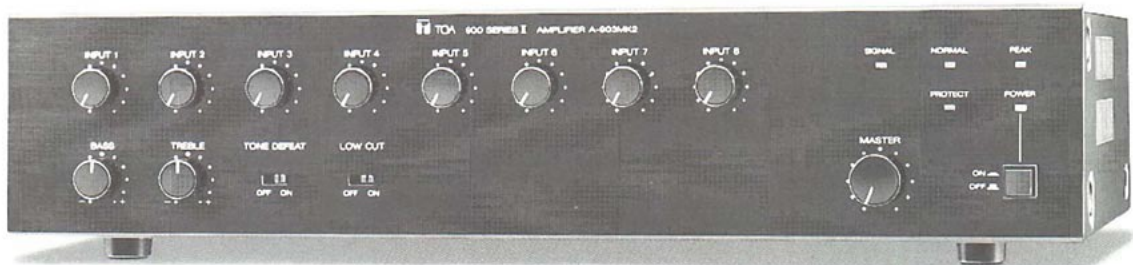


TOA 900 MK2 SERIES

8-CHANNEL MIXER POWER AMPLIFIER (30 WATT) A-903MK2



DESCRIPTION

The TOA A-903MK2 Mixer Power Amplifier controls and mixes up to eight independent input signals and delivers up to 30 watts of output power. Optional plug-in modules are available for use with the A-903MK2 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.

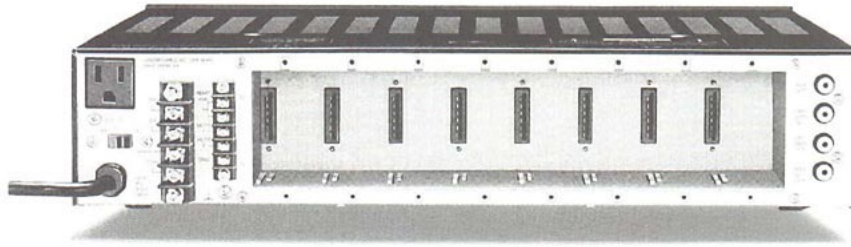
A remote master volume control is provided, functioning with an external potentiometer. A two-level muting function is available with optional modules.

The A-903MK2 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: 30 watts RMS
2. Wide frequency response: 20 to 20,000Hz \pm 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



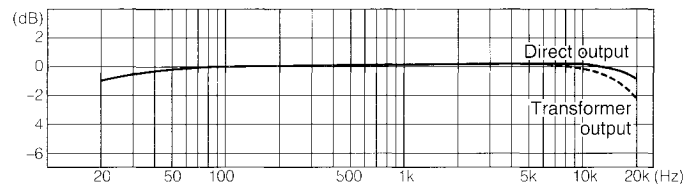


SPECIFICATIONS

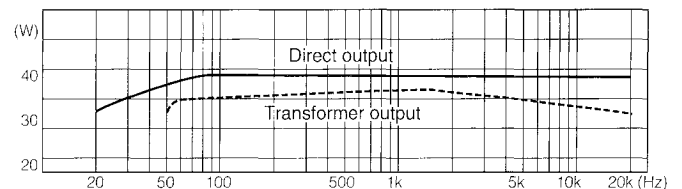
Type	8-channel mixer power amplifier
Output Power	30 watts RMS
Power Bandwidth	(D) 20—20,000Hz, 0.5% THD (T) 50—20,000Hz, 0.5% THD
Frequency Response	(D) 20—20,000Hz, ± 1 dB (T) 20-15,000Hz, ± 1 dB (T) 20—20,000Hz, +1dB/-3dB
Total Harmonic Distortion	0.02% at 1 kHz, rated output
Inputs	Eight input ports: Every port accepts any input module One bridging input/output
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): 4 ohms, 25 and 70 volts, balanced Main (D): 8 ohms, unbalanced Aux: 10k ohms, 1V
Output Regulation (1kHz)	(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	60 watts
Temperature Range	12°F to 140°F (-10°C to +60°C)
Dimensions	16.5"(W) x 3.9"(H) x 12.5"(D) (420 x 99.1 x 318mm)
Weight (without input modules)	17.2lbs (7.8kg)
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 1/10 rated output (Direct output: 8-ohm load, transformer output: 167-ohm load)



Power Output vs. Frequency at 0.5% THD (Direct output: 8-ohm load, transformer output: 167-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 30W 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, 20.8 (25V line) or 163.3 (70V line) ohms. Load voltage shall be 11, 15.5, 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-903MK2 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 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 power amplifier shall be rack mounted using the TOA MB-25B rack mounting bracket. The amplifier's dimensions shall be 16.5"(W) x 3.9"(H) x 12.5"(D) (420 x 99.1 x 318mm) and its weight shall be 17.2lbs (7.8kg). The mixer power amplifier shall be TOA model A-903MK2.



TOA Corporation