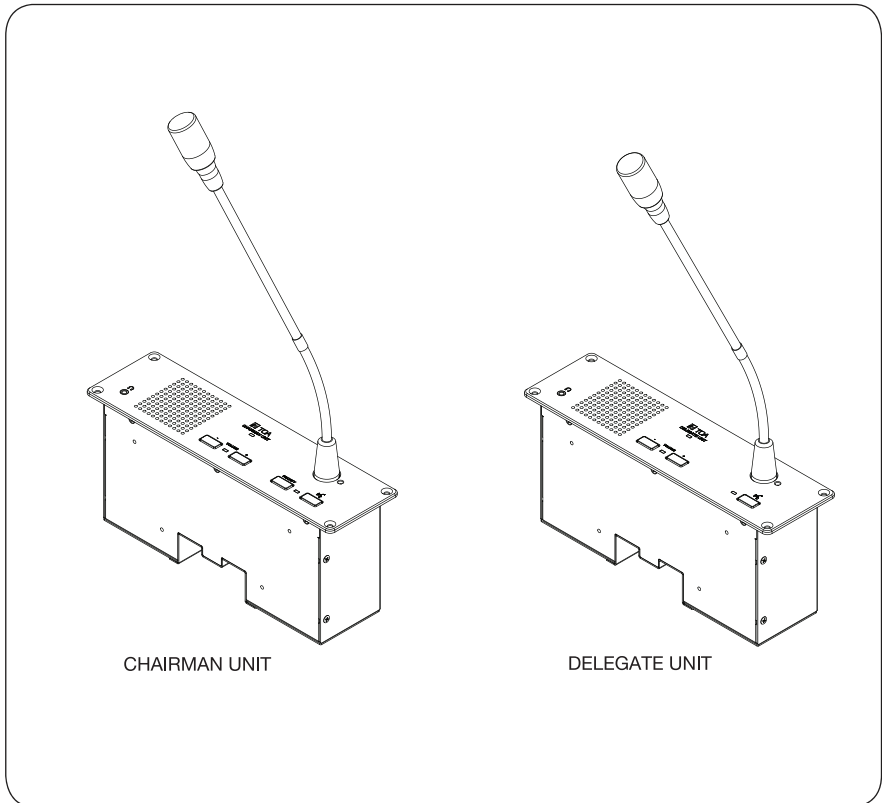


**FLUSH-MOUNT DIGITAL CONFERENCE UNIT**

TS-D1000-CF (CHAIRMAN UNIT)

TS-D1000-DF (DELEGATE UNIT)



Thank you for purchasing TOA's Conference system.

Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

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# 1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and cautions regarding safety.
- After reading, keep this manual for future reference.

## WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

## CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage

## WARNING

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- Since the unit is designed for indoor use, do not install it outdoors. If installed outdoors, the aging of parts causes the unit to fall off, resulting in personal injury. Also, when it gets wet with rain, there is a danger of electric shock.
- The terminals marked with the symbol are hazardous live. The external wiring to these terminals requires installation by an instructed person.
- Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.
- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - If you detect smoke or a strange smell coming from the unit
  - If water or any metallic object gets into the unit
  - If the unit falls, or the unit case breaks
  - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - If it is malfunctioning (no tone sounds)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to qualified service personnel.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover as this may result in fire or electric shock.

## CAUTION

- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.
- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.

Warning: Operation of this equipment in a residential environment could cause radio interference.

## 2. GENERAL DESCRIPTION

The TS-D1000-CF Chairman units, and the TS-D1000-DF Delegate units are designed for use in the TOA Digital conference systems.

The systems can be used by simply connecting a number of Conference units\* to the TS-D1000-MU or TS-D1100-MU Master control unit, using Cat5e STP LAN cable.

These conference units are the Flush-mount devices, ideal for use in permanent installations, creating individual participant positions.

Two types of dedicated microphones are made available for the conference units as optional products: the TS-D1000-M1 Standard microphone and the TS-D1000-M2 Long microphone.

\*Collective name of the two models: TS-D1000-CF Chairman Unit and TS-D1000-DF Delegate Unit

## 3. FEATURES

The TS-D1000-CF Chairman unit has Priority speech function. When a speech of other Delegate unit is in progress, the Chairman unit can terminate and supersede the Delegate unit.

The optional dedicated microphones employ the XLR-type connectors, and are designed to be detachable for space-saving storage. There is a hidden latch lock to help restrict unauthorized disassembly.

## 4. AVAILABLE INSTRUCTION MANUALS

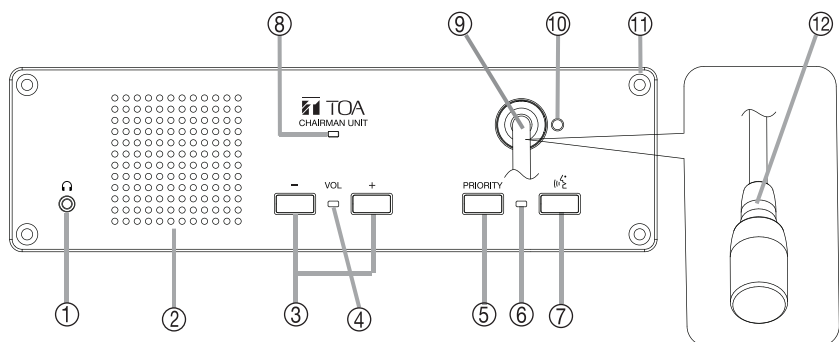
The following three instruction manuals are made available for the TS-D1100 Series digital conference system using the Flush-mount models:

	Manual Name	Manual Outline	Remarks
(1)	Instruction manual (TS-D1000-CF/DF)	General explanations of installation, connection, operation, settings, etc	The manual currently in hand
(2)	Instruction manual (TS-D1100-MU)	General explanations of installation, connection, operation, settings, etc	Packaged with TS-D1100-MU
(3)	Instruction manual (Browser settings)	Explanation of browser settings	Web only

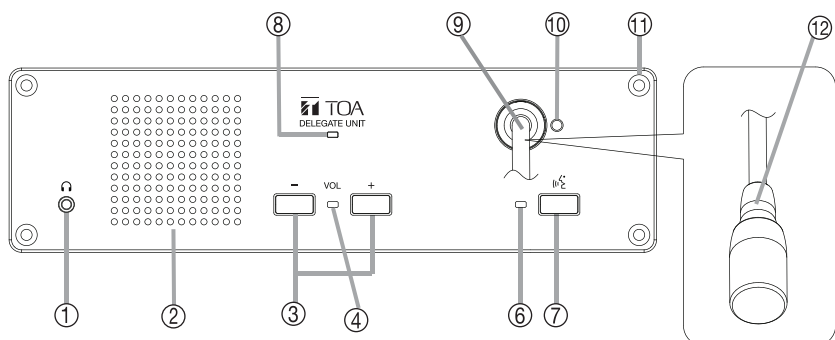
### Note

Regarding (3) above, since some items can only be set using a web browser, download the manual from the TOA DATA Library. (<https://www.toa-products.com/international/>).

## 5. NOMENCLATURE AND FUNCTIONS



[TS-D1000-CF Top view]



[TS-D1000-DF Top view]

### 1. Earphone jack

Connect earphone to this jack (mini-jack).

#### Note

Monitor speaker output is muted when the earphone plug is inserted into the earphone jack.

### 2. Monitor speaker

Speech signals from other Conference units and other audio signals from the Master control unit are output from this speaker.

Use the Volume control key (3) to adjust the volume. The sound volume of the monitor speaker is attenuated whenever the unit is being used for speaking.

#### Tip

Speaker output can be muted by way of browser setting.\*

### 3. Volume control keys (-, +)

Pressing or pressing and holding these keys reduce or increase volume of the Monitor speaker and the Earphone sound.

#### Note

The factory default setting is minimum volume.

\* For details, please refer to the separate Instruction Manual (Browser Settings), which can be downloaded from the TOA DATA Library (<https://www.toa-products.com/international/>).

### 4. Volume key indicator

Lights up green while pressing the Volume control key (- or +) and simultaneously not reaching min/max volume yet.

Lights up red while pressing the Volume control key (- or +) and simultaneously reaching min/max volume.

### 5. Priority speech key (TS-D1000-CF only)

Gives speaking priority to the current speaker. When this key is used for speech, no other delegate units can be used. Sound from external microphone, video conference inputs, and PC being connected to the USB port are also muted. The key has 2 different operating modes, PTT mode and ALT.

Factory preset to PTT mode.

PTT mode: Microphone turns ON only while the Talk key is pressed.

ALT mode: Microphone turns ON when the Talk key is pressed, and OFF when pressed again.

If Chime is set to sound, a chime tone sounds when the key is pressed.

Factory preset to ON.

A browser can be used to set key operation and chime volume.

For more information regarding key operation and its actions, please refer to "Initiating Priority Speech" on p.8-9.

### 6. Speech indicator (Red)

Remains lit while the microphone is in use (during speech).

### 7. Talk key

When this key is pressed, both the Speech indicator (6) and the Microphone in-use indicator (12) light, and the microphone turns on. Pressing this key again turns off both indicators and the microphone.

### 8. Power indicator (White)

Light when the power is switched ON.

### 9. Microphone

Use either the TS-D1000-M1 Standard microphone or TS-D1000-M2 Long microphone.

### 10. Microphone latch lock

Use the hex wrench M3 (accessory of TS-D1000-CF) to push into this latch lock hole to dismantle the microphone.

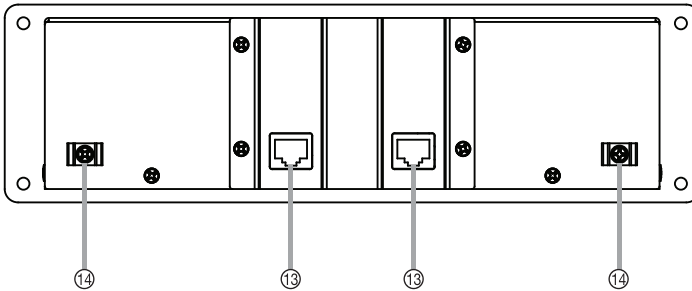
### 11. Installation holes

Use these supplied M4 wood screws to install through these 4 holes.

### 12. In-use indicator (Red)

Lights when the microphone is turned on for speech).

## [TS-D1000-CF and TS-D1000-DF Bottom View]



### 13. Conference unit connection terminals

RJ45 x 2 connect these terminals to the Conference unit connection terminal of the TS-D1100-MU Master control unit, a TS-D1000-SU Sub control unit, a TS-D1000-EX Extension unit or another Conference unit using CAT5e STP LAN cables.

#### Tip

Either terminal may be used for connection.

### 14. Cable clamp

To use the tie cable accessories to fix the LAN cables to prevent accidentally being disconnected.

## 6. CONFERENCE UNITS OPERATION

When the Voice activation conference mode is selected, no further operation of the Conference unit is required (See p. 31 of TS-D1100-MU's Instruction Manual).

### 6.1. Requesting Permission to Speak

**Step 1.** Press the Talk key.

Both the Speech and the microphone's In-use indicators light up, and the microphone turns on.

**Notes**

- The microphone cannot be turned on while the Chairman unit has Priority speech enabled (the next page), even if the Talk key is pressed.
- In the case of the TS-D1000-DF Delegate unit, the microphone may not turn on, even if the Talk key is pressed, due to Max. open mic No. restrictions being enabled (See p. 32 of TS-D1100-MU's Instruction Manual).
- Up to two Chairman units can always be used for speaking, regardless of Max. open mic No. restrictions (Priority speech excepted).

**Tips**

- Monitor speaker sound volume is automatically attenuated whenever both the Speech and the microphone's In-use indicators are lit.
- Speaker volume can also be muted in the browser settings.

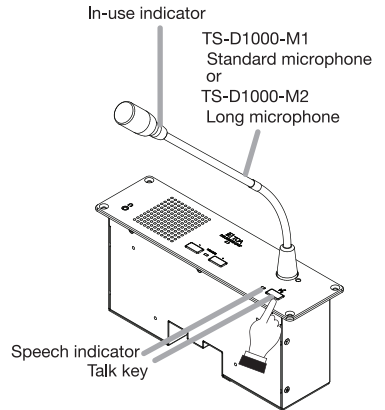
For details, please refer to the separate Instruction Manual (Browser Settings), which can be downloaded from the TOA DATA Library (<https://www.toaproducts.com/international/>).

**Step 2.** Speak.

**Step 3.** After speaking is finished, press the Talk key again.

Both the Speech and the microphone's In-use indicators extinguish, returning the monitor speaker output to its original volume.

[TS-D1000-DF Delegate unit example]



## 6.2. Initiating Priority Speech (TS-D1000-CF Chairman Unit Only)

Only the TS-D1000-CF Chairman unit has Priority control over speaking functions. Even when a speech is in progress among Conference units, the Chairman unit can terminate the speech and supersede other speakers.

Chairman unit priority speech activation can differ depending on whether operation is set to PTT (see below) or ALT (the next page). Priority speech operation can be changed by browser. For details, please refer to the separate Instruction Manual (Browser Settings).\*

### Note

Chairman unit priority speech cannot be activated when the Conference mode is set to Voice activation. (See "Conference Mode Setting" on p. 31 of TS-D1100-MU's Instruction manual).

### 6.2.1. When priority speech activation is set to PTT (factory default setting)

- Step 1.** Speak while holding down the Priority speech key.  
Both the Speech and the microphone's In-use indicators light, and the microphone turns on.  
A single-tone chime is sounded at all other Conference units, indicating that the Delegate units cannot be used for speaking.  
Chime ON/OFF settings can be changed via the browser (factory default setting: ON).  
For details, please refer to the separate Instruction Manual (Browser Settings).\*

### Notes

- During Chairman unit priority speech, sound output from connected wired microphones, video conference system, and PC being connected to the USB port are muted.
- In the case of systems configured with multiple Chairman units, if one Chairman unit has initiated Priority speech, other Chairman units cannot initiate Priority speech, even if their Priority speech keys are pressed.

### Tips

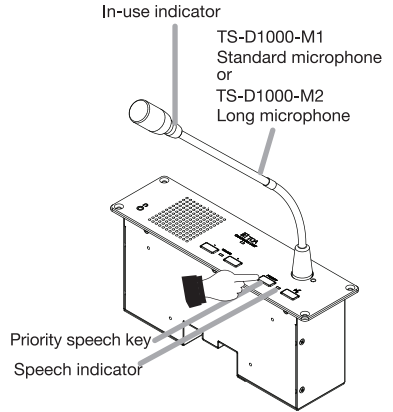
- Monitor speaker sound volume is attenuated when both Speech and the microphone's In-use indicators are lit.
- Monitor speaker volume can be muted in the browser settings. For details, please refer to the separate Instruction Manual (Browser Settings).

- Step 2.** Release the Priority speech key after speaking is completed.  
Both the Speech and the microphone's In-use indicators extinguish, returning monitor speaker output to its original volume.

### Note

Terminated Conference units do not automatically revert to their previous speaking modes after Priority speech is terminated. In such cases, first press the Talk key again to cause both the Speech and the microphone's In-use indicators to light, then begin speaking.

\* Can be downloaded from the TOA DATA Library (<https://www.toa-products.com/international/>).



## 6.2.2. When priority speech activation is set to ALT

### Step 1. Press the Priority speech key.

Both the Speech and the microphone's In-use indicators light, and the microphone turns on.

A single-tone chime is sounded at all other Conference units, disabling speech from the Delegate units.

The chime can be turned ON or OFF in the browser settings (factory default setting: ON). For details, please refer to the separate Instruction Manual (Browser Settings).\*

#### Notes

- Monitor speaker sound volume is attenuated when both Speech and the microphone's In-use indicators are lit.
- Monitor speaker volume can be muted in the browser settings. For details, please refer to the separate Instruction Manual (Browser Settings).\*

### Step 2. Speak.

While speaking in Priority speech mode, no Delegate units can speak.

#### Notes

- During Chairman unit Priority speech, sound output from connected wired microphones, video conference system, and PC being connected to the USB port are muted.
- In the case of systems configured with multiple Chairman units, if one Chairman unit has initiated Priority speech, other Chairman units cannot use Priority speech, even if their Priority speech keys are pressed.

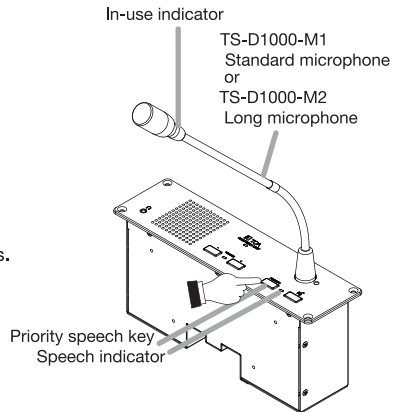
### Step 3. After speaking is finished, press the Priority speech key again.

Both the Speech and the microphone's In-use indicators extinguish, returning monitor speaker output to its original volume.

#### Note

Terminated Conference units do not automatically revert to their previous speaking modes after Priority speech is terminated. In such cases, first press the Talk key again to cause both the Speech and the microphone's In-use indicators to light, then begin speaking.

\* Can be downloaded from the TOA DATA Library (<https://www.toa-products.com/international/>).



## 6.3. Monitor Volume Setting

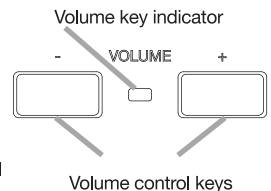
Set the Monitor speaker volume and Earphone sound volume to an appropriate level using the Volume control keys. The volume level can be adjusted in 64 steps (factory default setting: minimum).

Pressing or pressing and holding the [-] key reduces the volume.

Pressing or pressing and holding the [+] key increases the volume.

#### Notes

- The volume status is auto-stored. After restarting the unit's power, the volume will be previous state when turning off power.
- The Volume key indicator will light up green while pressing the Volume control key (- or +) and simultaneously not reaching min/max volume yet.
- The Volume key indicator will light up red while pressing the Volume control key (- or +) and simultaneously reaching min/max volume.

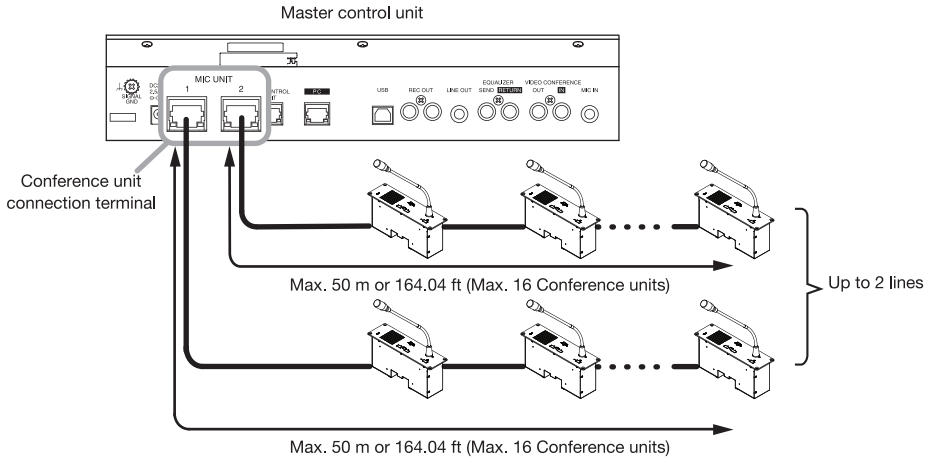


## 7. SYSTEM EXAMPLES

- In a basic system, a maximum of 32 Conference units can be connected to the Master control unit (See the "Basic System Example" below).
  - To connect more Conference units (33 to 246), add as many Sub control units as required to support the total number of Conference units (See "Expanded System Example – Connected Unit Expansion" on the next page).
  - To extend the maximum distance of Conference unit connectivity, add the Extension unit (See "Expanded System Example – Distance Extension" on p. 12).
- Use a CAT5e STP cable fitted with RJ45 connectors at both ends for connection.

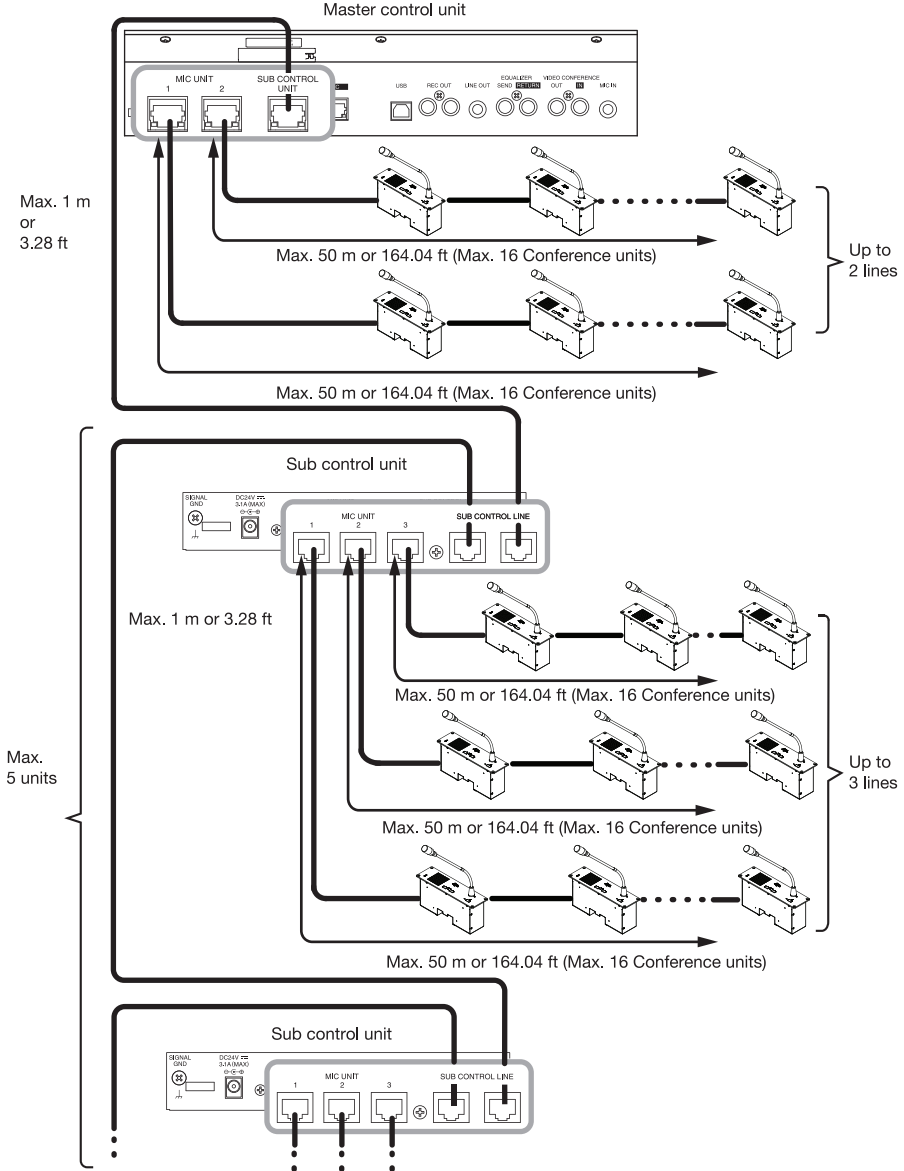
### 7.1. Basic System Example

The Master control unit is equipped with 2 Conference unit connection terminals, each of which allows up to 16 Conference units to be connected in a daisy chain. The maximum distance from the Master control unit to the last Conference unit in the daisy chain is 50 m (164.04 ft).



## 7.2. Expanded System Example – Connected Unit Expansion

- Up to 246 Conference units can be connected to the basic system with the addition of Sub control units.
- Up to 5 Sub control units can be connected to the Master control unit.
- The Master control unit has 2 Conference unit connection terminals. Each Sub control unit has 3.
- Up to 16 Conference units can be connected to each terminal in a daisy chain.
- The maximum distance from each Sub control unit to the last Conference unit in the daisy chain is 50 m (164.04 ft).
- The maximum distance between the Master control unit and a Sub control unit, or between Sub control units is 1 m (3.28 ft).

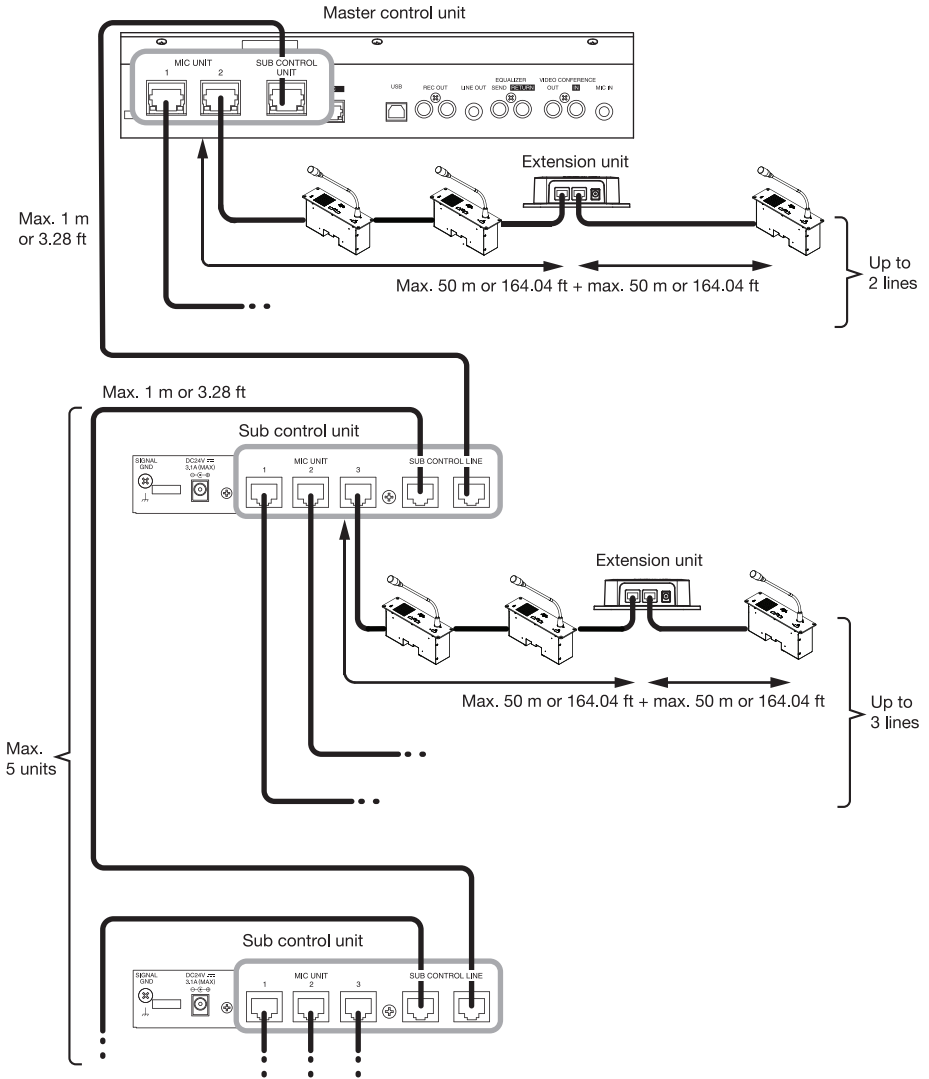


### 7.3. Expanded System Example – Distance Extension

Use the TS-D1000-EX Extension unit when wishing to extend the distance from the Master control unit or Sub control unit to the Conference units in the basic system or in systems in which the number of connected units has been increased.

#### Note

Only one TS-D1000-EX can be connected per line. It may be connected in any position on the line.

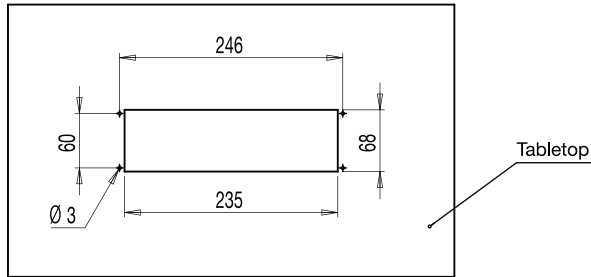


## 8. INSTALLATION

### 8.1. Mounting the Conference Unit on a Table

How to attach the Conference Unit on a Table:

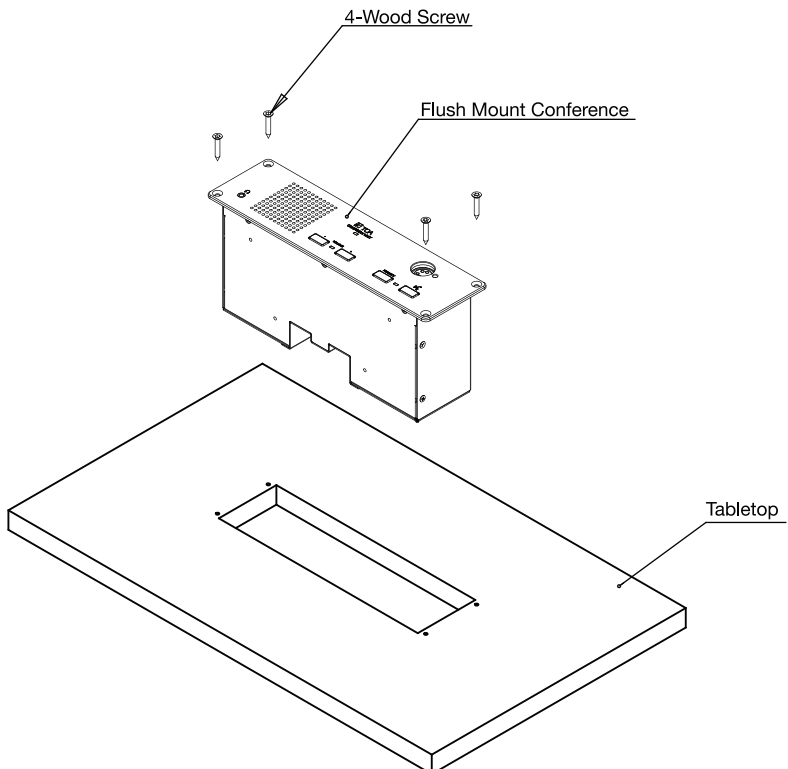
Step 1. Drill the square hole and screw hole of the corresponding size for the tabletop.



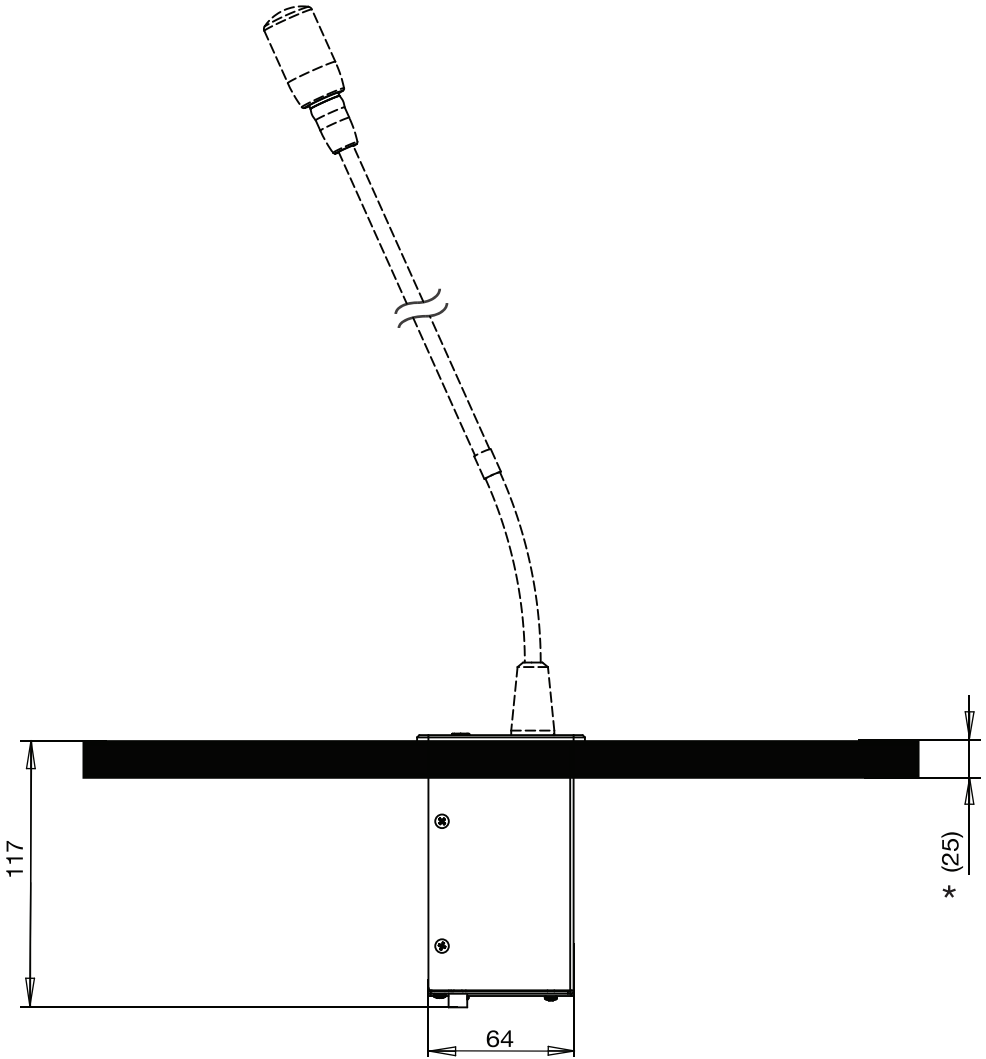
Step 2. Put the flush mounting unit into the desktop with a square hole.

Step 3. Install these supplied M4 wood screws to holds the fixed plate to the Table, so as to fix the device.

Step 4. Please see the Installation Diagram as below:



## 8.2. The installation information

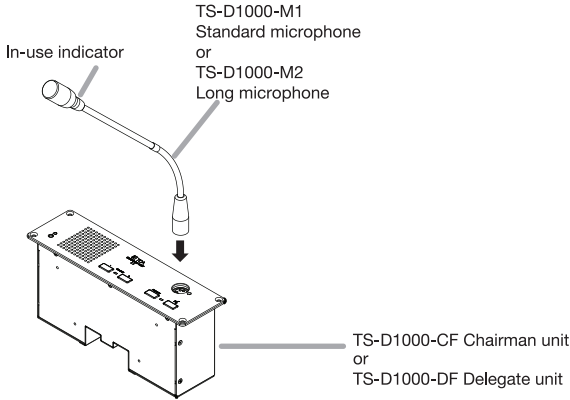


**Note :** \* In the case of using M4 wood screw accessories, the minimum thickness of tabletop is required 25mm.

## 8.3. Microphone Connection and Disconnection

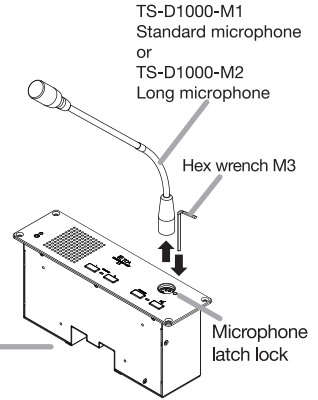
### 8.3.1. Microphone Connection

Attach the TS-D1000-M1 Standard microphone or TS-D1000-M2 Long microphone to the Conference unit as shown below.



### 8.3.2. Microphone Disconnection

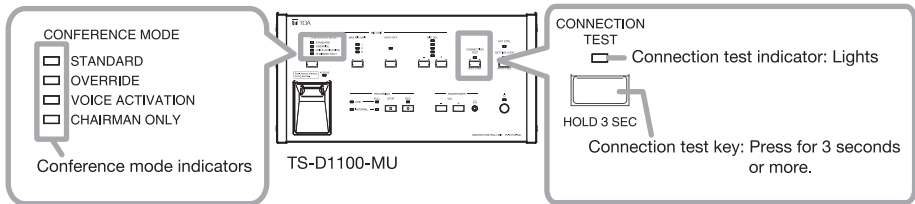
Use the hex wrench M3 to push into this latch lock hole to dismantle the microphone.



## 8.4. Connection Test

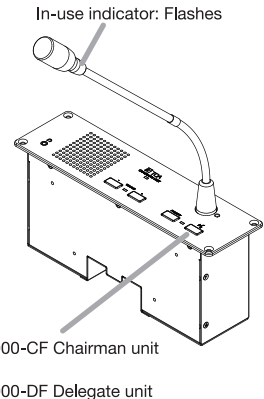
It is possible to confirm whether all Conference units are correctly connected following system setup.

Step 1. Press the Connection test key on the Master control unit's top panel for 3 seconds or more. The unit is placed in Connection test mode, causing the Connection test indicator to light and all connected microphones' In-use indicators to flash.



Step 2. Visually check to confirm that the microphone's In-use indicators of all connected Conference units are flashing. Conference units displaying flashing microphone's In-use indicators are correctly connected. If any units have Microphone indicators that do not flash, check the connection between the unresponsive Conference unit and its microphone, as well as the connection between that Conference unit and the Master control unit or Sub control unit.

Step 3. Press the Connection test key again for 3 seconds to terminate the Connection test mode. This causes both the Connection test and microphone's In-use indicators to extinguish.



## 9. SPECIFICATION

### 9.1. Chairman Unit TS-D1000-CF

Power Source	24 V DC (supplied from the TS-D1000-MU Master control unit (option) TS-D1100-MU Master control unit (option) TS-D1000-SU Sub control units (option) or TS-D1000-EX Extension units (option) )
Power Consumption	1.5 W or less
Signal to Noise Ratio	65 dB or more (A-weighted)
Input	Microphone terminal: XLR-3-31 type, hidden latch lock for removable microphone
Output	Monitor speaker: 8 Ω, 0.4 W Earphone: Ø3.5 mm mini Jack (3P: monaural)
Speaker Output	75dB SPL
Connecting Terminal	RJ45 connector x2
LED Indicator	Power indicator, Speech indicator, Volume key indicator
Function	Speech function, Priority indicator, Speaker/Earphone volume control
Operating Temperature	0 to +40 °C (32 to 104 °F)
Operating Humidity	90%RH or less (no condensation)
Finish	Front panel: Aluminum, Hairline, Anodizing (color: Black) Case: Steel plate
Dimensions	260.0(W) x 120.0 (H) x 74.0 (D) mm
Weight	1.04Kg
Accessory	Wood screw (M4)...4, Cable tie...2, Hex wrench (M3)...1
Option	Standard microphone: TS-D1000-M1 Long microphone TS-D1000-M2 Short microphone TS-D1000-M1S

Note: The design and specifications are subject to change without notice for improvement.

### 9.2. Delegate Unit TS-D1000-DF

Power Source	24 V DC (supplied from the TS-D1000-MU Master control unit (option) TS-D1100-MU Master control unit (option) TS-D1000-SU Sub control units (option) or TS-D1000-EX Extension units (option) )
Power Consumption	1.5 W or less
Signal to Noise Ratio	65 dB or more (A-weighted)
Input	Microphone terminal: XLR-3-31 type, hidden latch lock for removable microphone
Output	Monitor speaker: 8 Ω, 0.4 W Earphone: Ø3.5 mm mini Jack (3P: monaural)
Speaker Output	75dB SPL
Connecting Terminal	RJ45 connector x2
LED Indicator	Power indicator, Speech indicator, Volume key indicator
Function	Speech function, Speaker/Earphone volume control
Operating Temperature	0 to +40 °C (32 to 104 °F)
Operating Humidity	90%RH or less (no condensation)
Finish	Front panel: Aluminum, Hairline, Anodizing (color: Black) Case: Steel plate
Dimensions	260.0(W) x 120.0 (H) x 74.0 (D) mm
Weight	1.04Kg
Accessory	Wood screw (M4)...4, Cable tie...2
Option	Standard microphone: TS-D1000-M1 Long microphone: TS-D1000-M2 Short microphone: TS-D1000-M1S

Note: The design and specifications are subject to change without notice for improvement.