

Hybrid Series



GEN-5301P50

Network Integrated Amplifier

The GEN-5301P50 is an AC-powered, network-integrated amplifier featuring a built-in Class-D digital amplifier and supporting 100V/70V output. It can receive SIP calls from phones or VMS platforms, handle up to 20 multicast streams, and store up to 20 audio files. In addition, it includes priority management, a timer, Bluetooth connectivity, and custom actions that can be triggered via HTTP API.

SIP

Onvif

Multicast

100V/70V



MAIN FEATURES

▲ Network Audio Broadcast Function

The device supports audio broadcasting over an IP network, efficiently transmitting audio to multiple devices. This feature enables synchronized playback across different areas and locations, making it particularly suitable for large-scale sound systems and public address applications. Users can remotely manage audio streams over the network to ensure clear, real-time delivery of broadcast content.

▲ Multiple Input Source Support

The device provides a variety of audio input options to suit different application scenarios. It supports playback of locally stored audio files (MP3 or WAV formats) and accepts input from microphones or other external devices. In addition, it supports Bluetooth connectivity and other input sources, offering greater flexibility and adaptability for diverse applications.

▲ Remote Control and Management

This device features powerful remote control capabilities, supporting real-time management and configuration over the network. Users can control the device remotely via an API, selecting audio sources, setting scheduled playback tasks, and more. Additionally, broadcast events can be triggered remotely over the network, and system monitoring can be performed to ensure efficient operation and timely responses, greatly improving ease of management and overall operability.

SPECIFICATION

General	
Amplifier Topology	Class-D
Frequency Response	130Hz~18KHz(±3dB)
THD+N	< 0.1%@1KHz
SNR	≥85dB
Audio	
Audio Input Connectors	Line In 1#:1 x 3-Pin Phoenix Connectors,Balanced,500mV
	Line In 2#:1 x 3-Pin Phoenix Connectors,Balanced,500mV
	Mic In:1 x 6.5mm TRS,Balanced,50mV
	Bluetooth:1 x IPX1 External 2.4G Antenna
	Network:1 x RJ45 Connector
Audio Output Connectors	1 x 4-Pin Phoenix Connector(Power Output)
	2 x RCA Jacks(AUX Output)
Audio Output Power	70V/100V :1 x 500W
Audio Transmission	Multicast , ×20(Editable)
Audio Codec	Opus, PCMU (G.711u), PCMA (G.711a), G.722
Audio Stream	WAV (8/16/22/44.1/48 kHz sampling rate, 8/16 bits, mono/stereo), MP3(32/44.1/48 kHz sampling rate, 64-320kbps, CBR/VBR, mono/stereo).
Audio Storage	Max 20 audio files ,80MB
Audio File Format	WAV,MP3
Power Supply	
Input Voltage	100V~240VAC,50/60Hz
Standby Power Consumption	<10W
Maximum Power Consumption	<580W
Network	
Network I/F	100BASE-TX ,RJ45 Connector
Network Protocol	TCP/IP,UDP,HTTP,RTP,RTSP,ARP,ICMP,NTP,SIP,ONVIF
Config Method	Web Interface or DevConfig Tool

SPECIFICATION

Ohter Interface

USB	USB 2.0
Control Input	×2, 1 x 3-Pin Phoenix Connector
Control Output	×1, 1 x 3-Pin Phoenix Connector
EMC Out	×1, DC24V/2A
Accessory(Reserved)	×1

Mechanical & Environment Properties

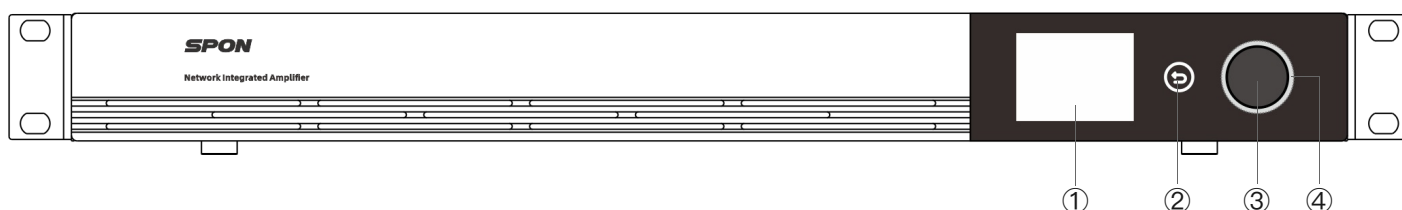
Mounting Method	Desktop,Wall Mount,Rack Mount
Installation Environment	Indoor Locations
Housing Material	Sheet Metal
Color	Gray+Black
Dimensions	483*317*44mm
Weight	4.2kg
Operating Temperature	0°C~+50°C
Warranty	2 Years

ACCESSORIES

1 × Power cord
1 × 2.4G glue stick antenna
2 × 6pin Terminal(3.81-6P)
1 × 4pin Terminal(7.62-4P)
1 × 2pin Terminal(3.81-2P)
8 × Countersunk Cross(M3*6)
2 × Hangers
4 × Foot pad
1 × Installation Manual
1 × Certification

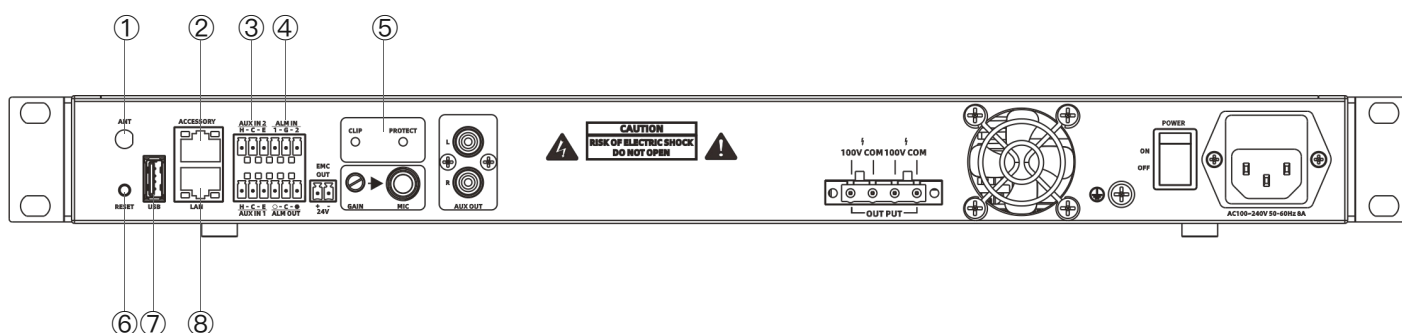
INTERFACE DESCRIPTION

[Front Panel]



- ① **Display Screen:** Displays information including network parameters.
- ② **Back Button:** Used to view parameters on the display screen and return to the previous menu.
- ③ **Shuttle Knob:** Used for menu navigation on the display screen; press to confirm a selection.
- ④ **Indicator Light:** Remains steadily lit by default and flashes when receiving a task.

[Rear Panel]



- ① **Antenna Interface:** External Bluetooth antenna
- ② **Accessory Interface:** Reserved
- ③/⑨ **Audio Input Interface:** For external audio source connection and local sound reinforcement
(H: Hot end, C: Cold end, E: Earth end)
- ④ **Alarm Input Terminal:** Used for receiving external dry contact signal triggers. Configurable interlinked tasks include: Pattern, Broadcast disable.
- ⑤ **Power Amplifier Status Indicators:**
CLIP: The indicator remains on when the input signal is too high or the output is overloaded.
PROTECT: The indicator remains on when the amplifier module is in protection mode or malfunctioning.
- ⑥ **Reset Button:** Press and hold the reset button for 10 seconds, then release. The device will automatically restart.
- ⑦ **USB Interface:** Supports USB drives in FAT32 format.
- ⑧ **RJ45 Connector:** Insert the network cable to connect the device to an Ethernet switch, allowing it to connect to the server properly.

[Rear Panel]



(● NC: Normally Closed; C COM: Common; O NO: Normally Open)

⑪ **24V Forced Trigger Output:** Follows the same status as the alarm output; when a relevant task is received, it outputs a DC24V strong-cut signal.

⑫ **MIC Input Interface:** Used for dynamic microphone connection and local sound reinforcement. The GAIN knob is used to adjust the microphone volume.

⑬ **Audio Output Interface:** Line output interface.

⑭ **Power Output Port:** Default constant-voltage 100V output; can be set to 70V via the web interface.

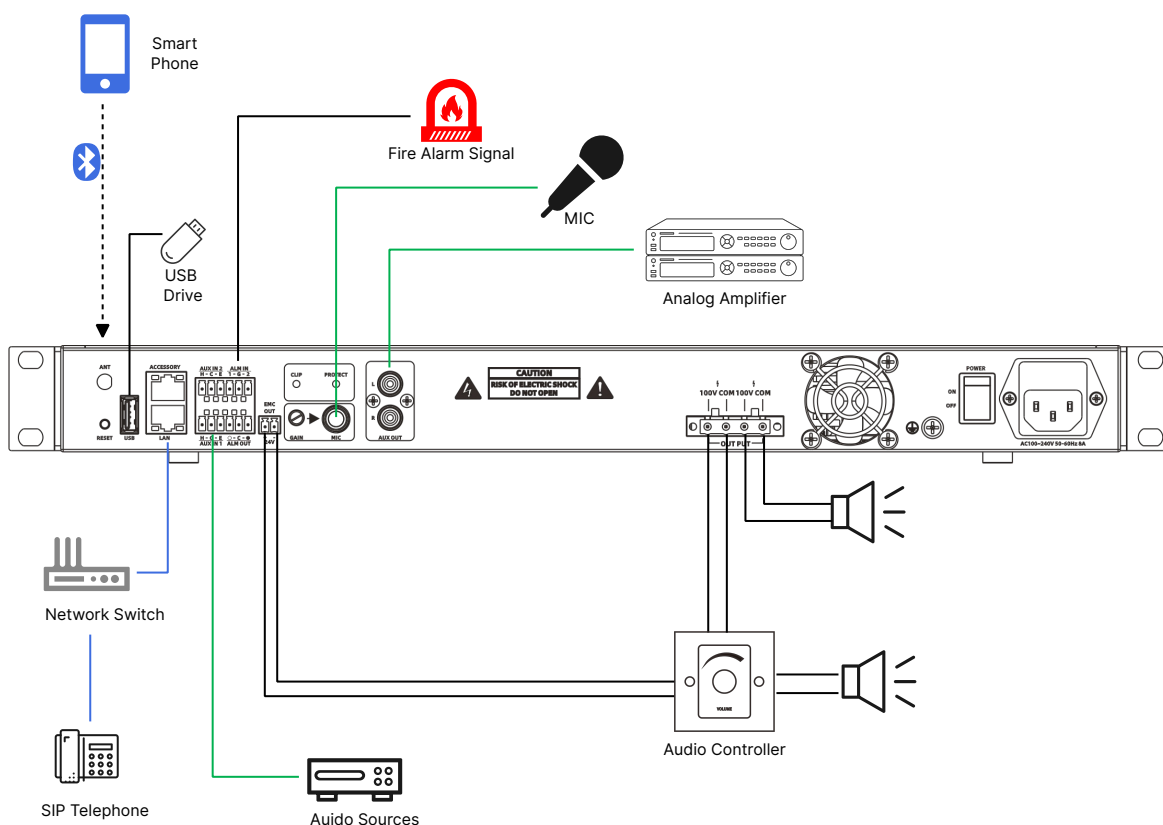
⑮ **Cooling Fan:** During installation, ensure that the fan outlet is not blocked, and try to keep a distance of more than 10 cm.

16 Ground Terminal: To ensure equipment safety and reliability, the ground terminal must be properly connected.

⑰ **Power Switch:** Used for turning the power on or off.

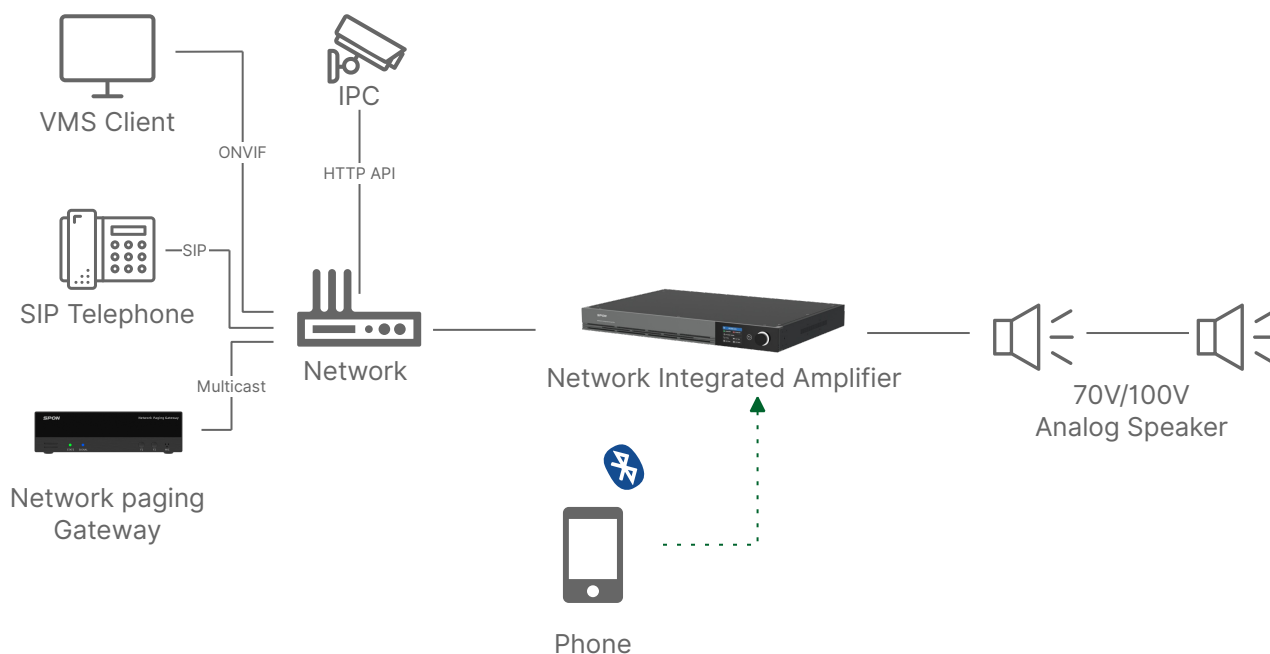
⑱ Power Input Interface: Used to connect the AC power supply input.

CONNECTION DIAGRAM



APPLICATION

The GEN-5301P50 Network Integrated Amplifier receives audio streams through protocols such as SIP, ONVIF, and multicast, and outputs audio to analog amplifiers or constant-voltage speakers. It supports multiple local audio inputs (microphone, line input, Bluetooth, and USB) for local broadcasting and background music. With a built-in Class-D digital amplifier that offers high efficiency and low heat generation, it is ideal for public address system setups.



INSTALLATION

unit:mm

