



## MASTER CONTROL UNIT

TS-D1000-MU  
(1CE/4CE/5CE/6CE)

### DESCRIPTION

The TS-D1000-MU Master control unit for TOA's Digital conference system is designed to be used by way of simple connections to its Chairman and Delegate units using CAT5e STP LAN cables.

The Master control unit is also equipped with a recording function, PC control (\*1), and one-touch connection confirmation capability. Up to 32 Chairman/Delegate 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 Chairman/Delegate units in one fully integrated conference system.

The TS-D1000-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) Relevant control software is supplied on a custom-made basis.

### SPECIFICATIONS

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Source                                  | 100 - 240 V AC, 50/60 Hz (use of the supplied AC adapter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Power Consumption                             | 60 W or less                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Audio Transmission System                     | Time division multiplexing (TDM), 10 channels<br>16-bit PCM, 32 kHz sampling frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| MIC Input                                     | -54 dB (*2), 600 $\Omega$ , unbalance, $\phi$ 6.3 mm phone jack (2P)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Output                                        | LINE: -10 dB (*2), 10 k $\Omega$ , unbalance, $\phi$ 6.3 mm phone jack (2P)<br>REC: -10 dB (*2), 10 k $\Omega$ , unbalance, RCA pin jack, monaural<br>HEADPHONES: $\phi$ 3.5 mm mini jack, monaural                                                                                                                                                                                                                                                                                                                                      |
| EQ Insert Input/Output Terminal               | -10 dB (*2), 10 k $\Omega$ , unbalance, RCA pin jack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Video Conference system Input/Output Terminal | -10 dB (*2), 10 k $\Omega$ , unbalance, RCA pin jack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Number of Connectable Chairman/Delegate Units | 32 units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Number of Connectable Sub Control Units       | 5 units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Cable Distance                        | 50 m (164.04 ft) (between Master control unit and terminal Chairman/Delegate unit at end of daisy chain) (*3)<br>1 m (3.28 ft) (between Master control unit and Sub control units)<br>(Use the cable supplied with the Sub control unit.)                                                                                                                                                                                                                                                                                                |
| Maximum Number of Open Microphones            | 2 chairman units, 8 delegate units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Chairman/Delegate Units Terminal              | RJ45 connector x2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Sub Control Units Terminal                    | RJ45 connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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 |
| Function Key                                  | Conference mode selector key: Standard/Override/Voice activation/Chairman Only<br>Number of open microphones selector key: 1/2/8<br>Microphone auto off setting key: ON/OFF<br>Monitor speaker of conference units volume setting key: -,+<br>Setting lock key: ON/OFF<br>Headphone volume setting key: -,+                                                                                                                                                                                                                              |
| Operation Key                                 | Connection test, Rec start, Rec stop                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Recording Ports                               | USB-A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Recording Function                            | Recordings can be made to a USB memory device (*4) or the internal memory.<br>Recording format: MP3 (MPEG-1 Audio Layer-3), monaural<br>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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Accessory                                     | AC adapter (Cord length: 1.8 m (5.91 ft) DC cord, and 2 m (6.56 ft) detachable AC cord) ---1                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Option                                        | Rack mounting bracket: MB-TS920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

(\*2) 0 dB = 1 V

(\*3) Cable lengths can be extended to a maximum of 100 m (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-D1000-MU, depending on the drive's attributes or recording conditions.

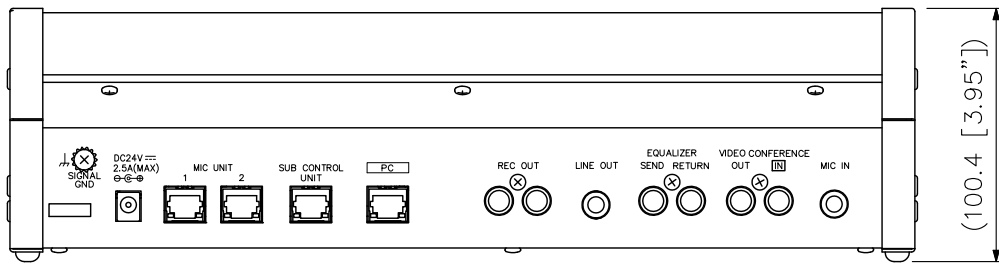


Figure as viewed from point A

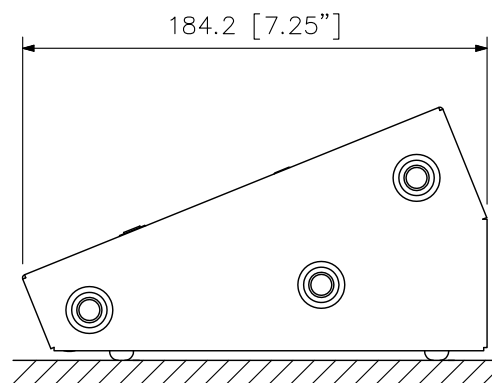
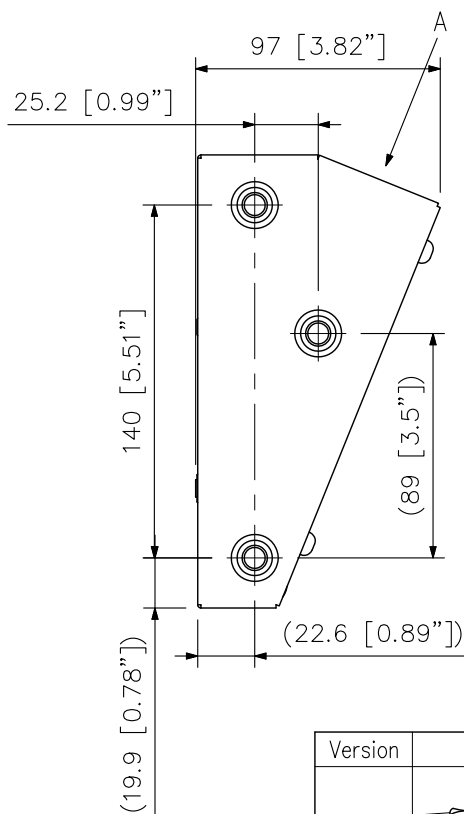
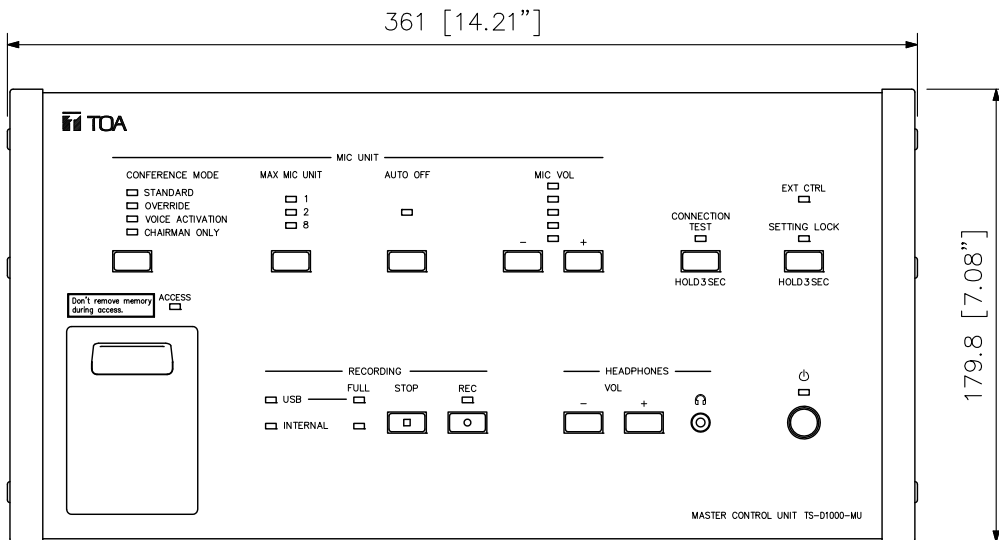


Figure of the unit installed

| Version | 1CE | 4CE | 5CE | 6CE |
|---------|-----|-----|-----|-----|
| AC plug |     |     |     |     |