P/NO : AFN30054107

FEBRUARY, 2021

SERVICE MANUAL

MODEL: SP8YA (SP8YA, SPP8-W)

LG

Wi-Fi Sound Bar
SERVICE MANUAL

MODEL: SP8YA
(SP8YA, SPP8-W)

CAUTION
BEFORE SERVICING THE UNIT, READ THE “SAFETY PRECAUTIONS” IN THIS MANUAL.

CONTENTS

SECTION 1

SUMMARY

CONTENTS

PRODUCT SAFETY SERVICING GUIDELINES FOR AUDIO PRODUCTS

IMPORTANT SAFETY NOTICE

This manual was prepared for use only by properly trained audio-video service technicians.

When servicing this product, under no circumstances should the original design be modified or altered without permission from LG Corporation. All components should be replaced only with types identical to those in the original circuit and their physical location, wiring and lead dress must conform to original layout upon completion of repairs.

Special components are also used to prevent x-radiation, shock and fire hazard. These components are indicated by the letter "x" included in their component designators and are required to maintain safe performance. No deviations are allowed without prior approval by LG Corporation.

Circuit diagrams may occasionally differ from the actual circuit used. This way, implementation of the latest safety and performance improvement changes into the set is not delayed until the new service literature is printed.

CAUTION : Do not attempt to modify this product in any way. Never perform customized installations without manufacturer's approval. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury.

Service work should be performed only after you are thoroughly familiar with these safety checks and servicing guidelines.

GRAPHIC SYMBOLS

The exclamation point within an equilateral triangle is intended to alert the service personnel to important safety information in the service literature.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the service personnel to the presence of noninsulated "dangerous voltage" that may be of sufficient magnitude to constitute a risk of electric shock.

The pictorial representation of a fuse and its rating within an equilateral triangle is intended to convey to the service personnel the following fuse replacement caution notice:

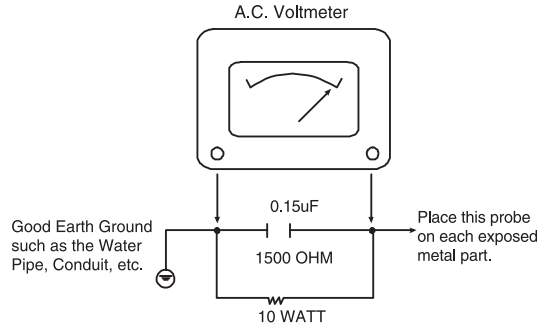
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ALL FUSES WITH THE SAME TYPE AND RATING AS MARKED NEAR EACH FUSE.

SERVICE INFORMATION

While servicing, use an isolation transformer for protection from AC line shock. After the original service problem has been corrected, make a check of the following:

FIRE AND SHOCK HAZARD

1. Be sure that all components are positioned to avoid a possibility of adjacent component shorts. This is especially important on items trans-ported to and from the repair shop.
2. Verify that all protective devices such as insulators, barriers, covers, shields, strain reliefs, power supply cords, and other hardware have been reinstalled per the original design. Be sure that the safety purpose of the polarized line plug has not been defeated.
3. Soldering must be inspected to discover possible cold solder joints, solder splashes, or sharp solder points. Be certain to remove all loose foreign particles.
4. Check for physical evidence of damage or deterioration to parts and components, for frayed leads or damaged insulation (including the AC cord), and replace if necessary.
5. No lead or component should touch a high current device or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. After reassembly of the set, always perform an AC leakage test on all exposed metallic parts of the cabinet (the channel selector knobs, antenna terminals, handle and screws) to be sure that set is safe to operate without danger of electrical shock. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST. Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm, 10 watt resistor, paralleled by a .15 mfd 150V AC type capacitor between a known good earth ground water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and .15 mfd capacitor. Reverse the AC plug by using a non-polarized adaptor and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



TIPS ON PROPER INSTALLATION

1. Never install any receiver in a closed-in recess, cubbyhole, or closely fitting shelf space over, or close to, a heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as: outdoor patio installations where dew is a factor, near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct venting. The customer should also avoid the use of decorative scarves or other coverings that might obstruct ventilation.
4. Wall- and shelf-mounted installations using a commercial mounting kit must follow the factory-approved mounting instructions. A product mounted to a shelf or platform must retain its original feet (or the equivalent thickness in spacers) to provide adequate air flow across the bottom. Bolts or screws used for fasteners must not touch any parts or wiring. Perform leakage tests on customized installations.
5. Caution customers against mounting a product on a sloping shelf or in a tilted position, unless the receiver is properly secured.
6. A product on a roll-about cart should be stable in its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against using extension cords. Explain that a forest of extensions, sprouting from a single outlet, can lead to disastrous consequences to home and family.

SERVICING PRECAUTIONS

CAUTION: Before servicing the Audio products covered by this service data and its supplements and addends, read and follow the SAFETY PRECAUTIONS.
NOTE: if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.
Remember Safety First :

General Servicing Precautions

1. Always unplug the Audio products AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this Audio products or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.

5. Do not apply AC power to this Audio products and / or any of its electrical assemblies unless all solid state device heat sinks are correctly installed.

6. Always connect the test instrument ground lead to an appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1Mohm.
Note 1: Accessible Conductive Parts include Metal panels, Input terminals, Earphone jacks,etc.

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 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 static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, 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” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate an electrical charge 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. (Normally 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 sufficient to damage an ES device.)

WIRELESS SUBWOOFER CONNECTION

LED indicator of wireless subwoofer

LED Color	Status
Green (Blink)	The connection is trying.
Green	The connection is completed.
Red	The wireless subwoofer is in standby mode or the connection is failed.
Off (No display)	The power cord of wireless subwoofer is disconnected.

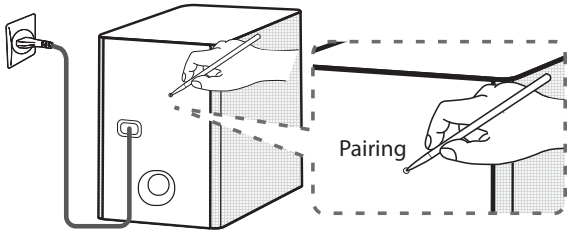
Setting up the wireless subwoofer for the first time

1. Connect the power cord of the sound bar and the wireless subwoofer to the outlet.
2. Turn on the sound bar. The sound bar and the wireless subwoofer will be automatically connected.
   - Pairing is completed. The green LED on the rear of the wireless subwoofer turns on.

Manually pairing wireless subwoofer

When your connection is not completed, you can check red LED on the wireless subwoofer and the wireless subwoofer does not make sound. To solve the problem, follow the steps below.

1. Press **Pairing** on the rear of the wireless subwoofer.

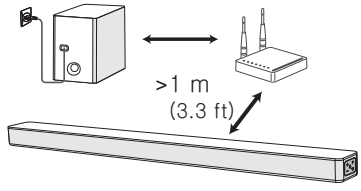


   - The green LED on the rear of the wireless subwoofer blinks quickly. (If the green LED does not blink, press and hold the **Pairing**)

2. Turn on the sound bar.
3. Pairing is completed.
   - Pairing is completed. The green LED on the rear of the wireless subwoofer turns on.

***Note*:**

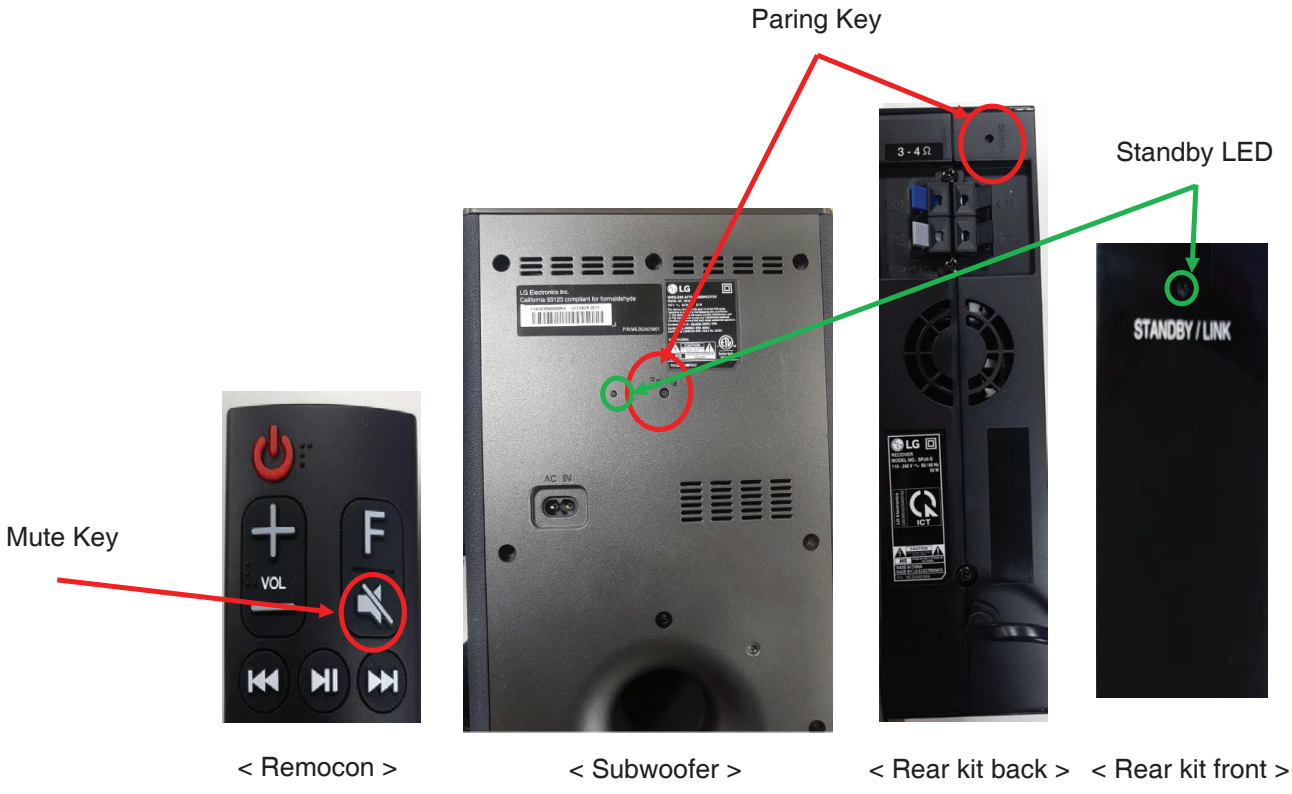
- It takes a few seconds (and may take longer) for the main unit and the subwoofer to communicate with each other and make sounds.
- The closer the main unit and the subwoofer, the better sound quality. It is recommended to install the main unit and the subwoofer as close as possible and avoid the cases below.
  - There is a obstacle between the main unit and the subwoofer.
  - There is a device using same frequency with this wireless connection such as a medical equipment, a microwave or a wireless LAN device.
  - Keep the sound bar and the subwoofer away from the device (ex. wireless router, microwave oven, etc.) over 1m (3.3 ft) to prevent wireless interference.



WOOFER & REAR PAIRING METHOD

How to pair Subwoofer and Rear kit

1) Down volume minimum to use Remocon or MAIN set key (Press '-' key).
2) Press 'Mute' key (about 2~3 seconds) on Remocon and then will display "WL RESET" on LCD.
3) Press paring key on the Subwoofer and Rear kit.
4) When woofer and rear kit attempt to connect wireless, the Green color LED blink faster than standby status.
5) When woofer and rear kit connect wireless completely, the LED will maintain Green color.



HIDDEN KEY MODE

1. Factory Reset

Press Wi-Fi Mute key 5 seconds, VFD display RESET. System rebooting.

2. Check Version

- Soundbar Volume '–' key + Remocon PLAY key for 3 seconds.
- Each Program Version is displayed when press Remocon Select key.

M : MICOM	PQ : PEQ	B : Main APK	No Alphabet : Main Android
TX : Woofer TX	RX : Woofer RX	D : DSP	H : HDMI
RR : Rear RX	RT : Rear TX	T : Touch	L : Sub MICOM

< MICOM >

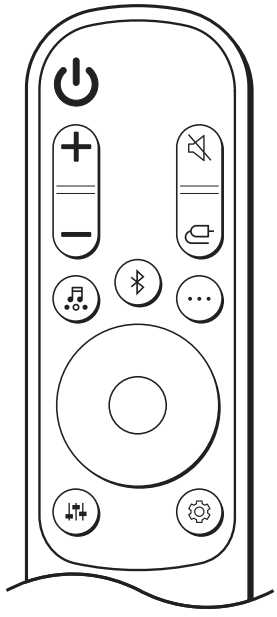
< DSP >

< PEQ >

3. Woofer (Rear Speaker) Reset

Soundbar Volume '–' key and Remocon MUTE for 3sec

- Volume must be Min (0) before input those keys.
- Woofer (Rear Speaker) must Power Off before input those keys.
- Woofer and Rear Speaker can be reset by pressing reset button on each unit.

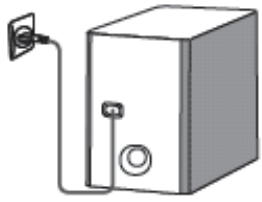


FIRMWARE UPDATE GUIDE

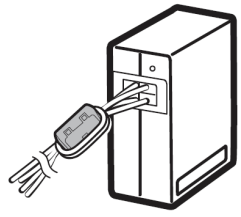
1. Preparation

1) SP8 Series Units : Main Unit, Wireless Subwoofer Unit, Rear Speaker Unit(optional)
2) SP8 RCU
3) USB Memory
4) Smart Phone with “LG Wi-Fi Speaker” App

<Main Unit>
Necessary



<Wireless Subwoofer Unit>
If wireless subwoofer rx module of primary unit is updated



<Rear Speaker Unit>
Optional as model suffix.
If wireless rear rx module is updated.

<RCU>
Necessary

<USB Memory>
for USB update

<Smart Phone>
for OOBE update
“LG Wi-Fi Speaker” App must be installed.

***Caution*:**
• Take care not to power off during update.
• Do format USB memory before update (FAT32 file system).

2. USB update

Step 1. Prepare SP8 update binaries.

Update module	SP8	Filename Sample
B/E	MAIN_SP8_*.bin	MAIN_SP8_WSB_2002171.bin
Micom	MICOM_SP8_*.HEX	MICOM_SP8_WSB_2002121_EBA2_rev2503.HEX
Touch	TOUCH_SP8_*.DLD	TOUCH_SP8_C4A_2001071_0xF535.dld
Wireless Subwoofer Tx	WOOFERTX_SP8_*.BIN	WOOFERTX_SP8_BAR_190007_PRO1_ CHECKSUM_C7CA.bin
Wireless Subwoofer Rx	WOOFERRX_SP8_*.BIN	WOOFERRX_SP8_BAR_191008_PRO1_ CHECKSUM_90BE.bin
Wireless Rear Tx	REARTX_SP8_*.BIN	REARTX_SP8_BAR_194006__PRO1_CHECKSUM_ BEA0.bin
Wireless Rear Rx	REARRX_SP8_*.BIN	REARRX_SP8_BAR_185001_PRO1_CHECKSUM_ DFDF.bin
MEQ	MEQ_SP8_*.BIN	MEQ_SP8_WSB_20012874_113652.BIN
PEQ	PEQ_SP8_*.BIN	PEQ_SP8_171016.bin

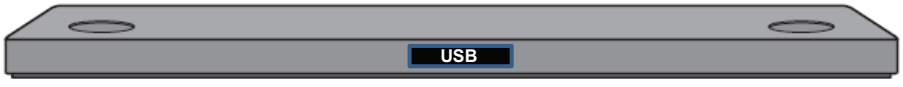
Step 2. Copy all updated SP8 binaries to USB memory.

Step 3. Power on SP8 main unit.

Step 4. If there is an updated wireless subwoofer rx binary in update list,
you need to pair between main unit and subwoofer unit before start update.

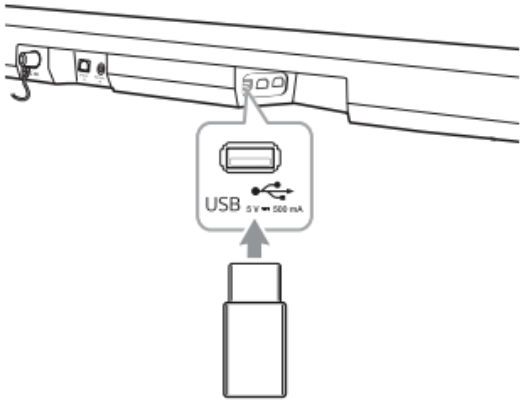
Step 5. If there is an updated wireless rear rx binary in update list,
you need to pair between main unit and rear speaker unit before start update.

Step 6. Press Function key to change function to USB.
Verify whether USB function is or not by VFD.



USB update

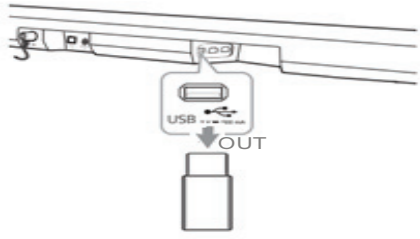
Step 7. Attach USB which has update binaries to the USB slot back of SP8 main unit.



Step 8. Update binaries will be copied from USB disk to temporary area of SP8.
VFD will display “READ”.

Step 9. If update is ready, VFD will display “REMOVE”.
If you detach the USB disk from USB slot, update will start automatically.

Update module	VFD display	Model
B/E	B-UPD ATE	SP8
MICOM	M-UPD ATE	SP8
Touch	T-UPD ATE	SP8
Wireless Subwoofer Tx	WT 00	SP8
Wireless Subwoofer Rx	WR 00	SP8
Wireless Rear Tx	RT 00	SP8
Wireless Rear Rx	RR 00	SP8
Wireless Rear L Tx	AT 00	-
Wireless Rear L Rx	AR 00	-
Wireless Rear R Tx	BT 00	-
Wireless Rear R Rx	BR 00	-
MEQ	MQ-UP DATE	-
PEQ	EQ-UP DATE	-



<SP8 Series
VFD Display in Update>

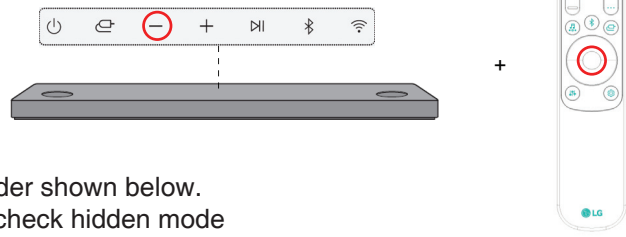
USB update

Step 10. SP8 main unit will be reset automatically after update finish.

Step 11. Check the current versions to verify whether the update was successfully completed or not.

1) Press “Version Check” hidden key

• Version Check Hidden Key : Press Set “Vol-” + RCU “Enter” for 3secs.



2) SP8 shows the version of all modules in the order shown below.

• The order that SP8 shows version in version check hidden mode

SP8 :

MICOM ➡ PEQ ➡ B/E ➡ C4A ➡ MEQ ➡ Wireless Subwoofer Tx ➡ Wireless Subwoofer Rx ➡ Wireless Rear Tx ➡ Wireless Rear Rx ➡ Touch ➡ Option

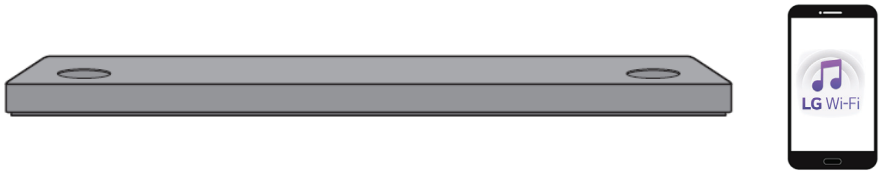
Module	VFD display sample	Model
MICOM	M2011241	SP8
PEQ	PQ2010210-6326	SP8
B/E	B2011250	SP8
C4A	1.44.219548	SP8
MEQ	MQ2010229	SP8
Wireless Subwoofer Tx	TX210002	SP8
Wireless Subwoofer Rx	RX201005	SP8
Wireless Rear Tx	RT214002	SP8
Wireless Rear Rx	RR205010	SP8
Wireless Rear L Tx	AT214102	-
Wireless Rear L Rx	AR205110	-
Wireless Rear R Tx	BT214202	-
Wireless Rear R Rx	BR205210	-
Touch	T2001075	SP8

< SP8’s VFD Display in Version Display>

3) Compare the version VFD shows and you updated.

3. OOBE update (LG App)

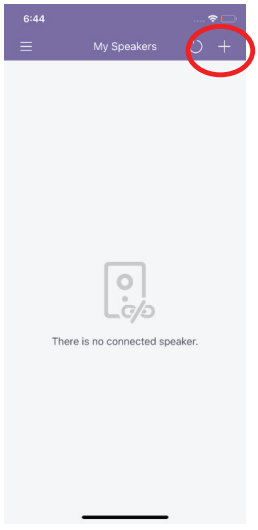
Step 1. Prepare SP8 main unit and Smart Phone with “LG Wi-Fi Speaker” App.
In setting up the network in OOB(out of the box), SP8 will be updated to the latest version automatically.

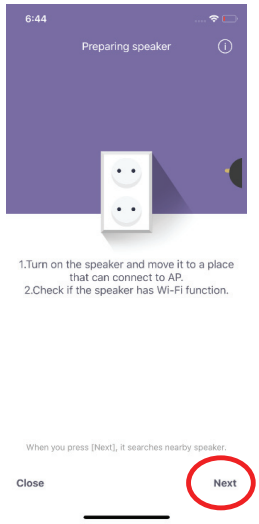


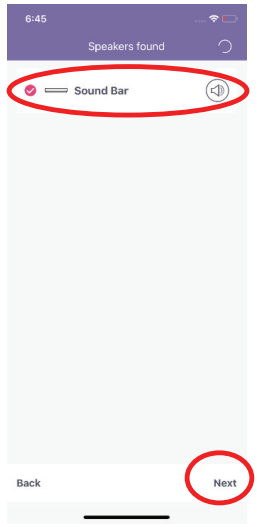
Step 2. Power on SP8 main unit.

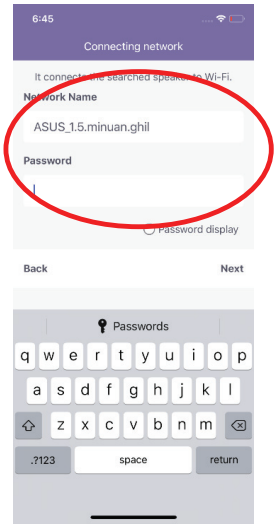
Step 3. Open “LG Wi-Fi Speaker” App.

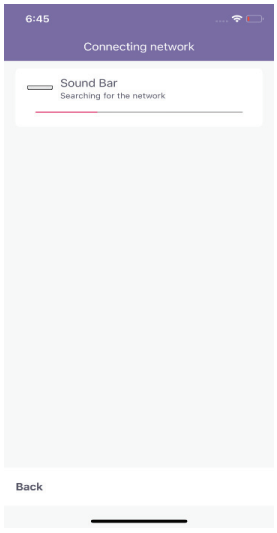
Step 4. Set up SP8 using “LG Wi-Fi Speaker” App.

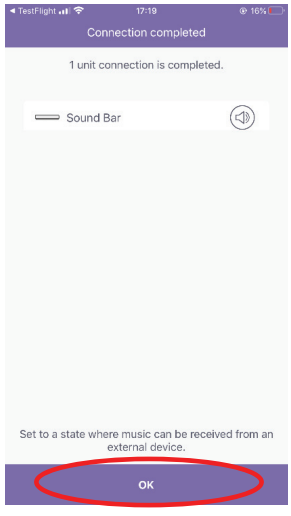






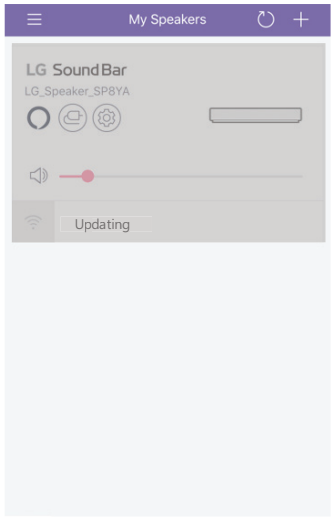


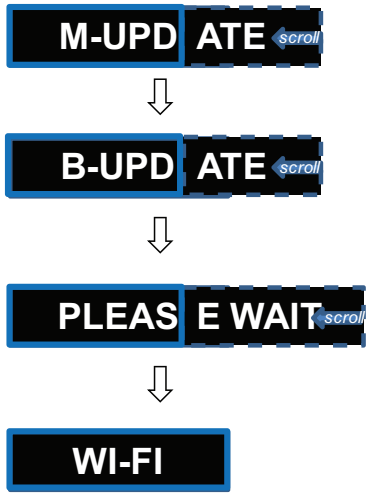




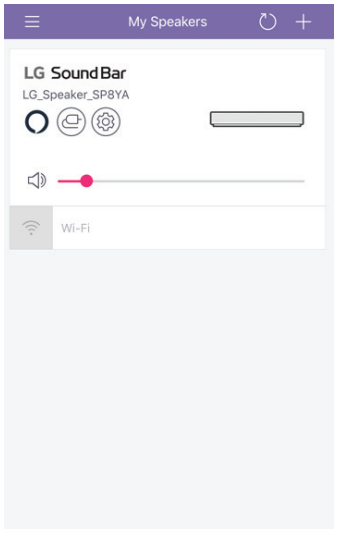
OOBE update (LG App)

Step 5. After network setup is complete, if the update server has uploaded the latest version that requires an update, the SP8 will automatically proceed with the update at this step.
If the SP8 is already the latest version, App shows SP8 without update step.





Step 6. At the end of the update step, LG App shows the SP8 on device list.



4. OOBE update (Google Home App)

※ Setting up a network through Google Home App

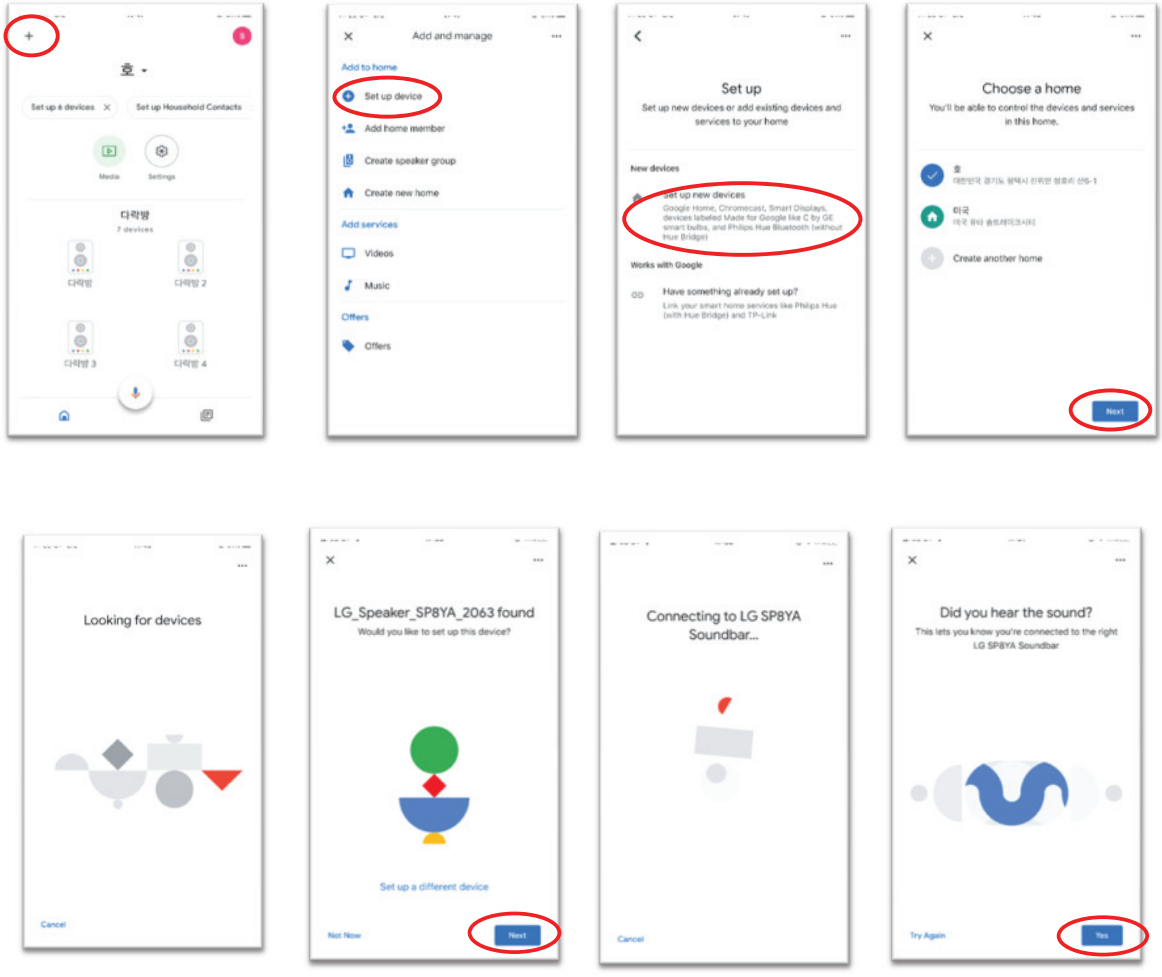
LG SP8 support Google Home App to connect Wi-Fi network.
So OOBE Update is also provided by Google Home App.
But LG does NOT recommend using Google Home App to setting up a network.
Please use LG Wi-Fi Speaker App if you could.

Step 1. Prepare SP8 main unit and Smart Phone with “Google Home” App. (LG Wi-Fi Speaker App recommended) In setting up the network in OOB(out of the box), SP8 will be updated to the latest version automatically.

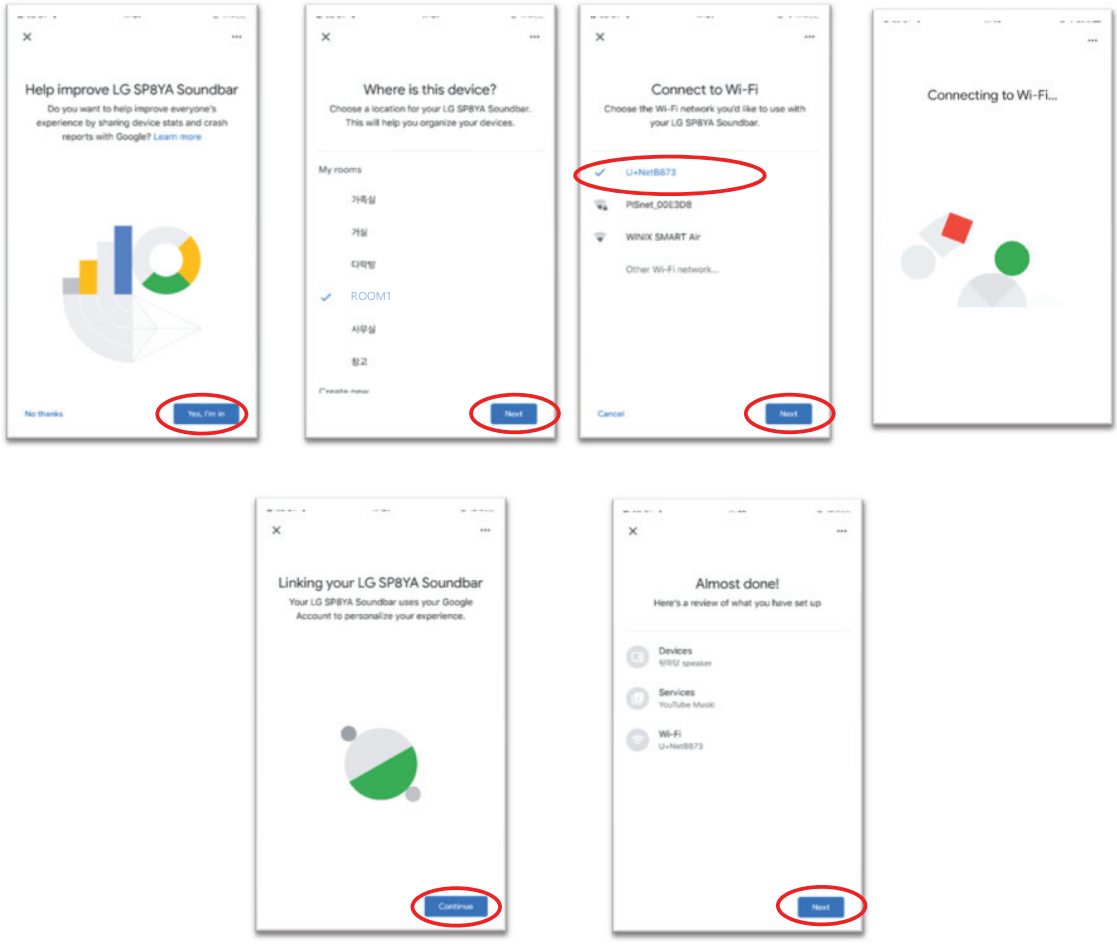
Step 2. Power on SP8 main unit.

Step 3. Open “Google Home” App.

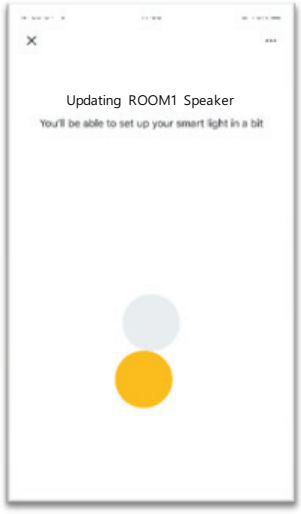
Step 4. Set up SP8 using Google Home App.

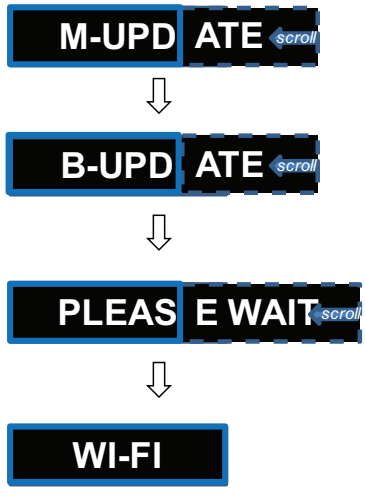


OOBE update (Google Home App)



Step 5. If the update server has uploaded the latest version that requires an update, the SP8 will automatically proceed with the update at this step.
If the SP8 is already the latest version, network setup will be finish without update.





OOBE update (Google Home App)

Step 6. At the end of the update step on Google Home App, the network setup is complete.

SPECIFICATIONS

• GENERAL

Power consumption	Refer to the main label on the unit.
AC adapter	Model: DA-50F25 Manufacturer : Asian Power Devices Inc. Input: 100 - 240 V ~ 50 - 60 Hz Output: 25 V ⎓ 2 A
Dimensions (W x H x D)	Approx. 1060.0 mm x 57.0 mm x 119.0 mm (with foot) (41.7 inch x 2.2 inch x 4.7 inch)
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Operating humidity	5 % to 90 %
Bus Power Supply (USB)	5 V ⎓ 500 mA
Available Digital Input Audio Sampling Frequency	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 192 KHz
Available Digital Input Audio format	Dolby Atmos, Dolby Audio, DTS:X, DTS-HD, PCM

• INPUT/OUTPUT

OPTICAL IN	3 V (p-p), Optical jack x 1
HDMI IN	19 Pin (Type A, HDMI™ connector) x 1
HDMI OUT	19 Pin (Type A, HDMI™ connector) x 1 1080p, 1080i, 720p, 576p, 480p 2160p@24/25/30 Hz 4:4:4 2160p@60/50 Hz 4:2:0 4K Sources dependent on HDCP 2.2 are supported at 4K resolutions.

• AMPLIFIER (RMS Output)

Total	440 W RMS
Front	40 W RMS x 2 (4 Ω at 1 kHz, THD 10 %)
Center	40 W RMS (4 Ω at 1 kHz, THD 10 %)
Top	50 W RMS x 2 (4 Ω at 1 kHz, THD 10 %)
Subwoofer	220 W RMS (3 Ω at 80 Hz, THD 10 %)

• WIRELESS SUBWOOFER

Power requirements	Refer to the main label on the subwoofer.
Power consumption	Refer to the main label on the subwoofer.
Type	1 Way 1 Speaker
Impedance	3 Ω
Rated Input Power	220 W RMS
Max. Input Power	440 W RMS
Dimensions (W x H x D)	Approx. 221.0 mm x 390.0 mm x 312.8 mm (8.7 inch x 15.4 inch x 12.3 inch)

• SYSTEM

Wireless LAN (Internal antenna)	802.11a/b/g/n Wi-Fi networks

SPK8-S (SPK8-S, S78S1-S), Sold Separately

• WIRELESS RECEIVER

Power requirements	Refer to the main label on the wireless receiver.
Power consumption	Refer to the main label on the wireless receiver.
Rear	70 W RMS x 2 (3 Ω at 1 kHz, THD 10 %)
Dimensions (W x H x D)	Approx. 60.0 mm x 220.0 mm x 175.0 mm (2.4 inch x 8.7 inch x 6.9 inch)

• REAR SPEAKERS (Each)

Type	1 Way 1 Speaker
Impedance	3 Ω
Rated Input Power	70 W RMS
Max. Input Power	140 W RMS
Dimensions (W x H x D)	Approx. 100.0 mm x 140.0 mm x 100.0 mm (3.9 inch x 5.5 inch x 3.9 inch)

• Designs and specifications are subject to change without prior notice.

MEMO

SECTION 2

CABINET & MAIN CHASSIS

CONTENTS

DISASSEMBLY INSTRUCTIONS

1. HOW TO DISASSEMBLE THE MAIN UNIT

1-1. Disassemble of Case Bottom

Disassemble Red points Screw(1SSZR-0097X) : 24 EA
(Disassemble Screw (1SSZR-0097X) : 24 EA)

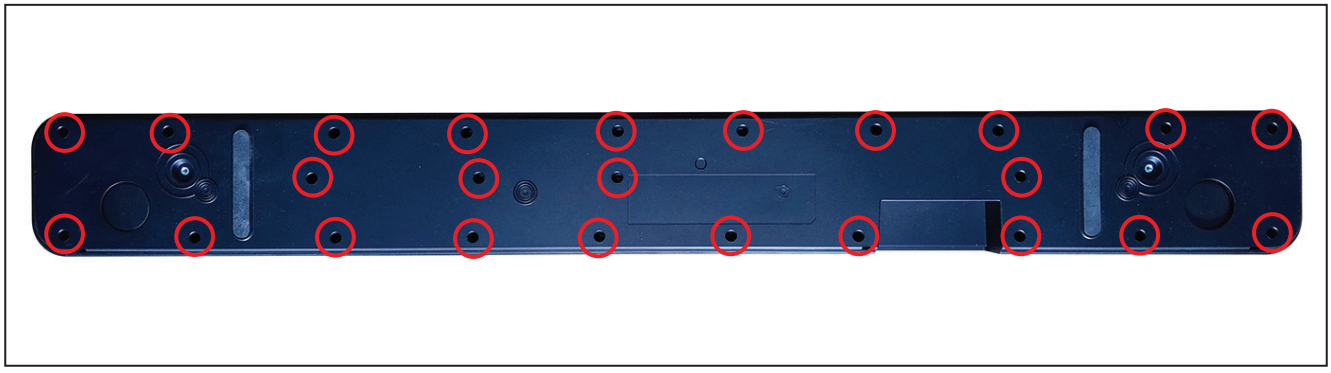


Figure 1-1

1-2. Disassemble Main PCB and Frame

(1) (Disassemble Case) – 3 Point

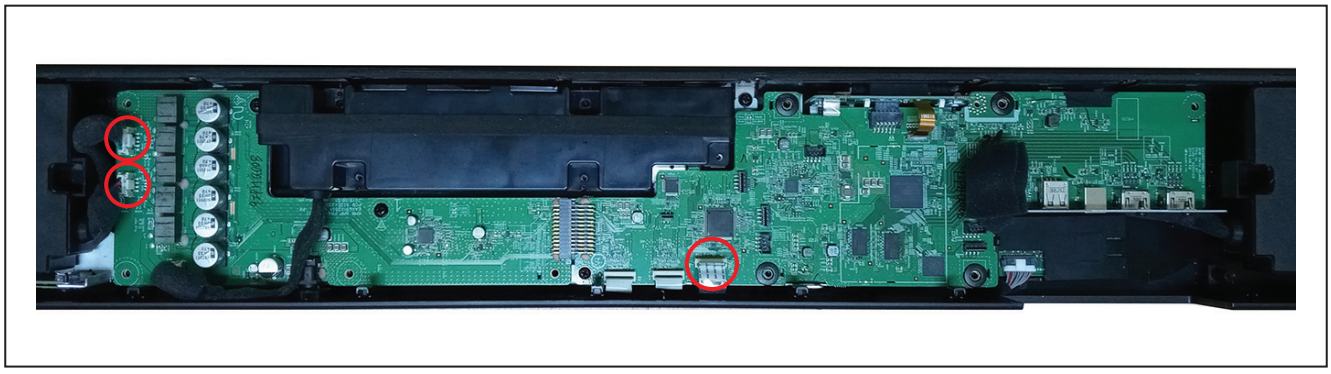


Figure 1-2 (1)

(2) (Disassemble Screw) – 2 Point
Disassemble Red points Screw(1SSZR-0098H) : 2 EA (Disassemble Screw(1SSZR-0098H) : 2 EA)

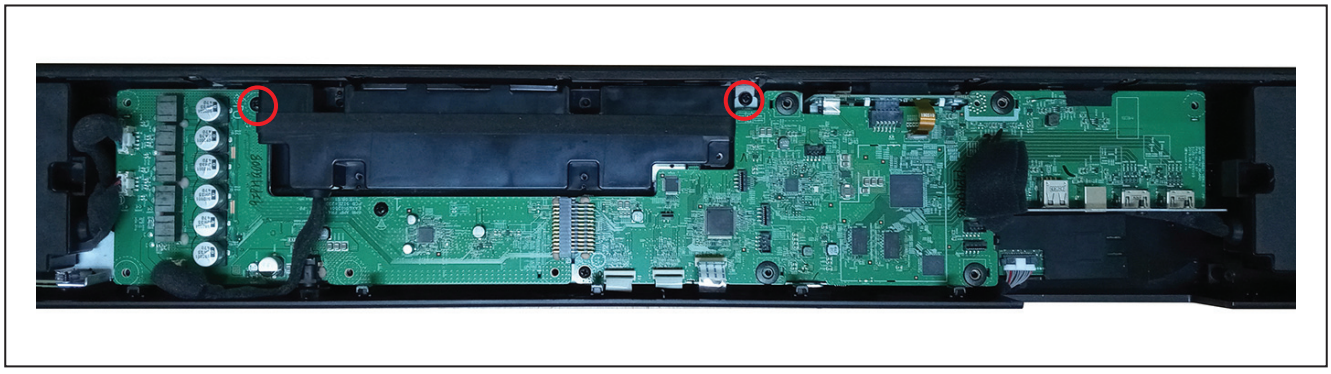


Figure 1-2 (2)

HOW TO DISASSEMBLE THE MAIN UNIT

1-3. Disassemble Chamber

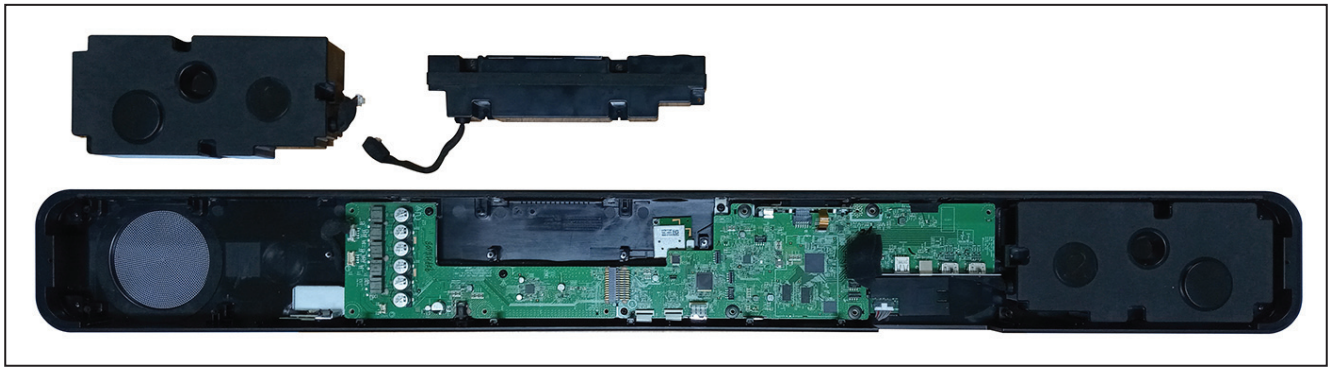


Figure 1-3

1-4. Disassemble Main PCB and AMP PCB

Disassemble Red points Screw(1SSZR-0098H) : 2 EA
(Disassemble Screw(1SSZR-0098H) : 2 EA)

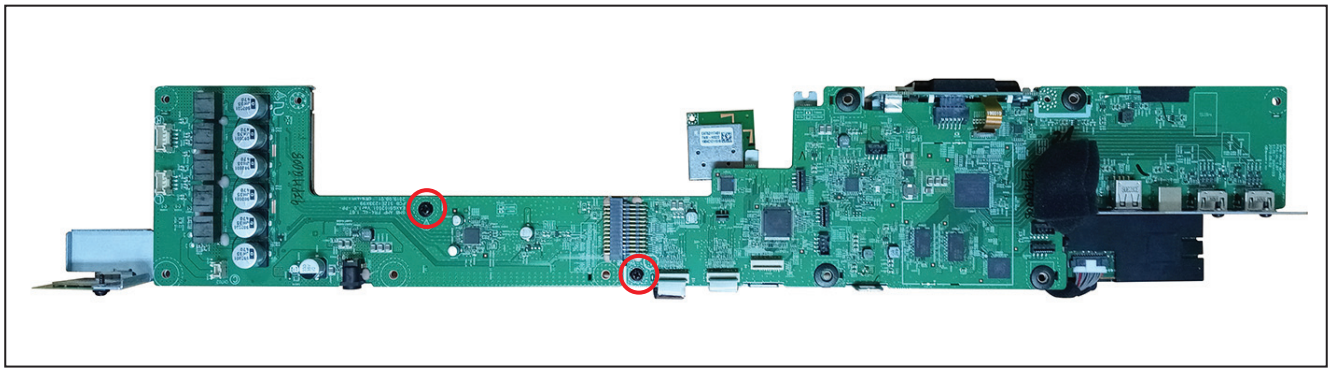


Figure 1-4

1-5. Disassemble PCB

(1) (Disassemble Front PCB Screw)
Disassemble Red points Screw(1SSZR-0098H) : 2 EA (Disassemble Screw(1SSZR-0098H) : 2 EA)

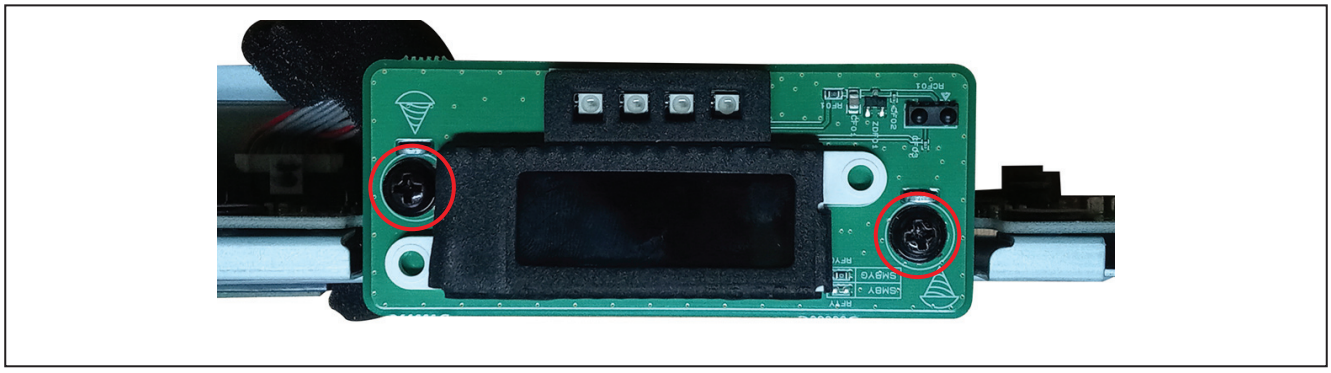


Figure 1-5 (1)

HOW TO DISASSEMBLE THE MAIN UNIT

(2) (Disassemble Main PCB and Amp PCB)
- Disassemble Cable – 4 Point of red mark

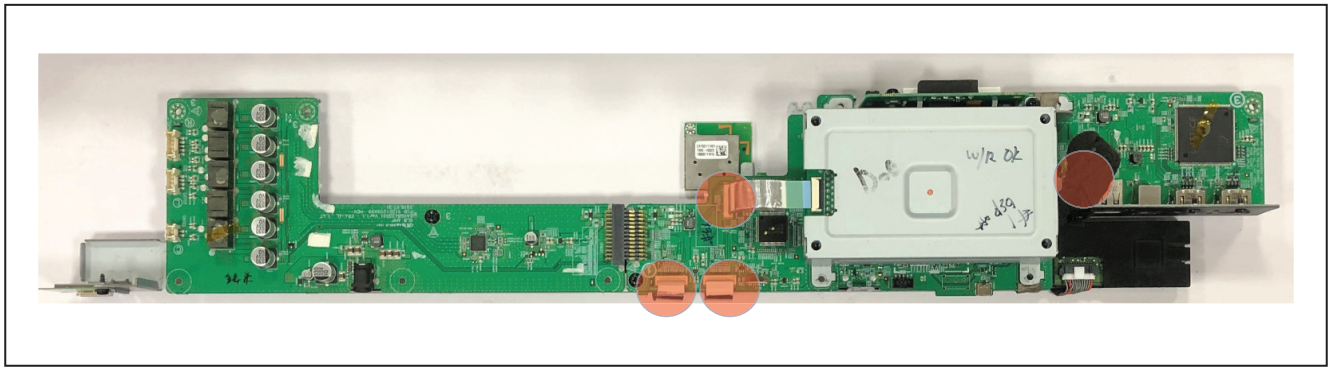


Figure 1-5 (2)

1-6. Disassemble Main PCB

- (Disassemble screw – 2 Point of red mark)

Figure 1-6 (1)

Disassemble Red points Screw(234-022S) : 2 EA)

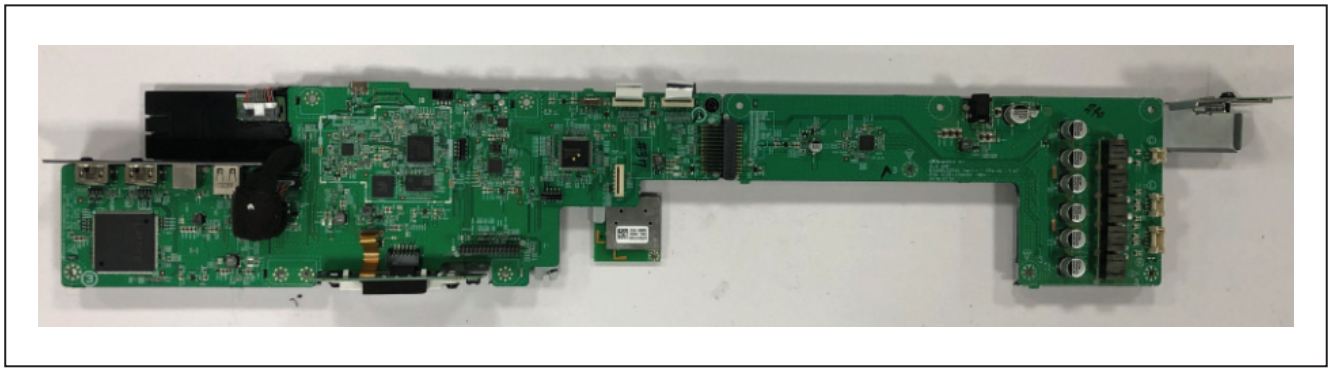


Figure 1-6 (2)

HOW TO DISASSEMBLE THE MAIN UNIT

1-7. Disassemble of Module Holders (Wi-Fi + BT Holder / Wireless / Rear Wireless)

- (Disassemble screw – 2 Point of red mark)
(Disassemble Red points Screw(1SSZR-0098H) : 2 EA)

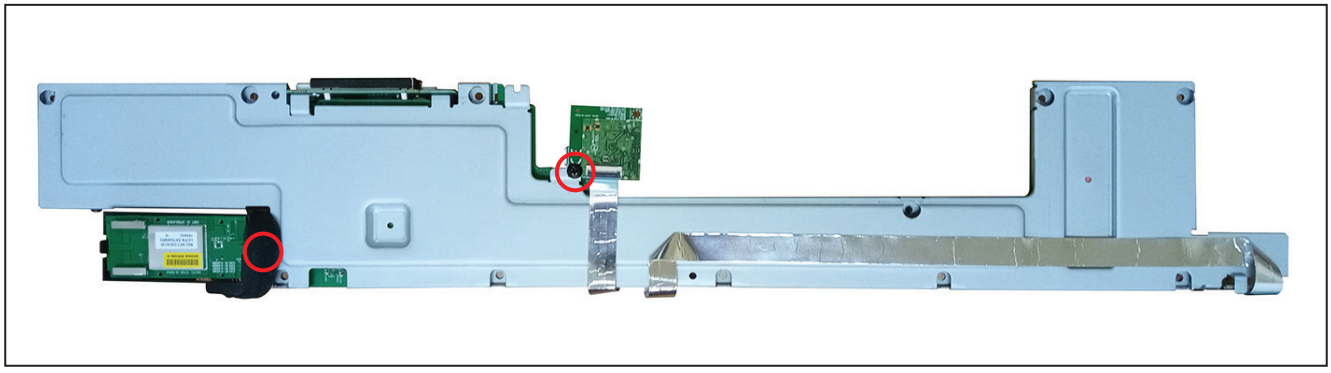


Figure 1-7

2. HOW TO DISASSEMBLE THE SUBWOOFER

2-1. Rear Panel Assembly

1) Remove the 11 screws.

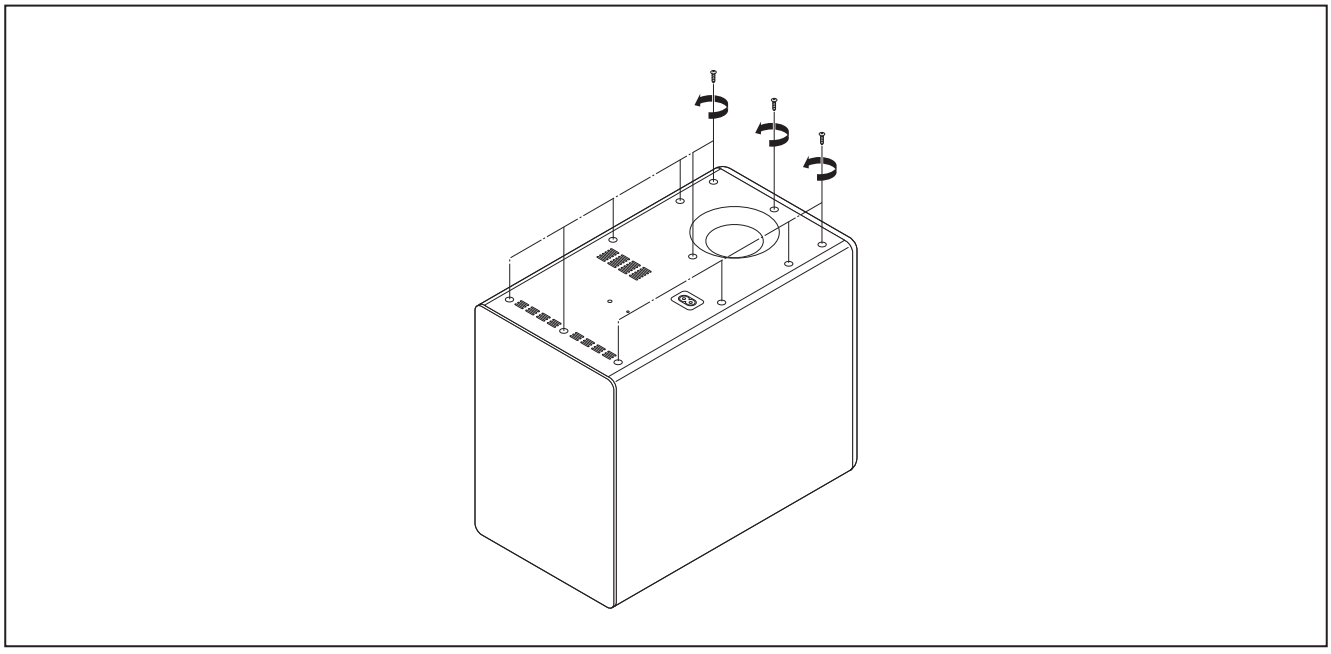


Figure 2-1 (1)

2) Pull out the Rear Panel Assembly and disconnect the SPK cable.

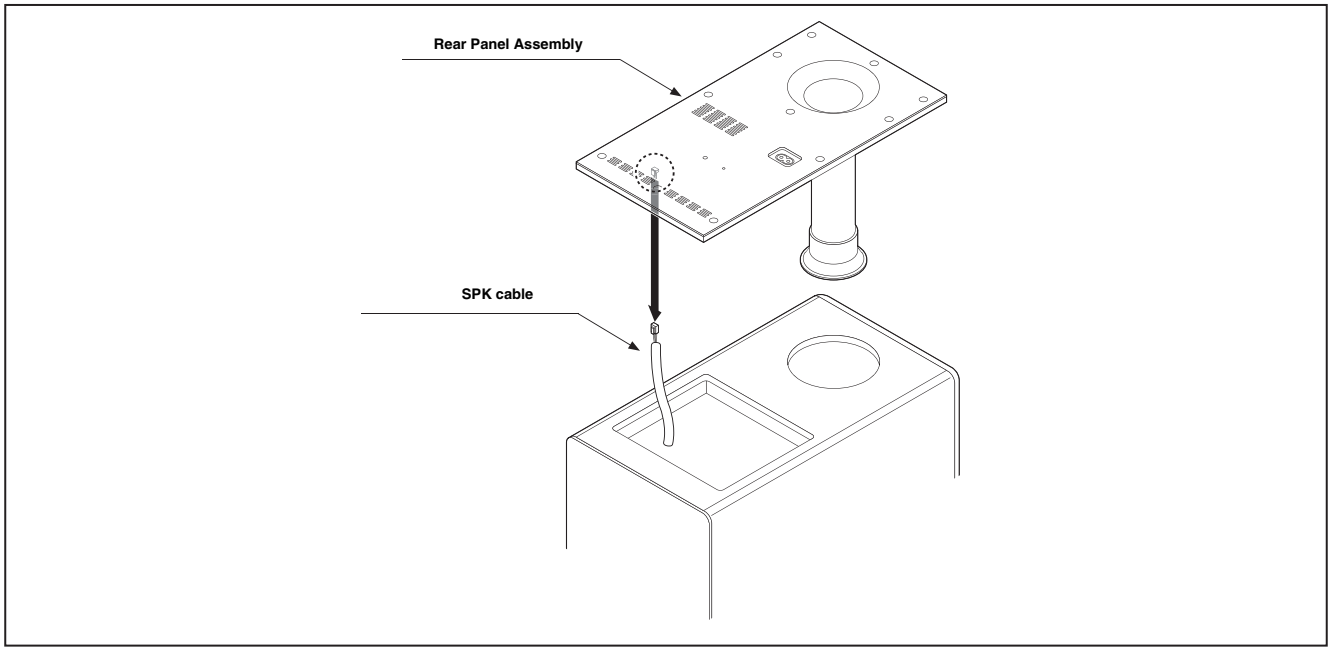


Figure 2-1 (2)

HOW TO DISASSEMBLE THE SUBWOOFER

2-2. WIRELESS Module

1) Disconnect the FFC cable.
2) Remove the EVA sheet (0.15T) covered the WIRELESS module.
3) Remove the WIRELESS module.
4) Remove the EVA gasket (1.0T) covered the WIRELESS module.

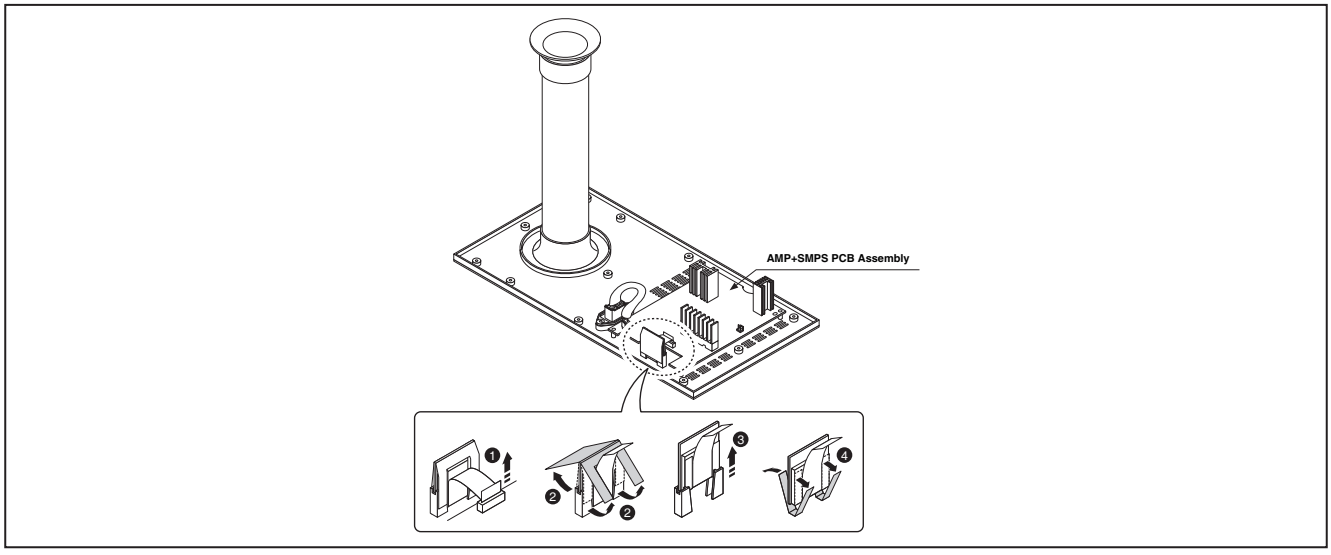


Figure 2-2 (1)

⚠ Caution when assembling the WIRELESS Module

1) Attach the EVA gaskets (1.0T) to both sides of the WIRELESS module.
2) Assemble the WIRELESS module into the wireless holder.
3) Attach the EVA sheet (0.15T) to the WIRELESS module.
4) Connect the FFC cable.

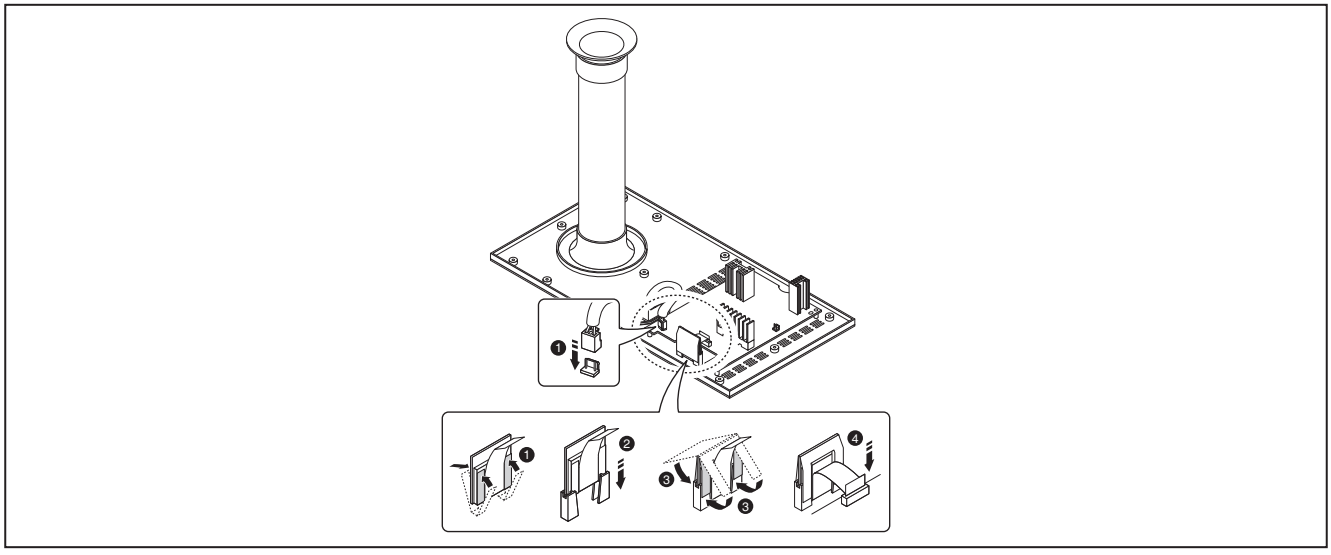


Figure 2-2 (2)

HOW TO DISASSEMBLE THE SUBWOOFER

2-3. AMP+SMPS PCB Assembly

1) Disconnect the Power inlet socket cable.

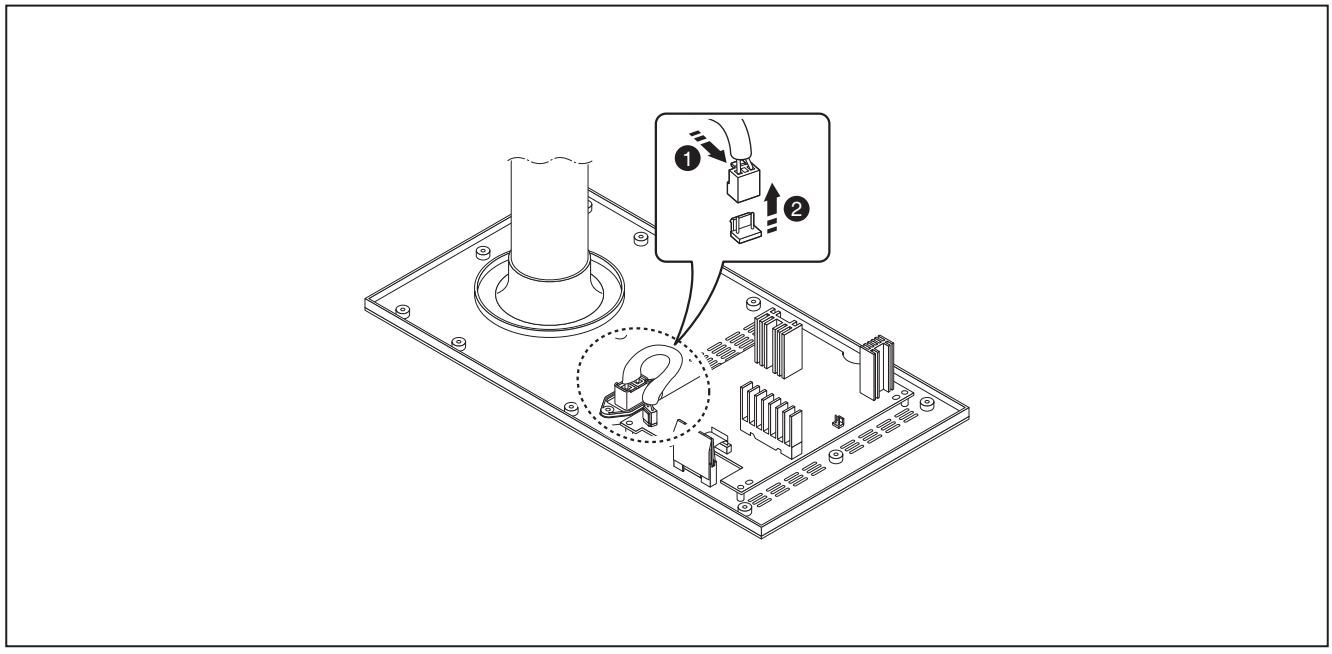


Figure 2-3 (1)

2) Remove the 5 screws.
3) Remove the AMP+SMPS PCB Assembly.

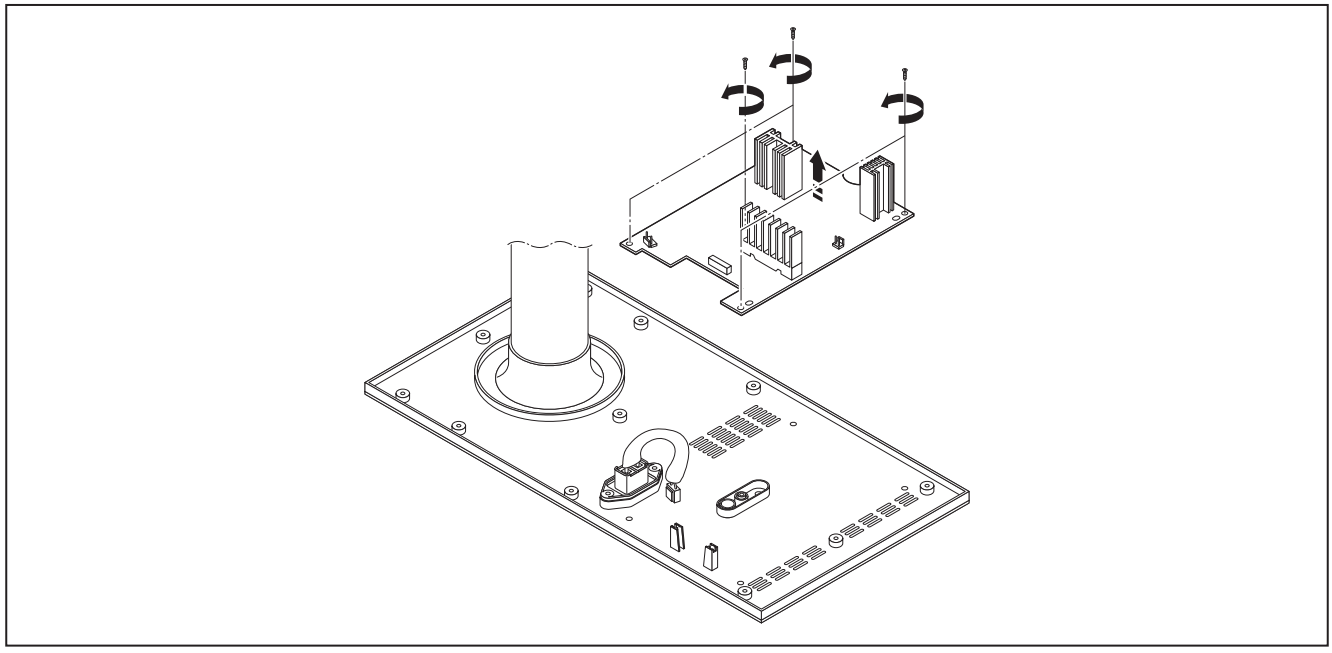
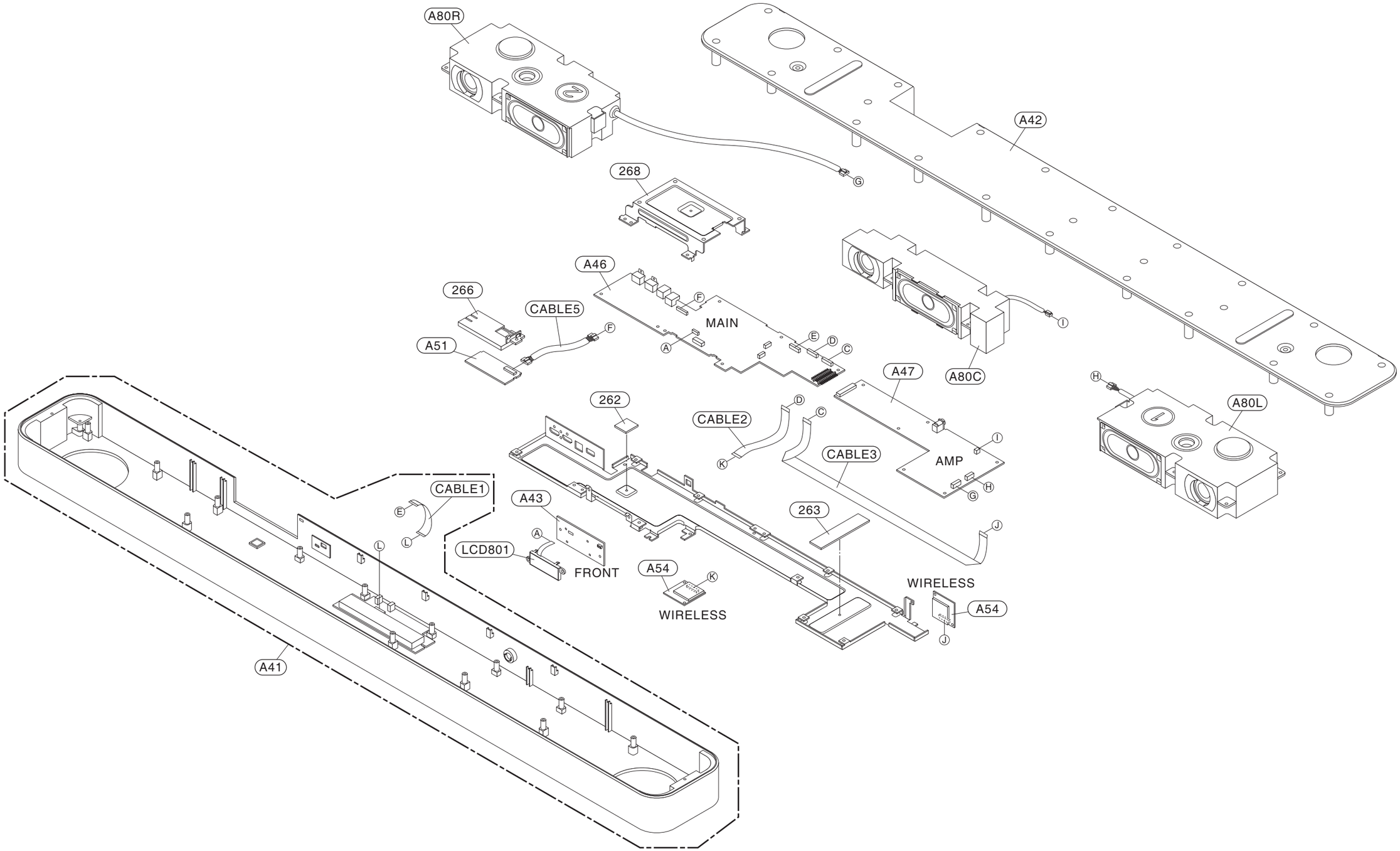


Figure 2-3 (2)

EXPLODED VIEWS

1. MAIN UNIT (SP8) SECTION



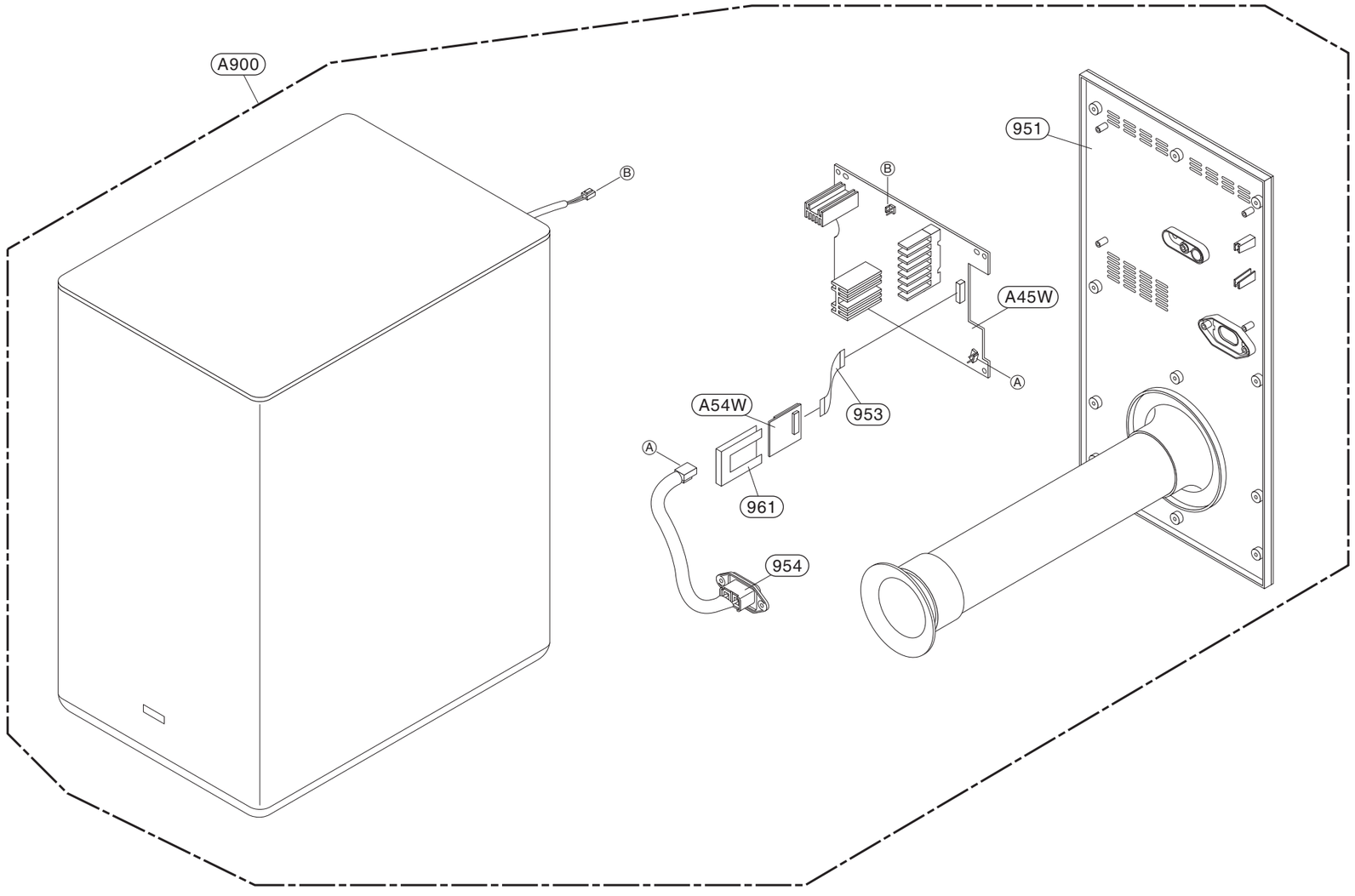
• Main unit parts list

RUN DATE : 1-February-2021

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
ASSEMBLY PARTS						
		A41	AAX76827606	Board Assembly	HOME SP8YA TOP case+Touch PCB	
		A42	ABQ76920212	Case Assembly	SP8 NEW BK Spray Case Bottom A	
		A43	EBR32700401	PCB Assembly	SP8 FRONT SVC ASSY -	
		A46	EBR32700301	PCB Assembly	SP8 MAIN SVC ASSY -	
		A47	EBT66636201	LFS Total PCB Assembly	SP8YA AMP LFS total -	
		A51	EAT64454802	Module,Wifi Bluetooth Module	TWCM-K505D MT7668_Brazil 3.135	
	OR	A51	EAT64454801	Module,Wifi Bluetooth Module	TWCM-K505D MT7668 3.135VTO3.6V	
		A54	EAT63117405	Module,RF Full Module(RxTx)	WL1NB6V2_ETWADYEC01 0DBM 0DB 0	
		A80C	ABQ77060902	Case Assembly	SL8 Chamber Center	
		A80L	ABQ77100408	Case Assembly	SP8YA Front L New 2.5in WF	
		A80R	ABQ77100508	Case Assembly	SP8YA Front R New 2.5in WF	
INDIVIDUAL PARTS						
		262	MCQ70767102	Damper	CUTTING THERMOPLASTIC HOME THE	
	OR	262	MCQ62096433	Damper	CUTTING THERMOPLASTIC DVD NB45	
		263	MCQ70767103	Damper	CUTTING THERMOPLASTIC HOME THE	
	OR	263	MCQ62096483	Damper	CUTTING THERMOPLASTIC HOME THE	
		266	AEJ75879401	Holder Assembly	SPK SL8YG.DUSALLK HOLDER WI-FI	
		268	MBS64585501	Chassis	PRESS SECC 1.0t SL8A PRESS Cha	
		LCD801	EAJ63172305	LCD Module	SMMD3276-A-00-VTNF-WX BACK LIG	
CABLES						
		CABLE1	EAD62131542	Cable,FFC	26P050D-H01-0F01A-T 70 70MM 0.	
		CABLE2	EAD63970514	Cable,FFC	AT05026090C04 90MM 0.50MM 26P	
		CABLE3	EAD63970513	Cable,FFC	AT05026370C01 370MM 0.50MM 26P	
		CABLE5	EAD65366201	Harness,Single	CAV-18-29 12507HS-H12G1 to 125	

MEMO

2. WIRELESS SUBWOOFER (SPP8-W) SECTION



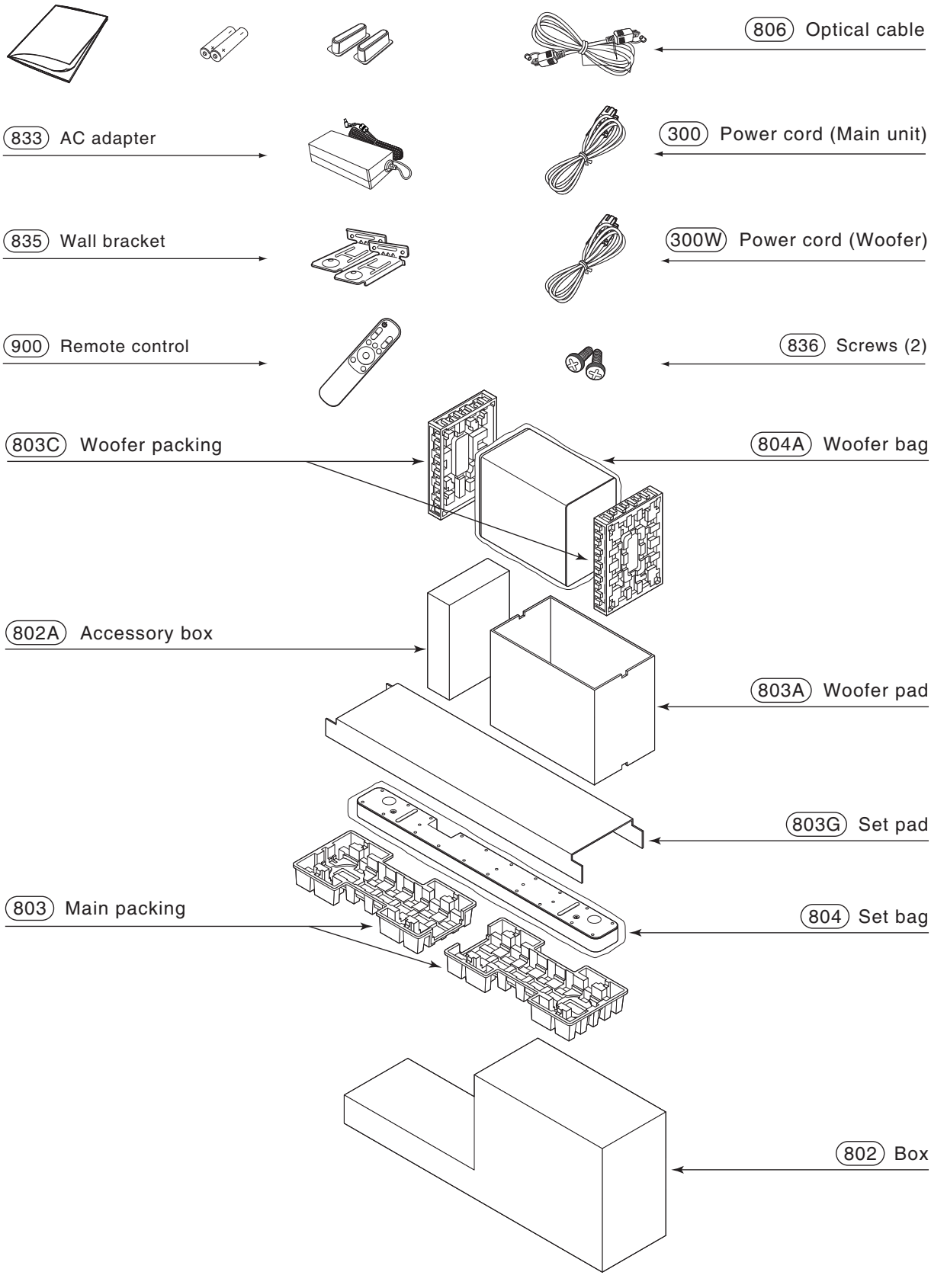
• Wireless subwoofer parts list

RUN DATE : 1-February-2021

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		A900	TCG37549502	Active Woofer	SPP8-W Print LG Logo SP8YA.DUS	
		A45W	EBR89625801	PCB Assembly	SPN8-W/SPN5B-W Woofer AMP+SMPS	
		A54W	EAT63117401	Module,RF Full Module(RxTx)	WL1NB6(TWBI-H002D) 0DBM 0DB 0%	
	OR	A54W	EAT63117404	Module,RF Full Module(RxTx)	WL1NB6_ 0DBM 0DB 0% 0A 0A 0DB	
		951	AGL77272902	Panel Assembly,Rear	SPK7-W WW COMMON_SL10YG.DDVEVN	
		953	EAD62131521	Cable,FFC	26P005D-H1-1F01A-T-60-60-0-0-0	
		954	EAG63233208	Socket,Power	DAC-18JN08 2P STRAIGHT WIRE BK	
		961	MHK65448501	Sheet	COMPLEX LDPE 20.6X15.6 2 0.5 T	

MEMO

3. PACKING ACCESSORY SECTION



• Packing accessory parts list

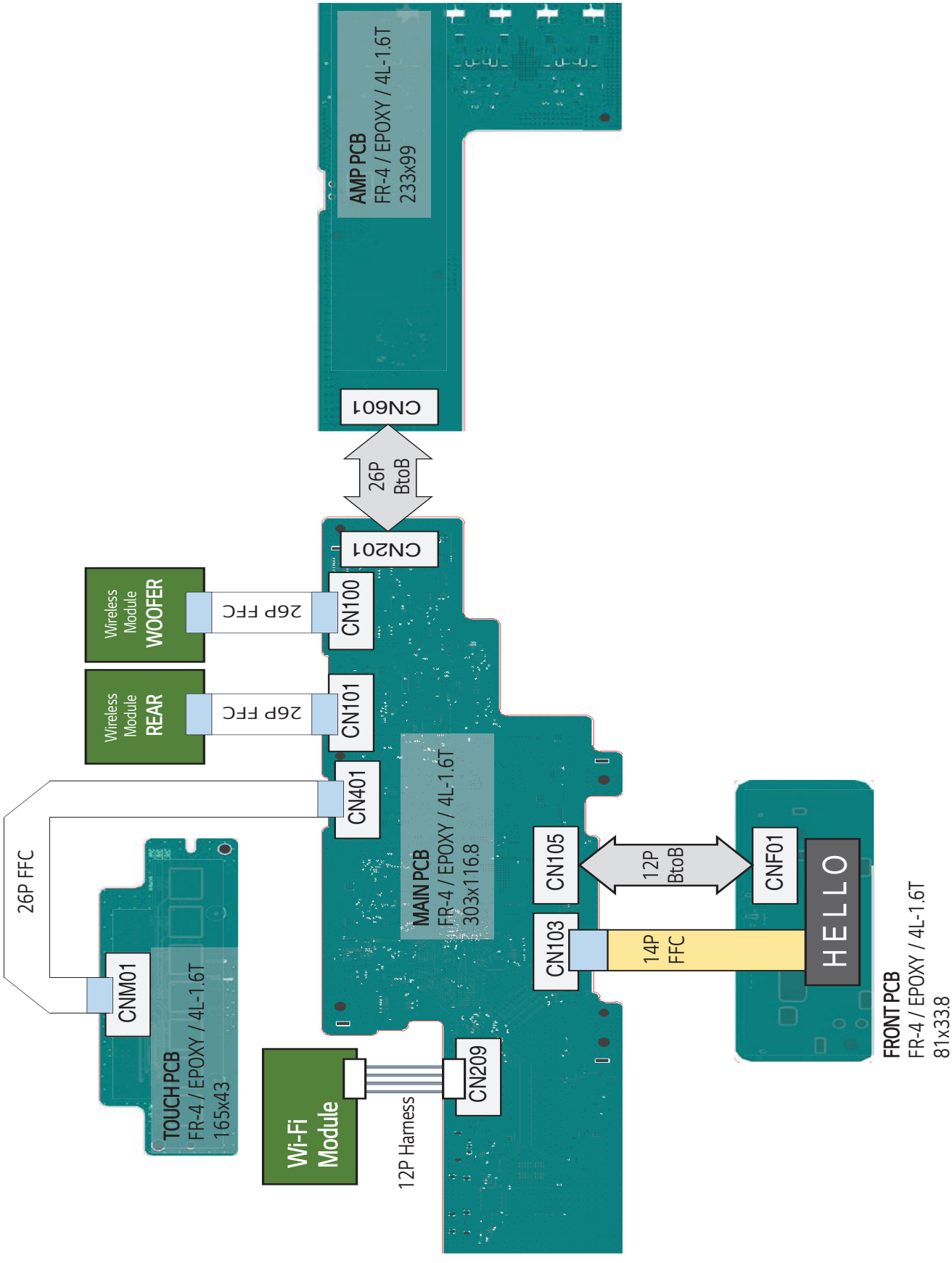
RUN DATE : 1-February-2021

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
⚠		300	EAD63525402	Power Cord	DE-2P-A-N-2P-S-1000-N-00-BK-US	
⚠		300W	EAD64108402	Power Cord	DE-2P-AN-PA-1500-N-00-BK-USA/C	
		802	MAY69793701	Box,Master	BOX DW2 1127 279 463 1 COLOR S	
		802A	MAY67849127	Box	BOX SW-B refer to the drwing f	
		803	MFZ66471620	Packing	CUTTING PAPER SPK SN8 Main set	
		803A	MFZ66293028	Packing	BOX DW3 3 refer to the drawing	
		803C	MFZ67251201	Packing	MOLD PULP SPK sp8 swf packing	
		803G	MFZ66293023	Packing	BOX DW3 3 refer to the drawing	
		804	MAF66405303	Bag	CUTTING LDPE 1190 300 0.3MM -	
		804A	MAF66405202	Bag	CUTTING EPE 680 660 0.03 PE+HD+HD	
		806	EAD61071210	Cable,Assembly	OPTICAL-1P-OPTICAL-OPTICAL-150	
	OR	806	EAD63345601	Cable,Assembly	POF1-BB2B-1500-02 OPTICAL OPTI	
	OR	806	EAD63727901	Cable,Assembly	210-26424 OPTICAL OPTICAL 1.5M	
	OR	806	EAD61071209	Cable,Assembly	OPTICAL-1P-OPTICAL-OPTICAL-250	
⚠		833	EAY62909702	Adapters	DA-50F25-AAAA 100~240Vac 25Vdc	
		835	AAA77508402	Accessory Assembly	SPK SP11RA/SP9RA/SP8RA Wallmou	
		836	AGG75620751	Packing Assembly	LAS550H silver new screw + bag	
		900	AKB76038001	Remote Controller Assembly	RAV21 Global_Hansung 21y(L-con	

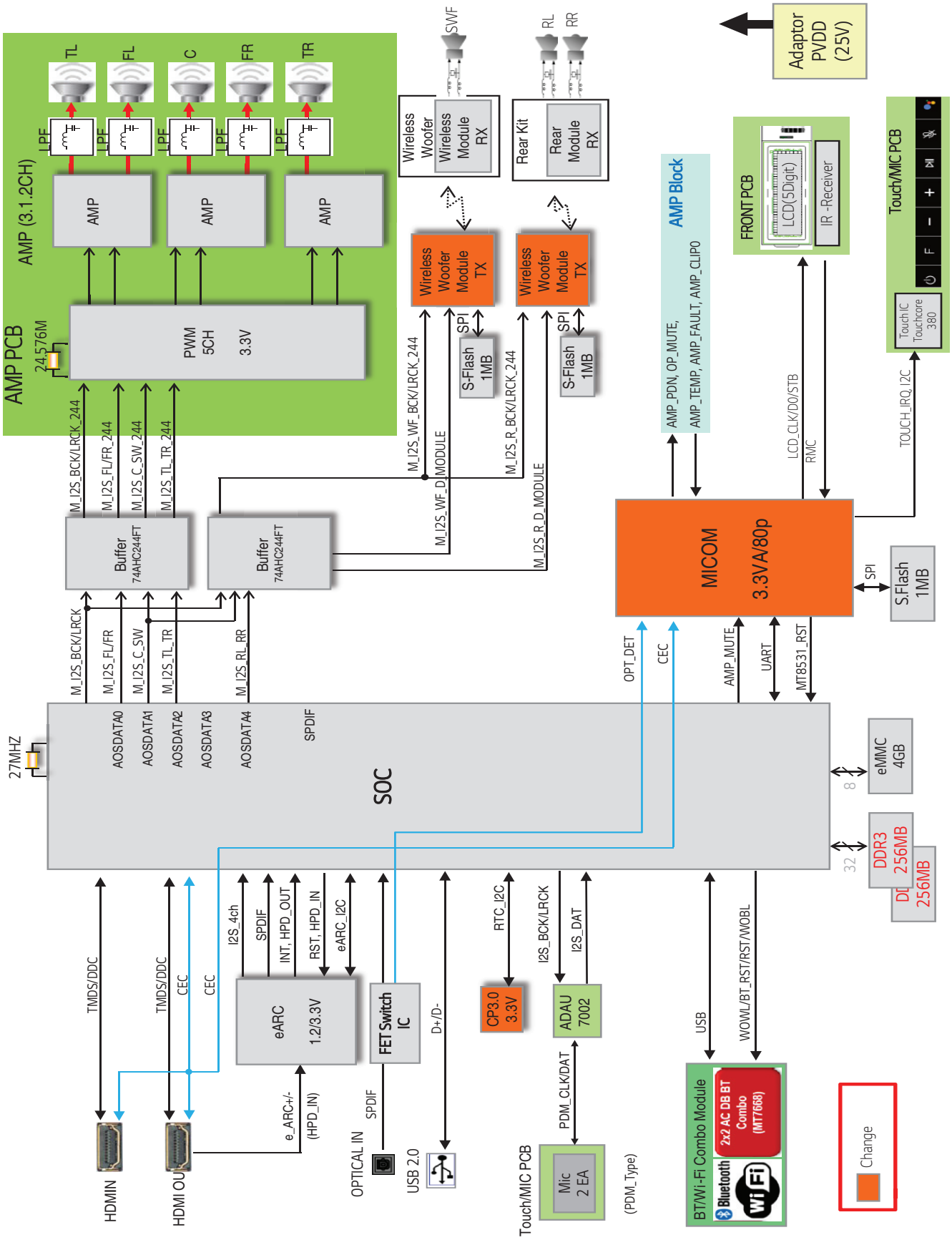
SECTION 3
ELECTRICAL

CONTENTS

WIRING DIAGRAM



BLOCK DIAGRAM



ONE POINT REPAIR GUIDE

1. NO BOOTING WHEN YOU TURN THE UNIT ON, NO MESSAGE OR “HELLO” ON FRONT PANEL

When you turn on your set, no message on the front panel, and LED doesn’t work.

1-1. IC604 System 12 VA (No 12 VA)

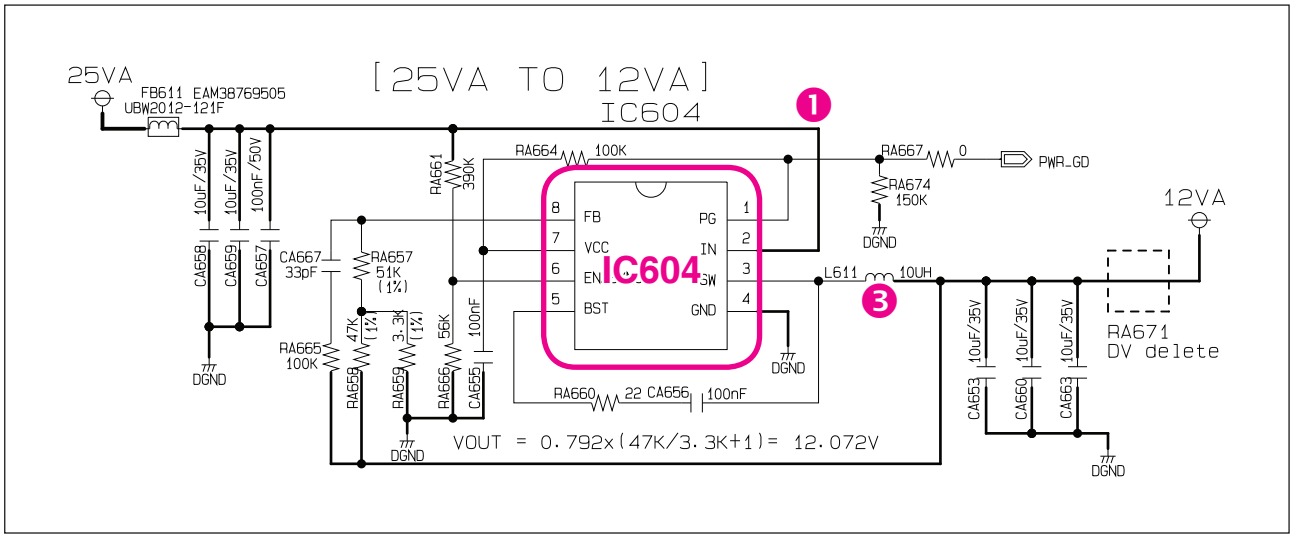
1-1-1. Solution

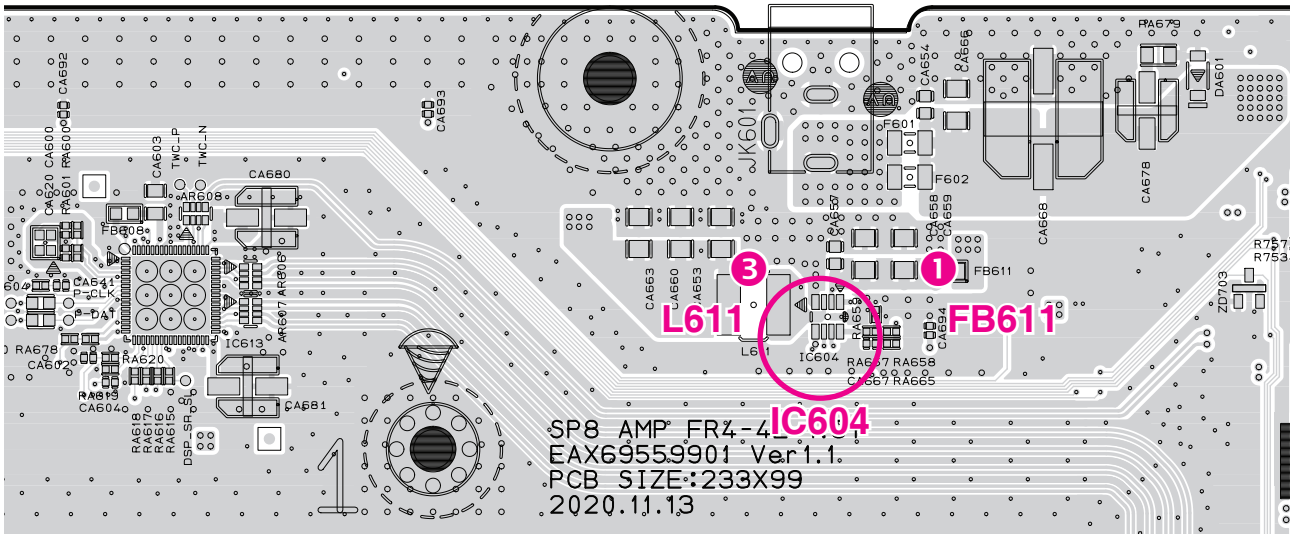
Replace AMP board.

1-1-2. How to troubleshoot (Countermeasure)

1) Please check 25 VA of IC604 pin2(VIN).
2) If 25 VA is abnormal, please check adapter.
3) If 25 VA is OK, but 12 VA is abnormal pin3 of IC604 (VOUT), replace AMP board.

1-1-3. Service hint (Any picture / Remark)





< AMP board top view >

ONE POINT REPAIR GUIDE

NO BOOTING WHEN YOU TURN THE UNIT ON, NO MESSAGE OR “HELLO” ON FRONT PANEL

When you turn on your set, no message on the front panel, and LED doesn’t work.

1-2. IC303 System 3.3 VA (No 3.3 VA)

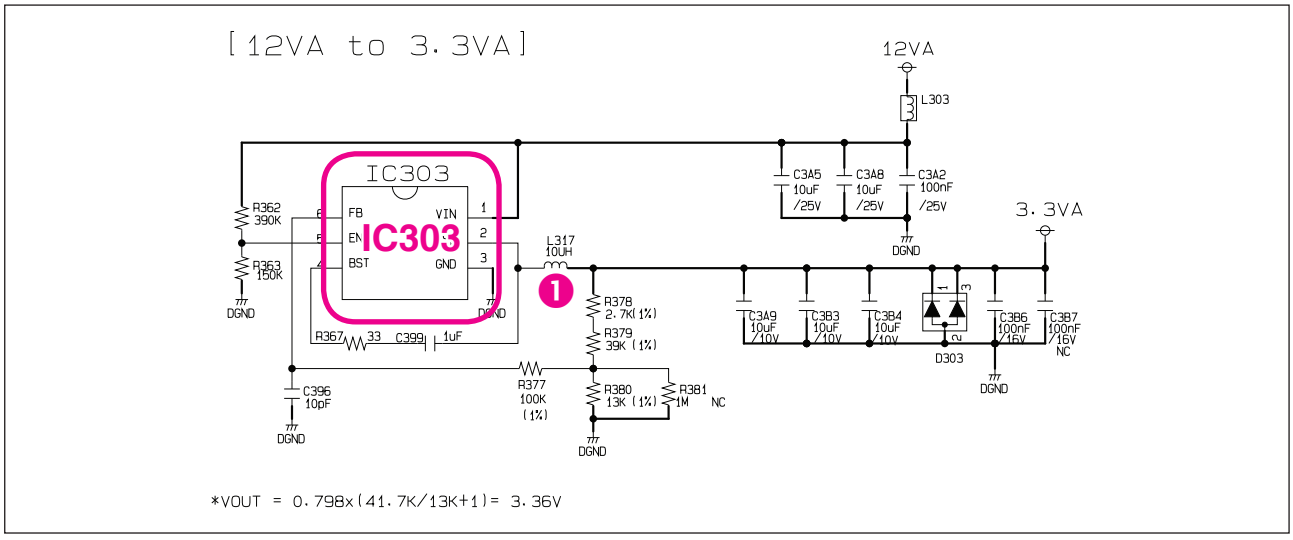
1-2-1. Solution

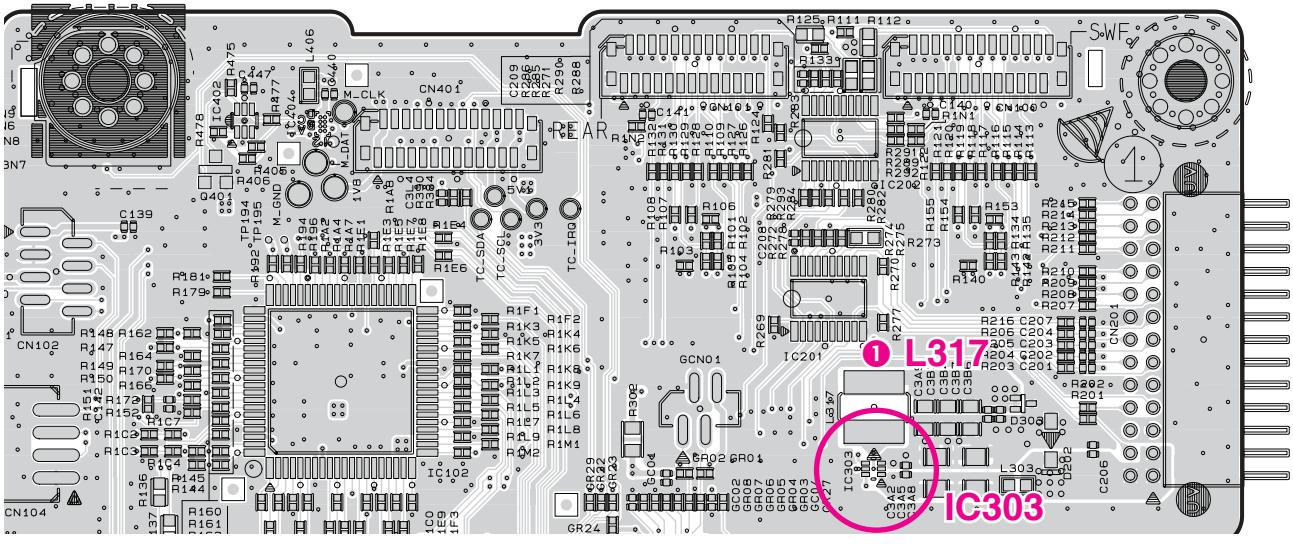
Replace MAIN / FRONT board.

1-2-2. How to troubleshoot (Countermeasure)

1) Please check 3.3 VA of IC303 pin2.
2) If 3.3 VA is abnormal, replace MAIN board.
3) If 3.3 VA is OK, replace FRONT board.

1-2-3. Service hint (Any picture / Remark)





< MAIN board top view >

ONE POINT REPAIR GUIDE

NO BOOTING WHEN YOU TURN THE UNIT ON, NO MESSAGE OR “HELLO” ON FRONT PANEL

When you turn on your set, no message on the front panel, and LED doesn’t work.

1-3. LCD System power VCC_5 V, 3.3 VA (No 5 V, 3.3 VA)

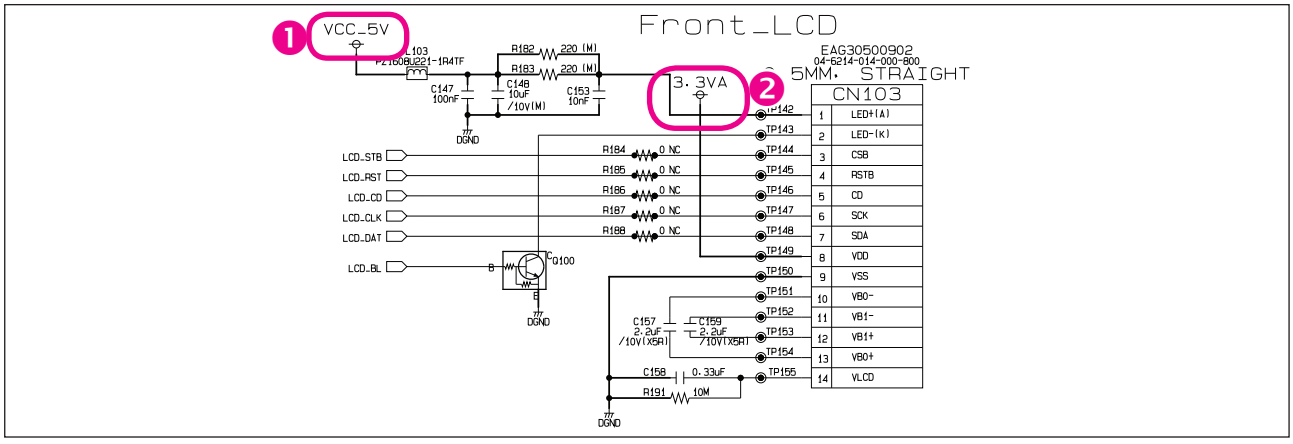
1-3-1. Solution

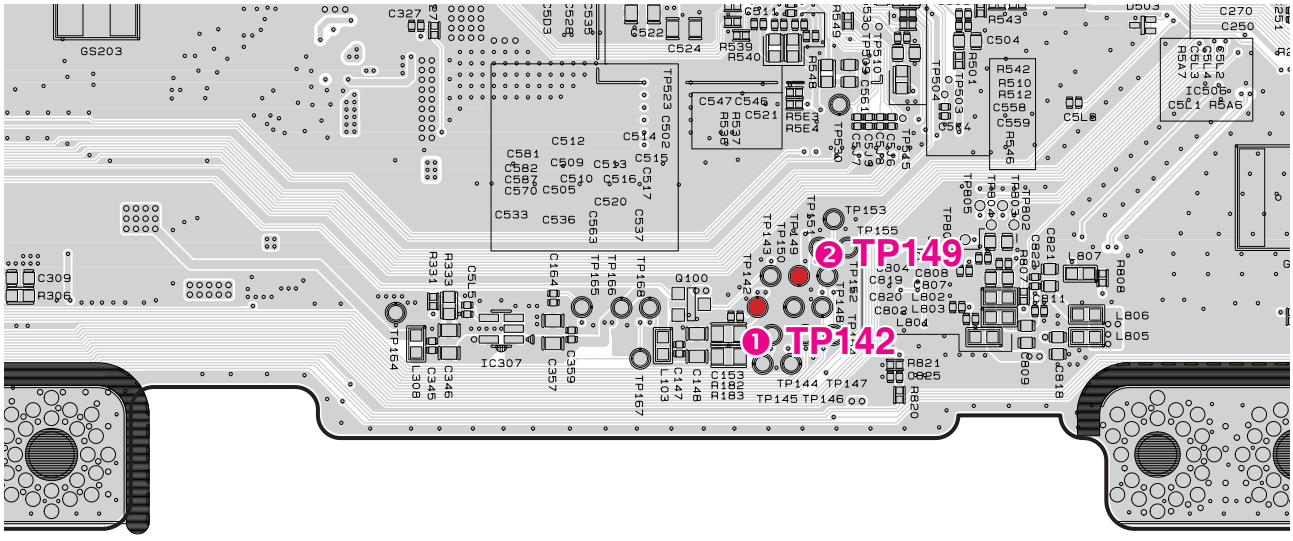
Replace MAIN / FRONT board.

1-3-2. How to troubleshoot (Countermeasure)

1) Please check VCC_5V at TP142.
  1-a) If VCC_5V is abnormal, replace MAIN board.
  1-b) If VCC_5V is OK, replace FRONT board.
2) Please check VCC_5V at TP149.
  1-a) If 3.3 VA is abnormal, replace MAIN board.
  1-b) If 3.3 VA is OK, replace FRONT board.

1-3-3. Service hint (Any picture / Remark)





< MAIN board bottom view >

ONE POINT REPAIR GUIDE

2. NO SOUND

2-1. BLUETOOTH

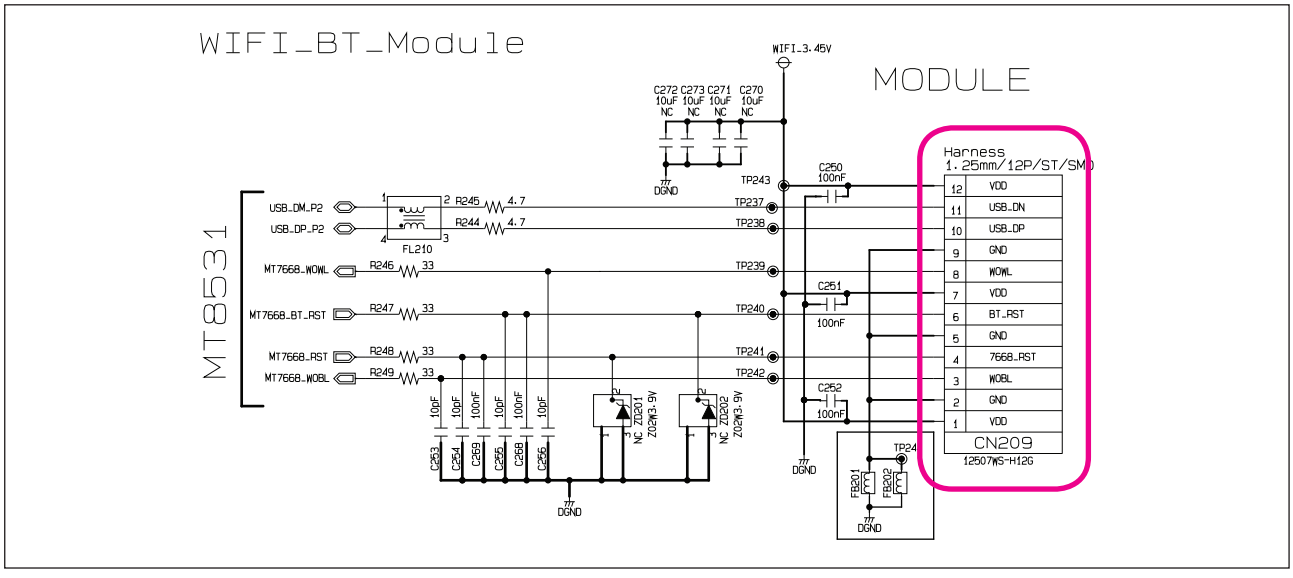
2-1-1. Solution

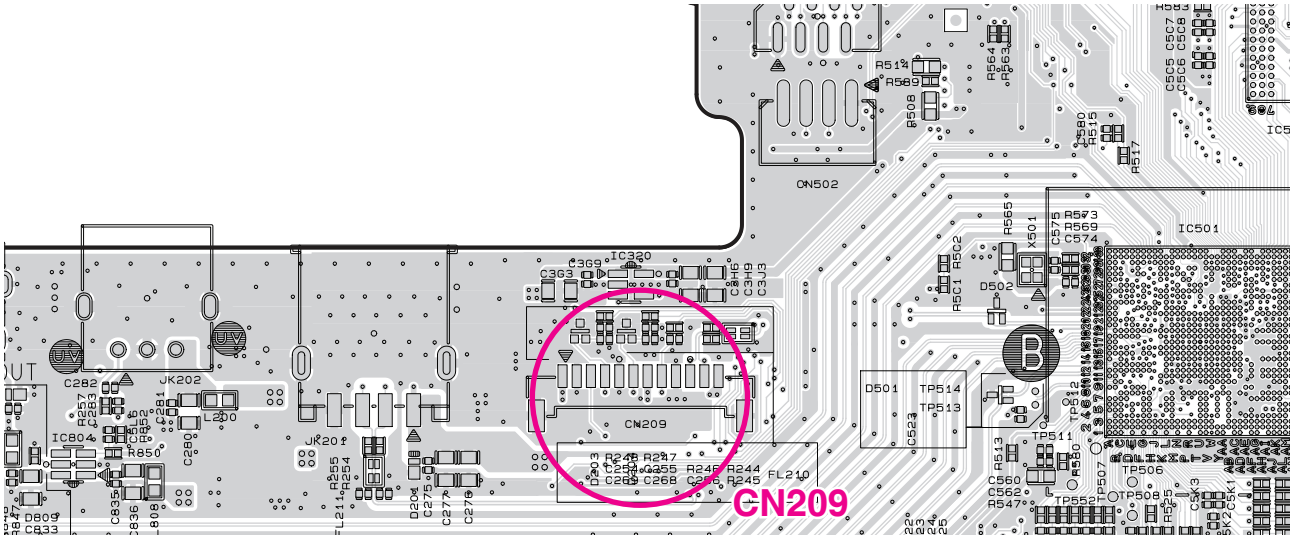
Replace Bluetooth module/ MAIN board.

2-1-2. How to troubleshoot (Countermeasure)

1) Please check status of Wi-Fi / Bluetooth cable connection. (at CN209 and module)
2) Please check WIFI_3.45 V (at pin1, 7, 12 of CN209).
   If Wi-Fi_3.45 V is OK, please check USB_DM_P1, USB_DP_P1 (pin10, 11).
   If no signal, please replace MAIN board.

2-1-3. Service hint (Any picture / Remark)





< MAIN board top view >

ONE POINT REPAIR GUIDE

NO SOUND

2-2. OPTICAL

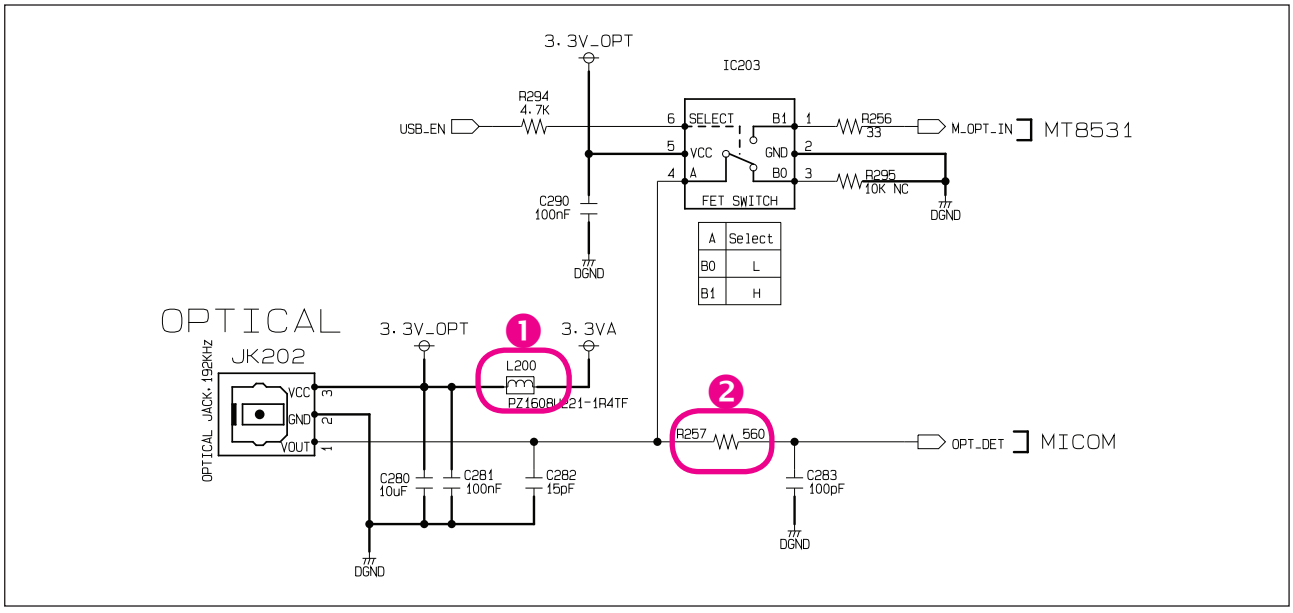
2-2-1. Solution

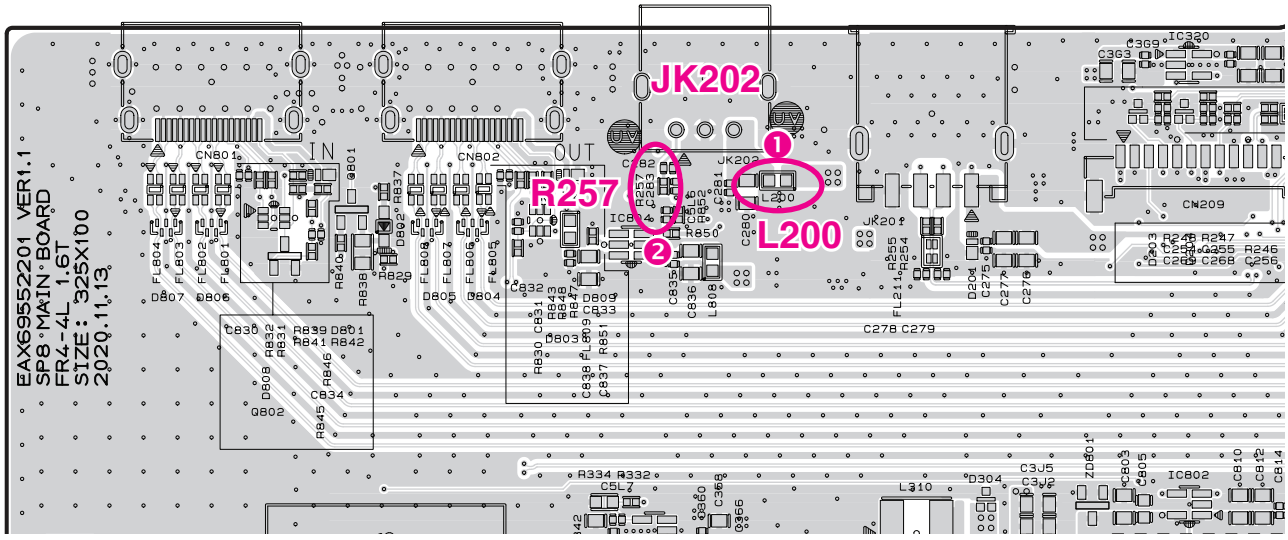
Replace MAIN board.

2-2-2. How to troubleshoot (Countermeasure)

1) Please check 3.3 VA at L200 of JK202.
2) If 3.3 VA is OK, please check OPT_IN signal(R257) when optical mode.
3) If signal abnormal, replace MAIN board.

2-2-3. Service hint (Any picture / Remark)





< MAIN board top view >

ONE POINT REPAIR GUIDE

NO SOUND

2-3. HDMI

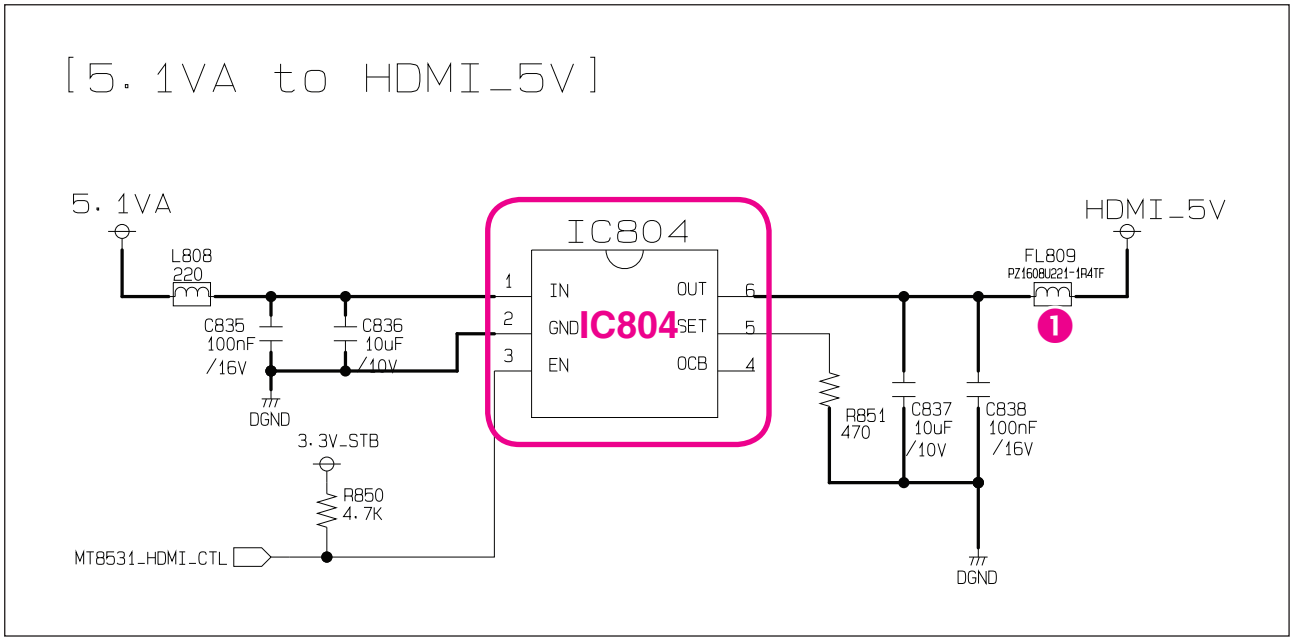
2-3-1. Solution

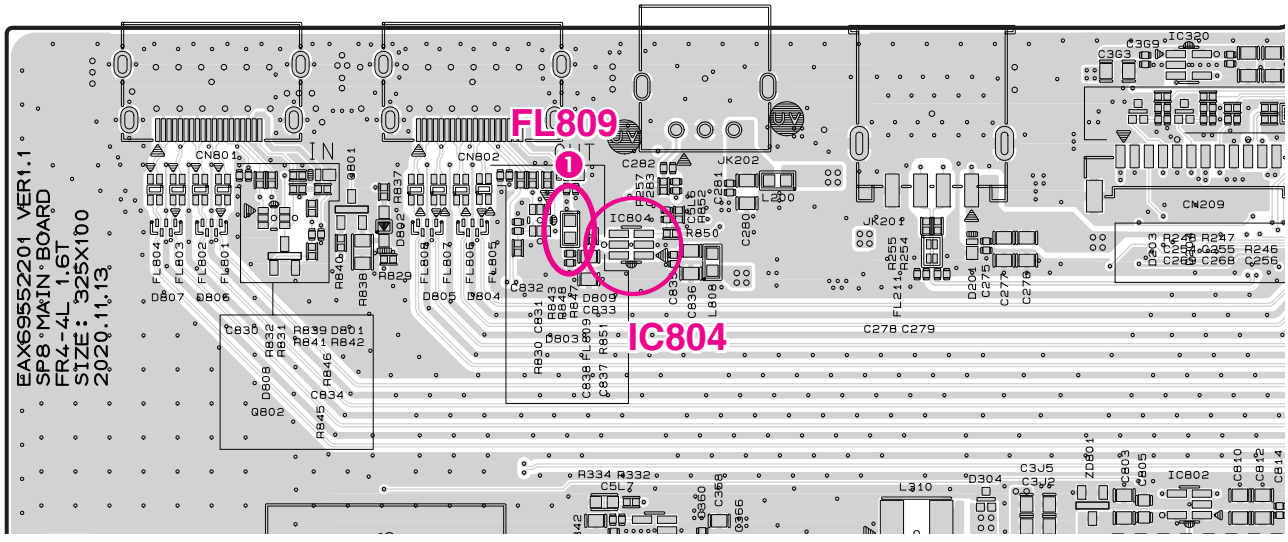
Replace MAIN board.

2-3-2. How to troubleshoot (Countermeasure)

1) Please check soldering status of HDMI jack and check HDMI_5 V at IC804 pin6.
2) If soldering status and HDMI_5 V(FL809) are abnormal, replace MAIN board.

2-3-3. Service hint (Any picture / Remark)





< MAIN board top view >

ONE POINT REPAIR GUIDE

NO SOUND

2-4. USB

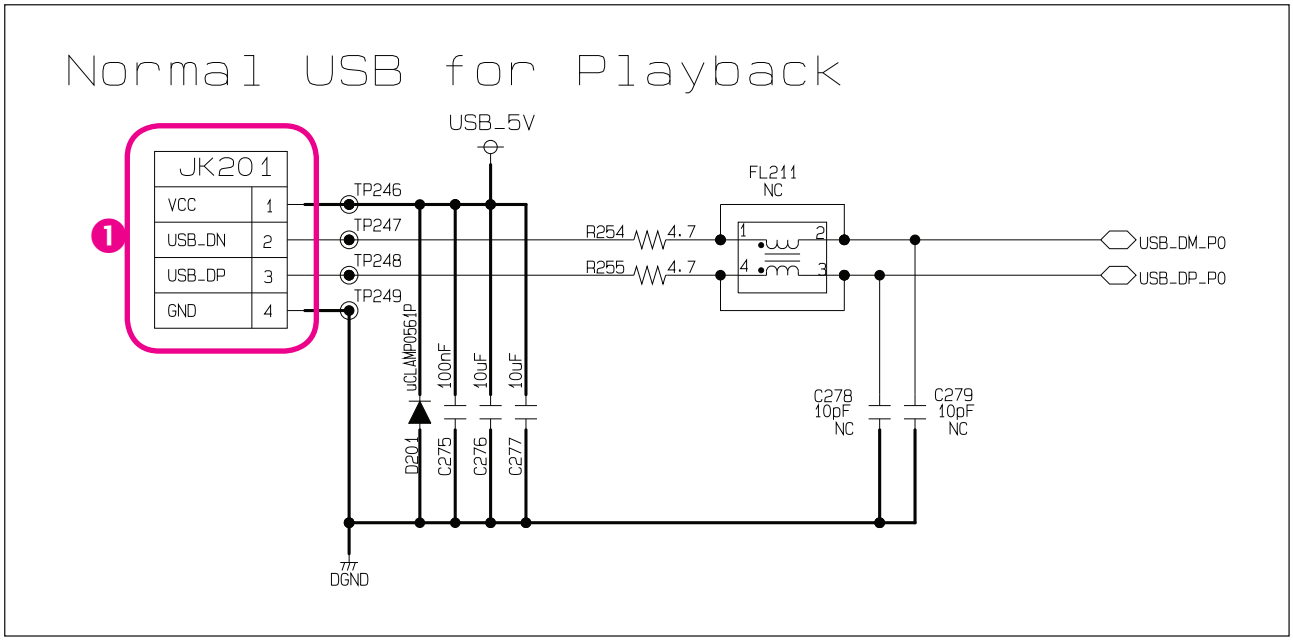
2-4-1. Solution

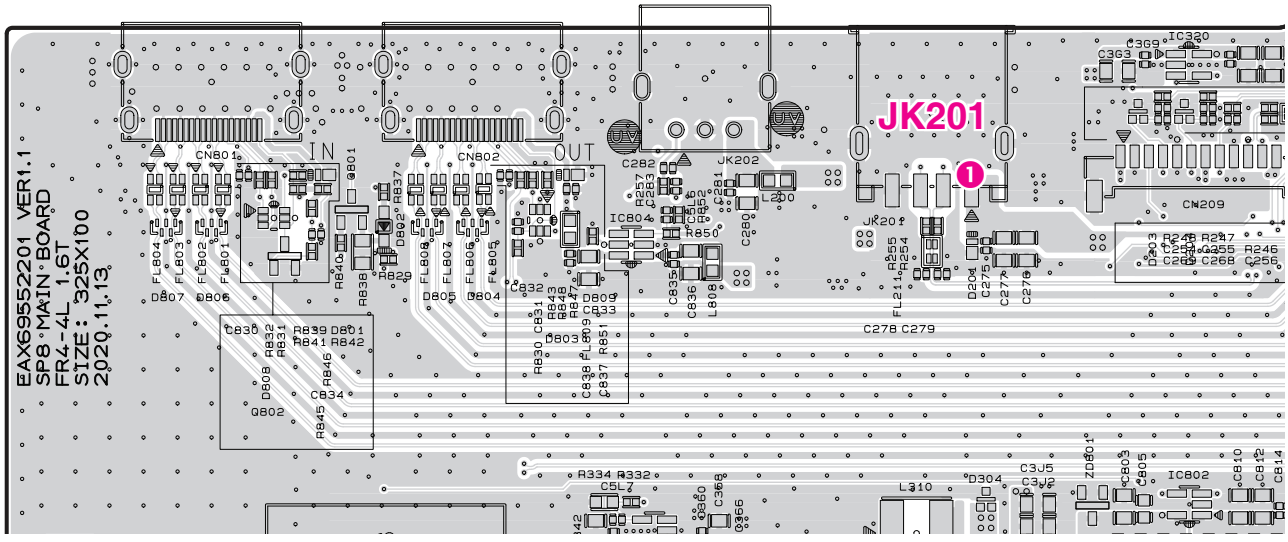
Replace MAIN board.

2-4-2. How to troubleshoot (Countermeasure)

1) Please check soldering status of USB_5 V at JK201 pin1.
2) If soldering status and USB_5 V are abnormal, replace MAIN board.

2-4-3. Service hint (Any picture / Remark)





< MAIN board top view >

ONE POINT REPAIR GUIDE

3. PROTECTION ERROR

No display or No Sound.

3-1. D(DC) PROTECTION

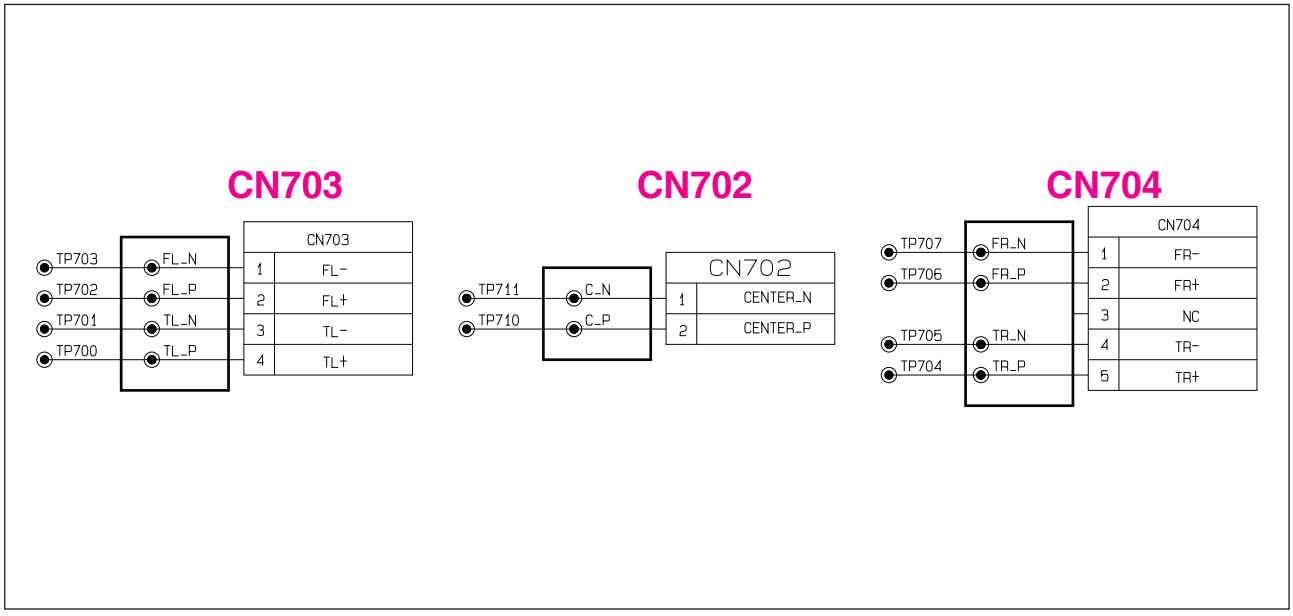
3-1-1. Solution

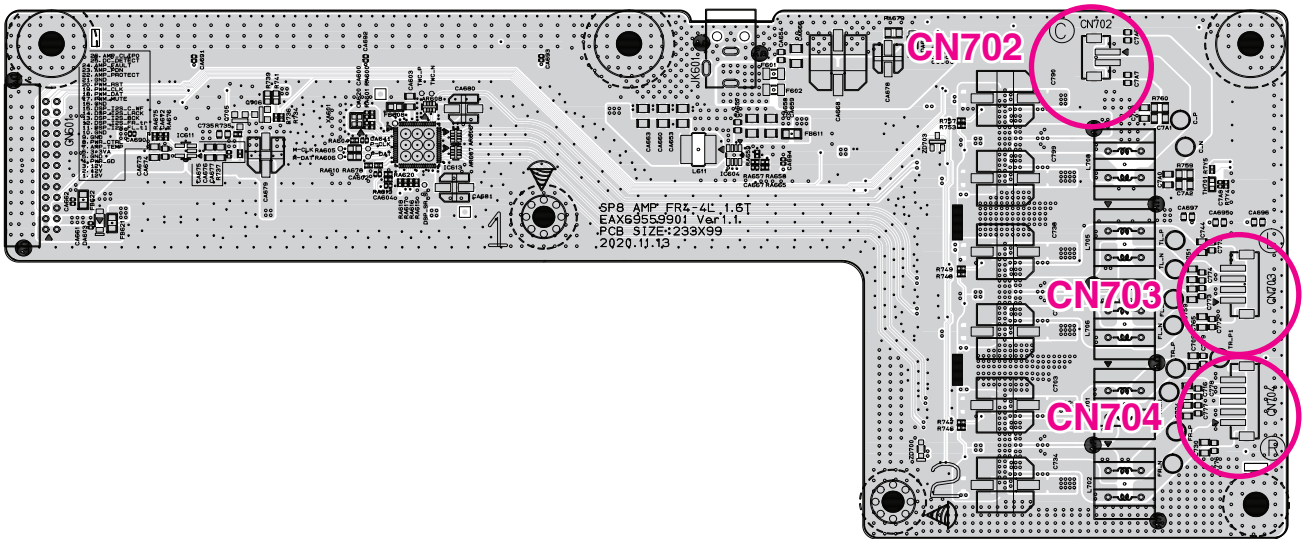
Replace AMP board.

3-1-2. How to troubleshoot (Countermeasure)

1) Check DC voltage of speaker out FL+/- & Top L+/- (CN703 pin1, 2, 3, 4), C+/- (CN702 pin1,2), FR+/- & TOP R+/- (CN704 pin1, 2, 4, 5).

3-1-3. Service hint (Any picture / Remark)





< AMP board top view >

ONE POINT REPAIR GUIDE

PROTECTION ERROR

No display or No Sound.

3-2. S(SHUT DOWN) PROTECTION

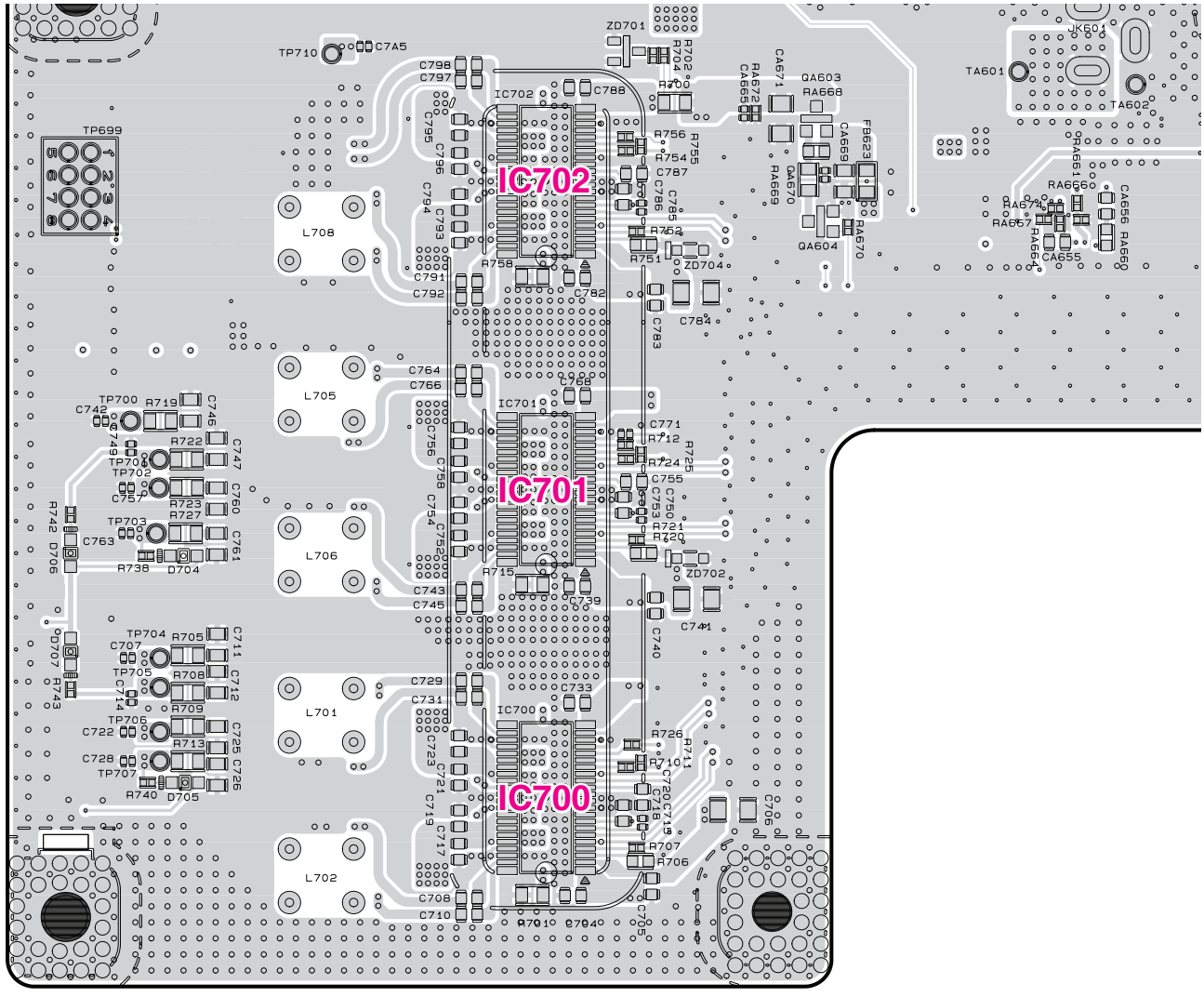
3-2-1. Solution

Replace AMP board.

3-2-2. How to troubleshoot (Countermeasure)

1) Check PVDD voltage (25 V) of IC700, IC701, IC702 pin29, 30, 31, 36, 37, 38.
   - If PVDD voltage has 8.5 V under, refer to STEP 1-1.
2) Check GVDD, VDD voltage (12 V) of IC700, IC701, IC702 pin1, 2, 22.
   - If GVDD, VDD voltage has 8.5 V under, refer to STEP 1-1.
3) Check impedance (4 Ω) of speaker unit.
   - If impedance of speaker unit has 1 Ω under, replace speaker unit.
4) If check point 1), 2), 3) is OK, replace AMP board.

3-2-3. Service hint (Any picture / Remark)



< AMP board bottom view >

ONE POINT REPAIR GUIDE

PROTECTION ERROR

No display or No Sound.

3-3. B(BURNT) PROTECTION

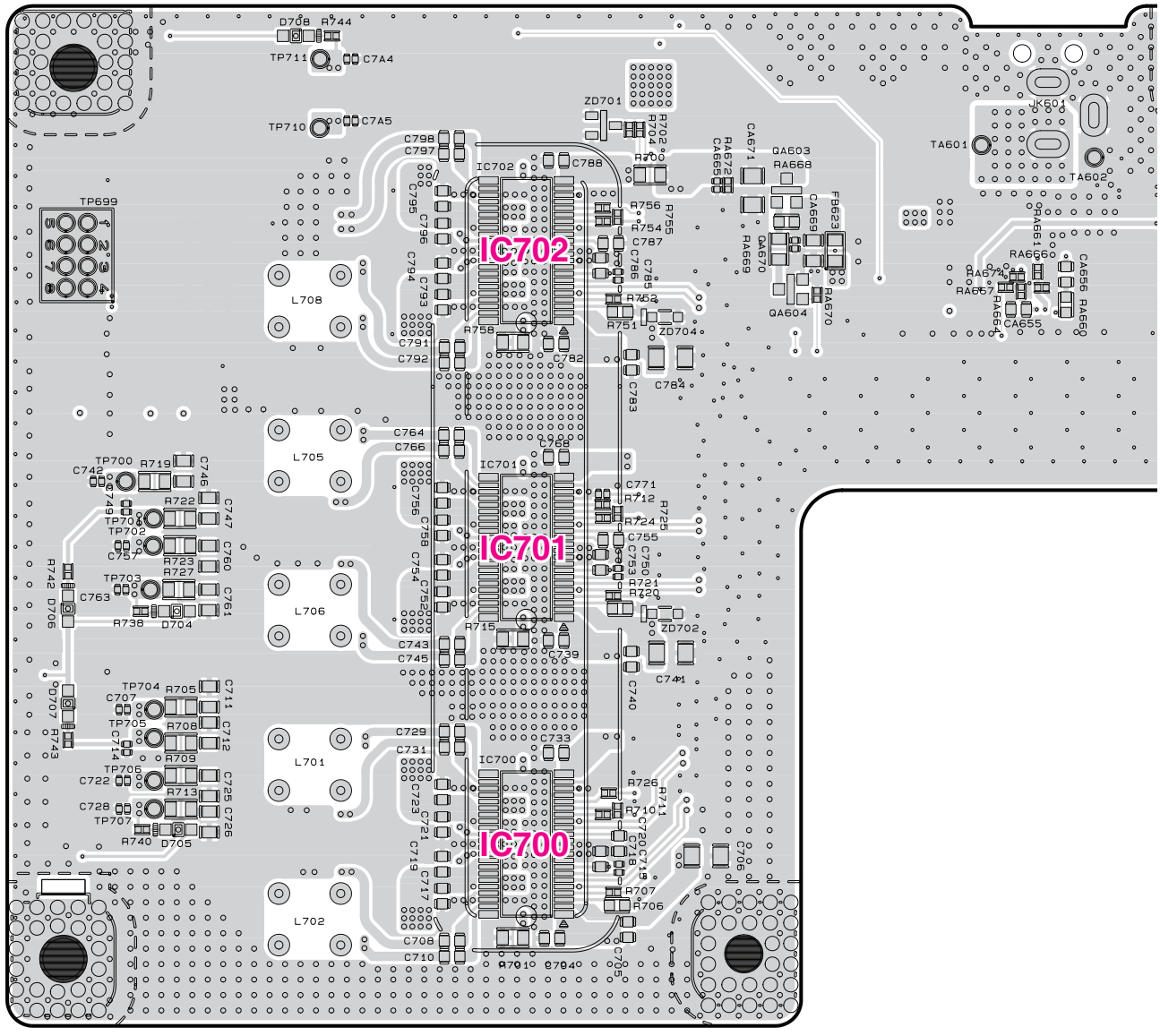
3-3-1. Solution

Replace AMP board.

3-3-2. How to troubleshoot (Countermeasure)

1) Check GVDD, VDD voltage (12 V) of IC700, IC701, IC702 pin1, 2, 22.
   - If GVDD, VDD voltage has 8.5 V under, refer to STEP 1-1.
2) If 12 V is OK, replace AMP board.

3-3-3. Service hint (Any picture / Remark)



< AMP board bottom view >

WAVEFORMS OF MAJOR CHECK POINT

1. CRYSTAL

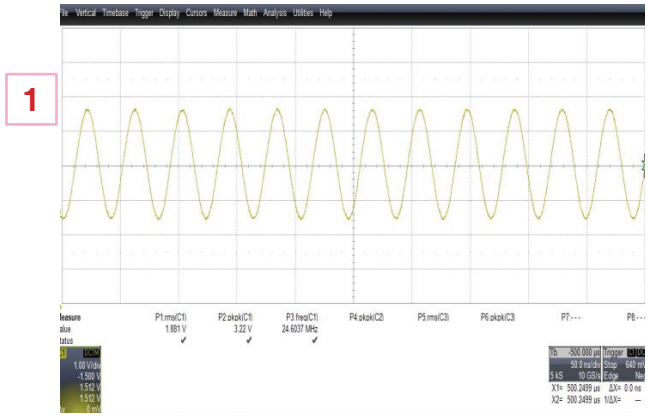


Fig 1-1. Crystal
XA601 (24.576 MHz)

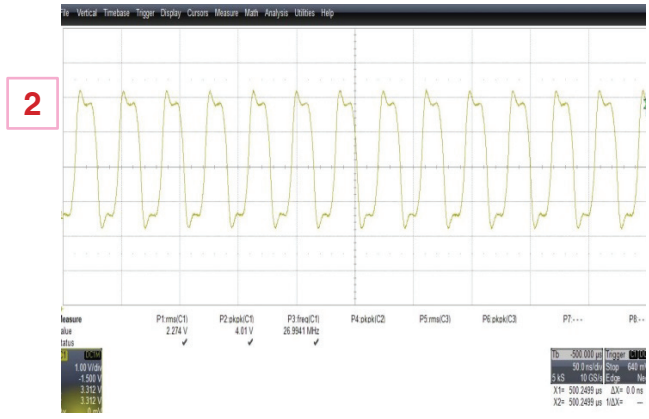
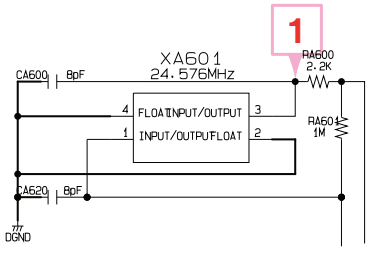
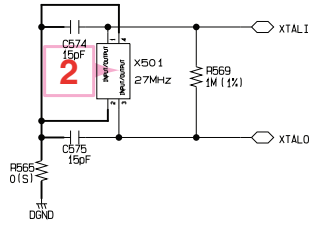


Fig 1-2. Crystal
X501 (27 MHz)





2. REMOTE CONTROL

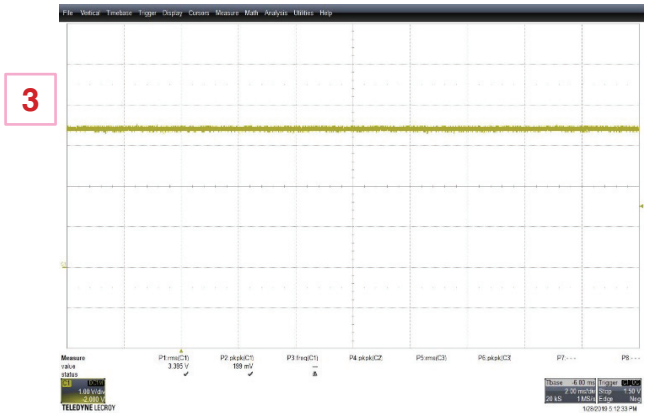
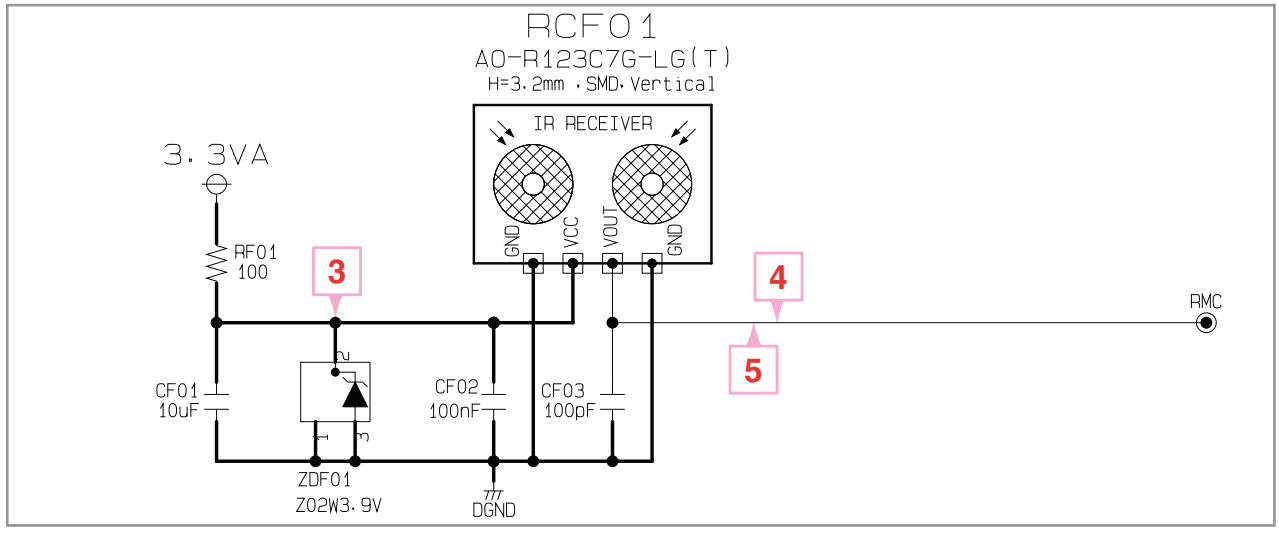


Fig 2-1. Remote Control Input Voltage

Fig 2-2. Remote Control High Timing

Fig 2-3. Remote Control Low Timing

Item	Measured	Spec.
Input Level	3.3 V	IR Receiver Spec: 2.7 ~ 5.5 V
“ Low” Timing	4.56 ms	4.0 ms ~ 7.0 ms
“ High” Timing	4.45 ms	3.9 ms ~ 5.5 ms



3. OPTICAL

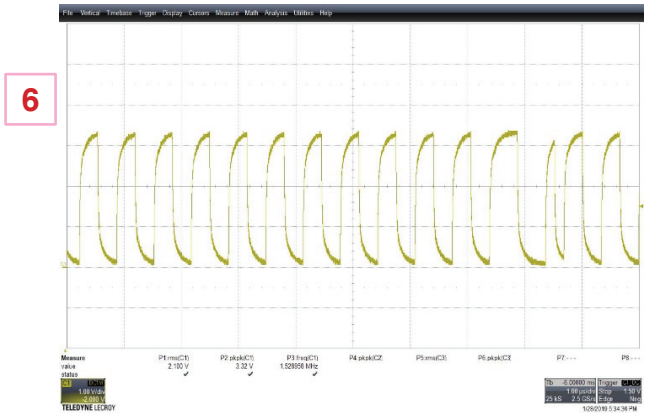


Fig 3-1. Optical
Opt In

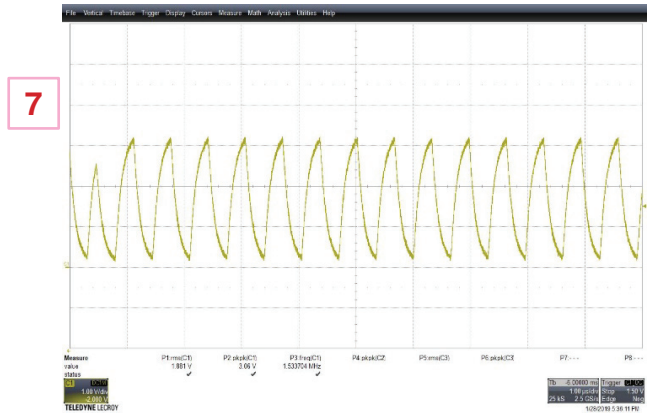
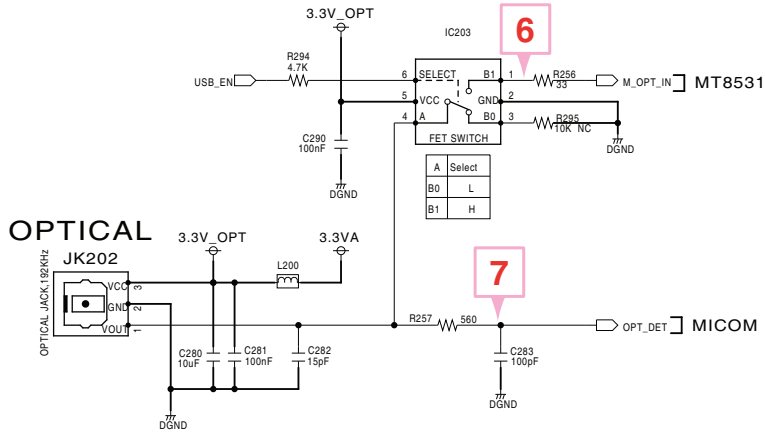


Fig 3-2. Optical
Opt Det



CIRCUIT VOLTAGE CHART

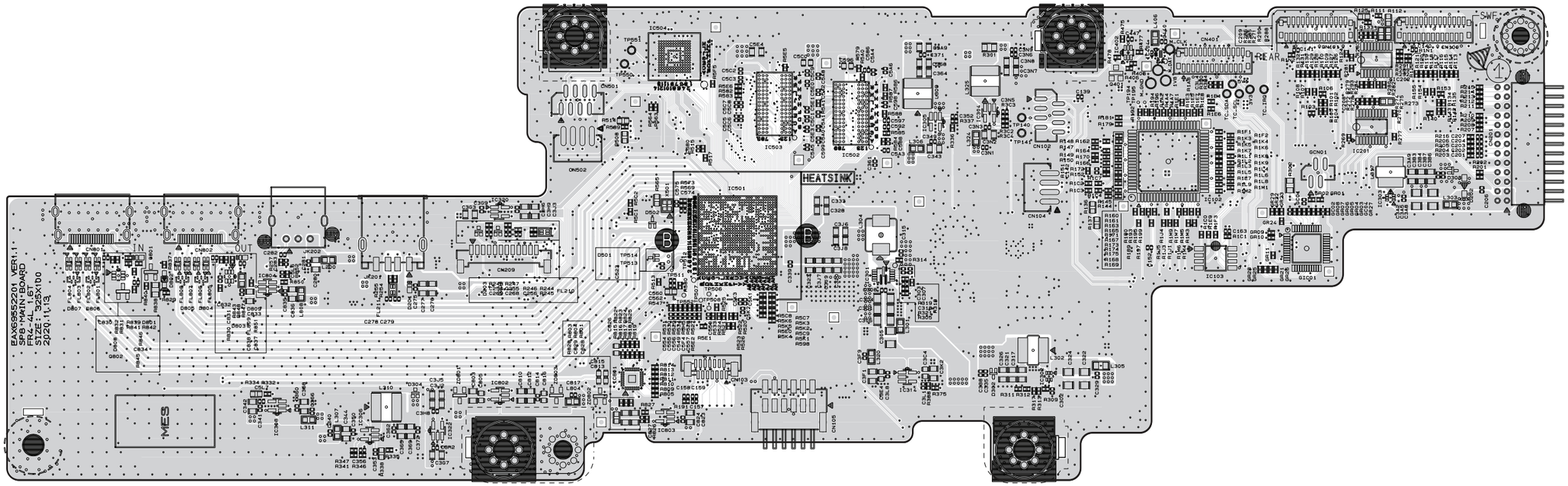
No.	Symbol	Spec (V, mW)	Measured voltage (V)
1	IC100, IC101, IC103 IC,Serial Flash Memory (EAN64309702)	VCC: -0.6 to 4.2V	VCC: 3.404
2	IC102 IC,Microcontrollers (EAN66340601)	VDD: -0.3 to 6.5V AVDD: -0.3 to 5.5V	VDD: 3.365 AVDD: 3.363
3	IC201, IC202 IC,CMOS (EAN61130301)	VCC: 2.0 to 5.5V	VCC: 3.405
4	IC203 IC,Analog Switch (EAN38256201)	VCC: -0.5 to 7V	VCC: 3.353
5	IC301 IC,DC,DC Converter (EAN64588401)	VIN: 4.5V to 17V VOUT: ADJ 1V	VIN: 12.13 VOUT: 1.04
6	IC302 IC,DC,DC Converter (EAN64387401)	VIN: 4.2V to 17V VOUT: ADJ 5.1	VIN: 12.13 VOUT: 5.206
7	IC303 IC,DC,DC Converter (EAN64387401)	VIN: 4.2V to 17V VOUT: ADJ 3.3V	VIN: 12.14 VOUT: 3.407V
8	IC304 IC,DC,DC Converter (EAN65626001)	VIN: 2.5V to 5.5V VOUT: ADJ 1.8V	VIN: 5.196 VOUT: 1.833
9	IC305 IC,DC,DC Converter (EAN65626001)	VIN: 2.5V to 5.5V VOUT: ADJ 1.5V	VIN: 5.197 VOUT: 1.53
10	IC306 IC,DC,DC Converter (EAN65626001)	VIN: 2.5V to 5.5V VOUT: ADJ 3.45V	VIN: 5.201 VOUT: 3.516
11	IC307 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 5V	VIN: 5.192 VOUT: 5.191
12	IC308 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 5V	VIN: 5.204 VOUT: 5.192
13	IC314 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.401 VOUT: 3.399
14	IC315 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.364 VOUT: 3.354
15	IC316 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.408 VOUT: 3.405
16	IC317 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.415 VOUT: 3.398
17	IC318 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.41 VOUT: 3.403
18	IC320 IC,LDO Voltage Regulator (EAN64395201)	VIN: 2.3 to 6V VOUT: ADJ 1.8V	VIN: 3.398 VOUT: 1.843
19	IC322 IC,LDO Voltage Regulator (EAN64395201)	VIN: 2.3 to 6V VOUT: ADJ 1.05V	VIN: 3.402 VOUT: 1.052

No.	Symbol	Spec (V, mW)	Measured voltage (V)
20	IC404 IC,Signal Bridge (EAN64389101)	IOVDD: 1.62 to 3.6	IOVDD: 1.823
21	IC501 IC,Digital Signal Processors (EAN65999301)	VCC33IO: -0.3 to 3.46V VCC18IO: -0.3 to 1.89 DVDD_CORE: -0.3 to 1.05 DDRV (DDR3) : -0.4 to 1.57 AVDD33: -0.3 to 3.45 AVDD18: -0.3 to 1.89 AVDD105: -0.3 to 1.10	VCC33IO: 3.380 VCC18IO: 1.824 DVDD_CORE: 1.036 DDRV (DDR3) :1.532 AVDD33: 3.347 AVDD18: 1.844 AVDD105: 1.047
22	IC502, IC503 IC,DDR3 SDRAM (EAN66249501)	VDD: -0.4 to 1.975V VDDQ: -0.4 to 1.975V	VDD: 1.544 VDDQ: 1.533
23	IC504 IC,MCP,eMMC (EAN64272902)	VCC: -0.5 to 4.1V (2.7 to 3.6) VCCQ: -0.5 to 4.1V (1.7 to 1.95V)	VCC: 3.407 VCCQ: 1.829
24	IC506 IC,Bridge Driver (EAN64668801)	VCC: -0.3 to 3.8V	VCC: 3.376
25	IC509 (CP chip) IC,I/O Support Chip (EAN66340701)	VCC: 1.71 to 3.6V	VCC: 3.380
26	IC604 IC,DC,DC Converter (EAN64151201)	VIN: 4V to 36V VOUT: ADJ 12V	VIN: 25.35 VOUT: 12.25
27	IC611 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.387 VOUT: 3.384
28	IC613 IC,Sound/Audio Processor (EAN62580901)	VDD_IO: -0.5 to 4.6 VDD_CORE: -0.5 to 1.8 VIN33_REG1: -0.5 to 4.6 VIN33_REG2: -0.5 to 4.6 VDD_PLL: -0.5 to 1.8	VDD_IO: 3.366 VDD_CORE: 1.239 VIN33_REG1: 3.361 VIN33_REG2: 3.371 VDD_PLL: 1.247
29	IC700, IC701, IC702 IC,Audio Amplifier (EAN62395902)	VDD: -0.3 to 13.2 GVDD: -0.3 to 13.2 PVDD: -0.3 to 50 DVDD: -0.3 to 4.2	VDD: 11.65 GVDD: 11.39 PVDD: 25.37 DVDD: 3.302
30	IC801 IC,Receiver (EAN66252301)	IOVCC33 : -0.3 to 4V AVCC33 : -0.3 to 4V AVCC12 : -0.3 to 1.5V CVCC12 : -0.3 to 1.5V PVCC12 : -0.3 to 1.5V	IOVCC33 : 3.349 AVCC33 : 3.367 AVCC12 : 1.235 CVCC12 : 1.223 PVCC12 : 1.225
31	IC802 IC,Analog Switch (EAN64407301)	VIN: 2.5 to 5.5V VOUT: ADJ 3.3V	VIN: 3.398 VOUT: 3.396
32	IC803 IC,LDO Voltage Regulator (EAN64395201)	VIN: 2.3 to 6V VOUT: ADJ 1.2V	VIN: 3.362 VOUT: 1.226
33	IC804 IC,Analog Switch (EAN65165901)	VIN: 2.5 to 5.5V VOUT: ADJ 5V	VIN: 5.2 VOUT: 5.193
34	ICK01 IC,Capacitive Touch Sensor (EAN62345001)	VDDIO: -0.5 to 3.6V	VDDIO: 3.352

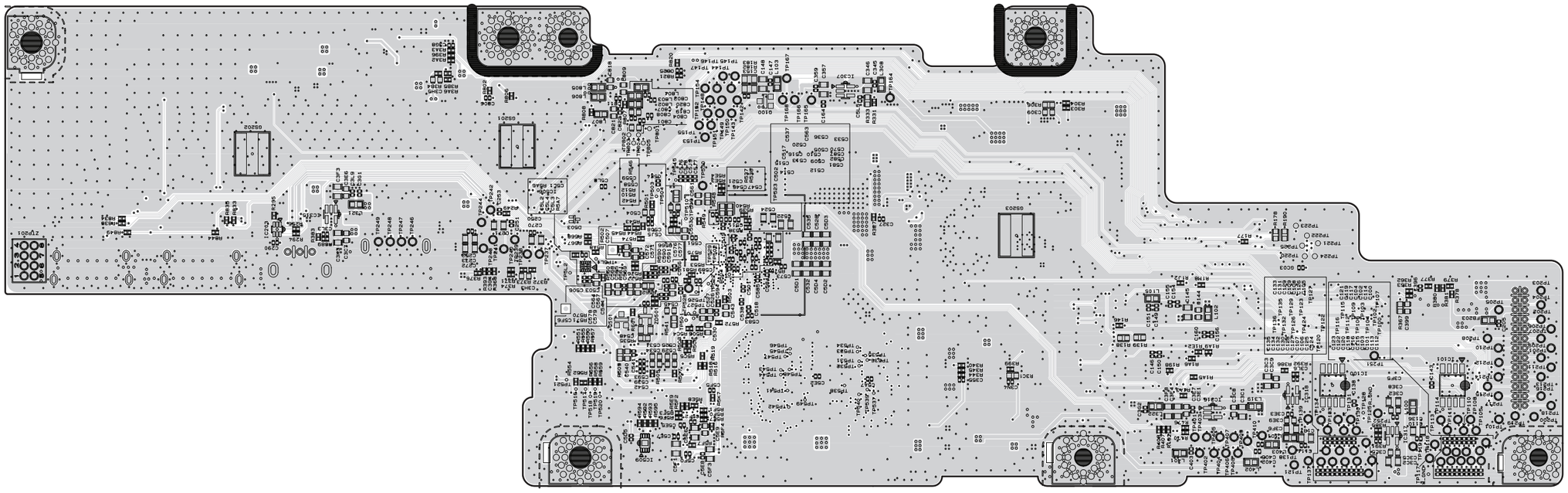
PRINTED CIRCUIT BOARD DIAGRAMS

1. MAIN P. C. BOARD DIAGRAM

(TOP VIEW)

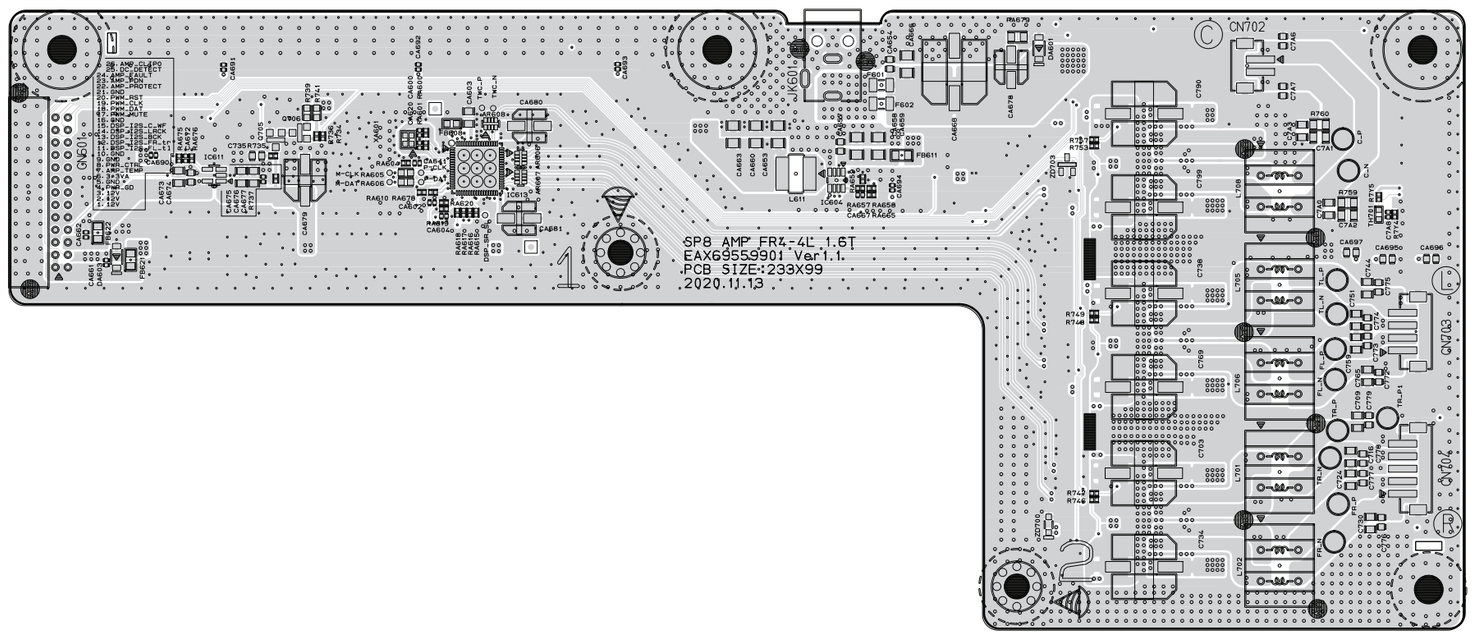


(BOTTOM VIEW)

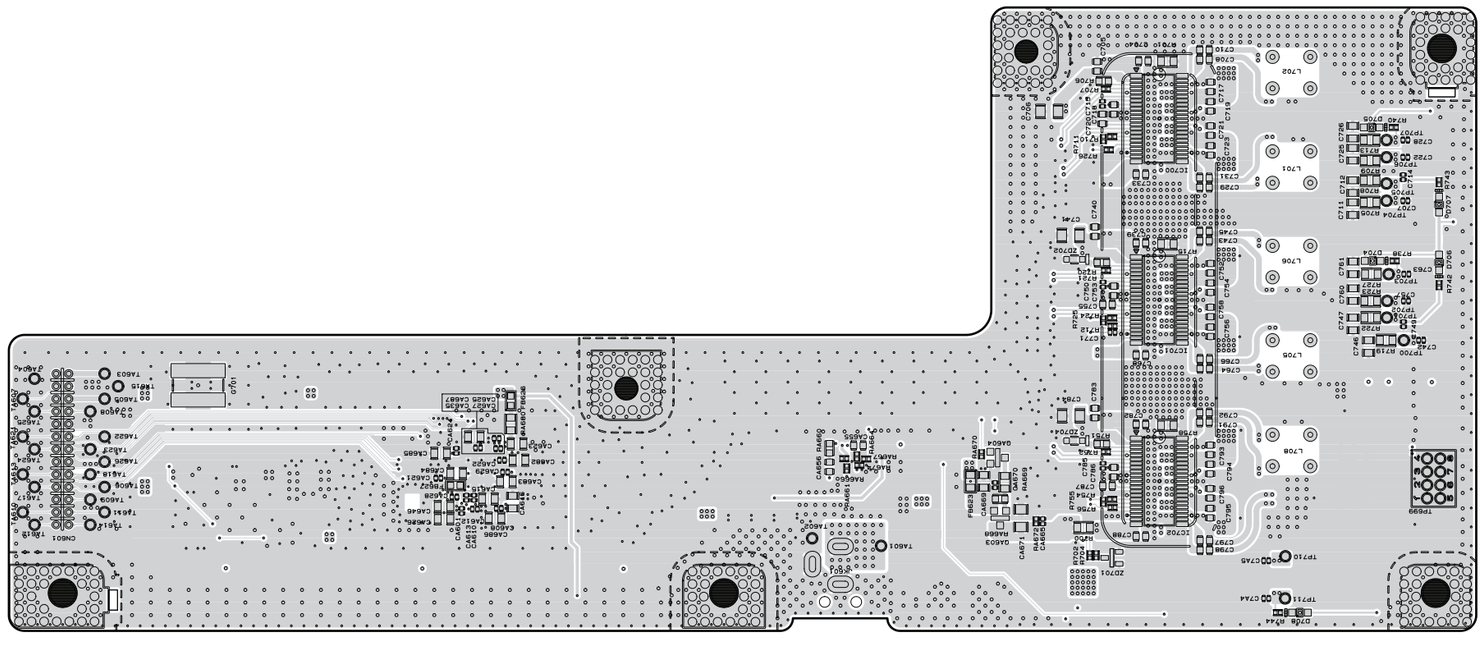


2. AMP P. C. BOARD DIAGRAM

(TOP VIEW)

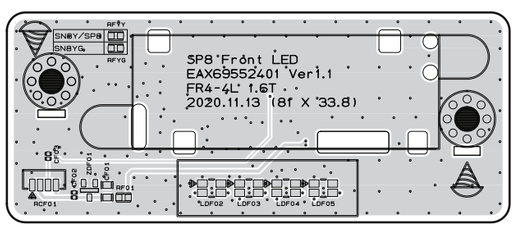


(BOTTOM VIEW)

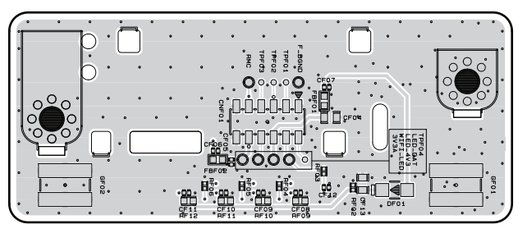


3. FRONT LED P. C. BOARD DIAGRAM

(TOP VIEW)

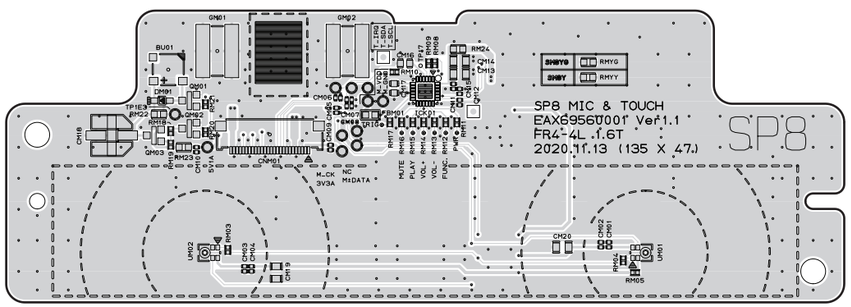


(BOTTOM VIEW)

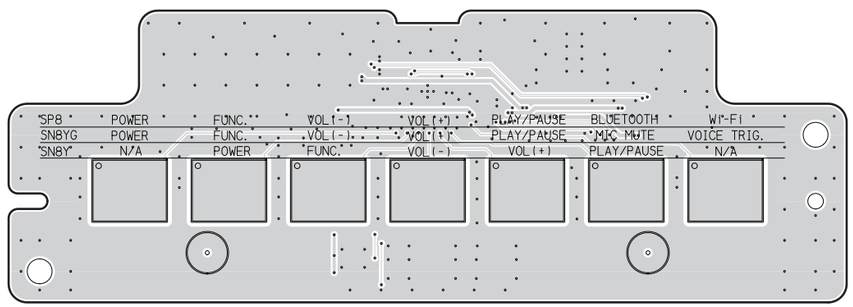


4. MIC & TOUCH P. C. BOARD DIAGRAM

(TOP VIEW)



(BOTTOM VIEW)

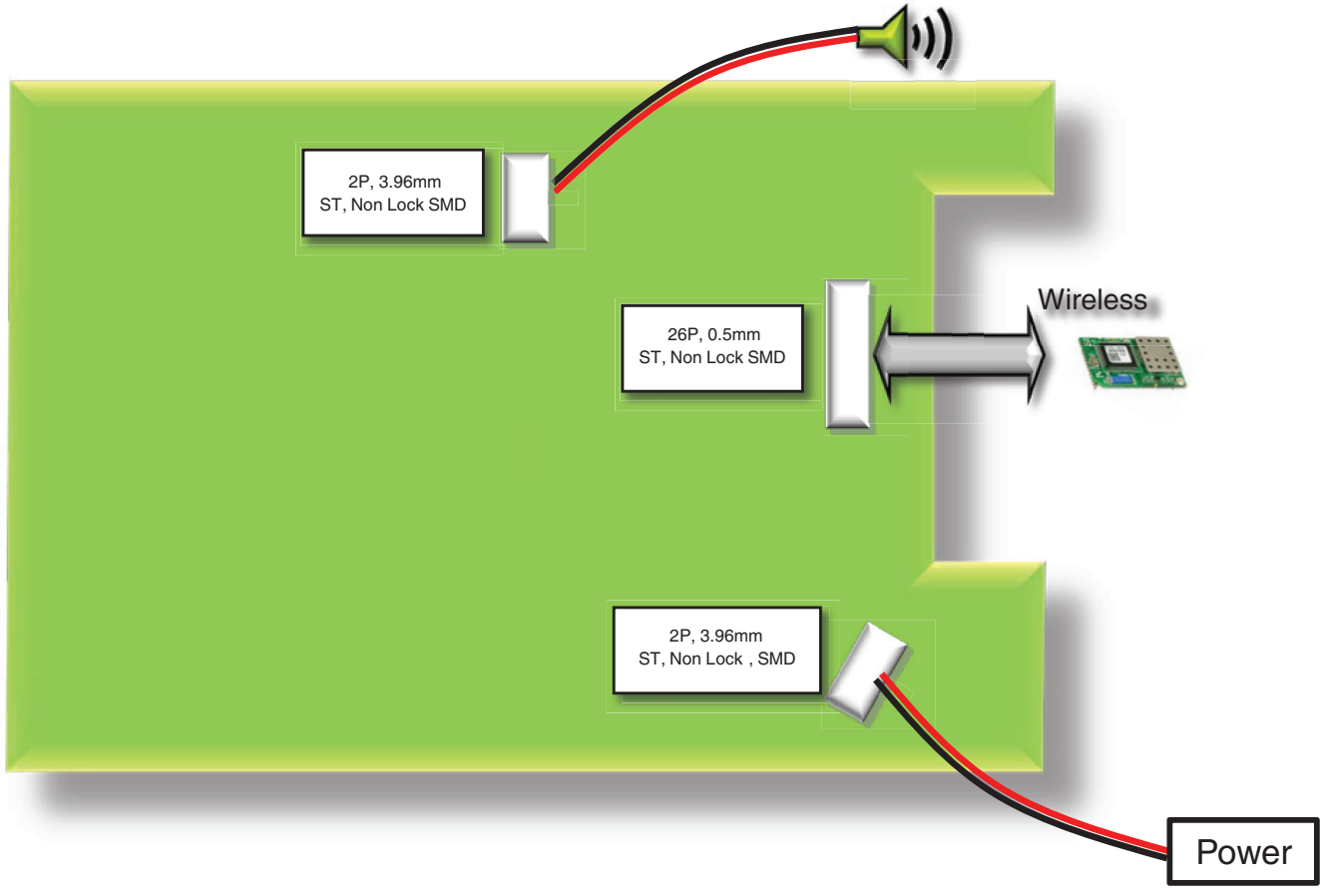


SECTION 4

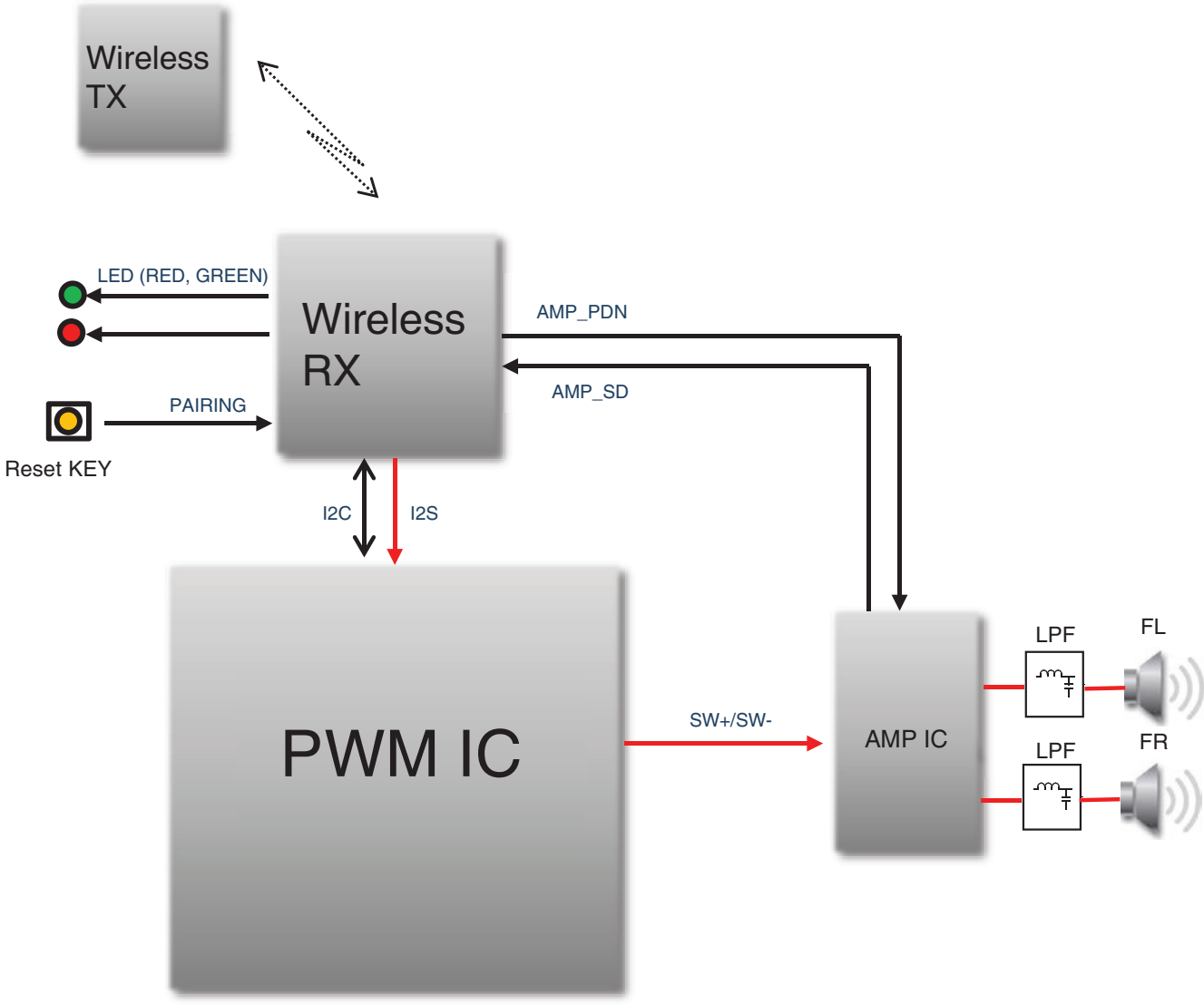
WIRELESS SUBWOOFER PART

CONTENTS

WIRING DIAGRAM



BLOCK DIAGRAM



ONE POINT REPAIR GUIDE

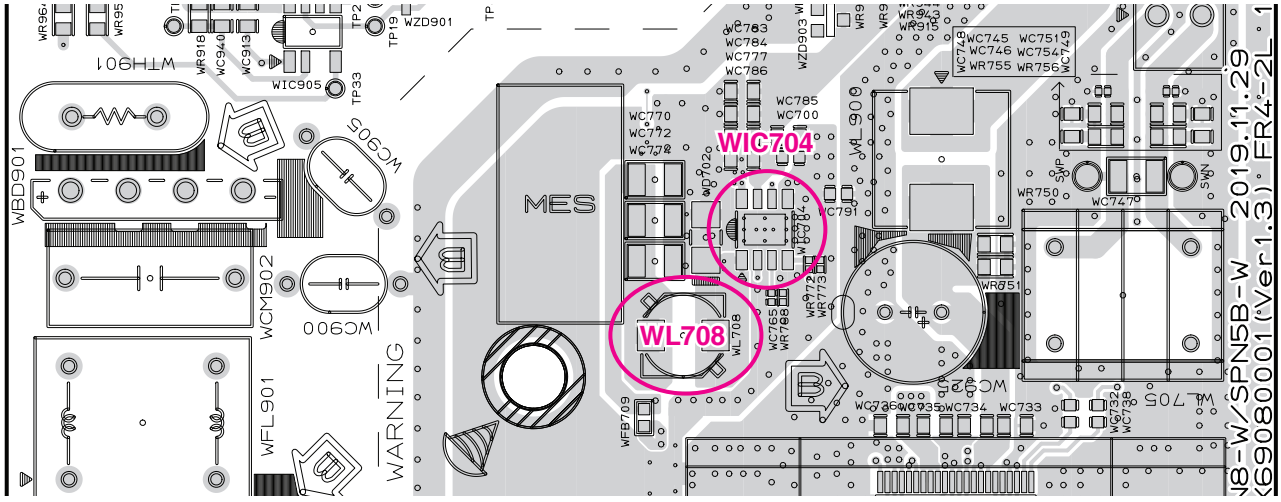
1. POWER ON ERROR

Fundamental power check points.

1-1. 12 V

1) Check 12 V at WL708.
2) If 12 V is not checked at the point, then find PVDD at pin7 of WIC704.
3) 1), 2) is NG ➡ Replace WIC704.

If you can't check PVDD voltage, then replace the PCB board.

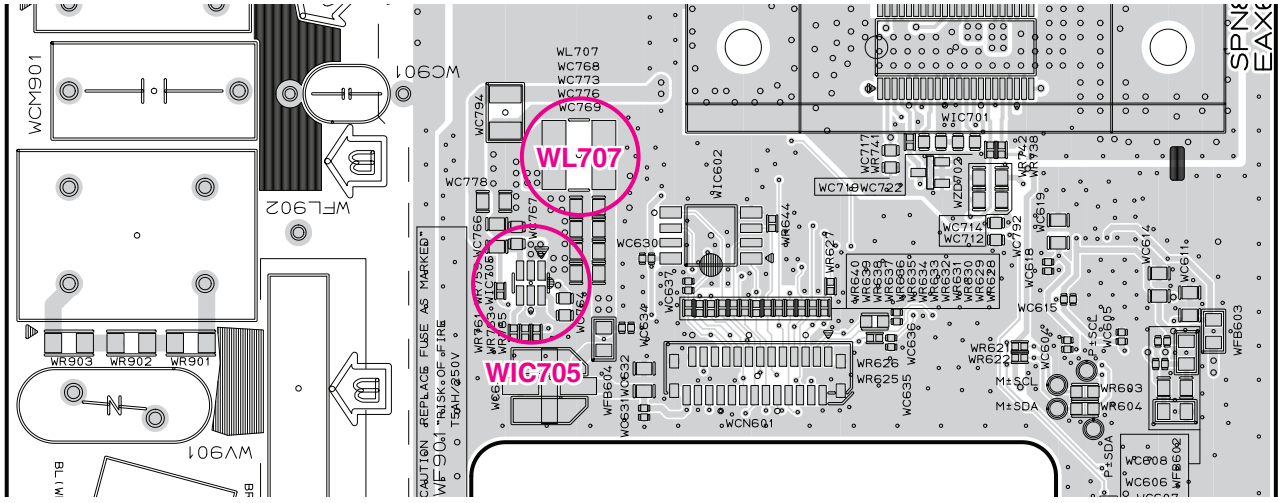


< Woofer SMPS & AMP board top view >

1-2. 3.3 VA

1) Check 3.3 VA at WL707 coil.
2) If 3.3 VA is not checked at the point, then find 12 VA at pin3 of WIC705.
3) 1), 2) is NG ➡ Replace WIC705.

If you can't check 12 VA voltage, refer to the step 1-1.



< Woofer SMPS & AMP board top view >

ONE POINT REPAIR GUIDE

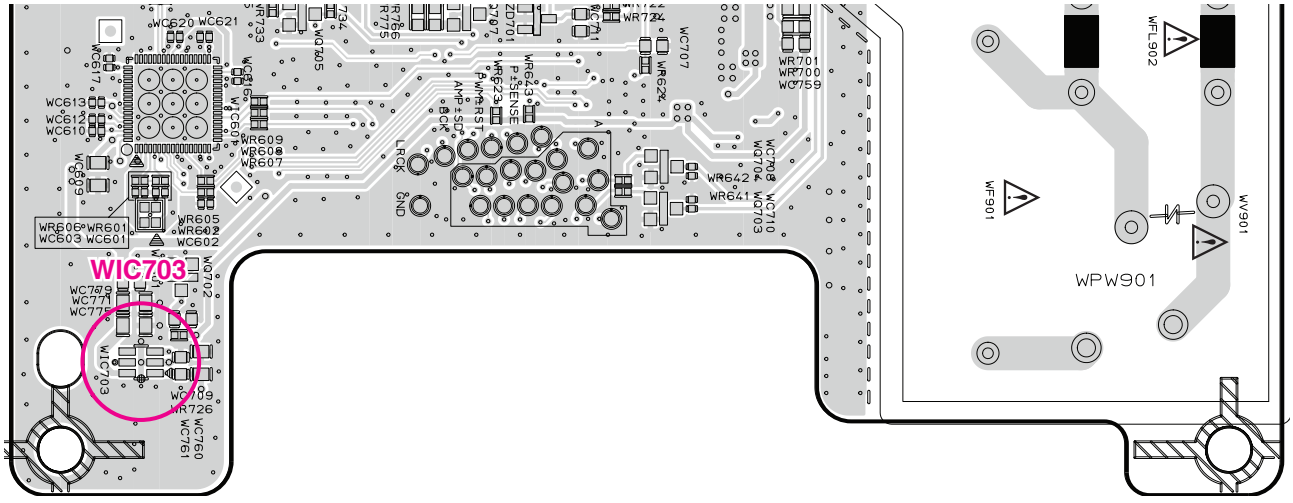
POWER ON ERROR

Fundamental power check points.

1-3. 3.3 VA

1) Check 3.3 VA at pin1 of WIC703.
2) Check 3.3V_PWM at pin6 of WIC703.
3) 1), 2) is NG ➡ Replace WIC703.

If you can't check PVDD voltage, then replace the PCB board.



< Woofer SMPS & AMP board bottom view >

ONE POINT REPAIR GUIDE

2. WIRELESS CONNECTION

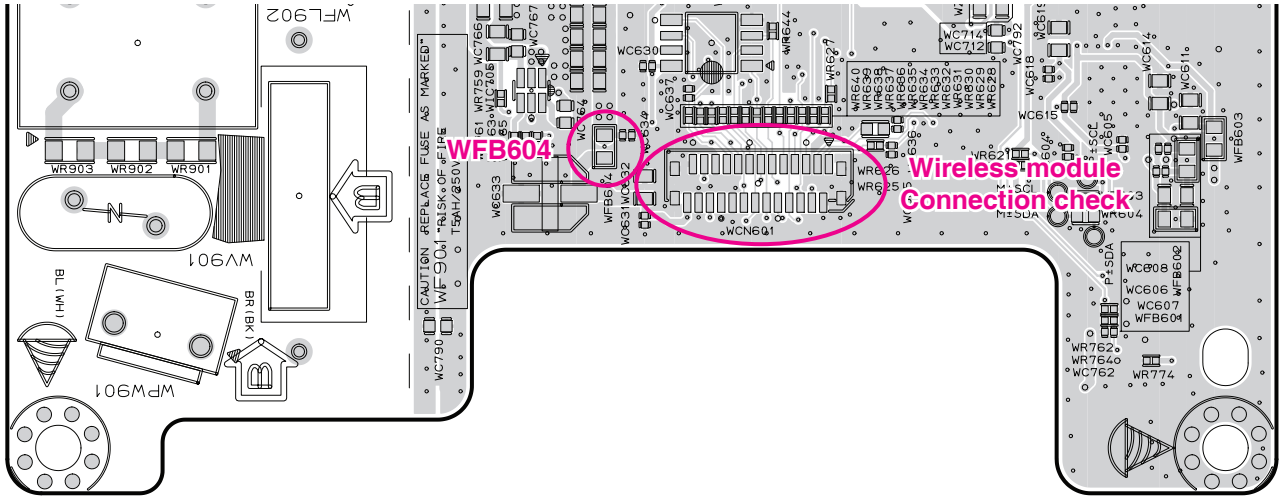
Wireless connection malfunction.

2-1. 3.3 VA

1) Check 3.3 VA at WFB604.

2-2. Connection

1) Wireless module connection closely.
2) Implement Wireless Factory Reset.
   - ➡ MAIN SET : Soundbar vol MIN and push Mute key (sustain 3 ~ 5 seconds).
   - ➡ Subwoofer : ❶ Press **Pairing** button on the rear of the wireless subwoofer.
     ❷ The LED of of the wireless subwoofer blink red and green, pull out power cord.
     ❸ The main set and the wireless subwoofer are factory reset mode, then power on.



< Woofer SMPS & AMP board top view >

WAVEFORMS OF MAJOR CHECK POINT

1. CRYSTAL

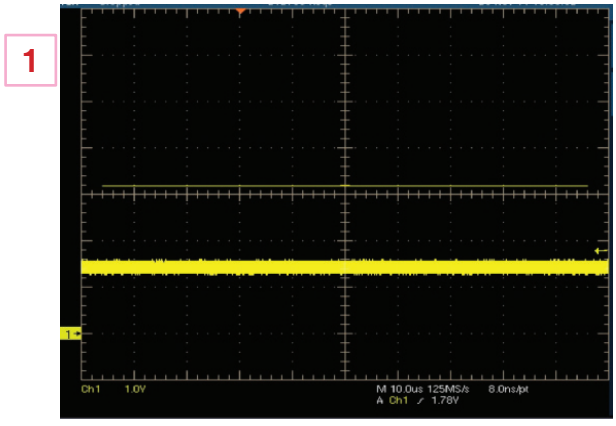
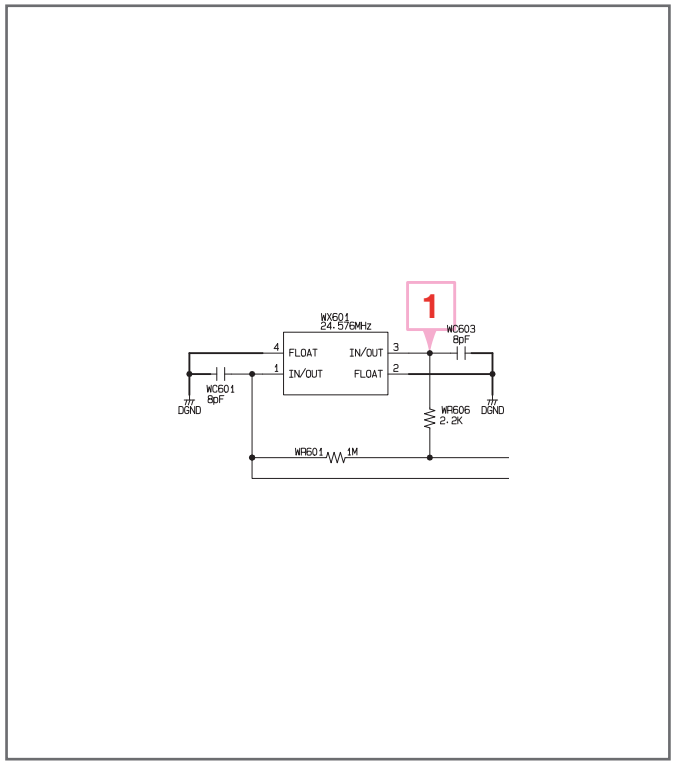


FIG 1. WX601 (24.576 MHz)



2. FLASH MEMORY

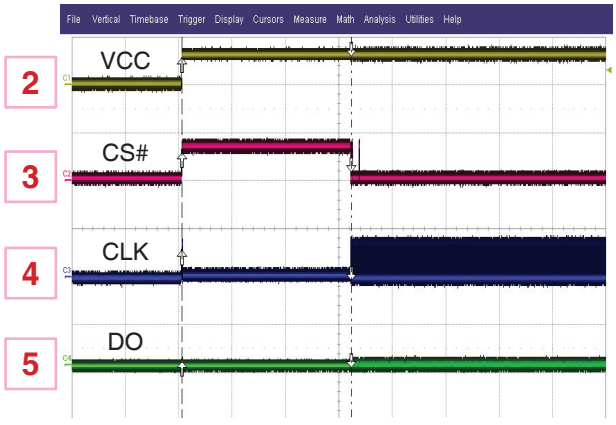
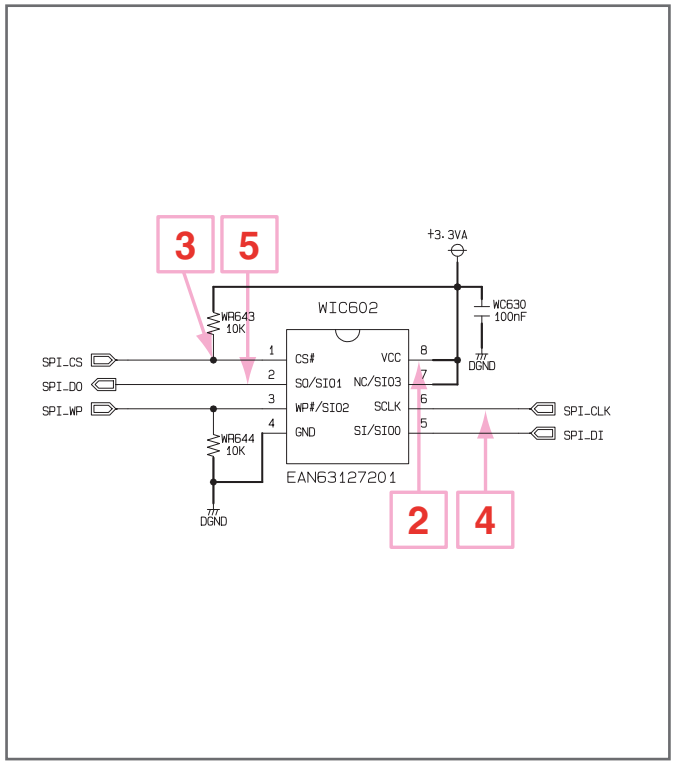


FIG 2. VCC, CS#, CLK, DO



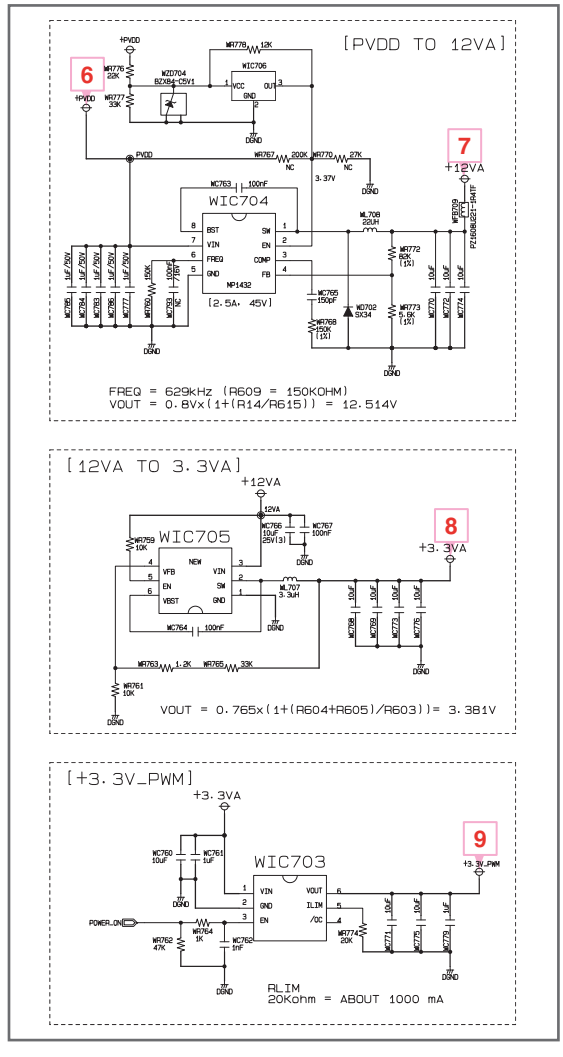
3. VOLTAGE

FIG 3-1. Woofer PVDD

FIG 3-2. Woofer 12 VA

FIG 3-3. Woofer 3.3 VA

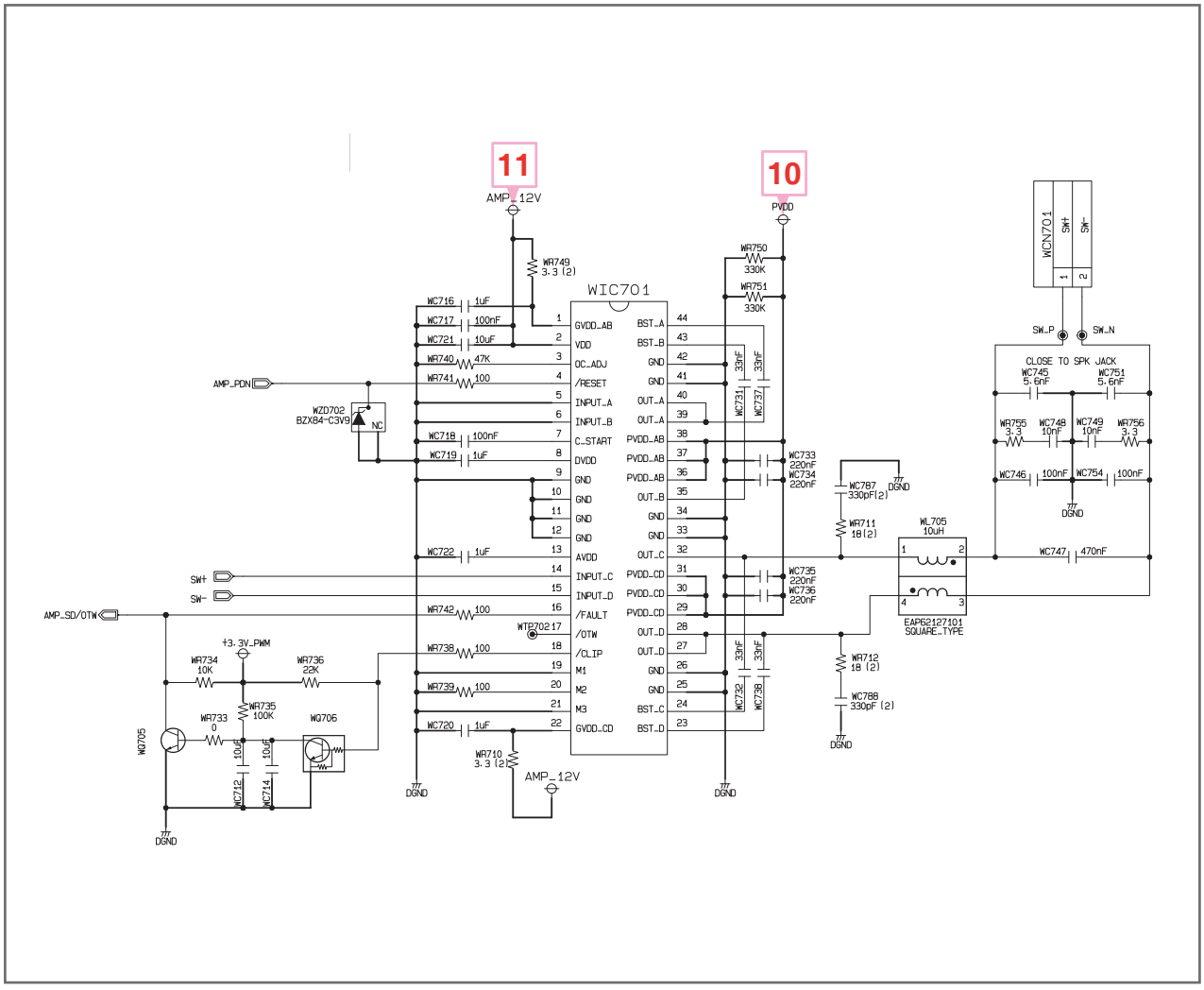
FIG 3-4. Woofer 3.3V_PWM



4. AMP VOLTAGE

FIG 4-1. AMP PVDD

FIG 4-2. AMP_12V



5. PWM

12

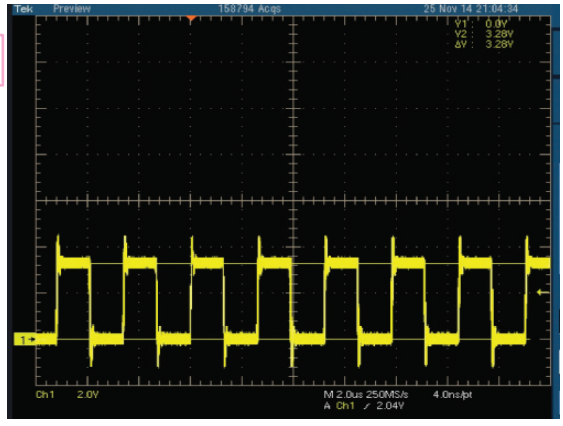


FIG 5-1. Woofer PWM SW+ Signal

13

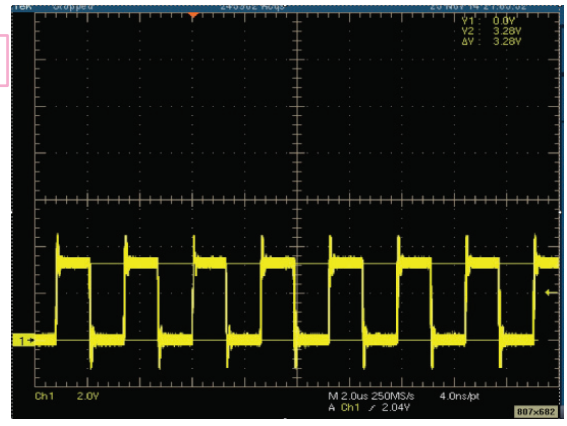
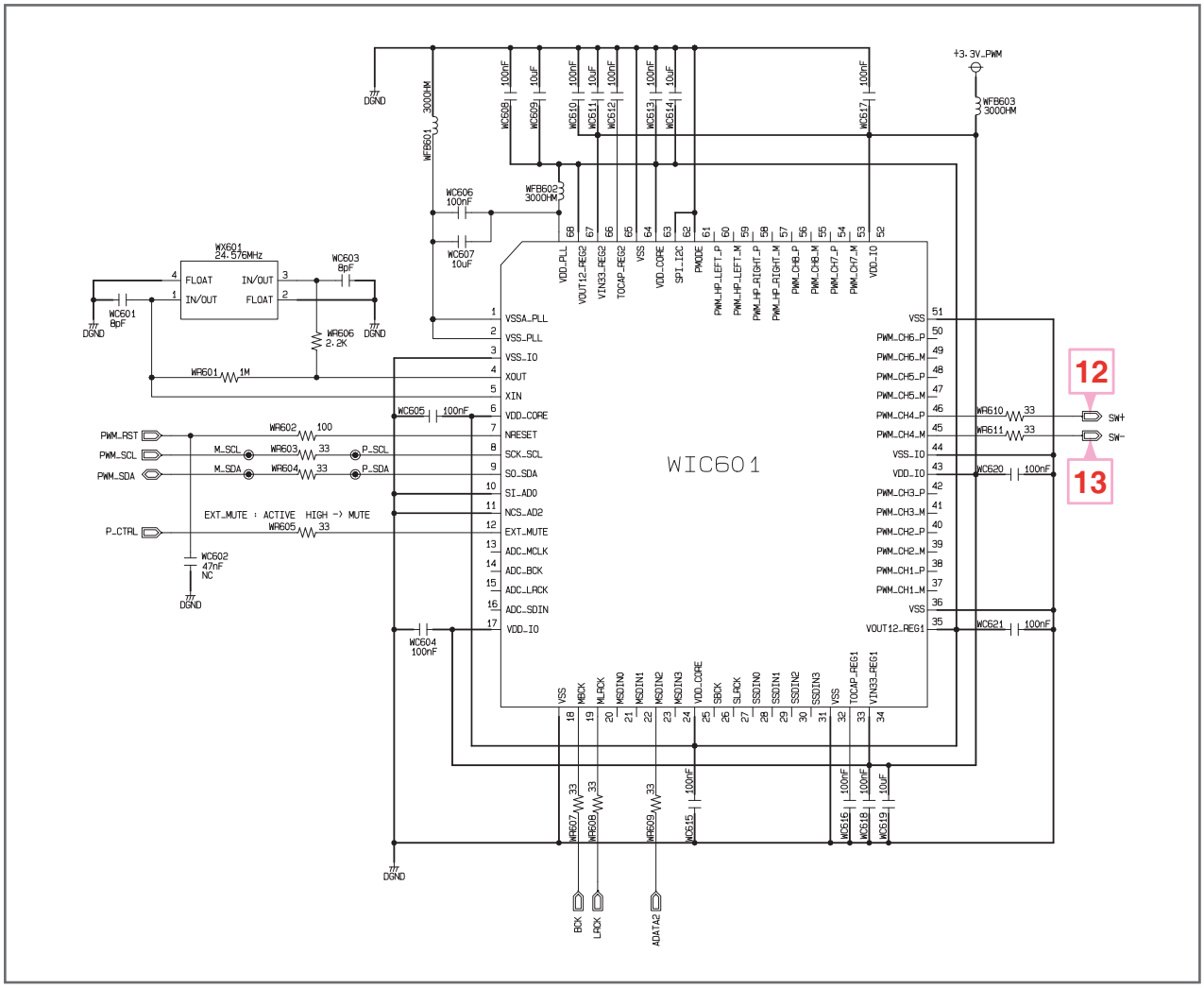


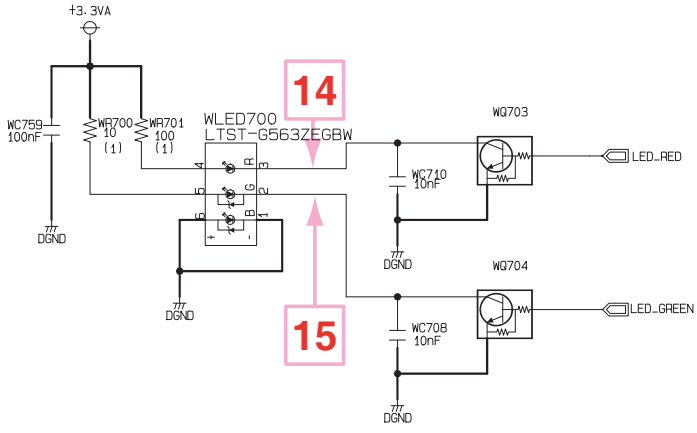
FIG 5-2. Woofer PWM SW- Signal



6. LED

FIG 6-1. Pairing Off Status ➡ Red LED

FIG 6-2. Pairing On Status ➡ Green LED



MEMO

CIRCUIT VOLTAGE CHART

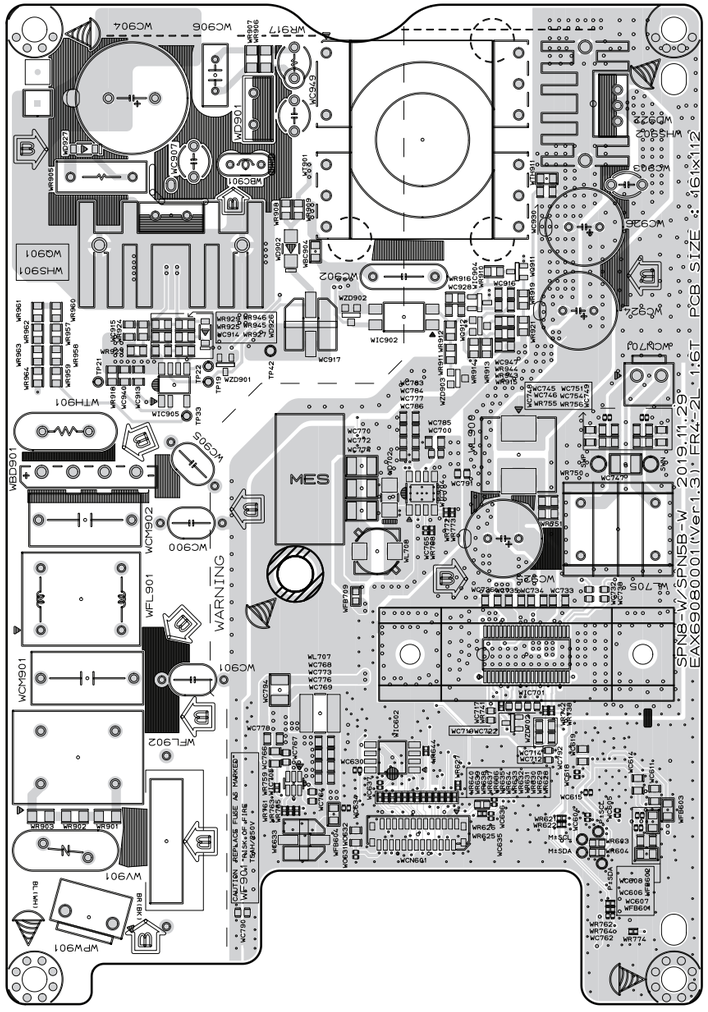
Location No.	Description	Pin Number	Specification	Real Value (#1, #2)	
WIC601	IC, Sound/Audio Processor	VDD _IO: #17, 43, 52	VDD_IO: 2.97 V ~ 3.63 V	3.37 V	3.37 V
		VDD_CORE: #6, 25, 63	VDD_CORE: 1.08 V ~ 1.32 V	1.27 V	1.27 V
		VDD_PLL: #68	VDD_PLL: 1.08 V ~ 1.32 V	1.28 V	1.28 V
WIC701	IC, Audio Amplifier	PVDD: #29, 30, 31, 36, 37, 38	PVDD: 12 V ~ 34 V	20.61 V	20.64 V
		GVDD: #1, 22	GVDD: 10.8 V ~ 13.2 V	12.41 V	12.42 V
		VDD: #2	VDD: 10.8 ~13.2V	12.47 V	12.47 V
WIC703	IC, Analog Switch	VIN: #1	VIN: 2.8 V ~ 5.5 V	3.42 V	3.42 V
		VOUT: #6	VOUT: 2.8 V ~ 5.5 V	3.41 V	3.41 V
WIC704	IC, DC,DC Converter	VIN: #7	VIN: 4.5 V ~ 45 V	34.61 V	34.64 V
		SW: #1	VOUT: 0.8 V ~ 42 V	12.53 V	12.53 V
WIC705	IC, DC,DC Converter	VIN: #3	VIN: 4.5 V ~ 17 V	12.52 V	12.52 V
		SW: #2	VOUT: 0.76 V ~ 7 V	3.42 V	3.42 V

MEMO

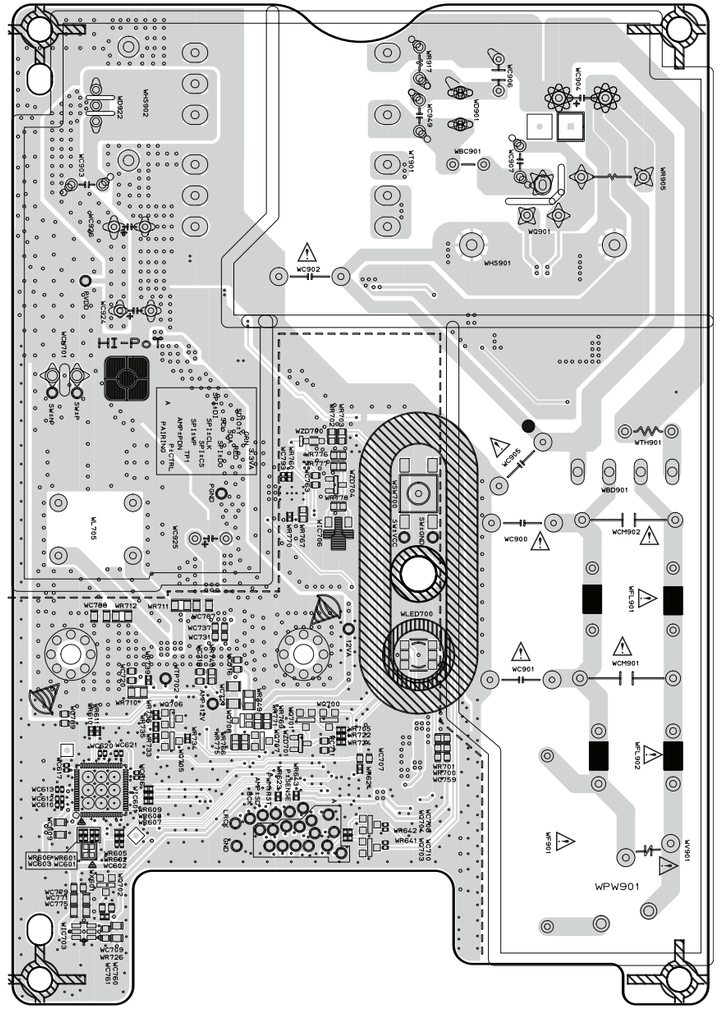
PRINTED CIRCUIT BOARD DIAGRAMS

1. WOOFER SMPS & AMP P. C. BOARD

(TOP VIEW)



(BOTTOM VIEW)



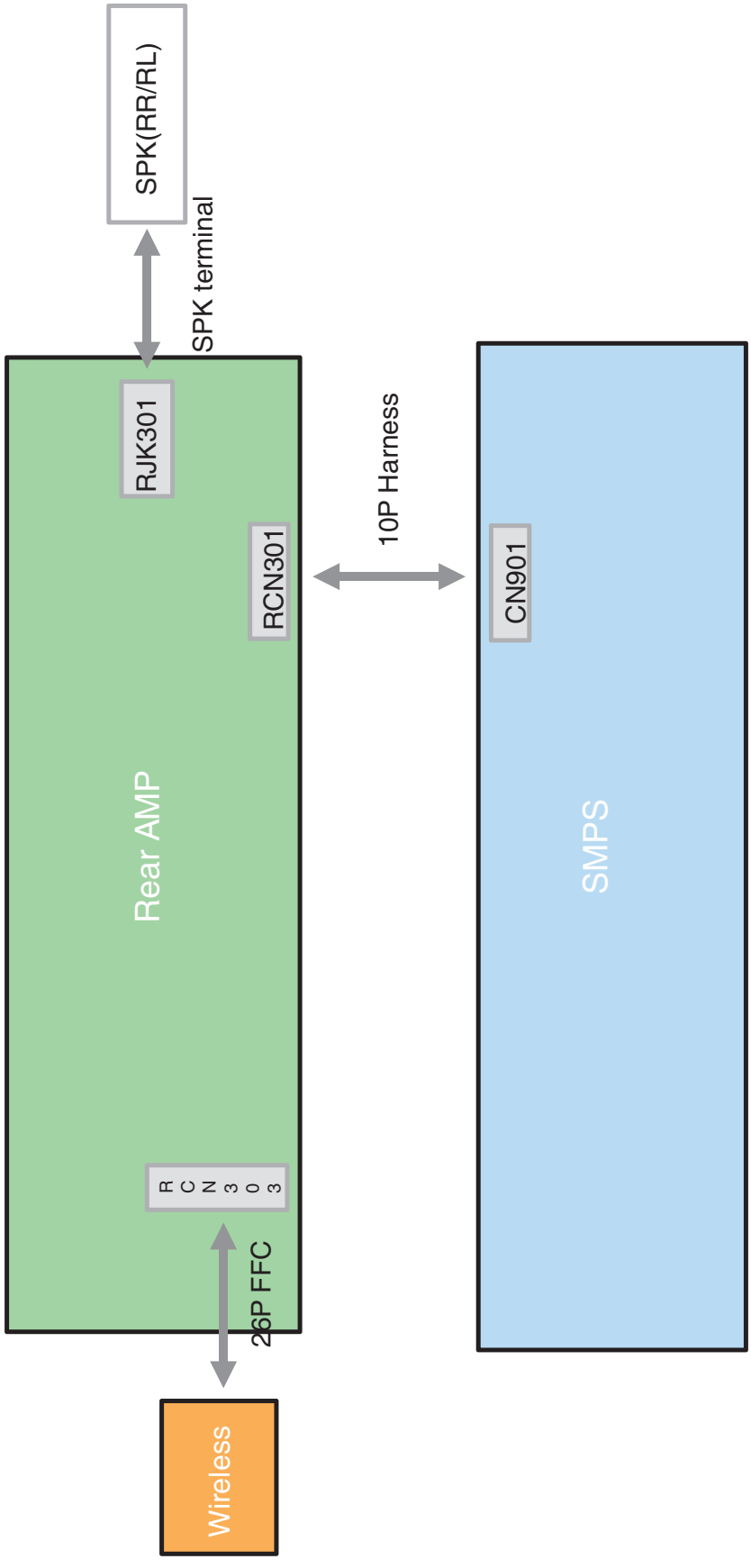
NOTE) Warning
⚠ Parts that are critical with respect to risk of fire or electrical shock.

SECTION 5

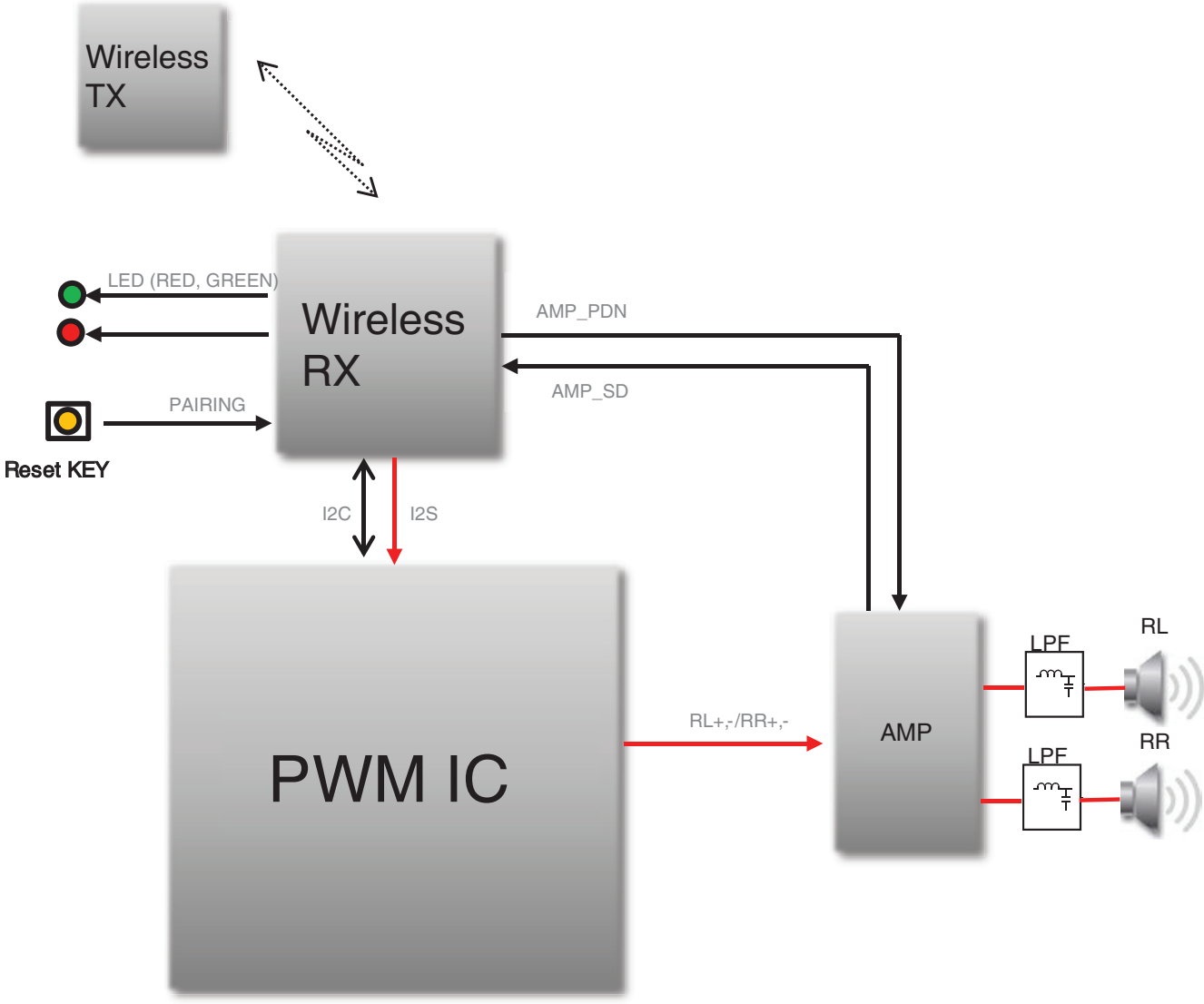
WIRELESS RECEIVER PART (OPTION)

CONTENTS

WIRING DIAGRAM



BLOCK DIAGRAM



ONE POINT REPAIR GUIDE

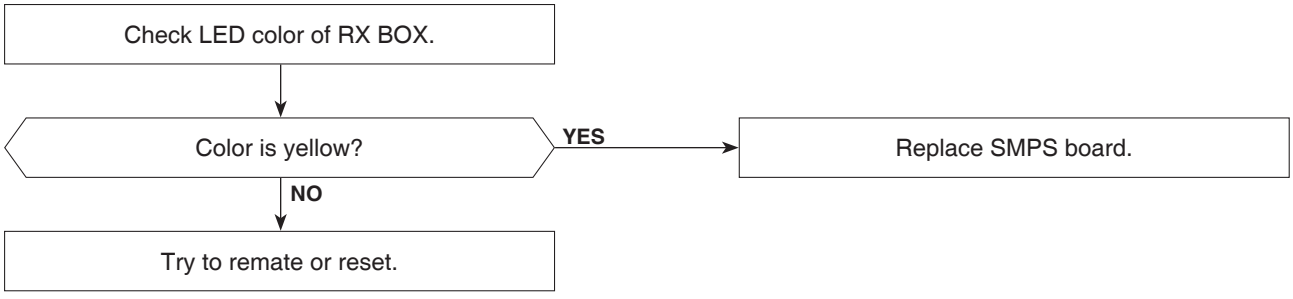
1. How to Duplicate Problem

Wireless rear speaker doesn't output a sound.

1-1. Solution

Replace SMPS board (No PVDD).

1-2. How to troubleshoot (Countermeasure)



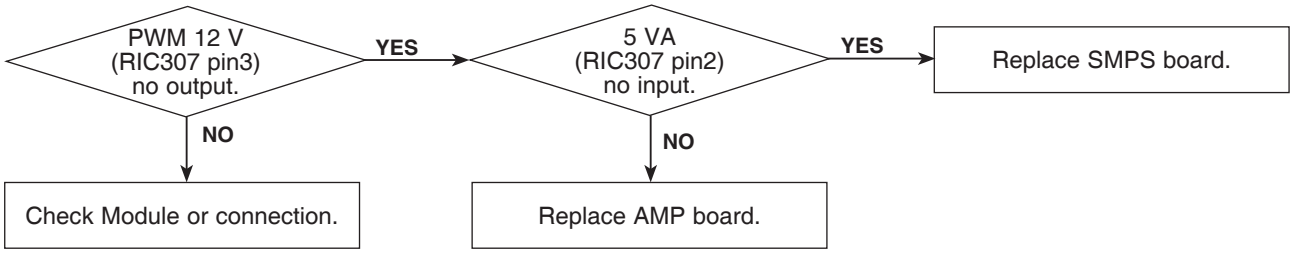
2. How to Duplicate Problem

Wireless rear speaker doesn't output a sound.

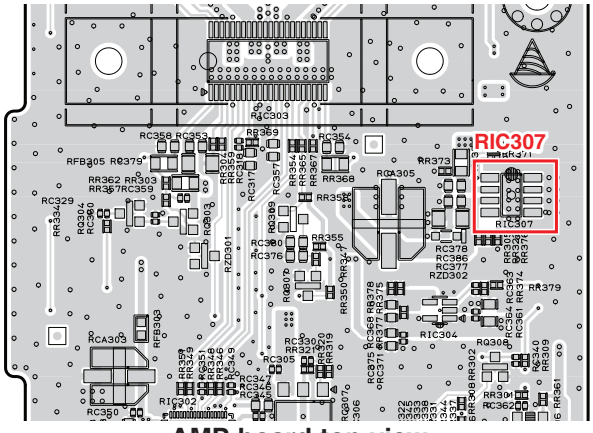
2-1. Solution

Replace AMP board (No 12 V).

2-2. How to troubleshoot (Countermeasure)

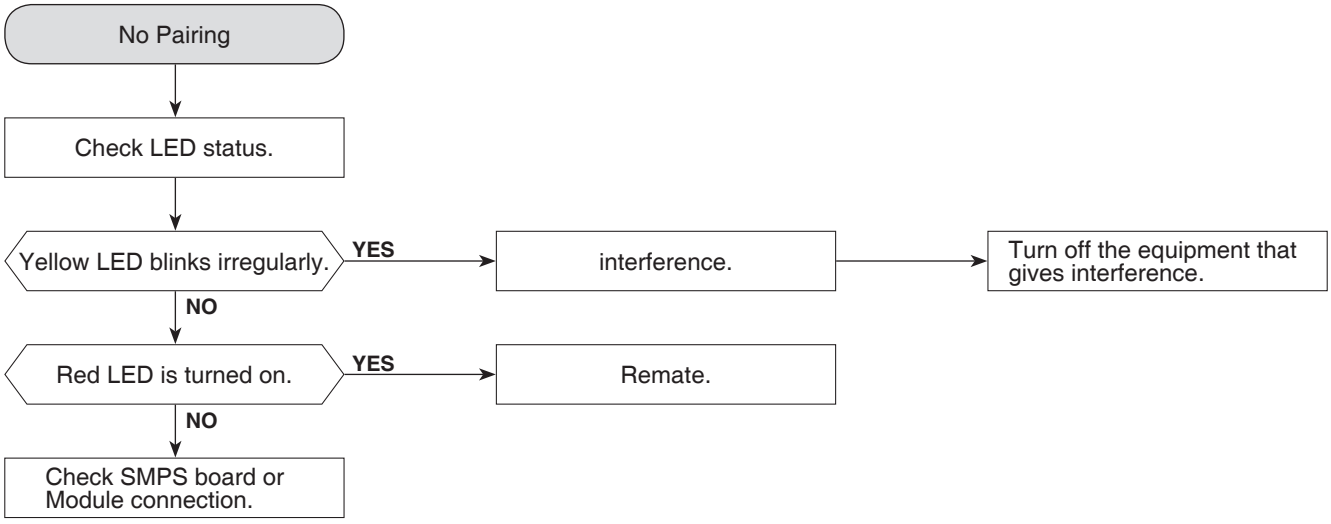


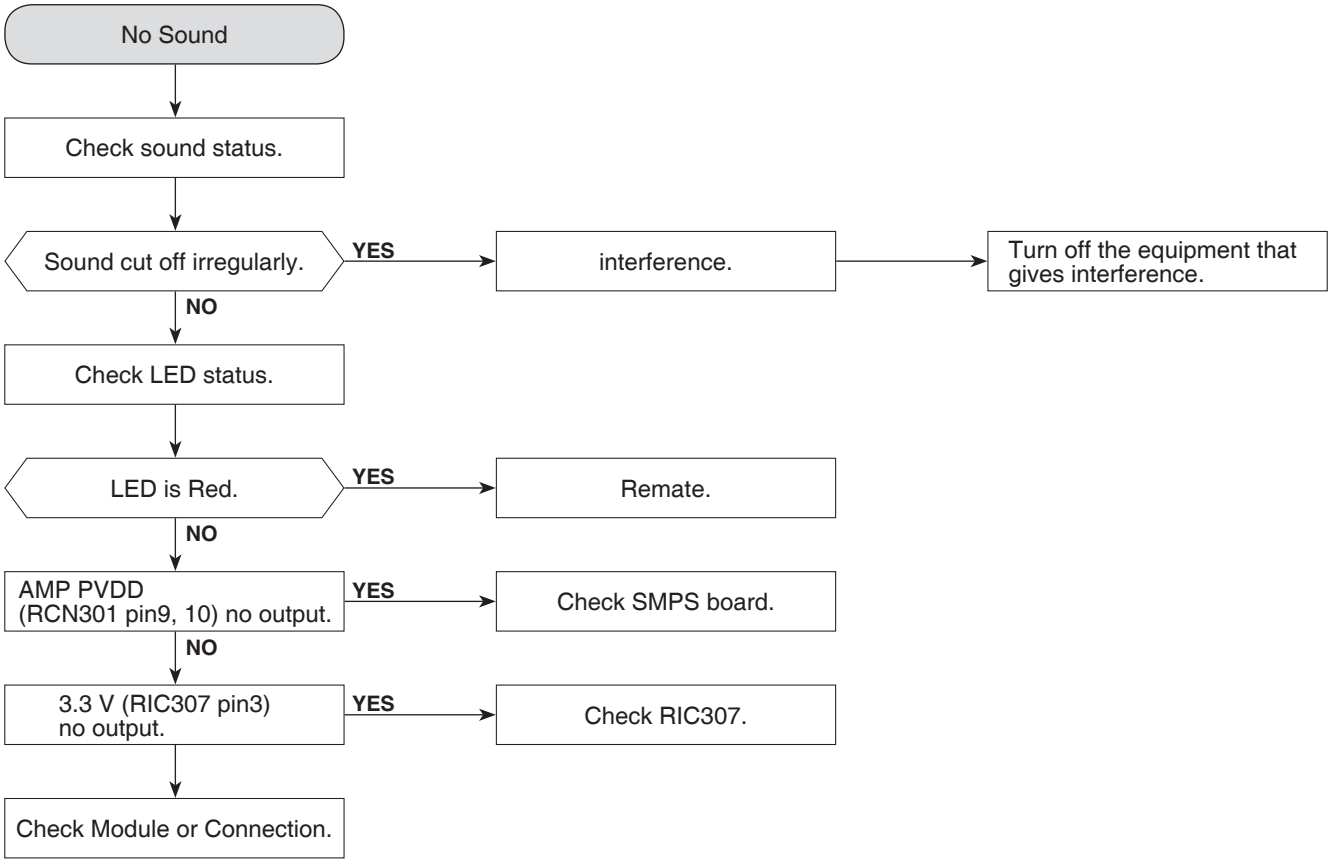
2-3. Service hint (Any picture / Remark)



< AMP board top view >

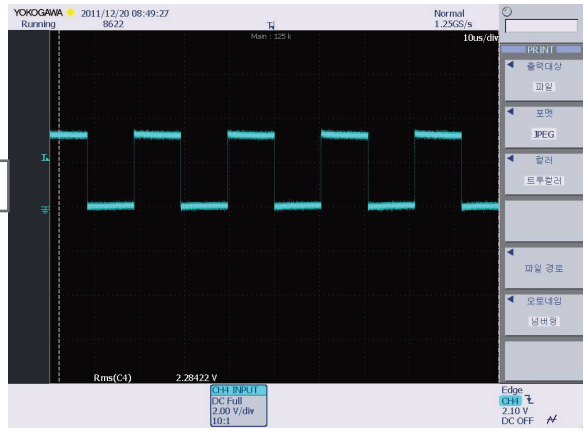
ELECTRICAL TROUBLESHOOTING GUIDE





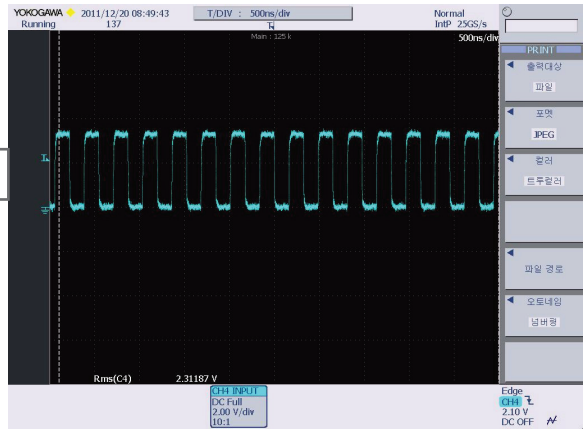
WAVEFORMS

1. AUDIO PART (I2S)



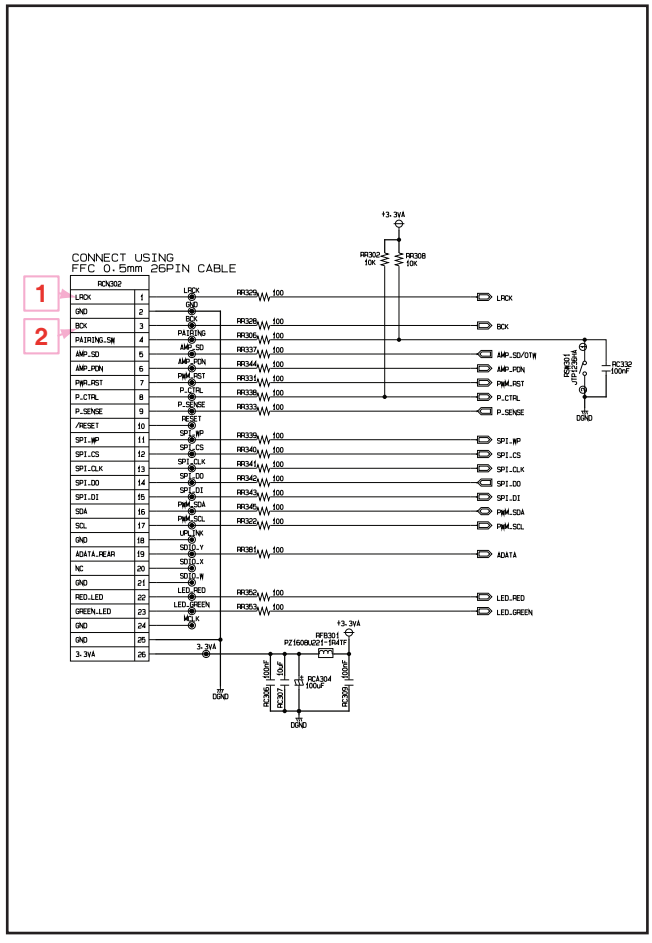
1

RCN302 pin1 : I2S LRCK



2

RCN302 pin3 : I2S BCK



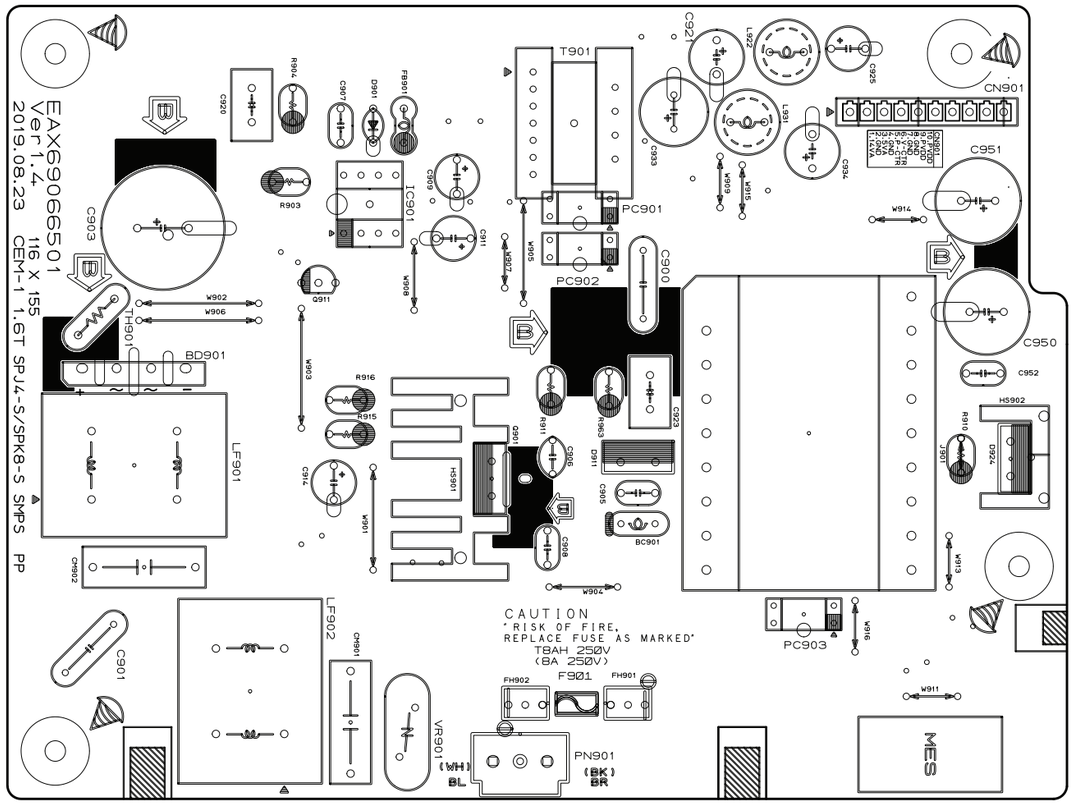
PRINTED CIRCUIT BOARD DIAGRAMS

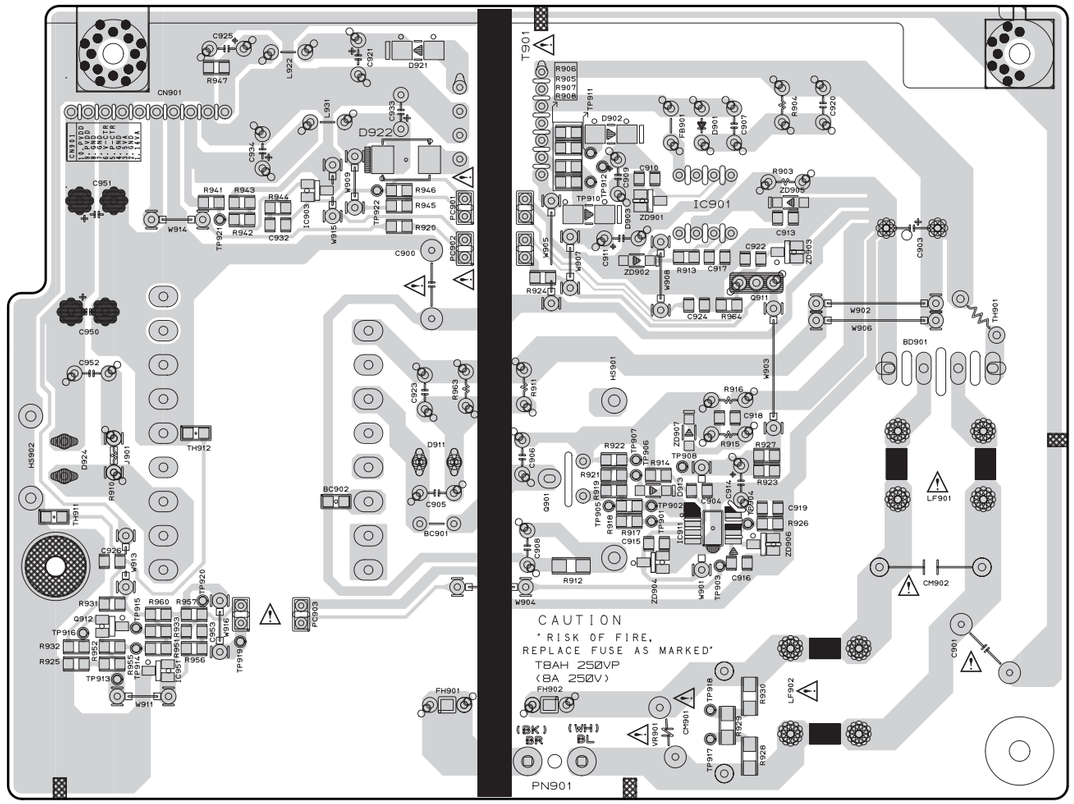
1. WIRELESS RECEIVER SMPS P. C. BOARD

(TOP VIEW)

(BOTTOM VIEW)

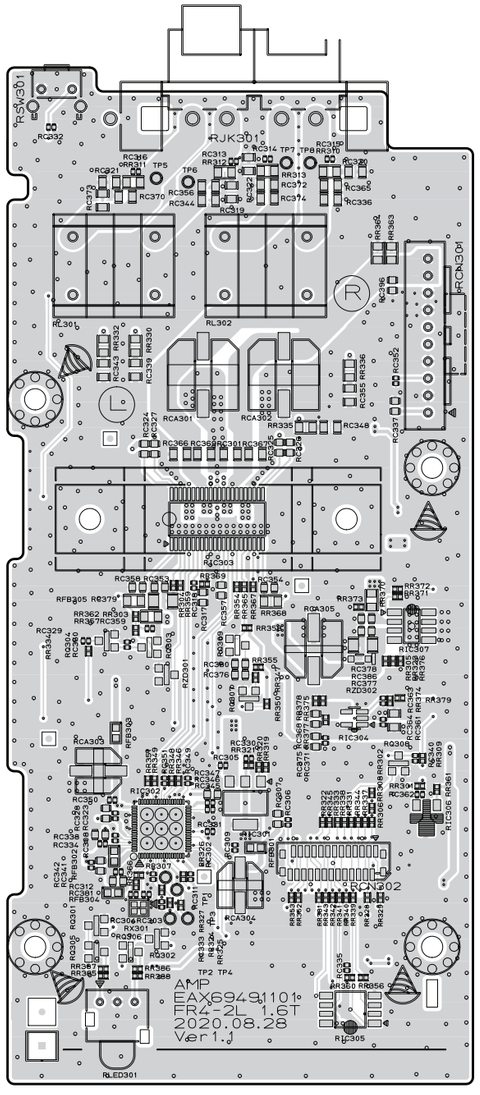
NOTE) Warning
⚠ Parts that are critical with respect to risk of fire or electrical shock.





2. WIRELESS RECEIVER AMP P. C. BOARD

(TOP VIEW)



(BOTTOM VIEW)