SPON

Innovate For Security


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SPON

# PRODUCT CATALOG

Security » Transport » Industry » Commerce » Education
Retail Business » Mosques





Surveillance Microphone



Public Address System



Intercom System



Conference System

# CATALOGUE




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# COMPANY DEVELOPMENT HISTORY

## 2004

### Establishment

Introduced Digital Language Learning System in school. Four young engineers formed "SPON" and launched pioneering IP Audio technology in China, supporting devices for language learning.

## 2007

### Pioneering development network PA products

Leveraging the technical advantages of the NAS series bi-directional network PA products, SPON quickly penetrated the market, and launched its branding strategy, marking the company's transformation journey.

## 2008

### Steady Sales Growth. Introduced the IP intercom

Communication system, paving the way in communication security with IP PA + IP intercom solutions for banks,schools,factories.

## 2009

### New Bank IP Voice Alarm System

With the rapid growth of China's banking sector, SPON launched a customized IP voice alarm system, propelling bank security services into a new era of network communication.

## 2014

### Assisted China's Aerospace Communication

Provided IP voice warning systems for hundreds of thousands of branches from major Chinese banks. Also served five major aerospace institutions.

## 2016

### Launch of XCoIP Technology

Introduced cutting-edge XCoIP tech, paving the way for cross-platform, cloud-based, reliable communication. SPON Communications positioned as a leading domestic base for modern, intelligent network audio product development.

## 2017

### Move to SPON New Industrial Park

Relocated to a 20,000+ square meter facility featuring an advanced, comprehensive audio product line.

## 2018

### Crowned industry's hidden champion

After years in the audio industry, SPON was recognized by international magazines as one of the "Top 10 Invisible Champion Enterprises Made in China.

## 2019

### Established Company Collaboratively with TOA

Formed joint venture with renowned Japanese Public address brand TOA, establishing "TOA SPON Electronics Ltd." Collaboratively developed high-end PA systems; also launched Noise Detection System products.

## 2020-2021

### Launch Era of Cloud PA

Launched XC-Cloud, pioneering intelligent cloud broadcasting with integrated AI audio ecosystem.

Recognized by the Ministry of Industry and Information Technology as a "Specialized, Fine, Special, and New" National Little Giant Enterprise.

## 2022-2024

### Launch of Digital Conference System

We expanding our product range to offer users intelligent, scenario-based professional conference system products and services.We have a wide range of digital conference system product lines for different requirements.



## ABOUT OUR COMPANY

SPON Communications is a leading manufacturer of IP audio technology in China. Since 2004, we have launched IP PA Systems in sectors like education, finance, and public security, gaining recognition for landmark projects and serving major banks nationwide. SPON's products have been widely recognized and successfully applied in national landmark projects such as Tiananmen Square, the Great Wall at Badaling, the Temple of Heaven Park, the Jiuquan Satellite Launch Center, the China Aerospace Science and Technology Corporation, and the National Games venues. With products exported to over 50 countries, SPON offers complete solutions for the rapidly growing markets of smart campus,smart building, smart transportation, smart financial security in a practical and adaptable way.

**5.7w**
m² Floor Space

**20+**
Years of Foundation

**500+**
Staffs

**200+**
Core Intellectual Properties

## SPON Core Products



IP PUBLIC ADDRESS SYSTEM



IP INTERCOM SYSTEM



IP CONFERENCE SYSTEM



IP SURVEILLANCE MICROPHONE



# COMPANY HONORS





ISO9001



ISO14001



ISO20000



CE Certificate



ISO27001



ISO45001



EMC



BCTC

## Our Partners

Honeywell
科大讯飞 iFLYTEK
HIKVISION
TOA
alhua
HUAWEI
uniview 宇视

## SPON OFFICE BUILDING


Company Building


Reception


Showroom


Office Area


Conference Room


Lounge Area

## SPON DUST-FREE WORKSHOP


SMT Workshop


Assembly Workshop


Testing Laboratory


Warehouse


Anechoic Chamber


QC Department

## SPON GLOBAL MARKETING



Intersec Dubai


IFSEC UK



ISE



## PROJECT CASES

SCHOOL


Holy Quran Society School
(Saudi Arabia)


Liwa New Residential Area School
(Oman)



Amity International School
(Oman)


Nursery School Parcheminerie
(France)


Association of Early Intervention for
Children with Disability (Oman)


Salalah Vocational College
(Oman)


International Indian School Dammam
(Saudi Arabia)


One World International School
(Saudi Arabia)


Maarif Schools Baghdad
(Iraq)


Tzu Chi International School
(Malaysia)



Singapore Korean International School
(Singapore)


Menzi Primary School
(South Africa)

## PROJECT CASES

PRISON



Darussalam Prison
(Brunei)




Al Awir Central Prison
(UAE)




New Bilibid Prison
(the Philippines)




Changi Prison Complex
(Singapore)



Sremska Mitrovica Prison
(Serbia)



Dob pri Mirni Prison
(Slovenija)

## PROJECT CASES

SAFE CITY



Kompleks Kemudahan PDRM
(Malaysia)



Politiezone Brussel-West
(Belgium)



Bahria Enclave Islamabad
(Pakistan)



Etihad Modern Art Gallery
(UAE)



King Salman Park
(Saudi Arabia)



Port of Guayaquil
(Ecuador)

FACTORY



Pakistan Cables Nooriabad Factory
(Pakistan)



Oruçoğlu Yağ Sanayi
(Turkey)



RAK Ceramics Factory
(Bangladesh)



Abul Kalam Spinning Mill
(Bangladesh)



AMANN Group Textile Factory
(Bangladesh)



Akij Plastics Chhatak Plant
(Bangladesh)

EXPRESSWAY




Khobar–Dammam–Dhahran Expressway
–Highway 613 (Saudi Arabia)



Jeddah - Makkah Expressway
(Saudi Arabia)



Islamabad-Murree-Muzaffarabad
Expressway - E75 Expressway (Pakistan)



Al Khor Expressway
(Qatar)



Autoroute du Soleil - A7
(France)



A4 Motorway (Matosinhos - Amarante)
(Portugal)

# PROJECT CASES

HOSPITAL




Centro Hospitalar Universitário
(Portugal)



Jinnah Hospital
(Pakistan)



King Fahad Medical City
(Saudi Arabia)



Royale Hayat Hospital
(Kuwait)



Santa Maria Nuova Hospital
(Italy)



Hospital De Montereau
(France)

COMMERCIAL BUILDING



King Abdullah Financial District
(Saudi Arabia)




Selangor Darul Ehsan Shopping Center
(Malaysia)



Rodizio Brazilian Churrascaria
(Qatar)



Al Sahafah Hotel
(Saudi Arabia)



Radisson Blu Hotel Muscat
(Oman)



Al Najaf Hotel
(Iraq)



# SYSTEM OVERVIEW

- With the application of advanced IP Audio ™ technology, SPON IP intercom system, a hands-free intercom system to transmit the pure digital data, sending the audio signal data packets via LAN and WAN, solves the traditional limitations on the transmission distance and the problem of being vulnerable to interference. With its simple structure, the system will convert to be a powerful transmission of digital system once the IP terminals connected to the Ethernet. No need separate wiring for every access point. SPON IP intercom system is actually the epitome of computer network, digital video monitoring and intercom system.
- The Internet bandwidth is increasing rapidly with the technological development , the video call requirements are increasing gradually by people, SPON has introduced a new series of video intercom terminals to achieve the effect of face to face communication, they are also compatible with standard SIP protocol, and they can be connected to VOIP telephone system which opened a new chapter.
- SPON IP intercom system has been used across fields such as the industries (iron and steel, electricity and petrochemical industry), the transportation, the prison and the financial industry, especially suitable for the working places which require a high standard of function and reliability on the communication. In order to meet variously customized demands, SPON has been engaging in developing versatile systems with diversified functions in different working environments such as the ordinary indoor and outdoor circumstances, the formidable industrial environment and some other special kinds.

## WHY CHOOSE SPON SYSTEM?

- With a smooth and clear sound effect with the ability to resist the external electromagnetic wave; the occupied rate of the bandwidth can be as low as 34kbps only; the intercom transmission delay in LAN can be ≤30ms;
- With an unlimited transmission distance; the intercom and multi-conversations will be realized as long as the network is available, constructing a broader communication system;
- With the digital audio processing technology; the audio bandwidth is 7kHz with echo-cancellation and anti-noise function where full-duplex, multi-conversation and partition broadcasting can be realized;
- With an encrypted call by encryption processing through a coding format, preventing eavesdropping;
- Easy to expand the communication system by means of adding terminals;
- With the simultaneous roles of alarming and PA system at any time (compatible with SPON IP network PA system products).



Highway toll station



Hotel

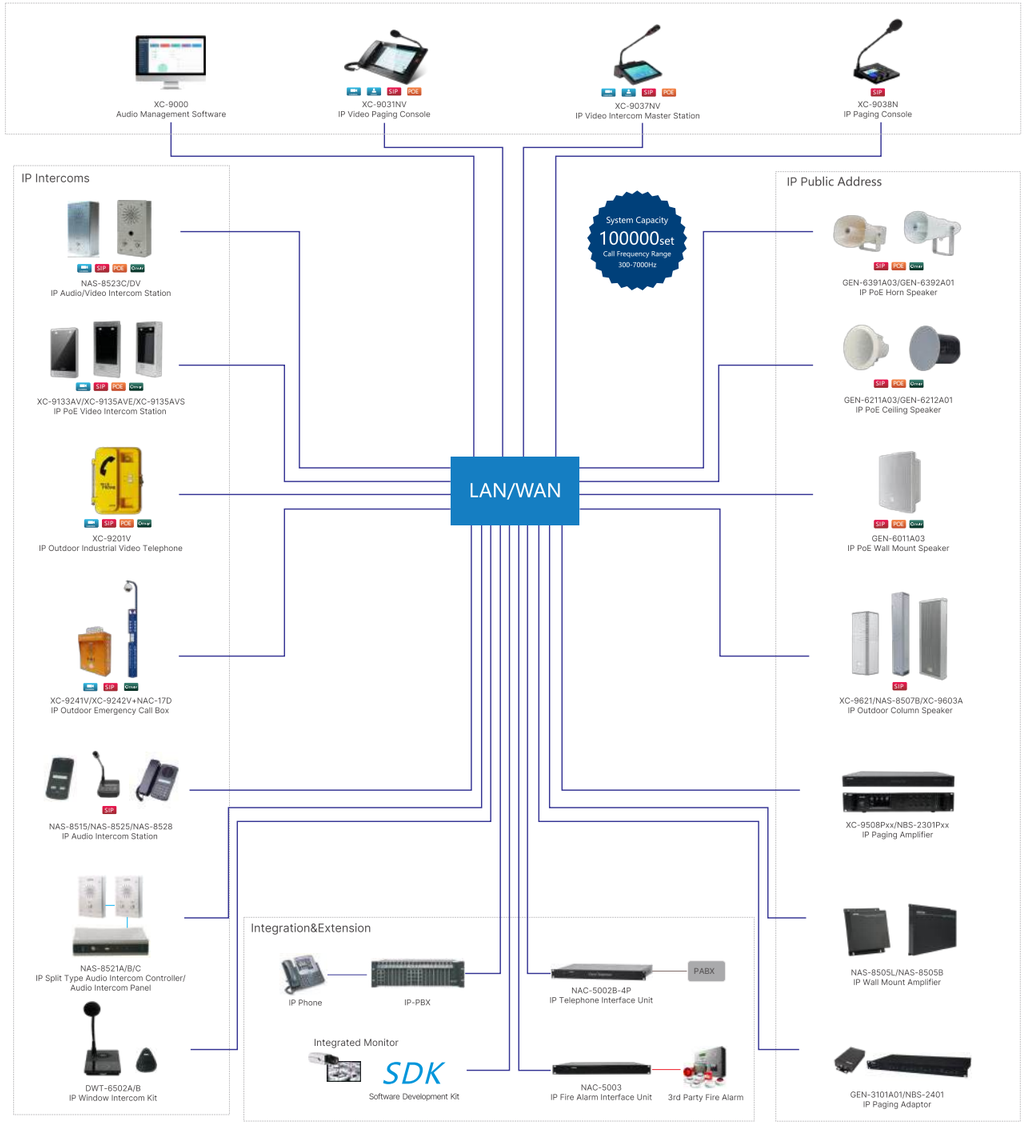


Stage monitor



Industrial enterprise

# SYSTEM DIAGRAM




All intercom terminals designed for the parallel structure, there is no host/ext difference.

Terminal in the LAN and WAN in use, and supports automatic access to IP addresses.

**PRACTICAL FUNCTIONS**

| | | | |
|---|---|---|---|
| Hands-free talk | Simple&SIP call | Auto response | Area broadcast |
| Monitor | Video Intercom | Door control | Busy transfer |
| Forcibly inserted | Alarm button | Digital record | External |

# SYSTEM FUNCTION

| FUNCTION | | INTRODUCTION |
|---|---|---|
| Intercom /Call | Hands-free call | Hands-free call, a mode of full-duplex with the function of noise cancellation. |
| | PTT call | A half-duplex whose working method is similar to the walkie-talkie in the way of pushing to talk and releasing to listen; commonly used in the noisy place. |
| | Video call | Supportive of one-way or two-way video call. |
| Multiparty calls | Conference mode | Supportive of fifteen terminals at most at any one time (full-duplex, hands-free); the conference will be interrupted by a superior intercom calling and will continue again when the interruption is over. |
| | Command mode | Supportive of thirty terminals at most at any one time(full-duplex, hands-free), the command will be interrupted by a s+uperior intercom calling and will continue again when the interruption is over. |
| Call | Single key call | A quick call to a target terminal; every terminal can set an independent target. |
| | Number keys call | Through numerical keys to randomly call any terminals. |
| | Group call | The system automatically calls a group of terminals as has been set. If any of the terminal responses, the call to the rest terminals will be terminated. |
| | Call ringtone | With such tones of "call through", "call busy" and "hang up" can be set up( only supportive by the terminals carrying a SD card). |
| | Caller ID Display | To display the callers's ID and review the missed calls and incoming calls; both in Chinese and English. |
| | Caller voice broadcast | To automatically broadcast the caller's voice through a built-in speaker. |
| Call answer | Auto answer | The automatic call can be set on the terminal at 1 time after the ring. |
| | Manual answer | The ring continues on the terminal until there is a manual answer. |
| | Agent answer | If a terminal that is being called is in a group, any other terminals in the group can answer the same call. |
| Call transfer | Busy line transfer | The call can be automatically transferred to another terminal if the target line is busy. |
| | Power-off Transfer | If the target is powered off or out of connection, the call will be automatically transferred. |
| | No-response transfer | If the call has not been answered in a specified times of ringtone, it will be automatically transferred. |
| | Time period transfer | The call will be transferred to another terminal in a designated period of time. |
| | Manual transfer | Half-way call will be terminated after being manually transferred to another terminal. |
| Call priority | Call-inserted | A priority can be set on the terminals and a higher priority user can insert user's call of a lower priority. |
| | Call waiting | If the terminal is busy with another user of the same priority level, the call will be answered after waiting in line within 30 seconds. |
| | Breakdown call | The administrator can abruptly break down an ongoing call,16 levels of priorities can be set. |

# SYSTEM FUNCTION

| FUNCTION | | INTRODUCTION |
|---|---|---|
| Zone broadcasting | Voice broadcasting | To broadcast to all of part of zones via IP network paging microphone. |
| | BGM | To broadcast MP3 or WAV format music files to speakers, real-time/ schedule time/ triggering broadcasting are available. |
| | TTS | With the function of converting text to speech and broadcasting to the IP terminals, real-time/ schedule time/ triggering broadcasting are available. |
| Monitoring | Environment monitoring | The ambient sound around IP terminal which is in the scope of the authorization can be monitored in the main control room. |
| | Communication monitoring | The communication between IP terminals which are in the scope of the authorization can be monitored in the main control room. |
| Digital record | | The system can automatically record the data of intercom. |
| Alarm | Trigger alarm | The terminal with an alarm input port for connecting external emergency button or infrared probe to trigger an alarm. |
| | Sound alarm | The terminal will automatically deliver alarm to the server software in the control center if it detects a screaming or a tumult. |
| | Tamper alarm | The IP terminal will alert automatically the server software in the control center when its panel is being removed (Note: Some models of IP terminals). |
| | Alarm treatment measures | The on-duty person confirms the alarm and adopts corresponding measures(e.g.,To initiate preset broadcasting,multiparty calls,SMS,alarm out) according to the on-site video which pops up automatically. |
| External control | | The terminal has an alarm output port, which can control external warning lights or door locks. |
| Extension Interface | Integration with wireless intercom | Through the linkage between the wireless intercom base station of the IP network and the 400/350M wireless intercom system, the users of the wired phone are free to join in the wireless users' group and make a half-duplex(PTT mode) talk to them. |
| | Integration with various phone | 1. Integrated with the fixed telephone: Connect with the SPC telephone exchange, enabling to initiate an intercom (with voice prompts). The fixed telephone can also broadcast to the intercom system (including the partitions and the entire area).<br>2. Integrated with the VOIP telephone: Available to make intercom with the VOIP system and compatible with the VOIP system whose mainstream is based on the SIP protocol. |
| | Integration with fire/PA system | To be comprehensively compatible with SPON IP PA system with the function of timing and live broadcast.<br>To broadcast through the PA system with the pre-programming information according to the alarms from the firefighting center. |
| | Integration with video conference | To interface with video conferencing MCU, available for joining in multi-party video conferencing via IP video console. |
| | Linked monitoring system | To provide SDK for second development and the monitoring system will control the talk switch or the monitoring pictures will switch automatically when talking. |
| Scale Application | Cluster server( for the large scale use) | To adopt multiple servers to manage terminals to reduce the risk of the malfunction of the network; serving for the interprovincial applications over a large scale where as much as 100000pcs terminals is used at one time ( a cluster of 100 pieces of servers with 1000 pieces of terminals loaded on each server). |
| | Single server (of medium scale) | To manage all the terminals and support the hot-backup of the main server; its application scale is up to 1000 pieces of terminals. |
| | Without server (of small scale) | Be independent from the running of the server to make the basic communication; to assist some independent zone to take emergency measures when its connection to the server breaks down; Its application scale is up to 100 pieces of terminals. |

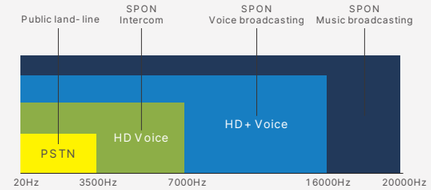


# TECHNOLOGY INTRODUCTION

## HD voice

With over two times sampling rate than VoIP phones to restore high-fidelity voice which makes you feel as if face-to-face communication experience to achieve a natural conversation even if there are thousands of miles away;

More reasonable network bandwidth allocation: With 7kHz frequency response for SPON intercom to transmit two-way clear voice, With 16kHz frequency response for voice broadcasting to collect the whole sound spectrum of human beings, With 20KHz frequency response for playing music(Corresponding amplifier and speaker have to be added).

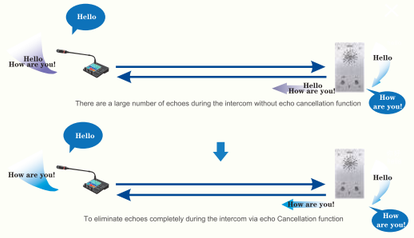


Frequency response

## ECHO CANCELLATION

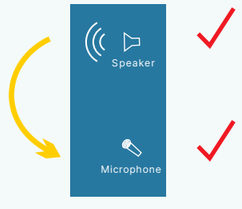
Echo cancellation technology is designed to prevent sound from the terminal speaker from re-entering its microphone, which can cause discomfort to the talker or make the terminal howl during a two-way conversation;

The principle is to separate the local signal from the far-end echo and offset it completely, The technology can realize hands-free talking on both sides without affecting the voice quality; At the same time it can inhibit the influence of ambient noise to improve voice clarity for harsh conditions of voice communications.




## INTELLIGENT DETECTION

Ensures the availability of IP intercom terminals while reducing the need for manual verification of its functionality via speaker -> microphone automatic detection which reflects especially the efficiency of intelligent detection function in the situation of widely distributed area of IP intercom terminals and difficult maintenance.



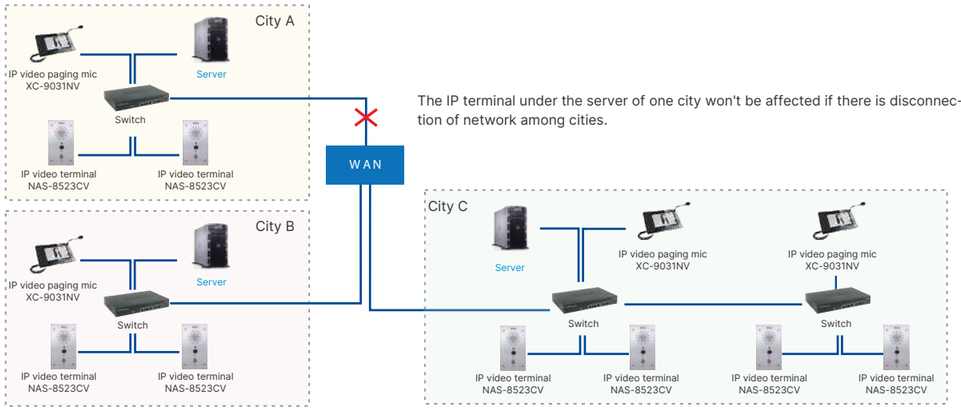
Speaker→Microphone
Auto- detection

# SYSTEM APPLICATION SCALE

## Large scale

Using the multiple servers to manage terminals to share the data traffic and reduce the abnormal network risk. It`s suitable for the large scale application which crosses different cities. It supports broadcasting and talking across different servers. Eg: Set the server at each city of province, it won`t affect the city local communication when the interurban network is abnormal.

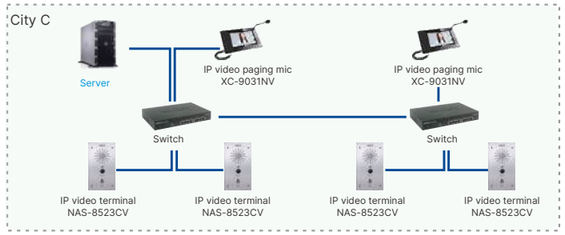
The system can connect up to 100000 IP terminals (It supports 100 servers, each server can load 1000 IP terminals).




## Medium scale

Using a single server to manage all IP terminals, it`s suitable for not too many IP terminals and without cross-region application. It also supports hot switching between main server and standby server.

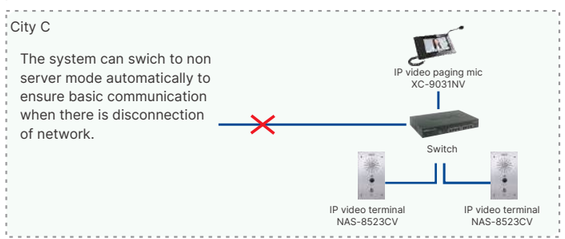
They system can connect up to 1000 IP terminals (one server can load 1000 IP terminals).




## Small scale

The system can realize the basic communication without server, It`s suitable for simple function request,or the independent zone terminal emergency measure when the server network disconnect.

They system can connect up to 100 IP terminals.




Notice: Distributed server, single server and non-server modes can be integrated use to meet the best system reliability.



# THE DIFFERENCES BETWEEN THE IP INTERCOM & THE TELEPHONE

## Simple & Fast Call

Intercom: Call→Only ring once→ Conversation
Telephone: Pick up the handset→ Dial-up→Ring→ Pick up handset at the other side→ Conversation

## High-quality & High definition

Intercom: Frequency response range is 7 kHz, available for hands-free call in a noisy place, the broadcasting frequency range can be up to 16 kHz
Telephone: Frequency response range is 3.4 kHz

## Call

Intercom: With single-key dial up, priority control, automatic call response
Telephone: None

## Broadcast & Monitor

Intercom: Available for a single terminal broadcasting, partitions and the entire areas broadcasting
Telephone: None

## External & Interfaces

Intercom: With audio output and the input connected with the alarm button, which can control the door lock & the alarm light
Telephone: None

## Suitable for Various Industries

Intercom: To provide special functions for the finance industry, the industry and the judicial branch field etc
Telephone: None

## Secondary Development

Intercom: To provide the Software Development Kit, be integrated into the monitoring system platform
Telephone: None

## Log File Output

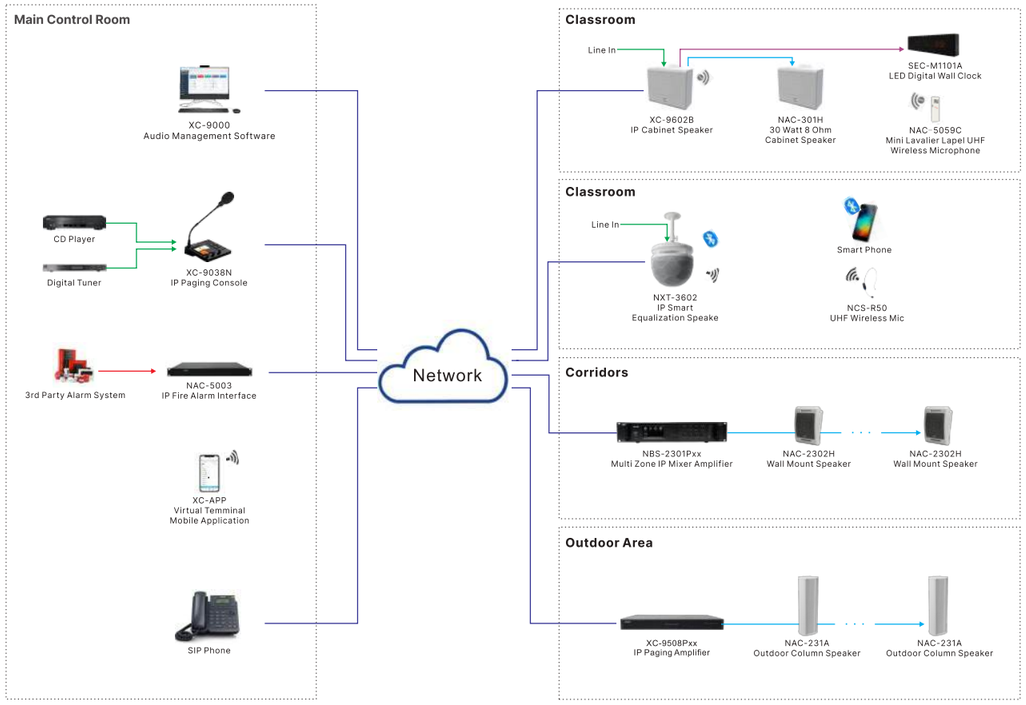
Intercom: To write down all the data of the calls, the conversations and the alarms and then save them in the hard disk
Telephone: None

## Safety

Intercom: Dedicated control protocols and audio encoding protocols, with encryption processing function
Telephone: Public VOIP controls and audio coding protocols, easy to be eavesdropped and falsified

As a dedicated phone system, the intercom system has a variety of unique functions and convenient operations which are unmatched and beyond any replacement by any ordinary telephones, contributing to relieving the labor intensity and uplifting the accuracy and efficiency of the communication.

# THE APPLICATION OF IP INTERCOM & PA SYSTEMS IN SCHOOLS




- Fully networked system framework, with all devices supporting transmission over Ethernet and enabling remote access, operation, and maintenance management.
- The system supports hierarchical permission management, allowing different users to be assigned specific operational permissions.
- The system supports broadcasting notifications to specific areas and terminals and provides the capability to schedule bell ringing tasks for 24 hours.
- The system supports integration with third-party devices, such as SIP terminal access, CCTV integration, and linkage with fire alarm tasks.
- Classrooms are equipped with network speakers to provide local multimedia device amplification, wireless microphone amplification, and other teaching applications.







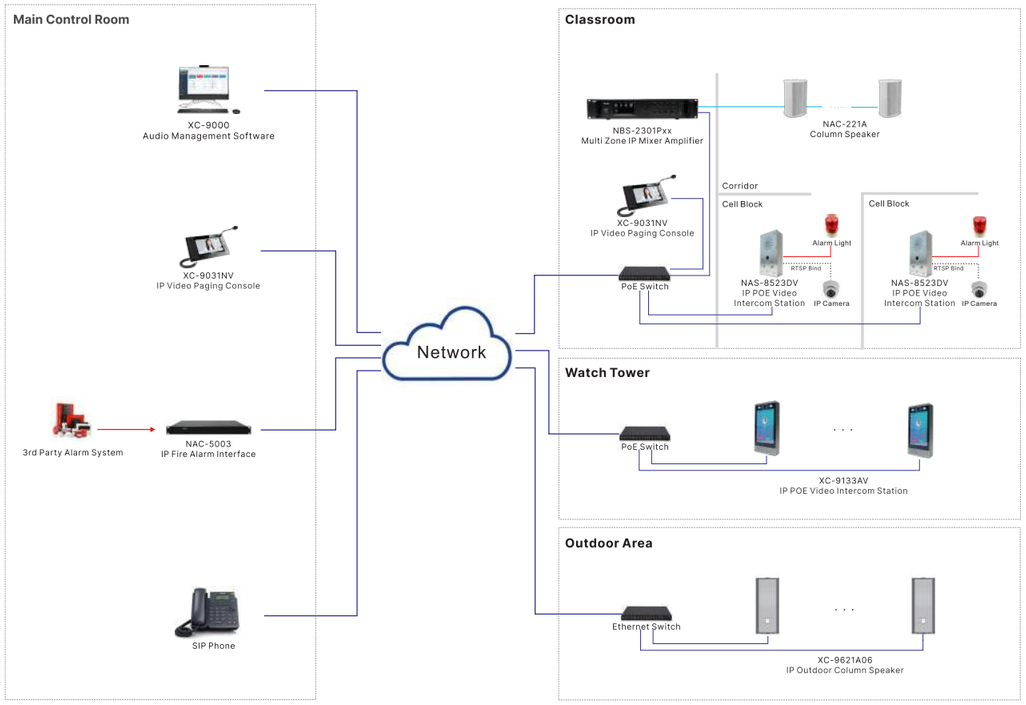






PLAYGROUND

# THE APPLICATION OF IP INTERCOM SYSTEMS IN PRISONS

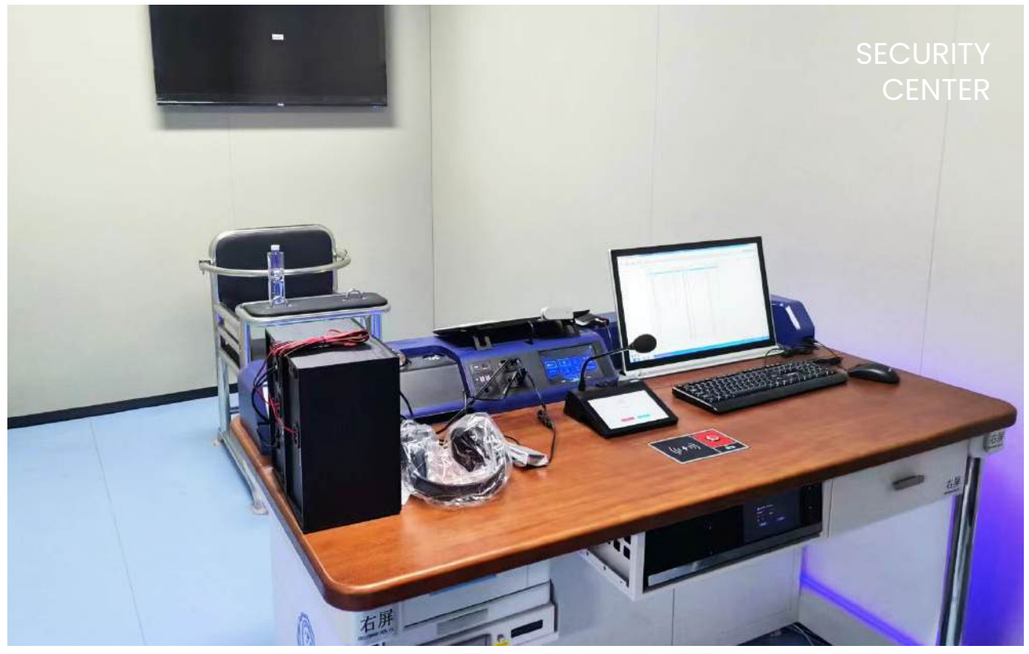



- Fully networked system framework, all devices support transmission over Ethernet, enabling remote access, operation, and management.
- The system supports saving audio and video files of terminal communications to servers, allowing for retrieval and review at any time.
- Intercom terminals in prisons support linking with environmental cameras. During conversations, the system software can automatically display environmental camera video, facilitating real-time situational awareness.
- The system supports one-touch emergency calls, allowing specified call targets and supporting call forwarding if the target is busy.
- The system supports linkage with third-party systems for alarm coordination. For example, in the event of a fire alarm, it can trigger emergency broadcasts to guide crowd evacuation.



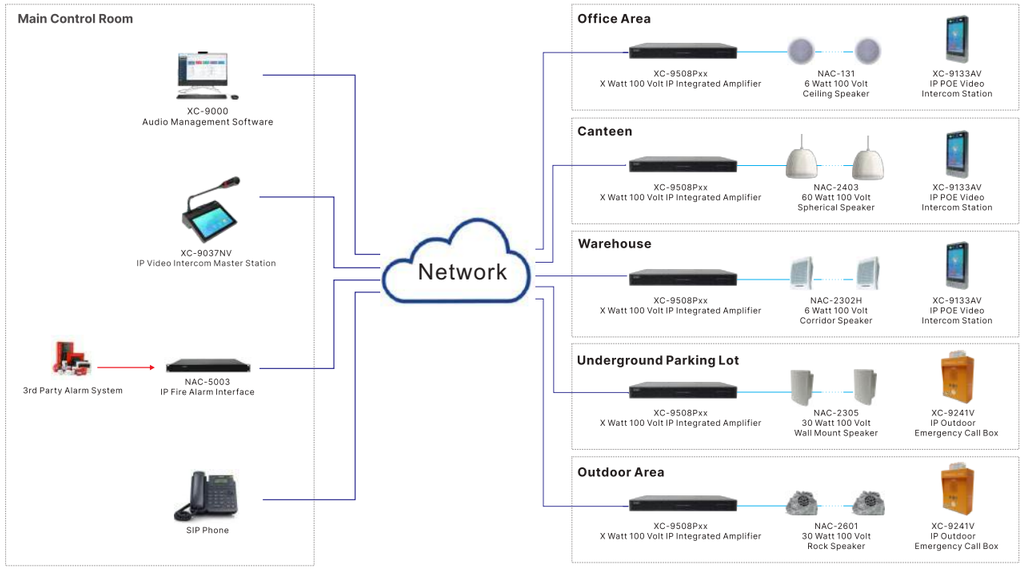






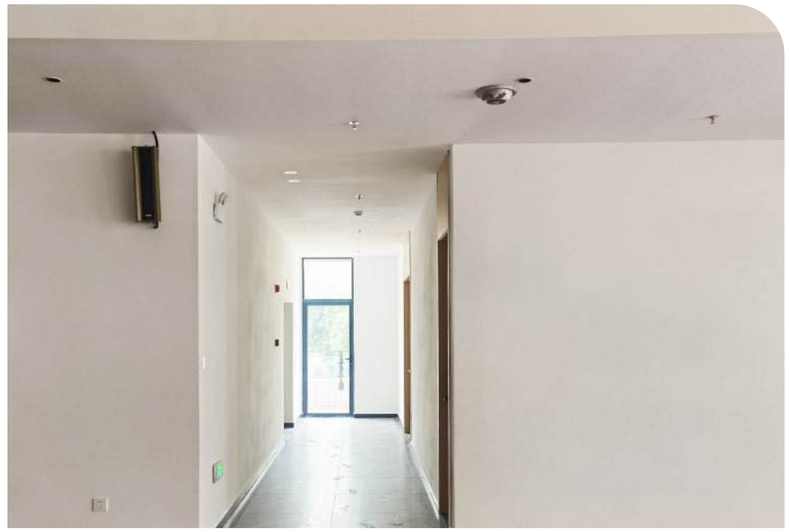


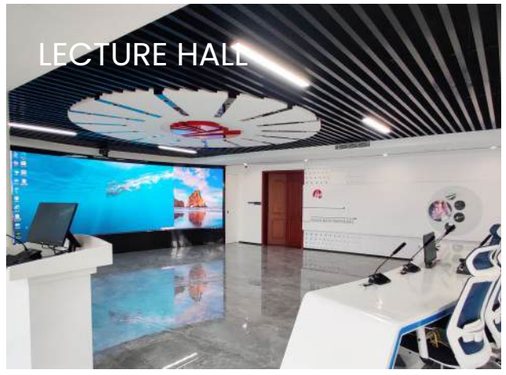

# THE APPLICATION OF IP INTERCOM & PA SYSTEMS IN ENTERPRISES




- The entire networked system framework supports transmission within Ethernet, enabling remote access, operation, and management.
- The system supports broadcasting notifications to regions and terminals, and can provide 24-hour scheduled bell ringing task editing.
- The system supports terminals using the SIP protocol, enabling integration with existing SIP phones for voice communication functionality.
- The system supports linkage alarms with third-party systems; for example, fire alarms can trigger emergency broadcasts to guide crowd evacuation.

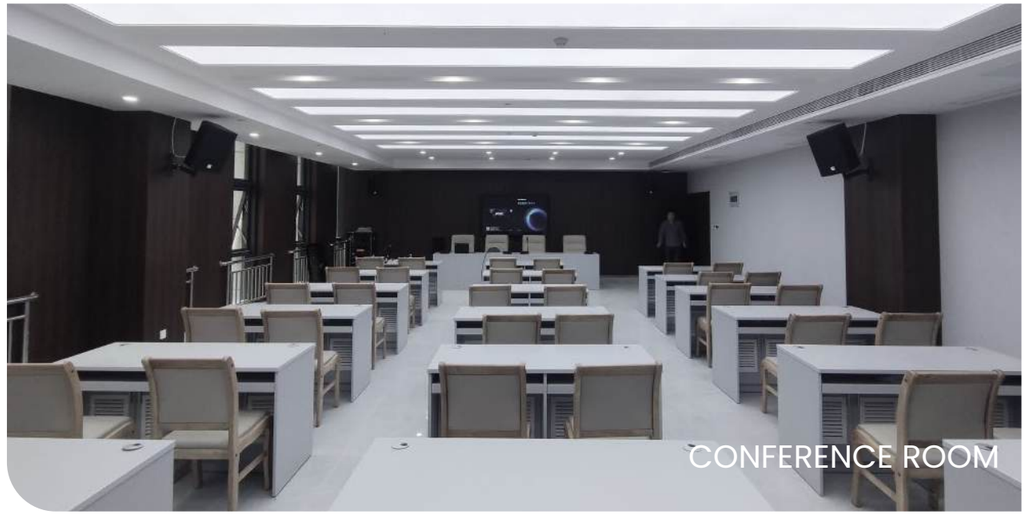
OFFICE HALL



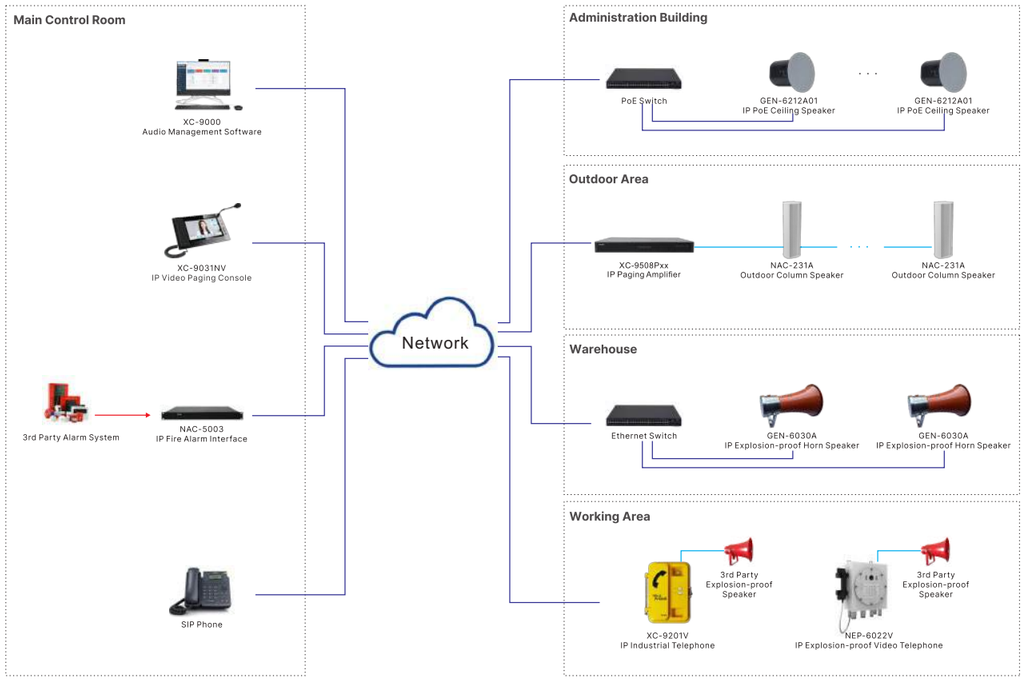








# THE APPLICATION OF IP INTERCOM & PA SYSTEMS IN FACTORIES




- The entire networked system framework supports Ethernet-based transmission for all devices, enabling remote access, operation, and maintenance management.
- There are various types of terminals available, capable of meeting different application scenarios.
- The system supports hierarchical permission management, assigning operational permissions based on different users.
- The system supports terminals using the SIP protocol, allowing integration with existing SIP phones to enable voice communication functionality.
- Intercom terminals feature built-in digital amplifiers, capable of connecting horn speakers to facilitate emergency broadcast functions.

INDOORS





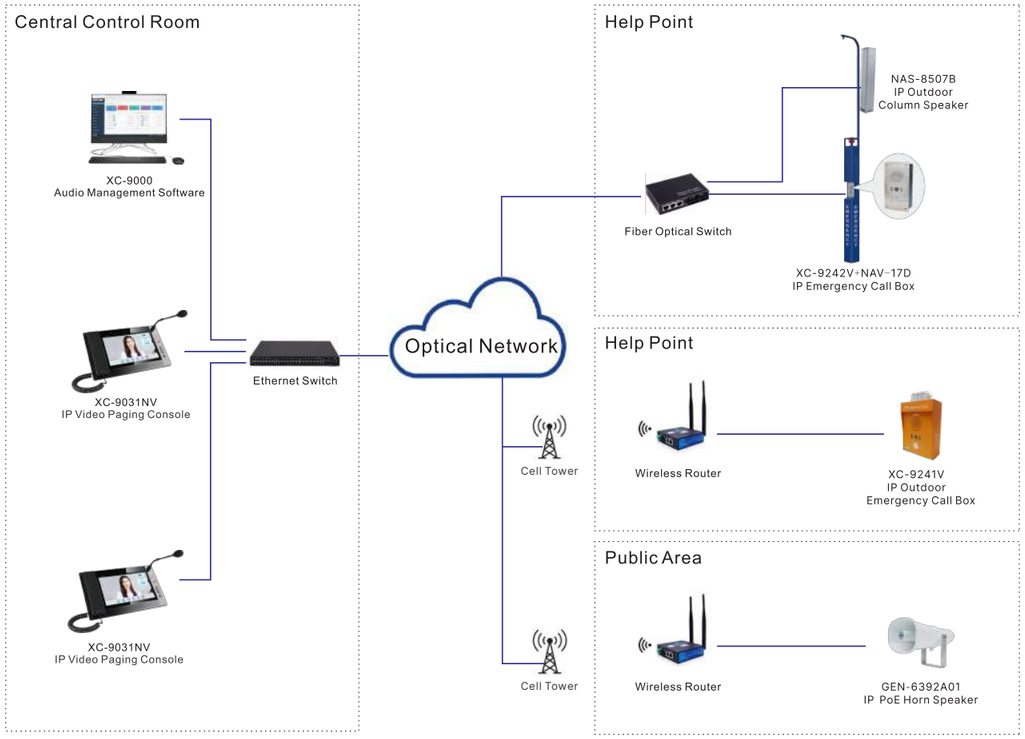






CONTROL ROOM

# THE APPLICATION OF IP INTERCOM & PA SYSTEMS IN SAFE CITIES




- The entire networked system framework supports Ethernet-based transmission for all devices, facilitating remote access, operation, and maintenance management.
- The system allows the control center to make remote calls to intercom terminals, enabling efficient, convenient, and timely communication.
- Intercom terminals support binding with environmental cameras. During calls, the system software can automatically display the environmental camera's video, providing convenient access to real-time situational awareness.
- Broadcast terminals support linkage with CCTV systems. They can receive alarm outputs from CCTV systems for integrated alarm functions.

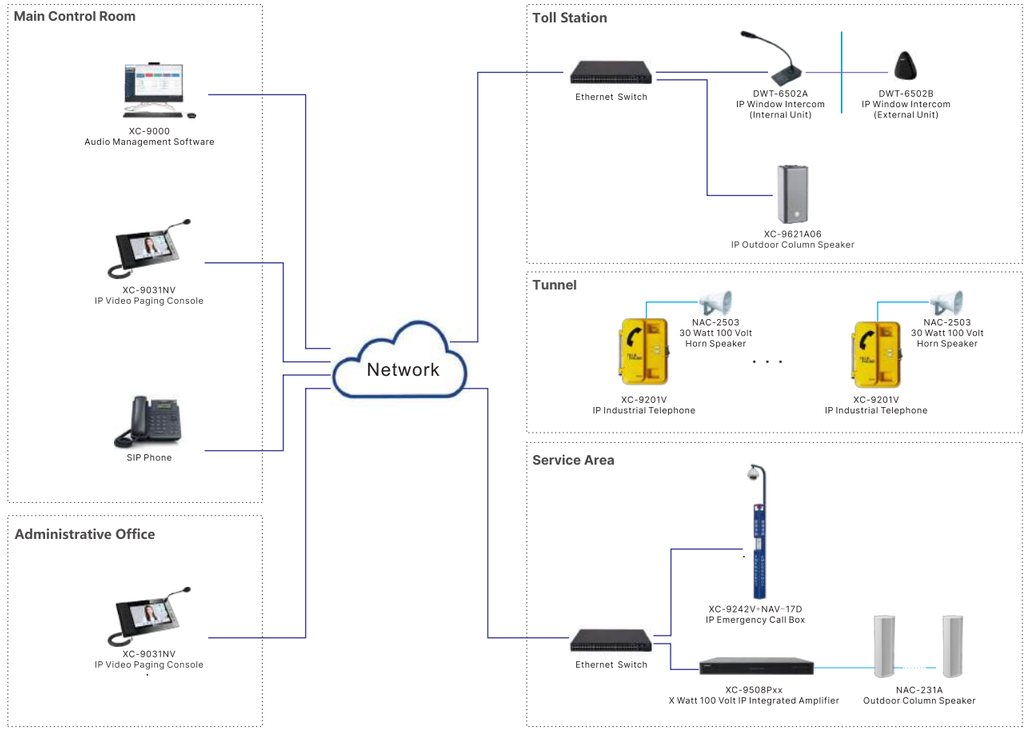










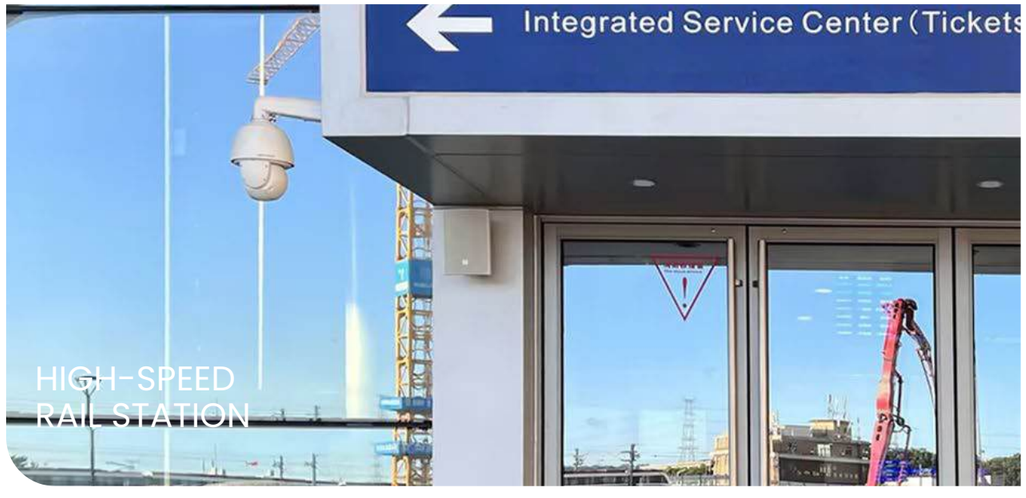

- Fully networked system framework, all devices support transmission within Ethernet, support remote access, operations management, etc.
- Terminal applications of the system cover scenarios such as service areas, toll stations, and tunnels, integrating voice systems from each scenario into one platform to meet daily needs such as voice calls, broadcast notifications, emergency broadcasts, etc.
- The system supports saving terminal communication audio and video files to servers, allowing for retrieval and playback at any time.



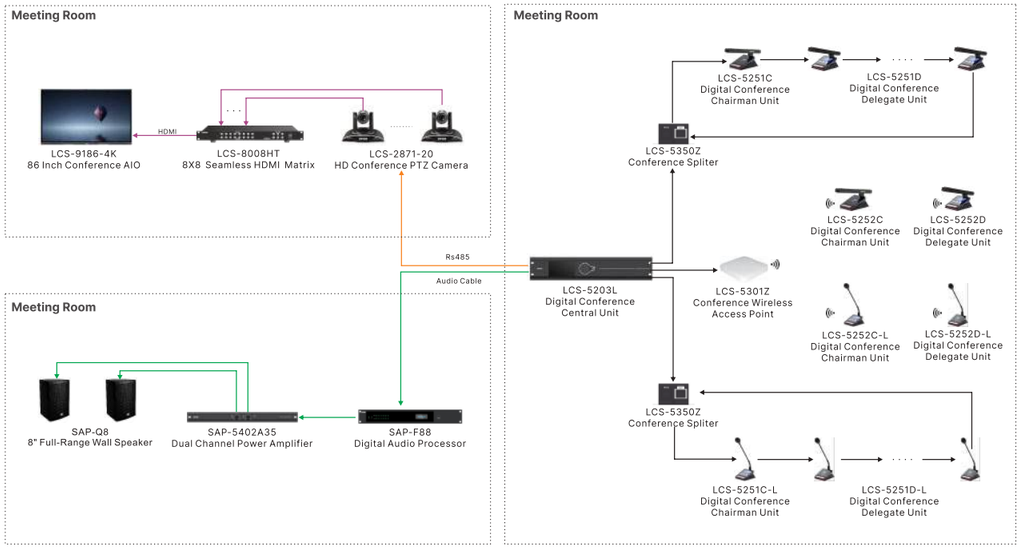






# THE APPLICATION OF DIGITAL CONFERENCE SYSTEMS IN CONFERENCE ROOMS



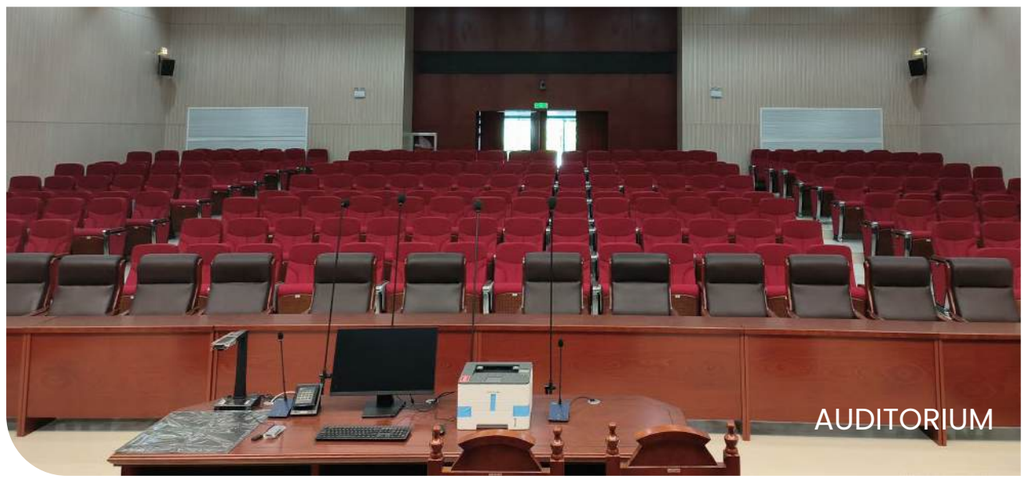

- The system supports both wired and WiFi wireless speaking units, allowing for mixed network usage. They can control each other and enable functions such as conference speaking, attendance registration, camera tracking, and voting.
- All speaking units in the system support functions like EQ (Equalizer), gain adjustment, and AGC (Automatic Gain Control).
- The conference host supports Bluetooth functionality, enabling wireless connection to mobile phones, PCs, tablets, and other terminal devices. It can be used in conjunction with remote video conferencing software.
- The conference host can customize RS232 control commands to control third-party high-definition video matrices or connect to central control systems, enabling more interactive features in various conference scenarios.



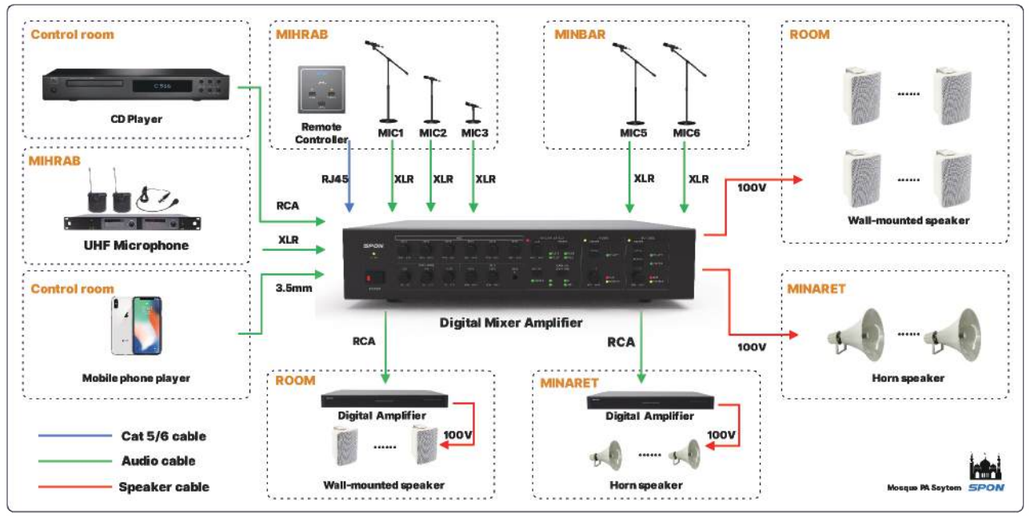






# MOSQUE SOUND AMPLIFICATION SOLUTION




- Specifically designed for mosque scenarios, the system supports 6 microphone inputs, catering to simultaneous use at the MIHRAB and MINBAR.
- The system supports expandable remote controllers, allowing independent control of amplifier outputs and activation of effects processors through this panel.
- Built-in DSP adjustment within the system allows for individual tuning of different audio effects tailored to mosque environments.
- The system features built-in Class D digital amplifiers with lightning protection design and automatic sleep mode for stable operation.







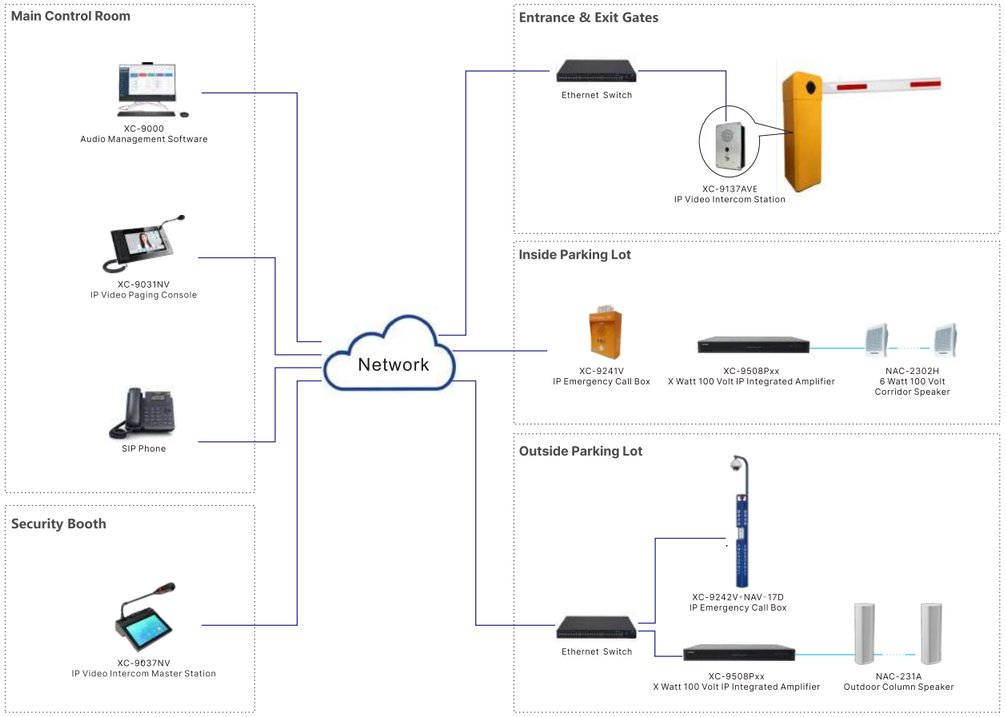








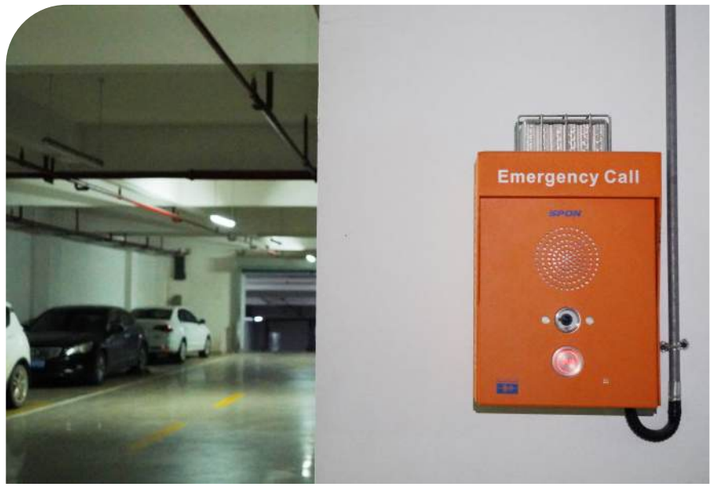

# PARKING LOT SOLUTION




- The entire networked system framework supports Ethernet transmission for all devices, enabling remote access, operation, and management.
- The system terminal applications cover scenarios such as entrances, exits, and parking areas, integrating all scenario-specific voice systems into a single platform. This platform satisfies everyday needs like one-touch calling, voice communication, and broadcast notifications.
- The system supports saving terminal communication audio and video files to servers, allowing retrospective review at any time.

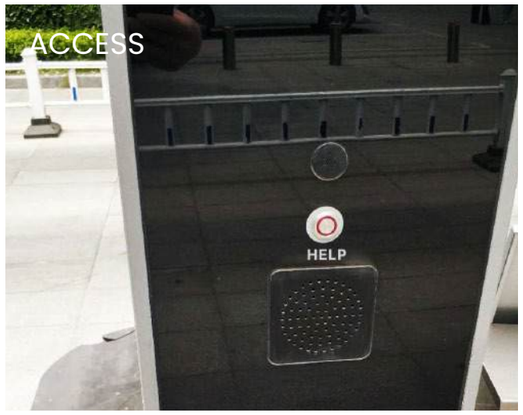





















# SOFTWARE APPLICATION







## AUDIO MANAGEMENT SOFTWARE XC-9000

### RECOMMENDED USES

As core management software installed on commercial PC and deployed at the master control room, mainly used by the system administrator to manage all the IP endpoint devices in the IP PA system & IP intercom system, control all the audio input sources and customize the paging zones.



### KEY FEATURES

- Based on B/S (Browser/Server) architecture.
- Support loading maximum 1000 IP endpoint devices.
- Support assigning different authorities to different users.
- Volume adjustment for each IP endpoint device.
- System health monitoring.
- Flexible zone management.
- Live & pre-recorded voice announcements.
- Scheduled voice announcements.
- Real-time & timed background music.
- Emergency notification alerting.
- Call target designation.
- Call response settings.
- Call forwarding settings.

### RECOMMENDED OPERATING ENVIRONMENT

| | |
|---|---|
| CPU | Intel Core i5 or AMD equivalent |
| Memory | 8GB |
| Storage | 500GB SSD |
| NIC | 100/1000Mbps self-adaptive |
| Sound Card | “Stereo Mix” enabled |
| Operating System | Microsoft Windows 10 |
| Peripherals | keyboard, mouse, headset, etc |

### SOFTWARE LICENSE



Registration Code (Trial License)

- 2-month free trial license for testing the audio management software.
- You can get it from SPON pre-sales department by providing the unique machine code.




XC-9000USB - USB Dongle

- Perpetual license with one-time fee.
- Available with audio management software running on Microsoft Windows 10 operating system.



XC-9000RD - Remote Dongle

- Perpetual license with one-time fee.
- Available with audio management software running on virtual machine.

# AUDIO MANAGEMENT INDUSTRIAL SERVER XC-9013



## RECOMMENDED USES

As core management equipment deployed at the master control room, mainly used by the system administrator to manage all the IP endpoint devices in the IP PA system & IP intercom system, control all the audio input sources and customize the paging zones.

## KEY FEATURES

- IPC (Industrial Personal Computer) case design with aluminum alloy structure, ensuring high anti-magnetic/dust-proof/vandal resistant performance and excellent heat dissipation effect.
- 17.3" reinforced industrial touch screen, equipped with pull-out type hidden keyboard and mouse pad.
- Built-in 240GB high-capacity SSD (Solid-State Drive) with high anti-vibration/anti-drop capabilities.
- Industrial motherboard design with faster processing speed and higher performance, suitable for 24/7 long-running operation.
- Equipped with red emergency button and emergency handheld microphone, can be used for emergency warning/evacuation voice announcement.
- Pre-installed with XC-9000 audio management software, acting as the management center of SPON™ IP PA system & IP intercom system.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Processor | Intel Core i5-6500 CPU @ 3.20GHz |
| Operating System | Microsoft Windows 10 Pro 64-bit |
| Power Supply | ATX (AC 180-264V~/47-63Hz/7/3.5A) |
| Display Screen | 17.3" Resistive Multi-Touch (RMT) Screen |
| Memory | 8GB DDR4 |
| Hard Drive | 240GB SSD |
| Ports (Back) | 1×PS/2 (Keyboard), 1×PS/2 (Mouse), 1×DVI-D, 1×VGA, 1×HDMI, 2×COM, 2×USB 3.1, 2×USB 2.0, 1×RJ45, 1×Line Input, 1×Line Output, 1×Mic Input |
| Ports (Front) | 2×USB 2.0 |
| Operating Temperature | -10°C-55°C (14°F-131°F) |
| Operating Humidity | ≤90% RH non-condensing |
| Dimensions | 484×353.5×303mm |
| Weight | 12.8kg |
| Standard Accessories | 1×Handheld Emergency Microphone, 1×Installation Manual |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |





# VISUALIZATION MODULE XC-9000VIS





## APPLICATION SCENARIOS

- Providing perfect overview for the operator by visualizing IP PA system & IP intercom system in consideration of the local circumstances.
- Displaying IP endpoint devices (e.g. IP intercom station, IP paging mic, IP amplifier, IP speaker, etc.) on customer's specific map or building layout.
- Enabling the operator to call, page or monitor any specific IP endpoint device on the map/building layout directly.
- Enabling the operator to adjust the output volume of any specific IP endpoint device on the building layout directly.

# VISUALIZATION MODULE XC-9000VMS



## APPLICATION SCENARIOS

- Integrating live video stream from video-over-IP sources into IP PA system & IP intercom system via RTSP (Real Time Streaming Protocol).
- Video images from 3rd-party IP security camera will be arranged on-screen in a clearly structured grid for easy viewing.
- Video images from 3rd-party IP security camera around different IP endpoint device locations can be displayed alternately at set intervals.
- Video images will be popping up automatically once receiving call from front-end IP intercom station.

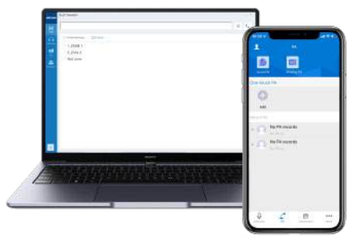
## 3RD PARTY VOIP CONNECTION MODULE
## XC-9000VOIP

### APPLICATION SCENARIOS

- Integrating industry-standard 3rd-party VoIP phone into IP PA system & IP intercom system via SIP (Session Initiation Protocol).
- Enabling the operator to initiate two-way communication from 3rd-party VoIP phone to front-end IP intercom station.
- Enabling the operator the receive two-way communication from front-end IP intercom station on 3rd-party VoIP phone.
- Enabling the operator to make live voice announcements from 3rd-party VoIP phone to single or a group of IP endpoint devices (e.g. IP amplifier, IP speaker, etc.).



## VIRTUAL TERMINAL APP
## XC-9000APP



### APPLICATION SCENARIOS

- Supported Operating Systems: Android/iOS/Windows.
- Integrating your smartphone or your laptop into IP PA system & IP intercom system over a local or wide-area network.
- Enabling the operator to initiate two-way audio/video communication from the virtual terminal app to front-end IP intercom station.
- Enabling the operator to make live voice announcements from the virtual terminal app to single or a group of IP endpoint devices (e.g. IP amplifier, IP speaker, etc.).
- Enabling the operator to play real-time background music from the virtual terminal app to single or a group of IP endpoint devices (e.g. IP amplifier, IP speaker, etc.).
- Enabling the operator to monitor or surveil specific IP endpoint device (e.g. IP intercom station, IP speaker, etc.) on the virtual terminal mobile app.



SPON

# IP PAGING MICROPHONE



# IP VIDEO PAGING CONSOLE XC-9031NV



Onvif POE SIP

## RECOMMENDED USES

This modern-looking desktop intercom station with 10.2” HD touch screen and 13 mega pixel camera is usually deployed at the master control room and would be a great fit for most security audio intercom projects.

## KEY FEATURES

- 10.2" digital TFT true color LCD display & capacitive touch screen (resolution: 1280×800).
- 13 mega-pixel HD digital camera.
- Hands-free desktop station with gooseneck microphone and built-in speaker.
- Equipped with red emergency button, can be used for one-touch emergency broadcasting to all zones.
- initiating & receiving audio/video conference.
- Being able to check the network state (online or offline) of every terminal in the system.
- PoE (Power over Ethernet).
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems.
- Multi-party (no more than 5 parties) audio and video communication
- H.264/H.265 video decoding format to meet HD video call transmission requirements.
- Other functionalities such as call transfer, call on hold, three-way calling, PTT (Push-to-Talk) or remote unlocking can also be achieved during the voice communication.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/3.3A or PoE IEEE802.3af |
| Camera | 13MP |
| Video Codec | VGA/720/1080 |
| S/N (Signal-to-Noise) Ratio | ≥85dB |
| Audio Sampling & Bit Rate | 8KHz～48KHz，16bit/32bit |
| Frequency Response | 25Hz～20KHz |
| Network Protocol | SIP (RFC 3261), TCP、UDP、ARP、ICMP、IGMP、HTTP、RTP |
| Configuration Method | Local Settings/Web Page |
| Mounting Method | Desktop |
| Interface | 1×RJ45 Ethernet Port, 1× PC Port,1× HDMI Port, 1× Headset Port , 1×USB 2.0, 1x Line Output, 1× USB 3.0 1×Line Input, 1×Relay Input, 1×Relay Output,1× Power Port , 1× SD card Port |
| Dimensions | 337×211×32.7mm |
| Weight | 1.5KG |
| Standard Accessories | 1×Telephone Cable, 1×Handset, 1×Gooseneck Microphone Rod, 1×Mounting Bracket, 1×Installation Manual |
| Optional Accessories | DC 12V/3.3A Power Adapter　IEC C13 Power Cord (US/EU/UK/AU) |





# IP AUDIO INTERCOM MASTER STATION XC-9037N & XC-9037NV



SIP IPV4 Three-Way Intercom Onvif

## RECOMMENDED USES

This modern-looking desktop intercom station with 7” HD touch screen is usually deployed at the master control room and would be a great fit for most security audio intercom projects.

## KEY FEATURES

- Two-way full duplex voice communication with front-end IP audio intercom station.
- Hands-free desktop station with gooseneck microphone and built-in speaker.
- 7”digital HD true color capacitive touch screen (resolution ratio: 1280×800).
- Built-in 200W HD digital camera
- User-defined ringtones, wallpaper & screensaver, screen brightness and screen lock passcode of the device.
- Caller ID service (display & announcement) can help the operator to identify who’s calling when receiving an incoming call.
- Optional answering modes include manual answering & automatic answering.
- Other functionalities such as call transfer, call on hold, three-way calling, PTT (Push-to-Talk) or remote unlocking can also be achieved during the voice communication.
- Music files stored in the built-in media library, USB flash drive or even your smartphone can be used to play real-time background music to SPON® IP PA system.
- Real-time monitoring/surveillance on any specific IP endpoint device (e.g. IP intercom station, IP speaker, etc.).

## TECHNICAL PARAMETERS

| **MODEL NO.** | **XC-9037N** | **XC-9037NV** |
|---|---|---|
| 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 | |
| Dimensions | 184×169.3×58.9mm | |
| Weight | 0.75kg | |
| Standard Accessories | 1 X Microphone Rod, 1x Terminal Block Connector,1 x Installation Manual, 1 x Certification | |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) | |

# IP PAGING CONSOLE XC-9038N



Three-Way Intercom SIP VoIP

## RECOMMENDED USES

This modern-looking desktop paging console with 4" HD touch screen is equipped with built-in a mini web server that can manage maximum 30 IP endpoint devices. It would be a great fit for most small projects.

## KEY FEATURES

- Two-way full duplex voice communication with front-end IP audio intercom station.
- Adopting high-end aluminum alloy which is sturdy and durable.
- 4" LCD screen with 480*480 resolution.
- Supporting U-disk and external audio sources mixing input
- Hands-free desktop station with gooseneck microphone and built-in 3W speaker.
- Available to trigger short circuit signal to the designated terminal during intercom (can be used to trigger external alarm light or electronic door lock.
- Cost-friendly as it is built-in with a mini server that can manage 30 terminals.
- Equipped with 3.5mm audio line output interface which can be connected to an active speaker.
- Supporting initiating & receiving offline intercom without centralized management server software.
- Independent audio volume adjustment button working like a mini mixer.
- Allow the operator to make live paging via this IP desktop intercom station.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/1.5A |
| Audio Codec | G.711 A-law, G.711 μ-law, G.729, PCM/L16 |
| S/N (Signal-to-Noise) Ratio | ≥80dB |
| Audio Sampling & Bit Rate | 8kHz-44.1kHz, 16bit, 8kbps-320kbps |
| Frequency Response | 100Hz~16kHz |
| Network Protocol | SIP (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP,FTP |
| Configuration Method | Local Settings/Web Page |
| Mounting Method | Desktop |
| Interface | 1×RJ45 Ethernet Port, 1×USB 2.0, 2×Line Input, 1×Line Output, 1×Relay Input, 1× Mic input,1×Power supply port, |
| Dimensions | 144×144×34mm |
| Weight | 0.55KG |
| Standard Accessories | 1 X Microphone Rod, 1x Terminal Block Connector,1 x Installation Manual, 1 x Certification |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) |

# MINI WEB SERVER XC-9038MS

## APPLICATION SCENARIOS

- Capability of adding maximum 30 terminals.
- Convenient operation by batch adding terminals.
- User-defined background music by uploading audio files into media library.
- Scheduled bell ringing function.
- User-defined different tasks priority.
- Emergency notification alerting.
- Managing different zones via mini server.



# IP SPEAKER







## IP POE HORN SPEAKER
## GEN-6392A01



2-way intercom | SIP | PoE | IP66 | Max SPL: 120DB

### RECOMMENDED USES

This device is well-suited for outdoor public spaces such as school playgrounds, urban broadcasting, squares, and parks. Its robust design, integrated audio capabilities, and support for various communication protocols make it ideal for environments where clear and reliable audio communication is essential.

### KEY FEATURES

- Integrated design with built-in amplifier, aluminum alloy housing, stainless steel bracket, sturdy and durable.
- Uses high-sensitivity speakers, capable of reaching 120dB when powered by POE.
- Built-in waterproof microphone, supports dynamic volume adjustment, and enables high-definition calls.
- Remote self-diagnosis feature allows for device-side diagnostics upon login, capable of detecting speaker faults.
- Resistant to rain, wind, and extreme weather conditions, with an overall protection rating of IP66, capable of stable operation in temperatures ranging from -40°C to 70°C.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply and Consumption | DC 24V/1A or PoE (802.3at/af protocol), Standby Power Consumption ≤ 3W |
| Power | 10W |
| Network Communication Protocols | HTTP, UDP, ARP, ICMP, IGMP, SIP, ONVIF |
| Max SPL | 120dB ± 3dB |
| Sensitivity | 109dB ± 3dB (1M/1W) |
| SNR | ≥85dB |
| Frequency Response | 100Hz - 18kHz |
| Microphone | Built-in |
| Intercom Function | Supported |
| Operating Temperature and Humidity | Temperature: -40°C to 70°C, Humidity: 10% to 90% RH (non-condensing) |
| Product Dimensions and N.W. | Dimensions: 281 x 233 x 214 mm, N.W.: 1.6 kg |

# NETWORK POE HORN SPEAKER
# GEN-6391A03



PoE Onvif SIP VoIP

## RECOMMENDED USES

Suitable for outdoor public spaces such as school playgrounds, urban broadcasting, squares, parks, and other similar environments.

## KEY FEATURES

- Integrated wall-mounted design, integrating network audio decoding, digital amplifier, and speakers.
- Utilizes high-speed industrial-grade dual-core (ARM+DSP) chipset, startup time ≤ 1 second.
- Built-in high-fidelity speakers and stereo D-class power amplifier.
- Built-in microphone, supports intercom functionality.
- Supports DC power supply and POE (compliant with IEEE802.3at standard), supports international standard SIP protocol.
- Standard RJ45 network interface, can be connected to Ethernet or POE switch interfaces, supports cross-segment and cross-router communication.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC24V/2.7A or PoE (802.3at/af protocol), |
| Power Consumption | Standby Power Consumption ≤ 3W |
| Network Communication Protocols | HTTP, UDP, ARP, ICMP, IGMP,SIP, ONVIF |
| Max SPL | 97dB ±3dB |
| Sensitivity | 88dB ±3dB (1M/1W) |
| SNR | ≥80dB |
| Frequency Response | 100Hz-18kHz |
| Microphone | Built-in |
| Intercom Function | Supported |
| Network Transmission Rate | 10M/100M adaptive |
| Operating Temperature, Humidity | -20°C to 50°C, 10% to 90% RH (non-condensing) |
| Product Dimensions, N.W. | 283.1x224.3x269mm, 2.0 kg |





# IP POE CEILING SPEAKER
# GEN-6212A01




2-way intercom SIP PoE Edgeless 100DB

## RECOMMENDED USES

Suitable for corridors, lobbies, and conference rooms, among other venues.

## KEY FEATURES

- Integrated design with built-in amplifier, metal housing for durability and robustness.
- Utilizes coaxial high-frequency speakers and dual-directional hole design for accurate bass and an enjoyable music experience.
- Built-in microphone supports dynamic volume adjustment and enables high-definition calls.
- Remote self-diagnosis feature allows for device-side diagnostics upon login, capable of detecting speaker faults.
- Supports POE for convenient installation wiring, equipped with multiple interfaces for integration with third-party devices.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC24V/1A or PoE (802.3at/af protocol) |
| Power Consumption | Standby Power Consumption ≤ 3W |
| Power Output | 10W |
| Network Communication Protocols | HTTP, UDP, ARP, ICMP, IGMP, SIP, ONVIF |
| Max SPL | 100dB ±3dB |
| Sensitivity | 89dB ±3dB (1M/1W) |
| SNR | ≥85dB |
| Frequency Response | 100Hz-18kHz |
| Microphone | Built-in |
| Intercom Function | Supported |
| Installation Aperture Size | φ180mm |
| Operating Temperature, Humidity | -30°C to 60°C, 10% to 90% RH (non-condensing) |
| Product Dimensions, N.W. | φ204x167mm, 1.85 kg |

# NETWORK CEILING SPEAKER
# GEN-6211A03



SIP PoE Onvif

## RECOMMENDED USES

Suitable for corridors, lobbies, and conference rooms, among other settings.

## KEY FEATURES

- Integrated ceiling-mounted design, integrating network audio decoding, digital amplifier, and speakers.
- Uses high-speed industrial-grade dual-core (ARM + DSP) chipset, startup time ≤ 1 second.
- Built-in high-fidelity speakers and stereo D-class power amplifier.
- Supports DC power supply and POE (compliant with IEEE802.3at standard), supports international standard SIP protocol.
- Standard RJ45 network interface, can be connected anywhere with Ethernet or POE switch interface, supports cross-segment and cross-router communication.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC24V/1A or PoE (802.3at protocol), |
| Power Consumption | standby ≤ 3W |
| Max SPL | 97dB ±3dB |
| Sensitivity | 88dB ±3dB (1M/1W) |
| Rated Power | 15W |
| Frequency Response | 100Hz-18kHz |
| SNR | ≥80dB |
| Network Communication Protocols | HTTP, UDP, ARP, ICMP, IGMP,c |
| Network Transmission Rate | 10M/100M adaptive |
| Interfaces | 1 network port, 1 DC power port, 1 alarm input, 1 line input, 1 alarm output |
| Operating Temperature, Humidity | -20°C to 50°C, 10% to 90% RH (non-condensing) |
| Product Dimensions, Weight | φ213x165mm, 1.4 kg |



# NETWORK WALL MOUNT SPEAKER
# GEN-6011A03



SIP PoE Onvif

## RECOMMENDED USES

Suitable for indoor such as conference rooms, classrooms, and halls,and outdoor areas.

## KEY FEATURES

- Integrated wall-mounted design, integrating network audio decoding, digital amplifier, and speakers.
- Uses high-speed industrial-grade dual-core (ARM+DSP) chipset, boot time ≤1 second.
- Built-in high-fidelity speakers and stereo Class-D power amplifier.
- Supports DC power and POE (Power over Ethernet) (compliant with IEEE802.3at standard), supports international standard SIP protocol.
- Standard RJ45 network interface, can be connected wherever there is Ethernet or POE switch port, supports cross-segment and cross-router connectivity.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC24V/1A or PoE (802.3at protocol), |
| Power Consumption | Standby ≤3W |
| Max SPL | 97dB ±3dB |
| Sensitivity | 88dB ±3dB (1M/1W) |
| Rated Power | 15W |
| Frequency Response | 100Hz-18kHz |
| SNR | ≥80dB |
| Network Communication Protocols | HTTP, UDP, ARP, ICMP, IGMP,SIP, ONVIF |
| Network Transmission Rate | 10M/100M adaptive |
| Interfaces | 1 network port, 1 DC power port, 1 alarm input, 1 line input, 1 alarm output |
| Operating Temperature, Humidity | -20°C to 50°C, 10% to 90% RH (non-condensing) |
| Product Dimensions, Weight | 193x151.5x292mm, 2.4 kg |

# NETWORK OUTDOOR BT LOUDSPEAKER
## GEN-6191A03/A06



SIP IPX5

### RECOMMENDED USES

Suitable for corridors, lobbies, and conference rooms, among other settings.

### KEY FEATURES

- Integrated wall-mounted design with a compact and stylish appearance.
- High-quality aluminum shell with a high-strength waterproof design, suitable for various installation environments.
- Uses a domestically produced core chip that is independently controllable.
- Built-in Class D digital amplifier with an output power of up to 30W/60W.
- Supports three broadcasting methods: network broadcasting, local line input amplification, and Bluetooth amplification (app installation required).
- One alarm input that can trigger server tasks when activated.
- Standard RJ45 interface for connection, compatible with various network segments and routers.

### TECHNICAL PARAMETERS

| Model No. | GEN-6191A03 | GEN-6191A06 |
|---|---|---|
| Power Supply | DC 24V/1.5A | DC 24V/2.7A |
| Power Consumption | ≤36W | ≤65W |
| Network Communication Protocols | TCP/IP (IPv4), UDP, HTTP, SIP | |
| Network Transmission Rate | 10M/100M adaptive | |
| Audio Encoding | MP2/MP3/PCM/ADPCM | |
| Audio Sampling Rate and Bitrate | 8kHz–44kHz, 16-bit, 8kbps–320kbps | |
| SNR and Frequency Response | ≥90dB (A-weighted), 45Hz–18kHz (±3dB) | |
| Output Power | 30W | 60W |
| Max SPL | 101dB±3dB | 104dB±3dB |
| Interfaces | 1 RJ45 network interface, 1 line input, 1 alarm input | |
| Operating Temperature and Humidity | -10°C to +55°C, 10% to 90% RH (non-condensing) | |
| Dimensions and Weight | 296 x 140 x 130 mm, 1.75 kg | 436 x 140 x 130 mm, 2.70 kg |





# IP OUTDOOR COLUMN LOUDSPEAKER
## NAS-8507B



### RECOMMENDED USES

Specifically designed for voice announcements and background music in smart pole projects.

### KEY FEATURES

- High-grade aluminum alloy enclosure, suitable for installations in different environments.
- Outdoor weatherproof design, IP rating could reach IP65.
- Easy configuration via user-friendly web interface.
- All-in-one loudspeaker with built-in network audio decoder, class-D digital amplifier and DSP (digital signal processor), ensuring crystal clear voice intelligibility all the time.
- Built-in loop detector for remotely monitoring the loudspeaker's working condition.
- Scheduled bell ringing tasks with custom MP3 audio files can be stored in the FTP server of the loudspeaker, specific audio file can be played automatically at the specified time even when the loudspeaker is offline.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

### TECHNICAL PARAMETERS

| Model No. | NAS-8507B(30W) | NAS-8507B(40W) |
|---|---|---|
| Power Supply | DC 24V/2.7A | |
| Power Consumption | ≤40W | ≤50W |
| Rated Power Output | 30W | 40W |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Codec | MP3, PCM/L16, ADPCM | |
| S/N (Signal-to-Noise) Ratio | ≥85dB | |
| Frequency Response | 50Hz-20kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Line Input, 1×Relay Input, 1×Power Input | |
| IP Rating | IP65 | |
| Dimensions | 450×88.1×83.2mm | 600×88.1×83.2mm |
| Weight | 2.2kg | 2.8kg |
| Standard Accessories | 1×Waterproof Connector, 1×Fixing Bracket, 1×Mounting Bracket, 1×Installation Manual | |
| Optional Accessories | DC 24V/2.7A Power AdapterIEC C13 Power Cord (US/EU/UK/AU) | |

# IP CABINET SPEAKER XC-9602B & NAC-301H



SIP | Wireless Amplification | Electronic Signa+ | PoE | Two-Way Speaker Design

## RECOMMENDED USES

Specifically designed for public address and local sound reinforcement in classroom, lecture hall or school auditorium.

## KEY FEATURES

- Bass reflex subwoofer design with 5” woofer and 3” tweeter, ensuring excellent sound reproduction of human voice.
- Easy configuration via user-friendly web interface.
- All-in-one speaker with built-in network audio decoder, class-D digital amplifier and DSP (digital signal processor), ensuring crystal clear voice intelligibility all the time.
- Scheduled bell ringing tasks with custom MP3 audio files can be stored in the FTP server of the speaker, specific audio file can be played automatically at the specified time even when the speaker is offline.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.
- Optional: USB 2.0 port on the back of the speaker can be connected to SEC-M1101A - LED Digital Wall Clock for synchronous time & text display.
- Optional: Auxiliary speaker output (8Ω) on the back of the speaker can be connected to and drive NAC-301H - 30 Watt 8 Ohm Cabinet Speaker.
- Optional: Built-in UHF wireless receiver module can be used together with NAC-5059C-Mini Lavalier Lapel UHF Wireless Microphone for local sound reinforcement in the classroom.

## TECHNICAL PARAMETERS(XC-9602B)

| | |
|---|---|
| Power Supply | AC 220V 50Hz |
| Power Consumption | ≤65W |
| Rated Power Output | 2×30W |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Codec | MP3, PCM/L16, ADPCM |
| Maximum SPL | 101dB±3dB |
| S/N (Signal-to-Noise) Ratio | ≥80dB |
| Frequency Response | 35Hz-18kHz |
| Auxiliary Speaker Output | 8Ω (Low-Impedance) |
| Interface | 2×RJ45 Ethernet Port, 1×USB 2.0, 2×Line Input (1/8” TS Jack), 1×Line Output (1/8” TS Jack), 1×Auxiliary Speaker Output (8Ω), 1×Power Input |
| Dimensions | 290×215×117mm |
| Weight | 3.3kg |
| Standard Accessories | 1×8.2 ft. 1/8” Male to Male Audio Cable, 1×Installation Manual |
| Optional Accessories | Fixed Power Cord (US/EU/UK/AU) |



## TECHNICAL PARAMETERS(NAC-301H)

| | |
|---|---|
| Speaker Unit | 1× Paper Cone Woofer;1× Paper Cone Tweeter |
| Rated Power Output | 30W |
| Input Impedance | 8Ω |
| Sensitivity | 89dB±3dB |
| Frequency Response | 200Hz-20KHz |
| Dimensions | 290×215×117mm |
| Weight | 2.5kg |

# MINI LAVALIER LAPEL UHF WIRELESS MICROPHONE NAC-5059C




## RECOMMENDED USES

Primarily designed as a wireless portable audio microphone for use in classrooms or offices, making it easy to carry around.

## KEY FEATURES

- Flame-retardant material
- Upon power-on, it automatically searches for the channel and pairs automatically, with the ability to prevent frequency interference and resist interference by UHF frequency band.
- A built-in algorithm is specifically designed for a certain frequency range. The middle frequency range is optimized for better sound clarity and feedback suppression, resulting in a more comfortable listening experience.
- Type-C interface allows for charging, audio input and headphones connections.
- a built-in high-capacity lithium battery allows for over 10 hours of continuous use.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | Battery(Lithium Polymer 550mAH) |
| Standby Power Consumption | <0.04W |
| S/N (Signal-to-Noise) Ratio | ≤83dB |
| Full Frequency Range | 350Hz-8KHz |
| Interface | 1×USB-C |
| Dimensions | 100×30×17.8mm |
| Weight | 0.05kg |
| Standard Accessories | 1×USB-C Male to 1/8” Female Headphone Jack Adapter / 1×USB-C Male to USB-A Male Charger Cable / 1×Headset / 1×Lanyard / 1×Installation Manual |

# IP OUTDOOR COLUMN LOUDSPEAKER XC-9603A



## RECOMMENDED USES

Ideal for voice announcements, background music and emergency notification alerting in warehouse, factory plant, sea port, outdoor parking lot, bus station, school playground and other outdoor public areas.

## KEY FEATURES

- High-grade aluminum alloy enclosure, suitable for installations in different environments.
- Outdoor weatherproof design, IP rating could reach IP65.
- Easy configuration via user-friendly web interface.
- All-in-one loudspeaker with built-in network audio decoder, class-D digital amplifier and DSP (digital signal processor), ensuring crystal clear voice intelligibility all the time.
- Built-in loop detector for remotely monitoring the loudspeaker's working condition.
- Integrating the unique feature of "dynamic volume control", the loudspeaker's output volume can be automatically adjusted according to the monitored ambient noise level.
- Scheduled bell ringing tasks with custom MP3 audio files can be stored in the FTP server of the loudspeaker, specific audio file can be played automatically at the specified time even when the loudspeaker is offline.
- Specific ringtone file can be stored in the FTP server of the loudspeaker and can be played automatically on the loudspeaker as soon as the relay input is triggered, making emergency notification alerting simpler.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

## TECHNICAL PARAMETERS

| Model No. | XC-9603A03 | XC-9603A06 | XC-9603A12 |
|---|---|---|---|
| Power Supply | DC 24V/2.7A | AC 220V 50Hz | AC 220V 50Hz |
| Power Consumption | ≤40W | ≤75W | ≤150W |
| Rated Power Output | 30W | 60W | 120W |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | | |
| Audio Codec | MP3, PCM/L16, ADPCM | | |
| Maximum SPL | 105dB±3dB | 108dB±3dB | 111dB±3dB |
| S/N (Signal-to-Noise) Ratio | ≥80dB | | |
| Frequency Response | 200Hz-18kHz | | |
| Interface | 1×RJ45 Ethernet Port, 1×Power Input | | |
| IP Rating | IP65 | | |
| Dimensions | 440×227×125mm | 710×227×125mm | 1110×227×125mm |
| Weight | 5.1kg | 8.4kg | 13.6kg |
| Standard Accessories | 1×Waterproof Connector, 2×Mounting Bracket, 1×Installation Manual | | |
| Optional Accessories | Fixed Power Cord (US/EU/UK/AU) | | |





# WALL MOUNT SPEAKER NAS-8507A & NAC-301C




## RECOMMENDED USES

NAS-8507A is suitable for offices, regular classrooms, and conference settings.

NAC-301C is suitable for indoor corridors, passageways, and rooms.

## KEY FEATURES

- The device features an integrated wall-mount design, combining network audio decoding, digital amplification, and speakers.
- It uses high-speed industrial dual-core chips (ARM + DSP) with a startup time of ≤ 1 second.
- It includes built-in high-fidelity speakers and 2×20W (8Ω) stereo Class D power amplifiers.
- The device has a built-in circuit detection function, allowing remote monitoring of speaker status and easy maintenance.
- Service software allows for remote adjustment of output volume, while local control is available for line input volume via a knob.
- It features a standard RJ45 network interface, enabling connection wherever there is an Ethernet port, with support for cross-segment and cross-router connections.
- The composite speaker cone delivers clear and pleasant sound quality, is easy to install, and features a composite suspension and damping treatment for extended lifespan.

## TECHNICAL PARAMETERS(NAS-8507A)

| | |
|---|---|
| Power Supply and Consumption | DC 24V/2A, ≤46W, Standby ≤3W |
| Network Communication Protocols | TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Encoding | MP2/MP3/PCM/ADPCM |
| Audio Sampling and Bit Rate | 8kHz–48kHz, 16bit, 8kbps–320kbps |
| SNR and Speaker Frequency Response | ≥88dB, 200Hz–18kHz |
| Built-in Amplifier Power | 2×20W (8Ω impedance) |
| Operating Temperature and Humidity | 0°C–45°C, 10%–90% RH (non-condensing) |
| Product Dimensions and Weight | 157.5 x 147 x 246 mm, 1.9 kg |

## TECHNICAL PARAMETERS(NAC-301C)

| | |
|---|---|
| Speaker Unit | 1× Paper Cone Woofer;1× Paper Cone Tweeter |
| Rated Power Output | 15W |
| Input Impedance | 8Ω |
| Sensitivity | 90dB±3dB |
| Frequency Response | 200Hz-20KHz |
| Dimensions | 157.5×147×246mm |
| Weight | 1.5kg |

# NETWORK EQUISOUND SPEAKER NXT-3602




Network Broadcasting
Blue Tooth
Multi-Channel Mixing
APP Remote Configuration
Audio Amplification

## RECOMMENDED USES

Designed for indoor environment, teaching amplification, multimedia amplification and broadcasting.

## KEY FEATURES

- Supports local UHF microphone sound reinforcement (optional support for two wireless microphones simultaneously).
- Supports line input and Bluetooth audio source input.
- Two line output interfaces, can be connected to recording systems and used in cascading with
- multiple speakers.
- Five-channel volume adjustment, each channel's volume can be adjusted independently.
- Built-in DSP for optimizing tuning for both human voice and music.
- Configuration management through the app includes volume adjustment, EQ configuration,
- network configuration, Bluetooth configuration, etc.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Frequency Response Range | 100Hz - 16KHz |
| Maximum Sound Pressure Level (1m) | 100dB±3dB |
| Amplifier Output Power | Treble 30W Bass 120W |
| Operating Temperature | 0°C - +55°C |
| Operating Humidity | 10%-90%RH(No condensing) |
| Net Weight | 3Kg |
| Loudspeaker Unit | Bass 2 "X8 Treble 1 "X2 |
| Sensitivity(1m/W) | 86dB(±6dB) |
| Total Harmonic Distortion (THD) | ＜0 .5% |
| Standby Power Consumption | ≤7W |
| Power Supply Voltage | AC100-240V 50-60Hz |
| Product Dimensions (LXWXH) | 235X200X204mm(Without bracket) |





# MINI EAR-HOOK UHF WIRELESS MICROPHONE NCS-R50



## KEY FEATURES

- Used in three different ways: ear-hook, collar clip, and handhold. Users can switch between these methods freely.
- Upon power-on, it automatically searches for the channel and pairs automatically.
- The Infrared connection prevents frequency interference and resist interference.

# MINI HANDHELD UHF WIRELESS MICROPHONE NCS-R50



## KEY FEATURES

- Supports 3.5mm audio input and microphone input;
- Newly designed noise elimination circuitry can eliminate power on/off shock noise;
- OLED high-definition liquid crystal display, which displays signal strength, frequency pairing mode, battery level (charging display), working channel, volume, and frequency pairing mode.
- Automatically shuts down within 60 minutes when there is no signal input, energy-saving and environmentally friendly.

# IP AMPLIFIER










## MULTI-ZONE IP MIXER AMPLIFIER NBS-2301



4 channels | Network Intercom | Remote Broadcasting

### RECOMMENDED USES

This unique multi-zone IP amplifier could be a cost-effective choice for schools, hospitals, office buildings, shopping malls and other public places.

### KEY FEATURES

- 2U rack-mount design with rugged all-metal housing, sturdy and durable.
- Easy configuration via user-friendly web interface.
- Fully integrated amplifier with multiple components built into one box, including preamp, network audio decoder, 100-volt constant-voltage digital amplifier, digital mixing console, MP3 player, mic and loudspeaker.
- TFT 4.3" LCD screen, function buttons, bass/treble controls, independent volume controls and peak level indicator LED on the front panel give the user powerful local control on the amplifier.
- Unique 4-zone 100-volt constant-voltage audio distribution allows the user to specify certain sub-zones for each voice announcement or background music.
- Local AOD (Audio-on-Demand): custom WAV or MP3 audio files can be stored in the SD card and played locally.
- Scheduled bell ringing tasks with custom MP3 audio files can be stored in the SD card as well, specific audio file can be played automatically at the specified time even when the amplifier is offline.
- Built-in mic and loudspeaker for two-way audio communication with other IP intercom station in the same system.
- Work with SPON® audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

### TECHNICAL PARAMETERS

| Model No. | NBS-2301P13 | NBS-2301P26 | NBS-2301P36 | NBS-2301P55 | NBS-2301P70 |
|---|---|---|---|---|---|
| Power Supply | AC220V/50Hz | AC220V/50Hz | AC220V/50Hz | AC220V/50Hz | AC220V/50Hz |
| Power Consumption | ≤170W | ≤320W | ≤420W | ≤650W | ≤800W |
| Rated Power Output | 130W | 260W | 360W | 550W | 700W |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP | | | | |
| Audio Codec | MP3, PCM/L16, ADPCM | | | | |
| S/N (Signal-to-Noise) Ratio | Mic Input 1: ≥65dB; Mic Input 2/3: ≥80dB; Line Input 1/2: ≥82dB | | | | |
| THD (Total Harmonic Distortion) | ≤0.5% at 1kHz, 1/2 rated output | | | | |
| Frequency Response | Mic Input 1: 80Hz-14kHz; Mic Input 2/3: 60Hz-16kHz; Line Input 1/2: 60Hz-16kHz | | | | |
| Speaker Output | 100V (Constant-Voltage) / 8-16Ω (Low-Impedance) | | | | |
| Interface | 1×RJ45 Ethernet Port, 1×SD Card Slot, 3×Mic Input (1/4" TS Jack), 2×Line Input (RCA Jack),1×Line Output (RCA Jack), 3×Relay Input, 2×Relay Output,1×4-Zone Speaker Output (100V), 2×Speaker Output (8-16Ω), 1×Speaker Output (100V),1×Power Input | | | | |
| Dimensions | 483×430×88mm | | | | |
| Weight | 7.5kg | | | | |
| Standard Accessories | 2×6-Pin Terminal Block Connector, 1×Remote Control, 1×Protective Cover, 1×Installation Manual | | | | |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) | | | | |

# IP INTEGRATED AMPLIFIER
# XC-9508



SIP | MIC Mute Adjustable | Offline Ringing

## RECOMMENDED USES

Universally suitable for adding high power paging, scheduled loud ringing and background music to a wide range of applications.

## KEY FEATURES

- 1U rack-mount design with rugged steel housing, sturdy and durable.
- Easy configuration via user-friendly web interface.
- Fully integrated amplifier with multiple components built into one box, including preamp, network audio decoder and 70-volt/100-volt constant-voltage digital amplifier.
- Separate indicator LED (power/status/signal/clip/protection) on the front panel and independent volume adjustment knobs on the back panel give the user powerful local control on the amplifier.
- Complete protection circuits including over-current protection, short-circuit protection, overload protection, thermal protection, lightning protection, surge protection, etc.
- Scheduled bell ringing tasks with custom MP3 audio files can be stored in the FTP server of the amplifier, specific audio file can be played automatically at the specified time even when the amplifier is offline.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

## TECHNICAL PARAMETERS

| Model No. | XC-9508P13 | XC-9508P26 | XC-9508P36 | XC-9508P50 |
|---|---|---|---|---|
| Power Supply | AC 100V-240V 50/60Hz | | | |
| Power Consumption | ≤160W | ≤310W | ≤420W | ≤580W |
| Rated Power Output | 130W | 260W | 360W | 500W |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, DHCP, TCP/IP, UDP, ARP, ICMP, IGMP | | | |
| Audio Codec | G.711 A-law, G.711 μ-law, G.729, PCM/L16 | | | |
| S/N (Signal-to-Noise) Ratio | ≥84dB | | | |
| THD (Total Harmonic Distortion) | ≤0.5% at 1kHz, 1/2 rated output | | | |
| Frequency Response | 80Hz-18kHz | | | |
| Speaker Output | 70V/100V (Constant-Voltage) | | | |
| Interface | 1×RJ45 Ethernet Port, 1×Line Input (Balanced), 1×Line Input (Unbalanced - RCA Jack),1×Mic Input (1/4" TS Jack), 1×Line Output (RCA Jack),1×Relay Input, 1×Relay Output, 1×Speaker Output (70V/100V), 1×Power Input | | | |
| Dimensions | 440×300×44mm | | | |
| Weight | 3.45kg | | | |
| Standard Accessories | 1×4-Pin Terminal Block Connector, 2×5-Pin Terminal Block Connector, 2×Rack Ear, 4×Rubber Foot, 1×Installation Manual | | | |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) | | | |





# IP WALL MOUNT AMPLIFIER
# NAS-8505L



## RECOMMENDED USES

This IP Wall Mounted Amplifier is mainly designed for office , conference room , classroom ect.

## KEY FEATURES

- All-metal structure, compact and lightweight design, sturdy and durable.
- Easy configuration via user-friendly web interface.
- Line input is available for connecting external music source equipment such as CD player or AM/FM tuner.
- Built-in network audio decoder for decoding digital audio stream into analog audio signal.
- A preamp to provide line input for connecting external music source equipment
- Built-in 2x10 or 2x30 watt class-D digital amplifier for driving up to 4 8-ohm passive analog speakers.
- With a high-speed dual-core(ARM+DSP) chip of industrial grade whose starting-up time is ≤1s.
- Equipped with indication of status light which can display a variety of status of terminals in real time (such as online and offline etc.).

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8505L02 | NAS-8505L06 |
|---|---|---|
| Power Supply | DC 24V/1A | DC 24V/2.7A |
| Power Consumption | ≤24W | ≤64W |
| Rated Power Output | 2×10W | 2×30W |
| Network Protocol | HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Codec | MP3, PCM/L16, ADPCM | |
| S/N (Signal-to-Noise) Ratio | ≥80dB | |
| THD (Total Harmonic Distortion) | ≤0.3% at 1kHz | |
| Frequency Response | 60Hz-20kHz | |
| Speaker Output | 8Ω (Low-Impedance) | |
| Interface | 1×RJ45 Ethernet Port, 1×Line Input (1/8" TS Jack), 1×Line Output (1/8" TS Jack),1×Relay Input, 1×Relay Output, 2×Speaker Output (8Ω), 1×Power Input | |
| Dimensions | 156.5×132×36mm | |
| Weight | 0.5kg | 0.6kg |
| Standard Accessories | 2×4-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 24V/1A Power Adapter (US/EU/UK/AU) | DC 24V/2.7A Power Adapter IEC C13 Power Cord (US/EU/UK/AU) |

# IP WALL MOUNT AMPLIFIER
# NAS-8505B




## RECOMMENDED USES

This IP wall mounted amplifier is the one which can connect constant-voltage passive speakers , and it can be used in office ,road ect.

## KEY FEATURES

- Easy configuration via user-friendly web interface.
- Line input is available for connecting external music source equipment such as CD player or AM/FM tuner.
- Built-in 60/120 watt class-D digital amplifier for driving up to constant-voltage passive analog speakers.
- Work with SPON® audio management software for more features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.
- With a high-speed dual-core(ARM+DSP) chip of industrial grade whose starting-up time is ≤1s;
- Built-in replay input and output can be used for connecting external manual call point ,heat/smoke detectors and LED Strobe light.
- All-metal structure, compact and lightweight design, sturdy and durable.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8505B06 | NAS-8505B12 |
|---|---|---|
| Power Supply | AC 100V-240V 50/60Hz | |
| Power Consumption | ≤75W | ≤150W |
| Rated Power Output | 60W | 120W |
| Network Protocol | HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Codec | MP3, PCM/L16, ADPCM | |
| S/N (Signal-to-Noise) Ratio | ≥75dB | |
| THD (Total Harmonic Distortion) | ≤0.3% at 1kHz | |
| Frequency Response | 60Hz-10kHz | |
| Speaker Output | 100V (Constant-Voltage) | |
| Interface | 1×RJ45 Ethernet Port, 1×Line Input (1/8" TS Jack), 1×Line Output (1/8" TS Jack), 1×Relay Input, 1×Relay Output, 2×Speaker Output (100V), 1×Power Input | |
| Dimensions | 337×283.5×50.5mm | |
| Weight | 4.3kg | 5.1kg |
| Standard Accessories | 1×4-Pin Terminal Block Connector, 4×Rubber Foot, 1×Installation Manual | |
| Optional Accessories | Fixed Power Cord (US/EU/UK/AU) | |





# DIGITAL MIXER AMPLIFIER
# GEN-5101P50

## RECOMMENDED USES

Designed for a mosque sound reinforcement scenario



Digital Amplifier | EQ Adjusment | DSP | High Speech Intelligibility

## KEY FEATURES

- 2-channel output amplifier with preset sound effect modes.
- Supports a remote control box for independent amplifier output control.
- Supports 6 microphone inputs with phantom power.
- Features independent volume control and built-in adjustment for treble, midrange, and bass.
- Supports 2 line inputs with separate volume control.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power | AC100～240V, 50/60Hz |
| Power Output | 2*240W (100V 42Ω) |
| Frequency Response | 70Hz~18KHz (±3dB) |
| SNR | ≥60dB |
| Total Harmonic Distortion | ≤1% |
| Phantom Power | Supported, +48V, supports microphones 1-6 |
| Input Interfaces | MIC1～6: -50dB, XLR-3-31 or 6.3mm input, phantom 48V can be independently switched.<br>AUX1: 500mV, 10 kΩ, unbalanced, RCA input.<br>AUX2: 1000mV, 10 kΩ, mono mixed, unbalanced, 3.5mm input. |
| Output Interfaces | Speaker Output: 240W*2, 100V<br>Line Output (Indoor): 500mV, 600Ω, unbalanced, RCA output.<br>Line Output (Outdoor): 500mV, 600Ω, unbalanced, RCA output. |
| Control Interfaces | MIC1～6 Input Volume Control<br>AUX1, AUX2 Input Volume Control<br>MIC1～6 EQ Adjustment: Supports low, mid, high adjustment.<br>MIC1～6 Effects Adjustment: Supports preset modes (PLATE, DOME, DELAY, HALL) selection, supports preset mode fine-tuning, supports indoor reverb time mode (L, M, S, OFF) selection.<br>MIC5～6 Effects Mode Switch<br>Indoor Amplifier Output Control: Supported<br>Indoor Speaker EQ Control: Supported<br>Indoor Amplifier Output Volume Adjustment: Supported<br>Outdoor Amplifier Output Control: Supported<br>Outdoor Speaker EQ Control: Supported<br>Outdoor Amplifier Effects Switch: Supported<br>Outdoor Amplifier Output Volume Adjustment: Supported |
| Network Interface | For program upgrades |
| Remote Control Interface | For remote control box |
| Serial Port | RS485, reserved |
| Reset Button | Supported |
| Operating Temperature | -10～50°C |
| Dimensions | 483x100x435mm |
| Weight | 8.1kg |

## REMOTE CONTROLLER NAC-5071A




### RECOMMENDED USES

In a mosque sound reinforcement scenario, remote control of the amplifier

### KEY FEATURES

- Compact and exquisite, supports wall mounting.
- Supports cascading, network interface format.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Interfaces | IO interface, RJ45 format |
| Transmission Distance | 200m |
| Cascading Control | Supported |
| Control Buttons | Amplifier output control switch, effects processor switch |

## IP AUDIO BRIDGE GEN-3101A01



### RECOMMENDED USES

Indoor，broadcast room.

### KEY FEATURES

- Compact and exquisite, with an aluminum alloy exterior design.
- Features a 15W power output and can be connected to analog constant impedance speakers.
- Includes one RCA line output for use with analog amplifiers.
- Supports POE and SIP, and can be connected to third-party SIP servers.

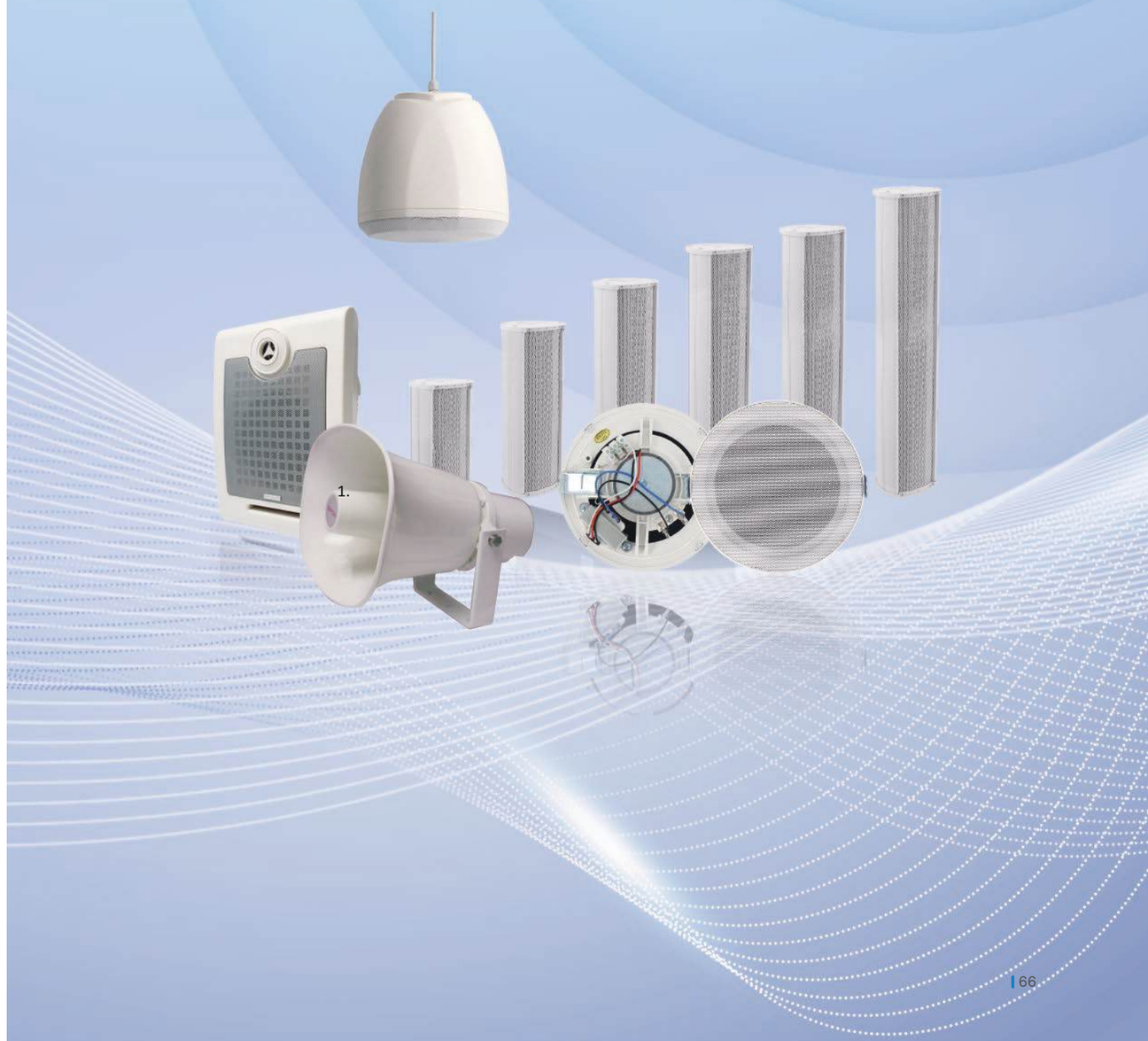
### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Power | POE, 802.3af/at, standby power less than 3W | Signal-to-Noise Ratio | ≥85dB |
| Network Protocols | TCP/IP, SIP, UDP, ARP, ICMP, IGMP | Interfaces | Ethernet port x1, RCA line output x1, power output x1 |
| Audio Codec | G.711-A, G.711-U | Operating Temperature | -10°C to 55°C |
| Power Output | 15W@8Ω | Dimensions | 126 x 66 x 27 mm |
| Frequency Response | 50Hz~20KHz | Weight | 0.16 kg |



SPON

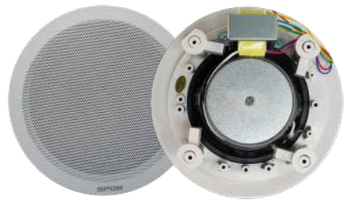
# ANALOG PA SPEAKER



## 15/25/35 WATT 100 VOLT CEILING SPEAKER NAC-111/NAC-112/NAC-113

### RECOMMENDED USES

The ceiling speaker has a minimalist and compact design, and its recessed installation allows it to achieve a discreet, hidden effect in limited spaces. It is also suitable for use in media rooms to play background music.



### TECHNICAL PARAMETERS

| MODEL NO. | NAC-111 | NAC-112 | NAC-113 |
|---|---|---|---|
| Speaker Unit | 1×5" PP Cone Woofer | 1×6" PP Cone Woofer | 1×7" PP Cone Woofer |
| Rated Power Output | 5W/10W/15W | 6W/12W/25W | 9W/18W/35W |
| Input Voltage | 100V | | |
| Sensitivity | 89dB±3dB | 91dB±3dB | 92dB±3dB |
| Frequency Response | 80Hz-15KHz | | |
| Ceiling Cut-out | 170mm | 200mm | 240mm |
| Dimensions | Φ203×90mm | Φ230×90mm | Φ270×105mm |
| Weight | 1.68kg | 2.2kg | 2.92kg |

## 6 WATT 100 VOLT CEILING SPEAKER NAC-131

### RECOMMENDED USES

This speaker is specifically designed to be installed on a ceiling without the need for drilling holes, providing greater convenience and flexibility.



### TECHNICAL PARAMETERS

| | |
|---|---|
| Speaker Unit | 1×6" Paper Cone Full Range Speaker |
| Rated Power Output | 3W/6W |
| Input Voltage | 100V |
| Sensitivity | 91dB±3dB |
| Frequency Response | 80Hz-18KHz |
| Ceiling Cut-out | Φ170mm |
| Dimensions | Φ188×76mm |
| Weight | 0.5kg |





## CEILING SPEAKER NAC-132/132C,NAC-133/133C, NAC-134

### RECOMMENDED USES

Indoor scenarios, such as hotels, hospitals, etc.



### KEY FEATURES

- Exceptional voice and music performance.
- High-strength ABS material.
- Perfectly integrates into all indoor environments.
- Ceiling-mounted installation, quick and easy to install.

### TECHNICAL PARAMETERS

| MODEL NO. | NAC-132 | NAC-132C | NAC-133 | NAC-133C | NAC-134 |
|---|---|---|---|---|---|
| Rated Power | 6W | 6W | 6W | 6W | 10W |
| Power Selection | 6/3W | 6/3W | 6/3W | 6/3W | 10/5W |
| Input Voltage | 100V | 100V | 100V | 100V | 100V |
| Sensitivity | 88±3dB | 90±3dB | 90±3dB | 91±3dB | 94±3dB |
| Frequency Response | 85~15KHz | 240~11KHz | 70~20KHz | 140~20KHz | 65~17KHz |
| Dimensions | φ160*54mm | Φ160*92mm | Φ186*71mm | Φ186*110mm | Φ232*90mm |
| Mounting Dimensions | φ140mm | φ140mm | Φ170mm | Φ170mm | Φ210mm |
| Material | ABS (aluminum grille) | | | | |
| Weight | 0.5kg | 0.68kg | 0.76kg | 1.2kg | 0.94kg |
| Speaker Specification | 5"*1 | 5"*1 | 6"*1 | 6"*1 | 8"*1 |
| Color | White | | | | |

# CEILING SPEAKER
# NAC-181/182

## RECOMMENDED USES

Indoor scenarios, such as hotels, hospitals, etc.



## KEY FEATURES

- Exceptional audio and music effects.
- Highstrength material casing.
- Simple and convenient power settings.
- Easy and quick installation, flexible assembly.

## TECHNICAL PARAMETERS

| NAC-181 | | NAC-182 | |
|---|---|---|---|
| Rated Power: | 20W | Rated Power: | 30W |
| Power Selection: | 20/10/5/2.5W/8Ω | Power Selection: | 30/15/7.5/3.75W/8Ω |
| Input Voltage: | 70V/100V | Input Voltage: | 70V/100V |
| Sensitivity: | 88±3dB | Sensitivity: | 88±3dB |
| Frequency Response: | 200~18KHz | Frequency Response: | 130~17KHz |
| Coverage Angle (1KHz/6dB): | 150 degrees | Coverage Angle (1KHz/6dB): | 150 degrees |
| Dimensions: | Φ204*165mm | Dimensions: | Φ267*162mm |
| Mounting Dimensions: | Φ180mm | Mounting Dimensions: | Φ240mm |
| Material: | Front Panel ABS, Rear Casing Iron | Material: | Front Panel ABS, Rear Casing Iron |
| Weight: | 2.2kg | Weight: | 3.34kg |
| Speaker Specifications: | 4" + 3/4" Coaxial Tweeter*1 | Speaker Specifications: | 6.5" + 1" Coaxial Tweeter*1 |
| Color: | White Mesh / Black Rear Bucket | Color: | White Mesh / Matte Black Rear Bucket |





# 6 WATT 100 VOLT CORRIDOR SPEAKER
# NAC-2302H

## RECOMMENDED USES

This type of speaker is widely used in school building corridors to remind students of the beginning of lectures, play audio tasks, and provide background music.



## TECHNICAL PARAMETERS

| | |
|---|---|
| Speaker Unit | 1×6.5" Paper Cone Full Range Speaker |
| Rated Power Output | 3W/6W |
| Input Voltage | 100V |
| Sensitivity | 92dB±2dB |
| Frequency Response | 150Hz-15KHz |
| Dimensions | 275×185×120mm |
| Weight | 1.2kg |

# 6 WATT 100 VOLT CORRIDOR SPEAKER
# NAC-2304

## RECOMMENDED USES

This type of speaker, designed with a lightweight and compact form factor, is commonly utilized in school building corridors to remind students of the beginning of lectures, play audio tasks, and provide background music.



## TECHNICAL PARAMETERS

| | |
|---|---|
| Speaker Unit | 1×5" Paper Cone Full Range Speaker |
| Rated Power Output | 3W/6W |
| Input Voltage | 100V |
| Sensitivity | 91dB±3dB |
| Frequency Response | 150Hz-15KHz |
| Dimensions | 178(L)×97(W)×200(H)mm |
| Weight | 0.8kg |

# 20/30/40 WATT 100 VOLT WALL MOUNT SPEAKER NAC-710W/NAC-720W/NAC-730W

## RECOMMENDED USES

The wall-mounted speaker is suitable for large rooms or public areas. This includes the provision of public address systems for halls in schools and malls.



## TECHNICAL PARAMETERS

| MODEL NO. | NAC-710W | NAC-720W | NAC-730W |
|---|---|---|---|
| Speaker Unit | 1×4″ PP Cone Woofer<br>1×1″ PP Cone Tweeter | 1×5″ PP Cone Woofer<br>1×1″ PP Cone Tweeter | 1×6″ PP Cone Woofer<br>1×1″ PP Cone Tweeter |
| Rated Power Output | 5W/10W/20W | 7.5W/15W/30W | 10W/20W/40W |
| Input Voltage | | 100V | |
| Sensitivity | 89dB±3dB | 91dB±3dB | 96dB±3dB |
| Frequency Response | 120Hz-15KHz | 130Hz-15KHz | 130Hz-15KHz |
| Dimensions | 215×170×150mm | 242×182×162mm | 300×215×185mm |
| Weight | 2.2kg | 3.0kg | 3.5kg |





# WALL MOUNT SPEAKER NAC-2312/2313/2314

## RECOMMENDED USES

Hotels, conference rooms, etc.



## KEY FEATURES

- Features a two-way design with 2 built-in speaker units for better sound reproduction.
- The casing is made from HIPS material, offering greater durability.
- Includes a multi-tap transformer for selectable impedance or constant voltage input, with adjustable power.
- Available in white and black to match different styles.

## TECHNICAL PARAMETERS

| MODEL NO. | NAC-2312 | NAC-2313 | NAC-2314 |
|---|---|---|---|
| Frequency Response | 110Hz～20KHz | 110Hz～20KHz | 100Hz～20KHz |
| Sensitivity | 90dB±3dB | 90dB±3dB | 88dB±3dB |
| Rated Power | 20W | 40W | 60W |
| Power Selection | 20W/10W/5W/2.5W & 8Ω | 40W/20W/10W/5W & 8Ω | 60W/30W/15W/7.5W & 8Ω |
| Input Voltage | 100V/70V | 100V/70V | 100V/70V |
| Speaker | 4-inch woofer *1 + 1-inch tweeter *1 | 5-inch woofer *1 + 1-inch tweeter *1 | 6.5-inch woofer *1 + 1-inch tweeter *1 |
| Material | HIPS | HIPS | HIPS |
| Color | Black/White | Black/White | Black/White |
| Weight | 2.38kg | 3.68kg | 4.76kg |
| Product Dimensions | 158*129*238(mm) | 196*157*295(mm) | 214*178*329(mm) |

## PENDANT SPEAKER
## NAC-2403



### RECOMMENDED USES

Airport terminals, shopping malls, restaurants, office environments, etc.

### KEY FEATURES

- Features a built-in coaxial high-quality speaker unit for superior sound reproduction and exceptional music performance.
- The casing is made from ABS material, ensuring higher durability.
- Elegant appearance with a simple structure.

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Frequency Response | 90Hz～20KHz | Speaker | 6.5-inch woofer *1 / 0.5-inch tweeter *1 |
| Sensitivity | 89dB±3dB | Material | ABS + aluminum mesh |
| Rated Power | 60W | Color | White |
| Power Selection | 7.5W/15W/30W/60W/8Ω (100V) | Weight | 3.12kg |
| Input Voltage | 100V/70V | Product Dimensions | Φ226*224mm |

## PENDANT SPEAKER
## NAC-2404



### RECOMMENDED USES

Airport terminal, shopping mall, restaurant, office, and other similar settings.

### KEY FEATURES

- Equipped with a built-in coaxial high-fidelity speaker unit, it delivers superior sound reproduction and exceptional music effects.
- The housing is made of PP material, enhancing durability.
- It features an exquisite appearance with a simple structure.

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Frequency Response | 85Hz～17KHz | Speaker | 6.5-inch woofer * 1 + 1-inch tweeter |
| Sensitivity | 87dB±3dB | Material | PP (Polypropylene) |
| Rated Power | 60W | Color | Black |
| Power Selection | 7.5W/15W/30W/60W/8Ω（100V） | Weight | 3.95kg |
| Input Voltage | 100V/70V | Product Dimensions (mm) | Φ234*314mm |

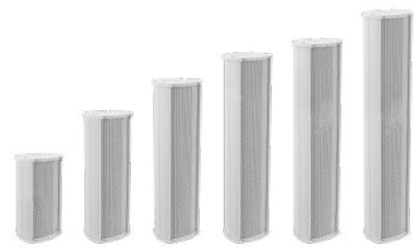




## WATERPROOF COLUMN SPEAKER
## NAC-221A/231A/241A/251A/261A/271A

### RECOMMENDED USES

Outdoor scenarios: playgrounds, parks



### KEY FEATURES

- Exceptional voice and music performance.
- Aluminum alloy casing.
- Waterproof and corrosion-resistant.
- Easy to install with simple and convenient power settings.

### TECHNICAL PARAMETERS

| MODEL NO. | NAC-221A | NAC-231A | NAC-241A | NAC-251A | NAC-261A | NAC-271A |
|---|---|---|---|---|---|---|
| Rated Power | 20W | 40W | 60W | 80W | 100W | 120W |
| Power Selection | 20W/10W | 40W/20W | 60W/30W | 80W/40W | 100W/50W | 120W/60W |
| Input Voltage | 100V | 100V | 100V | 100V | 100V | 100V |
| Sensitivity | 91dB ±3dB | 90±3dB | 94dB±3dB | 94±3dB | 97dB±3dB | 98dB±3dB |
| Frequency Response | 80Hz~18KHz | 80Hz~20KHz | 80Hz~18KHz | 100Hz~16KHz | 80Hz~18KHz | 70Hz~18KHz |
| Dimensions | 323x170x148mm | 442*170*148mm | 590*170*148mm | 736*170*148mm | 854*170*148mm | 986*170*148mm |
| Material | Aluminum | Aluminum | Aluminum | Aluminum | Aluminum | Aluminum |
| Weight | 3.2kg | 5.05kg | 5.84kg | 7.95kg | 8.54kg | 9.94kg |
| Waterproof Rating | IP55 | IP55 | IP55 | IP55 | IP55 | IP55 |
| Speaker Specification | 5"*1+ 1*1" | 5"*2 + 1*1" | 5"*3 + 1"*1 | 5"*4 + 1"*1 | 5"*5 + 1"*1 | 5"*6 + 1"*1 |
| Color | White | White | White | White | White | White |

## 30 WATT 100 VOLT HORN SPEAKER NAC-2503

### RECOMMENDED USES

This horn speaker is specifically designed for outdoor use and is perfect for amplifying sound in large open areas, such as school playgrounds and parks.



### TECHNICAL PARAMETERS

| | |
|---|---|
| Rated Power Output | 15W/30W |
| Input Voltage | 100V |
| Sensitivity | 104dB±2dB |
| Frequency Response | 250Hz-7KHz |
| IP Rating | IP65 |
| Dimensions | 285×205×285mm |
| Weight | 2.1kg |

## 50 WATT 100 VOLT HORN SPEAKER NAC-2510

### RECOMMENDED USES

This horn speaker is specifically designed for outdoor use and is perfect for amplifying sound in large open areas, such as school playgrounds and parks.



### TECHNICAL PARAMETERS

| | |
|---|---|
| Rated Power Output | 25W/50W |
| Input Voltage | 100V |
| Sensitivity | 109dB±3dB |
| Frequency Response | 380Hz-6.5KHz |
| IP Rating | IP65 |
| Dimensions | 325×325×350mm |
| Weight | 2.6kg |





## 200 WATT 100 VOLT HORN SPEAKER NAC-2508

### RECOMMENDED USES

Widely used in hotels, commercial buildings, supermarkets, schools, recreational facilities, and other public spaces.



### KEY FEATURES

The remote horn can be directly connected to a 100V line output.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Speaker Unit: | Circular horn speaker |
| Maximum Power: | 400W |
| Rated Power (PHC): | 200W |
| Sensitivity (1kHz, 1 meter): | 110dB ± 3dB |
| Effective Frequency Range (-10dB): | 120-18kHz |
| Rated Voltage: | 100V |
| Input Interface: | 2-core connection wire |
| Wiring Terminal Colors: | Red, Black |
| Product Dimensions: | 540mm × 460mm × 700mm |
| Net Weight: | 25kg |
| Installation Method: | Three-point suspension |
| Horn Body: | Aluminum with black coating |
| Bracket: | Steel with black coating |
| Operating Temperature: | -25°C to +55°C |
| Storage Humidity: | -40°C to +70°C |
| Relative Humidity: | <95% |

# HORN SPEAKER
# NAC-2517



## RECOMMENDED USES

Designed for outdoor areas, schools and parks.

## KEY FEATURES

- Built with high-quality aluminum material for enhanced durability and corrosion resistance, ensuring long-lasting performance in various environments.
- Features adjustable constant voltage (70V/100V) and constant resistance settings for flexible audio system configurations.
- Designed to seamlessly integrate with 70V or 100V input systems, offering versatility and ease of use in different audio installations.
- Engineered with IP66 protection to withstand harsh weather conditions, making it suitable for outdoor and industrial applications.

## General Specification

| | |
|---|---|
| Frequency Response | 300Hz-10KHz |
| Sensitivity(1KHZ/1W) | 107±3dB |
| Rated Power | 15W |
| Power taps | 1.9W/3.75W/7.5W/15W&8Q |
| Line inpu | 70V/100V |
| Dimension(mm) | φ200*235 |

## Physical Specification

| | |
|---|---|
| Material | Aluminum |
| Unit Weight | 1.38Kg |
| Gross Weight | 20.7Kg/12PCS |
| Packing Dimension(cm) | 67*45*54 |





# UNIDIRECTIONAL SPEAKER
# NAC-2701



## RECOMMENDED USES

Designed for shopping mall, metro corridor, museum and library.

## KEY FEATURES

- Optimized for long-distance sound projection, minimizes crosstalk to ensure minimal disruption for inhabitants.
- With a U-shaped portable bracket, the angle can be adjusted up to 180 degrees.
- Designed for optimal installation and use in pedestrian corridors and various tunnels.

## General Specification

| | |
|---|---|
| Frequency Response | 140Hz - 15KHz |
| Sensitivity(1m/1W) | 89±3dB |
| Rated Power | 30W |
| Power Options | 3.75W/7.5W/15W/30W |
| Input Voltage | 70V/100V |
| Dimension | Φ170mm x 212mm |

## Physical Specification

| | |
|---|---|
| Material | ABS |
| Woofer Speaker Size | 5" |
| Grille powder Coated | Iron Mesh |
| Product Weight | 1.9Kg |

## Woofer Speaker Specification

| | |
|---|---|
| Voice Coil Size | Φ0.13*2 Layer |
| Impedance | 6.8Ω |
| Voice Coil Frame | Kapton |
| Magnet Ferrite（305g） | Φ80*Φ32*15(Y30) |
| Basket | Iron |
| Diaphragm Material | Paper |
| Diaphragm | Fabric |
| Dust Cap | Mylar |
| Net Weight | 830g |

# BI-DIRECTIONAL SPEAKER
# NAC-2702



## RECOMMENDED USES

Designed for shopping mall, metro corridor, museum and library.

## KEY FEATURES

- Optimized for long-distance sound projection, minimizes crosstalk to ensure minimal disruption for inhabitants.
- With a U-shaped portable bracket,the angle can be adjusted up to 360 degrees.
- Designed for optimal installation and use in pedestrian corridors and various tunnels.

## General Specification

| | |
|---|---|
| Frequency Response | 180Hz - 16KHz |
| Sensitivity(1m/1W) | 86±3dB |
| Rated Power | 10W |
| Power Options | 2.5W/5W/10W |
| Input Voltage | 100V |
| Dimension | Φ138mm x 200mm |

## Physical Specification

| | |
|---|---|
| Material | ABS |
| Woofer Speaker Size | 5" |
| Grille powder Coated | AL Mesh |
| Product Weight | 1.7Kg |

## Woofer Speaker Specification

| | |
|---|---|
| Voice Coil Size | Φ0.12*2 Layer |
| Impedance | 6.8Ω |
| Magnet Ferrite（305g） | Φ60*Φ32*15(Y30) |
| Basket | Iron |
| Diaphragm Material | Paper |
| Dust Cap | Mylar cup |



SPON

# PERIPHERAL DEVICE



# 8-CHANNEL MIXER PRE-AMPLIFIER NAC-5001

## RECOMMENDED USES

Mainly used to amplify low-level output signals to line level input ,suitable for any PA scenario with multiple audio sources.



## KEY FEATURES

- Standard case design, 1U aluminum alloy panel, user-friendly design, beautiful and practical.
- Equipped with 5×MIC input, 3×AUX input, 2×EMC Line input.
- Equipped with 2×Line output to connect amplifier or other audio terminal.
- MIC 1 with the highest priority level.
- MIC 1 input with broadcast prompt tone ,the volume of prompt tone can be adjusted.
- MIC 2/3/4/5 are XLR and TRS two-in-one interfaces , easy to access different microphone interface.
- The volume for both MIC and AUX input channel can be adjusted independently.
- Mic Input 2/3/4/5 can be switched to supply +48V DC Phantom Power when needed.
- With TREBLE and BASS independent adjustment.
- With 5 audio signal indicator light and 1 overload indicator light to show real time audio signal input situation.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC 200V-240V, 50Hz |
| Power Consumption | ≤20W |
| Frequency Response | 20Hz~20kHz |
| S/N (Signal-to-Noise) Ratio | Mic Input: ≥50dB, Aux Input: ≥80dB |
| Tone Control (Bass) | ±10dB at 100Hz |
| Tone Control (Treble) | ±10dB at 10kHz |
| THD (Total Harmonic Distortion) | ≤0.5% at 1kHz |
| Interface | 1×TS Input Jack (Unbalanced)、4×TS&XLR Input Jack(Unbalanced)、<br>3×Dual RCA AUX Input Jack、2×Dual RCA Emergency Input Jack、<br>2×Dul RCA AUX Output Jack |
| Dimensions | 484×394×44mm |
| Weight | 5.8kg |
| Standard Accessories | 1×Quick Installation Guide、1×Quality Certificate、1×Warranty Card、1×Audio Cable |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |





# IP FIRE ALARM INTERFACE UNIT NAC-5003

## RECOMMENDED USES

Mainly used to integrate with 3rd-party fire alarm system , receiving fire alarm signal and trigger fire alarm broadcast , suitable for any PA scenario.



## KEY FEATURES

- Adopting high-speed industrial grade dual-core (ARM+DSP) chip, with start-up time ≤ 3 seconds.
- Equipped with 32×Relay Input interface (supporting short circuit signal input & DC 24V input) for external linkage with fire alarm system.
- Equipped with 8×Relay Output (NO contact) interface to be connected with alarm light to indicate the alarm status.
- Multiple IP fire alarm interface modules can be integrated in the same system to increase the number of alarm input interfaces.
- Being able to send the alarm signal to the server software automatically and apply to the server to implement corresponding task of playing the pre-set emergency evacuation announcement.
- Equipped with standard RJ45 interface, accessible to the system wherever Ethernet is available, supporting cross-segment and cross-router.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC100V-240V,50~60Hz |
| Power Consumption | ≤15W |
| Network Protocol | TCP/IP、UDP、ARP、ICMP、IGMP |
| Network Chip Rate | 10/100Mbps Self-adaptive |
| Interface | 1×RJ45 Ethernet Port、32×Relay Input、8×Relay Output、 1×Power Input |
| Operating Temperature | -10°C～70°C |
| Operating Humidity | ≤90% RH non-condensing |
| Dimensions | 440*300*44mm |
| Weight | 2.7kg |
| Standard Accessories | 1×Quick Installation Guide、1×Quality Certificate、1×Warranty Card |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |

# IP MINI WALL MOUNT REMOTE PA CONTROLLER XC-9520A

## RECOMMENDED USES

This remote PA controller provides convenient remote PA on demand and volume adjustment functions, suitable for schools, hotels,conference room, and other scenarios.




## KEY FEATURES

- Compact structure & delicate appearance, adopts 86 type box installation.
- Easy configuration via user-friendly web interface.
- Built-in 4-inch capacitive touch screen with 480*480 resolution.
- With the function of remote broadcast task control and task volume adjustment.
- Support free AOD Mp3 files from the media center of SPON® audio management software.
- Support to obtain the online devices of SPON® audio management software and remotely adjust the volume of the devices.
- Support to obtain the broadcast tasks on the SPON® audio management software and the tasks can be manually triggered.
- Equipped with standard RJ45 interface, accessible to the system wherever Ethernet is available, supporting cross-segment and cross-router.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC 100V-240V 50/60Hz |
| Network Protocol | TCP/IP、UDP、ARP、ICMP、IGMP |
| Network Chip Rate | 10/100Mbps Self-adaptive |
| Interface | 1×RJ45 Ethernet Port、1×RS485 Port(Reserved)、2×AC Power Input Port |
| Dimensions | 86x37.5x86mm |
| Weight | 0.21kg |
| Standard Accessories | 1×Quick Installation Guide、1×Quality Certificate、<br>1×Warranty Card、1×2-Pin Terminal Block Connector |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |





# MULTI-ZONE IP AUDIO ADAPTER NAS-8504B

## RECOMMENDED USES

Mainly used to convert your existing legacy analog amplifier to IP amplifier, suitable for PA scenarios that need multi-zone feature but utilize the same audio source.



## KEY FEATURES

- 1U rack-mount design with brushed aluminum panel and rugged all-metal housing, sturdy and durable.
- Easy configuration via SPON® self-developed IP audio device configuration tool.
- Line input is available for connecting external music source equipment such as CD player or AM/FM tuner.
- Line output can be used to connect to external analog amplifier for the transmission of the decoded analog audio signal.
- Built-in power output control enables the device to output AC power to the external analog amplifier only when it receives audio signal, this feature could effectively avoid the waste of electricity when the amplifier is idle.
- Unique 8-zone 100-volt constant-voltage audio distribution allows the user to specify certain sub-zones for each voice announcement or background music, perfectly suitable for scenarios that need multi-zone feature but utilize the same audio source.
- Work with SPON® audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC 100V-240V 50/60Hz |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Codec | MP3, PCM/L16, ADPCM |
| S/N (Signal-to-Noise) Ratio | ≥75dB |
| Audio Sampling & Bit Rate | 8kHz-44.1kHz, 16bit, 8kbps-320kbps |
| THD (Total Harmonic Distortion) | ≤0.5% at 1kHz |
| Frequency Response | 60Hz-20kHz |
| Power Output Capacity | 1600W |
| Interface | 1×RJ45 Ethernet Port, 1×Line Input (RCA Jack), 1×Line Output (RCA Jack),<br>1×Data Port, 8 Alarm output, 1×8-Zone Speaker Output (100V),<br>1×100V Amplifier Input, 1×Controlled Power Output, 1×Power Input |
| Dimensions | 483×259×44mm |
| Weight | 3.2kg |
| Standard Accessories | 4×4-Pin Terminal Block Connector, 1×5 ft. RCA 2-Male to 2-Male Audio Cable,<br>1×IEC C13 Power Cord (AU), 1×Installation Manual |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |

# MULTI-CHANNEL IP AUDIO ADAPTER
# NBS-2401

## RECOMMENDED USES

This 4-in-1 IP audio adapter has 4 separate I/O channels with 4 separate RJ45 ethernet ports, it could be an ideal choice to integrate your existing legacy analog amplifier into IP PA system in large-scale shopping malls, hotels, transport terminals (i.e. airports, railway stations, bus stations) and other public places.



## KEY FEATURES

- 1U rack-mount design with brushed aluminum panel and rugged all-metal housing, sturdy and durable.
- Easy configuration via user-friendly web interface.
- 4 separate line inputs (one for each channel) are available for connecting external music source equipment such as CD player or AM/FM tuner.
- 4 independent network encoders (one for each channel) for encoding 4 separate channels of analog audio signal, the encoded network audio signals will be transmitted to the server via network and thus transmitted to any other IP audio device in the same IP PA system.
- 4 separate line outputs (one for each channel) can be used to connect to external analog amplifiers for the transmission of the decoded analog audio signal.
- 4 independent network decoders (one for each channel) for decoding 4 separate channels of network audio signal simultaneously, the decoded analog audio signals will be transmitted to external analog amplifier via 4 line outputs.
- Work with SPON® audio management software for powerful features such as live and scheduled voice announcements, real-time and timed background music, emergency notification alerting, zone paging, etc.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC 180V-240V 50/60Hz |
| Power Consumption | ≤20W |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Codec | MP3, PCM/L16, ADPCM |
| S/N (Signal-to-Noise) Ratio | ≥90dB |
| Audio Sampling & Bit Rate | 22.05kHz-44.1kHz, 16bit, 8kbps-320kbps |
| THD (Total Harmonic Distortion) | ≤0.3% at 1kHz |
| Frequency Response | 100Hz-20kHz |
| Interface | 4×RJ45 Ethernet Port, 4×Line Input, 4×Line Output, 4×Relay Input, 4×Relay Output, 1×Power Input |
| Dimensions | 483×183×44mm |
| Weight | 4.2kg |
| Standard Accessories | 4×4-Pin Terminal Block Connector, 4×5-Pin Terminal Block Connector, 4×5 ft. RCA 2-Male to 2-Bare Wire Audio Cable, 1×Installation Manual |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |





# DESKTOP PAGING MICROPHONE WITH CHIME
# NAC-522A

## RECOMMENDED USES

Mainly installed at broadcast studio or reception area for making general voice announcements in a PA system.



## KEY FEATURES

- Modern design desktop unidirectional condenser microphone on a flexible stem.
- High-grade aluminum alloy shell, sturdy and durable.
- Rubber feet on the metal base ensure its stability on any flat surface.
- Big round button on the center of the device acts as a toggle for voice announcement (press to switch on, press again to switch off).
- Touch button design (big round button), no noise of keypress, easy to be cleaned or disinfected.
- Bi-colour (red/green) backlight on the touch button indicates the operating status of the device.
- When pressing the touch button to activate the paging mic, the voice announcement will be preceded by a chime.
- ON/OFF switch on the back panel for enabling/disabling the chime.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/1.5A |
| Standby Power Consumption | ≤3W |
| Mic Type | Condenser |
| Shell Material | Aluminum Alloy |
| Pickup Pattern | Unidirectional |
| S/N (Signal-to-Noise) Ratio | ≥80dB |
| Frequency Response | 100Hz-16KHz |
| Interface | 1×Line Output (1/8” TS Jack), 1×Line Output (1/4” TS Jack), 1×Power Input |
| Dimensions | 144×144×34.1mm |
| Weight | 0.55kg |
| Standard Accessories | 1×8.2 ft. 1/8” Male to Male Audio Cable / 1× ft. 1/4” Male to Male Audio Cable 1×IM-380 - Gooseneck Microphone Stem / 1×Installation Manual |
| Optional Accessories | DC 12V/1.5A Power Adapter (Optional Types: US/EU/UK/AU) |

# VOLUME CONTROLLER NAC-21\22\23\24




## RECOMMENDED USES

For constant voltage broadcasting lines.

## KEY FEATURES

- Volume adjustment is divided into 4 levels, allowing for volume changes according to needs. After installation, it provides a unified, coordinated, and aesthetically pleasing appearance.

## TECHNICAL PARAMETERS

| MODEL NO. | NAC-21 | NAC-22 | NAC-23 | NAC-24 |
|---|---|---|---|---|
| Rated Power | 6W | 30W | 60W | 120W |
| Input Voltage | 100V | 100V | 100V | 100V |
| Product Dimensions | 87x87x44mm | 87x87x60mm | 87x87x70mm | 87x87x70mm |
| N.W. | 60g | 160g | 320g | 330g |



SPON

# IP INTERCOM



# IP POE AUDIO INTERCOM STATION NAS-8523C/NAS-8523D



NAS-8523C



NAS-8523D

## RECOMMENDED USES

This IP PoE audio intercom station is a compliant with standard SIP server. It is also an IP door phone for hands-free visitor communication at a secure entrance door or gate, access point, and room intercom applications.

## KEY FEATURES

- All-metal shell, high-grade brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Hands-free wall mount station with built-in microphone and speaker.
- NAS-8523C: Single-button design for one-touch calling to the designated target intercom device.
- NAS-8523D: Dual-button design for one-touch calling to the designated target intercom device.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly damaged.
- Support PoE (Power over Ethernet).
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8523C | NAS-8523D |
|---|---|---|
| Power Supply | DC 24V/1A or PoE (IEEE802.3af) | |
| Power Consumption | ≤3W | |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-22.05kHz, 16bit | |
| Transmission Bit Rate | 8kbps-320kbps | |
| S/N (Signal-to-Noise) Ratio | ≥82dB | |
| Frequency Response | 50Hz-20kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Line Input, 1×Line Output, 1×Controlled Power Output, 1×Power Input | |
| Dimensions | 191×101×46mm | |
| Weight | 1.0kg | |
| Standard Accessories | 1×2-Pin Terminal Block Connector, 1×3-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 24V/1A Power Adapter (US/EU/UK/AU) | |





# IP POE VIDEO INTERCOM STATION NAS-8523CV/NAS-8523DV

## RECOMMENDED USES

This IP PoE intercom built-in with 1080P camera for a high quality video communication to with any video master station.This IP intercom delivers reliable video communication for building entry or access point communication with visitors and guests.



NAS-8523CV



NAS-8523DV

## KEY FEATURES

- All-metal shell, high-grade brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Built-in 1080P HD camera; Compatible with standard ONVIF protocol, can be connected with NVR to make recording;
- Two-way full duplex voice communication with IP video intercom master station in the master control room.
- Hands-free wall mount station with built-in microphone and speaker.
- NAS-8523CV: Single-button design for one-touch calling to the designated target intercom device.
- NAS-8523DV: Dual-button design for one-touch calling to the designated target intercom device.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly damaged.
- Outdoor weatherproof design, IP rating could reach IP54.
- Support PoE (Power over Ethernet).
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8523CV | NAS-8523DV |
|---|---|---|
| Power Supply | DC 24V/1A or PoE (IEEE802.3af) | |
| Power Consumption | ≤3W | |
| Network Protocol | SIP 2.0 (RFC 3261), FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-22.05kHz, 16bit | |
| Video transmission Bit Rate | 512Kbps-4Mbps | |
| Video Coding | GVA/720/1080P | |
| S/N (Signal-to-Noise) Ratio | ≥82dB | |
| Frequency Response | 50Hz-20kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Line Input, 1×Line Output, 1×Controlled Power Output, 1×Power Input | |
| Dimensions & Weight | 191×101×46mm & 1.0kg | |
| Standard Accessories | 1×2-Pin Terminal Block Connector, 1×3-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 24V/1A Power Adapter (US/EU/UK/AU) | |

# IP POE OUTDOOR AUDIO INTERCOM STATION XC-9137AE/XC-9137AS



XC-9137AE XC-9137AS

Concealed Mount PoE IPX5 SIP

## RECOMMENDED USES

This IP PoE outdoor audio intercom station is with IP65 waterproof level. It can be embedded to the intelligent road light pole to realize the outdoor emergency call with the police.

## KEY FEATURES

- All-metal shell, high-grade brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Outdoor weatherproof design, IP rating could reach IP65.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- XC-9137AE: Hands-free flush mount station with built-in microphone and speaker.
- XC-9137AS: Hands-free wall mount station with built-in microphone and speaker.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Support PoE (Power over Ethernet).
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | XC-9137AE | XC-9137AS |
|---|---|---|
| Power Supply | DC 12V/1.5A or PoE (IEEE802.3af) | |
| Power Consumption | ≤18W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit | |
| Transmission Bit Rate | 8kbps-320kbps | |
| S/N (Signal-to-Noise) Ratio | ≥81dB | |
| Frequency Response | 200Hz-18kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Record Output, 1×Power Input | |
| IP Rating | IP65 | |
| Dimensions | 162×100×36mm | 162×100×41mm |
| Weight | 0.8kg | 1.0kg |
| Standard Accessories | 1×Waterproof Connector, 2×2-Pin Terminal Block Connector, 1×3-Pin Terminal Block Connector, 1×Customer Operational Guideline, 1×Installation Manual | |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) | |





# IP POE OUTDOOR VIDEO INTERCOM STATION XC-9137AVE/XC-9137AVS



XC-9137AVE XC-9137AVS

Onvif Ultra Wide-Angle Camera IPX5 SIP PoE

## RECOMMENDED USES

This model supports H.264 encoding format for High Definition video communication. Supports with Surface mount and flush-mount which are mainly used for smart light pole, Charging pile and other outdoor environments.

## KEY FEATURES

- All-metal shell, high-grade brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Built-in 1080P HD camera; Compatible with standard ONVIF protocol, can be connected with NVR to make recording;
- Outdoor weatherproof design, IP rating could reach IP65.
- Two-way full duplex voice communication with IP video intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- XC-9137AVE: Hands-free flush mount station with built-in microphone and speaker.
- XC-9137AVS: Hands-free wall mount station with built-in microphone and speaker.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Support PoE (Power over Ethernet).
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems.
- Work with VoIP telephone system for two-way voice communication.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | XC-9137AVE | XC-9137AVS |
|---|---|---|
| Power Supply | DC 12V/1.5A or PoE (IEEE802.3af) | |
| Power Consumption | ≤18W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit | |
| Video transmission Bit Rate | 512Kbps-4Mbps | |
| Video Coding | VGA/720/1080P | |
| Transmission Bit Rate | 8kbps-320kbps | |
| S/N (Signal-to-Noise) Ratio | ≥81dB | |
| Frequency Response | 200Hz-18kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Record Output, 1×Power Input | |
| IP Rating | IP65 | |
| Dimensions | 162×100×36mm | 162×100×41mm |
| Weight | 1.0kg | |
| Standard Accessories | 1×Waterproof Connector, 1×3-Pin Terminal Block Connector, 1×4-Pin Terminal Block Connector, 1×Customer Operational Guideline, 1×Installation Manual | |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) | |

# IP OUTDOOR INDUSTRIAL TELEPHONE XC-9201 & XC-9201V




Onvif SIP IP66 PoE

## RECOMMENDED USES

This model has a robust anti-riot property and an aluminium alloy cast casing. Equipped with powerful features are designed specifically for the rough conditions in industrial environments, such as high noise, heavy dust, strong acid, and extreme low or high temperature.

## KEY FEATURES

- Aluminum alloy shell with baking varnish surface treatment (dust-proof/noise-proof/anti-riot/anti-corrosion).
- Outdoor weatherproof design, IP rating could reach IP66.
- Built-in wide-angle HD camera and supports video output in a variety of resolutions.
- Supports the standard ONVIF protocol and outputs video to external platforms for display.
- Two-way full duplex voice communication with IP video intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- Numeric keypad design for calling to any target intercom device by dialing the target device's ID.
- Hands-free wall mount telephone with built-in microphone and speaker.
- Handset can be used for two-way voice communication in noisy environment.
- Built-in 2×30 watt class-D digital amplifier for driving up to two 8-ohm passive analog speakers.
- Support PoE (Power over Ethernet).
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | XC-9201 | XC-9201V |
|---|---|---|
| Power Supply | DC24V/2.7A or PoE (IEEE802.3af) | |
| Power Consumption | ≤65W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit | |
| Video transmission Bit Rate | / | 16Kbps-2Mbps |
| Video Coding | / | VGA/720P/1080P |
| Transmission Bit Rate | 8kbps-320kbps | |
| S/N (Signal-to-Noise) Ratio | ≥93dB | |
| Frequency Response | 25Hz-15kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Output, 2×Speaker Output (8Ω), 1×Power Input | |
| IP Rating | IP66 | |
| Dimensions | 346×241×125mm | |
| Weight | 7.4kg | |
| Standard Accessories | 1×Waterproof Connector, 1×Mounting Plate, 1×Installation Manual | |
| Optional Accessories | DC 24V/2.7A Power Adapter IEC C13 Power Cord (US/EU/UK/AU) | |





# IP OUTDOOR EMERGENCY CALL BOX XC-9241V




Onvif HD 1080P IPX6 SIP

## RECOMMENDED USES

XC-9241V with a robust anti-riot property and an aluminium alloy cast casing which dedicated design for alarm assistance in the safe city, safe campus and smart scenic spot etc.

## KEY FEATURES

- Outdoor weatherproof design, IP rating could reach IP66.
- Aluminum alloy shell with baking varnish surface treatment (dust-proof/anti-riot/anti-corrosion).
- Built-in wide-angle 1080P HD camera and supports video output in a variety of resolutions.
- Supports the standard ONVIF protocol and outputs video to external platforms for display.
- Two-way full duplex voice communication with IP video intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- Hands-free wall mount telephone with built-in microphone and speaker.
- Handset can be used for two-way voice communication in noisy environment.
- Built-in 40 watt class-D digital amplifier for driving up to two 8-ohm passive analog speakers.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 24V/2.7A |
| Power Consumption | ≤80W |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit |
| Transmission Bit Rate | 8kbps-320kbps |
| Video transmission Bit Rate | 512Kbps-4Mbps |
| Video Coding | H.264 |
| S/N (Signal-to-Noise) Ratio | ≥80dB |
| Frequency Response | 100Hz-20KHz(MP3) |
| Interface | 1×RJ45 Ethernet Port, 2×Relay input, 1×Relay Output, 2×Line in put, 2×Line Output, 2×Speaker Output (8Ω), 1×Power Input |
| IP Rating | IP66 |
| Dimensions | 261×120×417mm |
| Weight | 9.5kg |
| Standard Accessories | 1×Waterproof Connector, 1×Power Supply 24V/2.7A 1×Installation Manual |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) |

# IP OUTDOOR EMERGENCY CALL BOX XC-9242V



SIP Onvif IPX5 HD1080P

## RECOMMENDED USES

This model with all-metal shell, high-grade brushed aluminum panel with flush mounted in outdoor environment for emergency call in the safe city, safe campus and smart scenic spot etc.

## KEY FEATURES

- All-metal shell, high-grade brushed aluminum panel.
- Outdoor weatherproof design, IP rating could reach IP65.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- Hands-free flush mount station with built-in microphone and speaker.
- Built-in 40 watt class-D digital amplifier for driving up to two 8-ohm passive analog speakers.
- Built-in wide-angle 1080P HD camera and supports video output in a variety of resolutions.
- Supports the standard ONVIF protocol and outputs video to external platforms for display.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly damaged.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 24V/2.7A |
| Power Consumption | ≤60W |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit |
| Transmission Bit Rate | 8kbps-320kbps |
| Video transmission Bit Rate | 512Kbps-4Mbps |
| Video Coding | VGA/720/1080P |
| S/N (Signal-to-Noise) Ratio | ≥80dB |
| Frequency Response | 100Hz-20KHz(MP3) |
| Interface | 1×RJ45 Ethernet Port, 2×Relay input, 1×Relay Output, 2×Line in put, 1×Line Output, 2×Speaker Output (8 Ω/20W), 1×Power Input |
| IP Rating | IP65 |
| Dimensions | 360×252×74mm |
| Weight | 9.5kg |
| Standard Accessories | 1×Waterproof Connector, 4×3-Pin Terminal Block Connector, 2×4-Pin Terminal Block Connector,1×Installation Manual,DC 24V/2.7A Power Adapter |
| Optional Accessories | IEC C13 Power Cord (US/EU/UK/AU) Emergency Pole NAC-17D |



# EMERGENCY POLE NAC-17D




## RECOMMENDED USES

This emergency pole work with emergency call box can be used for all outdoor environment to ensure safety. Specially for safe city, safe campus and smart scenic spot etc.

## KEY FEATURES

- Pole design, easy to identify.
- All-metal shell, outdoor weatherproof design, IP rating could reach IP65.
- Equipped with alarm light which can will flashing during intercom.
- Optional for emergency pole with speaker.
- Optional for surveillance poles in two heights.
- Two installation methods: flush mount & wall mount.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Two surveillance poles | 1.5m & 2.5m |
| Two Installation | Flush mount & Wall mount |
| Dimensions | 2406×260×260mm |
| Weight | 50kg |
| Standard Accessories | 1×Installation Manual |
| Optional Accessories(Wall mount ) | 1×Mounting Plate |

# IP POE VIDEO INTERCOM STATION XC-9133AV



Onvif SIP HD

## RECOMMENDED USES

XC-9133AV with 7 inch touch screen and High Definition camera for two-way full duplex video communication which can be used for any indoor environment such as office, factory, bank etc.

## KEY FEATURES

- 7” digital HD touch screen (resolution ratio: 1280×800).
- Two-way full duplex video communication with IP video intercom master station in the master control room.
- Hands-free wall mount station with built-in microphone and speaker.
- Built-in HD digital camera with H.264 encoding format.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way video communication and live voice announcements.
- Three different calling modes for options:
- a. One-touch Calling. Using the calling buttons on the touch screen to the calling target which set on the web page);
- b. Dial Calling. Entering target’s ID on the numeric keypad to initiate calling.
- c. Calling list. Call list showing target terminals which can make a quick dial.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC24V/1A |
| Power Consumption | ≤6W |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit |
| Transmission Bit Rate | 8kbps-320kbps |
| Video transmission Bit Rate | 512Kbps-1Mbps |
| Video Coding | VGA/720P/1080P |
| S/N (Signal-to-Noise) Ratio | ≥84dB |
| THD (Total Harmonic Distortion) | ＜1% |
| Interface | 1×RJ45 Ethernet Port, 2×Relay Input, 2×Relay Output, 1×Power Input |
| Dimensions | 120×231×36mm |
| Weight | 1.0kg |
| Standard Accessories | 1×Waterproof Connector, 1×Mounting Plate，2×wire Contact Cable， Connector, 1×Warranty Card, 1×Installation Manual |
| Optional Accessories | DC 24V/1A Power Adapter (US/EU/UK/AU) |





# IP POE OUTDOOR VIDEO INTERCOM STATION XC-9135AVE/XC-9135AVS



XC-9135AVE



XC-9135AVS

Onvif HD SIP IP65

## RECOMMENDED USES

This IP PoE outdoor Intercom station built-in with 1080P camera for a high quality video communication to any video master station. It supports with IP65 which can be used in any outdoor environment such as building entry or access point communication with visitors and guests.

## KEY FEATURES

- 7” digital HD touch screen (resolution ratio: 1280×800).
- Outdoor weatherproof design, IP rating could reach IP65.
- Two-way full duplex video communication with IP video intercom master station in the master control room.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way video communication and live voice announcements.
- Three different calling modes for options:
- a. One-touch Calling. Using the calling buttons on the touch screen to the calling target which set on the web page);
- b. Dial Calling. Entering target’s ID on the numeric keypad to initiate calling.
- c. Calling list. Call list showing target terminals with can make a quickly dial.
- XC-9135AVE: Hands-free flush mount station with built-in microphone and speaker.
- XC-9135AVS: Hands-free wall mount station with built-in microphone and speaker.

## TECHNICAL PARAMETERS

| MODEL NO. | XC-9135AVE | XC-9135AVS |
|---|---|---|
| Power Supply | DC24V/1A | |
| Power Consumption | ≤6W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit | |
| Transmission Bit Rate | 8kbps-320kbps | |
| Video transmission Bit Rate | 512Kbps-4Mbps | |
| Video Coding | VGA | |
| THD (Total Harmonic Distortion) | ＜1% | |
| S/N (Signal-to-Noise) Ratio | ≥81dB | |
| Interface | 1×RJ45 Ethernet Port, 2×Relay Input, 2×Relay Output, 1×Power Input | |
| IP Rating | IP65 | |
| Dimensions | 140×283×29mm | |
| Weight | 1.3kg | |
| Standard Accessories | 1×Waterproof Connector, 2×2-Pin Terminal Block Connector, 1×3-Pin Terminal Block Connector,1×Installation Manual | |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) | |

# IP AUDIO INTERCOM STATION NAS-8515/NAS-8516



NAS-8515



NAS-8516

## RECOMMENDED USES

This IP audio intercom station is a hands-free communication intercom, which is suitable for all kinds of indoor environment.

## KEY FEATURES

- BS composite plastic shell, compact and lightweight design.
- Easy configuration via user-friendly web interface.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Hands-free wall mount station with built-in microphone and speaker.
- With TFT LCD screen shows the working status of the device.
- NAS-8515: Dual-button design for one-touch calling to the designated target intercom device.
- NAS-8516: Numeric keypad design for calling to any target intercom device by dialing the target device's ID.
- Mic Input (1/8"TS Jack) & Line Output (1/8" TS Jack) on the side of the device can be connected to external headset.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8515 | NAS-8516 |
|---|---|---|
| Power Supply | DC 12V/2A | |
| Power Consumption | ≤5W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-22.05kHz, 16bit | |
| Transmission Bit Rate | 16kbps-352kbps | |
| S/N (Signal-to-Noise) Ratio | ≥80dB | |
| Frequency Response | 25Hz-10kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Mic Input (1/8" TS Jack), 1×Line Output (1/8" TS Jack), 1×Power Input | |
| Dimensions | 195.9×95.7×50.6mm | |
| Weight | 0.3kg | |
| Standard Accessories | 1×5-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 12V/2A Power Adapter (US/EU/UK/AU) | |





# IP AUDIO INTERCOM STATION NAS-8525/NAS-8526



NAS-8525



NAS-8526

## RECOMMENDED USES

This IP audio intercom station is compliant with standard SIP server. It supports full-duplex communication and PTT communication.

## KEY FEATURES

- ABS composite plastic shell, compact and lightweight design.
- Easy configuration via user-friendly web interface.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Hands-free desktop station with gooseneck microphone and built-in speaker.
- With TFT LCD screen shows the working status of the device.
- NAS-8525: Dual-button design for one-touch calling to the designated target intercom device.
- NAS-8526: Numeric keypad design for calling to any target intercom device by dialing the target device's ID.
- Mic Input (1/8" TS Jack) & Line Output (1/8" TS Jack) on the side of the device can be connected to external headset.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8525 | NAS-8526 |
|---|---|---|
| Power Supply | DC 12V/2A | |
| Power Consumption | ≤5W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-22.05kHz, 16bit | |
| Transmission Bit Rate | 16kbps-352kbps | |
| S/N (Signal-to-Noise) Ratio | ≥80dB | |
| Frequency Response | 25Hz-10kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Mic Input (1/8" TS Jack), 1×Line Output (1/8" TS Jack), 1×Power Input | |
| Dimensions | 195.9×95.7×50.6mm | |
| Weight | 0.4kg | |
| Standard Accessories | 1×Gooseneck Microphone Rod, 1×5-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 12V/2A Power Adapter (US/EU/UK/AU) | |

# IP AUDIO INTERCOM STATION NAS-8527/NAS-8528

## RECOMMENDED USES

This IP audio intercom station is with headset and LCD screen, which provides hands-free or handset communication.



NAS-8527



NAS-8528

## KEY FEATURES

- ABS composite plastic shell, compact and lightweight design.
- Easy configuration via user-friendly web interface.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Hands-free desktop station with built-in microphone and speaker.
- Handset can be used for two-way voice communication in noisy environment.
- With TFT LCD screen shows the working status of the device.
- NAS-8527: Dual-button design for one-touch calling to the designated target intercom device.
- NAS-8528: Numeric keypad design for calling to any target intercom device by dialing the target device's ID.
- Mic Input (1/8" TS Jack) & Line Output (1/8" TS Jack) on the side of the device can be connected to external headset.
- Under the circumstance of network interruption, offline two-way voice communication with certain target intercom device is also possible.
- Fully compliant 3rd party SIP endpoint, compatible with most mainstream on-premise and cloud/hosted VoIP telephone systems for live voice announcements.
- Work with SPON® XC-9000 audio management software for more features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8527 | NAS-8528 |
|---|---|---|
| Power Supply | DC 12V/2A | |
| Power Consumption | ≤5W | |
| Network Protocol | SIP 2.0 (RFC 3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP | |
| Audio Sampling Rate | 8kHz-22.05kHz, 16bit | |
| Transmission Bit Rate | 16kbps-352kbps | |
| S/N (Signal-to-Noise) Ratio | ≥80dB | |
| Frequency Response | 25Hz-10kHz | |
| Interface | 1×RJ45 Ethernet Port, 1×Relay Input, 1×Relay Output, 1×Mic Input (1/8" TS Jack), 1×Line Output (1/8" TS Jack), 1×Power Input | |
| Dimensions | 198×159×120mm | |
| Weight | 0.6kg | |
| Standard Accessories | 1×Base, 1×5-Pin Terminal Block Connector, 1×Installation Manual | |
| Optional Accessories | DC 12V/2A Power Adapter (US/EU/UK/AU) | |





# IP SPLIT TYPE AUDIO INTERCOM CONTROLLER NAS-8521A

## RECOMMENDED USES

This IP split type audio intercom controller is special designed for bank situation , especially can be deployed in ATM machine to avoid exposure of network cable.



## KEY FEATURES

- Unique split type design for avoiding exposure of network cable and improving local network security.
- Easy configuration via user-friendly web interface.
- Each split type intercom controller can be connected to maximum 8pcs split type intercom panels via daisy-chain connection.
- Distance between the split type intercom controller and the connected split type intercom panel could reach up to 150 meters.
- Integrated with network audio encoder/decoder, the split type intercom controller can act as the bridge between the connected split type intercom panels and IP audio intercom master station in the master control room.
- Record Output (1/8" TS Jack) on the back panel of the device can be connected to external storage device for audio recording of the voice communication.
- Built-in 2×10 watt class-D digital amplifier for driving up to two 8-ohm passive analog speakers.
- Custom WAV or MP3 audio files can be stored in the SD card and played automatically by triggering the relay inputs of the device.
- Work with SPON® XC-9000 audio management software for powerful features including two-way voice communication and live voice announcements.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/2A |
| Power Consumption | ≤23W |
| Network Protocol | FTP, HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Audio Sampling Rate | 8kHz-44.1kHz, 16bit |
| Transmission Bit Rate | 8kbps-320kbps |
| S/N (Signal-to-Noise) Ratio | ≥85dB |
| Frequency Response | 20Hz-16kHz |
| Interface | 1×RJ45 Ethernet Port, 1×SD Card Slot, 2×Relay Input, 2×Relay Output, 1×Line Output (1/8" TS Jack), 1×Record Output (1/8" TS Jack), 1×Intercom Panel Output, 2×Speaker Output (8Ω),1×Power Input |
| Dimensions | 210×155×44.5mm |
| Weight | 0.5kg |
| Standard Accessories | 2×8-Pin Terminal Block Connector, 1×Installation Manual |
| Optional Accessories | DC 12V/2A Power Adapter (US/EU/UK/AU) |

# AUDIO INTERCOM PANEL NAS-8521B/NAS-8521C




NAS-8521B NAS-8521C

Built-in Recording Output | High Security | 2-Channel Alarm Input And Output | Daisy-chain

## RECOMMENDED USES

This audio intercom panel has two type , panel with one button ,and panel with two button, which adopts high-end aluminum alloy.

## KEY FEATURES

- All-metal shell, anti-corrosion brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Hands-free wall mount panel with built-in microphone and speaker.
- NAS-8521B: Single-button design for one-touch calling to the designated target intercom device.
- NAS-8521C: Dual-button design for one-touch calling to the designated target intercom device.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly damaged.
- User-defined ringtones for phone call connected, busy line, target hang up, etc.
- Work specifically with SPON® NAS-8521 IP split type audio intercom controller via daisy-chain connection.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-851B | NAS-8521C |
|---|---|---|
| Interface | 1×Intercom Panel Input, 1×Intercom Panel Output | |
| IP Rating | IP54 | |
| Dimensions | 166×115×32mm | |
| Weight | 0.8kg | |
| Standard Accessories | 1×Customer Operational Guideline, 1×Installation Manual | |





# AUDIO INTERCOM PANEL NAS-8521D/NAS-8521E




NAS-8521D NAS-8521E

Built-in Recording Output | High Security | 2-Channel Alarm Input And Output | Daisy-chain

## RECOMMENDED USES

This audio intercom panel is equipped with two kinds , one is for surface-mounted installation, another is for embedded installation.

## KEY FEATURES

- All-metal shell, anti-corrosion brushed aluminum panel.
- Compact and lightweight design, sturdy and durable.
- Two-way full duplex voice communication with IP audio intercom master station in the master control room.
- Single-button design for one-touch calling to the designated target intercom device.
- NAS-8521D: Hands-free flush mount panel with built-in microphone and speaker.
- NAS-8521E: Hands-free wall mount panel with built-in microphone and speaker.
- Tamper alarm functionality enables the device to trigger a warning siren whenever the panel has been forcibly damaged.
- User-defined ringtones for phone call connected, busy line, target hang up, etc.
- Work specifically with SPON® NAS-8521 IP split type audio intercom controller via star connection.

## TECHNICAL PARAMETERS

| MODEL NO. | NAS-8521D | NAS-8521E |
|---|---|---|
| Interface: | 1×Intercom Panel Input, 1×Intercom Panel Output | |
| IP Rating: | IP54 | |
| Dimensions: | 150×62×31mm | 155×67×30mm |
| Weight: | 0.3kg | |
| Standard Accessories | 1×Customer Operational Guideline, 1×Installation Manual | |

# WINDOW INTERCOM







## IP WINDOW INTERCOM KIT
## DWT-6502AB

### RECOMMENDED USES

Mainly used for audio communication between staff and customer on bank counter, expressway charging window, ticket office, hospital registration counter, etc.



DWT-6502A



DWT-6502B

### KEY FEATURES

- Adopting industry-leading DSP (Digital Signal Processing) multichannel audio technology, effectively preventing howling and channel disturbance, realizing HD digital full duplex intercom.
- Anti-tilt design, adopting aluminum alloy shell, glass panel and full touch button (no noise of keypress, easy to be cleaned or disinfected), every button has its own status indicator light to indicate the real-time operating state of the staff unit.
- Equipped with directional condenser gooseneck microphone (polar pattern: cardioid) on the staff unit, realizing high-fidelity sound pickup, improving the sound clarity.
- Being able to intelligently recognize the sound source and suppress the ambient noise, high-quality restoration of human voice.
- Supporting engineer mode settings for precise volume adjustment of the staff unit and customer unit (offering 15 different volume levels for adjustment).
- Offering 4 kinds of recording function using together with software.
- Capable of connecting loop amplifier via recording port.
- Offering three different scene modes (noise/standard/quiet), rotary switch adjustment.
- Available for the customization of pre-recorded welcome and goodbye voice messages (including "hello, welcome to ..." and "thank you for coming, goodbye").

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/1.5A |
| Power Consumption | ≤5W |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP,FTP |
| Audio Codec | PCM/AAC |
| Audio Sampling Rate | 16KHZ-32KHZ |
| S/N (Signal-to-Noise) Ratio | ≥90dB |
| Frequency Response | 20Hz～16kHz |
| Interface | 1×RJ45 Ethernet Port, 1×Power Input , 1×Recording Port , 1× external and internal connector |
| Dimension | Internal Part:95x160x46.5mm, external: 83x24mm |
| Weight | 0.44kg,0.2kg |
| Standard Accessories | 1×Terminal Block Connector, 3×Cable Clamp, 1×Installation Manual,1×Certification,1×EV-cot-ton,3×screw,1× microphone rod,1× Bushings(cable guidance) |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) |

# DIGITAL WINDOW INTERCOM KIT DWT-6505AB



DWT-6505A



DWT-6505B

## RECOMMENDED USES

Mainly used for audio communication between staff and customer on bank counter, expressway charging window, ticket office, hospital registration counter, etc.

## KEY FEATURES

- Adopting industry-leading DSP (Digital Signal Processing) multichannel audio technology, effectively preventing howling and channel disturbance, realizing HD digital full duplex intercom.
- Anti-tilt design, adopting aluminum alloy shell, glass panel and full touch button (no noise of keypress, easy to be cleaned or disinfected), every button has its own status indicator light to indicate the real-time operating state of the staff unit.
- Professional metal cavity structure design, completely eliminating the resonance of the device, ensuring a pure & natural sound quality.
- Being able to intelligently recognize the sound source and suppress the ambient noise, high-quality restoration of human voice.
- Supporting engineer mode settings for precise volume adjustment of the staff unit and customer unit (offering 5 different volume levels for adjustment).
- Capable of connecting loop amplifier via recording port.
- Offering three different scene modes (noise/standard/quiet), rotary switch adjustment.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/1.5A |
| Power Consumption | ≤5W |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP,FTP |
| Audio Codec | PCM/AAC |
| Audio Sampling Rate | 16KHZ-32KHZ |
| S/N (Signal-to-Noise) Ratio | ≥90dB |
| Frequency Response | 20Hz～16kHz |
| Interface | 1×RJ45 Ethernet Port, 1×Power Input , 1×Recording Port , 1× external and internal connector |
| Dimension | Internal Part:95x160x46.5mm, external: 83x24mm |
| Weight | 0.44kg,0.2kg |
| Standard Accessories | 1×Terminal Block Connector,3×cable clamp, 1×Installation Manual,1×certification,1×EV-cotton,3×screw,1×microphone rod,1× Bushings(cable guidance) |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) |





# DIGITAL WINDOW INTERCOM KIT DWT-6507AB



DWT-6507A



DWT-6507B

## RECOMMENDED USES

Mainly used for audio communication between staff and customer on bank counter, expressway charging window, ticket office, hospital registration counter, etc.

## KEY FEATURES

- Adopting industry-leading DSP (Digital Signal Processing) multichannel audio technology, effectively preventing howling and channel disturbance, realizing HD digital full duplex intercom.
- Anti-tilt design, adopting aluminum alloy shell, glass panel and full touch button (no noise of keypress, easy to be cleaned or disinfected), every button has its own status indicator light to indicate the real-time operating state of the staff unit.
- Equipped with directional condenser gooseneck microphone (polar pattern: cardioid) on the staff unit, realizing high-fidelity sound pickup, improving the sound clarity.
- Being able to intelligently recognize the sound source and suppress the ambient noise, high-quality restoration of human voice.
- Supporting engineer mode settings for precise volume adjustment of the staff unit and customer unit (offering 15 different volume levels for adjustment).
- Capable of connecting loop amplifier via recording port
- Offering three different scene modes (noise/standard/quiet), rotary switch adjustment.
- With three physical buttons.
- Being able to intelligently self-check the connection status between staff & customer unit, warning tone will be activated automatically whenever the connection fails.

## TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V/1.5A |
| Power Consumption | ≤5W |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP,FTP |
| Audio Codec | PCM/AAC |
| Audio Sampling Rate | 8kHz-32kHz |
| S/N (Signal-to-Noise) Ratio | ≥90dB |
| Frequency Response | 20Hz～16kHz |
| Interface | 1×RJ45 Ethernet Port, 1×Power Input , 1×Recording Port , 1× external and internal connector |
| Dimension | Internal Part:95x160x46.5mm, external: 83x24mm |
| Weight | 0.44kg,0.2kg |
| Standard Accessories | 1×Terminal Block Connector,3×cable clamp, 1×Installation Manual,1×certification,1×EV-cotton,3×screw,1×microphone rod,1× Bushings(cable guidance) |
| Optional Accessories | DC 12V/1.5A Power Adapter (US/EU/UK/AU) |

# CONFERENCE SYSTEM






## DIGITAL CONFERENCE CENTRAL UNIT
LCS-5203L

### RECOMMENDED USES

This Conference system central unit with 4.3” screen is usually deployed at all kinds of medium-size meeting room and will largely save customer ‘s budget.






### KEY FEATURES

- The controller can connect 2 independent ring network, which can decrease the cable deployment between two meeting table.
- With the technology of  shared Gain Automatic Mixing Algorithm , and supports maximum 10 person speak at the same time.
- Processing 1x USB port , that can realize the function of real-time recording ,and the USB port can be up to 64G FAT format.
- 48KHz digital audio sampling transmission, and less than 10ms transmission delay.
- supports power-on self-test, automatic diagnosis, and fault cause prompting at the screen.
- Possessing AGC independent setting, to solve the issue of unstable volume due to different distance between people and the micro-phone.
- With EQ independent setting, to adjust the sound’s timbre
- Remote configuration via webpage or UI interface through other PC , cellphone,tablet PC after they connect to the controller ‘s wifi hotspot
- With bluetooth connection function , which allow operator to play the music through cellphone after it connects controller through bluetooth.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | 100V-240V~50HZ-60HZ 1A |
| Consumption | ≤10W |
| Network transmission protocol | TCP/IP、UDP、ARP、ICMP、IGMP、HTTP |
| Network chip rate | 100Mbps |
| Audio Codec | MP3/PCM/ADPCM |
| Audio sampling and bit rate | 8Khz-44.1Khz,16bit,8Kbps-320kbps |
| S/N (Signal-to-Noise) Ratio | ＞83dB |
| Frequency Response | 40Hz-18KHz |
| Screen | 4.3” |
| Resolution | 480*272 |
| Interface | 1×RJ45 Ethernet Port, 1×USB Port, 1× Phoenix EQ output , 1× Cannon EQ output, 1×RCA line output , 2×network ring output; 1× RS232 output,1× RS85 output |
| Dimension | 483×229.5×89mm |
| Standard Accessories | IEC C13 Power Cord (US/EU/UK/AU), 2×Digital Spliter ,  1×Terminal Block Connector(3.5-2P), |
| Optional Accessories | 1×Terminal Block Connector (3.5-3P) ,1×2.4G antenna , 1×Installation Manual, 1×certification 1×Digital loop repeater |

# DESKTOP WIRED CONFERENCE MICROPHONE UNIT
## LCS-5251C/LCS-5251D/LCS-5251C-L/LCS-5251D-L



LCS-5251C
(Gun-shaped Chairman Unit)



LCS-5251D
(Gun-shaped Delegate Unit)



LCS-5251C-L
(Gooseneck Chairman Unit)



LCS-5251D-L
(Gooseneck Delegate Unit)




### PRODUCT FEATURES

- 4.3-inch full-color touch display screen, resolution of 480*480.
- The chairman unit can initiate conference check-in, voting, and agenda; results are displayed in real-time.
- The chairman unit has the authority to approve or prohibit delegate units from speaking.
- The chairman unit can display the current speaker's name, seat number, and a list of waiting speakers in real-time.
- The chairman unit can access the intercom server directory and initiate IP intercom functions via IP address or directory.
- The microphone stem features a specially designed acoustic chamber for an elegant appearance.
- Equipped with a 14mm diameter supercardioid gold-plated high-fidelity capacitor microphone head for extended pickup range.
- Independent XLR analog audio output interface with digital-analog dual backup function ( LCS-5251C only).
- Fully digital signal transmission with strong anti-interference capability.
- The microphone stem has a status indicator light; it illuminates red during operation.
- The base has a status indicator light ring to indicate the current status of the microphone.
- Two RJ45 female interfaces for connecting to the conference host and loop backup via Cat5e or higher-grade cables.
- Features video tracking functionality.

### TECHNICAL PARAMETERS

| | LCS-5251C/LCS-5251D | LCS-5251C-L/LCS-5251D-L |
|---|---|---|
| Screen: | 4.3-inch capacitive touch screen | |
| Power Supply, Power Consumption: | DC24/0.5A，≤3.5W | |
| Audio Encoding Format: | MP3/PCM/ADPCM | |
| Audio Sampling Rate: | 8Khz-48Khz,16bit,8Kbps-320kbps | |
| Microphone: | Chairman Unit: Supercardioid Gold-Plated Hi-Fi Capacitor Microphone *2<br>Delegate Unit: Supercardioid Gold-Plated Hi-Fi Capacitor Microphone *1 | Supercardioid Gold-Plated High-Fidelity Capacitor Microphone *1 |
| Signal-to-Noise Ratio (SNR): | ≥83dB | |
| Frequency Response: | 40Hz-18KHz | |
| Interfaces: | RJ45 network port *2 | |
| Operating Temperature: | 0-45°C，≤90%(non-condensing) | |
| Product Dimensions: | 220×98.8×107.6mm | 220×98.8×107.6mm; Standard microphonestem length: 380mm |
| Shell Material: | Aluminum alloy for the microphone pickup chamber, ABS for the base. | |





# CONFERENCE SPLITER LCS-5350Z
# DIGITAL LOOP REPEATER LCS-5351Z

### RECOMMENDED USES

**LCS-5350Z(Conference Splitter) :**

In the conference system,a splitter is needed to form a hand-to-hand ring network connection. Each conference controller supports two network ring, which means two splitter is needed in one conference system.




LCS-5350Z

**LCS-5351Z (Conference Repeater):**

In each network ring, if there are more than 30 micro-phones to be added, then it is necessary to add a confer-ence repeater.




LCS-5351Z

### TECHNICAL PARAMETERS

| MODEL NO. | LCS-5350Z | LCS-5351Z |
|---|---|---|
| Interface | 1 x network input , 1 x network output,1 x range port | 1 x network input , 1 x network output |
| Dimension | 50x34x68.4mm | 50x34x68.4mm |
| Standard Accessories | 1 x quick installation, 1x certification | 1 x quick installation, 1x certification |

# DESKTOP WIRELESS CONFERENCE MICROPHONE UNIT
## LCS-5252C/LCS-5252D/LCS-5252C-L/LCS-5252D-L



LCS-5252C
(Gun-shaped Chairman Unit)

LCS-5252D
(Gun-shaped Delegate Unit)

LCS-5252C-L
(Gooseneck Chairman Unit)

LCS-5252D-L
(Gooseneck Delegate Unit)

4.3-Inch Touch Screen | Type-C magnetic charging | Voting/ Attendance | One touch Mute | 2.4G/4.8G Wireless

### PRODUCT FEATURES

- 4.3-inch full-color touch display screen, resolution of 480*480.
- The chairman unit can initiate conference check-in, voting, and agenda; results are displayed in real-time.
- The chairman unit has the authority to approve or prohibit delegate units from speaking.
- The chairman unit can display the current speaker's name, seat number, and a list of waiting speakers in real-time.
- The chairman unit can access the intercom server directory and initiate IP intercom functions via IP address or directory.
- The microphone stem features a specially designed acoustic chamber for an elegant appearance.
- Equipped with a 14mm diameter supercardioid gold-plated high-fidelity capacitor microphone head for extended pickup range.
- Ergonomically designed microphone base. Fully digital signal transmission with strong anti-interference capability.
- The microphone stem has a status indicator light; it illuminates red during operation.
- The base has a status indicator light ring to indicate the current status of the microphone.
- Supports magnetic charging; can be fully charged within 3 hours when powered off (compatible with LCS-5302Z).
- Equipped with a TYPE-C interface for charging and upgrades; Features video tracking functionality.

### TECHNICAL SPECIFICATIONS

| | LCS-5252C/LCS-5252D | LCS-5252C-L/LCS-5252D-L |
|---|---|---|
| Screen: | 4.3-inch capacitive touch screen | |
| Battery: | 4000mha | |
| Standby Time: | 6-8 hours | |
| Audio Encoding Format: | MP3/PCM/ADPCM | |
| Audio Sampling Rate, Bit Rate: | 8Khz-48Khz,16bit,8Kbps-320kbps | |
| Microphone: | Chairman Unit - Supercardioid Gold-Plated High-Fidelity Capacitor Microphone *2; Delegate Unit - Supercardioid Gold-Plated High-Fidelity Capacitor Microphone *1 | Supercardioid Gold-Plated High-Fidelity Capacitor Microphone *1 |
| Screen: | 4.3-inch capacitive touch screen | |
| Signal-to-Noise Ratio (SNR): | ≥83dB | |
| Frequency Response: | 40Hz-18KHz | |
| Connection Method: | Wireless | |
| Storage: | Built-in SPI FLASH | |
| Operating Temperature, Humidity: | 0-45°C，≤90%（non-condensing） | |
| Product Dimensions: | 220×98.8×107.6mm | |
| Shell Material: | Aluminum alloy for the microphone pickup chamber, ABS for the base | 220×98.8×107.6mm; Standard microphone stem length: 380mm |





# WIRELESS DIGITAL CONFERENCE ACCESS POINT
## LCS-5301Z



### PRODUCT FEATURES

- CPU: MT7981B+MT7976CN+7531AE;
- Provides better transmission quality, higher transmission rate, and a maximum concurrent rate of up to 3000Mbps;
- Supports hardware watchdog function, automatic recovery of abnormal devices, maintenance-free;
- Elegant appearance design, port-hidden shell, neat wiring;
- 1* 10/100/1000M adaptive WAN port, supports 48V POE power supply;
- 1* 10/100/1000M adaptive LAN port;
- Built-in 2 2.4G antennas and 3 5G antennas;
- Supports two power supply methods: 48V PoE and DC 12V.

# IP WIRELESS DIGITAL CONFERENCE CHARGING BOX
## LCS-5302Z





### PRODUCT FEATURES

- Supports 8 magnetic suction contact charging bases and 4 USB-A charging ports;
- Each magnetic suction contact charging base has a charging power of 12W, which can fully charge the speaking unit within 2.5 hours;
- USB-A ports support a charging power of 5W, fully charging the speaking unit within 3 hours;
- Total output power is 120W.

# MASTER CONTROL UNIT (WIRED/WIRELESS)
## LCM-6010



### RECOMMENDED USES

Conference Room、Lecture Hall




### KEY FEATURES

- Full Digital Conference System Host: Suitable for medium to smallsized conference rooms and lecture halls.
- MultiFunctional Integration: Combines wired and wireless conference discussions, video tracking, conference registration, voting,-service calling, and matrix control into one system.
- Various Speaking Modes: Offers multiple modes for managing conference speeches.
- External Bluetooth Audio Support: Allows for Bluetooth audio input and output.
- Customizable Microphone Unit Roles: Allows customization of roles and names for microphone units.
- Speech List Function: Manages the order of speakers.
- Comprehensive Software: Supports crossplatform conference management, registration, and voting software suitable for large meetings like those held by the People's Congress or Political Consultative Conference.
- Remote Access: Allows system parameter adjustments via smartphones, tablets, or PCs

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Power Supply | 100V-240V~50HZ-60HZ | Resolution | 480 × 272 |
| Power Consumption | ≤10W (when no microphone is connected) | Network Port | RJ45 × 1 |
| Protocols | TCP/IP, UDP, ARP, ICMP, IGMP, HTTP | USB Port | USB x 1 |
| Network Chip Rate | 100 Mbps | Balanced Output | Phoenix x 1 |
| Audio Encoding Formats | MP3, PCM, ADPCM | Balanced Output | XLR x 1 |
| Sampling Rates | 8 kHz to 44.1 kHz | Unbalanced Output | RCA x 1 |
| Bit Depth | 16bit | Ring Network Output | x 2 |
| Bit Rates | 8 kbps to 320 kbps | RS232 Serial Port | x 1 |
| SignaltoNoise Ratio | >83 dB | 485 Communication Interface | x 1 |
| Frequency Response | 40 Hz to 18 kHz | Temperature Range | 0°C to 45°C |
| Screen Size | 4.3 inches | Humidity | ≤90% (noncondensing) |
| Type | Touchscreen Color LCD | Product Dimensions | 483 mm x 204.5 mm x 89 mm |





# MICROPHONE UNIT (WIRED)
## LCM-6013CV-L & LCM-6013DV-L



### RECOMMENDED USES

Conference Room




### KEY FEATURES

- 4-inch Full-color Touch Screen Display, Resolution 480*480.
- Hypercardioid Capacitive Microphone Head.
- Fully digital signal transmission with strong anti-interference capability.
- Indicator light on the microphone stem shows speaking status; lights up in red during operation.
- Two RJ45 female socket interfaces for daisy-chaining via CAT6 cables to connect to the conference host.
- Supports video tracking functionality.
- Allows the conference host to individually set microphone input gain, EQ, and automatic gain control.
- LCM-6013CV-L can initiate meeting attendance, voting, and agenda setting. Attendance and voting results are displayed in real-time.
- LCM-6013CV-L has the authority to approve or mute delegate units.
- LCM-6013CV-L Real-time display of current speaker's name, seat number, and waiting speaker list.
- LCM-6013DV-L Supports conference check-in, voting agenda, real-time display of check-in and voting results.
- LCM-6013DV-L Real-time display of current speaker's name, seat number, and waiting list.

### TECHNICAL PARAMETERS

| MODEL NO. | LCM-6013CV-L | LCM-6013DV-L |
|---|---|---|
| Power Supply | 100V-240V~50HZ-60HZ 1A. | |
| Power Consumption | Microphone unit Power Consumption ≤ 3.5W | |
| Audio Coding Format | MP3/PCM/ADPCM | |
| Audio Sampling Rate, Bit Rate | 8KHz-48KHz, 16-bit, 8Kbps-320kbps | |
| SNR | ≥83dB | |
| Screen | 4-inch capacitive touch screen | |
| Screen Resolution | 480*480 (RGB) | |
| Headphone Output Interface | φ3.5mm stereo jack | |
| Storage | Built-in SPI FLASH | |
| Connection Method | Category 6 network cable | |
| Microphone | 14mm gold-plated electret condenser microphone | |
| Microphone Polar Pattern | Cardioid | Heart-shaped |
| Microphone Frequency Response | 20Hz-20KHz | |
| Microphone Sensitivity | -38dB, 12.6mV / Pa (0 dB = 1 V/Pa @ 1 kHz) | |
| Max SPL of Microphone | 130 dB SPL (1% THD @ 1 kHz) | |
| Interfaces | RJ45 Ethernet ports *2, connected to the next microphone unit | |
| Operating Temperature and Humidity | 0-45°C, ≤90% RH (non-condensing) | |
| Microphone Base Dimensions | 483×229.5×89mm | |

# MICROPHONE UNIT (WIRELESS)
## LCM-6013CVW-L & LCM-6013DVW-L




### RECOMMENDED USES

Conference Room

### KEY FEATURES

- 4-inch Full-color Touch Screen, resolution 480*480.
- Wireless Transmission Frequencies: 2.4GHz/5.2GHz/5.8GHz.
- Wireless Transmission Encryption: WPA/WPA2.
- 4000mAh Lithium Polymer Battery.
- Has Video Tracking Functionality.
- Allows the conference host to independently set microphone input gain, EQ, and automatic gain control.
- LCM-6013CVW-L can initiate attendance registration, voting agenda, and display real-time registration and voting results.
- LCM-6013CVW-L has the authority to approve or prohibit delegate speeches.
- LCM-6013CVW-L can display real-time speaker names, seat numbers, and waiting speaker lists.
- LCM-6013DVW-L Real-time Display of Current Speaker's Name, Seat Number, and Waiting Speaker List.

### TECHNICAL PARAMETERS

| MODEL NO. | LCM-6013CVW-L | LCM-6013DVW-L |
|---|---|---|
| Power Consumption | 3W | |
| Battery | 4000mAh | |
| SNR (SNR), Frequency Response | ≥83dB, 40Hz-18KHz | |
| Continuous Speaking Time | 6 hours, Screen On Standby Time approximately 8 hours | |
| Screen | 4-inch Capacitive Touch Screen | |
| Screen Resolution | 480*480 (RGB) | |
| Headphone Output Interface | φ3.5mm Stereo Jack | |
| Storage | Built-in SPI FLASH | |
| Connection Method | WiFi Wireless Connection | |
| Microphone Directivity | Cardioid | Hypercardioid |
| Microphone Frequency Response | 20-20,000 Hz | |
| Microphone Sensitivity | -38dB, 12.6mV / Pa (0 dB = 1 V/Pa @ 1 kHz) | |
| Max SPL (SPL) of Microphone | 130 dB SPL (1% THD @ 1 kHz) | |
| Operating Temperature and Humidity | 0-45°C, ≤90% (Non-condensing) | |
| Microphone Base Size | 168x58x103mm | |





# WIRELESS CHARGING STATION
## LCM-6015P

### RECOMMENDED USES

Conference Room



### KEY FEATURES

- Supports 12 USB charging ports.
- Each charging port supports a 5W charging power, with a total power of 75W.
- Active cooling fan.
- Includes overcharge protection.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply: | 100V-240V ~ 50Hz60Hz, 1A |
| Rated Output Power: | USB single port ≤ 5W |
| Cooling: | Active cooling |
| Interfaces: | 12 USB ports, power input port |
| Operating Temperature: | 0°C to 45°C |
| Operating Humidity: | ≤ 90% (noncondensing) |
| Enclosure Material: | Aluminum alloy |
| Product Dimensions: | 483 × 236.5 × 89 mm |
| Operating Altitude: | Up to 2000 meters |

# DUAL-CHANNEL DIGITAL POWER AMPLIFIER
## SAP-5402A35/SAP-5402A50/SAP-5402A70



### KEY FEATURES

- 1U slim chassis with a sleek and simple design
- Ultra-low standby power with up to 90% operating efficiency, significantly reducing power waste
- Built-in peak level limiter to reduce the risk of speaker damage from clipping signals, with a clipping indicator light to alert users.
- Embedded thermal level control to ensure the amplifier auto-compresses signals proportionally in extreme high temperatures.
- Comprehensive protection features including soft start, DC, high frequency, overvoltage, undervoltage, overload, short circuit, compression, and overheat protection, with superior EMI performance and surge protection for power input and output
- Global PFC power supply for worldwide use with minimal grid interference and lower grid requirements
- Temperature-sensitive stepless speed regulation cooling system, balancing heat and fan noise under full power output
- External fuse box design for power input with an internal spare fuse, providing equipment protection and ease of maintenance

### TECHNICAL PARAMETERS

| | SAP-5402A35 | SAP-5402A50 | SAP-5402A70 |
|---|---|---|---|
| Power Supply Range: | AC100～240V 50Hz～60Hz, 1A | | |
| Surge Protection: | Power input supports 1KV differential mode, 2KV common mode protection; power output supports 2KV common mode protection | | |
| Standby Power Consumption: | < 5W | < 8W | < 8W |
| Power Consumption: | 1/8 rated power 8Ω (1KHz): 120W<br>1/3 rated power 8Ω (1KHz): 280W | 1/8 rated power 8Ω (1KHz): 180W<br>1/3 rated power 8Ω (1KHz): 430W | 1/8 rated power 8Ω (1KHz): 235W<br>1/3 rated power 8Ω (1KHz): 540W |
| Output Power: | 350W×2 @8Ω;700W×2 @4Ω;<br>BTL:700W×1@16Ω<br>BTL:1400W×1@8Ω | 500W×2 @8Ω;1000W×2 @4Ω;<br>BTL:1000W×1@16Ω<br>BTL:1800W×1@8Ω; | 700W×2 @8Ω;1200W×2 @4Ω;<br>BTL:1200W×1@16Ω<br>BTL:2400W×1@8Ω; |
| Frequency Response: | 20Hz-20KHz | | |
| Total Harmonic Distortion: | < 0.05% @1KHz 1/3power output | | |
| Signal-to-Noise Ratio: | > 100dB(A-weighted) | | |
| Input Impedance: | Balanced 20KΩ / Unbalanced 10KΩ | | |
| Input Sensitivity: | 0.775Vrms/1.414Vrms | | |
| Maximum Input Level: | 3.5Vrms(13dBu) | | |
| Gain: | 36.7dB | | |
| Interfaces: | 2 line inputs, 2 line outputs, 2 power outputs | | |
| Operating Temperature and Humidity: | 0°C-45°C，≤90%RH(non-condensing) | | |
| Product Dimensions&Weight: | 300.5*483*44.5mm；3.3KG | 300.5*483*44.5mm；3.51KG | 300.5*483*44.5mm；4KG |





# CONFERENCE PTZ CAMERA
## LCS-2871-20



### RECOMMENDED USES

Conference Room

### KEY FEATURES

- Full HD Image Quality: Equipped with a 1/2.8-inch, 2.07-megapixel sensor, delivering a maximum resolution of 1920x1080 at up to 60 frames per second with low noise and high signal-to-noise ratio, enhanced by advanced 2D and 3D noise reduction technologies.
- 20X Optical Zoom with Advanced Autofocus: Features a 20X optical zoom lens combined with advanced autofocus algorithms for fast, accurate, and stable performance.
- Comprehensive Video and Audio Compression: Supports H.265/H.264 video compression and AAC, MP3, G.711A audio compression, up to 1920x1080 resolution at 60 fps. Offers various sampling frequencies for optimal audio quality.
- Multiple Output and Control Interfaces: Provides HDMI, SDI, USB, and LAN video output interfaces with SDI supporting up to 100 meters transmission at 1080P60. Includes RS485 and RS232 control interfaces with cascading support for easy installation.
- Extensive Network and Control Protocols: Compatible with ONVIF, GB/T28181, RTSP, RTMP, and VISCA control protocols, supporting RTP multicast and network full command VISCA control. RTMP push mode allows easy connection to streaming servers like Wowza and FMS.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Optical Zoom Lens: | 20x optical zoom, f = 5.5 to 110 mm |
| Field of View: | 3.3° (narrow) to 54.7° (wide) |
| Aperture: | F1.6 to F3.5 |
| Effective Pixels: | 2.07 million, 16:9 aspect ratio |
| Digital Zoom: | 10x |
| Overall Output Interfaces: | HDMI, SDI, LAN, USB 2.0, Audio In, RS232-IN, RS232-OUT, RS485, Rotary DIP Switch, DC12V power |
| Video Output Interfaces: | HDMI, SDI, LAN, USB 2.0 |
| Audio Input Interface: | Dual-channel 3.5mm linear input |
| Audio Output Interfaces: | HDMI, LAN, USB 2.0 |
| Audio Compression Formats: | AAC, MP3, G.711A |
| Network Interface: | 100M Ethernet port, optional POE power, supports audio and video output |
| Network Protocols: | RTSP, RTMP, ONVIF, GB/T28181; supports network VISCA control protocol; supports remote upgrade, remote reboot, remote reset |
| Control Interfaces: | RS232-IN, RS232-OUT, RS485 |
| Serial Communication Protocols: | VISCA/Pelco-D/Pelco-P; supports baud rates of 115200/38400/9600/4800/2400 |
| USB Communication Protocols: | UVC (Video Communication Protocol), UAC (Audio Communication Protocol) |
| Power Interface: | HEC3800 power socket (DC12V) |
| Power Adapter: | Input AC110V~AC220V; Output DC12V/1.5A |
| Input Voltage: | DC12V ±10% |
| Input Current: | <1A |
| Power Consumption: | <12W |
| Horizontal Rotation: | -170° to +170° |
| Tilt Rotation: | -30° to +90° |
| Horizontal Control Speed: | 0.1°/s to 100°/s |
| Tilt Control Speed: | 0.1°/s to 30°/s |
| Preset Speed: | Horizontal: 60°/s, Tilt: 30°/s |
| Dimensions (L × W × H): | 258 × 172 × 169 mm (H) |
| Weight: | Approximately 1.54 kg |

# DIGITAL AUDIO PROCESSING MATRIX
## SAP-F88/SAP-F1616H



SAP-F88



SAP-F1616H

### TECHNICAL PARAMETERS

| | SAP-F88 | SAP-F1616H |
|---|---|---|
| Number of analog input and output channels: | 8×8 | 16×16 |
| Dante input/output channel count: | / | / |
| Front panel: | 8 input tri-color LED indicators, 8 output tri-color LED indicators, OLED display, USB-A port | 16 input tri-color LED indicators, 16 output tri-color LED indicators, OLED display, USB-A port |
| Processor: | ADI SHARC 21489 | |
| Processing power: | 400 MIPS，1.6 GFLOPS | |
| Sampling rate: | 48K/24bit | |
| Functional algorithms: | 4-channel independent AEC, independent channel AFC (feedback suppression), adaptive noise suppression (ANS), automatic gain control (AGC), ducker, noise gain compensator (ANC), automatic mixing with gain sharing (AM), gate mixer, 12-band parametric equalizer, USB sound card playback and recording, hot backup | |
| Input gain: | 0/3/6/9/12/15/18/21/24/27/30/33/36/39/42/45/48 dBu | |
| Phantom power: | +48V/10mA max | |
| Frequency response: | 20~20kHz(±0.3dB) | |
| Maximum level: | +18dBu | |
| THD+N: | <-94dB @17dBu | |
| Input dynamic range: | 110dB | |
| Output dynamic range: | 112dB | |
| Channel isolation @1kHz: | 108dB | |
| Input impedance (balanced): | 5.4KΩ | |
| Output impedance (balanced): | 600Ω | |
| System latency: | <3ms | |
| Power supply: | AC110~240V,50Hz/60Hz | |
| Interface: | 8 analog input ports, 2*12P Phoenix connectors<br>8 analog output ports, 2*12P Phoenix connectors<br>2 RJ45 Dante primary/secondary ports (SAP-F88DT only)<br>1 RS232 port, 2*12P Phoenix connectors<br>1 RS485 port, 3P Phoenix connector<br>1 RJ45 port, 100-1000 Mbps<br>8 GPIO ports | 16 analog input ports, 4*12P Phoenix connectors<br>16 analog output ports, 4*12P Phoenix connectors<br>2 RJ45 Dante primary/secondary ports (SAP-F1616DT)<br>1 RS232 port, 2*12P Phoenix connectors<br>1 RS485 port, 3P Phoenix connector<br>1 RJ45 port, 100-1000 Mbps<br>8 GPIO ports |
| Dimensions (width x depth x height): | 482 × 260 × 45mm | |
| Weight: | 4KG | |





# PROFESSIONAL-GRADE TRUE DIVERSITY WIRELESS MICROPHONE
## LCS-23300/LCS-2330B/LCS-2330T



LCS-23300
Wireless Handheld Microphone



LCS-2330B
Wireless Lavalier Microphone



LCS-2330T
Wireless Headset Microphone

### PRODUCT FEATURES

- Spectrum Management
- Interference Detection and Avoidance
- Automatically search for clear, interference-free frequencies when interference occurs;
- The interference detection function can be clearly queried on the host window, indicating possible sources of interference;
- If signal attenuation or interference occurs, users can switch to clear compatible frequencies manually or automatically;
- Frequency Diversity
- Ensure seamless audio signal transmission without interruption in case of signal interruption;
- Frequency diversity transmits on two independent frequencies simultaneously, ensuring uninterrupted wireless transmission;
- Power Management
- Intelligent, low-consumption, reliable power management system;
- Real-time battery levels can be viewed on both the transmitter and receiver.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Chassis Specifications: | Standard 1U |
| Channel Groups: | Dual-channel |
| Frequency Stability: | ±0.005% PLL Locked Loop Frequency Control |
| Carrier Frequency Range: | UHF 603-935 MHz |
| Factory Preset Channels: | 32 preset channels |
| Effective Working Distance: | Typically 90 meters (open space) |
| Oscillation Method: | PLL Locked Loop Frequency Control |
| Sensitivity: | S/N > 60dB with input 6dBuV at deviation of 25KHz |
| Bandwidth: | 30MHz |
| Maximum Deviation: | ±45KHz |
| Composite S/N Ratio: | >105dB |
| Composite T.H.D: | <0.7% @ 1KHz |
| Composite Frequency Response: | 45Hz to 18KHz ±3dB |
| Power Supply: | 100-240VAC 50/60 Hz, 10W |
| Weight: | 3.6 Kg |
| Dimensions (H*W*D): | 421*200*45mm |
| Output Sockets: | XLR Balanced and φ6.3 Unbalanced sockets |

# UHF WIRELESS DELEGATE MICROPHONE
## LCS-2338Z

### RECOMMENDED USES

conference room, lecture hall, auditorium, playground.



### KEY FEATURES

- UHF frequency band transmission, frequency range: 500MHz-900MHz;
- Multiple channels available, with each channel stepping at 250KHz; Noise-free touch switch;
- Stable performance with PLL digital phase-locked loop synthesis technology and intelligent digital circuitry;
- Each channel equipped with a unique ID number for enhanced anti-interference functionality;
- High-fidelity uni-directional condenser microphone, providing excellent sound reproduction with a pickup distance of 30-50CM;
- Two XLR balanced outputs and one mixed TS unbalanced output on the back, suitable for direct connection to audio devices;
- Flexible gooseneck microphone design allowing 360° adjustment, with microphone light ring indicating speaking status;
- Powered by 3*1.5V AA batteries, providing continuous use for 8-10 hours;
- Both the main unit and transmitter feature LCD screens displaying working status and other information;
- Operating distance: Open environment: 80-100 meters, Complex environment: 50-80 meters;
- Suitable for various conference and speaking scenarios.

### RECEIVER TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Oscillation Method: | Phase-Locked Loop Frequency Synthesis | Modulation: | FM |
| Frequency Stability: | ±0.001% | Adjacent Channel Interference Ratio: | >80dB |
| Maximum Frequency Deviation: | ±30 kHz | Sensitivity: | 1.2/μV @S/N=12dB |
| Signal-to-Noise Ratio: | >60dB | Distortion: | <0.5% @1KHz |
| Audio Output: | Independent 0～400mV, Mixed ～300mV | Dynamic Range: | ≥100dB |
| Frequency Stability: | ±0.001% | Power Supply: | DC:12V～17V |
| Dimensions : | 420*220*44mm(W * D * H) | Weight: | 4.5 Kg, Total Weight: 7.5 Kg |
| Frequency Range: | UHF 500MHz～900MHz | | |

### MICROPHONE TECHNICAL PARAMETERS

| | |
|---|---|
| Type: | Electret |
| Frequency Response: | 40Hz～20KHz |
| Power Consumption: | 100mA |





# UHF WIDEBAND ANTENNA DISTRIBUTOR
## SAP-ANT20

### RECOMMENDED USES

This wide-compatible antenna distributor is designed to be used in conjunction with UHF wireless microphone systems, it helps stretching the power of your antenna pairs, giving your wireless mic setup more potential for efficient deployment and smooth wireless transmission, ideal for stage performances, live shows and other outdoor events.



### KEY FEATURES

- All-metal structure, sturdy and durable.
- Compatible with most wireless microphone systems with a wide RF frequency range from 500MHz to 850MHz.
- 4 DC 12V/1.2A power outputs to charge up to 4 wireless receivers and thus to organize the cabling to simplify your rack-mount setup.
- 8 RF outputs to accommodate up to 4 wireless receivers to simplify your antennas setup.
- A pair of cascade ports can also involve one extra wireless receiver in operation.
- This pair of cascade ports can also be used to connect another SAP-ANT20 antenna distributor for multiple setups with more wireless receivers.
- This antenna distributor can extend the extra long-range wireless coverage up to 160 ft. (50 meters).
- Compatible with SAP-ZQS20 antenna paddles to set up the entire antenna distribution system.
- Designed for avoiding signal interference and dropouts.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 12V-15V/5A |
| Frequency Range | 500MHz-850MHz UHF |
| Antenna Connector Type | TNC |
| Input/Output Impedance | 50Ω |
| Power Output | DC 12V/1.2A |
| Interface | 4×DC 12V/1.2A Power Output / 2× Antenna Input (A/B) / 2×Cascade Port / 8×RF Output / 1×Power Input |
| Dimensions | 430*45*180mm |
| Weight | 1.8kg |
| Standard Accessories | 1×DC 12V/5A Power Adapter / 4×DC Power Cord / 8×20 in. TNC Cable / 8×BNC Male to TNC Female Coaxial Adapter / 2×Rack Ear / 1×Installation Manual |
| Optional Accessories | IEC C13 Power Cord (Optional Types: US/EU/UK/AU) |

# UHF ACTIVE DIRECTIONAL ANTENNA PADDLE
## SAP-ZQS20

### KEY FEATURES

- Compatible with most wireless microphone systems with a wide RF frequency range from 500MHz to 850MHz.
- This directional antenna paddle utilizes a log-periodic array to enhance the rejection of RF signals outside the coverage area.
- Adjustable gain settings with up to 18dB gain compensates for any signal loss and reduces the likelihood of system dropouts.
- Visualized LCD screen helps to realize hassle-free setup.
- This directional antenna paddle can extend the extra long-range wireless coverage up to 160 ft. (50 meters).
- Designed for avoiding signal interference and dropouts.




### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC 6V-10V (supplied via TNC antenna port) |
| Current Consumption | Approx. 60mA |
| Frequency Range | 500MHz-850MHz UHF |
| Antenna Type | Log-Periodic Array |
| Antenna Connector Type | TNC |
| Output Impedance | 50Ω |
| Antenna Gain | Maximum 18dB |
| Dimensions | 302×252×23mm |
| Weight | 0.4kg |
| Standard Accessories | 2×Mounting Bracket / 2×13 ft. TNC Cable / 2×BNC Male to TNC Female Coaxial Adapter / 1×Installation Manual |

# TWO-WAY PASSIVE ANTENNA SPLITTER
## SAP-HLQ20



### KEY FEATURES

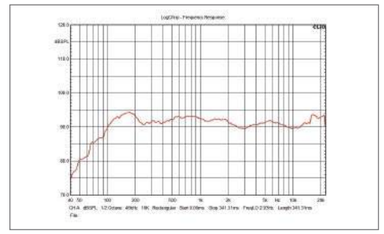
- Specifically designed for RF antenna installations.
- This passive antenna splitter splits an incoming signal into two outgoing signals, or combines two incoming signals into one signal.
- This passive antenna also allows DC power to pass through any of its output ports.





# SINGLE 8-INCH FULL-RANGE SPEAKER
## SAP-Q8





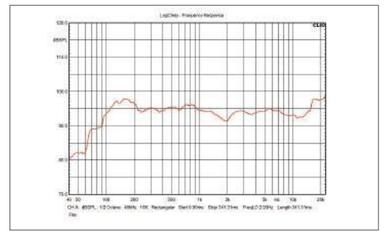
Frequency Response Curve

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Woofer | 1×8 inch | Coverage Angle | 90° * 50°(Horizontal * Vertical): |
| Tweeter | 1×1.34" horn, rotatable 90° | Connectors: | 2 * NL4 Speakon (1+/1-) |
| Frequency Response (Hz) | 93Hz-20kHz | Cabinet Material: | High-density MDF |
| Sensitivity (@1W/1m) | 95dB | Finish: | Durable, eco-friendly, water-based flame-retardant paint |
| Power (W) (Rated/Continuous/Peak) | 150W/300W/600W | Dimensions (H*W*D): | 407 * 255 * 260 mm |
| Maximum SPL | 116 dB | Net Weight: | 10.75 kg |
| Peak SPL | 122 dB | Installation Method: | 19 M8 screw suspension points, bottom mount for stand |
| Impedance | 8Ω | Accessories: | SAP-QZ wall mount bracket |

# SINGLE 10-INCH FULL-RANGE SPEAKER
## SAP-Q10 WATERPROOF MODEL(SAP-Q10-FS)



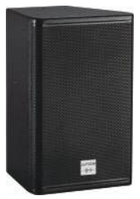


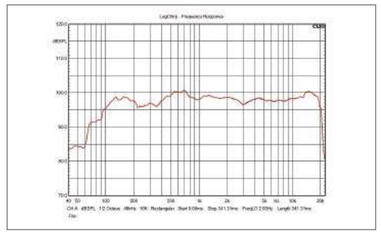
Frequency Response Curve

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Woofer: | 1 × 10 inch | Coverage Angle | 90° * 50°(Horizontal * Vertical): |
| Tweeter: | 1×1.75" horn, rotatable 90° | Connectors: | 2 * NL4 Speakon (1+/1-) |
| Frequency Response (Hz): | 77Hz-20kHz | Cabinet Material: | High-density MDF |
| Sensitivity (@1W/1m): | 96dB | Finish: | Durable, eco-friendly, water-based flame-retardant paint |
| Power (W) (Rated/Continuous/Peak) : | 300W/600W/1200W | Dimensions (H*W*D): | 500 * 310 * 310 mm |
| Maximum SPL: | 120 dB | Net Weight: | 15.5 kg |
| Peak SPL: | 126 dB | Installation Method: | 19 M8 screw suspension points, bottom mount for stand |
| Impedance: | 8Ω | Accessories: | SAP-QZ wall mount bracket |

## SINGLE 12-INCH FULL-RANGE SPEAKER
SAP-Q12 WATERPROOF MODEL(SAP-Q12-FS)





Frequency Response Curve

### TECHNICAL PARAMETERS

| | | | |
|---|---|---|---|
| Woofer | 1 × 12inch | Coverage Angle | 80° * 50° (Horizontal * Vertical): |
| Tweeter | 1×1.75" horn, rotatable 90° | Connectors: | 2 * NL4 Speakon (1+/1-) |
| Frequency Response (Hz) | 68Hz-20kHz | Cabinet Material: | High-density MDF |
| Sensitivity (@1W/1m) | 97dB | Finish: | Durable, eco-friendly, water-based flame-retardant paint |
| Power (W) (Rated/Continuous/Peak) | 400W/800W/1600W | Dimensions (H * W * D): | 560 * 355 * 360 mm |
| Maximum SPL | 123 dB | Net Weight: | 19.6 kg |
| Peak SPL | 129 dB | Installation Method: | 19 M8 screw suspension points, bottom mount for stand |
| Impedance | 8Ω | Accessories: | SAP-QZ wall mount bracket |

## SINGLE 15-INCH FULL-RANGE SPEAKER
SAP-Q15 WATERPROOF MODEL(SAP-Q15-FS)





Frequency Response Curve

### TECHNICAL PARAMETERS

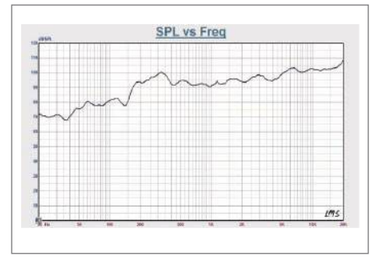
| | | | |
|---|---|---|---|
| Woofer: | 1 × 15 inch | Coverage Angle | 100° * 70°(Horizontal * Vertical): |
| Tweeter: | 1×1.75" horn, rotatable 90° | Connectors: | 2 * NL8 Speakon (1+/1-) |
| Frequency Response (Hz): | 66Hz-19kHz | Cabinet Material: | High-density MDF |
| Sensitivity (@1W/1m): | 98dB | Finish: | Durable, eco-friendly, water-based flame-retardant paint |
| Power (W) (Rated/Continuous/Peak): | 450W/900W/1800W | Dimensions (H * W * D): | 575 * 833 * 700 mm |
| Maximum SPL: | 124 dB | Net Weight: | 30.3 kg |
| Peak SPL: | 130dB | Installation Method: | 19 M8 screw suspension points, bottom mount for stand |
| Impedance: | 8Ω | Accessories: | SAP-QZ wall mount bracket |





## 4-UNIT LINEAR ARRAY COLUMN SPEAKER
SAP-L4504H WHITE VERSION（SAP-L4504H-W）






Frequency response curve

| | | | |
|---|---|---|---|
| Unit: | 4*4.5-inch woofers, 1*1.5-inch tweeter | Coverage Angle (Horizontal*Vertical): | 110°*130° |
| Frequency Response (Hz): | 100-20KHz | Interface: | 2*NL4 Speakon (1+/1-) |
| Sensitivity (@1W/1m): | 98dB | Enclosure Material: | 15mm Plywood |
| Power/W (Rated/Continuous/Peak): | 200W/400W/800W | Appearance Craftsmanship: | Spray Coating |
| Maximum Sound Pressure Level: | 122.5dB | Dimensions : | 678*146*150mm |
| Peak Sound Pressure Level: | 131dB | Net Weight: | 6.2 Kg |
| Impedance: | 8Ω | Bracket: | SAP-L45HZ/SAP-L45HZ-W Wall Mount Bracket |

## 6-UNIT LINEAR ARRAY COLUMN SPEAKER
SAP-L4506H WHITE VERSION（SAP-L4506H-W）






Frequency response curve

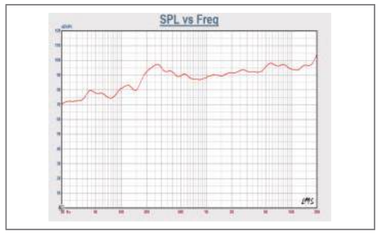
| | | | |
|---|---|---|---|
| Unit: | 6*4.5-inch woofers, 1*1.5-inch tweeter | Coverage Angle (Horizontal*Vertical): | 110°*130° |
| Frequency Response (Hz): | 100-20KHz | Interface: | 2*NL4 Speakon (1+/1-) |
| Sensitivity (@1W/1m): | 99dB | Enclosure Material: | Birch Plywood |
| Power/W (Rated/Continuous/Peak) | 240W/480W/960W | Appearance Craftsmanship: | Spray Coating |
| Maximum Sound Pressure Level: | 123dB | Dimensions (Height*Width*Depth): | 858*146*150 mm |
| Peak Sound Pressure Level: | 129dB | Net Weight: | 7.9 Kg |
| Impedance: | 6Ω | Accessories: | SAP-L45HZ Wall Mount Bracket |

# 8-UNIT LINEAR ARRAY COLUMN SPEAKER
# SAP-L4508H WHITE VERSION(SAP-L4508H-W)





Frequency response curve




## TECHNICAL SPECIFICATIONS

| | | | |
|---|---|---|---|
| Unit: | 8*4.5-inch woofers, 1*1.5-inch tweeter | Coverage Angle: | 110°*130° (Horizontal*Vertical) |
| Frequency Response (Hz): | 100-20KHz | Interface: | 2*NL4 Speakon (1+/1-) |
| Sensitivity (@1W/1m): | 100dB | Enclosure Material: | 15mm Plywood |
| Power/W (Rated/Continuous/Peak): | 300W/600W/1200W | Appearance Craftsmanship: | Spray Coating |
| Maximum Sound Pressure Level: | 124dB | Dimensions (H*W*D): | 1100*146*150mm |
| Peak Sound Pressure Level: | 130dB | Net Weight: | 10.5 Kg |
| Impedance: | 4Ω | Bracket: | SAP-L45HZ Wall Mount Installation Bracket |



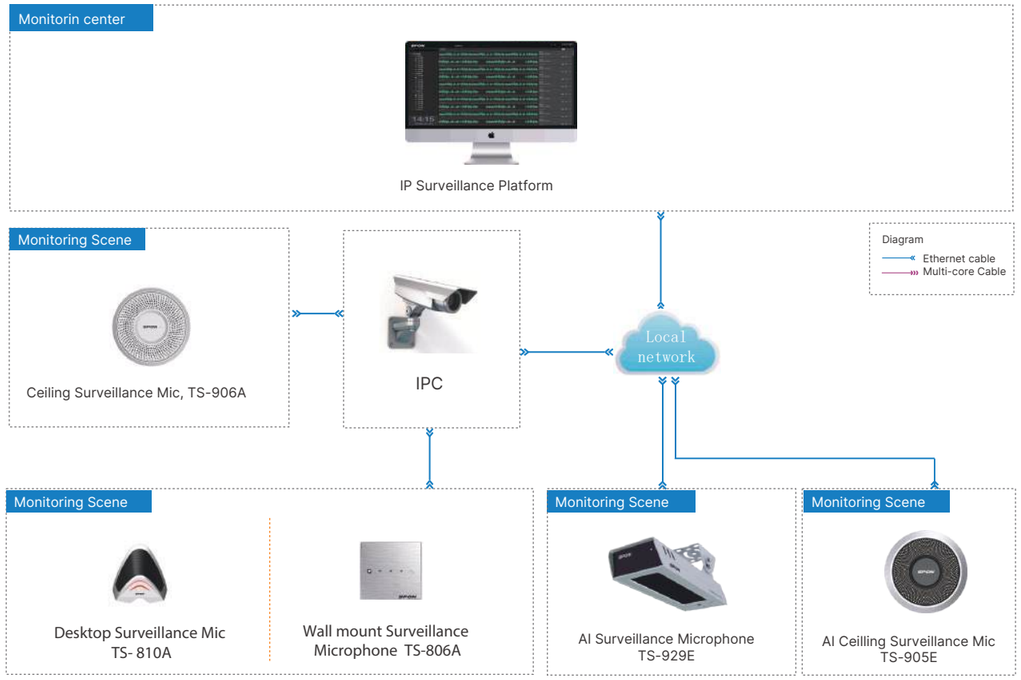


SPON

# SURVEILLANCE MICROPHONE



# SURVEILLANCE MICROPHONE




## System Function

| | |
|---|---|
| Centralized Platform Management | Monitors, alarms, updates, and adjusts settings for connected microphones. |
| Audio-Video Sync | Microphones and cameras synchronize audio-video data on networks for easy installation and maintenance. |
| Optimized Audio-Video Setup | Freely bind audio and video at surveillance sites, enabling both one-to-many and many-to-one bindings for optimized sync monitoring. |
| Sound Wave Configuration | Front-end microphones can be set up and maintained via sound waves, eliminating the need for physical contact or disassembly. |
| Voice-Activated Alerting | The system intelligently analyzes audio data, supporting voice recognition, keyword and abnormal sound alerts. |
| Supports Multiple Microphone Types | Integrates IP, digital, analog, and third-party microphones via system gateway for networked, centralized management. |





# SURVEILLANCE MICROPHONE PLATFORM
TS-900A



### RECOMMENDED USES

surveillance center

### TECHNICAL PARAMETERS

Operating environment: Windows 10 / Windows Server system

### KEY FEATURES

- The platform adopts a three-tier architecture for hierarchical management, allowing the addition of hosts. After addition, it automatically synchronizes host and channel parameter names and other information.
- The platform configures and modifies basic parameters, names, and channel parameters of channels, and synchronizes them to devices.
- It can preview real-time audio monitoring of each channel, displaying audio intensity using waveform graphics.
- It can monitor the status of IP microphones gateways and digital microphones on each channel, triggering alarms in case of anomalies.
- It supports upgrades for gateways, hosts, and digital microphones.
- The platform logs important operational information for subsequent maintenance and queries.
- It supports intelligent audio-video linkage alarms.
- It allows audio-video binding and switching on the platform, supporting multi-to-one or one-to-many audio-video bindings.
- Operating environment: Windows 10 / SERVER system.

# COMPATIBLE DONGLE
TS-900ES

### KEY FEATURES

- TS-900ES compatible dongle, authorizing registration for the microphone platform and enabling concurrent storage of 128 audio channels.

# ANALOG SURVEILLANCE MICROPHONE
## TS-601A

### RECOMMENDED USES

This ceiling surveillance microphone is suitable for use in prisons, public security, inspections and other occasions for sound collection.It is suitable for indoor installation on ceilings.



### KEY FEATURES

- The aluminium alloy construction of the shell provides excellent corrosion resistance.
- Adjusts the microphone's sound level according to the on-site environment.
- The hemisphere construction makes installation easier.
- The power polarity reversal protection ensures safer installation.
- The noise-canceling core effectively eliminates environmental noise, ensuring clarity and precision in the audio.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC:12V |
| Directionality | Allows for switch between Unidirectional and omnidirectional |
| Frequency Response | 20HZ-20KHZ |
| Effective Area | 5-100 m2 |
| Operating Temperature | -35°C～70°C |
| Output Resistance | 600-1000Ω |
| SNR | 80dB |
| Sensitivity | -45dB |
| Signal Output Amplitude | 2Vrms(@1KHz)/ 5.6Vpp(@1KHz) |





# ANALOG SURVEILLANCE MICROPHONE
## TS-602A



### RECOMMENDED USES

Indoor environment

### KEY FEATURES

- Made of engineering plastic structure, sturdy, durable, and aesthetically pleasing, preventing RF interference and suppressing noise from the surrounding environment.
- Uses professional recording interview microphone heads, with refined design and circuit processing technology for clear and natural sound quality.
- Built-in Automatic Gain Control (AGC) circuit, automatically suppresses high-intensity sounds, reduces differences in sound levels between near and far distances, resulting in clearer and brighter playback audio.
- Automatically adjusts to high-intensity sounds and sudden impact noises, reliably protecting the safety of backend audio monitoring equipment.
- Operating temperature range from -35°C to 70°C, suitable for various harsh environments.
- Built-in reverse polarity protection for worry-free on-site installation wiring.
- Integrated with professional voice processing chip, compatible with active speakers, computers, DVRs, network cameras, etc.
- Uses advanced line audio transmission technology, capable of signal transmission distances up to 3000 meters (use shielded cables in electromagnetic complex environments).

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Area | 100 square meters |
| Frequency Response | 20Hz～20kHz |
| Sensitivity | -45dB |
| SNR | 80dB (@1kHz) |
| Polar Pattern | Omnidirectional |
| Dynamic Range | 90dB (@1kHz) |
| Max SPL | 110dB (@1kHz) |
| Signal Output Amplitude | 2Vrms (@1kHz) / 5.6Vpp (@1kHz) |
| Output Impedance | 600～1000 ohms unbalanced |
| Protection Circuits | Reverse polarity protection, ESD protection |
| Connection Method | Three-wire output (Red: Power Positive, White: Audio Positive, Black: Common Ground) |
| Signal Transmission Distance | 3000 meters (use shielded cable in electromagnetic complex environments) |
| Power Supply Voltage | DC 12V |
| Operating Temperature | -35°C to 70°C |
| Enclosure Material | Engineering plastic |
| Dimensions | Φ70*18.3 (mm) |
| Mounting Method | Ceiling mount |
| Compliance Standards | Tested by the Ministry of Public Security's Safety and Police Electronic Products Quality Inspection Center |

# ANALOG SURVEILLANCE MICROPHONE
## TS-610A




### RECOMMENDED USES

Desktop

### KEY FEATURES

- Advanced dynamic condenser mic, providing clear and natural sound.
- Power polarity reverse protection.
- Integrated noise reduction chip to eliminate ambient noise, effectively preventing distortion and signal attenuation, ensuring output intensity.
- High fidelity, high sensitivity, low noise.
- Compact and lightweight design, easy and simple installation.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power | DC12V |
| Directionality | Omnidirectional |
| Frequency Response | 20Hz to 20kHz |
| Signal Transmission Distance | 3000 meters (using twisted pair or shielded cable) |
| Microphone Capsule | Advanced dynamic condenser microphone |
| Protection Circuits | Polarity protection, misconnection protection, lightning protection, ESD protection |
| Operating Temperature | -20°C to 65°C |
| Dimensions | 64.4*64.4*10 (mm) |





# DESKTOP SURVEILLANCE MICROPHONE
## TS-810A




### RECOMMENDED USES

Desktop or countertop environment

### KEY FEATURES

- The metal structure with sandblasted and oxidized finishes offers a sleek, high-tech appearance.
- Equipped with a professional microphone for clear, natural sound and advanced circuit processing.
- AEC technology and adaptive noise reduction minimize background noise for clear voice reproduction.
- Adjustable pickup distance and volume adapt to various environments for optimal listening.
- Automatic Gain Control (AGC) normalizes sound levels and reduces interference for clearer playback.
- Adapts to high-intensity sounds, protecting backend audio equipment.
- The patented design blends modern fashion with high-tech elements.
- Operates in temperatures from -35°C to 70°C, suitable for harsh environments.
- Features reverse polarity protection for hassle-free installation.
- Compatible with active speakers, computers, DVRs, and network cameras.
- Advanced line audio transmission supports distances up to 3000 meters (use shielded cables in complex environments).

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Range | 1-3 meters (adjustable) |
| Frequency Response | 20Hz to 20kHz |
| Sensitivity | -45dB |
| SNR | 85dB (@1kHz) |
| Directivity | Directional |
| Dynamic Range | 95dB (@1kHz) |
| Max SPL | 120dB (@1kHz) |
| Signal Output Amplitude | 2Vrms (@1kHz) / 5.6Vpp (@1kHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuits | Power polarity reverse protection, ESD protection |
| Connection Method | Supports three-wire and four-wire audio isolation output |
| Signal Transmission Distance | 3000 meters (use shielded cable in electromagnetic complex environments) |
| Power Supply Voltage | DC 12V |
| Operating Temperature | -35°C to 70°C |
| Enclosure Material | Aluminum alloy, metal mesh |
| Dimensions | 105*100*25 (mm) |
| Mounting Method | Desktop installation |
| Compliance Standards | Tested by the Ministry of Public Security's Safety and Police Electronic Products Quality Testing Center |

# ANALOG SURVEILLANCE MICROPHONE
## TS-808A




### RECOMMENDED USES

Embedded installation environment for intelligent bank counters.

### KEY FEATURES

- Fully aluminum alloy construction, waterproof and explosion-proof, treated with sandblasting and oxidation for corrosion resistance and a metallic texture.
- Features a professional recording microphone with advanced design and circuit processing for clear, natural sound.
- AEC technology and multi-level adaptive noise reduction effectively minimize background and environmental noise for high clarity.
- Built-in AGC micro-processing circuit and strong directional design suppress environmental noise interference.
- Automatically adjusts to high-intensity and impact noises to protect audio equipment.
- Operates within -35°C to 70°C, suitable for harsh environments.
- Includes reverse polarity protection for easy installation.
- Compatible with active speakers, computers, DVRs, and network cameras.
- Uses advanced line audio technology for signal transmission distances up to 3000 meters (use shielded cables in complex environments).

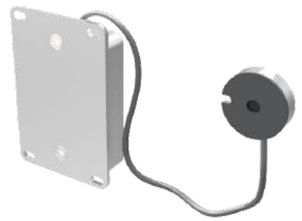
### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Range | 1-3 meters |
| Frequency Response | 20Hz to 20KHz |
| Sensitivity | -45dB |
| SNR | 80dB (@1KHz) |
| Directivity | Directional |
| Dynamic Range | 90dB (@1KHz) |
| Max SPL | 110dB (@1KHz) |
| Signal Output Amplitude | 2Vrms (@1KHz) / 5.6Vpp (@1KHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuit | Power polarity reverse protection, ESD protection |
| Connection Method | Three-wire output (red for power positive, white for audio positive, black for common ground) |
| Signal Transmission Distance | 3000 meters (use shielded cable in electromagnetic complex environments) |
| Power Supply Voltage | DC 12V |
| Operating Temperature | -35°C to 70°C |
| Enclosure Material | Aluminum alloy |
| Dimensions | φ30x38 (mm) |
| Mounting Method | Flush mount |
| Compliance Standards | Tested and certified by the Ministry of Public Security's Safety and Police Electronic Products Quality Testing Center |





# ANALOG SURVEILLANCE MICROPHONE
## TS-809A



### RECOMMENDED USES

Enclosed environments such as server cabinets.

### KEY FEATURES

- Features a durable aluminum alloy body with a corrosion-resistant sandblasted and oxidized finish.
- Modular design allows for flexible, space-saving installation with high concealment.
- Utilizes a professional microphone and advanced circuitry for clear, natural sound.
- Advanced AEC and multi-level noise reduction technologies minimize background noise and enhance clarity.
- Manual controls for pickup distance and volume adapt to various environments.
- Automatic gain control (AGC) manages high-intensity sounds and volume differences, with strong directional design to reduce noise interference.
- Protects backend equipment from high-intensity sounds and sudden impacts.
- Operates reliably in temperatures from -35°C to 70°C.
- Includes reverse polarity protection for safe installation.
- Compatible with active speakers, computers, DVRs, and network cameras via a professional voice processing chip.
- Supports audio transmission up to 3000 meters with shielded cables.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Range | 1-3 meters (adjustable) |
| Frequency Response | 20Hz to 20KHz |
| Sensitivity | -40dB |
| SNR | 85dB (@1KHz) |
| Directivity | Directional |
| Dynamic Range | 95dB (@1KHz) |
| Max SPL | 120dB (@1KHz) |
| Signal Output Level | 2Vrms (@1KHz) / 5.6Vpp (@1KHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuits | Power supply reverse polarity protection, ESD protection |
| Connection Method | Supports three-wire and four-wire audio isolation outputs |
| Signal Transmission Distance | 3000 meters (use shielded cables in complex electromagnetic environments) |
| Power Supply Voltage | DC 12V |
| Operating Temperature Range | -35°C to 70°C |
| Housing Material | Aluminum alloy |
| Dimensions | Main unit 75*49.5*14.5(mm), microphone head φ25*8 (mm) |
| Installation Method | Embedded installation |
| Compliance Standards | Tested by the Ministry of Public Security's Safety and Police Electronic Products Quality Inspection Center |

# ANALOG SURVEILLANCE MICROPHONE
## TS-812A




### RECOMMENDED USES

Embedded installation environment for intelligent bank counters.

### KEY FEATURES

- Ultra-thin aluminum alloy with sandblasted, oxidized surface for corrosion resistance and a metallic texture.
- Designed for service windows and self-service equipment, featuring a sleek nameplate-style structure with space for corporate logos, integrating seamlessly with devices.
- Equipped with professional microphones for clear, natural audio, utilizing advanced AEC and multi-level noise reduction to minimize background noise.
- Automatic Gain Control (AGC) balances sound levels, suppresses high-intensity noises, and enhances playback clarity.
- Adjusts to high-intensity and transient noises, protecting backend audio equipment.
- Operates in temperatures from -35°C to 70°C, suitable for harsh environments.
- Includes reverse polarity protection for easy installation.
- Compatible with active speakers, computers, DVRs, network cameras, and more, with advanced transmission technology supporting up to 3000 meters (use shielded cables in complex environments).

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Range | 1-3 meters |
| Frequency Response | 20Hz to 20kHz |
| Sensitivity | -45dB |
| SNR | 80dB (@1kHz) |
| Directivity | Directional |
| Dynamic Range | 90dB (@1kHz) |
| Max SPL | 110dB (@1kHz) |
| Signal Output Level | 2Vrms (@1kHz) / 5.6Vpp (@1kHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuits | Power polarity reversal protection, ESD protection |
| Connection Method | Three-wire output (red for power positive, white for audio positive, black for common ground) |
| Signal Transmission Distance | 3000 meters (use shielded cables in electromagnetic complex environments) |
| Power Supply Voltage | DC 12V |
| Operating Temperature Range | -35°C to 70°C |
| Housing Material | Aluminum alloy |
| Dimensions | 40 x 30 x 3 mm |
| Installation Method | Surface mount |
| Compliance Standards | Tested and approved by the Ministry of Public Security for safety and quality of police electronic products |





# ANALOG SURVEILLANCE MICROPHONE
## TS-806A




### RECOMMENDED USES

Ceiling-mounted installation.

### KEY FEATURES

- Ultra-thin aluminum alloy anti-riot structure, treated with brushed oxidation surface process, corrosion-resistant with a strong metallic texture.
- Uses professional interview recording microphone head, featuring lean design and circuit processing technology for clear and natural sound quality.
- AEC tail cancellation technology combined with multi-level adaptive noise reduction capability effectively reduces ambient noise and background noise, ensuring high fidelity voice clarity.
- Manual adjustment of microphone distance and volume according to the site environment, flexible adaptation to various field conditions to achieve optimal monitoring effects.
- Built-in automatic gain control (AGC) circuit automatically suppresses high-intensity sound and eliminates sound differences caused by distance, resulting in clear and bright playback sound.
- Automatically adjusts to protect backend audio monitoring equipment from high-intensity sound and transient impact noise, ensuring reliable operation.
- Standardized design based on 86-type box size and structure, suitable for various on-site installation and usage requirements, facilitating convenient installation and maintenance.
- 8. Power polarity reverse protection ensures worry-free on-site installation wiring.
- Operates in a temperature range of -35°C to 70°C, suitable for various harsh environments.
- Integrated professional voice processing chip, compatible with active speakers, computers, DVRs, network cameras, and other devices.
- Advanced line audio transmission technology allows signal transmission distance up to 3000 meters (use shielded cables in complex electromagnetic environments).

### CHNICAL PARAMETERS

| | |
|---|---|
| Pickup Area | 5-100 square meters (adjustable) |
| Frequency Response | 20Hz to 20KHz |
| Sensitivity | -40dB |
| SNR | 85dB (@1KHz) |
| Directivity | Omnidirectional |
| Dynamic Range | 95dB (@1KHz) |
| Max SPL | 120dB (@1KHz) |
| Signal Output Amplitude | 2Vrms (@1KHz) / 5.6Vpp (@1KHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuits | Power polarity reverse protection, ESD protection |
| Connection Method | Supports three-wire, four-wire audio isolation output |
| Signal Transmission Distance | 3000 meters (use shielded cables in complex electromagnetic environments) |
| Power Supply Voltage | DC 12V |

# DIGITAL SURVEILLANCE MICROPHONE
## TS-906A




### RECOMMENDED USES

Embedded installation environment for intelligent bank counters.

### KEY FEATURES

- Metal anti-loosening installation structure, processed with sandblasting and oxidation for an elegant and dignified appearance.
- Equipped with professional interview recording microphone head, refined design, and circuit processing technology for clear and natural sound quality.
- Utilizes proprietary noise reduction algorithms with multi-level adaptive noise reduction capability to effectively reduce ambient and background noise, adjustable for different scenarios.
- High-speed speech DSP processing unit combined with AEC (Acoustic Echo Cancellation) technology ensures rapid and smooth response of the microphone, achieving high fidelity voice reproduction.
- Supports self-check function; automatically reports microphone faults to enhance management and maintenance efficiency without the need for onsite troubleshooting.
- Built-in automatic gain control (AGC) circuit suppresses high-intensity sounds, eliminates differences in sound levels due to distance, ensuring clear and bright playback sound.
- Features dual recording function for audio and video synchronization, achieving high fidelity reproduction of live scenes.
- Concealed anti-loosening installation structure adapts to various onsite environments, ensuring both convenient maintenance and secure installation to prevent vibration and detachment.
- Operating temperature range from -20°C to 60°C, suitable for operation in harsh environments.
- Provides protection against reverse polarity and lightning strikes, ensuring worry-free onsite wiring during installation.
- Integrated with professional voice processing chip, compatible with active speakers, computers, DVRs, network cameras, and other devices.
- Features robust line audio transmission technology, capable of transmitting signals up to 3000 meters (use shielded cables in complex electromagnetic environments).

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Range | 5-150 square meters (adjustable) |
| Microphone Head | Gold-plated condenser MIC |
| Directivity | Omnidirectional |
| Frequency Response | 20Hz to 20kHz |
| Sensitivity | -35dB |
| Protection Circuit | Power polarity protection |
| Power Supply Voltage | DC 12V |
| Dimensions | φ79x22 (mm) |





# DIGITAL SURVEILLANCE MICROPHONE
## TS-915A




### RECOMMENDED USES

suitable for prison, safe city, scenic area, city park and other indoor or outdoor application scenarios.

### KEY FEATURES

- Sturdy and durable all-metal shell with sandblasting oxidation surface treatment process, ensuring strong adaptability to harsh outdoor environments.
- Adopting waterproof structure (ingress protection grade: IPX7).
- Adopting high-end directional gold-plated condenser microphone, ensuring high fidelity, high sensitivity and low noise audio collection.
- Adopting self-developed noise reduction algorithm, with self-adaptive noise reduction capability
- Built-in industry-leading digital signal processor and AEC (Automatic Echo Cancellation) technology, ensuring high fidelity audio transmission.
- Built-in lightning protection and reverse polarity protection, ensuring steady operation of the device.
- Supporting self-checking functionality, automatic self-checking in 5 seconds after the device is powered on (one beep indicating normal operation, three beeps indicating abnormal condition of the device).
- Supporting centralized power supply, powered by IP camera or DC power supply (DC 10V-30V).
- Equipped with mounting bracket for different installation positions including smart pole, wall or suspended ceiling.

### CHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | AC 10V-30V ; DC 10V-30V |
| Directivity | Directional |
| S/N | 85dB |
| Frequency Response | 20Hz-20KHz |
| Sensitivity | -35dB |
| Voice Pick-up Range | 1-20m (Adjustable) |
| Output Impedance | 600-1000Ω Unbalanced |
| Protection Circuit | Lightning Protection / Reverse Polarity Protection |
| Working Temperature | -20°C-60°C |
| Dimensions & Weight | 135×71.2×28.2mm, 0.22kg |

# DIGITAL SURVEILLANCE MICROPHONE
## TS-917A

### RECOMMENDED USES

Indoor focused directional audio pickup environment.




### KEY FEATURES

- Metal structure with directional adjustment design, treated with sandblasting oxidation for corrosion resistance and a strong metallic texture.
- Utilizes proprietary noise reduction algorithms, featuring highly directional audio capture capabilities and adaptive noise reduction to effectively eliminate environmental interference and focus on capturing on-site voices.
- High-speed speech DSP processing unit combined with AEC tail cancellation technology ensures fast and stable response of the microphone, achieving high clarity and fidelity in voice reproduction.
- The microphone includes self-diagnostic functionality and supports configuration of relevant parameters via external sound waves.
- Built-in automatic gain control (AGC) circuit automatically suppresses high-intensity sounds and equalizes sound differences from varying distances, enhancing playback clarity.
- Supports centralized power supply, camera power supply, and DC power supply, accommodating a wide range of voltages.
- Operates within a temperature range of -20°C to 60°C, suitable for various challenging environments.
- Provides protection against reverse polarity during installation, ensuring worry-free wiring on site.
- Supports analog audio isolation output with adjustable output amplitude.
- Integrates professional voice processing chips, compatible with active speakers, computers, DVRs, network cameras, and other devices.
- Features advanced line-level audio transmission technology, capable of transmitting signals up to 3000 meters (use shielded cables in complex electromagnetic environments).

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Distance | 1-15 meters (adjustable) |
| Frequency Response | 20Hz to 20kHz |
| Sensitivity | -35dB |
| SNR | 85dB (@1kHz) |
| Directivity | Super-directional (adjustable angle from 20° to 120°) |
| Dynamic Range | 95dB (@1kHz) |
| Max SPL | 120dB (@1kHz) |
| Signal Output Level | 1Vrms (@1kHz) / 2.8Vpp (@1kHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuit | Power polarity reversal protection, ESD protection |
| Connection Method | Supports standard RJ45, three-wire/four-wire audio isolation output, single/dual channel output |
| Signal Transmission Distance | 3000 meters (use shielded cable in complex electromagnetic environments) |
| Power Supply Voltage | DC 10V-30V / AC 10V-30V |
| Operating Temperature | -20°C to 60°C |
| Housing Material | Aluminum alloy |
| Dimensions | 135*71*28 mm |
| Installation Method | Bracket installation |
| Compliance Standard | Tested by the Ministry of Public Security's Safety and Police Electronic Products Quality Testing Center |





# NETWORK INDOOR DIRECTIONAL SURVEILLANCE MICROPHONE
## TS-715E

### RECOMMENDED USES

This indoor surveillance microphone is suitable for use in prisons, public security, subway platform and other occasions for sound collection.




### KEY FEATURES

- The metal construction of the shell provides excellent corrosion resistance.
- Built-in high-speed digital signal processor to ensure output strength.
- Adjusts the microphone's sound level according to the on-site environment.
- The device is equipped with a built-in high-sensitivity microphone that records natural sound with precision and clarity.
- It supports long-distance transmission and is highly resistant to interference.
- Supports both power adapter, DC power and POE supply.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC:12V, AC:24V; POE IEEE802.3AT/AF |
| Directionality | Unidirectional |
| Power consumption | Less than 1W |
| Frequency Response | 20HZ-20KHZ |
| Dimension | 113*42*37mm |

# OUTDOOR SURVEILLANCE MICROPHONE
## TS-915E



### RECOMMENDED USES

Embedded installation environment for intelligent bank counters.

### KEY FEATURES

- Operates in temperatures from -20°C to 60°C, suitable for harsh environments.
- Includes power polarity protection for easy wiring installation.
- Supports analog audio isolation and network output with no delay in video integration.
- Metal structure with adjustable direction, sandblasted and corrosion-resistant with a strong metallic texture.
- Proprietary noise reduction algorithms with multi-level adaptive modes to minimize background and environmental noise.
- High-speed DSP unit with AEC technology for fast, stable microphone response and clear voice fidelity.
- Built-in AGC circuit automatically suppresses loud sounds and balances audio levels for clearer playback.
- Supports direct network connection, PoE, centralized, camera, or independent power supply options.
- Backend web configuration for microphone settings, remote management, and system updates.
- Integrated voice processing chip compatible with various equipment; supports signal transmission up to 3000 meters with shielded cables.
- Connects via Ethernet, supports web-based management, and works across network segments and routers.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Pickup Distance | 1-20 meters (adjustable) |
| Frequency Response | 20Hz to 20kHz |
| Sensitivity | -35dB |
| SNR | 90dB (@1kHz) |
| Waterproof Rating | IP67 |
| Directivity | Directional |
| Dynamic Range | 100dB (@1kHz) |
| Max SPL | 120dB (@1kHz) |
| Signal Output Amplitude | 1Vrms (@1kHz) / 2.8Vpp (@1kHz) |
| Output Impedance | 600-1000 ohms, unbalanced |
| Protection Circuit | Power polarity reverse protection, ESD protection |
| Connection Method | Supports standard RJ45, three-wire, four-wire audio isolation output |
| Signal Transmission Distance | 3000 meters (use shielded cables in electromagnetic complex environments) |
| Network Communication Rate | 10M/100M adaptive |
| Power Supply Voltage | POE IEEE 802.3at/af, DC 10V-30V, AC 10V-30V |
| Operating Temperature | -20°C to 60°C |
| Housing Material | Aluminum alloy |
| Dimensions | 135*71*28 (mm) |
| Installation Method | Bracket installation |
| Compliance Standard | Tested by the Ministry of Public Security and Police Electronic Product Quality Testing Center |





# OUTDOOR DIRECTIONAL SURVEILLANCE MICROPHONE
## TS-929E

### RECOMMENDED USES

This surveillance microphone is suitable for use in prisons, public security, inspections and other occasions for sound collection. It can be installed outdoors on surveillance poles, walls, and ceilings.




### KEY FEATURES

- The shell is made of aluminum alloy, which has waterproof, dust-proof and corrosion resistance.
- Adaptive dynamic noise reduction processing, built-in high-speed digital signal processor to ensure output strength.
- Built-in AGC eliminates differences in sound levels from different distance, making the sound amplitude more balanced.
- It is integrated with a professional SMT audio processor that can directly drive various devices such as active speakers, DVRs, and network cameras.
- It is equipped with built-in modules for lightning protection, power polarity reversal protection, and ESD protection, ensuring stable and secure operation.
- Adjusts the microphone's sound level according to the on-site environment.
- The device is capable of detecting specific keywords or abnormal sounds, and can send alerts and upload the recordings to the server.
- Supports both power adapter, DC power and POE supply.

### TECHNICAL PARAMETERS

| | |
|---|---|
| Power Supply | DC:11V-30V, AC:24V；POE IEEE802.3AT/AF |
| Directionality | Allows for switch between Unidirectional and omnidirectional |
| Frequency Response | 20HZ-20KHZ |
| SNR | 90dB |
| Operating Temperature | -20°C ~ +60°C |
| Dimension | 188*75*32mm |

# GLOSSARY

**TCP/IP:** (Transmission Control Protocol/Internet Protocol) Network communication protocol is the most basic Internet protocol and the basis of international Internet. It's composed by network layer IP protocol and transport layer TCP protocol. TCP/IP defines how electronic devices connect to the Internet, and the data transmission standard.

**LAN:** (Local Area Network, LAN) It refers to a computer group composed by multiple computers in a certain area. It's generally within a thousands of meters. LAN can achieve document management, software application sharing, printer sharing, work group scheduling, e-mail and fax communication...these functions.

**WAN:** (Wide Area Network,WAN) It usually crosses the big physics range, the coverage range from a few tens of kilometers to thousands of kilometers. It can connect multiple cities or countries, or across several continents and provide long-distance communication to form the international remote internet.

**VPN:** (Virtual Private Network, VPN) It can be understood as a virtual internal exclusive communication line in an enterprise. It can use the special encrypted communication protocol to establish an exclusive communication line for multiple enterprises in different places which have connected to Internet.

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**UNICAST:** It's a point-to-point connection between the client and server. "Point-to-point" means each client receives the remote stream from server. The server will send unicast stream only when the client requested.

**MULTICAST:** To realize point-to-multipoint connection between the sender and each receiver. If a sender transmits the same data to multiple receivers simultaneously, it just need copy one same data packet. It improves data transfer efficiency and reduces the backbone network jam possibility.

**SIP:**(Session Initiation Protocol) It's multimedia communication protocol and established by the IETF (Internet Engineering Task Force). It is a text-based application-layer control protocol, it's used for creating, modifying and releasing one or multiple participants conversation.

**H.264:** It's the 10th part of MPEG-4, that is the highly compressed digital video codec standard suggested by JVT(JVT, Joint Video Team) which is composed by ITU-T video coding experts group (VCEG) and ISO/IEC moving pictures experts group (MPEG).

**ONVIF**: It's a global video open interface standard, it's an international open standard network interface development forum of network video products which is established by AXIS united BOSCH and SONY. It is committed to use public and openness principle. The ONVIF specification will ensure the intercommunity between different video products suppliers.

**Full Duplex:** It's a communication transmission term. Communication allows data transmit in two directions simultaneously, it is equivalent to two simplex communication mode combination. Full duplex refers to the data transmission in two directions simultaneously(A→B and B →A). Refers to A→B, and B→A simultaneously, it is instantaneous synchronous.

**Half Duplex:** It refers to one action only within a period of time. Early walkie-talkie and HUB devices are half duplex based.

**PTT:** PTT is transmit button, press the PTT to talking and loosen the PTT to receiving.

**Frequency Response:** It is also called response curve, it's the curve which describes gain variation with the changing of frequency. Any sound device or carrier(a device to record sound signal) all has its frequency response curve. The ideal frequency response curve should be flat, it does not produce distortion after the sound signal passed.

**Audio sampling:** Convert the sound wave convert into a series of binary data and reappear the original voice, the A/D converter use tens thousands of times per second rate for audio sampling, every sampling recorded the original analog sound waves status in the moment, that is sample. Sampling numbers per second is sampling frequency or rate, the unit is HZ(Hertz).

**Alarm in/Alarm out:** It is also On-off in/out, that is contactor, there have 2 states between the contactors, it's connect or disconnect. There are 2 kinds of switching signal: Active & passive, active switching signal will drive voltage when two contactors are connected.

**POE:** (Power Over Ethernet) It it based on Ethernet Cat.5 wiring to transmit the data signal to IP terminals(eg:IP phone, IP camera...etc), and it also can offer the DC power to device at the same time.

**P66/IP65/IP54:** IP protection degree,the 1st number means the dustproof capability, No.6 means no dust inside; the 2nd number means the waterproof capability, No.6 means no harmful effect for spraying the water to the shell everywhere, No.5 degree is weaker than No.6.

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