ULT TOWER 10
ECM-ULT1/SRS-ULT1000/YY7857E/YY7860E

SERVICE MANUAL

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Note:
Make sure that the your PC used for repair is not infected with a computer virus before using it.

SONY®

ULT TOWER 10
ECM-ULT1/SRS-ULT1000/YY7857E/YY7860E

SERVICE MANUAL

US Model

- This wireless speaker has three types of names for communication name (ULT TOWER 10), model name (SRS-ULT1000), and model (YY7857E). In addition, the wireless microphone that come with this wireless speaker has two types of names for model name (ECM-ULT1), and model (YY7860E).
- All of the units included in the ULT TOWER 10 (wireless speaker/wireless microphone) are required to confirming operation of this unit. Check in advance that the full set are prepared.

Photo: ECM-ULT1/YY7860E

Photo: SRS-ULT1000/YY7857E

- ULT TOWER 10/SRS-ULT1000/YY7857E come with a ECM-ULT1/YY7860E (Wireless microphone).

SPECIFICATIONS

▶ Wireless Speaker (YY7857E)

Amplifier section
Power output and total harmonic distortion:
 With 4 Ω loads, both channels driven, from 100 Hz – 10 000 Hz; rated 20 W per channel minimum RMS power in stereo mode, with no more than 1% total harmonic distortion from 250 mW to rated output.

Communication Specification
Frequency band
 BLUETOOTH®: 2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)
 Wireless microphone section: 2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)

General
Inputs
 • Type A USB port: Supported USB Device (Mass Storage Class)
 • AUDIO IN jack (Φ 3.5 mm)
 • OPTICAL IN connector (PCM)
 • MIC/GUITAR jack (Φ 6.3 mm)
DC OUT
 Type A USB port (for charging the battery of a connected device) (DC 5 V/MAX. 1.5 A)
Power
 AC 120 V, 60 Hz
Power consumption
 Approx. 139 W
Standby power consumption
 When BLUETOOTH standby mode is set to on: 2.0 W or less
 When BLUETOOTH standby mode is set to off: 0.3 W or less
Operating temperatures
 –5 °C - 40 °C (23 °F - 104 °F)
Dimensions (including projecting parts and controls)
 Approx. 418 mm × 1106 mm × 428 mm (16.5 in × 43.6 in × 16.9 in) (w/h/d)
Mass
 Approx. 29 kg (63 lb 15 oz)

▶ Wireless microphone (YY7860E)

Communication specification
Frequency band
 2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)

Microphone
Type
 Dynamic
Directivity
 Uni directional
Effective frequency range
 50 Hz - 15 000 Hz

General
Power
 3 V DC, two LR6 (size AA) alkaline batteries
Power consumption
 Approx. 0.2 W
Battery life
 Approx. 25 hours*1
Operating temperatures
 –5 °C - 40 °C (23 °F - 104 °F)
Dimensions (including projecting parts and controls)
 Approx. 50 mm × 233 mm × 50 mm (2.0 in × 9.2 in × 2.0 in) (w/h/d)
Mass (including battery)
 Approx. 280 g (10 oz)

Included items
Wireless Speaker (1)
AC power cord (mains lead) (1)
Optical digital cable (optical rectangular plug ↔ optical rectangular plug) (1)
Wireless microphone (1)
LR6 (size AA) alkaline battery (2)
Documents (1 set)

*1 The actual battery life may differ from the listed time due to the surrounding temperature and usage conditions, and the type and manufacturer of the batteries.

Design and specifications are subject to change without notice.

ULT TOWER 10/SRS-ULT1000/YY7857E
WIRELESS SPEAKER
ECM-ULT1/YY7860E
WIRELESS MICROPHONE

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SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
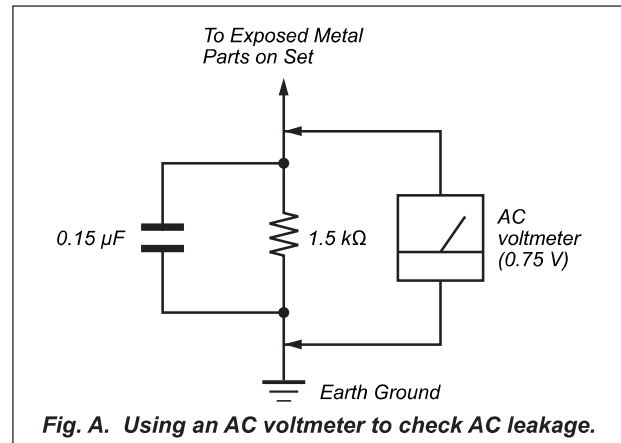
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.

Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

Fig. A. Using an AC voltmeter to check AC leakage.

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SYS SET

TABLE OF CONTENTS

SYS SET

SECTION 1
SERVICING NOTES

The SERVICING NOTES contains important information for servicing. Be sure to read this section before repairing the unit.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark)

⌊F⌋ : LEAD FREE MARK

Unleaded solder has the following characteristics.
* Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
* Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
* Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

ADVANCE PREPARATION WHEN CONFIRMING OPERATION

All of the units included in the ULT TOWER 10 (wireless speaker/wireless microphone) are required to confirming operation of this unit. Check in advance that the full set are prepared.

ABOUT MODEL NAME

This wireless speaker has three types of names.
Communication name : ULT TOWER 10
Model name   : SRS-ULT1000
Model   : YY7857E

The wireless microphone that come with this wireless speaker has two types of names.
Model name   : ECM-ULT1
Model   : YY7860E

PROTECT MODE

Symptoms	Type	Cause	Countermeasure
Stop play-back Disconnect BLUETOOTH Disable each key operation (other than initialize operation)	Fan error	Fan motor stopped	Perform the initialize (Refer to page 10). Unplug the AC power cord, reconnect it, and turn on the power. When it does not recover, replace the fan motor with a new parts. Also, the MAIN board may be damaged.
USB charging stopped	USB over current	USB VBUS line over current	Perform the restart (Refer to page 10). When it does not recover, the MAIN board may be damaged.
Stop play-back Disconnect BLUETOOTH Disable each key operation (other than initialize operation)	Amplifier error	Either abnormal amplifier temperature, over current or DC offset	Perform the initialize (Refer to page 10). Unplug the AC power cord, reconnect it, and turn on the power. When it does not recover, the MAIN board may be damaged.

ABOUT COMPOUND FOR HEAT RADIATION

The compound for heat radiation is applied to the touching portion between the MAIN board and the heatsink.
When the heatsink is removed, be careful not to touch the compound for heat radiation.

– MAIN Board (Side A) –

With the heatsink removed

U1201

heatsink (MAIN board touching side)

Compound for heat radiation

5

ABOUT THE THERMAL SHEET

The thermal sheet is attached to the chassis.
When installing the MAIN board, be sure to check that the thermal sheet is attached to the appropriate position.

chassis

– MAIN Board (Side B) –

Thermal sheet touching portion

thermal sheet

NOTES WHEN CHECKING THE OPERATION OF THE MAIN BOARD

Before checking the operation of the MAIN board with the wireless speaker disassembled, be sure to refer to the following.

When removing the fan motor to checking operation:
The temperature is detected by the fan motor voltage.
If the voltage value is 12 V or more (volume level about 18 or more) and the operated, the protection circuit will be activated and the wireless speaker will be in a protected state.
If the voltage value is 5 V or less (volume level about 17 or less), it is possible to check the operation for a short time, but it is not recommended.
It is recommended to check the operation with the fan motor connected to the MAIN board.

When removing the heatsink to checking operation:
The temperature is detected by the amplifier IC. Therefore, if the wireless speaker is operated for about 10 minutes at a low volume (volume level about 10 or less), it will be in a protected state.
It is possible to check the operation for a short time of about 5 minutes, but it is not recommended.
It is recommended to check the operation with the heatsink attached to the MAIN board.

With the top panel block removed

MAIN board

heatsink

fan motor connection conector

fan motor

DISCHARGE PROCESSING METHOD

When removing the SMPS board or MAIN board after checking the operation, for the electric shock prevention, be sure to perform discharge processing according to the following steps to prevent electric shock.
Note 1: Be sure to remove the SMPS board first, then the MAIN board.
Note 2: Be sure to use a resistor of 5000 to 8000 Ω/5 W for the discharge processing.

Discharge processing method for SMPS board:
1. Remove all wires connected to the SMPS board.
Note 1: Be careful not to touch the electrical parts mounted on the SMPS board.
2. Remove the screws that secure the SMPS board.
3. Grab the transformer (T2) and lift up the SMPS board.
Note 2: Be careful not to touch the electrical parts mounted on the SMPS board.
4. Turn over the SMPS board so that the solder side of the board is visible, connect a resistor to the CE1 terminal, and discharge for about 10 seconds.

– SMPS Board (Component Side) –   **– SMPS Board (Conductor Side) –**

CE1

5000 to 8000 Ω/5 W (for CE1)

T2

Discharge processing method for MAIN board:
1. Remove the SMPS board.
Note 1: Be sure to remove the SMPS board before the MAIN board.
2. Remove all wires and flexible flat cable connected to the MAIN board.
Note 2: Be careful not to touch the electrical parts mounted on the MAIN board.
3. Remove the screws that secure the MAIN board.
4. Hold both ends of the MAIN board and lift it up.
Note 3: Be careful not to touch the electrical parts mounted on the MAIN board.
5. Turn over the MAIN board so that the solder side of the board is visible, connect a resistor to the CE1201 terminal, and discharge for about 10 seconds.

– MAIN Board (Side A) –   **– MAIN Board (Side B) –**

CE1201

5000 to 8000 Ω/5 W (for CE1201)

SYS SET

MODEL IDENTIFICATION

When distinguishing the destination of the wireless speaker, refer to the model number label indicated on the inside of the jack cover (rear) on the rear.

In addition, when distinguishing the destination of the wireless microphone, remove the battery cover and refer to the model number label indicated on the PCB cap.

Note 1: The contents of model number label might be changed in the midway of production.

Note 2: When replacing the rear cabinet assy or jack cover (rear) of the wireless speaker with a new part, carefully peel off the label pasted to the inside of the jack cover (rear) before replacement, and paste it to the inside of the new jack cover (rear).

Wireless speaker
– Rear view –

Model number label

Model number label
(Wireless speaker)

WIRELESS SPEAKER   SRS-ULT1000   AC 120 V ∿ 60 Hz 139 W   CAN ICES-3 B/NMB-3 B
Contains/Content IC:23011-BMS002   Contains FCC ID:2AMX3BMS002   IC:9976A-0YY7857E   FCC ID:2VA0YY7857E
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received,
including interference that may cause undesired operation.
Made in China / Fabriqué en Chine   505673702
Model : YY7857E
Serial No.   E192039 CJ
XXXXXXX   US LISTED   In case of repairing, please bring the entire system set to the service station.

505673702

Note 3: This model number label indicates that it is SRS-ULT1000/ULT TOWER 10/YY7857E for US. If the model number label is other than this, it is SRS-ULT1000/ULT TOWER 10/YY7857E with a destination other than US.

Wireless microphone

Model number label
PCB cap
Battery cover

Model number label
(Wireless microphone)

WIRELESS MICROPHONE   Model/Modelo : YY7860E
ECM-ULT1   3 V ⎓ LR6 SIZE AA × 2 BATT OR EQUIV.
Manufacturer:Sony Corporation
IC:9976A-0YY7860E   FCC ID:2VA0YY7860E
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received,
including interference that may cause undesired operation.
Made in China / Fabrique en Chine

Note 4: This model number label indicates that it is ECM-ULT1/YY7860E for US. If the model number label is other than this, it is ECM-ULT1/YY7860E with a destination other than US.

CHECKING METHOD OF MODEL NAME, MODEL AND SERIAL NUMBER

When checking of the model name, model and serial number of the wireless speaker, refer to the model number label indicated on the inside of the jack cover (rear) on the rear.

In addition, when checking of the model name, model and serial number of the wireless microphone, remove the battery cover and refer to the model number label indicated on the PCB cap.

Note 1: The contents of model number label might be changed in the midway of production.

Note 2: The communication name (ULT TOWER 10) is not indicated.

Note 3: When the wireless microphone is replaced with a new wireless microphone, the serial number will change.

Wireless speaker
– Rear view –

Model number label

Model number label
(Wireless speaker)

Model name

WIRELESS SPEAKER   SRS-ULT1000   AC 120 V ∿ 60 Hz 139 W   CAN ICES-3 B/NMB-3 B
Contains/Content IC:23011-BMS002   Contains FCC ID:2AMX3BMS002   IC:9976A-0YY7857E   FCC ID:2VA0YY7857E
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received,
including interference that may cause undesired operation.
Made in China / Fabriqué en Chine   505673702
Model : YY7857E
Serial No.   E192039 CJ
XXXXXXX   US LISTED   In case of repairing, please bring the entire system set to the service station.

Serial No.   Model

Wireless microphone

Model number label
PCB cap
Serial number label
Battery cover

Model number label
(Wireless microphone)

Model name   Model

WIRELESS MICROPHONE   Model/Modelo : YY7860E
ECM-ULT1   3 V ⎓ LR6 SIZE AA × 2 BATT OR EQUIV.
Manufacturer:Sony Corporation
IC:9976A-0YY7860E   FCC ID:2VA0YY7860E
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received,
including interference that may cause undesired operation.
Made in China / Fabrique en Chine

Serial No.

CARRYING METHOD

This wireless speaker can be easily moved by rolling using wheels. To move the wireless speaker, grasp the center of the handle on the same side as the wheels (rear side), tilt the wireless speaker, and pull with one hand while checking that the wheels are rotating.

Note 1: Before carrying the wireless speaker, disconnect all the cables.

Note 2: The caster wheels can be used only on flat surfaces. On uneven surfaces, lift the wireless speaker by two people using the handles.

Note 3: To avoid personal injury or damage to surroundings, grasp the handle firmly and lift correctly.

Note 4: Exercise extreme caution when carrying on a slope.

Note 5: Do not carry the wireless speaker with a person, luggage, etc. on it.

Note 6: If your skin remains in contact with the handle for a long time while the light is turned on, there is a risk of low-temperature burns. To carry the wireless speaker while it is powered on, turn the light (lighting function) off.

Note 7: If sand or dust adheres to the caster wheels' axles, or grass or lint gets wrapped around them, the caster wheels may malfunction.

IMPORTANT NOTE OF REPLACING THE TOUCH BOARD

When the TOUCH board of the wireless speaker is replaced with a new board, be sure to perform the following works.

Note: It is not possible to operate normally just by replacing the TOUCH board.

- Perform reconnect the wireless microphone.
  (Refer to "WIRELESS MICROPHONE PAIRING METHOD" on page 11)
- Check the general operation.
  (Refer to the help guide)
- Perform initialization
  (Refer to "INITIALIZATION METHOD" on page 10)

IMPORTANT NOTE OF REPLACING THE WIRELESS MICROPHONE OR THE MICROPHONE BOARD

When the wireless microphone is replaced with a new wireless microphone, or the MICROPHONE board of the wireless microphone is replaced with a new board, be sure to perform the following works.

Note: Be sure to perform the following works. It will not operate normally if these works are not performed.

- Perform reconnect the wireless microphone.
  (Refer to "WIRELESS MICROPHONE PAIRING METHOD" on page 11)
- Check the general operation.
  (Refer to the help guide)

TV SOUND BOOSTER OPERATION CHECKING METHOD
The wireless speaker is equipped with the TV Sound Booster function.
When checking the operation of the TV Sound Booster, refer to the following.

Advance preparation:
Prepare the following equipment.
• TV or CD player with an optical digital audio output connector.
Note: The checking procedure below uses a TV.
• Optical digital cable supplied with the wireless speaker.
• AC power cord supplied with the wireless speaker.

Checking procedure:
1. Connect the optical digital cable to the optical output connector of the TV and the [OPTICAL IN] connector of the wireless speaker. In addition, connect the AC power cord to the AC input jack and insert it into an AC outlet.

2. Turn on the TV, set the TVs digital sound output to "PCM", and output the sound from the TV.
Note 1: Output a sound source that includes a human voice. (Music, drama, talk show, etc.)
Note 2: For how to operate the TV, refer to the instruction manual supplied with the TV.

3. Press the [⏻] button on the wireless speaker to turn the power on.

— Continued on upper right —

4. Touch the [TV SOUND BOOSTER] key of the wireless speaker and turn ON the TV Sound Booster function, and check that the human voice and vocal voice output from the wireless speaker is low.
   After checking, touch the [TV SOUND BOOSTER] key again to turn OFF the TV Sound Booster function, check that the human voice and vocal voice output from the wireless speaker is loud.
Note 3: When the TV Sound Booster is turn ON state, even if you touch the [+]/[–] keys of the wireless speaker to adjust the volume, the state where the human voice and vocal voice do not become loud is normal.
Note 4: If the human voice or vocal voice is not low while the TV Sound Booster is turn ON state, refer to "2. Sound is not output from the wireless speaker (Wireless Speaker)" (page 61) in TROUBLESHOOTING.

5. Touch the [TV SOUND BOOSTER] key of the wireless speaker and turn ON the TV Sound Booster function, and check there is no sound output from the front tweeter and midrange.
Note 5: When the TV Sound Booster is turn ON state, even if you touch the [+]/[–] keys of the wireless speaker to adjust the volume, the state where no sound is output from the front tweeter and midrange are normal.
Note 6: If the sound output from the front tweeter and midrange while the TV Sound Booster is turn ON state, refer to "2. Sound is not output from the wireless speaker (Wireless Speaker)" (page 61) in TROUBLESHOOTING.

6. Press the [⏻] button on the wireless speaker to turn off the power, disconnect from the TV, and complete the operation check of TV Sound Booster.

RESTART METHOD

If there is a problem with the operation of the wireless speaker, such as the wireless speaker not being able to be operated or pairing even after the power is turned on, unplug the AC power cord from an AC outlet. Then plug the AC power cord to an AC outlet again, and perform a restart.

Note 1: Even if you restart, the pairing information is not deleted. However, pairing information is registered by turning off the power of the wireless speaker. When pairing a new device, press the power button to turn off the wireless speaker, turn it on again, and then perform a restart.

Note 2: There is no behavior to indicate that a restart has occurred.

Note 3: Restarting may change the volume, functions, and sound settings.

AC power cord

rear side

INITIALIZATION METHOD

• **Initialization Method of the Wireless Speaker**

After completing the repair of the wireless speaker, be sure to initialize the wireless speaker according to the following procedure.

> **Note 1:** When initialize the wireless speaker, all device pairing information will be deleted and return each setting to the factory default settings.

Note 2: Initializing the wireless speaker does not delete the wireless microphone pairing information.

Wireless speaker initialization procedure:

1. Plug the AC power cord and press the [⏻] button to turn on the power.

Note 3: Initialization cannot be executed when the power is turn off.

AC power cord

2. Touch the [▶❚❚] key and press the [ULT] button at the same time for about 5 seconds or more, and keep touching and pressing until the power is turned off.

Touch (press) at the same time for about 5 seconds or more.

3. The power turns off automatically and initialization is complete.

Note 4: When the power is turned off, the [⏻] indicator light off.

WIRELESS MICROPHONE PAIRING METHOD

If replacing any parts of the wireless speaker or wireless microphone will disconnect the pairing of the wireless speaker and wireless microphone.

In that case, be sure to refer to the following and pairing the wireless speaker and wireless microphone.

1. Repairing and Parts Replacing that Require Pairing Work

- When the TOUCH board of the wireless speaker is replaced with a new board
- When the MICROPHONE board of the wireless microphone is replaced with a new board
- When the wireless microphone is replaced with a new wireless microphone

2. Perform Pairing the Wireless Microphone and Wireless Speaker

Pairing procedure:

1. Connect the AC power cord to the wireless speaker and plug it to an AC outlet. Then press the [⏻] button to turn on the power.

Note 1: The wireless speaker may suddenly output a loud sound, so touch the [–] key on the wireless speaker several times to the volume level down.

AC power cord

2. Install the batteries to the wireless microphone and press the [⏻] button to turn on the power.

Note 2: The wireless speaker may suddenly output a loud sound, so press the [–] button on the wireless microphone several times to the volume level down.

– Continued on upper right –

3. Touch the [ECHO] key and press the [GUITAR] button on the wireless speaker at the same time for about 5 seconds or more, and check that the [⏻] indicator on the wireless speaker repeatedly flashing twice.

Note 3: Place the wireless microphone within about 1 m from the wireless speaker.

Note 4: Depending on the pairing status of the wireless speaker and wireless microphone, may not be checked visually that the [⏻] indicator is flashing.

Touch (press) at the same time for about 5 seconds or more.

4. Press the [⏻] button on the wireless microphone for about 10 seconds or more, and check that the [⏻] indicator on the wireless microphone flashing twice.

Note 5: Place the wireless microphone within about 1 m from the wireless speaker.

Press for about 10 seconds or more.

5. Check that the [⏻] indicator on the wireless speaker and the [⏻] indicator on the wireless microphone have changed from flashing to light up.

6. Speak into the wireless microphone and check that voice is output from the wireless speaker without any problems.

Hello

Hello

7. Press the [⏻] button on the wireless speaker to turn off the power and disconnect the AC power cord.
   Press the [⏻] button on the wireless microphone to turn off the power and remove the batteries.

8. Completes the wireless microphone pairing work.

SYS SET

AUTO STANDBY FUNCTION ON/OFF SWITCHING METHOD

Such as when it want to temporarily turn off the auto standby function, it can switch the auto standby function on and off.

Note 1: It can also switch the auto standby function on and off by using the "Sony | Music Center". In that case, refer to help guide of the ULT TOWER 10/SRS-ULT1000/YY7857E.

State of wireless speaker:

- At the factory default, the auto standby function is set to "ON".
- The auto standby function is turned off when a microphone or guitar is connected to the wireless speaker.
- While the wireless speaker is supplying power to the other device, the auto standby function is turned off.

Procedure:

1. Plug the AC power cord and press the [⏻] button to turn on the power.

AC power cord

2. Touch the[–] key and [▶❚❚] key at the same time for about 5 seconds or more, the [⏻] indicator flashes in orange 3 times, and auto standby function is set to "OFF".

Note 2: When setting the auto standby function to "ON", touch the [–] key and [▶❚❚] key at the same time for about 5 seconds or more again, and the [⏻] indicator flashes in orange twice and set to "ON".

Touch at the same time for about 5 seconds or more.

3. Completes the switching work of auto standby function.

Note 3: After completing all the work, be sure to refer to "INITIALIZATION METHOD" on page 10, and initialize the wireless speaker.

BLUETOOTH CODEC SWITCHING METHOD

It can switch the quality of BLUETOOTH connection to "sound quality priority" or "connection priority".

When it set to sound quality priority, the optimum CODEC is automatically selected from AAC, LDAC, and SBC.

When it set to connection priority, SBC is selected.

Note 1: It can also switch the BLUETOOTH CODEC by using the "Sony | Music Center". In that case, refer to help guide of the ULT TOWER 10/SRS-ULT1000/YY7857E.

State of wireless speaker:

- At the factory default, the BLUETOOTH CODEC is set to "sound quality priority".
- When using the Stereo Pair function or Party Connect function, the CODEC automatically switches to SBC.

Procedure:

1. Plug the AC power cord and press the [⏻] button to turn on the power.

Note 2: If there is a previously connected BLUETOOTH device near the wireless speaker, it may automatically connect. When connected, the [✳] indicator light up in blue.

AC power cord

2. Touch the [▶❚❚] key and [✳] key at the same time for about 2 seconds or more.
   (When it is switched to "connection priority", the [⏻] indicator flashes in green 3 times)
   (When it is switched to "sound quality priority", the [⏻] indicator flashes in green twice)

Note 3: If the wireless speaker and BLUETOOTH device are connected, the connection will be automatically disconnected and then reconnected to enable the setting.

Note 4: When it set to "sound quality priority", noise might occur or the sound might be interrupted depending on the combination of the settings of the connected BLUETOOTH device and the usage environment.

connection priority

sound quality priority

Touch at the same time for about 2 seconds or more.

3. Completes the switching work of BLUETOOTH CODEC.

Note 5: After completing all the work, be sure to refer to "INITIALIZATION METHOD" on page 10, and initialize the wireless speaker.

BLUETOOTH FUNCTION ON/OFF SWITCHING METHOD

Such as when it want to temporarily turn off the BLUETOOTH function, it can switch the BLUETOOTH function on and off.

Note 1: When the BLUETOOTH function is set to "OFF", pairing and connection with BLUETOOTH devices cannot be performed. In addition, "Sony | Music Center" cannot be used.

State of wireless speaker:
• At the factory default, the BLUETOOTH function is set to "ON".

Procedure:
1. Plug the AC power cord and press the [⏻] button to turn on the power.

AC power cord

2. Touch the [–] key and [✳] key at the same time for about 5 seconds or more, the [✳] indicator light off, and BLUETOOTH function is set to "OFF".

Note 2: When setting the BLUETOOTH function to "ON", touch the [–] key and [✳] key at the same time for about 5 seconds or more again, and the [✳] indicator flashes and set to "ON".

Touch at the same time for about 5 seconds or more.

3. Completes the switching work of BLUETOOTH function.

Note 3: After completing all the work, be sure to refer to "INITIALIZATION METHOD" on page 10, and initialize the wireless speaker.

BUILT-IN DEMO SOUND SOURCE PLAYBACK METHOD

It can playback the demo sound source built into wireless speaker.

Note 1: The hands-free function cannot be used while the built-in demo sound source is playback.

Procedure:
1. Plug the AC power cord and press the [⏻] button to turn on the power.

AC power cord

2. Touch the [▶❚❚] key for about 5 seconds or more to start playback the built-in demo sound source.

Note 2: To stop playback the built-in demo sound source, touch the [▶❚❚] key again.

Touch for about 5 seconds or more.

3. Completes the playback the built-in demo sound source.

MALFUNCTION PREVENTION OF THE TOUCH KEYS

There are touch keys on the top side of the wireless speaker.
Therefore, when checking the operation, make sure that the operation check with nothing touching status the touch keys portion.

Note: When checking the operation by removing the top panel block, touching the touch key portion may malfunction.

touch keys portion

BLUETOOTH CONNECTION CHECK AND OTHER GENERAL OPERATION CHECK

After the repair such as parts replacement is completed, refer to the help guide with the ULT TOWER 10/SRS-ULT1000/YY7857E to check the BLUETOOTH connection and other general operations.

NOTE OF REPLACING THE REAR CABINET ASSY OR THE JACK COVER (REAR)

When replacing the rear cabinet assy or jack cover (rear) of the wireless speaker with a new part, carefully peel off the model number label affixed to the inside of the jack cover (rear), and affix it to the inside of the new jack cover (rear).

Note: Perform the working carefully and not to damage the model number label.

Replace the rear cabinet assy

jack cover (rear)

rear cabinet assy

model number label

Replace the jack cover (rear)

model number label

NOTE OF REPLACING THE PCB CAP

When replacing the PCB cap of the wireless microphone with a new part, carefully peel off the serial number label affixed on the PCB cap, and affix it to the appropriate location on the new PCB cap.

Note 1: Perform the working carefully and not to damage the serial number label.

Note 2: When the wireless microphone is replaced with a new wireless microphone, a new wireless microphone will have a serial number label affixed state to it. Therefore, there is no need to replace the serial number label, but the serial number will change.

0000000

serial number label

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NOTE OF REPLACING THE BOTTOM LED BOARD

The BOTTOM LED board used on the bottom rear side of the wireless speaker uses LG2, LH2, LI2, and LJ2 boards, but when replacing each board with a new board, it will be replace with the same board as the BOTTOM LED (LG, LH, LI, LJ) board used on the bottom front side.

The BOTTOM LED (LG, LH, LI, LJ) board and the BOTTOM LED board (LG2, LH2, LI2, LJ2) differ in the Ref. No. of electrical parts mounted on each board in addition to the board name, but the functions of the boards are common. Therefore, there is no problem even if replace the BOTTOM LED (LG2, LH2, LI2, LJ2) board with the BOTTOM LED (LG, LH, LI, LJ) board.

BOTTOM LED (LI) board   *BOTTOM LED (LG) board*
BOTTOM LED (LJ) board   *BOTTOM LED (LH) board*

Bottom lens (front) block

BOTTOM LED (LI2) board   *BOTTOM LED (LG2) board*
BOTTOM LED (LJ2) board   *BOTTOM LED (LH2) board*

Bottom lens (rear) block

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SECTION 2
DISASSEMBLY

• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

Wireless speaker

Note: Refer to the next page for the disassembly flow of Wireless microphone.

2-2. TOP PANEL BLOCK-1 *(Page 18)* 2-3. TOP PANEL BLOCK-2 *(Page 19)*

2-4. TOUCH BOARD *(Page 20)*

2-37. AC INLET *(Page 53)*

2-38. SERVICE POSITION *(Page 54)*

2-5. MIC BOARD *(Page 21)*

2-6. TOUCH PAD, ULT BUTTON, POWER BUTTON *(Page 22)*

2-7. TOP PANEL ASSY *(Page 23)*

2-8. JACK COVER (TOP) *(Page 24)*

2-9. HANDLE LENS ASSY *(Page 25)*

2-10. HANDLE LED (LA)/(LB)/(LC)/(LD)/(LE) BOARDS, HANDLE ASSY-1 *(Page 26)* 2-11. HANDLE LED (LA)/(LB)/(LC)/(LD)/(LE) BOARDS, HANDLE ASSY-2 *(Page 27)*

2-12. MAIN BOARD-1 *(Page 28)* 2-13. MAIN BOARD-2 *(Page 29)* 2-14. MAIN BOARD-3 *(Page 30)*

2-15. SMPS BOARD-1 *(Page 31)* 2-16. SMPS BOARD-2 *(Page 32)*

2-17. CHASSIS, FAN-1 *(Page 33)* 2-18. CHASSIS, FAN-2 *(Page 34)*

2-19. LEFT PANEL ASSY, RIGHT PANEL ASSY *(Page 35)*

2-27. BOTTOM PANEL ASSY *(Page 43)*

2-20. REAR CABINET BLOCK-1 *(Page 36)* 2-21. REAR CABINET BLOCK-2 *(Page 37)*

2-28. CASTER BLOCK *(Page 44)*

2-29. BOTTOM LENS (FRONT) BLOCK *(Page 45)*

2-22. JACK COVER (REAR) *(Page 38)*

2-30. BOTTOM LED (LG2)/(LH2)/ (LI2)/(LJ2)/(LK) BOARDS, CASTER ASSY-1 *(Page 46)* 2-31. BOTTOM LED (LG2)/(LH2)/ (LI2)/(LJ2)/(LK) BOARDS, CASTER ASSY-2 *(Page 47)*

2-32. BOTTOM LED (LF)/(LG)/ (LH)/(LI)/(LJ) BOARDS, BOTTOM LENS (FRONT)-1 *(Page 48)* 2-33. BOTTOM LED (LF)/(LG)/ (LH)/(LI)/(LJ) BOARDS, BOTTOM LENS (FRONT)-2 *(Page 49)*

2-23. REAR CABINET ASSY *(Page 39)*

2-24. REAR TWEETER *(Page 40)*

2-25. MIDRANGE *(Page 41)*

2-34. FRONT CABINET ASSY-1 *(Page 50)* 2-35. FRONT CABINET ASSY-2 *(Page 51)*

2-26. FRONT TWEETER *(Page 42)*

2-36. WOOFER *(Page 52)*

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ULT TOWER 10

Wireless microphone

2-39. GRILLE
(Page 55)

2-40. PCB CAP
(Page 56)

2-41. BODY
(Page 57)

2-42. MICROPHONE
BOARD
(Page 58)

2-43. MICROPHONE
(Page 59)

SYS SET

Note: Follow the disassembly procedure in the numerical order given.

2-2.   TOP PANEL BLOCK-1 (WIRELESS SPEAKER)

> **Note:** When reusing the screw cover (rear) or screw cover (side) for installation, make sure that the screw cover (rear) or screw cover (side) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (rear) or screw cover (side) and replace it with a new part.

❷ *two screw covers (side) (See Note) (See Fig. A)*

front side

top side

right side

❶ *two screw covers (rear) (See Note)*

❷ *two screw covers (side) (See Note)*

rear side

left side

• How to remove the screw cover (rear)
When removing the screw cover (rear), insert a sharp-tipped object such as tweezers into the gap.

tweezers, etc.

screw cover (rear)

– Rear view –

• How to remove the screw cover (side)
When removing the screw cover (side), insert a sharp-tipped object such as tweezers into the gap.

< Fig. A >

tweezers, etc.

screw cover (side)

– Left view –

❸ *two screws (BTP3.5 × 16) (black)*

❸ *two screws (BTP3.5 × 16) (black)*

❸ *two screws (BTP3.5 × 16) (black)*

2-3. TOP PANEL BLOCK-2 (WIRELESS SPEAKER)

❶ *Hold the rear handle and lift up the top panel block in the direction of the arrow.*
Note 1: FFC is connected. Be careful when lifting the top panel block.

❷ *claw*
❷ *claw (See Fig. B)*
❷ *claw*
❷ *claw (See Fig. B)*
❷ *claw (See Fig. B)*
❷ *claw (See Fig. B)*
❷ *claw (See Fig. B)*

hole *hole*

top side

front side

❷ *claw (See Fig. B)*

hole

hole

❷ *claw*

hole

❷ *claw*

rear side

❷ *claw*

< **Fig. B** >

claw

claw

― **Side view** ―

❻ *Peel off the adhesive carefully so as not to damage the connector and FFC.*

FFC (MAIN-TOUCH) (60 core)

adhesive

― **Inner view** ―

TOUCH board connector (XP2103)

Note 2: The FFC connected to the TOUCH board is fixed to the connector with adhesive.
Therefore, when removing the FFC from the connector on the TOUCH board, remove the adhesive carefully to avoid damaging the wire, and then remove the FFC.
Also, if it reconnect the FFC, it is not necessary to apply adhesive. Make sure to insert the FFC firmly and correctly into the connector.

❽ top panel block

TOUCH board connector (XP2103)

❺ *Lift up the top panel block in the direction of the arrow*
Note 1: FFC is connected. Be careful when lifting the top panel block.

The opposite side is terminal side.

❼ *FFC (MAIN-TOUCH) (See Note 2)*

FFC (MAIN-TOUCH) (60 core)

ferrite core

❹ *Remove the FFC (MAIN-TOUCH) (60 core) from the rear cabinet.*

rear side

❸ *two claws*

― **Top view** ―

• **Arrangement when installing the FFC (MAIN-TOUCH) (60 core)**

Press the ferrite core, and locked by two claws.

claw

FFC (MAIN-TOUCH) (60 core)

claw

rear side

ferrite core

― **Top view** ―

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2-4. TOUCH BOARD (WIRELESS SPEAKER)

TOUCH-HANDLE
LED (LD)/(LE)
8 pin wire

claw

❶ Remove the connector
while pressing the claw.

TOUCH board
connector (XS2100)

❷ TOUCH-HANDLE LED (LD)/(LE)
8 pin wire connector

TOUCH-HANDLE
LED (LB)/(LC)
10 pin wire

claw

❸ Remove the connector
while pressing the claw.

TOUCH board
connector (XS2101)

❹ TOUCH-HANDLE LED (LB)/(LC)
10 pin wire connector

front side

top panel block

top side

rear side

TOUCH board
connector (XS2100)

TOUCH board
connector (XS2101)

❺ seven screws (43)
(black)

❻ TOUCH board holder

❾ TOUCH board
(See Note)

Note: When the TOUCH board is replaced with a
new board, be sure to refer to "IMPORTANT
NOTE OF REPLACING THE TOUCH
BOARD" on page 8, and perform each work.

terminal side

terminal side

❽ MEMS MIC FPC

❼ FFC (TOUCH-MIC) connected
to the MIC board.

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2-5. MIC BOARD (WIRELESS SPEAKER)

rear side

❶ Open the jack cover (top).

jack cover
(top)

top side

❷ MIC knob
(See Fig. C)

Turn over and turn the
bottom side upward.

• How to install the MIC knob

Align the D-shaped parts of the rotary encoder
and MIC knob and insert.

< Fig. C >

MIC knob

rotary
encoder

rear side

— Top view —

❸ three screws (43)
(black)

❹ MIC board holder
Note: When installing the MIC board holder,
align the two holes and two bosses.

hole

hole

MIC board block

❺ Pull out the MIC board
block from the groove.

groove

boss

front side

rear side

groove

❻ FFC (TOUCH-MIC)
(14 core)

❼ MIC board

terminal
side

MIC board
connector (XP11)

top panel block

boss

top side

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2-6. TOUCH PAD, ULT BUTTON, POWER BUTTON (WIRELESS SPEAKER)

❶ touch pad

❷ ULT button (See Fig. D)

❸ power button (See Fig. E)

front side

top side

rear side

top panel block

• **Installation position of the ULT button**

< Fig. D >

When installing the ULT button, align the two protrusions and two grooves.

front side

ULT button

– Bottom view –

• **Installation position of the power button**

< Fig. E >

When installing the power button, align the two protrusions and two grooves.

front side

power button

– Bottom view –

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2-7. TOP PANEL ASSY (WIRELESS SPEAKER)

❶ two screws (43)
(black)

❺ top panel assy
Note: When installing the top panel assy,
align the two holes and two bosses.

groove
hole

❶ two screws (43)
(black)

groove

hole

❷ Remove the TOUCH-HANDLE
LED (LD)/(LE) 8 pin wire from
the groove.
(See Fig. F)

❹

❹

front side

❸ Remove the TOUCH-HANDLE
LED (LB)/(LC) 10 pin wire from
the groove.
(See Fig. G)

boss

handle block

rear side

boss

top side

• **Arrangement when installing the**
TOUCH-HANDLE LED (LD)/(LE)
8 pin wire

< Fig. F >

Press.

groove

rear side

TOUCH-HANDLE LED
(LD)/(LE) 8 pin wire

• **Arrangement when installing the**
TOUCH-HANDLE LED (LB)/(LC)
10 pin wire

< Fig. G >

Press.

groove

rear side

TOUCH-HANDLE LED
(LB)/(LC) 10 pin wire

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2-8. JACK COVER (TOP) (WIRELESS SPEAKER)

bottom side

jack cover (top)

rear side

front side

stopper portion

jack cover (top)

hole

❷ Cut.

❶ Pull the jack cover (top) in
the direction of the arrow.

Turn over.

❸ jack cover (top)

top side

hole

rear side

front side

• **How to install the jack cover (top)**
When replacing the jack cover (top) with a new one and
installing it to the top panel, pass the shaft of jack cover (top)
through the hole on the top panel, and use needle-nosed
pliers from the inside of top panel to pull it out until the
stopper portion passes through the hole completely.

jack cover (top)

hole

jack cover (top)

stopper portion

hole

needle-nosed pliers, etc.

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2-9. HANDLE LENS ASSY (WIRELESS SPEAKER)

• **How to remove the screw cover (handle)**
 When removing the screw cover (handle), insert a sharp-tipped object such as tweezers into the notch.
 < Fig. H >

tweezers, etc.
screw cover (handle)
notch
– **Bottom view** –

• **How to install the screw cover (handle)**
 Note: When installing the screw cover (handle), align the protrusion of screw cover (handle) and groove of screw hole.
 < Fig. I >

screw cover (handle)
protrusion
screw hole
groove
– **Bottom view** –

❶ Pull out the TOUCH-HANDLE LED (LD)/(LE) 8 pin wire through the hole.

hole

❸ screw cover (handle)

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

front side

❷ Pull out the TOUCH-HANDLE LED (LB)/(LC) 10 pin wire through the hole.

hole

❸ screw cover (handle) (See Fig. H, I)

❸ screw cover (handle) (See Fig. H, I)

top side

rear side

❸ screw cover (handle) (See Fig. H, I)

❹ two screws (43) (black)

❹ four screws (43) (black)

❹ six screws (43) (black)

❺ handle lens assy

❹ screw (43) (black)

❹ screw (43) (black)

bottom panel block

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2-10. HANDLE LED (LA)/(LB)/(LC)/(LD)/(LE) BOARDS, HANDLE ASSY-1 (WIRELESS SPEAKER)

• Pasting position of the EVA cushion

< Fig. J >

TOUCH-HANDLE LED (LD)/(LE) 8 pin wire

EVA cushion

TOUCH-HANDLE LED (LB)/(LC) 10 pin wire

EVA cushion

bottom side

bottom side

– Left view –

– Right view –

❶ EVA cushion (See Fig. J)

❶ EVA cushion (See Fig. J)

front side

rear side

top side

HANDLE LED (LE) board connector (XP1400)

claw

claw

❷ Remove the connector while pressing the claw.

HANDLE LED (LD) board connector (XP1300)

❸ TOUCH-HANDLE LED (LD)/(LE) 8 pin wire

TOUCH-HANDLE LED (LD)/(LE) 8 pin wire

TOUCH-HANDLE LED (LB)/(LC) 10 pin wire

HANDLE LED (LD) board connector (XP1300)

HANDLE LED (LC) board connector (XP1200)

HANDLE LED (LE) board connector (XP1400)

HANDLE LED (LB) board connector (XP1100)

HANDLE LED (LC) board connector (XP1200)

claw

claw

❹ Remove the connector while pressing the claw.

HANDLE LED (LB) board connector (XP1100)

❺ TOUCH-HANDLE LED (LB)/(LC) 10 pin wire

SYS SET

2-11. HANDLE LED (LA)/(LB)/(LC)/(LD)/(LE) BOARDS, HANDLE ASSY-2 (WIRELESS SPEAKER)

❶ *HANDLE LED (LE) board*
   Note 1: When installing the HANDLE LED (LE) board, align the three holes and three bosses.

❷ *HANDLE LED (LD) board*
   Note 2: When installing the HANDLE LED (LD) board, align the two holes and two bosses.

❸ *HANDLE LED (LC) board*
   Note 3: When installing the HANDLE LED (LC) board, align the two holes and two bosses.

❹ *HANDLE LED (LA)/(LB) board block*
   Note 4: When installing the HANDLE LED (LA)/ (LB) board block, align the five holes and five bosses.

hole

front side

boss

❺ *handle assy*

rear side

top side

❻ *Remove the HANDLE LED (LB) board from the connector on the HANDLE LED (LA) board.*

❽ *HANDLE LED (LA) board*

HANDLE LED (LA) board connector (XP1000)

HANDLE LED (LB) board connector (XP1101)

❼ *HANDLE LED (LB) board*

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2-12. MAIN BOARD-1 (WIRELESS SPEAKER)

Note 1: The wires connected to the MAIN board are fixed to the connector with adhesive. Therefore, when removing the wires from the connector on the MAIN board, remove the adhesive carefully to avoid damaging the wires, and then remove the wires. Also, if it reconnect the wires, it is not necessary to apply adhesive. Make sure to nsert the wires firmly and correctly into the connector.

❶ *Peel off the adhesive carefully so as not to damage the connector and wire.*

fan 3 pin wire

adhesive

— Inner view —

MAIN board connector (XP1203)

fan 3 pin wire

claw

❷ *Remove the connector while pressing the claw.*

MAIN board connector (XP1203)

❸ *fan 3 pin wire connector (See Note)*

top side

front side

rear side

MAIN board connector (XP1203)

MAIN board connector (XP1)

❹ *Peel off the adhesive carefully so as not to damage the connector and wire.*

MAIN-SMPS 13 pin wire

adhesive

— Inner view —

MAIN-SMPS 13 pin wire

claw

❺ *Remove the connector while pressing the claw.*

MAIN board connector (XP1)

❻ *MAIN-SMPS 13 pin wire connector (See Note)*

• Arrangement when installing the wires

Arrange the each wire as shown in the figure and and fix with the cable tie.

Note 2: When it is cut the cable tie, use a cable tie of commercial products.

< Fig. K >

front side

cable tie

woofer 2 pin wire

rear tweeter 4 pin wire

front tweeter/ midrange 8 pin wire

MAIN-BOTTOM LED (LF) 4 pin wire

❼ Cut the cable tie. (See Fig. K)

SYS SET

2-13. MAIN BOARD-2 (WIRELESS SPEAKER)

❶ *Peel off the adhesive carefully so as not to damage the connector and wire.*

adhesive

front tweeter/midrange 8 pin wire, rear tweeter 4 pin wire, woofer 2 pin wire, MAIN-BOTTOM LED (LF) 4 pin wire

MAIN board connector (XP1201, XP1202, XP1205, XP1501)

— *Inner view* —

Note: The wires connected to the MAIN board are fixed to the connector with adhesive.
Therefore, when removing the wires from the connector on the MAIN board, remove the adhesive carefully to avoid damaging the wires, and then remove the wires. Also, if it reconnect the wires, it is not necessary to apply adhesive. Make sure to insert the wires firmly and correctly into the connector.

rear side

top side

MAIN board connector (XP1501)

MAIN-BOTTOM LED (LF) 4 pin wire

claw

❷ Remove the connector while pressing the claw.

MAIN board connector (XP1501)

❸ *MAIN-BOTTOM LED (LF) 4 pin wire connector (See Note)*

front side

front tweeter/ midrange 8 pin wire

claw

❹ Remove the connector while pressing the claw.

MAIN board connector (XP1201)

❺ *front tweeter/ midrange 8 pin wire connector (See Note)*

MAIN board connector (XP1201)

rear tweeter 4 pin wire

claw

❻ Remove the connector while pressing the claw.

MAIN board connector (XP1202)

❼ *rear tweeter 4 pin wire connector (See Note)*

MAIN board connector (XP1202)

woofer 2 pin wire

claw

❽ Remove the connector while pressing the claw.

MAIN board connector (XP1205)

❾ *woofer 2 pin wire connector (See Note)*

MAIN board connector (XP1205)

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2-14. MAIN BOARD-3 (WIRELESS SPEAKER)

❶ *Peel off the adhesive carefully so as not to damage the connector and wire.*

FFC (MAIN-TOUCH)

adhesive

MAIN board connector (XP2003)

— Inner view —

Note 1: The FFC connected to the MAIN board is fixed to the connector with adhesive.
Therefore, when removing the FFC from the connector on the MAIN board, remove the adhesive carefully to avoid damaging the wire, and then remove the FFC.
Also, if it reconnect the FFC, it is not necessary to apply adhesive. Make sure to insert the FFC firmly and correctly into the connector.

❷ *FFC (MAIN-TOUCH) (See Note 1)*

terminal side

rear side

top side

front side

❸ *five screws (BTT3 × 7) (black)*

MAIN board connector (XP2003)

❹ *Lift up the MAIN board in the direction of the arrow.*

hole ❺ *rib*

hole

hole

❺ *rib*

hole

❺ *rib*

rib *rib*

thermal sheet

❻ *Remove the MAIN board in the direction of the arrow.*
Note 2: When installing the MAIN board, align the three holes and three ribs.

hole

rib

hole

hole

hole

❼ *MAIN board*

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2-15. SMPS BOARD-1 (WIRELESS SPEAKER)

Note: The wires connected to the SMPS board are fixed to the connector with adhesive.
Therefore, when removing the wires from the connector on the SMPS board, remove
the adhesive carefully to avoid damaging the wires, and then remove the wires.
Also, if it reconnect the wires, it is not necessary to apply adhesive. Make sure to insert
the wires firmly and correctly into the connector.

❶ *Remove the AC inlet 2 pin wire from the groove.
(See Fig. L)*

top side

front side

• **Arrangement when installing AC inlet 2 pin wire**

< Fig. L >

AC inlet 2 pin wire   Press.

groove

— **Top view** —

SMPS board
connector (XP1)

rear side

SMPS board
connector (CN1)

groove

❷ *Peel off the adhesive carefully so as not to damage the connector and wire.*

AC inlet
2 pin wire

adhesive

— **Inner view** —

AC inlet
2 pin wire

claw

❸ *Remove the connector while pressing the claw.*

SMPS board
connector (CN1)

❹ *AC inlet 2 pin wire connector
(See Note)*

❺ *Peel off the adhesive carefully so as not to damage the connector and wire.*

MAIN-SMPS
13 pin wire

adhesive

— **Inner view** —

claw

MAIN-SMPS
13 pin wire

❻ *Remove the connector while pressing the claw.*

SMPS board
connector (XP1)

❼ *MAIN-SMPS 13 pin wire connector
(See Note)*

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2-16. SMPS BOARD-2 (WIRELESS SPEAKER)

❶ *five screws (BTT3 × 7)*
(black)

❸ *SMPS board*

top side

❷ *Remove the SMPS board in*
the direction of the arrow.

front side

rear side

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2-17. CHASSIS, FAN-1 (WIRELESS SPEAKER)

❷ two screws (43)
(black)

❷ two screws (43)
(black)

❷ two screws (43)
(black)

hole

hole

hole

hole

❹ chassis block

hole

groove

❶ Remove the MAIN-BOTTOM LED (LF) 4 pin wire,
front tweeter/midrange 8 pin wire, rear tweeter
4 pin wire and woofer 2 pin wire from the groove.
(See Fig. M)

boss

boss

top side

❸ Remove the chassis block in
the direction of the arrow.
Note: When installing the chassis block,
align the four holes and four bosses.

boss

boss

rear side

front side

• **Arrangement when installing the wires**

< Fig. M >

MAIN-BOTTOM LED
(LF) 4 pin wire

front tweeter/midrange
8 pin wire

rear tweeter 4 pin wire

woofer 2 pin wire

rear side

Press.

groove

2-18. CHASSIS, FAN-2 (WIRELESS SPEAKER)

❷ MAIN-SMPS 13 pin wire

❶ Remove the MAIN-SMPS 13 pin wire from the groove. (See Fig. N)

groove

❸ thermal sheet

top side

❶ Remove the MAIN-SMPS 13 pin wire from the groove. (See Fig. N)

groove

front side

rear side

• **Arrangement when installing the MAIN-SIPS 13 pin wire**

< Fig. N >

MAIN-SMPS 13 pin wire

top side

Press.

Press.

– **Front view** –

• **How to install the fan**

< Fig. O >

Note: When installing the fan, align the fan so that it is inside the rib.

rib   label   rib

top side

rib   rib   wires position   rib   rib

– **Rear view** –

❼ fan (See Fig. O)

❹ four screws (BTP5 × 10) (black)

❻ chassis

❺ Remove the fan in the direction of the arrow.

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2-19. LEFT PANEL ASSY, RIGHT PANEL ASSY (WIRELESS SPEAKER)

Left side

top side   front side   ❶ Remove the left panel assy
                             in the direction of the arrow.

                          ❸ left panel assy
                             (See Fig. P)

                          ❷ total twelve
          left side   claws

rear side

total twelve hooks

Right side

top side   rear side   ❶ Remove the right panel assy
                             in the direction of the arrow.

                          ❸ right panel assy
                             (See Fig. P)

                          ❷ total twelve
          right side   claws

front side

total twelve hooks

• How to identify the left panel assy and right panel assy

Left panel assy and right panel assy are engraved with the letters "L" and "R".
Check the engraved letters to identify the left panel assy and right panel assy.

< Fig. P >

top side

L : left panel assy   R : right panel assy

— Inner view —

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2-20. REAR CABINET BLOCK-1 (WIRELESS SPEAKER)

❶ *Draw out the AC inlet 2 pin wire from the hole. (See Fig. Q)*

top side

hole

groove

rear side

❷ *Remove the AC inlet 2 pin wire from the groove. (See Fig. Q)*

❸ *Remove the rear tweeter 4 pin wire from the hook. (See Fig. R)*

hook

front side

• ***Arrangement when installing the AC inlet 2 pin wire***

< Fig. Q >

top side

AC inlet 2 pin wire

rear side

hole

Press.

groove

• ***Arrangement when installing the rear tweeter 4 pin wire***

< Fig. R >

rear tweeter 4 pin wire

top side

rear side

Press.

hook

2-21. REAR CABINET BLOCK-2 (WIRELESS SPEAKER)

Note 1: When reusing the screw cover (rear) for installation, make sure that the screw cover (rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (rear) and replace it with a new part.
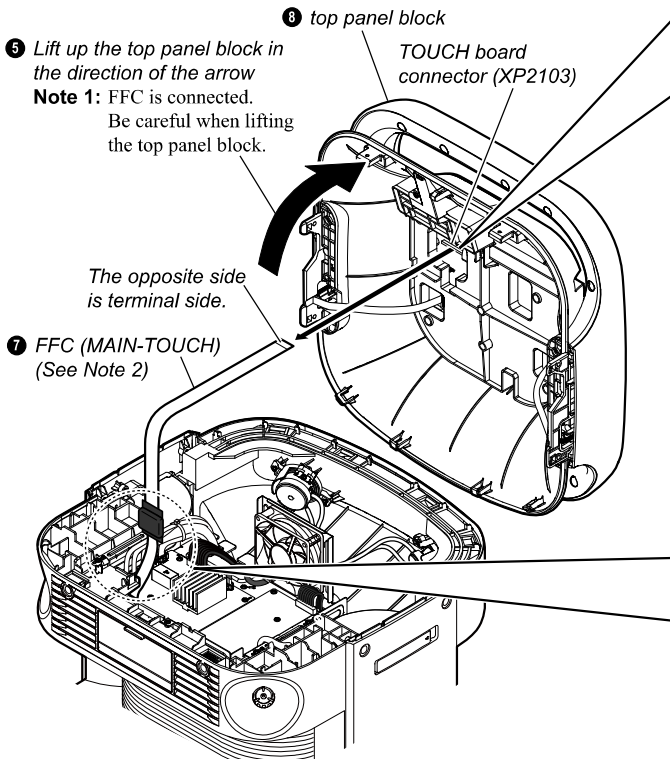
❸ *two screws (M4 × 20) (black)*

front side

top side

• **How to remove the screw cover (rear)**

When removing the screw cover (rear), insert a sharp-tipped object such as tweezers into the gap.

tweezers, etc.

screw cover (rear)

— Rear view —

rear side

❶ *screw cover (rear) (See Note 1)*

❷ *screw (BTP3.5 × 16) (black)*

❷ *screw (BTP3.5 × 16) (black)*

❸ *two screws (M4 × 20) (black)*

❶ *screw cover (rear) (See Note 1)*

❺ *Remove the rear cabinet block in the direction of the arrow.*
Note 2: When installing the rear cabinet block, align the two grooves and two ribs.

rib

rib

groove

❹ *three claws*

groove

❹ *three claws*

❻ *rear cabinet block*

2-22. JACK COVER (REAR) (WIRELESS SPEAKER)

top side

rear side

front side

Place the jack cover (rear) in the visible direction.

top side

front side

claw   claw

❶ *Remove the jack cover (rear) from the claw.*

jack cover (rear)

front side

hole

❷ *Remove the jack cover (rear) in the direction of the arrow.*

hole

rear side

❸ model number label

Note: When replacing the jack cover (rear) with a new part, carefully peel off the model number label affixed to the inside on the jack cover (rear), and affix it to the inside of the new jack cover (rear).

model number label

❹ jack cover (rear)

2-23. REAR CABINET ASSY (WIRELESS SPEAKER)

• **Note about installing the rear tweeter (left side) block**

Matched in "L".

— Front view —   rear tweeter (left side) block

top side

boss   three slits   rear side

hole

❷ Remove the rear tweeter 4 pin wire from the three slits. (See Fig. S)

❶ two screws (43) (black)

❸ rear tweeter block
Note 1: When installing the rear tweeter block, align the hole and boss.

❶ two screws (43) (black)

• **Note about installing the rear tweeter (right side) block**

Matched in "R".

R

rear tweeter (right side) block   — Front view —

• **Arrangement when installing the rear tweeter 4 pin wire**

< Fig. S >

top side

slit   slit   slit

Press.   Press.   Press.

— Front view —

Place the jack cover (rear) in the visible direction.

front side   ❻ rear cabinet assy

top side

❺ model number label

Note 2: When replacing the rear cabinet assy with a new part, open the jack cover (rear) on the rear side of the rear cabinet assy, carefully peel off the model number label affixed to the inside, and affix it to the inside on the jack cover (rear) of the new rear cabinet assy.

model number label

❹ Open the jack cover (rear).

rear side

2-24. REAR TWEETER (WIRELESS SPEAKER)

OK   NG

❶ *Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].*

protrusion

OK   NG

protrusion

❶ *Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/white].*

❷ *rear tweeter (left side) (See Fig. T)*

❷ *rear tweeter (right side) (See Fig. T)*

OK   NG

protrusion

❶ *Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/red].*

OK   NG

protrusion

❶ *Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].*

• ***How to identify the rear tweeter (left side) and rear tweeter (right side)***

Rear tweeter (left side) and rear tweeter (right side) are engraved with the letters "L" and "R".
Check the engraved letters to identify the rear tweeter (left side) and rear tweeter (right side).

< Fig. T >

L : rear tweeter (left side)   *top side*

R : rear tweeter (right side)

– Rear view –

2-25. MIDRANGE (WIRELESS SPEAKER)

❶ Remove the midrange 4 pin wire from the hook. (See Fig. U)

top side

hook

front side

rear side

❺ midrange (left side)

❹ Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/red].

| OK | NG |

protrusion

❹ Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].

protrusion

| OK | NG |

❷ four screws (43) (black)

❸ Remove the midrange block (right side) in the direction of the arrow. (See Fig. U)

❺ midrange (right side)

❷ four screws (43) (black)

❸ Remove the midrange block (left side) in the direction of the arrow. (See Fig. U)

❹ Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/white].

| OK | NG |

protrusion

• **How to install the midrange and arrangement when installing the front tweeter/midrange 8 pin wire**

Note: When installing the midrange, align the four holes and four bosses.

< Fig. U >

front tweeter/midrange 8 pin wire

Press.

hole

hook

hole

hole

hole

top side

midrange (right side)

midrange (left side)

boss

boss

— **Rear view** —

boss

boss

2-26. FRONT TWEETER (WIRELESS SPEAKER)

OK NG

protrusion

❷ Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].

OK NG

protrusion

❷ Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/yellow].

OK NG

protrusion

❷ Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/blue].

❸ front tweeter (right side)

❶ screw (43) (black)

❶ screw (43) (black)

top side

❸ front tweeter (left side)

❶ screw (43) (black)

❶ screw (43) (black)

front side

OK NG

protrusion

❷ Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].

rear side

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2-27. BOTTOM PANEL ASSY (WIRELESS SPEAKER)

• How to remove the side foot (left side)

When removing the side foot (left side), insert a sharp-tipped object such as tweezers into the gap.

— **Bottom view** —

tweezers, etc.

side foot (left side)

Note 1: When reusing the foot (front or side or rear) for installation, make sure that the foot (front or side or rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the foot (front or side or rear) and replace it with a new part.

❷ screw (BTP3.5 × 16) (black)

left side

❶ side foot (left side) (See Note 1)

❶ rear foot (rear side) (See Note 1)

rear side

• How to remove the rear foot (rear side)

When removing the rear foot (rear side), insert a sharp-tipped object such as tweezers into the gap.

tweezers, etc.

rear foot (rear side)

— **Bottom view** —

bottom side

front side

❶ side foot (right side) (See Note 1)

front foot (front side) (See Note 1)

Note 2: When removing the bottom panel assy, no need to remove this foot.

• How to remove the side foot (right side)

When removing the side foot (right side), insert a sharp-tipped object such as tweezers into the gap.

tweezers, etc.

side foot (right side)

— **Bottom view** —

Turn the opposite side facing up.

right side

front side

❸ screw (BTP3.5 × 16) (black)

❹

❸ nine screws (BTP3.5 × 16) (black)

bottom side

rear side

❺ bottom panel assy

43

2-28. CASTER BLOCK (WIRELESS SPEAKER)

❶ four screws (M4 × 20) (black)

rear side

bottom side

front side

❷ Open the caster block in the direction of the arrow.
Note: When installing the caster block, align the two holes and two bosses.

BOTTOM LED (LK) board connector (XP2001)

boss

hole

claw

BOTTOM LED (LK) board connector (XP2001)

❹ Remove the connector while pressing the claw.

groove

❺ BOTTOM LED (LF)-BOTTOM LED (LK) 4 pin wire connector

hole

boss

❻ caster block

❸ BOTTOM LED (LF)-BOTTOM LED (LK) 10 pin wire from the groove. (See Fig. V)

• **Arrangement when installing the BOTTOM LED (LF)-BOTTOM LED (LK) 10 pin wire**

< Fig. V >

groove

Press.

BOTTOM LED (LF)-BOTTOM LED (LK) 4 pin wire

top side

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2-29. BOTTOM LENS (FRONT) BLOCK (WIRELESS SPEAKER)

front side

BOTTOM LED (LF)
board connector
(XP1502)

claw

BOTTOM LED (LF)
board connector
(XP1502)

❶ Remove the connector
while pressing the claw.

❷ *MAIN-BOTTOM LED (LF)*
4 pin wire connector

bottom side

rear side

bottom lens
(front) block

BOTTOM LED (LF)
board connector
(XP1500)

adhesive

MAIN-BOTTOM LED
(LF) 4 pin wire

— *Inner view* —

❸ *six*
claws

❺ Peel off the adhesive carefully so as not
to damage the connector and wire.

Note: The wire connected to the BOTTOM LED (LF)
board is fixed to the connector with adhesive.
Therefore, when removing the wire from the
connector on the BOTTOM LED (LF) board,
remove the adhesive carefully to avoid
damaging the wire, and then remove the wire.
Also, if it reconnect the wire, it is not necessary
to apply adhesive. Make sure to insert the wire
firmly and correctly into the connector.

❹ Open the bottom lens (front) block
in the direction of the arrow.

❾ bottom lens (front) block

BOTTOM LED (LF)
board connector
(XP1500)

BOTTOM LED (LF) *claw*
board connector
(XP1500)

❻ Remove the connector
while pressing the claw.

❼ *BOTTOM LED (LF)-BOTTOM*
LED (LK) 4 pin wire connector
(See Note)

hole

❽ Pull out the BOTTOM LED (LF)-
BOTTOM LED (LK) 4 pin wire
through the hole.

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2-30. BOTTOM LED (LG2)/(LH2)/(LI2)/(LJ2)/(LK) BOARDS, CASTER ASSY-1 (WIRELESS SPEAKER)

• **How to remove the FFC**

< Fig. W >

FFC (BOTTOM LED (LG2)-BOTTOM LED (LH2) (6 core),
FFC (BOTTOM LED (LG2)-BOTTOM LED (LK) (10 core),
FFC (BOTTOM LED (LI2)-BOTTOM LED (LK) (10 core),
FFC (BOTTOM LED (LI2)-BOTTOM LED (LJ2) (6 core)

❶ *Peel off the adhesive carefully so as not to damage the connector and FFC.*

adhesive

— **Inner view** —

BOTTOM LED (LG2) connector (XP2300, XP2301),
BOTTOM LED (LH2) connector (XP2400),
BOTTOM LED (LI2) connector (XP2500, XP2501),
BOTTOM LED (LJ2) connector (XP2600),
BOTTOM LED (LK) connector (XP2000, XP2002)

Note: The FFCs connected to the BOTTOM LED (LG2)/(LH2)/(LI2)/(LJ2)/(LK) boards are fixed to the connector with adhesive.
Therefore, when removing the FFCs from the connector on the BOTTOM LED (LG2)/(LH2)/(LI2)/(LJ2)/(LK) boards, remove the adhesive carefully to avoid damaging the FFCs, and then remove the FFCs.
Also, if it reconnect the FFCs, it is not necessary to apply adhesive. Make sure to insert the FFCs firmly and correctly into the connector.
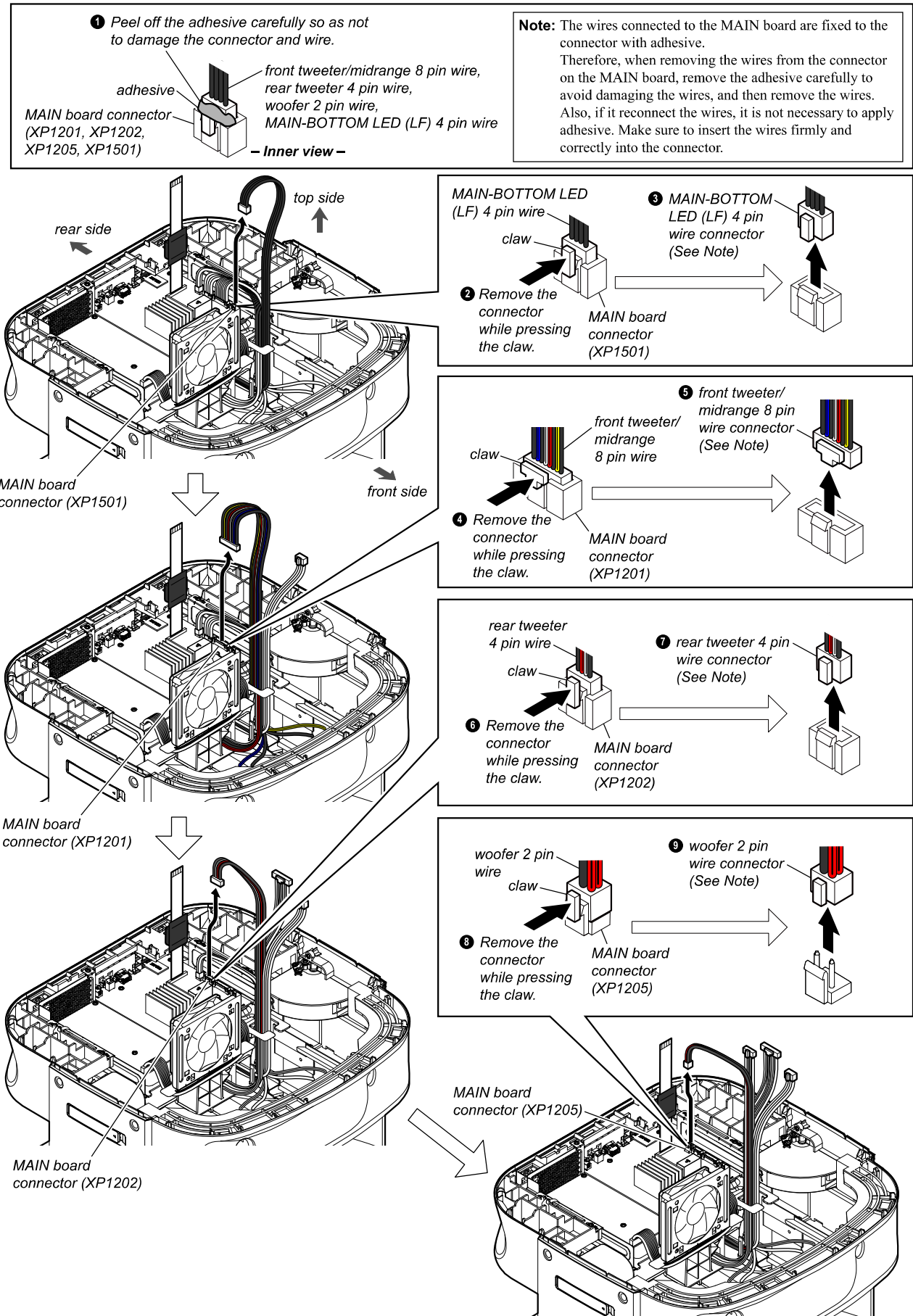

❺ *FFC (BOTTOM LED (LI2)-BOTTOM LED (LJ2) (6 core) (See Fig. W) (See Note)*

terminal side

terminal side

terminal side

❹ *FFC (BOTTOM LED (LI2)-BOTTOM LED (LK) (10 core) (See Fig. W) (See Note)*

The opposite side is terminal side.

The opposite side is terminal side.

❸ *FFC (BOTTOM LED (LG2)-BOTTOM LED (LK) (10 core) (See Fig. W) (See Note)*

rear side

terminal side

❷ *FFC (BOTTOM LED (LG2)-BOTTOM LED (LH2) (6 core) (See Fig. W) (See Note)*

terminal side.

terminal side.

BOTTOM LED (LJ2) board connector (XP2600)

BOTTOM LED (LI2) board connector (XP2500)

BOTTOM LED (LI2) board connector (XP2501)

front side

BOTTOM LED (LK) board connector (XP2002)

BOTTOM LED (LK) board connector (XP2000)

BOTTOM LED (LG2) board connector (XP2301)

caster block

BOTTOM LED (LG2) board connector (XP2300)

bottom side

BOTTOM LED (LH2) board connector (XP2400)

2-31. BOTTOM LED (LG2)/(LH2)/(LI2)/(LJ2)/(LK) BOARDS, CASTER ASSY-2 (WIRELESS SPEAKER)

❶ *three screws (43)*
(black)

❷ *rear bottom lens block*
   Note 1: When installing the rear bottom lens block,
            align the four holes and four ribs.

❶ *screw (43)*
(black)

hole
hole
hole
hole

rib
rib
rib
rib

rear side

front side

bottom side

❼ *BOTTOM LED (LJ2) board (See Note 10)*
   Note 9: When installing the BOTTOM LED
            (LJ2) board, align the three grooves
            and three ribs.

❻ *BOTTOM LED (LI2) board (See Note 8)*
   Note 7: When installing the BOTTOM LED
            (LI2) board, align the three grooves
            and three ribs.

groove
groove
groove
groove
groove

❺ *BOTTOM LED (LK) board*
   Note 6: When installing the BOTTOM LED
            (LK) board, align the four grooves
            and four ribs.

groove
groove
groove
groove
groove

❹ *BOTTOM LED (LG2) board (See Note 5)*
   Note 4: When installing the BOTTOM LED
            (LG2) board, align the three grooves
            and three ribs.

groove
groove
groove

❸ *BOTTOM LED (LH2) board (See Note 3)*
   Note 2: When installing the BOTTOM LED
            (LH2) board, align the three grooves
            and three ribs.

rib
rib
rib
rib
rib
rib
rib

rib
rib
rib
rib
rib
rib

❽ *caster assy*

Note 3: When the BOTTOM LED (LH2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LH) board. The BOTTOM LED (LH) board and the BOTTOMLED (LH2) board differ in the Ref. No. of each electrical parts in addition to the board name.	**Note 8:** When the BOTTOM LED (LI2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LI) board. The BOTTOM LED (LI) board and the BOTTOMLED (LI2) board differ in the Ref. No. of each electrical parts in addition to the board name.
Note 5: When the BOTTOM LED (LG2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LG) board. The BOTTOM LED (LG) board and the BOTTOMLED (LG2) board differ in the Ref. No. of each electrical parts in addition to the board name.	**Note 10:** When the BOTTOM LED (LJ2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LJ) board. The BOTTOM LED (LJ) board and the BOTTOMLED (LJ2) board differ in the Ref. No. of each electrical parts in addition to the board name.

SYS SET

2-32. BOTTOM LED (LF)/(LG)/(LH)/(LI)/(LJ) BOARDS, BOTTOM LENS (FRONT)-1 (WIRELESS SPEAKER)

• How to remove the FFC

< Fig. X >

FFC (BOTTOM LED (LF)-BOTTOM LED (LG) (10 core),
FFC (BOTTOM LED (LF)-BOTTOM LED (LI) (10 core),
FFC (BOTTOM LED (LG)-BOTTOM LED (LH) (6 core),
FFC (BOTTOM LED (LI)-BOTTOM LED (LJ) (6 core)

❶ Peel off the adhesive carefully so as not to damage the connector and FFC.

adhesive

— **Inner view** —

BOTTOM LED (LF) connector (XP1501, XP1503),
BOTTOM LED (LG) connector (XP1600,XP1601),
BOTTOM LED (LH) connector (XP1700),
BOTTOM LED (LI) connector (XP1800, XP1801),
BOTTOM LED (LJ) connector (XP1900)

Note: The FFCs connected to the BOTTOM LED (LF)/(LG)/(LH)/(LI)/(LJ) boards are fixed to the connector with adhesive. Therefore, when removing the FFCs from the connector on the BOTTOM LED (LF)/(LG)/(LH)/(LI)/(LJ) boards, remove the adhesive carefully to avoid damaging the FFCs, and then remove the FFCs.
Also, if it reconnect the FFCs, it is not necessary to apply adhesive. Make sure to insert the FFCs firmly and correctly into the connector.

❺ FFC (BOTTOM LED (LI)-BOTTOM LED (LJ) (6 core) (See Fig. X) (See Note)

terminal side

terminal side terminal side

❹ FFC (BOTTOM LED (LF)-BOTTOM LED (LI) (10 core) (See Fig. X) (See Note)

The opposite side is terminal side.

The opposite side is terminal side.

❸ FFC (BOTTOM LED (LF)-BOTTOM LED (LG) (10 core) (See Fig. X) (See Note)

terminal side.

front side

❷ FFC (BOTTOM LED (LG)-BOTTOM LED (LH) (6 core) (See Fig. X) (See Note)

terminal side

terminal side

BOTTOM LED (LJ) board connector (XP1900)

BOTTOM LED (LI) board connector (XP1800)

BOTTOM LED (LI) board connector (XP1801)

rear side

BOTTOM LED (LF) board connector (XP1503)

BOTTOM LED (LF) board connector (XP1501)

bottom side

BOTTOM LED (LG) board connector (XP1601)

BOTTOM LED (LG) board connector (XP1600)

BOTTOM LED (LH) board connector (XP1700)

SYS SET

2-33. BOTTOM LED (LF)/(LG)/(LH)/(LI)/(LJ) BOARDS, BOTTOM LENS (FRONT)-2 (WIRELESS SPEAKER)

❶ *six screws (43)*
(black)

screw hole

screw hole

screw hole

screw hole

screw hole

screw hole

❷ *front bottom lens*
Note 1: When installing the front bottom lens, align the six screw holes and six screw hole ribs.

front side

screw hole rib

screw hole rib

screw hole rib

screw hole rib

screw hole rib

screw hole rib

rear side

bottom side

❼ *BOTTOM LED (LJ) board*
Note 6: When installing the BOTTOM LED (LJ) board, align the three grooves and three ribs.

groove

groove

groove

groove

❻ *BOTTOM LED (LI) board*
Note 5: When installing the BOTTOM LED (LI) board, align the three grooves and three ribs.

groove

groove

❺ *BOTTOM LED (LF) board*
Note 4: When installing the BOTTOM LED (LF) board, align the four grooves and four ribs.

groove

groove

rib

rib

rib

rib

rib

rib

rib

rib

rib

rib

groove

groove

❹ *BOTTOM LED (LG) board*
Note 3: When installing the BOTTOM LED (LG) board, align the three grooves and three ribs.

groove

groove

❸ *BOTTOM LED (LH) board*
Note 2: When installing the BOTTOM LED (LH) board, align the three grooves and three ribs.

groove

groove

rib

rib

rib

rib

rib

❽ *BOTTOM LENS (FRONT)*

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2-34. FRONT CABINET ASSY-1 (WIRELESS SPEAKER)

• **Arrangement when installing the woofer 2 pin wire**

< Fig. Y >

front side

woofer 2 pin wire

Press.

groove

❶ Remove the woofer 2 pin wire from the hook. (See Fig. Y)

top side

front side

❷ two screws (M4 × 20) (black)

groove

rear side

Turn the front side upward.

top side

front side

❸ four screws (M4 × 20) (black)

left side

bottom side

right side

❸ two screws (M4 × 20) (black)

❸ four screws (M4 × 20) (black)

2-35. FRONT CABINET ASSY-2 (WIRELESS SPEAKER)

front side

total four bosses

top side

left side

bottom side

right side

speaker box

❶ *Insert the tool into the space and remove the boss.*
Note 1: When using a tool, please work carefully so as not to damage the speaker box and front cabinet assy.

❷ *Insert the flathead screwdriver into the space and remove the boss.*
Note 2: When using a flathead screwdriver, please work carefully so as not to damage the speaker box and front cabinet assy.

total four bosses

❸ *front cabinet assy*
Note 3: When installing the front cabinet assy, remove cleanly the sticked adhesive on bosses and holes, and apply adhesive to the speaker box holes again and install it.

total four holes

51

2-36. WOOFER (WIRELESS SPEAKER)

❶ eight screws (M4 × 20) (black)

bottom side

front side

top side

❷ *Insert the tool into the space and lift up the woofer block.*
Note 1: When using a tool, please work carefully so as not to damage the speaker box and woofer.

OK	NG

protrusion

❹ *Press the protrusion of the terminal to unlock it and remove the terminal (wide) [black/red].*

OK	NG

protrusion

❹ *Press the protrusion of the terminal to unlock it and remove the terminal (narrow) [black].*

❺ *woofer (See Fig. Z)*

❸ *Lift up the woofer block in the direction of the arrow.*

• **Installation direction for the woofer**

< Fig. Z >

Note 2: When installing the woofer, make the position of terminals as shown in the figure below.

terminals position

top side

bottom side

– **Front view** –

52

2-37. AC INLET (WIRELESS SPEAKER)

❷ *Remove the AC inlet block in the direction of the arrow.*

front side

❶ *two screws (M4 × 20) (black)*

rear side

bottom side

❹ *Pull out the AC inlet block in the direction of the arrow.*

❸ *claw*

❸ *claw*

❺ *AC cover*

❻ *Remove the connector while pressing the claw.*

claw

❼ *screw (43) (black)*

❽ *Lift up the AC inlet in the direction of the arrow.*

❶❶ *AC inlet*

❾ *Remove the AC inlet in the direction of the arrow.*

❶❶ *AC panel assy*

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2-38. SERVICE POSITION (WIRELESS SPEAKER)

top side

top panel block
Note: Place the top panel block so that the touch key
portion on the top side does not touch the stand.

right side

left side

MAIN board

SMPS board

top side

stand

speaker cabinet block

right side

left side

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2-39. GRILLE (WIRELESS MICROPHONE)

❶ Rotate the grille.

logo side

top side

❶ Rotate the grille.

bottom side

❸ grille

microphone

❷ Remove the grille in the direction of the arrow.

Note: Be careful not to touch the parts of the microphone shown in the figure below.

microphone

top side

touch prohibition area

• **Installation position of the grille**
When installing the grille, align the "SONY" logo and the flat surface on the grille.

flat surface

SONY

"SONY" logo

– **Side view** –

55

2-40. PCB CAP (WIRELESS MICROPHONE)

top side

logo side

❶ *Rotate the battery cover.*

bottom side

❶ *Rotate the battery cover.*

❹ *screw (2.3 × 6)*
(black)

❸ *battery cover*

❷ *Remove the battery cover*
in the direction of the arrow.

❺ *Lift up the PCB cap block*
in the direction of the arrow.

❻ *Remove the PCB cap block*
in the direction of the arrow.

Note: When replacing the PCB cap with a new part,
carefully peel off the serial number label affixed
on the PCB cap, and affix it on the new PCB cap.

❼ *serial number label*
(See Note)

❽ *PCB cap*

0000000

serial number label

2-41. BODY (WIRELESS MICROPHONE)

• *How to remove the volume button and power button*

When removing the volume button and power button, insert a sharp-tipped object such as tweezers into the gap.

tweezers, etc.

logo side

volume button   power button

logo side

top side

bottom side

• *Installation direction of the volume button and power button*

When installing the volume button and power button, take care for the direction of the buttons.

top side

power indicator reflector

protrusion

— Side view —

❷ power button

❶ volume button

❸ Remove the body in the direction of the arrow.

❹ body

• *How to install the body*

Pass the MICROPHONE board through the groove in the body.

body

groove   groove

MICROPHONE board

— Inner view —

2-42. MICROPHONE BOARD (WIRELESS MICROPHONE)

❶ microphone 2 pin wire connector

logo side

top side

❷ claw

❷ claw

bottom side

battery terminal (+) side

base assy

❽ Lift the battery terminal (+) side until it can be completely pulled out of the base assy.

❸ Lift up the MICROPHONE board block in the direction of the arrow.

❿ Remove the MICROPHONE board block in the direction of the arrow.

⓫ MICROPHONE board block

❾ claw

Turn over.

battery terminal side

⓮ MICROPHONE board (See Note 3)

top side

hole

hole

boss

⓭ button cover
Note 2: When installing the button cover, align the two bosses and two holes.

bottom side

⓬ claw

boss

⓬ two claws

❹ Remove the claw of terminal cover using a needle-nosed pliers, etc.
Note 1: Put the protection sheet between the base assy and needle-nose pliers, etc to avoid damaging the base assy.

claw
protection sheet

base assy

needle-nosed pliers, etc

– Inner view –

Turn over.

battery terminal side

❺ Lift up the terminal cover in the direction of the arrow.

❻ Remove the terminal cover in the direction of the arrow.

❼ terminal cover

Note 3: When the MICROPHONE board is replaced with a new board, be sure to refer to "IMPORTANT NOTE OF REPLACING THE WIRELESS MICROPHONE OR THE MICROPHONE BOARD"on page 8, and perform each work.

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SYS SET

2-43. MICROPHONE (WIRELESS MICROPHONE)

top side   claw   base assy

❷ Press.

base assy   claw   top side

❷ Press.

❶ microphone 2 pin wire connector

top side

logo side

bottom side

battery terminal side

base assy

❷ Press.

claw

❹ microphone

❸ Remove the microphone in the direction of the arrow.

59

SECTION 3
TROUBLESHOOTING

1. The power cannot be turned on (Wireless Speaker)

```
┌─────────────────────────────┐
│ The power cannot turn on,    │
│ even if connect the AC power │
│ cord and press the [⏻] button.│
└─────────────────────────────┘
             │ Yes
             ▼
┌─────────────────────────────┐           ┌──────────────────────────────┐
│ The following voltages are   │    No     │ After replacing the SMPS board│   Yes
│ output from the SMPS board   │ ────────▶ │ with a new board, connect the │ ─────▶
│ connector (XP1).             │           │ AC power cord and press the   │
│ Between pin 13 (B+) and      │           │ [⏻] button, the power will    │
│ pin 8 (GND): 58 V            │           │ turn on.                      │
│ Between pin 1 (B+) and       │           └──────────────────────────────┘
│ pin 8 (GND): 12 V            │
└─────────────────────────────┘
             │ Yes
             ▼
┌─────────────────────────────┐
│ The MAIN board may be damaged.│
└─────────────────────────────┘
```

When the MAIN board is not damaged.

After checking and repairing any defects in the 13 pin wire that connects the SMPS board (XP1) and the MAIN board (XP1), you can connect the AC power cord and press the [⏻] button, the power will turn on.

No

After replacing the FFC (MAIN-TOUCH) (60 core) (FFC1) that connects the TOUCH board (XP2103) and the MAIN board (XP2003), you can connect the AC power cord and press the [⏻] button, the power will turn on.

No

Yes

Yes

After replacing the TOUCH board with a new board, connect the AC power cord and press the [⏻] button, the power will turn on.

Yes

The work is complete if you can check that power is turn on.

ULT TOWER 10

2. Sound is not output from the wireless speaker (Wireless Speaker)

```
┌─────────────────────────┐
│ Sound is not output from │
│ the wireless speaker.    │
└─────────────────────────┘
          │ Yes
          ▼
┌─────────────────────────┐   Sound is    ┌──────────────────────────────────┐
│ When touching the [►❚❚]  │   not output. │ Use a multimeter to measure the  │
│ key for about 5 seconds  │──────────────▶│ resistance (impedance) between   │
│ or more to enter the     │               │ the terminals of each speaker    │
│ built-in demo sound      │               │ connected to the connector on    │
│ source play-back mode,   │               │ the MAIN board, and the          │
│ and demo sound will be   │               │ resistance (impedance) values    │
│ outputted.               │               │ are as follows.                  │
│ (To stop the built-in    │               │ XP1201 pin 1 and pin 2: 8 Ω      │
│ demo mode, touch the     │               │ (Front tweeter R)                │
│ [►❚❚] key again)         │               │ XP1201 pin 3 and pin 4: 4 Ω      │
└─────────────────────────┘               │ (Midrange R)                     │
          │ Sound is                        │ XP1201 pin 5 and pin 6: 4 Ω      │
          │ output.                         │ (Midrange L)                     │
          ▼                                 │ XP1201 pin 7 and pin 8: 8 Ω      │
                                            │ (Front tweeter L)                │
                                            │ XP1202 pin 1 and pin 2: 8 Ω      │
                                            │ (Rear tweeter R)                 │
                                            │ XP1202 pin 3 and pin 4: 8 Ω      │
                                            │ (Rear tweeter L)                 │
                                            │ XP1205 pin 1 and pin 2: 6 Ω      │
                                            │ (Woofer)                         │
                                            └──────────────────────────────────┘
```

Flow for section 2:

- **Sound is not output from the wireless speaker.** → (Yes) → **When touching the [►❚❚] key for about 5 seconds or more to enter the built-in demo sound source play-back mode, and demo sound will be outputted. (To stop the built-in demo mode, touch the [►❚❚] key again)**
- From "When touching the [►❚❚] key..." → (Sound is output.) → **No abnormality.** → (Yes) → **The work is complete if you can check that sound is output from the wireless speaker.**
- From "When touching the [►❚❚] key..." → (Sound is not output.) → **Use a multimeter to measure the resistance (impedance)... (values as listed)**
- From the multimeter box → (No) → **The speaker wires are properly connected to the speaker unit.**
  - (Yes) → **The MAIN board may be damaged.**
  - (No) → **After reconnecting all speaker unit wires correctly, check the sound output and the sound will be output.** → (Yes)
- From the multimeter box → (Yes) → **The MAIN board may be damaged.**
- The speaker wires box → (No) → **After reconnecting all speaker unit wires correctly, check the sound output and the sound will be output.** → (Yes)

3. Cannot be BLUETOOTH pairing (Wireless Speaker)

Flow for section 3:

- **After touching the [✳] key on the wireless speaker, cannot be BLUETOOTH pairing with the BLUETOOTH device.** → (Yes) → **Delete the connection history on the BLUETOOTH device (transmitter) side and check if BLUETOOTH pairing is possible.**
- From "Delete the connection history..." → (Yes) → **The work is complete if you successful BLUETOOTH pairing.**
- From "Delete the connection history..." → (Cannot be pairing) → **Touch the [►❚❚] key and press the [ULT] button on the wireless speaker at the same time for about 5 seconds to initialize to factory default settings, and check if BLUETOOTH pairing is possible.**
- From "Touch the [►❚❚] key..." → (Yes) → **The work is complete if you successful BLUETOOTH pairing.**
- From "Touch the [►❚❚] key..." → (Cannot be pairing) → **The MAIN board may be damaged.**
- From "The MAIN board may be damaged." → (When the MAIN board is not damaged.) → **Replacing the TOUCH board with a new board and check if BLUETOOTH pairing is possible.** → (Yes) → **The work is complete if you successful BLUETOOTH pairing.**

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4. The power cannot be turned on (Wireless Microphone)

```
┌─────────────────────────────────────────────┐
│ The power cannot turn on, even if press the  │
│ [⏻] button.                                   │
└─────────────────────────────────────────────┘
              │ Yes
              ▼
┌────────────────────────────────┐  No  ┌──────────────────────────────────────┐  No
│ The batteries are installed with│─────▶│ Reinstall the batteries with the +/–  │─────▶
│ the +/– terminals in the correct│      │ terminals in the correct orientation  │
│ orientation.                    │      │ and press the [⏻] button, the power    │
└────────────────────────────────┘      │ will turn on.                         │
              │ Yes                       └──────────────────────────────────────┘
              ▼                                      │ Yes
┌────────────────────────────────┐  No  ┌──────────────────────────────────────┐  No
│ Measure the battery voltage.    │─────▶│ Replace the batteries with new ones    │─────▶
│ The total voltage of the two    │      │ and press the [⏻] button, the power    │
│ batteries are 2.3 V or more.    │      │ will turn on.                         │
└────────────────────────────────┘      └──────────────────────────────────────┘
              │ Yes                                  │ Yes
              ▼
┌────────────────────────────────┐
│ Replacing the MICROPHONE board  │
│ with a new board.               │
└────────────────────────────────┘
              │ Yes
              ▼
┌────────────────────────────────┐
│ The work is complete if you can │
│ check that power is turn on.    │
└────────────────────────────────┘
```

5. Cannot be wireless microphone pairing with the wireless speaker (Wireless Microphone)

```
┌─────────────────────────────────────────────┐
│ Cannot be wireless microphone pairing with   │
│ the wireless speaker.                        │
└─────────────────────────────────────────────┘
              │ Yes
              ▼
┌────────────────────────────────┐  No  ┌──────────────────────────────────────┐
│ Refer to "WIRELESS MICROPHONE   │─────▶│ Replacing the MICROPHONE board with a  │
│ PAIRING METHOD" on page 11 and  │      │ new board. After replacing, perform    │
│ the wireless microphone and     │      │ the wireless microphone pairing        │
│ wireless speaker have been      │      │ operation again on the wireless        │
│ successfully paired.            │      │ microphone and wireless speaker.      │
└────────────────────────────────┘      └──────────────────────────────────────┘
              │ Yes                                  │ Yes
              ▼
┌────────────────────────────────┐
│ After wireless microphone       │
│ pairing, the work is complete   │
│ if you can check that the voice │
│ from the wireless micro-        │
│ phone is output from the        │
│ wireless speaker.               │
└────────────────────────────────┘
```

SYS SET

6. The wireless microphone voice is not output (Wireless Microphone)

The wireless microphone voice is not output from the wireless speaker.

Yes

Refer to "WIRELESS MICROPHONE PAIRING METHOD" on page 11 and wireless speaker and wireless microphone have paired, and the voice is output from the wireless microphone.

Wireless microphone voice is output.

Wireless microphone voice is not output.

The microphone head part (MIC1) connector is properly connected to the MICROPHONE board connector (XP1).

No

Yes

Wireless microphone voice is not output.

After reconnecting the connector correctly, check the voice output and the voice will be output.

Wireless microphone voice is output.

No abnormality.

Yes

Replacing the MICROPHONE board with a new board.
After replacing, perform the wireless microphone pairing operation again on the wireless microphone and wireless speaker, and the voice will be output.

Yes

The work is complete if you can check that wireless microphone voice is output from the wireless speaker.

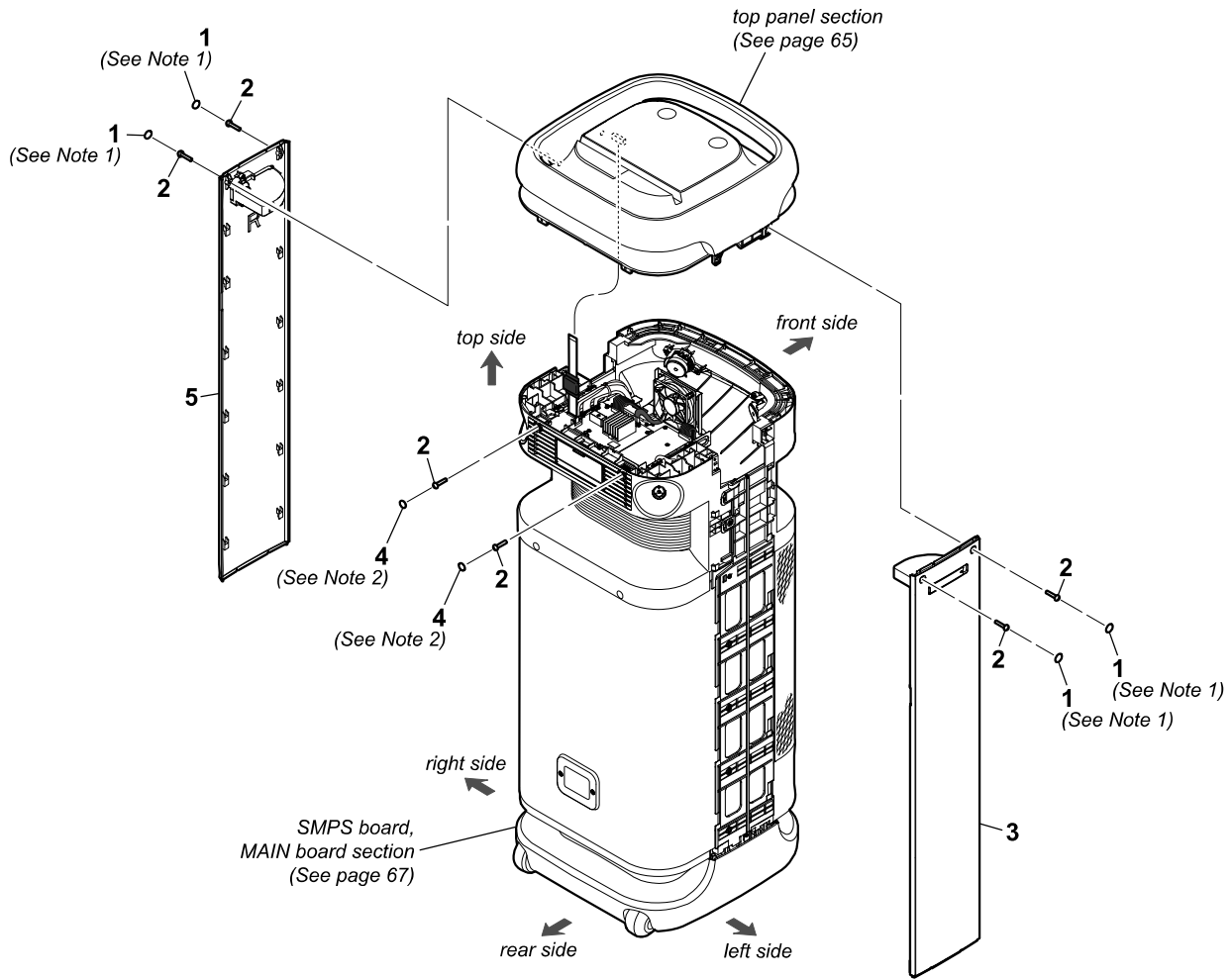SYS SET

SECTION 4
EXPLODED VIEWS

Note:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑   ↑
  Parts Color   Cabinet's Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-1. SIDE PANEL SECTION (WIRELESS SPEAKER)

Note 1: When reusing the screw cover (side) (Ref. No. 1) for installation, make sure that the screw cover (side) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (side) and replace it with a new part.

Note 2: When reusing the screw cover (rear) (Ref. No. 4) for installation, make sure that the screw cover (rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (rear) and replace it with a new part.

Ref. No.	Part No.	Description	Remark
1	930102293	COVER, SCREW (SIDE) (See Note 1)	
2	930101956	SCREW, +BTP3.5X16 (B) (BLACK)	
3	930102283	PANEL, LEFT ASSY (with MIC holder, Cushion)	

Ref. No.	Part No.	Description	Remark
4	930102294	COVER, SCREW (REAR) (See Note 2)	
5	930102284	PANEL, RIGHT ASSY (with MIC holder, Cushion)	

SYS SET

4-2. TOP PANEL SECTION (WIRELESS SPEAKER)

Note: When the complete TOUCH board (Ref. No. 55) is replaced with a new board, be sure to refer to "IMPORTANT NOTE OF REPLAC-ING THE TOUCH BOARD" on page 8, and perform each work.

Ref. No.	Part No.	Description	Remark
51	930100773	SCREWS (43) (BLACK)	
52	930102277	BUTTON, ULT (ULT)	
53	930102276	BUTTON, POWER (⏻)	
54	930102255	MIC BOARD, COMPLETE	
55	930102249	TOUCH BOARD, COMPLETE (See Note)	
56	930101944	KNOB, MIC (MIC and GUITAR level knob)	

Ref. No.	Part No.	Description	Remark
57	930102389	JACK COVER (TOP) (with PC sheet) (Cap)	
FFC2	930102269	FFC (TOUCH-MIC) (14 core)	
TOP1	930102275	PANEL, TOP ASSY	
		(with Touch panel, MIC button, Jack cover (top), MEMS MIC, Cushion, PC sheet, Magnet)	

4-3. HANDLE SECTION (WIRELESS SPEAKER)

bottom side

102 108 108
102 102 108
108 102 102
102 108
108 102
102 102
108 102
102 108
108 102
102 108 108
102 109 102

not supplied
(TOUCH-HANDLE LED (LD)/(LE)
8 pin wire)

not supplied
(TOUCH-HANDLE LED (LB)/(LC)
10 pin wire)

106
107
103
105
104

front side

101

rear side

top side

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark
101	930102273	HANDLE ASSY (with Metal parts, Cushion)			106	930102253	HANDLE LED (LD) BOARD, COMPLETE	
102	930100773	SCREWS (43) (BLACK)			107	930102254	HANDLE LED (LE) BOARD, COMPLETE	
103	930102250	HANDLE LED (LA) BOARD, COMPLETE			108	930102292	COVER, SCREW (HANDLE)	
104	930102251	HANDLE LED (LB) BOARD, COMPLETE			109	930102274	LENS, HANDLE ASSY (with Cushion)	
105	930102252	HANDLE LED (LC) BOARD, COMPLETE						

4-4. SMPS BOARD, MAIN BOARD SECTION (WIRELESS SPEAKER)

Ref. No.	Part No.	Description	Remark
151	930100773	SCREWS (43) (BLACK)	
152	930102279	THERMAL SHEET	
153	930102295	SCREW, +BTP5X10 (B) (BLACK)	
154	930101991	SCREW, +BTT3X7 (S) (BLACK)	
155	930102248	SMPS BOARD, COMPLETE (Adhesive applied)	

Ref. No.	Part No.	Description	Remark
FFC1	930102268	FFC (MAIN-TOUCH) (with Ferrite core, Cushion) (60 core)	
M1	930102278	FAN	

SYS SET

4-5.   REAR CABINET SECTION (WIRELESS SPEAKER)

Note 2: When replacing the rear cabinet assy (Ref. No. 203) with a new part, open the jack cover (rear) on the rear side of the rear cabinet assembly, carefully peel off the model number label affixed to the inside, and affix it to the inside on the jack cover (rear) of the new rear cabinet assy.

Note 1: When reusing the screw cover (rear) (Ref. No. 201) for installation, make sure that the screw cover (rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (rear) and replace it with a new part.

Note 3: When replacing the jack cover (rear) (Ref. No. 204) with a new part, carefully peel off the model number label affixed to the inside on the jack cover (rear), and affix it to the inside of the new jack cover (rear).

Ref. No.	Part No.	Description	Remark
201	930102294	COVER, SCREW (REAR) (See Note 1)	
202	988521901	SCREW (M4X20) (BLACK)	
203	930102280	CABINET, REAR ASSY (with Jack cover (rear), PC sheet, Cushion) (See Note 2)	
204	930102281	JACK COVER (REAR) (with PC sheet) (See Note 3)	
205	930100773	SCREWS (43) (BLACK)	

Ref. No.	Part No.	Description	Remark
SP3	930102265	SPEAKER, 4 cm (RL) (with Equalizer, Cushion) (Rear tweeter) (L-ch)	
SP4	930102266	SPEAKER, 4 cm (RR) (with Equalizer, Cushion) (Rear tweeter) (R-ch)	

SYS SET

4-6. MIDRANGE SECTION (WIRELESS SPEAKER)

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark
251	930100773	SCREWS (43) (BLACK)			SP6	930102287	SPEAKER, 8 cm (Midrange) (R-ch)	
SP5	930102287	SPEAKER, 8 cm (Midrange) (L-ch)						

SYS SET

4-7. BOTTOM PANEL SECTION (WIRELESS SPEAKER)

front cabinet section
(See page 72)

bottom lens (front),
caster section
(See page 71)

306

306   306

304   306

right side   front side

305   N

rear side   left side

front side

301
(See Note)

302
(See Note)   302
(See Note)

304   304

304   304

304   304

304   304

304

304   304

302
(See Note)

304

303
(See Note)

301
(See Note)

304   304

304   304   304

304   304

304

302
(See Note)

303
(See Note)

bottom side

304

304   304

304   304

304   304

303
(See Note)

— Bottom view —

rear side

Note: When reusing the foot (front or side or rear) (Ref. No. 301, 302, 303) for installation, make sure that the foot (front or side or rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the foot (front or side or rear) and replace it with a new part.

Ref. No.	Part No.	Description	Remark
301	930102289	FOOT, FRONT (See Note)	
302	930102290	FOOT, SIDE (See Note)	
303	930102291	FOOT, REAR (See Note)	
304	930101956	SCREW, +BTP3.5X16 (B) (BLACK)	

Ref. No.	Part No.	Description	Remark
305	930102288	PANEL, BOTTOM ASSY (with Bottom cover, Reflector (front), Front foot, Cushion, Screw)	
306	988521901	SCREW (M4X20) (BLACK)	

SYS SET

4-8.   BOTTOM LENS (FRONT), CASTER SECTION (WIRELESS SPEAKER)

top side

353 353
353
353
353
353

353

not supplied
(BOTTOM LED (LF)-BOTTOM LED (LK)
4 pin wire)

353
353

353

not supplied

not supplied

FFC10   FFC9

FFC8

359   S   R

FFC7

front side

355

355
(BOTTOM LED (LH2) board)
(See Note 1)

FFC4

358

357

356

358
(BOTTOM LED (LI2) board)
(See Note 3)

FFC3

P   Q   P

356
(BOTTOM LED (LG2) board)
(See Note 2)

P
Q

FFC6

FFC5

352

359
(BOTTOM LED (LJ2) board)
(See Note 4)

354

rear side

bottom side

351

Note 1: When the BOTTOM LED (LH2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LH) board (Ref. No. 355). The BOTTOM LED (LH) board and the BOTTOM LED (LH2) board differ in the Ref. No. of each electrical parts in addition to the board name.

Note 3: When the BOTTOM LED (LI2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LI) board (Ref. No. 358). The BOTTOM LED (LI) board and the BOTTOM LED (LI2) board differ in the Ref. No. of each electrical parts in addition to the board name.

Note 2: When the BOTTOM LED (LG2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LG) board (Ref. No. 356). The BOTTOM LED (LG) board and the BOTTOM LED (LG2) board differ in the Ref. No. of each electrical parts in addition to the board name.

Note 4: When the BOTTOM LED (LJ2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LJ) board (Ref. No. 359). The BOTTOM LED (LJ) board and the BOTTOM LED (LJ2) board differ in the Ref. No. of each electrical parts in addition to the board name.

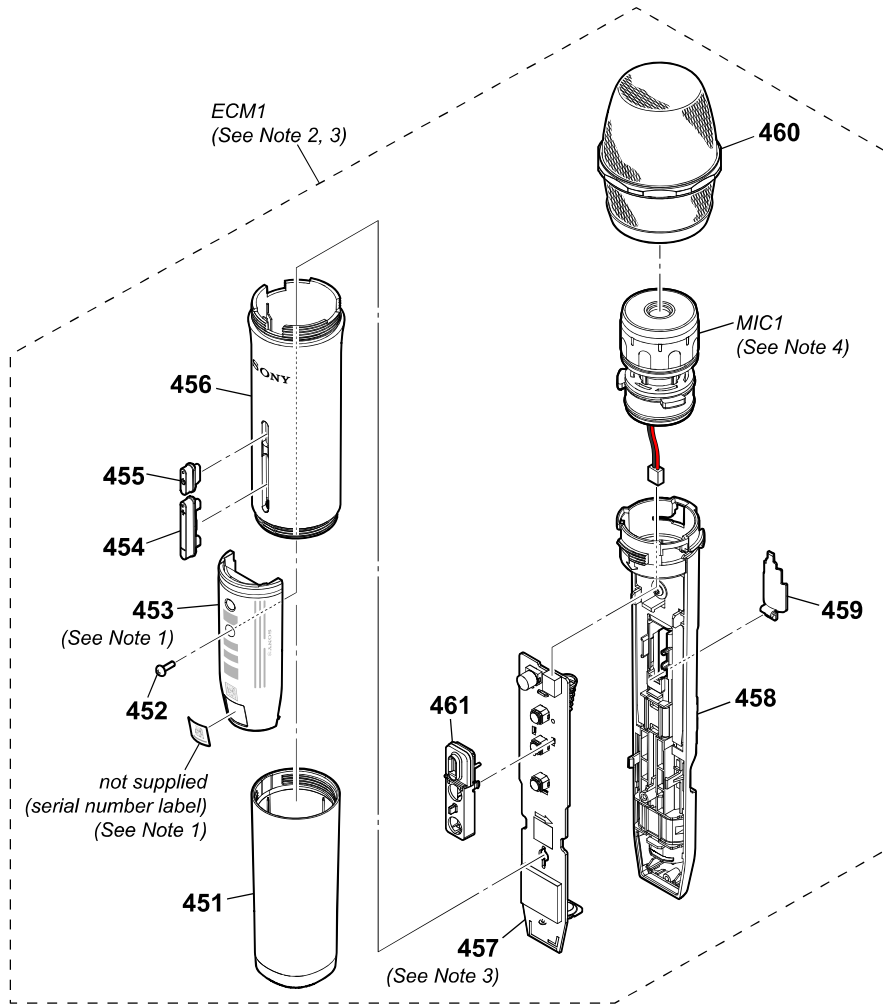| Ref. No.	Part No.	Description	Remark
351	930102286	CASTER ASSY (with Reflector (rear), Bottom lens (rear), Cushion)	
352	930102261	BOTTOM LED (LK) BOARD, COMPLETE	
353	930100773	SCREWS (43) (BLACK)	
354	930102285	LENS, BOTTOM (FRONT)	
355	930102258	BOTTOM LED (LH) BOARD, COMPLETE	(See Note 1)
356	930102257	BOTTOM LED (LG) BOARD, COMPLETE	(See Note 2)
357	930102256	BOTTOM LED (LF) BOARD, COMPLETE	
358	930102259	BOTTOM LED (LI) BOARD, COMPLETE	(See Note 3)
359	930102260	BOTTOM LED (LJ) BOARD, COMPLETE	(See Note 4)
FFC3	930102272	FFC (BOTTOM LED 3) (BOTTOM LED (LG2)-BOTTOM LED (LH2)) (6 core)	

Ref. No.	Part No.	Description	Remark
FFC4	930102271	FFC (BOTTOM LED 2) (BOTTOM LED (LK)-BOTTOM LED (LG2)) (10 core)	
FFC5	930102271	FFC (BOTTOM LED 2) (BOTTOM LED (LK)-BOTTOM LED (LI2)) (10 core)	
FFC6	930102272	FFC (BOTTOM LED 3) (BOTTOM LED (LI2)-BOTTOM LED (LJ2)) (6 core)	
FFC7	930102272	FFC (BOTTOM LED 3) (BOTTOM LED (LG)-BOTTOM LED (LH)) (6 core)	
FFC8	930102270	FFC (BOTTOM LED 1) (BOTTOM LED (LF)-BOTTOM LED (LG)) (10 core)	
FFC9	930102270	FFC (BOTTOM LED 1) (BOTTOM LED (LF)-BOTTOM LED (LI)) (10 core)	
FFC10	930102272	FFC (BOTTOM LED 3) (BOTTOM LED (LI)-BOTTOM LED (LJ)) (6 core)	

4-9. FRONT CABINET SECTION (WIRELESS SPEAKER)

not supplied
(front tweeter/midrange 8 pin wire)

402
SP1
402
402
402
402
402
top side
402
front side
SP2
402
402
401
CAB1
401
401
401
401
SP7
401
401
401
401
401
401
401
401
401
401
401
401
401
401
401
401
401
401
401

not supplied
402
AC1
not supplied
rear side
not supplied
bottom side

Ref. No.	Part No.	Description	Remark
401	988521901	SCREW (M4X20) (BLACK)	
402	930100773	SCREWS (43) (BLACK)	
⚠ AC1	930102262	AC INLET	
CAB1	930102282	CABINET, FRONT ASSY (with Grill, Cushion, Wire (MAIN board - BOTTOM LED (LF) board)	
SP1	930102264	SPEAKER, 4 cm (FLR) (with Equalizer, Cushion) (Front tweeter) (L-ch)	

Ref. No.	Part No.	Description	Remark
SP2	930102264	SPEAKER, 4 cm (FLR) (with Equalizer, Cushion) (Front tweeter) (R-ch)	
SP7	930102267	SPEAKER, 32 cm (X-BALANCED) (Woofer)	

4-10. MICROPHONE SECTION (WIRELESS MICROPHONE)

ECM1
(See Note 2, 3)

460

MIC1
(See Note 4)

456

455

454

453
(See Note 1)

452

461

459

458

457
(See Note 3)

451

not supplied
(serial number label)
(See Note 1)

Note 1: When replacing the PCB cap (Ref. No. 453) with a new part, carefully peel off the serial number label affixed on the PCB cap, and affix it on the new PCB cap.

Note 2: When the wireless microphone (Ref. No. ECM1) is replaced with a new wireless microphone, the serial number will be changed.

Note 3: When the wireless microphone (Ref. No. ECM1) is replaced with a new wireless microphone, or the complete MICROPHONE board (Ref. No. 457) is replaced with a new board, be sure to refer to "IMPORTANT NOTE OF REPLACING THE WIRELESS MICROPHONE OR THE MICROPHONE BOARD" on page 8, and perform each work.
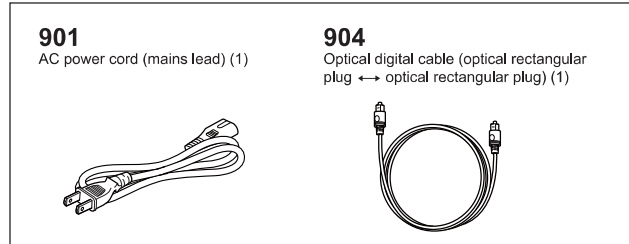
Note 4: Be careful not to touch the tip of the microphone (Ref. No. MIC1).

Ref. No.	Part No.	Description	Remark
451	930102297	COVER, BATTERY	
452	930102380	SCREW, 2.3X6 (BLACK)	
453	930102298	CAP, PCB (UC2) (Including weight parts) (See Note 1)	
454	930102309	BUTTON, VOLUME (+, −)	
455	930102308	BUTTON, POWER (⏻)	
456	930102307	BODY	
457	930102311	MICROPHONE BOARD, COMPLETE (See Note 3)	

Ref. No.	Part No.	Description	Remark
458	930102312	BASE ASSY (Including weight parts)	
459	930102313	TERMINAL COVER	
460	930102296	GRILLE	
461	930102390	BUTTON COVER	
ECM1	A5067156A	ECM-ULT1 (Wireless microphone (YY7860E)) (See Note 2, 3)	
MIC1	930102310	MICOPHONE (See Note 4)	

SYS SET

SECTION 5
ACCESSORIES

Ref. No.	Part No.	Description	Remark
	505657611	REFERENCE GUIDE	
		(ENGLISH, FRENCH, SPANISH)	
⚠ 901	930101982	AC CORD (UC) (AC power cord (mains lead))	
904	930101989	OPTICAL CABLE (Optical digital cable (optical rectangular plug ↔ optical rectangular plug))	

901
AC power cord (mains lead) (1)

904
Optical digital cable (optical rectangular plug ↔ optical rectangular plug) (1)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

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