

MAG6301 MAG63PL

Network Wireless Zone Explanation System



MAG6301

Network Wireless Zone Explanation Terminal



MAG63PL

Positioning Tag

Description

The system provides wireless zone explanation function to meet the needs for amplification of live explanation, and shares the broadcasting speakers for sound reinforcement without being affected by the broadcasting, enabling seamless and smooth switching among the explanation areas, allowing the on-site docent to switch his explanation freely while walking from one area to another, and truly realizing the explanation effect of “sound starts from the arrival of people and stops at their departure; sound moves along with people, as if shadowing them”.

The system features a variety of functions such as broadcasting, timing playback, paging and fire alarm of the network public address system, as well as automatic zone explanation.

Features

- With all functions of the network system such as background music playback, timing broadcast, paging and fire alarm.
- The system shares the broadcasting speakers for sound reinforcement of live explanation without being affected by the broadcasting, enabling seamless and smooth switching among the explanation areas, allowing free switching of explanations of the on-site docent while walking from one area to another.
- Adopt UWB technology for accurate detection, and calculate the distance from the people to the base station through the flight time of the electromagnetic wave from the tag to the base station, with an

error accuracy of up to about 10cm.

- Work with the system host for multi-zone timed explanation and cycle explanation.
- Support priority settings for audio sources of the terminal, with the highest priority given to the wireless microphone, and provide three priority modes, including local priority, network priority and mixed.
- Support mixed output when more than one docent speaks in the same zone, and allow up to 4 different docents to speak in turn.
- In the same system, up to 200 docents can speak simultaneously without interfering with each other.
- The live explanation is not affected in an offline state.
- With explanation zone grouping function. When there is a docent in the grouped zone, a certain channel will be activated, and all the channels corresponding to the grouped zone will be activated.
- All areas are centrally managed and controlled by the server.

Network Wireless Zone Explanation Terminal Features

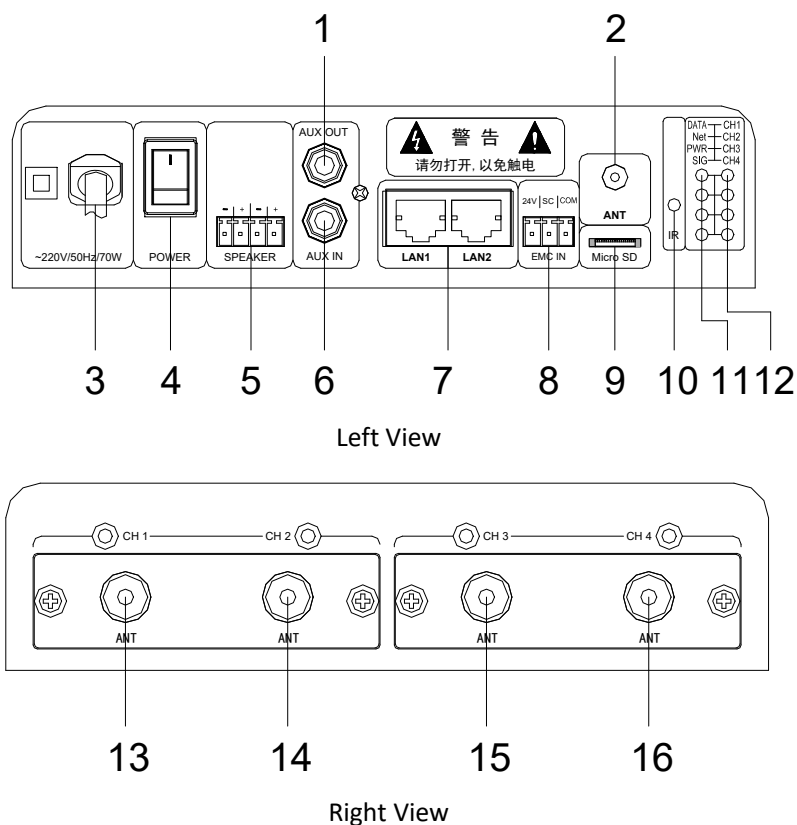
- With a built-in industrial-grade special network audio decoding chip to broadcast background music, emergency paging, alarm signals, etc. from the system host. With more than 7 levels of priority level management function for network program sources, including background broadcast, service broadcast and emergency broadcast.
- Support up to 48kHz sampling rate 16-bit digital audio stream decoding.
- With a built-in 2×20W digital amplifier to connect two 20W/4Ω passive speakers for live sound reinforcement.
- Compatible with DHCP, TCP, UDP, ICMP, IGMP, ARP and other standard network protocols.
- With a built-in centimeter-level high-precision UWB module, with an error accuracy of up to about 10cm.
- With a built-in 2/4-channel U-band wireless microphone receiver module, allowing the modification and adjustment of the receiving frequency band on the host and web side, with a wireless transmission distance of about 100m in the unobstructed state.
- With plug-in design, one zone can support 2 or 4 explanation modules.
- Come with 1 AUX IN and 1 AUX OUT to expand the local audio source and local power.
- Support remote access to the web page of the terminal device through the network and remote modification of the IP address and related parameters of the device.
- Support linkage control for automatic explanation function. When the linkage input signal is triggered, the device can automatically play the pre-produced audio file.
- Come with dual network ports, and support hand-in-hand connection.

Specifications

System Indicators	Parameters
Frequency Range	632-695.25MHz
Adjustable Range	60MHz
Channel Spacing	250KHz
Frequency Stability	Within ±0.005%
Dynamic Range	88dB
Maximum Frequency Deviation	±45 KHz
Audio Response	140Hz-12KHz(±3dB)
Comprehensive S/N Ratio	>70dB
Comprehensive Distortion	≤1%
Operating Temperature	-10℃ — +40℃

Effective Service Range	≤100m (in open environment)	
Wireless Interface	BNC/50Ω	
Sensitivity	≤-95dBm	
Spurious Rejection	≥75dB	
Terminal Indicators		Parameters
AUX IN	Input Sensitivity	350 mV±50mV
	Frequency Response	40Hz-16kHz(±3dB)
	Distortion	≤1%
	S/N Ratio	≥70dB
AUX OUT	Output Sensitivity	1000 mV±100mV
	Frequency Response	40Hz-16KHz(±3dB)
	Distortion	≤1%
	S/N Ratio	≥70dB
Maximum Output Power of Built-in Amplifier (Independent Channel Mode)	20W/4Ω	
MIC IN	Input Sensitivity	10 mV±2mV
	Frequency Response	140Hz-12kHz(±3dB)
	Distortion	≤1%
	S/N Ratio	≥70dB
SD/NET/MP3 Playback	Output Sensitivity	≥9V
	Frequency Response	40Hz-16kHz(±3dB)
	Distortion	≤1%
	S/N Ratio	≥70dB
Power Supply	AC220V/50Hz	
Overcurrent, overheat, overvoltage, undervoltage protection	Satisfied	
Package Dimensions (L×W×H)	375×280×110mm	
Machine Dimensions (L×W×H)	253×228×50.5mm	
Net Weight	1.85kg	
Gross Weight	2.6kg	
Positioning Tag Indicators		Parameters
Operating Frequency	3-8GHz	
Battery Power	500MAH	
Antenna Gain	≥2dbi	
Operating Temperature	0℃~85℃	
Storage Temperature	0℃~70℃	
Operating Humidity	0 to 95%, no condensation	
Protection Level	ip67	
Product Dimensions	110×65×10mm	
Net Weight	30g	
Charging Voltage	5V	

Wireless Zone Explanation Terminal Side Panel



1 Auxiliary Output Port (AUX OUT)

Connected to an amplifier to expand the power of the terminal.

2 UWB Positioning Antenna Connector

Used to connect the antenna.

3 AC220V Power Cord

Supply the working power to the machine.

4 Power Switch (POWER)

Press the “I” position to turn on the machine, while press the “O” position to turn off the machine.

5 Local Amplifier Output Port

The unit has a built-in 2×20W digital amplifier, with 20W for each output port.

Connected to two constant resistance (4Ω) speakers respectively.

6 Auxiliary Input Port (AUX IN)

Connected to an audio equipment (e.g. DVD) to expand the program source for this unit.

7 Network Interface (LAN1/LAN2)

This machine is designed with dual network ports and supports hand-in-hand connection to the network switch.

8 Linkage Playback Input Port

Support high-level trigger (5-24V) and short-circuit trigger. When the linkage input signal is triggered, the device can automatically play the pre-produced audio file.

9 SD Card Slot (Micro SD)

Insert an SD card with the host timing points into this slot. When the terminal is offline, it can provide audio sources to the host for timing broadcast.

10 Infrared Frequency Pairing Window (IR)

Used for infrared frequency pairing with the handheld microphone.

11 Working Indicator

➤ **Audio Stream Data Indicator (DATA)**

This indicator light lights up when audio data is received.

➤ **Network Indicator (NET)**

This indicator light lights up when the machine is successfully connected to the host via the network.

➤ **Power Indicator (PWR)**

This indicator light lights up when the machine is powered on.

➤ **Amplifier Output Level Indicator (SIG)**

This indicator light lights up when there is a signal output from the terminal amplifier. This indicator light gradually gets brighter when the amplifier becomes louder; this indicator light gradually gets dimmer when the amplifier becomes quieter.

12 CH1-CH4 Wireless Microphone Channel Indicator

When CH1-CH4 indicators are normally on, it indicates that the four channels are online; when off, it indicates that the channels are offline; when flashing, it indicates that the channels are open and working normally.

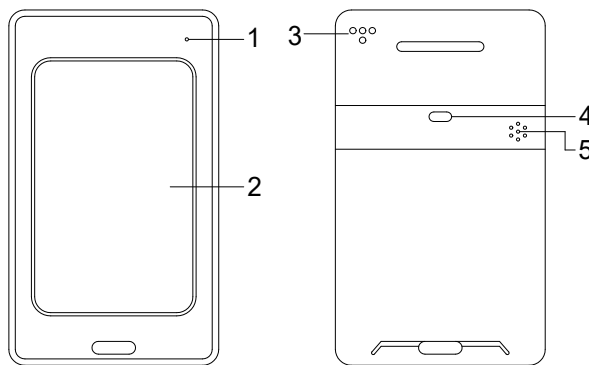
13 Channel 1 U-Band Antenna Connector (632-644.25MHz)

14 Channel 2 U-Band Antenna Connector (649-661.25MHz)

15 Channel 3 U-Band Antenna Connector (666-678.25MHz)

Channel 4 U-Band Antenna Connector (683-695.25MHz)

Positioning Tag Appearance



1. Working Indicator

- The indicator light flashes green when the tag is successfully connected to the terminal;
- the indicator stop flashing and turns off when the tag is powered off.

2. Badge Holder

Used for the docent to put in his own work badge.

3. 5V Charging Port

4. Ranging Tag Power Switch

Press and hold the button to power it on/off.

5. Buzzer

There will be a beeping sound for power-on/off.