

## TS-820 3CU

### CENTRAL UNIT



The TS-820 is a Central Unit of the Infrared Conference System that allows easy installation and flexible layout. By connecting TS-905/907 IR Transmitter/Receiver, TS-820 can control the Chairman and Delegate Units via wireless infrared signal. It features the installation confirmation function that allows the connection status of IR Transmitter/Receiver and Chairman/Delegate Units to be verified. The TS-820 is also equipped with FBS (Feedback Suppression), enabling effective control of acoustic feedback. The system can be controlled by PC (\*1). 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.

### Key features

- Main unit of the system
- Up to 64 conference units controllable
- Mic In, AUX In, Line Out, Rec Out, Headphone monitor out, EQ in/out
- Function setting – Number of open microphones, Auto mic-off function, Speech priority selector, Feedback suppressor
- Rack-mountable with MB-TS920 optional bracket

## Specifications

Power Source	100 - 240 V AC, 50/60 Hz (use of the supplied AC adapter)
Power Consumption	72 W
Current Consumption	Max. 3 A DC (when 24 V DC is supplied from the accessory AC adapter)
Input	MIC: -60 dB (*2) , 600 Ω, unbalanced, Ø6.3 mm phone jack (2P) AUX: -20 dB (*2) , 10 kΩ, unbalanced, Ø6.3 mm phone jack (2P)
Output	LINE: -10 dB (*2), 10 kΩ, unbalanced, Ø6.3 mm phone jack (2P) REC: -10 dB (*2), 10 kΩ, unbalanced, RCA pin jack HEADPHONES: Ø3.5 mm mini jack (3P:monaural)"
Equalizer Input/Output Terminal	Input: -20 dB (*2), 10 kΩ, unbalanced, RCA pin jack Output: -20 dB (*2), 10 kΩ, unbalanced, RCA pin jack
LED Indicator	Audio signal receiving indicators 1 - 4 CH, Data signal receiving indicator, External control priority indicator, External control communication indicator, Battery indicator (flashes when a Chairman/Delegate unit's battery nears complete discharge), Short-circuit indicator
Number of Connectable Conference Units	64 units
Number of Connectable Infrared Transmitter/Receiver Units	Up to 4 units (with the use of distributor, up to 16 units connectable when they are all TS-905, and up to 12 units when they are all TS-907, or TS-905 and TS-907 are used in combination)
Infrared Transmitter/Receiver I/O Terminal	BNC jacks
External Control Connection Terminal	D-sub connector (9P, male)/USB-B selectable
Function Switch	Number of open microphones setting switch: 1/2/3/4 Mic-off setting switch: TIME OUT ON/OFF Speech priority selector switch: FIRST (First-in-first-out priority) LATEST (Last-in-first-out priority) FIRST:FIXED NEXT:LATEST (Priority fixed for the first unit, and last-in-first-out priority for all other subsequent units.) FBS switch: AUTO/OFF/EXT
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	2.7 kg (5.95 lb)
Included Accessories	AC adapter (Cord length: 1.8 m (5.91 ft) DC cord, and 2 m (6.56 ft) detachable AC cord)(*3) ...1
Optional Accessories	Rack mounting bracket: MB-TS920

(\*2) 0 dB = 1 V

(\*3) Not supplied with the TS-820(-CN). For the usable power supply cord and AC adapter, contact your nearest TOA dealer.

# Dimensions

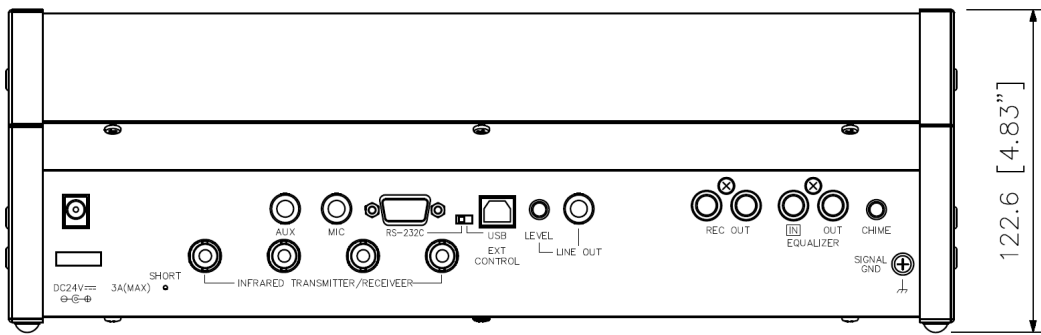


Figure as viewed from point A

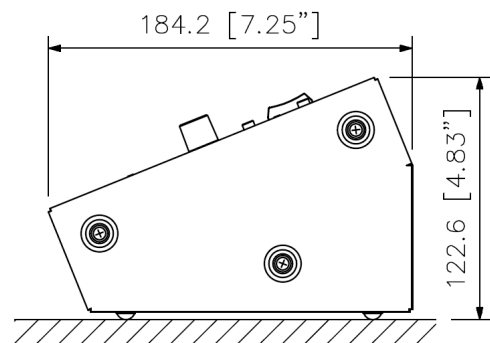
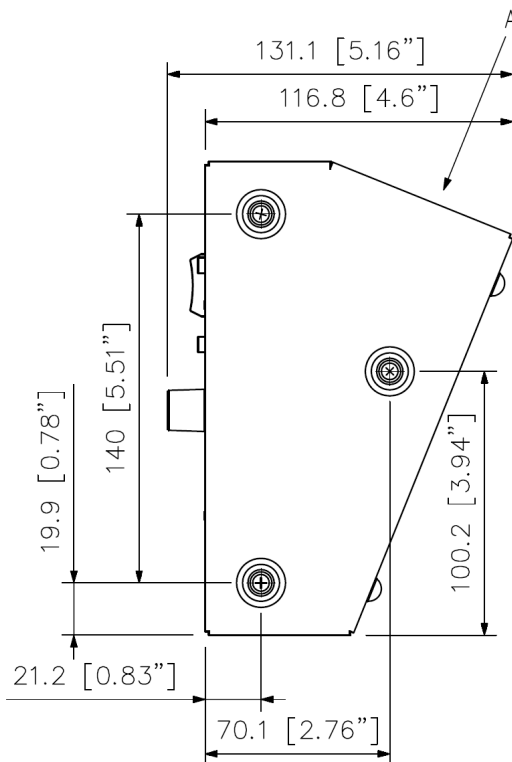
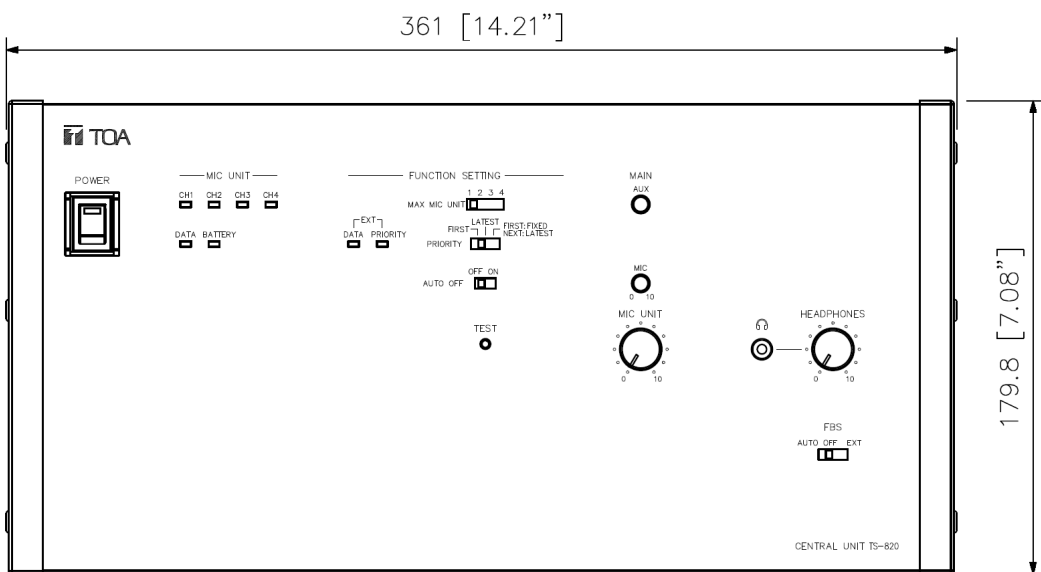


Figure of the unit installed (scale: 1/4)

## A&E specifications

The Central Unit shall include the following functionalities: “Number of Open Microphones Setting” shall support a well-organized meeting. One, two, three or four persons can be allowed to talk at the same time to prevent the confusion that could result from multiple participants all speaking at once. “Speech Priority Setting Function” shall operate as follows: when the Talk Keys on the conference units are activated exceeding the set number of authorized speakers, microphone ON/OFF operation can be set to any of the following: First-In-First-Out, Last-In-First-Out, or First-Fixed-Next-Latest (Priority fixed for the first unit). “Auto Mic-Off Function” shall prevent leaving the microphone on inadvertently. When this function is activated, the microphone shall automatically switch itself off after a 30-second period of silence. “Installation Status Checkup Function” shall allow a user to confirm the state of communication at a glance. If activated on the Central Unit, the microphone indicators in the Chairman/ Delegate Units light up. “Feedback Suppressor (FBS) Function” shall be able to locate up to seven feedback frequencies and set notch filters to eliminate them. With the use of an optional rack mounting bracket, it can be mounted in an EIA Standard equipment rack (4-unit size).

The conference system software is available. The software enables setup of Graphic User Interface configuration, camera control and audio. It is able to control 64 conference delegate units and up to 4 IP HD cameras. Clear image of the active speaker shall be captured by the camera.

The Central Unit shall provide one external microphone input: phone jack (600 ohms, -60 dBV, unbalanced), one auxiliary input: phone jack (10k ohms, -20 dBV, unbalanced), auxiliary outputs: phone jack (10k ohms, -10 dBV, unbalanced), RCA jack (10k ohms, -10 dBV, unbalanced), headphone mini jack, and external control terminal: D-sub connector 9P or USB-B.

The optional Infrared Transmitter/Receiver shall be connectable to the BNC jacks on the rear panel. Speech volume control shall be located on the front panel and adjust the microphone volume of the Chairman Unit and Delegate Unit. Priority chime volume control shall adjust the output volume of the chime tone that sounds when the Priority Speech Key on the Central Unit is pressed. Power requirement shall be 100-240 VAC, 50/60 Hz, maximum 72 W power consumption (using the provided AC Power Supply). Operating temperature range shall be 0°C to 40°C (32°F to 104°F).

The Central Unit shall weigh 2.8 kg (6.17 lbs) and be constructed of surface-treated steel plate with black metallic paint, semi-gloss finish. The dimensions shall be 361 (W) x 122.6 (H) x 179.8 (D) mm (14.21" x 4.83" x 7.08").

The Central Unit shall be the TOA model TS-820. The rack mounting bracket shall be the TOA model MB-TS920. The Infrared Transmitter/Receiver shall be the TOA model TS-905 or TS-907.