



Indoor Security Microphone

User Manual

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Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warnings” and “Cautions”

Warnings: Serious injury or death may occur if any of the warnings are neglected.

Cautions: Injury or equipment damage may occur if any of the cautions are neglected.

	
Warnings Follow these safeguards to prevent serious injury or death.	Cautions Follow these precautions to prevent potential injury or material damage.



Warnings

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- For the permanently connected device without a disconnect equipment, a readily accessible disconnect equipment shall be incorporated into the electrical installation of the connected building. Refer to datasheet for details.
- For the device powered on and off only by power plug and socket-outlet, the socket-outlet shall be installed near the device and easily accessible.
- Do not install devices for professional use in locations where children are likely to appear.
- Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- For the battery with + and - signs, + identifies the positive terminals of the device which is used with or generates direct current, and - identifies the negative terminals of the device which is used with or generates direct current.
- For the device with sound playing function, to prevent possible hearing damage, do not listen at high volume levels for long periods. Refer to the datasheet for details.



Cautions




- Keep the device in original or similar packaging while transporting it.
- Do not touch the sharp edges or corners.
- DO NOT drop the product or subject it to physical shock.
- Install the device according to the instructions in the Quick Start Guide.

- If the device supports wall mounting, the mounting surface shall be able to withstand the additional force of three times the weight of the device but not less than 50 N. The device and its associated mounting means shall remain secure during the installation.
- After the installation, the device, including any associated mounting plate, shall not be damaged. Refer to Quick Start Guide for details.
- If the device needs to be installed on the wall or ceiling,
- Install the device according to the instructions in Quick Start Guide.
- Attach the device properly to the floor/wall in accordance with the installation instructions to prevent injury. Refer to the Quick Start Guide for details.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- To avoid heat accumulation, good ventilation is required for a proper operating environment.
- If the device needs to be installed with a specific bracket of our company, use the corresponding bracket only. Use others (such as carts, stands, and carriers) may result in instability and cause injury. Refer to the device datasheet for bracket model details. Refer to datasheet for details.
- Please use a soft and dry cloth to clean the interior and exterior surfaces. Do not use alkaline detergents.
- Ensure correct wiring of the terminals, if it is required for the device, for connection to an AC mains supply.
- indicates hazardous live and the external wiring connected to the terminals requires installation by an instructed person.
- Refer to the device label for the standard power supply. Please make sure your power supply matches with your device.
- Use the power adapter that can work normally at an altitude over 2000 meters above sea level.
- This equipment shall be installed incorporated with UPS to avoid the risk of restart.
- The equipment has been designed, when required, modified for connection to an IT power distribution system.
- Use a power adapter provided by qualified manufacturers. It is recommended to provide an independent power adapter for each device as adapter overload may cause over-heating or a fire hazard.
- The equipment shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the equipment. Refer to the datasheet for details.
- DO NOT install indoor product where it may get wet by water or other liquid.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- To avoid fire hazard or electric shock, DO NOT expose the device to rain or extremely hot, cold, dusty, corrosive, saline-alkali, or damp environments. For temperature and humidity requirements, refer to the datasheet for details.
- DO NOT expose the device to high electromagnetic radiation.
- If the serial port of the device is used for debugging only, it is reserved only for professionals or technical support for device maintenance. Refer to the Quick Start Guide for details.
- identifies the battery holder itself and identifies the positioning of the cell(s) inside the battery holder.

- + identifies the positive terminal(s) of equipment which is used with, or generates direct current. - identifies the negative terminal(s) of equipment which is used with, or generates direct current.
- DO NOT touch the heat dissipation component to avoid burns.
- Do not listen to the device, if it has the audio playing function, at a high volume level for a long time to prevent possible hearing damage. Refer to datasheet for details.
- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.
- If the product does not work properly, please contact your dealer or the nearest service center. We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.
- If a power adapter is provided in the device package, use the provided adapter only. If no power adapter is provided, ensure the power adapter or other power supply complies with Limited Power Source. Refer to the product label for the power supply output parameters.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

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Chapter 1 Overview

1.1 Product Features

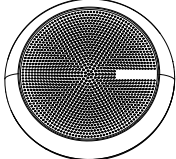
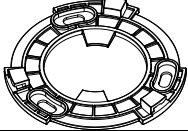
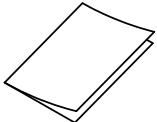

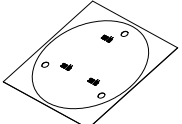
The main features of the device are as follow:

- With high sensitivity and high fidelity, this microphone can pick up sounds which come from all directions, including a clear sound and high anti-disruption ability.
- The built-in output driving circuit is able to directly drive earphones and other devices.
- This device is suitable for pick up sounds within a close range. 3 meters or closer/less will be the best range to pick up sounds.
- Support volume adjustment knob, which are used for adjusting volume according to surroundings.
- It is suitable for some practical situations like counter, cash register, meeting, negotiation, recording and so on.
- There are built-in modules in the top of indoor pick-up, including power protection module, modules for protecting itself from lightning stroke and polarity reversal.

1.2 Packing List

Check the package contents and make sure that the device in the package is in good condition and all the assembly parts are included.

Table 1-1 Packing List

Item	Description	Amount
	Microphone	1
	Installation Plate	
	User Manual	1
	Screws	1
	Sticker	1

1.3 Appearance and Interfaces

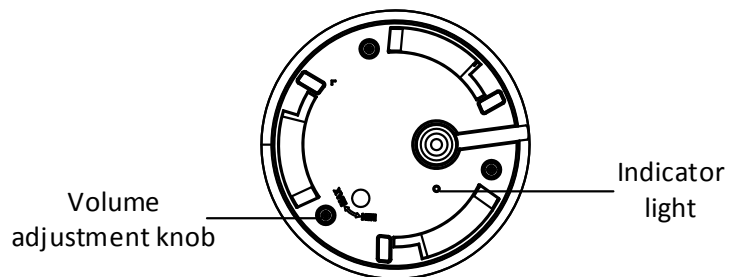


Figure 1-1 Bottom of the Device

 **Note**

Light on: the device is normal working. Light off: the device is damaged or powered off.

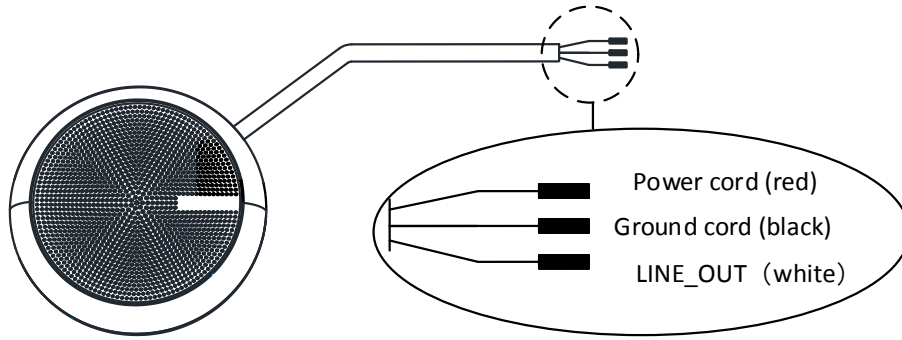


Figure 1-2 cable and connector

1.4 Connection

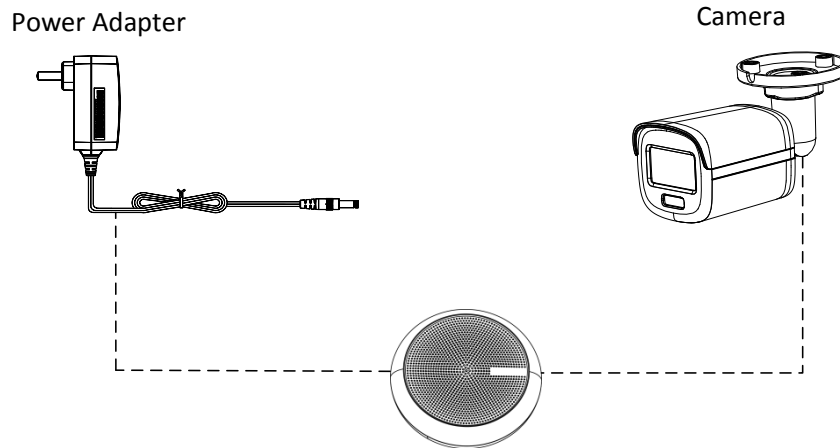


Figure 1-3 Connection I



Figure 1-4 Connection II

Chapter 2 Installation and Application

2.1 Installation

Before you start

The device is suitable for ceiling mounting, and it can also be placed on the desktop for use.

Step 1 Attach the installation sticker to the wall.

Step 2 (Optional) For cement wall, drill the screw holes with a 5.5 mm drill and insert the supplied wall plugs before installation.

Step 3 Fix the installation plate to the ceiling with three PA4 × 25 screws.

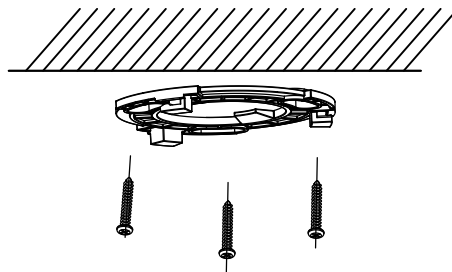


Figure 2-1 Fix the Installation Plate

Step 4 Fit the microphone onto the installation plate.

Step 5 Turn the microphone as the figure below until it snaps into the installation plate.

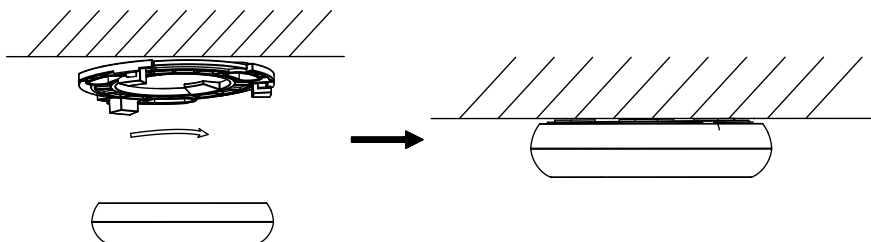


Figure 2-2 Install the Microphone to Ceiling

2.2 Cable Routing

- It is recommended to use RVVP 2 × 1.0 shielded cable.
- DO NOT install the microphone near the power adapter, power transformer, or mains electricity circuit.
- It is recommended to use an external linear regulated power supply.
- The audio cable length should be shorter than 30 meters.

2.3 WEB Configuration

When the camera connects to the network, you can configure the audio parameters of the camera via web browser. Refer to the user manual of the camera for detailed description.

Go to **Configuration**→**Video&Audio**→**Audio** to adjust the following parameters in order to improve the audio quality.

- **Audio Encoding:** It is recommended to select **AAC** or **G.711**.
- **Sampling Rate:** It is recommended to select **32 kHz** or above.
- **Audio Stream Bitrate:** It is recommended to select **32 kbps** or above.
- **Audio Input:** It is recommended to select **LineIn**.
- **Input Volume:** Set the volume according to the environment. Generally, it is recommended to set below 50.
- **Environmental Noise Filter:** Enable or disable the function according to the microphone type. For digital microphone, it is recommended to disable the function. Meanwhile, you can compare the effects according to the actual environment.

Chapter 3 FAQ

Question

The network camera does not record sound.

Answers

- Check if the microphone is power-on, and the cable connection is normal.
- Check if the volume button of the microphone is turned to the lowest level. Adjust the volume button and try again.
- Connect a mobile phone to the camera and play sound to check if the recording function of the camera is normal.
- Connect the microphone to another type of the camera to check if the microphone is normal.
- Check audio cable connection. For the camera with a 3.5 mm audio connector, it is recommended to connect the front two sound channels of the 3.5 mm connector with the positive pole of the microphone's audio cable. For the camera with terminal blocks, connect the audio in terminal with the positive pole of microphone's audio cable.

Question

The sound picked up by the device is of poor quality, with high noise or rustling sound.

Answers

- Check if the cables are connected correctly. Poor quality of the cable and the cable connector may cause poor sound quality, such as low sound and high noise.

Solution: Connect the device shell to the ground by cable, and use the twisted pair cable with good shielding performance.

- Check if the power supply of the microphone is a linear regulated power supply. Using the power of the network camera may cause ground loop and current sound.

Solution: Use an external linear regulated power to check the effect. If the noise disappears, it is recommended to use an external linear power supply.

- Check if the installation is not suitable for the device.

Solution: Keep the microphone far away from and back to the noise resource, and isolate it from the vibration source. The pick-up holes should be faced to the sound source, and keep them as close as possible.

- Check if the parameters of the network camera are wrong.

Solution: Refer to the user manual of the network camera to set the web parameters. Set the **Video Type** of the camera as **Video&Audio** and enable the audio function of the camera. Test before using the audio function. If there is sound when testing, check if the recording function is normal.

- The microphone does not support noise suppression function.



See Far, Go Further