

TS-D1100-MU 3CU

MASTER CONTROL UNIT



The TS-D1100-MU Master control unit for TOA's Digital conference system is designed to be used by way of simple connections to its Conference Units (*1) using CAT5e STP LAN cables. The Master control unit is also equipped with a recording function, PC control (*2), and one-touch connection confirmation capability. Up to 32 Conference units can be connected in a simple daisy chain configuration. However, for further expansion, up to 5 TS-D1000-SU Sub control units can be added to the system, making it possible to connect as many as 246 Conference units in one fully integrated conference system. Connection to a PC enables audio input and output during Web meetings and conferences, providing participants with clear, easy-to-hear audio. The TS-D1100-MU is also equipped with FBS (Feedback Suppression), enabling effective control of acoustic feedback. In addition the unit employs an MP3 recorder that makes it possible to record all conference contents to either a connected USB memory drive or internal memory. With the use of an optional rack mounting bracket, it can be mounted in an EIA Standard equipment rack (4 unit size).

(*1) Collective name of the 4 models: TS-D1000-CU Chairman Unit, TS-D1000-DU Delegate Unit, TS-D1100-MC Microphone Unit and TS-D1100-SP Speaker Unit

(*2) Relevant control software is supplied on a custom-made basis.

Key features

- USB Audio In/Out (USB 2.0 type-B port)
- Supports up to 32 conference units
- Mic In, AUX In, Line Out, Rec Out, Headphone monitor out, EQ In/Out
- Function setting : Number of open microphones, Auto mic-off function, Microphone priority selector
- Rack-mountable with optional MB-TS920 bracket

Specifications

Power Source	100 - 240 V AC, 50/60 Hz (use of the supplied AC adapter)
Power Consumption	60 W or less
Frequency Response	100 Hz - 13 kHz
Distortion	0.5 % or less
Signal to Noise Ratio	80 dB or more (A-weighted)
Audio Transmission System	Time division multiplexing (TDM), 10 channels 16-bit PCM, 32 kHz sampling frequency
MIC Input	-54 dB (*2), 600 Ω , unbalance, $\varnothing$ 6.3 mm phone jack (2P)
Output	LINE: -10 dB (*2), 10 k Ω , unbalance, $\varnothing$ 6.3 mm phone jack (2P) REC: -10 dB (*2), 10 k Ω , unbalance, RCA pin jack, monaural HEADPHONES: $\varnothing$ 3.5 mm mini jack, monaural
USB Audio Input/Output	USB 2.0, type-B port
Equalizer Input/Output Terminal	-10 dB (*2), 10 k Ω , unbalance, RCA pin jack
Video Conference System Input/Output Terminal	-10 dB (*2), 10 k Ω , unbalance, RCA pin jack
LED Indicator	Power indicator, Conference mode indicator, Number of open microphones indicators, Microphone auto off indicator, Monitor speaker of conference units volume indicators, Connection test indicator, External control indicator, Setting lock indicator, Recording status indicator, USB Access status indicator, USB memory status indicator, Internal memory status indicator, Remaining USB memory capacity warning indicator, Remaining internal memory capacity warning indicator, LINK/ACT indicator, 10BASE-T/100BASE-TX indicator
Number of Connectable Conference Units	32 units
Number of Connectable Sub Control Units	5 units
Maximum Cable Length	50 m (164.04 ft) (between Master control unit and terminal Chairman/Delegate unit at end of daisy chain) (*3) 1 m (3.28 ft) (between Master control unit and Sub control units) (Use the cable supplied with the Sub control unit.)
Maximum Number of Open Microphones	2 chairman units, 8 delegate units
Master/Sub Control Units Terminal	RJ45 connector
Function Key	Conference mode selector key: Standard/Override/Voice activation/Chairman Only Number of open microphones selector key: 1/2/8 Microphone auto off setting key: ON/OFF Monitor speaker of conference units volume setting key: -,+ Setting lock key: ON/OFF Headphone volume setting key: -,+
Operation Key	Connection test, Rec start, Rec stop
Recording Port	USB-A
Recording Function	Recordings can be made to a USB memory device (*4) or the internal memory. Recording format: MP3 (MPEG-1 Audio Layer-3), monaural Sampling frequency: 32 kHz, Bit rate: 128 kbps
Network I/F	10BASE-T/100BASE-TX (Automatic-Negotiation)
Network Protocol	TCP, HTTP, DHCP, ARP (APIPA), UDP (mDNS), UPnP
Network Connector	RJ45 connector

Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Panel: Surface-treated steel plate, black, 30 % gloss, paint
Weight	2.2 kg (4.85 lb)
Included Accessories	AC adapter (Cord length: 1.8 m or 5.91 ft DC cord, and 2 m or 6.56 ft detachable AC cord) x 1, USB cable (3 m or 9.84 ft) x 1
Optional Accessories	Rack mounting bracket: MB-TS920

(*2) 0 dB = 1V

(*3) Cable lengths can be extended to a maximum of 100 m or 328.08 ft with the use of the Extension Unit.

(*4) A USB 2.0-compatible FAT32-formatted flash memory device of up to 32 GB in capacity can be used. There may be cases in which a USB flash drive cannot be used with the TS-D1100-MU, depending on the drive's attributes or recording conditions.

Dimensions

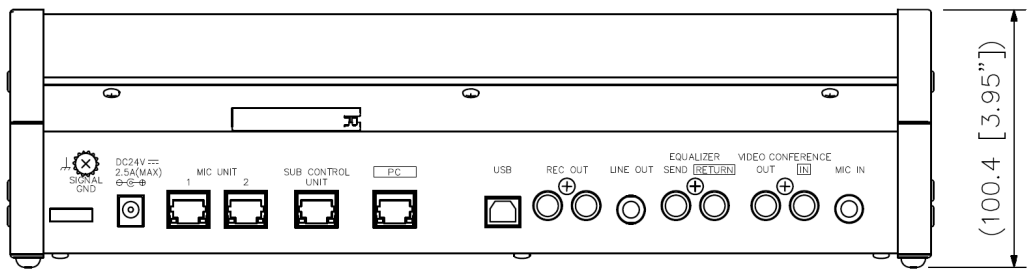


Figure as viewed from point A

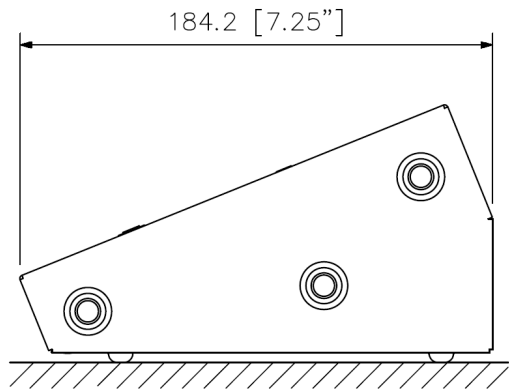
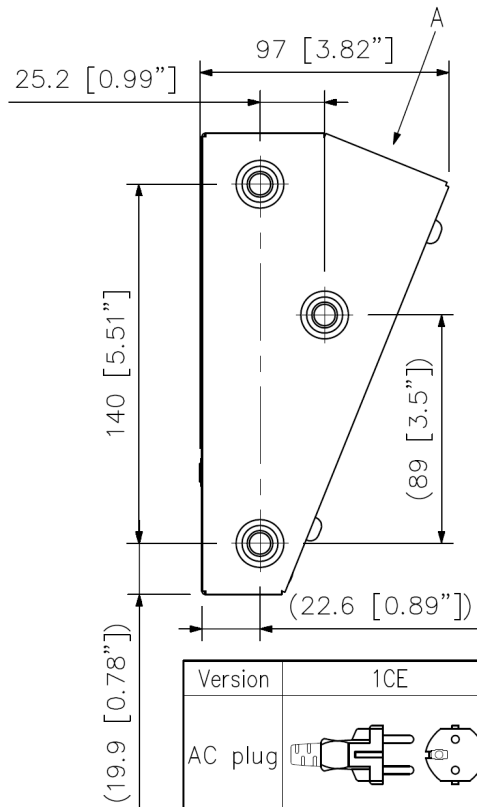
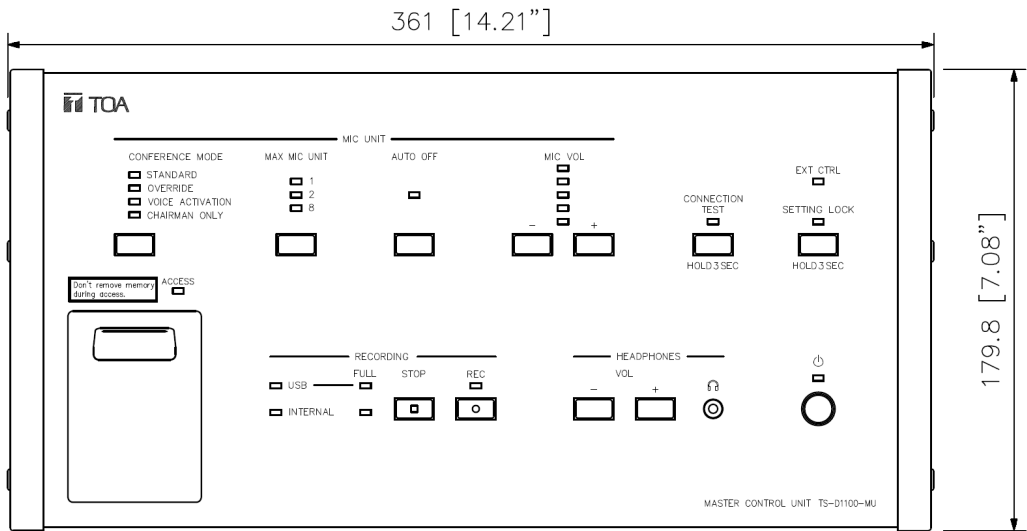


Figure of the unit installed

Version	1CE	3CU	4CE	5CE	6CE
AC plug					

UNIT:mm

Note: Numerical values in parentheses are for reference only.

A&E specifications

The master control unit shall configure and control delegate and chairman units via standard CAT5e STP LAN cable and by a simple daisy chain topology shall be able to control up to 32 chairman and delegate units. It shall include built-in USB audio input/output capability to support direct connection with a PC for establishing a hybrid conferencing environment. It shall be possible to extend the number of delegate/chairman units to 246 by utilizing sub-control units, allowing full-integrated conference facilities. The system shall be easy to configure allowing the user quick and easy set up and disassembly. The master control unit shall employ an automatic FBS (feedback suppressor) function that will systematically eliminate acoustic feedback by a series of notch filters allowing optimum performance at all times.

There shall be a NOM (Number of Open Microphones) facility allowing up to 2 chairmen and 8 delegates to participate simultaneously and a Mic auto-off function that will disable the microphone after 30 seconds if no signal is present. There also shall be an energy-saving function that will switch off the system after 2 hours of inactivity. The master control unit shall have recording facilities that will allow recordings to be made in MP3 format with a sampling frequency of 32 kHz with a 128 kbps bit rate and stored on an internal 1GB hard drive or an additional USB drive, there shall also be two mono RCA recording outputs. The master control unit shall also have PC control to facilitate custom control software as well as integration with other devices such as cameras. The master control unit shall employ a push and hold test function button that will confirm connectivity is correct and for additional monitoring purposes there shall be LED indication for the following: power, conference mode, number of open microphones, microphone auto-off, speaker monitor, connection test, external control, setting lock, recording status, USB access status, USB memory status, internal memory status, remaining USB memory capacity warning, internal memory capacity warning, LINK/ACT and 10BASE-T/100BASE-TX indicators. The master control unit shall also provide RCA sockets to facilitate an external graphic equalizer, videoconference, a line output jack socket for external amplifier and a headphone mini jack socket. Power requirement shall be 100-240 VAC, 50/60 Hz with a 60 W or less power consumption using the provided AC Power Supply. The master unit shall have the option of being a stand-alone unit or rack-mountable using optional brackets and shall use four EIA component rack spaces. Dimensions shall be 361 (W) x 100.4 (H) x 179.8 (D) mm (14.21" x 3.95" x 7.08") weighing 2.2 kg (4.85 lbs.) and finished in treated steel plate with black metallic paint. Optional extras: TS-D1000-SU Sub control unit, TS-D1000-EX Extension unit that will allow the increase in cable lengths, MB-TS920 Rack mounting brackets manufactured by TOA Corporation. Manufacturer: TOA Corporation

Model: TS-D1100-MU