

A-903MK2 Mixer/Power Amplifier (30-Watt)



◀ **A-903MK2 Mixer/Power Amplifier (30-Watt)**

TOA's 900MK2 Series products are widely recognized as the industry standard in commercial sound system amplification.

When reliability and performance are critical — such as in paging and music distribution for airport, hospital, and industrial sound systems — you can count on TOA's 900 Series to perform consistently and dependably, day-in and day-out.

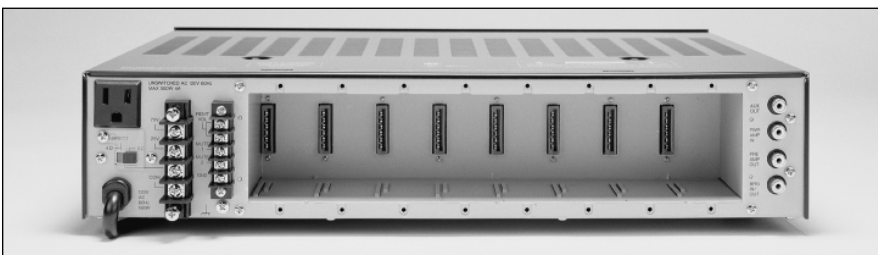
The 30-Watt A-903MK2 Mixer/Power Amplifier controls and mixes up to eight individual input signals. The modular design allows you to easily configure sound systems by choosing from TOA plug-in modules with an extensive array of features and connector-types.

For added flexibility, dual mute buses permit multiple levels of paging priority using optional mute-type modules. An external contact-closure or mute-send modules activate the mute function of mute-receive modules.

In addition to an extensive feature list, the A-903MK2 also offers competitive pricing and a three-year warranty.

FEATURES

- ▶ **Modular design** allows fast and easy custom configurations.
 - ▶ **Engineered for high performance** with wide frequency response, very low noise and distortion, and excellent output regulation.
 - ▶ **Eight module slots** accept any combination of TOA plug-in modules for unmatched flexibility.
 - ▶ **30 Watts RMS Output Power.**
 - ▶ **Dual Mute Bus** permits multiple levels of paging priority using optional mute-type modules.
 - ▶ **Remote Master Volume** controlled with an external 10k Ω linear-taper potentiometer.
 - ▶ **25 V, 70 V and 4/8 Ω Speaker Outputs** with screw terminal connector and protective cover plate.
 - ▶ **Protection Circuitry** prevents potential damage from overload, short-circuit, DC offset or overheating.
- ▶ **Front Panel Features:**
 - **Individual Channel and Master Volume Controls.**
 - **Bass/Treble Tone Controls with Tone Defeat Switch.**
 - **Low Cut Switch** to limit low frequency response.
 - **Normal, Peak, Power, Protect, and Signal LEDs** provide instantly recognizable status indication.
 - ▶ **Rear Panel Features:**
 - **Auxiliary Output** for connecting an external mixer or recording device.
 - **Pre-amp. Out / Power Amp. In Insert Jacks** for connecting external signal processors.
 - **Bridging Input/Output Jack** for fast and easy system expansion.
 - ▶ **Volume Control Security Covers** included (4), model **YA-920**.
 - ▶ **Optional Rack-Mount Kit**, model **MB-25B** (2 RU).
 - ▶ **UL / CSA Listed.**
 - ▶ **Three Year Warranty.**



SPECIFICATIONS

Type	8-channel modular mixer/power amplifier	
Output Power	30 W RMS	
Power Bandwidth	(D) 20 – 20k Hz, 0.5% THD; (T) 50 – 20k Hz, 0.5% THD	
Frequency Response	(D) 20 – 20k Hz, ± 1 dB; (T) 20 – 15k Hz, ± 1 dB (T) 20 – 20k Hz, +1 dB / -3 dB	
Total Harmonic Distortion	0.02% at 1k Hz, rated output	
Inputs	8 input ports: every port accepts any input module 1 Bridging Input/Output	
Input Sensitivity/Impedance	Please refer to 900 Series module specifications. Bridging Input/Output: 100 mV / 3.3k Ω	
Pre-amp. Out/Power Amp. In	1 V into 600 Ω / 1 V 10k Ω	
Output	Main (T): 4 Ω , 25 V and 70 V, balanced Main (D): 8 Ω , unbalanced Aux: 1 V, 10k Ω	
<i>(T)=Transformer</i>		
<i>(D)=Direct</i>		
Output Regulation (1k Hz)	(D): Less than 0.5 dB, no load to full load (T): Less than 1.0 dB, no load to full load	
Dynamic Range	Master volume set to min.: 90 dB (Band Pass: 20 – 20k Hz) Master volume set to max.: 77 dB With Tone Controls Centered Power amplifier only: 105 dB	
Tone Controls	Bass: ± 10 dB at 100 Hz; Treble: ± 10 dB at 10k Hz	
Controls	8 Input gain controls	1 Bass tone control
	1 Master gain control	1 Treble tone control
	1 Tone Defeat switch	1 Power ON/OFF switch
	1 Low-Cut switch (60 Hz, 6 dB/octave)	
Indicators	Power, Protect, Signal, Normal and Peak LEDs	
Protection	Self-protection, with internal AC fuse	
Connectors	Input #1 to #8: Card-edge connector Bridge Input/Output, Pre-amp. Output, Power Amp. Input, Aux Output: RCA phono jack Output: Screw-terminal strip Mute, Remote Master: Screw-terminal strip AC power cord/plug: SJT, 3-prong type AC outlet, 3-pin grounding type	
Power Consumption	60 W	
Temperature Range	12° F to 140° F (-10° C to +60° C)	
Dimensions (W x H x D)	16.5" x 3.9" x 12.5" (420 x 99.1 x 318 mm)	
Weight (without modules)	17.2 lbs. (7.8 kg)	
Color	Black	
Standard Accessories	Volume control covers: YA-920 (4); Input port covers (7)	
Optional Accessories	Plug-in modules (see individual module specifications) Rack-mount kit: MB-25B	
Other Features	Output connects approx. 5 seconds after switching power on.	

NOTE: Specifications are subject to change without notice.

Architect's & Engineer's Specifications

The mixer/power amplifier shall have eight mixer input ports and shall be capable of operation from a 110/120 V, 50/60 Hz line. Each input port shall be usable with TOA modules. The amplifier shall meet the following performance criteria: Power output shall be 30 W at less than 0.5% THD from 20 to 20k Hz (direct output) or 50 to 20k Hz (transformer output). Frequency response shall be ± 1 dB from 20 to 20k Hz (direct output) or 20 to 15k Hz (transformer output). Load impedance shall be 4, 8, 20.8 (25 V line) or 163.3 (70 V line) Ω . Load voltage shall be 11, 15.5, 25 or 70 V.

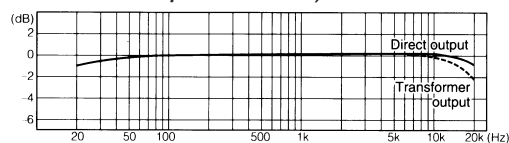
Equivalent input noise shall be -126 dBm with a low-Z microphone preamplifier. Output noise shall be 90 dB below rated output when all gain controls are off.

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 microphone, line, and special function models.

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 318 mm) and its weight shall be 17.2 lbs. (7.8 kg). The mixer/power amplifier shall be TOA model A-903MK2.

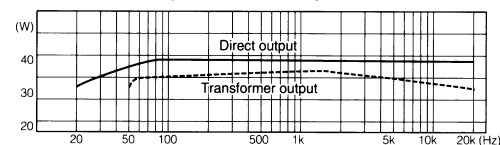
Frequency Response

@ 1/10 rated output (Direct output: 8 Ω load, transformer output: 167 Ω load)



Power Output vs. Frequency

@ 0.5% THD (Direct output: 8 Ω load, transformer output: 167 Ω load)



TOA Electronics, Inc.