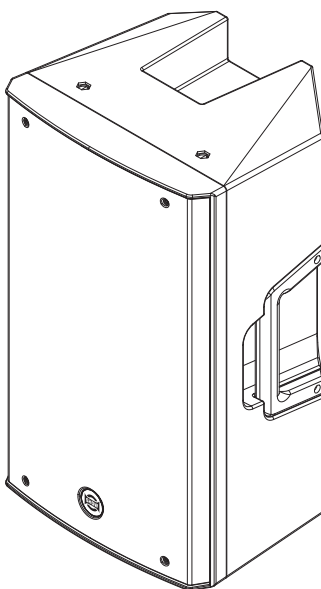




# User's Manual

## PROFESSIONAL SPEAKER SYSTEM



**12"**

Speaker Cabinet



**LighTning-12AP**



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### IMPORTANT!

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

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# Important Safety Instructions



**ATTENTION:** RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR.

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE

**AVERTISSEMENT:** NE PAS EXPOSER CE MATERIEL À LA PLUIE OU L'HUMIDITÉ AFIN DE RÉDUIRE LE RISQUE D'INFLAMMATION OU DE CHOC ÉLECTRIQUE



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.



**Warning!** This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.



**Warning!** This device is designed for use below 2000 metres in altitude.



**Warning!** This product is not intended for use in tropical climates.

**CAUTION :** Risk of fire or explosion if the battery is replaced by an incorrect type

**ATTENTION :** Risque d'incendie ou d'explosion si la batterie est remplacée par un type incorrect

**WARNING:** Remove batteries if exhausted or if they will not be used again for a long period.

- The incorrect use of batteries can cause electrolyte leakage and will corrode the compartment or cause the batteries to burst, therefore:
- Do not mix battery types, e.g. alkaline with zinc carbonate.
- When inserting new batteries, replace all batteries at the same time.



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

## Service Instructions

- Refer all servicing to authorized service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Disconnect power cord before servicing.
- Replace critical components only with factory parts or recommended equivalents.
- For AC line powered units: Before returning repaired unit to user, use an ohmmeter to measure from both AC plug blades to all exposed metal parts. The resistance should be more than 2,000,000 ohms.

1. Read and keep these instructions. Heed all warnings and follow all instructions.
2. **Warning** (if applicable): Please refer to any important information (e.g., electrical, safety, etc.) printed on the exterior bottom enclosure or rear panel before installing or operating the product.
3. Clean only with dry cloth.
4. **Water and Moisture** (if applicable): Do not use this apparatus near water. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. Electrical equipment should NEVER be kept or stored in damp environments.
5. (If applicable) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Do not install this equipment in a confined or "boxed-in" space such as a bookcase or similar unit, and maintain good ventilation conditions. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, tablecloths, curtains, etc.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place exposed flame sources such as lighted candles on the apparatus.
7. (If applicable) This product should be connected to a power supply only of the type described in these operating instructions, or as marked on the unit.
8. (if applicable) Be careful not to damage the power cord. When moving or not using the appliance, secure the power cord (e.g., wrap it with a cable tie). Before using it again, make sure the power cord has not been damaged. If the power cord has been damaged at all, bring the unit and cord to a qualified service technician for repair or replacement as specified by the manufacturer.

9. Unplug this apparatus during lightning storms or when unused for long periods of time.
10. Only use attachment/accessories specified by the manufacturer.
11. (If applicable) Use only the cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
12. Internal/External Voltage Selectors (if applicable): Internal or external voltage selector switches, if any, should only be reset and re-equipped with a proper plug for alternative voltage by a qualified service technician. Do not attempt to alter this yourself.
13. **Caution** (if applicable): Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. Batteries (a battery pack or an installed battery) shall not be exposed to excessive heat such as sunshine, fire, etc.
14. (If applicable) Do not defeat the safety purpose of the polarized or grounding-type plug.
15. Protective earthing terminal (if applicable): The apparatus should be connected to a mains socket outlet with a protective earthing connection.
  - Denmark (*Danmark*): Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.
  - Finland (*Suomi*): Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.
  - Norway (*Norge*): Apparatet må tilkoples jordnet stikkontakt.
  - Sweden (*Sverige*): Apparaten skall anslutas till jordat uttag.
16. **For Class II apparatus only:** This symbol means the equipment is a Class II or double-insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth. When servicing use only identical replacement parts installed by an instructed person or with the use of ready-made leads or cords.
17. **Warning** (if applicable): Provide an earthing connection before the mains plug is connected to the mains. When disconnecting the earthing connection, be sure to disconnect it after pulling the mains plug out from the mains.
18. (If applicable) Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
19. **Warning** (if applicable): To prevent possible hearing damage, do not listen at high volume levels for long periods.
20. This apparatus is for professional use only. Intended operational climate: moderate.



#### 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.



**General Note on the Declaration of Conformity:** We hereby declare that this device is in accordance with the essential requirements of the European Directive 2014/53/EU or 2014/30/EU (LVD: 2014/35/EU; GPSD: 2001/95/EC).

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## DESCRIPTION

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LighTning- I2AP is a versatile, easy-to-use, compact battery-powered speaker system. It delivers professional-grade performance with a rugged exterior shell. Delivers true professional performance for music performance, speech amplification and audio playback. Leveraging decades of professional audio and electronics expertise, along with new advanced technologies, to deliver audio solutions that are truly portable and truly.

Featuring a two-way configuration, it features a 12-inch woofer and a high-efficiency compression driver mounted on the front panel. It has a coverage area of 90° x 60°, standby function. Extends the battery life of the speaker when there is no signal, using a custom-designed high-capacity battery pack that is fully optimized for audio use. The battery pack provides enough power to get the show done.

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## FEATURES

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### 12" Two-Way Band Battery Powered Loud speaker

- Long-run rechargeable, removable and replaceable lithium-ion battery pack provides over 6 hours of continuous music playback at maximum output volume.
- Equipped with a 12-inch woofer and a 1-inch compression driver to achieve true professional-level output sound quality.
- Adopt DSP control and intuitive; LCD monitoring interface, easy to use.
- Provides high-quality stereo Bluetooth audio transmission by establishing a Wireless Stereo (TWS) connection between two speakers.
- Built-in digital 4-channel mixer with reverb, EQ, and standby function.

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## SYSTEM FEATURES

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– Long run-time removable and replaceable battery pack

The battery pack will provide 6+ hours of constant music playback at maximum output levels, or 12+ hours at 100 dB SPL average. The loudspeakers have integrated power saving features to extend battery life when no signal is present. Mobile device charging port - 5V 1.5A charging for mobile devices.

- Real professional level sound quality output

The Lightning-12AP features an 12-inch woofer and a 1-inch tweeter which produces 123dB SPL max, and has a frequency range from 55Hz to 20kHz. The has a waveguide formed coverage of 90° x 60° (HxV). Satisfy monitor angles 50° that ensure the right coverage and position for any situation.

-Easy to use with Intuitive User Interface

Feature intuitive push key interface for simple and quick setup. Loudspeakers can be paired via Bluetooth® to a Sound APP control device with the Mobile app installed to provide easy remote control of all audio functions.

-High Quality Stereo Bluetooth® streaming

Feature Bluetooth® streaming. Two loudspeakers can be paired for true wireless stereo (TWS) streaming from a mobile device.

-Built-in digital 4-channel mixer

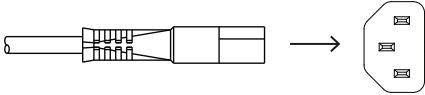


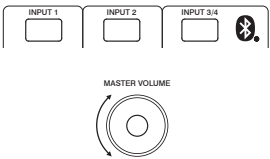
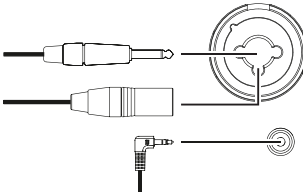
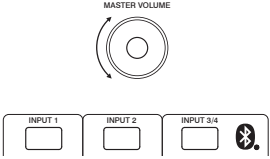

Feature a built-in 4-channel mixer, EQ, ducking functions. The mixer includes two XLR/TRS combo jacks, including 48V phantom power on INPUT 1 (XLR) and Hi-Z compatibility on INPUT 2 (TRS). The mixer also includes Stereo Bluetooth® and 3.5 mm connections.

- Auto-Standby

Loudspeakers offer an adjustable automatic standby function. This extends the battery runtime in case the loudspeaker is not being used. The default is 15 minutes. The loudspeaker can be re-activated to full operation by pressing a button on the panel or with the app.

## QUICK SETUP

### To set up the loudspeaker:

Step	Illustration
1. Connect the AC power cord from a grounded receptacle to the MAINS IN to ensure the battery has sufficient charge. Note: It is recommended to leave the loudspeaker plugged in and charging for 24 hours the first time it is used.	
2. Switch power to ON.	
3. Adjust the volume (VOL) to 0 dB using the MASTER VOL knob.	
4. Push the input selection soft key for INPUT 1 or INPUT 2 if using an XLR or 1/4-inch (6.35 mm) cable, or push the input selection soft key for INPUT 3/4 if using Bluetooth or 3.5 mm mini jack. Use the MASTER VOL knob to adjust INPUT LEVEL to MUTE.	
5. Connect an audio source using an XLR, TRS, or TS cable to INPUT 1, INPUT 2, or a 3.5 mm mini jack to INPUT 3/4. Ensure audio source is MUTE or at a low level before making connection. After connection is made, increase the source's output to a reasonable level.	
6. Adjust the INPUT LEVEL until the signal peaks are just below maximum level or the required output is achieved. If PK (PEAK) is indicated, turn the level down until the PK indication disappears. Press the input selection soft key again to exit the channel menu.	
7. Using the MASTER VOL knob, adjust the volume (VOL) until you get the required output from the loudspeaker.	



## AMPLIFIER DSP

### Amplifier DSP controls

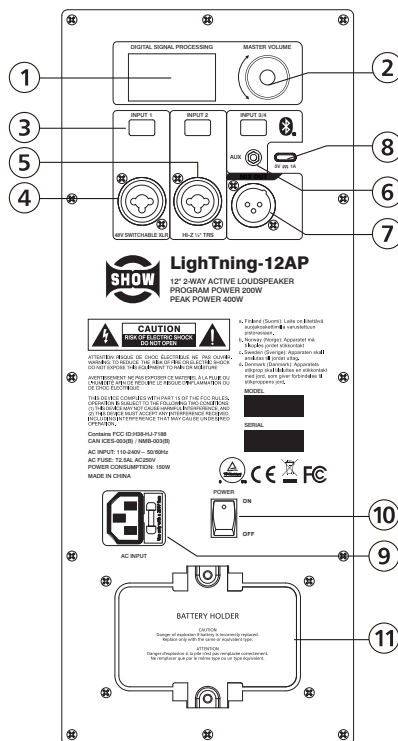
The amplifier has a combination of controls and connectors to ensure the most versatile loudspeaker system.

Loudspeaker control and monitoring interface

These DSP control menu selections are available for the LightTning-12AP .

### Loudspeaker amplifier panel

1. LCD – DSP control and monitoring interface.
2. MASTER VOL - Adjusts the sound level and navigates the DSP control menu.  
DSP - Scroll through the menu and select the available choices. Push the MASTER VOL knob to enter the DSP control menu.
3. Input selection soft keys - Press the soft key to select the input and access the DSP control menu for the channel. Press the softkey a second time to deselect the channel and return to the main DSP.
4. INPUT 1 - Balanced INPUT for the connection of signal sources like mixing consoles, microphones. Connections can be established using 1/4-inch TRS or XLR connectors. The XLR connector is selectable for 48V phantom power and wired microphone.
5. Input 2 - Balanced input for connecting an input source such as a mixing console (via XLR connectors) or a Hi-Z instrument (via TRS connectors).
6. INPUT 3/4 - Bluetooth® stereo INPUT for audio streaming or analog stereo INPUT via 3.5 mm mini-jack.
7. MIX OUT - XLR output sends either the mix of all input signals or the stereo L or stereo R signal to another loudspeaker or subwoofer.
8. Mobile device charging port - 5 V 1.5 A charging for mobile devices.
9. AC Power Socket with Main Fuse.
10. POWER - Switch for power ON or OFF of the loudspeaker. The LCD screen lights up when the power is turned ON, after approximately three seconds.
11. Lithium battery pack + battery box combination

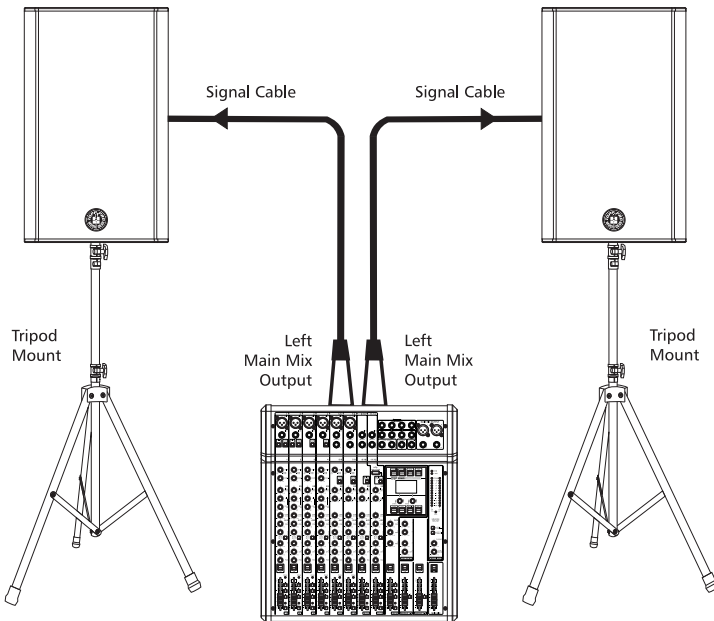


## CONNECTION PLATE

Make your initial connections with all the equipment powered off, and ensure that all the main volume controls are turned down completely

### For Active Full Range Speaker System

- 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 PFL 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.



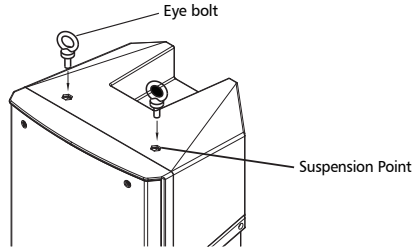
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## RIGGING

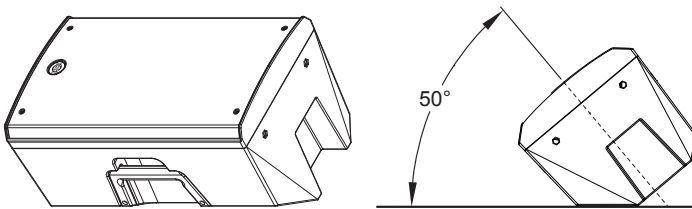
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The LighTing-12ap speaker cabinet also provides the suspension points for installation.  
(M10 x 1.5PH LENGTH: 30mm)

For further details, please refer to the right illustration.



The floor use is as a function of a monitor when the angle is 50°



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## BLUETOOTH CONTROL

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### **BT PAIR : Paired to one speaker**

- 1). Select Input3/4 and press the multi-function knob to confirm to go to the Input3/4 interface, or directly press the INPUT3/4 shortcut button to go to this interface.
- 2). Short press the Pair multi-function button to enter the audio Bluetooth pairing mode. You will hear a beep, indicating that it has entered the pairing state. The display screen will show a flashing P symbol on the main page, indicating that it is in the audio Bluetooth pairing mode. If it does not flash and keeps showing P, it means the connection is successful.
- 3). Turn on the Bluetooth function on the audio device, search and select "LighTning-12AP" to start pairing; (iPhone, iPad, Bluetooth adapter and other audio devices, no pairing password is required).
- 4). Pairing is completed in about 10-100 seconds. Once the source device and the product are successfully paired, the P symbol on the display home page will no longer flash. If pairing fails, repeat steps 1-3 above to try pairing again.
- 5). Music playback

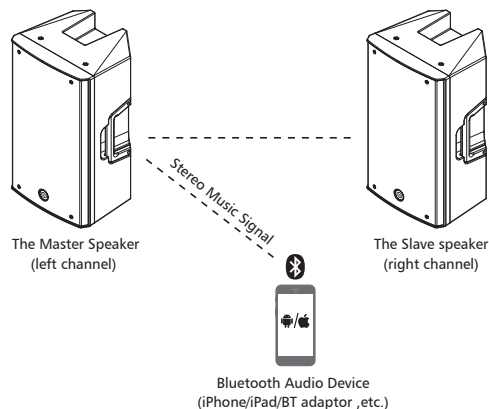
## BLUETOOTH CONTROL

- \* **Bluetooth memory function: After the device is restarted, the system will automatically pair according to the last memory.**

BT TWS: Interconnection between two of the same speakers

Note: If the speaker connected to the source device is the master device, the other speaker connected to it will be the slave device. If the master speaker is connected to the slave speaker, the sound signal will be sent from the source device to the master speaker, and then played on the left channel of the master speaker and the right channel of the slave speaker, finally achieving a left and right channel stereo effect.

- 1). Select one of the two connected speakers as the main speaker.
- 2). Short press the Pair multi-function button on the main speaker to enter the audio Bluetooth pairing mode. You will hear a beep, indicating that it has entered the pairing state. The P symbol on the main page of the display will flash, indicating that it is in the audio Bluetooth pairing mode. If it does not flash and keeps showing P, it means the connection is successful.
- 3). Turn on the Bluetooth function on the audio device, then search and select "Lightning-12AP" to start pairing (iPhone, iPad, Bluetooth adapter and other audio devices, no pairing password is required).
- 4). After about 10-100 seconds, the pairing will be complete. Once the source device and product are paired successfully, the P symbol on the display home page will no longer flash. If the pairing fails, please repeat the above steps 1-3 to try pairing again.
- 5). Short press the TWS multi-function button on the host and slave to enter BT LINK. You will hear a beeping sound for 10-100 seconds. The T symbol on the main screen flashes to indicate the mode in audio Bluetooth LINK.
- 6). Once the master is successfully paired with the slave, the beep will disappear and the T symbol on the main page of the display will not flash but will continue to display, indicating that the LINK is successful.
- 7). Play music, and achieve left and right channel stereo effect;



# BLUETOOTH CONTROL

## BT CONTROL APP:

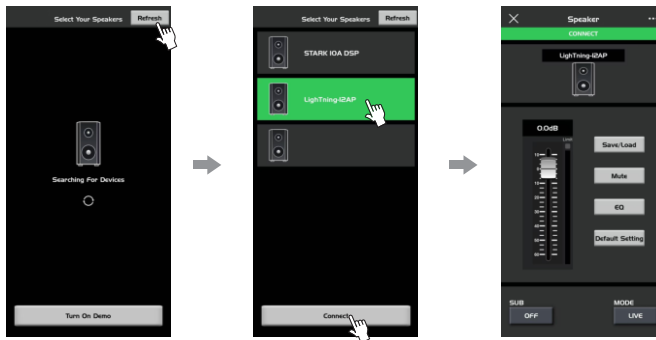
1. Please download the "Sound Control DSP" APP from the APP store.  
There are IOS and Android versions for selection.
2. Turn on the power switch of the LighTning-12AP product
3. Turn on the Bluetooth device on your phone or iPad, and then open the "Sound Control" APP
4. Click Refresh, click the selected model in the product model list that appears, and then click "Connect" to enter the control interface, as shown in the figure below

Stream music wirelessly from your smart device

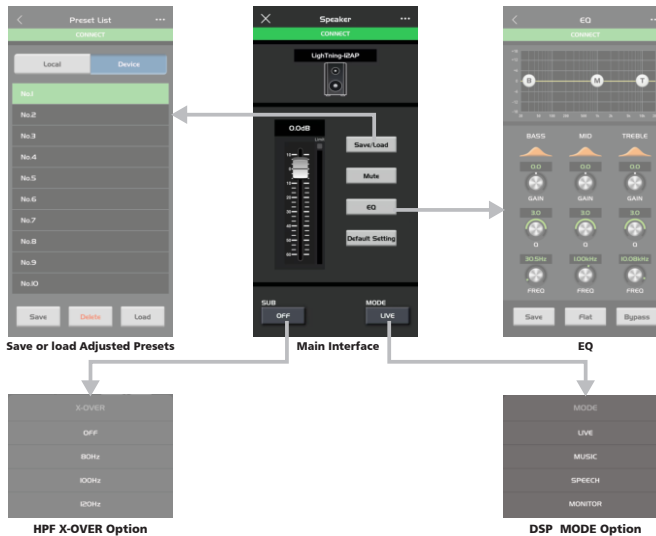


Sound Control DSP  
Music

## Connection Introduction:



## Function Introduction:



## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

1. Turn on the device, and enter standby interface as following.  
The home screen includes: input/output singal level status, BT connecting status, preset status, output volume status, battery status and other function memu options  
Regarding the battery display status as following:

When plug into AC power, the red lights flash in sequence when battery is charging.

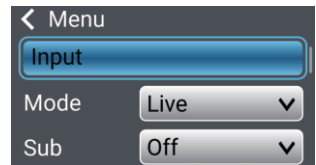
Battery level display:

- fully charged, all four bars will light up green.
- 75%-100%, all four bars will light up green.
- 50%-75%, three bars will light up green.
- 25%-50%, two bars will light up yellow.
- Less than 25%, one bar will light up red.

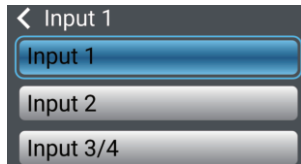


2. Press the multi-function knob to enter "Menu"

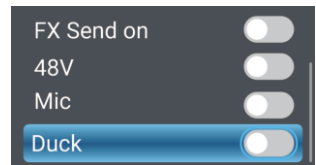
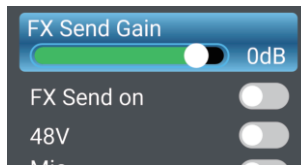
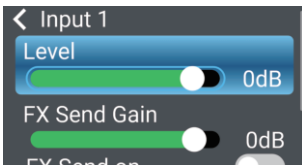
- 2.1 The blue cursor means that the function area has been selected, press the multi-function knob to confirm you can adjust clockwise or counterclockwise to select the function.



- 2.2 Press the multi-function knob to confirm and enter "Input", shown as below.



- 2.3 Press the multi-function knob or the quick knob( Input 1) to confirm and enter "Input 1", shown as below.



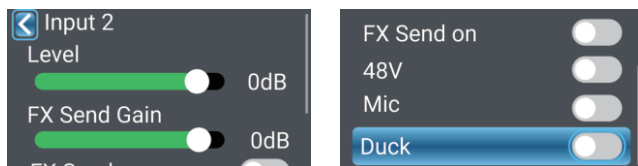
## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

- 2.3.1 Adjust the level (VOL) of Input 1 within the range "-60dB to 10dB".
- 2.3.2 Input "FX Send Gain" to Input1, which is sent to the gain adjustment of the effect unit, range from -60dB to 10dB.
- 2.3.3 Input "FX Send on" to Input1, which sent to the switch of effect unit.
- 2.3.4 Input1 channel DC48V switch.

For 48V phantom power of electronic microphones. Please note that this button only for use with external condenser microphones, otherwise you may damage the device.

- 2.3.5 MIC: Turning on the MIC input sensitivity increases. It is usually used for microphones and voice interaction devices.
- 2.3.6 Duck: when Input 1 channel priority function is enabled, the input audio sources of Input2/3/4 channels will be blocked.

- 2.4 Select or press the quick knob (Input2) to confirm and enter "Input2", shown as below.

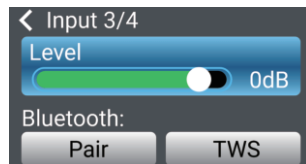


- 2.4.1 Adjust the level (VOL) of Input 2 within the range "-60dB to 10dB".
- 2.4.2 Input "FX Send Gain" to Input2, which is sent to the gain adjustment of the effect unit, range from -60dB to 10dB.
- 2.4.3 Input "FX Send on" to Input 2, which sent to the switch of effect unit.
- 2.4.4 The HI-Z high-impedance input switch, which is specially designed for connecting high-impedance output devices (such as electric guitars, basses, etc.). It reduces signal attenuation by increasing input impedance, to ensures the fidelity of the original tone.

- 2.5 Select or press the quick knob (Input 3/4) to confirm and enter "Input 3/4", shown as below.
- 2.5.1 Adjust the level (VOL) of Input 3/4 within the range "-60dB-10dB".
- 2.5.2 Bluetooth:

Pair: Short press to enter Bluetooth pairing mode, and press for about 2 seconds to disconnect Bluetooth connection.

TWS: short press to enter Bluetooth LINK mode, and press for about 2 seconds to disconnect Bluetooth LINK.



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## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

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Remark: Supports Bluetooth LINK for devices of the same model, and the Bluetooth names of the LINK devices must be consistent.

The main page of successful Bluetooth connection status is displayed as shown in the following figure.

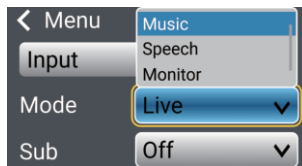
That if the "C" is flashing means that Bluetooth connection is successful (which control by APP).

That if the "P" icon is flashing means under the BT pairing mode, That the solid "P" icon showed means BT connection is successful.

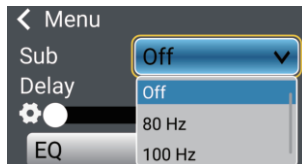
That if the "T" icon is flashing means under the BT LINK mode, That the solid "T" icon showed means BT LINK is successful.



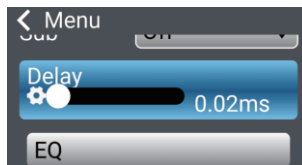
2.6 Mode : modes can be Live/Music/Speech/Monitor.



2.7 Sub: The High-pass filter can be set to Off/80Hz/100Hz/120Hz.



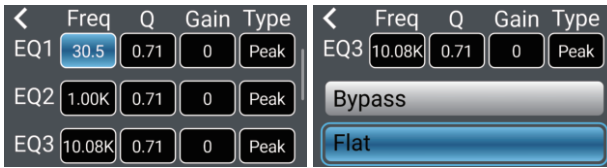
2.8 Delay: The adjustable delay range is from 0.02ms to 20.80ms.





## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

2.9 Select EQ and press the multi-function knob to confirm and enter the EQ interface.



An equalizer is used to compensate or change the spectral characteristics of a signal to obtain the most flat frequency response.

The module here is the parameter 3-band EQ.

2.9.1 Frequency: The center frequency of the filter is between 20Hz and 20kHz.

2.9.2 Fact: Selectivity of the filter, the larger the Q value, the thinner the processed part of the spectrum. It can be adjusted between 0.71 and 10.1.

2.9.3 Gain: The gain or attenuation at the center frequency, from -12dB to +6dB.

2.9.4 Type: filter type, Peak/Low/High.

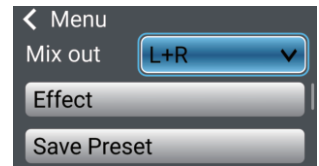
2.9.5 Bypass: Equalizer on and off.

2.9.6 Flat: All parameters are reset to default values.

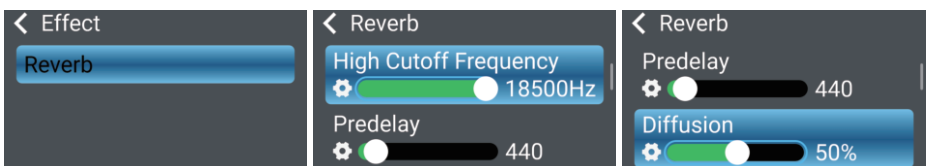
2.10 MIX OUT audio signal mixing output is selectable with L+R/L/R output.

2.10.1 The input is only for Input3/ Input4, and the MIX OUT is divided into L/R output

- When L+R is selected in MIX OUT, the stereo output of the external speaker is connected .
- When L or R is selected in MIX OUT, the external speaker corresponds to output L/R channels.
- When MIX OUT outputs L signal, the host M outputs R signal.
- When MIX OUT outputs R signal, the host M outputs L signal.
- When using INPUT3/4 AUX input, MIX OUT must be set to L+R mode.



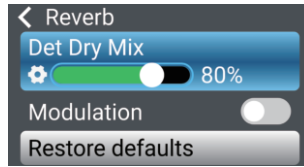
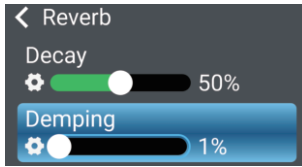
3.0 Effect: Click and select the "Effect" icon ==>Press the multi-function knob to access the interface of image 1 ==>Click and select "Reverb" icon and then confirm to access the effects interface as showed in image 2 by pressing the multi-function knob.



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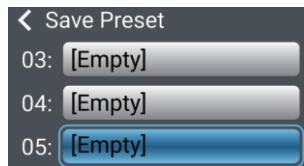
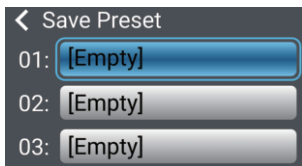
## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

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- 3.0.1 High Cutoff Frequency: It is used to set a frequency point. Sounds above this frequency will be gradually attenuated or cut off in reverb.
- 3.0.2 Predelay: It refers to the time interval between the direct sound and the first reflected sound.
- 3.0.3 Diffusion: It determines the uniformity of the distribution of reverberation reflected sound in space.
- 3.0.4 Decay: It determines the length of time from the generation of the reverb sound to its gradual disappearance.
- 3.0.5 Damping: It is mainly used to control the attenuation rate of high-frequency components in reverberation.
- 3.0.6 Wet/Dry Mix : It is used to control the mixing ratio between the original dry sound signal (Dry) and the reverb effect signal (Wet).
- 3.0.7 Modulation: It is usually used to make some dynamic changes and modifications to the reverb effect.
- 3.0.8 Restore defaults: Restore default settings

### 3.1 Select and confirm to "Save preset"

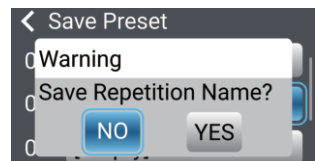


This menu is used to manage backup parameters. These data can be stored as presets directly in the internal memory of the host as presets. Its memory contains total 6 presets (including 1 default preset).

#### 3.1.1 Preset List shows all presets (total 5 presets).

The preset save name can be customized (the preset save does not include the model name and standby mode settings).

When the preset names are saved the same, there will be prompt "Save Repetition name" as shown below, users can choose per needs.

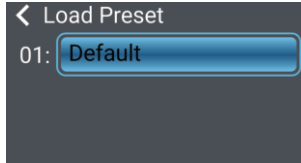


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## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

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3.2 Select and confirm to "Load preset".



3.2.1 The preset list is loaded and comes with a default preset stored from factory. The saved presets will be displayed in this list. Up to 5 presets can be saved, making it convenient for users to call up presets.

3.2.2 After the user calls a preset, the main interface will display the current preset number as shown below.



Remark: For example, when calling to load preset 01, the main page will display "Preset 01", and so on. Loading presets will display "Preset 02/03/04/05", and loading the default preset will display "Preset--".

3.2.3 After reloading the preset and modifying, the main page will add an "E" to indicate. The modification of the preset will display "Preset--E" by default, as shown below.



Operate the preset and modification on the APP, will display the same as above on the device.

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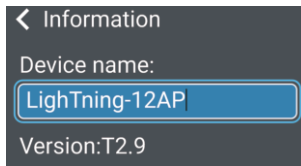
## SOFTWARE INTERFACE OPERATION INSTRUCTIONS

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- 3.3 Standby, time range: 1 min-60 min, (Standby does not works when there is a signal input or on APP connecting).



- 3.4 Select and confirm to "Information".

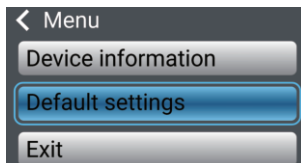


- 3.4.1 You can view device name information, and device name can be customized (synchronized with the Bluetooth name).

- 3.4.2 You can view device version information.

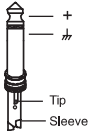
- 3.5 Default settings: Restore default settings.

- 3.6 Exit: Exit the setting interface and return to the default main interface (by default, if there is no operation for about 30 seconds, it will automatically return to the home page).

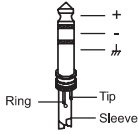


## WIRE CONNECTIONS

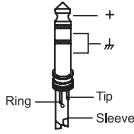
Either the 1/4" TRS phone jack or XLR connector can be wired in balanced and unbalanced modes, which will be determined by the actual application status, please wire your system as the following wiring examples:



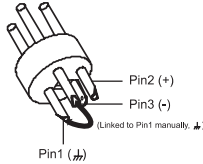
TS Type Unbalanced



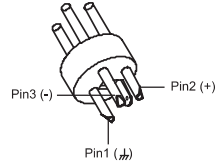
TRS Type **Balanced**



TRS Type Unbalanced



XLR Type Unbalanced

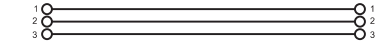
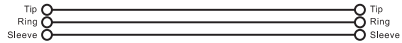


XLR Type Balanced

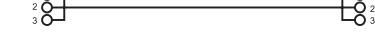
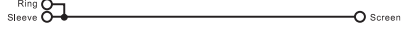
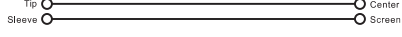
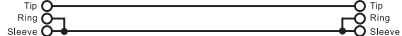
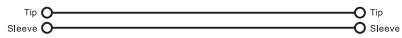
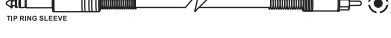
## In-line Connection

For these applications the unit provides 1/4" TRS and XLR connectors to easily interface with most professional audio devices. Follow the configuration examples below for your particular connection:

- **Balanced**



- **Unbalanced**



## TECHNICAL SPECIFICATIONS

Model	LighTning-12AP
System Type	12" 2-way battery powered speaker
Power System	Bi-AMP DSP Processor, Program 200W / Peak 400W @4ohm
Transducer Low	12" woofer, ferrite magnet
Transducer High	1" Throat Compression Driver
Crossover Frequency	2.5 kHz
Maximum SPL	123dB (peak)
Frequency Response	65 Hz – 20 kHz (-3 dB)
Frequency Range	55 Hz – 20 kHz (-10 dB)
Horn Coverage	90° horizontal x 60° vertical (nominal)
Kick-back/monitor angles	monitor angles 50°
DSP Preset Modes	<p>LIVE-MUSIC-SPEECH-MONITOR</p> <p>Selection Switch for 4 DSP Presets, select your Favourite Among live-music-speech-Monitor :</p> <ul style="list-style-type: none"> <li>- LIVE-for live sound reinforcement applications(Default).</li> <li>- MUSIC-for recording music playback and EDM applications.</li> <li>- SPEECH-for vocal language applications.</li> <li>- MONITOR-for stage monitoring applications.</li> </ul>
Connectors	<p>2 x XLR+ 1/4" (6.35 mm) TRS combo inputs</p> <p>1 x 3.5 Stereo AUX IN</p> <p>1 x 5V 1A Type C charging</p> <p>1 x XLR mix output (Link)</p> <p>1 x IEC power cable input</p>
Bluetooth Stereo	Bluetooth Stereo and app control
Battery capacity	lithium ion, 3300mAh, 25.2V, 7 verses , 83.16Wh
Battery at max output	6+ hours of run optimize 6+ hours of run time
Battery at 100 dB SPL	12 hours of run time
Controls	Master Volume , AC Power switch, Grille with built-in Power LED
Power	<p>Voltage: 110–240 V~, 50/60 Hz</p> <p>AC Fuse: T2.5AL AC250V</p> <p>Power Consumption: 150 W</p>
Electronic Protections	Electronic clip, thermal and transducer overdrive protection
Enclosure	Trapezoidal, injection-molded, polypropylene with perforated steel grille , 3*Handles( Top and both sides)
Mounting/Installation	36mm standard pole-mount, wedge monitor
Dimensions	615mm*364mm*348mm (24.2**14.3**13.7")
Weight	32.32 lb. /14.66kg

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## BATTERY USAGE AND PRECAUTIONS

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1. To reduce the risk of injury, charge only the battery pack specified for use with the speaker. Other types of batteries may explode, causing personal injury and damage.
2. The battery cannot be removed when the machine is charging or in operation. The battery can only be removed after the machine is turned off to avoid damage to the machine;
3. Charge the battery pack only at temperatures above  $0^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$ ) and below  $48^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$ ). Avoid charging in direct sunlight. Store the speaker and battery pack in a location where the temperature does not exceed  $55^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$ ). This is essential to prevent severe damage to the battery.
4. Unless otherwise specified and using approved accessories, do not charge the battery in a wet environment and do not expose the speaker plugged into the mains power supply to rain or snow. Water entering the battery charger may cause electric shock or fire.
5. Never immerse the battery pack or speaker in any type of liquid, nor allow liquid to enter. Corrosive or conductive liquids (such as sea water, industrial chemicals, or products containing bleach, etc.) can cause a short circuit, resulting in fire, personal injury, and property damage.
6. Battery leakage may occur under extreme use or temperature conditions. Avoid contact with skin and eyes. Battery fluid is corrosive and may cause chemical burns to tissue. If fluid contacts skin, wash quickly with soap and water. If fluid contacts eyes, rinse with clean water for at least 10 minutes and seek medical attention.
7. When using or charging the battery pack, place the speaker on a flat, non-flammable surface and away from flammable materials. Carpeting and other insulating surfaces can prevent proper air circulation and may cause the charger and battery pack to overheat. If you notice smoke or melting from the speaker or battery pack, unplug the speaker immediately and stop using the battery pack or speaker. Contact customer service immediately.
8. Do not insert the battery pack into the speaker if the battery compartment is cracked or visibly damaged. Using a damaged battery pack may result in electric shock or fire.
9. If you notice a significant decrease in operating time per charge, replace the battery pack. The battery pack may be nearing the end of its service life.



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