

Service Manual

 **PIONEER®**
The Art of Entertainment

ORDER NO.
RRV1972

AUDIO/VIDEO MULTI-CHANNEL RECEIVER **VSX-D337**

- Refer to the service manual RRV1953 for VSX-407RDS/HYXKEW.

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-D337		
HLXJI	○	AC220 – 230V	AC240V *
MAMXJI	○	AC220 – 230V	_____
XJI/TA	○	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.

1. CONTRAST OF MISCELLANEOUS PARTS

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 $\rightarrow$ $56 \times 10^1 \rightarrow$ 561 RD1/4PU $\overline{561} J$
 47k $\rightarrow$ $47 \times 10^3 \rightarrow$ 473 RD1/4PU $\overline{473} J$
 0.5 $\rightarrow$ R50 RN2H $\overline{R50} K$
 1 $\rightarrow$ 1R0 RS1P $\overline{1R0} K$

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 $\overline{5621} F$

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

■ CONTRAST TABLE

VSX-D337/HLXJI, MAMXJI, XJI/TA, YPWXJI and VSX-407RDS/HYXKEW are constructed the same except for the following :

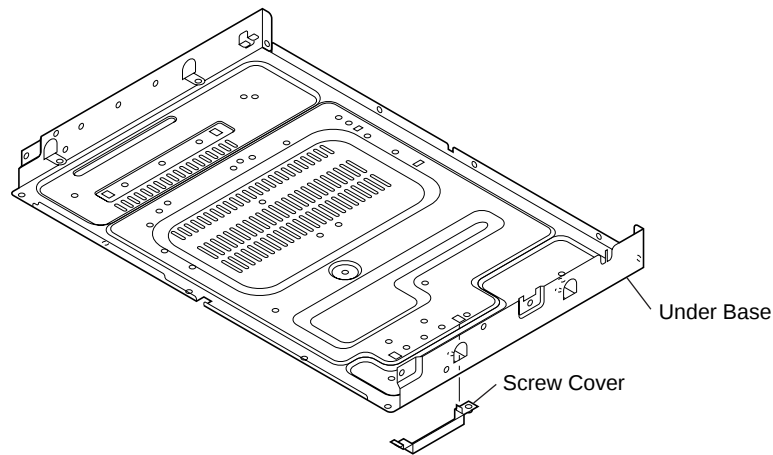
Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			VSX-407RDS /HYXKEW	VSX-D337 /HLXJI	VSX-D337 /MAMXJI	VSX-D337 /XJI/TA	VSX-D337 /YPWXJI	
P5- 1	NSP	MAIN ASSY	AWK7435	AWK7459	AWK7459	AWK7459	AWK7459	
		└ MOTHER ASSY	AWX7077	AWX7169	AWX7169	AWX7169	AWX7169	*1
	NSP	COMPLEX ASSY	AWK7440	AWK7442	AWK7442	AWK7458	AWK7460	
P5- 5		└ TRANS 1 ASSY	AWX7090	AWX7090	AWX7090	AWX7090	AWX7172	*1
P5- 7		└ PRIMARY ASSY	AWX7087	AWX7087	AWX7087	AWX7166	AWX7087	*1
P6- 1		└ FRONT ASSY	AWX7081	AWX7083	AWX7083	AWX7083	AWX7083	*1
P3- 1		FM Antenna	ADH7005	ADH7005	ADH7005	ADH7004	ADH7005	
P3- 3		Operating Instructions (Italian/Spanish/Portuguese)	ARC7190	Not used	Not used	Not used	Not used	
P3- 4	NSP	Warranty Card	ARY7010	Not used	Not used	Not used	PRY1003	
P3-10		Packing Sheet	AHG7028	AHG1218	AHG1218	AHG1218	AHG1218	
P3-11		Packing Case	AHD7586	AHD7588	AHD7588	AHD7589	AHD7589	
P3-13		Operating Instructions (Dutch/Swedish)	ARC7196	Not used	Not used	Not used	Not used	
P3-14		Operating Instructions (English/French)	ARE7156	Not used	Not used	Not used	Not used	
P3-15		Remote Control Unit (CU-VSX130)	AXD7162	Not used	Not used	Not used	Not used	
P3-15		Remote Control Unit (CU-VSX124)	Not used	AXD7161	AXD7161	AXD7161	AXD7161	
P3-16	NSP	Dry Cell Battery (R6P, AA)	AEX7001	VEM-013	VEM-013	VEM-013	VEM-013	
P3-17		Operating Instructions (German)	ARC7192	Not used	Not used	Not used	Not used	
		Operating Instructions (English/Chinese)	Not used	ARE7162	Not used	ARE7162	Not used	
		Operating Instructions (English/Chinese)	Not used	Not used	ARE7167	Not used	Not used	
		Operating Instructions (English)	Not used	Not used	Not used	Not used	ARB7146	
P5- 9		FM/AM TUNER Unit	AXX7048	AXX7048	AXX7048	AXX7047	AXX7048	
P5-10	Δ	Power Transformer (T1 : AC220-230V/240V)	ATS7204	ATS7204	ATS7204	Not used	ATS7204	
P5-10	Δ	Power Transformer (T1 : AC110V)	Not used	Not used	Not used	ATS7210	Not used	
P5-12	Δ	Fuse (FU1 : T2A)	AEK1057	AEK1057	AEK1057	Not used	AEK1057	
P5-12	Δ	Fuse (FU1 : T4A)	Not used	Not used	Not used	AEK1060	Not used	
P5-13	Δ	AC Power Cord	ADG7008	PDG1058	PDG1062	ADG1157	ADG1159	
P5-15		Flexible Cable 13P (J32)	ADD7094	ADD7081	ADD7081	ADD7081	ADD7081	
P5-16	NSP	Under Base	ANA7070	ANA7071	ANA7071	ANA7071	ANA7071	
P5-17		Rear Panel	ANC7629	ANC7657	ANC7659	ANC7688	ANC7658	
P5-18		Bonnet Case	AZN7727	AZN7710	AZN7710	AZN7710	AZN7710	

Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			VSX-407RDS /HYXKEW	VSX-D337 /HLXJI	VSX-D337 /MAMXJI	VSX-D337 /XJI/TA	VSX-D337 /YPWXJI	
P5-22	NSP	Top Cover	AME7373	Not used	Not used	Not used	Not used	*2
P5-23		Heat Sink Y	ANH7083	Not used	Not used	Not used	Not used	
P5-23		Heat Sink 307	Not used	ANH7075	ANH7075	ANH7075	ANH7075	
P6- 4	NSP	Screw Cover	Not used	AMR7199	AMR7199	AMR7199	AMR7199	
		Getter	AAX7643	AAX7633	AAX7633	AAX7633	AAX7633	
P6- 5		Power Button	AAD7457	AAD7440	AAD7440	AAD7440	AAD7440	
P6- 6		Function Button	AAD7456	AAD7441	AAD7441	AAD7441	AAD7441	
P6- 9		Sheet	AAK7580	AAK7539	AAK7539	AAK7539	AAK7539	
P6-10		Sub Panel	AAP7043	AAP7040	AAP7040	AAP7040	AAP7040	
P6-11		Front Panel	AMB7496	AMB7504	AMB7504	AMB7504	AMB7504	
P6-13		Flexible Cable 20P (J31)	ADD7093	ADD7083	ADD7083	ADD7083	ADD7083	
P6-14		Flexible Cable 20P (J35)	ADD7093	ADD7083	ADD7083	ADD7083	ADD7083	

*1 Refer to "CONTRAST OF PCB ASSEMBLIES".

*2 Refer to "EXPLODED VIEWS".

EXPLODED VIEWS



CONTRAST OF PCB ASSEMBLIES

A MOTHER ASSY

AWX7169 and AWX7077 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7077	AWX7169	
	Q192 C125, C126 C193 C408, C457 R193	2SC1740S CEZA2R2M50 CKPUYF103Z25 CEZA1R0M50 RD1/4PU221J	Not used CEAT2R2M50 Not used CEAT1R0M50 Not used	
	R194 R195 CN109, CN111 20P FFC CONNECTOR CN110 13P FFC CONNECTOR	RD1/4PU101J RD1/4PU472J 9604S-20C 9604S-13C	Not used Not used 52045-2045 52045-1345	

D FRONT ASSY

AWX7083 and AWX7081 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7081	AWX7083	
	IC501 IC581 Q581 Q582 Q583 D515 L581 S504, S519 C581 C582 C583, C585 C584 C586 C587, C588 C589 C590 R581, R583, R588 R584 R585 R586 R587 CN501, CN502 20P FFC CONNECTOR X581 CRYSTAL RESONATOR (4.332MHz)	PDG212A BU1923 2SA1115 KRC101M 2SC1740S 1SS254 LAU2R2J ASG1034 CEAT2R2M50 CGCYX472M25 CKPUYB102K50 CKPUYB561K50 CEAT101M10 CCCCH270J50 CEAT1R0M50 CEAL101M6R3 RD1/4PU102J RD1/4PU222J RD1/4PU473J RD1/4PU104J RD1/4PU273J 9607S-20F ASS7004	PDG211A Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used Not used 52044-2045 Not used	

I TRANS 1 ASSY

AWX7172 and AWX7090 have no service part.

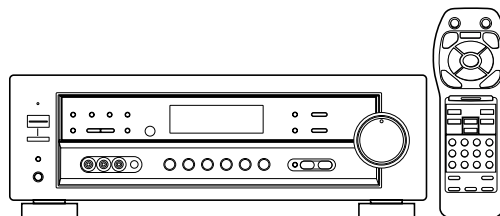
K PRIMARY ASSY

AWX7166 and AWX7087 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7087	AWX7166	
⚠	H901, H902 FUSE CLIP L901 LINE FILTER	AKR1003 ATF-151	AKR1004 ATF1006	

Service Manual

PIONEER
The Art of Entertainment



The illustration shows the VSX-607RDS.

ORDER NO.
RRV1953

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-607RDS

VSX-407RDS

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-607RDS	VSX-407RDS		
HYXKEW	○	○	AC220-230V	AC240V, *
HYXKGR	○	○	AC220-230V	AC240V, *

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

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

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

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

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

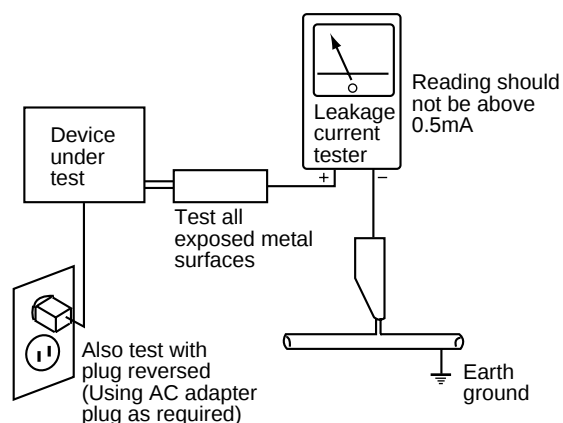
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

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

LEAKAGE CURRENT CHECK

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



AC Leakage Test

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

2. PRODUCT SAFETY NOTICE

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

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

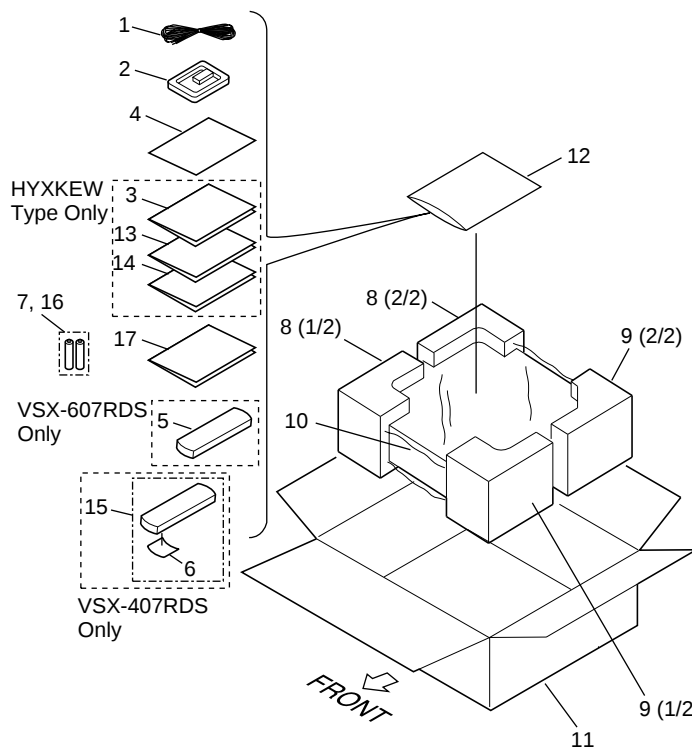
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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

2. EXPLODED VIEWS AND PARTS LIST

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

2.1 PACKING



(1) PACKING PARTS LIST

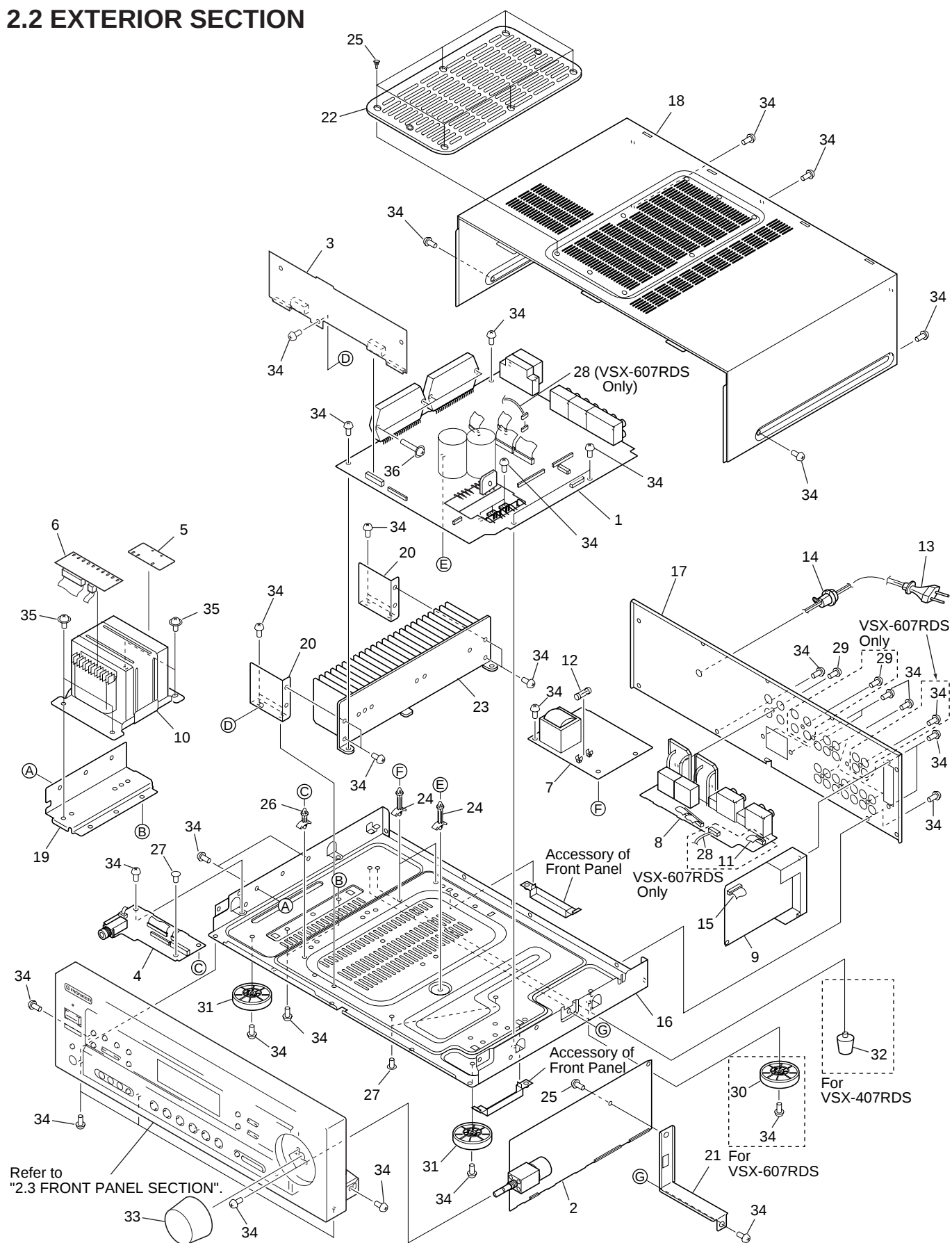
Mark	No.	Description	Part No.
	1	FM Antenna	ADH7005
	2	AM Loop Antenna	ATB7009
	3	Operating Instructions (Italian/Spanish/Portuguese)	See Contrast table (2)
NSP	4	Warranty Card	ARY7010
	5	Remote Control Unit (CU-VSX131)	See Contrast table (2)
	6	Battery Cover	See Contrast table (2)
NSP	7	Alkaline Dry Cell Battery (LR6, AA)	See Contrast table (2)
	8	Left Pad	AHA7203
	9	Right Pad	AHA7204
	10	Packing Sheet	AHG7028
	11	Packing Case	See Contrast table (2)
	12	Polyethylene Bag (0.03×230×340)	Z21-038
	13	Operating Instructions (Dutch/Swedish)	See Contrast table (2)
	14	Operating Instructions (English/French)	See Contrast table (2)
	15	Remote Control Unit (CU-VSX130)	See Contrast table (2)
	16	Dry Cell Battery (R6P, AA)	See Contrast table (2)
NSP	17	Operating Instructions (German)	See Contrast table (2)

(2) CONTRAST TABLE

VSX-607RDS/HYXKEW, HYXKGR, VSX-407RDS/HYXKEW and HYXKGR are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-607RDS		VSX-407RDS		
			HYXKEW	HYXKGR	HYXKEW	HYXKGR	
NSP	3	Operating Instructions (Italian/Spanish/Portuguese)	ARC7191	Not used	ARC7190	Not used	
	5	Remote Control Unit (CU-VSX131)	AXD7169	AXD7169	Not used	Not used	
	6	Battery Cover	Not used	Not used	RZN1156	RZN1156	
	7	Alkaline Dry Cell Battery (LR6, AA)	AEX1007	AEX1007	Not used	Not used	
	11	Packing Case	AHD7587	AHD7587	AHD7586	AHD7586	
NSP	13	Operating Instructions (Dutch/Swedish)	ARC7197	Not used	ARC7196	Not used	
	14	Operating Instructions (English/French)	ARE7157	Not used	ARE7156	Not used	
	15	Remote Control Unit (CU-VSX130)	Not used	Not used	AXD7162	AXD7162	
	16	Dry Cell Battery (R6P, AA)	Not used	Not used	AEX7001	AEX7001	
	17	Operating Instructions (German)	ARC7193	ARC7193	ARC7192	ARC7192	

2.2 EXTERIOR SECTION



(1) EXTERIOR SECTION PARTS LIST

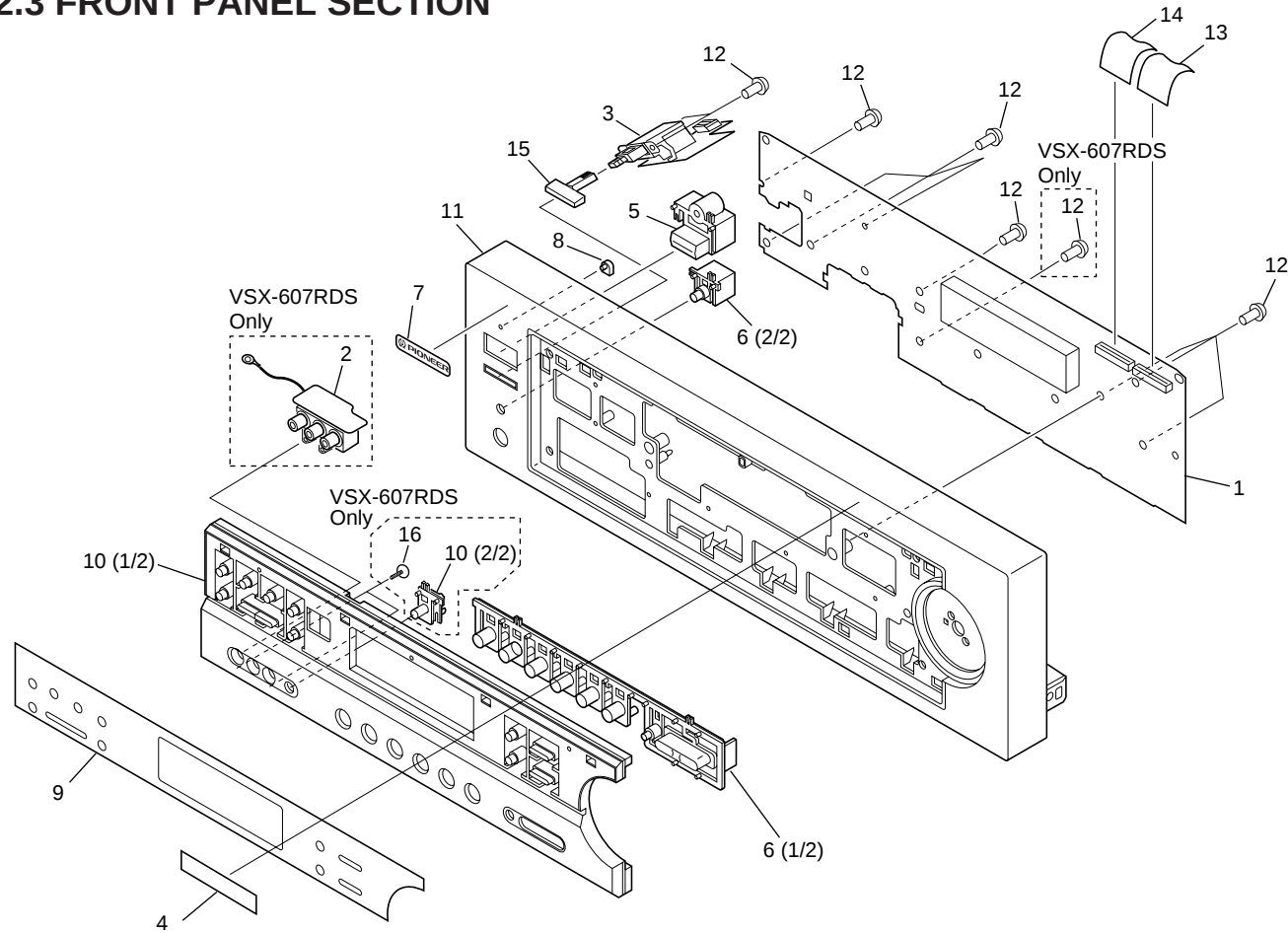
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	MOTHER Assy	See Contrast table (2)		19	T Angle	ANG7178
	2	VOLUME DSP Assy	See Contrast table (2)		20	H Angle	ANG7179
NSP	3	CONNECTION Assy	See Contrast table (2)		21	PCB Angle	ANG7180
NSP	4	HEADPHONE Assy	AWX7086		22	Top Cover	AME7373
NSP	5	TRANS 1 Assy	AWX7090	NSP	23	Heat Sink Y	ANH7083
	6	TRANS 2 Assy	AWX7080		24	PCB Support	AEC7006
	7	PRIMARY Assy	AWX7087		25	Push Rivet	AEC7025
	8	FRONT SPEAKER Assy	See Contrast table (2)		26	PCB Support	AEC7132
	9	FM/AM TUNER Unit	AXX7048		27	Card Spacer	AEC7133
△	10	Power Transformer (T1 : AC220-230V/240V)	ATS7204	NSP	28	5P Shield Cable (J34) (MOTHER CN105, FRONT SPEAKER CN703- FRONT INPUT CN571)	See Contrast table (2)
	11	Flexible Cable (J33) (FRONT SPEAKER CN752-MOTHER CN112)	See Contrast table (2)		29	Screw	ABA1007
△	12	Fuse (FU1 : T2A)	AEK1057		30	Insulator	See Contrast table (2)
△	13	AC Power Cord	ADG7008		31	Insulator	PNW2766
	14	Cord Stopper	CM-22B		32	Foot Assy	See Contrast table (2)
	15	Flexible Cable 13P (J32) (MOTHER CN110-FM/AM TUNER Unit)	ADD7094		33	Round Knob	AAB7082
NSP	16	Under Base	ANA7070		34	Screw	BBZ30P080FZK
	17	Rear Panel	See Contrast table (2)		35	Screw	ABA7044
	18	Bonnet Case	AZN7727		36	Screw	ABA7043

(2) CONTRAST TABLE

VSX-607RDS/HYXKEW, HYXKGR, VSX-407RDS/HYXKEW and HYXKGR are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-607RDS		VSX-407RDS		
			HYXKEW	HYXKGR	HYXKEW	HYXKGR	
NSP	1	MOTHER Assy	AWX7078	AWX7078	AWX7077	AWX7077	
	2	VOLUME DSP Assy	AWX7085	AWX7085	AWX7084	AWX7084	
	3	CONNECTION Assy	AWX7165	AWX7165	AWX7079	AWX7079	
	8	FRONT SPEAKER Assy	AWX7089	AWX7089	AWX7088	AWX7088	
	11	Flexible Cable (J33)	ADD7095	ADD7095	Not used	Not used	
NSP	17	Rear Panel	ANC7630	ANC7630	ANC7629	ANC7629	
	28	5P Shield Cable (J34)	ADX7237	ADX7237	Not used	Not used	
	30	Insulator	PNW2766	PNW2766	Not used	Not used	
	32	Foot Assy	Not used	Not used	REC1263	REC1263	

2.3 FRONT PANEL SECTION



(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	FRONT Assy	See Contrast table (2)		11	Front Panel	See Contrast table (2)
NSP	2	FRONT INPUT Assy	See Contrast table (2)		12	Screw	BPZ30P080FMC
NSP	3	POWER SW Assy	AWX7061		13	Flexible Cable 20P (J31) (MOTHER CN109-FRONT CN501)	ADD7093
NSP	4	Getter	See Contrast table (2)		14	Flexible Cable 20P (J35) (MOTHER CN111-FRONT CN502)	ADD7093
	5	Power Button PTK	AAD7457		15	Power Button M	AAD7442
	6	Function Button PTK	AAD7456		16	Screw	See Contrast table (2)
	7	PIONEER Badge	PAM1755				
	8	LED Lens	PNW2019				
	9	Sheet	AAK7580				
	10	Sub Panel	See Contrast table (2)				

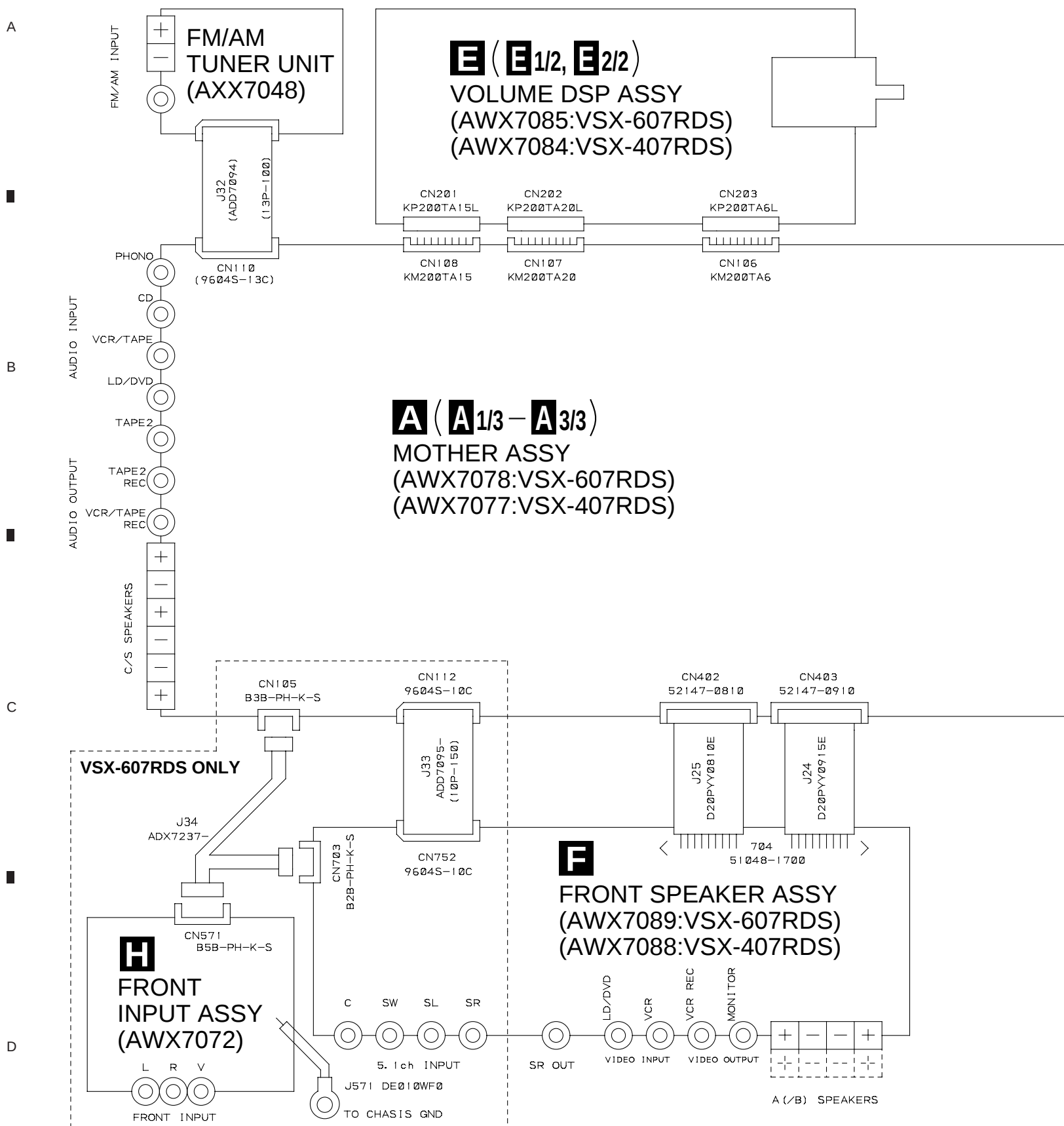
(2) CONTRAST TABLE

VSX-607RDS/HYXKEW, HYXKGR, VSX-407RDS/HYXKEW and HYXKGR are constructed the same except for the following :

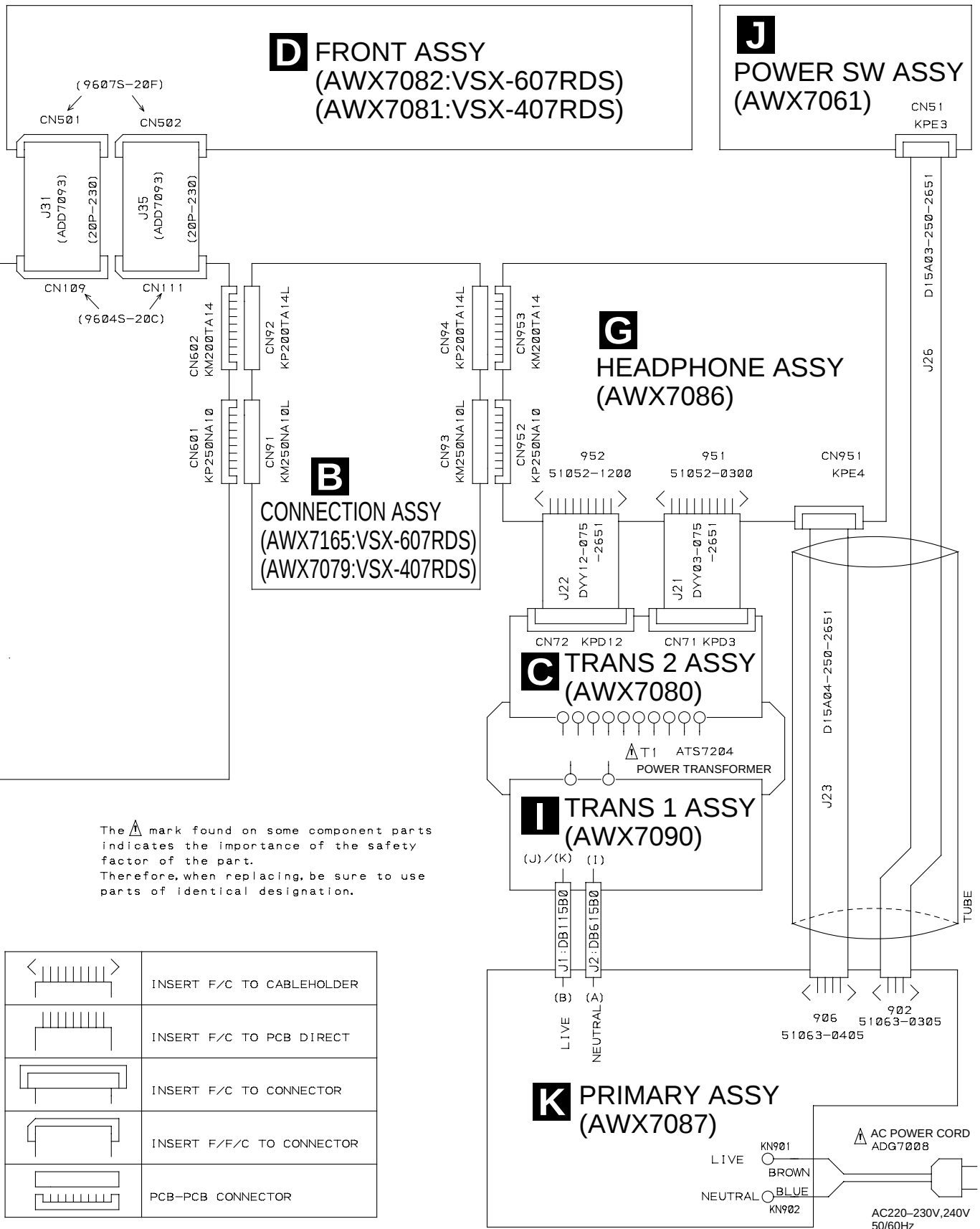
Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-607RDS		VSX-407RDS		
			HYXKEW	HYXKGR	HYXKEW	HYXKGR	
NSP NSP	1	FRONT Assy	AWX7082	AWX7082	AWX7081	AWX7081	
	2	FRONT INPUT Assy	AWX7072	AWX7072	Not used	Not used	
	4	Getter	AAX7644	AAX7644	AAX7643	AAX7643	
	10	Sub Panel	AAP7044	AAP7044	AAP7043	AAP7043	
	11	Front Panel	AMB7497	AMB7497	AMB7496	AMB7496	
	16	Screw	ABA7009	ABA7009	Not used	Not used	

3. SCHEMATIC DIAGRAM

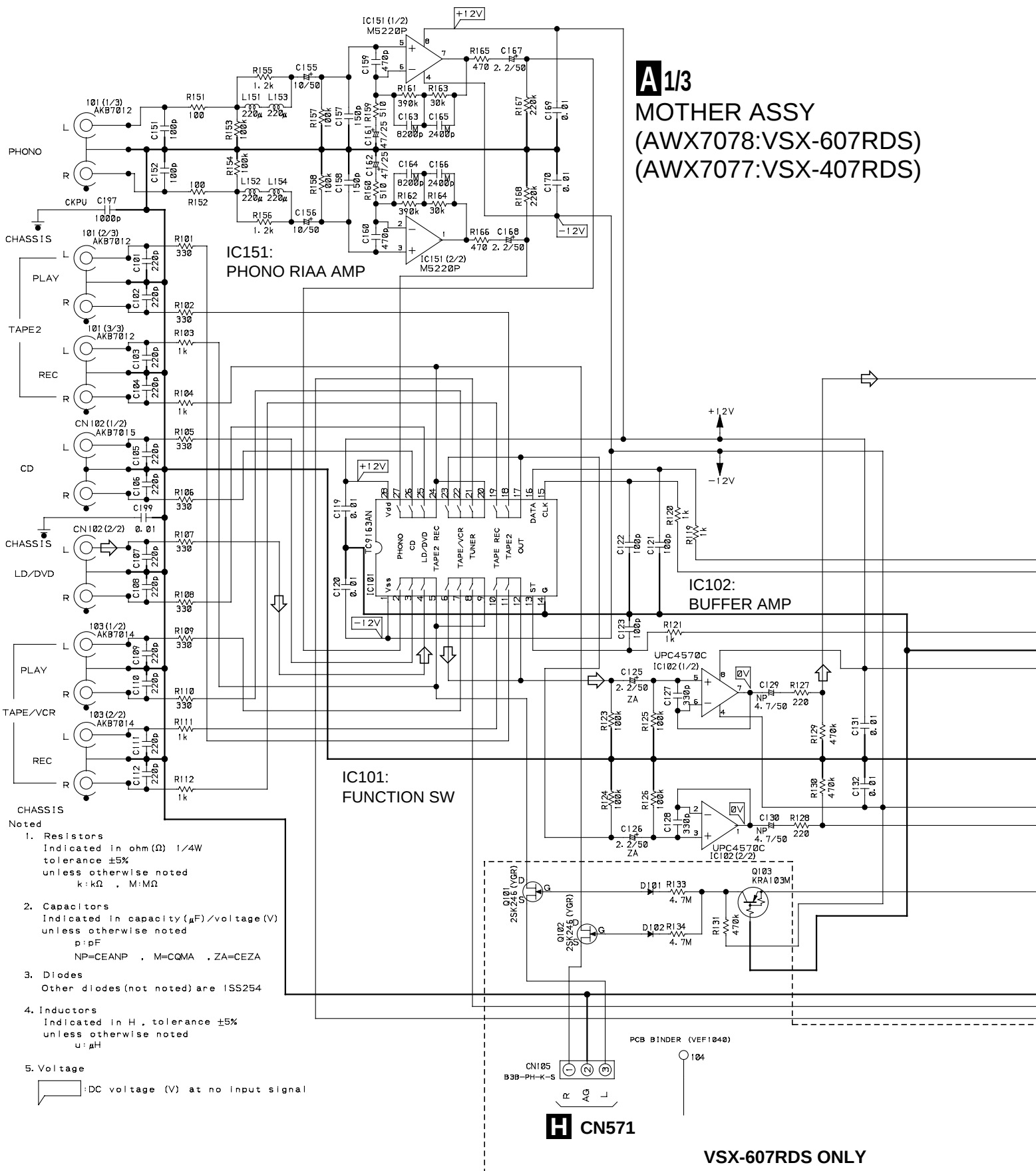
3.1 OVERALL CONNECTION DIAGRAM

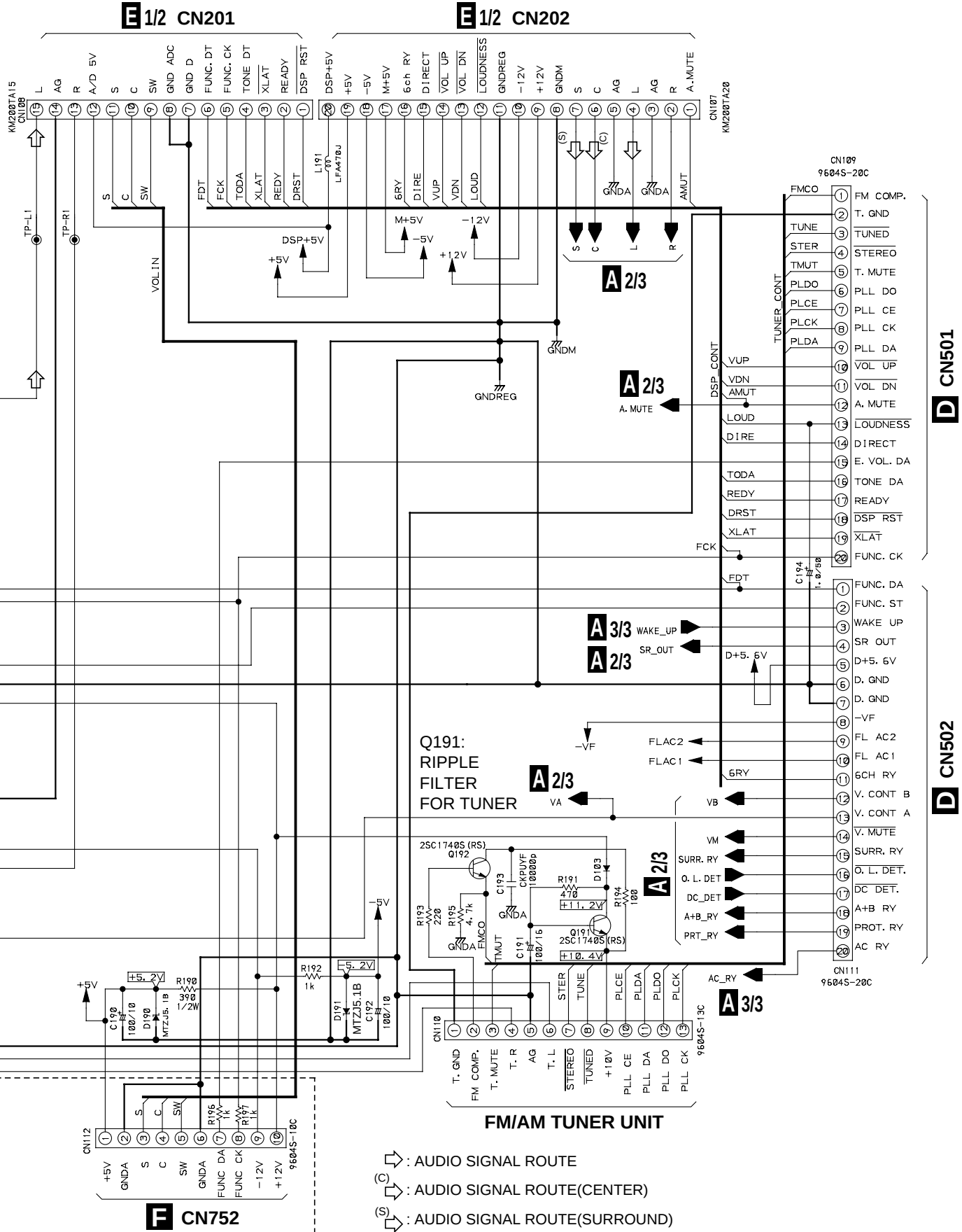


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



3.2 MOTHER ASSY (1/3)





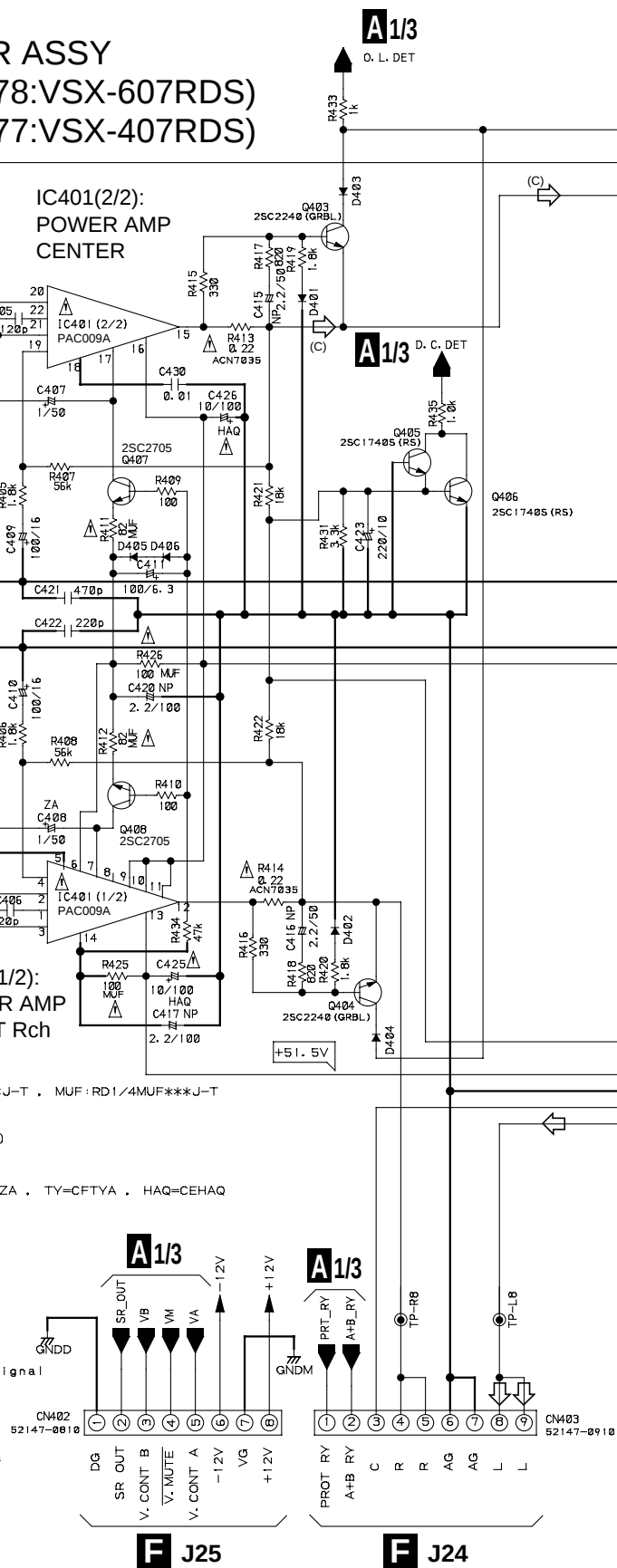
3.3 MOTHER ASSY (2/3)

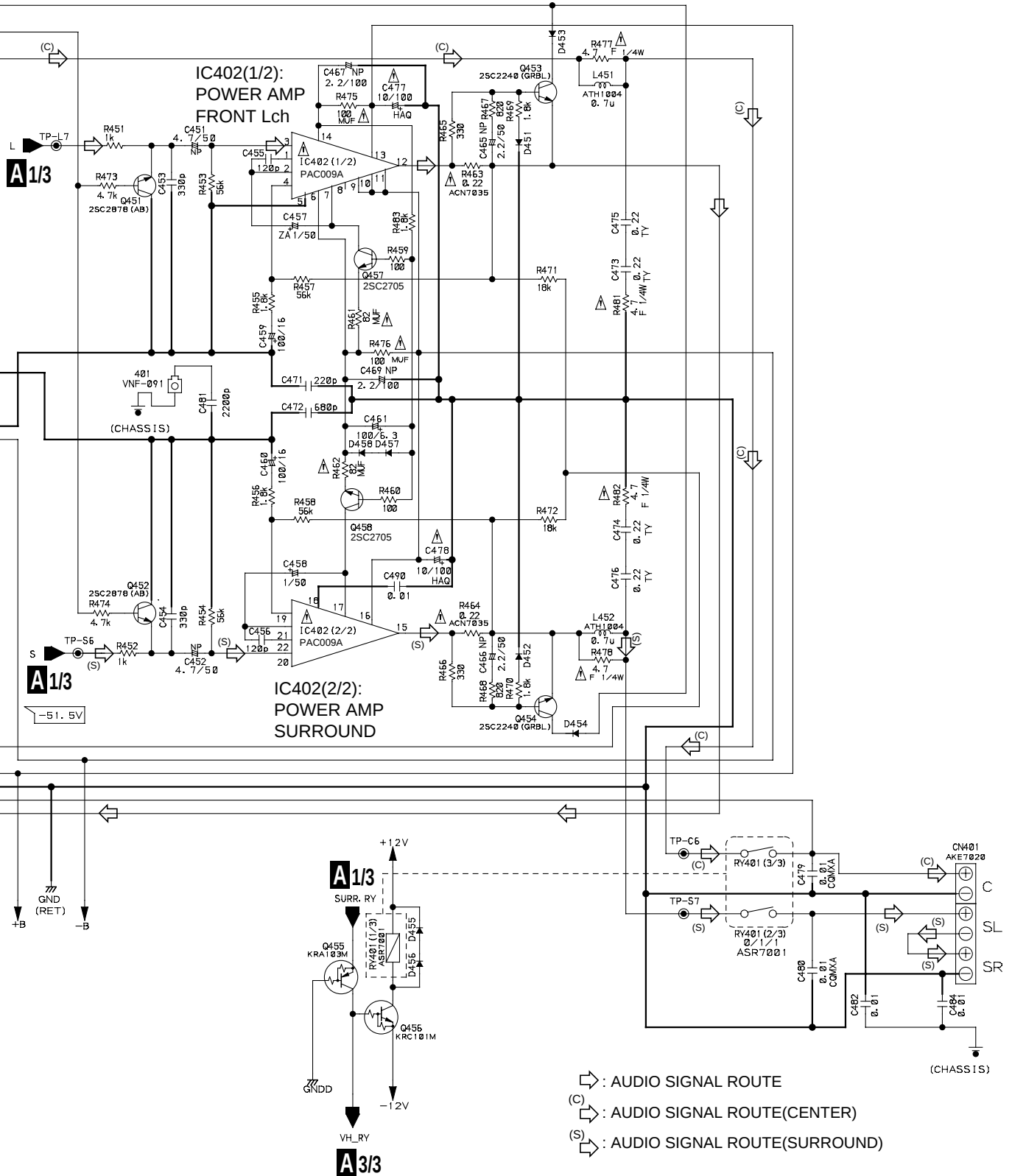
MOTHER ASSY
(AWX7078:VSX-607RDS)
(AWX7077:VSX-407RDS)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N25, MFD BY ROHM CO., LTD. FOR IC403.

- Noted
1. Resistors
Indicated in ohm (Ω) 1/4W
tolerance ±5%
unless otherwise noted
k:kΩ , M:MΩ , F:RD1/4PMF***J-T , MUF:RD1/4MUF***J-T
 2. Capacitors
Indicated in capacity (μF)/voltage (V)
unless otherwise noted
p:pF
NP=CEANP , TL=CFTLA , ZA=CEZA , TY=CFTYA , HAQ=CEHAQ
 3. Diodes
Other diodes (not noted) are ISS254
 4. Inductors
Indicated in H , tolerance ±5%
unless otherwise noted
u:μH
 5. Voltage
:DC voltage (V) at no input signal

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.





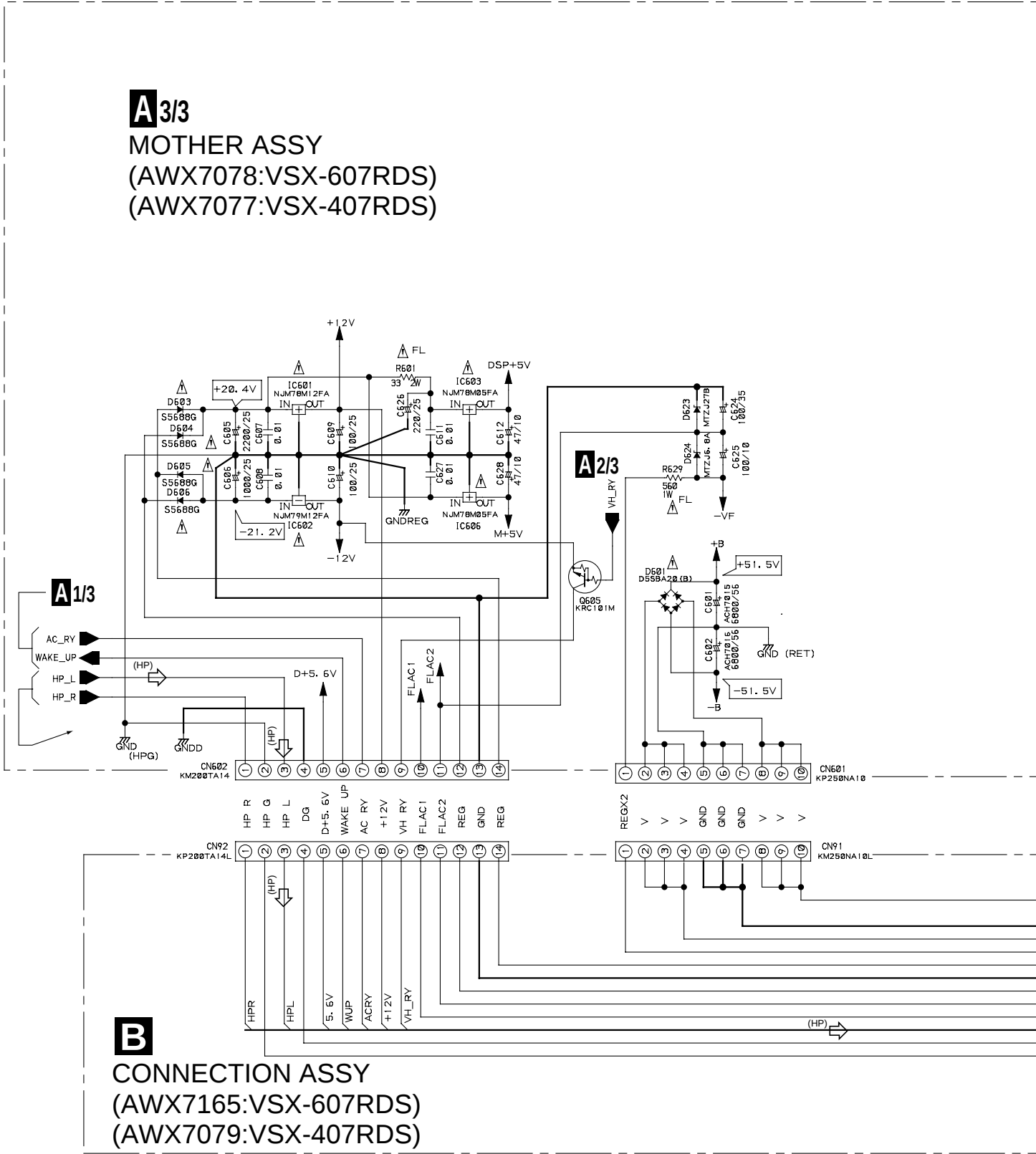
3.4 MOTHER (3/3), CONNECTION AND TRANS 2 ASSEMBLIES

A

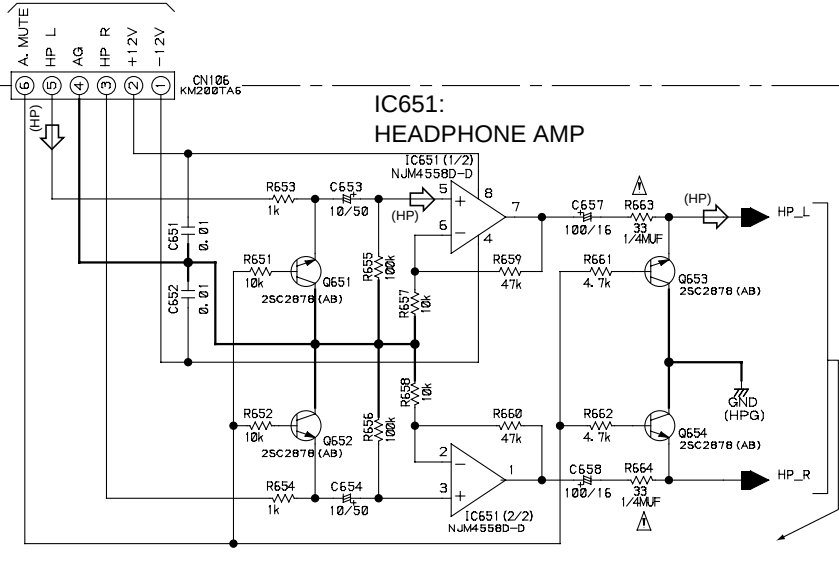
B

C

D



E1/2 CN203

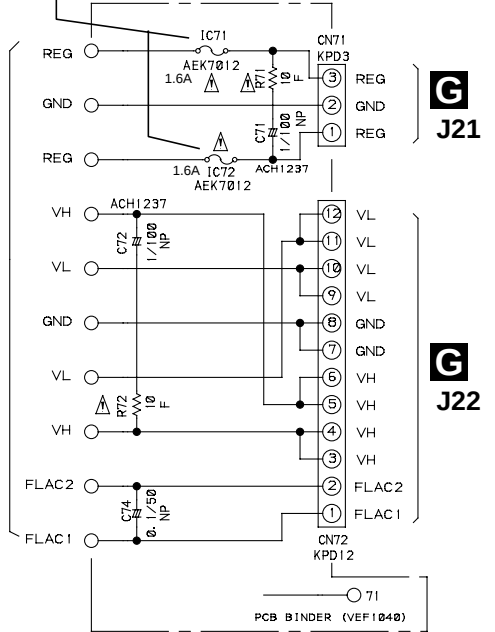


(HP) → AUDIO SIGNAL ROUTE(HEADPHONE)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 49101.6 MFD, BY LITTELFUSE INK. FOR IC71,IC72 (AEK7012).

C TRANS 2 ASSY (AWX7080)

T1 POWER TRANSFORMER



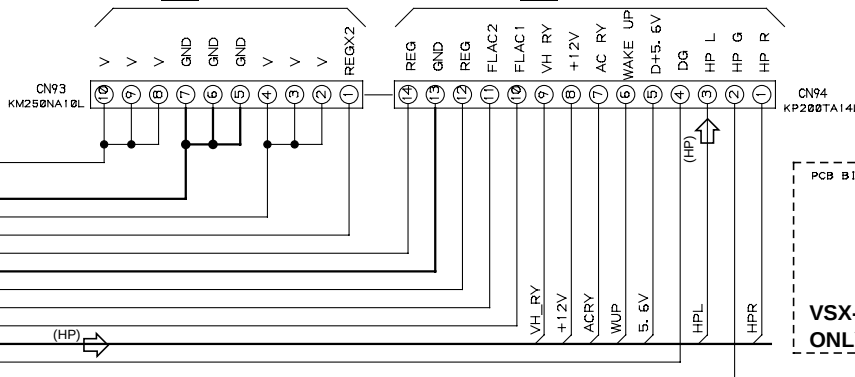
Noted

- Resistors
Indicated in ohm(Ω) 1/4W
tolerance $\pm 5\%$
unless otherwise noted
k:k Ω , M:M Ω , F:RD1/4PMF***J-T , FL:RS*LMF***J
MUF:RD1/4MUF***J-T
- Capacitors
Indicated in capacity(μ F)/voltage(V)
unless otherwise noted
p:pF
NP=CEANP
- Diodes
Other diodes(not noted) are 1SS254
- Inductors
Indicated in H , tolerance $\pm 5\%$
unless otherwise noted
u: μ H
- Voltage
:DC voltage (V) at no input signal

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.

G CN952

G CN953

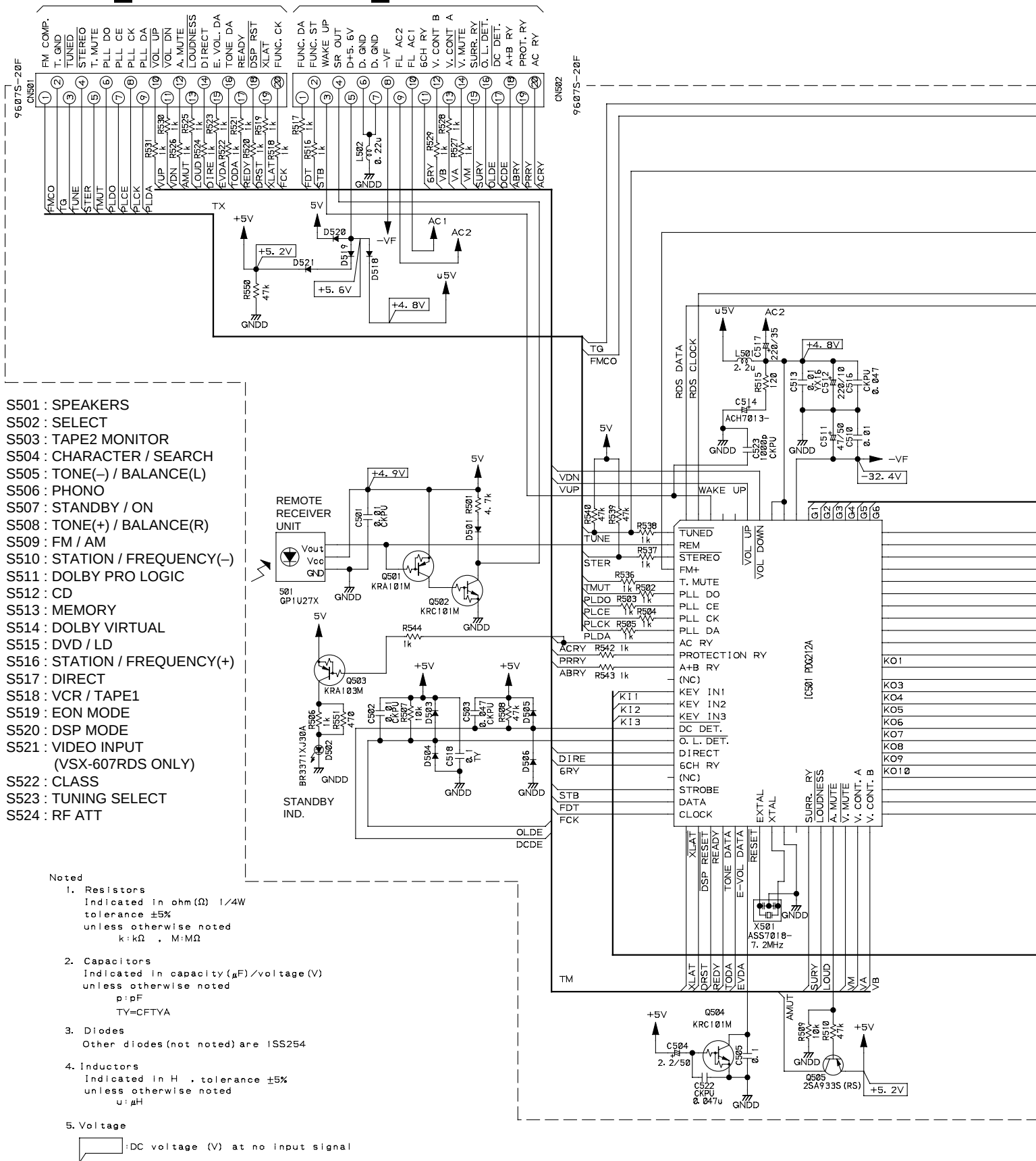


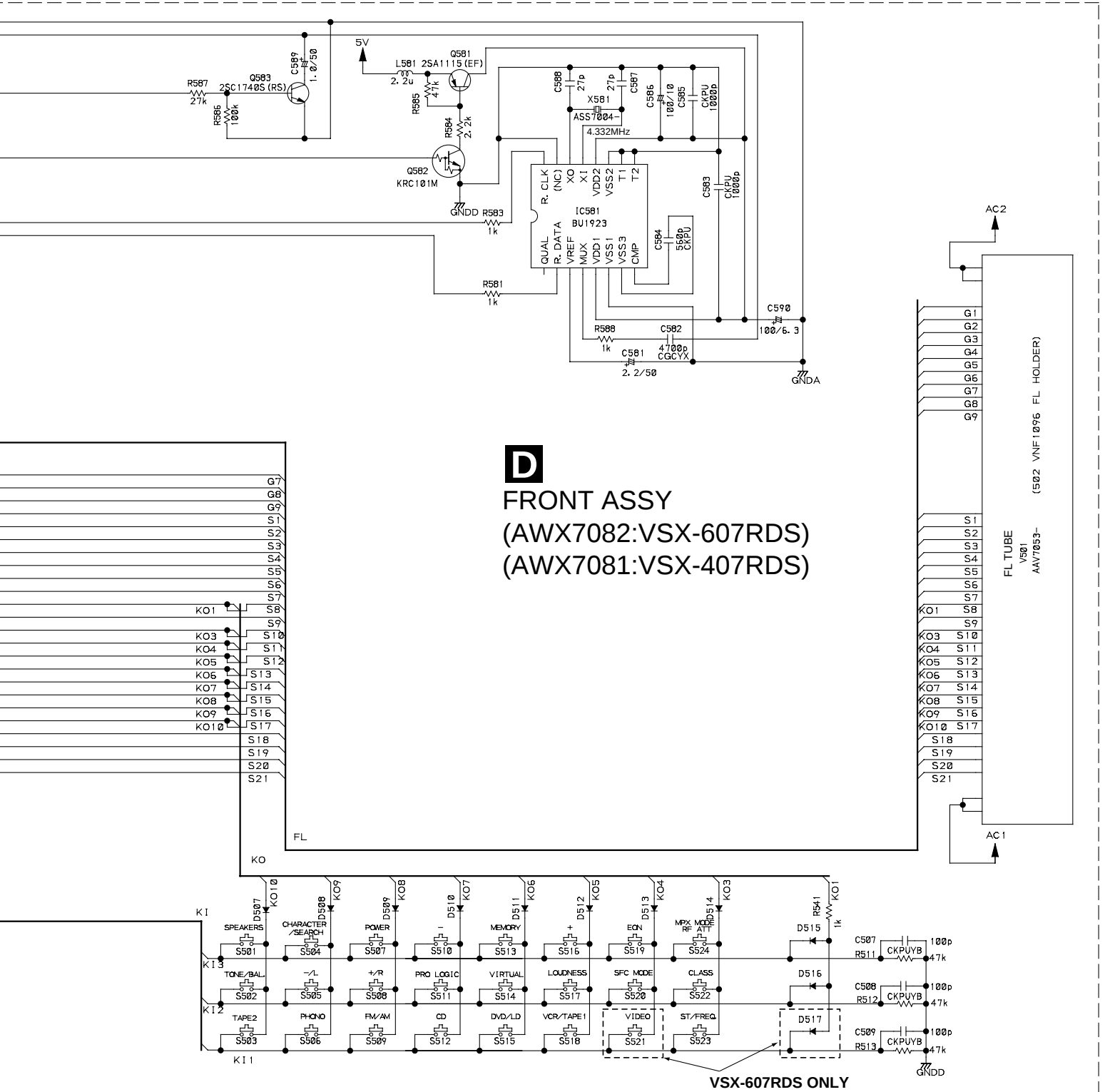
PCB BINDER (VEF1040)
91
VSX-607RDS ONLY

3.5 FRONT ASSY

A1/3 CN109

A1/3 CN111





3.6 VOLUME DSP ASSY (1/2)

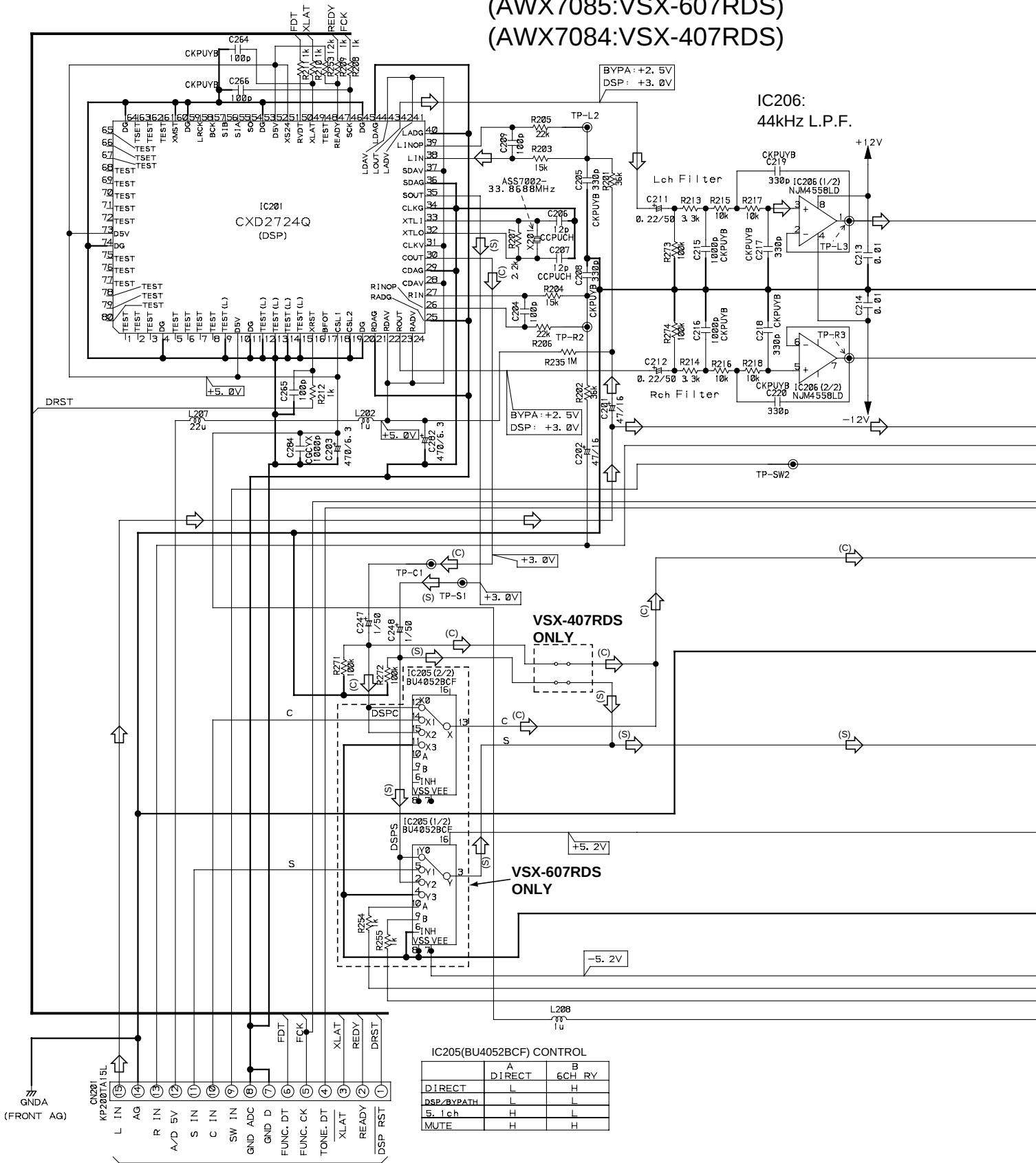
E1/2 VOLUME DSP ASSY
(AWX7085:VSX-607RDS)
(AWX7084:VSX-407RDS)

A

B

C

D



IC205(BU4052BCF) CONTROL

	A	B
DIRECT	L	H
DSP/BYPATH	L	L
5.1ch	H	L
MUTE	H	H

A1/3 CN108



1. Resistors
Indicated in ohm(Ω) 1/4W
tolerance $\pm 5\%$
unless otherwise noted
k:k Ω . M:M Ω

2. Capacitors
Indicated in capacity (μ F)/voltage (V)
unless otherwise noted
p:pF
NP=CEANP . TL=CFTLA

3. Diodes
Other diodes (not noted) are 1SS254

4. Inductors
Indicated in H, tolerance $\pm 5\%$
unless otherwise noted
u: μ H

5. Voltage

:DC voltage (V) at no input signal



3.7 VOLUME DSP ASSY (2/2)

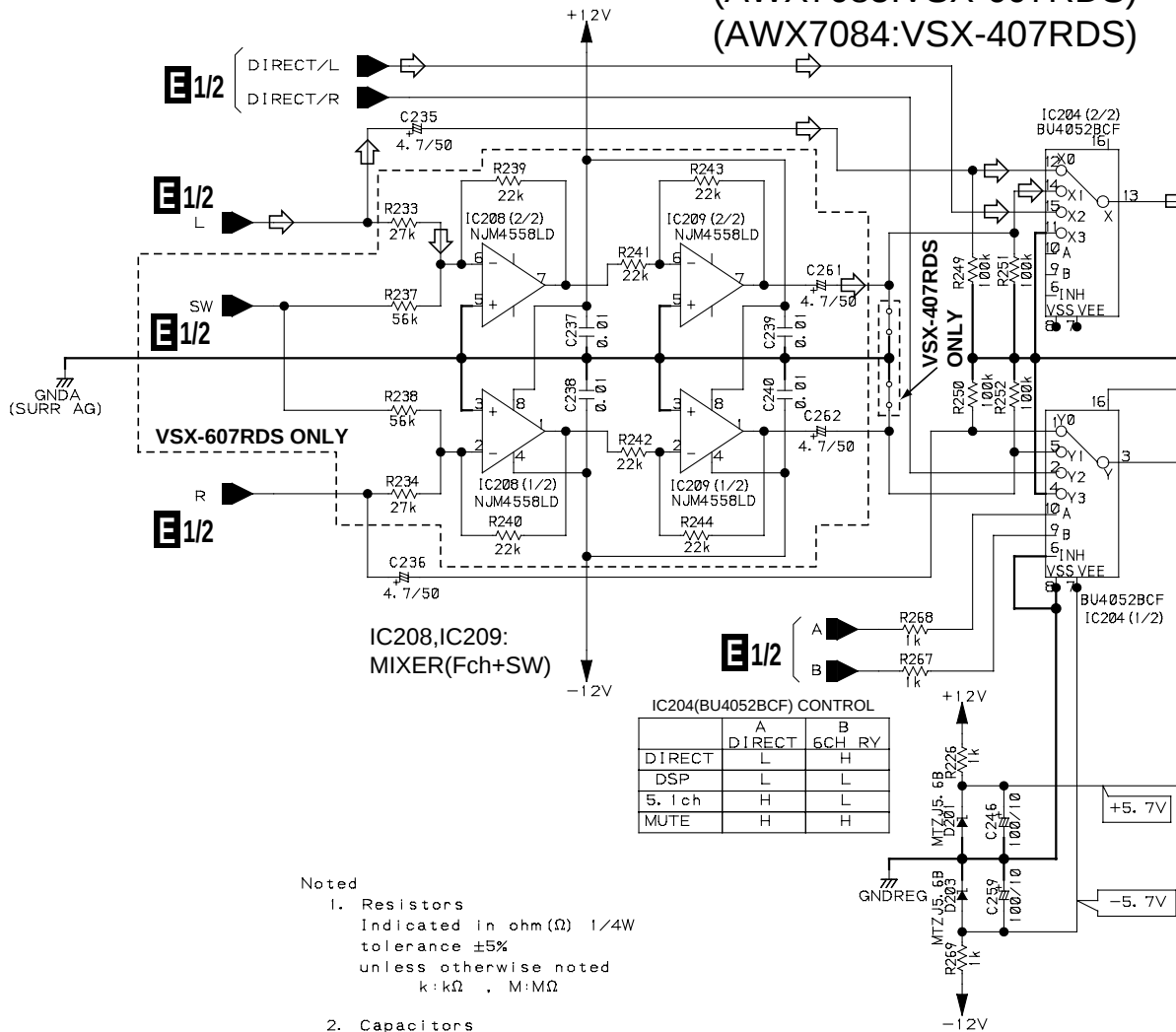
E2/2 VOLUME DSP ASSY
(AWX7085:VSX-607RDS)
(AWX7084:VSX-407RDS)

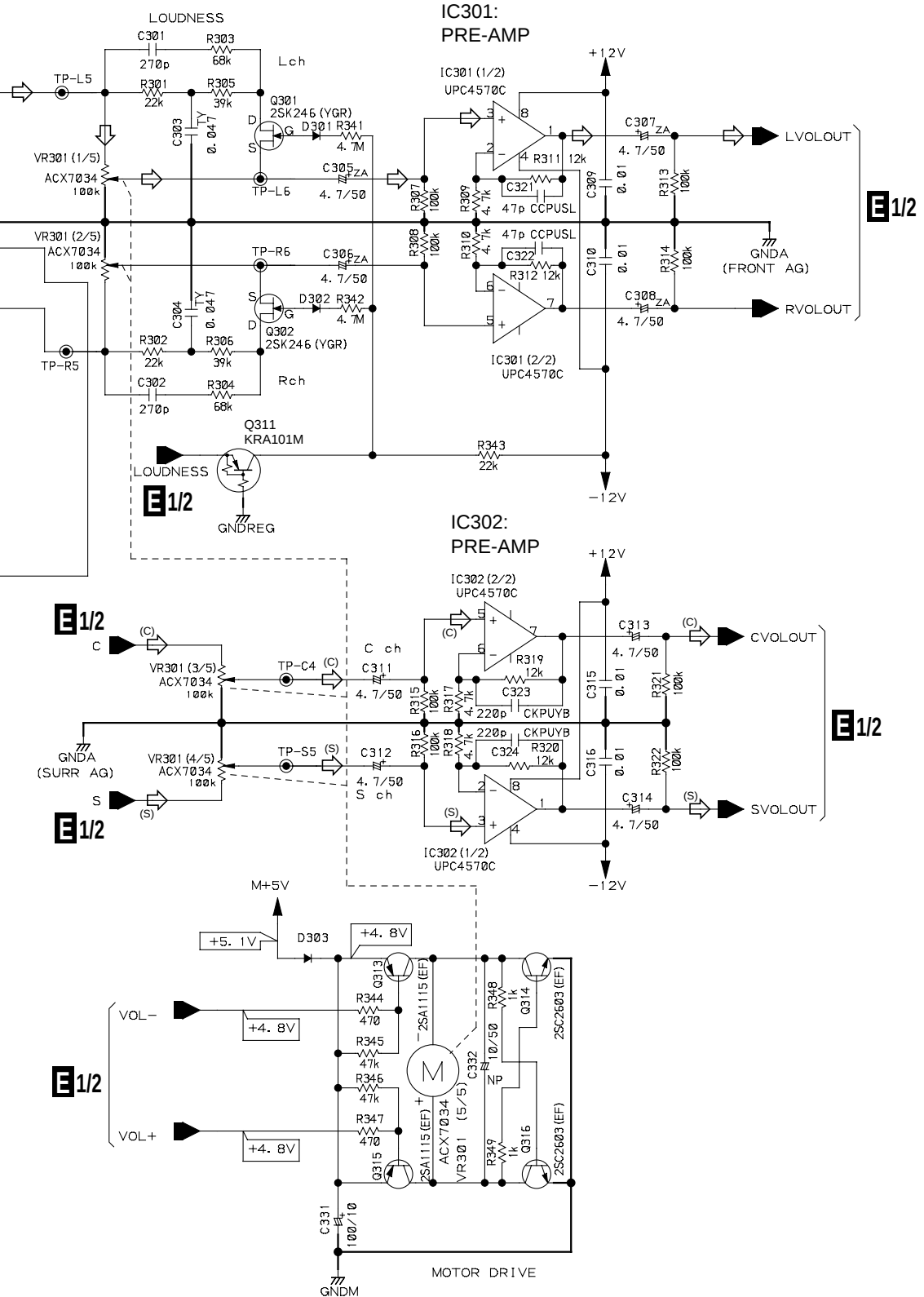
A

B

C

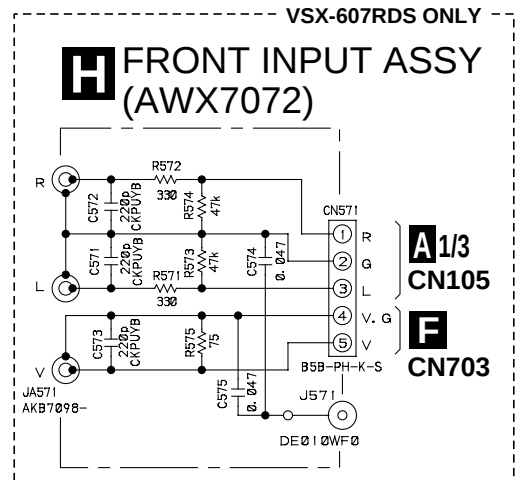
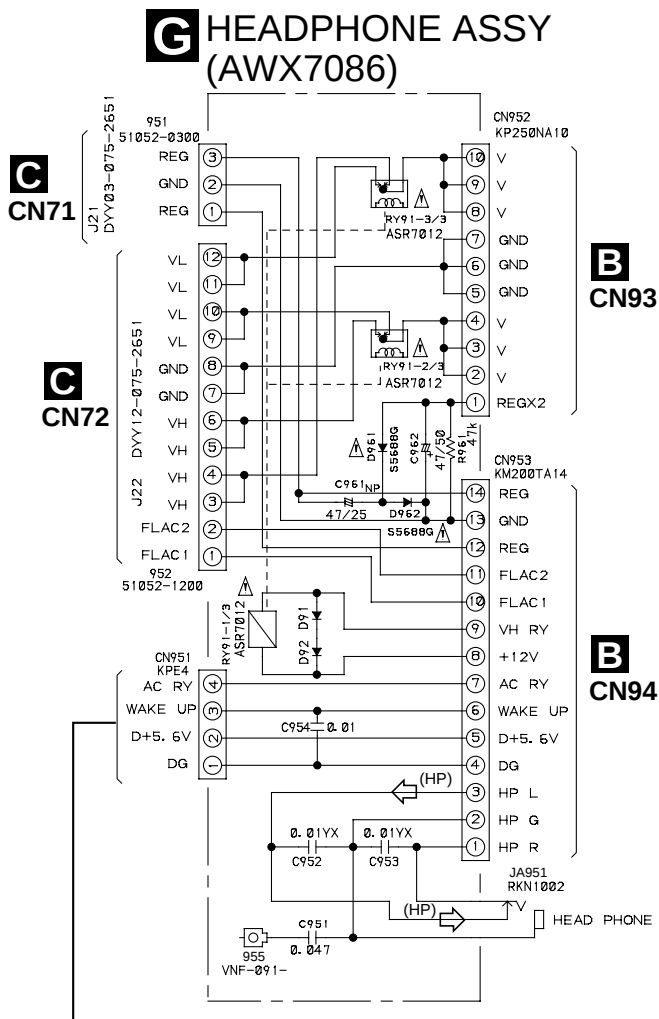
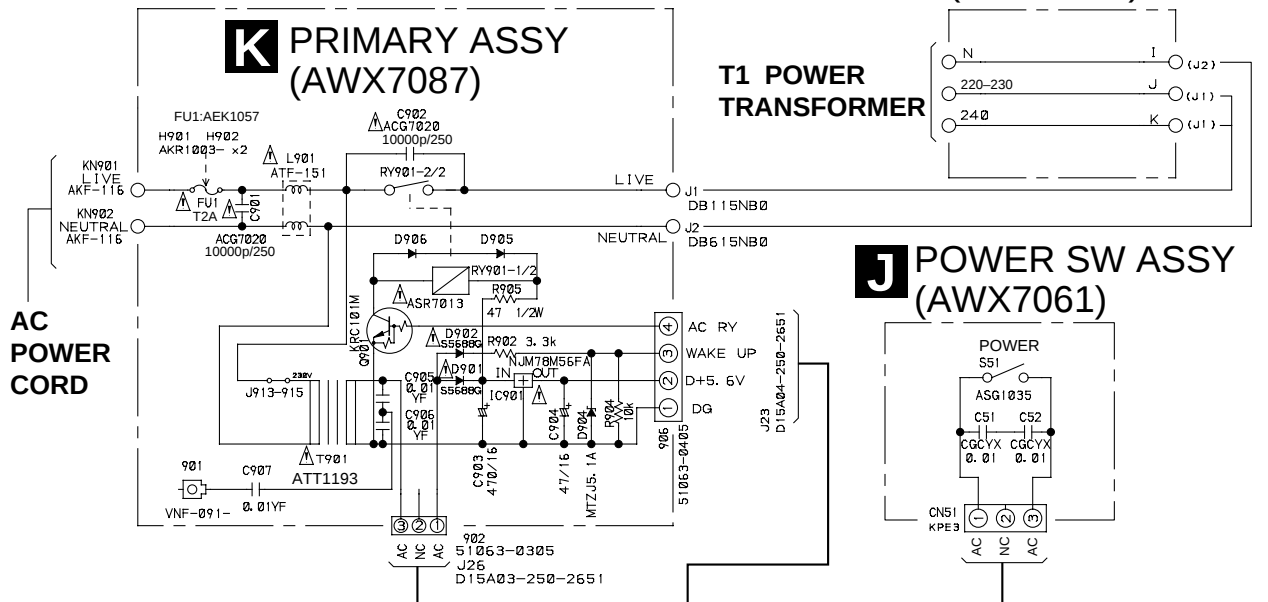
D





• NOTE FOR FUSE REPLACEMENT

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

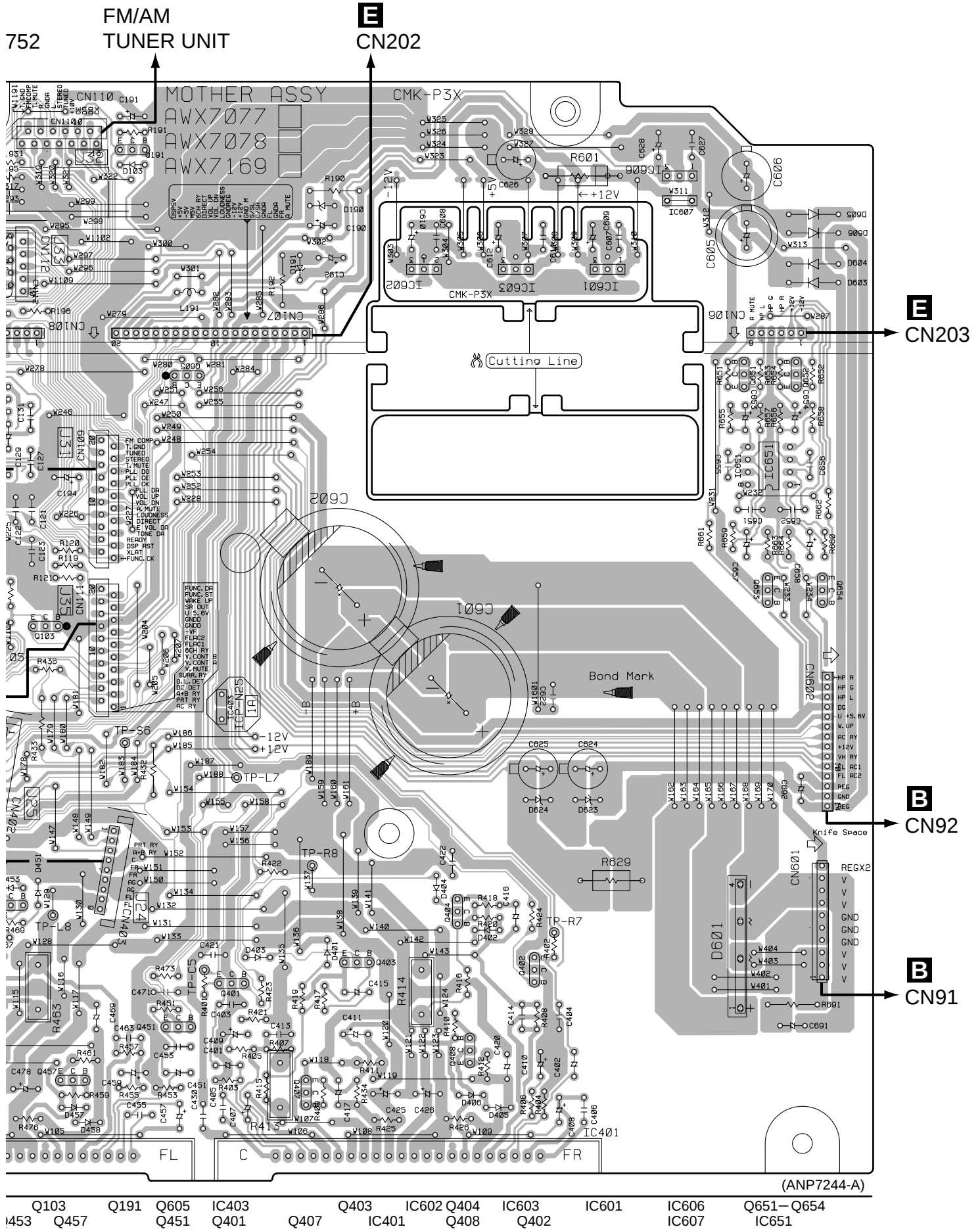


Noted

- Resistors
Indicated in ohm (Ω) 1/4W
tolerance $\pm 5\%$
unless otherwise noted
k: k Ω . M: M Ω
F=RD1/4PMF***J
- Capacitors
Indicated in capacity (μ F)/voltage (V)
unless otherwise noted
p: pF
TY=CFYTA, NP=CEANP, YF=CKCYF, YX=CGCYX
- Diodes
Other diodes (not noted) are 1SS254
- Inductors
Indicated in H, tolerance $\pm 5\%$
unless otherwise noted
u: μ H
- Voltage
:DC voltage (V) at no input signal

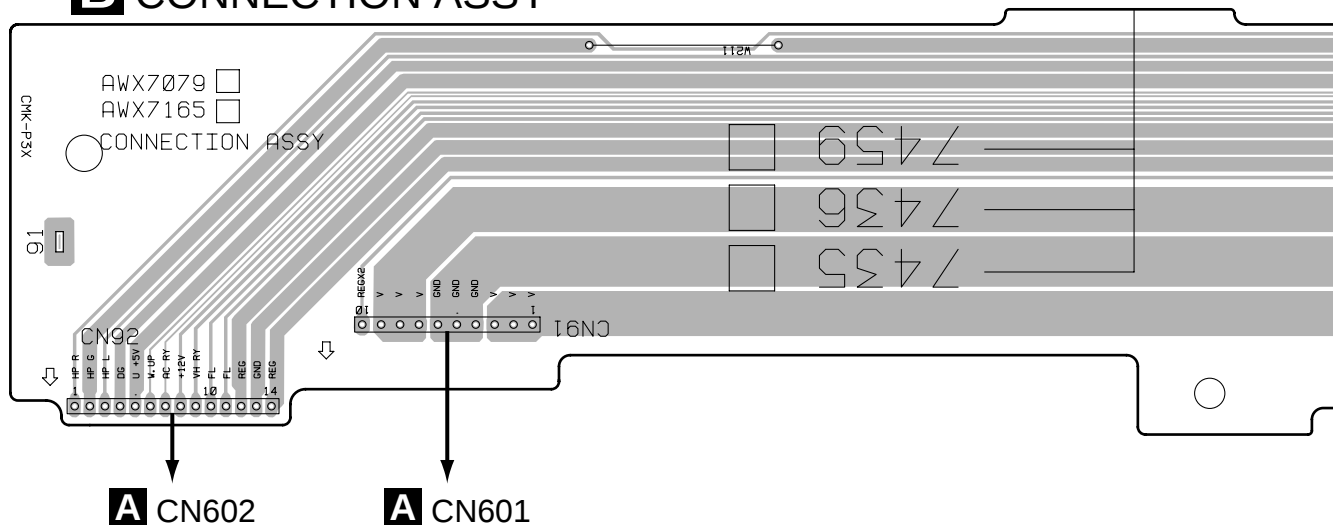
The Δ mark found on some component parts
indicates the importance of the safety
factor of the part.
Therefore, when replacing, be sure to use
parts of identical designation.

(HP) : AUDIO SIGNAL ROUTE(HEADPHONE)

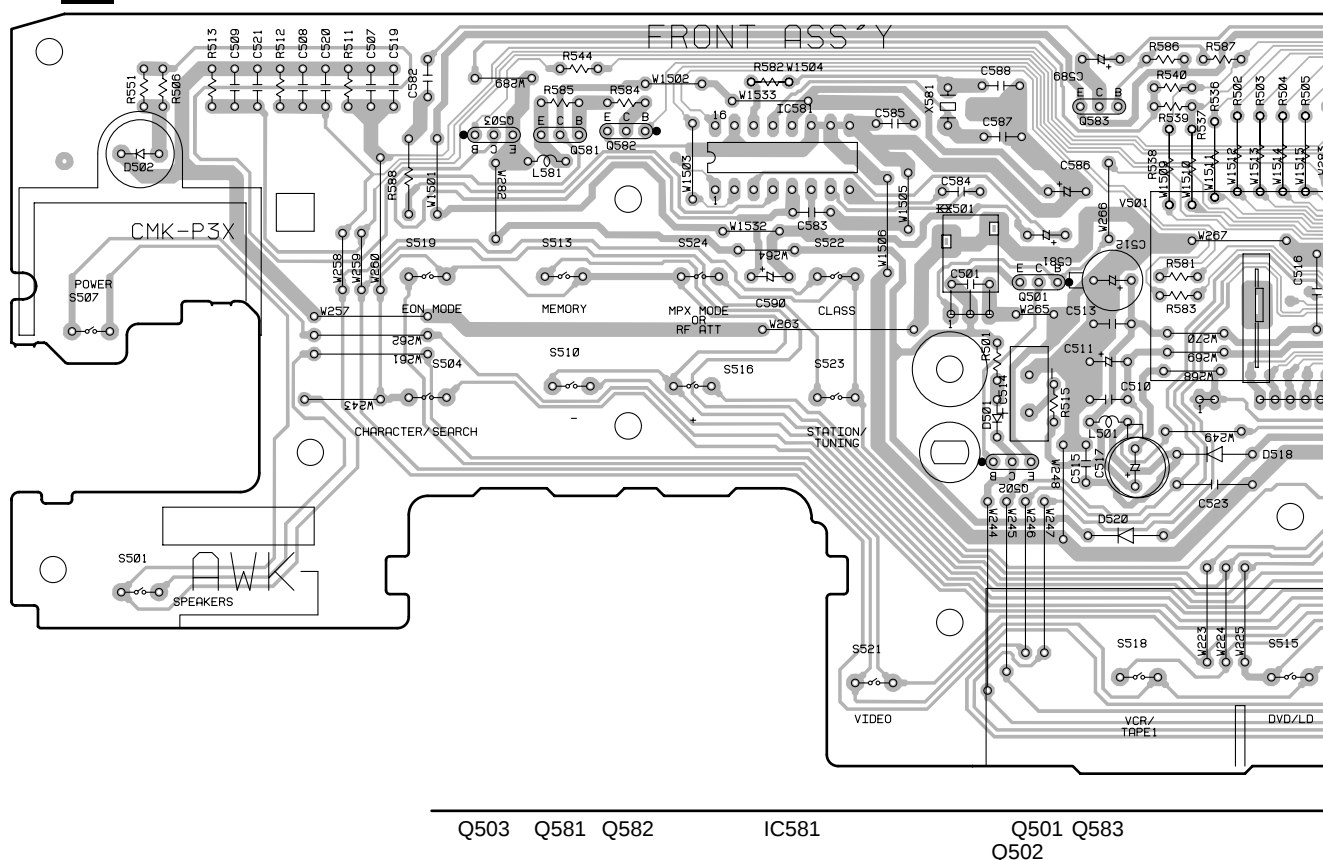


4.2 CONNECTION, TRANS 2 AND FRONT ASSEMBLIES

B CONNECTION ASSY



D FRONT ASSY



SIDE A

4.3 VOLUME DSP ASSY

VOLUME DSP ASSY

A

B

C

D

IC201

IC206

IC205

IC202

Q202

IC211

Q311 IC302

IC207

IC301

Q313-Q316

IC208

IC209

Q302

VR301

IC204

Q301

A
CN108

A
CN107

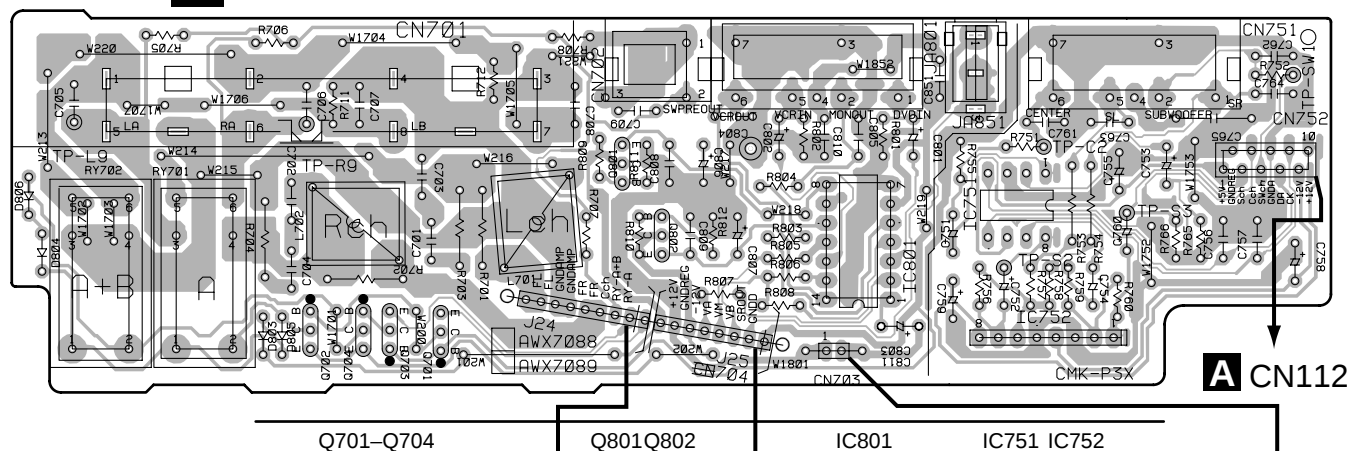
A
CN106

(ANP7245-B)

SIDE A



4.4 FRONT SPEAKER, HEADPHONE AND FRONT INPUT ASSEMBLIES

F FRONT SPEAKER ASSY

O701-O704

O801O802

IC801

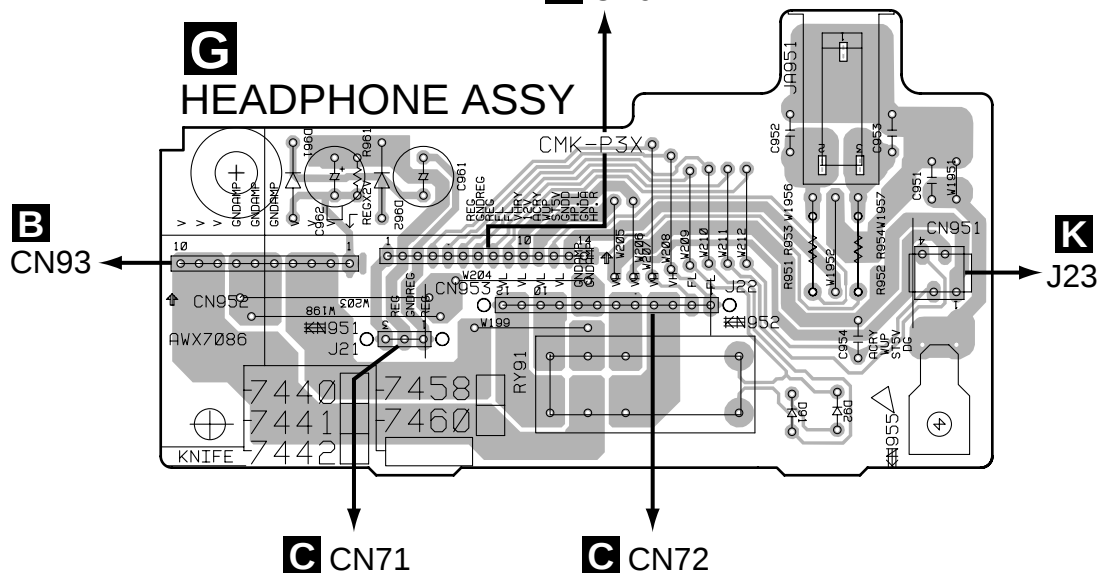
IC751 IC752

A CN403

A CN402

B CN94

G HEADPHONE ASSY



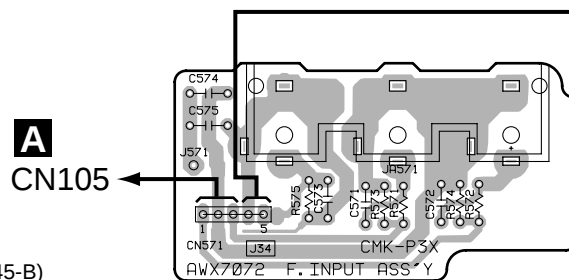
CN93

STUDY

K
J23

C CN71

C CN72



(ANP7245-B)

H FRONT INPUT ASSY

SIDE A

4.5 TRANS 1, POWER SW AND PRIMARY ASSEMBLIES

● 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 TRANS 1 ASSY [Terminal No. (J) or (K)] to PRIMARY ASSY (Terminal No. J1) as follows.

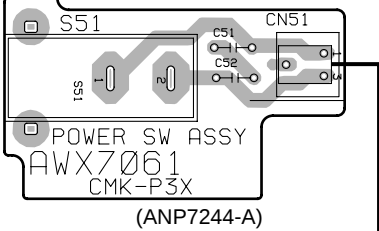
Voltage	Terminal No. of TRANS 1 ASSY
220-230V	(J)
240V	(K)

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

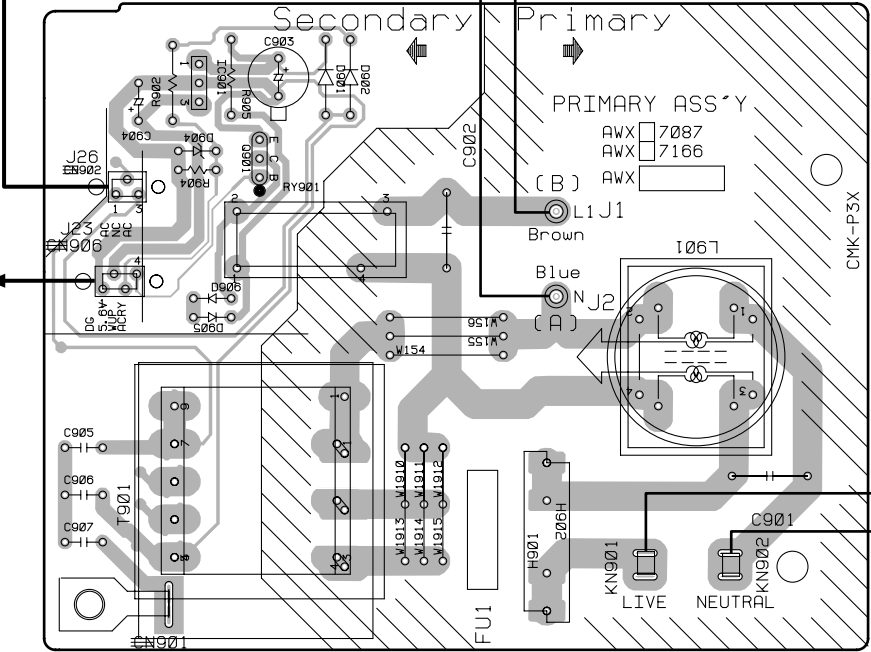
Description	Part No.
220V label	AAX-193
240V label	AAX-192

TRANS 1 ASSY

POWER SW ASSY



PRIMARY ASSY



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 $\triangle$ 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 $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix}$ 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-607RDS		VSX-407RDS		
		HYXKEW	HYXKGR	HYXKEW	HYXKGR	
NSP	MAIN ASSY	AWK7436	AWK7436	AWK7435	AWK7435	
	└ MOTHER ASSY	AWX7078	AWX7078	AWX7077	AWX7077	
NSP	└ CONNECTION ASSY	AWX7165	AWX7165	AWX7079	AWX7079	
NSP	└ TRANS 2 ASSY	AWX7080	AWX7080	AWX7080	AWX7080	
NSP	└ POWER SW ASSY	AWX7061	AWX7061	AWX7061	AWX7061	
NSP	COMPLEX ASSY	AWK7441	AWK7441	AWK7440	AWK7440	
	└ FRONT ASSY	AWX7082	AWX7082	AWX7081	AWX7081	
	└ VOLUME DSP ASSY	AWX7085	AWX7085	AWX7084	AWX7084	
	└ FRONT SPEAKER ASSY	AWX7089	AWX7089	AWX7088	AWX7088	
NSP	└ HEADPHONE ASSY	AWX7086	AWX7086	AWX7086	AWX7086	
NSP	└ FRONT INPUT ASSY	AWX7072	AWX7072	Not used	Not used	
NSP	└ TRANS 1 ASSY	AWX7090	AWX7090	AWX7090	AWX7090	
	└ PRIMARY ASSY	AWX7087	AWX7087	AWX7087	AWX7087	

Mark No. Description Part No.

A MOTHER ASSY

(1) CONTRAST TABLE

AWX7078 and AWX7077 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7078	AWX7077	
	Q101,Q102	2SK246	Not used	
	Q103	KRA103M	Not used	
	D101,D102	1SS254	Not used	
	R131	RD1/4PU474J	Not used	
	R133,R134	RD1/4PU475J	Not used	
	R196,R197	RD1/4PU102J	Not used	
	CN105 KR CONNECTOR 3P	B3B-PH-K-S	Not used	
	CN112 10P CONNECTOR	9604S-10C	Not used	
	PCB BINDER	VEF1040	Not used	

(2) PARTS LIST FOR AWX7078

SEMICONDUCTORS

$\triangle$	IC403	ICP-N25
	IC151	M5220P
	IC651	NJM4558D-D
$\triangle$	IC603,IC606	NJM78M05FA
$\triangle$	IC601	NJM78M12FA

Mark No. Description Part No.

$\triangle$	IC602	NJM79M12FA
$\triangle$	IC401,IC402	PAC009A
	IC101	TC9163AN
	IC102	UPC4570C
	Q191,Q192,Q405,Q406	2SC1740S
	Q403,Q404,Q453,Q454	2SC2240
	Q407,Q408,Q457,Q458	2SC2705
	Q401,Q402,Q451,Q452	2SC2878
	Q651-Q654	2SC2878
	Q101,Q102	2SK246
	Q103,Q455	KRA103M
	Q456,Q605	KRC101M
	D101-D103,D401-D406	1SS254
	D451-D458	1SS254
$\triangle$	D601	D5SBA20(B)
	D623	MTZJ27B
	D190,D191	MTZJ5.1B
	D624	MTZJ6.8A
$\triangle$	D603-D606	S5688G

COILS

L451,L452	AF CHOKE COIL (0.7mH)	ATH1004
L151-L154		LAU221J
L191		LFA470J

RELAY

RY401	ASR7001
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VSX-607RDS, VSX-407RDS

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

CAPACITORS

	C601 (6800μF/56V)	ACH7015
	C602 (6800μF/56V)	ACH7016
	C121-C123,C151,C152	CCCSL101J50
	C405,C406,C455,C456	CCCSL121J50
	C157,C158	CCCSL151J50
	C101-C112,C422,C471	CCCSL221J50
	C127,C128,C403,C404	CCCSL331J50
	C453,C454	CCCSL331J50
	C415,C416,C465,C466	CEANP2R2M50
	C417,C420,C467,C469	CEANP2R2M2A
	C129,C130,C401,C402	CEANP4R7M50
	C451,C452	CEANP4R7M50
	C155,C156,C653,C654	CEAT100M50
	C190,C192,C625	CEAT101M10
	C191,C409,C410,C459,C460	CEAT101M16
	C657,C658	CEAT101M16
	C609,C610	CEAT101M25
	C624	CEAT101M35
	C411,C461	CEAT101M6R3
	C606	CEAT102M25
	C194,C407,C458	CEAT1R0M50
	C423	CEAT221M10
	C626	CEAT221M25
	C605	CEAT222M25
	C167,C168	CEAT2R2M50
	C612,C628	CEAT470M10
	C161,C162	CEAT470M25
△	C425,C426,C477,C478	CEHAQ100M2A
	C408,C457	CEZA1R0M50
	C125,C126	CEZA2R2M50
	C473-C476	CFTYA224J50
	C199,C482,C484	CGCYX103M16
	C159,C160,C421	CKCYB471K50
	C472	CKCYB681K50
	C119,C120,C131,C132	CKCYF103Z50
	C169,C170,C430,C490	CKCYF103Z50
	C607,C608,C611,C627	CKCYF103Z50
	C651,C652	CKCYF103Z50
	C481	CKCYF222Z50
	C197	CKPUYB102K50
	C193	CKPUYF103Z25
	C165,C166	CQMA242J50
	C163,C164	CQMBA822J50
	C479,C480	CQMXA103J2A

RESISTORS

△	R413,R414,R463,R464(0.22Ω,5W)	ACN7035
	R190	RD1/2PM391J
△	R425,R426,R475,R476	RD1/4MUF101J
△	R663,R664	RD1/4MUF330J
△	R411,R412,R461,R462	RD1/4MUF820J
△	R477,R478,R481,R482	RD1/4PMF4R7J
△	R629	RS1LMF561J
△	R601	RS2LMF330J
	Other Resistors	RD1/4PU□□□J

OTHERS

	CN402 8P JUMPER CONNECTOR	52147-0810
	CN403 9P JUMPER CONNECTOR	52147-0910
	CN112 10P FFC CONNECTOR	9604S-10C
	CN110 13P FFC CONNECTOR	9604S-13C
	CN109,CN111 20P FFC CONNECTOR	9604S-20C

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

	101	6P PIN JACK	AKB7012
	103	4P PIN JACK	AKB7014
	CN102	4P PIN JACK	AKB7015
	CN401	6P SPEAKER TERMINAL	AKE7020
	CN105	KR CONNECTOR 3P	B3B-PH-K-S
	CN602	14P PLUG	KM200TA14
	CN108	15P PLUG	KM200TA15
	CN107	20P PLUG	KM200TA20
	CN106	6P PLUG	KM200TA6
	CN601	10P SOCKET	KP250NA10
		PCB BINDER	VEF1040
		EARTH METAL FITTING	VNF-091

B CONNECTION ASSY

(1) CONTRAST TABLE

AWX7165 and AWX7079 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7165	AWX7079	
	PCB BINDER	VEF1040	Not used	

(2) PARTS LIST FOR AWX7165

OTHERS

	CN91,CN93	10P PLUG	KM250NA10L
	CN92,CN94	14P SOCKET	KP200TA14L
		PCB BINDER	VEF1040

C TRANS 2 ASSY

SEMICONDUCTORS

△	IC71,IC72 (1.6A)	AEK7012
---	------------------	---------

CAPACITORS

	C71,C72 (1μF/100V)	ACH1237
	C74	CEANPR10M50

RESISTORS

△	R71,R72	RD1/4PMF100J
	Other Resistors	RD1/4PM□□□J

OTHERS

	CN72	12P JUMPER CONNECTOR	KPD12
	CN71	3P JUMPER CONNECTOR	KPD3
		PCB BINDER	VEF1040

D FRONT ASSY

(1) CONTRAST TABLE

AWX7082 and AWX7081 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7082	AWX7081	
	D517	1SS254	Not used	
	S521	ASG1034	Not used	

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

(2) PARTS LIST FOR AWX7082**SEMICONDUCTORS**

IC581	BU1923
IC501	PDG212A
Q581	2SA1115
Q505	2SA933S
Q583	2SC1740S
Q501	KRA101M
Q503	KRA103M
Q502,Q504,Q582	KRC101M
D501,D503-D521	1SS254
D502	BR3371XJ30A

COILS

L501,L581	LAU2R2J
L502	LAUR22J

SWITCHES

S501-S524	ASG1034
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CAPACITORS

C514	ACH7013
C587,C588	CCCCH270J50
C590	CEAL101M6R3
C586	CEAT101M10
C589	CEAT1R0M50
C512	CEAT221M10
C517	CEAT221M35
C504,C581	CEAT2R2M50
C511	CEAT470M50
C518	CFTYA104J50
C513	CGCYX103M16
C505	CGCYX104M16
C582	CGCYX472M25
C510	CKCYF103Z50
C507-C509	CKPUYB101K50
C523,C583,C585	CKPUYB102K50
C584	CKPUYB561K50
C501,C502	CKPUYF103Z25
C503,C516,C522	CKPUYF473Z16

RESISTORS

All Resistors	RD1/4PU□□□J
---------------	-------------

OTHERS

X581	CRYSTAL RESONATOR (4.332MHz)	ASS7004
X501	CERAMIC RESONATOR (7.2MHz)	ASS7018
CN501,CN502	20P FFC CONNECTOR	9607S-20F
V501	FL TUBE	AAV7053
501	REMOTE RECEIVER UNIT	GP1U27X

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

E VOLUME DSP ASSY**(1) CONTRAST TABLE**

AWX7085 and AWX7084 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7085	AWX7084	
	IC205	BU4052BCF	Not used	
	IC208,IC209	NJM4558LD	Not used	
	C237-C240	CKCYF103Z50	Not used	
	C261,C262	CEAT4R7M50	Not used	
	R233,R234	RD1/4PU273J	Not used	
	R237,R238	RD1/4PU563J	Not used	
	R239-R244	RD1/4PU223J	Not used	
	R254,R255	RD1/4PU102J	Not used	

(2) PARTS LIST FOR AWX7085**SEMICONDUCTORS**

IC204,IC205	BU4052BCF
IC201	CXD2724Q
IC202	M62420FP
IC211	NJM4558D-D
IC206-IC209	NJM4558LD
IC301,IC302	UPC4570C
Q313,Q315	2SA1115
Q202	2SC1740S
Q314,Q316	2SC2603
Q301,Q302	2SK246
Q311	KRA101M
D301-D303	1SS254
D201,D203	MTZJ5.6B
D204	MTZJ9.1B

COILS

L202,L208	LAU1R0J
L207	LAU220J

CAPACITORS

C251-C254	CCCCH121J50
C204,C209,C265	CCCSL101J50
C301,C302	CCCSL271J50
C206,C207	CCPUCH120J50
C321,C322	CCPUSL470J50
C332	CEANP100M50
C241,C242	CEANP4R7M50
C246,C259,C263,C331	CEAT101M10
C247,C248	CEAT1R0M50
C230	CEAT221M10
C201,C202	CEAT470M16
C203,C282	CEAT471M6R3
C221,C222,C229,C231-C236	CEAT4R7M50
C255,C256,C261,C262	CEAT4R7M50
C311-C314	CEAT4R7M50
C211,C212	CEATR22M50
C305-C308	CEZA4R7M50
C227,C228	CFTLA103J50
C223,C224	CFTLA223J50
C225,C226	CFTLA474J50
C303,C304	CFTYA473J50
C243,C244,C249,C250,C284	CGCYX102K25
C213,C214,C237-C240	CKCYF103Z50
C257,C258,C309,C310	CKCYF103Z50
C315,C316	CKCYF103Z50

VSX-607RDS, VSX-407RDS

Mark	No.	Description	Part No.
	C264,C266		CKPUYB101K50
	C215,C216		CKPUYB102K50
	C323,C324		CKPUYB221K50
	C205,C208,C217-C220		CKPUYB331K50
	C271		CKPUYF103Z25

RESISTORS

VR301 (100kΩ)	ACX7034
Other Resistors	RD1/4PU□□□J

OTHERS

X201	CRYSTAL RESONATOR (33.8688MHz)	ASS7002
CN201	15P SOCKET	KP200TA15L
CN202	20P SOCKET	KP200TA20L
CN203	6P SOCKET	KP200TA6L

FRONT SPEAKER ASSY

(1) CONTRAST TABLE

AWX7089 and AWX7088 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7089	AWX7088	
	IC751	M62429P	Not used	
	IC752	NJM4558LD	Not used	
	Q703	KRA103M	Not used	
	Q704	KRC101M	Not used	
	D804,D806	1SS254	Not used	
	RY702	ASR7001	Not used	
	C707,C708	CQMXA103J2A	Not used	
	C751,C752	CEAT1R0M50	Not used	
	C753,C754,C760	CEAT4R7M50	Not used	
	C755	CEAT470M10	Not used	
	C756,C757	CCCSL101J50	Not used	
	C758,C759	CEAT470M16	Not used	
	C761,C763	CCCSL221J50	Not used	
	C762,C764	CKPUYB221K50	Not used	
	C765	CKPUYF103Z25	Not used	
	C803	CEAT100M50	Not used	
	C811	Not used	CGCYX104M16	
	R711,R712,R751	RD1/4PU103J	Not used	
	R752	RD1/4PU471J	Not used	
	R753,R754	RD1/4PU121J	Not used	
	R755,R759	RD1/4PU123J	Not used	
	R756	RD1/4PU362J	Not used	
	R757,R758	RD1/4PU153J	Not used	
	R760	RD1/4PU223J	Not used	
	R765,R766	RD1/4PU104J	Not used	
	CN701	AKE7044	Not used	
	8P SPEAKER TERMINAL			
	CN701	Not used	AKE7049	
	SPEAKER TERMINAL			
	CN703 KR CONNECTOR	B2B-PH-K-S	Not used	
	CN751 4P PIN JACK	AKB7087	Not used	
	CN752	9604S-10C	Not used	
	10P FFC CONNECTOR			

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

(2) PARTS LIST FOR AWX7089

SEMICONDUCTORS

IC751	M62429P
IC801	NJM2279D
IC752	NJM4558LD
Q802	2SA933S
Q801	2SC1740S
Q701,Q703	KRA103M
Q702,Q704	KRC101M
D803-D806	1SS254

COILS

L701,L702	AF CHOKE COIL	ATH1004
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RELAYS

RY701,RY702	ASR7001
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CAPACITORS

C756,C757	CCCSL101J50
C761,C763,C804,C805	CCCSL221J50
C801-C803	CEAT100M50
C806,C807	CEAT101M10
C751,C752	CEAT1R0M50

C755	CEAT470M10
C758,C759	CEAT470M16
C753,C754,C760	CEAT4R7M50
C701-C704	CFTYA224J50
C808,C809	CKCYF103Z50

C709	CKPUYB101K50
C762,C764	CKPUYB221K50
C765,C810,C851	CKPUYF103Z25
C705-C708	CQMXA103J2A

RESISTORS

△ R701-R704	RD1/4PMF4R7J
Other Resistors	RD1/4PU□□□J

OTHERS

CN752	10P FFC CONNECTOR	9604S-10C
CN702	1P PIN JACK	AKB7042
CN751	4P PIN JACK	AKB7087
JA801	4P PIN JACK (YELLOW)	AKB7100
CN701	8P SPEAKER TERMINAL	AKE7044

CN703	KR CONNECTOR	B2B-PH-K-S
J25	JUMPER WIRE 9P	D20PYY0810E
J24	JUMPER WIRE 8P	D20PYY0915E
JA851	REMOTE CONTROL JACK	RKN1004

Mark	No.	Description	Part No.
G		HEADPHONE ASSY	
		SEMICONDUCTORS	
△	D91,D92 D961,D962	1SS254 S5688G	
		RELAY	
△	RY91	ASR7012	
		CAPACITORS	
	C961 C962 C952,C953 C951 C954	CEANP470M25 CEAT470M50 CGCYX103M16 CGCYX473M16 CKCYF103Z50	
		RESISTORS	
	All Resistors	RD1/4PU□□□J	
		OTHERS	
	951 3P CABLE HOLDER 952 12P CABLE HOLDER CN953 14P PLUG CN952 10P SOCKET CN951 4P JUMPER CONNECTOR	51052-0300 51052-1200 KM200TA14 KP250NA10 KPE4	
	JA951 HEADPHONE JACK EARTH METAL FITTING	RKN1002 VNF-091	
H		FRONT INPUT ASSY	
		CAPACITORS	
	C574,C575 C571-C573	CGCYX473M16 CKPUYB221K50	
		RESISTORS	
	All Resistors	RD1/4PU□□□J	
		OTHERS	
	JA571 3P PIN JACK (GOLD) CN571 KR CONNECTOR	AKB7098 B5B-PH-K-S	
I		TRANS 1 ASSY	
	No service parts.		
J		POWER SW ASSY	
		SWITCH	
	S51	ASG1035	
		CAPACITORS	
	C51,C52	CGCYX103K25	
		OTHERS	
	CN51 3P JUMPER CONNECTOR	KPE3	

Mark	No.	Description	Part No.
K		PRIMARY ASSY	
		SEMICONDUCTORS	
△	IC901 Q901 D905,D906 D904 D901,D902	NJM78M56FA KRC101M 1SS254 MTZJ5.1A S5688G	
		COIL	
△	L901 LINE FILTER	ATF-151	
		TRANSFORMER	
△	T901	ATT1193	
		RELAY	
△	RY901	ASR7013	
		CAPACITORS	
△	C901,C902 (10000pF/AC250V) C904 C903 C905-C907	ACG7020 CEAT470M16 CEAT471M16 CKCYF103Z50	
		RESISTORS	
	R905 Other Resistors	RD1/2PM470J RD1/4PU□□□J	
		OTHERS	
	902 3P CABLE HOLDER 906 4P CABLE HOLDER H901,H902 FUSE CLIP EARTH METAL FITTING	51063-0305 51063-0405 AKR1003 VNF-091	
	J23 JUMPER WIRE 4P J26 JUMPER WIRE 3P	D15A04-250-2651 D15A03-250-2651	

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 PARTS

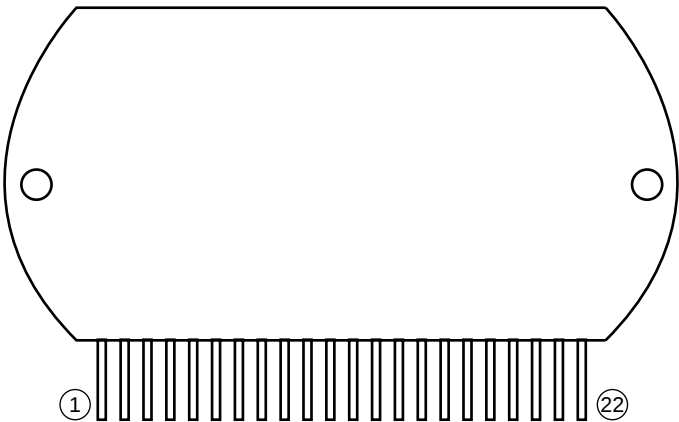
7.1.1 IC

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

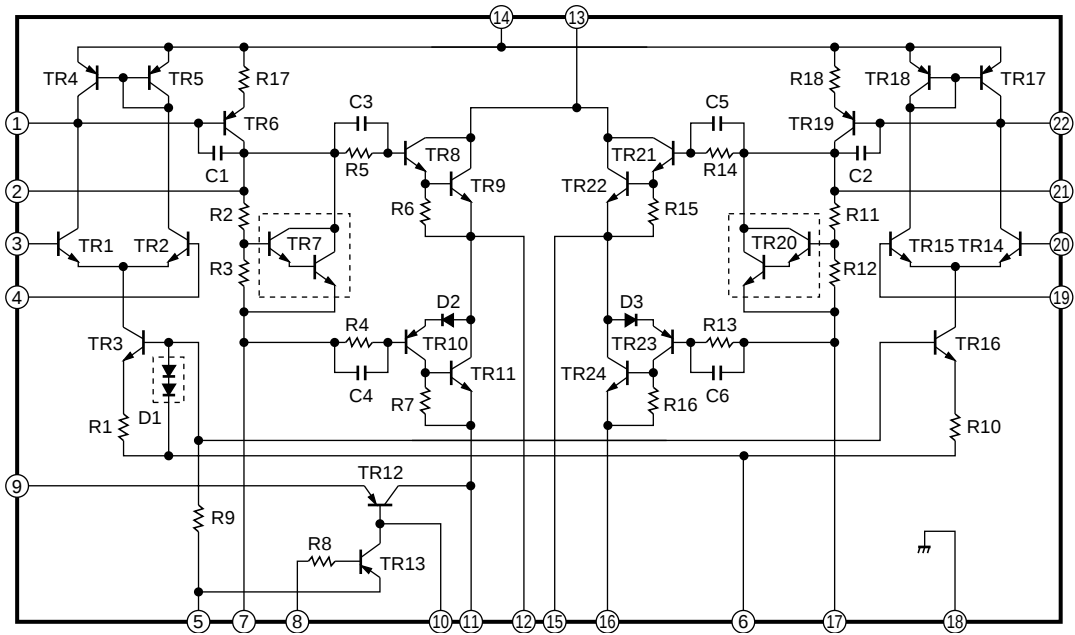
■ PAC009A (MOTHER ASSY : IC401, IC402)

• 2 ch AF Power Amplifier

●Pin Arrangement



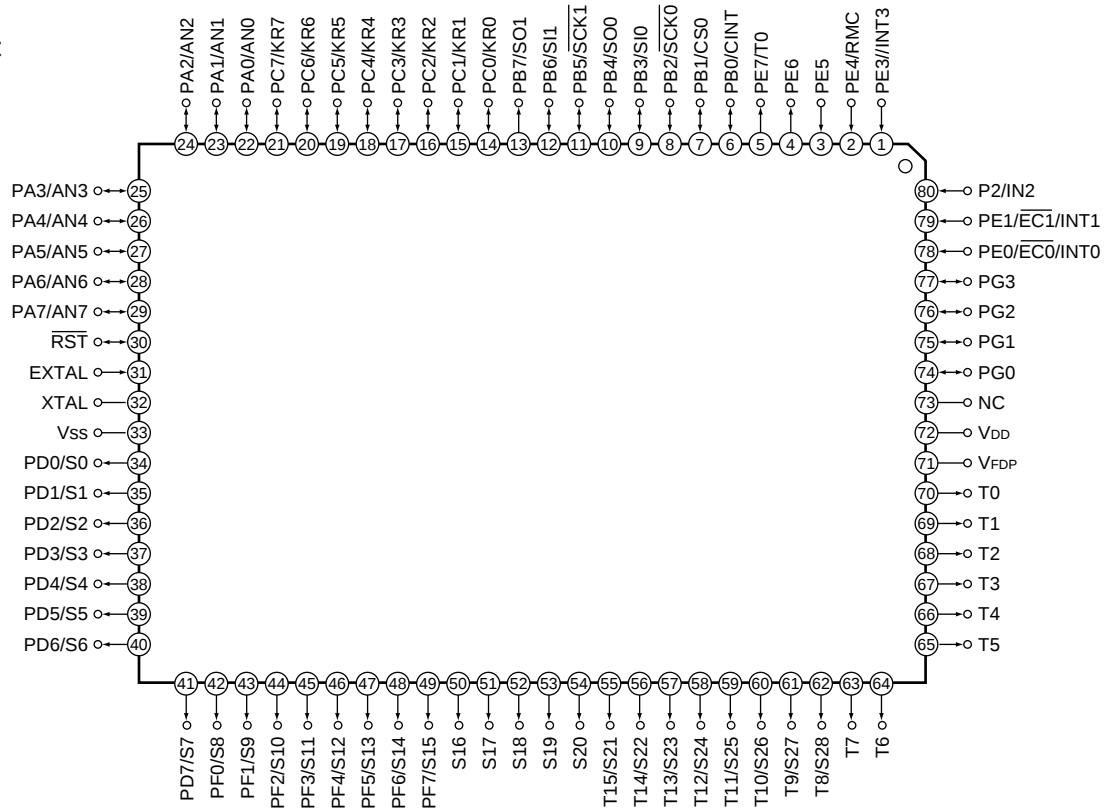
●Block Diagram



PDG212A (FRONT ASSY : IC501)

• Mode Control IC

•Pin Arrangement



•Pin Function

No.	Pin Name	I/O	Function Name	Function
1	PE3/INT3	I	TUNED	"L" inputs when TUNER is TUNE state. Only when IF count is right (when lighting is permitted), "TUNED" indicator in the FL can be turned on after the IF count.
2	PE4/RMC	I	REMOCON	Inputs the remote control receiver output
3	PE5	I	STEREO	When TUNER receives stereophonic broadcasting, "L" input. Ignore it at the time of forced MONO. "STEREO" indicator in the FL turned on when TUNED is "L" and STEREO is "L" at the "TUNED" indicator lighting is permitted.
4	PE6	O	FM+	ON and OFF the Transistor switch for VDD of the RDS decoder. "L" for AM and "H" for FM without relation to the FUNCTION.
5	PE7/T0	O	T. MUTE	MUTE control of the TUNER output
6	PB0/CINT	I	PLL DO	Data input from the PLL IC Read-in the IF frequency by this data. Request outputs from the microprocessor.
7	PB1/CS0	O	PLL CE	Chip enable of serial control of the TUNER PLL IC
8	PB2/SCK0	O	PLL CK	Clock of serial control of the TUNER PLL IC
9	PB3/SIO	O	PLL DA	Data of serial control of the TUNER PLL IC
10	PB4/SO0	O	AC RY	ON and OFF the transistor switch for AC power relay Stand-by : "L" , Power ON : "H"
11	PB5/SCK1	O	PROT RY	SP A SP A+B SP OFF
12	PB6/SI1	O	A+B RY	pin 12 : H H L pin 13 : L H L
13	PB7/SO1	O	NC	Not used
14	PC0/KR0	I	KEY IN1	Key scan input
15	PC1/KR1	I	KEY IN2	
16	PC2/KR2	I	KEY IN3	
17	PC3/KR3	I	D.C.DET.	DC detector input of the protection circuit When "L" is input, open relays excepting AC relay. 8-figures section of FL flashes as "POWEROFF" at "L".
18	PC4/KR4	I	O.L.DET.	
19	PC5/KR5	O	DIRECT	DSP/BYPATH At 6 ch input DIRECT MUTE
20	PC6/KR6	O	6CH RY	pin 19 : L H L pin 20 : L L H H
21	PC7/KR7	OL	NC	Not used
22	PA0/AN0	O	FUNC. ST	Serial control strobe of the function IC (TC9163AN)
23	PA1/AN1	O	FUNC. DA	Control the Function IC and DSP IC with the serial control data

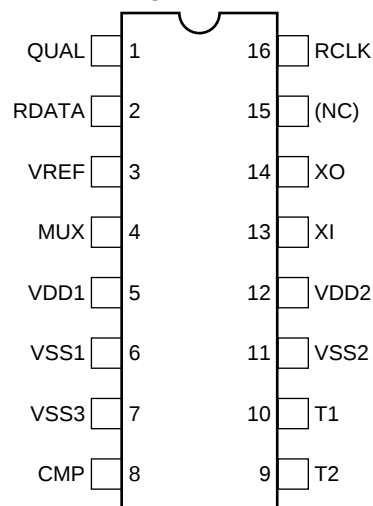
VSX-607RDS, VSX-407RDS

No.	Pin Name	I/O	Function Name	Function
24	PA2/AN2	O	FUNC. CK	Control the FUNCTION IC, DSP IC, TONE IC and E. VOL IC with the serial control clock
25	PA3/AN3	O	XLAT	Serial control latch of the DSP IC (CXD2724Q)
26	PA4/AN4	O	RESET (DSP)	Reset DSP IC (CXD2724Q)
27	PA5/AN5	I	REDY	For communicating with DSP IC (CXD2724Q) L :Inhibit the data transfer H :Permit the data transfer
28	PA6/AN6	O	TONE DA	Serial control data of TONE IC (M62420FP)
29	PA7/AN7	O	E. VOL DA	Serial control data of E. VOL IC (M62429P)
30	$\overline{\text{RST}}$	–	RST	Reset
31	EXTAL	–	EXTAL	Connect the crystal resonator (7.7MHz or 7.2MHz)
32	XTAL	–	XTAL	
33	Vss	–	Vss	Ground
34	PD0/S0	OL	NC	Not used
35	PD1/S1	O	SURROUND RY	ON and OFF the transistor switch for SURROUND relay
36	PD2/S2	O	LOUNDNESS	On and OFF the transistor switch of LOUNDNESS ON : Lights up "LOUNDNESS" character in FL DIRECT ON : Forced OFF
37	PD3/S3	O	A. MUTE	Control the system mute control of the AUDIO system
38	PD4/S4	O	V. MUTE	Control the VIDEO IC (NJM2279D) VCR :H, DVD :H, F.V. :H, AUDIO system :L
39	PD5/S5	O	V. CONT A	Control the VIDEO IC (NJM2279D) VCR :L, DVD :L, F.V. :H, AUDIO system :L
40	PD6/S6	O	V. CONT B	Control the VIDEO IC (NJM2279D) VCR :L, DVD :H, F.V. :H, AUDIO system :L
41	PD7/S7	O	FL Seg 21	FL driver
42	PF0/S8	O	FL Seg 20	
43	PF1/S9	O	FL Seg 19	
44	PF2/S10	O	FL Seg 18	
45	PF3/S11	O	FL Seg 17/KO10	FL driver / Key scan out
46	PF4/S12	O	FL Seg 16/KO9	
47	PF5/S13	O	FL Seg 15/KO8	
48	PF6/S14	O	FL Seg 14/KO7	
49	PF7/S15	O	FL Seg 13/KO6	
50	S16	O	FL Seg 12/KO5	
51	S17	O	FL Seg 11/KO4	
52	S18	O	FL Seg 10/KO3	
53	S19	O	FL Seg 9/KO2	
54	S20	O	FL Seg 8/KO1	
55	T15/S21	O	FL Seg 7	FL driver
56	T14/S22	O	FL Seg 6	
57	T13/S23	O	FL Seg 5	
58	T12/S24	O	FL Seg 4	
59	T11/S25	O	FL Seg 3	
60	T10/S26	O	FL Seg 2	
61	T9/S27	O	FL Seg 1	
62	T8/S28	O	FL Grid. 9	FL driver
63	T7	O	FL Grid. 8	
64	T6	O	FL Grid. 7	
65	T5	O	FL Grid. 6	
66	T4	O	FL Grid. 5	
67	T3	O	FL Grid. 4	
68	T2	O	FL Grid. 3	
69	T1	O	FL Grid. 2	
70	T0	O	FL Grid. 1	
71	VFDP	–	VFDP	Power supply
72	VDD	–	5V	Power supply
73	NC	–	5V	Power supply
74	PG0	O	VOL. DOWN	Motor volume control VOL DOWN : L
75	PG1	O	VOL. UP	Motor volume control VOL UP : L
76	PG2	OL	NC	Not used
77	PG3	OL	NC	Not used
78	PE0/ $\overline{\text{EC0}}$ /INT0	I	WAKE UP	AC wake up input
79	PE1/ $\overline{\text{EC1}}$ /INT1	I	RDS CK	Serial control CLK of RDS communication
80	PE2/IN2	I	RDS DA	Serial control DATA of RDS communication

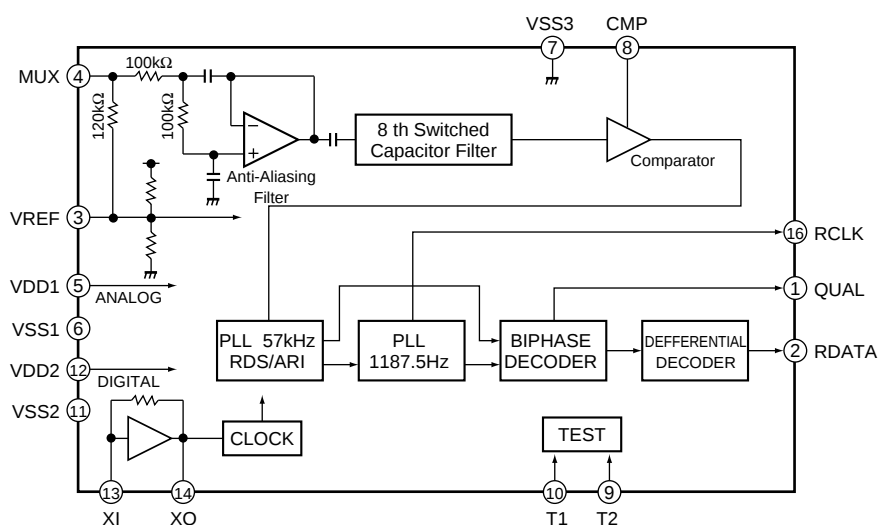
BU1923 (FRONT ASSY : IC581)

• Radio Data System (RDS) Demodulation IC

•Pin Arrangement



•Block Diagram



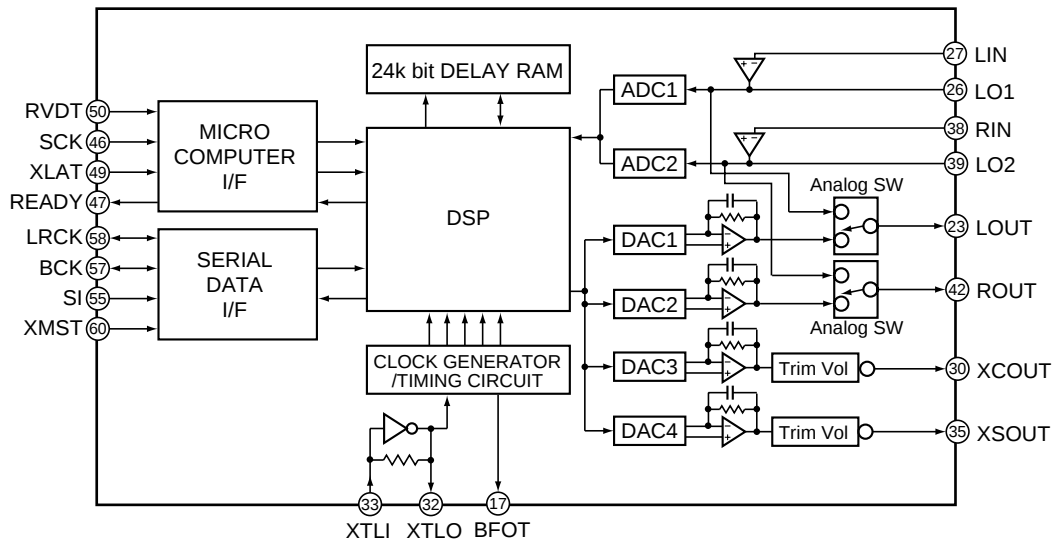
•Pin Function

No.	Pin Name	Function	No.	Pin Name	Function
1	QUAL	Demodulation quality fine data :H , error data :L	9	T2	Test input H : stops the internal clock , L or open : movements
2	RDATA	Demodulation data	10	T1	Test input Open or connect to GND.
3	VREF	Reference power supply (1/2 VDD1)	11	VSS2	Digital power supply (4.5V to 5.5V)
4	MUX	Composite signal input	12	VDD2	Digital power supply (4.5V to 5.5V)
5	VDD1	Analog power supply (4.5V to 5.5V)	13	XI	Connect the crystal resonator (4.332MHz)
6	VSS1		14	XO	
7	VSS3		15	(NC)	Non connection
8	CMP	Comparator	16	RCLK	Demodulation clock (1187.5kHz)

■ CXD2724Q (VOLUME DSP ASSY : IC201)

• DSP IC

●Block Diagram



●Pin Function

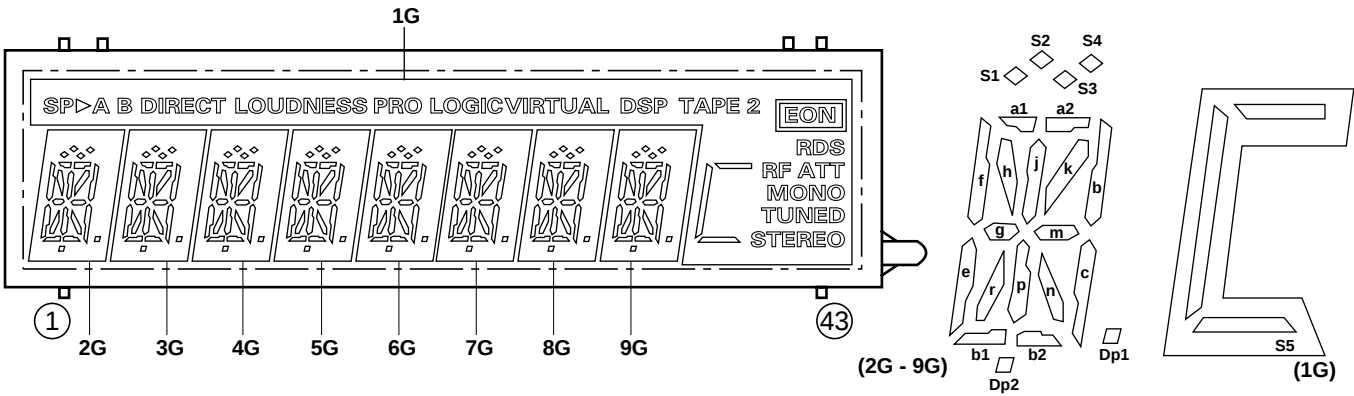
No.	Pin Name	I/O	Function
1-3	T.P	O	Monitor pin for test Normally, outputs "L".
4	VSS0	—	Digital ground
5-8	T.P	O	Monitor pin for test Normally, outputs "L".
9	TST0	I	Test pin Normally, fix to "L".
10	VDD0	—	Digital power supply
11	VSS1	—	Digital ground
12	TST1	I	Test pin Normally, fix to "L".
13	TST2	I	Test pin Normally, fix to "L".
14	TST3	I	Test pin Normally, fix to "L".
15	TST4	I	Test pin Normally, fix to "L".
16	XRST	I	System reset input L : reset.
17	BFOT	O	Clock and divided frequency output (384/768/256/512 fs)
18	CSL1	I	Test pin Normally, fix to "H".
19	CSL2	I	Test pin Normally, fix to "L".
20	VSS2	—	Digital ground
21	AVS3	—	Ground for L-ch D/A converter
22	AVD3	—	Power supply for L-ch D/A converter
23	LOUT	O	L-ch A/D converter output
24	AVD1	—	Power supply for L-ch A/D converter
25	AVS1	—	Ground for L-ch A/D converter
26	LO1	O	OP amp. inverting output for LPF of L-ch A/D converter
27	LIN	I	Analog input of L-ch A/D converter
28	AVD5	—	Power supply for C-ch D/A converter
29	AVS5	—	Ground for C-ch D/A converter
30	XCOUT	O	C-ch D/A converter output
31	AVDX	—	Analog power supply for master clock
32	XTLO	O	Crystal oscillation circuit output

No.	Pin Name	I/O	Function
33	XTLI	I	Crystal oscillation circuit input
34	AVSX	–	Analog ground for master clock
35	XSOUT	O	S-ch D/A converter output
36	AVS6	–	Ground for S-ch D/A converter
37	AVD6	–	Power supply for S-ch D/A converter
38	RIN	I	Analog input of R-ch A/D converter
39	LO2	O	OP amp. inverting output for LPF of R-ch A/D converter
40	AVS2	–	Ground for R-ch A/D converter
41	AVD2	–	Power supply for R-ch A/D converter
42	ROUT	O	R-ch D/A converter output
43	AVD4	–	Power supply for R-ch D/A converter
44	AVS4	–	Ground for R-ch D/A converter
45	VSS3	–	Digital ground
46	SCK	I	Shift clock input of microprocessor interface
47	REDY	O	Transfer permission signal output of microprocessor interface L : Transfer prohibition
48	T.P	–	Monitor pin for test Normally, outputs "Hi-Z".
49	XLAT	I	Latch input of microprocessor interface
50	RVDT	I	Data input of microprocessor interface
51	XS24	I	24/32 bit slot selection of serial data L : 24 bit slot (It is effective at slave mode.)
52	VDD1	–	Digital power supply
53	VSS4	–	Digital ground
54	T.P	–	Monitor pin for test Normally, outputs "L".
55	SI	I	Serial data input of 1 sampling 2 channel
56	T.P	–	Input pin for test Normelly, outputs "L".
57	BCK	I/O	Serial bit transfer clock of serial input/output data SI and SO
58	LRCK	I/O	Sampling frequency clock of serial input/output data SI and SO
59	VSS5	–	Digital ground
60	XMST	I	Master/slave mode switching input of BCK and LRCK L : master mode
61-63	T.P	O	Monitor pin for test Normally, outputs "L".
64	VSS6	–	Digital ground
65-72	T.P	O	Monitor pin for test Normally, outputs "L".
73	VDD2	–	Digital power supply
74	VSS7	–	Digital ground
75-80	T.P	O	Monitor pin for test Normally, outputs "L".

7.1.2 DISPLAY

AAV7053 (FRONT ASSY : V501)

• FL TUBE



● ANODE AND GRID ASSIGNMENT

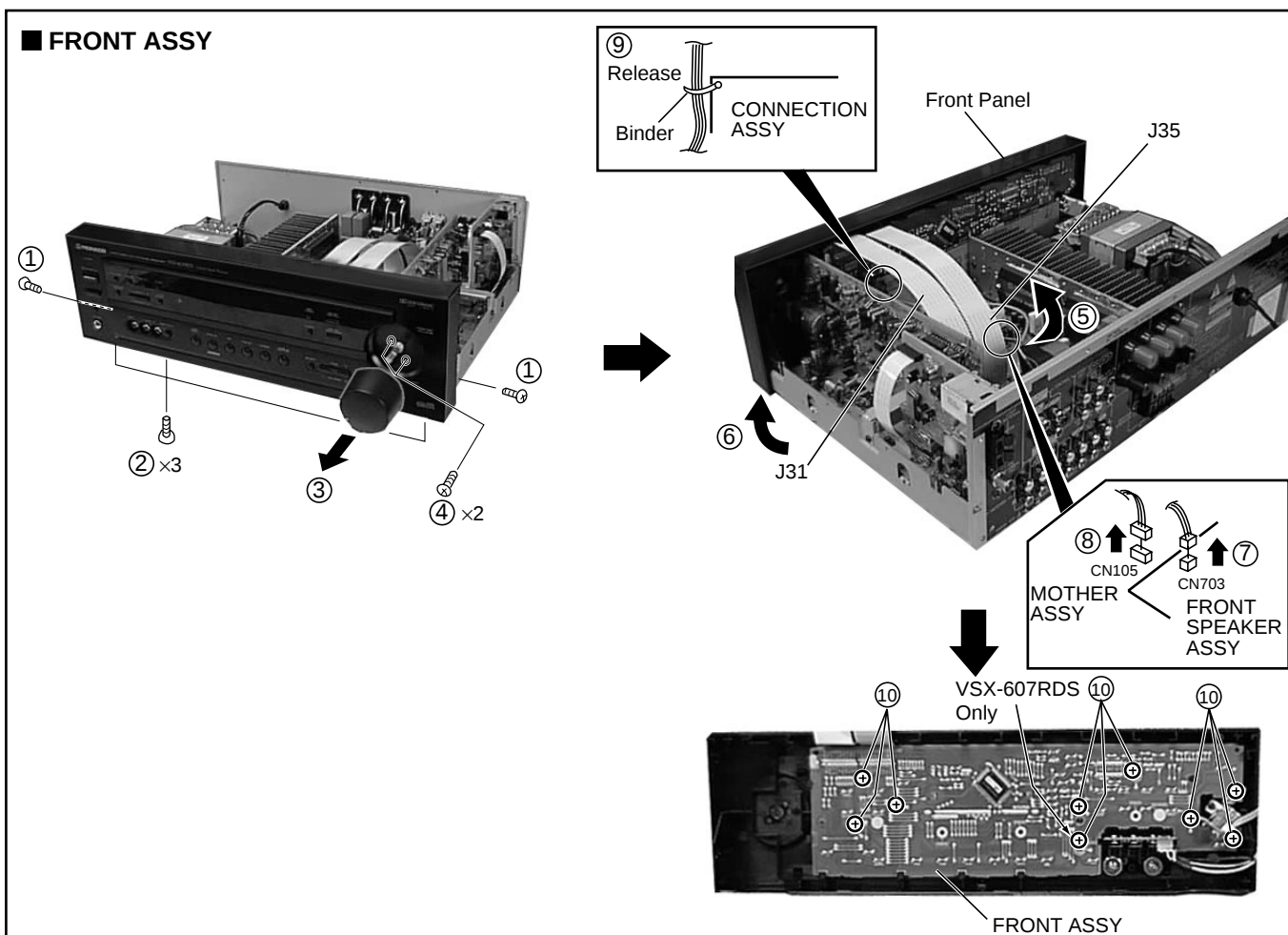
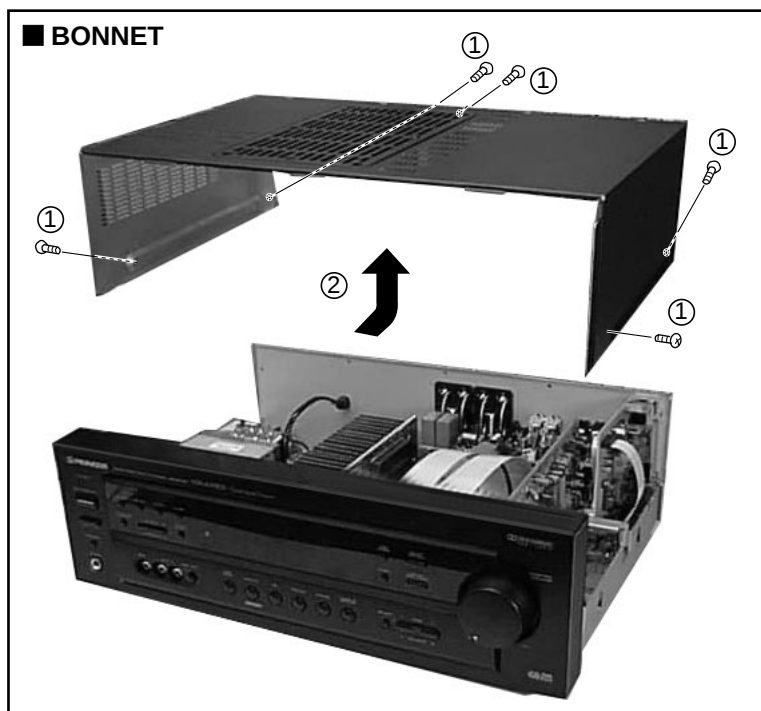
	1G	2G	3G	4G	5G	6G	7G	8G	9G
P1	SP>	a1	a1	a1	a1	a1	a1	a1	a1
P2	A	a2	a2	a2	a2	a2	a2	a2	a2
P3	B	h	h	h	h	h	h	h	h
P4	DIRECT	j	j	j	j	j	j	j	j
P5	LOUDNESS	k	k	k	k	k	k	k	k
P6	PRO LOGIC	b	b	b	b	b	b	b	b
P7	VIRTUAL	f	f	f	f	f	f	f	f
P8	DSP	m	m	m	m	m	m	m	m
P9	TAPE 2	g	g	g	g	g	g	g	g
P10	EON	c	c	c	c	c	c	c	c
P11	RDS	e	e	e	e	e	e	e	e
P12	S5	r	r	r	r	r	r	r	r
P13	RF ATT	p	p	p	p	p	p	p	p
P14	MONO	n	n	n	n	n	n	n	n
P15	TUNED	d1	d1	d1	d1	d1	d1	d1	d1
P16	STEREO	d2	d2	d2	d2	d2	d2	d2	d2
P17	—	Dp1	Dp1	Dp1	Dp1	Dp1	Dp1	Dp1	Dp1
P18	—	S1, S3	S1, S3	S1, S3	S1, S3	S1, S3	S1, S3	S1, S3	S1, S3
P19	—	S4	S4	S4	S4	S4	S4	S4	S4
P20	—	S2	S2	S2	S2	S2	S2	S2	S2
P21	—	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2

● PIN ASSIGNMENT

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Connection	F1	F1	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	NX	NX	NX	NX	NX	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	NP	NP	F2	F2

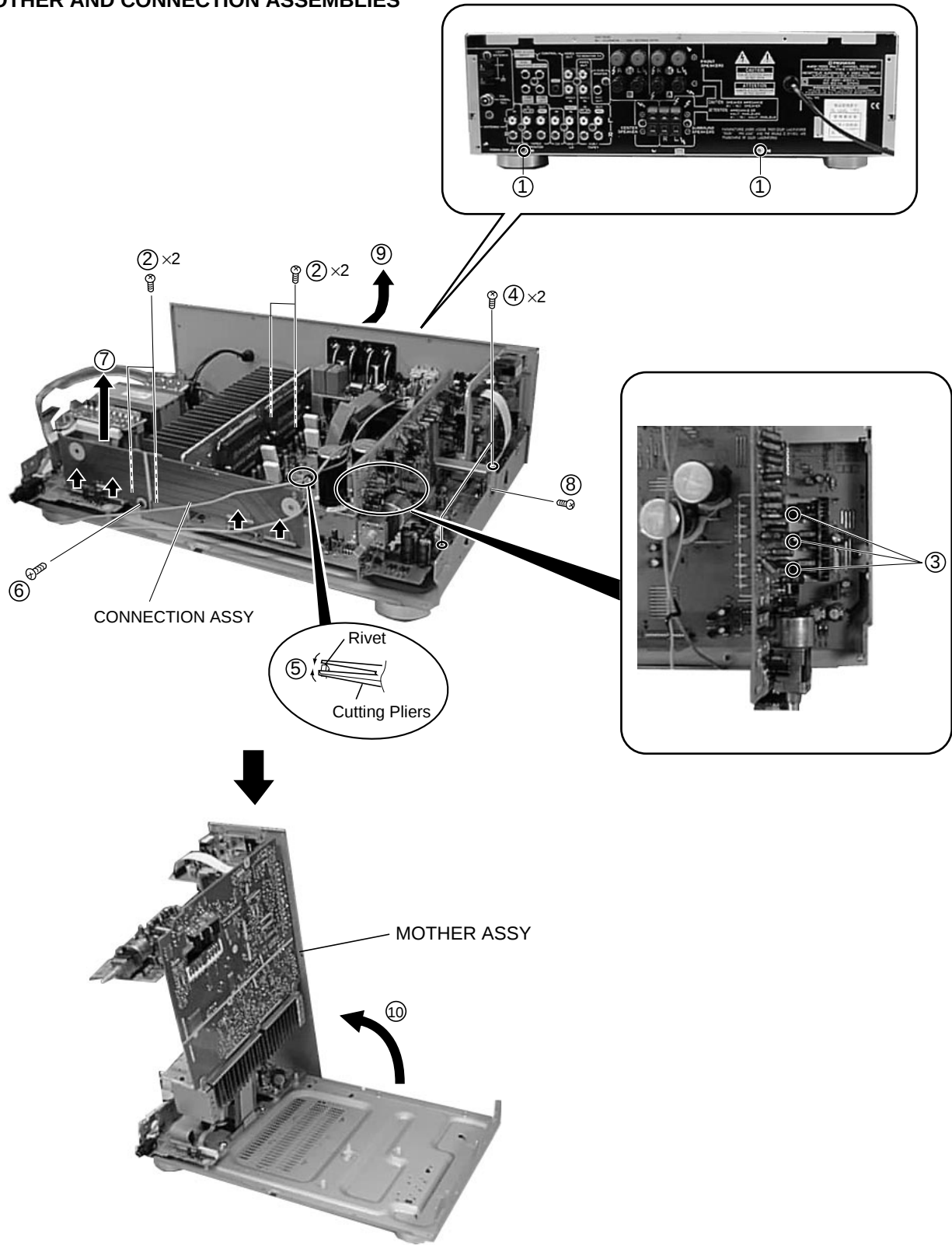
7.2 DISASSEMBLY

7.2.1 Bonnet and FRONT Assy



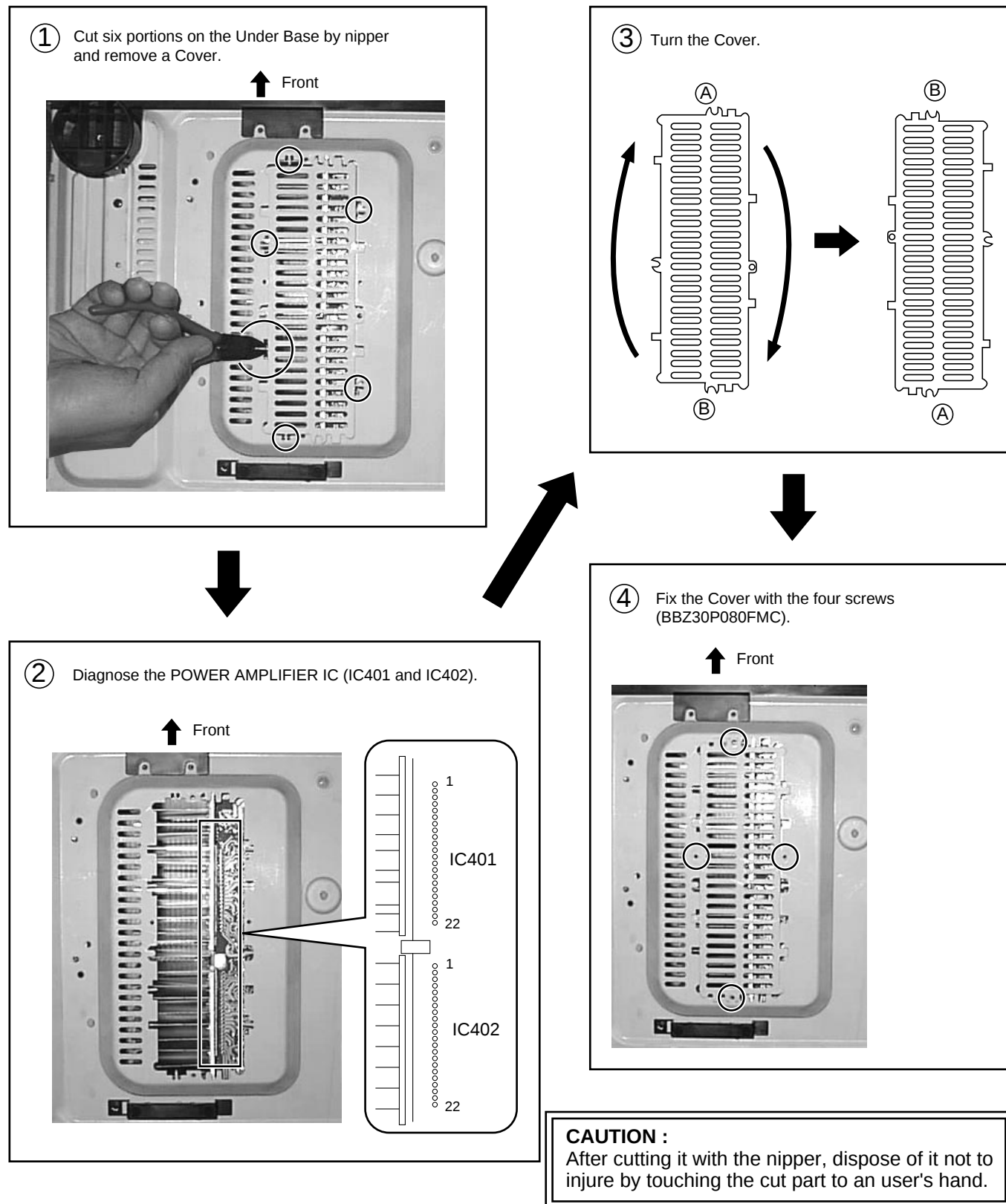
7.2.2 MOTHER and CONNECTION Assemblies

■ MOTHER AND CONNECTION ASSEMBLIES

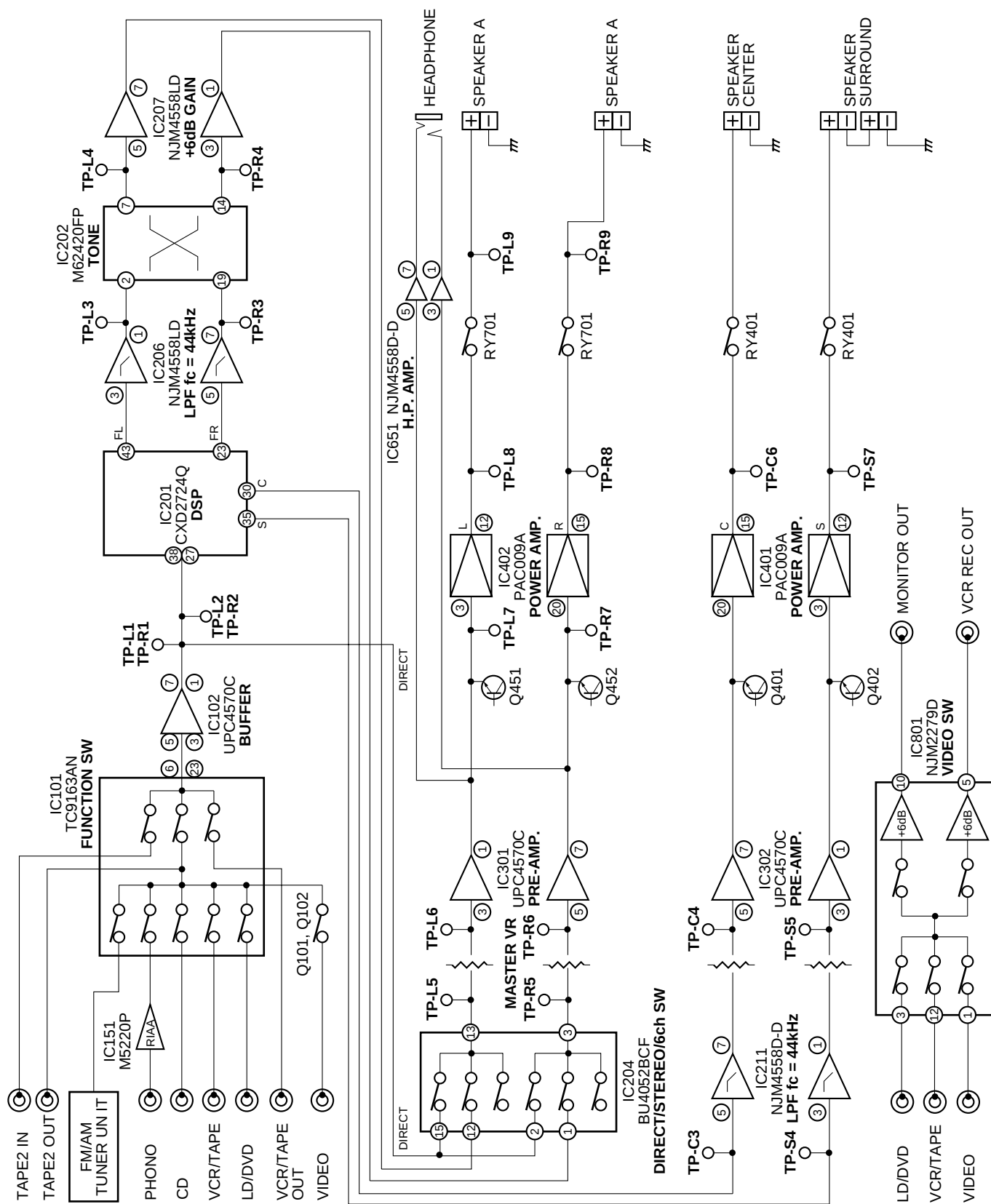


7.3 DIAGNOSIS

■ POWER AMPLIFIER IC (MOTHER ASSY : IC401 and IC402) (At Bottom Side)



7.4 BLOCK DIAGRAM



● Test Points for Diagnosis

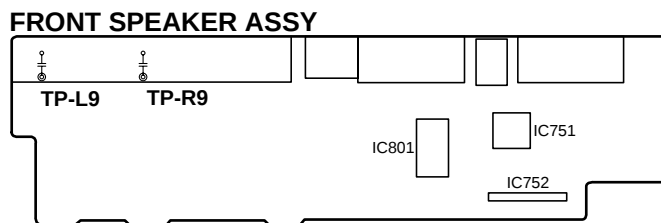
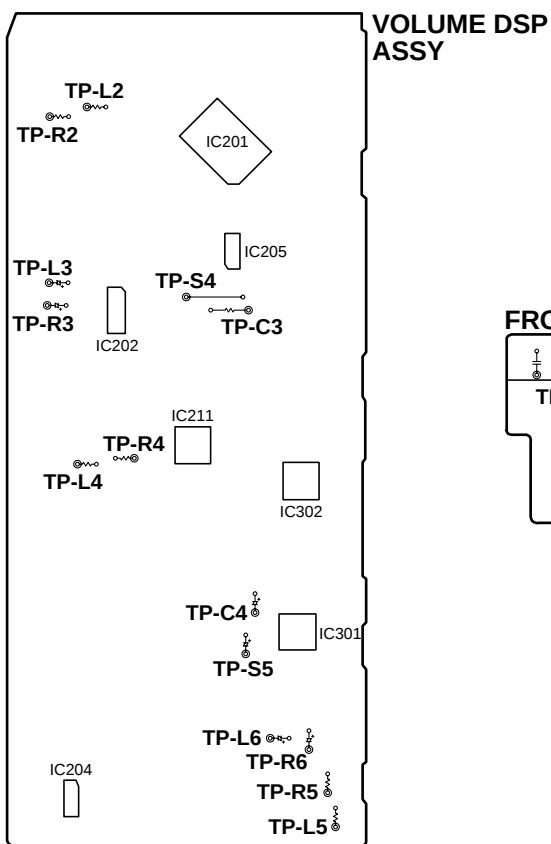
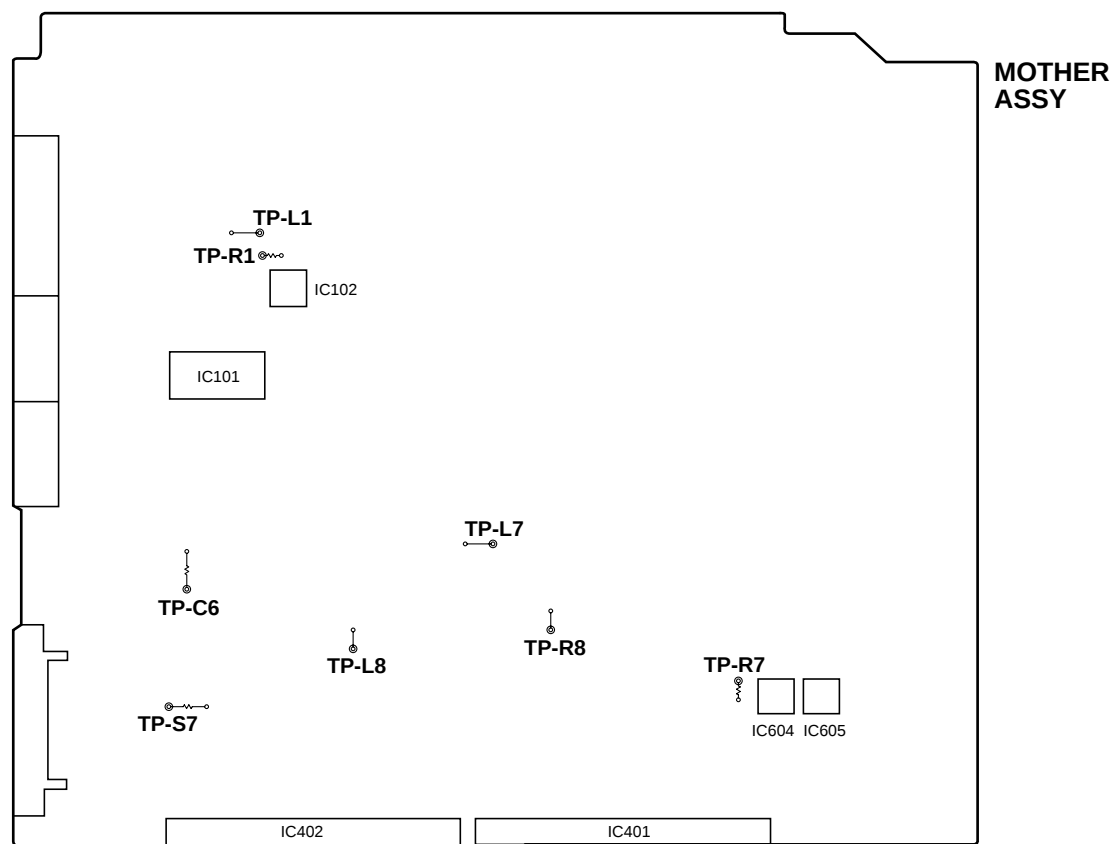
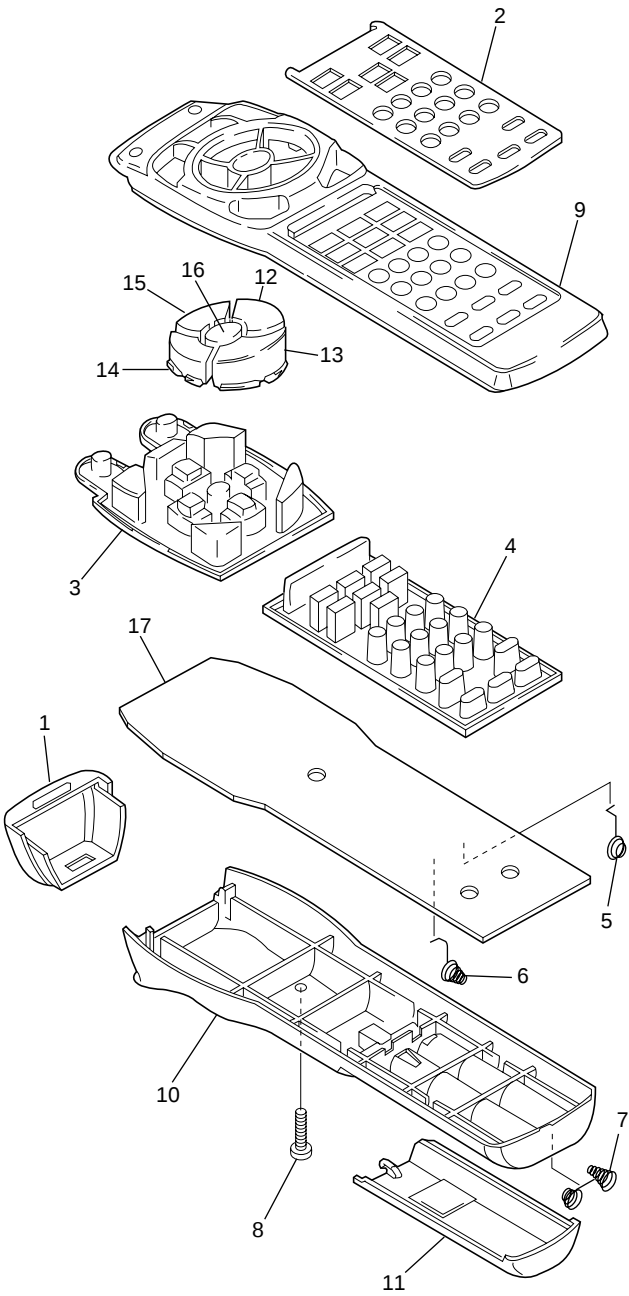


Fig.1 Test Point Location

7.5 REMOTE CONTROL UNIT [CU-VSX131 (AXD7169)] (VSX-607RDS ONLY)

7.5.1 EXPLODED VIEWS AND PARTS LIST

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

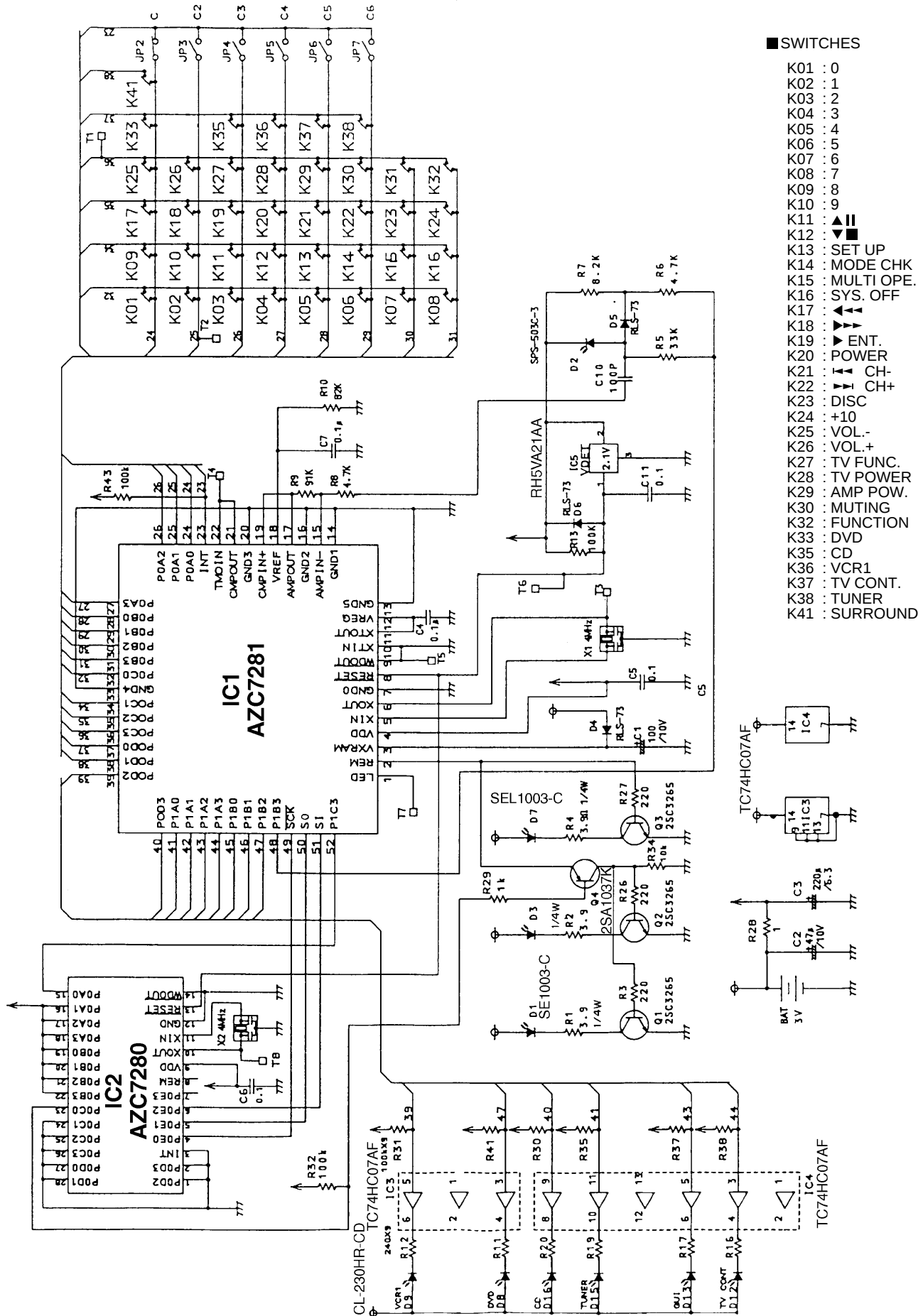


● Parts List

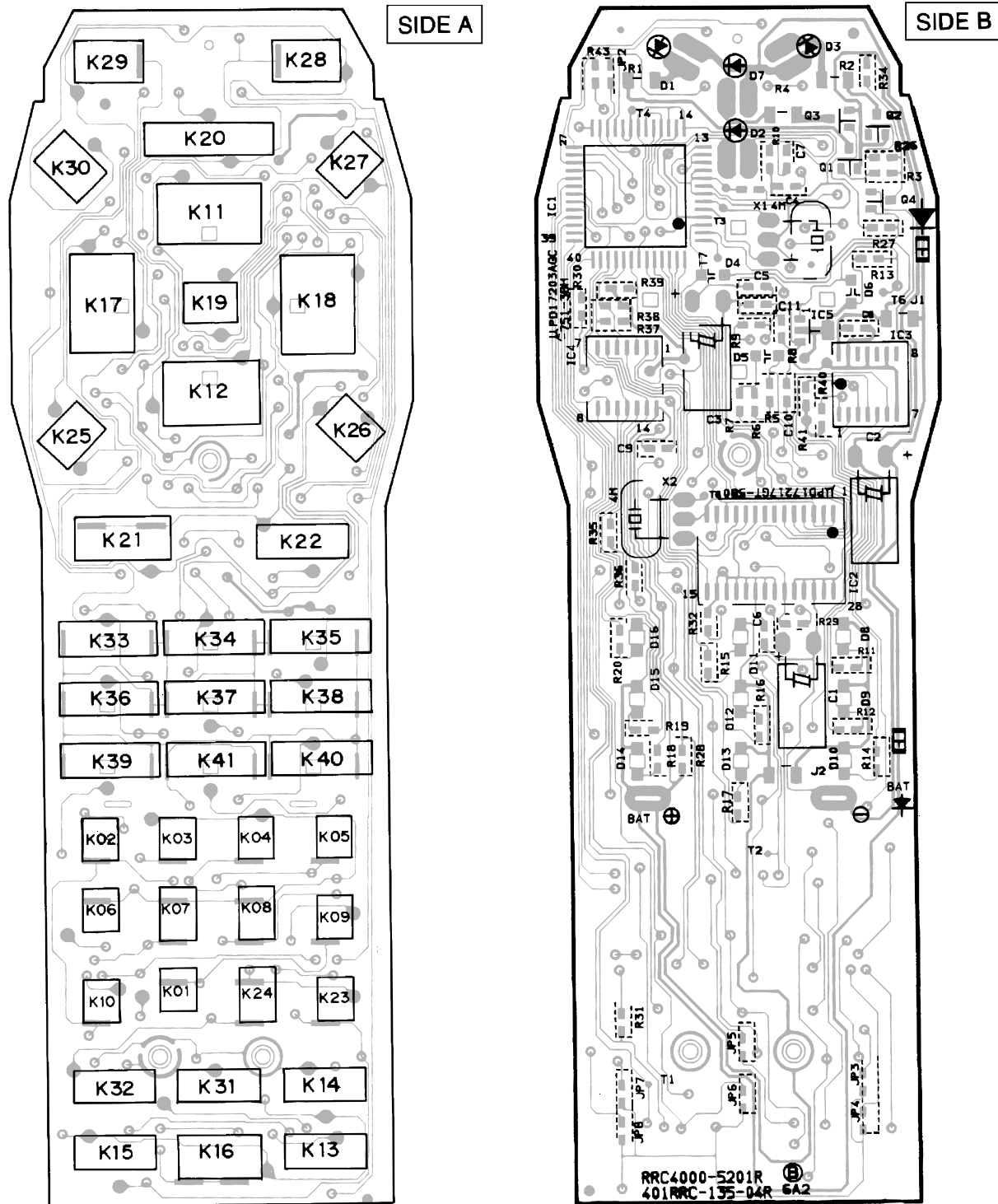
Mark	No.	Description	Part No.
	1	Filter	AZA7152
	2	Name Plate	AZA7301
	3	Rubber Sheet (A)	AZA7289
	4	Rubber Sheet (B)	AZA7300
	5	Spring (+)	AZB7049
	6	Spring (-)	AZB7050
	7	Spring	AZB7051
	8	Screw	AZB7052
	9	Remo-con Case (A)	AZN7712
	10	Remo-con Case (B)	AZN7326
	11	Battery Cover	AZN7327
	12	Main Key (FF)	AZN7666
	13	Main Key (STOP)	AZN7329
	14	Main Key (REV)	AZN7665
	15	Main Key (PAUSE)	AZN7331
	16	Main Key (PLAY)	AZN7664
NSP	17	PCB	AZW7243

7.5.2 SCHEMATIC DIAGRAM

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



7.5.3 PCB DIAGRAM



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

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

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

1 Ω $\rightarrow$ 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 Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC $\boxed{5} \boxed{6} \boxed{2} \boxed{1} F$

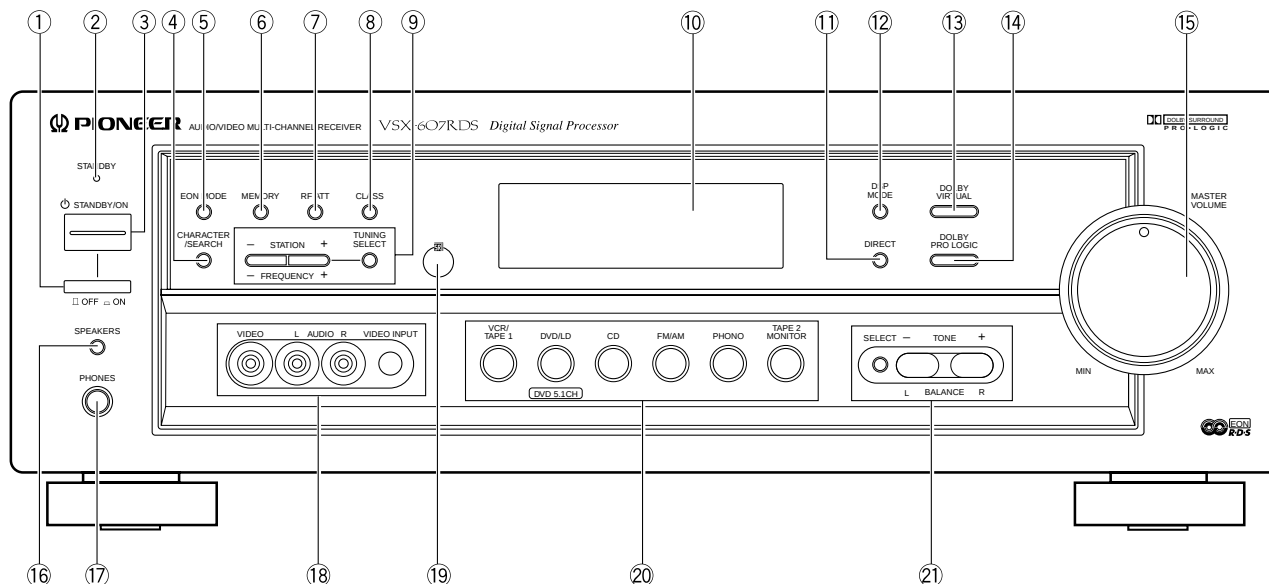
Mark No.	Description	Part No.
SEMICONDUCTORS		
IC1		AZC7281
IC2		AZC7280
IC3,IC4		TC74HC07AF
IC5		RH5VA21AA
Q4		2SA1037K
Q1-Q3		2SC3265
D1,D3,D7		SE1003-C
D2		SPS-503C-3
D8,D9,D12,D13,D15,D16		CL-230HR-CD
D4-D6		RLS-73
CAPACITORS		
C2		CEJA470M10
C4-C7,C11		CKSQYB104K25
C3		CEJA221M6R3
C1		CEJA101M6R3
C10		CCSQCH101J50
RESISTORS		
R2001,R2002		RS1/8S0R0J
R1,R2,R4		RS1/8S3R9J
Other Resistors		RS1/10S $\square\square\square$ J
OTHERS		
X1,X2	CERAMIC RESONATOR	KBR-4.0M (4MHz)

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Panel

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

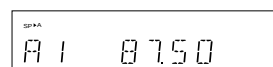


- ① **Power switch**
- ② **STANDBY indicator**
- ③ **STANDBY/ON button**
- ④ **CHARACTER/SEARCH button**
- ⑤ **EON MODE button**
- ⑥ **MEMORY button**
- ⑦ **RF ATT button**

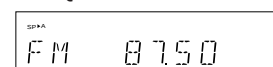
Set this button to on when receiving strong FM signals (nearby stations) to reduce sound distortion. Normally, this button should be set off. This button does not affect AM reception.

- ⑧ **CLASS button**
 - ⑨ **TUNING SELECT, STATION (-, +) and FREQUENCY (-, +) buttons**
- TUNING SELECT:**
Use to select the STATION mode and FREQUENCY mode when operating the tuner.

STATION mode:



FREQUENCY mode:



STATION (-, +):

Use to select the station number when operating the tuner.

FREQUENCY (-, +):

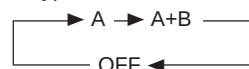
Use to select the frequency when operating the tuner.

- ⑩ **Display**
- ⑪ **DIRECT button**

Use to play back sound without going through the tone and balance control circuits. DOLBY PRO LOGIC, DSP MODE, DOLBY VIRTUAL and LOUDNESS also turn off.

- ⑫ **DSP MODE button**
- ⑬ **DOLBY VIRTUAL button**
- ⑭ **DOLBY PRO LOGIC button**
- ⑮ **MASTER VOLUME**
- ⑯ **SPEAKERS button**

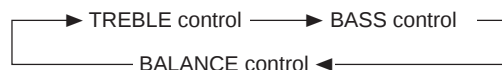
Switches as follows with each press (FRONT SPEAKER only).



- ⑰ **PHONES jack (Headphone terminal)**
- ⑱ **VIDEO INPUT button/terminals**
- ⑲ **Remote sensor**
- ⑳ **Function buttons**
- ㉑ **SELECT, TONE (-, +) and BALANCE (L, R) buttons**

SELECT:

Use to select the TONE (TREBLE, BASS) and BALANCE control.



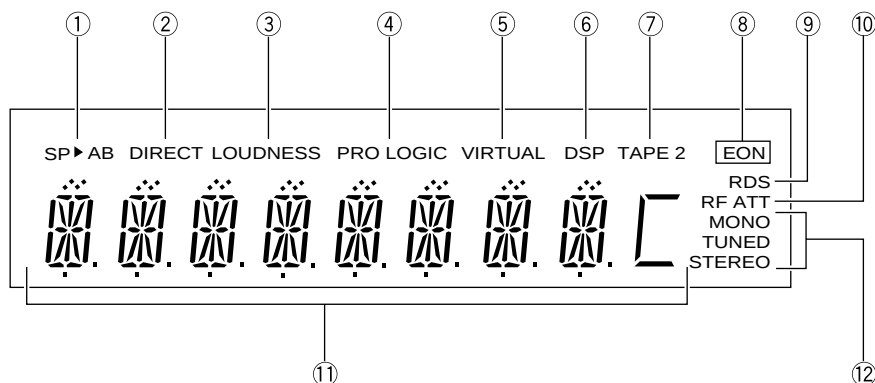
TONE (-, +):

Use to adjust tone.

BALANCE (L, R):

Use to adjust volume balance.

■ Display



① **SPEAKERS A, B indicator**

The indicator of the FRONT SPEAKER (A, A and B) selected will light.

② **DIRECT indicator**

Lights when DIRECT is ON.

③ **LOUDNESS indicator**

Lights when LOUDNESS is ON.

④ **PRO LOGIC indicator**

Lights when Dolby Pro Logic is selected.

⑤ **VIRTUAL indicator**

Lights when DOLBY VIRTUAL is selected.

⑥ **DSP indicator**

Lights when HALL, JAZZ, DANCE, THEATER 1 and THEATER 2 has been selected with the DSP MODE button.

⑦ **TAPE 2 indicator**

Lights when TAPE 2 MONITOR is ON.

⑧ **EON MODE indicator**

Lights when EON MODE is ON.

⑨ **RDS indicator**

Lights when RDS broadcast is received.

⑩ **RF ATT indicator**

⑪ **CHARACTER display**

⑫ **TUNER indicator**

MONO:

Lights when the monaural mode is set using the MPX MODE button.

TUNED:

Lights when broadcasts are being received.

STEREO:

Lights when stereo broadcasts are received during auto stereo mode.

■ For better reception of signals, use the FM external antenna.



AM indoor antenna (Vinyl-coated wire)

AM outdoor antenna

5 to 6 m

GND

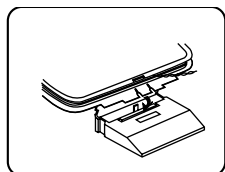
LOOP ANTENNA

AM

FM UNBAL 75Ω

Don't detach the AM

■ Assembling the AM loop antenna

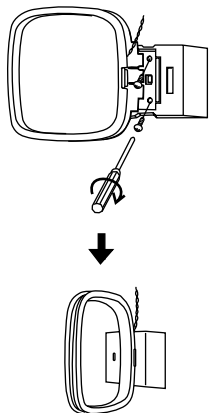


FM antenna



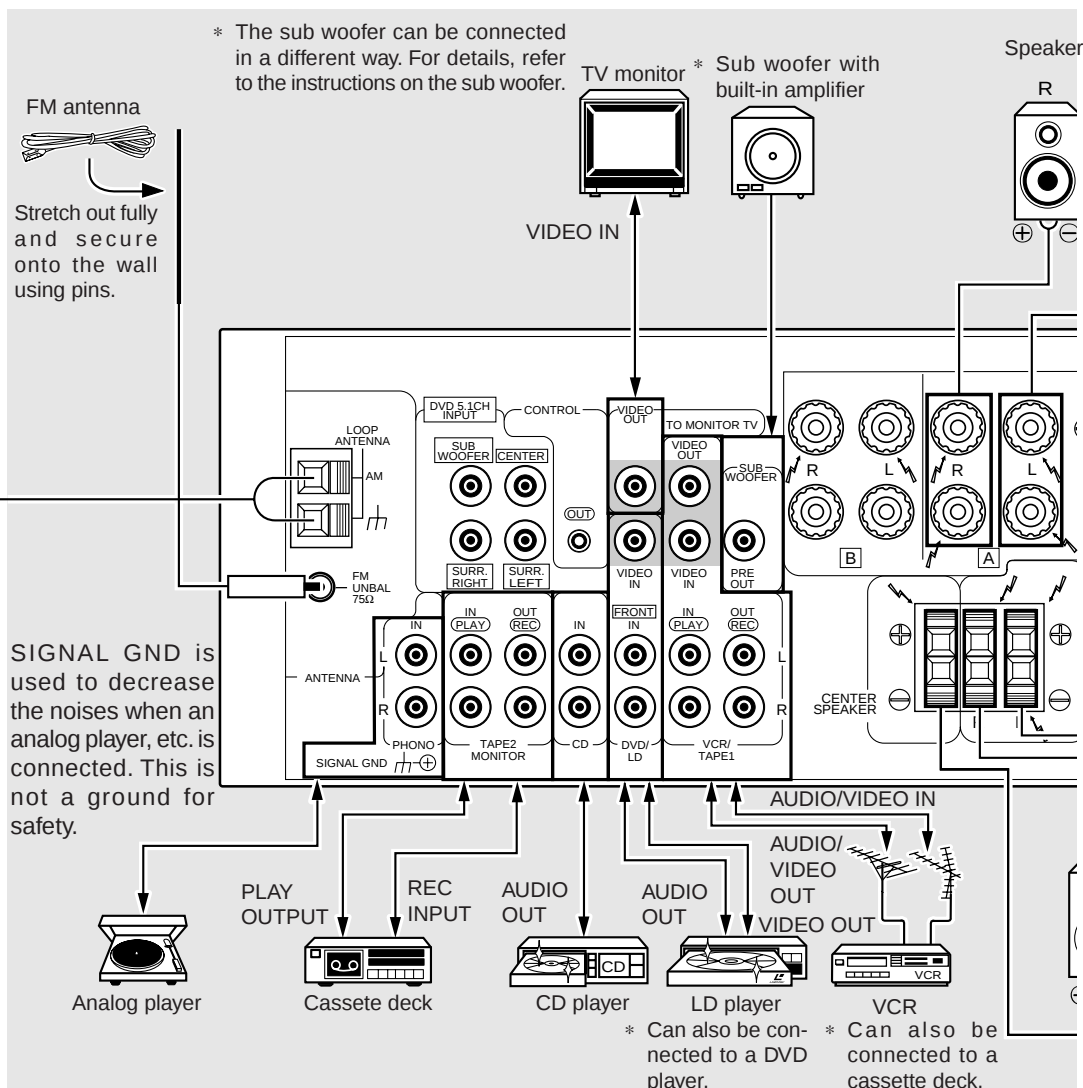
Stretch out fully and secure onto the wall using pins.

■ When attached on a wall, etc.



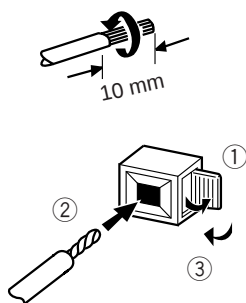
Face towards the direction
with the best reception.

* The sub woofer can be connected in a different way. For details, refer to the instructions on the sub woofer.

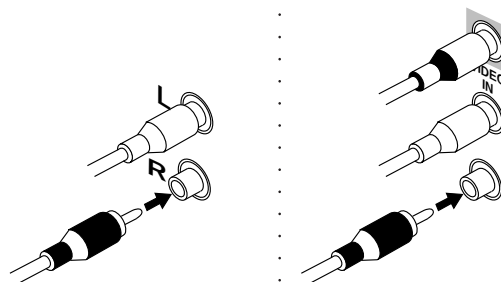


■ AM Antenna terminal

Twist the wire core.



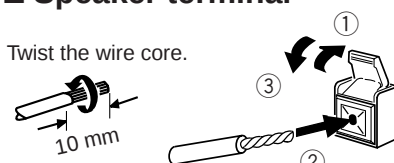
■ Input/output plug



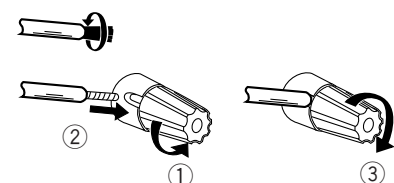
Connect the white plug to L, red plug to R, and yellow plug to VIDEO. Be sure to insert completely.

■ Speaker terminal

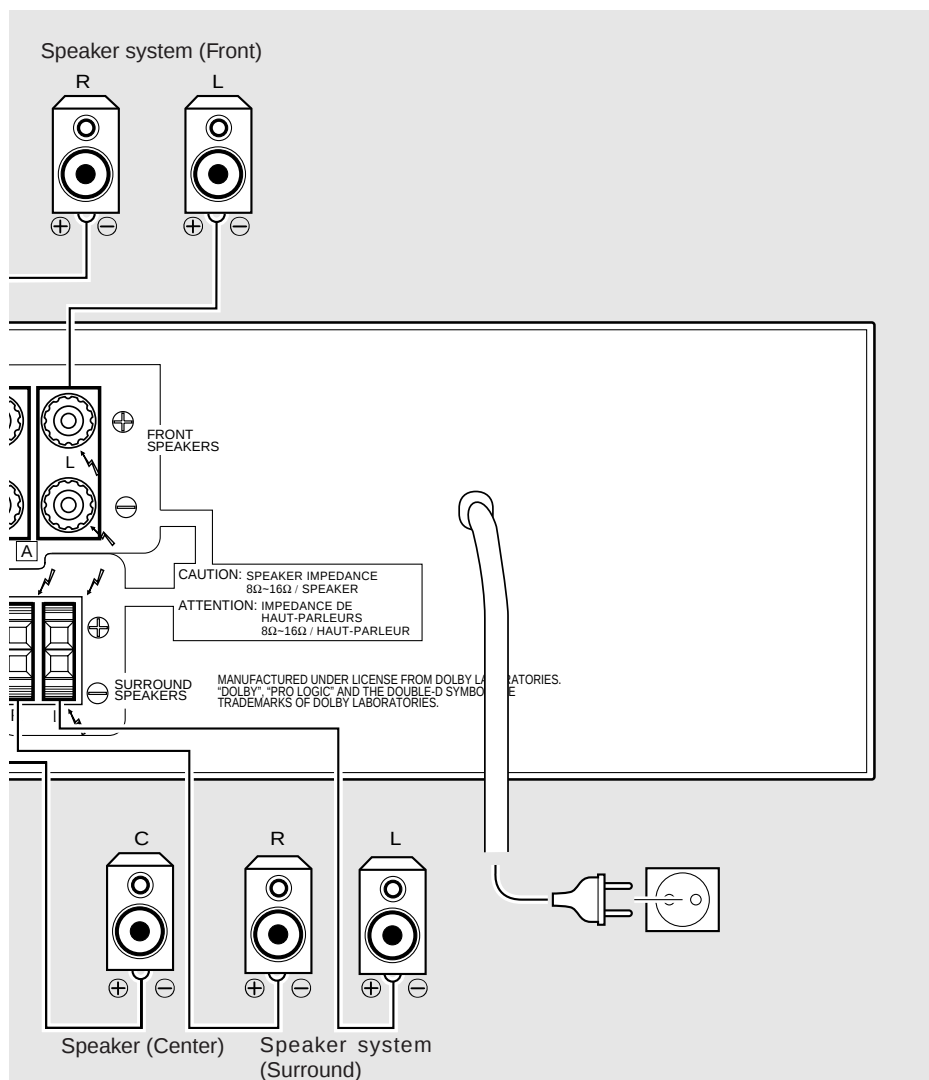
Twist the wire core.



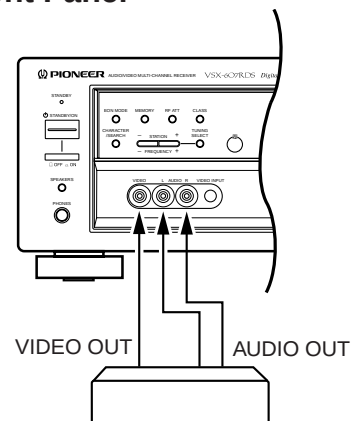
Twist the wire core.



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



■ Front Panel



Connect to equipment such as a video camera, etc.



Use nominal impedances ranging from 8 Ω to 16 Ω for the speaker system.

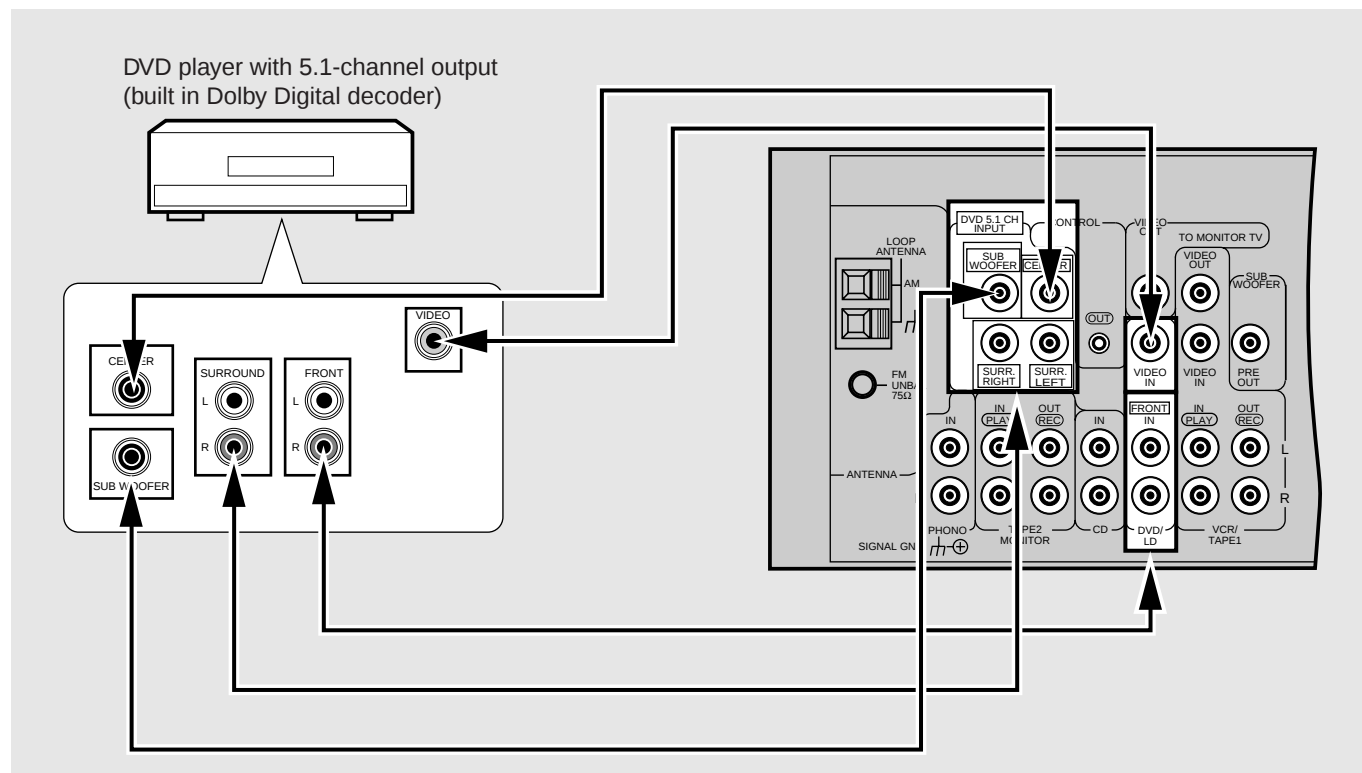
■ DVD 5.1-Channel Input Terminals

When using DVD/LD functions, the unit supports both 2-channel and 5.1-channel input. When the 5.1-channel mode is selected, SURROUND L, R, CENTER and SUB WOOFER terminal are enabled, thus allowing the connection of a Dolby Digital decoder or DVD player with 5.1-channel output.

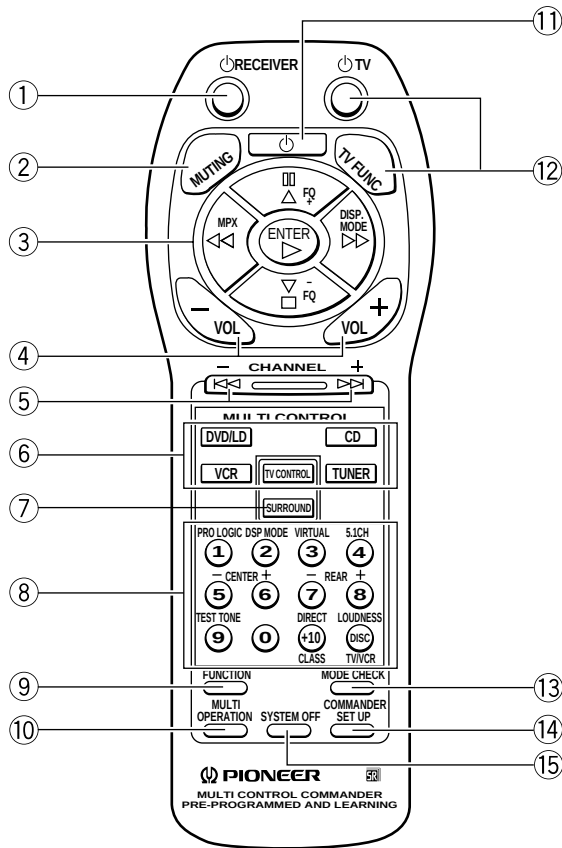


- 5.1-channel inputs are supported only during use of the DVD/LD function.
- Other functions cannot be used with 5.1-channel input.

[Connection Example]



Remote Control Unit



- ① **RECEIVER power button**
- ② **MUTING button**
Press to mute the volume.
- ③ **[When set to SURROUND (OPERATIONS)]**
△, ▽, ◀, ▶ (Select/Adjust) buttons
[When set to other than SURROUND (OPERATIONS)]
⏸ (Pause), □ (Stop), ◀◀ (Rewind), ▶▶ (Fast Forward), ENTER/▶ (Play) buttons
[Tuner Operations]
FQ +, FQ -, 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.
- ④ **VOL (-, +) buttons**
- ⑤ **[TV Operations]**
Selects the TV broadcast channel.
[Tuner Operations]
Select the Tuner station.
[CD, LD, DVD Operations]
◀◀, ▶▶ (Chapter/Track Search) buttons.

- ⑥ **MULTI CONTROL function buttons**
Used to set and operate the MULTI CONTROL, and switch the function.
TV CONTROL: Press to operate TV.
- ⑦ **SURROUND button**
Press when performing surround operations.
- ⑧ **Number/surround setting buttons**
[When set to SURROUND (OPERATIONS)]
PRO LOGIC: Switches the DOLBY PRO LOGIC.
DSP MODE: Switches the surround effects.
VIRTUAL: Turns the DOLBY VIRTUAL ON/OFF.
5.1CH: Use to set the DVD 5.1-channel input mode.
CENTER -, +: Adjusts the center level.
REAR -, +: Adjusts the rear (surround) level.
TEST TONE: When turned ON (while in DOLBY PRO LOGIC or DVD 5.1-channel input mode), volume balance adjustment signals are output in order from the speakers and can be adjusted.
DIRECT: Use to playback sound without going through the tone and balance control circuits. DOLBY PRO LOGIC, DSP MODE, DOLBY VIRTUAL and LOUDNESS also turn off.
LOUDNESS: When LOUDNESS is turned ON at a small volume, the low frequency and high frequency levels increase, enabling the sound to be easier to hear.
[Tuner Operations]
Number buttons: Use for setting the frequency value when the station call is selected or during direct access.
CLASS: Switches the CLASS (A/B/C).
DISC: Use to set the Direct Access mode.
[VCR operations]
Number buttons: Use to select the channel of the TV tuner in the VCR.
TV/VCR: Switches between TV/VCR.
[CD Operations]
DISC: Use to select the DISC number.
- ⑨ **FUNCTION button**
Switches the function.
- ⑩ **MULTI OPERATION button**
Use to operate the multi operation.
- ⑪ **Power button**
Turns ON/OFF the power of devices other than this unit.
- ⑫ **TV buttons**
- ⑬ **MODE CHECK button**
- ⑭ **COMMANDER SET UP button**
Use to control and learn operations of other manufacturers' equipment, and set multi operation functions.
- ⑮ **SYSTEM OFF button**
Use to turn OFF the power of all equipment connected to the main unit.

8.2 SPECIFICATIONS

Amplifier Section

Continuous rated power output of 65 watts* per channel, min., at 8 ohms, from 40 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output

(DIN, 1 kHz, T.H.D. 1 %, 8 Ω)

STEREO	Front	70 W + 70 W
SURROUND	Front	50 W + 50 W
	Center	50 W
	Rear	50 W

Input (Sensitivity/Impedance)

PHONO MM 2.8 mV/47 kΩ

CD, VCR/TAPE 1, TAPE 2, DVD/LD, VIDEO 200 mV/47 kΩ

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

PHONO MM 90 mV

Frequency Response*

PHONO MM 20 Hz to 20,000 Hz ± 0.5 dB

CD, VCR/TAPE 1, TAPE 2,
DVD/LD, VIDEO 5 Hz to 100,000 Hz ⁺⁰₋₃ dB

Output (Level/Impedance)

VCR/TAPE 1 REC, TAPE 2 REC 200 mV/1 kΩ

Tone Control

BASS ± 8 dB (150 Hz)

TREBLE ± 8 dB (10 kHz)

LOUDNESS +8 dB/+6 dB (100 Hz/10 kHz)

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

PHONO MM 68 dB/61 dB

CD, VCR/TAPE 1, TAPE 2, DVD/LD, VIDEO 86 dB/63 dB

* Direct: ON

** Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)

VCR/TAPE 1, DVD/LD, VIDEO 1 Vp-p/75 Ω

Output (Level/Impedance)

VCR/TAPE 1, REC, MONITOR TV 1 Vp-p/75 Ω

Frequency Response

VCR/TAPE 1, DVD/LD, VIDEO

→ MONITOR 5 Hz to 7 MHz ⁺⁰₋₃ dB

Signal-to-Noise Ratio 55 dB

Cross Talk 55 dB

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz

Usable Sensitivity Mono: 15.2 dBf, IHF (1.5 μV/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 μV (S/N 26 dB)
Stereo: 50 μV (S/N 46 dB)

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

Stereo: 58 dB

AM Tuner Section

Frequency Range 531 kHz to 1,602 kHz

Sensitivity (IHF, Loop antenna) 350 μV/m

Selectivity 30 dB

Signal-to-Noise Ratio 50 dB

Antenna Loop antenna

Miscellaneous

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

Power Consumption 170 W

Dimensions 420 (W) × 143 (H) × 334 (D) mm

Weight (without package) 6.7 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

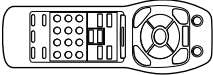
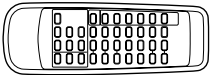
Warranty card 1

NOTE:

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

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Accessories

		
FM antenna ADH7005	AM loop antenna ATB7009	
		
(VSX-607RDS) Remote control unit AXD7169(CU-VSX131)	(VSX-407RDS) Remote control unit AXD7162(CU-VSX130)	Alkaline dry cell battery (size "AA" IEC LR6) x 2 : VSX-607RDS Dry cell battery (size "AA" IEC R6P) x 2 : VSX-407RDS