

Service Manual

Pioneer

ORDER NO.
RRV2154

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-D638-G

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

Type	Model	Power Requirement	The voltage can be converted by the following method.
	VSX-D638-G		
HLXJI	○	AC220-230V	AC240V, *
LBXJI	○	AC110V	_____
YPWXJI	○	AC240V	_____

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

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

Model	Order No.	Remarks
VSX-808RDS/HYXJI	RRV2115	

CONTENTS

1. CONTRAST OF MISCELLANEOUS PARTS 2
2. SCHEMATIC DIAGRAM 5

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 $\boxed{5}\boxed{6}\boxed{1}J$

47k $\rightarrow$ $47 \times 10^3 \rightarrow$ 473 RD1/4PU $\boxed{4}\boxed{7}\boxed{3}J$

0.5 $\rightarrow$ R50 RN2H $\boxed{R}\boxed{5}\boxed{0}K$

1 $\rightarrow$ 1R0 RS1P $\boxed{1}\boxed{R}\boxed{0}K$

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 $\boxed{5}\boxed{6}\boxed{2}\boxed{1}F$

■ CONTRAST TABLE

VSX-D638-G/HLXJI, LBXJI, YPWXJI and VSX-808RDS/HYXJI are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.				Remarks
			VSX-808RDS /HYXJI	VSX-D638-G /HLXJI	VSX-D638-G /LBXJI	VSX-D638-G /YPWXJI	
		ASSEMBLIES					
P5- 1	NSP	INPUT ASSY	AWK7474	AWK7475	AWK7475	AWK7475	
P5- 2		└ INPUT ASSY	AWX7210	AWX7365	AWX7365	AWX7365	
		└ FRONT ASSY	AWX7217	AWX7218	AWX7218	AWX7218	
P5- 5		AMP ASSY	AWK7482	AWK7482	AWK7507	AWK7506	
P5- 7		└ AMP ASSY	AWX7226	AWX7226	AWX7370	AWX7226	
		└ TRANS 1 ASSY	AWX7287	AWX7287	AWX7287	AWX7369	
		PACKING SECTION					
P3- 3		Operating Instructions (English)	ARB7158	ARB7160	ARB7160	ARB7160	
P3- 5		FM Antenna	ADH7005	ADH7005	ADH7004	ADH7005	
P3- 7		Warranty Card	ARY7022	Not used	Not used	ARY7027	
P3- 8		Remote Control Unit (CU-VSX140)	AXD7181	Not used	Not used	Not used	
P3- 8		Remote Control Unit (CU-VSX138)	Not used	AXD7178	AXD7178	AXD7178	
P3-13		Packing Case	AHD7695	AHD7696	AHD7697	AHD7697	
P3-14		Operating Instructions (German)	ARC7203	Not used	Not used	Not used	
P3-15		Operating Instructions (French/Italian)	ARC7204	Not used	Not used	Not used	
P3-16		Operating Instructions (Swedish/Dutch)	ARC7205	Not used	Not used	Not used	
P3-17		Operating Instructions (Portuguese/Spanish)	ARC7206	Not used	Not used	Not used	
		Operating Instructions (Chinese)	Not used	ARC7256	ARC7256	Not used	
		EXTERIOR SECTION					
P5-18		⚠	Power Transformer (T1) (AC220-230V/240V)	ATS7242	Not used	Not used	ATS7242
P5-18	⚠	Power Transformer (T1) (AC220-230V)	Not used	ATS7243	Not used	Not used	
P5-18	⚠	Power Transformer (T1) (AC110V)	Not used	Not used	ATS7244	Not used	
P5-19	⚠	Fuse (FU1 : T2.5A)	REK-104	REK-104	Not used	REK-104	
P5-19	⚠	Fuse (FU1 : T5A)	Not used	Not used	AEK1061	Not used	
P5-26	⚠	AC Power Cord	VDG1061	VDG1061	VDG1058	VDG1065	
P5-29		Tuner Holder	AAD7490	AAD7492	AAD7492	AAD7492	

Ref. No.	Mark	Symbol and Description	Part No.				Remarks
			VSX-808RDS /HYXJI	VSX-D638-G /HLXJI	VSX-D638-G /LBXJI	VSX-D638-G /YPWXJI	
P5-31		Rear Panel	ANC7723	ANC7765	ANC7768	ANC7766	
P5-32		Bonnet Case	AZN7771	AZN7823	AZN7823	AZN7823	
P5-41		Volume Knob	AAB7179	AAB7180	AAB7180	AAB7180	
P5-43		Function Button	AAD7500	AAD7487	AAD7487	AAD7487	
P5-44		Power Button	AAD7440	AAD7485	AAD7485	AAD7485	
P5-45		Power Button M	AAD7442	AAD7491	AAD7491	AAD7491	
P5-46		Display Window	AAK7612	AAK7649	AAK7649	AAK7649	
P5-47		Front Panel	AMB7561	AMB7580	AMB7580	AMB7580	
P5-49		Name Plate	PAM1776	PAM1779	PAM1779	PAM1779	
P5-52		Screw	ABA7017	Not used	Not used	Not used	
P5-55		Screw	RBA1099	ABA7044	ABA7044	ABA7044	
P5-57		Screw (×3, For Front Panel)	BBZ30P080FZK	BBZ30P080FCC	BBZ30P080FCC	BBZ30P080FCC	
P5-57		Screw (×5, For Bonnet Case)	BBZ30P080FZK	BBZ30P080FCC	BBZ30P080FCC	BBZ30P080FCC	
P5-60		Screw	FBT40P080FZK	FBT40P080FNI	FBT40P080FNI	FBT40P080FNI	
P5-67		FM/AM TUNER Unit	AXX7048	AXX7048	AXX7047	AXX7048	
P5-72		Screw	BBT30P100FCC	ABA1007	ABA1007	ABA1007	
P5-74		Push Rivet	AEC7025	AEC7205	AEC7205	AEC7205	
P5-75		Top Cover	AME7375	AME7376	AME7376	AME7376	
P5-76	NSP	Shrink Shield 140	PDM1021	Not used	Not used	Not used	
P5-77		Cord Clamper	RNH-184	Not used	Not used	Not used	

Notes : ● For ASSEMBLIES, refer to “CONTRAST OF PCB ASSEMBLIES” and “2. SCHEMATIC DIAGRAM”.

■ CONTRAST OF REMOTE CONTROL UNIT

AXD7178 and AXD7181 are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			AXD7181 (CU-VSX140)	AXD7178 (CU-VSX138)	
P53- 2		Name Plate	AZA7317	AZA7304	
P53-12		Main Key (FF)	AZN7751	AZN7666	
P53-14		Main Key (REV)	AZN7752	AZN7665	

■ CONTRAST OF PCB ASSEMBLIES



AMP ASSY

AWX7370 and AWX7226 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7226	AWX7370	
△	C413, C414, C463, C464	CEAT100M50	CEAT1R0M50	
△	C711, C712	CQMA103K2E	ACG1005 (0.01μF/AC250V)	
△	L701	ATF-151	ATF7018	
△	T701	ATT7037	ATT1193	



TRANS 1 ASSY

AWX7369 and AWX7287 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7287	AWX7369	
	J52 LEAD WIRE UNIT	DB135NB0	Not used	
	J53 LEAD WIRE UNIT (For J52)	Not used	DB135NB0	

AF INPUT ASSY

AWX7365 and AWX7210 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7210	AWX7365	
	Q105	Not used	KRA101M	
	Q106	Not used	KRC103M	
	Q107	2SC1740S	Not used	
	C144	ACH7112 (3300μF/35V)	CEAT332M35	
	C145	ACH7113 (2200μF/35V)	CEAT222M35	
	C146	ACH7111 (3300μF/16V)	CEAT332M16	
	C152	CKSQYB103K50	Not used	
	C304, C326, C327, C348, C349	CEBA1R0M50	CEAT1R0M50	
	C306, C328, C329, C1300, C1301	CECA100M50	CEAT100M50	
	C308, C330, C331, C1302, C1303	CECA1R0M50	CEAT1R0M50	
	C320, C342, C343, C1314, C1315	ACH7110 (47μF/25V)	CEAT470M25	
	R137	RS1/10S101J	Not used	
	R138	RS1/10S221J	Not used	
	R139	RS1/10S472J	Not used	

BF FRONT ASSY

AWX7218 and AWX7217 are constructed the same except for the following :

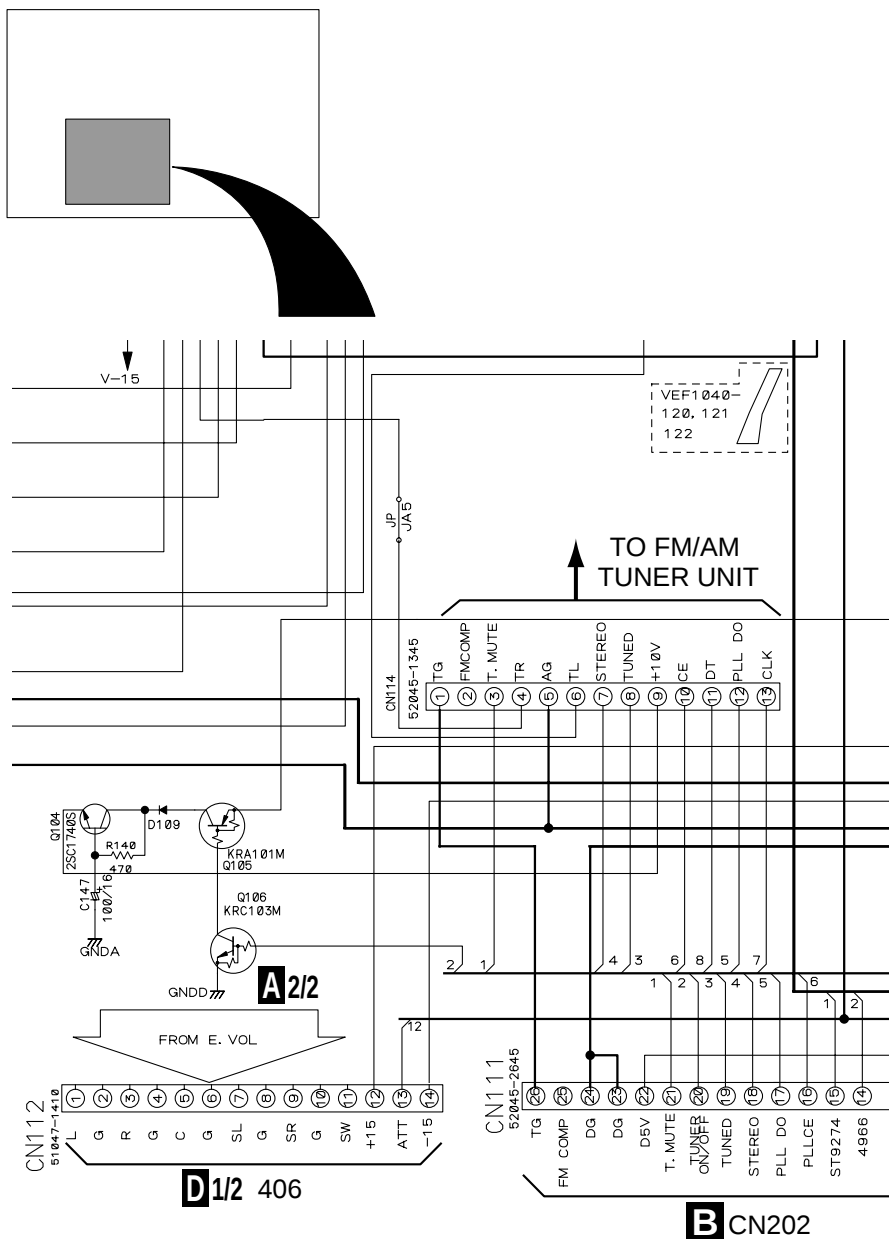
Mark	Symbol and Description	Part No.		Remarks
		AWX7217	AWX7218	
	IC281	BU1923	Not used	
	Q281	KRC101M	Not used	
	Q282	2SA1515	Not used	
	Q283	2SC1740S	Not used	
	D222	Not used	1SS355	
	L281	LFA2R2J	Not used	
	C281, C282	CCSQCH270J50	Not used	
	C283, C287	CEAT101M10	Not used	
	C284, C285	CKSQYB102K50	Not used	
	C286	CKSQYB561K50	Not used	
	C288	CEAT2R2M50	Not used	
	C289	CKSQYB472K50	Not used	
	C290	CEAT1R0M50	Not used	
	R231–R233	Not used	RS1/10S0R0J	
	R284	RS1/10S333J	Not used	
	R285	RS1/10S104J	Not used	
	R286	RS1/10S473J	Not used	
	R287	RS1/10S222J	Not used	
	R288–R290	RS1/10S102J	Not used	
	S232, S236	ASG1034	Not used	
	X281 CRYSTAL RESONATOR (4.332MHz)	ASS7004	Not used	

2. SCHEMATIC DIAGRAM

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

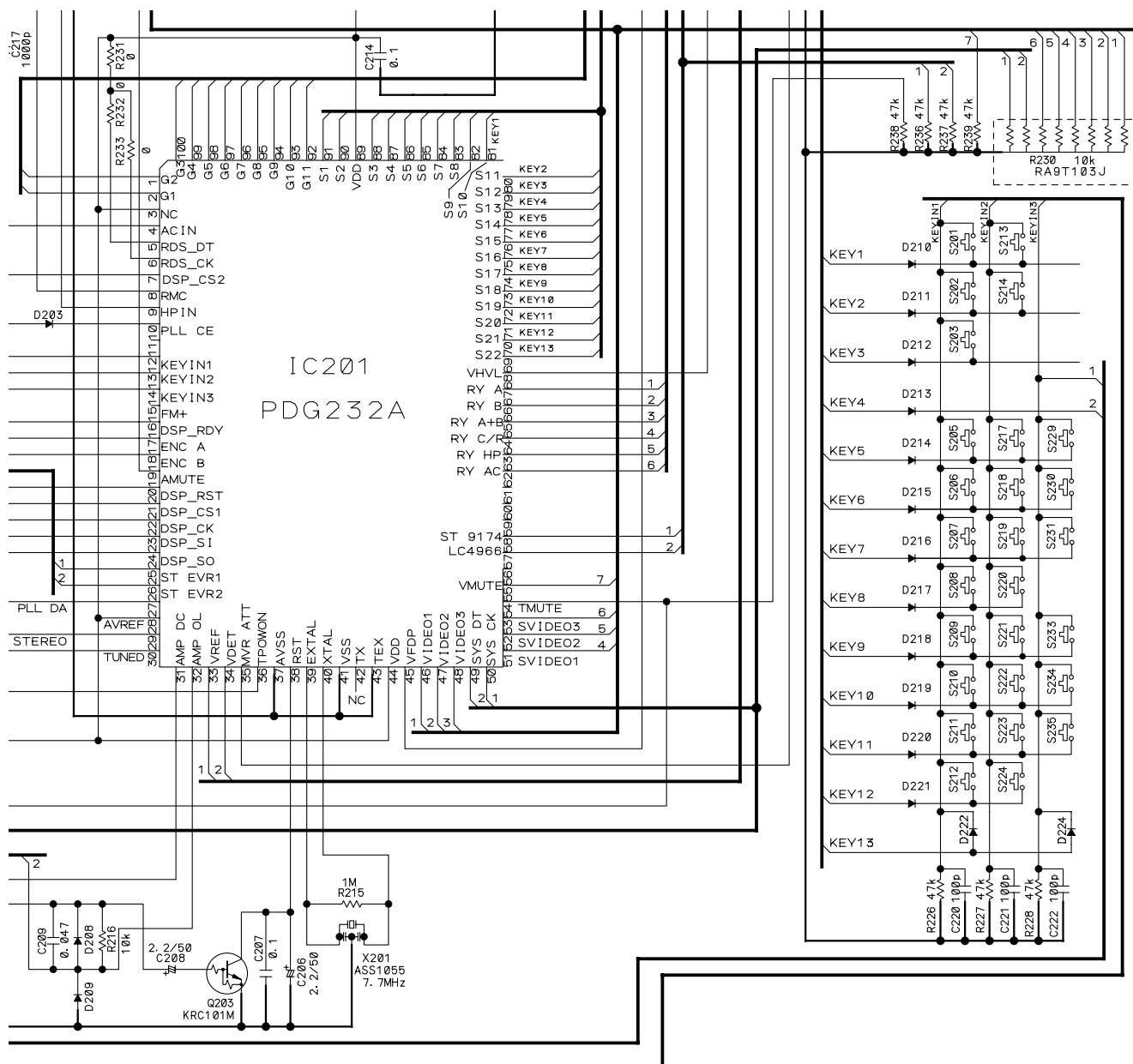
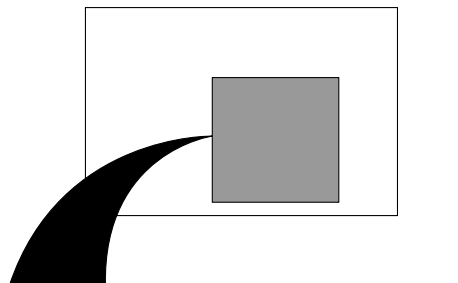
2.1 INPUT ASSY

A 1/2 F INPUT ASSY(1/2) (AWX7365)



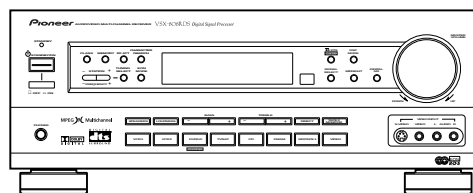
2.2 FRONT ASSY

B FRONT ASSY
(AWX7218)



Service Manual

Pioneer



ORDER NO.
RRV2115

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-808RDS

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

Type	Model	Power Requirement	The voltage can be converted by the following method.
	VSX-808RDS		
HYXJI	○	AC220-230V	AC240V, *
HYXJIGR	○	AC220-230V	AC240V, *
HVXJI	○	AC230V	AC240V, *

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

CONTENTS

1. SAFETY INFORMATION	2	7. GENERAL INFORMATION	45
2. EXPLODED VIEWS AND PARTS LIST	3	7.1 PARTS	45
3. SCHEMATIC DIAGRAM	6	7.1.1 IC	45
4. PCB CONNECTION DIAGRAM	26	7.1.2 DISPLAY	48
5. PCB PARTS LIST	39	7.2 DISASSEMBLY	50
6. ADJUSTMENT	44	7.3 BLOCK DIAGRAM	52
		7.4 REMOTE CONTROL UNIT	53
		[CU-VSX140 (AXD7181)]	
		8. PANEL FACILITIES AND SPECIFICATIONS	57

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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.

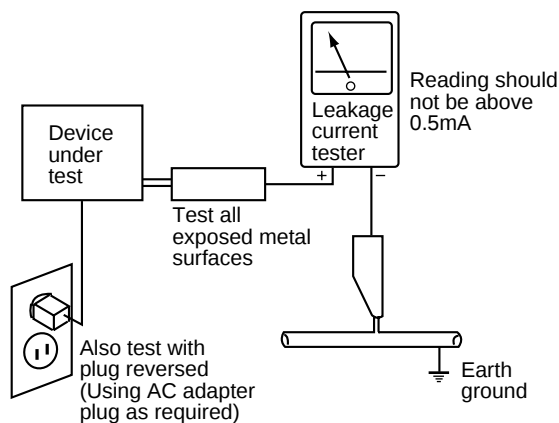
(FOR USA MODEL ONLY)

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.

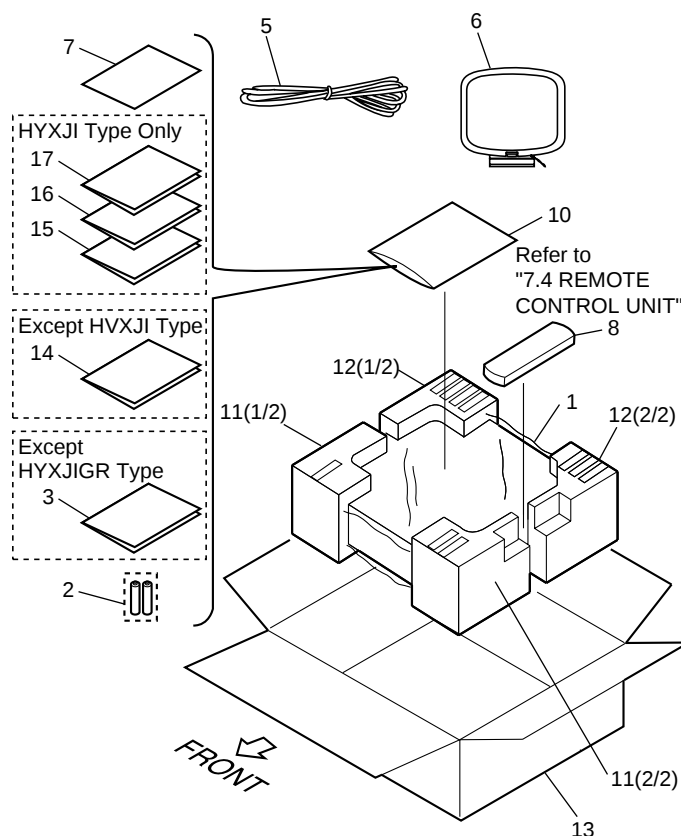
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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

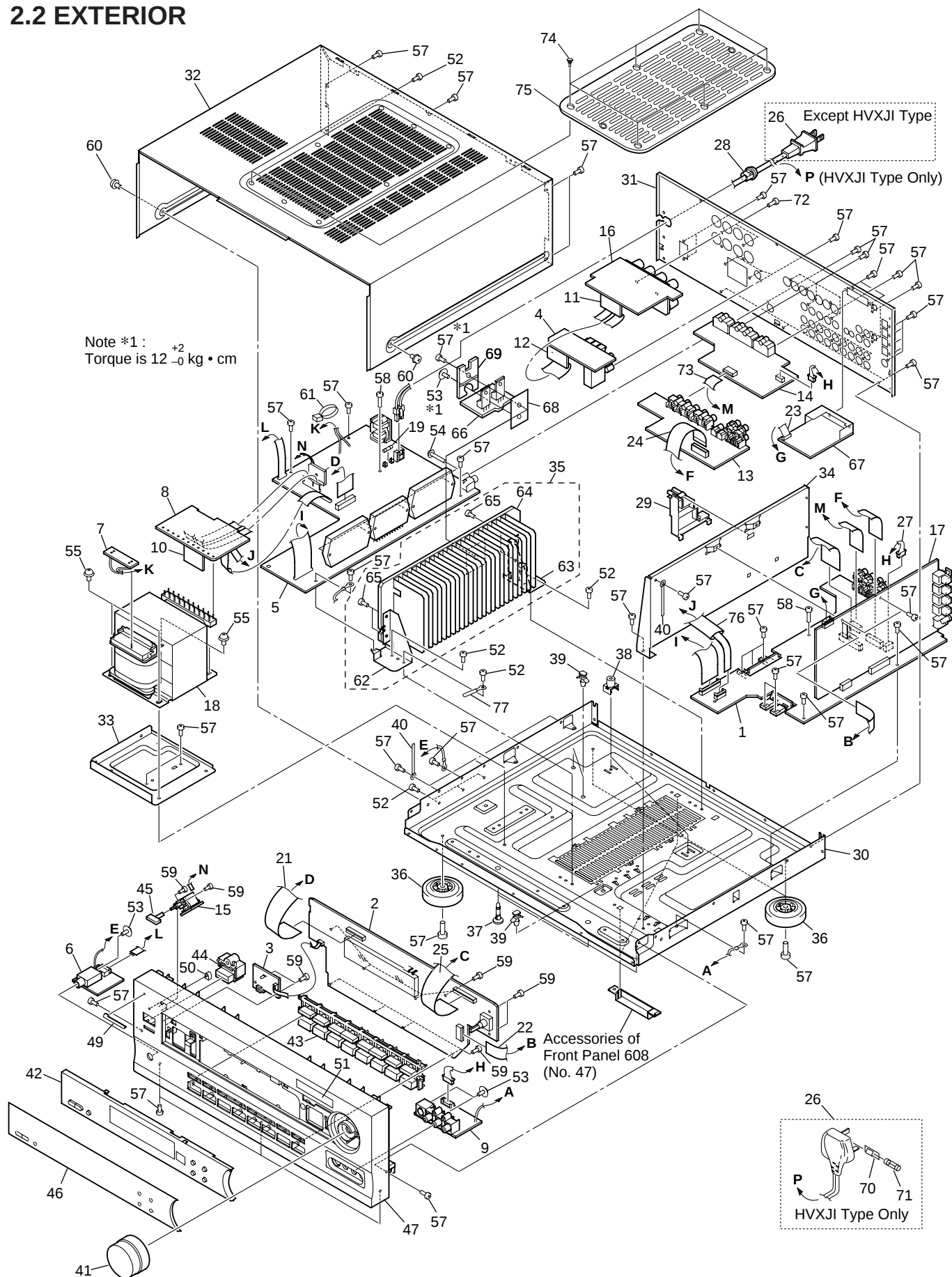
Mark	No.	Description	Part No.
NSP	1	Packing Sheet	AHG7010
	2	Alkaline Dry Cell Battery (LR6, AA)	VEM1012
	3	Operating Instructions	See Contrast table (2)
	4		
	5	FM Antenna	ADH7005
NSP	6	AM Loop Antenna	ATB7009
	7	Warranty Card	ARY7022
	8	Remote Control Unit (CU-VSX140)	AXD7181
	9		
	10	Polyethylene Bag (0.03×230×340)	Z21-038
	11	Front Pad 508	AHA7236
	12	Rear Pad 508	AHA7237
	13	Packing Case 808	AHD7695
	14	Operating Instructions	See Contrast table (2)
	15	Operating Instructions	See Contrast table (2)
	16	Operating Instructions	See Contrast table (2)
	17	Operating Instructions	See Contrast table (2)

(2) CONTRAST TABLE

VSX-808RDS/HYXJI, HYXJIGR and HVXJI are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.			Remarks
			HYXJI Type	HYXJIGR Type	HVXJI Type	
	3	Operating Instructions (English)	ARB7158	Not used	ARB7158	
	14	Operating Instructions (German)	ARC7203	ARC7203	Not used	
	15	Operating Instructions (French/Italian)	ARC7204	Not used	Not used	
	16	Operating Instructions (Swedish/Dutch)	ARC7205	Not used	Not used	
	17	Operating Instructions (Portuguese/Spanish)	ARC7206	Not used	Not used	

2.2 EXTERIOR



(1) EXTERIOR PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	INPUT Assy	AWX7210		41	Volume Knob 508	AAB7179
	2	FRONT Assy	AWX7217		42	Sub Panel 508	AAD7482
	3	POWER SW Assy	AWX7222		43	Function Button 608	AAD7500
NSP	4	REAR SP Assy	AWX7251		44	Power Button	AAD7440
	5	AMP Assy	AWX7226		45	Power Button M	AAD7442
	6	HEADPHONE Assy	AWX7230		46	Display Window W808	AAK7612
NSP	7	TRANS 1 Assy	AWX7287		47	Front Panel 808	AMB7561
	8	TRANS 2 Assy	AWX7292		48	*****	
	9	FRONT VIDEO Assy	AWX7241		49	Name Plate	PAM1776
	10	BARRIER Assy	AWX7284		50	LED Lens	PNW2019
NSP	11	F.SP.CONNECT Assy	AWX7285		51	*****	
NSP	12	R.C.SP.CONNECT Assy	AWX7286		52	Screw	ABA7017
	13	VIDEO Assy	AWX7236		53	Screw	ABA7009
	14	SVIDEO Assy	AWX7378		54	Screw	ABA7043
	15	MECH SW Assy	AWX7247		55	Screw	RBA1099
	16	FRONT LARGE Assy	AWX7245		56	*****	
△	17	DOLBY DIGITAL Assy	AWX7374		57	Screw	BBZ30P080FZK
△	18	Power Transformer (T1)	ATS7242		58	Screw	BBZ30P200FMC
	19	Fuse (FU1 : T2.5A)	REK-104		59	Screw	BPZ30P080FMC
	20	*****			60	Screw	FBT40P080FZK
	21	FFC 21P (J2)	ADD7100		61	Binder (BK-1)	ZCA-BK1
	22	FFC 07P (J4)	ADD7101	NSP	62	Heat Sink Angle F	ANG7194
	23	FFC 13P (J5)	ADD7103		63	Heat Sink Angle R	ANG7195
	24	FFC 17P (J8)	ADD7107	NSP	64	Heat Sink D5	ANH7090
	25	FFC 26P (J3)	ADD7118		65	Screw	BBZ30P080FMC
△	26	AC Power Cord	See Contrast table (2)		66	FET Assy	AWX7228
NSP	27	8P Shield Cable (J6)	ADX7251	NSP	67	FM/AM TUNER Unit	AXX7048
	28	Cord Stopper	CM-22B		68	Sheet	AEE7026
	29	Tuner Holder B	AAD7490		69	FET Angle	ANG7186
NSP	30	Under Base D5	ANA7079	△	70	Fuse Holder	See Contrast table (2)
	31	Rear Panel	ANC7723	△	71	Fuse (T5A)	See Contrast table (2)
	32	Bonnet Case	AZN7771		72	Screw	BBT30P100FCC
	33	Trans Frame	ANG7193		73	FFC 11P (J7)	ADD7142
	34	DSP Shield	ANG7196		74	Push Rivet	AEC7025
NSP	35	Heat Sink Assy D5	ANH7095		75	Top Cover	AME7375
	36	Insulator	PNW2766		76	Shrink Shield 140	PDM1021
	37	Locking Card Spacer	AEC7160	NSP	77	Cord Clamper	RNH-184
	38	PCB Mold	AMR2533				
NSP	39	Card Spacer	DEC1770				
NSP	40	Binder	RNE1277				

(2) CONTRAST TABLE

VSX-808RDS/HYXJI, HYXJIGR and HVXJI are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.			Remarks
			HYXJI Type	HYXJIGR Type	HVXJI Type	
△	26	AC Power Cord	VDG1061	VDG1061	VDG1063	
△	70	Fuse Holder	Not used	Not used	VKR1003	
△	71	Fuse (T5A)	Not used	Not used	PEK1003	

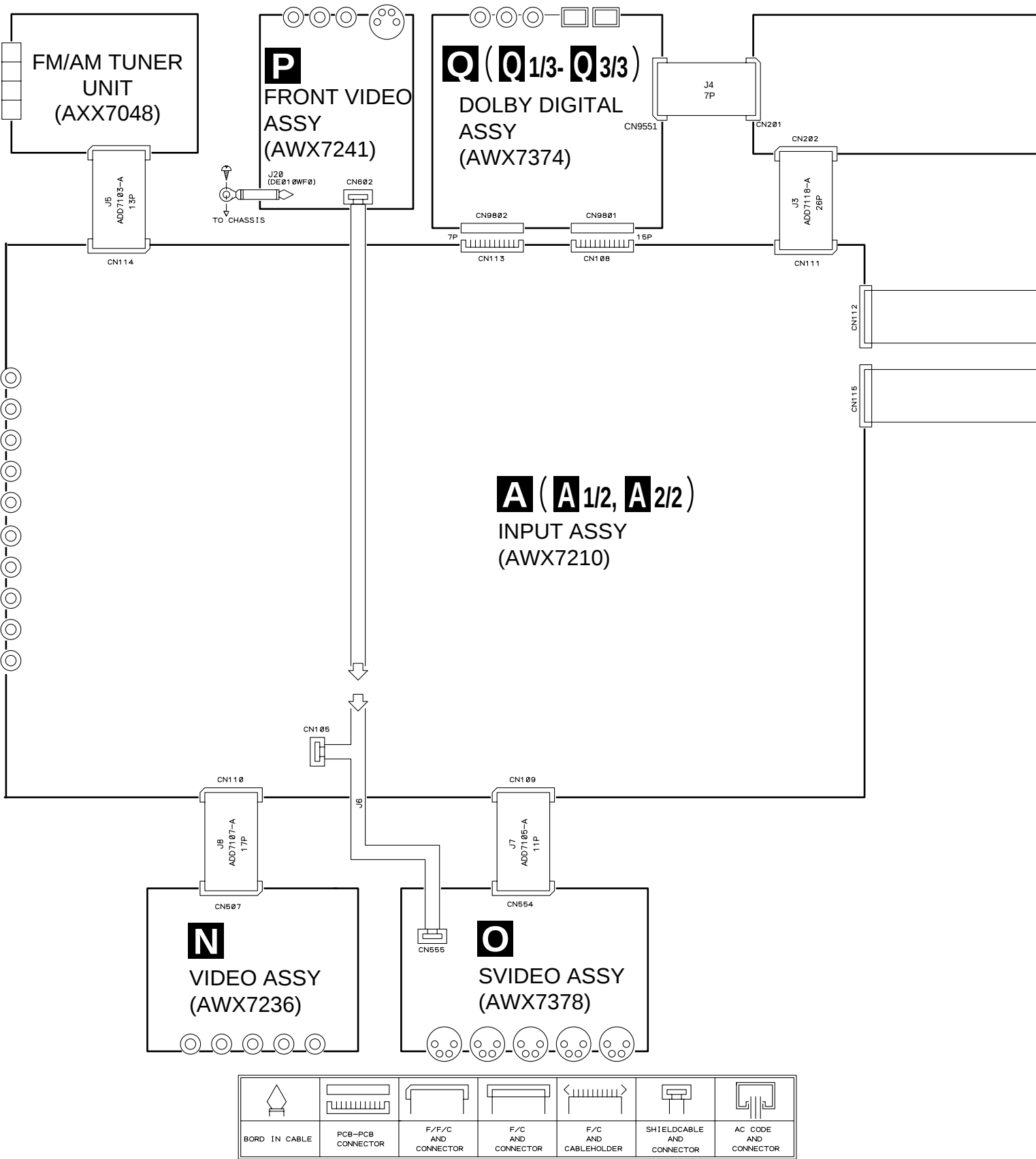
3. SCHEMATIC DIAGRAM
3.1 OVERALL WIRING CONNECTION DIAGRAM

A

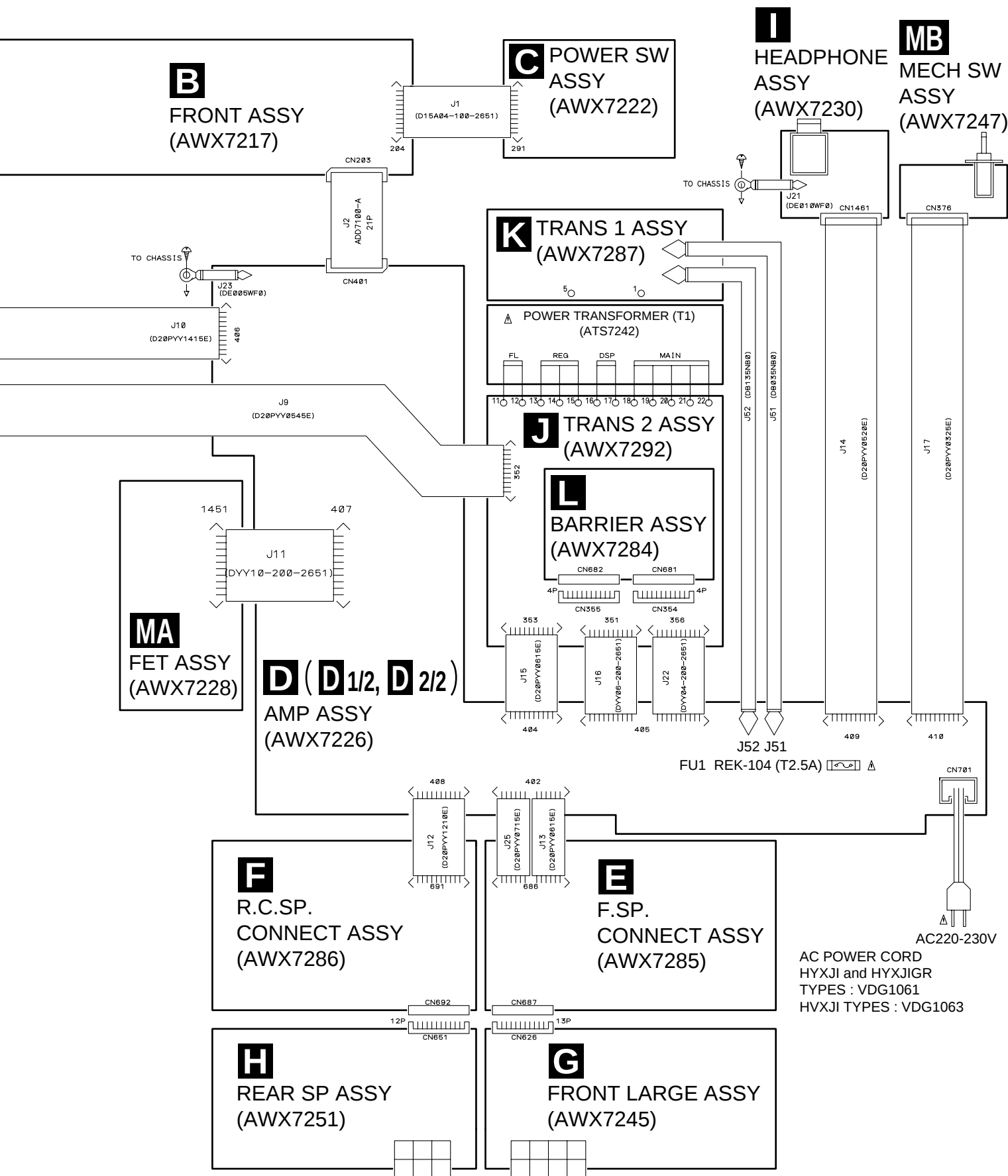
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C

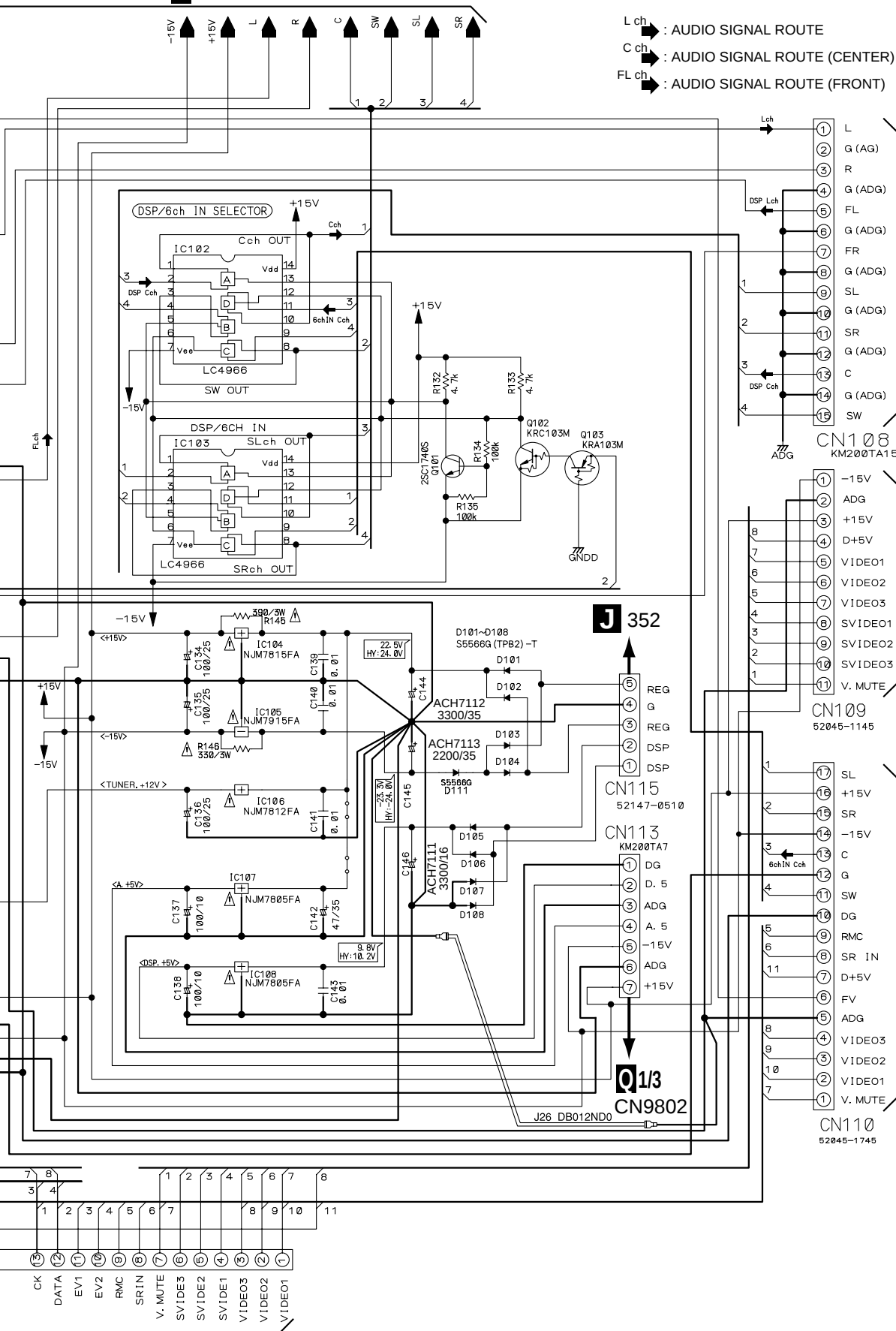
D



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



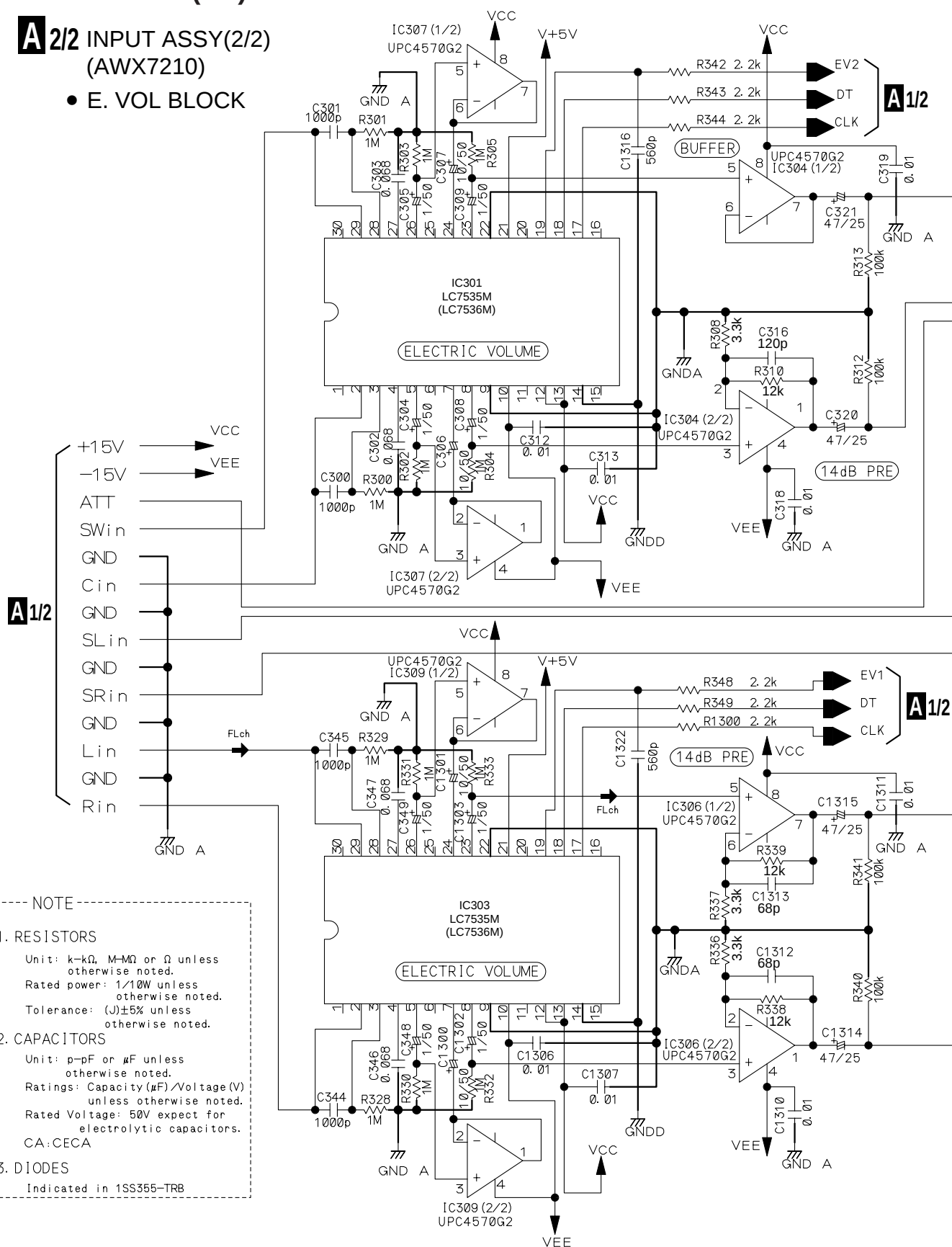
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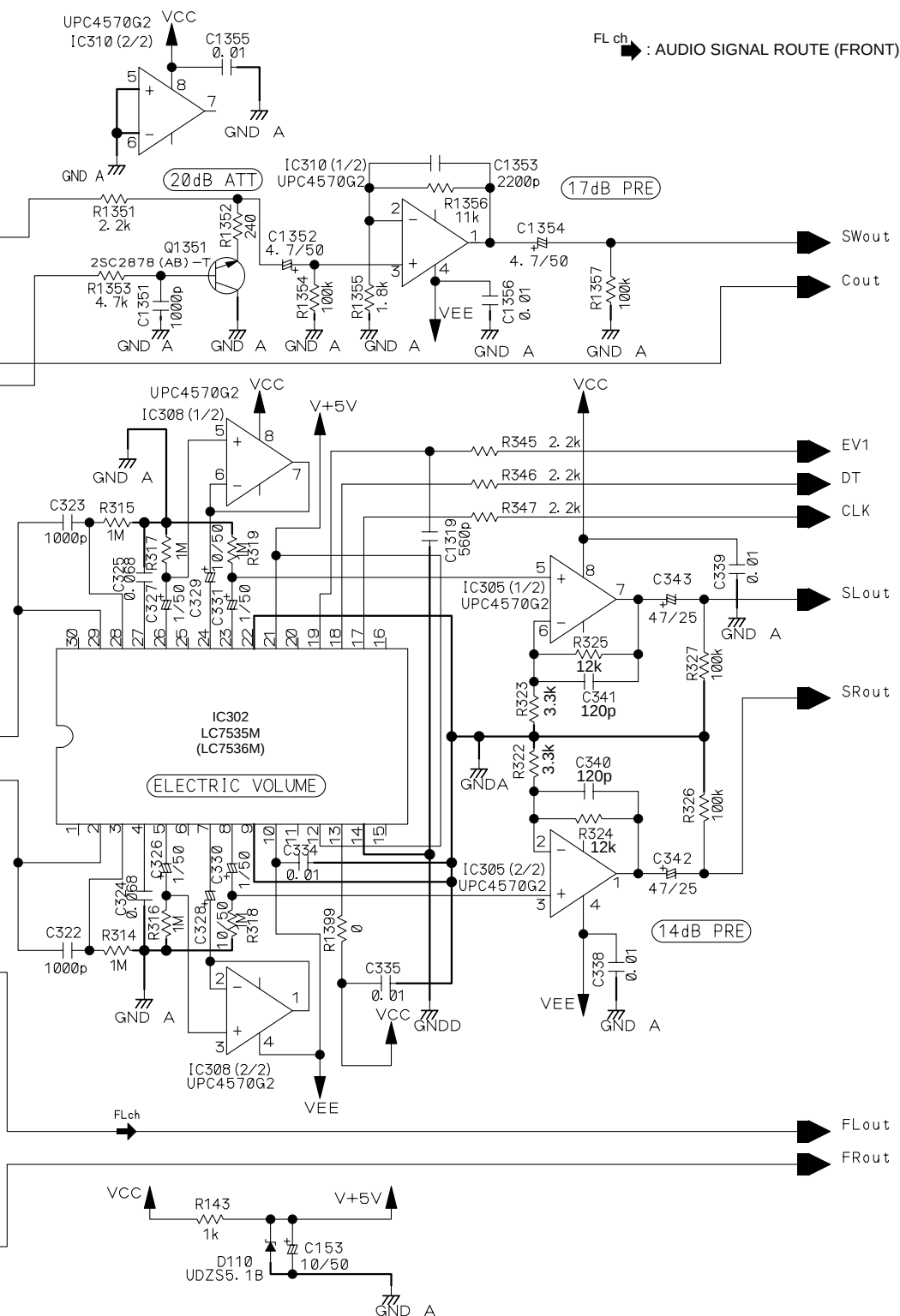


3.3 INPUT ASSY (2/2)

A 2/2 INPUT ASSY(2/2)
(AWX7210)

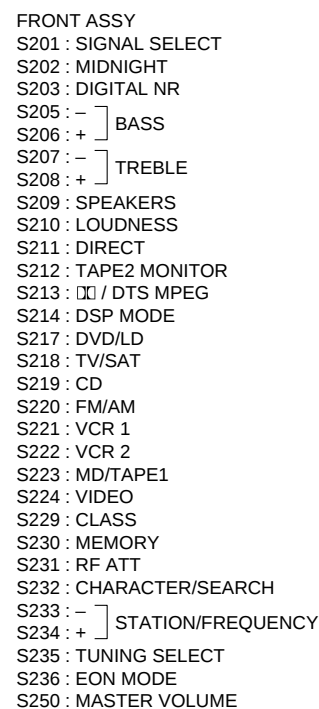
- E. VOL BLOCK





A 1/2

A 2/2



A

Unit: k-k Ω , M-M Ω or Ω
unless otherwise noted.
Rated power: 1/4W
unless otherwise noted.
Tolerance: (J) $\pm 5\%$
unless otherwise noted.

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.

Indicated in 1SS133-T



C

D

4

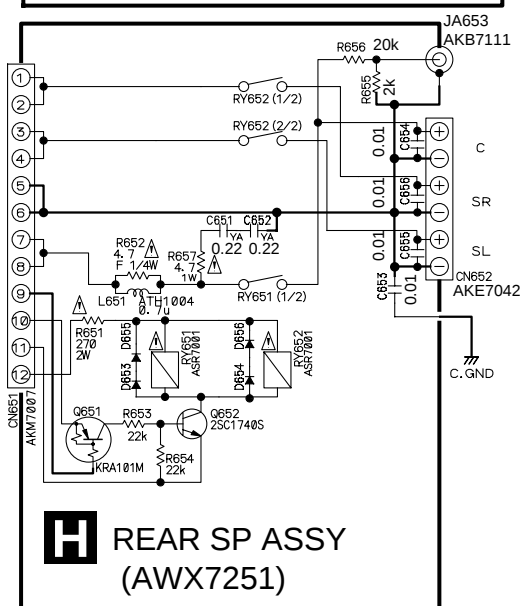


E



□

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE NO. ICP-N25, MFD BY
ROHM CO., LTD. FOR IC404 and IC405.



3.6 AMP (2/2), HEADPHONE, TRANS 2, TRANS 1, BARRIER, FET and MECH SW ASSYS

A

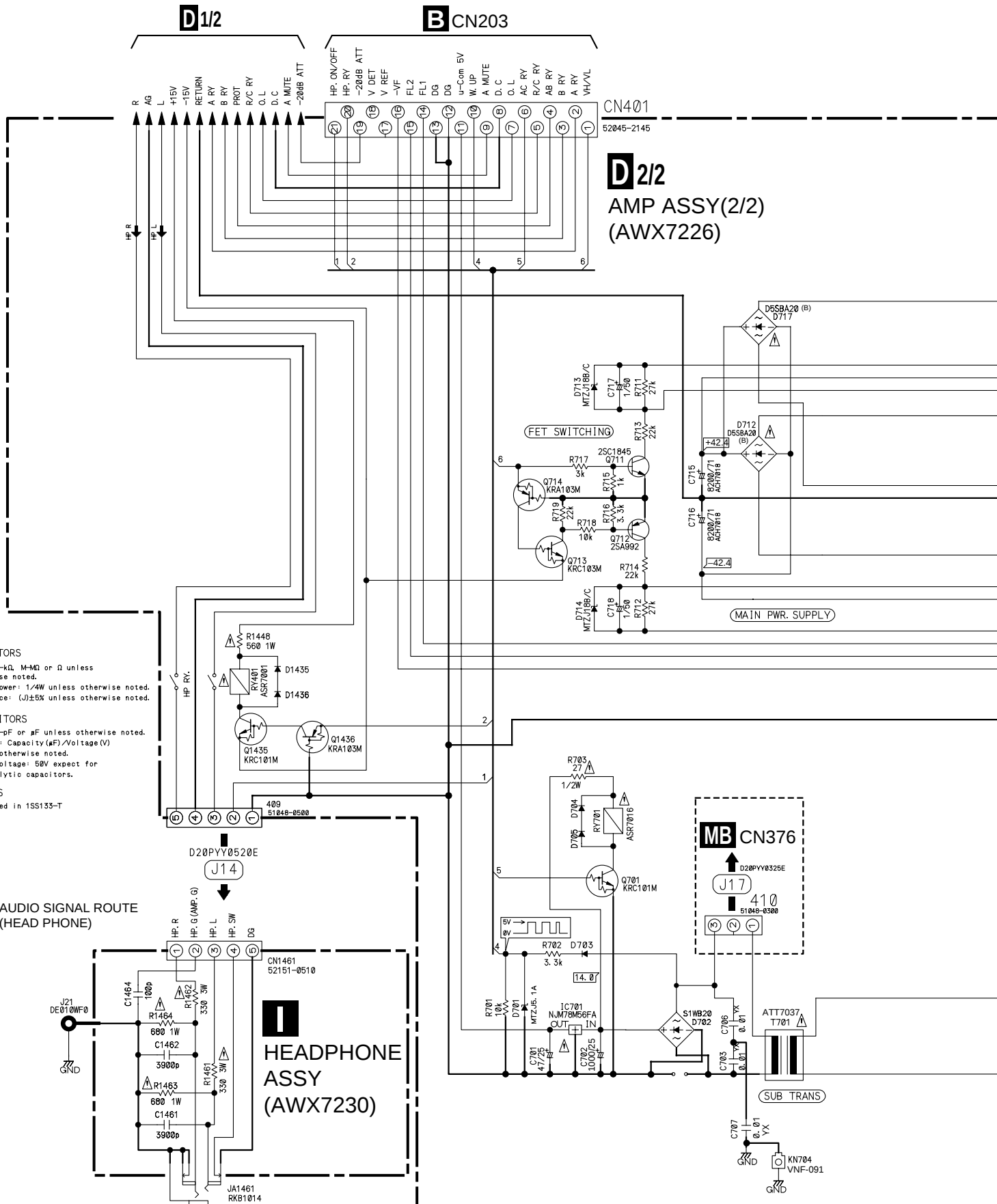
B

C

D

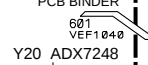
- NOTE
- RESISTORS
Unit: k- Ω , M-M Ω or Ω unless otherwise noted.
Rated power: 1/4W unless otherwise noted.
Tolerance: (J) $\pm$ 5% unless otherwise noted.
 - CAPACITORS
Unit: p-pF or μ F unless otherwise noted.
Ratings: Capacity(μ F)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V except for electrolytic capacitors.
 - DIODES
Indicated in 1SS133-T

HP : AUDIO SIGNAL ROUTE (HEAD PHONE)

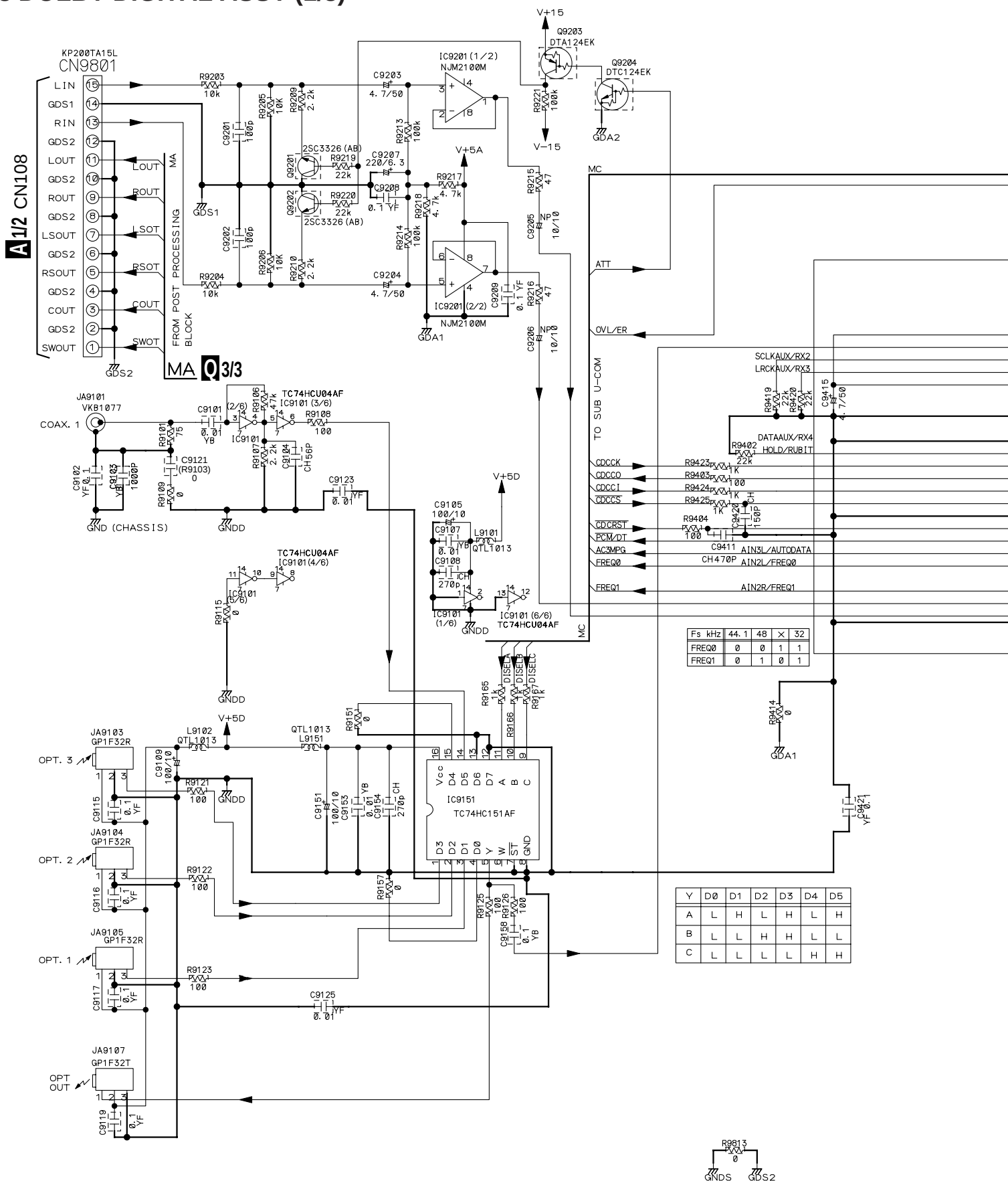




Y ➡ : S-VIDEO Y-SIGNAL ROUTE
C ➡ : S-VIDEO C-SIGNAL ROUTE
DC ➡ : S-VIDEO C-DC ROUTE

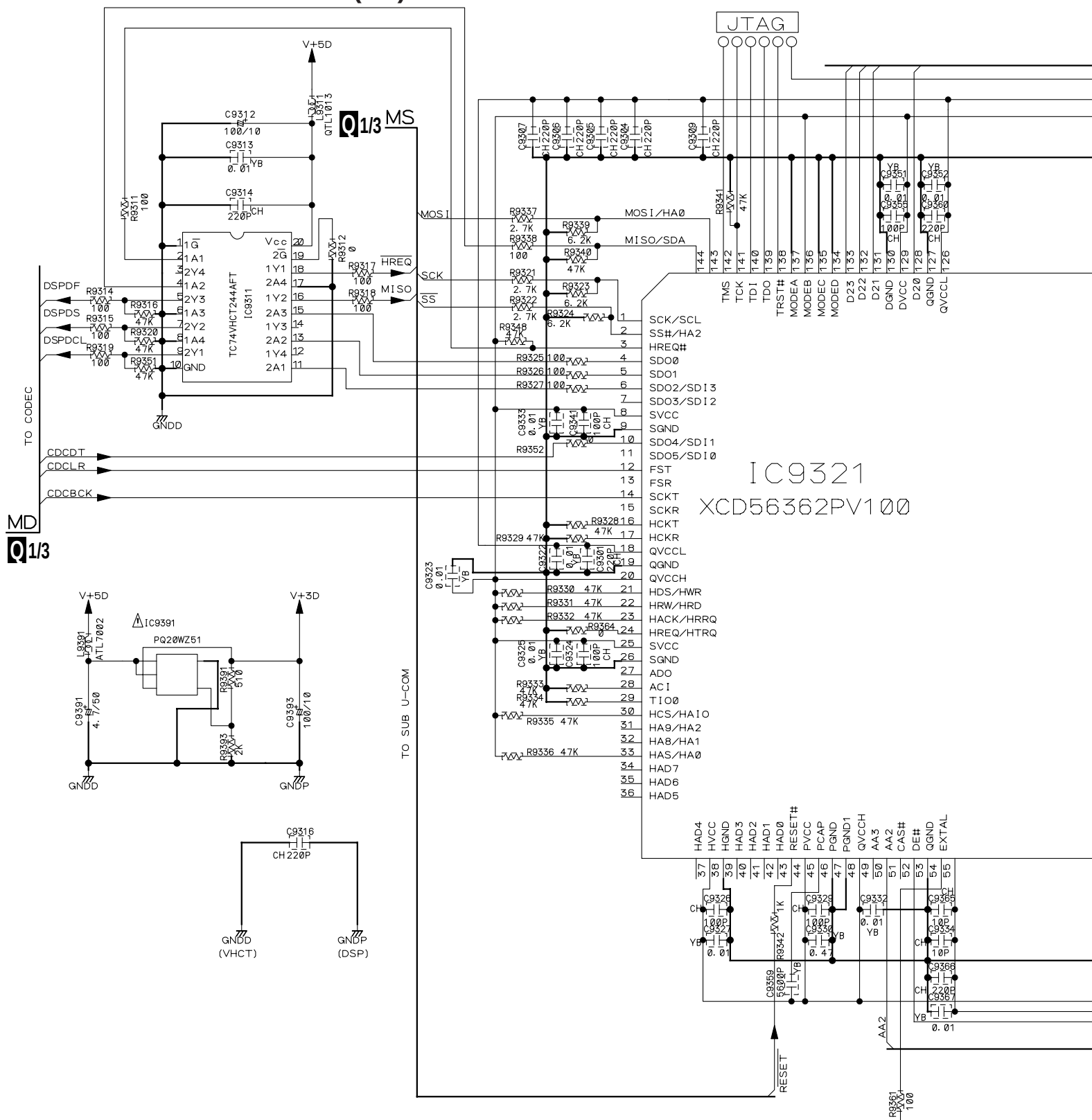


3.8 DOLBY DIGITAL ASSY (1/3)



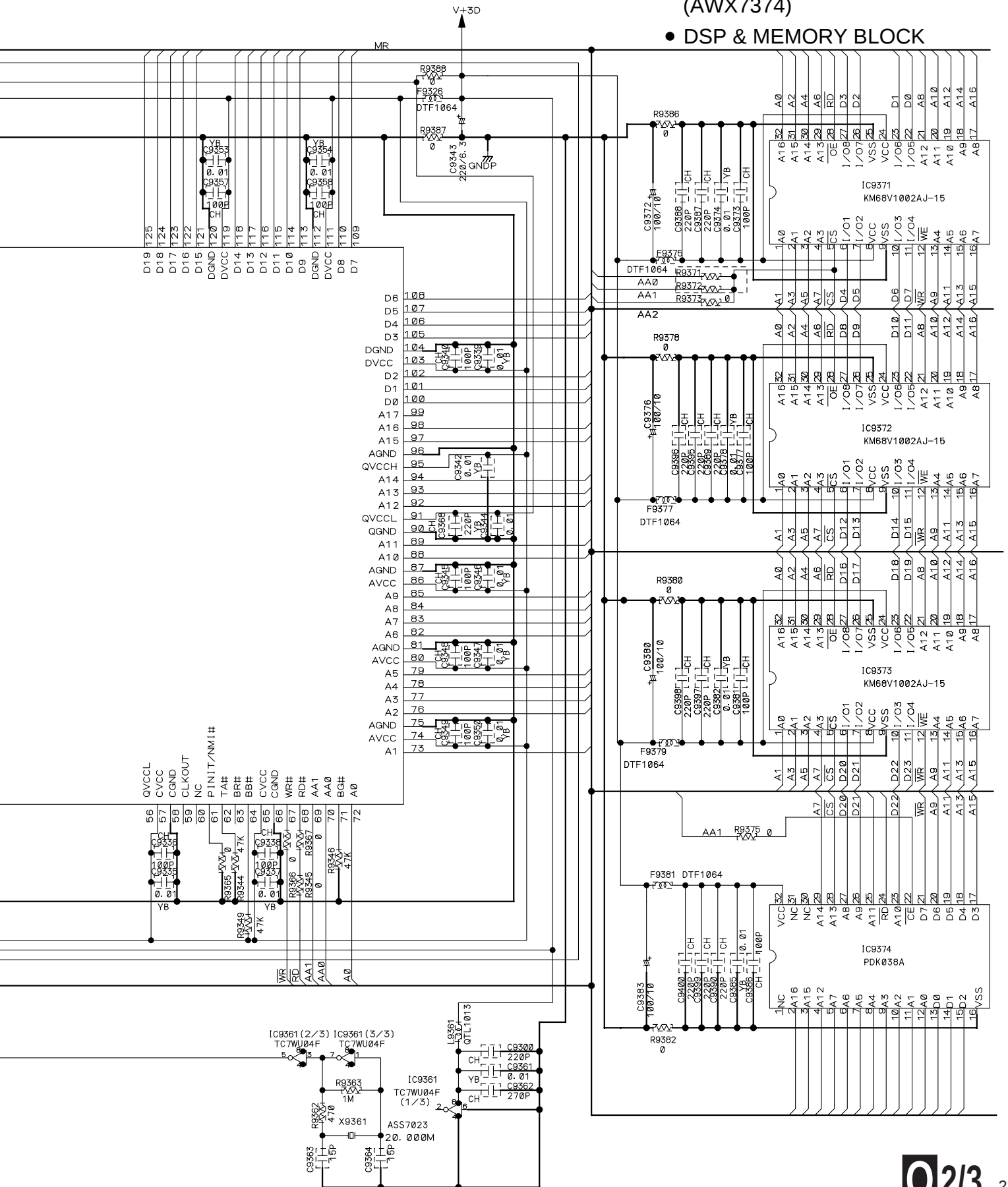


3.9 DOLBY DIGITAL ASSY (2/3)

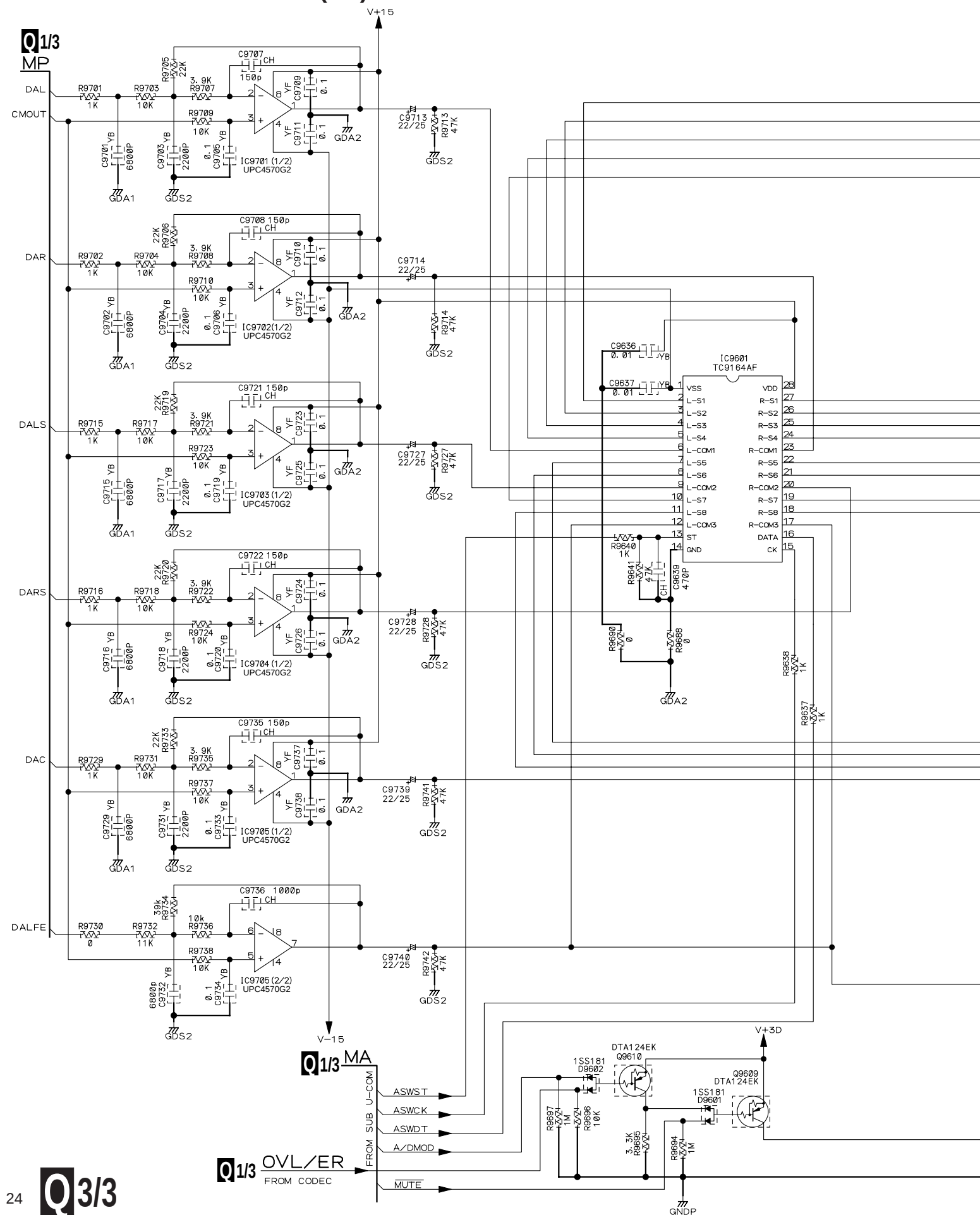


Q2/3 DOLBY DIGITAL ASSY(2/3) (AWX7374)

• DSP & MEMORY BLOCK

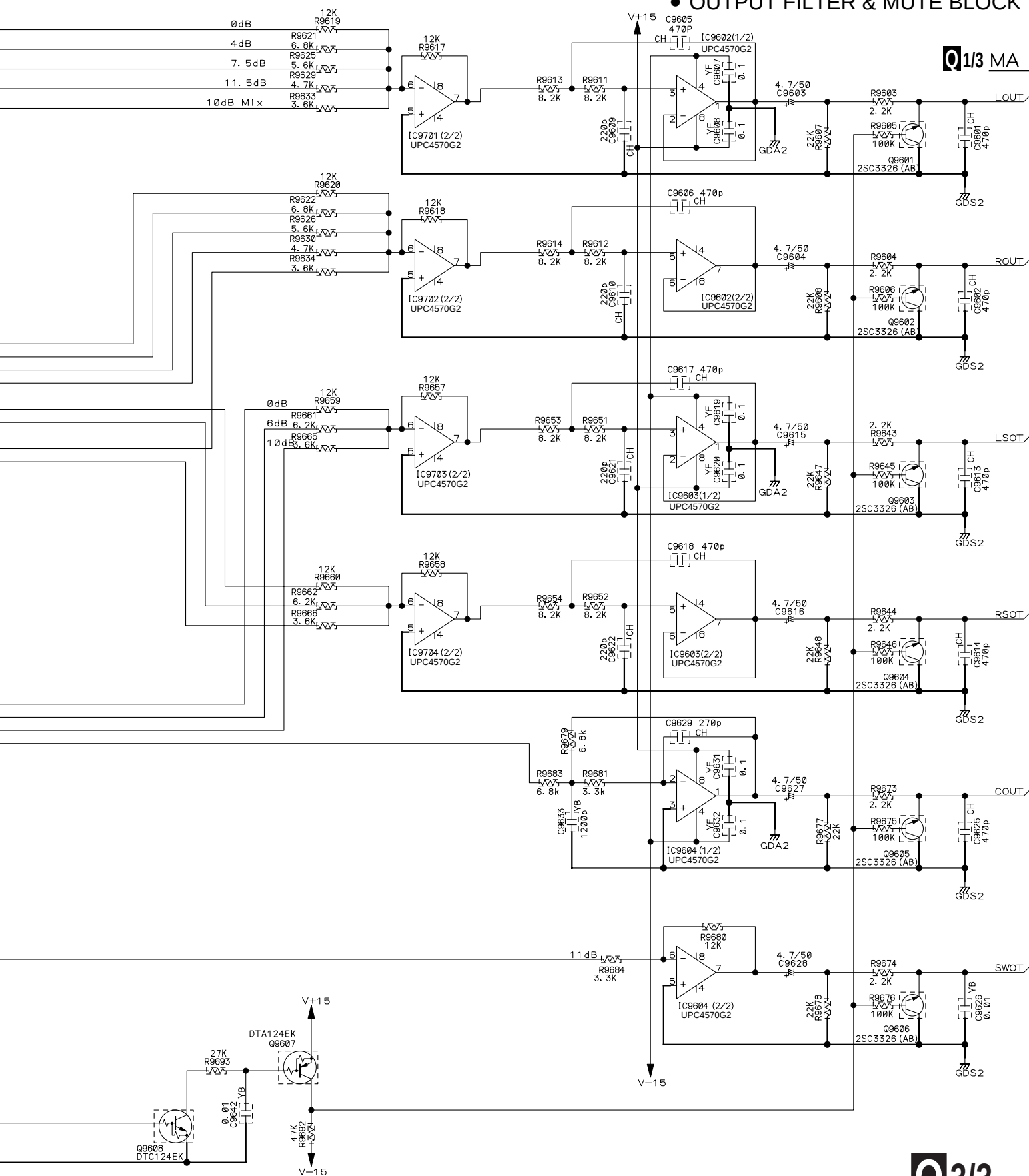


3.10 DOLBY DIGITAL ASSY (3/3)



Q3/3 DOLBY DIGITAL ASSY(3/3) (AWX7374)

• OUTPUT FILTER & MUTE BLOCK



A

B

C

D

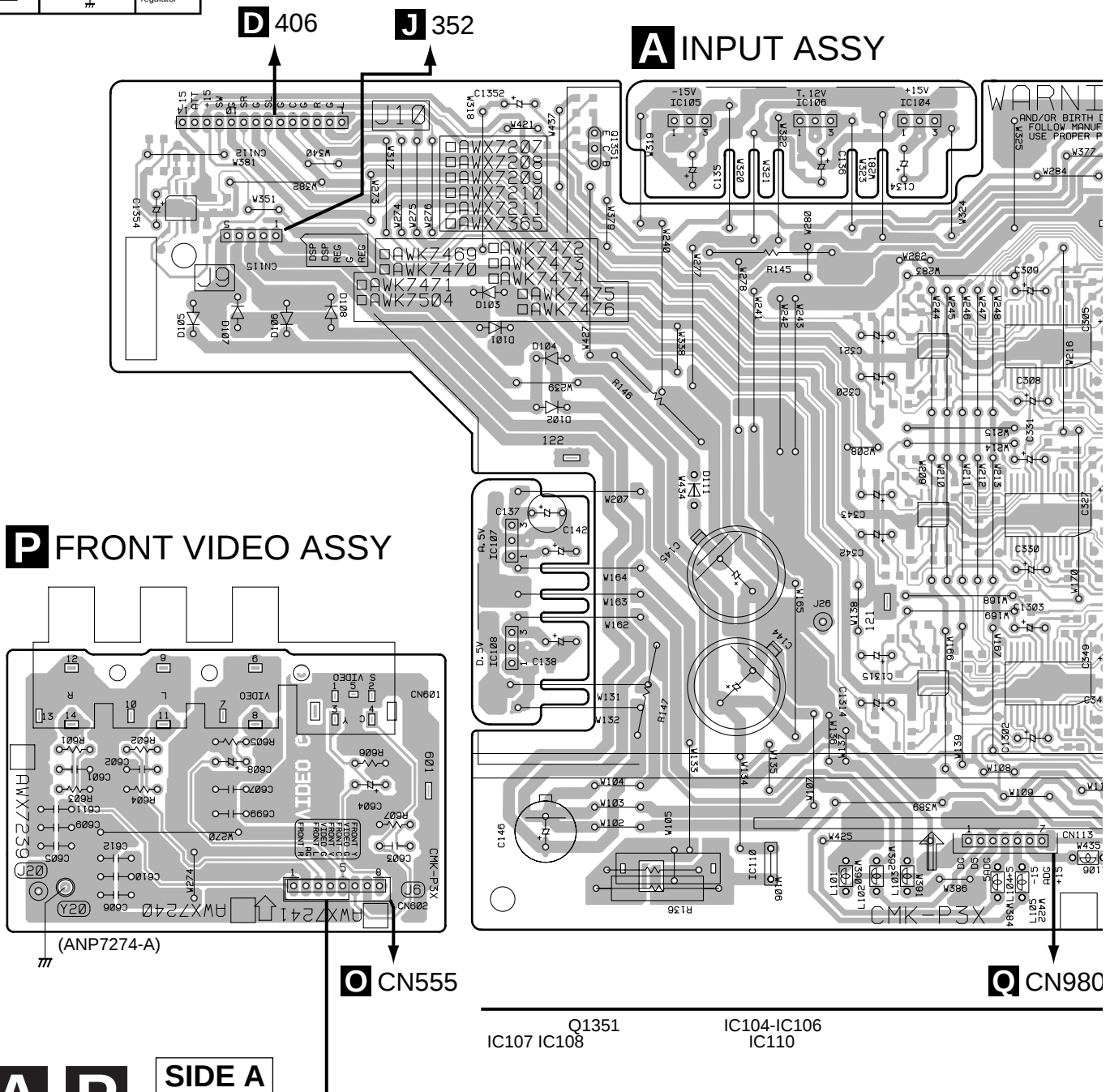
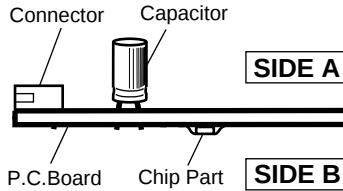
4. PCB CONNECTION DIAGRAM

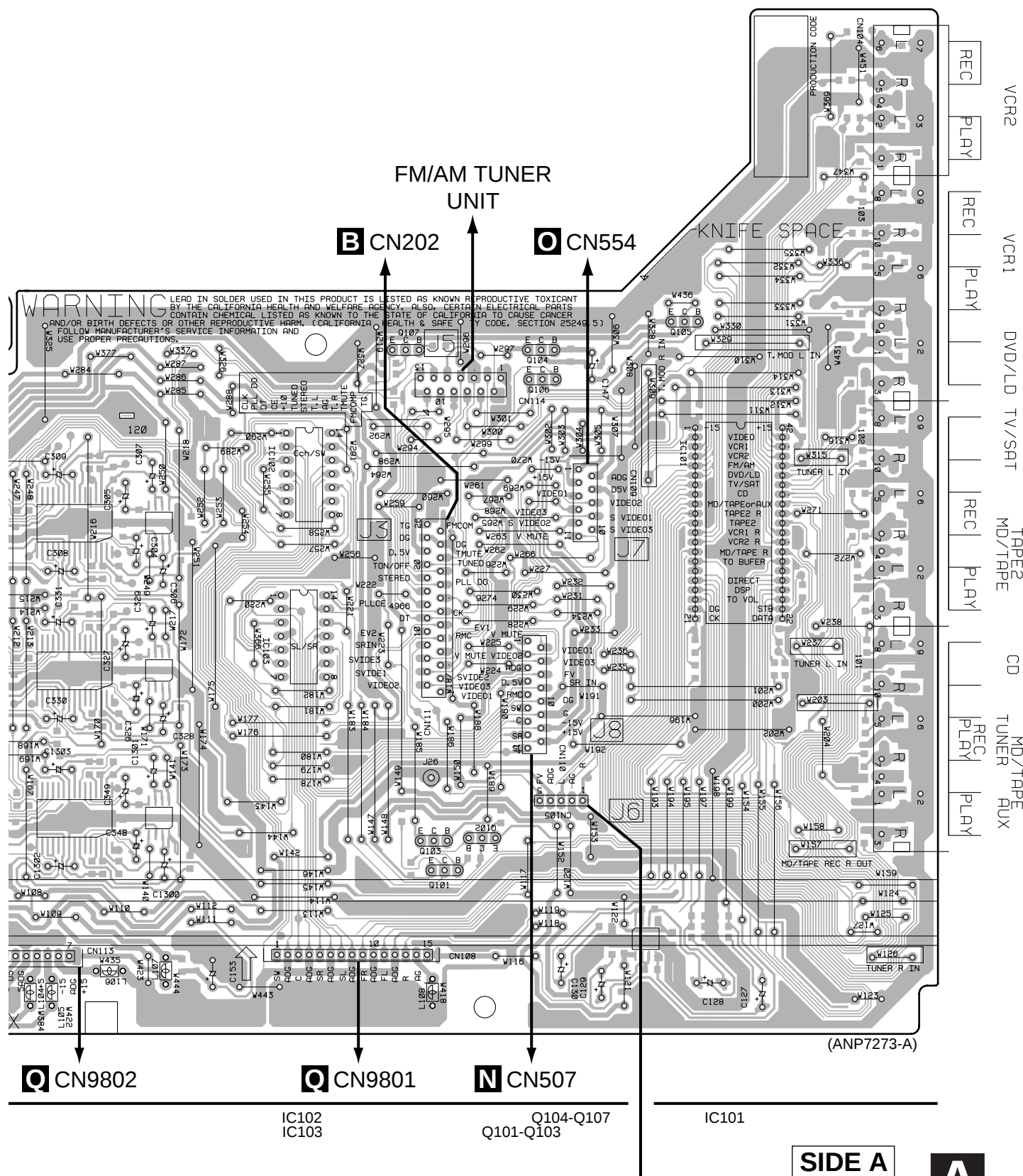
4.1 INPUT and FRONT VIDEO ASSYS

NOTE FOR PCB DIAGRAMS :

- 1. Part numbers in PCB diagrams match those in the schematic diagrams.
- 2. A comparison between the main parts of PCB and schematic diagrams is shown below.
- 3. The parts mounted on this PCB include all necessary parts for several destinations.
- 4. View point of PCB diagrams.

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

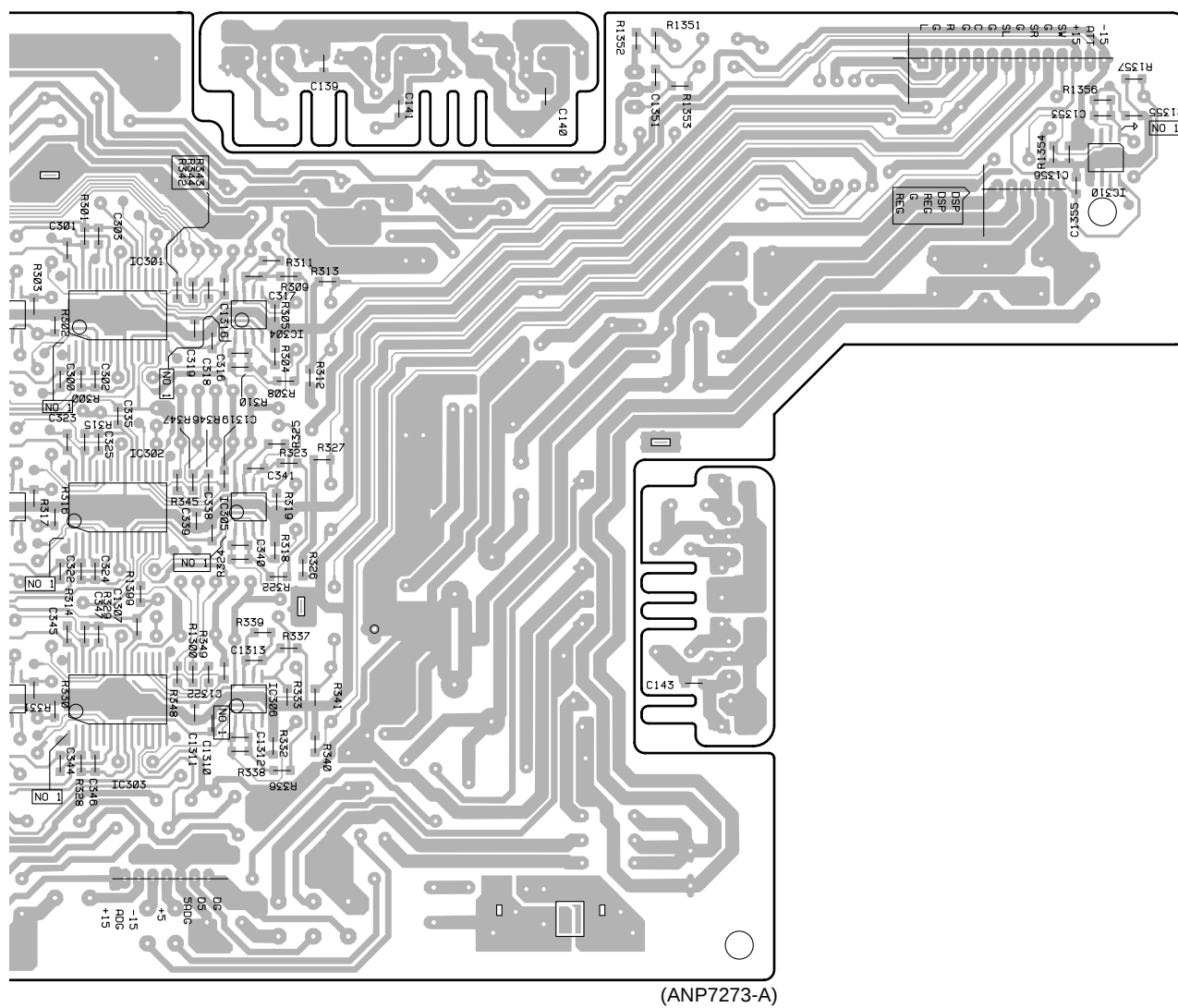




SIDE A

A

SIDE B

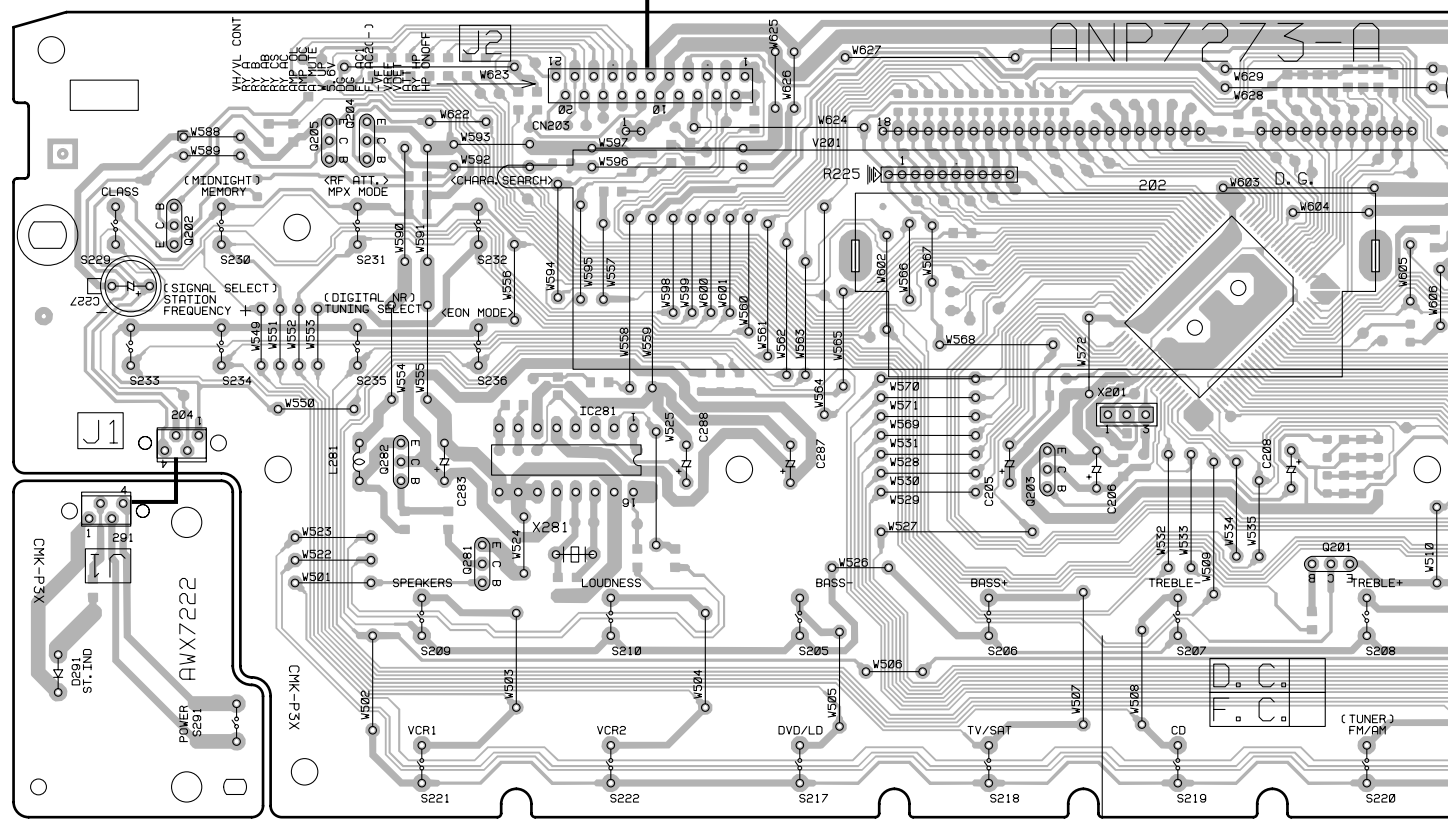


17-IC309 IC301-IC303 IC304-IC306

IC310

SIDE B

4.2 FRONT and POWER SW ASSYS

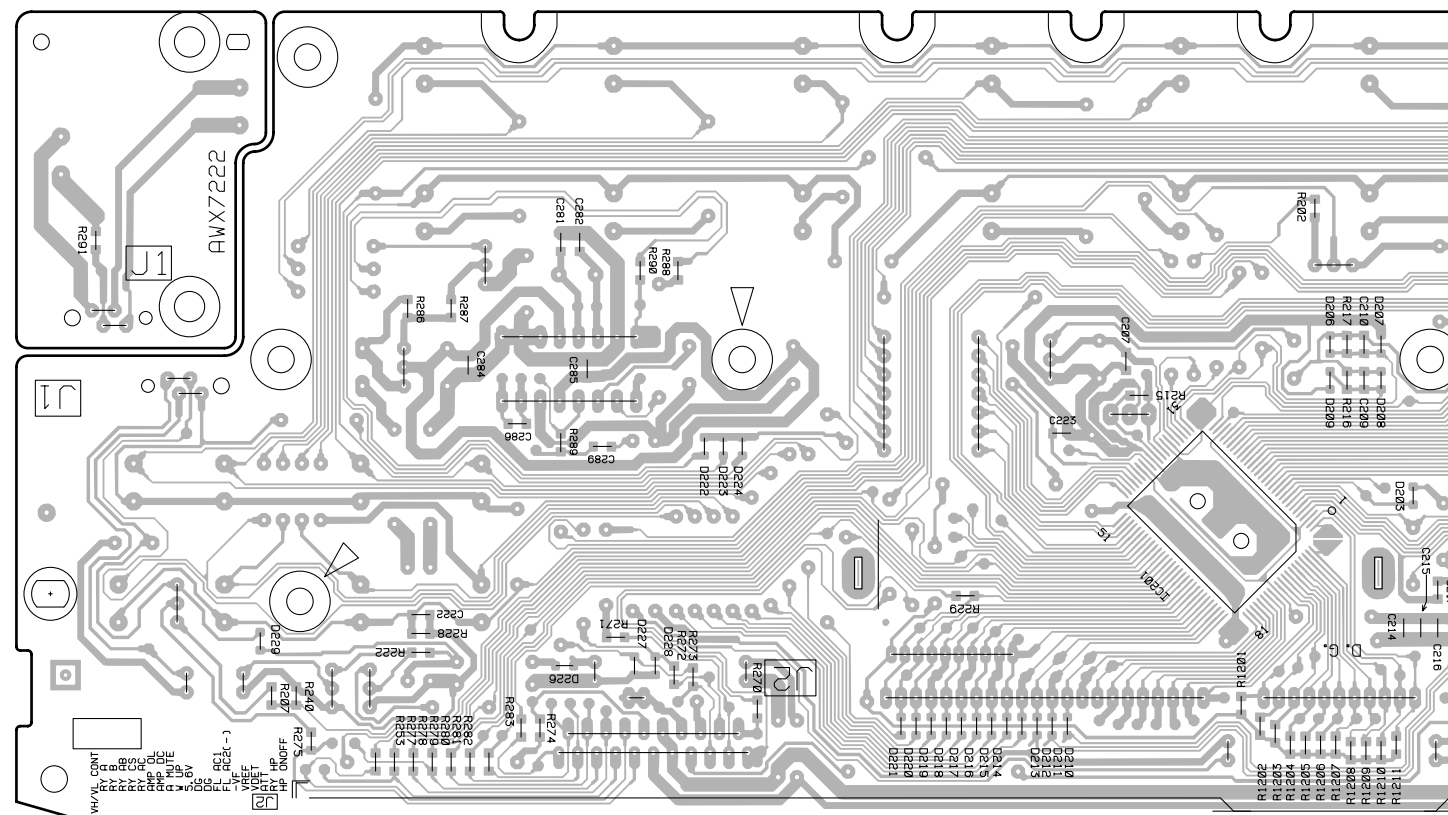
D CN401

C POWER
SW ASSY

Q202 Q205 Q204 Q282 Q281 IC281

Q203

Q201

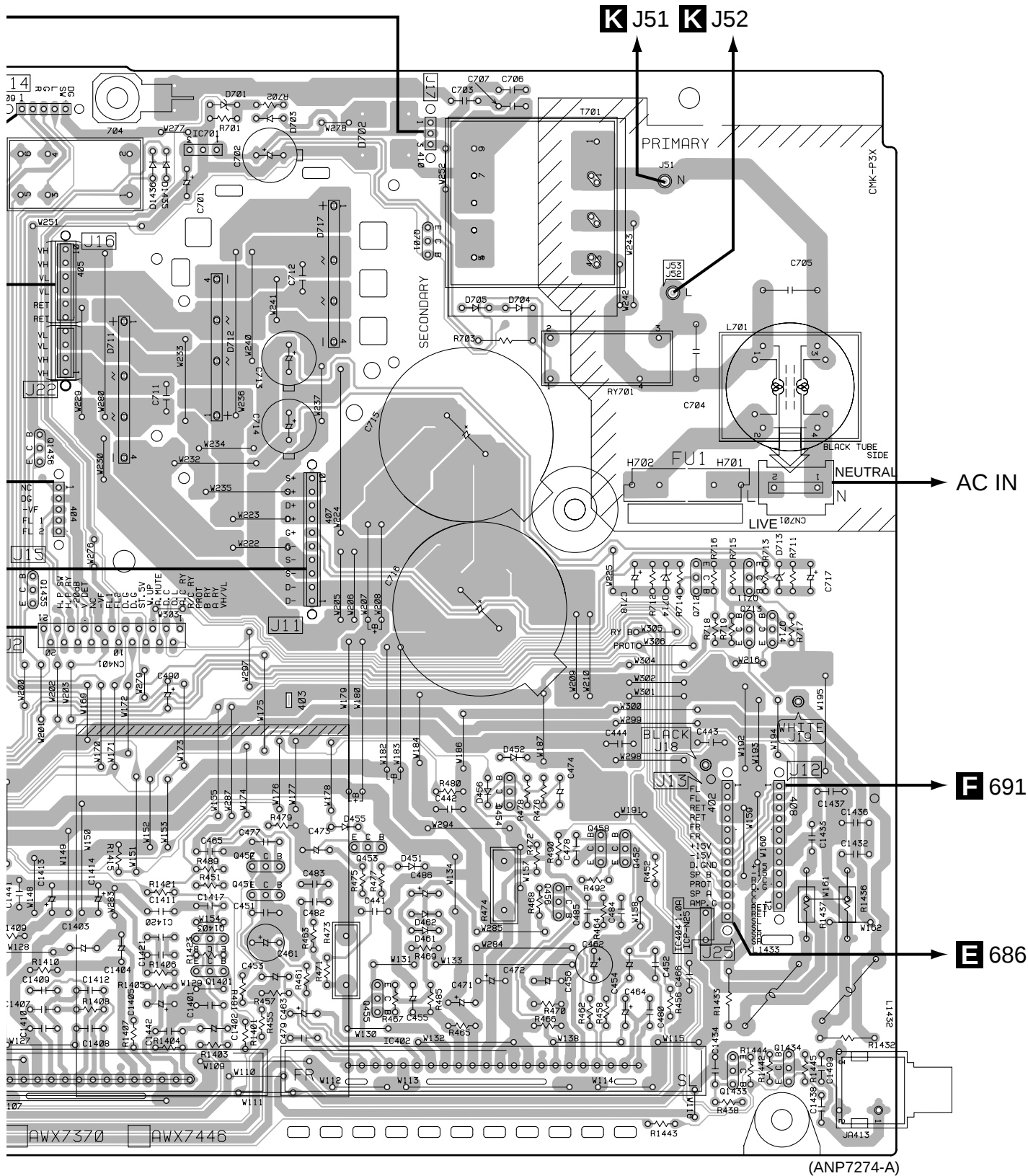


IC201



A

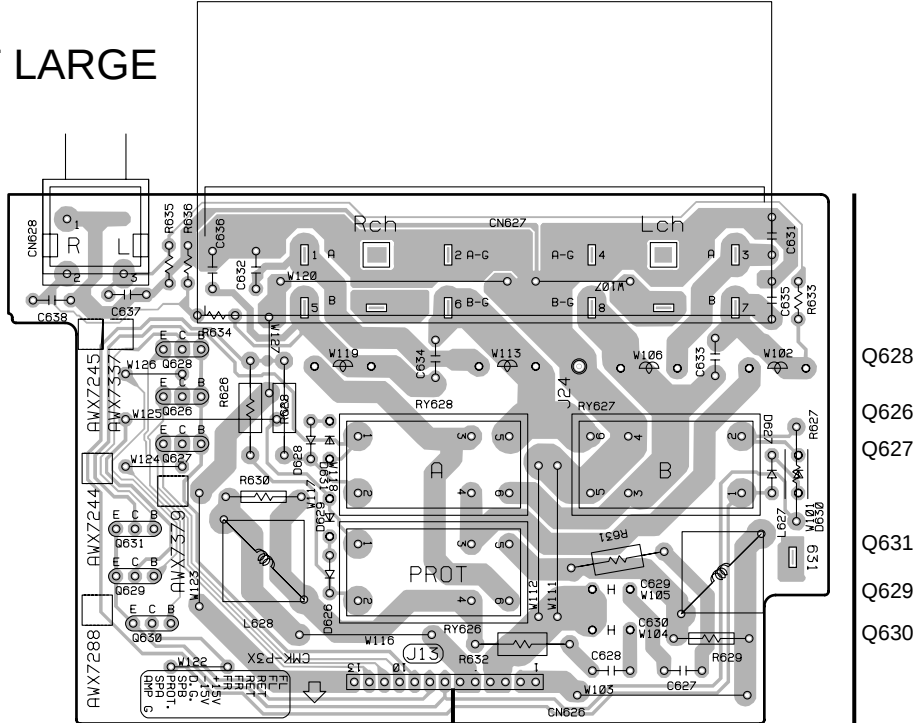




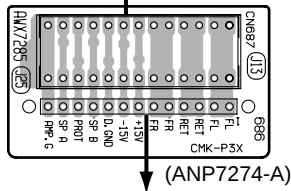
IC701 Q701 Q454
 IC403 Q1403 Q1401 Q451 Q457 Q453 Q456 Q458 Q452 IC404 Q711-Q714
 Q455 Q1433 Q1434

4.4 F.SP.CONNECT, R.C.SP.CONNECT, FRONT LARGE and REAR SP ASSYS

G FRONT LARGE ASSY

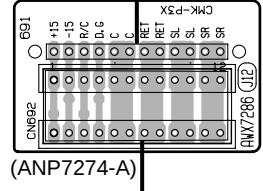


E F.SP. CONNECT ASSY



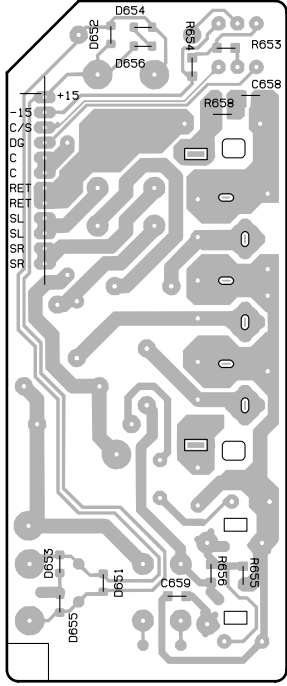
D 402

D 408

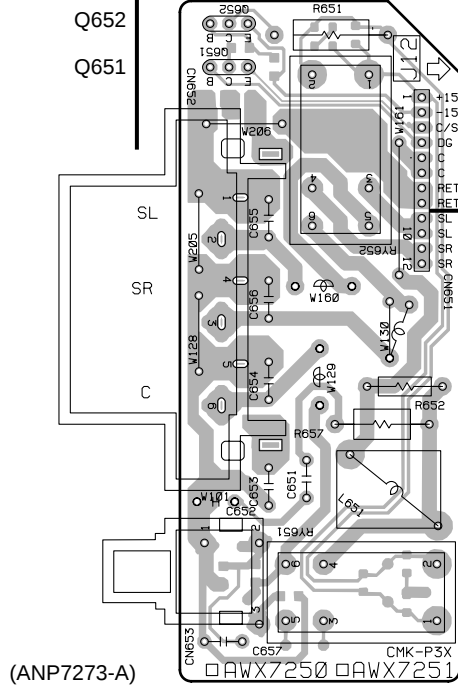


F R.C.SP. CONNECT ASSY

H REAR SP ASSY



SIDE B



SIDE A

H REAR SP ASSY

4.6 DOLBY DIGITAL ASSY

A

B

C

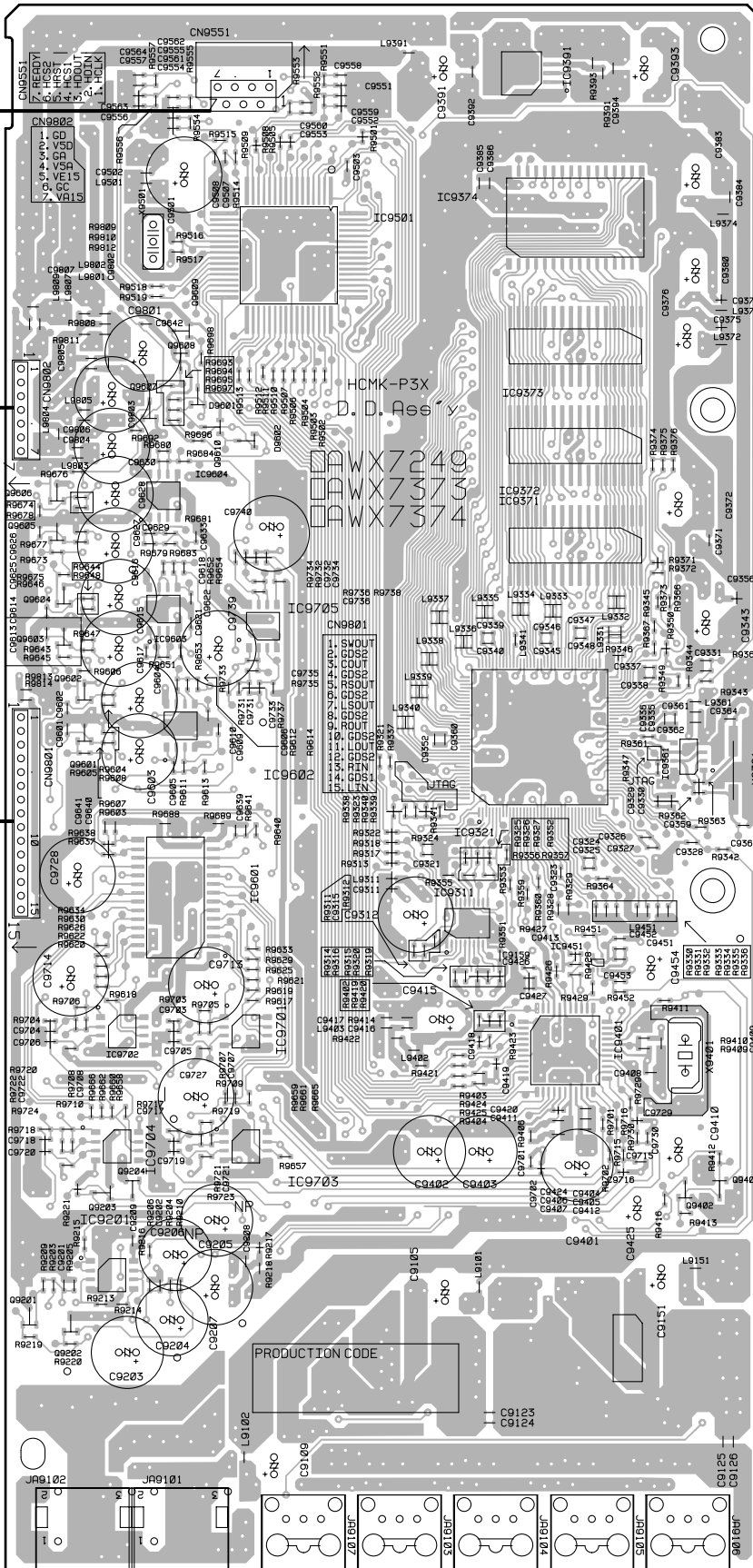
D

B
CN201

A
CN113

A
CN108

(ANP7297-B)
SIDE A



IC9391

IC9374

IC9501

Q9609
Q9608

IC9373

Q9607

Q9610 IC9372

Q9606 IC9604

Q9605 IC9371

Q9604 IC9603 IC9705

Q9603

Q9602

Q9601 IC9602 IC9361

IC9321

IC9601 IC9311

IC9451

IC9702 IC9701

IC9401

IC9704 IC9703

Q9203 Q9204 Q9401

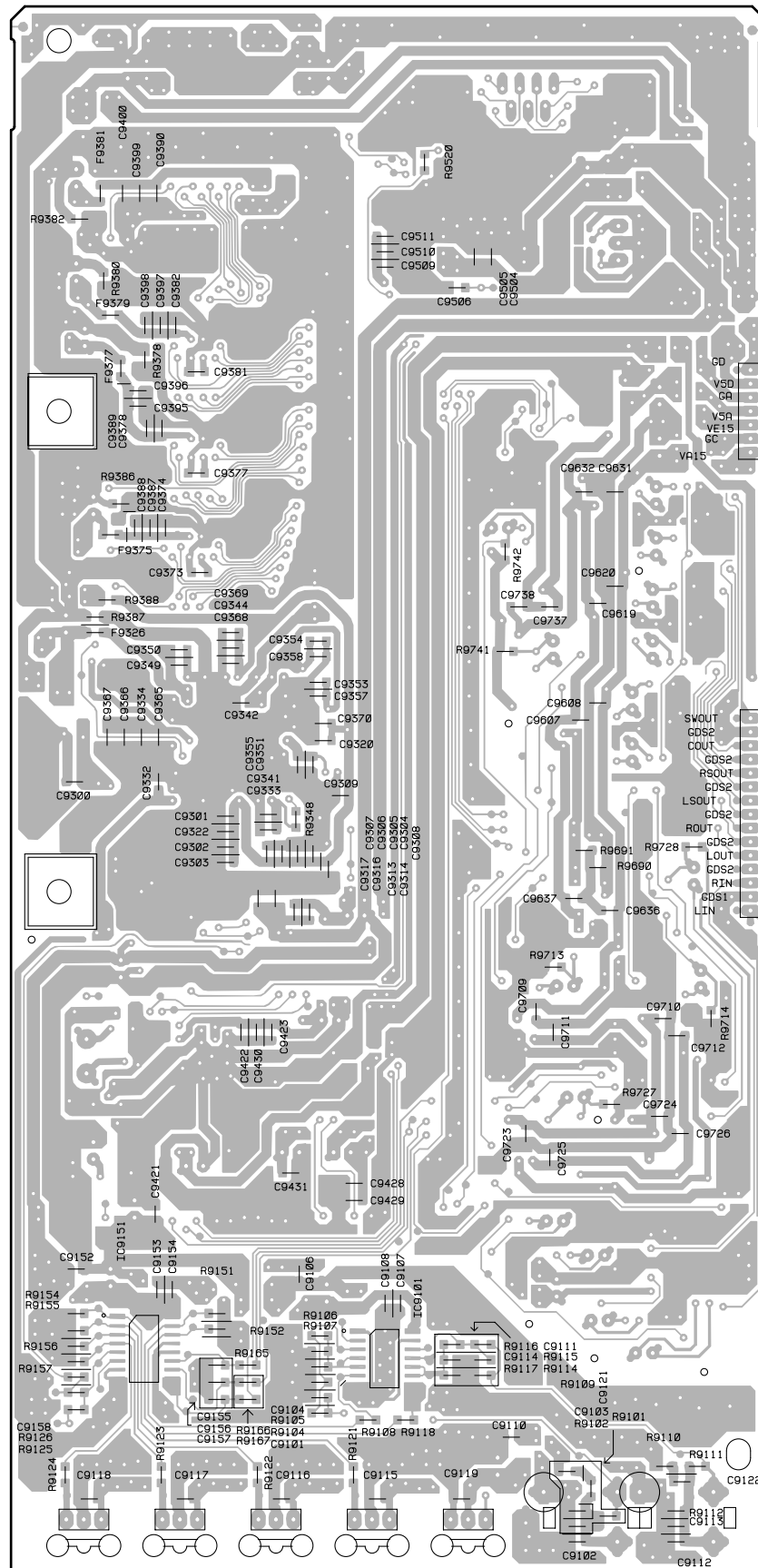
IC9201 Q9402

Q9201

Q9202



Q DOLBY
DIGITAL
ASSY



SIDE B

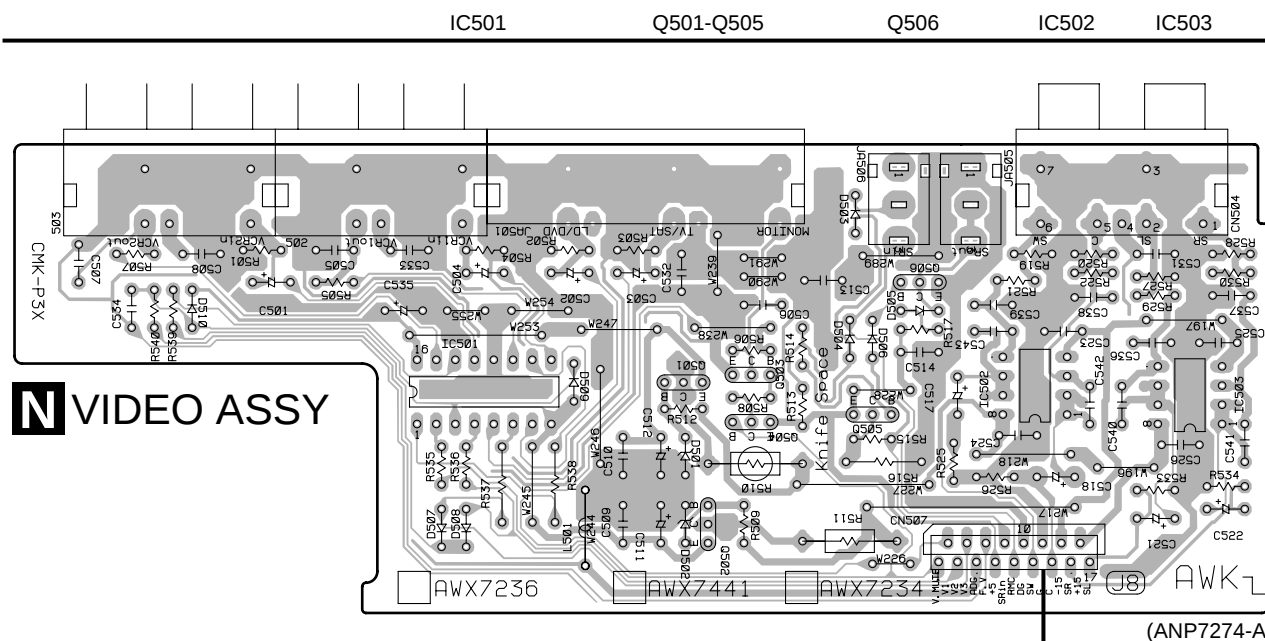
(ANP7297-B)

IC9151 IC9101



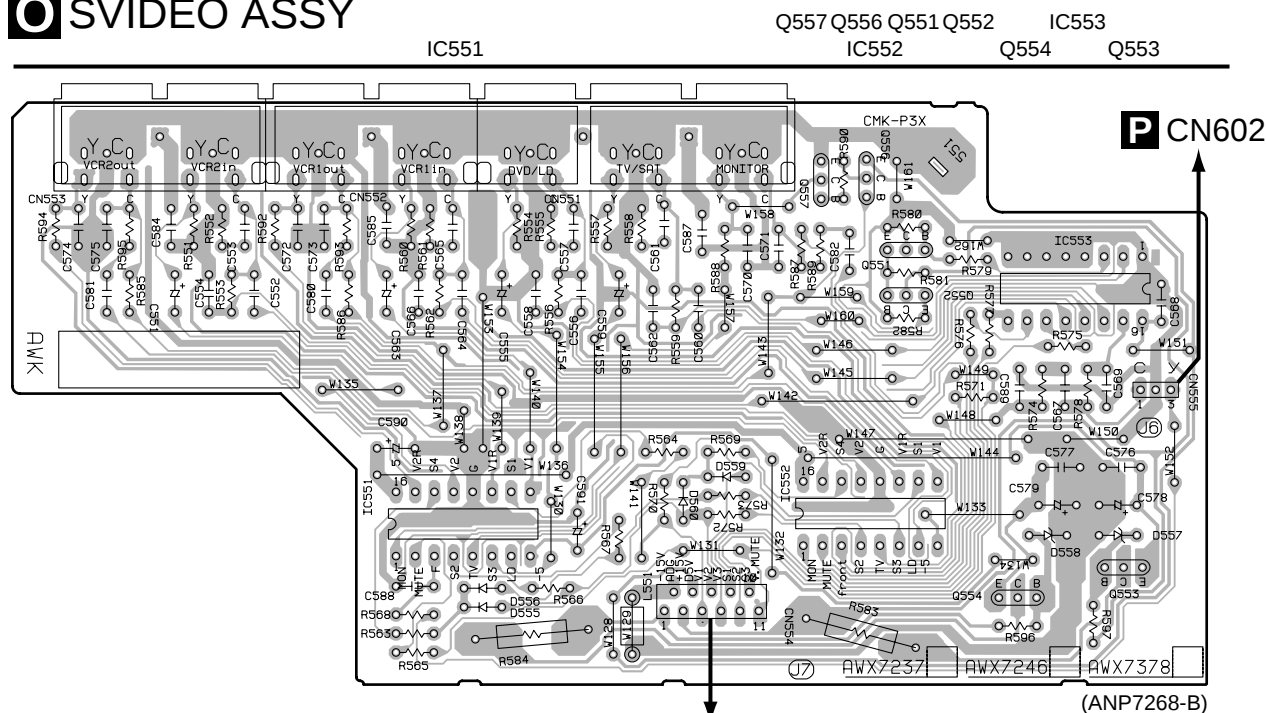
4.7 VIDEO and SVIDEO ASSYS

A



B

SVIDEO ASSY



C

D

SIDE A

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

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
LIST OF ASSEMBLIES				CAPACITORS			
NSP	INPUT ASSY	AWK7474			C1314, C1315, C320, C342, C343 (47 μ F/25V)	ACH7110	
	└ INPUT ASSY	AWX7210			C146 (3300 μ F/16V)	ACH7111	
	└ FRONT ASSY	AWX7217			C144 (3300 μ F/35V)	ACH7112	
NSP	└ POWER SW ASSY	AWX7222			C145 (2200 μ F/35V)	ACH7113	
	└ REAR SP ASSY	AWX7251			C101–C124, C131–C133	CCSQCH101J50	
					C300, C301, C322, C323	CCSQCH102J50	
NSP	AMP ASSY	AWK7482			C344, C345	CCSQCH102J50	
	└ AMP ASSY	AWX7226			C316, C340, C341	CCSQCH121J50	
NSP	└ FET ASSY	AWX7228			C1316, C1319, C1322	CCSQCH561J50	
NSP	└ HEADPHONE ASSY	AWX7230			C1312, C1313	CCSQCH680J50	
	└ VIDEO ASSY	AWX7236			C153, C307	CEAT100M50	
NSP	└ FRONT VIDEO ASSY	AWX7241			C137, C138	CEAT101M10	
	└ BARRIER ASSY	AWX7284			C147	CEAT101M16	
NSP	└ F.SP.CONNECT ASSY	AWX7285			C134–C136	CEAT101M25	
NSP	└ R.C.SP.CONNECT ASSY	AWX7286			C305, C309	CEAT1R0M50	
	└ TRANS1 ASSY	AWX7287			C127, C128	CEAT2R2M50	
	└ TRANS2 ASSY	AWX7292			C321	CEAT470M25	
NSP	EXCELLENT ASSY	AWK7486			C142	CEAT470M35	
	└ FRONT LARGE ASSY	AWX7245			C129, C130, C1352, C1354	CEAT4R7M50	
	└ MECH SW ASSY	AWX7247			C304, C326, C327, C348, C349	CEBA1R0M50	
	└ SVIDEO ASSY	AWX7378			C1300, C1301, C306, C328, C329	CECA100M50	
	DOLBY DIGITAL ASSY	AWX7374			C1302, C1303, C308, C330, C331	CECA1R0M50	
					C1351	CKSQYB102K50	
					C1306, C1307, C1310, C1311	CKSQYB103K50	
					C1355, C1356, C139–C141, C143	CKSQYB103K50	
					C148–C152, C154, C156, C157	CKSQYB103K50	
					C312, C313, C318, C319	CKSQYB103K50	
					C334, C335, C338, C339	CKSQYB103K50	
					C155	CKSQYB104K25	
					C1353	CKSQYB222K50	
					C125, C126	CKSQYB331K50	
					C302, C303, C324, C325	CKSQYB683K25	
					C346, C347	CKSQYB683K25	
INPUT ASSY				RESISTORS			
SEMICONDUCTORS				Δ	R146	RS3LMF331J	
	IC102, IC103	LC4966		Δ	R145	RS3LMF391J	
	IC301–IC303	LC7536M			Other Resistors	RS1/10S□□□□	
Δ	IC107, IC108	NJM7805FA					
Δ	IC106	NJM7812FA					
Δ	IC104	NJM7815FA					
Δ	IC105	NJM7915FA					
	IC101	TC9274N-001					
	IC109, IC304–IC310	UPC4570G2					
	Q101, Q104, Q107	2SC1740S					
	Q1351	2SC2878					
	Q103	KRA103M					
	Q102	KRC103M					
	D109	1SS355					
	D101–D108, D111	S5566G(TPB2)					
	D110	UDZS5.1B					
				OTHERS			
				CN109	11P FFC CONNECTOR	52045-1145	
				CN114	13P FFC CONNECTOR	52045-1345	
				CN110	17P FFC CONNECTOR	52045-1745	
				CN111	26P FFC CONNECTOR	52045-2645	
				CN115	5P JUMPER CONNECTOR	52147-0510	

VSX-808RDS

Mark	No.	Description	Part No.
	CN112	14P JUMPER CONNECTOR	52147-1410
	CN104	6P PIN JACK	AKB7015
	JA101-JA103	6P PIN JACK	AKB7113
	CN105	KR CONNECTOR	B5B-PH-K-S
	CN108	15P PLUG	KM200TA15
	CN113	7P PLUG	KM200TA7
	120-122	PCB BINDER	VEF1040

B FRONT ASSY SEMICONDUCTORS

IC281	BU1923
IC201	PDG252A
Q282	2SA1515
Q201, Q202	2SA933S
Q206, Q207, Q283	2SC1740S
Q203-Q205, Q281	KRC101M
D201-D203, D205-D221	1SS355
D224-D226, D229	1SS355
D227, D228	UDZS5.1B

COILS AND FILTERS

L201, L281	LFA2R2J
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SWITCHES AND RELAYS

S201-S203, S205-S214	ASG1034
S217-S224, S229-S236	ASG1034
S250	ASX7004

CAPACITORS

C204 (0.047F/5.5V)	ACH7017
C220-C222	CCSQCH101J50
C217	CCSQCH102J50
C281, C282	CCSQCH270J50
C283, C287	CEAT101M10
C290	CEAT1R0M50
C206, C208, C288	CEAT2R2M50
C212	CEAT470M25
C205	CEAT470M50
C202	CEAT471M6R3
C227	CEJA221M6R3
C284, C285	CKSQYB102K50
C201, C203, C211	CKSQYB103K50
C214	CKSQYB104K25
C289	CKSQYB472K50
C209, C210	CKSQYB473K50
C286	CKSQYB561K50
C207	CKSQYF104Z25

RESISTORS

R230	RA8T103J
R225	RA9T104J
Other Resistors	RS1/10S□□□J

OTHERS

201	REMOTE RECEIVER UNIT	GP1U27X
204	4P CABLE HOLDER	51063-0405
CN201	15P FFC CONNECTOR	52044-0745
CN203	21P FFC CONNECTOR	52045-2145
CN202	26P FFC CONNECTOR	52045-2645

Mark	No.	Description	Part No.
	V201	FL TUBE	AAV7062
	X201	CERAMIC RESONATOR (7.7MHz)	ASS1055
	X281	CRYSTAL RESONATOR (4.332MHz)	ASS7004

C POWER SW ASSY SEMICONDUCTORS

D291	BR3371XJ30A
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SWITCHES AND RELAYS

S291	ASG1034
------	---------

RESISTORS

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

OTHERS

291	4P CABLE HOLDER	51063-0405
-----	-----------------	------------

D AMP ASSY SEMICONDUCTORS

△ IC404, IC405	ICP-N25
△ IC701	NJM78M56FA
△ IC401, IC402	PAC007A
△ IC403	PAC008A
Q712	2SA992

Q1404, Q1405	2SC1740S
Q711	2SC1845
Q1402, Q403, Q404, Q453, Q454	2SC2240
Q405, Q406, Q455, Q456	2SC2705
Q1401, Q1403, Q1434, Q401, Q402	2SC2878

Q407, Q408, Q451, Q452	2SC2878
Q457, Q458	2SC2878
Q1436, Q714	KRA103M
Q1435, Q701	KRC101M
Q713	KRC103M

D1401, D1403, D1435, D1436	1SS133
D401, D402, D405, D406	1SS133
D411, D412, D451, D452	1SS133
D455, D456, D461, D462	1SS133
D703-D705	1SS133

△ D711, D712, D717	D5SBA20(B)
D713, D714	MTZJ18B
D701	MTZJ5.1A
D702	S1WB20

COILS AND FILTERS

△ L701	LINE FILTER	ATF-151
L1432, L1433	AF CHOKE COIL	ATH1004

SWITCHES AND RELAYS

△ RY401	ASR7001
△ RY701	ASR7016

CAPACITORS

△ C704, C705 (10000pF/AC250V)	ACG7020
C715, C716 (8200μF/71V)	ACH7018
C1408, C1410	CCCSL101K2H
C1411, C1442, C415, C416	CCCSL221J50
C465, C466	CCCSL221J50

Mark	No.	Description	Part No.
		C1441, C439, C442–C444 C1420, C1421 C437, C438, C479, C480 C1403, C1404, C405, C406 C455, C456	CCCSL221K2H CCCSL390J50 CCCSL470J50 CEANP2R2M2A CEANP2R2M2A
		C1415, C423, C424, C473, C474 C1402, C403, C404, C453, C454 C413, C414, C463, C464 C436, C486 C1405, C411, C412, C461, C462	CEANP2R2M50 CEANP4R7M50 CEAT100M50 CEAT101M10 CEAT101M25
		C713, C714 C702 C490, C717, C718 C1419 C701	CEAT101M2A CEAT102M25 CEAT1R0M50 CEAT221M10 CEAT470M25
		C1413, C1414, C421, C422 C471, C472 C1432, C1433, C1436, C1437 C1440 C1417, C1418, C429, C430	CEAT4R7M2A CEAT4R7M2A CFTYA224J50 CGCYX104M25 CKCYB102K50
		C477, C478 C1401, C401, C402, C451, C452 C1412 C1407, C1409 C1439, C703, C706, C707	CKCYB102K50 CKCYB331K50 CKCYB471K2H CKCYB471K50 CKCYF103Z50
△		C1438 C711, C712	CKPUYB331K50 CQMA103K2E
RESISTORS			
△		R1412, R423, R424, R473, R474 (0.22Ω, 5W)	ACN7094
△		R703	RD1/2PM270J
△		R1409, R1410, R415, R416	RD1/4MUF331J
△		R465, R466	RD1/4MUF331J
△		R419, R420, R469, R470	RD1/4MUF820J
△		R1432, R1433	RD1/4PMF4R7J
△		R1436, R1437	RS1LMF4R7J
△		R1448	RS1LMF561J
		Other Resistors	RD1/4PU□□□□
OTHERS			
	410	3P CABLE HOLDER	51048-0300
	404, 409	5P CABLE HOLDER	51048-0500
	408	12P CABLE HOLDER	51048-1200
	402	13P CABLE HOLDER	51048-1300
	405, 407	10P CABLE HOLDER	51052-1000
	CN401	21P FFC CONNECTOR	52045-2145
	JA413	1P PIN JACK	AKB7111
	H701, H702	FUSE CLIP	AKR1004
△	T701	POWER TRANSFORMER	ATT7037
	J17	JUMPER WIRE 3P	D20PYY0325E
	J14	JUMPER WIRE 5P	D20PYY0520E
	J10	JUMPER WIRE 14P	D20PYY1415E
	J18	BOARD IN WIRE	DB020ND0
	CN701	AC CORD SOCKET	RKP1751
	401, 403, 411, 412	PCB BINDER	VEF1040
	704	GROUND PLATE	VNF-091

Mark	No.	Description	Part No.
E	F.SP.CONNECT ASSY		
	OTHERS		
	686	13P CABLE HOLDER	51048-1300
F	R.C.SP.CONNECT ASSY		
	OTHERS		
	691	12P CABLE HOLDER	51048-1200
G	FRONT LARGE ASSY		
	SEMICONDUCTORS		
	Q626—Q628		KRA103M
	Q629—Q631		KRC101M
	D626—D631		1SS133
COILS AND FILTERS			
	L627, L628	AF CHOKE COIL	ATH1004
SWITCHES AND RELAYS			
△	RY626—RY628		ASR7001
CAPACITORS			
	C627—C630		CFTYA224J50
	C631—C636		CQMA103K2E
RESISTORS			
△	R629, R630		RD1/4LMF4R7J
△	R631, R632		RS1LMF4R7J
△	R626—R628		RS1LMF561J
OTHERS			
	627	8P SPEAKER TERMINAL	AKE7026
	CN626	13P PLUG	AKM7006
H	REAR SP ASSY		
	SEMICONDUCTORS		
	Q652		2SC1740S
	Q651		KRA101M
	D653—D656		1SS355
COILS AND FILTERS			
	L651	AF CHOKE COIL	ATH1004
SWITCHES AND RELAYS			
△	RY651, RY652		ASR7001
CAPACITORS			
	C651, C652		CFTYA224J50
	C653		CGCYX103M16
	C654—C656		CQMA103K2E
RESISTORS			
△	R652		RD1/4LMF4R7J
△	R657		RS1LMF4R7J
△	R651		RS2LMF271J
	Other Resistors		RS1/10S□□□□

VSX-808RDS

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

OTHERS

JA653	1P PIN JACK	AKB7111
CN652	SPEAKER TERMINAL 6P	AKE7042
CN651	12P PLUG	AKM7007

I HEADPHONE ASSY

CAPACITORS

C1461, C1462	CKCYB392K50
C1464	CKPUYB101K50

RESISTORS

△	R1463, R1464	RS1LMF681J
△	R1461, R1462	RS3LMF331J

OTHERS

JA1461	HEADPHONE JACK	RKB1014
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J TRANS2 ASSY

SEMICONDUCTORS

△	IC351, IC352 (5A)	AEK7019
△	IC353 (2.5A)	ICP-N70
	D356	MTZJ20A
	D357	MTZJ9.1B
	D354, D355	S5688G

CAPACITORS

C350-C354, C360, C361(1μF/100V)	ACH1237
C362	CEANP470M25
C359	CEAT101M10
C358	CEAT101M35
C357	CEAT470M50

RESISTORS

△	R350-R352	RD1/4PMF100J
△	R353	RFA1/4PS4R7J
△	R358	RS1LMF182J
	Other Resistors	RD1/4PU□□□□J

OTHERS

352, 353	5P CABLE HOLDER	51048-0500
356	4P CABLE HOLDER	51052-0400
351	6P CABLE HOLDER	51052-0600
J9	JUMPER WIRE 5P	D20PYY0545E
CN354, CN355	4P PLUG	KM200TA4
357, 358	PCB BINDER	VEF1040

K TRANS1 ASSY

OTHERS

J51	LEAD WIRE UNIT	DB035NB0
J52	LEAD WIRE UNIT	DB135NB0

L BARRIER ASSY

OTHERS

CN681, CN682	4P SOCKET	KP200TA4L
--------------	-----------	-----------

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

MA FET ASSY

SEMICONDUCTORS

△	Q1452	IRF540A
△	Q1451	IRF9540A

RESISTORS

△	R1451, R1452	RD1/4PMF101J
	Other Resistors	RD1/4PM□□□□J

OTHERS

1451	10P CABLE HOLDER	51052-1000
------	------------------	------------

MB MECH SW ASSY

SWITCHES AND RELAYS

S376	ASG7014
------	---------

CAPACITORS

C376, C377	CKCYF103Z50
------------	-------------

OTHERS

CN376	3PJUMPER CONNECTOR	52151-0310
-------	--------------------	------------

N VIDEO ASSY

SEMICONDUCTORS

IC501	NJM2296D
IC502, IC503	UPC4570C
Q502	2SA1515
Q505	2SA933S
Q501	2SC3377

Q506	KRC103M
D503, D505-D510	1SS133
D501, D502	MTZJ6.2B

CAPACITORS

C540-C543	CCCSL101J50
C505-C507, C536-C539	CCCSL221J50
C501-C504, C511, C512, C535	CEAT470M25
C517, C518, C521, C522	CEAT4R7M50
C545, C546	CEHAT470M25

C509, C510	CGCYX473M25
C508, C513, C514, C523-C526	CKCYF103Z50
C531-C533	CKCYF103Z50

RESISTORS

△	R510, R511	RS1LMF151J
	Other Resistors	RD1/4PU□□□□J

OTHERS

CN507	17P FFC CONNECTOR	52045-1745
502, 503	2P PIN JACK	AKB7017
JA501	3P PIN JACK	AKB7056
CN504	4P PIN JACK	AKB7087
JA505, JA506	REMOTE CONTROL JACK	RKN1004

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

**SVIDEO ASSY****SEMICONDUCTORS**

IC551, IC552	NJM2296D
IC553	TC4051BP
Q554	2SA1515
Q551	2SA933S
Q552	2SC1740S
Q553	2SC3377
D555, D556, D559, D560	1SS133
D557, D558	MTZJ6.2B

CAPACITORS

C570–C575	CCCSL221J50
C578, C579	CEAT470M10
C551, C555, C559, C563	CEAT470M25
C590, C591	CEAT470M25
C593, C594	CEHAT470M25
C552, C556, C560, C564, C567	CGCYX104M16
C580–C582	CGCYX104M16
C553, C557, C561, C565	CGCYX473M16
C576, C577	CGCYX473M16
C584, C585, C587	CKCYF103Z50
C554, C558, C562, C566	CKPUYY103M16
C568, C569	CKPUYY103M16

RESISTORS

△ R583, R584	RS2LMF101J
Other Resistors	RD1/4PU□□□J

OTHERS

CN554 11P FFC CONNECTOR	52044-1145
CN552, CN553 4P MINI DIN SOCKET	AKP7020
CN551 4P MINI DIN SOCKET	AKP7043
CN555 KR CONNECTOR 3P	B3B-PH-K-S
551 PCB BINDER	VEF1040

**FRONT VIDEO ASSY****CAPACITORS**

C601, C602	CCCSL221J50
C604, C608	CEAT470M25
C605–C607	CGCYX104M25
C603	CGCYX473M25
C609, C610	CKCYB471K50
C611, C612	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J
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OTHERS

CN601 FRONT PIN JACK	AKX7007
601 PCB BINDER	VEF1040

**DOLBY DIGITAL ASSY****SEMICONDUCTORS**

IC9401	CS4226-KQ
IC9371–IC9373	KM68V1002AJ-15
IC9201	NJM2100M
IC9501	PD5502A
IC9374	PDK038A

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



IC9391	PQ20WZ51
IC9151	TC74ACT151F
IC9101	TC74HCU04AF
IC9311	TC74VHCT244AFT
IC9451	TC7SH08FU

IC9361	TC7WU04F
IC9601	TC9164AF
IC9602–IC9604, IC9701–IC9705	UPC4570G2
IC9321	XCD56362PV100
Q9201, Q9202, Q9601–Q9606	2SC3326

Q9203, Q9402, Q9607, Q9609, Q9610	DTA124EK
Q9204, Q9401, Q9608	DTC124EK
D9601, D9602	1SS181

COILS AND FILTERS

L9391, L9501, L9807, L9809	ATL7002
CHIP FERRITE BEAD	
F9326, F9375, F9377, F9379, F9381	DTF1064
CHIP BEAD	
L9101, L9102, L9151, L9311, L9361	QTL1013
L9402, L9403, L9451, L9801–L9805	QTL1013
CHIP SOLID INDUCTOR	

CAPACITORS

C9334, C9365	CCSQCH100D50
C9341, C9349, C9355, C9357, C9358	CCSQCH101J50
C9373, C9377, C9381	CCSQCH101J50
C9300, C9301, C9304–C9307, C9309	CCSQCH221J50
C9314, C9316, C9366, C9368	CCSQCH221J50

C9387–C9390, C9395–C9400, C9422	CCSQCH221J50
C9428, C9429	CCSQCH221J50
C9108, C9154, C9505	CCSQCH271J50
C9127	CCSQCH471J50
C9104	CCSQCH560J50

C9159, C9201, C9202, C9324, C9326	CCSRCH101J50
C9329, C9336, C9338, C9340, C9345	CCSRCH101J50
C9348, C9386	CCSRCH101J50
C9736	CCSRCH102J50
C9363, C9364	CCSRCH150J50

C9420, C9707, C9708, C9721, C9722	CCSRCH151J50
C9735	CCSRCH151J50
C9408, C9409	CCSRCH180J50
C9360, C9405, C9424, C9554	CCSRCH221J50
C9609, C9610, C9621, C9622	CCSRCH221J50

C9362, C9629	CCSRCH271J50
C9411, C9426, C9427, C9452, C9508	CCSRCH471J50
C9601, C9602, C9605, C9606	CCSRCH471J50
C9613, C9614, C9617, C9618, C9625	CCSRCH471J50
C9639	CCSRCH471J50

C9105, C9109, C9151, C9312, C9372	CEJA101M10
C9376, C9380, C9383, C9393, C9402	CEJA101M10
C9501, C9801	CEJA101M10
C9410	CEJA1R0M50
C9803, C9805	CEJA220M25

C9207, C9343	CEJA221M6R3
C9391, C9401, C9415, C9454	CEJA4R7M50
C9205, C9206	CEJANP100M10
C9713, C9714, C9727, C9728	CEWAR220M25
C9739, C9740	CEWAR220M25

Mark	No.	Description	Part No.
	C9203, C9204, C9603, C9604 C9615, C9616, C9627, C9628 C9103 C9101, C9107, C9153, C9313, C9322 C9332, C9333, C9342, C9344	CEWAR4R7M50 CEWAR4R7M50 CKSQYB102K50 CKSQYB103K50 CKSQYB103K50	
	C9350, C9351, C9353, C9354, C9367 C9374, C9378, C9382, C9636, C9637 C9158, C9504 C9407 C9330	CKSQYB103K50 CKSQYB103K50 CKSQYB104K16 CKSQYB224K16 CKSQYB474K16	
	C9430 C9102, C9115—C9117, C9119, C9421 C9423, C9431, C9607, C9608 C9619, C9620, C9631, C9632 C9709—C9712, C9723—C9726	CKSQYF103Z50 CKSQYF104Z25 CKSQYF104Z25 CKSQYF104Z25 CKSQYF104Z25	
	C9737, C9738 C9323, C9325, C9327, C9335, C9337 C9339, C9346, C9347, C9352, C9361 C9385, C9626, C9642 C9705, C9706, C9719, C9720	CKSQYF104Z25 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB104K16	
	C9733, C9734 C9633 C9703, C9704, C9717, C9718, C9731 C9406 C9359	CKSRYB104K16 CKSRYB122K50 CKSRYB222K50 CKSRYB223K50 CKSRYB562K50	
	C9701, C9702, C9715, C9716, C9729 C9732 C9123, C9125, C9451 C9208, C9209, C9404, C9807	CKSRYB682K50 CKSRYB682K50 CKSRYF103Z50 CKSRYF104Z16	

RESISTORS

R9103, R9109, R9115, R9151, R9157 R9378, R9380, R9382, R9386–R9388 R9690 R9108, R9121–R9123, R9125, R9126 R9165–R9167	RS1/10S0R0J RS1/10S0R0J RS1/10S0R0J RS1/10S101J RS1/10S102J
R9107 R9106, R9348, R9521, R9713, R9714 R9727, R9728, R9741, R9742 R9101 Other Resistors	RS1/10S222J RS1/10S473J RS1/10S473J RS1/10S750J RS1/16S□□□J

OTHERS

CN9551 7P FFC CONNECTOR JA9103–JA9105 OPTICAL RECEIVE MODULE JA9107 OPTICAL SEND MODULE CN9801 15P SOCKET	52044-0745 GP1F32R GP1F32T KP200TA15L
CN9802 7P SOCKET JA9101 1P PIN JACK X9501 CERAMIC RESONATOR (7.7MHz) X9361 CERAMIC RESONATOR (20.000MHz) X9401 CERAMIC RESONATOR (18.432MHz)	KP200TA7L VKB1077 ASS1055 ASS7023 RSS1052

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 PARTS

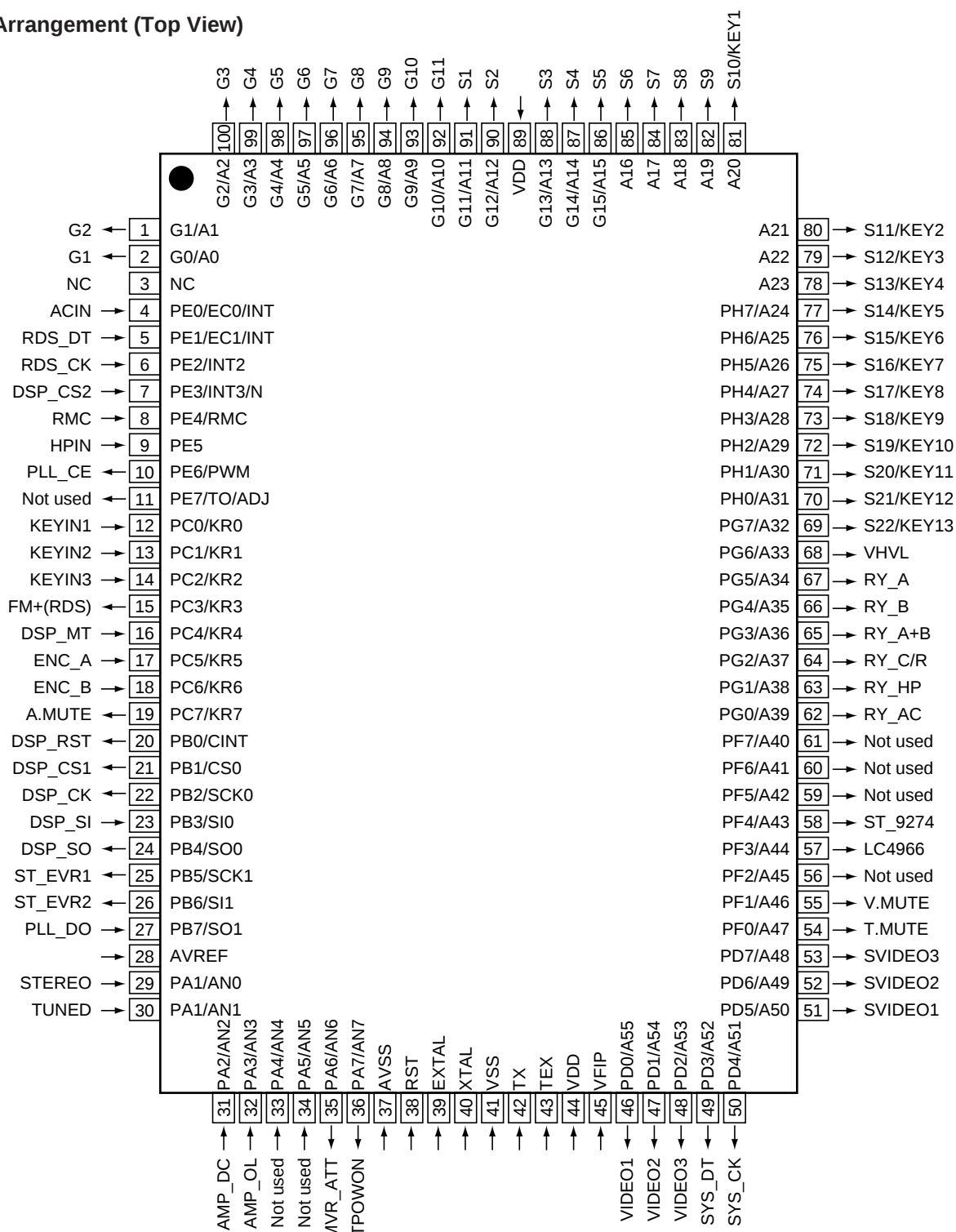
7.1.1 IC

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

■ PDG252A (FRONT ASSY : IC201)

- System Control Microcomputer

● Pin Arrangement (Top View)



●Pin Function

No.	Pin Name	I/O	Pin Function	Active
1	G2	O	Grid output 2	H
2	G1	O	Grid output 1	H
3	NC	–	Connect to VDD	
4	ACIN	I	AC pulse input	
5	RDS_DT	I	Serial control data signal for RDS communication	
6	RDS_CK	I	Serial control clock signal for RDS communication (used for external interrupt)	
7	DSP_CS2	I	CS input from DSP microcomputer	
8	RMC	I	Remote control signal input (no-carrier signal)	
9	HPIN	I	Headphone connection detection (H : connect)	
10	PLL_CE	O	Chip select signal for communication with LC72131 (tuner)	H
11	Not used	O	Open	
12	KEYIN1	I	Key scan input 1	
13	KEYIN2	I	Key scan input 2	
14	KEYIN3	I	Key scan input 3	
15	FM+(RDS)	O	Tr switch ON/OFF for power supply of RDS decoder (L : AM power off, H : others)	H
16	DSP_MT	I	Mute requirement from DSP microcomputer (H : Mute requirement)	H
17	ENC_A	I	Rotary encoder signal input A	
18	ENC_B	I	Rotary encoder signal input B	
19	AMUTE	O	Audio mute	L
20	DSP_RST	O	Reset signal of DSP microcomputer	L
21	DSP_CS1	O	CS output to DSP microcomputer	L
22	DSP_CK	O	Clock signal for communication with DSP microcomputer	H
23	DSP_SI	I	Data input signal for communication with DSP microcomputer	
24	DSP_SO	O	Data output signal for communication with DSP microcomputer	H
25	ST_EVR1	O	Strobe 1 for electric volume LC7535M	H
26	ST_EVR2	O	Strobe 2 for electric volume LC7535M	H
27	PLL_DO	I	Data input signal for communication with LC72131 (tuner)	
28	AVref	–	Connect to VDD	
29	STEREO	I	Stereo/Monoral signal judgment signal	
30	TUNED	I	TUNED information	
31	AMP_DC	I	DC abnormality detection of protection circuit (L : Abnormality detection)	
32	AMP_OL	I	Over-load detection of protection circuit (L : Abnormality detection)	
33	Not used	I		
34	Not used	I		
35	MVR_ATT	O	ATT control of master volume (L : Less than -20dB)	L
36	TPOWON	O	Tuner module ON/OFF (North America model only)	H
37	AVSS	–	Connect to VSS	
38	RST	–	Reset	
39	EXTAL	–	Connect to the oscillator (8MHz)	
40	XTAL	–		
41	VSS	–	Connect to VSS	
42	TX	–	Open	
43	TEX	–	Connect to VSS	
44	VDD	–	+5V	
45	VFDP	–	-30V	
46	VIDEO1	O	NJM2296D control	H
47	VIDEO2			
48	VIDEO3			
49	SYS_DT	O	Clock signal for communication with LC7535M and TC9274N-001	H
50	SYS_CK			

No.	Pin Name	I/O	Pin Function	Active
51	SVIDEO1	O	TC4051 control (S terminal control)	H
52	SVIDEO2			
53	SVIDEO3			
54	TMUTE	O	Tuner mute	H
55	VMUTE	O	Video mute	L
56	Not used	O	Open	
57	LC4966	O	Input switch the DVD 6ch	H
58	ST_9174	O	Strobe signal for communication with TC9174	H
59	Not used	O	Open	
60	Not used	O	Open	
61	Not used	O	Open	
62	RY_AC	O	AC relay ON/OFF	H
63	RY_HP	O	Headphone relay ON/OFF	H
64	RY_C/R	O	Rear/Center relay ON/OFF	H
65	RY_A+B	O	Speaker A + B relay ON/OFF	H
66	RY_B	O	Speaker B relay ON/OFF	H
67	RY_A	O	Speaker A relay ON/OFF	H
68	VHVL	O	Power switch for AMP system (H : VH)	H
69	S22/KEY13	O	Segment output 22/key scan output 13	H
70	S21/KEY12		Segment output 21/key scan output 12	
71	S20/KEY11		Segment output 20/key scan output 11	
72	S19/KEY10		Segment output 19/key scan output 10	
73	S18/KEY9		Segment output 18/key scan output 9	
74	S17/KEY8		Segment output 17/key scan output 8	
75	S16/KEY7		Segment output 16/key scan output 7	
76	S15/KEY6		Segment output 15/key scan output 6	
77	S14/KEY5		Segment output 14/key scan output 5	
78	S13/KEY4		Segment output 13/key scan output 4	
79	S12/KEY3		Segment output 12/key scan output 3	
80	S11/KEY2		Segment output 11/key scan output 2	
81	S10/KEY1		Segment output 10/key scan output 1	
82	S9	O	Segment output 9	H
83	S8		Segment output 8	
84	S7		Segment output 7	
85	S6		Segment output 6	
86	S5		Segment output 5	
87	S4		Segment output 4	
88	S3		Segment output 3	
89	VDD	—	5V	
90	S2	O	Segment output 2	H
91	S1		Segment output 1	
92	G11		Grid output 11	
93	G10		Grid output 10	
94	G9		Grid output 9	
95	G8		Grid output 8	
96	G7		Grid output 7	
97	G6		Grid output 6	
98	G5		Grid output 5	
99	G4		Grid output 4	
100	G3		Grid output 3	

Note : • In the power off condition (with the remote control unit key or the main unit tact key), set to "L" excepting tuner mute (pin 54). However, it nothing is done against to the input port.
 • When pin 10 and 11 detect "L" at the reset, be careful because it enter the microcomputer's own test mode.

• Anode Connection

	11G	10G	9G~2G	1G
P1	LFE	B	a1	dB
P2	○	A	a2	2a
P3	RS	SP▶	h	2b
P4	S	H.P	j	2f
P5	LS	TUNED	k	2g
P6	R	MONO	b	2c
P7	C	STEREO	f	2e
P8	L	TAPE 2	m	2d
P9	DIGITAL	DIRECT	g	1a
P10	PRO LOGIC	LOUDNESS	c	1b
P11	MPEG	DNR	e	1f
P12	dtb	VIRTUAL	r	1g
P13	MPEG	MIDNIGHT	p	1c
P14	DTS	5-D THEATER	n	1e
P15	AC-3	○	d1	1d
P16	DIGITAL	ATT	d2	
P17	ANALOG	SFC	DP2	RDS
P18	SS	-	DP1	RFATT
P19	-	-	S1	EON
P20	-	-	S4	(EON)
P21	-	-	S2	-
P22	-	-	S3	-

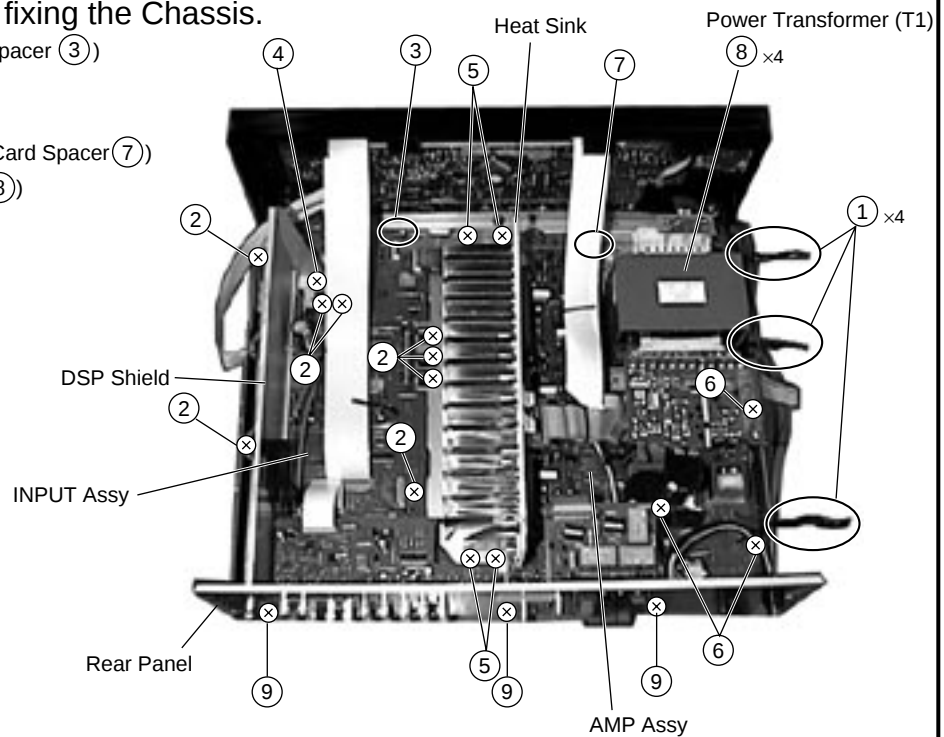
7.2 DISASSEMBLY

1 Remove the Bonnet. (seven screws)

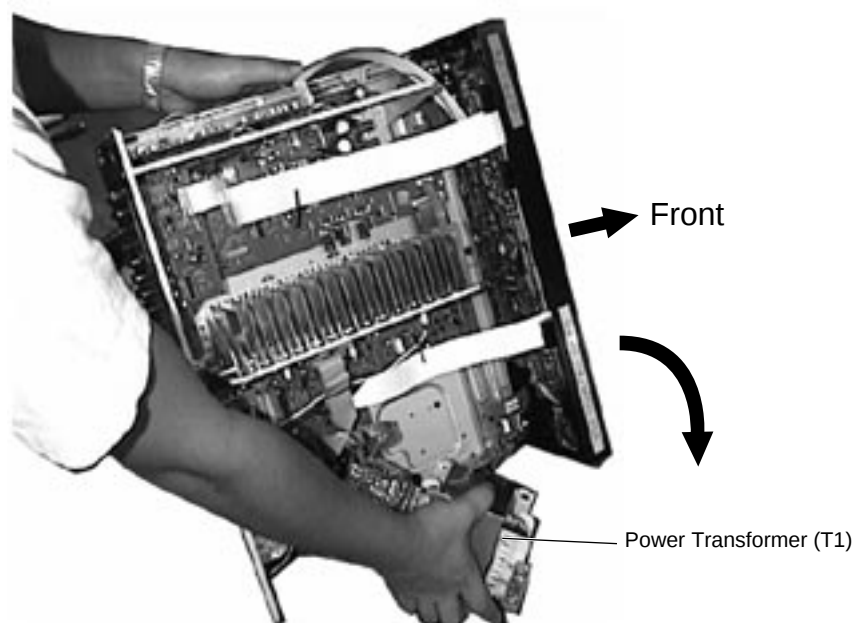
2 Release three binders (①) from the Power Transformer (T1).

3 Remove all screws which fixing the Chassis.

- INPUT Assy (eight screws ②, Card Spacer ③)
- DSP Shield (screw ④)
- Heat Sink (four screws ⑤)
- AMP Assy (three screws ⑥, Locking Card Spacer ⑦)
- Power Transformer (T1) (four screws ⑧)
- Rear Panel (three screws ⑨)

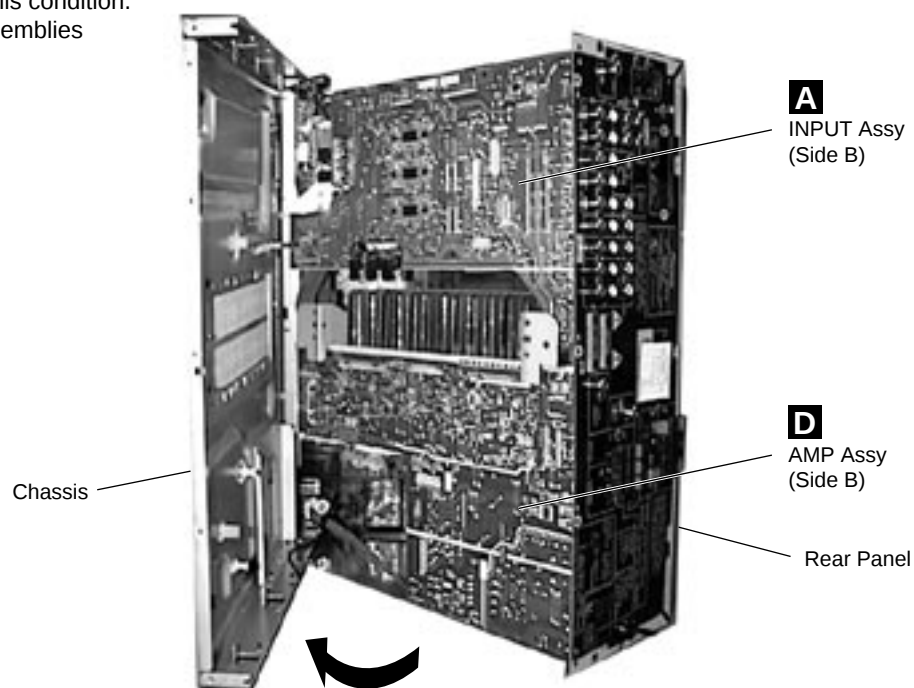


4 Put the Power Transformer on the bottom side, and stand the component sideways.

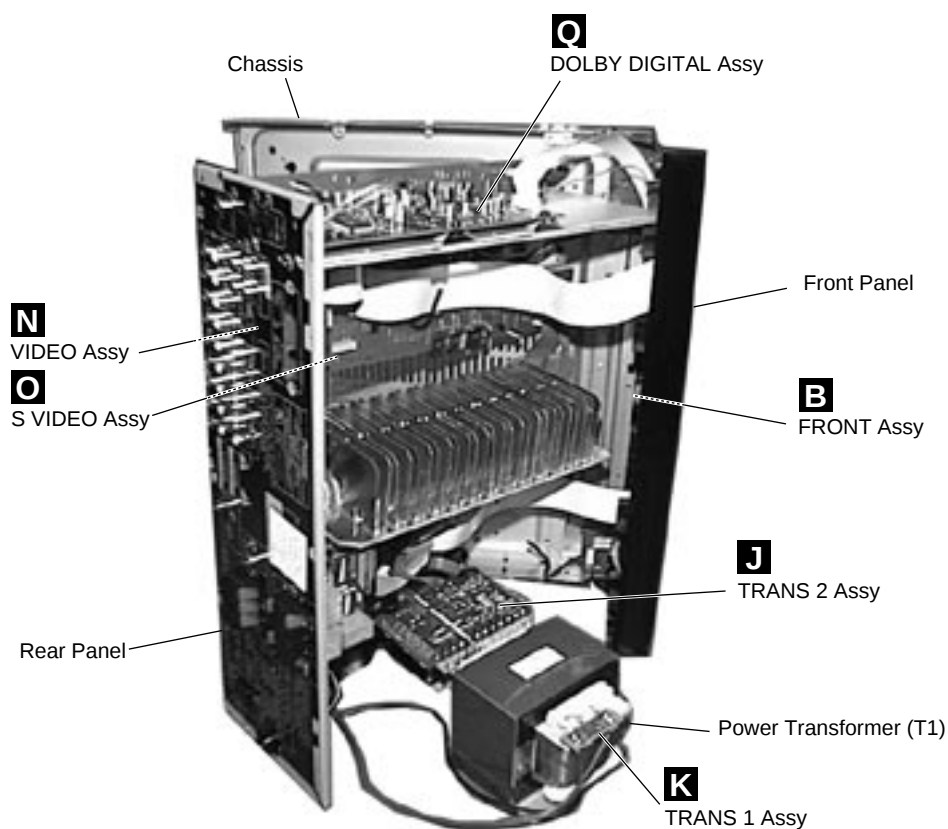


5 Open the Chassis and Rear Panel

It can be diagnosed under this condition.
Show the principal PCB Assemblies
in the illustration.

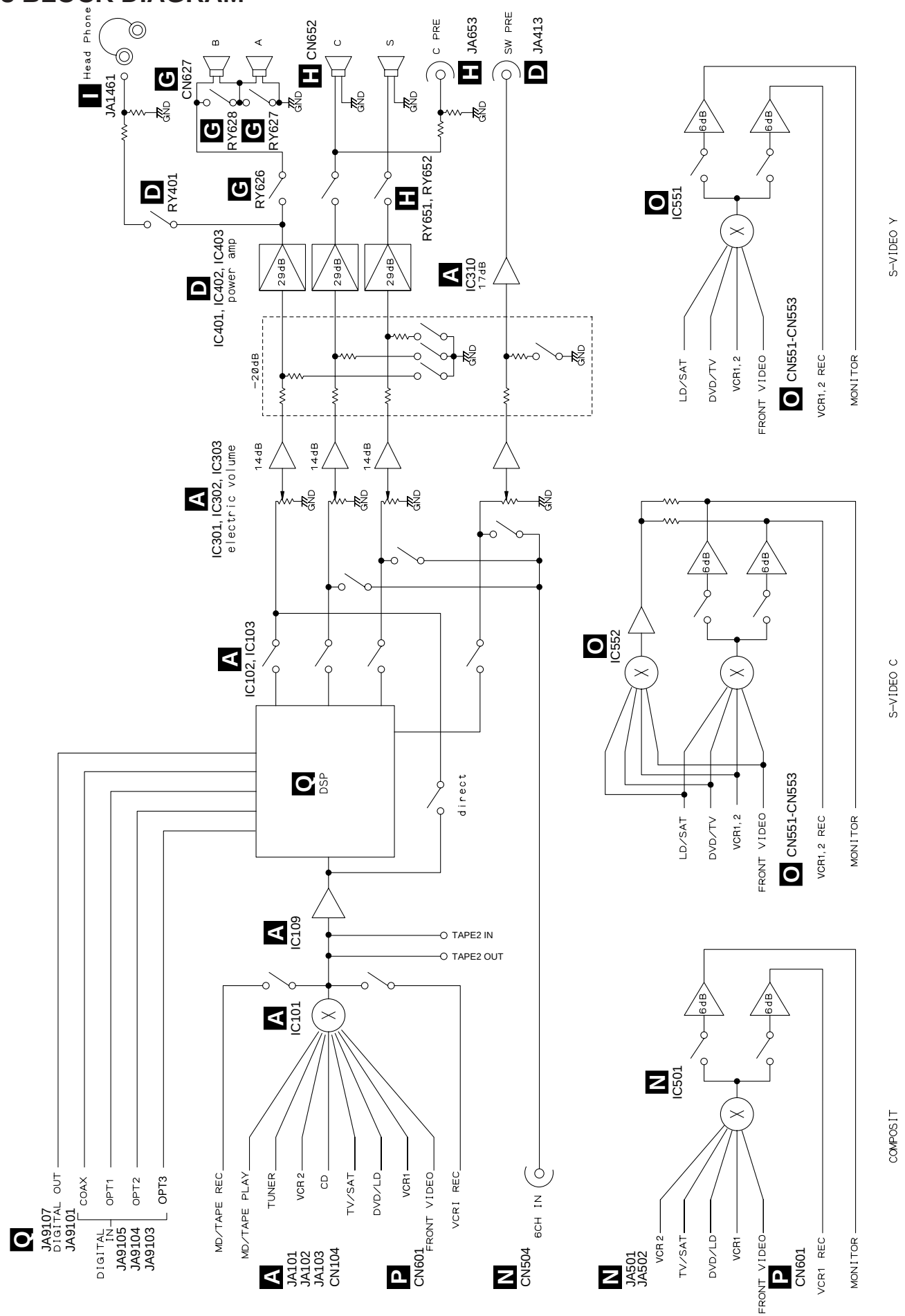


Rear View



Top View

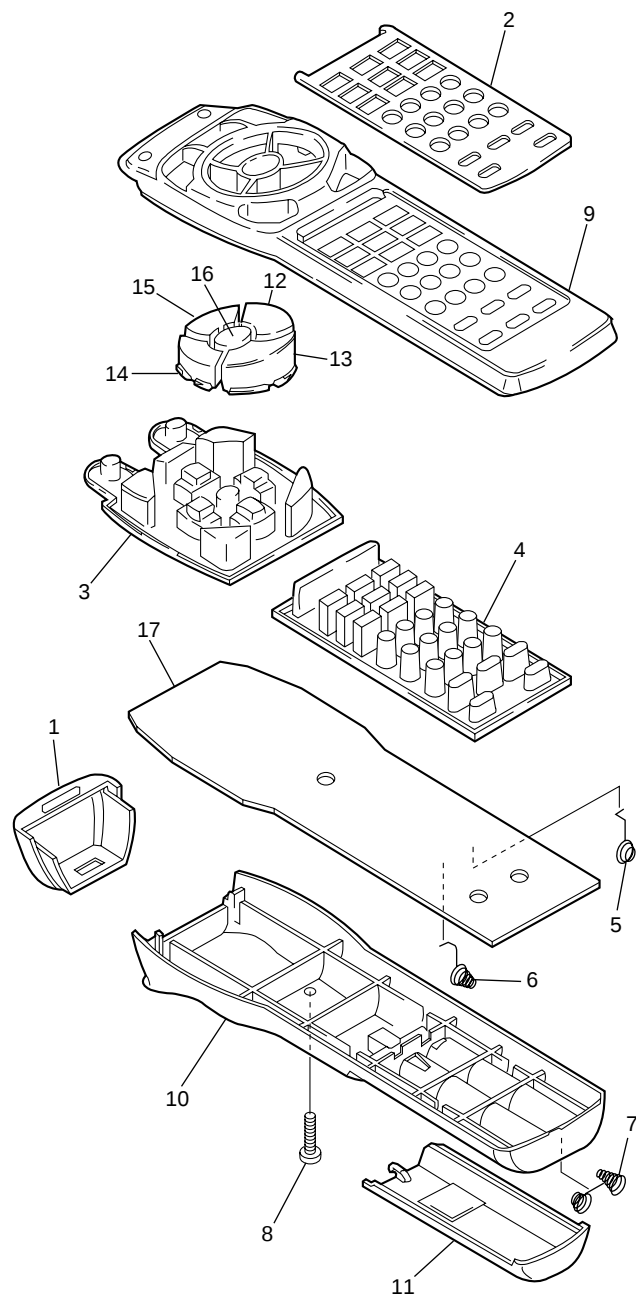
7.3 BLOCK DIAGRAM



7.4 REMOTE CONTROL UNIT [CU-VSX140 (AXD7181)]

7.4.1 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.



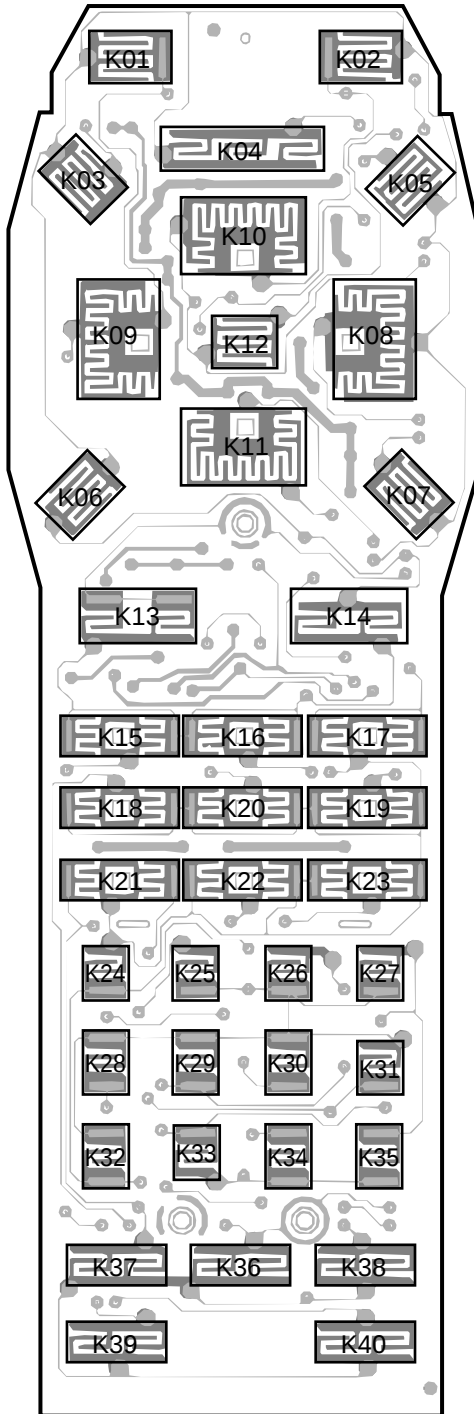
• Parts List

Mark	No.	Description	Part No.
	1	Filter	AZA7152
	2	Name Plate	AZA7317
	3	Rubber Sheet (A)	AZA7308
	4	Rubber Sheet (B)	AZA7307
	5	Spring (+)	AZB7049
	6	Spring (-)	AZB7050
	7	Screw	AZB7051
	8	Screw	AZB7052
	9	Remo-con Case (A)	AZN7738
	10	Remo-con Case (B)	AZN7326
	11	Battery Cover	AZN7327
	12	Main Key (FF)	AZN7751
	13	Main Key (STOP)	AZN7741
	14	Main Key (REV)	AZN7752
	15	Main Key (PAUSE)	AZN7742
	16	Main Key (PLAY)	AZN7664
NSP	17	PCB	AZW7248

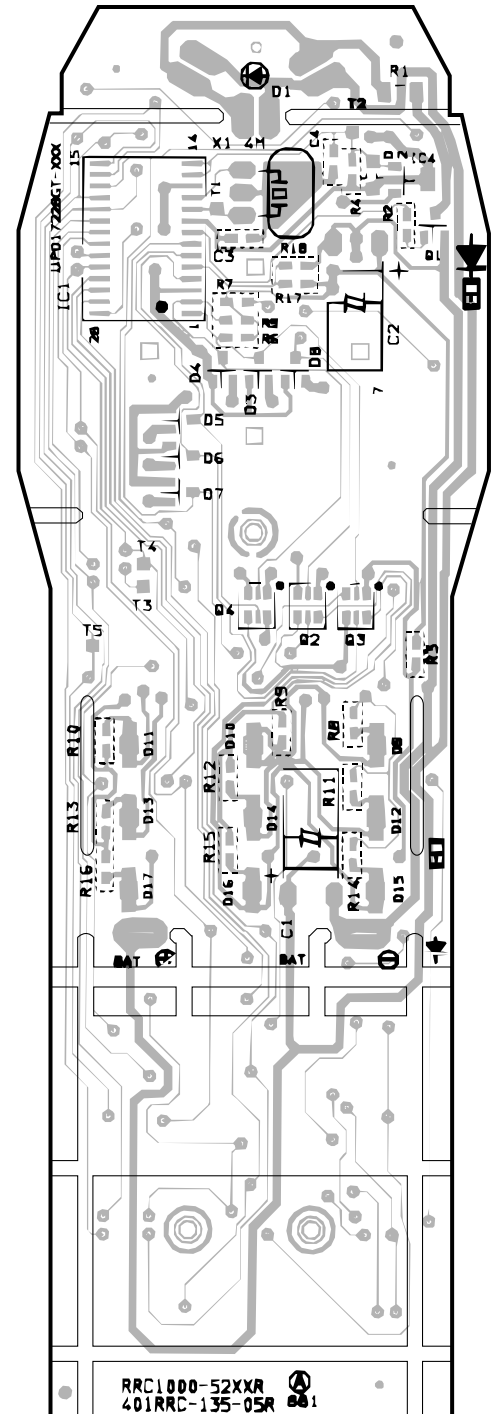
1 ■ 2 ■ 3 ■ 4 ■



7.4.3 PCB Diagram



SIDE A



SIDE B

7.4.4 PCB Parts List

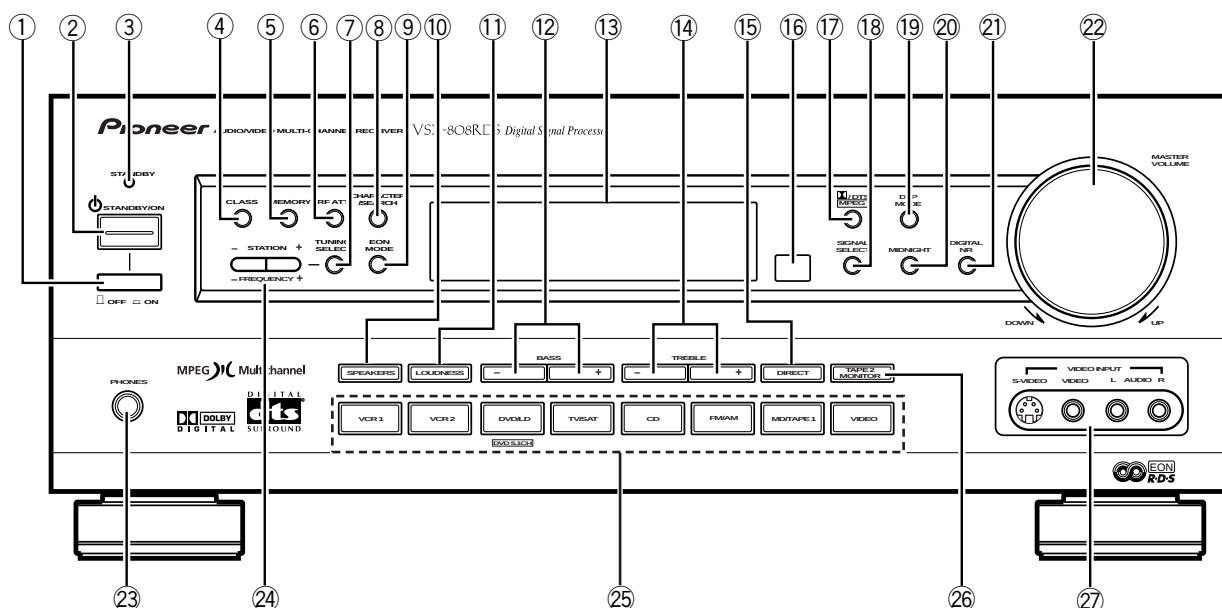
NOTES: ●Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
●The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.
●When ordering 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 $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{1} \end{matrix}$ J
47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU $\begin{matrix} \boxed{4} & \boxed{7} & \boxed{3} \end{matrix}$ J
0.5 Ω $\rightarrow$ R50 RN2H $\begin{matrix} \boxed{R} & \boxed{5} & \boxed{0} \end{matrix}$ K
1 Ω $\rightarrow$ 1R0 RS1P $\begin{matrix} \boxed{1} & \boxed{R} & \boxed{0} \end{matrix}$ 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 $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{2} & \boxed{1} \end{matrix}$ F

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC1		AZC7282
	Q1		2SC3265
	Q2-Q4		RN4605
	D1		SE303A-C
	D2		RLS-73
	D9-D17		CL-230HR-CD
CAPACITORS			
	C2		CEAT470M10
	C1		CEAT221M6R3
	C3,C4		CEATR10M50
RESISTORS			
	R1		RS1/8S1R8J
	Other Resistors		RS1/10S $\square\square\square$ J
OTHERS			
	X1	CERAMIC RESONATOR (4MHz)	KBR-4.0M

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Section



- ① **Main power switch** (■ OFF, ▬ ON)

- ② **STANDBY/ON button**

Press to switch the receiver on or put in standby.

- ③ **STANDBY indicator**

Lights when the receiver is in standby mode. (Please note that this receiver consumes a small amount of power (2 W) during the standby mode.)

- ④ **CLASS button**

Press repeatedly to switch the preset station classes.

- ⑤ **MEMORY button**

Press to memorize a preset station.

- ⑥ **RF ATT button**

Set this button to on when receiving strong FM signals (nearby stations) to reduce sound distortion. Normally, this button should be set off. This button does not affect AM reception.

- ⑦ **TUNING SELECT button**

Press to switch between STATION and FREQUENCY.

- ⑧ **CHARACTER/SEARCH button**

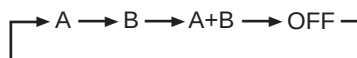
Press to select the character input mode, or initiate an RDS PTY search.

- ⑨ **EON MODE button**

Press to select the EON mode.

- ⑩ **SPEAKERS button**

Press repeatedly to switch between A and B speaker systems as follows.



- ⑪ **LOUDNESS button**

Switches the loudness on or off. Use to raise the level of the bass and treble so they can be more easily heard when listening at low volumes.

- ⑫ **BASS (+/-) button**

Press to adjust low frequencies in the range of ± 6 .

- ⑬ **Display**

- ⑭ **TREBLE (+/-) button**

Used to adjust high frequencies in the range of ± 6 .

- ⑮ **DIRECT button**

Switches direct playback on or off. Use to bypass the receiver's tone control circuitry or level control for higher fidelity to the program source. When DIRECT is ON, Dolby, DSP, LOUDNESS, DIGITAL NR and MIDNIGHT mode are automatically turned OFF.

- ⑯ **Remote sensor**

Point the remote control toward the remote sensor to operate the receiver.

- ⑰ **Dolby/DTS MPEG button**

Press repeatedly to select the standard Dolby/DTS, MPEG mode and the ADVANCED THEATER modes.

⑱ SIGNAL SELECT button

Use to select input signals for the digital components.
First press DVD/LD, TV/SAT, MD/TAPE 1, CD or VCR 1 (⑲, Function buttons) to select the component, then press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : Selects the analog (R and L) audio signals.

DIGITAL : Selects the digital audio signals. This receiver automatically detects and displays the format of the signal being input. AC-3 lights when Dolby Digital signals are input, DTS lights when DTS signals are input, and MPEG lights when MPEG signals are input. (AC-3 and DTS decoding is switched automatically.)

- SIGNAL SELECT is fixed in the "ANALOG" position for components not assigned to one of the four digital input jacks.
- Because the audio from a karaoke microphone and LD recorded with analog audio only is not output from the digital output, set SIGNAL SELECT to "ANALOG".
- This receiver can only play back Dolby Digital, PCM (32kHz, 44kHz, and 48kHz), DTS, and MPEG digital signal formats. With digital signal formats other than these, set SIGNAL SELECT to "ANALOG".

⑲ DSP MODE button

Press repeatedly to select a DSP sound mode (HALL 1, HALL 2, JAZZ, DANCE, THEATER 1, or THEATER 2). Use these modes to produce surround sound from standard (two channel) stereo sources.

⑳ MIDNIGHT button

Press to hear effective surround sound at low volume levels. The effect is automatically adjusted according to the volume level.

㉑ DIGITAL NR button

Switches DIGITAL NR on or off. Use to reduce noise in digital audio sources.

㉒ MASTER VOLUME

After turning on the desired component, rotate to adjust the volume.

㉓ PHONES jack

Connect headphones for private listening (the speakers turn off automatically).

㉔ STATION/FREQUENCY (+/-) button

STATION: Press to select the preset channel.

FREQUENCY: Press to select the frequency.

㉕ Function buttons

Selects the function. Each press switches the DVD/LD input between DVD/LD and DVD 5.1 channel.

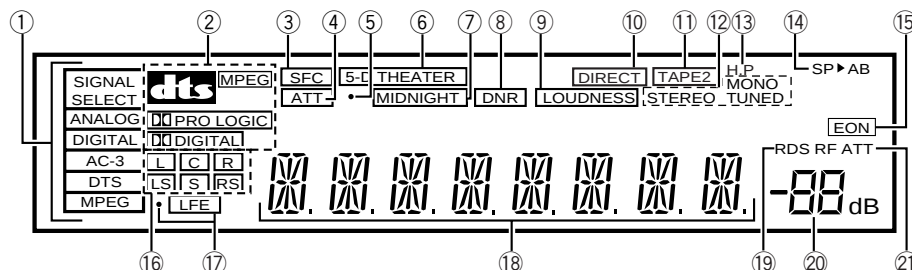
㉖ TAPE 2 MONITOR button

Switches the TAPE 2 monitor on or off.

㉗ VIDEO INPUT jacks

Connect a video camera, video game system, etc. to the VIDEO INPUT jacks.

■ Display



① SIGNAL SELECT indicators

Light to indicate the type of input signal selected for the current component (refer to "Front Panel", ①, SIGNAL SELECT).

ANALOG : Lights when the analog audio signals are selected.

DIGITAL : Lights when the digital audio signals are selected.

AC-3 : Lights when a source with Dolby Digital signals is played.

DTS : Lights when a source with DTS audio signals is played.

MPEG : Blinks when the MPEG mode is selected, and lights when a source with MPEG audio signals is played.

② Digital indicators

dts : Lights when DTS signals are input. (Dolby/DTS/MPEG mode is ON)

MPEG : Lights when MPEG signals are input. (Dolby/DTS/MPEG mode is ON)

PRO LOGIC : When the Dolby mode on the receiver is on, this indicator lights during 2 channel playback of Dolby Digital sources.

DDDIGITAL : When the Dolby mode on the receiver is on, this indicator lights to indicate playback of a Dolby Digital signal. However, **PRO LOGIC** lights during 2 channel playback of Dolby Digital.

③ SFC (DSP) mode indicator

Lights when the DSP mode or ADVANCED THEATER mode (except for 5-D THEATER) is selected.

④ ATT indicator

Lights when ATT (refer to "Remote Control", ⑦, Number buttons) is used to reduce the level of the input signal (available in ANALOG mode only).

⑤ Overload indicator

When "ANALOG" is selected in SIGNAL SELECT, this indicator lights to show that an excessively strong signal is being processed. When this occurs, press ATT on the remote control to attenuate the signal. Also, when "DIGITAL" is selected in SIGNAL SELECT, this indicator lights to show that a source containing an excessive amount of information is being processed. When this occurs.

⑥ 5-D THEATER indicator

Lights when 5-D THEATER is selected.

⑦ MIDNIGHT indicator

Lights when the MIDNIGHT mode is on.

⑧ DNR indicator

Lights when the DIGITAL NR is on.

⑨ LOUDNESS indicator

Lights when loudness is on (refer to "Front Panel", ⑪, LOUDNESS).

⑩ DIRECT indicator

Lights when direct playback is on (refer to "Front Panel", ⑮, DIRECT).

⑪ TAPE 2 indicator

Lights when TAPE 2 MONITOR is on.

⑫ Tuner indicators

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

TUNED : Lights when a broadcast is received.

MONO : Lights when the tuner is set to receive FM broadcasts in monaural.

⑬ H.P indicator

Lights when headphones are plugged in.

⑭ Speaker indicators

Light to indicate the current speaker system (refer to "Front Panel", ⑩, SPEAKERS (A/B)).

SP ► A : Lights when speaker system A is selected.

SP ► B : Lights when speaker system B is selected.

⑮ EON and EON reception indicators

EON indicator lights when the EON mode is on. EON reception indicator ☐ lights when an RDS station transmitting the EON data service is being received.

⑯ Program format indicators

The following indicators light to show the channels being played back.

L : Left front^{*1*2}, **C** : Center^{*1}, **R** : Right front^{*1*2},

LS : Left surround^{*1}, **S** : Surround (mono)^{*2},

RS : Right surround^{*1}

^{*1}: Indicates 5.1ch Dolby Digital playback.

^{*2}: Indicates Dolby surround playback.

⑰ LFE indicator

LFE (Low Frequency Effects) indicator lights to indicate that the program source contains an LFE channel. The indicator to the left of LFE lights during actual playback of the LFE signals (LFE signals are not present in all parts of the sound track).

⑱ Character display

⑲ RDS indicator

Lights when RDS broadcast is received.

⑳ Volume level display

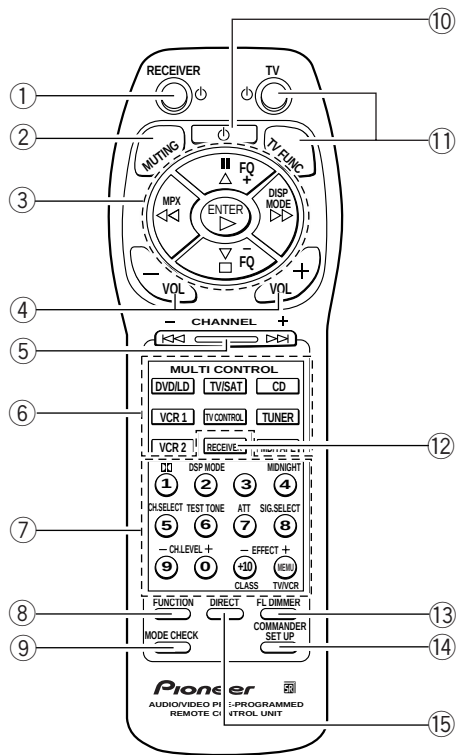
Displays the volume level. Volume level is maintained even when the power is off. ---dB indicates the minimum level, and 0dB indicates the maximum level.

- Depending on the level settings for individual channels, the MAX level can range between -10dB and 0dB.

㉑ RF ATT indicator

Remote Control Unit

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



① RECEIVER button

Press to switch the receiver on or to put in standby.

② MUTING button

Press to mute the volume. "MUTING" appears in the display. Press again to cancel.

③ [When set to SURROUND]

△, ▽, ◀, ▶, (Select/Adjust) buttons

[When set to other than OPERATIONS]

⏏(Pause), □(Stop), ◀◀(Rewind), ▶▶(Fast Forward), ENTER/▶(Play) buttons

[Tuner Operations]

FQ + (to higher frequencies), FQ - (to lower frequencies), MPX, DISP MODE, ▶ (FM/AM) buttons

MPX: Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

DISP MODE: Use to switch the RDS data while listening to an FM station. Each press changes the display in the order of RT, PS, PTY, and frequency.

④ VOL (+/-) buttons

Press to adjust the volume. When VOL (+/-) buttons are pressed while muting, muting is canceled.

⑤ CHANNEL (+/-) button

Use to select preset stations when operating the tuner. When the remote is used to control other components, this button may be used to change channels, tracks, or chapters.

⑥ MULTI CONTROL buttons

Use these buttons to select the remote operation mode. For example, pressing TUNER sets the remote to operate the tuner functions.

⑦ Number buttons

These buttons can perform a variety of different functions depending on the remote operation mode.

• [RECEIVER operations (press RECEIVER first)]

⏏: Press repeatedly to select the standard mode, the ADVANCED THEATER modes and MPEG mode.

DSP MODE: Press repeatedly to select a DSP sound mode.

MIDNIGHT: Press to hear surround sound effectively at low volumes.

CH.SELECT: Use to select a speaker when adjusting speaker levels.

TEST TONE: Press to switch the test tone on or off when listening to a surround mode.

ATT: Press to attenuate (lower) the level of the input signals and prevent distortion (refer to "Display", ⑤, Overload indicator).

SIG.SELECT: When the same component uses both analog and digital connections, use to select input signals as digital or analog.

CH.LEVEL (-/+): Use to adjust individual speaker levels.

EFFECT (+/-): Use to adjust the DSP mode effect level.

• [TUNER operations (press TUNER first)]

Number buttons (0~9): During preset tuning, use to input the number of the preset station. Use to input the station frequency during direct tuning.

CLASS (+10): Press repeatedly to switch the preset station classes during preset tuning.

MENU: Press to activate direct tuning.

⑧ FUNCTION button

Press repeatedly to select a source.

⑨ MODE CHECK button

Press to confirm the current remote operation mode and to switch operation modes without changing the source.

⑩ Power button

Press to turn on or put in standby all connected components other than this unit.

⑪ TV/TV FUNC button

Press TV to turn the TV's power on or put in standby. Press TV FUNC to select the TV for remote control operation.

⑫ RECEIVER button

Press to select the receiver for remote control operation.

⑬ FL DIMMER button

Press to adjust the brightness of the fluorescent display. Four levels of brightness ranging from very dim to very bright can be selected.

⑭ COMMANDER SET UP button

Use to customize the remote control functions.

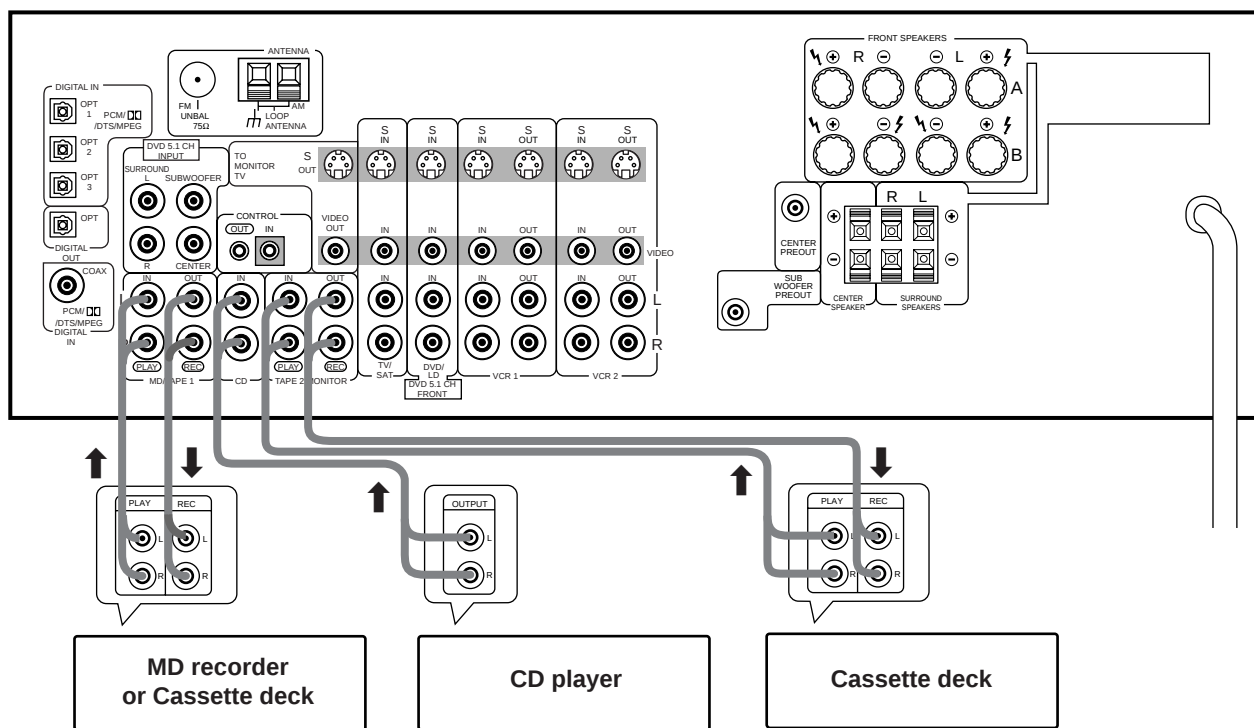
⑮ DIRECT button

Use to playback original source audio. When DIRECT is ON, Dolby, DSP, LOUDNESS, DIGITAL NR and MIDNIGHT mode are automatically turned OFF.

■ Audio Components Connections

Be sure to switch power to standby and remove the power cord from the wall outlet when you make or change connections.

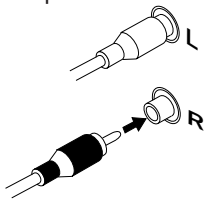
Connect your audio components as shown below.



*The arrows indicate the direction of the audio signal.

■ Audio cords

Use audio cords (not supplied) to connect the audio components.



Connect red plugs to R (right) and white plugs to L (left).
Be sure to insert completely.

Cassette deck placement

Depending on where the cassette deck is placed, noise may occur during playback of your cassette deck which is caused by leakage flux from the transformer in the receiver. If you experience noise, move the cassette deck farther away from the receiver.

8.2 SPECIFICATIONS

Amplifier Section

Continuous average power output of 80 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front; stereo mode).**

Continuous Power Output

(DIN, 1 kHz, T.H.D. 1%, 8 Ω)

STEREO	Front	100 W + 100 W
SURROUND	Front	60 W + 60 W
	Center	60 W
	Rear	60 W

Input (Sensitivity/Impedance)

VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD,
MD/TAPE 1, TAPE 2 200 mV/47 k Ω

Frequency Response

VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD,
MD/TAPE 1, TAPE 2 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB

Output (Level/Impedance)

VCR 1 REC, VCR 2 REC, MD/TAPE 1 REC,
TAPE 2 REC 200 mV/2.2 k Ω

Tone Control

BASS ± 6 dB (100 Hz)
TREBLE ± 6 dB (10 kHz)
LOUDNESS +9 dB/+7 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio [DIN (Rated power output/50 mW)]*

VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD,
MD/TAPE 1, TAPE 2 82 dB/62 dB

VIDEO Section

Input (Sensitivity/Impedance)

VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO 1 Vp-p/75 Ω

Output (Level/Impedance)

VCR 1, VCR 2, MONITOR 1 Vp-p/75 Ω

Frequency Response

VCR 1, VCR 2, MONITOR 5 Hz to 7 MHz $^{+0}_{-3}$ dB

Signal-to-Noise Ratio 55 dB

Cross Talk 55 dB

* Direct: ON

** Measured by Audio Spectrum Analyzer.

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz

Usable Sensitivity Mono: 15.2 dBf, IHF (1.5 μ V/75 Ω)

50 dB Quieting Sensitivity Mono: 20.2 dBf

Stereo: 41.2 dBf

Signal-to-Noise Ratio Mono: 76 dB (at 85 dBf)

Stereo: 72 dB (at 85 dBf)

Distortion Stereo: 0.6 % (1 kHz)

Alternate Channel Selectivity 70 dB (400 kHz)

Stereo Separation 40 dB (1 kHz)

Frequency Response 30 Hz to 15 kHz (± 1) dB

Antenna Input 75 Ω unbalanced

Sensitivity (DIN) Mono: 1.1 μ V (S/N 26 dB)

Stereo: 50 μ V (S/N 46 dB)

Signal-to-Noise Ratio (DIN) Mono: 62 dB

Stereo: 58 dB

AM Tuner Section

Frequency Range 531 kHz to 1,620 kHz

Sensitivity (IHF, Loop antenna) 350 μ V/m

Selectivity 30 dB

Signal-to-Noise Ratio 50 dB

Antenna Loop antenna

Miscellaneous

Power Requirement AC 220-230 V, 50/60 Hz

Power Consumption 220 W

Power Consumption in Standby mode 2 W

Dimensions 420 (W) $\times$ 158 (H) $\times$ 401 (D) mm

Weight (without package) 9.8 kg

Furnished Parts

FM Antenna 1

AM Loop Antenna 1

Dry Cell Batteries (SIZE "AA" (IEC LR6)) 2

Remote Control Unit 1

Operating Instructions 1

NOTE:

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

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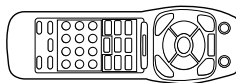
Accessories



**FM wire antenna
(ADH7005)**



**AM loop antenna
(ATB7009)**



**Remote control unit
(CU-VSX140 : AXD7181)**



"AA" IEC LR6 batteries $\times$ 2