# TOA 900 MK2 SERIES 8-CHANNEL MIXER POWER AMPLIFIER (60-WATT) A-906MK2



# DESCRIPTION

The TOA A-906MK2 Mixer Power Amplifier controls and mixes up to eight independent input signals and delivers up to 60 watts of output power. Optional plug-in modules are available for use with the A-906MK2 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.

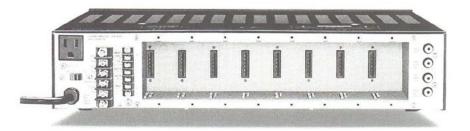
A remote master volume control is provided, functioning with an external potentiometer. A two-level muting function is available with optional modules.

The A-906MK2 has output terminals to match 4- or 8-ohm speaker systems and 25- or 70-volt constant voltage speaker distribution systems. An optional rack mounting bracket is available.

## **FEATURES**

- 1. Output power: 60 watts RMS
- 2. Wide frequency response: 20 to 20,000Hz ± 1 dB
- 3. Low distortion and noise level
- 4. Excellent output regulation
- 5. Bass and treble controls
- 6. Bridging input and output
- 7. Signal processing input and output
- 8. Remote master volume control
- 9. Built-in protection circuitry when heat sink temperature overheats
- 10. Separate output terminals for 4 and 8 ohms, 25 and 70 volts constant voltage speaker distribution systems
- 11. Full range of plug-in modules
- 12. Mountable in two EIA standard rack units with optional rack mounting bracket





#### **SPECIFICATIONS**

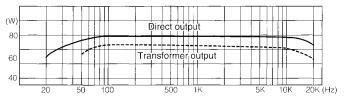
Type	8-channel mixer power amplifier				
Output Power	60 watts RMS				
Power Bandwidth	(D) 20—20,000Hz, 0 5% THD (T) 50—20,000Hz, 0.5% THD				
Frequency Response	(D)20—20,000Hz, ±1dB (T) 20-15,000Hz, ±1dB (T) 20—20,000Hz, ±1dB/-3dB 0.02% at 1kHz, rated output Eight input ports: Every port accepts any input module One bridging input/output				
Total Harmonic Distortion					
Inputs					
Input Sensitivity/Impedance	Input ports #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)				
Preamp Out/Power Amp In	1,000mV into 600 ohms/1,000mV, 10k ohms				
Outputs (T)= Transformer (D)= Direct	Main (T): 8 ohms, 25 and 70 volts, balanced Main (D): 4 ohms, unbalanced				
Output Regulation (1kHz)	Aux: 10k ohms, 1V (D): Less than 0.5dB, no load to full load (T): Less than 1.0dB, 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 Power amplifier only: 105dB				
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 1 low-cut switch (60Hz, 6dB/octave)				
Indicators	1 power LED, 1 protect LED, 1 signal LED, 1 normal LED, 1 peak LED				
Protection	Self-protection, with AC fuse (inside)				
Connectors	Input #1 to #8: Card-edge connector Bridging, Mixer preamp. output, Power amp. input, 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	100 watts				
Femperature Range	12°F to 140°F (-10°C to +60°C)				
Dimensions	16.5"(W) x 3.9"(H) x 14.1 "(D) (420 x 99.1 x 358mm)				
Neight (without input modules)	21.2lbs (9.6kg)				
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),				

Specifications are subject to change without notice.

#### Frequency Response at 1/10 rated output (Direct output: 4-ohm load, transformer output: 83-ohm load)

(dB)				$\square$
2			Direct output	
_2	 		· · · · · · · · · · · · · · · · · · ·	
_4			Transformer	
-6			output	
_د	 50 10	500 1k	5k 10k 20	)k (Hz)

Power Output vs. Frequency at 0.5% THD (Direct output: 4-ohm load, transformer output: 83-ohm load)



### Architect's and Engineer's Specifications

The mixer power amplifier 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 60W at less than 0.5% THD from 20 to 20,000Hz (direct output) or 50 to 20,000Hz (transformer output). Frequency response shall be ± 1 dB from 20 to 20,000Hz (direct output) or 20 to 15,000Hz (transformer output). 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 4, 8, 10.4 (25V line) or 81.7 (70V line) ohms. Load voltage shall be 15.5, 21.9, 25 or 70 volts.

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 A-906MK2 mixer power amplifier 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 1-01 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 power amplifier shall be rack mounted using the TOA MB-25B rack mounting bracket. The amplifier's dimensions shall be  $16.5"(W) \times 3.9"(H) \times 14.1"(D)$  (420 x 99.1 x 358mm) and its weight shall be 21.2lbs. (9.6kg). The mixer power amplifier shall be TOA model A-906MK2.

