

ART Model 405 Five Zone Distribution Mixer



The ART Model 405 Five Zone Distribution Mixer is designed to remotely adjust the volume of multiple amplifiers or powered speakers, either individually or in groups. The input of the Model 405 is connected to a PA mixer's line-level output (the Model 405 will accept the output of two mixers) and the power amps and/or powered speakers are connected to the Model 405's zone outputs.

What Is A Zone Distribution Mixer?

The use of multiple power amplifiers each driving one or more speakers, or multiple speakers with built-in amplifiers is now a fact of life. And whether they are installed in a club, a hall, a restaurant, a church, an arena, an office, a recreational facility, or even if they are part of a portable PA with distributed speakers, systems like this have a unique potential. It is possible to remotely adjust the volume of every amplifier or powered speaker, either in groups or individually, with a zone distribution mixer like the Model 405. Basically the input of the Model 405 is connected to the PA mixer's line-level output (the Model 405 will accept the output of two mixers) and the power amps and/or powered speakers are connected to the Model 405's zone outputs. Now it is possible for the operator to adjust the volume of all the system components with just one set of controls.

Specifications

- Input Impedance: 45.1k ohms
- Maximum Input level: +18 dBV line
- Output Level: 22 dBV
- Output Impedance: 125 ohms
- Maximum Gain: +6 dB
- Signal-to-Noise: 89dB
- T.H.D.: <0.2%
- Power Requirements: 120VAC / 50-60Hz, or 240VAC / 50Hz, 15VA
- Dimensions: 19 inch x 1.75 inch x 6.0 inch (483mm x 44.5mm x 152mm)
- Weight: 6.3 lb. (2.9 kg)

Features

- LEFT and RIGHT sets of balanced SOURCE 1 and 2 Inputs can also accept a mono signal source.
- The SOURCE 1 and 2 INPUT channels are internally routed to the five ZONE channels.
- The five ZONE channels each feature SOURCE 1 and 2 level controls and balanced LEFT and RIGHT OUTPUT connectors.
- A STEREO/MONO selector button on each zone separates the left and right signals in STEREO mode or combines them in MONO mode so that all signals are present at both outputs.
- A MONO indicator LED on each zone channel indicates that mono has been selected.
- CLIP and SIGNAL LEDs on each zone channel indicate the onset of clipping distortion and signal activity.
- SOURCE 1 and 2 INDICATION LEDs tell you which source channel is in use.

Usage

- a) Verify proper voltage selection on the IEC style power connector for your location. Connect the AC cord to a grounded AC outlet.
- b) Using balanced patch cables connect the balanced stereo output of the primary audio source (mixer) to the Model 405's LEFT & RIGHT INPUT SOURCE 1 connectors. Alternately a mono signal source may be connected to either the L or R input. However this may affect stereo operation (see Stereo/Mono button below). You may repeat the process with INPUT SOURCE 2 for an additional mixer or other audio source.
- c) Using balanced XLR cables connect the Model 405 OUTPUT ZONE connectors to the inputs of the appropriate power amplifiers and/or powered speakers.
- d) In most operating situations the MONO/STEREO button 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 too often find themselves closer to one speaker than the other. Now stereo separation can cause a situation where they predominantly 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.
- e) Adjust the SOURCE level controls to produce the desired volume in each area. If a CLIP light fires, reduce either that ZONE's level control, or the output of the signal source to prevent distortion.
- f) The SIGNAL light in each ZONE indicates the presence of input signal there.
- g) SOURCE INDICATOR 1 and 2 lights tell you which INPUT SOURCE is receiving signals.

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, (A R T) 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 **one** year 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.

A R T 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.

A R T 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 that all cables are connected correctly, and the cables themselves are in working condition.
- 2) If you find the unit to be at fault, write down a complete description of the problem, including how and when the problem occurs. Please write down a description of your complete setup before calling Customer Service.
- 3) Call the factory (585-436-2720) for a Return Authorization (RA) number.
- 4) Pack the unit in its original carton or a reasonable substitute. The packing box is not recommended as a shipping carton. Put the packaged unit in another box for shipping. Print the RA number clearly on the outside of the shipping box. Print your return shipping address on the outside of the box.
- 5) Include with your unit: a return shipping address (we cannot ship to a P.O. Box), a copy of your purchase receipt, a daytime phone number, and a description of the problem.
- 6) Ship only your unit (keep your manual!) to:

APPLIED RESEARCH AND TECHNOLOGY
215 TREMONT STREET
ROCHESTER, NEW YORK 14608
ATTN: REPAIR DEPARTMENT
RA# _____

- 7) Contact our Customer Service department at (585) 436-2720 for your Return Authorization number or questions regarding technical assistance or repairs. Customer Service hours are 9:00 AM to 5:30 PM Eastern Time, Monday through Friday.

APPLIED RESEARCH & TECHNOLOGY
215 TREMONT STREET
ROCHESTER, NEW YORK 14608 USA
(585) 436-2720 (585) 436-3942 – Fax
www.artproaudio.com
E-mail: cserve@artproaudio.com