



IP COMMUNICATION SYSTEM

CX-1000 Series

Connecting
Every Voice and Vision



Your Eyes, Your Voice, Your Broadcast —All in One Place

Monitor live CCTV footage, communicate instantly,
and broadcast effortlessly—all from a single interface.

CX Series



Connected Comms

Seamlessly integrates voice,
video, and systems for
comprehensive information.



Clear Delivery

Ensuring reliable and
intelligible communication with
advanced audio technologies.



Evolving Workplace

Flexible platform adapting to
dynamic needs with
integrated communication
and insights.

01

What is the CX Series

The CX Series is a next-generation communication system that integrates audio and video into a single platform. By supporting common industry-standard protocols—including ONVIF Profile S and SIP—it seamlessly combines voice communication, broadcasting, and video, meeting a wide range of communication needs. With network connectivity, the system can be easily integrated with existing infrastructures, while TOA's long-standing expertise in emergency broadcasting and clear sound technology ensures reliable and effective communication for customers.



02

Why choose the CX Series

The CX Series is designed to simplify and strengthen communication by integrating audio and video into a single platform. By supporting ONVIF Profile S and SIP-based communication, it allows users to monitor live camera footage on the CX terminal while managing calls and broadcasts, enabling secure and intuitive centralized control. Combined with TOA's advanced audio technologies, including noise and echo cancellation, the CX Series delivers clear, reliable sound for professional and mission-critical environments.

Challenge 1

Our existing system has various devices and systems for different uses, making operation and management complex and difficult.

Challenge 2

Due to labor shortages, a system that requires minimal effort to operate is needed!

Challenge 3

Existing intercom systems have excessive noise in noisy environments, making it difficult to hear voices.

Challenge 4

As the facility plans to expand, a system with high scalability is needed.



The CX Series solves these challenges



User-Friendly Operation

The CX Series integrates voice calls, broadcast, and video, streamlining information sharing. This enables flexible and efficient communication centered around people, in both daily operations and emergencies, meeting the needs of universities, office buildings, parkings, and various other environments.



Clear and Precise Sound

The system reduces noise with microphone arrays and noise-canceling features, while high-quality speakers ensure clear communication with excellent sound quality. Additionally, automatic equalizing based on the environment enhances audio clarity.



Flexible Scalability

Up to 3,000 devices can be connected, not only CX terminals but also with SIP phones and CCTV systems supporting generic protocols, as well as with the IP-A1 series. Boasting easy integration and continuous system updates, the CX series ensures a future-proof system.

03 Lineup

A versatile lineup designed to enhance communication, broadcasting, monitoring, and operations—reliably and efficiently across diverse environments.

System Manager

CX-SM1000



Central control for up to 3,000 devices with integrated voice, video, and control. Fault detection, logging, program timers, and audio scenes ensure secure, efficient operation.

Control I/O Unit

CX-CC1016



Provides versatile I/O with 16 inputs & 16 outputs. It easily integrates with external systems for automated & flexible control, enhancing system responsiveness.

Video Operation Station

CX-OP1700 ONVIF | S



Enables video calls. Supports CCTV monitoring via ONVIF Profile S. Includes a touch panel monitor, mic broadcast, and speaker for enhanced situational awareness.

Operation Station

CX-OP1500



Enables cost-effective voice communication via universal protocols. Features mic broadcast & speaker, enhancing clear communication across systems.

Video Call Station

CX-CL1750



IP65-rated, durable door terminal enables video calls and broadcast. Ideal for secure door entry and surveillance, offering security and peace of mind.

Call Station

CX-CL1550



IP65-rated terminal for clear voice communication. Ideal for secure door entry, offering reliable access control for any environment.

Touch Screen Remote Microphone

CX-RM1700 ONVIF | S



Easy touch control for broadcasting and ONVIF-based camera monitoring. Delivers clear audio and enhances situational awareness.

Audio Interface 6in2out

CX-AF1062



Versatile interface with 6 inputs & 2 outputs. Enables flexible systems by integrating with existing setups. Perfect for multi-source audio management.

Power Amplifier 120W 10SS

CX-PA1120



Versatile 120W amplifier with 10 speaker outputs. Ideal for wide-area broadcasting and volume control. Enhances communication in various applications.

Power Amplifier 240W 10SS

CX-PA1240



Versatile 240W amplifier with 10 speaker outputs. Ideal for wide-area broadcasting and volume control. Enhances communication in demanding applications.

04 System Features

The CX series connects people with user-friendly features, offering security, reliability, and flexibility for various applications.

Max 3,000 Devices

This system supports up to 3,000 device connections, ensuring reliable communication for large-scale environments like universities and railways. It provides seamless performance across expansive networks.

Protocol Support

The system supports a range of standard protocols, including SIP-based calls and ONVIF Profile S CCTV integration, enabling centralized management. This allows seamless communication and enhances operational efficiency.

Easy System Operation

The system manager constantly monitors devices for faults and collects all logs in bulk. This feature ensures real-time detection of issues, allowing for smooth, secure operation and peace of mind.

Clear Sound

Leveraging TOA's 90+ years of experience, this system ensures clear, reliable audio that effectively communicates messages in any environment, providing users with a stress-free listening.

High Fault Tolerance

Redundancy options allow network paths to be duplicated, ensuring continuous communication even if one path fails. This feature enhances the system's resilience to failures.

Standard GUI

With a user-friendly standard GUI, the system allows for the centralized management of video, audio, and broadcasting. It makes it easy to build an intuitive system tailored to user needs.



01 Calling

The CX Series, in addition to basic calling and paging, supports transfer functions, a phone book, group calls, remote dialing, and SIP phone connectivity. It also integrates with external systems, such as remote door control, for seamless communication in various applications.

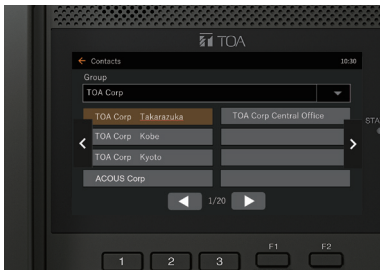


	CX-OP1700	CX-OP1500	CX-CL1750	CX-CL1550
				
Power Source	PoE / 12V DC	PoE / 12V DC	PoE / 12V DC	PoE / 12V DC
Voice Call	✓	✓	✓	✓
Video Call	✓	—	✓	—
CCTV Monitoring 	✓	—	—	—
Audio Protocols   	✓	✓	✓	✓
Controls  	✓	✓	✓	✓
Environmental Ratings	— (0 to +40°C / 32 to 104°F)	— (0 to +40°C / 32 to 104°F)	IP65 / IK08 (-40 to +60°C / -40 to 140°F)	IP65 / IK08 (-40 to +60°C / -40 to 140°F)
External Speaker Out (Maximum output 2 W 8 Ω)	✓	✓	✓	✓

Key Features of Calling

Phone Book

Easily call contacts by selecting them from the phone book, ensuring quick access and efficient communication management.



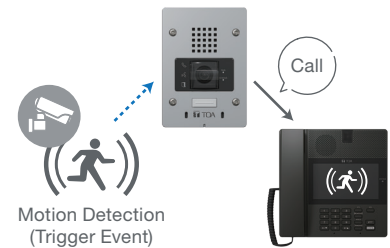
Video Call

Make video calls using built-in cameras and view CCTV footage via ONVIF Profile S, allowing visual confirmation during communication.



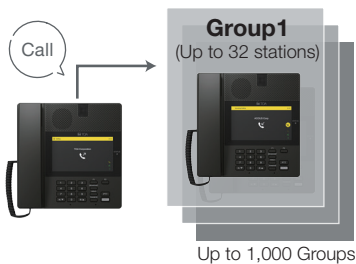
Remote Dialing

Allows dialing via control inputs for seamless integration with external systems. Ideal for automated call initiation and remote access applications.



Group Call

Simultaneously call multiple devices via a group number. Integrates with auto-forwarding, ensuring efficient communication workflows.



SIP Phone

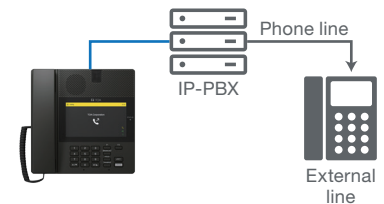
Connect with SIP phone systems for internal and external calls. Communicate seamlessly with SIP-enabled devices, including smartphones with a SIP app.



External Calling

Connect with external phone lines for seamless communication beyond the internal network. Supports both inbound and outbound calls, ensuring flexibility in various scenarios.

*External lines subject to local regulations.



Call Forwarding

- Redirecting
- Time-based redirecting
- Busy forwarding
- Failover forwarding
- No response forwarding
- Group call + auto forwarding



Door Remote Control

Trigger external devices based on control inputs, dialing actions, or call status. For example, remotely unlock electric locks during calls to enhance security and access control.



Hands-free Call

Enables hands-free communication via the built-in speaker or a connected headset, allowing flexible operation in various environments.



02 Broadcast

Leveraging TOA's expertise in emergency broadcasting, the CX Series integrates intercom systems with general and emergency broadcasts while supporting CCTV and IP-A1 Series integration. This enables seamless, scalable, and centrally managed operations.



General Broadcasting

Microphone Broadcasting

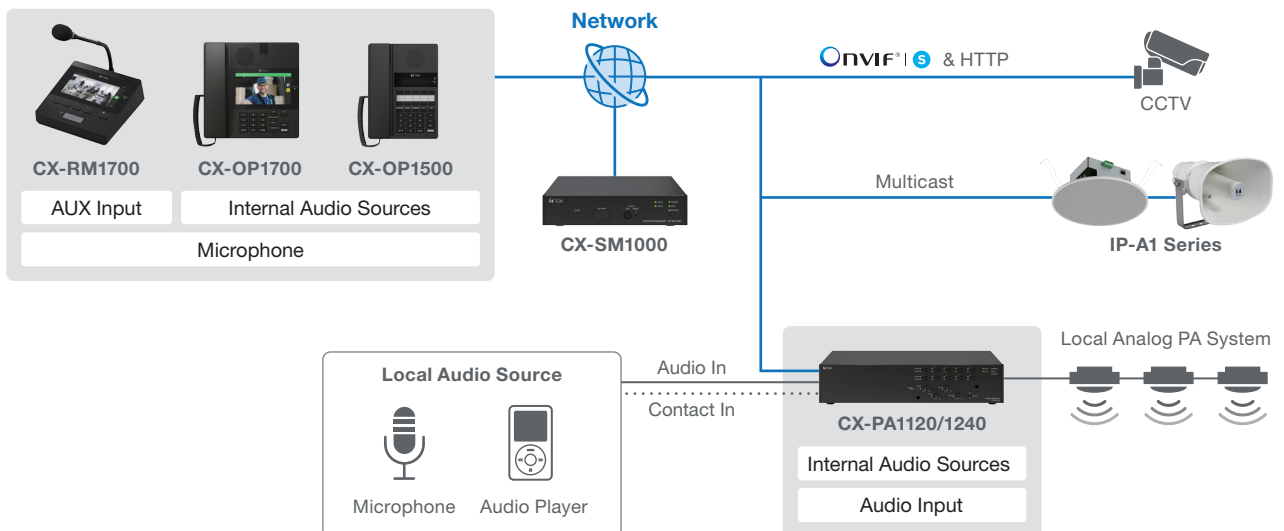
Announcements to the selected broadcast destinations using the device's microphone or an external microphone via AUX input.

BGM Broadcasting

BGM broadcasting utilizing internal sources, user-defined audio content, or external inputs via AUX/ audio connections.

Broadcast Patterns

Set broadcast destinations and audio sources, and automatically control broadcasting and output based on time and events.



Key Features of Broadcast

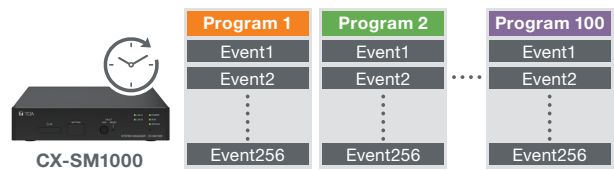
Video Monitoring Broadcast

The CX Series supports CCTV integration via ONVIF Profile S, allowing users to monitor live video and broadcast to the corresponding location with a single touch.



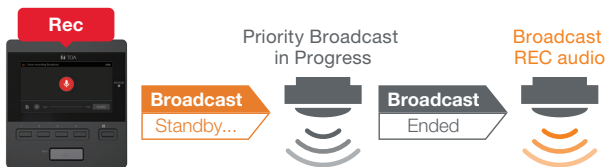
Program Timer

The CX series Program Timer automates broadcasts and events based on schedules. It offers flexible timing, multi-event triggers, and area-specific controls for efficient operations.



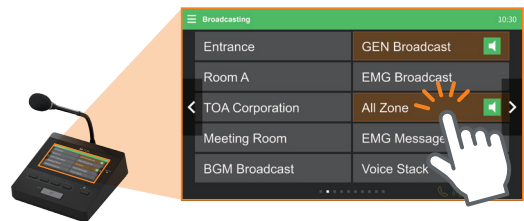
Voice Stack Broadcasting

Voice Stack Broadcasting queues a message during high-priority broadcasts and delivers it once they conclude. This ensures accurate communication for emergency and operational updates.



Operation via Touch Screen

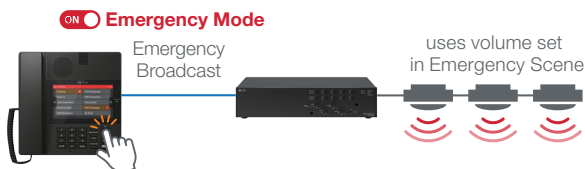
The CX-RM1700/OP1700, equipped with a touch screen, enables intuitive and versatile broadcast control. Its user-friendly design allows for easy operation of various broadcast patterns.



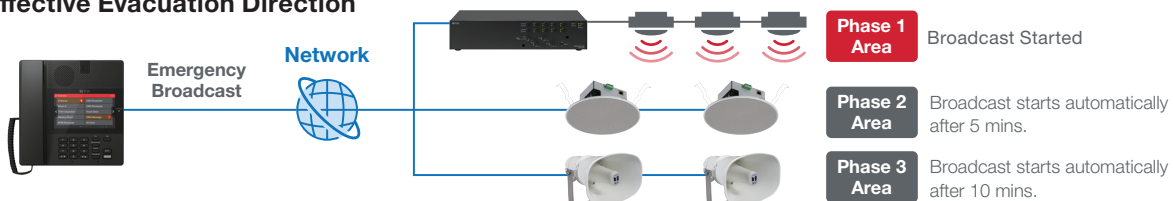
Emergency Mode

In emergencies such as intrusions or disasters, emergency mode is activated via device operation or control input. Broadcasts take priority over other functions, and connected attenuators (e.g., CX-PA1120/PA1240) are bypassed to output audio at the level set in the Audio Scene Emergency. Evacuation guidance can be delivered in up to three timed phases, with specific messages, destinations, and control outputs. Devices prioritize calls, broadcasts, and signal processing automatically, and all emergency broadcast can be recorded.

Emergency Mode Activation



Effective Evacuation Direction



Key Features of Maintenance

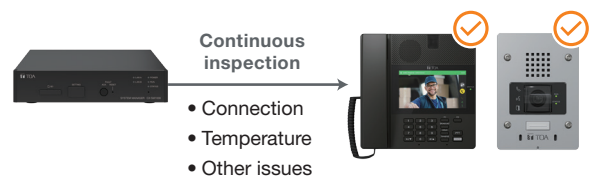
Regular Fault Check

The system automatically runs fault detection once a day. Any anomalies in audio lines, direct keys, or other components are notified via sound or display. Manual checks can also be performed via terminal or browser.



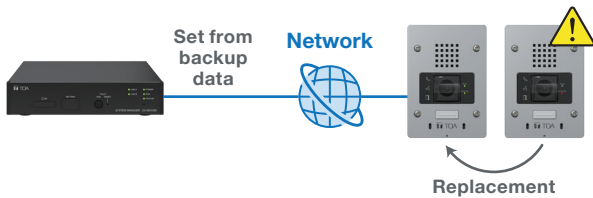
Continuous Fault Monitoring

The system continuously monitors for faults during operation. Any anomalies in device connections, temperature, or other components are notified via sound or display.



Remote Device Setup

The system manager backs up all device settings. When replacing a faulty device, only network settings are needed, and the system manager allows the new device to be configured by uploading the settings over the network.



System-wide Log Retrieval

The System Manager enables system-wide log collection via SD card or browser, simplifying data retrieval. It aids in fault analysis, identifying causes, and preventing future issues by reviewing historical data.



Standard GUI

The standard GUI runs in a web browser without software installation. It allows centralized control of audio scenes including volume levels, scheduling, and command execution, while providing real-time configuration and device monitoring.



Network Redundancy

Network redundancy allows for dual paths, ensuring continuous communication even if one route fails. This enhances fault tolerance, enabling reliable system operations.

Universities

Solution for multi-building facilities

CONTROL ROOM



CCTV footage of entrances and each building can be monitored, and, depending on the situation, operations such as making calls or broadcasting announcements can be carried out from the operation station.

Utilization of existing equipment



The CX series audio interfaces and power amplifiers enable the effective use of existing analog PA systems, allowing for centralized management and operation with the CX series.

ENTRANCES



The CX-CL1750's built-in camera and CCTV system send video to the operation station, enabling operators to see and speak with callers at gates or doors.

CLASSROOM



Communication with the control room and other areas, as well as the operation of Emergency Notification in the event of an anomaly, can be performed.

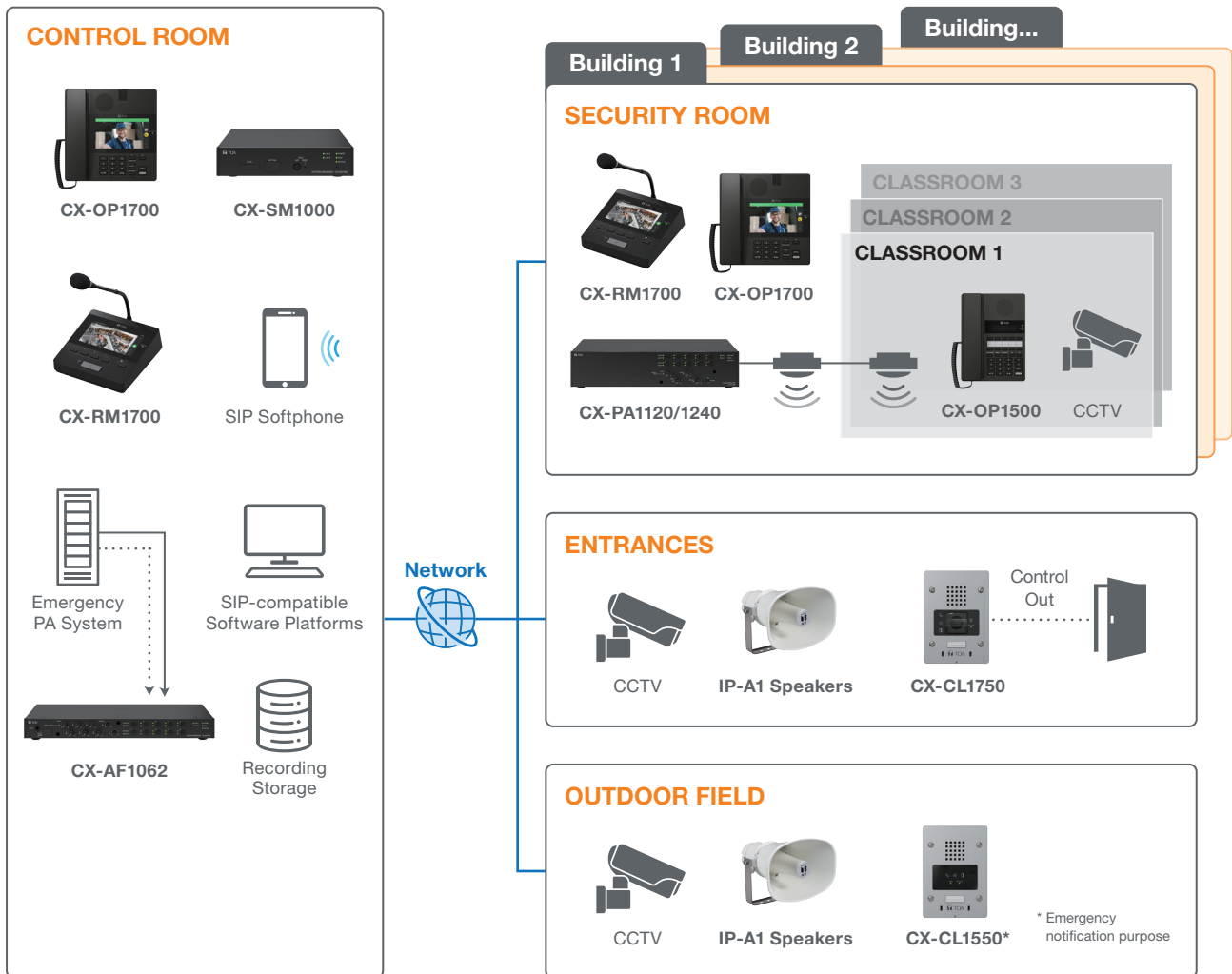
Safety and Security

The CX series provides comprehensive communication for large-scale facilities -such as multi-building universities and large commercial complexes- through its IP-based system. The call stations installed at entrance gates and doors are built with robust, impact-resistant construction (IK08-rated) and, through integration with built-in cameras and CCTV, enable remote monitoring of the site from control or security rooms. These stations allow remote control of doors and gates from the control room, ensuring the safety of the facilities through communication, video, and control. Additionally, by installing operation stations and emergency call stations in classrooms and laboratories, smooth communication within each area is facilitated. In the event of an anomaly, emergency notifications can be instantly sent to administrators from the call stations, enabling rapid evacuation across all areas. Furthermore, the system supports external calls*, allowing direct communication with fire departments, hospitals, or police. By utilizing the CX-AF1062 and CX-PA1120/1240, integration with existing analog PA systems is easy, allowing for the effective use of existing equipment while providing centralized management and operation of all communications.

*External lines subject to local regulations.



System Example



System Integration

The support for generic protocols and the audio interface enable integration with CCTV, analog systems, and even the IP-A1 series, allowing for the creation of a unified communication system.



Mobile Operation

With a SIP app or SIP software installed on a smartphone or PC, communication with the CX series is possible. Additionally, remote door control can be performed from the smartphone.



Efficient Evacuation

With TOA's deep history as a voice evacuation system manufacturer, it implements features such as emergency mode with area settings for each phase, ensuring effective evacuation during emergencies.

Corporate Buildings

Advanced Intercom System for Secure, Integrated Communication

ENTRANCE and RECEPTION

The built-in camera of the CX-CL1750 allows reception staff to remotely monitor visitors. Door control and other operations can be managed directly from the operation terminal, providing a smooth entry experience for visitors. Additionally, CCTV footage can be viewed from the operation terminal, preventing unauthorized access.

OFFICE

In the event of unauthorized access, the emergency notification call station allows immediate contact with the security center, where the situation can be assessed using CCTV footage.

SECURITY CENTER

- Situation confirmation via audio & video
- Evacuation instructions via broadcast
- Door access control
- Call to the police

The CX-OP1700 allows the Security Center to perform all tasks, including situation verification through CCTV footage and audio, phased evacuation broadcasts based on the extent of damage, remote door access control, and external calls to the police and fire department.

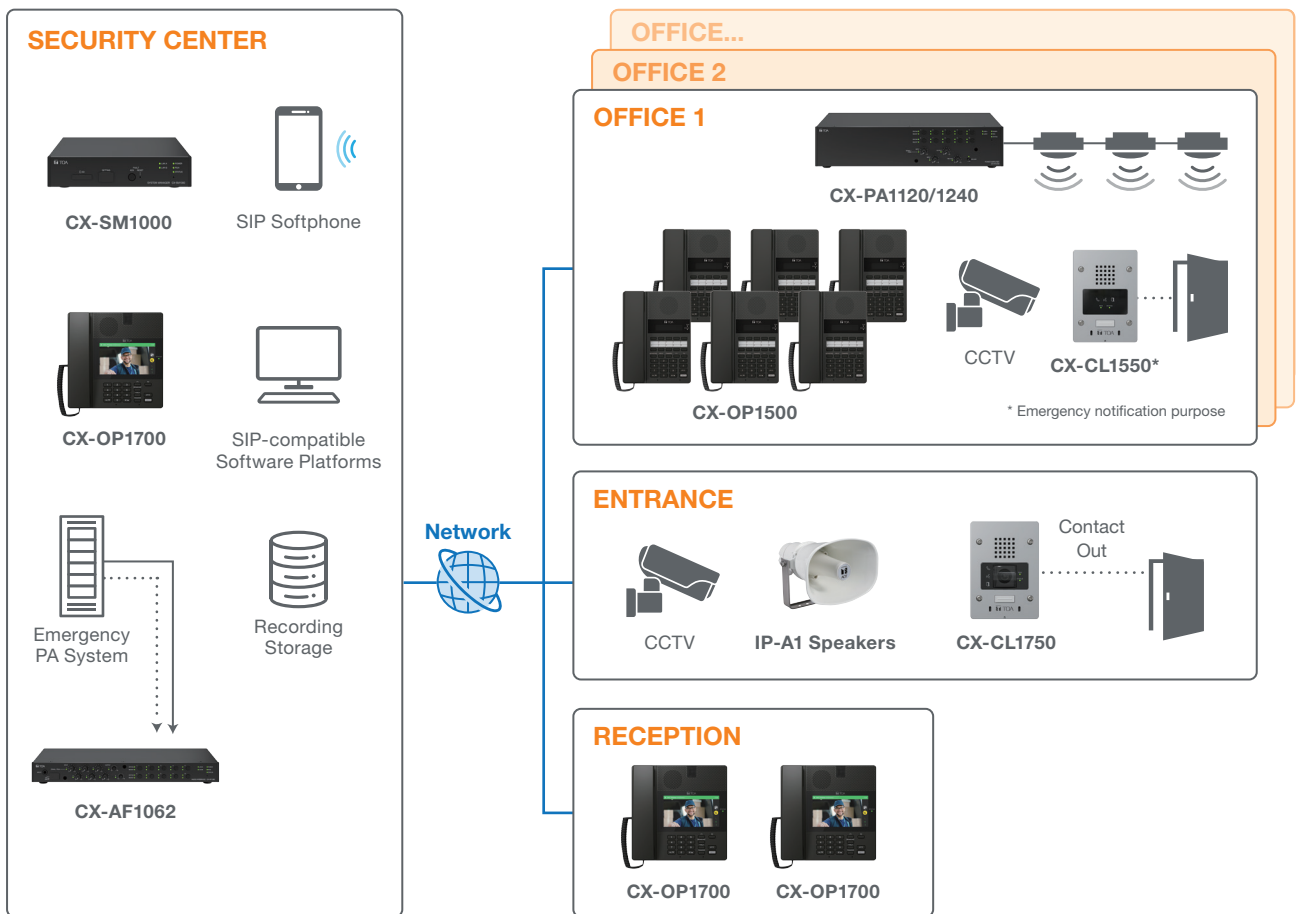
Next-Level Security Intercom System

The CX Series is an advanced intercom system that seamlessly integrates communication, broadcasting, and network-based management into a single, unified platform. It ensures compatibility with a wide range of products and services, making installation straightforward and system expansion effortless, even in large-scale or complex facilities. Built with robust security features and reliable emergency response capabilities, the CX Series strengthens the safety of employees, visitors, and assets while enhancing the technological resilience of the building. Its distributed architecture ensures uninterrupted operation even in the event of localized failures, providing peace of mind in mission-critical environments.

From corporate headquarters and universities to data centers that safeguard critical information, and smart buildings that demand multifunctional integration, the CX Series delivers versatility, scalability, and operational efficiency. For property owners, this combination of performance and reliability can contribute to both smoother daily operations and long-term value growth.



System Example



One-stop evacuation instructions using audio and video

The CX series enables quick and seamless management of emergency situations -such as intruder alerts- by notifying users of any anomalous occurrences, verifying the situation through audio and video, guiding evacuation via broadcasts and signage, and making external calls to required civil authorities.



Emergency Notification

Pressing the button on the emergency notification call station installed in the office immediately sends a notification to the Security Center.



Situation Confirmation

The Security Center monitors and verifies the situation on-site through audio and live CCTV footage.

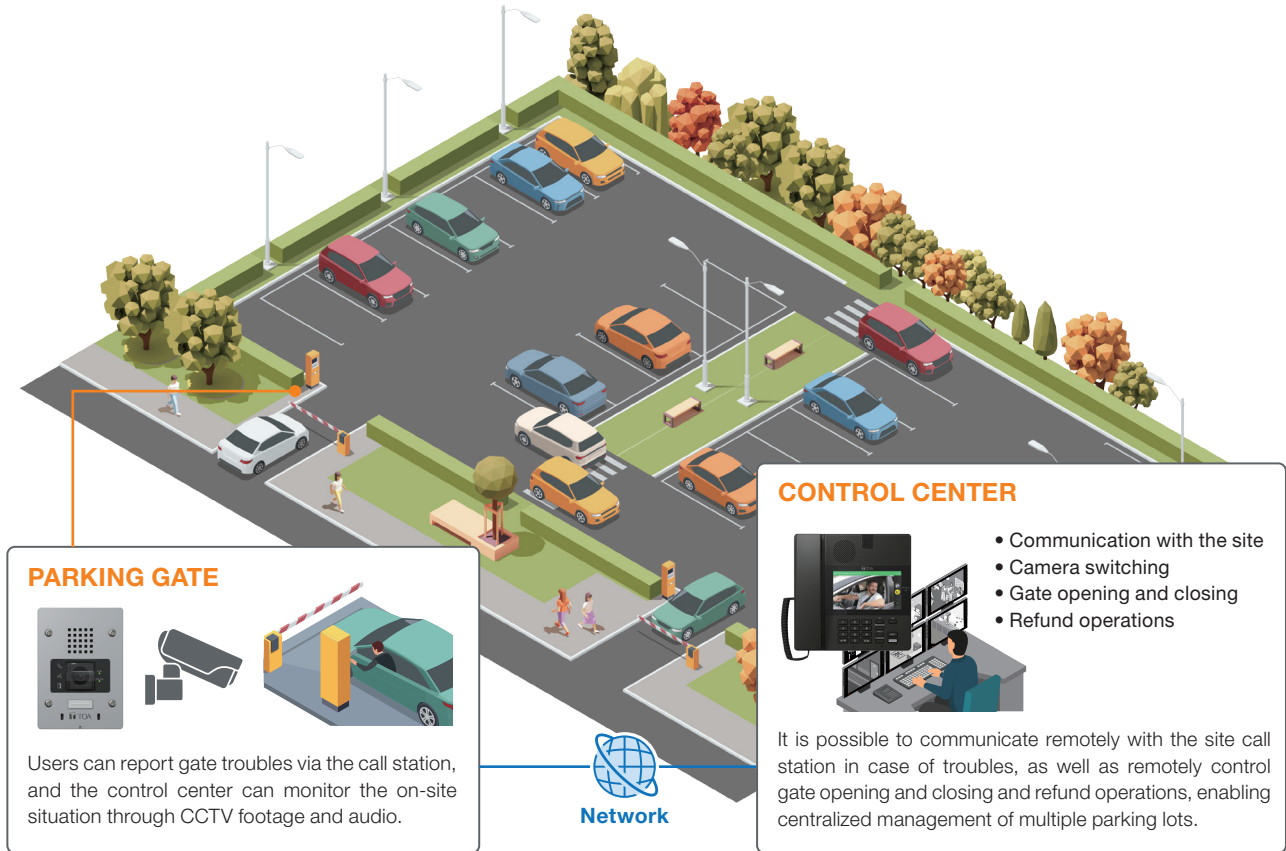


Evacuation Guidance

All broadcasting, signage and door control via contact signals can be executed from the operation station, ensuring rapid evacuation guidance.

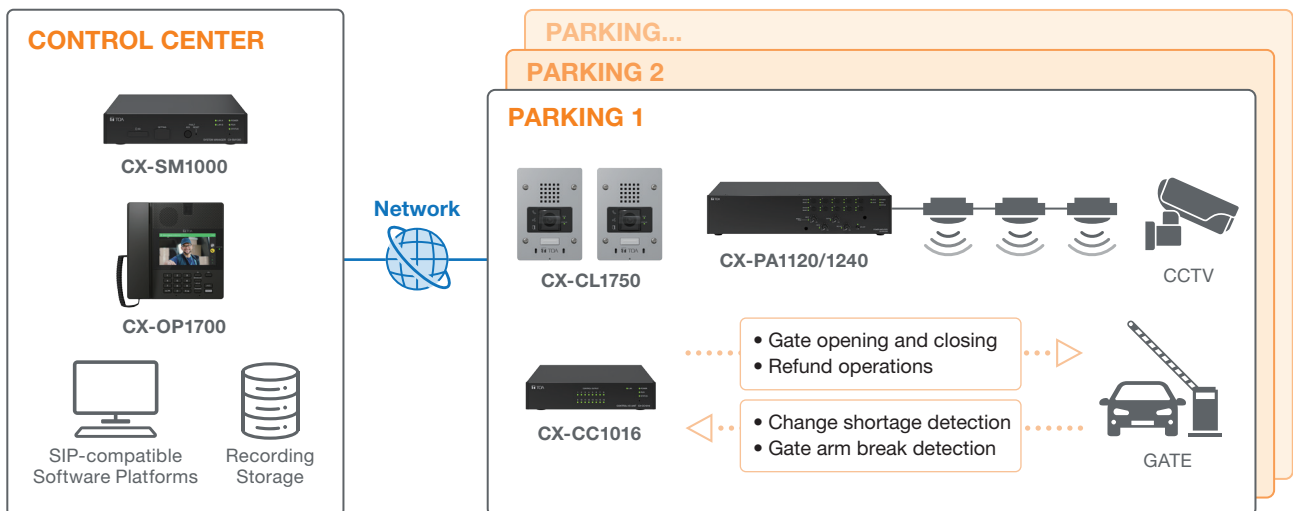
Parking

Remote centralized control



System Example

The control center enables efficient centralized management of multiple parking facilities. When a user encounters a gate issue, they can contact the control center via the CX-CL1750, where an operator responds by remotely operating gate equipment or dispatching maintenance staff. Real-time data from the CX-CC1016 allows monitoring of gate conditions, detecting issues such as coin shortages and gate arm break to ensure smooth parking operations.



Others

Flexibility through IP integration and advanced security



Versatile and Secure Solutions for a Wide Range of Environments



The CX series offers high scalability, advanced security, and integrated management through support for standard protocols. It is not only ideal for the examples mentioned but also well-suited for any environment that requires efficient operation, including hospitals, factories, railways, and airports. This series provides exceptional flexibility and scalability, making it perfect for a wide range of applications.

CX-SM1000 System Manager



- Central control unit indispensable for the CX Series system
- Supports up to 15,000 I/O configurations for system-wide integration
- Manages up to 200 audio links for calls and broadcasts
- Dual LAN ports for flexible and reliable network connection
- Compatible with SIP, HTTP, and other standard protocols
- SD card slot for log storage and configuration backup
- Relay and open collector outputs for external control
- Desktop, rack, or wall mountable for flexible installation
- 24 V DC power input with removable terminal block

Specifications

CX-SM1000

Power Source	24 V DC (operating range: 21.6 - 26.4 V DC) Removable terminal block (2 pins) or use of the optional AC adapter
Current Consumption	200 mA
Power Consumption	5 W
Network	Network I / F: 100Base- TX Network protocol: TCP /IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, SIP, FTP, RSTP, DNS Connector: RJ45 connector x 2 Network cable: UTP (Cat5 or greater)
Maximum number of configurations	
Audio Input	3000 channels
Audio Output	3000 channels
Speaker Line	3000 channels
Control Input	12000 channels
Control Output	15000 channels (Normal control output + ATT control output)
Maximum number of configurations	CX-OP1700: 100 units CX-OP1500: 3000 units CX-CL1750: 3000 units CX-CL1550: 3000 units CX-RM1700: 100 units CX-AF1026: 300 units CX-PA1120/CX-PA1240: 300 units CX-CC1016: 100 units CX-SM1000: 1 unit (Only 1 unit per system, Indispensable)
Number of Audio Links	Maximum 200 links within the system (each 1 link for calls and multi/unicast broadcasts)
Operation	FAULT ACK x 1, FAULT RESET x 1, Reset key x 1, Setting switch x 1
Indicators	LED indicators: LAN (green) x 2, POWER (green) x 1, RUN (green) x 1, STATUS (yellow, red, green) x 1
Control Output	1 channel, relay contact output, maximum contact capacity : 30 V DC/1.0 A 1 channel, open collector output, maximum contact capacity : 30 V DC/100 mA, removable terminal block (5 pins)
SD Section	Setting file upload/download/for log storage Media: SD/SDHC/SDXC(*2) *No SD card provided.
Installation Method	Desktop, rack, or wall mounting (Rack or wall mounting needs optional brackets.)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Panel, Case: Pre-coated steel plate, black, 30 % gloss
Dimensions	210 (W) x 44.3 (H) x 268 (D) mm (8.27" x 1.74" x 10.55")
Weight	1.5 kg (3.31 lb)
Accessory	Removable terminal plug (2 pins) …1, Removable terminal plug (5 pins) …1, Plastic foot …4, Screw for fitting plastic foot …4
Option	AC adaptor: AD-246 Wall mounting bracket: YC-850 Half width blank panel: MB-15B-BK (for rack mounting one CX-SM1000 unit) Rack joint bracket: MB-15B-J (When mounting the unit on the rack in conjunction with the CX-CC1016)

(*1) The maximum number of configurations means that the entire system can be configured to have the maximum number of audio inputs, audio outputs, control inputs/outputs, and speaker line outputs, within the range not exceeding the maximum allowable number for each device.

(*2) For SD cards that have been verified to work, please refer to the TOA DATA Library (<https://www.toa-products.com/international/>).

CX-CC1016 Control I/O Unit



- 16-channel relay inputs and outputs control unit for external device integration
- Supports no-voltage make contact inputs with 24 V DC open voltage
- Maximum relay contact capacity of 30 V DC/1.0 A for outputs
- Single LAN port with 100Base-TX network interface
- Reset key for easy system reboot
- Compact design for desktop, rack, or wall mounting
- 24 V DC power input with removable terminal block

Specifications	CX-CC1016
Power Source	24 V DC (operating range: 21.6 - 26.4 V DC) Removable terminal block (2 pins) or use of the optional AC adapter
Current Consumption	230 mA
Power Consumption	5.5 W
Network	Network I /F: 100Base-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, FTP Connector: RJ45 connector x 1 Network cable: UTP (Cat5 or greater)
Operation	Reset key x1
Indicators	LED indicators: LAN (green) x 1, POWER (green) x 1, RUN (green) x 1, STATUS (yellow, red, green) x 1 Control output indicators: CONTROL OUTPUT (green) x 16
Control Input	16 channels, no-voltage make contact input, open voltage: 24 V DC, short-circuit current: 10 mA or less, removable terminal block (10 pins x 2)
Control Output	16 channels, relay contact output, maximum contact capacity: 30 V DC/1.0 A removable terminal block (16 pins x 2)
Installation Method	Desktop, rack, or wall mounting (Rack or wall mounting needs optional brackets.)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Panel, Case: Pre-coated steel plate, black, 30 % gloss
Dimensions	210 (W) x 44.3 (H) x 266.7 (D) mm (8.27" X 1.74" X 10.5")
Weight	1.5 kg (3.31 lb)
Accessory	Removable terminal plug (2 pins) ...1, Removable terminal plug (10 pins) ...2, Removable terminal plug (16 pins) ...2, Plastic foot ...4, Screw for fitting plastic foot ...4
Option	AC adaptor: AD-246 Wall mounting bracket: YC-850 Half width blank panel: MB-15B-BK (for rack mounting one CX-CC1016 unit) Rack joint bracket: MB-15B-J (for rack mounting two CX-CC1016 units)

CX-OP1700 Video Operation Station



- 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
- 3.5mm headset jacks for versatile audio input/output
- Supports key audio/video codecs including G.722 and H.264
- 2 control inputs and 2 open collector outputs for external device integration
- PoE (IEEE802.3af compliant) or 12 V DC power

Specifications	CX-OP1700
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, φ3.5 mm mini jack Microphone: Electret condenser microphone, φ3.5 mm mini jack
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	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)
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.)
Operation	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.)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Dust/Water Protection	Conforming to IP3X
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)
Accessory	Stand ...1, Stand fixing screw ...2, Zip tie ...2
Option	AC adaptor: AD-1210P, AD-1215P Wall mounting bracket: YC-1001

*ONVIF is a registered trademark of ONVIF Inc.

CX-OP1500 Operation Station



- 16-character x 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
- 3.5mm 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	CX-OP1500
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, φ3.5 mm mini jack Microphone: Electret condenser microphone, φ3.5 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	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: 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
Operation	Dial key, Direct key x10, Function 1, Function 2, Broadcast, Hold, Transfer, PTT, Cancel
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 or less (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)
Accessory	Stand ...1, Stand fixing screw ...2, Zip tie ...2
Option	AC adaptor: AD-1210P, AD-1215P Wall mounting bracket: YC-1001

CX-CL1750 Video Call Station



- 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	CX-CL1750
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	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.)
Operation	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 CMOS Number 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 or less (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)
Accessory	Waterproof washer ...4, Tamper-proof screw ...4, Protection seal ...2
Option	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.

CX-CL1550 Call Station



- Full-duplex hands-free communication with echo canceller
- 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	CX-CL1550
Power Source	PoE (IEEE802.3af compliant) or 12 V DC (use of the optional AC adaptor)
Current Consumption	PoE: 140 mA, 12 V DC (AC adaptor) : 390 mA
Power Consumption	5.5 W
Speech Method	Hands-free: Full-duplex (echo canceler + voice switch)
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
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	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: 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
Operation	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
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 or less (no condensation)
Finish	Case: Die-cast aluminum, silver, mat finish, paint, Panel: PC resin
Dimensions	115 (W) x 162 (H) x 72.2 (D) mm (4.53" x 6.38" x 2.84")
Weight	750 g (1.65 lb)
Accessory	Waterproof washer ...4, Tamper-proof screw ...4
Option	AC adaptor: 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 adaptor, when used as power source, cannot be put in the YS-13A, YC-150, or a 3-gang electrical box together with the CX-CL1550 because such boxes do not have enough room to accommodate both.

CX-RM1700 Touch Screen Remote Microphone



- 5-inch touch screen LCD and direct keys for intuitive operation
- ONVIF Profile S compliant for video monitoring from network cameras
- Equipped with an electret condenser microphone
- Built-in dynamic speaker with 1 W max output
- Supports key audio codecs including G.722 and PCM
- 1 control input and 1 relay output for external device integration
- Dual LAN ports with PoE support on LAN A
- PoE (IEEE802.3af compliant) or 12 V DC power

Specifications	CX-RM1700
Power Source	PoE (IEEE802.3af compliant) or 12 V DC (use of the optional AC adaptor)
Current Consumption	PoE: 190 mA, 12 V DC (AC adaptor) : 560 mA
Power Consumption	7.5 W
Microphone	Unidirectional electret condenser microphone (with indicator)
AUX Input	1 channel, -60 dB (*1)/20 dB (*1) selectable, 600 Ω, transformer-balanced, push-in terminal (3 pins)
Frequency Response	200 Hz - 16 kHz
Signal to Noise Ratio	60 dB or more
Distortion	1 % or less
Volume Control	Microphone volume control, AUX volume control
Internal speaker	Dynamic type speaker, maximum output 1 W
Signal Processing	Input channel: Gain, EQ x 2, Comp, AGC, Trim, Gate (for VOX function), speech enhancement
Network	Network I /F: 100Base-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, 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 (controllable on the software) Audio codec: PCM, G.722 Quantization bit depth: 16-bit Voice packet loss recovery: Silence insertion
Operation	Touch screen LCD, Direct key x 5, Talk key
Indicators	Touch screen LCD: 5" TFT color LCD, 1280 x 780 LED indicator: SELECT (green) x 5, Microphone (green) x 1, STATUS (yellow, red, green) x 1, TALK (green) x 1
Control Input	1 channel, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 5 mA or less, push-in terminal (2 pins)
Control Output	1 channel, relay contact output, maximum contact capacity : 30 V DC/100 mA, push-in terminal (2 pins)
Installation Method	Desktop installation only
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	ABS resin, dark gray
Dimensions	152 (W) x 57.1 (H) x 188.7(D) mm (5.98" X 2.25" X 7.43") (excluding microphone)
Weight	670 g (1.48 lb)
Accessory	Zip tie *1
Option	AC adapter: AD-1210P, AD-1215P

(*1) 0 dB = 1 V

*ONVIF is a registered trademark of ONVIF Inc.

CX-AF1062 Audio Interface 6in2out



- Supports 6 balanced audio inputs and 2 balanced audio outputs
- Comprehensive volume control with 6 inputs and 2 outputs
- Signal processing with Gain, EQ, Comp, AGC, Trim, Gate (VOX)
- Network support with dual RJ45 connectors and key protocols
- Unicast and multicast audio packet transmission
- 10 direct keys and multiple LED indicators
- 10 control inputs and 10 control outputs for external device integration
- Desktop, rack, or wall mountable for flexible installation

Specifications	CX-AF1062
Power Source	24 V DC (operating range: 21.6 - 26.4 V DC) Removable terminal block (2 pins) or use of the optional AC adapter
Current Consumption	340 mA
Power Consumption	8 W
Audio Input	3 channels, -60 dB (*1) /0 dB (*1) selectable, 600 Ω, transformer-balanced 3 channels, 0 dB (*1), 10 kΩ, electronically-balanced Removable terminal block (9 pins x 2) Only Input 1 is used in common with the front-mounted φ6.3 mm phone jack.
Audio Output	2 channels, 0 dB (*1), 10 kΩ, electronically-balanced, removable terminal block (3 pins x 2)
Frequency Response	200 Hz - 16 kHz
Signal to Noise Ratio	60 dB or more
Distortion	1% or less
Volume Control	Audio input volume control x 6, Audio output volume control x 2
Signal Processing	Input channel: Gain, EQ x 2, Comp, AGC, Trim, Gate (for VOX function) Output channel: Gain, EQ x 7
Network	Network I/F: 100BASE-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, FTP, RSTP Audio packet transmission system: Unicast, Multicast Number of paging destinations: Unicast (max. 16), Multicast (max. 2999) Connector: RJ45 connector x 2 Network cable: UTP (Cat5 or greater)
Audio Transmission	Sampling frequency: 48 kHz, 16 kHz (controllable on the software) Method Audio codec: PCM, G.722 Quantization bit depth: 16-bit Voice packet loss recovery: Silence insertion
Operation	Direct key x 10, Reset key x 1, Setting switch (input level setting (MIC/LINE selectable)) x 1
Indicators	LED indicators: LAN (green) x 2, POWER (green) x 1, RUN (green) x 1, STATUS (yellow, red, green) x 1, INPUT (red, green) x 6, OUTPUT (red, green) x 2 Direct keys: SELECT (green) x 10, STATUS (yellow, red, green) x 10
Control Input	10 channels, no-voltage make contact input, open voltage: 24 V DC, short-circuit current: 5 mA or less, removable terminal block (12 pins x 2)
Control Output	4 channels, relay output, maximum contact capacity : 30 V DC/1.0 A, removable terminal block (6 pins x 2) 6 channels, open collector output, maximum contact capacity : 30 V DC/100 mA, removable terminal block (6 pins x 2)
Installation Method	Desktop, rack, or wall mounting (Rack or wall mounting needs optional brackets.)
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Panel, Case: Pre-coated steel plate, black, 30 % gloss Front cover: ABS resin, gray smoke
Dimensions	420 (W) x 44.3 (H) x 284.5 (D) mm (16.54" x 1.74" x 11.2")
Weight	3.1 kg (6.83 lb)
Accessory	Removable terminal plug (2 pins) ...1, Removable terminal plug (3 pins) ...2, Removable terminal plug (6 pins) ...4, Removable terminal plug (9 pins) ...2, Removable terminal plug (12 pins) ...2, Plastic foot4, Screw for fitting plastic foot ...4, Removable terminal plug (2 pins) ...1
Option	AC adaptor: AD-246 Wall mounting bracket: YC-850 Rack mounting bracket: MB-15B

(*1) 0 dB = 1 V

CX-PA1120 Power Amplifier 120W 10SS



- 120 W rated output
- 2 balanced audio inputs with phantom power on input 1
- 10 balanced speaker outputs, selectable 100 V / 70 V output voltage
- Signal processing with Gain, EQ, Comp, AGC, Trim, Gate(VOX), ANC
- Dual RJ45 connectors supporting key network protocols and multicast/unicast
- 10 direct keys and multiple LED indicators
- 10 control inputs and outputs with high capacity relay contacts
- Emergency cutoff input

Specifications	CX-PA1120_W	CX-PA1120_1CE	CX-PA1120_3CU	CX-PA1120_4CE
Power Source	100 - 240 V AC 50/60 Hz	240 V AC 50/60 Hz	120 V AC 50/60 Hz	240 V AC 50/60 Hz
Rated Output	120 W			
Power Consumption	180 W (rated output), 55 W (based on EN62368)			
Audio Input	1 channel, -60 dB (*1)/-40 dB (*1)/-20 dB (*1)/0 dB (*1) selectable, 10 kΩ, electronically-balanced, phantom power supply available, removable terminal block (3 pins) 1 channel, -60 dB (*1)/0 dB (*1) selectable, 10 kΩ, electronically-balanced, removable terminal block (3 pins)			
Recording Output	1 channel, 0 dB (*1), 10 kΩ, electronically-balanced, removable terminal block (3 pins)			
Frequency Response	200 Hz - 16 kHz			
Signal to Noise Ratio	60 dB or more			
Distortion	1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))			
Speaker Line	10 channels, removable terminal block (10 pins x 2)			
Output Voltage	100 V /70 V switchable			
Volume Control	Audio input volume control x 2, Recording output volume control x 1, Speaker output volume control x 1			
Signal Processing	Input channel: Gain, EQ x 2, Comp, AGC, Trim, Gate (for VOX function) Output channel: Gain, EQ x 7, ANC			
Network	Network I/F: 100BASE-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, FTP, RSTP Audio packet transmission method: Unicast, Multicast Number of broadcasting destinations: Unicast (max.1), Multicast (max. 2999) Connector: RJ45 connector x 2 Network cable: UTP (Cat5 or greater)			
Audio Transmission	Sampling frequency: 48 kHz, 16 kHz (controllable on the software) Audio codec: PCM, G.722 Quantization bit depth: 16-bit Voice packet loss recovery: Silence insertion			
Operation	Direct key x 10, Reset key x 1, CPU OFF switch x 1, Output voltage selection switch x 1, Input setting switch (input level setting (MIC/LINE selectable), phantom power setting) x 1			
Indicators	LED indicators: LAN (green) x 2, POWER (green) x 1, RUN (green) x 1, STATUS (yellow, red, green) x 1, INPUT (green, red) x 2, REC OUT (green, red) x 1, OUTPUT (green, red) x 1, CPU OFF (red) x 1 Direct keys: SELECT (green) x 10, STATUS (yellow, red, green) x 10			
Control Input	10 channels, no-voltage make contact input, open voltage: 24 V DC, short-circuit current: 5 mA or less, removable terminal block (12 pins x 2)			
Control Output	10 channels, relay contact output, maximum contact capacity : 125 V AC/24 V DC, 4.0 A, removable terminal block (15 pins x 2)			
Emergency Control Input	1 channel, photo coupler input, input current: 5 mA or less, removable terminal block (2 pins)			
Installation Method	Desktop, rack, or wall mounting (Rack or wall mounting needs optional brackets.)			
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)			
Operating Humidity	90 %RH or less (no condensation)			
Finish	Panel, Case: Pre-coated steel plate, black, 30 % gloss Volume control section cover: ABS resin, gray smoke			
Dimensions	420 (W) x 88.7 (H) x 326 (D) mm (16.54" X 3.49" X 12.83")			
Weight	5.6 kg (12.35 lb)			
Accessory	Power cord (2 m (6.56 ft)) ---1, Removable terminal plug (2 pins) ---1, Removable terminal plug (3 pins) ---3, Removable terminal plug (12 pins) ---2, Removable terminal plug (10 pins) ---2, Removable terminal plug (15 pins) ---2, Plastic foot ---4, Screw for fitting plastic foot ---4			
Option	Wall mounting bracket: YC-850 Rack mounting bracket: MB-25B			

(*1) 0 dB = 1 V

CX-PA1240 Power Amplifier 240W 10SS



- 240 W rated output
- 2 balanced audio inputs with phantom power on input 1
- 10 balanced speaker outputs, selectable 100 V / 70 V output voltage
- Signal processing with Gain, EQ, Comp, AGC, Trim, Gate(VOX), ANC
- Dual RJ45 connectors supporting key network protocols and multicast/unicast
- 10 direct keys and multiple LED indicators
- 10 control inputs and outputs with high capacity relay contacts
- Emergency cutoff input

Specifications	CX-PA1240_W	CX-PA1240_1CE	CX-PA1240_3CU	CX-PA1240_4CE
Power Source	100 - 240 V AC 50/60 Hz	240 V AC 50/60 Hz	120 V AC 50/60 Hz	240 V AC 50/60 Hz
Rated Output	240 W			
Power Consumption	330 W (rated output), 72 W (based on EN62368),			
Audio Input	1 channel, -60 dB (*1) /-40 dB (*1) /-20 dB (*1) /0 dB (*1) selectable, 10 kΩ, electronically-balanced, phantom power supply available, removable terminal block (3 pins) 1 channel, -60 dB (*1) /0 dB (*1) selectable, 10 kΩ, electronically-balanced, removable terminal block (3 pins)			
Recording Output	1 channel, 0 dB (*1), 10 kΩ, electronically-balanced, removable terminal block (3 pins)			
Frequency Response	200 Hz - 16 kHz			
Signal to Noise Ratio	60 dB or more			
Distortion	1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))			
Speaker Line	10 channels, removable terminal block (10 pins x 2)			
Output Voltage	100 V /70 V switchable			
Volume Control	Audio input volume control x 2, Recording output volume control x 1, Speaker output volume control x 1			
Signal Processing	Input channel: Gain, EQ x 2, Comp, AGC, Trim, Gate (for VOX function) Output channel: Gain, EQ x 7, ANC			
Network	Network I/F: 100BASE-TX Network protocol: TCP/IP, UDP, ARP, ICMP, HTTP, RTP, RTSP, IGMP, NTP, FTP, RSTP Audio packet transmission method: Unicast, Multicast Number of broadcasting destinations: Unicast (max. 1), Multicast (max. 2999) Connector: RJ45 connector x 2 Network cable: UTP (Cat5 or greater)			
Audio Transmission	Sampling frequency: 48 kHz, 16 kHz (controllable on the software) Audio codec: PCM, G.722 Quantization bit depth: 16-bit Voice packet loss recovery: Silence insertion			
Operation	Direct key x 10, Reset key x 1, CPU OFF switch x 1, Output voltage selection switch x 1, Input setting switch (input level setting (MIC/LINE selectable), phantom power setting) x 1			
Indicators	LED indicators: LAN (green) x 2, POWER (green) x 1, RUN (green) x 1, STATUS (yellow, red, green) x 1, INPUT (green, red) x 2, REC OUT (green, red) x 1, OUTPUT (green, red) x 1, CPU OFF (red) x 1 Direct keys: SELECT (green) x 10, STATUS (yellow, red, green) x 10			
Control Input	10 channels, no-voltage make contact input, open voltage: 24 V DC, short-circuit current: 5 mA or less, removable terminal block (12 pins x 2)			
Control Output	10 channels, relay contact output, maximum contact capacity : 125 V AC/24 V DC, 4.0 A, removable terminal block (15 pins x 2)			
Emergency Control Input	1 channel, photo coupler input, input current: 5 mA or less, removable terminal block (2 pins)			
Installation Method	Desktop, rack, or wall mounting (Rack or wall mounting needs optional brackets.)			
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)			
Operating Humidity	90 %RH or less (no condensation)			
Finish	Panel, Case: Pre-coated steel plate, black, 30 % gloss Volume control section cover: ABS resin, gray smoke			
Dimensions	420 (W) X 88.7 (H) X 326 (D) mm (16.54" X 3.49" X 12.83")			
Weight	5.6 kg (12.35 lb)			
Accessory	Power cord (2 m (6.56 ft)) ---1, Removable terminal plug (2 pins) ---1, Removable terminal plug (3 pins) ---3, Removable terminal plug (12 pins) ---2, Removable terminal plug (10 pins) ---2, Removable terminal plug (15 pins) ---2, Plastic foot ---4, Screw for fitting plastic foot ---4			
Option	Wall mounting bracket: YC-850 Rack mounting bracket: MB-25B			

(*1) 0 dB = 1 V

