

A-824D 3CU

800D SERIES MIXER AMPLIFIER



TOA's 800D Series mixer amplifier is a PA amplifier equipped with 4 microphone inputs, 2 auxiliary inputs, and 2 slots dedicated to the 900 Series modules. It employs a PFC circuit. It also features the following functions: Volume control function, Priority function, Chime function, and Remote confirmation function. In addition, it is equipped with a 2-channel input BUS of AUDIO and DUCK, and the signal processing function. The 800D Series mixer amplifier is ideal for paging announcement and BGM applications in schools, offices, and super markets.

Key features

- TOA Class D amplifiers for maximum efficiency
- Auto Gain Control for microphone inputs
- Onboard DSP - Dynamic Feedback Filters, Speaker EQ (3 bands of parametric EQ) , Input tone controls
- Assignable input priorities
- Built-in defeatable pre-announce chime
- Log Data
- IP protocol available

Specifications

*0 dB = 1 V

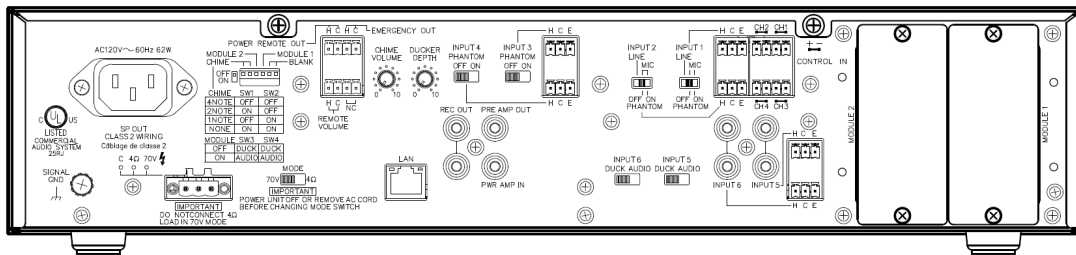
Power Source	120 V AC, 60 Hz
Rated Output	240 W
Power Consumption	317 W (rated output), 62 W (based on UL62368), 200 mA or less (when power switch is OFF)
Frequency Response	50 Hz to 20 kHz ± 3 dB (1/8 rated output)
Distortion	1% or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))
Signal to Noise Ratio	88 dB or more (Master volume: min) 76 dB or more (Master volume: max) 55 dB or more (INPUT 1 to 6) (A-weighted)
Audio Input	INPUT 1, 2: -60 dB* (MIC)/-20 dB* (LINE) selectable, 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins) Note: MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable). INPUT 3, 4: -60 dB*, 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins) Note: Equipped with phantom power (24 V DC, ON/OFF switchable). INPUT 5, 6: MIC/LINE selectable. MIC: -60 dB*, 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins). LINE: -20 dB*, 10 k Ω , unbalanced, RCA pin jack x 2. MODULE 1,2: -20 dB*, 10 k Ω PWR AMP IN: 0 dB*, 600 Ω , unbalanced, RCA pin jack (An equalizer or other signal processor connectable between PRE AMP OUT and PWR AMP IN terminals.)
Input Bus	Input 1 to 4: AUDIO Input 5, 6: AUDIO/DUCK selectable Module 1, 2: AUDIO/DUCK selectable
Audio Output	SPEAKER OUT: High impedance (70 V line/21 Ω) / Low impedance (4 - 16 Ω) selectable, removable terminal block (3 pins) REC OUT: 0 dB*, 600 Ω , unbalanced, RCA pin jack x 2 PRE AMP OUT: 0 dB*, 600 Ω , unbalanced, RCA pin jack
Tone Control	Bass: ± 10 dB at 100 Hz, Treble: ± 10 dB at 10 kHz
Control Input	4 channels, no-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (4 pins), REMOTE VOLUME: Removable terminal block (4 pins)
Control Output	POWER REMOTE: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins), EMERGENCY OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins)
Chime	1-note, 2-note, or ascending 4-note chime or None selectable with switch setting
Indicator	5-point LED output level meter, Power indicator LED, LAN Connect indicator LED, Priority indicator LED, Emergency indicator LED, Thermal protection indicator LED, Over current protection indicator LED, CPU RUN indicator LED, Error indicator LED
Operating Temperature	-10 $^{\circ}$ C to +40 $^{\circ}$ C (14 $^{\circ}$ F to 104 $^{\circ}$ F)
Operating Humidity	85%RH or less (no condensation)
Finish	Panel: ABS resin, black Case: Surface-treated steel plate, black, paint
Dimensions	420 (W) x 96.1 (H) x 313.1 (D) mm (16.54" x 3.78" x 12.33")
Weight	5.2 kg (11.46 lb)

Included Accessories

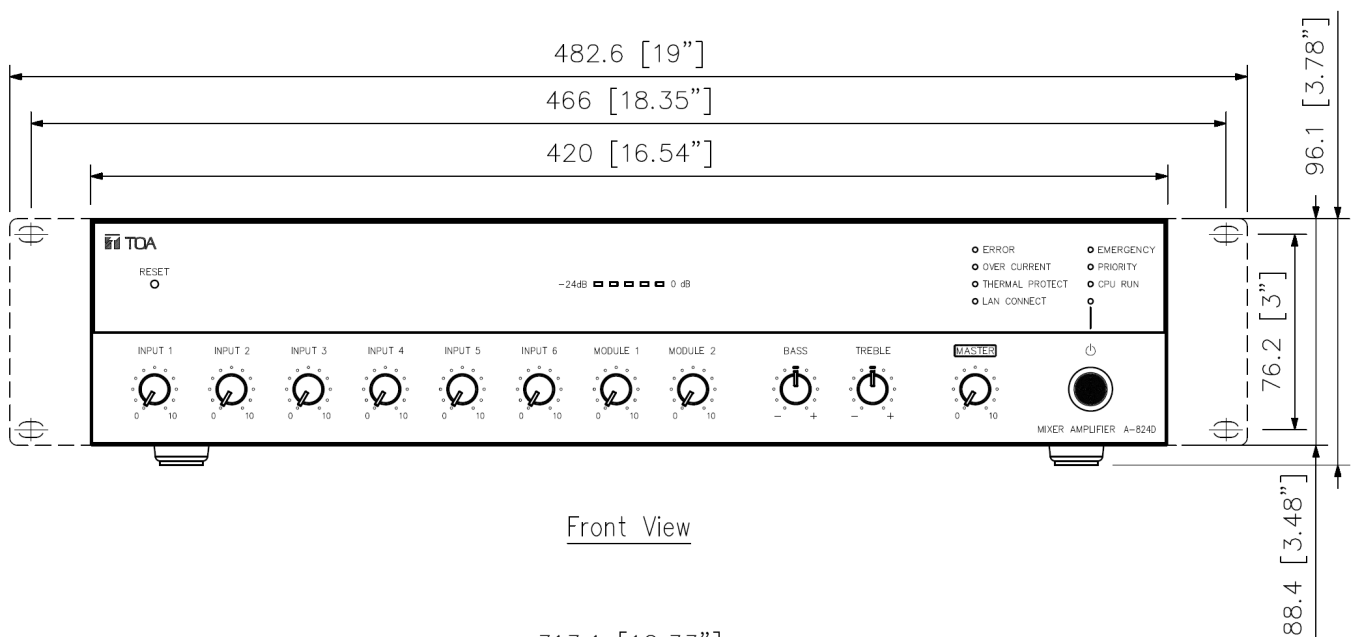
Power cord (2 m (6.56 ft) x 1, Audio input removable terminal plug (3.81 mm, 3 pins) x 6, Control input removable terminal plug (3.81 mm, 4 pins) x 2, Remote control removable terminal plus (3.5 mm, 4 pins) x 2, Speaker out removable terminal plug (5 mm, 3 pins) x 1, Volume control cover x 4, Rack mounting bracket x 2, Binding head screw M4 x 4, Flat washer x 4

Dimensions

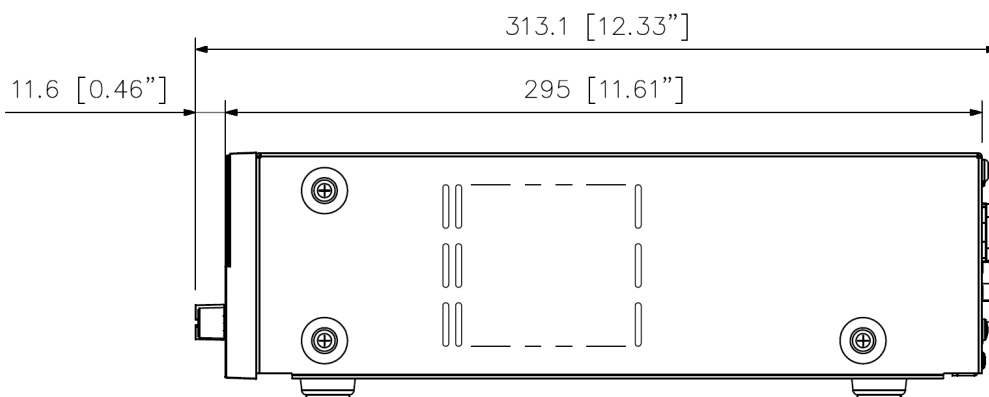
■ APPEARANCE



Rear View



Front View



Side View

UNIT:mm

A&E specifications

The mixer power amplifier shall use digital Class-D technology with active PFC (power factor correction) circuit to achieve a power output of 240 W and shall include 4 microphone inputs and 2 auxiliary inputs and switchable 70 V (21 Ω) line, or 4 - 16 Ω low impedance outputs. The mixer power amplifier shall be able to connect to a PC and have the facilities for remote access and settings by using a web browser. Inputs 1 and 2 shall be electronically balanced and selectable, offering MIC or LINE. Inputs 3 and 4 shall be fixed electronically balanced 600 Ω inputs. Inputs 1 - 4 shall have the switchable option of 24 V DC phantom power and shall be connected via a 3 pin removable terminal block. Inputs 5 and 6 shall offer either electronically balanced 600 Ω MIC inputs via a 3 pin removable terminal block, or a 10 k Ω unbalanced LINE inputs via two RCA connectors. Additionally, there shall be 2 x RCA connectors for external recordings and RCA pre-amp input and output for the purpose of adding additional amplification, or signal processing.

The mixer power amplifiers shall include two module slots to facilitate 900 series modules, manufactured by TOA Corporation, to increase its versatility of a wide range of operating applications. The mixer power amplifier shall accommodate up to eight levels of priority and via the remote protocol software, it shall be possible to edit the manufacturer's standard default settings. The device shall also have an emergency priority that will broadcast at full volume even when the equipment is powered OFF and regardless of the set value of the volume controls. It shall be able to mute audio signals from the browser using manual mode. The mixer power amplifier shall have an internal chime generator with dedicated volume adjustment allowing a 1-note tone, 2-note tone or a 4-note ascending tone. In addition, there shall be adjustable ducking facilities to decrease background music while announcements are being broadcast. The device shall have a frequency response of 50 Hz – 20 kHz with separate treble and bass controls located on the front panel. Additional equalization parameters can be achieved via the RJ45 network terminal located on the rear panel and by accessing a web browser, status display, setting content display, input priority setting and display, remote volume, network settings, account settings, and firmware updates can also be performed.

The mixer power amplifier shall have separate volume controls for each input channel and a master volume control that will adjust all input levels simultaneously.

There shall be a visual five LED output level meter and visual LED indication of internal errors, over current, thermal protection, LAN connection, emergency broadcast, priority broadcast and CPU run.

Power requirements shall be 120 V AC via a supplied power cord. The unit shall use 2 space units of a standard EIA component rack space and its dimensions shall be 420 (W) X 96.1 (H) X 313.1 (D) mm (16.54" x 3.78" x 12.33"). Weight shall be 5.2 kg (11.46 lb.) and finished in black ABS resin front panel, with black surface-treated steel plate case. Optional extras; input transformer: IT-450, perforated panel: PF-013B, manufactured by TOA Corporation. Manufacturer: TOA Corporation

Model: A-824D