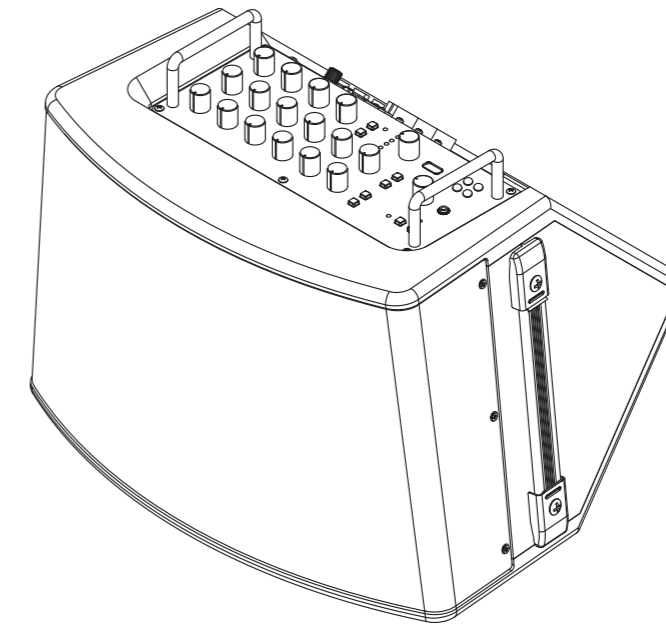


# PORTABLE SOUND SYSTEM WITH BLUETOOTH

## User Manual



**WS-8**

Thank you for purchasing this product, It is helpful of you to get the best wonderful experience if you can read the user manual carefully before operating it.  
Also please keep it safe for reference at any time in future.

## IMPORTANT SAFETY INSTRUCTIONS



TO REDUCE THE RISK OF ELECTRIC SHOCK PLEASE DO NOT REMOVE THE COVER OR THE BACK PANEL OF THIS EQUIPMENT. THERE ARE NO PARTS NEEDED BY USER INSIDE THE EQUIPMENT. FOR SERVICE, PLEASE CONTACT QUALIFIED SERVICE CENTERS.



This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages in the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions. Please read.



Protective Ground Terminal



AC mains (Alternating Current)




Hazardous Live Terminal

ON: Denotes the product is turned on.

OFF: Denotes the product is turned off.

### CAUTION

Describes precautions that should be observed to prevent damage to the product.

1. Read this Manual carefully before operation.
2. Keep this Manual in a safe place.
3. Be aware of all warnings reported with this symbol. 
4. Keep this Equipment away from water and moisture.
5. Clean it only with dry cloth. Do not use solvent or other chemicals.
6. Do not damp or cover any cooling opening. Install the equipment only in accordance with the Manufacturer's instructions.
7. Power Cords are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet, seek advice from a qualified electrician. Protect the power cord and plug from any physical stress to avoid risk of electric shock. Do not place heavy objects on the power. This could cause electric shock or fire.
8. Unplug this equipment when unused for long periods of time or during a storm.
9. Refer all service to qualified service personnel only. Do not perform any servicing other than those instructions contained within the User's Manual.
10. To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder.

## NOTICE

1. For safety reasons, do not use any volatile solvents (such as toluene, alcohol or gasoline) to clean the device, and keep it clean and dust-free.
2. In summer, please do not expose the device directly to sunlight.
3. When using it outdoors, please do not place this product directly in the rain.
4. After use, please press the power switch to turn off the device.
5. If you do not use the device for a long time, please charge the battery to at least 80% of the full power to prolong the battery life.

### The name and content of hazardous substances involved

Part Name	hazardous substances					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Shell (Housing)	○	○	○	○	○	○
Electronic parts (PCB, etc.)	×	○	×	○	○	○
Attachment (Power cable, Adaptor, etc.)	×	○	○	○	○	○

This form is prepared according to the regulations of SJ/T 11364. ○: Indicates that the content of the hazardous substance in all homogeneous materials of the part is within the limit specified in GB/T 26572 Requires the following.  
 ×: Indicates that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit requirement specified in GB/T 26572.  
 (Manufacturers can further explain the technical reasons for marking "×" in the above table according to the actual situation here.)



**CAUTION:** There is a risk of explosion if the battery is of the wrong type. Sufficient technical knowledge, experience or instructions must be present to perform correctly connection, and the battery must be installed and replaced by professionals.  
 Do not use this product near water.  
 Do not use this product near any heat sources and keep it away from naked flames.



## IMPORTANT SAFETY INSTRUCTIONS

### WARNING

**To reduce the risk of electric shock and fire, do not expose this equipment to moisture or rain.**



**Dispose of this product should not be placed in municipal waste and should be separate collection.**

Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

11. Move this Equipment only with a cart, stand, tripod, or bracket, specified by the manufacturer, or sold with the Equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid possible injury from tip-over.



12. Permanent hearing loss may be caused by exposure to extremely high noise levels. The US. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible exposure to noise level. These are shown in the following chart:

Hours x day	SPL	Example
8	90	Small gig
6	92	Train
4	95	Subway train
3	97	High level desktop monitors
2	100	Classic music concert
1.5	102	
1	105	
0.5	110	
0.25 or less	115	Rock Concert

According to OSHA, an exposure to high SPL in excess of these limits may result in the loss of heat. To avoid the potential damage of heat, it is recommended that Personnel exposed to equipment capable of generating high SPL use hearing protection while such equipment is under operation.

The apparatus shall be connected to a mains socket outlet with a protective earthing connection.

The mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

## FCC STATEMENT

1. 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.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

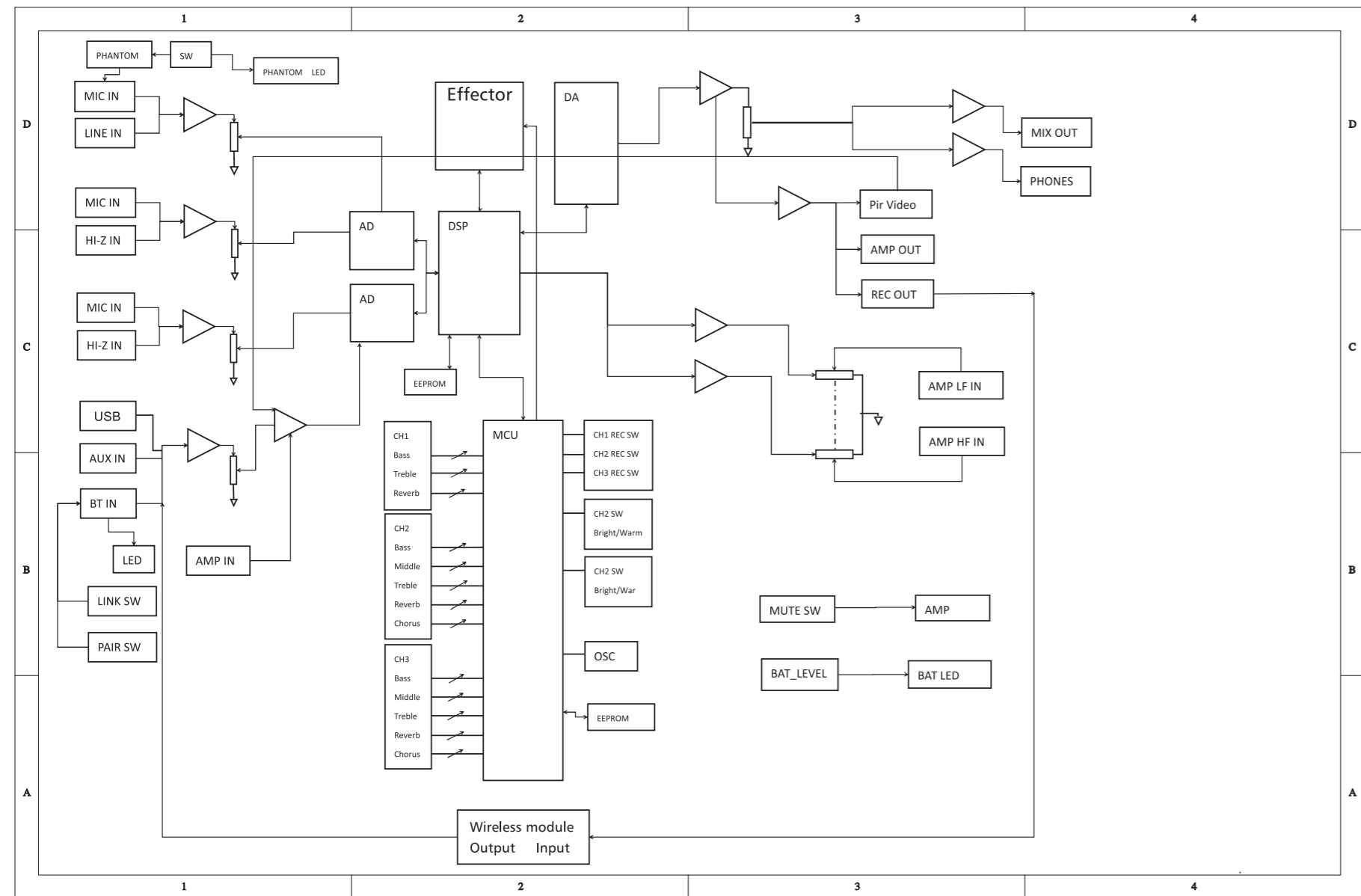
### IMPORTANT!

Please read this manual carefully before operating this unit for the first time.

## TECHNOLOGY PARAMETERS

Model	WS-8
System Type	Portable active instrument speaker
Frequency Response	80Hz-20kHz (±10dB)
The MAX sensitivity	118dB
Crossover point	950 Hz
Bass	1*8" bass speaker
Treble	4* 2.75" treble speaker
Built-in Player	Bluetooth(4mW Max, frequency range: 2402-2480 MHz)/2.4G wireless live recording/3.5mm L/R stereo input/3.5mm wired internal recording input interface( Apply to iOS/Android)/MP3 input interface.
Input Sensitivity	CH1 MIC input: -39dBu(±1dBu), CH1 wired input: -36dBu(±1dBu); CH2/3 MIC input: -36dBu(±1dBu), CH2/3 Line Input: -36dBu(±1dBu); Stereo Line input: 3.5mm AUX IN: -15dBu(±1dBu).
EQ Adjustment	Low-frequency adjustment(BASS): ±22dBu(at 80Hz VR 0dBu), Middle-frequency adjustment(MIDDLE): ±22dBu(at 1kHz VR 0dBu), High-frequency adjustment (TREBLE): ±26dBu(at 10kHz VR 0dBu).
External Control	CH1: CH1 volume adjustment, BASS/TREBLE adjustment, REVERB adjustment,PHANTOM switch (support condenser MIC ) and indicator, CH1 tracking recording selection switch. CH2/CH3: CH2/CH3 volume adjustment, BASS/MIDDLE/TREBLE QE adjustment. REVERB adjustment, CHORUS selection switch, CH2/CH3 tracking recording selection switch. DSP tone-color selection switch (WARM/BRIGHT). Bluetooth/MP3 mode switch, Bluetooth/MP3 indicator; Live recording: Pair switch and Pair indicator. Headphone monitor mode selection switch (MUTE) and volume knob, A/B switch for selecting internal recording applied on multiple serial speakers, Charging indicator and master volume (MASTER)adjustment.
External Link	Channel 1(CH1): 1x6.35mm MIC input or XLR Cannon MIC input port ;1x in-parallel 6.35mm MIC input port . Channel 2(CH2): 1x6.35mm MIC input or XLR Cannon MIC input port; 1x in-parallel 6.35mm instrument input port; Channel 3(CH3): 1x6.35mm MIC input or XLR Cannon MIC input port; ; 1x in-parallel 6.35mm instrument input port; 1*XLR Cannon mixer line balanced output port; 1 x Ø6.35mm headphone monitor mode output port; 1 x Ø6.35mm input port for two serial speakers; 1 x Ø6.35mm output port for two serial speaker.
Chargable lithium battery	Rated Capacity: 25.9V / 2200mAh (type: 18650-25.9V-2200mAh-71NR19/66)
Charging time	At least 4 hours (Lighting solid green means fully charged), Use life: 6-8 hours based on normal playback.
Power	AC input: 100-240V~50-60Hz with power switch.
Cabinet Structure	Environmental friendly plywood wooden box, metal grill, hardware/plastic handle, portable.
Installment	Using 35mm standard bracket
Dimension (H*W*D)	277mm(H)*419mm(W)*324mm(D)
Net Weight	9.8 KG
Application	Bars, shopping malls, street music, school teaching, health clubs, etc.

## BLOCK DIAGRAM



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## FUNCTION CONFIGURATION

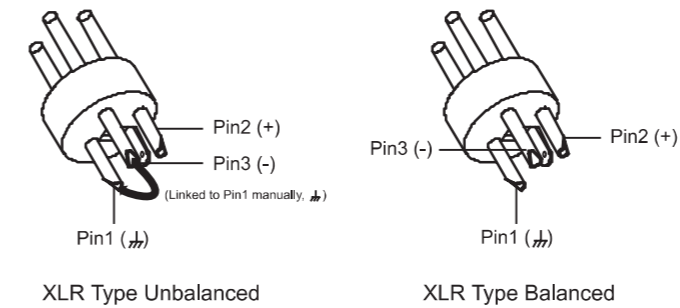
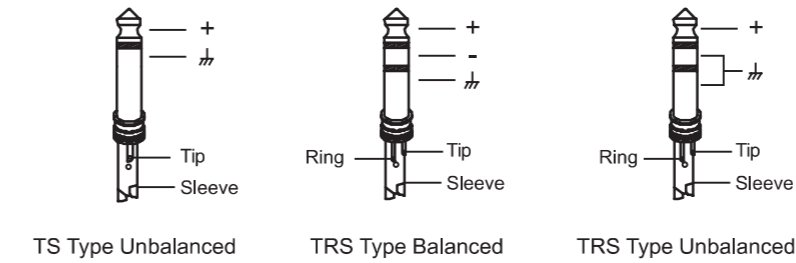
- Humanized constructure design, easy to operate it for user.
- Features involves portable, multifunctional and active speaker.
- Diversity of installation methods such as tilt-back or bracket installation which can be applied to installation in various positions to support monitor function.
- Two-way design (1 \*8"woofer + 4 \*2.75" mid-treble).
- Connecting with different devices via bluetooth or wireless paires to achieve L/R stereo effects.
- Equipped with MP3 audio input to meet multi-format playback such as MP3/WMA/WAV/FLAC/APE.
- Dual power supply applied: AC 110-240V ~50/60Hz and DC25.9V(lithium battery).
- To achieve freely switch between different instruments/ different presets (Warm/Bright) by adjustment function of DSP.
- 3-stage EQ adjustment(bass, middle, treble) , reverb &chorus effects and DSP control function.
- Live recording function.
- 4-channel (wired) input can realize simultaneous connection among different sound-sources, instruments and microphones.
- 3-fragment AC power switch can meet operation and charging simultaneously or independent charging function.
- Wide directional structure design, 180-degree sound coverage without dead angle.
- Equipped with mixer output port and output &control under headphone monitor mode.
- Suitable for personal entertainment, bars, shopping centers, street playing and singing, school teaching, fitness clubs and other multi-scenario applications.

## Accessories

Device	× 1
Power cable	× 1
2.4G built-in receiver	× 1
User manual	× 1
3.5mm male to male digital cable	× 1
Leather bag	× 1
Carton box	× 1

## WIRE CONNECTIONS

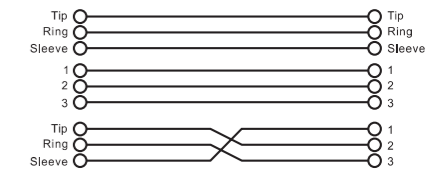
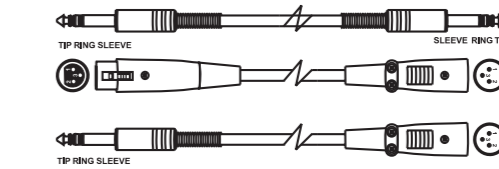
Both connectors, 1/4" XLR or TRS, can be wired in balanced or unbalanced way, depending on the work necessity. The following ones are examples of how these connectors can be wired:



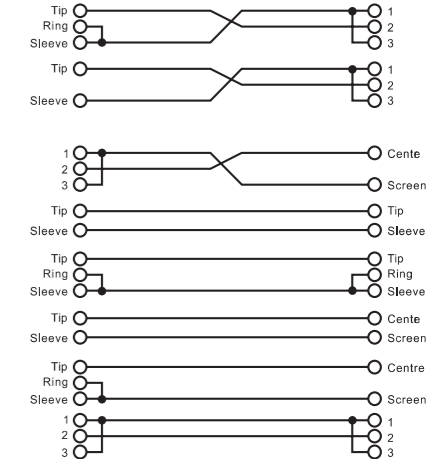
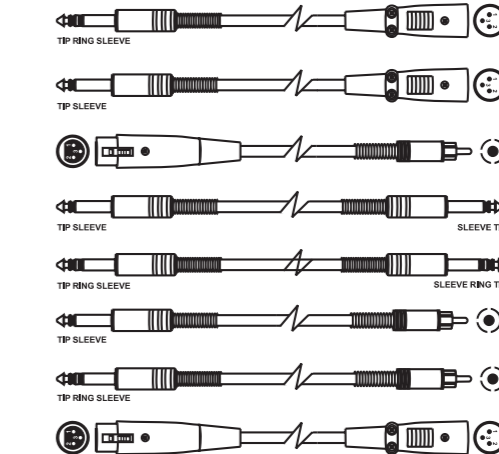
For Active Speaker Cabinets

As to these circumstances, audio connections is mostly intended for the signal flow, so, determine the wire configuration according to your real application system and its connecting facility. Normally, you have the following choices:

### • Balanced



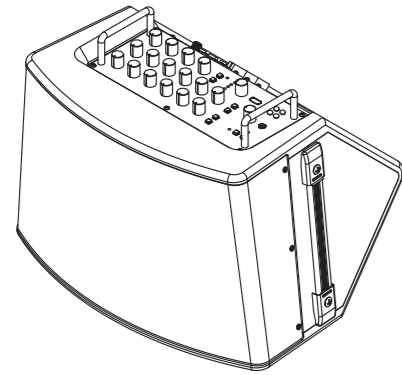
### • Unbalanced





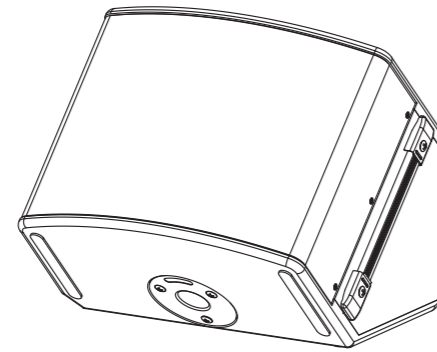
## SYSTEM CONFIGURATION

As one portable multi-functional active speaker, it can always display the best tonal balance due to running in three unique modes and combined humanized structure design with digital DSP control.



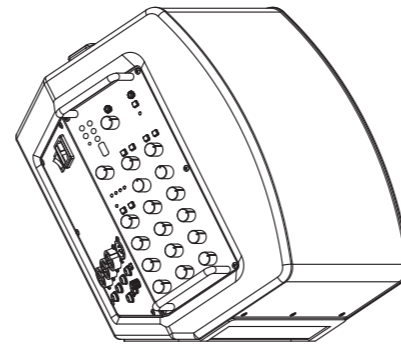
Flat Lay

Place the speaker on a flat surface or on a tripod. In this mode, the sound can spread to each listener clearly and evenly and ensure they can enjoy listening from sound-sources from all bands of system.



Tilt-back Lay

Please turn the speaker backforward to the rear edge like above image in order to make each audience enjoy your performance clearly. Also performer is suggested to stand or sit on one side of the speaker in order not to block audience to get the best effects.



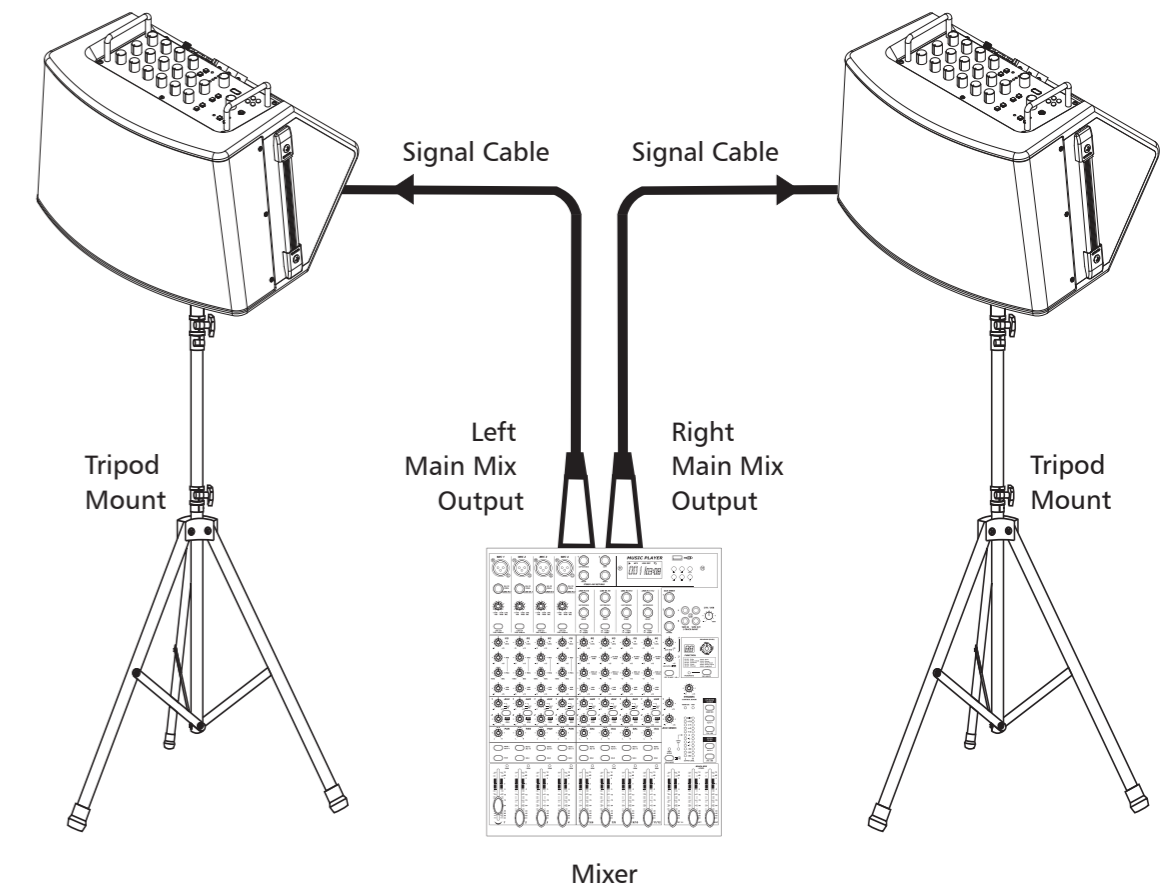
Roll-type Lay

By means of roll-type lay way like above image, the device can be used as floor-monitor speaker or DJ speaker.

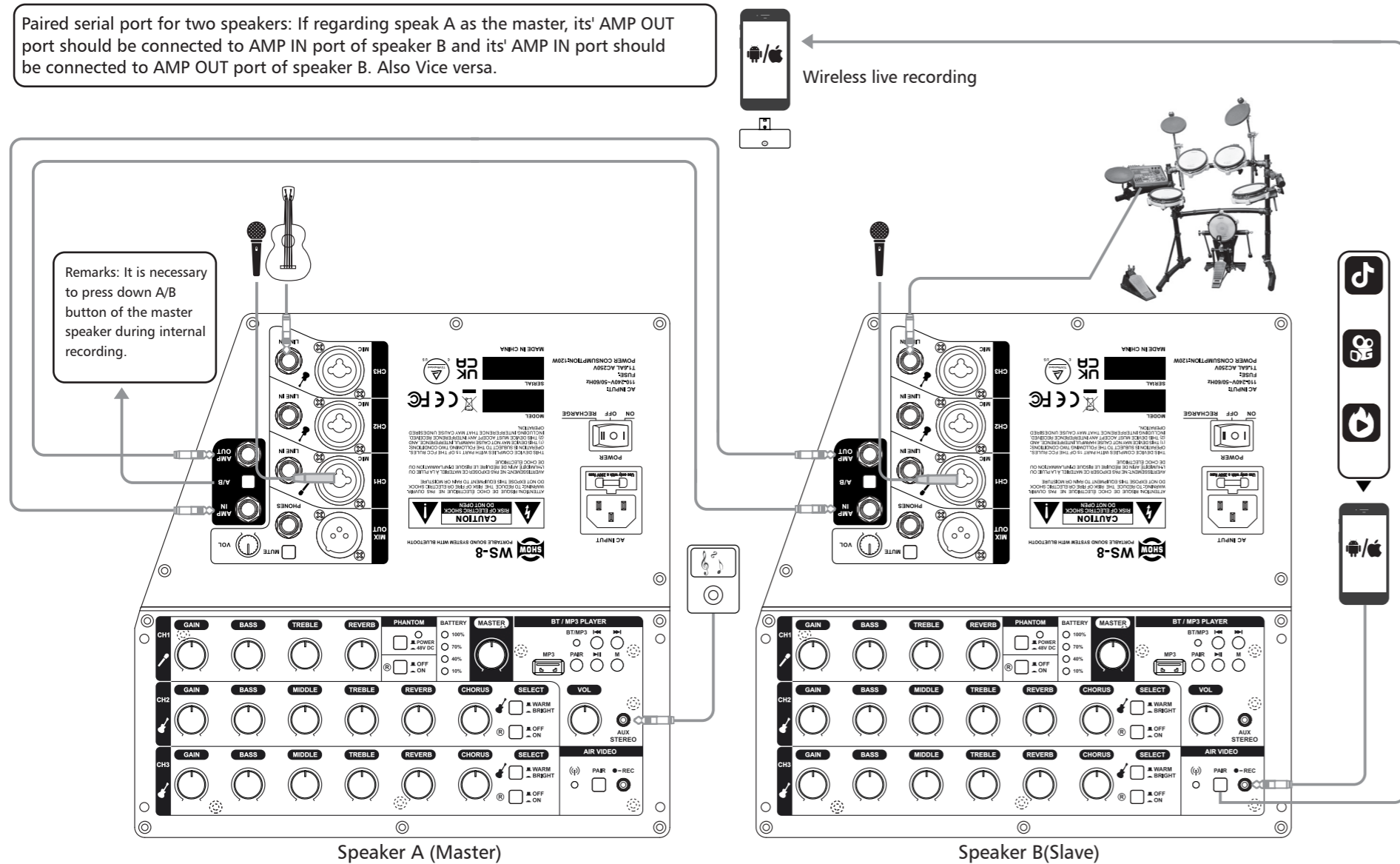
## EQUIPMENT CONFIGURATION DIAGRAM

As below images shows, the hooling details for 2-way active speaker is similar to the activeless speaker's. Only difference means none amplifier needed between the mixer and 2 speakers. It is worth noting that all initial connection should be porceeded with all devices powered off and ensure all master volume controls are fully turned down.

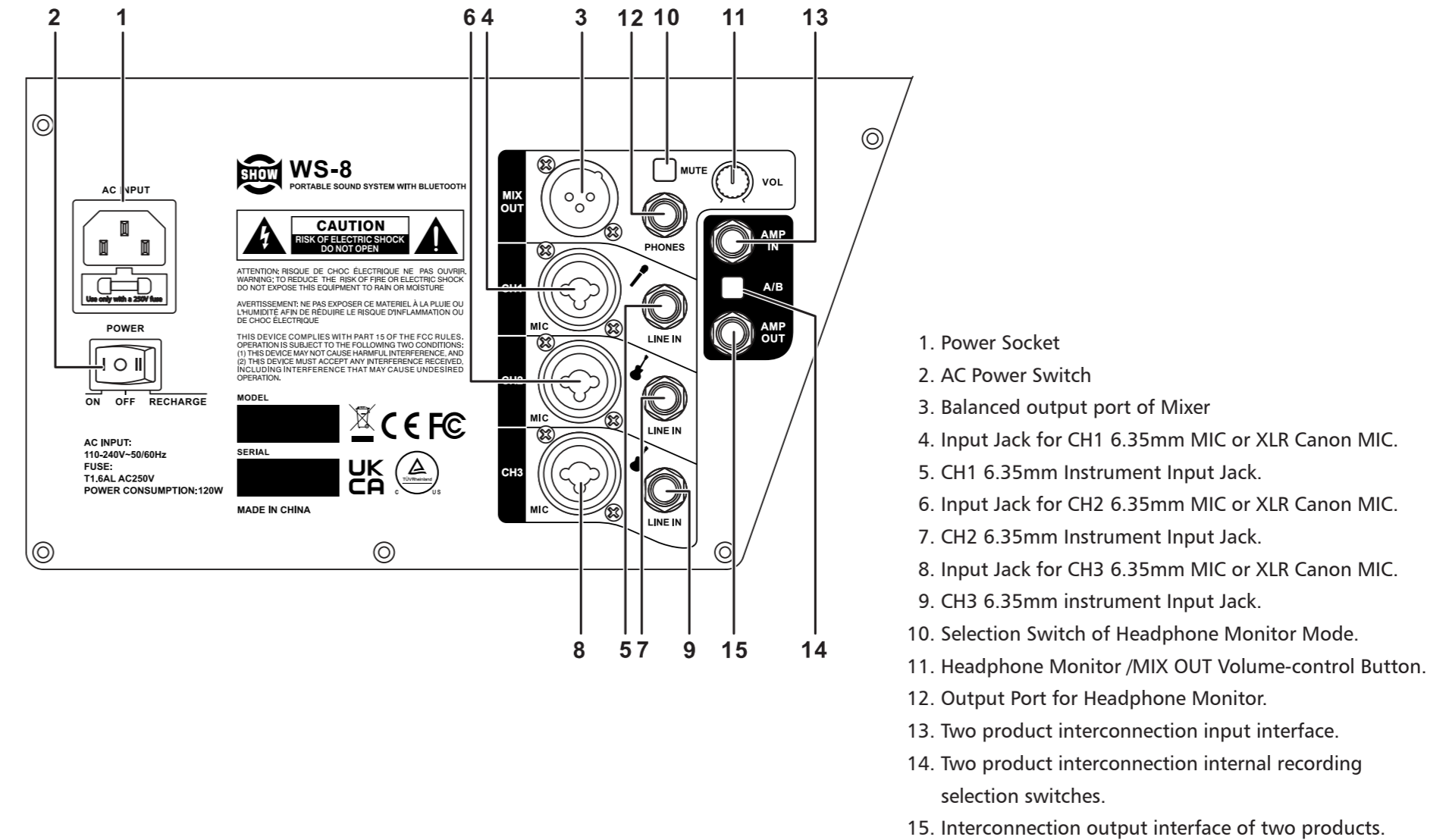
1. Connect one side of the signal cable at your mixer into the Output Left/Right(with Stereo Jack or XLR) and the other side of the cable into the Line Input(COMBO) of your active speaker cabinet (with Stereo Jack or XLR).
2. Connect the power cord to main.
3. Turn ON your mixer first, then the active speaker cabinets.
4. Turn up the volume control of the cabinets.
5. Use PEL function to get the proper input level for the mixer, and adjust the Main Mix Level control to reach the desired output level.
6. After use, turn off your active speaker cabinets first, then the mixer.



## FUNCTION CONNECTION DISPLAY



## FEATURE DETAILS



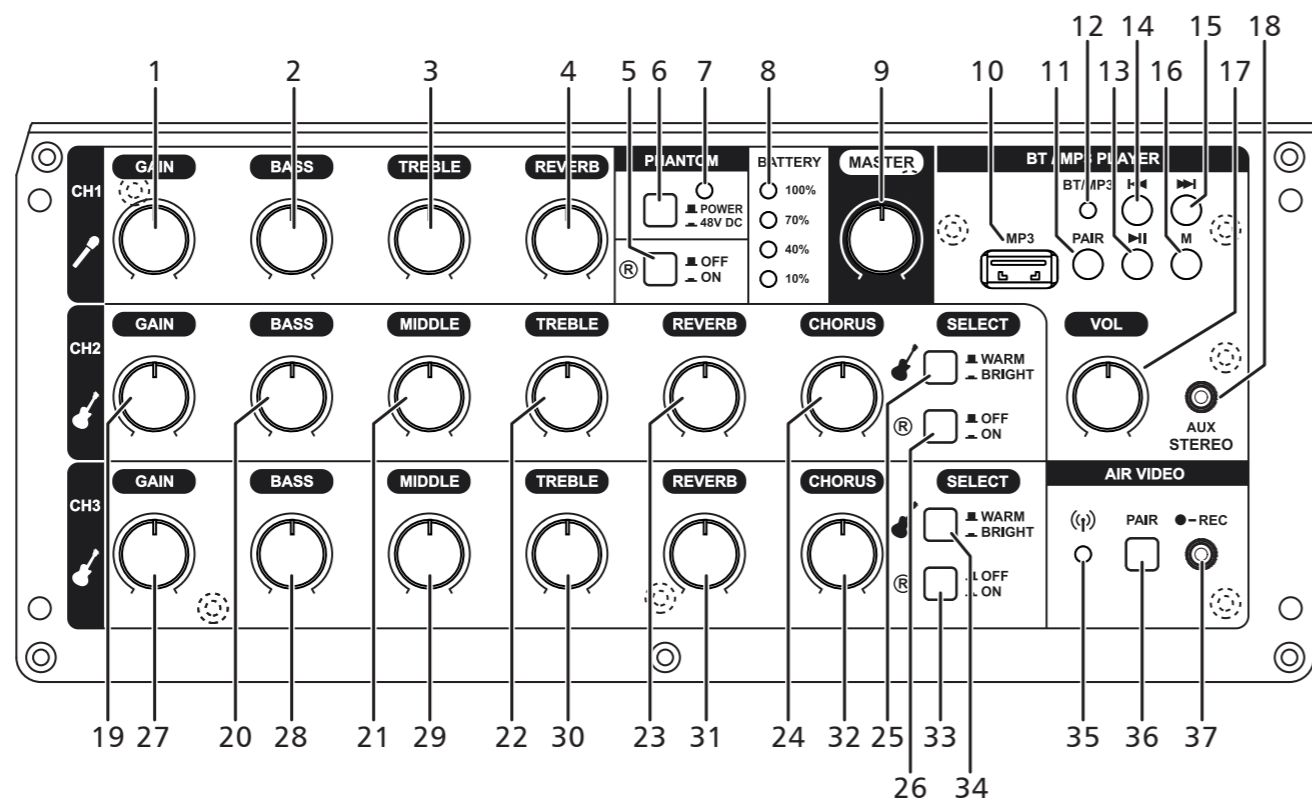


## FEATURE DETAILS

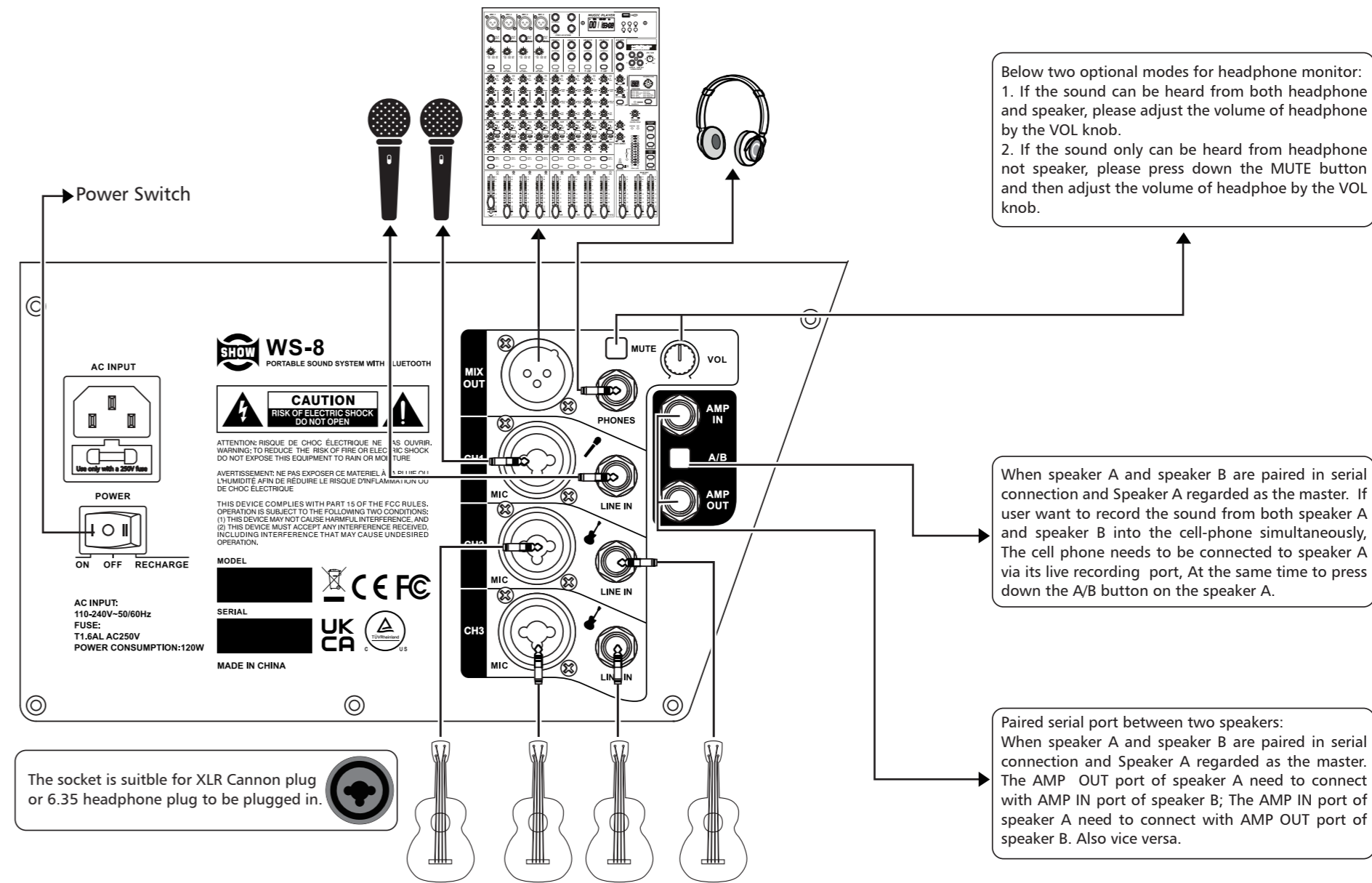
1. CH1 volume knob
2. CH1 bass knob
3. CH1 treble knob
4. CH1 reverb knob
5. CH1 tracking recording selection switch.
6. CH1 48V phantom power switch
7. CH1 48V phantom power indicator
8. Battery level display
9. Master volume
10. MP3 playback port
11. BT Pair/TWS connection button  
(One click it to pair music source;  
Double clicks for TWS connection)
12. Function indicator of BT/MP3  
(Pairing: the blue flashes; Paired: the blue solid lights; U disk identified: the red solid lights.)
13. BT/MP3 playback/pause  
(Press and hold the button to cancel BT pair)
14. Previous track selected from BT/MP3
15. Next track selected from BT/MP3
17. Volume control button.
18. AUX in
19. CH2 volume knob
20. CH2 bass knob
21. CH2 middle-volume knob
22. CH2 treble knob

23. CH2 reverb knob
24. CH2 chorus knob
25. CH2 DSP tone-color switch (Warm or Bright)
26. CH2 tracking recording selection switch.
27. CH3 volume knob
28. CH3 bass knob
29. CH3 middle-volume knob
30. CH3 treble knob
31. CH3 reverb knob

32. CH3 chorus knob.
33. DSP tone-color switch (Warm or Bright)
34. CH3 tracking recording selection switch
35. Pair indicator for wireless internal recording  
(Pairing: the blue flashes; Paired: the blue solid lights).
36. Pair button for wireless internal recording.
37. Wired internal recording live interface, support iOS, Android, Hongmeng system




## FEATURE DETAILS



## FEATURE DETAILS

To minimize the noise floor, please don't use AC power supply to power your devices such as speaker, cell phone and so on. The noise floor can be reached to a lower level with battery. The recording volume is directly related to the Gain value applied on each channel but nothing to the master volume. Usually users are advised to locate the Gain knob to between 10 o'clock and 2 o'clock

Operation steps of internal recording and singing live broadcast:  
 .....

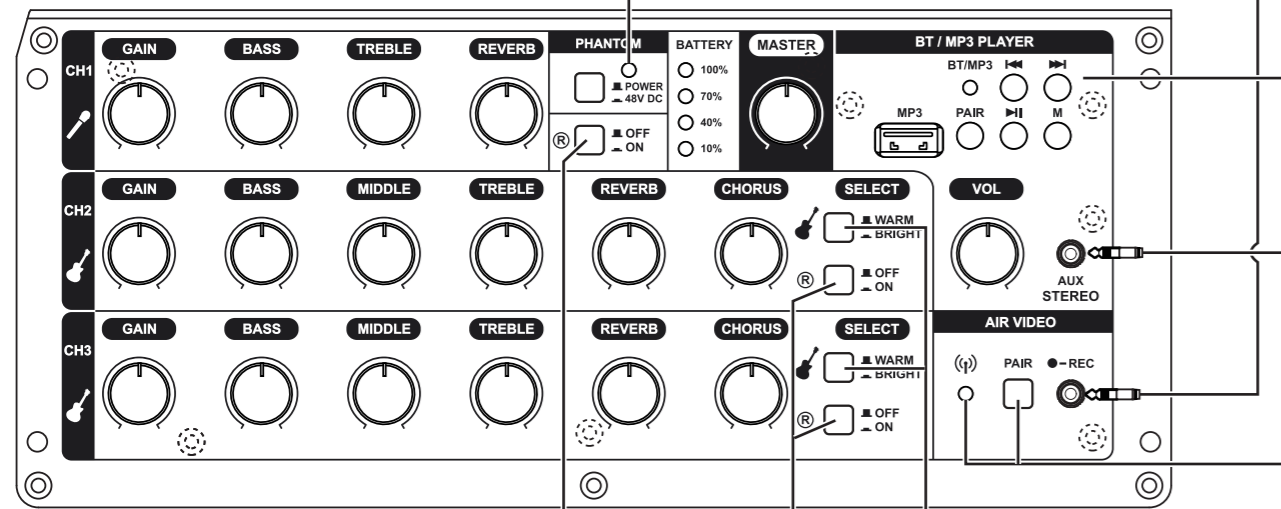
Step1: Connect to MIC  
 Step2: Connect to instrument  
 Step3: Turn on power switch  
 Step4: Adjust the knob  
 Step5: Connect headphone and speaker with live line  
 Step6: Enter related software to proceed live broadcast.  
 Step7: Fine-tune speaker high and low frequency chorus reverb and other effects. It is suggested to adjust the cell phone's volume not more than 60% and then enter live-broadcast software.

Before making any connections, Please Turn down the volume first, and turn off all power to the device to avoid causing Malfunction and equipment damage.

Power switch for condenser MIC 48V phantom power supply. The red light is 48V on.

Wired live recording port for Android cell phone: It maybe necessary to download the third part APP such as "No-other camera software" or "All-purpose camera software" to complete recording video for some Adroid cell phone. The reason to download is to use the recording function built in these software to proceed video recording and playback.

Wired live recording port for iOS cell phone: Just open the Apple's built-in internal recording function to record video. Only the sound which go through the speaker can be recorded not any other external sound or noise. If the internal recording fails, please restart the phone and reconnect your speaker device.



When connected to APP software of cell phone to proceed track recording or connected to some Karaoke software such as "national karaoke software", "bar software" and so on, It necessary to press all recording channels simultaneously and the ® button under the SELECT function to realize the track recording of each channel.

The interface support APP software.  
 1. Track recording software involves GarageBand(iOS system) Walk band (partial Android system). Karaoke Software involves Sing Bar, National Karaoke, Kugou.  
 2. The AUX interface is also the line input interface through this interface to connect mobile phone, MP3 Players and other devices to play music.

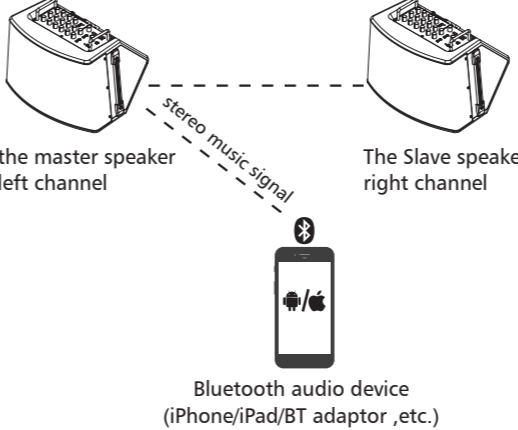
Press the button to switch the tone-color between WARM and BRIGHT.

- Paired to one speaker**
  - One click the "PAIR" button on the master speaker, You will hear a beep (boom), then the blue starts to flash. which means to enter pairing state.
  - Turn on the Bluetooth function on the audio device, search and select "WS-8" to start pairing; (iPhone, iPad, Bluetooth adapter and other audio devices, no pairing password is required).
  - After about 20-100 seconds, the pairing will be completed. Once paired sucessfully between source device and product, the blue will solid light, if pair failed, Please repeat above steps 1-3 to try pairing again.
  - Music playback

\*Bluetooth memory function: After the unit reboot, the system will proceed the automatic pairing based on the last memory.  
 \*Bluetooth priority rules: When the U disk is inserted, the red will light and the bluetooth-mode LED light blue (Press it one click for BT audio device pairing, Double clicks for TWS interconnection of two products).
- Interconnection between two speakers:**

Remark: If the speaker connected to your source device is the master, The other speaker linked with it will the Slave. The sound signal will be sent to the master from source device, if the master speaker linked with the Slave speaker. then it playback on the left channel of the master and on the right channel of the Slave, Finally realize the left/right channel stereo effects.

  - Select one of two linked speaker as the master.
  - One click the PAIR button on the master, You will hear a beep (boom), then the blue starts to flash, which means to enter pairing state.
  - Open the BT function on audio device, Then search and select "WS-8" to start pairing (iPhone, iPad, Bluetooth adapter and other audio devices, no pairing password is required).
  - After about 20-100 seconds, the pairing will be completed. Once paired sucessfully between source device and product, the blue will solid light, if pair failed, Please repeat above steps 1-3 to try pairing again.
  - Separately Double clicks the PAIR button on the master and the Slave ,you will keep hear a beep (boom) and keep 20-100 seconds.
  - Once the master paired to the Slave sucessfully, the beep(boom) will disappear and the BT indicator will light solid blue.
  - Play music.



**Live broadcast application:**

- Connect the wireless internal recording receiver to the data interface of the mobile phone, and the blue indicator light on the receiver will flash;
- Turn on the power of the product, press the "PAIR" button in the product, the blue indicator light starts to flash, and the device is in the pairing state; when the indicator light of the receiver/transmitter is always on, the pairing is successful (use again, just Turn on the power to automatically pair);
- The video recorded by the wireless device supports one-key playback;
- It is recommended to download APP software such as "Wuta Camera" or "Almighty Camera" for Android system wireless internal video recordin

