



500 SERIES

MIXER/ AMPLIFIERS: A-503A A-506A A-512A

THE TOA 500 SERIES

MIXER/POWER AMPLIFIERS are ideal for a wide variety of installed sound applications. Engineered with proven TOA quality and reliability, the 500 Series is simple to install and operate, saving you time and money.

The **A-503A** (30 W), **A-506A** (60 W), and **A-512A** (120 W) Mixer/Amplifiers each have six input channels to accommodate a variety of input sources and a built-in power amplifier with transformer-isolated 25 V, 70 V and 4 ohm speaker outputs.

Pre-Out/Power-In jacks allow connection of external signal processing between the mixer and amplifier sections. Other features include booster and tape outputs for connecting an external mixer, amplifier or recording device. A convenient +24 VDC input allows operation in remote applications.

The TOA 500 Series are UL and cUL Listed and carry a five year warranty.



HIGHLIGHTS

- **Integrated Six Channel Mixer/Amplifiers** for paging, music distribution and messaging-on-hold.
- **Proven TOA Quality and Reliability**
- **Engineered for High Performance** with wide frequency response, very low noise and distortion, and excellent output regulation.
- **Three Models:** A-503A (30 W), A-506A (60 W), A-512A (120 W)
- **25 V, 70 V and 4 Ohm Transformer-Isolated Speaker Outputs** with screw terminal connector and protective cover plate.
- **Two Low Impedance Microphone Inputs**, balanced, transformer-isolated with XLR-F connectors and switchable phantom power.
- **Three Auxiliary Line Inputs**, unbalanced with RCA connectors
- **Hi-Z Mic/Phono Input** (switchable), unbalanced with RCA/screw terminal connectors
- **Optional Module** converts Inputs 3 & 4 to low impedance microphone inputs with XLR-F connectors.
- **External Mute Terminals** for switch closure override of Inputs 3-5 with adjustable mute depth.
- **Individual Channel and Master Volume Controls**
- **Remote Mic Volume Terminals (Input 2)** for control with an external 10k ohm linear-taper potentiometer.
- **Bass/Treble Tone Controls**
- **Insert Jacks** for connecting external signal processor.
- **Booster and Tape Outputs** for connecting external mixer, amplifier or recording device.
- **+24 VDC Input** for connection to external power source.
- **Rear Panel AC Convenience Outlet** for powering external equipment.
- **Over-current and Thermal Protection Circuitry** prevents potential damage from overload, short-circuit and overheating.
- **Optional Rack-Mount Kit**
- **UL / cUL Listed**
- **Five Year Warranty**

OPTIONAL ACCESSORIES

MB-21B2	Rack-mount Kit
PF-511	Perforated Rack Panel (2 RU)
U-51	Dual Lo-Z Mic Input Module
U-52	Unbalanced-to-Balanced Transformer (600:600 ohms)



500 SERIES MIXER/ AMPLIFIERS

APPLICATIONS

- A/V Rentals
- Airports
- Audio/Visual
- Auditoriums / Theatres
- Banks
- Bars / Lounges / Nightclubs
- Boardrooms
- Business Music
- Conference Facilities
- Convenience Stores
- Educational Facilities
- Fitness Clubs / Gymnasiums
- Hotels / Hospitality
- Houses of Worship
- Industrial / Warehouses
- Museums
- Music Distribution
- Offices
- Public Address
- Restaurants
- Retail Stores
- Theme Parks
- Training Rooms



TOA ELECTRONICS, INC.
601 GATEWAY BLVD., SUITE 300
SOUTH SAN FRANCISCO, CA 94080
TEL: 800-733-7088
FAX: 800-733-9766

www.toaelectronics.com

Literature Order #: L-500SERIES
Specifications subject to change without notice.
© 2003, TOA Electronics, Inc.



SPECIFICATIONS

Type	6-channel mixer/amplifier
Output Power	A-503A: 30 W RMS; A-506A: 60 W RMS; A-512A: 120 W RMS
Frequency Response	50 - 15k Hz, ± 3 dB
Total Harmonic Distortion	0.02% at 1k Hz, rated output
Inputs	INPUT 1: 200 Ω , 0.3 mV (MIC 1), 15 VDC phantom power INPUT 2: 200 Ω , 0.3 mV (MIC 2), 15 VDC phantom power INPUT 3: 50k Ω , 3 mV (MIC 3) / 50k Ω , 2 mV (MAG. PHONO) INPUT 4: 50k Ω , 3 mV (MIC 4) / 220k Ω , 100 mV (AUX 1) INPUT 5: 10k Ω , 100 mV (AUX 2) AUX 3: 10k Ω , 100 mV Power amp input: 10k Ω , 1 V
Outputs	Speaker outputs: 4 Ω , 25 V & 70 V, balanced Tape output: 4.7k Ω , 650 mV Booster output and Pre-amp output: 600 Ω , 1 V
Output Regulation (1k Hz)	Less than 2 dB, no load to full load
Dynamic Range (Band Pass: 20 - 20k Hz, with Tone Controls centered)	All volume controls c.c.w.: 80 dB below rated power MIC 1, 2: 60 dB below rated power (200 Ω terminated) AUX 2, 3: 70 dB below rated power Mag. phono: 60 dB below rated power
Tone Controls	Bass: ± 10 dB at 100 Hz; Treble: ± 10 dB at 10k Hz
Power Supply	120 VAC 60 Hz or 24 VDC
Power Consumption	A-503A: 60 W; A-506A: 100 W; A-512A: 180 W
Current Consumption (idling / rated power)	A-503A: AC: 220 mA / 0.9 A, DC: 220 mA / 2.1 A A-506A: AC: 200 mA / 1.6 A, DC: 220 mA / 4.2 A A-512A: AC: 250 mA / 2.8 A, DC: 300 mA / 7.5 A
Color	Black
Dimensions (W x H x D)	16.5" x 3.5" x 11" (420 x 88.5 x 280 mm)
Weight (without modules)	A-503A: 15.7 lbs (7.1 kg) A-506A: 17.9 lbs (8.1 kg) A-512A: 22.9 lbs (10.4 kg)
Other Features	Muting function Remote volume control (MIC 2)

Visit www.toaelectronics.com to download:

- 500 Series Architect and Engineering Specifications
- 500 Series Installation Manual
- 500 Series CAD Files