

## A-3648D 1CE

### MIXER AMPLIFIER



A-3600D Series Digital Mixer Amplifier provides maximum flexibility with up to seven inputs and up to 480 W of power. Browser based control and monitoring from anywhere reduces your time troubleshooting and adjusting systems.

Feedback suppressor, input priorities, a sleek new appearance, and TOA's legendary quality and reliability make this a perfect fit for background and foreground music, paging, and noise masking applications.

### Key features

- TOA class D amplifiers for maximum efficiency
- Feedback Suppressor (Dynamic feedback filters)
- Speaker EQ (3 points equalizer)
- Assignable input priorities
- Built-in pre-announce chime
- Two speaker zones
- Web browser interface
- IP protocol available for further integrations and developments

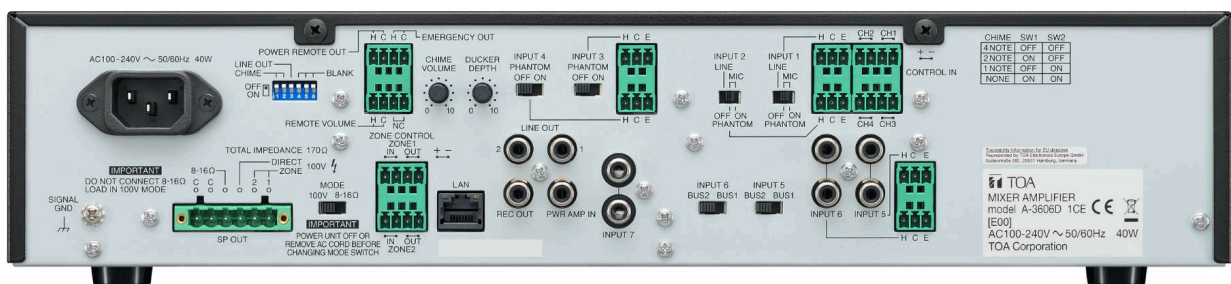
## Specifications

(\*1) 0 dB = 1 V

|                       |  |
|-----------------------|--|
| Power Source          | 100 - 240 V AC, 50/60 Hz   |
| Rated Output          | 480 W  |
| Power Consumption     | 601 W (rated output), 113 W (based on EN62368)   |
| Current Consumption   | 200 mA or less (when power switch is OFF)  |
| Frequency Response    | 50 Hz - 20 kHz $\pm$ 3 dB (1/8 rated output)   |
| Distortion            | 1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))  |
| Tone Control          | Bass: $\pm$ 10 dB at 100 Hz<br>Treble: $\pm$ 10 dB at 10 kHz   |
| Signal to Noise Ratio | 88 dB or more (Master volume: min)<br>76 dB or more (Master volume: max)<br>55 dB or more (INPUT 1 - 6)<br>72 dB or more (INPUT 7)<br>(A-weighted)   |
| Audio Input           | INPUT 1, 2: -60 dB (*1) (MIC)/-20 dB (*1) (LINE) selectable, 600 $\Omega$ , electronically-balanced, removable terminal block (3 pins)<br>Note: MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable).<br>INPUT 3, 4: -60 dB (*1), 600 $\Omega$ , electronically-balanced, removable terminal block (3 pins)<br>Note: Equipped with phantom power (24 V DC, ON/OFF switchable).<br>INPUT 5, 6: MIC (BUS 1)/LINE (BUS 2) selectable<br>MIC: -60 dB (*1), 600 $\Omega$ , electronically-balanced, removable terminal block (3 pins)<br>LINE: -20 dB (*1), 10 k $\Omega$ , unbalanced, RCA pin jack x 2<br>INPUT 7: -20 dB (*1), 10 k $\Omega$ , unbalanced, RCA pin jack x 2<br>PWR AMP IN: 0 dB (*1), 600 $\Omega$ , unbalanced, RCA pin jack |
| Input Bus             | INPUT 1 - 4 : BUS 1<br>INPUT 5, 6 : BUS 1/BUS 2 selectable<br>INPUT 7 : BUS 2  |
| Audio Output          | SPEAKER OUT: Low impedance (4 - 16 $\Omega$ )/<br>High impedance (DIRECT, ZONE 1/ZONE 2: 100 V/total 21 $\Omega$ ), removable terminal block (6 pins)<br>(ZONE 1/ZONE 2 is selectable, Max. 480 W per output)<br>REC OUT: 0 dB (*1), 600 $\Omega$ , unbalanced, RCA pin jack<br>LINE OUT 1, 2: 0 dB (*1), 600 $\Omega$ , unbalanced, RCA pin jack, (Interlock with zone selection is possible)   |
| 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)<br>REMOTE VOLUME: Removable terminal block (4 pins)<br>ZONE CONTROL IN: No-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (4 pins)  |
| Control Output        | POWER REMOTE OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins)<br>EMERGENCY OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins)<br>ZONE CONTROL 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, Zone 1 indicator LED, Zone 2 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<br>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 I/O removable terminal plug (3.81 mm, 4 pins) x 4, Remote control removable terminal plug (3.5 mm, 4 pins) x 2, Speaker out removable terminal plug (5 mm, 6 pins) x 1, Volume control cover x 4 |
| Optional Accessories | Rack mounting bracket: MB-25B<br>Perforated panel : PF-013B  |

## Product rear image

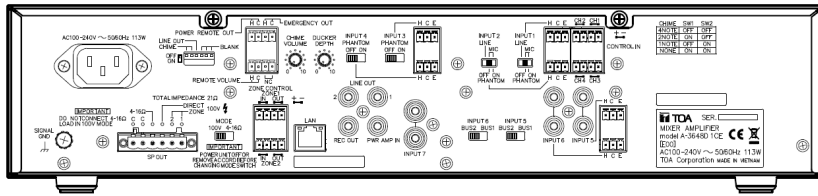


# Dimensions

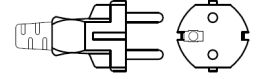
## ■ APPEARANCE

Rear View

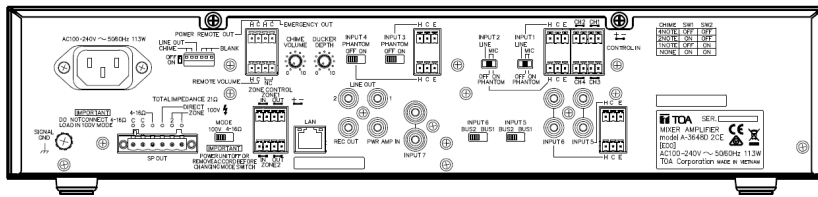
1CE model



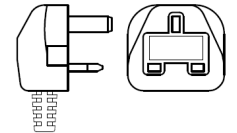
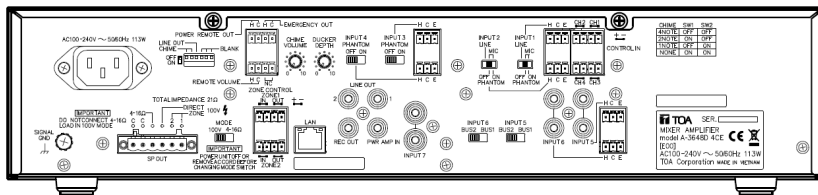
AC plug



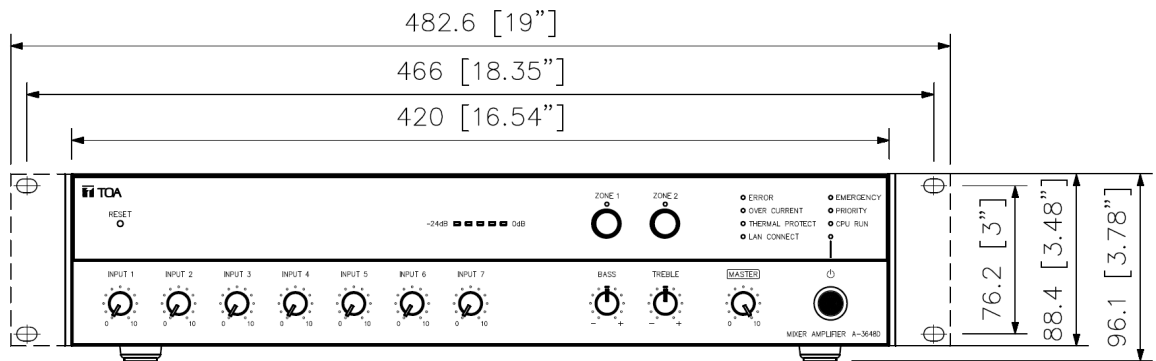
2CE model



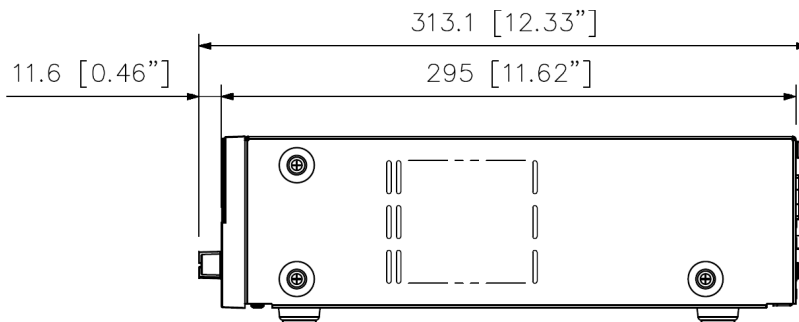
4CE model



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 480 W and shall include 4 microphone inputs and 3 auxiliary inputs and switchable 100 V (21  $\Omega$ ) line, or 4 - 16  $\Omega$  low impedance outputs. It shall be equipped with a 2-channel input BUS and a signal processing function. 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  $\Omega$  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  $\Omega$  MIC inputs via a 3 pin removable terminal block, or a 10 k $\Omega$  unbalanced LINE inputs via two RCA connectors. Input 7 shall be fixed unbalanced 10 k $\Omega$  input via two RCA connectors. Power amplifier input shall also be available.

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.

The mixer power amplifier shall have two speaker output channels, a REC output, and two LINE outputs.

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.

There shall be adjustable ducking facilities to decrease background music while announcements are being broadcast. The mixer power amplifier shall accommodate up to six levels of priority and via the remote control 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.

Additional equalization parameters can be achieved via the RJ45 network terminal located on the rear panel. 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.

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 100 - 240 V AC via a supplied power cord. The device shall have a frequency response of 50 Hz - 20 kHz with separate treble and bass controls located on the front panel.

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; Rack Mounting Bracket: MB-25B, Perforated Panel: PF-013B, manufactured by TOA Corporation.

Manufacturer: TOA Corporation

Model: A-3648D