

MX821

EIGHT CHANNEL MIC/LINE MIXER WITH TONE CONTROL



USER'S MANUAL



IMPORTANT SAFETY INSTRUCTIONS - READ FIRST



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltages inside the enclosure that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

Read instructions:

Retain these safety and operating instructions for future reference. Heed all warnings printed here and on the equipment. Follow the operating instructions printed in this user guide.

Do not open:

There are no user serviceable parts inside. Refer any service work to qualified technical personnel only.

Power sources:

Only connect the unit to mains power of the type marked on the rear panel. The power source must provide a good ground connection.

Power cord:

Use the power cord with sealed mains plug appropriate for your local mains supply as provided with the equipment. If the provided plug does not fit into your outlet consult your service agent. Route the power cord so that it is not likely to be walked on, stretched or pinched by items placed upon or against.

Grounding:

Do not defeat the grounding and polarization means of the power cord plug. Do not remove or tamper with the ground connection on the power cord.

Ventilation:

Do not obstruct the ventilation slots or position the unit where the air required for ventilation is impeded. If the unit is to be operated in a rack, case or other furniture, ensure that it is constructed to allow adequate ventilation.

Moisture:

To reduce the risk of fire or electrical shock do not expose the unit to rain, moisture or use in damp or wet conditions. Do not place a container of liquid on it, which may spill into any openings.

Heat:

Do not locate the unit in a place close to excessive heat or direct sunlight, as this could be a fire hazard. Locate the unit away from any equipment, which produces heat such as: power supplies, power amplifiers and heaters.

Environment:

Protect from excessive dirt, dust, heat, and vibration when operating and storing. Avoid tobacco ash, drink spillage and smoke, especially that associated with smoke machines.

Handling:

To prevent damage to the controls and cosmetics avoid rough handling and excessive vibration. Protect the controls from damage during transit. Use adequate padding if you need to ship the unit. To avoid injury to yourself or damage to the equipment take care when lifting, moving or carrying the unit.

Servicing:

Switch off the equipment and unplug the power cord immediately if it is exposed to moisture, spilled liquid, objects fallen into opening, or the power cord or plug becomes damaged during a lightning storm or if smoke odor or noise is noted. Refer servicing to qualified technical personnel only.

Installation:

Install the unit in accordance with the instructions printed in the user guide.

INTRODUCTION

The MX821 is a versatile rack mount mixer combining eight independent input channels into a single mono line level mixed output.

Essential features include: XLR microphone and 1/4 inch line level inputs, Level and Tone controls, and switch-selectable +48 Volt phantom power on each channel. Main output is balanced low impedance. Additional Pre-Fade output and Aux Buss input jacks allow patching of multiple MX821's when more channels are needed.

Built in power supply and single high 19-inch rack mount format allows for easy installation and reliable long-term operation.

Features

- Eight Independent Input Channels
- Level and Tone Controls on each Channel
- Balanced XLR Microphone and 1/4-inch Unbalanced Line Inputs on each Channel
- Full +48 Volt Phantom Power on XLR inputs with DIP Switch for each Channel
- Balanced TRS 1/4-inch Main Output Jack with Master Level Control
- RCA-type Pre-Fade Output Jack (Not Affected by the Master Level Control)
- RCA-type Aux Buss Input Jack for Channel Expansion
- Solid Single High Rack Mount Chassis w/ Built In Power Supply

OPERATION

Verify proper voltage selection on the IEC style power connector for your location. Connect the AC cord to a grounded AC outlet.

Connect low-impedance microphones to the XLR sockets.

Connect shielded unbalanced line inputs to the ¼-inch inch jacks.

For microphone channels requiring phantom power (for condenser microphones) set the appropriate PHANTOM POWER DIP switches in the down position. Do not engage phantom power on a channel unless it is for a condenser microphone.

Switch on the power and set the MASTER LEVEL to the ½ way setting, then adjust the channel LEVEL controls as required for the best mix and level. Adjust the channel TONE controls for the desired balance of lows and highs. Center setting is neutral.

Re-adjust the MASTER LEVEL as required for best overall signal level.

To patch two MX821's for 16 channel input operation, run a shielded, unbalanced RCA type patch cable from the PREFADE OUT jack on mixer A to the AUX BUS INPUT jack on mixer B. Note that only the MASTER LEVEL on mixer B will now function.

To convert the ¼-inch line input on any channel to a direct line output for that channel, unplug the MX821's AC cord from the wall and remove the top cover. Inside you will see a row of jumpers. Move the jumper for the desired channel to the left, when viewed from the front. Now that channel's line input is converted to a direct line output and may be connected to the input of another mixer. Any converted channel is still included in the main output mix as well. Do not connect the output of a mixer or any other signal source to the ¼-inch jack on this channel now or the channel may sustain damage. Be sure to replace the lid before plugging the unit back into the AC socket.

WARRANTY INFORMATION

Limited Warranty (USA only)

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.

Online Registration

We recommend that you register your product online to insure prompt warranty repair servicing on any repair issues. Please go to www.artproaudio.com. Select "*Support*", then "*Product Registration*". Then input your information here.

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 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 that the ART unit is at fault, go to www.artproaudio.com. Select “*Support*”, then “*Return Authorization Request*” to request a return authorization number.
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. Print your return shipping address on the outside of the box.
4. Include, with your unit, a note with the RA number and your contact information, including a return shipping address (we cannot ship to a P.O. box) and a daytime phone number, and a description of the problem, preferably attached to the top of the unit. Also include a copy of your purchase receipt.

Please fill in the following information for your reference:

Date of purchase: _____

Purchased from: _____

Serial Number: _____

SPECIFICATIONS

Input Connections	XLR-F balanced (8), 1/4-inch unbalanced (8), RCA (1)
Output Connections	1/4-inch balanced TRS (1), RCA (1)
Input Impedance	2K Ohms Mic, 20K Ohms Line, 10K Ohms Aux. Bus In
Output Impedance	200 Ohms balanced Main Out, 100 Ohms Pre-Fade Out
Maximum Input Level	-6dBu Mic, +18dBu Line
Maximum Output Level	+27dBu balanced, +21dBu unbalanced
Phantom Power	+48 Volts DC (regulated/low noise)
Maximum Gain	65dB/39dB mic/line
Signal to Noise Ratio	>90dB typical
THD	<0.01% typical
Equivalent Input Noise	-108dBu typical
CMRR	>52dB typical
Phase Shift	<10 degrees, 20Hz - 20kHz
Power Requirements	120VAC / 50-60Hz, or 230VAC / 50 Hz, 15VA
Dimensions (HxWxD)	1.75-inch x 19-inch x 6-inch
Dimensions	44.5 mm x 483 mm x 152 mm
Weight	6.3 lbs. (2.9kg)

Note: 0 dBu = 0.775 V_{RMS}

ART maintains a policy of constant product improvement. ART reserves the right to make changes in design, or make additions to, or improvements upon, this product without any obligation to install same on products previously manufactured. Therefore, specifications are subject to change without notice.



www.artproaudio.com
E-mail: support@artproaudio.com

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