

MPA II

AUTOMATIC MICROPHONE MIXER/POWER AMPLIFIER



The MPA II is an eight channel, automatic gated microphone mixer and two channel power amplifier. The MPA II uses a microcomputer to control all mixing parameters, giving high precision and repeatability in performance. Additionally, installation and setup are easy with six pre-set programs for the most common applications. Six more programs may be configured by the user with a PC connected to the unit's RS-232 port. A locking front panel prevents unauthorized access to the controls.

Up to eight microphones and two 8 Ohm speakers can be connected to the MPA II. For expanded microphone and speaker coverage additional MPAs can link to the system.

The MPA II makes intelligent decisions as to who is speaking, and automatically turns on the appropriate microphones without the user touching a single button. Each microphone can be independently set to either an automatic gating or non-automatic (always on) mode.

The MPA II's operating parameters can be set to accommodate virtually any application. Using the MPA II, you'll never have to install special switches or hard wire a mixer again.

The MPA II's adjustable parameters include:

Hold Time—the length of time microphone audio stays on after audio is no longer present.

Gate Ratio—determines how much louder microphone audio must be compared to the ambient noise floor before it turns on.

Ambient Level—sets the ambient noise floor. In the adaptive ambient mode, the MPA II dynamically establishes the ambient level.

Off Attenuation—sets the amount (in dB) microphone audio is reduced.

Decay Rate—sets the rate at which microphone audio is reduced.

The MPA II can also be placed in a combination of different operating modes to assure accurate and tailored performance for most any application:

Last Mic On Mode—keeps the last microphone on even if no audio is present, eliminating "dead silence."

of Mics On Mode—limits the number of open microphones for increased audio intelligibility and reduced risk of feedback. Can be set from one to eight.

Constant Gain Mode—reduces the gain of each microphone as more microphones are gated on. Achieves a constant overall audio gain in the room, lowering the risk of feedback.

Adaptive Gain Mode—adjusts the threshold at which the microphones gate on as the ambient noise floor in the room changes. Compensate and ensures accurate microphone gating.

PA Adaptive Mode—senses when audio is present in the power amp and instantly raises the ambient noise floor to prevent speaker audio from inadvertently gating on microphones.

- Designed specifically for audioconferencing applications—allows smooth integration with acoustic echo cancellers
- First Mic Priority and PA Adaptive Modes—increase audio intelligibility and reduces the risk of feedback
- Eight channel automatic or non-automatic gated microphone mixer and 2 x 15 watt power amplifier—give you a "One Box" solution
- Six factory pre-sets—make installation and setup easy for common applications
- Six programmable pre-sets—computer and supplied software provide easy setup and customization for a wide variety of applications
- Locking front panel—makes the MPA II tamper-proof after setup
- outputs—for controlling cameras, etc.
- Selectable phantom power per input
- Aux-In—for audio feed (CD/tape)
- Aux-Out—for recording

 **Gentner**

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SPECIFICATIONS

Physical Dimensions:

19"W x 3.5"H x 11"D
48.3W x 8.9H x 27.9D cm

Weight:

12 lbs./5.4 kg dry
15 lbs./6.8 kg shipping

Software:

3" disk provided
DOS 3.1 or higher required

Power Requirements:

100/120/220/240Vac, 50/60Hz

Ports

Com Port:

RS232, 75-9600 BAUD selectable

Open Collector Output Port:

8 channels, 40Vmax, 400mA each

Mixer

Auxiliary Input:

-10dBu nominal, adjustable,
10kOhms; unbalanced

Mixer Output Balanced:

+4dBm nominal, adjustable,
600Ohms, balanced

Mixer Output Unbalanced:

-10dBu nominal, adjustable

Frequency Response:

± 1dB, 20Hz - 20kHz

Signal to Noise Ratio:

>60dB ref. -55dBu input,
+4dBm output

Total Harmonic Distortion:

<0.1%

Microphones 1-8

Mic Inputs:

-55dBu nominal, adjustable
1.5kOhms; balanced, bridging

Gating Method:

Reconfigurable, microprocessor controlled

Hold Time:

0.1 to 3 sec., adjustable

Off Attenuation:

-50dB to -1dB, adjustable

Phantom Power:

30V, individual channel selectable

Power Amplifier

Maximum Output Power:

2 x 15 watts into 80hms

Frequency Response:

±1dB, 50Hz - 20kHz,
±3dB, 20Hz - 20kHz

Signal to Noise Ratio:

>80dB ref. +4dBm input, 15 watts into
80hms output

Total Harmonic Distortion:

<0.1%

APPLICATIONS:

- Audioconferencing/Videoconferencing
- Houses of Worship
- Courtrooms
- Hotels/Convention Centers
- Distance Learning

ARCHITECTURAL SPECS

The audio mixer shall be a computer programmable, automatic gating microphone mixer with eight microphone inputs. Each input shall be balanced bridging, 1.5kOhms, with a nominal sensitivity of -55dBu, and shall be capable of operation in either a gating or non-gating mode. Phantom power selection shall be available for each microphone. The adjustable master output shall be 600 Ohms with a nominal level of +4dBm. Logic (control) outputs shall also be provided to indicate gating status of each microphone. The mixer shall provide linking controls for system expansion with additional units.

Mixer programming shall be accomplished either through selection of factory pre-sets or by PC through an RS232 port. A total of 12 parameter programs shall be available. A key locked front panel shall be provided to prevent unauthorized access to the controls.

The mixer shall also incorporate two 15 watt power amplifiers capable of driving 80hm speakers.

The Gentner MPAII is specified.



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