CX-OP1500 Y

OPERATION STATION



The CX-OP1500 is an Operation station designed for the CX-1000 series IP communication system. By connecting this station to a network (LAN or WAN), hands-free and handset voice conversations can be made using this station or other intercom stations. You can make broadcasts not only to the same model stations and other intercom stations, but also to the Audio interface and amplifier units. It is equipped with an LCD, a one-touch dialing function, a headset terminal, and an external speaker terminal. Power can be supplied from a PoE-compatible switching hub (in this case, an optional AC adapter is not required). The CX-OP1500 supports the SIP protocol, which allows conversations with general-purpose SIP phones via the System manager. The supplied Angle adjustment stand allows you to adjust the angle when it is placed on a desk.

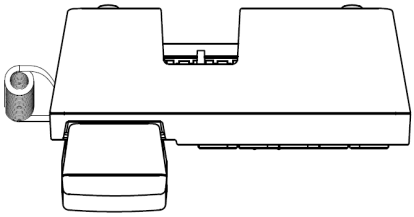
Key features

- 16-character × 2-line LCD for clear status display
- Full-duplex communication via handset and hands-free with echo canceller
- Dual MEMS mics and array processing for clear pickup
- 3.5 mm headset jacks for versatile audio input/output
- Supports key audio codecs including G.722 and G.711
- 2 control inputs and 2 open collector outputs for external device integration
- Desktop or wall mounting options with optional bracket
- PoE (IEEE802.3af compliant) or 12 V DC power

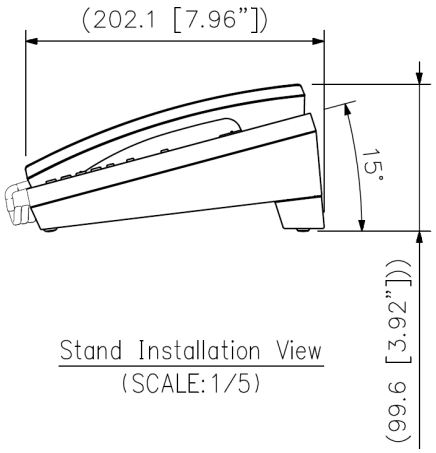
Specifications

Power Source	PoE (IEEE802.3af compliant) or 12 V DC (use of the optional AC adapter)
Current Consumption	PoE: 120 mA, 12 V DC (AC adapter): 340 mA
Power Consumption	4.5 W
Speech Method	Handset: Full-duplex Hands-free: Full-duplex (echo canceler + voice switch), Half-duplex (PTT)
Frequency Response	Conversation /Broadcast: 300 Hz - 7 kHz
Hands-free	Speaker: Dynamic type speaker, maximum output 2.0 W Microphone: Omni-directional digital MEMS microphone x 2
Handset	Receive path: Dynamic type speaker Send path: Electret condenser microphone
Headset	Speaker: Dynamic type speaker, 32 Ω, Ø3.5 mm mini jack Microphone: Electret condenser microphone, Ø3.5 mm mini iack
External Speaker	Maximum output 2.0 W, 8 Ω, push-in terminal (2 pins)
Signal Processing	Input channel: Gain, EQ x 2, Comp, AGC, noise canceler, echo canceler, voice switch, microphone array, speech enhancement Output channel: Gain, EQ x 7
Network Section	Network I/F: 100Base-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, I GMP, NTP, SIP, FTP, RSTP Audio packet transmission method: Unicast, Multicast Number of broadcasting destinations: Unicast (max. 16), Multicast (max. 2999) Connector: RJ45 connector x 2, LAN A (PoE compatible), LAN B (PoE incompatible) Network cable: UTP (Cat5 or greater)
Audio Transmission	Sampling frequency: 16 kHz, 8 kHz (controllable on the software) Audio codec: PCM, G.722, G.711 μ-Law/A-Law Quantization bit depth: 16-bit Voice packet loss recovery: Silence insertion
User Control	Dial key, Direct key x10, Function 1, Function 2, Broadcast, Hold, Transfer, PTT, Cancel
Display	*UNDEFINED TEXT*
Indicators	LCD: 16 characters x 2 lines LED indicators: RUN (green) x 1, STATUS (yellow, red, green) x 1
Control Input	2 channels, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 5 mA or less, push-in terminal (3 pins)
Control Output	2 channels, open collector output, maximum contact capacity : 30 V DC/100 mA, push-in terminal (3 pins)
Installation Method	Desktop installation or wall mounting (Wall mounting needs an optional bracket.)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH (no condensation)
Finish	ABS resin, dark gray
Dimensions	148 (W) x 78.9 (H) x 200 (D) mm (5.83" X 3.11" x 7.87") (excluding cord)
Weight	760 g (1.58 lb)
Included Accessories	Stand x 1, Stand fixing screw x 2, Zip tie x 2
Optional Accessories	AC adaptor: AD-1210P, AD-1215P Wall mounting bracket: YC-1001

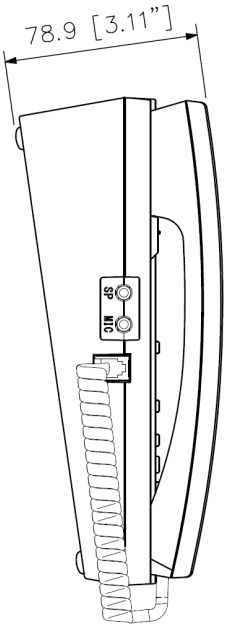
Dimensions



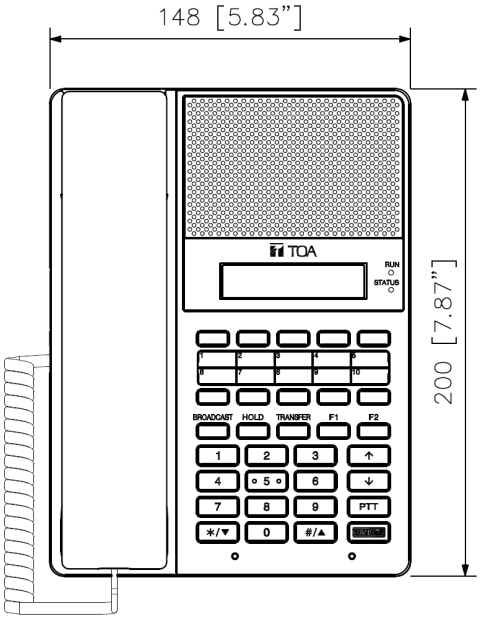
Rear View



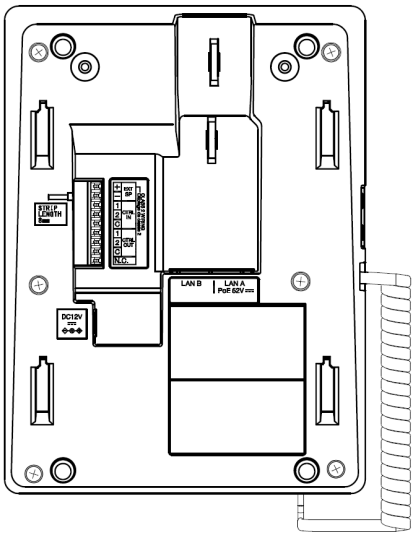
Stand Installation View
(SCALE: 1/5)



Side View



Top View



Bottom View

UNIT: mm

Note: Numerical values in parentheses are for reference only.

A&E specifications

The Operation Station shall be a network-connected two-way audio communication device designed for use with TOA's CX-1000 Series IP communication system. The Operation Station shall provide full-duplex communication via both handset and hands-free modes.

Hands-free audio input shall be captured by dual omnidirectional MEMS microphones with array processing, while audio output shall be supported through a built-in dynamic speaker. An external speaker terminal shall be provided with a maximum output of 2 W at 8 Ω, along with 3.5 mm microphone and speaker jacks for external headset connection. The Operation Station shall feature a 16-character × 2-line LCD for clear display of status information.

Audio signal processing functions shall include gain control, 2-band EQ, compressor, Automatic Gain Control (AGC), noise canceler, echo canceler, voice-operated switching, microphone array processing, and a speech intelligibility filter for input channels. Output signal processing shall include 7-band EQ.

The Operation Station shall support data transmission over 100BASE-TX Ethernet. Dual LAN ports shall be provided, with LAN A supporting PoE (IEEE802.3af compliant) and LAN B for redundant network connection. The Operation Station shall allow for up to 16 unicast and 2999 multicast audio transmission destinations. Supported protocols shall include TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, SIP, FTP, and RSTP. The Audio encoding shall use PCM, G.722, and G.711 μ-Law/A-Law codecs with sampling frequencies of 16 kHz or 8 kHz.

Operation shall be performed using dial keys, ten direct keys, two function keys, and dedicated Broadcast, Hold, Transfer, PTT, and Cancel buttons. A 32-character LCD display shall be provided, together with LED indicators for system operation and network status. Two control inputs and two open collector outputs shall be provided for integration with external devices.

Power shall be supplied via IEEE802.3af-compliant PoE or 12 V DC using an optional AC adapter. Power consumption shall not exceed 4.5 W.

Installation options shall include desktop placement or wall mounting using an optional bracket. A stand accessory shall be provided to allow angle adjustment of 15 degrees when placed on a desktop. The unit shall operate within a temperature range of 0 °C to +40 °C (32 °F to 104 °F) and relative humidity up to 90 % (non-condensing). The Operation Station shall be constructed of dark gray ABS resin.

Dimensions shall be 148 (W) × 78.9 (H) × 200 (D) mm (5.83" × 3.11" × 7.87"), excluding the cord, and weight shall be 760 g (1.68 lbs).

Optional extras: AC adapter (AD-1210P, AD-1215P), Wall mounting bracket (YC-1001)

Manufacturer: TOA Corporation

Model: CX-OP1500