

**MPX-4Aii Quad Microphone Preamplifier  
Operator's Manual**

**Sytek Audio Systems Corp.**

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Sytek warrants that the Product, in course of its normal use, will be free from defects in material and workmanship and will conform to Sytek's specifications therefor. This limited warranty shall extend for a period of **one year** and shall commence on the latter of the date appearing in coded format on the Serial Number or the purchase date appearing on your purchase receipt.

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# **MPX-4Aii Quad Microphone Preamplifier Operator's Manual**

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## **Introduction**

This Operator's Manual provides you with concise instructions to make the installation of your MPX-4Aii Microphone Preamplifier as quick and easy as possible. The most commonly asked installation questions are answered on the following pages. To fully understand your options, we recommend that you read this entire guide before starting the installation procedure.

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The Sytek MPX-4Aii Quad Microphone Preamplifier is a modern, low noise, professional audio device. The hybrid transformerless design achieves superb bandwidth and distortion figures.

Each preamplifier section uses a Class A, Auto Bias Bridge topology that assures the lowest noise floor, best phase linearity, and least thermal drift possible. The amplifier is perfectly balanced over the entire gain range.

# Setup and Connection

Unpack the MPX-4Aii carefully and inspect for shipping damage immediately upon receipt. Damage occurring during shipping is the responsibility of the carrier, and a claim should be filed immediately.

The shipping carton should contain:

This manual  
The MPX-4Aii unit  
Power cable

If any parts are missing, contact Sytek immediately for replacements.

Install the MPX-4Aii in a vacant slot in your AUX rack well grounded. Power connection is standard 115 VAC 50/60 Hz unless otherwise specified.

## **For balanced input connection:**

Pin 1 is GND (SHIELD)

Pin 2 is PLUS (HOT or HIGH)

Pin 3 is MINUS (LOW)

For balanced output connection:

Pin 1 is GND (SHIELD) \*

Pin 2 is PLUS (HOT or HIGH)

Pin 3 is MINUS (LOW)

For unbalanced output connection :

Pin 1 is GND (SHIELD)

Pin 2 is PLUS (HOT or HIGH)

Pin 3 is GND (SHIELD) \*\*

### **Note :**

\* OPTION: For balanced output connection Pin 1 GND may NOT BE Connected to minimize hum in an installation and avoid multiple ground paths between the MPX-4Aii and the equipment it is connected to.

\*\* For unbalanced output PIN 3 MUST BE CONNECTED TO GND (SHIELD).

## Operation

Set the Power switch to ON.

Adjust the channel gain by rotating the desired channel Gain control. The gain is adjustable from 12db to 72 dB.

The MUTE button mutes the channel it is associated with. Pressing this button cuts off the microphone from the output.

The PHASE button selects 0 or 180 degree phasing of the channel signal. Pressing this button indicates 180 degree phasing.

The 48V button enables the phantom power supply for the channel, for those microphones that require phantom power.

The PEAK (!) LED lights when the channel input reach +17dB and is within 8 dB of the maximum input before clipping.

Turn the unit off at the POWER switch when finished with the session.



# Troubleshooting

Please try the following suggestions before calling SYTEK for assistance.  
Unit does not turn on with POWER switch.

Check console power. Is it ON?

Check fuse at the rear panel of the MPX-4A. If it is blown, replace it with the same size and model fuse as described on the rear panel of the unit.

## 2. Noise or distortion on output signals.

Check input connections and microphone connections for good contacts, solid wiring, and proper connections.

Check using a microphone that does not require phantom power.

Check the channel with another microphone.

Check connections to the console bus for proper hook-up.

# Specifications

## MPX-4Aii Quad Microphone Preamplifier

Input Level:	Nominal -60 to -12 dBm
Gain:	+72 dB range (ref. input)
Maximum Output:	24 dBm into 600 ohms
E. I. Noise:	-129 dBm (Source Impedance = 150 ohms)
THD + Noise:	0.0015% at 60 dB gain, 1 kHz
Signal to Noise:	>100 dB
Bandwidth:	10 Hz to 85 kHz +/- 0.25 dB
CMRR:	>100 dB at 100 Hz
Phase Linearity:	10 Hz to 20 kHz +/- 0.1 degree
Phantom Power:	+48V at 50 mA or customer specified

## Obtaining Service

Sytek Audio Systems Corp. offers service under the terms of its limited warranty for Products that are within the warranty as well as that are outside the period. If this Product ever requires maintenance, either contact the dealer from whom you originally purchased the Product or telephone Sytek Technical Support Department.

No product may be returned directly to Sytek without first contacting our Technical Support Department.

If it is determined that the Product may be defective, you will be given a Return Material Authorization ("RMA") number and instruction for Product return. An unauthorized return, i.e., one for which an RMA number has not been issued, will be returned to you at your expense. Authorized returns are to be shipped prepaid and insured to the address on the RMA and are to be packaged securely to prevent damages. In order to conclusively establish the period of warranty, an original purchase receipt must accompany the returned Product.

This warranty explicitly depends upon the safe and proper installation and operation by personnel that are qualified professional audio engineers and technicians, fully cognizant of proper practices, and aware of the possible dangers to equipment and personnel, especially including damage to personnel that may occur by way of unsafe sound levels or electrical exposure. This warranty explicitly depends upon the proper storage, use, and maintenance of the equipment by only qualified electronic engineering and technical personnel, and is void in the event that maintenance is improperly performed, or in the event that alterations or modifications are made to the circuitry without the express direction and approval of Sytek.

## How to Contact Sytek

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**Sytek Audio Systems Corp.**