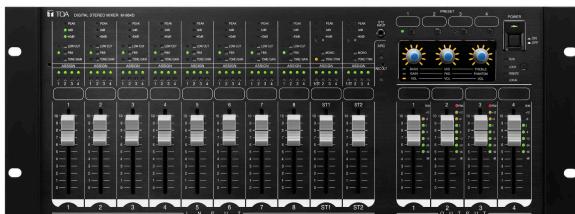


## M-864D CU

## DIGITAL STEREO MIXER



The M-864D digital stereo mixer maintains the basic functionality and operability of its predecessor, the M-633D, but adds such versatile features as analog-feel fader operation, 8 monaural and 7 stereo input channels, remote controller operation and fine-tuning of settings with GUI software.

With its release, TOA has made the clear sound achieved by its proprietary resonance control technology available for use in hotel banquet rooms, multipurpose halls and other facilities that host events of various types.

## Key features

- 15 input and 5 output channels per unit
- Equipped with digital signal processing functions such as automatic resonance control function (ARC), Feedback suppressor function (FBS), Automatic stereo input mute function (AUTO MUTE or Ducker) and Equalizer
- Advanced acoustic compensation can be automatically performed without using an acoustic measuring instrument
- Furnished with various function setting buttons and 14 analog volume faders
- Can be operated without need for use of a PC, by connecting the PC, optional Remote control panel

## Specifications

(*2) 0 dB = 0.775 V	
Power Source	100 – 120 V AC, 60 Hz
Power Consumption	30 W
Frequency Response	20 Hz – 20 kHz, $\pm 1$ dB
Sampling Frequency	48 kHz
Dynamic Range	100 dB or more
Distortion	0.03 % or less, 1 kHz, +4 dB* input/output, 20 Hz – 20 kHz BPF
Crosstalk	–80 dB or less, 1 kHz
Input	<p>Monaural input, 8 channels, removable terminal block (3 P)</p> <p>Phantom power (+24 V DC, 10 mA, ON/OFF switchable for each channel)</p> <p>Gain setting (settable for each channel)</p> <ul style="list-style-type: none"> <li>: PAD ON Gain min., +4 dB* (max. +24 dB*), 10 k<math>\Omega</math>, electronically-balanced</li> <li>Gain max., –14 dB* (max. +6 dB*), 10 k<math>\Omega</math>, electronically-balanced</li> <li>: PAD OFF Gain min., –10 dB* (max. +10 dB*), 7 k<math>\Omega</math>, electronically-balanced</li> <li>Gain max., –56 dB* (max. –36 dB*), 7 k<math>\Omega</math>, electronically-balanced</li> </ul> <p>Stereo Input (L, R), 7 channels (1-A, 1-B, 1-C, 2-A, 2-B, 2-C, front-mounted input), RCA jack (stereo mini jack provided on the front panel)</p> <ul style="list-style-type: none"> <li>: –10 dB* (max. +10 dB*), 10 k<math>\Omega</math>,</li> </ul> <p>Trim gain for each individual channel: <math>-\infty</math> to 0 dB (except front-mounted input)</p> <ul style="list-style-type: none"> <li>• 1-A (L), 1-B (L), and 1-C (L) are mixed after passing through each trim gain circuit (the same applies to R channel)</li> <li>• 2-A (L), 2-B (L), and 2-C (L) are mixed with front-mounted input after passing through each trim gain circuit (the same applies to R channel)</li> </ul>
Output	<p>4 channels, +4 dB* (max. +24 dB*), applicable load 600 <math>\Omega</math> or more, electronically-balanced, removable terminal block (3 P)</p> <p>REC OUT (L, R): –10 dB* (max. +10 dB*), applicable load 1 k<math>\Omega</math> or more, RCA jack Gain is adjustable.</p>
A/D Converter	24 bits
D/A Converter	24 bits
Preset Memory	16
Automatic Resonance Control (ARC)	Automatic EQ curve creation by ARC, 4 channels (each output channel), settable independently on each channel
Feedback Suppressor (FBS)	Feedback suppressor filter creation, 8 channels (each monaural input channel), settable independently on each channel
Filter	8 channels (each monaural input channel), settable independently on each channel, high-pass filter: 20 Hz – 20 kHz
Tone Controller	<p>BASS, Low-shelving filter: 20 – 500 Hz, <math>\pm 15</math> dB MID, parametric equalizer: 20 Hz – 20 kHz, <math>\pm 15</math> dB Q: 0.267 – 69.249</p> <p>TREBLE, high-shelving filter: 6 – 20 kHz, <math>\pm 15</math> dB 10 channels (each monaural input channel, each stereo mixing input channel), settable independently on each channel</p>
Equalizer	Parametric equalizer: 20 Hz – 20 kHz, $\pm 15$ dB, Q: 0.267 – 69.249 4 channels (each output channel)
Crosspoint Gain	$-\infty$ to 0 dB in 1 dB steps
Matrix	12 x 4
Automatic Mute	Stereo input section matrix, independent control

Function	Input PAD (-16 dB) control, low cut (cutoff frequency: 100 Hz) control, analog output attenuator (-6 dB, -12 dB, -18 dB, -24 dB, -36 dB, -42 dB) control, system lock function, stereo summing function, Control knobs (3 rotary encoders)
Front Panel	
Input Level Indicator	3-point LED, 12 channels (each monaural input channel, stereo 1L, 1R, 2L, 2R)
Output Level Indicator	8-point LED, 4 channels (each output channel)
Automatic Resonance Control (ARC) Measurement	ARC switch x 1, ARC operation indicator x 1
Feedback Suppressor (FBS)	Feedback Suppressor switch x 8, Feedback suppressor indicator x 8
Low Cut	Low cut switch x 8, Low cut indicator x 8
Tone Control	BASS, MID, TREBLE/Settable with control knobs, 10 channels (each monaural input channel, stereo 1L, 1R, 2L, 2R)
Monaural Input, Analog Setting	Gain setting, PAD ON/OFF, Phantom power ON/OFFSettable with control knobs, 8 channels (each monaural input channel)
Stereo Input, Analog Setting	Trim setting Settable with control knobs, 6 channels (1-A, 1-B, 1-C), (2-A, 2-B, 2-C)
REC OUT, Gain Setting	Gain setting Settable with control knobs, 2 channels (REC OUT L, REC OUT R)
Preset Memory Switching	Preset memory key x 4, Preset memory indicator x 4
Front Panel Operation Lock	System lock key x 1, System lock indicator x 1
Operation Status Indication	Operation status indicator x 3
Function Setting Panel	Control knob x 3, 10-point position indication LED x 3, Tone control mode indicator x 1, Gain control mode indicator x 1, Trim control mode indicator x 1
Analog Volume Fader	Input volume fader x 10, Output volume fader x 4, 2 faders linkable with supplied gang bar
Control Section	
Control Input	8 channels, open voltage: 24 V DC, short-circuit current: 5 mA, removable terminal block (10 P)
Control Output	8 channels, no-voltage make contact, contact capacity: 24 V DC/100 mA, removable terminal block (10 P)
Remote Control Panel	2 channels, Maximum number of units: 8 units per channel 24 V DC input x 2, termination switch x 1, removable terminal block (10 P) Maximum total cable length (star wiring): 800 m or 870 yd (total for 2 channels) Maximum cable length (daisy chain wiring): 400 m or 435 yd per channel Note: In daisy chain wiring, the number of units differs depending on the cable length. Star wiring and daisy chain wiring cannot be used together. Type of cable: Shielded CPEV cable (a pair of data cable and a pair of power supply cable) or shielded Cat 5 twisted pair cable for LAN (CAT5-STP)
Network	Network I/F: 1 channel of 10BASE-T/100BASE-TX (auto-negotiation) RJ45 connector, connection via switching hub Network protocol: TCP/IP Connection cable: Shielded Cat. 5 or higher twisted pair cable for LAN (Cat. 5-STP or better) Maximum cable length: 100 m or 110 yd (between M-864D and switching hub)
Included Accessories	Power supply cord (2 m (6.56 ft)x 1, Removable terminal plug (3P) x 12, Large type removable terminal plug (10P) x 2, Small type removable terminal plug (10P) x 1, Fader gang bar x 4, Protective cover x 1
Operating Temperature	0 to 40 °C (32 to 104 °F)
Operating Humidity	90 %RH (no condensation)
Finish	Panel: Aluminum, hairline, black, Case: Surface-treated steel plate

Dimensions	482.6 (w) x 177.1 (h) x 157.2 (d) mm (19" x 6.97" x 6.19")
Weight	5.1 kg (11.24 lb)

## PC requirements

### PC Requirements

Hardware	CPU: 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor Memory: 1GB or more RAM (for 32-bit CPU) or 2 GB or more RAM (for 64-bit CPU) Display: 1024 x 768 resolution or higher Free Hard Disk Space: 16 MB or more however 600 MB or more is required for the 32-bit edition or 1.5 GB or more for the 64-bit edition when ".NET Framework" is not yet installed Network Adapter: 10BASE-T or faster connection
OS	Windows 10 Pro (32/64 bit edition) Windows 11 Pro (64-bit edition)
Required Component	.NET Framework 4 Client Profile

## Dimensions

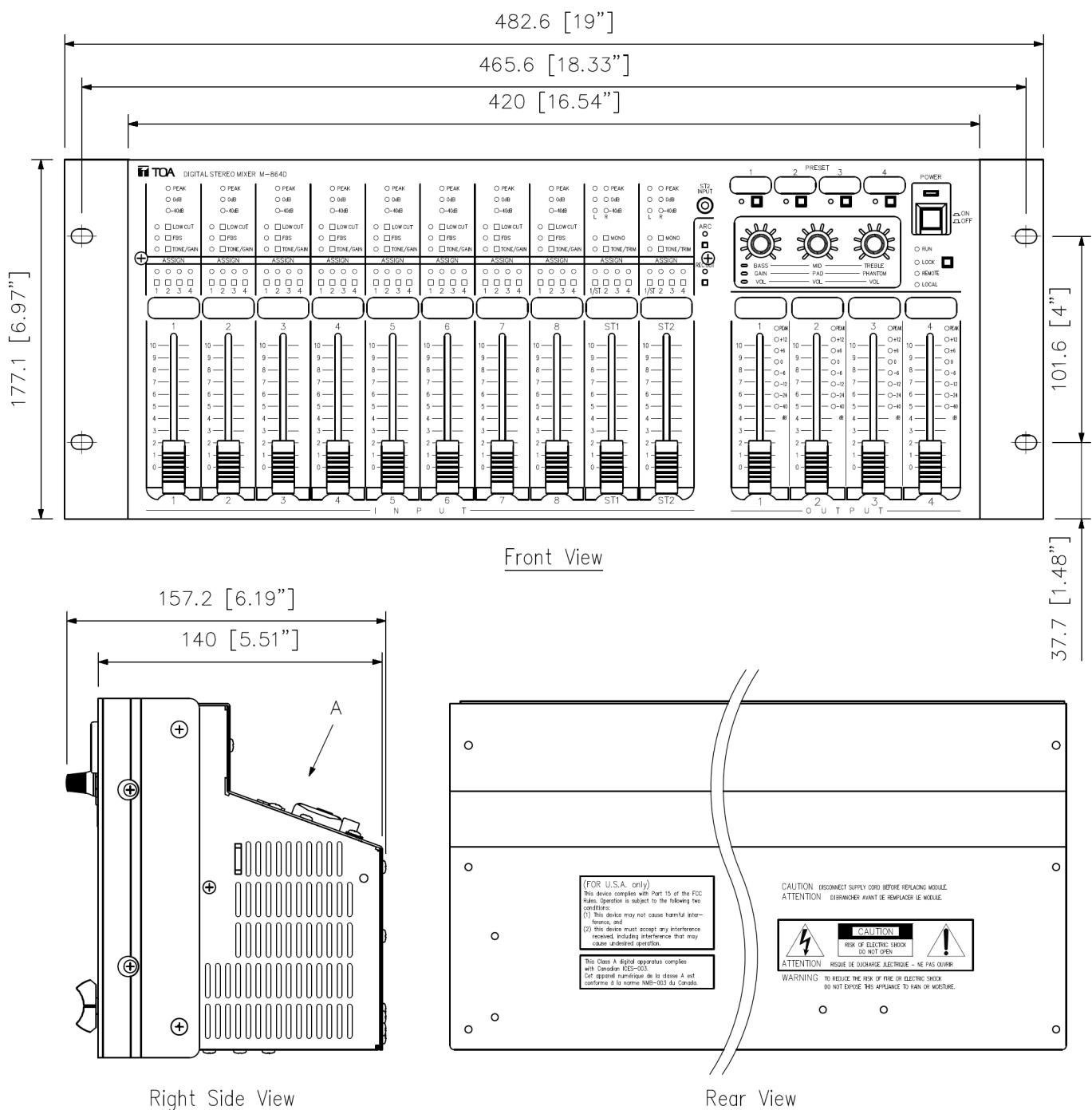
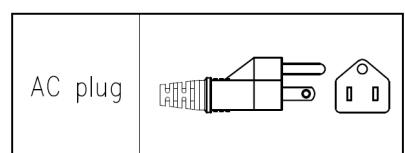


Figure as viewed from point A



## A&E specifications

The digital stereo mixer shall be equipped with digital signal processing functions such as Automatic Resonance Control function (ARC), Feedback Suppressor function (FBS), Automatic stereo input mute function, Tone controller, and PEQ.

Tone control and gain adjustment shall be made through the front panel operation. Each input shall have a built-in analog gain control circuit. The digital stereo mixer shall be mounted in a 19-inch EIA component rack (4U size).

The mixer shall have the following DSP functions:

- Automatic Resonance Control (ARC) measurement and processing algorithm that optimizes speech and sound clarity for individual acoustic environments
- Feedback Suppressor (FBS) function that eliminates feedback caused by carrying the microphone from place to place
- Automatic stereo input mute (Auto Mute or Ducker) function that mutes stereo input automatically when detecting a monaural control signal

Front-mounted stereo input shall allow connection of digital audio player

Preset memory shall enable operators to store user-specified settings in response to specific needs

Optional remote control panels shall permit convenient remote operation and featuring an assign function supporting assignment of such settings as volume control, channel ON/OFF, matrix switching and preset memory recall to specified buttons. Dedicated GUI software shall facilitate higher-precision parameter setting adjustment on PC via Ethernet LAN.

Connection of up to five mixers shall realize the operation with 15 input and 5 output channels.