# XC-9603

## IP Paging Amp Adapter

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SPON XC-9603 IP paging adaptor is SIP enabled multifunctional IP audio device dedicated for industry users. It can convert voice streams from a SIP paging system or IP PBX system to analogue sounds for background music, public address,etc. With the compact hardware design, open standard SIP protocol support, rich functionality and high performance.

SIP

# MAIN FEATURES

### User-Friendly Configuration & Compatibility

- Easy setup via web interface or DevConfig Tool.
- Compatible with most analog amplifiers and standard SIP protocol for VoIP integration (Yeastar, Asterisk, Cisco, etc.).

### Amplification & Audio Management:

- Built-in 60W or 120W Class-D digital amplifier module for 4Ω/8Ω passive speakers, suitable for series or parallel connection.
- External audio source support and dynamic volume control for clear voice output.

### Connectivity & Broadcasting:

- Ability to receive live voice announcements from third-party VoIP systems or SPON software.
- Offline timed broadcasting independent of a server.
- Relay I/O port for connection to third-party fire alarm systems.

# SPECIFICATION

| POWER PARAMETERS | |
| --- | --- |
| Power Supply: | DC 24V/2.7A |
| Power Consumption: | ≤3W |

| AUDIO PARAMETERS | |
| --- | --- |
| Audio Codec: | G.711 A-law, G.711 μ-law, G.729, PCM/L16 |
| S/N (Signal-to-Noise) Ratio: | ≥86dB |
| Audio Sampling & Bit Rate: | 8kHz~44.1kHz, 16bit, 8kbps~320kbps |
| THD (Total Harmonic Distortion): | ≤0.3% @ 1kHz |
| Frequency Response: | 50Hz~20kHz |

| NETWORK PARAMETERS | |
| --- | --- |
| Network I/F: | 10BASE-T/100BASE-TX RJ45 |
| Network Protocol: | SIP (RFC3261), HTTP, TCP/IP, UDP, ARP, ICMP, IGMP |
| Configuration Method: | Web Interface or DevConfig Tool. |

| MECHANICAL & ENVIRONMENT PROPERTIES | |
| --- | --- |
| Mounting Method: | Wall-Mounted or Desktop |
| Installation Environment: | Dry Indoor Locations Only |
| Operatiing Temperature: | -20°C~55°C (-4°F~131°F) |
| Storage Temperature: | -40°C~65°C (-40°F~149°F) |
| Operating Humidity: | 10%~90% RH non-condensing |
| Casing Material: | iron |
| Color: | Black |
| Dimensions: | 140×71×43mm |
| Weight: | 0.4kg |

## ACCESSORIES

| Standard Accessories |
| --- |

- Pluggable Terminal Block Connector (2-pin)
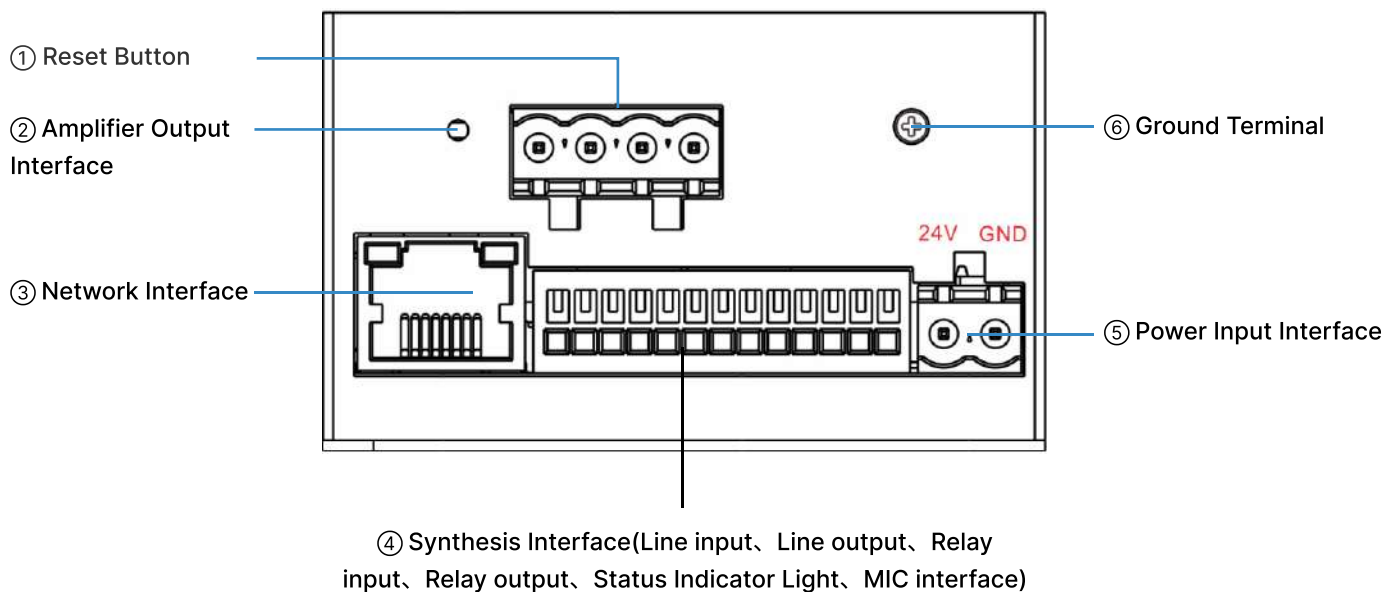- Pluggable Terminal Block Connector (4-pin)

| Optional Accessories |
| --- |

- DC 24V/2.7A Power Adapter (Full English Marking)
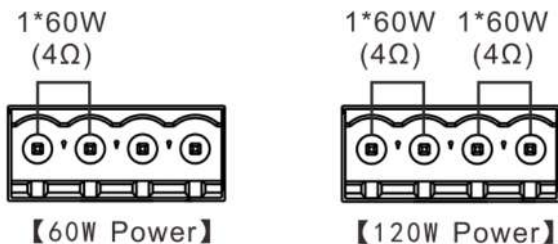- Power Cord (IEC C13 Female - Type A/C/G power plug)

## COMPLIANCE

| Approved Standards |
| --- |

- EN 55032:2015、EN 55035:2017

# PORTS DESCRIBTION

① Reset Button

② Amplifier Output Interface

③ Network Interface

⑥ Ground Terminal

⑤ Power Input Interface

24V   GND

④ Synthesis Interface(Line input、Line output、Relay input、Relay output、Status Indicator Light、MIC interface)
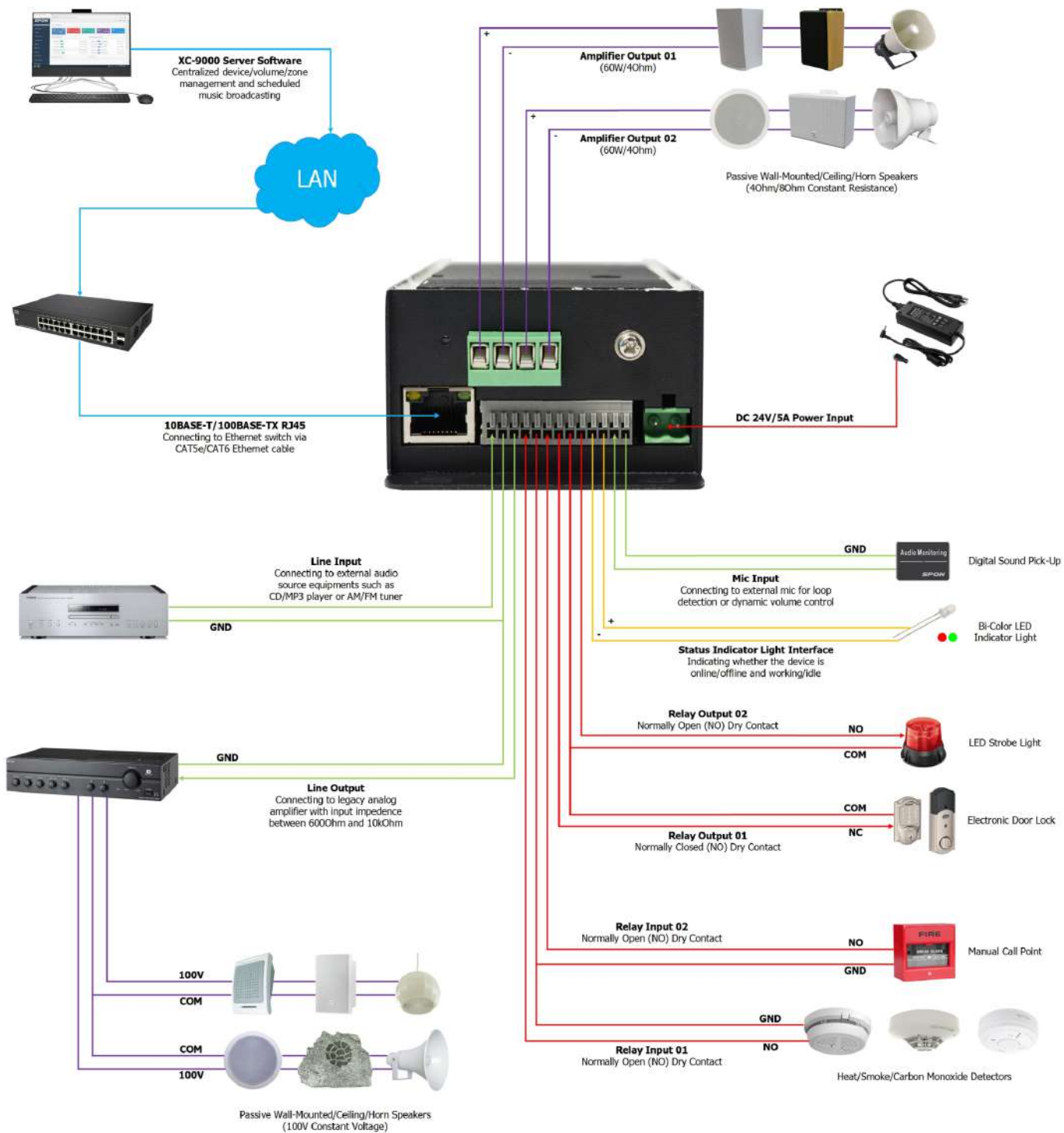
The built-in 1×60 or 2×60-watt class-D digital amplifier module of the IP paging adapter enables the device to drive multiple connection mode of passive loundspeaker. For detail , please take the table for reference:

1*60W
(4Ω)

【60W Power】

1*60W   1*60W
(4Ω)     (4Ω)

【120W Power】

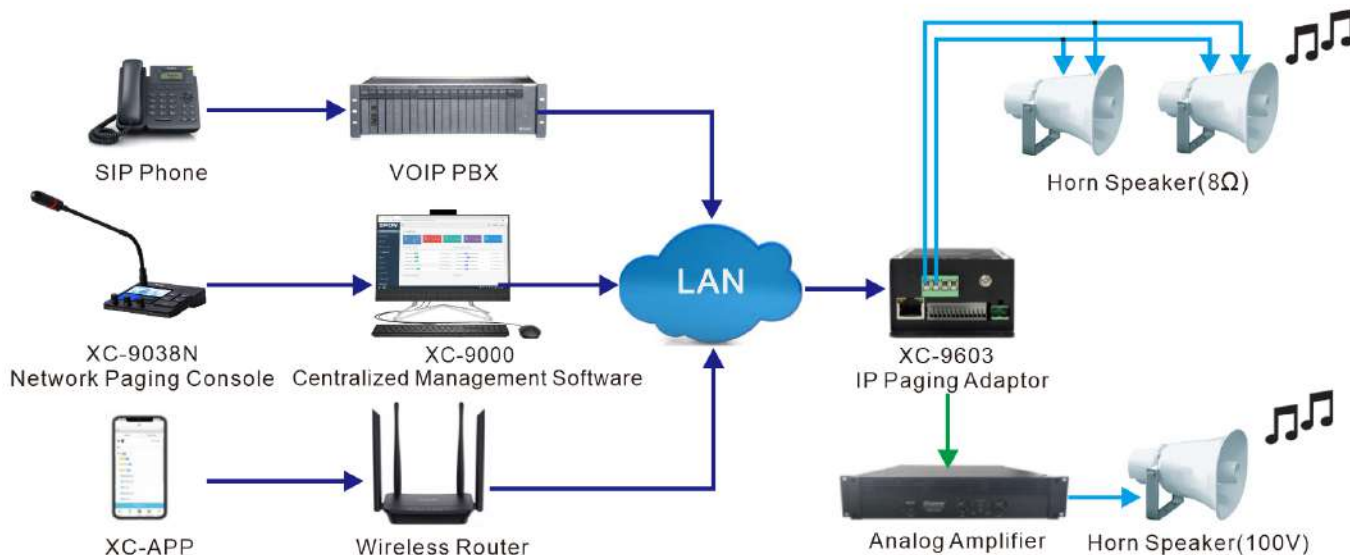| Power Output | Loudspeaker | Connection Mode | Recommend Passive Speaker |
|---|---|---|---|
| 60W | 1×60W/4Ω | Direct | - |
| | 2×30W/8Ω | Parallel | SPON™NAC-2503 30 Watt 8 Ohm Horn Speaker<br>SPON™ NAC-301X 30 Watt 8 Ohm Cabinet Speaker<br>SPON™ NAC-301H 30 Watt 8 Ohm Cabinet Speaker |
| | 4×15W/4Ω | Series-parallel | - |
| 120W | 2×60W/4Ω | Direct | - |
| | 4×30W/8Ω | Parallel | SPON™NAC-2503 30 Watt 8 Ohm Horn Speaker<br>SPON™ NAC-301X 30 Watt 8 Ohm Cabinet Speaker<br>SPON™ NAC-301H 30 Watt 8 Ohm Cabinet Speaker |
| | 4×15W/8Ω | Parallel | SPON™ NAC-2509 15 Watt 8 Ohm Horn Speaker |
| | 4×10W/8Ω | Parallel | SPON™ NAC-301C 10 Watt 8 Ohm Wall Mount Speaker<br>SPON™ NAC-301F 10 Watt 8 Ohm Wall Mount Speaker<br>SPON™ NAC-2507 10 Watt 8 Ohm Horn Speaker |
| | 8×15W/4Ω | Series-parallel | - |

# CONNECTION DIAGRAM



**XC-9000 Server Software**
Centralized device/volume/zone management and scheduled music broadcasting

LAN

**10BASE-T/100BASE-TX RJ45**
Connecting to Ethernet switch via CAT5e/CAT6 Ethernet cable

**Amplifier Output 01**
(60W/4Ohm)

**Amplifier Output 02**
(60W/4Ohm)

Passive Wall-Mounted/Ceiling/Horn Speakers
(4Ohm/8Ohm Constant Resistance)

**DC 24V/5A Power Input**

**Line Input**
Connecting to external audio source equipments such as CD/MP3 player or AM/FM tuner

GND

GND

**Mic Input**
Connecting to external mic for loop detection or dynamic volume control

**Status Indicator Light Interface**
Indicating whether the device is online/offline and working/idle

Digital Sound Pick-Up

Bi-Color LED Indicator Light

**Line Output**
Connecting to legacy analog amplifier with input impedence between 600Ohm and 10kOhm

**Relay Output 02**
Normally Open (NO) Dry Contact

NO

COM

LED Strobe Light

COM

NC

Electronic Door Lock

**Relay Output 01**
Normally Closed (NO) Dry Contact

100V

COM

COM

100V

Passive Wall-Mounted/Ceiling/Horn Speakers
(100V Constant Voltage)

**Relay Input 02**
Normally Open (NO) Dry Contact

NO

GND

Manual Call Point

GND

NO

**Relay Input 01**
Normally Open (NO) Dry Contact

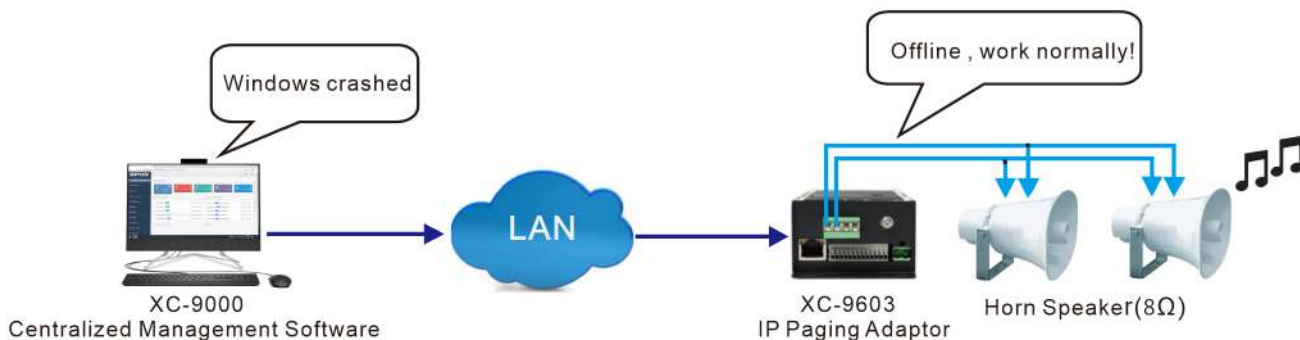Heat/Smoke/Carbon Monoxide Detectors

# APPLICATION

## ▌ Application 1

The IP paging adaptor XC-9603 can receive real-time voice announcement initiated by the 3-rd party VOIP telephone 、 SPON IP paging microhone/APP(Windows、Android/IOS),etc. With built-in amplifier and line output interface, the voice can be transmitted to external passive speaker for amlification.
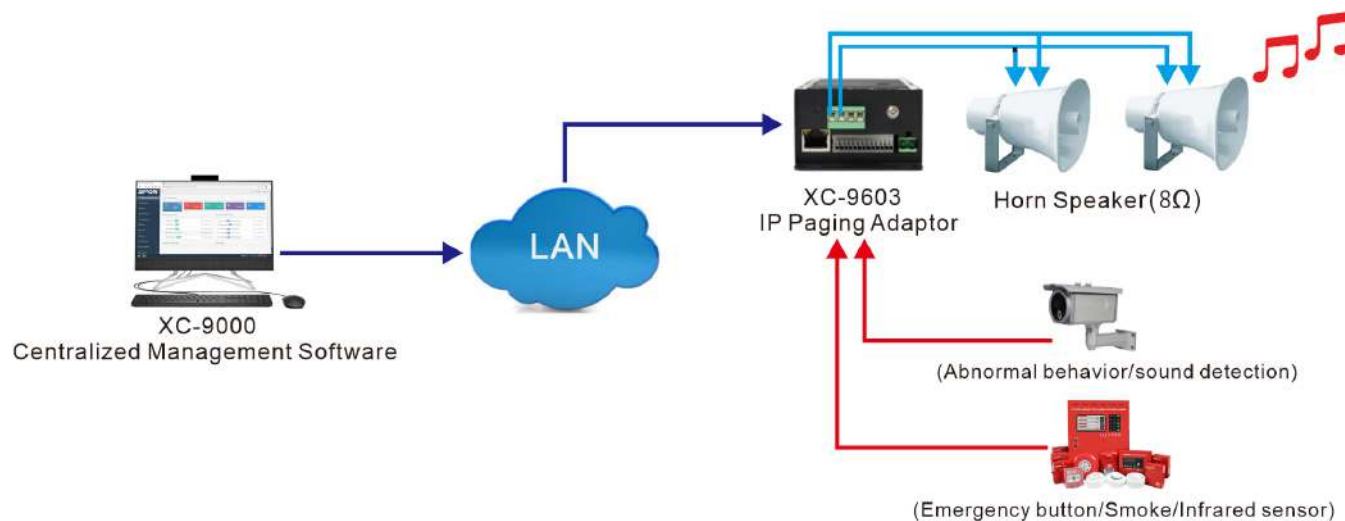


## ▌ Application 2

The IP paging adaptor XC-9603 support to receive offline timed broadcasting , the offline timed tasks need to be pushed to the FTP of XC-9603, when the windwos crashed , the system can normally work .
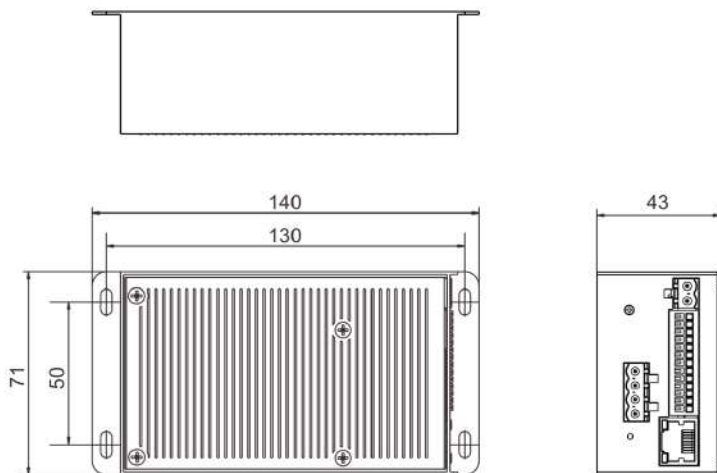
# APPLICATION

## ▌ Application 3

The IP paging adaptor XC-9603 support to automatic broadcast the alarm tone when receiving relay input signal from the 3-rd party system (For example ,IP camera of surveillance system 、 Emergence button of Fire alarm system) , the alarm tone needs to be pre-uploaded to the FTP of XC-9603 .

# DIMENSION DRAWING

The IP paging adaptor xc-9603 is suitable for wall mounting. Four plastic expansion sleeves and four m3 * 4 half round head tapping screws are used to fix the equipment at the required position on the wall according to the following appearance installation dimension drawing.

SPON Communications Co., LTD