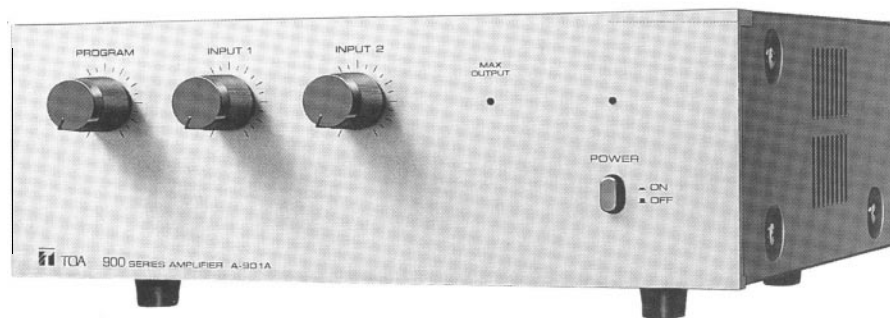


TOA 900 SERIES

# 3-CHANNEL MIXER POWER AMPLIFIER (10-WATT)

## A-901A



### Features

1. Output power: 10 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 for Input #1 and Program Input
6. Incorporates muting function
7. Built-in protection circuitry when heatsink temperature overheats
8. Separate output terminals for 4 and 8 ohms, 25 and 70 volts
9. Full range of plug-in modules
10. Can be rack mounted

### Description

The TOA A-901A Mixer Power Amplifier controls and mixes up to three independent input signals. The A-901A delivers up to 10 watts of output power.

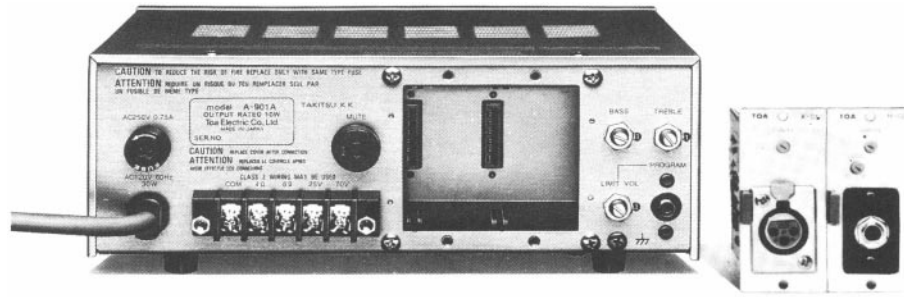
Thirty five optional accessory modules are available to allow the A-901A amplifier to be configured for a variety of applications. Edge connectors on the rear of the units permit TOA modules to be easily inserted for use.

Modules include 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-01R 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-01S Exes interface paging module. The T-02S module featuring auxiliary input and balanced line output is also available for music-on-hold.

For detailed module specifications, please refer to publication TOA 900 Series Module Specifications, Features and Connector Chart.

The A-901A has input and output terminals to match 4- or 8-ohm speaker systems and 25 or 70-volt speaker distribution systems. A rack mounting bracket is available.





## Specifications

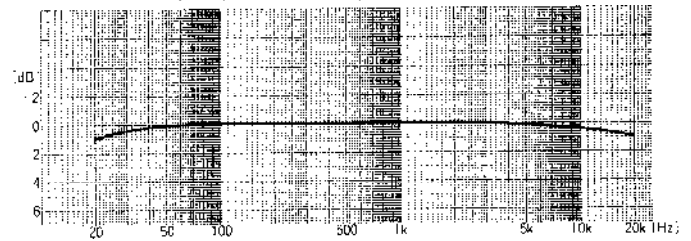
Type	3-channel mixer power amplifier
Output Power	10 watts RMS
Power Bandwidth	50—20,000 Hz, 2% THD
Frequency Response	20—20,000 Hz, $\pm 1$ dB
Total Harmonic Distortion	0.1% at 1 kHz, rated output
Inputs	Two input ports: Each port accepts any input module except the T-01, which cannot be used. One program input
Input Sensitivity/Impedance	Input ports #1 & #2: 100 mV/10k ohms Program input: 100 mV/50k ohms
Source Impedance	200 ohms with M-01/M-11/M-21/M-51/M-61 module (balanced Lo Z microphone preamplifier) 50k ohms with M-03P module (unbalanced Hi Z microphone preamplifier), R-01R module (mag. phono preamplifier) 220k ohms with U-01/U-11/U-12/U-21/U-61 module (auxiliary preamplifier) 10k ohms with B-01 module (bridging transformer) 600 ohms with L-01 module (line matching transformer), 1-01 (paging input)
Outputs (Transformer-isolated)	4 and 8 ohms, 25 and 70 volts, balanced
Output Regulation (1 kHz)	Less than 2.0 dB, no load to full load
Signal-to-Noise Ratio (Band Pass: 20-20,000 Hz) With Tone Controls Centered	All gain controls max: 82dB
Tone Controls	Bass: $\pm 10$ dB at 100 Hz; Treble: $\pm 10$ dB at 10 kHz Controls affect only input port #1 and program input
Controls	2 input gain controls 1 program gain control 1 program gain limit control 1 bass tone control 1 treble tone control 1 power ON/OFF switch
Indicators	1 power LED 1 max. output LED
Protection Circuitry	Built-in with 1 AC fuse Output circuitry protection when heatsink temperature overheats
Connectors	Inputs #1 & #2: Card-edge connectors Program input: RCA phono jack Output: Screw-terminal strip Mute: 2-pin socket AC power cord/plug: SJT, 3-prong type
Power Consumption	AC 120 volts, 60 Hz, 30 watts
Temperature Range	-10°C to +60°C (12°F to 140°F)
Dimensions	3.98"(H)X9.84"(W)X9.65"(D) (101X250x245mm) Rack-mounting space size:"2U" (3.46")
Weight (without input modules)	8.6 lbs. (3.9 kg)
Color	Silver
Standard Accessory	1 muting terminal plug
Other Features	Program input and input port #1 muted simultaneously
Optional Accessories	Plug-in modules (see specifications for individual modules), rack mounting bracket model MB-920

\*Specifications are subject to change without notice

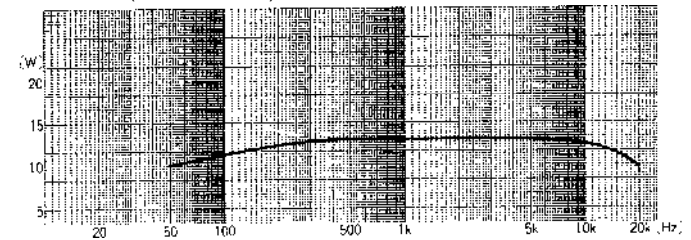
\* NOTE 1: THE T-01S MODULE WILL NOT FUNCTION IN THE A-901A MIXER POWER AMPLIFIER.

\* NOTE 2: THE L-41S MUST OCCUPY PORT NUMBER TWO WHEN UTILIZED IN THE A-901A.

## Frequency Response at 1/10 rated output (490-ohm load)



## Power Output vs Frequency at 2% THD (490-ohm load)



## Architect's and Engineer's Specifications

The mixer power amplifier shall have two input ports and one program input. It shall be capable of operation from a 120V, 50/60Hz line. Input ports shall be usable with microphone, phono pickup or high-level devices, and program input shall be usable with high-level devices. The amplifier shall meet the following performance criteria. Power output shall be 10W at less than 2% THD from 50 to 20,000Hz. Frequency response shall be  $\pm 1$  dB 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 4, 8, 62.5 (25-volt line) or 490 ohms (70-volt line). Load voltage shall be 6.3, 8.9, 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.

The TOA plug-in accessory modules designed for use with the A-901A mixer power amplifier shall utilize the latest in surface mount component technology and include the following modules: the M Series microphone preamplifiers 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-01R 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 1-01S Exes interface paging module. The T-02S module featuring auxiliary input and balanced line output shall also be available for music-on-hold.

The mixer power amplifier shall be rack mounted using the TOA MB-920 rack mounting bracket. The amplifier's dimensions shall be 3.98"(H) x 9.84"(W) x 9.65"(D) (101 x 250 x 245mm) and its weight shall be 8.6 lbs. (3.9kg).

The mixer power amplifier shall be TOA model A-901A.



TOA Corporation