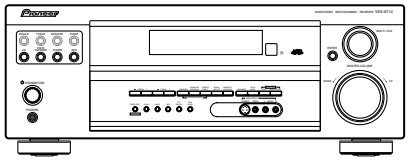
Pioneer *sound.vision.soul*

Service Manual



VSX-D714-K

ORDER NO.
RRV2928

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-D714-K
VSX-D714-S

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

Model	Type	Power Requirement	Remarks
VSX-D714-K	MYXJI	AC220-230V	
VSX-D714-K	MYXJIFG	AC220-230V	
VSX-D714-S	MYXJI	AC220-230V	
VSX-D714-S	MYXJIFG	AC220-230V	

For details, refer to "Important symbols for good services".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

T-ZZK APR. 2004 printed in Japan

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.

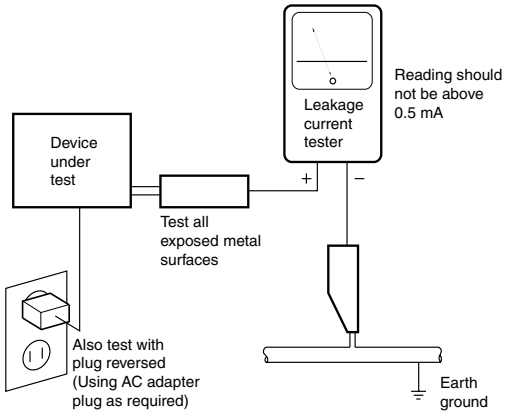
(FOR USA MODEL ONLY)

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



AC Leakage Test

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

2. PRODUCT SAFETY NOTICE

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

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

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

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

[Important symbols for good services]
In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

CONTENTS

1. SPECIFICATIONS

Amplifier section

Continuous power output (stereo)
Front. . . . . .100 W (DIN 1kHz, THD 1.0%, 8 Ω)

Continuous power output (surround)
Front. . . . .100 W per channel (1kHz, 1.0%, 8 Ω)
Center . . . . . .100 W (1kHz, 1.0%, 8 Ω)
Surround . . . . . 100W per channel
(1kHz, 1.0%, 8 Ω)

The above specifications are applicable when the power supply is 230 V.

Input (Sensitivity/Impedance)
CD, DVR/VCR, CD-R/TAPE/MD,
DVD/LD, TV/SAT. . . . . .200 mV/47 kΩ

Frequency response
CD, DVR/VCR, CD-R/TAPE/MD, DVD/LD,
TV/SAT. . . . . 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB

Output (Level/Impedance)
DVR/VCR REC, CD-R/TAPE/
MD REC. . . . . .200 mV/2.2 kΩ

Tone control
Bass. . . . . ± 6 dB (100 Hz)
Treble. . . . . ± 6 dB (10 kHz)
Loudness. . . . +6.5 dB/+3 dB (100 Hz/10 kHz)
(at volume level -50 dB)

Signal-to-Noise Ratio
DIN (Continuous rated power output / 50mW)
CD, DVR/VCR, CD-R/TAPE/MD,
DVD/LD, TV/SAT. . . . . .88/64 dB

Video Section

Input (Sensitivity/Impedance)
DVR/VCR, DVD/LD, TV/SAT. . . . .1 Vp-p/75 Ω

Output (Level/Impedance)
DVR/VCR, MONITOR OUT. . . . . .1 Vp-p/75 Ω

Frequency response
DVR/VCR, DVD/LD,
TV/SAT⇨ MONITOR . . . . 5 Hz to 7 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio . . . . . 55 dB

Component video section

Input (Sensitivity)
DVD/LD, TV/SAT. . . . . 1 Vp-p/75 Ω

Output (Level/Impedance)
MONITOR OUT. . . . . 1 Vp-p/75 Ω

Frequency response
DVD/LD,
TV/SAT⇨ MONITOR. . . . 5 Hz to 40 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio. . . . . 55 dB

FM Tuner Section

Frequency Range . . . . . .87.5 MHz to 108 MHz
Usable Sensitivity . . . . . Mono:13.2dBf, IHF
(1.3 µV/ 75 Ω)
50 dB Quieting Sensitivity. . . . . Mono: 20.2 dB
Stereo: 38.6 dBf
Signal-to-Noise Ratio . Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)
Distortion . . . . . .Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity. 60dB
(400 kHz)
Stereo Separation. . . . . 40 dB (1 kHz)
Frequency Response . . . . . 30 Hz to 15 kHz
(±1 dB)
Antenna Input (DIN) . . . . . .75 Ω unbalanced

AM Tuner Section

Frequency Range . . . . . .531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) . . . . . 350 µV/m
Selectivity . . . . . 25 dB
Signal-to-Noise Ratio . . . . . 50 dB
Antenna . . . . . Loop antenna

Miscellaneous

Power Requirements . . . AC 220-230 V, 50/60Hz
Power Consumption
VSX-D714 . . . . . 250 W

In standby . . . . . .0.5 W
Dimensions . . .420 (W) x 158 (H) x 401 (D) mm
Weight (without package)
VSX-D714 . . . . . .10.0 kg

Furnished Parts

AM loop antenna 1
FM wire antenna 1
Dry cell batteries (AA size IEC R6) 2
Remote control 1

Operating instructions 1

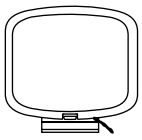
Note

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

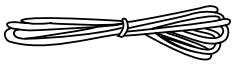
Cleaning the unit

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

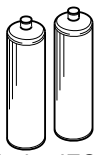
Accessories



AM loop antenna
(ATB7013)



FM wire antenna
(ADH7030)



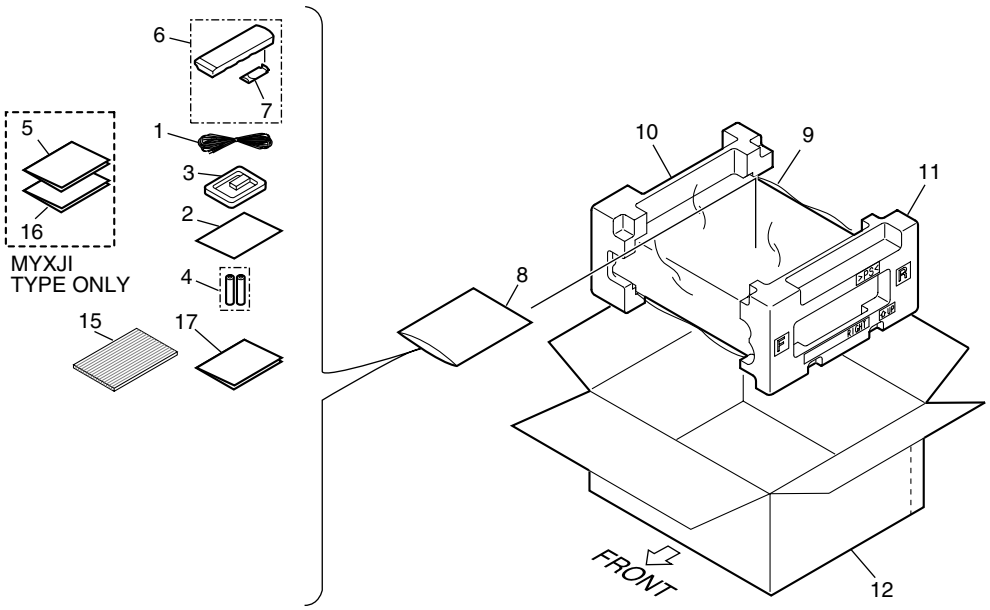
AA size IEC R6
Dry cell batteries (x2)

Remote control unit
(XXD3072)

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

2.1 PACKING



PACKING SECTION Parts List

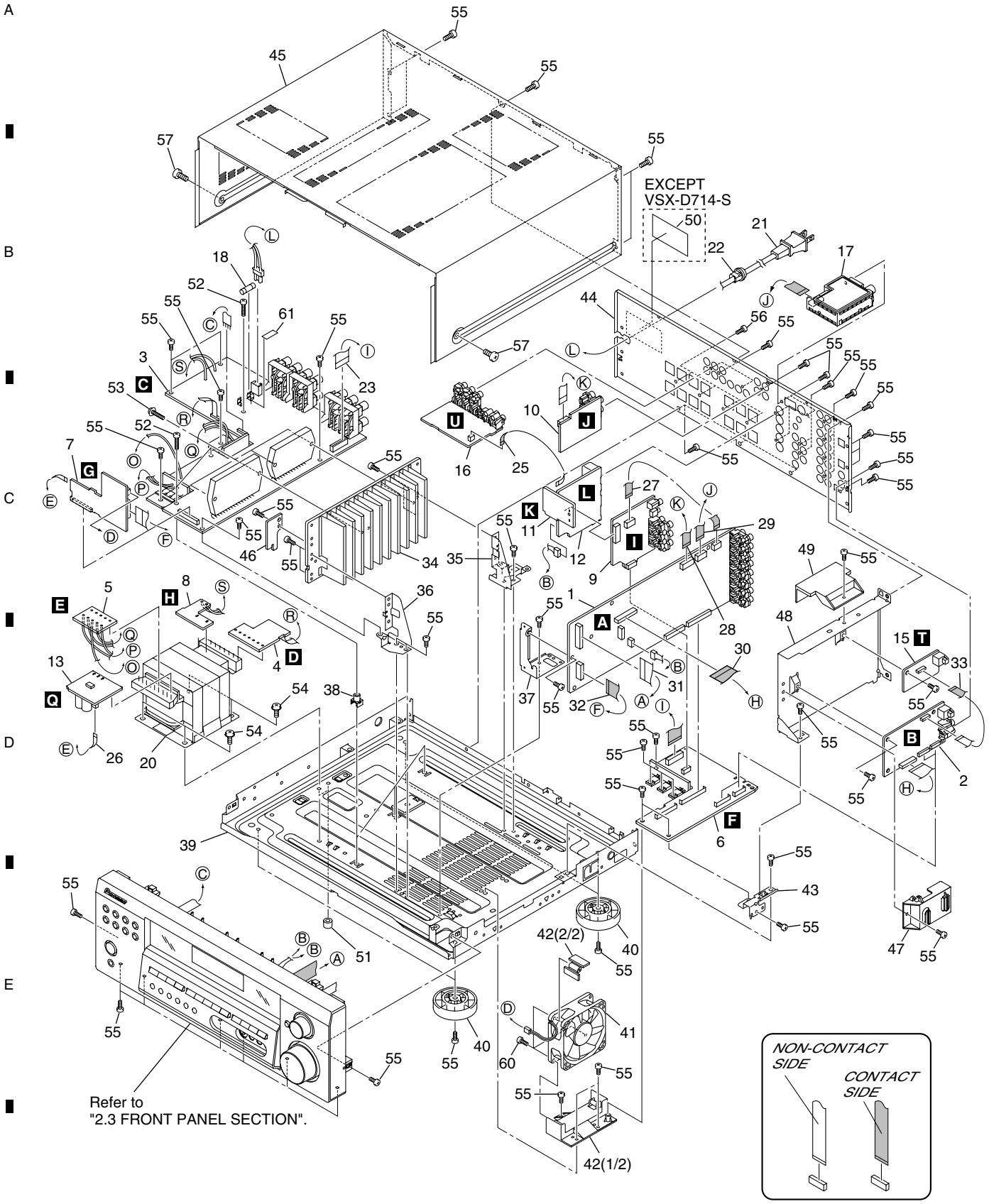
Mark	No.	Description	Part No.
	1	FM wire antenna	ADH7030
NSP	2	Warranty Card	ARY7065
	3	AM loop antenna	ATB7013
NSP	4	Alkaline Dry cell batteries (AA/R6)	VEM1031
	5	Operating instructions (English/Italian)	See Contrast table(2)
	6	Remote Control Unit	XXD3072
	7	Battery Cover	AZA7424
NSP	8	Literature Bag	AHG1180
	9	Packing Sheet	AHG7069
	10	Left Pad V1	XHA3141
	11	Right Pad V1	XHA3142
	12	Packing Case	See Contrast table(2)
	13	•••••	
	14	•••••	
NSP	15	Accessory Board R6	XHB3008
	16	Operating instructions (Dutch/Spanish)	See Contrast table(2)
	17	Operating instructions (French/German)	XRC3118

(2) CONTRAST TABLE

VSX-D714-K/MYXJI, VSX-D714-K/MYXJIFG, VSX-D714-S/MYXJI and VSX-D714-S/MYXJIFG are constructed the same except for the following :

Mark	No.	Description	VSX-D714-K /MYXJI	VSX-D714-K /MYXJIFG	VSX-D714-S /MYXJI	VSX-D714-S /MYXJIFG
	5	Operating instructions (English/Italian)	XRE3079	Not used	XRE3079	Not used
	12	Packing Case	XHD3395	XHD3395	XHD3396	XHD3396
	16	Operating instructions (Dutch/Spanish)	XRC3117	Not used	XRC3117	Not used

2.2 EXTERIOR SECTION



EXTERIOR SECTION Parts List

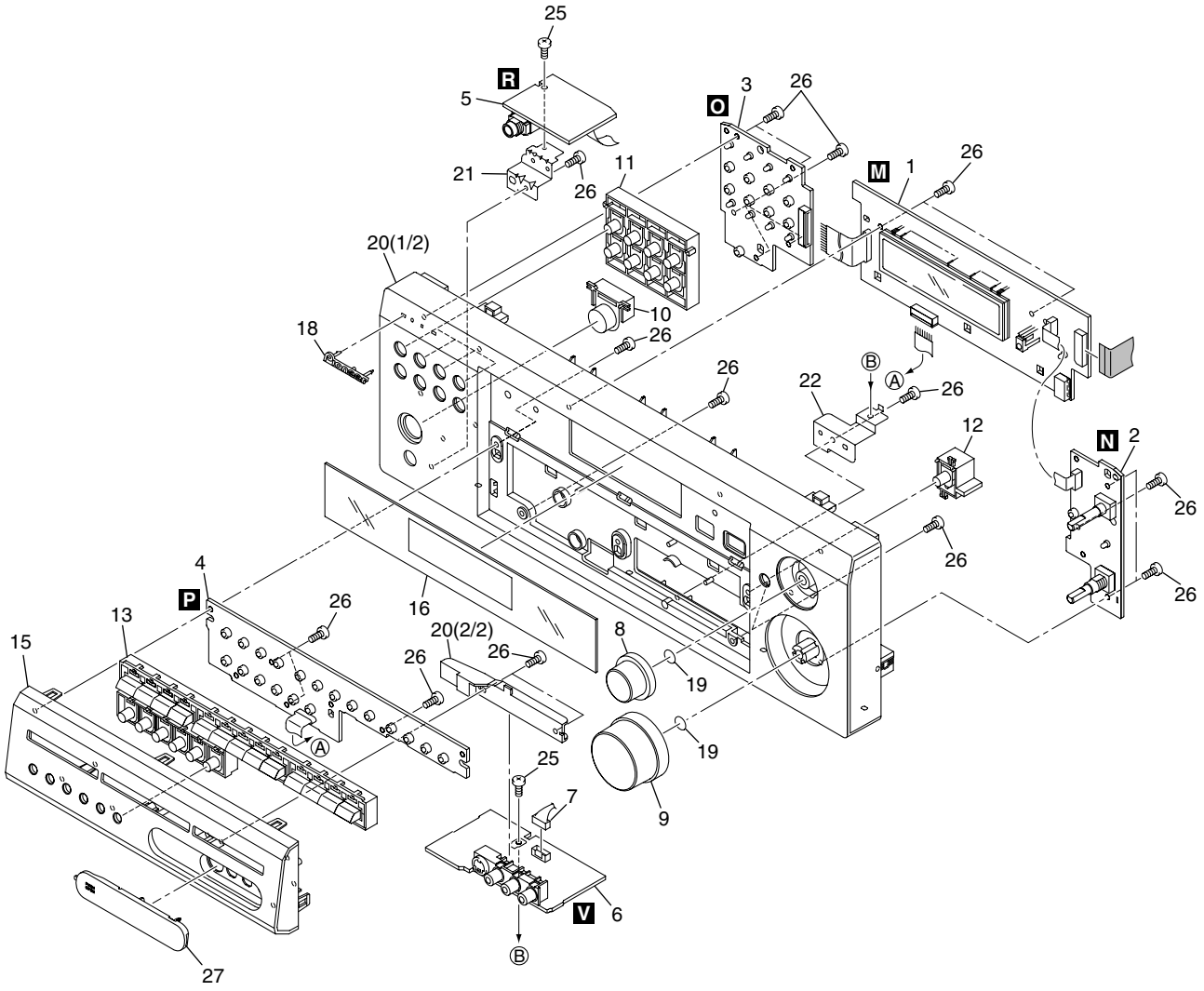
Mark	No.	Description	Part No.
	1	MAIN Assy	XWK3120
	2	DSP Assy	AWX1082
	3	AMP & PRIMARY Assy	XWZ3788
	4	TRANS2 Assy	XWZ3809
	5	TRANS3 Assy	XWZ3813
	6	REGULATOR Assy	XWZ3798
	7	AMP INPUT Assy	XWZ3801
	8	TRANS1 Assy	XWZ3806
	9	VIDEO Assy	XWZ3752
	10	5.1CH Assy	XWZ3760
	11	B TO B Assy	XWZ3781
	12	S. VIDEO Assy	XWZ3776
	13	TRANS4 Assy	XWZ3778
	14	•••••	
	15	DIGITAL IN Assy	XWZ3772
	16	COMPONENT Assy	XWZ3777
	17	FM/AM TUNER UNIT	AXX7170
⚠	18	FU1 Fuse (T2.5A)	REK1026
	19	•••••	
⚠	20	T1 Power Transformer	XTS3079
⚠	21	AC Power Cord	VDG1077
	22	Cord Stopper	CM-22B
	23	J36 23P F.F.C/30V	XDD3102
	24	•••••	
	25	J38 5P F.F.C/30V	XDD3104
	26	J22 3P F.F.C/30V	XDD3107
	27	J33 11P F.F.C/30V	XDD3150
	28	J48 9P F.F.C/30V	XDD3151
	29	J34 13P F.F.C/30V	XDD3149
	30	J43 19P F.F.C/30V	XDD3126
	31	J31 17P F.F.C/30V	XDD3118
	32	J35 19P F.F.C/30V	XDD3101
	33	J37 10P F.F.C/30V	XDD3127
NSP	34	Heatsink R6A CORR	XNH3027
	35	H/S Angle Rear	XNG3095
	36	H/S Angle Front	XNG3094
	37	PCB Angle R5	XNG3073
	38	PCB Mold	AMR2533
NSP	39	Under Base R6	XNA3012
	40	Insulator	PNW2766
	41	DC Fan Motor	XXM3007
	42	Fan Holder R6	XMR3066
	43	REG Support R6	XNG3093
	44	Rear Panel 714K	XNC3248
	45	Bonnet	See Contrast table(2)
NSP	46	HOLDER Assy	XWZ3820
	47	FFC Holder R6	XMR3072
	48	Shield A R6	XNG3068
	49	FFC Cover R6	XMR3060
NSP	50	N Label	See Contrast table(2)
NSP	51	Spacer	AEB7092
	52	Screw	BBZ30P200FTC
	53	Screw 3x23	XBA3012
	54	Screw	FBT40P080FNI
	55	Screw	BBZ30P080FTC
	56	Screw	BBT30P100FCC
	57	Screw	See Contrast table(2)
	58	•••••	
NSP	59	BINDER Assy	XWZ3817
	60	Screw	BPZ30P120FTC
	61	Fuse Card	AAX7277

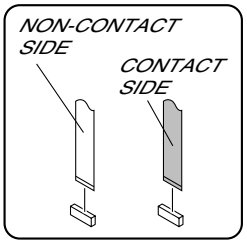
(2) CONTRAST TABLE

VSX-D714-K/MYXJI, VSX-D714-K/MYXJIFG, VSX-D714-S/MYXJI and VSX-D714-S/MYXJIFG are constructed the same except for the following :

Mark	No.	Description	VSX-D714-K /MYXJI	VSX-D714-K /MYXJIFG	VSX-D714-S /MYXJI	VSX-D714-S /MYXJIFG
	45	Bonnet K V1	XZN3148	XZN3148	Not used	Not used
	45	Bonnet S V1	Not used	Not used	XZN3149	XZN3149
NSP	50	N Label 714K/MY	XAL3198	XAL3198	Not used	Not used
	57	Screw	FBT40P080FZK	FBT40P080FZK	FBT40P080FNI	FBT40P080FNI

2.3 FRONT PANEL SECTION





FRONT PANEL SECTION Parts List

Mark	No.	Description	Part No.
	1	FRONT DISPLAY ASSY	XWZ3756
	2	R. ENCODER Assy	XWZ3766
	3	P. SW & FUNC. KEY Assy	XWZ3763
	4	FRONT KEY Assy	XWZ3758
	5	H.P. Assy	XWZ3768
	6	FRONT VIDEO Assy	XWZ3769
	7	J29 8P Shield Cable	XDX3022
	8	JOG Knob	See Contrast table(2)
	9	VOL Knob	See Contrast table(2)
	10	Standby BTN V1	See Contrast table(2)
	11	FUNC BTN V1	See Contrast table(2)
	12	Enter BTN V1	See Contrast table(2)
	13	Sub BTN V1	See Contrast table(2)
	14	•••••	
	15	Sub Panel	See Contrast table(2)
	16	D Panel MCACC V1	XAK3426
	17	•••••	
	18	Pioneer Badge B	See Contrast table(2)
NSP	19	C Ring DIM 8.1	XBH3016
	20	FRT Panel	See Contrast table(2)
	21	Earth Plate R5 HP	XNG3066
	22	Earth Plate FI V1	XNG3119
	23	•••••	
	24	•••••	
	25	Screw	BBZ30P080FTC
	26	Screw	BPZ30P100FTC
	27	Input Cover V1	See Contrast table(2)

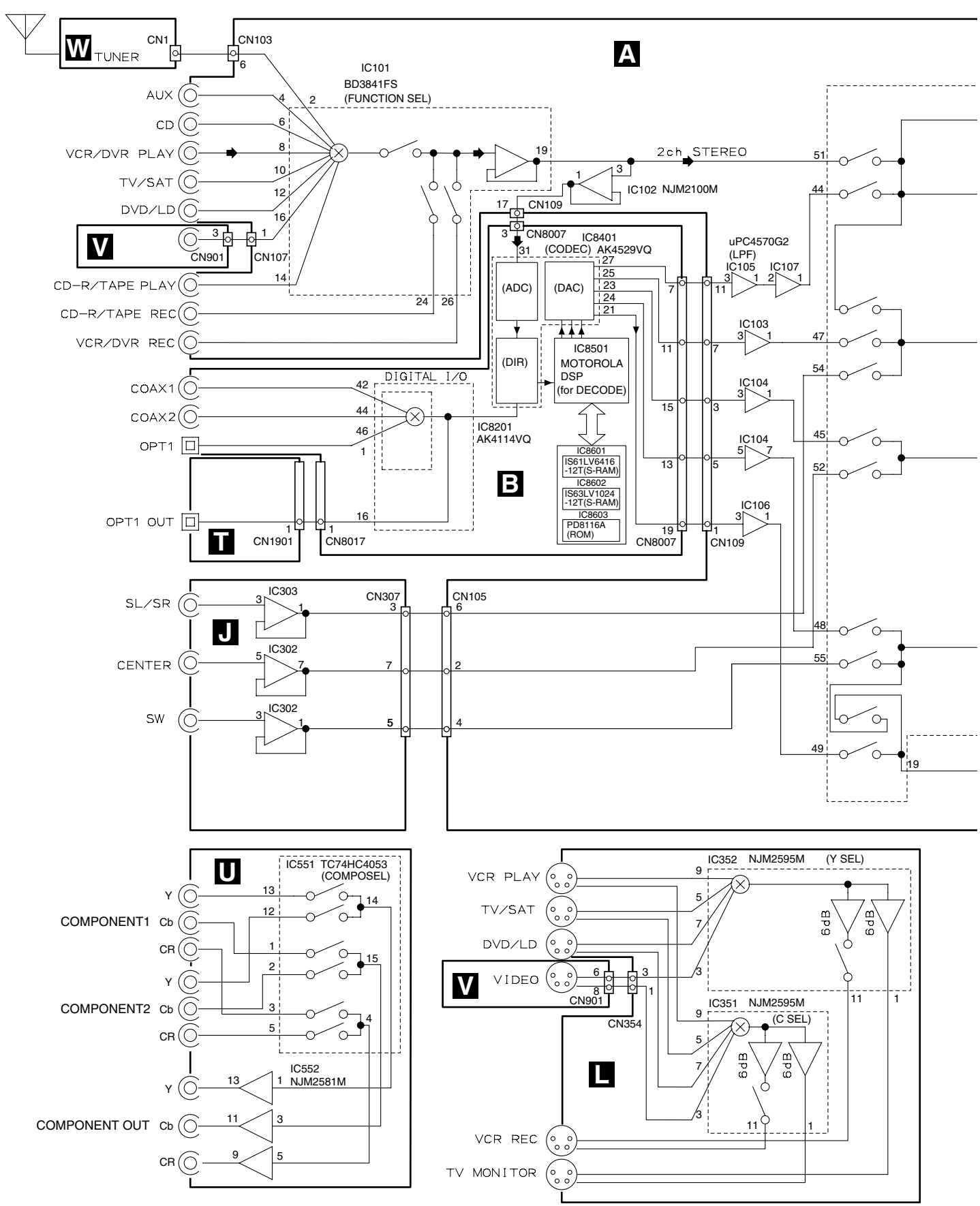
(2) CONTRAST TABLE

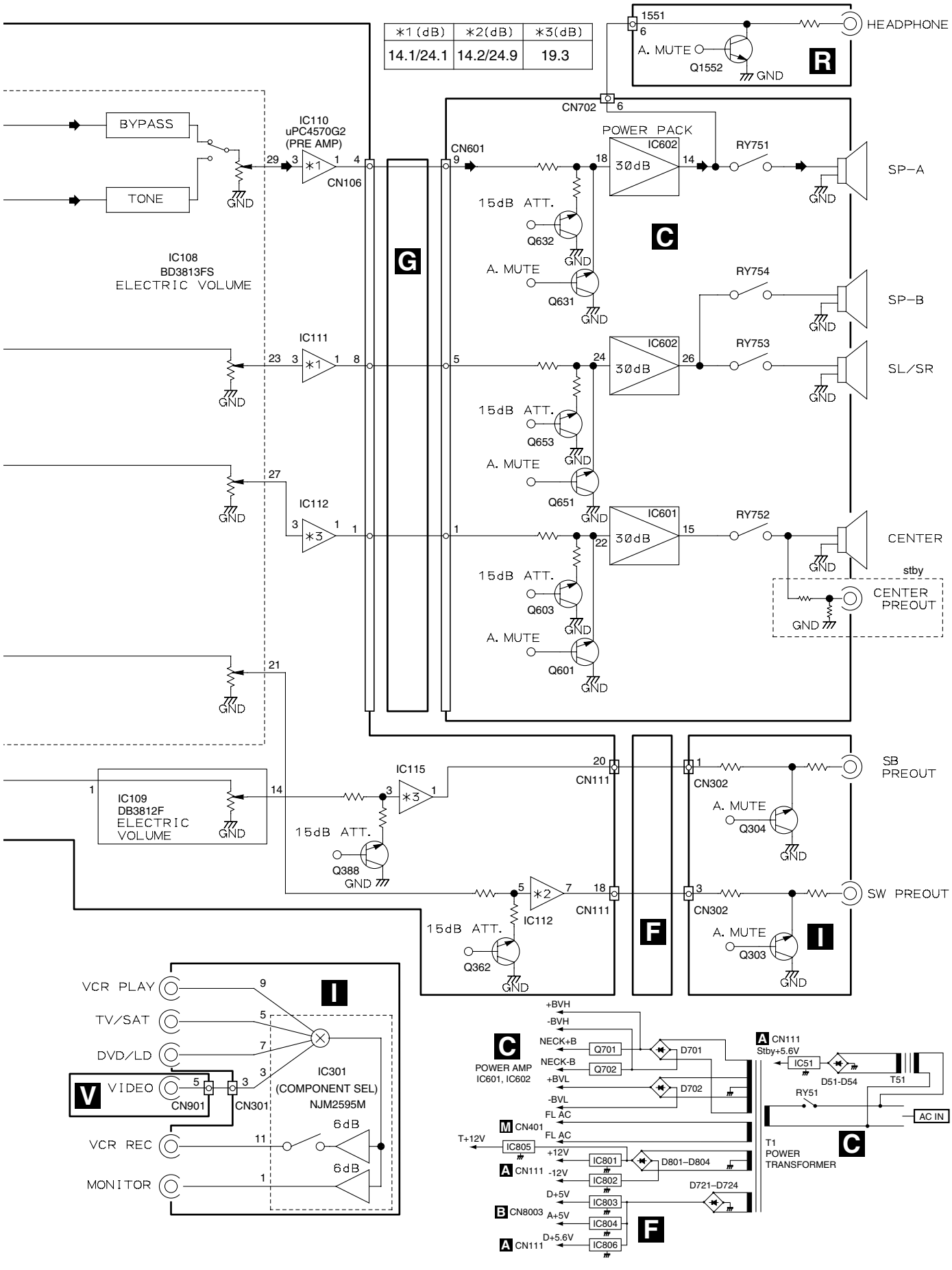
VSX-D714-K/MYXJI, VSX-D714-K/MYXJIFG, VSX-D714-S/MYXJI and VSX-D714-S/MYXJIFG are constructed the same except for the following :

Mark	No.	Description	VSX-D714-K /MYXJI	VSX-D714-K /MYXJIFG	VSX-D714-S /MYXJI	VSX-D714-S /MYXJIFG
	8	JOG Knob V1K	XAB3038	XAB3038	Not used	Not used
	8	JOG Knob V1S	Not used	Not used	XAB3042	XAB3042
	9	VOL Knob V1K	XAB3039	XAB3039	Not used	Not used
	9	VOL Knob V1S	Not used	Not used	XAB3043	XAB3043
	10	Standby BTN V1K	XAD3173	XAD3173	Not used	Not used
	10	Standby BTN V1S	Not used	Not used	XAD3178	XAD3178
	11	FUNC BTN V1K	XAD3174	XAD3174	Not used	Not used
	11	FUNC BTN V1S	Not used	Not used	XAD3180	XAD3180
	12	Enter BTN V1K	XAD3175	XAD3175	Not used	Not used
	12	Enter BTN V1S	Not used	Not used	XAD3181	XAD3181
	13	Sub BTN V1K	XAD3176	XAD3176	Not used	Not used
	13	Sub BTN V1S	Not used	Not used	XAD3177	XAD3177
	15	Sub Panel 814K	XAK3439	XAK3439	Not used	Not used
	15	Sub Panel 814S	Not used	Not used	XAK3431	XAK3431
	18	Pioneer Badge B	XAM3006	XAM3006	VAM1129	VAM1129
	20	FRT Panel 714K/MY	XMB3139	XMB3139	Not used	Not used
	20	FRT Panel 714S/MY	Not used	Not used	XMB3142	XMB3142
	27	Input Cover V1K	XAK3429	XAK3429	Not used	Not used
	27	Input Cover V1S	Not used	Not used	XAK3433	XAK3433

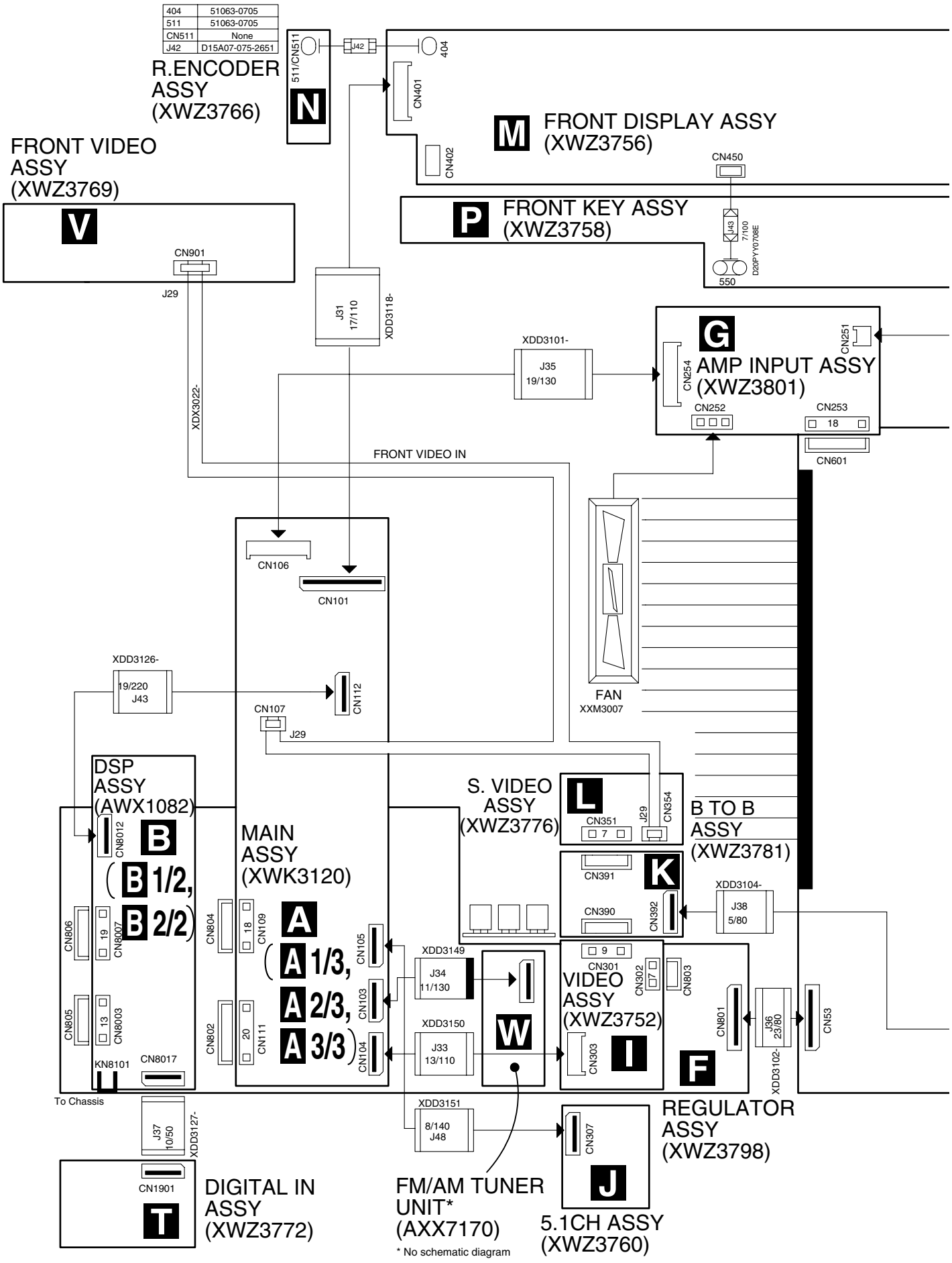
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

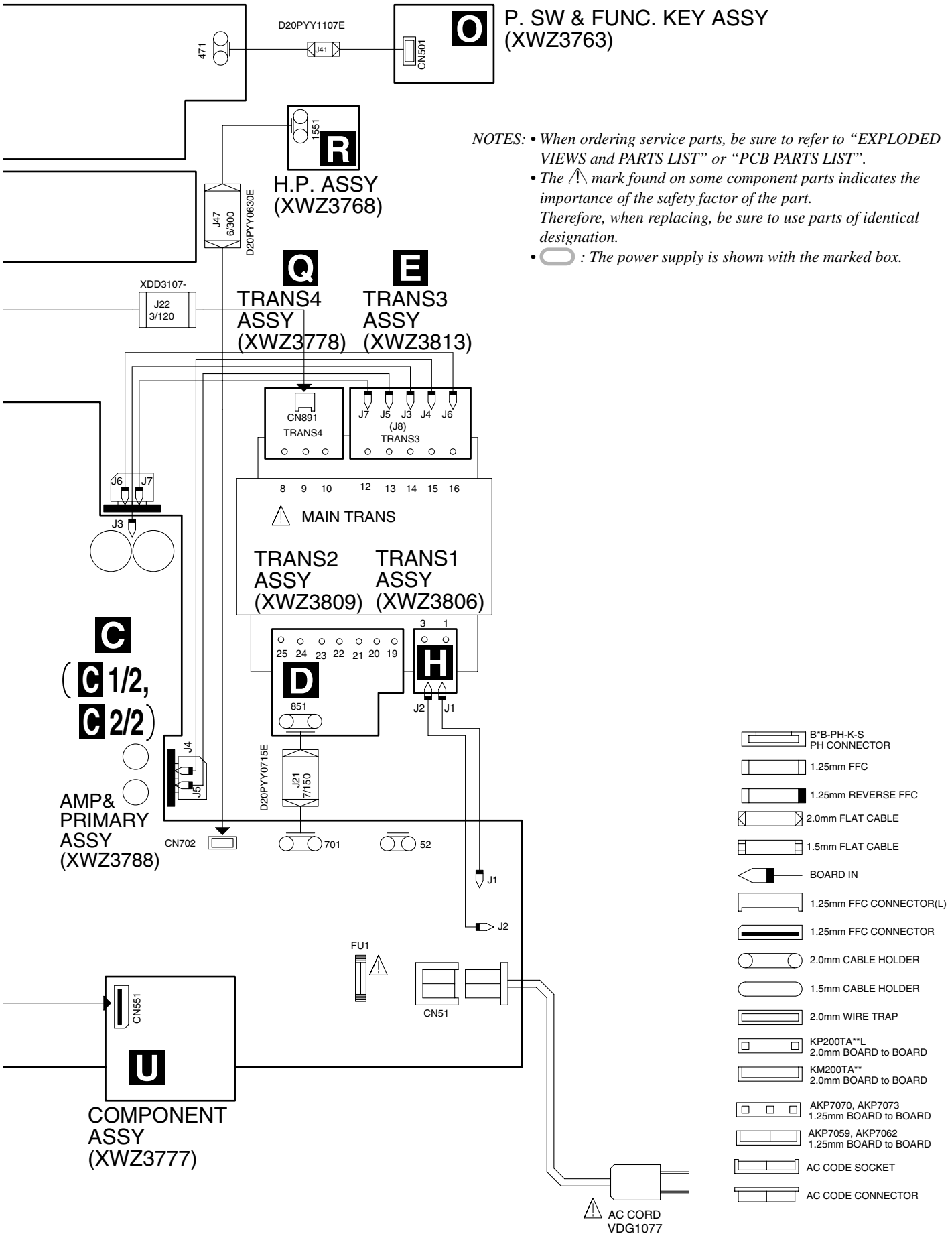
3.1 BLOCK DIAGRAM




∗1 (dB)
∗2(dB)
∗3(dB)
14.1/24.1
14.2/24.9
19.3
1551
HEADPHONE
A. MUTE
Q1552
GND
R
CN702
POWER PACK
IC602
30dB
RY751
SP–A
BYPASS
TONE
IC110
uPC4570G2
(PRE AMP)
CN106
CN601
15dB ATT.
Q632
C
G
IC108
BD3813FS
ELECTRIC VOLUME
RY754
SP–B
IC111
IC602
RY753
SL/SR
Q653
Q651
IC112
IC601
RY752
CENTER
stby
CENTER PREOUT
Q603
Q601
IC115
CN111
SB PREOUT
CN302
IC109
DB3812F
ELECTRIC VOLUME
Q388
Q304
SW PREOUT
Q362
F
Q303
I
VCR PLAY
TV/SAT
DVD/LD
VIDEO
CN901
CN301
IC301
(COMPONENT SEL)
NJM2595M
6dB
VCR REC
MONITOR
V
POWER AMP
IC601, IC602
+BVH
-BVH
NECK+B
NECK-B
+BVL
-BVL
FL AC
Q701
Q702
D701
D702
M CN401
T+12V
IC805
+12V
-12V
IC801
IC802
D801–D804
D+5V
A+5V
D+5.6V
IC803
IC804
IC806
B CN8003
A CN111
D721–D724
A CN111
Stby+5.6V
IC51
D51-D54
T51
RY51
AC IN
T1
POWER
TRANSFORMER

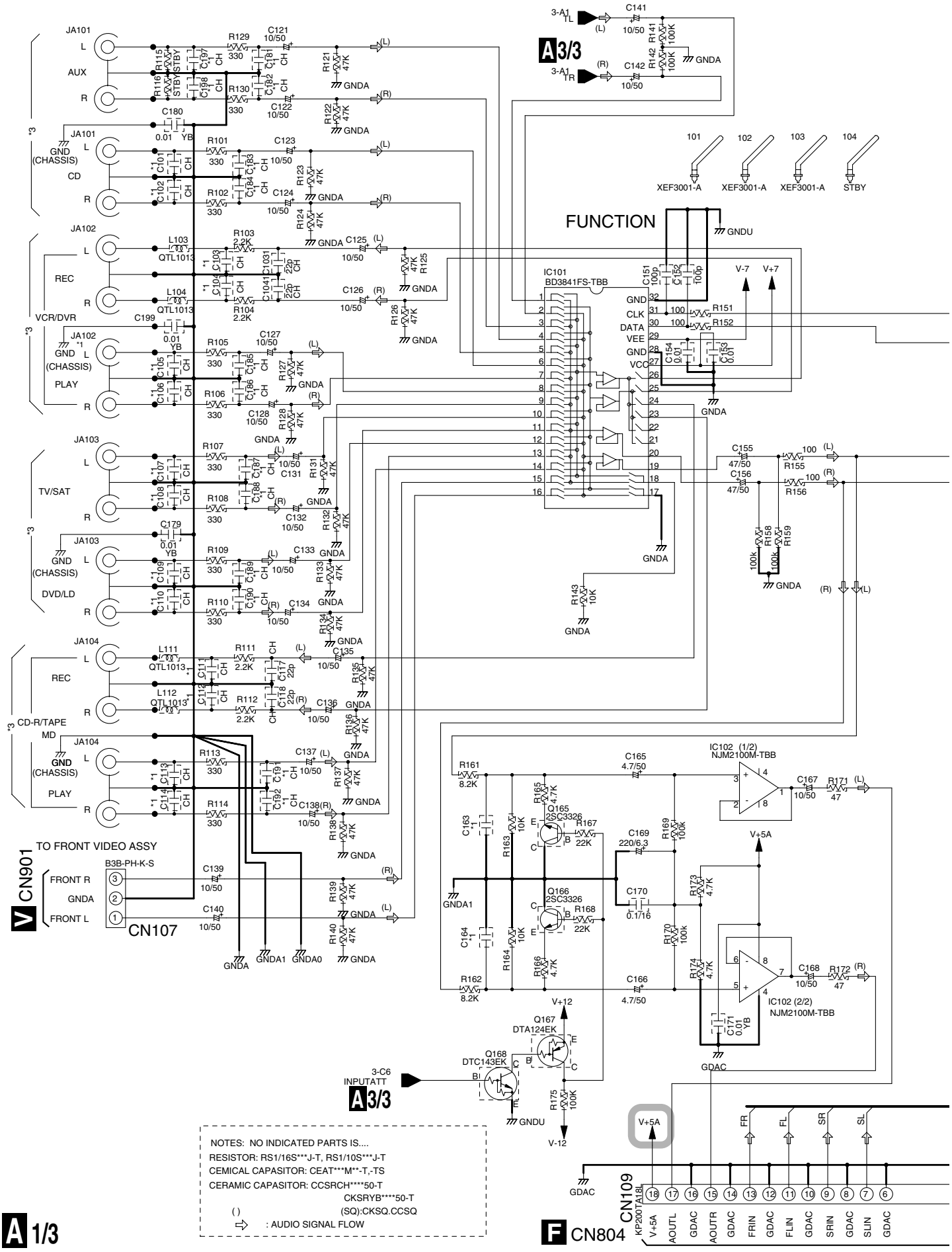
3.2 OVERALL WIRING CONNECTION DIAGRAM

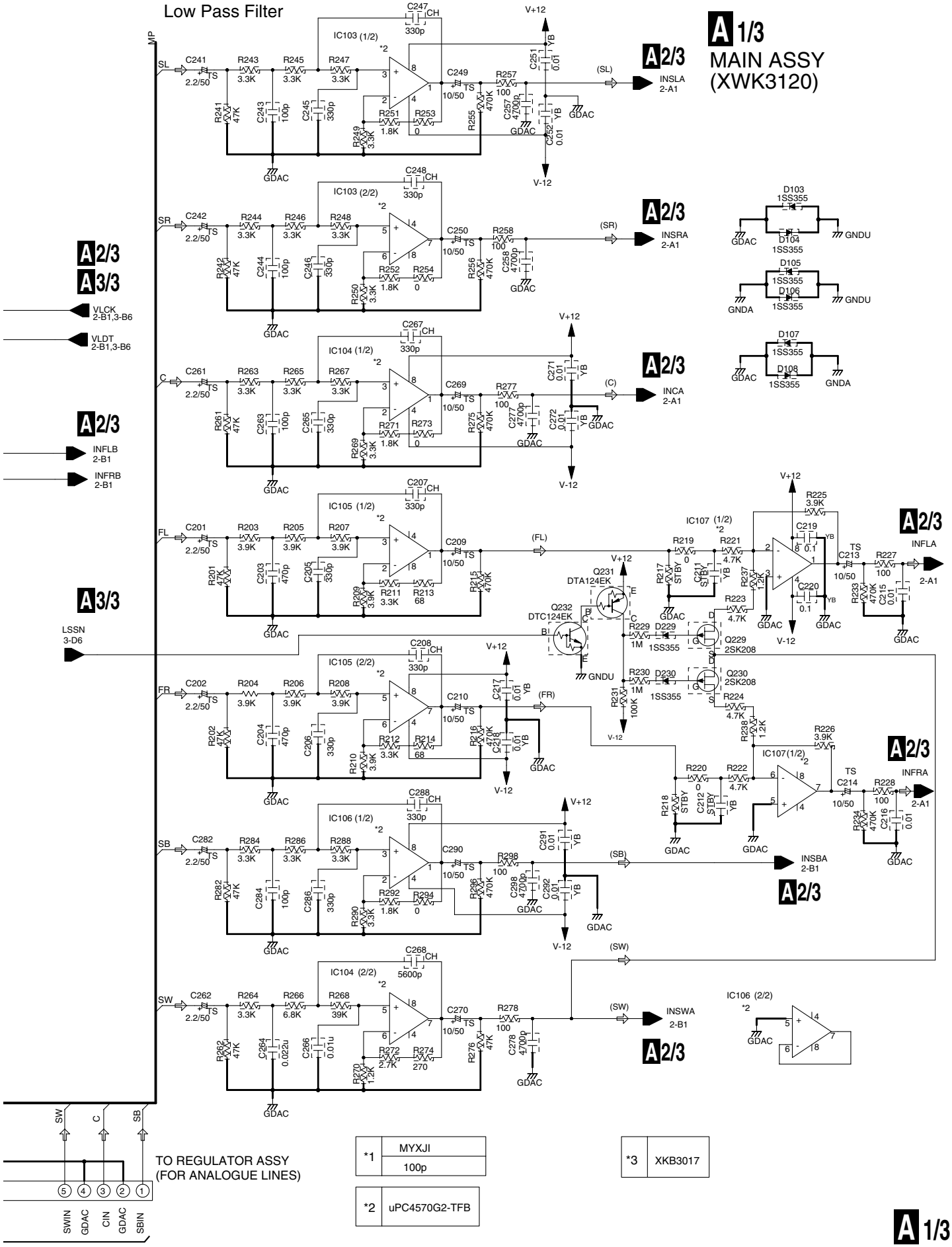




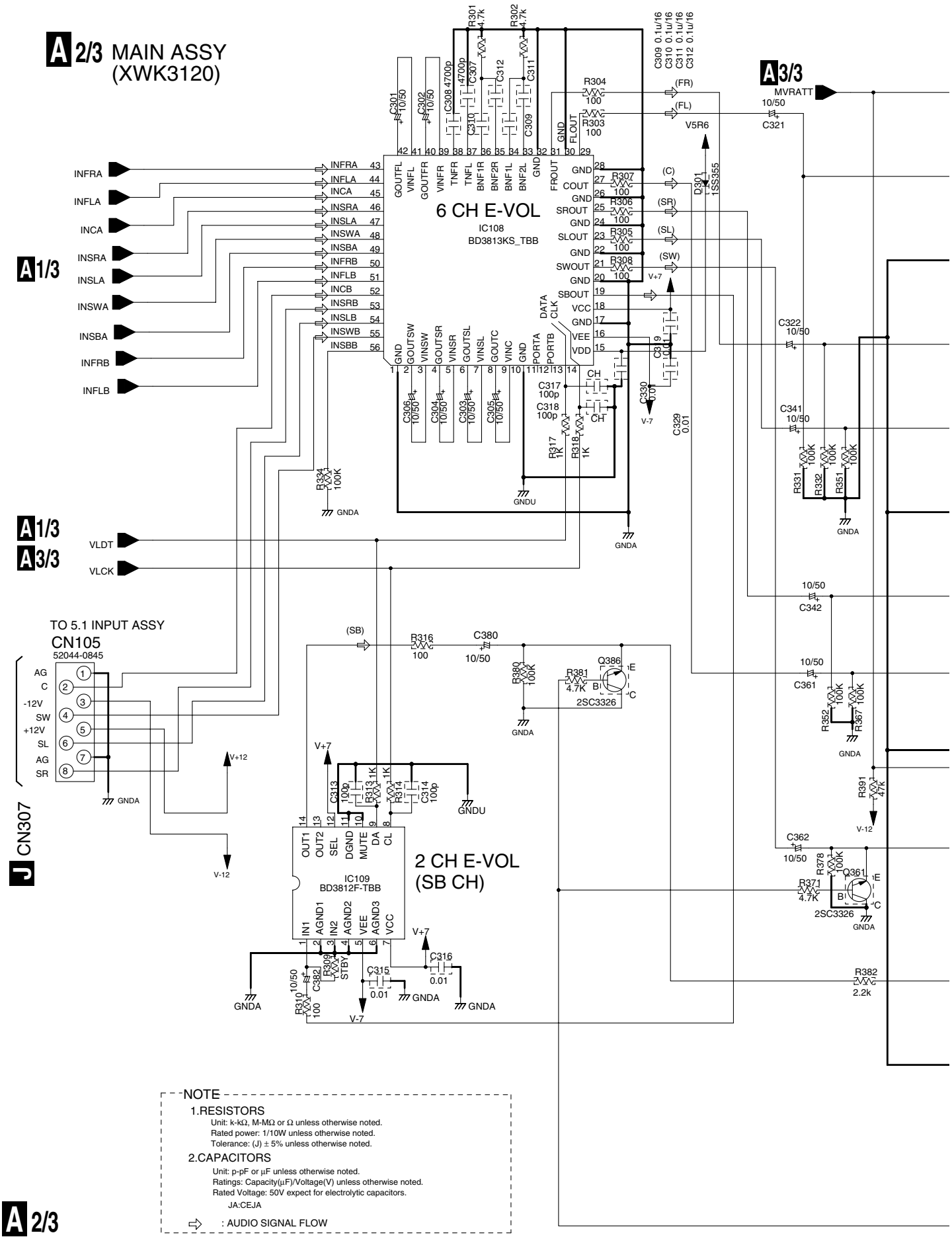
NOTES:
- *When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *: The power supply is shown with the marked box.*

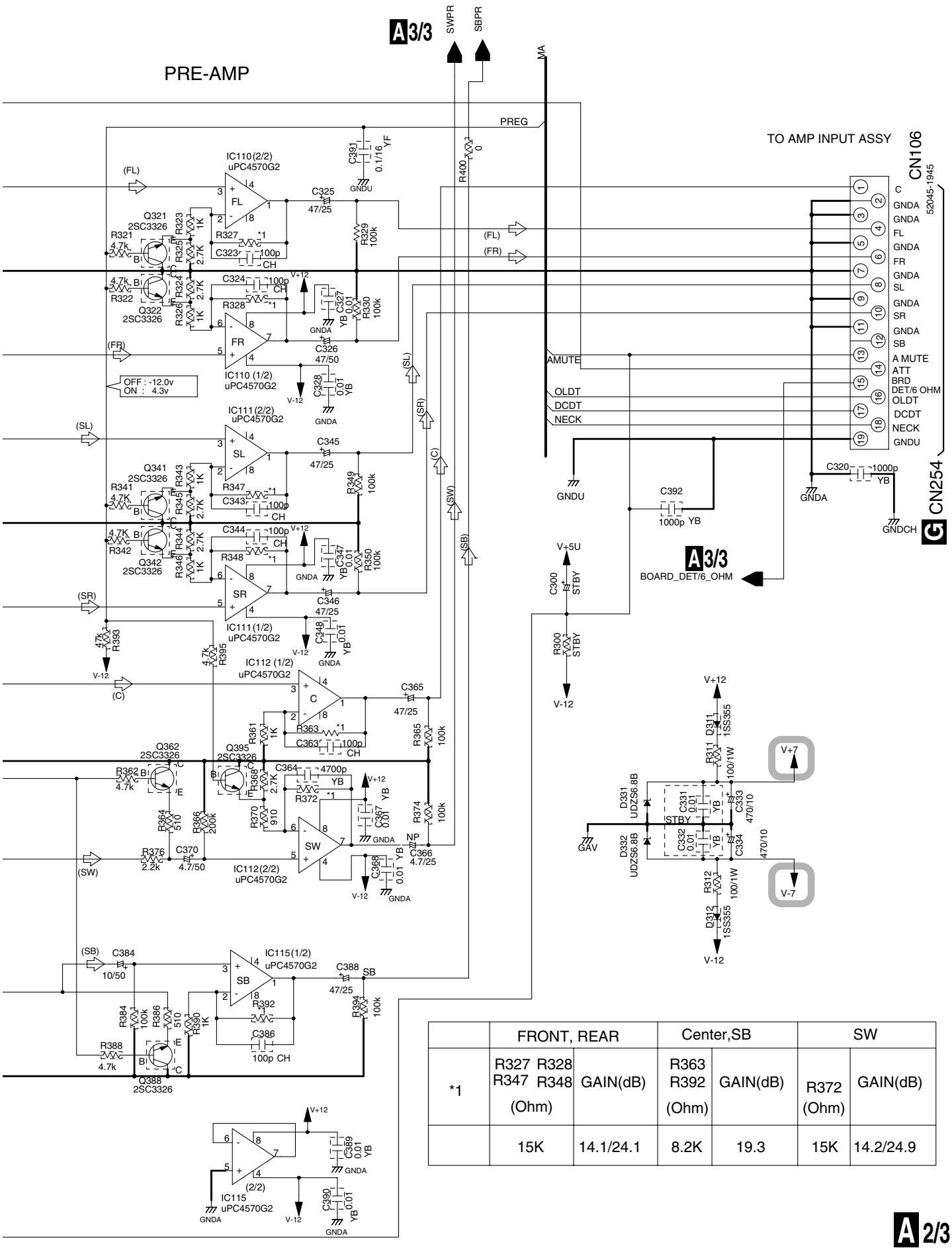
3.3 MAIN ASSY (1/3)




Low Pass Filter
A 1/3
MAIN ASSY
(XWK3120)
IC103 (1/2)
IC103 (2/2)
IC104 (1/2)
IC104 (2/2)
IC105 (1/2)
IC105 (2/2)
IC106 (1/2)
IC106 (2/2)
IC107 (1/2)
IC107(1/2)
SL
SR
C
FL
FR
SB
SW
(SL)
(SR)
(C)
(FL)
(FR)
(SB)
(SW)
INSLA 2-A1
INSRA 2-A1
INCA 2-A1
INFLA 2-A1
INFRA 2-A1
INSBA 2-B1
INSWA 2-B1
VLCK 2-B1,3-B6
VLDT 2-B1,3-B6
INFLB 2-B1
INFRB 2-B1
LSSN 3-D6
Q231 DTA124EK
Q232 DTC124EK
Q229 2SK208
Q230 2SK208
D103 1SS355
D104 1SS355
D105 1SS355
D106 1SS355
D107 1SS355
D108 1SS355
V+12
V-12
GDAC
GNDA
GNDU
TO REGULATOR ASSY
(FOR ANALOGUE LINES)
SWIN
GDAC
CIN
GDAC
SBIN
*1 MYXJI 100p
*2 uPC4570G2-TFB
*3 XKB3017

3.4 MAIN ASSY (2/3)

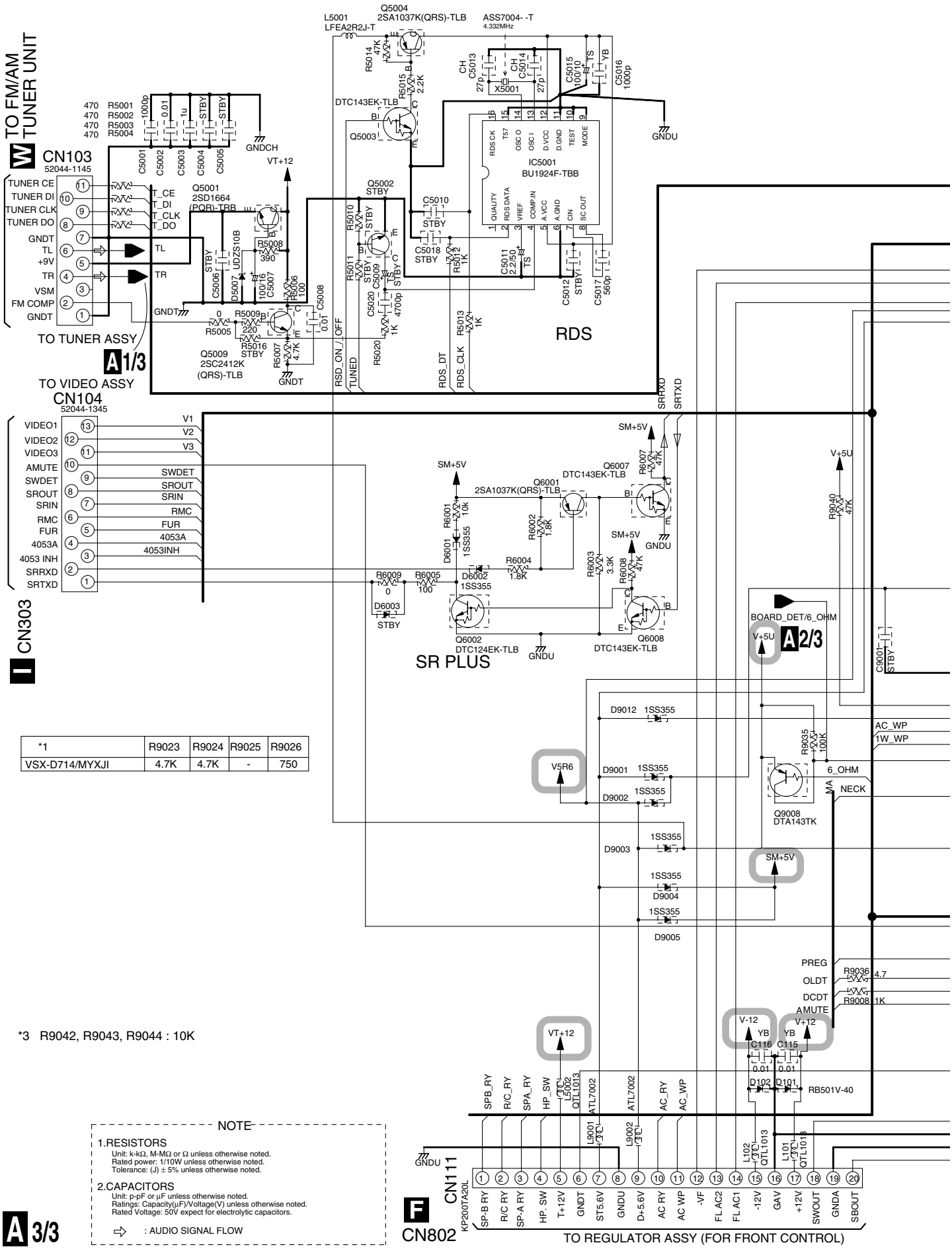




	FRONT, REAR		Center,SB		SW	
*1	R327 R328 R347 R348 (Ohm)	GAIN(dB)	R363 R392 (Ohm)	GAIN(dB)	R372 (Ohm)	GAIN(dB)
	15K	14.1/24.1	8.2K	19.3	15K	14.2/24.9

A2/3

3.5 MAIN ASSY (3/3)



*1	R9023	R9024	R9025	R9026
VSX-D714/MYXJI	4.7K	4.7K	-	750

*3 R9042, R9043, R9044 : 10K

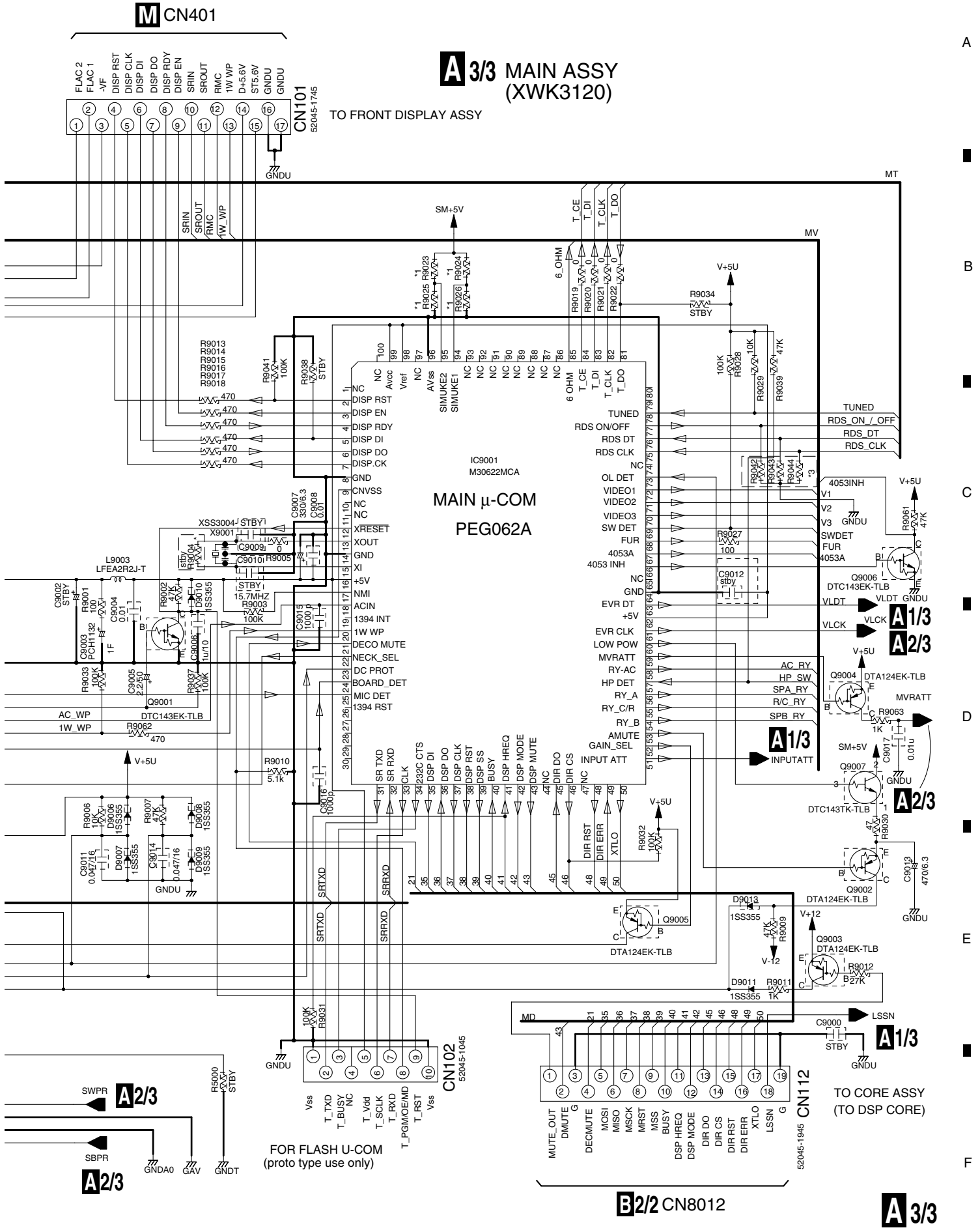
NOTE

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

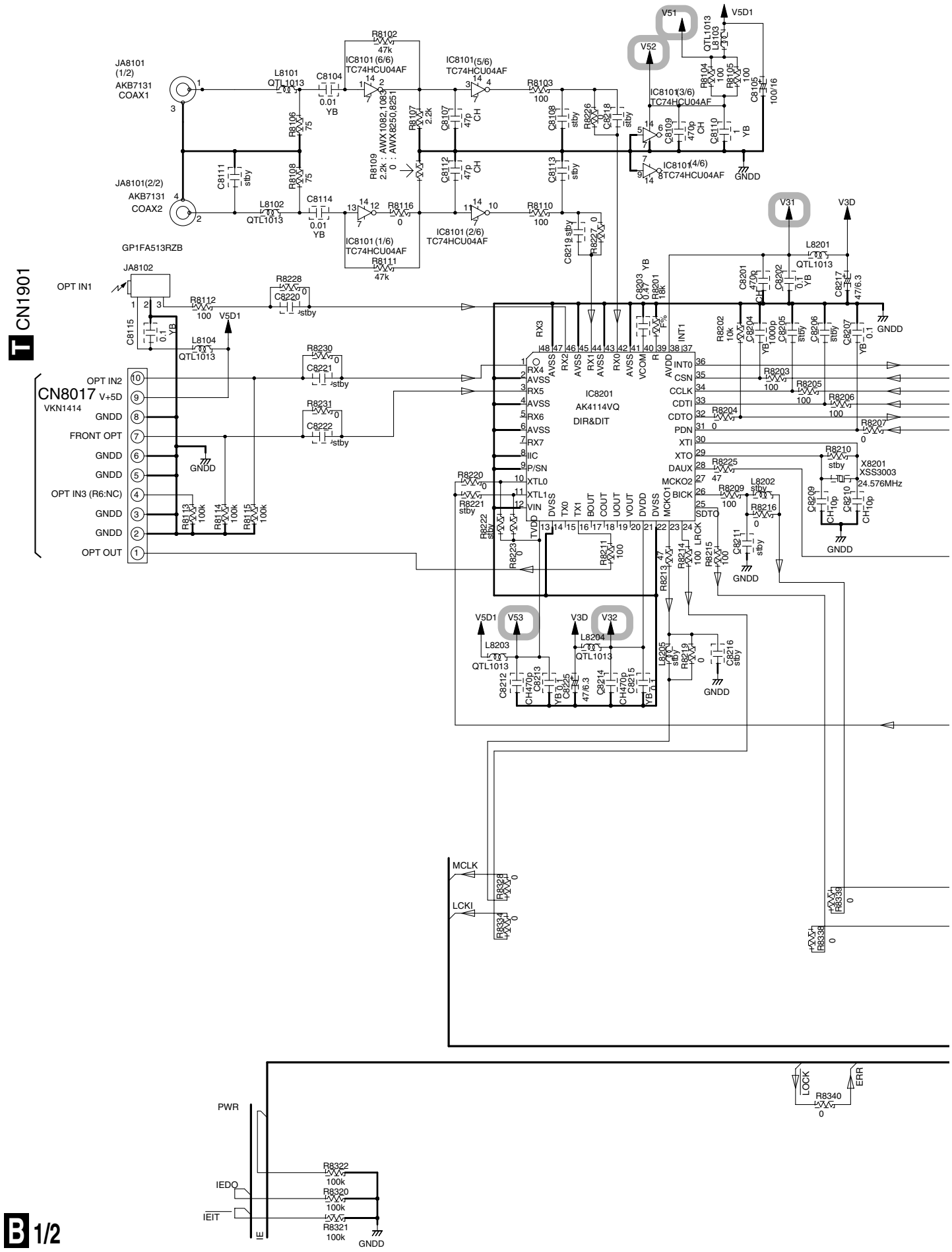
2.CAPACITORS
Unit: p-pF or µF unless otherwise noted.
Ratings: Capacity(µF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.

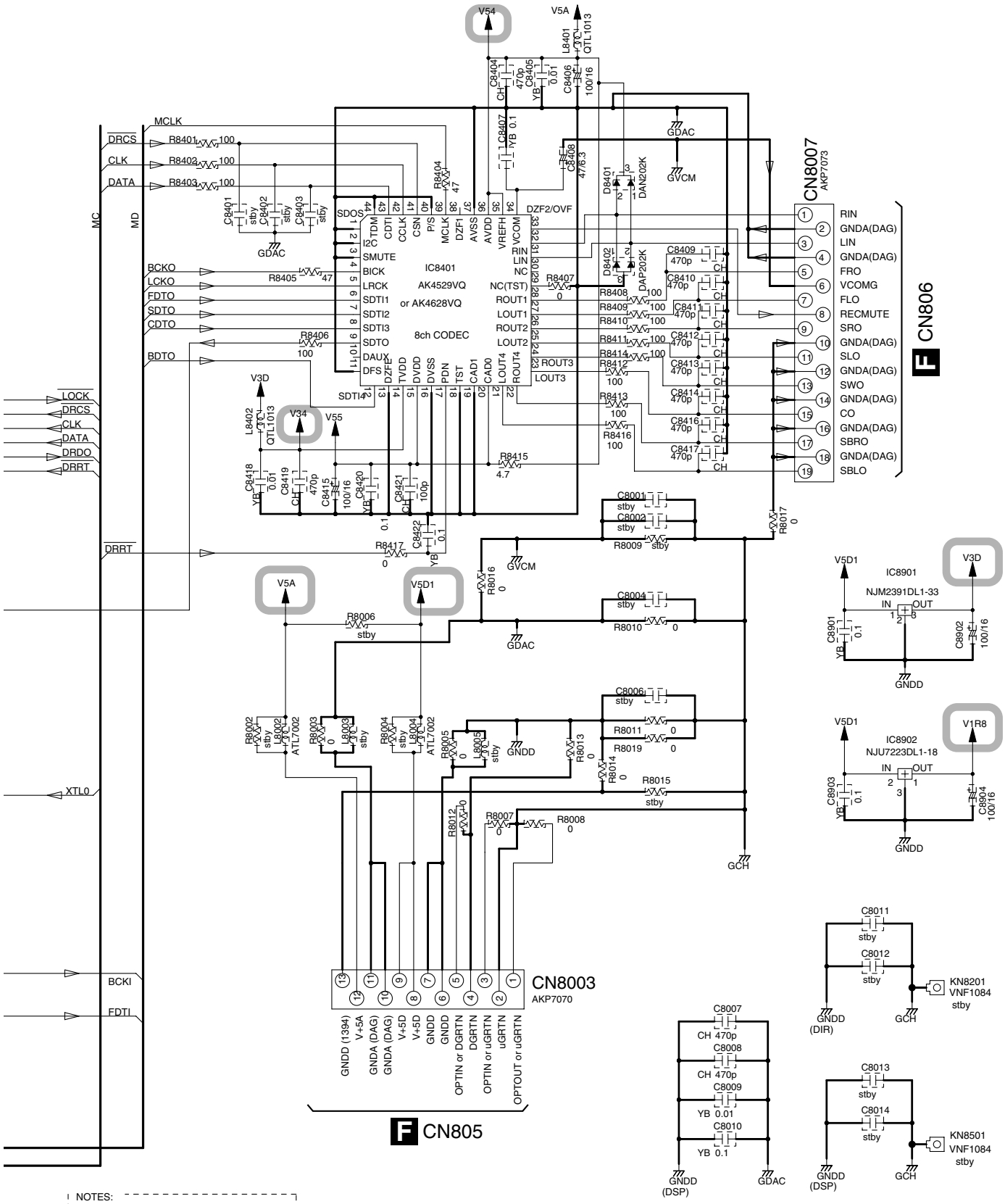
⇨ : AUDIO SIGNAL FLOW

A 3/3


M CN401
A 3/3 MAIN ASSY
(XWK3120)
TO FRONT DISPLAY ASSY
CN101
52045-1745
FLAC 2
FLAC 1
-VF
DISP RST
DISP CLK
DISP DI
DISP DO
DISP RDY
DISP EN
SRIN
SROUT
RMC
1W WP
D+5.6V
ST5.6V
GNDU
GNDU
SRIN
SROUT
RMC
1W_WP
SM+5V
T_CE
T_DI
T_CLK
T_DO
MT
MV
V+5U
R9034
STBY
6_OHM
R9019
R9020
R9021
R9022
R9023
R9024
R9025
R9026
R9013
R9014
R9015
R9016
R9017
R9018
R9041
100K
R9038
STBY
IC9001
M30622MCA
MAIN µ-COM
PEG062A
NC
DISP RST
DISP EN
DISP RDY
DISP DI
DISP DO
DISP.CK
GND
CNVSS
NC
NC
XRESET
XOUT
GND
XI
+5V
NMI
ACIN
1394 INT
1W WP
DECO MUTE
NECK_SEL
DC PROT
BOARD_DET
MIC DET
1394 RST
Avcc
Vref
AVss
SIMUKE2
SIMUKE1
TUNED
RDS ON/OFF
RDS DT
RDS CLK
OL DET
VIDEO1
VIDEO2
VIDEO3
SW DET
FUR
4053A
4053 INH
EVR DT
EVR CLK
LOW POW
MVRATT
RY-AC
HP DET
RY_A
RY_C/R
RY_B
AMUTE
GAIN_SEL
INPUT ATT
SR TXD
SR RXD
CLK
32C CTS
DSP DI
DSP DO
DSP CLK
DSP RST
DSP SS
BUSY
DSP HREQ
DSP MODE
DSP MUTE
DIR DO
DIR CS
DIR RST
DIR ERR
XTLO
TUNED
RDS_ON_/_OFF
RDS_DT
RDS_CLK
4053INH
V1
V2
V3
SWDET
FUR
4053A
VLDT
VLCK
AC_RY
HP_SW
SPA_RY
R/C_RY
SPB_RY
MVRATT
INPUTATT
A 1/3
A 2/3
XSS3004
X9001
15.7MHZ
C9007
330/6.3
C9008
0.01
C9009
C9010
R9005
R9004
L9003
LFEA2R2J-T
C9002
C9003
PCH132
C9004
0.01
R9001
R9002
47K
R9003
100K
C9015
1000 p
C9006
1u/10
D9010
1SS355
R9033
C9005
2.2/50
R9037
Q9001
DTC143EK-TLB
AC_WP
1W_WP
R9062
470
R9010
5.1k
C9016
1000p
R9006
D9006
1SS355
R9007
47K
D9008
1SS355
C3011
0.047/16
D9007
1SS355
C9014
0.047/16
D9009
1SS355
GNDU
SRTXD
SRRXD
R9032
100K
DIR RST
DIR ERR
XTLO
Q9005
DTA124EK-TLB
D9013
1SS355
R9009
47K
V-12
V+12
Q9003
DTA124EK-TLB
R9012
27K
D9011
1SS355
R9011
1K
R9027
100
C9012
stby
R9042
R9043
R9044
*3
R9061
47K
Q9006
DTC143EK-TLB
Q9004
DTA124EK-TLB
R9063
1K
C9017
0.01u
Q9007
DTC143TK-TLB
R9030
47
Q9002
DTA124EK-TLB
C9013
470/6.3
R9028
10K
R9029
47K
R9039
100K
R9031
100K
CN102
52045-1045
Vss
T_TXD
T_BUSY
NC
T_Vdd
T_SCLK
T_RXD
T_PGM/OE/MD
T_RST
Vss
FOR FLASH U-COM
(proto type use only)
R5000
STBY
SWPR
SBPR
GNDA0
GAV
GNDT
A 2/3
MD
LSSN
C9000
STBY
CN112
52045-1945
MUTE_OUT
DMUTE
G
DECMUTE
MOSI
MISO
MSCK
MRST
MSS
BUSY
DSP HREQ
DSP MODE
DIR DO
DIR CS
DIR RST
DIR ERR
XTLO
LSSN
G
TO CORE ASSY
(TO DSP CORE)
B 2/2 CN8012
A 3/3

3.6 DSP ASSY (1/2)





NOTES:

NO INDICATED PARTS IS...

CCSRCH****50-T
CKSRYB****50-T
CKSRYB333K16-T
CKSRYB104K16-T
CKSRYB105K6R3-T

CEV***M**-T

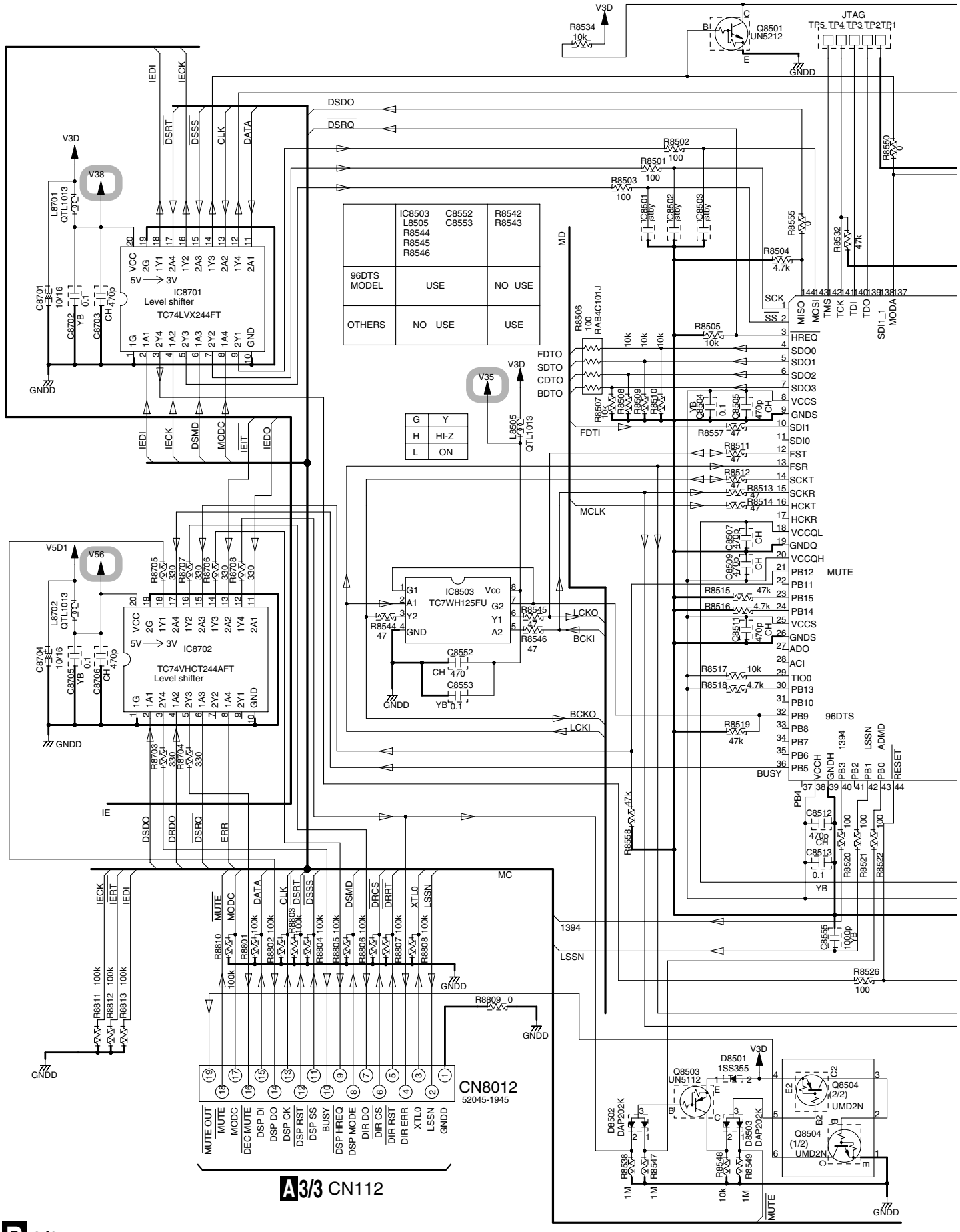
RS1/16S***J-T

UNLESS OTHERWISE NOTED

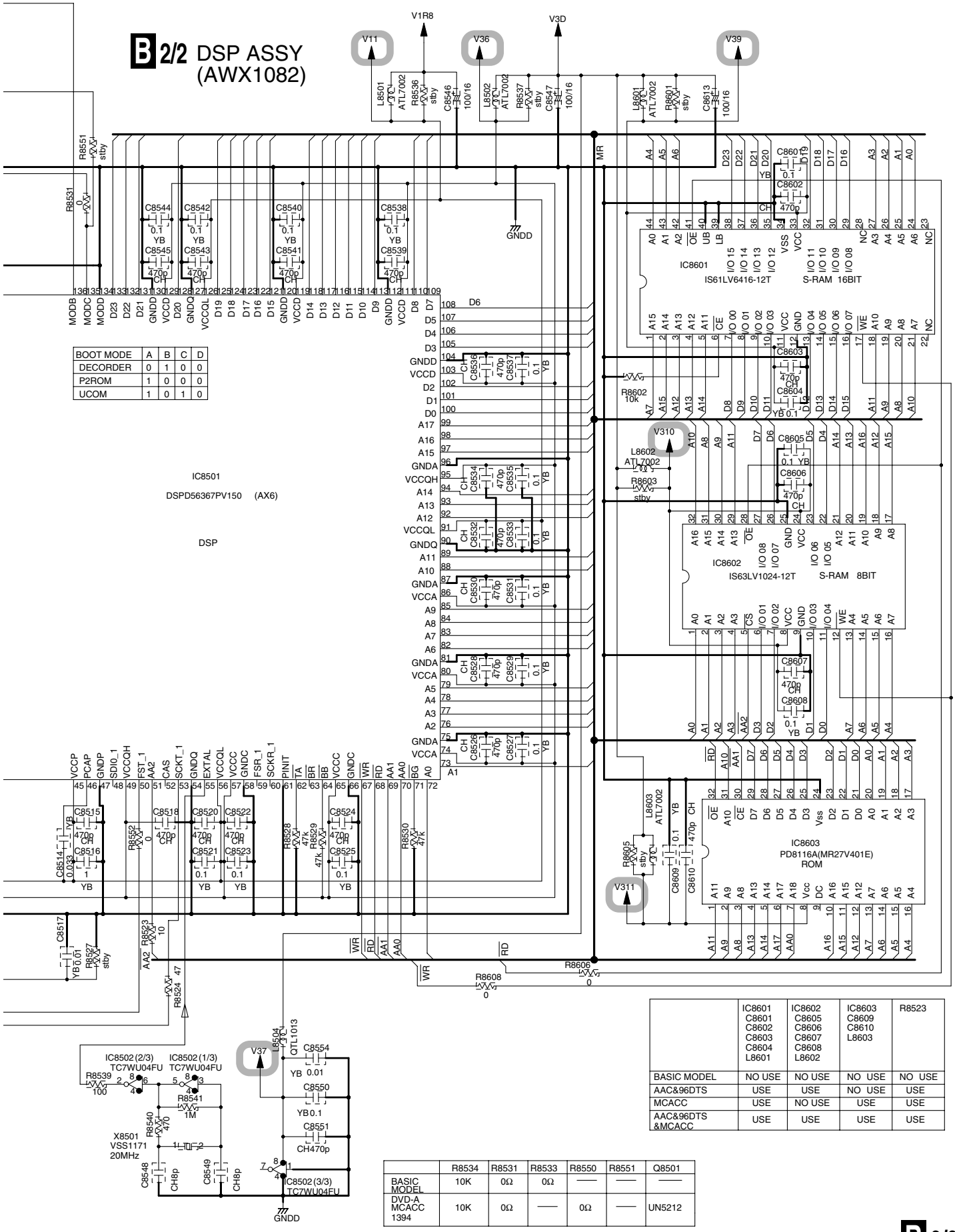
B 1/2 DSP ASSY
(AWX1082)

B 1/2

3.7 DSP ASSY (2/2)



B 2/2 DSP ASSY (AWX1082)

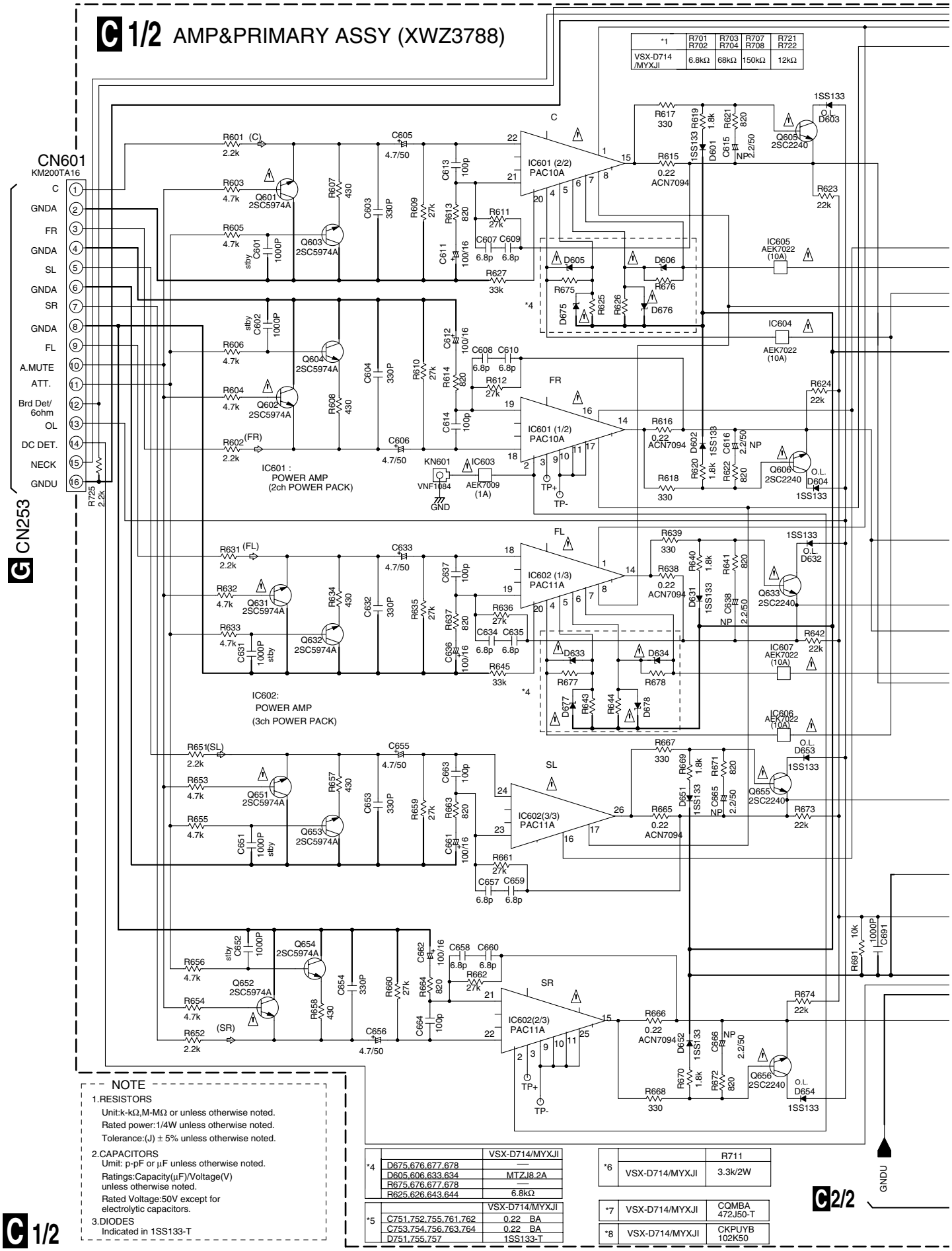


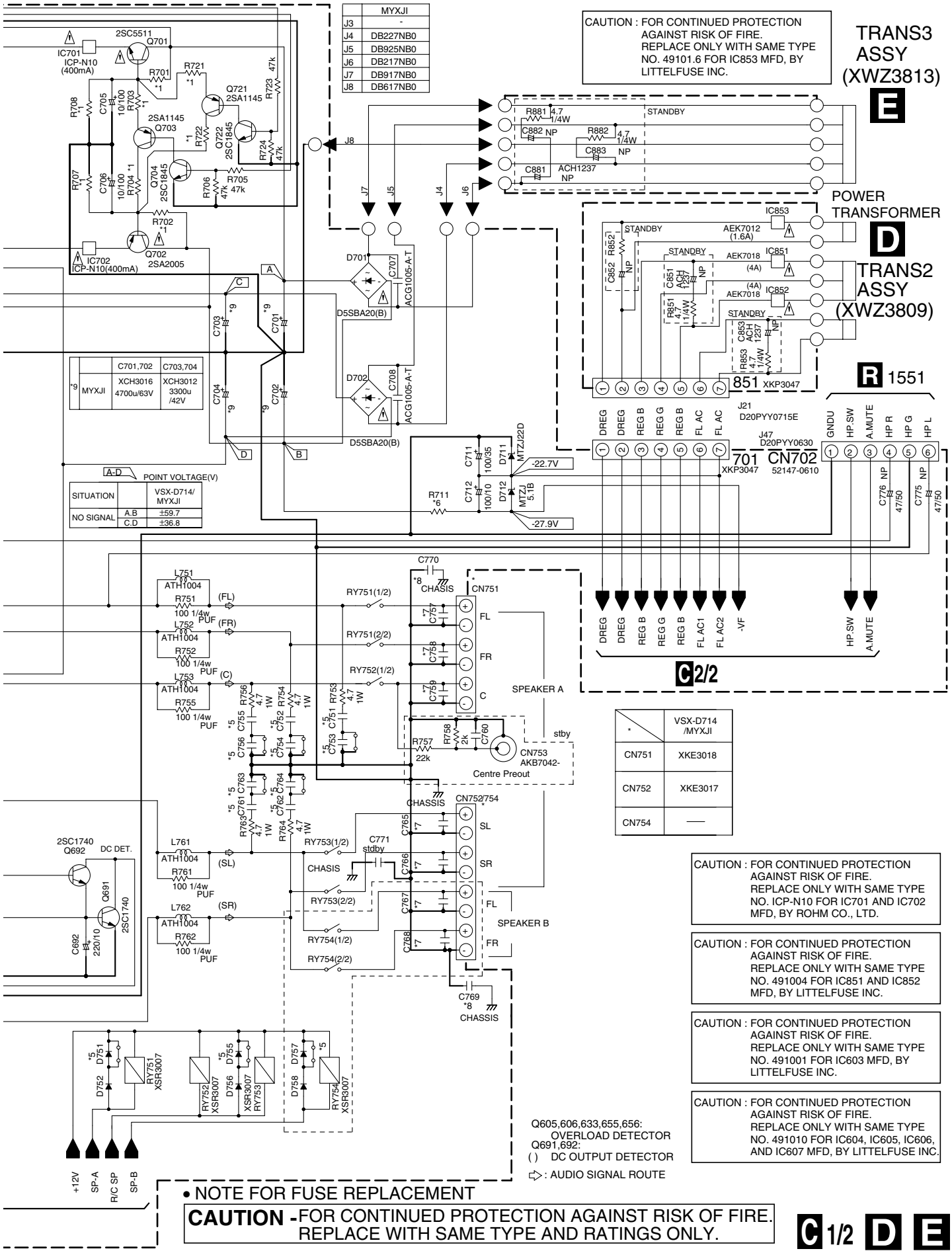
BOOT MODE	A	B	C	D
DECORDER	0	1	0	0
P2ROM	1	0	0	0
UCOM	1	0	1	0

	IC8601 C8601 C8602 C8603 C8604 L8601	IC8602 C8605 C8606 C8607 C8608 L8602	IC8603 C8609 C8610 L8603	R8523
BASIC MODEL	NO USE	NO USE	NO USE	NO USE
AAC&96DTS	USE	USE	NO USE	USE
MCACC	USE	NO USE	USE	USE
AAC&96DTS &MCACC	USE	USE	USE	USE

	R8534	R8531	R8533	R8550	R8551	Q8501
BASIC MODEL	10K	0Ω	0Ω	—	—	—
DVD-A MCACC 1394	10K	0Ω	—	0Ω	—	UN5212

3.8 AMP & PRIMARY (1/2), TRANS2 and TRANS3 ASSYS





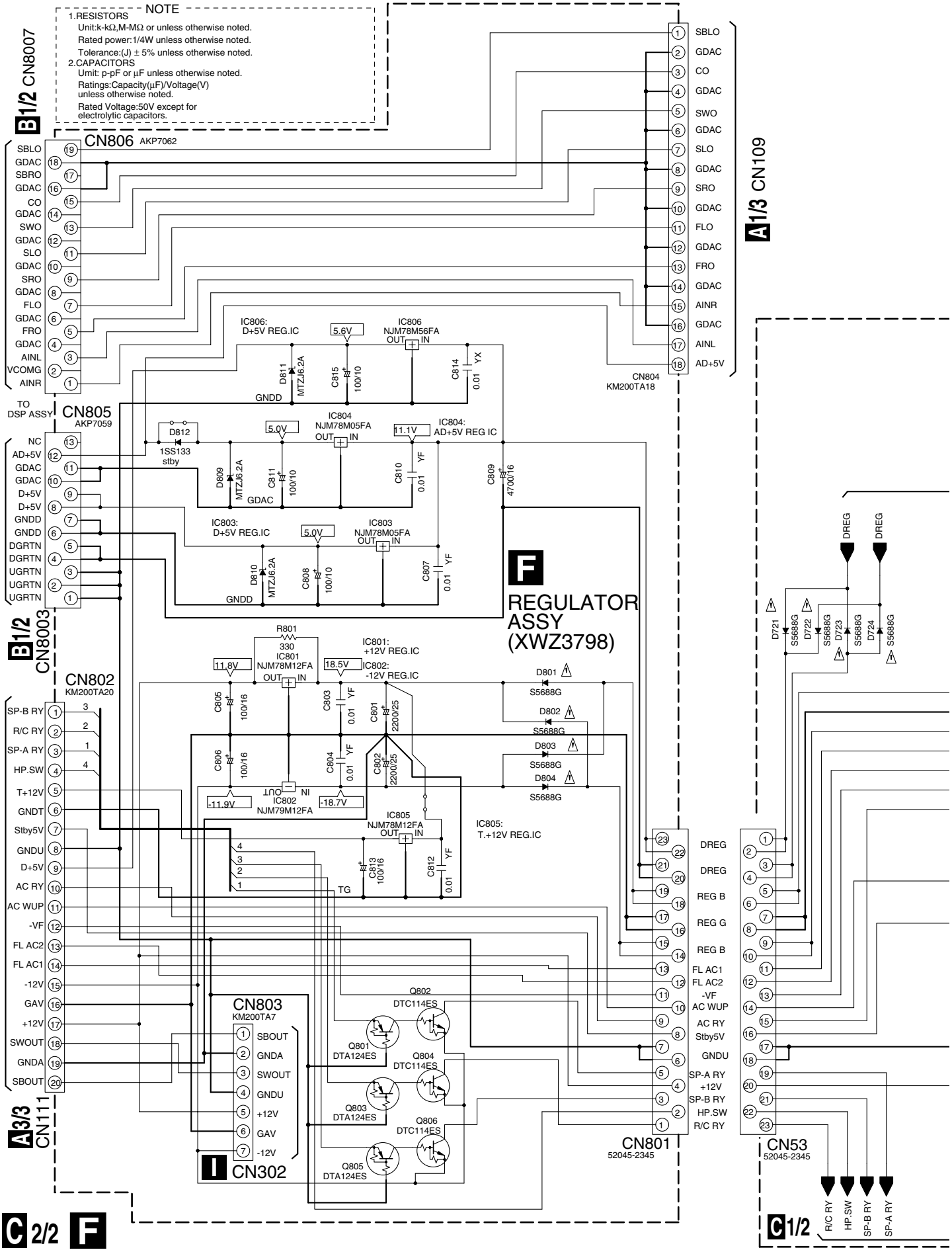
	MYXJI
J3	-
J4	DB227NB0
J5	DB925NB0
J6	DB217NB0
J7	DB917NB0
J8	DB617NB0

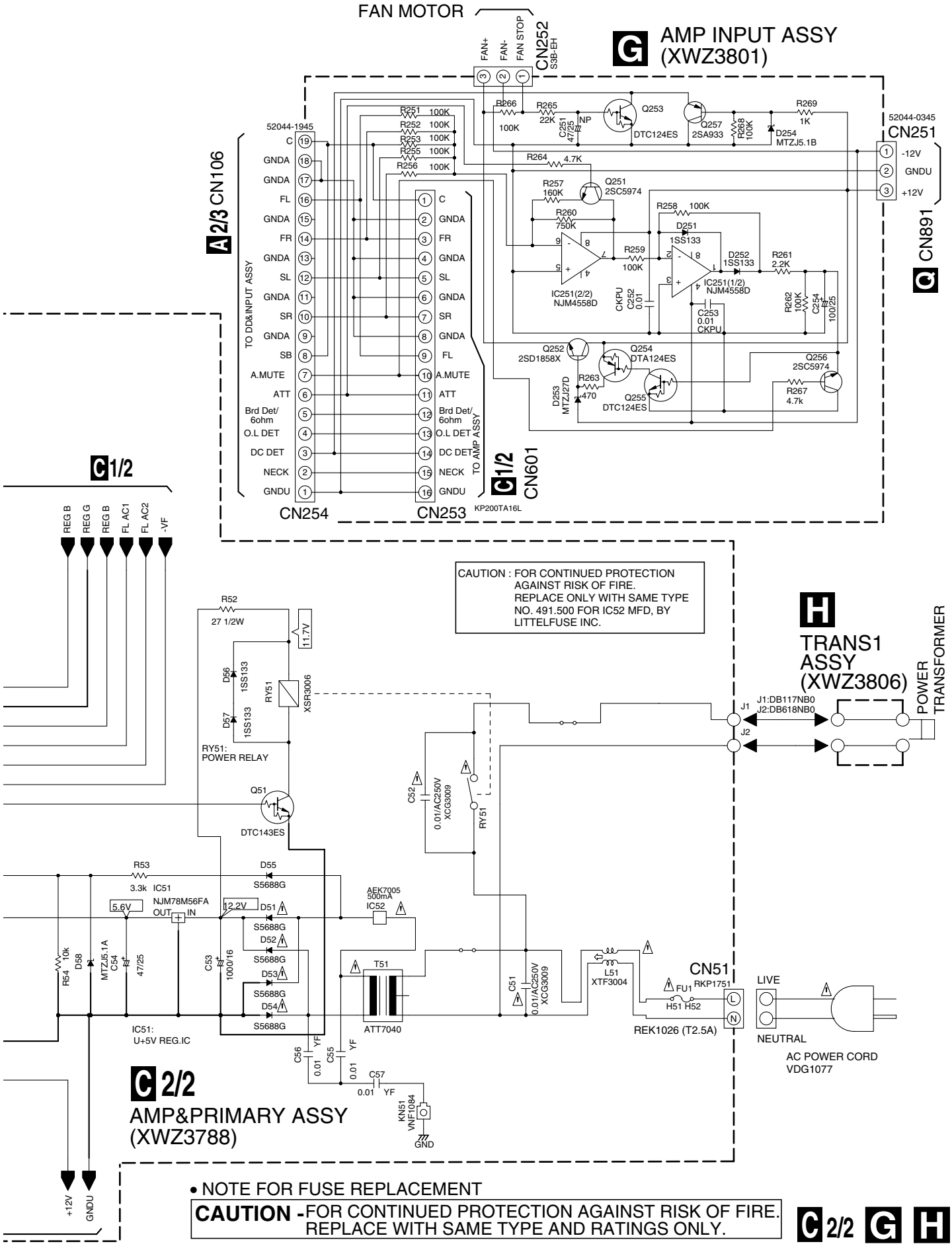
*9 MYXJI	C701,702	C703,704
	XCH3016 4700u/63V	XCH3012 3300u /42V

SITUATION		VSX-D714/ MYXJI
NO SIGNAL	A.B	±59.7
	C.D	±36.8

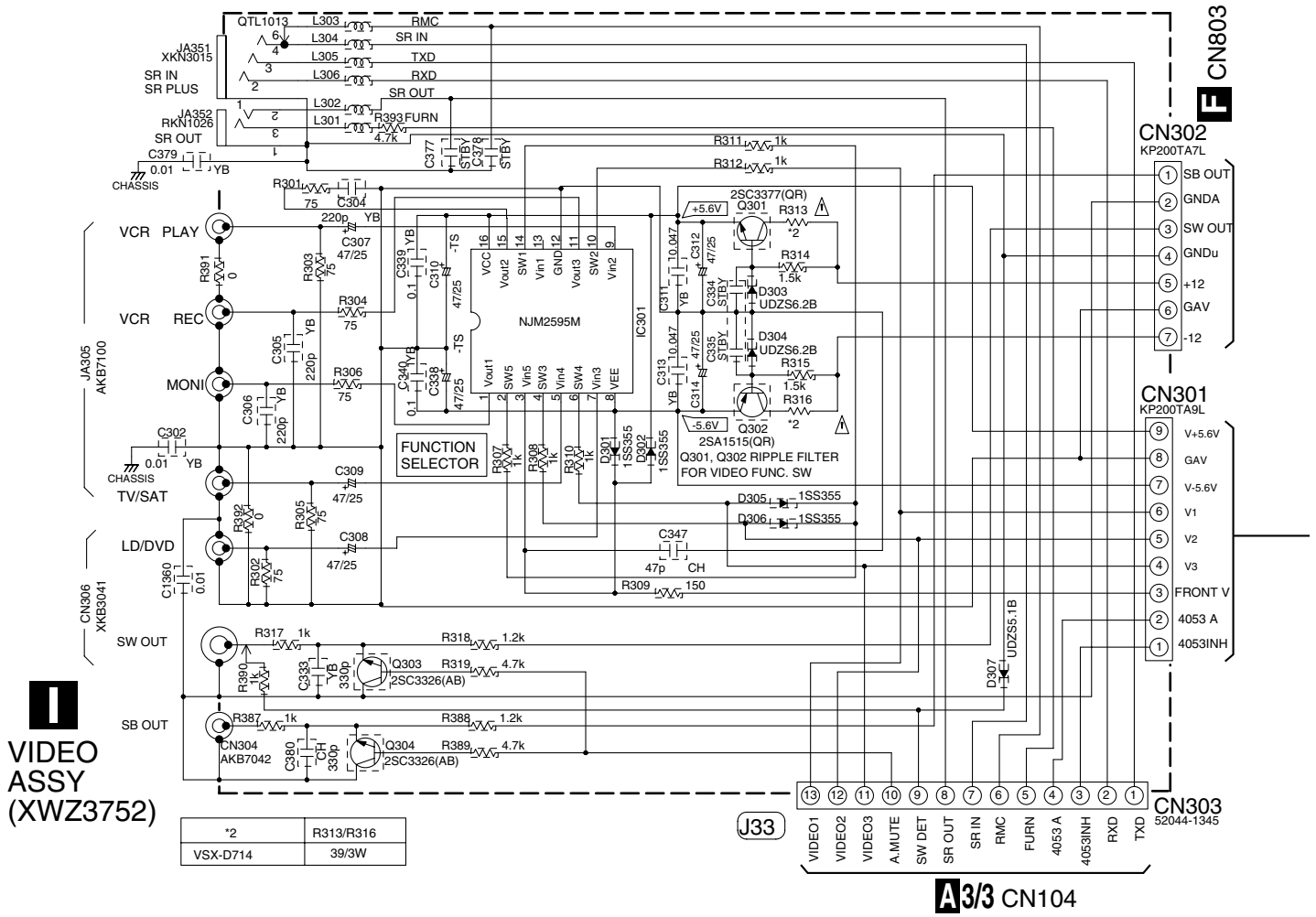
*	VSX-D714 /MYXJI
CN751	XKE3018
CN752	XKE3017
CN754	—

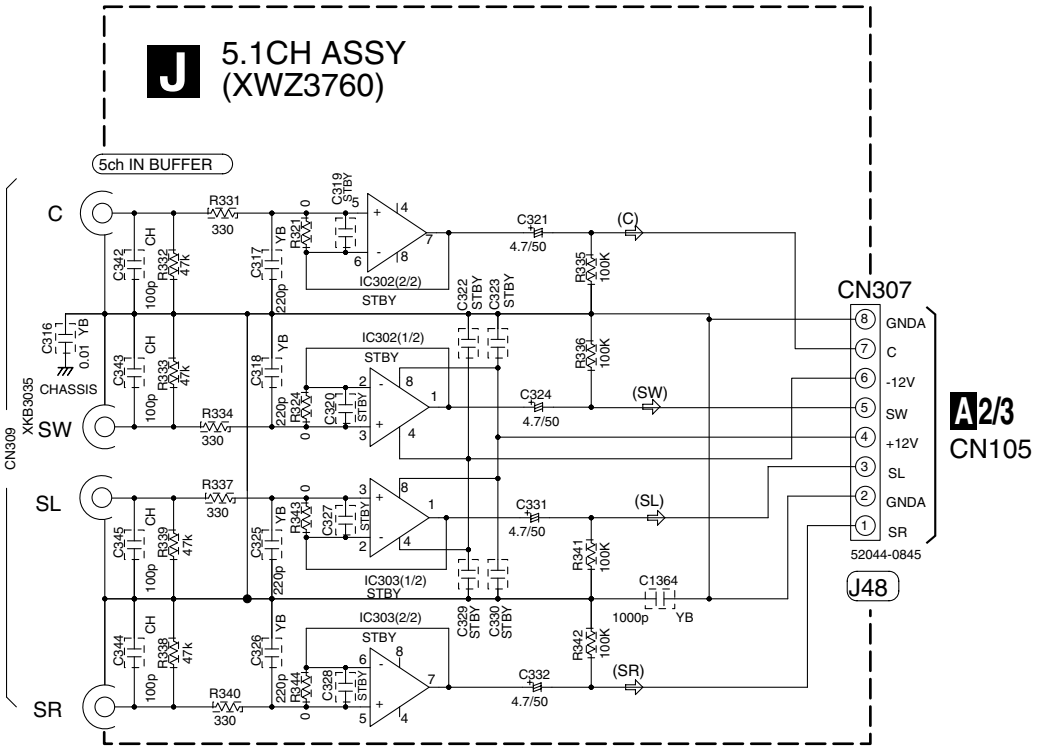
3.9 AMP & PRIMARY (2/2), REG. , AMP INPUT and TRANS1 ASSYS



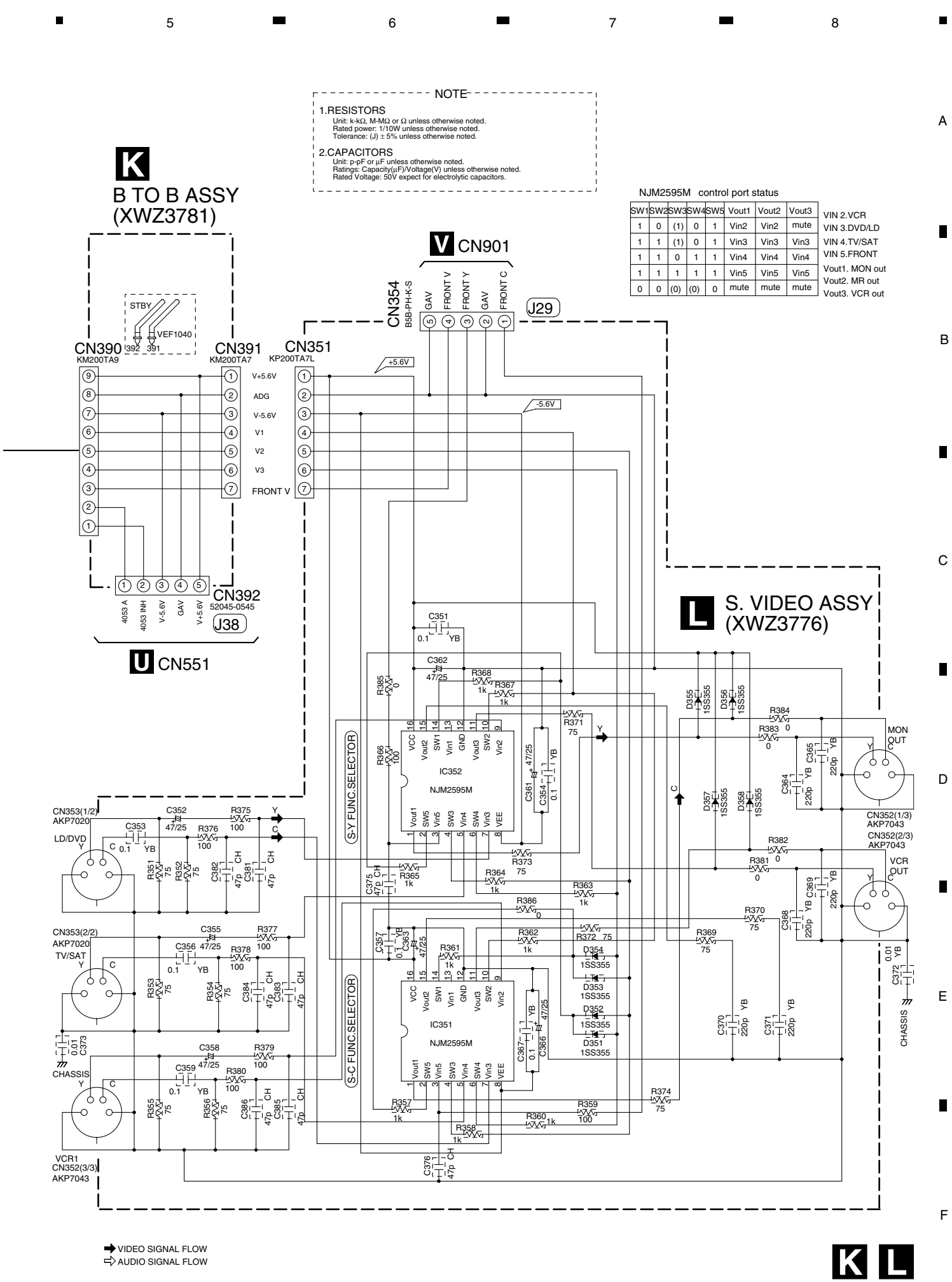

FAN MOTOR
FAN+
FAN-
FAN STOP
CN252
S3B-EH
G AMP INPUT ASSY
(XWZ3801)
A 2/3 CN106
TO DD&INPUT ASSY
52044-1945
C
GNDA
FL
FR
SL
SR
SB
A.MUTE
ATT
Brd Det/ 6ohm
O.L DET
DC DET
NECK
GNDU
CN254
CN253
TO AMP ASSY
C 1/2
CN601
KP200TA16L
R251 100K
R252 100K
R253 100K
R255 100K
R256 100K
R266 100K
R265 22K
C251 47/25 NP
Q253 DTC124ES
Q257 2SA933
R268 100K
R269 1K
D254 MTZJ5.1B
R264 4.7K
Q251 2SC5974
R257 160K
R260 750K
IC251(2/2) NJM4558D
R259 100K
D252 1SS133
D251 1SS133
R258 100K
R261 2.2K
IC251(1/2) NJM4558D
CKPU
C252 0.01
C253 0.01 CKPU
R262 100K
C254 100/25
Q252 2SD1858X
Q254 DTA124ES
Q255 DTC124ES
R263 470
D253 MTZJ27D
Q256 2SC5974
R267 4.7k
52044-0345
CN251
-12V
GNDU
+12V
Q CN891
C 1/2
REG B
REG G
REG B
FL AC1
FL AC2
-VF
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.500 FOR IC52 MFD, BY LITTELFUSE INC.
H
TRANS1 ASSY (XWZ3806)
POWER TRANSFORMER
J1:DB117NB0
J2:DB618NB0
J1
J2
R52 27 1/2W
11.7V
D56 1SS133
D57 1SS133
RY51 XSR3006
RY51: POWER RELAY
Q51 DTC143ES
C52 0.01/AC250V XCG3009
RY51
R53 3.3k
IC51 NJM78M56FA
5.6V
OUT
IN
12.2V
D55 S5688G
D51 S5688G
D52 S5688G
D53 S5688G
D54 S5688G
AEK7005 500mA IC52
R54 10k
D58 MTZJ5.1A
C54 47/25
C53 1000/16
T51 ATT7040
C51 0.01/AC250V XCG3009
L51 XTF3004
CN51
FU1 RKP1751
H51 H52
REK1026 (T2.5A)
LIVE
NEUTRAL
AC POWER CORD VDG1077
IC51: U+5V REG.IC
C56 0.01 YF
C55 0.01 YF
C57 0.01 YF
KN51 VNF1084
GND
C 2/2
AMP&PRIMARY ASSY
(XWZ3788)
+12V
GNDU
• NOTE FOR FUSE REPLACEMENT
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.
C 2/2 G H

3.10 VIDEO, 5.1CH, B TO B and S. VIDEO ASSYS



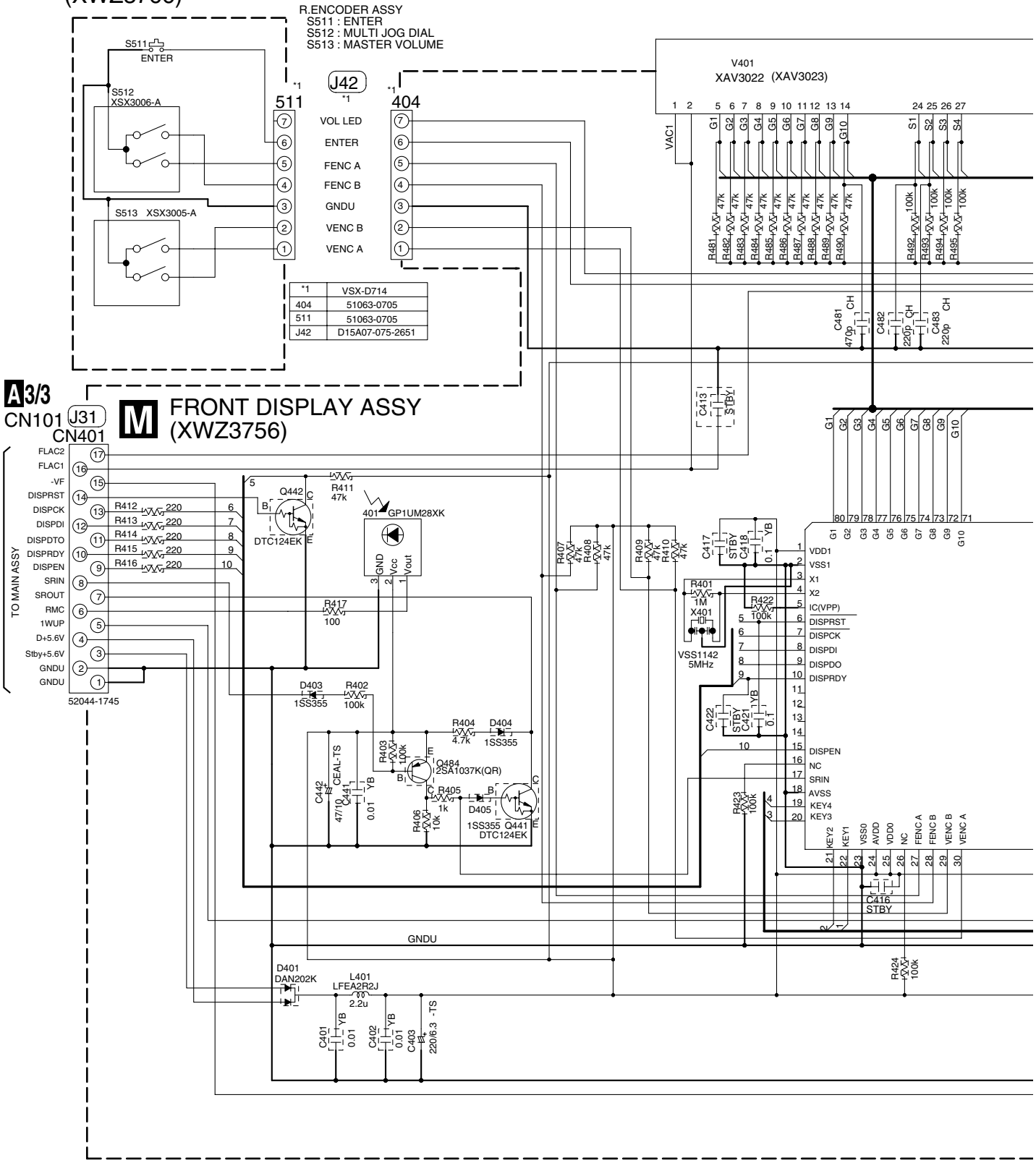


I J

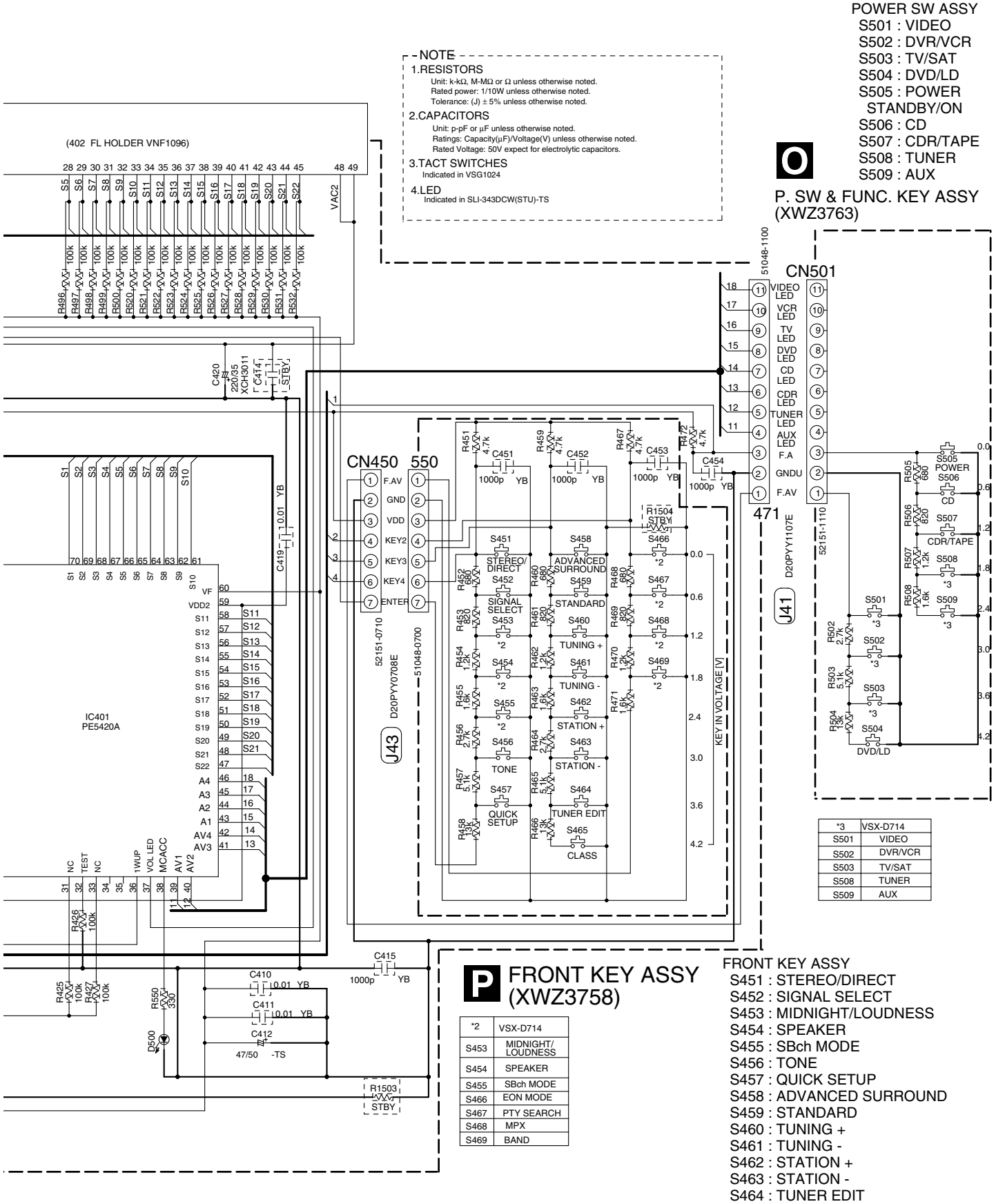

NOTE
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ± 5% unless otherwise noted.
2.CAPACITORS
Unit: p-pF or µF unless otherwise noted.
Ratings: Capacity(µF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.
K
B TO B ASSY
(XWZ3781)
NJM2595M control port status
SW1 SW2 SW3 SW4 SW5 Vout1 Vout2 Vout3
1 0 (1) 0 1 Vin2 Vin2 mute
1 1 (1) 0 1 Vin3 Vin3 Vin3
1 1 0 1 1 Vin4 Vin4 Vin4
1 1 1 1 1 Vin5 Vin5 Vin5
0 0 (0) (0) 0 mute mute mute
VIN 2.VCR
VIN 3.DVD/LD
VIN 4.TV/SAT
VIN 5.FRONT
Vout1. MON out
Vout2. MR out
Vout3. VCR out
V CN901
CN354
B5B-PH-K-S
GAV
FRONT V
FRONT Y
GAV
FRONT C
J29
STBY
VEF1040
392
391
CN390
KM200TA9
CN391
KM200TA7
CN351
KP200TA7L
+5.6V
-5.6V
V+5.6V
ADG
V-5.6V
V1
V2
V3
FRONT V
CN392
52045-0545
4053 A
4053 INH
V-5.6V
GAV
V+5.6V
J38
U CN551
L S. VIDEO ASSY
(XWZ3776)
IC352
NJM2595M
IC351
NJM2595M
S-Y FUNC.SELECTOR
S-C FUNC.SELECTOR
CN353(1/2)
AKP7020
LD/DVD
CN353(2/2)
AKP7020
TV/SAT
CHASSIS
VCR1
CN352(3/3)
AKP7043
MON OUT
CN352(1/3)
AKP7043
CN352(2/3)
AKP7043
VCR OUT
CHASSIS
VIDEO SIGNAL FLOW
AUDIO SIGNAL FLOW
K L
VSX-D714-K
31

3.11 FRONT DISPLAY, R.ENCODER, P.SW & FUNC. KEY and FRONT KEY ASSYS

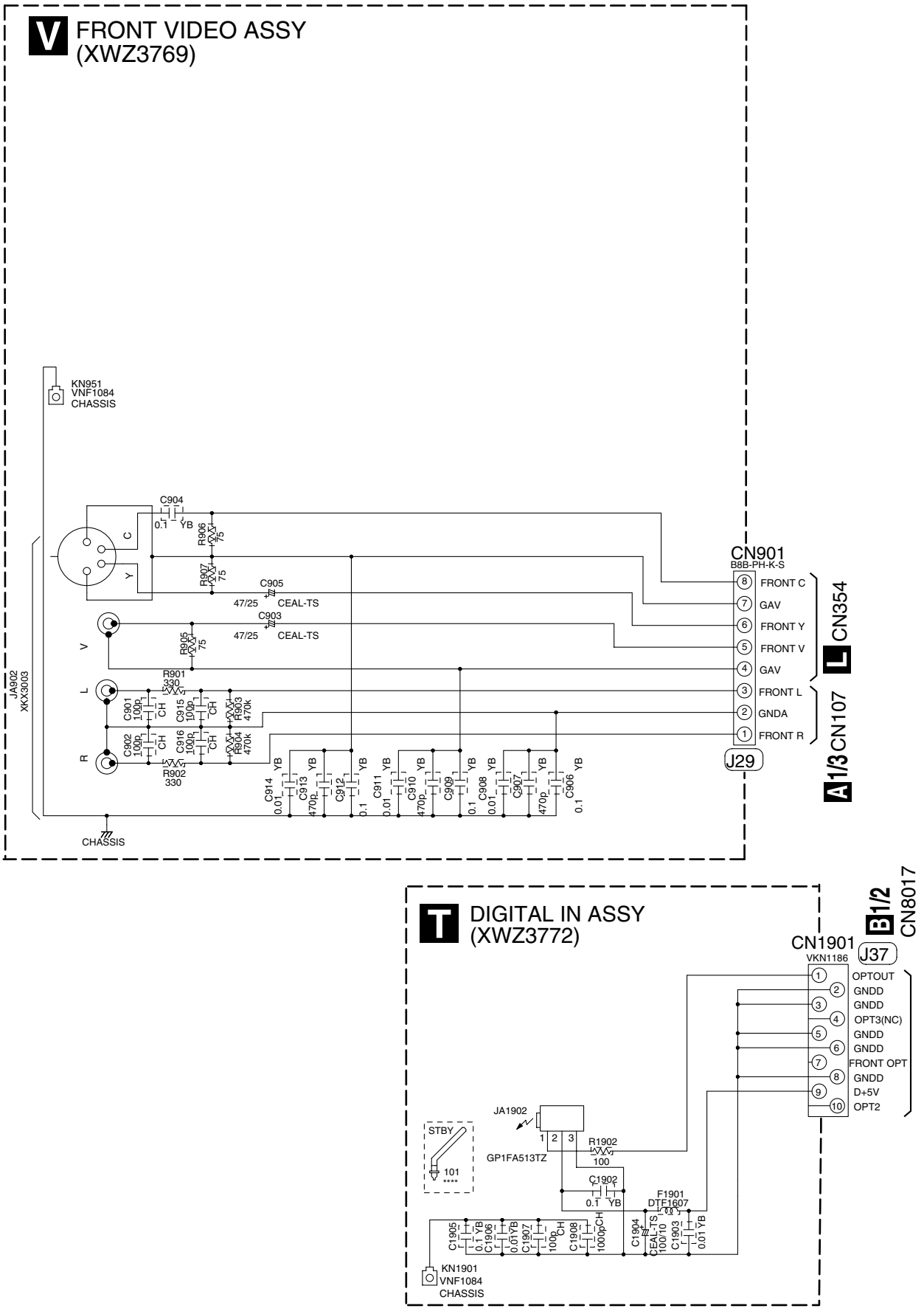
N R.ENCODER ASSY (XWZ3766)



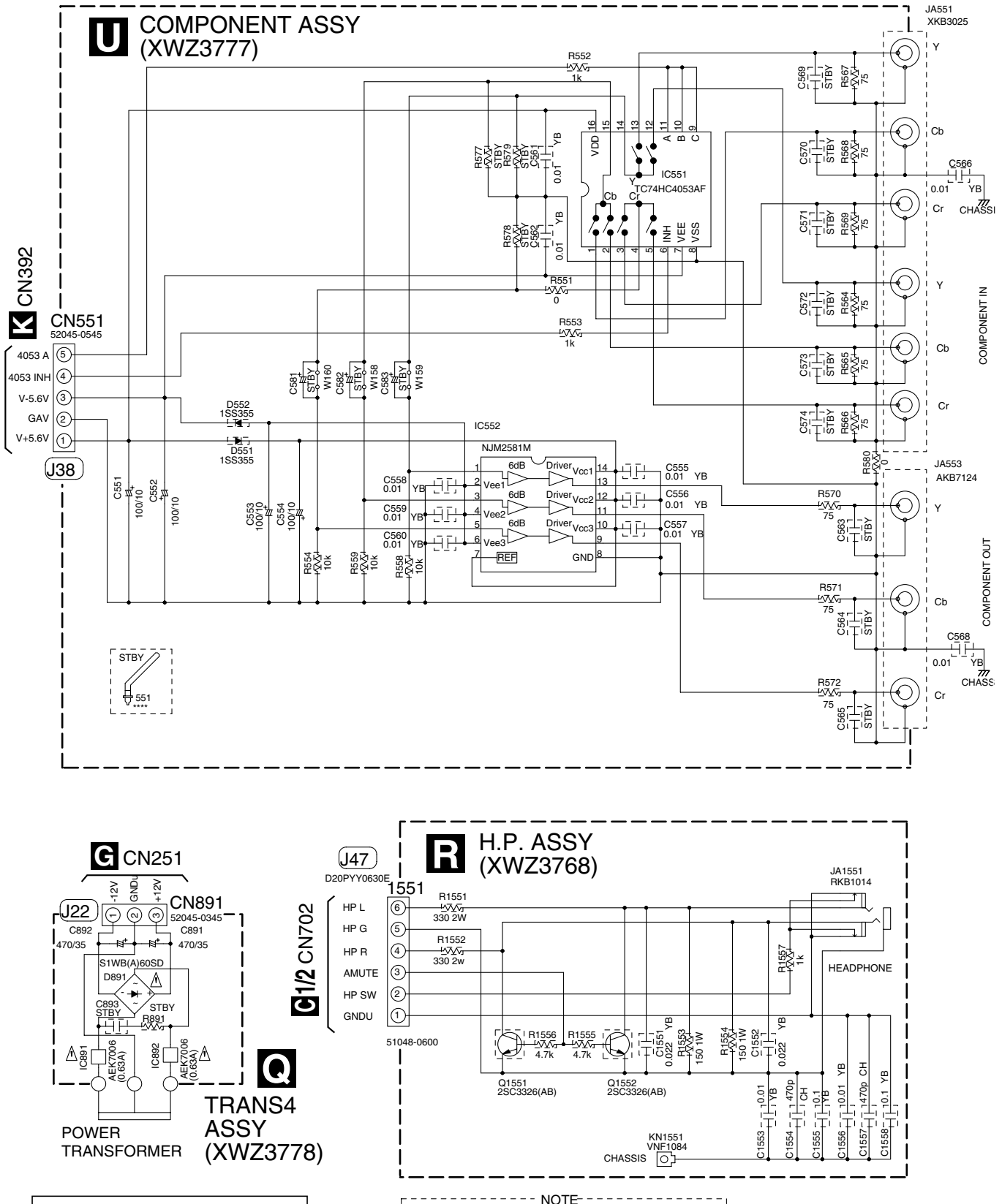
M N


POWER SW ASSY
S501 : VIDEO
S502 : DVR/VCR
S503 : TV/SAT
S504 : DVD/LD
S505 : POWER STANDBY/ON
S506 : CD
S507 : CDR/TAPE
S508 : TUNER
S509 : AUX
O
P. SW & FUNC. KEY ASSY (XWZ3763)
NOTE
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ± 5% unless otherwise noted.
2.CAPACITORS
Unit: p-pF or µF unless otherwise noted.
Ratings: Capacity(µF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.
3.TACT SWITCHES
Indicated in VSG1024
4.LED
Indicated in SLI-343DCW(STU)-TS
(402 FL HOLDER VNF1096)
CN501
CN450
550
J43
J41
471
IC401
PE5420A
52151-0710
D20PYY0708E
51048-0700
52151-1110
D20PYY1107E
KEY IN VOLTAGE [V]
VIDEO LED
VCR LED
TV LED
DVD LED
CD LED
CDR LED
TUNER LED
AUX LED
F.A
GNDU
F.AV
GND
VDD
KEY2
KEY3
KEY4
ENTER
STEREO/ DIRECT
SIGNAL SELECT
ADVANCED SURROUND
STANDARD
TUNING +
TUNING -
STATION +
STATION -
TONE
QUICK SETUP
TUNER EDIT
CLASS
POWER
CD
CDR/TAPE
DVD/LD
*3 VSX-D714
S501 VIDEO
S502 DVR/VCR
S503 TV/SAT
S508 TUNER
S509 AUX
P
FRONT KEY ASSY (XWZ3758)
*2 VSX-D714
S453 MIDNIGHT/ LOUDNESS
S454 SPEAKER
S455 SBch MODE
S466 EON MODE
S467 PTY SEARCH
S468 MPX
S469 BAND
FRONT KEY ASSY
S451 : STEREO/DIRECT
S452 : SIGNAL SELECT
S453 : MIDNIGHT/LOUDNESS
S454 : SPEAKER
S455 : SBch MODE
S456 : TONE
S457 : QUICK SETUP
S458 : ADVANCED SURROUND
S459 : STANDARD
S460 : TUNING +
S461 : TUNING -
S462 : STATION +
S463 : STATION -
S464 : TUNER EDIT
S465 : CLASS
S466 : EON MODE
S467 : PTY SEARCH
S468 : MPX
S469 : BAND
M O P

3.12 TRANS4, H.P., D.IN, COMP. and F.VIDEO ASSYS



T V



CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.630 FOR IC891 AND IC892 MFD, BY LITTELFUSE INC.

NOTE

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

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

Q R U

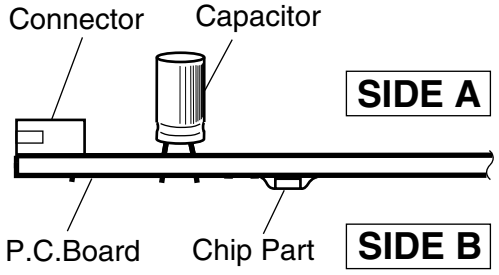
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

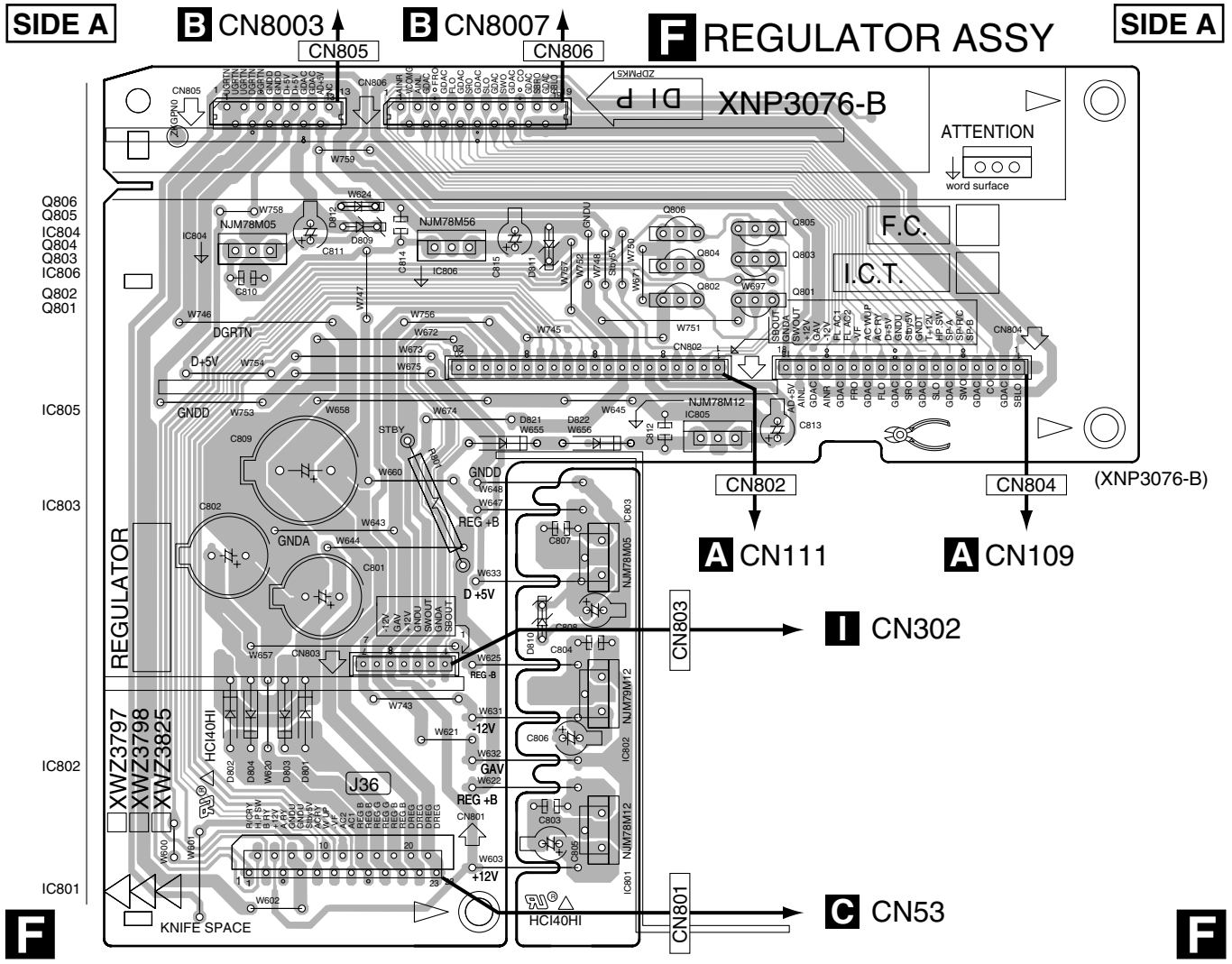
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

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

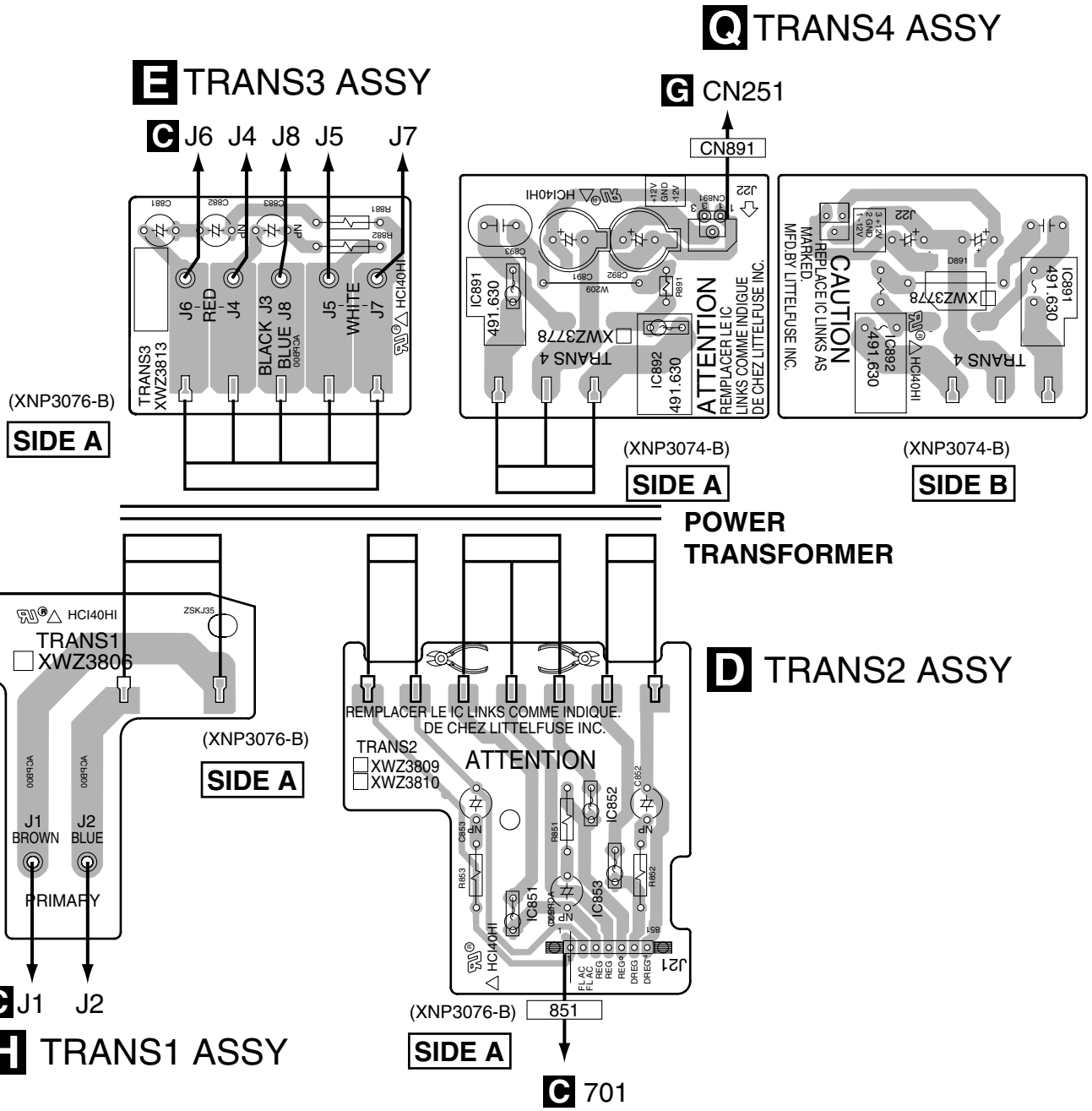


4.1 REGULATOR ASSY



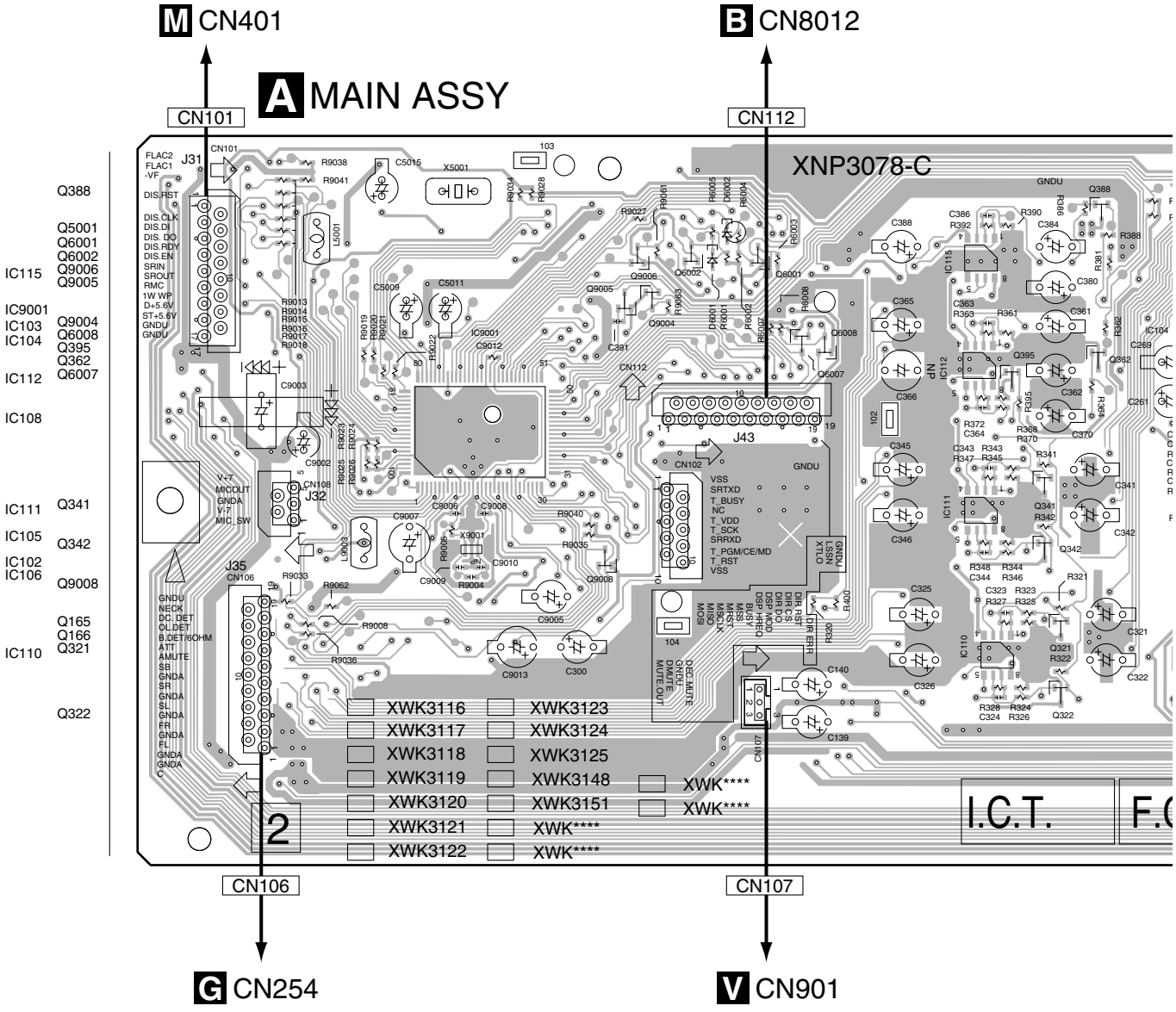
4.2 TRANS2, TRANS3, TRANS1 and TRANS4 ASSYS

SIDE A **SIDE B**

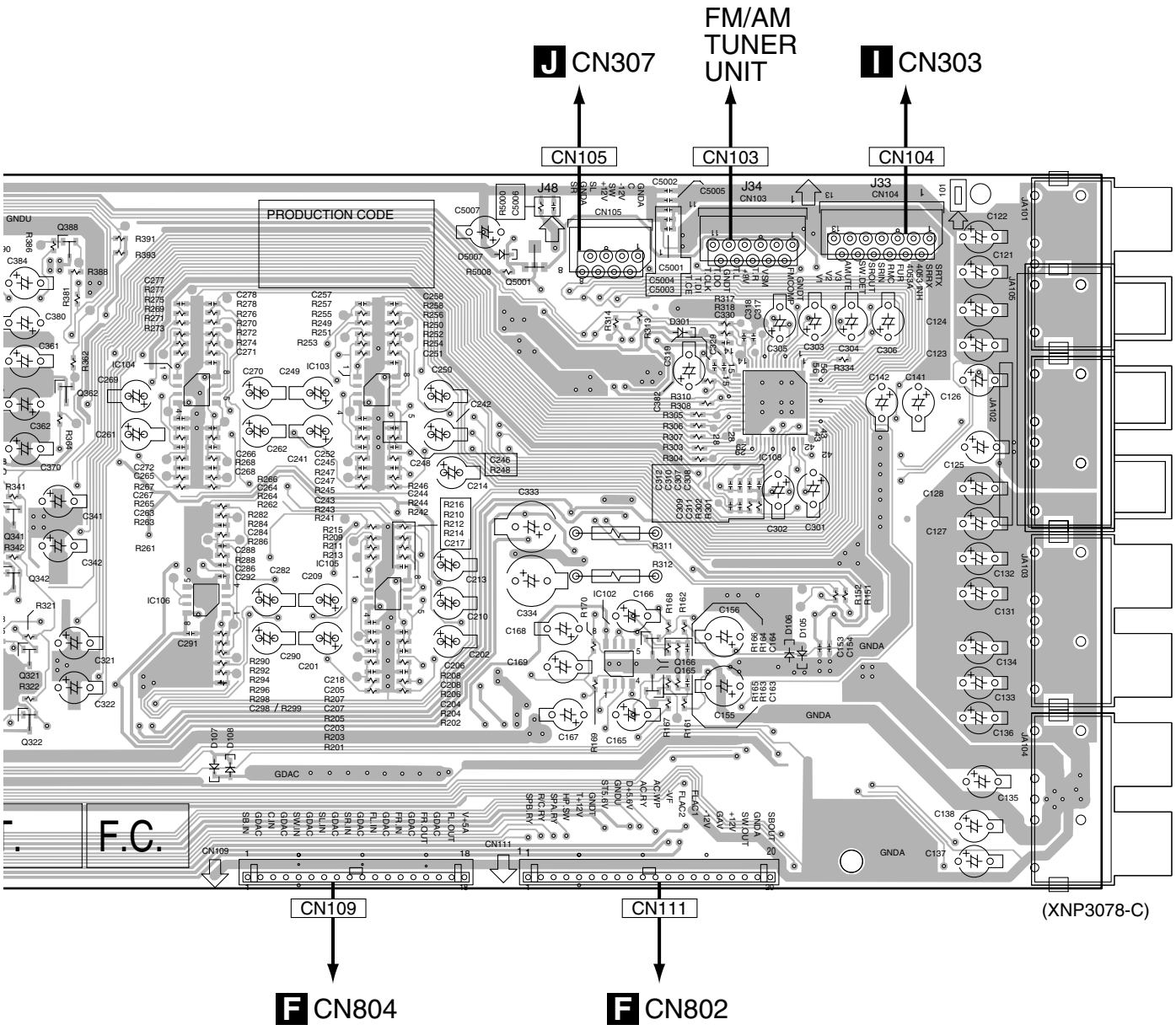


4.3 MAIN ASSY

SIDE A

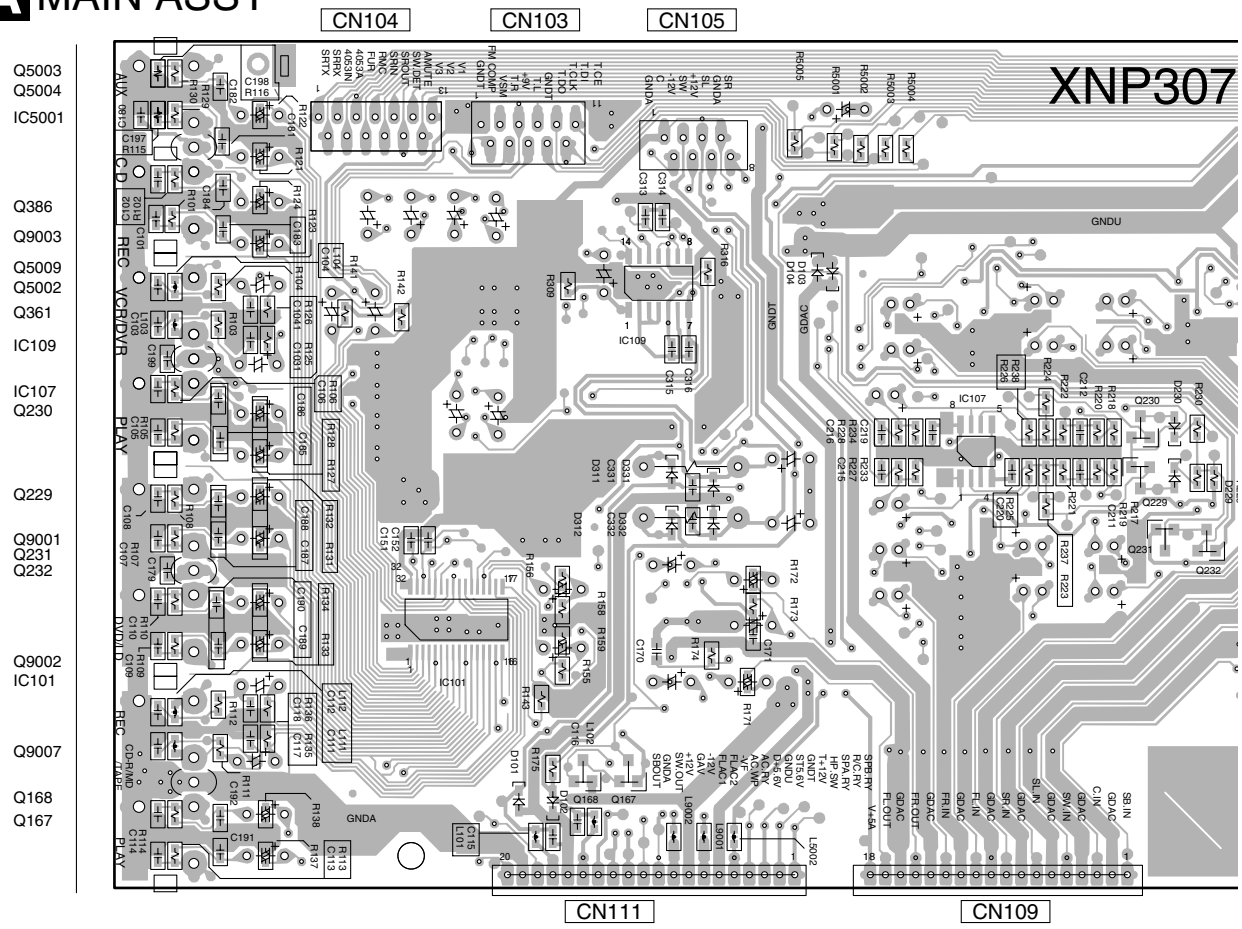


SIDE A


J CN307
FM/AM TUNER UNIT
I CN303
CN105
CN103
CN104
PRODUCTION CODE
CN109
CN111
(XNP3078-C)
F CN804
F CN802

SIDE B

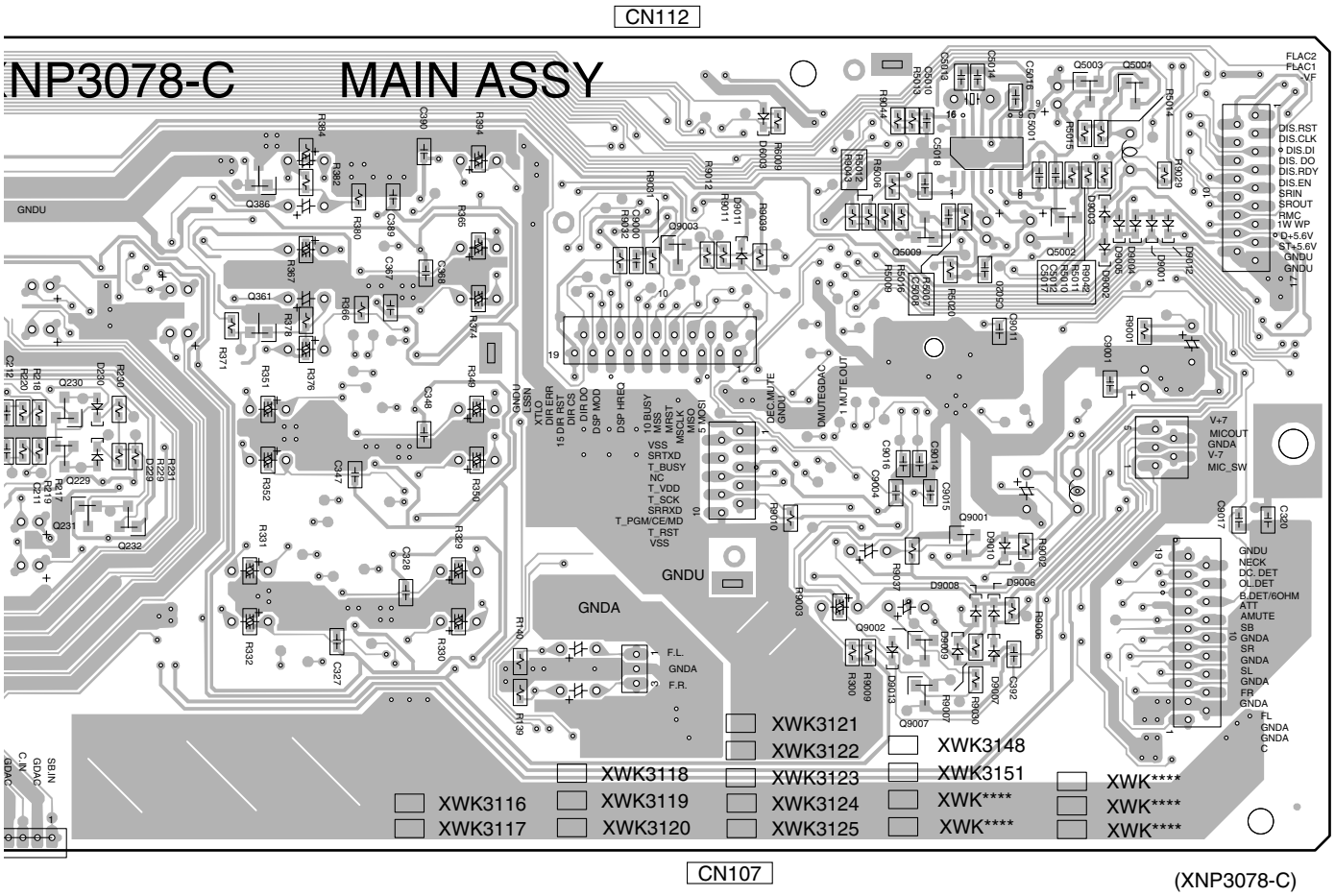
A MAIN ASSY



SIDE B

A

B



(XNP3078-C)

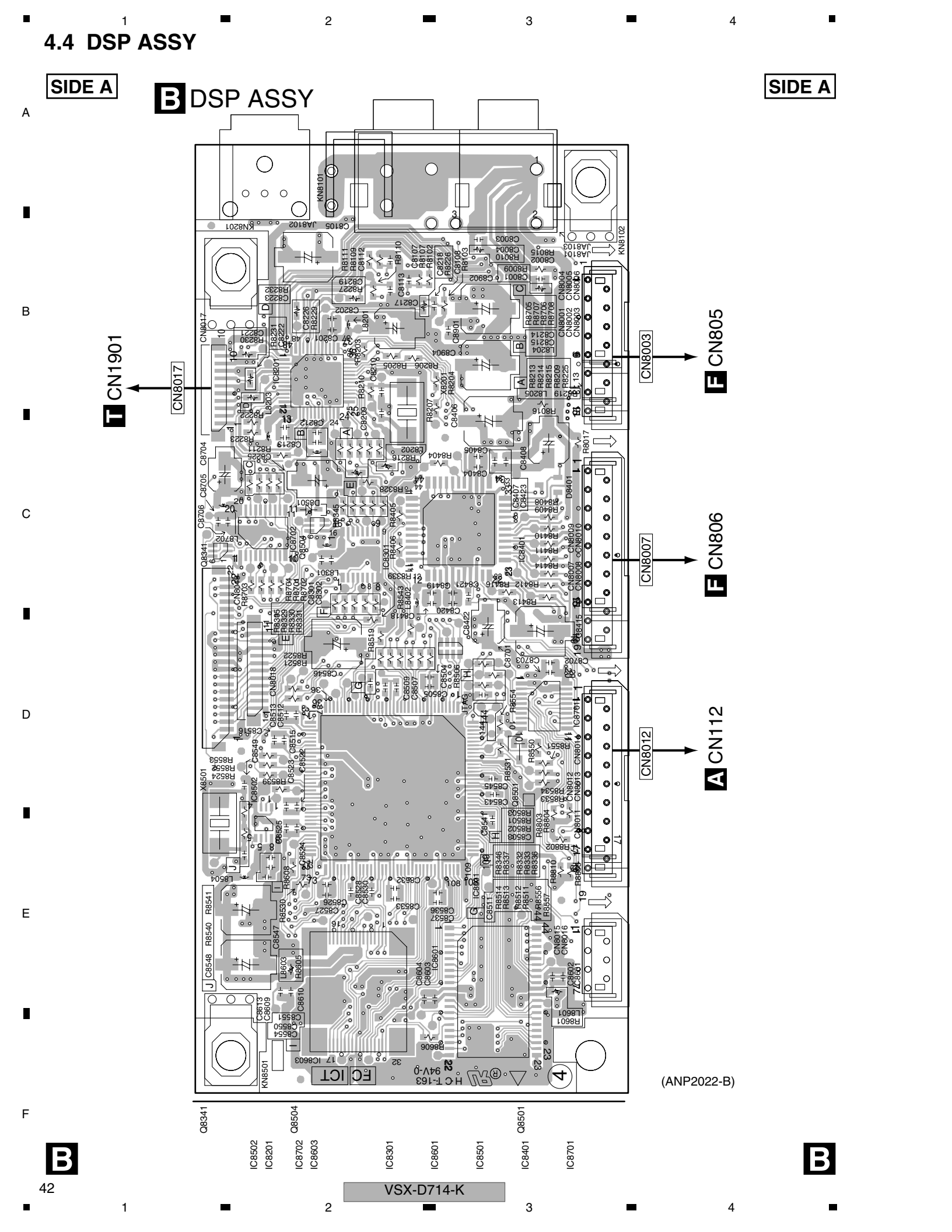
C

D

E

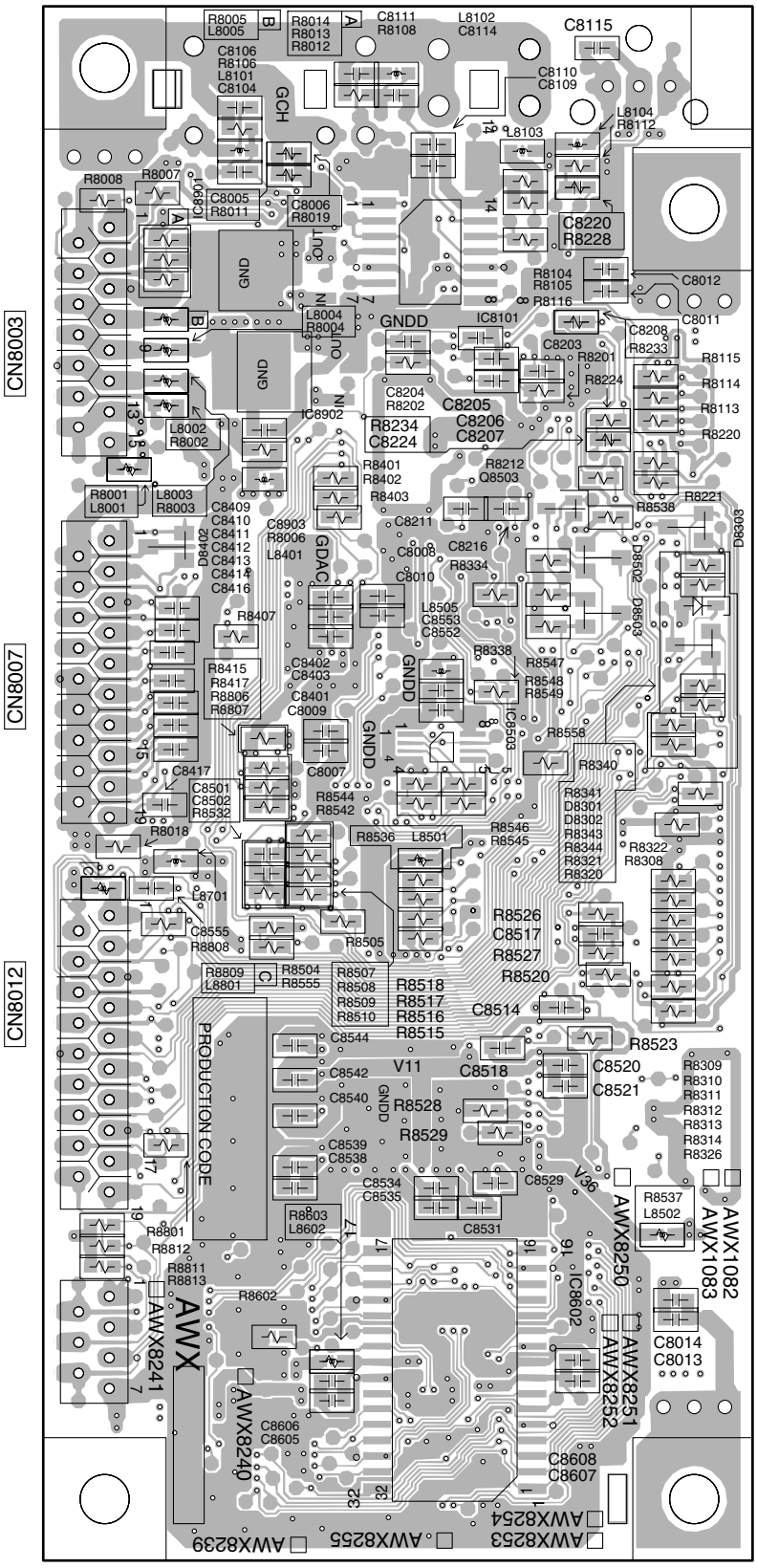
F

4.4 DSP ASSY


SIDE A
B DSP ASSY
SIDE A
T CN1901
CN8017
CN8003
F CN805
CN8007
F CN806
CN8012
A CN112
(ANP2022-B)
Q8341
Q8504
Q8501
IC8502
IC8201
IC8702
IC8603
IC8301
IC8601
IC8501
IC8401
IC8701

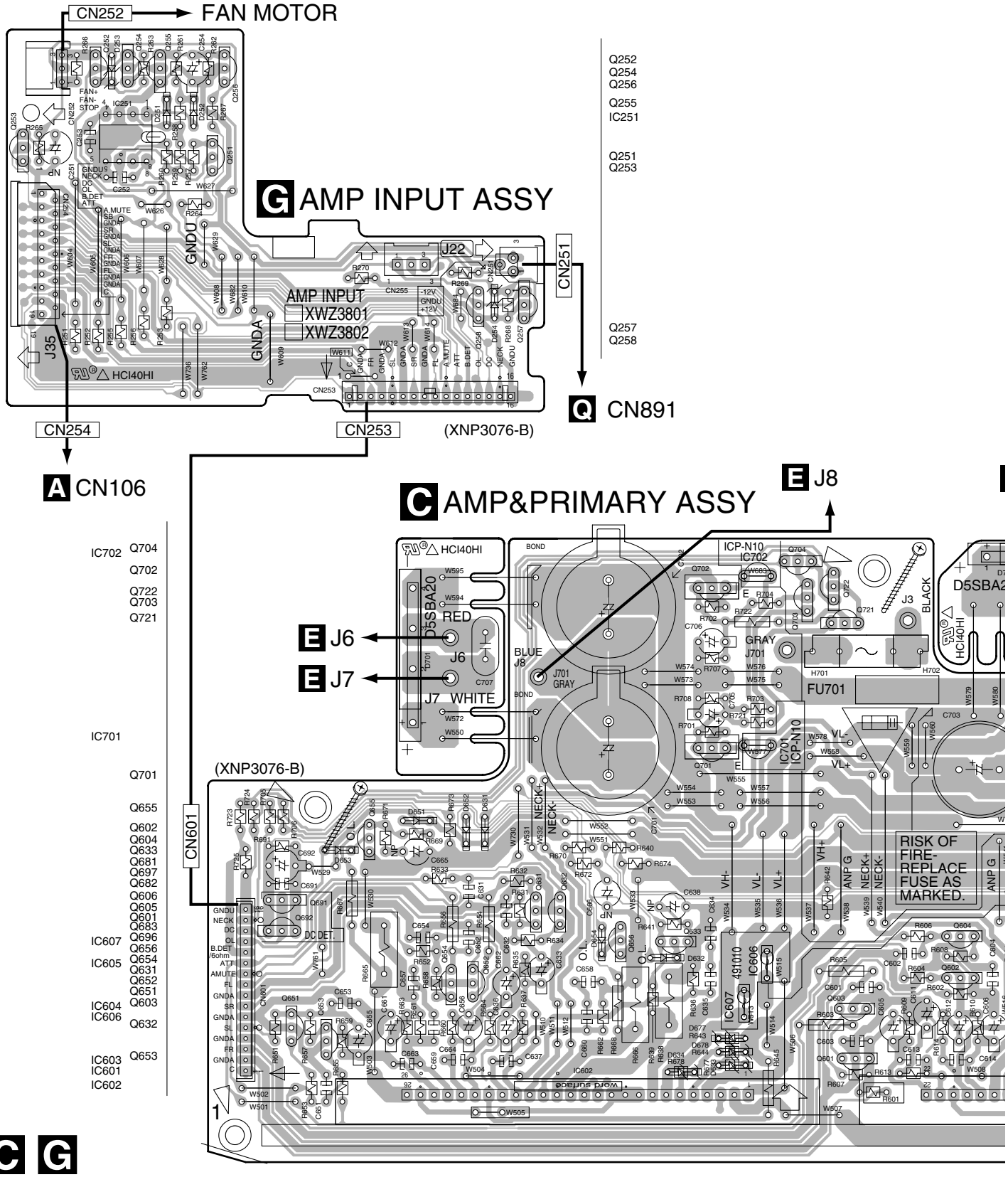
B DSP ASSY

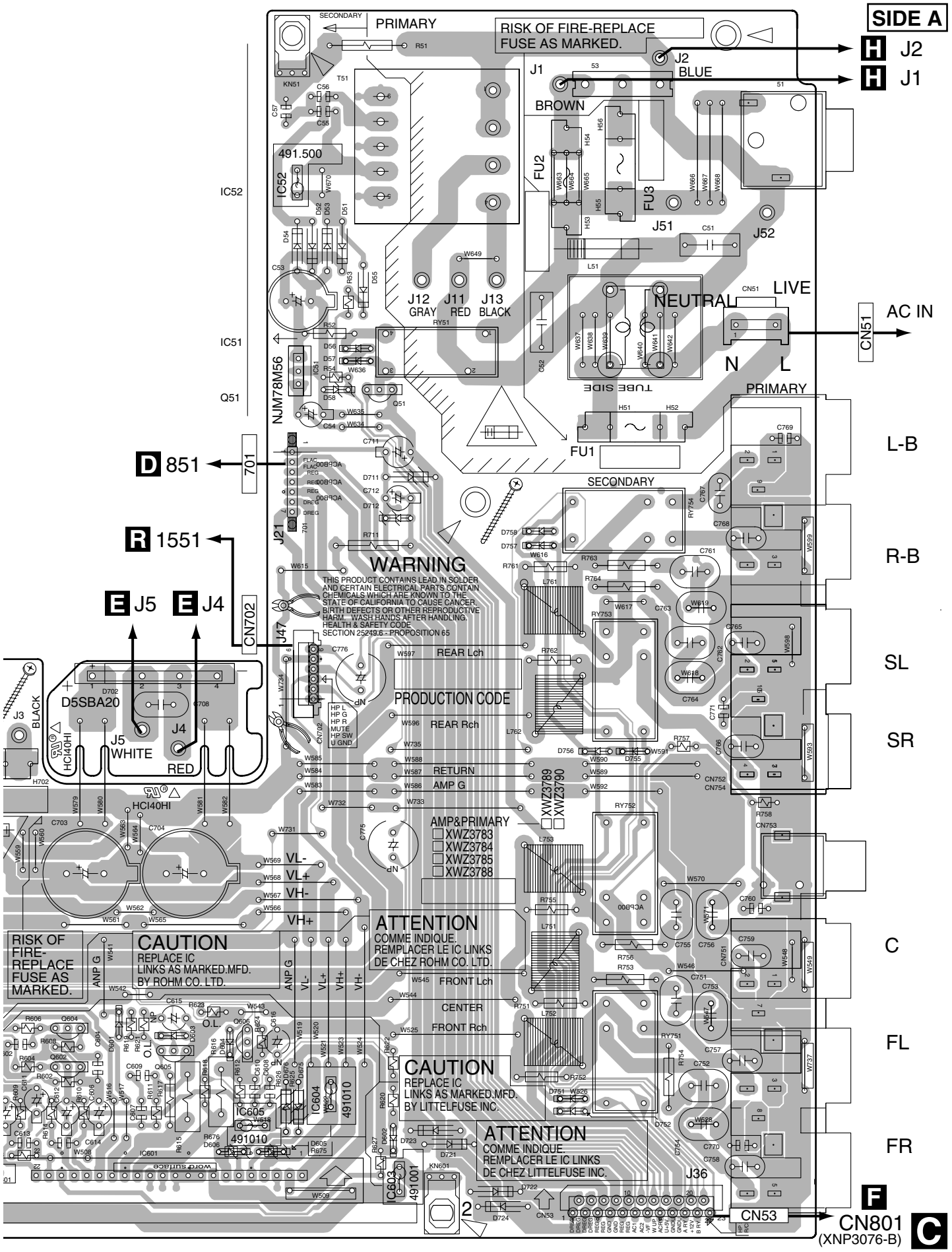
SIDE B



4.5 AMP & PRIMARY and AMP INPUT ASSYS

SIDE A

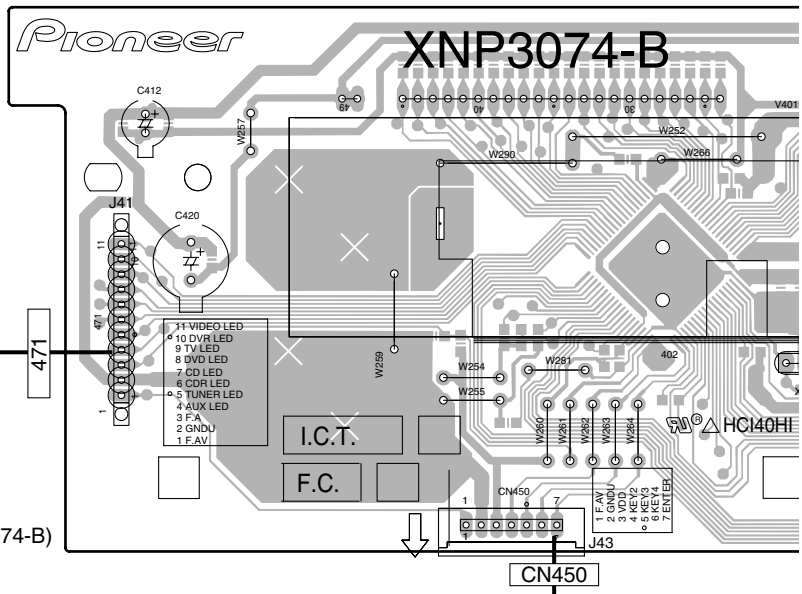


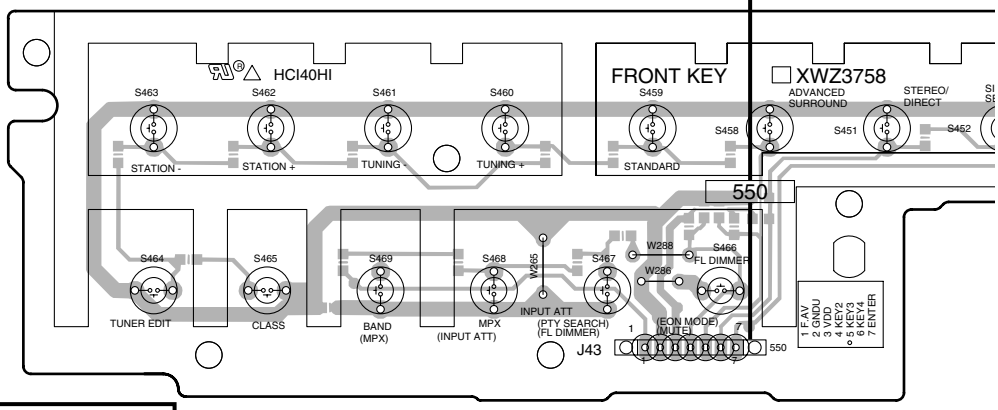

SIDE A
H J2
H J1
J2 BLUE
J1
BROWN
RISK OF FIRE-REPLACE FUSE AS MARKED.
SECONDARY
PRIMARY
491.500
IC52
NJM78M56
IC51
Q51
FU1
FU2
FU3
J51
J52
J12 GRAY
J11 RED
J13 BLACK
NEUTRAL
LIVE
CN51
AC IN
N L
TUBE SIDE
D 851
701
R 1551
E J5
E J4
CN702
J47
J21
WARNING
THIS PRODUCT CONTAINS LEAD IN SOLDER AND CERTAIN ELECTRICAL PARTS CONTAIN CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. - WASH HANDS AFTER HANDLING.
HEALTH & SAFETY CODE SECTION 25249.6 - PROPOSITION 65
PRODUCTION CODE
REAR Lch
REAR Rch
RETURN
AMP G
HP L
HP G
HP R
MUTE
HP SW
U GND
D5SBA20
HCI40HI
J3 BLACK
J5 WHITE
J4 RED
AMP&PRIMARY
XWZ3789
XWZ3790
XWZ3783
XWZ3784
XWZ3785
XWZ3788
VL-
VL+
VH-
VH+
ANP G
FRONT Lch
CENTER
FRONT Rch
RISK OF FIRE-REPLACE FUSE AS MARKED.
CAUTION
REPLACE IC LINKS AS MARKED.MFD. BY ROHM CO. LTD.
CAUTION
REPLACE IC LINKS AS MARKED.MFD. BY LITTELFUSE INC.
ATTENTION
COMME INDIQUE. REMPLACER LE IC LINKS DE CHEZ ROHM CO. LTD.
ATTENTION
COMME INDIQUE. REMPLACER LE IC LINKS DE CHEZ LITTELFUSE INC.
IC605
IC604
IC603
491010
491001
O.L.
J36
CN53
F
CN801
(XNP3076-B)
C
L-B
R-B
SL
SR
C
FL
FR

4.6 F. DISPLAY, R. ENCODER, P. SW & FUNC. KEY, H. P. and F. KEY ASSYS

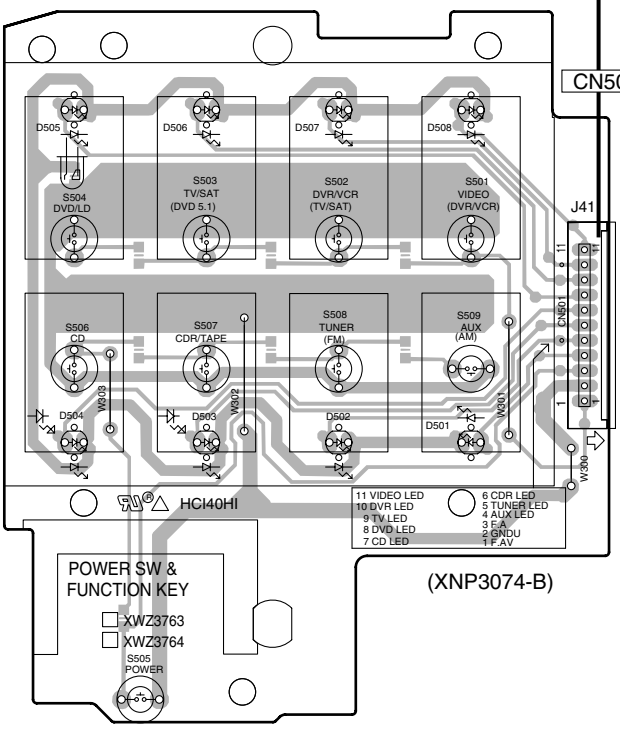
SIDE A

M FRONT DISPLAY ASSY



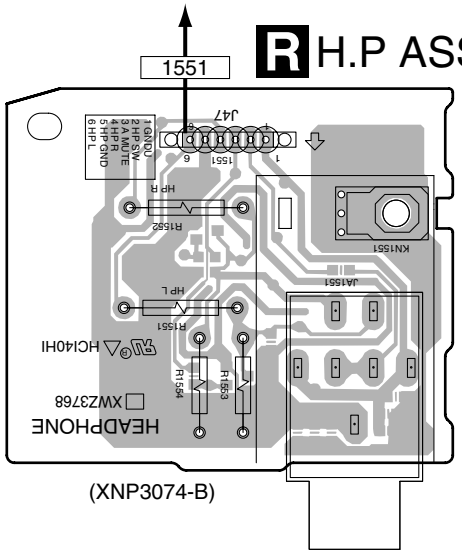


O P. SW & FUNC. KEY ASSY



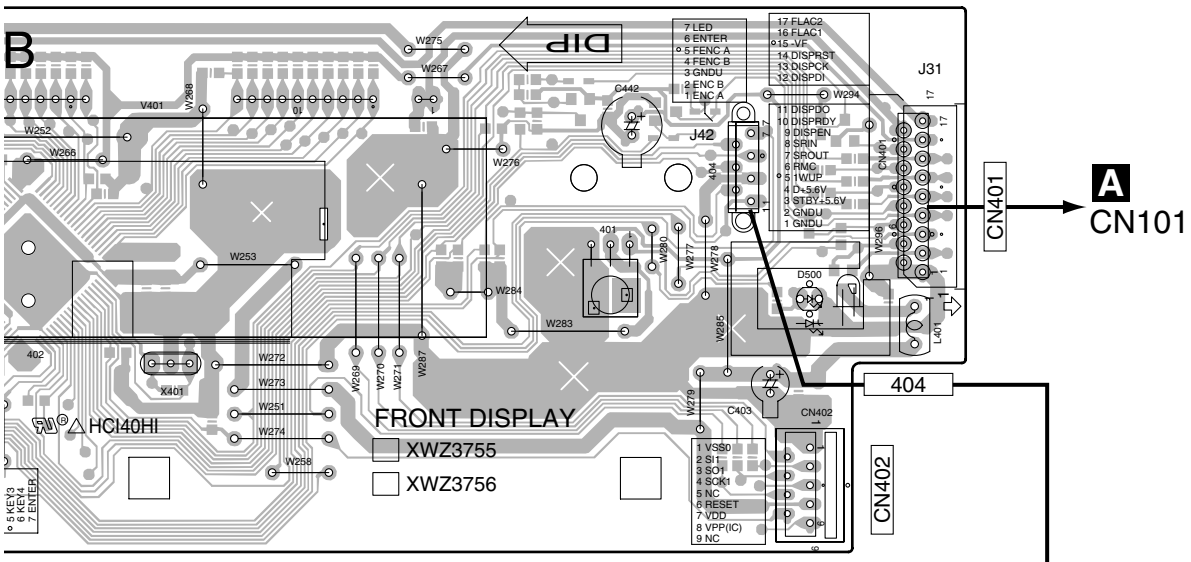
C CN702

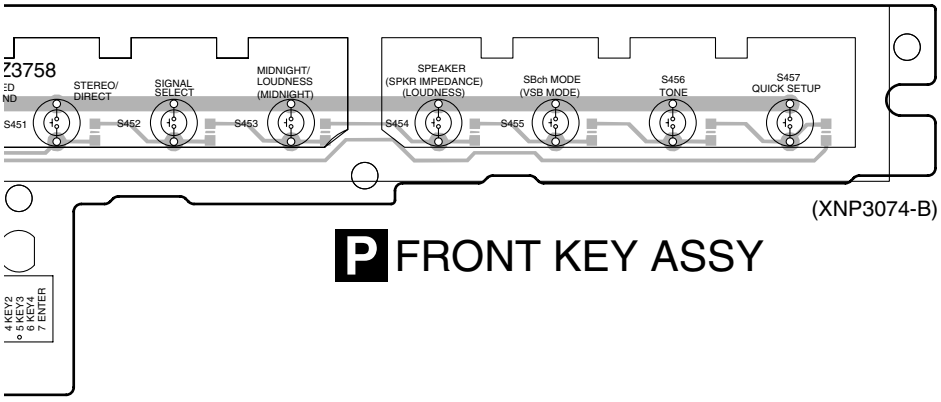
R H.P ASSY



M O P R

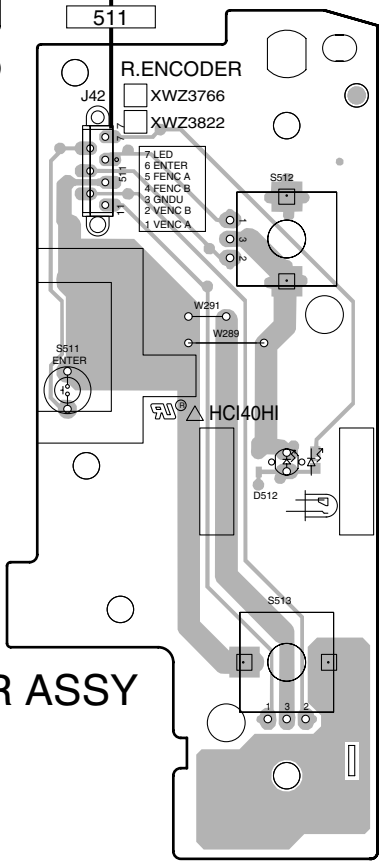
SIDE A





(XNP3074-B)

P FRONT KEY ASSY

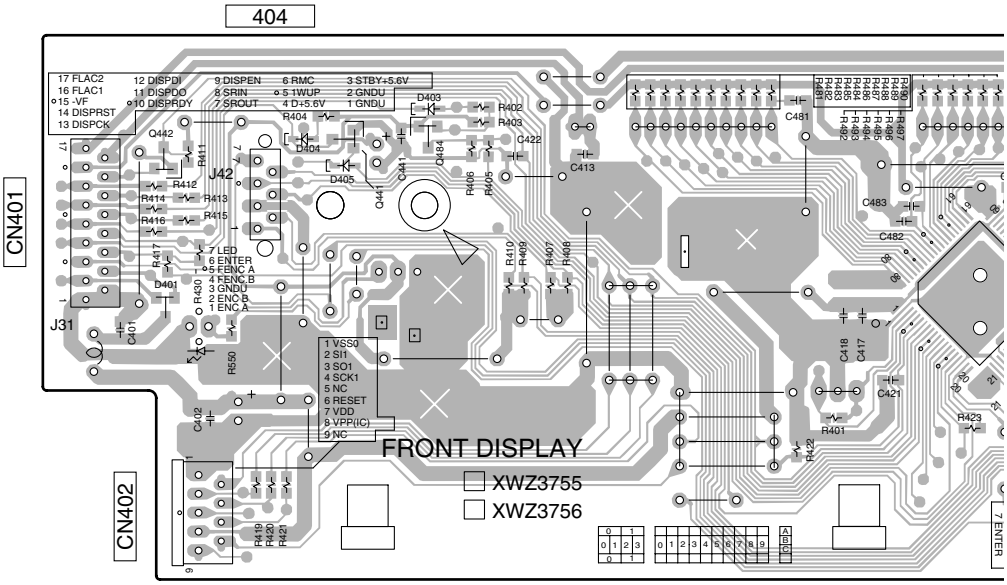


(XNP3074-B)

N R.ENCODER ASSY

M N P

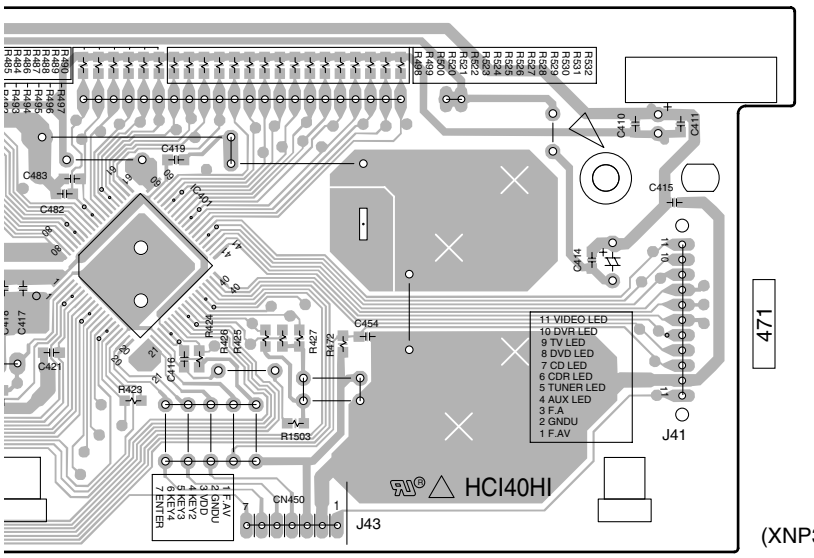
SIDE B


404
CN401
CN402
J31
J42
FRONT DISPLAY
XWZ3755
XWZ3756
HCI40HI
SPEAKER
QUICK SETUP
TONE
SBch MODE
(VSB MODE)
(SPKR IMPEDANCE)
(LOUDNESS)
MIDNIGHT/
LOUDNESS
(MIDNIGHT)
SIGNAL
SELECT
STEREO/
DIRECT
(XNP3074-B)
P FRONT KEY ASSY
R.ENCODER
XWZ3766
XWZ3822
511
J42
HCI40HI
ENTER
(XNP3074-B)
N R.ENCODER ASSY

M N P

SIDE B

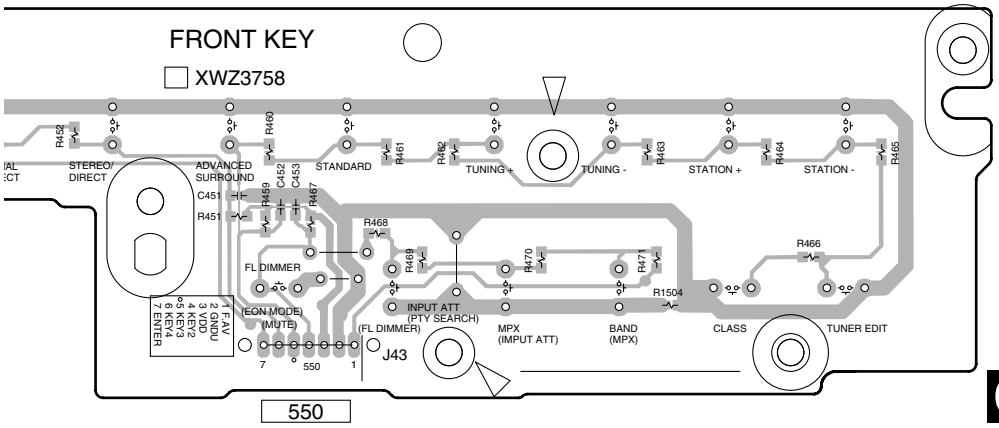
M FRONT DISPLAY ASSY



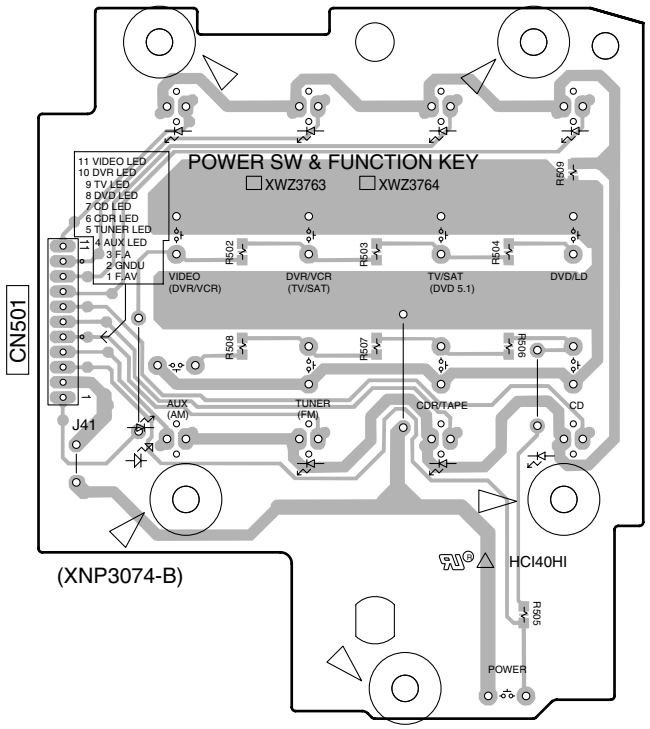
Q441
Q442
Q484

IC401

(XNP3074-B)



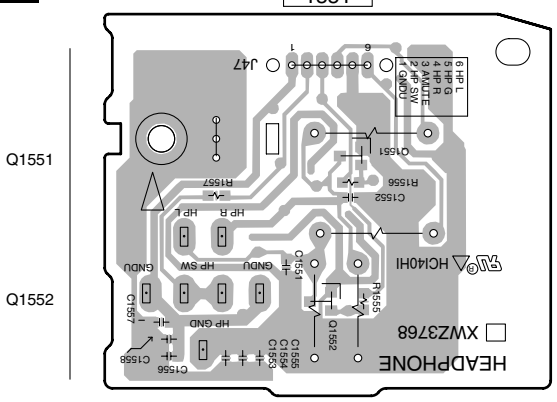
O P. SW & FUNC. KEY ASSY



(XNP3074-B)

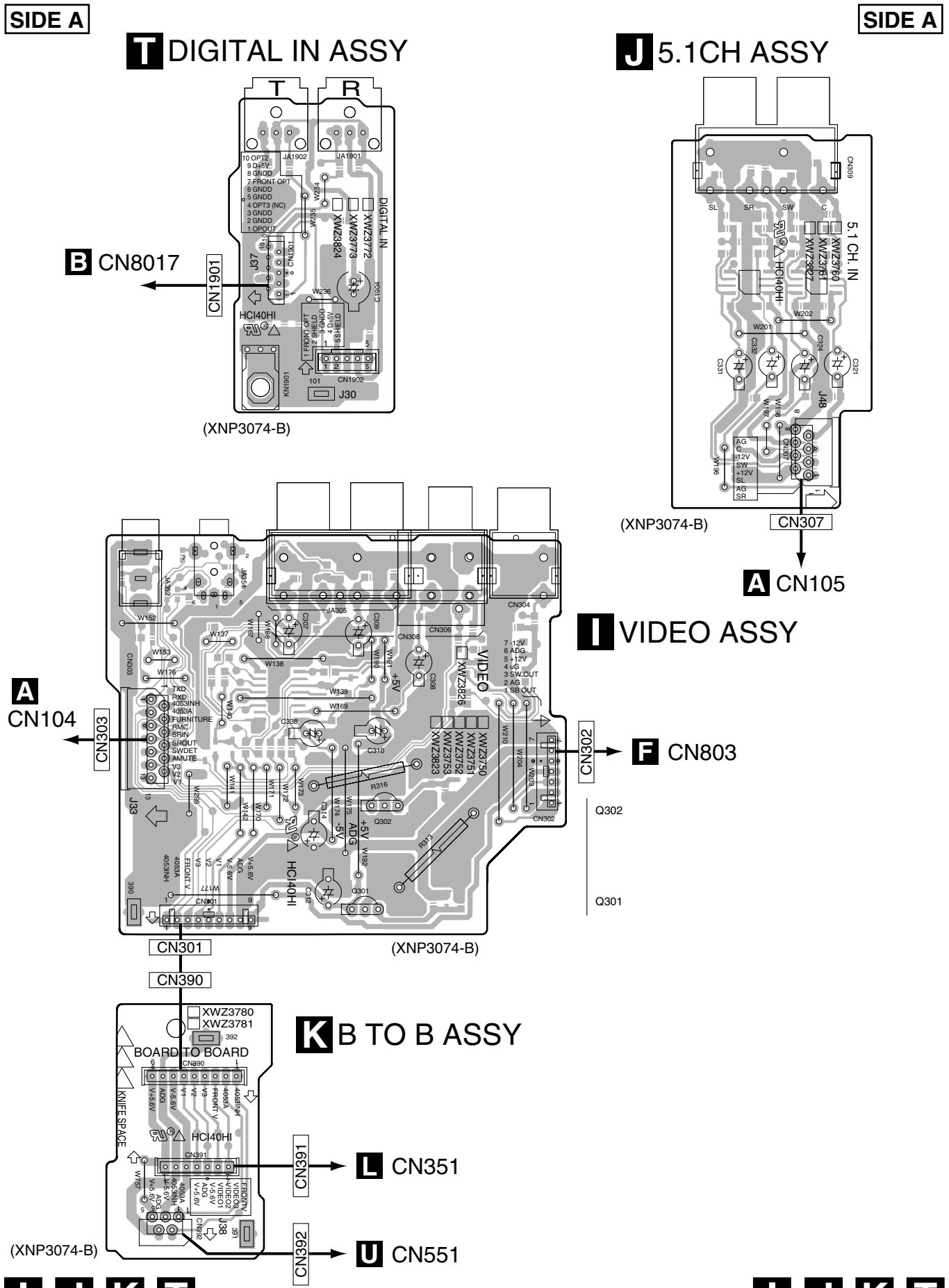
R H.P ASSY

1551



(XNP3074-B)

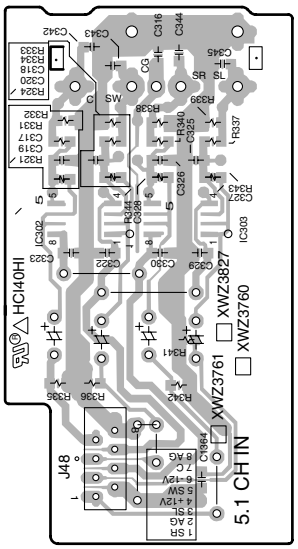
4.7 B TO B, DIGITAL IN, VIDEO and 5.1CH ASSYS



SIDE B

SIDE B

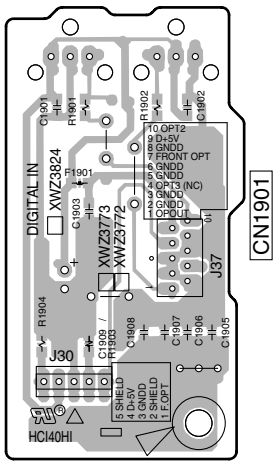
J 5.1CH ASSY



CN307

(XNP3074-B)

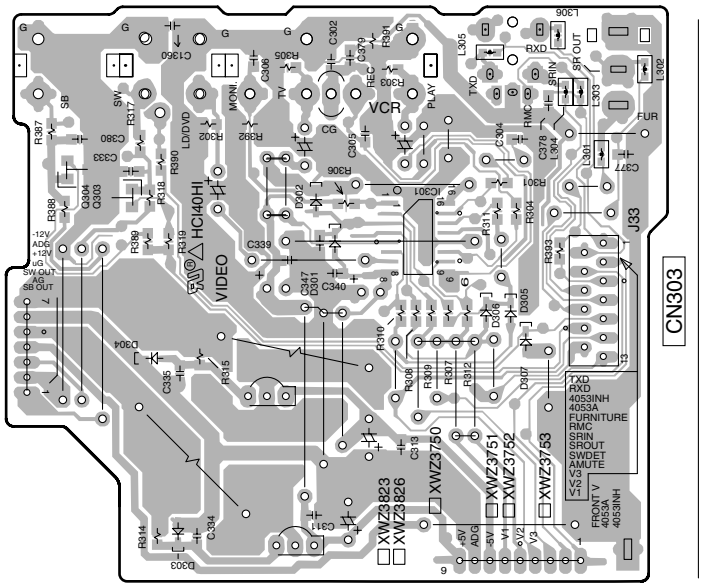
T DIGITAL IN ASSY



CN1902

(XNP3074-B)

I VIDEO ASSY

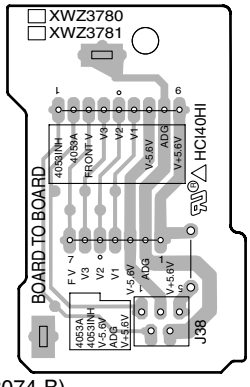


(XNP3074-B)

CN301

CN390

K B TO B ASSY



(XNP3074-B)

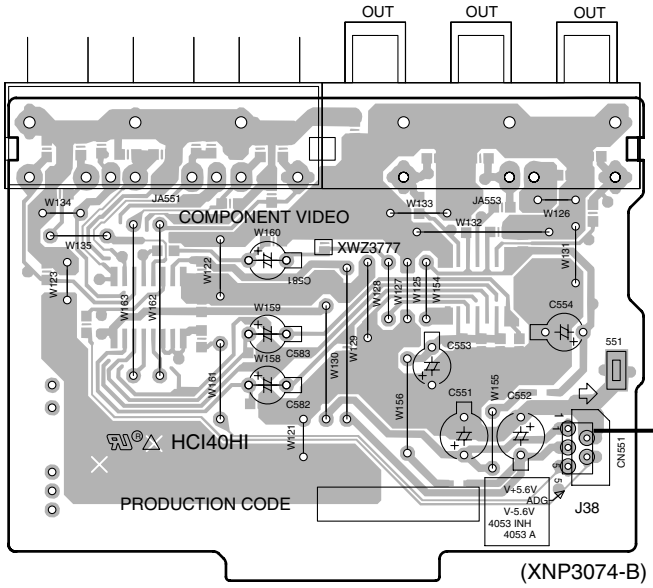
I J K T

I J K T

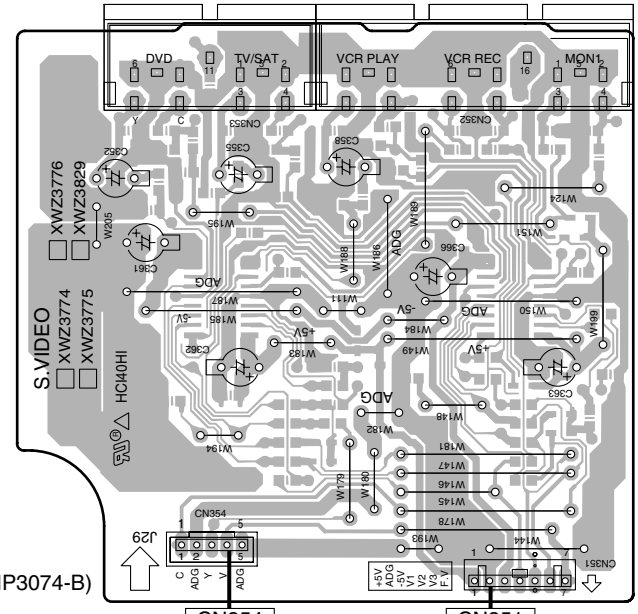
4.8 S.VIDEO, F.VIDEO and COMPONENT ASSYS

SIDE A

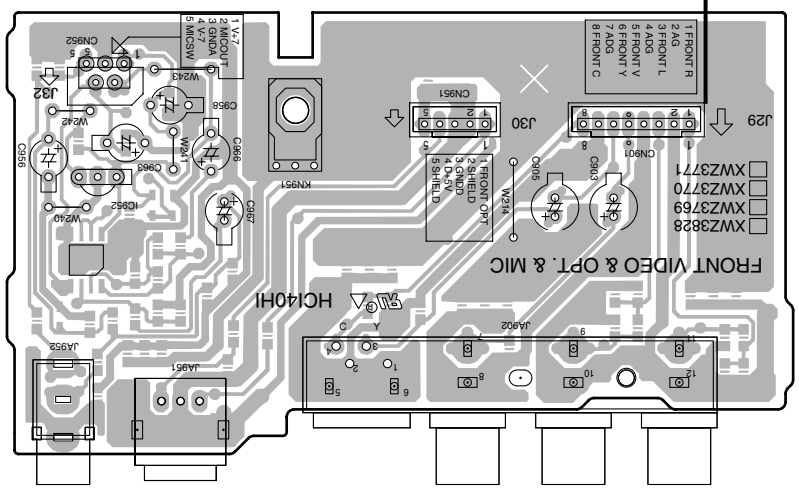
U COMPONENT ASSY



L S. VIDEO ASSY



V FRONT VIDEO ASSY



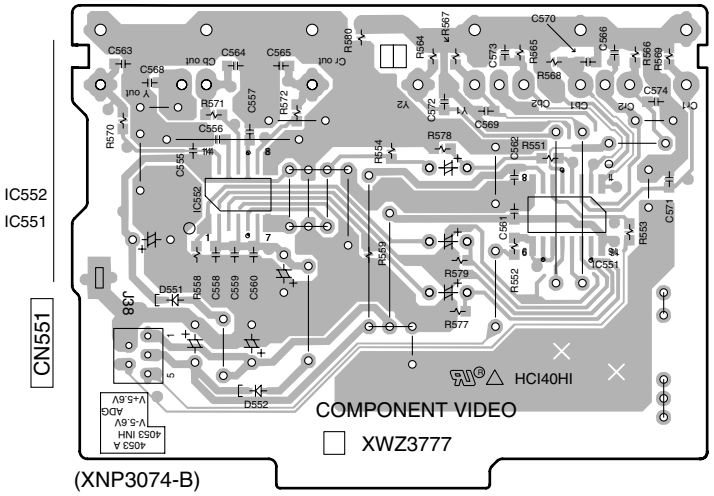
L U V

L U V

SIDE B

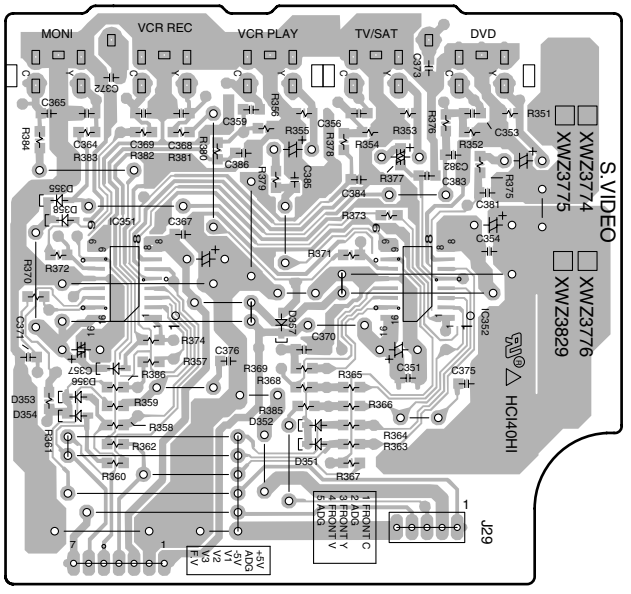
SIDE B

U COMPONENT ASSY

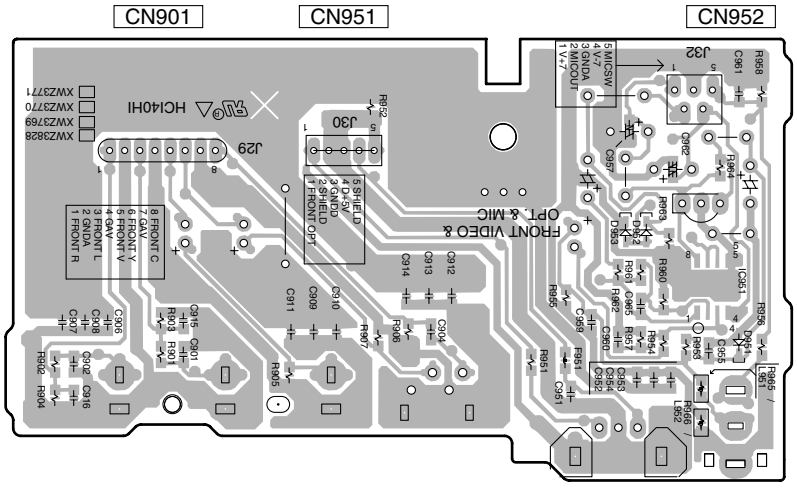


(XNP3074-B)

L S. VIDEO ASSY



(XNP3074-B)



(XNP3074-B)

V FRONT VIDEO ASSY

L U V

L U V

5 6 7 8

5. PCB 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.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

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

560 Ω	→ *56 x 10[1]* →	*561*	*RD1/4PU 5 6 1 J*
47k Ω	→ *47 x 10[3]* →	*473*	*RD1/4PU 4 7 3 J*
0.5 Ω	→ *R50*		*RN2H R 5 0 K*
1 Ω	→ *1R0*		*RS1P 1 R 0 K*

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

5.62k Ω	→ *562 x 10[1]* →	*5621*	*RN1/4PC 5 6 2 1 F*

LIST OF ASSEMBLIES

Mark	No.	Description	Part No.
	1	MAIN ASSY	XWK3120
	1	DSP ASSY	AWX1082
NSP	1	AMP & PS ASSY	XWK3138
	2	AMP & PRIMARY ASSY	XWZ3788
	2	REGULATOR ASSY	XWZ3798
	2	AMP INPUT ASSY	XWZ3801
	2	TRANS1 ASSY	XWZ3806
	2	TRANS2 ASSY	XWZ3809
	2	TRANS3 ASSY	XWZ3813
	2	BINDER ASSY	XWZ3817
	2	HOLDER ASSY	XWZ3820
NSP	1	COMPLEX ASSY	XWK3129
	2	VIDEO ASSY	XWZ3752
	2	FRONT DISPLAY ASSY	XWZ3756
	2	FRONT KEY ASSY	XWZ3758
	2	5.1CH ASSY	XWZ3760
	2	P. SW & FUNC. KEY ASSY	XWZ3763
	2	R. ENCODER ASSY	XWZ3766
	2	H.P. ASSY	XWZ3768
	2	FRONT VIDEO ASSY	XWZ3769
	2	DIGITAL IN ASSY	XWZ3772
	2	S. VIDEO ASSY	XWZ3776
	2	COMPONENT ASSY	XWZ3777
	2	TRANS4 ASSY	XWZ3778
	2	B TO B ASSY	XWZ3781
	1	FM/AM TUNER UNIT	AXX7170

COMPLEX ASSY

OTHERS

Mark	No.	Description	Part No.
	J42	JUMPER WIRE	D15A07-075-2651
	J47	JUMPER WIRE	D20PYY0630E
	J43	JUMPER WIRE 7P	D20PYY0708E
	J41	JUMPER WIRE 11P	D20PYY1107E

AMP & PS ASSY

OTHERS

Mark	No.	Description	Part No.
	J21	JUMPER WIRED	D20PYY0715E

A MAIN ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC109		BD3812F
	IC108		BD3813KS
	IC101		BD3841FS
	IC5001		BU1924F
	IC102		NJM2100M
	IC9001		PEG062A
	IC103–IC107, IC110–IC112, IC115		UPC4570G2
	Q5004,Q6001		2SA1037K
	Q5009		2SC2412K
	Q165, Q166, Q321, Q322		2SC3326
	Q341, Q342, Q361, Q362, Q386		2SC3326
	Q388, Q395		2SC3326
	Q5001		2SD1664
	Q229, Q230		2SK208
	Q167, Q231, Q9002-Q9005		DTA124EK
	Q9008		DTA143TK
	Q232, Q6002		DTC124EK
	Q168, Q5003,Q6007,Q6008,Q9001		DTC143EK
	Q9006		DTC143EK
	Q9007		DTC143TK
	D103–D108, D229, D230, D301		1SS355
	D311, D312, D6001,D6002		1SS355
	D9001-D9013		1SS355
	D101, D102		RB501V-40
	D5007		UDZS10B
	D331, D332		UDZS6.8B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L9001,L9002	CHIP SOLID INDUCTOR	ATL7002
	L5001,L9003		LFEA2R2J
	L101–L104, L111, L112, L5002	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C101–C114, C151, C152		CCSRCH101J50
	C163, C164, C181–C192		CCSRCH101J50
	C197, C198, C243, C244, C263		CCSRCH101J50
	C284, C313, C314, C317, C318		CCSRCH101J50
	C323, C324, C343, C344, C363		CCSRCH101J50
	C386		CCSRCH101J50
	C1031,C1041,C117, C118		CCSRCH220J50
	C5013,C5014		CCSRCH270J50
	C205–C208, C245–C248, C265		CCSRCH331J50
	C267, C286, C288		CCSRCH331J50

Mark No.	Description	Part No.
	C203, C204	CCSRCH471J50
	C5017	CCSRCH561J50
	C366	CEANP4R7M50
	C121–C128, C131–C142	CEAT100M50
	C167, C168, C209, C210	CEAT100M50
	C213, C214, C249, C250	CEAT100M50
	C269, C270, C290, C301–C306	CEAT100M50
	C321, C322, C341, C342	CEAT100M50
	C361, C362, C380, C382, C384	CEAT100M50
	C5015	CEAT101M10
	C5007	CEAT101M16
	C169	CEAT221M6R3
	C201, C202, C241, C242	CEAT2R2M50
	C261, C262, C282, C5011,C9005	CEAT2R2M50
	C9007	CEAT331M6R3
	C325, C326, C345, C346, C365	CEAT470M25
	C388	CEAT470M25
	C155, C156	CEAT470M50
	C333, C334	CEAT471M10
	C9013	CEAT471M6R3
	C165, C166, C370	CEAT4R7M50
	C170	CKSQYB104K16
	C320, C392, C5001,C5016	CKSRYB102K50
	C9015,C9016	CKSRYB102K50
	C115, C116, C153, C154, C171	CKSRYB103K50
	C179, C180, C199, C215–C218	CKSRYB103K50
	C251, C252, C266, C271, C272	CKSRYB103K50
	C291, C292, C315, C316, C319	CKSRYB103K50
	C327–C330, C347, C348	CKSRYB103K50
	C367, C368, C389, C390, C5002	CKSRYB103K50
	C5008,C9004,C9008,C9017	CKSRYB103K50
	C219, C220, C309–C312	CKSRYB104K16
	C5003,C9006	CKSRYB105K10
	C264	CKSRYB223K25
	C257, C258, C277, C278, C298	CKSRYB472K50
	C307, C308, C364, C5020	CKSRYB472K50
	C9011,C9014	CKSRYB473K16
	C268	CKSRYB562K50
	C391	CKSRYF104Z16
	C9003 (1F/5.5V)	PCH1132

RESISTORS

⚠	R171, R172	RS1/16S470J
⚠	R173, R174	RS1/16S472J
⚠	R311, R312	RS1LMF101J
	Other Resistors	RS1/16S###J

OTHERS

	CN105 8P CONNECTOR	52044-0845
	CN103 11P CONNECTOR	52044-1145
	CN104 13P CONNECTOR	52044-1345
	CN101 5P CONNECTOR	52045-1745
	CN106, CN112 19P CONNECTOR	52045-1945
	CN107 CONNECTOR POST	B3B-PH-K
	CN109 18P SOCKET	KP200TA18L
	CN111 20P SOCKET	KP200TA20L
	101–103 PCB BINDER	VEF1040
	JA101–JA104 PIN JACK(4P)	XKB3017
	X5001 CRYSTAL RESONATOR (4.332 MHz)	ASS7004
	X9001 CERAMIC RESONATOR (15.7 MHz)	XSS3004

B DSP ASSY

SEMICONDUCTORS

IC8201	AK4114VQ
IC8401	AK4628VQ
IC8501	DSPD56367PV150
IC8601	IS61LV6416-12T
IC8602	IS63LV1024-12T
IC8901	NJM2391DL1-33
IC8902	NJU7223DL1-18
IC8603	PD8116A
IC8101	TC74HCU04AF
IC8701	TC74LVX244FT
IC8702	TC74VHCT244AFT
IC8503	TC7WH125FU
IC8502	TC7WU04FU
Q8504	UMD2N
Q8503	UN5112
Q8501	UN5212
D8501	1SS355
D8401	DAN202K
D8402,D8502,D8503	DAP202K

COILS AND FILTERS

L8002,L8004,L8501,L8502	ATL7002
L8601-L8603 CHIP SOLID INDUCTOR	ATL7002
L8101-L8104,L8201,L8203,L8204	QTL1013
L8401,L8402,L8504,L8505	QTL1013
L8701,L8702 CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

C8209,C8210	CCSRCH100D50
C8421	CCSRCH101J50
C8107,C8112	CCSRCH470J50
C8007,C8008,C8109,C8201,C8212	CCSRCH471J50
C8214,C8404,C8409-C8414	CCSRCH471J50
C8416,C8417,C8419,C8505,C8507	CCSRCH471J50
C8509,C8511,C8512,C8515,C8518	CCSRCH471J50
C8520,C8522,C8524,C8526,C8528	CCSRCH471J50
C8530,C8532,C8534,C8536,C8539	CCSRCH471J50
C8541,C8543,C8545,C8551,C8552	CCSRCH471J50
C8602,C8603,C8606,C8607,C8610	CCSRCH471J50
C8703,C8706	CCSRCH471J50
C8548,C8549	CCSRCH8R0D50
C8701,C8704	CEV100M16
C8105,C8406,C8415,C8546,C8547	CEV101M16
C8613,C8902,C8904	CEV101M16
C8217,C8225,C8408	CEV470M6R3
C8204,C8555	CKSRYB102K50
C8009,C8104,C8114,C8405,C8418	CKSRYB103K50
C8517,C8554	CKSRYB103K50
C8010,C8115,C8202,C8207,C8213	CKSRYB104K16
C8215,C8407,C8420,C8422,C8504	CKSRYB104K16
C8513,C8521,C8523,C8525,C8527	CKSRYB104K16
C8529,C8531,C8533,C8535	CKSRYB104K16
C8537,C8538,C8540,C8542,C8544	CKSRYB104K16
C8550,C8553,C8601,C8604,C8605	CKSRYB104K16
C8608,C8609,C8702,C8705,C8901	CKSRYB104K16
C8903	CKSRYB104K16
C8110,C8516	CKSRYB105K6R3
C8514	CKSRYB333K16

Mark	No.	Description	Part No.
	C8203		CKSRYB473K50
	RESISTORS		
	R8506		RAB4C101J
	R8201		RS1/16S1802F
	Other Resistors		RS1/16S###J
	OTHERS		
	CN8012	19P CONNECTOR	52045-1945
	JA8101	2P PIN JACK	AKB7131
	CN8003	13P SOCKET	AKP7070
	CN8007	19P SOCKET	AKP7073
	JA8102	OPT. LINK IN	GP1FA513RZB
	CN8017	10P CONNECTOR	VKN1414
	X8501	CRYSTAL RESONATOR (20 MHz)	VSS1171
	X8201	CRYSTAL RESONATOR (24.576 MHz)	XSS3003

C AMP & PRIMARY ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
⚠	IC52	PROTECTOR(500mA)	AEK7005
⚠	IC603	PROTECTOR(1A)	AEK7009
⚠	IC604–IC607	PROTECTOR(125mA)	AEK7022
	IC701, IC702	PROTECTOR(400mA)	ICP-N10
	IC51		NJM78M56FA
⚠	IC601		PAC010A
⚠	IC602		PAC011A
	Q703, Q721		2SA1145
	Q702		2SA2005
	Q691, Q692		2SC1740S
	Q704, Q722		2SC1845
	Q605, Q606, Q633, Q655, Q656		2SC2240
	Q701		2SC5511
	Q601–Q604, Q631, Q632		2SC5974A
	Q651–Q654		2SC5974A
	Q51		DTC143ES
	D56, D57, D601–D604		1SS133
	D631, D632, D651–D654		1SS133
	D751, D752, D755–D758		1SS133
⚠	D701, D702		D5SBA20
	D711		MTZJ22D
	D58, D712		MTZJ5.1B
	D605, D606, D633, D634		MTZJ8.2A
⚠	D51–D55, D721–D724		S5688G
	COILS AND FILTERS		
	L751–L753, L761, L762		ATH1004
	L51	LINE FILTER	XTF3004
	SWITCHES AND RELAYS		
	RY51		XSR3006
	RY751–RY754		XSR3007
	CAPACITORS		
	C707, C708	(0.01/AC250V)	ACG1005
	C607–C610, C634, C635		CCPUCH6R8K50
	C657–C660		CCPUCH6R8K50
	C615, C616, C638, C665, C666		CEANP2R2M50
	C775, C776		CEANP470M50
	C712		CEAT101M10
	C611, C612, C636, C661, C662		CEAT101M16
	C711		CEAT101M35
	C53		CEAT102M16
	C692		CEAT221M10
	C54		CEAT470M25
	C605, C606, C633, C655, C656		CEAT4R7M50
	C705, C706		CEHAT100M2A
	C613, C614, C637, C663, C664		CKPUYB101K50
	C691, C769, C770		CKPUYB102K50
	C603, C604, C632, C653, C654		CKPUYB331K50
	C55–C57		CKPUYF103Z25
	C751–C756, C761–C764		CQMBA224J50
	C757–C759, C765–C768		CQMBA472J50
	C51, C52	(10000pF/250V(AC))	XCG3009
	C703, C704	(3300/42V)	XCH3012
	C701, C702	(4700/71V)	XCH3016
	RESISTORS		
	R615, R616, R638, R665, R666	(0.22/5W)	ACN7094
⚠	R52		RD1/2PM270J
⚠	R751, R752, R755, R761, R762		RD1/4PUF101J
⚠	R753, R754, R756, R763, R764		RS1LMF4R7J
⚠	R711		RS2LMF332J
	Other Resistors		RD1/4PU###J
	OTHERS		
	CN53	23P CONNECTOR	52045-2345
	CN702	6P JUMPER CONNECTOR	52147-0610
	H51, H52	FUSE CLIP	AKR7001
⚠	T51	STANDBY TRANSFORMER	ATT7040
	CN601	16P PLUG	KM200TA16
	CN51	AC CODE SOCKET	RKP1751
	KN51, KN601	EARTH METAL FITTING	VNF1084
	CN752	SP TERMINAL 8-P(V0)	XKE3017
	CN751	SP TERMINAL 6-P(V0)	XKE3018
	701	7P CABLE HOLDER	XKP3047

D TRANS2 ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
⚠	IC853	PROTECTOR(1.6A)	AEK7012
⚠	IC851, IC852	PROTECTOR (4A)	AEK7018
	OTHERS		
	851	7P CABLE HOLDER	XKP3047

E TRANS3 ASSY

TRANS3 ASSY has no service part.

F REGULATOR ASSY

Mark	No.	Description	Part No.
	SEMICONDUCTORS		
	IC803, IC804		NJM78M05FA
	IC801, IC805		NJM78M12FA
	IC806		NJM78M56FA
	IC802		NJM79M12FA
	Q801, Q803, Q805		DTA124ES
	Q802, Q804, Q806		DTC114ES
	D809–D811		MTZJ6.2B
⚠	D801–D804		S5688G

Mark No.	Description	Part No.
	CAPACITORS	
	C811, C815	CEAT101M10
	C813	CEAT101M16
	C801, C802	CEAT222M25
	C809	CEAT472M16
	C808	CEHAT101M10
	C805, C806	CEHAT101M16
	C803, C804, C807, C810, C812	CKPUYF103Z25
	C814	CKPUYF103Z25
	RESISTORS	
	R801	RS3LMF331J
	OTHERS	
	CN801 23P CONNECTOR	52045-2345
	CN805 13P PLUG	AKP7059
	CN806 19P PLUG	AKP7062
	CN804 18P PLUG	KM200TA18
	CN802 20P PLUG	KM200TA20
	CN803 7P PLUG	KM200TA7

G AMP INPUT ASSY

Mark No.	Description	Part No.
	SEMICONDUCTORS	
	IC251	NJM4558D-D
	Q257	2SA933S
	Q251, Q256	2SC5974A
	Q252	2SD1858X
	Q254	DTA124ES
	Q253, Q255	DTC124ES
	D251, D252	1SS133
	D253	MTZJ27D
	D254	MTZJ5.1B
	CAPACITORS	
	C251	CEANP470M25
	C254	CEAT101M25
	C252, C253	CKPUYF103Z25
	RESISTORS	
	All Resistors	RD1/4PU###J
	OTHERS	
	CN251 3P CONNECTOR	52044-0345
	CN254 19P CONNECTOR	52044-1945
	CN253 16P SOCKET	KP200TA16L
	CN252 3PIN CONNECTOR	S3B-EH

H TRANS1 ASSY

TRANS1 ASSY has no service part.

I VIDEO ASSY

Mark No.	Description	Part No.
	SEMICONDUCTORS	
	IC301	NJM2595M
	Q302	2SA1515
	Q303, Q304	2SC3326
	Q301	2SC3377
	D301, D302, D305, D306	1SS355
	D307	UDZS5.1B
	D303, D304	UDZS6.2B
	COILS AND FILTERS	
	L301–L306 CHIP SOLID INDUCTOR	QTL1013
	CAPACITORS	
	C380	CCSRCH331J50
	C347	CCSRCH470J50
	C307–C310, C312, C314, C338	CEAT470M25
	C1360,C302, C379	CKSRYB103K50
	C339, C340	CKSRYB104K25
	C304–C306	CKSRYB221K50
	C333	CKSRYB331K50
	C311, C313	CKSRYB473K25
	RESISTORS	
⚠	R313, R316	RS3LMF390J
	Other Resistors	RS1/16S###J
	OTHERS	
	CN303 13P CONNECTOR	52044-1345
	CN304 PIN JACK 1P	AKB7042
	JA305 PIN JACK(4P)YELLOW	AKB7100
	CN302 7P SOCKET	KP200TA7L
	CN301 9P SOCKET	KP200TA9L
	JA352 JACK	RKN1026
	CN306 2P PIN JACK	XKB3041
	JA351 MINI JACK(4P) /W SW	XKN3015

J 5.1CH ASSY

Mark No.	Description	Part No.
	CAPACITORS	
	C342–C345	CCSRCH101J50
	C321, C324, C331, C332	CEAT4R7M50
	C1364	CKSRYB102K50
	C316	CKSRYB103K50
	C317, C318, C325, C326	CKSRYB221K50
	RESISTORS	
	All Resistors	RS1/16S###J
	OTHERS	
	CN307 8P CONNECTOR	52044-0845
	CN309 PIN JACK(4P)	XKB3035

K B TO B ASSY

Mark No.	Description	Part No.
	OTHERS	
	CN392 5P CONNECTOR	52045-0545
	CN391 7P PLUG	KM200TA7
	CN390 9P PLUG	KM200TA9
	391 PCB BINDER	VEF1040

L S. VIDEO ASSY

Mark No.	Description	Part No.
	SEMICONDUCTORS	
	IC351, IC352	NJM2595M
	D351–D358	1SS355
	CAPACITORS	
	C375, C376, C381–C386	CCSRCH470J50
	C352, C355, C358, C361–C363	CEAT470M25
	C366	CEAT470M25
	C372, C373	CKSRYB103K50
	C351, C353, C354, C356, C357	CKSRYB104K25

Mark No.	Description	Part No.
	C359, C367	CKSRYB104K25
	C364, C365, C368–C371	CKSRYB221K50
	RESISTORS	
	All Resistors	RS1/16S###J
	OTHERS	
	CN353 2-4P MINI DIN SOCKET	AKP7020
	CN352 3-4P MINI DIN SOCKET	AKP7043
	CN354 CONNECTOR POST	B5B-PH-K
	CN351 7P SOCKET	KP200TA7L
	M FRONT DISPLAY ASSY	
	SEMICONDUCTORS	
	IC401	PE5420A
	Q484	2SA1037K
	Q441, Q442	DTC124EK
	D403–D405	1SS355
	D401	DAN202K
	D500	SLI-343DCW
	COILS AND FILTERS	
	L401	LFEA2R2J
	CAPACITORS	
	C482, C483	CCSRCH221J50
	C481	CCSRCH471J50
	C442	CEAL470M10
	C403	CEAT221M6R3
	C412	CEAT470M50
	C415, C454	CKSRYB102K50
	C401, C402, C410, C411, C419	CKSRYB103K50
	C441	CKSRYB103K50
	C418, C421	CKSRYB104K16
	C420 (220uF/35V)	XCH3011
	RESISTORS	
	All Resistors	RS1/16S###J
	OTHERS	
	471 11P CABLE HOLDER	51048-1100
	404 CABLE HOLDER (7P)	51063-0705
	CN401 17P CONNECTOR	52044-1745
	CN450 7PJUMPER CONNECTOR	52151-0710
	V401 FL TUBE	XAV3022
	X401 CERAMIC RESONATOR (5 MHz)	VSS1142
	401 REMOTE RECEIVERUNIT	GP1UM28XK
	N R. ENCODER ASSY	
	SWITCHES AND RELAYS	
	S511	VSG1024
	S513 ROTARY ENCODER	XSX3005
	S512 ROTARY ENCODER	XSX3006
	OTHERS	
	511 CABLE HOLDER (7P)	51063-0705
	O P. SW & FUNC. KEY ASSY	
	SWITCHES AND RELAYS	
	S501–S509	VSG1024

Mark No.	Description	Part No.
	RESISTORS	
	All Resistors	RS1/16S###J
	P FRONT KEY ASSY	
	SWITCHES AND RELAYS	
	S451–S469	VSG1024
	CAPACITORS	
	C451–C453	CKSRYB102K50
	RESISTORS	
	All Resistors	RS1/16S###J
	OTHERS	
	550 7P CABLE HOLDER	51048-0700
	Q TRANS4 ASSY	
	SEMICONDUCTORS	
	IC891, IC892 PROTECTOR (630mA)	AEK7006
	D891	S1WB(A)60SD
	CAPACITORS	
	C891, C892	CEAT471M35
	OTHERS	
	CN891 3P CONNECTOR	52045-0345
	R H.P. ASSY	
	SEMICONDUCTORS	
	Q1551,Q1552	2SC3326
	CAPACITORS	
	C1554,C1557	CCSRCH471J50
	C1553,C1556	CKSRYB103K50
	C1555,C1558	CKSRYB104K16
	C1551,C1552	CKSRYB223K50
	RESISTORS	
⚠	R1553,R1554	RS1LMF151J
⚠	R1551,R1552	RS2LMF331J
	Other Resistors	RS1/16S###J
	OTHERS	
	1551 6P CABLE HOLDER	51048-0600
	JA1551 HEADPHONE JACK	RKB1014
	KN1551 EARTH METAL FITTING	VNF1084
	T DIGITAL IN ASSY	
	COILS AND FILTERS	
	F1901 CHIP BEAD	DTF1067
	CAPACITORS	
	C1907	CCSRCH101J50
	C1904	CEAL101M10
	C1908	CKSRYB102K50
	C1903,C1906	CKSRYB103K50
	C1902,C1905	CKSRYB104K25
	RESISTORS	
	All Resistors	RS1/16S###J

Mark No.	Description	Part No.
OTHERS		
JA1902	OPT. LINK OUT 12MB/S	GP1FA513TZ
CN1901	10P CONNECTOR	VKN1186
KN1901	WRAPPING TERMINAL	VNF1084

U COMPORNENT ASSY

SEMICONDUCTORS		
IC552		NJM2581M
IC551		TC74HC4053AF
D551, D552		1SS355
CAPACITORS		
C551–C554		CEAT101M10
C555–C562, C566, C568		CKSRYB103K50
RESISTORS		
All Resistors		RS1/16S###J
OTHERS		
CN551	5P CONNECTOR	52045-0545
JA553	3P RCA PINJACK	AKB7124
JA551	6P RCA PINJACK	XKB3025

V FRONT VIDEO ASSY

CAPACITORS		
C901, C902, C915, C916		CCSRCH101J50
C903, C905		CEAL470M25
C908, C911, C914		CKSRYB103K50
C904, C906, C909, C912		CKSRYB104K25
C907, C910, C913		CKSRYB471K50
RESISTORS		
All Resistors		RS1/16S###J
OTHERS		
CN901	CONNECTOR	B8B-PH-K
KN951	WRAPPING TERMINAL	VNF1084
JA902	PIN JACK(4P)	XKX3003

W FM/AM TUNER UNIT

FM/AM TUNER UNIT has no service part.

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

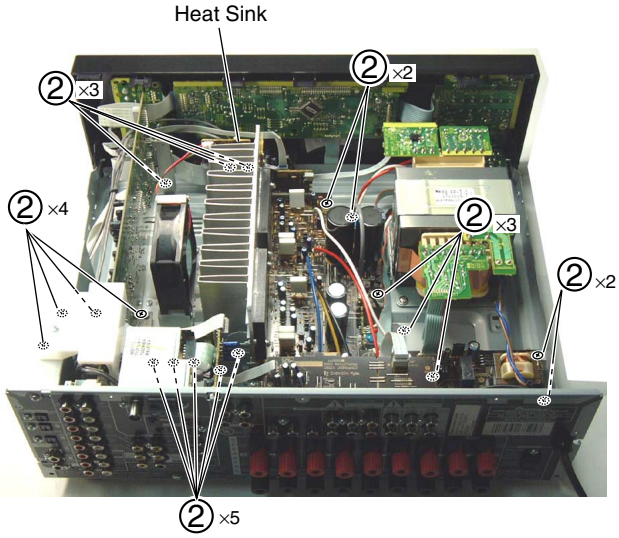
7.1 DIAGNOSIS

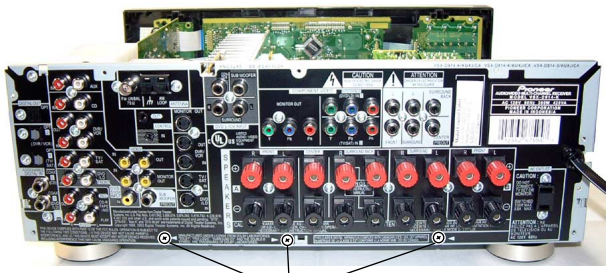
7.1.1 DISASSEMBLY

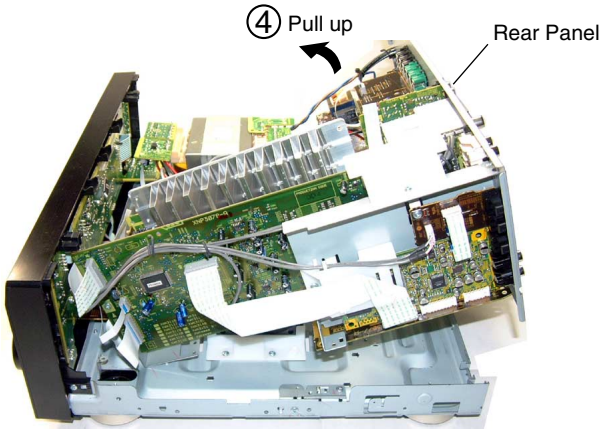
■ Diagnosis

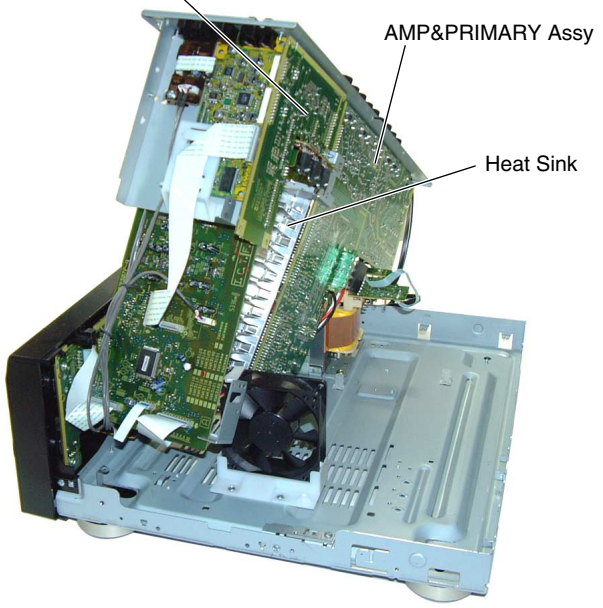
Note : This photograph may show a different model.
however, the method for disassembly is the same.

① Remove the top cover (seven screws).



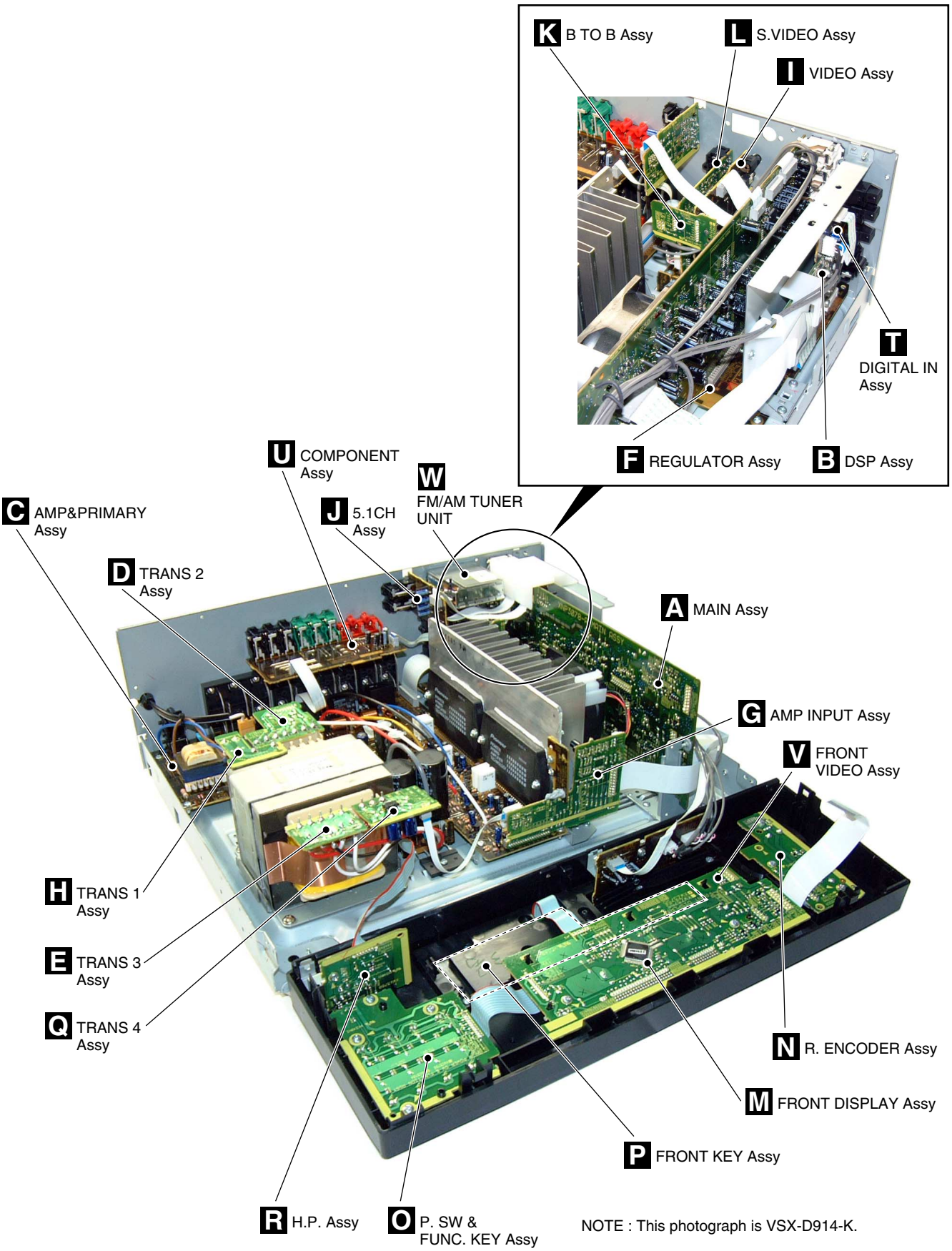






Note : The unit does not operate when the screws of Speaker Terminal are taken off from Rear Panel.

Heat-sink caution in the disassembling : Because Heat-sink becomes hot, please pay attention.



NOTE : This photograph is VSX-D914-K.

7.2 PARTS
7.2.1 IC

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

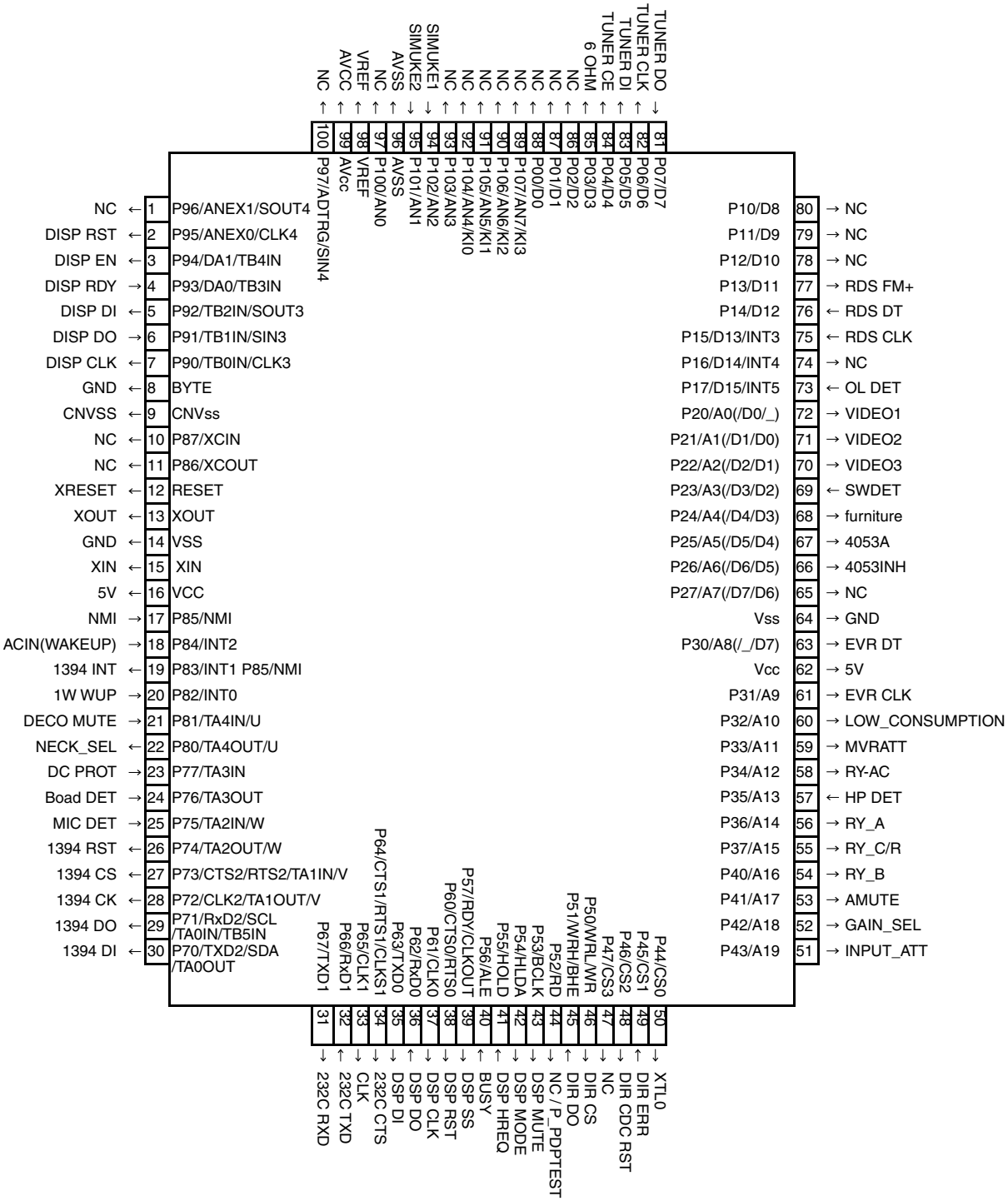
• List of IC

PEG062A, PE5420A

■ PEG062A (MAIN ASSY : IC9001)

• System Control MCU

■ Pin Arrangement (Top View)



• Pin Function

No.	Port	Pin Name	I/O	Pin Function
1	P96/ANEX1/SOUT4	NC	I/O	
2	P95/ANEX0/CLK4	DISP RST	I/O	Reset signal to display u-com
3	P94/DA1/TB4IN	DISP EN	I/O	Enable signal to display u-com
4	P93/DA0/TB3IN	DISP RDY	I/O	Ready signal from display u-com
5	P92/TB2IN/SOUT3	DISP DI	I/O	Data out to display u-com
6	P91/TB1IN/SIN3	DISP DO	I/O	Data input from display u-com
7	P90/TB0IN/CLK3	DISP CLK	I/O	Clock signal to display u-com
8	BYTE	GND		
9	CNVss	CNVSS		
10	P87/XCIN	NC	I/O	
11	P86/XCOUT	NC	I/O	
12	RESET	XRESET		
13	XOUT	XOUT		
14	VSS	GND		
15	XIN	XIN		
16	VCC	5V		
17	P85/NMI	NMI	I	No use
18	P84/INT2	ACIN(WAKEUP)	I/O	AC pulse input
19	P83/INT1 P85/NMI	1394 INT	I/O	No use (Standby for 1394)
20	P82/INT0	1W WUP	I/O	Wake up signal from display u-com
21	P81/TA4IN/U	DECO MUTE	I/O	1st DSP detect port
22	P80/TA4OUT/U	NECK_SEL	I/O	5.1ch, surround mode and A+B Stereo : H / Stereo : L
23	P77/TA3IN	DC PROT	I/O	AMP DC detect
24	P76/TA3OUT	Boad DET	I/O	AMP INPUT ASSY detect, H : detected
25	P75/TA2IN/W	MIC DET	I/O	MIC detect, L : detect
26	P74/TA2OUT/W	1394 RST	I/O	No use (Standby for 1394)
27	P73/CTS2/RTS2/TA1IN/V	1394 CS	I/O	No use (Standby for 1394)
28	P72/CLK2/TA1OUT/V	1394 CK	I/O	No use (Standby for 1394)
29	P71/RxD2/SCL/TA0IN/TB5IN	1394 DO	I/O	No use (Standby for 1394)
30	P70/TXD2/SDA/TA0OUT	1394 DI	I/O	No use (Standby for 1394)
31	P67/TXD1	232C RXD	I/O	For rewriting 232C (Data output)
32	P66/RxD1	232C TXD	I/O	For rewriting 232C (Data input)
33	P65/CLK1	CLK	I/O	It is necessary when writing for JIG
34	P64/CTS1/RTS1/CLKS1	232C CTS	I/O	For rewriting 232C (Admit communication)
35	P63/TXD0	DSP DI	I/O	Data output signal for communication with DSP and DIR
36	P62/RxD0	DSP DO	I/O	Data input signal for communication with DSP
37	P61/CLK0	DSP CLK	I/O	Clock signal for communication with DSP and DIR
38	P60/CTS0/RTS0	DSP RST	I/O	Reset signal for DSP
39	P57/RDY/CLKOUT	DSP SS	I/O	Srobe select signal to DSP
40	P56/ALE	BUSY	I/O	Use it in MCACC
41	P55/HOLD	DSP HREQ	I/O	DSP error detect signal
42	P54/HLDA	DSP MODE	I/O	Mode select of DSP (ROM/RAM)
43	P53/BCLK	DSP MUTE	I/O	DSP ASSY mute
44	P52/RD	NC / P_PDPTEST	I/O	For SR+ testmode only
45	P51/WRH/BHE	DIR DO	I/O	Data input signal for communication with DIR/DAC
46	P50/WRL/WR	DIR CS	I/O	Chip select signal for communication with DIR/DAC
47	P47/CS3	NC	I/O	
48	P46/CS2	DIR CDC RST	I/O	Reset signal for DIR CODEC
49	P45/CS1	DIR ERR	I/O	lock/unlock signal
50	P44/CS0	XTL0	I/O	DIR X'tal change

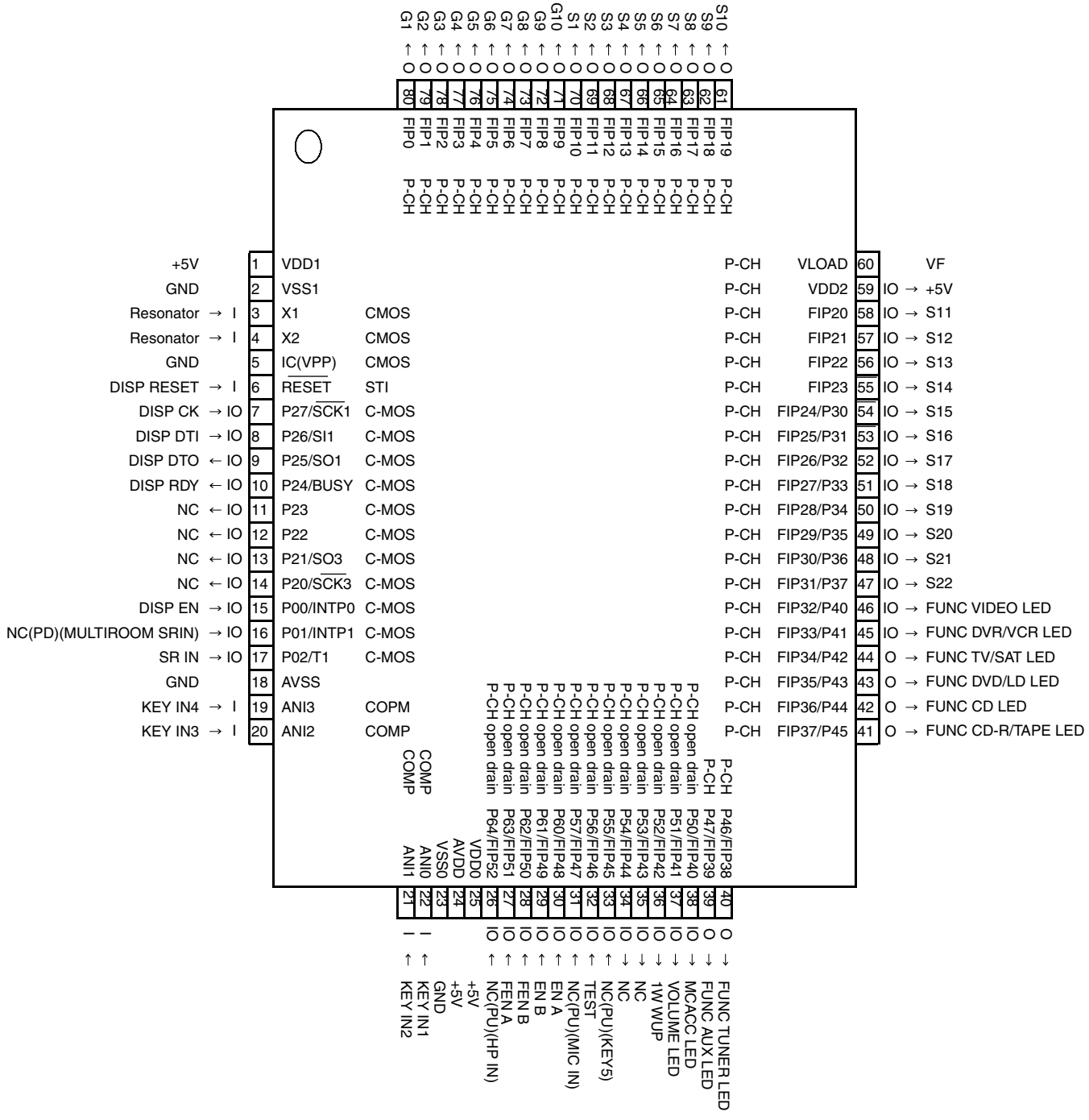
• Pin Function

No.	Port	Pin Name	I/O	Pin Function
51	P43/A19	INPUT_ATT	I/O	Analog input ATT(H : ATT ON)
52	P42/A18	GAIN_SEL	I/O	Gain select (5.1ch and Stereo of analog input : H)
53	P41/A17	AMUTE	I/O	System mute
54	P40/A16	RY_B	I/O	Speaker B relay ON/OFF
55	P37/A15	RY_C/R	I/O	Rear/Center Speaker relay ON/OFF
56	P36/A14	RY_A	I/O	Speaker A relay ON/OFF
57	P35/A13	HP DET	I/O	HP detect, H : detected
58	P34/A12	RY-AC	I/O	AC relay ON/OFF
59	P33/A11	MVRATT	I/O	ATT control of master volume (less than -15dB : L)
60	P32/A10	LOW_CONSUMPTION	I/O	If stop mode, port L, else H
61	P31/A9	EVR CLK	I/O	Clock signal for Function and E-volume
62	Vcc	5V		
63	P30/A8(/_/D7)	EVR DT	I/O	Data signal for Function and E-volume
64	Vss	GND		
65	P27/A7(/D7/D6)	NC	I/O	
66	P26/A6(/D6/D5)	4053INH	I/O	Component terminal control
67	P25/A5(/D5/D4)	4053A	I/O	Component terminal control
68	P24/A4(/D4/D3)	furniture	I/O	Furniture control signal
69	P23/A3(/D3/D2)	SWDET	I/O	SWSP detect
70	P22/A2(/D2/D1)	VIDEO3	I/O	SWSP detect
71	P21/A1(/D1/D0)	VIDEO2	I/O	SWSP detect
72	P20/A0(/D0/_)	VIDEO1	I/O	NJM2296 control (VIDEO input select)
73	P17/D15/INT5	OL DET	I/O	Detect overload of AMP
74	P16/D14/INT4	NC	I/O	
75	P15/D13/INT3	RDS CLK	I/O	Clock input signal for RDS module
76	P14/D12 RDS	RDS DT/NC	I/O	Data input signal for RDS module
77	P13/D11 RDS	RDS FM+/NC	I/O	Power ON/OFF of RDS decoder
78	P12/D10	NC	I/O	
79	P11/D9	NC	I/O	
80	P10/D8	NC	I/O	
81	P07/D7	TUNER DO	I/O	Data input signal for tuner contorol
82	P06/D6	TUNER CLK	I/O	Clock signal for tuner contorol
83	P05/D5	TUNER DI	I/O	Data output signal for tuner contorol
84	P04/D4	TUNER CE	I/O	Chip select signal for tuner contorol
85	P03/D3	6 OHM	I/O	If stop mode, port L, else L/H depends on selection.
86	P02/D2	NC	I/O	
87	P01/D1	NC	I/O	
88	P00/D0	NC	I/O	
89	P107/AN7/KI3	NC	I/O	
90	P106/AN6/KI2	NC	I/O	
91	P105/AN5/KI1	NC	I/O	
92	P104/AN4/KI0	NC	I/O	
93	P103/AN3	NC	I/O	
94	P102/AN2	SIMUKE1	I/O	Input 1 to switch region
95	P101/AN1	SIMUKE2	I/O	Input 2 to switch region
96	AVSS	AVSS		Connect to VSS
97	P100/AN0	NC	I/O	
98	VREF	VREF		Connect to VCC
99	AVcc	AVCC		Connect to VCC
100	P97/ADTRG/SIN4	NC	I/O	

■ PE5420A (FRONT ASSY : IC401)

• System Control MCU

■ Pin Arrangement (Top View)



• Pin Function

No.	Port	Pin Name	I/O	Pin Function
1	VDD1	+5V	-	positive power supply
2	VSS1	GND	-	ground potential
3	X1	Resonator	I	crystal connection for system clock oscillation
4	X2	Resonator	I	crystal connection for system clock oscillation
5	IC(VPP)	GND	-	
6	RESET	DISP RESET	I	receive reset signal from main u-com
7	P27/SCK1	DISP CK	I/O	clock signal from main u-com
8	P26/SI1	DISP DTI	I/O	datain from main u-com
9	P25/SO1	DISP DTO	I/O	data out to main u-com
10	P24/BUSY	DISP RDY	I/O	ready signal from main u-com
11	P23	NC	I/O	
12	P22	NC	I/O	
13	P21/SO3	NC	I/O	
14	P20/SCK3	NC	I/O	
15	P00/INTP0	DISP EN	I/O	enable signal from main u-com
16	P01/INTP1	NC	I/O	
17	P02/T1	SR IN	I/O	remote control signal input from main room
18	AVSS	GND	-	ground potential for A/D converter
19	ANI3	KEY IN4	I	
20	ANI2	KEY IN3	I	
21	ANI1	KEY IN2	I	
22	ANI0	KEY IN1	I	
23	VSS0	GND	-	ground potential for ports
24	AVDD	'+5V	-	analog power voltage input to A/D converter
25	VDD0	'+5V	-	positive power supply to ports
26	P64/FIP52	NC	I/O	
27	P63/FIP51	FEN A	I/O	MULTI JOG(Right)
28	P62/FIP50	FEN B	I/O	MULTI JOG(Left)
29	P61/FIP49	EN B	I/O	VOLUME JOG1(-)
30	P60/FIP48	EN A	I/O	VOLUME JOG1(+)
31	P57/FIP47	NC	I/O	
32	P56/FIP46	TEST	I/O	test mode input for checker
33	P55/FIP45	NC	I/O	
34	P54/FIP44	NC	I/O	
35	P53/FIP43	NC	I/O	
36	P52/FIP42	1W WUP	I/O	output wakeup signal to main u-com
37	P51/FIP41	VOLUME LED	I/O	LED Output
38	P50/FIP40	MCACC LED	I/O	LED Output
39	P47/FIP39	FUNC AUX	I/O	LED Output
40	P46/FIP38	FUNC TUNER	I/O	LED Output

• **Pin Function**

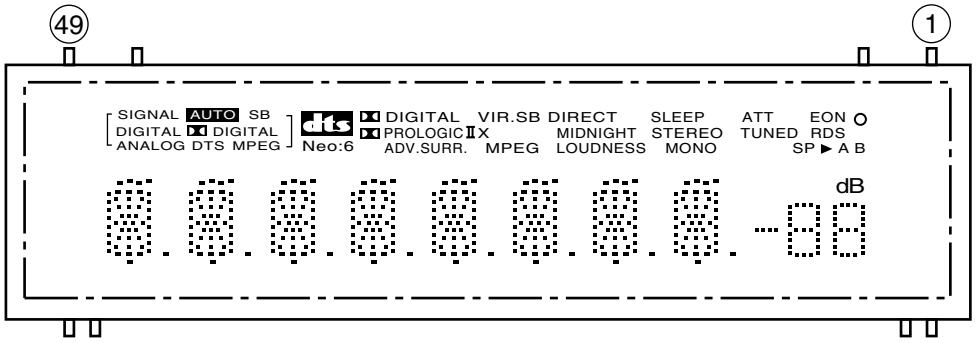
No.	Port	Pin Name	I/O	Pin Function
41	FIP37/P45	FUNC CD-R/TAPE	I/O	LED Output
42	FIP36/P44	FUNC CD	I/O	LED Output
42	FIP35/P43	FUNC DVD/LD	I/O	LED Output
44	FIP34/P42	FUNC TV/SAT	I/O	LED Output
45	FIP33/P41	FUNC DVR/VCR	I/O	LED Output
46	FIP32/P40	FUNC VIDEO	I/O	LED Output
47	FIP31/P37	S22	I/O	Display
48	FIP30/P36	S21	I/O	Display
49	FIP29/P35	S20	I/O	Display
50	FIP28/P34	S19	I/O	Display
51	FIP27/P33	S18	I/O	Display
52	FIP26/P32	S17	I/O	Display
53	FIP25/P31	S16	I/O	Display
54	FIP24/P30	S15	I/O	Display
55	FIP23	S14	O	Display
56	FIP22	S13	O	Display
57	FIP21	S12	O	Display
58	FIP20	S11	O	Display
59	VDD2	'+5V	-	positive power supply to FIP controller.
60	VLOAD	VF	-	pull down resistor connection of FIP controller
61	FIP19	S10	O	Display
62	FIP18	S9	O	Display
63	FIP17	S8	O	Display
64	FIP16	S7	O	Display
65	FIP15	S6	O	Display
66	FIP14	S5	O	Display
67	FIP13	S4	O	Display
68	FIP12	S3	O	Display
69	FIP11	S2	O	Display
70	FIP10	S1	O	Display
71	FIP9	G10	O	Display
72	FIP8	G9	O	Display
73	FIP7	G8	O	Display
74	FIP6	G7	O	Display
75	FIP5	G6	O	Display
76	FIP4	G5	O	Display
77	FIP3	G4	O	Display
78	FIP2	G3	O	Display
79	FIP1	G2	O	Display
80	FIP0	G1	O	Display

7.2.2 DISPLAY

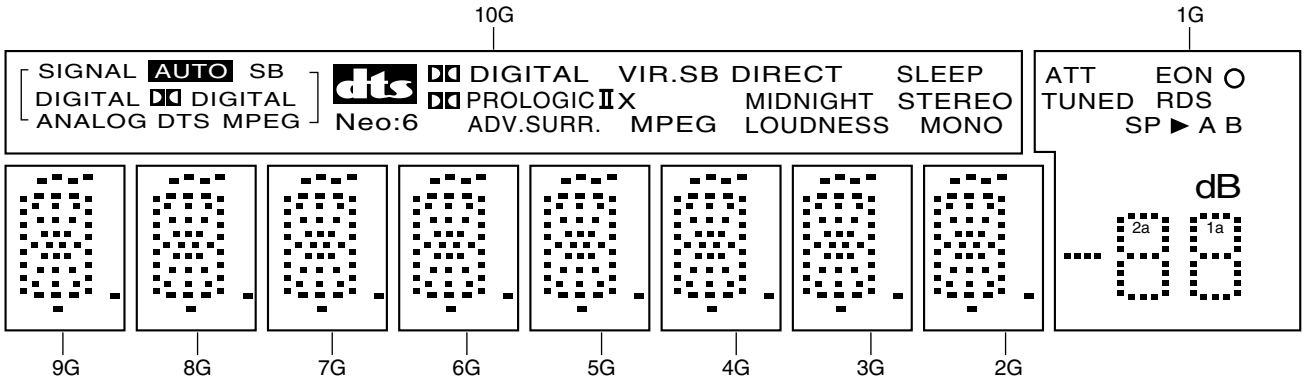
■ XAV3022 (FRONT ASSY : V401)

• FL DISPLAY

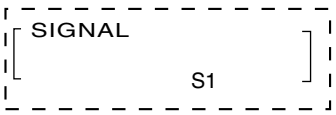
• Pin Assignment



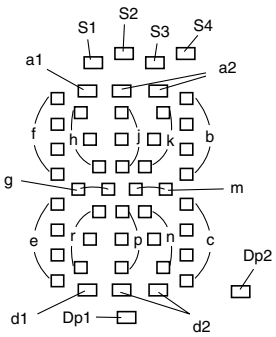
• Grid Assignment



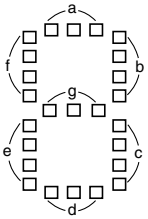
• Segment Designation



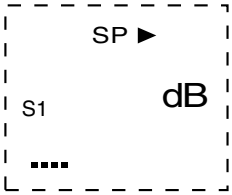
(10G)



(2G to 9G)



(1G)



(1G)

• Pin Connection

Pin No.	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
Connection	F2	F2	NP	NP	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2
Pin No.	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Connection	P1	NX	NX	NX	NX	NX	NX	NX	NX	NX	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F1	F1	

NOTE 1) F1, F2..... Filament
2) NP..... No pin
3) NX..... No extend pin
4) DL..... Datum Line
5) 1G to 10G..... Grid
6) Field of vision is a minimum of 21.8° from the lower side.

• Anode Connection

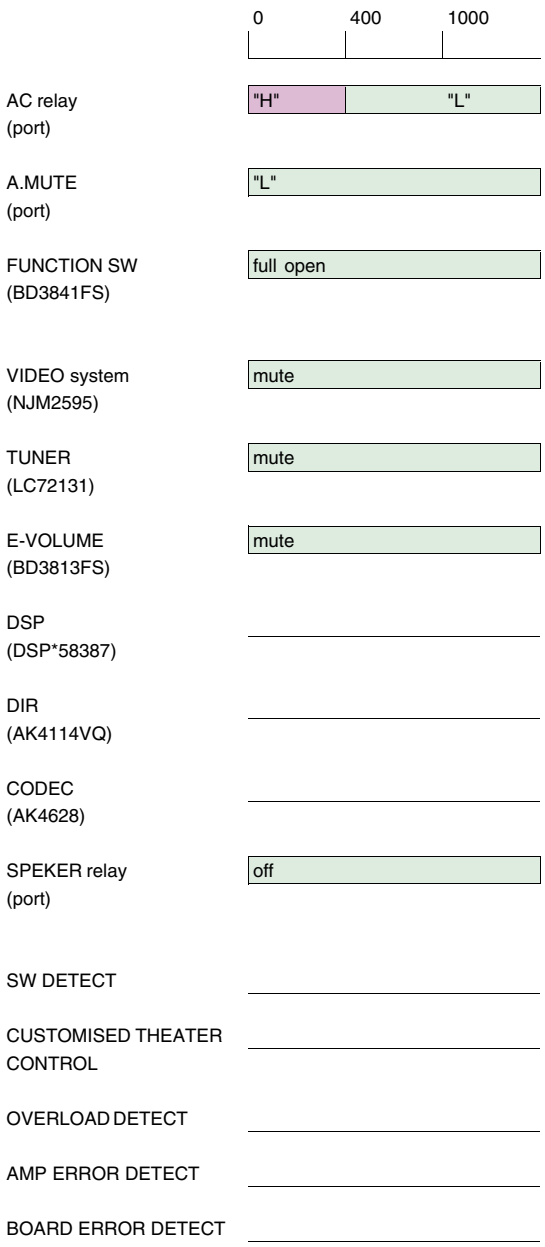
	10G	9G-2G	1G
P1	S1	a1	ATT
P2	AUTO	a2	EON
P3	SB	h	○
P4	DIGITAL	j	TUNED
P5	ANALOG	k	RDS
P6	DIGITAL (L)	b	S1
P7	DTS	f	A
P8	MPEG (L)	m	B
P9	dts	g	1a
P10	MPEG (R)	c	1b
P11	DIGITAL (R)	e	1f
P12	PRO LOGIC Π	r	1g
P13	Neo:6	p	1c
P14	VIR.SB	n	1e
P15	ADV.SURR.	d1	1d
P16	X	d2	2a
P17	DIRECT	Dp2	2b
P18	MIDNIGHT	Dp1	2f
P19	LOUDNESS	S1	2g
P20	SLEEP	S4	2c
P21	STEREO	S2	2e
P22	MONO	S3	2d

7.3 EXPLANATION

7.3.1 POWER ON AND OFF INITIAL TIMING CHART

■ **POWER ON INITIAL TIMING CHART**

■ POWER OFF INITIAL TIMING CHART



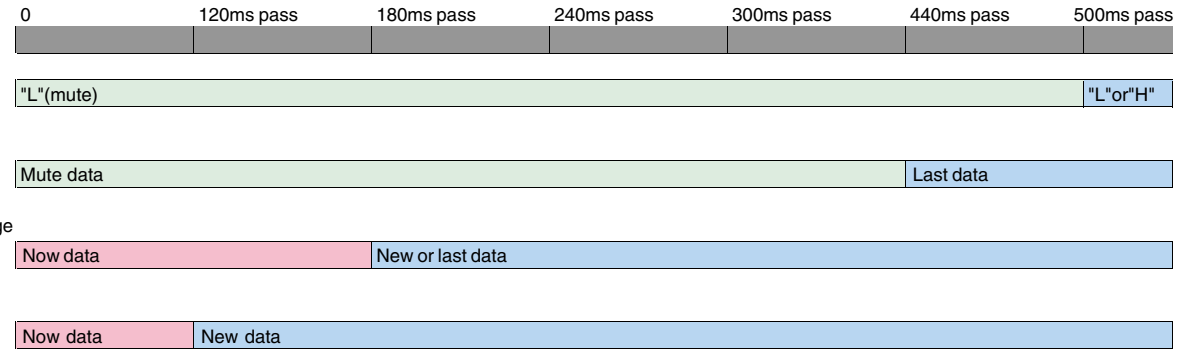
7.3.2 IC DATA TRANSMISSION TIMING CHART

■ IC data transmission timing chart

1.When function chage

condition of mute cancel (system mute & E-volume mute)
1) when tuner mute during Tuner function
2) when communicate to DSP
3) when initial processing
4) when detect trouble of AMP DC
5) when detect overload of AMP
6) when Power off
7) when muting by key input

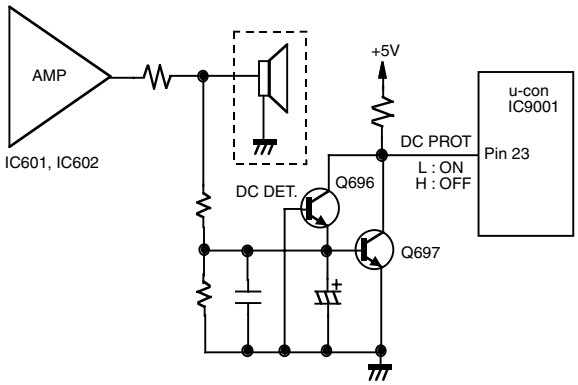
2.When except function chage



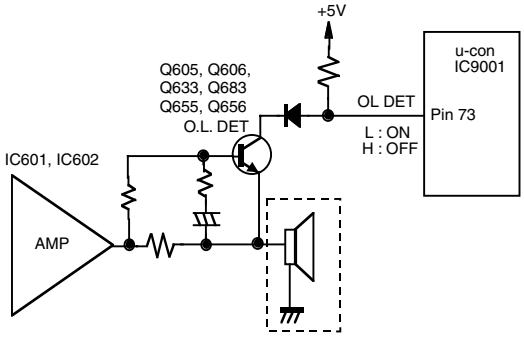
condition of mute cancel (system mute & E-volume mute)
1) when tuner mute during Tuner function
2) when communicate to DSP
3) when initial processing
4) when detect trouble of AMP DC
5) when detect overload of AMP
6) when Power off
7) when muting by key input

7.3.3 DETECTION CIRCUIT

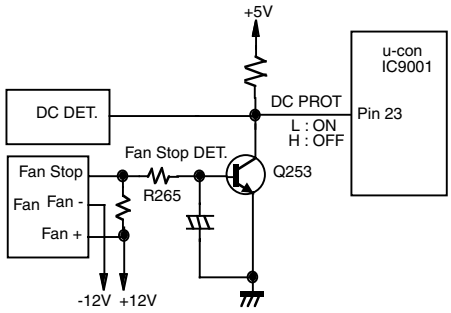
1.DC Detection Circuit Diagram:



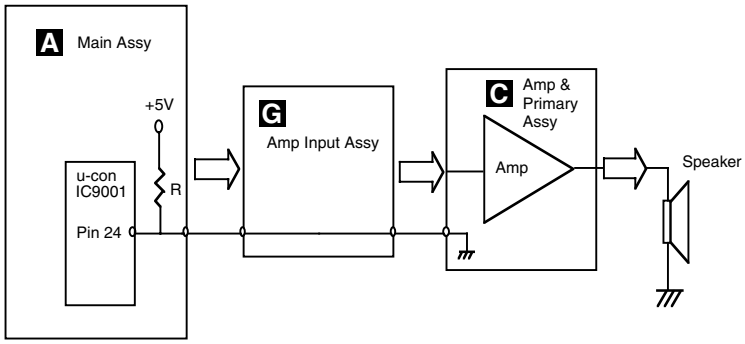
2. Overload Detection Circuit Diagram:



3. Fan Stop Prottection Circuit Diagram:



4. PCB Board Protection Circuit Diagram

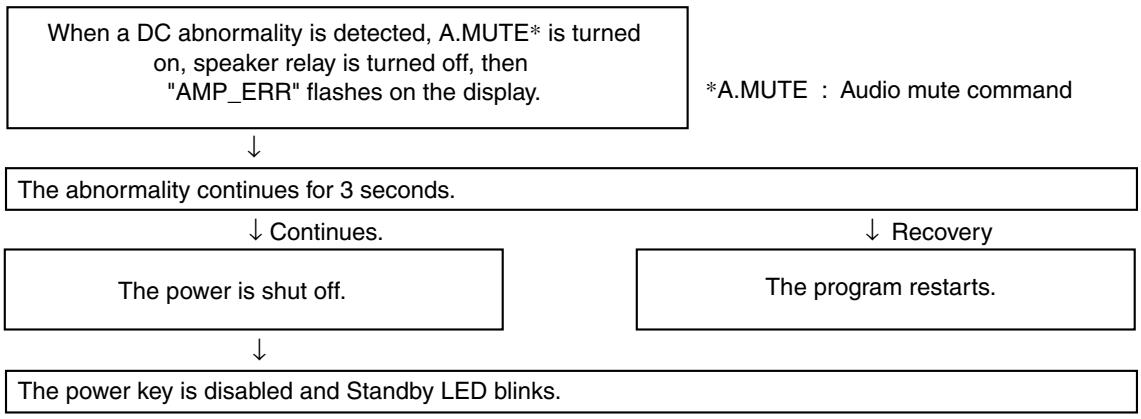


7.3.4 AMPLIFIER SYSTEM PROTECTION OPERATION SPECIFICATION

1. DC-abnormality detection

If there is a fault in the power amplifier or a high-level signal lower than 5 Hz is input, the DC_DET port becomes “L”.
If the “L” is detected, the microprocessor will perform as following flow chart.

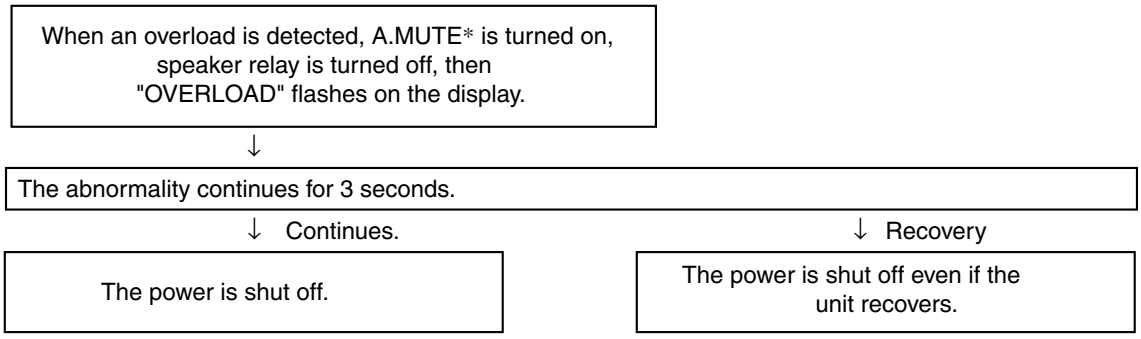
In the case of simultaneous detection with the overload protection circuit, DC-abnormality detection is performed preferentially to overload detection.



But be switched on with the following methods.
① TESTMODE ON (A55F+A55F)
② When power off, push FRONT ENTER key + ADVANCED SURROUND key continuously 2sec.
(②: When a DC abnormality is detected and the power is shut off.)

2. Overload detection

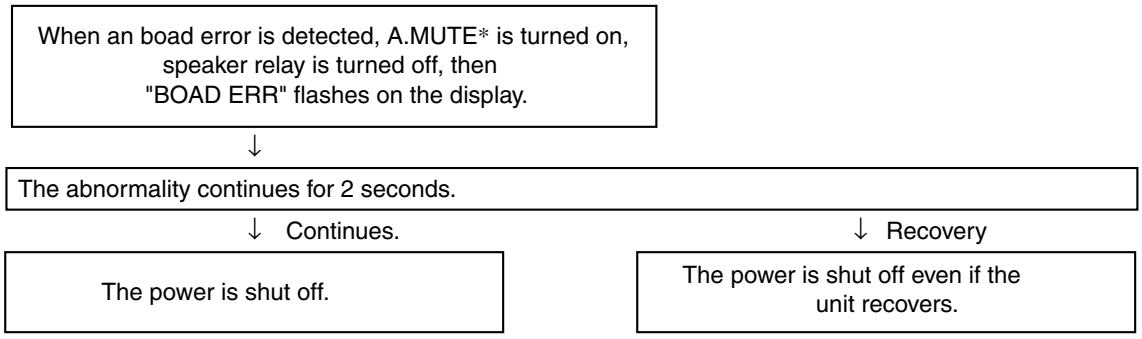
If the speaker terminals are short-circuited or low-load driving is detected, the OL_DET port becomes “L”.
If the “L” is detected, the microprocessor will perform as following flow chart.



3. Board detection

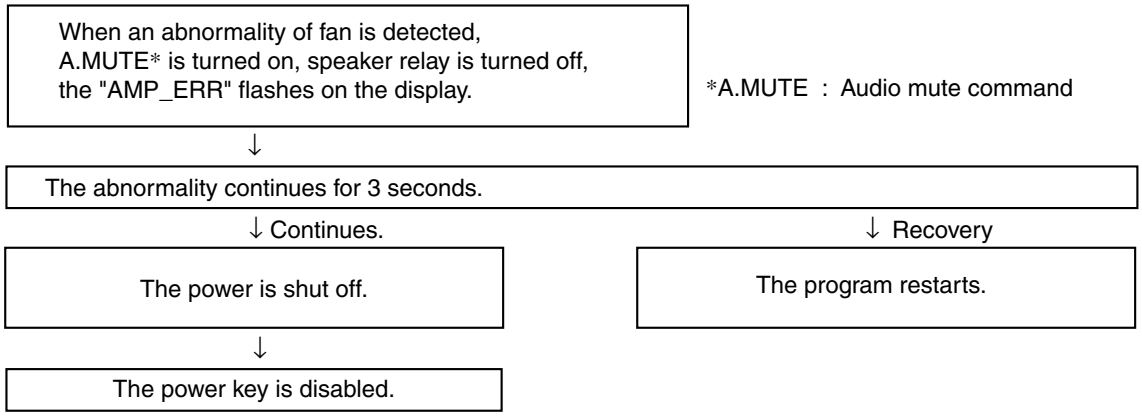
Board detection is only enabled 2 seconds after power-on.
If the board connection from Main Ass'y to Amp&Primary Ass'y is interrupted,
the BOARD_DET port becomes "H".
If the "H" is detected, the microprocessor will perform as following flow chart.

In the case of simultaneous detection with the overload protection circuit,
Board detection is performed preferentially to DC-abnormality detection and Overload detection.



4. Fan stop detection operation flow in the DC abnormality detection

If the fan is forcibly stopped, the 'DC PROT' port becomes "L". Then an abnormality of fan is detected.



However, when the following keys are pushed so that the key input of a line and the service can be carried out, power can be on.

① TESTMODE ON (A55F+A55F)
② When power off, push FRONT ENTER key + ADVANCED SURROUND key continuously 2sec.
(Effective, only when power-off is carried out by DC detection)

7.3.5 AMPLIFIER FAILURE DIAGNOSIS FLOW CHART

■ **Amplifier failure diagnosis flow chart**

When DC detection is activated ("AMP_ERR" flashes on the display), failure (damage) of the power amplifier section is considered.
As DC detection and fan stop protection circuits commonly use same abnormality detection port in microprocessor, please make sure that the operation of fan motor is in normal condition before proceeding to the troubleshooting of amplifier.

Caution:
When release the lock state of power key before repair, please be careful because there is the possibility that more damages will occur when turns on the power once again!

• According to a symptom, perform the following confirmation beforehand.

1) Is the operation of fan motor in normal condition?

2) Are there any Fuses and IC protectors open?

3) After turn on the power, confirm that the supply voltage of the point that can be measured is appropriate.

4) Whether the voltage of pin3 of IC601 or IC602 is equal to (VL-0.7V). If not (eg, equal to VH), then change the corresponding power pack IC601 or IC602.

5) Furthermore, check the output DC voltage of each channel of power pack IC601 and IC602 to limit the failure channel and identify the defect power pack.

• After identify the failure channel, check that each part is not damaged (resistor, diode... etc. value / open / short)

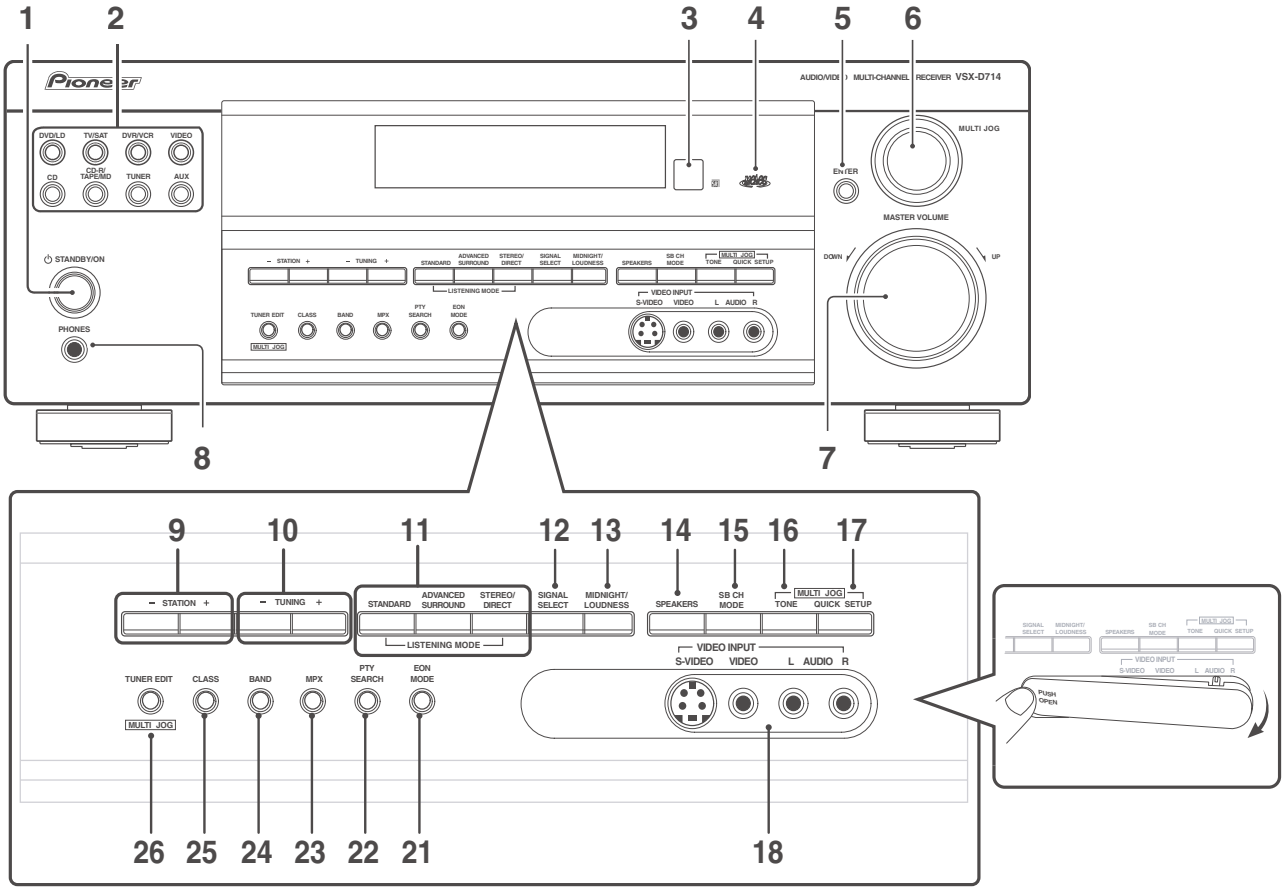
7.4 CLEANING

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

8. PANEL FACILITIES

Front panel



1 ⏻ STANDBY/ON
Switches the receiver between on and standby.

2 Input select buttons
Press to select an input source.

3 Remote sensor
Receives the signals from the remote control.

4 MCACC indicator
Lights after the MCACC setup is complete.

5 ENTER

6 MULTI JOGdial
The **MULTI JOG** dial performs a number of tasks. Use it to select options after pressing **TONE**, **QUICK SETUP** or **TUNER EDIT**.

7 MASTER VOLUME

8 PHONES jack
Use to connect headphones. When the headphones are connected, there is no sound output from the speakers.

9 STATION +/– buttons
Selects station presets when using the tuner.

10 TUNING +/– buttons
Selects the frequency when using the tuner.

11 LISTENING MODE buttons

STANDARD
Press for Standard decoding and to switch between the various Pro Logic II and Neo:6 options.

ADVANCED SURROUND
Use to switch between the various surround modes.

STEREO/DIRECT
Switches between direct and stereo playback. Direct playback bypasses the tone controls and channel levels for the most accurate reproduction of a source.

12 SIGNAL SELECT
Use to select an input signal.

13 MIDNIGHT/LOUDNESS
Use Midnight when listening to movie soundtracks at low volume. Use Loudness to boost the bass and treble at low volume.

14 SPEAKERS
Use to cycle through the speaker system:
A → B → A+B

15 SB CH MODE
Selects the Surround back channel mode and the Virtual Surround Back (VSB) mode.

16 TONE
Press this button to access the bass and treble controls, which you can then adjust with the **MULTI JOG** dial.

17 QUICK SETUP
See *Using the Quick Setup.*

18 VIDEO INPUT
See *Connecting to the front panel video terminal.*

21 EON MODE
Use to search for different programs that are transmitting traffic or news information (this search method is called EON).

22 PTY SEARCH
Use to search for different program types in RDS mode.

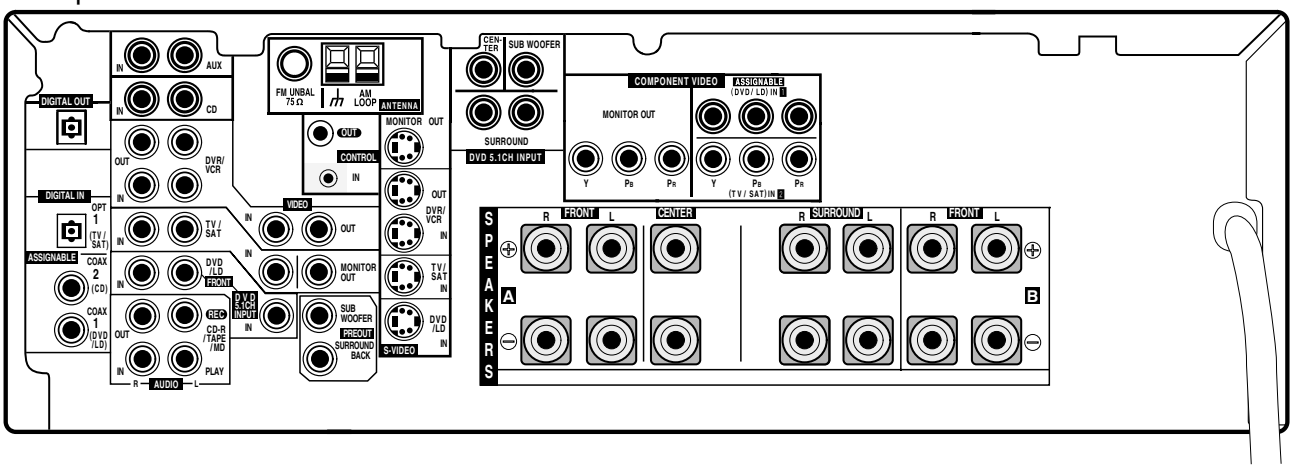
23 MPX
Press to receive a radio broadcast in mono.

24 BAND
Switches between AM and FM radio bands.

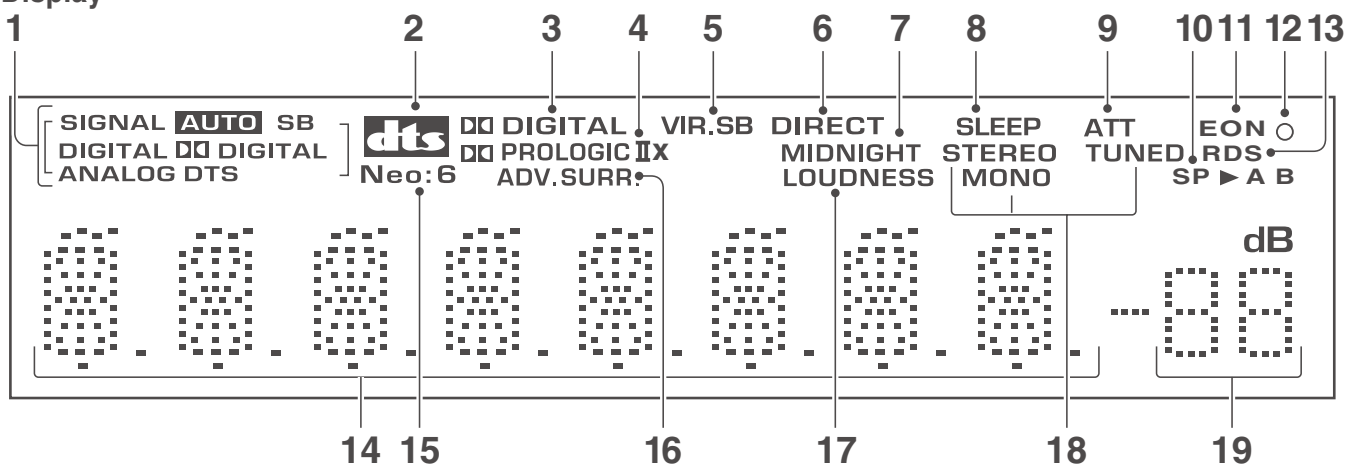
25 CLASS
Switches between the three banks (classes) of station presets.

26 TUNER EDIT
Press to memorize and name a station for recall.

Rear panel



Display



1 SIGNAL SELECT indicators
Lights to indicate the type of input signal assigned for the current component:

AUTO
Lights when **AUTO** signal select is on.

SB
Depending on the source, this lights when a signal with surround back channel encoding is detected.

DIGITAL
Lights when a digital audio signal is detected.

DIGITAL
Lights when a Dolby Digital encoded signal is detected.

ANALOG
Lights when an analog signal is detected.

DTS
Lights when a source with DTS encoded audio signals is detected.

2 dts
When the **STANDARD** mode of the receiver is on, this lights to indicate decoding of a DTS signal.

3 DIGITAL
When the **STANDARD** mode of the receiver is on, this lights to indicate decoding of a Dolby Digital signal.

4 PRO LOGIC II (x)
When the (**STANDARD**) Pro Logic II mode of the receiver is on, this lights to indicate Pro Logic II decoding. The **x** lights to indicate Pro Logic IIx decoding (see *Listening in surround sound* for more on this).

5 VIR.SB
Lights during Virtual surround back processing.

6 DIRECT
Lights when source direct playback is in use. Direct playback bypasses the tone controls and channel levels for the most accurate reproduction of a source.

7 MIDNIGHT
Lights during Midnight listening.

8 SLEEP
Lights when the receiver is in sleep mode.

9 ATT
Lights when **INPUT ATT** is used to attenuate (reduce) the level of the analog input signal.

10 Speaker indicator
Shows the speaker system currently in use.

11 EON
When the EON mode is set. the **EON** indicator lights, but during actual reception of an EON broadcast the **EON** indicator will flash.

12 ○ indicator
The ○ indicator lights to inform you that the currently tuned station carries the EON data service.

13 RDS
Lights when an RDS broadcast is received.

14 Character display

15 Neo:6
When the (**STANDARD**) NEO:6 mode of the receiver is on, this lights to indicate NEO:6 processing.

16 ADV.SURR. (Advanced Surround)
Lights when one of the Advanced Surround modes has been selected.

17 LOUDNESS
Lights when **LOUDNESS** has been selected.

18 TUNER indicators

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

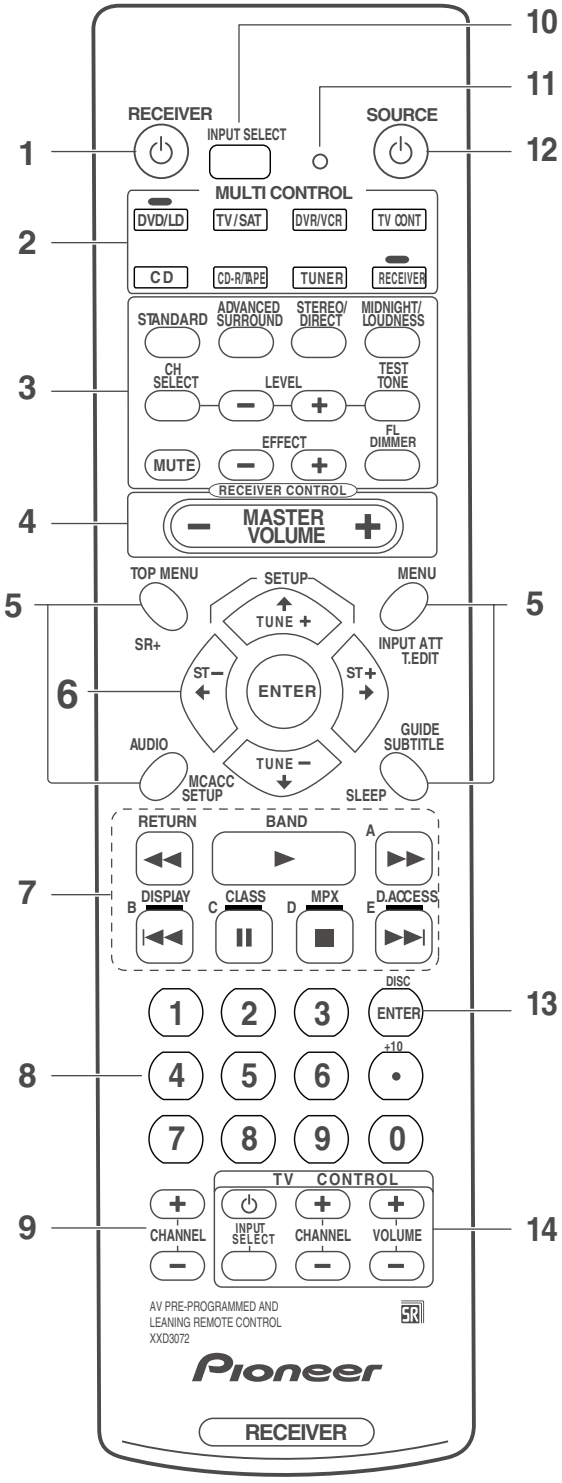
MONO
Lights when the mono mode is set using the **MPX** button.

TUNED
Lights when a broadcast is being received.

19 Master volume level
Shows the overall volume level. **---dB** indicates the minimum level, and **- 0 dB** indicates the maximum level.

Depending on your level settings for each channel, the maximum volume can range between –10 dB and –0 dB.

Remote control



1 RECEIVER ⏻
This switches between standby and on for this receiver.

2 MULTI CONTROL buttons
Press to select control of other components.

RECEIVER
Switches the remote to control the receiver (used to select the features such as **SLEEP**, **MCACC SETUP**, etc). Also use this button to set up surround sound.

3 RECEIVER CONTROL buttons

STANDARD
Press for Standard decoding and to switch between the various Pro Logic II and Neo:6 options.

ADVANCED SURROUND
Use to switch between the various surround modes.

STEREO/DIRECT
Switches between direct and stereo playback. Direct playback bypasses the tone controls and channel levels for the most accurate reproduction of a source.

MIDNIGHT/LOUDNESS
Switches to Midnight or Loudness listening.

CH SELECT
Selects a speaker when setting up the surround sound of the receiver.

LEVEL +/–
Adjusts the levels of the surround sound of the receiver.

TEST TONE
Sounds the test tone when setting up the surround sound of the receiver.

MUTE
Mutes the sound (or restores the sound if it has been muted).

EFFECT +/–
Adds or subtracts the amount of effect with different advanced surround modes.

FL DIMMER
Dims or brightens the display.

4 MASTER VOLUME +/–
Use to set the listening volume.

5 Receiver and component control buttons *(Press the corresponding* **MULTI CONTROL** *button first to access).*
These controls function according to the component youíve selected.

TOP MENU
Displays the disc 'top' menu of a DVD.

SR+
Switches the SR+ mode on/off.

AUDIO
Changes the audio language or channel with DVD discs.

MCACC SETUP
Use to setup your speaker system using the multichannel acoustic calibration system.

MENU
Displays the disc menu of DVD-Video discs. It also displays TV and DTV menus.

INPUT ATT
Attenuates (lowers) the level of an analog input signal to prevent distortion.

T.EDIT
Use to memorize and name a station for recall using the **STATION +/–** buttons.

GUIDE
Displays the guides on a digital TV.

SUBTITLE
Displays/changes the subtitles included in multilingual DVD-Video discs.

SLEEP
Use to put the receiver in sleep mode and select the amount of time before the receiver turns off.

6 ⇨⇦⇩⇧ (TUNE +/–,ST +/–) / ENTER
Use the arrow buttons when setting up your surround sound system.
Also used to control DVD menus/options and for deck 1 of a double cassette deck player. Use the **TUNE +/–** buttons to find radio frequencies and use **ST +/–** to find preset stations.

7 Component/Tuner control buttons
The main buttons (►, ■ ,etc.) are used to control a component after you have selected it using the **MULTI CONTROL** buttons. The tuner / DTV controls above these buttons can be accessed after you have selected the corresponding **MULTI CONTROL** button (**TUNER** or **TV / SAT** (when connected to DTV)).

RETURN
Returns to the last screen selected when using a digital TV tuner.

BAND
Switches between the tuner AM and FM bands.

DISPLAY
Use to switch the display between the station preset name and the frequency for the tuner. Also displays the different types of RDS information available.

CLASS
Switches between the three banks (classes) of radio station presets.

MPX
Switches between stereo and mono reception of FM broadcasts. If the signal is weak then switching to mono will improve the sound quality.

D.ACCESS
After pressing, you can access a radio station directly using the number buttons.

8 Number buttons
Use the number buttons to directly select a radio frequency or the tracks on a CD, DVD, etc.

9 CHANNEL +/–
Use to select channels when using a VCR, DVR, etc.

10 INPUT SELECT
Use to select the input source.

11 LED
This lights when a command is sent from the remote control.

12 SOURCE ⏻
Press to turn on/off other components connected to the receiver.

13 DISC (ENTER)
The buttonís use depends on the component selected. It can be used to enter commands for TV or DTV, and can also be used to select a disc in a multi - CD player.

14 TV CONTROLbuttons
These buttons are dedicated to control the TV assigned to the **TV CONT** button. Thus if you only have one TV to hook up to this system assign it to the **TV CONT MULTI CONTROL** button. If you have two TVs, assign the main TV to the **TV CONT** button.

⏻
Use to turn on/off the power of the TV.

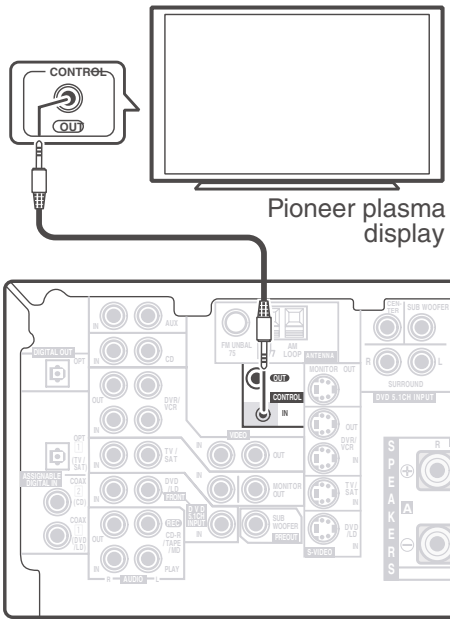
(TV CONTROL) INPUT SELECT
Use select the TV function.

CHANNEL +/–
Use to select channels.

VOLUME +/–
Use to adjust the volume on your TV.

Using this receiver with a Pioneer plasma display

If you have a Pioneer plasma display (models PDP-504HDE and PDP-434HDE), you can use an SR+ cable (see note below) to connect it to this unit and take advantage of various convenient features, such as automatic video input switching of the plasma display when the input is changed.

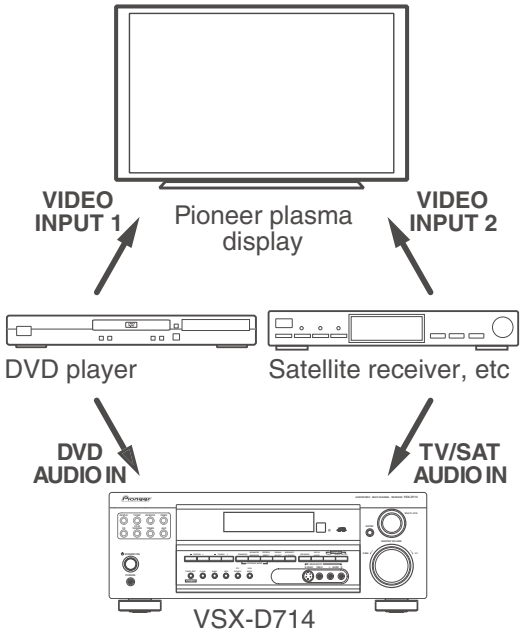


Important

- If you connect to a Pioneer plasma display using an SR+ cable, you will need to point the remote control at the plasma display remote sensor to control the receiver. In this case, you won't be able to control the receiver using the remote control if you switch the plasma display off.

- **Use a 3-ringed miniplug SR+ cable to connect the CONTROL IN jack of this receiver with the CONTROL OUT of your plasma display.**

Before you can use the extra SR+ features, you need to make a few settings in the receiver. See *Using the SR+ mode with a Pioneer plasma display* for detailed instructions.



To make the most of the SR + features, you should connect your source components (DVD player, etc.) in a slightly different way to that described in this chapter. For each component, connect the video output directly to the plasma display, and just connect the audio (analog and/or digital) to this receiver.

Note

- The 3-ringed SR+ cable from Pioneer is commercially available under the part number ADE7095. Contact the Pioneer Customer Support division for more information on obtaining an SR + cable.

SERVICE PARTS

- SR+ mini-plug cable (ADE7095)