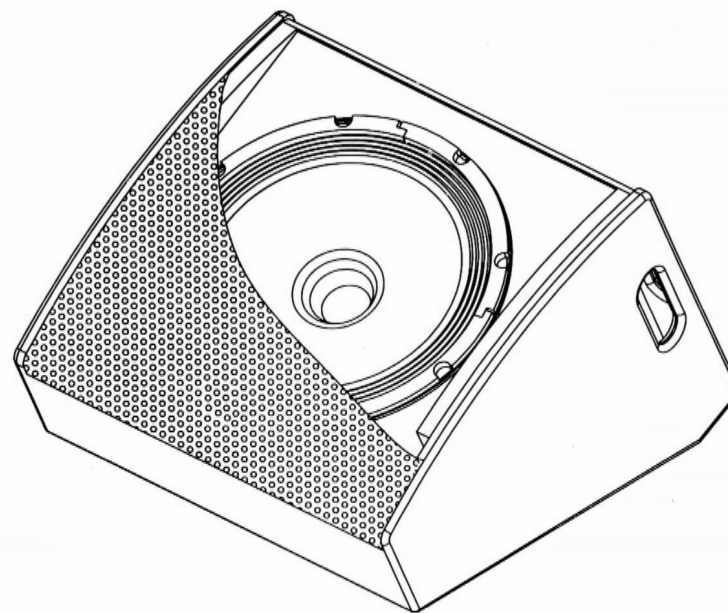


# INVO TONE

**USER'S MANUAL**

**PROFESSIONAL ACTIVE  
AUDIO MONITORS  
DSX12CMA**



# 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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## Introduction

Thank you for purchasing our very versatile DSX12CMA powered monitor system, which is designed for accurate reproduction characteristic. The DSX12CMA is a small-sized, compact stage monitor using trapezium configuration which greatly decreases the resonance of standing waves in the cabinet. Also the surface of the cabinet is processed in high-density matrix spray paint technics. The speaker system is prepared for using with standard speaker stands that gives you additional application flexibility. A 2-way coaxial speaker with the size of 12"/1" and a bi-amped digital power circuit with a switch mode power supply give you a fully professional performance within one of lightest powered cabinets of this type ever made.

Another useful feature of this compact DSX12CMA powered monitor speaker system is a build in 2 sound-preset circuit for optional Monitor or FOH application.

Enjoy your DSX12CMA and make sure to read this manual carefully before operation of the system.

Thanks again for choosing our InvoTone product.

## Features

The excellent quality DSX12CMA powered monitor speakers cabinets have the following features:

- Small and compact stage monitor.
- Trapezium configuration decreases the resonance of the standing wave in the cabinet.
- Using hi-density matrix spray-paint technics for the cabinets.
- The cabinet flange makes mounting quickly and flexibly.
- HF compression driver and vented LF for fully professional performance.
- Preset - FOH / Monitor.
- Switch mode power supply and digital power circuitry.

## Usefull Data

Please write your serial number here for future reference.

Serial Number:

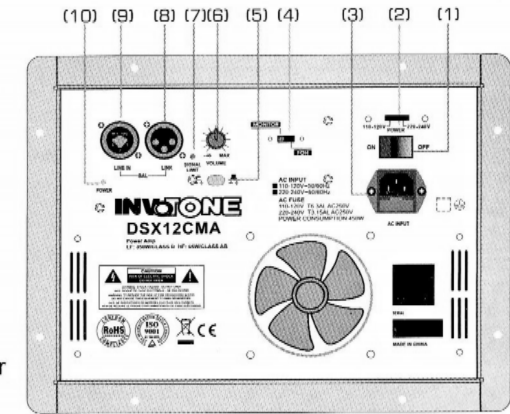
Date of Purchase:

Purchased at:

## Control Elements

### DSX12CMA Power Monitor Cabinet

1. ON-OFF main power switch
2. Voltage selector between 110-120V and 220-240V
3. Input AC power socket with main fuse
4. Monitor or FOH selector
5. Ground switch
6. Volume main power amplifier control
7. SIGNAL LIMIT, Red LED, indicating ON status
8. LINK at -6dBu on XLR connector
9. LINE IN at -6dBu on COMBO connector
10. POWER, Green LED, indicate ON status



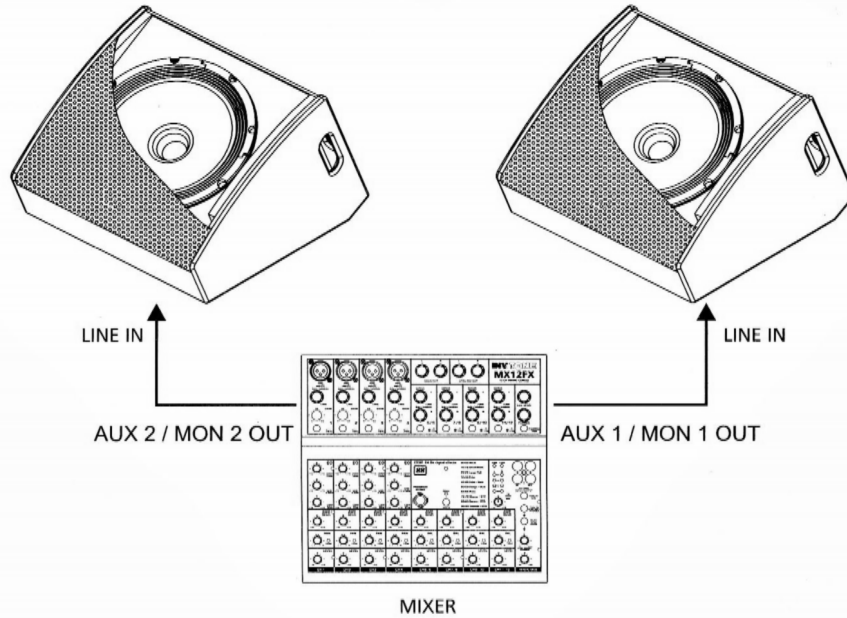
## Installation & Connection Diagram

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

- 1) Connect one side of the signal cable at your mixer into the AUX / Monitor Outputs (with 1/4" Jack or XLR) and the other side of the cable to the Line Input (COMBO) of your DSX12CMA monitor speaker cabinet (with 1/4" Jack or XLR)
- 2) Connect the power cord to mains.
- 3) Turn ON your mixer first, then the DSX12CMA cabinets.
- 4) Turn up the volume control of the DSX12CMA 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.

# Introduction & Connection Diagram

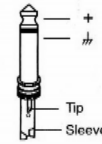
For DSX12CMA Monitor on the floor



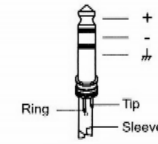
## Wire Connections

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:

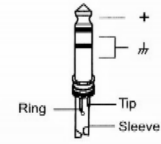
### For 1/4" phone jack



TS Type Unbalanced

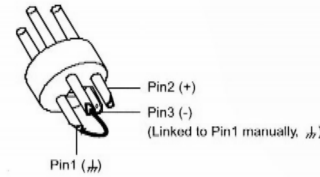


TRS Type Balanced

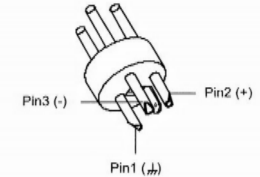


TRS Type Unbalanced

### For XLR connector



XLR Type Unbalanced

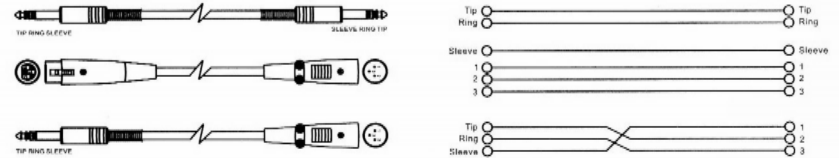


XLR Type Balanced

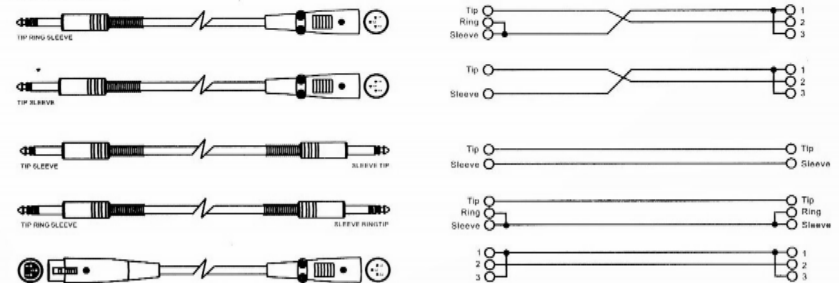
### In-line Connection

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.

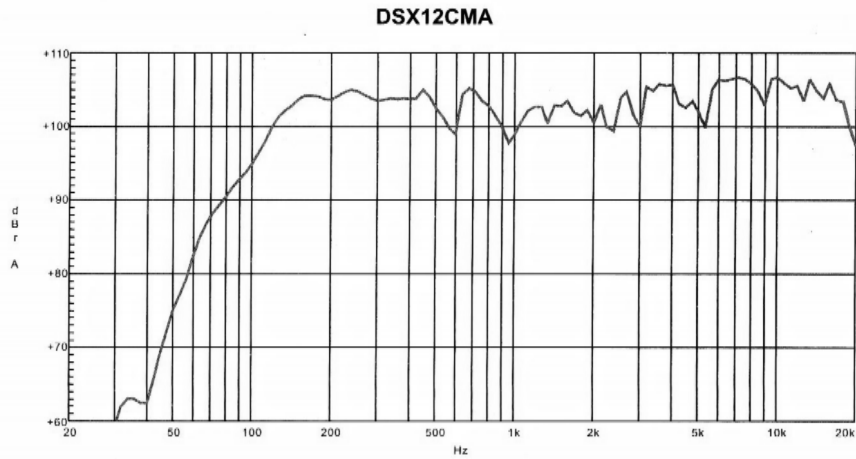
#### • Balanced



#### • Unbalanced



## Frequency Response Diagrams



## Technical Specifications

<b>Model</b>	<b>DSX12CMA</b>
<b>System Type</b>	2-Way Active Monitor
<b>Coaxial Speaker</b>	12" WF With 1" Driver, Horn-70°x70°
<b>Frequency Response (-6dB)</b>	60Hz-20KHz
<b>Max SPL</b>	121dB (at 1M)
<b>Power AMP</b>	BI-AMP, LF-350W/ Class D, HF-65W/Class AB
<b>Connector</b>	Input with Combo/Link with XLR
<b>External Controls</b>	Volume Control/FOH&Monitor Preset/Power ON with Green LED/Clip Limiter with Red LED/Ground Lift
<b>Electronic Protections</b>	Thermal/Convection-Fan/Overload/Lim./Compressor
<b>Enclosure Construction</b>	MDF cabinet, resistant black paint,metal grille, rubber feet, two wood handles
<b>Power Supply</b>	110-120V~50/60Hz / 220-240V~50/60Hz Switchable
<b>Dimensions(HxWxD)</b>	12.3"(313mm)x15.5"(393mm)x20.2"(513mm)
<b>Net Weight</b>	13.89kg / 30.62 lbs.