8-CHANNEL MIXER PREAMPLIFIER M-900MK2



DESCRIPTION

The TOA M-900MK2 Mixer Preamplifier controls and mixes up to eight independent input signals and delivers up to +20dBm of output power. Optional plug-in modules are available for use with the M-900MK2 to provide a full range of operating applications. The use of edge connectors on the rear of the unit permits selection from a wide assortment of TOA plug-in modules.

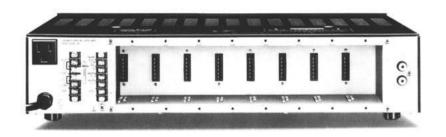
A remote master volume control is provided, functioning with an external potentiometer. A two-level muting function is available with optional modules.

The mixer preamplifier has a balanced and transformerisolated output for operation with 600-ohm or 150-ohm loads.

Other features include a tone defeat switch and connections for another mixer preamplifier or mixer power amplifiers A-903MK2, A-906MK2 and A-912MK2.

FEATURES

- 1. Wide frequency response: 20 to 20,000Hz ± 1dB
- 2. Low distortion and noise level
- 3. Excellent output regulation
- 4. Bass and treble controls
- 5. Bridging input and output
- 6. Signal processing input and output
- 7. Built-in protection circuitry
- 8. Transformer-isolated output of 150/600 ohms
- 9. Full range of plug-in modules
- 10. Mountable in two EIA standard rack units with optional rack mounting bracket

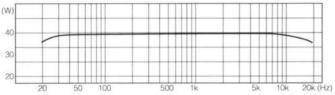


SPECIFICATIONS

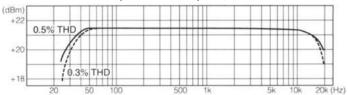
Туре	8-channel mixer preamplifier
Output Power	+4dBm, +20dBm (max.)
Power Bandwidth	30-20,000Hz, +20dBm 0.5% THD 250-20,000Hz, + 18dBm 0.5% THD
Frequency Response	20-20,000Hz, ± 1dB
Total Harmonic Distortion	0.01% at 1kHz, rated output
Inputs	Eight input ports: Every port accepts any input module One bridging input/output
Input Sensitivity/Impedance	Input port #1 to #8: 100mV/10k ohms Bridging input/output: 100mV/3.3k ohms
Source Impedance	200 ohms with M-01/M-11/M-21/M-51/M-61 modules (balanced Lo-Z microphone preamplifier) 50k ohms with M-03 module (unbalanced Hi-Z microphone preamplifier). R-01 module (mag. phono preamplifier) 220k ohms with U-01/U-11/U-21/U-61 modules (auxiliary preamplifier) 10k ohms with B-01/B-11 modules (bridging transformer) 600 ohms with L-01/L-11/L-41 modules (line matching transformer), I-01 module (paging input) 600 ohms (load impedance) with T-01 module (line output)
Outputs	Main: Balanced, 150/600 ohms Aux: Unbalanced, 10k ohms, 0dBm
Output Regulation (1kHz)	Less than 1.5dB, no load to full load
Signal-to-Noise Ratio (Band Pass: 20-20,000Hz) With Tone Controls Centered	Master volume min.: 90dB Master volume max.: 77dB
Tone Controls	Bass: ± 10dB at 100Hz; Treble: ± 10dB at 10kHz
Controls	8 input gain controls 1 bass tone control 1 power ON/OFF switch 1 treble tone control 1 master gain control 1 tone defeat switch
Indicators	1 power LED, 1 protect LED, 1 signal LED, 1 normal LED, 1 peak LED
Protection	Self-protection, with AC fuses (inside)
Connectors	Input #1 to #8: Card-edge connector Bridging, Aux output: RCA phono jack Output: Screw-terminal strip Mute, Remote master VR: Screw-terminal strip AC power cord/plug: SJT, 3-prong type AC outlet: 3-pin grounding type
Power Consumption	18 watts
Temperature Range	12°F to 140°F (-10°C to +60°C)
Dimensions	16.5"(W) x 3.9"(H) x 12.1"(D) (420 x 99.1 x 307.5mm)
Weight (without input modules)	11.7lbs. (5.3kg)
Color	Black
Standard Accessories	4 volume control covers (YA-920), 7 input port covers
Other Features	Output disconnected for approx. 5 seconds after switching power on.
Optional Accessories	Plug-in modules (see specifications for individual modules), Rack mounting bracket model MB-25B

Specifications are subject to change without notice.

Frequency Response at rated output (600-ohm load)



Power Output vs. Frequency at 0.5% /0.3% THD (600-ohm load)



Architect's and Engineer's Specifications

The mixer preamplifier shall have eight mixer input ports and shall be capable of operation from a 120V, 50/60Hz line. Each input port shall be usable with microphone, phono pickup or high-level devices. The amplifier shall meet the following performance criteria. Power output shall be +20dBm at less than 0.5% THD from 30 to 20,000Hz and +18dBm at less than 0.3% THD from 25 to 20,000Hz. Frequency response shall be ±1dB from 20 to 20,000Hz.

Source impedance shall be 200/50k ohms with a microphone preamplifier, 50k ohms with a mag. phono preamplifier, 220k ohms with an auxiliary preamplifier, 10k ohms with a bridging transformer, 600 ohms with a line matching transformer and 600 ohms with a paging input. Load impedance shall be 150 or 600 ohms (transformer-isolated output).

Equivalent input noise shall be -126dBm with a Lo-Z microphone preamplifier. Output noise shall be 90dB below rated output when all gain controls are off.

TOA plug-in accessory modules designed for use with the M-900MK2 mixer preamplifier shall utilize the latest in surface mount component technology and include the following modules: the M Series microphone preamplifiers available with muting, remote volume control, voice gate and compressor options; the U Series auxiliary preamplifiers available with muting, remote volume control and compressor options; the R-01 magnetic phono preamplifier; the B Series bridging transformers available with muting option; the L Series line matching transformers available with muting option; the S Series signal generator modules, and the I-01 TOA intercom system interface paging module. Also available shall be the T-01 module featuring 600-ohm balanced output capability, and the T-02 module featuring auxiliary input and balanced line output for music-on-hold.

The mixer preamplifier shall be rack mounted using the TOA MB-25B rack mounting bracket. The amplifier's dimensions shall be $16.5^{\circ}(W) \times 3.9^{\circ}(H) \times 12.1^{\circ}(D)$ ($420 \times 99.1 \times 307.5$ mm) and its weight shall be 11.7lbs. (5.3kg). The mixer preamplifier shall be TOA model M-900MK2.

TOA Corporation