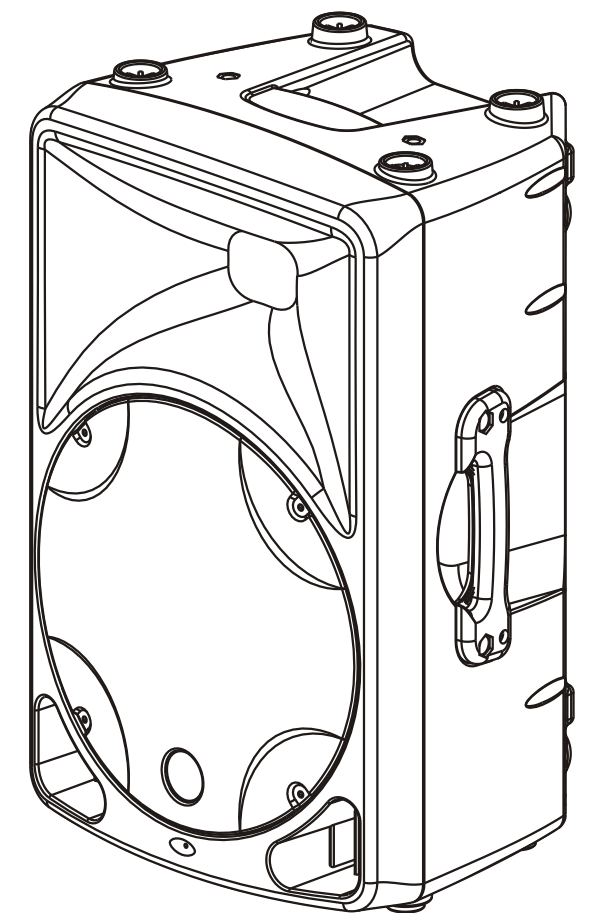


INVOTONE

USER'S MANUAL

ACTIVE SPEAKER CABINET EVO15A / EVO-15WBA



 **USB**

 **Bluetooth®**

IMPORTANT SAFETY INSTRUCTION



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

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.

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.

TECHNICAL SPECIFICATIONS

Model Active	EVO15A
System Type	2-Way Active Vented Speaker
Transducer Low	15" Woofer, 2"voice coil
Transducer Driver	1" NEO Driver, 1" Voice Coil
Horn Coverage H° x V°	90°H x 45°V
Frequency Response (-6dB)	55Hz-20KHz
Crossover Frequency	2.5K Hz
Max SPL	117dB Max.
Power Rating	Class D SMPS (Bi-AMP , LF 90W/RMS + HF 30W/RMS), Total power 120W RMS, 250W Program power
USB Player	With USB&Mirco SD CARD, Bluetooth
Connector	INPUT1-Mic With XLR*1&6.3 Jack*1/INPUT2-Line With XLR*1&6.3Jack*1&3.5Jack*1
External Controls	Input 1&2 and Master Volume Control / 2 Band EQ-High&Low / Power ON with Green LED / Clip Limiter with Red LED
Electronic Protections	Thermal/Overload/Analog limiter/Compressor
Power Supply	110~120 /220~240V~50 /60Hz swtichable
Enclosure Construction	Plastic cabinet,Trapezoidal & Monitor shape,Metal grille, Rubber foot, 3* Handles (both side and Top)
Mounting	36MM standard pole-mount/ M10*4PCS Flying Pointing(Optional)
Dimensions (HxWxD)	632*386*366 mm
Net Weight	14.37(kg)
Volume	5.35CFT

Model Active	EVO-15WBA
System Type	2-Way Active Vented Speaker
Transducer Low	15" Woofer, 2"voice coil
Transducer Driver	1" NEO Driver, 1" Voice Coil
Horn Coverage H° x V°	90°H x 45°V
Frequency Response (-6dB)	55Hz-20KHz
Crossover Frequency	2.5K Hz
Max SPL	117dB Max.
Power Rating	Class D SMPS (Bi-AMP , LF 90W/RMS + HF 30W/RMS), Total power 120W RMS, 250W Program power
Connector	INPUT1-Mic With XLR*1&6.3 Jack*1/INPUT2-Line With XLR*1&6.3Jack*1&3.5Jack*1
External Controls	Input 1&2 and Master Volume Control / 2 Band EQ-High&Low / Power ON with Green LED / Clip Limiter with Red LED
Electronic Protections	Thermal/Overload/Analog limiter/Compressor
Power Supply	110~120 /220~240V~50 /60Hz swtichable
Enclosure Construction	Plastic cabinet,Trapezoidal & Monitor shape,Metal grille, Rubber foot, 3* Handles (both side and Top)
Mounting	36MM standard pole-mount/ M10*4PCS Flying Pointing(Optional)
Dimensions (HxWxD)	632*386*366 mm
Net Weight	14.37(kg)
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* EVO15A / EVO-15WBA are Active Speakers for professional use, they can be used in following electromagnetic environment: residential, commercial and light industrial, urban outdoors. They are the apparatus Not intended for rack mounting.

* For EVO15A, the peak inrush current is 0.9A

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

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.

INTRODUCTION

Thank you for choosing **INVOTONE**. The **INVOTONE** cabinets have been designed to provide a cost effective high grade solution while maintaining high quality cabinet construction and optimum components. The EVO15A / EVO-15WBA, can be used for all types of applications including, but not limited to, churches, conference centers and discos. The woofer and neodymium driver combination provides excellent performance rivaling those cabinets costing much more.

Our Professional Audio Products are designed and tested by a highly qualified engineering team with more than 20 years of experience. Great care is placed in delivering products with excellent performance, specifications and dependable reliability. Also great emphasis is placed in creating and bringing to market products that can fill multiple applications and also offer customers exceptional value.

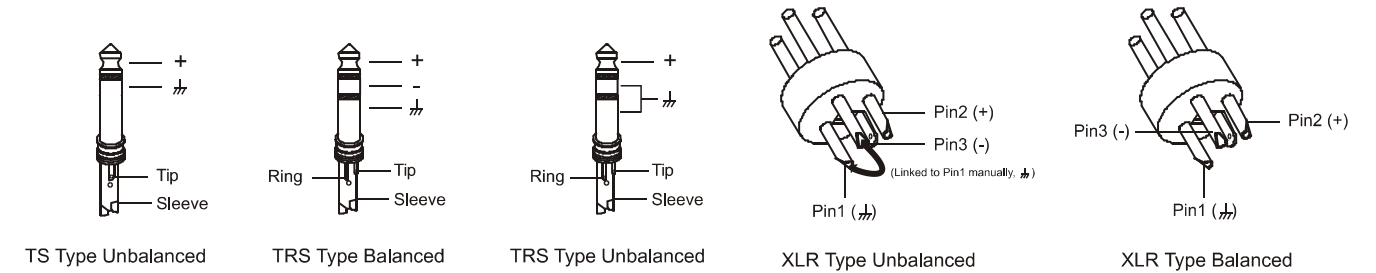
INSTALLATION TIPS

- Speakers should be placed in a position that allows for unobstructed sound projection. In many instances it is beneficial for speakers to elevate on tripod stands to achieve maximum dispersion and reach. Consider INVOTONE speaker stand or equivalent to raise speakers.
- Using quality cables ensure best possible sound. Consider using INVOTONE 16 or 14 gauge cables or equivalent.
- For best results match the speakers to a good amplifier that matches the wattage and impedance of your speakers. Proper amplification power results in good quality audio and longer component life. Check out.
- Avoid pointing microphone directly at an amplified speaker otherwise could cause feedback possible damaging speaker components and your hearing.

Enjoy the sound!

WIRE CONNECTIONS

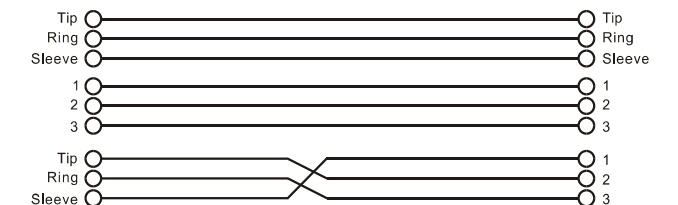
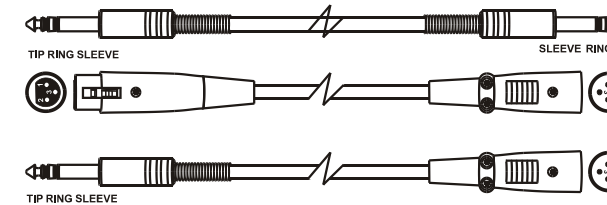
Both connectors, 1/4" XLR or TRS, can be wired in balanced or unbalanced way, depending on the work necessity. The following ones are examples of how these connectors can be wired:



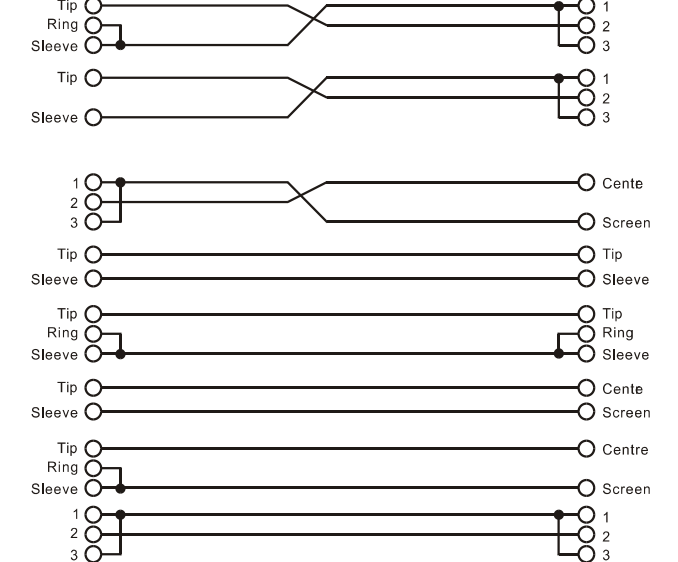
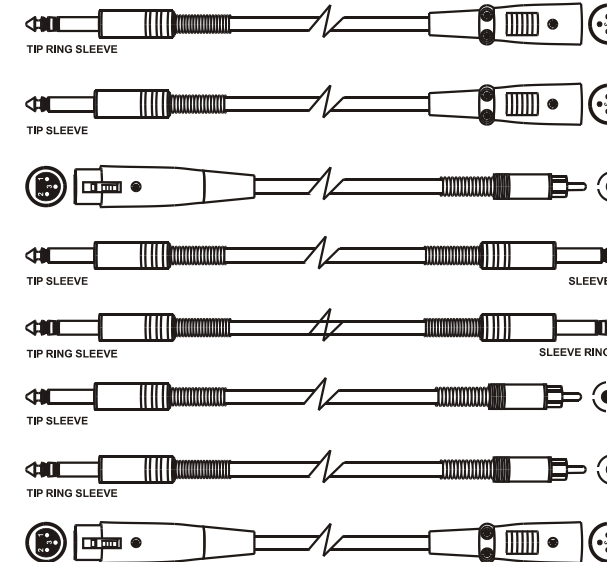
For Active Speaker Cabinets

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

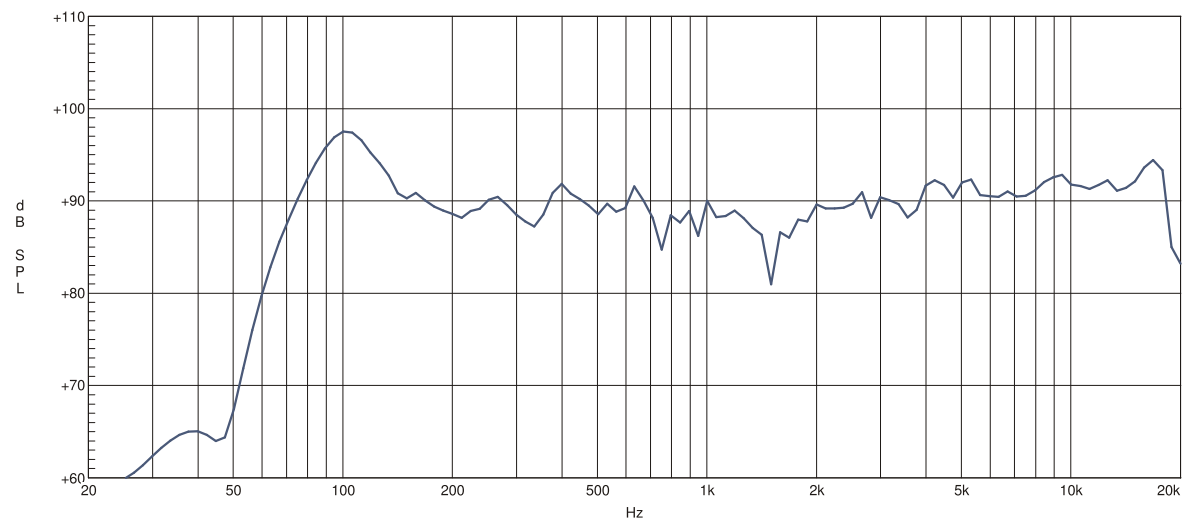


• Unbalanced



FREQUENCY RESPONSE DIAGRAM

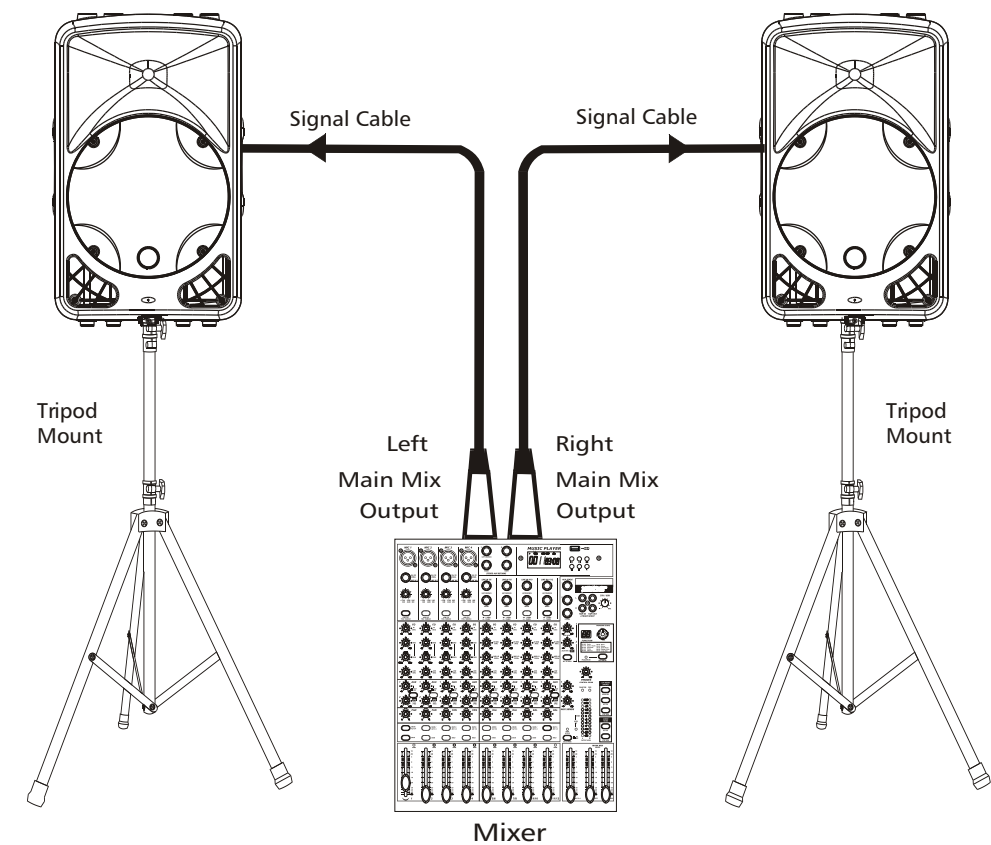
EVO15A / EVO-15WBA



QUICK START

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

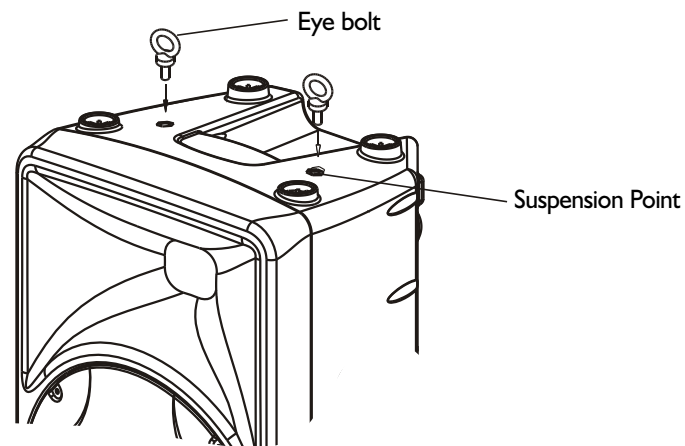
- 1). Connect one side of the signal cable at your audio mixer into output left / right (with Stereo-Jack or XLR) and the other side of the cable into the line input Stereo-Jack) of your active speaker cabinet.
- 2). Connect the power cord to mains.
- 3). Turn on your mixer first, then the active speaker cabinets.
- 4). Turn up the volume control of the active speaker cabinets.
- 5). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 6). After using, turn off your active speaker cabinets first, then the mixer.



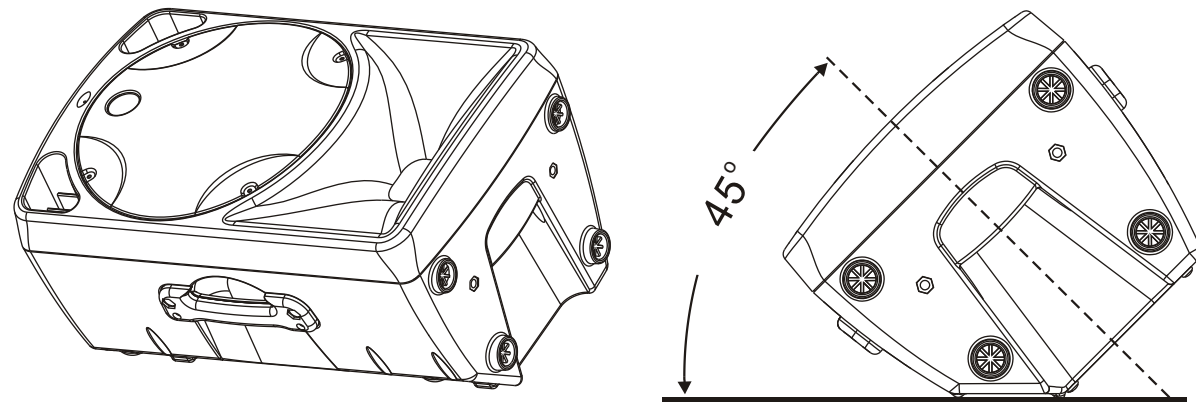
RIGGING

The EVO15A / EVO-15WBA speaker cabinet also provides the suspension points for installation. (M10×1.5PH LENGTH: 30mm).

For further details, please refer to the right illustration(OPTIONAL FUNCTIONAL)



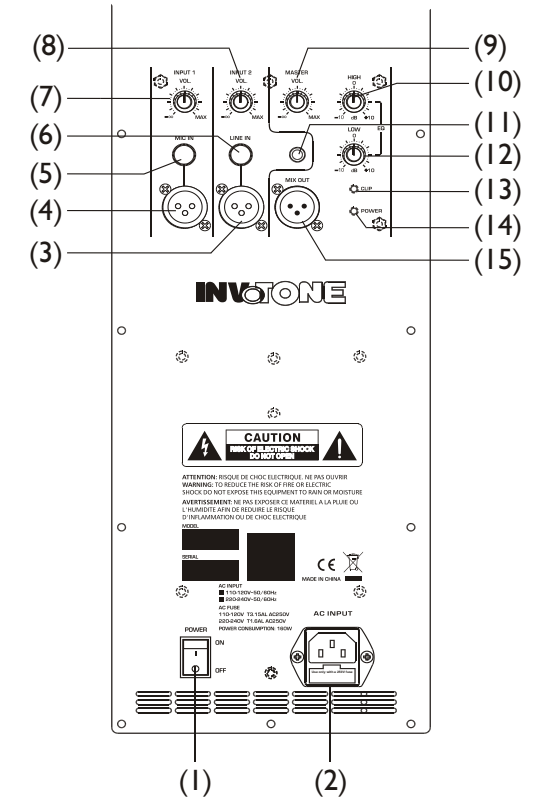
The floor use is as a function of a monitor when the angle is 45°



PANEL DESCRIPTION

AMP INTERFACE FOR EVO15A / EVO-15WBA

- (1) BI-POLAR MAIN POWER SWITCH
- (2) AC POWER SOCKET WITH MAIN FUSE
- (3) LINE INPUT ON XLR CONNECTOR
- (4) MIC INPUT ON XLR CONNECTOR
- (5) MIC INPUT ON 1/4 JACK CONNECTOR
- (6) LINE INPUT ON 1/4 JACK CONNECTOR
- (7) MIC INPUT VOLUME CONTROL
- (8) LINE INPUT VOLUME CONTROL
- (9) MASTER VOLUME CONTROL
- (10) EQ-HIGH CONTROL
- (11) LINE INPUT ON AUX CONNECTOR
- (12) EQ-LOW CONTROL
- (13) CLIP INDICATOR RED LED
- (14) POWER INDICATOR GREEN LED
- (15) MIX OUT ON XLR CONNECTOR



USB PLAYER FOR EVO15A

- (a) Insert a standard microSD card
- (b) Insert USB player
- (c) Aux Input
- (d) Play the last song or decrease the volume after pressing 2 seconds
- (e) Press this key to start playing or Press this key to pause
- (f) Play the next song or increase the volume after pressing 2 seconds
- (g) PLAY MODE

In the opening or playing state, press this key to select the three circling modes in order:
 Line: The player plays the files you input. The mark on the screen is "LINE".
 Bluetooth: The player plays the files from your bluetooth device The mark on the screen is "b t", In this state, you will hear a tone from the loudspeaker. From your Bluetooth device's settings page, enable Bluetooth and select " VIRE BT " as the device.

USB : The player plays the files in a standard USB drive. The mark on the screen is "USB"

- (h) Display the status of USB playing

