

**SPON**



## Prison Audio System Solution



www.sponcomm.com

**Address:** No.70, Nantang Road, High-Tech Zone, Changsha, China.

**Mobile:** +86 138 7314 3517

**Tel:** +86 731 8557 0190

**Email:** Inquiry@Sponcomm.Com



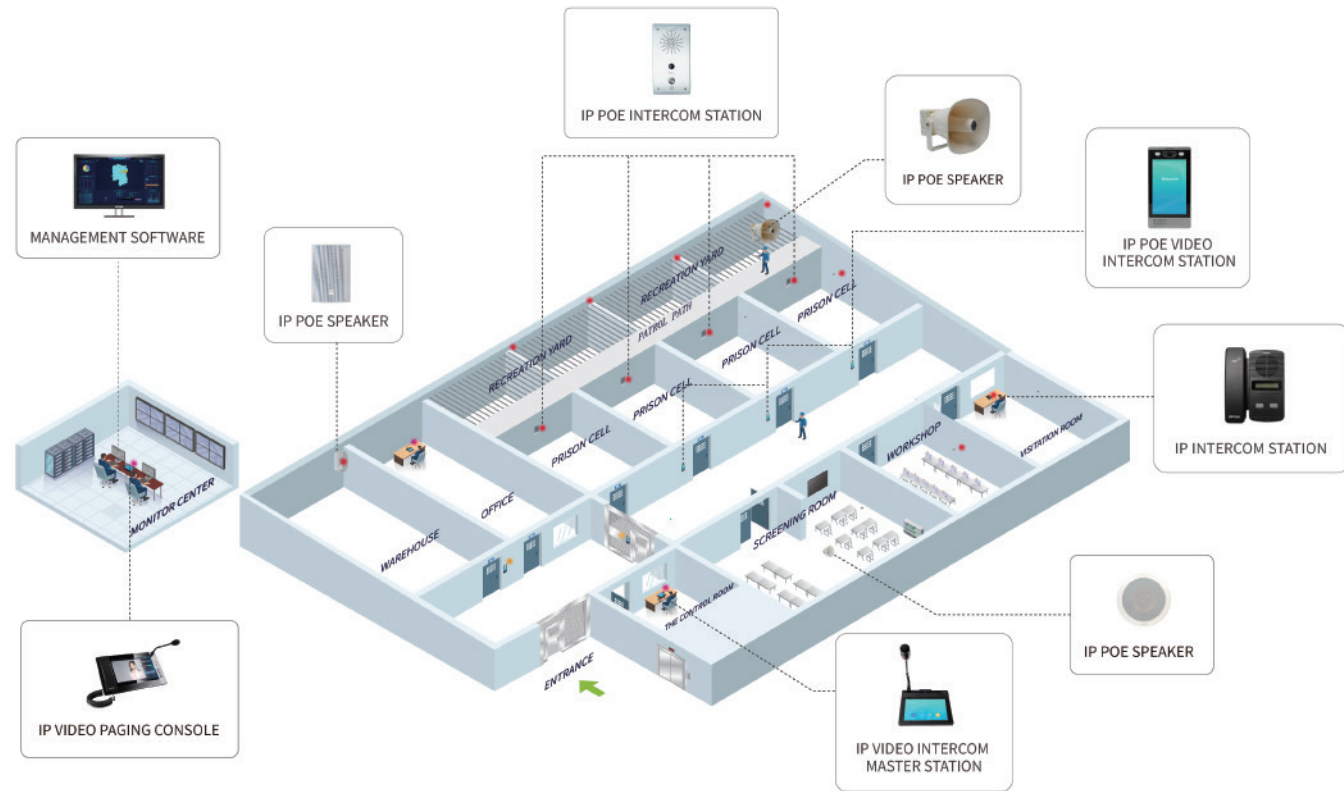
Enhanced Security



System Integration



Centralized Control



## System Overview

### SPON IP Audio System

The prison IP intercom and PA (Public Address) system offers a contemporary communication approach tailored for correctional institutions. Merging IP intercom and public address features, it ensures streamlined and protected communication within prison settings.

SPON's specialized system for prisons seamlessly blends IP Intercom Panel, visual talkback, and broadcasting capabilities, ensuring effective, clear, and secure exchanges.



## Solution Key Benefits

### Simplified and Efficient Audio Solutions

- ▲ **Enhanced Security** Advanced security measures ensure encrypted, breach-free communication among authorized users.
- ▲ **Intercom Communication** Streamlines communication between inmates, guards, and staff via direct calls to specific locations or individuals using strategically placed intercom terminals.
- ▲ **PA Broadcasting** Quickly disseminate announcements or emergency alerts throughout select zones or the entire facility.
- ▲ **System Integration** Harmonizes with other management systems like video surveillance, access control, and fire alarms, boosting security and efficiency.
- ▲ **Centralized Control** Manage all functionalities from one interface for efficient operations and rapid emergency responses.
- ▲ **Scalability** Designed for easy expansion to meet future infrastructural needs.
- ▲ **Emergency Response** Enables instant communication for swift action during critical situations.
- ▲ **Real-time Monitoring** Track communication activities in real-time for transparency and accountability.
- ▲ **Customization & Zoning** Tailored to the prison's specific needs, with zoning to direct messages to designated areas, minimizing disruptions.

In essence, the Prison IP Intercom and PA system is a state-of-the-art communication tool that ensures heightened security, effective communication, and efficient operations within correctional settings. Its combined functionalities are pivotal for advanced prison management and rapid emergency handling.



## Solution Applications

### Versatile Applications of SPON Audio System



#### ▲ 1. Control Center

In control center , it needs a powerful management platform to manage all endpoints , simultaneously need a platform which can integrate with other platforms like CCTV server , SIP server. Using good quality products rather than poor ones will be your best choice. The management platform by SPON provides a continuous system-wide overview to support a fast reaction when meeting an emergency.

#### ▲ 2. Officer rooms

In the officer rooms, Here is typically equipped with microphones, sub software station to allow officers to make live paging announcements, scheduled message, emergency notifications and two way communication throughout the prison facility using the existing data network infrastructure.



#### ▲ 3. Different Cells

In the cell rooms of a prison, SPON anti-Riot Intercom provides an advanced communication system that enables efficient and secure interactions between inmates and prison staff. Moreover it is designed to enhance safety, streamline operations, and ensure effective communication.



#### ▲ 4. Visitor Management

SPON IP phones in the Visitor Management system of a prison refers to the integration of an internet protocol (IP) based intercom system within the facility's visitor management procedures. Our IP Phones allows for seamless communication between visitors and prisoner for enhanced security and controlled access.

#### ▲ 5. Pedestrian Access

An IP intercom station at Pedestrian access in a prison is essential facility , it can allow the individuals , including authorized personnel, visitors, and inmates to access in specific areas. It is a critical aspect of prison security and management, as it regulates the movement of people within the facility, ensuring only authorized individuals have access to specific areas.



#### ▲ 6. Public Areas

The SPON IP PA system, with its advanced capabilities, empowers seamless and comprehensive public address across a multitude of areas, enhancing safety, information dissemination, and evacuation procedures. This state-of-the-art system enables the transmission of general announcements with utmost clarity and reach, ensuring that vital information, warnings, and evacuation instructions are effectively communicated to various spaces, including the dining room, cells, pedestrian areas, and outside areas ect.



## AUDIO MANAGEMENT PLATFORM XC-9000



### ▲ KEY FEATURES

#### UNIFIED MANAGEMENT AND USER INTERFACE

- - **B/S software architecture:** centralized management of all IP intercom and PA devices.
- - **User-friendly web interface:** all critical system information displayed on the Dashboard.
- - **Versatile Events:** Creation and scheduling of timed events, alarm events, and customizable event combinations.
- - **Mobile app Management:** PA system management and user account management, including operation authority settings.

#### PA AND INTERCOM FLEXIBILITY

- - **Various Task Form:** Supports multiple real-time PA tasks using server sound card, files, terminals, and speech synthesis.
- - **Multiple Calling way:** User-defined call transfer, answer, and call priority settings.
- - **Online Database:** Upload functionality for audio files and pre-recorded messages to the media library.
- - **Seamless Compatibility:** Integration with third-party VOIP phones using SIP trunk for seamless VOIP system connection.

#### SYSTEM MONITORING AND INTEGRATION

- - **Operation Log:** Call-log and event-log recording and inquiry features for efficient monitoring.
- - **API Flexibility:** Standard HTTP API documentation to facilitate integration with other systems and third-party development.

## IP INTERCOM STATION NAS-8527



### ▲ TECHNICAL PARAMETERS

Power Supply	DC12V/1.5A
Audio Sampling Rate	8kHz to 22.050kHz, 16bit, 16kbps to 352kbps
Power Consumption	≤5W
Network Protocol	TCP/IP, UDP, SIP, ARP, ICMP, IGMP
Signal-to-Noise Ratio	>80dB
Operating Temperature, Humidity	0°C to 45°C, ≤90%RH (non-condensing)
Product Dimensions	159x198x120mm

### ▲ KEY FEATURES

#### DESIGN AND ACCESSIBILITY

- - Compact and aesthetically pleasing, suitable for desktop installation.
- - Numeric physical buttons for direct calling to any designated terminal.
- - Built-in 3W speaker and receiver microphone for hands-free operation.

#### AUDIO CONNECTIVITY AND EMERGENCY RESPONSE

- - Ports for 3.5mm audio line output and microphone input, compatible with headsets.
- - Alarm Input/Output for integration with emergency systems like buttons, detectors, and locks.

#### NETWORK COMPATIBILITY AND COMMUNICATION

- - Supports offline intercom without centralized server software.
- - SIP protocol compatibility for IPPBX registration as a SIP endpoint.
- - Standard RJ45 interface for Ethernet connectivity, adaptable across network segments and routers.



# NETWORK VIDEO INTERCOM MASTER STATION XC-9037NV



## ▲ TECHNICAL PARAMETERS

Power Supply	DC 12V/1.5A
Camera	2MP
Video Codec	VGA/720/1080
S/N (Signal-to-Noise) Ratio	≥82dB
Audio Sampling & Bit Rate	8kHz-44.1kHz, 16bit, 8kbps-320kbps
Frequency Response	40Hz-18kHz
Network Protocol	SIP (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Configuration Method	Local Settings/Web Page
Mounting Method	Desktop
Interface	1×RJ45 Ethernet Port, 1×USB 2.0, 1×Line Input, 1×Line Output, 1×Relay Input, 1×Relay Output

## ▲ KEY FEATURES

### INTERACTIVE DISPLAY AND CAMERA FEATURES

- - **7-Inch Touchscreen:** User-Friendly Interface For Easy Interaction.
- - **200W HD Camera:** Equipped With Physical Privacy Protection.

### COMMUNICATION TECHNOLOGIES

- - **Full-Duplex Visual Intercom:** Enables Effective Two-Way Visual Communication.
- - **Noise Reduction Algorithm:** Enhances Audio Quality For Clearer Communication.
- - **Remote Monitoring Capabilities:** Ability To Check The Status Of The Terminals, Including Login And Intercom Status.

### BROADCASTING AND CUSTOMIZATION

- - **Flexible Broadcasting Options:** Supports Broadcasts To All Areas, Specific Zones, Or Individual Terminals.
- - **Multiple Broadcast Formats:** Including Audio Files, Pre-Recorded Messages, And TTS Options.
- - **Emergency Broadcast System:** One-Touch PA Across All Terminals.
- - **Customizable Ring Tones:** Personalize Ringtones For Calls And Broadcasts.

# IP INTERCOM STATION NAS-8523C



## ▲ TECHNICAL PARAMETERS

Power Supply	DC 24V/1A or PoE (IEEE802.3af)
Network Protocol	SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Power Consumption	≤30W
Audio Sampling Rate	8kHz-22.05kHz, 16bit
Transmission Bit Rate	8kbps-320kbps
S/N (Signal-to-Noise) Ratio	≥82dB

## ▲ KEY FEATURES

### PANEL DESIGN

- - **Material:** 6mm thick aluminum panel with anti-stab protection.
- - **Security Features:** Special screws to prevent vandalism.
- - **Button Configuration:** Single-button design for one-touch alarm and full-duplex intercom.

### AUDIO CAPABILITIES

- - **Built-in Speaker and Microphone:** 3W speaker and mic for receiving broadcasts and hands-free communication.
- - **Digital Audio Processing:** Enhances noise reduction, improves audible range and sound quality.
- - **Audio Output:** Connects to external powered speakers or headphones.

### SECURITY FEATURES

- - **Tamper Alarm:** Automatic alert to management software upon forced disassembly.
- - **Alarm System Integration:** Includes one alarm output for controlling lights or locks, and one input for connecting additional alarms or sensors.

### CONNECTIVITY AND NETWORKING

- - **SIP Support:** Standard open SIP signaling for independent VOIP system integration.
- - **POE Support:** Equipped for Power Over Ethernet supply.
- - **Network Accessibility:** Standard RJ45 interface for easy connection across various network segments and routers.

# IP VIDEO INTERCOM PAGING CONSOLE

## XC-9031NV

### ▲ TECHNICAL PARAMETERS

Power Supply	DC 12V/3.3A or PoE IEEE802.3af
Video Codec	VGA/720/1080
Configuration Method	Local Settings/Web Page
Frequency Response	25Hz~20KHz
Audio Sampling & Bit Rate	8KHz~48KHz, 16bit/32bit
Network Protocol	SIP (RFC 3261), TCP, UDP, ARP, ICMP, IGMP, HTTP, RTP



### ▲ KEY FEATURES

#### DESIGN & COMMUNICATION

- - **Multifunctional Console:** Professional, versatile console supporting various installations (desktop, embedded, wall-mounted).
- - **Interactive Touch Screen & Camera:** Equipped with a 10.2" TFT LCD touch screen and a 13MP HD camera for two-way video intercom.
- - **Versatile Audio Options:** Built-in 3W speaker, unidirectional microphone, and Bluetooth connectivity for diverse intercom options, including hands-free and gooseneck microphone use.

#### BROADCASTING, CALLING, AND RECOGNITION CAPABILITIES

- - **Zone-Wise PA:** Flexible paging broadcasting across different zones.
- - **Diverse Calling Methods:** Offers Dial, Bookmarks, and Map calling modes.
- - **Enhanced Security:** Intelligent face recognition for enhanced security.
- - **Media Broadcasting and Conference Support:** Pre-recording and file broadcasting to specified terminals, along with full audio/video conference support.

#### NETWORK MONITORING AND EXTERNAL INTEGRATION

- - **Comprehensive Network Monitoring:** Network state checks for each system terminal.
- - **Emergency and Access Control:** Relay Input/Output interfaces for linking with emergency buttons, detectors, alarms, and electronic locks.
- - **VoIP Integration:** SIP protocol compatibility for seamless integration with VoIP systems like Cisco, Asterisk, and Yealink.

# IP POE VIDEO INTERCOM STATION

## XC-9133AV

### ▲ TECHNICAL PARAMETERS

Power Supply	DC 24V/1A or PoE (IEEE802.3af)
Network Protocol	SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Audio Sampling Rate	8kHz~44.1kHz, 16bit
Signal-to-Noise (S/N) Ratio	≥84dB
Total Harmonic Distortion	<1%
Interface	1×RJ45 Ethernet Port, 2×Relay Input, 2×Relay Output, 1×Power Input



### ▲ KEY FEATURES

#### HIGH-QUALITY DISPLAY AND CAMERA

- - **High-Resolution Touchscreen:** 7-inch high-definition capacitive touch-screen with 800×1280 resolution.
- - **Advanced Camera Technology:** Built-in 2 MP low illuminance, wide dynamic dual camera.

#### ADVANCED COMMUNICATION AND CONNECTIVITY

- - **Full Duplex Audio Processing:** Digital audio processor for full duplex communication with echo cancellation.
- - **Versatile Calling Options:** Multiple call modes including double virtual buttons, virtual numerical dialpad, and call list.
- - **Independent Operation:** Offline calling capabilities without server dependency.
- - **SIP Protocol Integration:** Standard SIP protocol support for easy integration with mainstream SIP PBX systems (Yeastar, Asterisk, Cisco, etc.).

#### SYSTEM INTEGRATION AND OUTDOOR SUITABILITY

- - **Flexible Connectivity:** Relay I/O port for connecting to third-party external equipment.
- - **Remote System Management:** Remote management and online upgrading features.
- - **Outdoor-Ready Design:** Designed for outdoor use with a protection level of IPX5.

## NETWORK WALL-MOUNTED SPEAKER XC-9607



### ▲ TECHNICAL PARAMETERS

Power Supply	DC 24V/1A or PoE (IEEE802.3af)
Rated Power Output	20W (at DC 24V/1A powered) 15W (at PoE powered)
Network Protocol	TCP/IP, UDP, ARP, ICMP, IGMP
Maximum SPL	97dB±3dB
Frequency Response	100Hz-18kHz
Operating Temperature, Humidity	-20°C to 50°C, 10% to 90% RH (non-condensing)

### ▲ KEY FEATURES

#### PERFORMANCE AND ENCODING

- - **High-Speed Processing:** Employs a high-speed, industrial-grade dual-core (ARM+DSP) chip for superior processing power.
- - **Clear Voice Encoding:** Features versatile voice encoding with both narrowband (G.711a/u) and broadband (G.722) options for crystal-clear voice paging.

#### CONNECTIVITY & SYSTEM INTEGRATION

- - **SIP Phone Paging Support:** Supports receiving paging from SIP phones through 10 dedicated multicast addresses.
- - **Efficient Multicast Scalability:** Incorporates a multicast scalable function, efficiently saving SIP account resources.
- - **SIP Protocol Integration:** Fully compatible with standard SIP protocols for seamless integration with leading SIP PBX systems like Yeastar, Asterisk, and Cisco.

#### AUDIO MANAGEMENT & NETWORK FUNCTIONALITY

- - **Versatile Audio Functions:** Facilitates background music, emergency paging, and alarm signals from the SPON management system.
- - **Flexible Network Power Options:** Offers flexible deployment with PoE or PoE+ interface support.
- - **Remote Management:** Equipped with remote management and online upgrading capabilities for ongoing system optimization.

## NETWORK HORN SPEAKER XC-9615



### ▲ TECHNICAL PARAMETERS

Power Supply	DC 24V/2.7A or PoE (IEEE802.3af)
Power Consumption	≤65W
Rated Power Output	30W(at DC 24V/2.7A powered) 22W (at PoE+ powered) 15W (at PoE powered)
Network Protocol	SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Maximum SPL	97dB±3dB
S/N (Signal-to-Noise) Ratio	≥80dB
Audio Encoding	MP3/PCM/ADPCM/G711.a/G711.u/G729
Frequency Response	100Hz-18kHz
Interface	1×RJ45 Ethernet Port, 1×Power Input
IP Rating	IP65

### ▲ KEY FEATURES

#### CONNECTIVITY & SYSTEM INTEGRATION

- - **Multicast Addresses:** 10 Multicast Addresses For Paging From SIP Phones.
- - **Server Efficiency:** Multicast Scalability Saves SIP Account Resources.
- - **SIP Compatibility:** Standard SIP Protocol For Easy Integration With Yeastar, Asterisk, Cisco.
- - **Onvif Compatibility:** Onvif Protocol Compatible For Third-Party Monitoring System Integration.

#### AUDIO MANAGEMENT & NETWORK FUNCTIONALITY

- - **Content Management:** Manages Background Music, Emergency Pages, And Alarms From SPON.
- - **Adaptive Volume:** Dynamic Volume Control Adapts To Ambient Noise.
- - **Power Option:** PoE/PoE+ Support For Versatile Installation.
- - **Remote Management:** Remote Management And Online Upgrades.
- - **Two-Way Intercom:** Two-Way Communication With SIP Telephones/Intercoms.