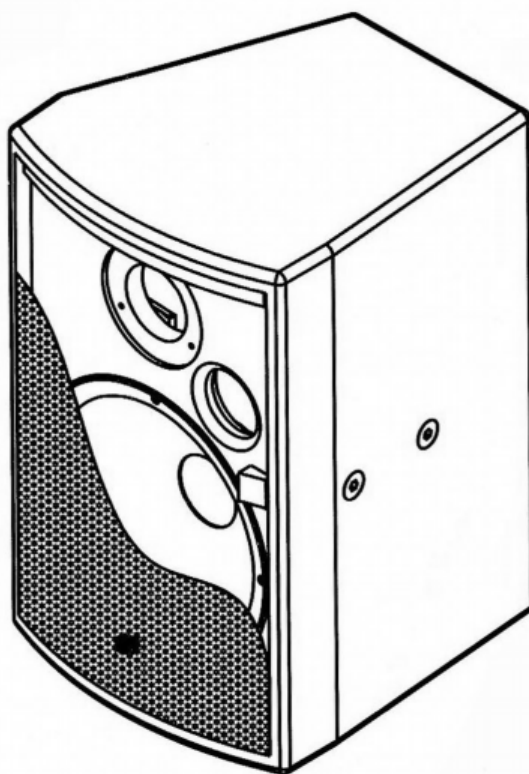


INVOTONE

USER'S MANUAL

IPS16A
PROFESSIONAL SPEAKER
ACTIVE MODELS



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.

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1. INTRODUCTION

Thank you for purchasing INVOTONE IPS16A, active sound reinforcement speaker cabinets. It is just one of the many INVOTONE products which a talented, multinational audio team and engineers and musicians have developed with their great passion for music. Your IPS16A is capable of enormous sound pressure level and it has been created to give you a performance that is better than any loudspeaker in this range. Thanks to the quality of its transducers, built-in amplifier.

Enjoy your IPS16A and make sure to read this Manual carefully before operation!

2. FEATURES

- * 2-Way 6.5" Vented Active Speaker Cabinet
- * ClassD 70Wx2
- * 6.5"(165mm)woofer/1" Voice Coil
- * 1" Neodymium Tweeter
- * Trapezoidal painted wood cabinet. metal grille
- * 4xM4 Standard(2xVertical and Horizontal side)
- * Modern design & Lightweight

3. CONTROL ELEMENT

IPS16A Active Speaker Cabinet

1- POWER INDICATOR

This LED lights up blue when the speaker is powered ON.

2- POWER SWITCH

This switch is used to turn the IPS16A active speaker ON OR OFF.

Caution: Make sure you supply voltage is same to the value printed on the rear panel, before turn on the SWITCH. (230V ~ 50HZ / 115V ~ 60HZ)

3- AC POWER SOCKET WITH MAIN FUSE

4- MAIN VOLUME

This control adjusts the proper signal present on the COMBO CONNECTOR (LINE INPUT).

Caution: The signal present on the RCA connector (INPUT) IS OUT OF THE VOLUME CONTROL.

5- SIGNAL INPUT

Line input on combined connector (XLR / Jack) for receiving any type of signal sources. Balanced or unbalanced configuration is possible.

6- OUT/LINK

Balanced output (XLR male), can be used for linked at another IPS16A active speaker cabinet with the same SIGNAL LEVEL OF THE FIRST.

7- SOURCE SWITCH

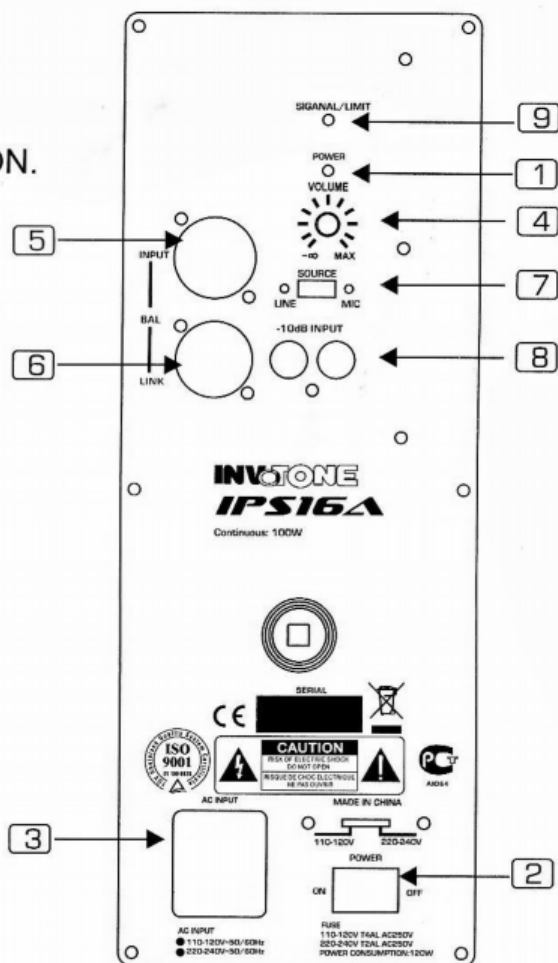
Use this switch in LINE position at +6dB when you connect the MX12FX, use the switch in MIC position at 45dB when you connect a MIC.

8- DIRECT AUX INPUT

Direct AUX input, with RCA connector, the signal work without volume control at 10dB of sensitivity.

9- LIMITER INDICATOR

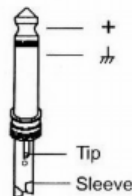
When the LED indicator flashes in Red color, the limiter circuit is engaged. When the LED indicate turns to fixed Red light, the signal is excessive. Please adjust the volume control or decrease the mixer output.



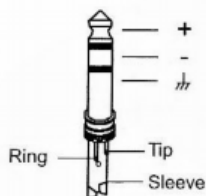
4. WIRING CONNECTION

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:

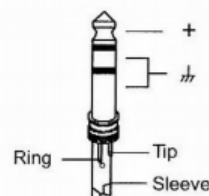
For 1/4" Phone jack



TS Type Unbalanced

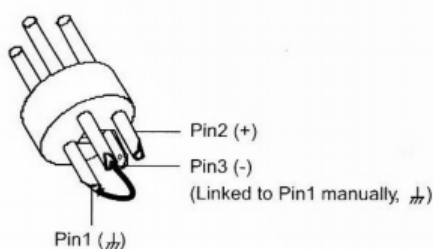


TRS Type Balanced

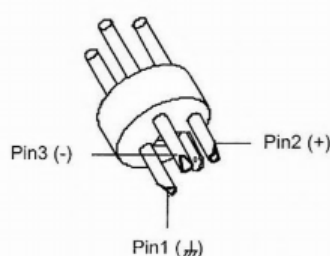


TRS Type Unbalanced

For XLR connector



XLR Type Unbalanced

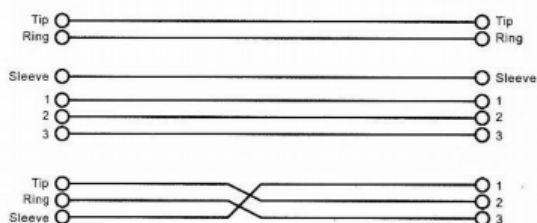
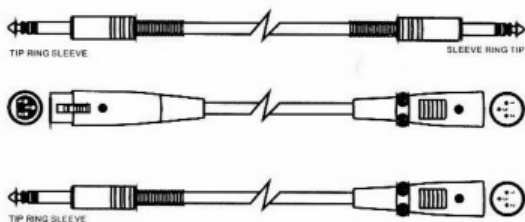


XLR Type Balanced

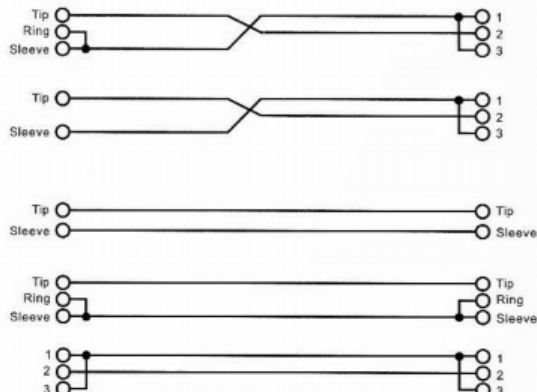
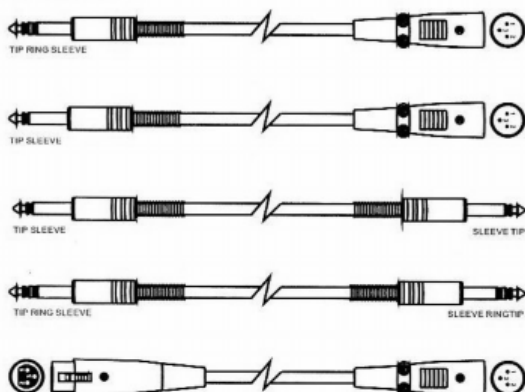
In-line Connection

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



5. TECHNICAL SPECIFICATION

Model:	IPS 16A
System Type:	2-way active acoustic system
Power Handling:	120W RMS (cont.), 240W Program
Frequency Response:	75Hz-20kHz (-6dB)
SPL:	88dB / 112dB Max.
X-over Frequency:	6kHz@12dB/oct
Low frequency woofer:	6.5" woofer/1" voice coil
Hi frequency driver:	1" neodymium tweeter
Connectors:	MIC/LINE balanced inputs at -45/+6 dB (combo connector), AUX input at -10dB with RCA connector, LINK output at -45/+6dB with XLR
Amplifier:	Class D 2*70W
Electronic Protections:	Thermal, overload, analog, limiter
Volume control:	Continuous, work only on MIC/LINE input
Power Supply:	230V-115V@50-60Hz
Enclosure:	Trapezoidal painted wood cabinet with metal grille.
Fixing Point:	4*M4 Standard, (2*Vertical and Horizontal side)
Dimensions:	318mm*200 mm* 201.5 mm
Net Weight:	13.05 lbs/5.92 kg

6. WARRANTY

1. WARRANTY REGISTRATION CARD

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card within 10 days of the Purchase Date.

All the information presented in this Warranty Registration Card gives the manufacturer a better understanding of the sales status, so as to provide a more effective and efficient after-sales warranty service. Please fill out all the information carefully and genuinely, miswriting or absence of this card will void your warranty service.

2. RETURN NOTICE

- 2.1 In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.
- 2.2 Please provide a copy of your sales receipt or other proof of purchase with the returned machine, and give detail information about your return address and contact telephone number.
- 2.3 A brief description of the defect will be appreciated.
- 2.4 Please prepay all the costs involved in the return shipping, handling and insurance.

3. TERMS AND CONDITIONS

- 3.1 INVOTONE warrants that this product will be free from any defects in materials and/or workmanship for a period of 1 year from the purchase date if you have completed the Warranty Registration Card in time.
- 3.2 The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.
- 3.3 During the warranty service, INVOTONE may repair or replace this product at its own option at no charge to you for parts or for labor in accordance with the right side of this limited warranty.
- 3.4 This warranty does not apply to the damages to this product that occurred as the following conditions:
 - Instead of operating in accordance with the user's manual thoroughly, any abuse or misuse of this product.
 - Normal tear and wear.
 - The product has been altered or modified in any way.
 - Damage which may have been caused either directly or indirectly by another product / force / etc.
 - Abnormal service or repairing by anyone other than the qualified personnel or technician.

And in such cases, all the expenses will be charged to the buyer.

- 3.5 In no event shall INVOTONE be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.
- 3.6 This warranty gives you the specific rights, and these rights are compatible with the state laws, you may also have other statutory rights that may vary from state to state.