

Service Manual

Active Speaker System

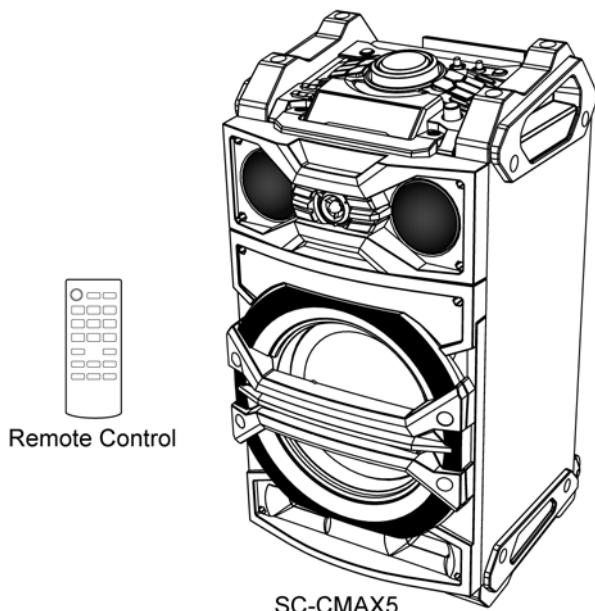
Model No. SC-CMAX5GS

SC-CMAX5PH

SC-CMAX5PR



Product Color: (K)...Black Type



⚠ 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.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by **⚠** in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and 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.

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1 Safety Precautions

1.1. General Guidelines

1. IMPORTANT SAFETY NOTICE

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

2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. 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.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. measure the resistance value, with an ohmmeter 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 $1M\Omega$ and $5.2M\Omega$. 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 $1.5k\Omega$, 10 watts resistor, in parallel with a $0.15\mu F$ capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1-1.
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. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

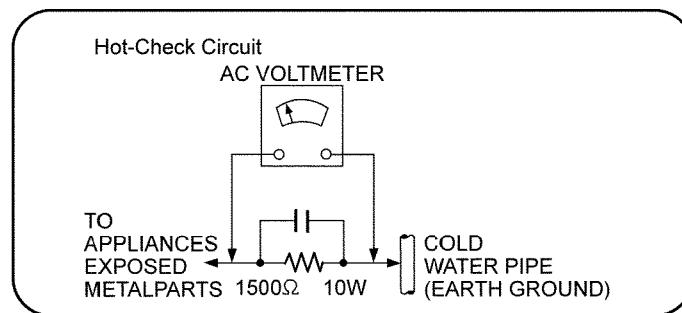


Figure 1-1

1.2. Caution for AC Cord (For GS only)

(For the AC mains plug of three pins)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

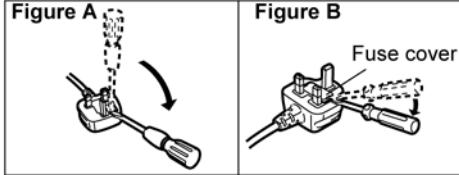
Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.

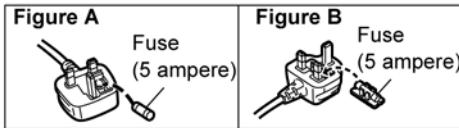


Figure 1-2

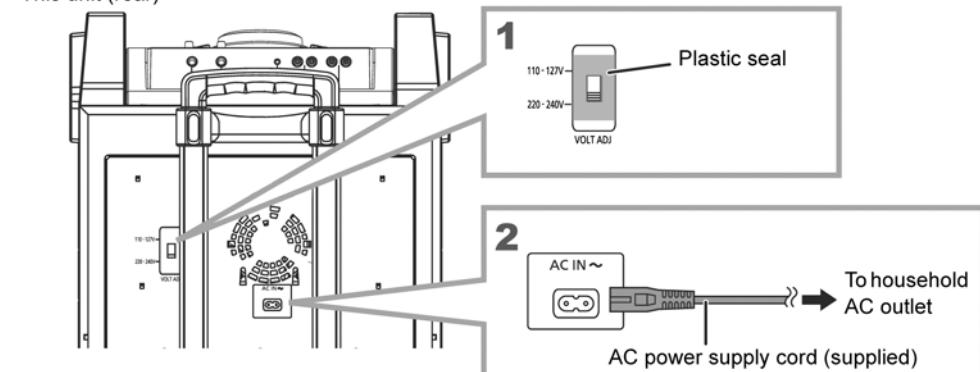
1.3. Before Use (For PH only)

Be sure to disconnect the AC cord before adjusting the voltage selector.

Use a minus(-) screwdriver to set the voltage selector (on the bottom panel) to the voltage setting for the area in which the unit will be used.

Note : that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries, the correct voltage is already set.)

This unit (rear)



1 Set the voltage.

CONFIRM THE AC VOLTAGE AND SET THE VOLTAGE SELECTOR TO THE CORRECT POSITION. TO CHANGE THE POSITION, REMOVE THE PLASTIC SEAL.

Use a flat-head screwdriver to set the voltage selector to the AC voltage in your area.

2 Connect the AC power supply cord.

Conserving power

The system consumes a small amount of power even when it is in standby mode. Disconnect the power supply if you do not use the system.

Some settings will be lost after you disconnect the system. You have to set them again.

Figure 1-3

1.4. Before Repair and Adjustment

Caution :

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 220V - 240V, at 50/60Hz during power on, (In Standby mode) should be ~550 mA. (For PR/GS)
- Current consumption at AC 110V - 127V / 220V - 240V, at 50/60Hz during power on, (In Standby mode) should be ~550 mA. (For PH)

1.5. 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.

1.6. 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, Exploded View & 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.

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	10	RGR0468A-A	REAR PANEL	PH
	10	RGR0468B-A	REAR PANEL	PR
	10	RGR0468B-B	REAR PANEL	GS
	A2	K2CA2YY00039	AC CORD	PR
	A2	K2CJ2YY00101	AC CORD	GS
	A2	K2CP2YY00061	AC CORD	GS
	A2	K2CQ2YY00119	AC CORD	GS,PH
	A2	K2CT2YY00097	AC CORD	GS
	A3	RQT9960-M	O/I BOOK (En/Sp)	PH,PR
	A3	RQT9961-G	O/I BOOK (En/Cn)	GS
	A4	K2DAYYY00002	AC PLUG ADAPTOR	PH
	PCB5	N0AC2GP00001	SMPS MODULE	GS,PR
	PCB5	N0AD2GP00002	SMPS MODULE	PH

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices.

Examples of typical ES devices are IC (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 electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped 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 equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup 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 removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient 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, aluminum 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 bodily 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).

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2.2. Service caution based on Legal restrictions

2.2.1. 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%

3 Service Navigation

3.1. Service Information

This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

3.1.1. Firmware update

- Software Update through USB

Steps:

1. Power On the unit.
2. Go to USB selector.
3. Plug In USB (containing FW_IMAGE.BIN & FWUPDATE (disc image file)).
4. Display will show 'READING' (blink) → UPD 0% to 100%.
5. After Software Update complete, display will be as show [SUCCESS].
6. Plug out USB.
7. Power off unit (unplug AC cord).
8. Software Update Process Finish.

3.1.2. Special

- For first lot of this model, there is additional Mute circuit (refer to Fig.2-1) to the Main P.C.B. Assembly.
- This circuit is for improvement to the quality.
- This Service Manual will be described with the Mute circuit implemented in the Main P.C.B. Assembly.

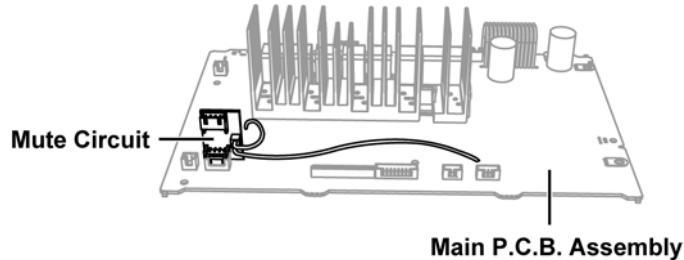


Fig.2-1

4 Specifications

■ General

Power consumption	92 W
Power consumption in standby mode	Approx. 0.4 W
(with "BLUETOOTH STANDBY" is "ON")	Approx. 0.6 W
Power supply	
(For PH)	AC 110 V to 127 V/220 V to 240 V, 50/60 Hz
(For GS/PR)	AC 220 V to 240 V, 50/60 Hz
Dimensions (W x H x D)	378 mm x 724 mm x 436 mm
Mass	Approx. 19.8 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80 % RH (no condensation)

- Specifications are subject to change without notice.
- Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

*Trolley handle at fully pushed-down position

■ Amplifier Section

Output power	
RMS Output Power Mono mode	
Front High ch	300 W per channel (3 Ω), 10 kHz, 30 % THD
Front Mid ch	300 W per channel (3 Ω), 1 kHz, 30 % THD
Subwoofer Ch	400 W per channel (2 Ω), 100 Hz, 30 % THD
Total RMS Mono mode power	1000 W (30 % THD)

■ Terminal Section

USB Port	
USB Standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32
USB port power	500 mA (max)
USB Recording	
Bit rate	128 kbps
USB recording speed	1x
Recording file format	MP3 (*.mp3)
Microphone jack/Guitar jack (2 systems)	
Mic 1	Mono, 6.3 mm jack
Mic 2/Guitar	Mono, 6.3 mm jack
Audio Input	
AUX IN 1	Stereo, Pin jack (1 system)
AUX IN 2	Stereo, 3.5 mm jack
Audio Output (Line Out)	
AUDIO OUT	Stereo, Pin jack (1 system)

■ Bluetooth Section

Version	Bluetooth® Ver.2.1+EDR
Class	Class 2
Supported profiles	A2DP, AVRCP, SPP
Operating frequency	2.4 GHz band FH-SS
Operation distance	10 m Line of Sight

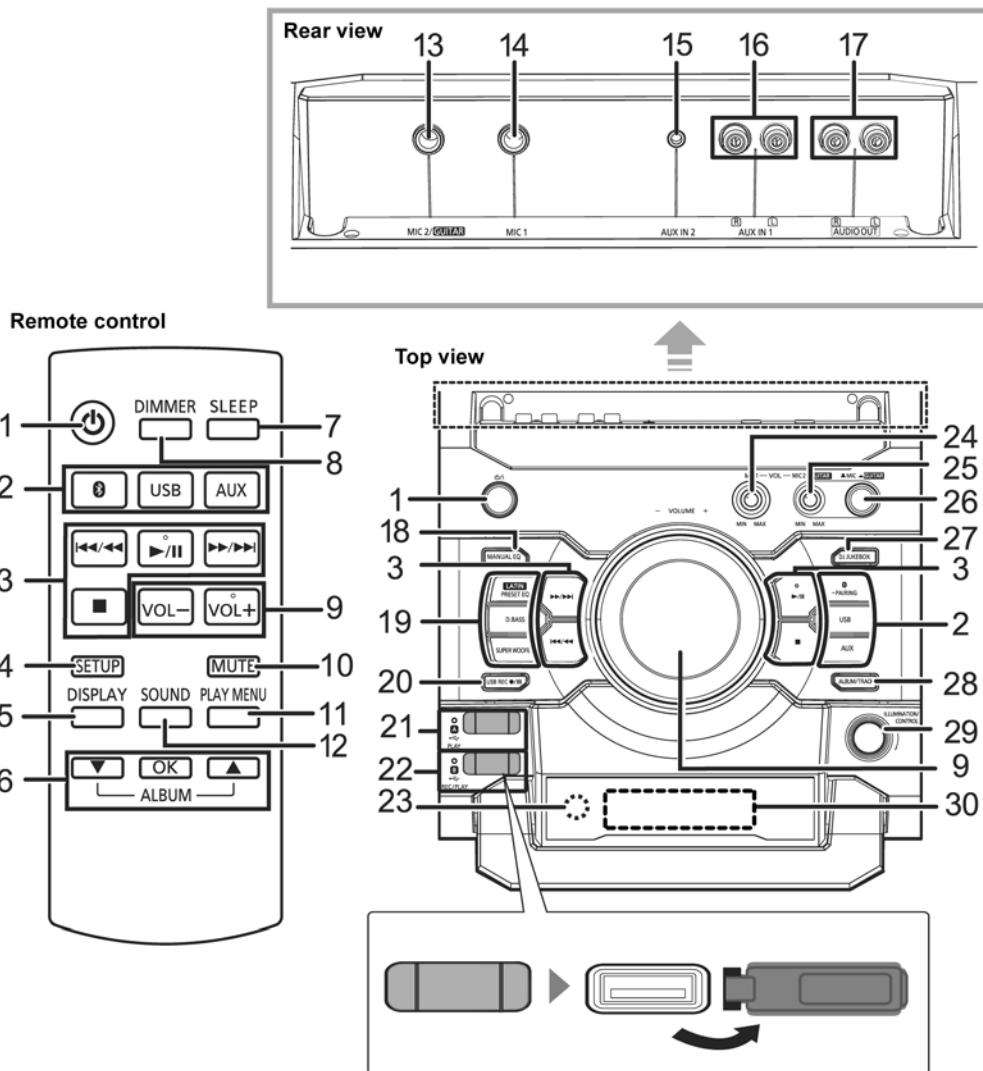
■ Speaker Section

Front High	
Speaker unit(s)	
Tweeter	6 cm Cone type
Front Mid	
Speaker unit(s)	
Woofer	10 cm Cone type x 2
Subwoofer	
Speaker unit(s)	
Superwoofer	25 cm Cone type

Note:

5 Location of Controls and Components

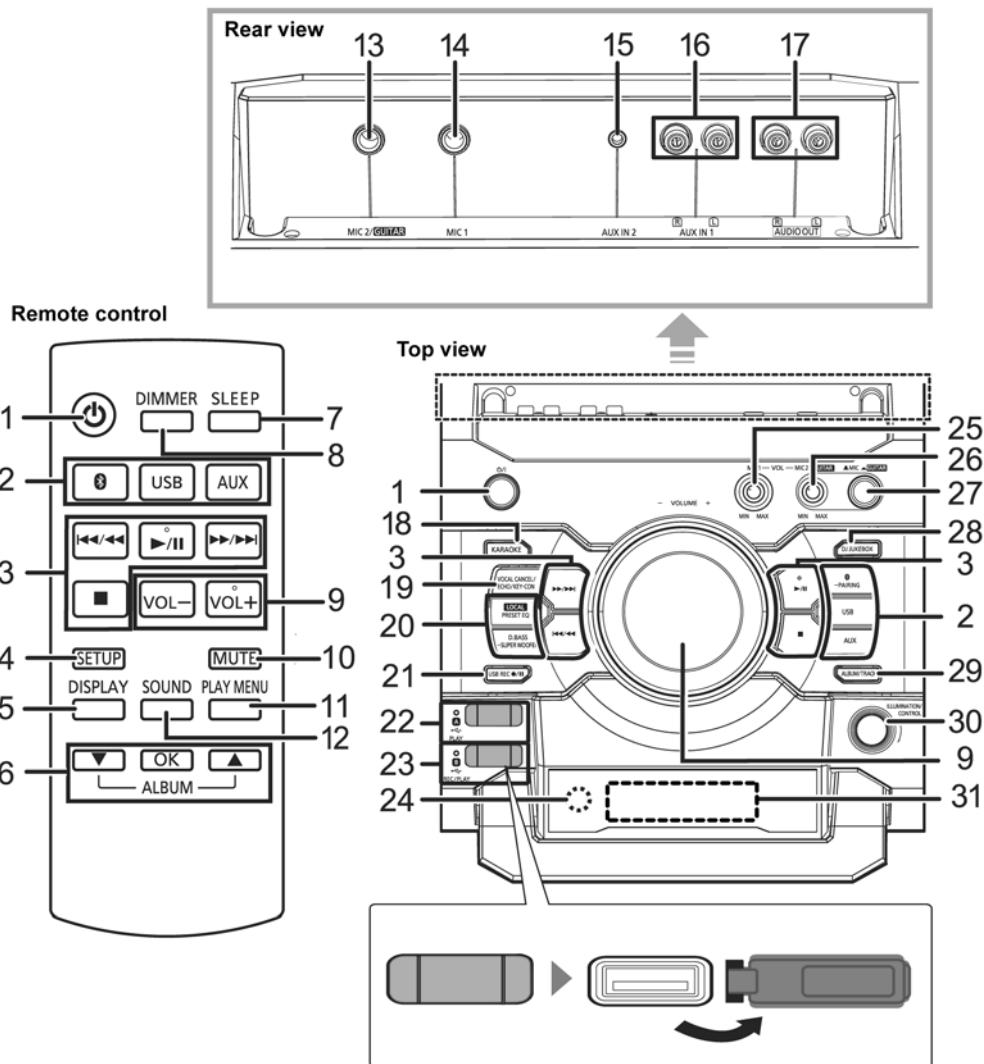
5.1. Main Unit & Remote Control Key Button Operations (For PH/PR)



- 1 **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.
- 2 Select audio source
On the unit:
To start Bluetooth® pairing, press and hold [Bluetooth -PAIRING] when you are in Bluetooth® source.
- 3 Basic playback control buttons
- 4 Enter setup menu
- 5 Change the displayed information
- 6 Selection/OK
- 7 Set the sleep timer
- 8 Dim the display panel and turn off the illumination
Press again to cancel.
- 9 Adjust the volume (0 (min.) to 50 (max.))
- 10 Mute the sound
Press again to cancel. "MUTE" is also canceled when the volume is adjusted or the unit is turned off.
- 11 Set the play menu item
- 12 Enter sound menu
- 13 Microphone jack 2/Guitar input jack
- 14 Microphone jack 1
- 15 AUX IN 2 terminal

- 16 AUX IN 1 terminal
- 17 AUDIO OUT terminal
- 18 Select MANUAL EQ
- 19 Select the sound effects
- 20 Recording operation control
- 21 **USB A**
USB port for playback
USB status indicator
- 22 **USB B**
USB port for recording/playback
USB status indicator
- 23 Remote control signal sensor
Distance: Within approx. 7 m directly in front
Angle: Approximately 20° up and down, 30° left and right
- 24 Adjust the volume of microphone 1
- 25 Adjust the volume of microphone 2 or guitar
- 26 Microphone 2 or guitar switch
- 27 Select the DJ jukebox
- 28 Select MP3 album or track browsing mode
- 29 Change the illumination setting
Browse MP3 tracks or albums
Change DJ jukebox playback mode
- 30 Display panel

5.2. Main Unit & Remote Control Key Button Operations (For GS)

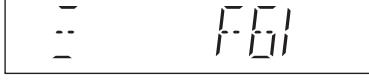
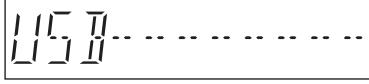


- 1 **Standby/on switch [Ø], [Ø/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- 2 **Select audio source**
On the unit:
To start Bluetooth® pairing, press and hold [Bluetooth -PAIRING] when you are in Bluetooth® source.
- 3 **Basic playback control buttons**
- 4 **Enter setup menu**
- 5 **Change the displayed information**
- 6 **Selection/OK**
- 7 **Set the sleep timer**
- 8 **Dim the display panel and turn off the illumination**
Press again to cancel.
- 9 **Adjust the volume (0 (min.) to 50 (max.))**
- 10 **Mute the sound**
Press again to cancel. "MUTE" is also cancelled when the volume is adjusted or the unit is turned off.
- 11 **Set the play menu item**
- 12 **Enter sound menu**
- 13 **Microphone jack 2/Guitar input jack**
- 14 **Microphone jack 1**
- 15 **AUX IN 2 terminal**
- 16 **AUX IN 1 terminal**
- 17 **AUDIO OUT terminal**
- 18 **Enter KARAOKE mode**
- 19 **Select vocal cancel, echo or key control**
- 20 **Select the sound effects**
- 21 **Recording operation control**
- 22 **USB A**
USB port for playback
USB status indicator
- 23 **USB B**
USB port for recording/playback
USB status indicator
- 24 **Remote control signal sensor**
Distance: Within approx. 7 m directly in front
Angle: Approximately 20° up and down, 30° left and right
- 25 **Adjust the volume of microphone 1**
- 26 **Adjust the volume of microphone 2 or guitar**
- 27 **Microphone 2 or guitar switch**
- 28 **Select the DJ jukebox**
- 29 **Select MP3 album or track browsing mode**
- 30 **Change the illumination setting**
Browse MP3 tracks or albums
Change DJ jukebox playback mode
- 31 **Display panel**

6 Service Mode

This unit is equipped with features of service mode & doctor mode setting for checking the functions & reliability.

6.1. Self Diagnostic Mode

Item		FL display	Key operation
Mode name	Description		
Service Mode	To enter into Service Mode checking.		Step 1 : Select USB A mode Step 2 : Press and hold [■] 2 seconds follow by [▶▶/▶▶] on main unit for 2 seconds.
Error code information	System will perform a check on any unusual/error code from the memory.	Example: 	Step 1 : In service mode, Press [■] on main unit. To exit, press [◊/] on main unit or remote control.
Delete Error code	To clear the stored in memory (EEPROM IC).		Step 1 : In service mode, Press [OK] on remote control more than 5 seconds. To exit, press [◊/] on main unit or remote control.
Cold Start	To activate cold start upon next power up. (Backup date are initialized)		Step 1 : In service mode Press [SETUP] on the remote control. To exit, press [◊/] on main unit or remote control.
Opecon Version	Opecon version display	Opecon Version: 	Step 1 : Enter service mode Press [DISPLAY] on the remote control. To exit, press [◊/] on main unit or remote control.

6.2. Self Diagnostic Function Error Code

Self-Diagnostic Function provides information on any problems occurring for the unit and its respective components by displaying the error codes. These error code such as U**, H** and F** are stored in memory and held unless it is cleared.

The error code is automatically display after entering into self-diagnostic mode.

6.2.1. Power Supply Error Code Table

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Error Code F61	Diagnosis Contents: DAMP output abnormal. DC_DET (SOC Pin 108)= L (NG). DC DET is checked by reading the input 2x20ms, F61 error code shall be memorized	F- E 1	Press [■] on main unit for next error.
Error Code F76	Diagnosis Contents: Power supply abnormal. PDET (SOC Pin 107) = L (NG) or PDET +46V (SOC Pin 13) = H (NG) PDET and PDET +46V is checked by reading the input 2x1ms, F76 error code shall be memorized.	F- 76	Press [■] on main unit for next error.

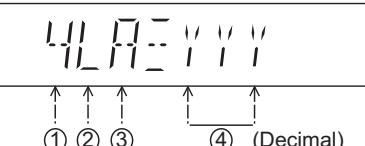
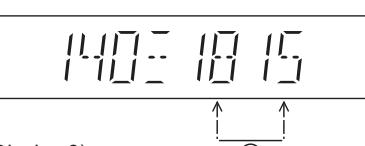
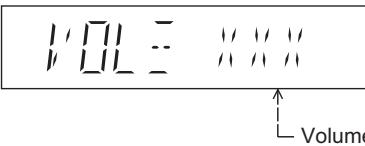
6.2.2. Bluetooth Error Code Table

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Error Code F70	Diagnosis Contents: Bluetooth Communication. Communication between Bluetooth module and micro-p abnormal.	F- 70	Press [■] on main unit for next error.
Error Code F77	Diagnosis Contents: Bluetooth Address Error If there is no valid Bluetooth address stored in the EEPROM IC.	F- 77	Press [■] on main unit for next error.

6.3. Doctor Mode

Note : To enter the Doctor Mode, please use MAX770 remote control. (Part No : N2QAYB000915)

6.3.1. Doctor Mode Table 1

Mode Name	Item Description	FL Display	Key Operation
			Front Key
Doctor Mode	To enter into Doctor Mode for checking of various items and displaying EEPROM check sum and Opecon firmware version. Note: The Opecon firmware version as shown is an example. It will be revised when there is updates. Displaying of 1. Year Develop. 2. Model Type. 3. ROM Type. 4. Firmware Version. 5. SDK Version.	(Display 1)  (Display 2)  (Display 3) 	In AUX Mode: 1. Press [■] button on main unit follow by [4] and [7] on remote control. 2. To cancel this mode, press [0] button on the remote control or press [POWER, φ/I] button on Main Unit
Cold Start	To active cold start upon next AC power up when reset start is execute the next time.		In Doctor Mode: 1. Press [4] button on the remote control. 2. To cancel this mode, press [0] button on the remote control or press [POWER, φ/I] button on Main Unit
Volume Setting Check	To check the volume setting of the main unit.		In Doctor Mode: 1. Press below button on the remote control. Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0 2. To cancel this mode, press [0] button on the remote control or press [POWER, φ/I] button on Main Unit
FL Display Check	To check the FL segment display. All segments will light up while all LED blink at 0.5s intervals.		In Doctor mode: 1. Press [1] button on the remote control. 2. To cancel this mode, press [0] button on the remote control or press [POWER, φ/I] button on Main Unit

6.3.2. Doctor Mode Table 2

Item		FL Display	Key Operation														
Mode Name	Description		Front Key														
Bluetooth mac Address Checking	Bluetooth Address Check	 Display of BlueTooth MAC Address will scroll forever	In Doctor Mode: 1. Press [10] → [4] → [1] and display will show. 2. To cancel this mode press [POWER, φ/I] button on Main Unit														
Bluetooth Module Check	Bluetooth module check and NFC writing	Device name is set to [SC-CMAX5-XX] X= region number (Please refer table below). <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Region</th> <th>Model</th> <th>Series</th> </tr> <tr> <td>1</td> <td rowspan="5" style="text-align: center;">CMAX5</td> <td>PH</td> </tr> <tr> <td>2</td> <td>GS</td> </tr> <tr> <td>3</td> <td>PR</td> </tr> <tr> <td>4</td> <td>JPN</td> </tr> <tr> <td>5</td> <td>LM</td> </tr> </table>	Region	Model	Series	1	CMAX5	PH	2	GS	3	PR	4	JPN	5	LM	In Doctor Mode: 1. Press [10] → [2] → [5] and display will show. 2. To cancel this mode press [POWER, φ/I] button on Main Unit
Region	Model	Series															
1	CMAX5	PH															
2		GS															
3		PR															
4		JPN															
5		LM															
Region Check	Checking for model no and Region	 AD value of region pin is check and display will show [REG-YYY] based on region table. YYY = 1 ~ 5 based on region table as below. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Region</th> <th>Model</th> <th>Series</th> </tr> <tr> <td>1</td> <td rowspan="5" style="text-align: center;">CMAX5</td> <td>PH</td> </tr> <tr> <td>2</td> <td>GS</td> </tr> <tr> <td>3</td> <td>PR</td> </tr> <tr> <td>4</td> <td>JPN</td> </tr> <tr> <td>5</td> <td>LM</td> </tr> </table>	Region	Model	Series	1	CMAX5	PH	2	GS	3	PR	4	JPN	5	LM	In Doctor Mode: 1. Press [10] → [1] → [6] button on the remote control. 2. To cancel this mode, press [0] button on the remote control or press [POWER, φ/I] button on Main Unit
Region	Model	Series															
1	CMAX5	PH															
2		GS															
3		PR															
4		JPN															
5		LM															

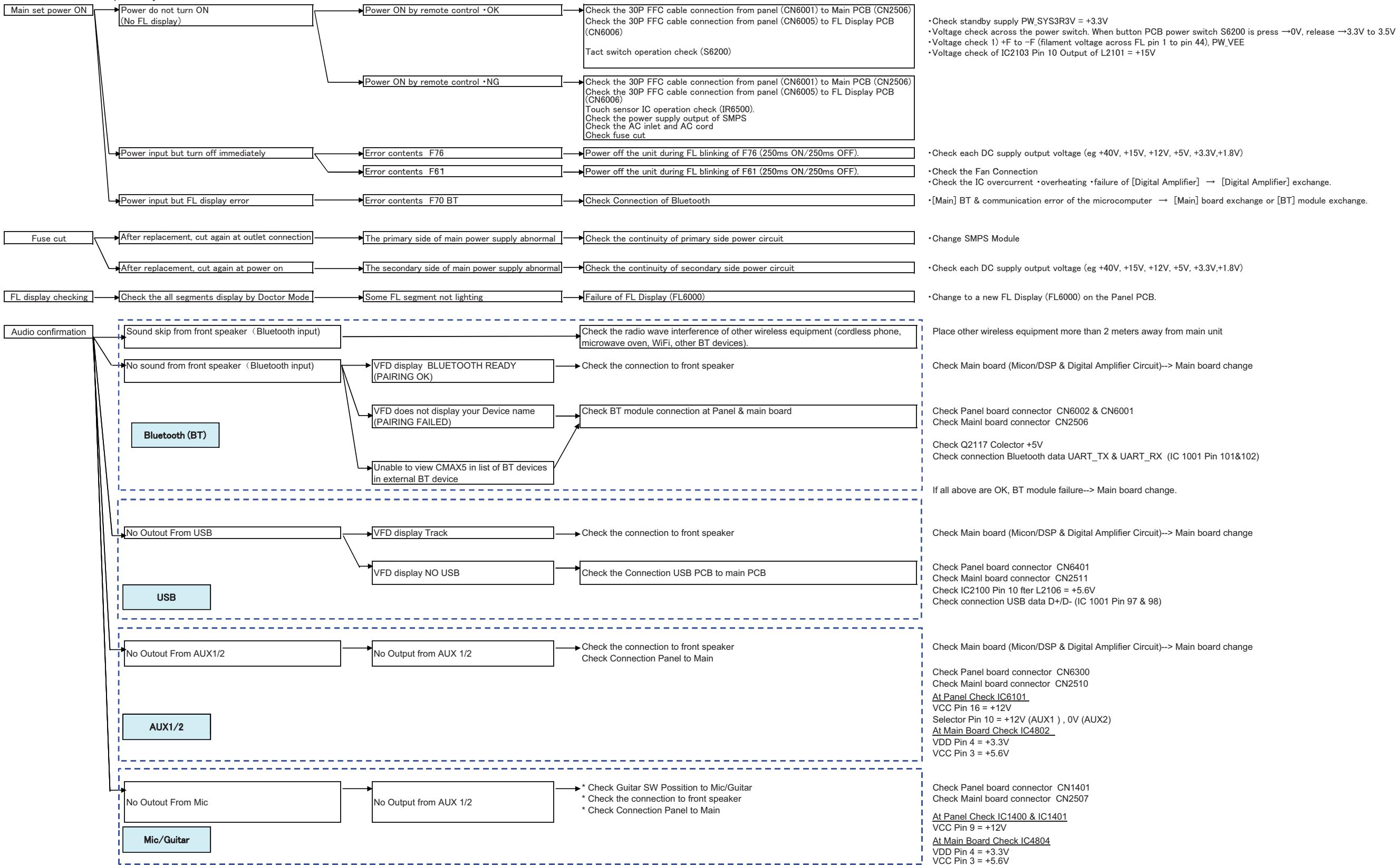
7 Troubleshooting Guide

• Reset Method (Factory Shipment Status)

1. Plug In AC cord together with (no 2).
2. Press and hold the power button for 4 seconds then FL display will show RESET for 2 seconds.
3. Turn off the power.

• Entering Doctor Mode

1. Turn ON main set.
2. Press main set [Stop ■] button, then continue press the [4] & [7] of remote control. FL display will show "TΞ".
3. Go in the desired option of doctor mode by pressing the button on remote control. (Refer to Doctor Mode Table)
4. After turn off the power, you can exit from Doctor Mode.



• Check standby supply PW.SYS3R3V = +3.3V
 • Voltage check across the power switch. When button PCB power switch S6200 is press → 0V, release → 3.3V to 3.5V
 • Voltage check 1) +F to -F (filament voltage across FL pin 1 to pin 44), PW_VEE
 • Voltage check of IC2103 Pin 10 Output of L2101 = +15V

• Check each DC supply output voltage (eg +40V, +15V, +12V, +5V, +3.3V,+1.8V)
 • Check the Fan Connection
 • Check the IC overcurrent •overheating •failure of [Digital Amplifier] → [Digital Amplifier] exchange.
 • [Main] BT & communication error of the microcomputer → [Main] board exchange or [BT] module exchange.

• Change SMPS Module
 • Check each DC supply output voltage (eg +40V, +15V, +12V, +5V, +3.3V,+1.8V)

• Change to a new FL Display (FL6000) on the Panel PCB.

Place other wireless equipment more than 2 meters away from main unit

Check Main board (Micon/DSP & Digital Amplifier Circuit)--> Main board change

Check Panel board connector CN6002 & CN6001
Check Main board connector CN2506

Check Q2117 Colector +5V
Check connection Bluetooth data UART_TX & UART_RX (IC 1001 Pin 101&102)

If all above are OK, BT module failure--> Main board change.

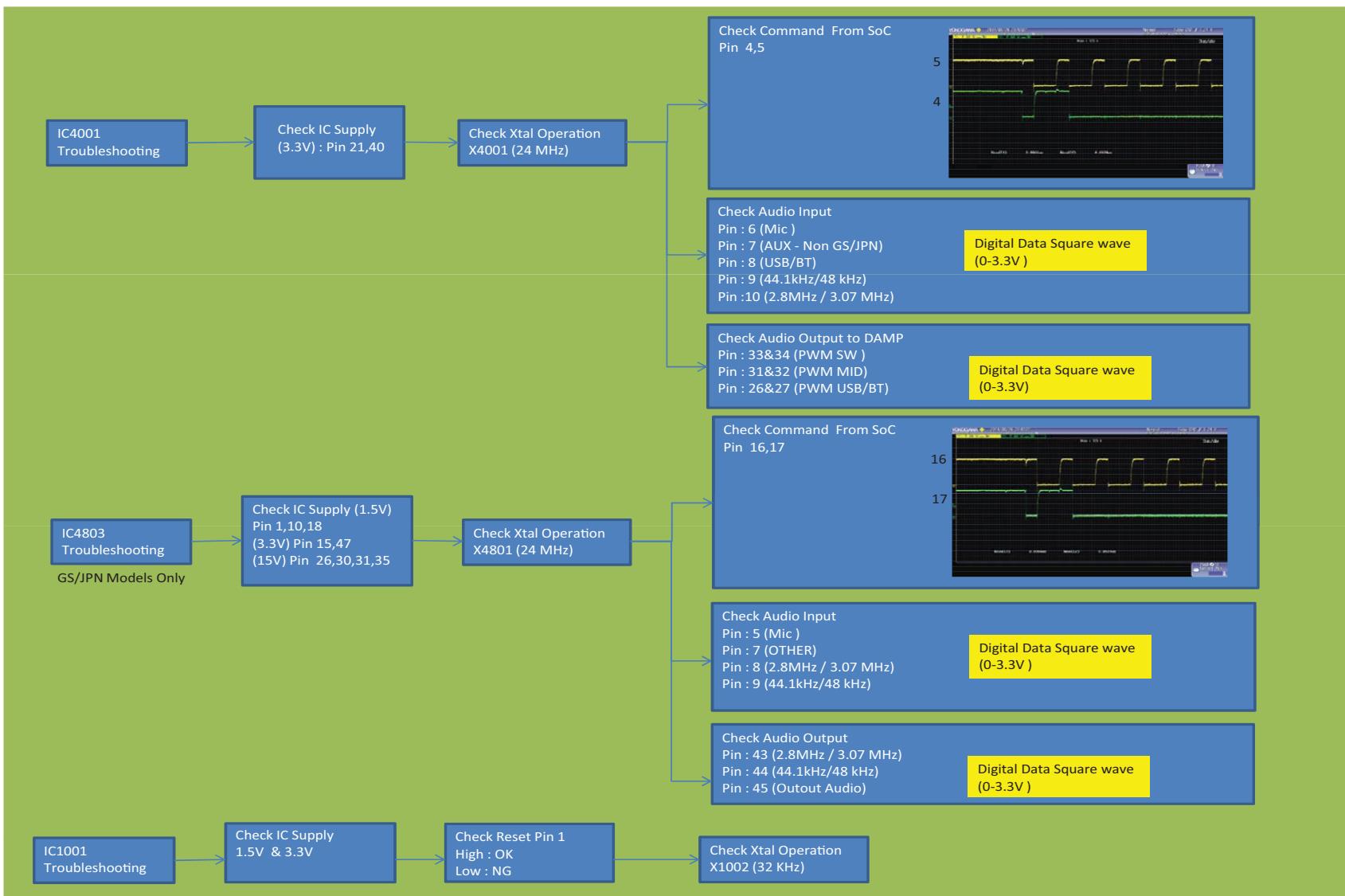
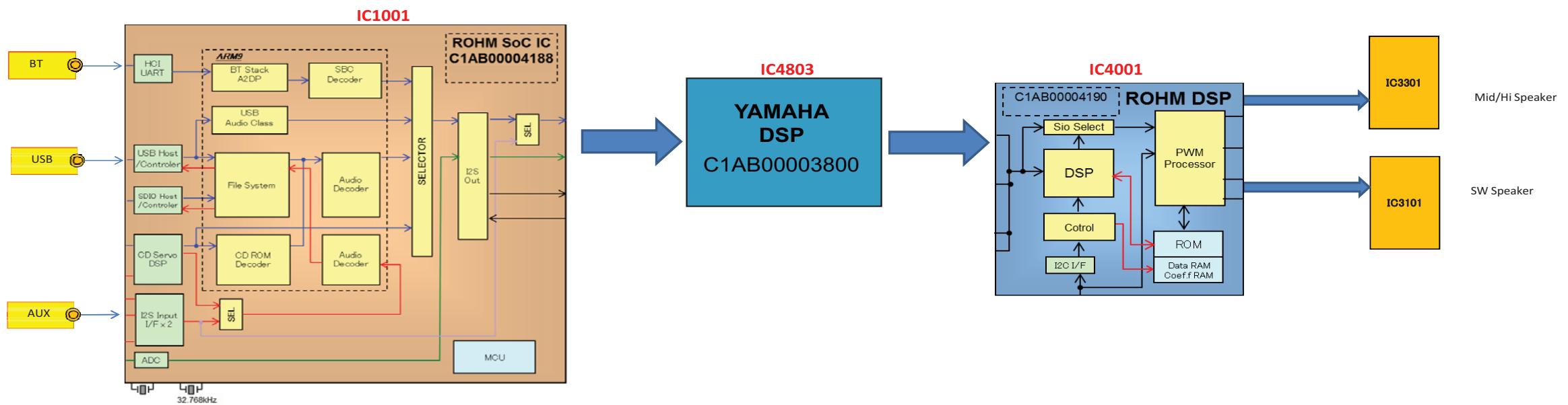
Check Main board (Micon/DSP & Digital Amplifier Circuit)--> Main board change

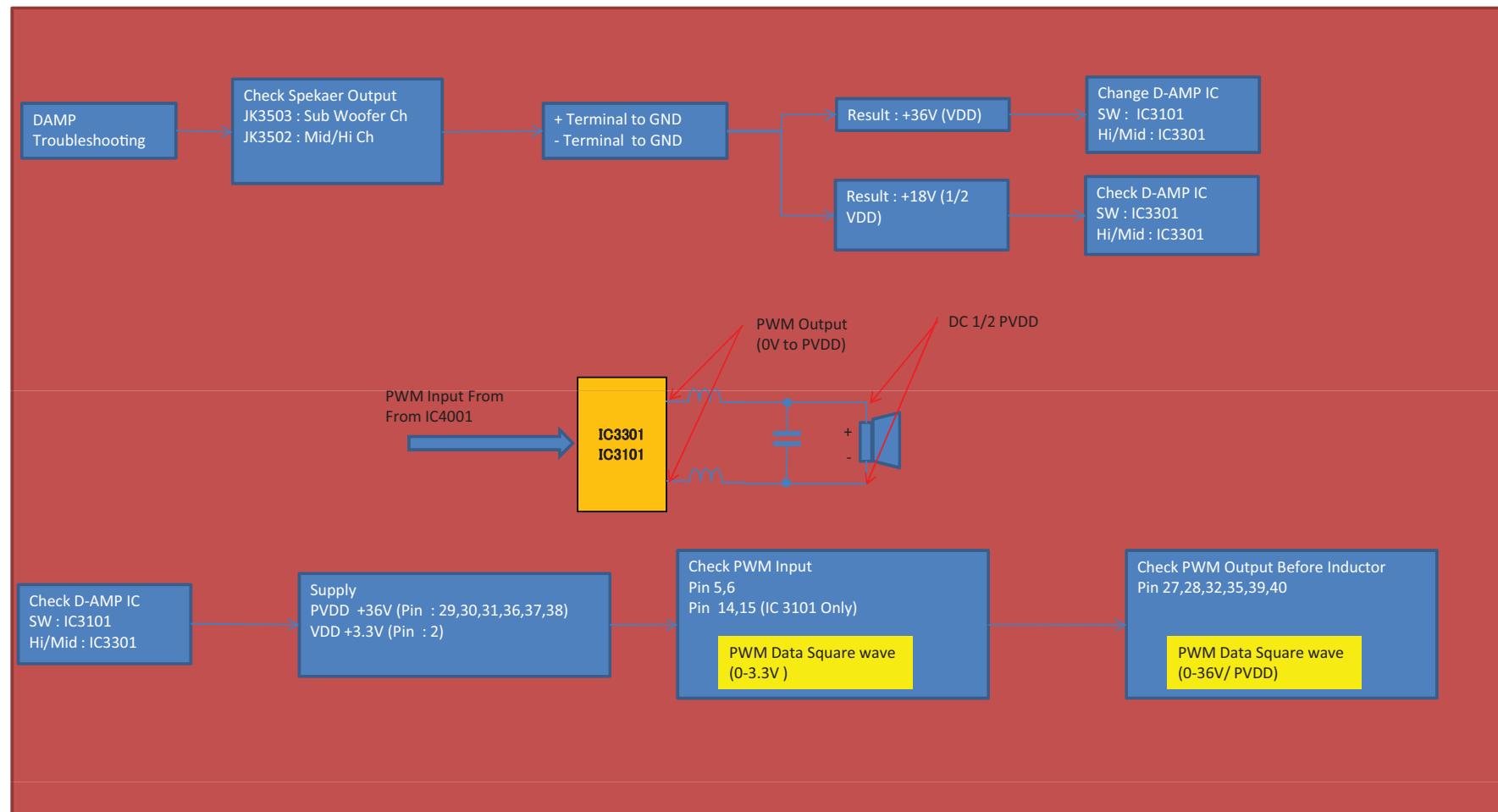
Check Panel board connector CN6401
Check Main board connector CN2511
Check IC2100 Pin 10 after L2106 = +5.6V
Check connection USB data D+/D- (IC 1001 Pin 97 & 98)

Check Main board (Micon/DSP & Digital Amplifier Circuit)--> Main board change

Check Panel board connector CN6300
Check Main board connector CN2510
At Panel Check IC6101
VCC Pin 16 = +12V
Selector Pin 10 = +12V (AUX1) , 0V (AUX2)
At Main Board Check IC4802
VDD Pin 4 = +3.3V
VCC Pin 3 = +5.6V

Check Panel board connector CN1401
Check Main board connector CN2507
At Panel Check IC1400 & IC1401
VCC Pin 9 = +12V
At Main Board Check IC4804
VDD Pin 4 = +3.3V
VCC Pin 3 = +5.6V





8 Disassembly and Assembly Instructions

- This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of “Main components and P.C.B Locations” as described in the service manual)
- Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.
- During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.
- Avoid touching heatsinks due to its high temperature after prolong use. (See caution as described below)

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

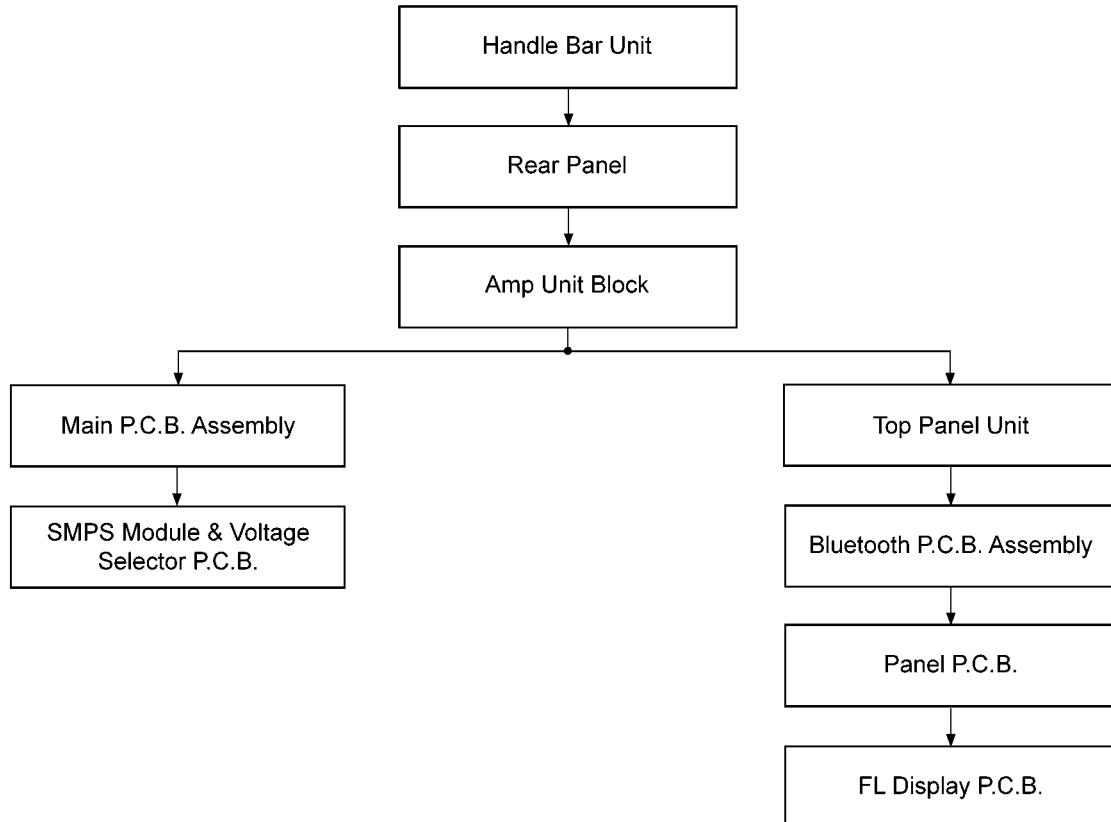
- During disassembly and assembly, please ensure proper service tools, equipments or jigs is being used.
- During replacement of component parts, please refer to the section of “Replacement Parts List” as described in the service manual.
- Select items from the following indexes when disassembly or replacement are required.
 - Disassembly of Handle Bar Unit
 - Disassembly of Rear Panel
 - Disassembly of Amp Unit Block
 - Disassembly of Main P.C.B. Assembly
 - Disassembly of SMPS Module & Voltage Selector P.C.B.
 - Disassembly of Top Panel Unit
 - Disassembly of Bluetooth P.C.B. Assembly
 - Disassembly of Panel P.C.B.
 - Disassembly of FL Display P.C.B.
 - Disassembly of Top Front Panel Block
 - Disassembly of Tweeter Speaker (6cm)
 - Disassembly of Woofer Speaker (10cm)
 - Disassembly of Center Front Panel
 - Disassembly of Subwoofer Front Panel Block
 - Disassembly of Woofer Speaker (25cm)
 - Disassembly of Lighting Wire P.C.B. Assembly

8.1. Disassembly flow chart

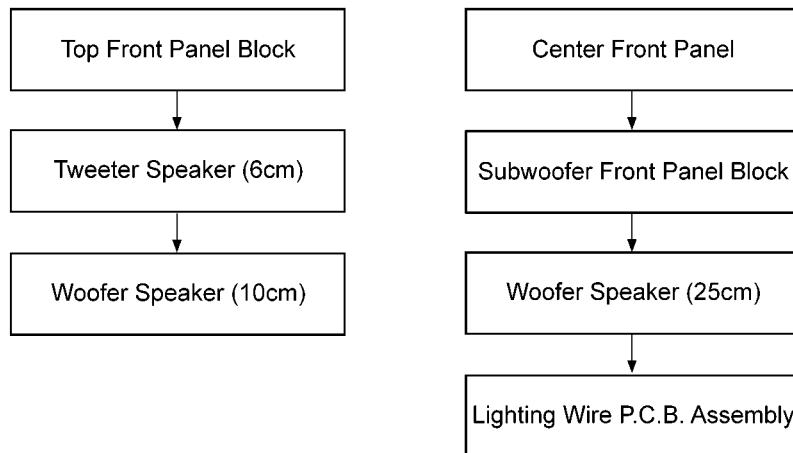
The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

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

8.1.1. Amp Unit



8.1.2. Speaker Block



8.2. Type of screws

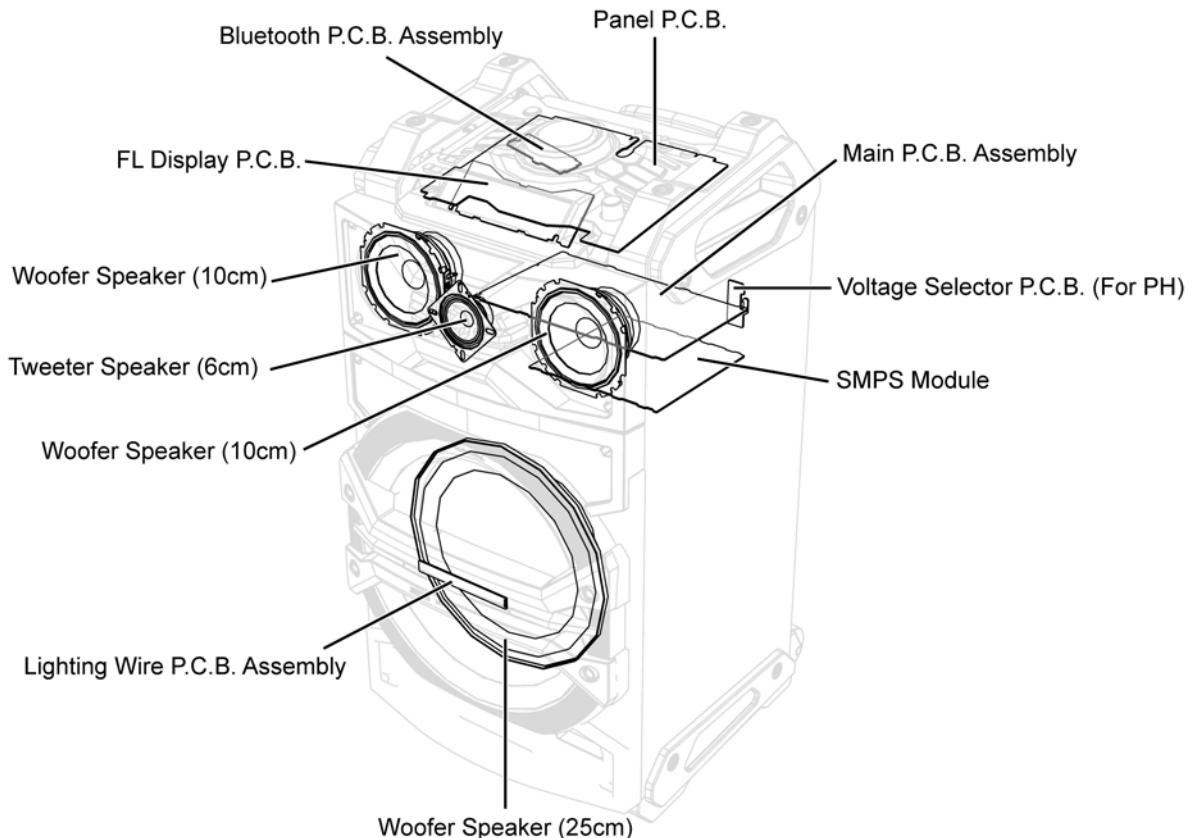
CAUTION NOTE:

Please use original screw and at correct locations.

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

- | | | |
|------------------------|------------------------|------------------------|
| a : XYN5+J20FJK | e : RHD26016-1L | i : RHD26043-1 |
| b : XTB4+20AFJK | f : XTB3+10JFJ | k : XTB3+16GFJK |
| c : XTB3+10JFJK | g : RHDX30005-J | l : XTB3+10GFJ |
| d : RHD26046-L | h : XTB4+20AFJK | m : XTB4+10GFJ |

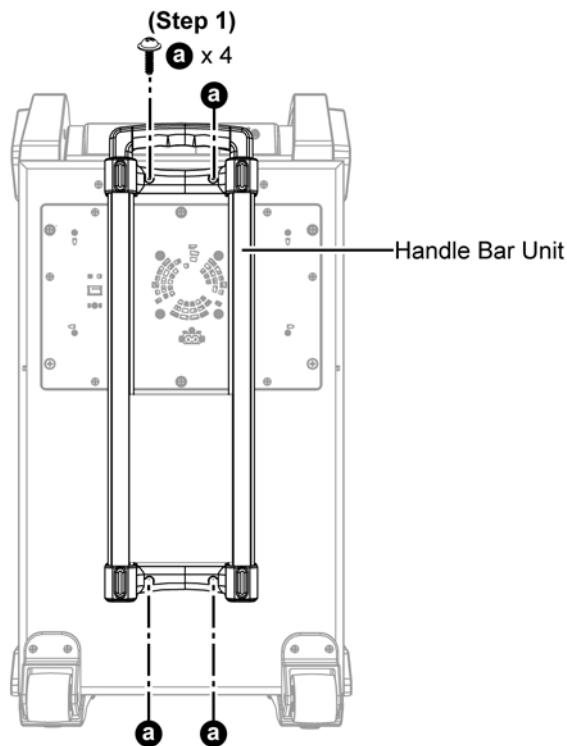
8.3. Main Parts Location Diagram



8.4. Disassembly of Handle Bar Unit

Step 1 : Remove 4 screws.

Step 2 : Remove Handle Bar Unit.

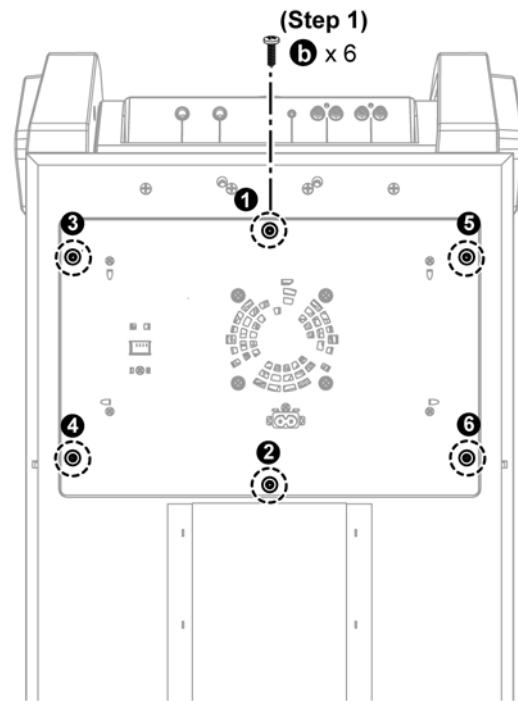


8.5. Disassembly of Rear Panel

• Refer to "Disassembly of Handle Bar Unit"

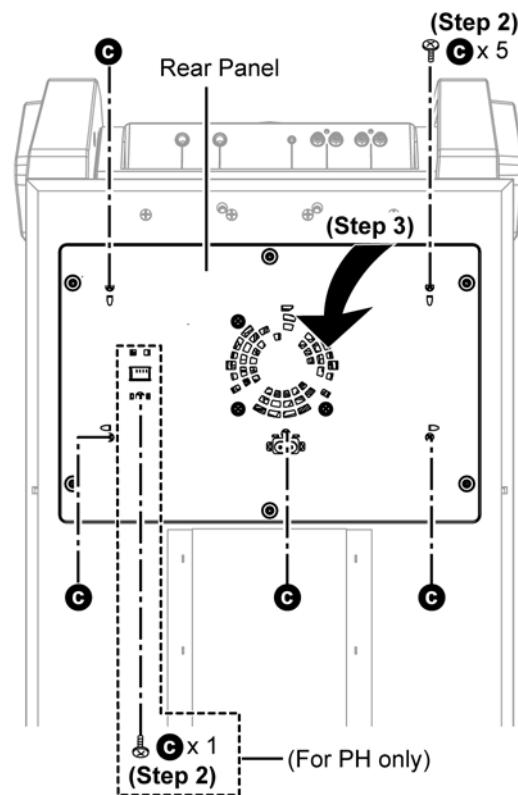
Step 1 : Remove 6 screws.

Caution : During assembling, fixed the screws in sequence of 1 to 7 as shown.



Step 2 : Remove screws.

Step 3 : Slightly lift up Rear Panel.

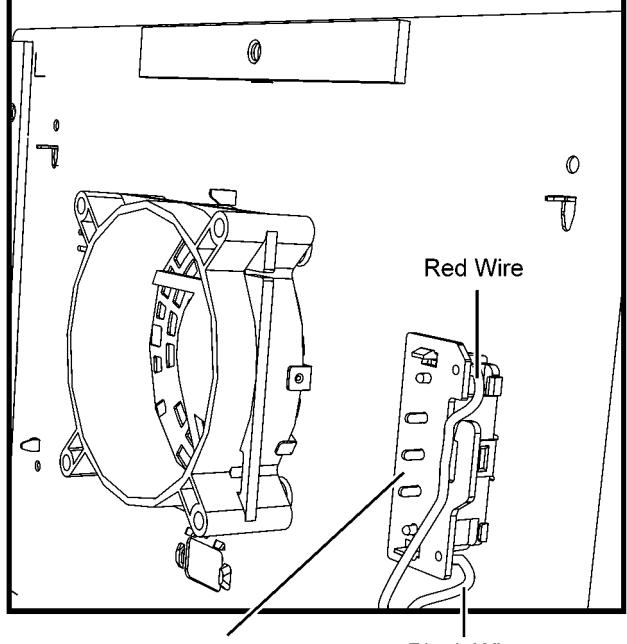
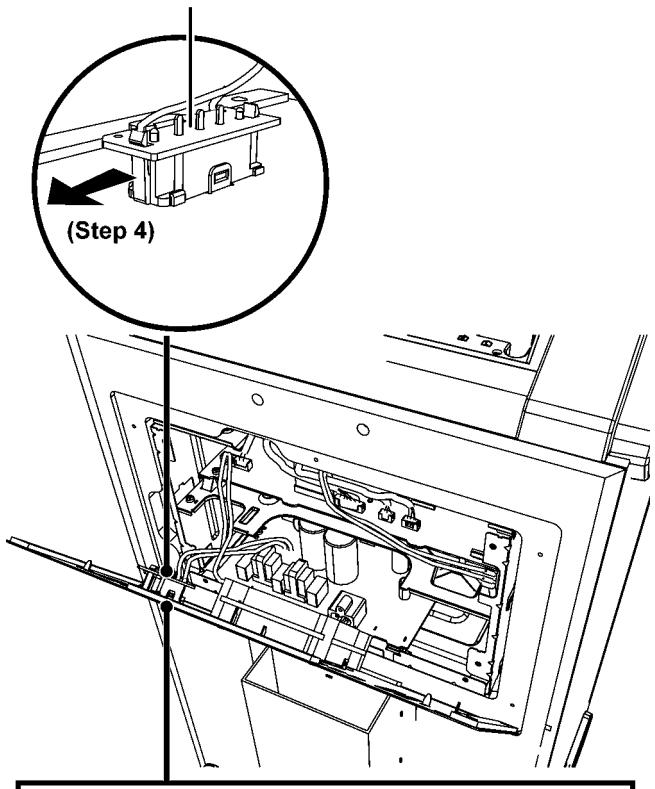


- (For PH only)

Step 4 : Remove Voltage Selector P.C.B. as shown.

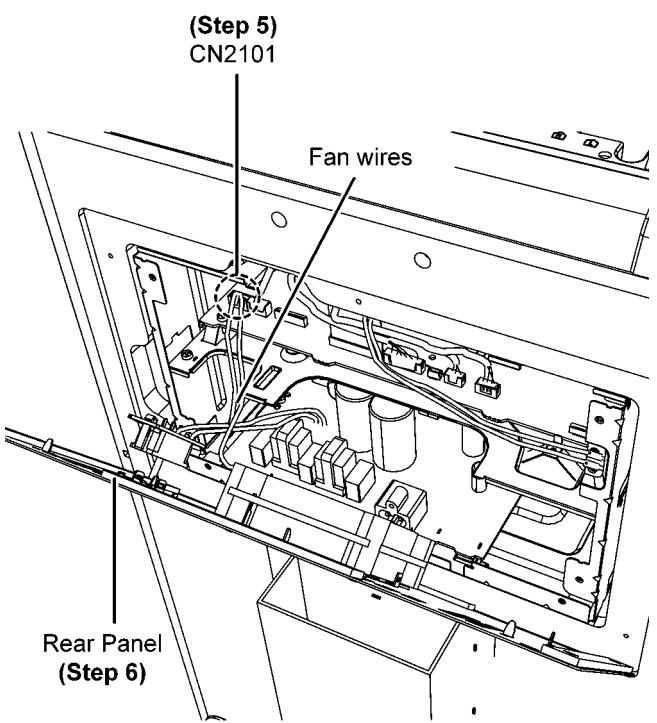
Caution: During assembling, ensure Voltage Selector P.C.B. is inserted properly into the Rear Panel as Red Wire on the top and Black Wire on the lower as picture shown.

Voltage Selector P.C.B.



Step 5 : Detach 2P Fan wires at connector (CN2101) on the Main P.C.B. Assembly.

Step 6 : Remove Rear Panel.



8.6. Disassembly of Amp Unit Block

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"

Step 1 : Detach 4P wire at connector (CN2508) on Main P.C.B. Assembly.

Step 2 : Detach 30P FFC at connector (CN2506) on Main P.C.B. Assembly.

Step 3 : Detach 10P wire at connector (CN2511) on Main P.C.B. Assembly.

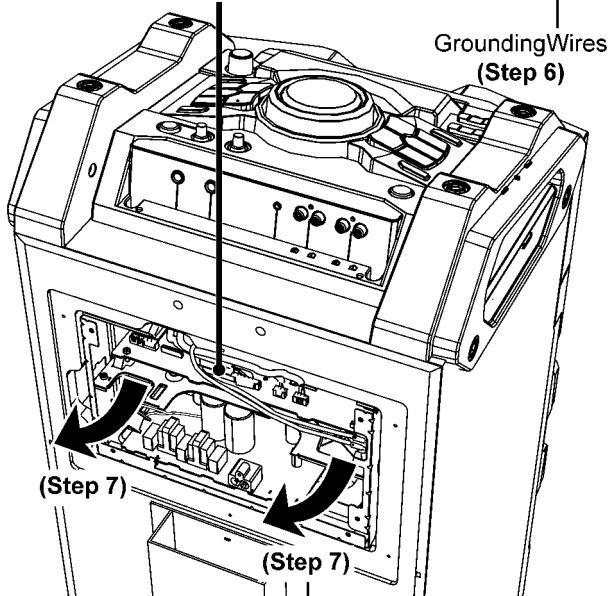
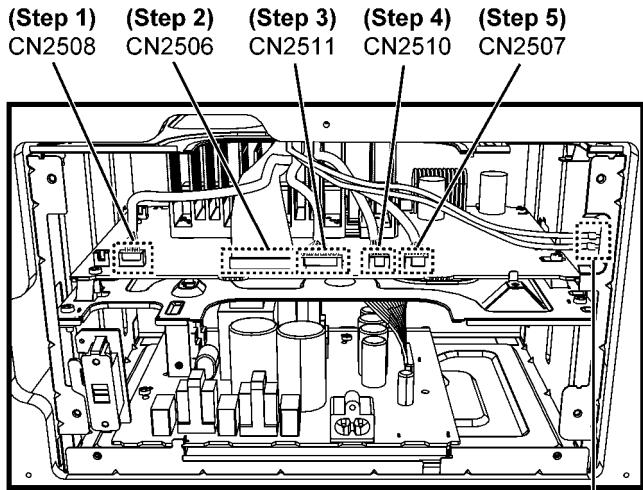
Step 4 : Detach 4P wire at connector (CN2510) on Main P.C.B. Assembly.

Step 5 : Detach 6P wire at connector (CN2507) on Main P.C.B. Assembly.

Step 6 : Detach grounding wires.

Step 7 : Slightly lift up Amp Unit Block.

Caution : Do not exert strong force as it may damage the wiring within.



Step 8 : Place Amp Unit Block on the support block.

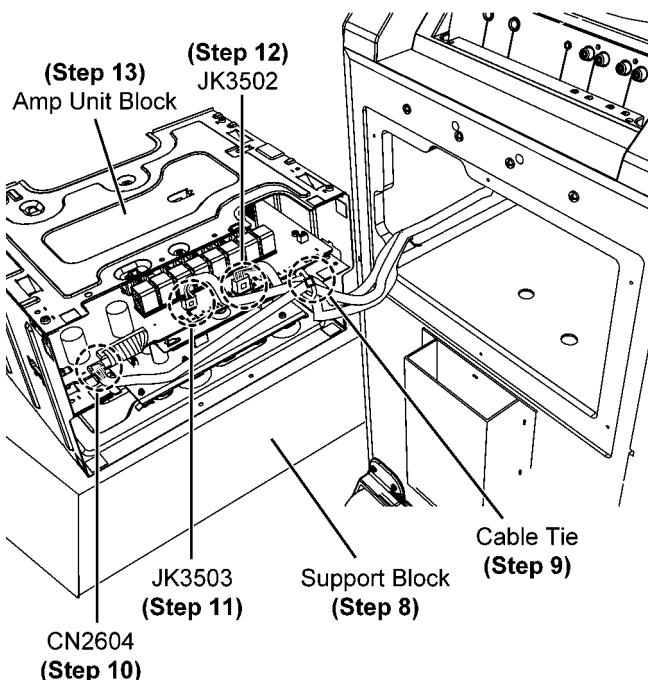
Step 9 : Cut the cable tie.

Step 10 : Detach 4P wire at connector (CN2604) on Main P.C.B. Assembly.

Step 11 : Detach 2P wire at connector (JK3503) on Main P.C.B. Assembly.

Step 12 : Detach 4P wire at connector (JK3502) on Main P.C.B. Assembly.

Step 13 : Remove Amp Unit Block.

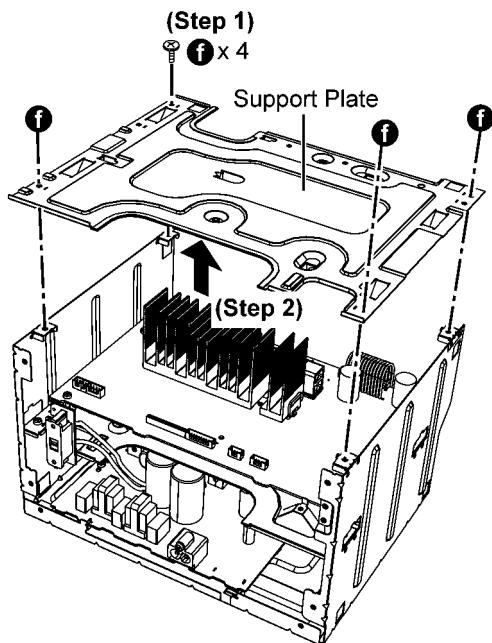


8.7. Disassembly of Main P.C.B. Assembly

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"

Step 1 : Remove 4 screws.

Step 2 : Remove Support Plate.

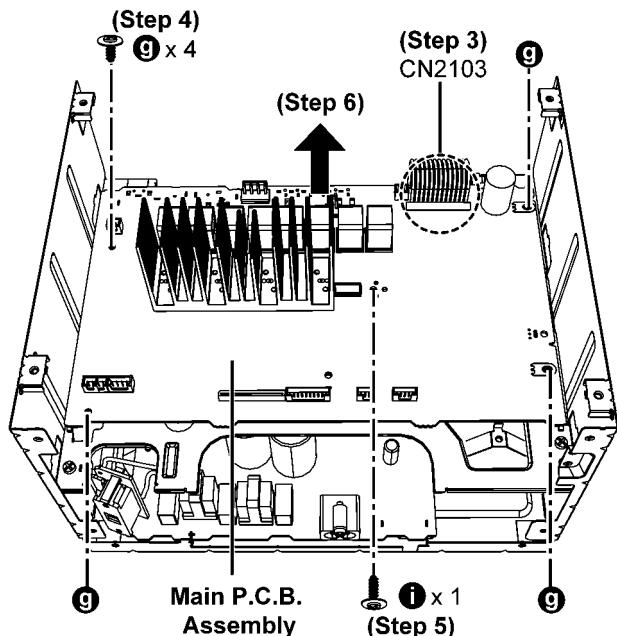


Step 3 : Detach 13P wire at connector (CN2103) on Main P.C.B. Assembly.

Step 4 : Remove 4 screws.

Step 5 : Remove 1 screw.

Step 6 : Remove Main P.C.B. Assembly.

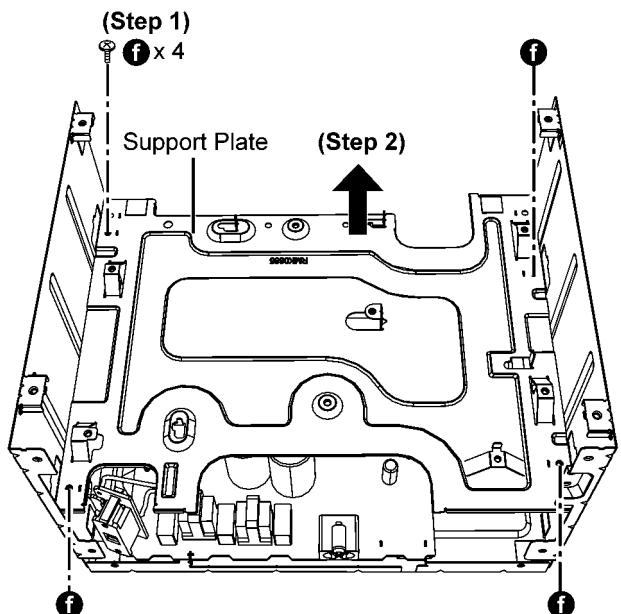


8.8. Disassembly of SMPS Module & Voltage Selector P.C.B.

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"
- Refer to "Disassembly of Main P.C.B. Assembly"

Step 1 : Remove 4 screws.

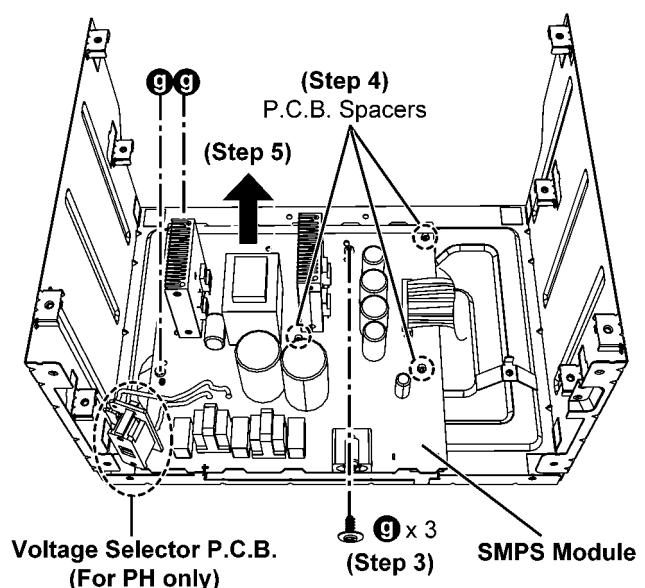
Step 2 : Remove Support Plate.



Step 3 : Remove 3 screws.

Step 4 : Release P.C.B. spacers.

Step 5 : Remove SMPS Module and Voltage Selector P.C.B..

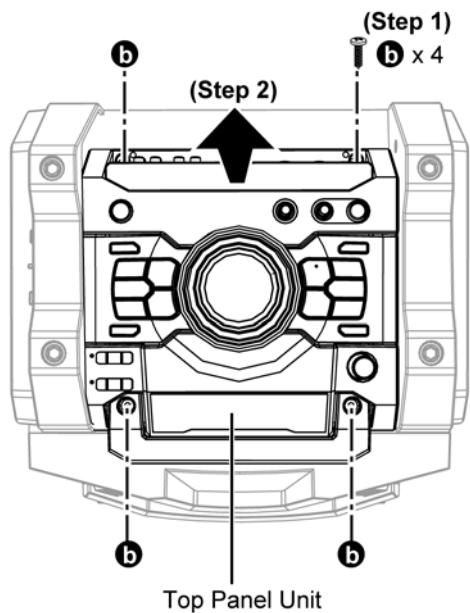


8.9. Disassembly of Top Panel Unit

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"

Step 1 : Remove 4 screws.

Step 2 : Remove Top Panel Unit.



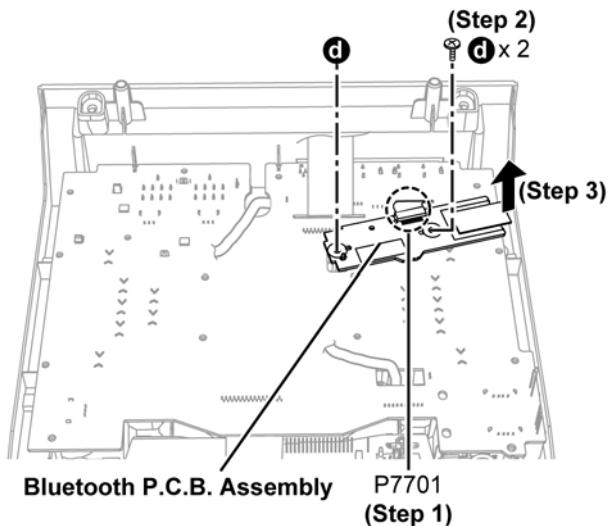
8.10. Disassembly of Bluetooth P.C.B. Assembly

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"
- Refer to "Disassembly of Top Panel Unit"

Step 1 : Detach 12P FFC at connector (P7701) on Bluetooth P.C.B. Assembly.

Step 2 : Remove 2 screws.

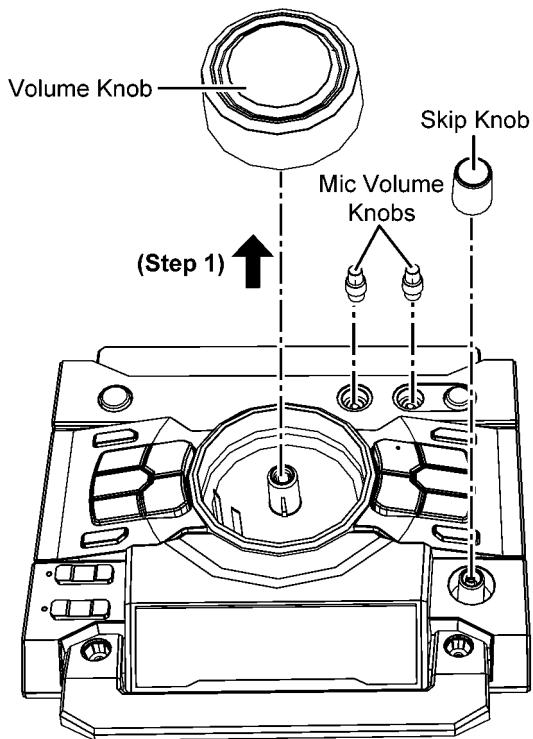
Step 3 : Remove Bluetooth P.C.B. Assembly.



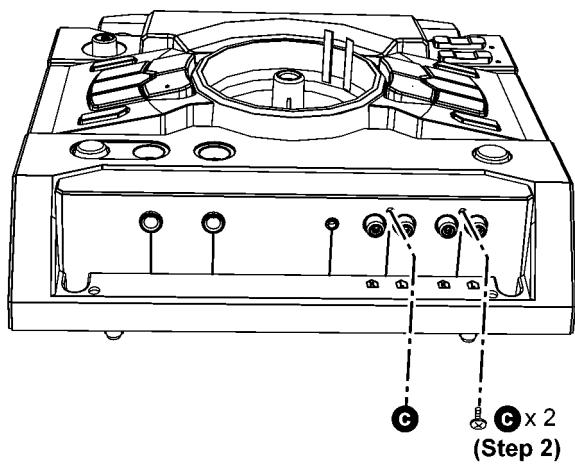
8.11. Disassembly of Panel P.C.B.

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"
- Refer to "Disassembly of Top Panel Unit"
- Refer to "Disassembly of Bluetooth P.C.B. Assembly"

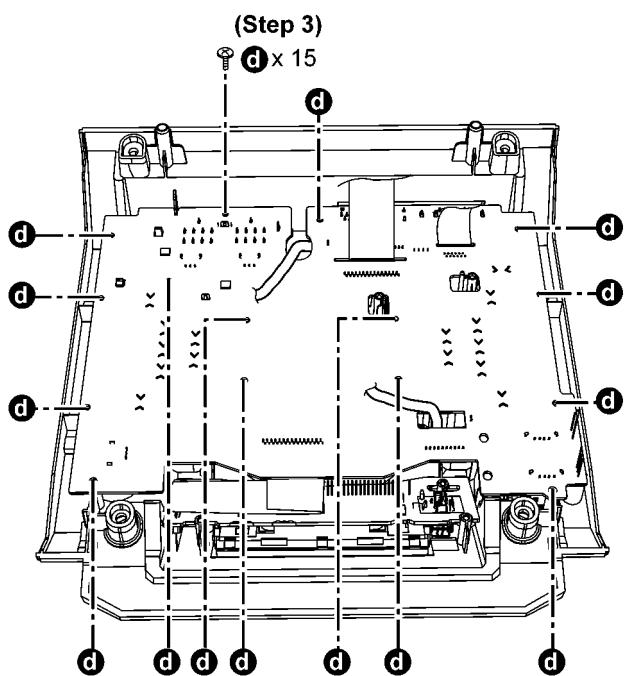
Step 1 : Remove Volume Knob, Mic Volume Knobs & Skip Knob.



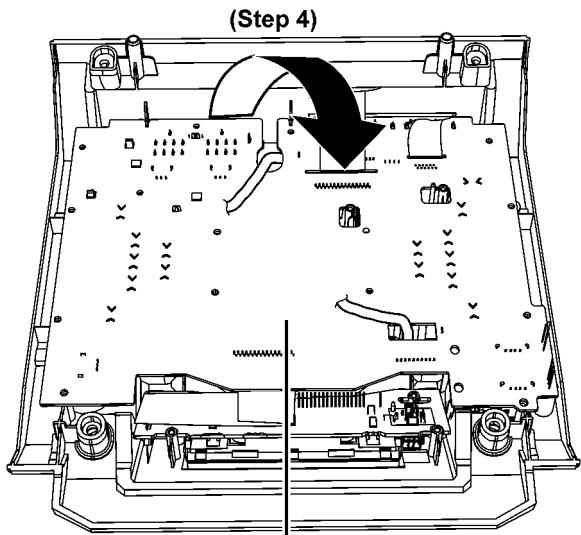
Step 2 : Remove 2 screws.



Step 3 : Remove 15 screws.



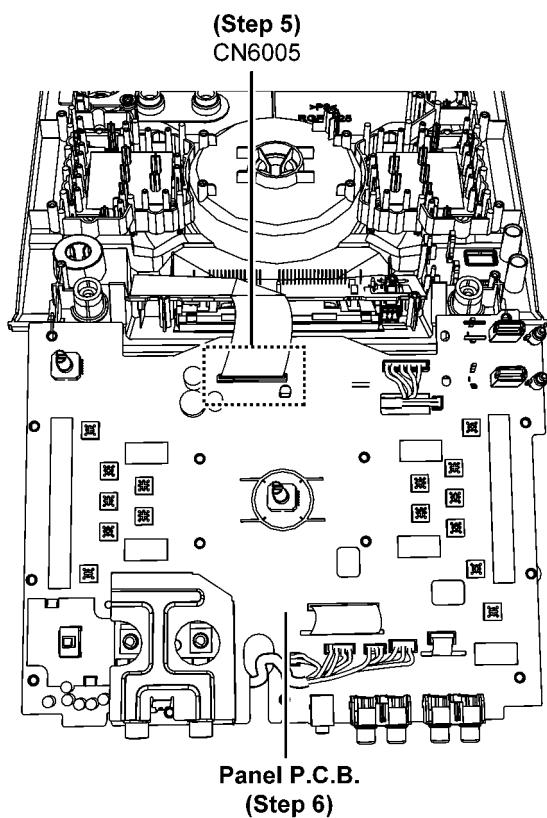
Step 4 : Lift up Panel P.C.B..



Panel P.C.B.

Step 5 : Detach 30P FFC at connector (CN6005) on Panel P.C.B..

Step 6 : Remove Panel P.C.B..

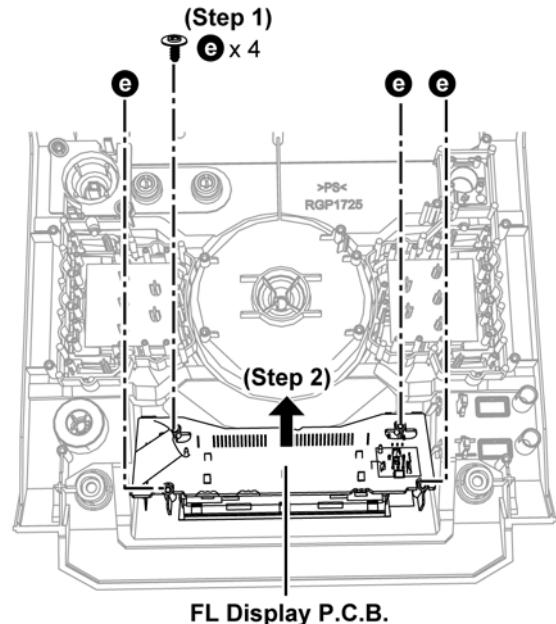


8.12. Disassembly of FL Display P.C.B.

- Refer to "Disassembly of Handle Bar Unit"
- Refer to "Disassembly of Rear Panel"
- Refer to "Disassembly of Amp Unit Block"
- Refer to "Disassembly of Top Panel Unit"
- Refer to "Disassembly of Bluetooth P.C.B. Assembly"
- Refer to "Disassembly of Panel P.C.B."

Step 1 : Remove 4 screws.

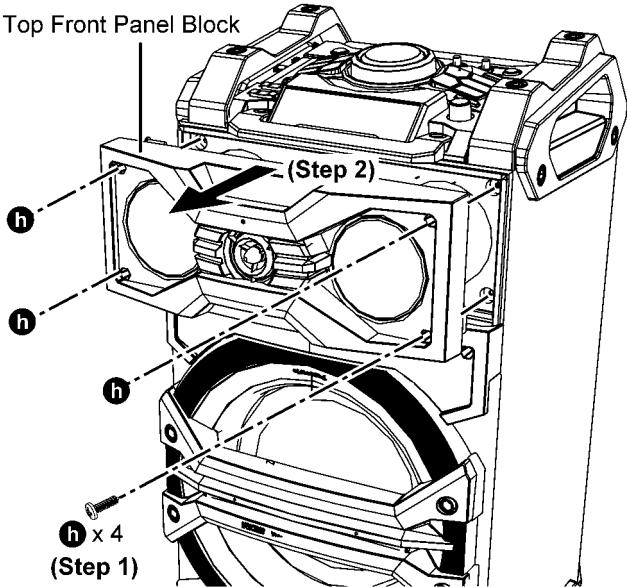
Step 2 : Remove FL Display P.C.B..



8.13. Disassembly of Top Front Panel Block

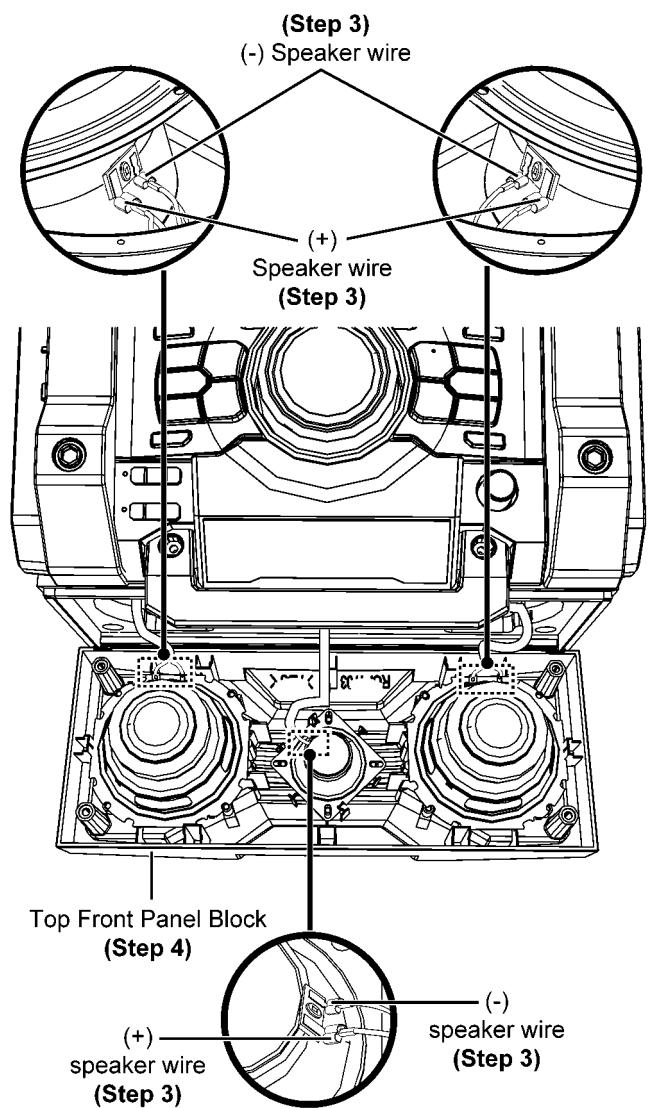
Step 1 : Remove 4 screws.

Step 2 : Detach Top Front Panel Block.



Step 3 : Detach speaker wire.

Step 4 : Remove Top Front Panel Block.



8.14. Disassembly of Tweeter Speaker (6cm)

- Refer to "Disassembly of Top Front Panel Block"

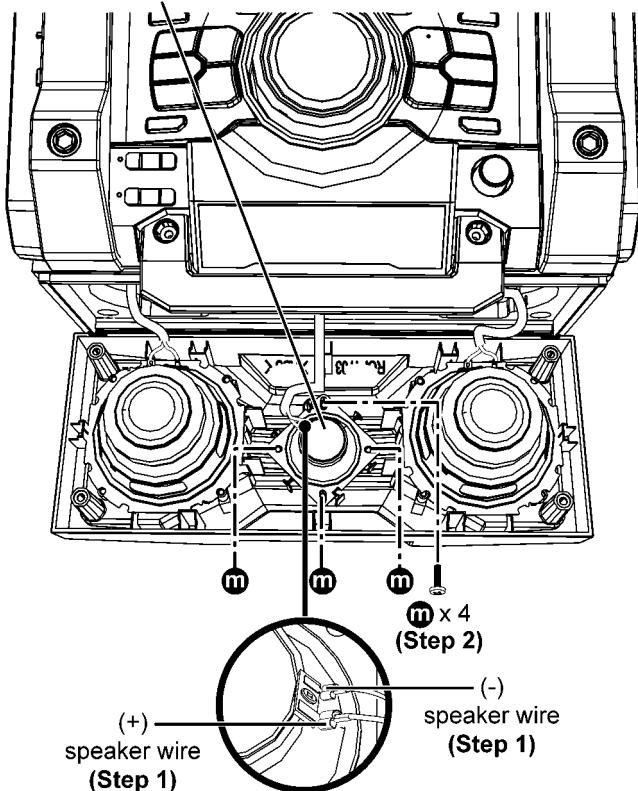
Step 1 : Detach speaker wire.

Step 2 : Remove 4 screws.

Step 3 : Remove Tweeter Speaker (6cm).

(Step 3)

Tweeter Speaker (6cm)



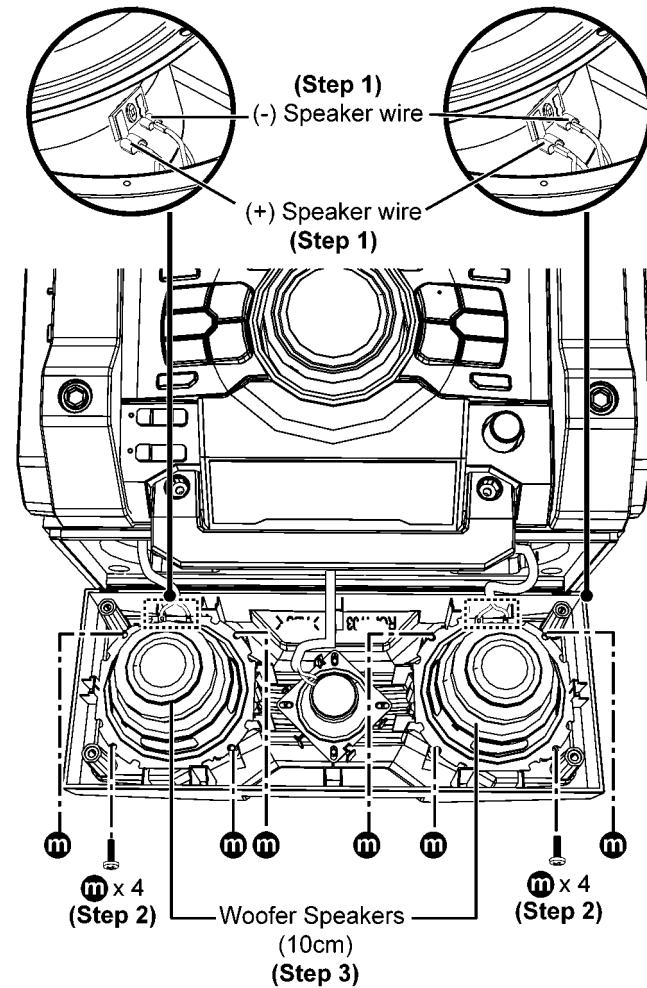
8.15. Disassembly of Woofer Speaker (10cm)

- Refer to "Disassembly of Top Front Panel Block"

Step 1 : Detach speaker wire.

Step 2 : Remove screws.

Step 3 : Remove Woofer Speakers (10cm).



8.16. Disassembly of Center Front Panel

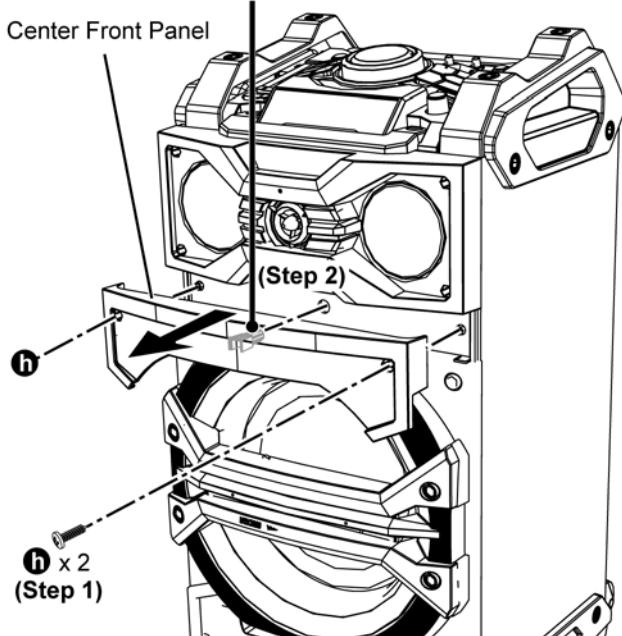
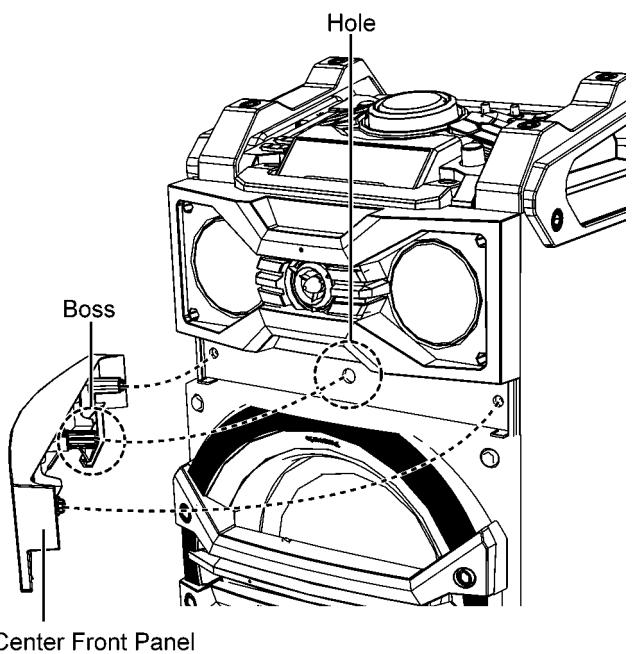
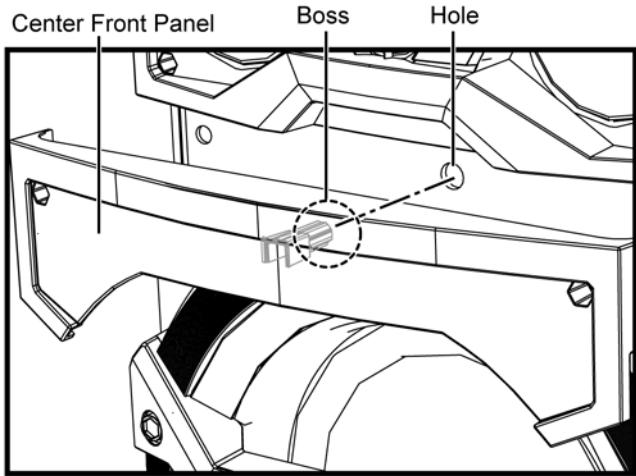
Step 1 : Remove 2 screws.

Step 2 : Apply light force along the boss to remove Center Front Panel.

Caution : Do not exert strong force as it may damage the Center Front Panel.

Caution 1 : Scrape off and clean up the remaining glue at the boss and hole.

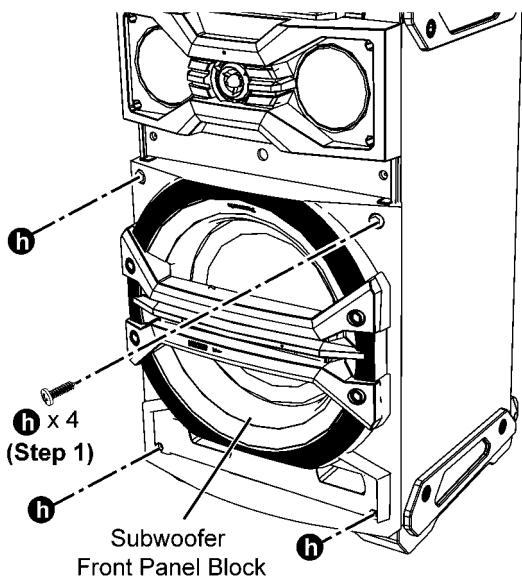
Caution 2 : During assembling, align the hole of the Boss with the Center Front Panel and fix it properly.



8.17. Disassembly of Subwoofer Front Panel Block

- Refer to "Disassembly of Center Front Panel"

Step 1 : Remove 4 screws.



Step 2 : Insert flathead screwdriver into the grooves.

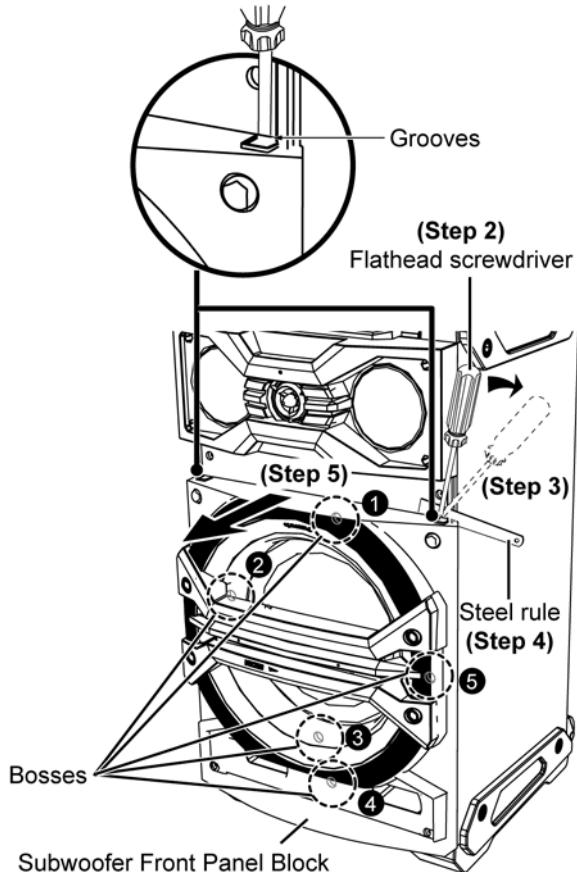
Step 3 : Apply light force to push the Subwoofer Front Panel Block as arrow shown.

Step 4 : Insert a steel rule in between the Subwoofer Front Panel Block and Speaker Cabinet Assembly.

Caution : Do not exert strong force as it may damage the Subwoofer Front Panel Block.

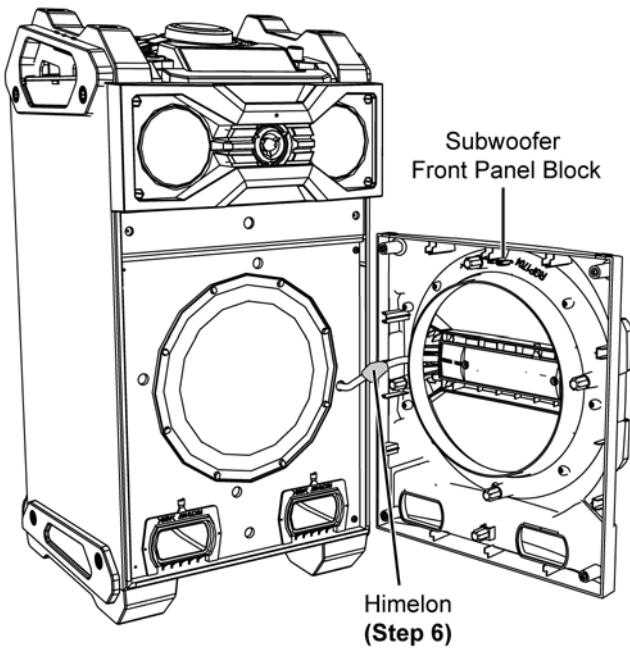
Step 5 : Detach Subwoofer Front Panel Block slightly by sequence (1-5) shown.

Caution : Do not exert strong force as it may damage the wiring within.



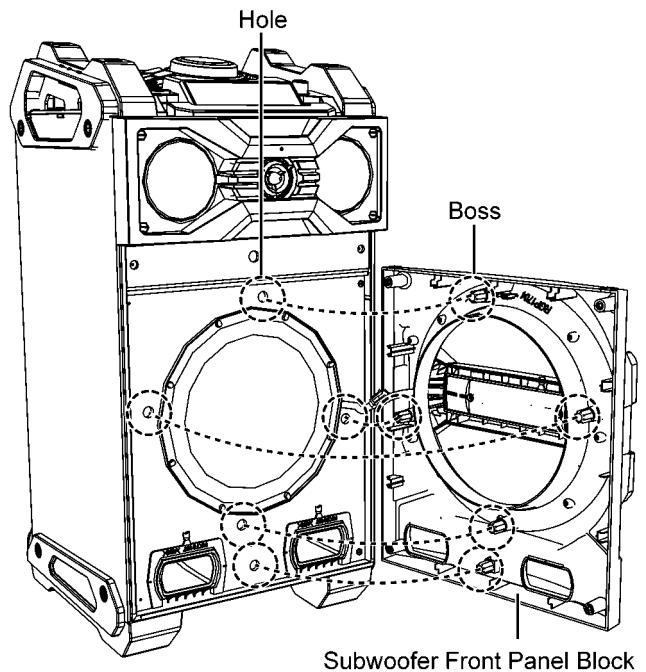
Step 6 : Lift up himelon.

Caution : Replace the himelon if they are torn during disassembling.



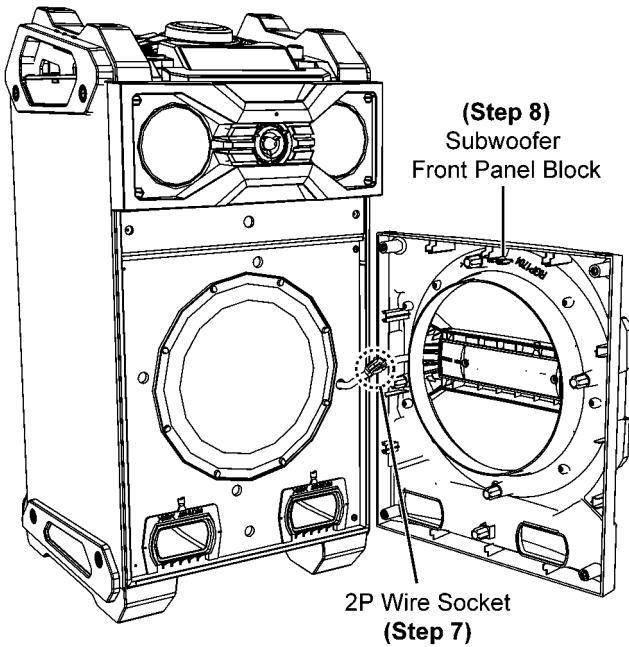
Caution 1 : Scrape off and clean up the remaining glue at the boss and hole.

Caution 2 : During assembling, align the holes of the Bosses with the Subwoofer Front Panel Block and fix it properly.



Step 7 : Detach 2P Wire Socket.

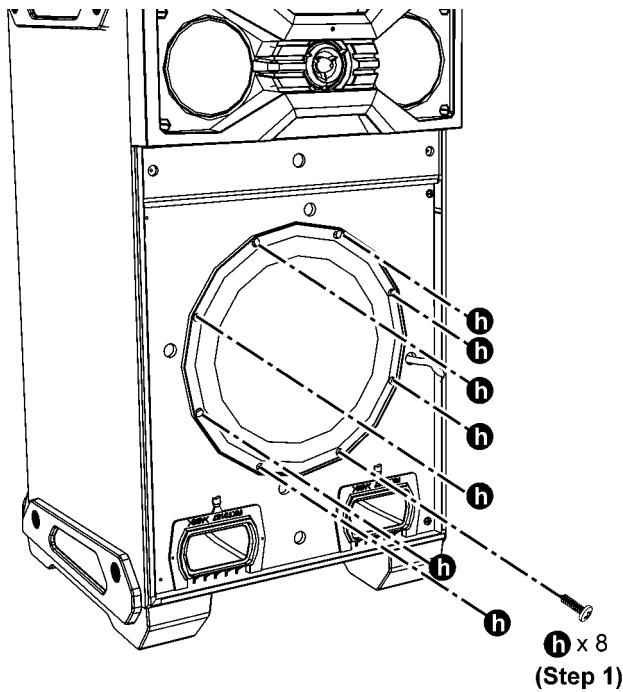
Step 8 : Remove Subwoofer Front Panel Block.



8.18. Disassembly of Woofer Speaker (25cm)

- Refer to "Disassembly of Center Front Panel"
- Refer to "Disassembly of Subwoofer Front Panel Block"

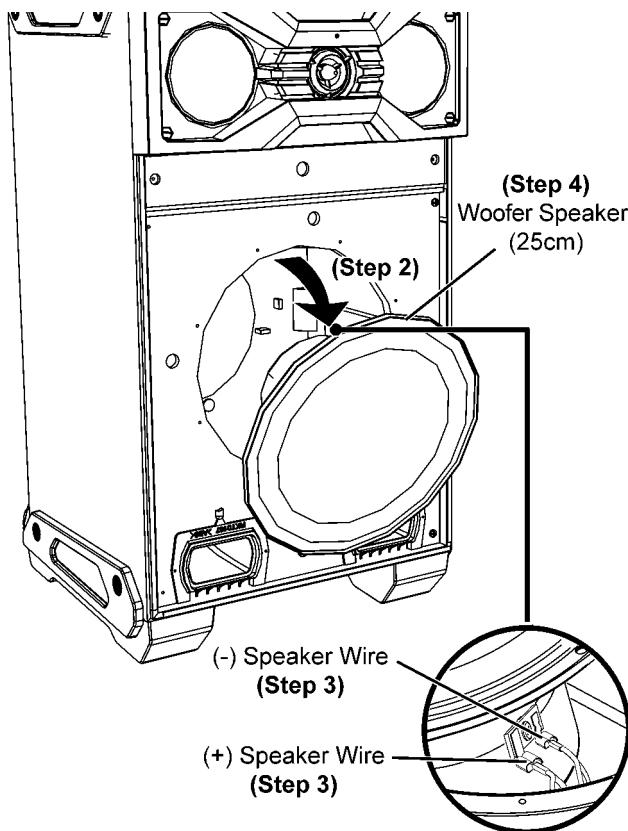
Step 1 : Remove 8 screws.



Step 2 : Slightly lift up Woofer Speaker (25cm) as shown.

Step 3 : Detach speaker wire.

Step 4 : Remove Woofer Speaker (25cm).

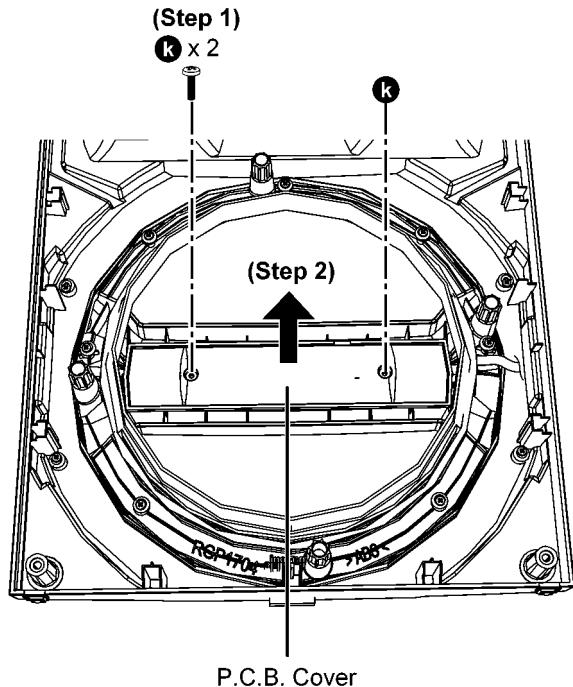


8.19. Disassembly of Lighting Wire P.C.B. Assembly

- Refer to "Disassembly of Center Front Panel"
- Refer to "Disassembly of Subwoofer Front Panel Block"

Step 1 : Remove 2 screws.

Step 2 : Remove P.C.B. Cover.

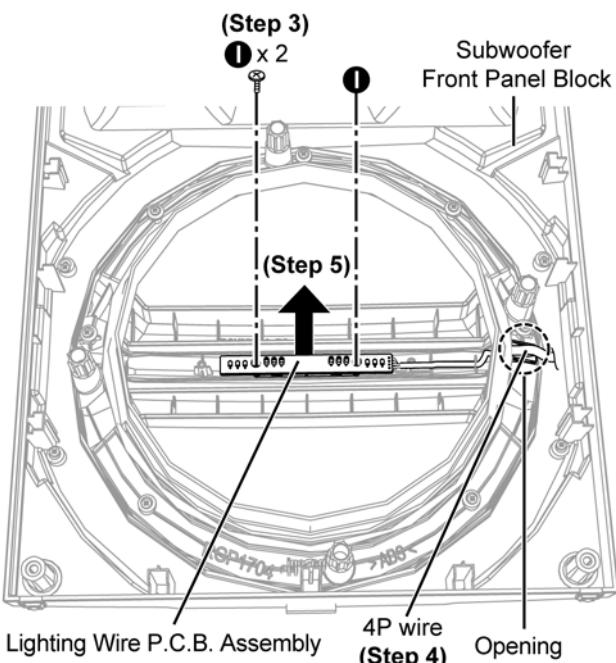


Step 3 : Remove 2 screws.

Step 4 : Release 4P wire from Subwoofer Front Panel Block.

Caution : During assembling, inserted the 4P wire into the opening of Subwoofer Front Panel Block as diagram shown.

Step 5 : Remove Lighting Wire P.C.B. Assembly.



9 Service Position

Note: For description of the disassembly procedures, see the Section 8

9.1. Checking of SMPS Module, Voltage Selector P.C.B. & Main P.C.B. Assembly

Step 1 : Remove Handle Bar Unit.

Step 2 : Remove Rear Panel.

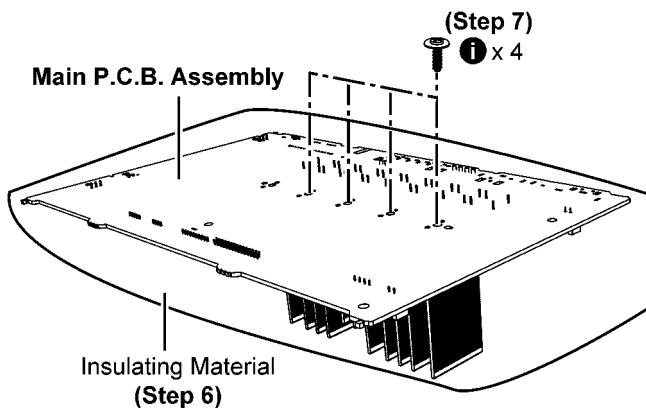
Step 3 : Remove Amp Unit Block.

Step 4 : Remove Main P.C.B. Assembly.

Step 5 : Remove SMPS Module.

Step 6 : Place Main P.C.B. Assembly on Insulated Material.

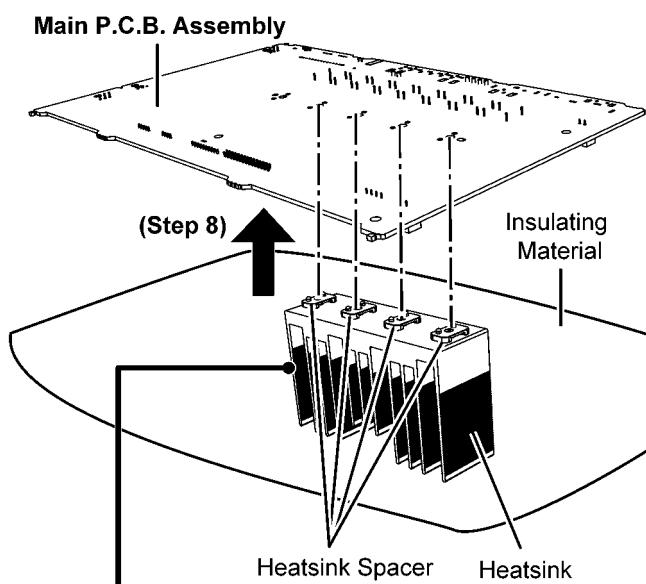
Step 7 : Remove 4 screws.



Step 8 : Lift up Main P.C.B. Assembly.

Caution 1: Keep the Heatsink Spacer in safe place. Avoid denting it, place it back during assembling.

Caution 2: Handle the Heatsink & P.C.B. with caution due to it's high temperature after prolonged use. Touching it may lead to injuries



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

Step 9 : Place Main P.C.B. Assembly on support block.

Step 10 : Connect 4P wire at connector (CN2508) on Main P.C.B. Assembly.

Step 11 : Connect 30P FFC at connector (CN2506) on Main P.C.B. Assembly.

Step 12 : Connect 10P wire at connector (CN2511) on Main P.C.B. Assembly.

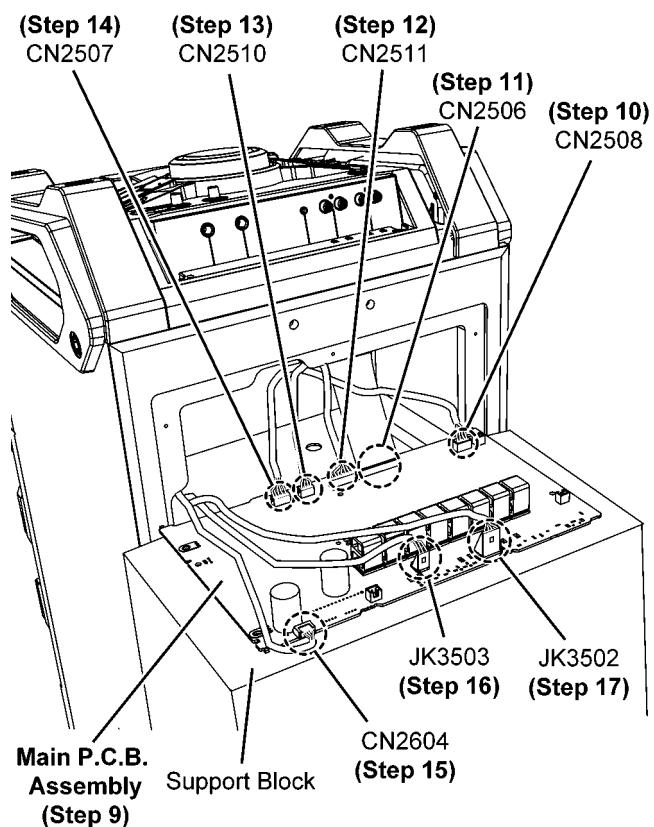
Step 13 : Connect 4P wire at connector (CN2510) on Main P.C.B. Assembly.

Step 14 : Connect 6P wire at connector (CN2507) on Main P.C.B. Assembly.

Step 15 : Connect 4P wire at connector (CN2604) on Main P.C.B. Assembly.

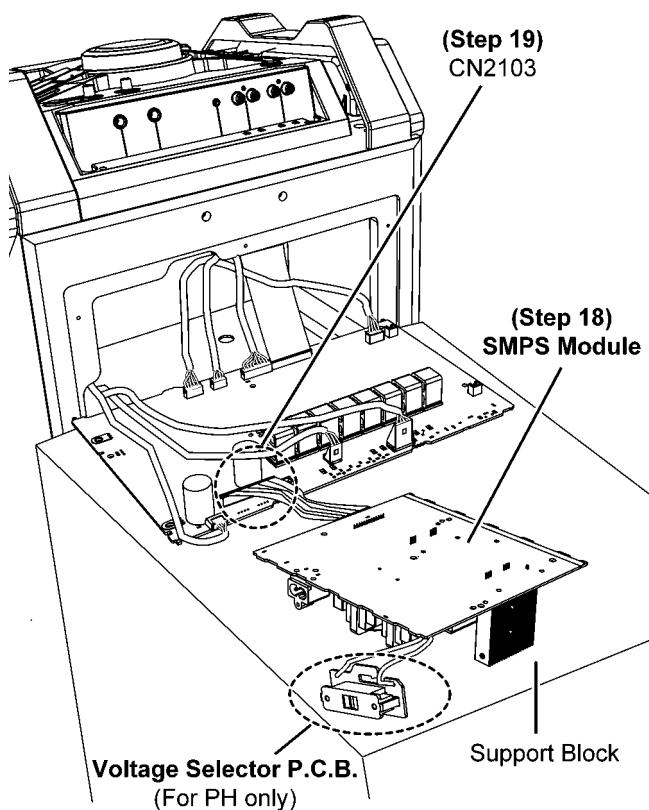
Step 16 : Connect 2P wire at connector (JK3503) on Main P.C.B. Assembly.

Step 17 : Connect 4P wire at connector (JK3502) on Main P.C.B. Assembly.

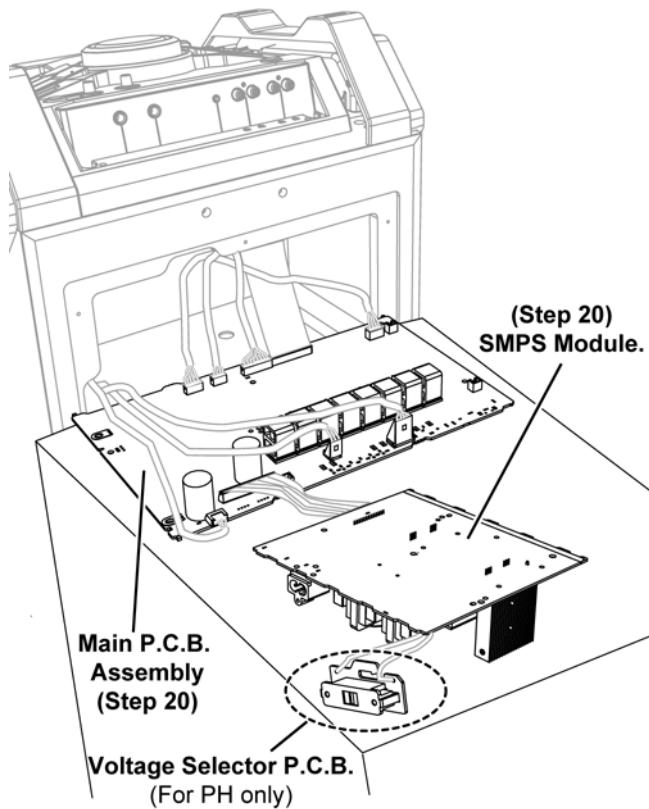


Step 18 : Place SMPS Module on support block.

Step 19 : Connect 13P wire at connector (CN2103) on Main P.C.B. Assembly.



Step 20 : Check SMPS Module, Voltage Selector P.C.B. & Main P.C.B. Assembly according to the diagram shown.



9.2. Checking of Bluetooth P.C.B. Assembly, Panel P.C.B. & FL Display P.C.B.

Step 1 : Remove Handle Bar Unit.

Step 2 : Remove Rear Panel.

Step 3 : Remove Amp Unit Block.

Step 4 : Remove Bluetooth P.C.B. Assembly.

Step 5 : Remove Panel P.C.B..

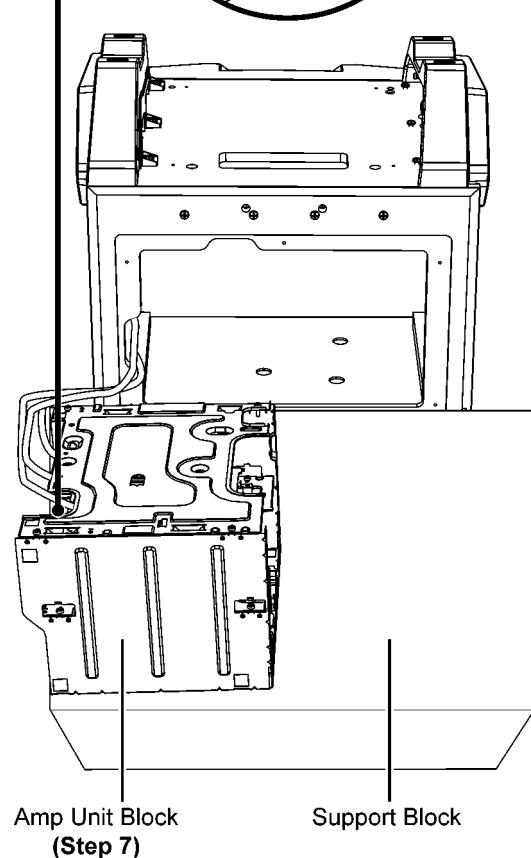
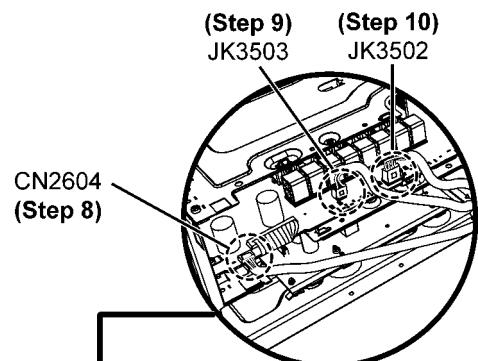
Step 6 : Remove FL Display P.C.B..

Step 7 : Place Amp Unit Block on support block.

Step 8 : Connect 4P wire at connector (CN2604) on Main P.C.B. Assembly.

Step 9 : Connect 2P wire at connector (JK3503) on Main P.C.B. Assembly.

Step 10 : Connect 4P wire at connector (JK3502) on Main P.C.B. Assembly.



Step 11 : Place Panel P.C.B. on support block.

Step 12 : Connect 4P wire at connector (CN2508) on Main P.C.B. Assembly.

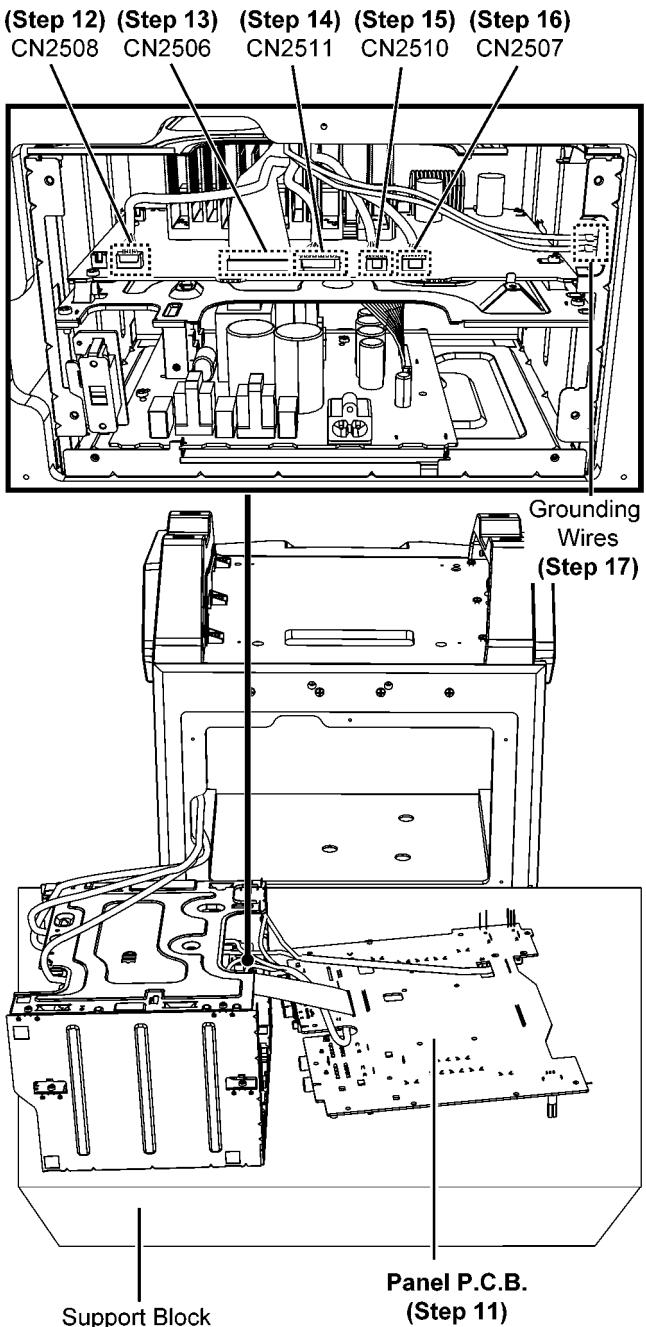
Step 13 : Connect 30P FFC at connector (CN2506) on Main P.C.B. Assembly.

Step 14 : Connect 10P wire at connector (CN2511) on Main P.C.B. Assembly.

Step 15 : Connect 4P wire at connector (CN2510) on Main P.C.B. Assembly.

Step 16 : Connect 6P wire at connector (CN2507) on Main P.C.B. Assembly.

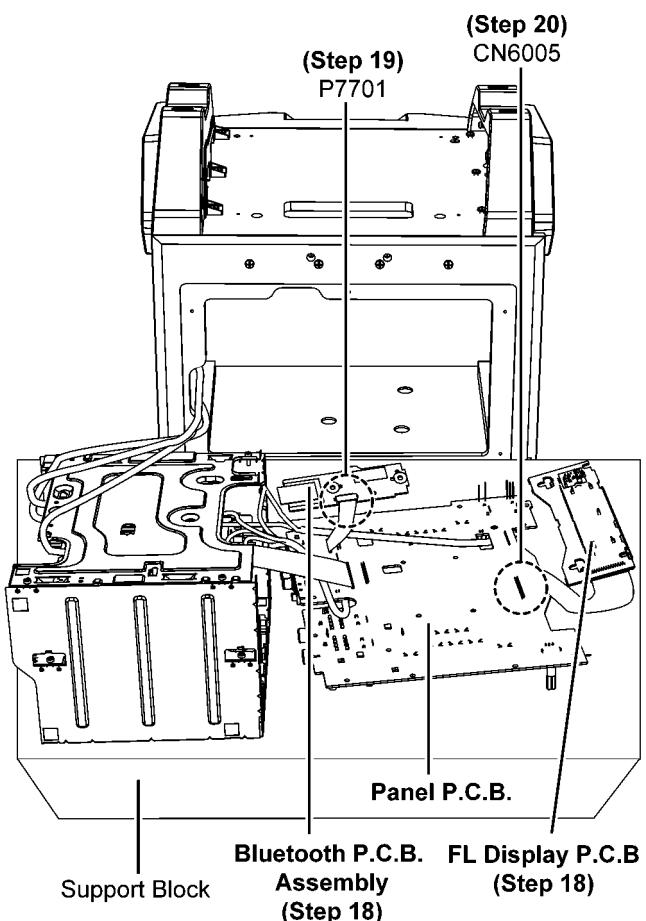
Step 17 : Connect grounding wires.



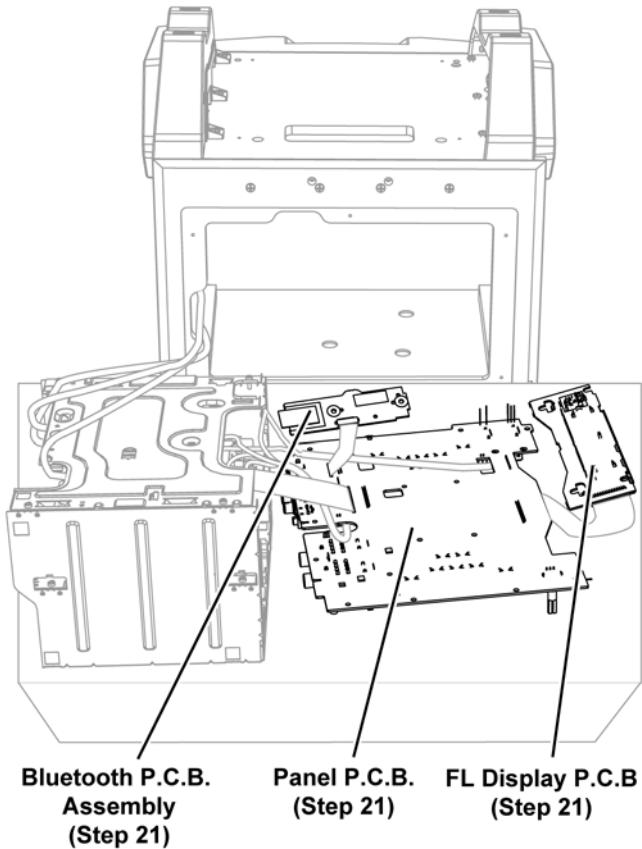
Step 18 : Place FL Display P.C.B. & Bluetooth P.C.B. Assembly on support block.

Step 19 : Connect 12P FFC at connector (P7701) on Bluetooth P.C.B. Assembly.

Step 20 : Connect 30P FFC at connector (CN6005) on Panel P.C.B..



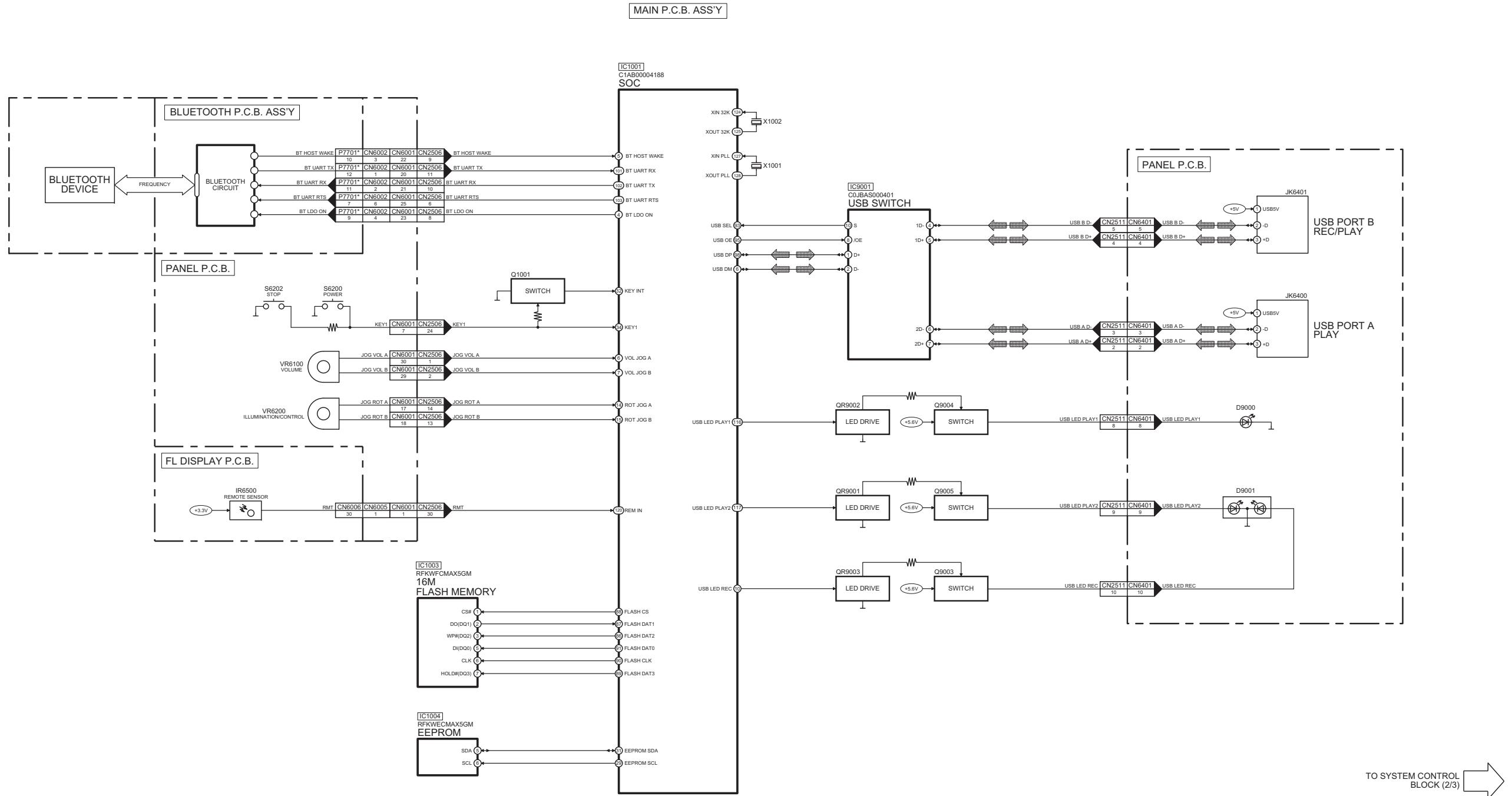
Step 21 : Check Panel P.C.B., Bluetooth P.C.B. Assembly & FL Display P.C.B. according to the diagram shown.



10 Block Diagram

10.1. SYSTEM CONTROL (1/3) BLOCK DIAGRAM

: AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE

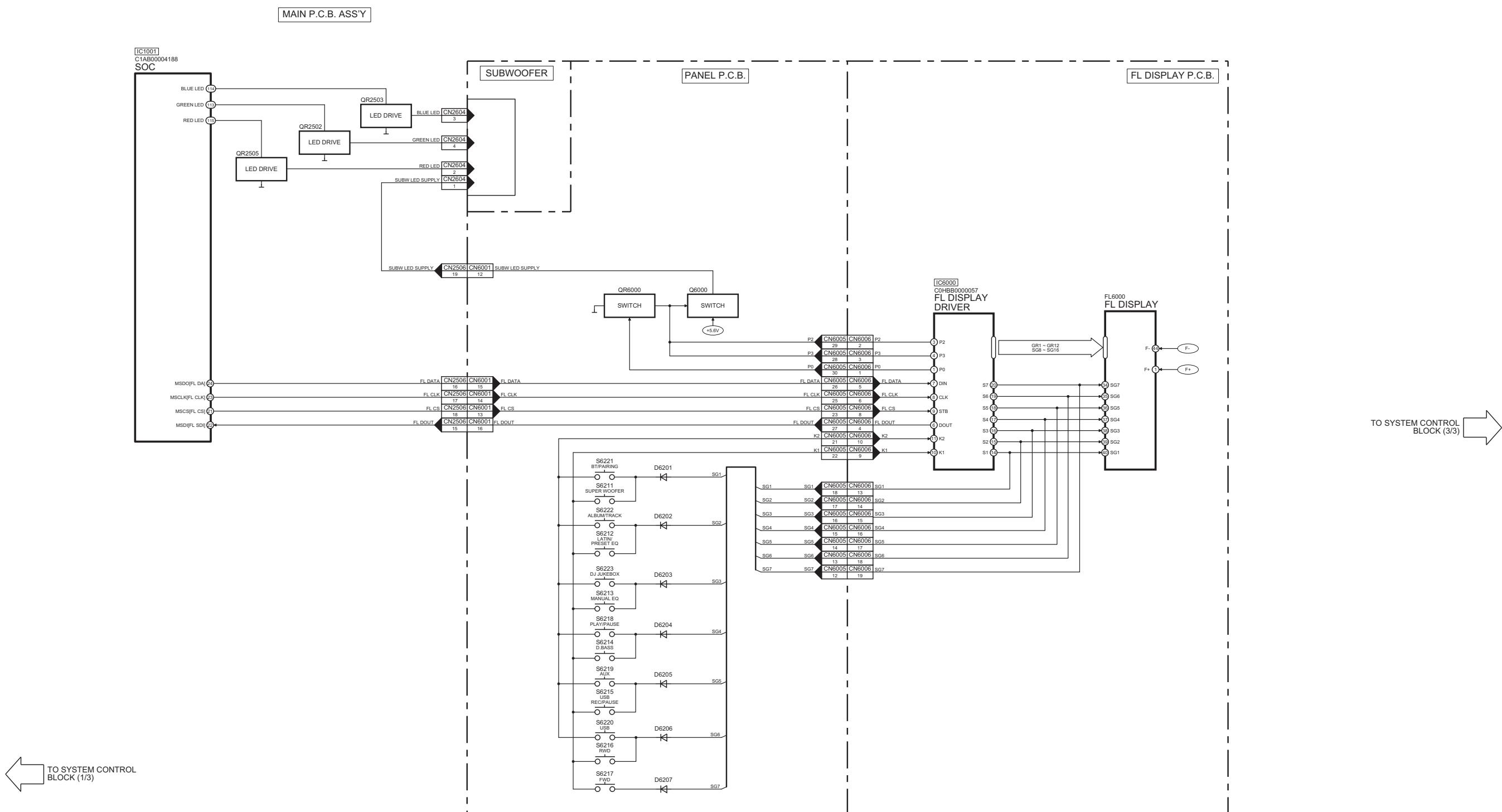


NOTE: “*” REF IS FOR INDICATION ONLY

SC-CMAX5GS/PH/PR SYSTEM CONTROL (1/3) BLOCK DIAGRAM

10.2. SYSTEM CONTROL (2/3) BLOCK DIAGRAM

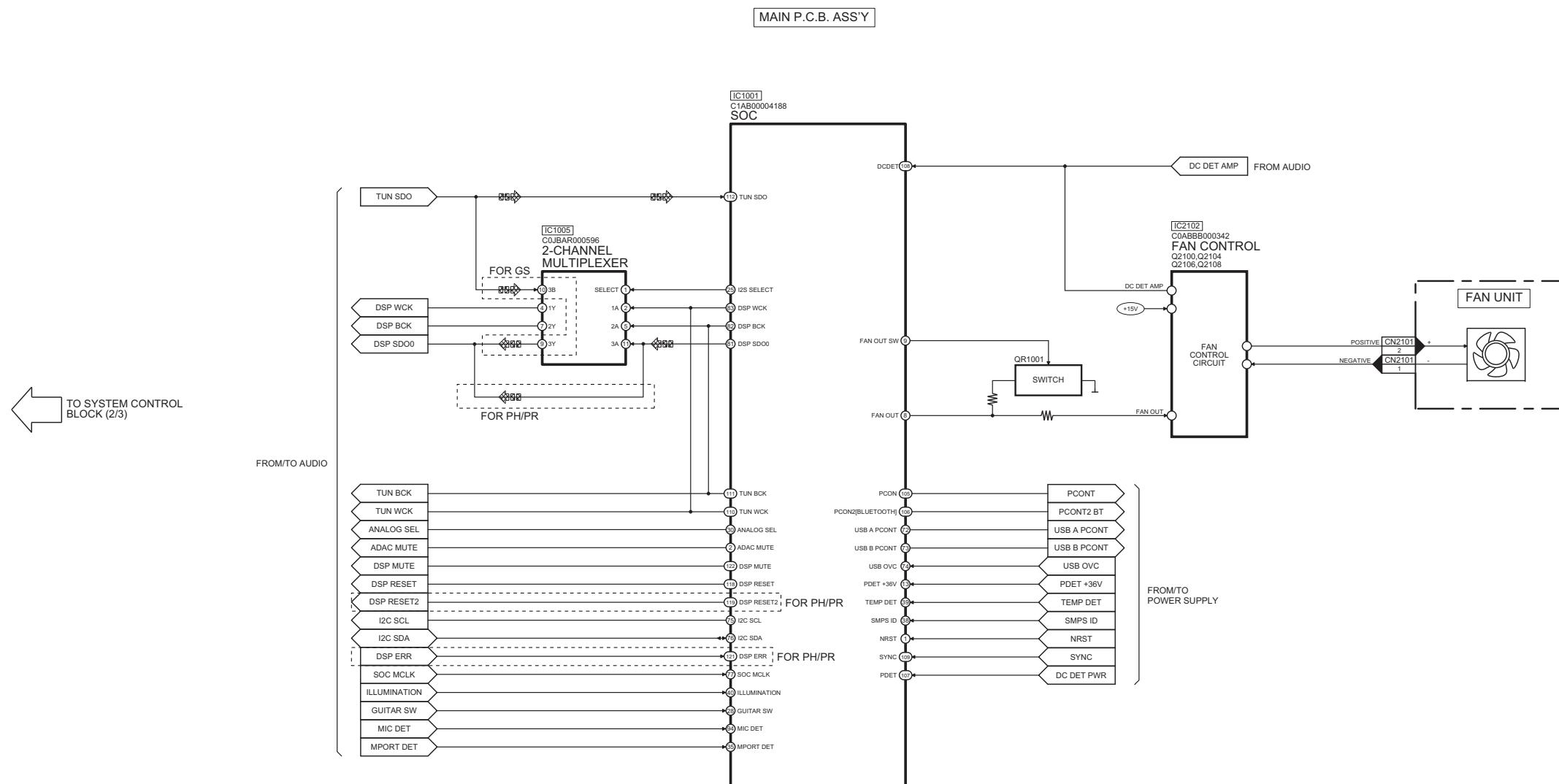
: AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



SC-CMAX5GS/PH/PR SYSTEM CONTROL (2/3) BLOCK DIAGRAM

10.3. SYSTEM CONTROL (3/3) BLOCK DIAGRAM

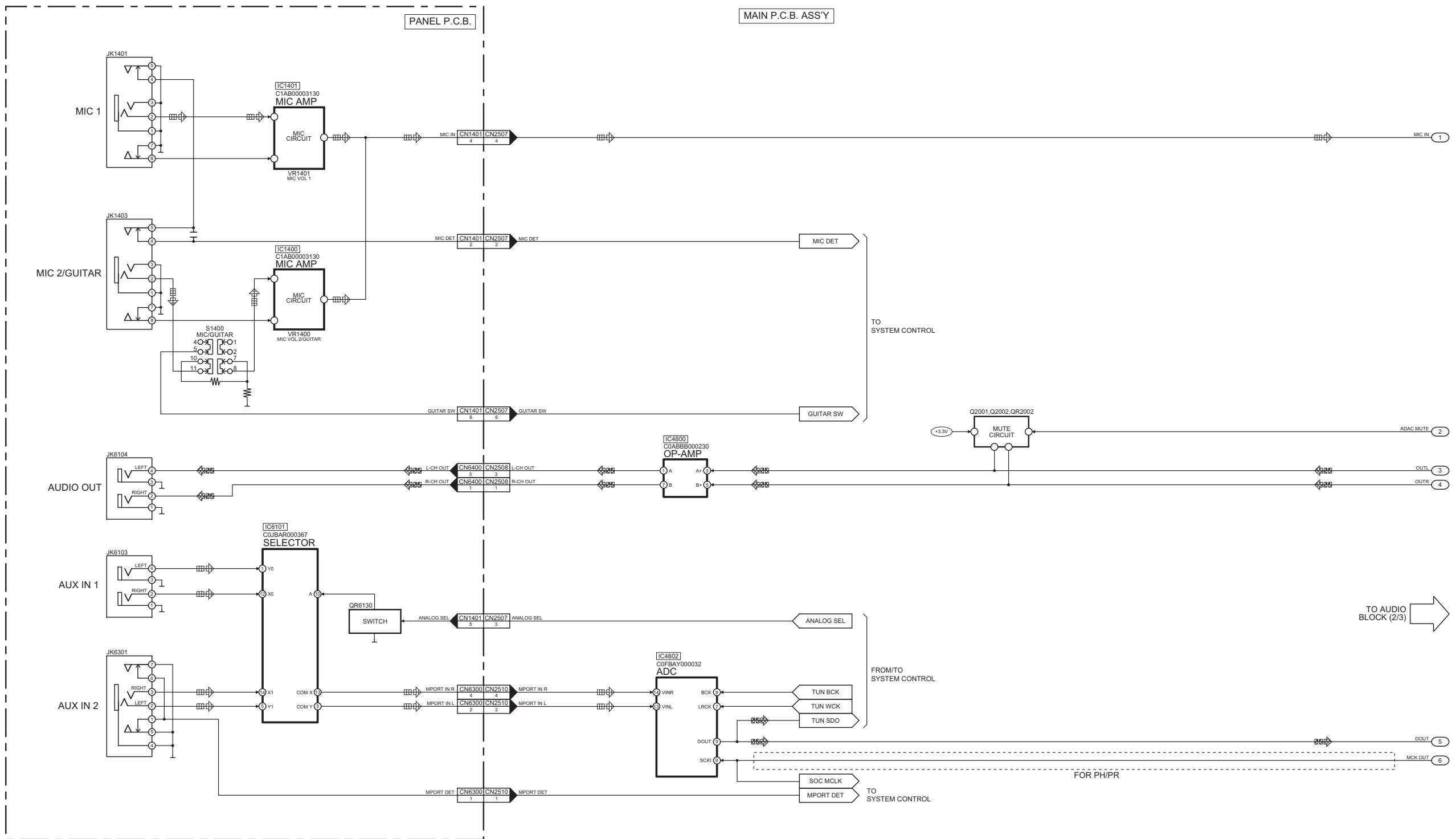
: AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



SC-CMAX5GS/PH/PR SYSTEM CONTROL (3/3) BLOCK DIAGRAM

10.4. AUDIO (1/3) BLOCK DIAGRAM

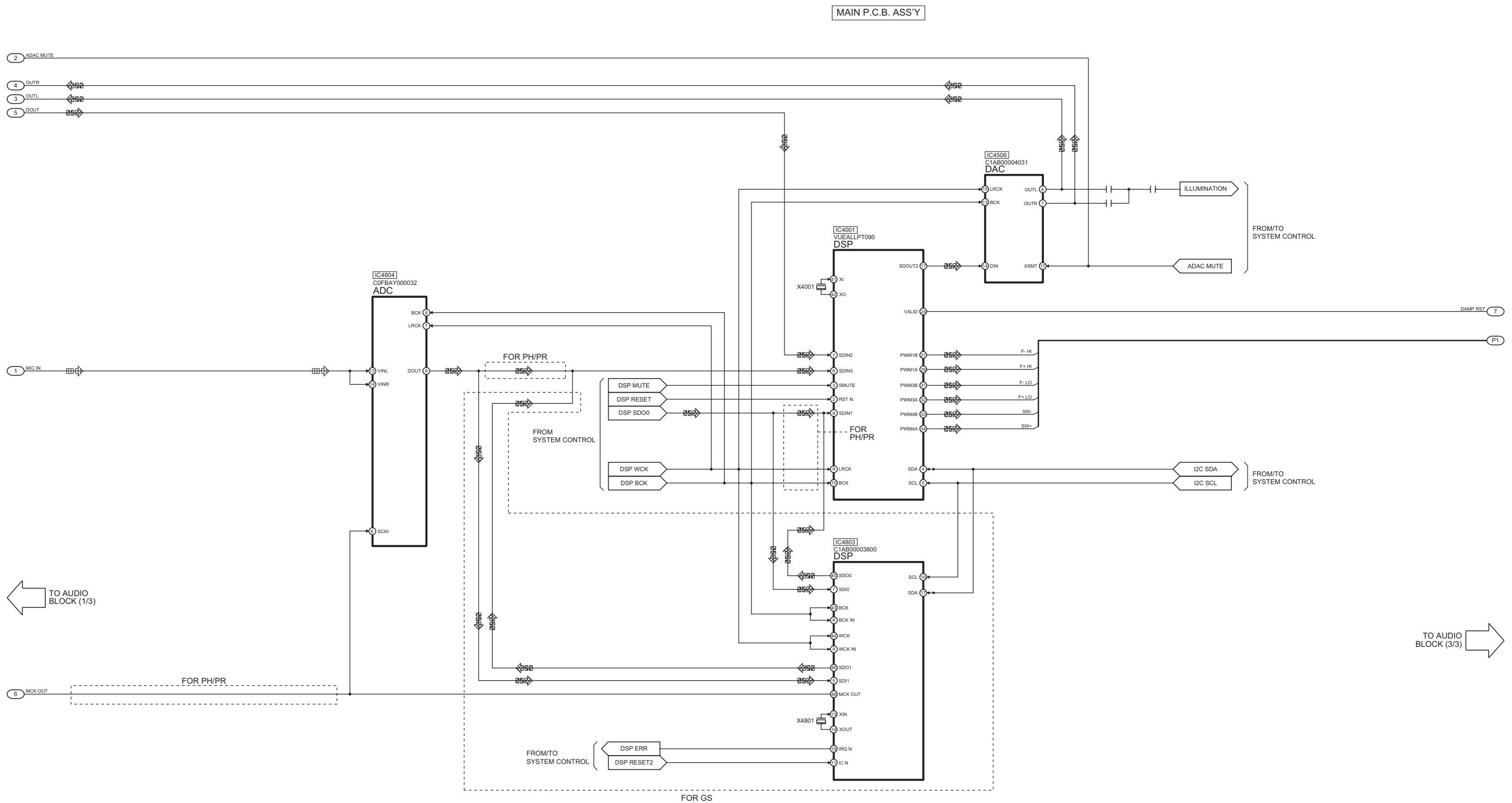
: AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



SC-CMAX5GS/PH/PR AUDIO (1/3) BLOCK DIAGRAM

10.5. AUDIO (2/3) BLOCK DIAGRAM

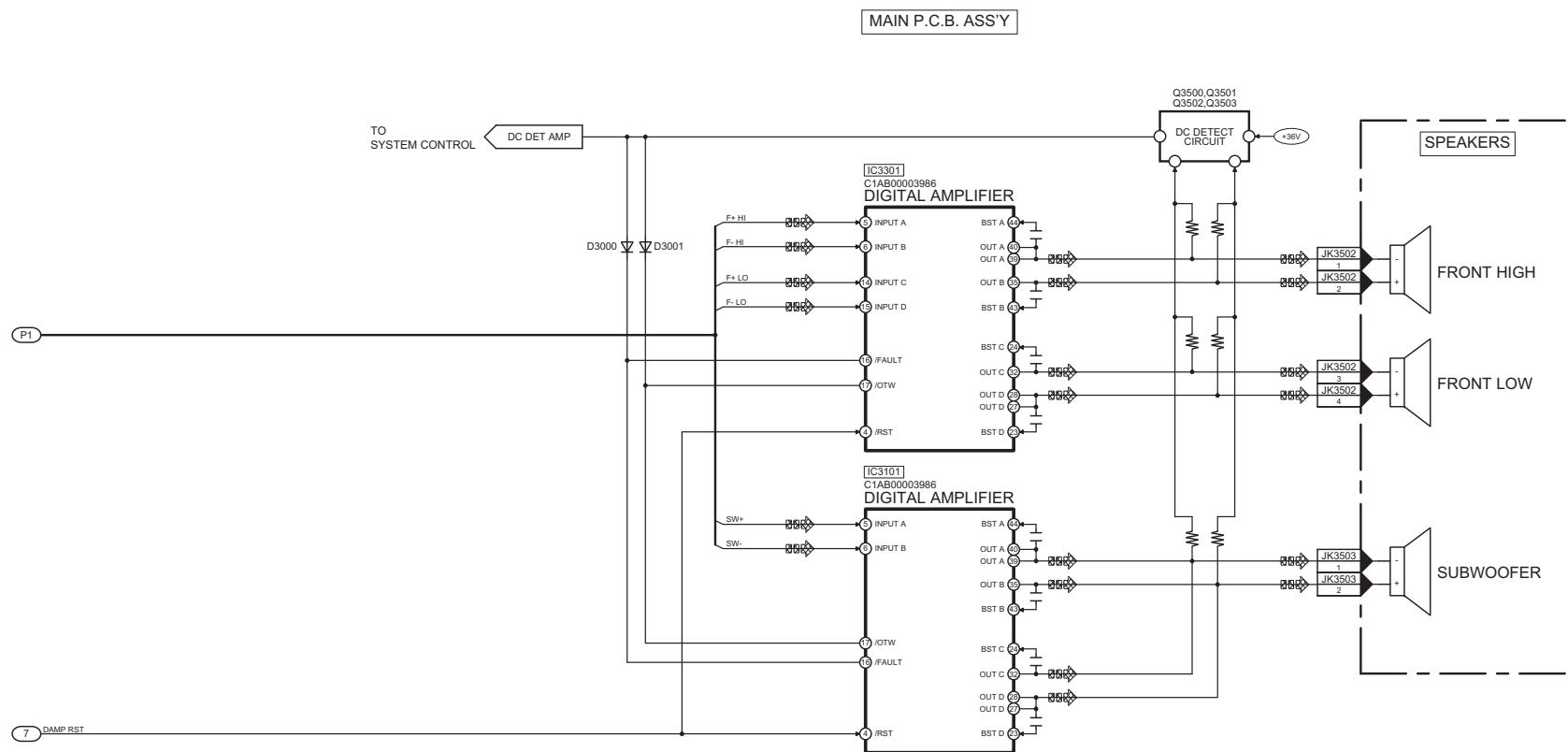
: AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



SC-CMAX5GS/PH/PR AUDIO (2/3) BLOCK DIAGRAM

10.6. AUDIO (3/3) BLOCK DIAGRAM

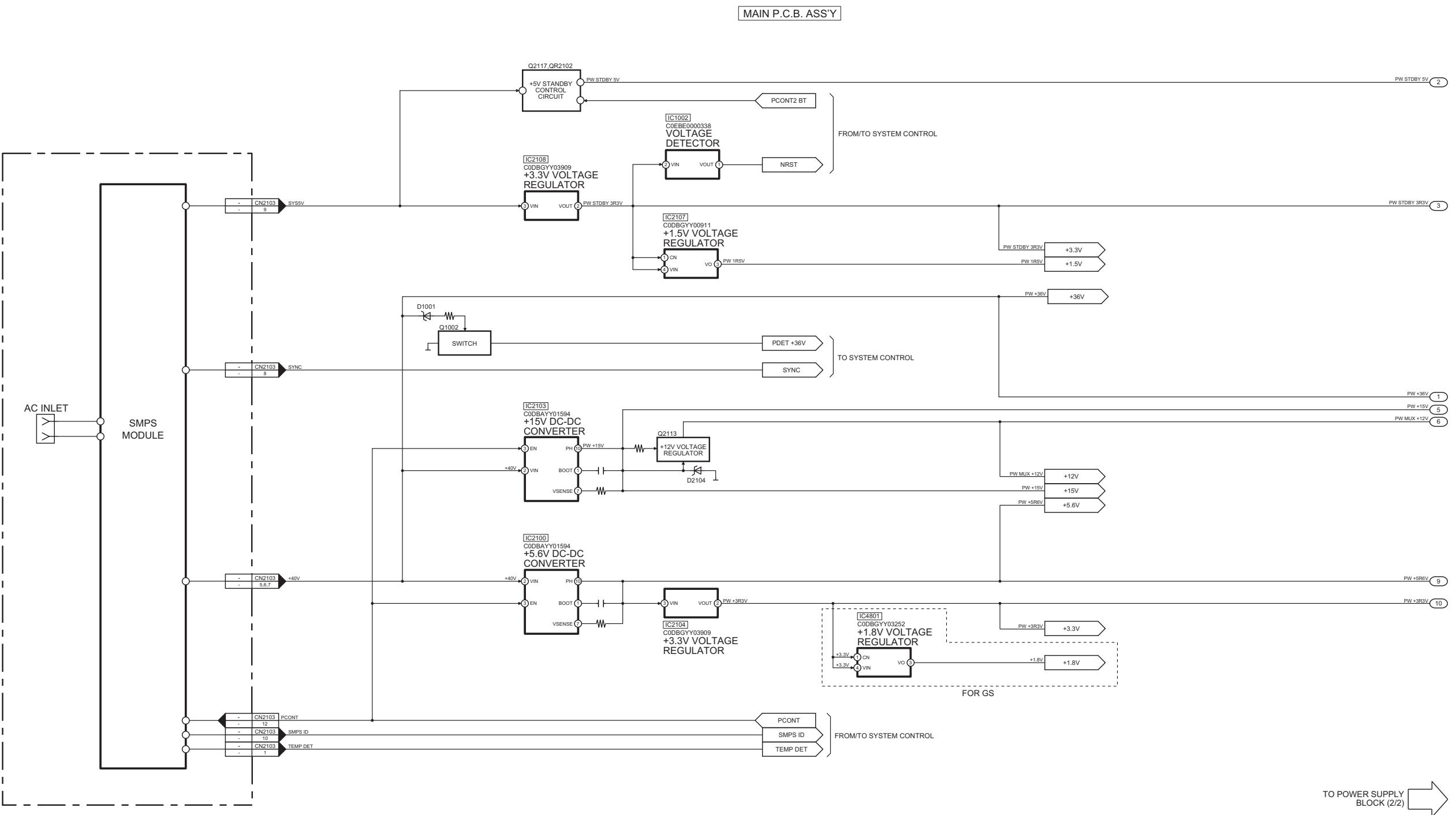
: AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



TO AUDIO
BLOCK (2/3)

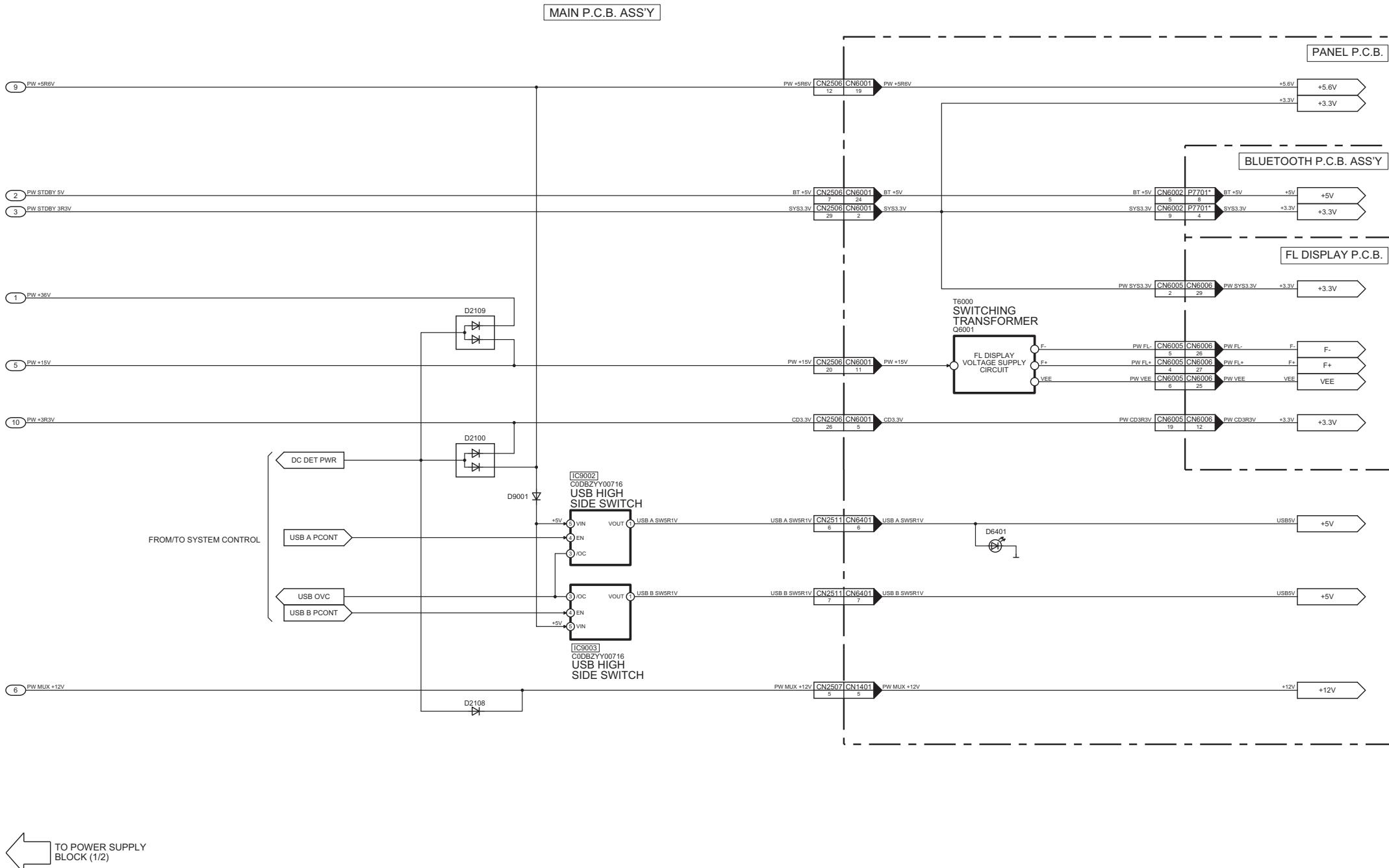
SC-CMAX5GS/PH/PR AUDIO (3/3) BLOCK DIAGRAM

10.7. POWER SUPPLY (1/2) BLOCK DIAGRAM



SC-CMAX5GS/PH/PR POWER SUPPLY (1/2) BLOCK DIAGRAM

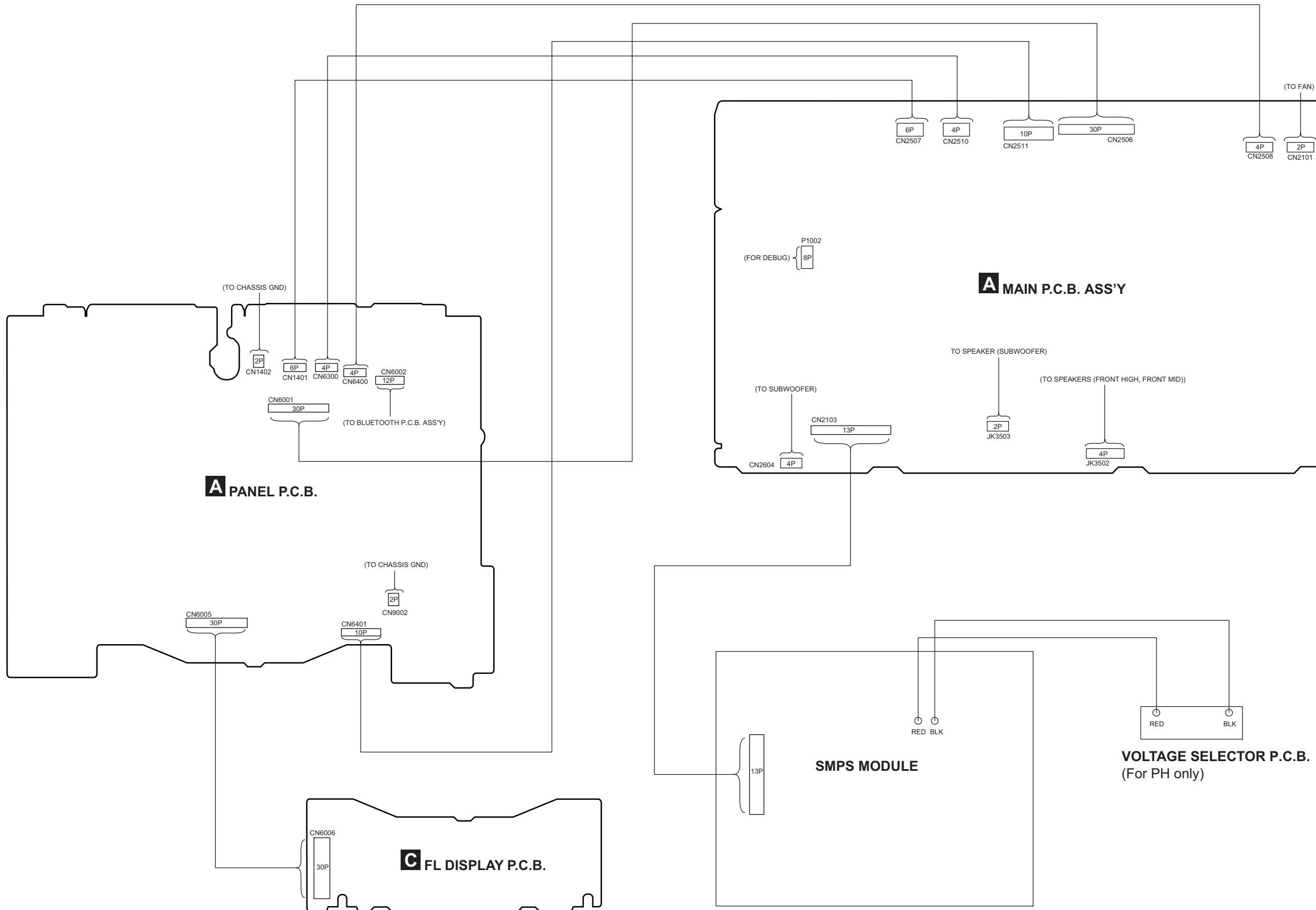
10.8. POWER SUPPLY (2/2) BLOCK DIAGRAM



NOTE: “*” REF IS FOR INDICATION ONLY

SC-CMAX5GS/PH/PR POWER SUPPLY (2/2) BLOCK DIAGRAM

11 Wiring Connection Diagram



Note : “ * ” REF IS FOR INDICATION ONLY.

SC-CMAX5GS/PH/PR
WIRING CONNECTION DIAGRAM

12 Schematic Diagram

12.1. Schematic Diagram Notes

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

Notes:

S1400:	MIC/GUITAR SWITCH.
S6200:	POWER SWITCH ().
S6202:	STOP SWITCH ().
S6211:	SUPER WOOFER SWITCH.
S6212:	LATIN/PRESET EQ SWITCH.
S6213:	MANUAL EQ SWITCH.
S6214:	D.BASS SWITCH.
S6215:	USB REC/PAUSE SWITCH.
S6216:	RWD SWITCH ( / ).
S6217:	FWD SWITCH ( / ).
S6218:	PLAY/PAUSE SWITCH ( / ).
S6219:	AUX SWITCH.
S6220:	USB SWITCH.
S6221:	BT/PAIRING SWITCH ().
S6222:	ALBUM/TRACK SWITCH.
S6223:	DJ JUKEBOX SWITCH.

- Important 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.

- Resistor**

Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

- Capacitor**

Unit of capacitance is μF , unless otherwise noted. F=Farads, pF=pico-Farad.

- Coil**

Unit of inductance is H, unless otherwise noted.

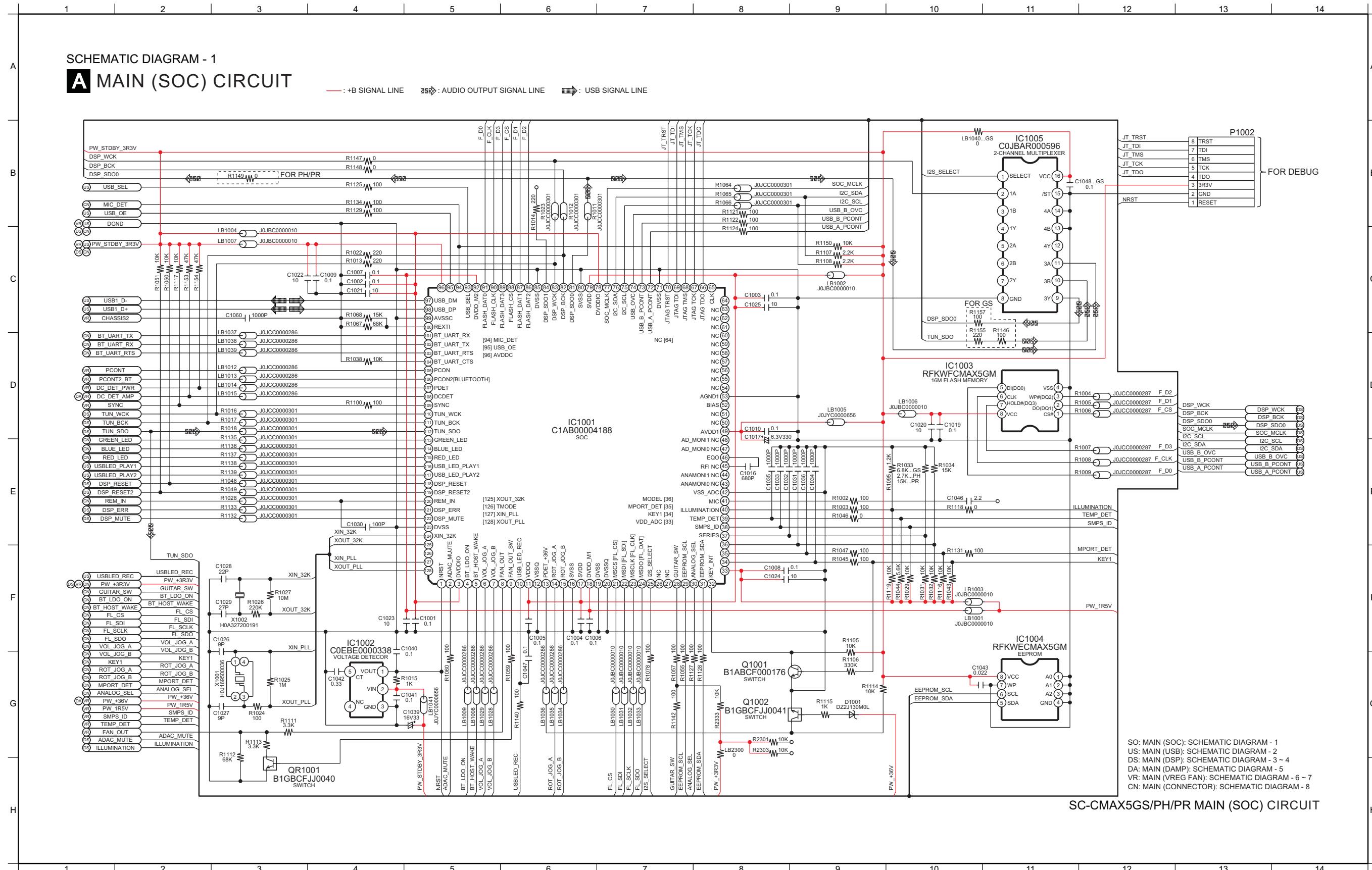
- *

REF IS FOR INDICATION ONLY.

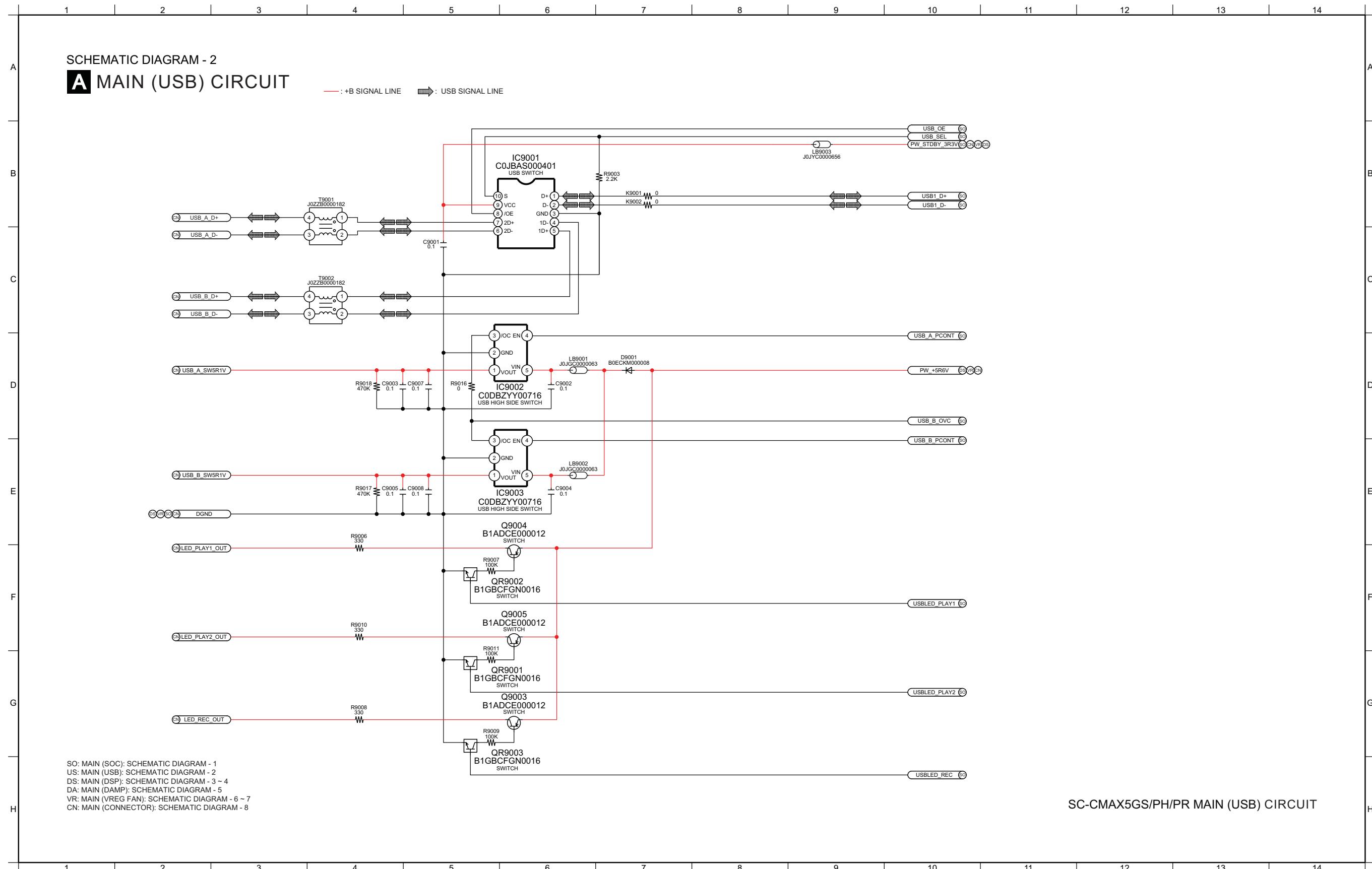
- Voltage and signal line

	: +B Signal Line
	: -B Signal Line
	: Audio Output Signal Line
	: USB Signal Line
	: Aux/Mic/Guitar Audio Input Signal Line

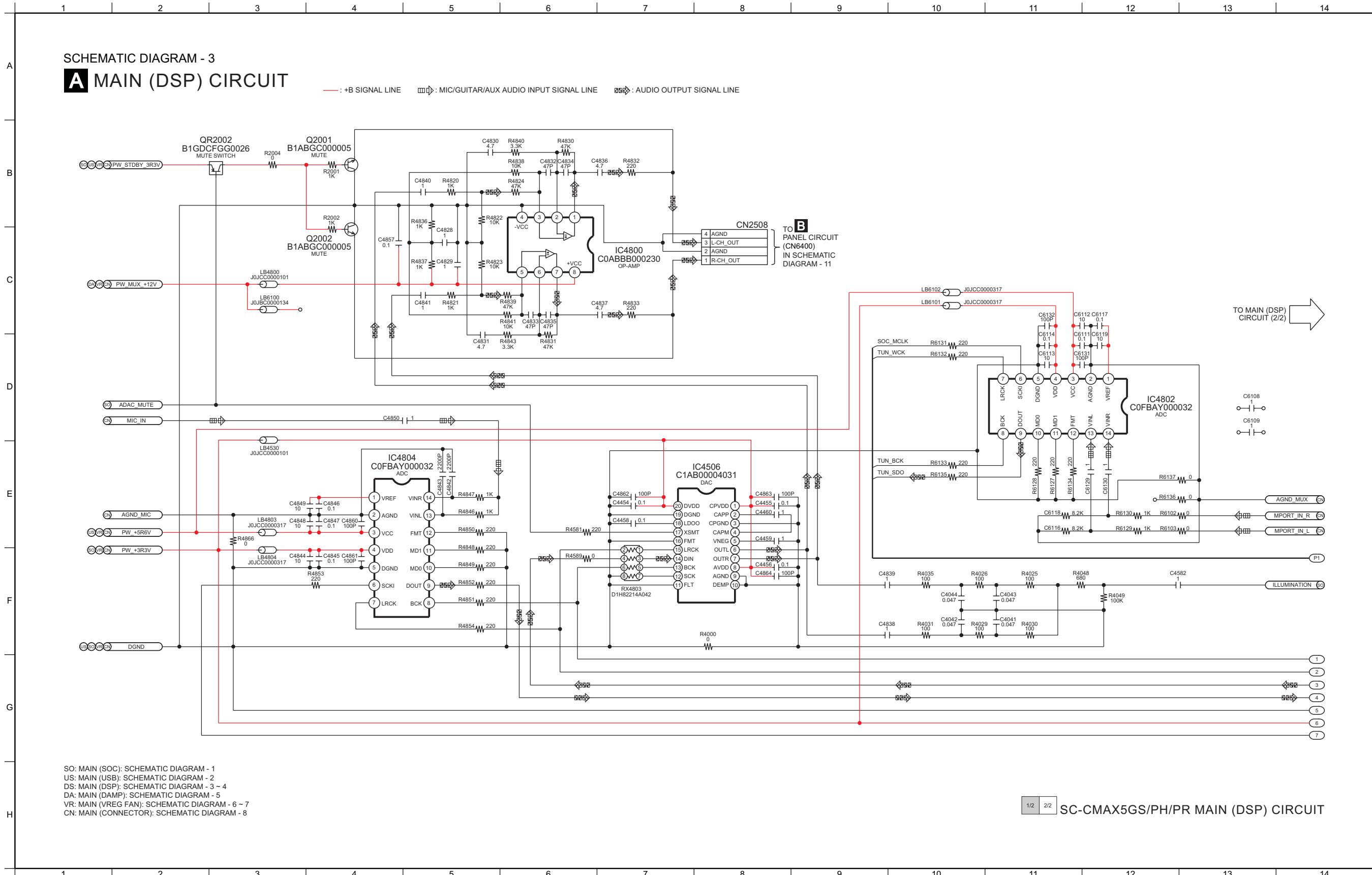
12.2. MAIN (SOC) CIRCUIT



12.3. MAIN (USB) CIRCUIT



12.4. MAIN (DSP) CIRCUIT (1/2)



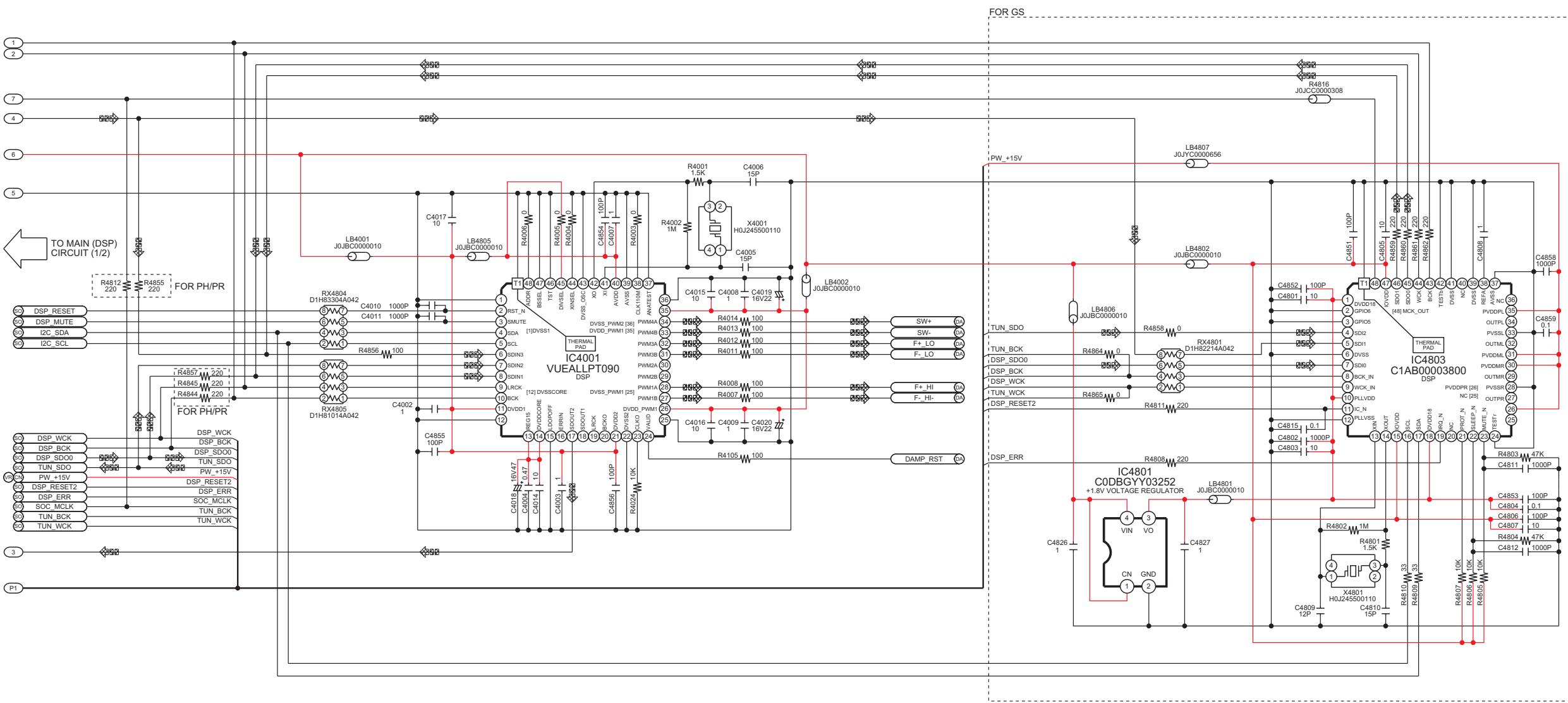
12.5. MAIN (DSP) CIRCUIT (2/2)

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

SCHEMATIC DIAGRAM - 4

A MAIN (DSP) CIRCUIT

— : +B SIGNAL LINE □□□ : MIC/GUITAR/AUX AUDIO INPUT SIGNAL LINE □□□ : AUDIO OUTPUT SIGNAL LINE

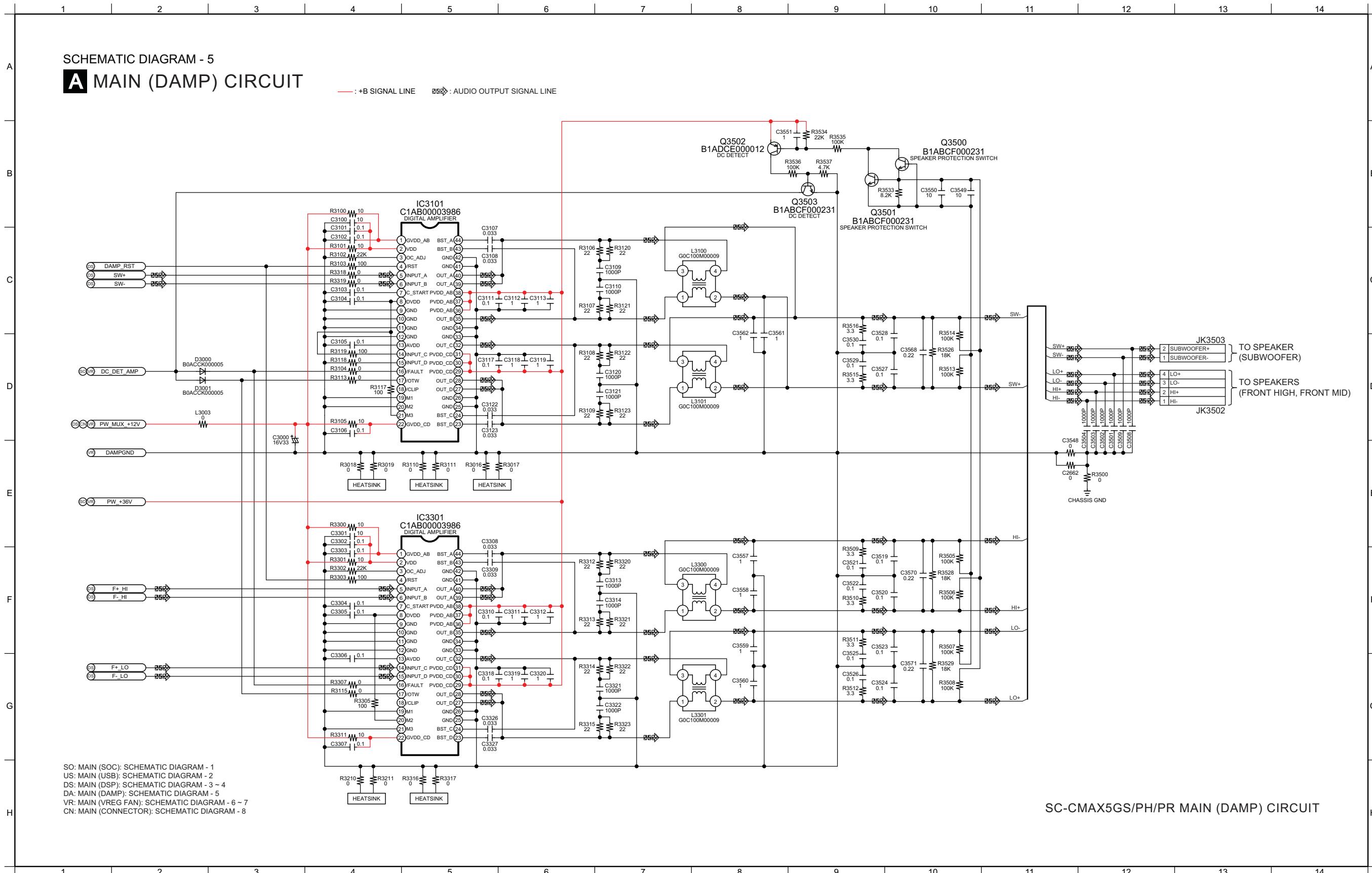


SO: MAIN (SOC): SCHEMATIC DIAGRAM - 1
 US: MAIN (USB): SCHEMATIC DIAGRAM - 2
 DS: MAIN (DSP): SCHEMATIC DIAGRAM - 3 ~ 4
 DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5
 VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 6 ~ 7
 CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 8

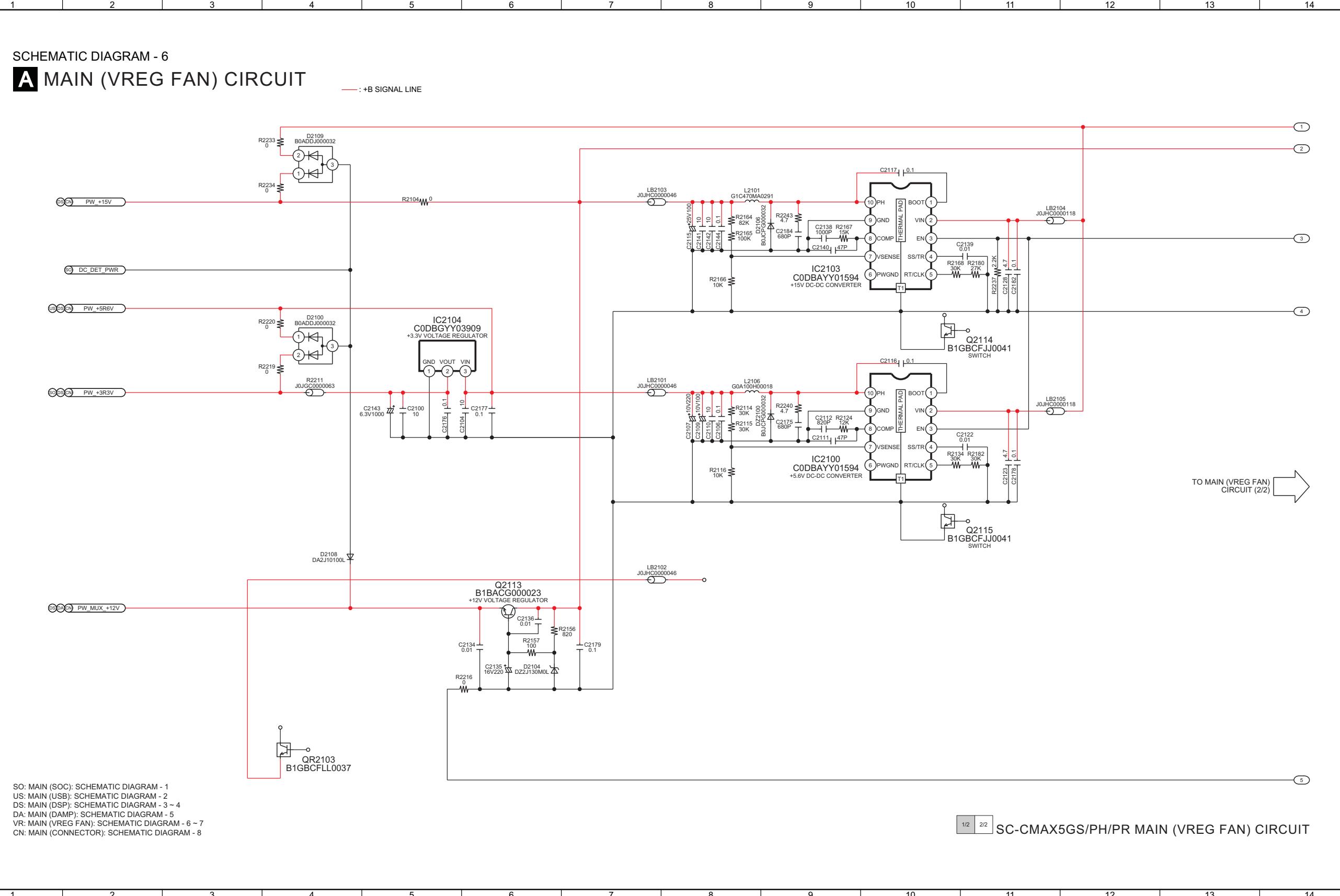
1/2 2/2 SC-CMAX5GS/PH/PR MAIN (DSP) CIRCUIT

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

12.6. MAIN (DAMP) CIRCUIT



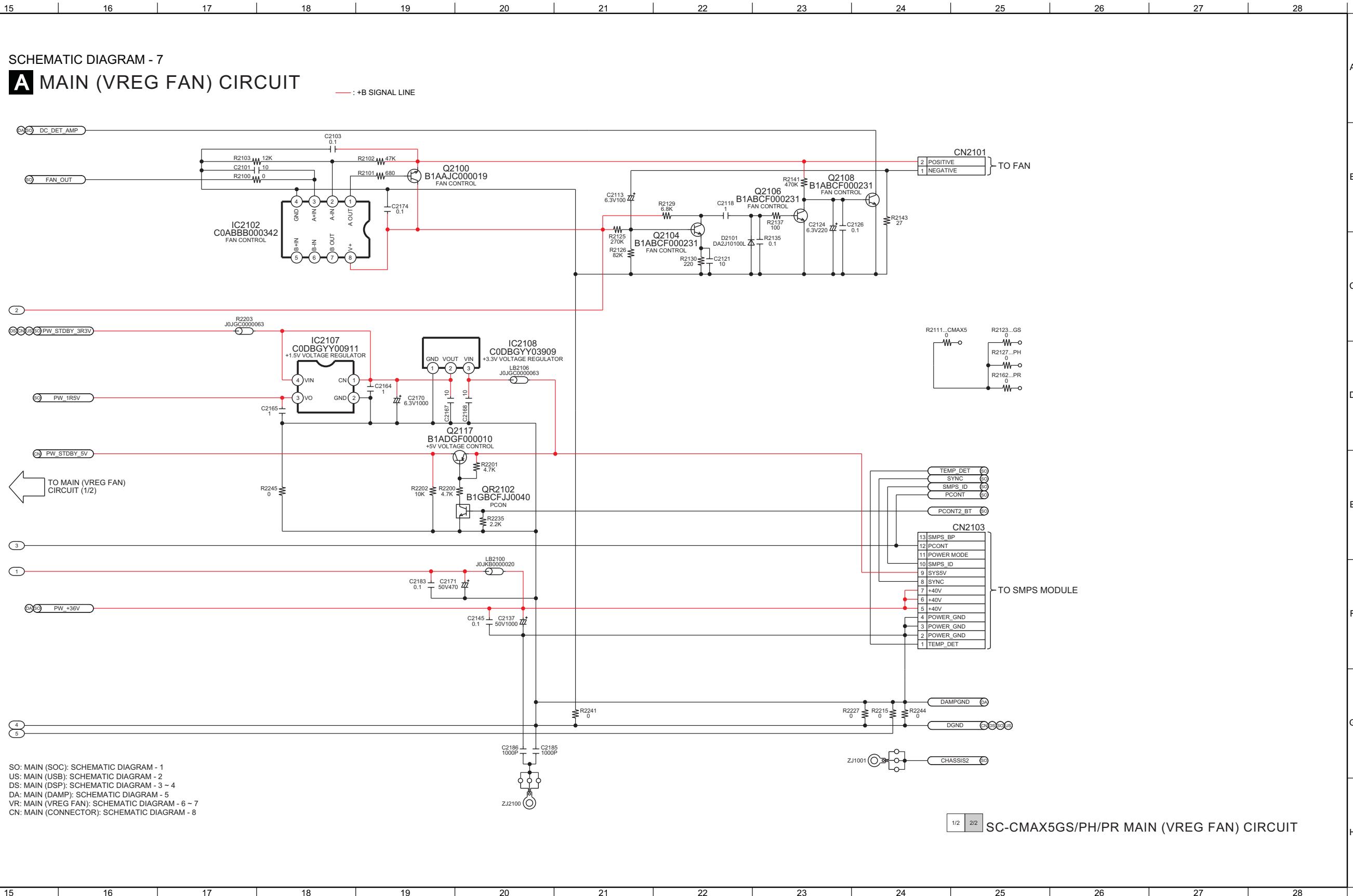
12.7. MAIN (VREG FAN) CIRCUIT (1/2)



SO: MAIN (SOC): SCHEMATIC DIAGRAM - 1
 US: MAIN (USB): SCHEMATIC DIAGRAM - 2
 DS: MAIN (DSP): SCHEMATIC DIAGRAM - 3 ~ 4
 DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5
 VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 6 ~ 7
 CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 8

1/2 2/2 SC-CMAX5GS/PH/PR MAIN (VREG FAN) CIRCUIT

12.8. MAIN (VREG FAN) CIRCUIT (2/2)

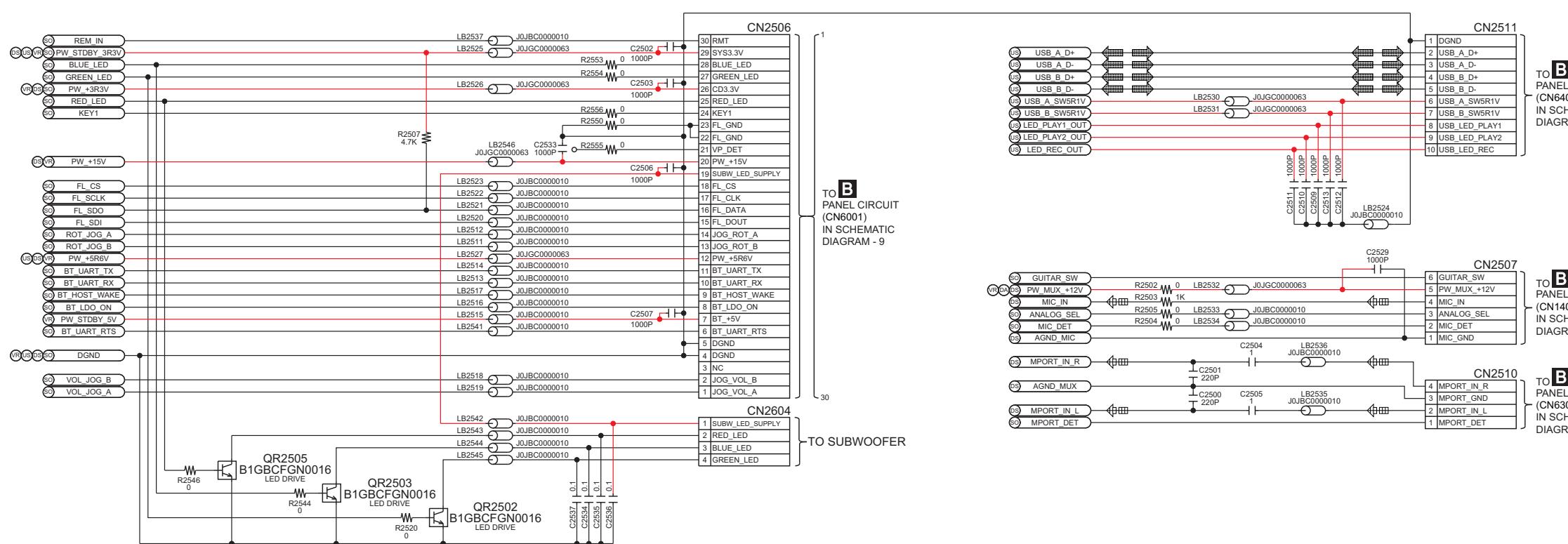


12.9. MAIN (CONNECTOR) CIRCUIT

SCHEMATIC DIAGRAM - 8

A MAIN (CONNECTOR) CIRCUIT

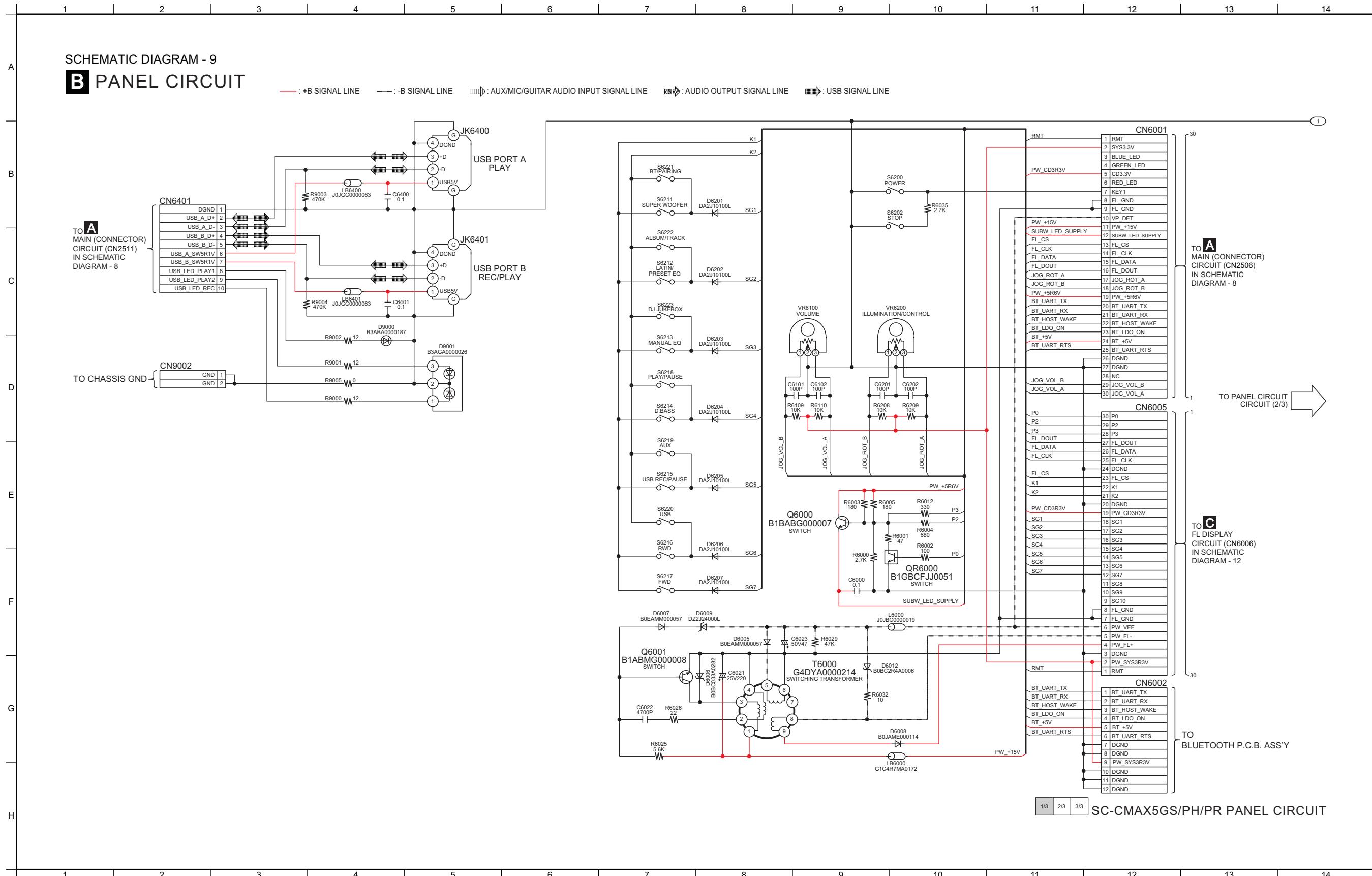
— : +B SIGNAL LINE □□□ : AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE ──■■■ : USB SIGNAL LINE



SO: MAIN (SOC): SCHEMATIC DIAGRAM - 1
 US: MAIN (USB): SCHEMATIC DIAGRAM - 2
 DS: MAIN (DSP): SCHEMATIC DIAGRAM - 3 ~ 4
 DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 5
 VR: MAIN (VREG FAN): SCHEMATIC DIAGRAM - 6 ~ 7
 CN: MAIN (CONNECTOR): SCHEMATIC DIAGRAM - 8

SC-CMAX5GS/PH/PR MAIN (CONNECTOR) CIRCUIT

12.10. PANEL CIRCUIT (1/3)



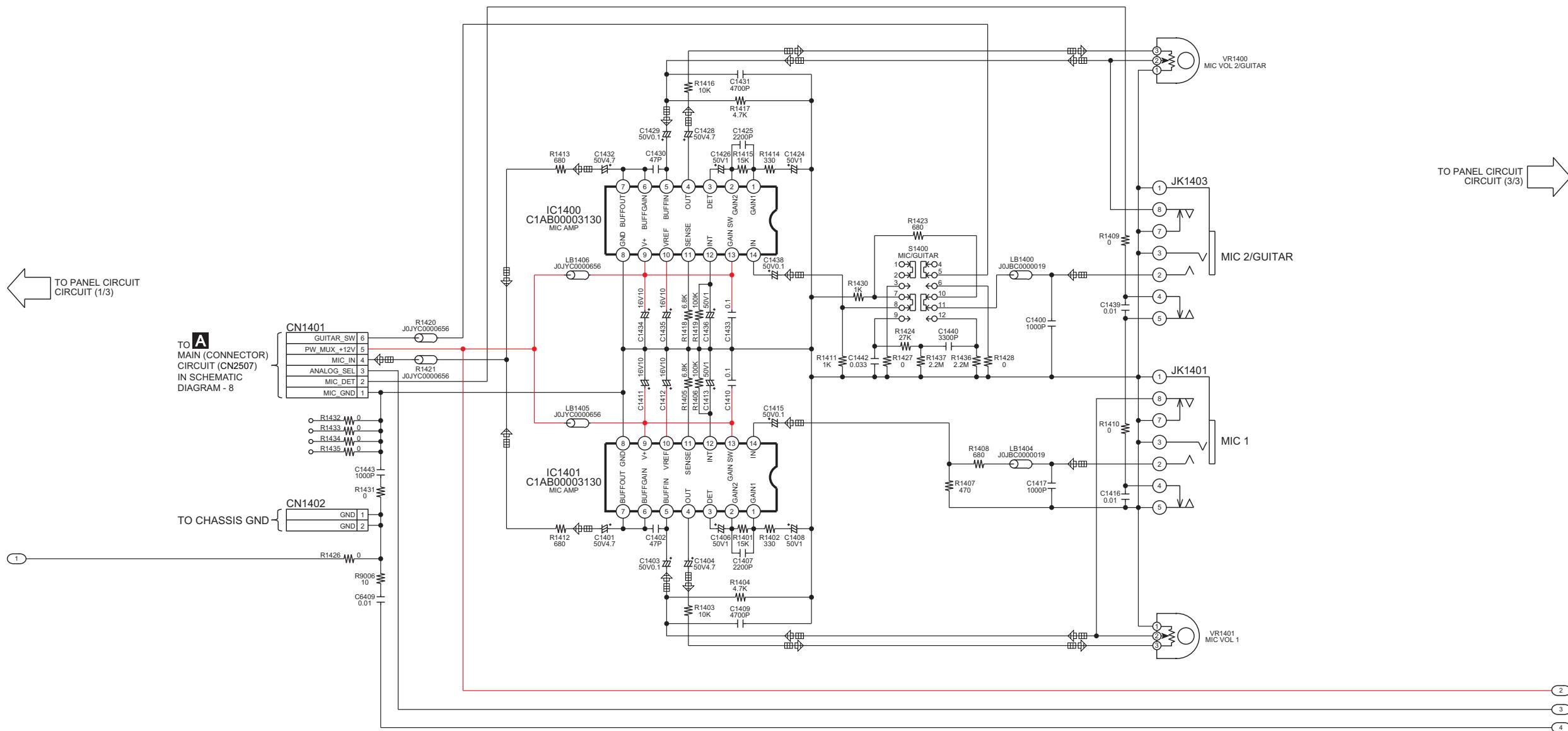
12.11. PANEL CIRCUIT (2/3)

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

SCHEMATIC DIAGRAM - 10

B PANEL CIRCUIT

— : +B SIGNAL LINE — : -B SIGNAL LINE □ : AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE □ : AUDIO OUTPUT SIGNAL LINE □ : USB SIGNAL LINE



1/3 2/3 3/3 SC-CMAX5GS/PH/PR PANEL CIRCUIT

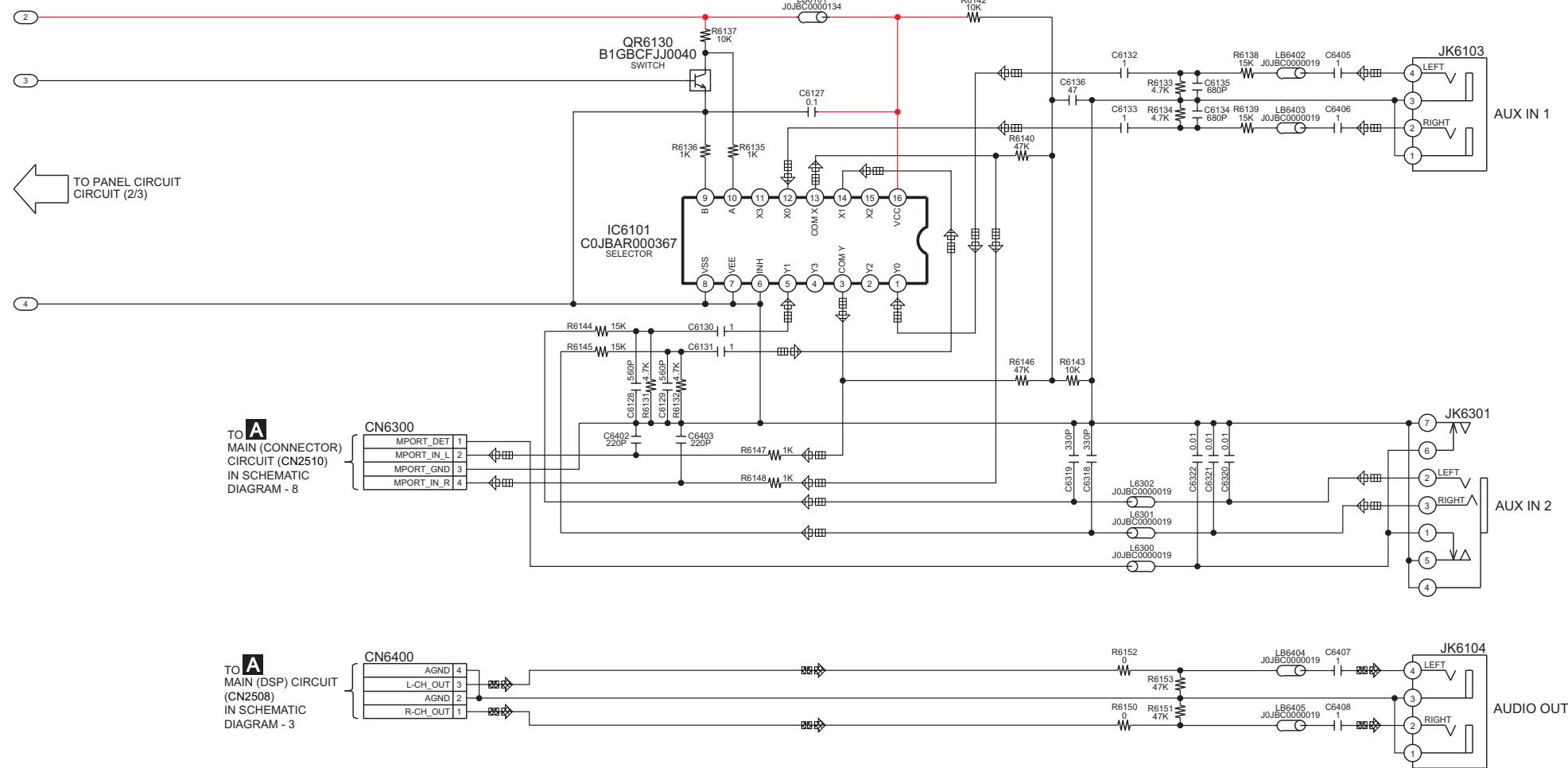
15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28

12.12. PANEL CIRCUIT (3/3)

SCHEMATIC DIAGRAM - 11

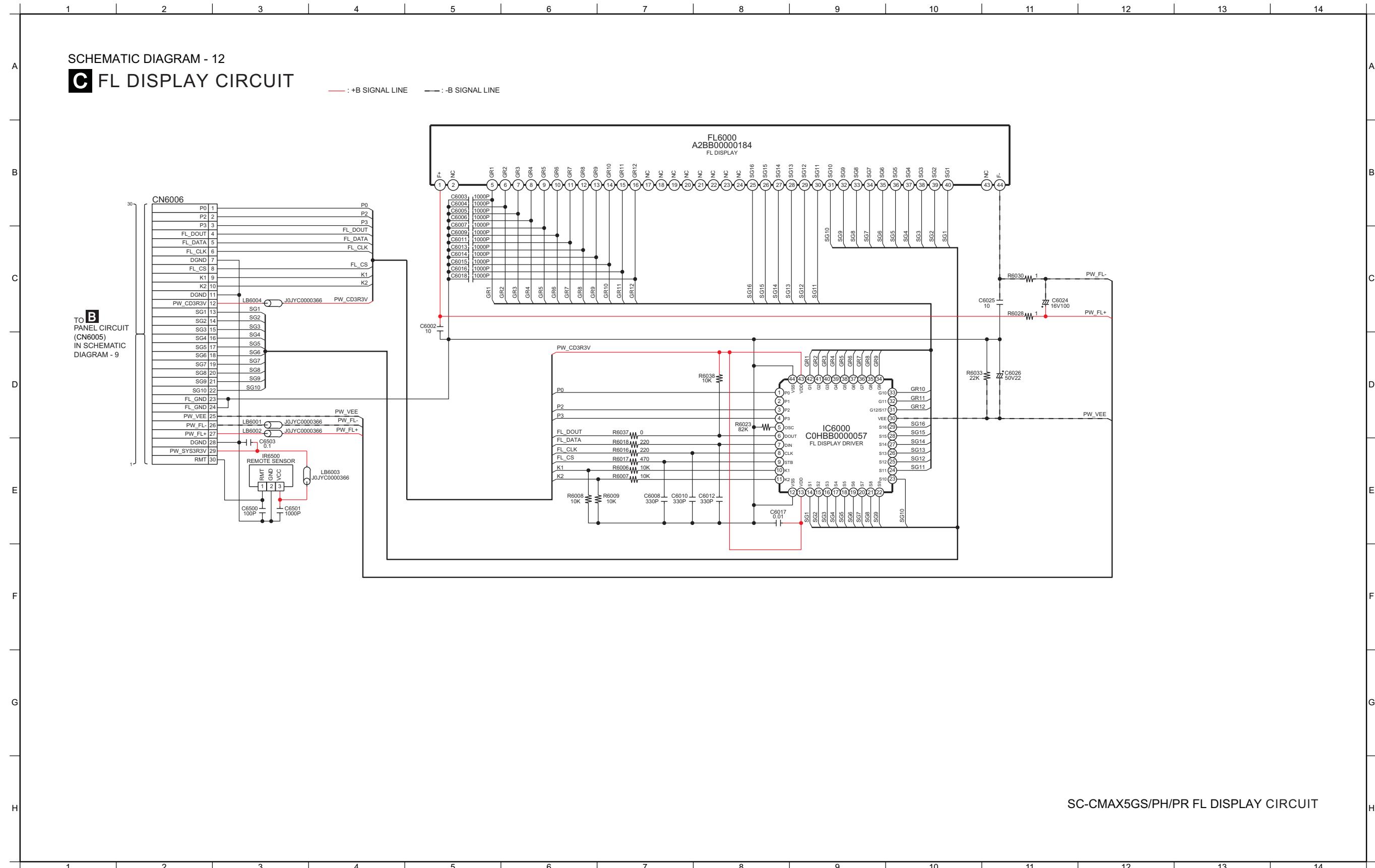
B PANEL CIRCUIT

— : +B SIGNAL LINE — : -B SIGNAL LINE ▶ : AUX/MIC/GUITAR AUDIO INPUT SIGNAL LINE □ : AUDIO OUTPUT SIGNAL LINE ▶ : USB SIGNAL LINE



1/3 2/3 3/3 SC-CMAX5GS/PH/PR PANEL CIRCUIT

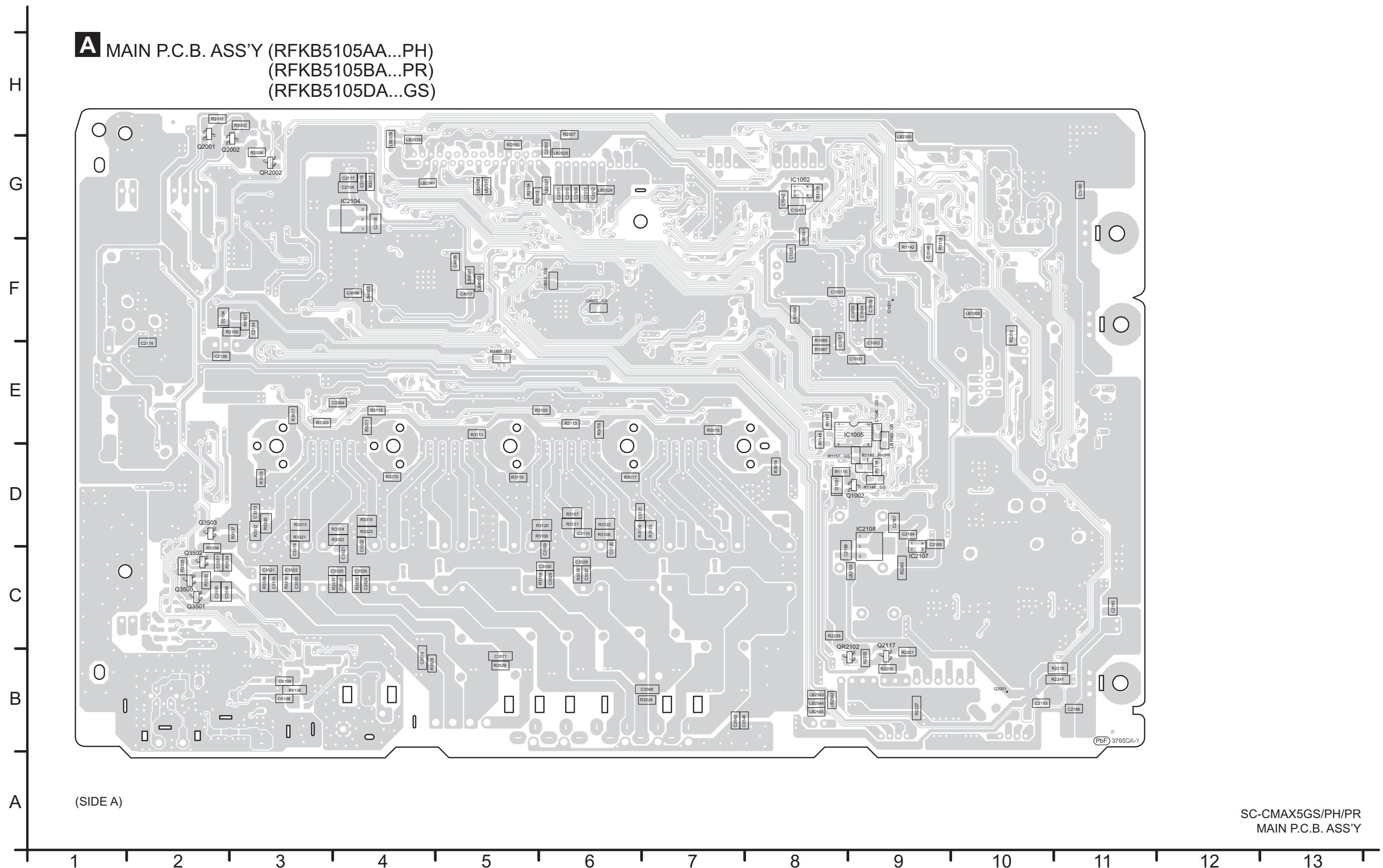
12.13. FL DISPLAY CIRCUIT



13 Printed Circuit Board

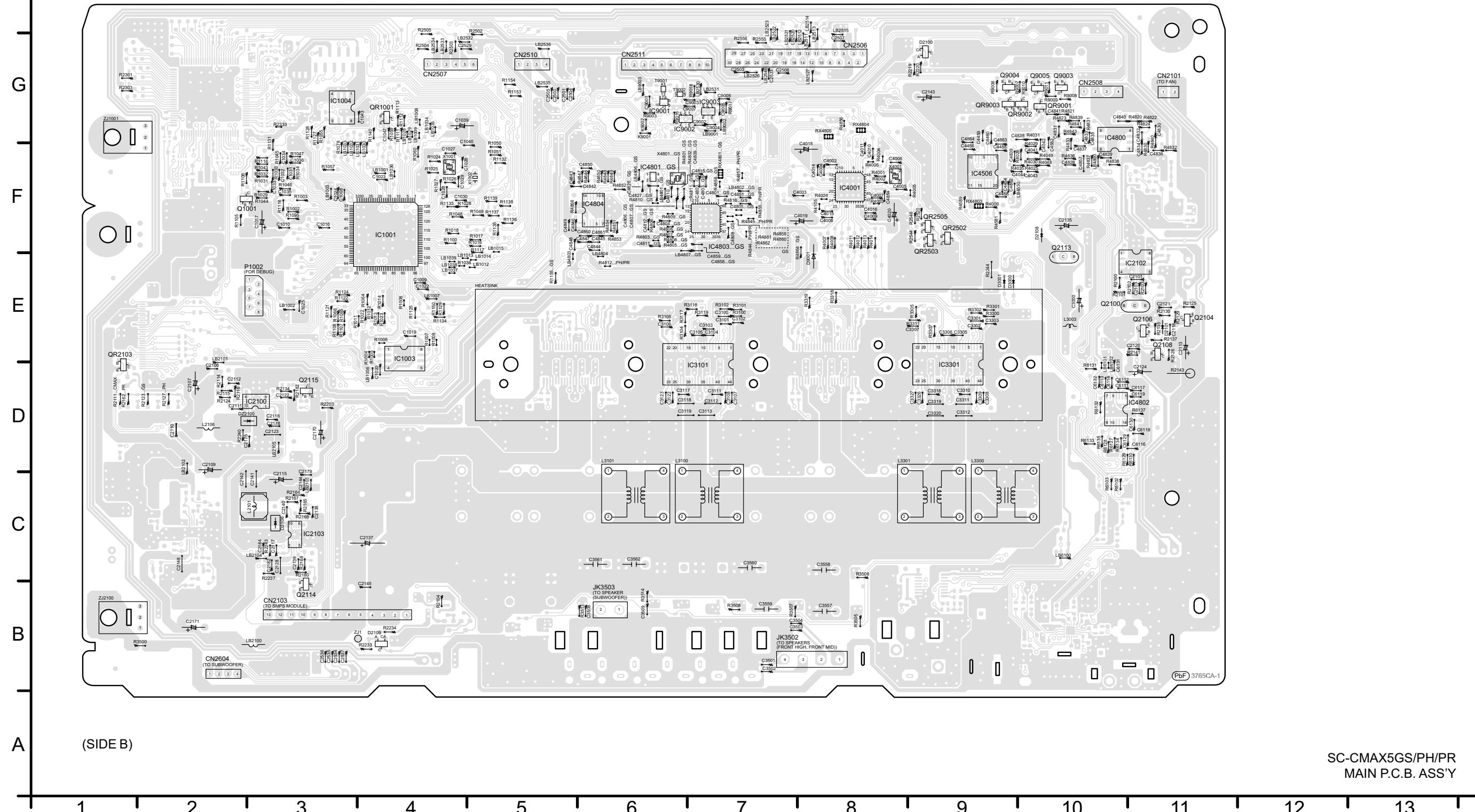
13.1. MAIN P.C.B. ASS'Y (Side A)

A MAIN P.C.B. ASS'Y (RFKB5105AA...PH)
(RFKB5105BA...PR)
(RFKB5105DA...GS)

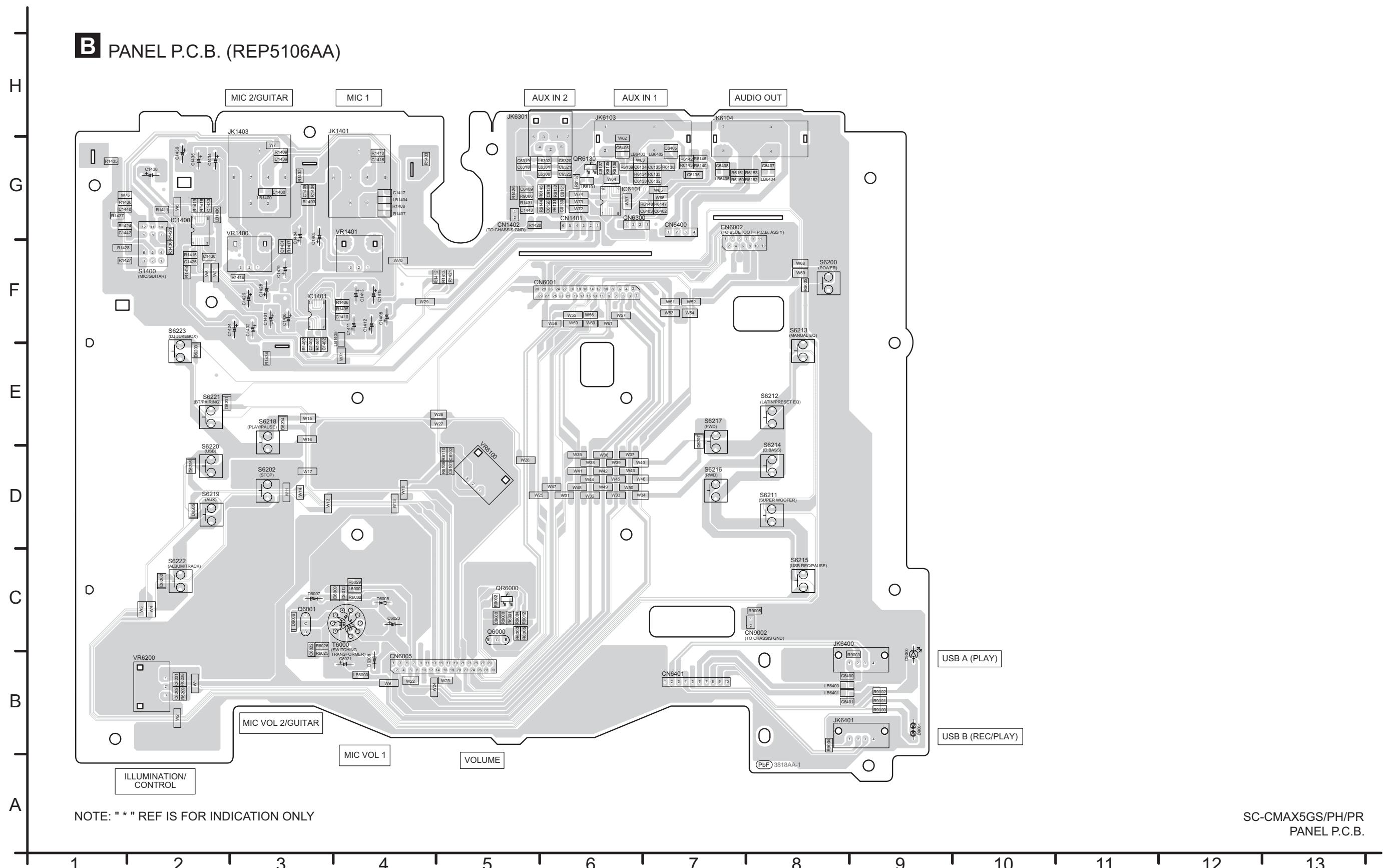


13.2. MAIN P.C.B. ASS'Y (Side B)

A MAIN P.C.B. ASS'Y (RFKB5105AA...PH)
(RFKB5105BA...PR)
(RFKB5105DA...GS)

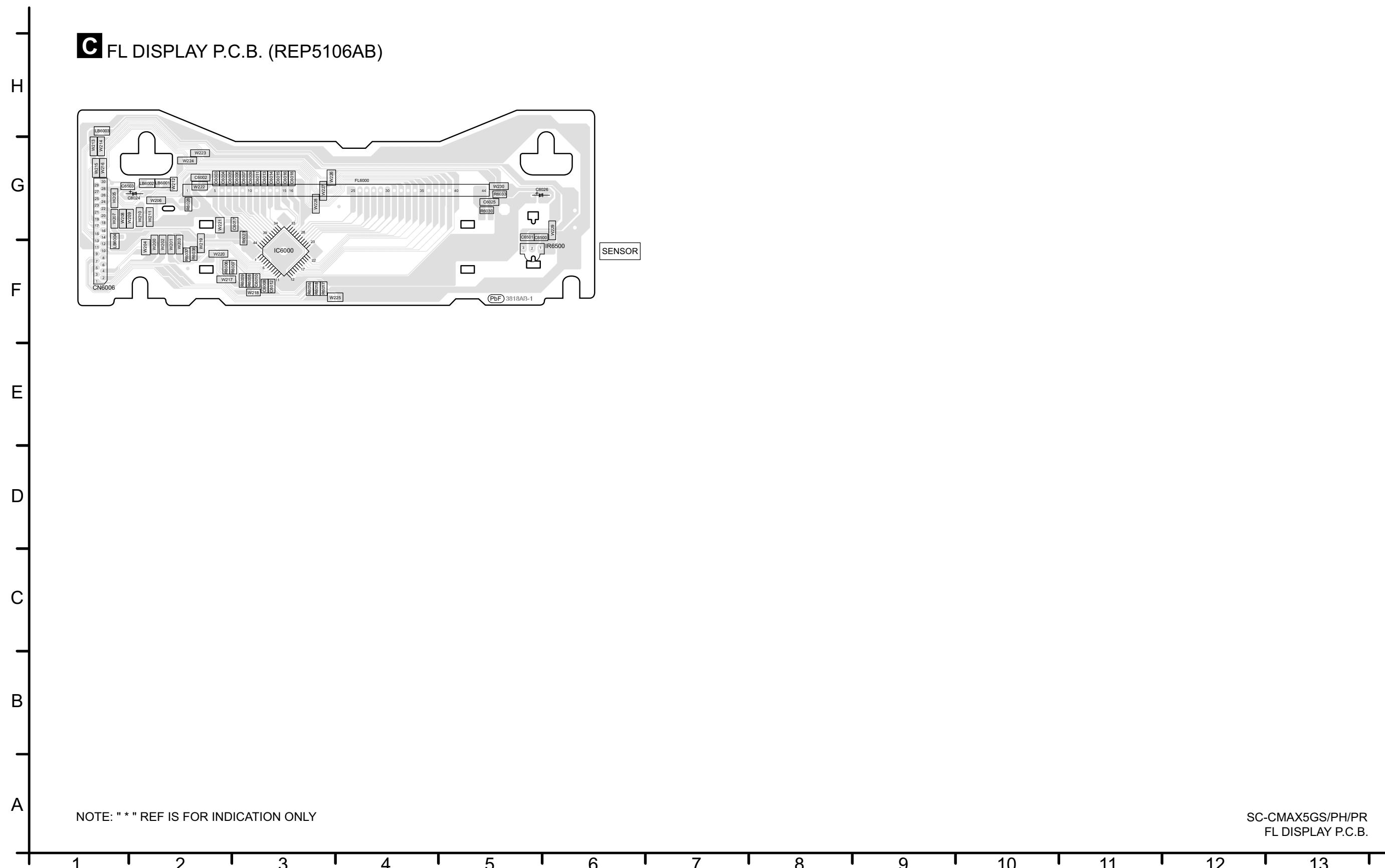


13.3. PANEL P.C.B.



13.4. FL DISPLAY P.C.B.

C FL DISPLAY P.C.B. (REP5106AB)



14 Voltage and Waveform Measurement

14.1. Voltage Measurement

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.

14.1.1. MAIN P.C.B. ASS'Y (1/4)

REF NO.		IC1001																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		3.3	3.3	3.3	3.3	1.4	3.3	0	3.3	3.3	0	3.3	0	0	3.3	0	0	3.3	1.6	0	0
STANDBY		3.3	3.3	3.3	3.3	1.4	3.3	0	3.3	3.3	0	3.3	0	0	3.3	0	0	3.3	1.6	0	0
IC1001																					
REF NO.		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY		3	3.3	0.1	3	0	0	0	2.2	3.3	0	3.3	0.1	1.6	1.6	0.9	0	0	1.3	1.3	0.2
STANDBY		3	3.3	0.1	3	0	0	0	2.2	3.3	0	3.3	0.1	1.6	1.6	0.9	0	0	1.3	1.3	0.2
IC1001																					
REF NO.		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
PLAY		0.7	0	3.3	3.3	1.1	1.1	3.3	3.3	3.3	1.7	1.7	1.7	0	1.6	1.6	1.4	1.4	0.1	0.5	1.6
STANDBY		0.7	0	3.3	3.3	1.1	1.1	3.3	3.3	3.3	1.7	1.7	1.7	0	1.6	1.6	1.4	1.4	0.1	0.5	1.6
IC1001																					
REF NO.		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
PLAY		1.7	1.7	1.7	1.7	1.7	0	1.5	1.5	1.5	1.5	0	0	3.3	3.3	3.3	3.3	1.7	3.3	3.3	0
STANDBY		1.7	1.7	1.7	1.7	1.7	0	1.5	1.5	1.5	1.5	0	0	3.3	3.3	3.3	3.3	1.7	3.3	3.3	0
IC1001																					
REF NO.		81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
PLAY		0	1.7	1.7	0.9	0	3.3	1.4	3.3	3.3	0	0	1.6	0	3.2	0	3.3	0	0	0	0
STANDBY		0	1.7	1.7	0.9	0	3.3	1.4	3.3	3.3	0	0	1.6	0	3.2	0	3.3	0	0	0	0
IC1001																					
REF NO.		101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
PLAY		1.6	3.3	3.3	0	3.1	3.1	3.3	3.3	2	1.7	1.7	1.5	3.3	0	0	3.3	3.3	3.3	3.3	3.3
STANDBY		1.6	3.3	3.3	0	3.1	3.1	3.3	3.3	2	1.7	1.7	1.5	3.3	0	0	3.3	3.3	3.3	3.3	3.3
IC1001																					
REF NO.		121	122	123	124	125	126	127	128												
PLAY		3.3	3.3	0	1.5	1.6	0	1.4	1.5												
STANDBY		3.3	3.3	0	1.5	1.6	0	1.4	1.5												
IC1002																					
REF NO.		1	2	3	4	5															
PLAY		3.3	3.3	0	0	1.9															
STANDBY		3.3	3.3	0	0	1.9															
IC1005																					
REF NO.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
PLAY		0	1.2	0.8	1.2	1.6	1.6	1.6	0	1.6	1.7	1.6	0	0	0	0	3.3				
STANDBY		0	1.2	0.8	1.2	1.6	1.6	1.6	0	1.6	1.7	1.6	0	0	0	0	3.3				
IC2100																					
REF NO.		1	2	3	4	5	6	7	8	9	10										
PLAY		10.9	39.5	3.1	2.1	0.5	0	0.8	0.7	0	4.7										
STANDBY		10.9	39.5	3.1	2.1	0.5	0	0.8	0.7	0	4.7										

SC-CMAX5PH/PR/GS MAIN P.C.B. ASS'Y

14.1.2. MAIN P.C.B. ASS'Y (2/4)

REF NO.		IC2102																			
MODE		1	2	3	4	5	6	7	8												
PLAY		8.6	1.6	1.6	0	1.6	1.6	8.6	15.3												
STANDBY		8.6	1.6	1.6	0	1.6	1.6	8.6	15.3												
REF NO.		IC2103																			
MODE		1	2	3	4	5	6	7	8	9	10										
PLAY		21.3	39.5	3.1	2.1	0.5	0	0.8	0.7	0	15.2										
STANDBY		21.3	39.5	3.1	2.1	0.5	0	0.8	0.7	0	15.2										
REF NO.		IC2104																			
MODE		1	2	3																	
PLAY		0	3.3	5.5																	
STANDBY		0	3.3	5.5																	
REF NO.		IC2107																			
MODE		1	2	3	4																
PLAY		3.3	0	1.6	3.3																
STANDBY		3.3	0	1.6	3.3																
REF NO.		IC2108																			
MODE		1	2	3																	
PLAY		0	3.3	5																	
STANDBY		0	3.3	5																	
REF NO.		IC3101																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY		12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
REF NO.		IC3101																			
MODE		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY		3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY		3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
REF NO.		IC3101																			
MODE		41	42	43	44																
PLAY		0	0	30.1	30																
STANDBY		0	0	30.1	30																
REF NO.		IC3301																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
STANDBY		12.2	12.1	1.2	0	1.7	1.7	3.3	0	0	0	0	0	7.8	3.3	0	3.3	3.3	0	0	0
REF NO.		IC3301																			
MODE		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY		3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
STANDBY		3.3	12	30.1	30.1	0	0	19	19	39.5	39.5	39.5	19	0	0	19	39.5	39.5	39.5	19	19
REF NO.		IC3301																			
MODE		41	42	43	44																
PLAY		0	0	30.1	30																
STANDBY		0	0	30.1	30																
REF NO.		IC4001																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		0	3.3	3.3	3.3	3.3	0	1.4	1.3	1.7	1.6	3.3	3.3	1.5	1.5	0	1.4	0	0	1.7	1.6
STANDBY		0	3.3	3.3	3.3	3.3	0	1.4	1.3	1.7	1.6	3.3	3.3	1.5	1.5	0	1.4	0	0	1.7	1.6

SC-CMAX5PH/PR/GS MAIN P.C.B. ASS'Y

14.1.3. MAIN P.C.B. ASS'Y (3/4)

REF NO.		IC4001																			
MODE		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY		3.3	0	1.5	3.3	0	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3	0	0	0	0	3.3
STANDBY		3.3	0	1.5	3.3	0	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3	0	0	0	0	3.3
REF NO.		IC4001																			
MODE		41	42	43	44	45	46	47	48												
PLAY		1.5	1.5	0	0	3.3	0	0	0												
STANDBY		1.5	1.5	0	0	3.3	0	0	0												
REF NO.		IC4506																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		3.3	1.7	0	-1.6	-3.2	0	0	3.3	0	0	0	0	1.6	1.3	1.7	0	3.3	1.9	0	3.3
STANDBY		3.3	1.7	0	-1.6	-3.2	0	0	3.3	0	0	0	0	1.6	1.3	1.7	0	3.3	1.9	0	3.3
REF NO.		IC4800																			
MODE		1	2	3	4	5	6	7	8												
PLAY																					
STANDBY																					
REF NO.		IC4801																			
MODE		1	2	3	4																
PLAY		3.3	0	1.8	3.3																
STANDBY		3.3	0	1.8	3.3																
REF NO.		IC4802																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14						
PLAY		2.8	0	5.5	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.8	2.8						
STANDBY		2.8	0	5.5	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.8	2.8						
REF NO.		IC4803																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY		1.8	0	3	1.7	1.8	0	0.8	1.2	1.2	1.8	3.3	0	1.3	1.6	3.3	3.3	3.3	1.8	3.3	0
STANDBY		1.8	0	3	1.7	1.8	0	0.8	1.2	1.2	1.8	3.3	0	1.3	1.6	3.3	3.3	3.3	1.8	3.3	0
REF NO.		IC4803																			
MODE		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY		3.3	3.3	3.3	0	0	16.8	0	0	3	16.8	16.8	0.6	0	3	16.8	0	0	0.3	0	0
STANDBY		3.3	3.3	3.3	0	0	16.8	0	0	3	16.8	16.8	0.6	0	3	16.8	0	0	0.3	0	0
REF NO.		IC4803																			
MODE		41	42	43	44	45	46	47	48												
PLAY		0	0	0	0	0	1.5	3.3	1.6												
STANDBY		0	0	0	0	0	1.5	3.3	1.6												
REF NO.		IC4804																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14						
PLAY		2.8	0	5.5	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.8	2.8						
STANDBY		2.8	0	5.5	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.8	2.8						
REF NO.		IC6100																			
MODE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
PLAY		0	0	0	0	0	0	0	0	12.5	12.5	0	0	0	0	0	0	12.5			
STANDBY		0	0	0	0	0	0	0	0	12.5	12.5	0	0	0	0	0	0	0	12.5		
REF NO.		IC9001																			
MODE		1	2	3	4	5	6	7	8	9	10										
PLAY		0	0	0	0	0	1	1.4	0	3.3	0										
STANDBY		0	0	0	0	0	1	1.4	0	3.3	0										

SC-CMAX5PH/PR/GS MAIN P.C.B. ASS'Y

14.1.4. MAIN P.C.B. ASS'Y (4/4)

REF NO.		IC9002															
MODE		1	2	3	4	5											
PLAY		0	0	3.3	0	5.1											
STANDBY		0	0	3.3	0	5.1											
REF NO.		IC9003															
MODE		1	2	3	4	5											
PLAY		5.1	0	3.3	3.3	5.1											
STANDBY		5.1	0	3.3	3.3	5.1											
REF NO.		Q1001			Q1002			Q2001			Q2002			Q2100			
MODE		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY		0	0	0.6		0	0	23.9							7.9	15.3	8.5
STANDBY		0	0	0.6		0	0	23.9							7.9	15.3	8.5
REF NO.		Q2104			Q2106			Q2108			Q2113			Q2117			
MODE		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY		0.2	11.1	0.2		0	0	0.7		0	3.2	0		12.5	15.3	13.1	
STANDBY		0.2	11.1	0.2		0	0	0.7		0	3.2	0		12.5	15.3	13.1	
REF NO.		Q3500			Q3501			Q3502			Q3503			Q9003			
MODE		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY		19.7	39	19.7		19.7	39	19.7		39.5	0	39.4		0	3.2	0	
STANDBY		19.7	39	19.7		19.7	39	19.7		39.5	0	39.4		0	3.2	0	
REF NO.		Q9004			Q9005			QR1001			QR2002			QR2102			
MODE		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY		5.5	0	5.1		5.5	0	5.1							0	0	3.1
STANDBY		5.5	0	5.1		5.5	0	5.1							0	0	3.1
REF NO.		QR2502			QR2503			QR2505			QR9001			QR9002			
MODE		E	C	B		E	C	B		E	C	B		E	C	B	
PLAY		0	0	0		0	0	3.2		0	0	0		0	6.2	0	
STANDBY		0	0	0		0	0	3.2		0	0	0		0	6.2	0	
REF NO.		QR9003															
MODE		E	C	B													
PLAY		0	6.2	0													
STANDBY		0	6.2	0													

SC-CMAX5PH/PR/GS MAIN P.C.B. ASS'Y

14.1.5. PANEL & FL DISPLAY P.C.B.

REF NO. MODE	IC1400																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
PLAY	6.2	6.2	6.2	6.2	6.2	6.3	6.3	0	12.3	6.1	0.2	0	12.3	6.2						
STANDBY	6.2	6.2	6.2	6.2	6.2	6.3	6.3	0	12.3	6.1	0.2	0	12.3	6.2						

REF NO. MODE	IC1401																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
PLAY	6.2	6.2	6.1	6.1	6.1	6.2	6.2	0	12.3	6.1	0.2	0	12.3	6.1						
STANDBY	6.2	6.2	6.1	6.1	6.1	6.2	6.2	0	12.3	6.1	0.2	0	12.3	6.1						

REF NO. MODE	Q6000			Q6001			QR6000			QR6130											
	E	C	B	E	C	B	E	C	B	E	C	B									
PLAY	1.7	4.8	2.1	0	15.5	-0.2	0	0.4	3.3	0	12.2	0									
STANDBY	1.7	4.8	2.1	0	15.5	-0.2	0	0.4	3.3	0	12.2	0									

SC-CMAX5PH/PR/GS PANEL P.C.B.

REF NO. MODE	IC6000																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAY	0	0	0	0	1.9	3.3	1.3	0	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4
STANDBY	0	0	0	0	1.9	3.3	1.3	0	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4

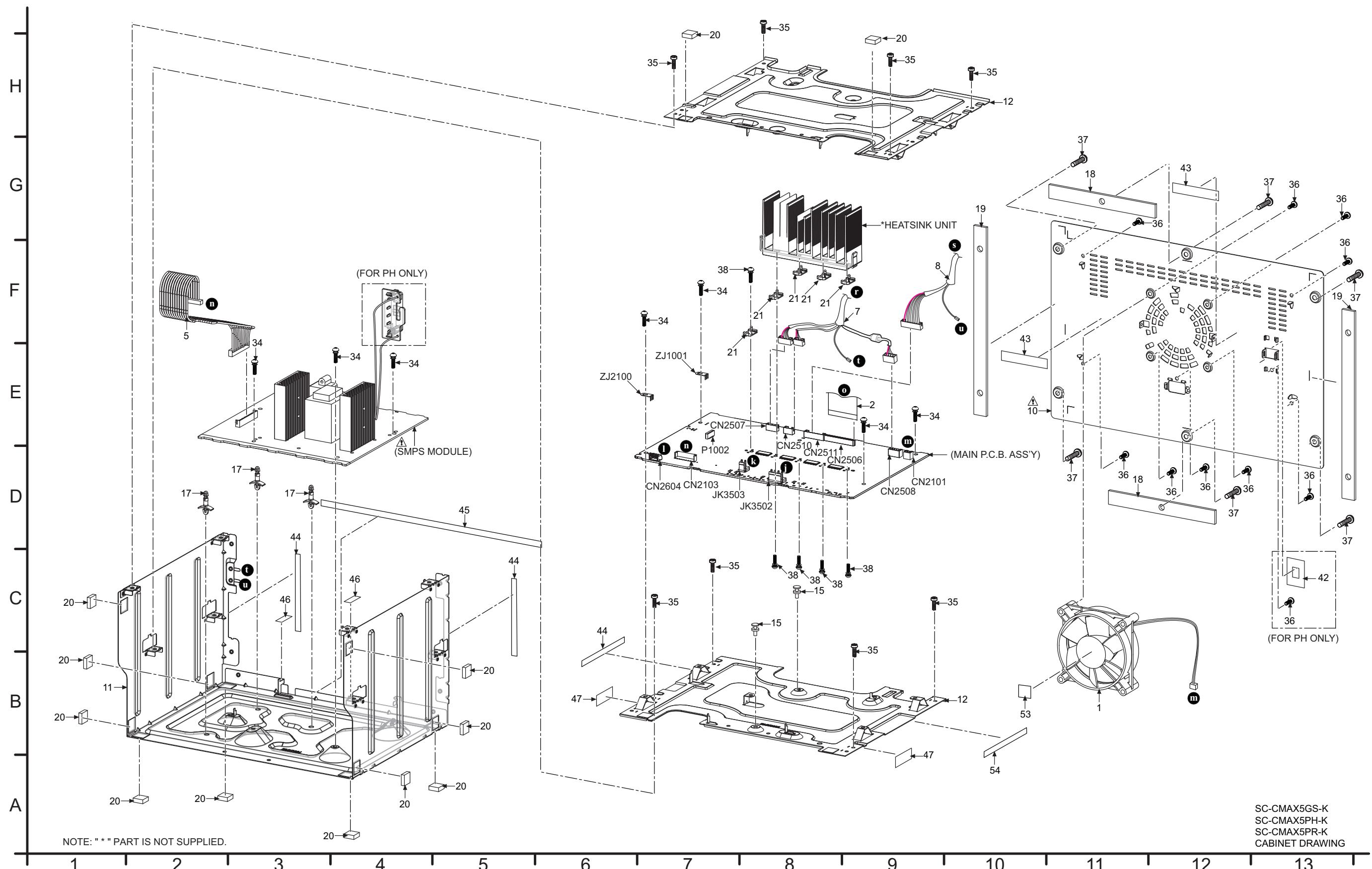
REF NO. MODE	IC6000																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
PLAY	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4
STANDBY	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4

REF NO. MODE	IC6000																			
	41	42	43	44																
PLAY	-21.5	-21.8	3.3	0																
STANDBY	-21.5	-21.8	3.3	0																

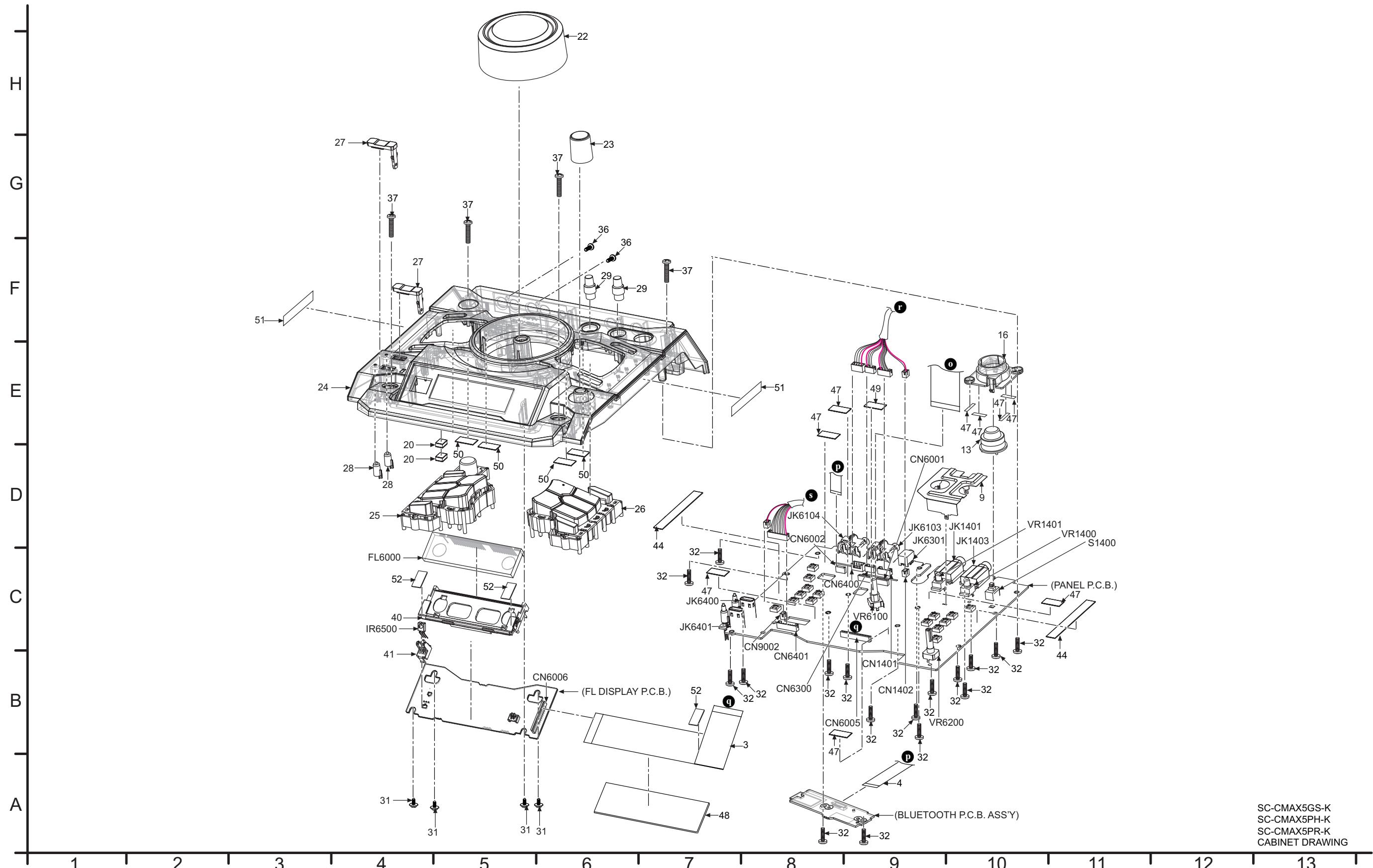
SC-CMAX5PH/PR/GS FL DISPLAY P.C.B.

15 Exploded View and Replacement Parts List

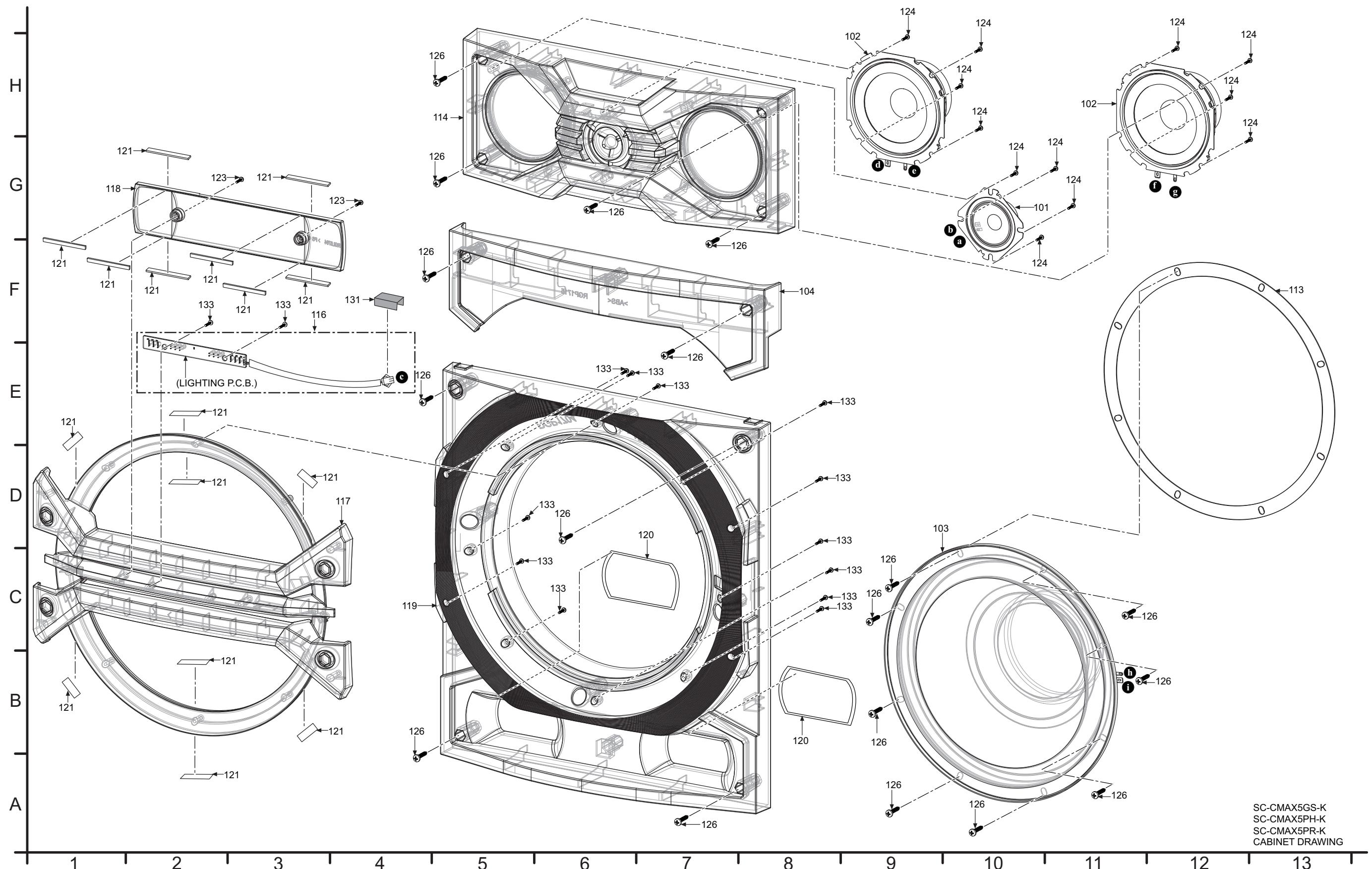
15.1. Cabinet Parts Location (1/4)



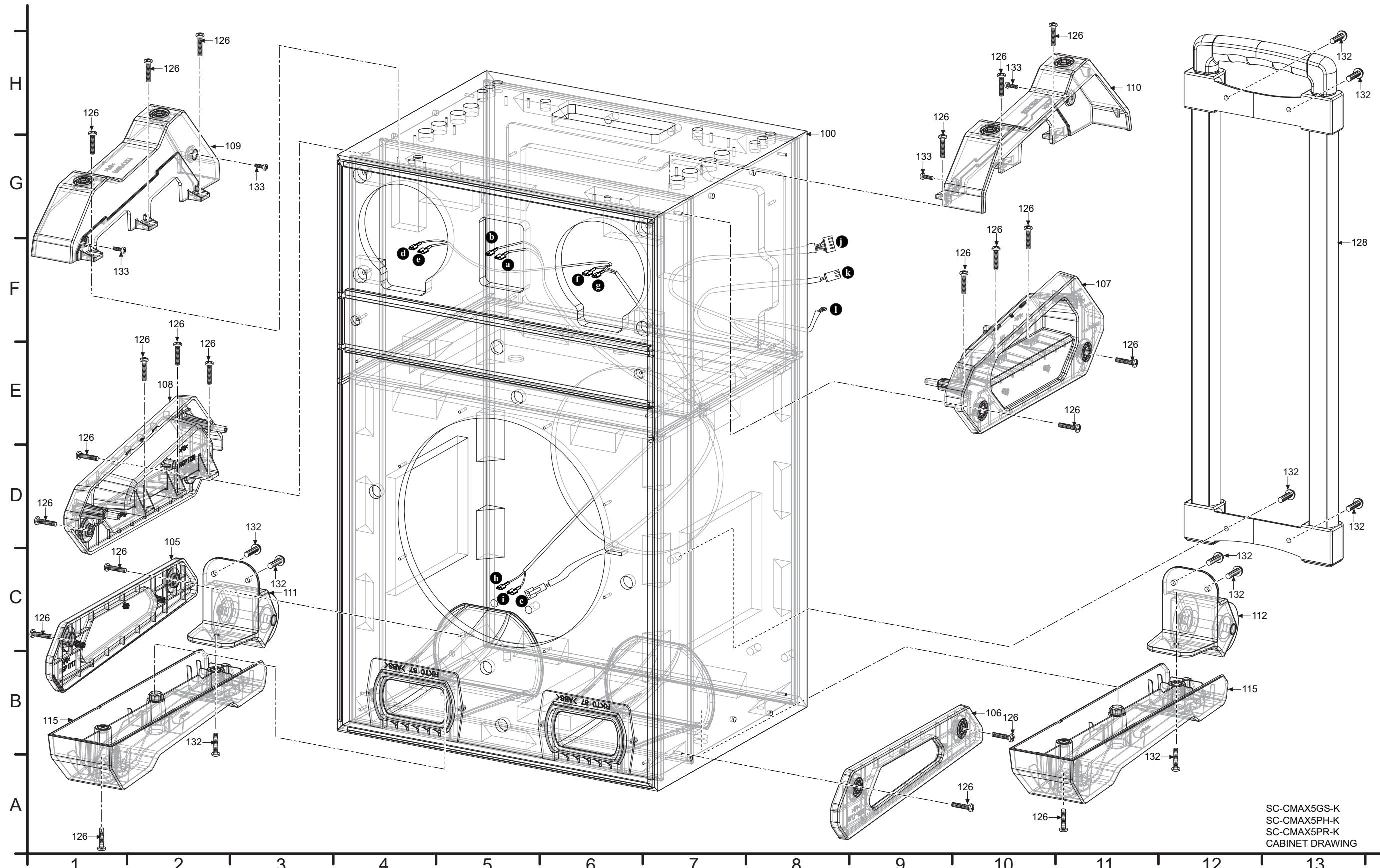
15.2. Cabinet Parts Location (2/4)



15.3. Cabinet Parts Location (3/4)

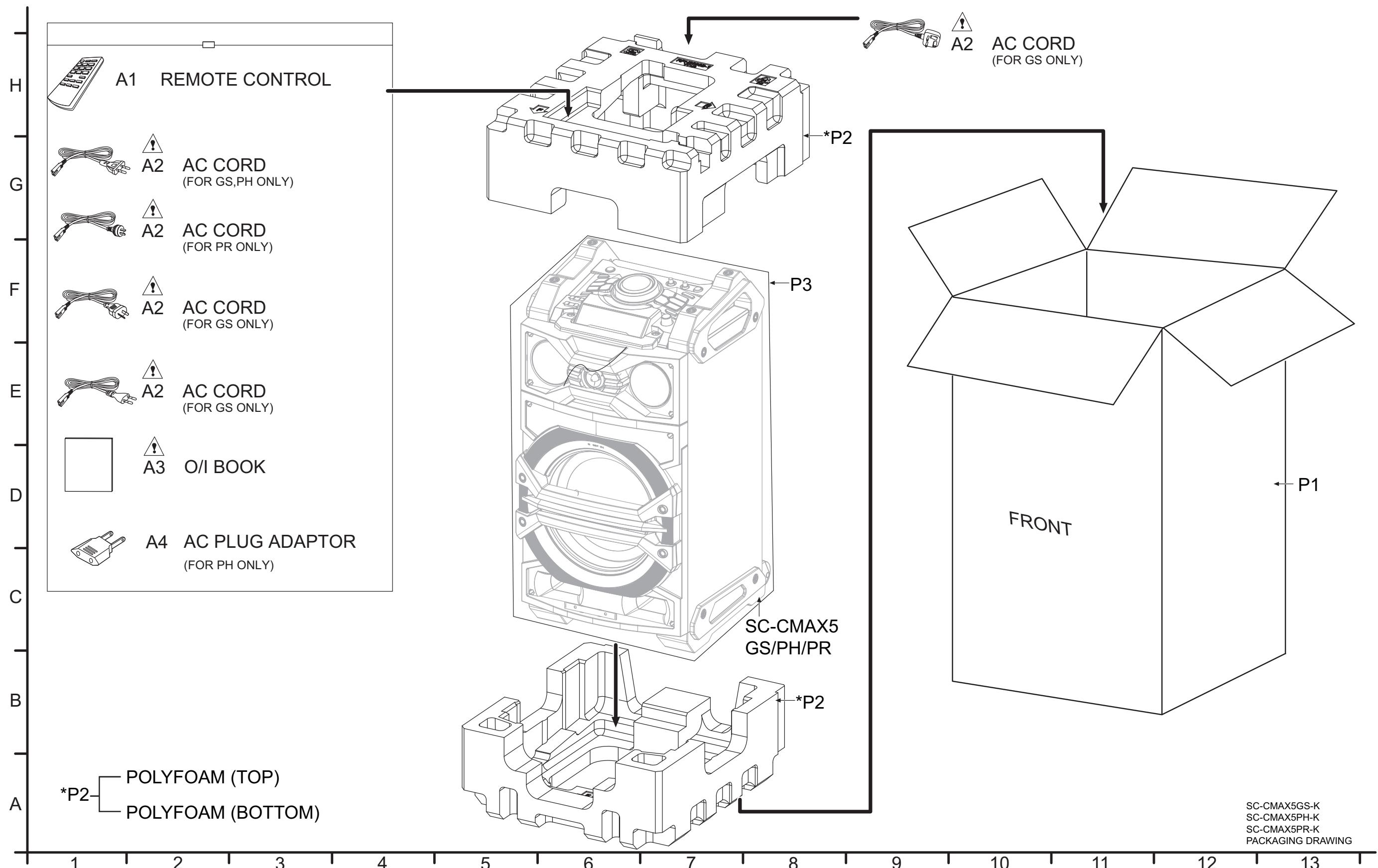


15.4. Cabinet Parts Location (4/4)



SC-CMAX5GS-K
SC-CMAX5PH-K
SC-CMAX5PR-K
CABINET DRAWING

15.5. Packaging



SC-CMAX5GS-K
SC-CMAX5PH-K
SC-CMAX5PR-K
PACKAGING DRAWING

15.6. Mechanical Replacement Parts List

Important Safety Notice

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

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 availability is dependant 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.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- 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	Fi:	Finnish

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
1	L6FALEFH0030	FAN UNIT		1	
2	REE2014	30P FFC (PANEL - MAIN)		1	
3	REE2015	30P FFC (PANEL - FL)		1	
4	REE2016	12P FFC (PANEL - BT)		1	
5	REX1761	13P WIRE (SMPS - MAIN)		1	
7	REX1831	4 BUNDLE WIRE WITH FERRITE CORE		1	
8	REX1798	2 BUNDLE WIRE		1	
9	RSC1301	MIC SHIELD PLATE		1	
 10	RGR0468A-A	REAR PANEL		1	PH
 10	RGR0468B-A	REAR PANEL		1	PR
 10	RGR0468B-B	REAR PANEL		1	GS
11	RMK0884	BOTTOM CHASSIS		1	
12	RMK0885	SUPPORT PLATE		2	
13	RGU2972-K	GUITAR BUTTON		1	
15	RMX0444	PCB SPACER (D-AMP)		2	
16	RMQ2373-1	GUITAR BUTTON HOLDER		1	
17	RMX0510	SMPS PCB SPACER		3	
18	RKA0334-K	CUSHION A		2	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	19	RKA0335-K	CUSHION B	2	
	20	RKA0336-K	CHASSIS CUSHION	14	
	21	RMZX1022-1	PCB SPACER	5	
	22	RGW0428-1S	VOLUME KNOB	1	
	23	RGW0435-K	SKIP KNOB	1	
	24	RFKNCMAX5PHK	TOP PANEL ASS'Y	1	PH, PR
	24	RFKNCMAX5GSK	TOP PANEL ASS'Y	1	GS
	25	RGU2973-K	LEFT FUNCTION BUTTON	1	PH, PR
	25	RGU2973A-K	LEFT FUNCTION BUTTON	1	GS
	26	RGU2974-K	RIGHT FUNCTION BUTTON	1	
	27	RKF0983-H	USB COVER	2	
	28	RGL0787A-W	USB REC LIGHT PIECE	2	
	29	RGW0450-K	MIC VOLUME KNOB	2	
	31	RHD26016-1L	SCREW	4	
	32	RHD26046-L	SCREW	17	
	34	RHDX30005-J	SCREW	7	
	35	XTB3+10JFJ	SCREW	8	
	36	XTB3+10JFJK	SCREW	12	PH
	36	XTB3+10JFJK	SCREW	11	GS, PR
	37	XTB4+20AFJK	SCREW	10	
	38	RHD26043-1	SCREW	5	
	40	RMNV0079-1	FL HOLDER	1	
	41	RMN1085	IR HOLDER	1	
	42	RMN1079	VOLTAGE SELECTOR COVER PC SHEET	1	PH
	43	RMF0734	EVA	2	
	44	RMFX0099	HIMELON	5	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	45	RMF0737	HIMELON	1	
	46	RMF0738	HIMELON	2	
	47	RMF0739	HIMELON	11	
	48	RMF0730	HIMELON	1	
	49	RMQ2420	EPT SEALER	1	
	50	RMQ2421	EPT SEALER	4	
	51	RMF0736	EVA	2	
	52	RMF0731	EVA	3	
	53	RMF0735	EVA	1	
	54	RMF0740	HIMELON	1	
	100	RYQ1458-K	SPEAKER BOX ASS'Y	1	
	101	EAS6PH134C	TWEETER SPEAKER (6CM)	1	
	102	L0AA10A00044	WOOFER SPEAKER (10CM)	2	
	103	L0AA25A00032	WOOFER SPEAKER (25CM)	1	
	104	RGP1715-K	CENTER PANEL	1	
	105	RGP1717-K	SIDE COVER LEFT	1	
	106	RGP1718-K	SIDE COVER RIGHT	1	
	107	RGP1719-K	HANDLE RIGHT	1	
	108	RGP1720-K	HANDLE LEFT	1	
	109	RGP1721-K	HANDLE COVER LEFT	1	
	110	RGP1722-K	HANDLE COVER RIGHT	1	
	111	RKL0007	CASTER WHEEL (L)	1	
	112	RKL0008	CASTER WHEEL (R)	1	
	113	RMQ2208	EVA PACKING	1	
	114	RYP1977-K	FRONT PANEL ASS'Y	1	
	115	RYP2023-K	BOTTOM STAND ASS'Y	2	
	116	REE1844	LIGHTING WIRE PCB ASSY	1	
	117	RGK2558A-S	FRONT ORNAMENT	1	
	118	RGL0784-Q	PCB COVER	1	
	119	RGP1704-K	FRONT PANEL	1	
	120	RMF0688A	HIMELON (INNER PORT)	2	
	121	RMQ2223	EVA	16	
	123	XTB3+16GFJK	SCREW	2	
	124	XTB4+10GFJ	SCREW	12	
	126	XTB4+20AFJK	SCREW	40	
	128	RYH0024-K	HANDLE BAR UNIT	1	
	131	RMQ2070	EVA	1	
	132	XYN5+J20FJK	SCREW	10	
	133	XTB3+10GFJ	SCREW	18	
			PACKING MATERIALS		
P1	RPG0N61-2	PACKING CASE	1	PH	
P1	RPG0N62	PACKING CASE	1	PR	
P1	RPG0N63	PACKING CASE	1	GS	
P2	RPN2696-1	POLYFOAM	1		
P3	RPF0736	MIRAMAT BAG	1		
		ACCESSORIES			
A1	N2QAYB001000	REMOTE CONTROL	1		
▲ A2	K2CA2YY00039	AC CORD	1	PR	
▲ A2	K2CJ2YY00101	AC CORD	1	GS	
▲ A2	K2CP2YY00061	AC CORD	1	GS	
▲ A2	K2CQ2YY00119	AC CORD	1	GS, PH	
▲ A2	K2CT2YY00097	AC CORD	1	GS	
▲ A3	RQT9960-M	O/I BOOK (En/Sp)	1	PH, PR	
▲ A3	RQT9961-G	O/I BOOK (En/Cn)	1	GS	
▲ A4	K2DAYYY00002	AC PLUG ADAPTOR	1	PH	

15.7. Electrical Replacement Parts List

Important Safety Notice

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

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 availability is dependant 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.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- Capacitor value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by JAPAN.

E.S.D. standards for Electrostatically Sensitive Devices, refer to "PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES" section.

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUIT BOARDS		
PCB1	RFKB5105AA	MAIN P.C.B. ASS'Y	1 (E.S.D) (RTL) PH	1	
PCB1	RFKB5105BA	MAIN P.C.B. ASS'Y	1 (E.S.D) (RTL) PR	1	
PCB1	RFKB5105DA	MAIN P.C.B. ASS'Y	1 (E.S.D) (RTL) GS	1	
PCB2	RFKV5105AB	BLUETOOTH P.C.B. ASS'Y	1 (E.S.D) PH	1	
PCB2	RFKV5105BB	BLUETOOTH P.C.B. ASS'Y	1 (E.S.D) PR	1	
PCB2	RFKV5105DB	BLUETOOTH P.C.B. ASS'Y	1 (E.S.D) GS	1	
PCB3	REP5106AA	PANEL P.C.B.	1 (RTL)	1	
PCB4	REP5106AB	FL DISPLAY P.C.B.	1 (RTL)	1	
	PCB5	N0AC2GP00001	SMPS MODULE	1	GS, PR
	PCB5	N0AD2GP00002	SMPS MODULE	1	PH
			INTEGRATED CIRCUITS		
IC1001	C1AB00004188	IC	1 (E.S.D) JIGS & ADJ	1	
IC1002	C0EBE0000338	IC	1 (E.S.D)	1	
IC1003	RFKWFMAX5GM	IC	1 (E.S.D) JIGS & ADJ	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC1004	RFKWECEMAX5GM	IC	1	(E.S.D) JIGS & ADJ
	IC1005	C0JBAR0000596	IC	1	(E.S.D)
	IC1400	C1AB00003130	IC	1	(E.S.D)
	IC1401	C1AB00003130	IC	1	(E.S.D)
	IC2100	C0DBAYY01594	IC	1	(E.S.D)
	IC2102	C0ABBB000342	IC	1	(E.S.D)
	IC2103	C0DBAYY01594	IC	1	(E.S.D)
	IC2104	C0DBGYY03909	IC	1	(E.S.D)
	IC2107	C0DBGYY00911	IC	1	(E.S.D)
	IC2108	C0DBGYY03909	IC	1	(E.S.D)
	IC3101	C1AB00003986	IC	1	(E.S.D)
	IC3301	C1AB00003986	IC	1	(E.S.D)
	IC4001	VUEALLPT090	IC	1	(E.S.D)
	IC4506	C1AB00004031	IC	1	(E.S.D)
	IC4800	C0ABBB000230	IC	1	(E.S.D)
	IC4801	C0DBGYY03252	IC	1	(E.S.D) GS
	IC4802	C0FBAY000032	IC	1	(E.S.D)
	IC4803	C1AB00003800	IC	1	(E.S.D) GS
	IC4804	C0FBAY000032	IC	1	(E.S.D)
	IC6000	C0HBB0000057	IC	1	(E.S.D)
	IC6101	C0JBAR000367	IC	1	(E.S.D)
	IC9001	C0JBAS000401	IC	1	(E.S.D)
	IC9002	C0DBZYY00716	IC	1	(E.S.D)
	IC9003	C0DBZYY00716	IC	1	(E.S.D)
			TRANSISTORS		
	Q1001	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1002	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2001	B1ABGC000005	TRANSISTOR	1	(E.S.D)
	Q2002	B1ABGC000005	TRANSISTOR	1	(E.S.D)
	Q2100	B1AAJC000019	TRANSISTOR	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q2104	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2106	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2108	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q2113	B1BACG000023	TRANSISTOR	1	(E.S.D)
	Q2114	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2115	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q2117	B1ADGF000010	TRANSISTOR	1	(E.S.D)
	Q3500	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q3501	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q3502	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q3503	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q6000	B1BABG000007	TRANSISTOR	1	(E.S.D)
	Q6001	B1ABMG000008	TRANSISTOR	1	(E.S.D)
	Q9003	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q9004	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q9005	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	QR1001	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2002	B1GDCFGG0026	TRANSISTOR	1	(E.S.D)
	QR2102	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR2103	B1GBCFLL0037	TRANSISTOR	1	(E.S.D)
	QR2502	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR2503	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR2505	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR6000	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6130	B1GBCFJJ0040	TRANSISTOR	1	(E.S.D)
	QR9001	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR9002	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR9003	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
			DIODES		
	D1001	DZ2J130M0L	DIODE	1	(E.S.D)
	D2100	B0ADDJ000032	DIODE	1	(E.S.D)
	D2101	DA2J10100L	DIODE	1	(E.S.D)
	D2104	DZ2J130M0L	DIODE	1	(E.S.D)
	D2106	B0JCPG000032	DIODE	1	(E.S.D)
	D2108	DA2J10100L	DIODE	1	(E.S.D)
	D2109	B0ADDJ000032	DIODE	1	(E.S.D)
	D3000	B0ACCK000005	DIODE	1	(E.S.D)
	D3001	B0ACCK000005	DIODE	1	(E.S.D)
	D6005	B0EAMM000057	DIODE	1	(E.S.D)
	D6006	B0BC033A0282	DIODE	1	(E.S.D)
	D6007	B0EAMM000057	DIODE	1	(E.S.D)
	D6008	B0JAME000114	DIODE	1	(E.S.D)
	D6009	DZ2J24000L	DIODE	1	(E.S.D)
	D6012	B0BC2R4A0006	DIODE	1	(E.S.D)
	D6201	DA2J10100L	DIODE	1	(E.S.D)
	D6202	DA2J10100L	DIODE	1	(E.S.D)
	D6203	DA2J10100L	DIODE	1	(E.S.D)
	D6204	DA2J10100L	DIODE	1	(E.S.D)
	D6205	DA2J10100L	DIODE	1	(E.S.D)
	D6206	DA2J10100L	DIODE	1	(E.S.D)
	D6207	DA2J10100L	DIODE	1	(E.S.D)
	D9000	B3ABA0000187	DIODE	1	(E.S.D)
	D9001	B0ECKM000008	DIODE	1	(E.S.D)
	D9001	B3AGA000026	DIODE	1	(E.S.D)
	DZ2100	B0JCPG000032	DIODE	1	(E.S.D)
			VARIABLE RESISTORS		
	VR1400	EVUF2AF15B14	MIC VOL2/GUITAR	1	
	VR1401	EVUF2AF15B14	MIC VOL1	1	
	VR6100	EVEKE2F3024B	VOLUME	1	
	VR6200	K9AA012Y0012	ILLUMINATION/CONTROL JOG	1	
			SWITCHES		
	S1400	K0F142A00004	SW MIC/GUITAR	1	
	S6200	EVQ21405RJ	SW POWER	1	
	S6202	EVQ21405RJ	SW STOP	1	
	S6211	EVQ21405RJ	SW SUPER WOOFER	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	S6212	EVQ21405RJ	SW LATIN/PRESET EQ	1	
	S6213	EVQ21405RJ	SW MANUAL EQ	1	
	S6214	EVQ21405RJ	SW D.BASS	1	
	S6215	EVQ21405RJ	SW USB REC/PAUSE	1	
	S6216	EVQ21405RJ	SW RWD	1	
	S6217	EVQ21405RJ	SW FWD	1	
	S6218	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6219	EVQ21405RJ	SW AUX	1	
	S6220	EVQ21405RJ	SW USB	1	
	S6221	EVQ21405RJ	SW BT/PAIRING	1	
	S6222	EVQ21405RJ	SW ALBUM/TRACK	1	
	S6223	EVQ21405RJ	SW DJ JUKEBOX	1	
			CONNECTORS		
	CN1401	K1KA06A00452	6P CONNECTOR	1	
	CN1402	K1KA02AA0193	2P CONNECTOR	1	
	CN2101	K1KA02AA0186	2P CONNECTOR	1	
	CN2103	K1KA13AA0181	13P CONNECTOR	1	
	CN2506	K1MN30A00019	30P CONNECTOR	1	
	CN2507	K1KA06A00452	6P CONNECTOR	1	
	CN2508	K1KA04AA0186	4P CONNECTOR	1	
	CN2510	K1KA04AA0193	4P CONNECTOR	1	
	CN2511	K1KA10AA0194	10P CONNECTOR	1	
	CN2604	K1KA04BA0061	4P CONNECTOR	1	
	CN6001	K1MN30A00019	30P CONNECTOR	1	
	CN6002	K1MY12AA0267	12P CONNECTOR	1	
	CN6005	K1MN30A00019	30P CONNECTOR	1	
	CN6006	K1MN30A00019	30P CONNECTOR	1	
	CN6300	K1KA04AA0193	4P CONNECTOR	1	
	CN6400	K1KA04AA0186	4P CONNECTOR	1	
	CN6401	K1KA10AA0194	10P CONNECTOR	1	
	CN9002	K1KA02AA0193	2P CONNECTOR	1	
	P1002	K1MN08A00048	8P CONNECTOR	1	
	JK3502	K1KA04A00629	4P CONNECTOR	1	
	JK3503	K1KA02AA00735	2P CONNECTOR	1	
			COILS AND INDUCTORS		
	L2101	G1C470MA0291	INDUCTOR	1	
	L2106	G0A100H00018	CHOKE COIL	1	
	L3100	G0C100M00009	INDUCTOR	1	
	L3101	G0C100M00009	INDUCTOR	1	
	L3300	G0C100M00009	INDUCTOR	1	
	L3301	G0C100M00009	INDUCTOR	1	
	L6000	J0JBC0000019	INDUCTOR	1	
	L6300	J0JBC0000019	INDUCTOR	1	
	L6301	J0JBC0000019	INDUCTOR	1	
	L6302	J0JBC0000019	INDUCTOR	1	
	LB1001	J0JBC0000010	INDUCTOR	1	
	LB1002	J0JBC0000010	INDUCTOR	1	
	LB1003	J0JBC0000010	INDUCTOR	1	
	LB1004	J0JBC0000010	INDUCTOR	1	
	LB1005	J0JYC0000656	INDUCTOR	1	
	LB1006	J0JBC0000010	INDUCTOR	1	
	LB1007	J0JBC0000010	INDUCTOR	1	
	LB1008	J0JCC0000286	INDUCTOR	1	
	LB1009	J0JCC0000286	INDUCTOR	1	
	LB1012	J0JCC0000286	INDUCTOR	1	
	LB1013	J0JCC0000286	INDUCTOR	1	
	LB1014	J0JCC0000286	INDUCTOR	1	
	LB1015	J0JCC0000286	INDUCTOR	1	
	LB1028	J0JCC0000286	INDUCTOR	1	
	LB1029	J0JCC0000286	INDUCTOR	1	
	LB1030	J0JBC0000010	INDUCTOR	1	
	LB1031	J0JBC0000010	INDUCTOR	1	
	LB1032	J0JBC0000010	INDUCTOR	1	
	LB1033	J0JBC0000010	INDUCTOR	1	
	LB1034	J0JCC0000286	INDUCTOR	1	
	LB1035	J0JCC0000286	INDUCTOR	1	
	LB1036	J0JCC0000286	INDUCTOR	1	
	LB1037	J0JCC0000286	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB1038	J0JCC0000286	INDUCTOR	1	
	LB1039	J0JCC0000286	INDUCTOR	1	
	LB1041	J0JYC0000656	INDUCTOR	1	
	LB1400	J0JBC0000019	INDUCTOR	1	
	LB1404	J0JBC0000019	INDUCTOR	1	
	LB1405	J0JYC0000656	INDUCTOR	1	
	LB1406	J0JYC0000656	INDUCTOR	1	
	LB2100	J0JKB0000020	INDUCTOR	1	
	LB2101	J0JHC0000046	INDUCTOR	1	
	LB2102	J0JHC0000046	INDUCTOR	1	
	LB2103	J0JHC0000046	INDUCTOR	1	
	LB2104	J0JHC0000118	INDUCTOR	1	
	LB2105	J0JHC0000118	INDUCTOR	1	
	LB2106	J0JGC0000063	INDUCTOR	1	
	LB2511	J0JBC0000010	INDUCTOR	1	
	LB2512	J0JBC0000010	INDUCTOR	1	
	LB2513	J0JBC0000010	INDUCTOR	1	
	LB2514	J0JBC0000010	INDUCTOR	1	
	LB2515	J0JBC0000010	INDUCTOR	1	
	LB2516	J0JBC0000010	INDUCTOR	1	
	LB2517	J0JBC0000010	INDUCTOR	1	
	LB2518	J0JBC0000010	INDUCTOR	1	
	LB2519	J0JBC0000010	INDUCTOR	1	
	LB2520	J0JBC0000010	INDUCTOR	1	
	LB2521	J0JBC0000010	INDUCTOR	1	
	LB2522	J0JBC0000010	INDUCTOR	1	
	LB2523	J0JBC0000010	INDUCTOR	1	
	LB2524	J0JBC0000010	INDUCTOR	1	
	LB2525	J0JGC0000063	INDUCTOR	1	
	LB2526	J0JGC0000063	INDUCTOR	1	
	LB2527	J0JGC0000063	INDUCTOR	1	
	LB2530	J0JGC0000063	INDUCTOR	1	
	LB2531	J0JGC0000063	INDUCTOR	1	
	LB2532	J0JGC0000063	INDUCTOR	1	
	LB2533	J0JBC0000010	INDUCTOR	1	
	LB2534	J0JBC0000010	INDUCTOR	1	
	LB2535	J0JBC0000010	INDUCTOR	1	
	LB2536	J0JBC0000010	INDUCTOR	1	
	LB2537	J0JBC0000010	INDUCTOR	1	
	LB2541	J0JBC0000010	INDUCTOR	1	
	LB2542	J0JBC0000010	INDUCTOR	1	
	LB2543	J0JBC0000010	INDUCTOR	1	
	LB2544	J0JBC0000010	INDUCTOR	1	
	LB2545	J0JBC0000010	INDUCTOR	1	
	LB2546	J0JGC0000063	INDUCTOR	1	
	LB4001	J0JBC0000010	INDUCTOR	1	
	LB4002	J0JBC0000010	INDUCTOR	1	
	LB4530	J0JCC0000101	INDUCTOR	1	
	LB4800	D0GB101JA065	INDUCTOR	1	
	LB4801	J0JBC0000010	INDUCTOR	1	GS
	LB4802	J0JBC0000010	INDUCTOR	1	GS
	LB4803	J0JCC0000317	INDUCTOR	1	
	LB4804	J0JCC0000317	INDUCTOR	1	
	LB4805	J0JBC0000010	INDUCTOR	1	
	LB4806	J0JBC0000010	INDUCTOR	1	GS
	LB4807	J0JYC0000656	INDUCTOR	1	GS
	LB6000	G1C4R7MA0172	INDUCTOR	1	
	LB6001	J0JYC0000366	INDUCTOR	1	
	LB6002	J0JYC0000366	INDUCTOR	1	
	LB6003	J0JYC0000366	INDUCTOR	1	
	LB6004	J0JYC0000366	INDUCTOR	1	
	LB6100	J0JBC0000134	INDUCTOR	1	
	LB6101	J0JBC0000134	INDUCTOR	1	
	LB6101	J0JCC0000317	INDUCTOR	1	
	LB6102	J0JCC0000317	INDUCTOR	1	
	LB6400	J0JGC0000063	INDUCTOR	1	
	LB6401	J0JGC0000063	INDUCTOR	1	
	LB6402	J0JBC0000019	INDUCTOR	1	
	LB6403	J0JBC0000019	INDUCTOR	1	
	LB6404	J0JBC0000019	INDUCTOR	1	
	LB6405	J0JBC0000019	INDUCTOR	1	
	LB9001	J0JGC0000063	INDUCTOR	1	
	LB9002	J0JGC0000063	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB9003	J0JYC0000656	INDUCTOR	1	
	R1004	J0JCC0000287	INDUCTOR	1	
	R1005	J0JCC0000287	INDUCTOR	1	
	R1006	J0JCC0000287	INDUCTOR	1	
	R1007	J0JCC0000287	INDUCTOR	1	
	R1008	J0JCC0000287	INDUCTOR	1	
	R1009	J0JCC0000287	INDUCTOR	1	
	R1011	J0JCC0000301	INDUCTOR	1	
	R1012	J0JCC0000301	INDUCTOR	1	
	R1016	J0JCC0000301	INDUCTOR	1	
	R1017	J0JCC0000301	INDUCTOR	1	
	R1018	J0JCC0000301	INDUCTOR	1	
	R1023	J0JCC0000301	INDUCTOR	1	
	R1028	J0JCC0000301	INDUCTOR	1	
	R1048	J0JCC0000301	INDUCTOR	1	
	R1049	J0JCC0000301	INDUCTOR	1	
	R1064	J0JCC0000301	INDUCTOR	1	
	R1065	J0JCC0000301	INDUCTOR	1	
	R1066	J0JCC0000301	INDUCTOR	1	
	R1132	J0JCC0000301	INDUCTOR	1	
	R1133	J0JCC0000301	INDUCTOR	1	
	R1135	J0JCC0000301	INDUCTOR	1	
	R1136	J0JCC0000301	INDUCTOR	1	
	R1137	J0JCC0000301	INDUCTOR	1	
	R1138	J0JCC0000301	INDUCTOR	1	
	R1139	J0JCC0000301	INDUCTOR	1	
	R1420	J0JYC0000656	INDUCTOR	1	
	R1421	J0JYC0000656	INDUCTOR	1	
	R2203	J0JGC0000063	INDUCTOR	1	
	R2211	J0JGC0000063	INDUCTOR	1	
	R4816	J0JCC0000308	INDUCTOR	1	GS
			TRANSFORMER		
	T6000	G4DYA0000214	SWITCHING TRANSFORMER	1	
			FILTERS		
	T9001	J0ZZB0000182	FILTER	1	
	T9002	J0ZZB0000182	FILTER	1	
			TERMINALS		
	ZJ1001	K9ZZ00001279	EARTH PLATE	1	
	ZJ2100	K9ZZ00001279	EARTH PLATE	1	
			OSCILLATORS		
	X1001	H0J169500036	OSCILLATOR	1	
	X1002	H0A327200191	OSCILLATOR	1	
	X4001	H0J245500110	OSCILLATOR	1	
	X4801	H0J245500110	OSCILLATOR	1	GS
			FL DISPLAY		
	FL6000	A2BB00000184	FL DISPLAY	1	
			JACKS		
	JK1401	K2HB107B0001	JK MIC 1	1	
	JK1403	K2HB107B0001	JK MIC 2/GUITAR	1	
	JK6103	K2HAA2YYA0006	JK AUX IN 1	1	
	JK6104	K2HAA2YYA0006	JK AUDIO OUT	1	
	JK6301	K2HC1YYB0033	JK AUX IN 2	1	
	JK6400	K1FY104A0042	USB A (PLAY)	1	
	JK6401	K1FY104A0042	USB B (REC/PLAY)	1	
			CHIP JUMPERS		
	K9001	D0GBR00J0004	0 1/10W	1	
	K9002	D0GBR00J0004	0 1/10W	1	
	L3003	D0GFR00J0005	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB1040	D0GBR00J0004	0 1/10W	1	GS
	LB2300	D0GBR00J0004	0 1/10W	1	
W1	ERJ8GEY0R00V	0 1/4W	1		
W2	ERJ8GEY0R00V	0 1/4W	1		
W3	ERJ6GEY0R00V	0 1/8W	1		
W4	ERJ6GEY0R00V	0 1/8W	1		
W5	ERJ8GEY0R00V	0 1/4W	1		
W6	ERJ8GEY0R00V	0 1/4W	1		
W7	ERJ3GEY0R00V	0 1/10W	1		
W9	ERJ8GEY0R00V	0 1/4W	1		
W10	ERJ8GEY0R00V	0 1/4W	1		
W11	ERJ8GEY0R00V	0 1/4W	1		
W12	ERJ8GEY0R00V	0 1/4W	1		
W13	ERJ8GEY0R00V	0 1/4W	1		
W14	ERJ3GEY0R00V	0 1/10W	1		
W15	ERJ6GEY0R00V	0 1/8W	1		
W16	ERJ8GEY0R00V	0 1/4W	1		
W17	ERJ8GEY0R00V	0 1/4W	1		
W21	ERJ8GEY0R00V	0 1/4W	1		
W22	ERJ6GEY0R00V	0 1/8W	1		
W23	ERJ3GEY0R00V	0 1/10W	1		
W24	ERJ8GEY0R00V	0 1/4W	1		
W25	ERJ8GEY0R00V	0 1/4W	1		
W26	ERJ6GEY0R00V	0 1/8W	1		
W27	ERJ6GEY0R00V	0 1/8W	1		
W28	ERJ8GEY0R00V	0 1/4W	1		
W29	ERJ8GEY0R00V	0 1/4W	1		
W31	ERJ8GEY0R00V	0 1/4W	1		
W32	ERJ8GEY0R00V	0 1/4W	1		
W33	ERJ8GEY0R00V	0 1/4W	1		
W34	ERJ6GEY0R00V	0 1/8W	1		
W35	ERJ8GEY0R00V	0 1/4W	1		
W36	ERJ8GEY0R00V	0 1/4W	1		
W37	ERJ8GEY0R00V	0 1/4W	1		
W38	ERJ8GEY0R00V	0 1/4W	1		
W39	ERJ8GEY0R00V	0 1/4W	1		
W40	ERJ6GEY0R00V	0 1/8W	1		
W41	ERJ8GEY0R00V	0 1/4W	1		
W42	ERJ8GEY0R00V	0 1/4W	1		
W43	ERJ8GEY0R00V	0 1/4W	1		
W44	ERJ8GEY0R00V	0 1/4W	1		
W45	ERJ8GEY0R00V	0 1/4W	1		
W46	ERJ6GEY0R00V	0 1/8W	1		
W47	ERJ8GEY0R00V	0 1/4W	1		
W48	ERJ8GEY0R00V	0 1/4W	1		
W49	ERJ8GEY0R00V	0 1/4W	1		
W50	ERJ8GEY0R00V	0 1/4W	1		
W51	ERJ8GEY0R00V	0 1/4W	1		
W52	ERJ8GEY0R00V	0 1/4W	1		
W53	ERJ8GEY0R00V	0 1/4W	1		
W54	ERJ6GEY0R00V	0 1/8W	1		
W55	ERJ8GEY0R00V	0 1/4W	1		
W56	ERJ3GEY0R00V	0 1/10W	1		
W57	ERJ8GEY0R00V	0 1/4W	1		
W58	ERJ8GEY0R00V	0 1/4W	1		
W59	ERJ8GEY0R00V	0 1/4W	1		
W60	ERJ3GEY0R00V	0 1/10W	1		
W61	ERJ8GEY0R00V	0 1/4W	1		
W62	ERJ3GEY0R00V	0 1/10W	1		
W63	ERJ3GEY0R00V	0 1/10W	1		
W64	ERJ6GEY0R00V	0 1/8W	1		
W65	ERJ8GEY0R00V	0 1/4W	1		
W66	ERJ3GEY0R00V	0 1/10W	1		
W67	ERJ6GEY0R00V	0 1/8W	1		
W68	ERJ6GEY0R00V	0 1/8W	1		
W69	ERJ6GEY0R00V	0 1/8W	1		
W70	ERJ8GEY0R00V	0 1/4W	1		
W71	ERJ6GEY0R00V	0 1/8W	1		
W72	ERJ8GEY0R00V	0 1/4W	1		
W73	ERJ8GEY0R00V	0 1/4W	1		
W74	ERJ8GEY0R00V	0 1/4W	1		
W75	ERJ3GEY0R00V	0 1/10W	1		
W200	ERJ8GEY0R00V	0 1/4W	1		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W201	ERJ8GEY0R00V	0 1/4W	1	
	W202	ERJ8GEY0R00V	0 1/4W	1	
	W203	ERJ8GEY0R00V	0 1/4W	1	
	W204	ERJ6GEY0R00V	0 1/8W	1	
	W205	ERJ8GEY0R00V	0 1/4W	1	
	W206	ERJ8GEY0R00V	0 1/4W	1	
	W207	ERJ8GEY0R00V	0 1/4W	1	
	W208	ERJ8GEY0R00V	0 1/4W	1	
	W209	ERJ8GEY0R00V	0 1/4W	1	
	W210	ERJ8GEY0R00V	0 1/4W	1	
	W211	ERJ8GEY0R00V	0 1/4W	1	
	W212	ERJ3GEY0R00V	0 1/10W	1	
	W213	ERJ8GEY0R00V	0 1/4W	1	
	W214	ERJ8GEY0R00V	0 1/4W	1	
	W215	ERJ8GEY0R00V	0 1/4W	1	
	W216	ERJ8GEY0R00V	0 1/4W	1	
	W217	ERJ8GEY0R00V	0 1/4W	1	
	W218	ERJ3GEY0R00V	0 1/10W	1	
	W219	ERJ8GEY0R00V	0 1/4W	1	
	W220	ERJ8GEY0R00V	0 1/4W	1	
	W221	ERJ6GEY0R00V	0 1/8W	1	
	W222	ERJ6GEY0R00V	0 1/8W	1	
	W223	ERJ8GEY0R00V	0 1/4W	1	
	W224	ERJ8GEY0R00V	0 1/4W	1	
	W225	ERJ6GEY0R00V	0 1/8W	1	
	W226	ERJ6GEY0R00V	0 1/8W	1	
	W227	ERJ8GEY0R00V	0 1/4W	1	
	W228	ERJ8GEY0R00V	0 1/4W	1	
	W229	ERJ8GEY0R00V	0 1/4W	1	
	W230	ERJ8GEY0R00V	0 1/4W	1	
			REMOTE SENSOR		
	IR6500	B3RAD000220	REMOTE SENSOR	1	
			RESISTORS		
	R1002	D0GB101JA065	100 1/10W	1	
	R1003	D0GB101JA065	100 1/10W	1	
	R1013	D0GB221JA065	220 1/10W	1	
	R1014	D0GB221JA065	220 1/10W	1	
	R1015	D0GB102JA065	1K 1/10W	1	
	R1022	D0GB221JA065	220 1/10W	1	
	R1024	D0GB101JA065	100 1/10W	1	
	R1025	D0GB105JA065	1M 1/10W	1	
	R1026	D0GB224JA065	220K 1/10W	1	
	R1027	D0GB106JA065	10M 1/10W	1	
	R1029	D0GB103JA065	10K 1/10W	1	
	R1031	D0GB103JA065	10K 1/10W	1	
	R1032	D0GB103JA065	10K 1/10W	1	
	R1033	D0GB153JA065	15K 1/10W	1	PR
	R1033	D0GB272JA065	2.7K 1/10W	1	PH
	R1033	D0GB682JA065	6.8K 1/10W	1	GS
	R1034	D0GB153JA065	15K 1/10W	1	
	R1038	D0GA103JA023	10K 1/16W	1	
	R1043	D0GB103JA065	10K 1/10W	1	
	R1044	D0GB562JA065	5.6K 1/10W	1	
	R1045	D0GB101JA065	100 1/10W	1	
	R1046	D0GBR00J0004	0 1/10W	1	
	R1047	D0GB101JA065	100 1/10W	1	
	R1050	D0GB103JA065	10K 1/10W	1	
	R1051	D0GB103JA065	10K 1/10W	1	
	R1055	D0GB101JA065	100 1/10W	1	
	R1057	D0GB101JA065	100 1/10W	1	
	R1059	D0GB101JA065	100 1/10W	1	
	R1060	D0GB101JA065	100 1/10W	1	
	R1067	ERJ3RBD683V	68K 1/16W	1	
	R1068	ERJ3RBD153V	15K 1/16W	1	
	R1078	D0GB101JA065	100 1/10W	1	
	R1095	D0GB122JA065	1.2K 1/10W	1	
	R1100	D0GB101JA065	100 1/10W	1	
	R1105	D0GB103JA065	10K 1/10W	1	
	R1106	D0GB334JA065	330K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C9004	F1H1C104A178	0.1uF 16V	1	
	C9005	F1H1C104A178	0.1uF 16V	1	
	C9007	F1H1H104B047	0.1uF 50V	1	
	C9008	F1H1H104B047	0.1uF 50V	1	

IPSG1408