

CX-OP1700 Y

VIDEO OPERATION STATION



The CX-OP1700 is a Video 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 video conversations and 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 a touch screen LCD and a camera, allowing the intuitive operation and video conversations. In addition, other features include a one-touch dialing function, and 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-OP1700 supports the SIP protocol, which allows conversations with general-purpose SIP phones via the System manager. Images from the ONVIF® -Compatible IP cameras can be displayed. The supplied Angle adjustment stand allows you to adjust the angle when it is placed on a desk.

Note: We do not guarantee the operations of all IP cameras.

Key features

- 5-inch touch screen LCD with intuitive operation keys
- Full-duplex communication via handset and hands-free with echo canceller
- Built-in HD camera with 69° horizontal viewing angle
- ONVIF Profile S compliant for integration with CCTV and network cameras
- 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 H.264
- 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

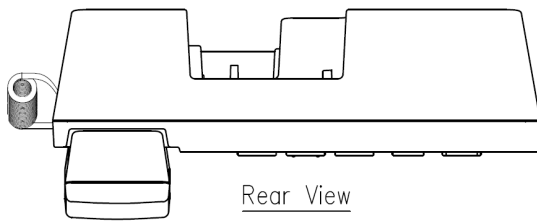
Specifications

Power Source	PoE (IEEE802.3af compliant) or 12 V DC (use of the optional AC adapter)
Current Consumption	PoE: 210 mA, 12 V DC (AC adapter): 680 mA
Power Consumption	8.5 W
Speech Method	Handset: Full-duplex Hands-free: Full-duplex (echo canceler + voice switch), Half-duplex (PTT)
Frequency Response	Conversation: 300 Hz - 7 kHz Broadcast: 300 Hz - 16 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)
ONVIF	Profile S Client
Audio Transmission	Sampling frequency: 48 kHz, 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
Video Transmission	Video codec: H.264, MJPEG Resolution: HD 1280 x 720 (max.) Frame rate: 20 fps (max.)
User Control	Touch screen LCD, Dial key, Function 1, Function 2, Broadcast, Hold, Transfer, PTT, Cancel
Indicators	Touch screen LCD: 5" TFT color LCD, 1280 x 780 LED indicators: STATUS (yellow, red, green) x 1
Camera	Image device: 1/2.9 type CMOS Number of effective pixels: 1280 x 720 (max.) Angle of view: horizontal 69°, vertical 37.4°
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.)
Dust/Water Protection	Conforming to IP3X
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH (no condensation)

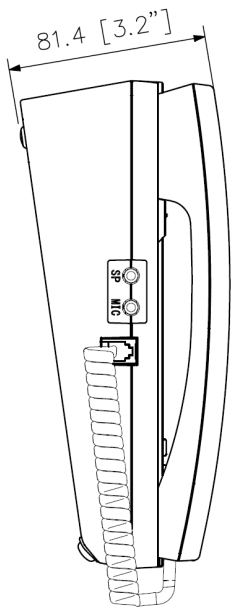
Finish	ABS resin, dark gray
Dimensions	200 (W) x 81.4 (H) x 200 (D) mm (7.87" X 3.2" x 7.87") (excluding cord)
Weight	940 g (2.07 lb)
Included Accessories	Stand x 1, Stand fixing screw x 2, Zip tie x 2
Optional Accessories	AC adaptor: AD-1210P, AD-1215P Wall mounting bracket: YC-1001

*ONVIF is a registered trademark of ONVIF Inc.

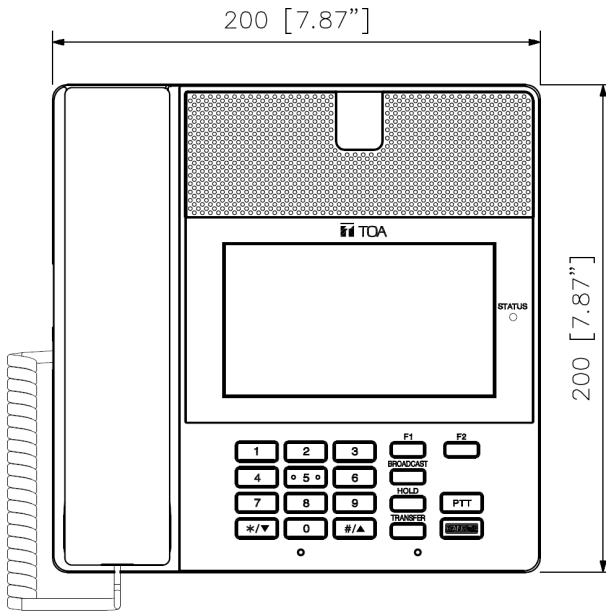
Dimensions



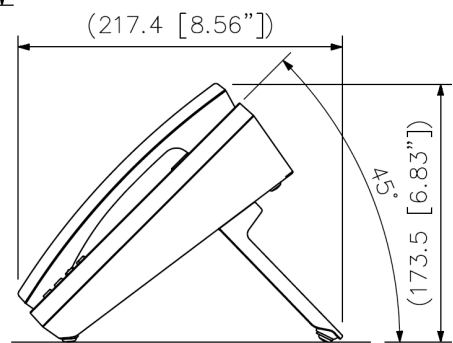
Rear View



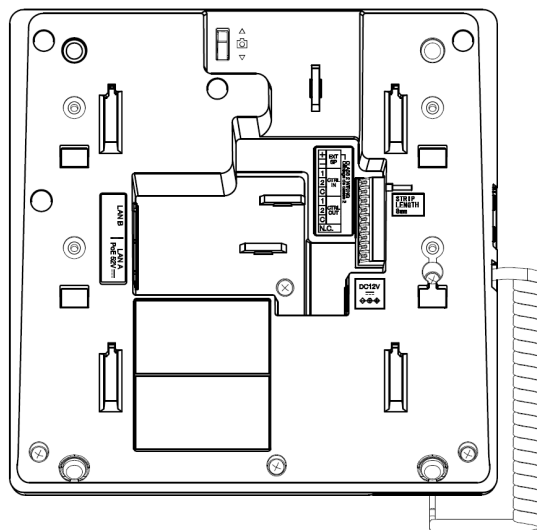
Side View



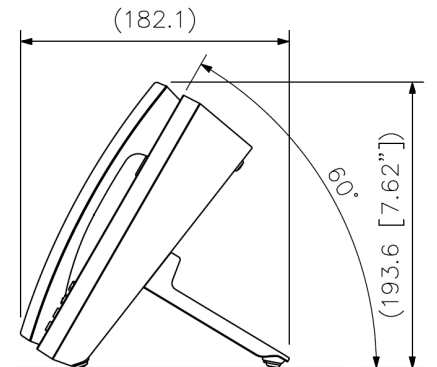
Top View



Stand Installation View (45° upward)
(SCALE: 1/5)



Bottom View



Stand Installation View (60° upward)
(SCALE: 1/5)

UNIT:mm

Note: Numerical values in parentheses are for reference only.

A&E specifications

The Video Operation Station shall be a multifunctional, network-connected audio and video communication device designed for use with TOA's CX-1000 Series IP communication system. The Video Operation Station shall provide full-duplex audio communication via handset and hands-free modes with echo cancellation, and shall incorporate a built-in HD camera with a 69° horizontal viewing angle for video transmission. A 5-inch touchscreen LCD shall be provided for operation and display. The Video Operation Station shall support video monitoring of images streamed over the network from CX-1000 Series Video Call Stations or other network cameras using a general-purpose IP camera protocol.

Hands-free audio input shall be captured by dual omnidirectional MEMS microphones with array processing, while audio output shall be provided through a dynamic speaker. 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 unit shall support up to 16 unicast and 2999 multicast audio transmission destinations. An external speaker terminal shall be provided with a maximum output of 2 W at 8 Ω , together with 3.5 mm jacks for external headset connection.

The Video 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 Video Operation Station shall support TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, SIP, FTP, and RSTP. The Video Operation Station shall use PCM, G.722, and G.711 μ -Law/A-Law codecs with sampling frequencies of 16 kHz or 8 kHz for audio communications, and video codecs including H.264 and MJPEG with resolutions up to 1280 \times 720 at 20 fps.

The Video Operation Station shall support voice announcement recording and preview. A Voice Stack Broadcast function shall be provided, allowing queued announcements to be held during higher-priority broadcasts and automatically delivered once priority broadcasts are completed.

Operation shall be performed using the touchscreen LCD, dial keys, two function keys, and dedicated Broadcast, Hold, Transfer, PTT, and Cancel buttons. LED indicators shall be provided 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 8.5 W.

Installation options shall include desktop placement or wall mounting using an optional bracket. A stand accessory shall be supplied to allow angle adjustment of 45° or 60° 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), and shall comply with IP3X dust/water protection rating. The Video Operation Station shall be housed in a dark gray ABS resin enclosure. Dimensions shall be 200 (W) \times 81.4 (H) \times 200 (D) mm (7.87" \times 3.20" \times 7.87"), excluding the cord, and weight shall be 940 g (2.07 lbs).

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

Manufacturer: TOA Corporation

Model: CX-OP1700