TOA

DIGITAL STEREO MIXER

M-864D
(CE/CE-AU/CE-GB)

■DESCRIPTION

The M-864D is a 4U rack mountable Digital stereo mixer having 22 input channels including 8 monaural input channels and 7 stereo input channels, 6 output channels including 4 monaural output channels and 1 stereo recording output channel, and 4 bus channels. It is equipped with digital signal processing functions such as Automatic resonance control function (ARC(*1)), 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, the M-864D can be operated without need for use of a PC. However, it can also be operated by connecting the PC or optional Remote control panel. It can be mounted in an EIA component rack (4U size).

(*1) Automatic Resonance Control function automatically creates the filter curve to improve sound clarity by measuring the acoustic characteristics inherent in architectural space.

■SPECIFICATIONS

(*2) 0 dB = 0.775 V

Version	CE/CE-GB	CE-AU
Power Source	220-240 V AC, 50/60 Hz	220-240 V AC, 50 Hz
Power Consumption	30 W	
Frequency Response	20 Hz - 20 kHz, ±1 dB	
Sampling Frequency	48 kHz	
Dynamic Range	100 dB or more	
Distortion	0.03 % or less, 1 kHz, +4 dB(*2) input/output, 20 Hz - 20 kHz BPF	
Crosstalk	-80 dB or less, 1 kHz	
Input	Monaural input, 8 channels, removable terminal block (3P) Phantom power (+24 V DC, 10 mA, ON/OFF switchable for each channel) Gain setting (settable for each channel) :PAD ON Gain min., +4 dB(*2) (max. +24 dB(*2)), 10 kΩ, electronically-balanced Gain max., -14 dB(*2) (max. +6 dB(*2)), 10 kΩ, electronically-balanced :PAD OFF Gain min., -10 dB(*2) (max. +10 dB(*2)), 7 kΩ, electronically-balanced Gain max., -56 dB(*2) (max. -36 dB(*2)), 7 kΩ, electronically-balanced 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) : -10 dB(*2) (max. +10 dB(*2)), 10 kΩ Trim gain for each individual channel: -∞ to 0 dB (except front-mounted input) ※ 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) ※ 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)	
Output	Output, 4 channels, +4 dB(*2) (max. +24 dB(*2)), applicable load 600 Ω or more, electronically-balanced, removable terminal block (3P) REC OUT (L, R): -10 dB(*2) (max. +10 dB(*2)), applicable load 1 kΩ or more, RCA jack Gain is adjustable.	
AD Converter	24 bits	
DA Converter	24 bits	
Preset Memory	16	
Signal Processing Section		
Automatic Resonance Control (ARC) Function	Automatic EQ curve creation by ARC, 4 channels (each output channel), settable independently on each channel, ARC measuring start switch ×1, ON/OFF LED ×1	
Feedback Suppressor Function	Feedback suppressor filter creation, 8 channels (each monaural input channel), settable independently on each channel, ON/OFF switch ×8, ON/OFF LED ×8	
Filter	8 channels (each monaural input channel), settable independently on each channel, high-pass filter: 20 Hz - 20 kHz	
Tone Controller	BASS, Low-shelving filter: 20 - 500 Hz, ±15 dB MID, parametric equalizer: 20 Hz - 20 kHz, ±15 dB Q: 0.267 - 69.249 TREABLE, high-shelving filter: 6 - 20 kHz, ±15 dB 10 channels (each monaural input channel, each stereo mixing input channel), settable independently on each channel	
Equalizer	Parametric equalizer: 20 Hz - 20 kHz, ±15 dB, Q: 0.267 - 69.249 4 channels (each output channel)	
Matrix	12×4	
Crosspoint Gain	-∞ to 0 dB in 1 dB steps	
Automatic Mute Function	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, front panel operation lock function, stereo summing function, function setting panel (3 rotary encoders)	

TOA

DIGITAL STEREO MIXER

M-864D
(CE/CE-AU/CE-GB)

■SPECIFICATIONS

Front Panel Section	
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)
Auto Resonance Control (ARC) Measurement	ARC measuring start switch ×1, ON/OFF LED ×1
Feedback Suppressor (FBS) Function	ON/OFF switch ×8, ON/OFF LED ×8
Low Cut	ON/OFF switch ×8, ON/OFF LED ×8
Stereo Summing	ON/OFF switch ×2, ON/OFF LED ×2
Tone Control	BASS, MID, TREBLE/Settable on the function setting panel, 10 channels (each monaural input channel, stereo 1L, 1R, 2L, 2R)
Monaural Input, Analog Setting	Gain setting, PAD ON/OFF, Phantom power ON/OFF Settable on the function setting panel, 8 channels (each monaural input channel)
Stereo Input, Analog Setting	Trim setting Settable on the function setting panel, 6 channels (1-A, 1-B, 1-C), (2-A, 2-B, 2-C)
REC OUT, Gain Setting	Gain setting Settable on the function setting panel, 2 channels (REC OUT L, REC OUT R)
Preset Memory Switching	Preset selection switch ×4, ON/OFF LED ×4
Front Panel Operation Lock	Operation lock switch ×1, ON/OFF LED ×1
Operation Status Indication	Operation status LED ×3
Function Setting Panel	Rotary encoder ×3, 10-point position indication LED ×3, Function mode LED ×3
Analog Volume Fader	Input volume fader ×10, Output volume fader ×4, 2 faders linkable with supplied gang bar
Control Section	
Contact Input	8 channels, open voltage: 24 V DC, short-circuit current: 5 mA, removable terminal block (10P),
Contact output	8 channels, no-voltage make contact, contact capacity: 24 V DC/100 mA, removable terminal block (10P),
Remote Control Panel	2 channels, Maximum number of units: 8 units per channel 24 V DC input ×2, termination ON/OFF switch ×1, removable terminal block (10P) Maximum total cable length (star wiring): 800 m (total for 2 channels) Maximum cable length (daisy chain wiring): 400 m 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 (between M-864D and switching hub)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH (no condensation)
Finish	Panel: Aluminum, hairline, black, Case: Surface-treated steel plate
Dimensions	482.6 (W) × 177.1 (H) × 157.2 (D) mm (19" × 6.97" × 6.19")
Weight	5.1 kg (11.24 lb)
Accessories	Power supply cord (2 m (6.56 ft)) ×1, removable terminal plug (3P) ×12, large type removable terminal plug (10P) ×2, small type removable terminal plug (10P) ×1, fader gang bar ×4, protective cover ×1, rack mounting screw ×4, CD-ROM (containing setup software) ×1
Option	Remote control panel: ZM-9011/9012/9013/9014 AC adapter: AD-246(*3) (When using the Remote Control Panel)

(*3) Consult your TOA dealer when using an equivalent adapter.

Personal Computer Requirements

Requirements	CPU: Pentium 4, 2 GHz or faster Memory: 1.5 GB or more (2 GB recommended) Display: 1024 × 768 resolution or higher Free Hard Disk Space: 16 MB or more, however 600 MB or more is required for the 32-bit version or 1.5 GB or more for the 64-bit version when ".NET Framework" is not yet installed Optical Drive: CD-ROM drive, Network Adapter: 10BASE-T or faster connection
OS	Windows XP Service Pack 3 or later, Windows Vista (32/64-bit) Service Pack 1 or later, Windows 7 (32/64-bit)
Required Component	.NET Framework 4 Client Profile

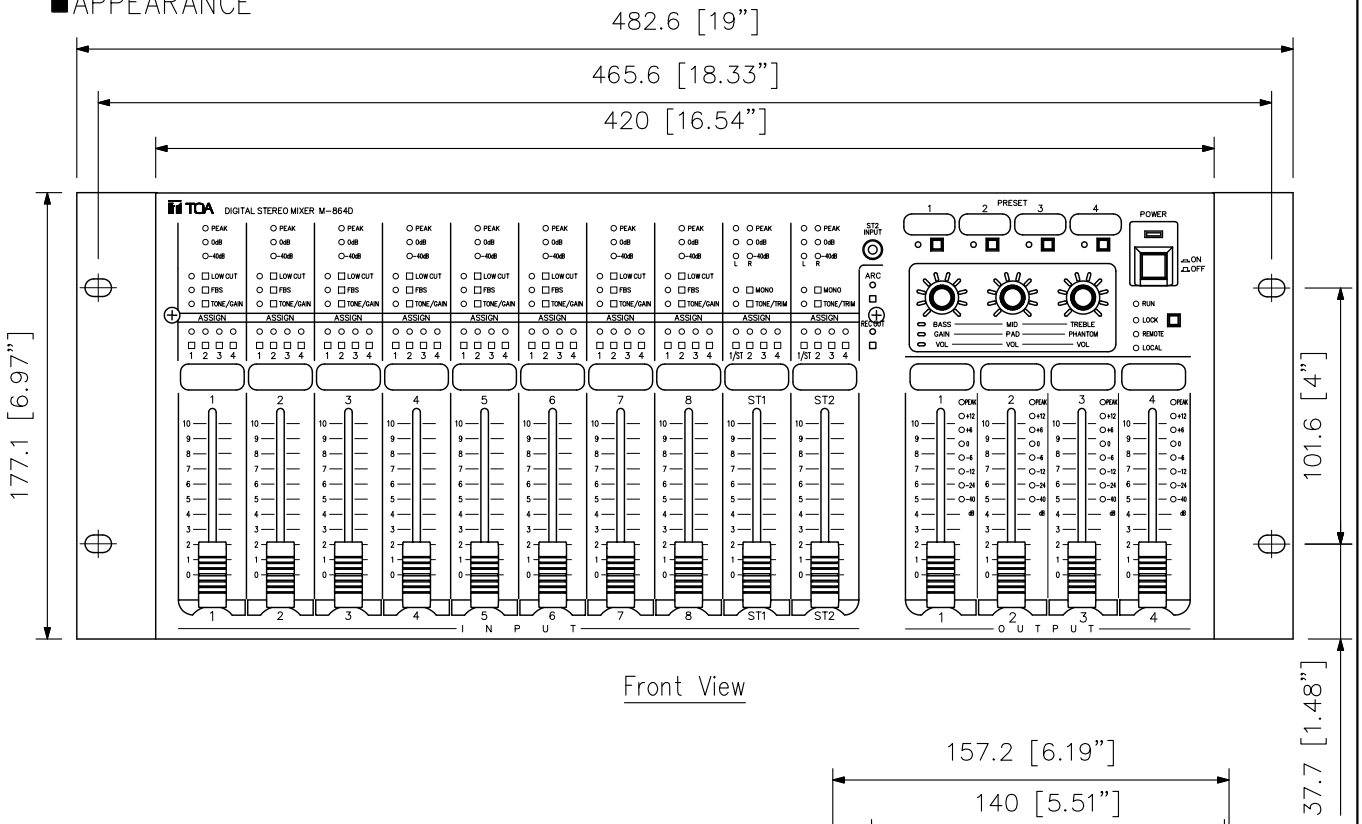
※ Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
※ Pentium is a trademark of Intel Corporation.
※ Other company names and products are alse trademarks of individual companies.

TOA

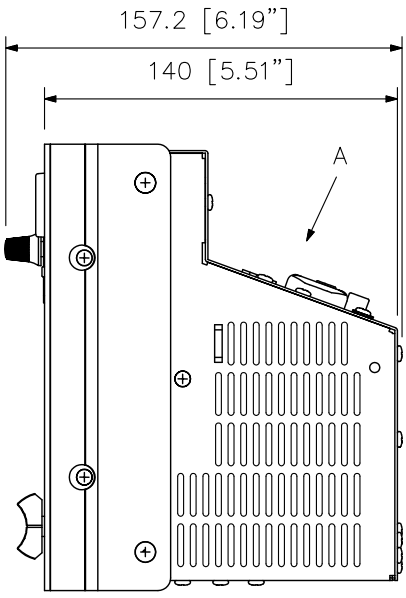
DIGITAL STEREO MIXER

M-864D
(CE/CE-AU/CE-GB)

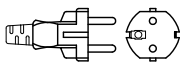
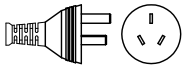
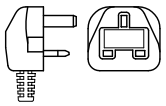
■APPEARANCE



Front View



Right Side View

Version	CE	CE-AU	CE-GB
Indication	CE	CE-AU	CE-GB
	50/60Hz	50Hz	50/60Hz
AC plug			
Conformity mark	CE	CE N29	CE

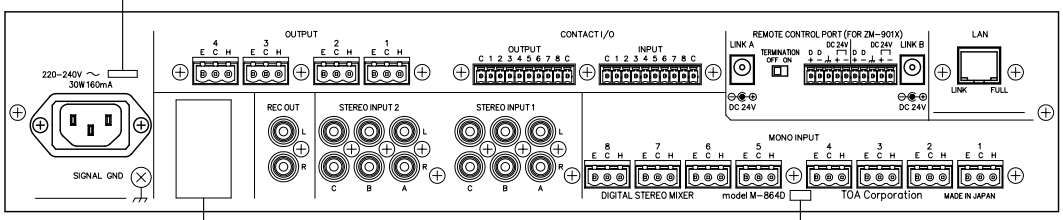


Figure as viewed from point A

UNIT: mm SCALE: 1/3

TOA Corporation

DWG No: GM-01JC1