

# ART – MX225

## Stereo Dual Source Five Zone Distribution Mixer

### OPERATION MANUAL



### INTRODUCTION

The MX225 is designed for remote volume control of multiple amplifiers or powered speakers in a distributed audio system. Two stereo sources are available to each of five output zones. Each source input pair handles separate left and right balanced line level signals. Each output zone features independent level control from inputs 1 and 2, stereo/mono selector with mono indicator, LED level metering, and left and right balanced line level zone outputs. All audio connections are balanced XLR. The built in power supply and single high 19" rack mount format allows for easy installation and reliable operation.

#### What Is A Zone Distribution Mixer?

The use of multiple power amplifiers, each driving one or more speakers, or multiple powered speakers is now commonplace in most distributed audio systems. Whether the installation is a club, a hall, a restaurant, a church, an arena, an office, a recreational facility, or even a portable PA with distributed speakers, systems like this offer the potential to balance the audio level throughout the coverage area. You can adjust the volume of every amplifier or powered speaker, either in groups or individually, from a centralized location with a zone distribution mixer like the Model MX225. Basically the input of the Model MX225 is connected to the PA mixer's line-level output (the Model MX225 will accept the output of two mixers or stereo signal sources) and the power amps or powered speakers are connected to the Model MX225s zone outputs. As you adjust volume for each zone within the system the independent LED level metering gives a quick visual reference to the level variations throughout the system.

#### FEATURES:

- Left and right balanced Source 1 and 2 Inputs, accepts stereo or mono signal sources.
- Source 1 and 2 input channels are internally routed to all five Zone channels.
- Five Zone channels each feature Source 1 and 2 level controls and left and right balanced output XLR connectors.
- Stereo/Mono selector on each zone sums left and right into Mono mode when engaged.
- Mono indicator LED on each zone channel indicates that mono has been selected.
- Five LED level metering (-25, -20, -15, -10, Clip) on each zone channel indicate signal activity for each zone.
- Source 1 and 2 indicator LEDs show you when signal is present in each source channel.

#### SPECIFICATIONS:

Input Connections:	XLR-F balanced (4)
Output Connections:	XLR-M balanced (10)
Input Impedance:	47k Ohms
Output Impedance:	200 Ohms
Maximum Input Level:	+20dBu balanced
Maximum Output Level:	+24dBu balanced
Maximum Gain:	+6dB
Signal to Noise Ratio:	>90dB typical
THD:	< 0.05% typical
Power Requirements:	USA: 105 to 125 VAC / 50-60Hz, 15 Watts typical
Dimensions: (HxWxD in)	1.75 x 19.0 x 7.25
Dimensions: (HxWxD mm)	(44.5 x 483 x 184)
Weight:	5.34 lbs. (2.42kg)

### OPERATION

- Verify proper voltage selection on the IEC style power connector for your location. Connect the AC cord to a grounded AC outlet.
- Using balanced XLR cables connect the balanced stereo output of the primary audio source (mixer) to the MX225's left & right Line 1 In source connectors. Alternately a mono signal source can be connected to either L or R input. Repeat the process with Line 2 In source for an additional mixer or other audio source.
- Using balanced XLR cables connect the Zone Out connectors to the inputs of the appropriate power amplifiers and/or powered speakers.
- In many situations the Stereo/Mono selector would be in the Mono position. There are two reasons for this. Firstly, stereo separation works well in the home where the listener can be situated more exactly between the speakers to hear each one equally. But away from that environment in a club, restaurant, office, rec hall, etc, listeners often find themselves closer to one speaker than the other. Stereo separation can cause a situation where you primarily hear just part of the program e.g., guitar but no keyboard or vice-versa. With the system in Mono mode, all of the program music comes out all of the speakers. Secondly, if you connect a mono source to one of the Left or Right Source Input connectors then switch one or more zones into Stereo, that source will only come out the amp/speakers connected to the Left or Right Zone outputs. People not situated close to those speakers may not be able to hear that source at all.
- Adjust the Source level controls to produce the desired volume in each area. If a CLIP indicator lights, reduce either that Zones level control, or the output of the signal source to prevent distortion.
- The LED level indicators in each Zone show the relative signal level for that Zone.
- The Source Indicator 1 and 2 lights show signal activity of each source.

## WARNINGS

All operating instructions should be read before using this equipment.

To prevent the risk of electrical shock, do not remove the cover or the back.

There are no user-serviceable parts inside. Please refer servicing to a qualified service technician.

Do not expose this unit to rain or moisture or to heat sources such as radiators, stoves, or other items that generate excessive heat.

This unit should be cleaned only with a damp cloth. Do not get moisture inside the unit.

When moving this equipment, it should be placed in its original carton and packing, to reduce the risk of damage in transit.

## WARRANTY INFORMATION

### Limited Warranty

Applied Research and Technology will provide warranty and service for this unit in accordance with the following warrants:

Applied Research and Technology, (ART) warrants to the original purchaser that this product and the components thereof will be free from defects in workmanship and materials for a period of **three years** from the date of purchase. Applied Research and Technology will, without charge, repair or replace, at its option, defective product or component parts upon prepaid delivery to the factory service department or authorized service center, accompanied by proof of purchase date in the form of a valid sales receipt.

#### Exclusions:

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. This warranty is void if the serial number is altered, defaced, or removed.

ART reserves the right to make changes in design or make additions to or improvements upon this product without any obligation to install the same on products previously manufactured.

ART shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights and you may have other rights, which vary from state to state.

For units purchased outside the United States, an authorized distributor of Applied Research and Technology will provide service.

## SERVICE

The following information is provided in the unlikely event that your unit requires service.

- 1) Be sure that the unit is the cause of the problem. Check to make sure the unit has power, all cables are connected correctly, and the cables themselves are in working condition. You may want to consult with your dealer for assistance in troubleshooting or testing your particular configuration.
- 2) If you believe the ART unit is at fault, go to [www.artproaudio.com](http://www.artproaudio.com). You may contact Customer Service for more assistance, or directly request a Return Authorization for service in the "resources" area of the website.
- 3) If you are returning the unit for service, pack the unit in its original carton or a reasonable substitute. The original packaging may not be suitable as a shipping carton, so consider putting the packaged unit in another box for shipping. Print the RA number clearly on the outside of the shipping box.
- 4) Include, with your unit, a note with the RA number and your contact information including a daytime phone number, preferably attached to the top of the unit.