ARISTEL

Public Address System

IP Network Ceiling Speaker   **AN6311**

User Manual

Thank you for using our public address system. Please read this User Manual carefully to make better use of this equipment.

This page is left blank for users' notes.

About the User Manual

This User Manual is available and effective upon completion of development of the AN6311 Ceiling Speaker. The User Manual includes system description, matters needing attentions in use, instructions on system connection, instructions on use of product and technical specifications of the terminal. Please read this User Manual carefully before connection, installation and use and operate in accordance with corresponding instructions in the Manual.

⚠ This symbol on the rear panel indicates matters needing attention, please use or operate the product in accordance with corresponding instructions.

Please keep this User Manual for future use.

PoE—V2.3

Edition 2.1

Contents

I. Product Description
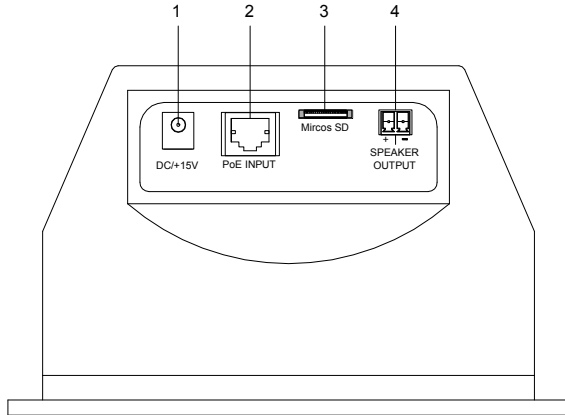
1.1   About AN6311 Ceiling Speaker

The AN6311 ceiling speaker is a network full-digital & analog-digital conversion signal processor based on the SIP transmission protocol. It can be mounted in any place accessible to a network. The remote audio data steam can output as an audio signal through the equipment with intelligent host control.

1.2   Features

- Can be mounted to any place accessible to a network.

- Supports maximum 48kHz sampling rate, 16bit digital audio stream decoding.

- Built-in 2×9W digital amplifier.

- Can play background music, emergency paging, alarm signals from the system host.

- Can operate as a loud ringer for PBX systems.

- Local output volume and local play status can be controlled.

- Provide a complete interface that complies with the IEEE 802.3af / at standard of the Power over Ethernet (PoE) system and a DC15V power supply interface, with two optional power supply modes for switching.

- Appealing design and easy to install.

II. Appearance Description

2.1 Side Panel

1   Power supply interface

DC power supply. (Note: You can use this interface for power supply when not using PoE power supply)

2   PoE interface

Connect a PoE switch with 48V with AT mode output when used for data and power transmission.
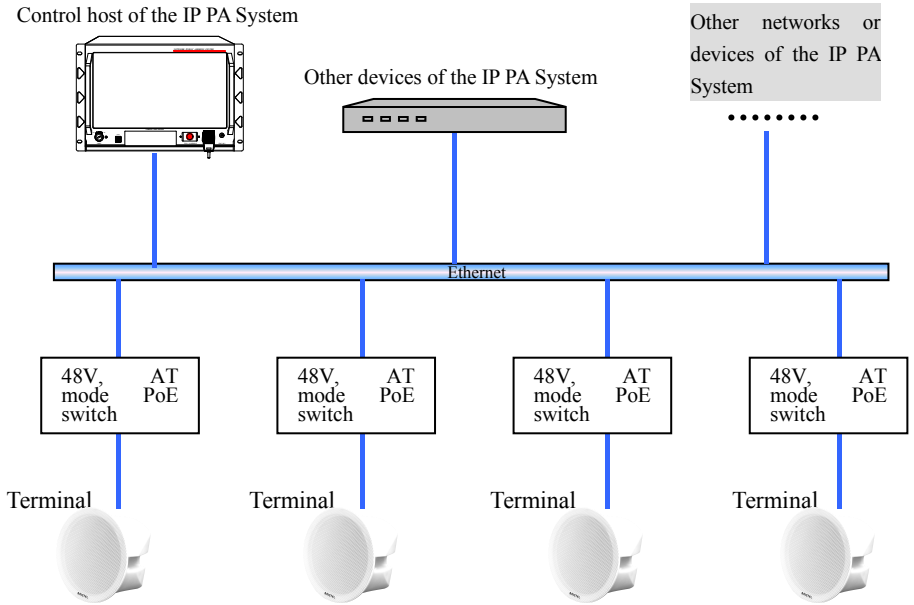
3   Micro SD

Reserved for later .

4   Speaker output

Built-in 2×9W digital amplifier (Note: Please be careful when using the two simultaneous outputs due to the power limitation of the PoE switch), which can only drive its own speaker with constant resistance (8Ω).

III. Connection Diagram

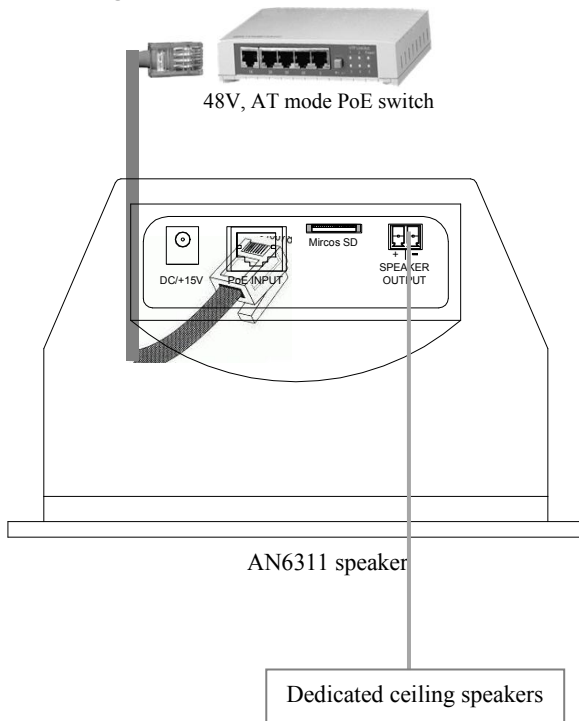## 3.1 AN6311 Application Diagram in the System

Control host of the IP PA System

Other devices of the IP PA System

Other networks or devices of the IP PA System

Ethernet

| 48V, AT mode PoE switch | 48V, AT mode PoE switch | 48V, AT mode PoE switch | 48V, AT mode PoE switch |

Terminal   Terminal   Terminal   Terminal

Note:

① The above figure illustrates the connection diagram of the AN6311 approximate application, Please refer to the user manual of the network control host for the whole system connection.

② The above figure is for illustrative purposes only. Please refer to the system connection diagram for specific connection.

③ The AN6311 in the system must be powered by 48V IEEE802.3at standard switch port, and set the corresponding address before connecting with the host.

④ Due to the PoE power supply mechanism, it is normal for the device to be temporarily disconnected and online when it is powered on.
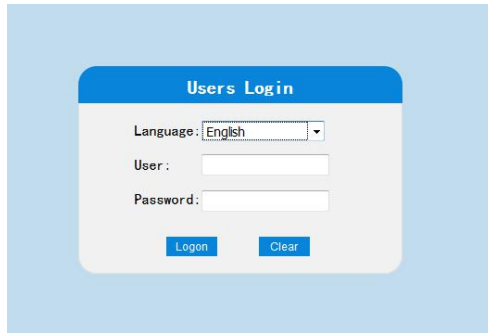
3.2 AN6311 Interface Connection Diagram

Interface connection diagram

48V, AT mode PoE switch

DC/+15V   PoE INPUT   Mircos SD   SPEAKER OUTPUT
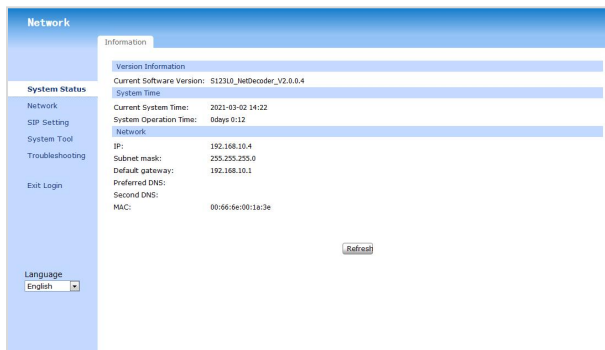
AN6311 speaker

Dedicated ceiling speakers

IV.   Terminal WEB Function Settings

Make sure that the device and your computer are on the same LAN network. After connecting the computer and the terminal, enter the IP address displayed on the equipment label (default 192.168.5.3) into the IE browser as shown below, and then enter the user name: admin, password: 123456 for login.

After successful login, enter the interface as shown below.

1) System Status

Can view the current software version, system time and device network details.

2) Network Settings

The network connection mode of the device. Please select an appropriate network mode according to the actual network environment. The device provides two network connection modes:

Static IP mode (Static): You can select this option. After selecting, fill in the static IP address, subnet mask, gateway, DNS domain name, primary DNS, and backup DNS.

DHCP mode: In this mode, network-related information will be automatically obtained from the DHCP server,

and you do not need to manually enter these fields.

3 SIP Settings

Registration status: The SIP registration status of the device can be displayed. If the registration is successful, it will be displayed as registered, while if it is not successful, it will be displayed as unregistered.

Username: The account for SIP registration.

Password: The password of the account for SIP registration.

Server address: Server address for SIP registration.

 Server port: Server signaling port for SIP registration.

SIP automatic answering switch: When it is turned on, the device will answer automatically when there is a SIP phone connected. Alternatively, you can disable auto answer to use the device as a PBX loud ringer.

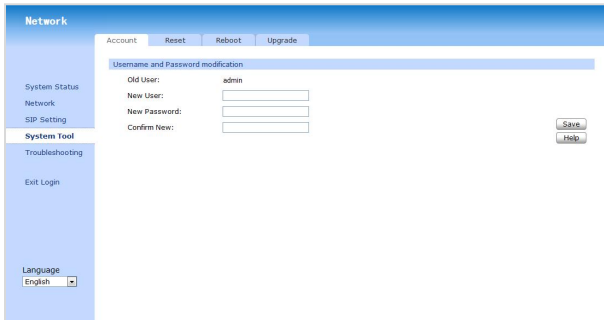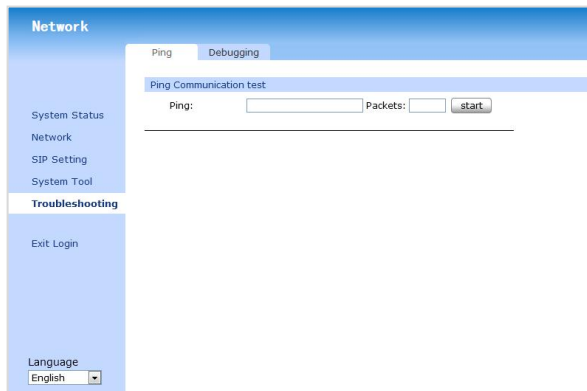Device volume control: You can set the device volume level.

4) System Tool

you can modify the login username and password, restore factory settings, restart the device, and upgrade

the software on the WEB end of the device.

5) Troubleshooting

Trouble shooting can be performed on the WEB end through the Ping function and remote debugging.

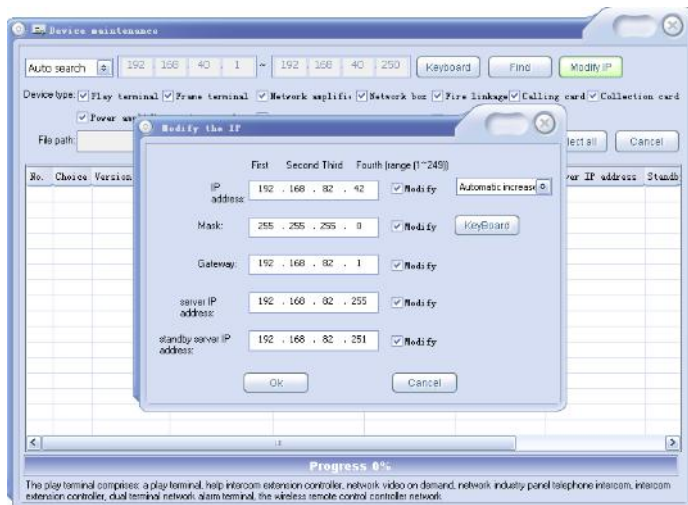# V. IP Address Setting of the Terminal on the Host

This speaker can be customized for the network parameters. Please read this section carefully if you need to use this function. The alteration methods are as follows:

Method 1：

1. IP address of host / computer alteration requires IP address of host / computer and the terminal address on the same network segment. For example, the terminal IP address is 192.168.5.3, while the IP address of host / computer should be 192.168.5.XX (Note: There shall be no IP conflict for the set IP);

2. Enter the IP address of the terminal on IE browser after connecting host / computer and the terminal (Please refer to the network setting above).
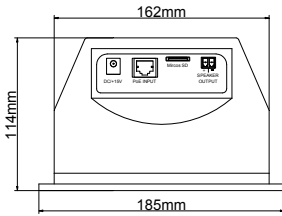
Method 2:

1. Enter the host software "Settings" -> "System Maintenance" -> "Device Maintenance".

2. Find the IP address of the indoor ceiling speaker, select and click "Modify IP".

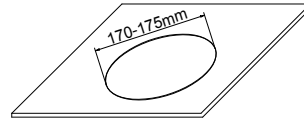3. As shown in the Pic. 3 below, modify the parameters and click OK to display Success.

(Pic. 3)

VI. Installation

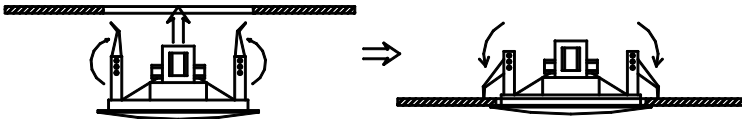**Dimension**   **Mounting hole**

Just 120mm headroom above your ceiling.

1. Cut a diameter of 170-175mm mounting hole on the ceiling (as shown above).

2. Adjust the spring clip locating bolt to make the height of the spring clip adapted to the ceiling with different thickness:

Locating pins are located in the upper hole, the middle hole, the lower hole to suitable for the ceiling of 20mm above, 10-25mm and 15mm below respectively.

3. Insert the spring clip on both sides of the speaker into the mounting hole, then release, and push the speaker into the ceiling (see below). **To avoid spring pinch, it is recommended to wear gloves when doing this.**

4. Finally, check that it is secure and reliable.

Safety Precautions

1. Safety Precautions

- Please do NOT connect this device to the power source, before the system is correctly wired.
- It is important to ensure that input voltage to the device is the same as required voltage of the device, otherwise the device may be damaged.
- There is dangerous voltage in the device, which may cause personal electric shock. Please do NOT open the case without permission, to avoid potential risks of electric shock.
- The device is not completely disconnected from power source when it is switched to "OFF". For sake of safety, please disconnect the device from the socket if it is not in use.
- Please do NOT place the device where it is extremely cold or hot.
- Good ventilation must be provided in the working environment of the device, to avoid excessive temperature during its operation, which may cause damages to the device.
- Please unplug the device from power socket in raining and wet days or if the device is not in use for a long time.
- Please disconnect the power plug from sockets, to ensure the device has been completely disconnected from power source, before any component is removed from or re-installed in the device or before any electric connector of the device is disconnected or reconnected.
- In case of any failure of the device, please do NOT open the case and repair without permission from a professional personnel, to avoid accident or additional damages to the device.
- Please do NOT place any corrosive chemicals near or on the device.

2. Matters needing attention

- Our company provides a one year free warranty service (including free replacement parts) over quality issues as from the date of purchase, provided that the device is installed and used in accordance with requirements specified in the User Manual.
- For warranty, the user must show the Warranty Card and the receipt kept by the user and purchase invoice of the device as supporting documents.
- The following conditions are beyond the scope of warranty:
    1. Product damage due to improper installation, use or handling;
    2. Product damage due to abnormal conditions (such as excessive power source voltage or ambient humidity);
    3. Product damage due to natural disasters;
    4. Product SN is changed, altered or removed;
    5. Product has been repaired or modified by any person without duly authorization from our company;
- Please keep the User Manual and Warranty Card in good custody.
- For issues and precautions not mentioned in this User Manual, if required, please contact the distributor or visit our website.
- In case of any failure in the warranty period, please contact service personnel (or distributor) of our company for service. The company shall not be liable for damages due to unauthorized dis-assembly or maintenance or service by unauthorized personnel.

Specification

Item		Parameter
Model		AN6311
Tone Adjustment	Bass	0～14 (±2) (60Hz)
	Treble	+7，-8 (±2) (10KHz)
THD		≤1%
Effective Output Power		≧9W
Input Sensitivity		-10±1dB
Frequency Response		40-18KHz (±3dB)
SNR (A)		≧70dB
Power		2×9W
Power Supply		IEEE 802.3 at PoE
Package Size		255×255×185mm
Machine Size		Φ185×114mm
Gross Weight		2.5kg
Net Weight		1.5kg

Packing List

No.	List	Quantity
1	Ceiling Speaker	1 piece
2	Crystal Head	2 pieces
3	2P Green Plug 2.5MM	1 piece
4	User Manual	1 copy
5	Certificate / Warranty Card	1 copy / each

www.aristel.com.au

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