

MAG6468

IP Network Classroom Ceiling Speaker



Description

The IP network classroom ceiling speaker utilizes a professional-grade audio processing chip and operates on an embedded Linux operating system, ensuring stability and reliability. It manages network program sources with a 7-level or higher priority management function, divided into three categories: background broadcasting, service broadcasting, and emergency broadcasting. It supports playback of background music, emergency paging, and alarm signals from the system host. Additionally, it offers two local line inputs for expanding program sources and supports Bluetooth amplification for ensuring clear and bright audio output. With a built-in 2.4G wireless microphone receiving module, it allows for local amplification with compatible wireless microphones, supporting a one-teacher-one-microphone configuration. With high operational efficiency, this device is suitable for various settings.

Features

- Can play background music, emergency paging, alarm signals from the system host, with network program sources featuring a priority management function with over 7 levels, categorized into three main types: background broadcasting, service broadcasting, and emergency broadcasting.
- Employ 4×4.5-inch full-range speaker units, providing uniform 360-degree sound coverage for enhanced performance.
- Indoor sound field uniformity: The difference between the maximum and minimum steady-state sound pressure levels measured at various student seating points within the indoor environment should be within a range of 4dB.
- Speech transmission index for public address systems ((STIPA): ≤ 0.7 .
- Rated output power of the built-in amplifier: 4×15W.
- Support Bluetooth function: It is equipped with a built-in Bluetooth module of version 5.1, enabling wireless audio reception and convenient sharing of audio from mobile devices. It also allows for the modification of the Bluetooth username and password to prevent unauthorized connections.
- Wireless microphone teaching function: It includes a built-in 2.4G wireless microphone signal receiver module, enabling the use of a paired wireless microphone for local sound amplification. It supports

one-teacher-one-microphone usage, PPT page-turning, and laser pointer functions.

- WeChat mini program function: The speaker supports connection via the WeChat mini program, allowing independent volume adjustment for the sound units in all four directions (front, back, left, and right). It also enables individual volume control for different audio sources, including AUX IN line input, wireless microphone (MIC), Bluetooth, and network audio sources, as well as the ability to modify the audio source priority. Additionally, it provides the option to turn on/off or modify the speaker's color light effects.
- Audio source priority function: It supports flexible adjustment between three modes: network audio source priority, local audio source (Bluetooth, wireless microphone) priority, or a mixed mode combining both network and local sources.
- Support standard SIP protocol, allowing integration with SIP phone systems to enable paging and voice broadcasting via SIP phones or mobile phones.
- With 1 mono local line input and 1 stereo local line input for connecting a local integrated system or other audio source devices to expand program sources.
- With 1 stereo local line output for expanding local power output.
- Support remote web access to the speaker's web interface, with options to set password protection for the web interface and switch between Chinese and English. Once logged in, users can modify the speaker's IP address, SIP parameters, priority settings, and speaker channel parameters.
- Feature a built-in full-color working status indicator light strip, making the speaker's working status clearly visible from a distance. The device can display different lighting effects to indicate network playback, idle status, or offline status, and it offers ≥ 10 effects such as breathing light, flowing light, and gradient color light, with adjustable speed (high, medium, low).
- Include a built-in clock display screen to show the system time and device status. With a remote control, users can adjust the volume for local line input and network audio sources, as well as view or modify network parameters such as the device's IP address.

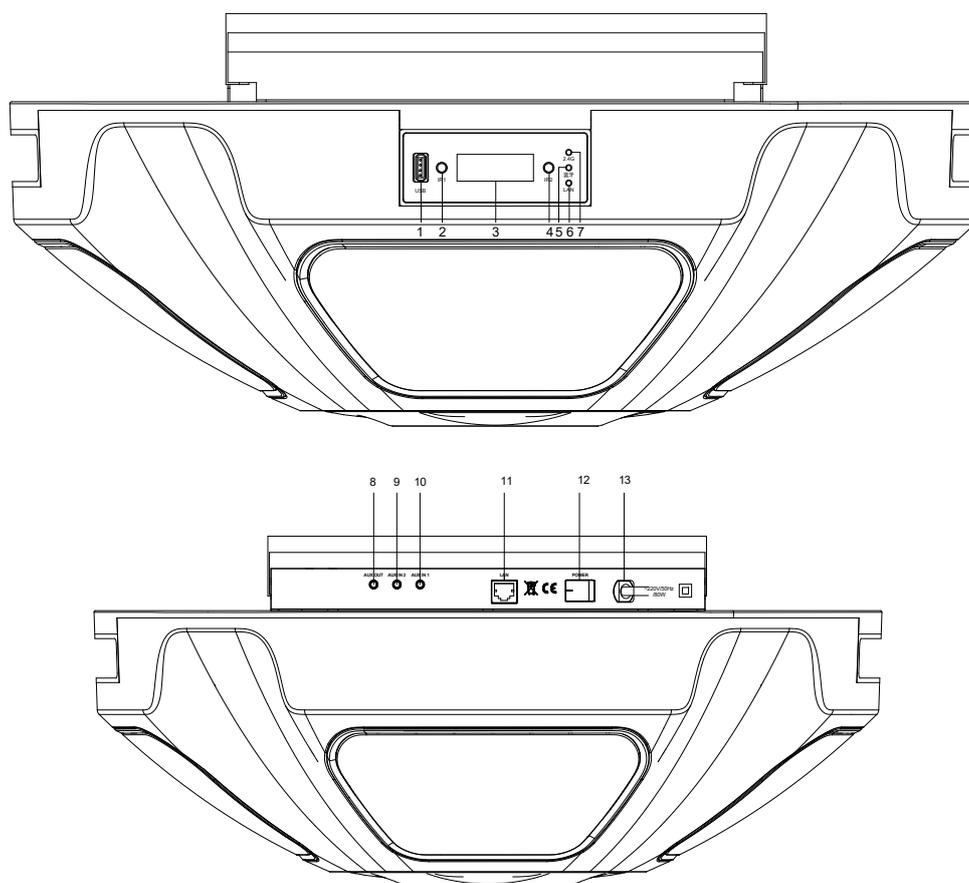
Specifications

	Model	MAG6468
AUX1	Input Sensitivity	300±50mV
	Frequency Response	20Hz-18kHz
	Distortion	≤0.6%
	S/N Ratio	≥76dB
AUX2	Input Sensitivity	300±50mV
	Frequency Response	20Hz-18kHz
	Distortion	≤0.55%
	S/N Ratio	≥76dB
Network Playback	Input Sensitivity	-10 (±1)mV
	Frequency Response	20Hz-18kHz
	Distortion	≤0.4%
	S/N Ratio	≥76dB
2.4G Wireless MIC	Input Sensitivity	80±10mV
	Frequency Response	150Hz-10kHz
	Distortion	≤0.7%
	S/N Ratio	≥70dB
Bluetooth	Input Sensitivity	-10±1mV
	Distortion	≤9%

	Frequency Response	20Hz-18kHz
	S/N Ratio	≥76dB
	Power Supply	AC220V/50Hz
2.4G Wireless Microphone		
	Transmission and Receiving Distance	≥10m
	AUX Input Sensitivity	80mV±10mV
	THD	<1%
	Frequency Characteristics	80Hz~10kHz (-3dB)
	S/N Ratio	≥70dB
	Transmission and Receiving Distance	≥10m
	Pairing Method	Automatic frequency matching, automatic frequency hopping, automatic frequency locking, 1-to-1 matching.
	Matching Distance	Set to within 3 meters, adjustable via the operational microphone.
	Outer Packaging Dimensions (L×W×H mm)	750×595×300mm
	Machine Dimensions (L×W×H mm)	Φ510×200mm
	Gross Weight	12kg
	Net Weight	8kg

Front / Rear Panel

Appearance Description



1. USB Interface

Debugging interface.

2. Wireless Microphone Infrared Frequency Pairing Point

When using infrared frequency pairing for the wireless microphone, it should be oriented in this direction.

3. Clock Digital Display Screen

The digital display screen shows the device's time and status.

4. Remote Control Point

Point the remote control towards this direction to view or modify the speaker's parameters.

5. Bluetooth Status Indicator

This indicator light turns on when the Bluetooth connection is successful.

6. Network Connection Status Indicator

This indicator light turns on when the device is online and turns off when the device is offline.

7. 2.4G Wireless Microphone Connection Status Indicator

This indicator light turns on when the 2.4G connection to the speaker is successful.

8. Stereo Output Interface (AUX OUT)

Connect to other amplifiers to expand the power of this terminal.

9. Stereo Input Interface (AUX IN2)

Connect to audio source devices to expand the program sources for this unit.

10. Mono Input Interface (AUX IN1)

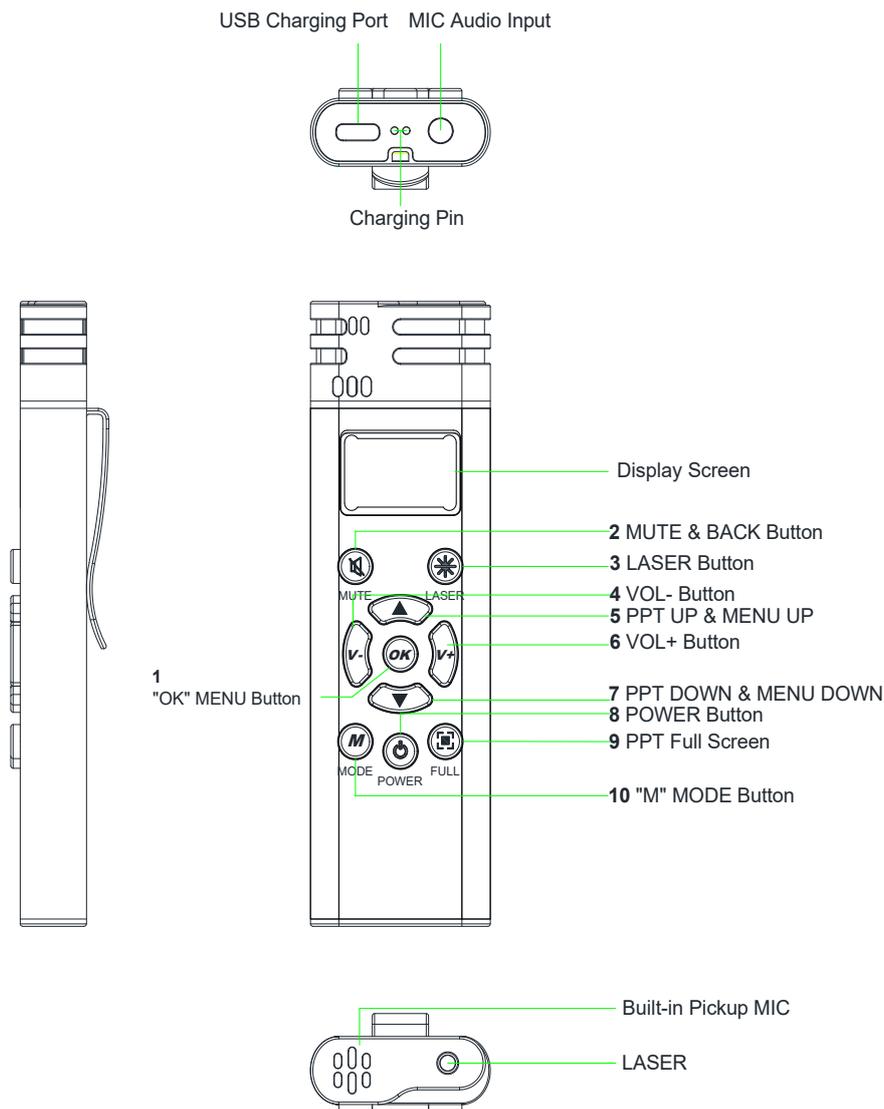
Connect to audio source devices to expand the program sources for this unit.

11. Network Interface

12. Power Switch

13. Power Cord

2.4G Wireless Microphone



1. "OK" Main Menu Button	<p>1. Confirm button.</p> <p>2. Enter the main menu, which displays "PPT Settings", "Built-in Card Playback", "Playback Mode Settings", "Reverb Settings", and "System Settings".</p> <p>3. Press and hold the OK button to enter recording mode, press and hold the button again to exit recording.</p>										
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2. Mute Button	<p>1. The upper left corner is the mute button; press once to mute, and press again to unmute.</p> <p>2. It also serves as the back button. Press to return to the main interface.</p>										
3. Laser Button	The upper right corner is the laser button; press to activate the laser pointer for teaching use; it requires a long press. When the laser button is pressed, it projects an infrared laser for use as a teaching pointer. The laser pointer can be used without activating the microphone.										
4/6. Volume Control Buttons	"+" is the volume increase button, and "-" is the volume decrease button. A short press of the "+" button increases the volume, with a maximum of 32. A short press of the "-" button decreases the volume, with a minimum of 0. You can adjust the volume of the handheld microphone (MIC) and AUX.										
5/7. Page Turning Button	"^" is the page up button, and "v" is the page down button. These buttons are used only in function setting selections and PPT page turning.										

8. Power Control Button	Press and hold the power button to turn the device on or off (press and hold the power button for 1-2 seconds to operate). It displays “Hello.” when powered on and “Bye.” when powered off.
9. PPT Full Screen Switch Button	The lower left button is PPT full screen switch button. After connecting to a computer and opening PPT, pressing it will enlarge the PPT page to full screen. Pressing it again will restore the PPT page to its original size.
10. “M” Mode Button	1. Mode switching. 2. MP3 Pause/Play Button.

Notes:

- For first-time use of PPT, pairing is required. First, enable the PPT function and insert the PPT receiver. Simultaneously press the up and down buttons to pair; the PPT icon will stop flashing and remain lit when pairing is successful. The PPT button operations are disabled during menu navigation.
- After a successful 2.4G audio connection, if you need to connect to other receiving devices, you should power off and restart to pair again.

Remote Control

The structure of the remote control is as shown in the figure on the right.

1. Mute Button.

2. Number Keys:

Used for setting IP addresses and configuring parameter values.

3. Volume Down (V-):

Used to decrease the output volume of the terminal.

4. F7: Play/Pause Button:

Repeatedly press this button to toggle between play and pause during playback.

5. Volume Up (V+):

Used to increase the output volume of the terminal.

6. F3:

IP Address View/Modify Button. Press once to enter viewing mode. Press CH+/CH- to select the parameter you want to view. Press F3 again to enter the setting mode. After modifying, press Enter to save the changes; otherwise, the modifications will not be saved. Press Cancel to exit without saving.

7. F1: Volume Setting Button:

Select the audio source to be modified. Once selected, press V+ and V- to adjust the volume. (AUX1 is mono, AUX2 is stereo, MIC1 is microphone input, MP3 is for network or USB audio sources.)

8. Screen Sleep Button

In idle mode, it functions as a screen sleep button; during active tasks, it triggers the screen to remain on.

