CX-CL1750

VIDEO CALL STATION



The CX-CL1750 is a Video call station designed for the CX-1000 series IP communication system. By connecting this station to a network (LAN or WAN), hands-free voice conversations can be made using this station or other intercom stations. It is also possible to receive broadcasts made by other CX stations, audio interfaces, and amplifier units. It is equipped with a camera that enables video conversations with the CX-1000 series Video operation station. Power can be supplied from a PoE-compatible switching hub (in this case, an optional AC adapter is not required). The CX-CL1750 supports the SIP protocol, which allows conversations with general-purpose SIP phones via the System manager.

Key features

- Full-duplex hands-free communication with echo canceller
- Built-in camera (max. 1280x720 pixels) for video communication
- Dual MEMS mics and array processing for clear pickup
- Supports key audio/video codecs like G.722 & H.264
- IP65/IK08 compliant for outdoor durability
- Compatible with SIP, HTTP, and other protocols
- 4 control inputs and 4 outputs for external device integration
- Flush or wall mounting for flexible installation
- PoE (IEEE802.3af compliant) or 12 V DC power

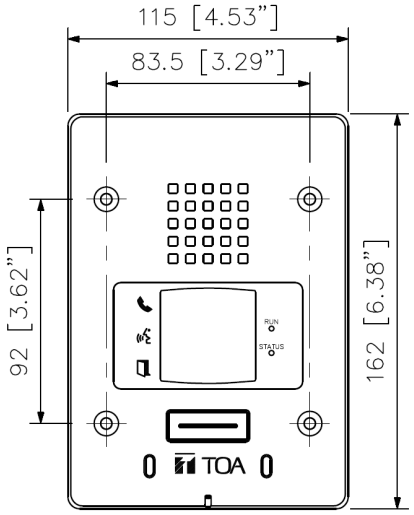
Specifications

Power Source	PoE (IEEE802.3af compliant) or 12 V DC (use of the optional AC adapter)
Current Consumption	PoE: 200 mA, 12 V DC (AC adaptor) : 610 mA
Power Consumption	8 W
Speech Method	Hands-free: Full-duplex (echo canceler + voice switch)
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
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, ANC
Network Section	Network I/F: 100Base-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, 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: 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	Direct key x 1
Indicators	LED indicators: RUN (green) x 1, STATUS (yellow, red, green) x 1,Calling indicator (yellow) x 1, Conversation indicator (green) X 1, Unlock indicator (green) x 1
Camera	Image device: 1/2.9 type CMOSNumber of effective pixels: 1280 x 720 (max.)Angle of view: horizontal 120°, vertical 69°
Control Input	4 channels, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 5 mA or less, push-in terminal (5 pins)
Control Output	1 channel, relay contact output, withstand voltage: 30 V DC, maximum control current: 1 A, push-in terminal (2 pins) 4 channels, open collector output, maximum contact capacity : 30 V DC/100 mA, push-in terminal (5 pins)
Installation Method	Flush-mounting or wall-mounting
Impact Resistance	IK08
Dust/Water Protection	IP65 (Note that front cover edges must be sealed at installation.)
Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F)
Operating Humidity	90 %RH (no condensation)
Finish	Case: Die-cast aluminum, silver, mat finish, paint Panel: PC resin
Dimensions	115 (W) x 162 (H) x 75.5 (D) mm (4.53" X 6.38" X 2.97")

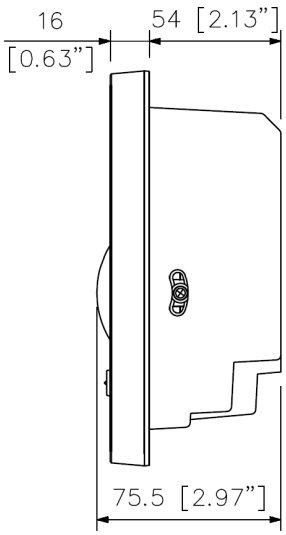
Weight	770 g (1.7 lb)
Included Accessories	Waterproof washer x 4, Tamper-proof screw x 4, Protection seal x 2
Optional Accessories	AC adapter: AD-1210P, AD-1215P
Compatible Box	For flush mount: 3-gang electrical box or Back Box YC-150 (option) For wall mount: Wall-mount Box YS-13A (option)

Note: An AC adapter, when used as power source, cannot be put in the YS-13A, YC-150 or a 3-gang electrical box together with the CX-CL1750 because such boxes do not have enough room to accommodate both.

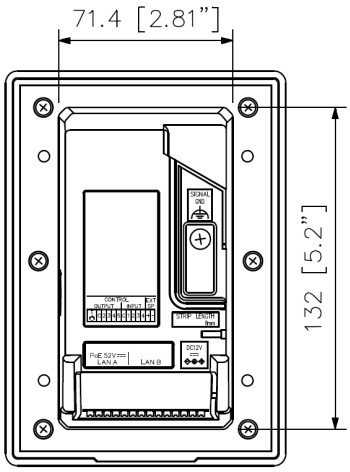
Dimensions



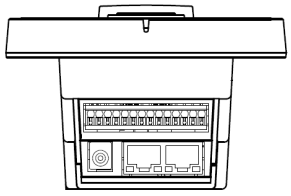
Front View



Side View



Rear View



Bottom View

UNIT: mm

Note: Numerical values in parentheses are for reference only.

A&E specifications

The Video Call Station shall be designed for outdoor voice communication with integrated video monitoring as part of TOA's CX-1000 Series IP communication system. The Video Call Station shall provide full-duplex hands-free audio communication with echo cancellation and voice-operated switching.
Hands-free audio input shall be captured by dual omnidirectional MEMS microphones with array processing, while audio output shall be provided via a dynamic speaker with a maximum output of 2.0 W. Audio signal processing functions shall include gain control, 2-band EQ, compressor, Automatic Gain Control (AGC), noise canceler, echo canceler, microphone array processing, voice-operated switching, and a speech intelligibility filter for input channels. Output signal processing shall include 7-band EQ with Ambient Noise Control (ANC).
A built-in fixed-focus camera shall be provided for video transmission. The camera shall employ a 1/2.9-type CMOS sensor with a resolution of up to 1280 × 720 pixels, a horizontal viewing angle of 120°, and a vertical viewing angle of 69°.
The Video Call Station shall support data transmission over 100BASE-TX Ethernet. Dual LAN ports shall be provided, with LAN A supporting IEEE802.3af-compliant Power over Ethernet (PoE) and LAN B supporting redundant network connection. The unit shall support 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. Audio communication shall support PCM, G.722, and G.711 μ-Law/A-Law codecs. Video communication shall support H.264 and MJPEG codecs.
LED indicators shall be provided for system operation and network status. Operating statuses for calling, conversation, and unlocking shall be indicated via individual visual labels with LED indicators. Control interfaces shall include four contact inputs, four open collector outputs, and one relay output rated at 30 V DC, 1.0 A maximum. Power shall be supplied via IEEE802.3af-compliant PoE or 12 V DC using an optional AC adapter. Power consumption shall not exceed 8 W.
The Video Call Station shall be designed for flush-mount or surface wall-mount installation. The unit shall comply with IP65 dust/water protection and IK08 impact resistance ratings. Operating temperature shall range from -40 °C to +60 °C (-40 °F to 140 °F), with relative humidity up to 90 % (non-condensing). The Video Call Station shall be constructed of die-cast aluminum with a matte silver painted finish and a polycarbonate front panel. Dimensions shall be 115 (W) × 162 (H) × 75.5 (D) mm (4.53" × 6.38" × 2.97"), and weight shall be 770 g (1.7 lbs).
Optional extras: AC Adapter (AD-1210P, AD-1215P), Flush-mount Box (YC-150), Wall-mount Box (YS-13A)
Manufacturer: TOA Corporation
Model: CX-CL1750