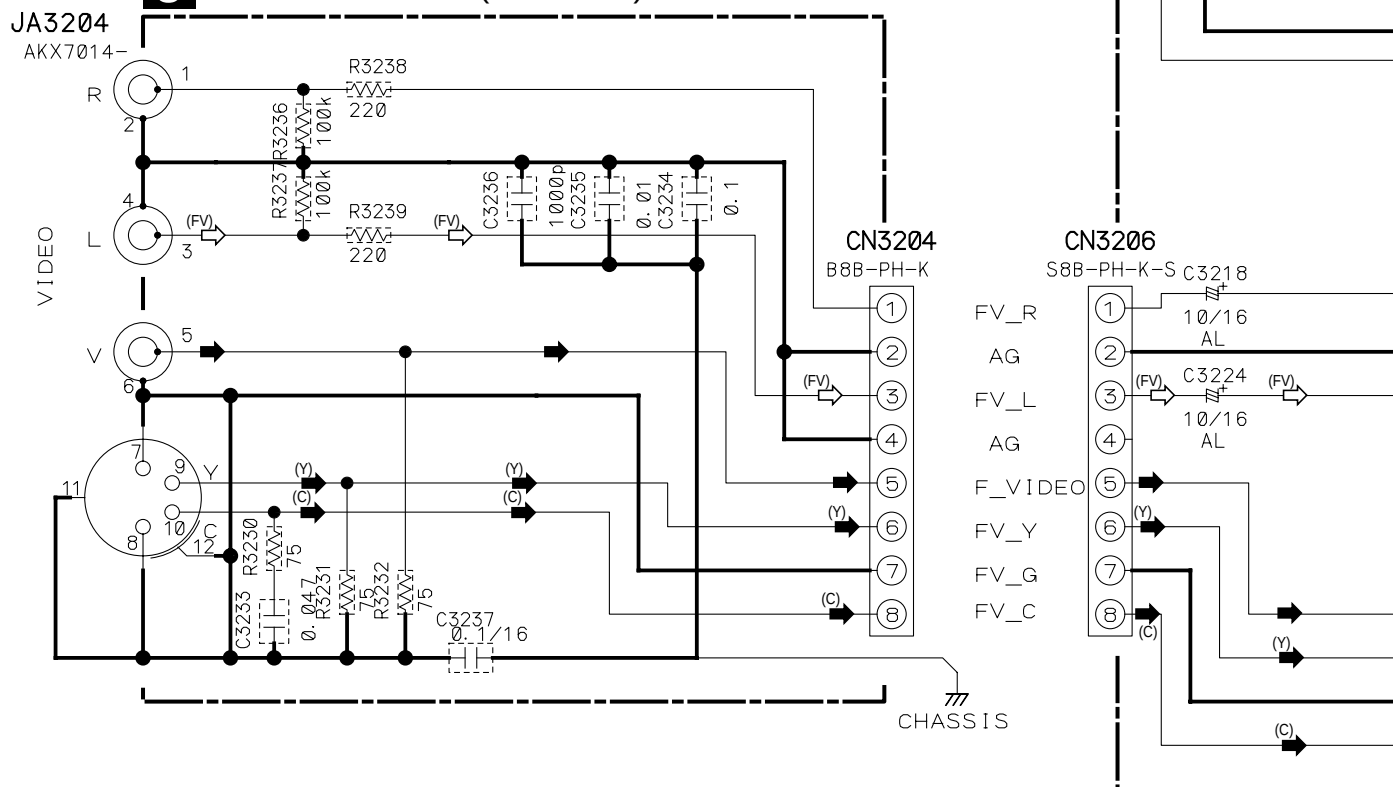
A

I MIC & OPT ASSY (AWX7875)



B

J FRONT AV ASSY (AWX7902)



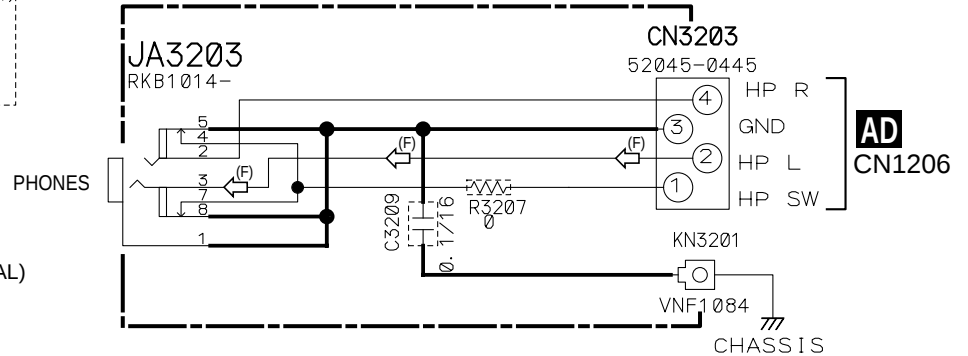
C

D

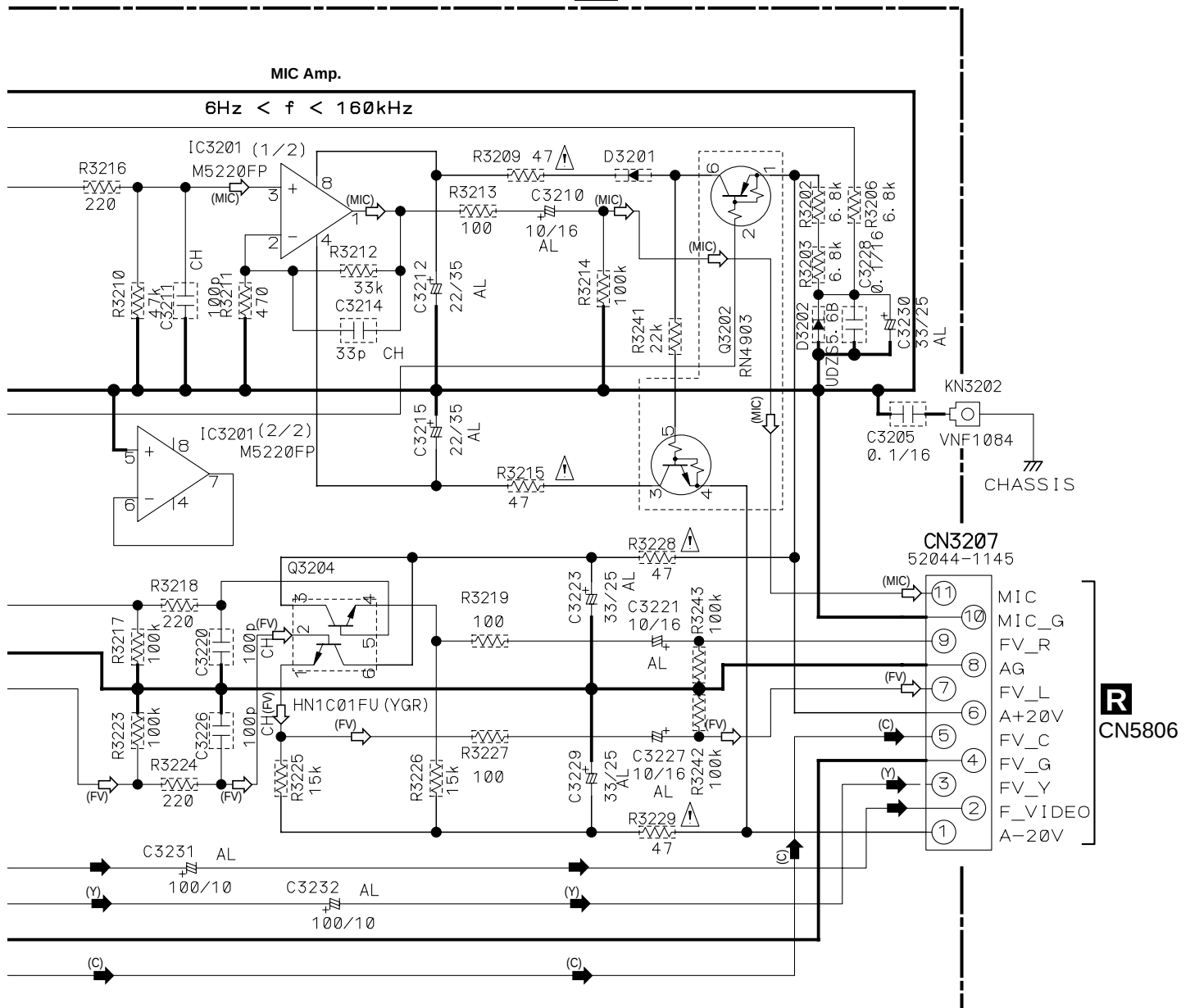
- NOTE**
- RESISTORS**
Indicated in ohm 1/16W ±5%
tolerance unless otherwise
noted k:kΩ, M:MΩ
 - CAPACITORS**
Indicated in capacity (μF)/voltage (V)
unless otherwise noted p:pF
Indication without voltage is
50V except electrolytic capacitor.
AL:CEAL, CH:CCSRCH
 - DIODE**
Diode without indication is
1SS355

- ➡ : VIDEO SIGNAL ROUTE
 (Y) ➡ : Y SIGNAL ROUTE
 (C) ➡ : C SIGNAL ROUTE
 (D) ➡ : AUDIO SIGNAL ROUTE (DIGITAL)
 (MIC) ➡ : AUDIO SIGNAL ROUTE (MIC)
 (F) ➡ : AUDIO SIGNAL ROUTE (F)
 (FV) ➡ : AUDIO SIGNAL ROUTE (FV)

K HEADPHONE ASSY (AWX7874)

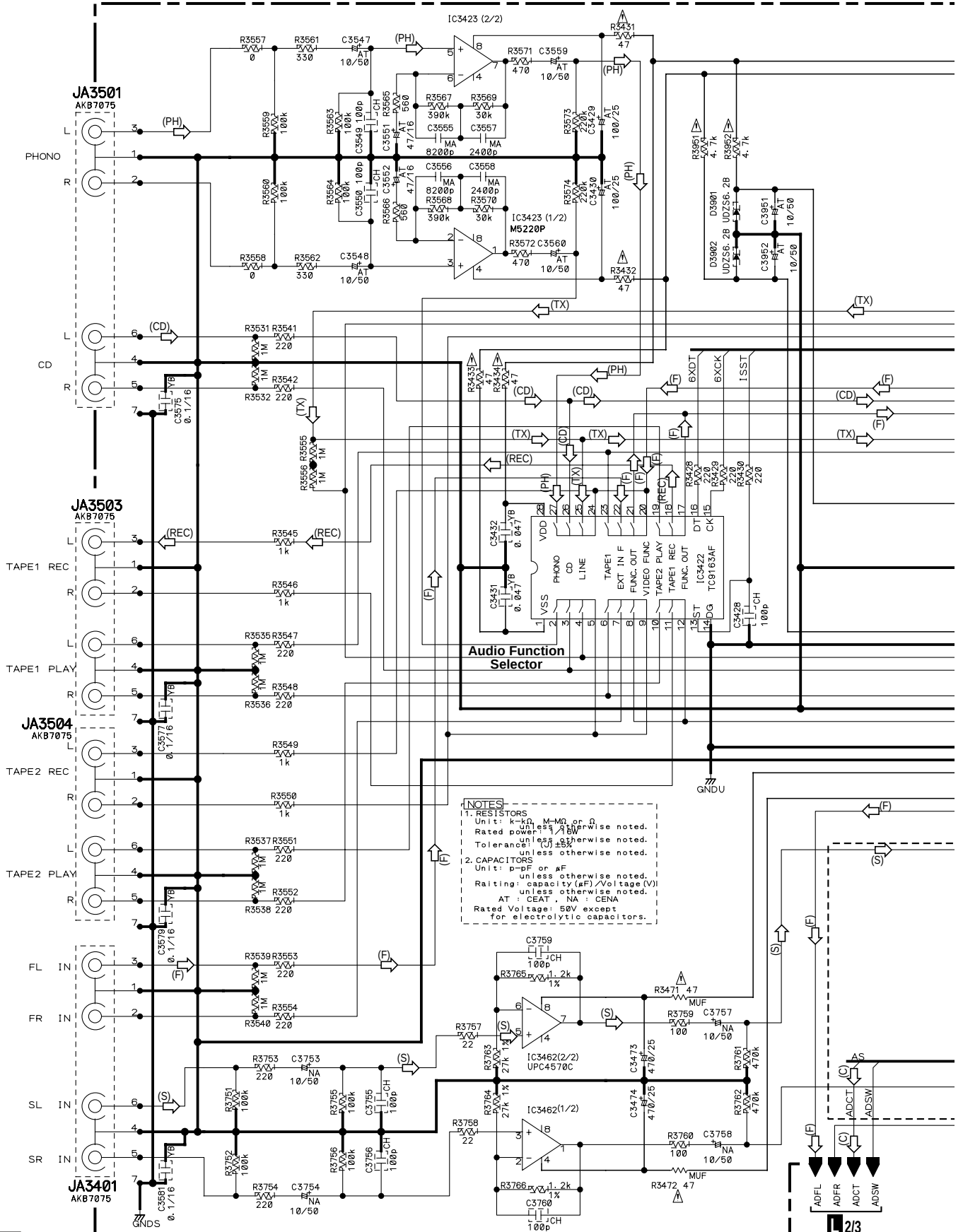


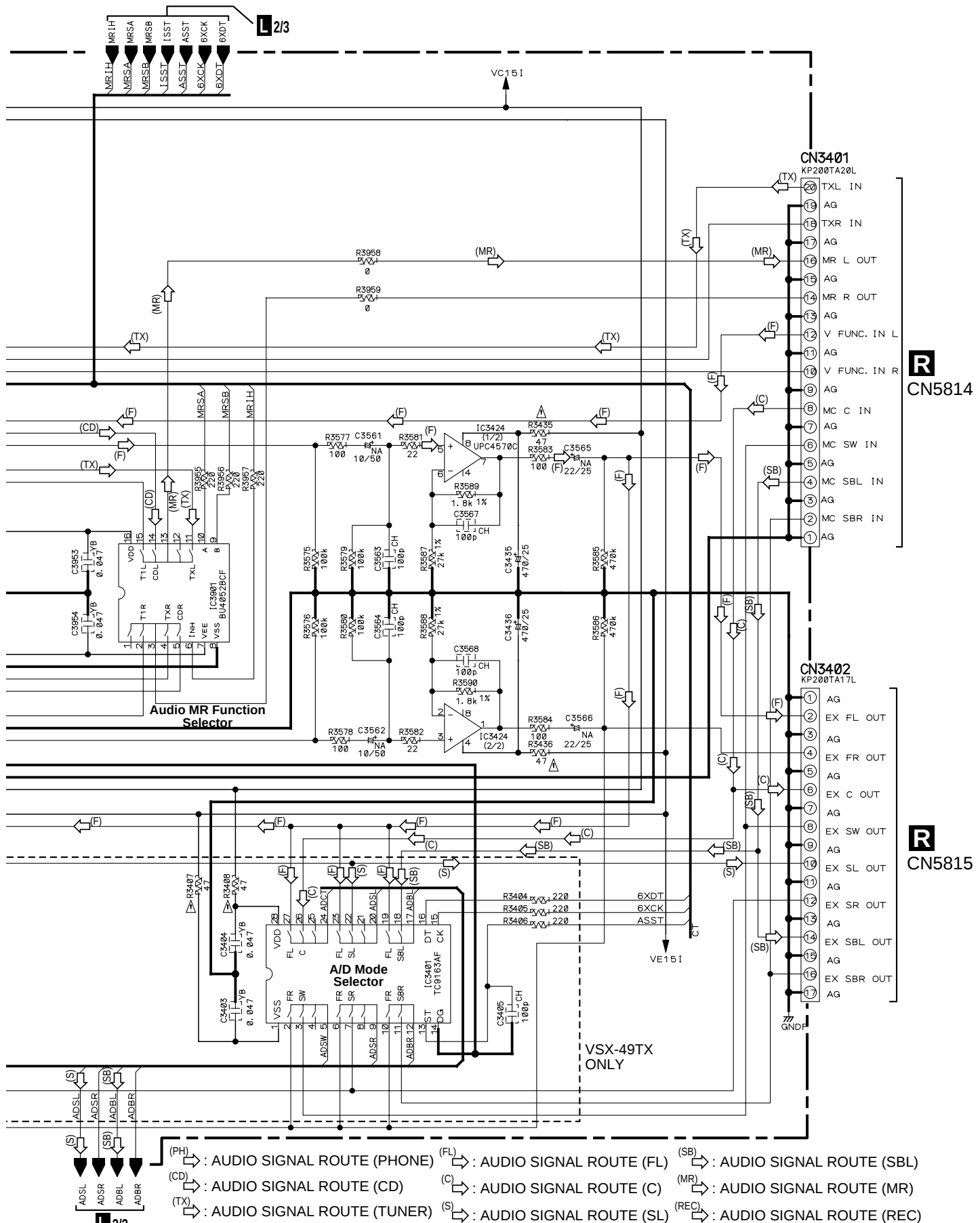
H MIC AMP ASSY (AWX7872)



3.10 ANALOG IN & A/D ASSY (1/3)

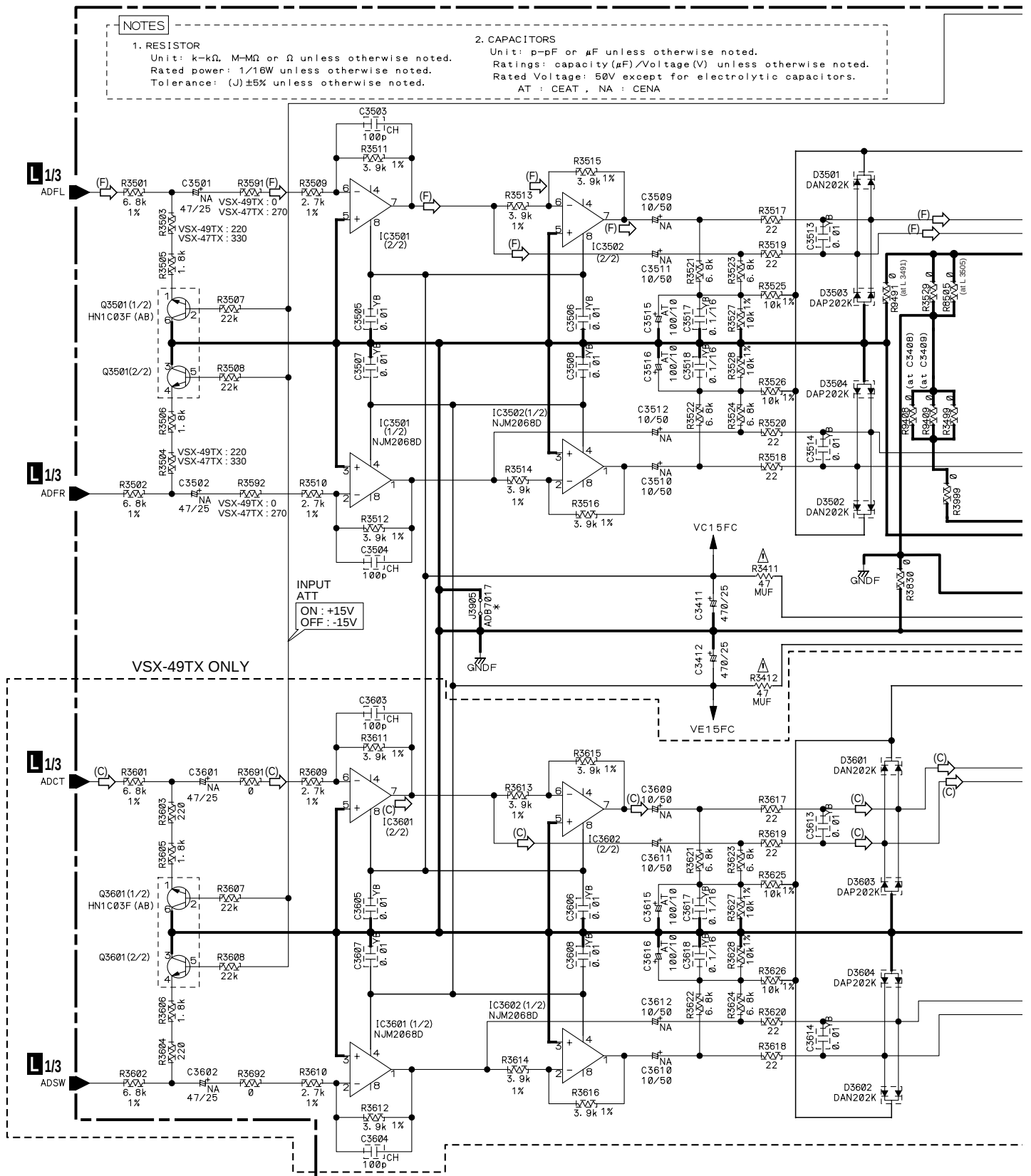
L 1/3 ANALOG IN & A/D ASSY (VSX-49TX : AWX7878)
(VSX-47TX : AWX7879)





3.11 ANALOG IN & A/D ASSY (2/3)

L 2/3 ANALOG IN & A/D ASSY (VSX-49TX : AWX7878) (VSX-47TX : AWX7879)

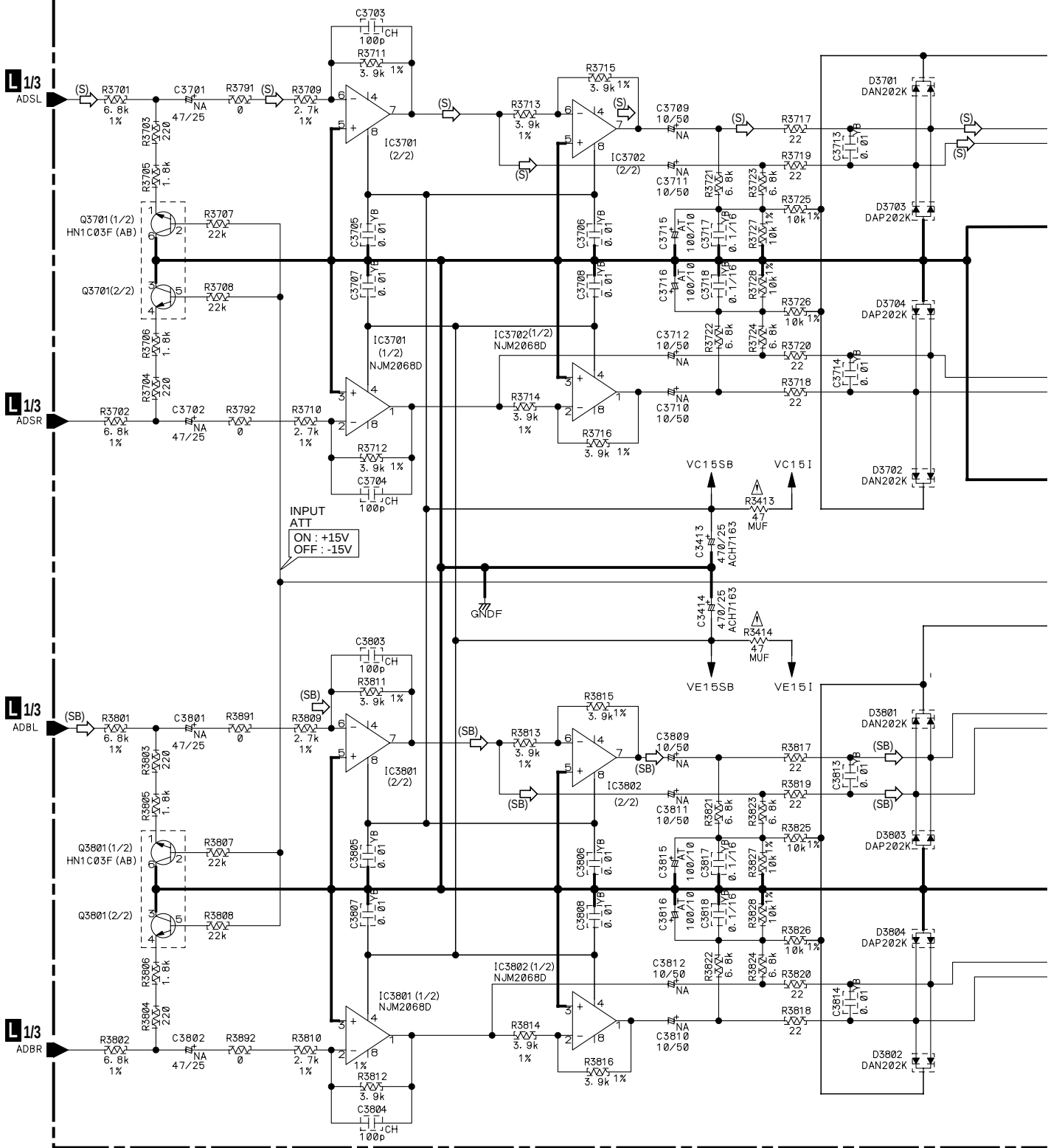


(F) ⇨ : AUDIO SIGNAL ROUTE (F) (S) ⇨ : AUDIO SIGNAL ROUTE (SL)
(C) ⇨ : AUDIO SIGNAL ROUTE (C) (SB) ⇨ : AUDIO SIGNAL ROUTE (SBL)



3.12 ANALOG IN & A/D ASSY (3/3) (VSX-49TX ONLY)

3/3 ANALOG IN & A/D ASSY
(AWX7878)(VSX-49TX ONLY)

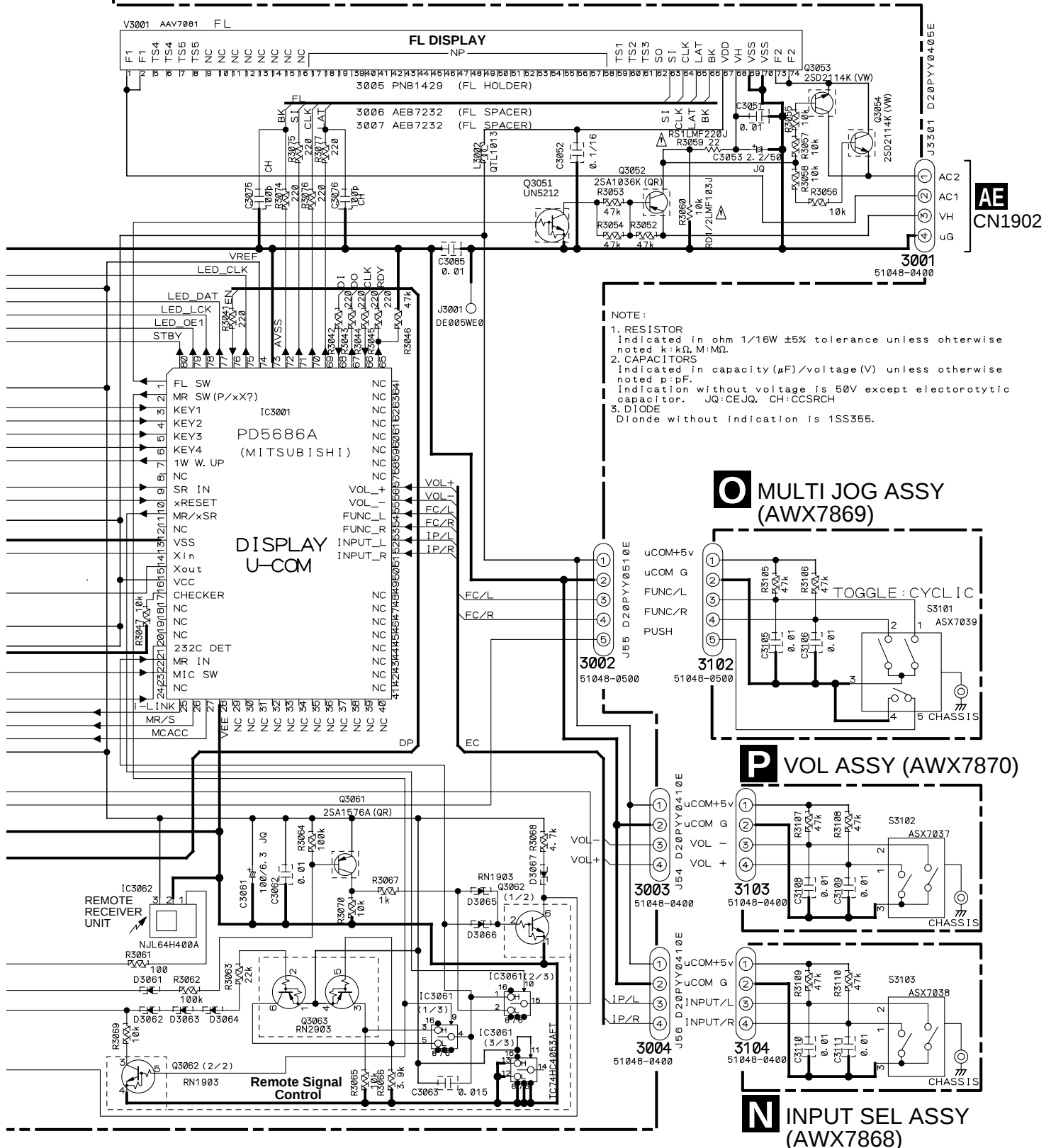




R CN5807

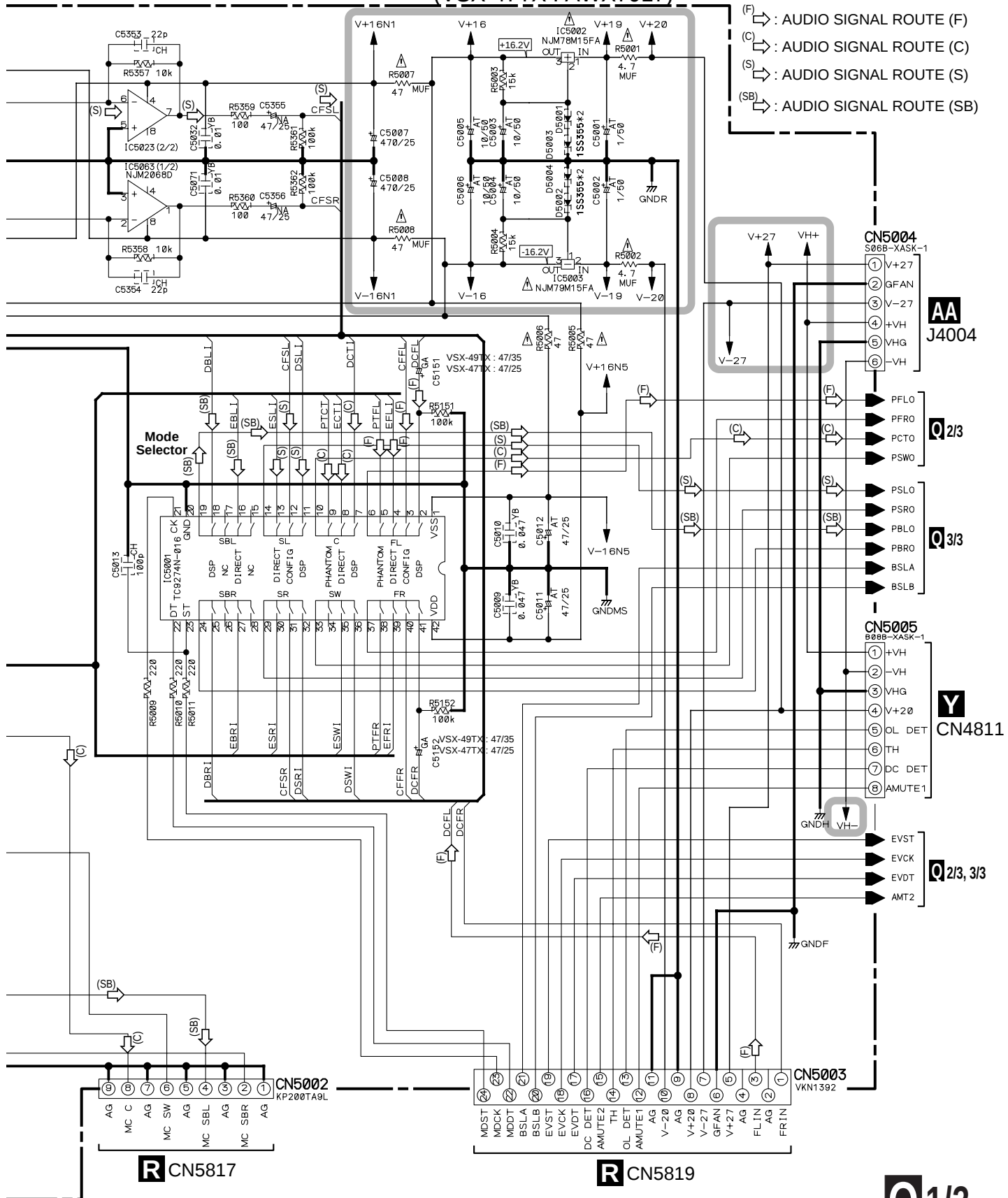


M DISPLAY ASSY (VSX-49TX : AWX7864) (VSX-47TX : AWX7865)

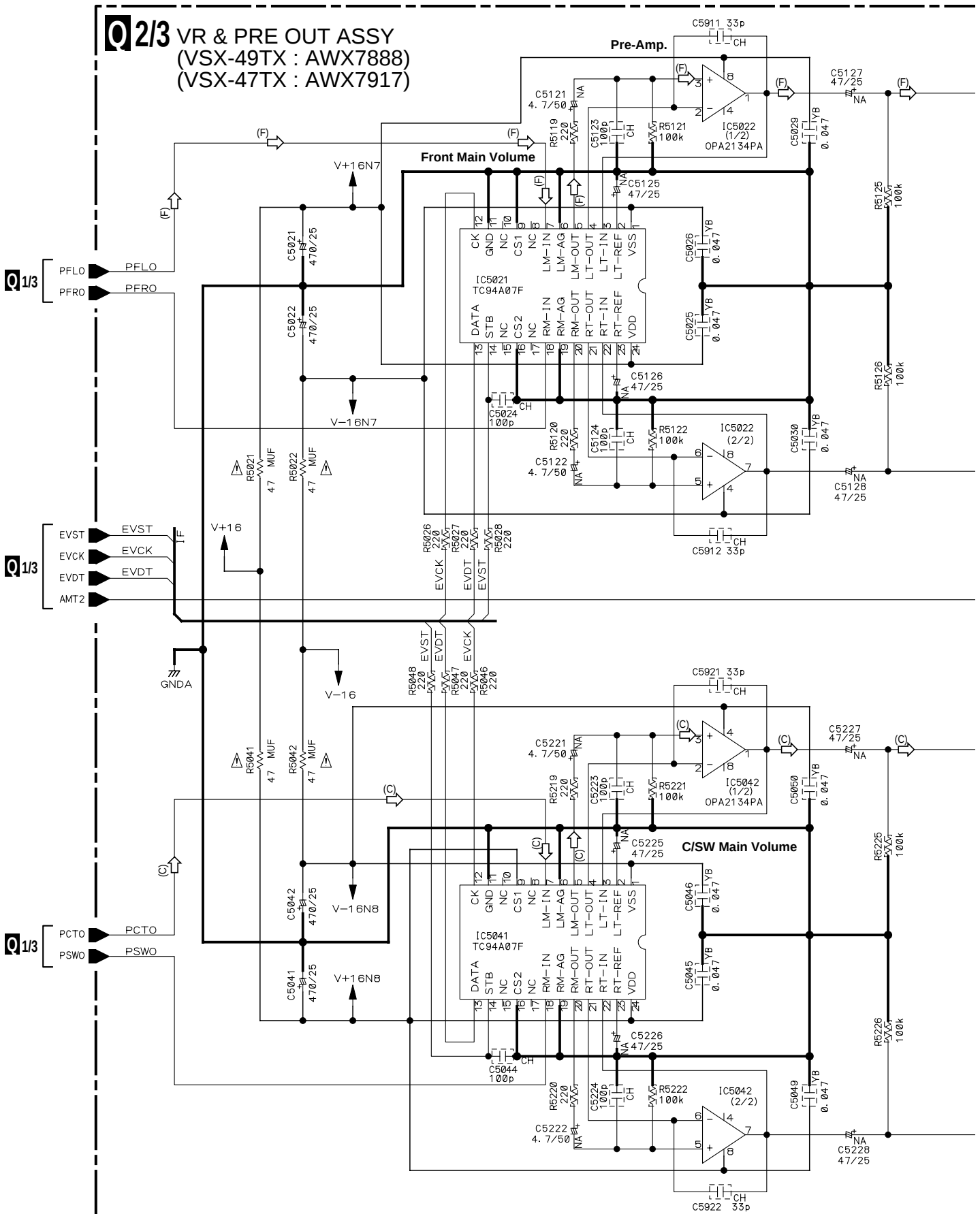


: The power supply is shown with the marked box.

Q1/3 VR & PRE OUT ASSY (VSX-49TX : AWX7888)
(VSX-47TX : AWX7917)



3.15 VR & PRE OUT ASSY (2/3)



NOTES

1. RESISTORS

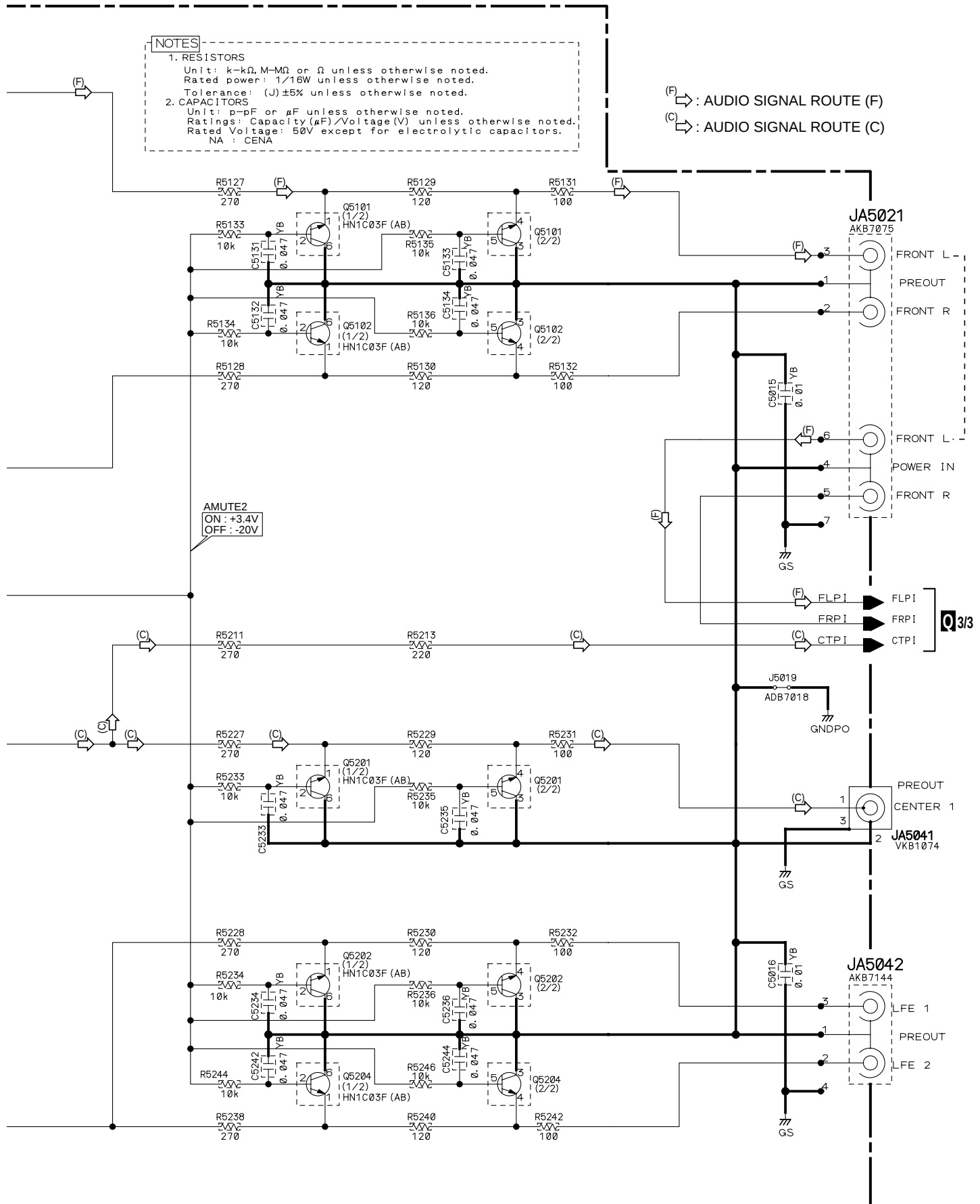
Unit: k-k Ω , M-M Ω or Ω unless otherwise noted.
 Rated power: 1/16W unless otherwise noted.
 Tolerance: (J) $\pm 5\%$ unless otherwise noted.

2. CAPACITORS

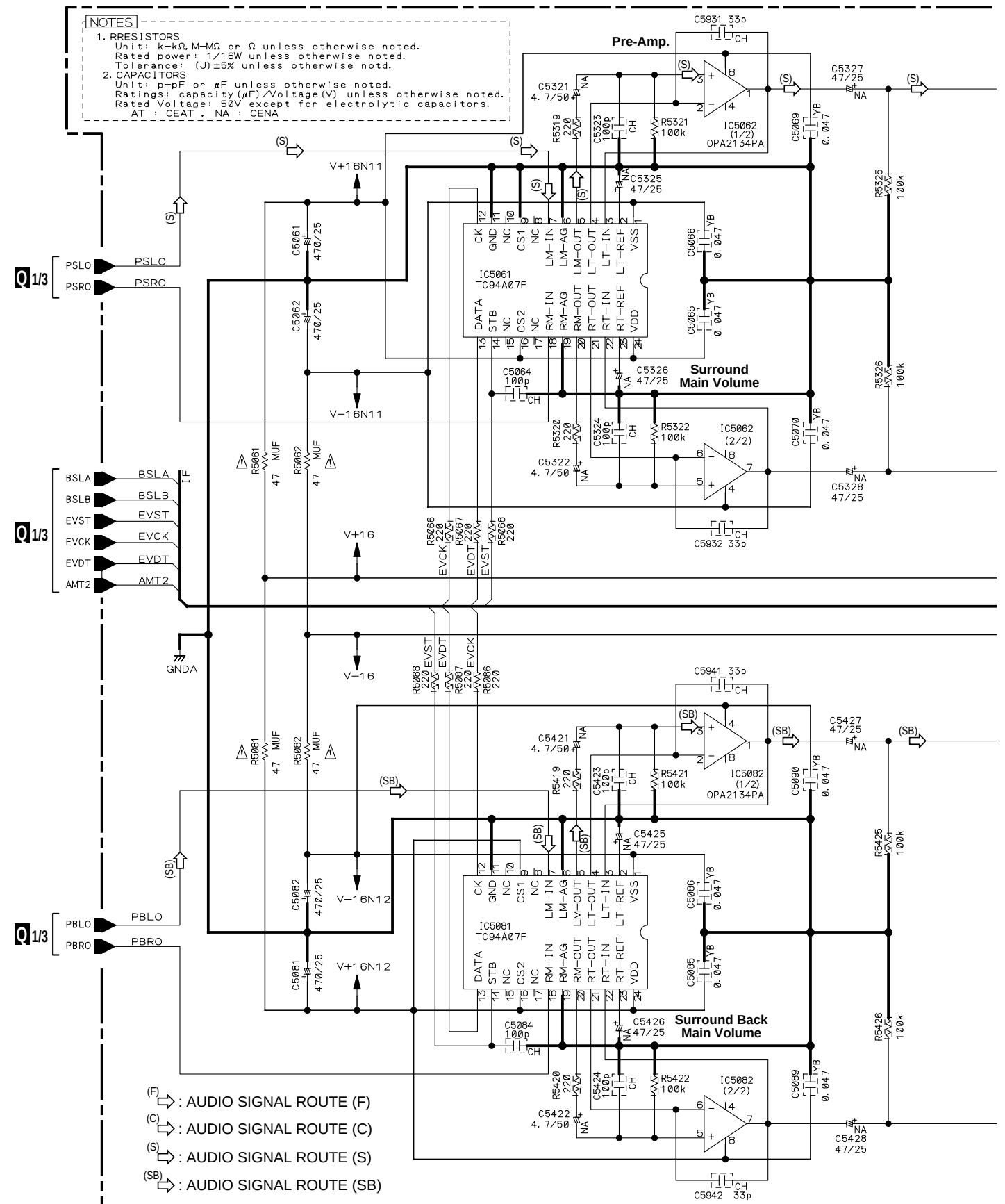
Unit: p-pF or μ F unless otherwise noted.
 Ratings: Capacity (μ F) / Voltage (V) unless otherwise noted.
 Rated Voltage: 50V except for electrolytic capacitors.
 NA : CENA

(F) : AUDIO SIGNAL ROUTE (F)

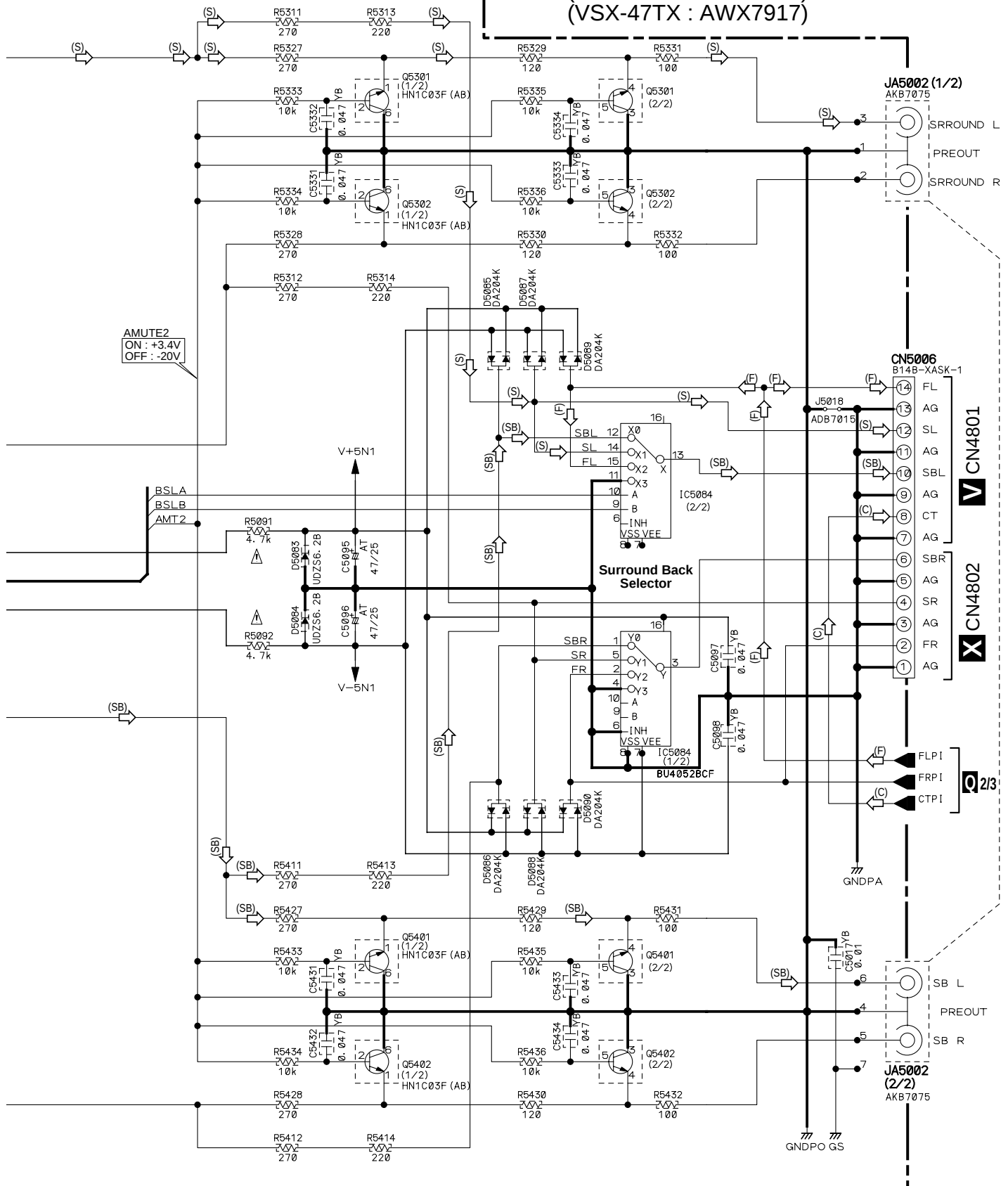
(C) : AUDIO SIGNAL ROUTE (C)



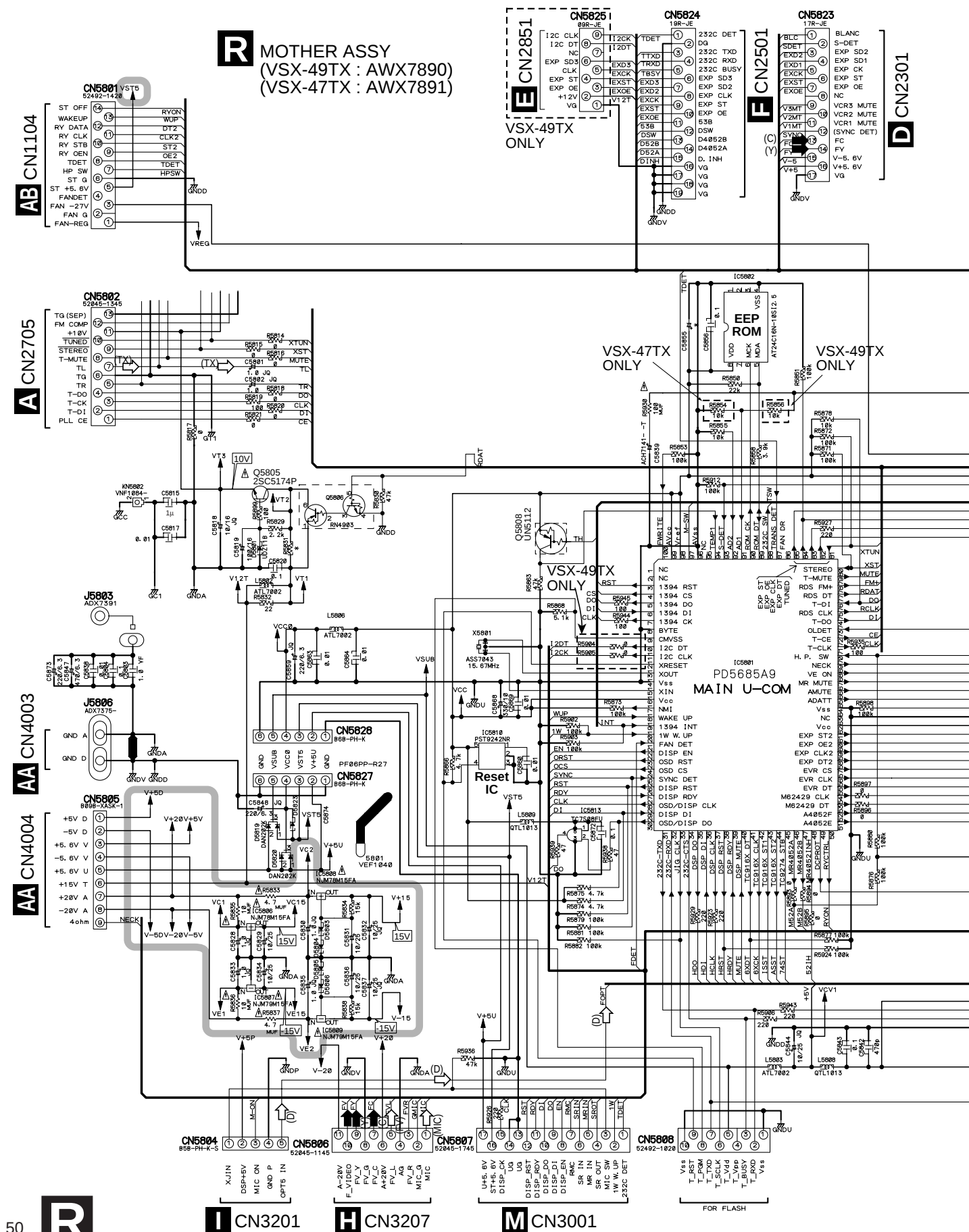
3.16 VR & PRE OUT ASSY (3/3)



Q3/3 VR & PRE OUT ASSY (VSX-49TX : AWW7888) (VSX-47TX : AWW7917)



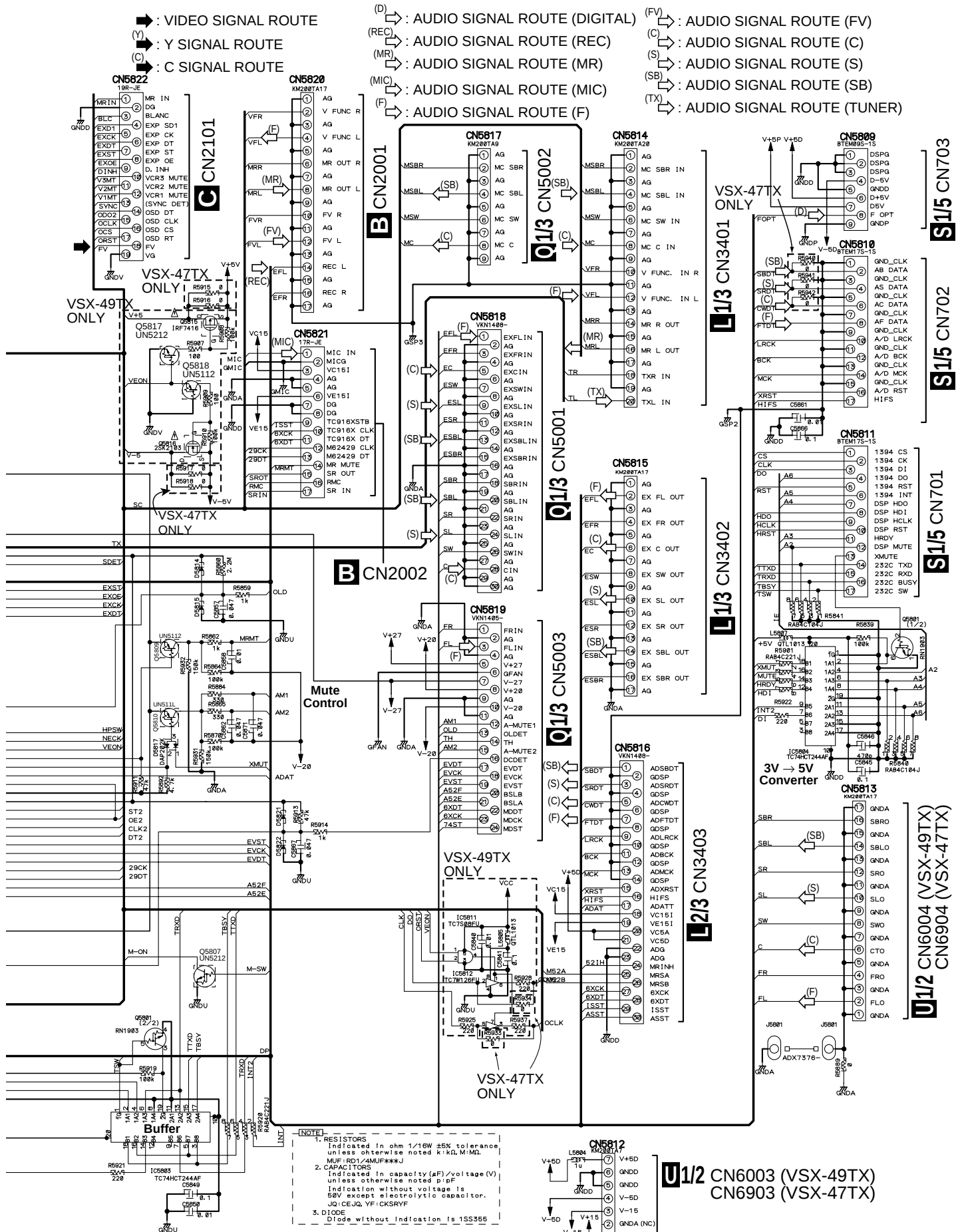
3.17 MOTHER ASSY



➡ : VIDEO SIGNAL ROUTE
 (Y) : Y SIGNAL ROUTE
 (C) : C SIGNAL ROUTE

(D) : AUDIO SIGNAL ROUTE (DIGITAL)
 (REC) : AUDIO SIGNAL ROUTE (REC)
 (MR) : AUDIO SIGNAL ROUTE (MR)
 (MIC) : AUDIO SIGNAL ROUTE (MIC)
 (F) : AUDIO SIGNAL ROUTE (F)

(FV) : AUDIO SIGNAL ROUTE (FV)
 (C) : AUDIO SIGNAL ROUTE (C)
 (S) : AUDIO SIGNAL ROUTE (S)
 (SB) : AUDIO SIGNAL ROUTE (SB)
 (TX) : AUDIO SIGNAL ROUTE (TUNER)



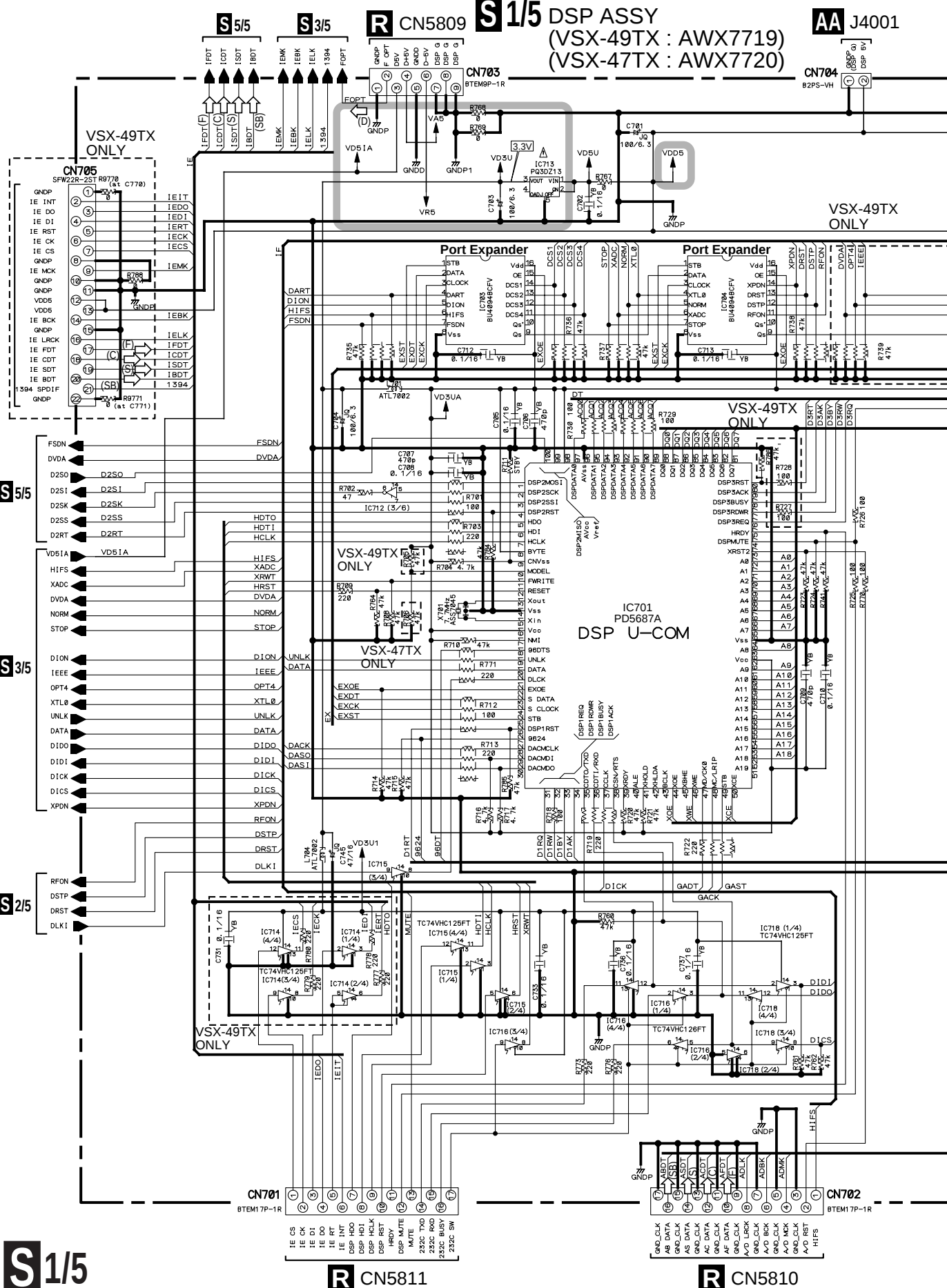
A

B

C

D

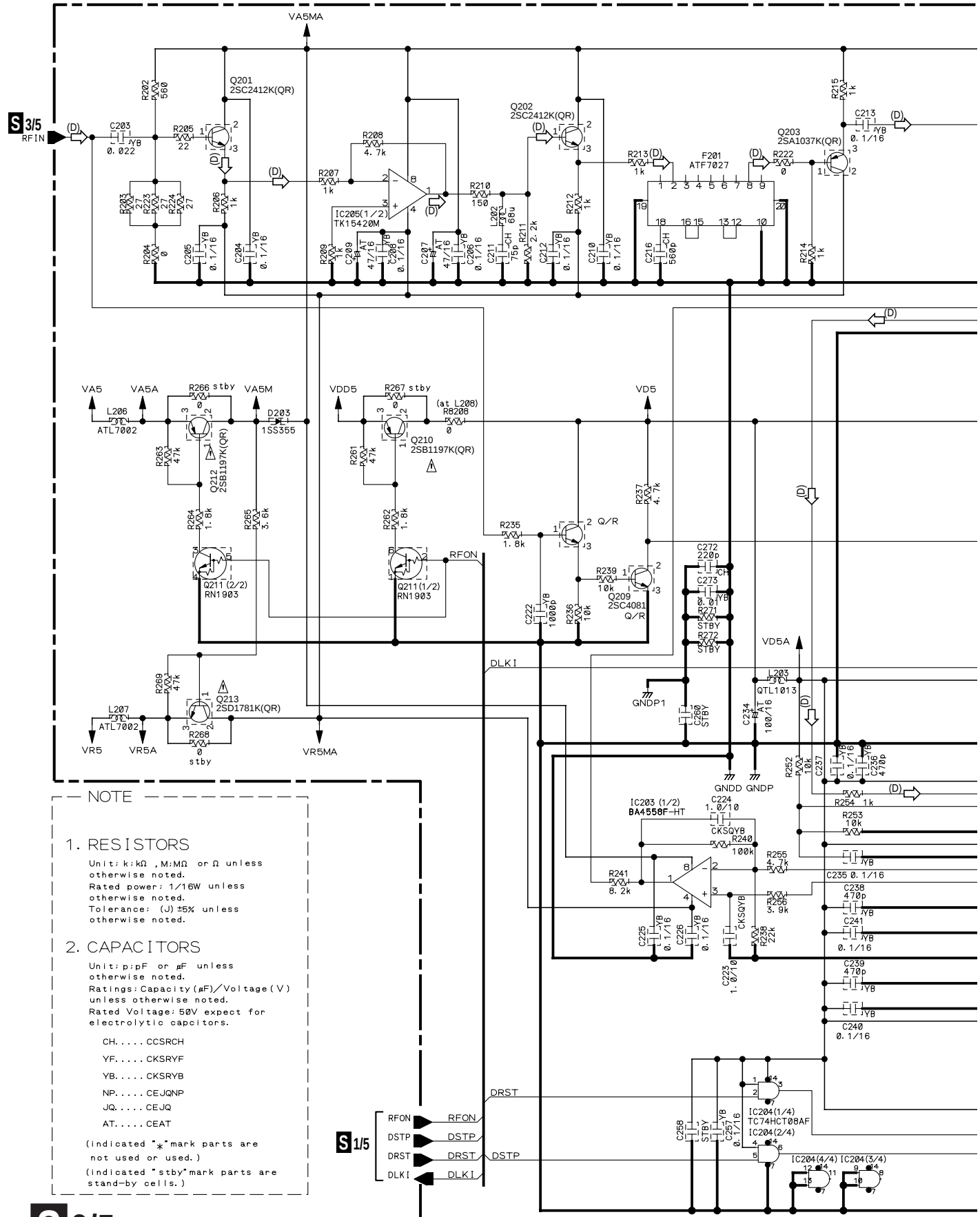
3.18 DSP ASSY (1/5)



D



3.19 DSP ASSY (2/5)



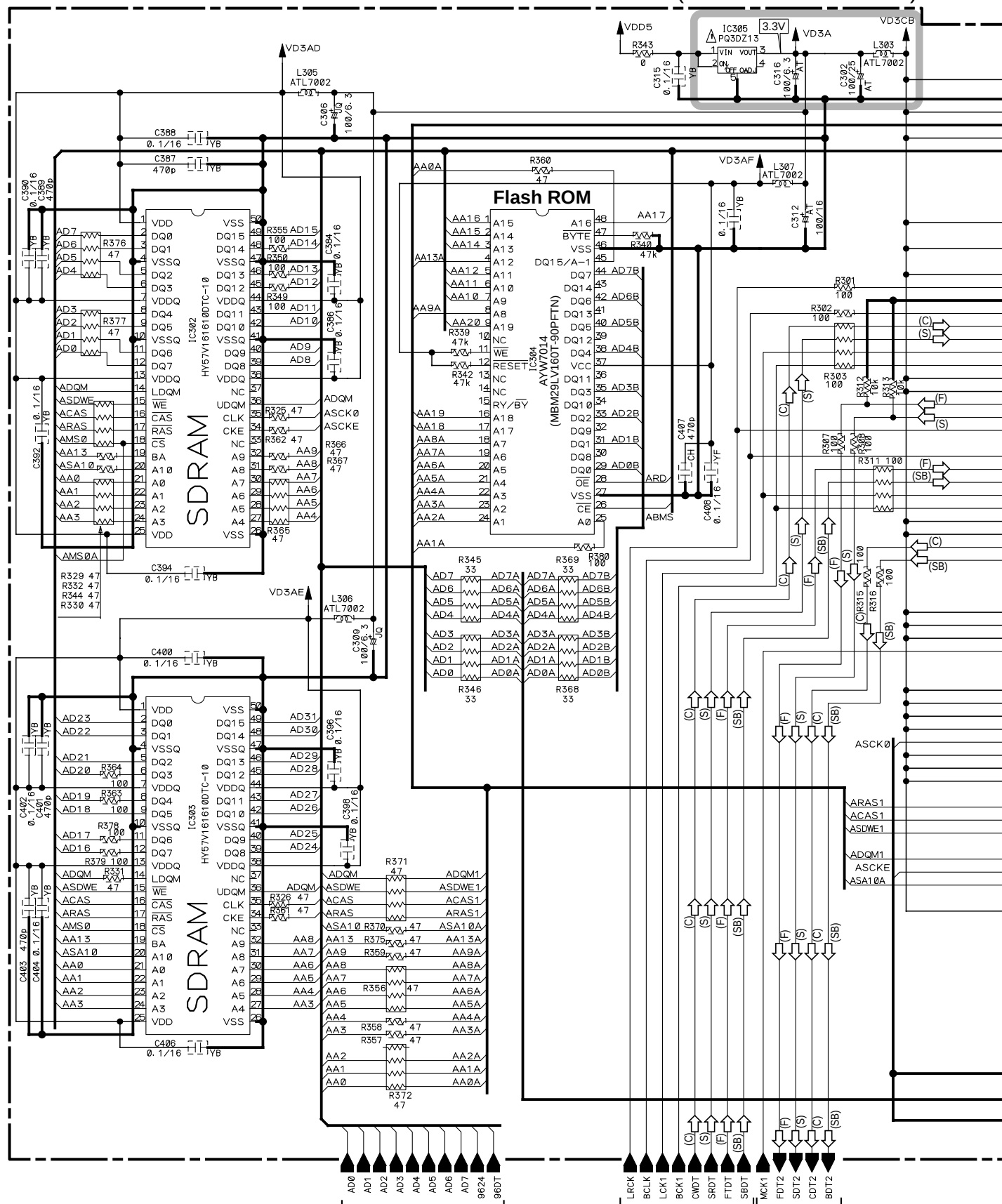


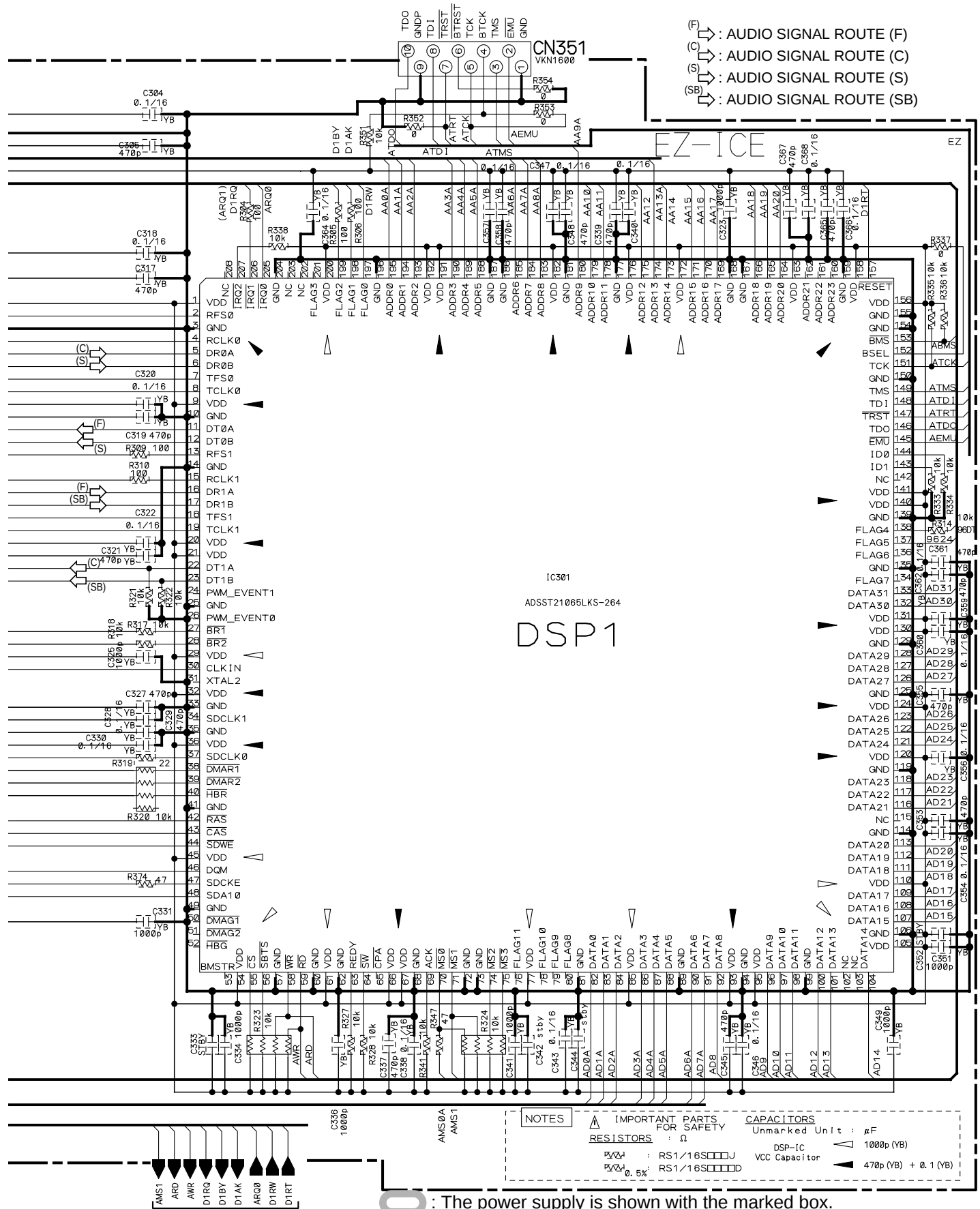
D



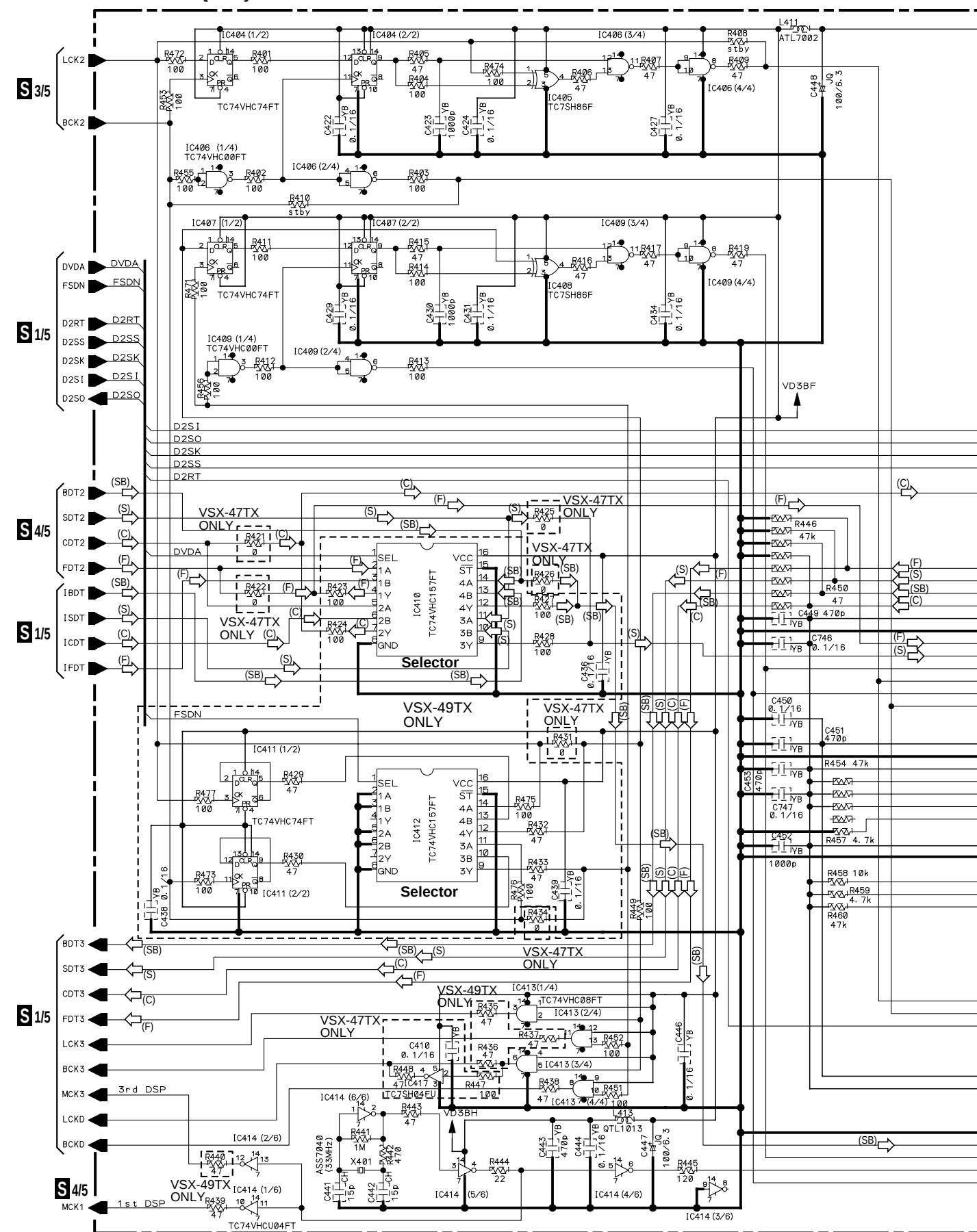
3.21 DSP ASSY (4/5)

S 4/5 DSP ASSY (VSX-49TX : AWX7719)
(VSX-47TX : AWX7720)





3.22 DSP ASSY (5/5)



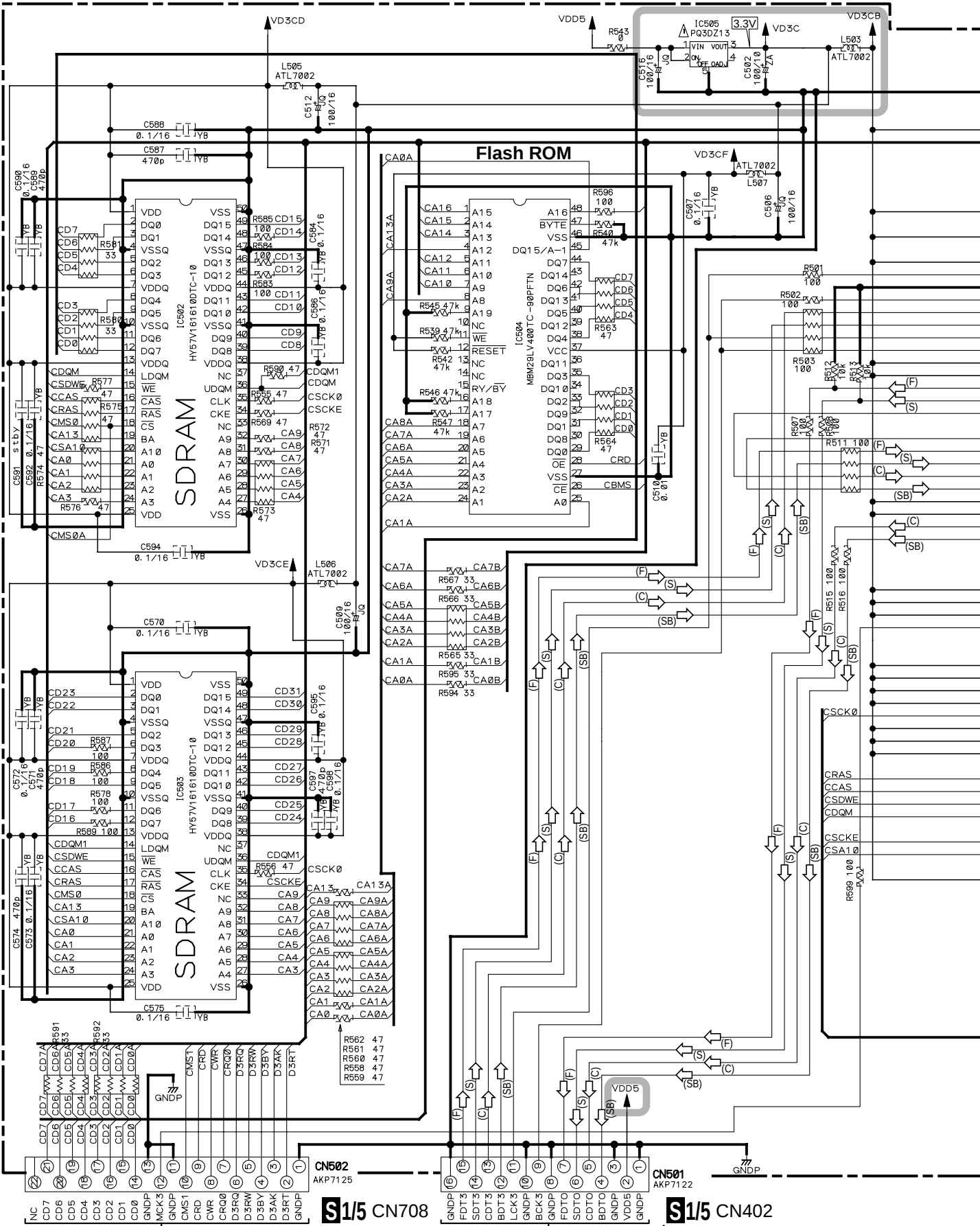
(F)  : AUDIO SIGNAL ROUTE (F)
(C)  : AUDIO SIGNAL ROUTE (C)
(S)  : AUDIO SIGNAL ROUTE (S)
(SB)  : AUDIO SIGNAL ROUTE (SB)



C

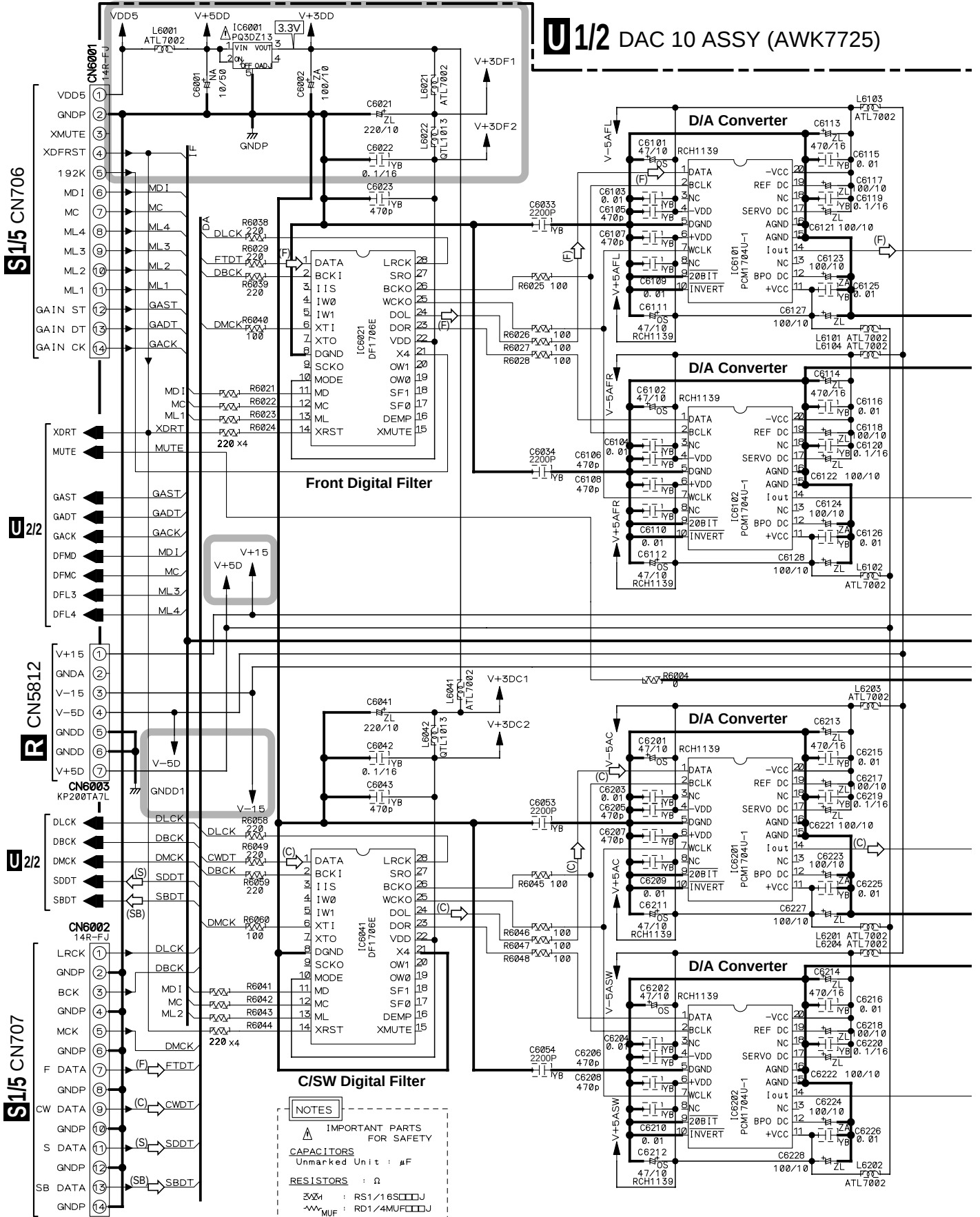
D

3.23 DSP3 ASSY (VSX-49TX ONLY)



3.24 DAC10 ASSY (1/2) (VSX-49TX ONLY)

U1/2 DAC 10 ASSY (AWK7725)



NOTES

▲ IMPORTANT PARTS FOR SAFETY

CAPACITORS
Unmarked Unit : μF

RESISTORS : Ω

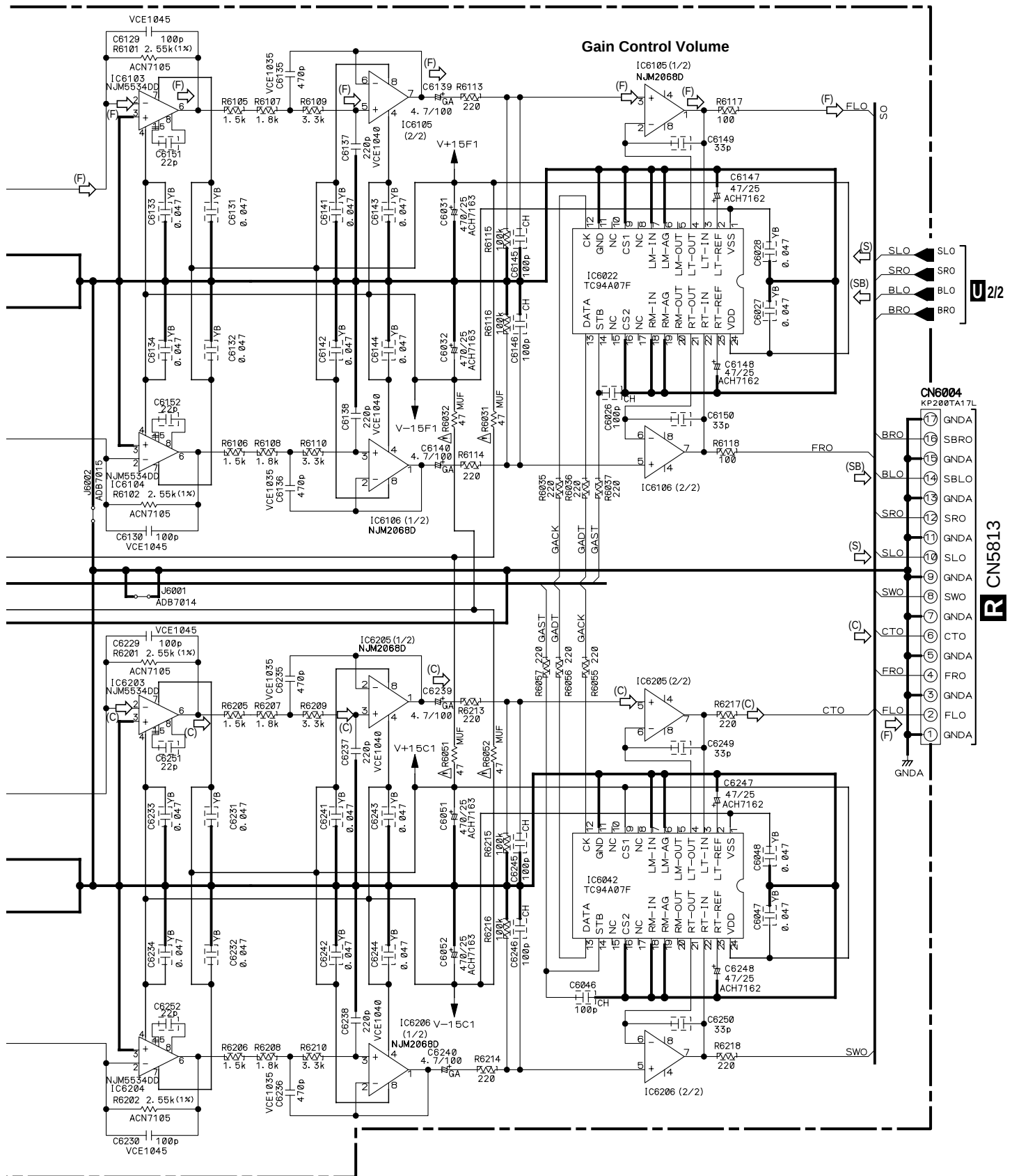
$\text{3W} \times 4$: RS1/16S□□□J

$\text{1/4W} \times 4$: RD1/4MU□□□J

: The power supply is shown with the marked box.

(F)  : AUDIO SIGNAL ROUTE (F)
(C)  : AUDIO SIGNAL ROUTE (C)
(S)  : AUDIO SIGNAL ROUTE (S)
(SB)  : AUDIO SIGNAL ROUTE (SB)

A



B

C

D

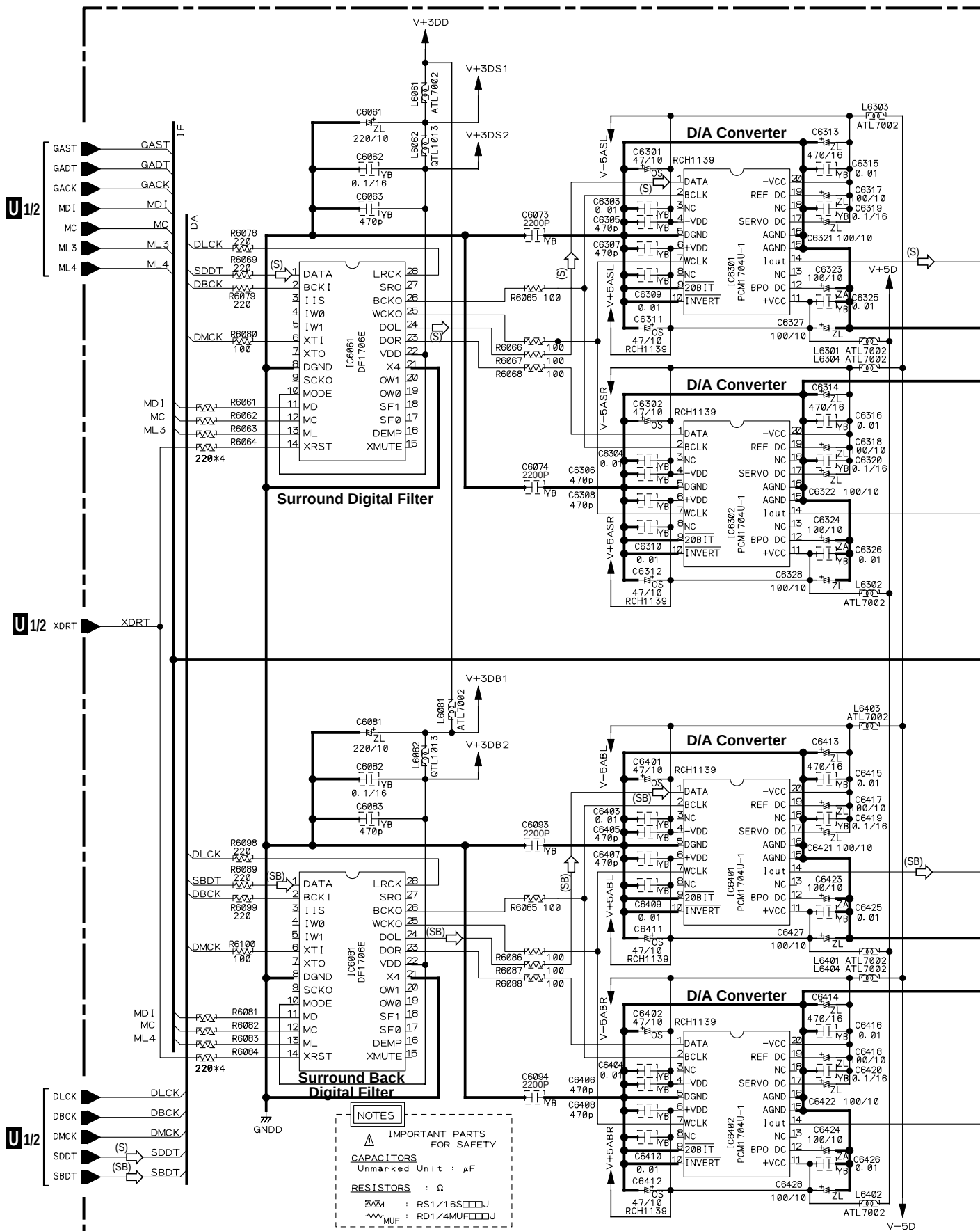
3.25 DAC10 ASSY (2/2) (VSX-49TX ONLY)

A

B

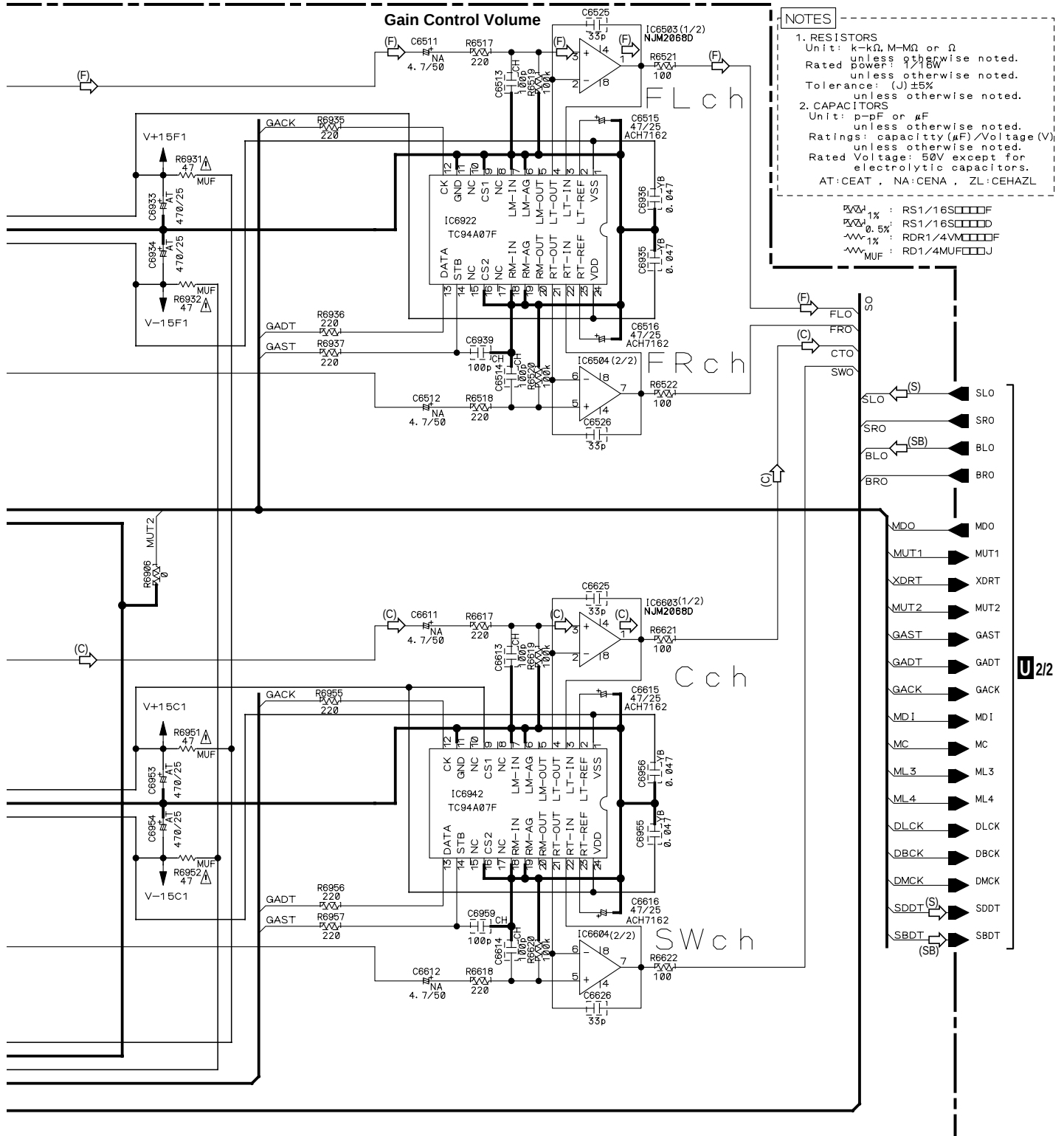
C

D



U1/2 DAC 8 ASSY (AWK7726)

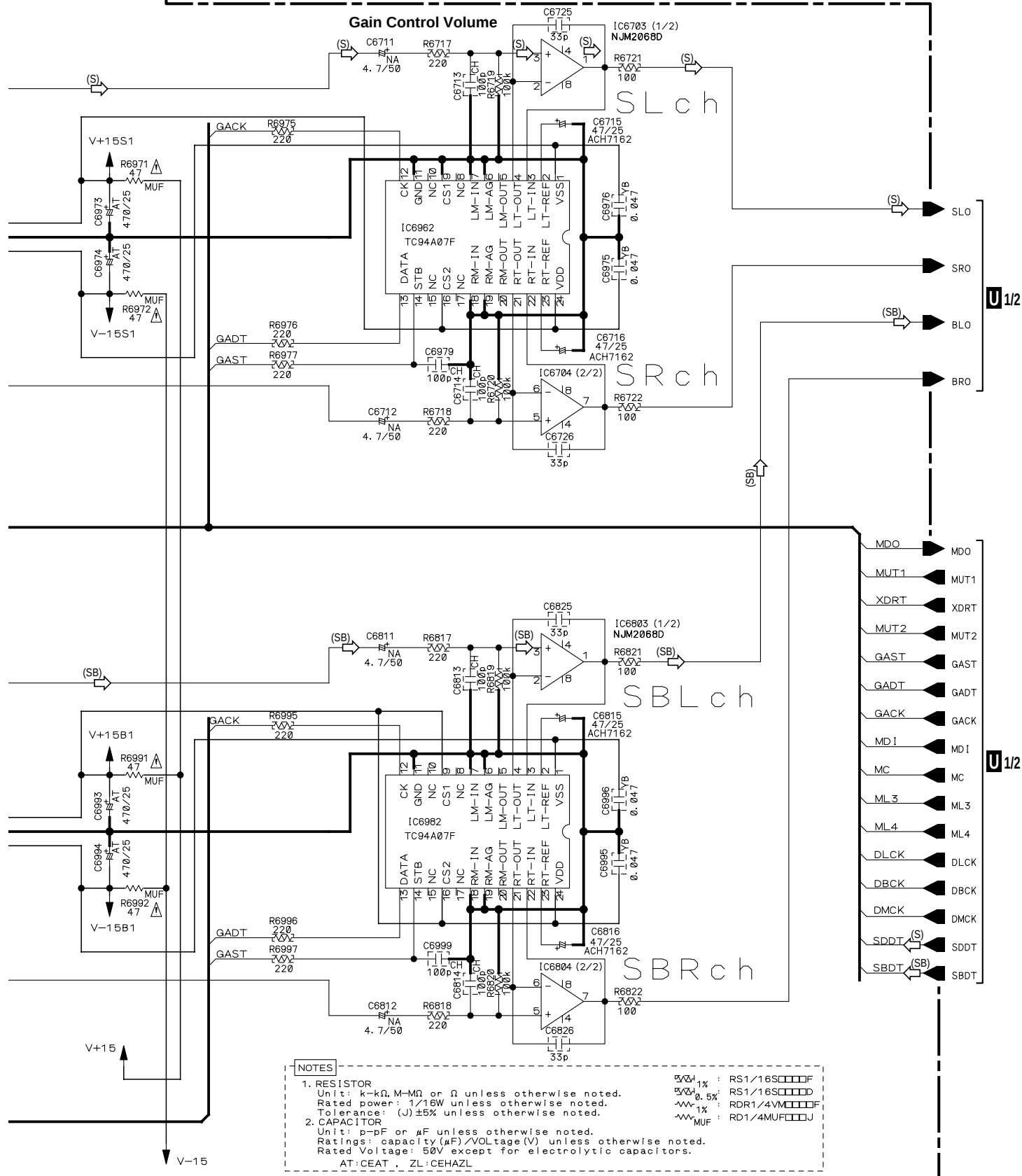
- (F) : AUDIO SIGNAL ROUTE (F)
 (C) : AUDIO SIGNAL ROUTE (C)
 (S) : AUDIO SIGNAL ROUTE (S)
 (SB) : AUDIO SIGNAL ROUTE (SB)



⌘ : The power supply is shown with the marked box.

U2/2 DAC 8 ASSY (AWK7726)

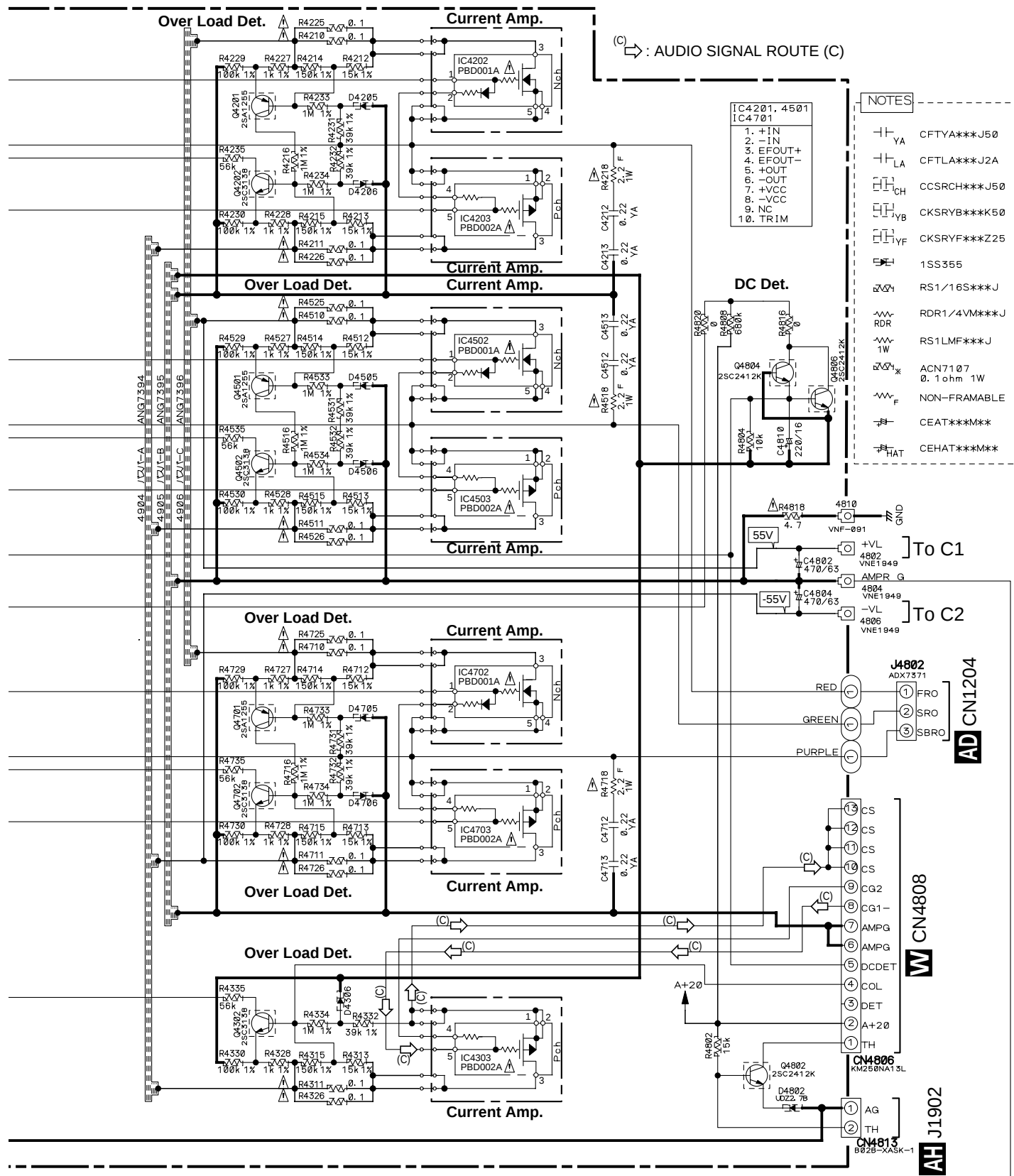
(S) : AUDIO SIGNAL ROUTE (S)
(SB) : AUDIO SIGNAL ROUTE (SB)



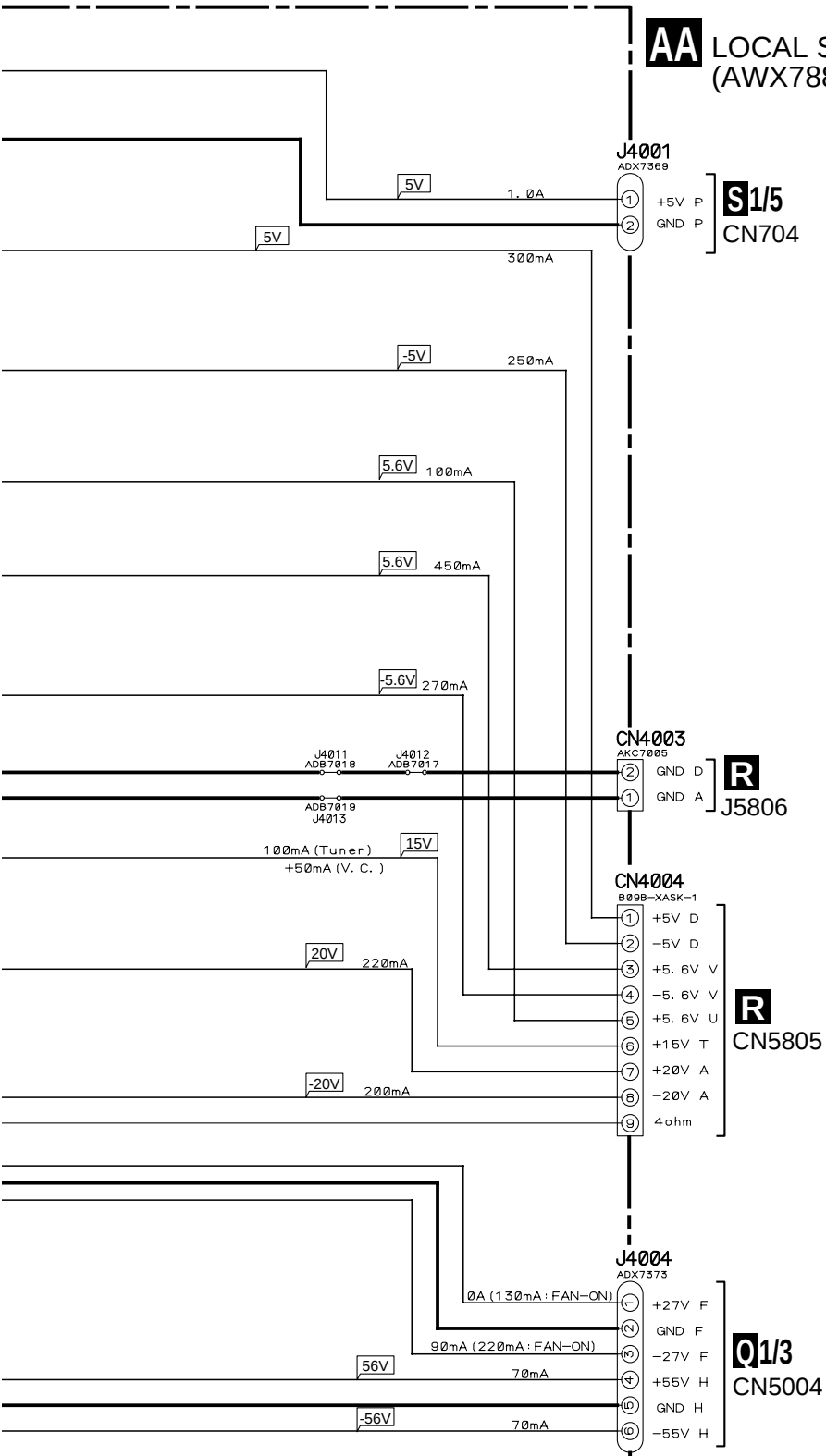


C

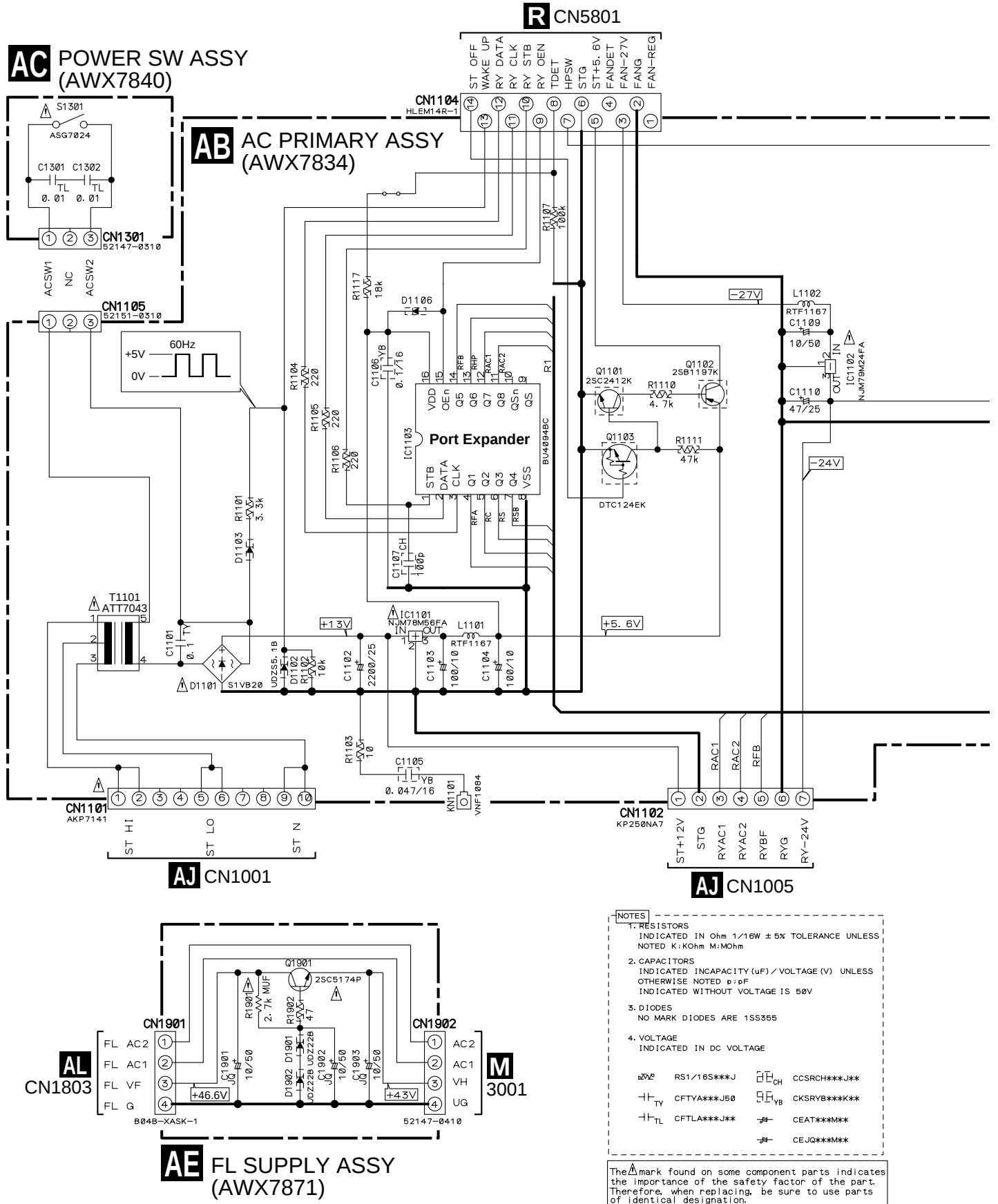
D

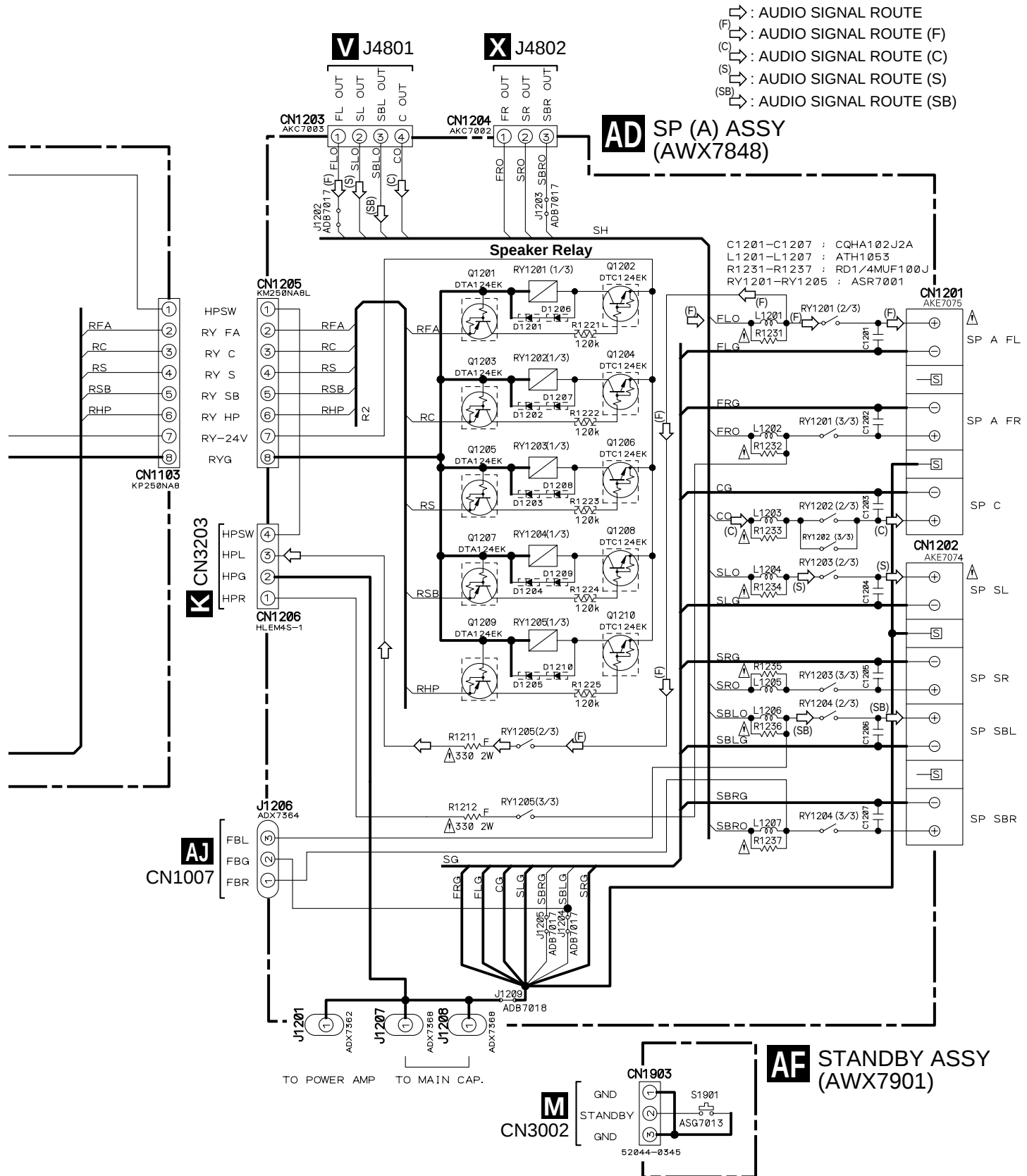


The mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.



3.31 AC PRIMARY, POWER SW, SP (A), FL SUPPLY and STANDBY ASSYS



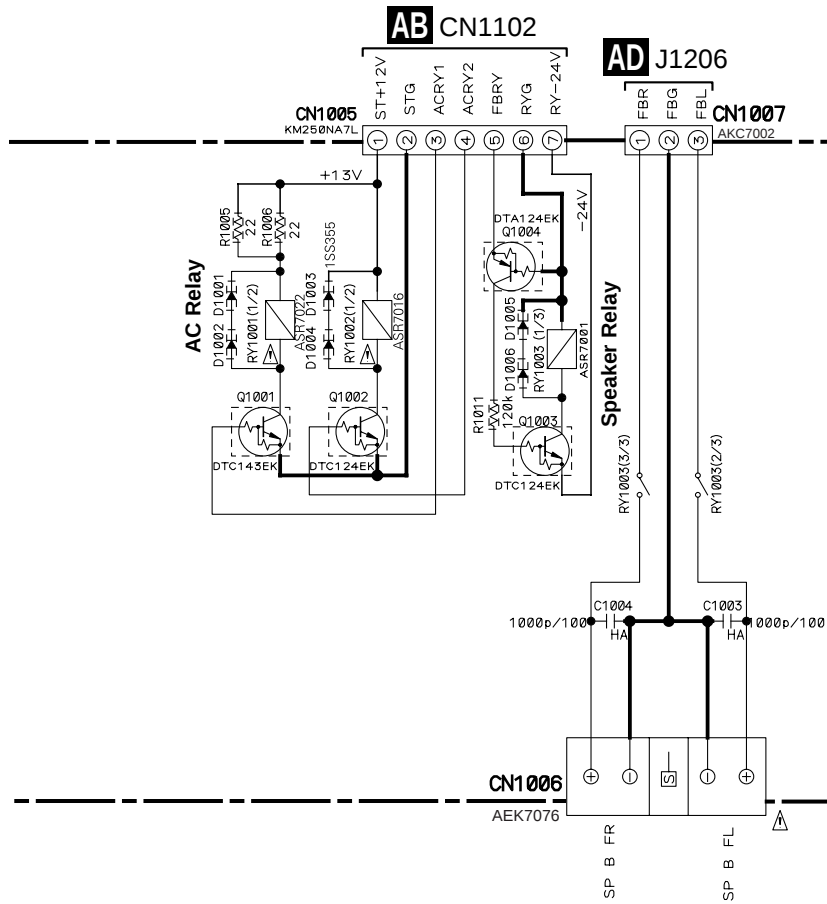


80 **AG AH AI AJ AK AM AN**



• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.



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.

NOTES

1. RESISTORS
INDICATED IN Ohm 1/16W $\pm 5\%$ TOLERANCE UNLESS NOTED K:KOhm M:MOhm
2. CAPACITORS
INDICATED INCAPACITY (μ F) / VOLTAGE (V) UNLESS OTHERWISE NOTED p:pF
INDICATED WITHOUT VOLTAGE IS 50V EXCEPT
3. DIODES
NO MARK DIODES ARE 1SS355
4. VOLTAGE
INDICATED IN DC VOLTAGE

Δ MUF RD1/8MUF***J

Δ MMF RD1/2MMF***J

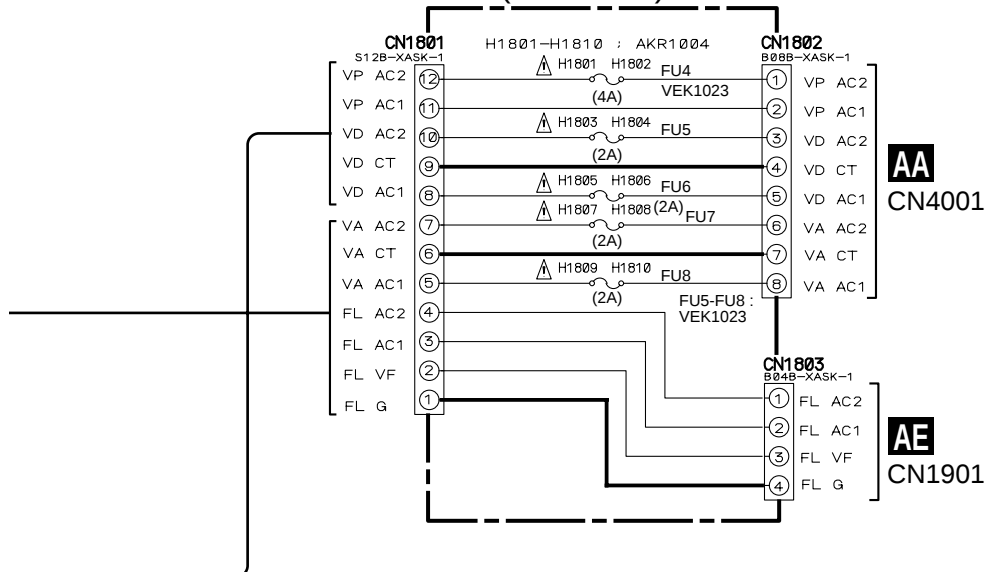
Δ TY CFTYA***J50

Δ HA CQHA***J**

Δ CEAT***M**

Δ JQ CEJQ***M**

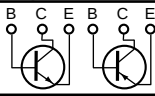
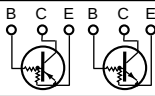
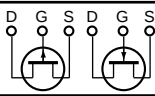
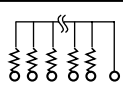
AL FUSE ASSY (AWX7843)



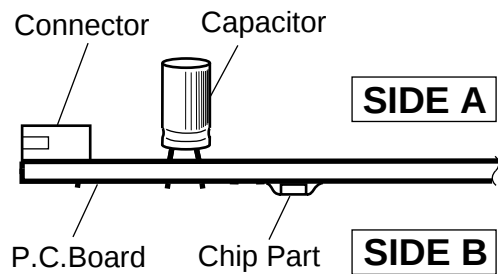
4. PCB CONNECTION DIAGRAM

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.

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

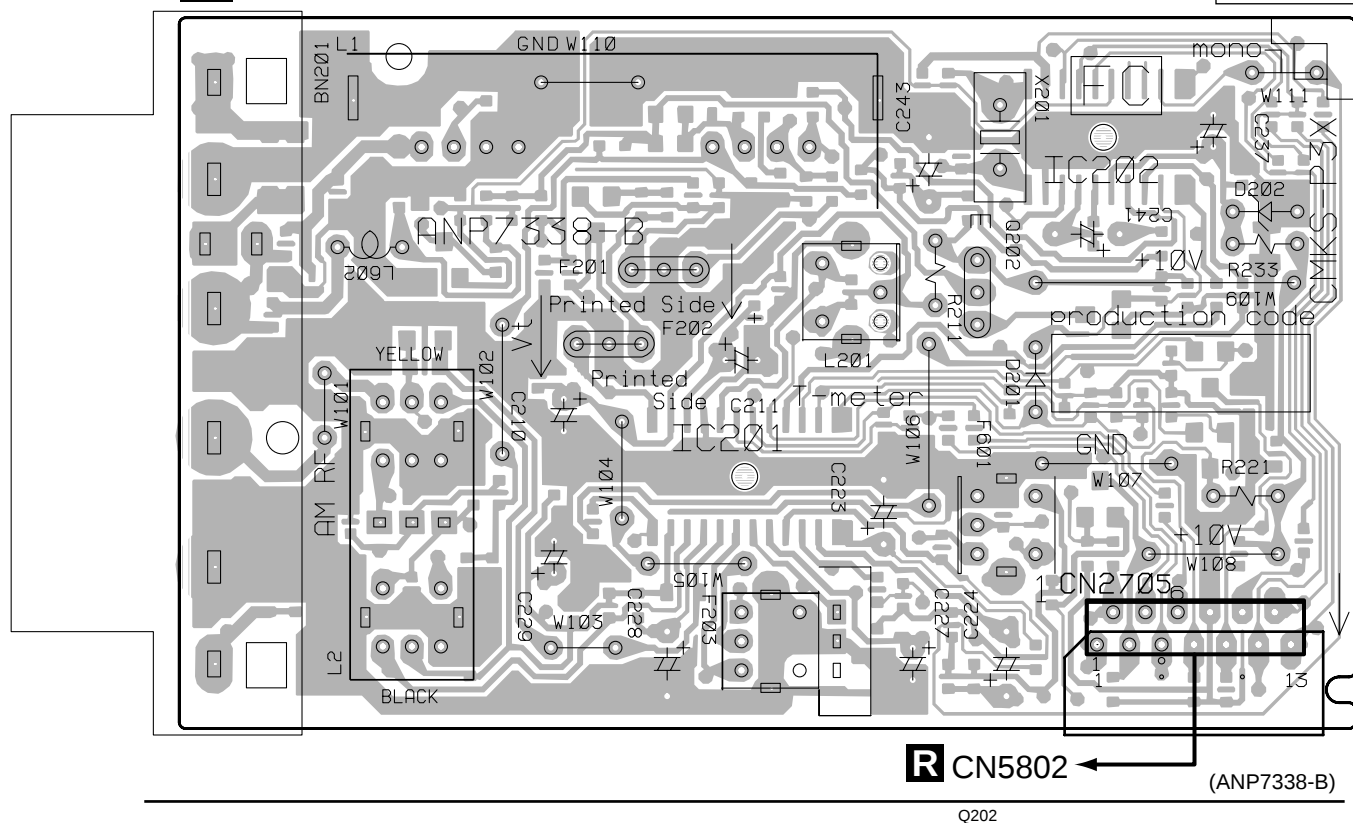
- 3. The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.
- 4. View point of PCB diagrams.



4.1 FM/AM TUNER MODULE

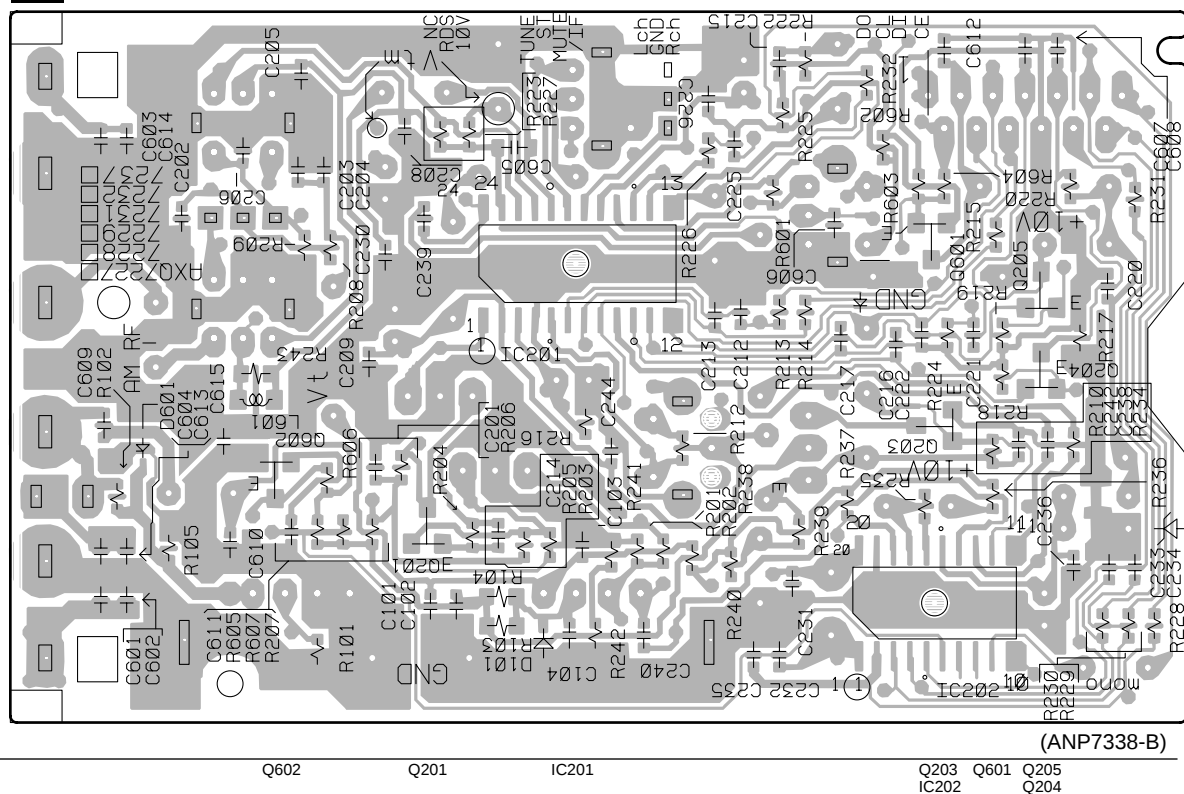
A FM/AM TUNER MODULE

SIDE A



A FM/AM TUNER MODULE

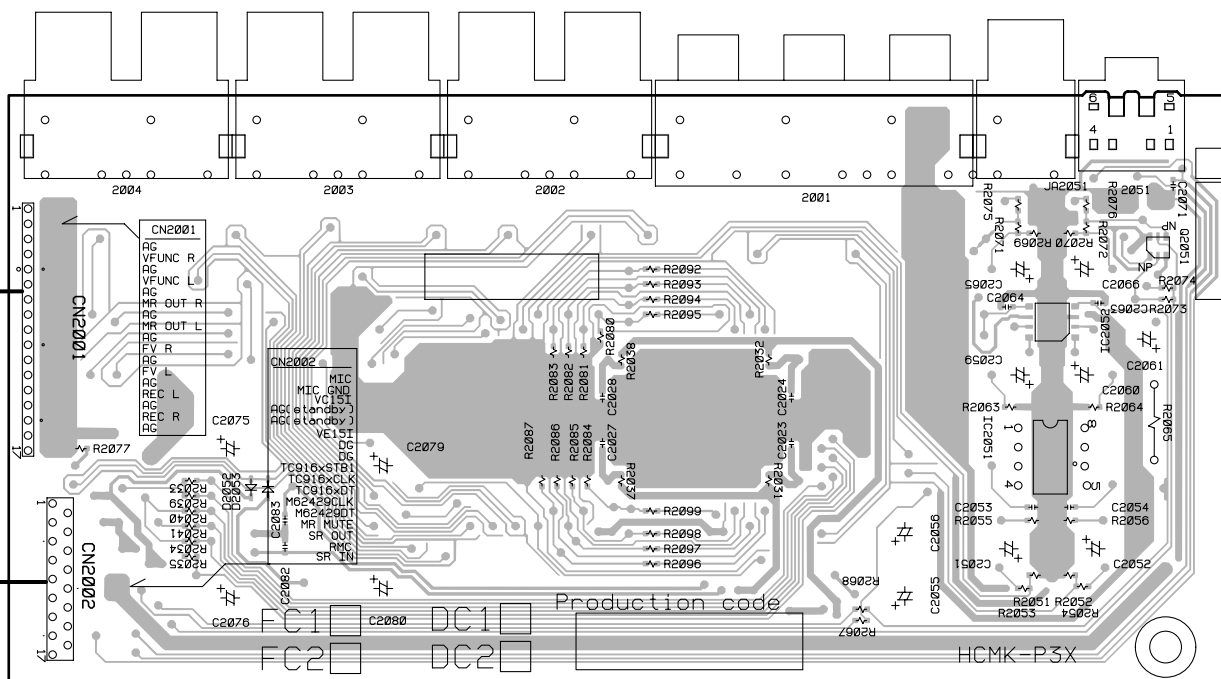
SIDE B



4.2 A/V I/O ASSY

B A/V I/O ASSY

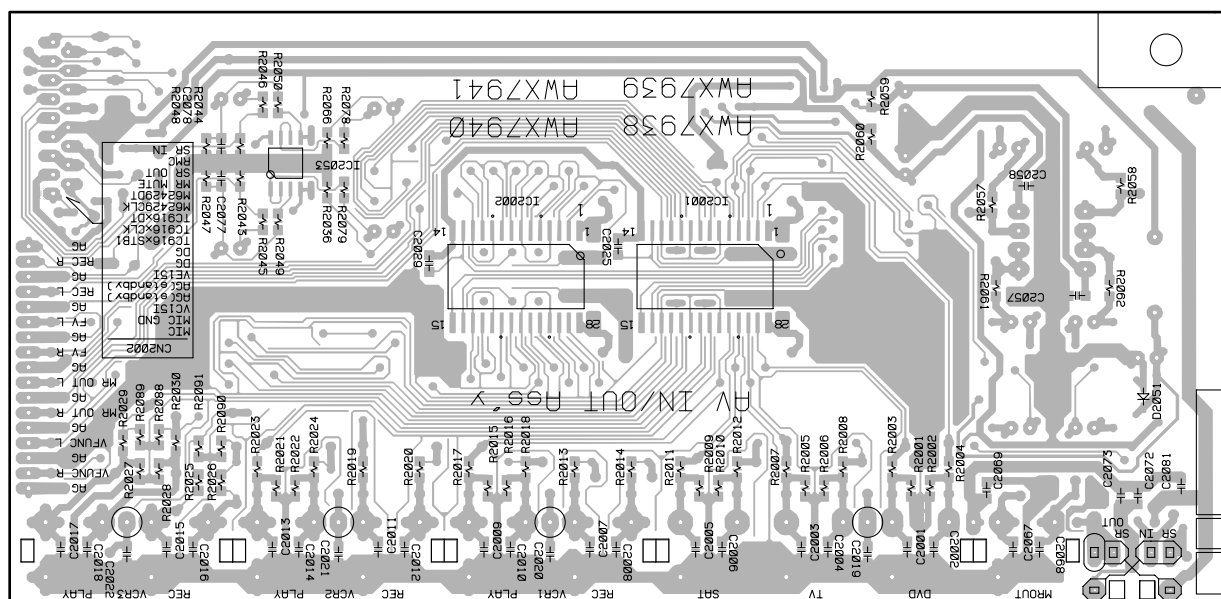
SIDE A



IC2051 IC2052 Q2051

(ANP7389-A)

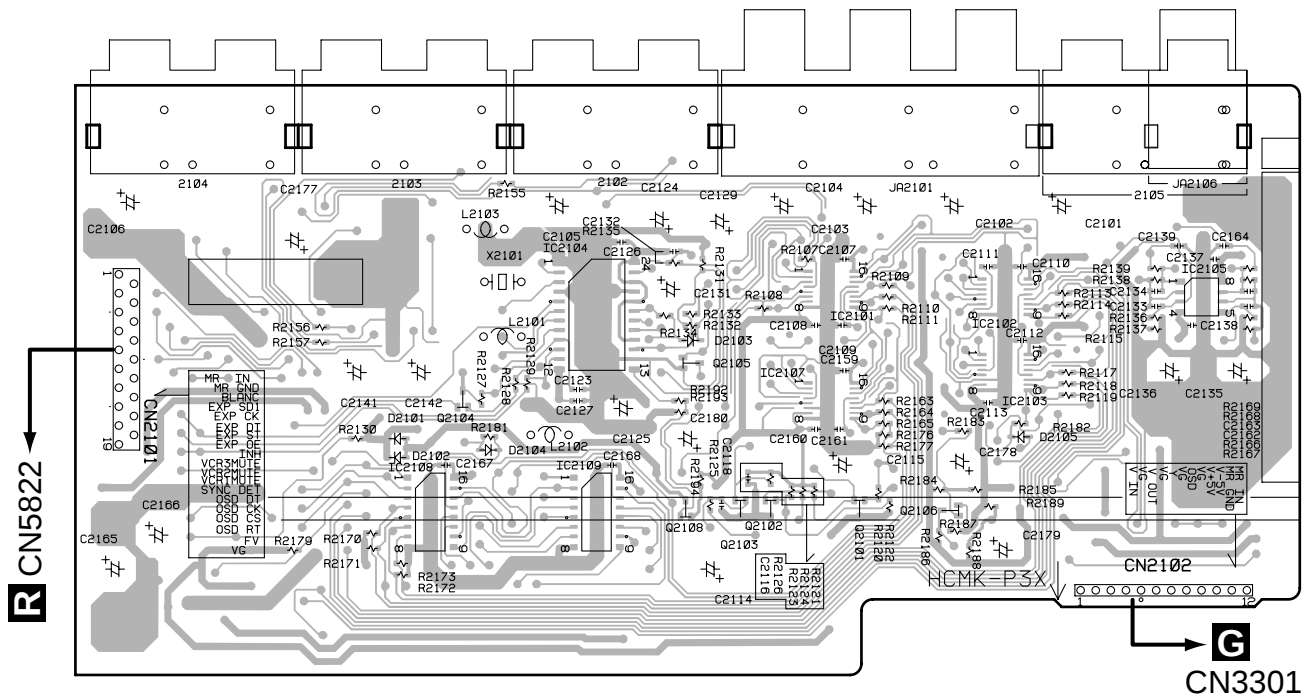
SIDE B



IC2053 IC2002 IC2001

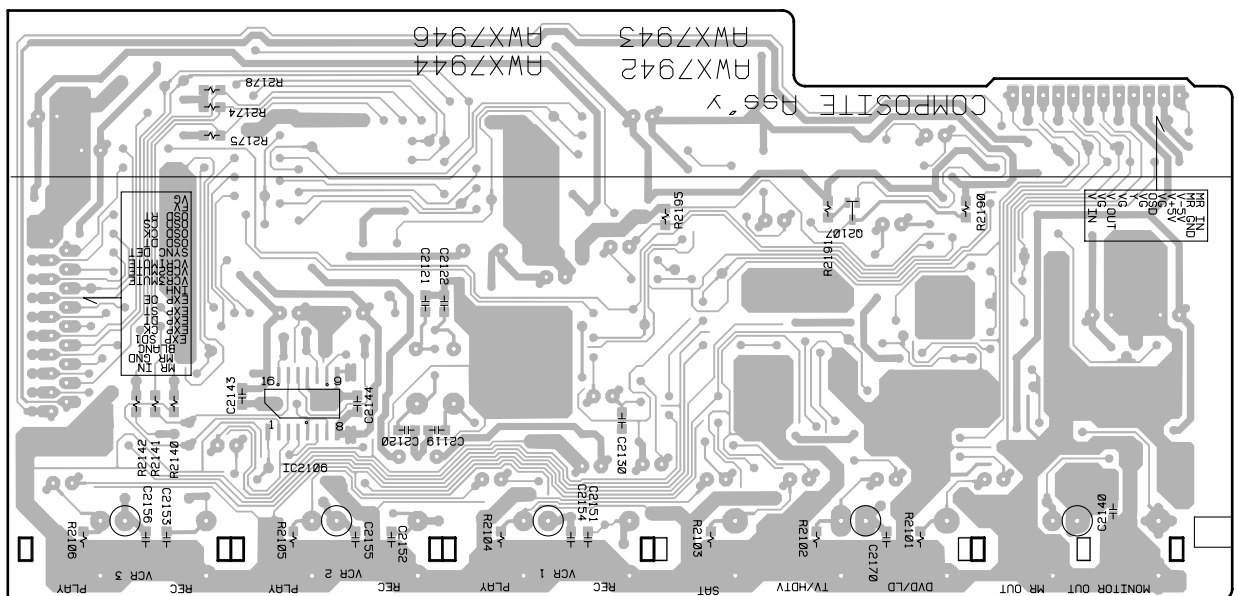
(ANP7389-A)

4.3 COMPOSITE ASSY

C COMPOSITE ASSY**SIDE A**

Q2104 IC2108 Q2105 IC2109 Q2103 Q2102 Q2101 IC2107 IC2101 IC2106 IC2102 IC2103 IC2105

(ANP7389-A)

SIDE B

IC2106

Q2107

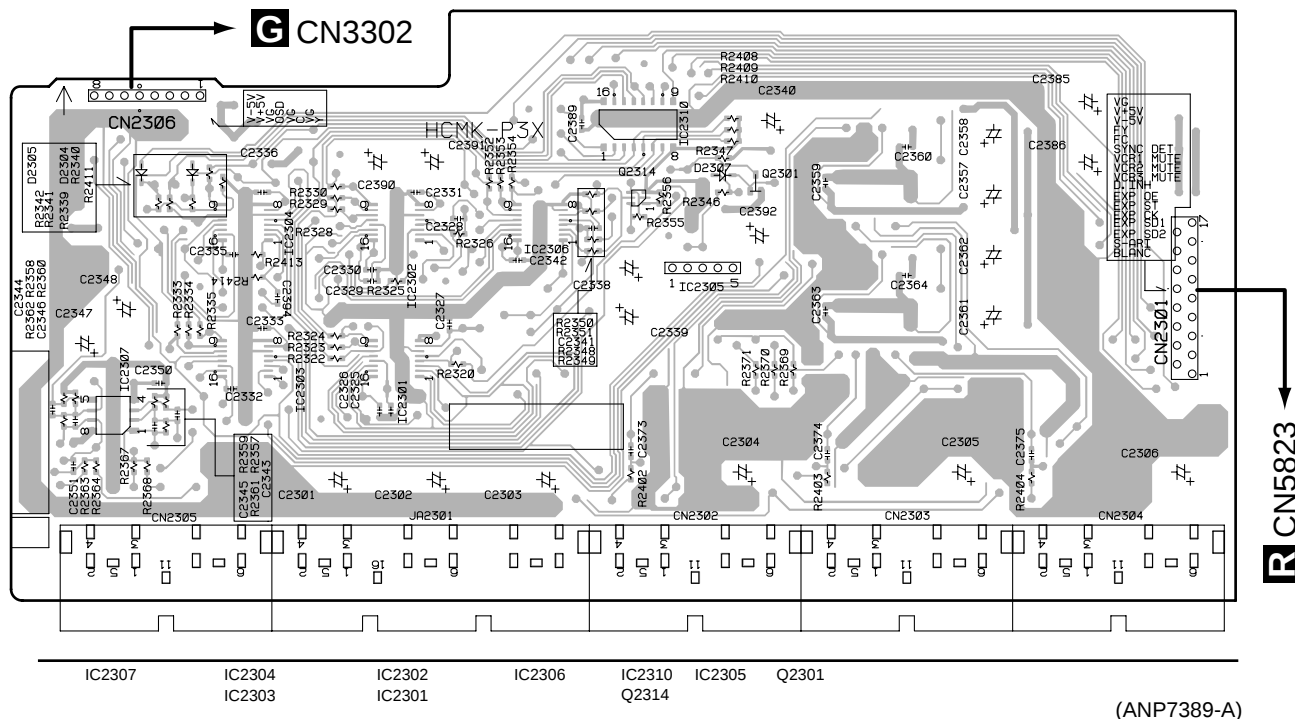
(ANP7389-A)

C

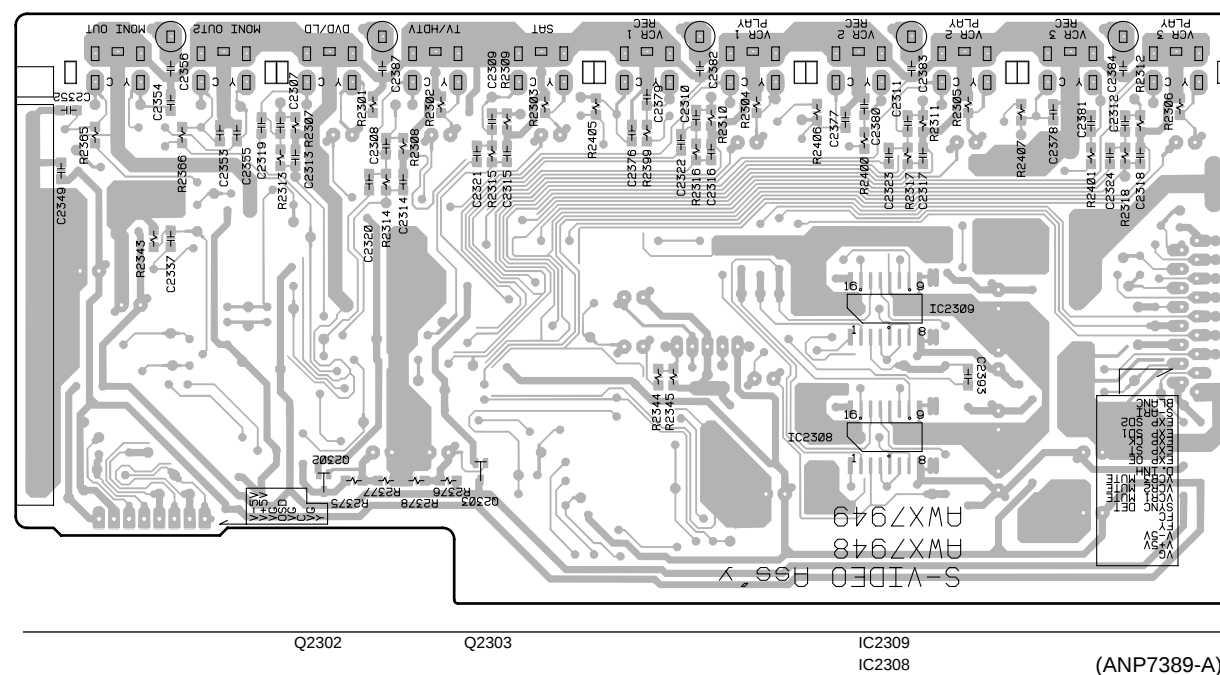
4.4 S-VIDEO ASSY

D S-VIDEO ASSY

SIDE A



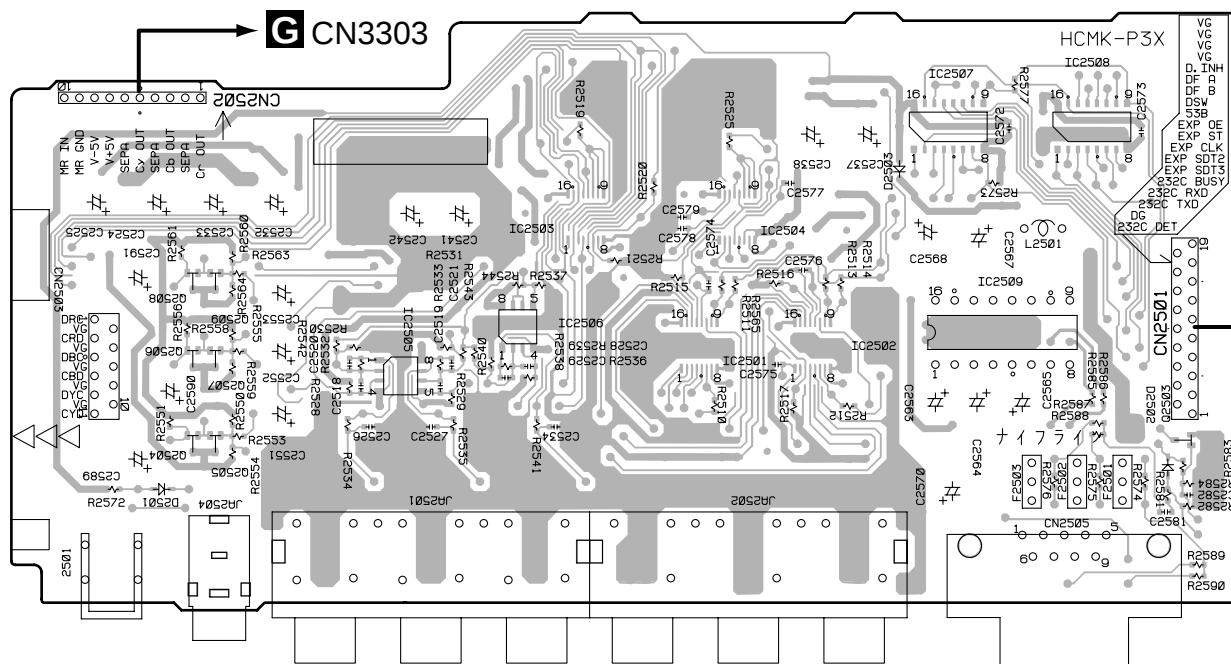
SIDE B



4.6 COMPONENT ASSY

COMPONENT ASSY

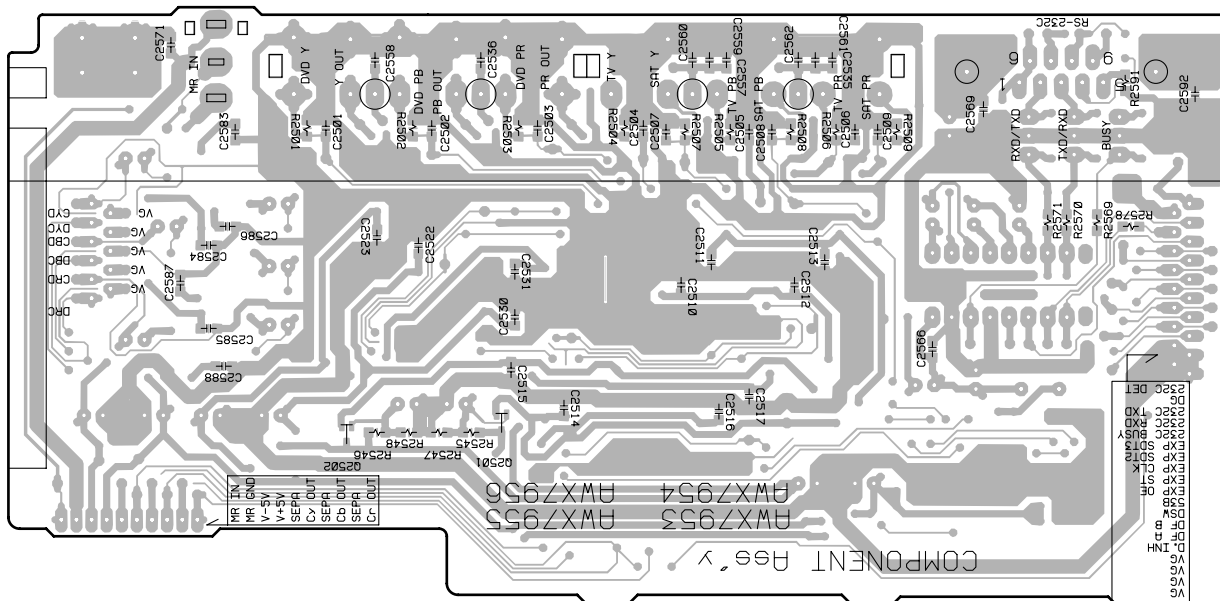
SIDE A



Q2508 Q2509 IC2505 IC2506 IC2503 IC2501 IC2504 IC2502 IC2507 IC2508
Q2506 Q2507
Q2504 Q2505

(ANP7389-A)

SIDE B



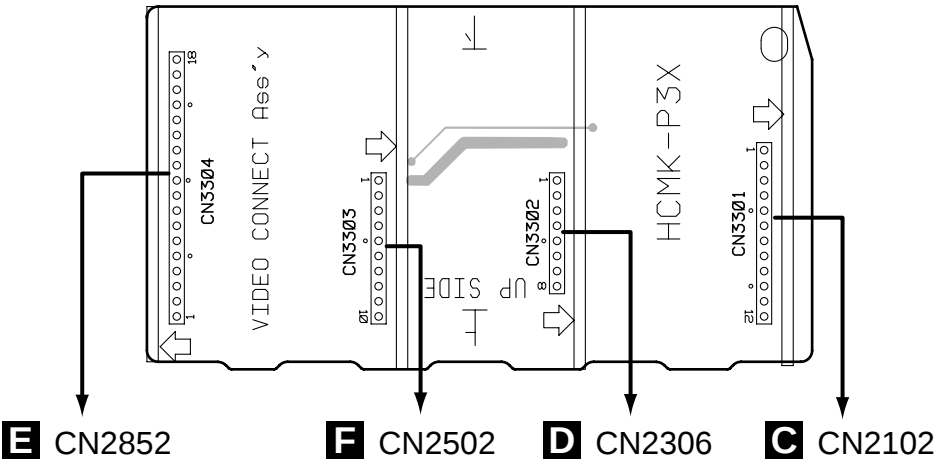
Q2502 Q2501

(ANP7389-A)

4.7 VIDEO CONNECT ASSY

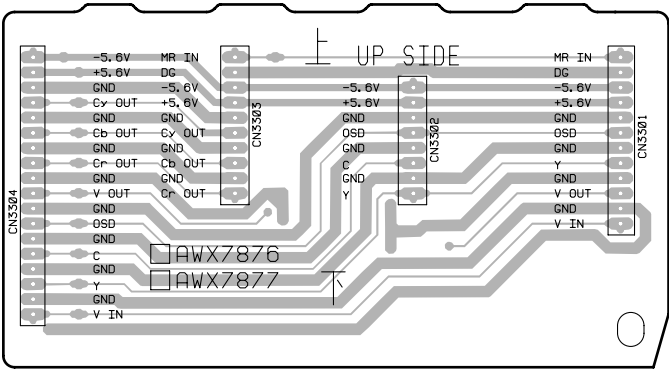
SIDE A

G VIDEO CONNECT ASSY



(ANP7390-A)

SIDE B

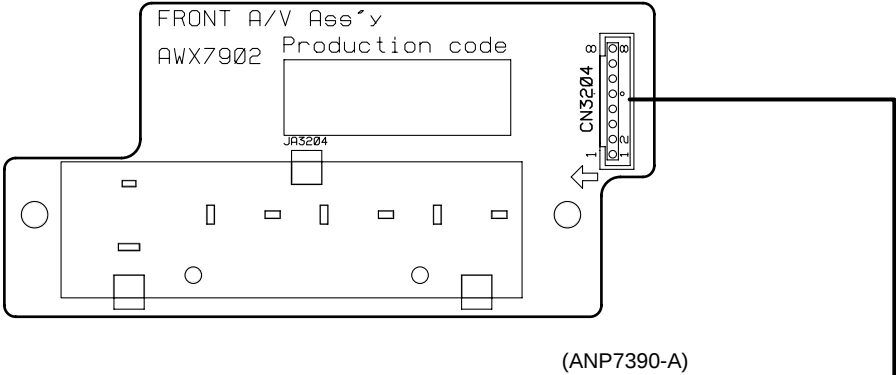


(ANP7390-A)

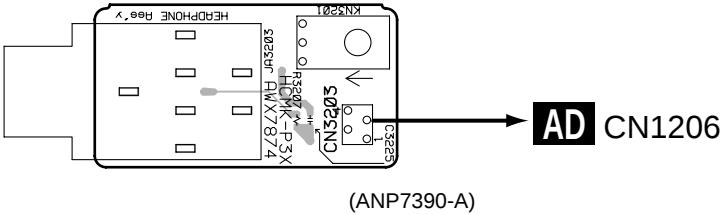
4.8 MIC AMP, MIC & OPT, RFONT A/V and HEADPHONE ASSYS

J FRONT A/V ASSY

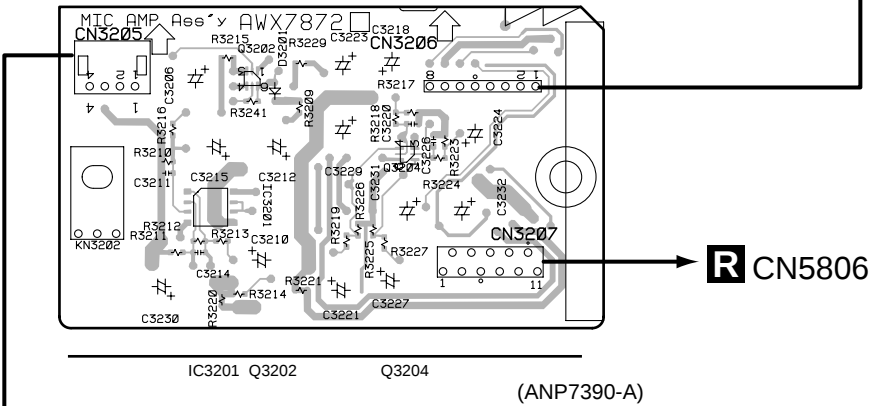
SIDE A



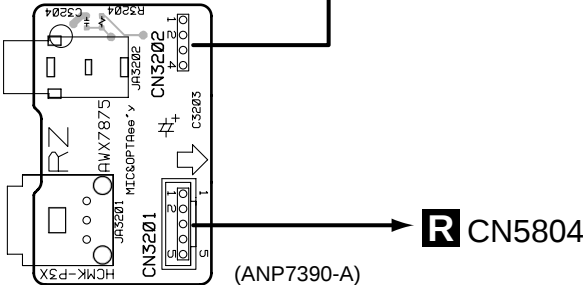
K HEADPHONE ASSY



H MIC AMP ASSY



I MIC & OPT ASSY



4.9 ANALOG IN & A/D ASSY

ANALOG IN & A/D ASSY

SIDE A

A

B

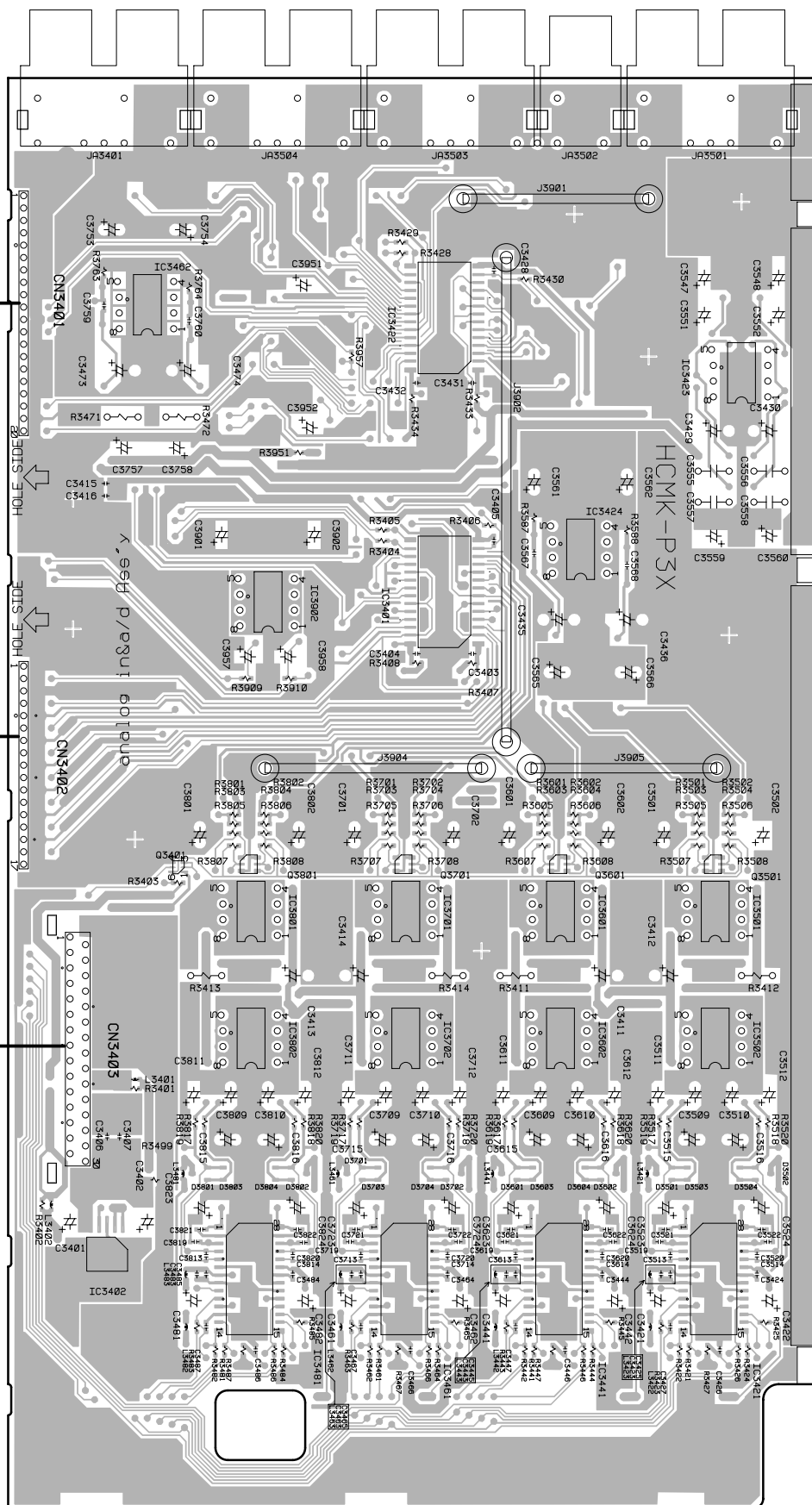
C

D

R CN5814

R CN5815

R CN5816



IC3462
IC3422

IC3423

IC3424

IC3401

IC3902

Q3401 Q3601
Q3801 Q3501

IC3801 IC3601
IC3701 IC3501

IC3802 IC3602
IC3702 IC3502

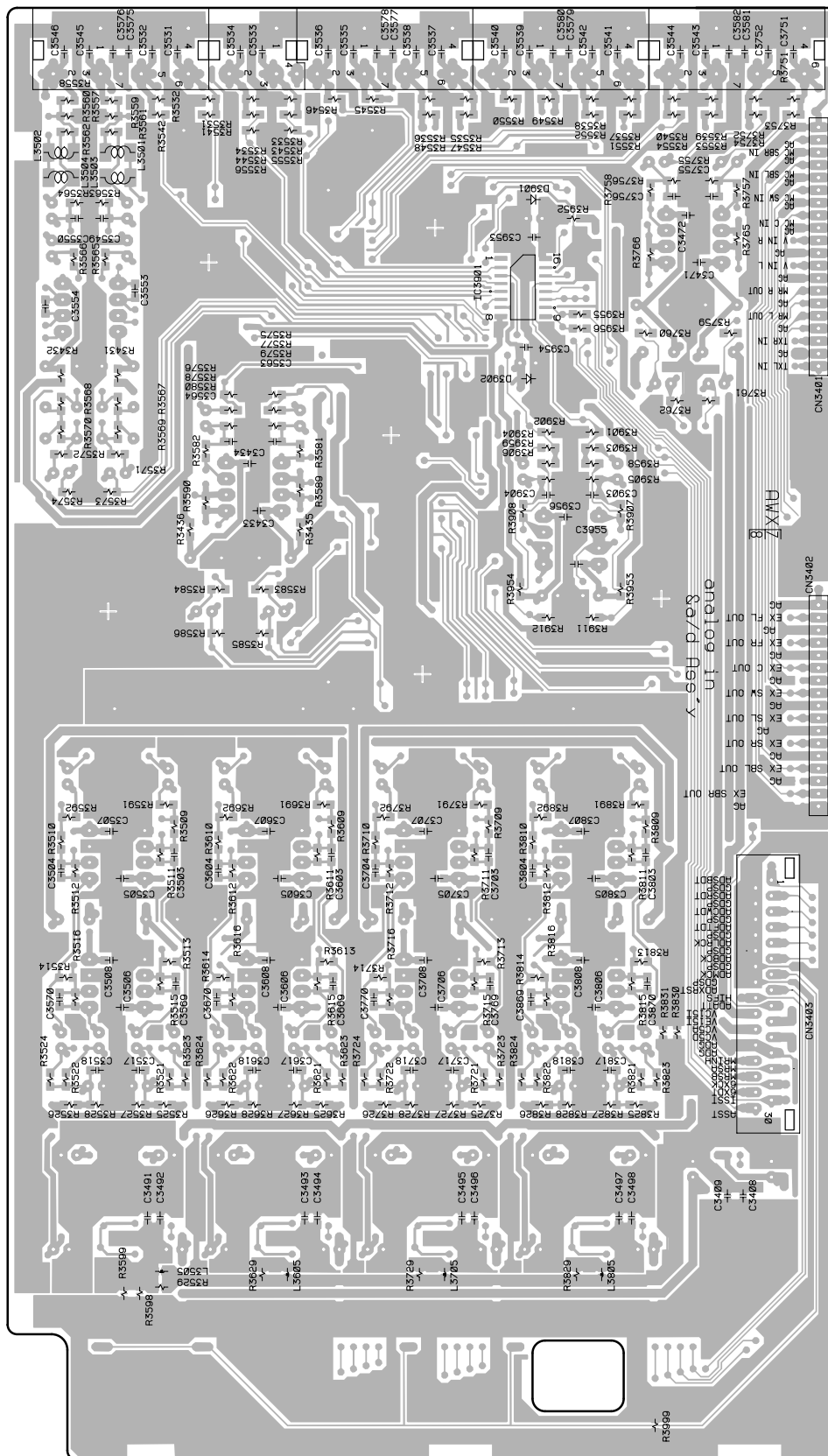
IC3402

IC3481 IC3441
IC3461 IC3421

(ANP7390-A)

SIDE B

ANALOG IN & A/D ASSY



IC3901

XW

XW

XW

XW

XW

XW

XW

XW

XW

XW

XW

XW

XW

XW

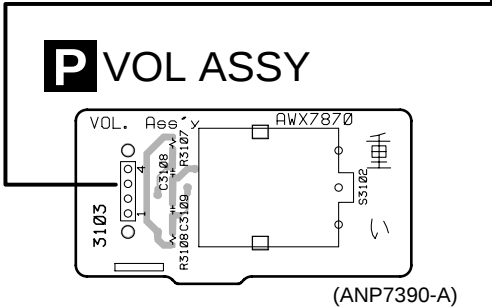
XW

XW

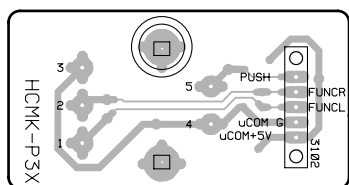
XW

(ANP7390-A)

D



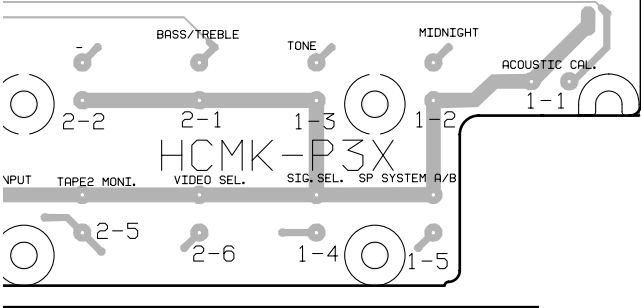
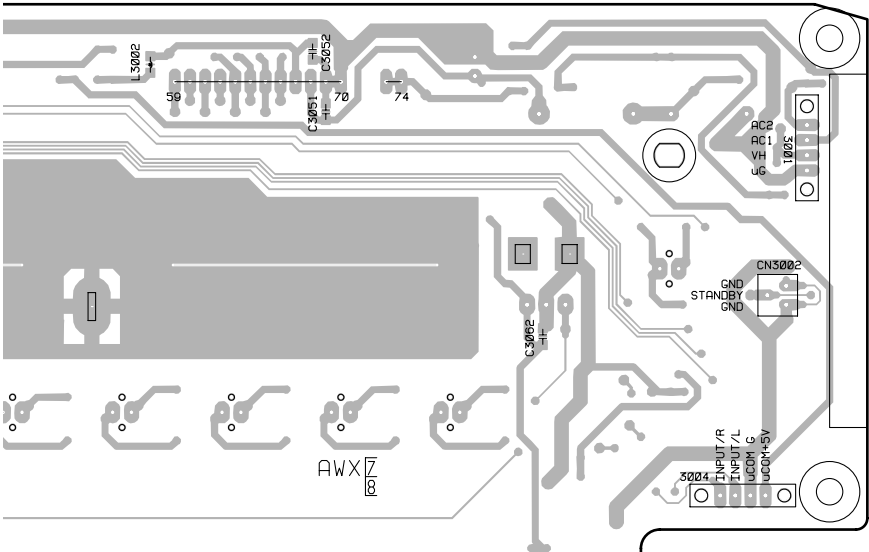
AE



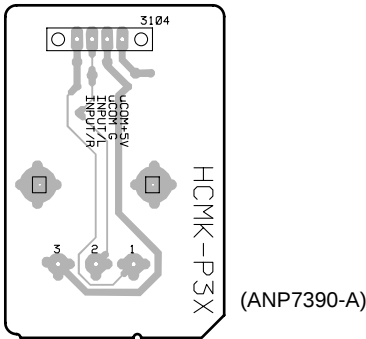
C

(ANP7390-A)

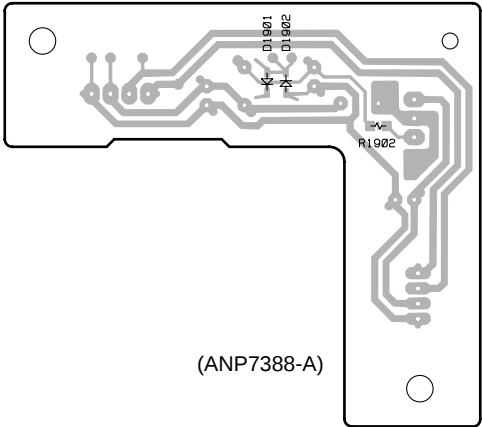
SIDE B



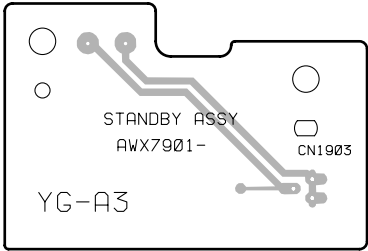
N INPUT
SEL ASSY



AE FL SUPPLY ASSY



AF STANDBY ASSY



4.11 VR & PRE OUT ASSY

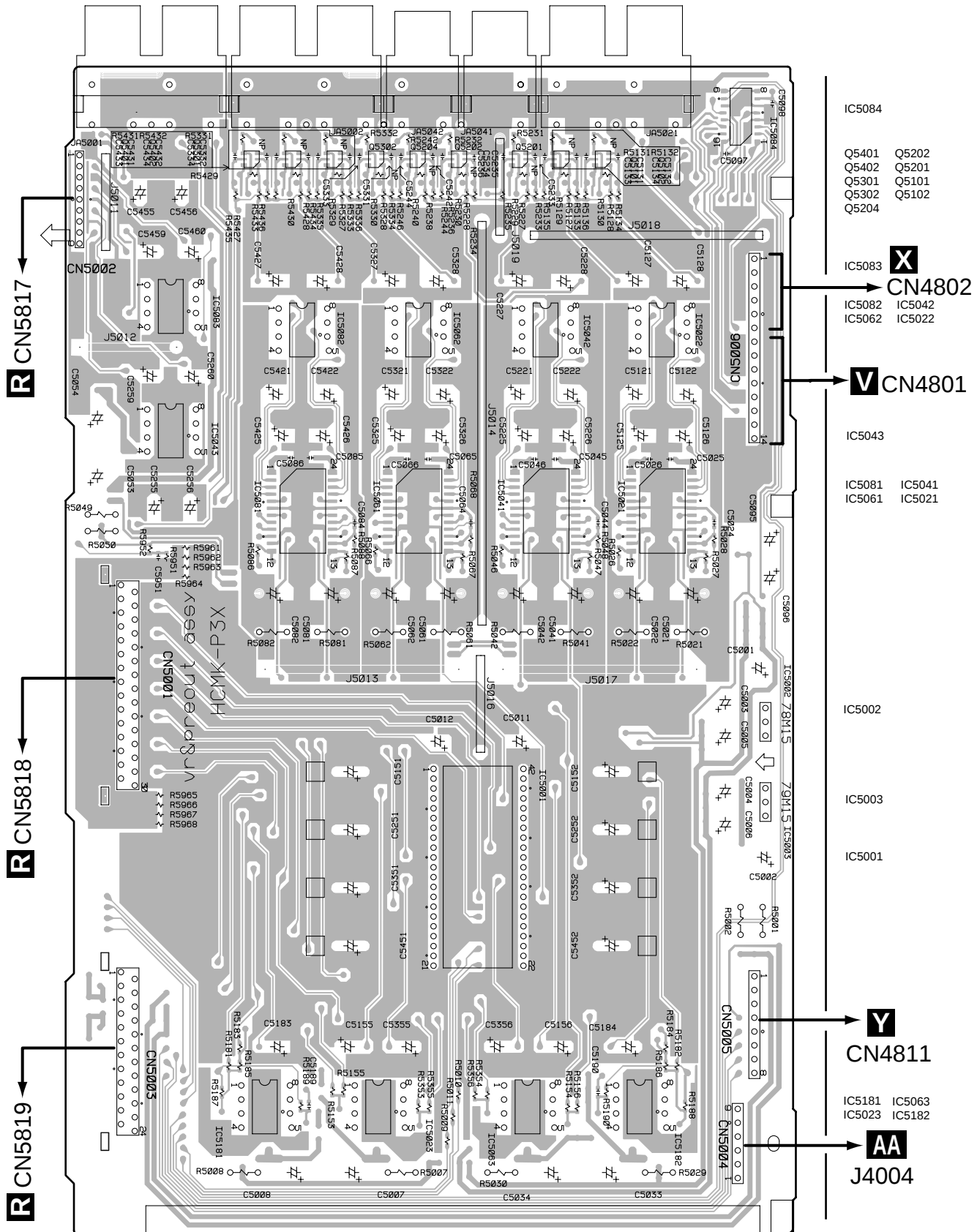
VR & PRE OUT ASSY

A

B

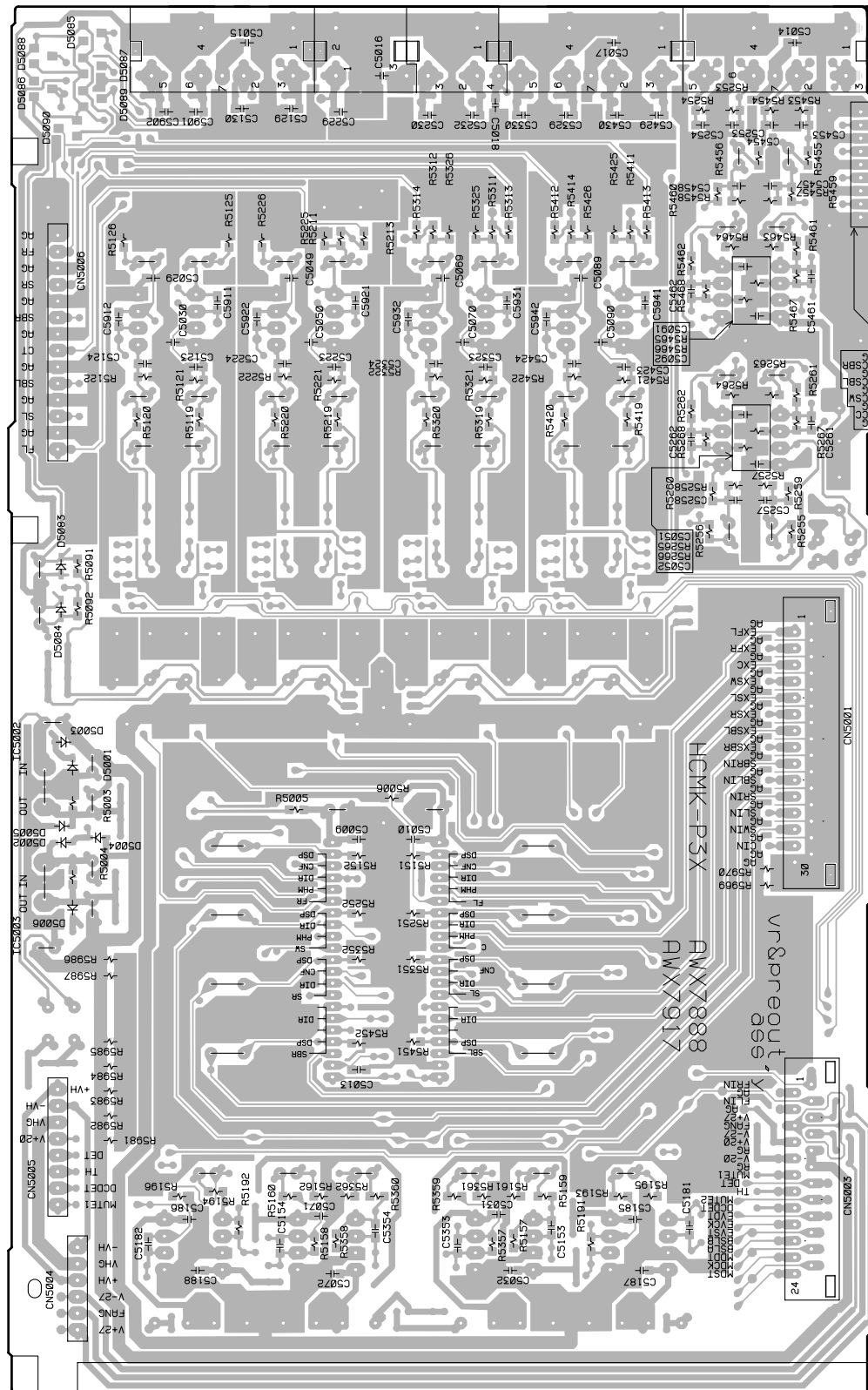
C

D



(ANP7392-A)

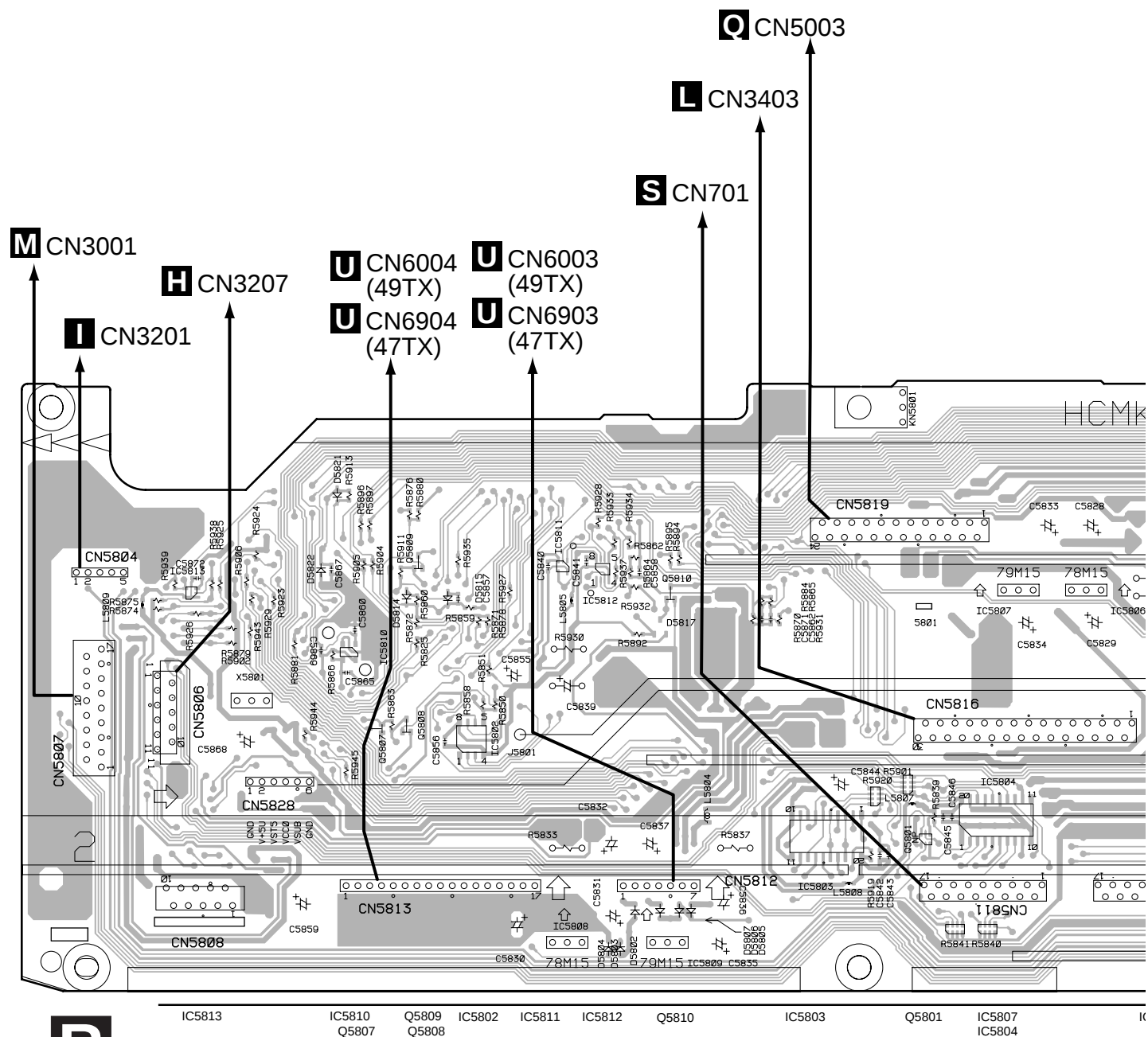
VR & PRE OUT ASSY



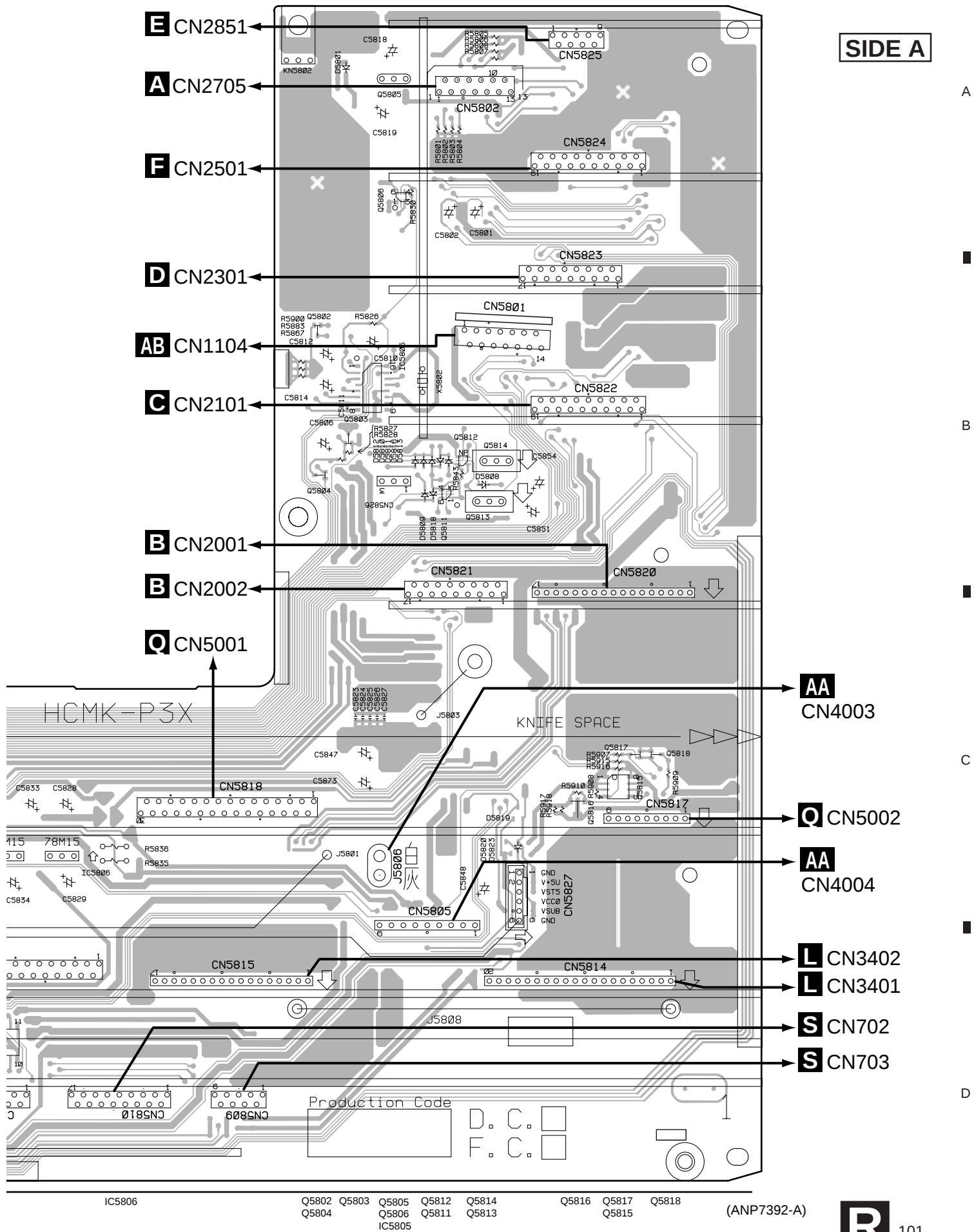
(ANP7392-A)

SIDE B

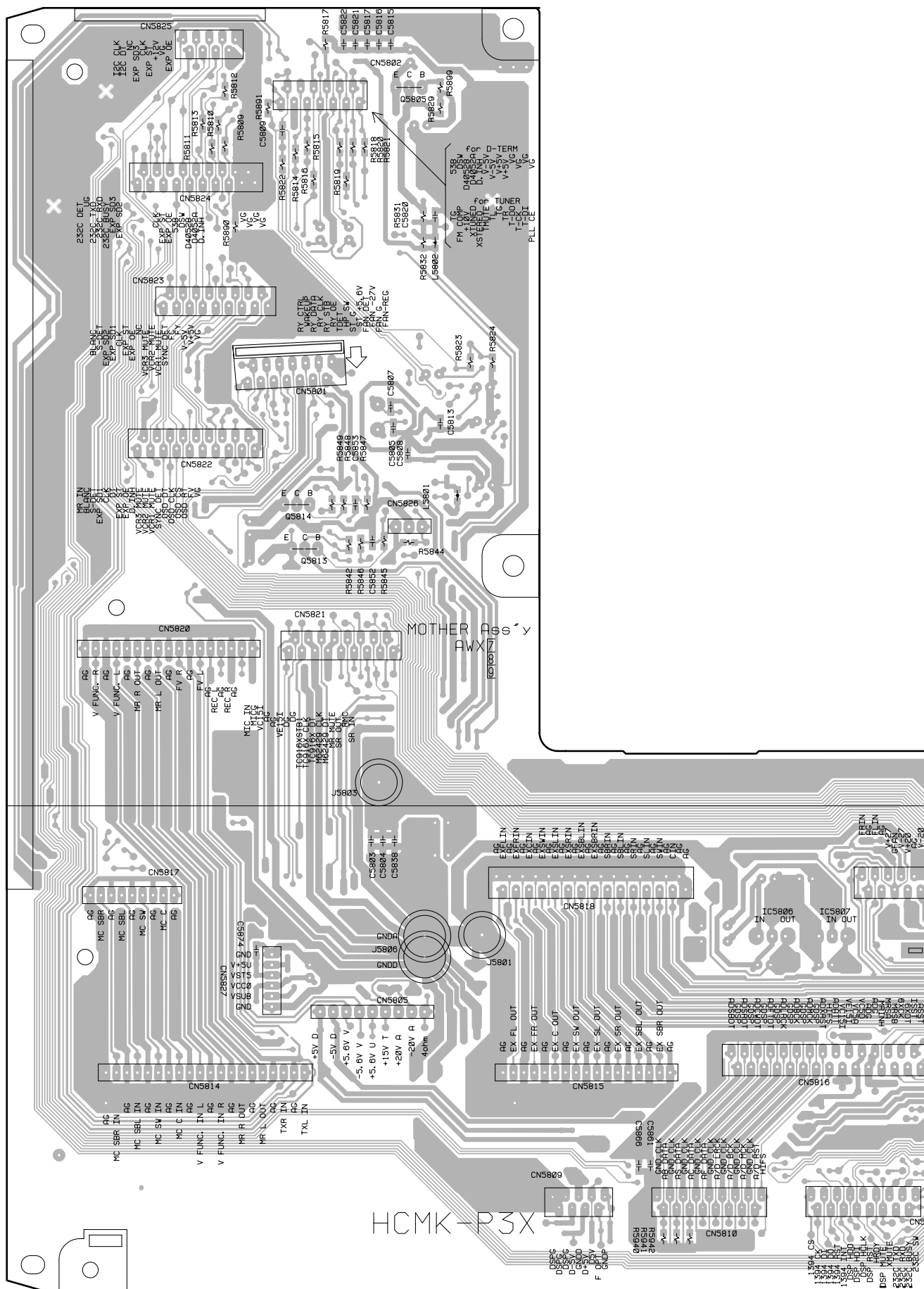
R MOTHER ASSY



SIDE A

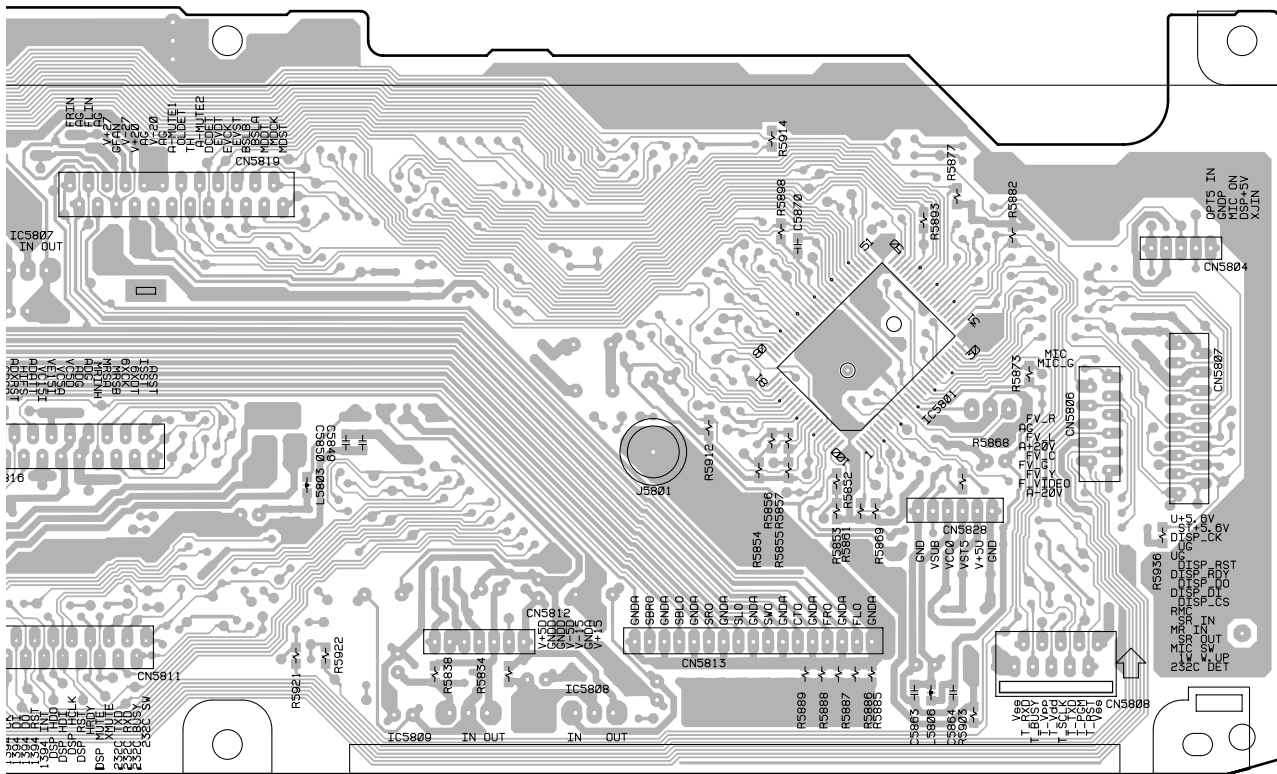


VSX-49TX, VSX-47TX



SIDE B

R MOTHER ASSY



IC5807

IC5809

IC5808

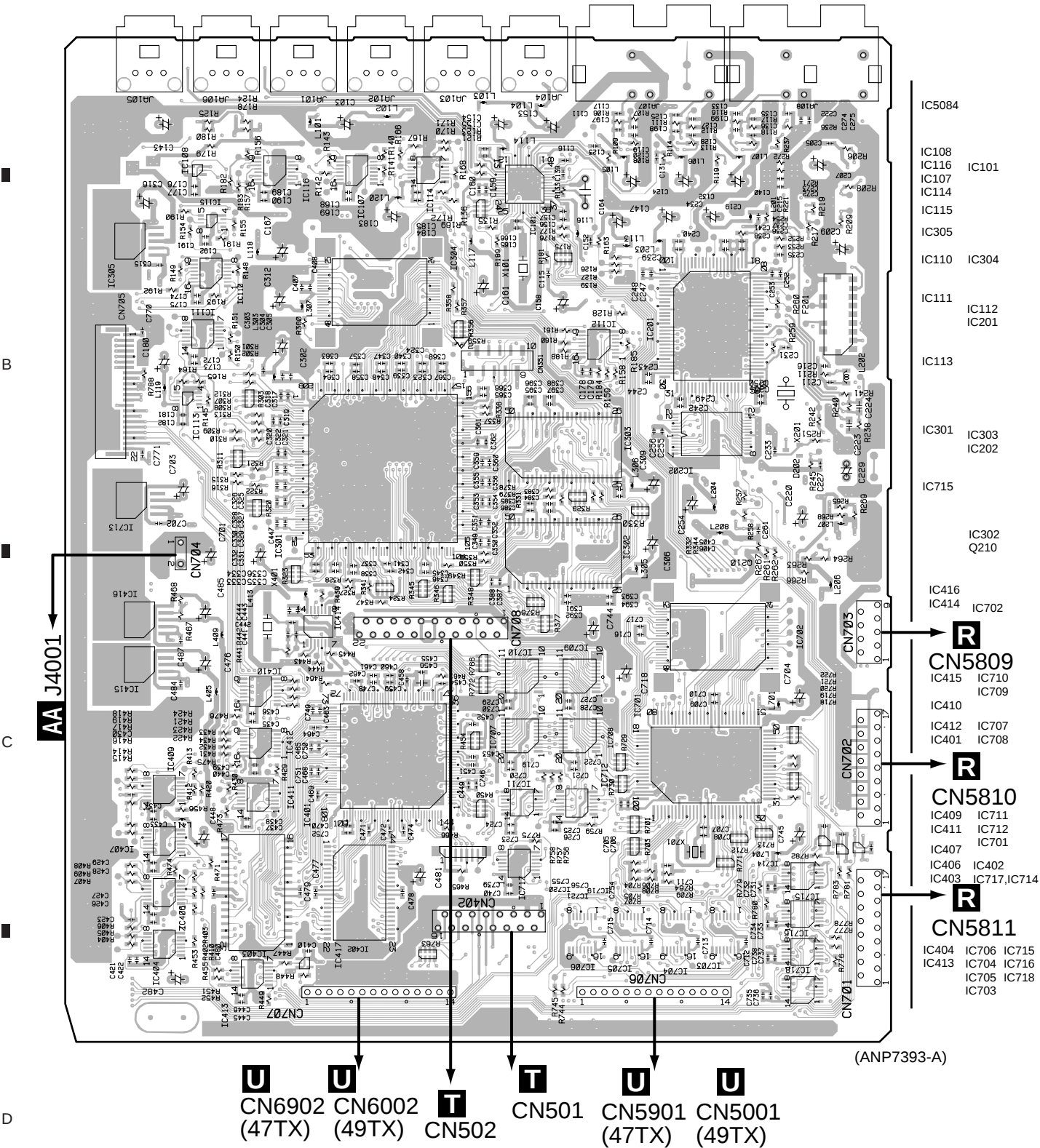
IC5801

(ANP7392-A)

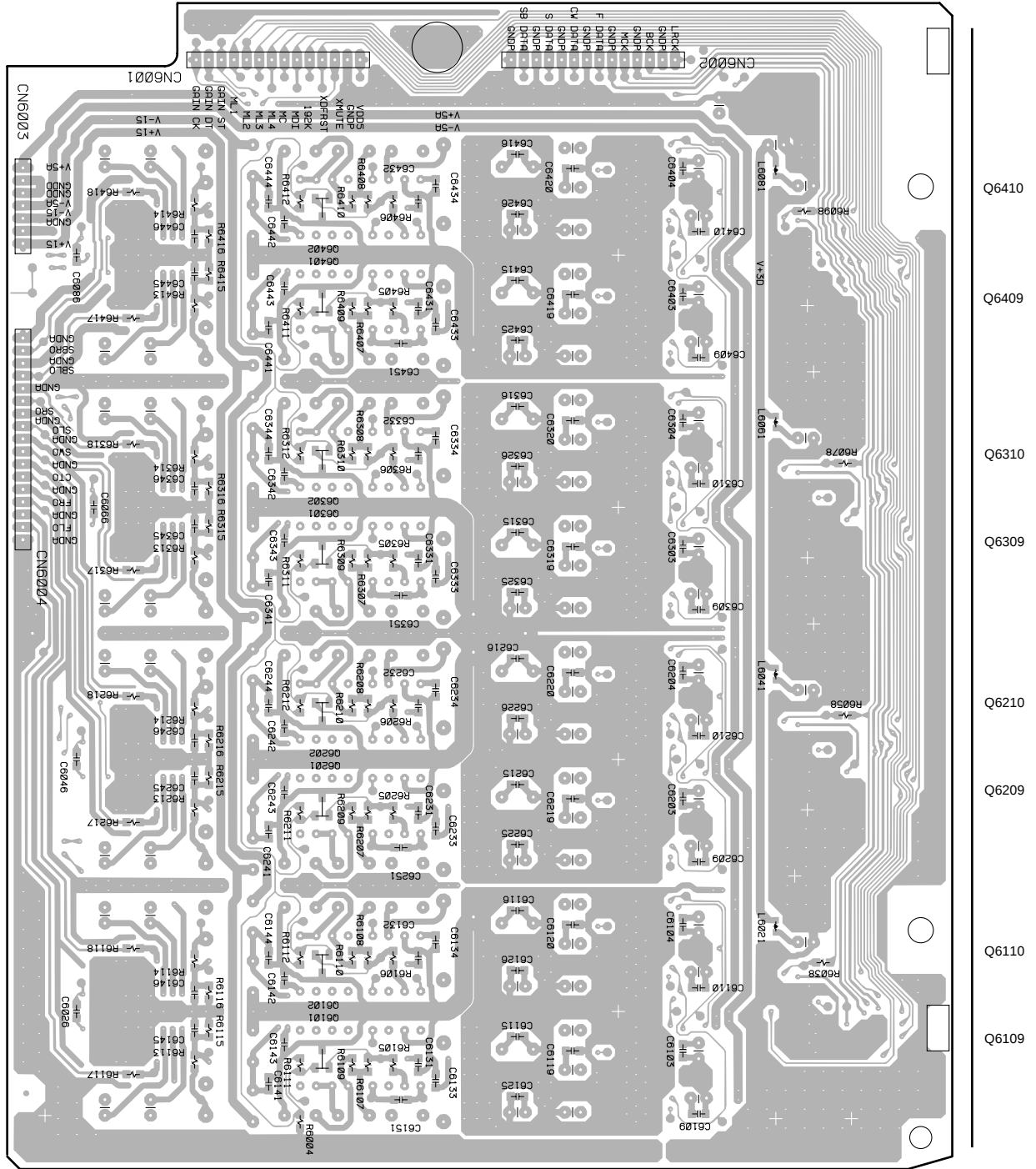


4.13 DSP ASSY

A DSP ASSY



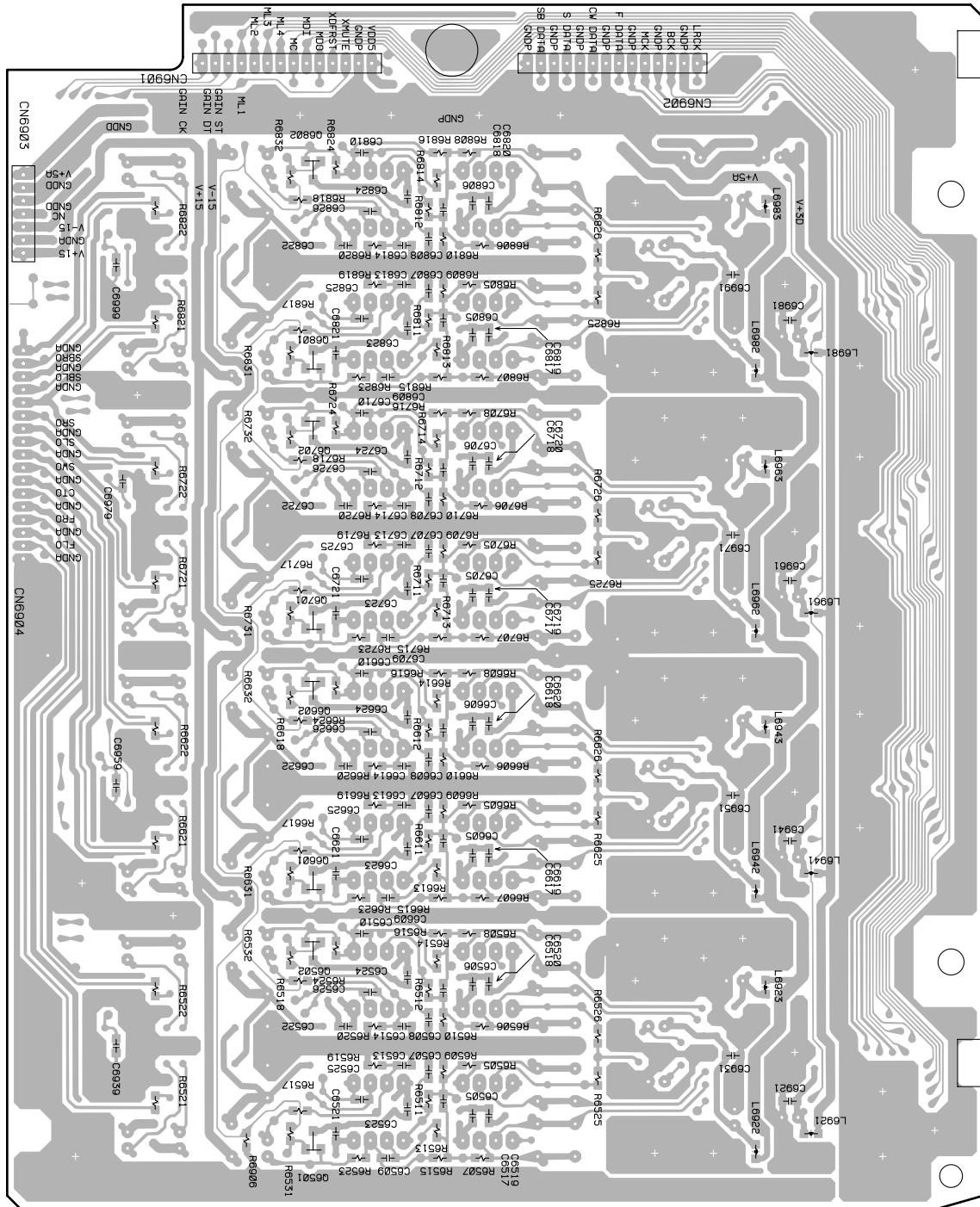
DAC10 ASSY



(ANP7394-A)

SIDE B

UDAC8 ASSY



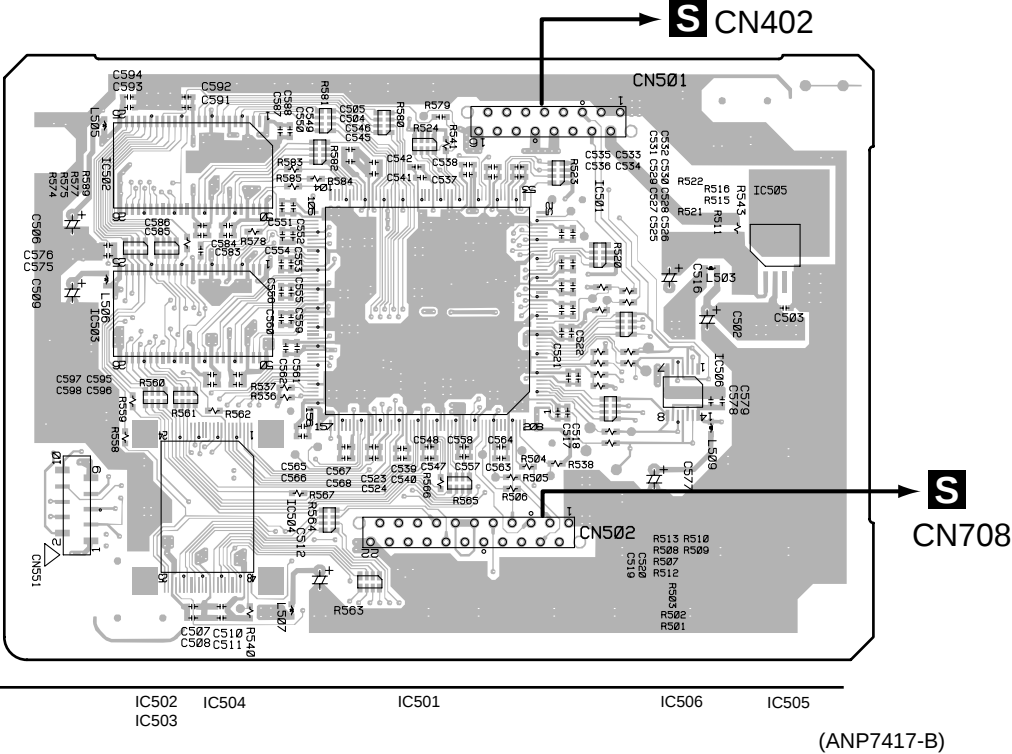
(ANP7416-A)

SIDE B

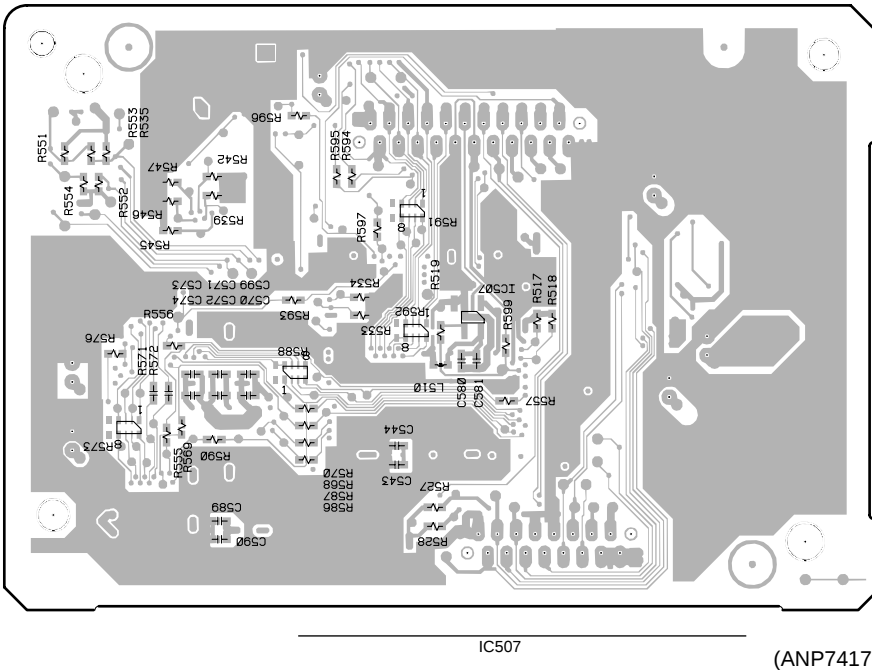
4.16 DSP3 ASSY (VSX-49TX ONLY)

T DSP3 ASSY

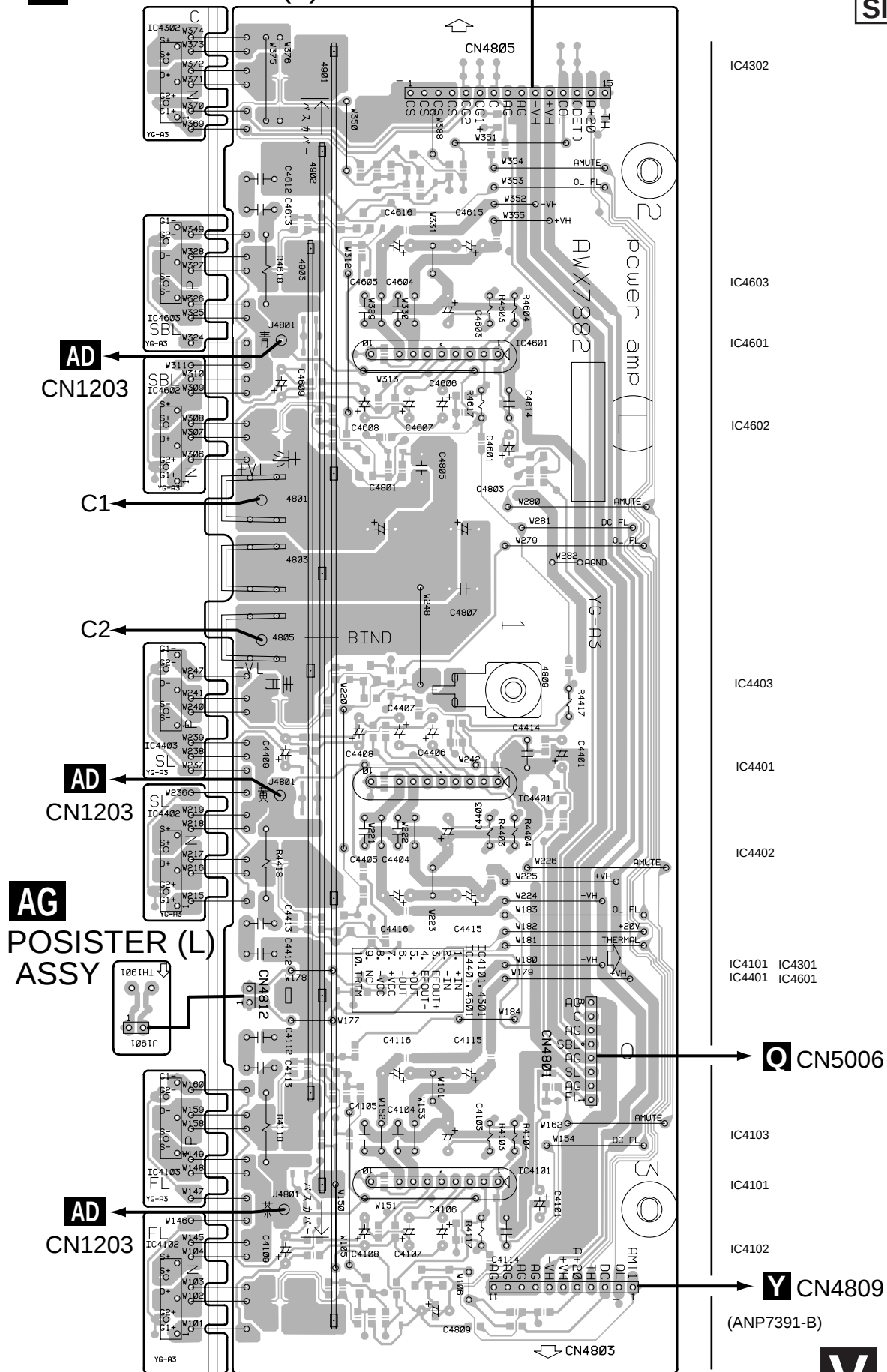
SIDE A



SIDE B



4.17 POWER AMP (L) and POSISTER (L) ASSYS

V POWER AMP (L) ASSY**W** CN4807**SIDE A**

A

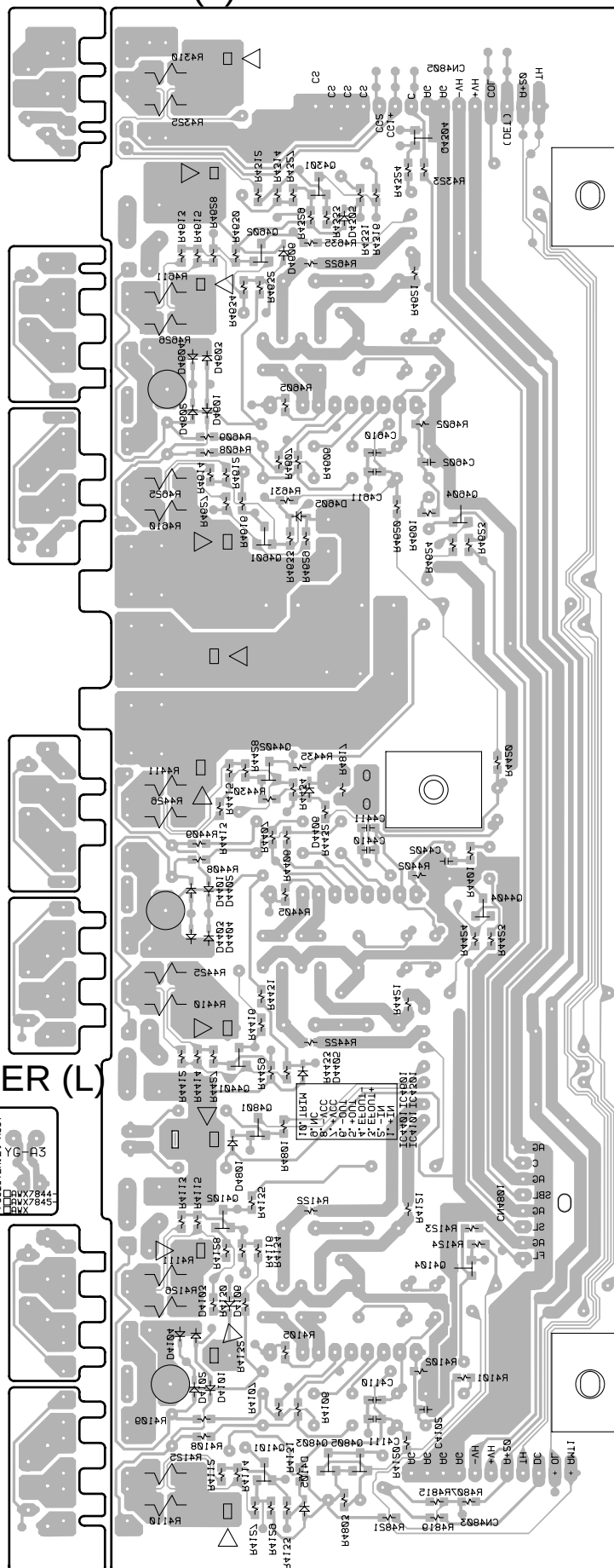
B

C

D

V POWER AMP (L) ASSY

SIDE B



- Q4304
- Q4301
- Q4602
- Q4604
- Q4601
- Q4402
- Q4404
- Q4801
- IC4101 IC4301
IC4401 IC4601
- Q4401
- Q4102
- Q4104
- Q4101 Q4803
Q4805

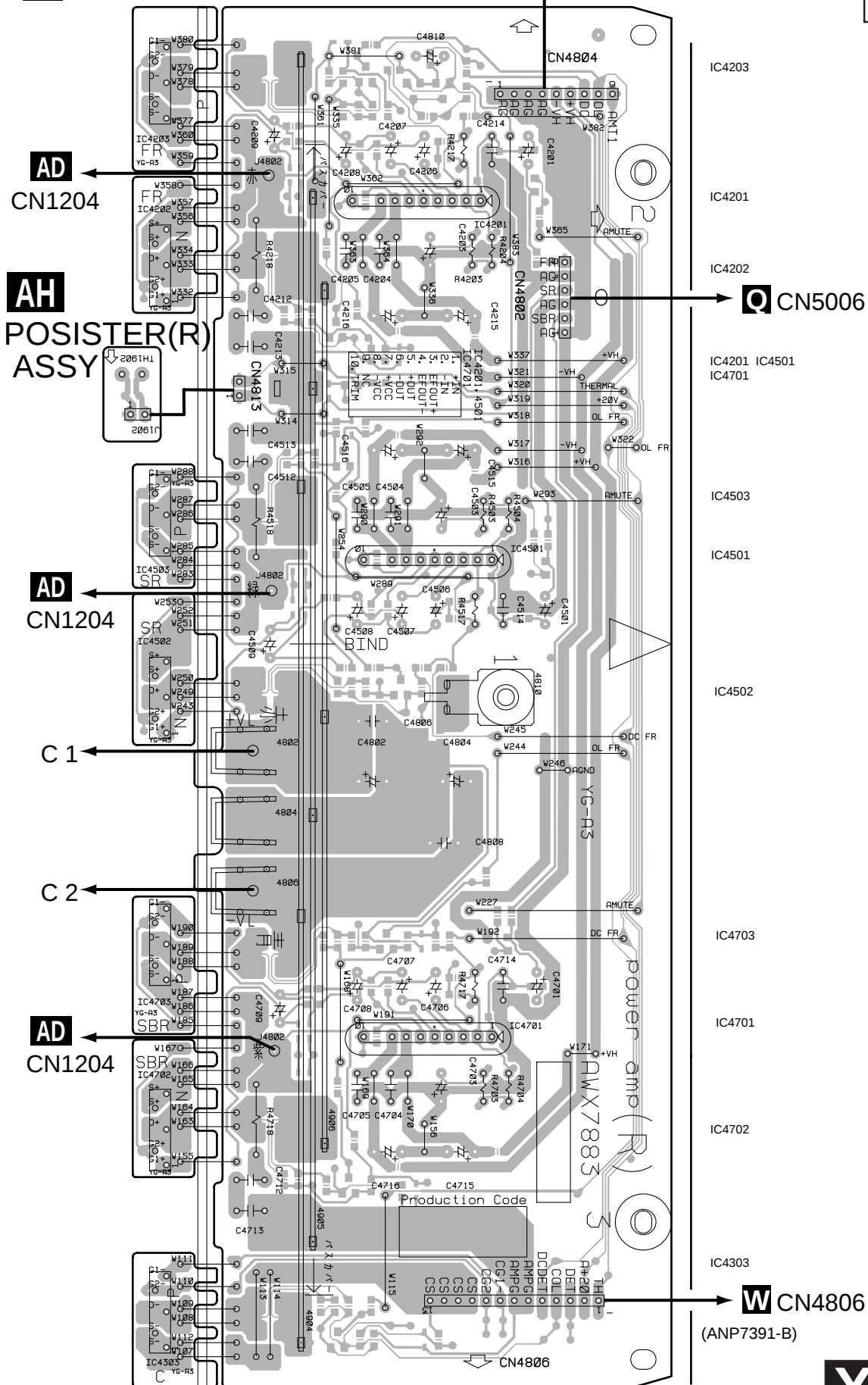
(ANP7391-B)

4.18 POWER AMP (R) and POSISTER (R)ASSYS

X POWER AMP (R) ASSY

Y CN4810

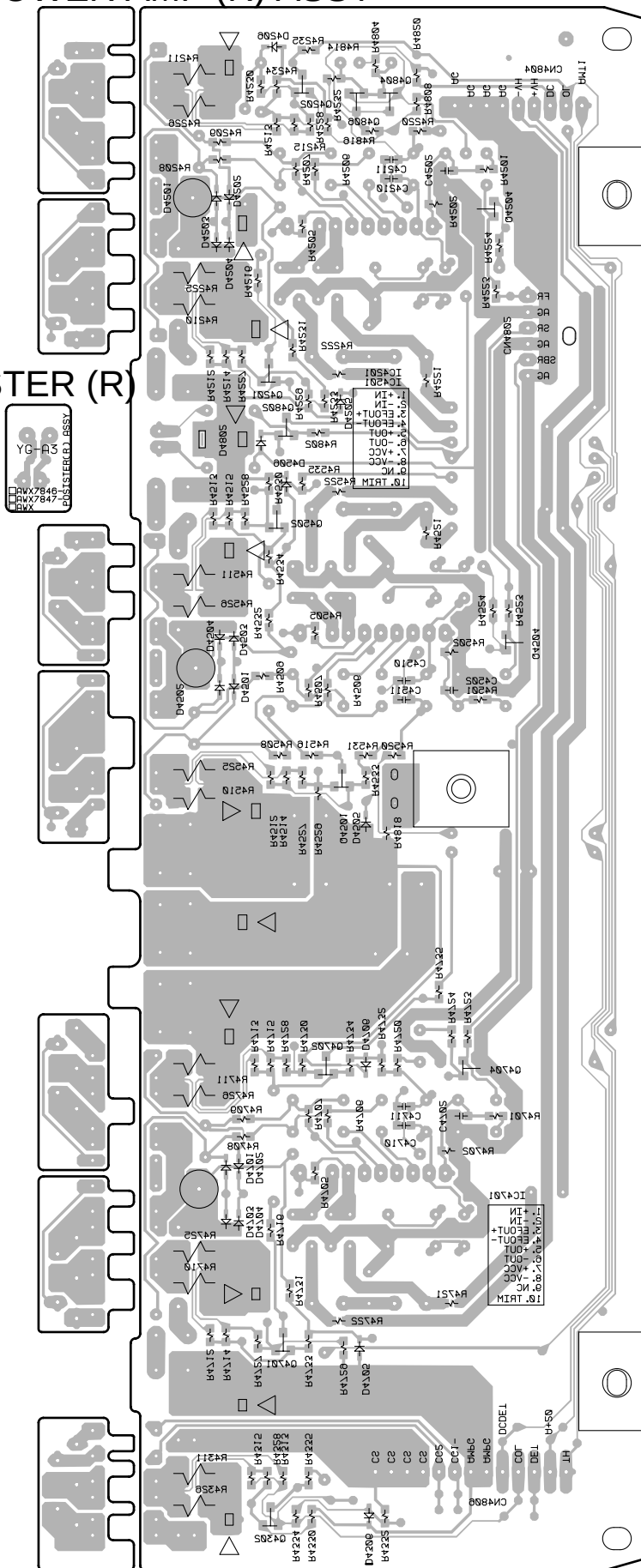
SIDE A



X AH

AH

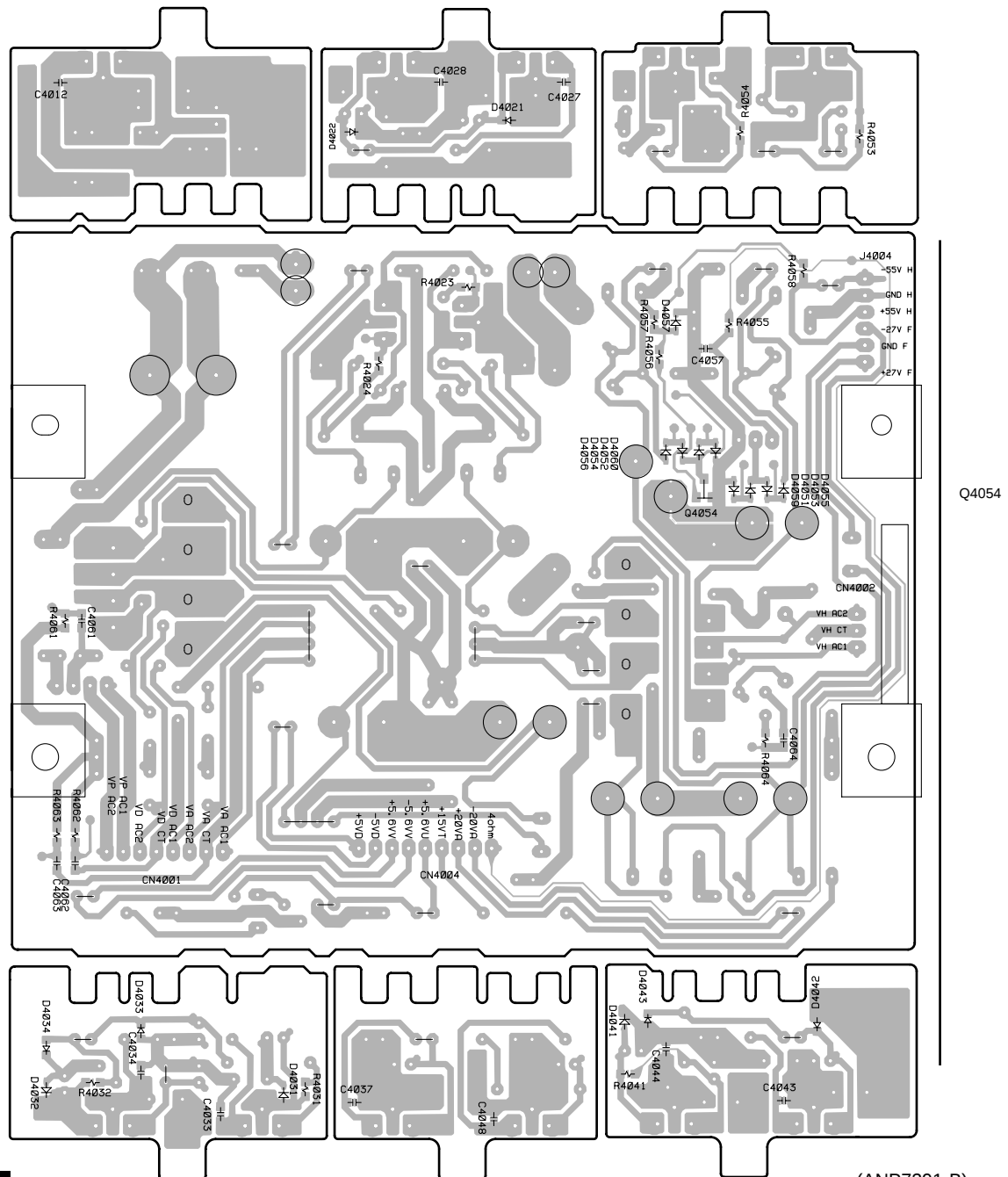
(ANP7391-B)



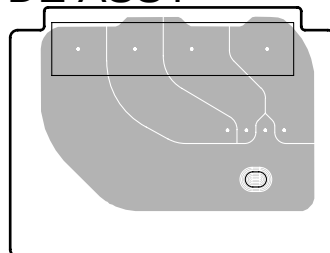
Q4302

(ANP7391-B)

AA LOCAL SUPPLY ASSY

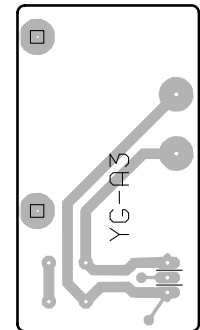


AI DSP DIODE ASSY



SIDE B

AB



AD



4.22 TRANS(A), TRANS(B), DIODE and FUSE ASSYS

AK DIODE ASSY

SIDE A

AM TRANS (A) ASSY

AN TRANS (B) ASSY

AL FUSE ASSY

AA CN4002

AE CN1901

AA CN4001

5. 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.

● 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 $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix}$ J

47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix}$ J

0.5 Ω $\rightarrow$ R50 RN2H $\begin{bmatrix} R & 5 & 0 \end{bmatrix}$ K

1 Ω $\rightarrow$ 1R0 RS1P $\begin{bmatrix} 1 & R & 0 \end{bmatrix}$ K

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

5.62k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix}$ F

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.		Remarks
		VSX-49TX/KU/CA	VSX-47TX/KU/CA	
	FM/AM TUNER Module	AXQ7237	AXQ7237	
NSP	VIDEO Assy	AWQ7010	AWQ7011	
	└ A/V I/O Assy	AWX7938	AWX7939	
	└ COMPOSITE Assy	AWX7942	AWX7943	
	└ S-VIDEO Assy	AWX7948	AWX7949	
	└ V-CONVERT Assy	AWX7952	Not used	
	└ COMPONENT Assy	AWX7953	AWX7954	
NSP	A/D & CONTROL Assy	AWM7558	AWM7559	
	└ VIDEO CONNECT Assy	AWX7876	AWX7877	
	└ MIC AMP Assy	AWX7872	AWX7872	
	└ MIC & OPT Assy	AWX7875	AWX7875	
	└ FRONT A/V Assy	AWX7902	AWX7902	
	└ HEADPHONE Assy	AWX7874	AWX7874	
	└ ANALOG IN & A/D Assy	AWX7878	AWX7879	
	└ DISPLAY Assy	AWX7864	AWX7865	
	└ INPUT SEL Assy	AWX7868	AWX7868	
	└ MULTI JOG Assy	AWX7869	AWX7869	
	└ VOL Assy	AWX7870	AWX7870	
NSP	VR & MOTHER Assy	AWM7562	AWM7563	
	└ VR & PRE OUT Assy	AWX7888	AWX7917	
	└ MOTHER Assy	AWX7890	AWX7891	
	DSP Assy	AWK7719	AWK7720	
	DSP3 Assy	AWK7727	Not used	
	DAC10 Assy	AWK7725	Not used	
	DAC8 Assy	Not used	AWK7726	
NSP	POWER AMP Assy	AWH7004	AWH7004	
	└ POWER AMP (L) Assy	AWX7882	AWX7882	
	└ POWER AMP (C) Assy	AWX7884	AWX7884	
	└ POWER AMP (R) Assy	AWX7883	AWX7883	
	└ POWER AMP (BR) Assy	AWX7885	AWX7885	
	└ POWER AMP (G) Assy	AWX7886	AWX7886	
	└ LOCAL SUPPLY Assy	AWX7887	AWX7887	
NSP	PS & SP Assy	AWK7712	AWK7712	
	└ AC PRIMARY Assy	AWX7834	AWX7834	
	└ POWER SW Assy	AWX7840	AWX7840	
	└ SP (A) Assy	AWX7848	AWX7848	
	└ FL SUPPLY Assy	AWX7871	AWX7871	
	└ STANDBY Assy	AWX7901	AWX7901	
	└ POSISTER (L) Assy	AWX7844	AWX7844	
	└ POSISTER (R) Assy	AWX7846	AWX7846	
	└ DSP DIODE Assy	AWX7958	AWX7958	
	└ SP (B) Assy	AWX7852	AWX7852	
	└ DIODE Assy	AWX7841	AWX7841	
	└ FUSE Assy	AWX7843	AWX7843	
	└ TRANS (A) Assy	AWX7838	AWX7838	
	└ TRANS (B) Assy	AWX8057	AWX8057	

B A/V I/O ASSY

AWX7938 and AWX7939 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7938	AWX7939	
	R2025, R2026 R2027, R2028 R2029, R2030 R2088-R2091 2004 4P Pin Jack	RS1/16S102J RS1/16S105J RS1/16S221J Not used AKB7075	Not used Not used Not used RS1/16S0R0J Not used	

C COMPOSITE ASSY

AWX7942 and AWX7943 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7942	AWX7943	
	IC2102 Logic IC C2106 C2153 C2110, C2111, C2156 R2106, R2157 R2113- R2115 2104 2P Pin Jack	TC74HC4053AFT CEAT101M10 CCSRCH181J50 CKSRYB103K50 RS1/16S750J RS1/16S102J AKB7076	Not used Not used Not used Not used Not used Not used Not used	

D S-VIDEO ASSY

AWX7948 and AWX7949 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7948	AWX7949	
	C2306 C2312 C2318, C2384 C2324, C2375 C2378, C2381 R2306, R2312, R2401, R2404 R2318 R2407 CN2304 Dual 4P Mini DIN Socket	CEAT101M10 CKSRYB473K25 CKSRYB103K50 CKSRYB104K16 CCSRCH181J50 RS1/16S750J RS1/16S102J RS1/16S103J AKP7023	Not used Not used Not used Not used Not used Not used Not used Not used Not used	

F COMPONENT ASSY

AWX7953 and AWX7954 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7953	AWX7954	
	IC2503 C2514, C2515 R2519 R2521	TC74LVX4053FT CKSRYB103K50 RS1/16S102J RS1/16S0R0J	Not used Not used Not used Not used	

VSX-49TX, VSX-47TX

G VIDEO CONNECT ASSY

AWX7876 and AWX7877 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7876	AWX7877	
	CN3304 18P Plug	KM200TA18	Not used	

M DISPLAY ASSY

AWX7864 and AWX7865 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7864	AWX7865	
	D3013 R3013	SLI-343URW RS1/16S561J	Not used Not used	

Q VR & PRE OUT ASSY

AWX7888 and AWX7917 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7888	AWX7917	
	C5007, C5008, C5021, C5022, C5033, C5034 C5041, C5042, C5053, C5054, C5061, C5062 C5081, C5082 C5151, C5152, C5251, C5252, C5351, C5352 C5451, C5452	ACH7163 ACH7163 ACH7163 CEGA470M35 CEGA470M35	CEAT471M25 CEAT471M25 CEAT471M25 CENA470M25 CENA470M25	

R MOTHER ASSY

AWX7890 and AWX7891 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7890	AWX7891	
	IC5811 IC5812 Q5815 Q5816 Q5817 Q5818 L5805 C5840 C5841 R5854 R5856 R5904, R5905 R5907, R5909, R5944, R5945 R5908, R5910 R5915-R5918, R5933, R5934, R5940-R5942 R5928, R5937 CN5825 JE Connector Socket	TC7S08FU TC7W126FU IRF7416 2SK2103 UN5212 UN5112 QTL1013 CKSRYB103K50 CKSRYB104K16 Not used RS1/16S103J RS1/16S0R0J RS1/16S101J RS1/16S104J Not used RS1/16S221J 09R-JE	Not used Not used Not used Not used Not used Not used Not used Not used Not used RS1/16S103J Not used Not used Not used Not used RS1/16S0R0J Not used Not used	

PCB PARTS LIST FOR VSX-49TX/KU/CA UNLESS OTHERWISE NOTED

Mark	No.	Description	Part No.
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A FM/AM TUNER MODULE

SEMICONDUCTORS

IC201	BA1451F
IC202	LC72131MD
Q201,Q204,Q205	2SC2412K
Q202	DTA124ES
Q203	DTC124EK
D201	1SS133
D202	MTZJ5.1C

COILS AND FILTERS

L201	FM DET COIL	ATE7003
F202	FM CERAMIC FILTER	ATF-107
F201	FM CERAMIC FILTER	ATF-119
F203	AM CERAMIC FILTER	ATF7026

CAPACITORS

C206	CCSRCH100D50
C212,C213,C226,C233-C235	CCSRCH101J50
C240	CCSRCH101J50
C231,C232	CCSRCH150J50
C223	CEAT100M50
C229	CEAT101M10
C224	CEAT1R0M50
C227	CEAT220M25
C241	CEAT2R2M50
C243	CEAT330M16
C228	CEAT3R3M50
C237	CEAT470M10
C211	CEJQ1R0M50
C210	CEJQ470M16
C204,C238,C613	CKSRYB102K50
C101,C102,C208,C220,C239	CKSRYB103K50
C242,C604	CKSRYB103K50
C216,C217,C225	CKSRYB153K50
C201,C205,C209,C214,C230	CKSRYB223K50
C236,C603	CKSRYB223K50
C221	CKSRYB224K10
C202,C222	CKSRYB473K16
C215	CKSRYB681K50

RESISTORS

R211	RD1/4PU221J
R221	RD1/4PU222J
R233	RD1/4PU391J
R243	RS1/10S0R0J
R103	RS1/10S331J
R104	RS1/10S391J
Other Resistors	RS1/16S□□□J

OTHERS

CN201	13P FFC CONNECTOR	52044-1345
BN201	2P ANTENNA TERMINAL	AKA7002
	SHIELD CASE T	ANK7072
	SHIELD CASE B	ANK7073
X201	CRYSTAL RESONATOR (7.2MHz)	ASS1093

Mark	No.	Description	Part No.
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B A/V I/O ASSY

SEMICONDUCTORS

IC2053	BA4558F-HT
IC2052	M62429FP
IC2002	TC9162AF
IC2001	TC9164AF
IC2051	UPC4570C
Q2051	HN1C03F
D2052,D2053	1SS355
D2051	UDZS5.6B

CAPACITORS

C2025,C2029,C2053,C2054	CCSRCH101J50
C2063,C2064,C2077,C2078	CCSRCH101J50
C2071	CCSRCH221J50
C2079,C2080	CEAT100M50
C2075,C2076	CEAT1R0M50
C2055,C2056	CEAT470M25
C2061,C2065,C2066	CEJQ100M16
C2051,C2052,C2059,C2060	CEJQ1R0M50
C2072	CKSRYB102K50
C2019-C2022,C2069,C2081	CKSRYB103K50
C2023,C2024,C2027,C2028	CKSRYB473K25
C2082,C2083	CKSRYB473K50

RESISTORS

R2065	RD1/2LMF561J
Other Resistors	RS1/16S□□□J

OTHERS

CN2002	JE CONNECTOR	17PS-JE
JA2001	6P PIN JACK	AKB7073
2002-2004	4P PIN JACK	AKB7075
JA2051	2P PIN JACK	DKB1045
CN2001	17P SOCKET	KP200TA17L
2051	2P MINI JACK	VKN1034

C COMPOSITE ASSY

SEMICONDUCTORS

IC2108,IC2109	BU4094BCF
IC2106	NJM2296M
IC2104	PDC084A
IC2101,IC2107	TC74HC4051AFT
IC2102,IC2103	TC74HC4053AFT
IC2105	TK15420M
Q2101-Q2103,Q2105-Q2108	2SC4081
Q2104	UN5212
D2101-D2103	1SS355

COILS

L2102,L2103	LAU100J
L2101	LAU330J

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
CAPACITORS			
	C2118		CCSRCH100D50
	C2123,C2132		CCSRCH101J50
	C2119		CCSRCH150J50
	C2120		CCSRCH180J50
	C2139,C2151-C2153,C2164		CCSRCH181J50
	C2121,C2122		CCSRCH240J50
	C2115,C2129,C2177-C2179		CEAT100M50
	C2101-C2106,C2114,C2124,C2125		CEAT101M10
	C2135,C2136,C2141,C2142		CEAT101M10
	C2165,C2166		CEAT101M10
	C2131		CEAT1R0M50
	C2180		CEAT470M10
	C2107-C2113,C2137,C2138		CKSRYB103K50
	C2143,C2144,C2154-C2156		CKSRYB103K50
	C2159-C2161,C2167,C2168,C2170		CKSRYB103K50
	C2130		CKSRYB122K50
	C2116,C2126,C2127,C2140		CKSRYB473K25

RESISTORS			
	All Resistors		RS1/16S□□□J

OTHERS			
	X2101	CRYSTAL RESONATOR (14.31818MHz)	ASS1056
	CN2101	JE CONNECTOR	19PS-JE
	2102-2105	2P PIN JACK	AKB7076
	JA2101	3P PIN JACK	AKB7109
	CN2102	12P SOCKET	KP200TA12L

D S-VIDEO ASSY

SEMICONDUCTORS

IC2310	BU4094BCF
IC2305	LA7213
IC2308,IC2309	NJM2296M
IC2306	TC74HC4051AFT
IC2303,IC2304	TC74HC4053AFT
IC2301,IC2302	TC74LVX4051FT
IC2307	TK15420M
Q2303	2SA1576A
Q2302	2SC4081
Q2314	HN1B04FU
Q2301	UN5212
D2304,D2305,D2307	1SS355

CAPACITORS			
	C2337		CCSRCH151J50
	C2352,C2353,C2376-C2381		CCSRCH181J50
	C2390-C2392		CEAT100M50
	C2301-C2306,C2339,C2340		CEAT101M10
	C2347,C2348,C2357,C2358		CEAT101M10
	C2361,C2362,C2385,C2386		CEAT101M10
	C2338		CEAT3R3M50
	C2313-C2318,C2325-C2327		CKSRYB103K50
	C2330-C2333,C2335,C2336		CKSRYB103K50
	C2341,C2342,C2349,C2350,C2356		CKSRYB103K50
	C2359,C2360,C2363,C2364		CKSRYB103K50
	C2382-C2384,C2387,C2389		CKSRYB103K50
	C2319-C2324,C2328,C2351		CKSRYB104K16
	C2373-C2375,C2393,C2394		CKSRYB104K16
	C2307-C2312		CKSRYB473K25

Mark	No.	Description	Part No.
RESISTORS			
	All Resistors		RS1/16S□□□J
OTHERS			
	CN2301	JE CONNECTOR	17PS-JE
	CN2302-CN2305	DUAL 4P MINI DIN SOCKET	AKP7023
	JA2301	TRIPLE 4P MINI DIN SOCKET	AKP7049
	CN2306	8P SOCKET	KP200TA8L

E V-CONVERT ASSY (VSX-49TX Only)

SEMICONDUCTORS

IC2862	BU4094BCF
IC2852	MM1093NF
IC2863	NJM78M09FA
IC2853	TA1270BF
IC2859,IC2860	TC74LVX4053FT
IC2851	TC90A49F
IC2854-IC2858	TK15420M
Q2851,Q2852,Q2902	2SA1576A
Q2853,Q2854,Q2901,Q2904	2SC4081

COILS			
	L2856	CHIP FERRITE BEAD	ATL7002
	L2852-L2854,L2857		LAU100J
	L2855		LAU330J
	L2859		LCTA1R0J2520

CAPACITORS			
	C2865,C2887,C2876		CCSRCH100D50
	C2885		CCSRCH101J50
	C2919,C2920		CCSRCH120J50
	C2968		CCSRCH151J50
	C2867		CCSRCH181J50
	C2881		CCSRCH391J50
	C2873,C2886		CCSRCH560J50
	C2879		CCSRCH6R0D50
	C2851,C2853,C2981,C2982		CEAT100M50
	C2989-C2991		CEAT100M50
	C2855,C2860,C2862,C2868		CEAT101M10
	C2892,C2893,C2903,C2904		CEAT101M10
	C2909,C2910,C2917,C2918,C2928		CEAT101M10
	C2938,C2945,C2946,C2970,C2971		CEAT101M10
	C2924,C2926		CEAT2R2M50
	C2884,C2985		CEAT470M10
	C2874,C2877,C2880		CEAT4R7M50
	C2882		CKSRYB102K50
	C2854,C2856,C2857,C2859,C2861		CKSRYB103K50
	C2863,C2866,C2869-C2872,C2875		CKSRYB103K50
	C2878,C2883,C2890,C2891		CKSRYB103K50
	C2894-C2897,C2901,C2902		CKSRYB103K50
	C2907,C2908,C2915,C2916,C2923		CKSRYB103K50
	C2929,C2937,C2943,C2944,C2967		CKSRYB103K50
	C2978,C2979		CKSRYB103K50
	C2852,C2925,C2930-C2936,C2966		CKSRYB104K16
	C2986,C2983,C2984		CKSRYB104K16
	C2864		CKSRYB122K50
	C2921		CKSRYB222K50
	C2927		CKSRYB223K50

Mark	No.	Description	Part No.
	C2922		CKSRYB224K10
	C2858		CKSRYB474K10
	C2969		CKSRYB561K50

RESISTORS

All Resistors	RS1/16S□□□J
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OTHERS

CN2851	JE CONNECTOR	09PS-JE
X2851,X2853	CRYSTAL RESONATOR ASS1091	
	(3.579545MHz)	
X2852	CRYSTAL RESONATOR ASS1092	
	(4.433619MHz)	
X2854	CERAMIC RESONATOR ASS7036	
	(503kHz)	
CN2852	18P SOCKET	KP200TA18L

F COMPONENT ASSY**SEMICONDUCTORS**

IC2507	BU4094BCF
IC2505,IC2506	OPA2652U
IC2509	SP232AEP
IC2504	TC74HC4053AFT
IC2501,IC2502	TC74LVX4052FT
IC2503	TC74LVX4053FT
Q2502	2SA1576A
Q2501,Q2503	2SC4081
D2501-D2503	1SS355

COIL

L2501	LAU1R0J
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CAPACITORS

C2541,C2542	CEAT100M50
C2524,C2525,C2532,C2533	CEAT101M10
C2537,C2538,C2567	CEAT101M10
C2563-C2565,C2568	CEAT1R0M50
C2510-C2517,C2522,C2523	CKSRYB103K50
C2530,C2531,C2535,C2536	CKSRYB103K50
C2557,C2558,C2569,C2571-C2579	CKSRYB103K50
C2581	CKSRYB103K50
C2566	CKSRYB104K25
C2582	CKSRYB331K50

RESISTORS

All Resistors	RS1/16S□□□J
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OTHERS

CN2501	JE CONNECTOR	19PS-JE
JA2502	6P PIN JACK	AKB7127
JA2501	6P PIN JACK	AKB7141
JA2504	MULTI ROOM JACK	AKN7014
CN2505	9P D-SUB SOCKET	AKP1213
CN2502	10P SOCKET	KP200TA10L
2501	SCREW TERMINAL	VNE1948

Mark	No.	Description	Part No.
G	VIDEO CONNECT ASSY		
	OTHERS		

CN3303	10P PLUG	KM200TA10
CN3301	12P PLUG	KM200TA12
CN3304	18P PLUG	KM200TA18
CN3302	8P PLUG	KM200TA8

H MIC AMP ASSY**SEMICONDUCTORS**

IC3201	M5220FP
Q3204	HN1C01FU
Q3202	RN4903
D3201	1SS355
D3202	UDZS5.6B

CAPACITORS

C3211,C3220,C3226	CCSRCH101J50
C3214	CCSRCH330J50
C3210,C3218,C3221,C3224,C3227	CEAL100M16
C3231,C3232	CEAL101M10
C3206	CEAL220M16
C3212,C3215	CEAL220M35
C3223,C3229,C3230	CEAL330M25
C3205,C3228	CKSRYB104K16

RESISTORS

All Resistors	RS1/16S□□□J
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OTHERS

CN3207	11P FFC CONNECTOR	52044-1145
CN3205	KR CONNECTOR	S4B-PH-K
KN3202	EARTH METAL FITTING	VNF1084

I MIC & OPT ASSY**COILS**

L3202	CHIP SOLID INDUCTOR	QTL1013
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CAPACITORS

C3203	CEAL470M10
C3202	CKSRYB104K16
C3201	CKSRYB103K50

RESISTORS

All Resistors	RS1/16S□□□J
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OTHERS

CN3202	KR CONNECTOR	B4B-PH-K
CN3201	KR CONNECTOR	B5B-PH-K
JA3201	OPTICAL LINK IN	GP1FA502RZ
JA3202	REMOTE CONTROL JACK	RKN1004

J FRONT A/V ASSY**CAPACITORS**

C3234,C3237	CKSRYB104K16
C3233	CKSRYB473K50

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
RESISTORS			
	All Resistors		RS1/16S□□□J
OTHERS			
	JA3204	FRONT PIN JACK 4P	AKX7014
	CN3204	KR CONNECTOR	B8B-PH-K
	J3301	4P JUMPER WIRE	D20PYY0405E
	J3003, J3004	4P JUMPER WIRE	D20PYY0410E
	J3002	5P JUMPER WIRE	D20PYY0510E

K HEADPHONE ASSY

CAPACITOR	C3209	CKSRYB104K16
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RESISTORS	R3207	RS1/16S0R0J
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OTHERS			
	CN3203	4P FFC CONNECTOR	52045-0445
	JA3203	HEADPHONE JACK	RKB1014
	KN3201	EARTH METAL FITTING	VNF1084

L ANALOG IN & A/D ASSY (AWX7878 for VSX-49TX)

SEMICONDUCTORS			
	IC3421, IC3441, IC3461, IC3481	AK5383VS	
	IC3901	BU4052BCF	
	IC3423	M5220P	
	IC3501, IC3502, IC3601, IC3602	NJM2068D	
	IC3701, IC3702, IC3801, IC3802	NJM2068D	
△	IC3402	PQ3DZ13	
	IC3401, IC3422	TC9163AF	
	IC3424, IC3462	UPC4570C	
	Q3501, Q3601, Q3701, Q3801	HN1C03F	
	Q3401	RN4903	
	D3501, D3502, D3601, D3602	DAN202K	
	D3701, D3702, D3801, D3802	DAN202K	
	D3503, D3504, D3603, D3604	DAP202K	
	D3703, D3704, D3803, D3804	DAP202K	
	D3901, D3902	UDZS6.2B	

COILS			
	L3401, L3402, L3421, L3422	ATL7002	
	CHIP FERRITE BEAD		
	L3441, L3442, L3461, L3462	ATL7002	
	CHIP FERRITE BEAD		
	L3481, L3482	ATL7002	
	CHIP FERRITE BEAD		
	L3423, L3443, L3463, L3483	QTL1013	
	CHIP SOLID INDUCTOR		

CAPACITORS			
	C3411-C3414, C3435, C3436	ACH7163	
	(470μF/25V)		
	C3473, C3474 (470μF/25V)	ACH7163	
	C3405, C3428, C3503, C3504	CCSRCH101J50	
	C3549, C3550, C3563, C3564	CCSRCH101J50	

Mark	No.	Description	Part No.
	C3567, C3568, C3603, C3604	CCSRCH101J50	
	C3703, C3704, C3755, C3756	CCSRCH101J50	
	C3759, C3760, C3803, C3804	CCSRCH101J50	
	C3401, C3547, C3548, C3559, C3560	CEAT100M50	
	C3951, C3952	CEAT100M50	
	C3515, C3516, C3615, C3616	CEAT101M10	
	C3715, C3716, C3815, C3816	CEAT101M10	
	C3429, C3430	CEAT101M25	
	C3551, C3552	CEAT470M16	
	C3402	CEHAZL101M10	

C3421, C3422, C3441, C3442	CENA100M50
C3461, C3462, C3481, C3482	CENA100M50
C3509, C3512, C3523, C3524	CENA100M50
C3561, C3562, C3609, C3612	CENA100M50
C3623, C3624, C3709, C3712	CENA100M50

C3723, C3724, C3753, C3754	CENA100M50
C3757, C3758, C3809, C3812	CENA100M50
C3823, C3824	CENA100M50
C3565, C3566	CENA220M25
C3501, C3502, C3601, C3602	CENA470M25

C3701, C3702, C3801, C3802	CENA470M25
C3427, C3447, C3467, C3487	CKSRYB102K50
C3505, C3508, C3513, C3514	CKSRYB103K50
C3605, C3608, C3613, C3614	CKSRYB103K50
C3705, C3708, C3713, C3714	CKSRYB103K50

C3805, C3808, C3813, C3814	CKSRYB103K50
C3423, C3424, C3443, C3444	CKSRYB104K16
C3463, C3464, C3483, C3484	CKSRYB104K16
C3517, C3518, C3521, C3522, C3575	CKSRYB104K16
C3577, C3579, C3581, C3617, C3618	CKSRYB104K16

C3621, C3622, C3717, C3718	CKSRYB104K16
C3721, C3722, C3817, C3818	CKSRYB104K16
C3821, C3822	CKSRYB104K16
C3519, C3520, C3619, C3620	CKSRYB224K10
C3719, C3720, C3819, C3820	CKSRYB224K10

C3425, C3445, C3465, C3485	CKSRYB471K50
C3403, C3404, C3431, C3432	CKSRYB473K50
C3953, C3954	CKSRYB473K50
C3557, C3558	CQMA242J50
C3555, C3556	CQMA822J50

RESISTORS

△	R3411-R3414, R3471, R3472	RD1/4MUF470J
	R3525-R3528, R3625-R3628	RS1/16S1002F
	R3725-R3728, R3825-R3828	RS1/16S1002F
	R3765, R3766	RS1/16S1201F
	R3589, R3590	RS1/16S1801F

R3509, R3510, R3609, R3610	RS1/16S2701F
R3709, R3710, R3809, R3810	RS1/16S2701F
R3587, R3588, R3763, R3764	RS1/16S2702F
R3511, R3516, R3611, R3616	RS1/16S3901F
R3711, R3716, R3811, R3816	RS1/16S3901F

△	R3407, R3408, R3431, R3436	RS1/16S470J
△	R3951, R3952	RS1/16S472J
	R3501, R3502, R3601, R3602	RS1/16S6801F
	R3701, R3702, R3801, R3802	RS1/16S6801F
	Other Resistors	RS1/16S□□□J

OTHERS

3401, 3501, 3503, 3504	AKB7075
4P PIN JACK	
CN3402	17P SOCKET
CN3401	20P SOCKET
CN3403	B TO B CONNECTOR 30P
	KP200TA17L
	KP200TA20L
	VKN1395

Mark	No.	Description	Part No.
L ANALOG IN & A/D ASSY (AWX7879 for VSX-47TX)			
SEMICONDUCTORS			
	IC3421	AK5383VS	
	IC3901	BU4052BCF	
	IC3423	M5220P	
	IC3501,IC3502	NJM2068D	
△	IC3402	PQ3DZ13	
	IC3422	TC9163AF	
	IC3424,IC3462	UPC4570C	
	Q3501	HN1C03F	
	Q3401	RN4903	
	D3501,D3502	DAN202K	
	D3503,D3504	DAP202K	
	D3901,D3902	UDZS6.2B	
COILS			
	L3401,L3402,L3421,L3422	ATL7002	
	CHIP FERRITE BEAD		
	L3423	CHIP SOLID INDUCTOR	QTL1013
CAPACITORS			
	C3428,C3503,C3504,C3549,C3550	CCSRCH101J50	
	C3563,C3564,C3567,C3568	CCSRCH101J50	
	C3755,C3756,C3759,C3760	CCSRCH101J50	
	C3401,C3547,C3548,C3559,C3560	CEAT100M50	
	C3951,C3952	CEAT100M50	
	C3515,C3516	CEAT101M10	
	C3429,C3430	CEAT101M25	
	C3551,C3552	CEAT470M16	
	C3411,C3412,C3435,C3436	CEAT471M25	
	C3473,C3474	CEAT471M25	
	C3402	CEHAZL101M10	
	C3421,C3422,C3509-C3512	CENA100M50	
	C3523,C3524,C3561,C3562	CENA100M50	
	C3753,C3754,C3757,C3758	CENA100M50	
	C3565,C3566	CENA220M25	
	C3501,C3502	CENA470M25	
	C3427	CKSRYB102K50	
	C3505-C3508,C3513,C3514	CKSRYB103K50	
	C3423,C3424,C3517,C3518	CKSRYB104K16	
	C3521,C3522,C3575,C3577,C3579	CKSRYB104K16	
	C3581	CKSRYB104K16	
	C3519,C3520	CKSRYB224K10	
	C3425	CKSRYB471K50	
	C3431,C3432,C3953,C3954	CKSRYB473K50	
	C3557,C3558	CQMA242J50	
	C3555,C3556	CQMA822J50	
RESISTORS			
△	R3411,R3412,R3471,R3472	RD1/4MUF470J	
	R3525-R3528	RS1/16S1002F	
	R3765,R3766	RS1/16S1201F	
	R3589,R3590	RS1/16S1801F	
	R3591,R3592	RS1/16S2700F	
	R3509,R3510	RS1/16S2701F	
	R3587,R3588,R3763,R3764	RS1/16S2702F	
	R3511-R3516	RS1/16S3901F	
△	R3431-R3436	RS1/16S470J	
△	R3951,R3952	RS1/16S472J	

Mark	No.	Description	Part No.
	R3501,R3502		RS1/16S6801F
	Other Resistors		RS1/16S□□□J
OTHERS			
	3401,3501,3503,3504		AKB7075
	4P PIN JACK		
	CN3402	17P SOCKET	KP200TA17L
	CN3401	20P SOCKET	KP200TA20L
	CN3403	B TO B CONNECTOR 30P	VKN1395
M DISPLAY ASSY			
SEMICONDUCTORS			
	IC3002		BU2092F
	IC3001		PD5686B
	IC3061		TC74HC4053AFT
	Q3052		2SA1036K
	Q3061		2SA1576A
	Q3053,Q3054		2SD2114K
	Q3002,Q3062		RN1903
	Q3063		RN2903
	Q3001,Q3003,Q3051		UN5212
	D3061-D3067		1SS355
	D3030,D3031		DAN202K
	D3026,D3028,D3029		SLI-343DUW(STU)
	D3001,D3003,D3005,D3007,D3009		SLI-343URW(RST)
	D3011,D3013,D3015-D3018,D3025		SLI-343URW(RST)
	D3019		TLGE68TG(NP)
COILS			
	L3001	CHIP FERRITE BEAD	ATL7002
	L3002	CHIP SOLID INDUCTOR	QTL1013
SWITCHES			
	S3081-S3098		ASG7013
CAPACITORS			
	C3035,C3071,C3075,C3076		CCSRCH101J50
	C3031,C3061,C3072,C3074		CEJQ101M6R3
	C3053		CEJQ2R2M50
	C3081-C3084		CKSRYB102K50
	C3051,C3062,C3085		CKSRYB103K50
	C3034,C3052,C3073,C3079		CKSRYB104K16
	C3063		CKSRYB153K50
	C3020,C3021		CKSRYB473K50
RESISTORS			
	R3060		RD1/2LMF103J
	R3059		RS1LMF220J
	Other Resistors		RS1/16S□□□J
OTHERS			
	X3001	CERAMIC RESONATOR (4.19MHz)	ASS7042
	3001,3003,3004	4P CABLE HOLDER	51048-0400
	3002	5P CABLE HOLDER	51048-0500
	CN3001	FFC CONNECTOR 17P	52492-1720
	V3001	FL TUBE	AAV7081
	J3001	EARTH LEAD WIRE	DE005WE0
	CN3002	FFC CONNECTOR 3P	HLEM3S-1
	IC3062	REMOTE RECEIVER UNIT	NJL64H400A
	3006,3007	SOACER	AEB7232

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
N	INPUT SEL ASSY		
	SWITCH		
	S3103		ASX7038
	CAPACITORS		
	C3110,C3111		CKSRYB103K50
RESISTORS	R3109,R3110		RS1/16S437J
OTHERS	3104	4P CABLE HOLDER	51048-0400

O	MULTI JOG ASSY		
	SWITCH		
	S3101		ASX7039
	CAPACITORS		
	C3105,C3106		CKSRYB103K50
RESISTORS	R3105,R3106		RS1/16S473J
OTHERS	3102	5P CABLE HOLDER	51048-0500

P	VOL ASSY		
	SWITCH		
	S3102		ASX7037
	CAPACITORS		
	C3108,C3109		CKSRYB103K50
RESISTORS	R3107,R3108		RS1/16S473J
OTHERS	3103	4P CABLE HOLDER	51048-0400

Q	VR & PRE OUT ASSY		
	SEMICONDUCTORS		
	IC5084		BU4052BCF
	IC5023,IC5063,IC5181,IC5182		NJM2068D
	IC5002		NJM78M15FA
△	IC5003		NJM79M15FA
	IC5022,IC5042,IC5062,IC5082		OPA2134PA
△	IC5001		TC9274N-016
	IC5021,IC5041,IC5061,IC5081		TC94A07F
△	IC5043,IC5083		UPC4570C
	Q5101,Q5102,Q5201,Q5202,Q5204		HN1C03F
△	Q5301,Q5302,Q5401,Q5402		HN1C03F

Mark	No.	Description	Part No.
	D5001-D5004		1SS355
	D5085-D5090		DA204K
	D5083,D5084		UDZS6.2B
CAPACITORS	C5007,C5008,C5021,C5022		ACH7163
	(470μF/25V)		
	C5033,C5034,C5041,C5042		ACH7163
	(470μF/25V)		
	C5053,C5054,C5061,C5062		ACH7163
	(470μF/25V)		
	C5081,C5082 (470μF/25V)		ACH7163
	C5013,C5024,C5044,C5064,C5084		CCSRCH101J50
	C5123,C5124,C5223,C5224		CCSRCH101J50
	C5257,C5258,C5261,C5262		CCSRCH101J50
	C5323,C5324,C5423,C5424		CCSRCH101J50

	C5457,C5458,C5461,C5462		CCSRCH101J50
	C5153,C5154,C5181,C5182		CCSRCH220J50
	C5189,C5190,C5353,C5354		CCSRCH220J50
	C5911,C5912,C5921,C5922		CCSRCH330J50
	C5931,C5932,C5941,C5942		CCSRCH330J50
	C5003-C5006		CEAT100M50
	C5001,C5002		CEAT1R0M50
	C5011,C5012,C5095,C5096		CEAT470M25
	C5151,C5152,C5251,C5252		CEGA470M35
	C5351,C5352,C5451,C5452		CEGA470M35
	C5255,C5256,C5259,C5260		CENA100M50
	C5455,C5456,C5459,C5460		CENA100M50
	C5125-C5128,C5155,C5156		CENA470M25
	C5183,C5184,C5225-C5228		CENA470M25
	C5325-C5328,C5355,C5356		CENA470M25
	C5425-C5428		CENA470M25
	C5121,C5122,C5221,C5222		CENA4R7M50
	C5321,C5322,C5421,C5422		CENA4R7M50
	C5015-C5017,C5031,C5032		CKSRYB103K50
	C5051,C5052,C5071,C5072		CKSRYB103K50
	C5091,C5092,C5185-C5188		CKSRYB103K50
	C5014		CKSRYB104K16
	C5009,C5010,C5025,C5026		CKSRYB473K50
	C5029,C5030,C5045,C5046		CKSRYB473K50
	C5049,C5050,C5065,C5066		CKSRYB473K50
	C5069,C5070,C5085,C5086		CKSRYB473K50
	C5089,C5090,C5097,C5098		CKSRYB473K50
	C5131-C5134,C5233-C5236,C5242		CKSRYB473K50
	C5244,C5331-C5334,C5431-C5434		CKSRYB473K50

RESISTORS			
△	R5007,R5008,R5021,R5022		RD1/4MUF470J
△	R5029,R5030,R5041,R5042		RD1/4MUF470J
△	R5049,R5050,R5061,R5062		RD1/4MUF470J
△	R5081,R5082		RD1/4MUF470J
△	R5001,R5002		RD1/4MUF4R7J
	R5267,R5268,R5467,R5468		RS1/16S1201F
	R5265,R5266,R5465,R5466		RS1/16S2702F
△	R5005,R5006		RS1/16S470J
△	R5091,R5092		RS1/16S472J
	Other Resistors		RS1/16S□□□J

OTHERS			
5002,5021	4P PIN JACK		AKB7075
JA5042	AUDIO 2P PIN JACK		AKB7144
JA5001	4P PIN JACK		AKB7145
CN5005	8P CONNECTOR		B08B-XASK-1
CN5006	14P CONNECTOR		B14B-XASK-1

Mark	No.	Description	Part No.
	CN5002	9P SOCKET	KP200TA9L
	CN5004	6P CONNECTOR	S06B-XASK-1
	JA5041	1P PIN JACK (AU, BLK)	VKB1074
	CN5003	B TO B CONNECTOR 24P	VKN1392
	CN5001	B TO B CONNECTOR 30P	VKN1395

R MOTHER ASSY

SEMICONDUCTORS

	IC5802	AT24C16N-10SI2.5
△	IC5806,IC5808	NJM78M15FA
△	IC5807,IC5809	NJM79M15FA
	IC5801	PD5685A9
	IC5810	PST9242NR
	IC5803,IC5804	TC74HCT244AF
	IC5811,IC5813	TC7S08FU
	IC5812	TC7W126FU
△	Q5805	2SC5174P
△	Q5816	2SK2103
△	Q5815	IRF7416
	Q5801	RN1903
	Q5806	RN4903
	Q5808,Q5809,Q5818	UN5112
	Q5810	UN511L
	Q5807,Q5817	UN5212
	D5803-D5806,D5814,D5815	1SS355
	D5821-D5823	1SS355
	D5819,D5820	DAN202K
	D5817	DAP202K
	D5801	UDZ11B

COILS

L5802,L5803,L5806	ATL7002
CHIP FERRITE BEAD	
L5804	LCTA1R0J2520
L5805,L5807-L5809	QTL1013
CHIP SOLID INDUCTOR	

CAPACITORS

C5839 (0.1μF/5.5V)	ACH7141
C5829,C5831,C5834,C5836	CEAT100M50
C5819	CEAT101M16
C5873	CEAT221M6R3
C5868	CEAT331M10
C5847	CEAT471M6R3
C5818	CEJQ100M16
C5832,C5837,C5844	CEJQ100M25
C5801,C5802,C5828,C5830,C5833	CEJQ1R0M50
C5835	CEJQ1R0M50
C5848,C5859	CEJQ221M6R3
C5817,C5838,C5840,C5850,C5858	CKSRYB103K50
C5860,C5861,C5863,C5864,C5869	CKSRYB103K50
C5804,C5820,C5841,C5843,C5845	CKSRYB104K16
C5849,C5856,C5866,C5872	CKSRYB104K16
C5842,C5846	CKSRYB471K50
C5857,C5862,C5867,C5871	CKSRYB473K50
C5803	CKSRYF105Z10

RESISTORS

R5840,R5841	RAB4C104J
R5901,R5920	RAB4C221J
△ R5835,R5836	RD1/4MUF100J
△ R5930	RD1/4MUF101J

Mark	No.	Description	Part No.
△	R5833,R5837		RD1/4MUF4R7J
	Other Resistors		RS1/16S□□□J

OTHERS

CN5825	JE CONNECTOR	09R-JE
CN5821,CN5823	JE CONNECTOR	17R-JE
CN5822,CN5824	JE CONNECTOR	19R-JE
CN5806	11P FFC CONNECTOR	52045-1145
CN5802	13P FFC CONNECTOR	52045-1345
CN5807	17P FFC CONNECTOR	52045-1745
CN5801	14P FFC CONNECTOR	52492-1420
J5806	2P CONNECTOR ASSY	ADX7375
J5801	1P BOARD IN WIRE	ADX7376
J5803	1P BOARD IN WIRE	ADX7391
X5801	CERAMIC RESONATOR (15.67MHz)	ASS7043
CN5805	9P CONNECTOR	B09B-XASK-1
CN5804	KR CONNECTOR	B5B-PH-K
CN5827,CN5828	KR CONNECTOR	B6B-PH-K
CN5810,CN5811	B TO B CONNECTOR 17P	BTEM17S-1S
CN5809	CONNECTOR	BTEM9S-1S
CN5813,CN5815,CN5820	17P PLUG	KM200TA17
CN5814	20P PLUG	KM200TA20
CN5812	7P PLUG	KM200TA7
CN5817	9P PLUG	KM200TA9
5801	PCB BINDER	VEF1040
CN5819	B TO B CONNECTOR 24P	VKN1405
CN5816,CN5818	B TO B CONNECTOR 30P	VKN1408
KN5802	EARTH METAL FITTING	VNF1084

S DSP ASSY (AWK7719 for VSX-49TX)

SEMICONDUCTORS

IC301	ADSST21065LKS-264
IC101	AK4114VQ
IC203	BA4558F-HT
IC703-IC705	BU4094BCFV
IC302,IC303	HY57V161610DTC-10
IC402	IS61LV6416-12T
IC202	IS62C256-45T
IC403	IS63LV1024-12T
IC702	AYW7012
IC304	AYW7014
IC701	M30620SAFP
IC201	PM4007A
△ IC305,IC415,IC713	PQ3DZ13
△ IC416	PQ7VZ5
IC102	TC74HC151AF
IC204	TC74HCT08AF
IC406,IC409,IC717	TC74VHC00FT
IC712	TC74VHC04FT
IC111,IC413	TC74VHC08FT
IC114,IC714,IC715,IC718	TC74VHC125FT
IC716	TC74VHC126FT
IC110	TC74VHC153FT
IC112,IC410,IC412	TC74VHC157FT
IC116	TC74VHC257FT
IC711	TC74VHC32FT

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
	IC107		TC74VHC4040FT
	IC707-IC710		TC74VHC573FT
	IC404,IC407,IC411		TC74VHC74FT
	IC414		TC74VHC04FT
	IC103		TC7SET08F
	IC719-IC721		TC7SET08FU
	IC108		TC7SH04FU
	IC405,IC408		TC7SH86F
	IC115		TC7WH08FU
	IC113		TC7WH157FU
	IC104-IC106		TC7WU04F
	IC205		TK15420M
	IC401		XCA56367PV150
△	Q203,Q204		2SA1037K
	Q101,Q210,Q212		2SB1197K
△	Q201,Q202		2SC2412K
	Q208,Q209		2SC4081
	Q213		2SD1781K
	Q102		DTC124EK
	Q211		RN1903
	D203		1SS355
	D202		KV1851

COILS AND FILTERS

F201	BAND PASS FILTER	ATF7027
L114,L117,L201,L206,L207	CHIP FERRITE BEAD	ATL7002
L303,L305-L307,L405-L407	CHIP FERRITE BEAD	ATL7002
L409,L411,L701-L704	CHIP FERRITE BEAD	ATL7002
L202		LCTA680J2520
L101-L108,L110,L113	CHIP SOLID INDUCTOR	QTL1013
L118-L120,L203,L204,L413	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

C166,C231,C441,C442	CCSRCH150J50
C120,C128,C136,C165	CCSRCH220J50
C272	CCSRCH221J50
C119,C127,C135	CCSRCH470J50
C216	CCSRCH561J50
C211	CCSRCH750J50
C103,C111,C124,C132,C140	CEAT101M16
C143,C153,C167,C234	CEAT101M16
C180,C183,C312,C316,C703	CEAT101M6R3
C220	CEAT470M10
C147,C207,C209,C219,C254	CEAT470M16
C476,C485	CEHAZA101M10
C158,C161	CEHAZA470M16
C302	CEHAZL101M25
C306,C309,C447,C448,C701	CEJQ101M6R3
C704	CEJQ101M6R3
C481,C482,C718,C744,C745	CEJQ470M16
C229	CEJQNP4R7M25
C164	CFTYA474J50
C223,C224,C456	CKSQYB105K10
C222,C323,C325,C331,C334	CKSRYB102K50
C336,C341,C349,C351,C364	CKSRYB102K50
C423,C430,C452,C455,C462	CKSRYB102K50
C464,C469,C471	CKSRYB102K50
C104,C108,C112,C116,C117	CKSRYB103K50

Mark	No.	Description	Part No.
	C123,C125,C131,C133,C139		CKSRYB103K50
	C152,C202,C214,C232,C233		CKSRYB103K50
	C273,C454,C458		CKSRYB103K50
	C101,C105,C109,C113,C121		CKSRYB104K16
	C129,C138,C141,C144		CKSRYB104K16
	C149,C150,C155,C156,C160		CKSRYB104K16
	C168,C172,C174,C176,C178		CKSRYB104K16
	C181,C185,C189,C191		CKSRYB104K16
	C204-C206,C208,C210		CKSRYB104K16
	C212,C213,C215,C225-C228		CKSRYB104K16
	C230,C235,C237,C240-C242		CKSRYB104K16
	C244,C248,C251,C252,C255		CKSRYB104K16
	C257,C304,C315,C318,C320		CKSRYB104K16
	C322,C328,C330,C338,C340		CKSRYB104K16
	C343,C346,C347,C354		CKSRYB104K16
	C356,C357,C360,C362,C366		CKSRYB104K16
	C368,C384,C388-C391,C393		CKSRYB104K16
	C395,C398,C400,C401,C403		CKSRYB104K16
	C405,C407,C422,C424,C427		CKSRYB104K16
	C429,C431,C434,C436		CKSRYB104K16
	C438,C439,C444,C446,C450		CKSRYB104K16
	C460,C461,C467,C473,C478		CKSRYB104K16
	C480,C484,C487,C702,C705		CKSRYB104K16
	C708,C710,C712-C714,C717		CKSRYB104K16
	C719,C721,C723,C725,C727		CKSRYB104K16
	C729,C731,C733,C736,C737		CKSRYB104K16
	C739,C741,C742,C746,C747		CKSRYB104K16
	C749,C751-C756		CKSRYB104K16
	C203		CKSRYB223K50
	C154,C157,C159,C236		CKSRYB471K50
	C238,C239,C243,C247		CKSRYB471K50
	C249,C250,C253,C256,C305		CKSRYB471K50
	C317,C319,C321,C327,C329		CKSRYB471K50
	C337,C339,C345,C348,C353		CKSRYB471K50
	C355,C358,C359,C361,C365		CKSRYB471K50
	C367,C386,C387,C397,C402		CKSRYB471K50
	C404,C408,C443,C449,C451		CKSRYB471K50
	C453,C459,C463,C465,C466		CKSRYB471K50
	C468,C470,C472,C474,C477		CKSRYB471K50
	C479,C706,C707,C709,C716		CKSRYB471K50
	C748,C750		CKSRYB471K50
	C457		CKSRYB563K16

RESISTORS

R136,R196,R303,R311,R348	RAB4C101J
R701,R712,R729,R730	RAB4C101J
R320,R323,R324	RAB4C103J
R175,R703,R713,R719,R722	RAB4C221J
R771	RAB4C221J
R345,R346,R368,R369,R766	RAB4C330J
R772	RAB4C330J
R329,R330,R365,R376,R377	RAB4C470J
R450	RAB4C470J
R446,R454,R735-R740	RAB4C473J
R356,R371,R372	RAB4C680J
R133	RS1/16S1802D
R467	RS1/16S3600F
R468	RS1/16S7500F
Other Resistors	RS1/16S□□□J

OTHERS

CN706,CN707	FJ CONNECTOR 14P	14PL-FJ
JA107,JA108	2P PIN JACK	AKB7148

Mark	No.	Description	Part No.
	CN709	16P PLUG	AKM7049
	CN708	22P PLUG	AKM7052
	X201	CRYSTAL RESONATOR (18.432MHz)	ASS7009
	X101	CRYSTAL RESONATOR (24.576MHz)	ASS7025
	X401	CRYSTAL RESONATOR (33MHz)	ASS7040
	X701	CERAMIC RESONATOR (7.7MHz)	ASS7045
	CN704	2P VH SIDE CONNECTOR	B2PS-VH
	CN701,CN702	B TO B CONNECTOR 17P	BTEM17P-1R
	CN703	B TO B CONNECTOR 9P	BTEM9P-1R
	JA101-JA104	OPTICAL LINK IN	GP1FA502RZ
	JA105,JA106	OPTICAL LINK OUT	GP1FA502TZ
	CN705	FLEXIBLE CONNECTOR	SFW22R-2ST
	CN401	7P FFC CONNECTOR	VKN1411
	CN351	10P FFC CONNECTOR	VKN1600
	CN9304	ROM SOCKET	AKP7169

S DSP ASSY (AWK7720 for VSX-47TX)

SEMICONDUCTORS

	IC301	ADSST21065LKS-264
	IC101	AK4114VQ
	IC702	AYW7012
	IC304	AYW7014
	IC203	BA4558F-HT
	IC703,IC704	BU4094BCFV
	IC302,IC303	HY57V161610DTC-10
	IC402	IS61LV6416-12T
	IC202	IS62C256-45T
	IC403	IS63LV1024-12T
	IC201	PM4007A
△	IC305,IC415,IC713	PQ3DZ13
△	IC416	PQ7VZ5
	IC204	TC74HCT08AF
	IC406,IC409,IC717	TC74VHC00FT
	IC712	TC74VHC04FT
	IC111,IC413	TC74VHC08FT
	IC114,IC715,IC718	TC74VHC125FT
	IC716	TC74VHC126FT
	IC110	TC74VHC153FT
	IC112	TC74VHC157FT
	IC116	TC74VHC257FT
	IC711	TC74VHC32FT
	IC107	TC74VHC4040FT
	IC707,IC708	TC74VHC573FT
	IC404,IC407	TC74VHC74FT
	IC414	TC74VHCU04FT
	IC719-IC721	TC7SET08FU
	IC108,IC417	TC7SH04FU
	IC405,IC408	TC7SH86F
	IC115	TC7WH08FU
	IC104,IC105	TC7WU04F
	IC205	TK15420M
	IC401	XCA56367PV150
	IC701	M30620SAFP
	Q203,Q204	2SA1037K
△	Q101,Q210,Q212	2SB1197K

Mark	No.	Description	Part No.
	Q201,Q202		2SC2412K
	Q208,Q209		2SC4081
△	Q213		2SD1781K
	Q102		DTC124EK
	Q211		RN1903
	D203		1SS355
	D202		KV1851

COILS AND FILTERS

F201	BAND PASS FILTER	ATF7027
L114,L117,L201,L206,L207		ATL7002
	CHIP FERRITE BEAD	
L303,L305-L307,L405-L407		ATL7002
	CHIP FERRITE BEAD	
L409,L411,L701-L704		ATL7002
	CHIP FERRITE BEAD	
L202		LCTA680J2520
L102-L106,L108,L110,L118		QTL1013
	CHIP SOLID INDUCTOR	
L120,L203,L204,L413		QTL1013
	CHIP SOLID INDUCTOR	

CAPACITORS

C166,C231,C441,C442	CCSRCH150J50
C120,C128,C165	CCSRCH220J50
C272	CCSRCH221J50
C119,C127	CCSRCH470J50
C216	CCSRCH561J50
C211	CCSRCH750J50
C103,C111,C124,C132,C143	CEAT101M16
C153,C167,C234	CEAT101M16
C183,C312,C316,C703	CEAT101M6R3
C220	CEAT470M10
C207,C209,C219,C254	CEAT470M16
C476,C485	CEHAZA101M10
C158,C161	CEHAZA470M16
C302	CEHAZL101M25
C306,C309,C447,C448,C701	CEJQ101M6R3
C704	CEJQ101M6R3
C481,C482,C718,C744,C745	CEJQ470M16
C229	CEJQNP4R7M25
C164	CFTYA474J50
C223,C224,C456	CKSQYB105K10
C222,C323,C325,C331,C334	CKSRYB102K50
C336,C341,C349,C351,C364	CKSRYB102K50
C423,C430,C452,C455,C462	CKSRYB102K50
C464,C469,C471	CKSRYB102K50
C104,C108,C112,C116,C117	CKSRYB103K50
C123,C125,C131,C139,C202	CKSRYB103K50
C214,C232,C233,C273,C454	CKSRYB103K50
C458	CKSRYB103K50
C105,C109,C113,C121,C129	CKSRYB104K16
C141,C144,C155,C156,C160	CKSRYB104K16
C168,C172,C174,C176,C178	CKSRYB104K16
C185,C189,C191,C204-C206	CKSRYB104K16
C208,C210,C212,C213,C215	CKSRYB104K16
C225-C228,C230,C235,C237	CKSRYB104K16
C240-C242,C244,C248	CKSRYB104K16
C251,C252,C255,C257,C304	CKSRYB104K16
C315,C318,C320,C322,C328	CKSRYB104K16
C330,C338,C340,C343	CKSRYB104K16
C346,C347,C354,C356,C357	CKSRYB104K16
C360,C362,C366,C368,C384	CKSRYB104K16

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
	C388,C391,C393,C395,C398 C400,C401,C403,C405,C407 C410,C422,C424,C427,C429 C431,C434,C444,C446,C450 C460,C461,C467,C473,C478		CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16
	C480,C484,C487,C702,C705 C708,C710,C712,C713,C717 C719,C721,C723,C725,C733 C736,C737,C739,C741 C746,C747,C749,C751-C756		CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16
	C203 C154,C157,C159,C236 C238,C239,C243,C247 C249,C250,C253,C256,C305 C317,C319,C321,C327,C329		CKSRYB223K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50
	C337,C339,C345,C348,C353 C355,C358,C359,C361,C365 C367,C386,C387,C397,C402 C404,C408,C443,C449,C451 C453,C459,C463,C465,C466		CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50
	C468,C470,C472,C474,C477 C479,C706,C707,C709,C716 C748,C750 C457		CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB563K16

RESISTORS

R763 R136,R196,R303,R311,R348 R701,R712,R729,R730 R320,R323,R324 R175,R703,R713,R719,R722	RAB4C0R0J RAB4C101J RAB4C101J RAB4C103J RAB4C221J
R771 R345,R346,R368,R369 R329,R330,R365,R376,R377 R450 R446,R454,R735-R738	RAB4C221J RAB4C330J RAB4C470J RAB4C470J RAB4C473J
R356,R371,R372 R133 R467 R468 Other Resistors	RAB4C680J RS1/16S1802D RS1/16S3600F RS1/16S7500F RS1/16S□□□J

OTHERS

CN706,CN707 FJ CONNECTOR 14P 14PL-FJ JA107 2P PIN JACK AKB7148 X201 CRYSTAL RESONATOR ASS7009 (18.432MHz) X101 CRYSTAL RESONATOR ASS7025 (24.576MHz) X401 CRYSTAL RESONATOR ASS7040 (33MHz) X701 CERAMIC RESONATOR ASS7045 (7.7MHz) CN704 2P VH SIDE CONNECTOR B2PS-VH CN701,CN702 BTEM17P-1R B TO B CONNECTOR 17P CN703 B TO B CONNECTOR 9P BTEM9P-1R JA102-JA104 OPTICAL LINK IN GP1FA502RZ JA105,JA106 OPTICAL LINK OUT GP1FA502TZ JA108 1P PIN JACK (BLK, AU) VKB1160 CN401 7P FFC CONNECTOR VKN1411 CN351 10P FFC CONNECTOR VKN1600 CN9304 ROM SOCKET AKP7169

Mark	No.	Description	Part No.
		T DSP3 ASSY (VSX-49TX Only)	
		SEMICONDUCTORS	
	IC501 IC502,IC503 IC504 △ IC505		ADSST21065LKS-264 HY57V161610DTC-10 AYW7013 PQ3DZ13

COILS

L503,L505-L507 CHIP FERRITE BEAD	ATL7002
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CAPACITORS

C502 C506,C509,C512,C516 C523,C525,C531,C534,C536 C541,C549,C551,C564 C510 C504,C507,C518,C520,C522 C528,C530,C538,C540,C543 C546,C547,C554,C556,C557 C560,C562,C566,C568,C570 C572,C573,C575,C584,C586 C588,C590,C592,C594,C595 C598 C505,C517,C519,C521,C527 C529,C537,C539,C545,C548 C553,C555,C558,C559,C561 C565,C567,C571,C574,C587 C589,C597	CEHAZA101M10 CEJQ101M16 CKSRYB102K50 CKSRYB102K50 CKSRYB103K50 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50 CKSRYB471K50
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RESISTORS

R503,R511,R582 R520,R523,R524 R565,R580,R581,R591,R592 R560,R561,R563,R564 R573-R575 R588 Other Resistors	RAB4C101J RAB4C103J RAB4C330J RAB4C470J RAB4C470J RAB4C680J RS1/16S□□□J
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OTHERS

CN501 16P SOCKET CN502 22P SOCKET CN551 10P FFC CONNECTOR CN9504 ROM SOCKET	AKP7122 AKP7125 VKN1600 AKP7169
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U DAC10 ASSY (VSX-49TX Only)

SEMICONDUCTORS

IC6021,IC6041,IC6061,IC6081 IC6105,IC6106,IC6205,IC6206 IC6305,IC6306,IC6405,IC6406 IC6103,IC6104,IC6203,IC6204 IC6303,IC6304,IC6403,IC6404 IC6101,IC6102,IC6201,IC6202 IC6301,IC6302,IC6401,IC6402 △ IC6001 IC6022,IC6042,IC6062,IC6082	DF1706E NJM2068D NJM2068D NJM5534DD NJM5534DD PCM1704U-1 PCM1704U-1 PQ3DZ13 TC94A07F
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COILS

L6001,L6021,L6041,L6061,L6081 CHIP FERRITE BEAD	ATL7002
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Mark	No.	Description	Part No.
	L6101-L6104,L6201-L6204	CHIP FERRITE BEAD	ATL7002
	L6301-L6304,L6401-L6404	CHIP FERRITE BEAD	ATL7002
	L6022,L6042,L6062,L6082	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

C6147,C6148,C6247,C6248 (47µF/25V)	ACH7162
C6347,C6348,C6447,C6448 (47µF/25V)	ACH7162
C6031,C6032,C6051,C6052 (470µF/25V)	ACH7163
C6071,C6072,C6091,C6092 (470µF/25V)	ACH7163
C6026,C6046,C6066,C6086	CCSRCH101J50
C6145,C6146,C6245,C6246	CCSRCH101J50
C6345,C6346,C6445,C6446	CCSRCH101J50
C6151,C6152,C6251,C6252	CCSRCH220J50
C6351,C6352,C6451,C6452	CCSRCH220J50
C6149,C6150,C6249,C6250	CCSRCH330J50
C6349,C6350,C6449,C6450	CCSRCH330J50
C6139,C6140,C6239,C6240	CEGA4R7M2A
C6339,C6340,C6439,C6440	CEGA4R7M2A
C6002,C6123,C6124,C6223,C6224	CEHAZA101M10
C6323,C6324,C6423,C6424	CEHAZA101M10
C6117,C6118,C6121,C6122	CEHAZL101M10
C6127,C6128,C6217,C6218	CEHAZL101M10
C6221,C6222,C6227,C6228	CEHAZL101M10
C6317,C6318,C6321,C6322	CEHAZL101M10
C6327,C6328,C6417,C6418	CEHAZL101M10
C6421,C6422,C6427,C6428	CEHAZL101M10
C6021,C6041,C6061,C6081	CEHAZL221M10
C6113,C6114,C6213,C6214	CEHAZL471M16
C6313,C6314,C6413,C6414	CEHAZL471M16
C6001	CENA100M50
C6103,C6104,C6109,C6110	CKSRYB103K50
C6115,C6116,C6125,C6126	CKSRYB103K50
C6203,C6204,C6209,C6210	CKSRYB103K50
C6215,C6216,C6225,C6226	CKSRYB103K50
C6303,C6304,C6309,C6310	CKSRYB103K50
C6315,C6316,C6325,C6326	CKSRYB103K50
C6403,C6404,C6409,C6410	CKSRYB103K50
C6415,C6416,C6425,C6426	CKSRYB103K50
C6022,C6033,C6034,C6042	CKSRYB104K16
C6053,C6054,C6062,C6073,C6074	CKSRYB104K16
C6082,C6093,C6094,C6119,C6120	CKSRYB104K16
C6219,C6220,C6319,C6320	CKSRYB104K16
C6419,C6420	CKSRYB104K16
C6033,Z6034,C6053,C6054	CKSRYB222K50
C6073,C6074,C6093,C6094	CKSRYB222K50
C6023,C6043,C6063,C6083	CKSRYB471K50
C6105-C6108,C6205-C6208	CKSRYB471K50
C6305-C6308,C6405-C6408	CKSRYB471K50
C6027,C6028,C6047,C6048	CKSRYB473K50
C6067,C6068,C6087,C6088	CKSRYB473K50
C6131-C6134,C6141-C6144	CKSRYB473K50
C6231-C6234,C6241-C6244	CKSRYB473K50
C6331-C6334,C6341-C6344	CKSRYB473K50
C6431-C6434,C6441-C6444	CKSRYB473K50

Mark	No.	Description	Part No.
	C6101,C6102,C6111,C6112 (47µF/10V)		RCH1139
	C6201,C6202,C6211,C6212 (47µF/10V)		RCH1139
	C6301,C6302,C6311,C6312 (47µF/10V)		RCH1139
	C6401,C6402,C6411,C6412 (47µF/10V)		RCH1139

C6135,C6136,C6235,C6236 (470pF)	VCE1035
C6335,C6336,C6435,C6436 (470pF)	VCE1035
C6137,C6138,C6237,C6238 (220pF)	VCE1040
C6337,C6338,C6437,C6438 (220pF)	VCE1040
C6129,C6130,C6229,C6230 (100pF)	VCE1045
C6329,C6330,C6429,C6430 (100pF)	VCE1045

RESISTORS

R6101,R6102,R6201,R6202 (2.55kΩ, 1/2W)	ACN7105
R6301,R6302,R6401,R6402 (2.55kΩ, 1/2W)	ACN7105
△ R6031,R6032,R6051,R6052	RD1/4MUF470J
△ R6071,R6072,R6091,R6092 Other Resistors	RD1/4MUF470J RS1/16S□□□□

OTHERS

CN6001,CN6002	14R-FJ
FJ CONNECTOR14P	
CN6004 17P SOCKET	KP200TA17L
CN6003 7P SOCKET	KP200TA7L

U DAC8 ASSY (VSX-47TX Only)**SEMICONDUCTORS**

IC6501-IC6504,IC6601-IC6604	NJM2068D
IC6701-IC6704,IC6801-IC6804	NJM2068D
IC6921,IC6941,IC6961,IC6981	PCM1738E-1
IC6901	PQ3DZ13
IC6922,IC6942,IC6962,IC6982	TC94A07F

COILS

L6902,L6922,L6923,L6942,L6943	ATL7002
CHIP FERRITE BEAD	
L6962,L6963,L6982,L6983	ATL7002
CHIP FERRITE BEAD	
L6921,L6941,L6961,L6981	QTL1013
CHIP SOLID INDUCTOR	

CAPACITORS

C6515,C6516,C6615,C6616 (47µF/25V)	ACH7162
C6715,C6716,C6815,C6816 (47µF/25V)	ACH7162
C6513,C6514,C6613,C6614	CCSRCH101J50
C6713,C6714,C6813,C6814,C6939	CCSRCH101J50
C6959,C6979,C6999	CCSRCH101J50
C6525,C6526,C6625,C6626	CCSRCH330J50
C6725,C6726,C6825,C6826	CCSRCH330J50
C6507-C6510,C6607-C6610	CCSRCH821J50
C6707-C6710,C6807-C6810	CCSRCH821J50
C6901	CEAT100M50
C6933,C6934,C6953,C6954	CEAT471M25
C6973,C6974,C6993,C6994	CEAT471M25
C6902,C6920,C6930,C6932,C6940	CEHAZL101M10

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
	C6950,C6952,C6960,C6970,C6972 C6980,C6990,C6992 C6511,C6512,C6611,C6612 C6711,C6712,C6811,C6812 C6914,C6921,C6925,C6927,C6929	CEHAZL101M10 CEHAZL101M10 CENA4R7M50 CENA4R7M50 CKSRYB104K16	
	C6931,C6941,C6945,C6947,C6949 C6951,C6961,C6965,C6967,C6969 C6971,C6981,C6985,C6987,C6989 C6991 C6922,C6942,C6962,C6982	CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB471K50	
	C6517-C6524,C6617-C6624 C6717-C6724,C6817-C6824 C6935,C6936,C6955,C6956 C6975,C6976,C6995,C6996 C6505,C6506,C6605,C6606	CKSRYB473K50 CKSRYB473K50 CKSRYB473K50 CKSRYB473K50 CKSRYB682K50	
	C6705,C6706,C6805,C6806 C6501-C6504,C6601-C6604 (4700pF/40V) C6701-C6704,C6801-C6804 (4700pF/40V)	CKSRYB682K50 VCE1046 VCE1046	

RESISTORS

△	R6931, R6932, R6951, R6952	RD1/4MUF470J
△	R6971, R6972, R6991, R6992 R6501-R6504, R6601-R6604 R6701-R6704, R6801-R6804 R6927, R6947, R6967, R6987	RD1/4MUF470J RDR1/4VM6200F RDR1/4VM6200F RS1/16S1602D
	R6505-R6516, R6605-R6616 R6705-R6716, R6805-R6816 Other Resistors	RS1/16S6200F RS1/16S6200F RS1/16S□□□J

OTHERS

CN6901, CN6902	14R-FJ
FJ CONNECTOR 14P	
CN6904 17P SOCKET	KP200TA17L
CN6903 7P SOCKET	KP200TA7L

V POWER AMP (L) ASSY

SEMICONDUCTORS

△	IC4101, IC4401, IC4601	PA9008A
△	IC4102, IC4302, IC4402, IC4602	PBD001A
△	IC4103, IC4403, IC4603 Q4101, Q4301, Q4401, Q4601 Q4801, Q4803, Q4805	PBD002A 2SA1255 2SC2412K
	Q4102, Q4402, Q4602 Q4104, Q4204, Q4304, Q4404, Q4604 D4103-D4106, D4305, D4403-D4406 D4603-D4606 D4801	2SC3138 2SC3326 1SS355 1SS355 UDZ2.7B
	D4101, D4102, D4401, D4402 D4601, D4602	UDZS7.5B UDZS7.5B

CAPACITORS

C4110, C4111, C4410, C4411 C4610, C4611 C4101, C4401, C4601 C4809 C4115, C4116, C4415, C4416 C4615, C4616 C4109, C4409, C4609	CCSRCH220J50 CCSRCH220J50 CEAT101M10 CEAT221M16 CEAT221M63 CEAT221M63 CEAT470M16
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Mark	No.	Description	Part No.
	C4801,C4803		CEAT471M63
	C4103,C4403,C4603		CEHAT102M10
	C4106-C4108,C4406-C4408		CEHAT470M16
	C4606-C4608		CEHAT470M16
	C4104,C4105,C4404,C4405		CFTLA104J2A
	C4604,C4605		CFTLA104J2A
	C4112,C4113,C4412,C4413		CFTYA224J50
	C4612,C4613		CFTYA224J50
	C4102,C4402,C4602		CKSRYB221K50

RESISTORS

△	R4110, R4111, R4125, R4126, R4310 (0.1Ω)	ACN7107
△	R4325, R4410, R4411, R4425, R4426 (0.1Ω)	ACN7107
△	R4610, R4611, R4625, R4626 (0.1Ω)	ACN7107
	R4117, R4417, R4617 R4104, R4404, R4604 R4103, R4403, R4603 R4127, R4128, R4327, R4427, R4428 R4627, R4628	RDR1/4VM103J RDR1/4VM220J RDR1/4VM331J RS1/16S1001F RS1/16S1001F
	R4129, R4130, R4329, R4429, R4430 R4629, R4630 R4116, R4133, R4134, R4316, R4333 R4416, R4433, R4434, R4616 R4633, R4634	RS1/16S1003F RS1/16S1003F RS1/16S1004F RS1/16S1004F RS1/16S1004F
	R4112, R4113, R4312, R4412, R4413 R4612, R4613 R4114, R4115, R4314, R4414, R4415 R4614, R4615 R4131, R4132, R4331, R4431, R4432	RS1/16S1502F RS1/16S1502F RS1/16S1503F RS1/16S1503F RS1/16S3902F

△	R4631, R4632 R4118, R4418, R4618 Other Resistors	RS1/16S3902F RS1LMF2R2J RS1/16S□□□J
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OTHERS

J4801	LEAD WITH HOUSING	ADX7370
CN4812	2P CONNECTOR	B02B-XASK-1
CN4803	11P PLUG	KM250NA11L
CN4805	15P PLUG	KM250NA15L
CN4801	8P CONNECTOR	S08B-XASK-1

4801, 4803, 4805	SCREW TERMINAL	VNE1949
4809	EARTH METAL FITTING	VNF-091

W POWER AMP (C) ASSY

SEMICONDUCTORS

△	IC4301 D4303, D4304 D4301, D4302	PA9008A 1SS355 UDZS7.5B
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CAPACITORS

C4310, C4311 C4315, C4316 C4309 C4301 C4303	CCSRCH220J50 CEAT221M63 CEAT470M16 CEHAT101M10 CEHAT102M10
C4306-C4308 C4304, C4305 C4312, C4313 C4302	CEHAT470M16 CFTLA104J2A CFTYA224J50 CKSRYB221K50

Mark	No.	Description	Part No.
RESISTORS			
	R4317		RDR1/4VM103J
	R4304		RDR1/4VM220J
	R4303		RDR1/4VM331J
△	R4318		RS1LMF2R2J
	Other Resistors		RS1/16S□□□J

OTHERS

CN4808	13P SOCKET	KP250NA13
CN4807	15P SOCKET	KP250NA15

X POWER AMP (R) ASSY**SEMICONDUCTORS**

△	IC4201,IC4501,IC4701	PA9008A
△	IC4202,IC4502,IC4702	PBD001A
△	IC4203,IC4303,IC4503,IC4703	PBD002A
	Q4201,Q4501,Q4701	2SA1255
	Q4802,Q4804,Q4806	2SC2412K
	Q4202,Q4302,Q4502,Q4702	2SC3138
	Q4504,Q4704	2SC3326
	D4203-D4206,D4306,D4503-D4506	1SS355
	D4703-D4706	1SS355
	D4802	UDZ2.7B
	D4201,D4202,D4501,D4502	UDZS7.5B
	D4701,D4702	UDZS7.5B

CAPACITORS

C4210,C4211,C4510,C4511	CCSRCH220J50
C4710,C4711	CCSRCH220J50
C4201,C4501,C4701	CEAT101M10
C4810	CEAT221M16
C4215,C4216,C4515,C4516	CEAT221M63
C4715,C4716	CEAT221M63
C4209,C4509,C4709	CEAT470M16
C4802,C4804	CEAT471M63
C4203,C4503,C4703	CEHAT102M10
C4206-C4208,C4506-C4508	CEHAT470M16
C4706-C4708	CEHAT470M16
C4204,C4205,C4504,C4505	CFTLA104J2A
C4704,C4705	CFTLA104J2A
C4212,C4213,C4512,C4513	CFTYA224J50
C4712,C4713	CFTYA224J50
C4202,C4502,C4702	CKSRYB221K50

RESISTORS

△	R4210,R4211,R4225,R4226,R4311	ACN7107
	(0.1Ω)	
△	R4326,R4510,R4511,R4525,R4526	ACN7107
	(0.1Ω)	
△	R4710,R4711,R4725,R4726 (0.1Ω)	ACN7107
	R4217,R4517,R4717	RDR1/4VM103J
	R4204,R4504,R4704	RDR1/4VM220J
	R4203,R4503,R4703	RDR1/4VM331J
	R4227,R4228,R4328,R4527,R4528	RS1/16S1001F
	R4727,R4728	RS1/16S1001F
	R4229,R4230,R4330,R4529,R4530	RS1/16S1003F
	R4729,R4730	RS1/16S1003F
	R4216,R4233,R4234,R4334,R4516	RS1/16S1004F
	R4533,R4534,R4716,R4733,R4734	RS1/16S1004F
	R4212,R4213,R4313,R4512,R4513	RS1/16S1502F

Mark	No.	Description	Part No.
	R4712,R4713		RS1/16S1502F
	R4214,R4215,R4315,R4514,R4515		S1/16S1503F
	R4714,R4715		RS1/16S1503F
	R4231,R4232,R4332,R4531,R4532		RS1/16S3902F
	R4731,R4732		RS1/16S3902F
△	R4218,R4518,R4718		RS1LMF2R2J
	Other Resistors		RS1/16S□□□J

OTHERS

J4802	LEAD WITH HOUSING	ADX7371
CN4813	2P CONNECTOR	B02B-XASK-1
CN4806	13P PLUG	KM250NA13L
CN4804	9P PLUG	KM250NA9L
CN4802	6P CONNECTOR	S06B-XASK-1

4802,4804,4806	SCREW TERMINAL	VNE1949
4810	EARTH METAL FITTING	VNF-091

Y POWER AMP (BR) ASSY**SEMICONDUCTORS**

Q4303,Q4403	2SC2412K
Q4103	DTA124EK
D4806	1SS355
D4805	UDZS5.1B

CAPACITOR

C4812	CKSRYF105Z10
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RESISTORS

All Resistors	RS1/16S□□□J
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OTHERS

J4803	BOARD IN WIRE	ADX7372
CN4809	11P SOCKET	KP250NA11
CN4810	9P SOCKET	KP250NA9
CN4811	8P CONNECTOR	S08B-XASK-1

Z POWER AMP (G) ASSY**OTHERS**

J4804	BOARD IN WIRE	ADX7363
4807,4808	EARTH METAL FITTING	VNF-091

AA LOCAL SUPPLY ASSY**SEMICONDUCTORS**

△	IC4047 (315mA)	AEK7003
△	IC4023,IC4024 (500mA)	AEK7005
△	IC4045,IC4046 (500mA)	AEK7005
△	IC4036 (1A)	AEK7009
△	IC4035 (1.25A)	AEK7010
△	IC4011	LM1085IT-5.0
△	IC4021,IC4031	LM2940CT-5.0
△	IC4041	NJM7820FA
△	IC4043	NJM78M15FA
△	IC4033	NJM78M56FA

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
△	IC4042		NJM7918FA
△	IC4022,IC4032		NJM79M05FA
	Q4054		2SA1037K
△	Q4022,Q4052		2SB951A
△	Q4021,Q4051		2SD1277A
	Q4053		2SK1132
	D4031,D4032,D4057		1SS355
△	D4003,D4004		D3SBA20(B)
	D4041		HZU2.2B
△	D4002,D4005		S1VB20/F03
	D4059,D4060		UDZ12B
	D4051-D4054		UDZ15B
	D4055,D4056		UDZ16B

CAPACITORS

C4003 (1μF/250V)	ACE7036
C4051,C4052 (2200μF/71V)	ACH7117
C4011 (333μF/16V)	ACH7159
C4053,C4054	CEAT101M63
C4023,C4024	CEAT471M16

C4021,C4022,C4032	CEAT472M16
C4041,C4042	CEAT472M35
C4031	CEAT682M16
C4045-C4047	CEJQ100M50
C4055,C4056	CEJQ100M63

C4013,C4035,C4036,C4038	CEJQ101M6R3
C4025,C4026,C4029,C4030	CEJQ470M16
C4039,C4040,C4049	CEJQ470M16
C4002	CFTLA474J2A
C4001	CFTYA105J50

C4057	CKSRYB102K50
C4043,C4044,C4048	CKSRYB103K50
C4012,C4027,C4028,C4033,C4034	CKSRYB104K16
C4037	CKSRYB104K16
C4061-C4064	CKSRYB473K16

RESISTORS

△	R4003	RD1/2MMF470J
△	R4021,R4022	RD1/4MUF151J
△	R4001,R4002	RD1/4MUF330J
△	R4051,R4052	RD1/4MUF472J
	Other Resistors	RS1/16S□□□□

OTHERS

J4001	2P CONNECTOR ASSY	ADX7369
J4004	6P CONNECTOR ASSY	ADX7373
J4002	4P CONNECTOR ASSY	ADX7374
CN4002	3P CONNECTOR	B03B-XASK-1
CN4001	8P CONNECTOR	B08B-XASK-1

CN4004	9P CONNECTOR	B09B-XASK-1
KN4001,KN4002	EARTH METAL FITTING	VNF1084

AB AC PRIMARY ASSY

SEMICONDUCTORS

△	IC1103	BU4094BC
△	IC1101	NJM78M56FA
△	IC1102	NJM79M24FA
	Q1102	2SB1197K
	Q1101	2SC2412K

Mark	No.	Description	Part No.
	Q1103		DTC124EK
	D1103,D1106		1SS355
△	D1101		S1VB20/F03
	D1102		UDZS5.1B

COILS

L1101,L1102	NOISE FILTER	RTF1167
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TRANSFORMER

△	T1101	ATT7043
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CAPACITORS

C1107	CCSRCH101J50
C1109	CEAT100M50
C1103,C1104	CEAT101M10
C1102	CEAT222M25
C1110	CEAT470M25

C1101	CFTYA104J50
C1106	CKSRYB104K16
C1105	CKSRYB473K16

RESISTORS

All Resistors	RS1/16S□□□□
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OTHERS

△	CN1105	3P JUMPER CONNECTOR	52151-0310
	CN1101	6P SOCKET	AKP7141
	CN1104	FFC CONNECTOR 14P	HLEM14R-1
	CN1102	7P SOCKET	KP250NA7
	CN1103	8P SOCKET	KP250NA8

KN1101	EARTH METAL FITTING	VNF1084
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AC POWER SW ASSY

SWITCH

△	S1301	ASG7024
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CAPACITORS

C1301,C1302	CFTLA103J50
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OTHERS

CN1301	3P JUMPER CONNECTOR	52147-0310
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AD SP (A) ASSY

SEMICONDUCTORS

Q1201,Q1203,Q1205,Q1207,Q1209	DTA124EK
Q1202,Q1204,Q1206,Q1208,Q1210	DTC124EK
D1201-D1210	1SS355

COILS

L1201-L1207	AF CHOKE COIL	ATH1053
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RELAYS

RY1201-RY1205	ASR7001
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Mark	No.	Description	Part No.
CAPACITORS			
	C1201-C1207		CQHA102J2A
RESISTORS			
△	R1231-R1237		RD1/4MUF100J
△	R1211,R1212		RS2LMF331J
	R1221-R1225		RS1/16S124J
OTHERS			
	J1201	BOARD IN WIRE	ADX7362
	J1206	3P CONNECTOR ASSY	ADX7364
	J1207,J1208	1P WIRE	ADX7368
△	CN1202	8P SPEAKER TERMINAL	AKE7074
△	CN1201	6P SPEAKER TERMINAL	AKE7075
	CN1206	FFC CONNECTOR 4P	HLEM4S-1
	CN1205	8P PLUG	KM250NA8L

AE FL SUPPLY ASSY**SEMICONDUCTORS**

△	Q1901	2SC5174P
	D1901,D1902	UDZ22B

CAPACITORS

C1901-C1903	CEJQ100M50
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RESISTORS

△	R1901	RD1/4MUF272J
	R1902	RS1/16S470J

OTHERS

CN1902	4P JUMPER CONNECTOR	52147-0410
CN1901	4P CONNECTOR	B04B-XASK-1

AF STANDBY ASSY**SWITCH**

S1901	ASG7013
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OTHERS

CN1903	3P FFC CONNECTOR	52044-0345
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AG POSISTER (L) ASSY**OTHERS**

△	J1901	2P CONNECTOR ASSY	ADX7365
	TH1901	POSISTOR	AEX7006

AH POSISTER (R) ASSY**OTHERS**

△	J1902	2P CONNECTOR ASSY	ADX7365
	TH1902	POSISTOR	AEX7006

Mark	No.	Description	Part No.
AI DSP DIODE ASSY			
SEMICONDUCTOR			
△	D1903		D5SBA20(B)
OTHERS			
	CN1904	4P CONNECTOR	S04B-XASK-1

AJ SP (B) ASSY**SEMICONDUCTORS**

Q1004	DTA124EK
Q1002,Q1003	DTC124EK
Q1001	DTC143EK
D1001-D1006	1SS355

COIL

△	L1001	LINE FILTER	ATF7018
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RELAYS

	RY1003	ASR7001
△	RY1002	ASR7016
△	RY1001	ASR7022

CAPACITORS

△	C1001,C1002 (0.01μF/AC250V)	ACG7033
	C1003,C1004	CQHA102J2A

RESISTORS

△	R1001,R1002 (15Ω, 10W)	ACN7104
△	R1003 (2.2MΩ, 1/2W)	RCN1080
	Other Resistors	RS1/16S□□□□

OTHERS

△	CN1006	4P SPEAKER TERMINAL	AKE7076
△	CN1001	6P PLUG	AKM7056
△	1004	1P AC OUTLET	AKP1033
	H1001,H1002	FUSE HOLDER	AKR1007
	CN1005	7P PLUG	KM250NA7L

△	CN1002	AC CORD SOCKET	RKP1751
△	CN1003	AMP U-P CONNECTOR	RKP1834
	1001	SCREW TERMINAL	VNE1948

AK DIODE ASSY**SEMICONDUCTORS**

△	D1501	KCH30A15
△	D1502	KRH30A15

CAPACITOR

C1501 (1μF/250V)	ACE7036
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RESISTOR

△	R1501	RD1/2MMF470J
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OTHERS

J1501	BOARD IN WIRE	ADX7358
J1502	BOARD IN WIRE	ADX7359
J1503	BOARD IN WIRE	ADX7360
J1504	BOARD IN WIRE	ADX7361

VSX-49TX, VSX-47TX

Mark	No.	Description	Part No.
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AL FUSE ASSY

OTHERS

H1801-H1810	FUSE CLIP	AKR1004
CN1803	4P CONNECTOR	B04B-XASK-1
CN1802	8P CONNECTOR	B08B-XASK-1
CN1801	12P CONNECTOR	S12B-XASK-1

AM TRANS (A) ASSY

CAPACITOR

C1601	CFTYA105J50
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RESISTOR

△ R1601	RD1/4MUF100J
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OTHERS

CN1601	5P CONNECTOR	B05B-XASK-1
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AN TRANS (B) ASSY

SEMICONDUCTORS

△ IC1703	PROTECTOR (750mA)	AEK7007
△ D1701		S1VB20/F03
D1702		UDZS7.5B

CAPACITORS

C1701	CEAT331M50
C1702	CEJQ101M10

RESISTORS

△ R1703-R1706	RS1/16S2R2J
R1701,R1702	RS1/16S683J

OTHERS

CN1701	3P CONNECTOR	B03B-XASK-1
CN1702	7P CONNECTOR	B07B-XASK-1
H701-H704	FUSE CLIP	AKR1004

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 Test Mode

• How to Enter the Test Mode

With the attached Remote Control Unit.

1. Press the [REMOTE SETUP]+[1] keys simultaneously to enter the "SECRET" mode.
LCD displays the "SECRET [DVD/LD]"
2. Press the [△]+[▽]+[VCR2] keys simultaneously to enter the Test Mode.
LCD displays the "SECRET [VCR2]".

1. Test Mode ON (Press [C] key)

- Set the function to CD.
- Set the signal selection to AUTO.
- Set the tuner-preset data.
- Set speaker A to ON and speaker B to OFF.
- Set the BASS and TREBLE to +6.
- Set the remaining items to their factory settings.

Display: TEST MODE

2. Test Mode OFF (Press [0] key)

When you quit Test mode, the unit automatically enters STANDBY status.

Note: Do NOT quit Test mode by disconnecting the power cord. Doing so prevents factory-set data from being written to EEPROM to backup the data.

3. Items to be checked in Test mode

For checking the main unit of a product: Remote control codes A55F+A500 ([1] key) through A509 ([0] key).

1. FL display check (Press [1] key)

Normal display → All FLs and LEDs on → All FLs and LEDs off → Normal display → . . .

Display transition:
TEST MODE → FL ALL ON → FL ALL OFF → TEST MODE

2. Bass and treble operations (Press [4] key)

Each time this code is issued, the bass and treble values change. In modes (THX, Direct, Multichannel-Direct) in which tone control is invalid, the display also changes as shown below. To use, select a mode (Standard, etc.) in which tone control is valid.

Display transition:
TRE/BASS 0dB → TRE/BASS MAX → TRE/BASS 0dB

Remarks:

In Test mode, the bass and treble keys on the main unit functions as follows:

- + : 0 dB → +6 dB → 0 dB → +6 dB, . . .
- − : 0 dB → −6 dB → 0 dB → −6 dB, . . .

3. Master volume switching (Press [5] key)

When this code is issued, the master volume changes. Trimming of all channels becomes 0 dB at this time.

Display transition:
TEST VOL MIN → TEST VOL MAX → TEST VOL MIN

4. Tuner 9K/10K switching (Press [6] key)

When this code is issued, the reception frequency interval of the tuner cyclically changes. The code is valid only with models (SD models) having 9K/10K switching capability.

Display transition:
TEST TUN 9K → TEST TUN 10K → TEST TUN 9K

5. FAN ON/OFF (Press [8] key)

When this code is issued, the fan turns on or off. The code is valid only with models having a fan.

Display transition: FAN OFF → FAN ON

OFF : Fan stops.

ON : Fan operates.

6. Microphone input check (Press [9] key)

When this code is issued, Direct mode is selected (a path that bypasses DSP), and a microphone input signal will be output from the pre-output on the front panel.

- Set the function to CD.
- Set the signal selection to AUTO.

Display transition: TEST MIC CHECK

7. RS232C operation check (Press [2] key)

When this code is issued, the RS-232C transmission port is switched to act as a general-purpose port, and self-check of data input/output ports is performed.

The signal ("L" output) at the data output port is read to the data-input port and checked as to whether it is correct or not. "H" is output from the CTS port.

If the port self-check successfully ends:

Display: MAIN RS232C OK

If the port self-check fails:

Display: MAIN RS232C NG

8. Tuner: Auto scan (Press [3] key)

When this code is issued, an auto scan operation begins.

The step of frequency increment is forcibly set to 9K.

If the function is not Tuner, it is switched to Tuner, then auto scanning starts from 88.5 MHz FM in the + direction.

When the code is issued again, auto scan starts from 1062 kHz AM in the − direction.

VSX-49TX, VSX-47TX

The reception points on the line:

AM : 1008 kHz

FM : 89 MHz

* If this code is issued during auto scanning, it merely causes the operation to stop. Issue the code again to resume auto scanning.

9. Video converter operation check (Press [7] key)

When this code is issued, All-through mode will be selected.

The video converter operation is deactivated.

The following assignment will be made for component connectors 1 to 3 and D4 connectors 1 and 2.

Component 1 : DVD/LD

Component 2 : TV/DVD

Component 3 : VCR2

D4-1 : SAT

D4-2 : VCR1/DVR

For checkers: Remote control codes other than A55F+A500 ([1] key) through A509 ([0] key).

4. DSP Microcomputer Test Mode

232C Test Mode

Overview

This test is for checking the operations of the buffer IC in the 232C block.

Signal supplied to pin 36 of the DSP microcomputer will be output from pins 35 and 38.

To enter this mode

You may enter 232C test mode using an identification code for serial transmission.

Identification code: 55h

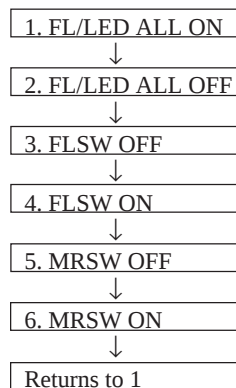
5. Display Microcomputer Test Mode

1. Test Mode ON

With pin 17 of PD5686 (M38B5) set to 5 V, set pin 10 (RESET) from 5 V to GND, then back to 5 V. Enter the Test Mode for checker.

2. How to check

Switch the mode using remote control code (k_afunc=A555) from SR_IN and MR_IN.



7.1.2 Protection Circuit Control Specifications

Microcomputer-related ports

TRANS_DET (pin 87)

Input port : To detect temperature rise at the transformer
Active: "L"

TEMP1 (pin 94)

Input port : To detect temperature rise at the heat sink
Active: "H"

FAN_DET (pin 21)

Input port : To detect forcible fan stop
Active: "H"

OL_DET (pin 73)

Input port : To detect overloading at the amplifier (Interrupt port)
Active: "H"

DC_DET (pin 49)

Input port : For DC detection
Active: "H"

FAN_DRIVE (pin 86)

Output port : For fan on/off
H"= ON, "L"= OFF

AMUTE (pin 66)

Output port : For system muting on/off
H"= ON, "L"= OFF

EXP_DT2 (pin 58)/EXP_CLK2 (pin 59)/EXP_OE2 (pin 60)/EXP_ST2 (pin 61)

Output ports : Data on the extension IC for relay control (IC1103 of the AC PRIMARY assembly).
The protection relays mentioned below include all the relays within the SP(B) assembly except RY1001 and RY1002.

The following control processes are activated immediately before the relay system is turned on upon power-on. The time is 4.8 seconds after power-on. (Control of the relay system is enabled 5.2 seconds after power-on.)

Only DC detection is enabled 2 seconds after power-on to activate it before other protection functions.

(1) Fan control

Valid with European and other general-area models only.

① Fan on/off

If the temperature at the heat sink rises, the TEMP1 port becomes "H." Detecting "H," the microcomputer starts the fan. No indication is made on the FL display.

② Fan detection

If the fan is forcibly stopped, the FAN_DET port becomes "H." Detecting "H," the microcomputer performs the following operations:

1. System muting on
2. Protection relays off

The warning indication "FAN STOP" appears (flashing) on the FL display.

If this status continues for more than 3 seconds, the power is turned off (for Standby mode).

If the port becomes "L" within 3 seconds, the unit resets automatically.

(2) Transformer temperature rise control

Valid with European and Japanese domestic models only.

European models

If the temperature at the transformer rises, the TRANS_DET port becomes "L."

Detecting "L," the microcomputer performs the following operations:

1. System muting on
2. Protection relays off

As long as the detection port remains "L," statuses 1 and 2 are maintained.

When the port becomes "H" (when the temperature at the transformer drops), statuses 1 and 2 are canceled, and the unit resets automatically (automatic reset is requested by safety regulations).

The warning indication "THERMAL" appears on the FL display.

(3) Temperature detection

Valid with North American and Japanese domestic models only.

The process mentioned in (1) is performed with European and other general-area models.

If the temperature at the heat sink rises, the TEMP1 port becomes "H." Detecting "H," the microcomputer performs the following operations:

1. System muting on
2. Protection relays off

The warning indication "THERMAL" appears on the FL display.

If this status continues for more than 3 seconds, the power is turned off (for Standby mode).

If the port becomes "L" within 3 seconds, the unit resets automatically.

(4) Overload detection (abnormality detection)

If the speaker terminals are short-circuited or low-load driving is detected, the OL_DET port becomes "H."

Detecting "H" in an interrupt process, the microcomputer performs the following operations:

1. System muting on
2. All relays off (expander output off)

The expander output is turned off to perform detection during the interrupt. As the AC relay is also turned off, no warning indication appears on the FL display.

3. Power off (Standby mode)

(5) DC detection (defect detection)

Only DC detection is enabled 2 seconds after power-on.

If there is a fault in the power amplifier or a high-level signal lower than 5 Hz is input, the DC_DET port becomes "H."

Detecting "H," the microcomputer performs the following operations:

1. System muting on
2. Protection relays off

The warning indication "AMP ERR" appears on the FL display.

If this status continues for more than 3 seconds, the power is turned off (for Standby mode).

If the port becomes "L" within 3 seconds, the unit resets automatically.

When the power is turned off owing to DC detection (also when a user prompted by the warning indication turns off the switch on the primary side), key inputs are disabled for 60 seconds.

The microcomputer backs up the value of the 60-second timer. The unit will only enter Standby mode, and power will not be turned on within 60 seconds in response to a key input after power-off on the primary side. (When the switch on the primary side is turned on again, key inputs will be limited for 60 seconds even if the timer value is less than 60 seconds.)

After DC detection, power-on from the multiroom side is also disabled for 60 seconds.

If the unit resets within 3 seconds (before the power is turned off) after DC detection, the normal operation is restored.

(6) Diagnostic mode

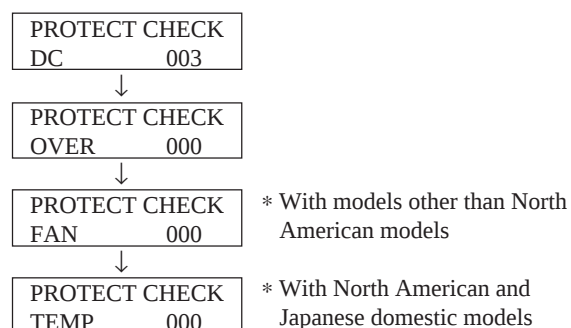
This mode is only for servicing and checking the circuit design, and not open to users.

When the DNR key and VSEL key are both held pressed for 3 seconds in Standby mode, the power is turned on, and the number of times of each defect or abnormality detection is sequentially displayed on the FL display.

Displayed items:

- DC detection
- Overload detection
- Fan detection
- Temperature detection

Hold the DNR key and VSEL key pressed for 3 seconds in Standby mode.



There is no specific mode for clearing the above-mentioned diagnostic mode.

Diagnostic mode is only cleared with an all-reset operation.

● Protection process list

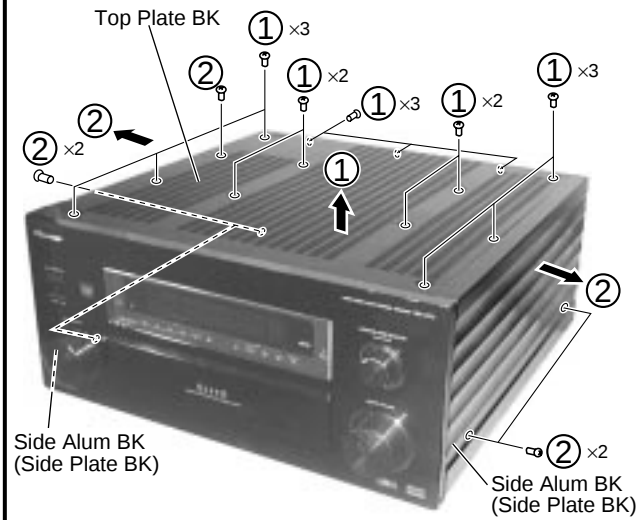
Item	Purpose	Detection Method	Process	Warning Indication	Remarks	North America	Japan	Europe	General Areas
DC detection	To detect amplifier damage (defect status) A process to protect speakers (for protection of connected external devices)	Detects when the DC_DET port becomes "H."	Turns muting on and protection relays off, then turns off the power after 3 seconds.	Flashing "AMP ERR" for 3 seconds	Once detected, key inputs are disabled for 60 seconds. If the DC_DET port becomes "L" within 3 seconds, the unit resets automatically.	O	O	O	O
AMP overload	To detect overloading (abnormal status) With low-load driving or a short circuit of the speaker terminals (for protection of the amplifier)	Detects when the AMP_OL port becomes "H" (checks by interrupt).	Turns muting on and all relays off, and immediately turns off the power.	None		O	O	O	O
Fan control	Protection function against a temperature rise at the heat sink	Detects when the TEMP1 port becomes "H" (checks by interrupt).	Rotates the fan.	None	The fan stops when the TEMP1 port becomes "L."	X	X	O	O
Fan stop (models with a fan and J models only)	To know that the rotating fan is forcibly stopped	Detects when the FAN_DET port becomes "H."	Turns muting on and protection relays off, then turns off the power after 3 seconds.	Flashing "FAN STOP" for 3 seconds	If the FAN_DET port becomes "L" within 3 seconds, the unit resets automatically.	X	O	O	O
Transformer temperature detection (1)	Protection function against a temperature rise in the transformer	Detects when the TRANS_DET port becomes "L."	Turns muting on and protection relays off.	Indicating "THERMAL"	If the TRANS_DET port becomes "H," the unit resets automatically.	X	X	O	X
Transformer temperature detection (2)	Protection function against a temperature rise at the transformer	Detects when the TRANS_DET port becomes "L."	Rotates the fan.	None	The fan stops when the TRANS_DET port becomes "L."	X	O	X	X
Temperature detection	Protect function against a temperature rise at the heat sink	Detects when the TEMP1 port becomes "H."	Turns muting on and protection relays off, then turns off the power after 3 seconds.	Flashing "THERMAL" for 3 seconds	If the TEMP1 port becomes "L" within 3 seconds, the unit resets automatically.	O	O	X	X

Note: Reset and key input are enabled after DC detection, as the DC detection circuit is designed to detect DC as well as low frequencies (lower than 5 Hz) and the warning may be caused by something other than a defect.

7.1.3 DISASSEMBLY

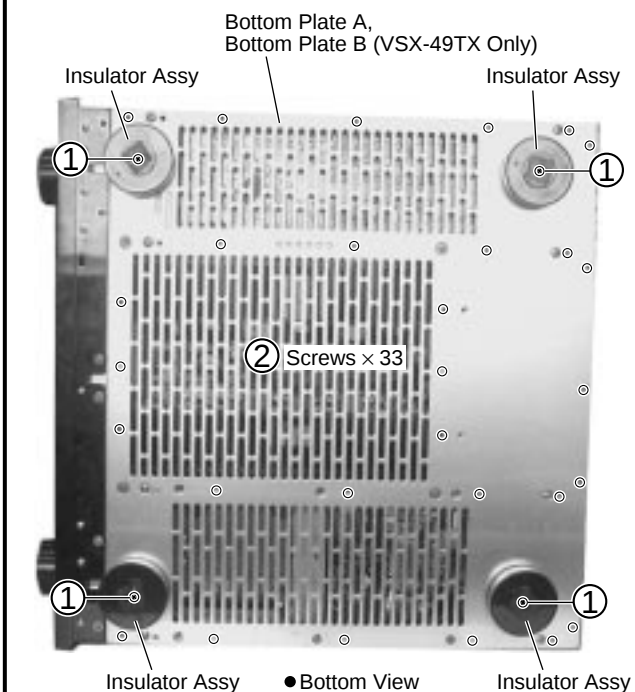
1 Exterior Block

- ① Remove the Top Plate BK (Screws × 13)
- ② Remove the Side Alum BK (Screws × 5)(for VSX-49TX)
Remove the Side Plate BK (Screws × 5)(for VSX-47TX)

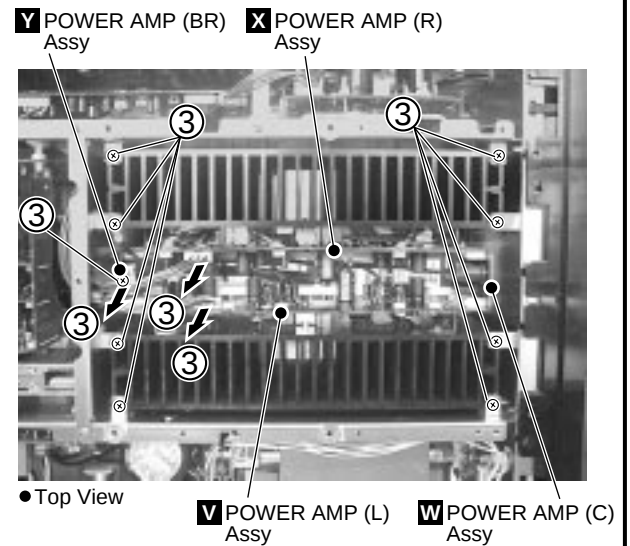


2 Heat Sink Block

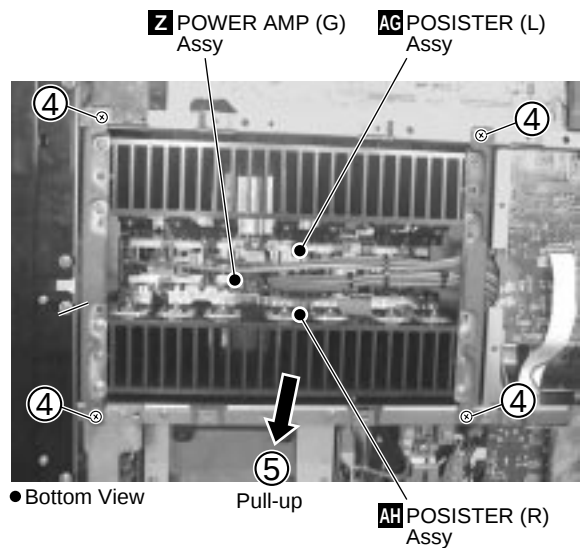
- ① Remove the Insulator Assy (Screws × 4)
- ② Remove the Bottom Plate A and Bottom Plate B (Screws × 33)



- ③ Remove 9 screws and three connectors

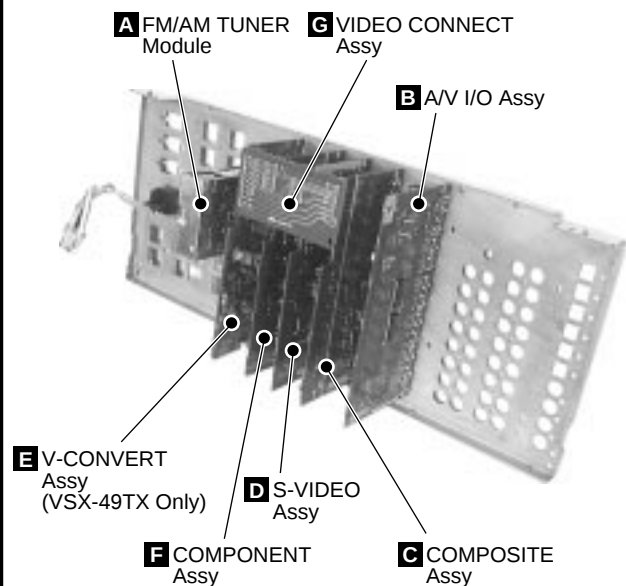
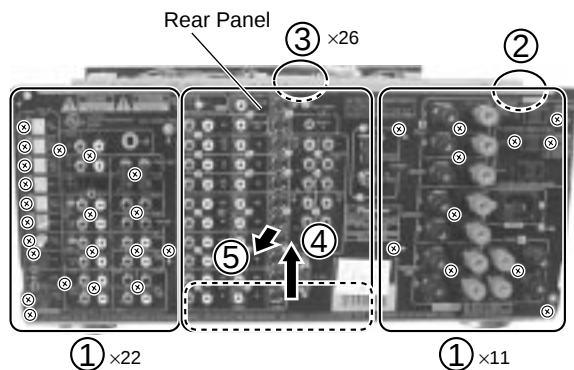


- ④ Remove four screws
- ⑤ Remove the Heat Sink Block

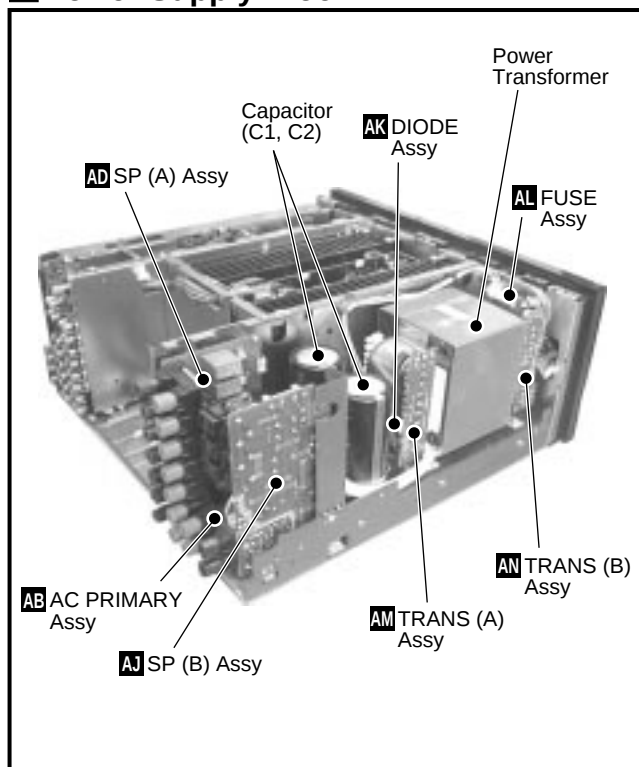


3 Rear Panel Block

- ① Remove screws (× 33)
- ② Remove the connector from SP (B) Assy
- ③ Remove screws (× 26)
- ④ Remove six connectors from MOTHER Assy
- ⑤ Remove the Rear Panel



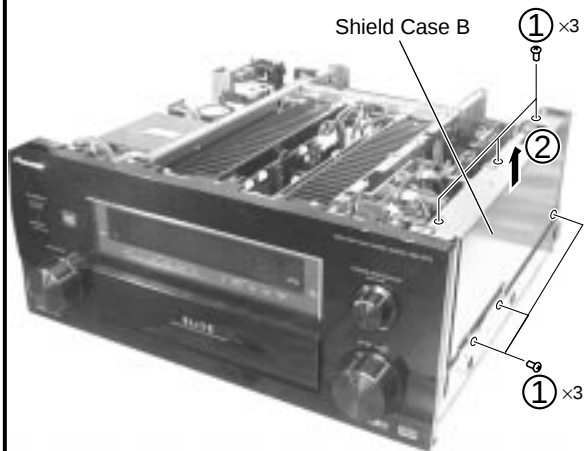
4 Power Supply Block



5 DSP and DAC Block

① Remove 6 screws

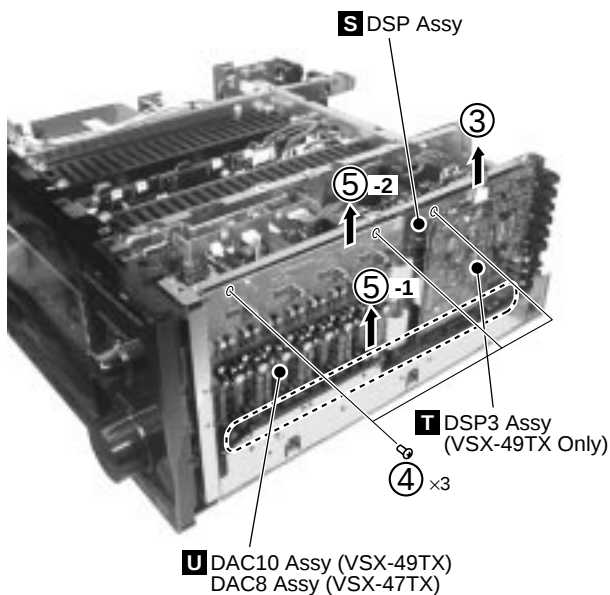
② Remove the Shield Case B



③ Remove the connector

④ Remove 3 screw

⑤ Remove DAC10 Assy (VSX-49TX), DAC8 Assy (VSX-47TX) and DSP Assy (Connectors x 5)

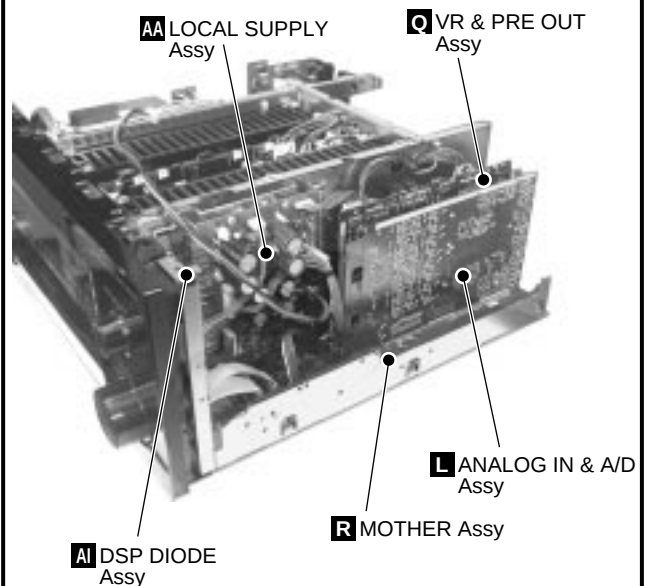
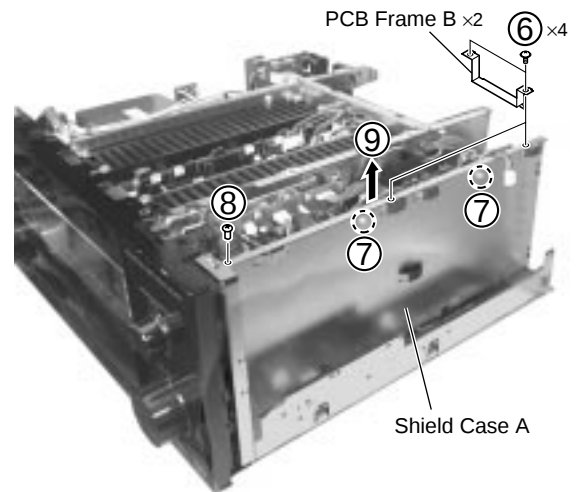


⑥ Remove two PCB Frame B (Screws x 4)

⑦ Remove two Wire Clip

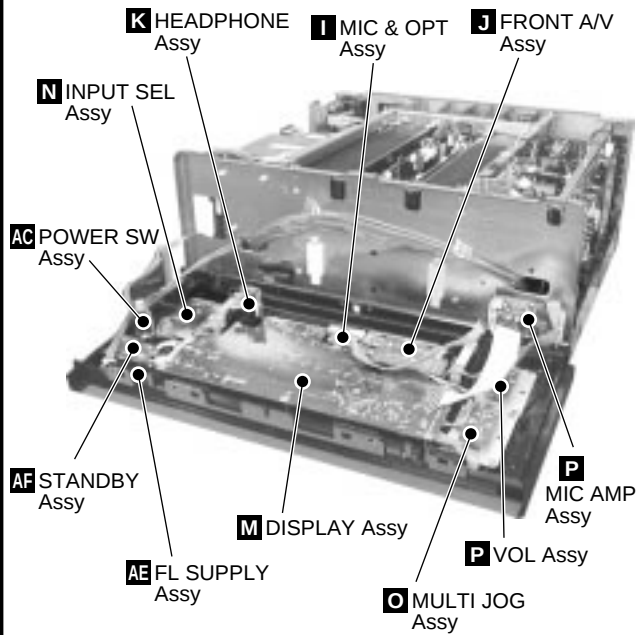
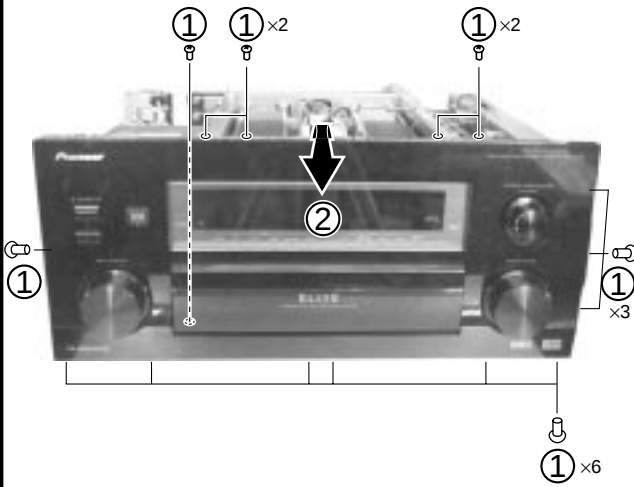
⑧ Remove the screw

⑨ Remove the Shield Case A



6 Front Panel Block

- ① Remove screws (× 15)
- ② Remove the Front Panel Block



7.2 PARTS

7.2.1 IC

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

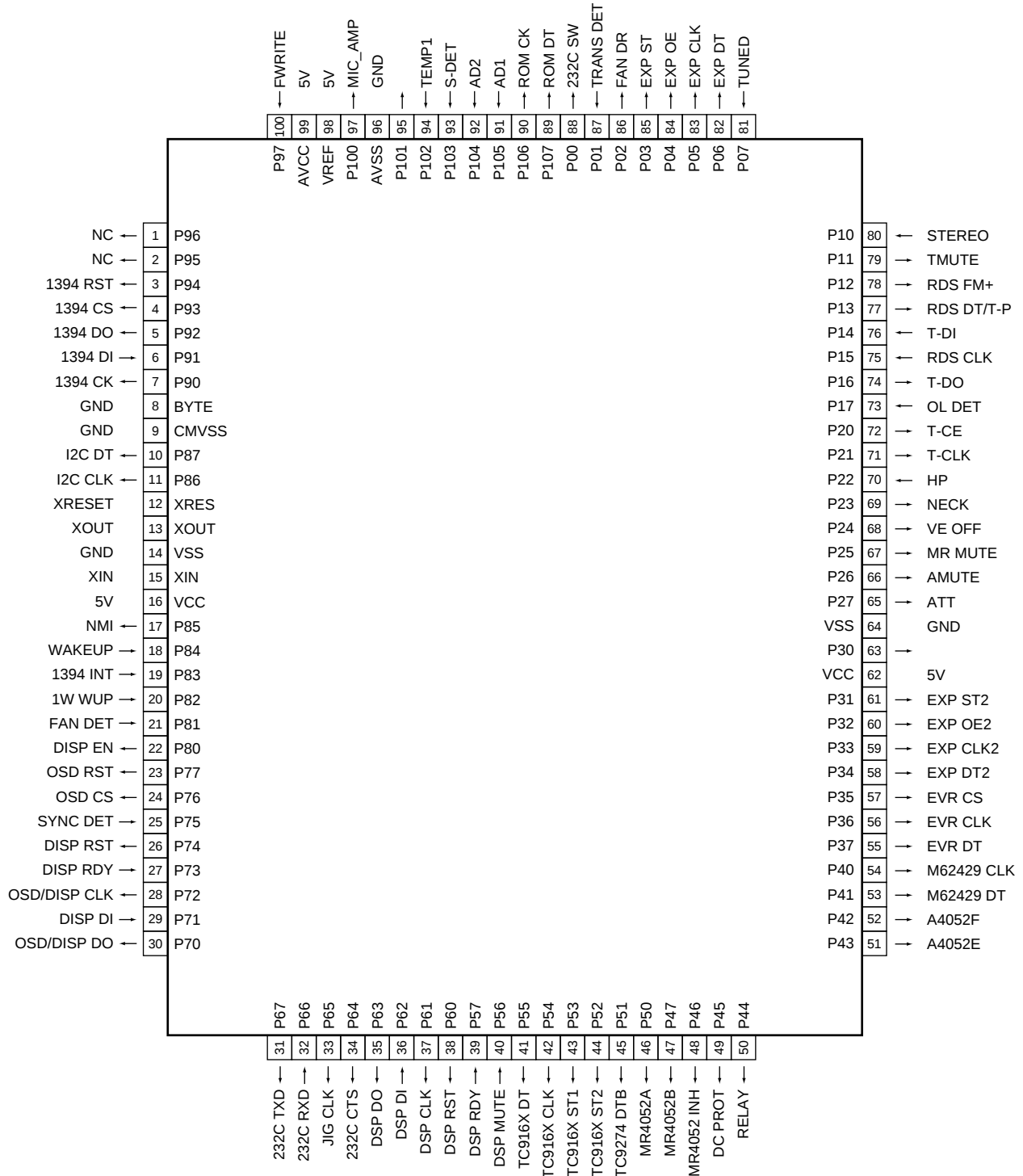
●List of IC

PDG5685A9, PD5686A, PD5687A, BU4094BCFV

■ PD5685A9 (MOTHER ASSY : IC5801)

- Main Microcomputer

● Pin Assignment (Top view)



VSX-49TX, VSX-47TX

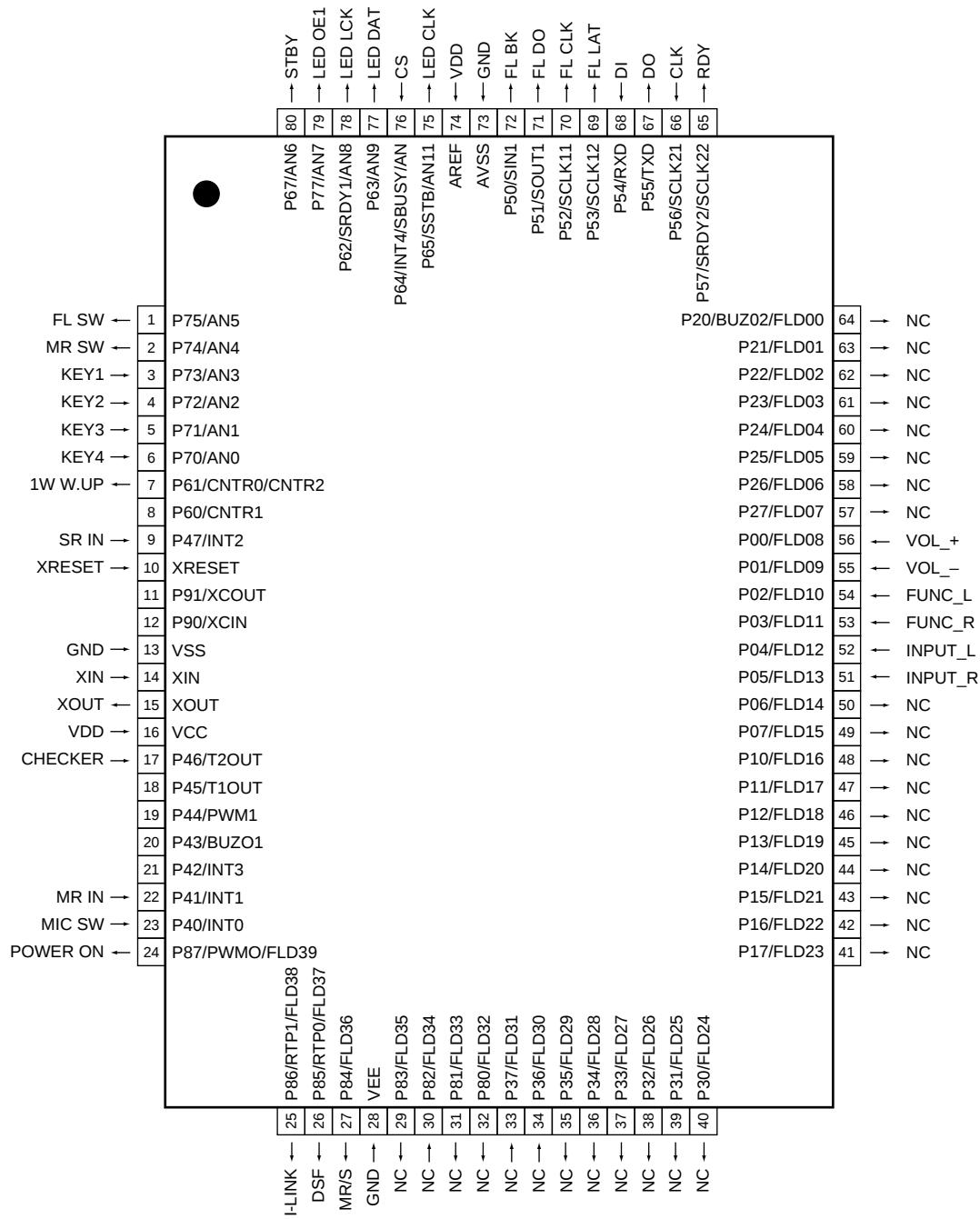
● Pin Function

No.	Pin Name	I/O	Pin Function	Active
1	—	O	NC "L" fixed.	
2	—	O	NC "L" fixed.	
3	1394 RST	O	Standby for 1394 (Not used) "L" fixed.	
4	1394 CS	O	Standby for 1394 (Not used) "L" fixed.	
5	1394 DO	O	Standby for 1394 (Not used) "L" fixed.	
6	1394 DI	I	Standby for 1394 (Not used) Standby with the circuit.	
7	1394 CK	O	Standby for 1394 (Not used) "L" fixed.	
8	GND	—	Ground	
9	GND	—	Ground	
10	I2C DT	I/O	Data signal for video converter IC control I2C bus system	
11	I2C CLK	O	Clock signal for video converter IC control I2C bus system	
12	XRESET	—	Reset	
13	XOUT	—	Oscillator	
14	GND	—	Ground	
15	XIN	—	Oscillator	
16	5V	—	5V power supply	
17	NMI	I	Cannot use it as usual input port (100kΩ pullup)	
18	WAKEUP	I	Wakeup	H
19	1394 INT	I	Standby for 1394 (Not used) Standby with the circuit.	
20	1W WUP	I	Wakeup signal at standby (from the display microcomputer) (pulldown)	H
21	FAN DET	I	Fix to "L" with the hardware.	
22	DISP EN	O	Communication enabling signal to the display microcomputer	H
23	OSD RST	O	OSD-IC reset signal L: reset, H: release reset	
24	OSD CS	O	OSD-IC chip select signal	H
25	SYNC DET	I	Internal/external sync detection (Switch the internal/external sync of OSD-IC.)	L: EXT
26	DISP RST	O	Display microcomputer reset signal L: reset, H: release reset (pulldown)	
27	DISP RDY	I	Communication enabling signal from the display microcomputer	H
28	OSD/DISP CLK	O	Communication clock signal with the OSD-IC/display microcomputer	
29	DISP DI	I	Communication data in signal with the display microcomputer (N ch open drain: pullup)	
30	OSD/DISP DO	O	Communication data out signal with the OSD-IC/display microcomputer (N ch open drain: pullup)	
31	232C TXD	O	For 232C rewriting (data output)	
32	232C RXD	I	For 232C rewriting (data input)	
33	CLK	O	Not used	
34	232C CTS	O	For 232C rewriting (communication enabling)	
35	DSP DO	O	Communication data out signal with the DSP microcomputer	
36	DSP DI	I	Communication data in signal with the DSP microcomputer	
37	DSP CLK	O	Communication clock signal with the DSP microcomputer	
38	DSP RST	O	DSP microcomputer reset signal L: reset, H: release reset	
39	DSP RDY	I	Communication enabling signal from the DSP microcomputer	H
40	DSP MUTE	I	Mute request signal from the DSP microcomputer H: Mute request	H
41	TC916X DT	O	Function SW control data	
42	TC916X CLK	O	Function SW control clock	
43	TC916X ST1	O	Main audio switching control strobe of TC9162 and TC9163. Multi audio switching control strobe of TC9164	
44	TC9163 STX	O	Multi/2ch signal switch	
45	TC9274 STB	O	DIRECT/DSP switching control strobe	
46	MR4052A	O	Switching control signal 1 of multi room audio system	
47	MR4052B	O	Switching control signal 2 of multi room audio system	
48	MR4052INH	O	Switching control signal 3 of multi room audio system H: output OFF	
49	DC PROT	I	DC detection H: detection	H
50	RELAY	O	SP relay ON/OFF	H

No.	Pin Name	I/O	Pin Function	Active
51	A4052E	O	Output switching control signal 1 of surround back ch	
52	A4052F	O	Output switching control signal 2 of surround back ch	
53	M62429 DT	O	Data signal for multi room volume IC control	
54	M62429 CLK	O	Clock signal for multi room volume IC control	
55	EVR DT	O	Data signal for erelectronic volume	
56	EVR CLK	O	Clock signal for erelectronic volume	
57	EVR CS	O	Chip select signal for erelectronic volume	
58	EXP DT2	O	Data signal for expansion IC control	
59	EXP CLK2	O	Clock signal for expansion IC control	
60	EXP OE2	O	Output enable signal for expansion IC control	
61	EXP ST2	O	Chip clock signal for expansion IC control	
62	5V	–	5V power supply	
63	NC	O	NC "L" fixed.	
64	GND	–	Ground	
65	ATT	O	Attenuator	H
66	AMUTE	O	System mute L: Mute ON	L
67	MRMUTE	O	Multi room mute L: Mute ON	L
68	VE OFF	O	Video system power supply switch At Power OFF of video system: L	L
69	NECK	O	4/6Ω switch 4Ω: H , 6Ω: L , Initial value: 6Ω	
70	HP	I	Headphone detection H: Detection	H
71	TUNER CLK	O	Clock signal of tuner control	
72	TUNER CE	O	Chip select signal of tuner control	
73	OL DET	I	Amp. overload detection H: Detection	H
74	TUNER DO	O	Data output signal of tuner control	
75	RDS CLK	O	"L" fixed	
76	TUNER DI	I	Data input signal of tuner control (pullup)	
77	T-POWER	O	Power ON/OFF of tuner module	H
78	NC	O	NC	
79	TMUTE	O	Tuner mute	H
80	STEREO	I	L: STEREO (pullup)	L
81	TUNED	I	L: TUNED (pullup)	L
82	EXP DT	O	Data signal of expansion IC control	
83	EXP CLK	O	Clock signal of expansion IC control	
84	EXP OE	O	Output enable signal of expansion IC control	
85	EXP ST	O	Chip clock signal of expansion IC control	
86	FAN DR	O	"L" fixed	
87	TRANS DET	I	"H" fixed by hardware	
88	232CSW	I/O	232C switch L: Main unit, H: DSP microcomputer	
89	ROM DT	I/O	EEPROM control data signal	
90	ROM CK	O	EEPROM control clock signal	
91	SIMUKE1	I	Destination read 1	
92	SIMUKE2	I	Destination read 2	
93	S-DET	I	Sync detection H: S signal present "H" for sync detection	H
94	TEMP1	I	Temperature detection H: Protection function ON	H
95	NC	O	"L" fixed	
96	AVSS	–	Connect to VSS	
97	MIC AMP	O	5-3V conversion IC control H: MIC AMP ON	H
98	VREF	–	Connect to VCC	
99	AVCC	–	Connect to VCC	
100	FWRITE	I	Forced rewriting mode detection (H: Rewriting mode)	H

■ PD5686A (DISPLAY ASSY : IC3001)

- Display Microcomputer
- Pin Assignment (Top view)



● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	FL SW	O	FL power supply ON/OFF	41	NC	O/L	Non connection
2	MR SW	O	MR PIONEER / OTHER	42	NC		
3	KEY1	I	KEY AD input	43	NC		
4	KEY2			44	NC		
5	KEY3			45	NC		
6	KEY4			46	NC		
7	1W W.UP	O	1W correspondence main wakeup	47	NC		
8	NC	O/L		48	NC		
9	SR IN	I	Remote control input of main room	49	NC		
10	RESET	–	Reset	50	NC		
11	NC	O/L	Non connection	51	NC		
12	NC			52	INPUT_R	I	Input SEL L
13	GND	–	Ground	53	INPUT_L	I	Input SEL R
14	XIN	–	Oscillator	54	FUNC_R	I	Multi JOG R
15	XOUT	–	Oscillator	55	FUNC_L	I	Multi JOG L
16	VDD	–	Power supply	56	VOL_–	I	VOL_–
17	CHECKER	I	Checker mode detection	57	VOL_+	I	VOL_+
18	NC	O/L	Non connection	58	NC	O/L	Non connection
19	NC			59	NC		
20	NC			60	NC		
21	NC			61	NC		
22	MR IN	I	Remote control input of sub room	62	NC	O/L	Non connection
23	MIC SW	I	MIC detection	63	NC		
24	POWER ON	O	Power ON LED	64	NC		
25	I-LINK	O	I-LINK LED	65	RDY		
26	DSF	O	Sound field LED	66	CLK	I	Main communication CLK
27	MR/S	O	MR/S LED	67	DO	O	Main communication data out
28	GND	–	Ground	68	DI	I	Main communication data in
29	NC	O/L	Non connection	69	FL_LAT	O	FL DRV LAT
30	NC			70	FL_CLK	O	FL DRV CLK
31	NC			71	FL_DO	O	FL DRV DATA
32	NC			72	FL_BK	O	FL DRV BK
33	NC			73	GND	–	Ground
34	NC			74	VDD	–	Power supply
35	NC			75	LED_CLK	O	LED DRV CLK
36	NC			76	CS	O	Main communication CS
37	NC			77	LED_DAT	O	LED DRV DATA
38	NC			78	LED_LCK	O	LED DRV LCK
39	NC			79	LED_OE1	O	LED DRV OE
40	NC			80	STBY	O	STBY LED

VSX-49TX, VSX-47TX

■ PD5687A (DSP ASSY : IC701)

• DSP Microcomputer

● Pin Function

No.	Pin Name	I/O	Pin Function
1	DSP2MOSI	O	2nd DSP communication data output
2	DSP2SCK	O	2nd DSP communication clock output
3	DSP2SSI	O	2nd DSP communication strobe
4	DSP2RST	O	2nd DSP reset
5	HDO	O	Data output of microcomputer communication to main microcomputer
6	HDI	I	Data input of microcomputer communication from main microcomputer
7	HCLK	I	Clock input of microcomputer communication from main microcomputer
8	BYTE	I	Vcc (bus width 8 bit)
9	CNVSS	I	Vss (Use with memory expansion mode)
10	MODEL	I	Upper/lower model distinction input
11	FWRITE	I	FLASH rewrite control input
12	RESET	I	Reset input from main microcomputer
13	XOUT	O	Connect a ceramic resonator (7.7MHz)
14	VSS	–	Vss
15	XIN	I	Connect a ceramic resonator (7.7MHz)
16	VCC	–	Vcc
17	NMI	I	Vcc
18	96DTS	I	DTS 96kHz detection input
19	UNLK	I	UNLOCK signal input
20	DATA	I	DIR various factor data
21	DLCK	I	Demodulator UNLOCK
22	EXOE	O	OE output of expansion IC
23	S DATA	O	Data output of expansion IC
24	S CLOCK	O	Clock output of expansion IC
25	STB	O	Strobe output of expansion IC
26	DSP1RST	O	1st DSP reset
27	9624	O	DSP IC mute output (at DTS 96kHz)
28	DACMCLK	O	DAC/D.F. clock output
29	DSCMDI	I	DAC data input
30	DACMDO	O	DAC/D.F. data output
31	DSP1REQ	O	1st DSP communication request
32	DSP1RDWR	O	1st DSP READ/WRITE switch
33	DSP1BUSY	I	1st DSP BUSY communication wait
34	DSP1ACK	I	1st DSP communication completion check
35	CDTO	O	DIR serial communication data output / TxD (rewrite)
36	CDTI	I	DIR serial communication data input / RxD (rewrite)
37	CCLK	O	DIR serial communication output
38	CSN	O	DIR serial communication chip select / RTS (rewrite)
39	XRDY	I	Vcc
40	ALE	O	NC
41	XHOLD	I	Vcc
42	XHLDA	O	NC
43	BCLK	O	NC
44	XOE	O	Flash memory I/F read enable
45	XBHE	O	NC
46	XWE	O	Flash memory I/F write enable
47	MD	O	Gain amp data output
48	MC	O	Gain amp clock output
49	STB	O	Gain amp strobe output
50	XCE	O	Flash ROM CE control

No.	Pin Name	I/O	Pin Function
51	A19	O	NC
52	A18	O	Address output of flash memory communication
53	A17		
54	A16		
55	A15		
56	A14		
57	A13		
58	A12		
59	A11		
60	A10		
61	A9		
62	Vcc	–	Vcc
63	A8	O	Address output of flash memory communication
64	Vss	–	Vss
65	A7	O	Address output of flash memory communication
66	A6		
67	A5		
68	A4		
69	A3		
70	A2		
71	A1		
72	A0		
73	XRST2	O	ADC reset output
74	DSPMUTE	O	Mute (Notify to the main microcomputer)
75	HRDY	O	Communication permission to the main microcomputer
76	DSP3REQ	O	3rd DSP communication request
77	DSP3RDWR	O	3rd DSP READ / WRITE switch
78	DSP3BUSY	I	3rd DSP BUSY communication wait
79	DSP3ACK	I	3rd DSP communication complete check
80	DSP3RST	O	3rd DSP reset
81	DQ7	I/O	Data input/output of flash memory communication
82	DQ6		
83	DQ5		
84	DQ4		
85	DQ3		
86	DQ2		
87	DQ1		
88	DQ0		
89	DSPDATA7	I/O	1st/3rd DSP data bit 7 (sharing port)
90	DSPDATA6		1st/3rd DSP data bit 6 (sharing port)
91	DSPDATA5		1st/3rd DSP data bit 5 (sharing port)
92	DSPDATA4		1st/3rd DSP data bit 4 (sharing port)
93	DSPDATA3		1st/3rd DSP data bit 3 (sharing port)
94	DSPDATA2		1st/3rd DSP data bit 2 (sharing port)
95	DSPDATA1		1st/3rd DSP data bit 1 (sharing port)
96	AVss	–	Vss
97	DSPDATA0	I/O	1st/3rd DSP data bit 0 (sharing port)
98	Vref	–	Vcc
99	AVcc	–	Vcc
100	DSP2MISO	I	2nd DSP communication data input

VSX-49TX, VSX-47TX

■ BU4094BCFV (DSP ASSY : IC703)

- Expansion IC

● Pin Function

No.	Pin Name	I/O	Pin Function
1	STB	I	Strobe input
2	DATA	I	Serial data input
3	CLOCK	I	Serial clock input
4	DART	O	DAC/D.F. reset
5	DION	O	Digital input power ON/OFF switch
6	HIFS	O	Clock switching output
7	FSDN	O	Fs sampling frequency down output
8	Vss	–	Vss
9	Qs	O	Connect to DATA of expansion IC
10	Qs'	–	Not used
11	DACS4	O	DAC/D.F. latch output 4
12	DACS3	O	DAC/D.F. latch output 3
13	DACS2	O	DAC/D.F. latch output 2
14	DACS1	O	DAC/D.F. latch output 1
15	OE	I	Microcomputer EXOE
16	Vdd	–	Vdd

■ BU4094BCFV (DSP ASSY : IC704)

- Expansion IC

● Pin Function

No.	Pin Name	I/O	Pin Function
1	STB	I	Strobe input
2	DATA	I	Connect to pin 9 of expansion IC1
3	CLOCK	I	Serial clock input
4	XTLO	O	DIR XTLO control
5	NORM	O	Control output for DTS96
6	XADC	O	Analog/Digital switching output
7	STOP	O	Control output for DTS96
8	Vss	–	Vss
9	Qs	–	Connect to DATA of expansion IC3
10	Qs'	–	Not used
11	RFON	O	RF demodulation power ON/OFF switch
12	DSTP	O	Demodulator stop output
13	DRST	O	Demodulator reset output
14	XPDN	O	DIR power down
15	OE	I	Microcomputer EXOE
16	Vdd	–	Vdd

■ BU4094BCFV (DSP ASSY : IC705) (VSX-49TX only)

- Expansion IC

● Pin Function

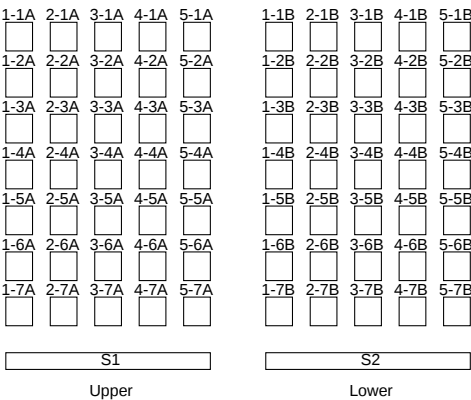
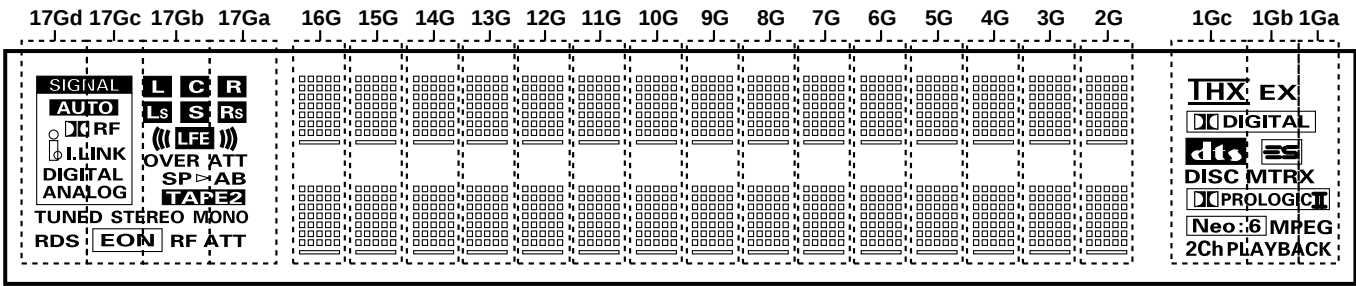
No.	Pin Name	I/O	Pin Function
1	STB	I	Strobe input
2	DATA	I	Connect to pin 9 of expansion IC2
3	CLOCK	I	Serial clock input
4	IEEE	O	Input switching output 1
5	OPT4	O	2nd PLL 256/384 switch
6	DVDA	O	2nd PLL clock switch
7	NC	O	Non connection
8	Vss	–	Vss
9	Qs	–	Connect to DATA of expansion IC4
10	Qs'	–	Not used
11	NC	O	Non connection
12	192K	O	D.F. x4 sampling output
13	NC	O	Non connection
14	NC	O	Non connection
15	OE	I	Microcomputer EXOE
16	Vdd	–	Vdd

7.2.2 DISPLAY

■ AAV7081 (DISPLAY ASSY : V3001)

- FL Indicator Tube

● Grid Assignment



● Anode Connection

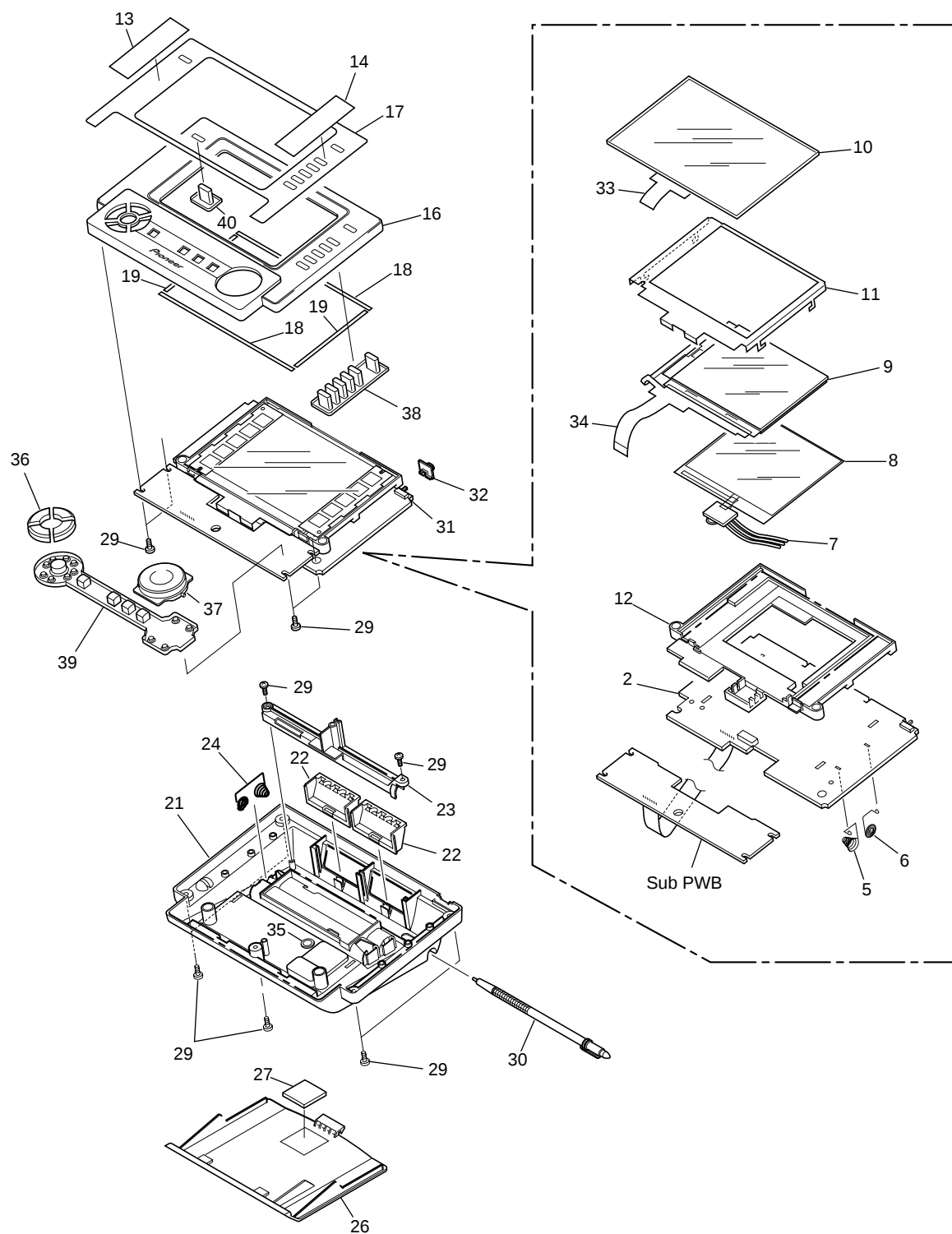
	17Gd to 17Ga	16G to 2G	1Gc to 1Ga		17Gd to 17Ga	16G to 2G	1Gc to 1Ga
P1	L	1-1A	–	P37	–	1-1B	THX
P2	C	2-1A	–	P38	–	2-1B	EX
P3	R	3-1A	–	P39	–	3-1B	DIGITAL
P4	Ls	4-1A	–	P40	–	4-1B	ds
P5	S	5-1A	–	P41	–	5-1B	ES
P6	Rs	1-2A	–	P42	–	1-2B	DISC
P7	LFE	2-2A	–	P43	–	2-2B	MTRX
P8	((()))	3-2A	–	P44	–	3-2B	PROLOGIC
P9	SIGNAL 	4-2A	–	P45	–	4-2B	Neo:6
P10	AUTO	5-2A	–	P46	–	5-2B	MPEG
P11	RF	1-3A	–	P47	–	1-3B	2ChPLAYBACK
P12	I.LINK	2-3A	–	P48	–	2-3B	–
P13	DIGITAL	3-3A	–	P49	–	3-3B	–
P14	ANALOG	4-3A	–	P50	–	4-3B	–
P15	OVER	5-3A	–	P51	–	5-3B	–
P16	ATT	1-4A	–	P52	–	1-4B	–
P17	SP	2-4A	–	P53	–	2-4B	–
P18	▷	3-4A	–	P54	–	3-4B	–
P19	A	4-4A	–	P55	–	4-4B	–
P20	B	5-4A	–	P56	–	5-4B	–
P21	TAPE2	1-5A	–	P57	–	1-5B	–
P22	TUNED	2-5A	–	P58	–	2-5B	–
P23	STEREO	3-5A	–	P59	–	3-5B	–
P24	MONO	4-5A	–	P60	–	4-5B	–
P25	RDS	5-5A	–	P61	–	5-5B	–
P26	EON	1-6A	–	P62	–	1-6B	–
P27	 (EON)	2-6A	–	P63	–	2-6B	–
P28	RF ATT	3-6A	–	P64	–	3-6B	–
P29	–	4-6A	–	P65	–	4-6B	–
P30	–	5-6A	–	P66	–	5-6B	–
P31	–	1-7A	–	P67	–	1-7B	–
P32	–	2-7A	–	P68	–	2-7B	–
P33	–	3-7A	–	P69	–	3-7B	–
P34	–	4-7A	–	P70	–	4-7B	–
P35	–	5-7A	–	P71	–	5-7B	–
P36	–	S1	–	P72	–	S2	–

7.3 REMOTE CONTROL UNIT

7.3.1 AXD7295 (for VSX-49TX)

7.3.1.1 EXPLODED VIEWS AND PARTS LIST

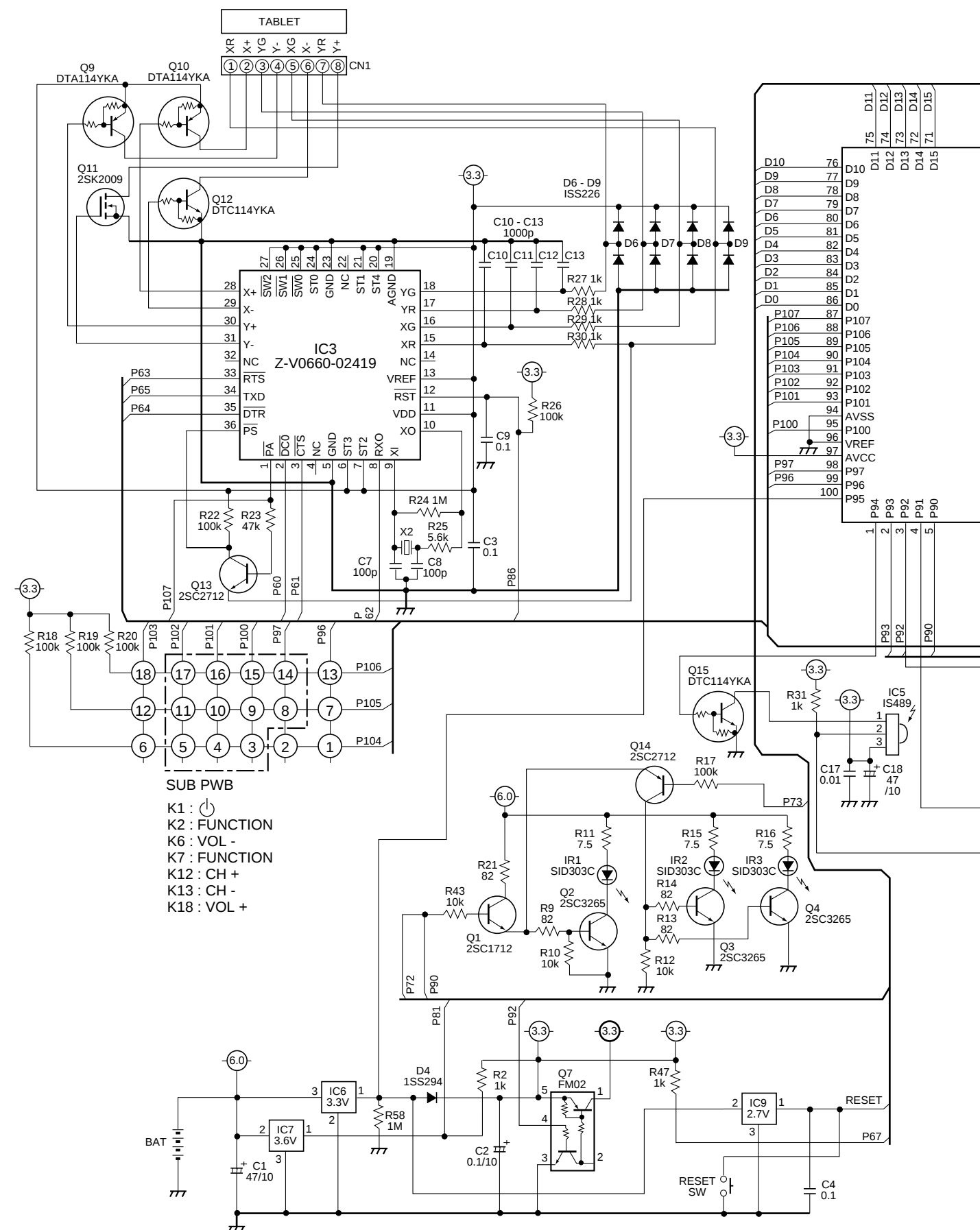
- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screws adjacent to ▼ mark on the product are used for disassembly.

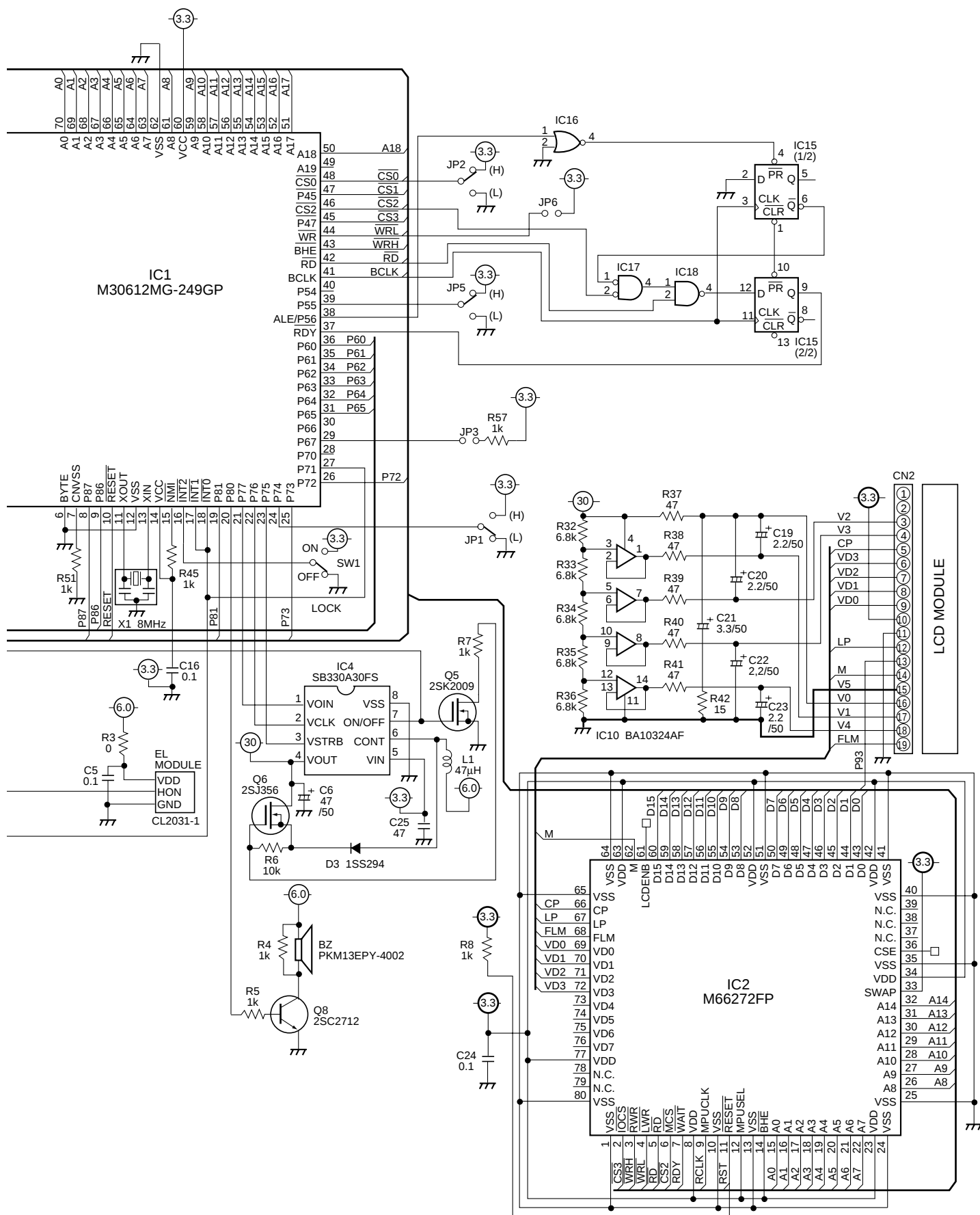


● PARTS LIST

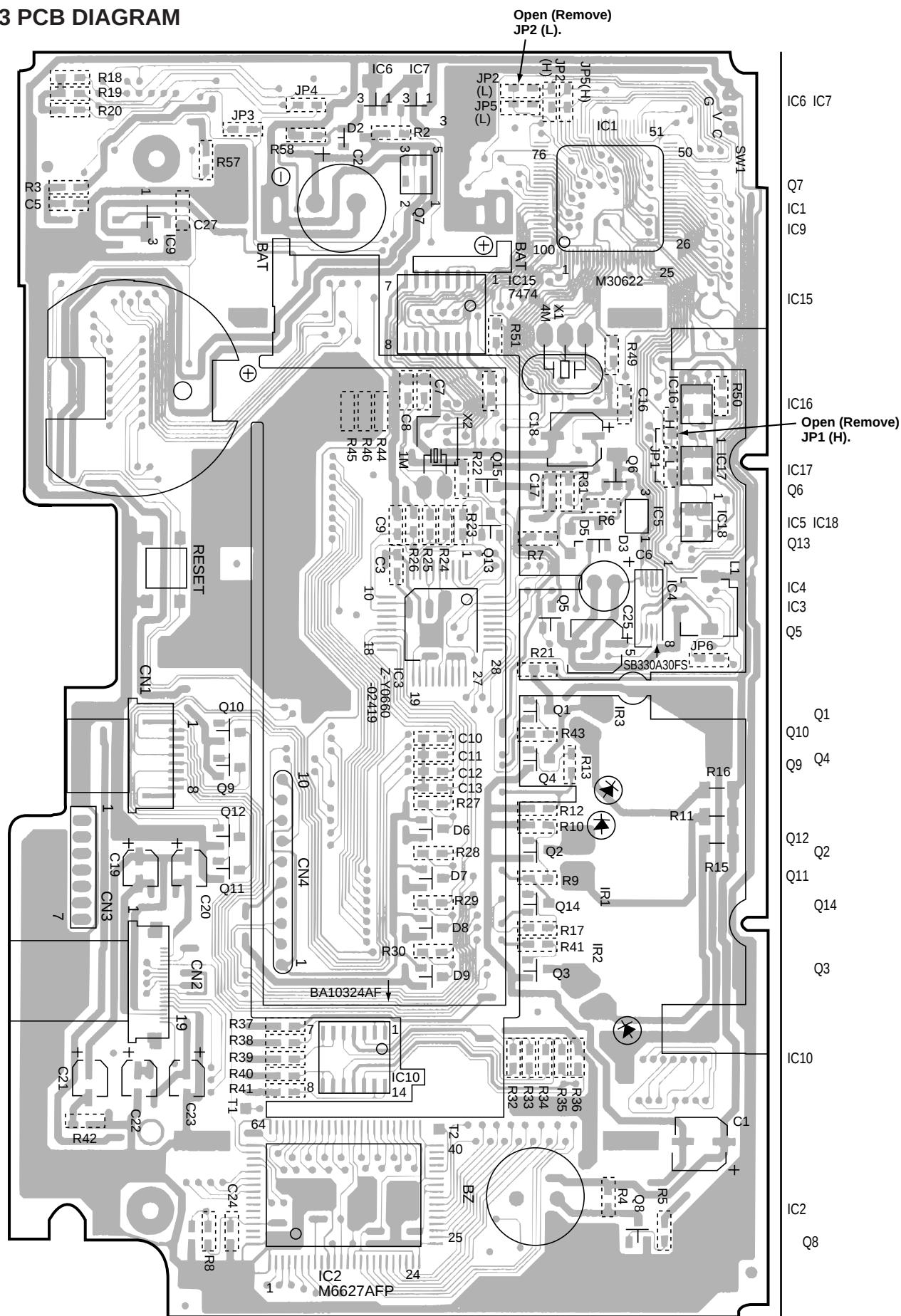
Mark	No.	Description	Part No.
	1		
	2	PCB Assy	AZC7299
	3		
	4		
	5	Terminal A	411RRC15801R
	6	Terminal B	411RRC15901R
	7	Jumper Cable	E-AA1446-001
	8	EL Module	AZC7294
	9	LCD Module	AZC7295
	10	Touch Panel	NTX01005701R
	11	Frame	501RRC01901R
	12	LCD Holder	AZN7787
	13	Seal A	AZA7415
	14	Seal B	AZA7416
	15		
	16	Case A	AZN7783
	17	Name Plate	AZA7406
	18	Cushion A	701RRC04801R
	19	Cushion B	701RRC04901R
	20		
	21	Case B	AZN7784
	22	Filter	AZA7343
	23	Pen Holder	AZN7786
	24	Terminal	413RRC11201R
	25		
	26	Battery Cover	AZN7785
	27	Cushion C	701RRC03501R
	28		
	29	Screw	AZB7144
	30	Touch Pen	AZA7350
	31	Slide Switch	JSB1220-0111
	32	Slide Knob	AZA7347
	33	FPC Connector	CFP5519-0101
	34	FPC Connector	E-CP0535-008
	35	MT Switch	JPM1030-0801
	36	Key Top A	AZA7345
	37	Key Top B	AZA7346
	38	Rubber Sheet A	AZA7410
	39	Rubber Sheet B	AZA7349
	40	Rubber Sheet C	AZA7411

7.3.1.2 SCHEMATIC DIAGRAM

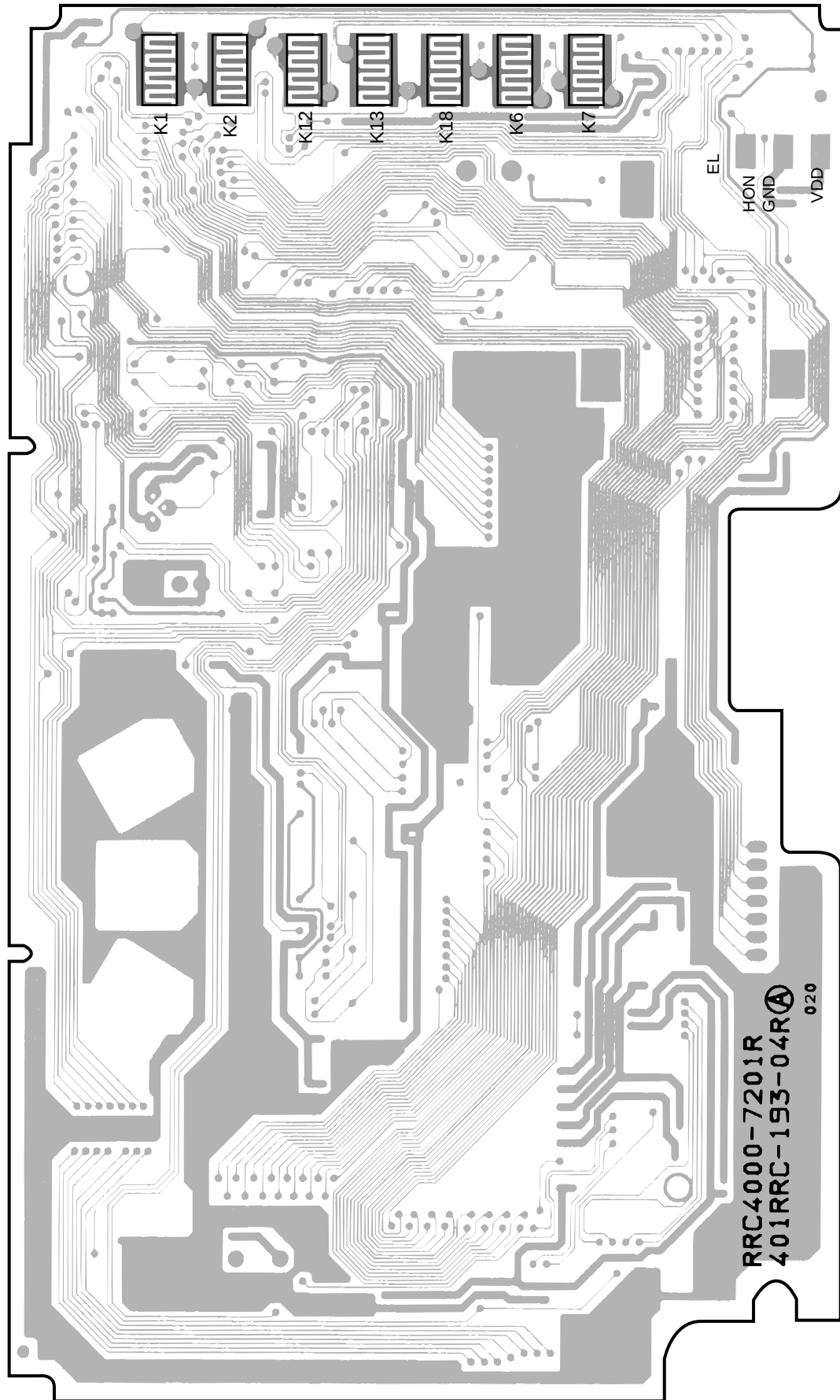




7.3.1.3 PCB DIAGRAM



SIDE A

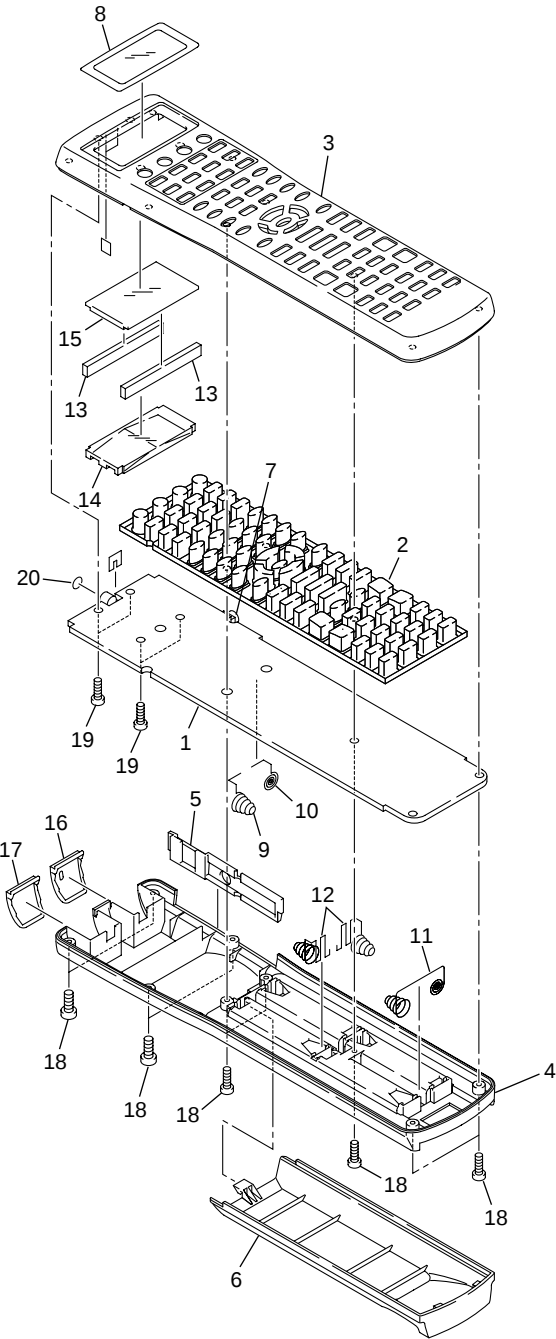


SIDE B

7.3.2 AXD7299 (for VSX-47TX)

7.3.2.1 EXPLODED VIEWS AND PARTS LIST

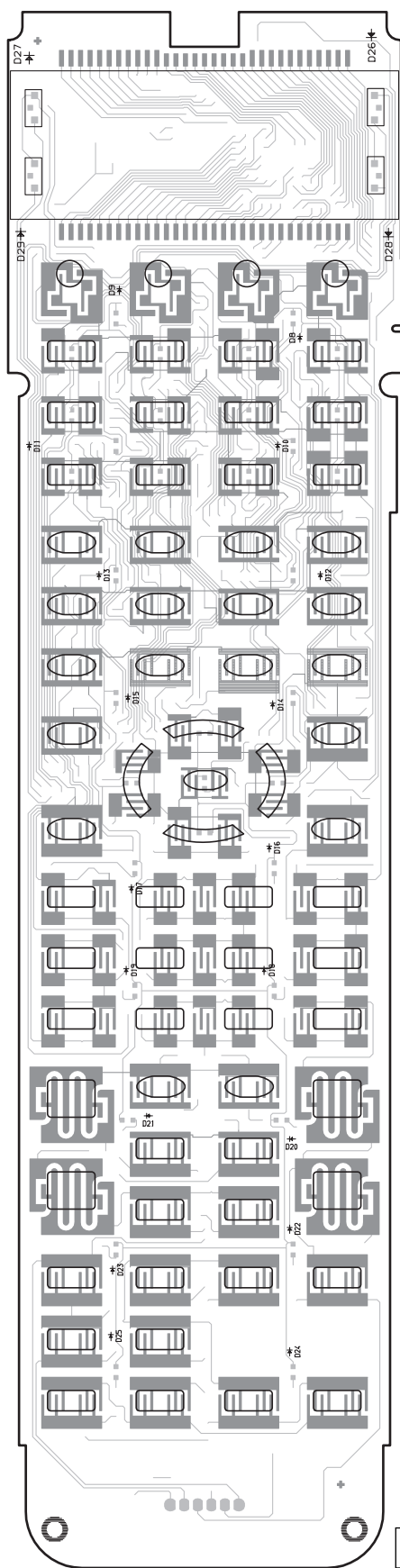
- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screws adjacent to $\blacktriangledown$ mark on the product are used for disassembly.



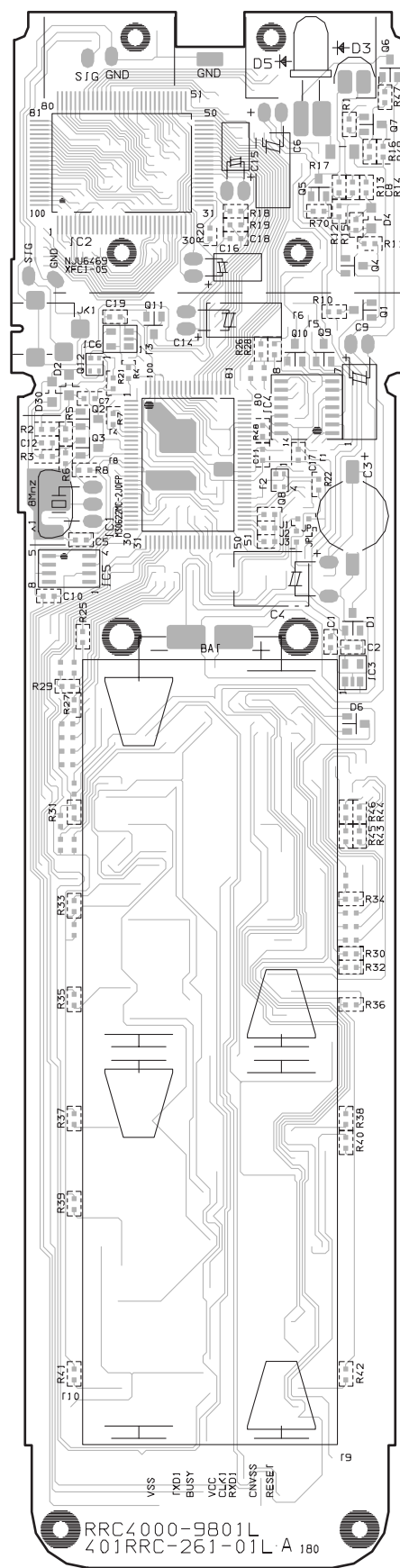
● PARTS LIST

Mark	No.	Description	Part No.
	1	PCB Assy	AZC7301
	2	Rubber Sheet	AZA7423
	3	Case A	AZN7890
	4	Case B	AZN7892
	5	Frame	AZN7894
	6	Battery Cover	AZN7896
	7	Mini Jack	LGY3312-0111
	8	Name Plate	201RRC-314-01L
	9	Terminal A	411RRC-212-01G
	10	Terminal B	411RRC-213-01G
	11	Battery Terminal	413RRC-143-01R
	12	Spring	413RRC-171-01G
	13	Connector	423RRC-046-01G
	14	Plate	481RRC-018-01G
	15	Shield Plate	801RRC-020-01L
	16	Filter A	811RRC-109-01G
	17	Filter B	811RRC-110-01G
	18	Screw	A-BA2008-225002
	19	Screw	A-BJ2006
	20	Microphone	WM-60A

7.3.2.2 PCB DIAGRAM



SIDE A



SIDE B

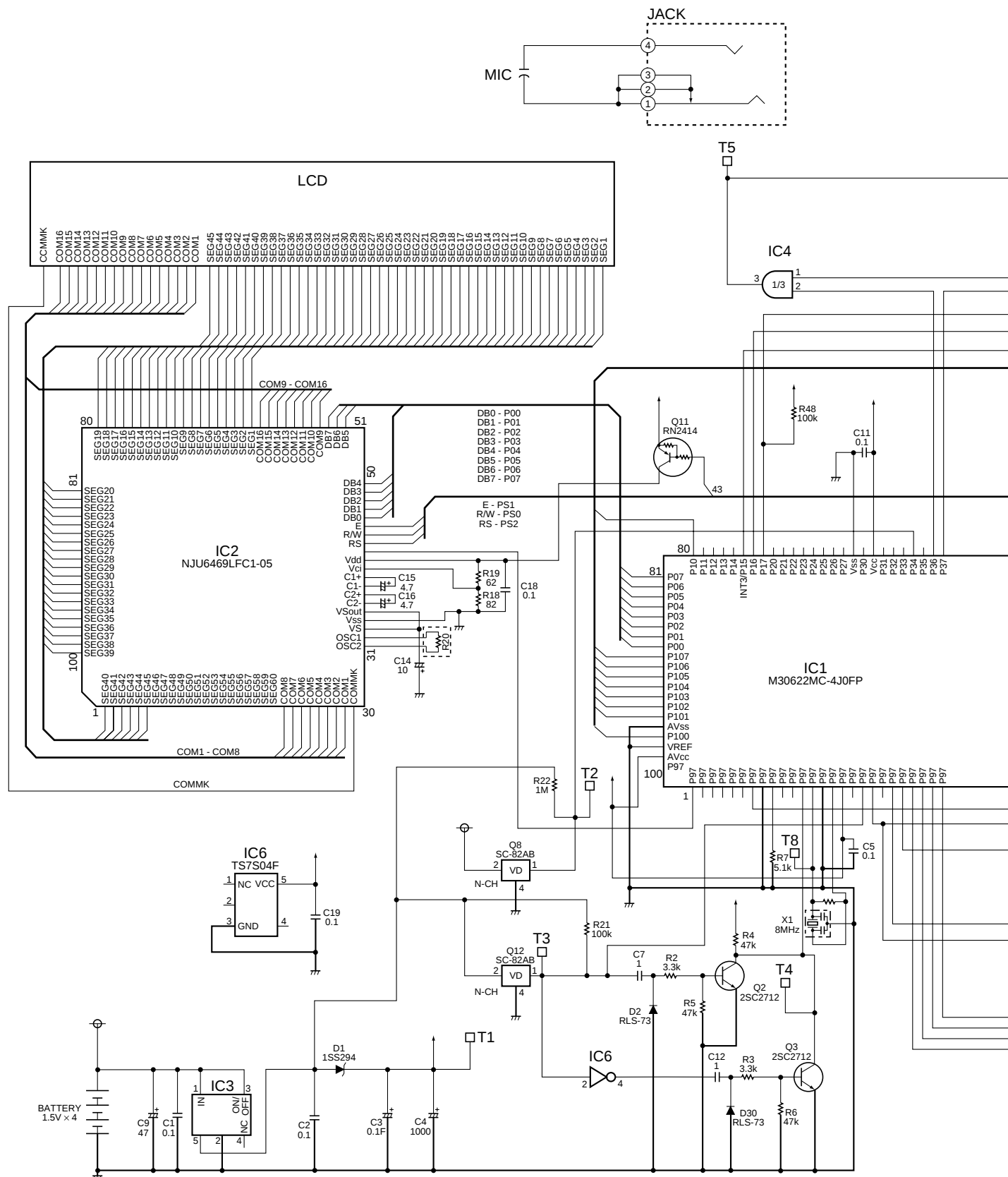
A

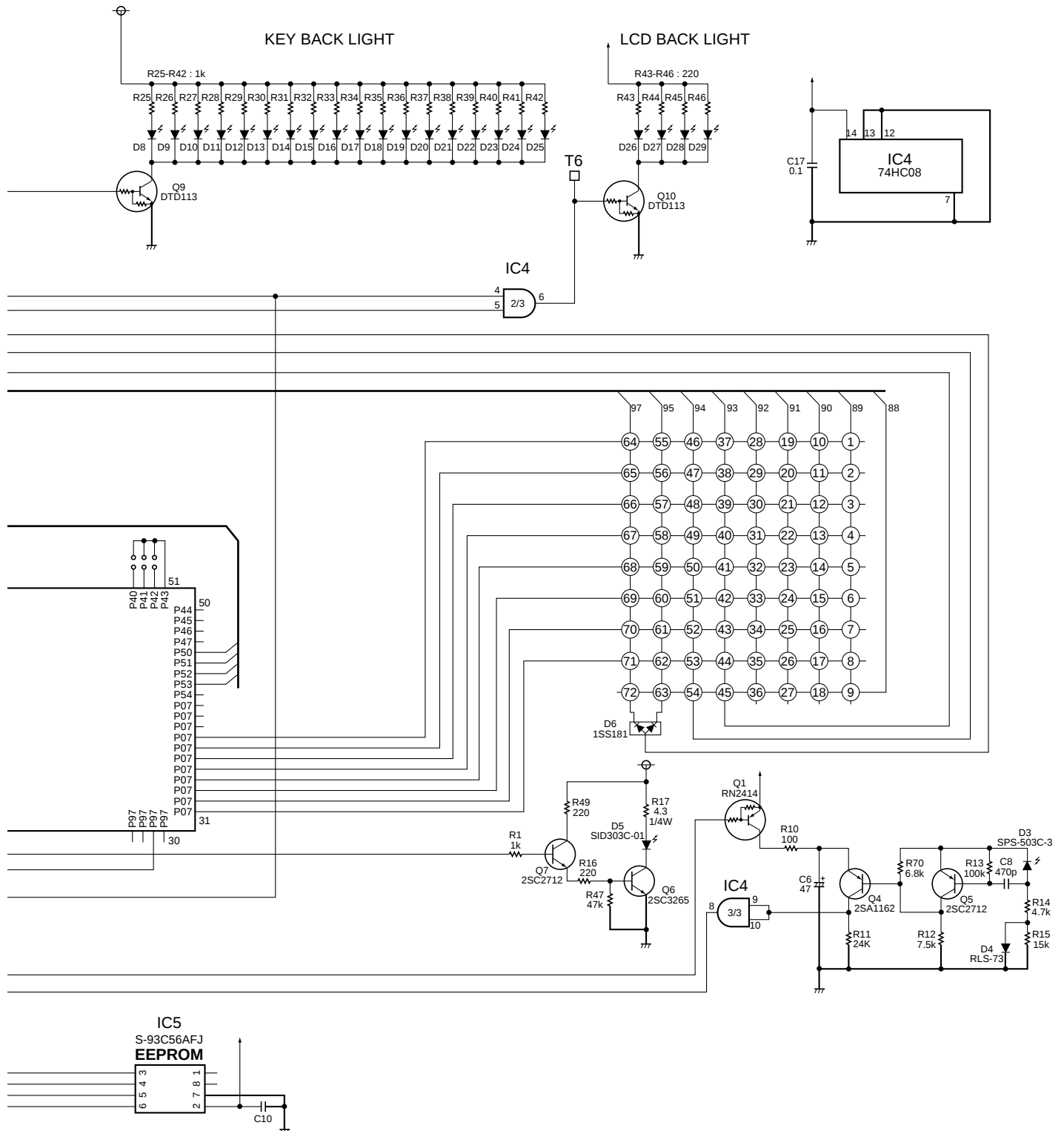
B

C

D

7.3.2.3 SCHEMATIC DIAGRAM





7.3.2.4 PCB PARTS LIST

NOTES: ●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.

●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 $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU

5	6	1
---	---	---

 J

47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU

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

 J

0.5 Ω $\rightarrow$ R50 RN2H

R	5	0
---	---	---

 K

1 Ω $\rightarrow$ 1R0 RS1P

1	R	0
---	---	---

 K

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

5.62k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC

5	6	2	1
---	---	---	---

 F

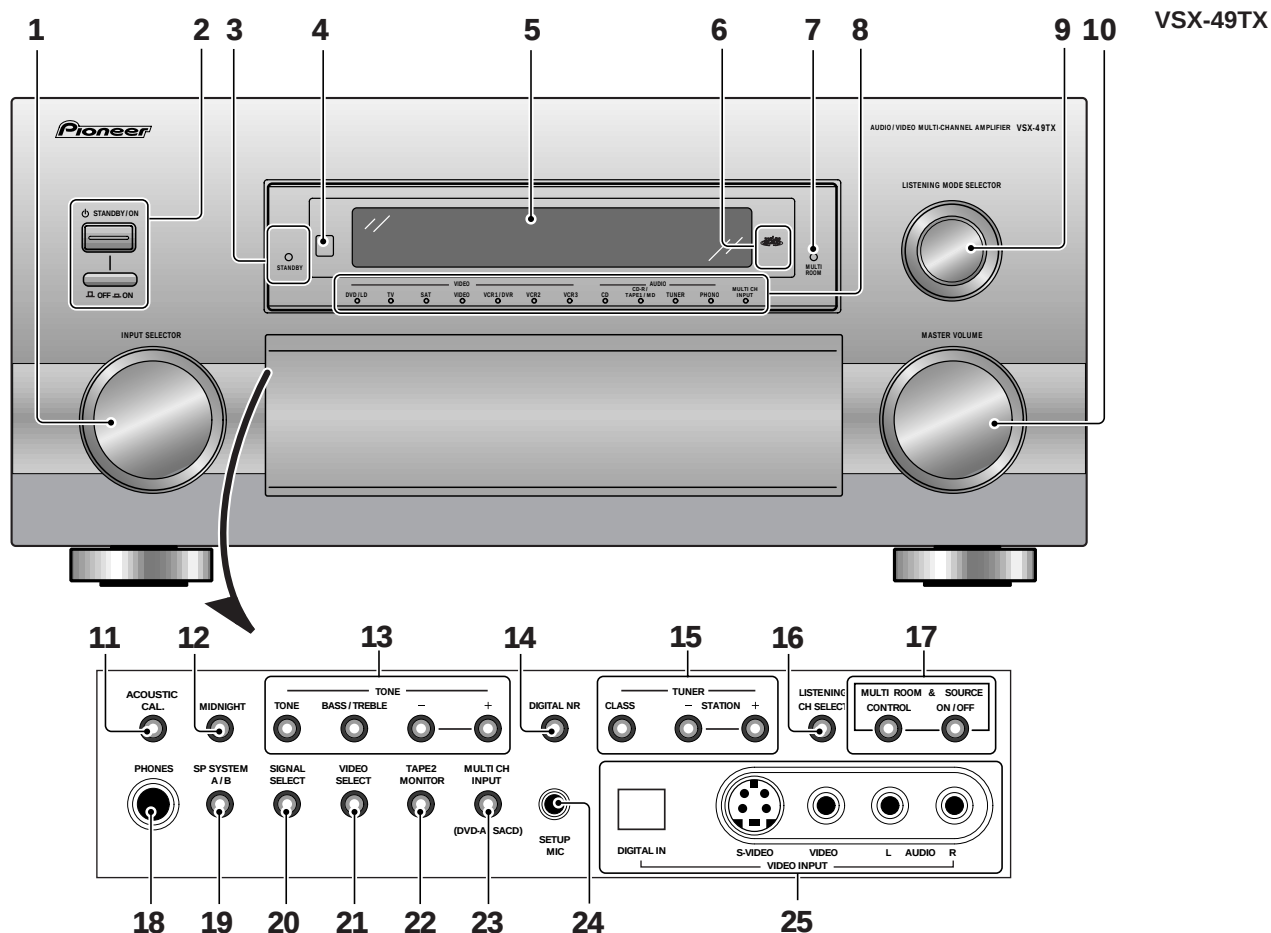
Mark	No.	Description	Part No.				
	IC1		M30622MC-4JOFA				
	IC2		NJU6469LFC1-05				
	IC3		S-818A33AMC-BGN				
	IC4		74HC08				
	IC6		TC7S04F				
	Q1,Q11		RN2414				
	Q2,Q3,Q5,Q7		2SC2712				
	Q4		2SA1162				
	Q6		2SC3265				
	Q9,Q10		DTD113ZK				
	Q12		S-80826ANNP-EDP				
	Q8		S-80836ANNP-EDO				
	D5		SID303C-01				
	D1		1SS294				
	D3		SPS-503C				
	D2,D4,D30		RLS-73				
	D6		1SS181				
	D8-D25		BR1111C				
	D26-D29		FA1101F-430				
	C3		0.1F/6.3v				
	C4		1000 μ F/6.3v				
	C6, C9		47 μ F/10v				
	C14		10 μ F/10v				
	C2,C5,C11,C17-C19		0.1 μ F/25v				
	C7,C12		1 μ F/25v				
	C8		470pF/25v				
	R17		15 Ω 1/4w				
	Other Resistors		RS1/16S <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> J				
	XI Ceramic Resona(8MHz)		CST8.00MTW				
	LCD		T557007				

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Section (VSX-49TX)

All the controls on the front panel are explained and/or referenced here. To open the front panel push gently on the lower third of the panel.



1 INPUT SELECTOR dial

Turn to select a source component. (You can also use to select a source in the MULTI-ROOM & SOURCE mode.) The input indicators show the current component.

2 STANDBY/ON button—power ON/OFF button

Press to switch the receiver ON or into STANDBY mode or to switch OFF.

3 STANDBY indicator

Lights when the receiver is in STANDBY mode. (Please note that this receiver consumes a small amount of power [0.65 W] in the standby mode.)

4 Remote sensor

Receives the signals from the remote control.

5 Display

6 MCACC indicator

Lights when the ACOUSTIC CAL EQ is on. (After the Auto Surround Sound Setup has been completed the ACOUSTIC CAL EQ is set on and this display will light.)

7 MULTI-ROOM indicator

Shows whether the multi-room function is active or not.

8 INPUT indicators

Shows which source component is selected. The MULTI CH INPUT indicator lights when a component connected to MULTI CH INPUT is selected.

9 LISTENING MODE SELECTOR dial

10 MASTER VOLUME dial

Adjusts the overall receiver volume.

11 ACOUSTIC CAL. button

Use to switch on and off the Acoustic Calibration EQ.

12 MIDNIGHT button

Use to switch the receiver into MIDNIGHT mode.

13 TONE control buttons

TONE button

This button switches between TONE ON and TONE BYPASS, which bypasses the tone circuitry.

BASS/TREBLE button

Use to select whether the bass or treble will be adjusted..

(-/+) buttons

Use to adjust the frequencies.

14 DIGITAL NR button

Switches the DIGITAL NR on or off (cannot be used in THX).

15 TUNER CONTROL buttons

CLASS button – Press repeatedly to switch the preset station classes.

-/+ button – Use to choose programmed radio stations.

16 LISTENING CH SELECT button

Use this button to select the number of channels used for playback (5.1, 7.1, or AUTO).

17 MULTI-ROOM & SOURCE buttons

Press to use the multi room feature (requires an optional PIONEER Multi-Room Remote Sensor Unit MR-100 or another IR receiver).

CONTROL button: Used together with the INPUT SELECTOR to select the function or use with the MASTER VOLUME to select the volume of the MULTI ROOM system.

ON/OFF button: Use to switch Multi-room function on or off.

18 PHONES jack

Connect headphones for private listening (no sound will be heard through the speakers).

19 SP SYSTEM A/B button

Use to select the speaker system. A is the primary setting. The button cycles through the speaker systems as follows: A⇒B⇒A&B⇒off. Different conditions apply when bi-amping the speakers. For this case refer to page 71.

20 SIGNAL SELECT button

Use to select the type of signal being input into the receiver. Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG – To select an analog signal.

DIGITAL – To select an optical or coaxial digital signal.

RF – To select an RF signal.

AUTO – This is the default setting. If there are analog, digital and RF signals input, the receiver automatically selects the RF signal. If there are analog and digital signals input the digital will be selected.

21 VIDEO SELECT button

Switches the receiver between the various types of video input.

22 TAPE 2 MONITOR button

Selects the tape deck (MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/ outputs. Allows monitoring of a recording as it's being made.

23 MULTI CH INPUT button

Use when you have hooked up an external component that can decode other types of signals and input them into the VSX-49TX.

24 SETUP MIC jack

Plug in the setup mic here. This is very important for setting up your system to get proper surround sound.

25 Front VIDEO INPUT jacks

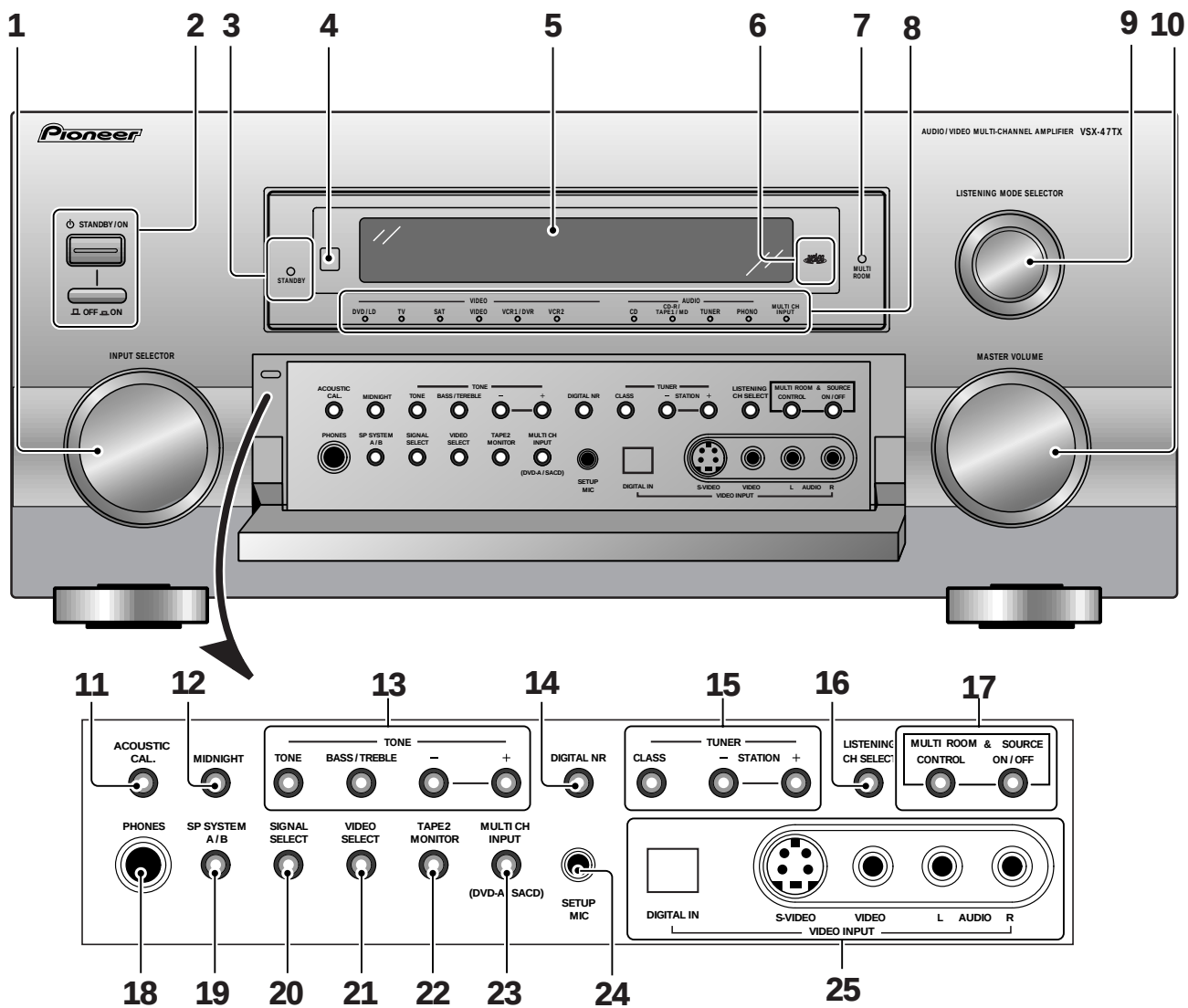
DIGITAL IN : digital input for connecting a game console, portable DVD player, video camera (etc.), that has an optical digital connection.

S VIDEO : Video input for connecting a video camera (etc.), that has an S video out.

RCA VIDEO / AUDIO (L/R) : Video input for connecting a video camera, etc. that has standard RCA video/audio outputs.

■ Front Section (VSX-47TX)

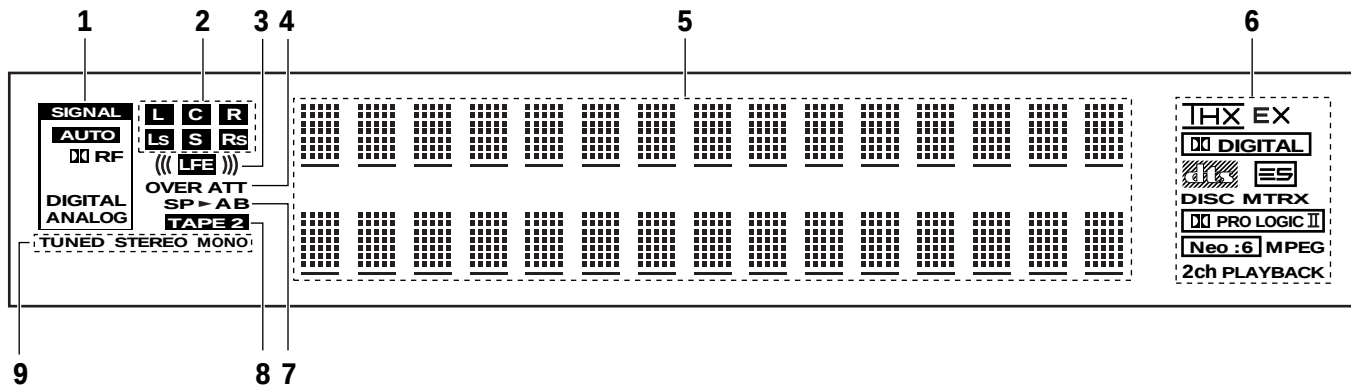
VSX-47TX



VSX-49TX, VSX-47TX

■ Display (VSX-49TX)

All the display information is explained and /or referenced here.



1 SIGNAL SELECT indicators

Light to indicate the input signal you selected.
 ANALOG : Lights when an analog signal is selected.
 DIGITAL : Lights when a digital signal is selected.
 RF : Lights when an RF signal is selected.
 AUTO : Lights when the receiver is set to select the input signal automatically.

2 Program Format indicators

For Dolby Digital or DTS sources : These indicators change according to which channels are active in the source. When all three **LS** (left surround), **S** (surround) and **RS** (right surround) light at the same time it means a source with a 6.1ch playback flag is being used.

L – Left front channel.
C – Center channel.
R – Right front channel.
LS – Left surround channel.
S – Surround channel (mono).
RS – Right surround channel.
LFE – Low frequency effects channel.

3 ((())) – Lights when LFE signal is input.

4 Analog level indicators

OVER – This lights if the signal is in danger of distorting for analog source signals. Press INPUT ATT on the front panel to lower the signal level.

ATT – Lights when INPUT ATT is used to reduce the level of the analog source signal.

5 Character display

Shows current mode, status, etc.

6 Digital format indicators

DIGITAL : Lights when a Dolby Digital signal is detected.

DTS: Lights when a DTS signal is detected.

MPEG: Lights when an MPEG signal is detected.

THX: Lights when the HOME THX mode is selected.

EX: Lights during Surround EX matrix processing.

ES: Lights when a decoding DTS ES audio.

DISC: Lights during DTS ES discrete processing

MTRX: Lights during DTS ES matrix processing

PRO LOGIC II : Lights during Dolby Pro Logic II processing.

NEO:6: Lights during NEO:6 processing.

2CH PLAYBACK Lights during two-channel playback.

7 Speaker indicators

Light to indicate the current speaker system, A and/or B.

8 TAPE 2 indicator

Lights when the TAPE 2 monitor is on.

9 TUNER indicators

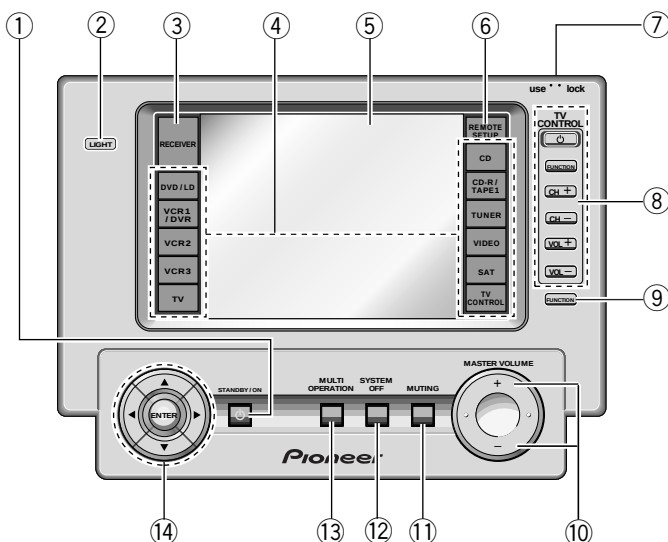
MONO : Lights when the tuner is set to receive FM broadcasts and when selected MPX mode.

STEREO : Lights when a FM stereo broadcast is received in the auto stereo mode.

TUNED : Lights when a broadcast is received.

■ Remote Control Unit (VSX-49TX)

These pages describe the buttons on the remote control used to operate the receiver. Since the screen on this LCD remote control changes when you select a different function, explanations of buttons for controlling other components/functions can be found in the sections for those components/functions.



To turn on the remote control touch it anywhere on the screen.

① **STANDBY/ON button**

Press to turn power of the receiver on or to STANDBY (off).

② **LIGHT button**

Use to turn on and off the backlight on the remote control receiver screen.

③ **RECEIVER button**

Press to switch the remote control into receiver mode or to get receiver screens.

④ **Function buttons**

These buttons are the basic controls that switch the mode of the receiver and the remote control, which allows you to control your other components.

⑤ **Remote control screen**

⑥ **REMOTE SETUP button**

Use to customize the remote control functions and the remote control itself. (See "Setting Up Remote Control of Other Components" starting on)

⑦ **LOCK switch**

Use to lock the remote control so it doesn't turn on by accident. For normal use keep it set in USE.

⑧ **TV CONTROL buttons**

The following buttons are used to control the TV only and can be used once they are preset to control your TV.

STANDBY/ON : Press to turn the power of the TV on/off.

INPUT : Press to select the input source for the TV.

CH +/- : Use these buttons to change the channel of the TV.

VOL +/- : Press to control the volume of the TV.

⑨ **INPUT button**

Press to select a source. The button will cycle through all the possible sources.

⑩ **MASTER VOLUME button**

Use to raise or lower the volume of the receiver.

⑪ **MUTING button**

Press to mute or restore the volume.

⑫ **SYSTEM OFF button**

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will be turned off.

For example : If you programmed power off in the SYSTEM OFF settings for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

⑬ **MULTI OPERATION button**

Use this button to start the MULTI OPERATION mode. See p.80 & 81 for how to program and use the MULTI OPERATION mode.

⑭ **▲/▼/◀/▶/ENTER buttons**

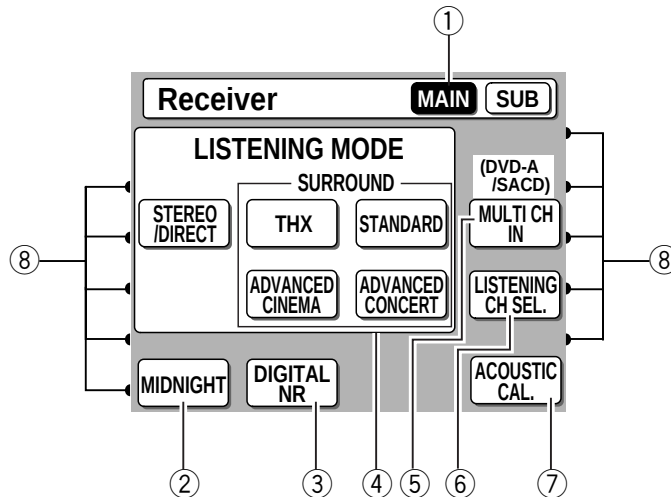
These buttons can be used for a variety of operations. In the SYSTEM SETUP menu, the ▲/▼ buttons can be used to adjust CHANNEL DELAY or CHANNEL LEVEL.

The ▲/▼ buttons, pressed simultaneously, can be use to lock or unlock a setting (see p.67).

These buttons are also used to control the DVD menu for the DVD remote control screen. Also, in TUNER mode they can select station and frequency.

Basic Receiver LCD Screens

Receiver MAIN Screen



① **Receiver MAIN button**

Press this button to select the MAIN receiver screen (above) when the remote control is on the SUB receiver screen.

② **MIDNIGHT button**

Switches the MIDNIGHT listening mode on or off (for all modes except THX).

③ **DIGITAL NR button**

Switches the DIGITAL NR on or off (for all modes except THX).

④ **LISTENING MODE buttons**

STEREO/DIRECT: Switches the receiver into STEREO mode if it was in a different listening mode or toggles between DIRECT and STEREO mode.

THX: Press to put the receiver into HOME THX sound mode.

STANDARD: Press to put the receiver into STANDARD listening mode.

ADVANCED CINEMA: Press to put the receiver into ADVANCED CINEMA listening mode.

ADVANCED CONCERT: Press to put the receiver into ADVANCED CONCERT listening mode.

⑤ **MULTI CH IN button**

Use to hook up an external component (for example a DVD-Audio player) that can decode other types of signals and input them into the VSX-49TX.

⑥ **LISTENING CH SEL. button**

Use this button to select a listening channel (5.1, 7.1, or AUTO)

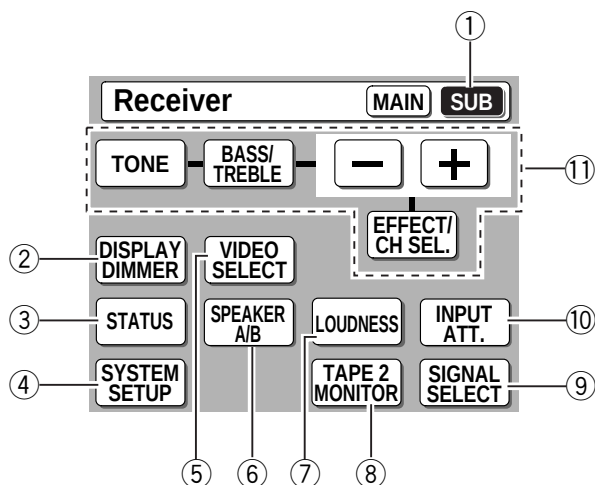
⑦ **ACOUSTIC CAL. button**

Press to switch on/off the acoustic calibration EQ.

⑧ **DIRECT FUNCTION on/off indicator**

These dots indicate whether the DIRECT FUNCTION is on or off for the function (DVD/LD, CD, etc.) they point to.

Receiver SUB Screen



① Receiver SUB button

Press this button to select the SUB receiver screen (above) when the remote control is on the main receiver screen.

② DISPLAY DIMMER button

Use to adjust the brightness of the receiver's display.

③ STATUS button

Use to display the present mode of the receiver and other selected settings.

④ SYSTEM SETUP button

Use for all system setups, including the speaker and sound systems. For more information see "Setting up for Surround Sound" starting on.

⑤ VIDEO SELECT button

Use to toggle between the different video input possibilities.

⑥ SPEAKER A/B button

Use to select the speaker system. A is the primary setting. The button cycles through the speaker systems as follows: A⇒B⇒A&B⇒off. Different conditions apply when bi-amping the speakers.

⑦ LOUDNESS button

Switches the LOUDNESS mode on or off (for all modes except THX).

⑧ TAPE 2 MONITOR button

Selects the tape deck (or MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/outputs. Allows monitoring of a recording as it's being made.

⑨ SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal

RF : To select an RF signal

AUTO : This is the default. If there are analog, digital and RF signals input, the receiver automatically selects the RF signal. If there are analog and digital signals input the digital will be selected.

⑩ INPUT ATT. button

Use to lower the input level of an analog signal that is too powerful, thus causing the receiver to distort. In this case the overload (OVER) indicator will be flashing furiously.

⑪ TONE control/EFFECT CH SEL. buttons

TONE button

This button has two functions. Firstly, it switches between TONE on and TONE BYPASS, which bypasses the tone circuitry. Secondly, you need to press the button before using the BASS & TREBLE (+/-) buttons.

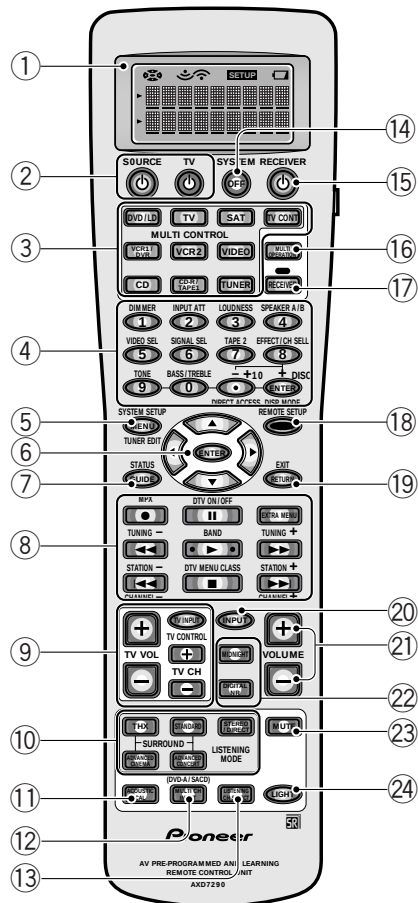
EFFECT/CH SEL. button

Switches the tone adjust controls between the front, center, surround and surround back speakers. You can then use the + and - buttons to adjust the sound.

While in Advanced mode, you can also adjust the effect level.

■ Remote Control Unit (VSX-47TX)

These pages describe the buttons on the remote control used to operate the receiver.



① Remote Control Display Screen

② SOURCE button

Use this button to turn off other components. You must input the preset code in order to use this function.

TV button

This is a dedicated TV button. Use it to turn on/off your TV.

③ MULTI CONTROL buttons

The mode of the receiver and allow you to control your other components.

DVD/LD: Press to switch the remote control into DVD/LD mode.

TV/SAT: Press to switch the remote control into TV/SAT (satellite tuner) mode.

VCR 1: Press to switch the remote control into VCR 1 mode.

VCR 2: Press to switch the remote control into VCR 2 mode.

MD/TAPE 1: Press to switch the remote control into MD/TAPE 1 mode.

CD: Press to switch the remote control into CD mode.

TUNER: Press to switch the remote control into TUNER mode.

TV CONTROL: Press so that the remote control can operate the TV CONTROL commands.

④ Number buttons

These can be used for many purposes depending on the mode of the receiver. When the in receiver mode the buttons operate as below:

Display DIMMER

Use to adjust the brightness of the main display.

INPUT ATT. button

Use to lower the input level of an analog signal that is too powerful, thus causing the receiver to distort (in this case the overload indicator will be flashing furiously).

LOUDNESS button

Switches the LOUDNESS mode on or off (for all modes except THX and MULTI CH IN).

SPEAKER A/B button

Use to select the speaker system. A is the primary setting. It plays all speakers hooked up to the A system. A & B setting only plays the front speakers of both the A & B systems and the subwoofer. Multi channel sources will be down-mixed to these speakers so no sound will be lost. B setting only plays the front speakers connected to the B system and multi channel sources will be down-mixed to these two speakers. The button cycles through the speaker systems as follows:
A⇒B⇒A&B⇒off.

VIDEO SELECT button

Use to toggle between the different video input possibilities.

SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal (DVD/LD, TV/SAT, CD, MD/TAPE 1, VCR 1, VCR 2).

RF : To select an RF signal (DVD/LD, TV/SAT, VCR 1, VCR 2).

AUTO : This is the default. If there are analog, digital and RF signals input, the receiver automatically selects the RF signal. If there are analog and digital signals input the digital will be selected. TAPE 2 MONITOR button (See p.57) Selects the tape deck (or MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/outputs. Allows monitoring of a recording as it's being made.

EFFECT/CH SEL. button

Switches the tone adjust controls between the front, center, surround and surround back speakers. You can then use the + and - buttons to adjust the sound.

TONE buttons

This button has two functions. Firstly, it switches between TONE on and TONE DIRECT, which bypasses the tone circuitry. Secondly, you need to press the button before using the CHANNEL SELECT buttons to adjust the BASS & TREBLE.

BASS & TREBLE buttons

Use to choose the high or low frequencies to adjust.

(+/-) buttons

Use to adjust the high and low frequencies, effect level and channel level.

⑤ SYSTEM SET UP button

Use to set up the speaker and sound systems. For more information see "Setting up for Surround Sound".

⑥ ▲/▼/◀/▶/ENTER buttons

These buttons can be used for a variety of operations. In the SYSTEM SETUP menu, the ▲/▼ buttons can be used to adjust CHANNEL DELAY or CHANNEL LEVEL. These buttons are also used to control the DVD menu for the DVD remote control screen.

⑦ STATUS button

Use to display the present mode the receiver is in and another settings.

⑧ Command button for other components

Use these buttons to control other components you selected with the MULTI CONTROL buttons. You must input the preset code in order use this function.

⑨ TV CONTROL buttons

The following buttons are used to control the TV only and can be used once they are preset to control your TV.

TV INPUT : Press TV INPUT to select the TV for remote control operation.

TV CH +/- : Use these buttons to change the channel of the TV.

TV VOL +/- : Press to control the volume of the TV.

⑩ LISTENING MODE buttons

THX : Press to put the receiver into THX sound mode.

STANDARD : Press to put the receiver into STANDARD sound mode.

STEREO/DIRECT : Switches the receiver into STEREO mode if it was in a different sound mode or toggles between DIRECT and STEREO mode.

ADVANCED CINEMA : Press to put the receiver into ADVANCED CINEMA sound mode.

ADVANCED CONCERT : Press to put the receiver into ADVANCED CONCERT: sound mode.

⑪ ACOUSTIC CAL. button

Press to switch on/off the acoustic calibration function.

⑫ MULTI CH INPUT button

Use to hook up an external component that can decode other types of signals and input them into the VSX-47TX.

⑬ LISTENING CH SELECT.

Use this button to select a listening channel to add or subtract the amount of effect applied in Advanced Theater or other Listening modes.

⑭ SYSTEM OFF button

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will be turned off.

For example : If you programmed power off in the SYSTEM OFF settings for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

⑮ ⏻ RECEIVER (standby/power on) button

Press to turn power of the receiver on or to standby (off).

⑯ MULTI OPERATION button

Use this button to start the MULTI OPERATION mode. for how to program and use the MULTI OPERATION mode.

⑰ RECEIVER button

Use this button to switch the remote control into receiver mode in order to get certain receiver functions or do receiver setups.

⑱ REMOTE SETUP button.

Use to customize the remote control functions and the remote control itself. (See "Setting Up Remote Control of Other Components".)

⑲ EXIT button**⑳ INPUT button**

Press to select an input source. The button will cycle through all the possible sources.

㉑ VOLUME (+/-) buttons

Use to raise or lower the volume of the receiver.

㉒ MIDNIGHT button

Switches the MIDNIGHT listening mode on or off (for all modes except THX and MULTI CH IN).

DIGITAL NR button

Switches the DIGITAL NR on or off (for all modes except THX and MULTI CH IN).

㉓ MUTE button

Press to mute or restore the volume.

㉔ LIGHT button

Use to light the remote control screen.

8.2 SPECIFICATIONS

VSX-49TX :

Amplifier Section

Continuous average power output of 160 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 %** total harmonic distortion (front).

Continuous Power Output

Front	130 W + 130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Center	130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Surround	130 W + 130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Surr. back	130 W + 130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)

Audio Section

Input (Sensitivity/Impedance)	
PHONO MM	4.7 mV/47 kΩ
LINE	382 mV/47 kΩ
Phono Overload level (T.H.D.0.1 %, 1kHz)	
PHONO MM	120 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ± 0.3 dB
LINE	5 Hz to 100,000 Hz ⁺⁰ ₋₃ dB
Output (Level/Impedance)	
LINE	382 mV/2.2 kΩ
Tone Control	
BASS	± 6 dB (100 Hz)
TREBLE	± 6 dB (10 kHz)
LOUDNESS	+4/+2 dB (100Hz/10 kHz) (at volume position -40dB)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	86 dB
LINE	105 dB
MULTI CHANNEL IN	103 dB(Channel Level: Bypass)
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]	
PHONO MM	83 dB
LINE	93 dB

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

** Measured by Audio Spectrum Analyzer.

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, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

Video Section

Input (Sensitivity)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Signal-to-Noise Ratio	70 dB
Frequency Response	5 Hz to 10 MHz ⁺⁰ ₋₃ dB

Component Video Section

Input (Sensitivity)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Signal-to-Noise Ratio	70 dB
Frequency Response	5 Hz to 40 MHz ⁺⁰ ₋₃ dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 13.2 dBf, IHF (1.3 μV/75 Ω)
50 dB Quieting Sensitivity	Mono: 20.2 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	530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna)	350 μV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	AC 120 V, 60 Hz
Power Consumption	710 W
Power Consumption in Standby mode	0.65 W
AC Outlet	
SWITCHED	100 W (0.8 A) MAX
Dimensions	440 (W) × 203 (H) × 472 (D) mm (17 ⁻⁵ / ₁₆ (W) × 8 (H) × 18 ⁻⁹ / ₁₆ (D) in.)
Weight (without package)	29.3 kg (64 lb 6 oz)

Furnished Parts

FM wire Antenna	1
AM Loop Antenna	1
AC Power Cord	1
"AA" IEC LR6 batteries	4
Remote Control Unit	1
Touch Pen	1
Cushion for Remote	4
Microphone	1
U-shaped connectors	2
Operating Instructions	1

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

VSX-47TX :

Amplifier Section

Continuous average power output of 160 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion (front).**

Continuous Power Output

Front	130 W + 130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Center	130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
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Surr. back	130 W + 130 W (20 Hz-20 kHz, 0.09 %, 8 Ω)

Audio Section

Input (Sensitivity/Impedance)

PHONO MM	4.7 mV/47 k Ω
LINE	382 mV/47 k Ω

Phono Overload level (T.H.D.0.1 %, 1kHz)

PHONO MM	120 mV
----------------	--------

Frequency Response

PHONO MM	20 Hz to 20,000 Hz $\pm$ 0.3 dB
LINE	5 Hz to 100,000 Hz $\pm$ 0.3 dB

Output (Level/Impedance)

LINE	382 mV/2.2 k Ω
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Tone Control

BASS	$\pm$ 6 dB (100 Hz)
TREBLE	$\pm$ 6 dB (10 kHz)
LOUDNESS	+4/+2 dB (100Hz/10 kHz) (at volume position -40dB)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM	86 dB
LINE	105 dB
MULTI CHANNEL IN	103 dB(Channel Level: Bypass)

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM	83 dB
LINE	93 dB

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Input (Sensitivity)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
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Component Video Section

Input (Sensitivity)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Signal-to-Noise Ratio	70 dB
Frequency Response	5 Hz to 40 MHz $\pm$ 0.3 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 13.2 dBf, IHF (13 μ V/75 Ω)
50 dB Quieting Sensitivity	Mono: 20.2 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 ($\pm$ 1) dB
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna)	350 μ V/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	AC 120 V, 60 Hz
Power Consumption	710 W
Power Consumption in Standby mode	0.65 W
AC Outlet	SWITCHED
Dimensions	100 W (0.8 A) MAX
	440 (W) $\times$ 203 (H) $\times$ 472 (D) mm
	(17 $\frac{5}{16}$ (W) $\times$ 8 (H) $\times$ 18 $\frac{9}{16}$ (D) in.)
Weight (without package)	29.3 kg (64 lb 6 oz)

Furnished Parts

FM wire Antenna	1
AC Power Cord	1
AM Loop Antenna	1
"AA" IEC LR6 batteries	4
Remote Control Unit	1
Remote Control Cable	1
Remote Control Stand	1
U-shaped connectors	2
Operating Instructions	1

NOTE:

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

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VSX-49TX, VSX-47TX

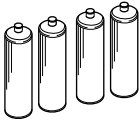
■ Accessories (VSX-49TX)



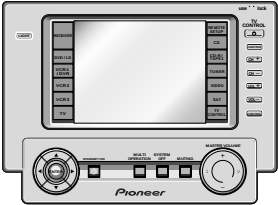
FM wire antenna
(ADH7010)



AM loop antenna
(ATB7009)



“AA” IEC LR6
batteries x 4



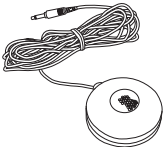
Remote control unit
(Remocon49 : AXD7295)



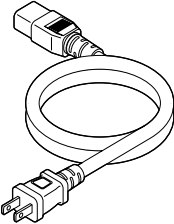
Touch pen
(AZA7350)



Cushion for
Remote x 4
(AXG7080)



Microphone
(APM7001)



AC Power Cord
(ADG7052)

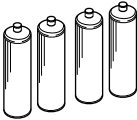
■ Accessories (VSX-47TX)



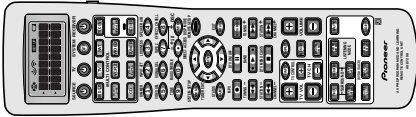
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(ADH7010)



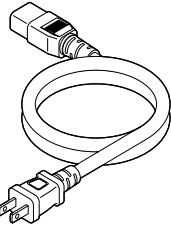
AM loop antenna
(ATB7009)



“AA” IEC LR6
batteries x 4



Remote control unit
(Remocon47 : AXD7299)
VSX-47TX



AC Power Cord
(ADG7052)



Remote Control
Cable
(ADE7083)



Remote Control
Stand
(AEB7243)