ORDER NO. MD0808009CE
A6

Service Manual

Home Theater Audio System

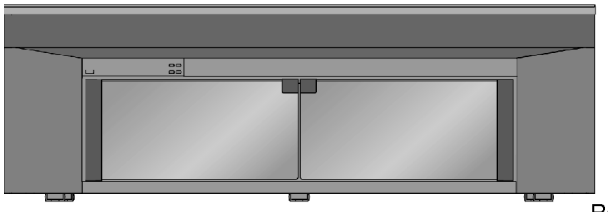
HIGH-DEFINITION MULTIMEDIA INTERFACE

VIERA Link

SC-HTR310P

Colour

(K)... Black Type



SC-HTR310

Remote Control

Specification

■ Amplifier Section

RMS output power of each channel driven	
10% total harmonic distortion	
1 kHz Front CH	70 W per channel (4 Ω)
1 kHz Center CH	70 W per channel (4 Ω)
100 Hz Subwoofer CH	90 W per channel (3 Ω)
Total RMS output power	300 W
Total harmonic distortion	
half power at 1kHz (Front CH)	0.5 % (4 Ω)
Input sensitivity	
TV, AUX 3	450 mV, IHF'66
S/N at rated power (4 Ω)	
BD/DVD, TV, AUX 1, AUX 2	80 dB
Input impedance	
TV, AUX 3	47 kΩ
Tone controls	
BASS	50 Hz, +6 dB to -6 dB
TREBLE	20 kHz, +6 dB to -6 dB
Digital input	
Optical	2
Coaxial	1
HDMI Input	1
HDMI Output	1

This system supports "HDAVI Control 1" function.

■ General

Power supply	AC 120V, 60 Hz
Power consumption	
Main set	68 W
Standby (HDMI ON)	0.7 W
Standby (HDMI OFF)	0.3 W

■ Rack System

INCLUDING SPEAKER	
Dimensions (W x H x D)	1300 mm x 444 mm x 458 mm
Mass	approx. 50 kg

* Mass is a Completed (AMP, Speaker Unit inc)

Maximum Loading Weight	80 kg

■ Speaker System

FRONT (L/R)	1-Way 1 Speaker System (Bass Reflect)
	6.5 cm Cone Type Full Range x1
CENTER	1-Way 1 Speaker System (Bass Reflect)
	6.5 cm Cone Type Full Range x1
SUBWOOFER	1-Way 2 Speaker System (Bass Reflect)
	13 cm Cone Type Woofer x2

Notes :

1. Specifications are subject to change without notice.
2. Total harmonic distortion is measured by the digital spectrum analyser.

Panasonic®

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

1 Safety Precautions

1.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, ensure that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, check for leakage current checks to prevent from being exposed to shock hazards.

(This “Safety Precaution” is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer’s recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Using an ohmmeter measure the resistance value, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2Ω.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞.

1.1.2. Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. should the measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and re-checked before it is returned to the customer.

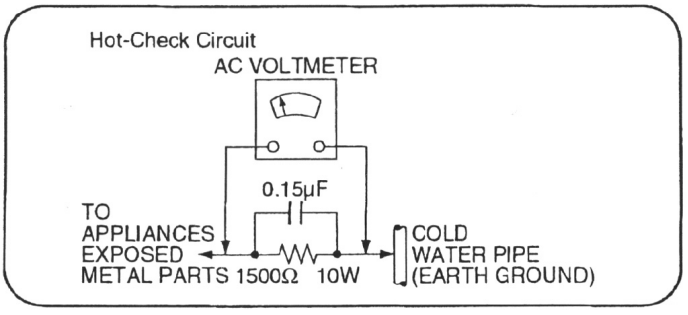


Fig. 1

1.2. Before Repair and Adjustment

Disconnect AC power, discharge ac capacitors C5712, C5808, C5805, C5813, C5816, C5824, C5517, C5516, C5508, C5509, C5510, C5511, C5512 and C5513 through a 10Ω, 1W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

- Current consumption at AC 120 V, 60 Hz in NO SIGNAL mode (at volume minimum) should be 200 ~ 800 mA.

1.3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

1.4. Safety Part Information

Safety Parts List:

There are special components used in this equipment which are important for safety.These parts are marked by ⚠ in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Table 1

Reference No.	Part No.	Part Name & Description	Remarks
8	REXX0640-J	BLACK WIRE	[M] ⚠
9	REXX0641-J	RED WIRE	[M] ⚠
14	RKMX0141B-S1	TOP CABINET	[M] ⚠
15	RGR0383D-C	REAR PANEL	[M] ⚠
A2	K2CB2CB00021	AC CORD	[M] ⚠
A6	RFA2903	TOP GLASS ACCESSORY	[M] ⚠
A8	RXQ1607	PREPARED GLASS DOOR ASSY L	[M] ⚠
A9	RXQ1608	PREPARED GLASS DOOR ASSY R	[M] ⚠
DZ5701	ERZV10V511CS	ZENER	[M] ⚠
L5701	ELF15N035AN	LINE FILTER	[M] ⚠
L5702	ELF22V020A	LINE FILTER	[M] ⚠
T701	G4D1A0000117	SW TRANSFORMER	[M] ⚠
T5701	ETS42BM1A1AC	TRANSFORMER	[M] ⚠
T5751	ETS19AB281AG	BACKUP TRANSFORMER	[M] ⚠
PC5701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5720	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5799	B3PBA0000402	PHOTO COUPLER	[M] ⚠
F1	K5D802APA008	FUSE	[M] ⚠
IP701	K5H5012A0010	IC PROTECTOR	[M] ⚠
IP702	K5H302100004	IC PROTECTOR	[M] ⚠
TH5701	D4CAA2R20001	THERMISTOR	[M] ⚠
TH5860	D4CC11040013	THERMISTOR	[M] ⚠
P5701	K2AB2B000011	AC INLET	[M] ⚠
PCB5	REPX0676N	SMPS P.C.B. / AC INLET P.C.B.	[M] (RTL) ⚠

1.5. Caution for fuse replacement

(For English)
CAUTION:

Replace with the same type fuse:
(Manufacturer: Hollyland, Type: 51MS or F1, 8A 125V)

2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

3 Handling the Lead free Solder

3.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of “PbF” is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
  (Definition: The letter of “PbF” is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
  RFKZ03D01K----------(0.3mm 100g Reel)
  RFKZ06D01K----------(0.6mm 100g Reel)
  RFKZ10D01K----------(1.0mm 100g Reel)

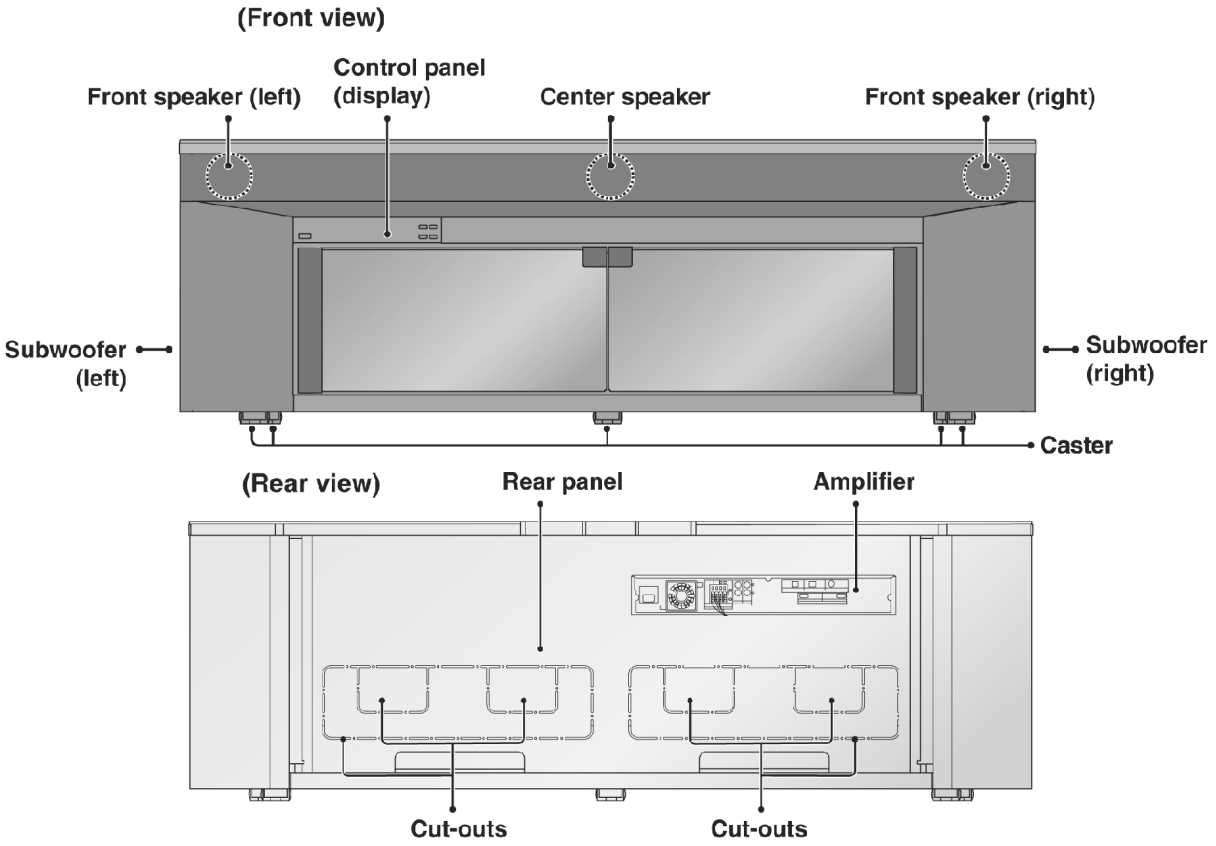
Note

* Ingredient: Tin (Sn), 96.5%, Silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

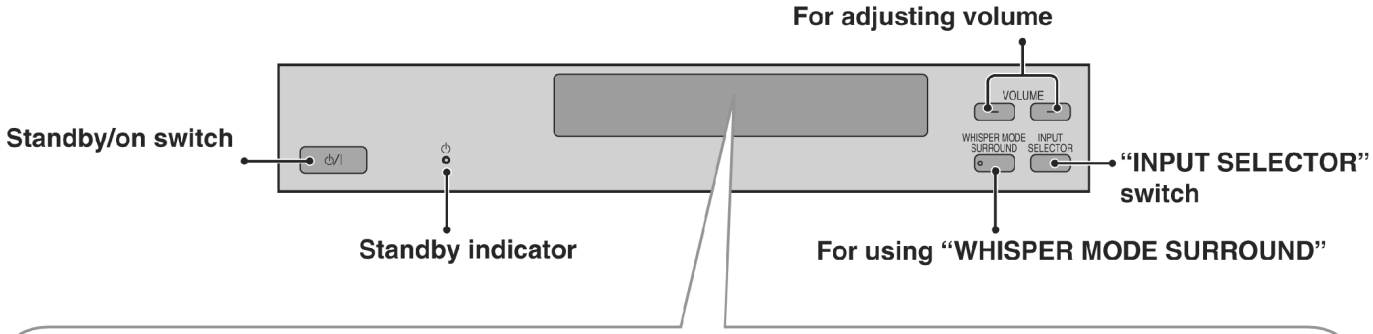
4 Operating Procedures

4.1. Control guide

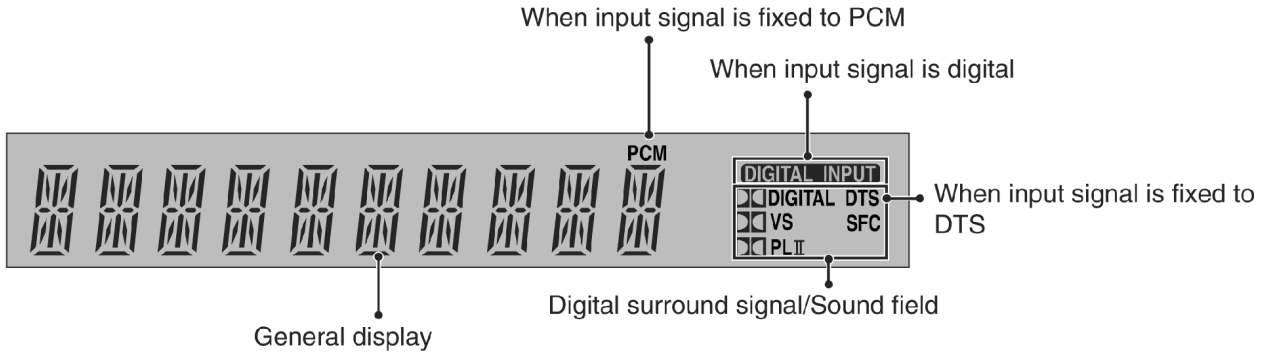
4.1.1. This system



4.1.2. Control panel

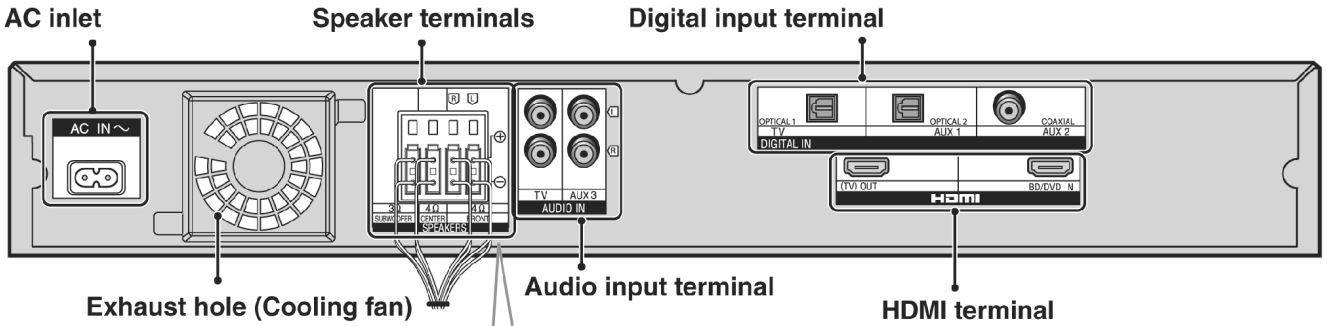


Display



DIGITAL	:	Dolby Digital sources	PL II	: When Dolby Pro Logic II decoder is being used (When using Dolby Virtual Speaker on 2 channel stereo source)
DTS	:	DTS sources		
VS	:	When Dolby Virtual Speaker is working		
SFC	:	When you are using an SFC mode		

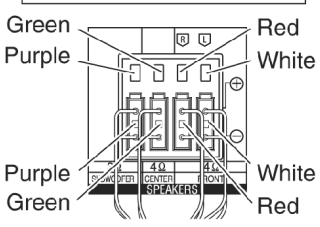
4.1.3. Amplifier



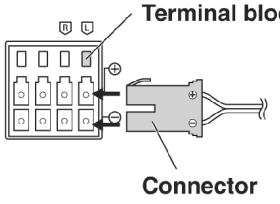
Speaker terminals

The speakers are already connected. Do not touch the connectors unless absolutely necessary.
If the connectors become disconnected, refer to the illustrations below for connection.

Connector connection

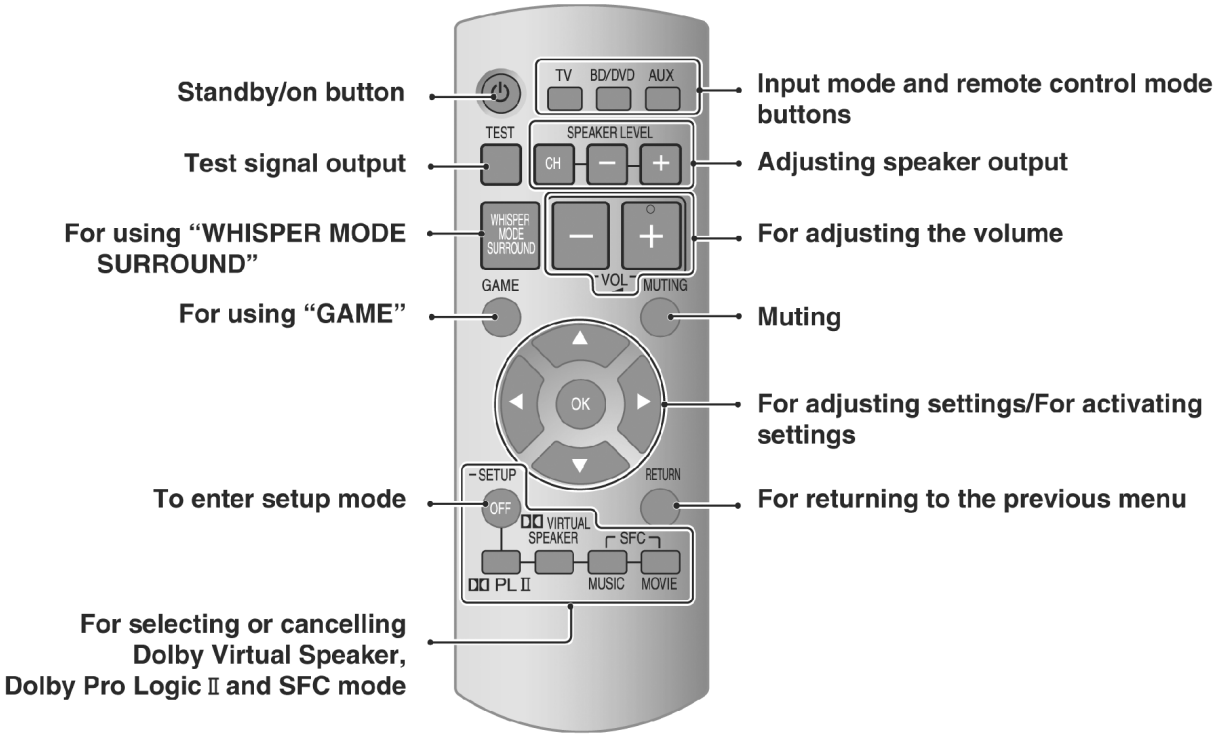


How to attach the connectors



Make sure the colour on the connector indicates the same as corresponding terminal and insert the connector straight all the way.

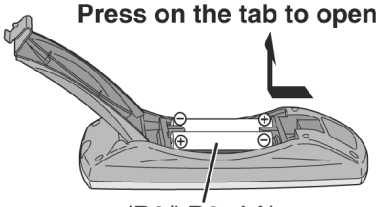
4.1.4. Remote control



4.2. Remote control preparation

4.2.1. Inserting the batteries

Press on the tab to open.



(R6/LR6, AA)

Insert so the poles (+ and –) match those in the remote control.

Do not:

- mix old and new batteries.
- use different types at the same time.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can severely damage the remote control.

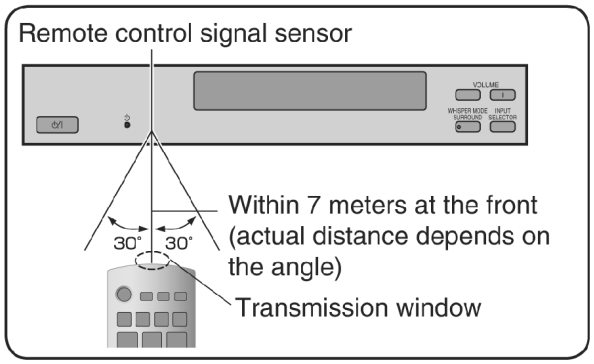
Remove the batteries if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Do not use rechargeable type batteries.
- Do not heat or expose to flame.
- Do not leave the batteries in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

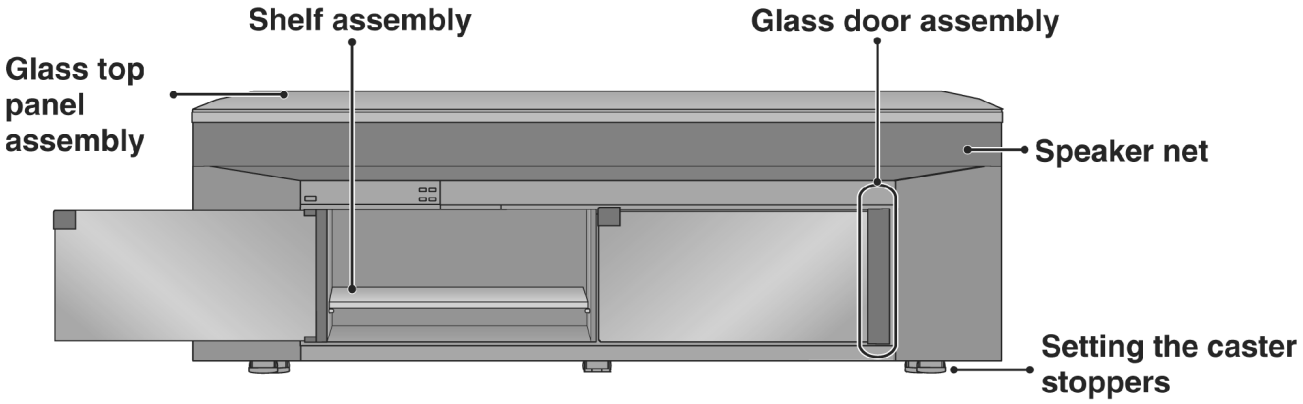
4.2.2. Using the remote control



Note

- Do not place an object between the signal sensor and the remote control.
- Do not place the signal sensor under direct sunlight or the strong light of a fluorescent lamp.
- Keep the transmission window and the system's sensor free from dust.

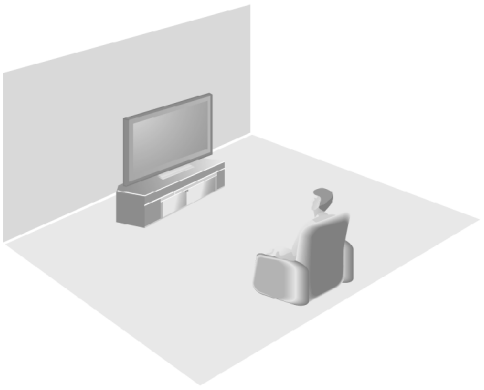
4.3. Installing and assembling the rack



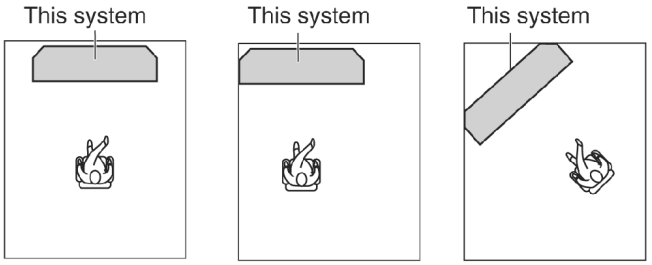
Installing each equipment **(DVD player/Blu-ray Disc player/DVD recorder) (TV)**

Installation

- **At least 2 people are necessary for installation.**
- **Use a Phillips-head screwdriver. (Do not use a powered screwdriver.)**
- **Choose a stable location for installation.**
- **Handle the glass top panel and glass doors with enough care.**



Setup example

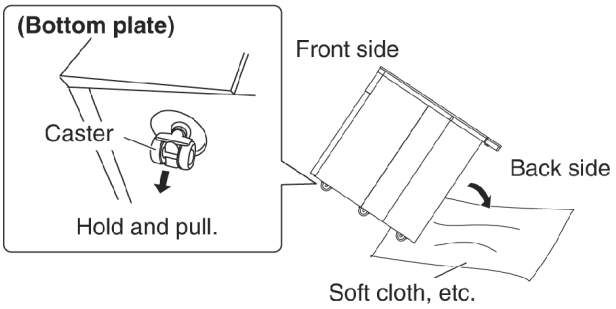


- Make sure to place the rack on a flat, stable surface so there is no danger of it falling over. Take enough safety measures to prevent the television from falling down.
- You can install this system so that it is flush with the wall at either the sides or back, but you will require some space for working during setup and connection.
- Do not place in front of curtains as they may obstruct the system's exhaust hole.
- Avoid pressing on the speaker nets during installation.
- If the surface of the wooden floor is soft, the caster mark may remain.

Caution
- Use the speakers only with the recommended system. Failure to do so can damage the amplifier and speakers, and can cause fire.
- Consult a qualified service person if damage occurs or if performance worsens.

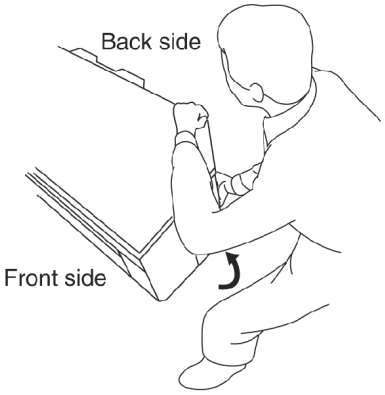
Removing casters

- Remove casters at unstable places. (thick-piled carpet, etc.)
- Spread soft cloth on the floor and tip the rack back to remove the casters.
- Hold and pull to remove.
- At least 2 people are necessary for removing casters.
- Make sure that at least 2 people hold the bottom plate when moving the rack after removing the casters. See the following instructions about how to lift the rack.
- Do not put anything on and in the rack when removing casters. Do not put the included glass top panel either.



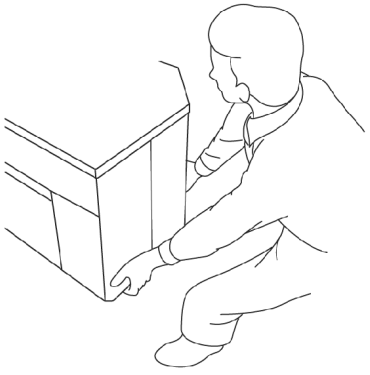
How to lift the rack

① Lift the back side of the top board and insert your hand to the bottom of the back side.



② Insert your hand to the bottom of the front side.

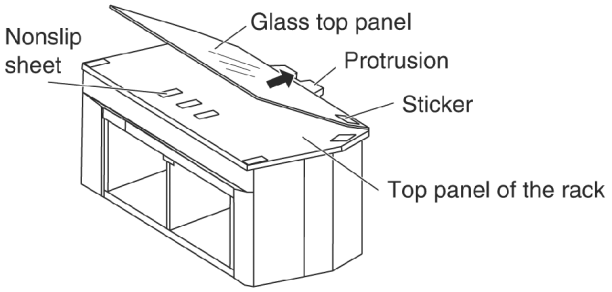
③ Lift the rack horizontally using your both hands.



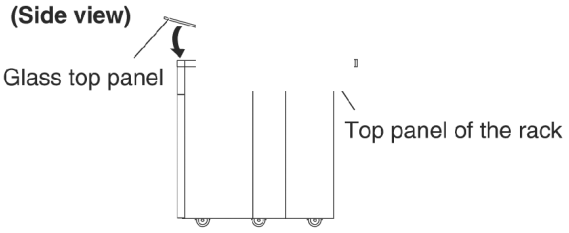
Glass top panel assembly

1 Adjust the glass top panel (included) to protrusion.

- The glass top panel has the front side and back side. Face up the front side with the sticker.
- The nonslip sheet has been put on the top panel of the rack. Do not remove the sheet when installing the glass top panel.



2 Put it down slowly adjusting to the top panel of the rack.

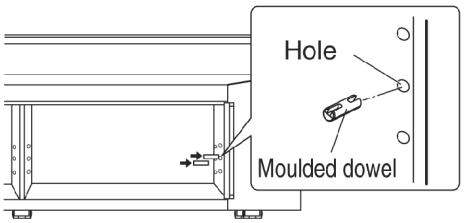


Note

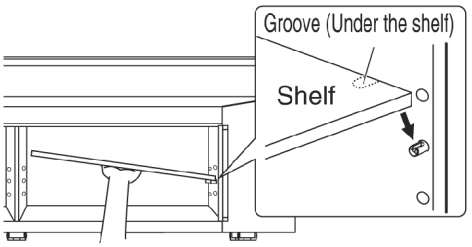
Lift up and down slowly not to make an impact on the glass.

Shelf assembly

1 **Insert the moulded dowel (included) into the dowel hole on one side.**

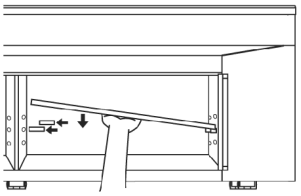


2 **Insert the shelf (included) with a slope and set it adjusting the shelf groove to the moulded dowel.**



3 **Hold the shelf, insert the moulded dowel into the dowel hole on the other side. Set the shelf horizontally.**

- The height of the shelf can be adjusted at 3 different levels.
- Change the position of the dowels to move the shelf up or down.
- Insert the moulded dowel not to lose even when the shelf is not set.



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UNIT: mm

Dowel position			Upper	Middle	Lower
Compartment	H	Upper shelf	101	131	161
		Lower shelf	101	71	41
	W		448 (both L and R)		
	D		354		

SC-HTR210

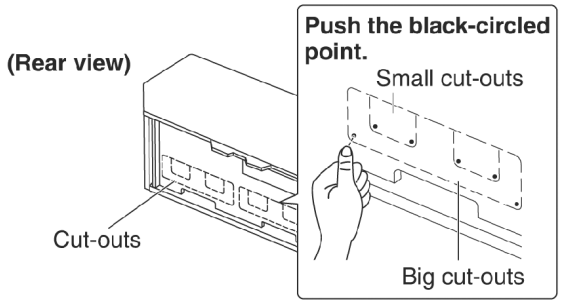
UNIT: mm

Dowel position			Upper	Middle	Lower
Compartment	H	Upper shelf	98	128	158
		Lower shelf	101	71	41
	W		700		
	D		354		

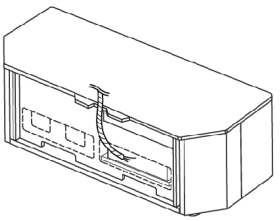
Installing a DVD player/Blu-ray Disc player/DVD recorder or other equipment on the shelf (Please also refer to the other equipment's operating instructions.)

1 Press the cut-out on the back panel using your thumb etc. with force to remove it for wiring after installing the equipment.

- If the operating instructions of the equipment require heat release or ventilation, remove the cut-out on the back panel to secure ventilation.
- When setting equipment with the exhaust hole on the side, follow the operating instruction of the equipment before setting.

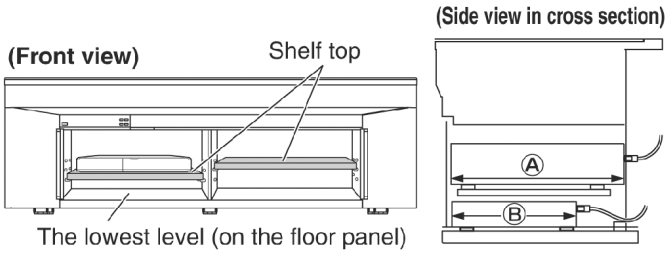


2 Pull out the bundled cords of stored equipment from the cut-outs for connection.



Note

- Do not put equipment weighing more than 12 kg on the upper shelf or more than 20 kg on the lower shelf.
- Image interference may occur if you put a DVD recorder, etc. on the upper shelf. Put it on the lower shelf if this occurs.
- Depending on the equipment to install, the cables may not be connected.
  To install the equipment, adjust the height of the shelf to the position where the cables come out.
- If you set on the lowest level (on the floor panel), the equipment with long depth may not be set properly or the equipment cord may not be taken out.



Shelf top (dimension Ⓐ): 348 mm (Maximum depth of equipment when the big cut-outs part on the back panel is opened)
Shelf top (dimension Ⓐ): 255 mm (Maximum depth of equipment when the small cut-outs part on the back panel is opened)
The lowest level (on the floor panel) (dimension Ⓑ): 255 mm (Maximum depth of equipment)

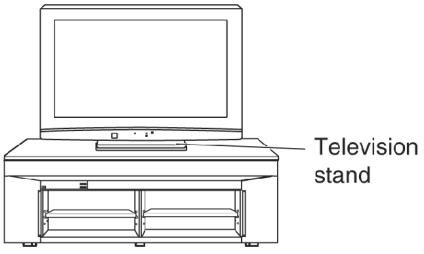
Installing the television (Please also refer to the television's operating instructions.)

Recommended: **SC-HTR310** : 50 inches or less
SC-HTR210 : 42 inches or less

Place the television (with stand attached) in the center of the rack.

Note

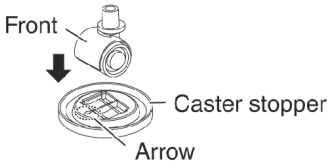
- Lift the television when placing it on the rack. Dragging it may damage the top panel.
  (For details, refer to the television's operating instructions.)
- If the television stand adheres to the glass top panel too tight to remove, lift the stand inserting a flat and thin object. This may help removing the stand.
- Install the rotary television stand not to run over the rack even if it rotates.



Setting the caster stoppers

Set the caster stoppers (included) under the casters to fix this system and prevent from moving.

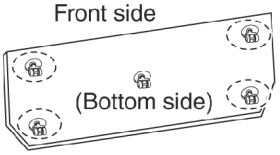
- When setting the caster stoppers, match the front side of caster with the arrow of the caster stopper.



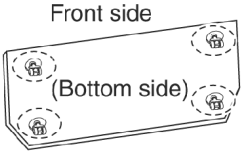
(Caster stopper position)

Set the caster stoppers under 4 casters circled with the dotted line of figure below.

SC-HTR310



SC-HTR210



Stabilising the television

Attach the television to the rack to prevent it from falling over.

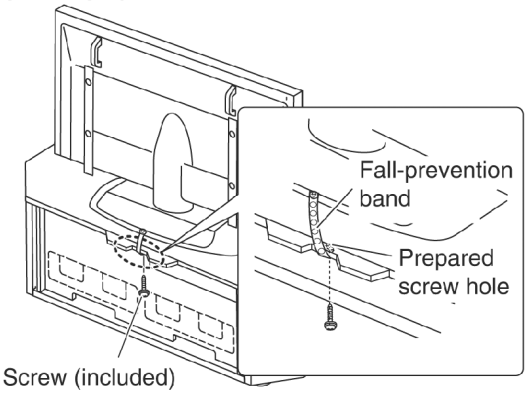
■ Fixing to the rack

- Attach the fall-prevention band etc. supplied with TV using the included screws as illustrated at right. (If the fall-prevention band is not supplied with TV, use a commercially available band to fix.)
  Attach the fall-prevention band to the prepared hole in the center of the underside of the top board.
  If the hole is not positioned at a suitable place, drill approx. 2 mm hole on the underside and attach the band with the screw.
- If you fasten the screw too tightly, it goes around in circles and the TV cannot be fixed.

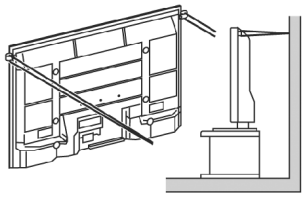
■ Fixing to the wall

- Use commercially available screws, strong string or chain suitable for materials of the wall or pillar to fix to the solid parts.
- Walls and pillars must be strong enough to support the weight of TV. Ask installation personnel for more information.
- Fix 2 parts at both left and right.

(Setup example)



(Setup example)

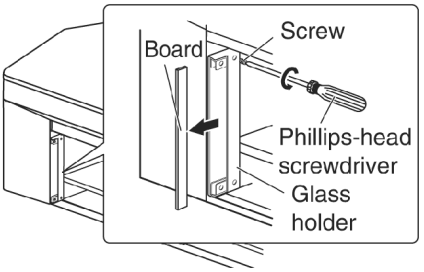


The illustration is an example.
The shape may differ from the actual product.

Glass door assembly

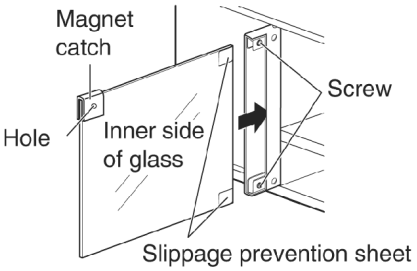
1 **Remove 4 screws from the glass holder using a Phillips-head screwdriver and take out the board.**

- Before taking out the board, remove the tape fixing the glass holder.
- Use the Phillips-head screwdriver that matches the screw size.

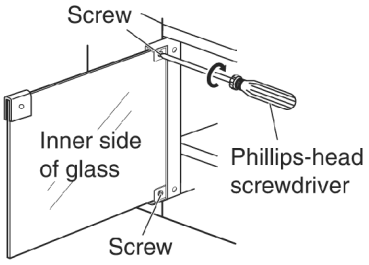


2 **Insert the glass door (included) to the glass holder firmly and tighten the 2 screws in front tentatively.**

- The illustration at right shows how to fix the left glass door.
- One side of the magnet catch has a hole. This is the inner side of the glass.
- The slippage prevention sheet is pasted on the glass holder inserting part on the surface of the glass door. Fix as it is.

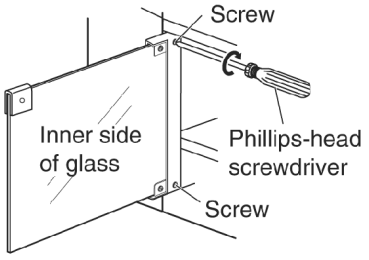


3 **Close the glass door to adjust the height and gap on both sides. Open the glass door so it does not misalign and tighten 2 screws in front with the Phillips-head screwdriver.**



4 **Tighten 2 screws at the back firmly.**

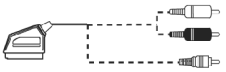
- Install the other glass door in the same way.



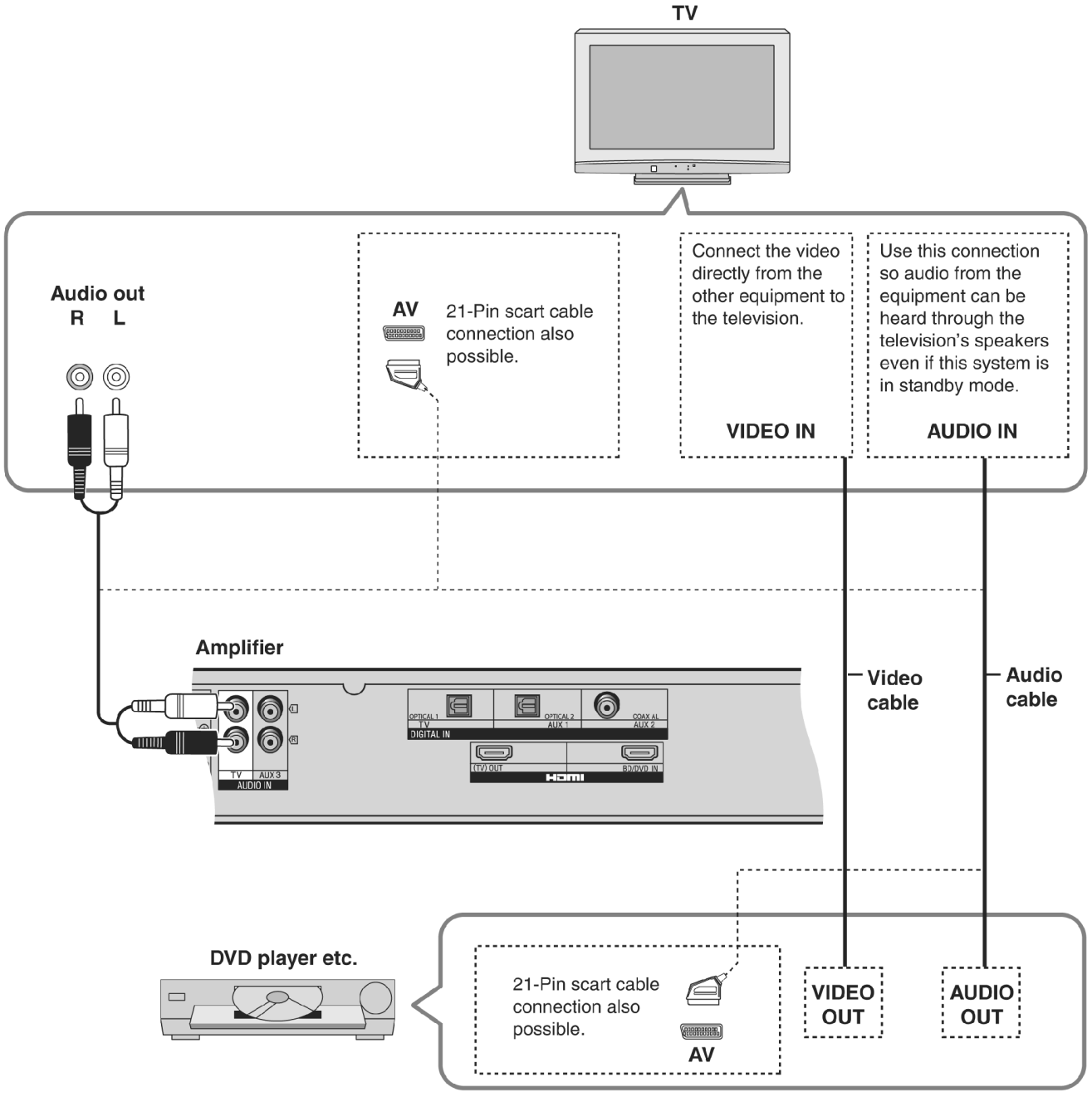
4.4. Home Theater connections

4.4.1. Basic connections

Connection cable

Stereo phono cable (not included)	**21-pin scart cable** (not included)
	

- **Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.**



Reduce the volume on the television and select "*TV*" after you have done connections as above if you want to use this system.

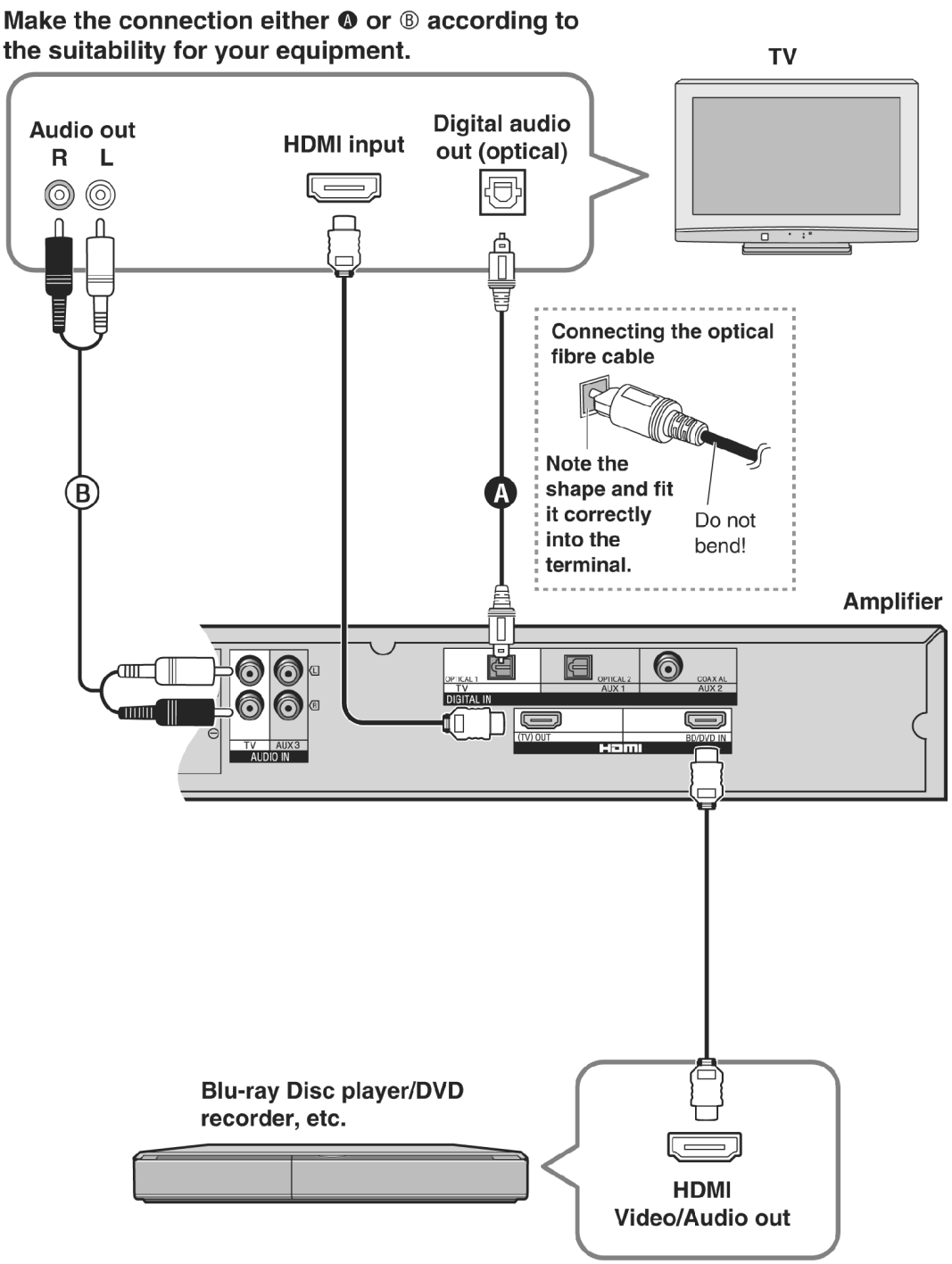
4.4.2. Connecting equipment with HDMI terminal (TV, DVD recorder, etc.)

Connection cable

Stereo phono cable (not included)	**HDMI cable** (not included)	**Optical fibre cable** (not included)
		

HDMI cable notes

- Use a Panasonic HDMI cable for best results.

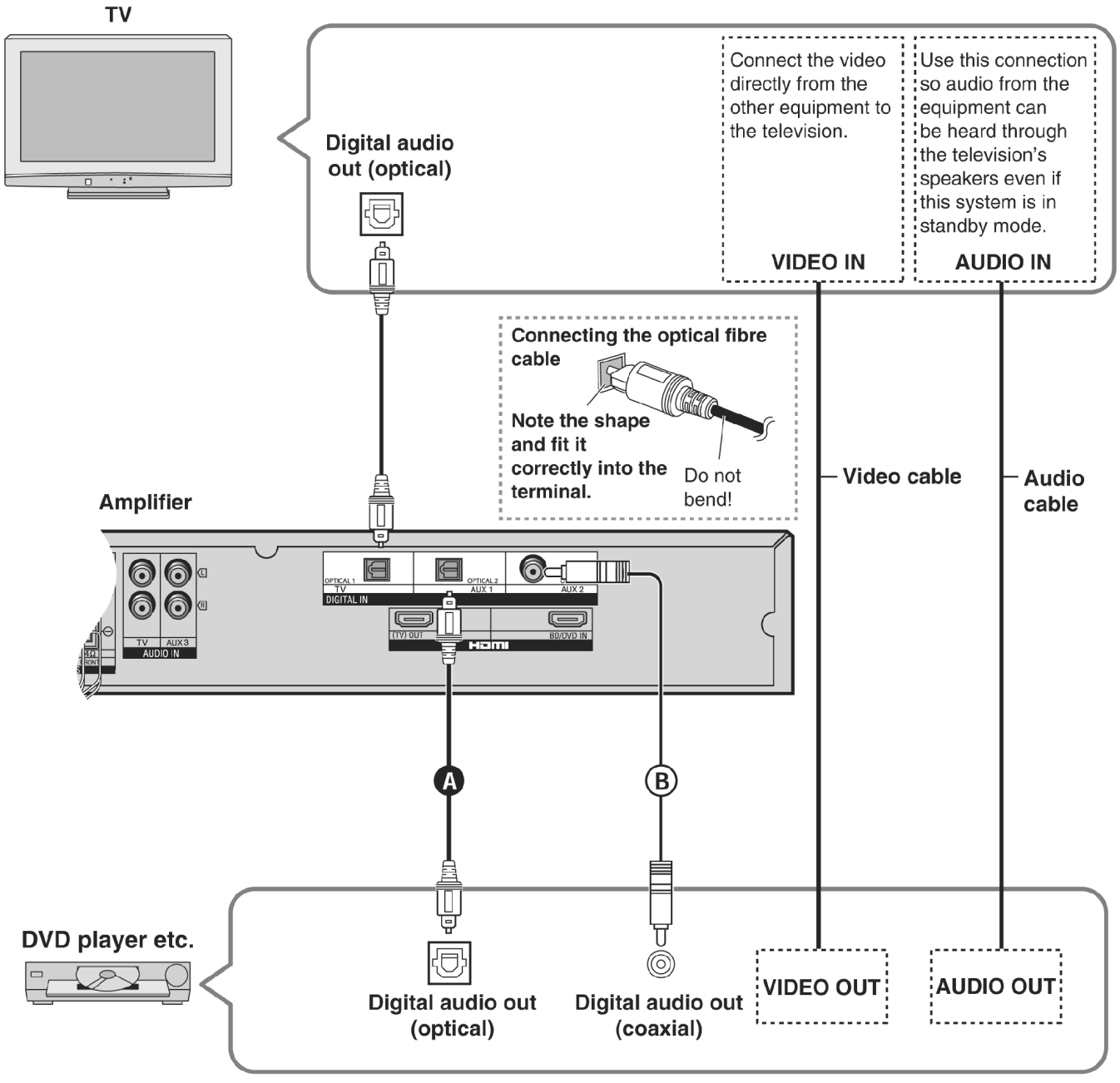


4.4.3. Connecting with digital terminal-mouted equipment

Connection cable

Optical fibre cable (not included)	**Coaxial cable** (not included)
	

- **Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.**



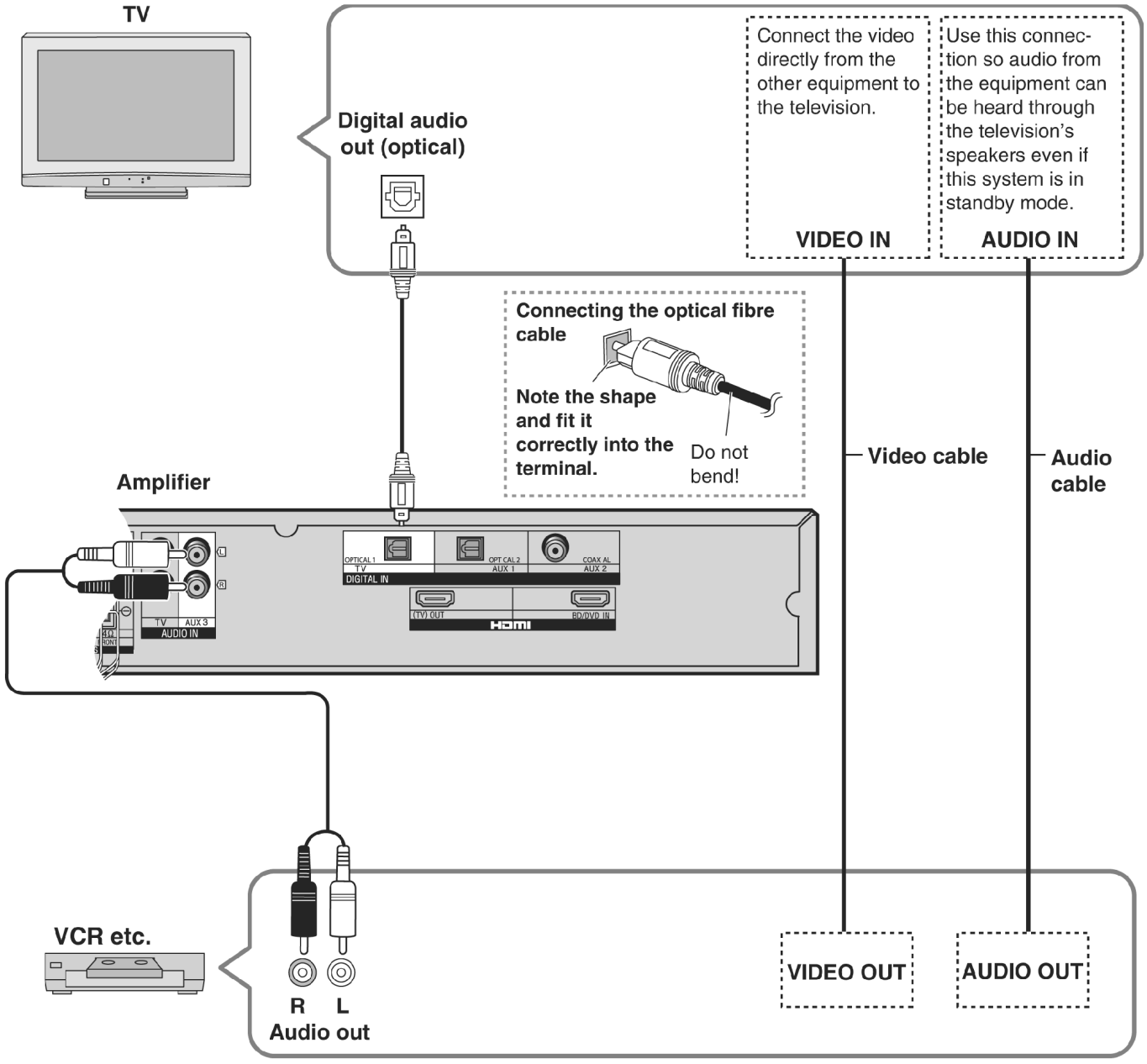
Make the connection either Ⓐ or Ⓑ according to the suitability for your equipment.

4.4.4. Connecting with VCR

Connection cable

Stereo phono cable (not included)	**Optical fibre cable** (not included)
	

- **Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.**



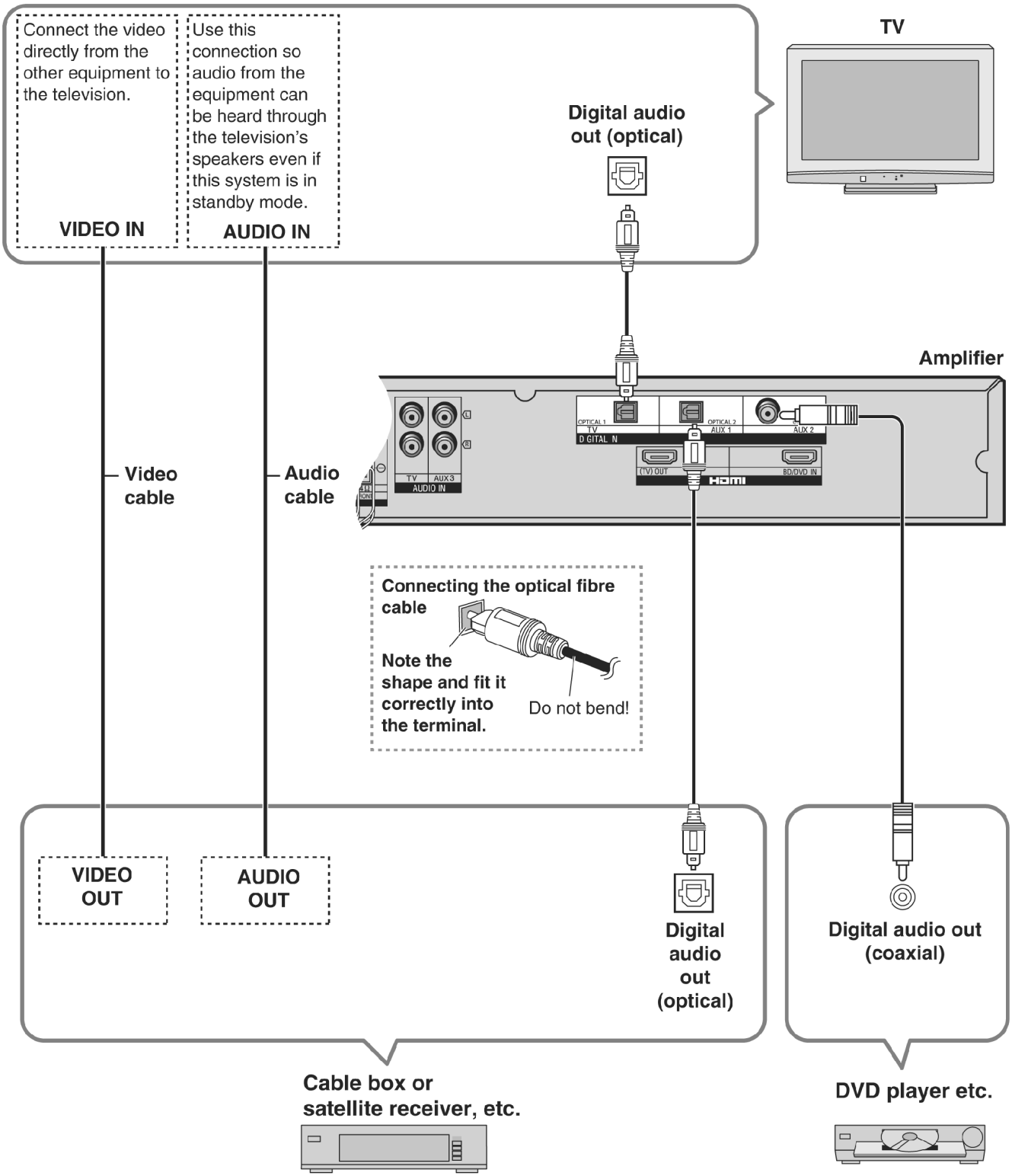
4.5. Other connections

4.5.1. Connecting a set top box (cable or satellite)

Connection cable

Optical fibre cable (not included)	**Coaxial cable** (not included)
	

- **Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.**



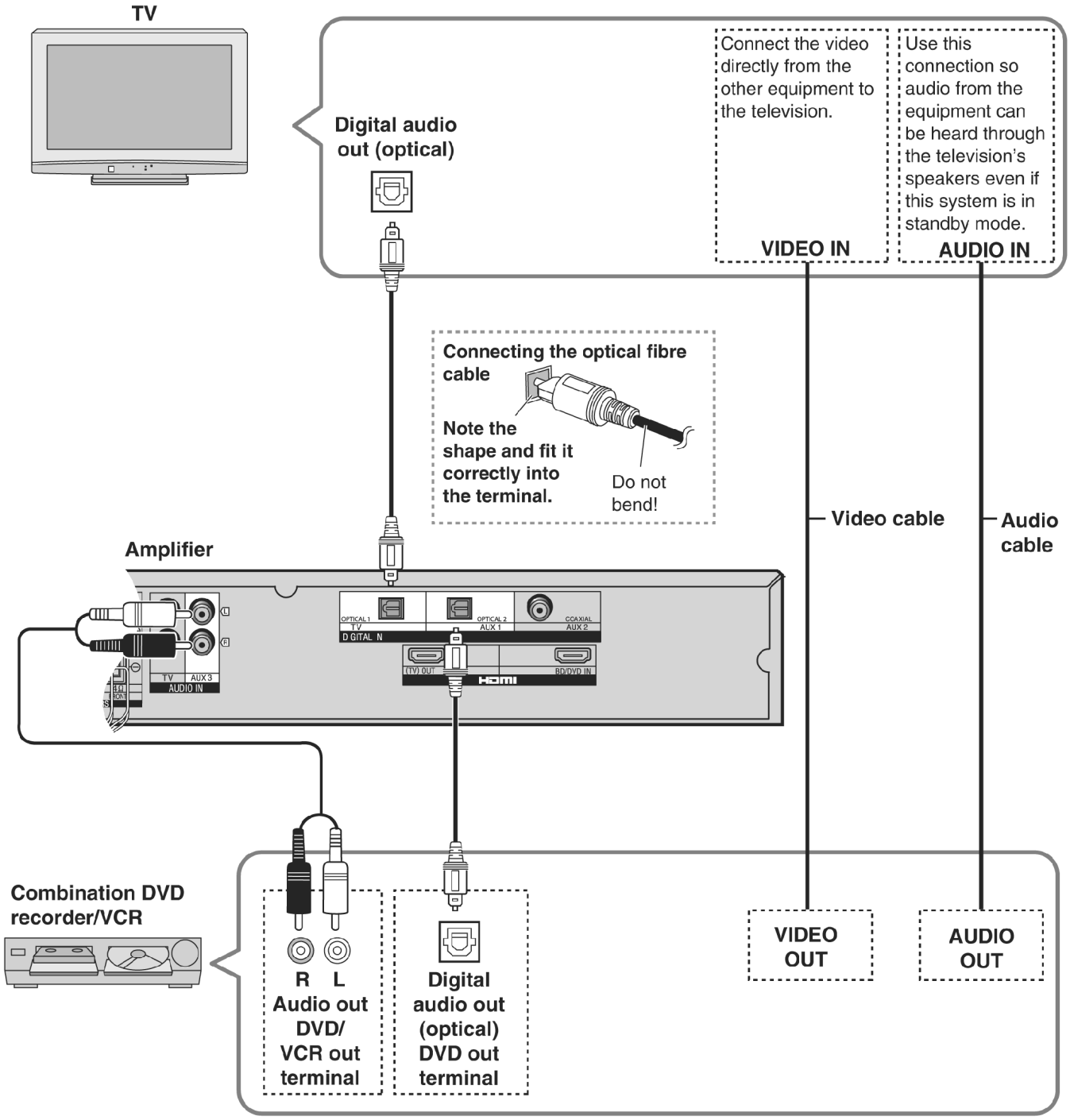
4.5.2. Connecting a combination DVD recorder/VCR

Connection for equipment with DVD/VCR terminal.

Connection cable

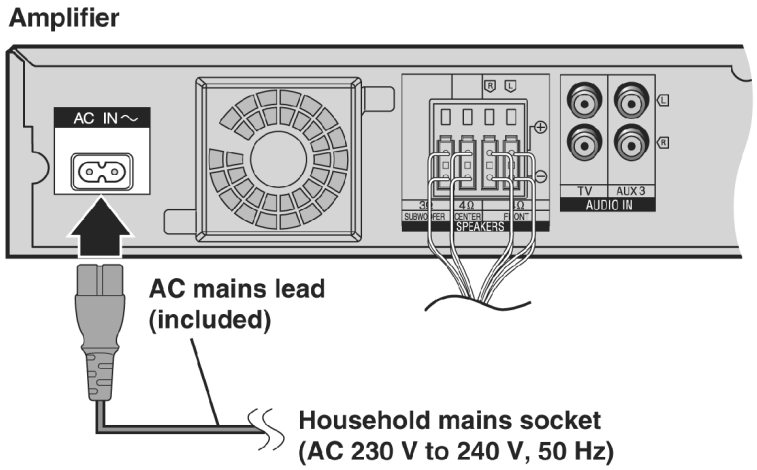
Optical fibre cable (not included)	**Stereo phono cable** (not included)
	

- **Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.**

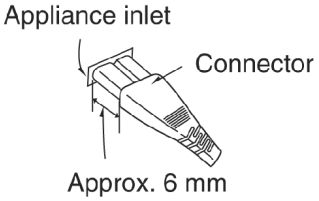


4.6. AC mains supply connection

Connect AC mains lead after all other cables are connected.



Insertion of connector
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. There is however no problem using the system.



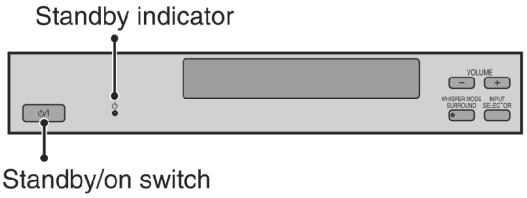
Note

- The included AC mains lead is for use with this system only. Do not use it with other equipment.
- Also, do not use AC mains lead for other equipment with this system.

Conserving power

This system consumes a small amount of power, even when it is in standby mode (approx. 0.7 W). To save power when the system is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in this system.

"Standby" indicator



Standby/on switch [⏻/I]
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

Standby indicator [⏻]
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

5 Self Diagnosis Display Function

This unit is equipped with the self diagnosis display function, which alarms faulty operation with error code. Use this function during servicing.

5.1. Automatically Displayed Error Codes

An error code automatically appears on the display (LCD) when faulty operation is detected. Refer to Fig. 5.1.

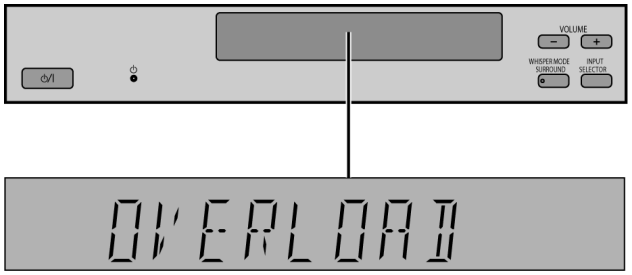


Fig. 5.1

5.2. Display Details

Refer to the following table.

LCD display	Symptom	Cause and Remedy
OVERLOAD	Speaker short, amplifier failure, electrical overload etc.	Speaker short and failure in power amplifier, pre-amplifier circuits. Check for faulty parts and replace with new parts if necessary.
	Humidity protection activated	
FANLOCK	Fan stopped	Failure fan and fan control circuits. Check for faulty parts and replace with new parts if necessary.
F70	Communication error between sub micro-processor and its peripheral LSI	Failure sub-micro processor and its peripherals LSI. Check for faulty parts and replace with new parts if necessary.
F76	When the power is turned on, the unit power automatically turns off; the power cannot be turned on.	Failure in the power circuit system of the unit. This may happen when the direct current electricity is supplied to speaker terminals. Check that the speaker wires are not shorted (bare wire touching each other) or that the unit is in a hot enviroment without proper ventillation.
Remote 2 Remote 1	—	Set the same remote control code for this system and remote control. • If “REMOTE 2” is displayed, set remote control code to “2”. • If “REMOTE 1” is displayed, set remote control code to “1”.
U70-1-1	—	The equipment connected by the HDMI cable is not compatible with this system’s copyright protection technology.
U70-1-2	—	The system is receiving video signals that are incompatible with it through HDMI connection. Check the settings of the connected equipment.
U70-3	—	A problem has occurred with the HDMI connection. Try the following to correct the problem. Consult your dealer if the error code remains on the display. • Turn the connected equipment off and on again. • Disconnect the HDMI cable then reconnect it. • Do not connect more than 2 equipment in series to the output of this system.
NOT POSSIBLE FOR THIS INPUT SOURCE (Scrolling)	—	You cannot use Dolby Virtual Speaker, Dolby Pro Logic II and SFC for dual sounds.

LCD display	Symptom	Cause and Remedy
NOT POSSIBLE FOR THIS PCM SOURCE (Scrolling)	—	You cannot use Dolby Virtual Speaker, Dolby Pro Logic and SFC effect with PCM signals with sampling frequency over 48 kHz. SFC is not available for multi-channel LPCM signal.

5.3. Activating Self Diagnosis Function (Servicing Mode)

This mode can be used during servicing.

1. Plug the AC adapter to the power source. Press and hold down the [VOL +] button and the [VOL -] button, and then press the [POWER] button at the same time.
2. The message, [SERVICE] appears on the display for three seconds, and then it will display the following. Refer to Fig. 5.2.

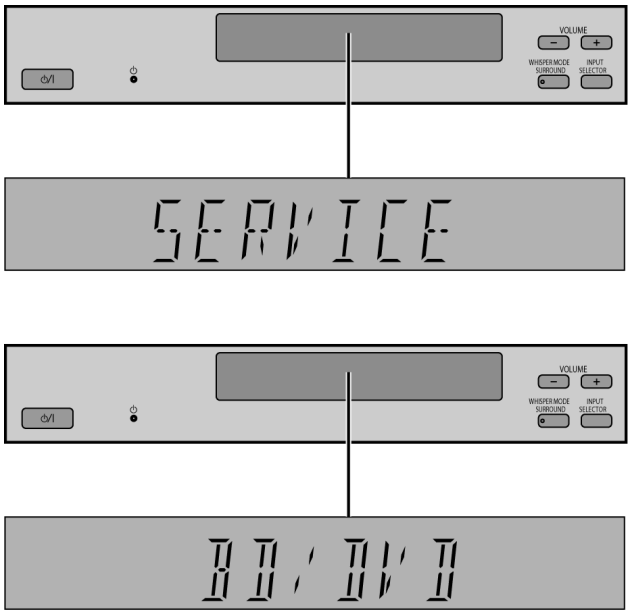


Fig. 5.2

3. To confirm the µP software version: When [VOL +] button is pressed, [M--- ****] is displayed [---] is current main micon version; [****] is current checksum. If no ROM correction, [NO] is displayed.

   When [VOL -] is pressed, display [H***], [***] is current version of HDMI micon.

5.4. Activating Self Diagnosis Function (Doctor Mode)

This mode can be used during servicing.

1. Plug the AC adapter to the power source. Press and hold down the [INPUT SELECTOR] button and the [VOL +] button, and then press the [POWER] button at the same time.
2. The message, "_DOCTOR_" appears on the display for three seconds, and then it will display the following. Refer to Fig. 5.3.

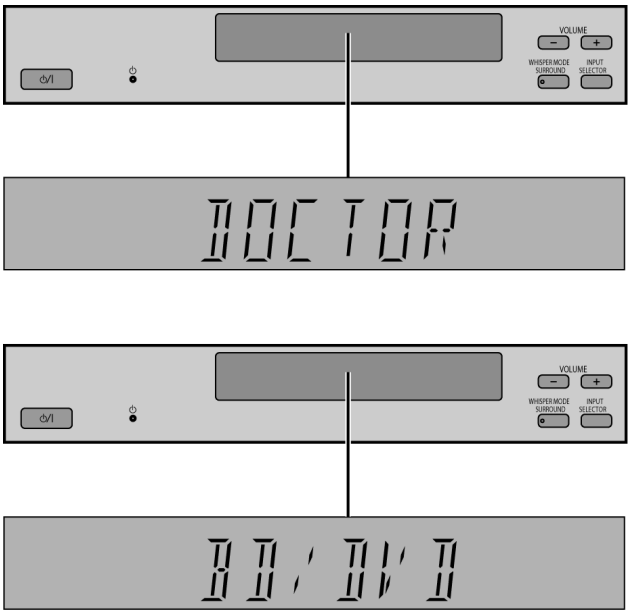


Fig. 5.3

3. Doctor mode function at some remote control codes as below table.

Remote Control	Test Mode Function and settings			
	Selector	Sound Mode	other settings	Vol/Tone
OK	TV	STEREO	Digital (OPT 1)	-48dB/0dB
SFC MUSIC	AUX 1	STEREO	Digital (OPT 2)	-48dB/0dB
MUTING	All indicators of FL are displayed. All LED are off. Refer to Fig. 5.4. Note : After this setting, only 'POWER' button or 'Checker Command' code by the remote control can be entered.			
Volume Up	Check Main µP software version. Display [M---- ****], [----] is current version; **** is current checksum. If no ROM correction, [NO] is displayed. Volume is still increased but not displayed.			
Volume Down	Check HDMI uP software Version. Display [H---- ^^^^^], [----] is current version. Volume is still increased but not displayed.			
TEST	AUX2 (Analog)	-	All CH Output Mode	-18dB/0dB
▲	TV	STEREO	Balance is set to leftmost.	-18dB/0dB
▼	TV	STEREO	Balance is set to rightmost.	-18dB/0dB

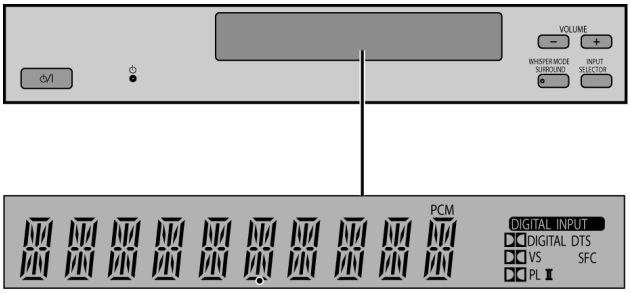


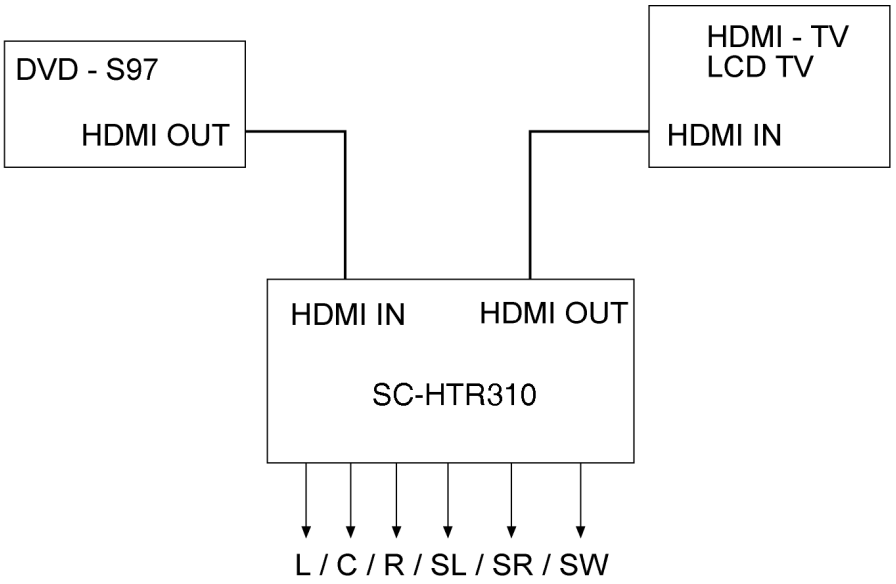
Fig. 5.4

5.5. Returning to Normal Display

Press the [POWER] button on the unit to exit the function. The power is turned off.

6 HDMI Checking Method

1. Connection of HDMI system



Setting of DVD-S97

[Setup Menu]

1. Video	→	TV Aspect	→	16:9
	→	TV type	→	LCD TV
2. Audio	→	PCM Digital Out	→	Up to 192kHz
	→	Dolby Digital	→	Bitstream
	→	DTS Digital Sound	→	Bitstream
3. HDMI	→	HDMI RGB Range	→	Enhanced
	→	HDMI Video mode	→	on
	→	HDMI Audio output	→	on

[Display Menu]

1. Picture Menu	→	Picture mode	→	Normal
	→	Video output mode	→	1125i (1080i)
	→	HDMI Colour space	→	RGB

2. Check of HDMI Sound
   a. Using the [DVD AUDIO TEST DISC V-612] and DVD-VIDEO disc with Dolby Digital signal.
   b. [DVD AUDIO TEST DISC V-612] - Track No. 92 (96kHz, 5.1ch). Track No. 40 (Zero) Check the Level and Noise, output from L / C / R / SL / SR / SW / speaker or pin.
   c. [DVD AUDIO TEST DISC V-612] - Track No. 7 (192kHz, 2ch)
   if this source can be reproduced, it is OK.
3. Check of HDMI Picture
   a. The picture quality of TV is checked by watching that using [DVD TEST DISK S-20] or DVD disc with the colour bar signal.
   b. [DVD TEST DISK S-20] - Track No. 2 (Flag of the rising sun)
   [Colour bar disc] - Colour bar signal.
   c. Make on DVD Setup Picture
   Comfirmed that there are neither distortion nor a noise on the screen.

- If it is a picture quality equal when DVD was connected directly to TV, it is OK

1. Connect directly DVD player to TV.
2. Connect DVD player to set then connect it to TV.
3. Do the comparison for (1) and (2) if same, it is OK.

7 Assembling and Disassembling

7.1. Caution

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

Special Note:

1. **This section describes the disassembly procedures for all the major printed circuit boards and main components.**
2. **Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out. (Ensure that no AC power supply is connected during disassembling.)**
3. **For assembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**
4. **Do take note of the locators on each printed circuit board during reassembling procedures.**
5. **The Switch Regulator IC may have high temperature after prolonged use.**
6. **Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.**

CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK

7. **Select items from the following index when checks or replacement are required.**

- **Disassembly of Front Net Frame**
- **Disassembly of Front ornament (L)**
- **Disassembly of Side Board Assy (L)**
- **Disassembly of Sub Woofer Left (SP2)**
- **Disassembly of Front ornament (R)**
- **Disassembly of Side Board Assy (R)**
- **Disassembly of Sub Woofer Right (SP2)**
- **Disassembly of Centre speaker (SP1)**
- **Disassembly of Front Left speaker (SP1)**
- **Disassembly of Front Right speaker (SP1)**
- **Disassembly of Front Baffle Assembly**
- **Disassembly of Panel P.C.B.**
- **Disassembly of Amplifier Unit**
- **Disassembly of Glass Ornament (L)**
- **Disassembly of Glass Ornament (R)**
- **Disassembly of Top Cabinet**
- **Disassembly of Rear Cabinet**
- **Disassembly of Front Cabinet**
- **Disassembly of AC Inlet P.C.B.**
- **Disassembly of Main P.C.B.**
- **Disassembly of D-Amp P.C.B.**
- **Replacement of Audio Digital Power Amp IC (IC5000)**
- **Replacement of Audio Digital Power Amp IC (IC5300)**
- **Disassembly of SMPS P.C.B.**
- **Replacement of Switching Regulator IC (IC5701)**
- **Replacement of Diode (D5702)**
- **Replacement of Diode (D5801)**

- **Replacement of Diode (D5802)**
- **Replacement of Diode (D5803)**
- **Disassembly of HDMI P.C.B.**
- **Disassembly of DSP P.C.B.**

CAUTION NOTE:

Please use original screw and at correct locations.

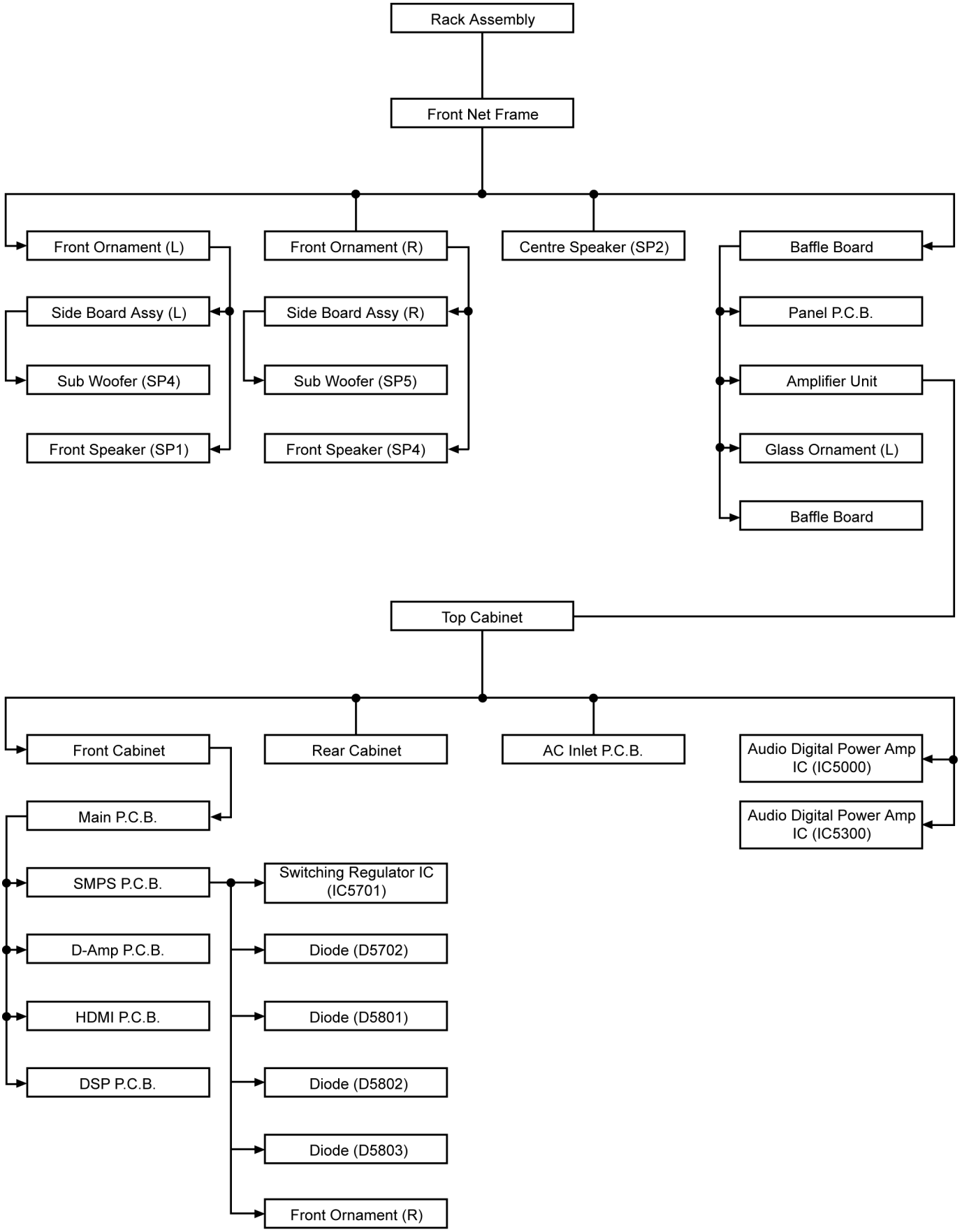
Below shown is part no. of different screw types used:

ⓐ : XTB3+14JFJK
ⓑ : XTB4+12AFJK
ⓒ : XTB3+10JFJK
ⓓ : XTB4+20AFJK
ⓔ : XTB4+25AFJK
ⓕ : XTB3+10JFJ
ⓖ : XTB3+25AFJK
ⓚ : XTS3+30AFJK
ⓛ : RHD30119-S
ⓜ : XSN3+4FJ
ⓝ : RHD30111-31
ⓞ : XTW3+8TFJ
ⓟ : XTW3+25JFJK

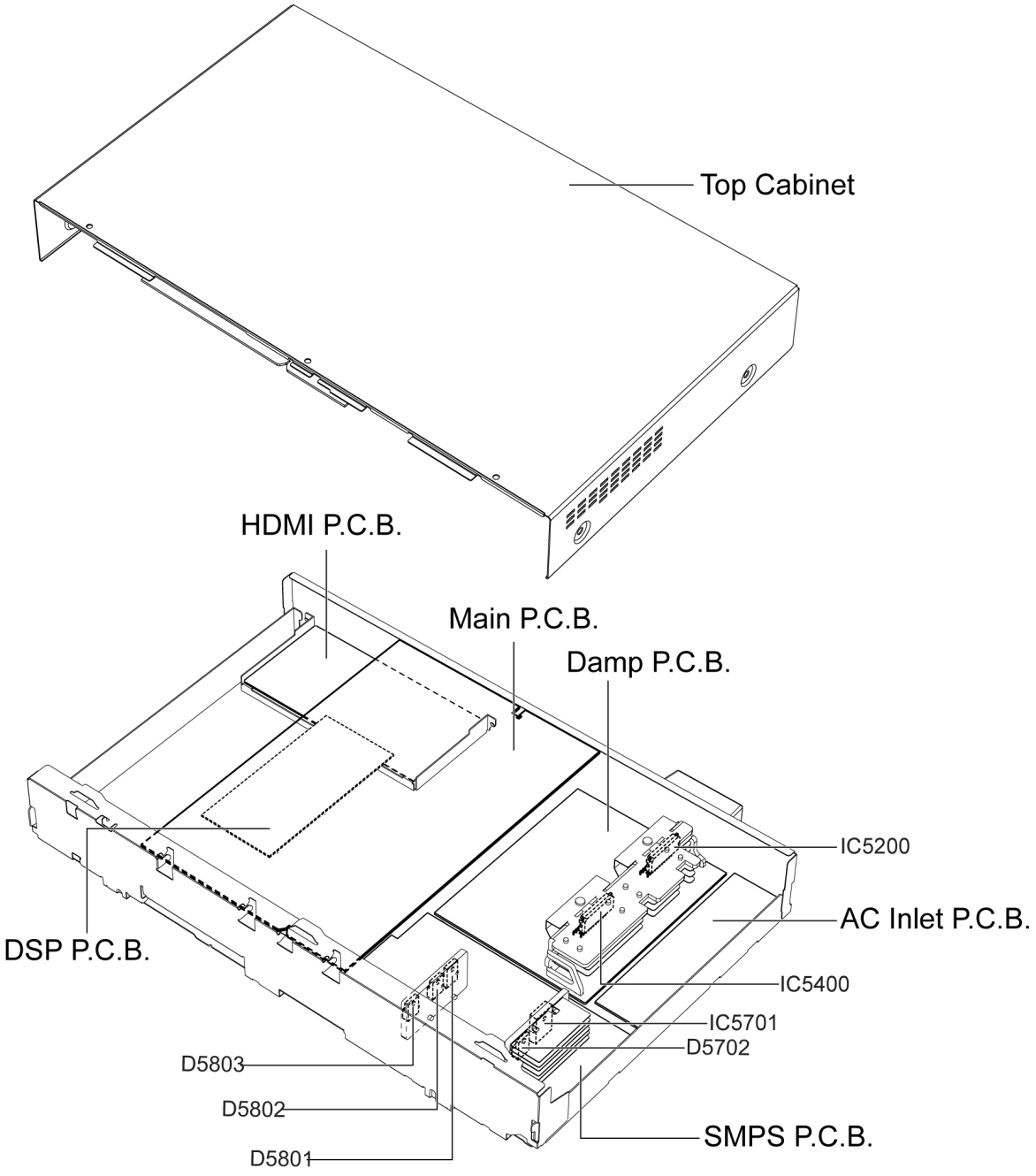
7.2. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

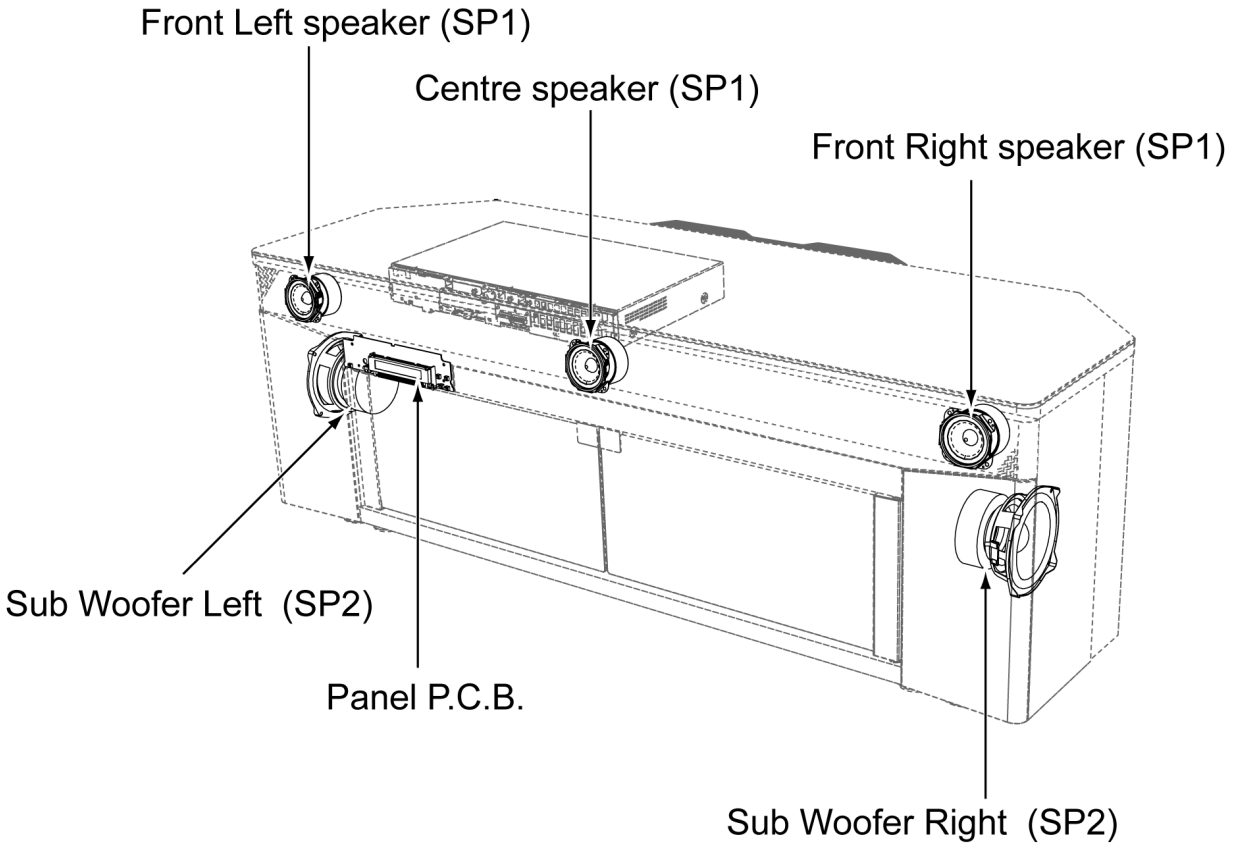
To assemble the unit, reverse the steps shown in the chart below.



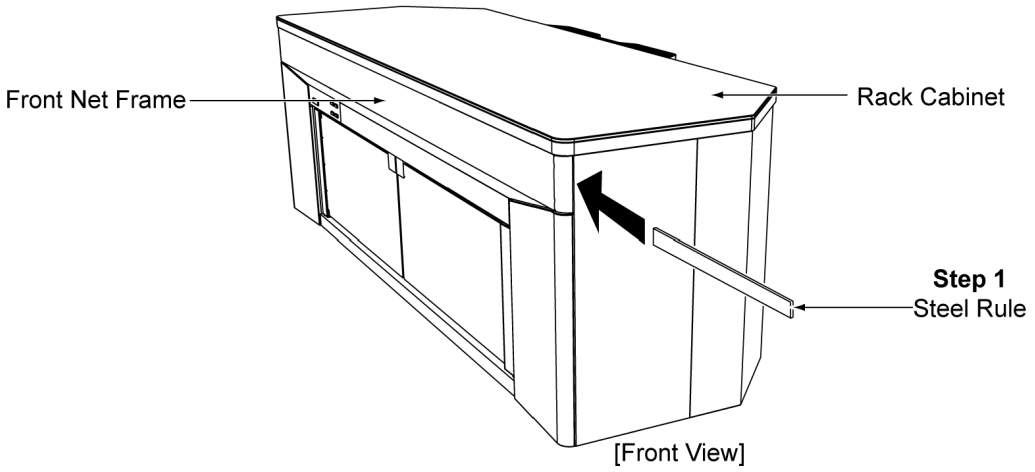
7.3. Main Parts Location Diagram (Amplifier unit)



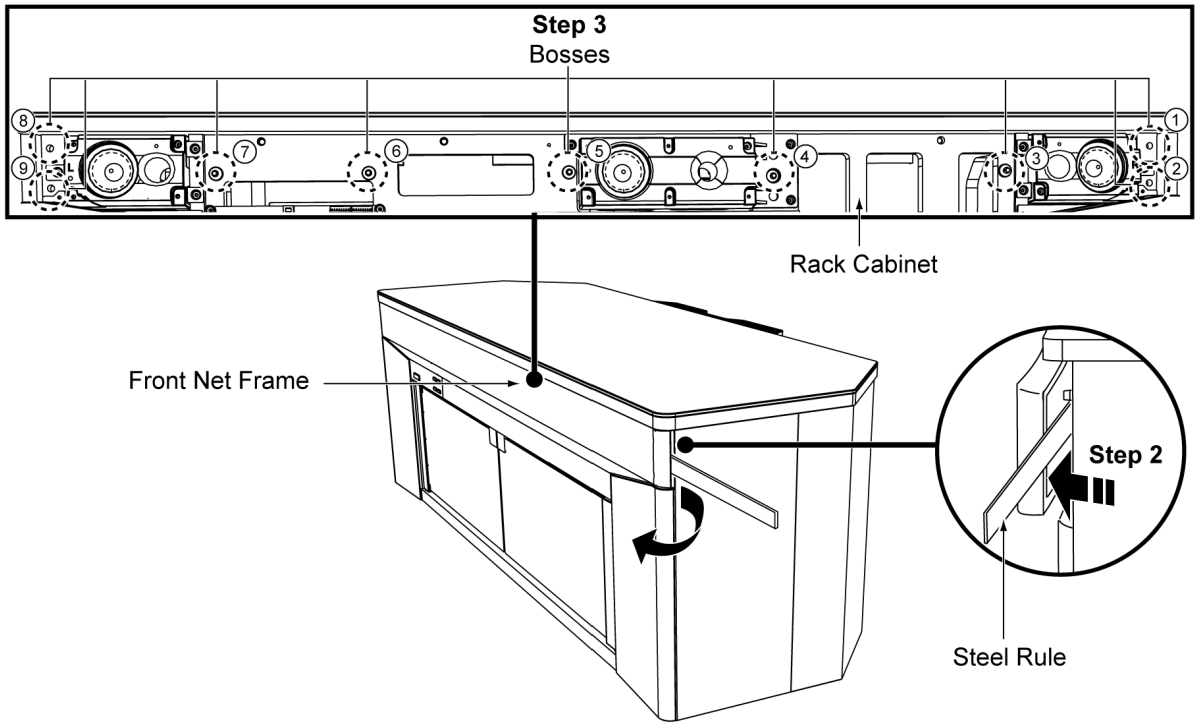
7.4. Main Parts Location Diagram (Rack Cabinet)



7.5. Disassembly of Front Net Frame



Step 1 : Insert Steel Rule in between Front Net Frame and Rack Cabinet as arrow shown.

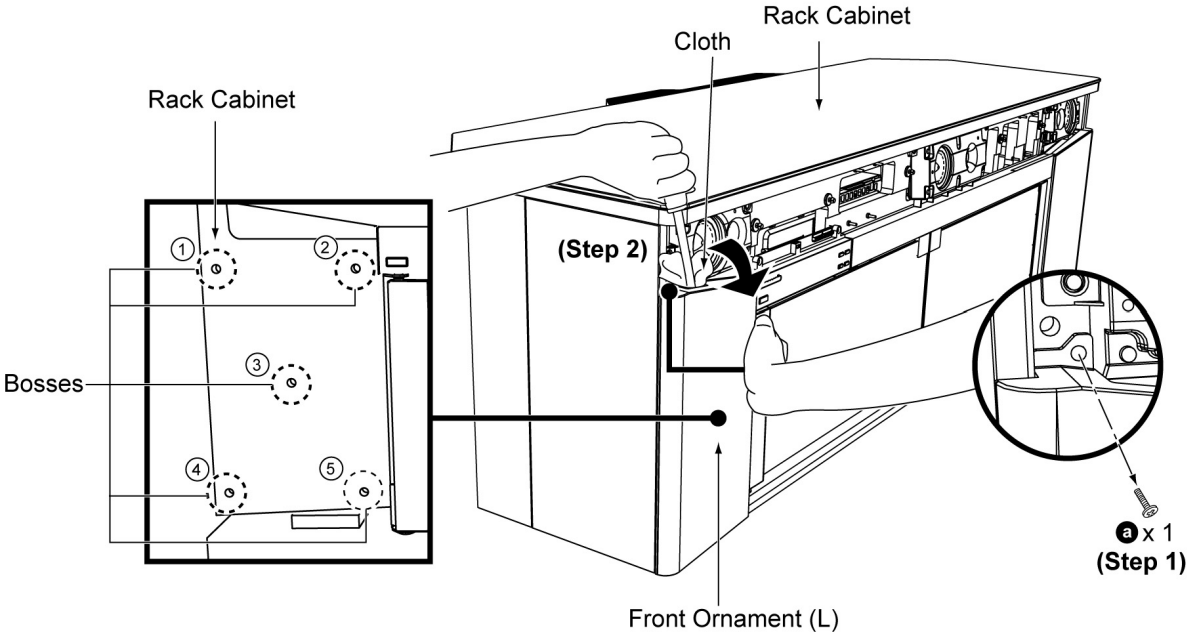


Step 2 : Slightly push the Steel Rule as arrow shown to push out the Front Net Frame.

Step 3 : Apply light force to remove the Front Net Frame in order of sequences (from 1 to 9).

7.6. Disassembly of Front ornament (L)

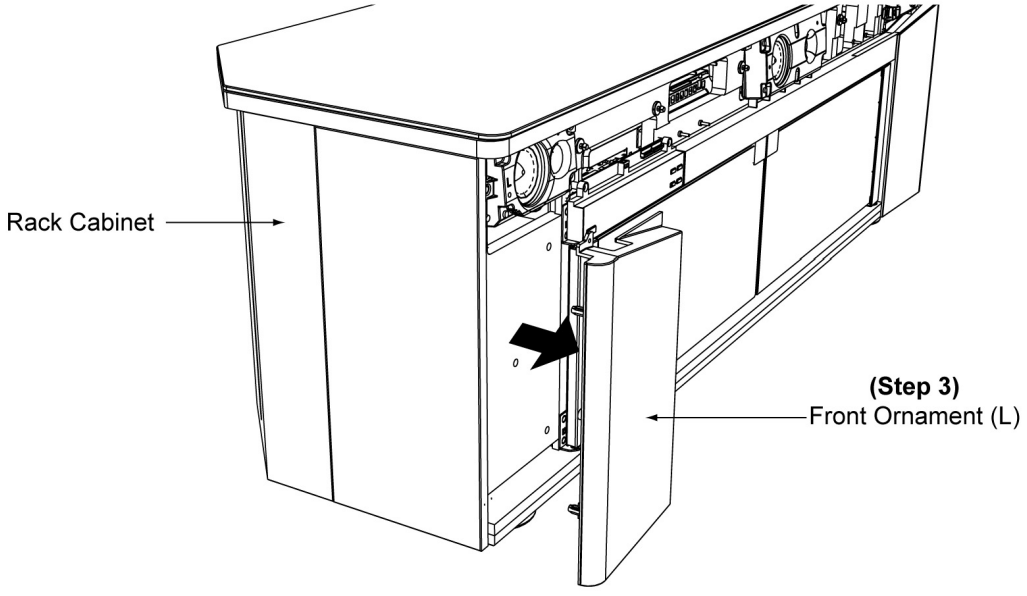
- Follow the (Step 1) - (Step 3) of item 7.5.



Step 1 : Remove 1 screw.

Step 2 : Insert the screwdriver with Cloth in between the Rack Cabinet and the Front Ornament (L), and slightly push the screwdriver as arrow shown to release the Bosses in order of sequence.

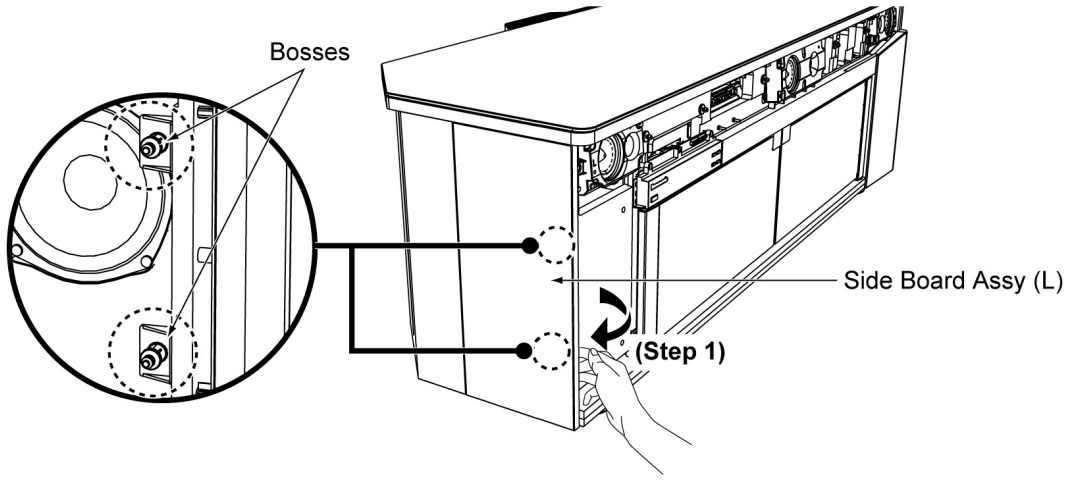
Caution : Wrap the screwdriver with a cloth.



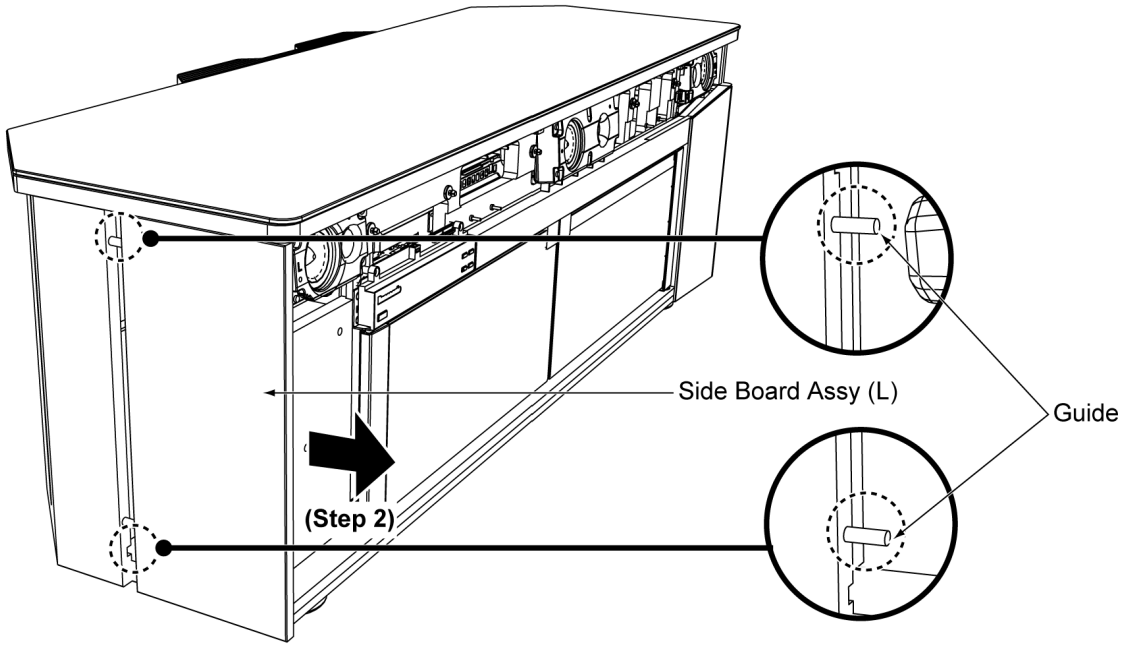
Step 3 : Remove the Front Ornament (L) as arrow shown.

7.7. Disassembly of Side Board Assy (L)

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.6.



Step 1 : Pull the Side Board Assy (L) to release the bosses as arrow shown.

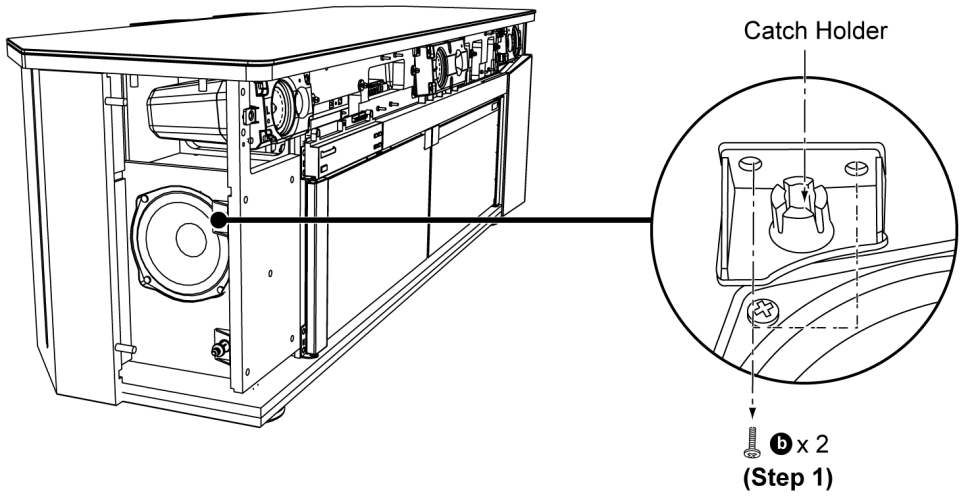


Step 2 : Remove the Side Board Assy (L) as arrow shown.

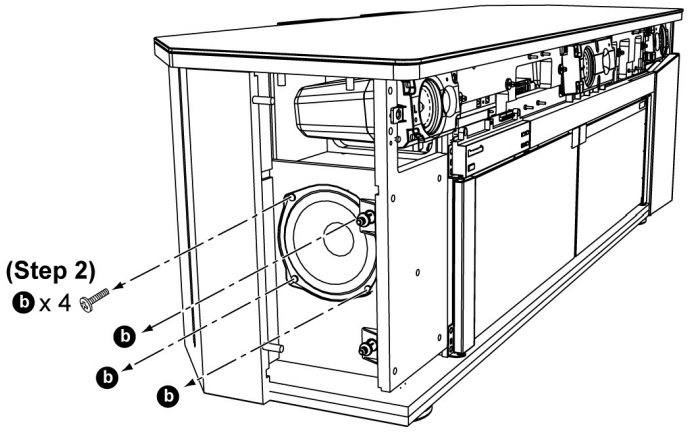
Caution : Take extra care for the guide holes on the cabinet during removal and assembly of the side board assy (L).

7.8. Disassembly of Sub Woofer Left (SP2)

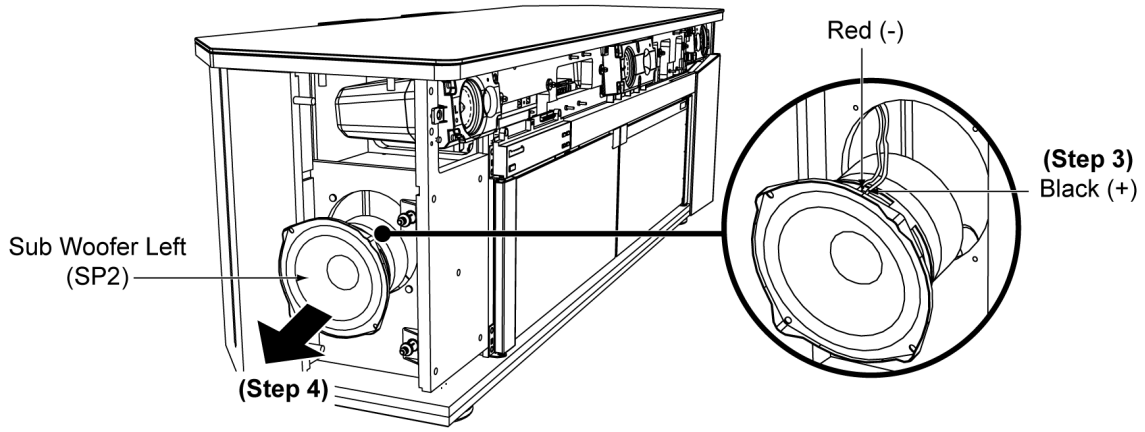
- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.6.
- Follow the (Step 1) - (Step 2) of item 7.7.



Step 1 : Remove 2 screws and remove Catch Holder.



Step 2 : Remove 4 screws.

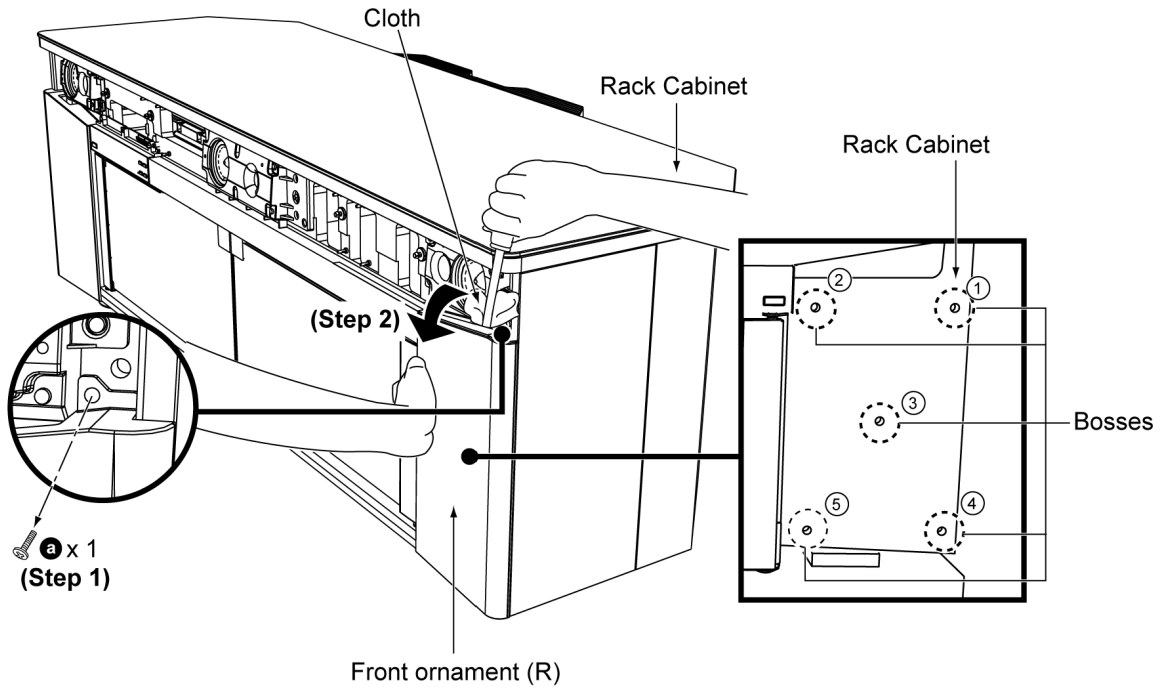


Step 3 : Detach the Black (+) and Red (-) speaker wires.

Step 4 : Remove the Sub Woofer Left (SP2) as arrow shown.

7.9. Disassembly of Front ornament (R)

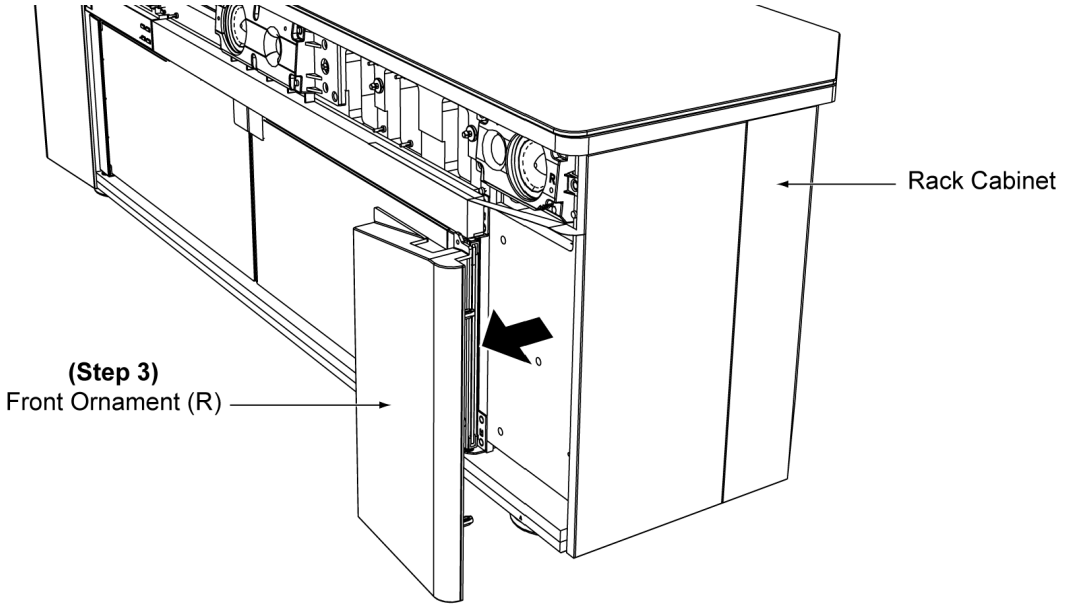
- Follow the (Step 1) - (Step 3) of item 7.5.



Step 1 : Remove 1 screw.

Step 2 : Insert the screwdriver with Cloth in between the Rack Cabinet and the Front Ornament (R), and slightly push the screwdriver as arrow shown to release the Bosses in order of sequence.

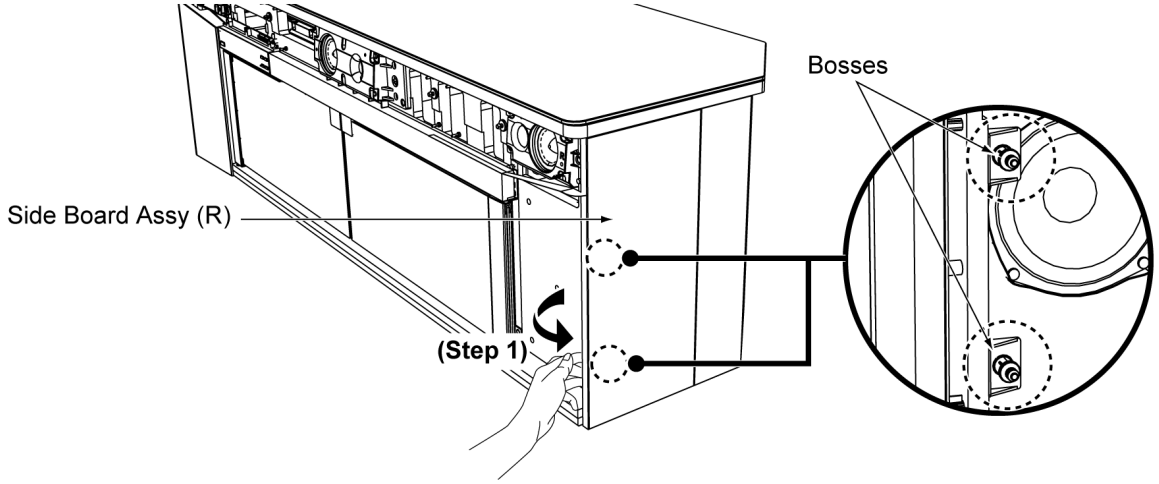
Caution : Wrap the screwdriver with a cloth.



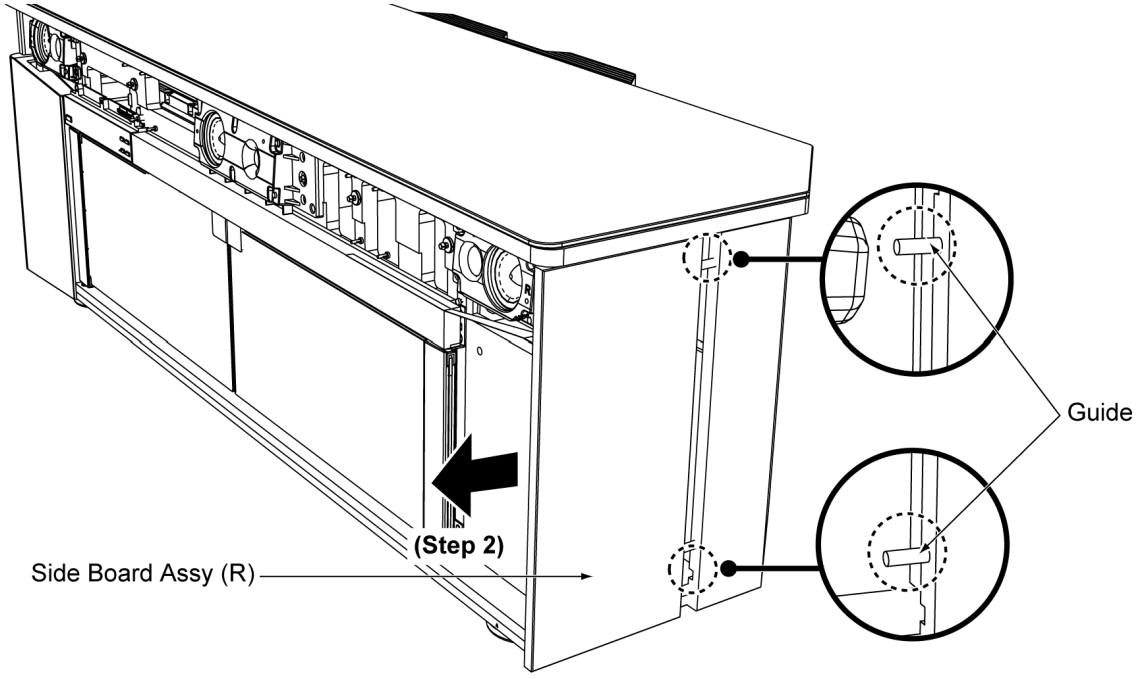
Step 3 : Remove the Front Ornament (R) as arrow shown.

7.10. Disassembly of Side Board Assy (R)

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.9.



Step 1 : Pull the Side Board Assy (R) to release the Bosses as arrow shown.

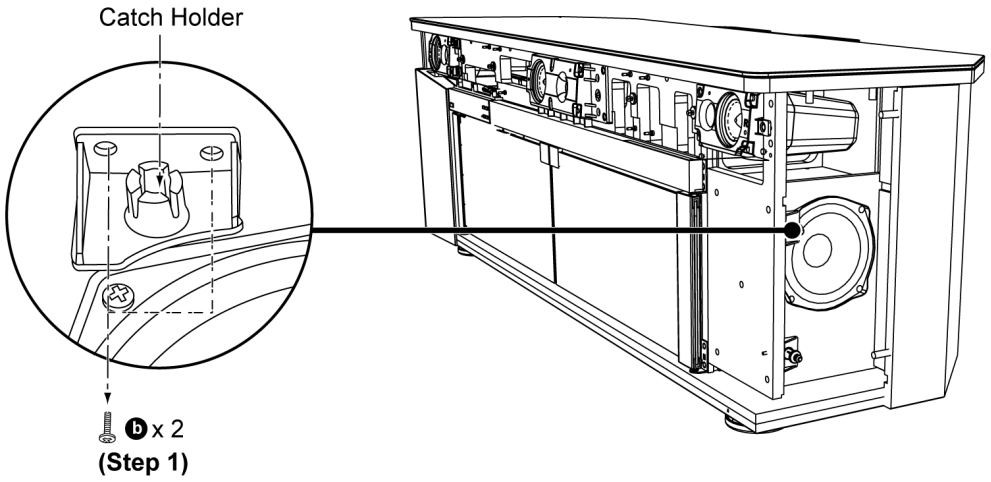


Step 2 : Remove the Side Board Assy (R) as arrow shown.

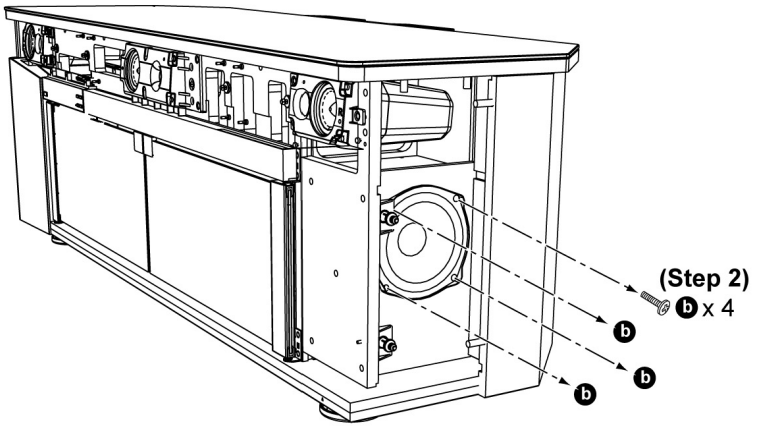
Caution : Take extra care for the guide holes on the cabinet during removal and assembly of the side board assy (R).

7.11. Disassembly of Sub Woofer Right (SP2)

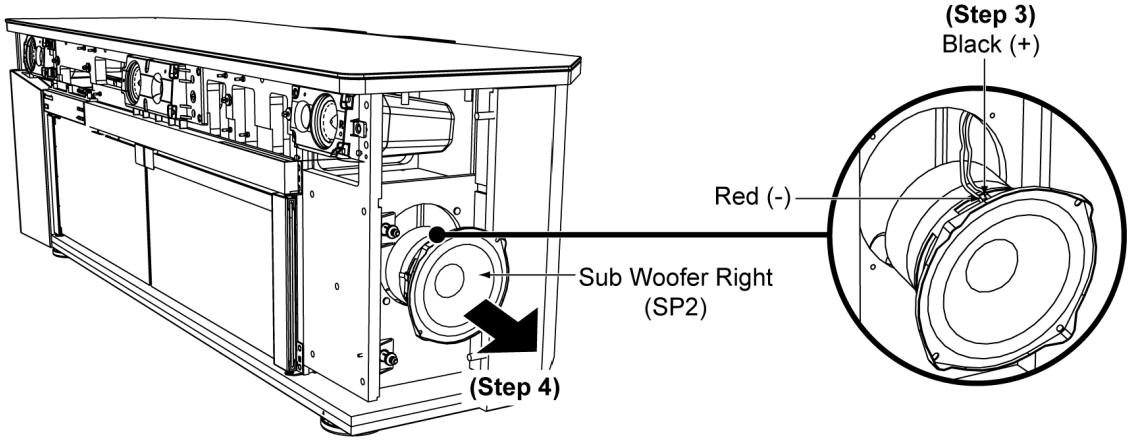
- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.9.
- Follow the (Step 1) - (Step 2) of item 7.10.



Step 1 : Remove 2 screws and remove Catch Holder.



Step 2 : Remove 4 screws.

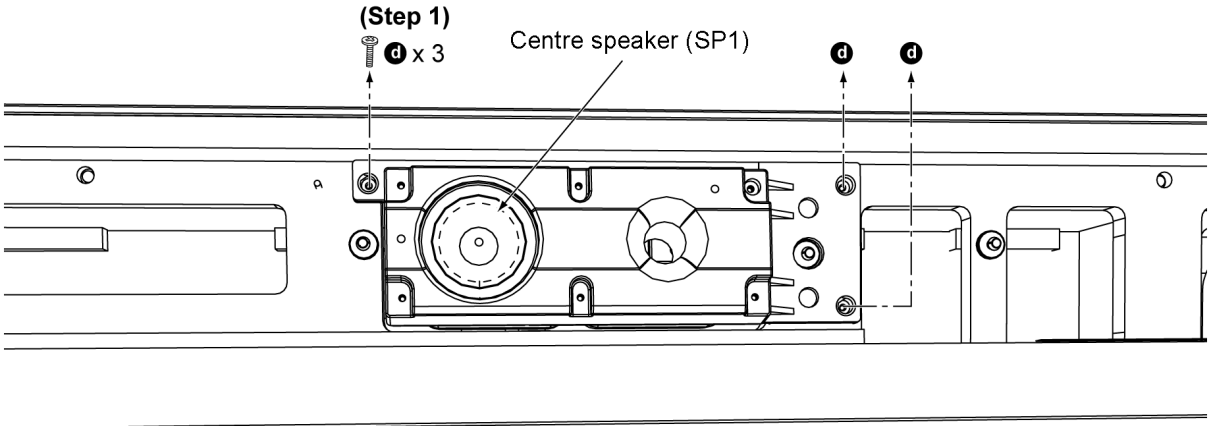


Step 3 : Detach the Black (+) and Red (-) speaker wires.

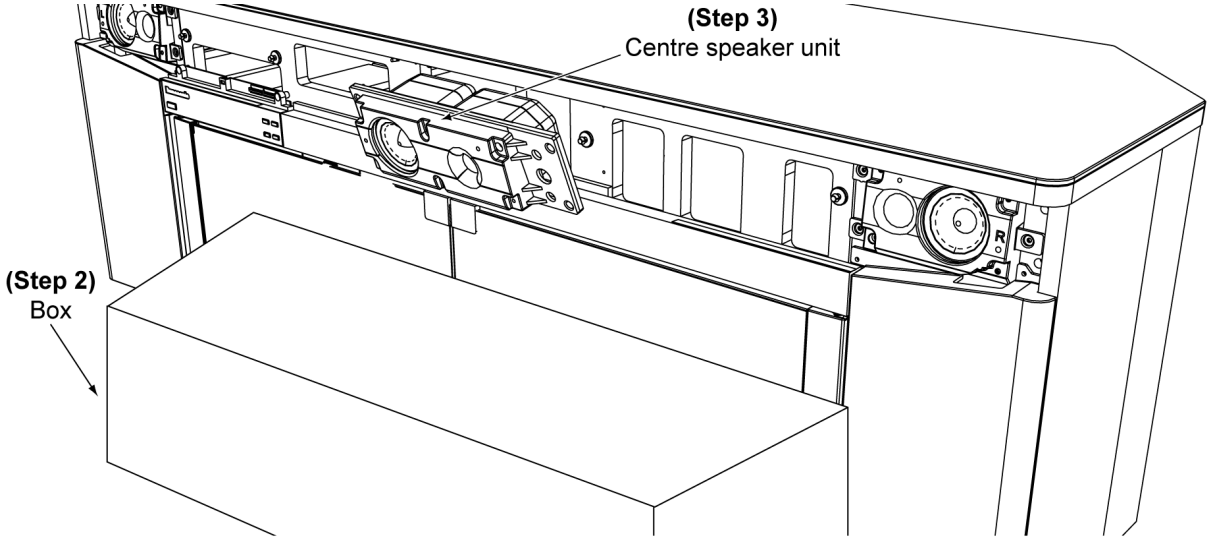
Step 4 : Remove the Sub Woofer Right (SP2) as arrow shown.

7.12. Disassembly of Centre speaker (SP1)

- Follow the (Step 1) - (Step 3) of item 7.5.

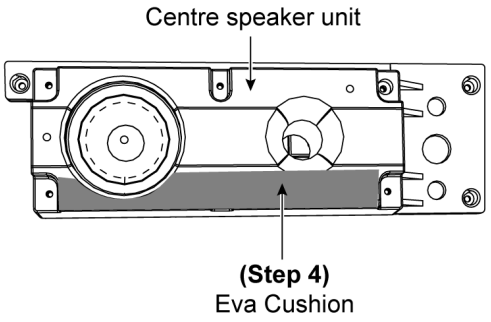


Step 1 : Remove 3 screws.

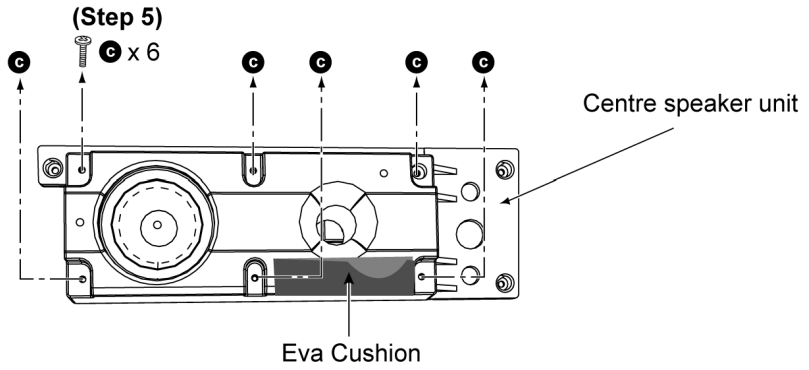


Step 2 : Prepare a Box.

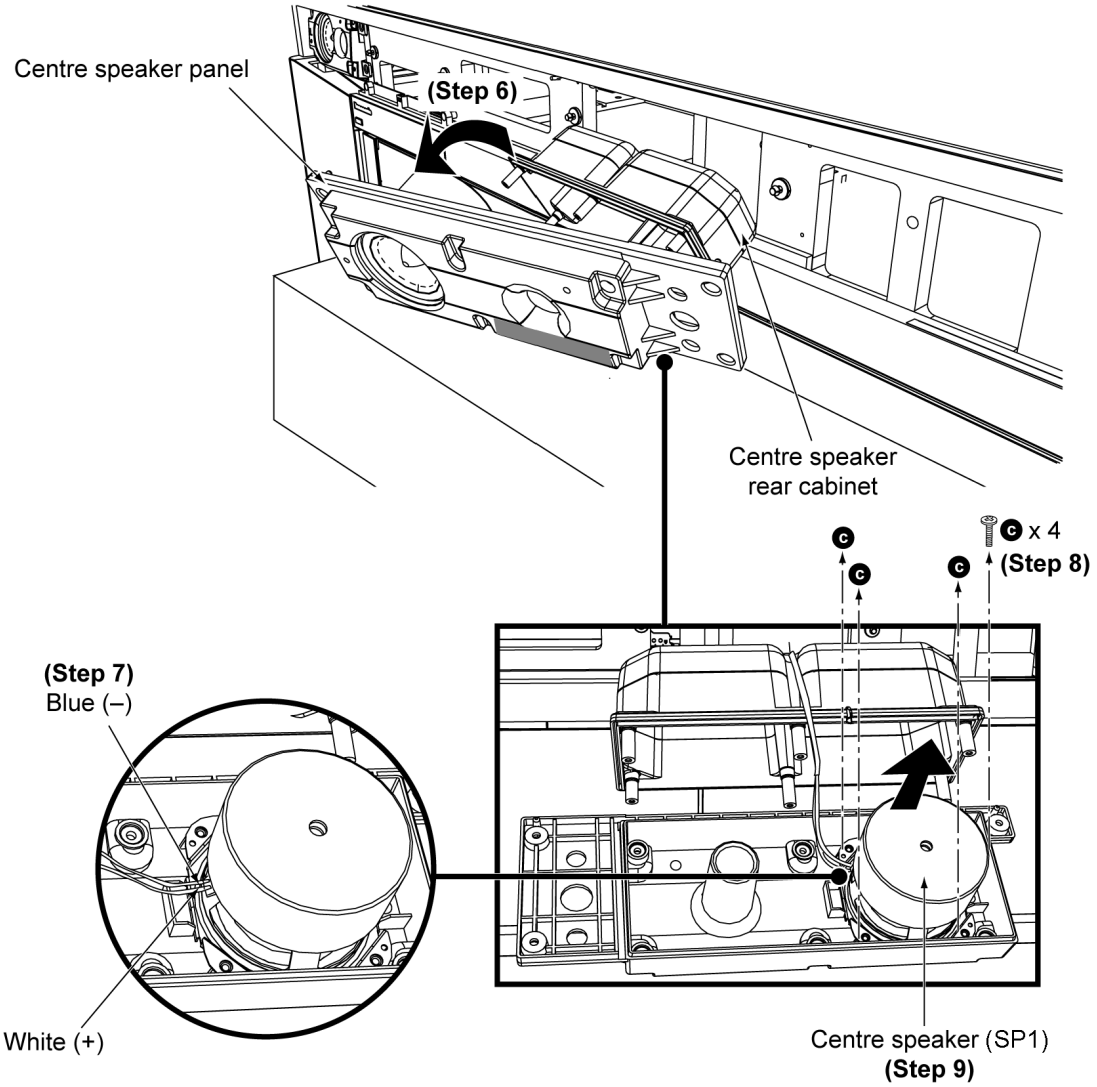
Step 3 : Remove the Centre speaker unit and place on the box.



Step 4 : Pull out the Eva Cushion partially.



Step 5 : Remove 6 screws.



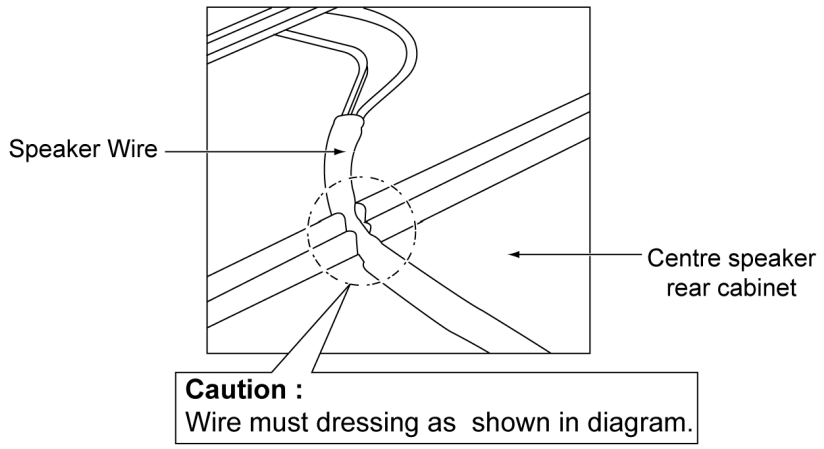
Step 6 : Remove the Centre speaker panel as arrow shown.

Step 7 : Detach the White (+) and Blue (-) speaker wires.

Step 8 : Remove 4 screws.

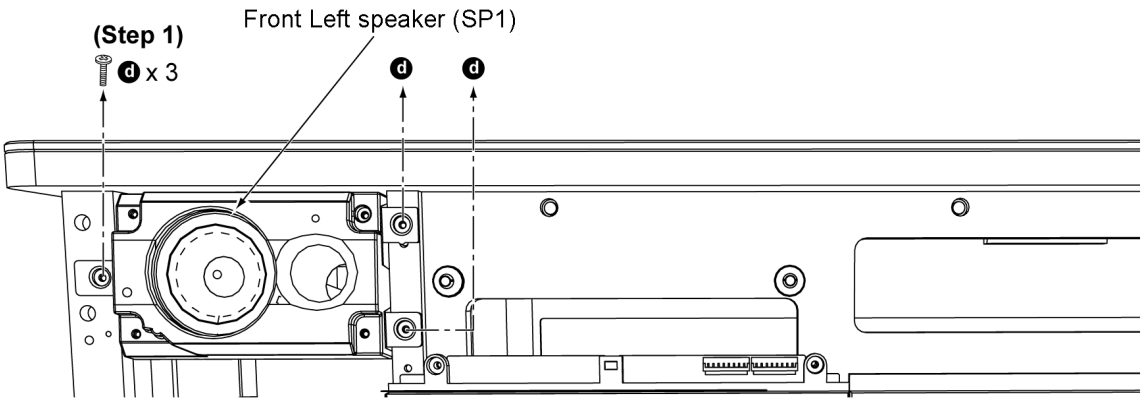
Step 9 : Remove the Centre speaker (SP1) as arrow shown.

Caution : During reassembling procedures, ensure the cable are properly dressed.

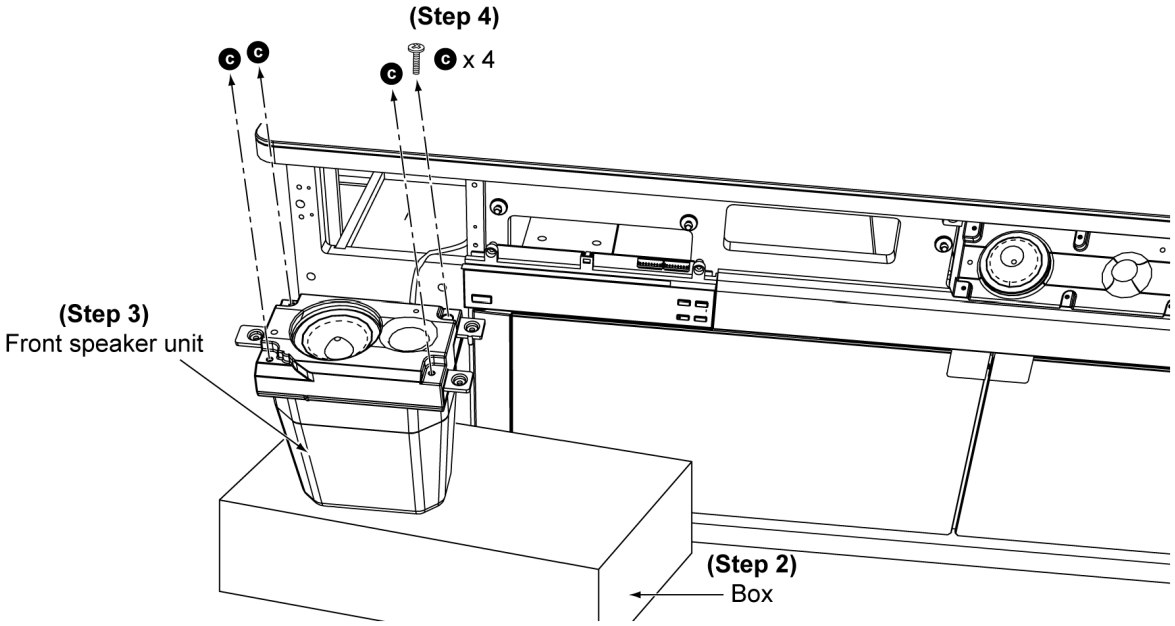


7.13. Disassembly of Front Left speaker (SP1)

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.6.



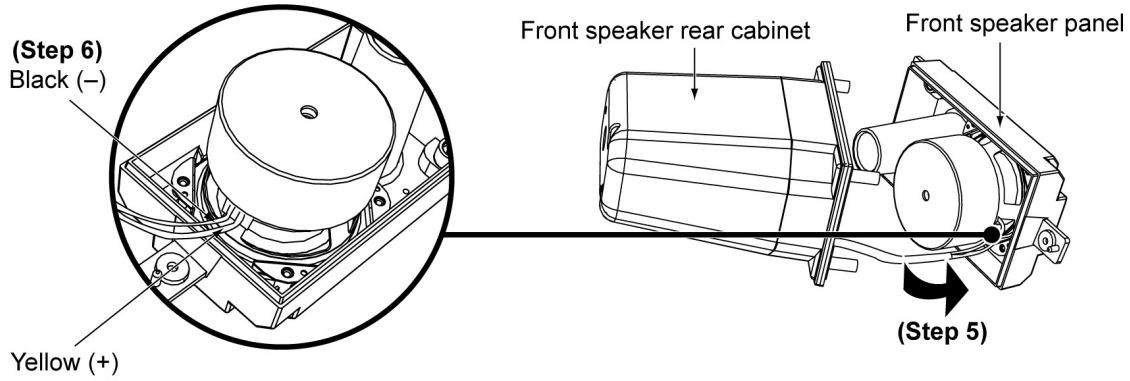
Step 1 : Remove 3 screws.



Step 2 : Prepare a Box.

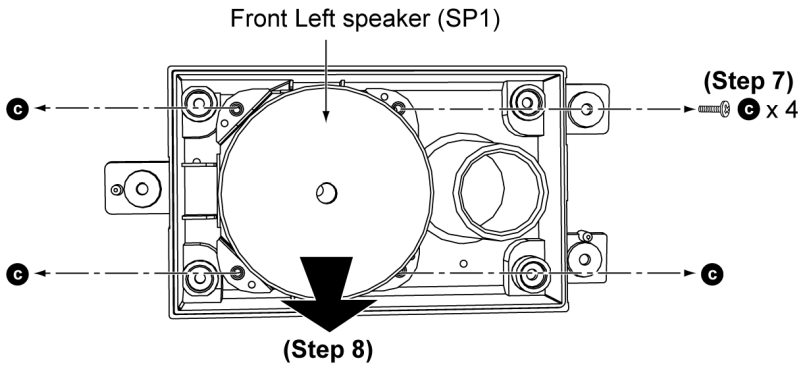
Step 3 : Remove the front Speaker unit and place on the box.

Step 4 : Remove 4 screws.



Step 5 : Remove the Front speaker panel as arrow shown.

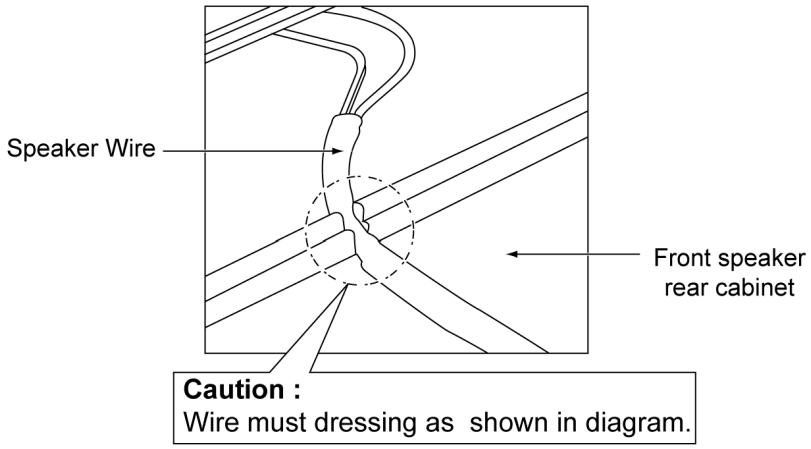
Step 6 : Detach the Yellow (+) and Black (-) speaker wires.



Step 7 : Remove 4 screws.

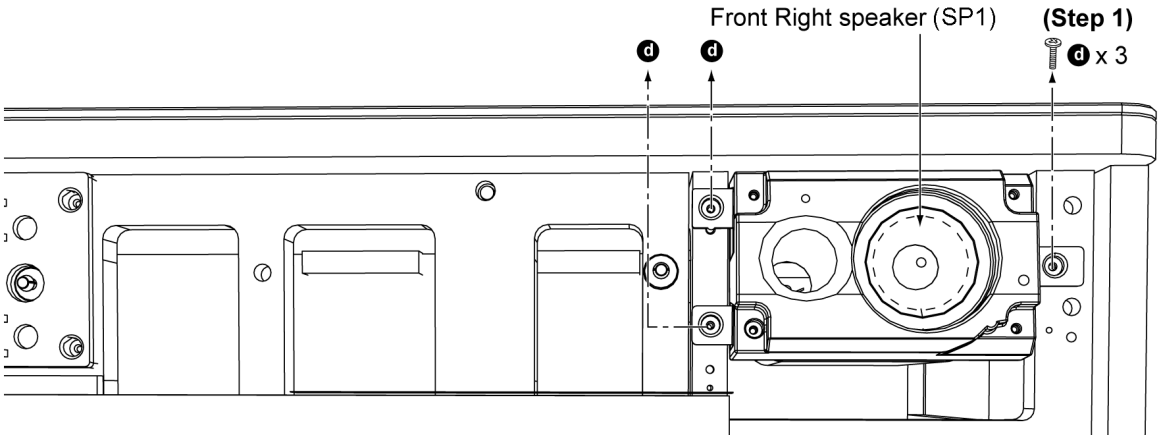
Step 8 : Remove the Front Left speaker (SP1) as arrow shown.

Caution : During reassembling procedures, ensure the cable are properly dressed.

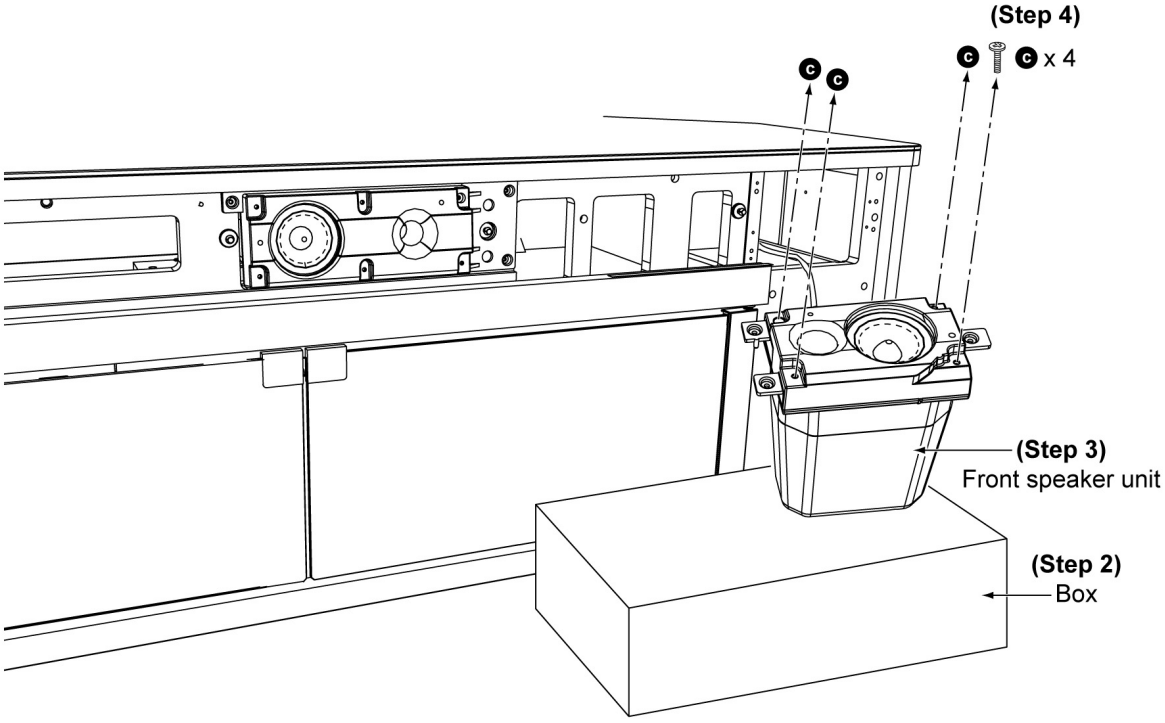


7.14. Disassembly of Front Right speaker (SP1)

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 3) of item 7.9.



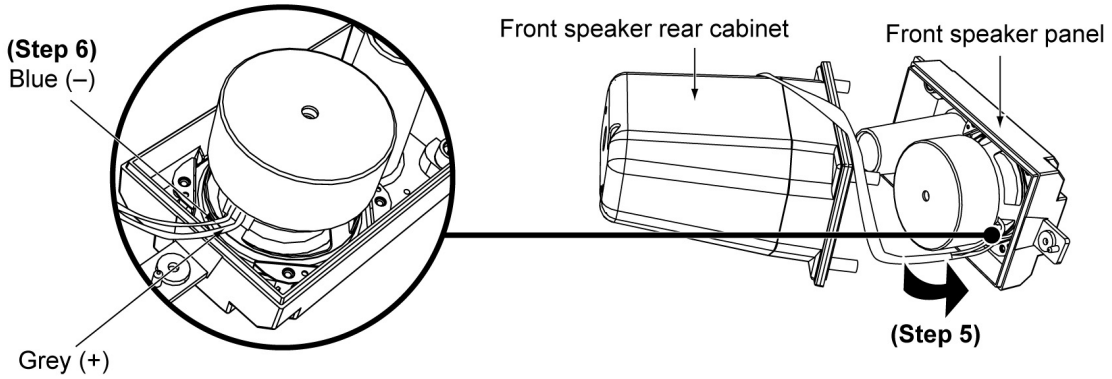
Step 1 : Remove 3 screws.



Step 2 : Prepare a Box.

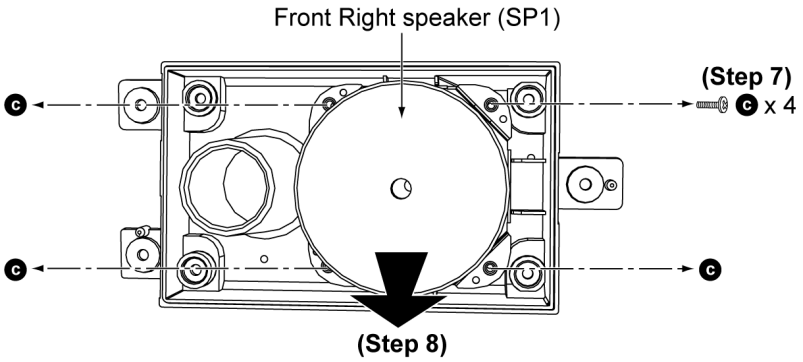
Step 3 : Remove the Front speaker unit and place on the box.

Step 4 : Remove 4 scews.



Step 5 : Remove the Front speaker panel as arrow shown.

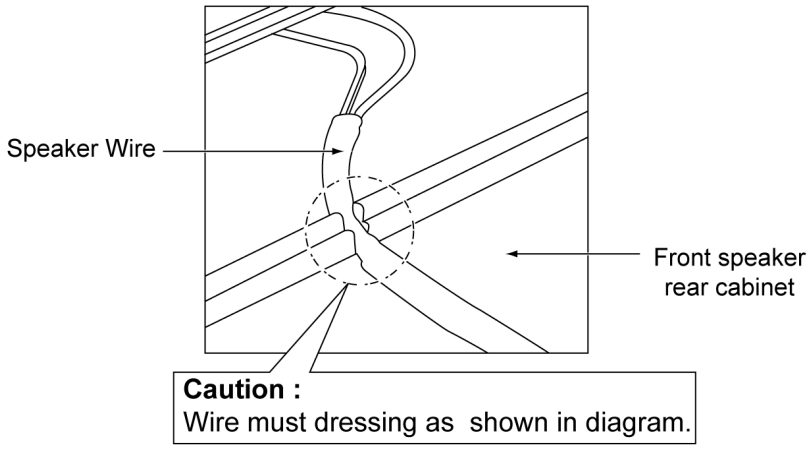
Step 6 : Detach the Grey (+) and Blue (-) speaker wires.



Step 7 : Remove 4 screws.

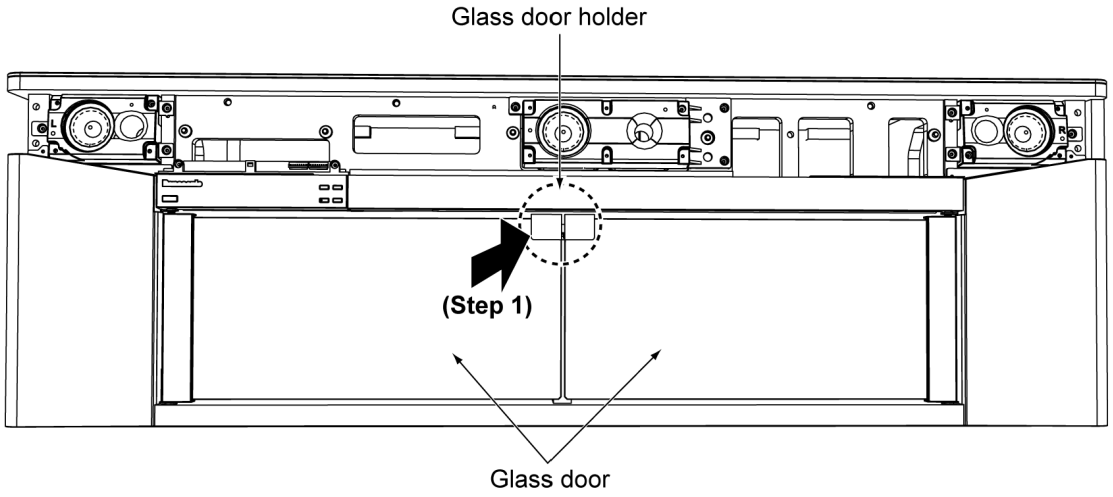
Step 8 : Remove the Front Right speaker (SP1) as arrow shown.

Caution : During reassembling procedures, ensure the cable are properly dressed.

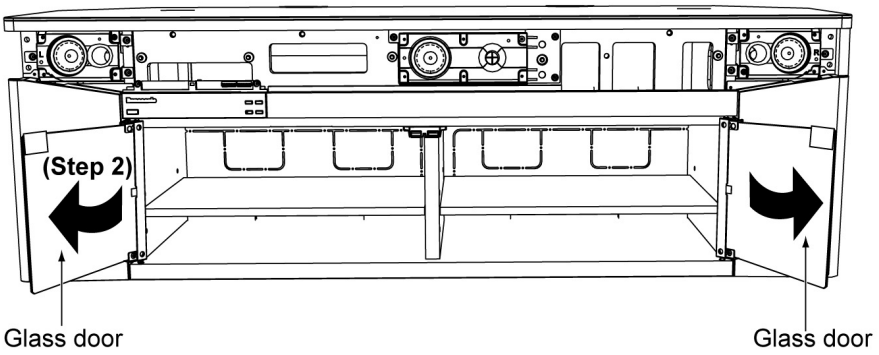


7.15. Disassembly of Front Baffle Assembly

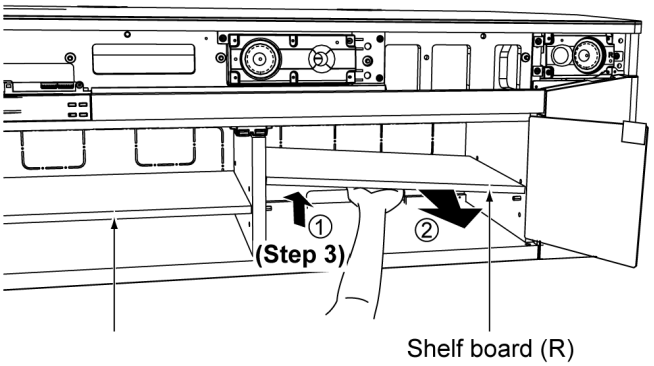
- Follow the (Step 1) - (Step 3) of item 7.5.



Step 1 : Push the Glass door holder.

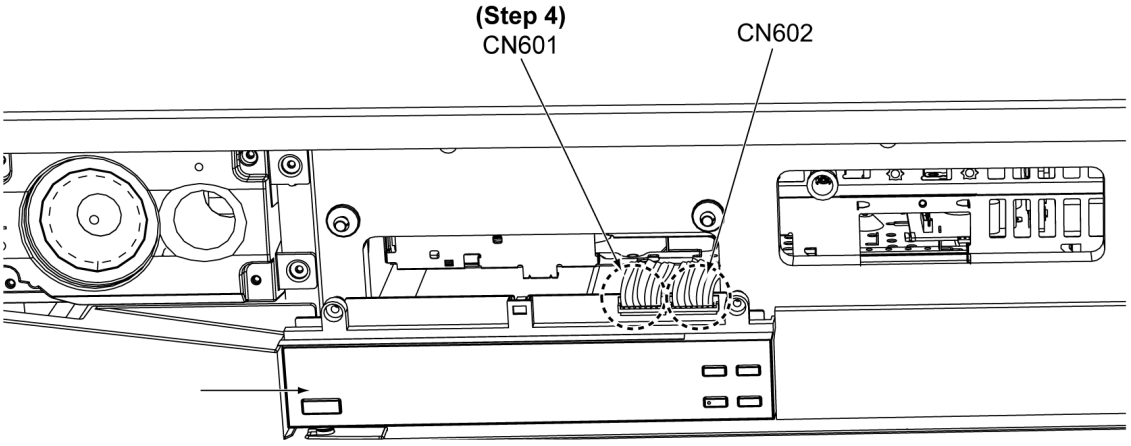


Step 2 : Open the Glass door as arrow shown.

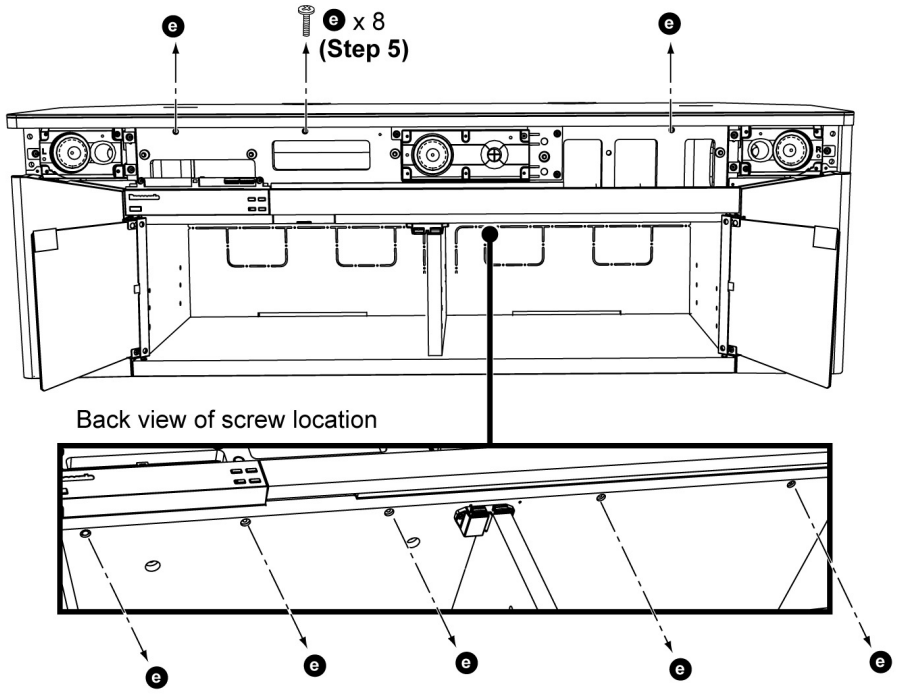


Step 3 : Tilt the Shelf board (R) up slightly and remove it as arrow shown.

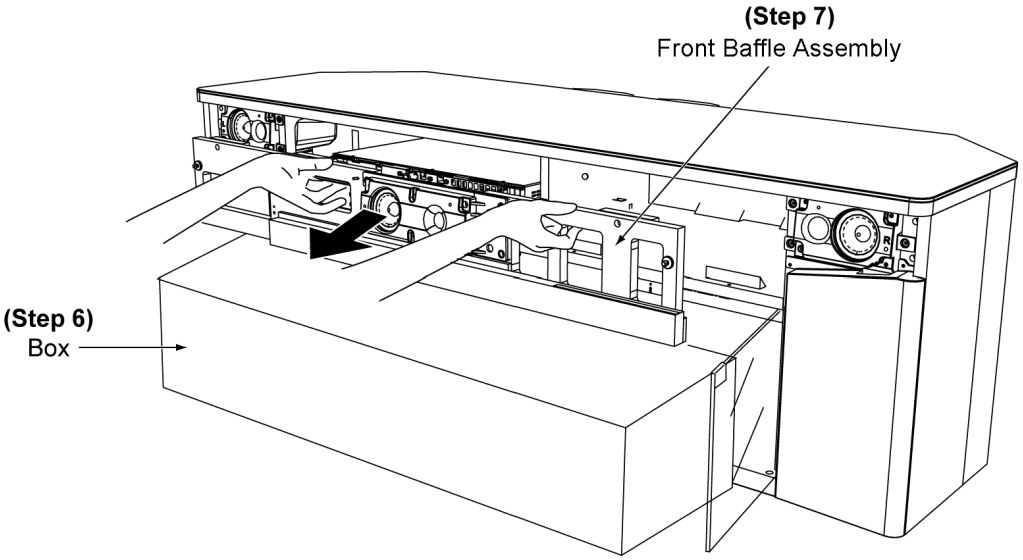
Note : Repeat the same step for the Shelf board (L).



Step 4 : Detach cable at connector (CN601 and CN602) on Panel P.C.B..



Step 5 : Remove 8 screws.

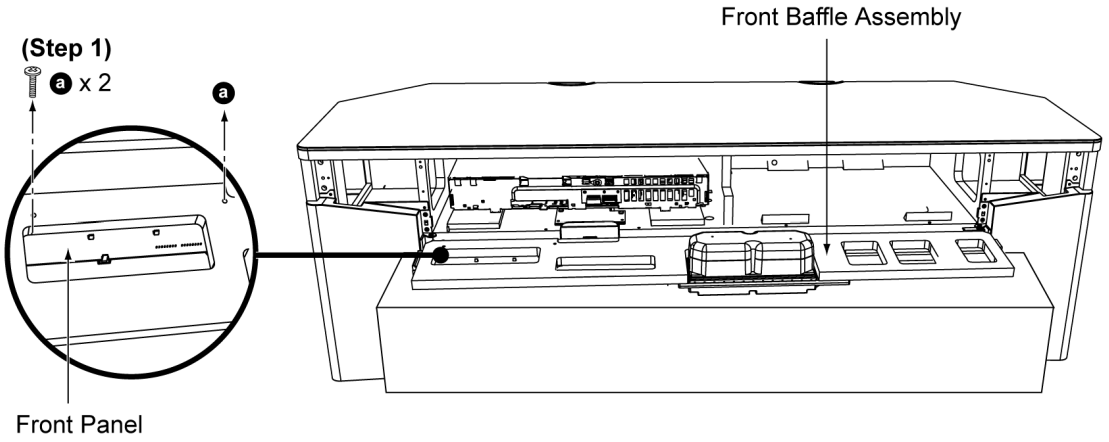


Step 6 : Prepare a Box.

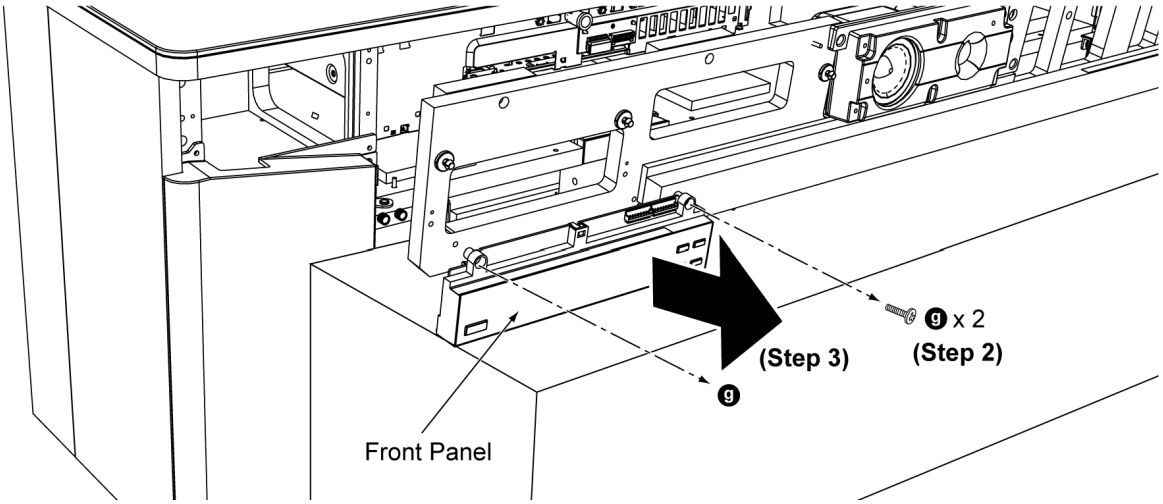
Step 7 : Remove the Front Baffle Assembly as arrow shown and place it on the Box.

7.16. Disassembly of Panel P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 7) of item 7.15.

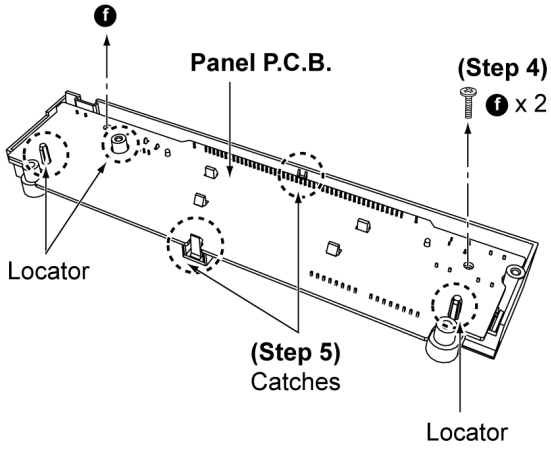


Step 1 : Remove 2 screws.



Step 2 : Remove 2 screws.

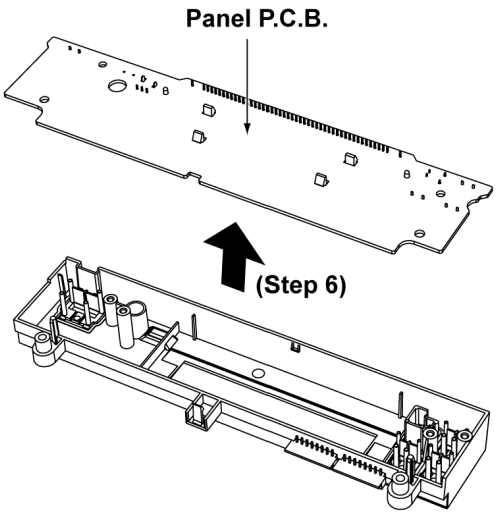
Step 3 : Remove the Front Panel as arrow shown.



Step 4 : Remove 2 screws.

Step 5 : Release 2 catches.

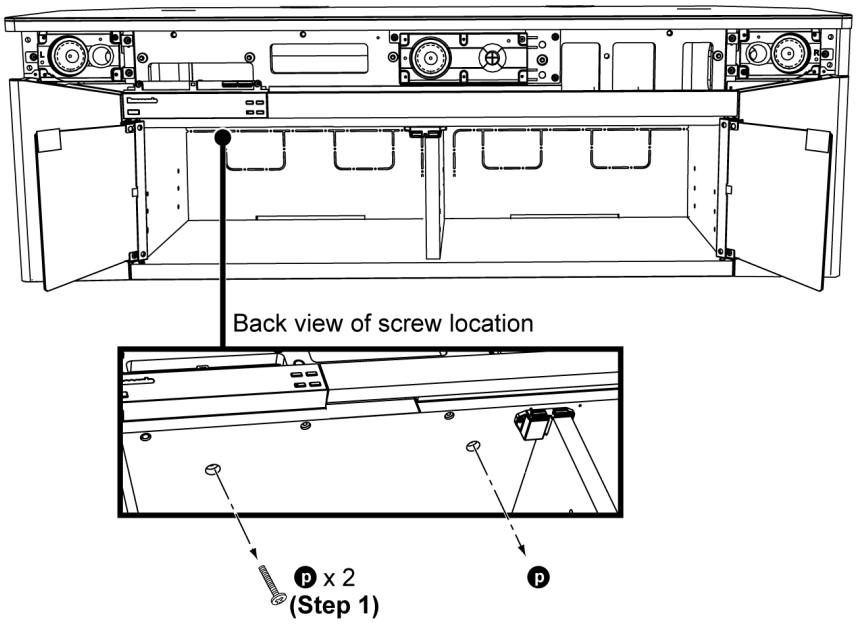
Caution : Take extra care for the locator on the Panel P.C.B. during removal and assembly of the Panel P.C.B..



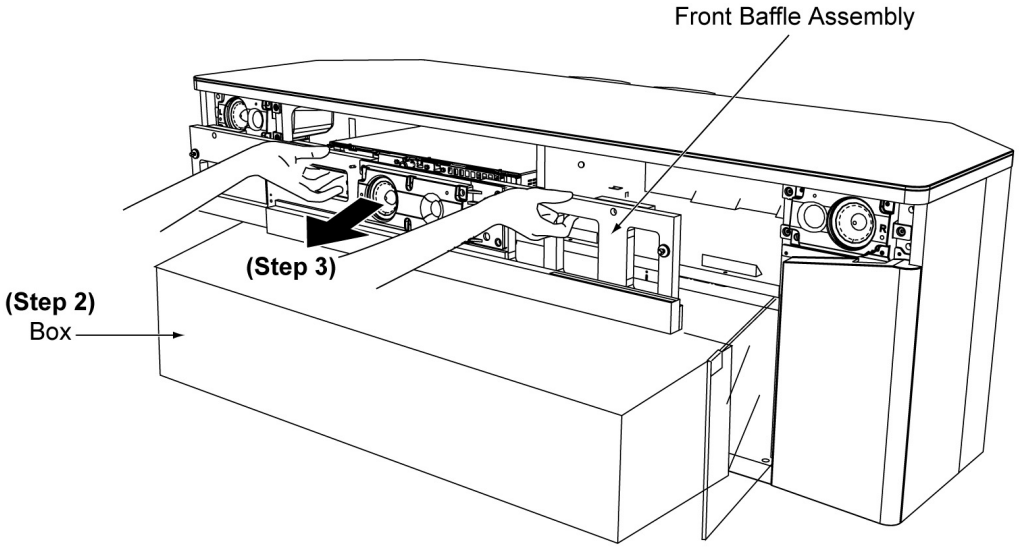
Step 6 : Remove the Panel P.C.B. as arrow shown.

7.17. Disassembly of Amplifier Unit

- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 5) of item 7.15.

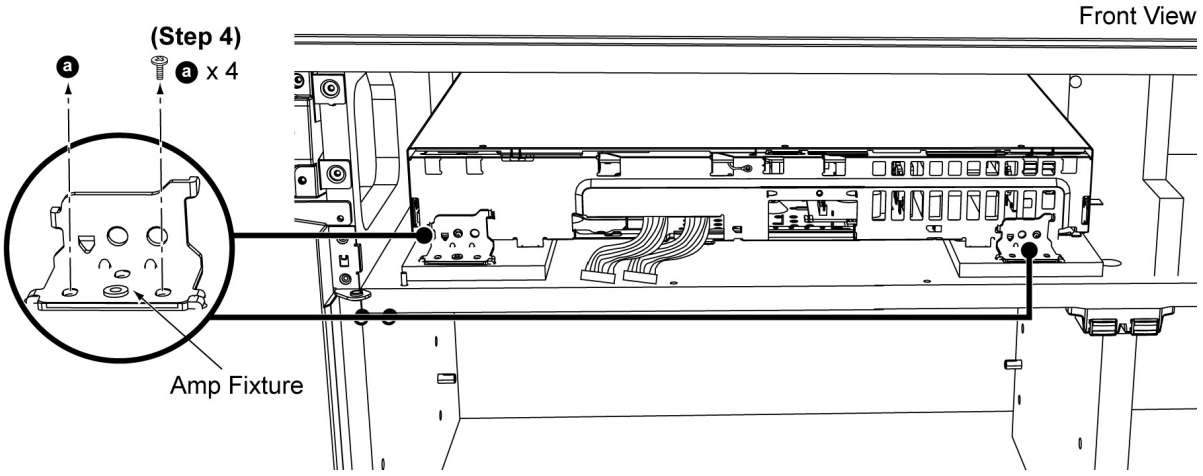


Step 1 : Remove 2 screws.

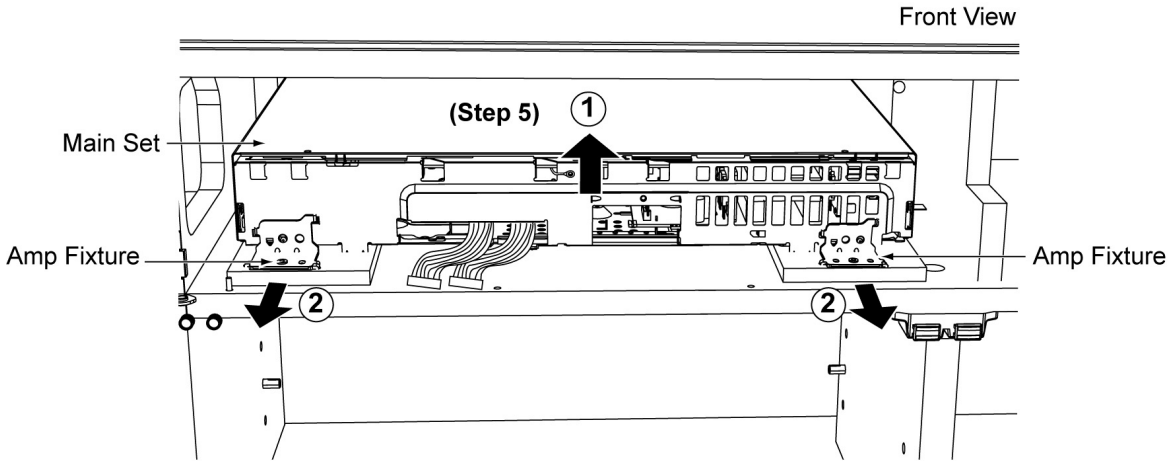


Step 2 : Prepare a Box.

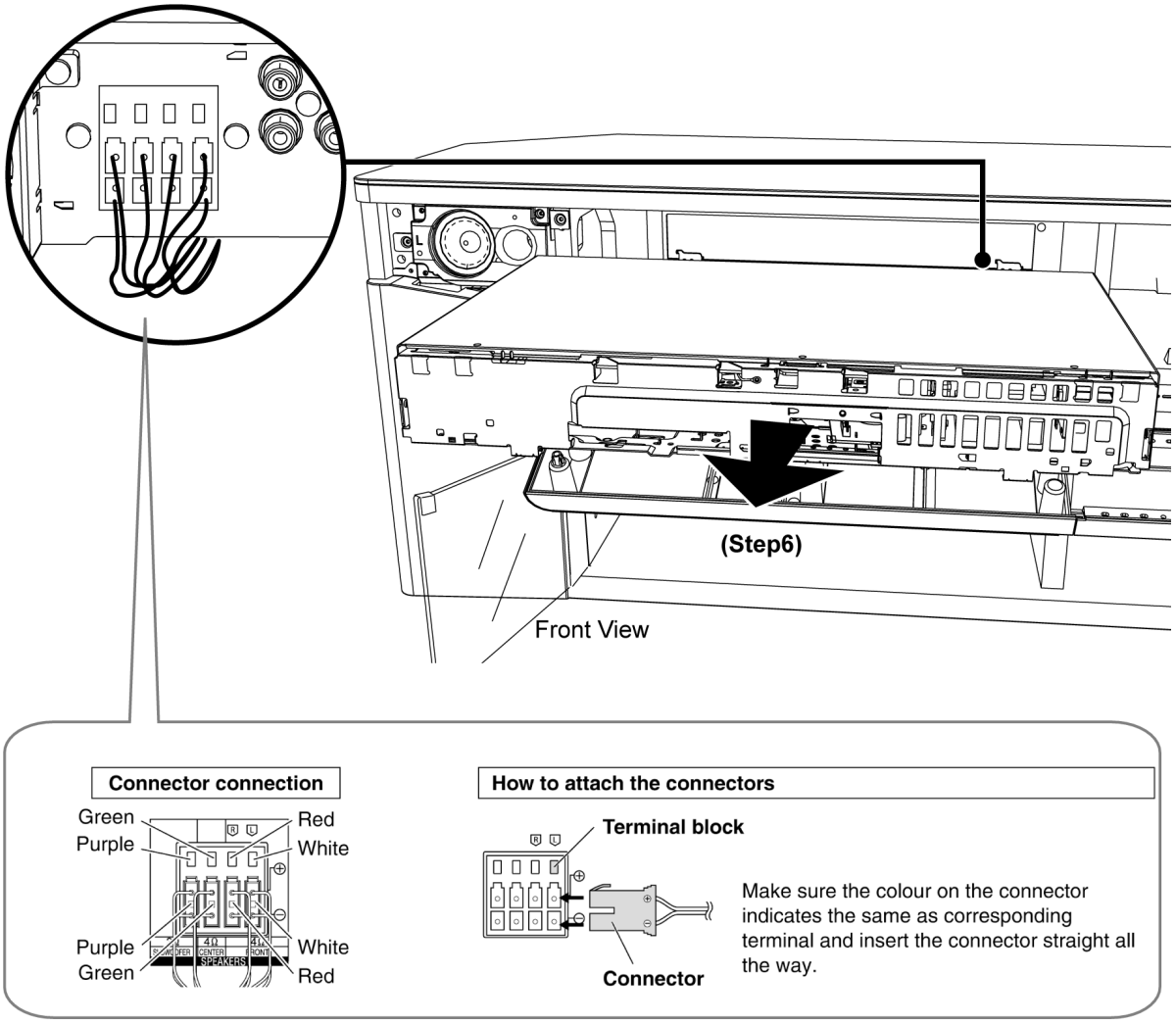
Step 3 : Remove the Front Baffle Assembly as arrow shown and place it on the Box.



Step 4 : Remove 4 screws.

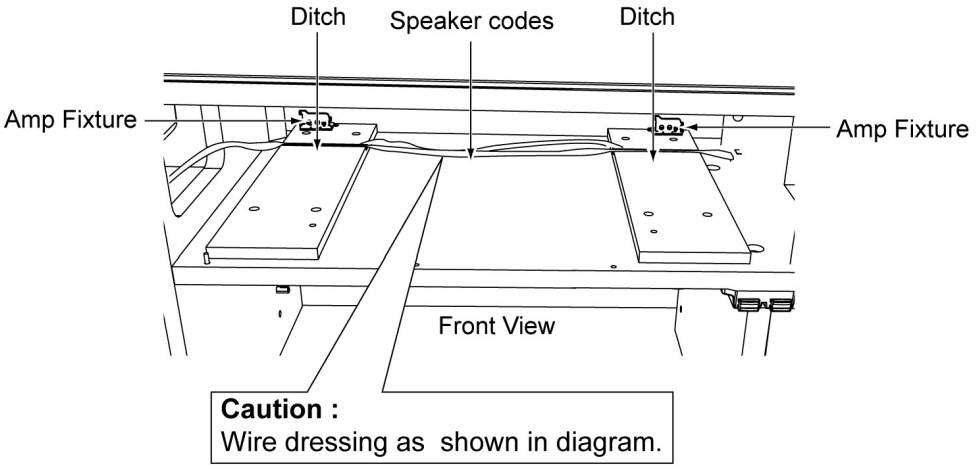


Step 5 : Lift up the Main Set a bit and remove the Amp Fixtures as arrow shown.



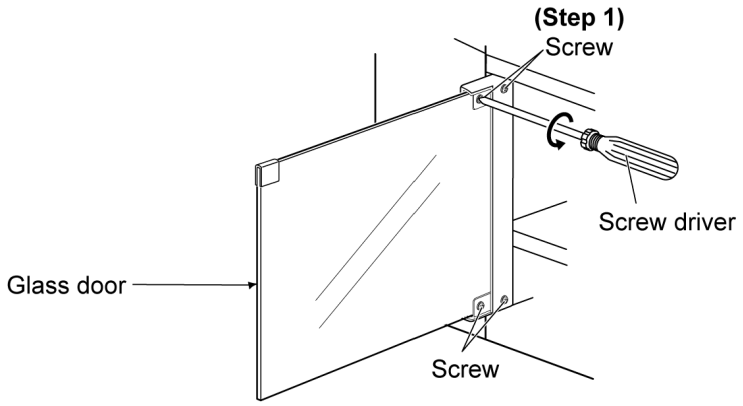
Step 6 : Remove the main set as arrow shown.

Caution : During reassembling procedures, ensure the cable are properly dressed.

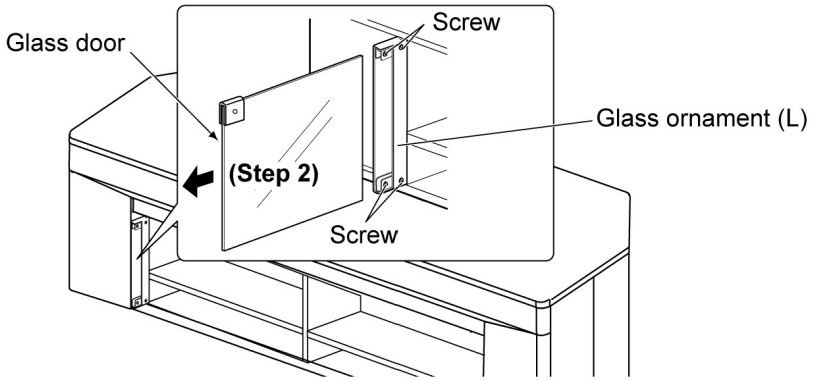


7.18. Disassembly of Glass Ornament (L)

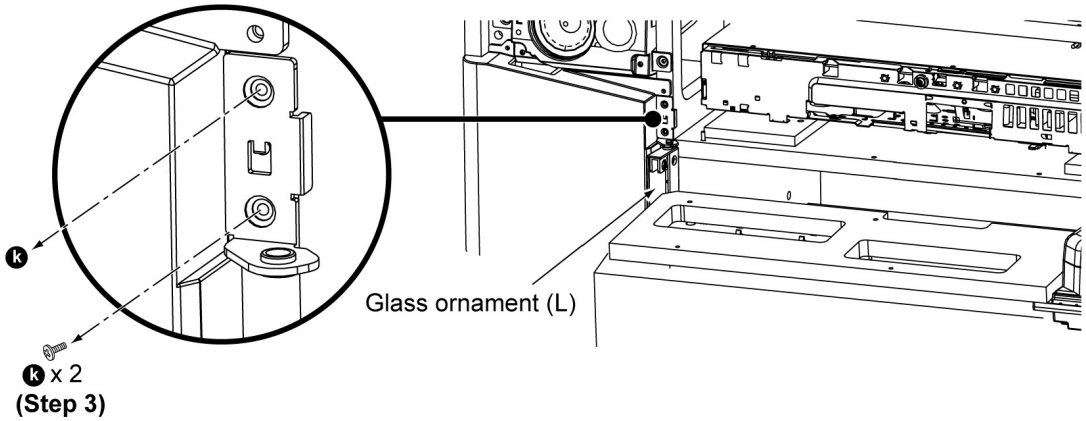
- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 7) of item 7.15.



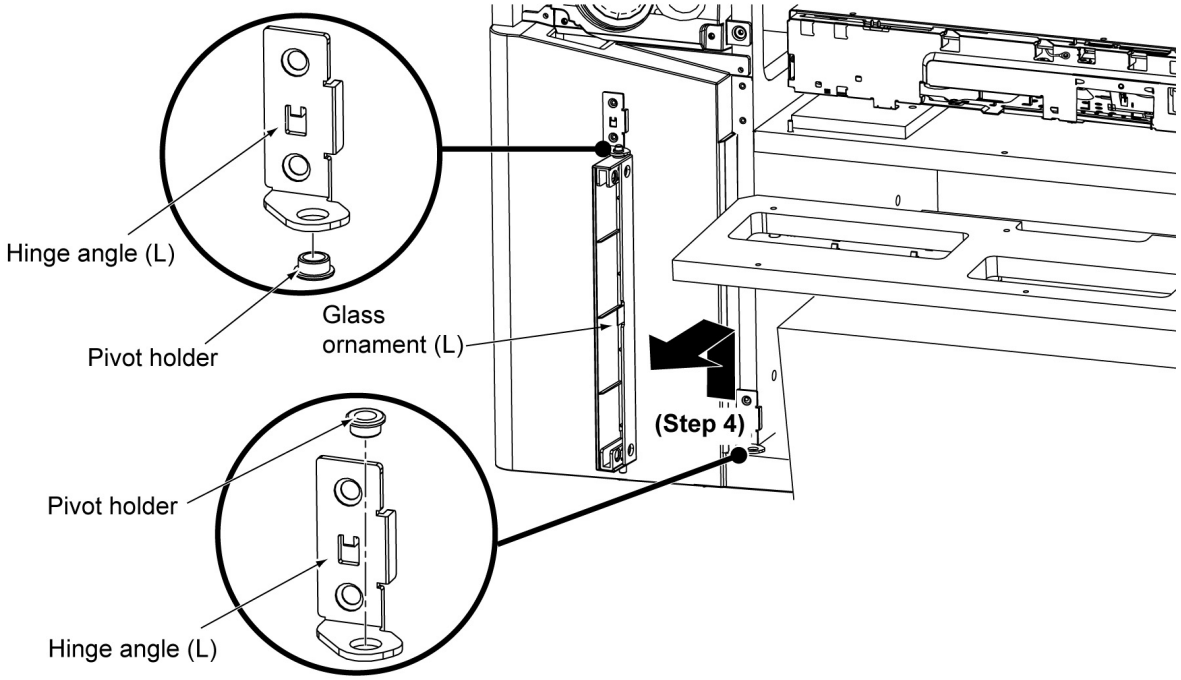
Step 1 : Loosen the Screws for removing the Glass door.



Step 2 : Remove the Glass door as arrow shown.



Step 3 : Remove 2 screws.

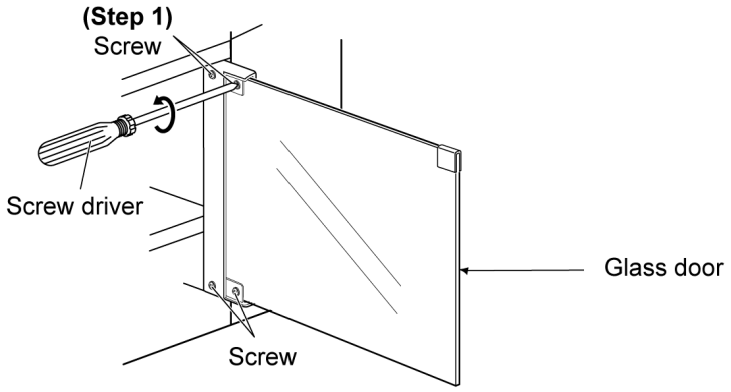


Step 4 : Remove the Glass ornament (L) as arrow shown.

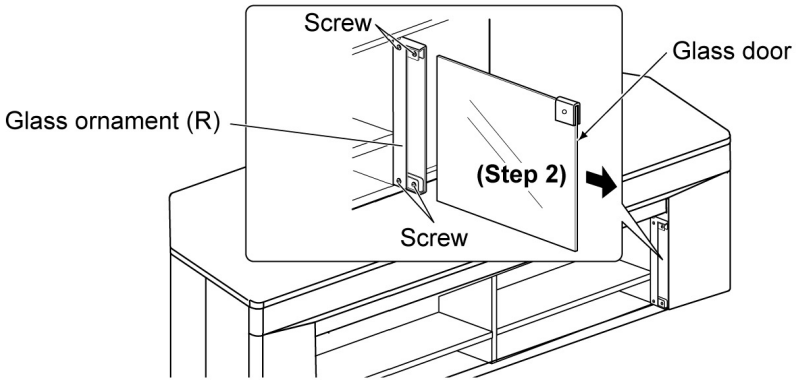
Caution : Be careful of losing the Pivot holder as it may fall off when the Hinge angle (L) removed from the Glass ornament (L).

7.19. Disassembly of Glass Ornament (R)

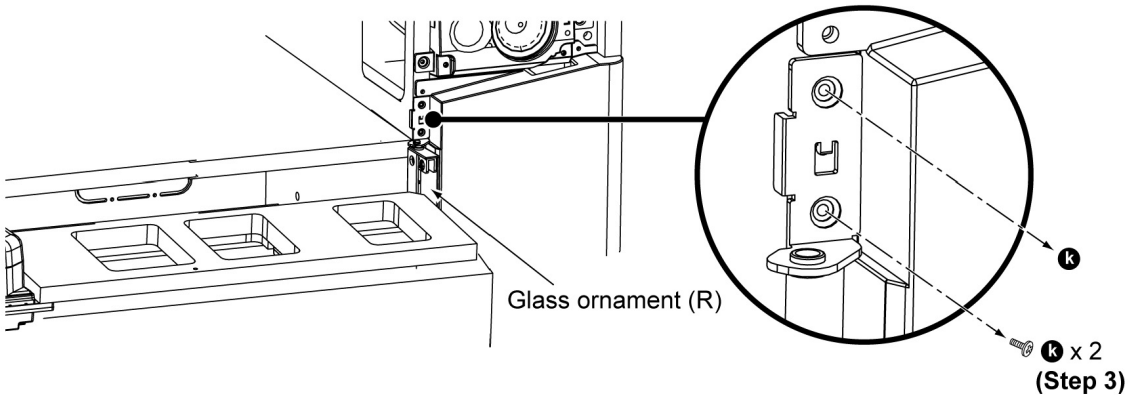
- Follow the (Step 1) - (Step 3) of item 7.5.
- Follow the (Step 1) - (Step 7) of item 7.15.



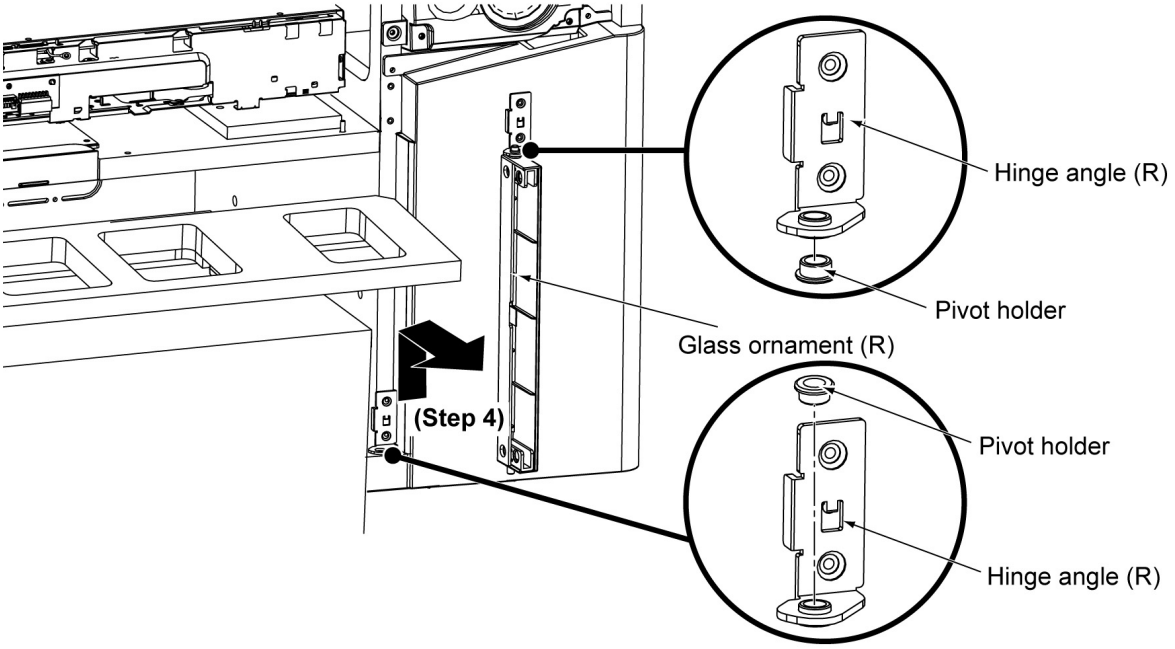
Step 1 : Loosen the Screws for removing the Glass door.



Step 2 : Remove the Glass door as arrow shown.



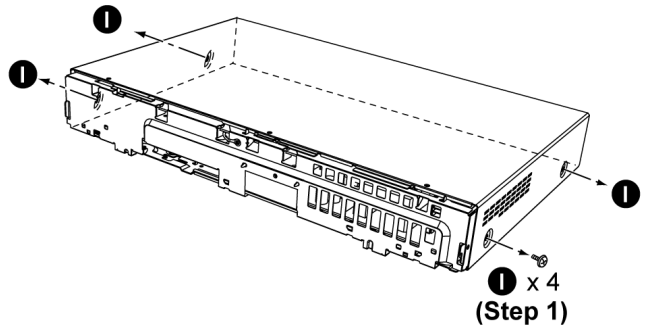
Step 3 : Remove 2 screws.



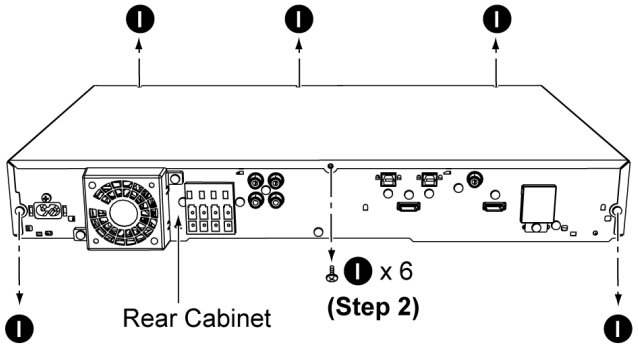
Step 4 : Remove the Glass ornament (R) as arrow shown.

Caution : Be careful of losing the Pivot holder as it may fall off when the Hinge angle (R) removed from the Glass ornament (R).

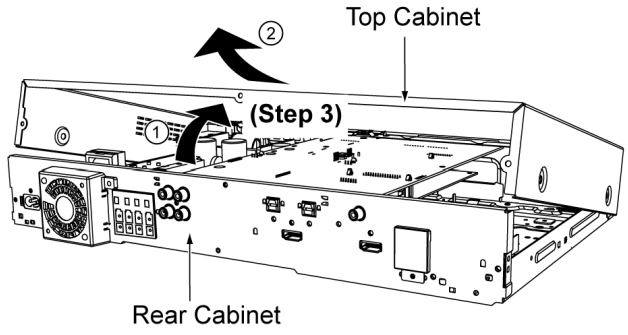
7.20. Disassembly of Top Cabinet



Step 1 : Remove 4 screws.



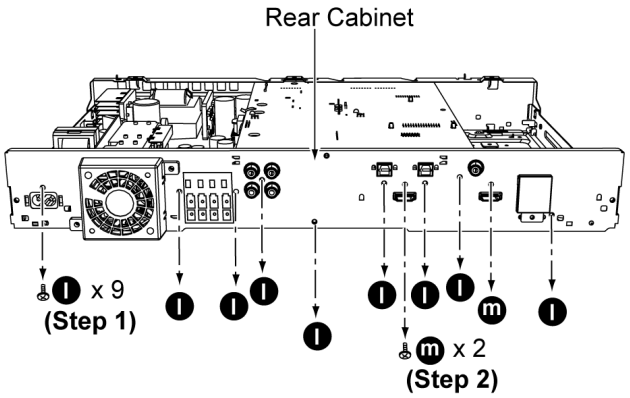
Step 2 : Remove 6 screws.



Step 3 : Lift up the back part of the Top Cabinet and remove it as arrow shown.

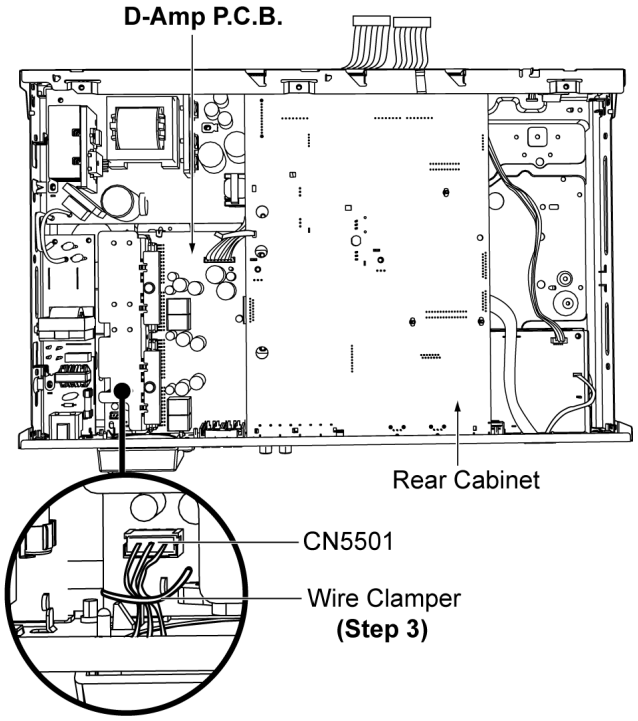
7.21. Disassembly of Rear Cabinet

- Follow the (Step 1) - (Step 3) of item 7.20.

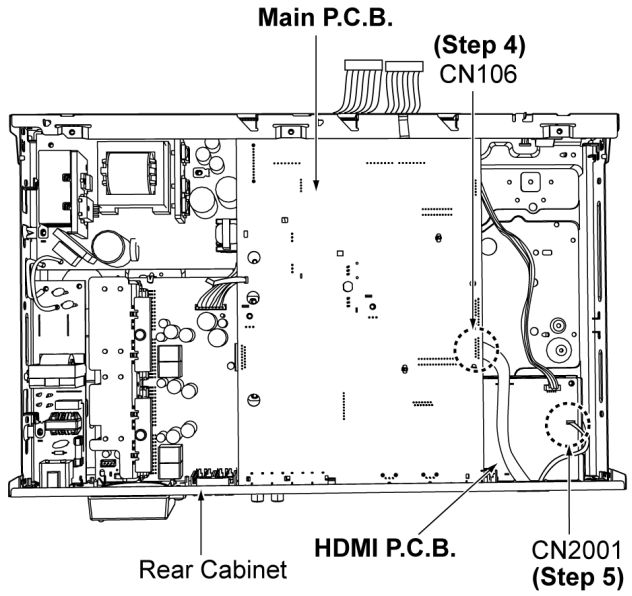


Step 1 : Remove 9 screws.

Step 2 : Remove 2 screws.

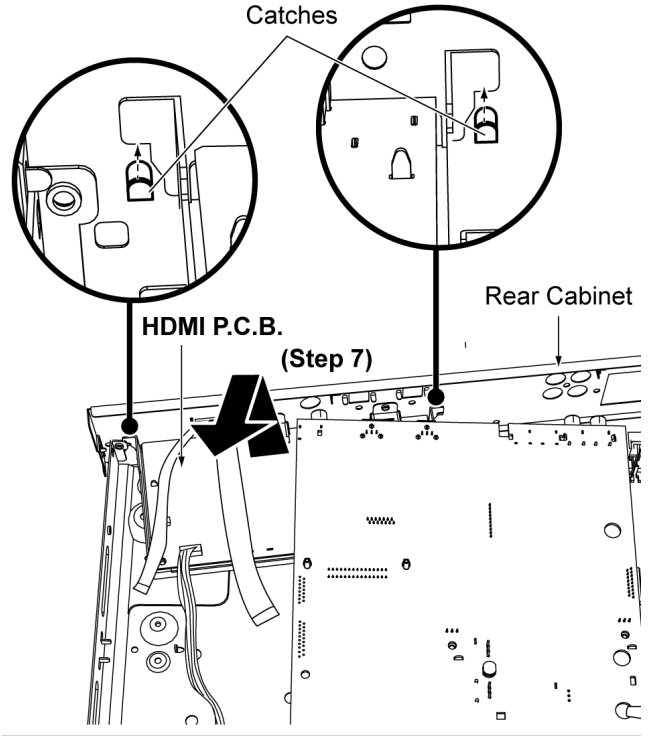


Step 3 : Remove the Wire Clamper to detach the fan unit connector (CN5501) on D-Amp P.C.B..



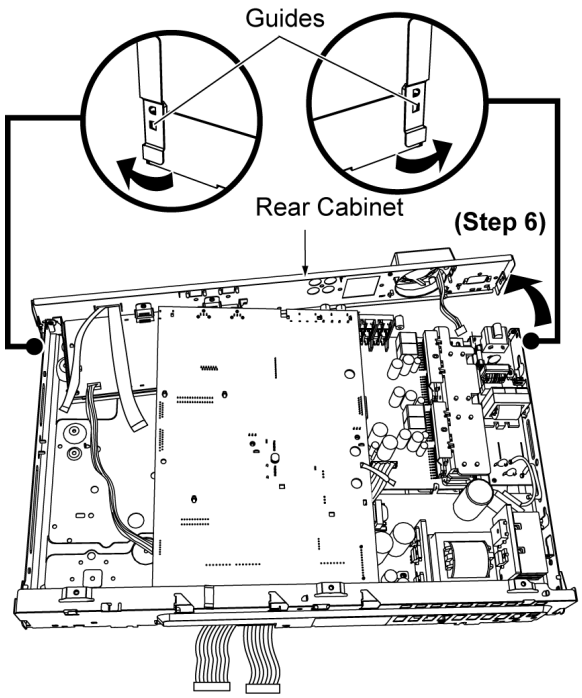
Step 4 : Detach FFC cable at the connector (CN106) on Main P.C.B..

Step 5 : Detach FFC cable at the connector (CN2001) on HDMI P.C.B..

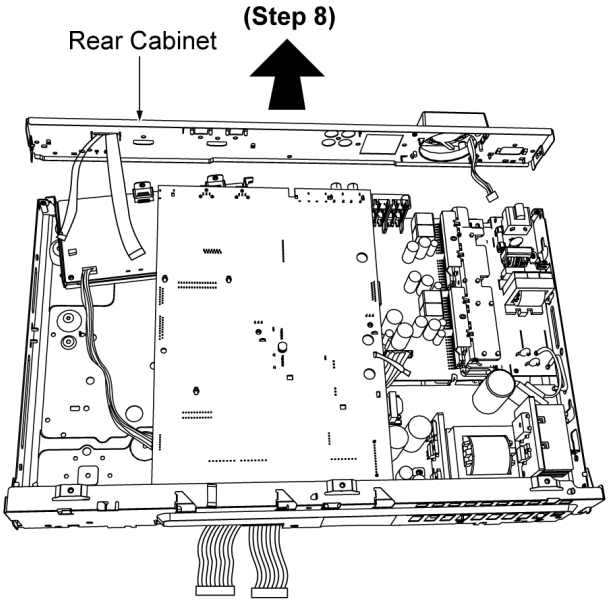


Step 7 : Lift up and remove the HDMI P.C.B. with the chassis from the Rear Cabinet as arrow shown.

Caution : Take extra care for the catches on the Rear Cabinet during removal and assembly of the HDMI P.C.B. (with chassis).



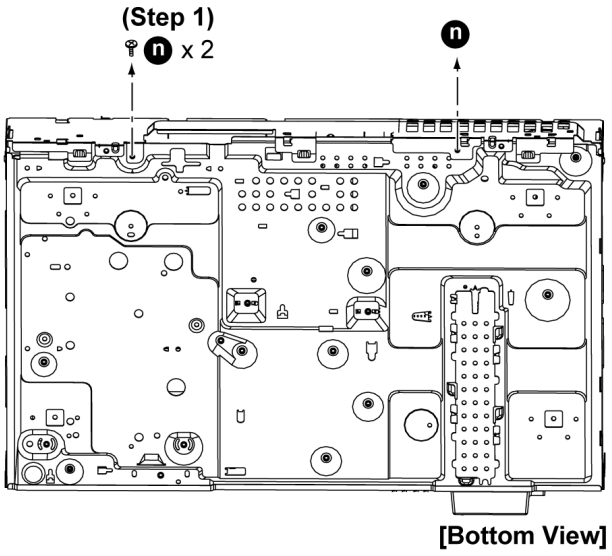
Step 6 : Remove one side of the Rear Cabinet as arrow shown. Be careful both side guides when removing the rear cabinet.



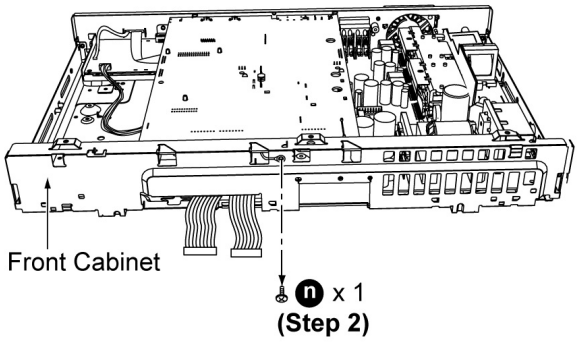
Step 8 : Remove the Rear Cabinet as arrow shown.

7.22. Disassembly of Front Cabinet

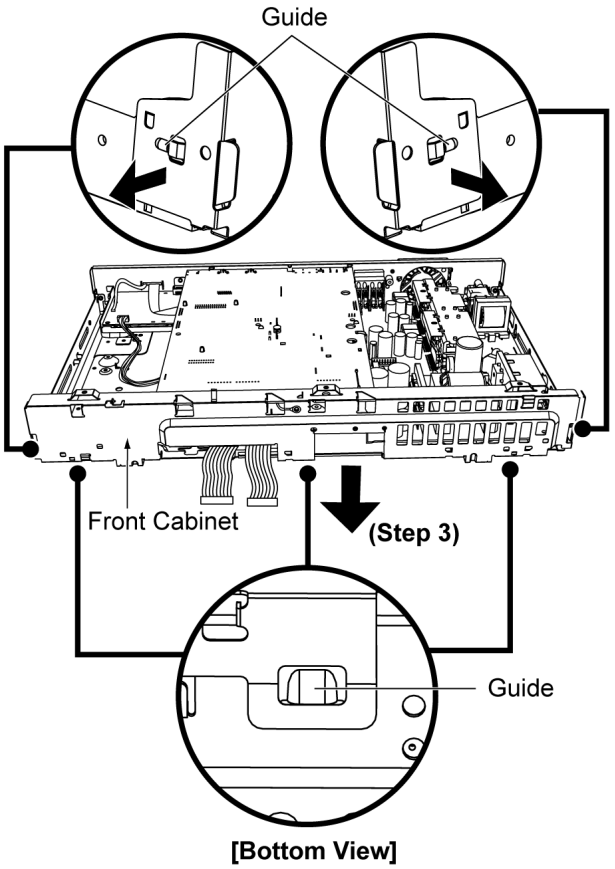
- Follow the (Step 1) - (Step 3) of item 7.20.



Step 1 : Remove 2 screws.



Step 2 : Remove 1 screw.

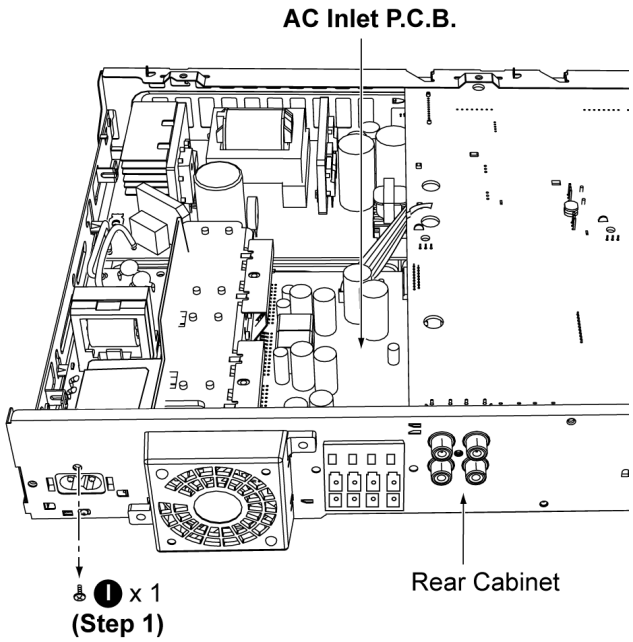


Step 3 : Remove the Front Cabinet as arrow shown. Be careful both side guides and three guides at the bottom when removing the Front Cabinet.

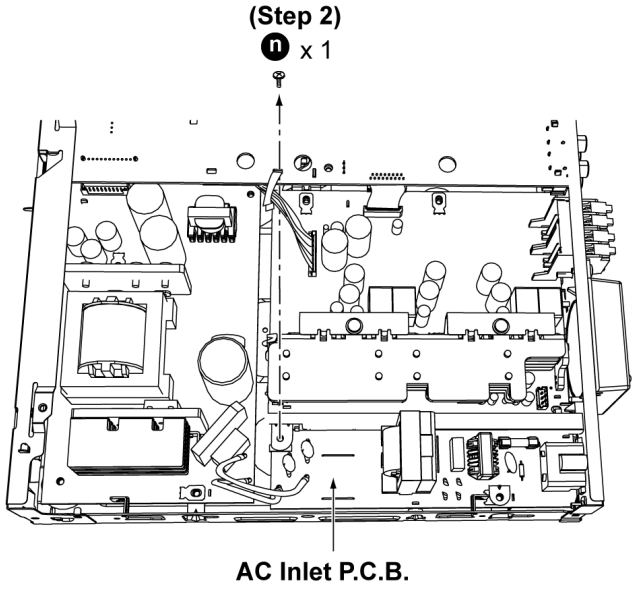
Caution : Do not exert too much force when releasing the guides.

7.23. Disassembly of AC Inlet P.C.B.

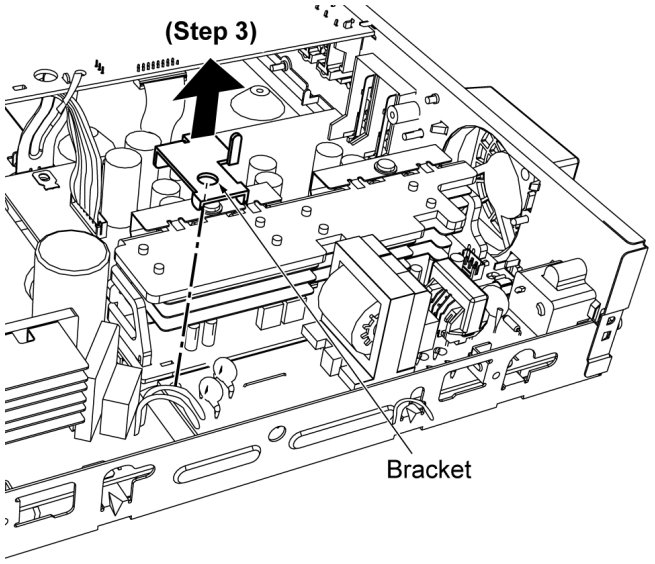
- Follow the (Step 1) - (Step 3) of item 7.20.



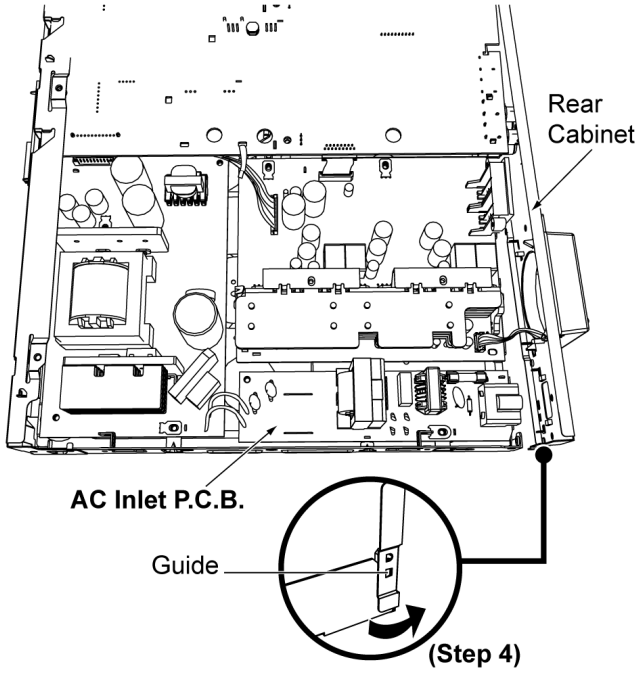
Step 1 : Remove 1 screw.



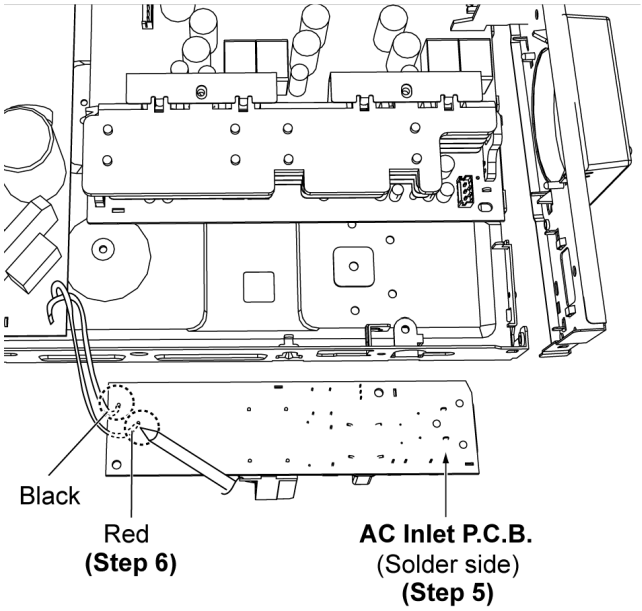
Step 2 : Remove 1 screw.



Step 3 : Remove Bracket as arrow shown.

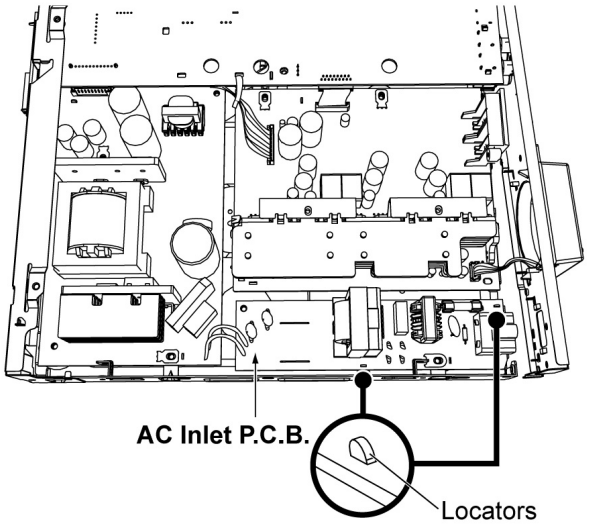


Step 4 : Release the one side of the Rear Cabinet as arrow shown. Be careful Guide when removing the Rear Cabinet.



Step 5 : Flip over the AC Inlet P.C.B..

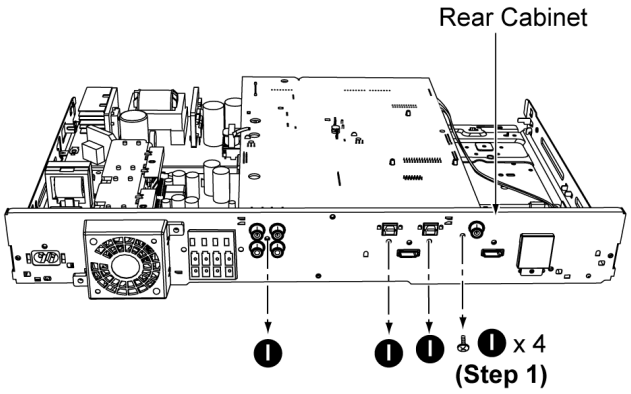
Step 6 : Desolder Black and Red wires.



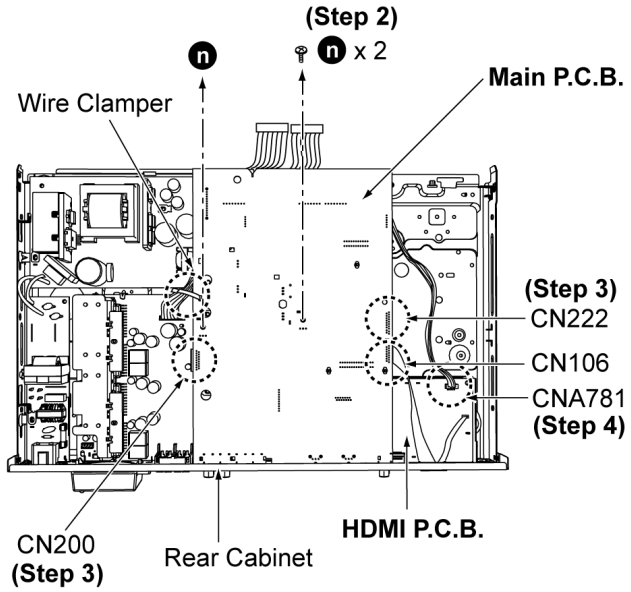
Caution : Take extra care for the locator on the AC Inlet P.C.B. during removal and assembly of the AC Inlet P.C.B..

7.24. Disassembly of Main P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.



Step 1 : Remove 4 screws.

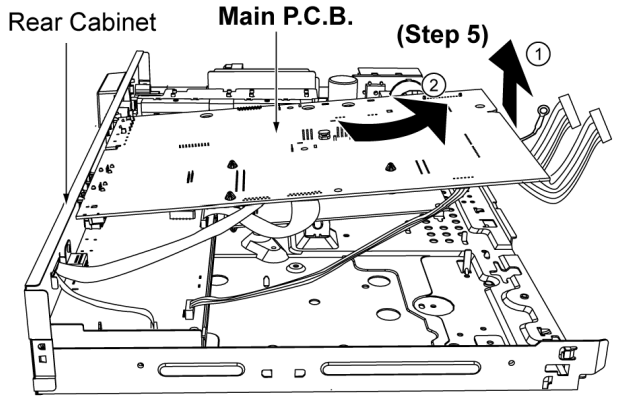


Step 2 : Remove 2 screws.

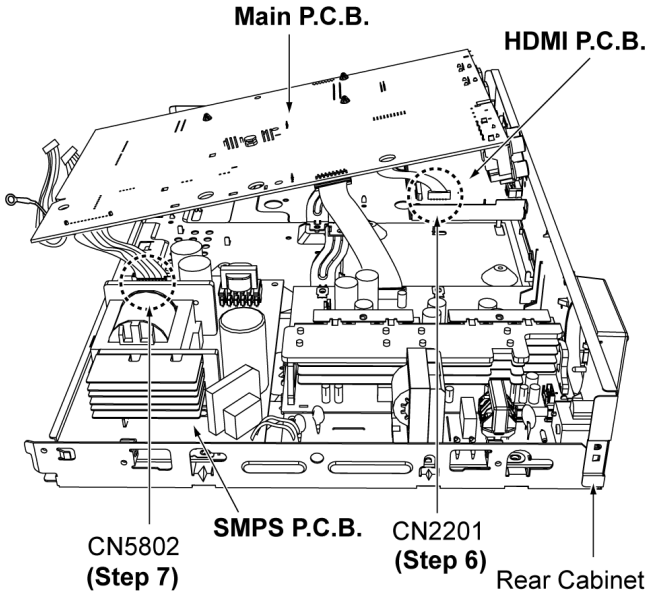
Step 3 : Detach FFC cable at the connector (CN106, CN222 and CN200) on Main P.C.B..

Step 4 : Detach cable at the connector (CNA781) on HDMI P.C.B..

Caution : Attach wire to Main P.C.B. with Wire Clamper during assembly. (Replace a new Wire Clamper after service)

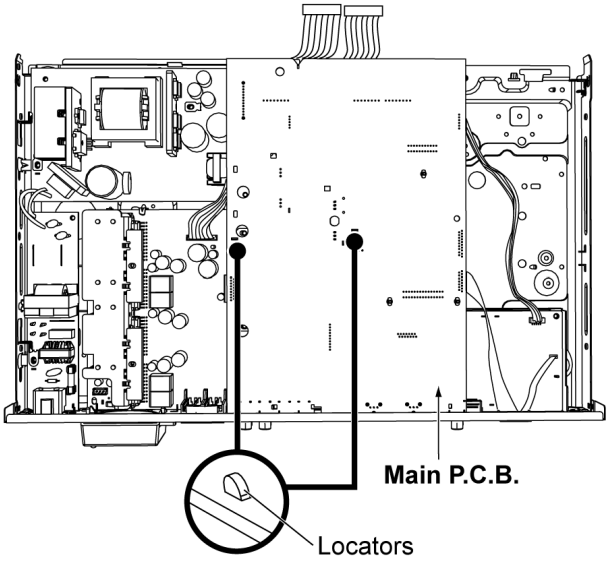


Step 5 : Lift up Main P.C.B. and remove it forward as arrow shown in sequences (from 1-2).



Step 6 : Detach FFC cable at the connector (CN2201) on HDMI P.C.B..

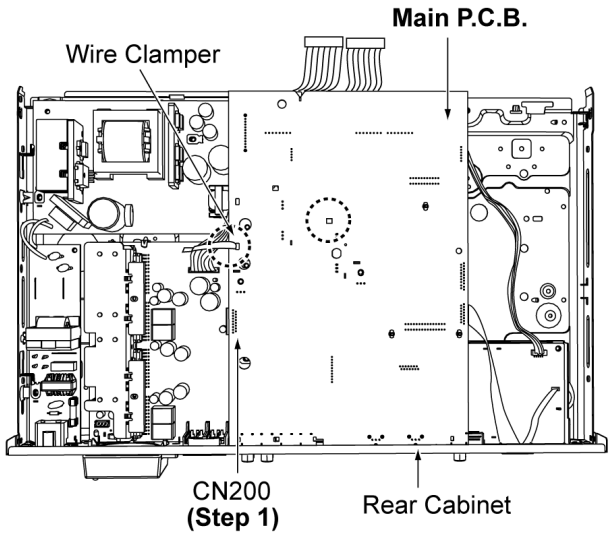
Step 7 : Detach cable at the connector (CN5802) on SMPS P.C.B..



During reassembling procedures, ensure the P.C.B. is seated properly at the locators.

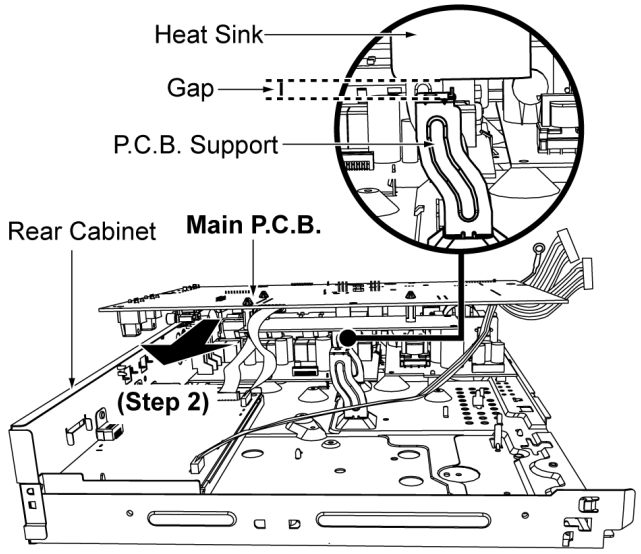
7.25. Disassembly of D-Amp P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 3) of item 7.23.
- Follow the (Step 1) - (Step 2) of item 7.24.

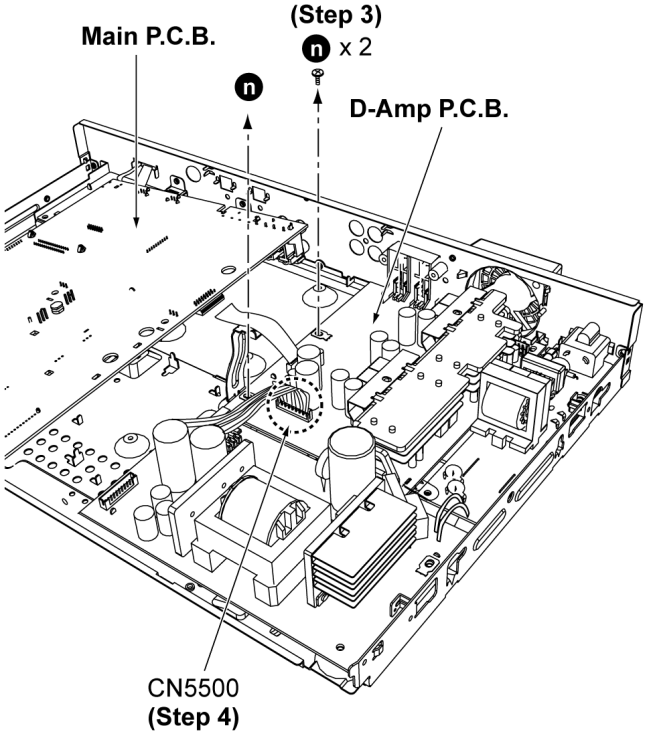


Step 1 : Detach FFC cable at the connector (CN200) on Main P.C.B..

Caution : Attach wire to Main P.C.B. with Wire Clamper during assembly. (Replace a new Wire Clamper after service)

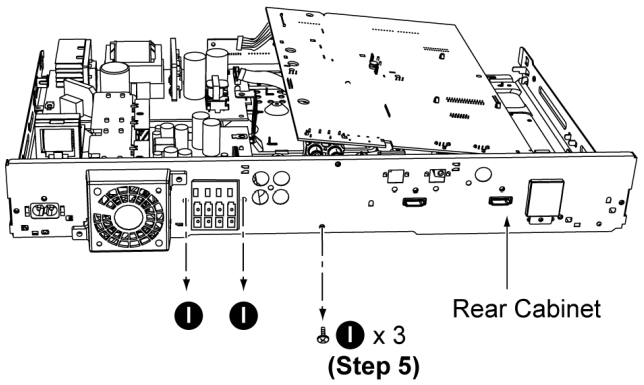


Step 2 : Lift up Main P.C.B. and shift over the Heat Sink.

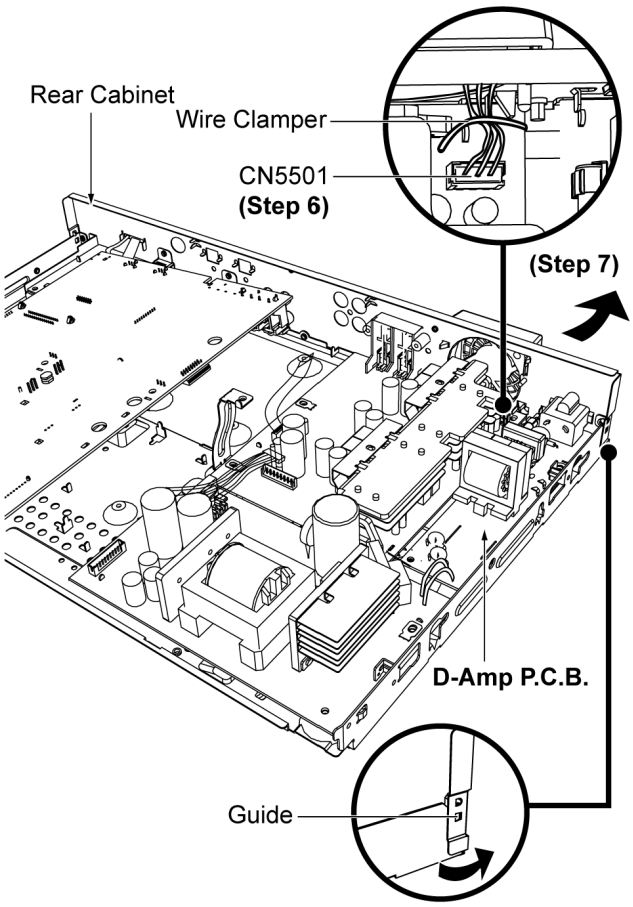


Step 3 : Remove 2 screws.

Step 4 : Detach cable at the connector (CN5500) on D-Amp P.C.B..

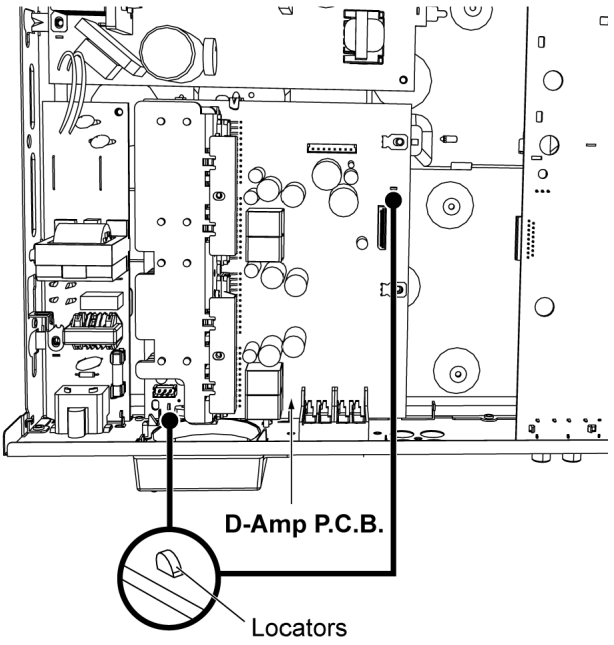


Step 5 : Remove 3 screws.

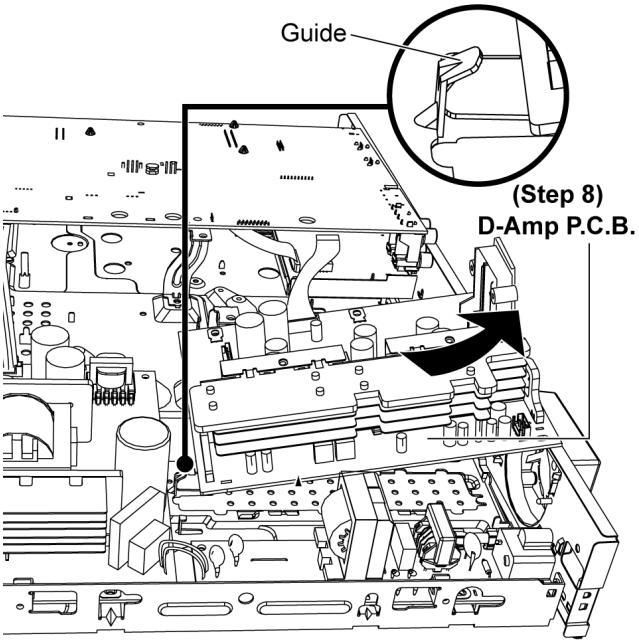


Step 6 : Remove the wire clamper to detach the fan unit connector (CN5501) on D-Amp P.C.B..

Step 7 : Open one side of the Rear Cabinet slightly as arrow shown. Be careful guide when removing the Rear Cabinet.



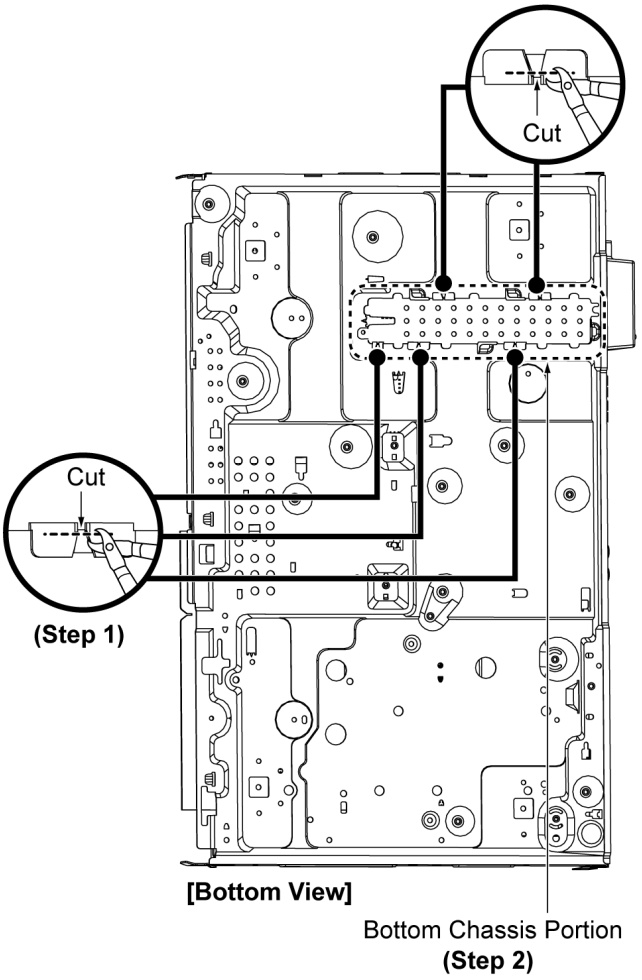
During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



Step 8 : Remove D-Amp P.C.B. as arrow shown. Be careful with the guide.

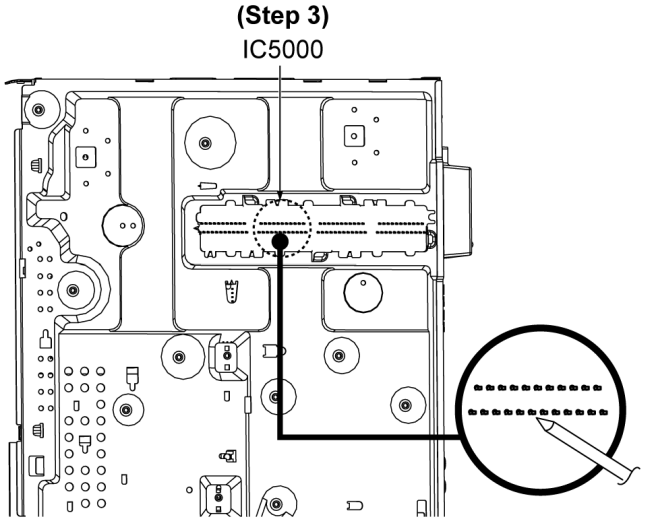
7.26. Replacement of Audio Digital Power Amp IC (IC5000)

- Follow the (Step 1) - (Step 3) of item 7.20.

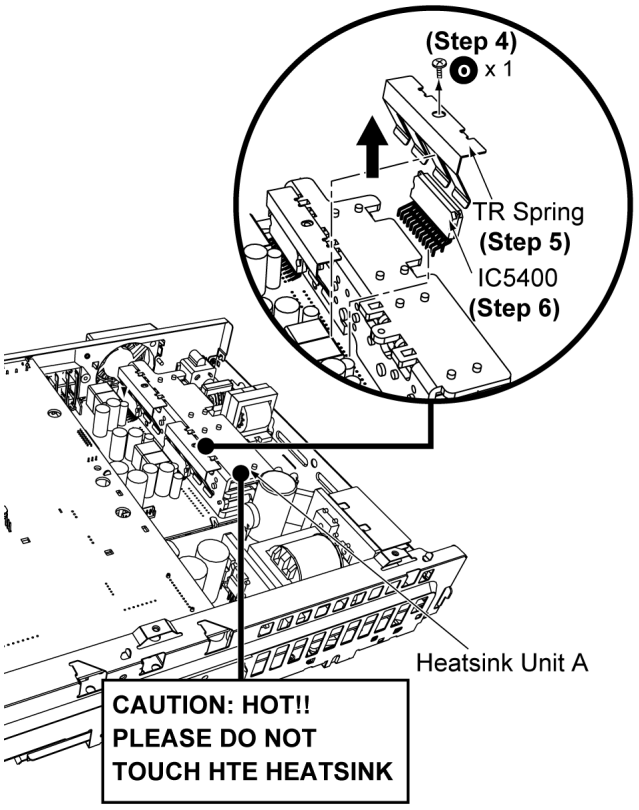


Step 1 : Cut the 5 connecting points as indicated in the diagram.

Step 2 : Remove the marked portion from the bottom chassis.



Step 3 : Desolder pins of the Audio Digital Power Amp IC (IC5000) on the reverse side of D-Amp P.C.B.

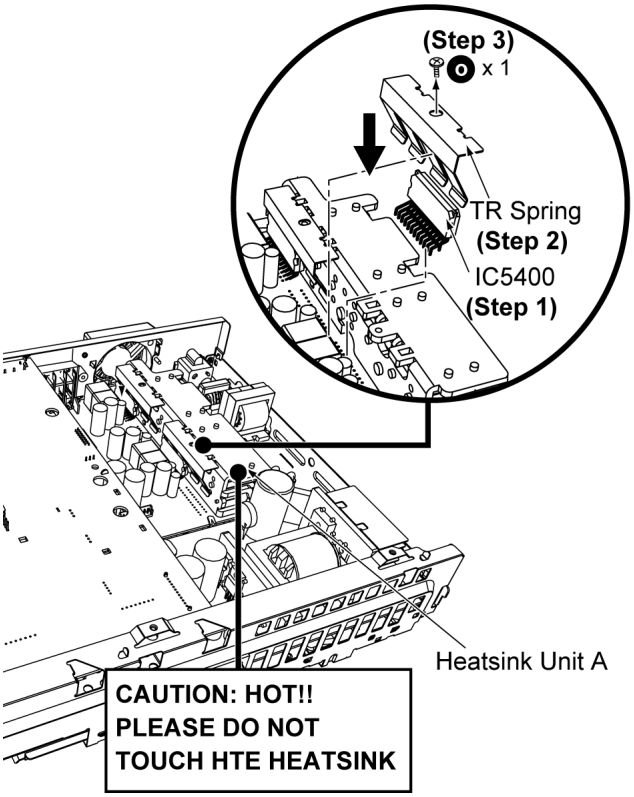


Step 4 : Remove 1 screw.

Step 5 : Remove the TR spring as arrow shown.

Step 6 : Remove the Audio Digital Power Amp IC (IC5000) from the heat sink unit A.

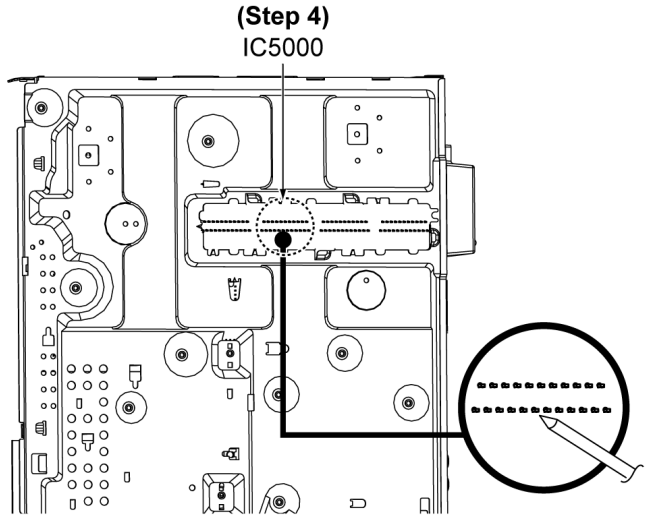
- **Assembly of the Audio Digital Power Amp IC (IC5000)**



Step 1 : Fix the Audio Digital Power Amp IC (IC5000) to the heat sink unit A.

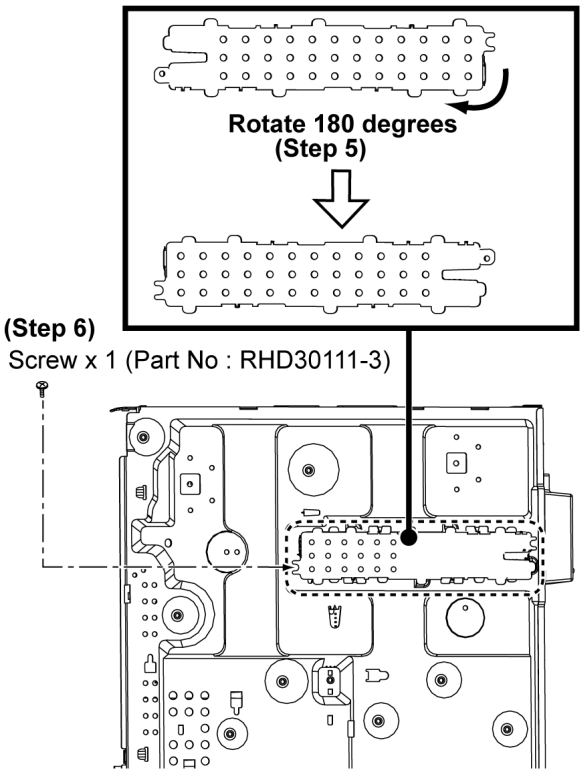
Step 2 : Fix the TR spring as arrow shown.

Step 3 : Screw 1 screw at digital amp IC (IC5000) to the heat sink unit A.



Step 4 : Solder pins of the digital amp IC (IC5000) on the reverse side of D-Amp P.C.B.

Caution : Ensure pins of the digital amp IC (IC5000) are properly seated and soldered on D-Amp P.C.B.

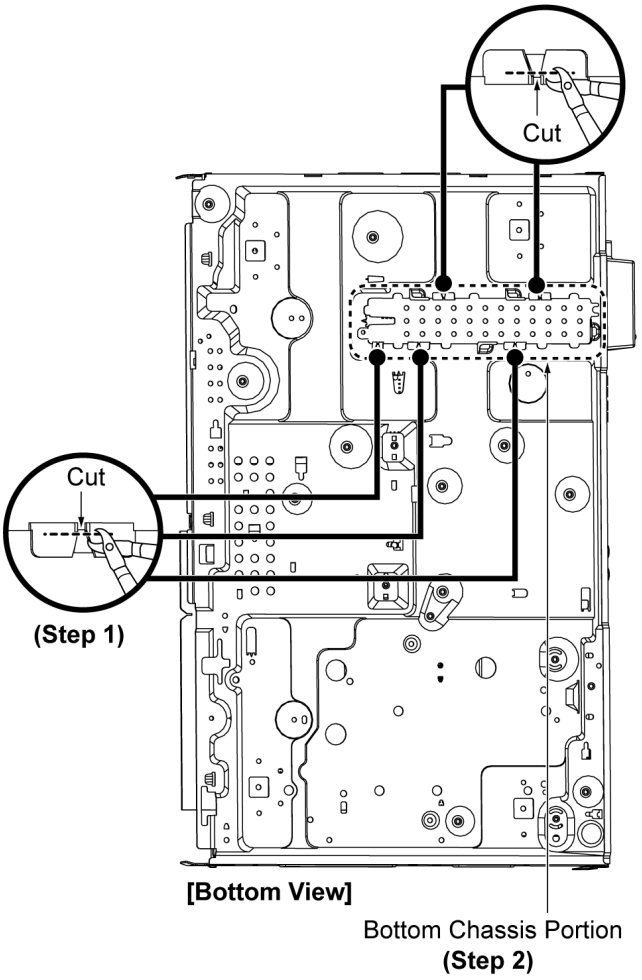


Step 5 : Position the bottom chassis portion into the curves according to the diagram shown. (Rotate the part at 180 degrees as compared to its original position.)

Step 6 : Screw 1 screw at the Chassis Portion.

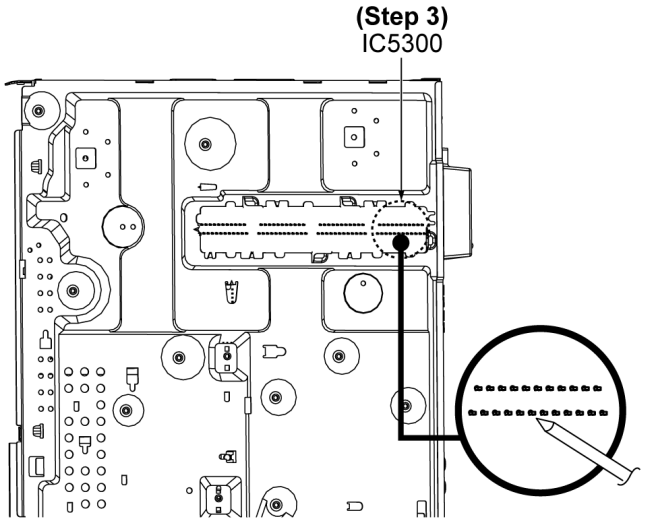
7.27. Replacement of Audio Digital Power Amp IC (IC5300)

- Follow the (Step 1) - (Step 3) of item 7.20.

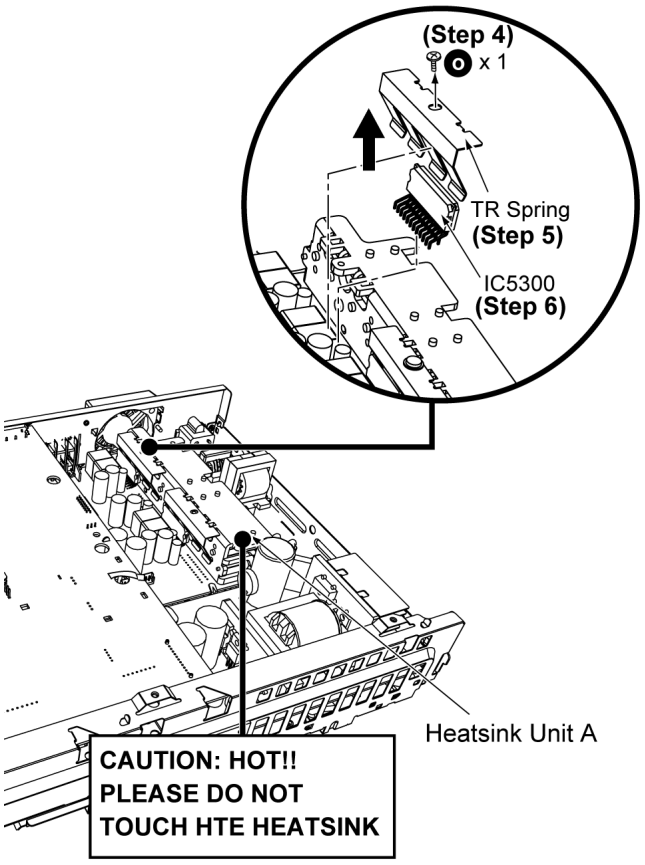


Step 1 : Cut the 5 connecting points as indicated in the diagram.

Step 2 : Remove the marked portion from the bottom chassis.



Step 3 : Desolder pins of the Audio Digital Power Amp IC (IC5300) on the reverse side of D-Amp P.C.B.

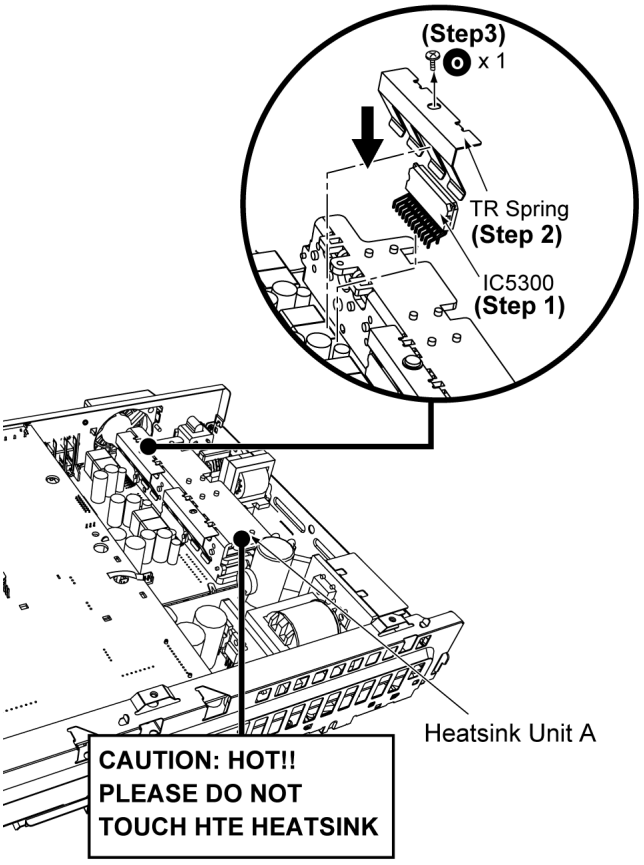


Step 4 : Remove 1 screw.

Step 5 : Remove the TR spring as arrow shown.

Step 6 : Remove the Audio Digital Power Amp IC (IC5300) from the heat sink unit A.

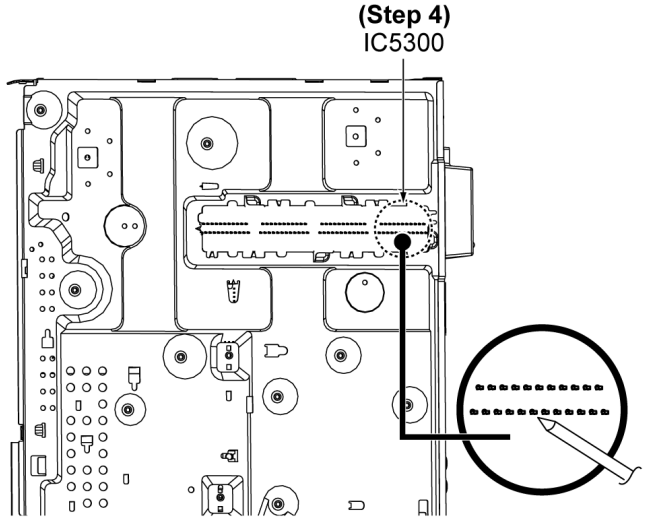
- **Assembly of the Audio Digital Power Amp IC (IC5300)**



Step 1 : Fix the Audio Digital Power Amp IC (IC5300) to the heat sink unit A.

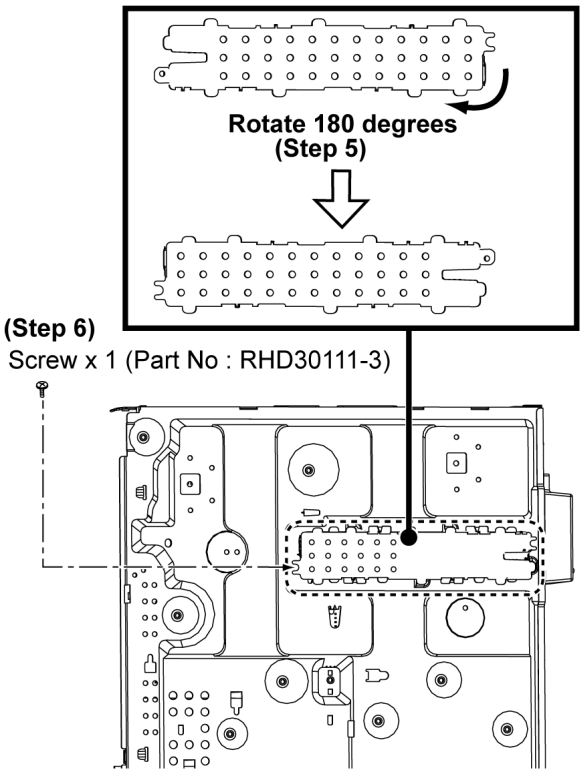
Step 2 : Fix the TR spring as arrow shown.

Step 3 : Screw 1 screw at digital amp IC (IC5300) to the heat sink unit A.



Step 4 : Solder pins of the digital amp IC (IC5300) on the reverse side of D-Amp P.C.B.

Caution : Ensure pins of the digital amp IC (IC5300) are properly seated and soldered on D-Amp P.C.B.

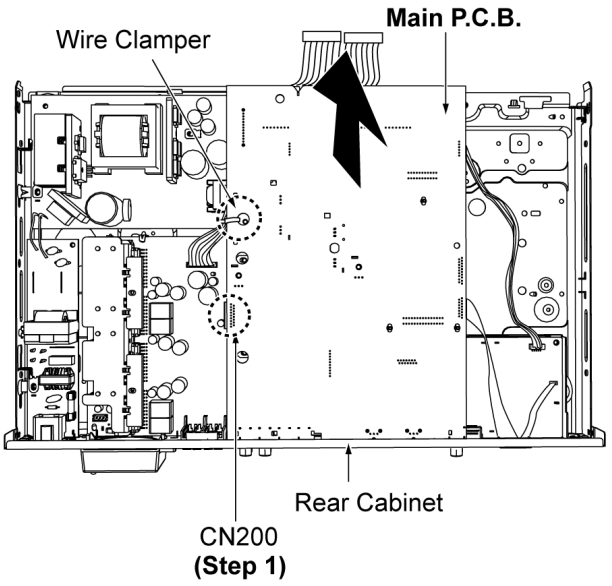


Step 5 : Position the bottom chassis portion into the curves according to the diagram shown. (Rotate the part at 180 degrees as compared to its original position.)

Step 6 : Screw 1 screw at the Chassis Portion.

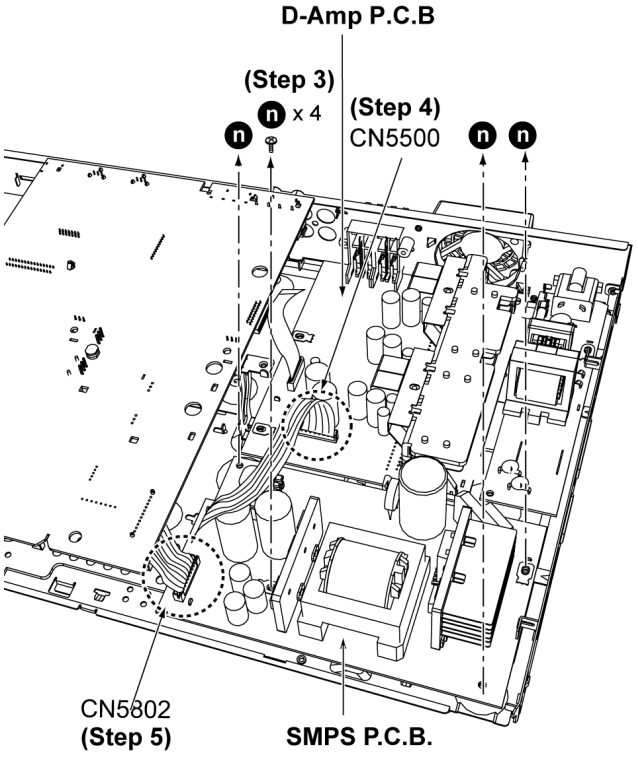
7.28. Disassembly of SMPS P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.



Step 1 : Detach FFC cable at the connector (CN200) on Main P.C.B..

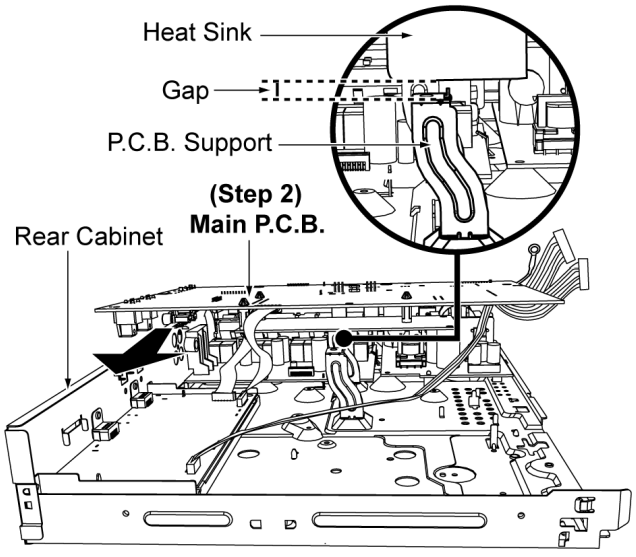
Caution : Move Main P.C.B. until creat a gap between the Rear Cabinet.



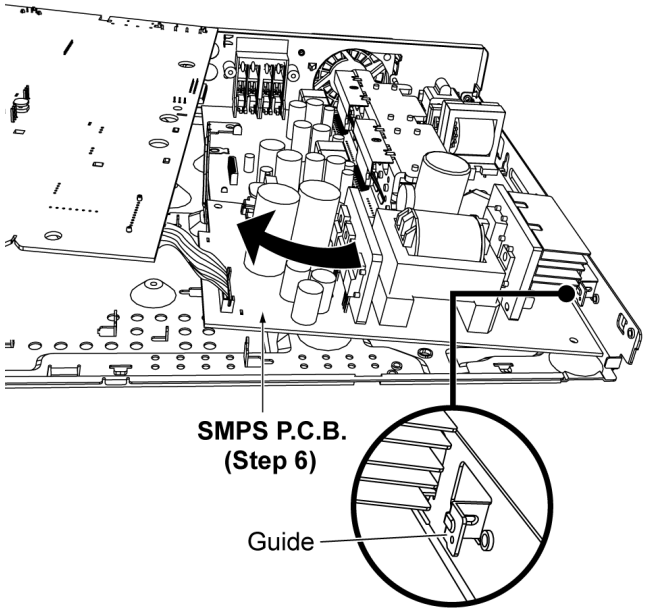
Step 3 : Remove 4 screws.

Step 4 : Detach FFC cable at the connector (CN5500) on D-Amp P.C.B..

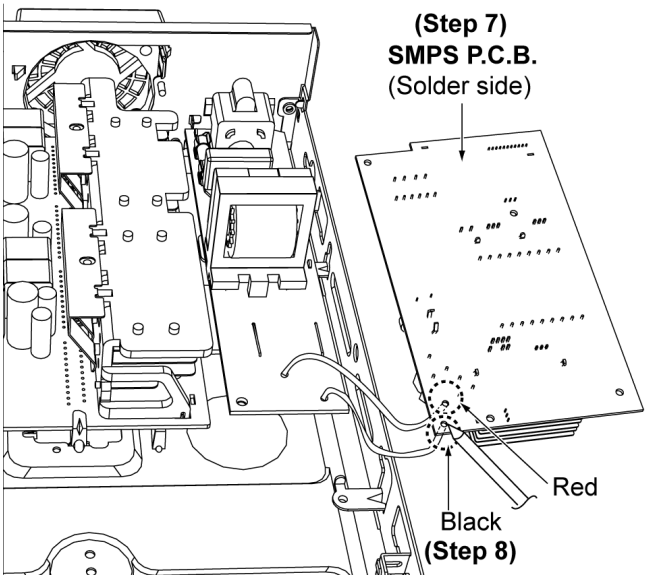
Step 5 : Detach FFC cable at the connector (CN5802) on SMPS P.C.B..



Step 2 : Lift up Main P.C.B. and shift over the heatsink.

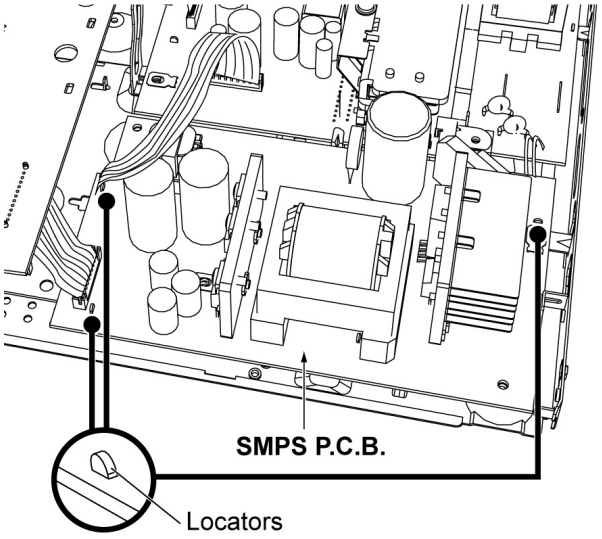


Step 6 : Remove SMPS P.C.B. as arrow shown. Be careful with the guide.



Step 7 : Flip over the SMPS P.C.B..

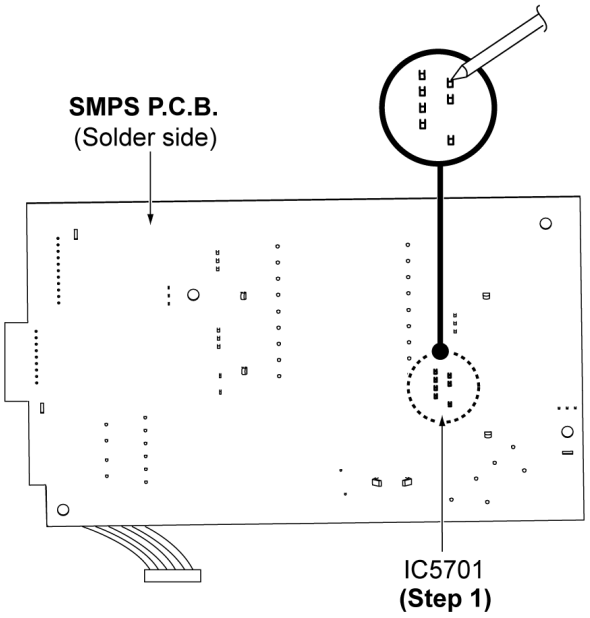
Step 8 : Desolder Black and Red wires.



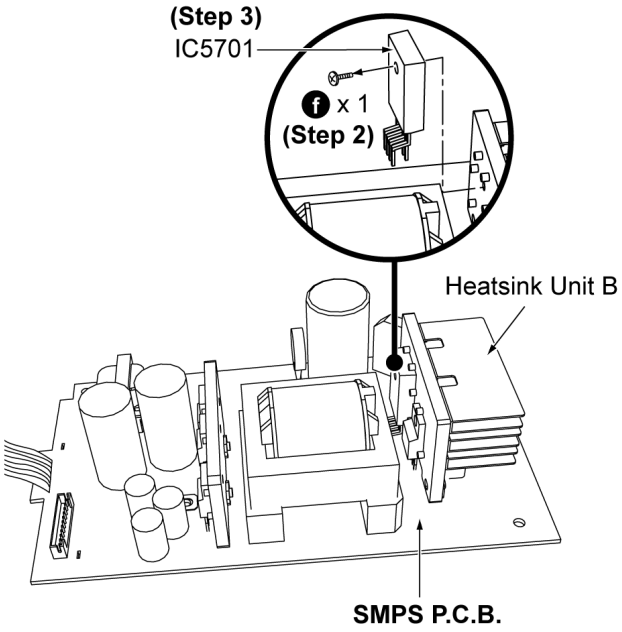
Caution : During reassembling procedures, ensure the P.C.B.is seated properly at the locators.

7.29. Replacement of Switching Regulator IC (IC5701)

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.
- Follow the (Step 1) - (Step 6) of item 7.28.



Step 1 : Desolder pins of Switching Regulator IC (IC5701) on the reverse side of SMPS P.C.B..

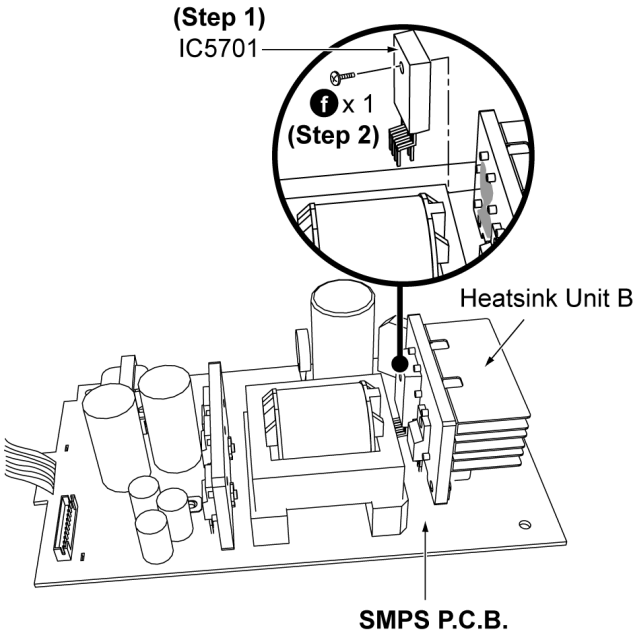


Step 2 : Remove 1 screw from the switch regulator IC (IC5701).

Step 3 : Remove the switch regulator IC (IC5701) from the Heatsink Unit B.

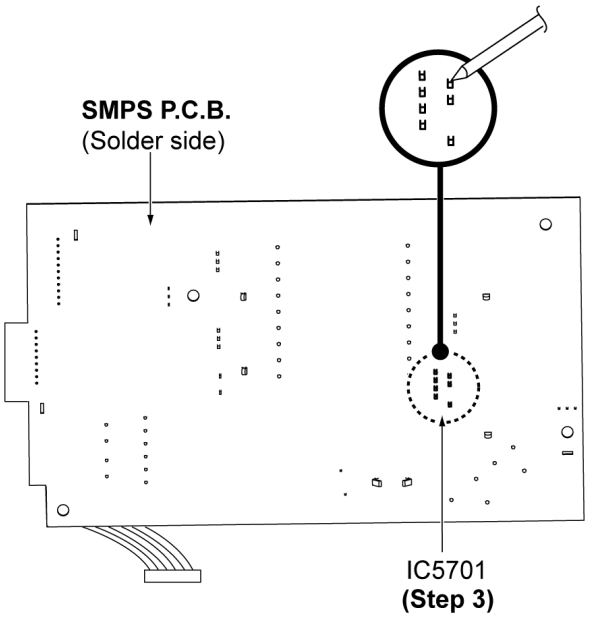
Caution : Handle the heatsink unit B with caution due to its high temprature after prolonged use. Touching it may lead to injuries.

• **Assembly of the Switching Regulator IC (IC5701)**



Step 1 : Fix the switching regulator IC (IC5701) to the Heatsink Unit B.

Step 2 : Screw 1 screw at switching regulator IC (IC5701) to the Heatsink Unit B.

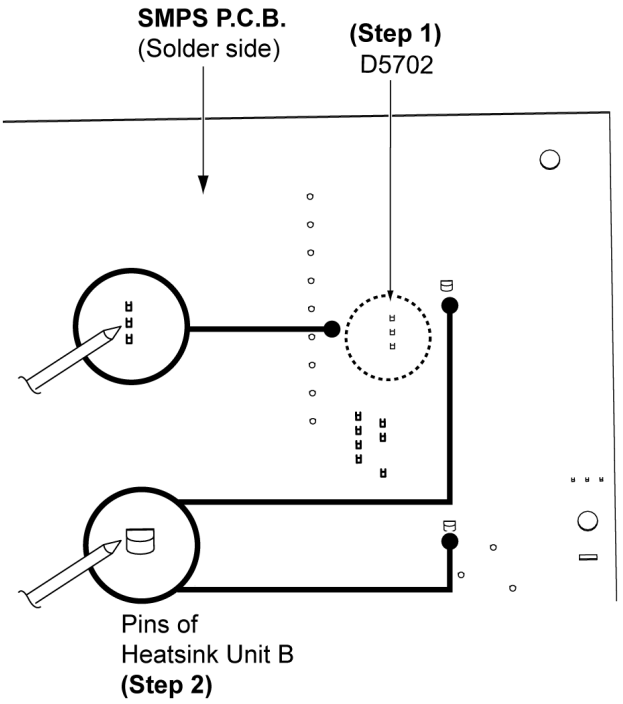


Step 3 : Solder pins of the switching regulator IC (IC5701) on the reverse side of SMPS P.C.B..

Caution : Ensure pins of the switching regulator IC (IC5701) are properly seated and soldered on SMPS P.C.B.

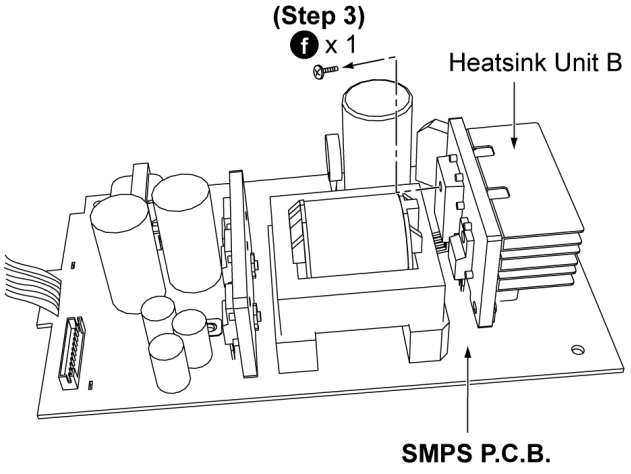
7.30. Replacement of Diode (D5702)

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.
- Follow the (Step 1) - (Step 6) of item 7.28.

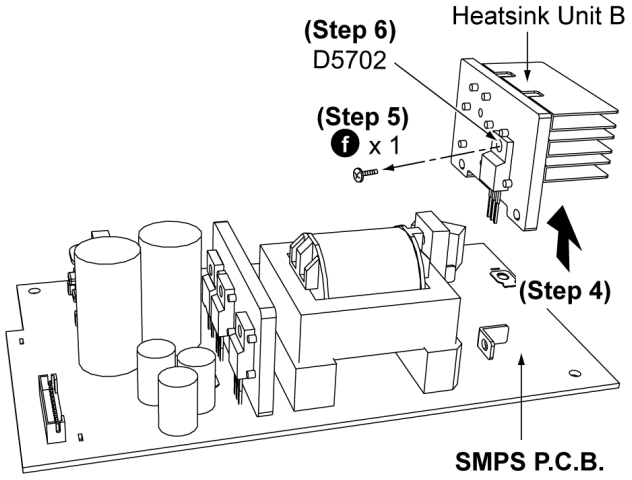


Step 1 : Desolder pins of the switch regulator diode (D5702) on the reverse side of SMPS P.C.B..

Step 2 : Desolder pins of the Heatsink Unit B.



Step 3 : Remove 1 screw from the Heatsink Unit B.



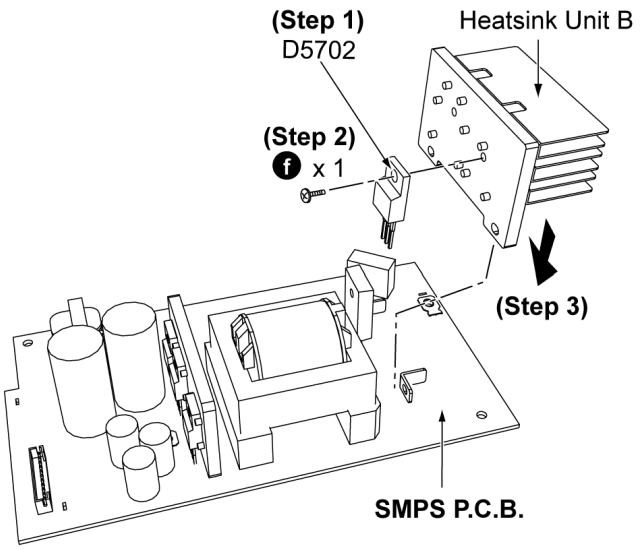
Step 4 : Release the Heatsink Unit B as arrow shown.

Step 5 : Remove 1 screw from Diode (D5702).

Step 6 : Remove the Diode (D5702) from the Heatsink Unit B.

Caution : Handle the Heatsink Unit B with caution due to its high temprature after prolonged use. Touching it may lead to injuries.

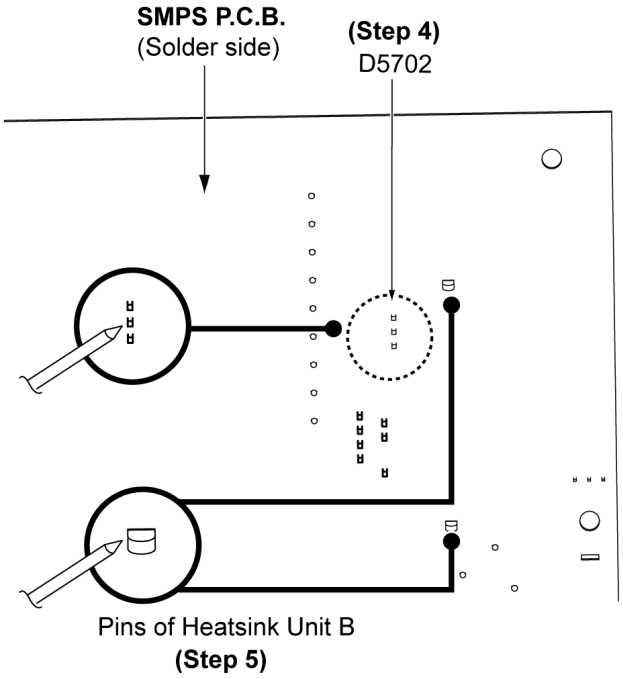
- **Assembly of the Diode (D5702)**



Step 1 : Fix the Diode (D5702) from the Heatsink Unit B.

Step 2 : Screw 1 screw at Diode (D5702).

Step 3 : Fix the Heatsink Unit B as arrow shown.



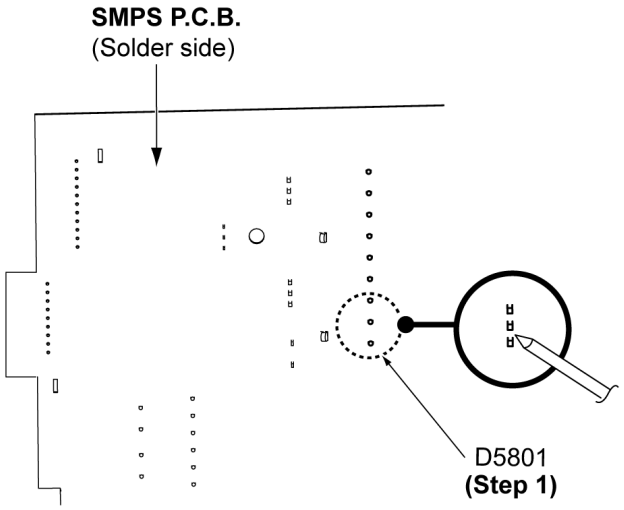
Step 4 : Solder pins of the Diode (D5702) on the reverse side of SMPS P.C.B..

Step 5 : Solder pins of the Heatsink Unit B.

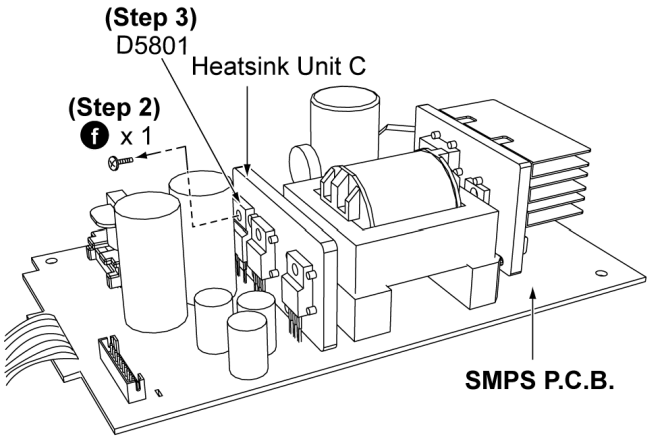
Caution : Ensure pins of the Diode (D5702) are properly seated and soldered on SMPS P.C.B.

7.31. Replacement of Diode (D5801)

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.
- Follow the (Step 1) - (Step 6) of item 7.28.



Step 1 : Desolder pins of the Diode (D5801) on the reverse side of SMPS P.C.B..

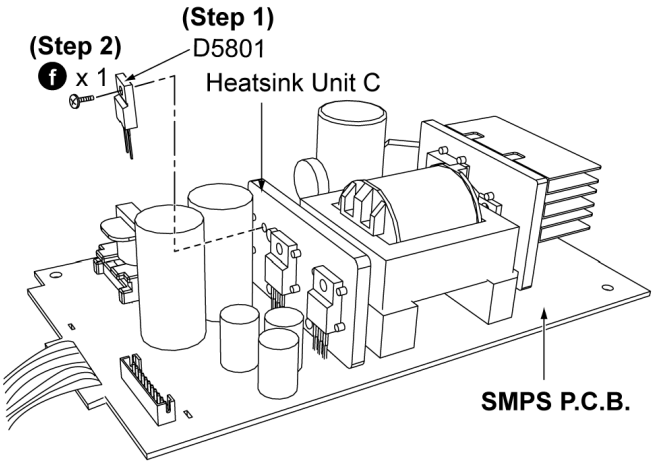


Step 2 : Remove 1 screw from the Diode (D5801).

Step 3 : Remove the Diode (D5801) from the Heatsink Unit C.

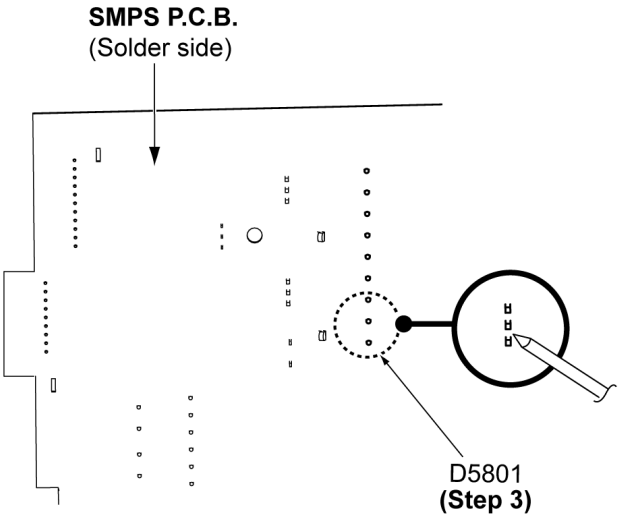
Caution : Handle the Heatsink Unit C with caution due to its high temprature after prolonged use. Touching it may lead to injuries.

- **Assembly of the Diode (D5801)**



Step 1 : Fix the Diode (D5801) from the Heatsink Unit C.

Step 2 : Screw 1 screw at the Diode (D5801).

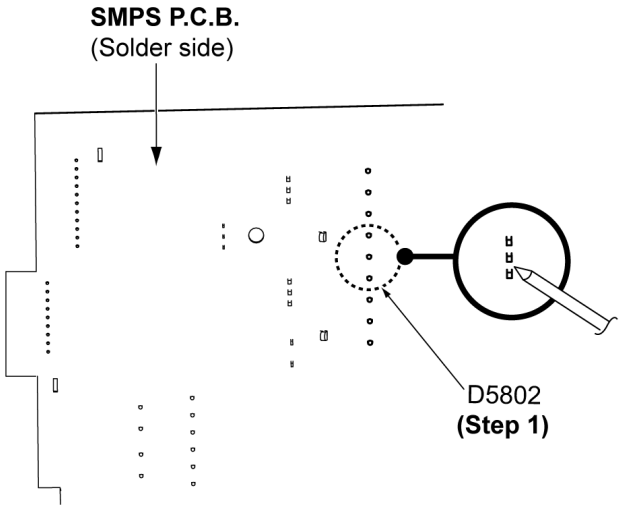


Step 3 : Solder pins of the Diode (D5801) on the reverse side of SMPS P.C.B..

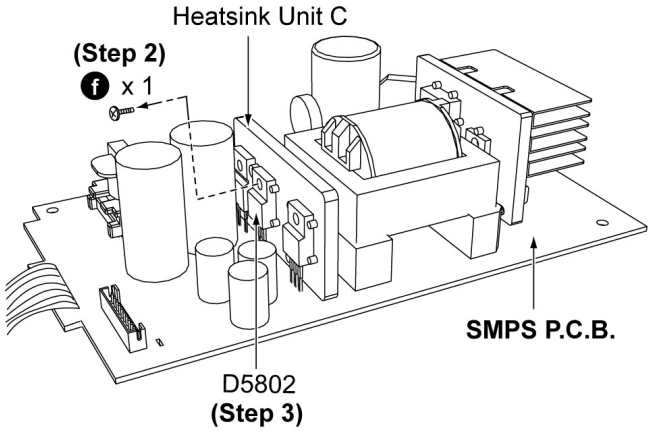
Caution : Ensure pins of the Diode (D5801)are properly seated and soldered on SMPS P.C.B.

7.32. Replacement of Diode (D5802)

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.
- Follow the (Step 1) - (Step 6) of item 7.28.



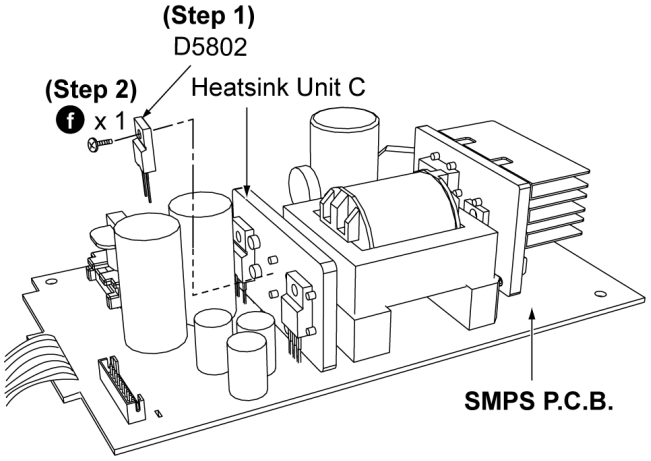
Step 1 : Desolder pins of the Diode (D5802) on the reverse side of SMPS P.C.B..



Step 2 : Remove 1 screw from the Diode (D5802).

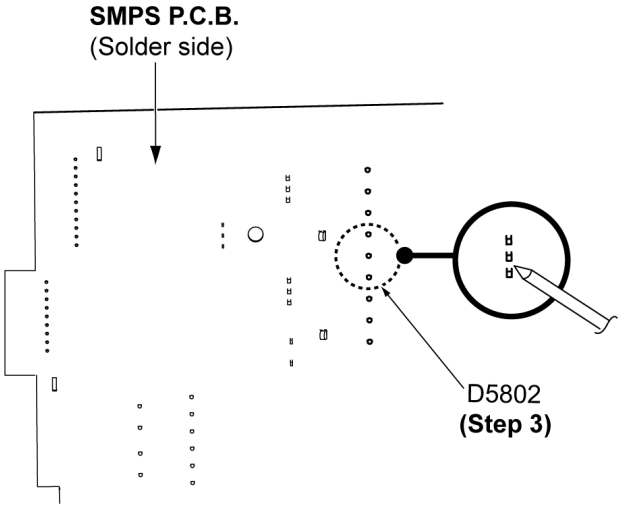
Step 3 : Remove the Diode (D5802) from the Heatsink Unit C.

- **Assembly of the Diode (D5802)**



Step 1 : Fix the Diode (D5802) from the Heatsink Unit C.

Step 2 : Screw 1 screw at the Diode (D5802).

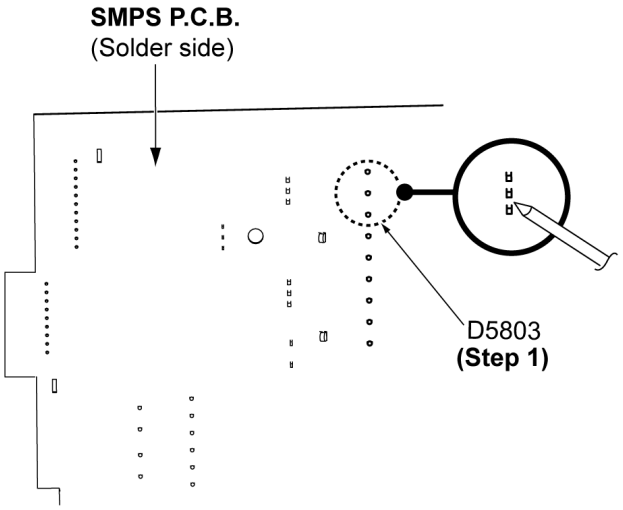


Step 3 : Solder pins of the Diode (D5802) on the reverse side of SMPS P.C.B.

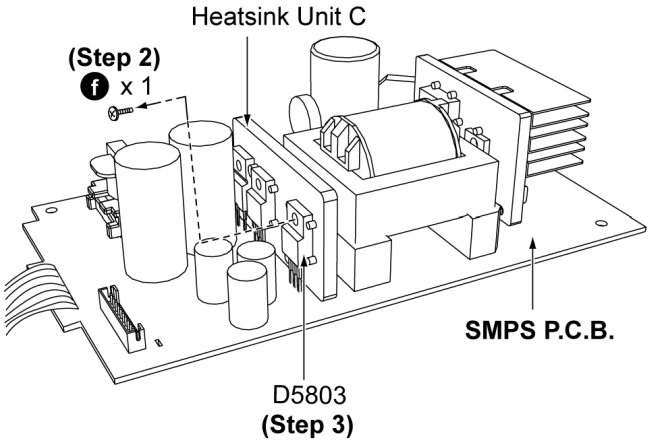
Caution : Ensure pins of the Diode (D5802) are properly seated and soldered on SMPS P.C.B.

7.33. Replacement of Diode (D5803)

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.
- Follow the (Step 1) - (Step 6) of item 7.28.



Step 1 : Desolder pins of the Diode (D5803) on the reverse side of SMPS P.C.B..

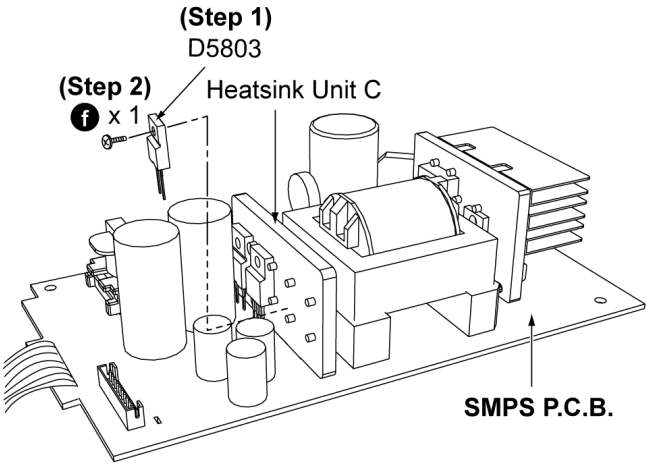


Step 2 : Remove 1 screw from the Diode (D5803).

Step 3 : Remove the Diode (D5803) from the Heatsink Unit C.

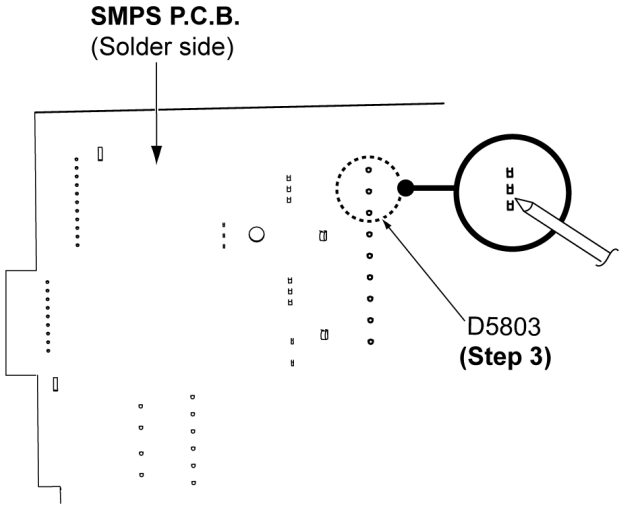
Caution : Handle the Heatsink Unit C with caution due to its high temprature after prolonged use. Touching it may lead to injuries.

- **Assembly of the Diode (D5803)**



Step 1 : Fix the Diode (D5803) from the Heatsink Unit C.

Step 2 : Screw 1 screw at the Diode (D5803).

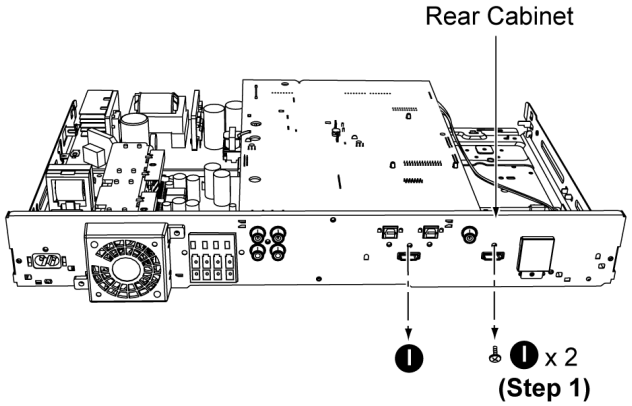


Step 3 : Solder pins of the Diode (D5803) on the reverse side of SMPS P.C.B..

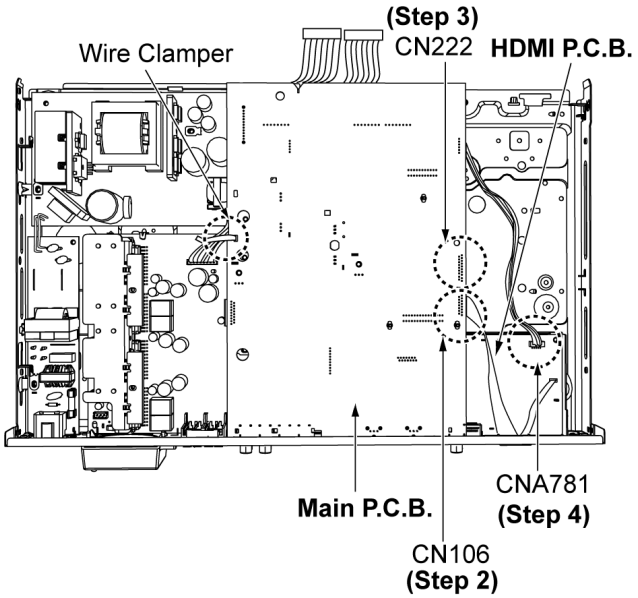
Caution : Ensure pins of the Diode (D5803)are properly seated and soldered on SMPS P.C.B.

7.34. Disassembly of HDMI P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.



Step 1 : Remove 2 screws.

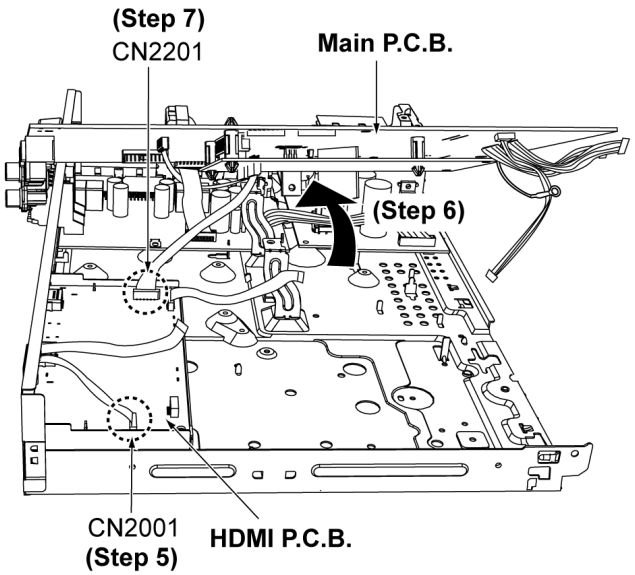


Step 2 : Detach FFC cable at the connector (CN106) on Main P.C.B..

Step 3 : Detach FFC cable at the connector (CN222) on Main P.C.B..

Step 4 : Detach FFC cable at the connector (CNA781) on HDMI P.C.B..

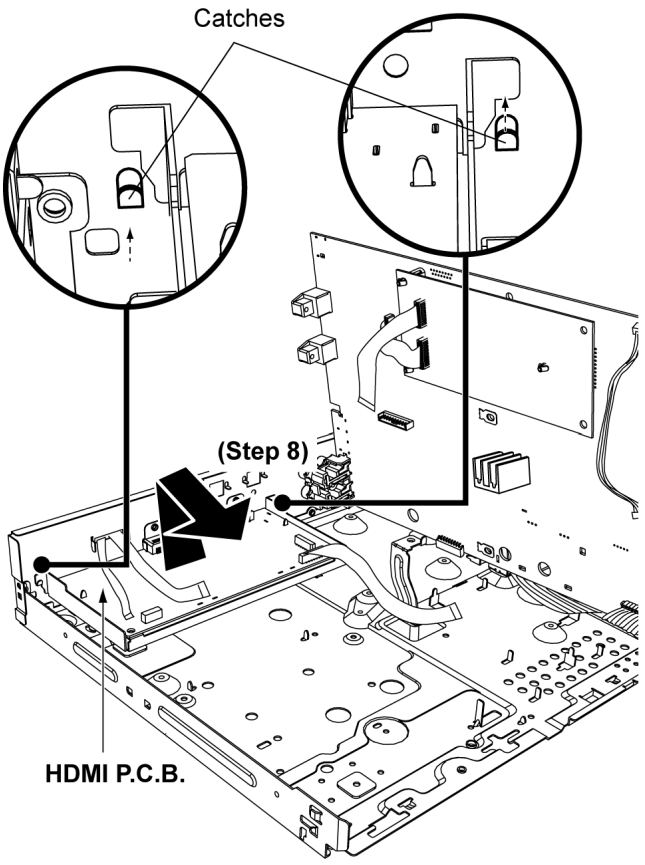
Caution : Attach wire to Main P.C.B. with Wire Clamper during assembly. (Replace a new Wire Clamper after service)



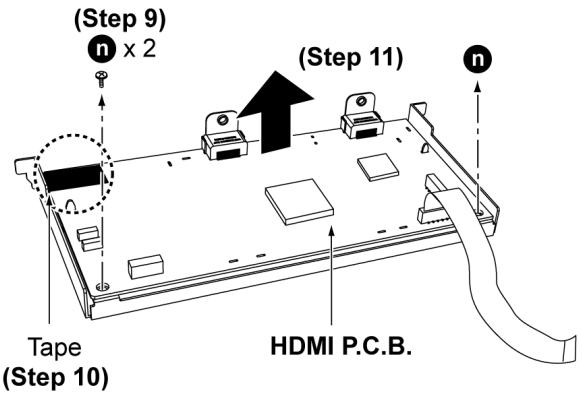
Step 5 : Detach FFC cable at the connector (CN2001) on HDMI P.C.B..

Step 6 : Lift up Main P.C.B.as arrow shown.

Step 7 : Detach FFC cable at the connector (CN2201) on HDMI P.C.B..



Step 8 : Lift up and remove the HDMI P.C.B. with the chassis from the rear cabinet as arrow shown.

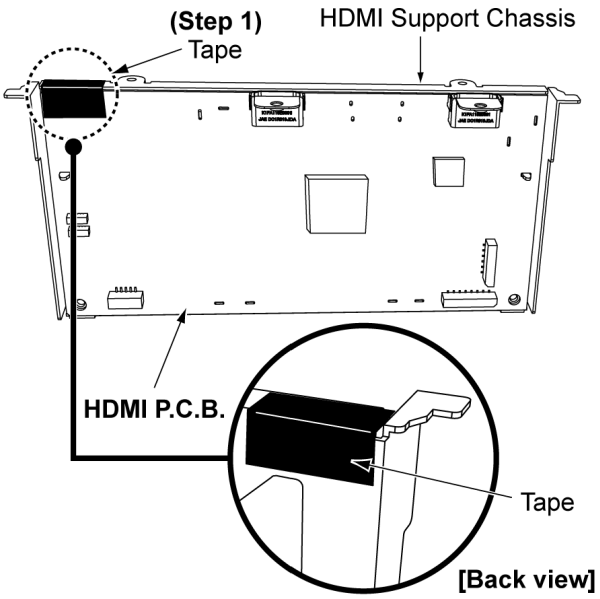


Step 9 : Remove 2 screws.

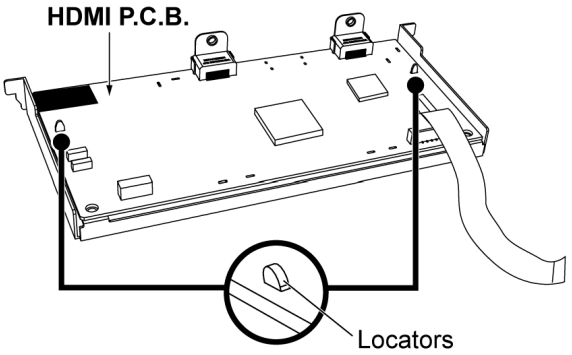
Step 10 : Remove the tape.

Step 11 : Remove the HDMI P.C.B. as arrow shown.

- **Assembly of HDMI P.C.B.**



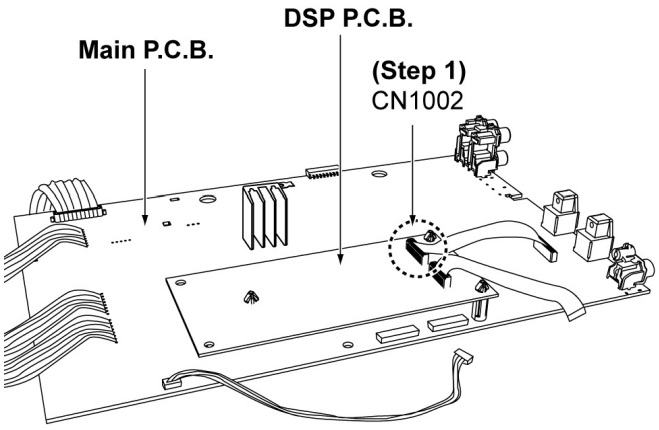
Step 1 : Place back a tape after disassembly as a diagram shown.



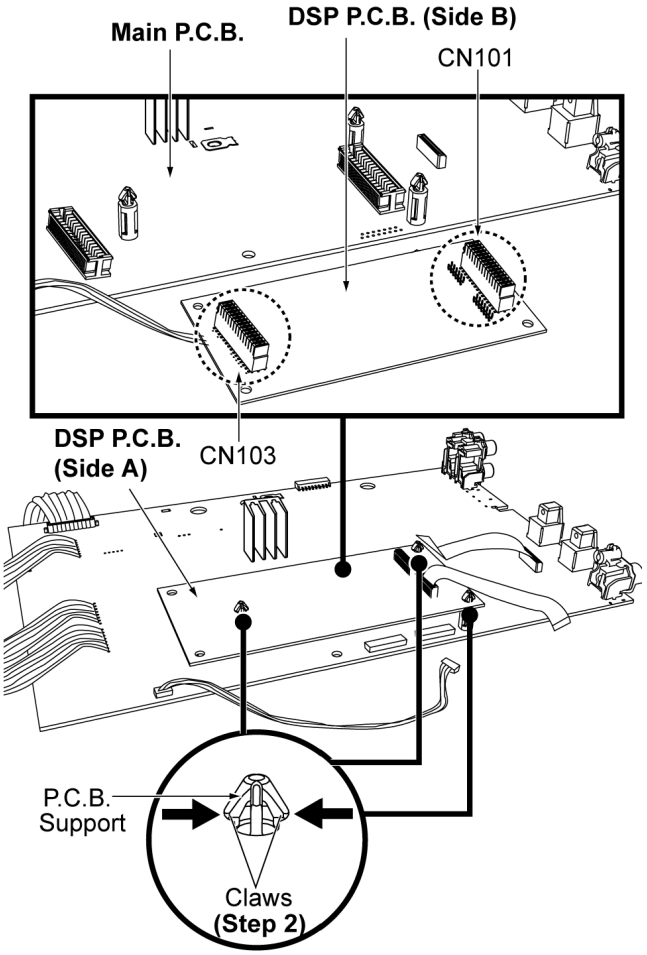
Caution : During reassembling procedures, ensure the HDMI P.C.B.is seated properly at the locators.

7.35. Disassembly of DSP P.C.B.

- Follow the (Step 1) - (Step 3) of item 7.20.
- Follow the (Step 1) - (Step 3) of item 7.22.
- Follow the (Step 1) - (Step 2) of item 7.24.



Step 1 : Detach FFC cable at the connector (CN1002) on DSP P.C.B..



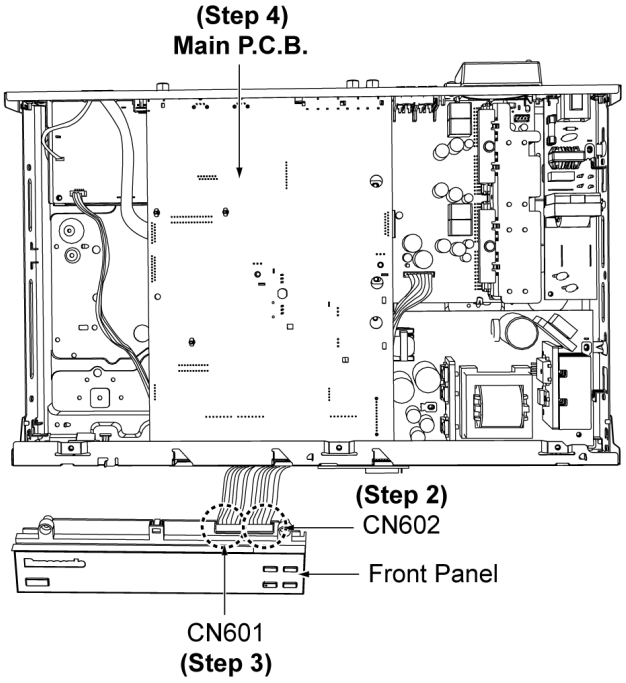
Step 2 : Release the claws of the P.C.B. Support together with the connectors (CN101 and CN103) on a reverse side of DSP P.C.B. (Side B) to detach the DSP P.C.B..

8 Service Position

Note : For description of the disassembly procedures, see the section 7

8.1. Checking & Repairing Main P.C.B

Step 1 : Remove the top cabinet



Step 2 : Connect 9P cable at the connectors (CN602) on Panel P.C.B..

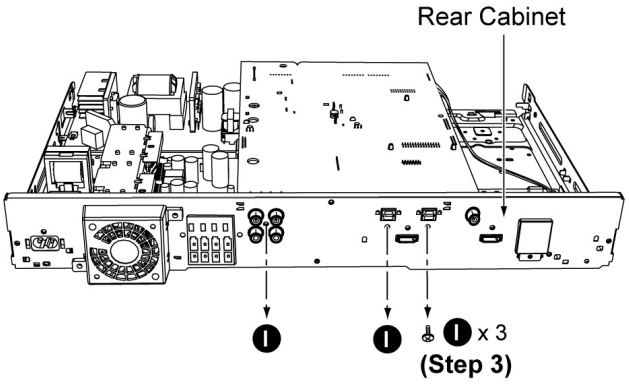
Step 3 : Connect 8P cable at the connectors (CN601) on Panel P.C.B..

Step 4 : Main P.C.B. can be checked at its original position.

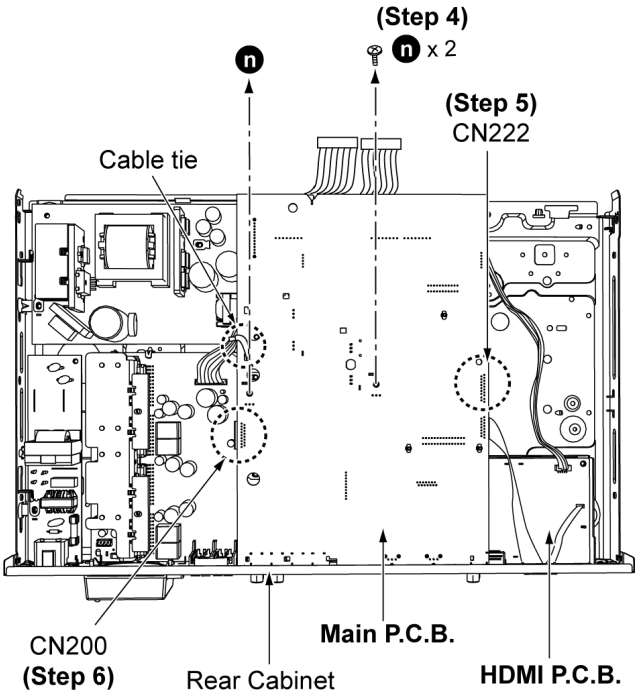
8.2. Checking & Repairing D-Amp P.C.B

Step 1 : Remove the Top Cabinet

Step 2 : Remove the Front Cabinet



Step 3 : Remove 3 screws.

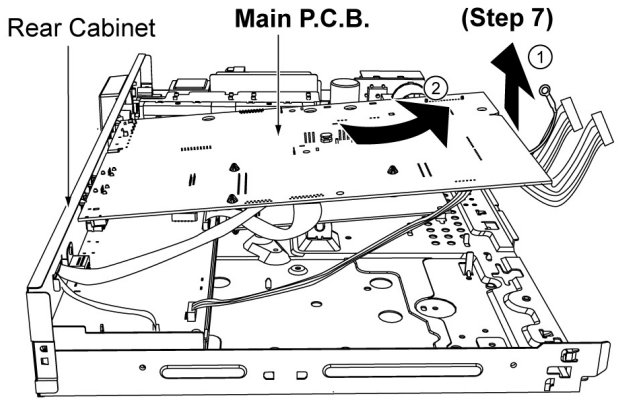


Step 4 : Remove 2 screws.

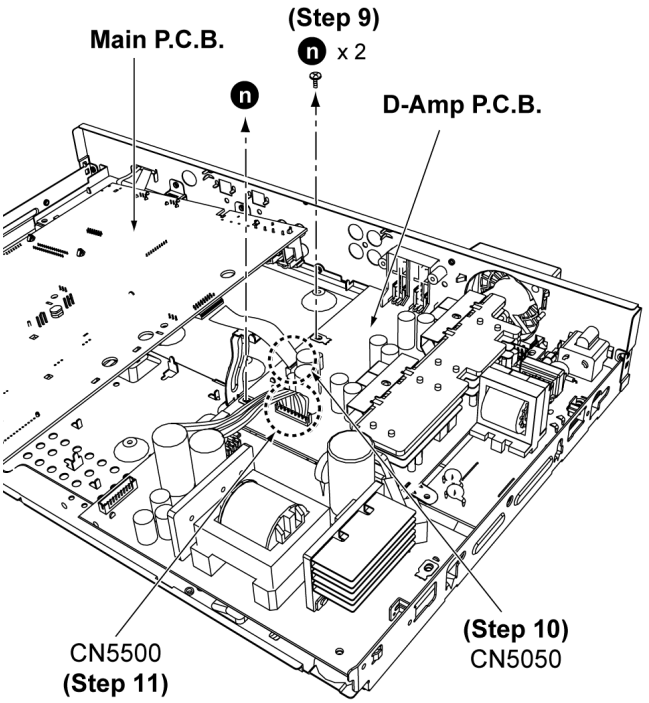
Step 5 : Detach 15P FFC cable at the connector (CN222) on Main P.C.B..

Step 6 : Detach 10P FFC cable at the connector (CN200) on Main P.C.B..

Caution : Attach wire to main P.C.B. with cable tie during assembly. (Replace a new cable tie after service)



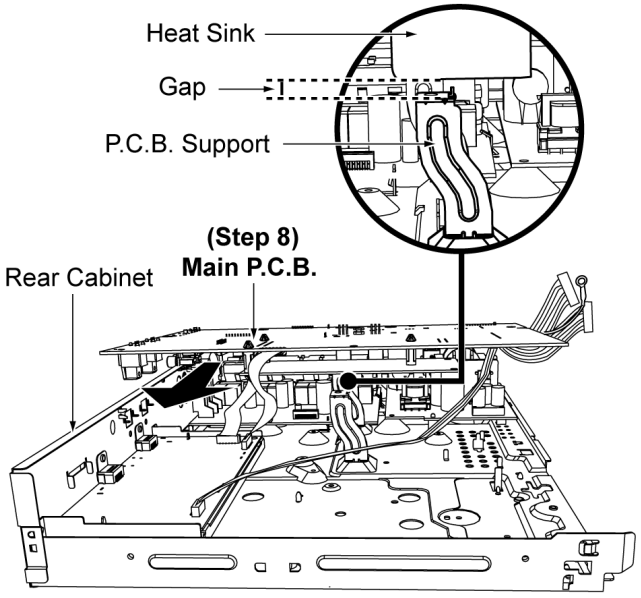
Step 7 : Slightly lift up Main P.C.B. and shift forward Main P.C.B. as arrow shown in sequences (from 1-2).



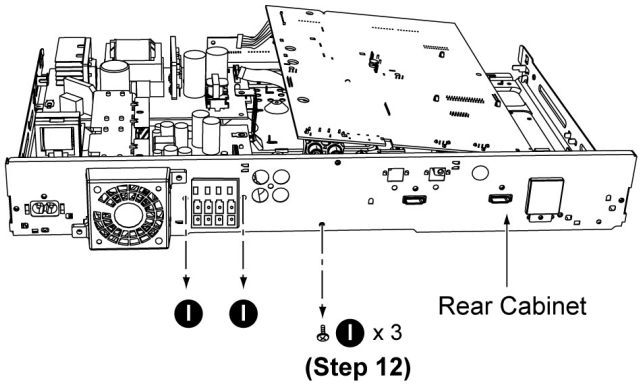
Step 9 : Remove 2 screws.

Step 10 : Detach 17P FFC cable at the connector (CN5050) on D-Amp P.C.B..

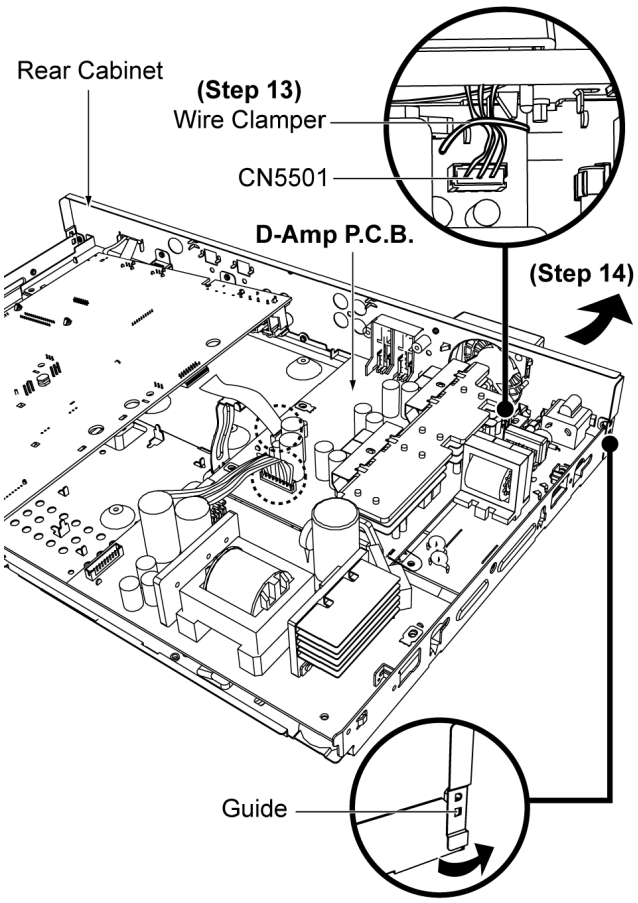
Step 11 : Detach 8P FFC cable at the connector (CN5500) on D-Amp P.C.B..



Step 8 : Ensure there is a gap between Heat sink on the Main P.C.B. and P.C.B. Support when moving of the Main P.C.B..

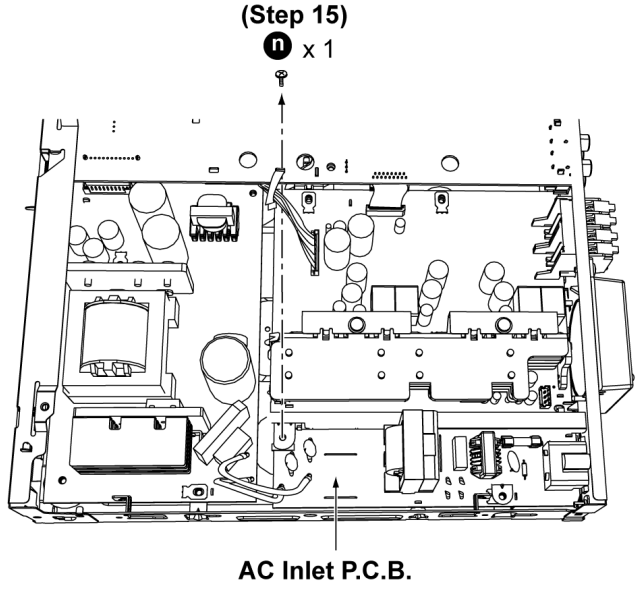


Step 12 : Remove 3 screws.

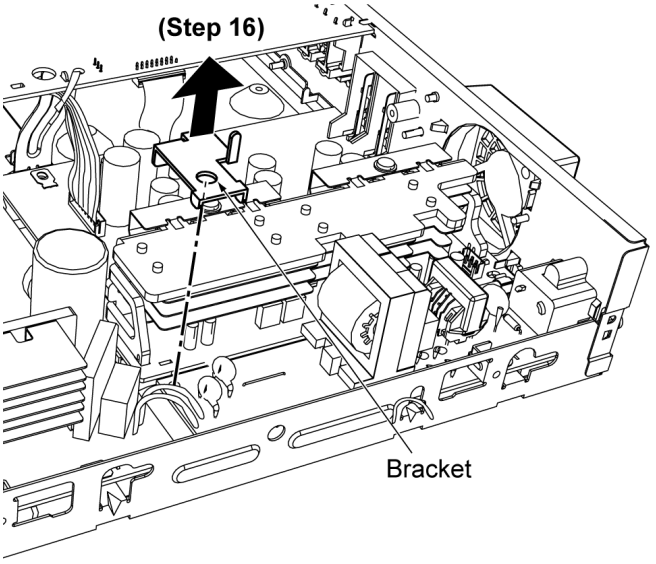


Step 13 : Remove the wire clamper to detach the fan unit connector (CN5501) on D-Amp P.C.B..

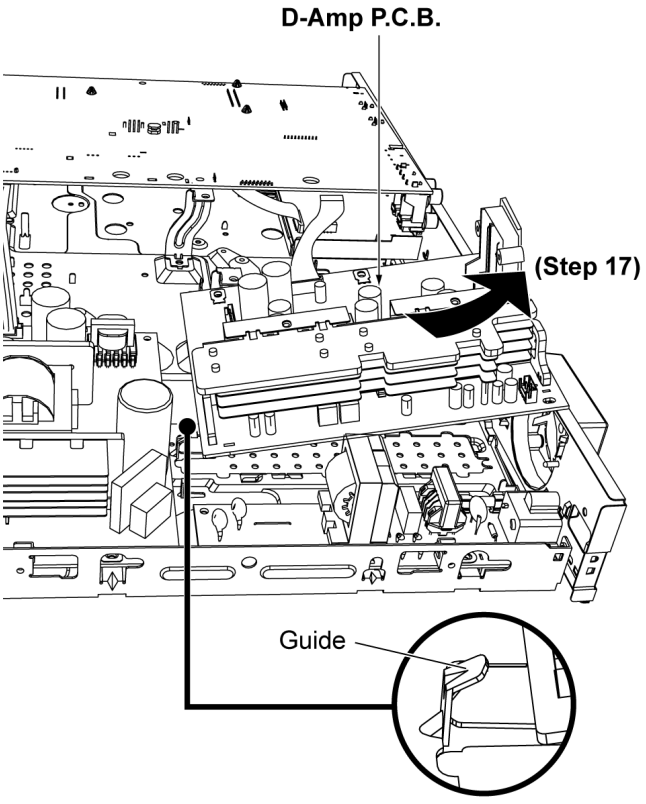
Step 14 : Open one side of the rear cabinet slightly as arrow shown. Be careful guide when removing the rear panel.



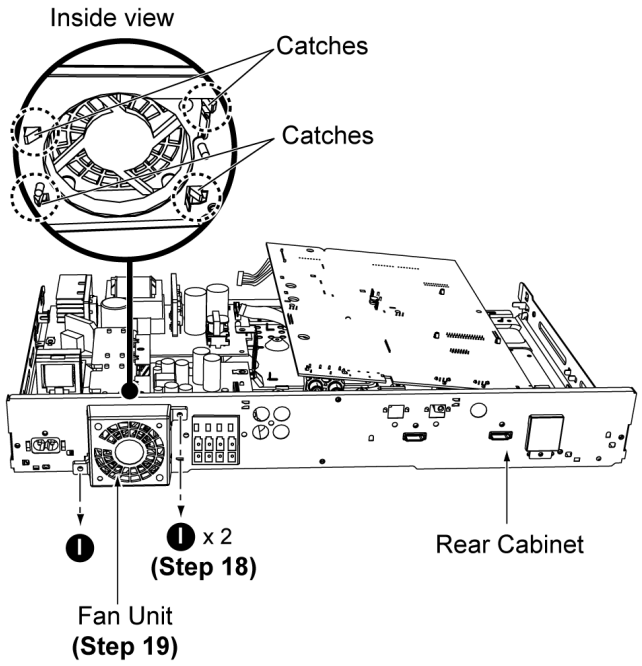
Step 15 : Remove 1 screw.



Step 16 : Remove Bracket as arrow shown.

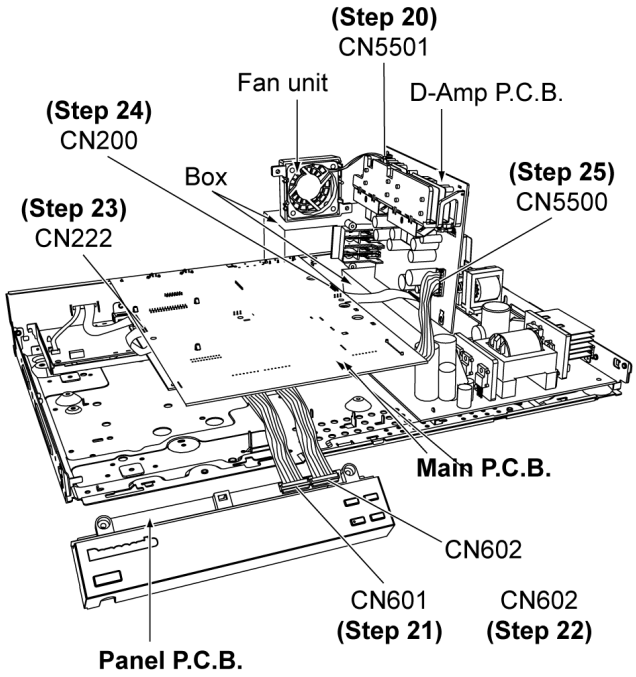


Step 17 : Remove D-Amp P.C.B. as arrow shown. Be careful with the guide.



Step 18 : Remove 2 screws.

Step 19 : Release the catches and remove the fan unit.



Step 20 : Connect 3P cable at the connector (CN5501) on D-Amp P.C.B..

Step 21 : Connect 8P cable at the connector (CN601) on Panel P.C.B..

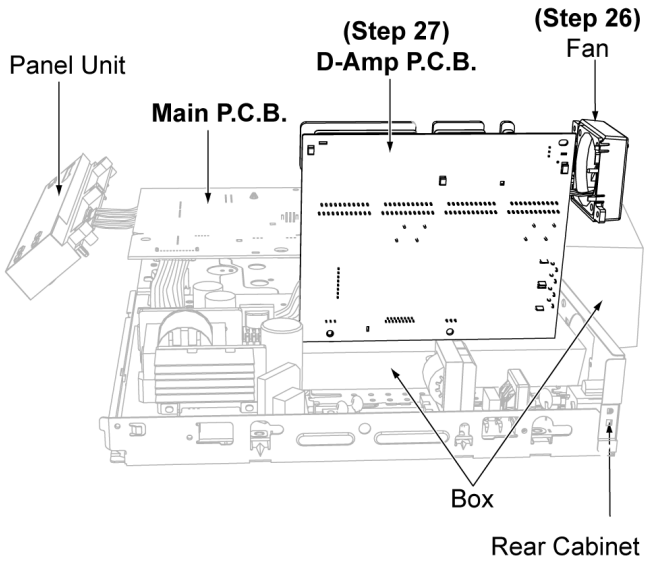
Step 22 : Connect 9P cable at the connector (CN602) on Panel P.C.B..

Step 23 : Connect 15P FFC cable at the connector (CN222) on Main P.C.B..

Step 24 : Connect 10P FFC cable at the connector (CN200) on Main P.C.B..

Step 25 : Connect 8P cable at the connector (CN5500) on D-Amp P.C.B..

Caution : Ensure the cable is attached properly.

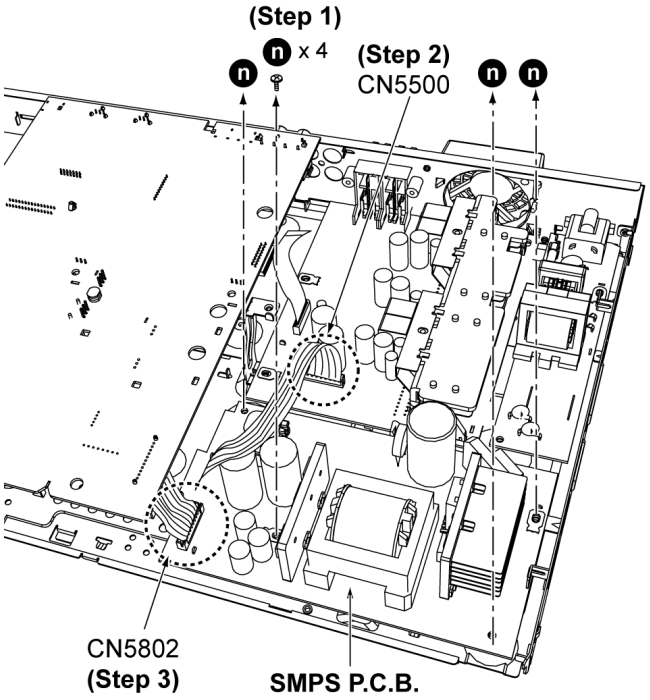


Step 26 : Position Fan unit and D-Amp P.C.B. with the object support according to the diagram shown.

Step 27 : Check & repair D-Amp P.C.B. according to the diagram shown.

8.3. Checking & Repairing SMPS P.C.B

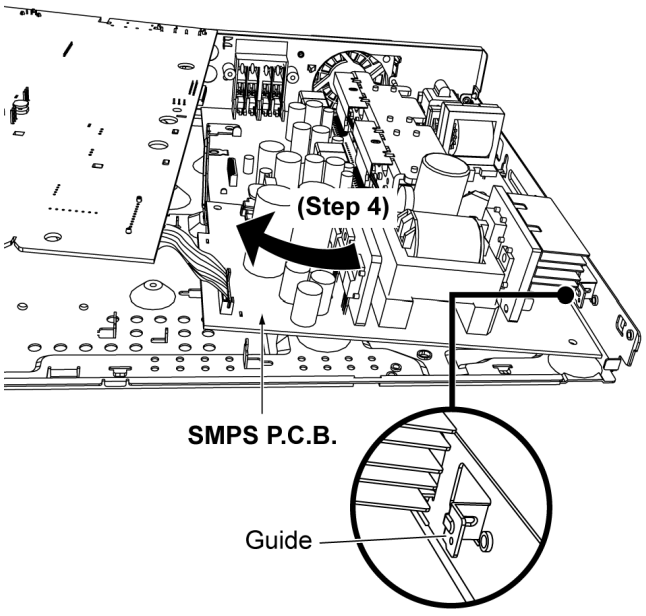
- Follow the (Step 1) - (Step 8) of item 8.2.



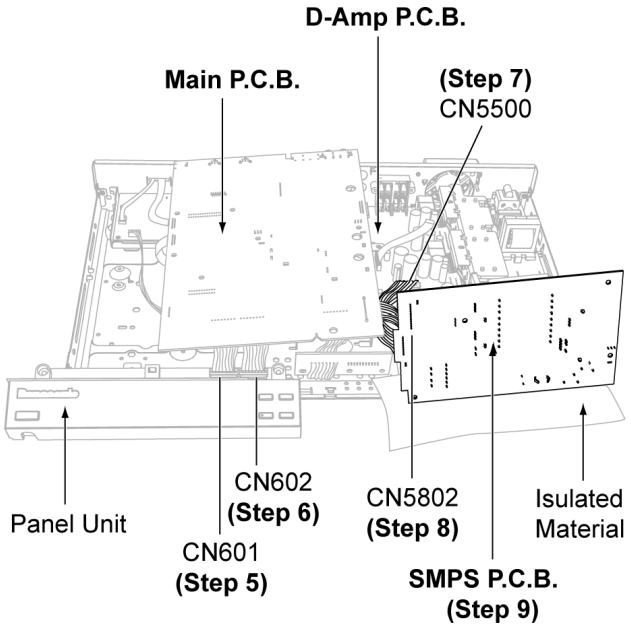
Step 1 : Remove 4 screws.

Step 2 : Detach 8P FFC cable at the connector (CN5500) on D-Amp P.C.B.

Step 3 : Detach 11P FFC cable at the connector (CN5802) on SMPS P.C.B.



Step 4 : Remove SMPS P.C.B. as arrow shown. Be careful with the guide.



Step 5 : Connect 8P cable at the connector (CN601) on Panel P.C.B..

Step 6 : Connect 9P cable at the connector (CN602) on Panel P.C.B..

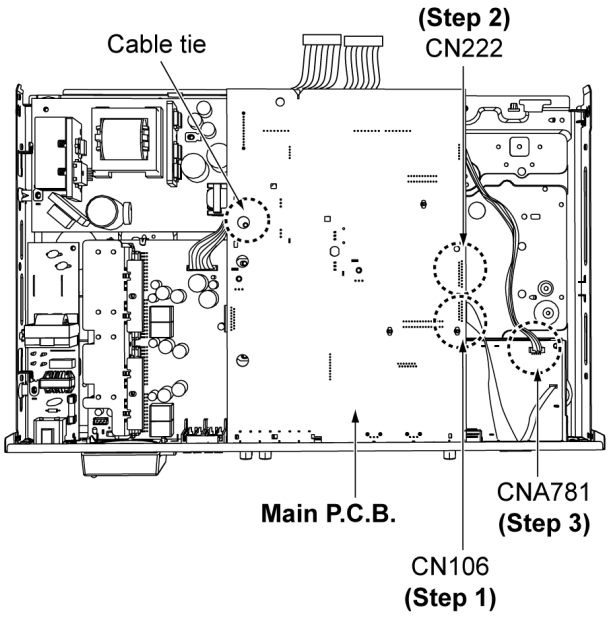
Step 7 : Connect 8P cable at the connector (CN5500) on D-Amp P.C.B..

Step 8 : Connect 11P cable at the connector (CN5802) on SMPS P.C.B..

Step 9 : Check & repair SMPS P.C.B. according to the diagram shown.

8.4. Checking & Repairing HDMI P.C.B

- Follow the (Step 1) - (Step 4) of item 8.2.

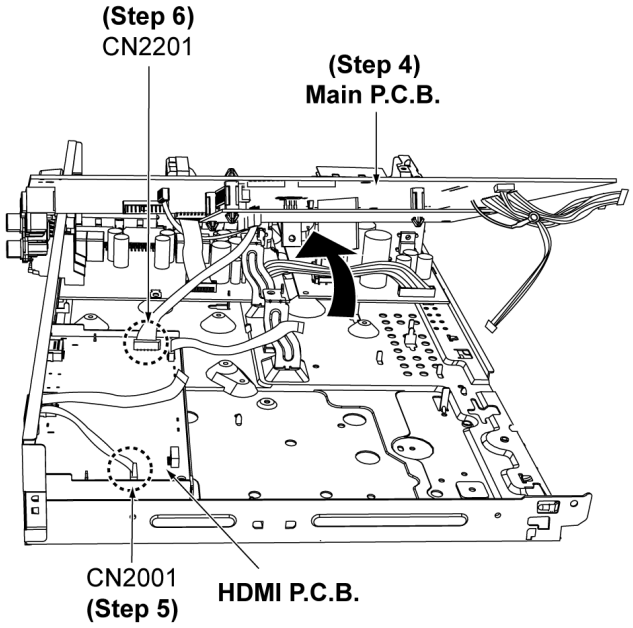


Step 1 : Detach 10P FFC cable at the connector (CN106) on Main P.C.B..

Step 2 : Detach 15P FFC cable at the connector (CN222) on Main P.C.B..

Step 3 : Detach 5P cable at the connector (CNA781) on HDMI P.C.B..

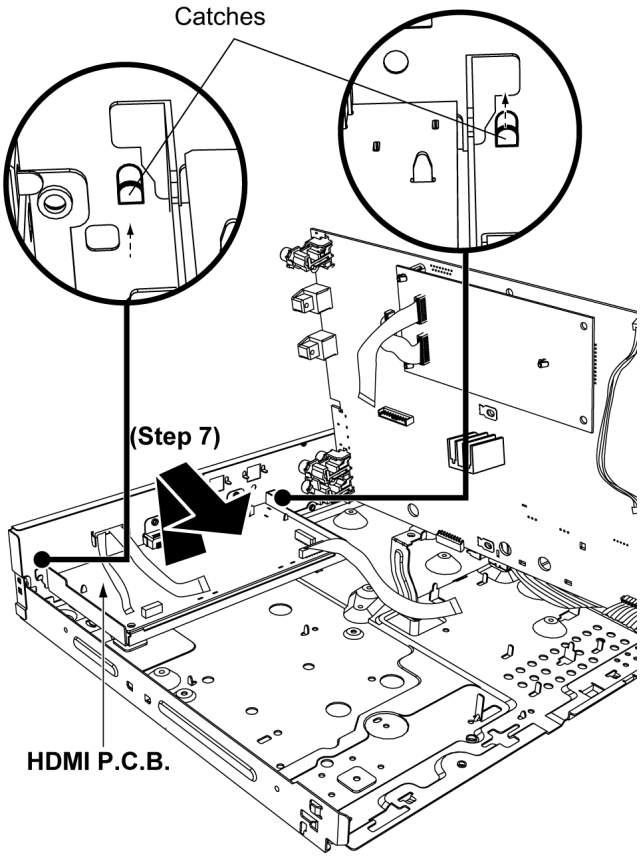
Caution : Attach wire to main P.C.B. with cable tie during assembly. (Replace a new cable tie after service)



Step 4 : Lift up Main P.C.B..

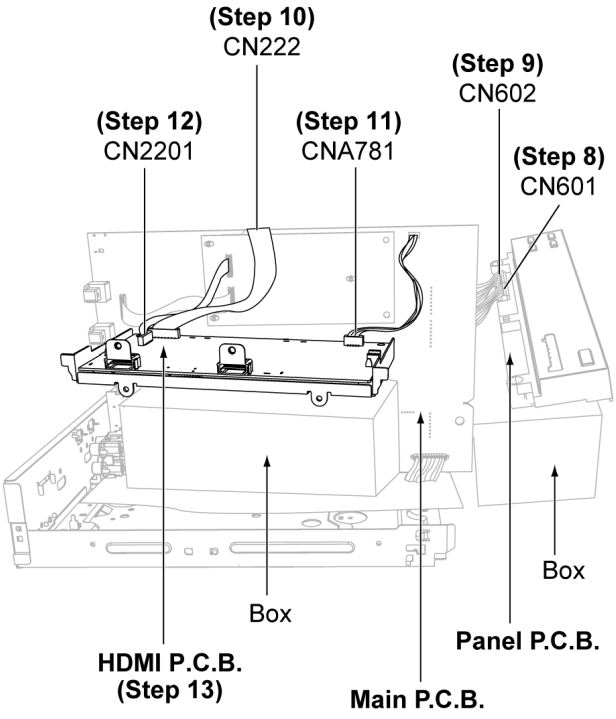
Step 5 : Detach 10P FFC cable at the connector (CN2001) on HDMI P.C.B..

Step 6 : Detach 12P FFC cable at the connector (CN2201) on HDMI P.C.B..



Step 7 : Lift up and remove the HDMI P.C.B. with the chassis from the rear cabinet as arrow shown.

Caution : Take extra care for the catches on the rear panel during removal and assembly of the HDMI P.C.B. (with chassis).



Step 8 : Connect 8P cable at the connector (CN601) on Panel P.C.B..

Step 9 : Connect 9P cable at the connector (CN602) on Panel P.C.B..

Step 10 : Connect 15P FFC cable at the connector (CN222) on Main P.C.B..

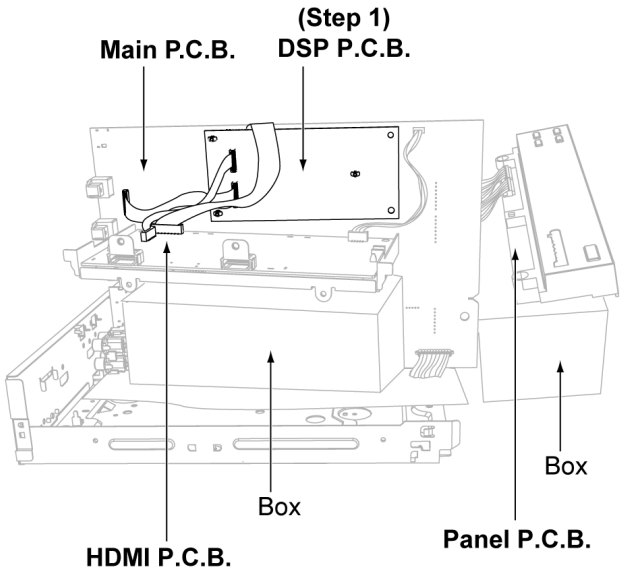
Step 11 : Connect 5P cable at the connector (CNA781) on HDMI P.C.B..

Step 12 : Connect 12P FFC cable at the connector (CN2201) on HDMI P.C.B..

Step 13 : Check & repair HDMI P.C.B. according to the diagram shown.

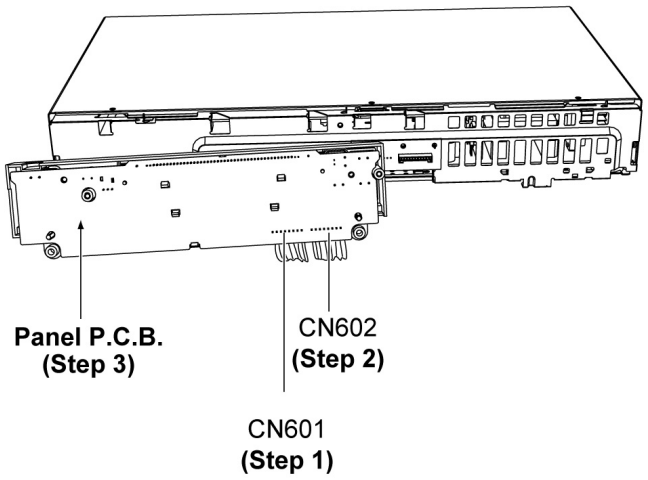
8.5. Checking & Repairing DSP P.C.B

- Follow the (Step 1) - (Step 12) of item 8.4.



Step 1 : Check & repair DSP P.C.B. according to the diagram shown.

8.6. Checking & Repairing Panel P.C.B



Step 1 : Connect 8P cable at the connector (CN601) on Panel P.C.B..

Step 2 : Connect 9P cable at the connector (CN602) on Panel P.C.B..

Step 3 : Check & repair Panel P.C.B. according to the diagram shown.

9 Voltage Measurement & Waveform Chart

Note:

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.

  Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

9.1. Voltage Measurement

9.1.1. D-AMP P.C.B.

REF NO.	IC5000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0.1	0.1	2.9	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	0.1	0.1	2.9	0	-29.3	-21	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.2	0	29
REF NO.	IC5000																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5300																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
REF NO.	IC5300																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5500																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5.2	5	0	2.7	2.2	0	2.5	2.6	2.6	2.5	0	5.2	5.2						
STANDBY	0	5.2	5	0	2.7	2.2	0	2.5	2.6	2.6	2.5	0	5.2	5.2						
REF NO.	IC5501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	2.6	2.5	0	2.6	0	0	0	0	0	0	0	5.2	5.2						
STANDBY	2.5	2.6	2.5	0	2.6	0	0	0	0	0	0	0	5.2	5.2						
REF NO.	Q5101				Q5102				Q5601				Q5603				Q5604			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	5.2	0		0	5.2	0		0	0	0.7		5.2	5.1	4.4		0	0	0.7	
STANDBY	0	5.2	0		0	5.2	0		0	0	0.7		5.2	5.1	4.5		0	0	0.7	
REF NO.	Q5640				Q5641				Q5642				Q5644							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	6.9	16.4	7.4		0	5.2	0		0	0	0.7		0	3.7	0					
STANDBY	6.9	16.4	7.4		0	5.2	0		0	0	0.7		0	3.7	0					

SC-HTR310P D-AMP P.C.B.

9.1.2. DSP P.C.B.

Ref No.	IC1000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.7	3.7		3.7	3.7	3.2	3.7	3.7	0	3.7	3.7	1.8	3.7	3.7	0	1.7	0.8	0.9	0	1.6
STANDBY	0.9	0.9	0.9	0	0.9	0	0.9	0	0	1	1	0	1	1	0	0	0	0	0	0
Ref No.	IC1000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	1.8	3.6	3.6	0	3.6	3.6	3.7	3.6	3.6	0	1.8	1.8	0	1.8	3.7	3.7	0	0	1.7
STANDBY	0	0	3.3	3.3	0.9	3.3	0	0.1	0	0	0	0	0	0	0.9	0.1	0.1	1	1	0
Ref No.	IC1000																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	1.7	0	1.7	0	1.7	0	1.3	0	3.3	1.7	1.7	0	1.8	1.8	0	3.3	3.3	3.3	3.3
STANDBY	0.1	0	0.8	0.8	0	0.7	0.8	0.1	0	0.1	0.1	0	0	0	0.9	0.8	0.7	0.7	0.7	0.8
Ref No.	IC1000																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.3	3.3	3.3	3.3	3.3	3.3	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	3.3	3.3	3.3	1.9
STANDBY	0.7	0	1	0.9	0.7	0.7	0	0.7	1	0.7	0.7	0.7	0	0.7	0.7	0	0.7	0.7	0.7	1
Ref No.	IC1000																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.3	3.3	1.8	0	0	0	0	0	3.3	0	0	0	0	3.3	1.8	0	0	0	0	3.3
STANDBY	1	1	0	0	0	0	1	1	0	1	1	0	1	1	0	1	1	0	1	0
Ref No.	IC1000																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	0	0	0	0	0	3.3	3.3	3.3	3.3	0	1.8	0	0	0	0	0	3.3	3.3	3.3
STANDBY	1	0.9	1	0.6	0	0.6	0	0.6	0.7	0.7	0.7	0	0.7	0.7	0	0.7	0.7	0.7	0.7	0
Ref No.	IC1000																			
MODE	121	122	123	124	125	126	127	128												
CD PLAY	3.2	0	0.4	3.6	1.8	0.5	0	3.3												
STANDBY	0	0	0	0	0	0	0	0												
Ref No.	IC1001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.6	1.7	3.3	0	3.3	0	0	0.4	1.9	0	3.3	2.6	2.6	2.6	2.6	2.7	4.6	0	0
STANDBY	0.1	0	0	0.1	0	0.1	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0	0
Ref No.	IC1001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	4.8	0	2.6	2.7	2.6	2.6	0	2.6	2.7	2.7	2.7	2.7	2.7	2.7	4.8	0	0
STANDBY	0	0	0	0.1	0	0.2	0.2	0.2	0.2	0	0	0	0	0.2	0.2	0.2	0.2	0.1	0	0
Ref No.	IC1001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	4.8	0.4	0.1	0	0	2.4	2.4	1.8	2.4	0	3.4	0	3.3	0	1.6	0	0	0	1.6	1.6
STANDBY	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0	0	0.1	0	0	0	0	0	0.1
Ref No.	IC1001																			
MODE	61	62	63	64																
CD PLAY	1.7	0	0	0																
STANDBY	0	0.1	0.1	0																
Ref No.	IC1002																			
MODE	1	2	3																	
CD PLAY	3.3	0	1.8																	
STANDBY	0	0	0																	
Ref No.	IC1003																			
MODE	1	2	3																	
CD PLAY	4.8	0	3.3																	
STANDBY	0	0	0																	
Ref No.	IC1004																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	1.6	1.6	0	0	0	0	1.6	3.3												
STANDBY	0	0	0	0	0	0	0	0												

SC-HTR310P DSP P.C.B.

9.1.3. HDMI P.C.B.

Ref No.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.9	1.9	1	0.8	0	0.1	0.1	0	0	0	0	0	0.1	0	0	0	0	0	0	0
STANDBY	0	0	0	0	3.3	3.3	3.3	0	0.1	0	3.3	0	3.3	0.8	0	3.3	0.4	0	3.3	0.4
Ref No.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	-0.2	-0.2
STANDBY	0	1.8	1.8	0	0	3.3	0	2.2	3	3	3.3	3.3	0.8	0	1.8	0	3.3	3.3	1.3	1.3
Ref No.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	-0.2	-0.2	0	0	-0.2	-0.2	0	0	-0.1	-0.1	0.1	0	0	0.1	0	0.1	-0.2	-0.2
STANDBY	0	3.3	1.3	1.3	0	3.3	1.3	1.3	0	3.3	1.3	1.3	0	0	3.3	1.4	3.3	1.4	1.4	0
Ref No.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	0	-0.2	-0.1	0	-0.2	-0.2	0	0.1	0.1	0.1	0	0	0	0	0	1.7	0.8	0.1	0
STANDBY	3.3	1.3	1.3	0	3.3	1.3	1.3	0	3.3	1.3	1.3	0	0	1.8	0	3.3	0	0	1.8	0
Ref No.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	1	0.9	0.9	0.8	0.8	0.8	0.8	0	0	0	0	0	0	0	0	0	0	0.1	0	0
STANDBY	3.1	3.1	3.1	3.1	0	0	0	0	3.3	0	0	1.8	0.3	0.3	1.8	0	1.6	1.6	3.3	0.1
Ref No.	IC2001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	0.1	0.6	0.7	0.7	0	0.5	0	0	1.8	0.9	0.9	0.9	0	0	1.5	1.7	1.4	1.4	0
STANDBY	0	3.3	0	3.3	1.8	0	0	0	3.3	0	0	0	1.8	0	0	0	0	0	0	0
Ref No.	IC2001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.8	0	1.8	1.8	1.8	1.8	0	0	1.8	1.8	1.8	1.8	1.8	0.1	0	1.8	1.8	0	0	1.8
STANDBY	0	3.3	0	0	0	0	0	1.8	0	0	0	0	0	3.3	0	0	0	0	1.8	0
Ref No.	IC2001																			
MODE	141	142	143	144																
CD PLAY	1.8	1.8	1.8	0																
STANDBY	0	0	0	0																
Ref No.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.8	1.5	0	0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0	0	0	0	0.1	0	0	0
STANDBY	0	0	0	1.8	3.3	3.3	1.8	1.3	1.3	1.3	0	0	3.3	0	0	1.8	3.3	0	1.5	1.5
Ref No.	IC2002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0	2.6	2.6	0	2.6	2.6	0	2.6	2.6	0.1	2.6	21.6	0	0.1	0	0
STANDBY	0	0	3.3	3.3	0	0.5	0.4	3.3	1.3	1.3	0	0.9	0.9	3.3	1.2	1.2	0	3.3	0	0
Ref No.	IC2002																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0	0	0	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3	0	0
STANDBY	0	0	0	0	0	0	0	0	1.8	0	0	0	0	0	0	0	0	0	0	0
Ref No.	IC2002																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.8	1.8	0.9	0.8	1.7	1.2	0.9	0.9	0.9	0.9	0	0	0	0	0	1.3	1.3	1.3	1.3	1.3
STANDBY	0	0	0	0	0	0	0	0	0	0	3.3	0	0	1.8	0	0	0	0	0	0

Ref No.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	2.5	0	3.1	2.8	0	0	0	0	0	3.3	1.6	0	1.6	3.3	3.3	0.6	0.1	0.5
STANDBY	0	0	0.4	0	0	0.4	0.4	0	0	0	0	3.3	0	1.6	1.6	3.3	3.3	0	3.3	3.3
Ref No.	IC2003																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	3.3	0	0	0	0	0	0	2.7	2.7	0	0	0	0	0.1	0.1	0	0	0	0
STANDBY	3.3	3.3	0	0	0	0	0	0	3	3	0	0	0	0	2.4	2.2	0	3.3	3.3	0
Ref No.	IC2003																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0	0	0	0	3.3	3.3	0	0	0	0	0	0	0	0	0
STANDBY	0	3.3	0	0.8	0	0	0	0	0	3.3	0	0	0	0	0	0	0	0	0	0
Ref No.	IC2003																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.3	0	0	0	0	0	3.2	0	0	0.7	0	0	0.6	0	0	0	0	0	0	0
STANDBY	0	3.3	0	0	0	0	0	0	1.5	1.5	0.5	0	0	0	0	0	0	0	0	0
Ref No.	IC2003																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	0	0	3.3	3.3	3.3
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6	0	0	3.3	3.3	0
Ref No.	IC2004																			
MODE	1	2	3	4	5															
CD PLAY	0.1	0	-	0	0															
STANDBY	3.3	3.3	-	0	0															
Ref No.	IC2005																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.1	0	0.1	0	0	0	0	0.1	0	0.1	0	0	0	0	0.1	0.1	0	0.6	0.1	0.1
STANDBY	0	0	0	0	0	0	0	3.3	0	3.3	0	0	3.3	0	0	0	0	0	0	0
Ref No.	IC2005																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0
STANDBY	3.3	0	3.3	0	0	0	0	0	3.3	3.3	0.6	2.4	2.2	0	0	0	3.3	0	0	0
Ref No.	IC2005																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0	0.7	0	0	0	0	0	0												
STANDBY	0	0	0	0	0	0	0	0												
Ref No.	IC2006																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	1	2.4	0	0	0	1	0	1												
STANDBY	1.2	0	1.2	0	0	1.2	0	2.5												
Ref No.	IC2007																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0.1	0	0.7	0.1	0.6	0.6	0	0.1	0.7	0.7	0.7	0	0.7	0.1						
STANDBY	3.3	0	0	0	0	0	0	0	0	0	0	0	0	3.3						
Ref No.	IC2008																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	3.3	3.3	3.3	0.1	0.1	0.1	0.1												
STANDBY	0	3.3	3.3	0.2	3.3	3.3	3.3	3.3												
Ref No.	IC2009																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.3	1.3	1.4	1.1	1.3	1.1	0	1	0	0	1.1	1.2	1	1.6	1.1	1.6	1	1.7	3.3	0.1
STANDBY	0.3	0	3.3	0	3.3	0	0	3	0	0	0	3.3	2.8	0	2.8	0	2.8	0	0.3	3.3

Ref No.	IC2010																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	3.3	0	3.3	0	0	3.3												
STANDBY	0	0	3.3	0	3.3	3.3	0	3.3												
Ref No.	IC2011																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0.1	0	0	2.4	2.4	0	1.1												
STANDBY	0	0	0	0	0	2.5	0.1	1.2												
Ref No.	IC2012																			
MODE	1	2	3	4	5															
CD PLAY	0	0	-	0	0															
STANDBY	3.3	3.3	-	0	0															
Ref No.	IC2016																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	1.5	1.5	0	2.4	0	2.3	0	0	2.5	0	2.3	0.1	1.4	0.1	1.4	0	0
STANDBY	3.3	0	3.3	0	3.3	0	0	0	0	0	0	3.3	0	3.3	3.3	3.3	3.3	3.3	0	3.3
Ref No.	Q2001				Q2002				Q2005				Q2006				Q2007			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	2.3	0		0	2.3	0		0.1	5	0.1		0	5	0.1		2.7	2.4	3.3	
STANDBY	3	2.5	3.3		3	2.5	3.3		1.5	1.5	3.3		1.5	1.5	3.3		3	2.6	3.3	
Ref No.	Q2008				Q2009				Q2010				Q2011				Q2012			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	2.7	2.4	3.3		0	0	3.3		0	0	3.3		3	3	3		0	2.6	0	
STANDBY	3	2.6	3.3		2.2	2.2	3.3		2.2	2.2	3.3		3	3	3		0	2.6	0	
Ref No.	Q2016				Q2017				Q2018				QR2021				QR2022			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0.6	-0.6		0	3.3	0		0	0	0.6		0	3.3	0		0	3.8	0	
STANDBY	0	3.5	-1.1		0	3.3	0		0	0	0.6		0	3.3	0		0	0	2.8	
Ref No.	QR2023				QR2024				QR2025											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	3.2	0		0	0	3.3		0	0	3.3									
STANDBY	0	0	3.3		0	0	3.3		0	0	3.3									

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9.1.4. MAIN P.C.B.

Ref No.	IC101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0.16	0.15	0	0	0	0	0	0	0.41	0.04	0.04	0	0	0	0	0	0
STANDBY	0	0.01	0.01	0	0	0.02	0.01	0	0	0.01	0.01	0.43	0.04	0.04	0	0	0	0	0	0
Ref No.	IC101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0	0.15	0.37	0	0	0	0.11	0.11	0.39	0.38	0	0.1	0	0	0.29	0.29
STANDBY	0	0	0	0	0	0	0.39	0	0	0	0	0	0	0	0	0	0	0	0	0
Ref No.	IC101																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				
CD PLAY	0.36	0.35	0	0.01	0.01	0	0.37	0.36	0.35	0.35	0	0	0.38	0.38	0.38	0.38				
STANDBY	0	0.17	0	0.01	0.01	0	0.19	0.19	0.19	0.19	0	0.01	0.4	0.4	0.4	0.4				
Ref No.	IC103																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.1	0.1	0.1	0	0.1	0.03	0.03	0.27												
STANDBY	0.1	0.1	0.1	0	0.1	0.04	0.04	0.26												
Ref No.	IC104																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0.03	0.1	0	0	0.1	0	0.26												
STANDBY	0.04	0.04	0.1	0	0.1	0.1	0	0.26												
Ref No.	IC105																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.4	0	0	0	0	0	0.4	0.37												
STANDBY	0.36	0	0	0	0	0	0	0												
Ref No.	IC106																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.33	0	0.33	0.41	0	0	0.31	0.37												
STANDBY	0.31	0.1	0.1	0	0.3	0.3	0.3	0.4												
Ref No.	IC109																			
MODE	1	2	3	4																
CD PLAY	0	0.39	0.26	0.39																
STANDBY	0	0.39	0.26	0.39																
Ref No.	IC110																			
MODE	1	2	3																	
CD PLAY	4.01	0	5.88																	
STANDBY	4	0	5.88																	
Ref No.	IC202																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0.41	0	0	0	0												
STANDBY	0	0	0	0.43	0	0	0	0												
Ref No.	IC204																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.06	0	0.06	0.41	0	0	0.06	0.37												
STANDBY	0.06	0.06	0.07	0.43	0.01	0	0.07	0												
Ref No.	IC205																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0.42	0	0	0	0												
STANDBY	0	0	0.06	0.43	0	0	0	0												

Ref No.	IC301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	3.28	3.28	0	0	0	0	0	0	0	0	3.34	1.66	0	1.56	3.37	3.36	0	3.33	3.34
STANDBY	0	0	3.33	0	0	0	0	0	0	0	0	3.31	1.65	0	1.59	3.35	3.34	0	3.31	3.32
Ref No.	IC301																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	3.35	0	0	0	0	0	0	3.75	3.76	0	0	0	0	0	0	0	0	0	0
STANDBY	0	3.33	0	0	0	0	0	0	3.75	0	0	0	0	0	0	0	0	0	0	0
Ref No.	IC301																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0.02	0	0.04	3.33	3.36	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0.02	0	0.04	3.33	3.36	0	0	0	0	0	0	0	0	0	0
Ref No.	IC301																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	3.36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.33
STANDBY	0	3.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.33
Ref No.	IC301																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.33	3.33	3.33	3.33	0	0	0	0	0	0	0	0	0.02	0.71	0.66	0	1.34	3.34	3.36	0
STANDBY	3.33	3.33	3.33	3.33	0	0	0	0	0	0	0	0	0.02	0.72	0.66	0	1.34	3.33	3.35	0
Ref No.	IC302																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	3.74	3.73	0	0	3.74	3.73	0	3.24												
STANDBY	3.75	3.74	0	0	0.74	3.74	0	3.75												
Ref No.	IC303																			
MODE	1	2	3	4	5															
CD PLAY	3.31	3.34	0	0	1.81															
STANDBY	3.31	3.35	0	0	1.81															
Ref No.	IC704																			
MODE	1	2	3	4	5															
CD PLAY	0.57	0.15	0	0.05	0															
STANDBY	0.57	0.15	0	0.05	0															
Ref No.	IC722																			
MODE	1	2	3	4	5															
CD PLAY	5.88	3.35	0	1.21	2.19															
STANDBY	5.88	3.35	0	1.21	2.19															
Ref No.	IC774																			
MODE	1	2	3	4	5															
CD PLAY	0.57	0	0	0	0															
STANDBY	0.57	0	0	0	0															
Ref No.	IC793																			
MODE	1	2	3	4	5															
CD PLAY	5.88	0	3.34	5.88	5.34															
STANDBY	5.88	0	3.34	5.88	5.34															
Ref No.	Q221							Q222							Q311					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B			
CD PLAY	0	0	0	0	0.67	0		0	0	0	0	0.64	0		5.87	5.87	5.18			
STANDBY	0	0	0	0	0.67	0		0	0	0	0	0.64	0		5.88	5.87	5.18			
Ref No.	Q701				Q704				Q705				Q706				Q707			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0		0.42	0.12	0.12		0	0.12	0.39		0.37	0	0		0	2.2	0.01	
STANDBY	0	0	0		0.43	0.15	0.15		0	0.15	0.41		0.4	0	0		0	2.2	0	
Ref No.	QR109				QR221				QR222				QR223				QR224			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0.01	3.34		4	3.98	4		0	4	0		4.01	0	0.59		4.01	3.98	0.59	
STANDBY	0	0	3.34		4	3.98	4		0	4	0		0	3.98	0.59		4	0	0.59	
Ref No.	QR225				QR226				QR271				QR701							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	3.98	3.98	0.02		0	0.02	2.79		0	0.66	0.4		0	0.66	0					
STANDBY	3.98	3.98	0.02		0	0.02	2.8		0	0.66	0.42		0	0.66	0					

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9.1.5. PANEL P.C.B.

Ref No.	IC601																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	2.6	1.5	2.5	2.6	0	1.5	1.5	0	3.3	-18	-22	-13	-22	-18	-22	-18
STANDBY	0	0	0	0	0	0.4	0.4	0	0	0.4	0.4	0	0.4	0	-19	-18	-18	-18	-18	-18
Ref No.	IC601																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-22	-22	-18	-22.3	-22	-18	-18	-22	-22	-23	-17	-23	-23	-23	-23	-23	-23	-23	-18	-18
STANDBY	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18
Ref No.	IC601																			
MODE	41	42	43	44																
CD PLAY	-18	-18	3.3	0																
STANDBY	-18	-18	0.6	0																
Ref No.	QR402				QR601				QR603				QR604							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	0	2.5	0		3.3	0.6	2.5		-24	1.5	-22		3.3	-21	1.4					
STANDBY	0	3.2	0		3.3	3.1	1.1		-20	0.6	-20		0.6	-19	0.6					

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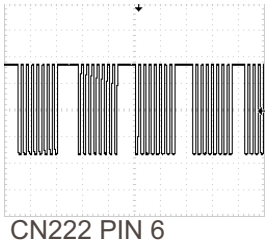
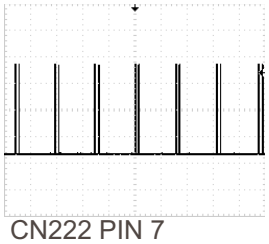
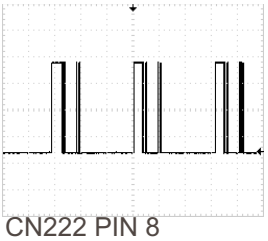
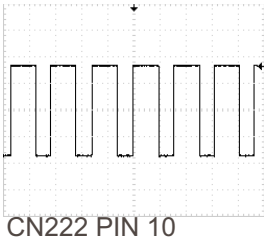
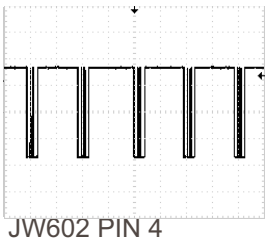
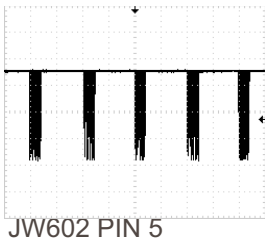
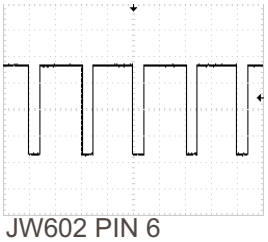
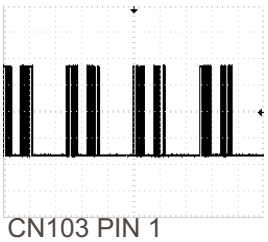
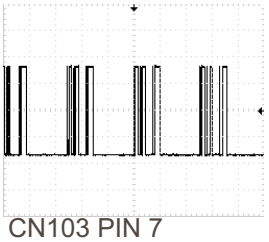
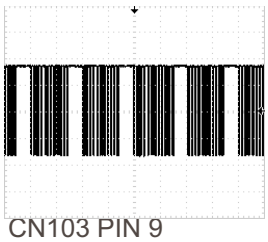
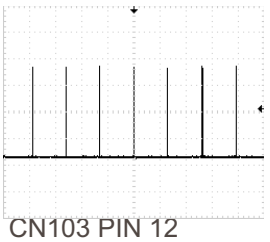
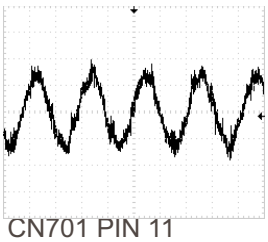
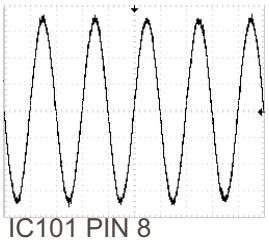
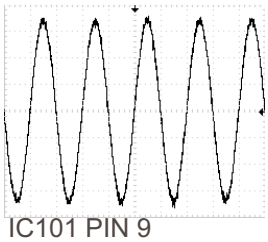
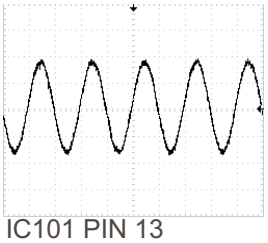
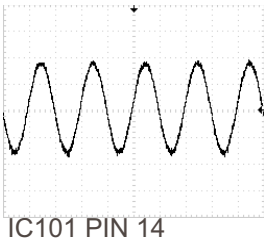
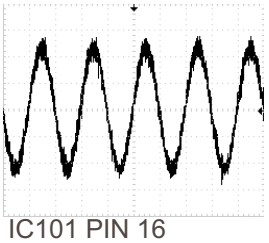
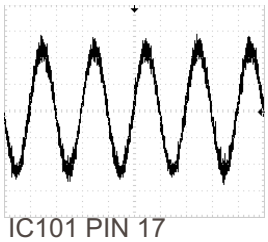
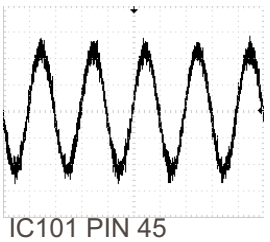
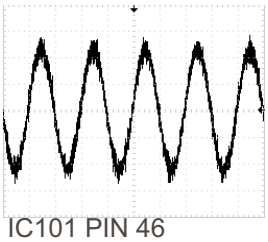
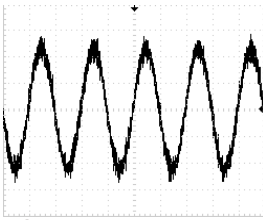
9.1.6. SMPS P.C.B.

REF NO.	IC5701																			
MODE	1	2	3	4	5	6	7													
CD PLAY	162	0	0	19.3	0.1	1.4	0.5													
STANDBY	162	0	0	19.3	0.1	1.4	0.5													
REF NO.	IC5799																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	6.0	1.6	1.8	20.3	162.2	-	0	0												
STANDBY	6.0	1.6	2.0	20.3	163.0	-	0	0												
REF NO.	IC5801																			
MODE	1	2	3																	
CD PLAY	-2.2	-29.5	-26.8																	
STANDBY	-2.2	-29.5	-26.8																	
REF NO.	IC5899																			
MODE	1	2	3																	
CD PLAY	4.2	0	2.5																	
STANDBY	4.2	0	2.5																	
REF NO.	Q5720				Q5721				Q5722				Q5802				Q5860			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	5.9	6.5	5.6		19.9	19.9	19.2		0	17.0	0.1		-21.9	-2.2	-22		1.3	0	0.7	
STANDBY	5.9	6.6	5.6		19.9	19.9	19.2		0	16.8	0.1		-21.8	-2.2	-22		1.3	0	0.7	
REF NO.	Q5861				Q5862				QR5801				QR5802				QR5810			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.7		0	5.2	0		0	5.0	0		0	4.5	0		0	0.1	5	
STANDBY	0	0	0.7		0	5.2	0		0	5.0	0		1.5	1.5	0		0	0	5	

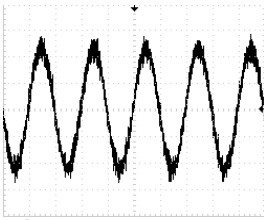
SC-HTR310P SMPS P.C.B.

9.2. Waveform Chart

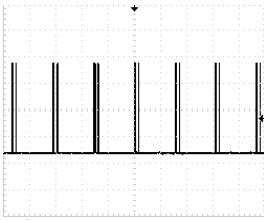
 CN222 PIN 6 CD PLAY 3.40Vp-p (1msec.div)	 CN222 PIN 7 CD PLAY 3.40mVp-p (50msec.div)	 CN222 PIN 8 CD PLAY 3.44mVp-p (25msec.div)	 CN222 PIN 10 CD PLAY 3.44Vp-p (50msec.div)
 JW602 PIN 4 CD PLAY 3.44Vp-p (10msec.div)	 JW602 PIN 5 CD PLAY 3.44Vp-p (10msec.div)	 JW602 PIN 6 CD PLAY 3.48Vp-p (10msec.div)	 CN103 PIN 1 CD PLAY 3.48Vp-p (500usec.div)
 CN103 PIN 7 CD PLAY 3.40Vp-p (500usec.div)	 CN103 PIN 9 CD PLAY 3.44Vp-p (10msec.div)	 CN103 PIN 12 CD PLAY 3.48Vp-p (1msec.div)	 CN701 PIN 11 CD PLAY 18.8mVp-p (10usec.div)
 IC101 PIN 8 CD PLAY 724mVp-p (50usec.div)	 IC101 PIN 9 CD PLAY 720mVp-p (50usec.div)	 IC101 PIN 13 CD PLAY 720mVp-p (500usec.div)	 IC101 PIN 14 CD PLAY 728mVp-p (50usec.div)
 IC101 PIN 16 CD PLAY 278mVp-p (500usec.div)	 IC101 PIN 17 CD PLAY 282mVp-p (500usec.div)	 IC101 PIN 45 CD PLAY 556mVp-p (500usec.div)	 IC101 PIN 46 CD PLAY 556mVp-p (500usec.div)



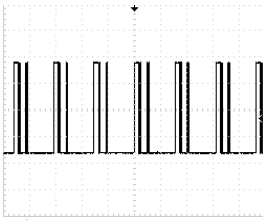
IC101 PIN 51
CD PLAY
556mVp-p (500usec.div)



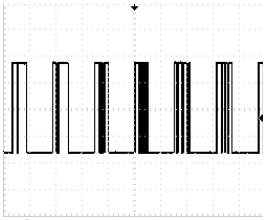
IC101 PIN 52
CD PLAY
556mVp-p (500usec.div)



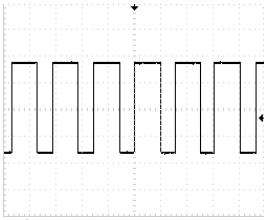
IC301 PIN 35
CD PLAY
3.44Vp-p (50msec.div)



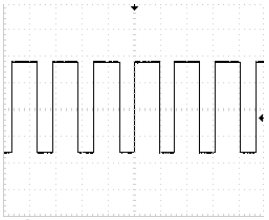
IC301 PIN 36
CD PLAY
3.44Vp-p (50msec.div)



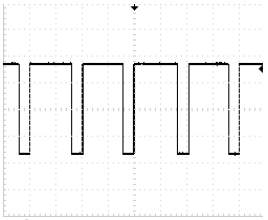
IC301 PIN 37
CD PLAY
3.44Vp-p (50msec.div)



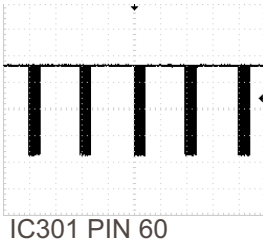
IC301 PIN 44
CD PLAY
3.48Vp-p (50msec.div)



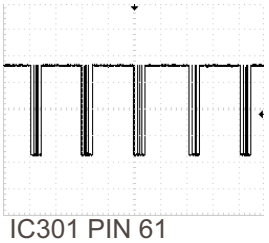
IC301 PIN 49
CD PLAY
3.44Vp-p (2.5msec.div)



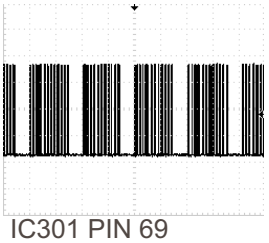
IC301 PIN 59
CD PLAY
3.48Vp-p (10msec.div)



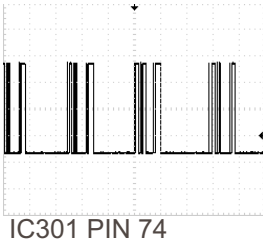
IC301 PIN 60
CD PLAY
3.44Vp-p (10msec.div)



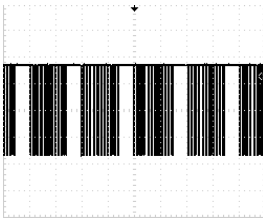
IC301 PIN 61
CD PLAY
3.44Vp-p (10msec.div)



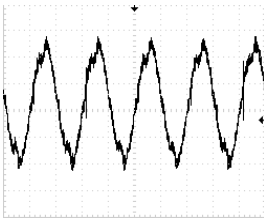
IC301 PIN 69
CD PLAY
3.52Vp-p (10msec.div)



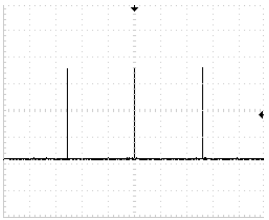
IC301 PIN 74
CD PLAY
3.44Vp-p (500usec.div)



IC301 PIN 76
CD PLAY
3.48Vp-p (10msec.div)

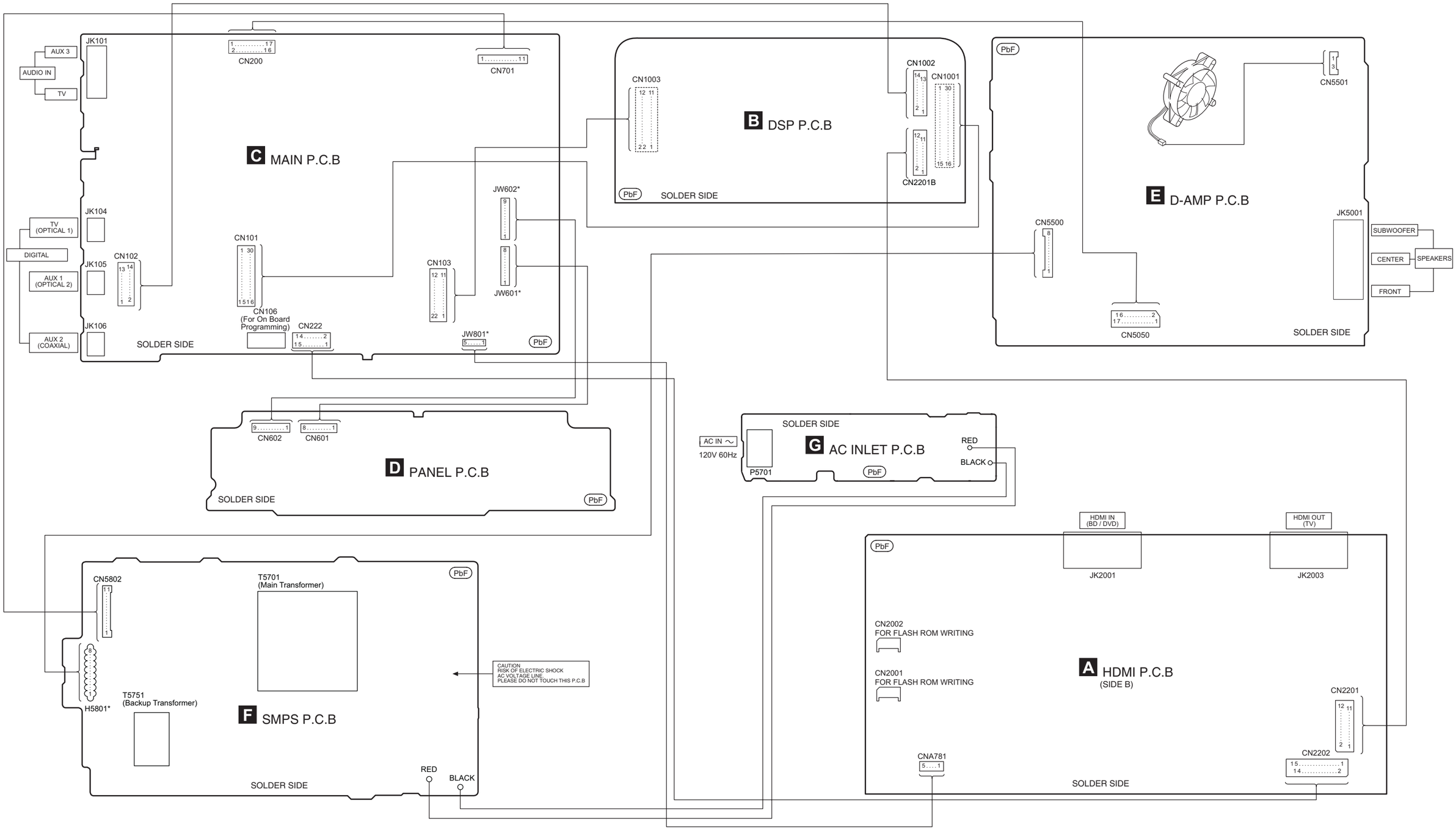


IC301 PIN 77
CD PLAY
5.00Vp-p (10msec.div)



IC301 PIN 79
CD PLAY
3.44Vp-p (500usec.div)

10 Wiring Connection Diagram

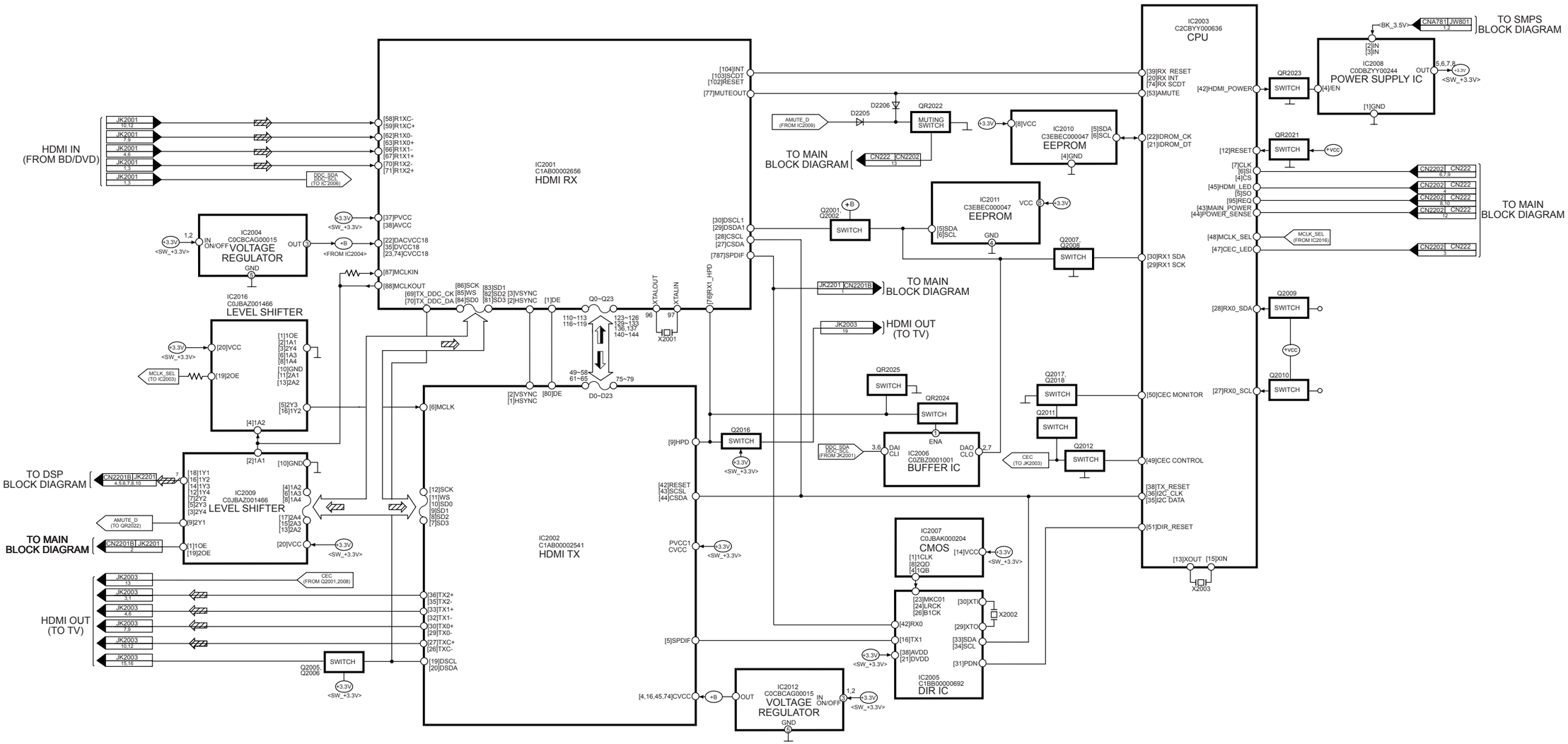


Note : * For indication only

SC-HTR310P

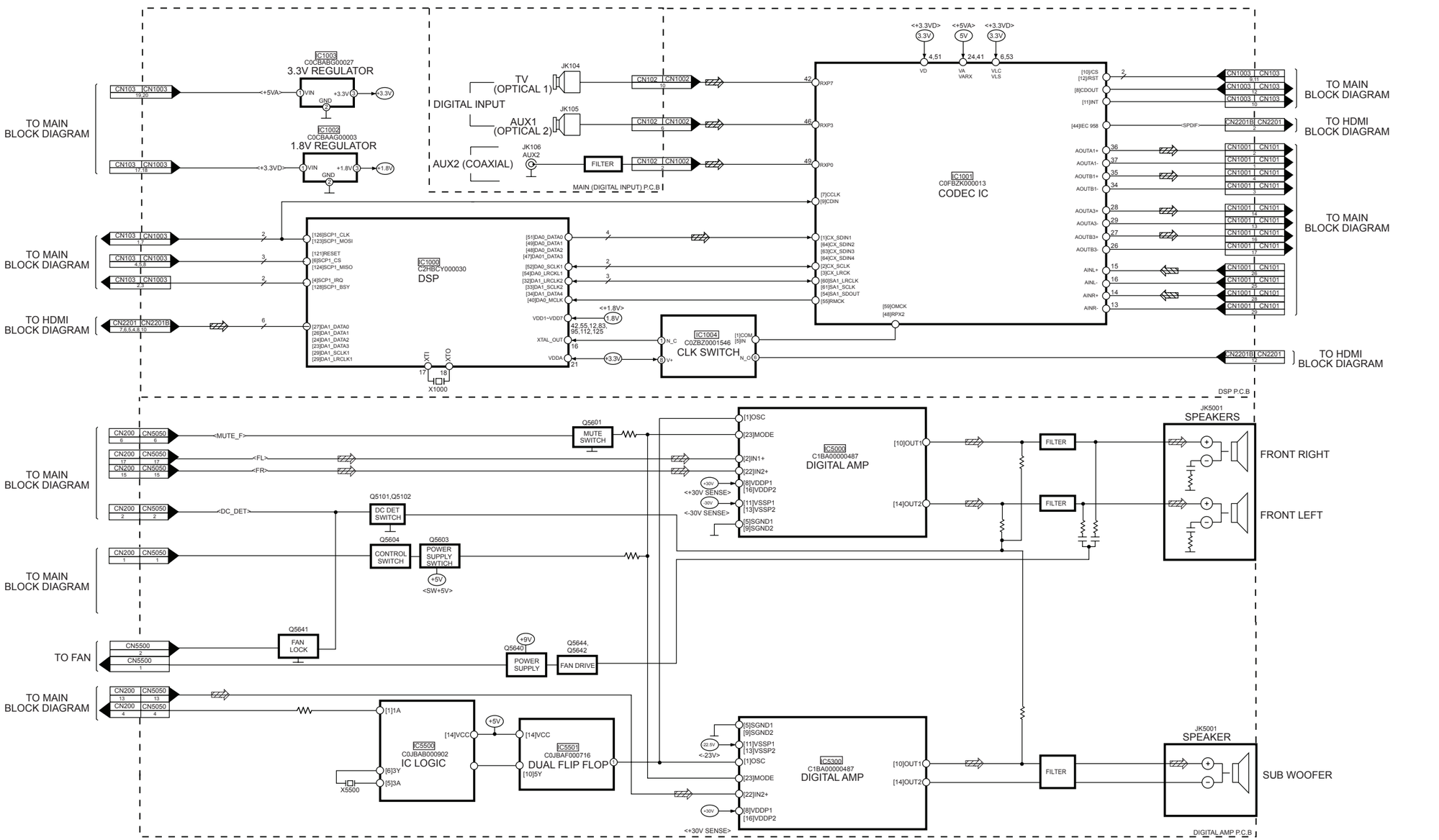
11 Block Diagram

11.1. HDMI BLOCK DIAGRAM



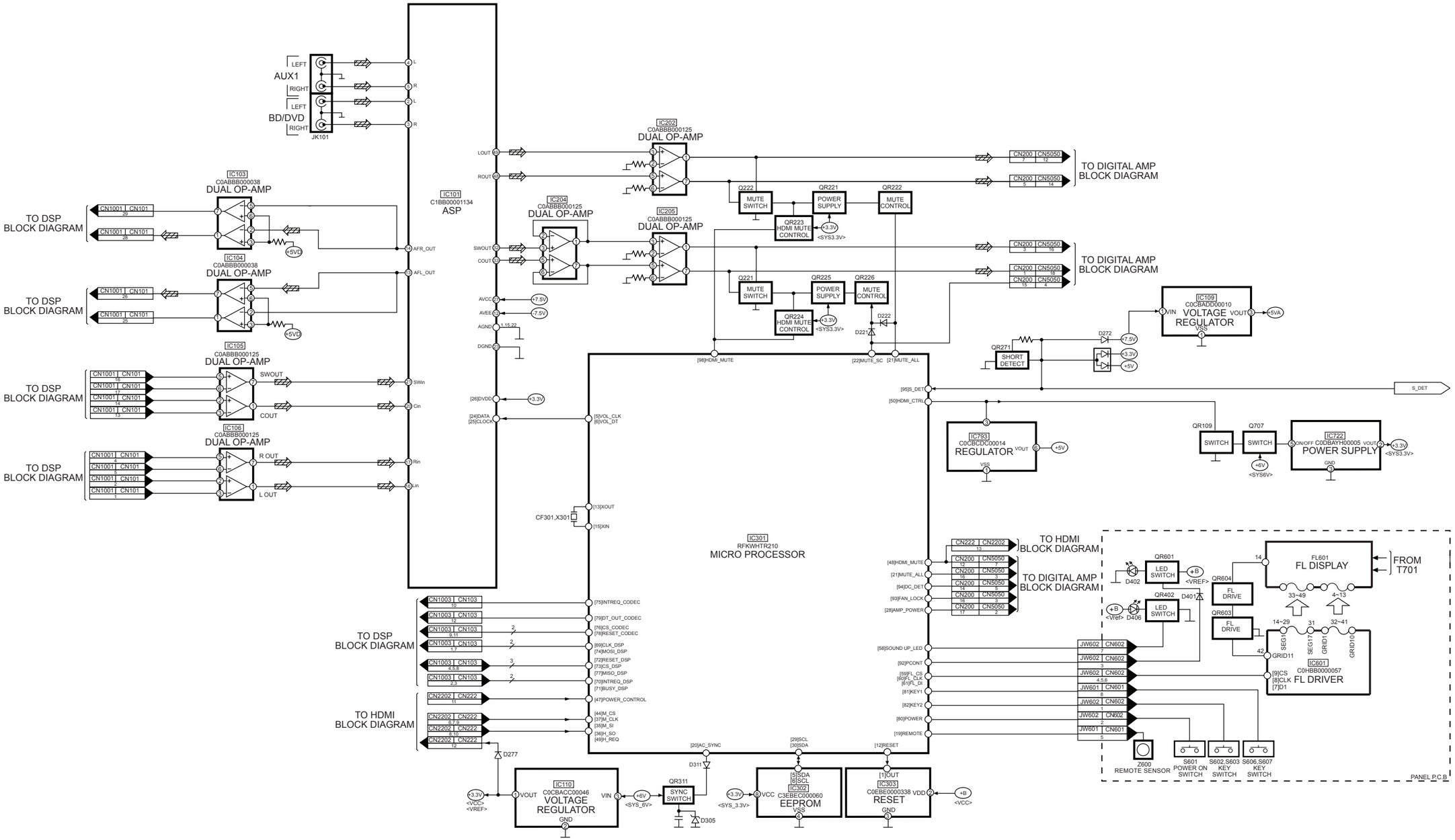
SC-HTR310P HDMI BLOCK DIAGRAM

11.2. DSP/D-AMP BLOCK DIAGRAM



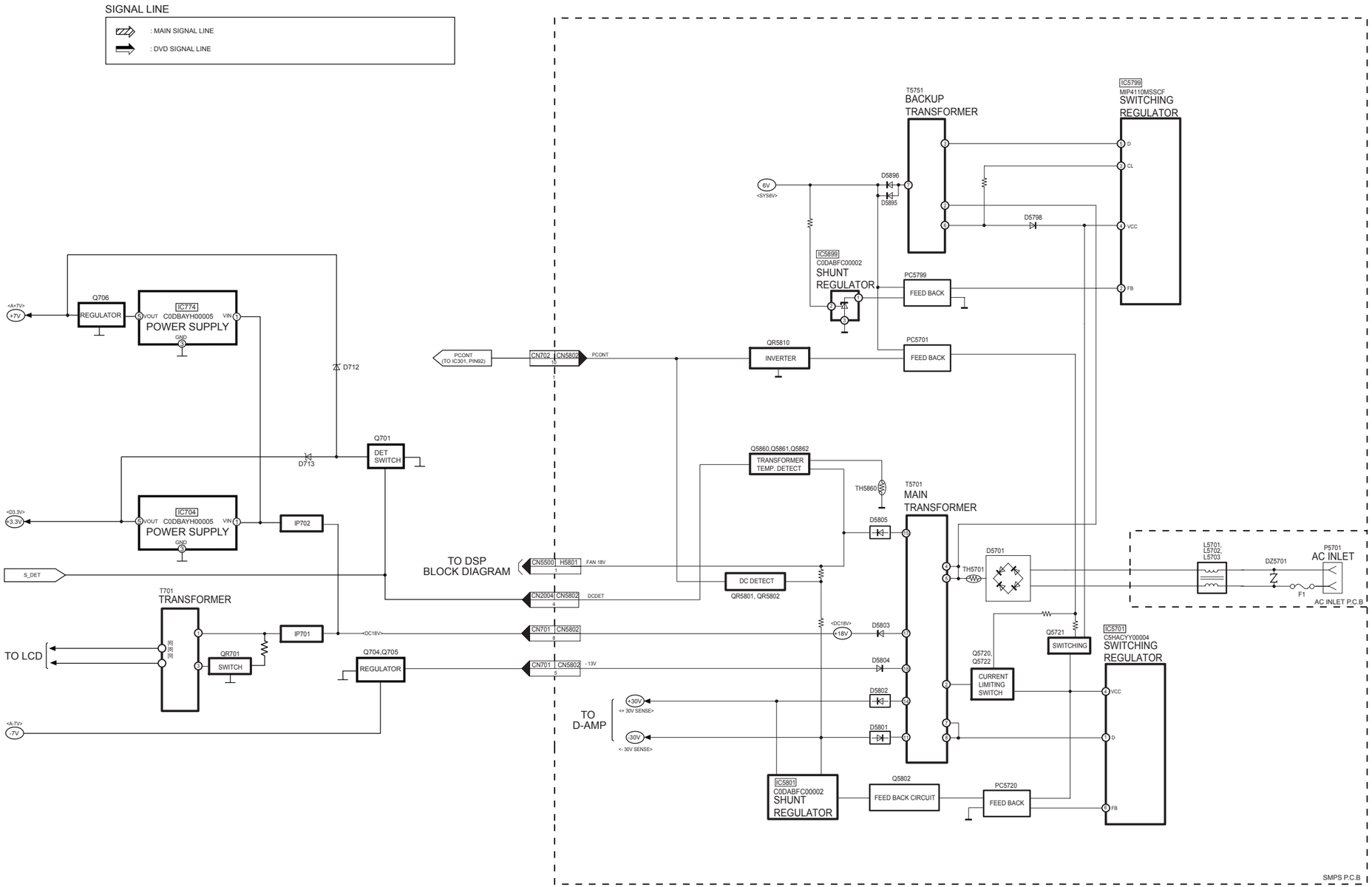
SC-HTR310P DSP/D-AMP BLOCK DIAGRAM

11.3. MAIN 1/2 /PANEL BLOCK DIAGRAM



SC-HTR310P MAIN 1/2 /PANEL BLOCK DIAGRAM

11.4. MAIN 2/2 /SMPS BLOCK DIAGRAM



SC-HTR310P MAIN 2/2 /SMPS BLOCK DIAGRAM

12 Notes Of Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)

Notes:

S601:	POWER switch. (⏻/I)
S602:	WHISPER MODE SURROUND switch.
S603:	VOLUME UP switch. (+)
S606:	SELECTOR switch.
S607:	VOLUME DOWN switch. (-)

- * For Indication only.

- **Importance safety notice :**

  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
  When replacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

- In case of **AC rated voltage Capacitor**, the part no and values will be indicated in the Schematic Diagram.

  AC rated voltage capacitor:
  C5700, C5701, C5703, C5704, C5705

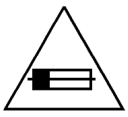
- Capacitor values are in microfarad(μF) unless specified otherwise, F=Farad, pF=Pico-Farad

  Resistance values are in ohm(Ω), unless specified otherwise, 1K=1,000Ω, 1M=1,000KΩ

- **Voltage and Signal lines:**

  : +B Signal line
  : -B Signal line
  : Main signal line
  : DVD Audio signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 8A, 125V FUSE.



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

13 Schematic Diagram

13.1. HDMI CIRCUIT

SCHEMATIC DIAGRAM - 1

A HDMI CIRCUIT

: + B SIGNAL LINE : - B SIGNAL LINE : MAIN SIGNAL LINE : DVD AUDIO SIGNAL LINE

HDMI OUT (TV)

JK2003

FRAME GND
FRAME GND
FRAME GND
FRAME GND
HOT_PLUG
+5V POWER
DDC/CEC_GND
DDC_SDA
DDC_SCL
NC
CEC
TMDS_CLK-
CLK_GND
TMDS_CLK+
TMDS_D0-
D0_GND
TMDS_D0+
TMDS_D1-
D1_GND
TMDS_D1+
TMDS_D2-
D2_GND
TMDS_D2+

R2101 1K C2101 1
VA2117 EZJZ0V800088
VA2115 EZJZ0V800088
VA2116 EZJZ0V800088
VA2118 EZJZ0V800088

LB2105 J0JCC0000119
LB2104 J0JCC0000119
LB2103 J0JCC0000119
LB2102 J0JCC0000119

R2102 2200
R2103 2200

L2104 J0MAB0000170
L2103 J0MAB0000170
L2102 J0MAB0000170
L2101 J0MAB0000170

VA2112 EZAEG2A50AX
VA2113 EZAEG2A50AX
VA2110 EZAEG2A50AX
VA2111 EZAEG2A50AX
VA2108 EZAEG2A50AX
VA2109 EZAEG2A50AX
VA2106 EZAEG2A50AX
VA2107 EZAEG2A50AX

Q2005
Q2005, Q2006 B1CBGD000001 SWITCH
Q2006

R2112 1K
R2113 6800
R2114 6800

Q2016 B1ABCF000079 DETECT SWITCH
R2104 10K
Q2016
D2105 MAZJ72800L
R2105 10K
R2106 4700

TX_DDC_SCL
TX_DDC_SDA
TX_HPD
TX_INT

BCK_H
LRCK_H
I2S_0_H
I2S_1_H
I2S_2_H
I2S_3_H

R2121 33
R2120 33
R2119 33
R2118 33
R2117 33
R2116 33

C2104 0.1
C2103 0.1
C2102 0.1

12.288MHz (48kHz X 256) MCLK
SPDIF
VSYNC
HSYNC

DSCL DSDA HPD INT CVCC DGND IOVCC SCK WS SD0 SD1 SD2 SD3 MCLK SPDIF CVCC CGND VSYNC HSYNC

C2105 0.1
C2106 1000P
R2107 4.2K
C2107 0.1
C2108 1000P
C2109 1000P
C2110 1000P
C2111 0.1

21 RSVDL
22 PGND1
23 PVCC1
24 EXT_SWING
25 AGND
26 TXC-
27 TXC+
28 AVCC
29 TX0-
30 TX0+
31 AGND
32 TX1-
33 TX1+
34 AVCC
35 TX2-
36 TX2+
37 AGND
38 PVCC2
39 PGND2
40 NC

IC2002 C1AB00002541 HDMI TX

DE 80
D0 79
D1 78
D2 77
D3 76
D4 75
CVCC 74
CGND 73
IOGND 72
IOVCC 71
D5 70
D6 69
D7 68
D8 67
IDCK 66
D9 65
D10 64
D11 63
D12 62
D13 61

C2119 0.1
C2117 0.1

DE D0 D1 D2 D3 D4 MCLK_H D5 D6 D7 D8 DCLK D9 D10 D11 D12 D13

C2C CA RESET SCSL SDSA CVCC CGND IOVCC D23 D22 D21 D20 D19 D18 D17 D16 D15 D14 CVCC CGND
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

R2111 1K
C2112 4V330
C2113 0.1
C2114 0.1
C2115 0.1
R2109 100
R2108 100
R2115 47K
C2116 4V330

LB2108 J0JHC0000021
LB2109 J0JHC0000021
LB2106 J0JHC0000021
LB2107 J0JHC0000021
C2118 0.1

B/ACCK000005
D2106

IC2012 C0CBCAG00015 REGULATOR
IN ON/OFF OUT NC GND
1 2 3 4 5

SW_3.3V TX_RST I2C_CK I2C_DT

CEC
BK_5.0V

A1 A2 A3 A4 A5

TO HDMI SECTION (2/4)

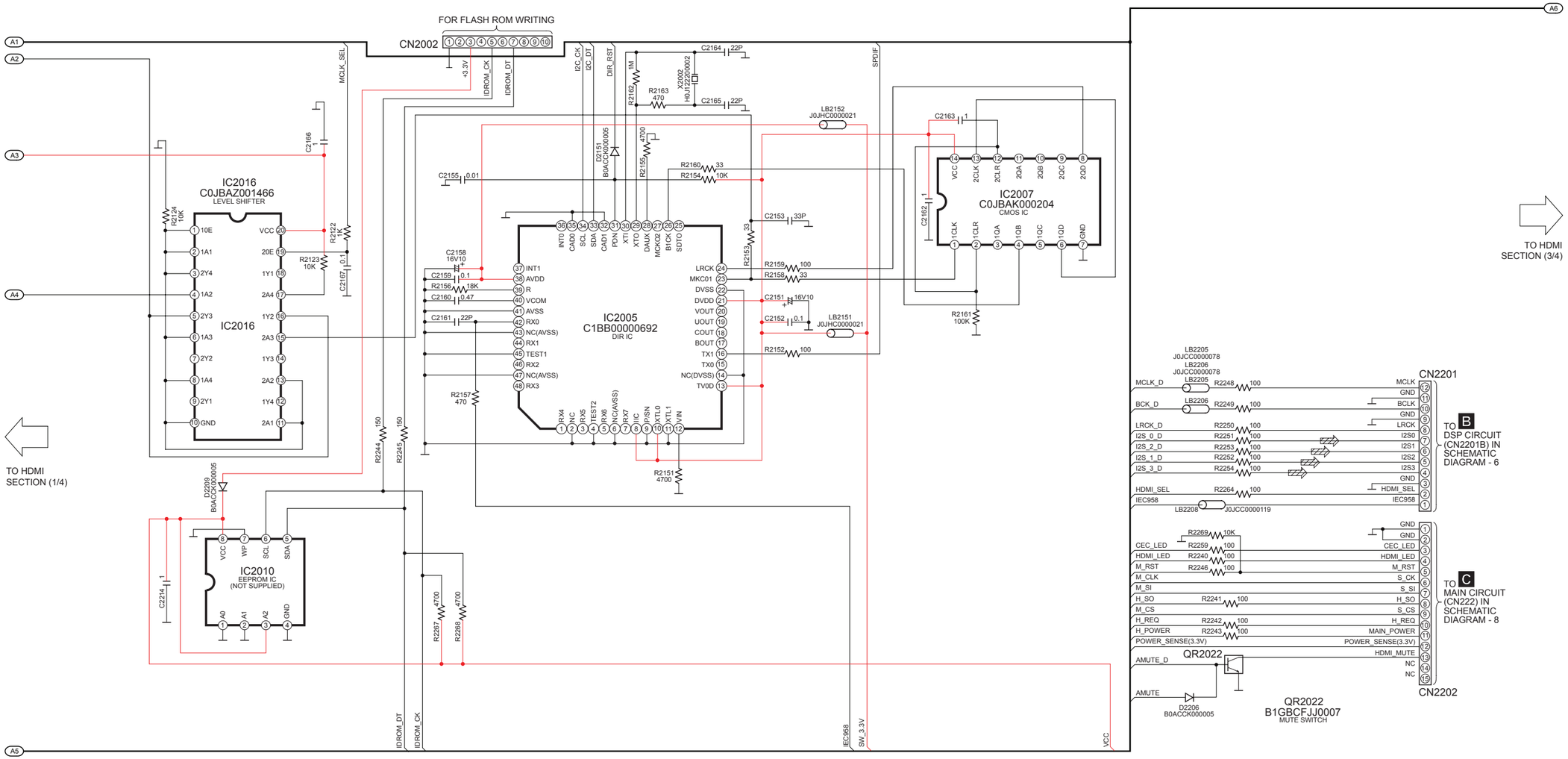
1/4 2/4 3/4 4/4 SC-HTR310P HDMI CIRCUIT

15 16 17 18 19 20 21 22 23 24 25 26 27 28

SCHEMATIC DIAGRAM - 2

A HDMI CIRCUIT

: + B SIGNAL LINE : - B SIGNAL LINE : MAIN SIGNAL LINE



1/4 | 2/4 | 3/4 | 4/4 SC-HTR310P HDMI CIRCUIT

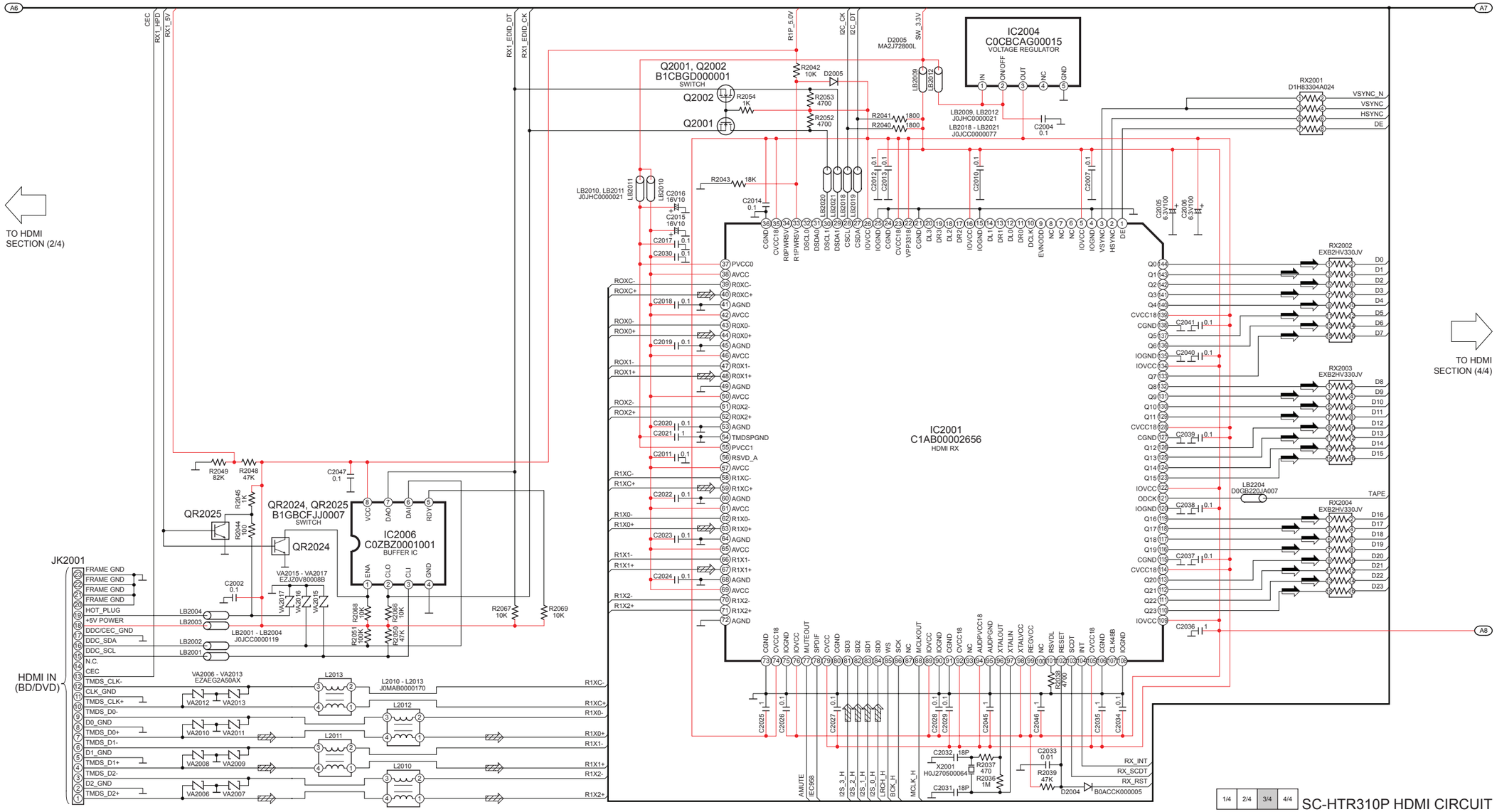
15 16 17 18 19 20 21 22 23 24 25 26 27 28

29 30 31 32 33 34 35 36 37 38 39 40 41 42

SCHEMATIC DIAGRAM - 3

A HDMI CIRCUIT

: + B SIGNAL LINE : - B SIGNAL LINE : MAIN SIGNAL LINE : DVD AUDIO SIGNAL LINE



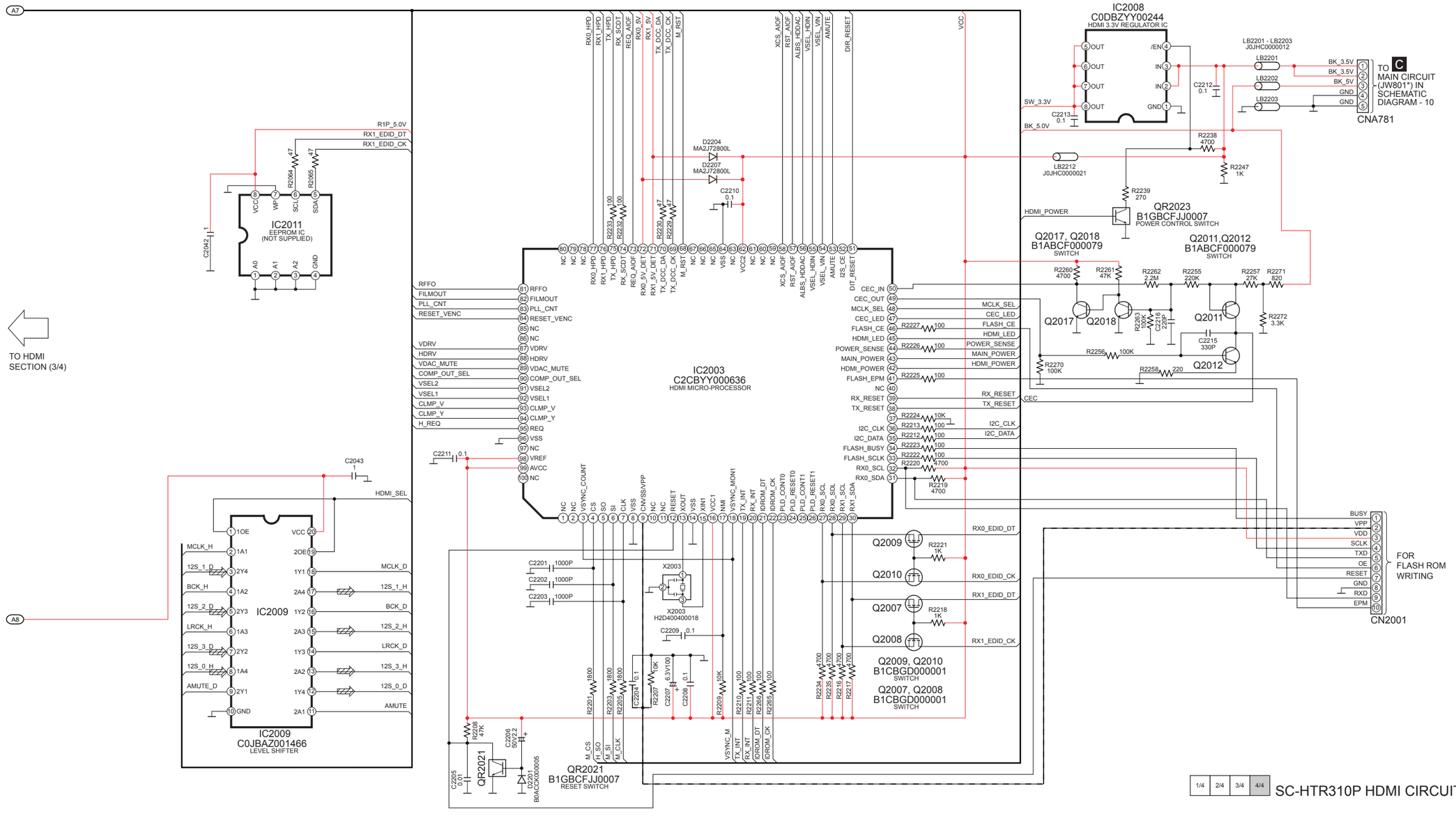
1/4 2/4 3/4 4/4 SC-HTR310P HDMI CIRCUIT

29 30 31 32 33 34 35 36 37 38 39 40 41 42

SCHEMATIC DIAGRAM - 4

A HDMI CIRCUIT

: + B SIGNAL LINE : - B SIGNAL LINE : MAIN SIGNAL LINE



13.2. DSP CIRCUIT

SCHEMATIC DIAGRAM - 5

B DSP CIRCUIT

: +B SIGNAL LINE　: -B SIGNAL LINE　: MAIN SIGNAL LINE

CN1003

TO C MAIN CIRCUIT (CN103) IN SCHEMATIC DIAGRAM - 8

IC1000
C2HBCY000030
DSP IC

X1000
H0J245500068

LB1002
J0JHC0000021

TO DSP SECTION (2/2)

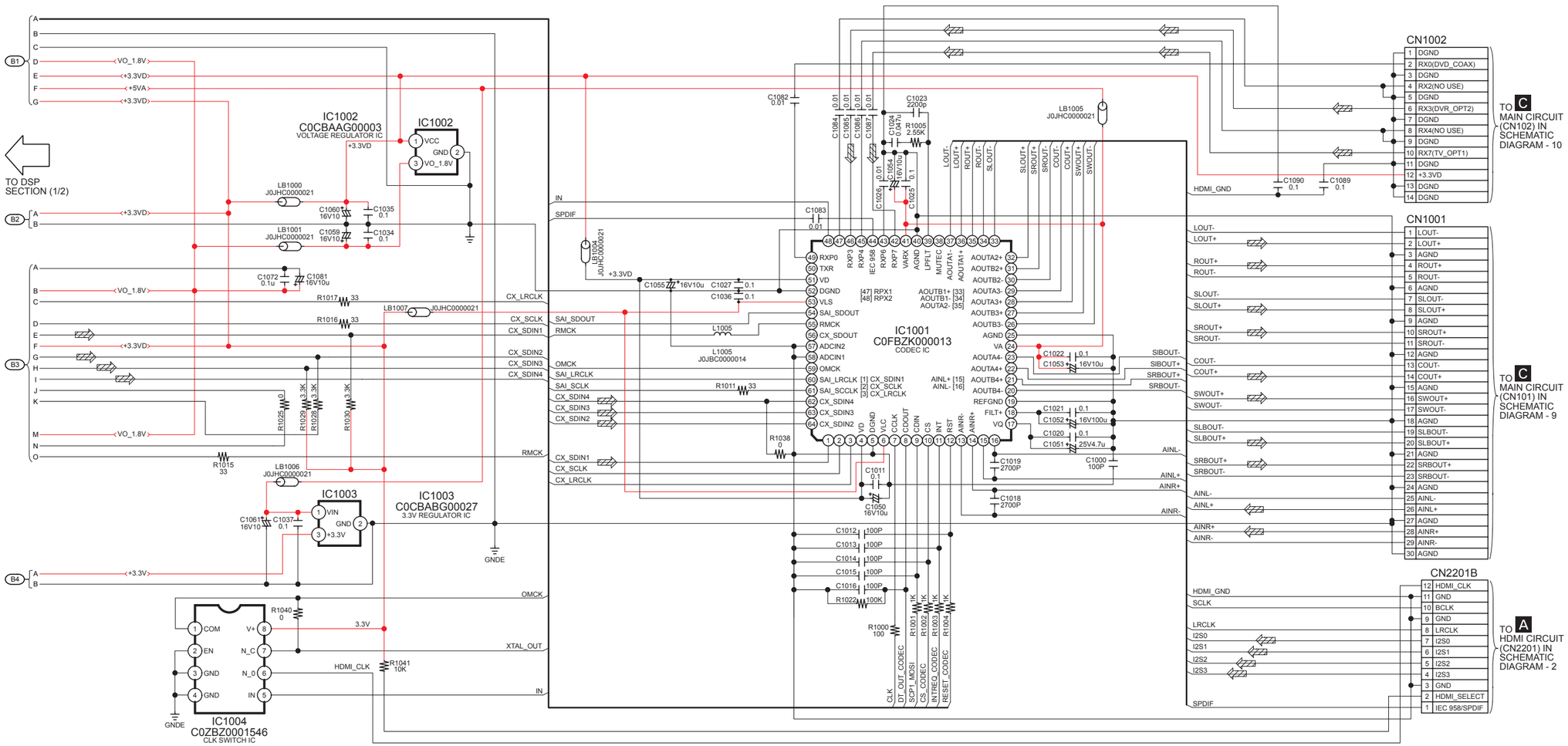
CORE GND　IOGND

1/2　2/2　SC-HTR310P DSP CIRCUIT

SCHEMATIC DIAGRAM - 6

B DSP CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE



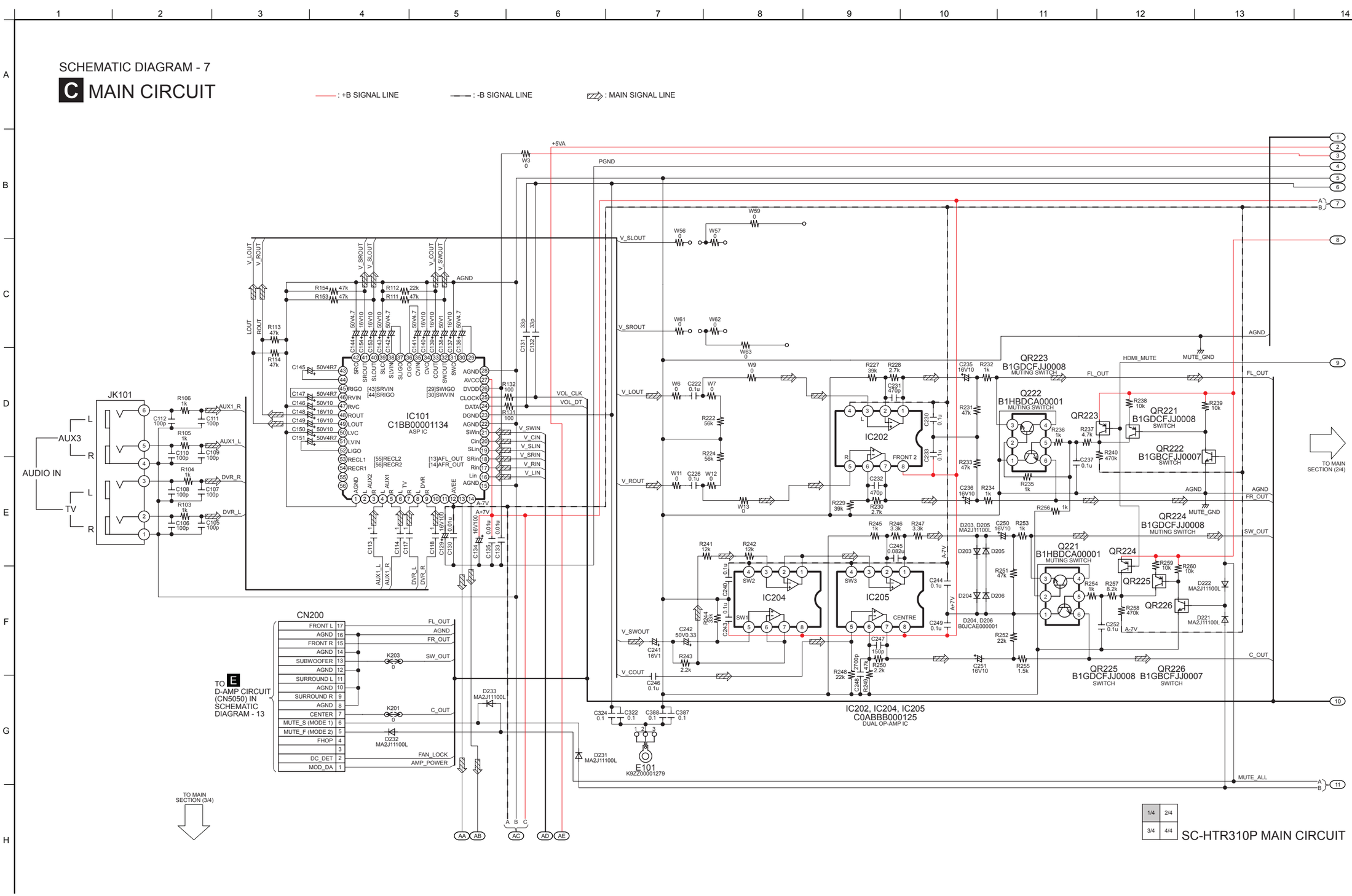
1/2 2/2 SC-HTR310P DSP CIRCUIT

13.3. MAIN CIRCUIT

SCHEMATIC DIAGRAM - 7

C MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE



1/4	2/4
3/4	4/4

SC-HTR310P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 8

C MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE

IC109
C0CBADD00010
VOLTAGE REGULATOR IC

IC301
RFKWHTR210
MICRO PROCESSOR IC

IC302
EEPROM IC
(NOT SUPPLIED)

IC303
C0EBE0000338
RESET IC

IC110
C0CBACC00046
REGULATOR IC

Q311
B1ADCF000063
SYS6V VOLTAGE REGULATOR

QR271
B1GBCFJA0017
SWITCH

X301
H2B100500004

D273 B0ADCJ000020
D272 B0ACCK000005
D278 B0JCAE000001
D311 B0JCAE000001
D301 MA2J11100L
D302 MA2J11100L
D307 MA2J11100L
D277 MA2J11100L
D305 MAZ80470ML

JW601*
JW602*

TO D PANEL CIRCUIT (CN601) IN SCHEMATIC DIAGRAM - 11

TO D PANEL CIRCUIT (CN602) IN SCHEMATIC DIAGRAM - 11

LJ1B*
TO MAIN CIRCUIT (LJ1A*) IN SCHEMATIC DIAGRAM - 10

CN103
TO B DSP CIRCUIT (CN1003) IN SCHEMATIC DIAGRAM - 5

CN222
TO A HDMI CIRCUIT (CN2202) IN SCHEMATIC DIAGRAM - 2

CN106
FOR ON BOARD PROGRAMMING

TO MAIN SECTION (1/4)

TO MAIN SECTION (4/4)

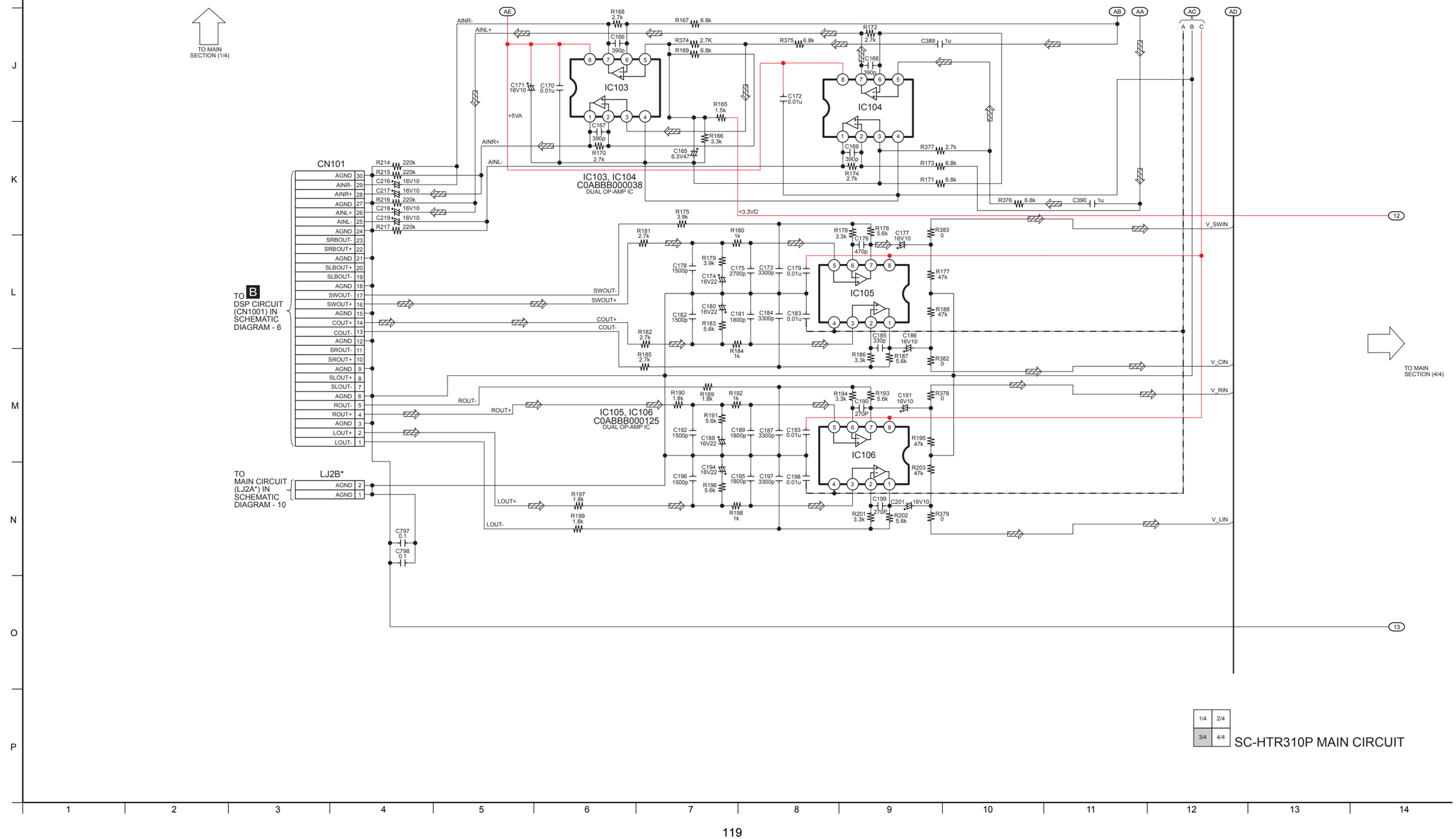
1/4	2/4
3/4	4/4

SC-HTR310P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 9

C MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE



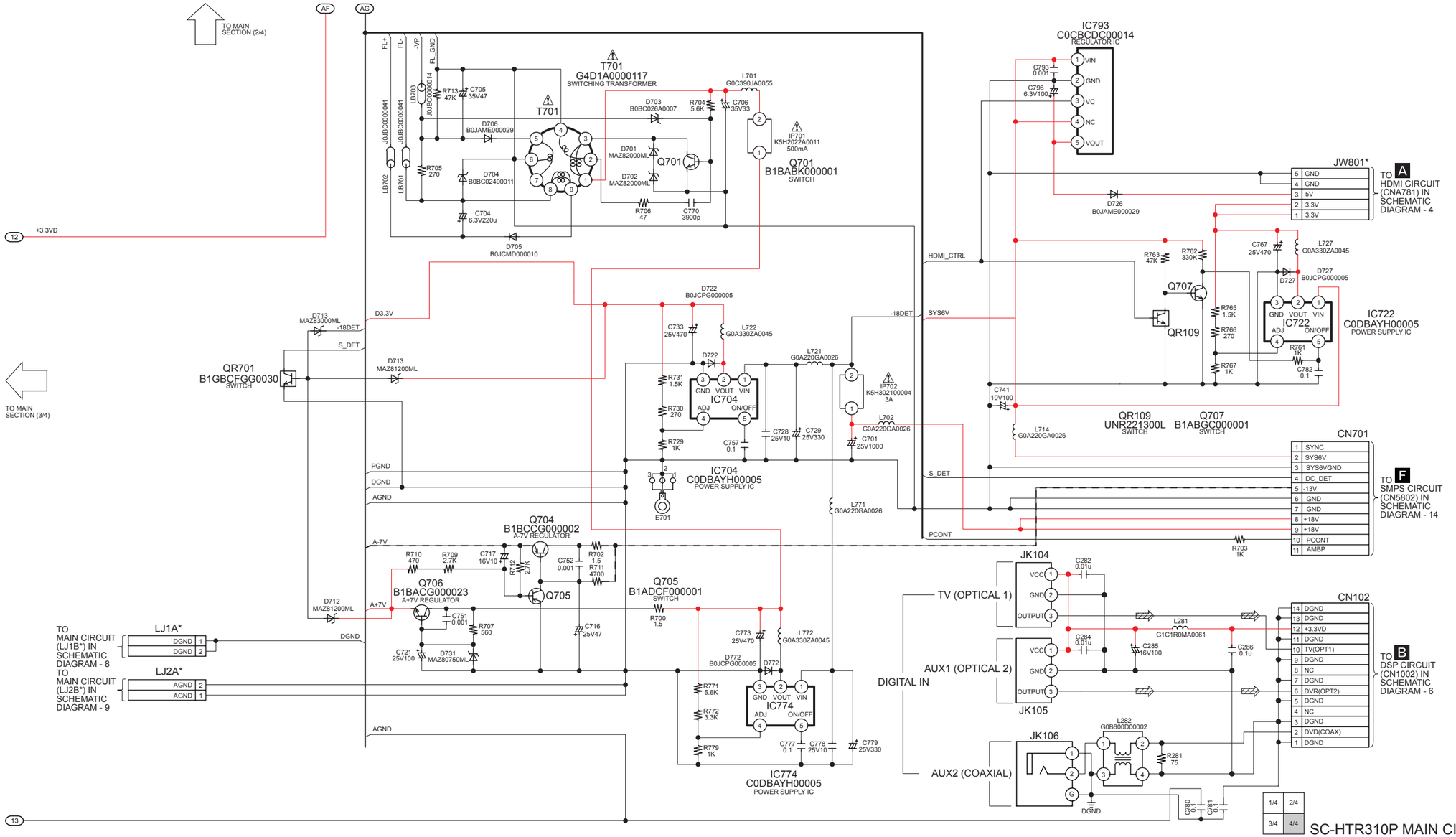
1/4	2/4
3/4	4/4

SC-HTR310P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 10

C MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE



13.4. PANEL CIRCUIT

SCHEMATIC DIAGRAM - 11

D PANEL CIRCUIT

: +B SIGNAL LINE

: -B SIGNAL LINE

FL601
A2BB00000158
FL DISPLAY

QR601
B1GDCFJJ0008
SWITCH

QR604
B1GDCFJJ0008
SWITCH

QR402
B1GBCFJJ0007
SWITCH

QR603
B1GBCFJJ0007
SWITCH

IC601
C0HBB0000057
FL DRIVER IC

CN601

1	FL+
2	FL-
3	FL_GND
4	-VP
5	REMOTE
6	Vref
7	VSS
8	KEY1

TO C MAIN CIRCUIT (JW601*) IN SCHEMATIC DIAGRAM - 8

CN602

1	KEY2
2	POWER_SAVE
3	PCONT
4	FL_DI
5	FL_CLK
6	FL_CS
7	RC_LED
8	DGND
9	DGND

TO C MAIN CIRCUIT (JW602*) IN SCHEMATIC DIAGRAM - 8

Z600
B3RAD0000143
REMOTE SENSOR

SC-HTR310P PANEL CIRCUIT

13.5. D-AMP CIRCUIT

SCHEMATIC DIAGRAM - 12

E D-AMP CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE

IC5500
C0JBAB000902
INVERTER GATE
(CLOCK GENERATOR)

IC5501
C0JBAF000716
D-TYPE FLIP-FLOP

IC5300
C1BA00000487
AUDIO DIGITAL POWER AMP

JK5001
FL-
FL+
FR-
FR+
C-
C+
SW-
SW+
8 FRONT L-
7 FRONT L+
6 FRONT R-
5 FRONT R+
4 CENTER -
3 CENTER +
2 SUBWOOFER -
1 SUBWOOFER +
FRONT
CENTER
SUBWOOFER
SPEAKERS

CN5501
1 FAN DC OUT
2 FAN GND
3 FAN LOCK
TO FAN

Q5603
B1ADCE000012
SWITCH

Q5604
B1ABCF000176
SWITCH

Q5601
B1ABCF000176
SWITCH

Q5101
B1ABCF000176
DC DETECT

Q5102
B1ABCF000176
DC DETECT

Q5640
B1BACD000018
FAN MOTOR DRIVE

Q5641
2SC584500L
FAN LOCK DETECT

Q5642
2SC584500L
FAN MOTOR DRIVE

Q5644
2SC584500L
FAN MOTOR DRIVE

L5300
G0A150L00003

L5301
G0B9R5K00003

ZJ5410

TO D-AMP SECTION (2/2)

1/2 2/2 SC-HTR310P D-AMP CIRCUIT

SCHEMATIC DIAGRAM - 13

E D-AMP CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MAIN SIGNAL LINE

IC5000
C1BA00000487
AUDIO DIGITAL POWER AMP

CN5500
CN5050
L5501 J0JKB0000020
L5500 J0JKB0000020
L5000 G0A150L00003
L5001 G0B9R5K00003
L5002 G0B9R5K00003
L5201 G0B9R5K00003
ZJ5400
K5302
K5004

TO F SMPS CIRCUIT (H5801*) IN SCHEMATIC DIAGRAM - 14

TO D-AMP SECTION (1/2)

TO C MAIN CIRCUIT (CN200) IN SCHEMATIC DIAGRAM - 7

13.6. SMPS CIRCUIT

SCHEMATIC DIAGRAM - 14

F SMPS CIRCUIT

—— : +B SIGNAL LINE ----- : -B SIGNAL LINE

TO E D-AMP CIRCUIT (CN5500) IN SCHEMATIC DIAGRAM - 13

H5801*
+30V_SENSE 8
+30V_SENSE 7
GND 6
GND 5
-30V_SENSE 4
-30V_SENSE 3
FAN_GND 2
FAN_18V 1

C5831 0.1
C5832 0.1
C5823 0.1

DCDET1
DCDET
FAN_18V
-30V_SENSE
+30V_SENSE

D5809 MA2J11100L

Q5861 - Q5862
B1ABCF000176
TRANSFORMER TEMP DETECT

Q5860
2SA207700L
TRANSFORMER TEMP DETECT

R5860 10K
R5861 12K
R5862 10K
R5863 68K
R5864 10K
Q5861
Q5862
C5869 0.1

D5801
B0HBSM000043

D5810 DA2C10100L0013

T5701
ETS42BM1A1AC
MAIN TRANSFORMER

-30V
AMPGND
+30V
+FAN 18V
GND
+18V
-12V
DRAIN
VIN
VCC

R5703 33K
R5702 33K
C5713 0.01
D5702 B0ZAZ0000052

TO SMPS SECTION (2/2)

R5632 2.2K
C5805 35V2200
C5821 0.01
C5820 0.01
C5819 0.01
C5822 0.01
C5806 35V2200

R5841 120K
R5840 82K
R5834 2.2K

R5800 8.2K
R5801 10K
QR5801
UNR221400L
DC DETECT

D5807 MA2J11100L
QR5802
B1GDCFGA0018
DC DETECT
W5807 0

C5800 0.01
C5826 0.01
ZJ5801

D5802
B0HBSM000043

D5803 B0HFRJ000012
C5813 35V470
D5804 B0EAMM000057
C5816 25V470
D5805 B0EAMM000057
C5824 25V470

CN5802
AM_BP 11
PCONT 10
DC18V 9
DC18V 8
+18V_-12V_GND 7
+18V_-12V_GND 6
-13V 5
DCDET 4
SYS_GND 3
SYS6V 2
SYNC 1

TO C MAIN CIRCUIT (CN701) IN SCHEMATIC DIAGRAM - 10

PCONT
DC_18V
C5812 0.1
C5815 0.1
W5801 0
-13V
DCDET
C5896 0.1
SYS6V
DCDET1

K6 0
K7 0

W5806 0

Q5720
2SC3940ARA
CURRENT LIMITING SWITCH

Q5722
B1ABCF000176
CURRENT LIMITING SWITCH

D5721 B0EAMM000057
R5720 22

Q5721
2SA207700L
SWITCHING

R5724 120
R5723 1.2K
D5726 B0EAKM000117
D5721 MAZ81800ML
Q5720
D5729 B0EAMM000057
R5721 10K
C5720 0.1
D5722 B0BC019A0007
D5728 MA2J11100L
Q5722
R5722 1.2K
D5724 MA2J11100L
D5727 MA2J11100L
R5725 0

R5732 100
IC5701
C5HACYY00004
SWITCHING REGULATOR
OCP/BD 7
FB 6
OLP/SS 5
VCC 4
GND 3
S 2
D 1
C5730 50V1
C5726 0.1
C5727 3300P
R5726 0.1
R5727 0.1

D5732 B0BC035A0007
C5724 470P
C5725 0.1
R5731
C5723 470P
R5733 47K

R5730 1K
D5725 B0BC6R100010

D5723 MA2J11100L
C5728 1000P
C5721 0.22
C5722 1000P
C5700 F1BAF1020020 1000P
ZJ5803
R5729 18K
R5728 100K
R5750 0

+30V_SENSE
-30V_SENSE
SYS6V
PCONT

C5817 100V0.22
R5814 8.2K
R5802 27K
R5803 5.6K
R5804 33K
R5806 15K
C5818 0.1
R5805 2.2K
C5810 0.1

IC5801
C0DABFC00002
SHUNT REGULATOR

W5804 0
W5803 0
W5805 0

R5809 330
R5807 330
R5808 2.2K

PC5720
B3PBA0000402
FEED BACK

R5811 1.5K
R5816 1.5K
R5815 2.7K
R5813 24K
R5812 8.2K
Q5802
B1ABCF000176
FEED BACK CONTROL
C5825 0.1
D5806 MAZ80750ML

PC5701
B3PBA0000402
FEED BACK

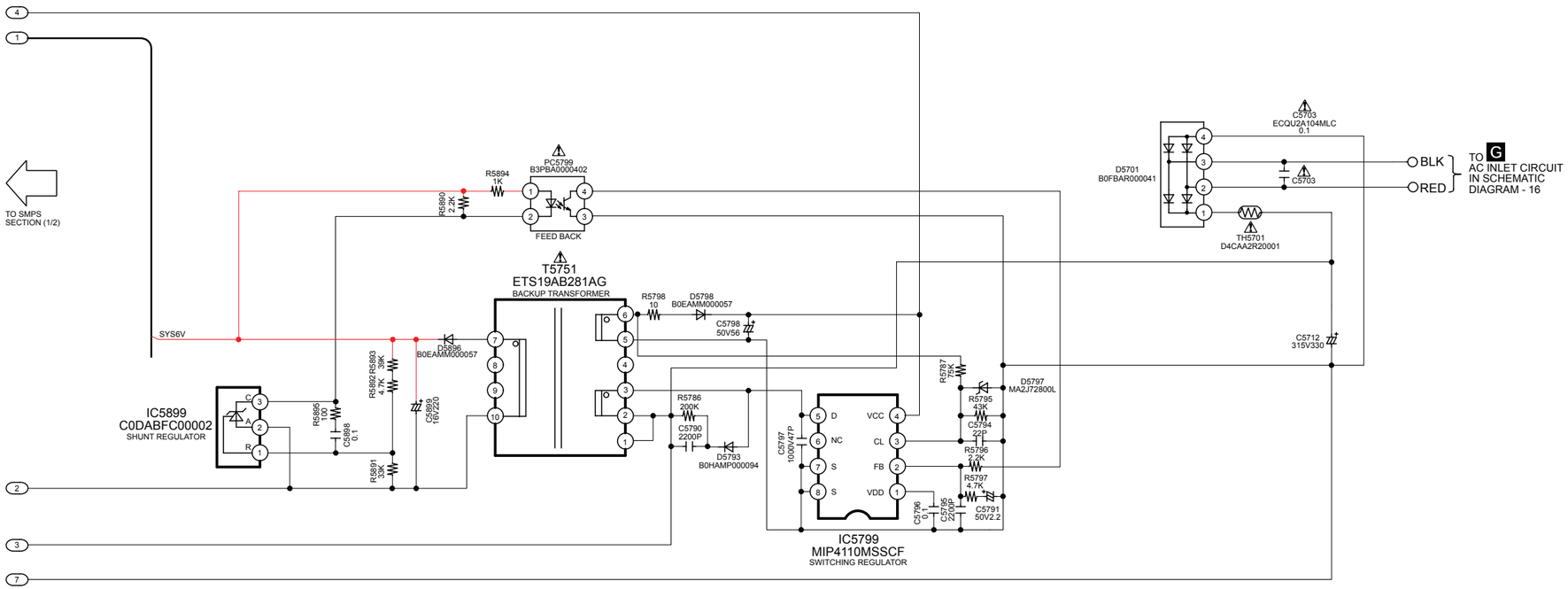
R5810 330
R5817 330
QR5810
B1GBCFLL0037
INVERTER

1/2 2/2 SC-HTR310P SMPS CIRCUIT

SCHEMATIC DIAGRAM - 15

F SMPS CIRCUIT

—— : +B SIGNAL LINE ---- : -B SIGNAL LINE

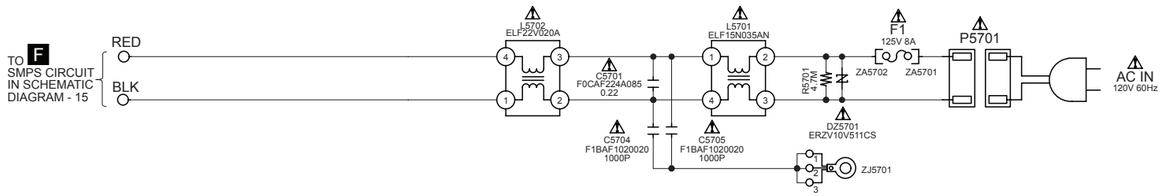


1/2 2/2 SC-HTR310P SMPS CIRCUIT

13.7. AC INLET CIRCUIT

SCHEMATIC DIAGRAM - 16

G AC INLET CIRCUIT

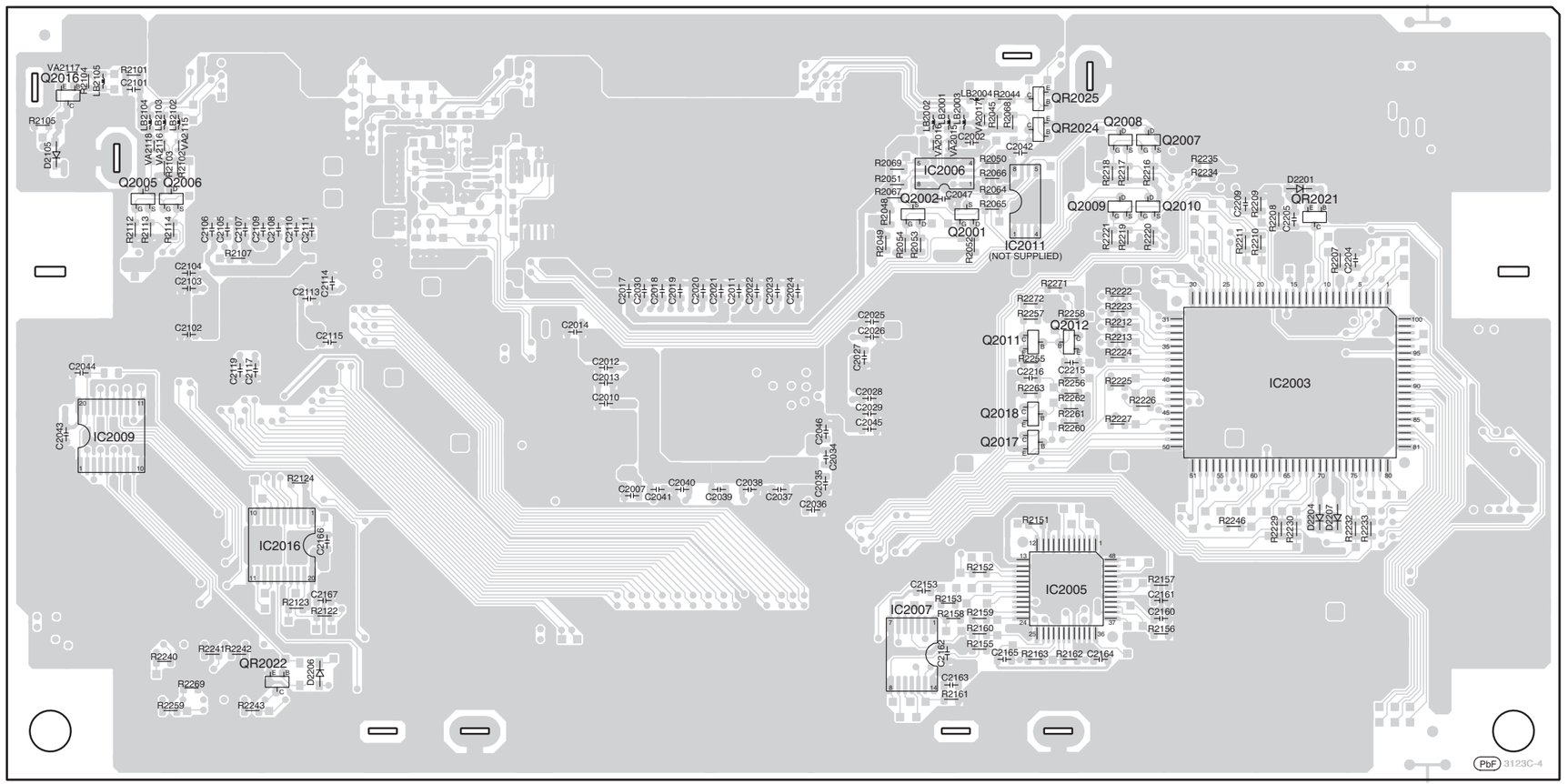


SC-HTR310P AC INLET CIRCUIT

14 Printed Circuit Board Diagrams

14.1. HDMI P.C.B.

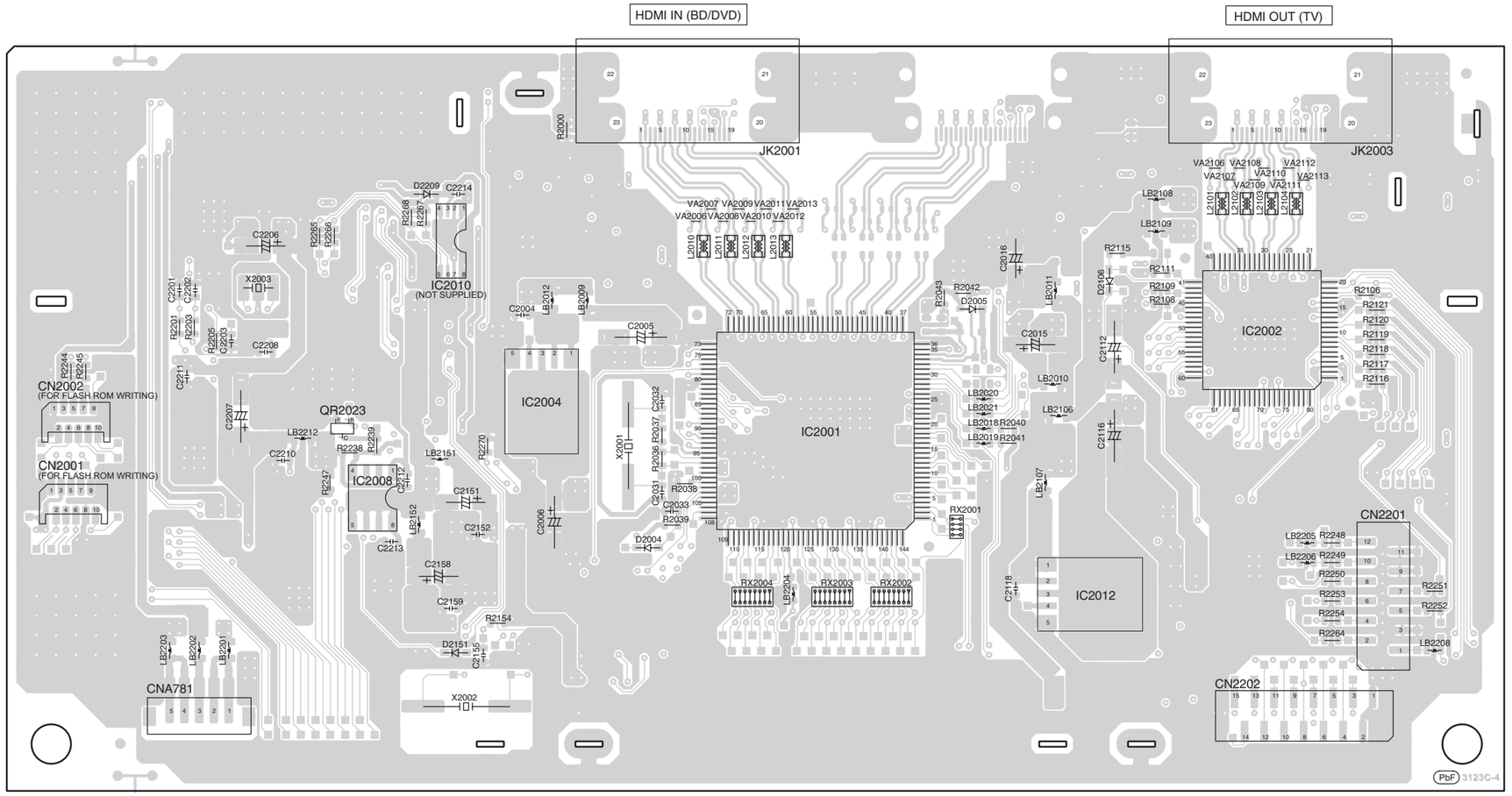
A HDMI P.C.B. (REP4030K-T)



(SIDE A)

SC-HTR310P
HDMI P.C.B.

A HDMI P.C.B. (REP4030K-T)

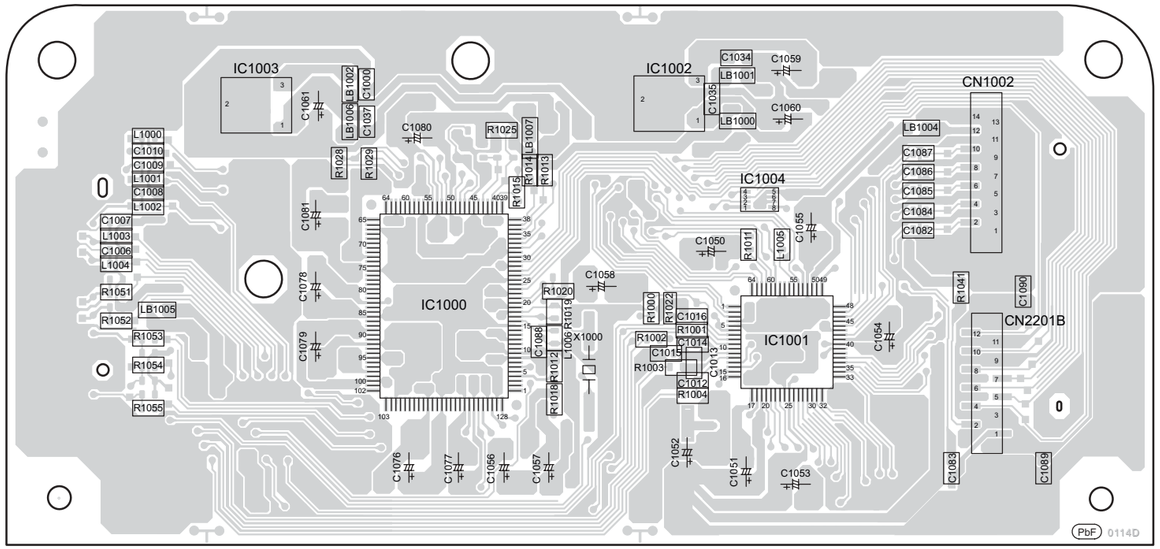


(SIDE B)

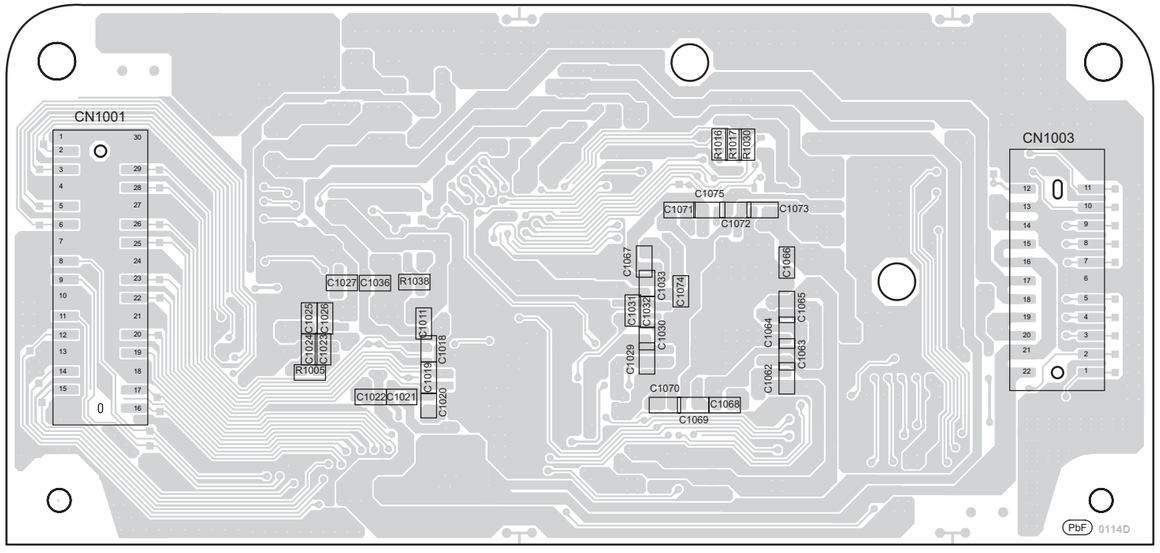
SC-HTR310P
HDMI P.C.B.

14.2. DSP P.C.B.

B DSP P.C.B. (REPV0114D-T)



(SIDE A)

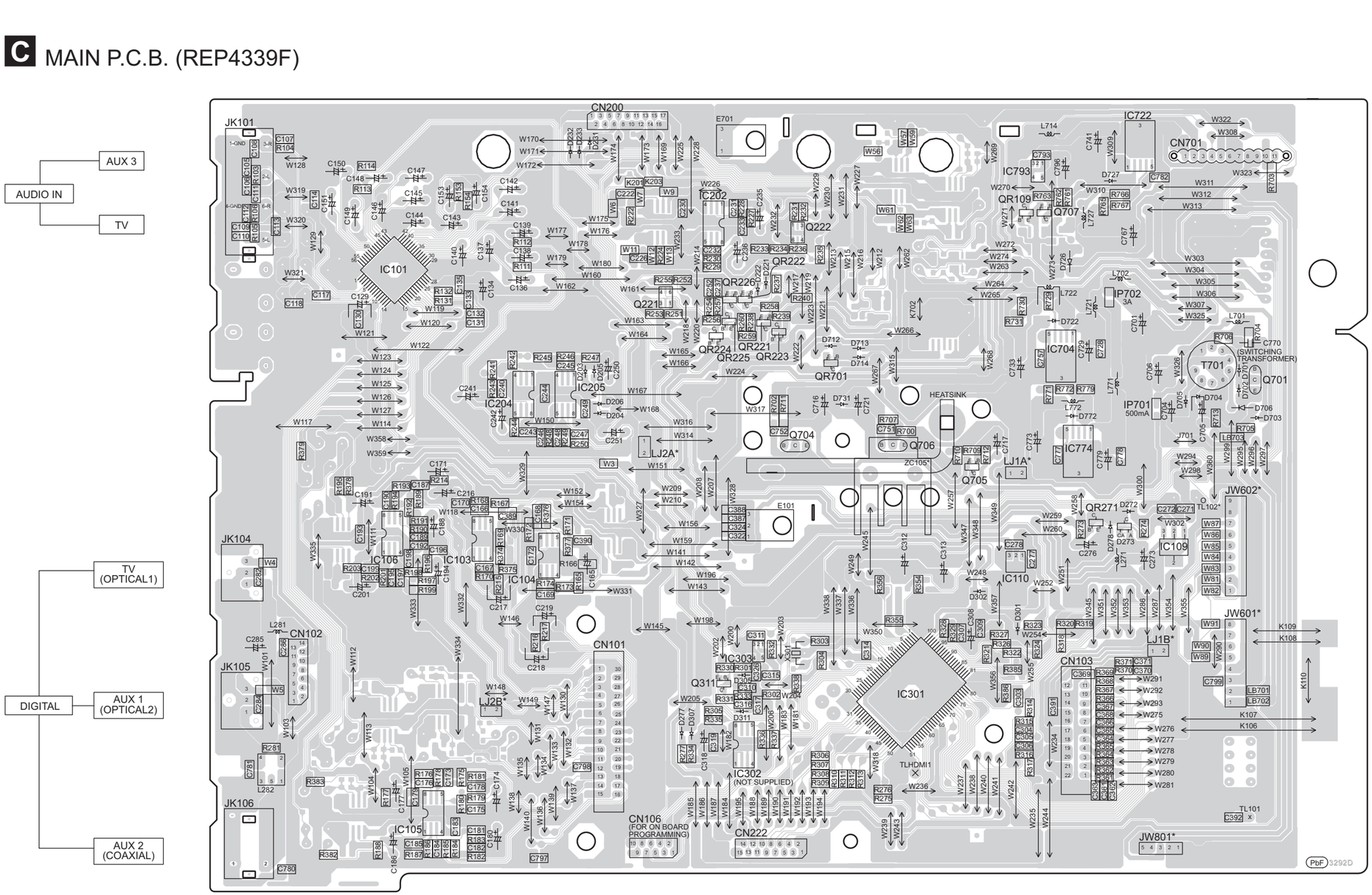


(SIDE B)

SC-HTR310P
DSP P.C.B.

14.3. MAIN P.C.B.

C MAIN P.C.B. (REP4339F)

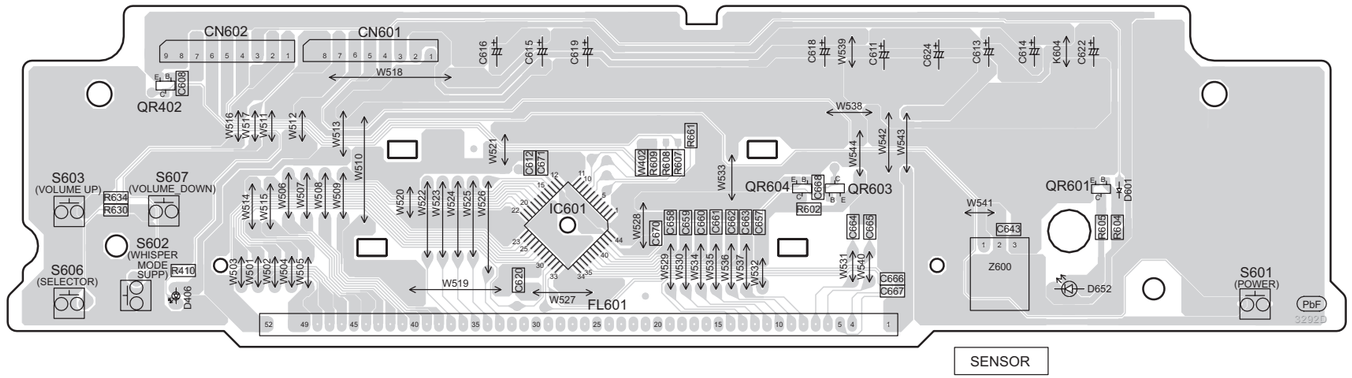


*FOR INDICATION ONLY

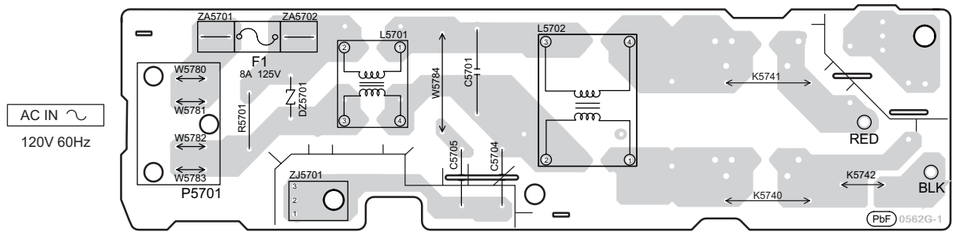
SC-HTR310P
MAIN P.C.B.

14.4. PANEL P.C.B. and AC INLET P.C.B.

D PANEL P.C.B. (REP4339F)

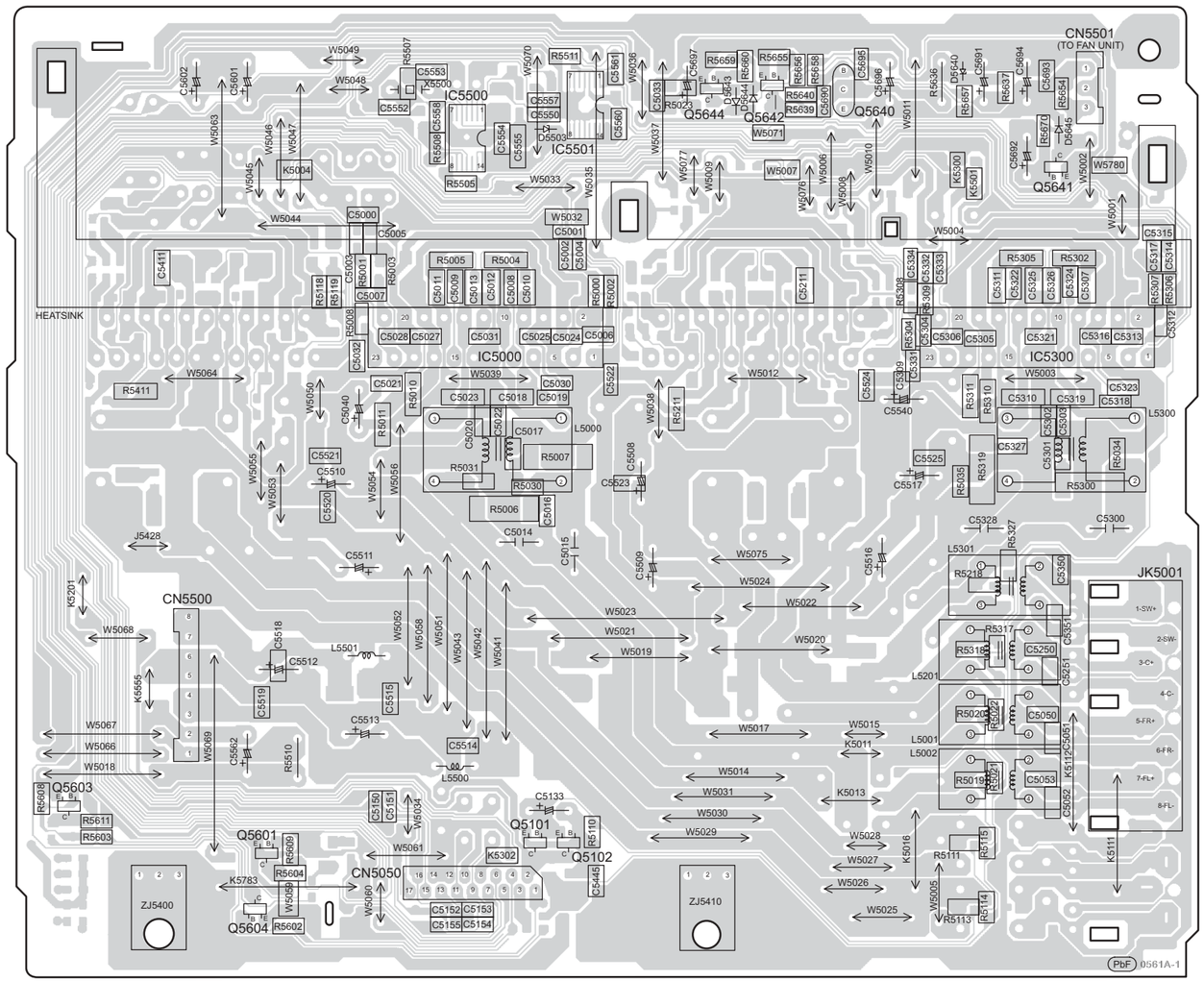


G AC INLET P.C.B. (REPX0676N)



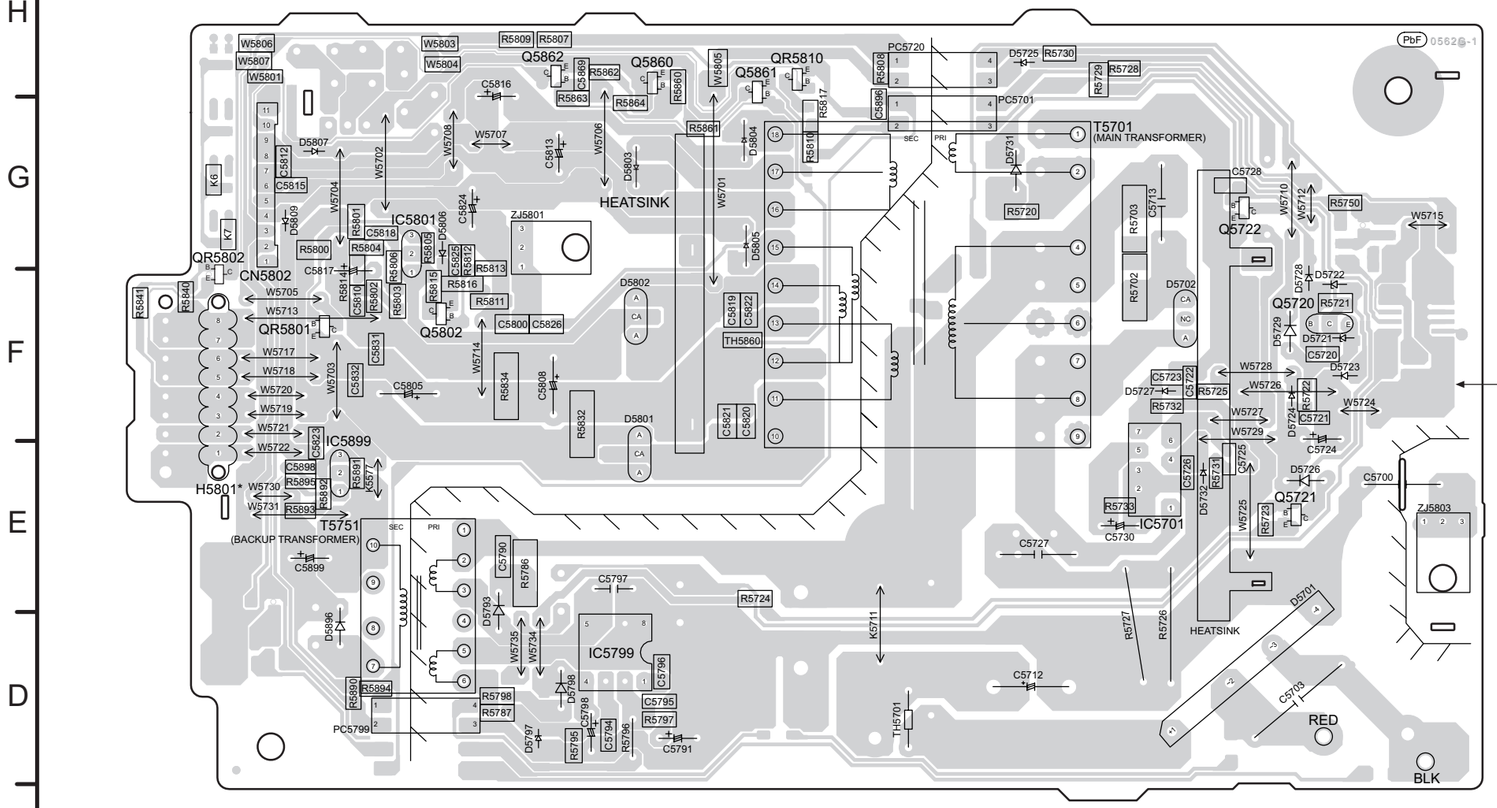
14.5. D-AMP P.C.B.

E D-AMP P.C.B. (REPX0621M)



14.6. SMPS P.C.B.

F SMPS P.C.B. (REPX0676N)

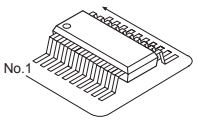
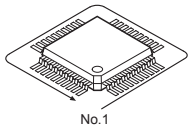
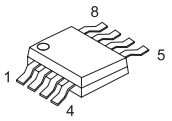
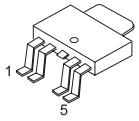
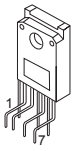
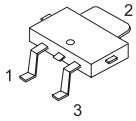
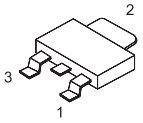
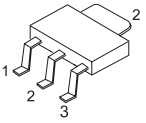
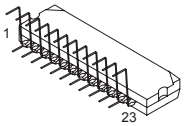
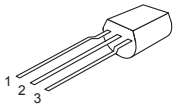
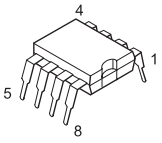
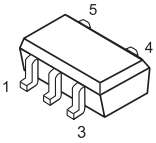
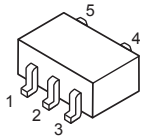
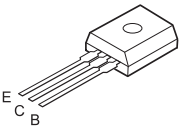
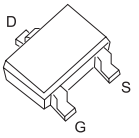
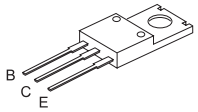
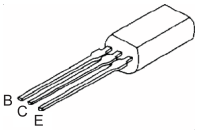
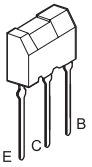
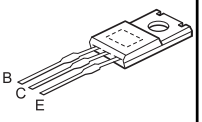
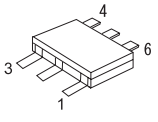
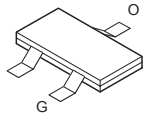
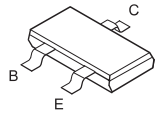
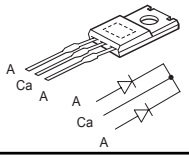
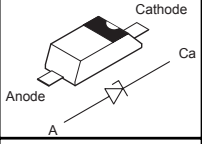
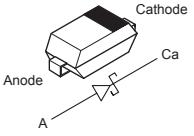
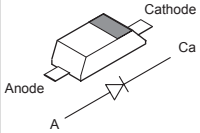
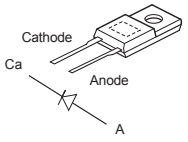
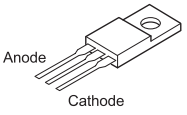
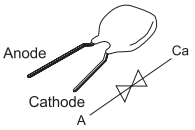
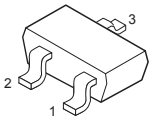
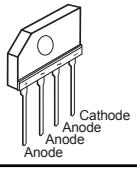
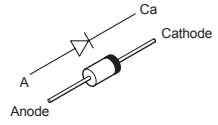
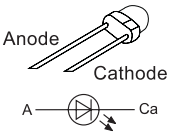
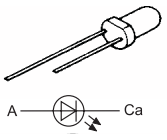


CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

*FOR INDICATION ONLY

SC-HTR310P
SMPS P.C.B.

15 Illustration of IC's, Transistors and Diodes

 C0JBAK000204(14P) C0JBAZ001466(20P) C0ZBZ0001001(8P) C0DBZYY00244(8P) C0JBAF000716(14P) C0JBAB000902(14P) C0ZBZ0001546(8P)		 C0FBZK000013(64P) C1BB00001134(56P) C1AB00002656(144P) C1BB00000692(48P) C1AB00002541(80P) C0HBB0000057(44P) C2HBCY000030(128P) C2CBYY000636(100P) RFKWHTR210(100P)		C0ABBB000125 C0ABBB000038 
C0CBCAG00015 C0CBAAG00003 C0DBAYH00005 	C5HACYY00004 	C0CBABG00027 	C0CBACC00046 	C0CBADD00010 	C1BA00000487 
C0DABFC00002 	MIP4110MSSCF 	C0EBE0000338 	C0CBCDC00014 	B1BACD000018 	B1CBGD000001 
B1BACG000023 	2SC3940ARA 	B1BABK000001 	B1BCCG000002 	B1HBDCA00001 	B1GDCFJJ0008 B1GBCFJJ0007 
	B1ABCF000176 B1ADCE000012 B1GBCFLL0037 UNR221400L 2SA207700L 2SC584500L B1ADCF000063	B1ABGC000001 B1ADCF000001 B1GBCFJA0017 UNR221300L B1GBCFGG0030 B1ABCF000079 B1GDCFGA0018	B0HBSM000043 	B0BC019A0007 B0BC6R100010 	B0JCPG000005 
	MA2J11100L B0ACCK000005 MA2J72800L B0BC035A0007 B0BC02400011 B0BC026A0007 B0JCMD000010	B0JCAE000001 MAZ80510ML MAZ80750ML MAZ81200ML MAZ81800ML MAZ83000ML MAZ82000ML MAZ80470ML	B0HFRJ000012 	B0ZAZ0000052 	ERZV10V511CS 
B0ADCJ000020 	B0FBAR000041 		B0EAKM000117 B0EAMM000057 B0HAMP000094 B0JAME000029	B3AAA0000489 	B3ACA0000261 

16 Terminal Function of IC's

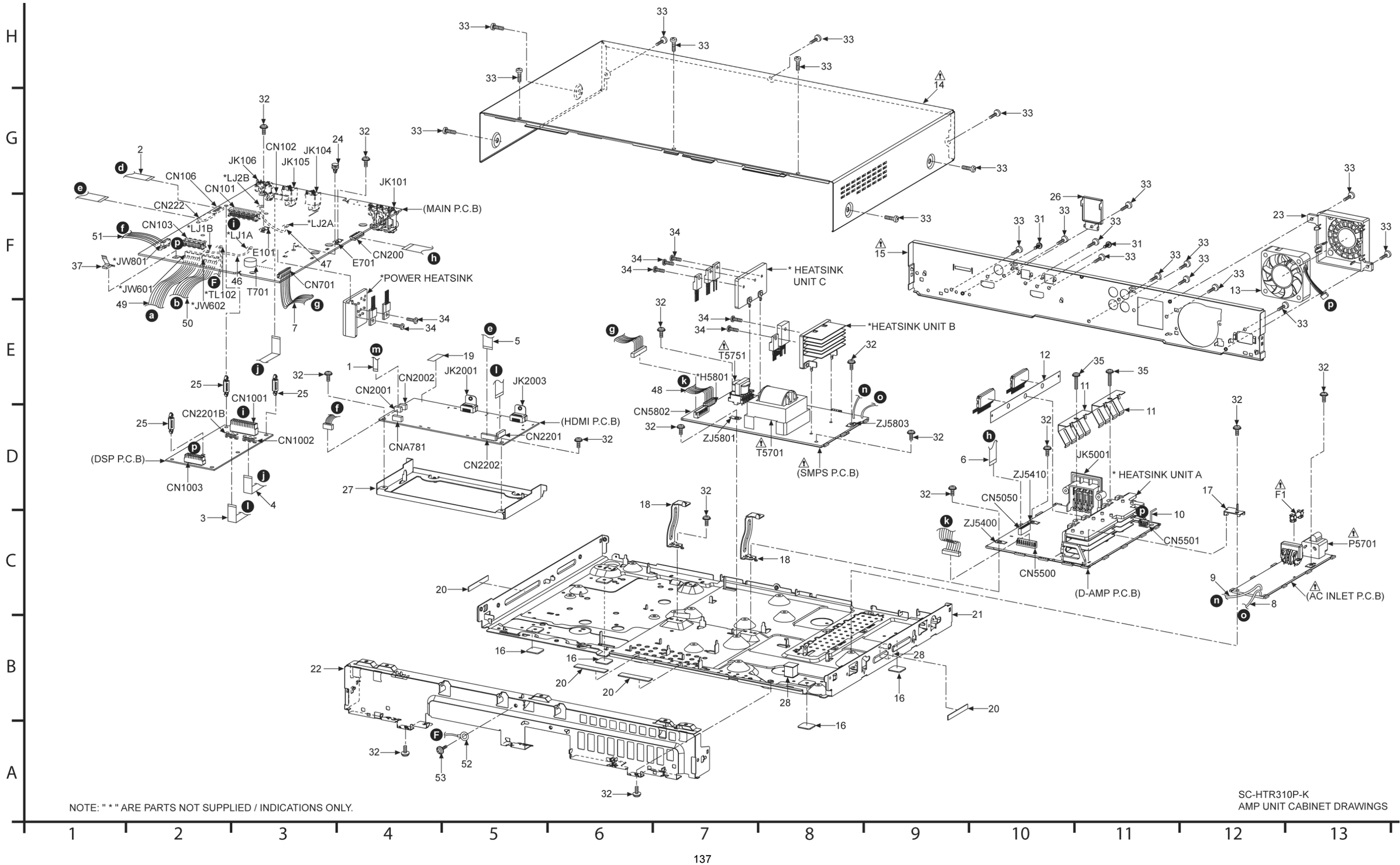
16.1. IC301 (RFKWHTR210) IC MICRO-PROCESSOR

Pin No.	Terminal Name	I/O	Function
1	PCONT	-	No Connection
2	DETECT	-	No Connection
3	LINK	-	No Connection
4	N.C	-	No Connection
5	VOL_CLK	O	Volume + Clock
6	VOL_DT	O	Volume + Data
7	N.C	-	No Connection
8	BYTE	-	GND
9	CNVSS	-	CNVSS
10	N.C	-	No Connection
11	N.C	-	No Connection
12	RESET	I	Reset input pin for active "L"
13	XOUT	O	Clock output [10.00MHz]
14	VSS	-	GND
15	XIN	I	Clock input [10.00MHz]
16	VCC	-	Voltage Supply
17	NM1	I	NM1
18	N.C	-	No Connection
19	REMOTE	I	Remote Control signal input
20	AC_SYNC	I	Power Failure Detection
21	MUTE_ALL	O	MUTE all Channel
22	MUTE_S/C	O	MUTE Center surround Channel
23	N.C	-	No Connection
24	N.C	-	No Connection
25	N.C	-	No Connection
26	N.C	-	No Connection
27	N.C	-	No Connection
28	AMP_POWER	O	Amplifier Power Shut Down
29	SCL	I/O	EEPROM CLOCK
30	SDA	I/O	EEPROM DATA
31	TXD	-	For Software
32	RXD	-	For Software
33	SCLK	-	For Software
34	BUSY	-	For Software
35	M_SI	I	Communication with HDMI uP
36	H_SO	0	Communication with HDMI uP
37	M_CLK	O	Communication with HDMI uP
38	N.C	-	No Connection
39	N.C	-	No Connection
40	N.C	-	No Connection
41	PIN 41	-	For Software
42	N.C	-	No Connection
43	M_RESET	O	RESET signal for HDMI uP
44	M_CS	O	Chip Select with HDMI uP
45	N.C	-	No Connection
46	PIN 46	-	For Software
47	PWR_ CONTROL	I	Input for CEC power supply control
48	HDMI_MUTE	I	HDMI mute detection
49	H_REQ	I	Interrupt Request HDMI uP
50	HDMI CTRL	O	Power saving mode ON/OFF output (ON : L)
51	TLHDMI1	-	No Connection
52	N.C	-	No Connection
53	N.C	-	No Connection
54	N.C	-	No Connection
55	N.C	-	No Connection
56	N.C	-	No Connection
57	N.C	-	No Connection
58	RC_LED	0	Control for GAME LED
59	FL_CS	0	FLD CHIP SELECT
60	FL_CLK	0	FLD CLOCK
61	FL_DI	0	FLD DATA I/P

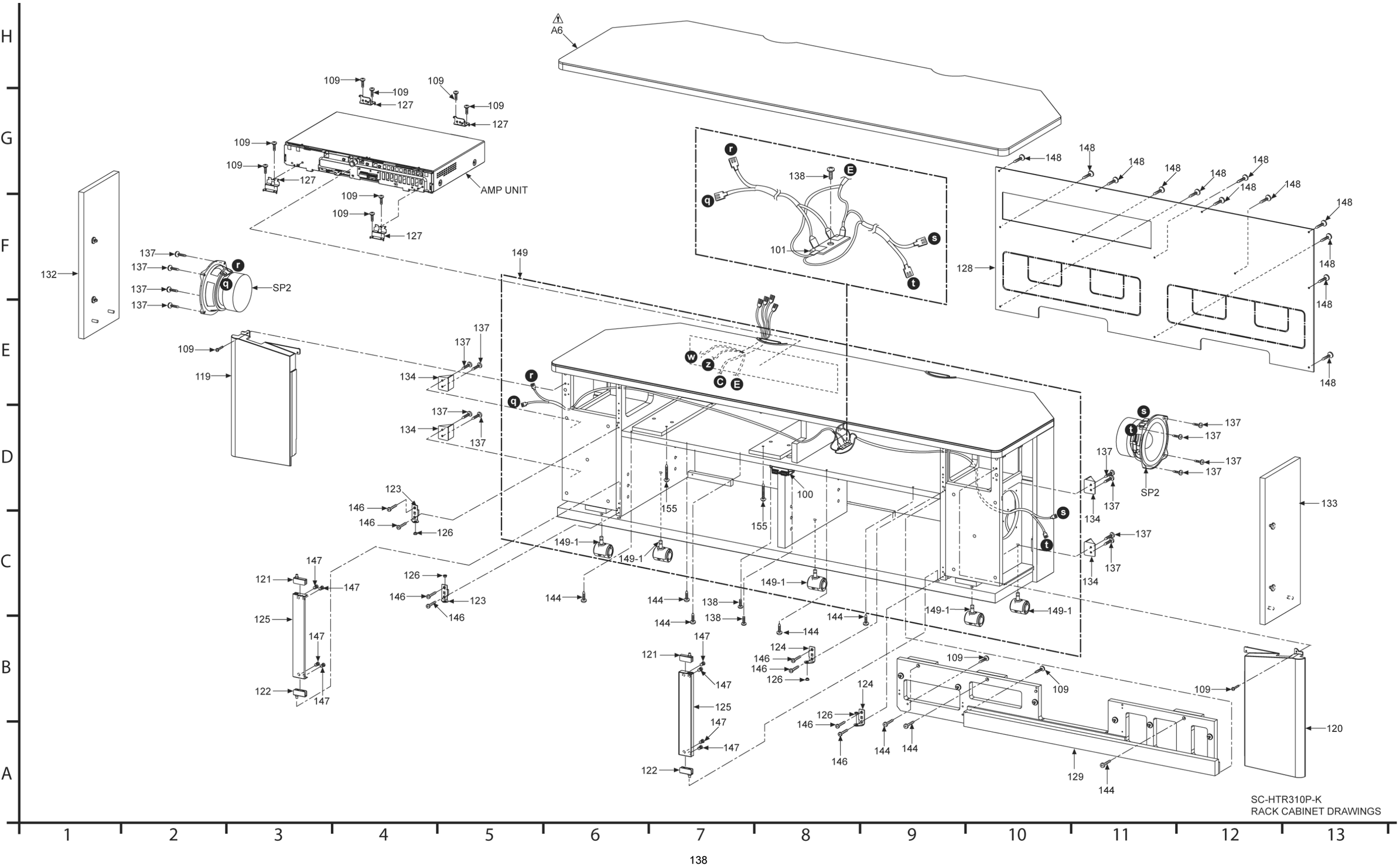
Pin No.	Terminal Name	I/O	Function
62	VCC2	-	Voltage Supply
63	N.C	-	No Connection
64	VSS	-	GND
65	N.C	-	No Connection
66	N.C	-	No Connection
67	N.C	-	No Connection
68	N.C	-	No Connection
69	CLK_DSP	0	DSP serial clock
70	INTREQ_DSP	I	DSP Interrupt Request
71	BUSY_DSP	I	DSP communication Status
72	RESET_DSP	0	DSP RESET
73	CS_DSP	0	DSP Chip Select
74	MOSI_DSP	0	Main Data Out - DSP
75	INTREQ_ CODEC	I	CODEC Interrupt Request
76	CS_CODEC	0	CODEC Chip Select
77	MISO_DSP	I	DSP Data OUT - Main
78	RESET_CODEC	0	CODEC RESET
79	DT_OUT_ CODEC	I	CODEC Data Out - Main
80	POWER_ON	0	Power Key Detection
81	KEY1	I	Key Input 1
82	KEY2	I	Key Input 2
83	REG1	-	No Connection
84	REG2	-	No Connection
85	N.C	-	No Connection
86	N.C	-	No Connection
87	N.C	-	No Connection
88	N.C	-	No Connection
89	N.C	-	No Connection
90	N.C	-	No Connection
91	N.C	-	No Connection
92	PCONT (POWER RELAY)	0	Power Relay Control
93	FAN_LOCK	I	FAN LOCK Detection
94	DC_DET	I	Power Amp Failure
95	S_DET	I	Power supply Short detection
96	AVSS	-	AVSS
97	FILTER	I	Filter setting
98	Vref	-	Reference power supply of the A/D converter [3.3v]
99	AVcc	-	AVCC
100	N.C	-	No Connection

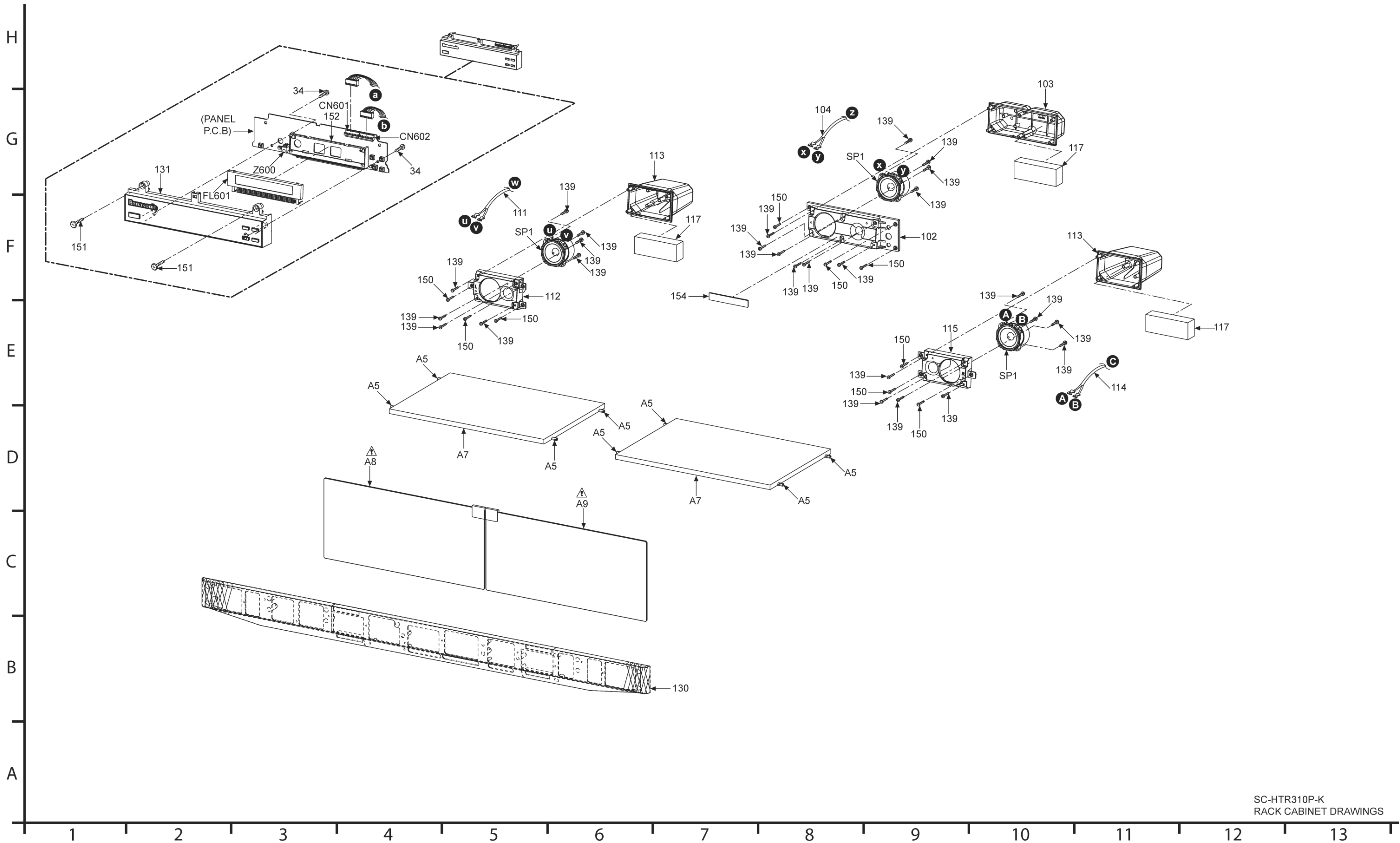
17 Exploded Views

17.1. Cabinet Parts Location (Amp Unit)



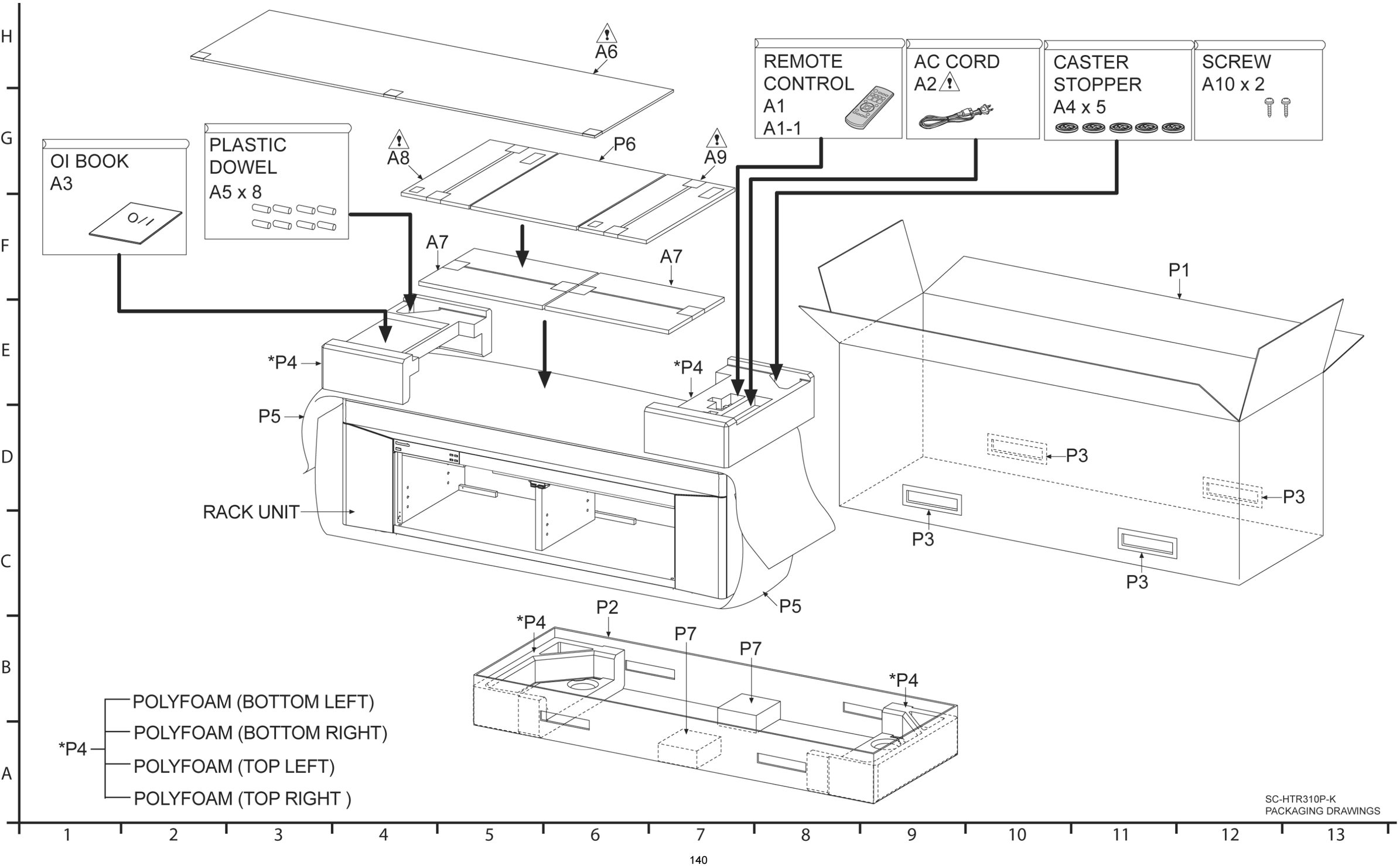
17.2. Cabinet Parts Location (Rack Cabinet)





SC-HTR310P-K
RACK CABINET DRAWINGS

17.3. Packaging



SC-HTR310P-K
PACKAGING DRAWINGS

18 Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

  Parts without these indications can be used for all areas.
- Capacitor values are in microfarads (μF) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by **PAVCSG.**
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian	Ur:	Ukraine	Pr:	Portuguese		

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REE1429-1	10P FFC CABLE (ROM WRITING)	[M]
2	REE1430	10P FFC CABLE (PROGRAMMING)	[M]
3	REE1431	12P FFC CABLE (DSP-HDMI)	[M]
4	REE1432	14P FFC CABLE (DSP-MAIN)	[M]
5	REE1433	15P FFC CABLE (HDMI-MAIN)	[M]
6	REE1434	17P FFC CALBE (D-AMP-MAIN)	[M]
7	REX1283	11P WIRE (MAIN-SMPS)	[M]
8	REXX0640-J	BLACK WIRE (AC INLET-SMPS)	[M] ⚠
9	REXX0641-J	RED WIRE (AC INLET-SMPS)	[M] ⚠
10	REVX0002	WIRE CLAMPER	[M]
11	RMC0465	TR SPRING	[M]
12	RMZX0039	IC INSULATOR	[M]
13	L6FAYYYH0079	FAN MOTOR	[M]
14	RKMX0141B-S1	TOP CABINET	[M] ⚠
15	RGR0383D-C	REAR PANEL	[M] ⚠
16	RKA0059-K	LEG FELT	[M]
17	RMAX0118-1	PCB BRACKET	[M]
18	RMAX0131	MAIN PCB BRACKET B	[M]
19	RMFV0063	HIMELON	[M]
20	RMFV0064	EVA	[M]
21	RMKX0144B-3	BOTTOM CHASSIS	[M]
22	RMQ1643	FRONT SHIELD	[M]
23	RMQX0233-K	FAN COVER	[M]
24	RMR0502A-W	PCB SUPPORT	[M]
25	RMR1359-W	PCB SUPPORT	[M]
26	RMZV0030-K	WIRE COVER	[M]
27	RSCV0082	SHIELD	[M]
28	RXQX0041	CUSHION ASS'Y	[M]
31	XSN3+4FJ	SCREW	[M]
32	RHD30111-31	SCREW	[M]
33	RHD30119-S	SCREW	[M]
34	XTB3+10JFJ	SCREW	[M]
35	XTW3+8TFJ	SCREW	[M]
37	RMCX0057	EARTH PLATE (FOR USB)	[M]
46	RWJ2V02100SS	WIRE (MAIN;LJ1)	[M]
47	RWJ2V02100SS	WIRE (MAIN;LJ2)	[M]
48	REX1282	8P WIRE (DAMP-SMPS;H6801)	[M]
49	REX1289-1	8P WIRE (MAIN-PANEL;JW601)	[M]
50	REX1290-1	9P WIRE (MAIN-PANEL;JW602)	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
51	REX1288	5P WIRE (MAIN-HDMI;JW801)	[M]
52	REXX0621-2	WIRE (MAIN-SHIELD;TL102)	[M]
53	RHD30090-1	SCREW	[M]
		RACK CABINET	
100	RKC0032	MAGNET CTACHER	[M]
101	RJR0251	TERMINAL	[M]
102	RKF0811-K2	CENTER SP PANEL	[M]
103	RKP0091-X	CENTER SPEAKER BACK CABINET	[M]
104	REE1445	PREPARED SPEAKER WIRE CENTER	[M]
109	XTB3+14JFJK	SCREW	[M]
111	REE1443	FRONT SPEAKER WIRE L	[M]
112	RKF0807-K2	FRONT SPEAKER PANEL L	[M]
113	RKP0090-X	FRONT SPEAKER BACK CABINET	[M]
114	REE1444	PREPARED SPEAKER WIRE R	[M]
115	RKF0807A-K2	FRONT SPEAKER PANEL R	[M]
117	RMF0406	ACOUSTIC ABSORBER	[M]
119	RGK2120-K1	SW ORNAMENT L	[M]
120	RGK2120A-K1	SW ORNAMENT R	[M]
121	RMA2117	HINGE A	[M]
122	RMA2117A	HINGE B	[M]
123	RMA2118	PIVOT HOLDER L	[M]
124	RMA2119	PIVOT HOLDER R	[M]
125	RGK2122-K	GLASS DOOR ORNAMENT	[M]
126	RMR1858-K1	PIVOT HOLDER	[M]
127	RMA2116	AMP FIXTURE	[M]
128	RKU0094-K1	REAR BOARD	[M]
129	RYQ0671-K	FRONT BAFFLE ASS'Y	[M]
130	RYK1528-K	PREPARED NET FRAME ASS'Y	[M]
131	RYPX0368	FRONT PANEL ASS'Y	[M]
132	RYQ0673-K	PREPARED SIDE COVER L	[M]
133	RYQ0674-K	PREPARED SIDE COVER R	[M]
134	RMR1875-K	CATCHER HOLDER	[M]
137	XTB4+12AFJK	SCREW	[M]
138	XTB3+14AFJK	SCREW	[M]
139	XTB3+10JFJK	SCREW	[M]
144	XTB3+25AFJK	SCREW	[M]
146	XTS3+30AFJK	SCREW	[M]
147	RHD80003	SCREW	[M]
148	XTW3+20AFJK	SCREW	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
149	RKPX0145	RACK CABINET ASS'Y	[M]
149-1	RXP0071	CASTER	[M]
150	XTB4+20AFJK	SCREW	[M]
151	XTB4+25AFJK	SCREW	[M]
152	RMNV0063A-K	FL HOLDER	[M]
154	RMG0765-K	EVA CUSHION	[M]
155	XTW3+25JFJK	SCREW	[M]
		SPEAKERS	
SP1	EAS65P122D	SPEAKER	[M]
SP2	L0AA13A00008	SPEAKER	[M]
		PACKING MATERIALS	
P1	RPGX2026-1	PACKING CASE (TOP)	[M]
P2	RPG8468-1	PACKING CASE (BOTTOM)	[M]
P3	TPD169487	JOINT (FOR PACKING CASE)	[M]
P4	RPN2043-1	POLYFOAM	[M]
P5	RPF0457	MIRAMAT SHEET	[M]
P6	RPQ2342	LAYER PAD (TOP)	[M]
P7	RPQ2343	LAYER PAD (BOTTOM)	[M]
		ACCESSORIES	
A1	N2QAYB000288	REMOTE CONTROL	[M]
A1-1	RKK-HTR200-K	R/C BATTERY COVER	[M]
A2	K2CB2CB00021	AC CORD	[M] ⚠
A3	RQTX0165-P	O/I BOOK (En)	[M]
A4	TBLB3008	CASTER TRAY	[M]
A5	RMQ1649	PLASTIC DOWEL	[M]
A6	RFA2903	TOP GLASS ACCESSORY	[M] ⚠
A7	RKQ2G0004-K	SHELF BOARD	[M]
A8	RXQ1607	PREPARED GLASS DOOR ASSY L	[M] ⚠
A9	RXQ1608	PREPARED GLASS DOOR ASSY R	[M] ⚠
A10	XTW4+16AFJK	SCREW	[M]
		PRINTED CIRCUIT BOARDS	
PCB1	REP4030L-T	HDMI P.C.B.	[M] (RTL)
PCB2	REP4339F	MAIN P.C.B. / PANEL P.C.B.	[M] (RTL)
PCB3	REPV0114D-T	DSP P.C.B.	[M] (RTL)
PCB4	REPX0621M	D-AMP P.C.B.	[M] (RTL)
PCB5	REPX0676N	SMPS P.C.B. / AC INLET P.C.B.	[M] (RTL) ⚠
		INTEGRATED CIRCUITS	
IC101	C1BB00001134	IC ASP	[M]
IC103	C0ABBB000038	IC DUAL OP-AMP	[M]
IC104	C0ABBB000038	IC DUAL OP-AMP	[M]
IC105	C0ABBB000125	IC DUAL OP-AMP	[M]
IC106	C0ABBB000125	IC DUAL OP-AMP	[M]
IC109	C0CBADD00010	IC VOLTAGE REGULATOR	[M]
IC110	C0CBACC00046	IC REGULATOR	[M]
IC202	C0ABBB000125	IC DUAL OP-AMP	[M]
IC204	C0ABBB000125	IC DUAL OP-AMP	[M]
IC205	C0ABBB000125	IC DUAL OP-AMP	[M]
IC301	RFKWHTR210	IC MICRO-PROCESSOR	[M]
IC303	C0EBE0000338	IC RESET	[M]
IC601	C0HBB0000057	IC FL DRIVER	[M]
IC704	C0DBAYH00005	IC POWER SUPPLY	[M]
IC722	C0DBAYH00005	IC POWER SUPPLY	[M]
IC774	C0DBAYH00005	IC POWER SUPPLY	[M]
IC793	C0CBCDC00014	IC REGULATOR	[M]
IC1000	C2HBCY000030	IC DSP	[M]
IC1001	C0FBZK000013	IC CODEC	[M]
IC1002	C0CBAAG00003	IC VOLTAGE REGULATOR	[M]
IC1003	C0CBABG00027	IC 3.3V REGULATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC1004	C0ZBZ0001546	IC CLK SWITCH	[M]
IC2001	C1AB00002656	IC HDMI RX	[M]
IC2002	C1AB00002541	IC HDMI TX	[M]
IC2003	C2CBYY000636	IC HDMI MICRO-PROCESSOR	[M]
IC2004	C0CBCAG00015	IC VOLTAGE REGULATOR	[M]
IC2005	C1BB00000692	IC DIR	[M]
IC2006	C0ZBZ0001001	IC BUFFER	[M]
IC2007	C0JBAK000204	IC CMOS	[M]
IC2008	C0DBZYY00244	IC HDMI 3.3V REGULATOR	[M]
IC2009	C0JBAZ001466	IC LEVEL SHIFTER	[M]
IC2012	C0CBCAG00015	IC REGULATOR	[M]
IC2016	C0JBAZ001466	IC LEVEL SHIFTER	[M]
IC5000	C1BA00000487	IC AUDIO DIGITAL AMP	[M]
IC5300	C1BA00000487	IC AUDIO DIGITAL AMP	[M]
IC5500	C0JBAB000902	IC INVERTER GATE (CLOCK GENERATOR)	[M]
IC5501	C0JBAF000716	IC D-TYPE FLIP-FLOP	[M]
IC5701	C5HACYY00004	IC SWITCHING REGULATOR	[M]
IC5799	MIP4110MSSCF	IC SWITCHING REGULATOR	[M]
IC5801	C0DABFC00002	IC SHUNT REGULATOR	[M]
IC5899	C0DABFC00002	IC SHUNT REGULATOR	[M]
		TRANSISTORS	
Q221	B1HBDCA00001	TRANSISTOR	[M]
Q222	B1HBDCA00001	TRANSISTOR	[M]
Q311	B1ADCF000063	TRANSISTOR	[M]
Q701	B1BABK000001	TRANSISTOR	[M]
Q704	B1BCCG000002	TRANSISTOR	[M]
Q705	B1ADCF000001	TRANSISTOR	[M]
Q706	B1BACG000023	TRANSISTOR	[M]
Q707	B1ABGC000001	TRANSISTOR	[M]
Q2001	B1CBGD000001	TRANSISTOR	[M]
Q2002	B1CBGD000001	TRANSISTOR	[M]
Q2005	B1CBGD000001	TRANSISTOR	[M]
Q2006	B1CBGD000001	TRANSISTOR	[M]
Q2007	B1CBGD000001	TRANSISTOR	[M]
Q2008	B1CBGD000001	TRANSISTOR	[M]
Q2009	B1CBGD000001	TRANSISTOR	[M]
Q2010	B1CBGD000001	TRANSISTOR	[M]
Q2011	B1ABCF000079	TRANSISTOR	[M]
Q2012	B1ABCF000079	TRANSISTOR	[M]
Q2016	B1ABCF000079	TRANSISTOR	[M]
Q2017	B1ABCF000079	TRANSISTOR	[M]
Q2018	B1ABCF000079	TRANSISTOR	[M]
Q5101	B1ABCF000176	TRANSISTOR	[M]
Q5102	B1ABCF000176	TRANSISTOR	[M]
Q5601	B1ABCF000176	TRANSISTOR	[M]
Q5603	B1ADCE000012	TRANSISTOR	[M]
Q5604	B1ABCF000176	TRANSISTOR	[M]
Q5640	B1BACD000018	TRANSISTOR	[M]
Q5641	2SC584500L	TRANSISTOR	[M]
Q5642	2SC584500L	TRANSISTOR	[M]
Q5644	2SC584500L	TRANSISTOR	[M]
Q5720	2SC3940ARA	TRANSISTOR	[M]
Q5721	2SA207700L	TRANSISTOR	[M]
Q5722	B1ABCF000176	TRANSISTOR	[M]
Q5802	B1ABCF000176	TRANSISTOR	[M]
Q5860	2SA207700L	TRANSISTOR	[M]
Q5861	B1ABCF000176	TRANSISTOR	[M]
Q5862	B1ABCF000176	TRANSISTOR	[M]
QR109	UNR221300L	TRANSISTOR	[M]
QR221	B1GDCFJJ0008	TRANSISTOR	[M]
QR222	B1GBCFJJ0007	TRANSISTOR	[M]
QR223	B1GDCFJJ0008	TRANSISTOR	[M]
QR224	B1GDCFJJ0008	TRANSISTOR	[M]
QR225	B1GDCFJJ0008	TRANSISTOR	[M]
QR226	B1GBCFJJ0007	TRANSISTOR	[M]
QR271	B1GBCFJA0017	TRANSISTOR	[M]
QR402	B1GBCFJJ0007	TRANSISTOR	[M]
QR601	B1GDCFJJ0008	TRANSISTOR	[M]
QR603	B1GBCFJJ0007	TRANSISTOR	[M]
QR604	B1GDCFJJ0008	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
QR701	B1GBCFGG0030	TRANSISTOR	[M]
QR2021	B1GBCFJJ0007	TRANSISTOR	[M]
QR2022	B1GBCFJJ0007	TRANSISTOR	[M]
QR2023	B1GBCFJJ0007	TRANSISTOR	[M]
QR2024	B1GBCFJJ0007	TRANSISTOR	[M]
QR2025	B1GBCFJJ0007	TRANSISTOR	[M]
QR5801	UNR221400L	TRANSISTOR	[M]
QR5802	B1GDCFGA0018	TRANSISTOR	[M]
QR5810	B1GBCFLL0037	TRANSISTOR	[M]
		DIODES	
D203	MA2J11100L	DIODE	[M]
D204	B0JCAE000001	DIODE	[M]
D205	MA2J11100L	DIODE	[M]
D206	B0JCAE000001	DIODE	[M]
D221	MA2J11100L	DIODE	[M]
D222	MA2J11100L	DIODE	[M]
D231	MA2J11100L	DIODE	[M]
D232	MA2J11100L	DIODE	[M]
D233	MA2J11100L	DIODE	[M]
D272	B0ACCK000005	DIODE	[M]
D273	B0ADCJ000020	DIODE	[M]
D277	MA2J11100L	DIODE	[M]
D278	B0JCAE000001	DIODE	[M]
D301	MA2J11100L	DIODE	[M]
D302	MA2J11100L	DIODE	[M]
D305	MAZ80470ML	DIODE	[M]
D307	MA2J11100L	DIODE	[M]
D311	B0JCAE000001	DIODE	[M]
D406	B3ACA0000261	DIODE	[M]
D601	MA2J11100L	DIODE	[M]
D652	B3AAA0000489	DIODE	[M]
D701	MAZ82000ML	DIODE	[M]
D702	MAZ82000ML	DIODE	[M]
D703	B0BC026A0007	DIODE	[M]
D704	B0BC02400011	DIODE	[M]
D705	B0JCMD000010	DIODE	[M]
D706	B0JAME000029	DIODE	[M]
D712	MAZ81200ML	DIODE	[M]
D713	MAZ81200ML	DIODE	[M]
D714	MAZ83000ML	DIODE	[M]
D722	B0JCPG000005	DIODE	[M]
D726	B0JAME000029	DIODE	[M]
D727	B0JCPG000005	DIODE	[M]
D731	MAZ80750ML	DIODE	[M]
D772	B0JCPG000005	DIODE	[M]
D2004	B0ACCK000005	DIODE	[M]
D2005	MA2J72800L	DIODE	[M]
D2105	MA2J72800L	DIODE	[M]
D2106	B0ACCK000005	DIODE	[M]
D2151	B0ACCK000005	DIODE	[M]
D2201	B0ACCK000005	DIODE	[M]
D2204	MA2J72800L	DIODE	[M]
D2206	B0ACCK000005	DIODE	[M]
D2207	MA2J72800L	DIODE	[M]
D2209	B0ACCK000005	DIODE	[M]
D5503	MAZ80510ML	DIODE	[M]
D5640	MAZ81200ML	DIODE	[M]
D5643	MA2J11100L	DIODE	[M]
D5644	MA2J11100L	DIODE	[M]
D5645	MA2J11100L	DIODE	[M]
D5701	B0FBAR000041	DIODE	[M]
D5702	B0ZAZ0000052	DIODE	[M]
D5721	MAZ81800ML	DIODE	[M]
D5722	B0BC019A0007	DIODE	[M]
D5723	MA2J11100L	DIODE	[M]
D5724	MA2J11100L	DIODE	[M]
D5725	B0BC6R100010	DIODE	[M]
D5726	B0EAKM000117	DIODE	[M]
D5727	MA2J11100L	DIODE	[M]
D5728	MA2J11100L	DIODE	[M]
D5729	B0EAMM000057	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D5731	B0EAMM000057	DIODE	[M]
D5732	B0BC035A0007	DIODE	[M]
D5793	B0HAMP000094	DIODE	[M]
D5797	MA2J72800L	DIODE	[M]
D5798	B0EAMM000057	DIODE	[M]
D5801	B0HBSM000043	DIODE	[M]
D5802	B0HBSM000043	DIODE	[M]
D5803	B0HFRJ000012	DIODE	[M]
D5804	B0EAMM000057	DIODE	[M]
D5805	B0EAMM000057	DIODE	[M]
D5806	MAZ80750ML	DIODE	[M]
D5807	MA2J11100L	DIODE	[M]
D5809	MA2J11100L	DIODE	[M]
D5896	B0EAMM000057	DIODE	[M]
DZ5701	ERZV10V511CS	ZENER	[M] ⚠
		VARISTORS	
VA2006	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2007	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2008	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2009	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2010	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2011	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2012	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2013	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2015	EZJZ0V80008B	VARISTOR	[M]
VA2016	EZJZ0V80008B	VARISTOR	[M]
VA2017	EZJZ0V80008B	VARISTOR	[M]
VA2106	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2107	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2108	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2109	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2110	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2111	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2112	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2113	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA2115	EZJZ0V80008B	VARISTOR	[M]
VA2116	EZJZ0V80008B	VARISTOR	[M]
VA2117	EZJZ0V80008B	VARISTOR	[M]
VA2118	EZJZ0V80008B	VARISTOR	[M]
		SWITCHES	
S601	EVQ21405RJ	SW POWER	[M]
S602	EVQ21405RJ	SW WHISPER MODE SURROUND	[M]
S603	EVQ21405RJ	SW VOLUME UP	[M]
S606	EVQ21405RJ	SW SELECTOR	[M]
S607	EVQ21405RJ	SW VOLUME DOWN	[M]
		CONNECTORS	
CN101	K1KA30A00121	30P CONNECTOR	[M]
CN102	K1MN14AA0003	14P CONNECTOR	[M]
CN103	K1KA22A00083	22P CONNECTOR	[M]
CN106	K1MN10BA0004	10P CONNECTOR	[M]
CN200	K1MN17BA0005	17P FFC CONNECTOR	[M]
CN222	K1MN15BA0005	15P CONNECTOR	[M]
CN601	K1KA08BA0154	8P CONNECTOR	[M]
CN602	K1KA09BA0055	9P CONNECTOR	[M]
CN701	K1YZ11000002	11P CABLE HOLDER	[M]
CN1001	K1KB30AA0071	30P CONNECTOR	[M]
CN1002	K1MN14AA0046	14P FFC CONNECTOR	[M]
CN1003	K1KB22A00043	22P CONNECTOR	[M]
CN2001	K1MY10AA0021	10P CONNECTOR	[M]
CN2002	K1MY10AA0021	10P CONNECTOR	[M]
CN2201	K1MN12AA0046	12P FFC CONNECTOR	[M]
CN2202	K1MN15AA0046	15P FFC CONNECTOR	[M]
CN5050	K1MN17AA0004	17P CONNECTOR	[M]
CN5500	K1KA08AA0180	8P CONNECTOR	[M]
CN5501	K1KA03AA0301	3P CONNECTOR	[M]
CN5802	K1KA11AA0194	11P CONNECTOR	[M]
CN2201B	K1MN12AA0046	12P FFC CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CNA781	K1KA05AA0083	5P CONNECTOR	[M]
		COILS & INDUCTORS	
L271	G0A200D00002	CHOKE COIL	[M]
L281	G1C1R0MA0061	INDUCTOR	[M]
L282	G0B600D00002	LINE FILTER	[M]
L701	G0C390JA0055	INDUCTOR	[M]
L702	G0A220GA0026	CHOKE COIL	[M]
L714	G0A220GA0026	CHOKE COIL	[M]
L721	G0A220GA0026	CHOKE COIL	[M]
L722	G0A330ZA0045	CHOKE COIL	[M]
L727	G0A330ZA0045	CHOKE COIL	[M]
L771	G0A220GA0026	CHOKE COIL	[M]
L772	G0A330ZA0045	CHOKE COIL	[M]
L1000	J0JBC0000014	INDUCTOR	[M]
L1001	J0JBC0000014	INDUCTOR	[M]
L1002	J0JBC0000014	INDUCTOR	[M]
L1003	J0JBC0000014	INDUCTOR	[M]
L1004	J0JBC0000014	INDUCTOR	[M]
L1005	J0JBC0000014	INDUCTOR	[M]
L1006	J0JBC0000014	INDUCTOR	[M]
L2010	J0MAB0000170	MODE FILTER	[M]
L2011	J0MAB0000170	MODE FILTER	[M]
L2012	J0MAB0000170	MODE FILTER	[M]
L2013	J0MAB0000170	MODE FILTER	[M]
L2101	J0MAB0000170	MODE FILTER	[M]
L2102	J0MAB0000170	MODE FILTER	[M]
L2103	J0MAB0000170	MODE FILTER	[M]
L2104	J0MAB0000170	MODE FILTER	[M]
L5000	G0A150L00003	CHOKE COIL	[M]
L5001	G0B9R5K00003	LINE FILTER	[M]
L5002	G0B9R5K00003	LINE FILTER	[M]
L5201	G0B9R5K00003	LINE FILTER	[M]
L5300	G0A150L00003	CHOKE COIL	[M]
L5301	G0B9R5K00003	LINE FILTER	[M]
L5500	J0JKB0000020	INDUCTOR	[M]
L5501	J0JKB0000020	INDUCTOR	[M]
L5701	ELF15N035AN	LINE FILTER	[M] ⚠
L5702	ELF22V020A	LINE FILTER	[M] ⚠
LB701	J0JBC0000041	INDUCTOR	[M]
LB702	J0JBC0000041	INDUCTOR	[M]
LB703	J0JBC0000014	INDUCTOR	[M]
LB1000	J0JHC0000021	INDUCTOR	[M]
LB1001	J0JHC0000021	INDUCTOR	[M]
LB1002	J0JHC0000021	INDUCTOR	[M]
LB1004	J0JHC0000021	INDUCTOR	[M]
LB1005	J0JHC0000021	INDUCTOR	[M]
LB1006	J0JHC0000021	INDUCTOR	[M]
LB1007	J0JHC0000021	INDUCTOR	[M]
LB2001	J0JCC0000119	INDUCTOR	[M]
LB2002	J0JCC0000119	INDUCTOR	[M]
LB2003	J0JCC0000119	INDUCTOR	[M]
LB2004	J0JCC0000119	INDUCTOR	[M]
LB2009	J0JHC0000021	INDUCTOR	[M]
LB2010	J0JHC0000021	INDUCTOR	[M]
LB2011	J0JHC0000021	INDUCTOR	[M]
LB2012	J0JHC0000021	INDUCTOR	[M]
LB2018	J0JCC0000077	INDUCTOR	[M]
LB2019	J0JCC0000077	INDUCTOR	[M]
LB2020	J0JCC0000077	INDUCTOR	[M]
LB2021	J0JCC0000077	INDUCTOR	[M]
LB2102	J0JCC0000119	INDUCTOR	[M]
LB2103	J0JCC0000119	INDUCTOR	[M]
LB2104	J0JCC0000119	INDUCTOR	[M]
LB2105	J0JCC0000119	INDUCTOR	[M]
LB2106	J0JHC0000021	INDUCTOR	[M]
LB2107	J0JHC0000021	INDUCTOR	[M]
LB2108	J0JHC0000021	INDUCTOR	[M]
LB2109	J0JHC0000021	INDUCTOR	[M]
LB2151	J0JHC0000021	INDUCTOR	[M]
LB2152	J0JHC0000021	INDUCTOR	[M]
LB2201	J0JHC0000012	INDUCTOR	[M]
LB2202	J0JHC0000012	INDUCTOR	[M]
LB2203	J0JHC0000012	INDUCTOR	[M]
LB2205	J0JCC0000078	INDUCTOR	[M]
LB2206	J0JCC0000078	INDUCTOR	[M]
LB2208	J0JCC0000119	INDUCTOR	[M]
LB2212	J0JHC0000021	INDUCTOR	[M]
W81	J0JBC0000014	INDUCTOR	[M]
W82	J0JBC0000014	INDUCTOR	[M]
W83	J0JBC0000014	INDUCTOR	[M]
W84	J0JBC0000014	INDUCTOR	[M]
W85	J0JBC0000014	INDUCTOR	[M]
W86	J0JBC0000014	INDUCTOR	[M]
W87	J0JBC0000014	INDUCTOR	[M]
W89	J0JBC0000014	INDUCTOR	[M]
W90	J0JBC0000014	INDUCTOR	[M]
W91	J0JBC0000014	INDUCTOR	[M]
		TRANSFORMERS	
T701	G4D1A0000117	SW TRANSFORMER	[M] ⚠
T5701	ETS42BM1A1AC	MAIN TRANSFORMER	[M] ⚠
T5751	ETS19AB281AG	BACKUP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z600	B3RAD0000143	REMOTE SENSOR	[M]
ZA5701	K3GE1ZZ00001	FUSE HOLDER	[M]
ZA5702	K3GE1ZZ00001	FUSE HOLDER	[M]
		PHOTO COUPLERS	
PC5701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5720	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5799	B3PBA0000402	PHOTO COUPLER	[M] ⚠
		OSCILLATORS	
X301	H2B100500004	CRYSTAL OSCILLATOR	[M]
X1000	H0J245500068	CRYSTAL OSCILLATOR	[M]
X2001	H0J270500064	CRYSTAL OSCILLATOR	[M]
X2002	H0J122200002	CRYSTAL OSCILLATOR	[M]
X2003	H2D400400018	CRYSTAL OSCILLATOR	[M]
X5500	H2A6023A0011	CRYSTAL OSCILLATOR	[M]
		FL DISPLAY	
FL601	A2BB00000158	LCD DISPLAY	[M]
		FUSE	
F1	K5D802APA008	FUSE	[M] ⚠
		IC PROTECTORS	
IP701	K5H5012A0010	IC PROTECTOR	[M] ⚠
IP702	K5H302100004	IC PROTECTOR	[M] ⚠
		THERMISTORS	
TH5701	D4CAA2R20001	THERMISTOR	[M] ⚠
TH5860	D4CC11040013	THERMISTOR	[M] ⚠
		JACKS	
JK101	K2HA406B0032	JK AUDIO IN	[M]
JK104	B3RAB0000056	JK OPTICAL IN	[M]
JK105	B3RAB0000056	JK OPTICAL IN	[M]
JK106	K4BK01H00010	JK INPUT	[M]
JK2001	K1FA119E0004	JK HDMI TERMINAL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
JK2003	K1FA119E0004	JK HDMI TERMINAL	[M]
JK5001	K4AL08B00001	JK 4 CHANNEL SPEAKER	[M]
P5701	K2AB2B000011	AC INLET	[M] ⚠
		EARTH TERMINALS	
E101	K9ZZ00001279	EARTH PLATE	[M]
E701	K4CZ01000027	TERMINAL	[M]
ZJ5400	K4CZ01000027	TERMINAL	[M]
ZJ5410	K4CZ01000027	TERMINAL	[M]
ZJ5701	K4CZ01000027	TERMINAL	[M]
ZJ5801	K4CZ01000027	TERMINAL	[M]
ZJ5803	K4CZ01000027	TERMINAL	[M]
		CHIP JUMPERS	
K6	ERJ3GEY0R00V	0 1/10W	[M]
K7	ERJ3GEY0R00V	0 1/10W	[M]
K201	D0GBR00JA008	0 1/16W	[M]
K203	D0GBR00JA008	0 1/16W	[M]
K5004	ERJ6GEY0R00V	0 1/8W	[M]
K5300	ERJ6GEY0R00V	0 1/8W	[M]
K5302	ERJ3GEY0R00V	0 1/10W	[M]
K5501	ERJ3GEY0R00V	0 1/10W	[M]
W3	D0GBR00JA008	0 1/16W	[M]
W4	D0GBR00JA008	0 1/16W	[M]
W5	D0GBR00JA008	0 1/16W	[M]
W6	D0GBR00JA008	0 1/16W	[M]
W7	D0GBR00JA008	0 1/16W	[M]
W9	D0GBR00JA008	0 1/16W	[M]
W11	D0GBR00JA008	0 1/16W	[M]
W12	D0GBR00JA008	0 1/16W	[M]
W13	D0GBR00JA008	0 1/16W	[M]
W56	D0GBR00JA008	0 1/16W	[M]
W57	D0GBR00JA008	0 1/16W	[M]
W59	D0GBR00JA008	0 1/16W	[M]
W61	D0GBR00JA008	0 1/16W	[M]
W62	D0GBR00JA008	0 1/16W	[M]
W63	D0GBR00JA008	0 1/16W	[M]
W402	ERJ3GEY0R00V	0 1/10W	[M]
W5007	ERJ6GEY0R00V	0 1/8W	[M]
W5032	ERJ8GEY0R00V	0 1/4W	[M]
W5059	ERJ6GEY0R00V	0 1/8W	[M]
W5071	ERJ3GEY0R00V	0 1/10W	[M]
W5780	ERJ6GEY0R00V	0 1/8W	[M]
W5801	ERJ3GEY0R00V	0 1/10W	[M]
W5803	ERJ6GEY0R00V	0 1/8W	[M]
W5804	ERJ3GEY0R00V	0 1/10W	[M]
W5805	ERJ6GEY0R00V	0 1/8W	[M]
W5806	ERJ6GEY0R00V	0 1/8W	[M]
W5807	ERJ6GEY0R00V	0 1/8W	[M]
		RESISTORS	
LB2204	D0GB220JA007	22 1/10W	[M]
R103	ERJ3GEYJ102V	1K 1/10W	[M]
R104	ERJ3GEYJ102V	1K 1/10W	[M]
R105	ERJ3GEYJ102V	1K 1/10W	[M]
R106	ERJ3GEYJ102V	1K 1/10W	[M]
R111	D0GB473JA007	47K 1/10W	[M]
R112	D0GB223JA007	22K 1/10W	[M]
R113	D0GB473JA007	47K 1/10W	[M]
R114	D0GB473JA007	47K 1/10W	[M]
R131	ERJ3GEYJ101V	100 1/10W	[M]
R132	ERJ3GEYJ101V	100 1/10W	[M]
R153	D0GB473JA007	47K 1/10W	[M]
R154	D0GB473JA007	47K 1/10W	[M]
R165	D0GB152JA007	1.5K 1/10W	[M]
R166	D0GB332JA007	3.3K 1/10W	[M]
R167	ERJ3GEYJ682V	6.8K 1/10W	[M]
R168	D0GB272JA007	2.7K 1/10W	[M]
R169	ERJ3GEYJ682V	6.8K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R170	D0GB272JA007	2.7K 1/10W	[M]
R171	ERJ3GEYJ682V	6.8K 1/10W	[M]
R172	D0GB272JA007	2.7K 1/10W	[M]
R173	ERJ3GEYJ682V	6.8K 1/10W	[M]
R174	D0GB272JA007	2.7K 1/10W	[M]
R175	ERJ3GEYJ392V	3.9K 1/10W	[M]
R176	D0GB562JA007	5.6K 1/10W	[M]
R177	D0GB473JA007	47K 1/10W	[M]
R178	ERJ3GEYJ332V	3.3K 1/10W	[M]
R179	ERJ3GEYJ392V	3.9K 1/10W	[M]
R180	ERJ3GEYJ102V	1K 1/10W	[M]
R181	ERJ3GEYJ272V	2.7K 1/10W	[M]
R182	ERJ3GEYJ272V	2.7K 1/10W	[M]
R183	ERJ3GEYJ562V	5.6K 1/10W	[M]
R184	ERJ3GEYJ102V	1K 1/10W	[M]
R185	ERJ3GEYJ272V	2.7K 1/10W	[M]
R186	ERJ3GEYJ332V	3.3K 1/10W	[M]
R187	D0GB562JA007	5.6K 1/10W	[M]
R188	D0GB473JA007	47K 1/10W	[M]
R189	ERJ3GEYJ182V	1.8K 1/10W	[M]
R190	ERJ3GEYJ182V	1.8K 1/10W	[M]
R191	ERJ3GEYJ562V	5.6K 1/10W	[M]
R192	ERJ3GEYJ102V	1K 1/10W	[M]
R193	D0GB562JA007	5.6K 1/10W	[M]
R194	ERJ3GEYJ332V	3.3K 1/10W	[M]
R195	D0GB473JA007	47K 1/10W	[M]
R196	ERJ3GEYJ562V	5.6K 1/10W	[M]
R197	ERJ3GEYJ182V	1.8K 1/10W	[M]
R198	ERJ3GEYJ102V	1K 1/10W	[M]
R199	ERJ3GEYJ182V	1.8K 1/10W	[M]
R201	ERJ3GEYJ332V	3.3K 1/10W	[M]
R202	D0GB562JA007	5.6K 1/10W	[M]
R203	D0GB473JA007	47K 1/10W	[M]
R214	D0GB224JA007	220K 1/10W	[M]
R215	D0GB224JA007	220K 1/10W	[M]
R216	D0GB224JA007	220K 1/10W	[M]
R217	D0GB224JA007	220K 1/10W	[M]
R222	D0GB563JA007	56K 1/10W	[M]
R224	D0GB563JA007	56K 1/10W	[M]
R227	D0GB393JA007	39K 1/10W	[M]
R228	D0GB272JA007	2.7K 1/10W	[M]
R229	D0GB393JA007	39K 1/10W	[M]
R230	D0GB272JA007	2.7K 1/10W	[M]
R231	D0GB473JA007	47K 1/10W	[M]
R232	ERJ3GEYJ102V	1K 1/10W	[M]
R233	D0GB473JA007	47K 1/10W	[M]
R234	ERJ3GEYJ102V	1K 1/10W	[M]
R235	ERJ3GEYJ102V	1K 1/10W	[M]
R236	ERJ3GEYJ102V	1K 1/10W	[M]
R237	D0GB472JA007	4.7K 1/10W	[M]
R238	ERJ3GEYJ103V	10K 1/10W	[M]
R239	ERJ3GEYJ103V	10K 1/10W	[M]
R240	D0GB474JA041	470K 1/10W	[M]
R241	ERJ3GEYJ123V	12K 1/10W	[M]
R242	ERJ3GEYJ123V	12K 1/10W	[M]
R243	D0GB222JA007	2.2K 1/10W	[M]
R244	D0GB333JA007	33K 1/10W	[M]
R245	ERJ3GEYJ102V	1K 1/10W	[M]
R246	D0GB332JA007	3.3K 1/10W	[M]
R247	D0GB332JA007	3.3K 1/10W	[M]
R248	D0GB223JA007	22K 1/10W	[M]
R249	D0GB473JA007	47K 1/10W	[M]
R250	D0GB222JA007	2.2K 1/10W	[M]
R251	D0GB473JA007	47K 1/10W	[M]
R252	D0GB223JA007	22K 1/10W	[M]
R253	ERJ3GEYJ102V	1K 1/10W	[M]
R254	ERJ3GEYJ102V	1K 1/10W	[M]
R255	D0GB152JA007	1.5K 1/10W	[M]
R256	ERJ3GEYJ102V	1K 1/10W	[M]
R257	ERJ3GEYJ822V	8.2K 1/10W	[M]
R258	D0GB474JA041	470K 1/10W	[M]
R259	ERJ3GEYJ103V	10K 1/10W	[M]
R260	ERJ3GEYJ103V	10K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R273	D0GB153JA007	15K 1/10W	[M]
R274	D0GB393JA041	39K 1/10W	[M]
R275	ERJ3GEYJ103V	10K 1/10W	[M]
R276	ERJ3GEYJ103V	10K 1/10W	[M]
R277	ERJ3GEYJ103V	10K 1/10W	[M]
R281	ERJ3GEYJ750V	75 1/10W	[M]
R301	ERJ3GEYJ103V	10K 1/10W	[M]
R302	ERJ3GEYJ103V	10K 1/10W	[M]
R303	ERJ3GEYJ681V	680 1/10W	[M]
R304	ERJ3GEYJ103V	10K 1/10W	[M]
R305	ERJ3GEYJ103V	10K 1/10W	[M]
R306	ERJ3GEYJ102V	1K 1/10W	[M]
R307	ERJ3GEYJ102V	1K 1/10W	[M]
R308	ERJ3GEYJ102V	1K 1/10W	[M]
R309	ERJ3GEYJ102V	1K 1/10W	[M]
R310	ERJ3GEYJ102V	1K 1/10W	[M]
R311	ERJ3GEYJ102V	1K 1/10W	[M]
R312	ERJ3GEYJ102V	1K 1/10W	[M]
R313	ERJ3GEYJ102V	1K 1/10W	[M]
R314	ERJ3GEYJ102V	1K 1/10W	[M]
R315	ERJ3GEYJ221V	220 1/10W	[M]
R316	ERJ3GEYJ221V	220 1/10W	[M]
R317	ERJ3GEYJ221V	220 1/10W	[M]
R318	ERJ3GEYJ103V	10K 1/10W	[M]
R319	D0GB153JA007	15K 1/10W	[M]
R320	D0GB153JA007	15K 1/10W	[M]
R321	ERJ3GEYJ103V	10K 1/10W	[M]
R322	ERJ3GEYJ103V	10K 1/10W	[M]
R323	ERJ3GEYJ224V	220K 1/10W	[M]
R324	ERJ3GEYJ103V	10K 1/10W	[M]
R326	ERJ3GEYJ102V	1K 1/10W	[M]
R327	ERJ3GEYJ102V	1K 1/10W	[M]
R328	ERJ3GEYJ103V	10K 1/10W	[M]
R329	ERJ3GEYJ682V	6.8K 1/10W	[M]
R330	D0GB271JA007	270 1/10W	[M]
R331	D0GB121JA007	120 1/10W	[M]
R332	D0GB104JA007	100K 1/10W	[M]
R333	ERJ3GEYJ103V	10K 1/10W	[M]
R334	D0GB472JA007	4.7K 1/10W	[M]
R335	D0GB473JA007	47K 1/10W	[M]
R336	ERJ3GEYJ103V	10K 1/10W	[M]
R337	ERJ3GEYJ103V	10K 1/10W	[M]
R338	ERJ3GEYJ104V	100K 1/10W	[M]
R354	D0GB182JA007	1.8K 1/10W	[M]
R355	D0GB473JA007	47K 1/10W	[M]
R356	D0GB473JA007	47K 1/10W	[M]
R361	D0GBR00JA008	0 1/16W	[M]
R362	ERJ3GEYJ102V	1K 1/10W	[M]
R363	ERJ3GEYJ102V	1K 1/10W	[M]
R364	ERJ3GEYJ102V	1K 1/10W	[M]
R365	D0GBR00JA008	0 1/16W	[M]
R366	ERJ3GEYJ102V	1K 1/10W	[M]
R367	ERJ3GEYJ102V	1K 1/10W	[M]
R368	ERJ3GEYJ102V	1K 1/10W	[M]
R369	ERJ3GEYJ102V	1K 1/10W	[M]
R370	ERJ3GEYJ102V	1K 1/10W	[M]
R371	D0GBR00JA008	0 1/16W	[M]
R374	D0GB272JA007	2.7K 1/10W	[M]
R375	ERJ3GEYJ682V	6.8K 1/10W	[M]
R376	ERJ3GEYJ682V	6.8K 1/10W	[M]
R377	D0GB272JA007	2.7K 1/10W	[M]
R378	D0GBR00JA008	0 1/16W	[M]
R379	D0GBR00JA008	0 1/16W	[M]
R382	D0GBR00JA008	0 1/16W	[M]
R383	D0GBR00JA008	0 1/16W	[M]
R385	ERJ3GEYJ103V	10K 1/10W	[M]
R386	ERJ3GEYJ103V	10K 1/10W	[M]
R410	ERJ3GEYJ101V	100 1/10W	[M]
R602	ERJ3GEYJ104V	100K 1/10W	[M]
R604	ERJ3GEYJ822V	8.2K 1/10W	[M]
R605	ERJ3GEYJ152V	1.5K 1/10W	[M]
R607	ERJ3GEYJ102V	1K 1/10W	[M]
R608	ERJ3GEYJ102V	1K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R609	ERJ3GEYJ102V	1K 1/10W	[M]
R630	D0GB332JA007	3.3K 1/10W	[M]
R634	D0GB332JA007	3.3K 1/10W	[M]
R661	ERJ3GEYJ104V	100K 1/10W	[M]
R700	ERJ6GEYJ1R5V	1.5 1/8W	[M]
R702	ERJ3GEYJ1R5V	1.5 1/10W	[M]
R703	ERJ3GEYJ102V	1K 1/10W	[M]
R704	ERJ3GEYJ562V	5.6K 1/10W	[M]
R705	ERJ6GEYJ271V	270 1/8W	[M]
R706	ERJ3GEYJ470V	47 1/10W	[M]
R707	ERJ6GEYJ561V	560 1/8W	[M]
R709	ERJ3GEYJ272V	2.7K 1/10W	[M]
R710	ERJ3GEYJ471V	470 1/10W	[M]
R711	ERJ6GEYJ472V	4.7K 1/8W	[M]
R712	ERJ3GEYJ272V	2.7K 1/10W	[M]
R713	ERJ3GEYJ473V	47K 1/10W	[M]
R729	ERJ6RBD102V	1K 1/10W	[M]
R730	ERJ6RBD271V	270 1/10W	[M]
R731	ERJ6RBD152V	1.5K 1/10W	[M]
R761	ERJ3GEYJ102V	1K 1/10W	[M]
R762	ERJ3GEYJ334V	330K 1/10W	[M]
R763	ERJ3GEYJ473V	47K 1/10W	[M]
R765	ERJ6RBD152V	1.5K 1/10W	[M]
R766	ERJ6RBD271V	270 1/10W	[M]
R767	ERJ6RBD102V	1K 1/10W	[M]
R771	ERJ6RBD562V	5.6K 1/10W	[M]
R772	ERJ6RBD332V	3.3K 1/10W	[M]
R779	ERJ6RBD102V	1K 1/10W	[M]
R1000	ERJ3GEYJ101V	100 1/10W	[M]
R1001	ERJ3GEYJ102V	1K 1/10W	[M]
R1002	ERJ3GEYJ102V	1K 1/10W	[M]
R1003	ERJ3GEYJ102V	1K 1/10W	[M]
R1004	ERJ3GEYJ102V	1K 1/10W	[M]
R1005	D1BB2551A012	2.55K 1/16W	[M]
R1011	D0GB330JA007	33 1/10W	[M]
R1012	D0GB332JA007	3.3K 1/10W	[M]
R1013	D0GB332JA007	3.3K 1/10W	[M]
R1014	D0GB332JA007	3.3K 1/10W	[M]
R1015	D0GB330JA007	33 1/10W	[M]
R1016	D0GB330JA007	33 1/10W	[M]
R1017	D0GB330JA007	33 1/10W	[M]
R1018	D0GB332JA007	3.3K 1/10W	[M]
R1019	D0GB105JA007	1M 1/10W	[M]
R1020	ERJ3EKF5111V	5.11K 1/10W	[M]
R1022	D0GB104JA007	100K 1/10W	[M]
R1025	ERJ3GEY0R00V	0 1/10W	[M]
R1028	D0GB332JA007	3.3K 1/10W	[M]
R1029	D0GB332JA007	3.3K 1/10W	[M]
R1030	D0GB332JA007	3.3K 1/10W	[M]
R1038	ERJ3GEY0R00V	0 1/10W	[M]
R1041	ERJ3GEYJ103V	10K 1/10W	[M]
R1051	ERJ3GEYJ101V	100 1/10W	[M]
R1052	ERJ3GEYJ101V	100 1/10W	[M]
R1053	ERJ3GEYJ101V	100 1/10W	[M]
R1054	ERJ3GEYJ101V	100 1/10W	[M]
R1055	ERJ3GEYJ101V	100 1/10W	[M]
R2000	ERJ3GEY0R00V	0 1/10W	[M]
R2036	D0GB105JA007	1M 1/10W	[M]
R2037	D0GB471JA007	470 1/10W	[M]
R2038	D0GB472JA007	4.7K 1/10W	[M]
R2039	D0GB473JA007	47K 1/10W	[M]
R2040	D0GB182JA007	1.8K 1/10W	[M]
R2041	D0GB182JA007	1.8K 1/10W	[M]
R2042	ERJ3GEYJ103V	10K 1/10W	[M]
R2043	D0GB183JA007	18K 1/10W	[M]
R2044	D0GB101JA007	100 1/10W	[M]
R2045	ERJ3GEYJ102V	1K 1/10W	[M]
R2048	ERJ3GEYJ473V	47K 1/10W	[M]
R2049	ERJ3GEYJ823V	82K 1/10W	[M]
R2050	ERJ3GEYJ473V	47K 1/10W	[M]
R2051	ERJ3GEYJ104V	100K 1/10W	[M]
R2052	D0GB472JA007	4.7K 1/10W	[M]
R2053	D0GB472JA007	4.7K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2054	ERJ3GEYJ102V	1K 1/10W	[M]
R2064	D0GB470JA008	47 1/16W	[M]
R2065	D0GB470JA008	47 1/16W	[M]
R2066	ERJ3GEYJ103V	10K 1/10W	[M]
R2067	ERJ3GEYJ103V	10K 1/10W	[M]
R2068	ERJ3GEYJ103V	10K 1/10W	[M]
R2069	ERJ3GEYJ103V	10K 1/10W	[M]
R2101	ERJ3GEYJ102V	1K 1/10W	[M]
R2102	D0GB222JA007	2.2K 1/10W	[M]
R2103	D0GB222JA007	2.2K 1/10W	[M]
R2104	ERJ3GEYJ103V	10K 1/10W	[M]
R2105	ERJ3GEYJ103V	10K 1/10W	[M]
R2106	D0GB472JA007	4.7K 1/10W	[M]
R2107	D1BB4220A006	422 1/16W	[M]
R2108	D0GB101JA007	100 1/10W	[M]
R2109	D0GB101JA007	100 1/10W	[M]
R2111	ERJ3GEYJ102V	1K 1/10W	[M]
R2112	ERJ3GEYJ102V	1K 1/10W	[M]
R2113	D0GB682JA008	6.8K 1/16W	[M]
R2114	D0GB682JA008	6.8K 1/16W	[M]
R2115	D0GB473JA007	47K 1/10W	[M]
R2116	D0GB330JA007	33 1/10W	[M]
R2117	D0GB330JA007	33 1/10W	[M]
R2118	D0GB330JA007	33 1/10W	[M]
R2119	D0GB330JA007	33 1/10W	[M]
R2120	D0GB330JA007	33 1/10W	[M]
R2121	D0GB330JA007	33 1/10W	[M]
R2122	ERJ3GEYJ102V	1K 1/10W	[M]
R2123	ERJ3GEYJ103V	10K 1/10W	[M]
R2124	ERJ3GEYJ103V	10K 1/10W	[M]
R2151	D0GB472JA007	4.7K 1/10W	[M]
R2152	D0GB101JA007	100 1/10W	[M]
R2153	D0GB330JA007	33 1/10W	[M]
R2154	ERJ3GEYJ103V	10K 1/10W	[M]
R2155	D0GB472JA007	4.7K 1/10W	[M]
R2156	D0GB183JA007	18K 1/10W	[M]
R2157	D0GB471JA007	470 1/10W	[M]
R2158	D0GB330JA007	33 1/10W	[M]
R2159	D0GB101JA007	100 1/10W	[M]
R2160	D0GB330JA007	33 1/10W	[M]
R2161	D0GB104JA007	100K 1/10W	[M]
R2162	D0GB105JA007	1M 1/10W	[M]
R2163	D0GB471JA007	470 1/10W	[M]
R2201	D0GB182JA007	1.8K 1/10W	[M]
R2203	D0GB182JA007	1.8K 1/10W	[M]
R2205	D0GB182JA007	1.8K 1/10W	[M]
R2207	ERJ3GEYJ103V	10K 1/10W	[M]
R2208	D0GB473JA007	47K 1/10W	[M]
R2209	ERJ3GEYJ103V	10K 1/10W	[M]
R2210	D0GB101JA007	100 1/10W	[M]
R2211	D0GB101JA007	100 1/10W	[M]
R2212	D0GB101JA007	100 1/10W	[M]
R2213	D0GB101JA007	100 1/10W	[M]
R2216	D0GB472JA007	4.7K 1/10W	[M]
R2217	D0GB472JA007	4.7K 1/10W	[M]
R2218	ERJ3GEYJ102V	1K 1/10W	[M]
R2219	D0GB472JA007	4.7K 1/10W	[M]
R2220	D0GB472JA007	4.7K 1/10W	[M]
R2221	ERJ3GEYJ102V	1K 1/10W	[M]
R2222	D0GB101JA007	100 1/10W	[M]
R2223	D0GB101JA007	100 1/10W	[M]
R2224	ERJ3GEYJ103V	10K 1/10W	[M]
R2225	D0GB101JA007	100 1/10W	[M]
R2226	D0GB101JA007	100 1/10W	[M]
R2227	D0GB101JA007	100 1/10W	[M]
R2229	D0GB470JA008	47 1/16W	[M]
R2230	D0GB470JA008	47 1/16W	[M]
R2232	D0GB101JA007	100 1/10W	[M]
R2233	D0GB101JA007	100 1/10W	[M]
R2234	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2235	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2238	D0GB472JA007	4.7K 1/10W	[M]
R2239	D0GB271JA007	270 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2240	D0GB101JA007	100 1/10W	[M]
R2241	D0GB101JA007	100 1/10W	[M]
R2242	D0GB101JA007	100 1/10W	[M]
R2243	D0GB101JA007	100 1/10W	[M]
R2244	D0GB151JA007	150 1/10W	[M]
R2245	D0GB151JA007	150 1/10W	[M]
R2246	D0GB101JA007	100 1/10W	[M]
R2247	ERJ3GEYJ102V	1K 1/10W	[M]
R2248	D0GB101JA007	100 1/10W	[M]
R2249	D0GB101JA007	100 1/10W	[M]
R2250	D0GB101JA007	100 1/10W	[M]
R2251	D0GB101JA007	100 1/10W	[M]
R2252	D0GB101JA007	100 1/10W	[M]
R2253	D0GB101JA007	100 1/10W	[M]
R2254	D0GB101JA007	100 1/10W	[M]
R2255	D0GB224JA007	220K 1/10W	[M]
R2256	D0GB104JA007	100K 1/10W	[M]
R2257	D0GB273JA007	27K 1/10W	[M]
R2258	D0GB221JA041	220 1/10W	[M]
R2259	D0GB101JA007	100 1/10W	[M]
R2260	D0GB472JA007	4.7K 1/10W	[M]
R2261	D0GB473JA007	47K 1/10W	[M]
R2262	D0GB225JA007	2.2M 1/10W	[M]
R2263	D0GB104JA007	100K 1/10W	[M]
R2264	D0GB101JA007	100 1/10W	[M]
R2265	D0GB101JA007	100 1/10W	[M]
R2266	D0GB101JA007	100 1/10W	[M]
R2267	D0GB472JA007	4.7K 1/10W	[M]
R2268	D0GB472JA007	4.7K 1/10W	[M]
R2269	ERJ3GEYJ103V	10K 1/10W	[M]
R2270	ERJ3GEYJ104V	100K 1/10W	[M]
R2271	ERJ3GEYJ821V	820 1/10W	[M]
R2272	ERJ3GEYJ332V	3.3K 1/10W	[M]
R5000	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5001	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5002	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5003	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5004	D0GF100JA014	10 1/8W	[M]
R5005	D0GF100JA014	10 1/8W	[M]
R5006	D0GZ220JA012	22 1W	[M]
R5007	D0GZ220JA012	22 1W	[M]
R5008	ERJ3GEYJ101V	100 1/10W	[M]
R5010	D0GF100JA014	10 1/8W	[M]
R5011	D0GF100JA014	10 1/8W	[M]
R5019	ERJ3GEYJ683V	68K 1/10W	[M]
R5020	ERJ3GEYJ124V	120K 1/10W	[M]
R5021	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5022	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5023	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5030	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5031	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5034	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5035	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5110	ERJ3GEYJ223V	22K 1/10W	[M]
R5218	ERJ3GEYJ683V	68K 1/10W	[M]
R5300	D0GZ220JA012	22 1W	[M]
R5302	ERJ8GEYJ100V	10 1/4W	[M]
R5304	ERJ3GEYJ101V	100 1/10W	[M]
R5305	ERJ8GEYJ100V	10 1/4W	[M]
R5306	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5307	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5308	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5309	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5310	ERJ8GEYJ100V	10 1/4W	[M]
R5311	ERJ8GEYJ100V	10 1/4W	[M]
R5317	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5318	ERJ3GEYJ124V	120K 1/10W	[M]
R5319	D0GZ220JA012	22 1W	[M]
R5327	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5505	ERJ3GEYJ101V	100 1/10W	[M]
R5507	ERJ3GEYJ105V	1M 1/10W	[M]
R5508	ERJ3GEYJ105V	1M 1/10W	[M]
R5510	ERG2SJ471E	470 2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5511	ERJ3GEYJ220V	22 1/10W	[M]
R5602	ERJ3GEYJ103V	10K 1/10W	[M]
R5603	ERJ3GEYJ103V	10K 1/10W	[M]
R5604	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5608	ERJ3GEYJ103V	10K 1/10W	[M]
R5609	ERJ3GEYJ103V	10K 1/10W	[M]
R5611	ERJ3GEYJ122V	1.2K 1/10W	[M]
R5636	ERDS1FVJ392T	3.9K 1/2W	[M]
R5637	ERJ3GEYJ100V	10 1/10W	[M]
R5639	ERJ3GEYJ332V	3.3K 1/10W	[M]
R5640	ERJ3GEY0R00V	0 1/10W	[M]
R5654	ERJ3GEYJ563V	56K 1/10W	[M]
R5655	ERJ3GEYJ103V	10K 1/10W	[M]
R5656	ERJ3GEYJ103V	10K 1/10W	[M]
R5657	ERJ3GEYJ103V	10K 1/10W	[M]
R5658	ERJ3GEYJ185V	1.8M 1/10W	[M]
R5659	ERJ3GEYJ104V	100K 1/10W	[M]
R5660	ERJ3GEYJ103V	10K 1/10W	[M]
R5670	ERJ3GEY0R00V	0 1/10W	[M]
R5701	ERDS1TJ475B	4.7M 1/2W	[M]
R5702	ERJ1TYJ333U	33K 1W	[M]
R5703	ERJ1TYJ333U	33K 1W	[M]
R5720	ERJ6GEYJ220V	22 1/8W	[M]
R5721	ERJ6GEYJ103V	10K 1/8W	[M]
R5722	ERJ6GEYJ122V	1.2K 1/8W	[M]
R5723	ERJ3GEYJ102V	1K 1/10W	[M]
R5724	ERJ6GEYJ121V	120 1/8W	[M]
R5725	ERJ3GEY0R00V	0 1/10W	[M]
R5726	ERX2SZJR10P	0.1 2W	[M]
R5727	ERX2SZJR10P	0.1 2W	[M]
R5728	ERJ3GEYJ104V	100K 1/10W	[M]
R5729	ERJ6GEYJ103V	10K 1/8W	[M]
R5730	ERJ3GEYJ102V	1K 1/10W	[M]
R5731	ERJ3GEY0R00V	0 1/10W	[M]
R5732	ERJ3GEYJ101V	100 1/10W	[M]
R5733	ERJ3GEYJ473V	47K 1/10W	[M]
R5750	ERJ3GEY0R00V	0 1/10W	[M]
R5786	ERJ1TYJ204U	200K 1W	[M]
R5787	ERJ3GEYJ753V	75K 1/10W	[M]
R5795	ERJ6GEYJ433V	43K 1/8W	[M]
R5796	ERDS1FVJ222T	2.2K 1/2W	[M]
R5797	ERJ6GEYJ472V	4.7K 1/8W	[M]
R5798	ERJ6GEYJ100V	10 1/8W	[M]
R5800	ERJ6GEYJ822V	8.2K 1/8W	[M]
R5801	ERJ6GEYJ103V	10K 1/8W	[M]
R5802	ERJ3RBD272V	2.7K 1/16W	[M]
R5803	ERJ6RBD562V	5.6K 1/10W	[M]
R5804	ERJ6RBD333V	33K 1/10W	[M]
R5805	ERJ3RBD222V	2.2K 1/16W	[M]
R5806	ERJ3GEYJ153V	15K 1/10W	[M]
R5807	ERJ6GEYJ331V	330 1/8W	[M]
R5808	ERJ6GEYJ222V	2.2K 1/8W	[M]
R5809	ERJ6GEYJ331V	330 1/8W	[M]
R5810	ERJ3GEYJ331V	330 1/10W	[M]
R5811	ERJ8GEYJ152V	1.5K 1/4W	[M]
R5812	ERJ3RBD822V	8.2K 1/16W	[M]
R5813	ERJ3RBD243V	24K 1/16W	[M]
R5814	ERJ3GEYJ822V	8.2K 1/10W	[M]
R5815	ERJ3GEYJ272V	2.7K 1/10W	[M]
R5816	ERJ8GEYJ152V	1.5K 1/4W	[M]
R5817	ERJ3GEYJ331V	330 1/10W	[M]
R5832	ERJ1TYJ222U	2.2K 1W	[M]
R5834	ERJ1TYJ222U	2.2K 1W	[M]
R5840	D0GB823JA008	82K 1/16W	[M]
R5841	D0GB124JA008	120K 1/16W	[M]
R5860	ERJ3GEYF103V	10K 1/10W	[M]
R5861	ERJ3GEYF123V	12K 1/10W	[M]
R5862	ERJ6GEYJ103V	10K 1/8W	[M]
R5863	ERJ6GEYJ683V	68K 1/8W	[M]
R5864	ERJ6GEYF103V	10K 1/8W	[M]
R5890	ERJ3GEYJ222V	2.2K 1/10W	[M]
R5891	ERJ3RBD333V	33K 1/16W	[M]
R5892	ERJ3RBD472V	4.7K 1/16W	[M]
R5893	ERJ3RBD393V	39K 1/16W	[M]
R5894	ERJ3GEYJ102V	1K 1/10W	[M]
R5895	ERJ3GEYJ101V	100 1/10W	[M]
RX2001	D1H83304A024	RESISTOR NETWORK	[M]
RX2002	EXB2HV330JV	RESISTOR NETWORK	[M]
RX2003	EXB2HV330JV	RESISTOR NETWORK	[M]
RX2004	EXB2HV330JV	RESISTOR NETWORK	[M]
		CAPACITORS	
C105	F1H1H101A230	100pF 50V	[M]
C106	F1H1H101A230	100pF 50V	[M]
C107	F1H1H101A230	100pF 50V	[M]
C108	F1H1H101A230	100pF 50V	[M]
C109	F1H1H101A230	100pF 50V	[M]
C110	F1H1H101A230	100pF 50V	[M]
C111	F1H1H101A230	100pF 50V	[M]
C112	F1H1H101A230	100pF 50V	[M]
C113	F1H1A105A025	1uF 10V	[M]
C114	F1H1A105A025	1uF 10V	[M]
C117	F1H1A105A025	1uF 10V	[M]
C118	F1H1A105A025	1uF 10V	[M]
C129	ECA1CAK101XB	100uF 16V	[M]
C130	F1H1E103A029	0.01uF 25V	[M]
C131	ECJ1VC1H330J	33pF 50V	[M]
C132	ECJ1VC1H330J	33pF 50V	[M]
C133	F1H1E103A029	0.01uF 25V	[M]
C134	ECA1CAK101XB	100uF 16V	[M]
C135	F1H1E103A029	0.01uF 25V	[M]
C136	ECA1HAK4R7XB	4.7uF 50V	[M]
C137	ECA1CAK100XB	10uF 16V	[M]
C138	ECA1HAK010XB	1uF 50V	[M]
C139	ECA1CAK100XB	10uF 16V	[M]
C140	ECA1CAK100XB	10uF 16V	[M]
C141	ECA1HAK4R7XB	4.7uF 50V	[M]
C142	ECA1HAK4R7XB	4.7uF 50V	[M]
C143	ECA1HAK100XB	10uF 50V	[M]
C144	ECA1HAK4R7XB	4.7uF 50V	[M]
C145	ECA1HAK4R7XB	4.7uF 50V	[M]
C146	ECA1HAK100XB	10uF 50V	[M]
C147	ECA1HAK4R7XB	4.7uF 50V	[M]
C148	ECA1CAK100XB	10uF 16V	[M]
C149	ECA1CAK100XB	10uF 16V	[M]
C150	ECA1HAK100XB	10uF 50V	[M]
C151	ECA1HAK4R7XB	4.7uF 50V	[M]
C153	ECA1CAK100XB	10uF 16V	[M]
C154	ECA1CAK100XB	10uF 16V	[M]
C165	ECA0JAK470XB	47uF 6.3V	[M]
C166	F1H1H391A013	390pF 50V	[M]
C167	F1H1H391A013	390pF 50V	[M]
C168	F1H1H391A013	390pF 50V	[M]
C169	F1H1H391A013	390pF 50V	[M]
C170	F1H1E103A029	0.01uF 25V	[M]
C171	ECA1CAK100XB	10uF 16V	[M]
C172	F1H1E103A029	0.01uF 25V	[M]
C173	ECJ1VB1H332K	3300pF 50V	[M]
C174	ECA1CAK220XB	22uF 16V	[M]
C175	ECJ1VB1H272K	2700pF 50V	[M]
C176	ECJ1VC1H471J	470pF 50V	[M]
C177	ECA1CAK100XB	10uF 16V	[M]
C178	ECJ1VB1H152K	1500pF 50V	[M]
C179	F1H1E103A029	0.01uF 25V	[M]
C180	ECA1CAK220XB	22uF 16V	[M]
C181	ECJ1VB1H182K	1800pF 50V	[M]
C182	ECJ1VB1H152K	1500pF 50V	[M]
C183	F1H1E103A029	0.01uF 25V	[M]
C184	ECJ1VB1H332K	3300pF 50V	[M]
C185	ECJ1VC1H331J	330pF 50V	[M]
C186	ECA1CAK100XB	10uF 16V	[M]
C187	ECJ1VB1H332K	3300pF 50V	[M]
C188	ECA1CAK220XB	22uF 16V	[M]
C189	ECJ1VB1H182K	1800pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C190	ECJ1VC1H271J	270pF 50V	[M]
C191	ECA1CAK100XB	10uF 16V	[M]
C192	ECJ1VB1H152K	1500pF 50V	[M]
C193	F1H1E103A029	0.01uF 25V	[M]
C194	ECA1CAK220XB	22uF 16V	[M]
C195	ECJ1VB1H182K	1800pF 50V	[M]
C196	ECJ1VB1H152K	1500pF 50V	[M]
C197	ECJ1VB1H332K	3300pF 50V	[M]
C198	F1H1E103A029	0.01uF 25V	[M]
C199	ECJ1VC1H271J	270pF 50V	[M]
C201	ECA1CAK100XB	10uF 16V	[M]
C216	ECA1CAK100XB	10uF 16V	[M]
C217	ECA1CAK100XB	10uF 16V	[M]
C218	ECA1CAK100XB	10uF 16V	[M]
C219	ECA1CAK100XB	10uF 16V	[M]
C222	F1H1C104A008	0.1uF 16V	[M]
C226	F1H1C104A008	0.1uF 16V	[M]
C230	F1H1C104A008	0.1uF 16V	[M]
C231	F1H1H471A219	470pF 50V	[M]
C232	F1H1H471A219	470pF 50V	[M]
C233	F1H1C104A008	0.1uF 16V	[M]
C235	ECA1CAK100XB	10uF 16V	[M]
C236	ECA1CAK100XB	10uF 16V	[M]
C237	F1H1C104A008	0.1uF 16V	[M]
C240	F1H1C104A008	0.1uF 16V	[M]
C241	ECA1HAK010XB	1uF 50V	[M]
C242	ECA1HAKR33XB	0.33uF 50V	[M]
C243	F1H1C104A008	0.1uF 16V	[M]
C244	F1H1C104A008	0.1uF 16V	[M]
C245	ECJ1VB1C823K	0.082uF 16V	[M]
C246	F1H1C104A008	0.1uF 16V	[M]
C247	ECJ1VC1H151J	150pF 50V	[M]
C248	F1H1H272A013	2700pF 50V	[M]
C249	F1H1C104A008	0.1uF 16V	[M]
C250	ECA1CAK100XB	10uF 16V	[M]
C251	ECA1CAK100XB	10uF 16V	[M]
C252	F1H1C104A008	0.1uF 16V	[M]
C271	F1H1A105A025	1uF 10V	[M]
C272	F1H1A105A025	1uF 10V	[M]
C273	F2A0J3310059	330uF 6.3V	[M]
C276	ECA1HAK4R7XB	4.7uF 50V	[M]
C277	F1H1A105A025	1uF 10V	[M]
C278	F1H1A105A025	1uF 10V	[M]
C282	F1H1E103A029	0.01uF 25V	[M]
C284	F1H1E103A029	0.01uF 25V	[M]
C285	ECA1CAK101XB	100uF 16V	[M]
C286	F1H1H104A783	0.1uF 50V	[M]
C303	F1H1H102A219	1000pF 50V	[M]
C304	F1H1H101A230	100pF 50V	[M]
C305	F1H1H101A230	100pF 50V	[M]
C306	F1H1H101A230	100pF 50V	[M]
C307	F1H1E103A029	0.01uF 25V	[M]
C308	ECA0JAK101XB	100uF 6.3V	[M]
C309	F1H1E103A029	0.01uF 25V	[M]
C310	F1H1E103A029	0.01uF 25V	[M]
C311	F1H1E103A029	0.01uF 25V	[M]
C312	ECA0JAM102XB	1000uF 6.3V	[M]
C313	ECA0JAM102XB	1000uF 6.3V	[M]
C314	F1H1C104A008	0.1uF 16V	[M]
C315	F1H1A105A025	1uF 10V	[M]
C316	F1H1A105A025	1uF 10V	[M]
C317	F1H1E103A029	0.01uF 25V	[M]
C318	ECA0JAK101XB	100uF 6.3V	[M]
C319	F1H1E103A029	0.01uF 25V	[M]
C322	F1H1C104A008	0.1uF 16V	[M]
C324	F1H1C104A008	0.1uF 16V	[M]
C326	ECJ1VB1H103K	0.01uF 50V	[M]
C361	ECJ1VC1H220J	22pF 50V	[M]
C362	ECJ1VC1H220J	22pF 50V	[M]
C363	ECJ1VC1H220J	22pF 50V	[M]
C364	ECJ1VC1H220J	22pF 50V	[M]
C365	ECJ1VC1H220J	22pF 50V	[M]
C366	ECJ1VC1H220J	22pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C367	ECJ1VC1H220J	22pF 50V	[M]
C368	ECJ1VC1H220J	22pF 50V	[M]
C369	ECJ1VC1H220J	22pF 50V	[M]
C370	ECJ1VC1H220J	22pF 50V	[M]
C371	ECJ1VC1H220J	22pF 50V	[M]
C387	F1H1C104A008	0.1uF 16V	[M]
C388	F1H1C104A008	0.1uF 16V	[M]
C389	F1H1A105A025	1uF 10V	[M]
C390	F1H1A105A025	1uF 10V	[M]
C391	ECJ1VB1H102K	1000pF 50V	[M]
C392	ECJ1VB1H102K	1000pF 50V	[M]
C608	F1H1H102A219	1000pF 50V	[M]
C611	ECA1AAK221XB	220uF 10V	[M]
C612	F1H1C104A008	0.1uF 16V	[M]
C613	ECA1HAK220XB	22uF 50V	[M]
C614	ECA1HAK220XB	22uF 50V	[M]
C615	ECA1HAK220XB	22uF 50V	[M]
C616	ECA1HAK220XB	22uF 50V	[M]
C618	ECA1HAK220XB	22uF 50V	[M]
C619	ECA1HAK220XB	22uF 50V	[M]
C620	F1H1C104A008	0.1uF 16V	[M]
C622	ECA1HAK100XB	10uF 50V	[M]
C624	ECA1AAK221XB	220uF 10V	[M]
C643	F1H1A105A025	1uF 10V	[M]
C657	F1H1H331A013	330pF 50V	[M]
C658	F1H1H331A013	330pF 50V	[M]
C659	F1H1H331A013	330pF 50V	[M]
C660	F1H1H331A013	330pF 50V	[M]
C661	F1H1H331A013	330pF 50V	[M]
C662	F1H1H331A013	330pF 50V	[M]
C663	F1H1H331A013	330pF 50V	[M]
C664	F1H1H331A013	330pF 50V	[M]
C665	F1H1H331A013	330pF 50V	[M]
C666	F1H1H331A013	330pF 50V	[M]
C667	F1H1H331A013	330pF 50V	[M]
C668	F1H1H331A013	330pF 50V	[M]
C670	F1H1C104A008	0.1uF 16V	[M]
C671	F1H1C104A008	0.1uF 16V	[M]
C701	F2A1E1020042	1000uF 25V	[M]
C704	F2A0J221A245	220uF 6.3V	[M]
C705	F2A1V470A654	47uF 35V	[M]
C706	F2A1V330A379	33uF 35V	[M]
C716	ECA1EAK470XB	47uF 25V	[M]
C717	ECA1CAK100XB	10uF 16V	[M]
C721	F2A1E1010067	100uF 25V	[M]
C728	F1K1E106A078	10uF 25V	[M]
C729	F2A1E3310051	330uF 25V	[M]
C733	F2A1E4710061	470uF 25V	[M]
C741	F2A1A1010072	100uF 10V	[M]
C751	ECJ1VB1H102K	1000pF 50V	[M]
C752	ECJ1VB1H102K	1000pF 50V	[M]
C757	F1H1H104A783	0.1uF 50V	[M]
C767	F2A1E4710061	470uF 25V	[M]
C770	ECQB1H392KF3	3900pF 50V	[M]
C773	F2A1E4710061	470uF 25V	[M]
C777	F1H1H104A783	0.1uF 50V	[M]
C778	F1K1E106A078	10uF 25V	[M]
C779	F2A1E3310051	330uF 25V	[M]
C780	F1H1C104A008	0.1uF 16V	[M]
C781	F1H1C104A008	0.1uF 16V	[M]
C782	F1H1H104A783	0.1uF 50V	[M]
C793	F1H1H102A219	1000pF 50V	[M]
C796	ECA0JAK101XB	100uF 6.3V	[M]
C797	F1H1C104A008	0.1uF 16V	[M]
C798	F1H1C104A008	0.1uF 16V	[M]
C799	F1H1C104A008	0.1uF 16V	[M]
C1000	F1H1H101A230	100pF 50V	[M]
C1006	F1H1H101A230	100pF 50V	[M]
C1007	F1H1H101A230	100pF 50V	[M]
C1008	F1H1H101A230	100pF 50V	[M]
C1009	F1H1H101A230	100pF 50V	[M]
C1010	F1H1H101A230	100pF 50V	[M]
C1011	F1H1C104A008	0.1uF 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1012	F1H1H101A230	100pF 50V	[M]
C1013	F1H1H101A230	100pF 50V	[M]
C1014	F1H1H101A230	100pF 50V	[M]
C1015	F1H1H101A230	100pF 50V	[M]
C1016	F1H1H101A230	100pF 50V	[M]
C1018	F1H1H272A013	2700pF 50V	[M]
C1019	F1H1H272A013	2700pF 50V	[M]
C1020	F1H1C104A008	0.1uF 16V	[M]
C1021	F1H1C104A008	0.1uF 16V	[M]
C1022	F1H1C104A008	0.1uF 16V	[M]
C1023	F1H1H222A219	2200pF 50V	[M]
C1024	ECJ1VB1C473K	0.047uF 16V	[M]
C1025	F1H1C104A008	0.1uF 16V	[M]
C1026	F1H1H103A219	0.01uF 50V	[M]
C1027	F1H1C104A008	0.1uF 16V	[M]
C1029	F1H1C104A008	0.1uF 16V	[M]
C1030	F1H1C104A008	0.1uF 16V	[M]
C1031	ECJ1VC1H330J	33pF 50V	[M]
C1032	ECJ1VC1H330J	33pF 50V	[M]
C1033	F1H1C104A008	0.1uF 16V	[M]
C1034	F1H1C104A008	0.1uF 16V	[M]
C1035	F1H1C104A008	0.1uF 16V	[M]
C1036	F1H1C104A008	0.1uF 16V	[M]
C1037	F1H1C104A008	0.1uF 16V	[M]
C1050	EEE1CA100SR	10uF 16V	[M]
C1051	EEE1ES4R7SR	4.7uF 25V	[M]
C1052	EEE1CA101P	100uF 16V	[M]
C1053	EEE1CA100SR	10uF 16V	[M]
C1054	EEE1CA100SR	10uF 16V	[M]
C1055	EEE1CA100SR	10uF 16V	[M]
C1056	EEE1CA100SR	10uF 16V	[M]
C1057	EEE1CA100SR	10uF 16V	[M]
C1058	EEE1CA100SR	10uF 16V	[M]
C1059	EEE1CA100SR	10uF 16V	[M]
C1060	EEE1CA100SR	10uF 16V	[M]
C1061	EEE1CA100SR	10uF 16V	[M]
C1062	F1H1C104A008	0.1uF 16V	[M]
C1063	F1H1C104A008	0.1uF 16V	[M]
C1064	F1H1C104A008	0.1uF 16V	[M]
C1065	F1H1C104A008	0.1uF 16V	[M]
C1066	F1H1C104A008	0.1uF 16V	[M]
C1067	F1H1C104A008	0.1uF 16V	[M]
C1068	F1H1C104A008	0.1uF 16V	[M]
C1069	F1H1C104A008	0.1uF 16V	[M]
C1070	F1H1C104A008	0.1uF 16V	[M]
C1071	F1H1C104A008	0.1uF 16V	[M]
C1072	F1H1C104A008	0.1uF 16V	[M]
C1073	F1H1C104A008	0.1uF 16V	[M]
C1074	F1H1C104A008	0.1uF 16V	[M]
C1075	F1H1C104A008	0.1uF 16V	[M]
C1076	EEE1CA100SR	10uF 16V	[M]
C1077	EEE1CA100SR	10uF 16V	[M]
C1078	EEE1CA100SR	10uF 16V	[M]
C1079	EEE1CA100SR	10uF 16V	[M]
C1080	EEE1CA100SR	10uF 16V	[M]
C1081	EEE1CA100SR	10uF 16V	[M]
C1082	F1H1H103A219	0.01uF 50V	[M]
C1083	F1H1H103A219	0.01uF 50V	[M]
C1084	F1H1H103A219	0.01uF 50V	[M]
C1085	F1H1H103A219	0.01uF 50V	[M]
C1086	F1H1H103A219	0.01uF 50V	[M]
C1087	F1H1H103A219	0.01uF 50V	[M]
C1088	ECJ1VC1H220J	22pF 50V	[M]
C1089	F1H1C104A008	0.1uF 16V	[M]
C1090	F1H1C104A008	0.1uF 16V	[M]
C2002	F1H1C104A041	0.1uF 16V	[M]
C2004	F1H1C104A041	0.1uF 16V	[M]
C2005	EEE0JA101SP	100uF 6.3V	[M]
C2006	EEE0JA101SP	100uF 6.3V	[M]
C2007	F1H1C104A041	0.1uF 16V	[M]
C2010	F1H1C104A041	0.1uF 16V	[M]
C2011	F1H1C104A041	0.1uF 16V	[M]
C2012	F1H1C104A041	0.1uF 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2013	F1H1C104A041	0.1uF 16V	[M]
C2014	F1H1C104A041	0.1uF 16V	[M]
C2015	EEE1CA100SR	10uF 16V	[M]
C2016	EEE1CA100SR	10uF 16V	[M]
C2017	F1H1C104A041	0.1uF 16V	[M]
C2018	F1H1C104A041	0.1uF 16V	[M]
C2019	F1H1C104A041	0.1uF 16V	[M]
C2020	F1H1C104A041	0.1uF 16V	[M]
C2021	F1H0J1050010	1uF 6.3V	[M]
C2022	F1H1C104A041	0.1uF 16V	[M]
C2023	F1H1C104A041	0.1uF 16V	[M]
C2024	F1H1C104A041	0.1uF 16V	[M]
C2025	F1H0J1050010	1uF 6.3V	[M]
C2026	F1H1C104A041	0.1uF 16V	[M]
C2027	F1H1C104A041	0.1uF 16V	[M]
C2028	F1H1C104A041	0.1uF 16V	[M]
C2029	F1H1C104A041	0.1uF 16V	[M]
C2030	F1H1C104A041	0.1uF 16V	[M]
C2031	F1H1H1800001	18pF 50V	[M]
C2032	F1H1H1800001	18pF 50V	[M]
C2033	F1H1H103A219	0.01uF 50V	[M]
C2034	F1H1C104A041	0.1uF 16V	[M]
C2035	F1H0J1050010	1uF 6.3V	[M]
C2036	F1H0J1050010	1uF 6.3V	[M]
C2037	F1H1C104A041	0.1uF 16V	[M]
C2038	F1H1C104A041	0.1uF 16V	[M]
C2039	F1H1C104A041	0.1uF 16V	[M]
C2040	F1H1C104A041	0.1uF 16V	[M]
C2041	F1H1C104A041	0.1uF 16V	[M]
C2042	F1H0J1050010	1uF 6.3V	[M]
C2043	F1H0J1050010	1uF 6.3V	[M]
C2044	ERJ3GEY0R00V	0 1/10W	[M]
C2045	F1H0J1050010	1uF 6.3V	[M]
C2046	F1H0J1050010	1uF 6.3V	[M]
C2047	F1H1C104A041	0.1uF 16V	[M]
C2101	F1H0J1050010	1uF 6.3V	[M]
C2102	F1H1C104A041	0.1uF 16V	[M]
C2103	F1H1C104A041	0.1uF 16V	[M]
C2104	F1H1C104A041	0.1uF 16V	[M]
C2105	F1H1C104A041	0.1uF 16V	[M]
C2106	F1H1H102A219	1000pF 50V	[M]
C2107	F1H1C104A041	0.1uF 16V	[M]
C2108	F1H1H102A219	1000pF 50V	[M]
C2109	F1H1H102A219	1000pF 50V	[M]
C2110	F1H1H102A219	1000pF 50V	[M]
C2111	F1H1C104A041	0.1uF 16V	[M]
C2112	EEE0GA331WP	330uF 4V	[M]
C2113	F1H1C104A041	0.1uF 16V	[M]
C2114	F1H1C104A041	0.1uF 16V	[M]
C2115	F1H1C104A041	0.1uF 16V	[M]
C2116	EEE0GA331WP	330uF 4V	[M]
C2117	F1H1C104A041	0.1uF 16V	[M]
C2118	F1H1C104A041	0.1uF 16V	[M]
C2119	F1H1C104A041	0.1uF 16V	[M]
C2151	EEE1CA100SR	10uF 16V	[M]
C2152	F1H1C104A041	0.1uF 16V	[M]
C2153	ECJ1VC1H330J	33pF 50V	[M]
C2155	F1H1H103A219	0.01uF 50V	[M]
C2158	EEE1CA100SR	10uF 16V	[M]
C2159	F1H1C104A041	0.1uF 16V	[M]
C2160	ECJ1VB0J474K	0.47uF 6.3V	[M]
C2161	F1H1H220A230	22pF 50V	[M]
C2162	F1H0J1050010	1uF 6.3V	[M]
C2163	F1H0J1050010	1uF 6.3V	[M]
C2164	F1H1H220A230	22pF 50V	[M]
C2165	F1H1H220A230	22pF 50V	[M]
C2166	F1H0J1050010	1uF 6.3V	[M]
C2167	F1H1C104A041	0.1uF 16V	[M]
C2201	F1H1H102A219	1000pF 50V	[M]
C2202	F1H1H102A219	1000pF 50V	[M]
C2203	F1H1H102A219	1000pF 50V	[M]
C2204	F1H1C104A041	0.1uF 16V	[M]
C2205	F1H1H103A219	0.01uF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2206	EEE1HA2R2SR	CHIP E- 50V	[M]
C2207	EEE0JA101SP	100uF 6.3V	[M]
C2208	F1H1C104A041	0.1uF 16V	[M]
C2209	F1H1C104A041	0.1uF 16V	[M]
C2210	F1H1C104A041	0.1uF 16V	[M]
C2211	F1H1C104A041	0.1uF 16V	[M]
C2212	ECJ1VB1C104K	0.1uF 16V	[M]
C2213	ECJ1VB1C104K	0.1uF 16V	[M]
C2214	F1H0J1050010	1uF 6.3V	[M]
C2215	ECJ1VC1H331J	330pF 50V	[M]
C2216	ECJ1VC1H221J	220pF 50V	[M]
C5000	ECJ1VB1H102K	1000pF 50V	[M]
C5001	ECJ1VB1H102K	1000pF 50V	[M]
C5002	F1H1A474A001	0.47uF 10V	[M]
C5003	F1H1A474A001	0.47uF 10V	[M]
C5004	F1H1A474A001	0.47uF 10V	[M]
C5005	F1H1A474A001	0.47uF 10V	[M]
C5006	ECJ1VB1H331K	330pF 50V	[M]
C5007	ECJ1VB1H331K	330pF 50V	[M]
C5008	ECJ1VB1H153K	0.015uF 50V	[M]
C5009	ECJ1VB1H153K	0.015uF 50V	[M]
C5010	F1H2A221A009	220pF 100V	[M]
C5011	F1H2A221A009	220pF 100V	[M]
C5012	F1H2A221A009	220pF 100V	[M]
C5013	F1H2A221A009	220pF 100V	[M]
C5014	ECQV1H684JL3	0.68uF 50V	[M]
C5015	ECQV1H684JL3	0.68uF 50V	[M]
C5016	ECJ1VB1H104K	0.1uF 50V	[M]
C5017	ECJ1VB1H104K	0.1uF 50V	[M]
C5018	F1K2A1040007	0.1uF 100V	[M]
C5019	ECJ1VB1H104K	0.1uF 50V	[M]
C5020	ECJ1VB1H104K	0.1uF 50V	[M]
C5021	ECJ1VB1H104K	0.1uF 50V	[M]
C5022	ECJ1VB1H104K	0.1uF 50V	[M]
C5023	F1K2A1040007	0.1uF 100V	[M]
C5024	ECJ1VB1H104K	0.1uF 50V	[M]
C5025	ECJ1VB1H104K	0.1uF 50V	[M]
C5027	ECJ1VB1H104K	0.1uF 50V	[M]
C5028	ECJ1VB1H104K	0.1uF 50V	[M]
C5030	ECJ1VC1H221J	220pF 50V	[M]
C5031	ECJ1VB1C224K	0.22uF 16V	[M]
C5032	ECJ1VB1H102K	1000pF 50V	[M]
C5033	ECJ1VB1H104K	0.1uF 50V	[M]
C5040	F2A2A2200035	22uF 100V	[M]
C5050	ECJ1VB1H104K	0.1uF 50V	[M]
C5051	ECJ1VB1H104K	0.1uF 50V	[M]
C5052	ECJ1VB1H104K	0.1uF 50V	[M]
C5053	ECJ1VB1H104K	0.1uF 50V	[M]
C5133	F2A0J101A245	100uF 6.3V	[M]
C5150	ECJ1VB1H332K	3300pF 50V	[M]
C5151	ECJ1VB1H332K	3300pF 50V	[M]
C5152	ECJ1VB1H102K	1000pF 50V	[M]
C5153	ECJ1VB1H102K	1000pF 50V	[M]
C5154	ECJ1VB1H102K	1000pF 50V	[M]
C5155	ECJ1VB1H102K	1000pF 50V	[M]
C5250	ECJ1VB1H104K	0.1uF 50V	[M]
C5251	ECJ1VB1H104K	0.1uF 50V	[M]
C5300	ECQV1H684JL3	0.68uF 50V	[M]
C5301	ECJ1VB1H104K	0.1uF 50V	[M]
C5302	ECJ1VB1H104K	0.1uF 50V	[M]
C5303	ECJ1VB1H104K	0.1uF 50V	[M]
C5304	ECJ1VB1H331K	330pF 50V	[M]
C5305	ECJ1VB1H104K	0.1uF 50V	[M]
C5306	ECJ1VB1H104K	0.1uF 50V	[M]
C5307	F1H2A221A009	220pF 100V	[M]
C5309	ECJ1VB1H104K	0.1uF 50V	[M]
C5310	ECJ3YB2A104K	0.1uF 100V	[M]
C5311	F1H2A221A009	220pF 100V	[M]
C5312	ECJ1VB1H331K	330pF 50V	[M]
C5313	ECJ1VB1H104K	0.1uF 50V	[M]
C5314	F1H1A474A001	0.47uF 10V	[M]
C5315	ECJ1VB1H102K	1000pF 50V	[M]
C5316	ECJ1VB1H104K	0.1uF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5317	F1H1A474A001	0.47uF 10V	[M]
C5318	ECJ1VB1H104K	0.1uF 50V	[M]
C5319	ECJ3YB2A104K	0.1uF 100V	[M]
C5321	ECJ1VB1C224K	0.22uF 16V	[M]
C5322	ECJ1VB1H153K	0.015uF 50V	[M]
C5323	ECJ1VC1H221J	220pF 50V	[M]
C5324	ECJ1VB1H153K	0.015uF 50V	[M]
C5325	F1H2A221A009	220pF 100V	[M]
C5326	F1H2A221A009	220pF 100V	[M]
C5327	ECJ1VB1H104K	0.1uF 50V	[M]
C5328	ECQV1H684JL3	0.68uF 50V	[M]
C5331	ECJ1VB1H102K	1000pF 50V	[M]
C5332	F1H1A474A001	0.47uF 10V	[M]
C5333	ECJ1VB1H102K	1000pF 50V	[M]
C5334	F1H1A474A001	0.47uF 10V	[M]
C5350	ECJ1VB1H104K	0.1uF 50V	[M]
C5351	ECJ1VB1H104K	0.1uF 50V	[M]
C5445	ECJ1VB1H104K	0.1uF 50V	[M]
C5508	F2A1V4710074	470uF 35V	[M]
C5509	F2A1V4710074	470uF 35V	[M]
C5510	F2A1V4710074	470uF 35V	[M]
C5511	F2A1V4710074	470uF 35V	[M]
C5512	F2A1V1020084	1000uF 35V	[M]
C5513	F2A1V1020084	1000uF 35V	[M]
C5514	ECJ1VB1H104K	0.1uF 50V	[M]
C5515	ECJ1VB1H104K	0.1uF 50V	[M]
C5516	F2A1V4710074	470uF 35V	[M]
C5517	F2A1V4710074	470uF 35V	[M]
C5518	ECJ1VB1H104K	0.1uF 50V	[M]
C5519	ECJ1VB1H104K	0.1uF 50V	[M]
C5520	ECJ1VB1H104K	0.1uF 50V	[M]
C5521	ECJ1VB1H104K	0.1uF 50V	[M]
C5522	ECJ1VB1H104K	0.1uF 50V	[M]
C5523	ECJ1VB1H104K	0.1uF 50V	[M]
C5524	ECJ1VB1H104K	0.1uF 50V	[M]
C5525	ECJ1VB1H104K	0.1uF 50V	[M]
C5540	F2A2A2200035	22uF 100V	[M]
C5550	ERJ3GEY0R00V	0 1/10W	[M]
C5552	ECJ1VB1H391K	390pF 50V	[M]
C5553	ECJ1VC1H101J	100pF 50V	[M]
C5554	ECJ1VB1H104K	0.1uF 50V	[M]
C5555	F1K1C1060001	10uF 16V	[M]
C5557	ERJ3GEY0R00V	0 1/10W	[M]
C5558	ECJ1VC1H470J	47pF 50V	[M]
C5560	ECJ1VB1H104K	0.1uF 50V	[M]
C5561	ECJ1VC1H101J	100pF 50V	[M]
C5562	F2A0J102A016	1000uF 6.3V	[M]
C5601	ECA1CAK100XB	10uF 16V	[M]
C5602	F2A1C100A234	10uF 16V	[M]
C5690	ECJ1VB1H102K	1000pF 50V	[M]
C5691	ECA1EAK100XB	10uF 25V	[M]
C5692	ECA0JAK221XB	220uF 6.3V	[M]
C5693	ECJ1VB1H104K	0.1uF 50V	[M]
C5694	ECA1CAK330XB	33uF 16V	[M]
C5695	ECJ1VB1H104K	0.1uF 50V	[M]
C5696	ECEA1EKS220B	22uF 25V	[M]
C5697	ECA1HAK010XB	1uF 50V	[M]
C5700	F1BAF1020020	1000pF	[M] ⚠
C5701	F0CAF224A085	0.22uF	[M] ⚠
C5703	ECQU2A104MLC	0.1uF	[M] ⚠
C5704	F1BAF1020020	1000pF	[M] ⚠
C5705	F1BAF1020020	1000pF	[M] ⚠
C5712	F2A2F3310001	330uF 315V	[M]
C5713	F0C2J1030005	0.01uF 630V	[M]
C5720	ECJ1VB1H104K	0.1uF 50V	[M]
C5721	ECJ1VB1H221K	220pF 50V	[M]
C5722	ECJ1VB1H102K	1000pF 50V	[M]
C5723	ECJ1VB1H471K	470pF 50V	[M]
C5724	F2A1H2200032	22uF 50V	[M]
C5725	ECJ1VB1H104K	0.1uF 50V	[M]
C5726	ECJ1VB1H104K	0.1uF 50V	[M]
C5727	ECQP6332JUB	3300uF 630V	[M]
C5728	ECJ1VB1H102K	1000pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5730	ECEA1HKS010B	1uF 50V	[M]
C5790	ECJ3YB2J222K	2200pF 630V	[M]
C5791	ECEA1HKA2R2B	2.2uF 50V	[M]
C5794	ECJ1VC1H220J	22pF 50V	[M]
C5795	ECJ2VC1H222J	2200pF 50V	[M]
C5796	F1J1H104A717	0.1uF 50V	[M]
C5797	F1A3A470A023	47pF 1000V	[M]
C5798	F2A1H5600009	56uF 50V	[M]
C5800	F1J2E1030004	0.01uF 250V	[M]
C5805	F2B1V222A007	2200uF 35V	[M]
C5808	F2B1V222A007	2200uF 35V	[M]
C5810	ECJ1VB1H104K	0.1uF 50V	[M]
C5812	ECJ1VB1H104K	0.1uF 50V	[M]
C5813	F2A1V4710035	470uF 35V	[M]
C5815	ECJ1VB1H104K	0.1uF 50V	[M]
C5816	F2A1E471A652	470uF 25V	[M]
C5817	F2A2AR22A358	0.22uF 100V	[M]
C5818	ECJ1VB1H104K	0.1uF 50V	[M]
C5819	F1J2E1030004	0.01uF 250V	[M]
C5820	F1J2E1030004	0.01uF 250V	[M]
C5821	F1J2E1030004	0.01uF 250V	[M]
C5822	F1J2E1030004	0.01uF 250V	[M]
C5823	ECJ1VB1H104K	0.1uF 50V	[M]
C5824	F2A1E471A652	470uF 25V	[M]
C5825	ECJ1VB1H104K	0.1uF 50V	[M]
C5826	F1J2E1030004	0.01uF 250V	[M]
C5831	ECJ1VB1H104K	0.1uF 50V	[M]
C5832	ECJ1VB1H104K	0.1uF 50V	[M]
C5869	ECJ1VB1H104K	0.1uF 50V	[M]
C5896	ECJ1VB1H104K	0.1uF 50V	[M]
C5898	ECJ1VB1H104K	0.1uF 50V	[M]
C5899	F2A1C221A104	220uF 16V	[M]