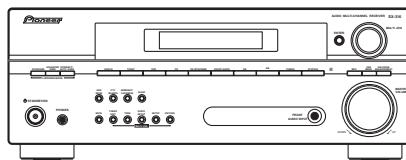


Service Manual



SX-316-S

ORDER NO.
RRV3330

AUDIO MULTI-CHANNEL RECEIVER

SX-316-S

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

Model	Type	Power Requirement	Remarks
SX-316-S	KUCXJ	AC 120 V	
SX-316-S	MYXJ5	AC 220 V to 230 V	



For details, refer to "Important Check Points for Good Servicing".

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

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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

- B 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)

- C 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.

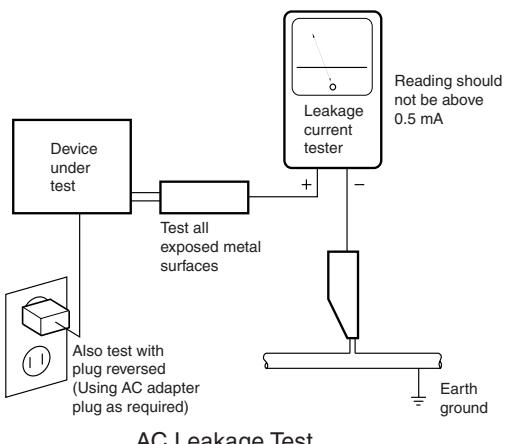
(FOR USA MODEL ONLY)

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.



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.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.
- Use genuine parts. Be sure to use important parts for safety.
- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SPECIFICATIONS

SX-316-S/KUCXJ

Amplifier section

Continuous power output

Front

..... 100 W per channel* (200 Hz to 20 kHz, 0.7 %**, 8 Ω)

Center 100 W*(200 Hz to 20 kHz, 0.7 %**, 8 Ω)

Surround

..... 100 W per channel*(200 Hz to 20 kHz, 0.7 %**, 8 Ω)

Subwoofer 100 W*(45 Hz to 200 kHz, 0.7 %**, 8 Ω)

RMS Power Output

Front 144 W per channel (1 kHz, THD, 10 %, 8 Ω)

Center 144 W (1 kHz, THD, 10 %, 8 Ω)

Surround 144 W per channel (1 kHz, THD, 10 %, 8 Ω)

Subwoofer 144 W (1 kHz, THD, 10 %, 8 Ω)

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

** Measured by Audio Spectrum Analyzer.

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz

Antenna Input (DIN) 75 Ω unbalanced

AM Tuner Section

Frequency Range 530 kHz to 1 700 kHz

Antenna Loop antenna

Miscellaneous

Power requirements AC 120 V / 60 Hz

Power consumption 320 W / 420 VA

In standby 0.5 W

Dimensions

..... 16 9/16 in. (W) x 6 1/4 in. (H) x 13 11/16 in.(D)

..... 420 mm (W) x 158 mm(H) x 348 mm(D)

Weight (without package) 19.0 lb (8.6 kg)

Furnished Parts

AM loop antenna 1

FM wire antenna 1

AA size IEC R6 dry cell batteries (to confirm

system operation) 2

Remote control 1

Mini-plug audio cable 1

Operating instructions

Note

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

Manufactured under license from Dolby Laboratories.
"Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" and "DTS 96/24" are trademarks of Digital Theater Systems, Inc.

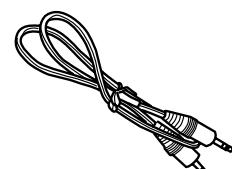
Accessories



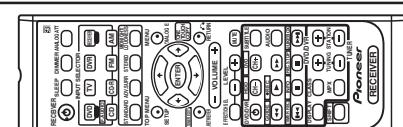
AM loop antenna
(ATB7013)



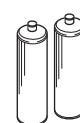
FM wire antenna
(ADH7030)



Mini-plug audio cable
(KUCXJ : ADE7059)
(L=1m)



Remote control
(XXD3108)



AA size IEC R6
Dry cell batteries (x2)

SX-316-S/MYXJ5

Amplifier section

A

Continuous Power Output (stereo)

Front 100 W (DIN 1 kHz, THD, 1.0 %, 8 Ω)

Power Output (surround)

Front

..... 100 W per channel (1 kHz, 1.0 % THD, 8 Ω)

Center 100 W (1 kHz, 1.0 % THD, 8 Ω)

Surround 100 W per channel

(1 kHz, 1.0 % THD, 8 Ω)

Subwoofer 100 W (100 Hz, 1.0 % THD, 8 Ω)

RMS Power Output

Front

..... 130 W per channel (1 kHz, 10 % THD, 8 Ω)

Center 130 W (1 kHz, 10 % THD, 8 Ω)

Surround 130 W per channel

(1 kHz, 10 % THD, 8 Ω)

Subwoofer 130 W (100 Hz, 10 % THD, 8 Ω)

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz

Antenna Input. 75 Ω unbalanced

AM Tuner Section

Frequency Range 531 kHz to 1 602 kHz

Antenna Loop antenna

Miscellaneous

Power requirements AC 220V to 230 V, 50 Hz/ 60 Hz

Power consumption. 320 W

In standby. 0.5 W

Dimensions

..... 420 mm (W) x 158 mm (H) x 348 mm (D)

Weight (without package). 8.5 kg

Furnished Parts

AM loop antenna 1

FM wire antenna 1

AA size IEC R6 dry cell batteries (to confirm

system operation). 2

Remote control. 1

Warranty card. 1

Operating instructions

Note

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

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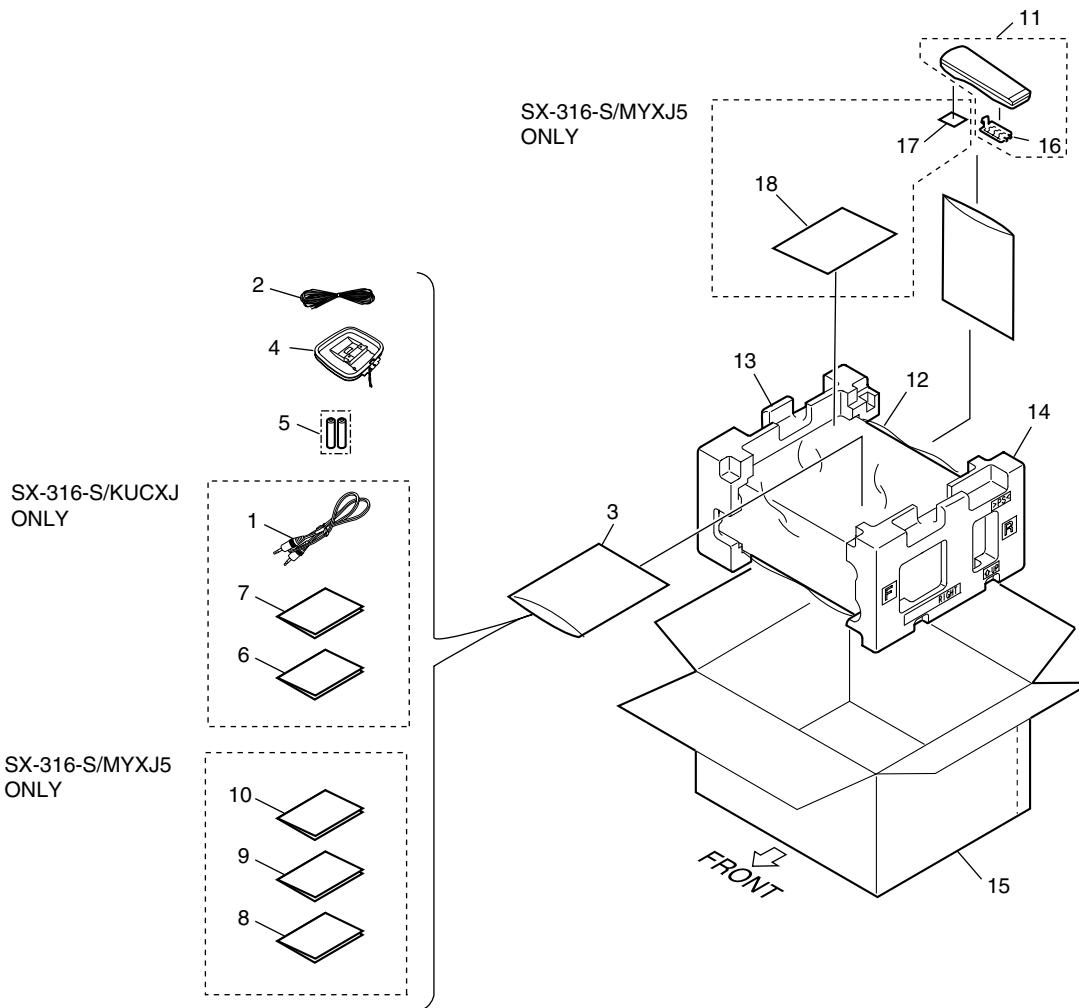
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2. EXPLODED VIEWS AND PARTS LIST

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- 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

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(1) PACKING SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Mini-plug Audio Cable	See Contrast table(2)	11	Remote control	XXD3108
2	FM Wire Antenna	ADH7030	12	Packing Sheet	AHG7069
NSP 3	Polyethylene Bag	See Contrast table(2)	13	Left Pad V3	XHA3158
4	AM Loop Antenna	ATB7013	14	Right Pad V3	XHA3159
NSP 5	Dry cell batteries (AA/R6) 2P	XEX3002	15	Packing Case	See Contrast table(2)
6	Operating Instructions (English/French)	See Contrast table(2)	16	Battery Cover	XZN3139
7	Operating Instructions Safety (English/French)	See Contrast table(2)	17	Label (WEEE)	See Contrast table(2)
8	Operating Instructions (Dutch/Spanish)	See Contrast table(2)	18	Warranty Card	See Contrast table(2)
9	Operating Instructions (French/German)	See Contrast table(2)			
10	Operating Instructions (English/Italian)	See Contrast table(2)			

(2) CONTRAST TABLE

SX-316-S/MYXJ5 and SX-316-S/KUCXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	SX-316-S /KUCXJ	SX-316-S /MYXJ5
NSP	1	Mini-plug Audio Cable	ADE7059	Not used
	3	Polyethylene Bag	AHG7117	Z21-038
	6	Operating Instructions (English/French)	XRE3113	Not used
	7	Operating Instructions Safety (English/French)	XRE3120	Not used
	8	Operating Instructions (Dutch/Spanish)	Not used	XRC3221
	9	Operating Instructions (French/German)	Not used	XRC3222
	10	Operating Instructions (English/Italian)	Not used	XRE3115
	15	Packing Case	XHD3586	XHD3593
	17	Label (WEEE)	Not used	ARW7322
	18	Warranty Card	Not used	ARY7065

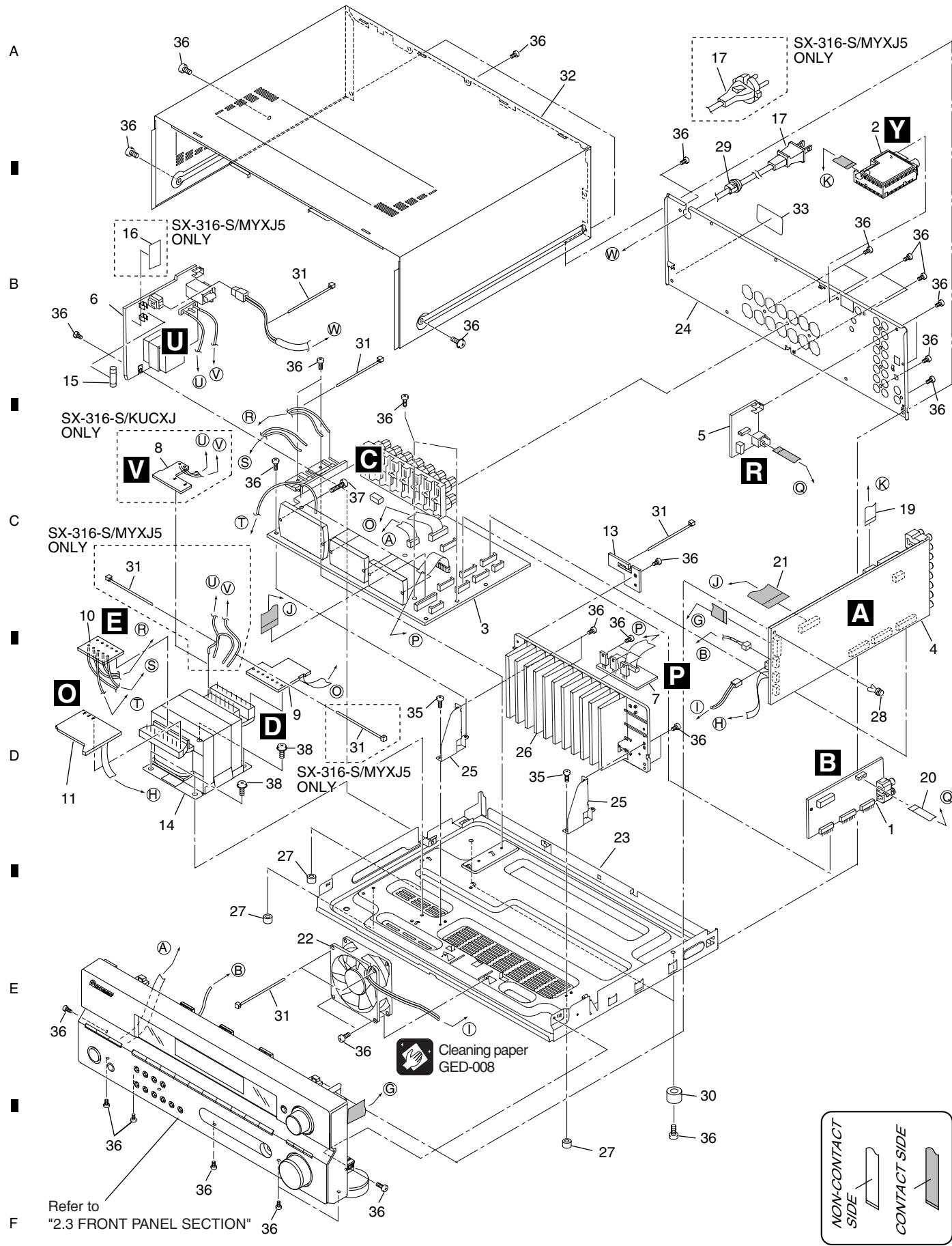
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2.2 EXTERIOR SECTION



(1) EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	DSP ASSY	AWX8573	21	17P F. F. C/30V	XDD3203
2	FM/AM TUNER UNIT	See Contrast table(2)	22	DC Fan Motor	XXM3012
3	POWER PACK ASSY	See Contrast table(2)	NSP 23	Chassis	XNA3026
4	MAIN ASSY	See Contrast table(2)	24	R Panel	See Contrast table(2)
5	DIGITAL IN ASSY	XWZ4066	25	H/S AngleV3	XNG3145
6	PRIMARY ASSY	See Contrast table(2)	NSP 26	H/Sink	XNH3044
7	REGULATOR ASSY	XWZ4077	NSP 27	Spacer	AEB7092
8	TRANS 1 ASSY	See Contrast table(2)	28	Push Rivet (BROWN)	AEC7205
9	TRANS 2 ASSY	See Contrast table(2)	29	Cord Stopper	See Contrast table(2)
10	TRANS 3 ASSY	XWZ4079	30	Insulator	XMR3100
11	TRANS 4 ASSY	XWZ4093	NSP 31	Binder (BK-1)	ZCA-BK1
12	•••••		32	Bonnet	XZN3184
13	BINDER ASSY	XWZ4199	NSP 33	Label	VRW1629
⚠ 14	Transformer	See Contrast table(2)	34	•••••	
⚠ 15	Fuse	See Contrast table(2)	35	Screw	BBZ30P060FCC
16	Fuse Card	See Contrast table(2)	36	Screw	BBZ30P080FNI
⚠ 17	AC Power Cord	See Contrast table(2)	37	Screw	BBZ30P140FTC
18	•••••		38	Screw	BBZ40P080FNI
19	11P F. F. C/30V	XDD3189			
20	10P F. F. C/30V	XDD3196			

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(2) CONTRAST TABLE

SX-316-S/MYXJ5 and SX-316-S/KUCXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	SX-316-S /KUCXJ	SX-316-S /MYXJ5
	2	FM/AM TUNER UNIT	AXX7210	AXX7170
	3	POWER PACK ASSY	XWZ4080	XWZ4117
	4	MAIN ASSY	XWK3227	XWK3244
	6	PRIMARY ASSY	XWZ4128	XWZ4073
	8	TRANS 1 ASSY	XWZ4078	Not used
⚠	9	TRANS 2 ASSY	XWZ4090	XWZ4092
⚠	14	Transformer	XTS3106	XTS3090
⚠	15	Fuse (10A)	REK1154	Not used
⚠	15	Fuse (T3.15A)	Not used	REK1027
⚠	16	Fuse Card	Not used	AAX7493
⚠	17	AC Power Cord	ADG7024	VDG1080
	24	R Panel	XNC3420	XNC3421
	29	Cord Stopper	CM-22C	CM-22B

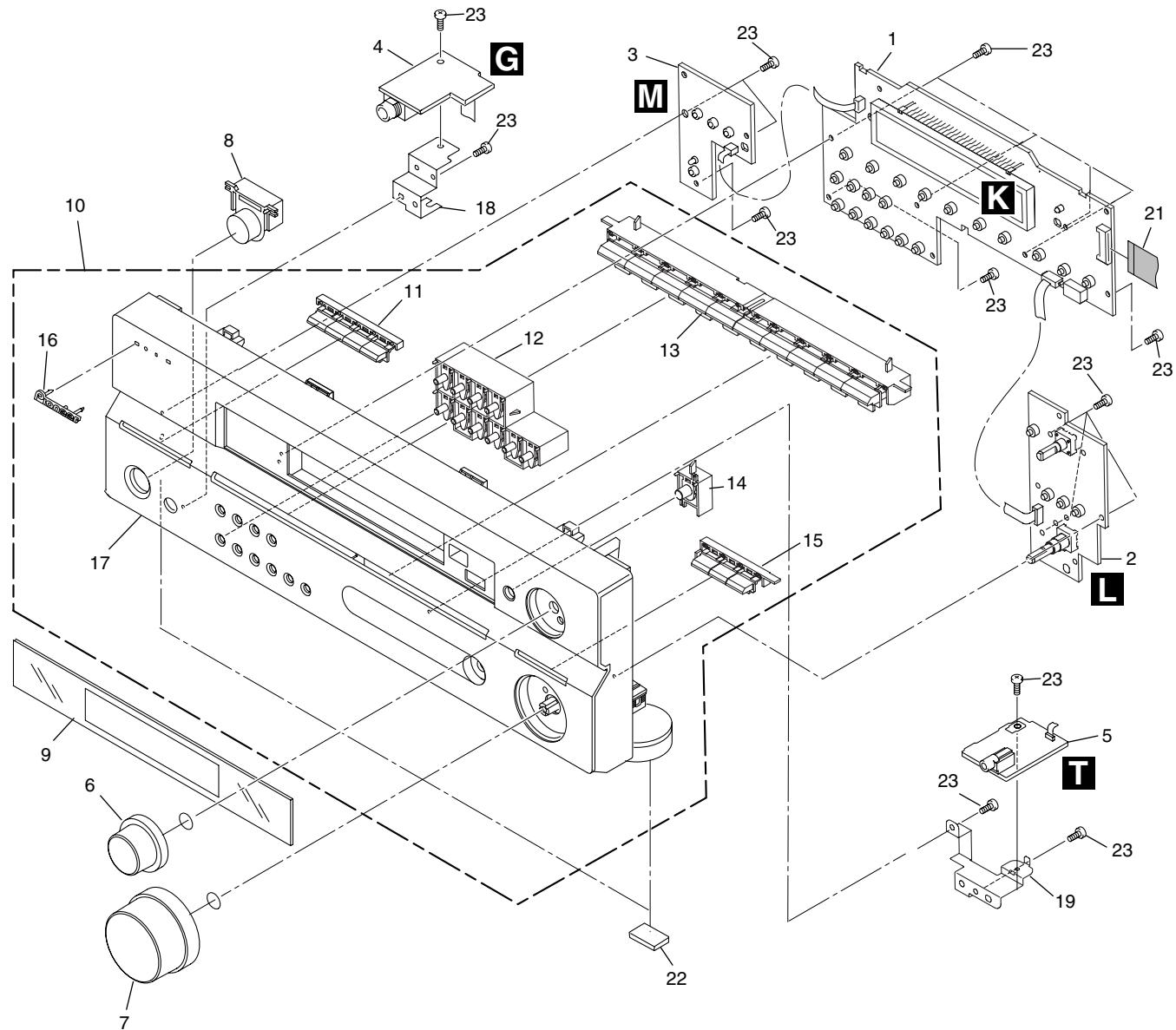
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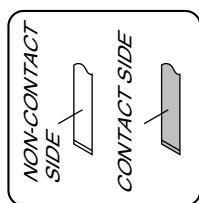
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■ 1 ■ 2 ■ 3 ■ 4
2.3 FRONT PANEL SECTION

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SX-316-S

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(1) FRONT PANEL SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	FRONT DISPLAY ASSY	XWZ4165	16	PIONEER Badge	VAM1129
2	R. ENCODER ASSY	XWZ4055	17	FRT Panel	See Contrast table(2)
3	POWER KEY ASSY	XWZ4056	18	Earth Plate HP V2	XNG3131
4	HP ASSY	XWZ4095	19	Earth Plate FR V3	XNG3144
5	FRONT INPUT ASSY	XWZ4124	20	•••••	
6	JOG Knob	XAB3048	21	17P F.F.C/30V	XDD3200
7	VOL Knob	XAB3051	22	Rubber Sheet	AEB1111
8	STDBY BTN	XAD3203	23	Screw	BPZ30P080FTC
9	D Panel V3CL	XAK3529			
NSP 10	F PANEL Assy	See Contrast table(2)			
11	Tuner BTN	XAD3248			
12	SUB BTN	XAD3249			
13	FUNC BTN	XAD3250			
14	JOG Button	XAD3251			
15	JOG Button	XAD3252			

(2) CONTRAST TABLE

SX-316-S/MYXJ5 and SX-316-S/KUCXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	SX-316-S /KUCXJ	SX-316-S /MYXJ5
NSP	10	F Panel Assy	XXG3257	XXG3258
	17	FRT Panel	XMB3236	XMB3237

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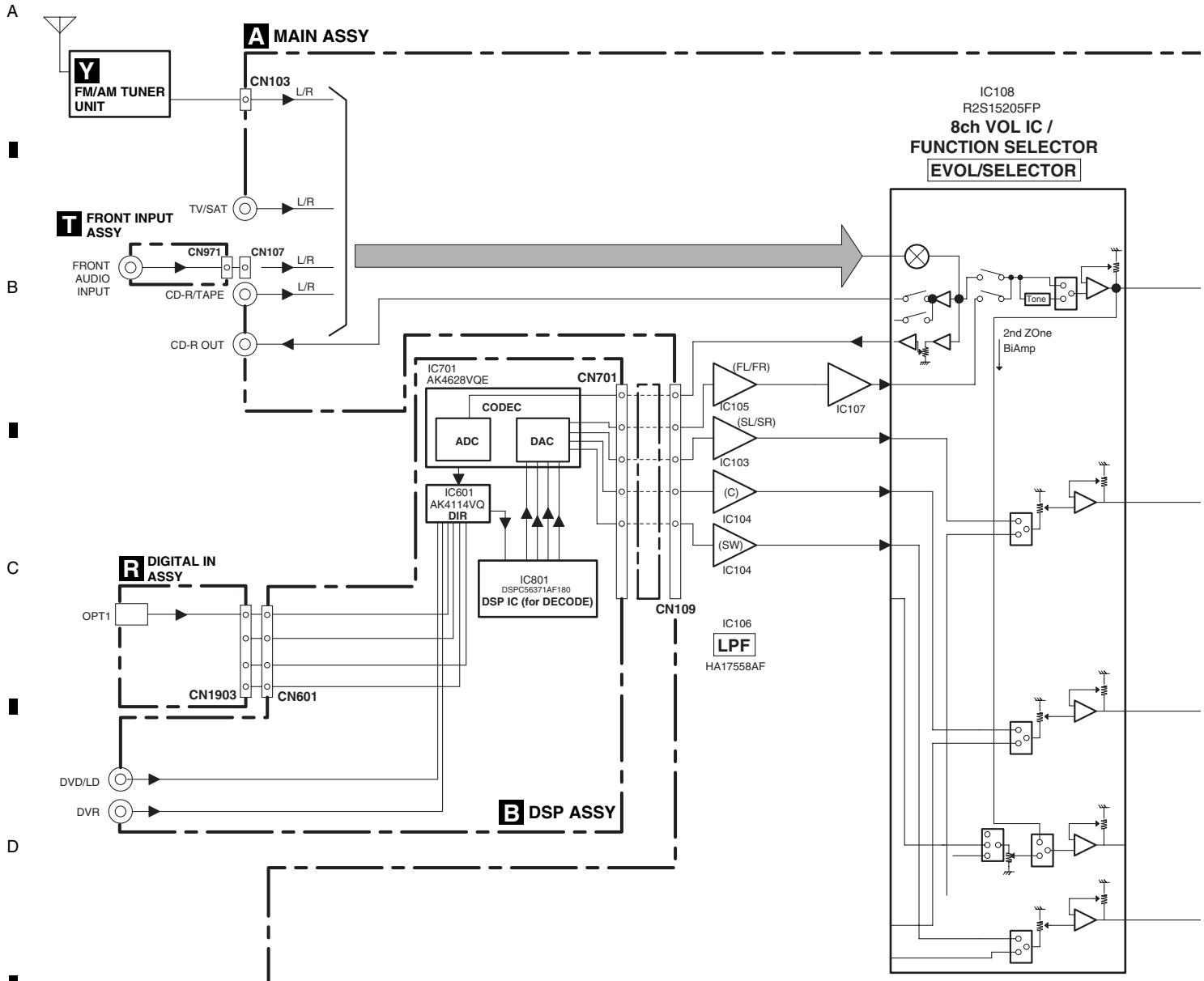
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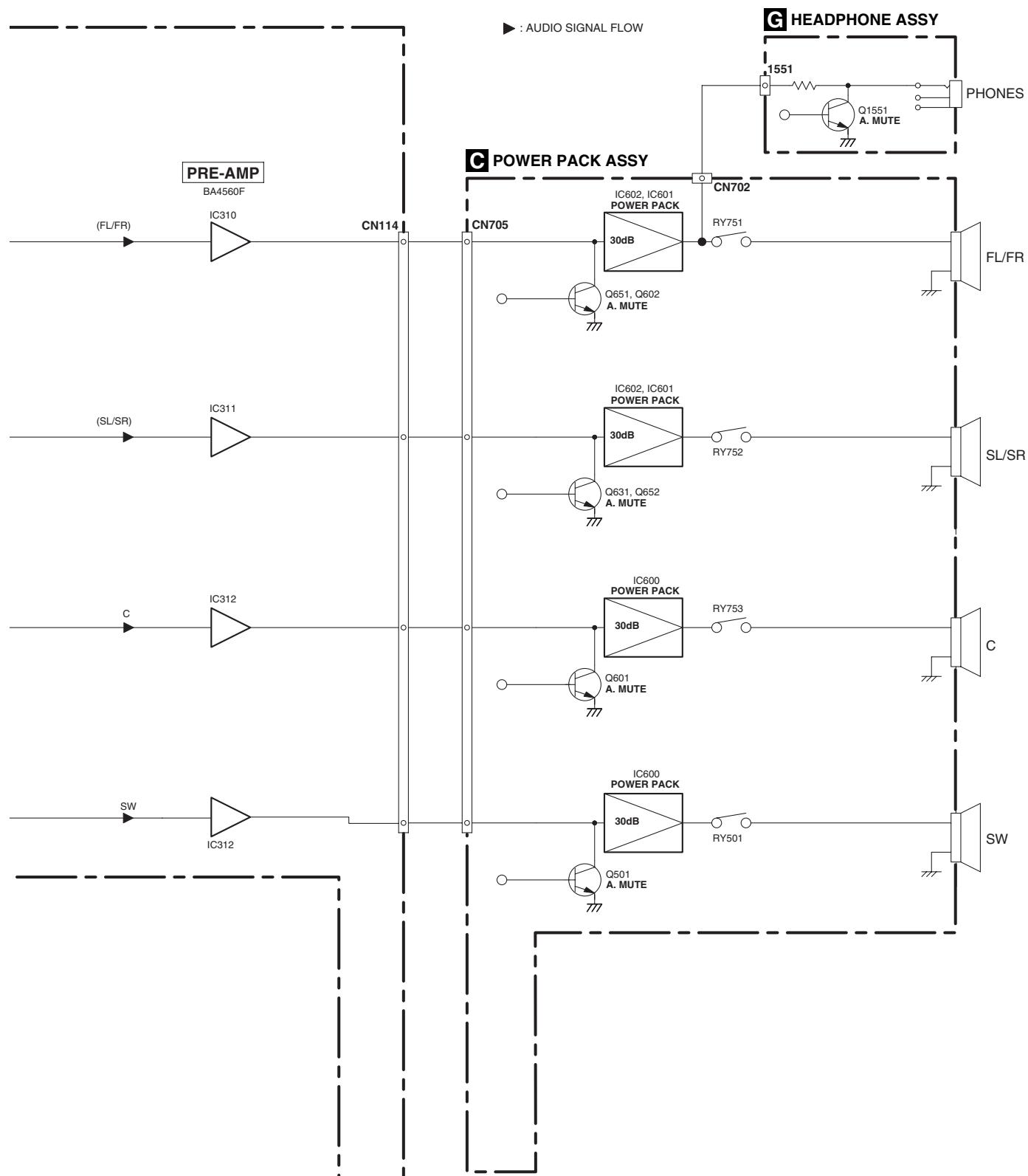
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3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

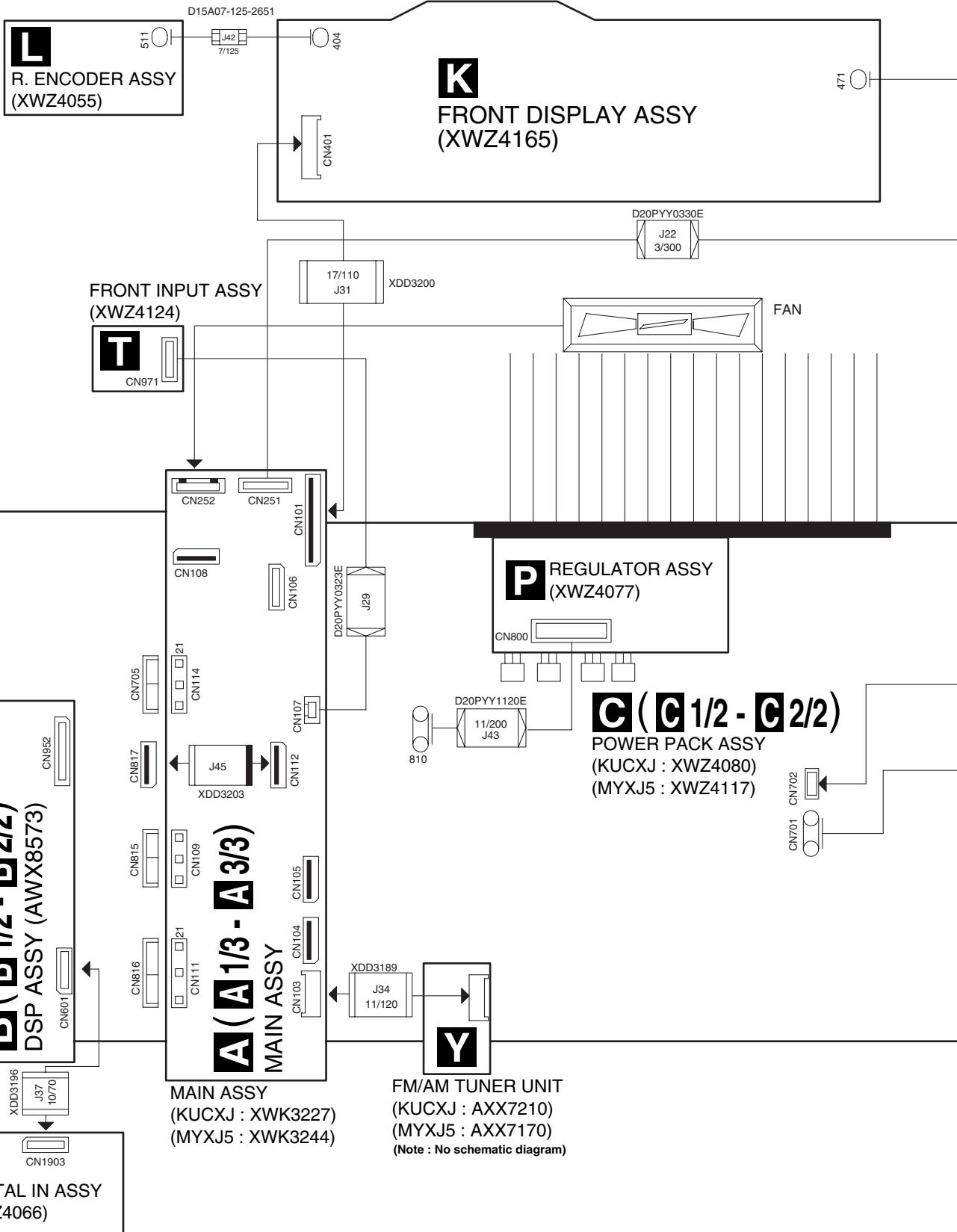




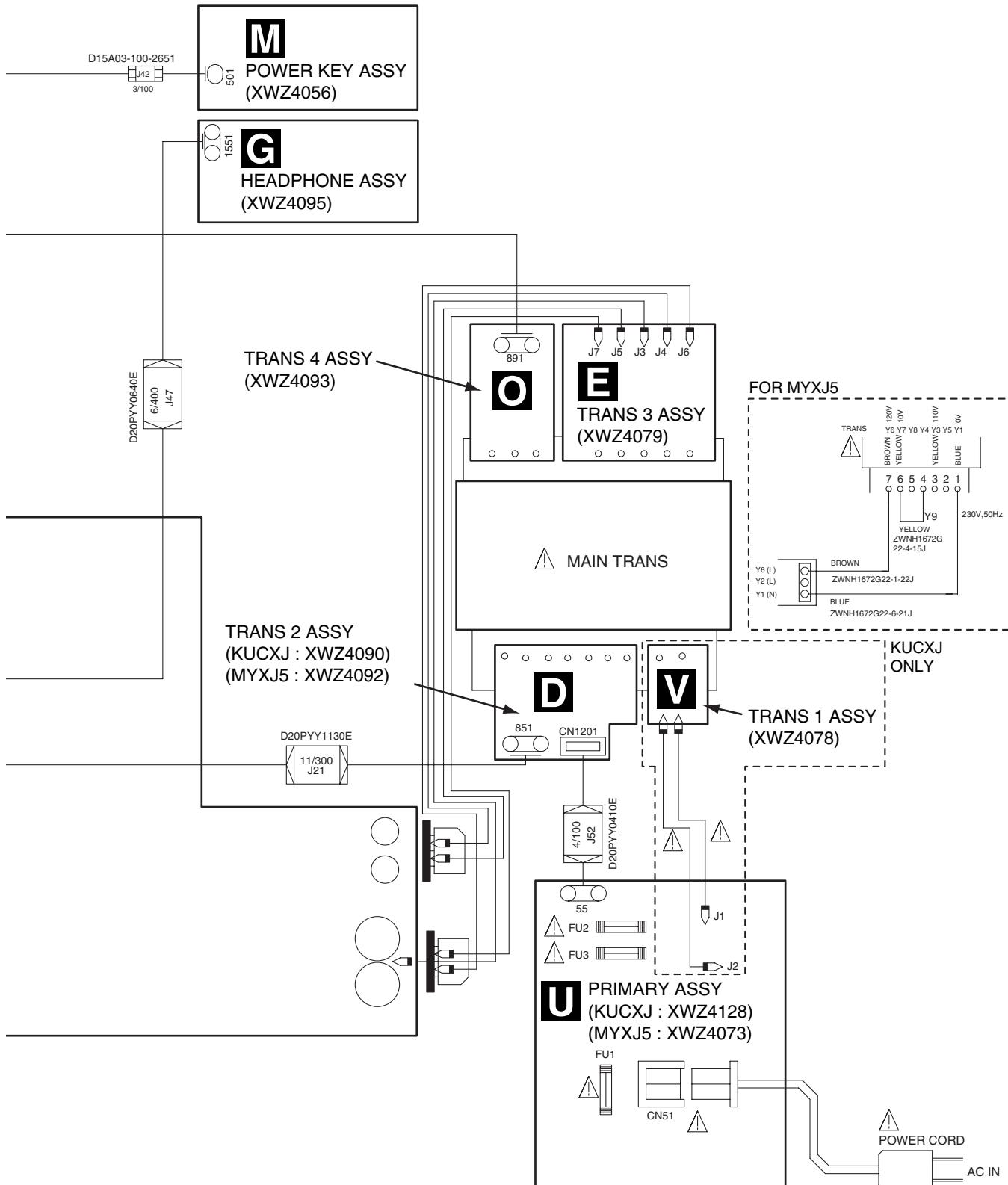
3.2 OVERALL WIRING CONNECTION DIAGRAM

-  B'PB-PH-K-S
PH CONNECTOR
-  B'PB-EH
EH CONNECTOR
-  1.0mm FFC
-  1.25mm FFC
-  1.25mm REVERSE FFC
-  2.0mm FLAT CABLE
-  1.5mm FLAT CABLE

 BOARD IN	
 1.0mm FFC CONNECTOR	 2.0mm BOARD to BOARD SOCKET
 1.25mm FFC CONNECTOR(L)	 2.0mm BOARD to BOARD PLUG
 1.25mm FFC CONNECTOR	 1.25mm BOARD to BOARD SOCKET
 2.0mm CABLE HOLDER	 1.25mm BOARD to BOARD PLUG
 1.5mm CABLE HOLDER	 AC CODE SOCKET
 2.0mm CABLE CONNECTOR	 AC CODE CONNECTOR



- 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)

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A 1/3 MAIN ASSY

(KUCXJ : XWK3227)
(MYXJ5 : XWK3244)

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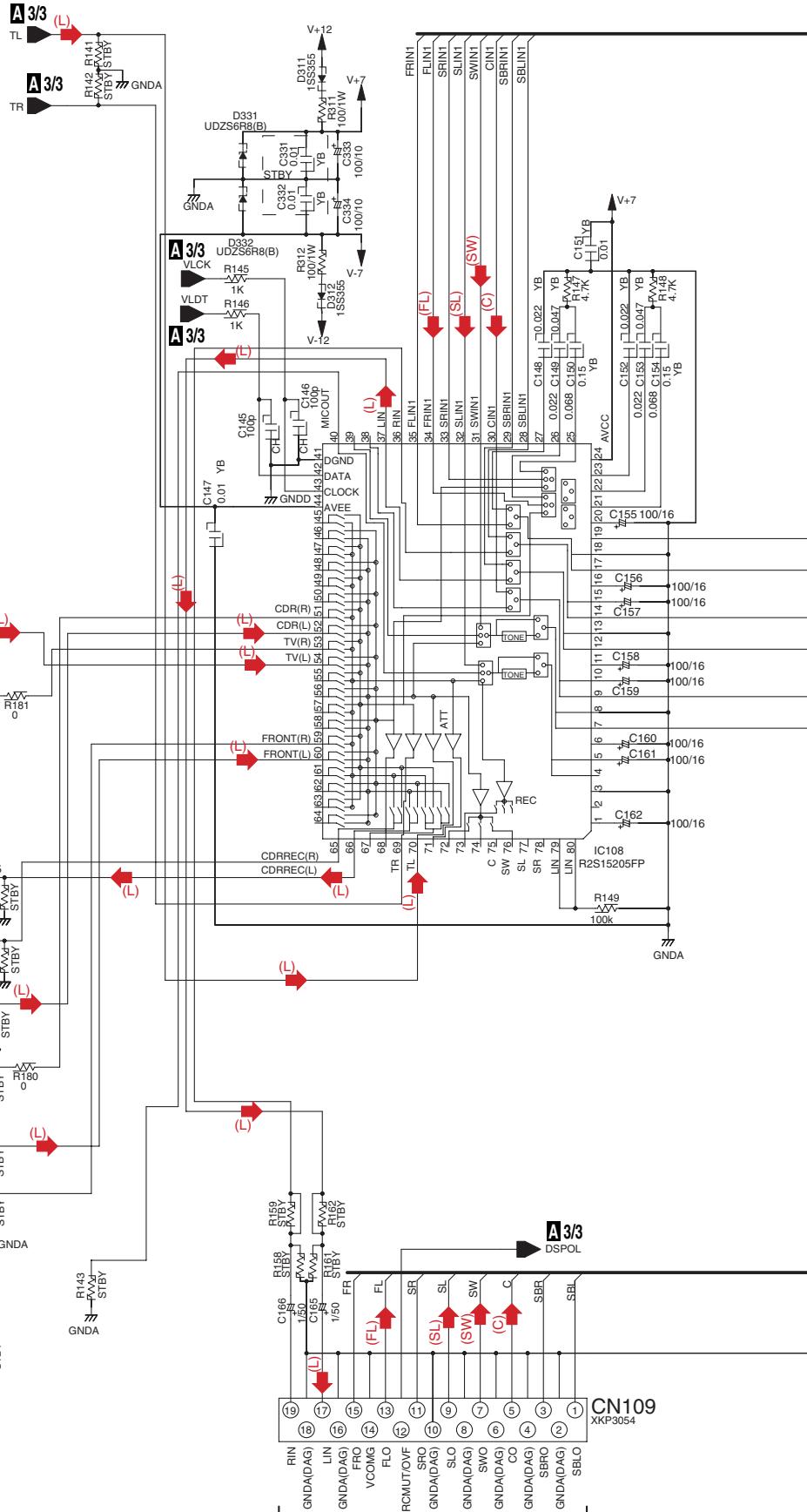
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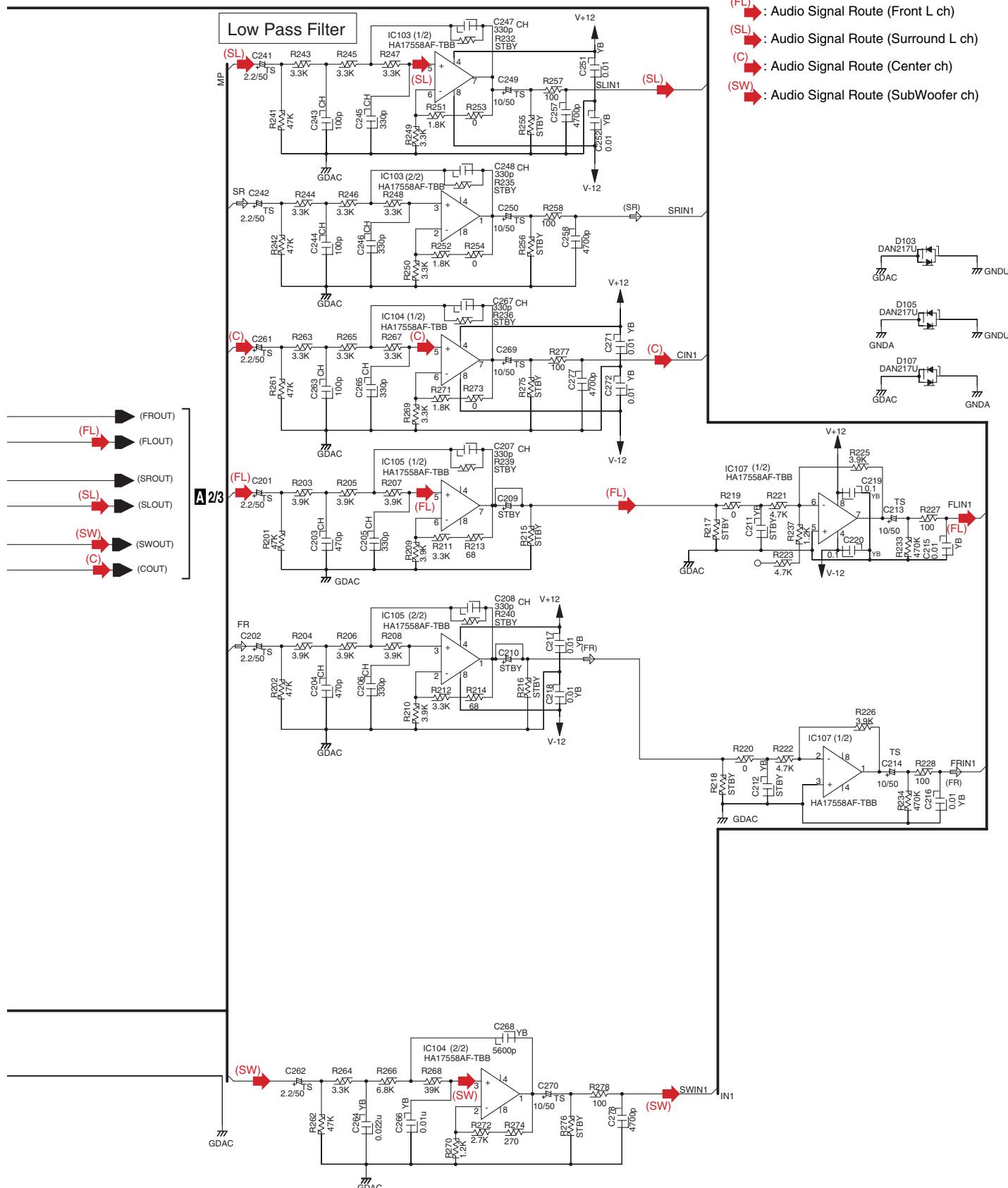
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(L) : Audio Signal Route (L ch)
 (FL) : Audio Signal Route (Front L ch)
 (SL) : Audio Signal Route (Surround L ch)
 (C) : Audio Signal Route (Center ch)
 (SW) : Audio Signal Route (SubWoofer ch)



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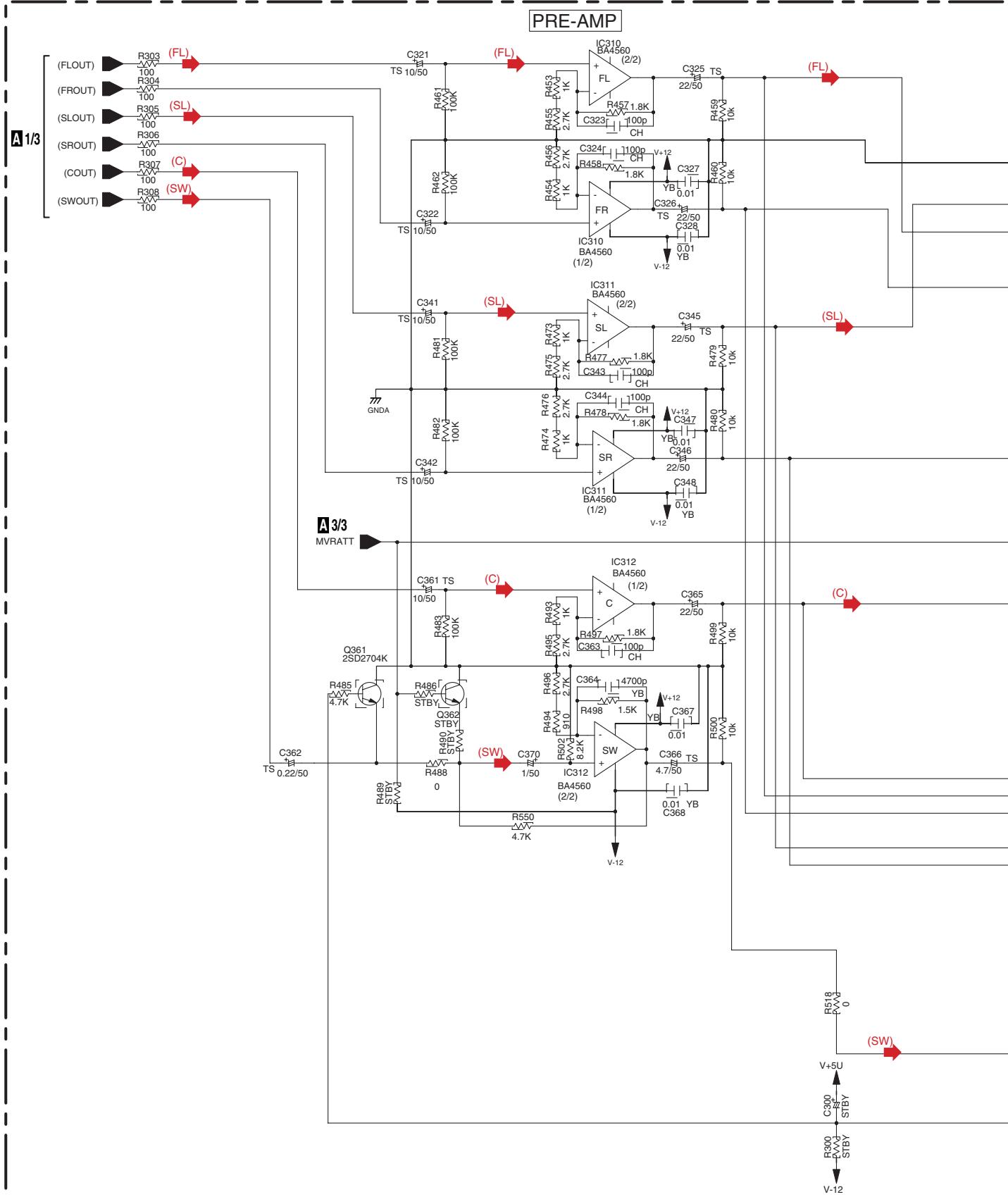
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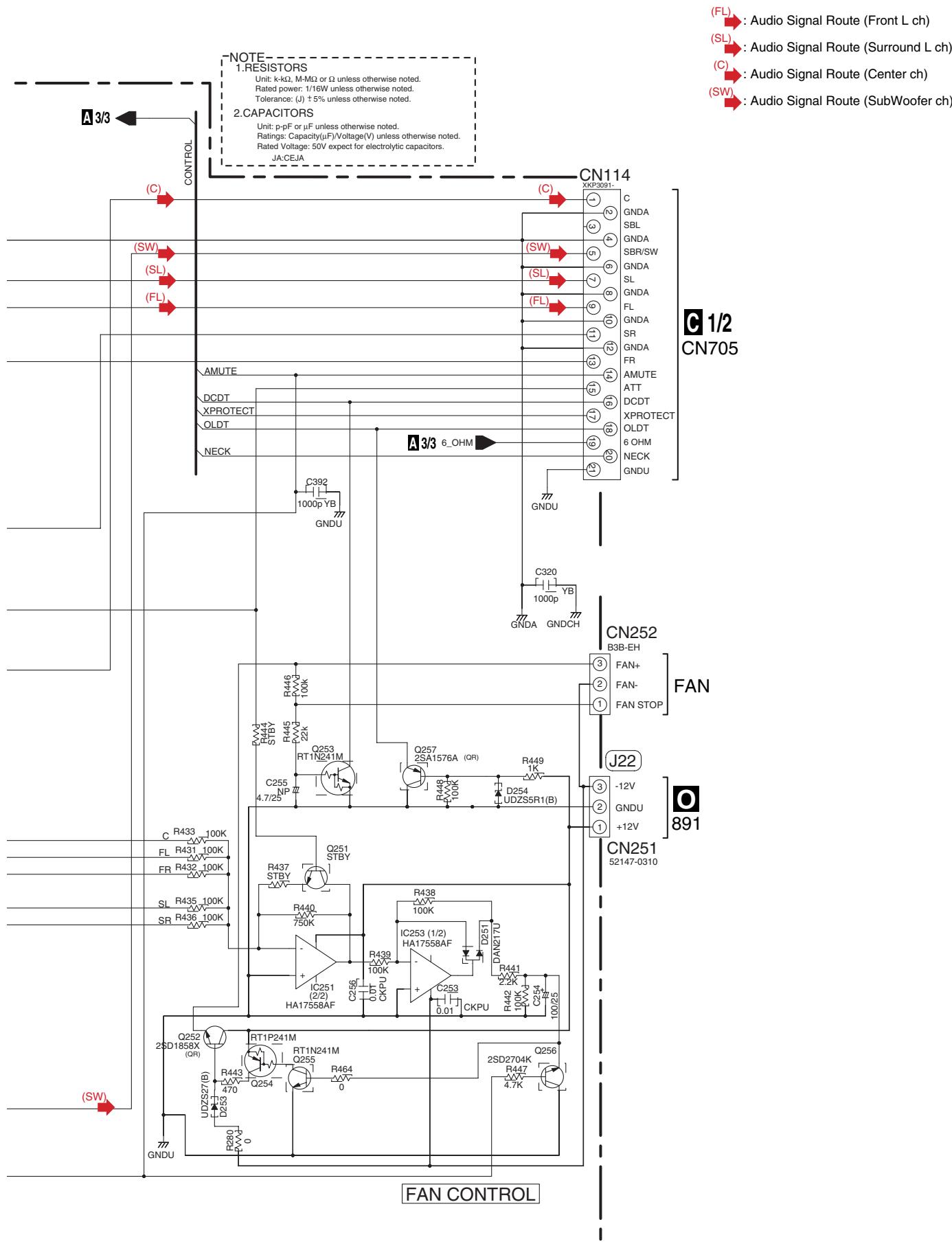
A 1/3

1 2 3 4
3.4 MAIN ASSY (2/3)

A 2/3 MAIN ASSY
(KUCXJ : XWK3227)
(MYXJ5 : XWK3244)



A 2/3

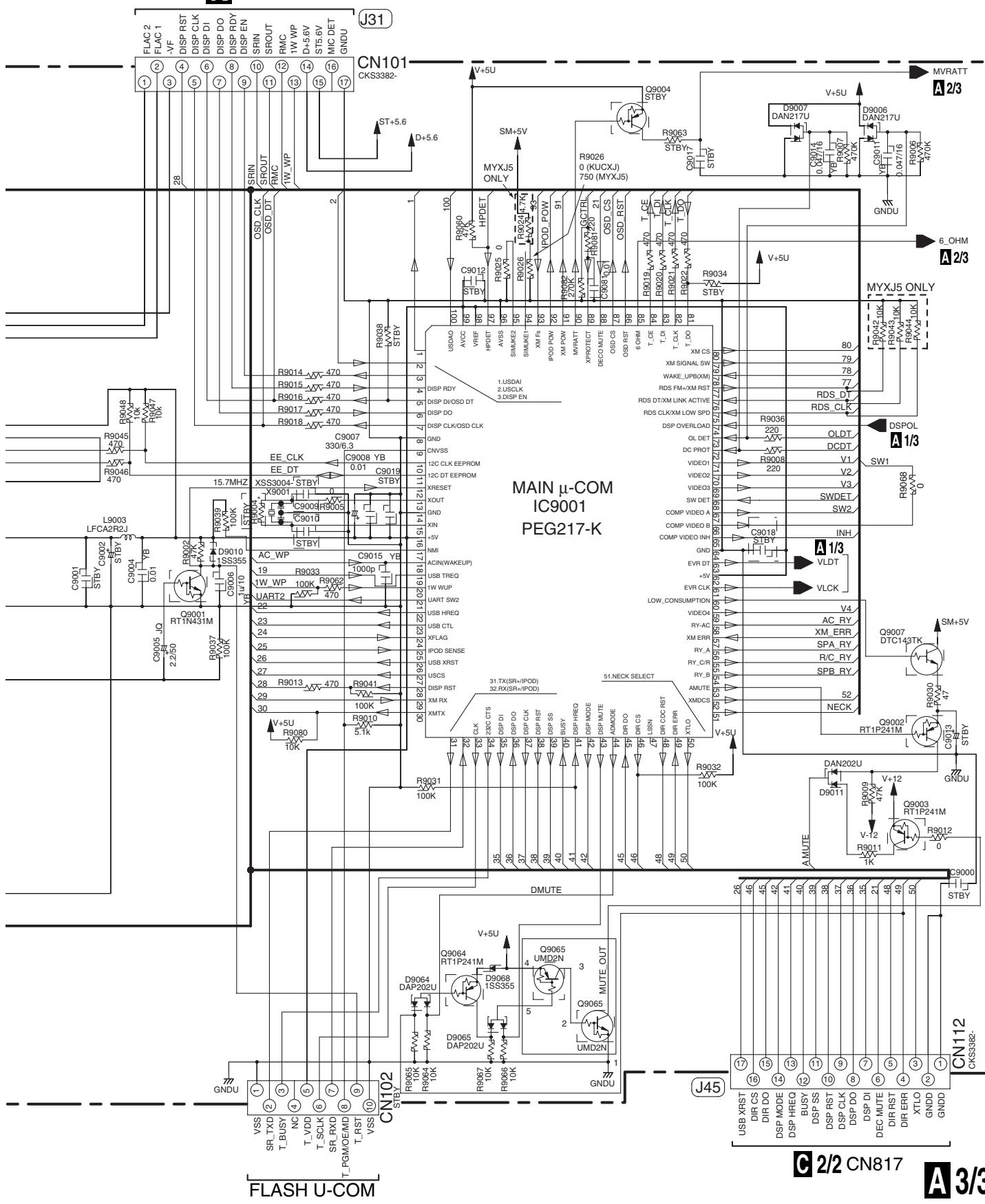


A 2/3

 (L) : Audio Signal Route (L ch)

A

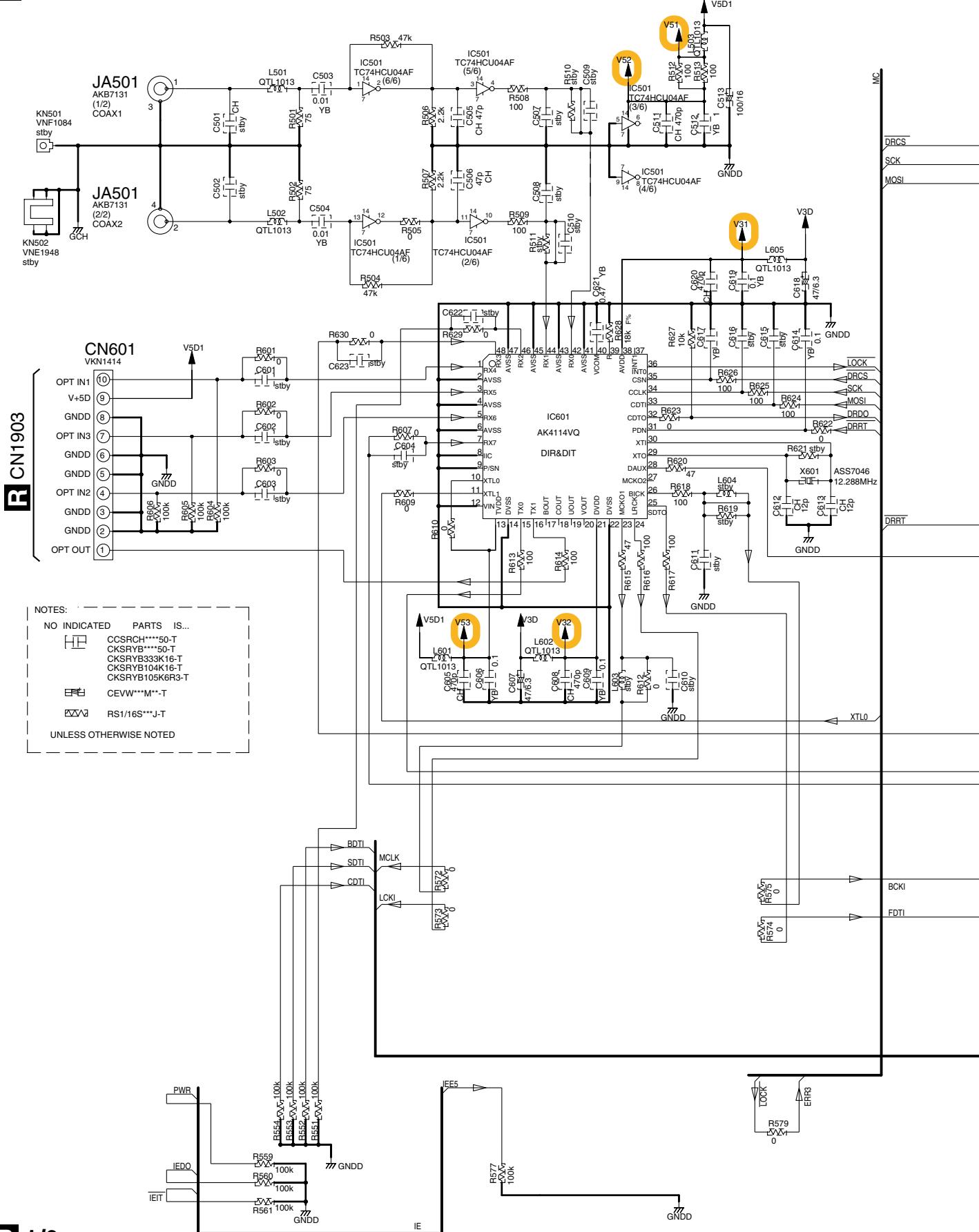
K CN401



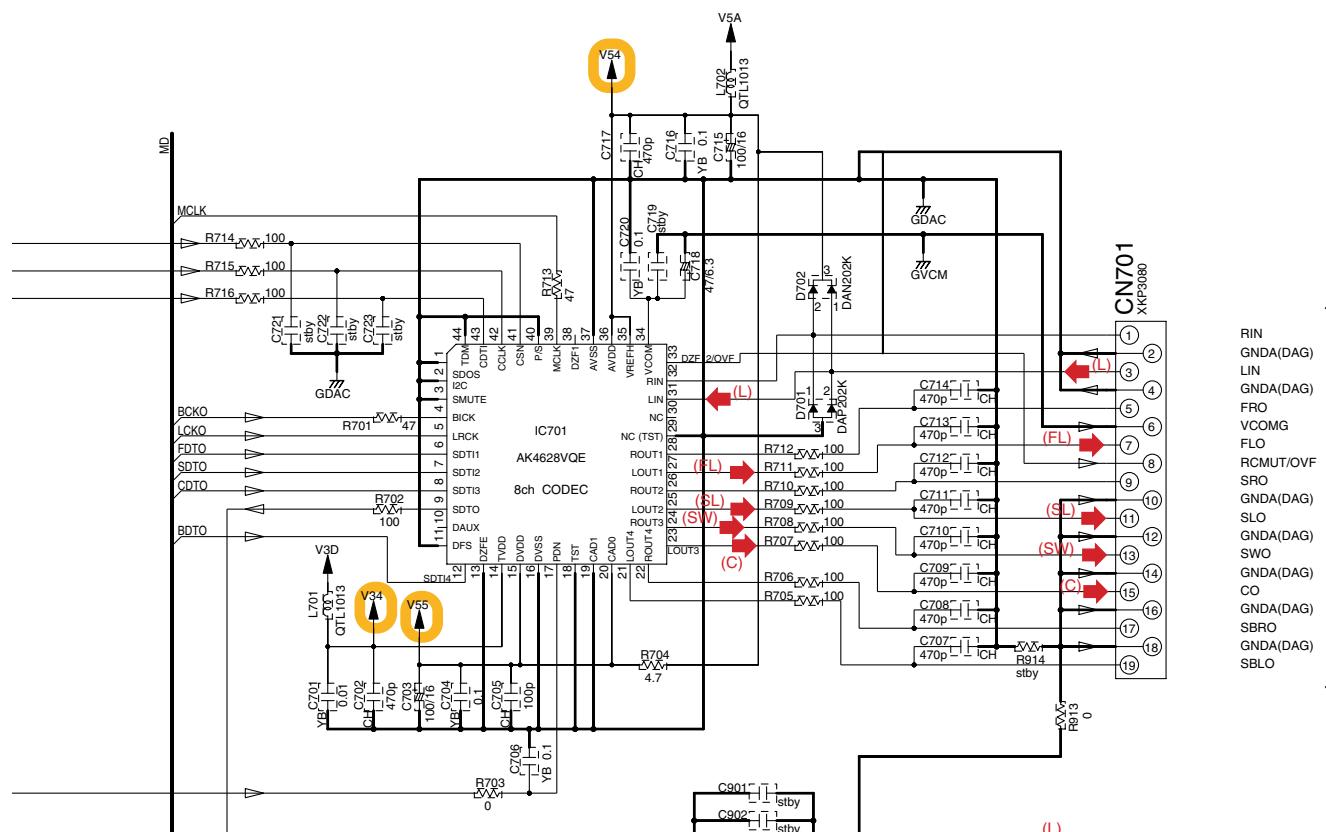
3.6 DSP ASSY (1/2)

B 1/2 DSP ASSY (AWX8573)

A



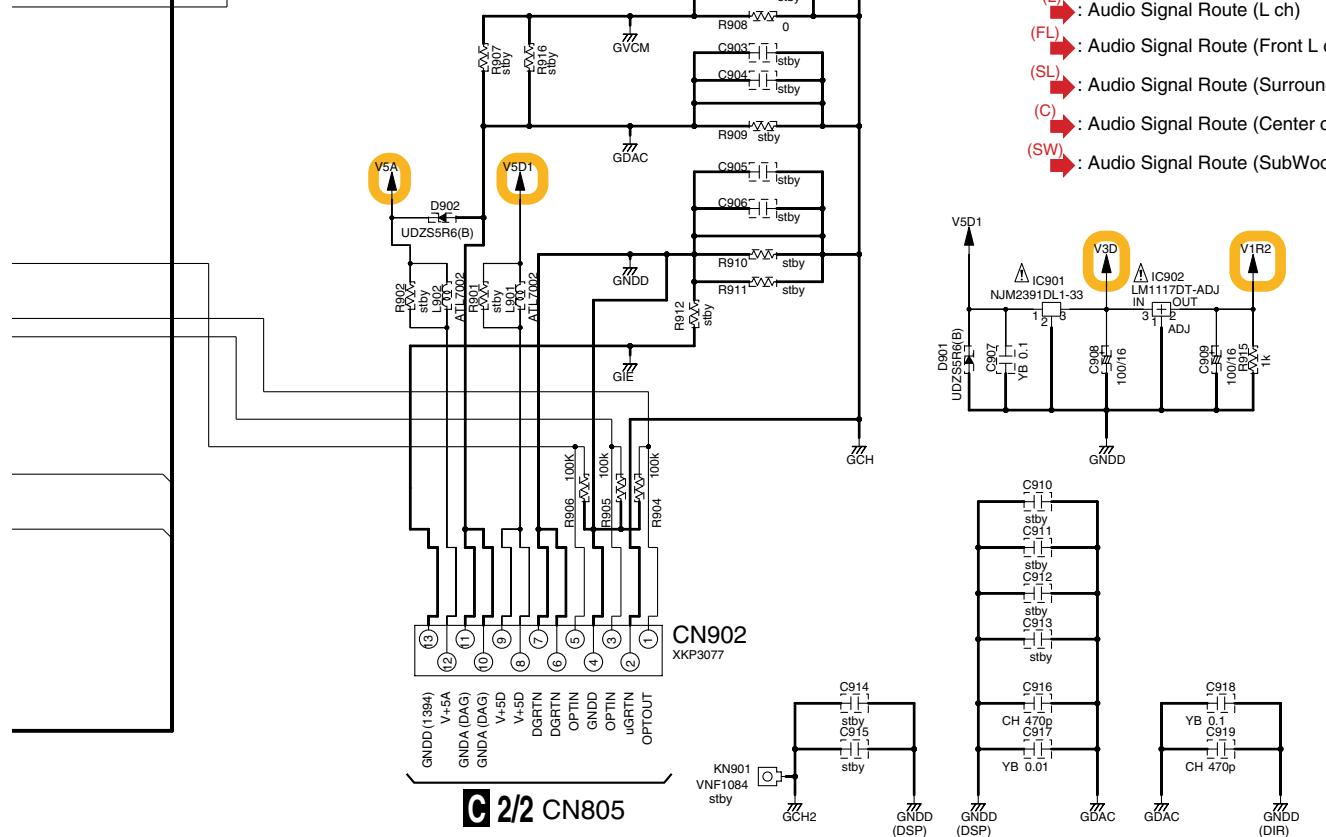
B 1/2



**C 2/2
CN806**

RIN
GNDA(DAG)
LIN
GNDA(DAG)
FRO
VCOMG
FLO
RCMUT/OVF
SRO
GNDA(DAG)
SLO
GNDA(DAG)
SWO
GNDA(DAG)
CO
GNDA(DAG)
SBRO
GNDA(DAG)
SBLO

- (L) : Audio Signal Route (L ch)
- (FL) : Audio Signal Route (Front L ch)
- (SL) : Audio Signal Route (Surround L ch)
- (C) : Audio Signal Route (Center ch)
- (SW) : Audio Signal Route (SubWoofer ch)



C 2/2 CN805

B 1/2

3.7 DSP ASSY (2/2)

B 2/2 DSP ASSY (AWX8573)

A

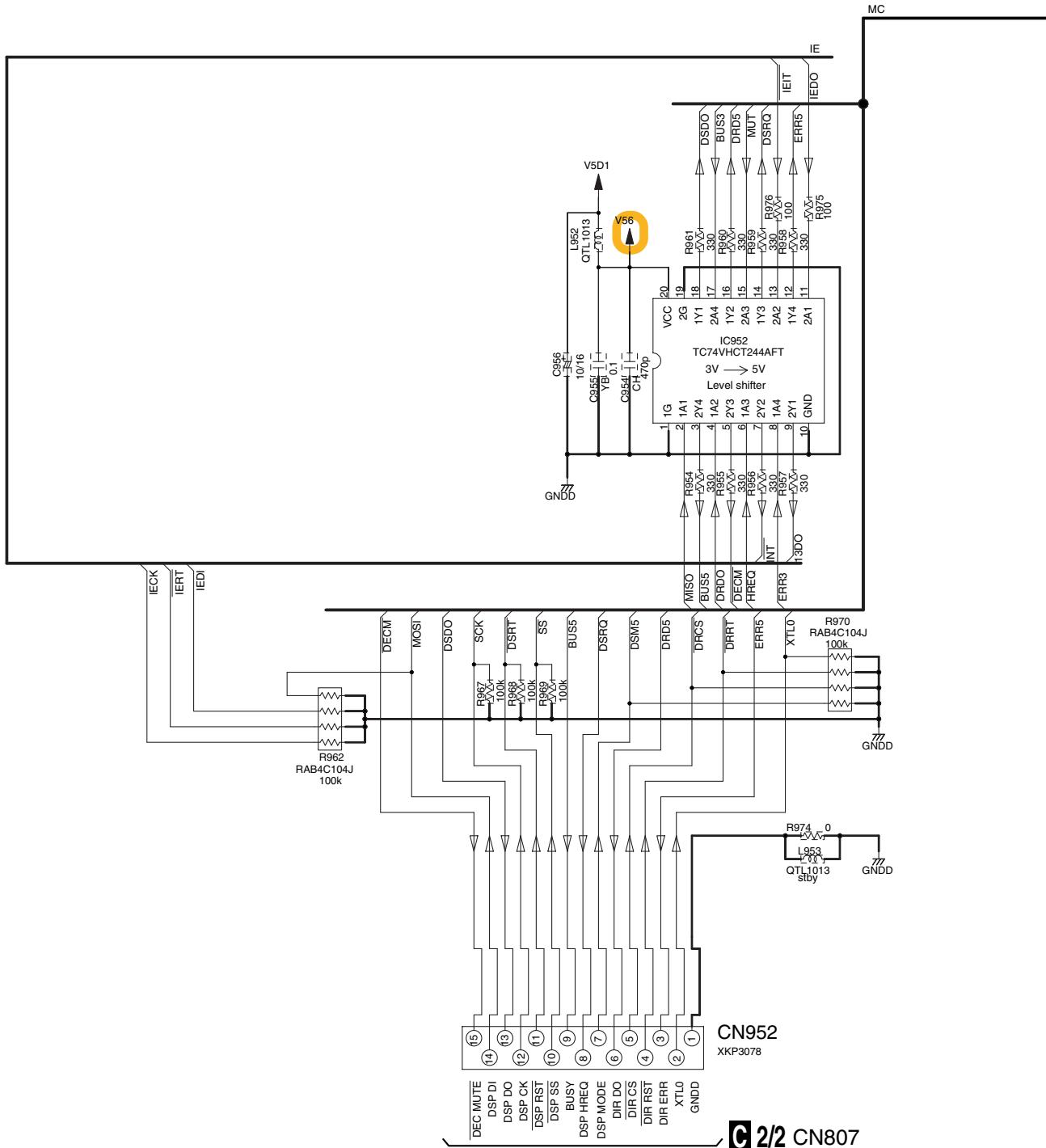
B

C

D

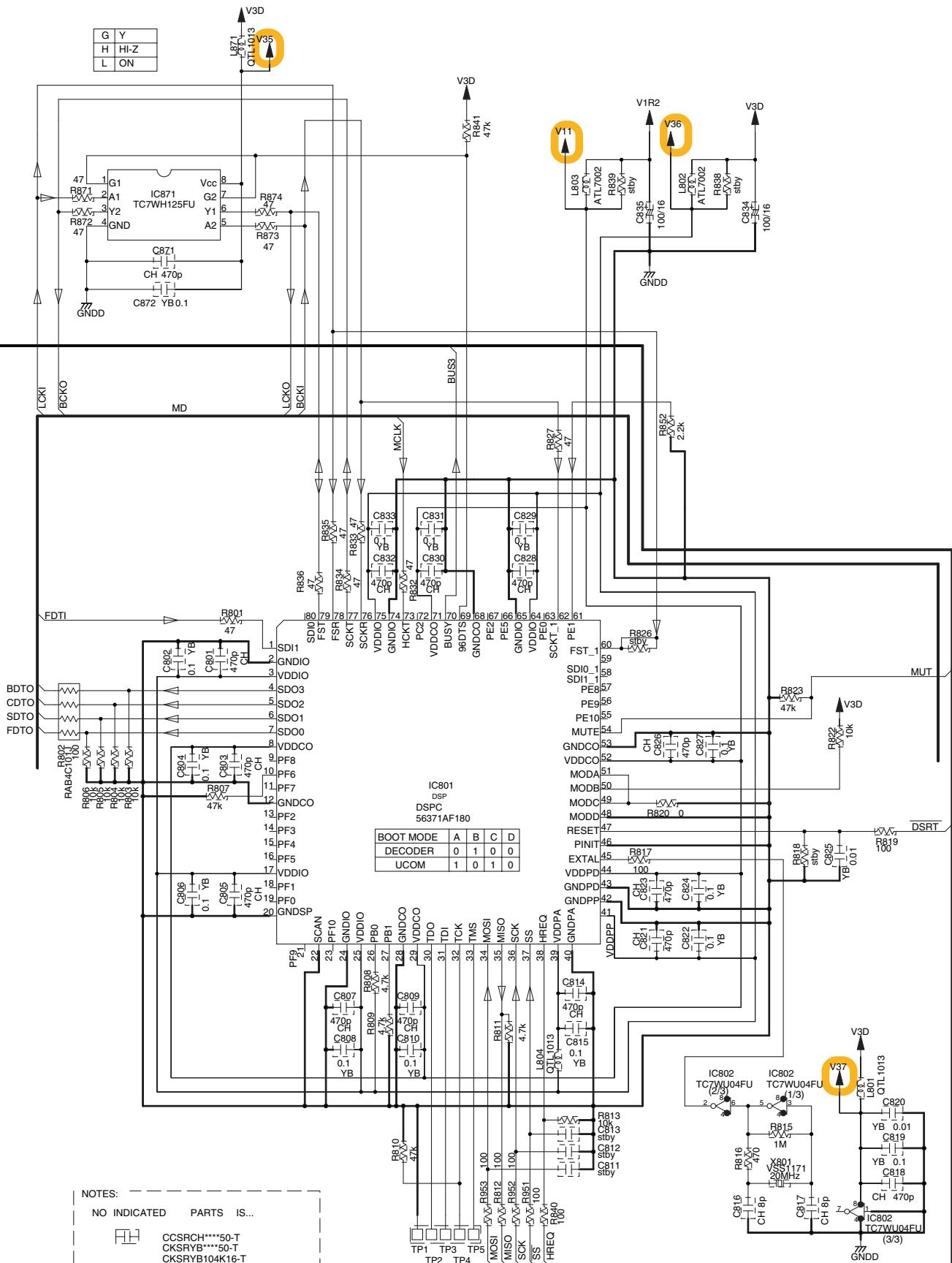
E

F



B 2/2

C 2/2 CN807



NOTES: _____

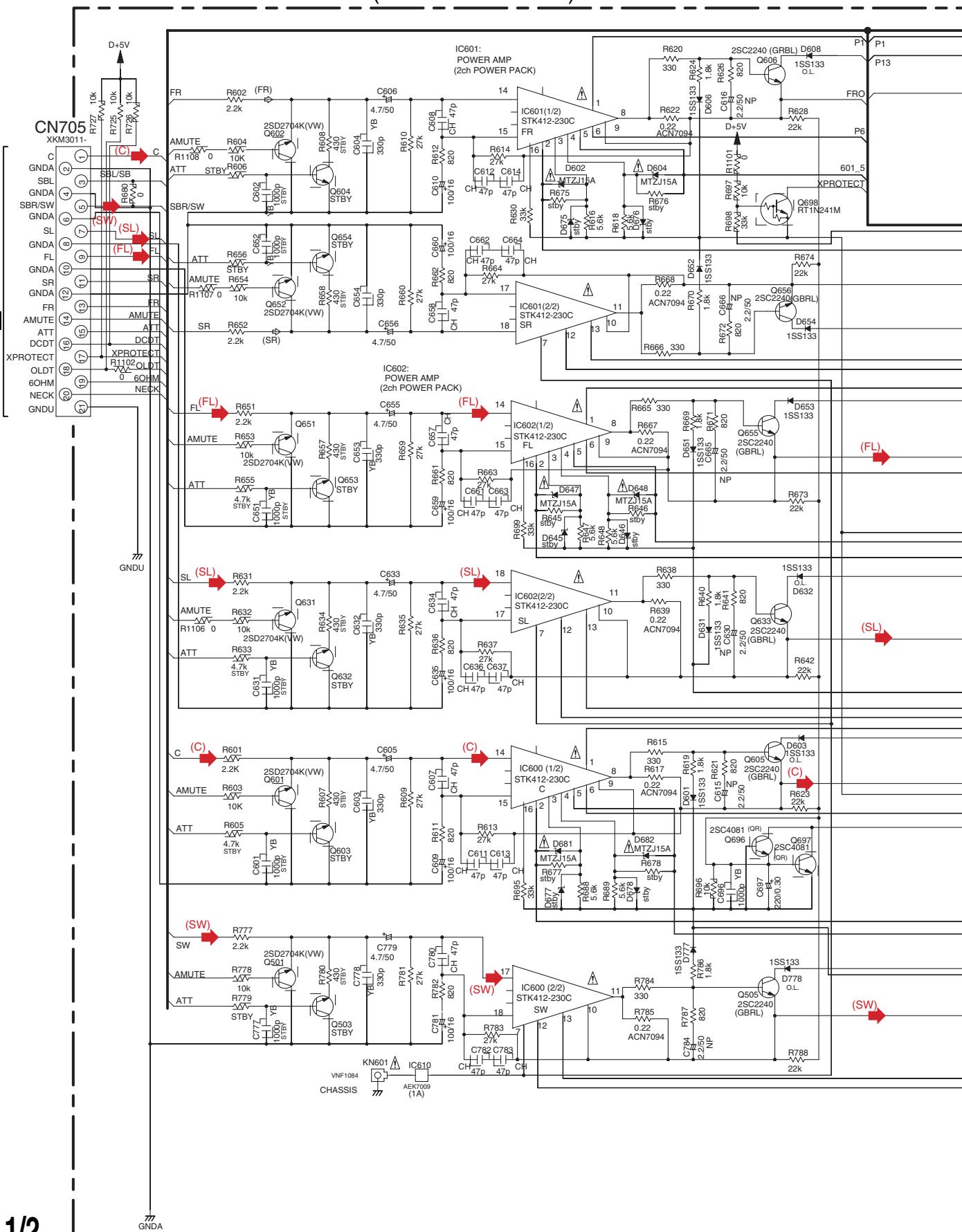
NO INDICATED PARTS IS...

1131/103 3-1

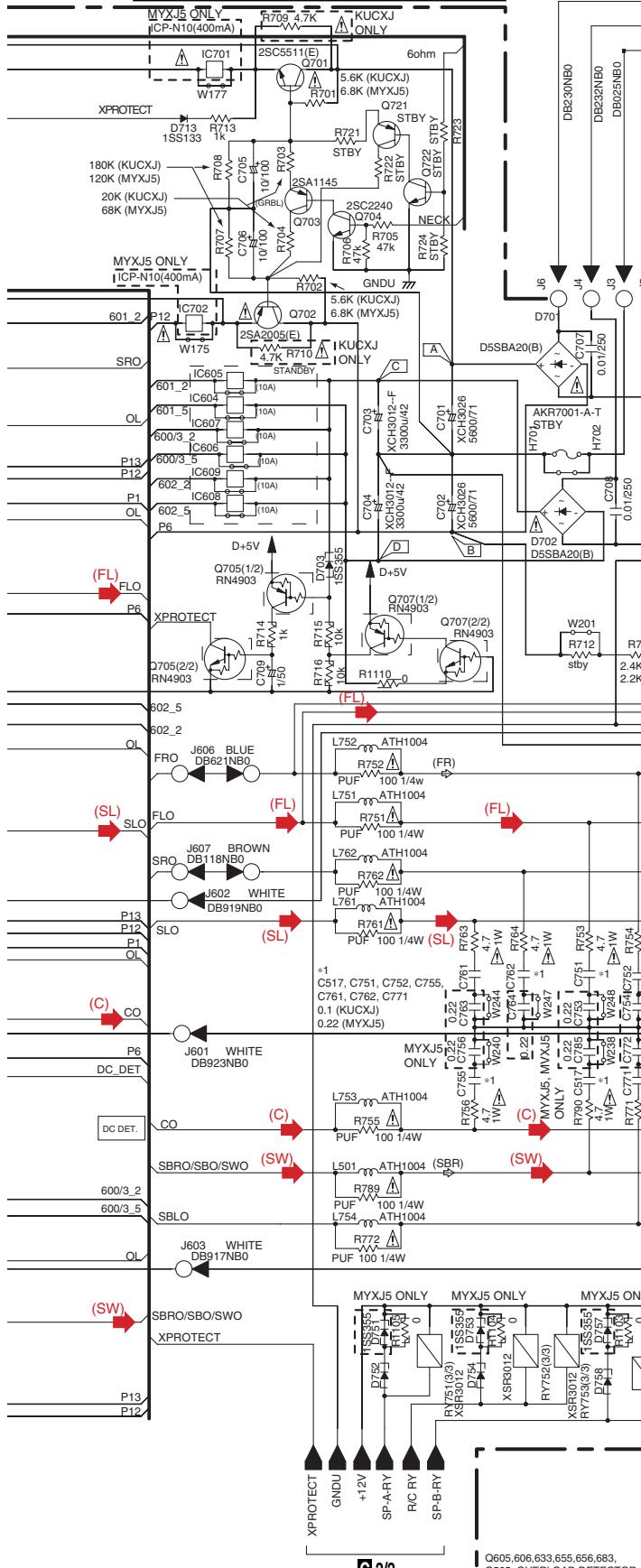
B 2/2

3.8 POWER PACK (1/2), TRANS 2 and TRANS 3 ASSYS

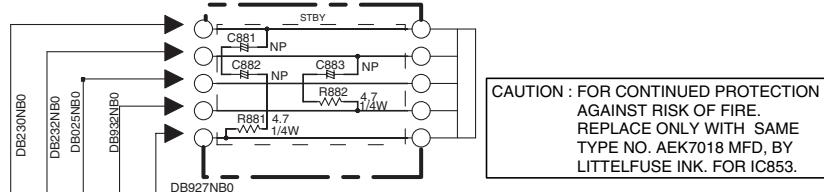
C 1/2 POWER PACK ASSY (KUCXJ : XWZ4080) (MYXJ5 : XWZ4117)



**CAUTION : FOR CONTINUED PROTECTION AGAINST
RISK OF FIRE. REPLACE ONLY WITH
SAME TYPE NO. ICP-N10, MFD BY ROHM
CO., LTD. FOR IC701 and IC702.**

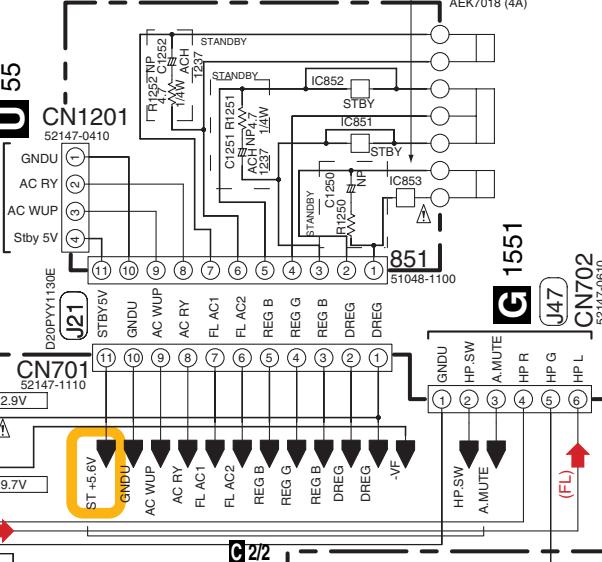


E TRANS 3 ASSY
(XWZ4079)



**CAUTION : FOR CONTINUED PROTECTION
AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME
TYPE NO. AEK7018 MFD. BY
LITTELFUSE INC. FOR IC853.**

D TRANS 2 ASSY
(KUCXJ : XWZ4090)
(MYXJ5 : XWZ4092)



CN751
KKE3053 (KUCXJ)
KKE3055 (MYXJ5)

CN753
XKE3054 (KUCXJ)

The diagram shows a power supply section connected to the chassis. A red arrow labeled (C) points to a connection point. Another red arrow labeled (SW) points to a switch labeled (SW) on the right. The connections include:

- W236 (top left)
- MYXJ5 ONLY (top center)
- RY753(1/3) (bottom left)
- RY501(1/3) (bottom center)
- RY501(2/3) (bottom right)
- CHASSIS (right side)
- MYXJ5 ONLY (right side)
- (SW) (right side)

CN753
XKE3054 (KUCXJ)

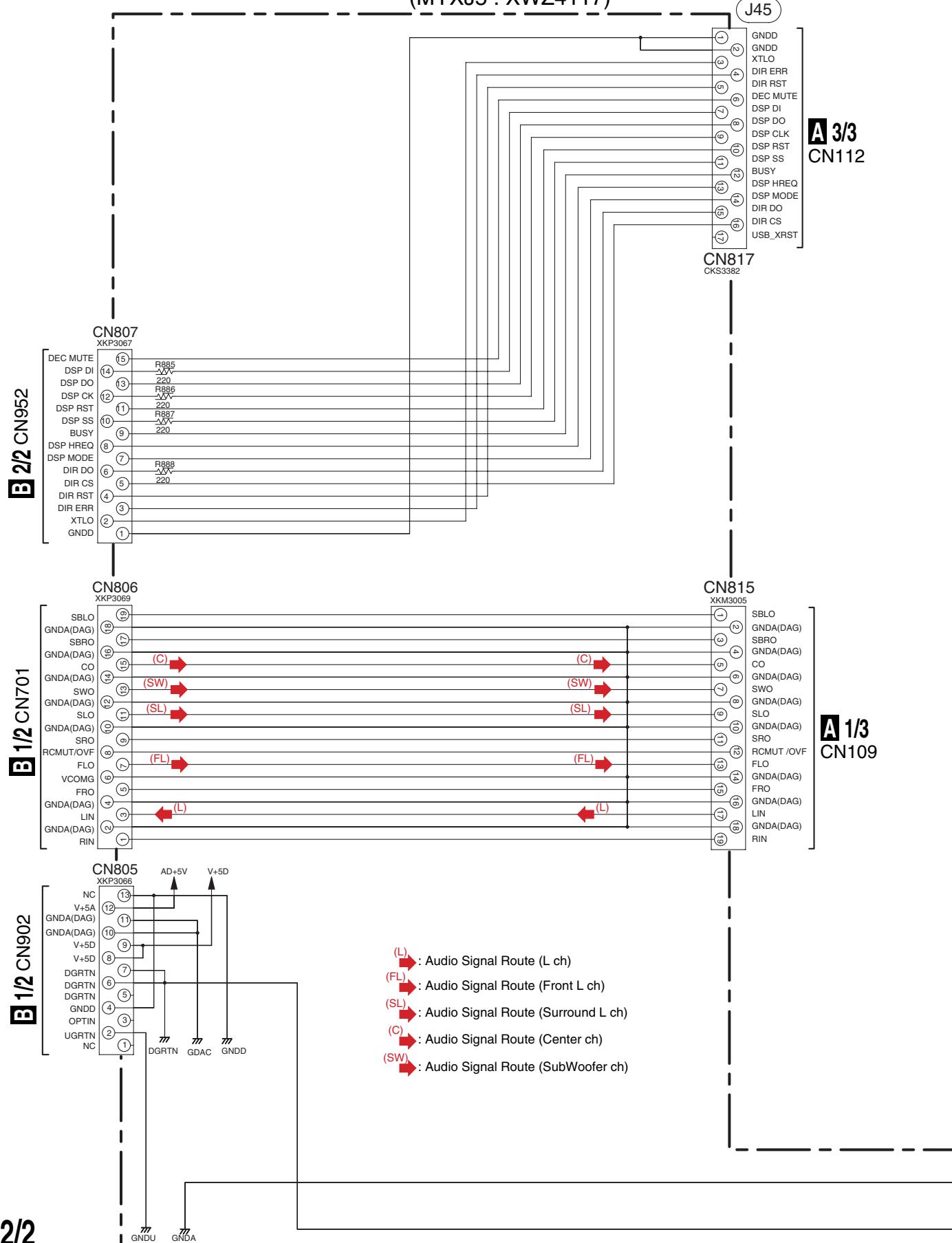
A-D		POINT VOLTAGE (V)	
SITUATION		/KU	Others
NO SIGNAL	A.B	± 67.0	± 61.4
	C.D	± 29.6	± 29.5

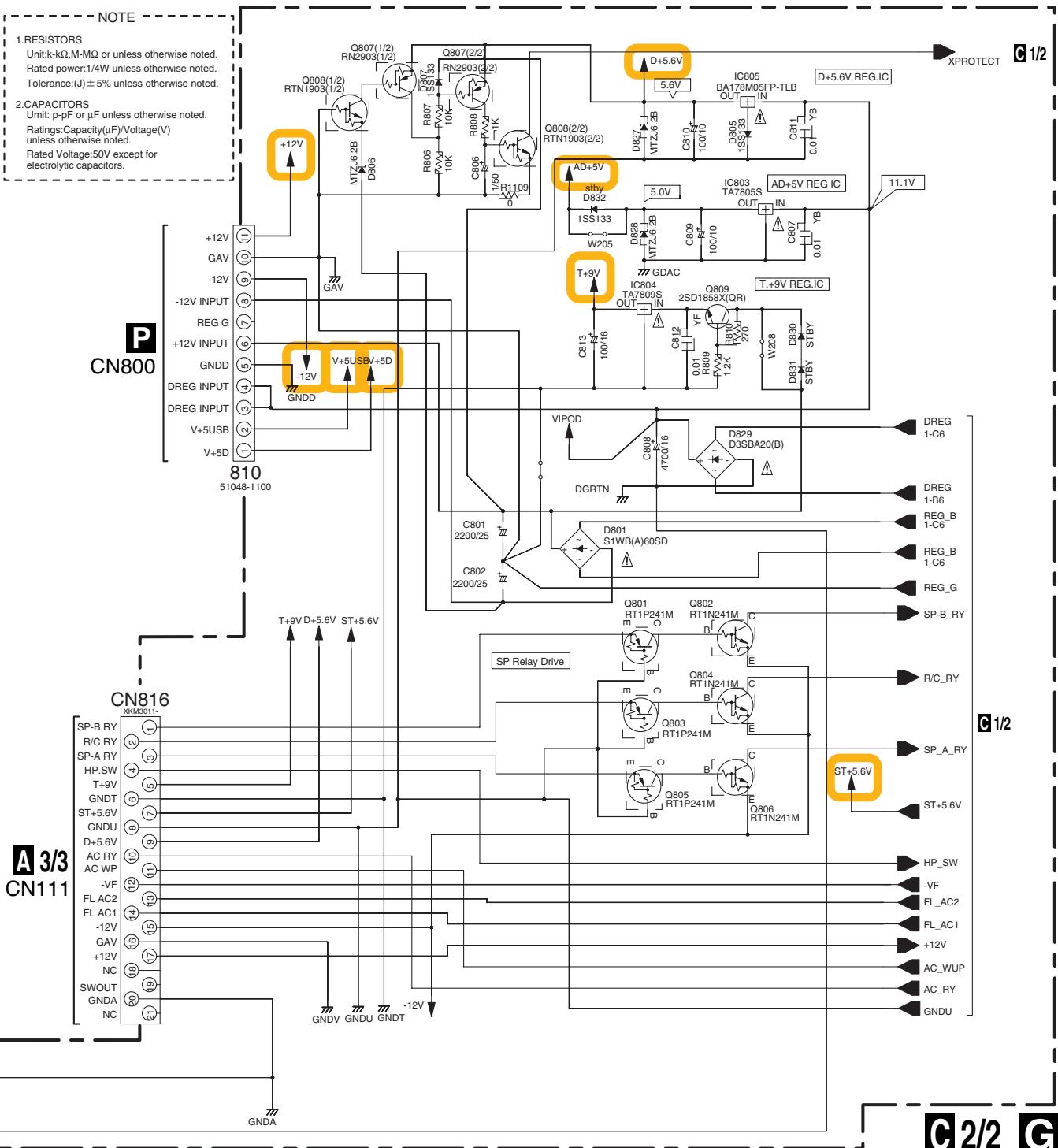
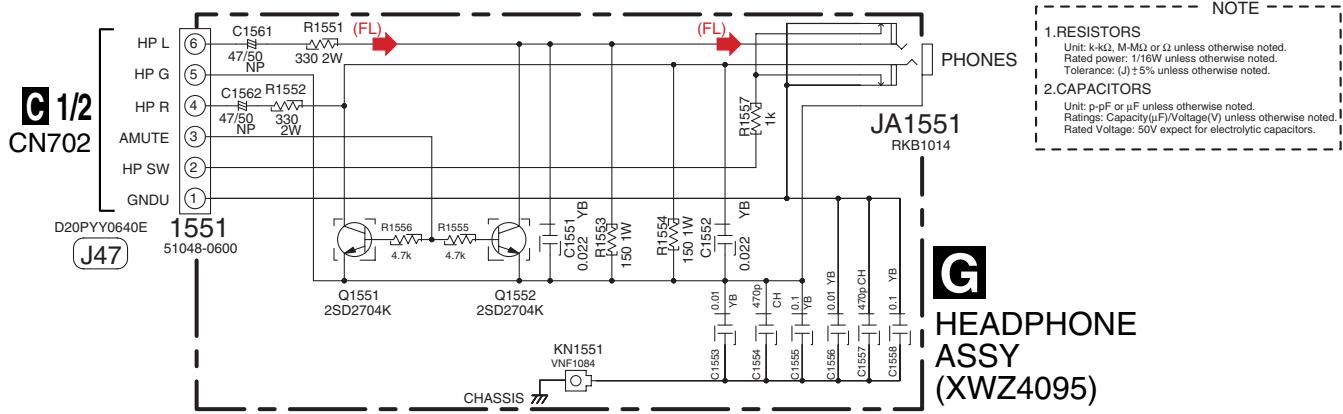
NOTE

- 1. **RESISTORS**
Unit:k_R,M_R or unless otherwise noted.
- Rated power:1/4W unless otherwise noted.
- Tolerance:(J) ±5% unless otherwise noted.
- 2. **CAPACITORS**
Unit: μ F or μ H unless otherwise noted.
- Ratings:Capacity(μF)/Voltage(V)
unless otherwise noted.
- Rated Voltage:50V except for electrolytic capacitors.
- 3. **DIODES**
Indicated in ISS133-T

1 2 3 4
3.9 POWER PACK (2/2) and HEADPHONE ASSYS

**C 2/2 POWER PACK ASSY (KUCXJ : XWZ4080)
(MYXJ5 : XWZ4117)**

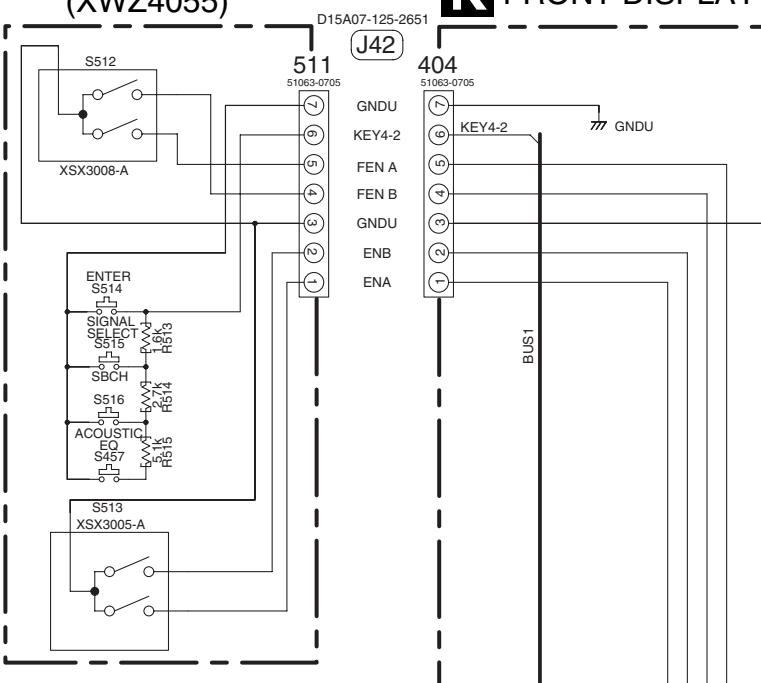




3.10 FRONT DISPLAY, R. ENCODER and POWER KEY ASSYS

A

L R. ENCODER ASSY (XWZ4055)



K FRONT DISPLAY ASSY (XWZ4165)

B

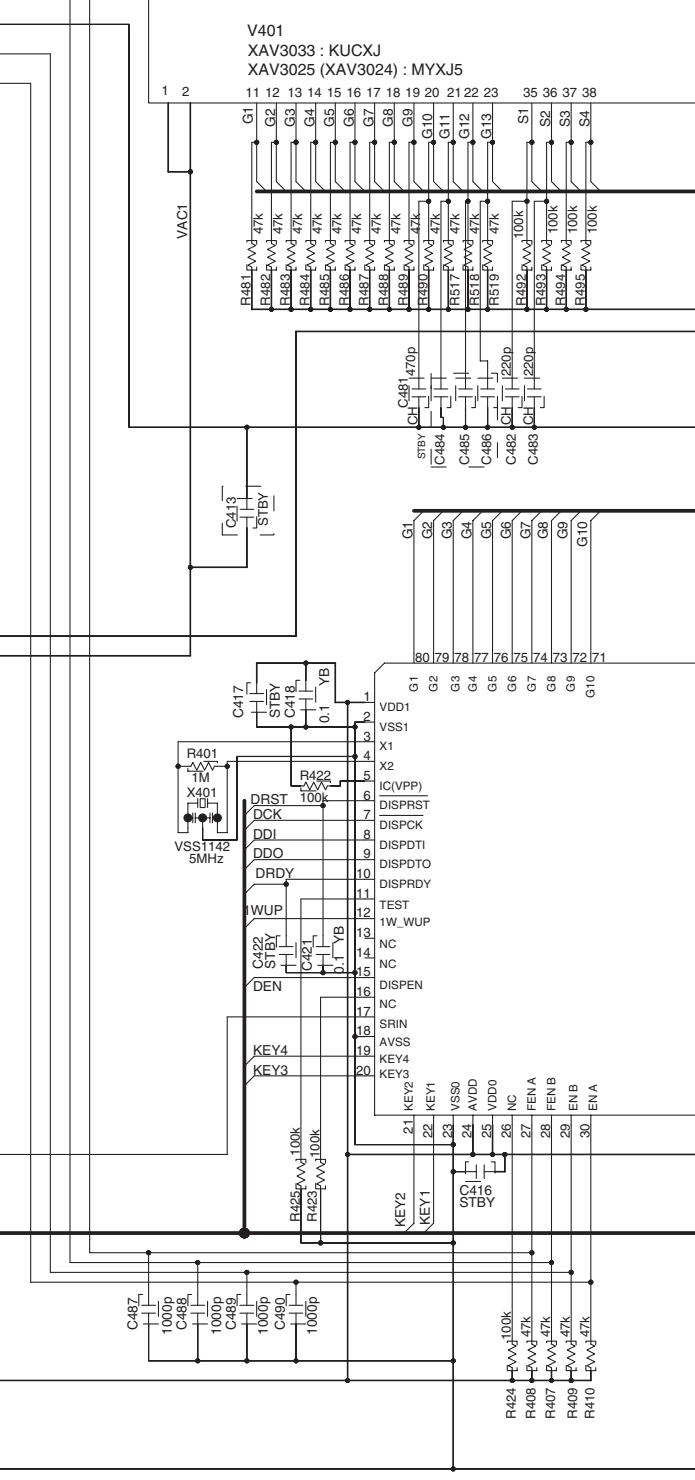
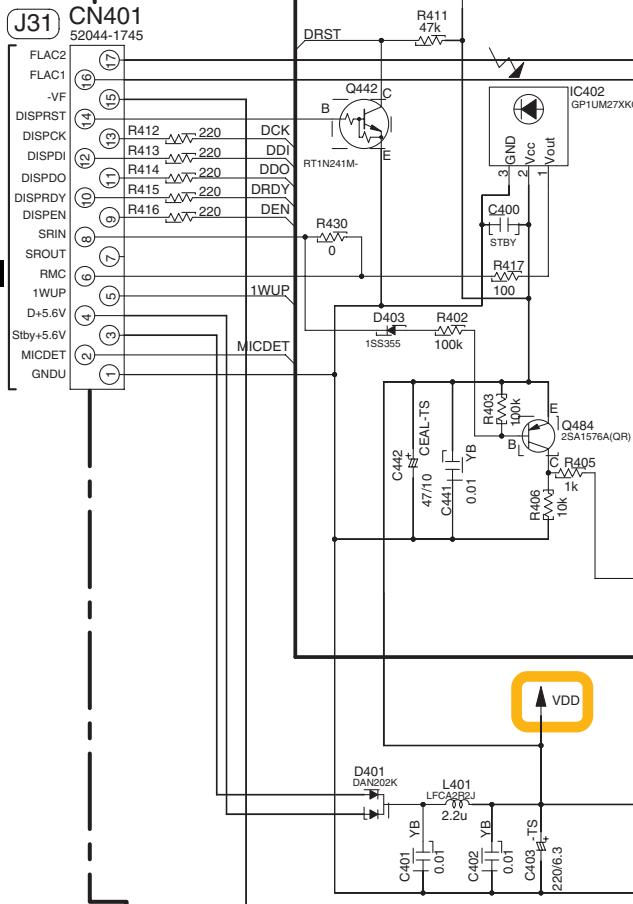
C

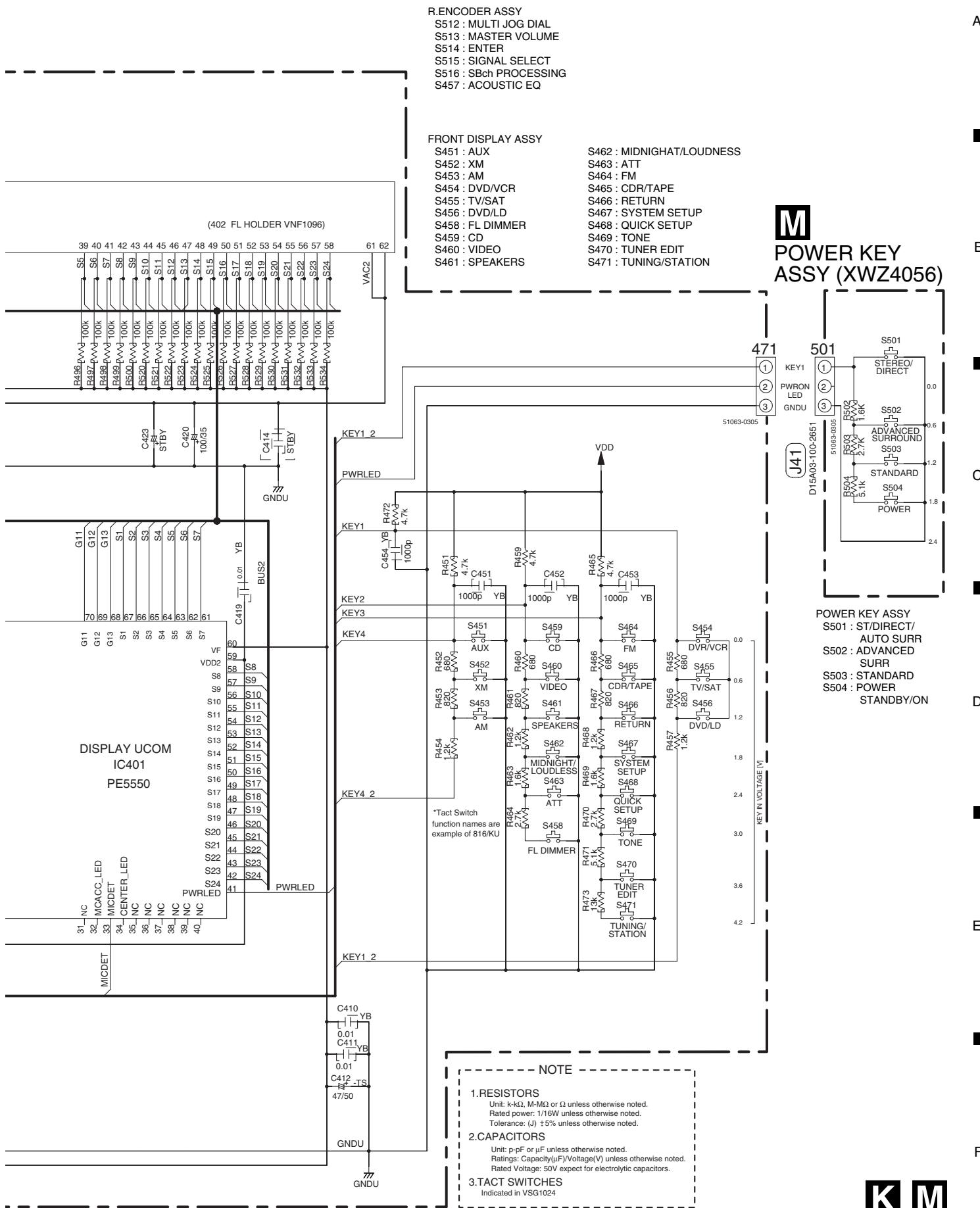
D

□

6

A 3/3 CN101

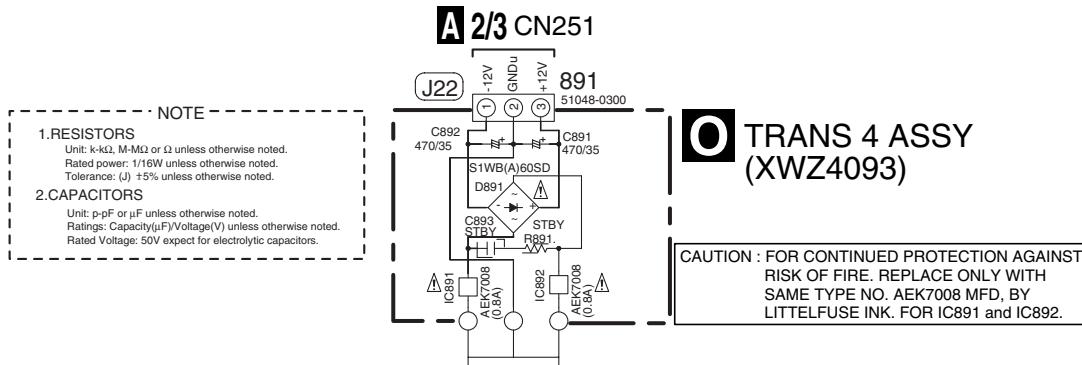




KM

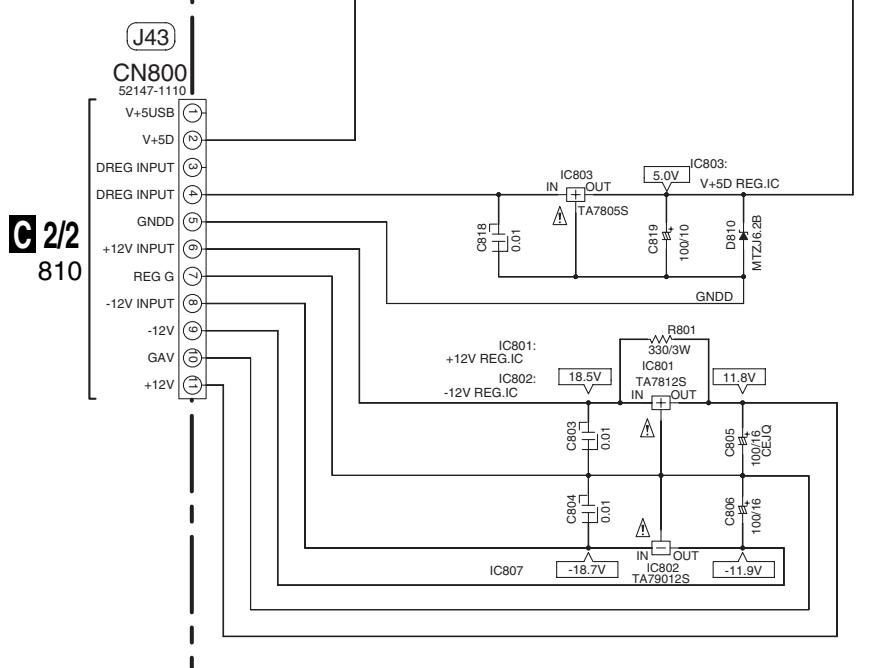
3.11 TRANS 4, REGULATOR and DIGITAL IN ASSYS

A



B

P REGULATOR ASSY (XWZ4077)



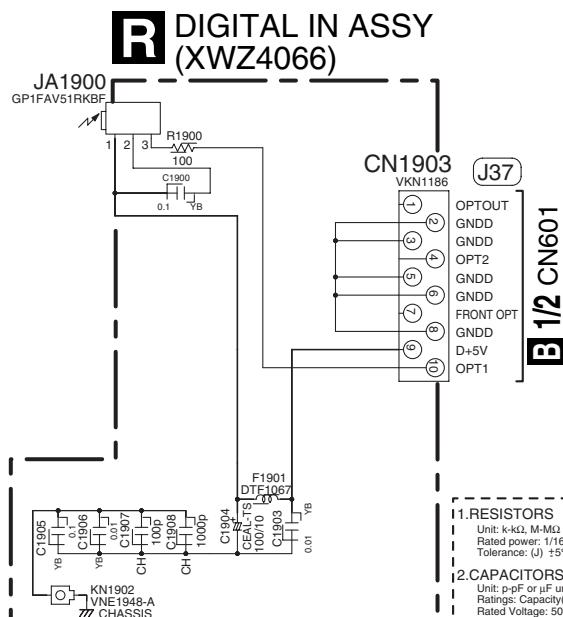
C

D

E

F

O P R

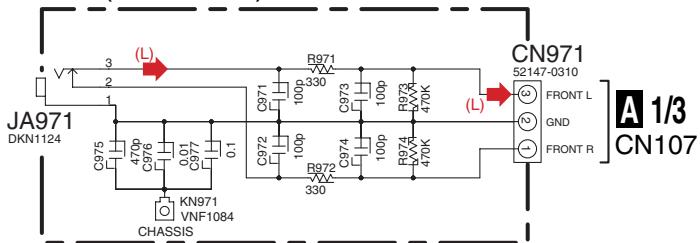


3.12 FRONT INPUT, PRIMARY and TRANS 1 ASSYS

(L) : Audio Signal Route (L ch)

A

T FRONT INPUT ASSY (XWZ4124)



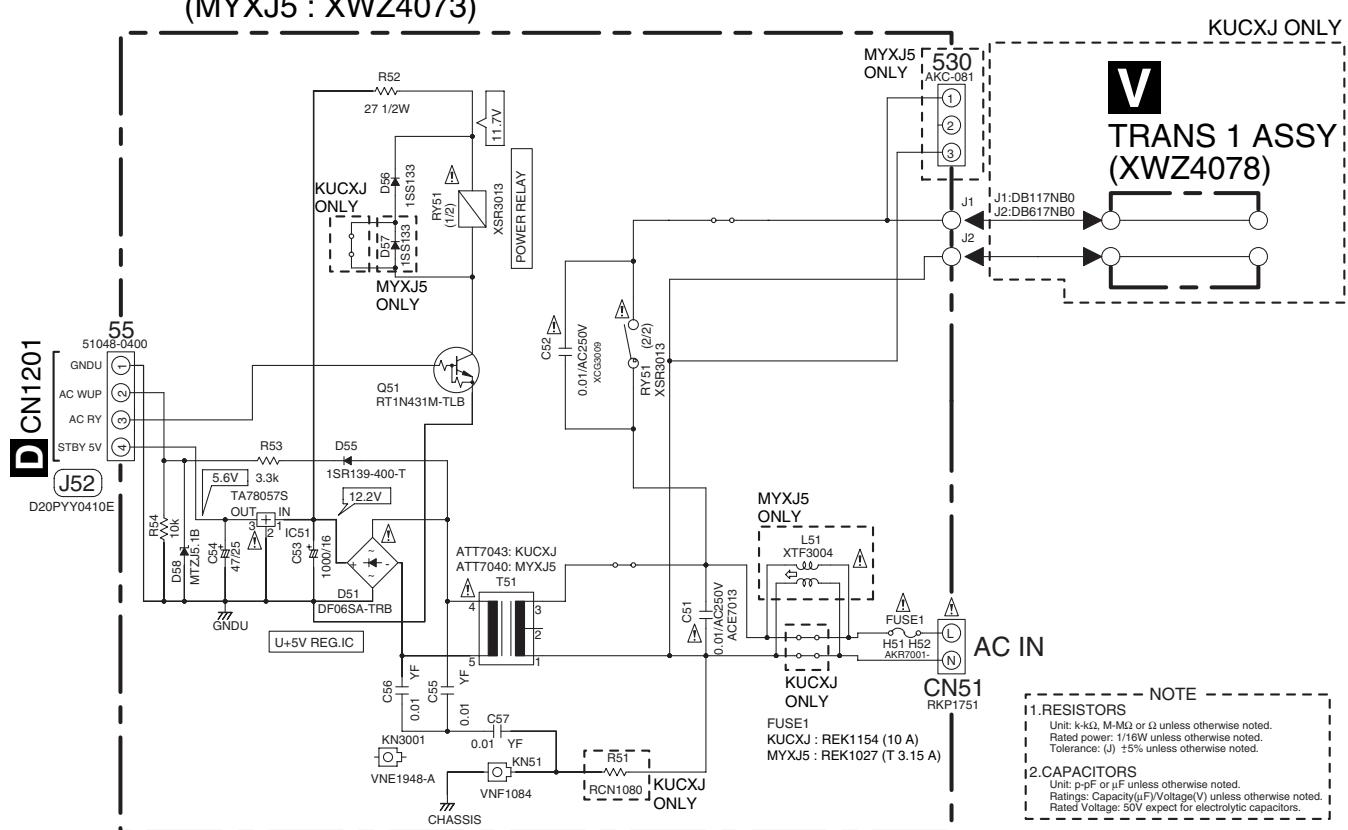
B

• NOTE FOR FUSE REPLACEMENT

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

C

U PRIMARY ASSY (KUCXJ : XWZ4128) (MYXJ5 : XWZ4073)



D

E

F

NOTE

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

2. CAPACITORS
Unit: pF or μ F unless otherwise noted.
Rating: Capacity(μ F)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V except for electrolytic capacitors.

T U V

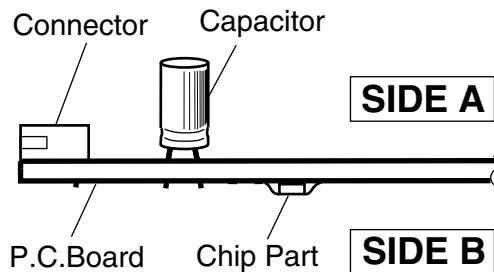
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

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

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

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



A

B

C

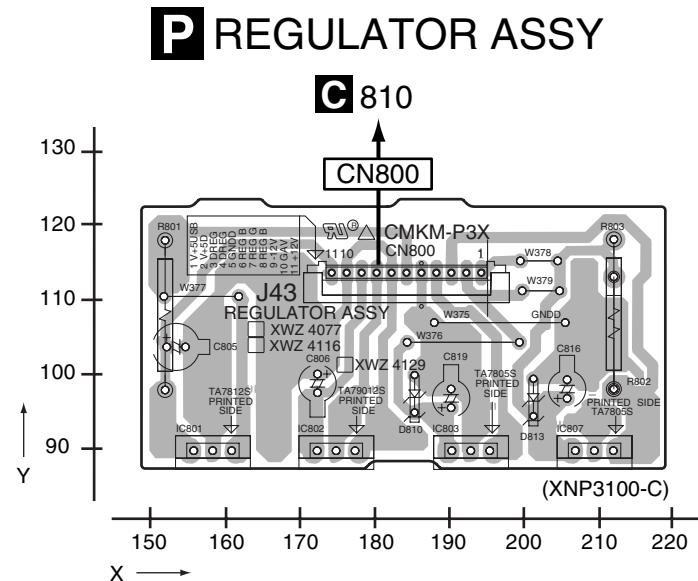
D

E

F

■ 4.1 REGULATOR and DIGITAL IN ASSYS

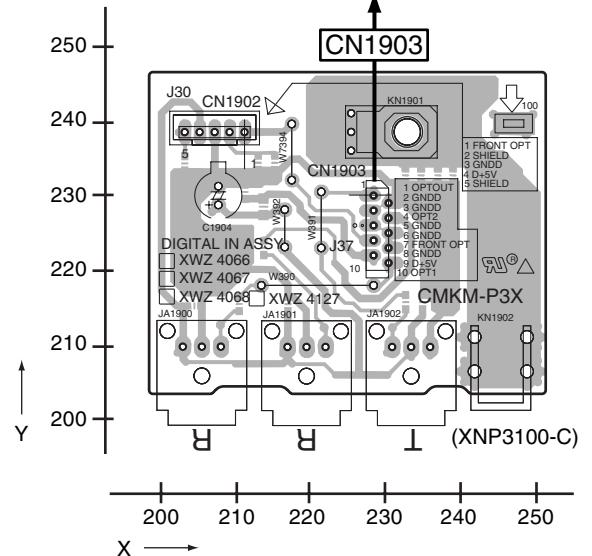
SIDE A



A

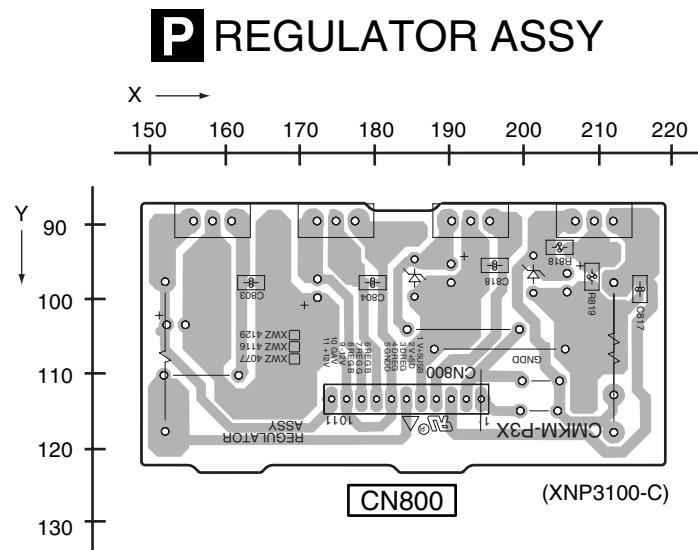
R DIGITAL IN ASSY

B CN601



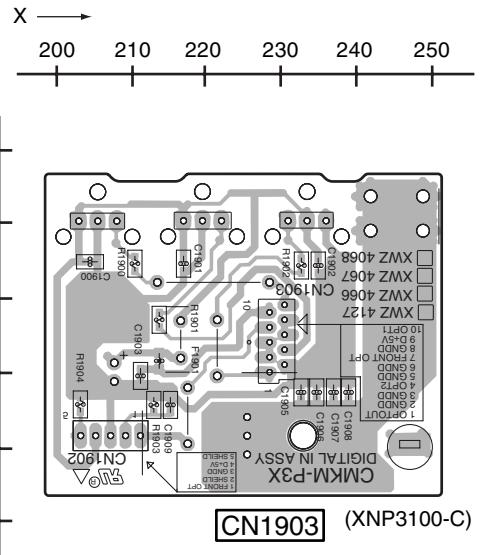
B

SIDE B



C

R DIGITAL IN ASSY



E

P R

5

6

SX-316-S

7

8

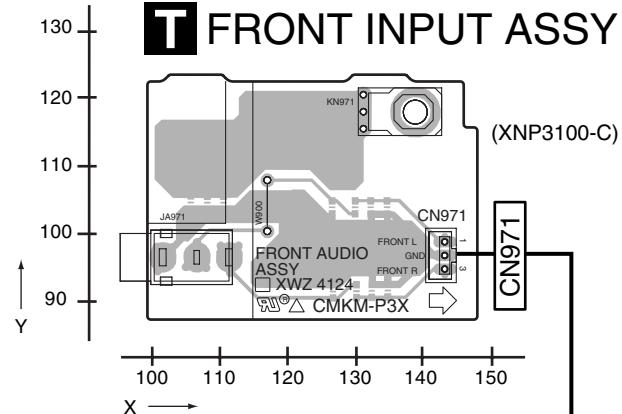
P R

35

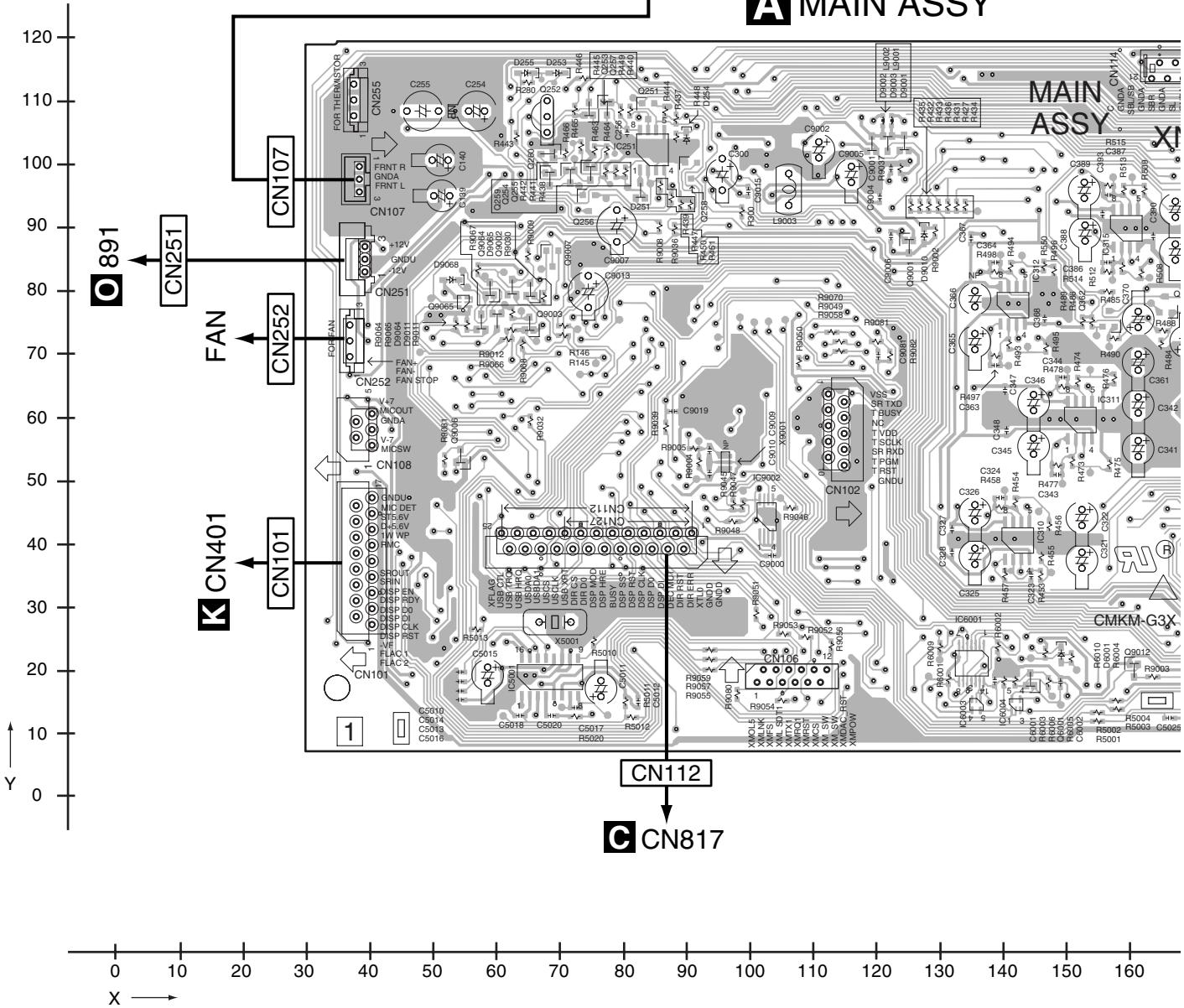
4.2 MAIN and FRONT INPUT ASSYS

SIDE A

T FRONT INPUT ASSY



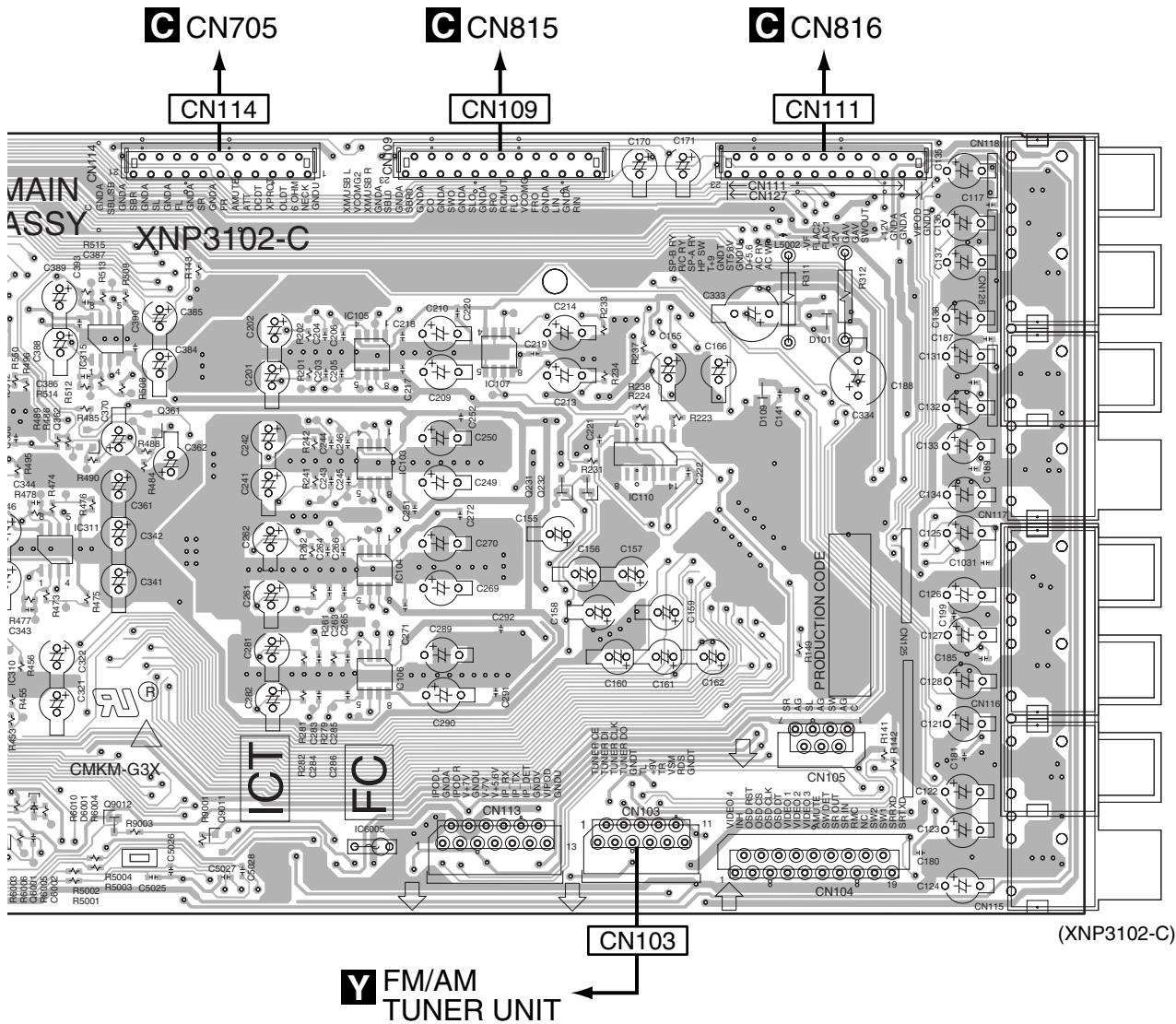
A MAIN ASSY



A T

SIDE A

A



B

C

D

E

F

A

SIDE B

A

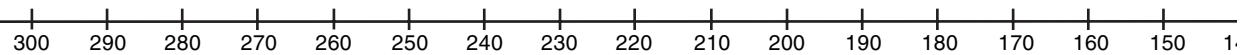
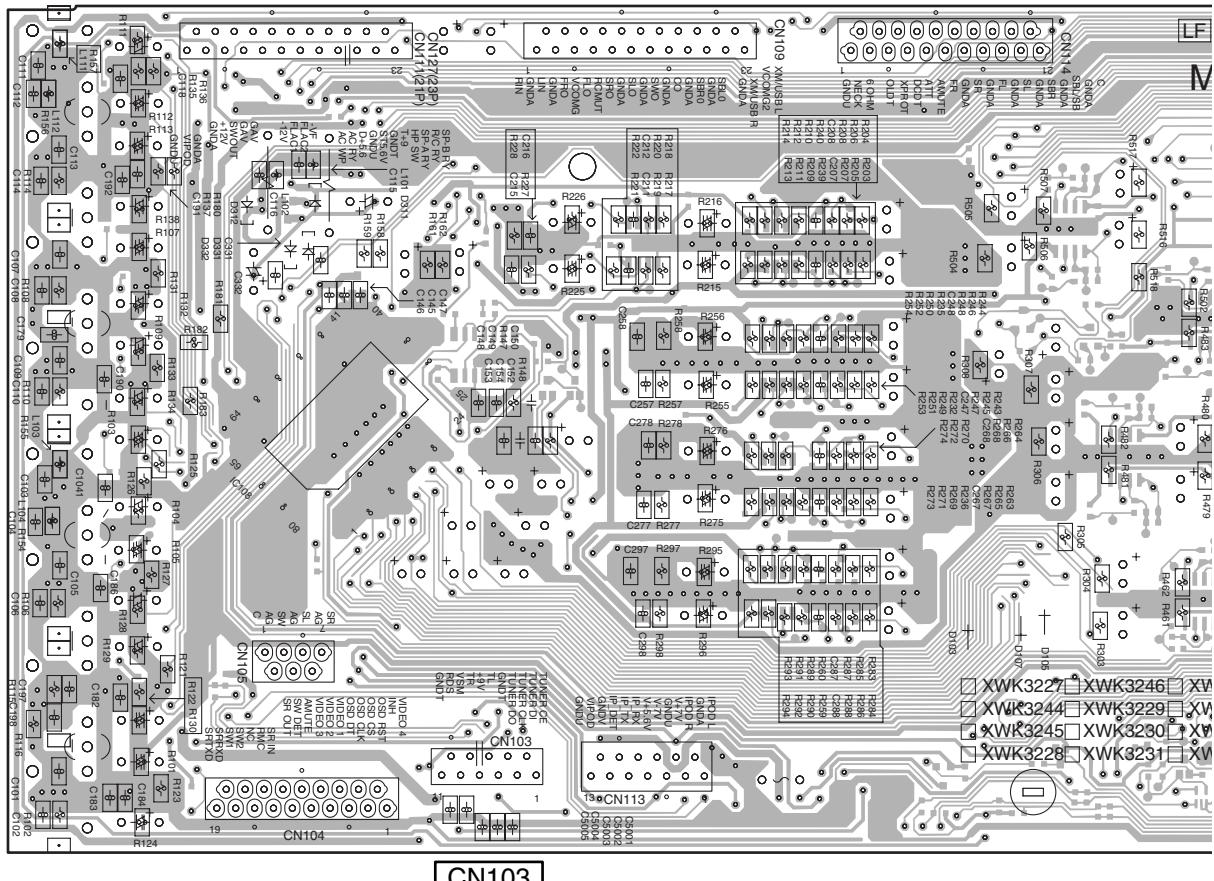
B

C

D

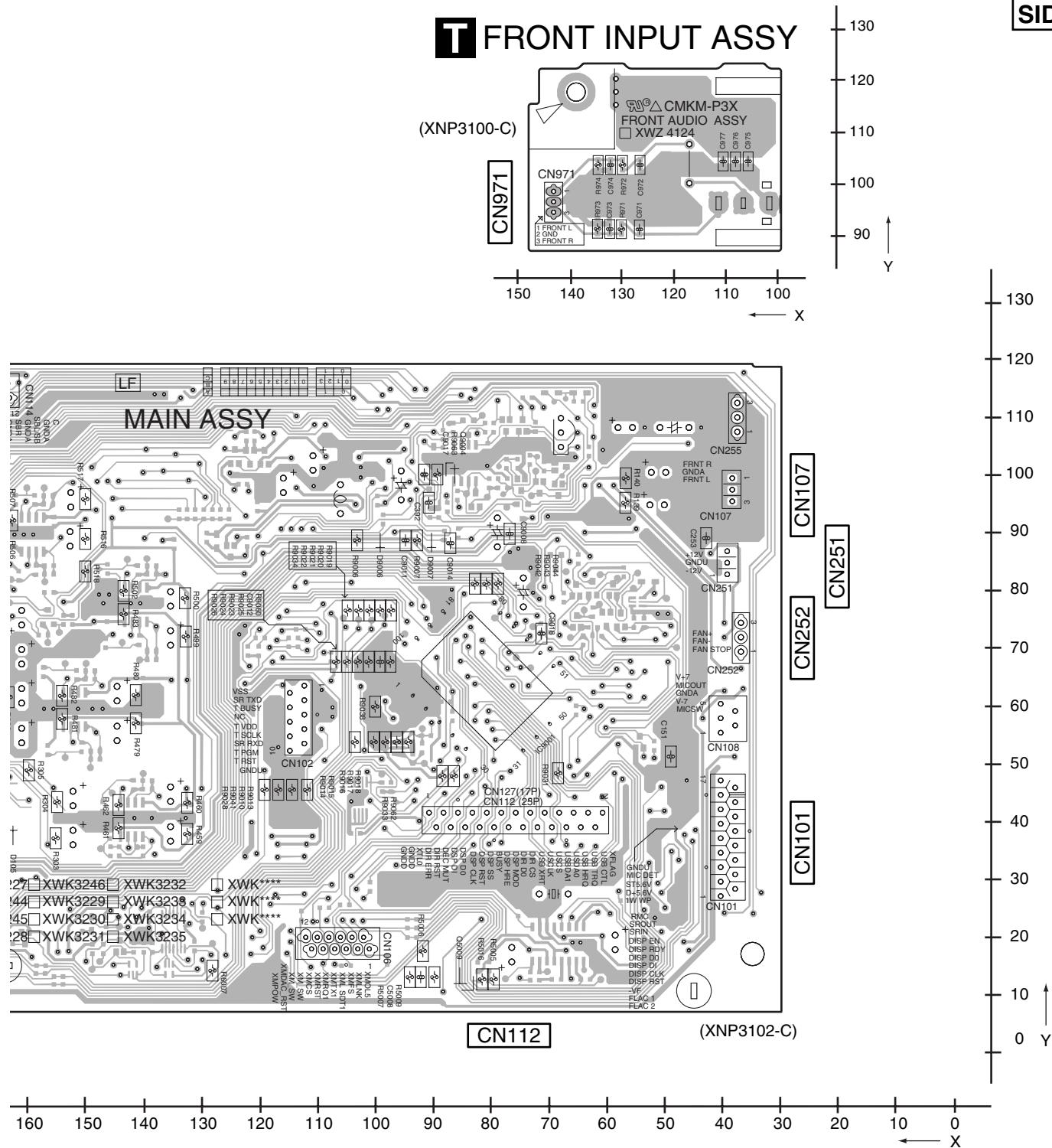
E

F

A MAIN ASSY**CN111****CN109****CN114****CN103****A**

T FRONT INPUT ASSY

SIDE B



AT

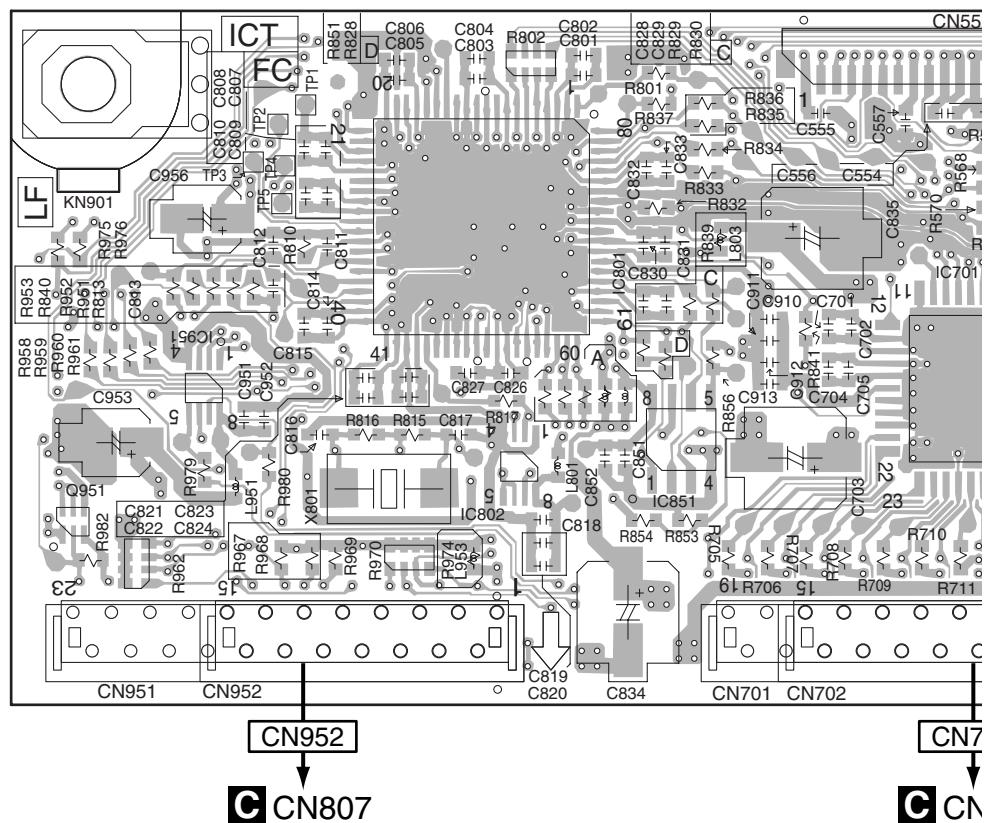
4.3 DSP ASSY

SIDE A

A

A vertical scale with numerical markings at intervals of 10, ranging from 0 at the bottom to 80 at the top. The scale is marked with horizontal grid lines extending across the page.

B DSP ASSY



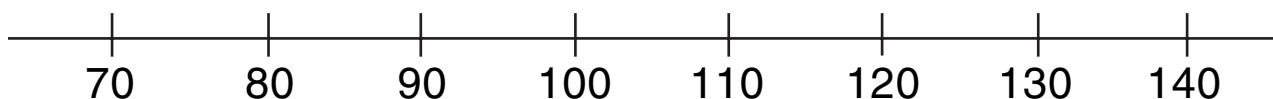
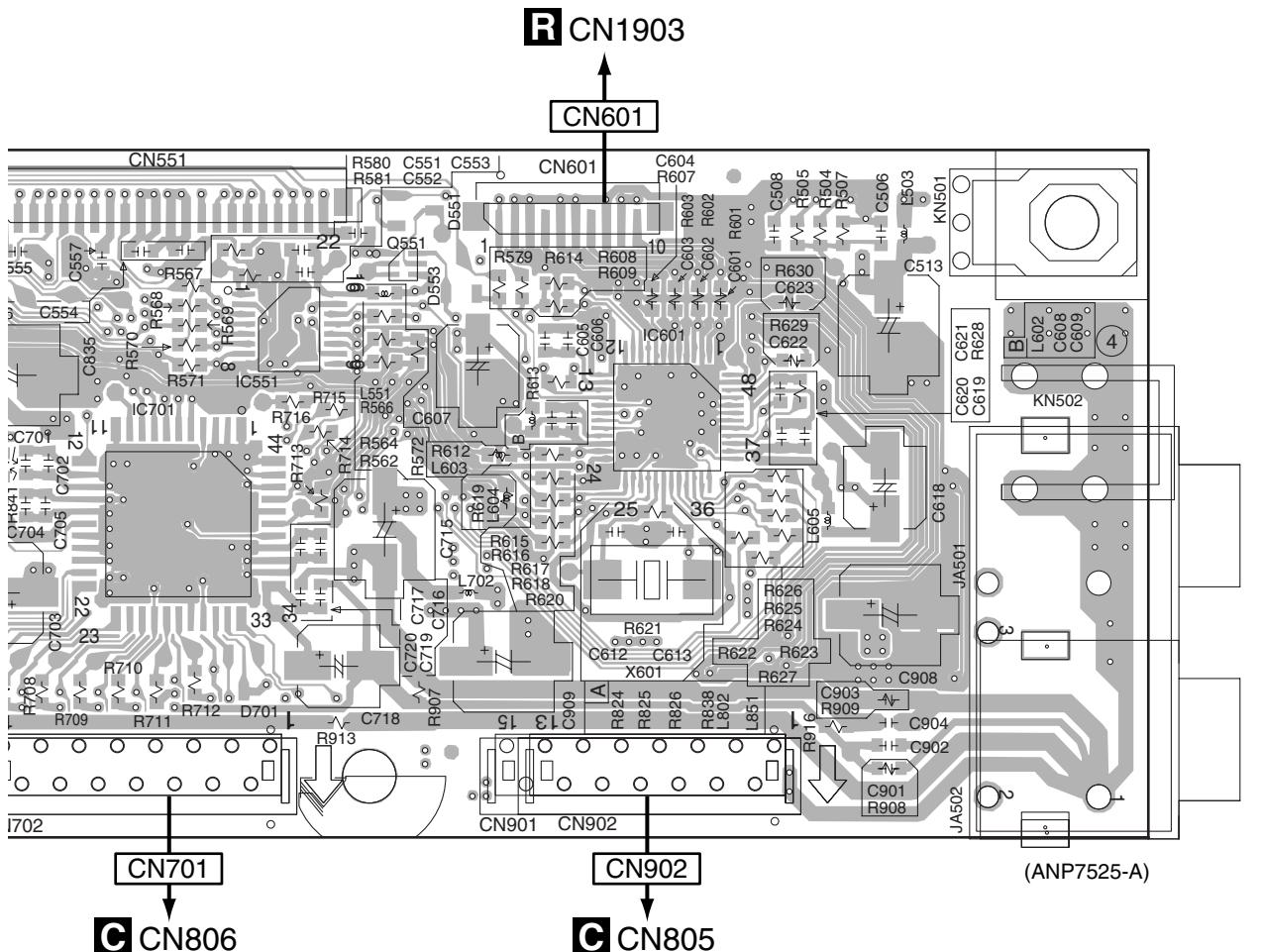
C CN807

CN

B

SIDE A

A



8

C

D

6

F

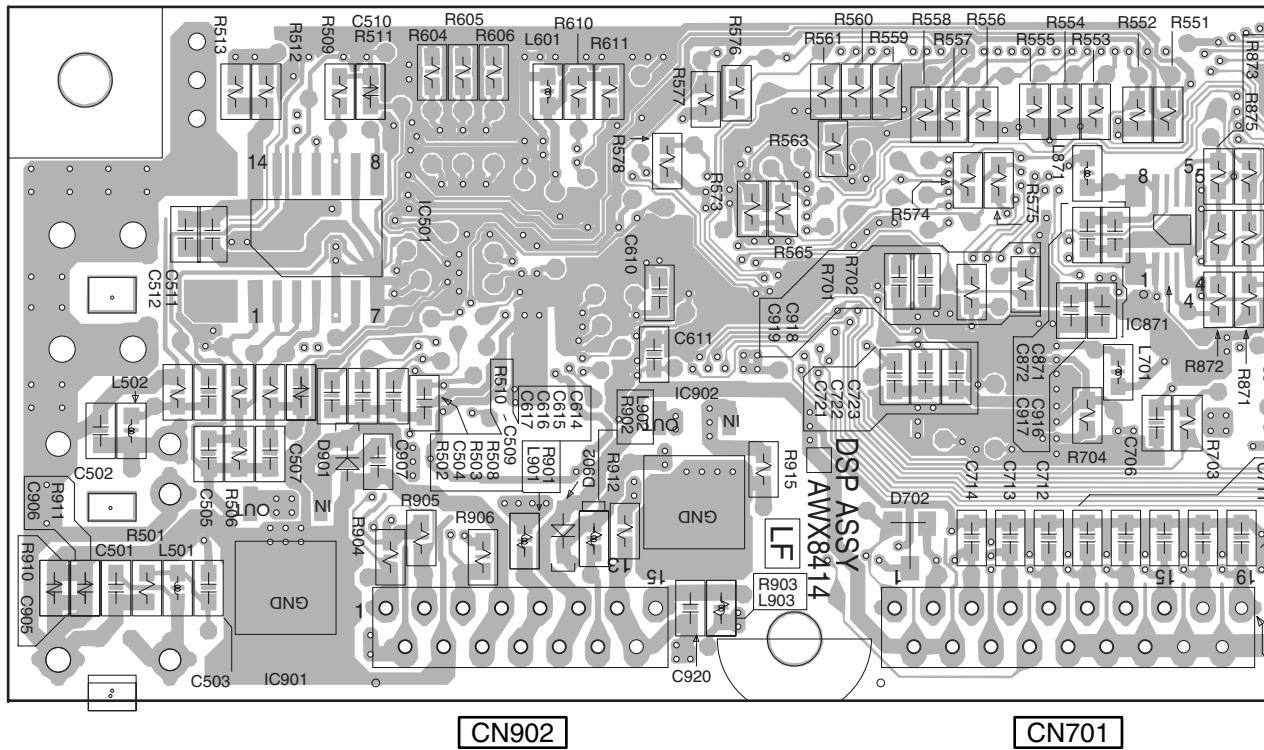
3

SIDE B

A

B DSP ASSY

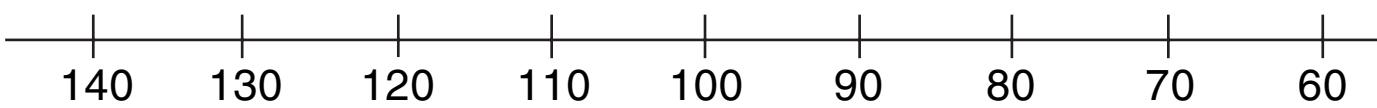
B



C

D

E



F

B

5

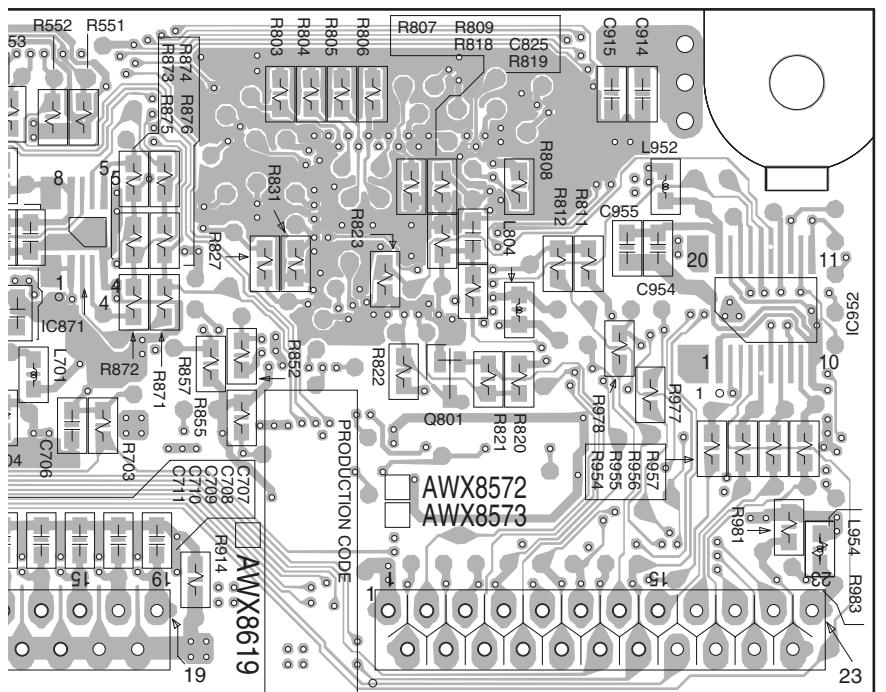
6

7

8

SIDE B

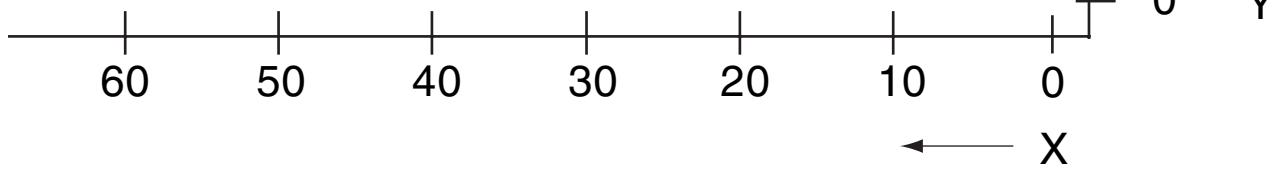
A



1

CN952

(ANP7525-A)

**B**

43

SX-316-S

5

6

7

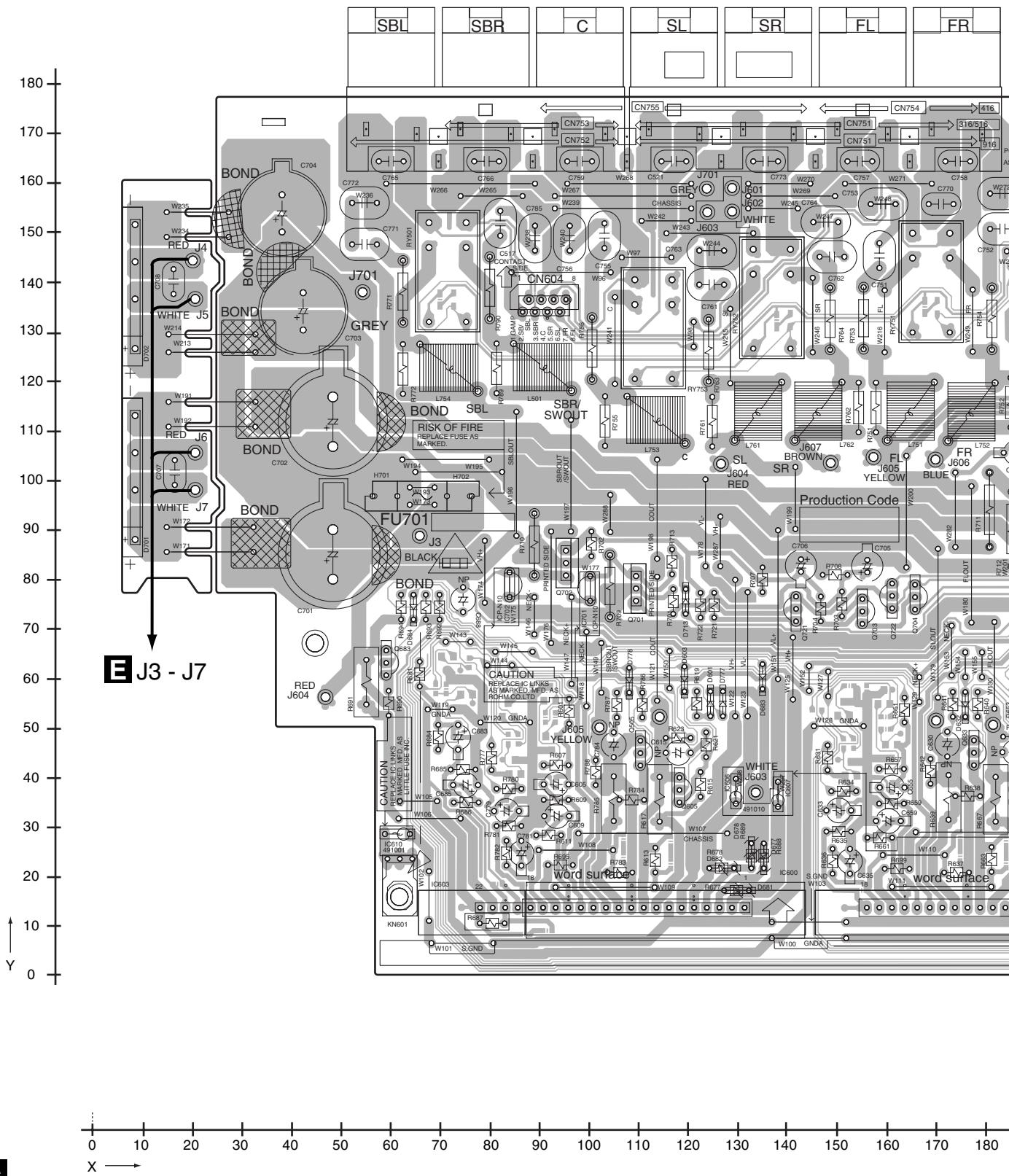
8

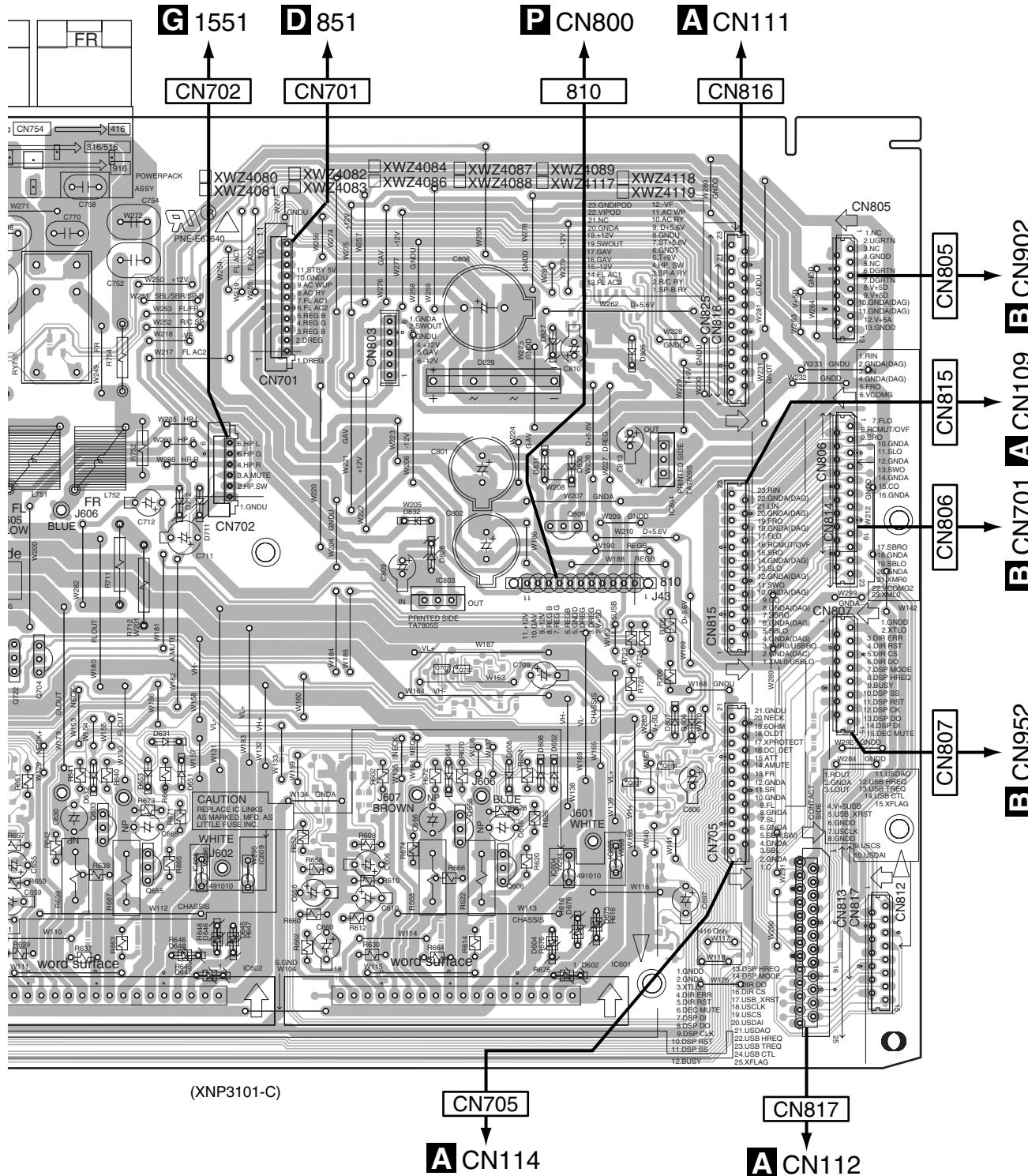
F

SIDE A

A

C POWER PACK ASSY





(XNP3101-C)

SIDE B

A

C POWER PACK ASSY

810

CN701 CN702

CN805

CN816

CN806

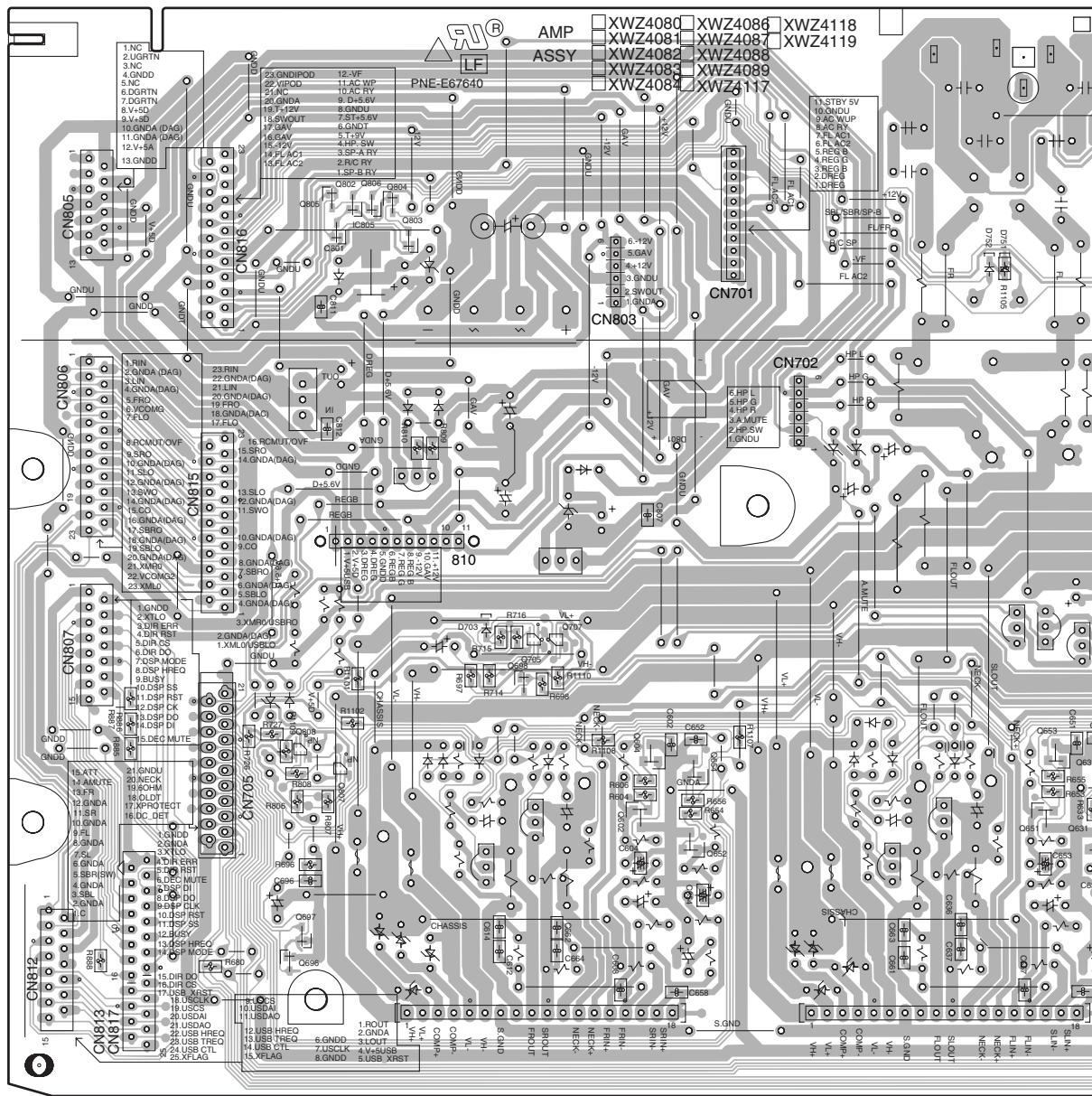
CN815

CN807

N705

1

CN817



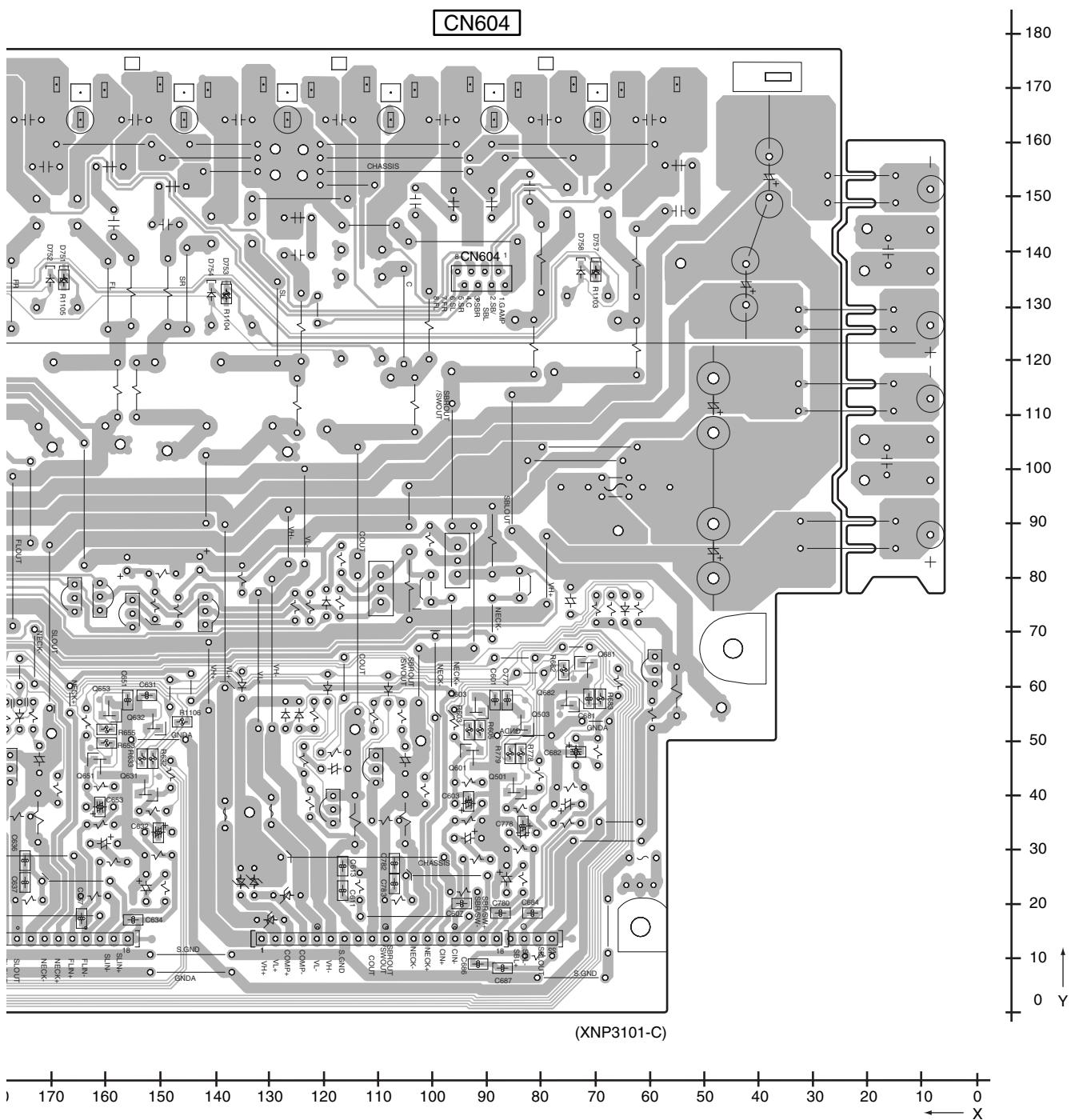
330 320 310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160

E

C

SIDE B

A



F

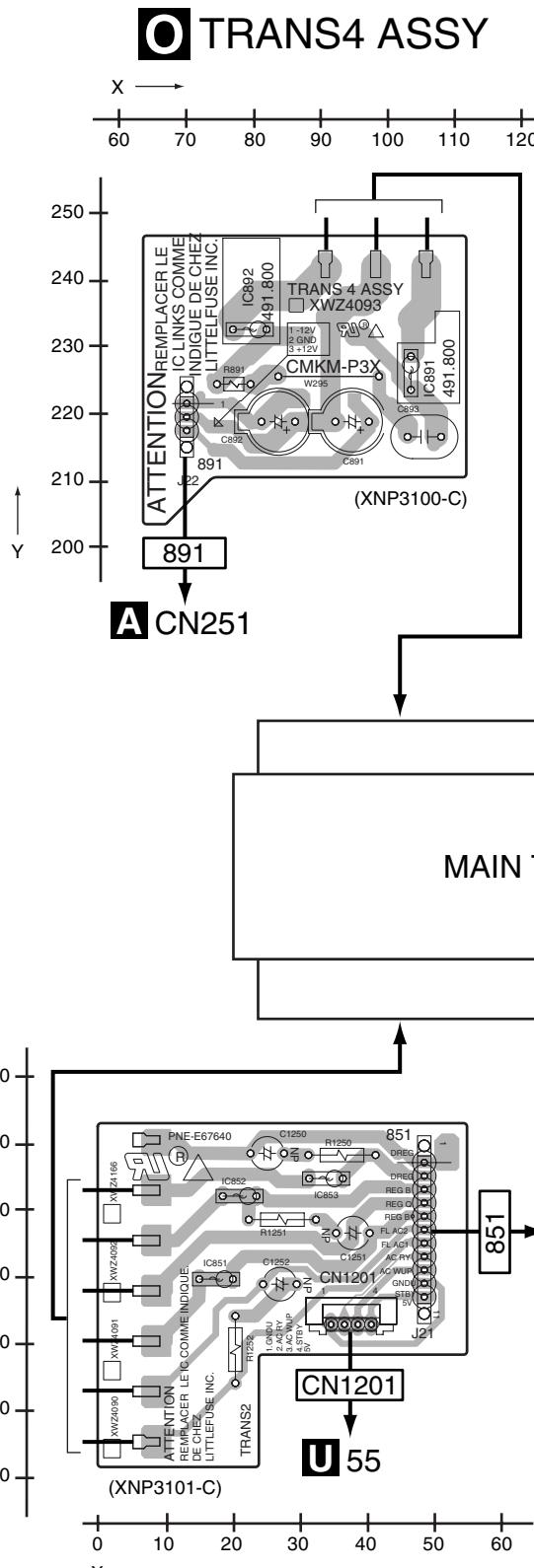
C

47

4.5 TRANS2, TRANS3, TRANS4 and TRANS1 ASSYS

SIDE A

SIDE A



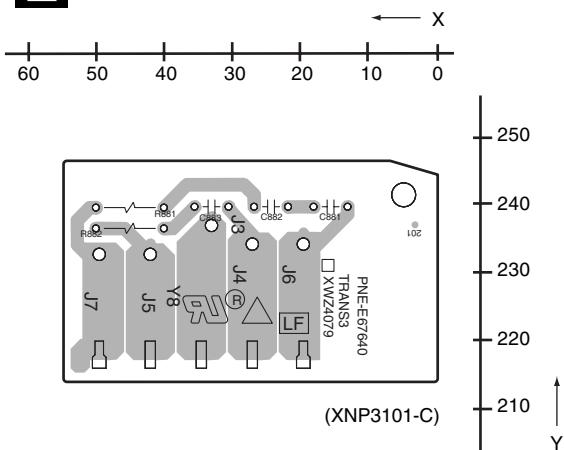
D E O V

D E O V

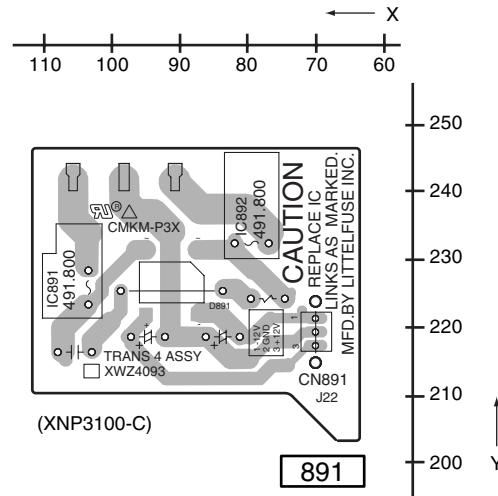
SIDE B

SIDE B

E TRANS3 ASSY



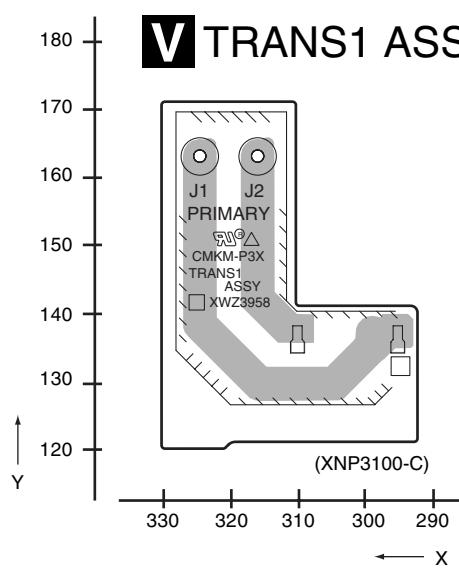
O TRANS4 ASSY



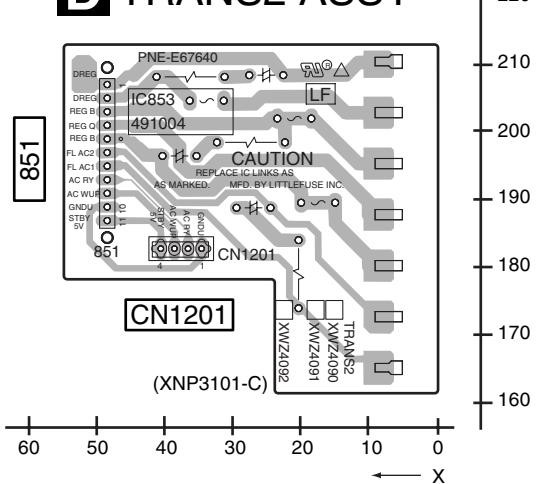
891

KUCXJ ONLY

V TRANS1 ASSY



D TRANS2 ASSY



851

D E O V

D E O V

SIDE A

A

B

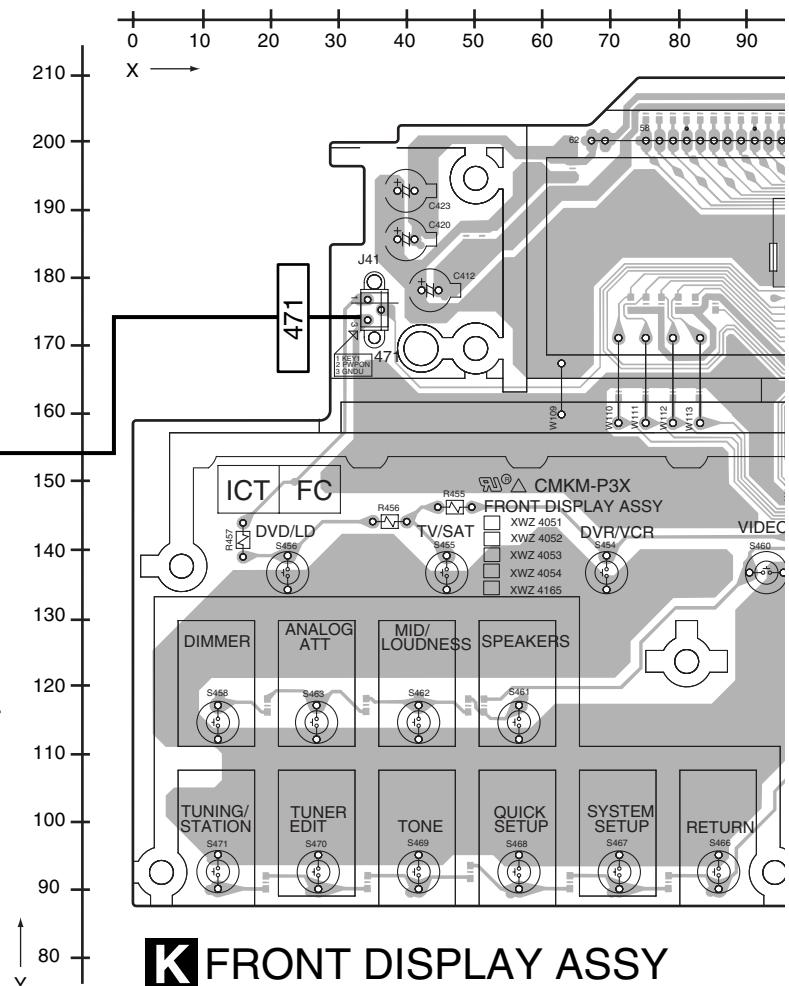
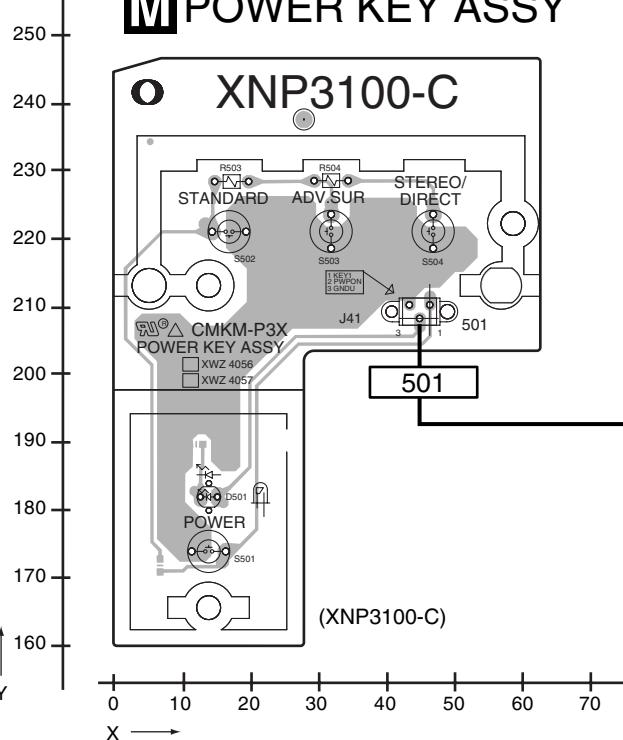
C

D

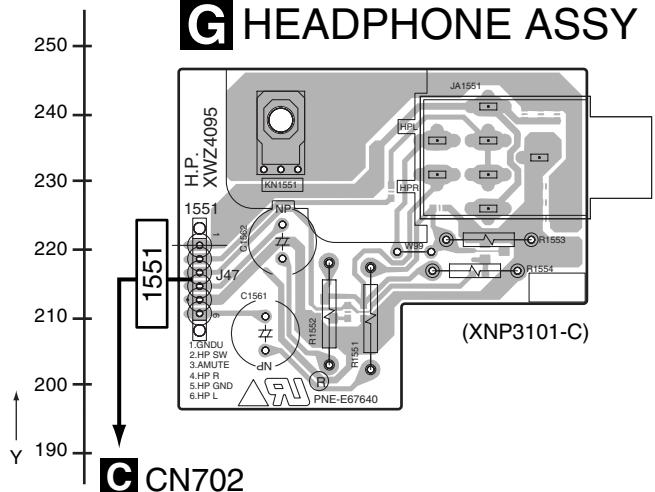
F

F

M POWER KEY ASSY



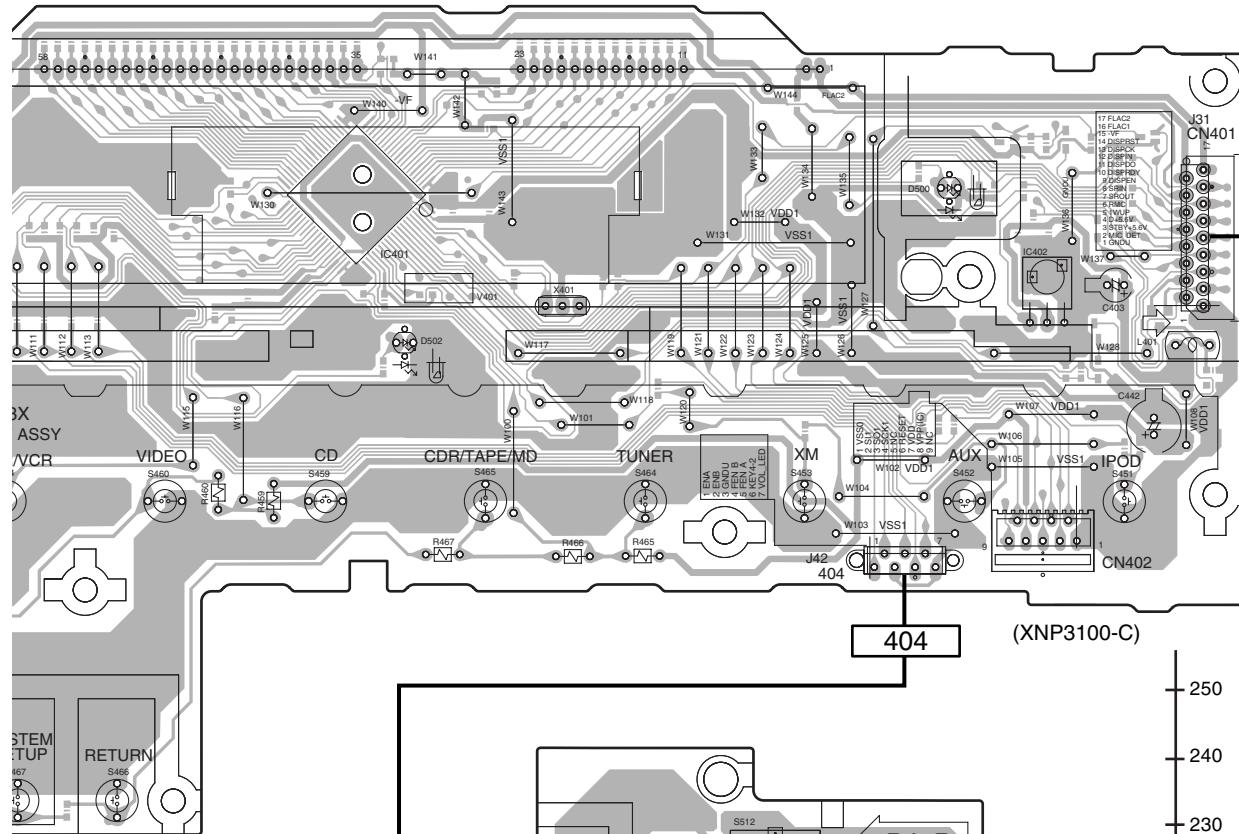
G HEADPHONE ASSY



G K M

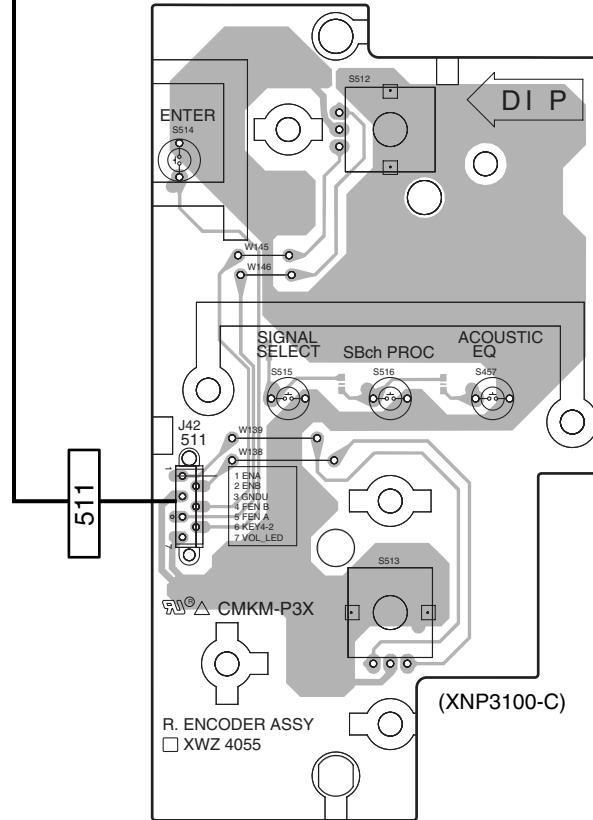
SIDE A

0 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260



A CN101

SY



L R. ENCODER ASSY

250 260 270 280 290 300 310 320 330 340
X →

250
240
230
220
210
200
190
180
170
160
150
140
130
120
Y ↑

K L

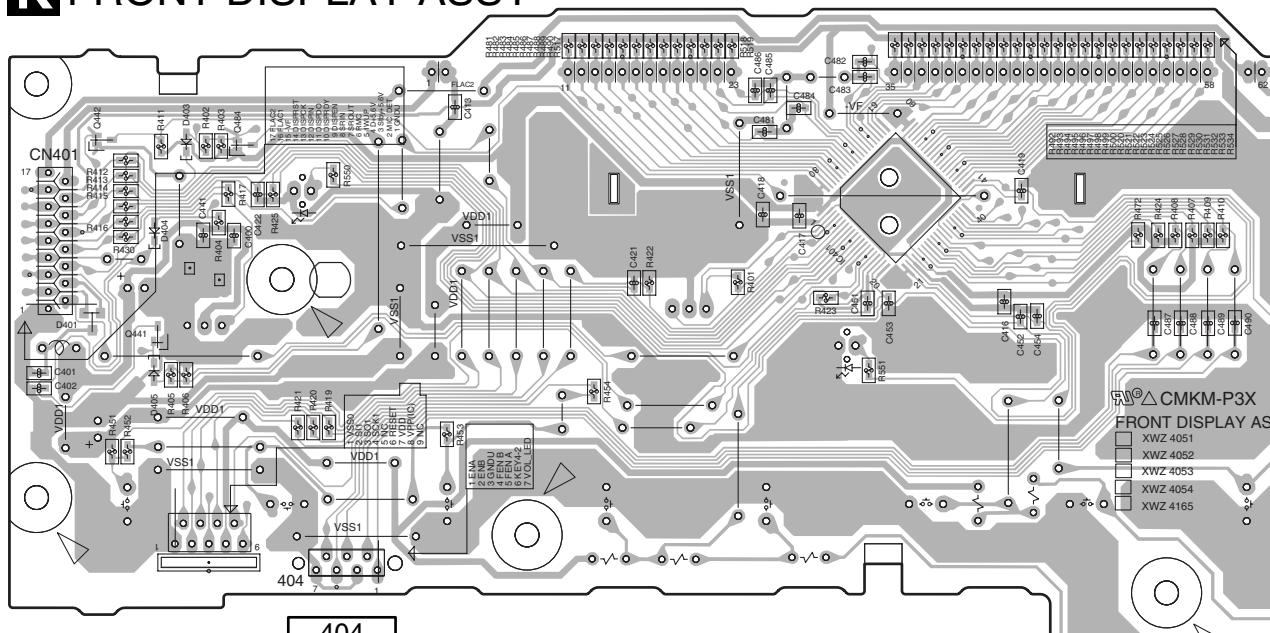
SIDE B

A

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70

K FRONT DISPLAY ASSY

CN401



B

C

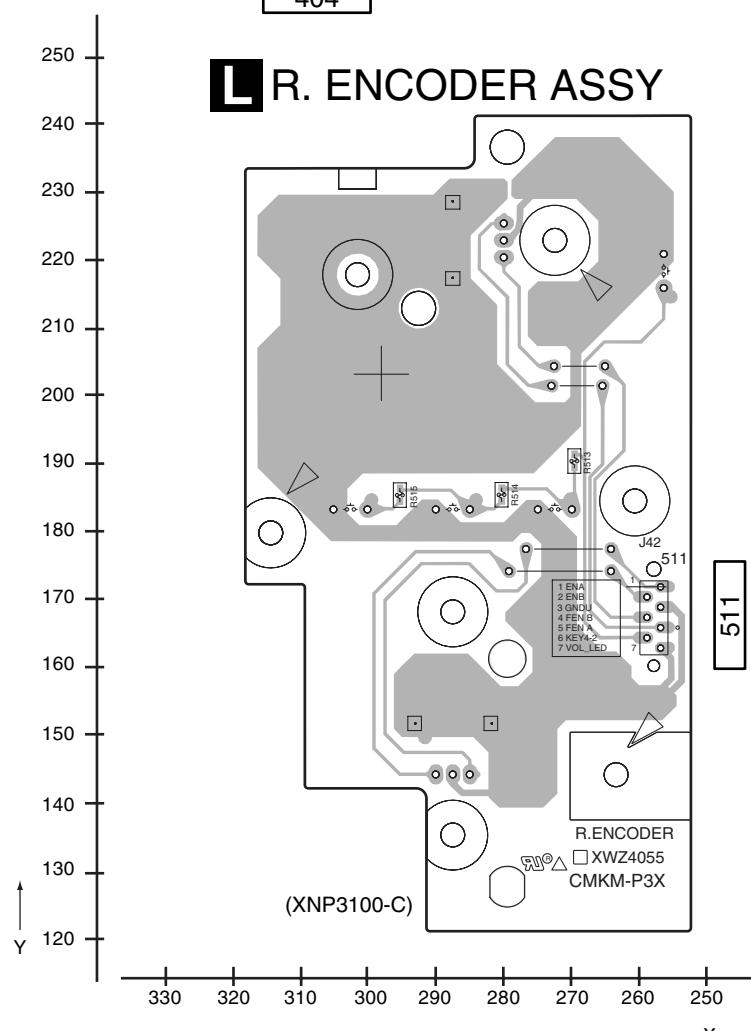
D

E

F

404

L R. ENCODER ASSY



511

K L

52

SX-316-S

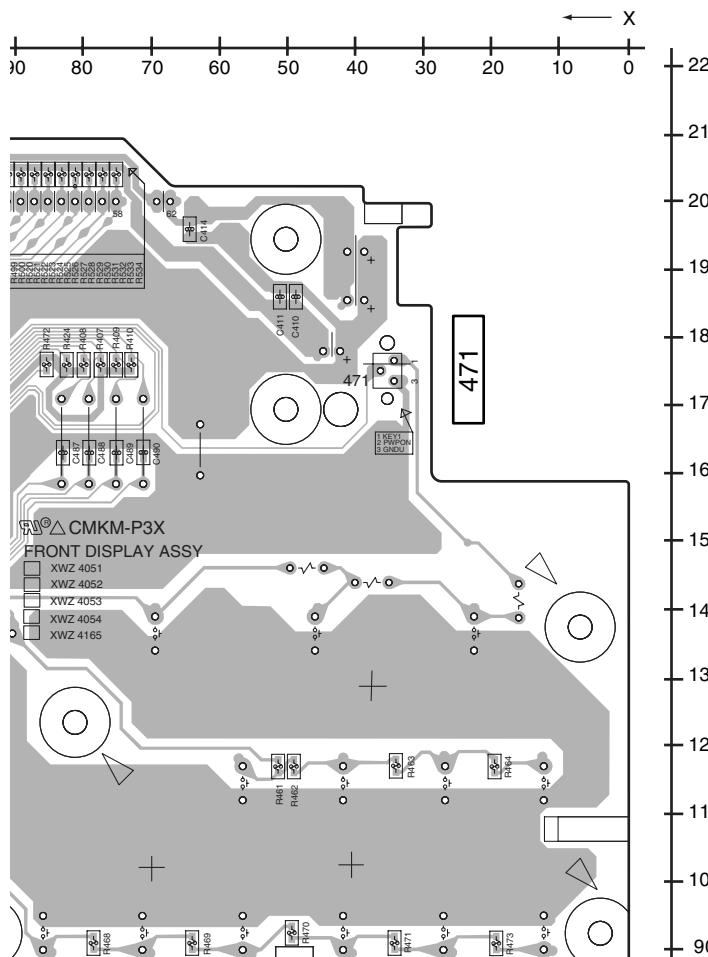
1

2

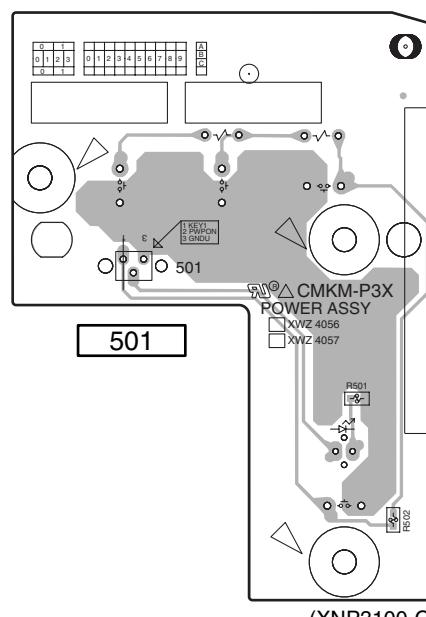
3

4

X



M POWER KEY ASSY



SIDE B

A

B

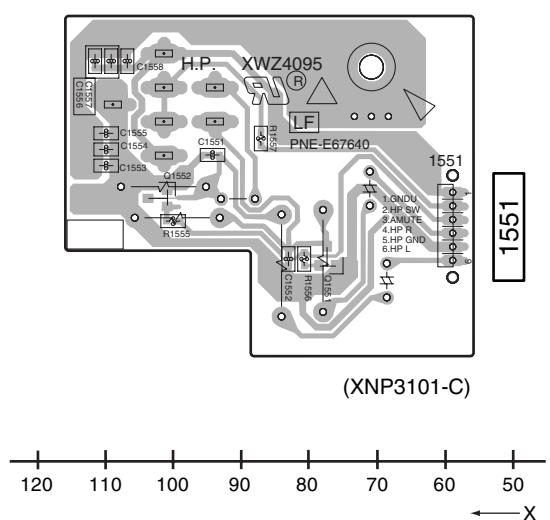
C

D

E

F

G HEADPHONE ASSY



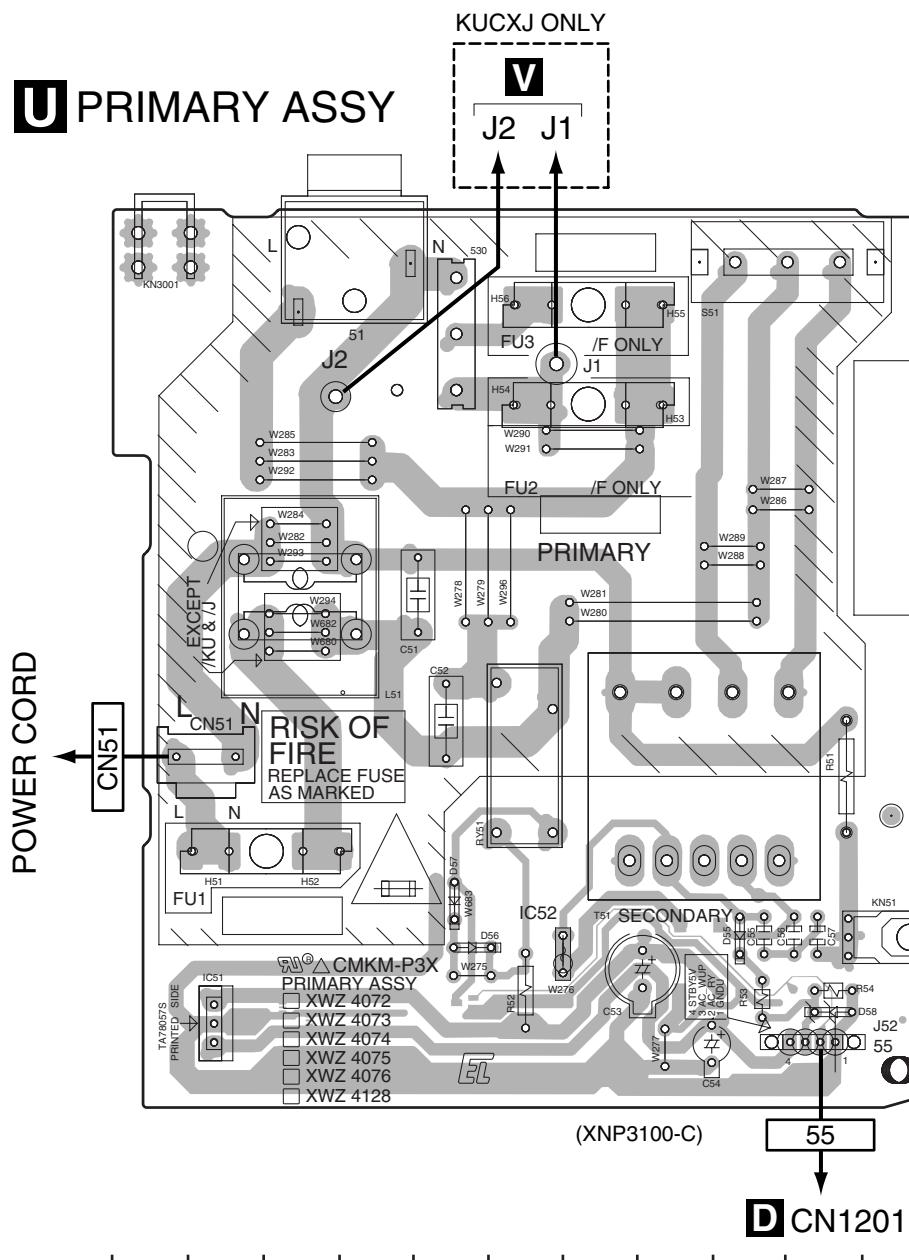
G K M

53

4.7 PRIMARY ASSY

SIDE A

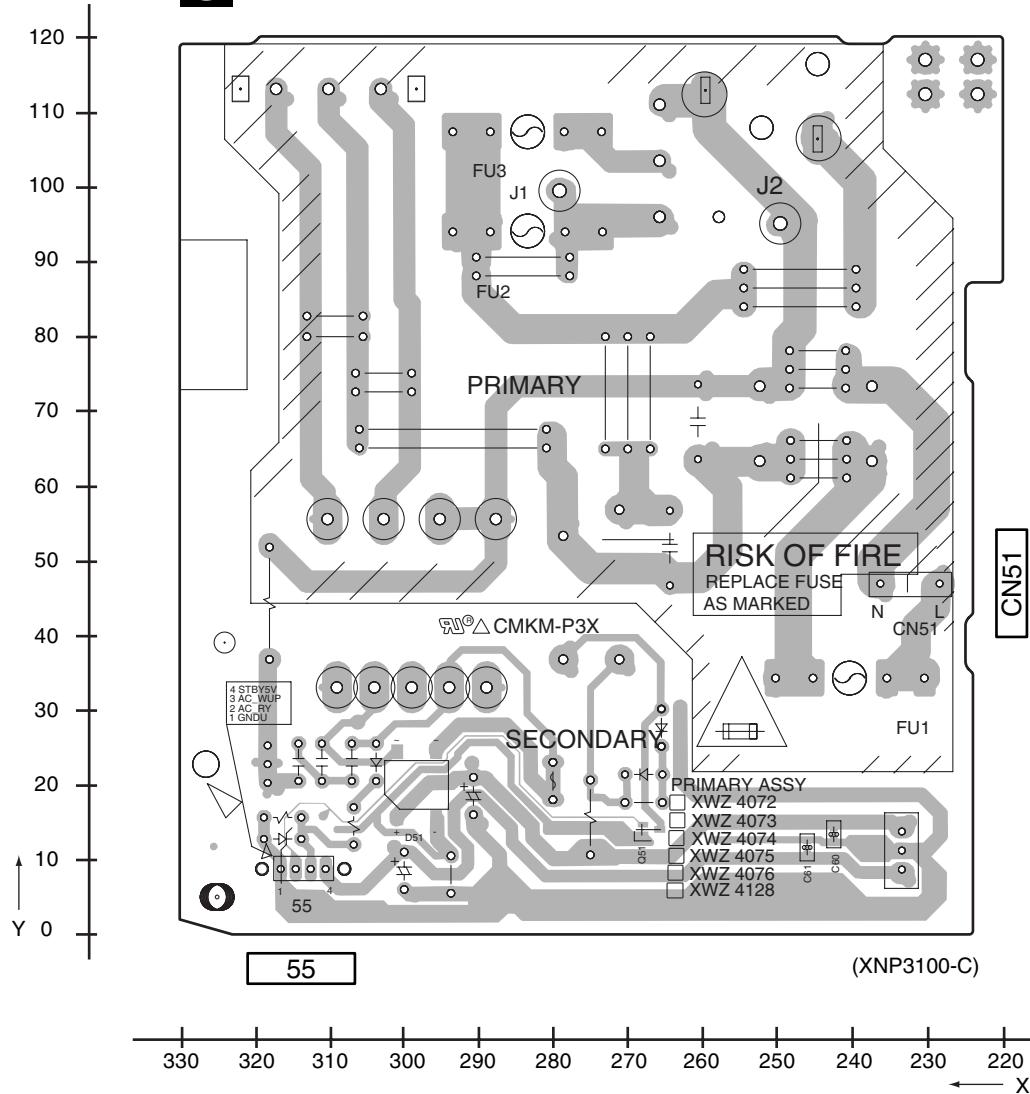
SIDE A



SIDE B**SIDE B**

A

U PRIMARY ASSY



B

C

D

E

F

U**U**

SX-316-S

5. PCB PARTS LIST

- A** 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 × 10 ¹	→ 561 RD1/4PU[5 6 1]J
47k Ω	→ 47 × 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 × 10 ¹	→ 5621 RN1/4PC[5 6 2 1]F
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- Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

LIST OF ASSEMBLIES

Mark	Symbol and Description	SX-316-S /KUCXJ	SX-316-S /MYXJ5
C NSP	1..MAIN ASSY	XWK3227	XWK3244
	1..DSP ASSY	AWX8573	AWX8573
	1..AMP ASSY	XWK3217	XWK3241
	2..POWER PACK ASSY	XWZ4080	XWZ4117
	2..TRANS2 ASSY	XWZ4090	XWZ4092
	2..TRANS3 ASSY	XWZ4079	XWZ4079
D NSP	2..HEADPHONE ASSY	XWZ4095	XWZ4095
	2..BINDER ASSY	XWZ4199	XWZ4199
	1..COMPLEX ASSY	XWK3207	XWK3237
	2..FRONT DISPLAY ASSY	XWZ4165	XWZ4165
	2..R. ENCODER ASSY	XWZ4055	XWZ4055
	2..POWER KEY ASSY	XWZ4056	XWZ4056
E	2..DIGITAL IN ASSY	XWZ4066	XWZ4066
	2..FRONT INPUT ASSY	XWZ4124	XWZ4124
	2..PRIMARY ASSY	XWZ4128	XWZ4073
	2..REGULATOR ASSY	XWZ4077	XWZ4077
	2..TRANS1 ASSY	XWZ4078	Not used
	2..TRANS4 ASSY	XWZ4093	XWZ4093
F	1..FM/AM TUNER UNIT	AXX7210	AXX7170

CONTRAST OF PCB ASSEMBLIES

D TRANS2 ASSY

XWZ4092 and XWZ4090 are constructed the same except for the following:

Mark	Symbol and Description	XWZ4090	XWZ4092
	IC853 PROTECTOR(4A)	AEK7018	Not used
	IC853 PROTECTOR(7A)	Not used	AEK7021

U PRIMARY ASSY

XWZ4073 and XWZ4128 are constructed the same except for the following:

Mark	Symbol and Description	XWZ4128	XWZ4073
F	D57	Not used	1SS133
	L51	Not used	XTF3004
	T51 STANDBY TRANSFORMER	ATT7043	ATT7040
	530 3P TERMINAL	Not used	AKC-081
	R51 (2.2M, 1/2W)	RCN1080	Not used

PCB PARTS LIST FOR SX-316/KUCXJ UNLESS OTHER WISE NOTED

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
A	MAIN ASSY (XWK3227)		CN111 (A,276,113) 21P SOCKET	XKP3091	
	MISCELLANEOUS		CN112 (A,91,41) CONNECTOR	CKS3382	A
IC 103 (A,198,72) OP-AMP IC	HA17558AF	CN114 (A,189,113) 21P SOCKET	XKP3091		
IC 104 (A,198,56) OP-AMP IC	HA17558AF	CN126 (A,302,98) 6P PIN JACK	XKB3055		
IC 105 (A,198,87) OP-AMP IC	HA17558AF	CN251 (A,39,83) 3P JUMPER CONNECTOR	52147-0310		
IC 107 (A,216,88) OP-AMP IC	HA17558AF	CN252 (A,37,69) 3P TOP POST	B3B-EH		
IC 108 (B,255,64) 8CH E-VOL	R2S15205FP				
IC 251 (A,85,102) OP-AMP IC	HA17558AF	RESISTORS			
IC 310 (A,142,40) OP-AMP IC	BA4560RF	R 107 (B,283,87)	RS1/16S331J		
IC 311 (A,152,59) OP-AMP IC	BA4560RF	R 108 (B,293,81)	RS1/16S331J		
IC 312 (A,142,77) OP-AMP IC	BA4560RF	R 111 (B,283,115)	RS1/16S222J		
IC 9001(B,82,64) CPU	PEG217A	R 112 (B,283,106)	RS1/16S222J		
		R 113 (B,283,101)	RS1/16S331J		B
IC 9002(A,103,44) EEPROM	BR24L16FV-W				
Q 252 (A,68,105) TRANSISTOR	2SD1858X	R 114 (B,293,96)	RS1/16S331J		
Q 253 (A,75,108) TRANSISTOR	RT1N241M	R 145 (A,71,73)	RS1/16S102J		
Q 254 (A,72,98) DIGITAL TR(SC-70)	RT1P241M	R 146 (A,71,74)	RS1/16S102J		
Q 255 (A,75,98) TRANSISTOR	RT1N241M	R 147 (B,233,67)	RS1/16S472J		
		R 148 (B,228,62)	RS1/16S472J		
Q 256 (A,75,94) CHIP TRANSISTOR	2SD2704K	R 149 (A,259,45)	RS1/16S104J		
Q 257 (A,78,108) TRANSISTOR	2SA1576A	R 156 (B,295,107)	RS1/16S0R0J		
Q 361 (A,166,78) CHIP TRANSISTOR	2SD2704K	R 157 (B,293,114)	RS1/16S0R0J		
Q 9001(A,125,87) DIGITAL TR(SC-70)	RT1N431M	R 180 (B,278,97)	RS1/16S0R0J		
Q 9002(A,66,80) DIGITAL TR(SC-70)	RT1P241M	R 181 (B,272,78)	RS1/16S0R0J		
					C
Q 9003(A,65,75) DIGITAL TR(SC-70)	RT1P241M	R 201 (A,189,85)	RS1/16S473J		
Q 9007(A,69,85) TRANSISTOR	DTC143TK	R 202 (A,189,90)	RS1/16S473J		
Q 9064(A,59,80) DIGITAL TR(SC-70)	RT1P241M	R 203 (B,187,85)	RS1/16S392J		
Q 9065(A,55,78) TRANSISTOR	UMD2N	R 204 (B,187,91)	RS1/16S392J		
D 103 (B,173,155) DIODE	DAN217U	R 205 (B,189,85)	RS1/16S392J		
D 105 (B,163,37) DIODE	DAN217U	R 206 (B,189,91)	RS1/16S392J		
D 107 (B,166,37) DIODE	DAN217U	R 207 (B,191,85)	RS1/16S392J		
D 251 (A,83,96) DIODE	DAN217U	R 208 (B,191,91)	RS1/16S392J		
D 253 (A,70,114) DIODE	UDZS27(B)	R 209 (B,198,85)	RS1/16S392J		
D 254 (A,90,104) DIODE	UDZS5R1(B)	R 210 (B,198,91)	RS1/16S392J		
D 311 (B,259,93) DIODE	1SS355	R 211 (B,200,85)	RS1/16S332J		D
D 312 (B,268,93) DIODE	1SS355	R 212 (B,200,91)	RS1/16S332J		
D 331 (B,260,87) DIODE	UDZS6R8(B)	R 213 (B,202,85)	RS1/16S680J		
D 332 (B,263,87) DIODE	UDZS6R8(B)	R 214 (B,202,91)	RS1/16S680J		
D 9001(A,125,103) DIODE	DAP202U	R 219 (B,216,84)	RS1/16S0R0J		
D 9002(A,119,103) DIODE	DAP202U	R 220 (B,215,91)	RS1/16S0R0J		
D 9003(A,122,103) DIODE	DAN202U	R 221 (B,220,84)	RS1/16S472J		
D 9006(B,99,89) DIODE	DAN217U	R 222 (B,219,91)	RS1/16S472J		
D 9007(B,91,89) DIODE	DAN217U	R 225 (B,225,84)	RS1/16S392J		
D 9010(A,128,88) DIODE	1SS355	R 226 (B,225,91)	RS1/16S392J		
D 9011(A,60,75) DIODE	DAN202U	R 227 (B,231,84)	RS1/16S101J		E
D 9064(A,58,75) DIODE	DAP202U	R 228 (B,233,89)	RS1/16S101J		
D 9065(A,63,80) DIODE	DAP202U	R 233 (A,231,91)	RS1/16S474J		
D 9068(A,53,81) DIODE	1SS355	R 234 (A,231,84)	RS1/16S474J		
L 101 (B,260,98) CHIP SOLID INDUCTOR	QTL1013	R 241 (A,190,69)	RS1/16S473J		
L 102 (B,265,97) CHIP SOLID INDUCTOR	QTL1013	R 242 (A,190,74)	RS1/16S473J		
L 5002(A,257,104) CHIP SOLID INDUCTOR	QTL1013	R 243 (B,186,69)	RS1/16S332J		
L 9001(A,123,107) CHIP SOLID INDUCTOR	ATL7002	R 244 (B,186,75)	RS1/16S332J		
L 9002(A,121,107) CHIP SOLID INDUCTOR	ATL7002	R 245 (B,188,69)	RS1/16S332J		
L 9003(A,106,98) RADIAL INDUCTOR	LFCA2R2J	R 246 (B,188,75)	RS1/16S332J		
X 9001(A,96,53) CERAMIC RESONATOR (15.7 MHz)	XSS3004	R 247 (B,190,69)	RS1/16S332J		
CN101 (A,41,27) CONNECTOR	CKS3382	R 248 (B,190,75)	RS1/16S332J		
CN103 (A,230,17) 11P CONNECTOR	52044-1145	R 249 (B,197,69)	RS1/16S332J		
CN107 (A,39,99) 3P JUMPER CONNECTOR	52147-0310	R 250 (B,197,75)	RS1/16S332J		
CN109 (A,230,113) 19P SOCKET	XKP3054	R 251 (B,199,69)	RS1/16S182J		

Mark No. **Description**
Part No.
Mark No. **Description**
Part No.

A	R 252 (B,199,75)	RS1/16S182J	R 483 (B,144,76)	RS1/16S104J
	R 253 (B,202,69)	RS1/16S0R0J	R 485 (A,157,80)	RS1/16S472J
	R 254 (B,202,75)	RS1/16S0R0J	R 488 (A,165,73)	RS1/16S0R0J
	R 257 (B,213,69)	RS1/16S101J	R 494 (A,141,83)	RS1/16S911J
	R 258 (B,213,75)	RS1/16S101J	R 496 (A,148,83)	RS1/16S272J
	R 261 (A,189,53)	RS1/16S473J	R 497 (A,139,69)	RS1/16S182J
B	R 262 (A,189,59)	RS1/16S473J	R 498 (A,139,83)	RS1/16S152J
	R 263 (B,186,53)	RS1/16S332J	R 499 (B,133,72)	RS1/16S103J
	R 264 (B,186,60)	RS1/16S332J	R 500 (B,133,79)	RS1/16S104J
	R 265 (B,188,53)	RS1/16S332J	R 502 (B,144,80)	RS1/16S822J
	R 266 (B,188,60)	RS1/16S682J	R 518 (B,150,83)	RS1/16S0R0J
	R 267 (B,190,53)	RS1/16S332J	R 550 (A,147,84)	RS1/16S472J
C	R 268 (B,190,60)	RS1/16S393J	R 9002(A,129,89)	RS1/16S473J
	R 269 (B,197,53)	RS1/16S332J	R 9005(A,91,55)	RS1/16S0R0J
	R 270 (B,197,60)	RS1/16S122J	R 9006(B,103,89)	RS1/16S474J
	R 271 (B,199,53)	RS1/16S182J	R 9007(B,93,89)	RS1/16S474J
	R 272 (B,199,60)	RS1/16S272J	R 9008(A,86,90)	RS1/16S221J
	R 273 (B,202,53)	RS1/16S0R0J	R 9009(A,65,85)	RS1/16S473J
D	R 274 (B,202,60)	RS1/16S271J	R 9010(B,115,45)	RS1/16S512J
	R 277 (B,214,53)	RS1/16S101J	R 9011(A,63,76)	RS1/16S102J
	R 278 (B,213,61)	RS1/16S101J	R 9012(A,63,73)	RS1/16S0R0J
	R 280 (A,65,113)	RS1/16S0R0J	R 9013(B,112,45)	RS1/16S471J
	R 303 (B,156,37)	RS1/16S101J	R 9014(B,104,54)	RS1/16S471J
	R 304 (B,155,43)	RS1/16S101J	R 9015(B,101,54)	RS1/16S471J
E	R 305 (B,160,49)	RS1/16S101J	R 9016(B,99,54)	RS1/16S471J
	R 306 (B,164,61)	RS1/16S101J	R 9017(B,97,54)	RS1/16S471J
	R 307 (B,165,68)	RS1/16S101J	R 9018(B,95,54)	RS1/16S471J
	R 308 (B,171,72)	RS1/16S101J	R 9019(B,98,76)	RS1/16S471J
	R 311 (A,258,102) METAL OXIDE RESISTOR	RS1LMF101J	R 9020(B,99,76)	RS1/16S471J
	R 312 (A,266,102) METAL OXIDE RESISTOR	RS1LMF101J	R 9021(B,101,76)	RS1/16S471J
F	R 431 (A,131,93)	RS1/16S104J	R 9022(B,103,76)	RS1/16S471J
	R 432 (A,127,93)	RS1/16S104J	R 9025(B,101,68)	RS1/16S0R0J
	R 433 (A,128,93)	RS1/16S104J	R 9026(B,107,68)	RS1/16S0R0J
	R 434 (A,134,93)	RS1/16S104J	R 9030(A,68,79)	RS1/16S470J
	R 435 (A,126,93)	RS1/16S104J	R 9031(B,69,48)	RS1/16S104J
	R 436 (A,130,93)	RS1/16S104J	R 9032(A,66,59)	RS1/16S104J
G	R 438 (A,81,98)	RS1/16S104J	R 9033(B,89,48)	RS1/16S104J
	R 439 (A,86,96)	RS1/16S104J	R 9036(A,88,89)	RS1/16S221J
	R 440 (A,81,108)	RS1/16S754J	R 9037(A,124,99)	RS1/16S104J
	R 441 (A,79,98)	RS1/16S222J	R 9039(A,87,58)	RS1/16S104J
	R 442 (A,77,98)	RS1/16S104J	R 9041(B,117,45)	RS1/16S104J
	R 443 (A,63,104)	RS1/16S471J	R 9045(A,98,46)	RS1/16S471J
H	R 445 (A,73,108)	RS1/16S223J	R 9046(A,107,45)	RS1/16S471J
	R 446 (A,74,113)	RS1/16S104J	R 9047(A,99,46)	RS1/16S103J
	R 447 (A,88,94)	RS1/16S472J	R 9048(A,98,43)	RS1/16S103J
	R 448 (A,89,104)	RS1/16S104J	R 9060(B,98,68)	RS1/16S473J
	R 449 (A,80,108)	RS1/16S102J	R 9062(B,87,48)	RS1/16S471J
	R 457 (A,140,35)	RS1/16S182J	R 9064(A,54,74)	RS1/16S103J
I	R 458 (A,140,46)	RS1/16S182J	R 9065(A,56,74)	RS1/16S103J
	R 459 (B,133,38)	RS1/16S103J	R 9066(A,62,72)	RS1/16S103J
	R 460 (B,133,43)	RS1/16S103J	R 9067(A,57,83)	RS1/16S103J
	R 461 (B,145,39)	RS1/16S104J	R 9081(A,120,72)	RS1/16S221J
	R 462 (B,145,43)	RS1/16S104J	R 9082(A,122,69)	RS1/16S274J
	R 464 (A,78,102)	RS1/16S0R0J		
J	R 477 (A,149,52)	RS1/16S182J		
	R 478 (A,150,65)	RS1/16S182J	C 115 (B,262,98)	CKSRYB103K50
	R 479 (B,142,57)	RS1/16S103J	C 116 (B,267,97)	CKSRYB103K50
	R 480 (B,142,62)	RS1/16S103J	C 117 (A,287,109)	CCSRCH220J50
	R 481 (B,154,58)	RS1/16S104J	C 118 (B,285,109)	CCSRCH220J50
	R 482 (B,154,62)	RS1/16S104J	C 131 (A,280,87)	CEAT100M50

CAPACITORS

Mark No.	Description	Part No.	Mark No.	Description	Part No.
C 132 (A,280,80)	CEAT100M50	C 254 (A,58,108)	ELECT. CAPACITOR	CEAT101M25	
C 135 (A,280,114)	CEAT100M50	C 255 (A,51,108)	ELECT. CAPACITOR	CEANP470M25	
C 136 (A,280,106)	CEAT100M50	C 256 (A,81,105)		CKSRYB103K50	
C 137 (A,280,101)	CEAT100M50	C 257 (B,216,69)		CKSRYB472K50	
C 138 (A,280,93)	CEAT100M50	C 258 (B,217,75)		CKSRYB472K50	
					A
C 139 (A,53,95)	CEAT100M50	C 261 (A,183,54)		CEAT2R2M50	
C 140 (A,53,100)	CEAT100M50	C 262 (A,183,62)		CEAT2R2M50	
C 141 (A,256,82)	CKSRYB104K50	C 263 (A,192,53)		CCSRCH101J50	
C 145 (B,256,81)	CCSRCH101J50	C 264 (A,191,59)		CKSRYB223K50	
C 146 (B,258,81)	CCSRCH101J50	C 265 (A,194,53)		CCSRCH331J50	
					B
C 147 (B,253,81)	CKSRYB103K50	C 266 (A,194,59)		CKSRYB103K50	
C 148 (B,238,67)	CKSRYB223K50	C 267 (B,193,53)		CCSRCH331J50	
C 149 (B,235,67)	CKSRYB223K50	C 268 (B,193,60)		CKSRYB562K50	
C 150 (B,231,67)	CKSRYB683K16	C 269 (A,205,54)		CEAT100M50	
C 151 (B,49,51)	CKSRYB103K50	C 270 (A,205,60)		CEAT100M50	
					C
C 152 (B,230,62)	CKSRYB223K50	C 271 (A,203,51)		CKSRYB103K50	
C 153 (B,234,62)	CKSRYB223K50	C 272 (A,210,64)		CKSRYB103K50	
C 154 (B,232,62)	CKSRYB683K16	C 277 (B,216,53)		CKSRYB472K50	
C 155 (A,226,62)	CEAT101M16	C 278 (B,215,61)		CKSRYB472K50	
C 156 (A,229,56)	CEAT101M16	C 321 (A,153,38)		CEAT100M50	
					D
C 157 (A,236,56)	CEAT101M16	C 322 (A,153,45)		CEAT100M50	
C 158 (A,232,50)	CEAT101M16	C 325 (A,136,39)	ELECT. CAPACITOR	CEAT220M50	
C 159 (A,241,50)	CEAT101M16	C 326 (A,136,46)	ELECT. CAPACITOR	CEAT220M50	
C 160 (A,234,44)	CEAT101M16	C 327 (A,132,42)		CKSRYB103K50	
C 161 (A,241,44)	CEAT101M16	C 328 (A,132,38)		CKSRYB103K50	
					E
C 162 (A,248,44)	CEAT101M16	C 333 (A,255,93)		CEAT101M10	
C 165 (A,240,86)	CEAT1R0M50	C 334 (A,268,81)		CEAT101M10	
C 166 (A,248,86)	CEAT1R0M50	C 341 (A,161,56)		CEAT100M50	
C 179 (B,294,76)	CKSRYB103K50	C 342 (A,161,63)		CEAT100M50	
C 180 (A,277,16)	CKSRYB103K50	C 345 (A,145,56)	ELECT. CAPACITOR	CEAT220M50	
					F
C 199 (A,281,50)	CKSRYB103K50	C 346 (A,145,63)	ELECT. CAPACITOR	CEAT220M50	
C 201 (A,183,85)	CEAT2R2M50	C 347 (A,140,64)		CKSRYB103K50	
C 202 (A,184,92)	CEAT2R2M50	C 348 (A,141,58)		CKSRYB103K50	
C 203 (A,191,85)	CCSRCH471J50	C 361 (A,161,70)		CEAT100M50	
C 204 (A,191,90)	CCSRCH471J50	C 362 (A,169,70)	ELECT. CAPACITOR	CEATR22M50	
					G
C 205 (A,193,85)	CCSRCH331J50	C 364 (A,139,84)		CKSRYB472K50	
C 206 (A,194,90)	CCSRCH331J50	C 365 (A,136,73)	ELECT. CAPACITOR	CEAT220M50	
C 207 (B,193,85)	CCSRCH331J50	C 366 (A,136,80)	ELECT. CAPACITOR	CEANP4R7M50	
C 208 (B,193,91)	CCSRCH331J50	C 367 (A,135,88)		CKSRYB103K50	
C 213 (A,223,84)	CEAT100M50	C 368 (A,147,75)		CKSRYB103K50	
					H
C 214 (A,223,90)	CEAT100M50	C 370 (A,161,74)		CEAT1R0M50	
C 215 (B,233,84)	CKSRYB103K50	C 392 (B,91,95)		CKSRYB102K50	
C 216 (B,231,89)	CKSRYB103K50	C 1031(A,286,57)		CCSRCH220J50	
C 217 (A,202,85)	CKSRYB103K50	C 1041(B,287,55)		CCSRCH220J50	
C 218 (A,202,90)	CKSRYB103K50	C 5001(B,233,10)		CKSRYB102K50	
					I
C 219 (A,221,87)	CKSRYB104K16	C 5002(B,235,10)		CKSRYB103K50	
C 220 (A,210,93)	CKSRYB104K16	C 5003(B,237,10)		CKSRYB105K10	
C 241 (A,183,70)	CEAT2R2M50	C 5025(A,166,12)		CKSRYB102K50	
C 242 (A,183,77)	CEAT2R2M50	C 5026(A,169,13)		CKSRYB102K50	
C 243 (A,192,69)	CCSRCH101J50	C 5027(A,177,12)		CKSRYB102K50	
					J
C 244 (A,192,74)	CCSRCH101J50	C 5028(A,179,13)		CCSRCH220J50	
C 245 (A,194,69)	CCSRCH331J50	C 9004(A,121,94)		CKSRYB103K50	
C 246 (A,194,74)	CCSRCH331J50	C 9005(A,116,99)		CEQJ2R2M50	
C 247 (B,193,69)	CCSRCH331J50	C 9006(A,122,88)		CKSRYB105K10	
C 248 (B,193,75)	CCSRCH331J50	C 9007(A,79,92)	ELECT. CAPACITOR	CEAT331M6R3	
					K
C 249 (A,205,69)	CEAT100M50	C 9008(B,77,90)		CKSRYB103K50	
C 250 (A,205,75)	CEAT100M50	C 9011(B,95,89)		CKSRYB473K25	
C 251 (A,204,65)	CKSRYB103K50	C 9014(B,87,88)		CKSRYB473K25	
C 252 (A,211,78)	CKSRYB103K50	C 9015(A,100,95)		CKSRYB102K50	
C 253 (B,43,89)	CKSRYB103K50	C 9018(B,72,72)		CKSRYB104K50	

Mark No. **Description**

C 9081(A,120,69)

Part No.

CKSRYB103K50

Mark No. **Description**
CN101 (A,41,27) CONNECTOR
CN103 (A,230,17) 11P CONNECTOR
Part No.
CKS3382
52044-1145
A **MAIN ASSY (XWK3244)**
MISCELLANEOUS

IC 103 (A,198,72) OP-AMP IC
 IC 104 (A,198,56) OP-AMP IC
 IC 105 (A,198,87) OP-AMP IC
 IC 107 (A,216,88) OP-AMP IC
 IC 108 (B,255,64) 8CH E-VOL

HA17558AF
 HA17558AF
 HA17558AF
 HA17558AF
 R2S15205FP

CN107 (A,39,99) CONNECTOR POST
 CN109 (A,230,113) 19P SOCKET
 CN111 (A,276,113) 21P SOCKET
 CN112 (A,91,41) CONNECTOR
 CN114 (A,189,113) 21P SOCKET

B3B-PH
 XKP3054
 XKP3091
 CKS3382
 XKP3091

CN126 (A,302,98) 6P PIN JACK
 CN251 (A,39,83) 3P JUMPER CONNECTOR
 CN252 (A,37,69) 3P TOP POST

XKB3055
 52147-0310
 B3B-EH

IC 251 (A,85,102) OP-AMP IC
 IC 310 (A,142,40) OP-AMP IC
 IC 311 (A,152,59) OP-AMP IC
 IC 312 (A,142,77) OP-AMP IC
 IC 5001(A,69,19) RDS DECODER IC

HA17558AF
 BA4560RF
 BA4560RF
 BA4560RF
 LC72725M

RESISTORS

R 107 (B,283,87)
 R 108 (B,293,81)
 R 111 (B,283,115)
 R 112 (B,283,106)
 R 113 (B,283,101)

RS1/16S331J
 RS1/16S331J
 RS1/16S222J
 RS1/16S222J
 RS1/16S331J

IC 9001(B,82,64) CPU
 IC 9002(A,103,44) EEPROM
 Q 252 (A,68,105) TRANSISTOR
 Q 253 (A,75,108) TRANSISTOR
 Q 254 (A,72,98) DIGITAL TR(SC-70)

PEG217A
 BR24L16FV-W
 2SD1858X
 RT1N241M
 RT1P241M

R 114 (B,293,96)
 R 145 (A,71,73)
 R 146 (A,71,74)
 R 147 (B,233,67)
 R 148 (B,228,62)

RS1/16S331J
 RS1/16S102J
 RS1/16S102J
 RS1/16S472J
 RS1/16S472J

Q 255 (A,75,98) TRANSISTOR
 Q 256 (A,75,94) CHIP TRANSISTOR
 Q 257 (A,78,108) TRANSISTOR
 Q 361 (A,166,78) CHIP TRANSISTOR
 Q 9001(A,125,87) DIGITAL TR(SC-70)

RT1N241M
 2SD2704K
 2SA1576A
 2SD2704K
 RT1N431M

R 149 (A,259,45)
 R 156 (B,295,107)
 R 157 (B,293,114)
 R 180 (B,278,97)
 R 181 (B,272,78)

RS1/16S104J
 RS1/16S0R0J
 RS1/16S0R0J
 RS1/16S0R0J
 RS1/16S0R0J

Q 9002(A,66,80) DIGITAL TR(SC-70)
 Q 9003(A,65,75) DIGITAL TR(SC-70)
 Q 9007(A,69,85) TRANSISTOR
 Q 9064(A,59,80) DIGITAL TR(SC-70)
 Q 9065(A,55,78) TRANSISTOR

RT1P241M
 RT1P241M
 DTC143TK
 RT1P241M
 UMD2N

R 201 (A,189,85)
 R 202 (A,189,90)
 R 203 (B,187,85)
 R 204 (B,187,91)
 R 205 (B,189,85)

RS1/16S473J
 RS1/16S473J
 RS1/16S392J
 RS1/16S392J
 RS1/16S392J

D 103 (B,173,35) DIODE
 D 105 (B,163,37) DIODE
 D 107 (B,166,37) DIODE
 D 251 (A,83,96) DIODE
 D 253 (A,70,114) DIODE

DAN217U
 DAN217U
 DAN217U
 DAN217U
 UDZS27(B)

R 206 (B,189,91)
 R 207 (B,191,85)
 R 208 (B,191,91)
 R 209 (B,198,85)
 R 210 (B,198,91)

RS1/16S392J
 RS1/16S392J
 RS1/16S392J
 RS1/16S392J
 RS1/16S392J

D 254 (A,90,104) DIODE
 D 311 (B,259,93) DIODE
 D 312 (B,268,93) DIODE
 D 331 (B,260,87) DIODE
 D 332 (B,263,87) DIODE

UDZS5R1(B)
 1SS355
 1SS355
 UDZS6R8(B)
 UDZS6R8(B)

R 211 (B,200,85)
 R 212 (B,200,91)
 R 213 (B,202,85)
 R 214 (B,202,91)
 R 219 (B,216,84)

RS1/16S332J
 RS1/16S332J
 RS1/16S680J
 RS1/16S680J
 RS1/16S0R0J

D 9001(A,125,103) DIODE
 D 9002(A,119,103) DIODE
 D 9003(A,122,103) DIODE
 D 9006(B,99,89) DIODE
 D 9007(B,91,89) DIODE

DAP202U
 DAP202U
 DAN202U
 DAN217U
 DAN217U

R 220 (B,215,91)
 R 221 (B,220,84)
 R 222 (B,219,91)
 R 225 (B,225,84)
 R 226 (B,225,91)

RS1/16S0R0J
 RS1/16S472J
 RS1/16S472J
 RS1/16S392J
 RS1/16S392J

E 9010(A,128,88) DIODE
 D 9011(A,60,75) DIODE
 D 9064(A,58,75) DIODE
 D 9065(A,63,80) DIODE
 D 9068(A,53,81) DIODE

1SS355
 DAN202U
 DAP202U
 DAP202U
 1SS355

R 227 (B,231,84)
 R 228 (B,233,89)
 R 233 (A,231,91)
 R 234 (A,231,84)
 R 241 (A,190,69)

RS1/16S101J
 RS1/16S101J
 RS1/16S474J
 RS1/16S474J
 RS1/16S473J

L 101 (B,260,98) CHIP SOLID INDUCTOR
 L 102 (B,265,97) CHIP SOLID INDUCTOR
 L 5002(A,257,104) CHIP SOLID INDUCTOR
 L 9001(A,123,107) CHIP SOLID INDUCTOR
 L 9002(A,121,107) CHIP SOLID INDUCTOR

QTL1013
 QTL1013
 QTL1013
 ATL7002
 ATL7002

R 242 (A,190,74)
 R 243 (B,186,69)
 R 244 (B,186,75)
 R 245 (B,188,69)
 R 246 (B,188,75)

RS1/16S473J
 RS1/16S332J
 RS1/16S332J
 RS1/16S332J
 RS1/16S332J

F L 9003(A,106,98) RADIAL INDUCTOR
 X 5001(A,67,27) CRYSTAL RESONATOR
 (4.332 MHz)
 X 9001(A,96,53) CERAMIC RESONATOR
 (15.7 MHz)

LFCA2R2J
 ASS7004
 XSS3004

R 247 (B,190,69)
 R 248 (B,190,75)
 R 249 (B,197,69)

RS1/16S332J
 RS1/16S332J
 RS1/16S332J

Mark No.	Description	Part No.	Mark No.	Description	Part No.
R 250 (B,197,75)		RS1/16S332J	R 473 (A,151,53)		RS1/16S102J
R 251 (B,199,69)		RS1/16S182J	R 474 (A,152,65)		RS1/16S102J
R 252 (B,199,75)		RS1/16S182J	R 475 (A,157,52)		RS1/16S272J
R 253 (B,202,69)		RS1/16S0R0J	R 476 (A,158,66)		RS1/16S272J
R 254 (B,202,75)		RS1/16S0R0J	R 477 (A,149,52)		RS1/16S153J
R 257 (B,213,69)		RS1/16S101J	R 478 (A,150,65)		RS1/16S153J
R 258 (B,213,75)		RS1/16S101J	R 479 (B,142,57)		RS1/16S103J
R 261 (A,189,53)		RS1/16S473J	R 480 (B,142,62)		RS1/16S103J
R 262 (A,189,59)		RS1/16S473J	R 481 (B,154,58)		RS1/16S104J
R 263 (B,186,53)		RS1/16S332J	R 482 (B,154,62)		RS1/16S104J
R 264 (B,186,60)		RS1/16S332J	R 483 (B,144,76)		RS1/16S104J
R 265 (B,188,53)		RS1/16S332J	R 484 (A,165,71)		RS1/16S104J
R 266 (B,188,60)		RS1/16S682J	R 485 (A,157,80)		RS1/16S472J
R 267 (B,190,53)		RS1/16S332J	R 488 (A,165,73)		RS1/16S0R0J
R 268 (B,190,60)		RS1/16S393J	R 493 (A,141,71)		RS1/16S102J
R 269 (B,197,53)		RS1/16S332J	R 494 (A,141,83)		RS1/16S911J
R 270 (B,197,60)		RS1/16S122J	R 495 (A,147,71)		RS1/16S272J
R 271 (B,199,53)		RS1/16S182J	R 496 (A,148,83)		RS1/16S272J
R 272 (B,199,60)		RS1/16S272J	R 497 (A,139,69)		RS1/16S153J
R 273 (B,202,53)		RS1/16S0R0J	R 498 (A,139,83)		RS1/16S153J
R 274 (B,202,60)		RS1/16S271J	R 499 (B,133,72)		RS1/16S103J
R 277 (B,214,53)		RS1/16S101J	R 500 (B,133,79)		RS1/16S104J
R 278 (B,213,61)		RS1/16S101J	R 502 (B,144,80)		RS1/16S204J
R 280 (A,65,113)		RS1/16S0R0J	R 518 (B,150,83)		RS1/16S0R0J
R 303 (B,156,37)		RS1/16S101J	R 5005(B,80,13)		RS1/16S0R0J
R 304 (B,155,43)		RS1/16S101J	R 5010(A,76,24)		RS1/16S473J
R 305 (B,160,49)		RS1/16S101J	R 5011(A,81,15)		RS1/16S473J
R 306 (B,164,61)		RS1/16S101J	R 5012(A,82,12)		RS1/16S102J
R 307 (B,165,68)		RS1/16S101J	R 5013(A,57,26)		RS1/16S102J
R 308 (B,171,72)		RS1/16S101J	R 5016(B,82,13)		RS1/16S0R0J
R 311 (A,258,102) METAL OXIDE RESISTOR	RS1LMF101J		R 5020(A,73,13)		RS1/16S0R0J
R 312 (A,266,102) METAL OXIDE RESISTOR	RS1LMF101J		R 9002(A,129,89)		RS1/16S473J
R 431 (A,131,93)		RS1/16S104J	R 9005(A,91,55)		RS1/16S0R0J
R 432 (A,127,93)		RS1/16S104J	R 9006(B,103,89)		RS1/16S474J
R 433 (A,128,93)		RS1/16S104J	R 9007(B,93,89)		RS1/16S474J
R 434 (A,134,93)		RS1/16S104J	R 9008(A,86,90)		RS1/16S221J
R 435 (A,126,93)		RS1/16S104J	R 9009(A,65,85)		RS1/16S473J
R 436 (A,130,93)		RS1/16S104J	R 9010(B,115,45)		RS1/16S512J
R 438 (A,81,98)		RS1/16S104J	R 9011(A,63,76)		RS1/16S102J
R 439 (A,86,96)		RS1/16S104J	R 9012(A,63,73)		RS1/16S0R0J
R 440 (A,81,108)		RS1/16S754J	R 9013(B,112,45)		RS1/16S471J
R 441 (A,79,98)		RS1/16S222J	R 9014(B,104,54)		RS1/16S471J
R 442 (A,77,98)		RS1/16S104J	R 9015(B,101,54)		RS1/16S471J
R 443 (A,63,104)		RS1/16S471J	R 9016(B,99,54)		RS1/16S471J
R 445 (A,73,108)		RS1/16S223J	R 9017(B,97,54)		RS1/16S471J
R 446 (A,74,233)		RS1/16S104J	R 9018(B,95,54)		RS1/16S471J
R 447 (A,88,94)		RS1/16S472J	R 9019(B,98,76)		RS1/16S471J
R 448 (A,89,104)		RS1/16S104J	R 9020(B,99,76)		RS1/16S471J
R 449 (A,80,108)		RS1/16S102J	R 9021(B,101,76)		RS1/16S471J
R 453 (A,146,35)		RS1/16S102J	R 9022(B,103,76)		RS1/16S471J
R 454 (A,142,46)		RS1/16S102J	R 9024(B,105,68)		RS1/16S472J
R 455 (A,146,38)		RS1/16S272J	R 9025(B,101,68)		RS1/16S0R0J
R 456 (A,147,43)		RS1/16S272J	R 9026(B,107,68)		RS1/16S751J
R 457 (A,140,35)		RS1/16S153J	R 9030(A,68,79)		RS1/16S470J
R 458 (A,140,46)		RS1/16S153J	R 9031(B,69,48)		RS1/16S104J
R 459 (B,133,38)		RS1/16S103J	R 9032(A,66,59)		RS1/16S104J
R 460 (B,133,43)		RS1/16S103J	R 9033(B,89,48)		RS1/16S104J
R 461 (B,145,39)		RS1/16S104J	R 9036(A,88,89)		RS1/16S221J
R 462 (B,145,43)		RS1/16S104J	R 9037(A,124,99)		RS1/16S104J
R 464 (A,78,102)		RS1/16S0R0J	R 9039(A,87,58)		RS1/16S104J

Mark No.	Description	Part No.	Mark No.	Description	Part No.
R 9041(B,117,45)		RS1/16S104J	C 214 (A,223,90)		CEAT100M50
R 9045(A,98,46)		RS1/16S471J	C 215 (B,233,84)		CKSRYB103K50
A R 9046(A,107,45)		RS1/16S471J	C 216 (B,231,89)		CKSRYB103K50
R 9047(A,99,46)		RS1/16S103J	C 217 (A,202,85)		CKSRYB103K50
R 9048(A,98,43)		RS1/16S103J	C 218 (A,202,90)		CKSRYB103K50
R 9060(B,98,68)		RS1/16S473J	C 219 (A,221,87)		CKSRYB104K16
R 9062(B,87,48)		RS1/16S471J	C 220 (A,210,93)		CKSRYB104K16
R 9064(A,54,74)		RS1/16S103J	C 241 (A,183,70)		CEAT2R2M50
R 9065(A,56,74)		RS1/16S103J	C 242 (A,183,77)		CEAT2R2M50
R 9066(A,62,72)		RS1/16S103J	C 243 (A,192,69)		CCSRCH101J50
R 9067(A,57,83)		RS1/16S103J	C 244 (A,192,74)		CCSRCH101J50
R 9081(A,120,72)		RS1/16S221J	C 245 (A,194,69)		CCSRCH331J50
B R 9082(A,122,69)		RS1/16S274J	C 246 (A,194,74)		CCSRCH331J50
CAPACITORS					
C 115 (B,262,98)		CKSRYB103K50	C 247 (B,193,69)		CCSRCH331J50
C 116 (B,267,97)		CKSRYB103K50	C 248 (B,193,75)		CCSRCH331J50
C 117 (A,287,109)		CCSRCH220J50	C 249 (A,205,69)		CEAT100M50
C 118 (B,285,109)		CCSRCH220J50	C 250 (A,205,75)		CEAT100M50
C 131 (A,280,87)		CEAT100M50	C 251 (A,204,65)		CKSRYB103K50
C 132 (A,280,80)		CEAT100M50	C 252 (A,211,78)		CKSRYB103K50
C 135 (A,280,114)		CEAT100M50	C 253 (B,43,89)		CKSRYB103K50
C 136 (A,280,106)		CEAT100M50	C 254 (A,58,108) ELECT. CAPACITOR		CEAT101M25
C 137 (A,280,101)		CEAT100M50	C 255 (A,51,108) ELECT. CAPACITOR		CEANP470M25
C 138 (A,280,93)		CEAT100M50	C 256 (A,81,105)		CKSRYB103K50
C 139 (A,53,95)		CEAT100M50	C 257 (B,216,69)		CKSRYB472K50
C 140 (A,53,100)		CEAT100M50	C 258 (B,217,75)		CKSRYB472K50
C 141 (A,256,82)		CKSRYB104K50	C 261 (A,183,54)		CEAT2R2M50
C 145 (B,256,81)		CCSRCH101J50	C 262 (A,183,62)		CEAT2R2M50
C 146 (B,258,81)		CCSRCH101J50	C 263 (A,192,53)		CCSRCH101J50
C 147 (B,253,81)		CKSRYB103K50	C 264 (A,191,59)		CKSRYB223K50
C 148 (B,238,67)		CKSRYB223K50	C 265 (A,194,53)		CCSRCH331J50
C 149 (B,235,67)		CKSRYB223K50	C 266 (A,194,59)		CKSRYB103K50
C 150 (B,231,67)		CKSRYB683K16	C 267 (B,193,53)		CCSRCH331J50
C 151 (B,49,51)		CKSRYB103K50	C 268 (B,193,60)		CKSRYB562K50
D C 152 (B,230,62)		CKSRYB223K50	C 269 (A,205,54)		CEAT100M50
C 153 (B,234,62)		CKSRYB223K50	C 270 (A,205,60)		CEAT100M50
C 154 (B,232,62)		CKSRYB683K16	C 271 (A,203,51)		CKSRYB103K50
C 155 (A,226,62)		CEAT101M16	C 272 (A,210,64)		CKSRYB103K50
C 156 (A,229,56)		CEAT101M16	C 277 (B,216,53)		CKSRYB472K50
C 157 (A,236,56)		CEAT101M16	C 278 (B,215,61)		CKSRYB472K50
C 158 (A,232,50)		CEAT101M16	C 321 (A,153,38)		CEAT100M50
C 159 (A,241,50)		CEAT101M16	C 322 (A,153,45)		CEAT100M50
C 160 (A,234,44)		CEAT101M16	C 323 (A,145,35)		CCSRCH101J50
C 161 (A,241,44)		CEAT101M16	C 324 (A,140,47)		CCSRCH101J50
E C 162 (A,248,44)		CEAT101M16	C 325 (A,136,39) ELECT. CAPACITOR		CEAT220M50
C 165 (A,240,86)		CEAT1R0M50	C 326 (A,136,46) ELECT. CAPACITOR		CEAT220M50
C 166 (A,248,86)		CEAT1R0M50	C 327 (A,132,42)		CKSRYB103K50
C 179 (B,294,76)		CKSRYB103K50	C 328 (A,132,38)		CKSRYB103K50
C 180 (A,277,16)		CKSRYB103K50	C 333 (A,255,93)		CEAT101M10
C 199 (A,281,50)		CKSRYB103K50	C 334 (A,268,81)		CEAT101M10
C 201 (A,183,85)		CEAT2R2M50	C 341 (A,161,56)		CEAT100M50
C 202 (A,184,92)		CEAT2R2M50	C 342 (A,161,63)		CEAT100M50
C 203 (A,191,85)		CCSRCH471J50	C 343 (A,149,51)		CCSRCH101J50
C 204 (A,191,90)		CCSRCH471J50	C 344 (A,150,66)		CCSRCH101J50
F C 205 (A,193,85)		CCSRCH331J50	C 345 (A,145,56) ELECT. CAPACITOR		CEAT220M50
C 206 (A,194,90)		CCSRCH331J50	C 346 (A,145,63) ELECT. CAPACITOR		CEAT220M50
C 207 (B,193,85)		CCSRCH331J50	C 347 (A,140,64)		CKSRYB103K50
C 208 (B,193,91)		CCSRCH331J50	C 348 (A,141,58)		CKSRYB103K50
C 213 (A,223,84)		CEAT100M50	C 361 (A,161,70)		CEAT100M50
			C 362 (A,169,70)		CEAT100M50
			C 363 (A,139,68)		CCSRCH101J50

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
C 364 (A,139,84)		CKSRYB472K50	L 801 (A,47,38)	CHIP SOLID INDUCTOR	QTL1013
C 365 (A,136,73)	ELECT. CAPACITOR	CEAT220M50	L 802 (A,50,42)	CHIP SOLID INDUCTOR	ATL7002
C 366 (A,136,80)	ELECT. CAPACITOR	CEANP4R7M50	L 803 (A,58,52)	CHIP SOLID INDUCTOR	ATL7002
C 367 (A,135,88)		CKSRYB103K50	L 804 (B,35,48)	CHIP SOLID INDUCTOR	QTL1013
C 368 (A,147,75)		CKSRYB103K50	L 871 (B,68,56)	CHIP SOLID INDUCTOR	A
C 370 (A,161,74)		CEAT4R7M50	L 901 (B,105,32)	CHIP SOLID INDUCTOR	QTL1013
C 392 (B,91,95)		CKSRYB102K50	L 902 (B,100,33)	CHIP SOLID INDUCTOR	ATL7002
C 1031(A,286,57)		CCSRCH220J50	L 952 (B,25,56)	CHIP SOLID INDUCTOR	ATL7002
C 1041(B,287,55)		CCSRCH220J50	JA501 (A,140,35)	JACK	QTL1013
C 5001(B,233,10)		CKSRYB102K50	X 601 (A,106,39)	CRYSTAL RESONATOR (12.288MHz)	AKB7131
C 5002(B,235,10)		CKSRYB103K50	X 801 (A,36,36)	CRYSTAL RESONATOR (20 MHz)	ASS7046
C 5003(B,237,10)		CKSRYB105K10	CN601 (A,100,63)	10P CONNECTOR	VSS1171
C 5011(A,77,16)		CEQJ100M50	CN701 (A,81,28)	19P SOCKET	B
C 5013(A,54,17)		CCSRCH270J50	CN902 (A,114,28)	13P SOCKET	XKP3080
C 5014(A,54,18)		CCSRCH270J50	CN952 (A,43,28)	15P SOCKET	XKP3077
C 5015(A,59,20)		CEQJ470M16			XKP3078
C 5016(A,54,15)		CKSRYB103K50			
C 5017(A,73,14)		CCSRCH561J50	R 501 (B,129,29)		RS1/16S750J
C 5020(A,69,13)		CKSRYB472K50	R 502 (B,127,42)		RS1/16S750J
C 5025(A,166,12)		CKSRYB102K50	R 503 (B,123,42)		RS1/16S473J
C 5026(A,169,13)		CKSRYB102K50	R 504 (A,117,62)		RS1/16S473J
C 5027(A,177,12)		CKSRYB102K50	R 505 (A,115,62)		RS1/16S0R0J
C 5028(A,179,13)		CCSRCH220J50	R 506 (B,123,38)		C
C 9004(A,121,94)		CKSRYB103K50	R 507 (A,118,62)		RS1/16S222J
C 9005(A,116,99)		CEQJ2R2M50	R 508 (B,121,42)		RS1/16S222J
C 9006(A,122,88)		CKSRYB105K10	R 509 (B,117,62)		RS1/16S101J
C 9007(A,79,92)	ELECT. CAPACITOR	CEAT331M6R3	R 512 (B,121,62)		RS1/16S101J
C 9008(B,77,90)		CKSRYB103K50	R 513 (B,123,62)		RS1/16S101J
C 9011(B,95,89)		CKSRYB473K25	R 551 (B,63,60)		RS1/16S104J
C 9014(B,87,88)		CKSRYB473K25	R 552 (B,65,60)		RS1/16S104J
C 9015(A,100,95)		CKSRYB102K50	R 553 (B,67,60)		RS1/16S104J
C 9018(B,72,72)		CKSRYB104K50	R 554 (B,69,60)		RS1/16S104J
C 9081(A,120,69)		CKSRYB103K50	R 555 (B,71,60)		D
			R 556 (B,75,60)		RS1/16S104J
			R 557 (B,77,60)		RS1/16S104J
			R 558 (B,79,60)		RS1/16S104J
			R 559 (B,81,62)		RS1/16S104J
B	DSP ASSY		R 560 (B,83,62)		
	MISCELLANEOUS		R 561 (B,85,62)		
IC 501 (B,118,52)	IC	TC74HCU04AF	R 572 (A,90,54)		
IC 601 (A,107,50)	DA I/F TRANSCEIVER	AK4114VQ	R 573 (B,90,54)		
IC 701 (A,75,43)	CODEC IC	AK4628AVQ	R 574 (B,76,56)		
IC 801 (A,42,53)	DSP IC	DSPC56371AF180	R 575 (B,74,56)		
IC 802 (A,44,38)	IC	TC7WU04FU	R 577 (B,93,61)		
IC 871 (B,63,53)	IC	TC7WH125FU	R 579 (A,96,58)		
△ IC 901 (B,120,30)	IC	NJM2391DL1-33	R 601 (A,110,57)		
△ IC 902 (B,94,36)	REGULATOR IC	LM1117DT-ADJ	R 602 (A,109,57)		
IC 952 (B,19,48)	OCTAL BUS BUFFER IC	TC74VHCT244AFTS1	R 603 (A,107,57)		E
D 701 (A,79,33)	DIODE	DAP202K	R 604 (B,111,63)		
D 702 (B,80,32)	DIODE	DAN202K	R 605 (B,109,63)		
D 901 (B,116,38)	DIODE	UDZS5R6(B)	R 606 (B,107,63)		
D 902 (B,102,33)	DIODE	UDZS5R6(B)	R 607 (A,106,57)		
L 501 (B,127,29)	CHIP SOLID INDUCTOR	QTL1013	R 609 (A,99,57)		
L 502 (B,130,40)	CHIP SOLID INDUCTOR	QTL1013	R 610 (B,101,62)		
L 503 (A,122,62)	CHIP SOLID INDUCTOR	QTL1013	R 612 (A,96,47)		
L 601 (B,103,62)	CHIP SOLID INDUCTOR	QTL1013	R 613 (A,99,52)		
L 602 (A,98,49)	CHIP SOLID INDUCTOR	QTL1013	R 614 (A,97,58)		
L 605 (A,117,43)	CHIP SOLID INDUCTOR	QTL1013	R 615 (A,99,47)		
L 701 (B,66,43)	CHIP SOLID INDUCTOR	QTL1013			
L 702 (A,94,38)	CHIP SOLID INDUCTOR	QTL1013			

Mark No.	Description	Part No.	Mark No.	Description	Part No.
A	R 616 (A,99,46)	RS1/16S101J	R 873 (B,60,56)		RS1/16S470J
	R 617 (A,99,44)	RS1/16S101J	R 874 (B,58,56)		RS1/16S470J
	R 618 (A,99,43)	RS1/16S101J	R 904 (B,113,31)		RS1/16S104J
	R 620 (A,99,41)	RS1/16S470J	R 905 (B,111,33)		RS1/16S104J
	R 622 (A,111,42)	RS1/16S0R0J	R 906 (B,107,31)		RS1/16S104J
	R 623 (A,114,42)	RS1/16S0R0J	R 908 (A,121,27)		RS1/16S0R0J
B	R 624 (A,114,43)	RS1/16S101J	R 913 (A,85,30)		RS1/16S0R0J
	R 625 (A,114,44)	RS1/16S101J	R 915 (B,89,37)		RS1/16S102J
	R 626 (A,114,46)	RS1/16S101J	R 951 (A,26,49)		RS1/16S101J
	R 627 (A,113,40)	RS1/16S103J	R 952 (A,25,49)		RS1/16S101J
	R 628 (A,115,51)	RS1/16S1802F	R 953 (A,22,49)		RS1/16S101J
	R 629 (A,115,53)	RS1/16S0R0J	R 954 (B,22,39)		RS1/16S331J
C	R 630 (A,115,57)	RS1/16S0R0J	R 955 (B,20,39)		RS1/16S331J
	R 701 (B,76,49)	RS1/16S470J	R 956 (B,18,39)		RS1/16S331J
	R 702 (B,72,49)	RS1/16S101J	R 957 (B,16,39)		RS1/16S331J
	R 703 (B,62,40)	RS1/16S0R0J	R 958 (A,17,44)		RS1/16S331J
	R 704 (B,68,41)	RS1/16S4R7J	R 959 (A,18,44)		RS1/16S331J
	R 705 (A,58,32)	RS1/16S101J	R 960 (A,19,45)		RS1/16S331J
D	R 706 (A,61,32)	RS1/16S101J	R 961 (A,21,45)		RS1/16S331J
	R 707 (A,63,32)	RS1/16S101J	R 962 (A,20,31) RESISTOR ARRAY		RAB4C104J
	R 708 (A,66,32)	RS1/16S101J	R 967 (A,29,32)		RS1/16S104J
	R 709 (A,68,32)	RS1/16S101J	R 968 (A,31,32)		RS1/16S104J
	R 710 (A,71,32)	RS1/16S101J	R 969 (A,33,32)		RS1/16S104J
	R 711 (A,73,32)	RS1/16S101J	R 970 (A,37,32) RESISTOR ARRAY		RAB4C104J
E	R 712 (A,76,32)	RS1/16S101J	R 974 (A,42,32)		RS1/16S0R0J
	R 713 (A,84,44)	RS1/16S470J	R 975 (A,15,52)		RS1/16S101J
	R 714 (A,84,49)	RS1/16S101J	R 976 (A,16,52)		RS1/16S101J
	R 715 (A,85,50)	RS1/16S101J	R 983 (B,15,32)		RS1/16S0R0J
	R 716 (A,82,51)	RS1/16S101J			
	R 801 (A,54,63)	RS1/16S470J	CAPACITORS		
F	R 802 (A,45,64)	RAB4C101J	C 503 (B,125,29)		CKSRYB103K50
	R 803 (B,50,62)	RS1/16S103J	C 504 (B,125,42)		CKSRYB103K50
	R 804 (B,48,62)	RS1/16S103J	C 505 (B,125,38)		CCSRCH470J50
	R 805 (B,46,62)	RS1/16S103J	C 506 (A,121,62)		CCSRCH470J50
	R 806 (B,44,62)	RS1/16S103J	C 511 (B,125,52)		CCSRCH471J50
	R 807 (B,42,56)	RS1/16S473J			
G	R 808 (B,35,56)	RS1/16S472J	C 512 (B,127,52)		CKSRYB105K6R3
	R 809 (B,40,56)	RS1/16S472J	C 513 (A,121,56)		CEVV101M16
	R 810 (A,31,52)	RS1/16S473J	C 605 (A,99,55)		CCSRCH471J50
	R 811 (B,30,51)	RS1/16S472J	C 606 (A,100,55)		CKSRYB104K16
	R 812 (B,32,51)	RS1/16S101J	C 607 (A,94,53)		CEVV470M6R3
	R 813 (A,27,49)	RS1/16S103J			
H	R 814 (A,38,40)	RS1/16S105J	C 608 (A,99,49)		CCSRCH471J50
	R 815 (A,35,40)	RS1/16S471J	C 609 (A,100,49)		CKSRYB104K16
	R 816 (A,35,40)	RS1/16S471J	C 612 (A,103,42)		CCSRCH120J50
	R 817 (A,44,42)	RS1/16S101J	C 613 (A,107,42)		CCSRCH120J50
	R 818 (B,38,49)	RS1/16S101J	C 614 (B,111,41)		CKSRYB104K16
	R 819 (B,35,43)	RS1/16S0R0J			
I	R 820 (B,42,44)	RS1/16S103J	C 617 (B,117,42)		CKSRYB102K50
	R 821 (B,43,50)	RS1/16S473J	C 618 (A,121,45)		CEVV470M6R3
	R 822 (B,51,51)	RS1/16S470J	C 619 (A,116,48)		CKSRYB104K16
	R 823 (A,53,54)	RS1/16S470J	C 620 (A,114,48)		CCSRCH471J50
	R 824 (A,57,57)	RS1/16S470J	C 621 (A,114,51)		CKSRYB474K10
	R 825 (A,57,58)	RS1/16S470J			
J	R 826 (A,57,60)	RS1/16S470J	C 701 (A,65,47)		CKSRYB103K50
	R 827 (A,57,61)	RS1/16S470J	C 702 (A,66,47)		CCSRCH471J50
	R 828 (A,23,49)	RS1/16S101J	C 703 (A,62,38)		CEVV101M16
	R 829 (A,63,46)	RS1/16S473J	C 704 (A,65,44)		CKSRYB104K16
	R 830 (B,53,45)	RS1/16S222J	C 705 (A,66,44)		CCSRCH101J50
	R 831 (B,58,48)	RS1/16S470J			
K	R 832 (B,60,48)	RS1/16S470J	C 706 (B,64,40)		CKSRYB104K16
			C 707 (B,58,33)		CCSRCH471J50
L			C 708 (B,61,33)		CCSRCH471J50
			C 709 (B,63,33)		CCSRCH471J50
M			C 710 (B,66,33)		CCSRCH471J50

Mark No.	Description	Part No.	Mark No.	Description	Part No.
C 711 (B,68,33)		CCSRCH471J50	△ IC 602 (A,199,14)	POWER PACK 2CH	STK412-230C
C 712 (B,71,33)		CCSRCH471J50	△ IC 610 (A,59,28)	PROTECTOR(1A)	AEK7009
C 713 (B,73,33)		CCSRCH471J50	△ IC 803 (A,238,87)	IC	TA7805S
C 714 (B,76,33)		CCSRCH471J50	△ IC 804 (A,282,111)	REGULATOR IC	A TA7809S
C 715 (A,88,42)		CEVV101M16	△ IC 805 (B,271,135)	IC	BA178M05FP
C 716 (A,84,41)		CKSRYB104K16	Q 501 (B,85,42)	CHIP TRANSISTOR	2SD2704K
C 717 (A,83,41)		CCSRCH471J50	Q 505 (A,111,47)	TRANSISTOR	2SC2240
C 718 (A,85,33)		CEVV470M6R3	Q 601 (B,93,47)	CHIP TRANSISTOR	2SD2704K
C 720 (A,83,38)		CKSRYB104K16	Q 602 (B,227,45)	CHIP TRANSISTOR	2SD2704K
C 801 (A,49,63)		CCSRCH471J50	Q 605 (A,118,40)	TRANSISTOR	2SC2240
C 802 (A,49,64)		CKSRYB104K16	Q 606 (A,252,40)	TRANSISTOR	2SC2240
C 803 (A,42,63)		CCSRCH471J50	Q 631 (B,153,42)	CHIP TRANSISTOR	2SD2704K
C 804 (A,42,64)		CKSRYB104K16	Q 633 (A,178,47)	TRANSISTOR	2SC2240
C 805 (A,37,63)		CCSRCH471J50	Q 651 (B,161,45)	CHIP TRANSISTOR	B 2SD2704K
C 806 (A,37,64)		CKSRYB104K16	Q 652 (B,219,42)	CHIP TRANSISTOR	2SD2704K
C 807 (A,32,58)		CCSRCH471J50	Q 655 (A,186,40)	TRANSISTOR	2SC2240
C 808 (A,31,58)		CKSRYB104K16	Q 656 (A,244,47)	TRANSISTOR	2SC2240
C 809 (A,32,55)		CCSRCH471J50	Q 696 (B,284,22)	TRANSISTOR	2SC4081
C 810 (A,31,55)		CKSRYB104K16	Q 697 (B,282,26)	TRANSISTOR	RT1N241M
C 814 (A,32,47)		CCSRCH471J50	Q 698 (B,246,67)	TRANSISTOR	2SC5511
C 815 (A,31,47)		CKSRYB104K16	△ Q 701 (A,110,75)	TRANSISTOR	2SA2005
C 816 (A,32,40)		CCSRCH8R0D50	△ Q 702 (A,96,86)	TRANSISTOR	2SA1145
C 817 (A,41,40)		CCSRCH8R0D50	Q 703 (A,155,76)	TRANSISTOR	2SC2240
C 818 (A,46,34)		CCSRCH471J50	Q 704 (A,166,79)	TRANSISTOR	RN4903
C 819 (A,46,33)		CKSRYB104K16	Q 705 (B,245,74)	CHIP TRANSISTOR	RN4903
C 820 (A,46,31)		CKSRYB103K50	Q 707 (B,241,74)	CHIP TRANSISTOR	RT1P241M
C 821 (A,35,43)		CCSRCH471J50	Q 801 (B,277,141)	DIGITAL TR(SC-70)	RT1P241M
C 822 (A,35,42)		CKSRYB104K16	Q 802 (B,274,145)	TRANSISTOR	RT1N241M
C 823 (A,37,43)		CCSRCH471J50	Q 803 (B,265,140)	DIGITAL TR(SC-70)	RT1P241M
C 824 (A,37,42)		CKSRYB104K16	Q 804 (B,268,145)	TRANSISTOR	RT1N241M
C 825 (B,38,52)		CKSRYB103K50	Q 805 (B,277,146)	DIGITAL TR(SC-70)	RT1P241M
C 826 (A,44,44)		CCSRCH471J50	Q 806 (B,271,145)	TRANSISTOR	RT1N241M
C 827 (A,41,44)		CKSRYB104K16	Q 807 (B,276,53)	CHIP TR(2*PNP)	RN2903
C 828 (A,53,48)		CCSRCH471J50	Q 808 (B,283,56)	CHIP TRANSISTOR	RN1903
C 829 (A,54,48)		CKSRYB104K16	Q 809 (A,266,101)	TRANSISTOR	2SD1858X
C 830 (A,53,52)		CCSRCH471J50	D 601 (A,125,57)	DIODE	D 1SS133
C 831 (A,54,52)		CKSRYB104K16	D 602 (A,267,17)	ZENER DIODE	MTZJ15A
C 832 (A,53,57)		CCSRCH471J50	D 603 (A,119,57)	DIODE	1SS133
C 833 (A,54,57)		CKSRYB104K16	D 604 (A,261,21)	ZENER DIODE	MTZJ15A
C 834 (A,52,28)		CEVV101M16	D 606 (A,259,57)	DIODE	1SS133
C 835 (A,63,52)		CEVV101M16	D 608 (A,253,52)	DIODE	1SS133
C 871 (B,66,52)		CCSRCH471J50	D 631 (A,192,61)	DIODE	1SS133
C 872 (B,68,52)		CKSRYB104K16	D 632 (A,176,52)	DIODE	1SS133
C 907 (B,114,38)		CKSRYB104K16	D 647 (A,200,17)	ZENER DIODE	MTZJ15A
C 908 (A,121,37)		CEVV101M16	D 648 (A,196,21)	ZENER DIODE	MTZJ15A
C 909 (A,96,34)		CEVV101M16	D 651 (A,192,57)	DIODE	E 1SS133
C 916 (B,67,47)		CCSRCH471J50	D 652 (A,262,57)	DIODE	1SS133
C 917 (B,69,47)		CKSRYB103K50	D 653 (A,186,52)	DIODE	1SS133
C 918 (B,79,49)		CKSRYB104K16	D 654 (A,242,52)	DIODE	1SS133
C 919 (B,80,49)		CCSRCH471J50	D 681 (A,132,17)	ZENER DIODE	MTZJ15A
C 954 (B,26,52)		CCSRCH471J50	D 682 (A,129,22)	ZENER DIODE	MTZJ15A
C 955 (B,28,52)		CKSRYB104K16	△ D 701 (A,9,88)	DIODE	D5SBA20(B)
C 956 (A,24,54)		CEVV100M16	△ D 702 (A,9,126)	DIODE	D5SBA20(B)
			D 703 (B,252,76)	DIODE	1SS355
			D 711 (A,196,103)	ZENER DIODE	MTZJ22D
			D 712 (A,192,103)	DIODE	MTZJ6R8(B)
			D 713 (A,120,78)	DIODE	1SS133
			D 752 (B,170,135)	DIODE	1SS355
			D 754 (B,141,132)	DIODE	1SS355
			D 758 (B,73,136)	DIODE	1SS355

C POWER PACK ASSY (XWZ4080)
MISCELLANEOUS

- △ IC 600 (A,132,14) POWER PACK 2CH
△ IC 601 (A,265,14) POWER PACK 2CH

STK412-230C
STK412-230C

Mark No. **Description****Part No.**

D 777 (A,127,57) DIODE
 D 778 (A,108,57) DIODE
 ⚠ D 801 (B,221,113) BRIDGE DIODE

1SS133
 1SS133
 S1WB(A)60SD

Mark No. **Description****Part No.**

R 635 (A,153,29)
 R 636 (A,149,25)
 R 637 (A,172,21)
 R 638 (A,174,36)
 ⚠ R 639 (A,173,31) RESISTOR (0.22, 5W)

RD1/4PU273J
 RD1/4PU821J
 RD1/4PU273J
 RD1/4PU331J
 ACN7094

A D 805 (A,276,131) DIODE
 D 806 (A,287,62) DIODE
 D 807 (A,284,67) DIODE
 D 827 (A,262,133) DIODE
 D 828 (A,239,98) DIODE

1SS133
 MTZJ6R2(B)
 1SS133
 MTZJ6R2(B)
 MTZJ6R2(B)

R 640 (A,179,57)
 R 641 (A,174,52)
 R 642 (A,169,39)
 R 647 (A,202,27)
 R 648 (A,199,27)

RD1/4PU182J
 RD1/4PU821J
 RD1/4PU223J
 RD1/4PU562J
 RD1/4PU562J

⚠ D 829 (A,239,128) DIODE
 L 501 (A,97,118) COIL
 L 751 (A,160,108) COIL
 L 752 (A,173,108) COIL
 L 753 (A,120,107) COIL

D3SBA20(B)
 ATH1004
 ATH1004
 ATH1004
 ATH1004

R 651 (A,164,56)
 R 652 (A,215,41)
 R 653 (B,160,50)
 R 654 (B,219,46)
 R 659 (A,159,35)

RD1/4PU222J
 RD1/4PU222J
 RS1/16S103J
 RS1/16S103J
 RD1/4PU273J

B L 761 (A,130,108) COIL
 L 762 (A,142,108) COIL
 J 43 JUMPER WIRE 11P
 KN601 (A,65,23) WRAPPING TERMINAL
 RY501 (A,75,132) RELAY

ATH1004
 ATH1004
 D20PYY1120E
 VNF1084
 XSR3012

R 660 (A,220,29)
 R 661 (A,156,28)
 R 662 (A,216,20)
 R 663 (A,181,21)
 R 664 (A,238,21)

RD1/4PU273J
 RD1/4PU821J
 RD1/4PU821J
 RD1/4PU273J
 RD1/4PU273J

RY751 (A,173,130) RELAY
 RY752 (A,141,126) RELAY
 RY753 (A,117,120) RELAY
 CN701 (A,212,134) 11P JUMPER CONNECTOR
 CN702 (A,201,106) 6P JUMPER CONNECTOR

XSR3012
 XSR3012
 XSR3012
 52147-1110
 52147-0610

⚠ R 667 (A,182,31) RESISTOR (0.22, 5W)
 ⚠ R 668 (A,239,31) RESISTOR (0.22, 5W)
 R 669 (A,189,52)

ACN7094
 ACN7094
 RD1/4PU182J

C CN705 (A,295,40) 21P PLUG
 CN751 SP TERMINAL 8-P(V0)
 CN753 SP TERMINAL 4-P(V0)
 CN805 (A,317,153) 13P PLUG
 CN806 19P PLUG

XKM3011
 XKE3053
 XKE3054
 XKP3066
 XKP3069

R 670 (A,245,52)
 R 671 (A,192,49)
 R 672 (A,240,57)
 R 673 (A,184,48)
 R 674 (A,236,38)

RD1/4PU182J
 RD1/4PU821J
 RD1/4PU821J
 RD1/4PU223J
 RD1/4PU223J

CN807 (A,317,82) 15P PLUG
 CN815 (A,295,79) 19P PLUG
 CN816 (A,295,126) 21P PLUG
 CN817 (A,308,38) CONNECTOR
 810 (A,277,90) 11P CABLE HOLDER

XKP3067
 XKM3005
 XKM3011
 CKS3382
 51048-1100

R 680 (B,297,21)
 R 688 (A,135,27)
 R 689 (A,133,27)
 R 695 (A,97,22)
 R 696 (B,281,38)

RS1/16S0R0J
 RD1/4PU562J
 RD1/4PU562J
 RD1/4PU333J
 RS1/16S103J

RESISTORS
 D R 601 (A,96,56)
 R 602 (A,230,52)
 R 603 (B,93,52)
 R 604 (B,226,49)
 R 609 (A,91,35)

RD1/4PU222J
 RD1/4PU222J
 RS1/16S103J
 RS1/16S103J
 RD1/4PU273J

R 697 (B,255,68)
 R 698 (B,243,67)
 R 699 (A,165,21)
 R 701 (A,117,78)
 R 702 (A,101,84)

RS1/16S103J
 RS1/16S333J
 RD1/4PU333J
 RD1/4PU562J
 RD1/4PU562J

D R 610 (A,225,35)
 R 611 (A,90,28)
 R 612 (A,223,28)
 R 613 (A,114,21)
 R 614 (A,247,21)

RD1/4PU273J
 RD1/4PU821J
 RD1/4PU821J
 RD1/4PU273J
 RD1/4PU273J

R 703 (A,151,72)
 R 704 (A,147,76)
 R 705 (A,283,85)
 R 706 (A,283,75)
 R 707 (A,135,77)

RD1/4PU203J
 RD1/4PU203J
 RD1/4PU473J
 RD1/4PU473J
 RD1/4PU184J

E ⚠ R 615 (A,123,36)
 R 616 (A,270,29)
 ⚠ R 617 (A,114,31) RESISTOR (0.22, 5W)
 R 618 (A,266,28)
 R 619 (A,122,52)

RD1/4PU331J
 RD1/4PU562J
 ACN7094
 RD1/4PU562J
 RD1/4PU182J

⚠ R 708 (A,147,81)
 ⚠ R 709 (A,104,72) METAL OXIDE RESISTOR
 ⚠ R 710 (A,89,93) METAL OXIDE RESISTOR
 ⚠ R 711 (A,181,86) METAL OXIDE RESISTOR
 R 713 (A,117,81)

RD1/4PU184J
 RS1LMF472J
 RS1LMF472J
 RS2LMF242J
 RD1/4PU102J

D R 620 (A,257,36)
 R 621 (A,124,49)
 ⚠ R 622 (A,248,31) RESISTOR (0.22, 5W)
 R 623 (A,116,48)
 R 624 (A,257,52)

RD1/4PU331J
 RD1/4PU821J
 ACN7094
 RD1/4PU223J
 RD1/4PU182J

R 714 (B,252,68)
 R 715 (B,250,75)
 R 716 (B,247,75)
 R 725 (A,276,74)
 R 726 (B,291,59)

RS1/16S102J
 RS1/16S103J
 RS1/16S103J
 RD1/4PU103J
 RS1/16S103J

F R 626 (A,258,49)
 R 628 (A,250,48)
 R 630 (A,230,21)
 R 631 (A,148,46)
 R 632 (B,152,47)

RD1/4PU821J
 RD1/4PU223J
 RD1/4PU333J
 RD1/4PU222J
 RS1/16S103J

R 727 (B,287,59)
 ⚠ R 751 (A,158,119) CARBON FILM RESISTOR
 ⚠ R 752 (A,185,120) CARBON FILM RESISTOR
 ⚠ R 753 (A,156,126) METAL OXIDE RESISTOR
 ⚠ R 754 (A,181,126) METAL OXIDE RESISTOR

RS1/16S103J
 RD1/4PUF101J
 RD1/4PUF101J
 RS1LMF4R7J
 RS1LMF4R7J

Mark No.	Description	Part No.	Mark No.	Description	Part No.
△ R 755 (A,103,117)	CARBON FILM RESISTOR	RD1/4PUF101J	C 637 (B,175,24)		CCSRCH470J50
△ R 756 (A,101,120)	METAL OXIDE RESISTOR	RS1LMF4R7J	C 653 (B,161,38)		CKSRYB331K50
△ R 761 (A,125,117)	CARBON FILM RESISTOR	RD1/4PUF101J	C 654 (B,217,33)		CKSRYB331K50
△ R 762 (A,155,119)	CARBON FILM RESISTOR	RD1/4PUF101J	C 655 (A,164,38)		CEAT4R7M50
△ R 763 (A,124,132)	METAL OXIDE RESISTOR	RS1LMF4R7J	C 656 (A,215,33)		A CEAT4R7M50
△ R 764 (A,149,139)	METAL OXIDE RESISTOR	RS1LMF4R7J	C 657 (B,165,17)		CCSRCH470J50
R 777 (A,81,41)		RD1/4PU222J	C 658 (B,221,17)		CCSRCH470J50
R 778 (B,84,48)		RS1/16S103J	C 659 (A,158,31)		CEAT101M16
R 781 (A,87,30)		RD1/4PU273J	C 660 (A,219,25)		CEAT101M16
R 782 (A,84,22)		RD1/4PU821J	C 661 (B,184,23)		CCSRCH470J50
R 783 (A,104,21)		RD1/4PU273J	C 662 (B,241,27)		CCSRCH470J50
R 784 (A,111,35)		RD1/4PU331J	C 663 (B,184,27)		CCSRCH470J50
△ R 785 (A,105,31)	RESISTOR (0.22, 5W)	ACN7094	C 664 (B,241,24)		CCSRCH470J50
R 786 (A,111,57)		RD1/4PU182J	C 665 (A,184,45)		CEANP2R2M50
R 787 (A,106,57)		RD1/4PU821J	C 666 (A,239,49)		B CEANP2R2M50
R 788 (A,102,38)		RD1/4PU223J	C 696 (B,281,35)		CKSRYB102K50
△ R 789 (A,82,127)	CARBON FILM RESISTOR	RD1/4PUF101J	C 697 (A,286,34)		CEAT221M6R3
△ R 790 (A,80,145)	METAL OXIDE RESISTOR	RS1LMF4R7J	C 701 (A,49,80) ELECT.CAPACITOR	XCH3026	
R 806 (B,283,48)		RS1/16S103J	C 702 (A,49,107) ELECT.CAPACITOR	XCH3026	
R 807 (B,278,48)		RS1/16S103J	C 703 (A,43,130) ELECT.CAPACITOR	XCH3012	
R 808 (B,283,52)		RS1/16S102J	C 704 (A,38,150) ELECT.CAPACITOR	XCH3012	
R 809 (B,261,105)		RS1/16S122J	C 705 (A,156,81) ELECT. CAPACITOR	CEAT100M2A	
R 810 (B,264,105)		RS1/16S271J	C 706 (A,143,84) ELECT. CAPACITOR	CEAT100M2A	
R 885 (B,310,57)		RS1/16S221J	C 707 (A,17,99) MYLAR FILM CAPACITOR	CQMA103K2E	
R 886 (B,310,61)		RS1/16S221J	C 708 (A,16,137) MYLAR FILM CAPACITOR	CQMA103K2E	C
R 887 (B,310,65)		RS1/16S221J	C 709 (A,257,73)	CEAT1R0M50	
R 888 (B,315,22)		RS1/16S221J	C 711 (A,195,99) ELECT. CAPACITOR	CEAT101M35	
R 1101(B,273,68)		RS1/16S0R0J	C 712 (A,189,105)	CEAT101M10	
R 1102(B,274,61)		RS1/16S0R0J	C 751 (A,159,143) FILM CAPACITOR	CQMB104J50	
R 1103(B,70,136)		RS1/16S0R0J	C 752 (A,181,150) FILM CAPACITOR	CQMB104J50	
R 1104(B,138,132)		RS1/16S0R0J	C 755 (A,103,147) FILM CAPACITOR	CQMB104J50	
R 1105(B,168,135)		RS1/16S0R0J	C 761 (A,122,139) FILM CAPACITOR	CQMB104J50	
R 1106(B,146,53)		RS1/16S0R0J	C 762 (A,152,145) FILM CAPACITOR	CQMB104J50	
R 1107(B,211,58)		RS1/16S0R0J	C 778 (B,84,34)	CKSRYB331K50	
R 1108(B,233,58)		RS1/16S0R0J	C 779 (A,81,33)	D CEAT4R7M50	
R 1109(B,285,56)		RS1/16S0R0J	C 780 (B,88,18)	CCSRCH470J50	
R 1110(B,241,68)		RS1/16S0R0J	C 781 (A,87,27)	CEAT101M16	
CAPACITORS					
C 517 (A,82,154)	film capacitor	CQMB104J50	C 782 (B,107,27)	CCSRCH470J50	
C 603 (B,94,39)		CKSRYB331K50	C 783 (B,107,24)	CCSRCH470J50	
C 604 (B,227,38)		CKSRYB331K50	C 784 (A,105,49)	CEANP2R2M50	
C 605 (A,96,38)		CEAT4R7M50	C 801 (A,248,114) ELECT. CAPACITOR	CEAT222M25	
C 606 (A,230,38)		CEAT4R7M50	C 802 (A,249,100) ELECT. CAPACITOR	CEAT222M25	
C 607 (B,95,20)		CCSRCH470J50	C 806 (A,288,55)	CEAT1R0M50	
C 608 (B,230,17)		CCSRCH470J50	C 807 (B,226,95)	CKSRYB103K25	
C 609 (A,91,32)		CEAT101M16	C 808 (A,245,142) ELECT. CAPACITOR	CEAT472M16	
C 610 (A,225,32)		CEAT101M16	C 809 (A,234,95)	CEAT101M10	
C 611 (B,117,22)		CCSRCH470J50	C 810 (A,266,133)	CEAT101M10	
C 612 (B,250,24)		CCSRCH470J50	C 811 (B,279,128)	CKSRYB103K25	
C 613 (B,117,27)		CCSRCH470J50	C 812 (B,278,109)	CKSRYB103K25	
C 614 (B,250,28)		CCSRCH470J50	C 813 (A,276,118)	CEAT101M16	
C 615 (A,116,45)		CEANP2R2M50			
C 616 (A,250,45)		CEANP2R2M50			
C 630 (A,172,44)		CEANP2R2M50			
C 632 (B,151,33)		CKSRYB331K50			
C 633 (A,148,33)		CEAT4R7M50			
C 634 (B,155,17)		CCSRCH470J50			
C 635 (A,153,25)		CEAT101M16			
C 636 (B,175,28)		CCSRCH470J50			
C POWER PACK ASSY (XWZ4117)					
MISCELLANEOUS					
△ IC 600 (A,132,14)	POWER PACK 2CH				
△ IC 601 (A,265,14)	POWER PACK 2CH				
△ IC 602 (A,199,14)	POWER PACK 2CH				
△ IC 610 (A,59,28)	PROTECTOR(1A)				
△ IC 701 (A,100,75)	IC PROTECTOR				
					F STK412-230C
					STK412-230C
					STK412-230C
					AEK7009
					ICP-N10

Mark No. **Description**
Part No.
Mark No. **Description**
Part No.

A **IC 702 (A,84,81) IC PROTECTOR**
IC 803 (A,238,87) IC
IC 804 (A,282,111) REGULATOR IC
IC 805 (B,271,135) IC
Q 501 (B,85,42) CHIP TRANSISTOR

ICP-N10
TA7805S
TA7809S
BA178M05FP
2SD2704K

Q 505 (A,111,47) TRANSISTOR
Q 601 (B,93,47) CHIP TRANSISTOR
Q 602 (B,227,45) CHIP TRANSISTOR
Q 605 (A,118,40) TRANSISTOR
Q 606 (A,252,40) TRANSISTOR

2SC2240
2SD2704K
2SD2704K
2SC2240
2SC2240

Q 631 (B,153,42) CHIP TRANSISTOR
Q 633 (A,178,47) TRANSISTOR
Q 651 (B,161,45) CHIP TRANSISTOR
Q 652 (B,219,42) CHIP TRANSISTOR
Q 655 (A,186,40) TRANSISTOR

2SD2704K
2SC2240
2SD2704K
2SD2704K
2SC2240

Q 656 (A,244,47) TRANSISTOR
Q 696 (B,284,22) TRANSISTOR
Q 697 (B,282,26) TRANSISTOR
Q 698 (B,246,67) TRANSISTOR
Q 701 (A,110,75) TRANSISTOR

2SC2240
2SC4081
2SC4081
RT1N241M
2SC5511

Q 702 (A,96,86) TRANSISTOR
Q 703 (A,155,76) TRANSISTOR
Q 704 (A,166,79) TRANSISTOR
Q 705 (B,245,74) CHIP TRANSISTOR
Q 707 (B,241,74) CHIP TRANSISTOR

2SA2005
2SA1145
2SC2240
RN4903
RN4903

Q 801 (B,277,141) DIGITAL TR(SC-70)
Q 802 (B,274,145) TRANSISTOR
Q 803 (B,265,140) DIGITAL TR(SC-70)
Q 804 (B,268,145) TRANSISTOR
Q 805 (B,277,146) DIGITAL TR(SC-70)

RT1P241M
RT1N241M
RT1P241M
RT1N241M
RT1P241M

Q 806 (B,271,145) TRANSISTOR
Q 807 (B,276,53) CHIP TR(2*PNP)
Q 808 (B,283,56) CHIP TRANSISTOR
Q 809 (A,266,101) TRANSISTOR
D 601 (A,125,57) DIODE

RT1N241M
RN2903
RN1903
2SD1858X
1SS133

D 602 (A,267,17) ZENER DIODE
D 603 (A,119,57) DIODE
D 604 (A,261,21) ZENER DIODE
D 606 (A,259,57) DIODE
D 608 (A,253,52) DIODE

MTZJ15A
1SS133
MTZJ15A
1SS133
1SS133

D 631 (A,192,61) DIODE
D 632 (A,176,52) DIODE
D 647 (A,200,17) ZENER DIODE
D 648 (A,196,21) ZENER DIODE
D 651 (A,192,57) DIODE

1SS133
1SS133
MTZJ15A
MTZJ15A
1SS133

E 652 (A,262,57) DIODE
D 653 (A,186,52) DIODE
D 654 (A,242,52) DIODE
D 681 (A,132,17) ZENER DIODE
D 682 (A,129,22) ZENER DIODE

1SS133
1SS133
1SS133
MTZJ15A
MTZJ15A

Q 701 (A,9,88) DIODE
Q 702 (A,9,126) DIODE
D 703 (B,252,76) DIODE
D 711 (A,196,103) ZENER DIODE
D 712 (A,192,103) DIODE

D5SBA20(B)
D5SBA20(B)
1SS355
MTZJ22D
MTZJ6R8(B)

F 713 (A,120,78) DIODE
D 751 (B,168,135) DIODE
D 752 (B,170,135) DIODE
D 753 (B,138,132) DIODE
D 754 (B,141,132) DIODE

1SS133
1SS355
1SS355
1SS355
1SS355

Mark No. **Description**

D 757 (B,70,136) DIODE
D 758 (B,73,136) DIODE
D 777 (A,127,57) DIODE
D 778 (A,108,57) DIODE
Q 801 (B,221,113) BRIDGE DIODE

D 805 (A,276,131) DIODE
D 806 (A,287,62) DIODE
D 807 (A,284,67) DIODE
D 827 (A,262,133) DIODE
D 828 (A,239,98) DIODE

Q 829 (A,239,128) DIODE
L 501 (A,97,118) COIL
L 751 (A,160,108) COIL
L 752 (A,173,108) COIL
L 753 (A,120,107) COIL

L 761 (A,130,108) COIL
L 762 (A,142,108) COIL
J 43 JUMPER WIRE 11P
KN601 (A,65,23) WRAPPING TERMINAL
RY501 (A,75,132) RELAY

RY751 (A,173,130) RELAY
RY752 (A,141,126) RELAY
RY753 (A,117,120) RELAY
CN701 (A,212,134) 11PJUMPER CONNECTOR
CN702 (A,201,106) 6P JUMPER CONNECTOR

CN705 (A,295,40) 21P PLUG
CN751 SP TERMINAL 8-P(V0)
CN753 SP TERMINAL 4-P(V0)
CN805 (A,317,153) 13P PLUG
CN806 19P PLUG

CN807 (A,317,82) 15P PLUG
CN815 (A,295,79) 19P PLUG
CN816 (A,295,126) 21P PLUG
CN817 (A,308,38) CONNECTOR
810 (A,277,90) 11P CABLE HOLDER

RESISTORS

R 601 (A,96,56)
R 602 (A,230,52)
R 603 (B,93,52)
R 604 (B,226,49)
R 609 (A,91,35)

R 610 (A,225,35)
R 611 (A,90,28)
R 612 (A,223,28)
R 613 (A,114,21)
R 614 (A,247,21)

R 615 (A,123,36)
R 616 (A,270,29)
R 617 (A,114,31) RESISTOR (0.22, 5W)
R 618 (A,266,28)
R 619 (A,122,52)

R 620 (A,257,36)
R 621 (A,124,49)
R 622 (A,248,31) RESISTOR (0.22, 5W)
R 623 (A,116,48)
R 624 (A,257,52)

R 626 (A,258,49)
R 628 (A,250,48)
R 630 (A,230,21)
R 631 (A,148,46)

RD1/4PU222J
RD1/4PU222J
RS1/16S103J
RS1/16S103J
RD1/4PU273J

RD1/4PU273J
RD1/4PU821J
RD1/4PU821J
RD1/4PU273J
RD1/4PU273J

RD1/4PU331J
RD1/4PU562J
ACN7094
RD1/4PU562J
RD1/4PU182J

RD1/4PU331J
RD1/4PU821J
ACN7094
RD1/4PU223J
RD1/4PU182J

RD1/4PU821J
RD1/4PU223J
RD1/4PU333J
RD1/4PU222J

Mark No.**Description****Part No.**

R 632 (B,152,47)

RS1/16S103J

R 635 (A,153,29)

RD1/4PU273J

R 636 (A,149,25)

RD1/4PU821J

R 637 (A,172,21)

RD1/4PU273J

R 638 (A,174,36)

RD1/4PU331J

△ R 639 (A,173,31) RESISTOR (0.22, 5W)

ACN7094

R 640 (A,179,57)

RD1/4PU182J

R 641 (A,174,52)

RD1/4PU821J

R 642 (A,169,39)

RD1/4PU223J

R 647 (A,202,27)

RD1/4PU562J

R 648 (A,199,27)

RD1/4PU562J

R 651 (A,164,56)

RD1/4PU222J

R 652 (A,215,41)

RD1/4PU222J

R 653 (B,160,50)

RS1/16S103J

R 654 (B,219,46)

RS1/16S103J

R 659 (A,159,35)

RD1/4PU273J

R 660 (A,220,29)

RD1/4PU273J

R 661 (A,156,28)

RD1/4PU821J

R 662 (A,216,20)

RD1/4PU821J

R 663 (A,181,21)

RD1/4PU273J

R 664 (A,238,21)

RD1/4PU273J

R 665 (A,190,36)

RD1/4PU331J

R 666 (A,240,35)

RD1/4PU331J

△ R 667 (A,182,31) RESISTOR (0.22, 5W)

ACN7094

△ R 668 (A,239,31) RESISTOR (0.22, 5W)

ACN7094

R 669 (A,189,52)

RD1/4PU182J

R 670 (A,245,52)

RD1/4PU182J

R 671 (A,192,49)

RD1/4PU821J

R 672 (A,240,57)

RD1/4PU821J

R 673 (A,184,48)

RD1/4PU223J

R 674 (A,236,38)

RD1/4PU223J

R 680 (B,297,21)

RS1/16S0R0J

R 688 (A,135,27)

RD1/4PU562J

R 689 (A,133,27)

RD1/4PU562J

R 695 (A,97,22)

RD1/4PU333J

R 696 (B,281,38)

RS1/16S103J

R 697 (B,255,68)

RS1/16S103J

R 698 (B,243,67)

RS1/16S333J

R 699 (A,165,21)

RD1/4PU333J

R 701 (A,117,78)

RD1/4PU682J

R 702 (A,101,84)

RD1/4PU682J

R 703 (A,151,72)

RD1/4PU683J

R 704 (A,147,76)

RD1/4PU683J

R 705 (A,283,85)

RD1/4PU473J

R 706 (A,283,75)

RD1/4PU473J

R 707 (A,135,77)

RD1/4PU124J

R 708 (A,147,81)

RD1/4PU124J

△ R 711 (A,181,86) METAL OXIDE RESISTOR

RS2LMF222J

R 713 (A,117,81)

RD1/4PU102J

R 714 (B,252,68)

RS1/16S102J

R 715 (B,250,75)

RS1/16S103J

R 716 (B,247,75)

RS1/16S103J

R 725 (A,276,74)

RD1/4PU103J

R 726 (B,291,59)

RS1/16S103J

R 727 (B,287,59)

RS1/16S103J

△ R 751 (A,158,119) CARBON FILM RESISTOR

RD1/4PUF101J

△ R 752 (A,185,120) CARBON FILM RESISTOR

RD1/4PUF101J

△ R 753 (A,156,126) METAL OXIDE RESISTOR

RS1LMF4R7J

△ R 754 (A,181,126) METAL OXIDE RESISTOR

RS1LMF4R7J

△ R 755 (A,103,117) CARBON FILM RESISTOR

RD1/4PUF101J

Mark No.**Description****Part No.**

△ R 756 (A,101,120) METAL OXIDE RESISTOR

RS1LMF4R7J

△ R 761 (A,125,117) CARBON FILM RESISTOR

RD1/4PUF101J

△ R 762 (A,155,119) CARBON FILM RESISTOR

RD1/4PUF101J

△ R 763 (A,124,132) METAL OXIDE RESISTOR

RS1LMF4R7J

△ R 764 (A,149,139) METAL OXIDE RESISTOR

RS1LMF4R7J

R 777 (A,81,41)

RD1/4PU222J

R 778 (B,84,48)

RS1/16S103J

R 781 (A,87,30)

RD1/4PU273J

R 782 (A,84,22)

RD1/4PU821J

R 783 (A,104,21)

RD1/4PU273J

R 784 (A,111,35)

RD1/4PU331J

△ R 785 (A,105,31) RESISTOR (0.22, 5W)

ACN7094

R 786 (A,111,57)

RD1/4PU182J

R 787 (A,106,57)

RD1/4PU821J

R 788 (A,102,38)

RD1/4PU223J

R 789 (A,82,127) CARBON FILM RESISTOR

RD1/4PUF101J

△ R 790 (A,80,145) METAL OXIDE RESISTOR

RS1LMF4R7J

R 806 (B,283,48)

RS1/16S103J

R 807 (B,278,48)

RS1/16S103J

R 808 (B,283,52)

RS1/16S102J

R 809 (B,261,105)

RS1/16S122J

R 810 (B,264,105)

RS1/16S271J

R 885 (B,310,57)

RS1/16S221J

R 886 (B,310,61)

RS1/16S221J

R 887 (B,310,65)

RS1/16S221J

R 888 (B,315,22)

RS1/16S221J

R 1101(B,273,68)

RS1/16S0R0J

R 1102(B,274,61)

RS1/16S0R0J

R 1106(B,146,53)

RS1/16S0R0J

R 1107(B,211,58)

RS1/16S0R0J

R 1108(B,233,58)

RS1/16S0R0J

R 1109(B,285,56)

RS1/16S0R0J

R 1110(B,241,68)

RS1/16S0R0J

CAPACITORS

C 517 (A,82,154) FILM CAPACITOR

CQMB224J50

C 521 (A,120,164) FILM CAPACITOR

CQMB123J50

C 603 (B,94,39)

CKSRYB331K50

C 604 (B,227,38)

CKSRYB331K50

C 605 (A,96,38)

CEAT4R7M50

C 606 (A,230,38)

CEAT4R7M50

C 607 (B,95,20)

CCSRCH470J50

C 608 (B,230,17)

CCSRCH470J50

C 609 (A,91,32)

CEAT101M16

C 610 (A,225,32)

CEAT101M16

C 611 (B,117,22)

CCSRCH470J50

C 612 (B,250,24)

CCSRCH470J50

C 613 (B,117,27)

CCSRCH470J50

C 614 (B,250,28)

CCSRCH470J50

C 615 (A,116,45)

CEANP2R2M50

C 616 (A,250,45)

CEANP2R2M50

C 630 (A,172,44)

CEANP2R2M50

C 632 (B,151,33)

CKSRYB331K50

C 633 (A,148,33)

CEAT4R7M50

C 634 (B,155,17)

CCSRCH470J50

C 635 (A,153,25)

CEAT101M16

C 636 (B,175,28)

CCSRCH470J50

C 637 (B,175,24)

CCSRCH470J50

C 653 (B,161,38)

CKSRYB331K50

C 654 (B,217,33)

CKSRYB331K50

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
A	C 655 (A,164,38)	CEAT4R7M50	D TRANS2 ASSY MISCELLANEOUS	IC 853 (A,32,204) PROTECTOR(4A)	AEK7018
	C 656 (A,215,33)	CEAT4R7M50		J 21 JUMPER WIRE 11P	D20PYY1130E
	C 657 (B,165,17)	CCSRCH470J50		CN1201(A,35,183) 4P JUMPER CONNECTOR	52147-0410
	C 658 (B,221,17)	CCSRCH470J50		851 (A,49,207) 11P CABLE HOLDER	51048-1100
	C 659 (A,158,31)	CEAT101M16			
	C 660 (A,219,25)	CEAT101M16			
	C 661 (B,184,23)	CCSRCH470J50			
	C 662 (B,241,27)	CCSRCH470J50			
	C 663 (B,184,27)	CCSRCH470J50			
	C 664 (B,241,24)	CCSRCH470J50			
B	C 665 (A,184,45)	CEANP2R2M50	E TRANS3 ASSY		
	C 666 (A,239,49)	CEANP2R2M50		TRANS3 ASSY has no service part.	
	C 696 (B,281,35)	CKSRYB102K50			
	C 697 (A,286,34)	CEAT221M6R3			
	C 701 (A,49,80) ELECT.CAPACITOR	XCH3026			
	C 702 (A,49,107) ELECT.CAPACITOR	XCH3026			
	C 703 (A,43,130) ELECT.CAPACITOR	XCH3012			
	C 704 (A,38,150) ELECT.CAPACITOR	XCH3012			
	C 705 (A,156,81) ELECT. CAPACITOR	CEAT100M2A			
	C 706 (A,143,84) ELECT. CAPACITOR	CEAT100M2A			
C	C 707 (A,17,99) MYLAR FILM CAPACITOR	CQMA103K2E	G HEAD PHONE ASSY MISCELLANEOUS		
	C 708 (A,16,137) MYLAR FILM CAPACITOR	CQMA103K2E			
	C 709 (A,257,73)	CEAT1R0M50			
	C 711 (A,195,99) ELECT. CAPACITOR	CEAT101M35			
	C 712 (A,189,105)	CEAT101M10			
	C 751 (A,159,143) FILM CAPACITOR	CQMB224J50			
	C 752 (A,181,150) FILM CAPACITOR	CQMB224J50			
	C 753 (A,157,155) FILM CAPACITOR	CQMB224J50			
	C 754 (A,181,158) FILM CAPACITOR	CQMB224J50			
	C 755 (A,103,147) FILM CAPACITOR	CQMB224J50			
D	C 756 (A,96,151) FILM CAPACITOR	CQMB224J50	R RESISTORS		
	C 757 (A,157,164) FILM CAPACITOR	CQMB224J50			
	C 758 (A,177,164) FILM CAPACITOR	CQMB224J50			
	C 759 (A,101,164) FILM CAPACITOR	CQMB224J50			
	C 761 (A,122,139) FILM CAPACITOR	CQMB224J50			
	C 762 (A,152,145) FILM CAPACITOR	CQMB224J50			
	C 763 (A,122,146) FILM CAPACITOR	CQMB224J50			
	C 764 (A,150,152) FILM CAPACITOR	CQMB224J50			
	C 766 (A,82,164) FILM CAPACITOR	CQMB224J50			
	C 773 (A,138,164) FILM CAPACITOR	CQMB224J50			
E	C 778 (B,84,34)	CKSRYB331K50	C CAPACITORS		
	C 779 (A,81,33)	CEAT4R7M50			
	C 780 (B,88,18)	CCSRCH470J50			
	C 781 (A,87,27)	CEAT101M16			
	C 782 (B,107,27)	CCSRCH470J50			
	C 783 (B,107,24)	CCSRCH470J50			
	C 784 (A,105,49)	CEANP2R2M50			
	C 785 (A,89,146) FILM CAPACITOR	CQMB224J50			
	C 801 (A,248,114) ELECT. CAPACITOR	CEAT222M25			
	C 802 (A,249,100) ELECT. CAPACITOR	CEAT222M25			
F	C 806 (A,288,55)	CEAT1R0M50	K FRONT DISPLAY MISCELLANEOUS		
	C 807 (B,226,95)	CKSRYB103K25			
	C 808 (A,245,142) ELECT. CAPACITOR	CEAT472M16			
	C 809 (A,234,95)	CEAT101M10			
	C 810 (A,266,133)	CEAT101M10			
	C 811 (B,279,128)	CKSRYB103K25			
	C 812 (B,278,109)	CKSRYB103K25			
	C 813 (A,276,118)	CEAT101M16			

Mark No.**Description****Part No.**

S 460 (A,91,136)	SWITCH	VSG1024
S 461 (A,57,112)	SWITCH	VSG1024
S 462 (A,42,112)	SWITCH	VSG1024
S 463 (A,27,112)	SWITCH	VSG1024
S 464 (A,164,134)	SWITCH	VSG1024
S 465 (A,140,134)	SWITCH	VSG1024
S 466 (A,86,90)	SWITCH	VSG1024
S 467 (A,72,90)	SWITCH	VSG1024
S 468 (A,57,90)	SWITCH	VSG1024
S 469 (A,42,90)	SWITCH	VSG1024
S 470 (A,27,90)	SWITCH	VSG1024
S 471 (A,13,90)	SWITCH	VSG1024
X 401 (A,149,165)	CERAMIC RESONATOR (5.00 MHz)	VSS1142
CN401 (A,246,165)	17P CONNECTOR	52044-1745

RESISTORS

R 401 (B,144,169)	RS1/16S105J
R 402 (B,223,189)	RS1/16S104J
R 403 (B,220,189)	RS1/16S104J
R 405 (B,228,155)	RS1/16S102J
R 406 (B,226,155)	RS1/16S103J
R 407 (B,78,176)	RS1/16S473J
R 408 (B,80,176)	RS1/16S473J
R 409 (B,75,176)	RS1/16S473J
R 410 (B,73,176)	RS1/16S473J
R 411 (B,229,189)	RS1/16S473J
R 412 (B,234,187)	RS1/16S221J
R 413 (B,234,184)	RS1/16S221J
R 414 (B,234,182)	RS1/16S221J
R 415 (B,234,180)	RS1/16S221J
R 416 (B,234,178)	RS1/16S221J
R 417 (B,219,182)	RS1/16S101J
R 422 (B,157,169)	RS1/16S104J
R 423 (B,131,167)	RS1/16S104J
R 424 (B,83,176)	RS1/16S104J
R 425 (B,213,182)	RS1/16S104J
R 430 (B,234,175)	RS1/16S0R0J
R 451 (B,236,144)	RS1/16S472J
R 452 (B,234,144)	RS1/16S681J
R 453 (B,187,147)	RS1/16S821J
R 454 (B,166,153)	RS1/16S122J
R 455 (A,45,146)	RD1/4PU681J
R 456 (A,35,144)	RD1/4PU821J
R 457 (A,16,139)	RD1/4PU122J
R 459 (A,109,134)	RD1/4PU472J
R 460 (A,101,135)	RD1/4PU681J
R 461 (B,52,117)	RS1/16S821J
R 462 (B,49,117)	RS1/16S122J
R 463 (B,34,117)	RS1/16S162J
R 464 (B,20,117)	RS1/16S272J
R 465 (A,161,128)	RD1/4PU472J
R 466 (A,151,128)	RD1/4PU681J
R 467 (A,131,128)	RD1/4PU821J
R 468 (B,79,91)	RS1/16S122J
R 469 (B,64,91)	RS1/16S162J
R 470 (B,50,92)	RS1/16S272J

Part No.**Mark No.****Description**

R 471 (B,34,91)	RS1/16S512J
R 472 (B,86,176)	RS1/16S472J
R 473 (B,19,91)	RS1/16S133J
R 481 (B,169,204)	RS1/16S473J
R 482 (B,167,204)	RS1/16S473J
R 483 (B,165,204)	RS1/16S473J
R 484 (B,163,204)	RS1/16S473J
R 485 (B,161,204)	RS1/16S473J
R 486 (B,159,204)	RS1/16S473J
R 487 (B,157,204)	RS1/16S473J

R 488 (B,155,204)	RS1/16S473J
R 489 (B,153,204)	RS1/16S473J
R 490 (B,151,204)	RS1/16S473J
R 492 (B,121,204)	RS1/16S104J
R 493 (B,119,204)	RS1/16S104J

R 494 (B,117,204)	RS1/16S104J
R 495 (B,115,204)	RS1/16S104J
R 496 (B,113,204)	RS1/16S104J
R 497 (B,111,204)	RS1/16S104J
R 498 (B,109,204)	RS1/16S104J

R 499 (B,107,204)	RS1/16S104J
R 500 (B,105,204)	RS1/16S104J
R 517 (B,149,204)	RS1/16S473J
R 518 (B,147,204)	RS1/16S473J
R 519 (B,145,204)	RS1/16S473J

R 520 (B,103,204)	RS1/16S104J
R 521 (B,101,204)	RS1/16S104J
R 522 (B,99,204)	RS1/16S104J
R 523 (B,97,204)	RS1/16S104J
R 524 (B,95,204)	RS1/16S104J

R 525 (B,93,204)	RS1/16S104J
R 526 (B,91,204)	RS1/16S104J
R 527 (B,89,204)	RS1/16S104J
R 528 (B,87,204)	RS1/16S104J
R 529 (B,85,204)	RS1/16S104J

R 530 (B,83,204)	RS1/16S104J
R 531 (B,81,204)	RS1/16S104J
R 532 (B,79,204)	RS1/16S104J
R 533 (B,77,204)	RS1/16S104J
R 534 (B,75,204)	RS1/16S104J

CAPACITORS

C 401 (B,247,155)	CKSRYB103K50
C 402 (B,247,153)	CKSRYB103K50
C 403 (A,234,168)	ELECTR.CAPACITOR
C 410 (B,49,186)	CEAT101M6R3
C 411 (B,51,186)	CKSRYB103K50
C 412 (A,42,178)	CEAT470M50
C 418 (B,141,179)	CKSRYB104K16
C 419 (B,103,182)	CKSRYB103K50
C 420 (A,39,185)	ELECT. CAPACITOR
C 421 (B,160,169)	CEAT101M35
C 441 (B,223,176)	CKSRYB104K16
C 442 (A,239,146)	CEAL470M10
C 451 (B,125,166)	CKSRYB102K50
C 452 (B,103,164)	CKSRYB102K50
C 453 (B,122,166)	CKSRYB102K50
C 454 (B,100,164)	CKSRYB102K50
C 481 (B,140,191)	CCSRCH471J50
C 482 (B,126,201)	CCSRCH221J50
C 483 (B,126,199)	CCSRCH221J50

Mark No. **Description****Part No.****Mark No.** **Description****Part No.**

C 487 (B,83,163)

CKSRYB102K50

C 805 (A,152,103)

CEQJ101M16

C 488 (B,79,163)

CKSRYB102K50

C 806 (A,173,100)

CEAT101M16

C 489 (B,75,163)

CKSRYB102K50

C 818 (B,196,95)

CKSRYB103K25

C 490 (A,241,34)

CKSRYB102K50

C 819 (A,190,95)

CEAT101M10

L R.ENCODER ASSY**MISCELLANEOUS**

- S 457 (A,300,183) SWITCH VSG1024
 S 512 (A,288,223) ROTARY ENCODER (JOG) XSX3008
 S 513 (A,288,152) ROTARY ENCODER XSX3005
 S 514 (A,257,216) SWITCH VSG1024
 S 515 (A,270,183) SWITCH VSG1024

B	S 516 (A,285,183) SWITCH VSG1024 511 (A,257,172) CABLE HOLDER(7P) 51063-0705
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RESISTORS

- R 513 (B,270,190) RS1/16S162J
 R 514 (B,280,185) RS1/16S272J
 R 515 (B,295,185) RS1/16S512J

M POWER KEY ASSY
MISCELLANEOUS

C	S 501 (A,12,174) SWITCH VSG1024 S 502 (A,20,221) SWITCH VSG1024 S 503 (A,32,218) SWITCH VSG1024 S 504 (A,47,218) SWITCH VSG1024 501 (A,47,210) CABLE HOLDER(3P) 51063-0305
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RESISTORS

- R 502 (B,7,171) RS1/16S162J
 R 503 (A,15,228) RD1/4PU272J
 R 504 (A,30,228) RD1/4PU512J

O TRANS4 ASSY
MISCELLANEOUS

⚠ IC 891 (A,104,223) PROTECTOR(800MA)	AEK7008
⚠ IC 892 (A,77,232) PROTECTOR(800MA)	AEK7008
⚠ D 891 (B,91,226) BRIDGE DIODE	S1WB(A)60SD
J 22 JUMPER WIRE	D20PYY0330E
891 (A,70,221) 3P CABLE HOLDER	51048-0300

CAPACITORS

- C 891 (A,97,218) ELECT. CAPACITOR CEAT471M35
 C 892 (A,86,218) ELECT. CAPACITOR CEAT471M35

E**P REGULATOR ASSY****MISCELLANEOUS**

⚠ IC 801 (A,161,89) REGULATOR IC TA7812S
⚠ IC 802 (A,178,89) REGULATOR IC TA79012S
⚠ IC 803 (A,196,89) IC TA7805S
D 810 (A,186,95) ZENER DIODE MTZJ6.2B
CN800 (A,194,113) 11PJUMPER CONNECTOR 52147-1110

RESISTORS

- ⚠ R 801 (A,152,97) METAL OXIDE RESISTOR RS3LMF331J

CAPACITORS

- C 803 (B,164,98) CKSRYB103K25
 C 804 (B,180,98) CKSRYB103K25

Mark No. **Description****Part No.****Mark No.** **Description****Part No.****R DIG. INPUT ASSY****MISCELLANEOUS**

- F 1901(B,214,228) INDUCTOR CTF1295
 JA1900(A,206,201) OPT. LINK IN GP1FAV51RKBF
 KN1902(A,249,206) SCREW PLATE VNE1948
 CN1903(A,229,230) CONNECTOR VKN1186

RESISTORS

- R 1900(B,211,215) RS1/16S101J

CAPACITORS

- C 1900(B,205,215) CKSRYB104K25
 C 1903(B,211,230) CKSRYB103K50
 C 1904(A,208,228) CEAL101M10
 C 1905(B,233,232) CKSRYB104K25
 C 1906(B,235,232) CKSRYB103K50

- C 1907(B,237,232) CCSRCH101J50
 C 1908(B,239,232) CKSRYB102K50

T FRONT INPUT ASSY**MISCELLANEOUS**

- JA971 (A,100,96) JACK DKN1124
 KN971 (A,131,120) WRAPPING TERMINAL VNF1084
 CN971 (A,143,98) 3P CABLE HOLDER 51048-0300
 J29 (A,143,98) 3P CABLE D20PYY0323E

RESISTORS

- R 971 (B,130,91) RS1/16S331J
 R 972 (B,130,104) RS1/16S331J

CAPACITORS

- C 971 (B,127,91) CCSRCH101J50
 C 972 (B,127,104) CCSRCH101J50
 C 973 (B,132,91) CCSRCH101J50
 C 974 (B,132,104) CCSRCH101J50
 C 975 (B,106,104) CCSRCH471J50
- C 976 (B,108,104) CKSRYB103K50
 C 977 (B,111,104) CKSRYB104K25

U PRIMARY ASSY**MISCELLANEOUS**

- ⚠ IC 51 (A,234,14) REGULATOR IC TA78057S
 Q 51 (B,267,14) DIGITAL TR(SC-70) RT1N431M
 ⚠ D 51 (B,298,20) BRIDGE DIODE DF06SA
- D 55 (A,304,21) DIODE 1SR139-400
 D 56 (A,271,21) DIODE 1SS133
- D 58 (A,314,13) ZENER DIODE MTZJ5.1B
 H 51 (A,231,34) FUSE CLIP AKR7001
 H 52 (A,250,34) FUSE CLIP AKR7001
- J 52 JUMPER WIRE D20PYY0410E
- KN51 (A,318,25) WRAPPING TERMINAL VNF1084
- KN3001(A,223,117) SCREW PLATE VNE1948
- ⚠ RY51 (A,271,57) RELAY XSR3013
- ⚠ T 51 (A,288,56) STANDBY TRANSFORMER ATT7043

Mark No. **Description**

△ CN51 (A,236,47) AC CODE SOCKET
55 (A,317,9) 4P CABLE HOLDER

Part No.

RKP1751
51048-0400

RESISTORS

△ R 51 (A,318,37)	RESISTOR(2.2M, 1/2W)	RCN1080
R 52 (A,275,11)		RD1/2PM270J
R 53 (A,307,12)		RD1/4PU332J
R 54 (A,319,16)		RD1/4PU103J

CAPACITORS

△ C 51 (A,261,64)	FILM CAPACITOR	ACE7013
△ C 52 (A,265,57)	SAFETY CAPACITOR	XCG3009
C 53 (A,291,21)	ELECT. CAPACITOR	CEAT102M16
C 54 (A,300,11)		CEAT470M25
C 55 (A,307,21)		CKPUYF103Z25
C 56 (A,311,21)		CKPUYF103Z25
C 57 (A,314,21)		CKPUYF103Z25

V TRANS1 ASSY

TRANS1 ASSY has no service part.

Y FM/AM TUNER UNIT

FM/AM TUNER UNIT has no service part.

6. ADJUSTMENT

There is no information to be shown in this chapter.

A

B

C

D

E

F

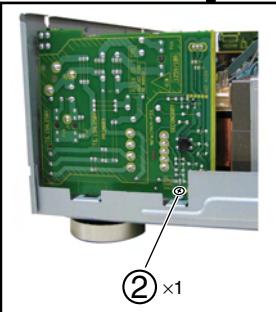
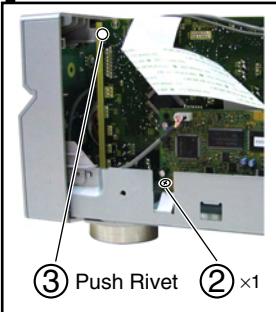
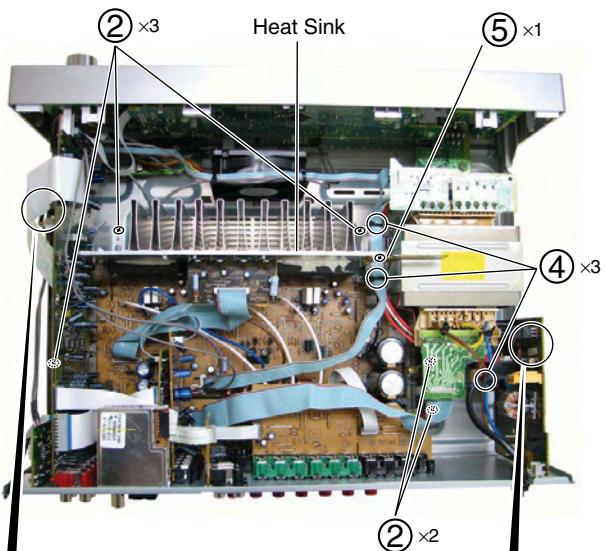
7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

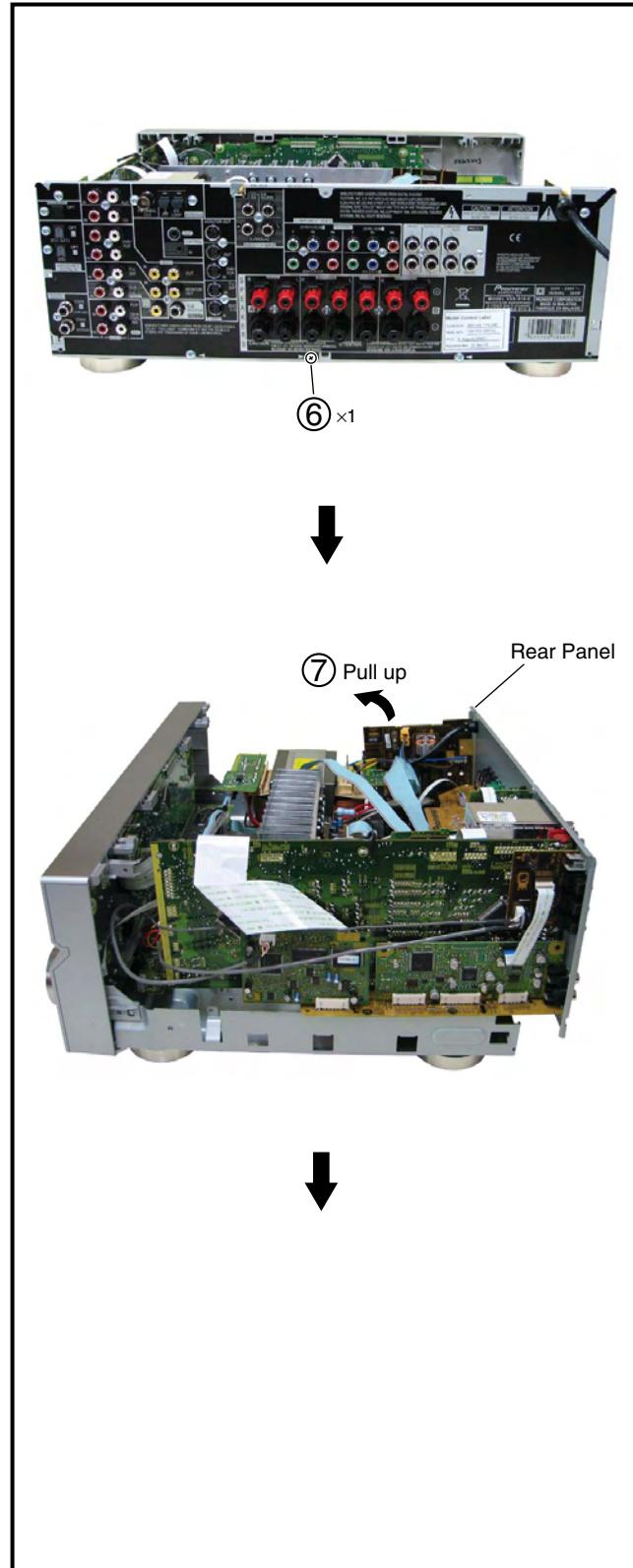
Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

- (1) Remove the top cover (five screws).



- (4) Cut 3 cable ties.

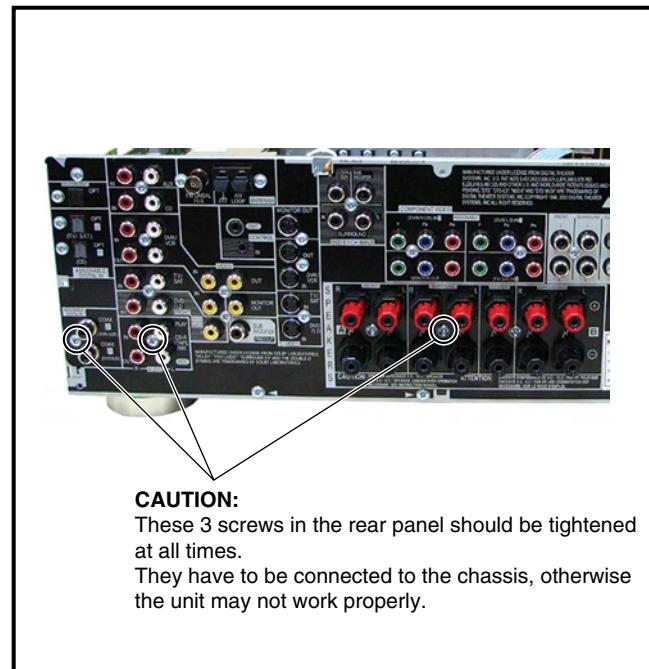
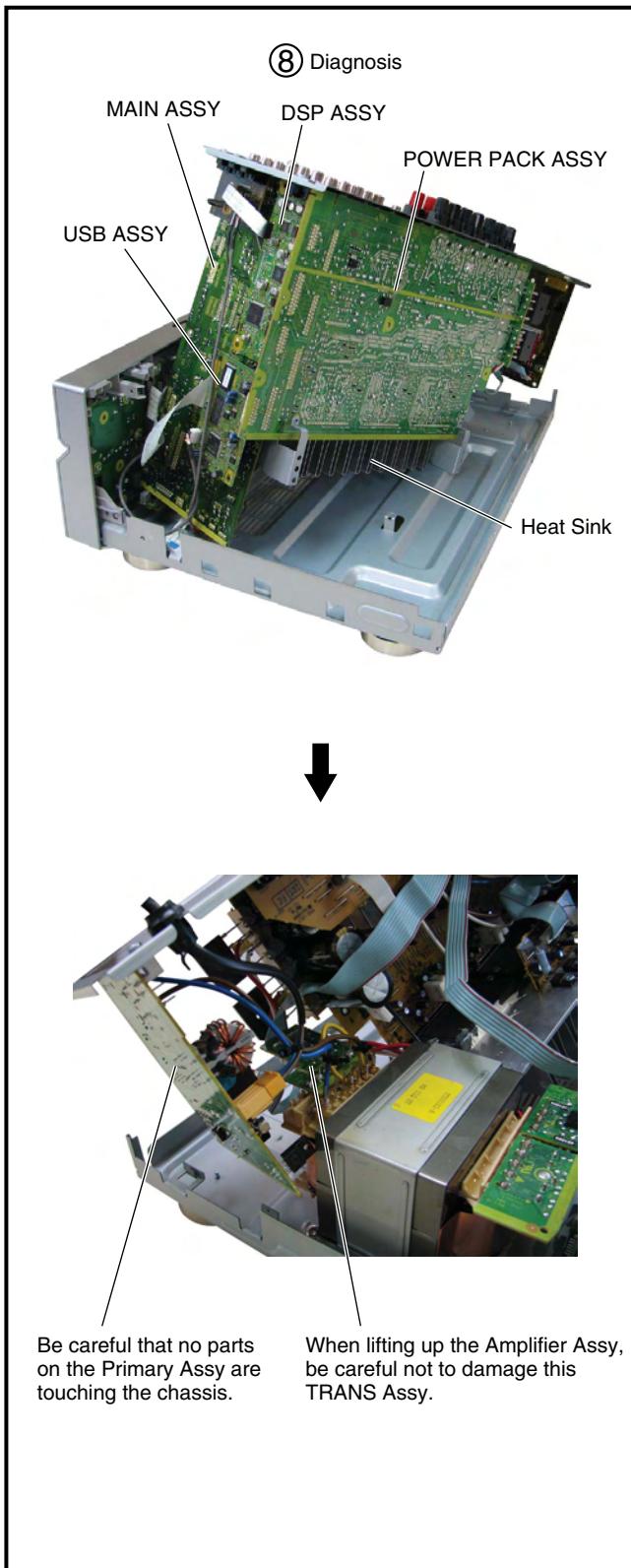
- (5) Remove PCB holder(one screw).



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

Heat-sink caution when disassembling : The Heat-sink becomes hot; please take care.

Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.



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

Heat-sink caution when disassembling : The Heat-sink becomes hot; please take care.

A

B

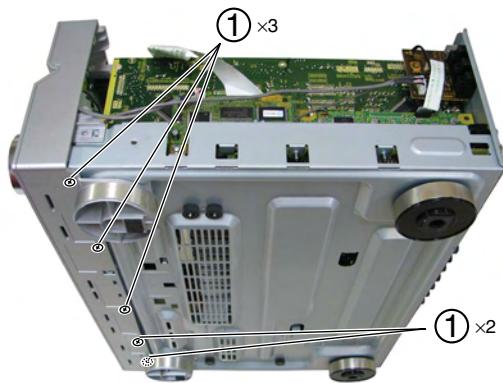
C

D

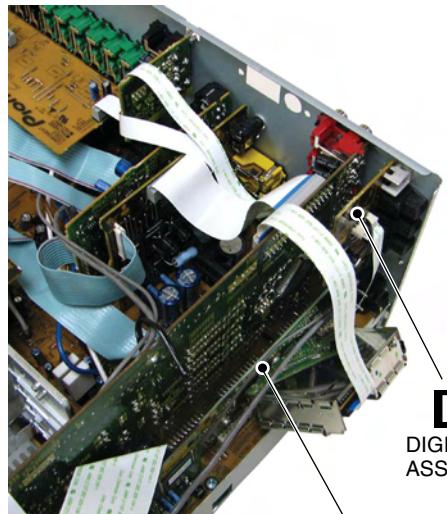
E

F

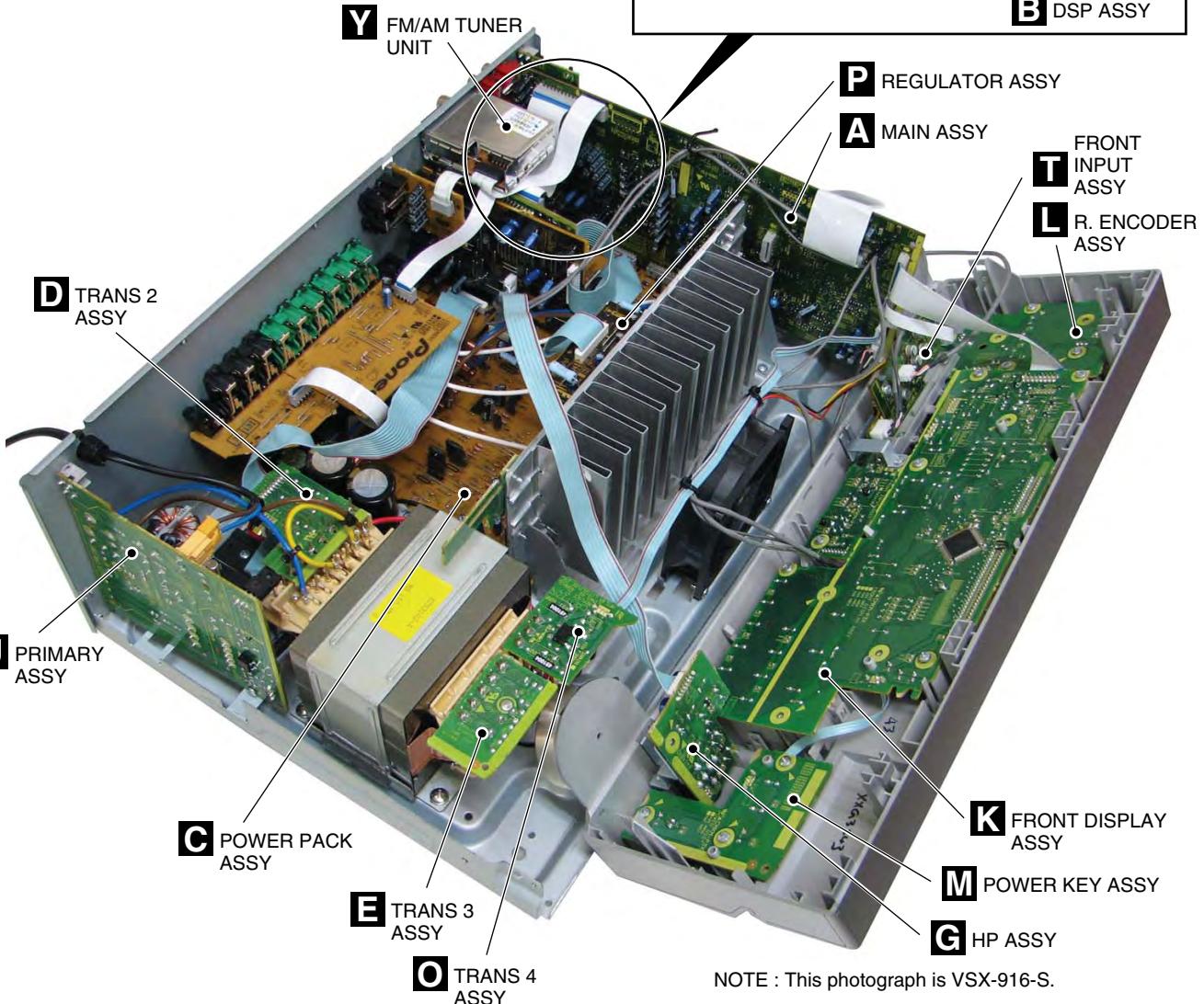
A



B



C



NOTE : This photograph is VSX-916-S.

F

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.

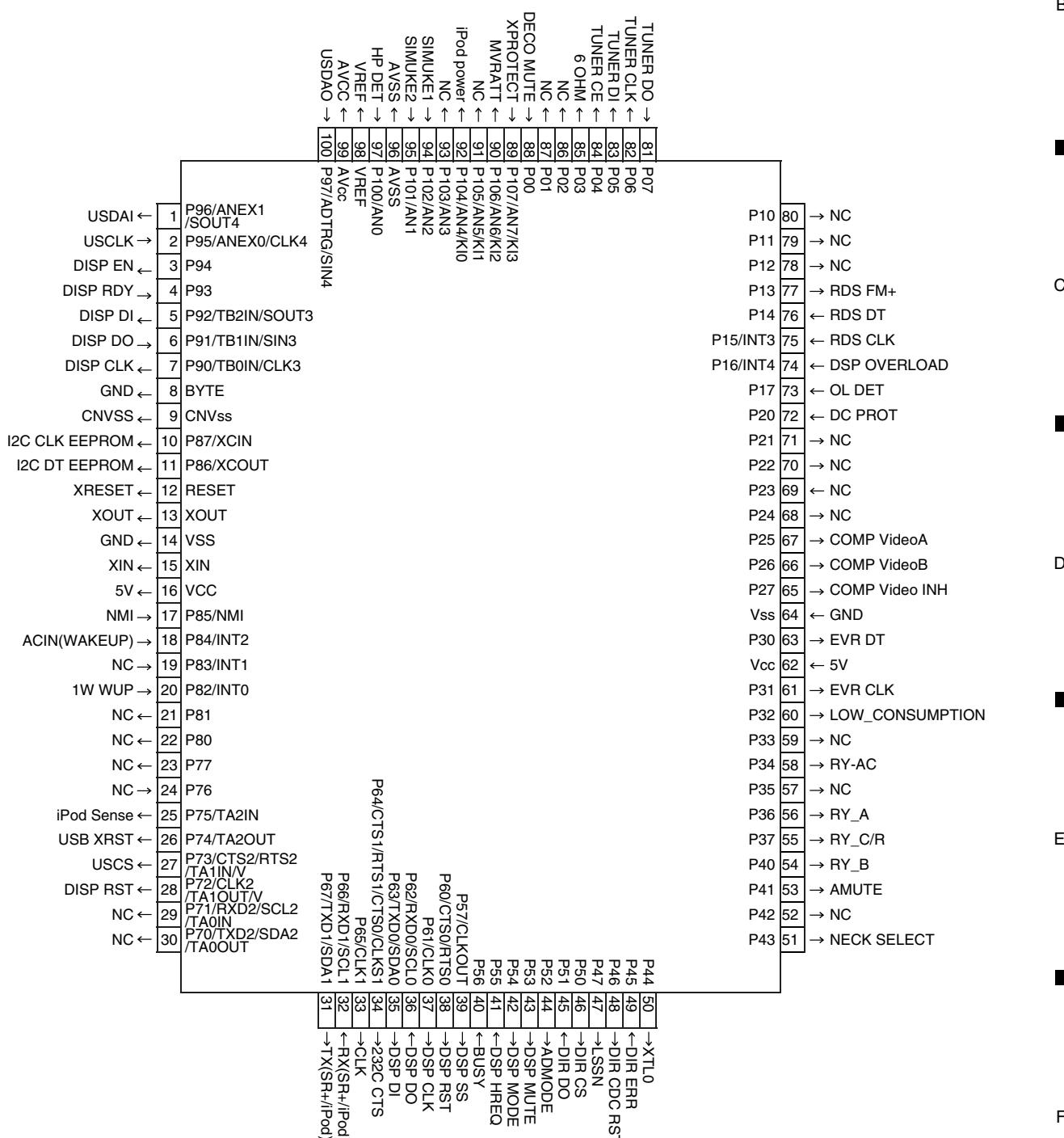
- List of IC

PEG217A, PE5550A, R2S15205FP

■ PEG217A (MAIN ASSY : IC9001)

- System Control MCU

■ Pin Arrangement (Top View)



• Pin Function

A	No.	Port	Pin Name	I/O	Pin Function
	1	P96/ANEX1/SOUT4	USDAI	I/O	No use
	2	P95/ANEX0/CLK4	USCLK	I/O	No use
	3	P94	DISP EN	I/O	Enable signal to display u-com
	4	P93	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 in from display u-com
	7	P90/TB0IN/CLK3	DISP CLK	I/O	Clock signal to display u-com
	8	BYTE	GND		
B	9	CNVss	CNVSS		
	10	P87/XCIN	I2C CK	I/O	Clock for I2C communication with EEPROM IC
	11	P86/XCOUT	I2C DT	I/O	Data for I2C communication with EEPROM IC
	12	RESET	XRESET		
	13	XOUT	XOUT		
	14	VSS	GND		
	15	XIN	XIN		
	16	VCC	5V		
C	17	P85/NMI	NMI	I	No use
	18	P84/INT2	ACIN(WAKEUP)	I/O	AC pulse in
	19	P83/INT1	NC	I/O	Request from TCC760 to main u-com
	20	P82/INT0	1W WUP	I/O	wake up signal from display u-com
	21	P81	NC	I/O	No use
	22	P80	NC	I/O	No use
	23	P77	NC	I/O	No use
D	24	P76	NC	I/O	No use
	25	P75/TA2IN	iPod Sense	I/O	No use
	26	P74/TA2OUT	USB XRST	I/O	No use
	27	P73/CTS2/RTS2/TA1IN/V	USCS	I/O	No use
	28	P72/CLK2/TA1OUT/V	DISP RST	I/O	reset signal to display u-com
	29	P71/RXD2/SCL2/TA0IN	NC	I/O	
	30	P70/TXD2/SDA2/TA0OUT	NC	I/O	
	31	P67/TXD1/SDA1	TXD(SR+/iPod)	I/O	SR+/iPod communication
	32	P66/RxD/SCL1	RXD(SR+/iPod)	I/O	SR+/iPod communication
	33	P65/CLK1	CLK	I/O	It is necessary when writing for JIG
E	34	P64/CTS1/RTS1/CTSO0/CLKS1	232C CTS	I/O	For rewriting 232C (Admit communication)
	35	P63/TXD0/SDA0	DSP DI	I/O	Data output signal for communication with DSP and DIR
	36	P62/RxD0/SCL0	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/CLKOUT	DSP SS	I/O	Strobe select signal to DSP
F	40	P56	BUSY	I/O	Use it in MCACC
	41	P55	DSP HREQ	I/O	DSP error detect signal
	42	P54	DSP MODE	I/O	Mode select of DSP (ROM/RAM)
	43	P53	DSP MUTE	I/O	DSP ASSY mute
	44	P52	ADMODE	I/O	DSP ASSY
	45	P51	DIR DO	I/O	Data input signal for communication with DIR/DAC
	46	P50	DIR CS	I/O	Chip select signal for communication with DIR/DAC
	47	P47	LSSN	I/O	DSP ASSY
	48	P46	DIR CDC RST	I/O	Reset signal for DIR CODEC
	49	P45	DIR ERR	I/O	lock/unlock signal
	50	P44	XTL0	I/O	DIR X'tal change

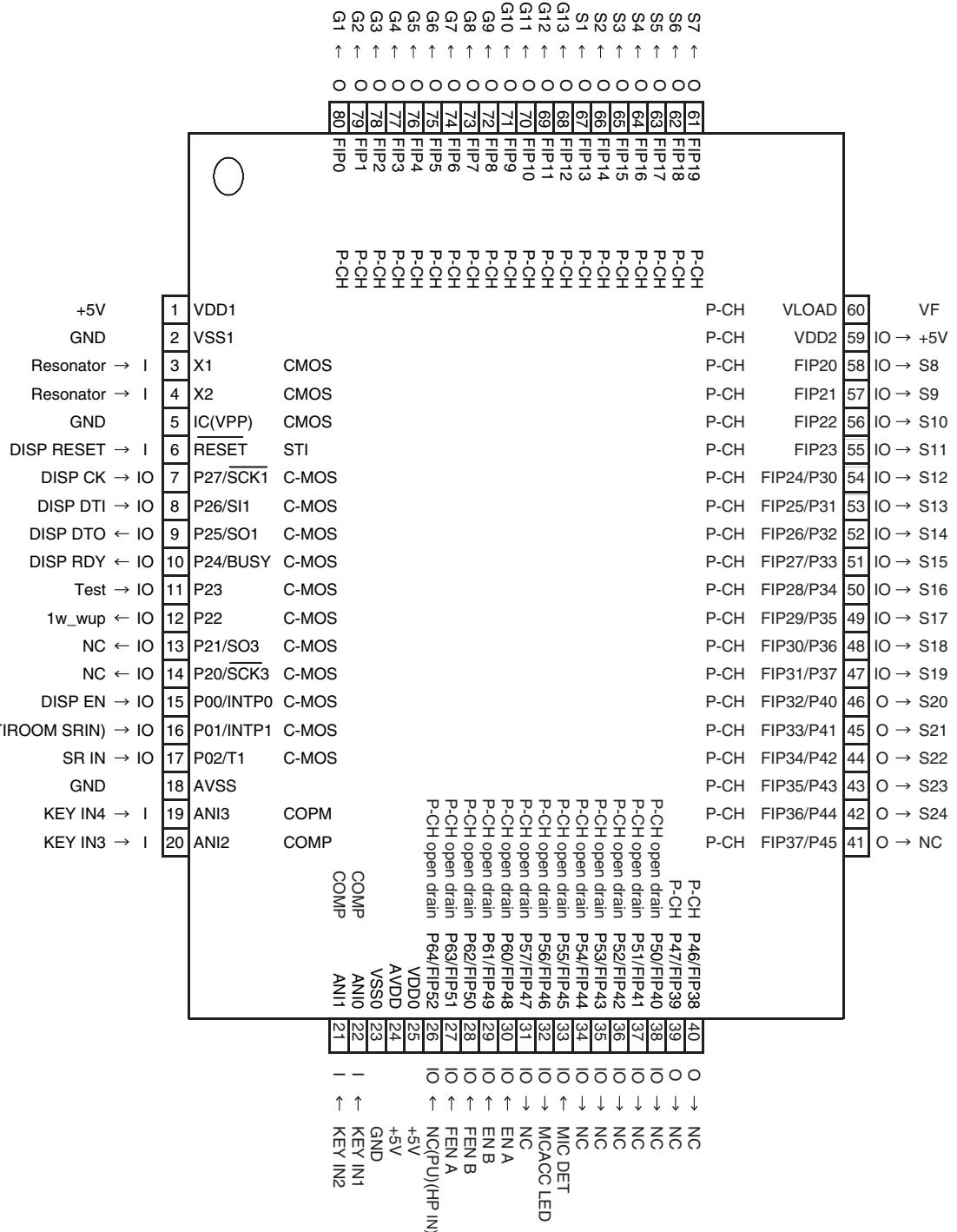
• Pin Function

No.	Port	Pin Name	I/O	Pin Function
51	P43	NECK_SEL	I/O	For 8ohm spk impedance: "H" at Adv Surr,Standard,5.1Multich,speaker A+B/7ch model). For 6 ohm spk impedance: L
52	P42	NC	I/O	
53	P41	AMUTE	I/O	System mute
54	P40	RY_B	I/O	Speaker B relay-on / OFF at 916, 816 and 516. This RY_B is used for SW relay at 316.
55	P37	RY_C/R	I/O	Rear one / center relay-on / OFF
56	P36	RY_A	I/O	Speaker A relay-on / OFF
57	P35	NC	I/O	
58	P34	RY_AC	I/O	AC relay on/off
59	P33	VIDEO4	I/O	NJM2296 control (VIDEO input select) (SX316 no connect)
60	P32	LOW_CONSUMPTION	I/O	When 1 minutes passed after power off and then go into stop mode and port L, else H.
61	P31	EVR CLK	I/O	Clock signal for Function and E-volume
62	Vcc	5V		
63	P30	EVR DT	I/O	Data signal for Function and E-volume
64	Vss	GND		
65	P27	COMP VIDEO INH	I/O	Component terminal control
66	P26	COMP VideoB	I/O	Component terminal control
67	P25	COMP VideoA	I/O	Component terminal control
68	P24	SWDET	I/O	"H": SW YES, "L": SW NO(SX316 no connect)
69	P23	VIDEO3	I/O	NJM2296 control (VIDEO input select) (SX316 no connect)
70	P22	VIDEO2	I/O	NJM2296 control (VIDEO input select) (SX316 no connect)
71	P21	VIDEO1	I/O	NJM2296 control (VIDEO input select) (SX316 no connect)
72	P20	DC PROTECT	I/O	Amplifier DC detection. H:Normal, L:Abnormal
73	P17	OL DET	I/O	Amplifier overload detection. H:Normal, L:Abnormal
74	P16/INT4	DSP OL	I/O	ANALOG OVER LOAD detect (H : detect)
75	P15/INT3	RDS CLK	I/O	RDS clock in signal
76	P14	RDS DT	I/O	RDS data in signal
77	P13	RDS FM+	I/O	RDS power supply. FM: Low, AM:High
78	P12	NC	I/O	
79	P11	NC	I/O	
80	P10	NC	I/O	
81	P07	TUNER DO	I/O	Data input signal for tuner contorol
82	P06	TUNER CLK	I/O	Clock signal for tuner contorol
83	P05	TUNER DI	I/O	Data output signal for tuner contorol
84	P04	TUNER CE	I/O	Chip select signal for tuner contorol
85	P03	6 OHM	I/O	if stop mode, port L, else according to setting (J model No connect)
86	P02	NC	I/O	
87	P01	NC	I/O	
88	P00	DECO MUTE	I/O	1st DSP detect port
89	P107/AN7/KI3	XPROTECT	I/O	Power supply abnormal condition detection. H: Normal, L: Abnormal.
90	P106/AN6/KI2	MVRATT	I/O	Master volume ATT control (-15dB or less : L)
91	P105/AN5/KI1	NC	I/O	
92	P104/AN4/KI0	iPod POW	I/O	iPod power supply. H always. When abnormally detecting it, it makes it to L.
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		connects with VCC.
97	P100/AN0	HP DET	I/O	HP detection H:detected.
98	VREF	VREF		connects with VCC.
99	AVcc	AVCC		connects with VCC.
100	P97/ADTRG/SIN4	USDAO	I/O	data input from USB

■ PE5550A (FRONT DISPLAY 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	-	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	data input 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	Test	I/O	test mode input for checker
12	P22	1w_wup	I/O	output wakeup signal to main u-com
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	ANIO	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	NC
32	P56/FIP46	MCACC LED	I/O	MCACC LED output
33	P55/FIP45	MIC DET	I/O	MIC detection. L:detected, H:No detect
34	P54/FIP44	NC	I/O	NC
35	P53/FIP43	NC	I/O	NC
36	P52/FIP42	NC	I/O	NC
37	P51/FIP41	NC	I/O	NC
38	P50/FIP40	NC	I/O	NC
39	P47/FIP39	NC	O	NC
40	P46/FIP38	NC	O	NC
41	FIP37/P45	NC	I/O	NC
42	FIP36/P44	S24	O	Display
43	FIP35/P43	S23	O	Display
44	FIP34/P42	S22	O	Display
45	FIP33/P41	S21	O	Display
46	FIP32/P40	S20	O	Display
47	FIP31/P37	S19	O	Display
48	FIP30/P36	S18	O	Display
49	FIP29/P35	S17	O	Display
50	FIP28/P34	S16	O	Display

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B
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F

• Pin Function

A	No.	Port	Pin Name	I/O	Pin Function
	51	FIP27/P33	S15	O	Display
	52	FIP26/P32	S14	O	Display
	53	FIP25/P31	S13	O	Display
	54	FIP24/P30	S12	O	Display
	55	FIP23	S11	O	Display
	56	FIP22	S10	O	Display
	57	FIP21	S9	O	Display
	58	FIP20	S8	O	Display
B	59	VDD2	+5V	-	positive power supply to FIP controller.
	60	VLOAD	VF	-	pull down resistor connection of FIP controller
	61	FIP19	S7	O	Display
	62	FIP18	S6	O	Display
	63	FIP17	S5	O	Display
	64	FIP16	S4	O	Display
	65	FIP15	S3	O	Display
	66	FIP14	S2	O	Display
	67	FIP13	S1	O	Display
C	68	FIP12	G13	O	Display
	69	FIP11	G12	O	Display
	70	FIP10	G11	O	Display
	71	FIP9	G10	O	Display
	72	FIP8	G9	O	Display
	73	FIP7	G8	O	Display
D	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

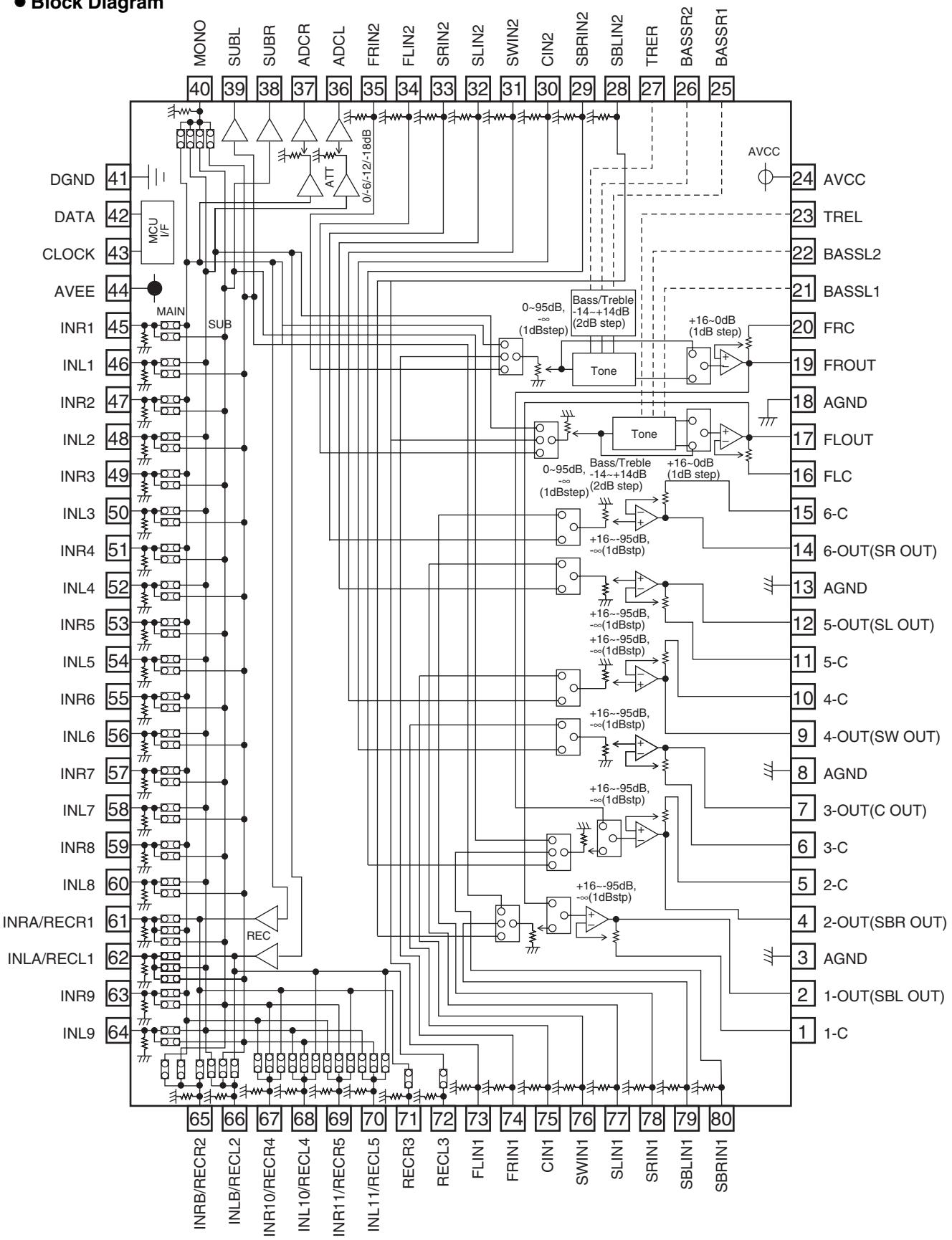
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■ R2S15205FP (MAIN ASSY : IC108)

• 8ch electronic volume with 11 input selectors and tone control

● Block Diagram



A

● Pin Function

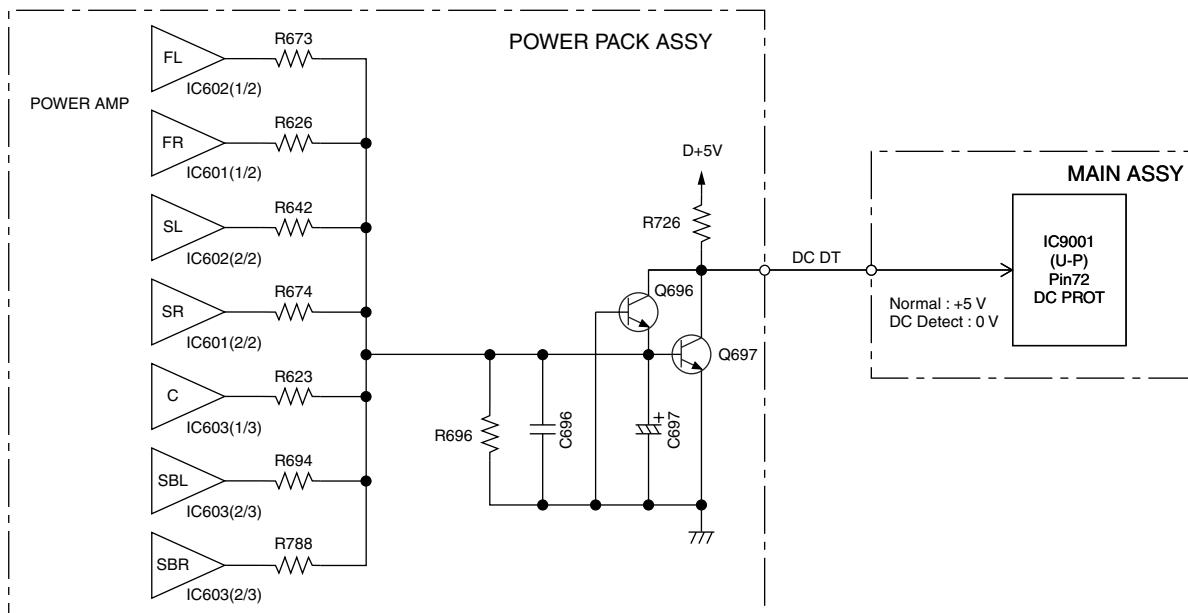
	PIN No.	Name	Function
B	19,17, 14,12, 9,7, 4,2	FROUT,FLOUT, 6-OUT,5-OUT, 4-OUT,3-OUT, 2-OUT,1-OUT	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
	20,16, 15,11, 10,6, 5,1	FRC,FLC, 6-C,5-C, 4-C,3-C, 2-C,1-C	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
	3,8, 13,18	AGND	Analog ground of internal circuit
	23,27	TREL,TRER	Frequency characteristic setting pin of L/R channel tone control(Treble)
	21,22, 25,26	BASS1,BASSL2, BASSR1,BASSR2,	Frequency characteristic setting pin of L/R channel tone control(Bass)
C	24	AVCC	Positive power supply to internal circuit
	35,34, 33,32, 31,30, 29,28	FRIN2,FLIN2, SRN2,SLIN2, SWN2,CIN2, SBRIN2,SBLIN2,	Input pin of L/R/C/SW/SL/SR/SBL/SBR channel(Multi IN 1/2)
	73,74, 75,76, 77,78, 79,80	FLIN1,FRIN1, CIN1,SWIN1, SLIN1SRIN1, SBLIN1,SBRIN1	
D	41	DGND	Digital ground of internal circuit
	42	DATA	Input pin of control data
	43	CLOCK	Input pin of control clock
	44	AVEE	Negative power supply to internal circuit
	46,48,50, 52,54,56, 58,60,64	INL1,INL2,INL3, INL4,INL5,INL6, INL7,INL8,INL9	Input pin of L/R channel(Input Selector)
	45,47,49, 51,53,55, 57,59,63	INR1,INR2,INR3, INR4,INR5,INR6, INR7,INR8,INR9	
	40	MONO	Input pin of monaural(Input Selector)
	38,39	SUBL,SUBR	Output pin for L/R channel SUB Output
	36,37	ADCL,ADCR	Output pin for L/R channel ADC
E	72	RECL3	Output pin for L/R channel REC Output
	71	RECR3	Input pin of L/R channel(Input Selector)/ Output pin for L/R channel REC Output
	61,62, 65,66, 67,68, 69,70	INRA/RECR1,INLA/RECL1, INRB/RECR2,INLB/RECL2, INR10/RECR4,INL10/RECL4, INR11/RECR5,INL11/RECL5,	

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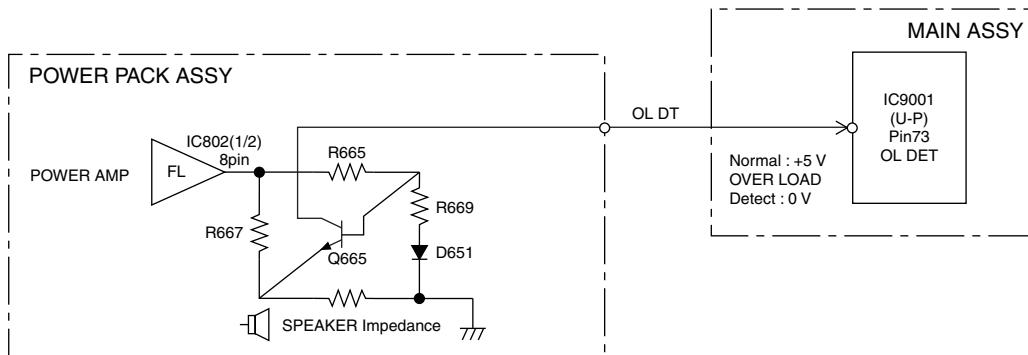
7.3 EXPLANATION

7.3.1 DETECTION CIRCUIT

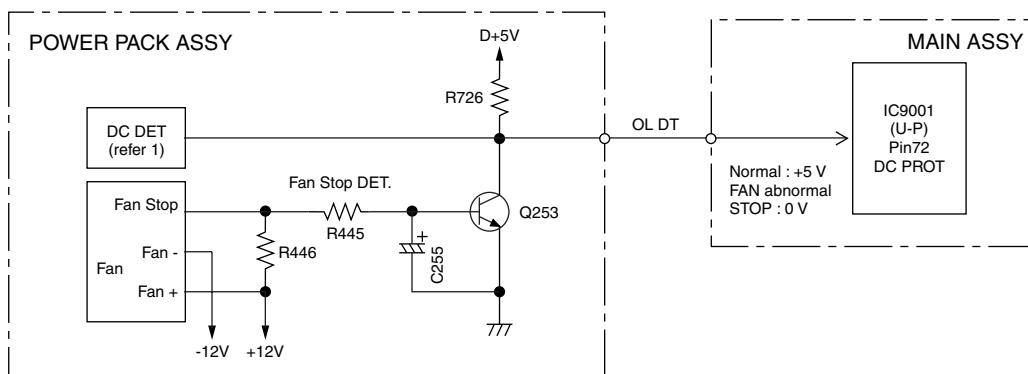
1. DC Detection Circuit Diagram : Example of VSX-816/KUXJ/CA



2. Overload Detection Circuit Diagram: Example of VSX-816/KUXJ/CA FRONT Channel



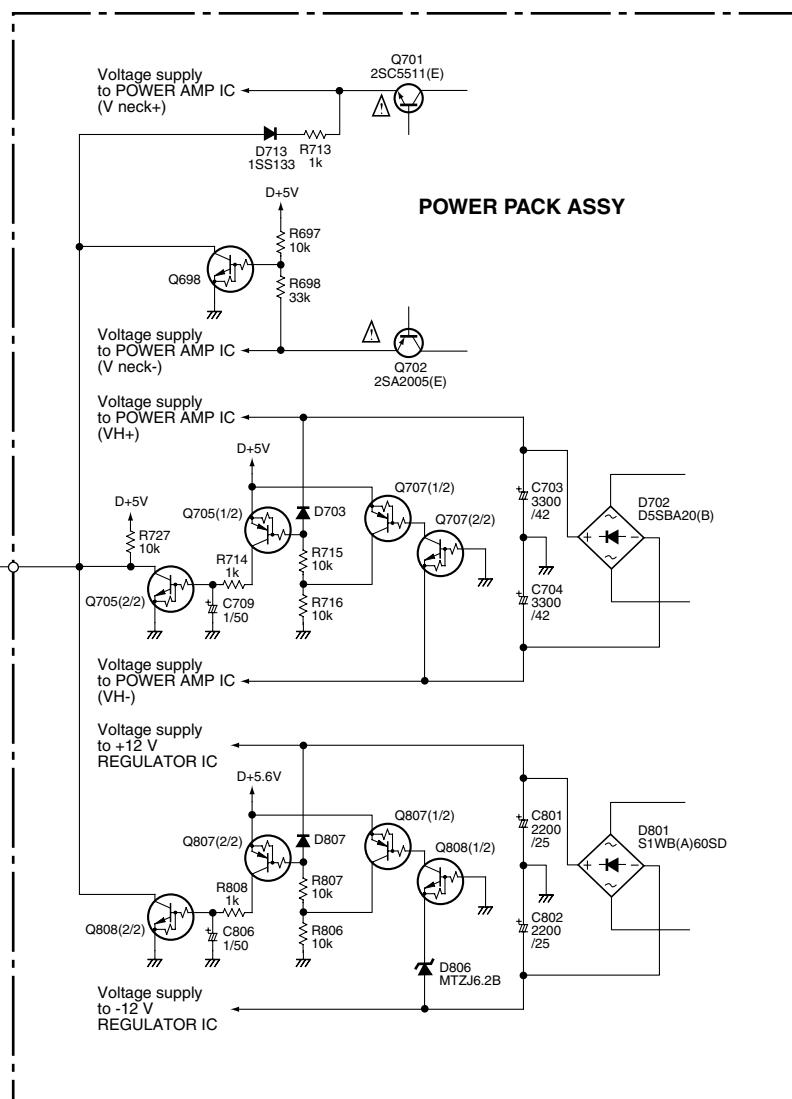
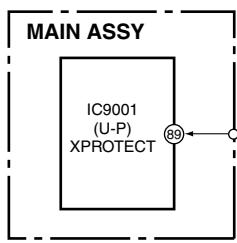
3. Fan Stop Protection Circuit Diagram



4. XPROTECT Detection Circuit Diagram

A When below 6 kind of voltage supply become to be short circuit to GND, XPROTECT circuit work and U-P input port voltage change from +5 V to 0 V. The U-P detect this condition as ERROR.

- Voltage supply to POWER AMP IC (V neck+)
- Voltage supply to POWER AMP IC (V neck-)
- Voltage supply to POWER AMP IC (VH+)
- Voltage supply to POWER AMP IC (VH-)
- Voltage supply to +12 V REGULATOR IC
- Voltage supply to -12 V REGULATOR IC



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7.3.2 AMPLIFIER SYSTEM PROTECTION OPERATION SPECIFICATION

1. DC-abnormality detection

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

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

When a DC abnormality is detected, A.MUTE* is turned on, speaker relay is turned off, then "AMP_ERR" flashes on the display.

*A.MUTE : Audio mute command



The abnormality continues for 3 seconds.

↓ Continues.

↓ Recovery

The power is shut off.

The program restarts.



Power key not effective.

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.
(②: When a DC abnormality is detected and the power is shut off.)
- Any other key input from front panel or remote control will not be detected.

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.

When an overload is detected, A.MUTE* is turned on, speaker relay is turned off, then "OVERLOAD" flashes on the display.



The abnormality continues for 3 seconds.

↓ Continues.

↓ Recovery

The power is shut off.

The power is shut off even if the unit recovers.

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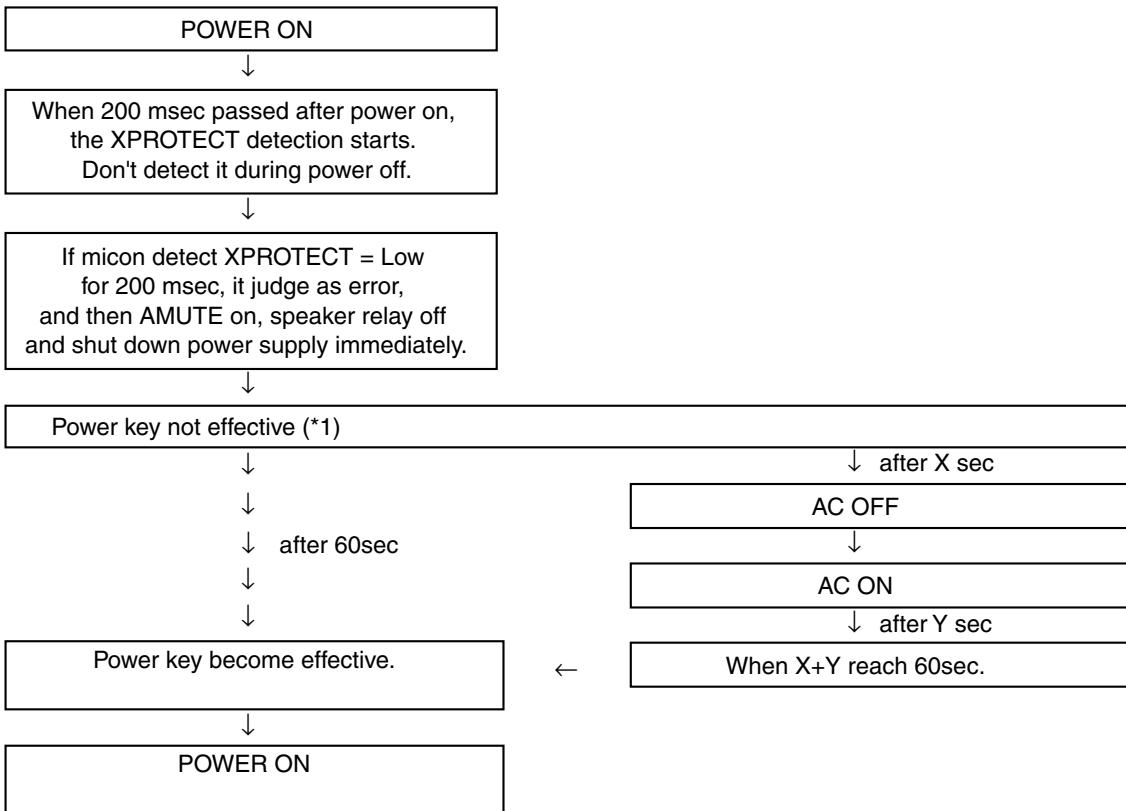
3. XPROTECT detection

XPROTECT is started to be monitored 200msec after power on.

XPROTECT port is checked every 20msec.

If Low level (ERROR) is recognized during consecutive 9 times, micon judge it as XPROTECT ERROR.

It processes more preferentially than DC abnormal detection and overload detection.



(*1) 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.

- D 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 / XPROTECT detection)
- Any other key input from front panel or remote control will not be detected.

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.

When an abnormality of fan is detected,
A.MUTE* is turned on, speaker relay is turned off,
the "AMP_ERR" flashes on the display.

*A.MUTE : Audio mute command

The abnormality continues for 3 seconds.

↓ Continues.

↓ Recovery

The power is shut off.

The program restarts.

Power key not effective.

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.

- F 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)

7.3.3 AMPLIFIER FAILURE DIAGNOSIS FLOW CHART

■ Amplifier failure diagnosis flow chart

A

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 releasing the lock state of power key before repair, please be careful because there is the possibility that more damages will occur when turning on the power once again!

B

- 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.
(Particularly the supply voltage of the power Tr and drive step)
↓

4) Whether the voltage of pin3 of IC600, IC601, IC602 or IC603 is equal to (VL-0.7V). If not (eg, equal to VH),
then change the corresponding power pack IC600, IC601, IC602 or IC603.
↓

5) Furthermore, check the output DC voltage of each channel of power pack IC600, IC601, IC602 and IC603
to limit the failure channel and identify the defect power pack.

C

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

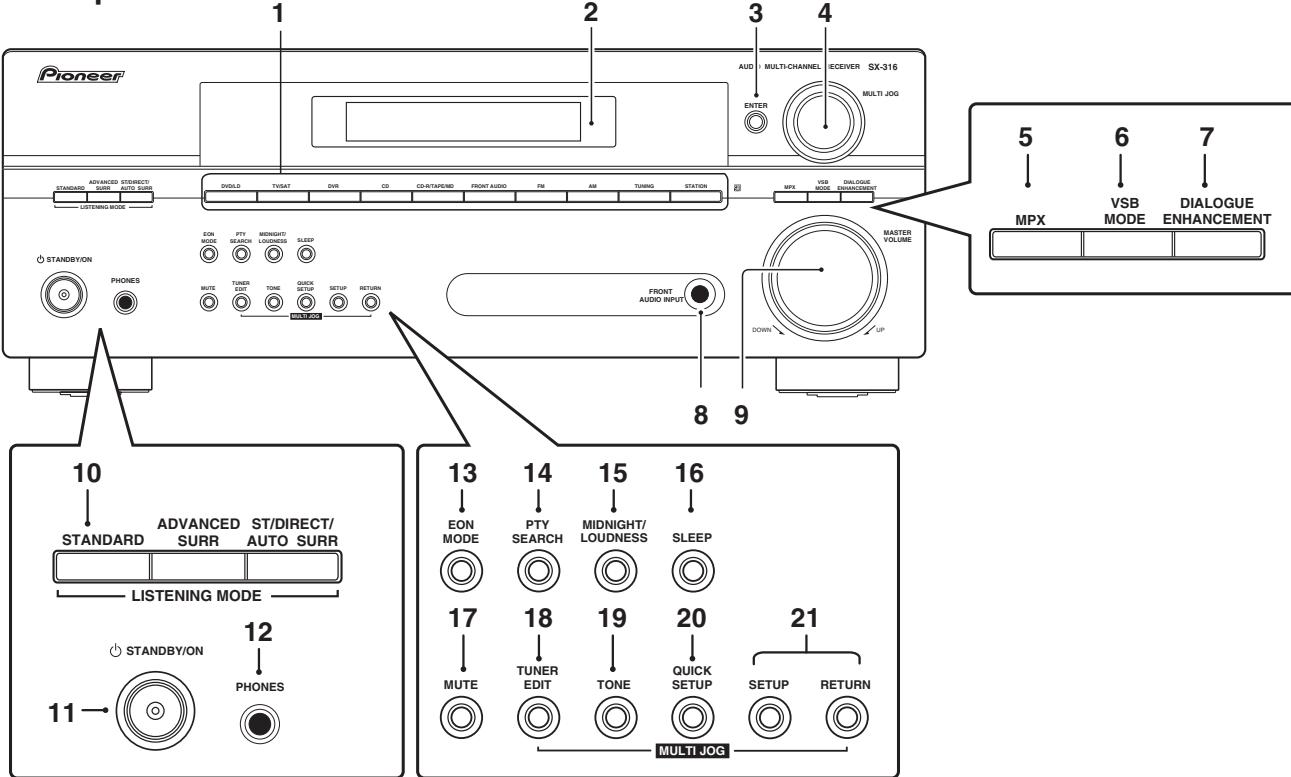
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8. PANEL FACILITIES

Front panel SX-316-S/MYXJ5



1 Input select buttons

Press to select an input source.

2 Character display

3 ENTER

4 MULTI JOG dial

5 MPX

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

6 VSB MODE

Selects the Virtual Surround Back (VSB) mode.

7 DIALOGUE ENHANCEMENT

This feature localizes dialog in the center channel to make it stand out from other background sounds in a TV or movie soundtrack.

8 FRONT AUDIO INPUT

9 MASTER VOLUME

Use to set the listening volume.

10 LISTENING MODE buttons

STANDARD

Press for Standard decoding and to switch between Pro Logic II options.

ADVANCED SURR

Switches between the various surround modes.

ST/DIRECT/AUTO SURR

Switches between direct and stereo playback. Direct playback bypasses the tone controls for the most accurate reproduction of a source. Also selects the Auto Surround mode (Auto playback).

11 \diamond STANDBY/ON

Switches the receiver between standby and on.

12 PHONES jack

13 EON MODE

Use to search for programs that are broadcasting traffic or news information.

14 PTY SEARCH

Use this button to search for RDS program types.

15 MIDNIGHT/LOUDNESS

These features give you good sound at low volume levels when listening to movie (Midnight) or music (Loudness) sources. Press to switch between MIDNIGHT, LOUDNESS, and OFF.

16 SLEEP

Press to change the amount of time before the receiver switches into standby (30 min - 60 min - 90 min - Off).

17 MUTE

Mutes/unmutes the sound.

18 TUNER EDIT

Press to memorize and name a station for recall.

19 TONE

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

20 QUICK SETUP

21 System Setup menu controls

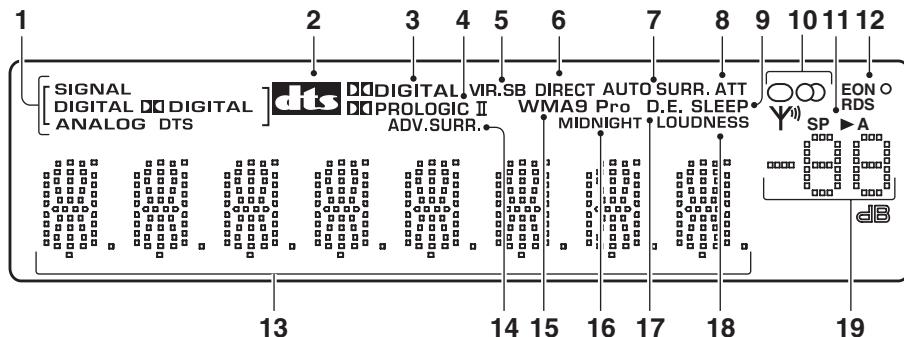
SETUP

Press to access the System Setup menu.

RETURN

Confirm and exit the current menu screen.

Display SX-316-S/MYXJ5



1 SIGNAL indicators

Lights to indicate the type of input signal assigned for the current component:

DIGITAL

Lights when a Dolby Digital¹ encoded signal is detected.

ANALOG

Lights when an analog signal is detected.

DTS

Lights when a DTS² encoded audio signal is detected.

DIGITAL

Lights when a digital audio signal is detected.

2 dts

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

3 DIGITAL

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

4 PRO LOGIC II

When the **(STANDARD)** Pro Logic II mode of the receiver is on, **PRO LOGIC II** lights to indicate Pro Logic II 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 for the most accurate reproduction of a source.

7 AUTO SURR.

Lights when the Auto Surround feature is switched on (see Auto playback).

8 ATT

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

9 SLEEP

Lights when the receiver is in sleep mode.

10 Tuner indicators

MONO

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

STEREO

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

TUNED

Lights when a broadcast is being received.

11 Speaker indicator

Shows if the speaker system is on or not. **SP A** means the speakers are switched on. **SP B** means the headphones are connected.

12 EON/RDS indicators

EON

Lights when the EON mode is set, and flashes during an EON broadcast. The **O** indicator lights when the current station carries the EON service.

RDS

Lights when an RDS broadcast is received.

13 Character display

14 ADV.SURR. (Advanced Surround)

Lights when one of the Advanced Surround modes has been selected.

15 WMA9 Pro

Lights to indicate decoding of a WMA9 Pro signal.

16 MIDNIGHT

Lights during Midnight listening.

17 D.E.

Lights when Dialog Enhancement (**DIALOG E**) is switched on.

18 LOUDNESS

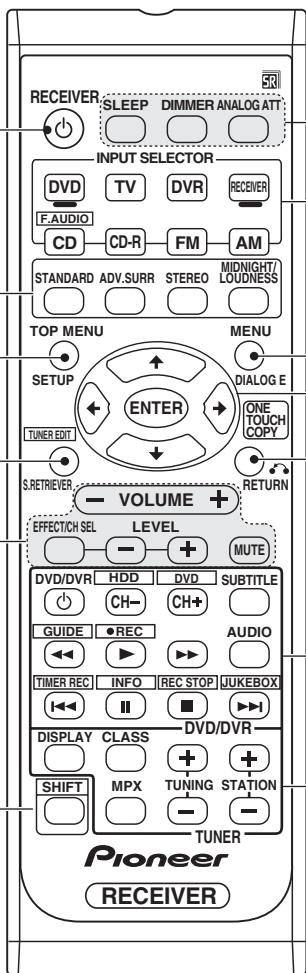
Lights during Loudness listening.

19 Master volume level

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

Remote control

SX-316-S/MYXJ5



1 RECEIVER

Switches the receiver between standby and on.

2 Listening mode buttons

STANDARD

Press for Standard decoding and to switch between Pro Logic II options.

ADV.SURR.

Switches between the various surround modes.

STEREO

Switches between direct and stereo playback. Direct playback bypasses the tone controls for the most accurate reproduction of a source. Also selects the Auto Surround mode(Auto playback).

MIDNIGHT/LOUDNESS

These features give you good sound at low volume levels when listening to movie (Midnight) or music (Loudness) sources.

Press to switch between **MIDNIGHT**, **LOUDNESS**, and **OFF**.

3 TOP MENU

Displays the disc "top"menu of a DVD disc.

SETUP

Press to access the System Setup menu.

4 TUNER EDIT*

Press to memorize and name a station for recall.

Also functions as the SETUP button for DVD/DVR units.

S. RETRIEVER

Press to restore CD quality sound to compressed audio sources.

5 RECEIVER CONTROL buttons

VOLUME +/-

Use to set the listening volume.

EFFECT/CH SEL

Press repeatedly to select a channel, then use **LEVEL +/-** to adjust the level.

Also selects the Advanced Surround effect level (use **LEVEL +/-** to adjust).

LEVEL +/-

Use to adjust the effect and channel levels.

MUTE

Mutes/unmutes the sound.

6 SHIFT

Press to access commands in a rectangle (above the buttons) on the remote. These buttons are marked with an asterisk(*) in this section.

7 SLEEP

Press to change the amount of time before the receiver switches into standby (**30 min - 60 min - 90 min - Off**).

DIMMER

Dims or brightens the display.

ANALOG ATT

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

8 INPUT SELECTOR buttons

Press to select an input source (press **DVD/DVR** to use the DVD player/recorder controls on the remote).

RECEIVER

Use to switch to the receiver controls on the remote control. Also used when setting up the surround sound for the receiver.

9 MENU

Displays the disc menu of DVD-Video discs.

DIALOG E

This feature localizes dialog in the center channel to make it stand out from other background sounds in a TV or movie soundtrack.

10 ↑↓←→ / ENTER

11 RETURN

Confirm and exit the current menu screen.

ONE TOUCH COPY*

Copies the currently playing title from DVD to HDD or vice-versa.

12 DVD/DVR control buttons

You can use these buttons to control a Pioneer DVD player or recorder connected to your system.(press **DVD/DVR** to access the below controls).

Button	What it does
DVD/ DVR ◊	Turns DVD player or DVD recorder power on/off.
AUDIO	Changes the audio language or channel.
SUBTITLE	Displays/changes the subtitles on multilingual DVD-Video discs.
CH +/-	Switches channels.
▶	Starts/resumes normal playback.
⏸	Pauses/unpauses a disc.
■	Stops playback.
◀◀	Press to start fast reverse scanning.
▶▶	Press to start fast forward scanning.
◀◀	Skips to the start of the current track or chapter, then previous tracks/chapters.
▶▶	Skips to the next track or chapter.
HDD/ DVD*	Switch between the hard disk and DVD controls for DVD/HDD recorders.
GUIDE*	Displays the guides on a DVD recorder.
●REC*	Starts recording.
TIMER	Accesses the timer recording menu.
REC*	
INFO*	Displays additional EPG information.
REC	Stops recording.
STOP*	
JUKEBOX*	Switches to the Jukebox feature.
TUNER	Press to access the SETUP menu .
EDIT*	

13 TUNER controls

The **TUNING +/-** buttons can be used to find radio frequencies and the **STATION +/-** buttons can be used to select preset radio stations.

DISPLAY

Switch the display between station preset name, frequency (see tip on) and RDS data.

CLASS

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

MPX

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

About the WMA9 Pro decoder

This unit has an on-board Windows Media® Audio 9 Professional (WMA9 Pro) decoder, so it is possible to playback WMA9 Pro-encoded audio using a coaxial or optical digital connection when connected to a WMA9 Pro-compatible player. However, the connected DVD player, set-top box, etc. must be able to output WMA9 Pro format audio signals through a coaxial or optical digital output.



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A

B

C

D

E

F

■ CLEANING



A 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

B

C

D

E

F