# A-2060/2120/2240 Mixer Power Amplifiers



## DESCRIPTION

A-2000 Series Mixer Power Amplifiers offer high levels of performance and versatility and are especially well-suited for broadcasting paging and supplying background music in schools, offices, shops, factories, houses of worship, and large meeting rooms.

The A-2000 series makes available a wide range of power outputs (A-2060: 60W, A-2120: 120W, A-2240: 240W), with a frequency response of 50 – 20,000 Hz and distortion under 1% (at 1kHz, 1/3 rated). Two balanced/screw terminal MIC inputs, one balanced/screw terminal TEL input and two unbalanced/RCA pin jack AUX inputs, along with high and low impedance balanced (floating) speaker outputs and unbalanced REC outputs ensure operational versatility.

This model provides the Auto-Mute function for voice-activated paging at an adjustable threshold level (0 to 64dB for MIC 1 and MIC 2/0 to -23dB for TEL) which overrides the BGM channels (AUX 1 and AUX 2). Other features include Bass and Treble controls with Signal, Peak and Power LED indicators.

# FEATURES

#### **High cost-performance**

- Suitable for commercial audio systems in schools, offices, restaurants, shops, factories, houses of worship, and large meeting rooms
- Engineered for high performance with wide frequency response, low noise and distortion, and excellent output regulation
- Equipped with balanced mic. inputs for better isolation from external noise, compared to unbalanced inputs
- UL/cUL Listed

#### Flexibility

- A wide range of power outputs from 60W to 240W
- Offers a comfortable acoustic space thanks to tone control at bass and treble
- Phantom power can be provided to MIC 1, for supplying power to a condenser microphone
- Equipped with Auto-mute function which allows voiceactivated paging by Microphone and Telephone paging inputs which override the Auxiliary inputs

#### Easy to handle

- · Scratch- and fingerprint-resistant front panel
- · Easy and quick volume control with master volume knob

## APPEARANCE AND DIMENSIONAL DIAGRAM







### A-2120/2240













## **ARCHITECT'S AND ENGINEER'S SPECIFICATIONS**

#### A-2060/2120/2240 Mixer Power Amplifiers

The mixer power amplifier shall be ideal for a wide variety of installed sound applications such as paging and background music (BGM) distribution.

The amplifier shall control and mix up to two balanced (screw terminal) MIC inputs, a balanced (screw terminal) TEL input and two unbalanced (RCA pin jack) AUX inputs, and deliver an audio output of 60W / 120W / 240W. The MIC input impedance shall be 600 ohms and the TEL input impedance shall be 10k ohms. The AUX impedance shall be 10k ohms. Frequency response shall be 50 to 20k Hz (+/- 3 dB) with less than 1 % THD at 1/3 rated output. It shall be capable of operation from a 120 V AC 60 Hz line. The S/N ratio shall be over 60dB.

The mixer power amplifier shall include 25 V, 70 V or 4 ohm transformer-isolated outputs with screw terminal type connections and protective cover plate, and AUX output with dual-RCA jacks for recording or connection to an external booster amplifier. The amplifier shall incorporate an auto-mute function that overrides the BGM channels (AUX 1 and AUX 2), for voice-activated paging at an adjustable threshold level (0 to 64dB for MIC 1 and MIC 2/0 to -23dB for TEL). The mixer power amplifier front panel shall include a master volume control, MIC/TEL and AUX volume controls, Bass/Treble tone controls (100 and 10k Hz, + 10 dB) and Signal, Peak and Power LEDs. Fan cooling ventilation shall be provided (A-2240 only).

Dimensions shall be A-2060: 420(W)  $\times$  100.9 (H)  $\times$  280.3 (D)  $(16.5" \times 4.0" \times 11.0")$ , A-2120/2240: 420(W)  $\times$  100.9 (H)  $\times$  360.3 (D)  $(16.5" \times 4.0" \times 14.2")$ . Net weight shall be A-2060: 7kg (15.43lb), A-2120: 10.8kg (23.81lb), A-2240: 13.2kg (29.10lb). Front panel finish and material shall be black ABS resin and case finish (and material) shall be black steel plate.

The mixer power amplifier shall be TOA model A-2060/ A-2120/2240.

> 240W 238W (EN60065)

520W (AC operation at rated output)

A-2240

\*0dB = 1V

Mouel No.		A-2000	A-2120
Power Source			120V AC, 60Hz
Rated Output	60W		120W
Power Consumption		(EN60065), V (AC operation at rated output)	124W (EN60065), 260W (AC operation at rated output)
Frequency Response			50 – 20,000Hz (±3dB)
Distortion			Under 1% at 1kHz, 1/3 rated power
Input			1, 2: -60dB* (10mV), 600 $\Omega$ , electronically balance 10dB* (300mV), 10k $\Omega$ , transformer isolated balance AUX 1, 2: -20dB* (100mV), 10k $\Omega$ , unbalanced, R
Output Spea High imp Low imp	edance 83Ω	nced (floating) (70V), 10Ω (25V) 15.5V)	Balanced (floating) 42Ω (70V), 5Ω (25V) 4Ω (22V)

A-2060

SPECIFICATIONS

Model No.

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put		MIC 1, 2: -60dB* (10mV), 600 $\Omega$ , electronically balanced, screw terminal TEL: -10dB* (300mV), 10k $\Omega$ , transformer isolated balanced, screw terminal				
		AUX 1, 2: -20dB* (100mV), $10k\Omega$ , unbalanced, RCA pin jack				
utput	Speaker out High impedance Low impedance Rec. out	Balanced (floating) $83\Omega$ (70V), 10 $\Omega$ (25V) $4\Omega$ (15.5V) OdB* (1.0V), 600 $\Omega$ , unbalanced, PCA pic instru-	Balanced (floating) $42\Omega$ (70V), $5\Omega$ (25V) $4\Omega$ (22V) odB* (1.0V), 600 $\Omega$ , unbalanced, PCA pic inclu	Balanced (floating) $21\Omega (70V), 2.6\Omega (25V)$ $4\Omega (31V)$ $0dB^* (1.0V), 600\Omega$ , unbalanced, RCA pin jack		
nantom Pov	ver	RCA pin jack RCA pin jack   DC +21V (MIC1, with ON/OFF switch) RCA pin jack		поя ріп јаск		
N Ratio		Over 60dB				
one Control		Bass: ±10dB at 100Hz/Treble: ±10dB at 10kHz				
uting		MIC 1, MIC 2 and TEL overrides other input signals with -30dB attenuation. Sensitivity input level adjustable for MIC 1, MIC 2: 0 to -64dB, TEL: 0 to -23dB (MIC 1, MIC 2, TEL, same priority level)				
entilation		-	-	Fan cooling		
dicators		Power, signal, peak				
nish		Panel: ABS resin, black/Case: Steel plate, black				
mensions		420 (W) × 100.9 (H) × 280.3 (D)mm (16.5" × 4.0" × 11.0")	420 (W) × 100.9 (H) × 360.3 (D)mm (16.5" × 4.0" × 14.2")			
eight		7kg (15.43 lb)	10.8kg (23.81 lb)	13.2kg (29.10 lb)		

A-2120 120V AC. 60Hz



## **TOA** Corporation www.toa.jp

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