

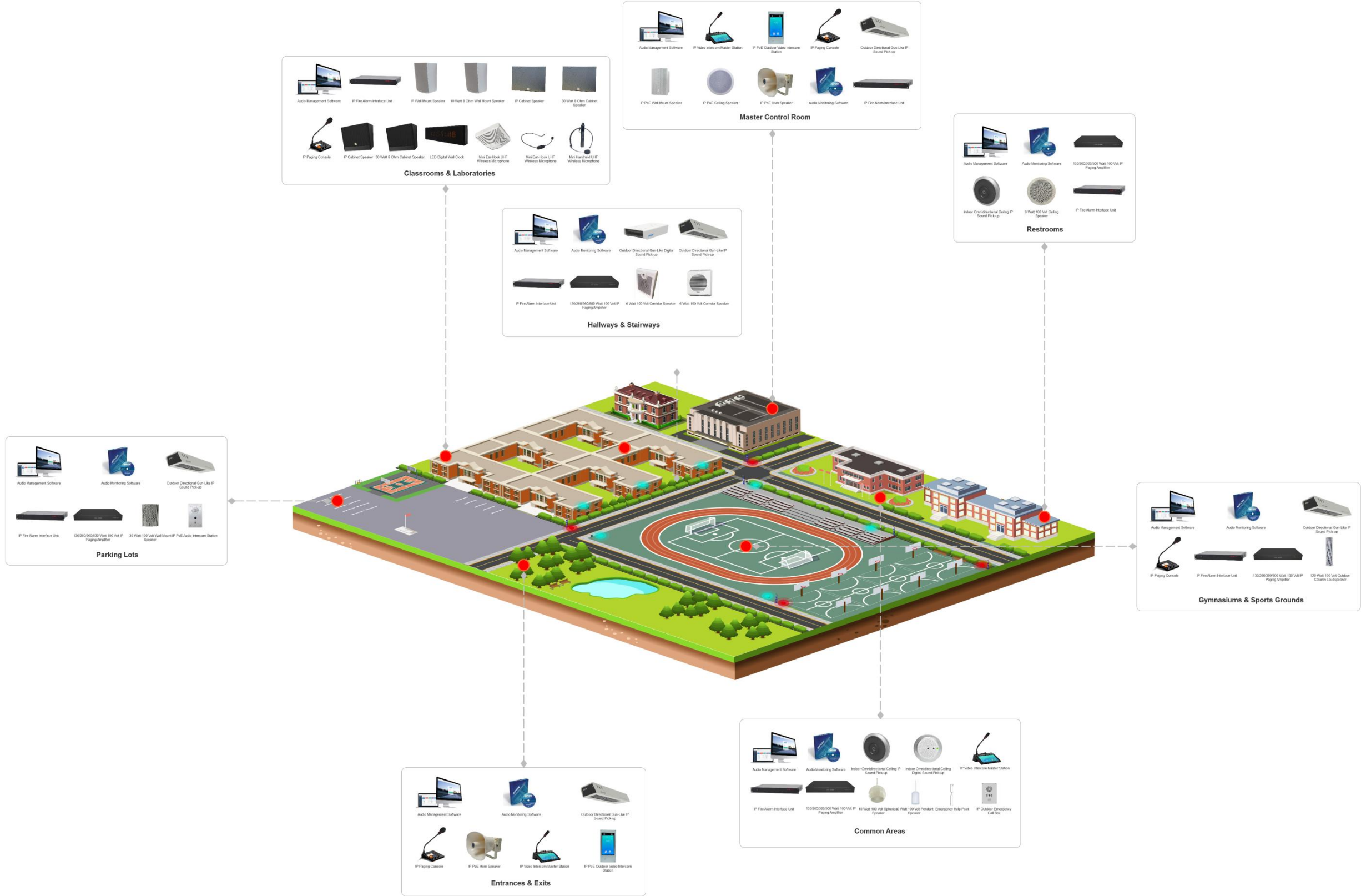
EDUCATION

AUDIO SOLUTION DESIGN

FOR K-12 SCHOOLS



SYSTEM LAYOUT



SYSTEM DIAGRAM

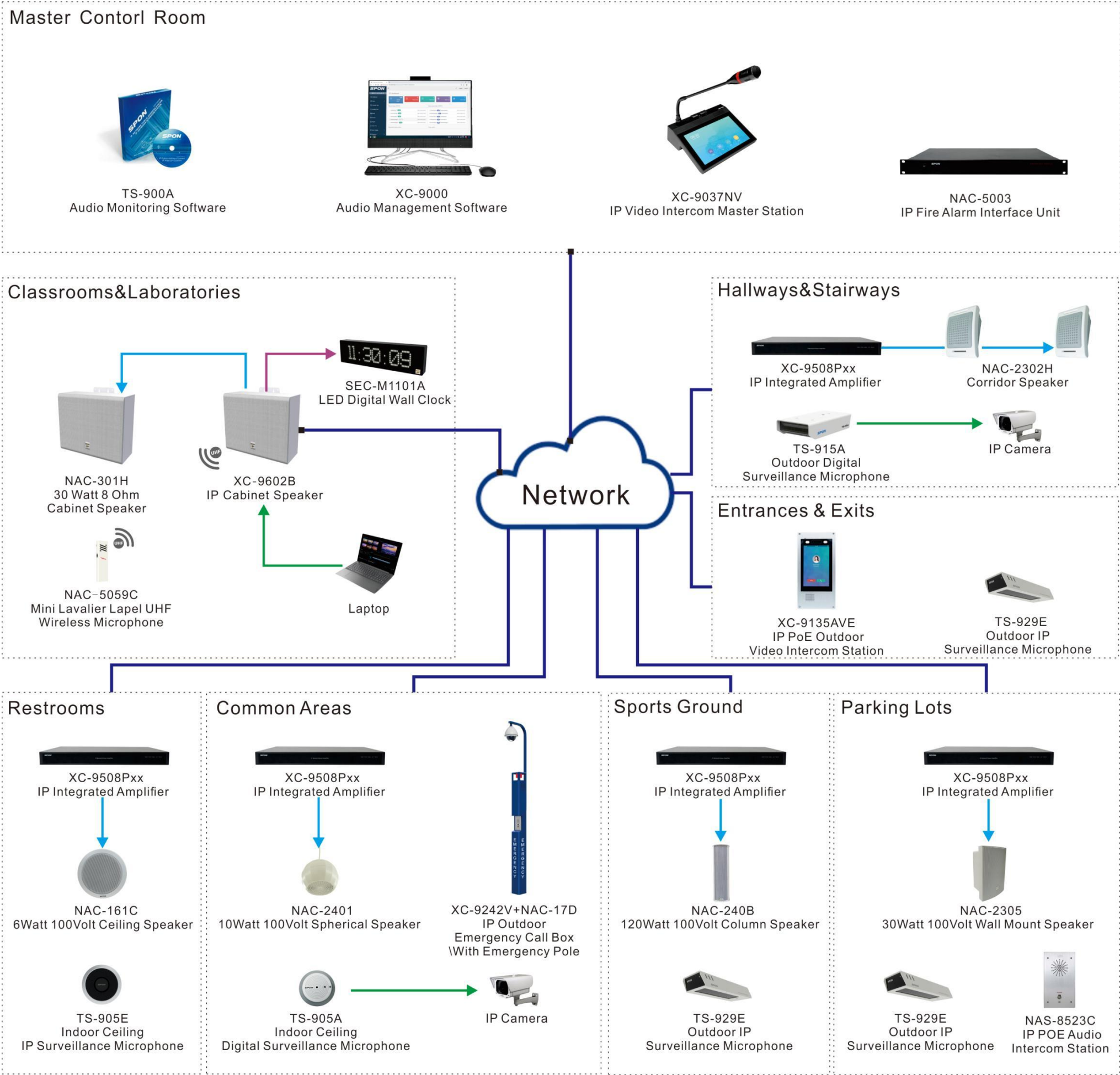


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System Layout

System Diagram



APPLICATIONS

Maximizing School Safety and Efficiency with SPON

In today's age, educational institutions are tasked not only with fostering learning but also with ensuring the safety and well-being of every individual within their premises. As threats diversify and challenges amplify, the importance of comprehensive security solutions has never been clearer. SPON's integrated security audio solutions are tailor-made to address these intricacies, providing a multi-faceted approach that transcends basic safety measures.

1. A Bastion of Safety

- **Proactive Vigilance:** SPON's audio suite, with its cutting-edge public address, intercom, and audio surveillance capabilities, coupled with intelligent analytics, offers schools a proactive stance, enabling early threat detection and prompt intervention.
- **Rapid Response Mechanisms:** In volatile situations, swift action can make all the difference. SPON's systems ensure that in emergencies, pertinent information is relayed instantly, allowing for a timely and effective response.

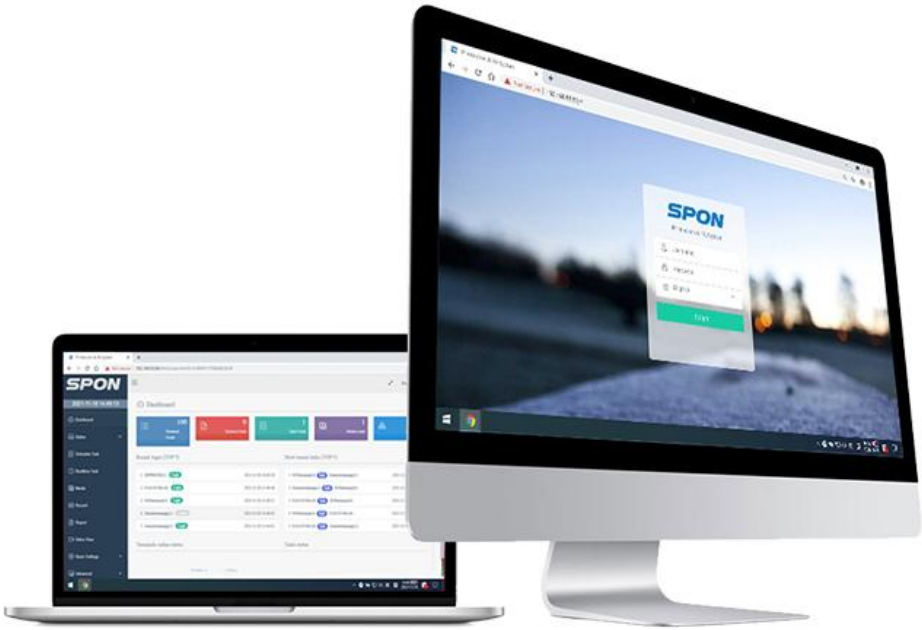
2. Elevating Operational Efficiency

- **Seamless Daily Operations:** From managing peak traffic during school start and end times to making specific announcements, SPON's solutions optimize operations, ensuring a disruption-free environment.
- **Automated Excellence:** SPON leverages the power of automation, simplifying processes, and allowing staff to focus on core educational tasks.

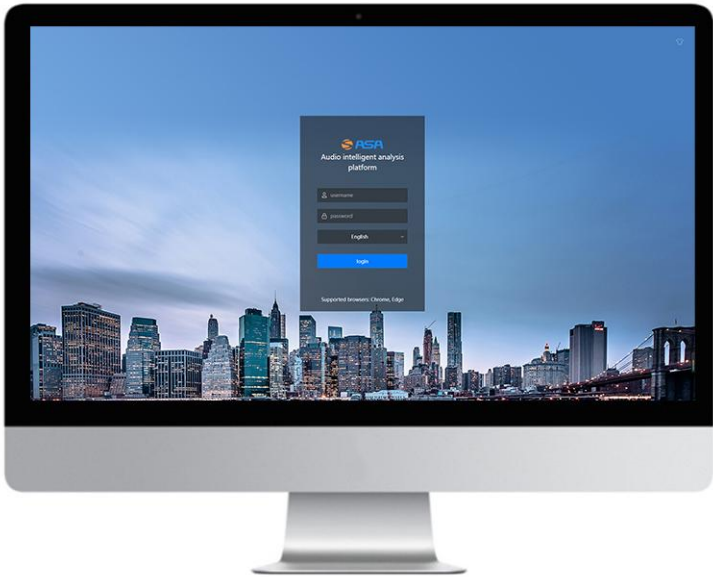
3. Enriched Learning Paradigms

- **Enhanced Audio Learning:** SPON's network speakers deliver impeccable sound quality, amplifying the clarity of educational content, ensuring that students absorb lessons more effectively.
- **Crystal Clear Communication:** The integration of mini UHF wireless receivers in the network speakers, complemented by mini UHF wireless microphones, guarantees that teachers' voices resonate clearly across classrooms. This clarity in communication is pivotal for productive learning.

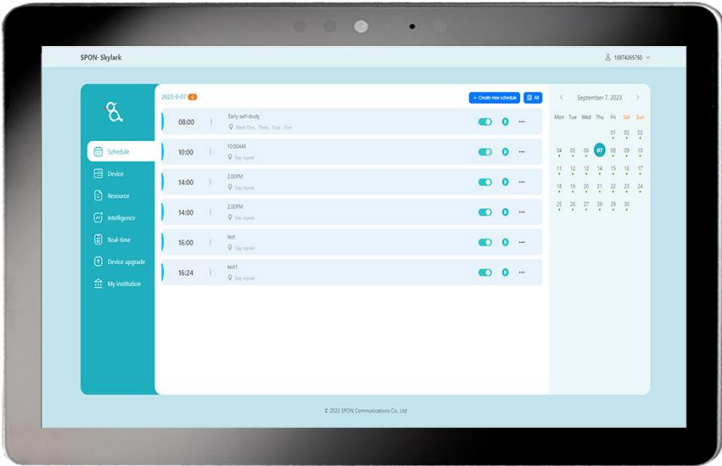




XC-9000 - Audio Management Software



TS-900A - SPON Audio Monitoring Software



NXT-2000 - Cloud PA Platform

CRITICAL AREAS DEMONSTRATION

➤ Entrances & Exits

Audio surveillance using detection analytic alerts for aggression, gunshots, or glass breaking at school entrances/exits. The IP-based public address system ensures timely and targeted safety announcements in these vital areas.

Detection of Intrusion

Utilize SPON® IP Surveillance Microphones, equipped with intelligent sound analytic, at entrances and exits to:

Detect Abnormal Noises: Such as screams, gunshots, or glass breakage.

Prompt Alerts: Immediate notifications to the control room and security or law enforcement on potential intrusions.

Related Products:

TS-900A: Audio Monitoring Software.

TS-929E: Outdoor IP Surveillance Microphone.

Rapid Response with IP Audio Solutions

Enhance video surveillance effectiveness with our IP audio solution:

Versatile Messaging: Utilize live or pre-recorded voice messages to deter potential threats, inform staff and students of emergencies, or guide evacuations.

Targeted Alerts: With audio zoning, send voice alerts to specific areas, ensuring the right people get informed without causing undue disturbances.

Related Products:

XC-9000: Audio Management Software.

XC-9038N: IP Paging Console.

XC-9615: IP PoE Horn Speaker.

Enhanced Security with Remote Visitor Verification

With our IP network video intercom, staff can visually verify and converse with visitors before permitting entry:

Safety & Efficiency: Two-way audio ensures secure and efficient visitor management.

Video Integration: The video feed can be integrated with your VMS, allowing for retrospective reviews if necessary.

Related Products:

XC-9000: Audio Management Software.

XC-9037NV: IP Video Intercom Master Station

XC-9135AVE: IP PoE Outdoor Video Intercom Station



CRITICAL AREAS DEMONSTRATION

➤ Master Control Room

As the center of school operations, the master control room requires special considerations. Here, network audio solutions can improve the flow of information and support safer interactions between staff and students or parents.

Fortify School Security with IP Video Intercom

Leverage our advanced IP video intercom for enhanced school safety. With two-way audio capabilities, security personnel can:

Verify & Approve: Identify and grant access to specific visitors, whether they're technicians or parents arriving for early pickups, all from the master control room.

Related Products:

- XC-9000: Audio Management Software.
- XC-9037NV: IP Video Intercom Master Station.
- XC-9135AVE: IP PoE Outdoor Video Intercom Station.

Proactive Monitoring for Enhanced Safety

Our state-of-the-art audio surveillance system harnesses sound detection analytic to:

Immediate Alerts: Recognize signs of aggression or the shattering of glass, instantly alerting security staff or law enforcement to possible threats.

After-Hours Monitoring: Security cameras with object recognition can notify you of unauthorized presence.

Integrated Response: Configure alerts to trigger connected systems for immediate action, like broadcasting warning messages through network speakers upon detecting potential intruders.

Related Products:

- TS-900A: Audio Monitoring Software.
- TS-929E: Outdoor IP Surveillance Microphone.
- NAC-5003: IP Fire Alarm Interface Unit.
- XC-9607: Wall-mounted IP PoE Speaker.

Streamlined Communication with Network Audio

The master control room stands central to your public address system, facilitating:

Diverse Messaging Modes: Make voice announcements via paging microphones, SIP telephones, smartphones, or handheld radios through a ROIP gateway addition.

Precise Targeting: Reconfigurable audio zones empower staff to direct messages universally, to specific sections, or even to a single speaker.

Related Products:

- XC-9000: Audio Management Software.
- XC-9038N: IP Paging Console.
- XC-9607: Wall-mounted IP PoE Speaker.
- XC-9610: Ceiling IP PoE Speaker.
- XC-9615: IP PoE Horn Speaker.



CRITICAL AREAS DEMONSTRATION

➤ Hallways & Stairways

Always crowded and often chaotic, the daily management and monitoring of the hallways & stairways in the school can be a big challenge for the administrative staffs.

24/7 Constant Audio Monitoring

While the video surveillance system or security cameras ensure the visibility of people going up or down the stairs, SPON® IP audio monitoring system helps you add 24/7 constant synchronized audio monitoring to your existing surveillance solutions.

The synchronized audio & video data of the hallways & stairways will be stored on the server, and it can be used in multiple ways - e.g. to identify problem areas where additional interventions may be needed, to monitor the progress of an evacuation, to investigate an incident, or to track an intruder's movements through the school.

Related Products:

TS-915A - Outdoor Directional Gun-Like Digital Surveillance Microphone

Emergency Alert System for Swift Evacuations

During emergencies, hallways and stairways often serve as primary evacuation routes. Clear guidance is essential for the safe evacuation of students and staff in schools.

Prompt Alerts: Upon detecting emergencies, the system instantly relays either pre-recorded evacuation messages or live announcements.

Crystal Clear Audio: With SPON® corridor speakers, clarity is paramount. Their impeccable voice intelligibility ensures every evacuation instruction is heard and understood, making them vital for life-saving scenarios.

Related Products:

XC-9000: Audio Management Software.

NAC-5003: IP Fire Alarm Interface Unit.

XC-9508: 100 Volt IP Amplifier (ranging from 130 to 500 Watts).

NAC-2302H & NAC-2304: 6 Watt 100 Volt Corridor Speakers designed for clarity.

CRITICAL AREAS DEMONSTRATION

Detection of Suspicious Behaviors

SPON® IP Surveillance Microphones with intelligent sound detection analytics installed in the hallways & stairways can effectively distinguish abnormal sound & voice such as yelling, screaming, abusive language, gunshot or breaking glass, thus sending the alarm signal to the master control room, alerting school security guards or law enforcement to a wide range of potential safety threats - from bullying, fights and behavioral flare-ups to active assailants or even terrorist attacks.

Combined with powerful intelligent audio analytics, SPON® IP Surveillance Microphones provide your security teams with early incident detection and situational awareness, and meanwhile, important safety voice messages can be broadcasted on the speakers in the hallways & stairways, just to avoid potential casualties and property losses among the students and staffs in the school.

Related Products:

TS-900A - Audio Monitoring Software

TS-929E - Outdoor Directional Gun-Like IP Surveillance Microphone



Where permitted by law, network audio devices installed inside of the classrooms & laboratories could give both students and teachers maximum security protection, and in the meantime, they could also offer many operational and educational benefits.

Efficient Information Dissemination

Effective communication is vital in a school setting. SPON® solutions ensure swift and accurate dissemination of information, be it administrative updates, exam notices, or special announcements.

Customizable Broadcasting: Reach everyone in the school, a specific class, or an individual teacher with precision.

High Coverage: SPON® IP cabinet speakers in classrooms and labs guarantee broad and effective coverage.

User-friendly Interface: The SPON® IP paging console in the administrative office facilitates live announcements, targeting all zones or specific ones. Integrated chimes make certain that essential announcements stand out.

Related Products:

XC-9000: Audio Management Software.

XC-9038N: IP Paging Console.

XC-9602A: IP Cabinet Speaker.

NAC-301X: 30 Watt 8 Ohm Cabinet Speaker.



Smart Bell Scheduling with SPON®



Modern schools need an efficient and versatile bell system. SPON®'s audio management software streamlines bell scheduling, ensuring:

- 1. Easy Setup:** Intuitive interface for seamless scheduling.
- 2. Tailored Bells:** Set bells for specific areas or times.
- 3. Accuracy: Precise timing keeps activities on track.**
- 4. Clear Sound:** High-quality bell rings via SPON® IP speakers in classrooms.

Related Products:

XC-9000 - Audio Management Software

XC-9602B - IP Cabinet Speaker

NAC-301H - 30 Watt 8 Ohm Cabinet Speaker



CRITICAL AREAS DEMONSTRATION

➤ Restrooms

Restrooms must always be camera-free spaces, but audio security technology near the entrances of the restrooms can alert school officials to potential risks and unwanted behaviors without compromising personal privacy. Besides, speakers installed in the restrooms help ensure that important emergency notification, public announcement and bell ringing will always be heard by the students in the restrooms.

Restroom Safety with SPON® Surveillance

In schools, restrooms can sometimes become hotspots for illicit activities, such as bullying, discrimination, and drug dealings.

SPON® Solutions for Comprehensive Monitoring:

Advanced Sound Detection: SPON® IP Surveillance Microphones equipped with intelligent analytics are installed near restroom entrances. They identify and alert security personnel to disruptive or aggressive noises, even when these events occur beyond the camera's sight.

Immediate Response: SPON®'s IP PA system allows for pre-set alert voice messages to be activated during such events, ensuring immediate communication with the relevant personnel for swift action.

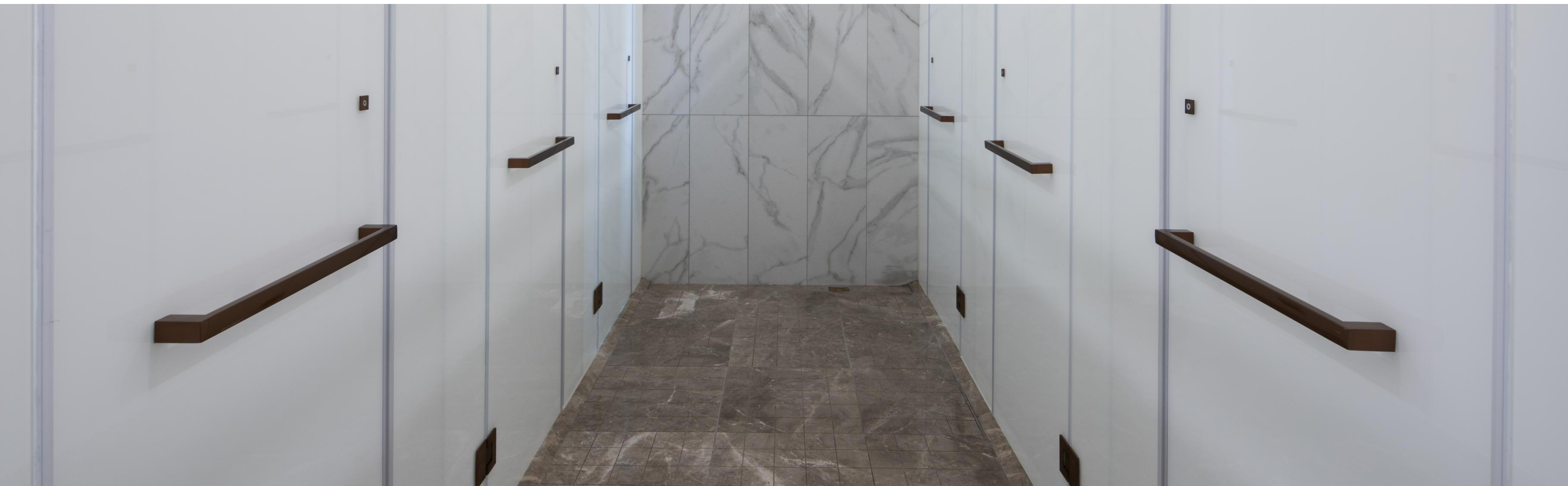
Related Products:

TS-900A: Optimal Audio Monitoring Software.

TS-905E: Precise Indoor Omnidirectional Ceiling IP Surveillance Microphone.

XC-9508: 130/260/360/500 Watt 100 Volt IP Paging Amplifier.

NAC-161C: 6 Watt 100 Volt Ceiling Speaker.



CRITICAL AREAS DEMONSTRATION

➤ Dormitory

Dormitories are more than sleeping quarters; they are hubs of friendship and learning. However, these micro-communities also present potential hazards, from large-scale emergencies to personal conflicts.

Preparedness for Major Emergencies

How SPON's PA system aids in quick evacuation during large-scale crises.

Prompt Evacuations: In the face of fires or earthquakes, the SPON PA system delivers pre-set evacuation instructions, ensuring cyclic playback for guiding students safely out.

Ensuring Safety: Dense populations in dorms necessitate an efficient emergency response to prevent serious harm.

Related Products:

XC-9610: IP Ceiling Speaker

XC-9607: IP wall-mounted Speaker.

Addressing Personal Conflicts and Privacy Concerns

Utilizing selective audio detection for personal conflicts and ensuring student privacy.

Monitoring for Bullying: The SPON surveillance microphone offers selective audio recording, activated upon detecting unusual sounds or certain keywords.

Rapid Intervention: If a potential threat is identified, the system not only records but also alerts the security room. Security can then use the SPON paging microphone for immediate communication or announcements.

Related Products:

TS-906A - IP Omnidirectional Surveillance Microphone

Immediate Assistance for Students

Highlighting SPON's emergency call box and its role in strengthening dorm security.

Emergency Call Box: Positioned on each dorm floor, SPON's system features a one-touch emergency button and a 13MP camera.

Reinforced Security: Its video intercom capabilities allow security to instantly assess situations, ensuring students always feel safeguarded.

Related Products:

XC-9242V - IP Emergency Call Box



CRITICAL AREAS DEMONSTRATION

➤ Common Areas

Cafeterias, libraries, media centers and other common spaces accommodate high volumes of students and staffs during and after school hours. Here, integrated network audio technology has multiple benefits.

Intelligent Audio Surveillance with SPON®

By integrating SPON® IP Surveillance Microphones into high-traffic zones like cafeterias and libraries, schools benefit from:

Advanced Sound Detection: These microphones can pinpoint aggressive behaviors, gunshots, or even the shattering of glass.

Complementary Surveillance: When paired with existing security cameras, they offer a comprehensive view of both visual and audio incidents.

Prompt Alert System: Any abnormal sounds trigger instant notifications, allowing security guards to respond quickly to potential threats.

Related Products:

TS-900A - Audio Monitoring Software

TS-905E - Indoor Omnidirectional Ceiling IP Surveillance Microphone

Immediate Assistance

SPON's Emergency Help Points aren't just communication tools but vital beacons for public safety. Features include:

Emergency Call Box: For direct, reliable communication.

Notification Speakers: Ensuring broad alerts when necessary.

Strobe Light: Ensuring visibility during emergencies.

Related Products:

XC-9000 - Audio Management Software

XC-9037NV - IP Video Intercom Master Station

NAC-17D - Emergency Help Point

XC-9242V - IP Outdoor Emergency Call Box

24/7 Monitoring with SPON®

Audio Surveillance: SPON® IP provides continuous audio monitoring, seamlessly synchronized with existing video systems.

Data Storage: Audio-video data is securely stored on the server, ready for retrieval.

Versatile Utility: This combined data can be used for identifying intervention areas, monitoring evacuations, incident investigations, or tracking intruders, providing comprehensive security for the premises.

Related Products:

TS-905A - Indoor Ceiling Digital Surveillance Microphone



CRITICAL AREAS DEMONSTRATION

➤ Gymnasiums & Sports Grounds

Integrated network audio devices can make events in large, active spaces like gymnasiums and sports grounds safer, more secure and more enjoyable for students and spectators.

Detection of Suspicious Behaviors

Advanced Audio Detection: Our audio surveillance system, with sound analytics, identifies and alerts security personnel to abnormal sounds or aggressive behaviors, such as yelling or gunshots.

Networked Communication: Network speakers enable immediate communication to areas like gymnasiums or sports grounds.

Proactive Deterrence: In synergy with intrusion protection, the audio system can broadcast event-triggered messages to deter unwanted actions or intruders.

Related Products:

TS-900A - Audio Monitoring Software

TS-929E - Outdoor IP Surveillance Microphone

XC-9000 - Audio Management Software

XC-9038N - IP Paging Console

NAC-5003 - IP Fire Alarm Interface Unit

XC-9508 - 130/260/360/500 Watt 100 Volt IP Paging Amplifier

NAC-240B - 120 Watt 100 Volt Outdoor Column Loudspeaker



CRITICAL AREAS DEMONSTRATION

➤ Parking Lots

Parking lots, typically located on the perimeter or underneath the administrative building of the school, are often significant and vulnerable investments.

SPON® Outdoor Security Solutions

For comprehensive school security, especially in expansive areas like parking lots, SPON® offers:

Weather-Resistant Surveillance Microphones: Engineered for challenging conditions from dust storms to heavy rain.

Integrated Surveillance: SPON® microphones and cameras work together, ensuring robust coverage.

Smart Detection: In parking areas, microphones pinpoint threats like aggression, gunshots, or glass breaking, alerting security in real-time.

Proactive Alerts: If a threat is detected, a relay signal from cameras to the SPON® IP fire alarm unit triggers warning messages, acting as a deterrent..

Related Products:

- TS-900A - Audio Monitoring Software
- TS-929E - Outdoor Directional Gun-Like IP Surveillance Microphone
- XC-9000 - Audio Management Software
- NAC-5003 - IP Fire Alarm Interface Unit
- XC-9508 - 130/260/360/500 Watt 100 Volt IP Paging Amplifier

Emergency Communication with SPON® Intercom

At parking lots, the potential for emergencies necessitates swift communication tools. SPON® has you covered:

Standardized Security: Every parking lot's protection system includes our reliable security intercom.

Instant Reporting: Spot a suspicious behavior? Simply press the call button on the wall-mounted SPON® IP intercom station.

Efficient Communication: This initiates a real-time, two-way audio link with the master control room. Report incidents and coordinate actions immediately, ensuring rapid response to any threat.

Related Products:

- XC-9000 - Audio Management Software
- NAS-8523C - IP PoE Audio Intercom Station

Emergency Notification Alerting

In the case of emergency incidents, staffs stopped at the parking lot should be given clear instructions during the evacuation process.

In actual applications, once an emergency incident has been detected, no matter it's pre-recorded evacuation voice messages or live emergency voice announcements, clear and understandable escape guidance should be heard as soon as possible, and this is why SPON® wall mount speakers with crystal voice intelligibility is so important for saving lives.

Related Products:

- XC-9000 - Audio Management Software
- NAC-5003 - IP Fire Alarm Interface Unit
- XC-9508 - 130/260/360/500 Watt 100 Volt IP Paging Amplifier
- NAC-2305 - 30 Watt 100 Volt Wall Mount Speaker



SPON Introduction

Located in Changsha, SPON Communications spans 57,000 square meters and employs 500, boasting a strong 250-person R&D division. Annually, our cutting-edge production line crafts up to a million IP endpoint devices. Honored as a 2016 intelligent production star, we have a global presence in 50 countries, with 24 branches within China. Our dedication to innovation shines through our Acoustic and Electromagnetic Labs, pushing our products beyond industry norms.

Offering a diverse product line, we deliver everything from IP Public Address systems and video intercoms to AI-powered surveillance microphones and Noise Detection systems. With expertise in custom IP audio solutions and the XC-cloud IoT platform's support, we adeptly cater to the ever-changing demands of our clients.

Main Prize and achievement:

- National "Specialized, Refined, Unique, and New Little Giant."
- Chinese manufacturers, Ten Hidden Champions.-

SPON core products:

XCoIP Network Audio Technology Platform

IP Intercom System

IP Public Address System

Conference System

Surveillance microphones

Contact Us:

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