

# High-end Ceiling Conference Microphone MC10

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## **Important Safety Precautions**

1. Please read this safety reminder and product instruction manual carefully.
2. Please keep this safety reminder and product instruction manual properly. When the product is given to others for use, be sure to attach the safety reminder and instruction manual.
3. When the product is given to a third party for use, please ensure that the instruction manual and safety reminder are included.
4. Only approved add-ons, attachments, and spare parts from the manufacturer may be used.
5. Do not attempt to disassemble the product casing. If a customer opens the product without authorization, the warranty automatically becomes void.
6. All repair work must be performed by authorized service personnel with the appropriate qualifications. Repair work must be performed when the product experiences any form of damage, liquid or foreign objects enter the product, the product is exposed to rain or moisture, the product malfunctions, or the product experiences an accidental fall.
7. The product should only be used under the specified technical parameters.
8. If the product is damaged during transportation, it should not be put into use.
9. When laying cables, ensure that no one can trip over them.
10. Prevent the product and its interfaces from contacting any liquids and conductive items that are not required for operation.
11. Do not use solvents or corrosive cleaning agents for cleaning.

## **Specification for Use**

1. The product is intended for indoor use, such as in conference rooms and exhibit rooms.
2. The product can be used for commercial purposes.
3. Any use that does not comply with the instructions in the product instruction manual is considered improper use.
4. Sphinx is not responsible for any damage caused by the misuse or improper use of the product and additional equipment/accessories.
5. Before turning on the machine for debugging, please be mindful of the regulations in your country/region!
6. Caution: Excessively high signal levels can damage your hearing and speakers! Before connecting the product, reduce the volume of any connected playback devices to reduce the risk of acoustic feedback.

## **Safety Precautions for Installation**

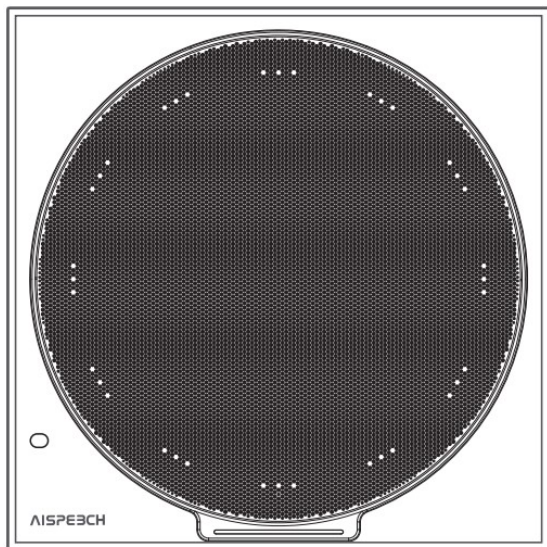
When installing, the following safety precautions must be observed:

1. Assembly and all electronic equipment installation work must be performed by a professional.
2. Professionals must use their professional knowledge and experience to evaluate the work delivered, identify potential hazards, and take appropriate safety measures in accordance with relevant regulations and standards.
3. Local, national, and international codes and standards must be observed and followed during installation.

## Packing List

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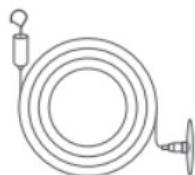
1. High-end ceiling-mounted conference microphone MC10\*1
2. 10m Cat6 network cable \*2
3. Remote control \*1
4. Suspension rope set \*4
5. User manual \*1



MC10\*1



Instruction manual \*1



Lifting rope set \*4



Remote control \*1

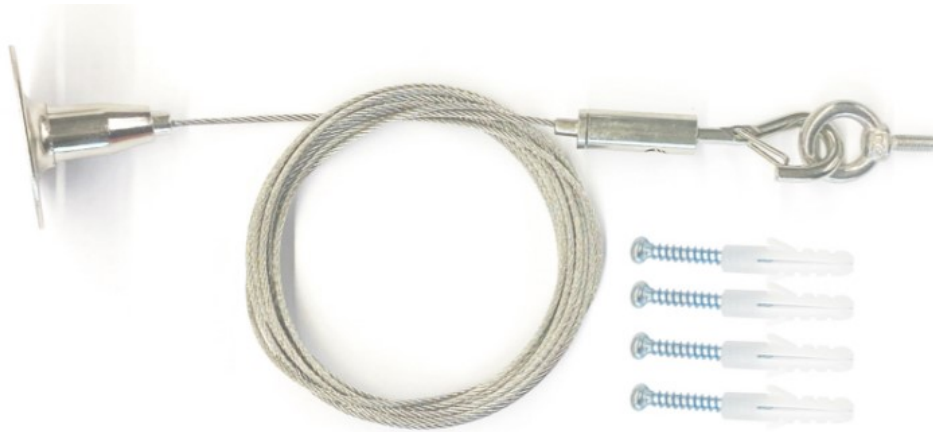


10m Cat6 network cable \*2

## Put this text

Suspension Rope Set for Ceiling Mounting and Flush Installation (included in the package)

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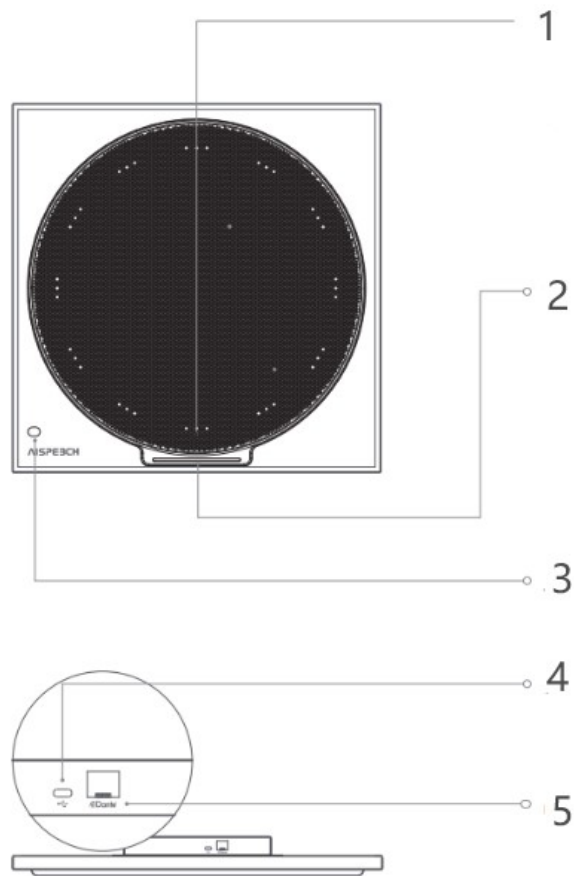
Additional Components for Pole Mounting, Telescopic Pole Bracket (additional purchase required).



# Component Diagram

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## Lower Side:



### 1、Reset Hole

- By pressing the reset button through the reset hole for a duration of more than 3 seconds and less than 8 seconds, the network configuration will be restored to factory default.
- By pressing the reset button through the reset hole for a duration of more than 8 seconds, the entire unit configuration will be restored to factory default.

## 2、Equipment status indicator

Off	The device is not powered on
Red global constant light	mute
Red global slow flashing	indicates equipment failure
Slow flashing of red color part	restore factory settings
Green marquee light	during the startup process of the equipment
Green global constant light	the device is working
Green local slow flashing	Device is being upgraded
Blue global constant lighting	local sound amplification of the device is on
Blue light bar increment	equipment loudspeaker volume '+'
Blue light bar decrement	equipment loudspeaker volume '-'

## 3、infrared reception

- Ceiling conference microphone remote control switches the working mode of the microphone and adjusts the local sound volume.

## 4、Debug port

- Used for debugging computer direct connection devices and assisting in standby debugging.

## 5、Dante Audio & PoE Power Supply

- Used to connect to a POE switch or POE power adapter to power the device and transmit Dante protocol network audio.



## Upper Side:

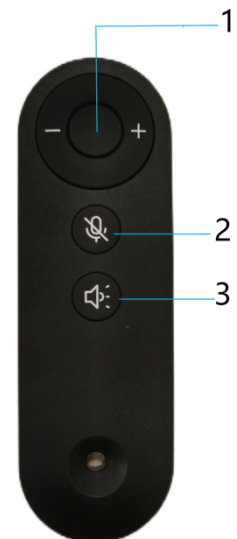


### Threaded holes

- 1: Threading hole for installation of the suspension rope.
- 2: Threading hole for installation of the telescopic support.

## Remote control:

- 1、Volume up and down buttons in amplified mode
- 2、Mute button during the meeting.
- 3、Switch between pickup mode and mixer mode (local amplification is on during pickup)

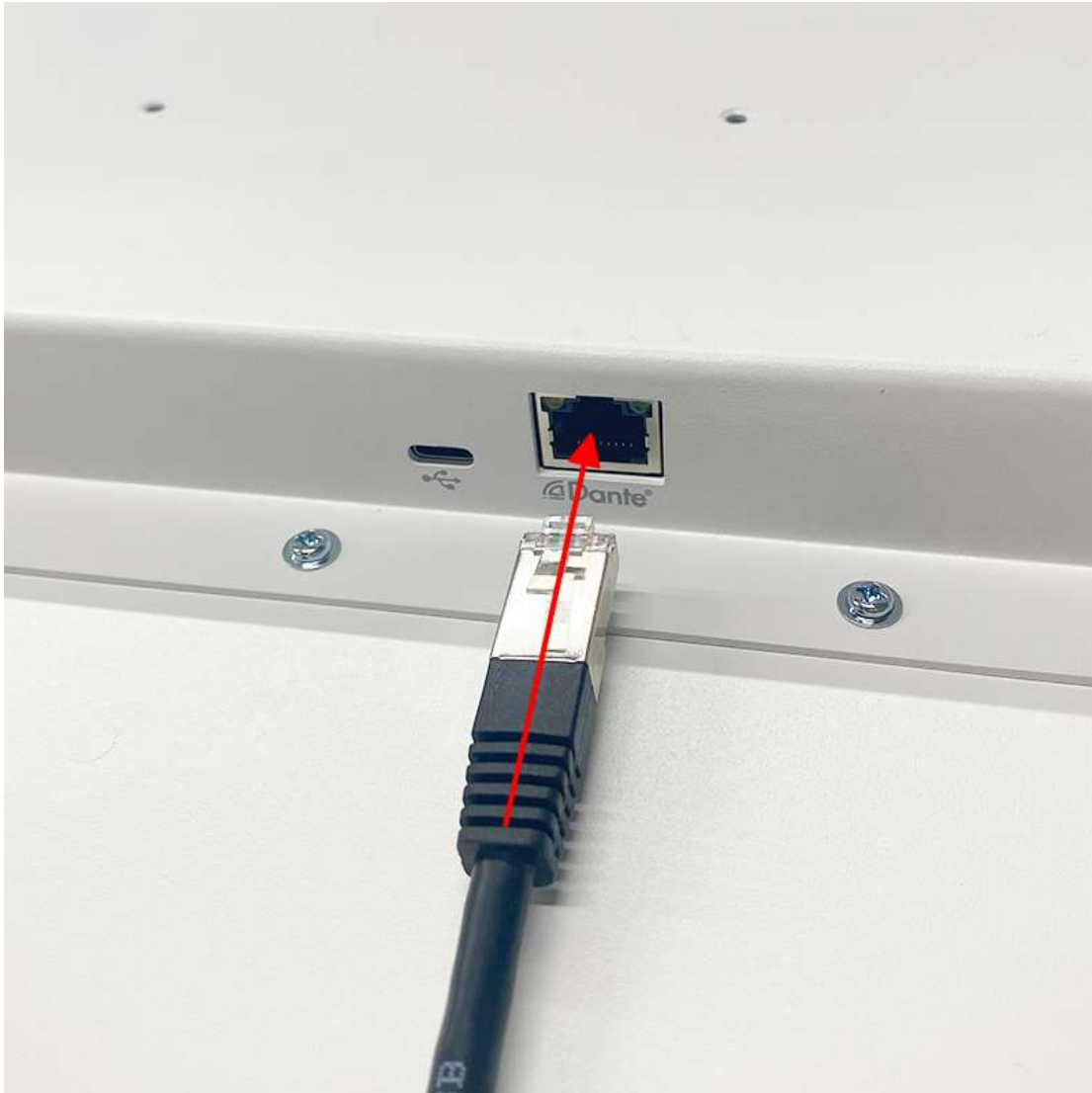


## Connect and deploy

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### Connect to network

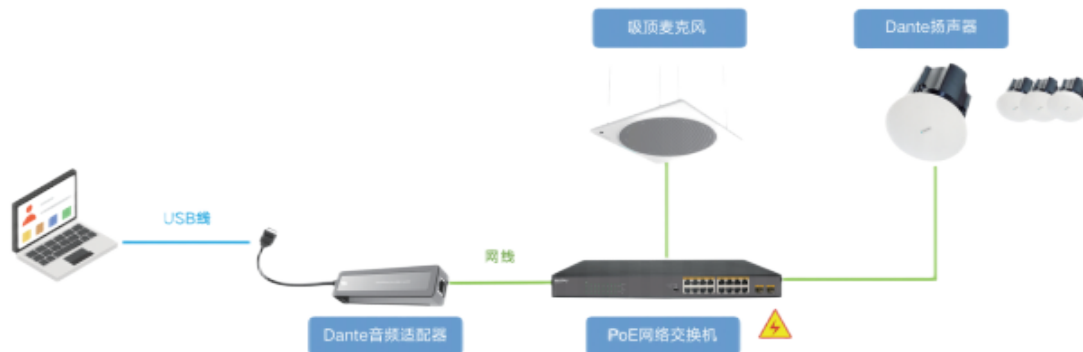
MC10 is connected to the Dante audio network through a Category 6A network cable:



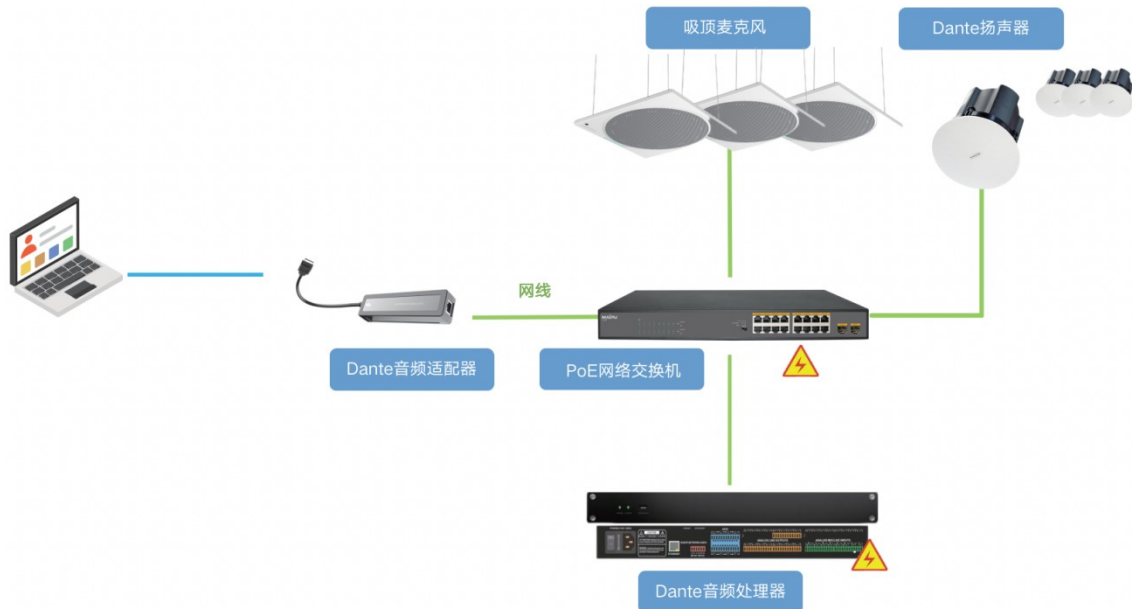
## Deployment topology

Dante digital audio can be converted to UAC audio through the Dante audio converter DU11. For specific reference, see the following common business topologies:

Single scenario - remote call + local sound amplification

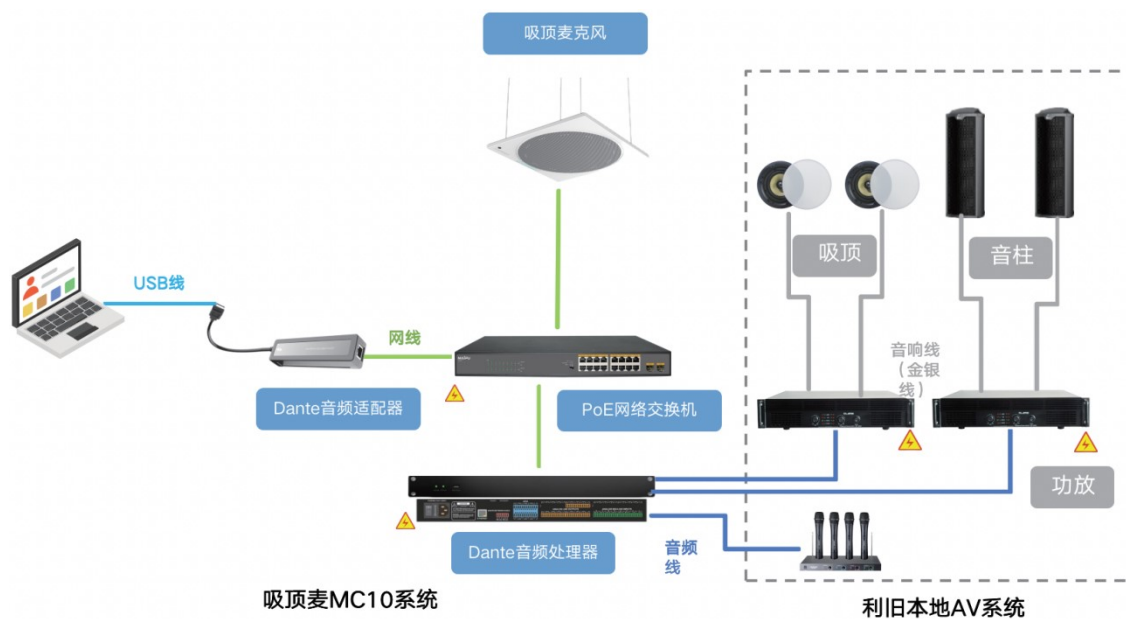


Cascading scenario - remote call + local sound amplification

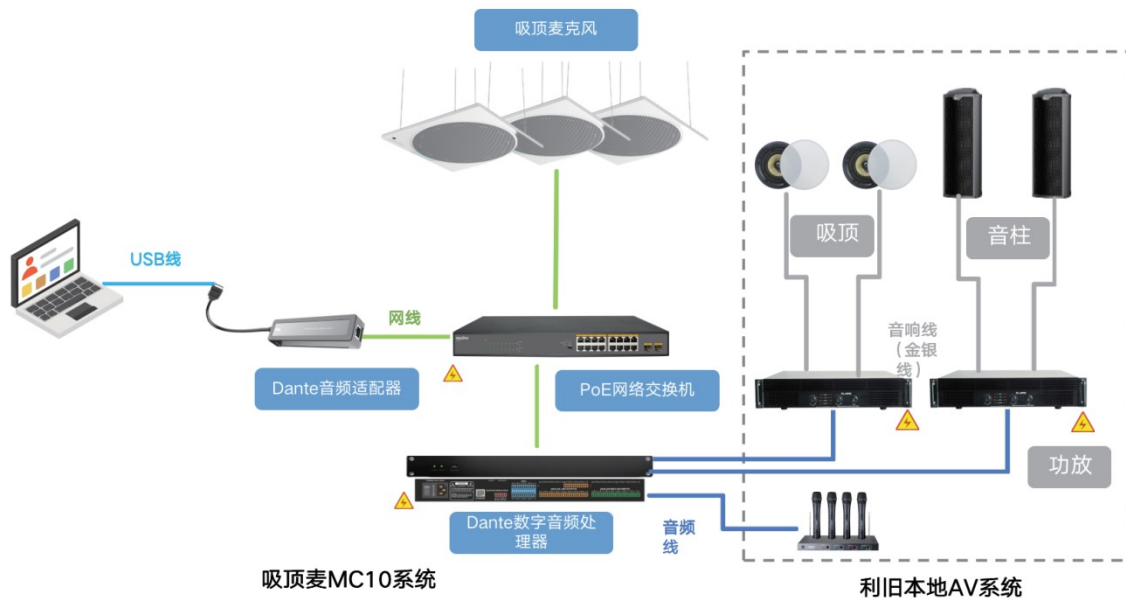


## Scene fusion (utilization of existing assets)

Single-device scenario - remote call + local loudspeaker (re-use)



Cascading scenario - remote call + local amplification (using existing equipment)



# Installation planning

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## Installation method

- Method 1: flush installation in the ceiling



- Method 2: Hang the steel wire rope under the ceiling



- Method 3: The boom is installed under the ceiling



## **Adjust the installation height**

1. For the three installation methods, it is recommended that the bottom of the ceiling-mounted conference microphone be at a vertical distance of  $\geq 2.5\text{m}$  from the ground, and not exceed 3.5m.
2. For better local sound reinforcement, it is recommended that the ceiling-mounted conference microphone be placed at a horizontal distance of  $> 2$  meters from the speaker, with a larger distance being better.
3. For rooms with high ceilings, it is recommended to use installation methods 2 and 3, with the ceiling being less than 5 meters away from the ceiling-mounted conference microphone.
4. For aesthetic and better sound pickup effect, it is recommended to install them as evenly spaced as possible (3 meters) on the center point or central axis of the sound pickup area.

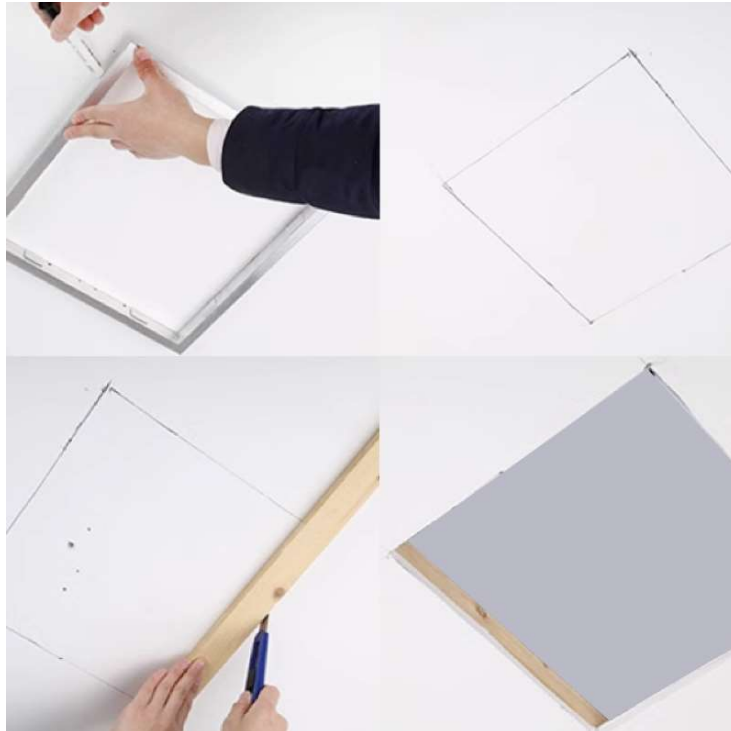
# Installing

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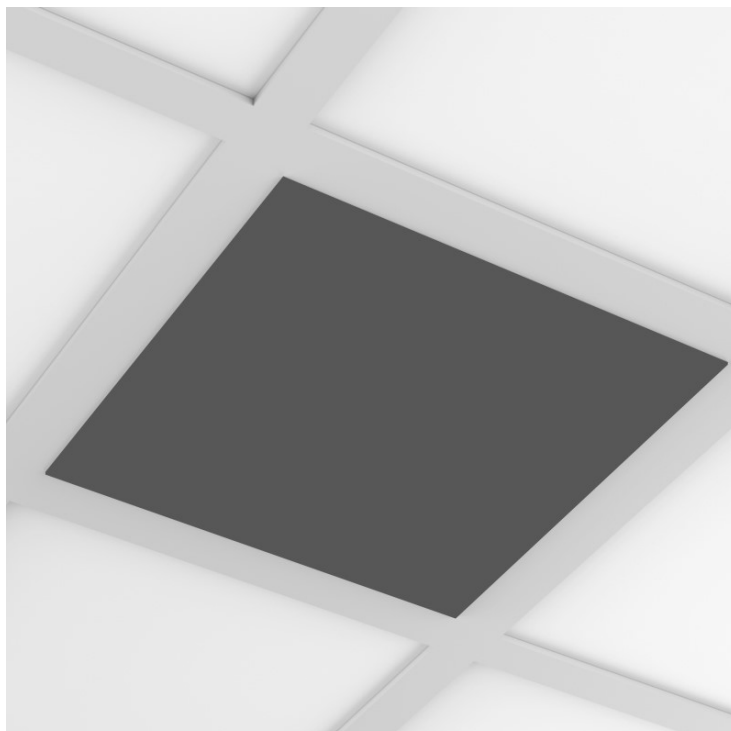
## Method 1: flush or embedded installation in sound-absorbing ceilings or lattice ceilings

- The ceiling-mounted conference microphone can be easily installed in suspended soundproof ceilings or square lattice/lattice ceilings (600 x 600 mm) ceilings.
- Be careful not to install ceiling microphones next to light fixtures or other electrical equipment on the ceiling!

1、Cut the ceiling according to the size of the ceiling-mounted conference microphone



2、Embedded cutting shape



### 3、 Embedded installation effect



### 4、 fixing hook screw



**When installing on the ceiling, always take extra precautions to prevent the ceiling-mounted conference microphone from falling. Note:**

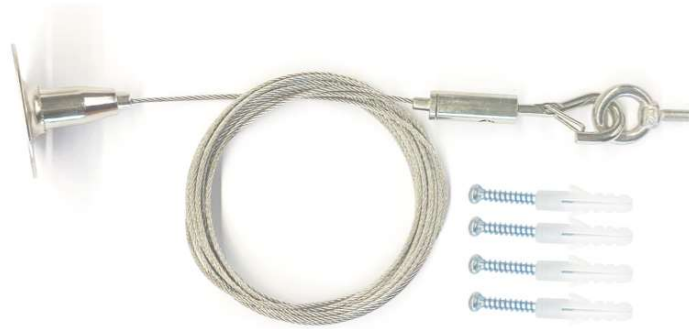
- ✓ Use a steel wire sling set, using steel wire and a hook, and secure it to the specified mounting point on the back of the ceiling-mounted conference microphone using the included eyebolt.
- ✓ To this end, the eyebolt should be manually screwed into the specified installation point on the back of the ceiling-mounted conference microphone to avoid damaging the metal housing due to over-screwing.
- ✓ It should be ensured that the threads of the eyebolt have been fully screwed into the designated assembly threads.

**Note! Installation method 2 also requires attention to these three requirements**



## Method 2: Hang the steel wire rope under the ceiling

1、assembly list



2、fixing hook screw



### 3、Assembly screw



### 4、lifting effect

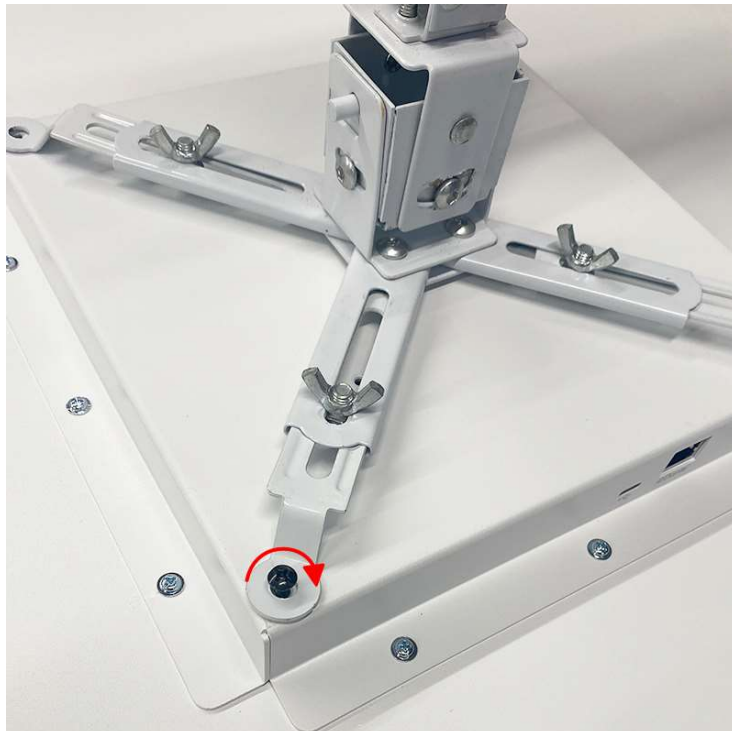


## Method 3: The hanger rod is installed under the ceiling

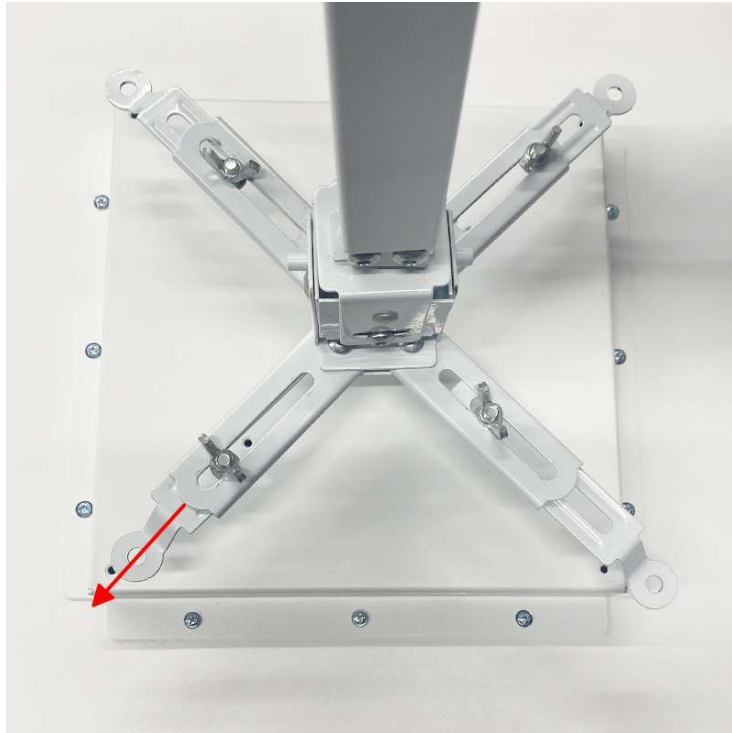
### 1、Expandable and stretchable support



### 2、Support fixing



### 3、Stent extension



### 4、bar installation effect



# Instructions for use

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## Prepare

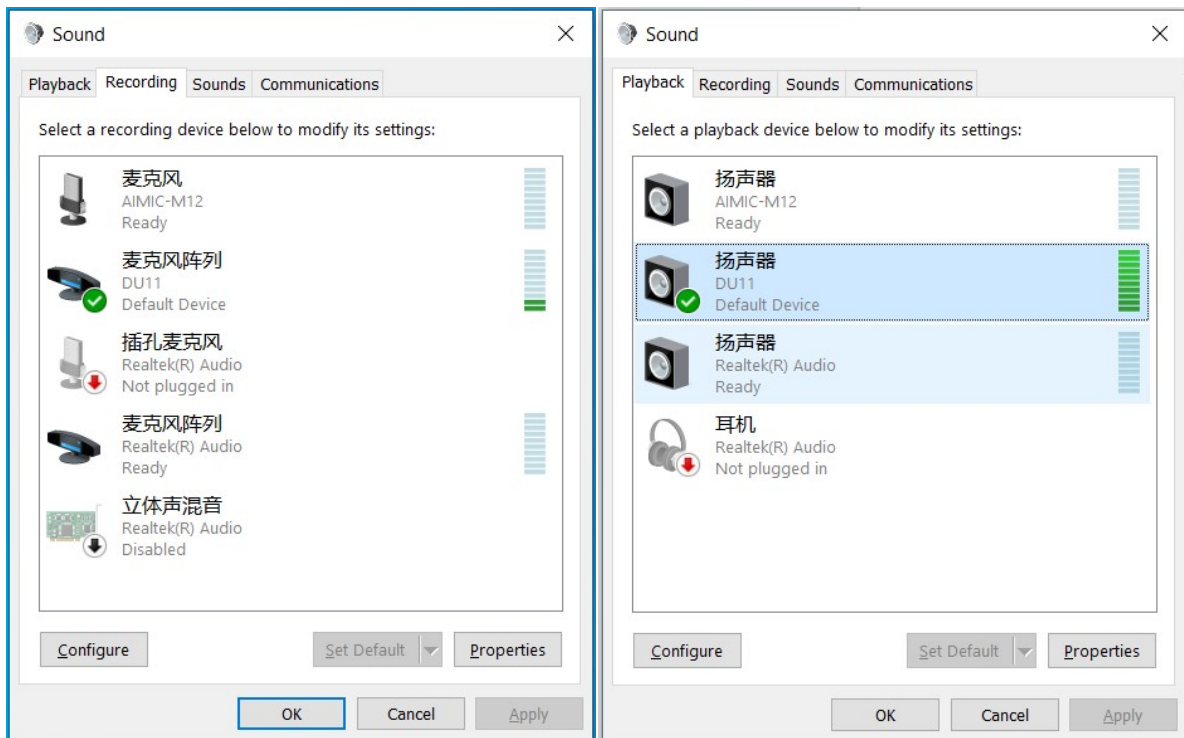
### Dante Audio Adapter: AIDIO-DU11

Convert the network audio transmitted by the Dante protocol into a digital audio signal that supports the UAC protocol, and connect the USB side to the USB port of the PC.



## PC sound card device

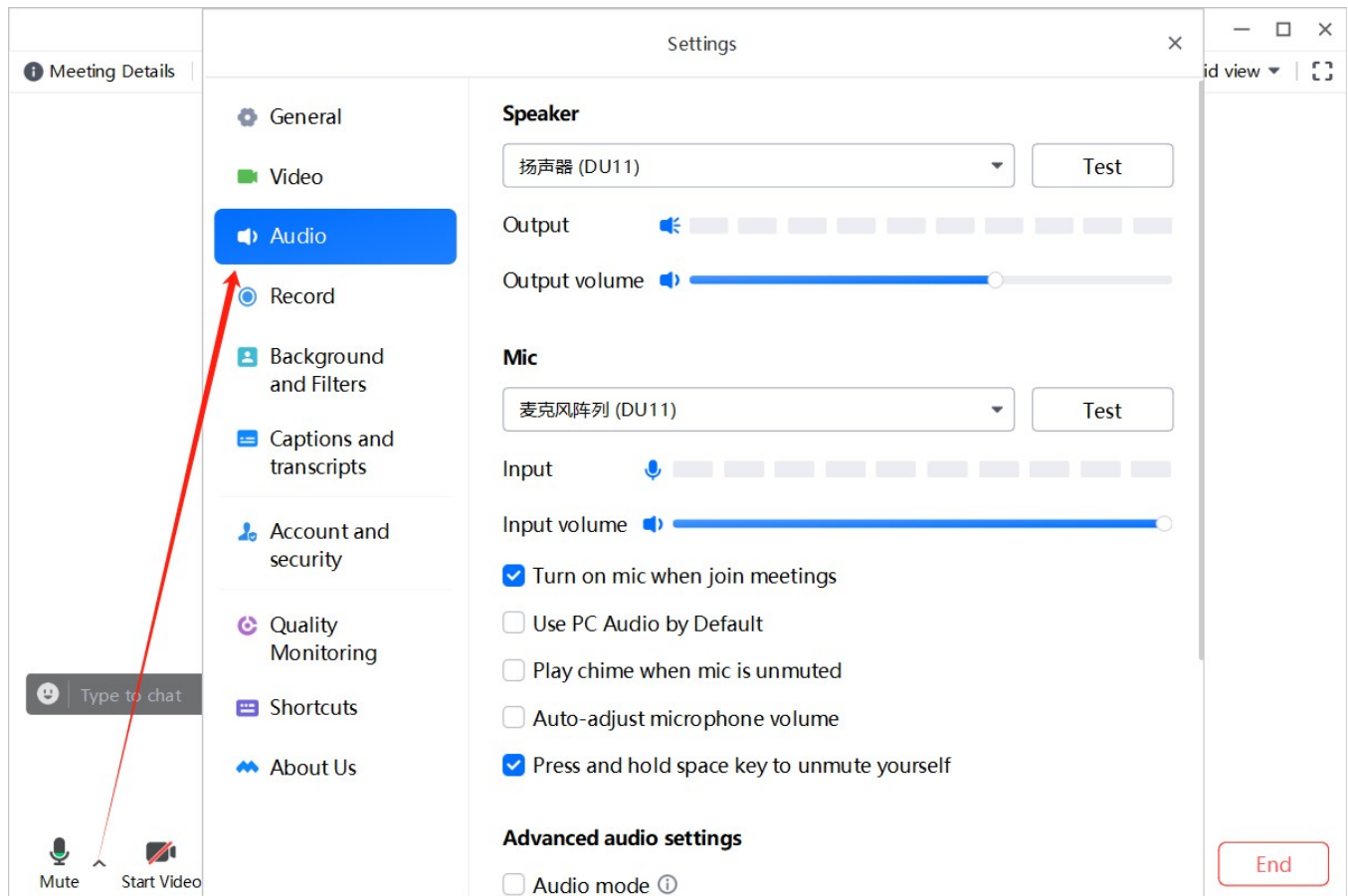
In the sound card of the PC connected to the Dante audio adapter AIDIO-DU11, it can be seen that the microphone array and speakers with DU11 have been automatically set as the default device by the system, indicating that the audio input and output of the ceiling conference microphone can be recognized normally, and it can be seen that there is a green layer on the volume indicator graph that is pulsating in real time.



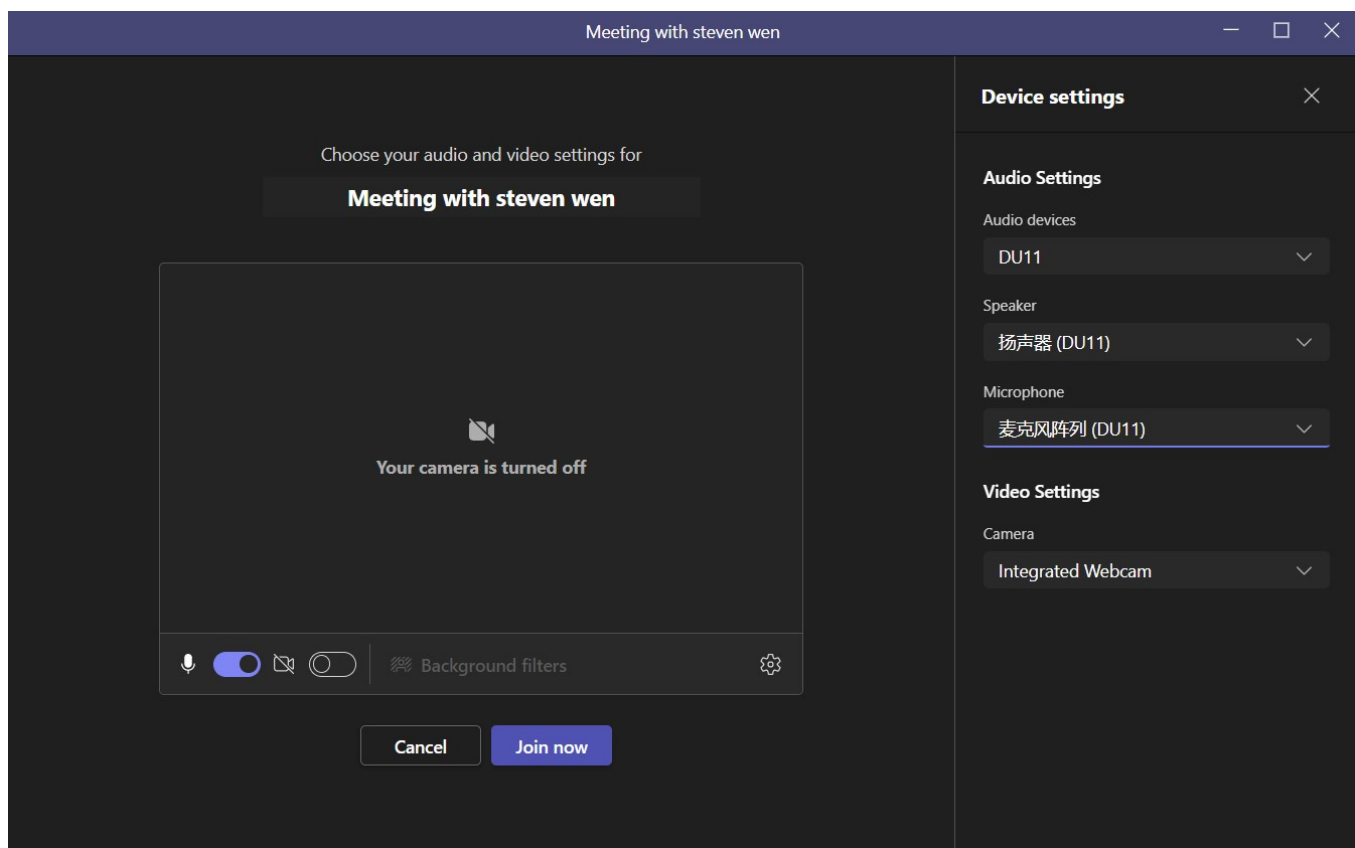
## Use it

### Video conference software settings

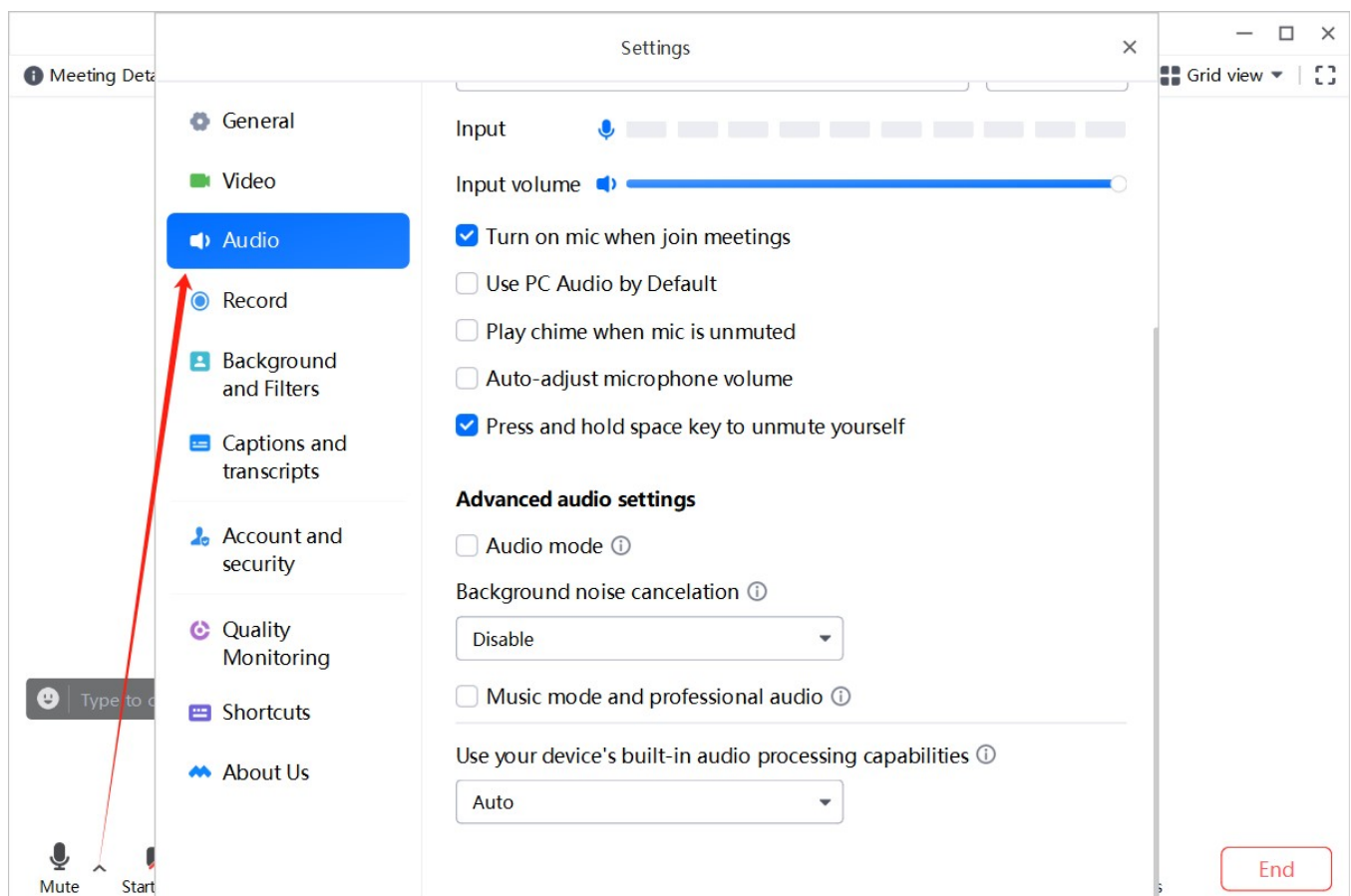
After opening the video conferencing software, you can select the system default speaker and microphone array on the audio settings on the software, and then use the ceiling conference microphone for audio and video conferencing communication.



Before the meeting, you can click on the test speaker to see if it is the conference speaker that is making the sound; click on the test microphone and speak, if you can hear your own voice, it means that the ceiling conference microphone can pick up sound normally.



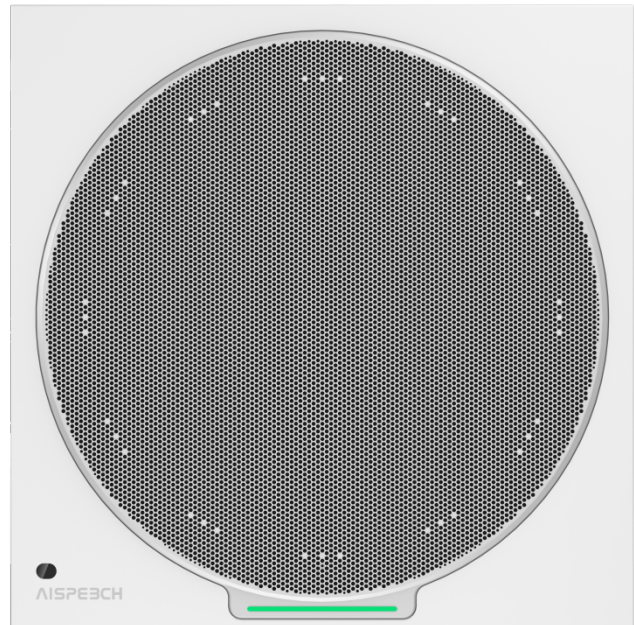
**Note!** On video conferencing software, it is necessary to turn off audio processing functions (background noise reduction, automatic adjustment of microphone volume, etc.) to avoid secondary duplication with the audio processing functions of ceiling-mounted conference microphones, which can affect the audio quality of the conference during use.



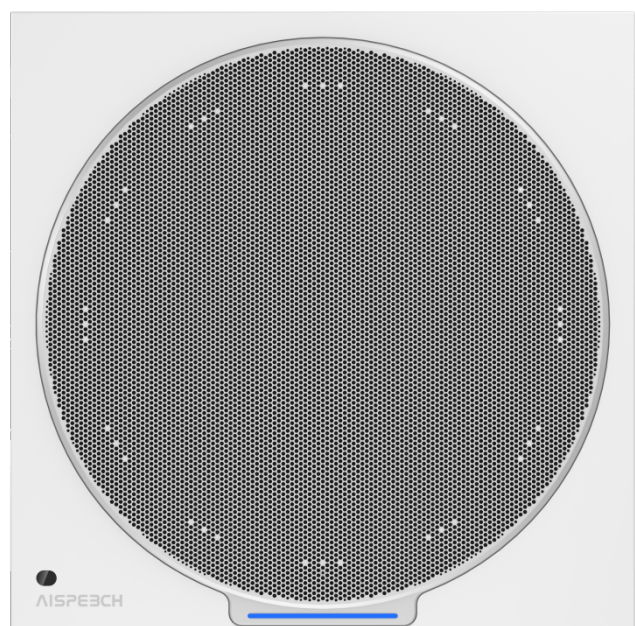


## Adjust the working mode of the ceiling conference microphone

In conference pickup mode, press the speaker button on the remote control, and the indicator light on the lower side of the ceiling conference microphone will turn green. During the conference, the ceiling conference microphone only performs conference pickup, and does not perform local sound reinforcement..

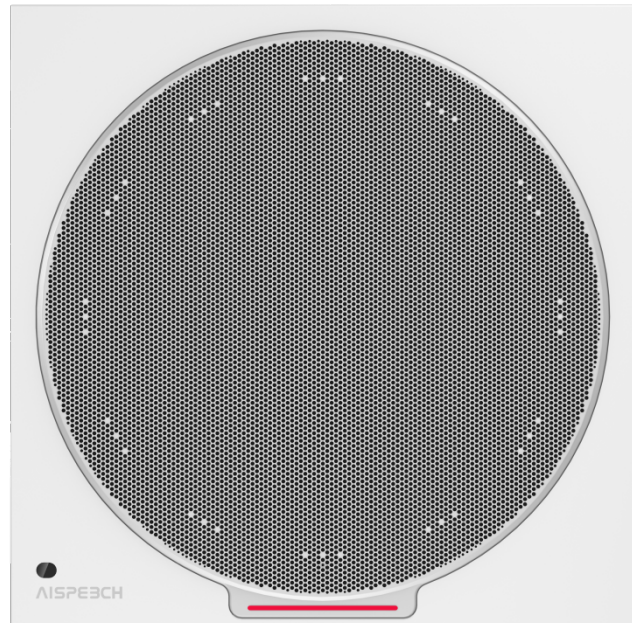


In the hybrid mode, press the speaker button on the remote control again, and the indicator light on the bottom side of the ceiling conference microphone will turn blue. During the conference, the ceiling conference microphone will simultaneously perform conference pickup and local sound reinforcement.



## Silence the ceiling conference microphone

During the conference, click the mute button, and the indicator light on the lower side of the ceiling conference microphone will turn red, indicating that the sound pickup has been turned off and the voice of the speaker in the conference will no longer be picked up. The other party will also not be able to hear the voice of the speaker in the conference.



## Adjust the sound volume of the ceiling conference microphone

During the conference, click the "+" and "-" buttons on the remote control to weaken or enhance the sound volume of the ceiling conference microphone.

