



ALL-IN-ONE CONFERENCE CAM

User Manual



Model: AW-C30R

V1.0

Content

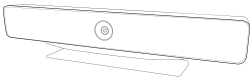
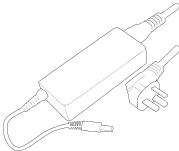
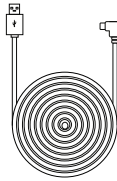
1. Product Introduction	01
2. Product Overview	01
2.1 Packing List	01
2.2 Optional Accessories	01
2.3 Indicators and Ports	02
2.4 Product Dimension	02
3. Remote Control	03
4. Deployment	05
4.1 Installation	05
4.2 Connection	14
4.3 Adjusting the Camera Tilt Angle	16
4.4 LED Indicators	16
5. Operation on Nearsync	17
5.1 Downloading link	17
5.2 Downloading link	19
5.3 Device Setting	19
5.4 Video Setting	20
6. Product Specifications	21
7. FAQ	23
8. Caution	23

● 1. Product Introduction

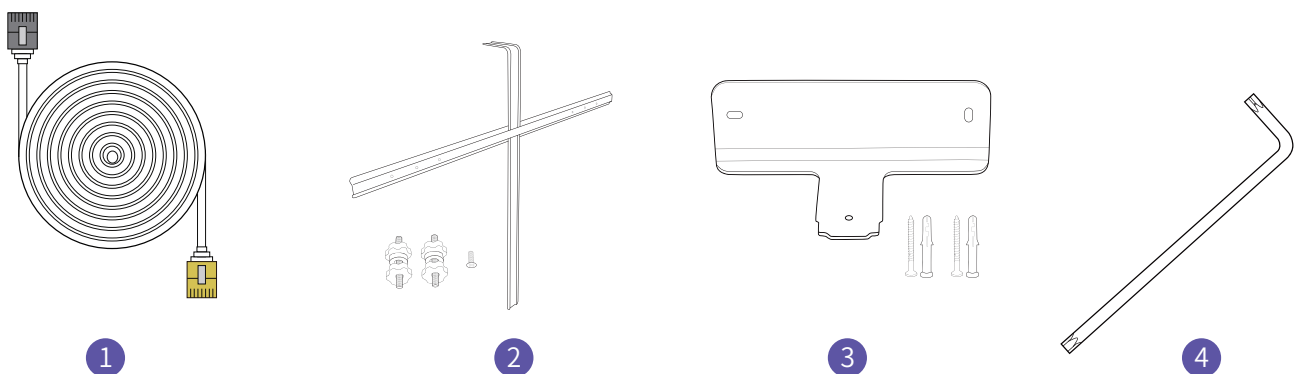
NEARITY C30R drives meetings and organizations forward with adaptable AI functions and powerful hardware. 4K camera, 120° super wide angle lens, and the built in 5-element microphone array drive crystal clear video and audio, while advanced intelligent functions like auto-framing, close-up grouping, and speaker tracking keep your audiences engaged.

● 2. Product Overview

2.1 Packing List

				
C30R * 1	Power Adapter * 1	USB-C to USB-A Cable (5m/16.4ft)* 1	Remote control * 1	User Guide * 1

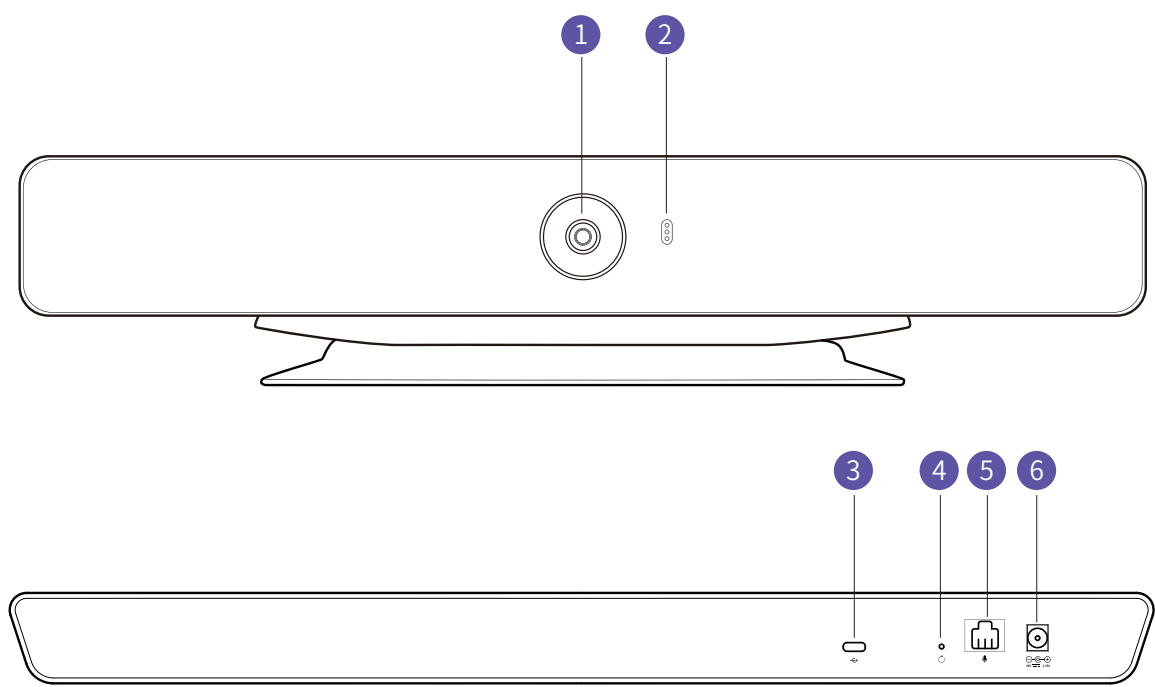
2.2 Optional Accessories



1	Ethernet Cable(8m/26.2ft)	3	Wall Mount
2	Screen Mount*	4	Torx Key

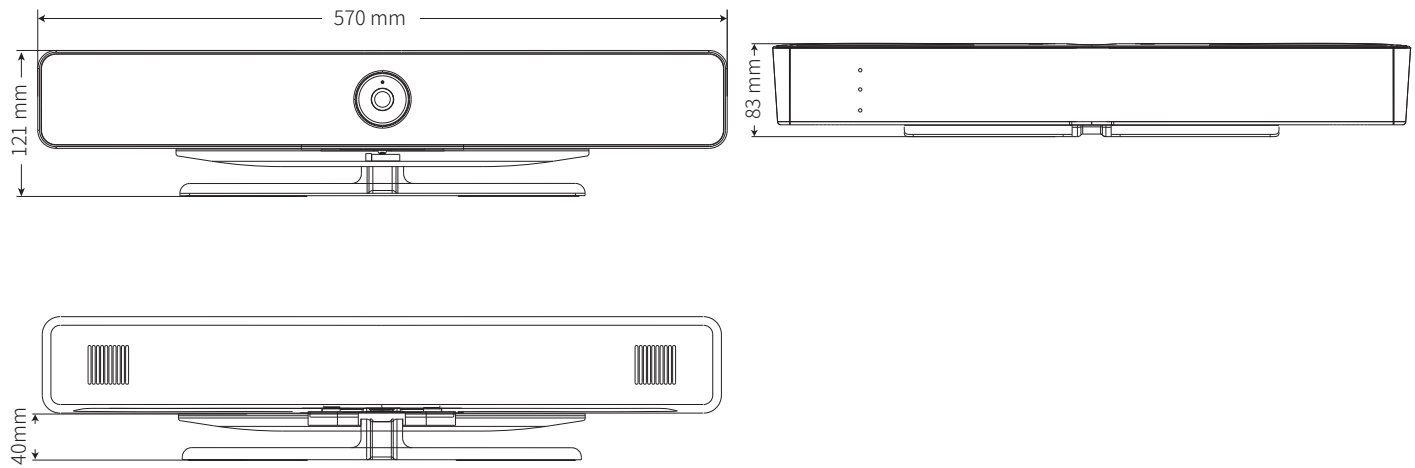
* Optional accessories are not included in this package, they are sold separately.

2.3 Indicators and Ports

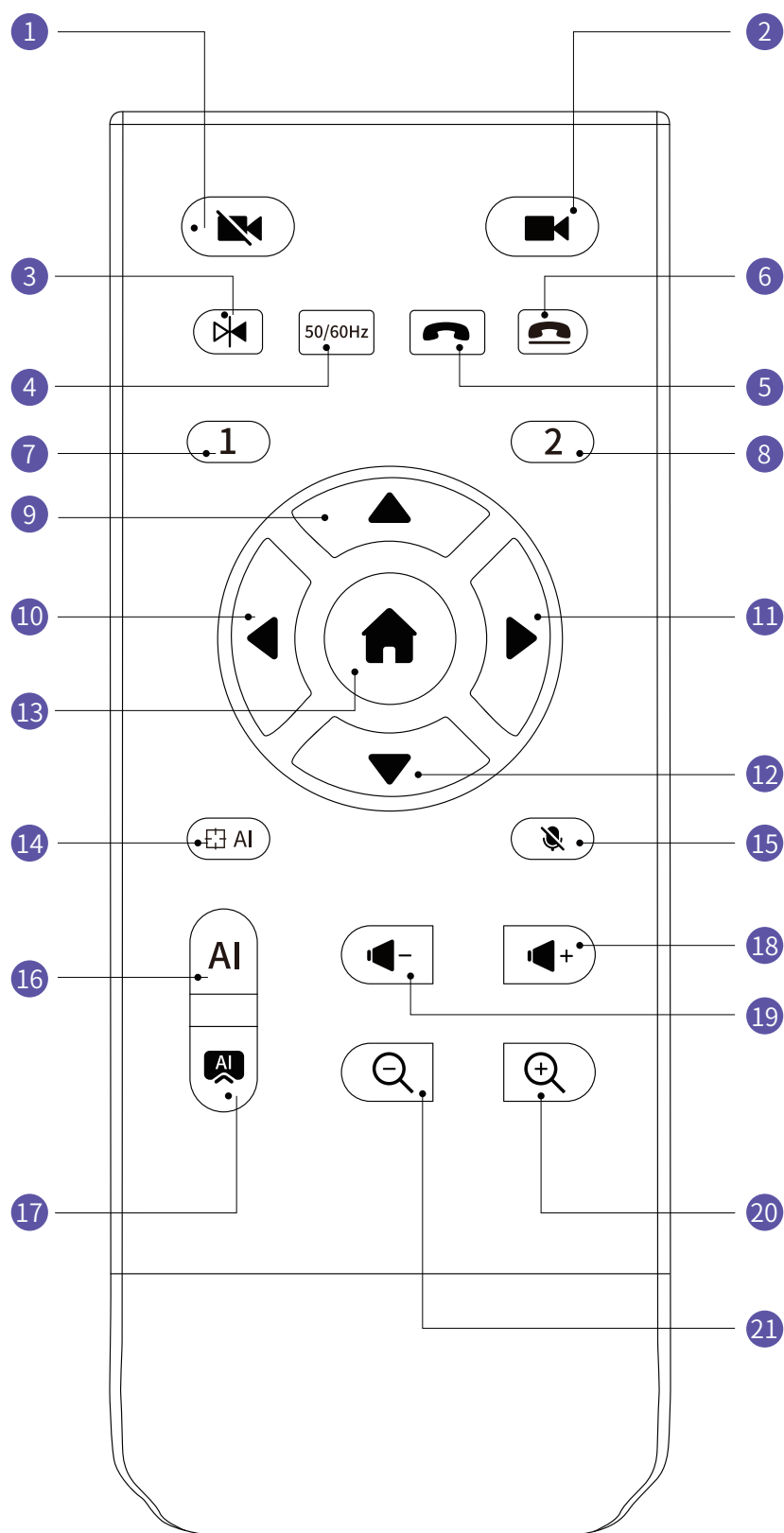


1	Camera LED	4	Reset Hole
2	Status LED	5	Ethernet Port For Daisy Chain
3	USB Type-C Port	6	DC Power Input Jack

2.4 Product Dimension



3. Remote Control



NO.	Button	Description
1	Camera off	Turn off the camera
2	Camera on	Turn on the camera
3	Mirror mode	Activate or deactivate mirror mode
4	Power line frequency	Switch between 50Hz and 60 Hz
5	Answer Call	Compatible with UC software*
6	End/Reject Call	Compatible with UC software*
7	Preset 1	Short press to preset 1, long press to current position
8	Preset 2	Short press to preset 2, long press to current position
9	Image up	Image up
10	Image left	Image left
11	Image right	Image right
12	Image down	Image down
13	Panorama	Switch to panoramic view
14	Previous mode	Back to previous saved AI mode
15	Mute	Mute or unmute microphone
16	Switch AI modes	Auto framing, speaker tracking, closeup group mode switch, Panoramic view switch
17	Switch AI submodes	1. Panoramic view 2. 2.Speaker tracking: a. delay 1s, b. delay 2s, c. delay 3s, d. delay 4s, e. delay 5s 3. Close-up group: a. max to 2 windows b. max to 4 windows c. max to 6 windows
18	Voice +	Volume up
19	Voice -	Volume down
20	Zoom +	Zoom in
21	Zoom -	Zoom out

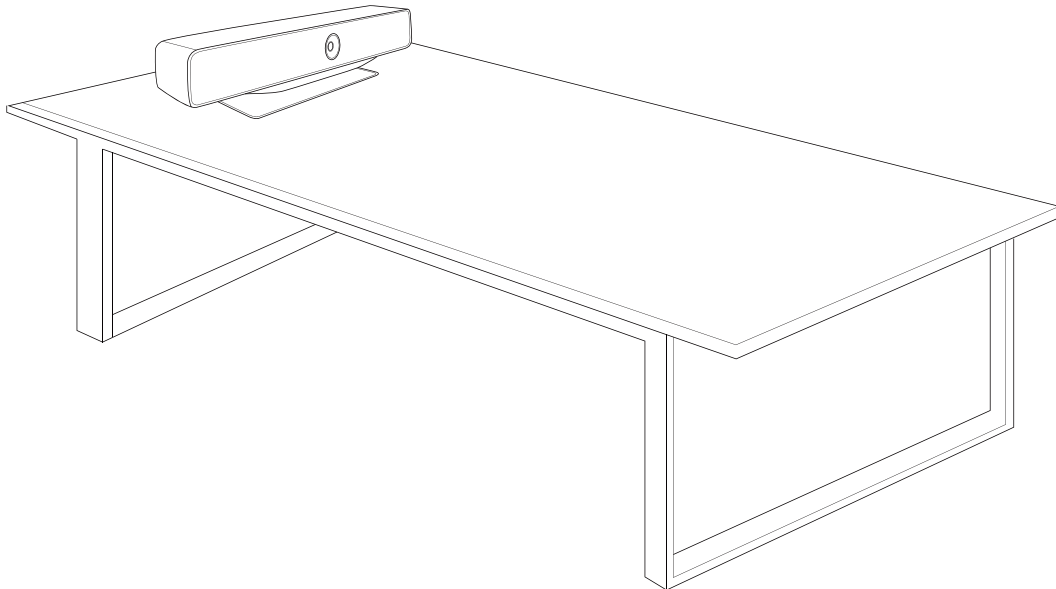
*Should match with the specific VC software

● 4. Deployment

4.1 Installation

4.1.1 Desktop (default)

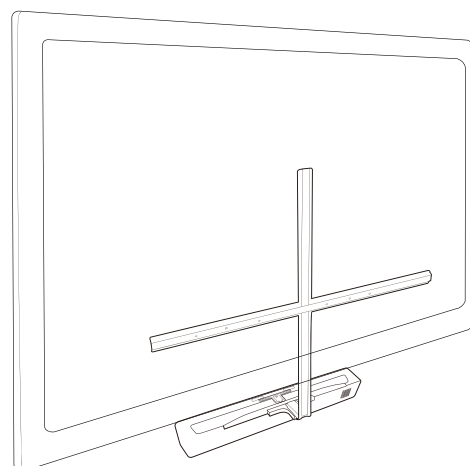
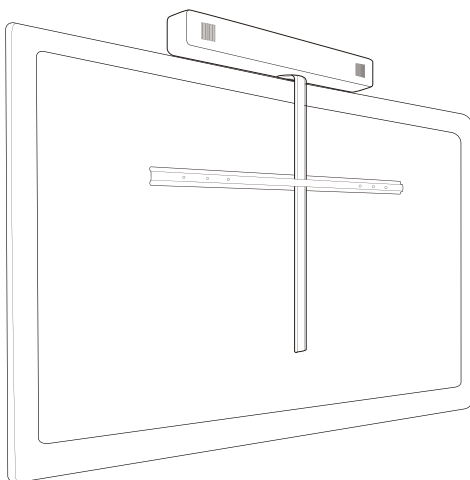
Place it on the conference room table or other flat surface. Generally, the position will be in the front of the table.

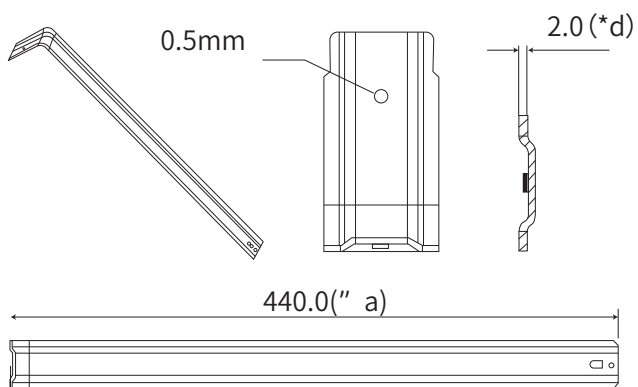


* The product comes pre-installed with a desktop stand at the factory, which is the default installation method.

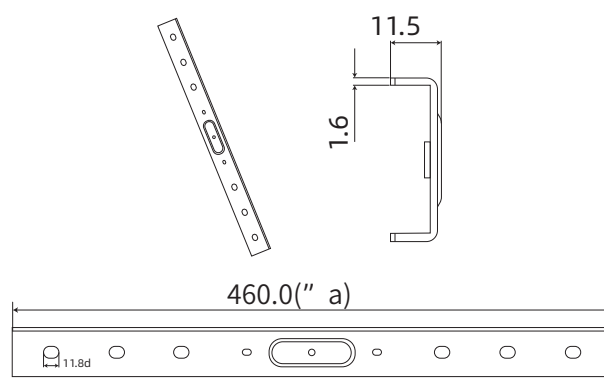
4.1.2 Screen Mounting (optional)

There are 2 installation positions for screen mounting: on the top or under the screen.





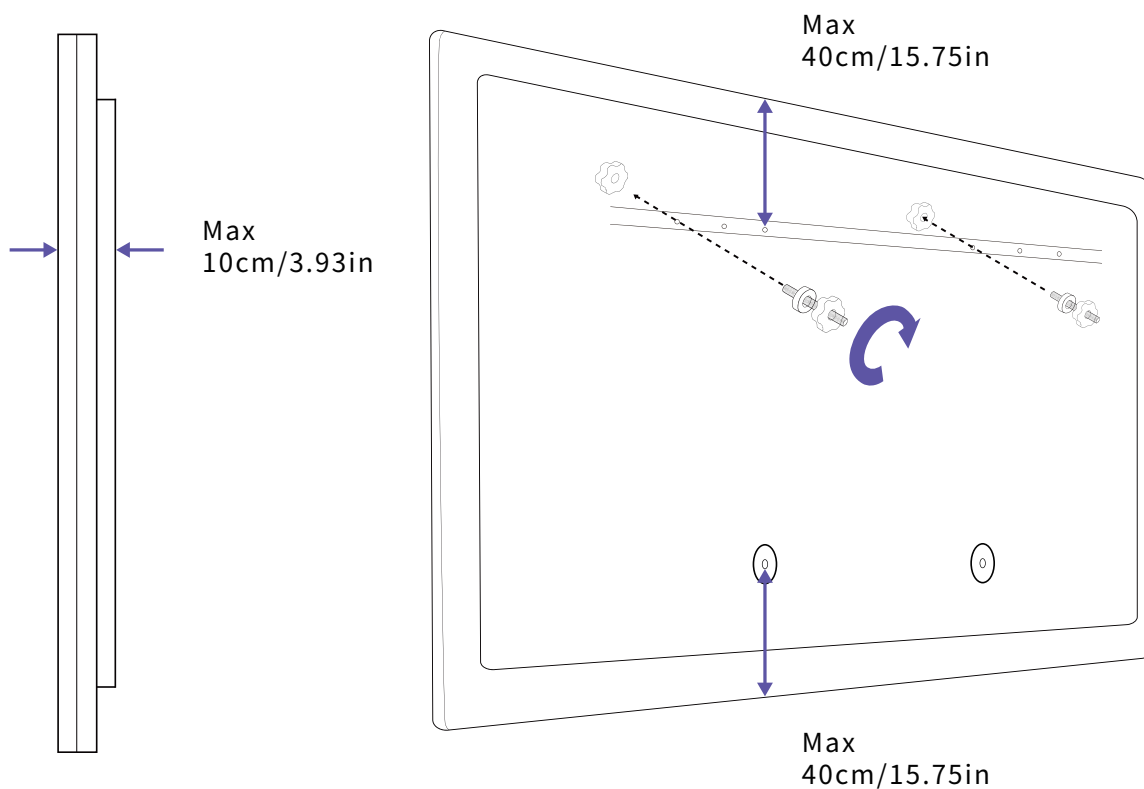
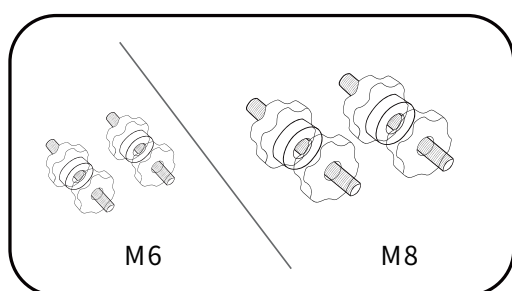
vertical bracket



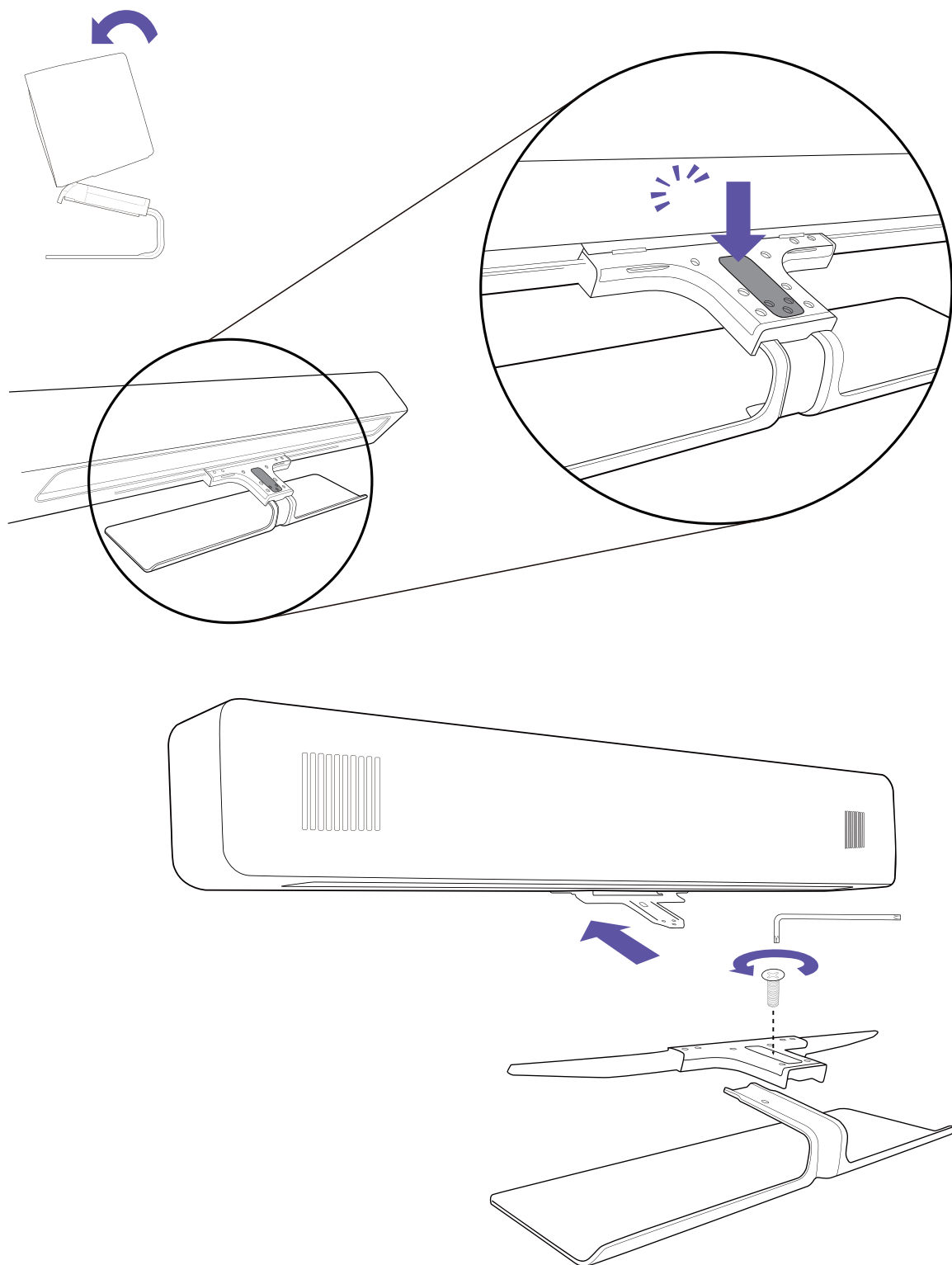
horizontal bracket

Screen mounting may change the center of its gravity, check the stability after installation. If instability is detected, another installation method should be selected.

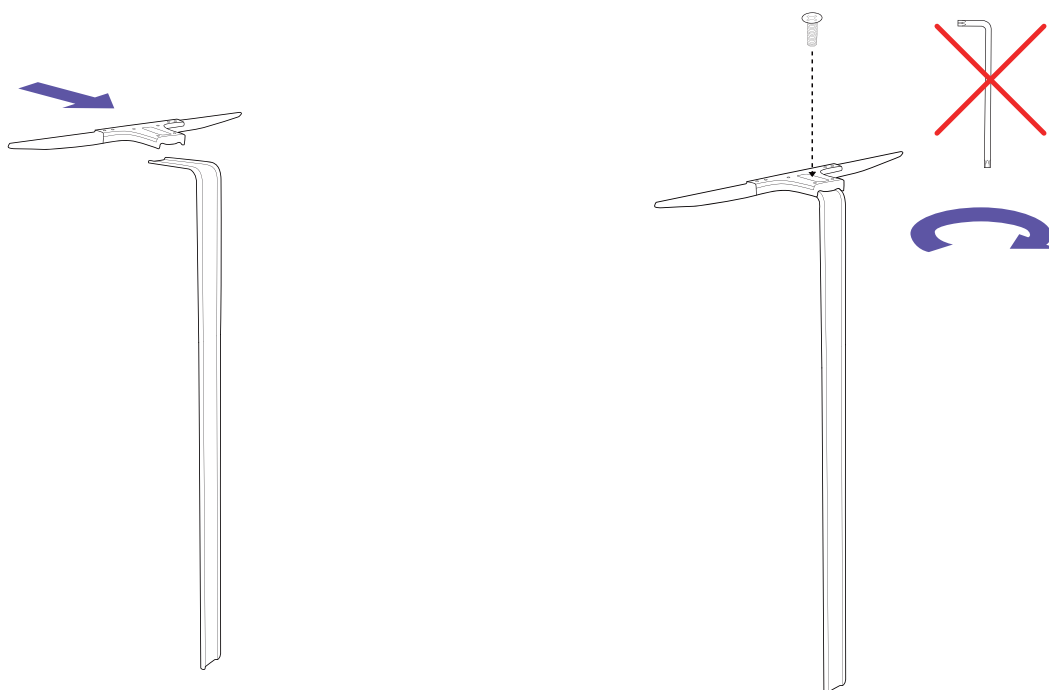
1) Place the horizontal part on the back of the display and tighten the bolts to make sure that the part is balanced with the screen;



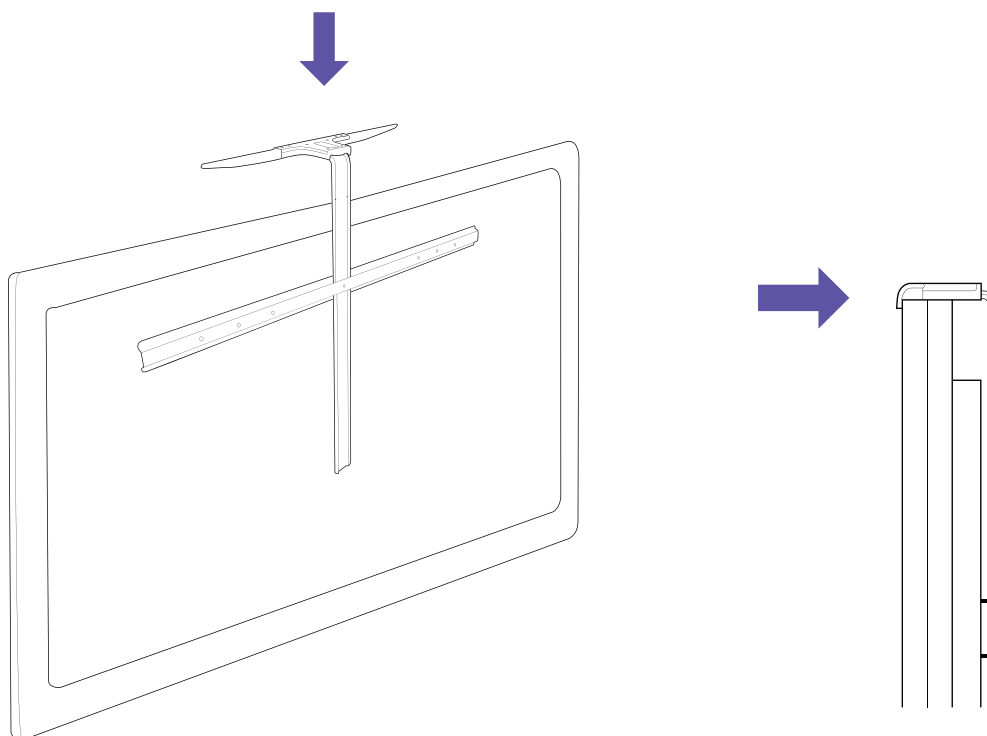
2) Press the shrapnel to remove the device, use a screwdriver to unscrew the screw at the connection between the T-bracket and the desktop stand, and pull out the T-bracket;



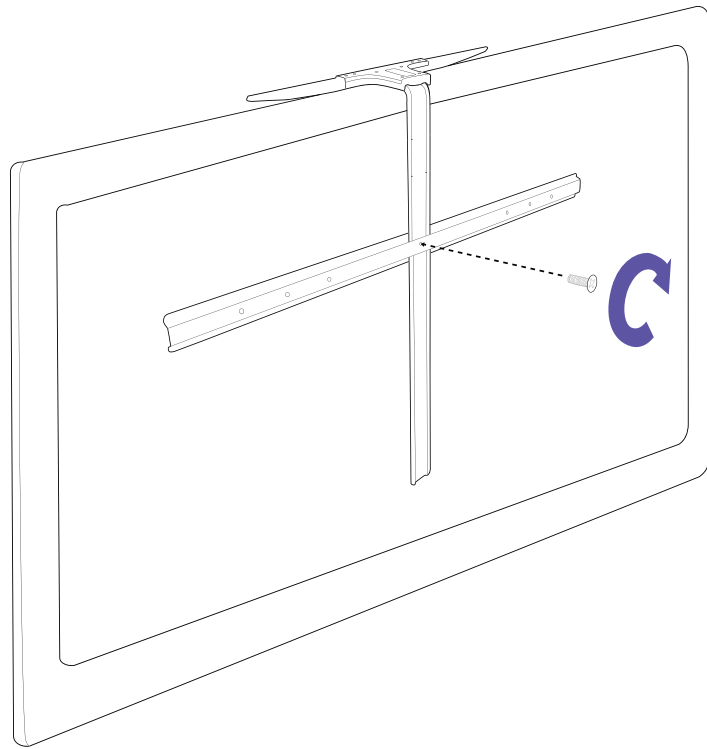
3) Connect the T-shaped bracket with the vertical part, put in the screw, do not tighten, in order to adjust the installation position;



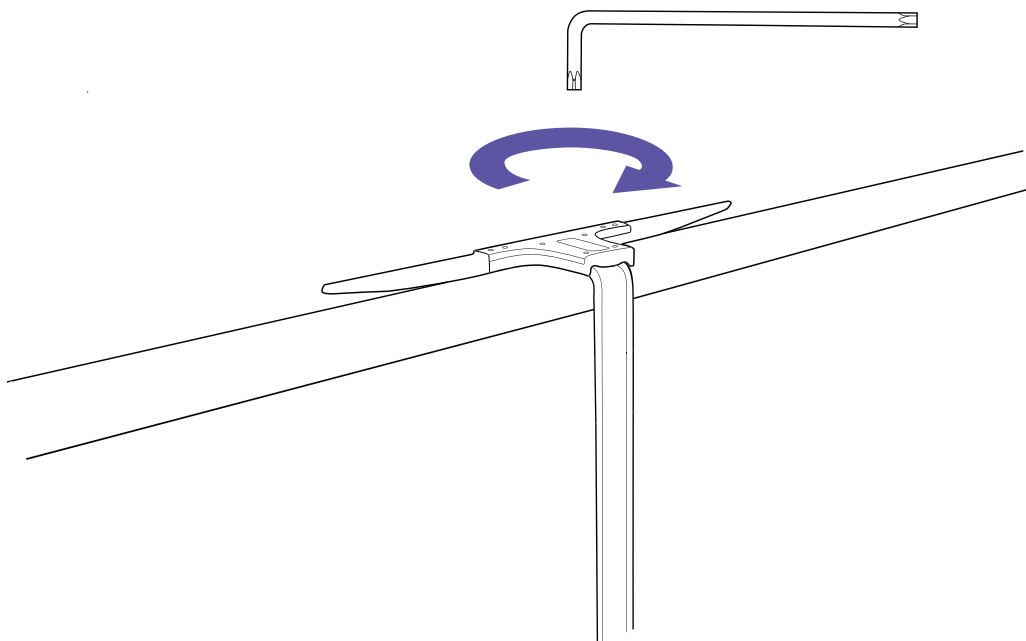
4) Insert the vertical part into the fixed horizontal part and adjust it to the appropriate position on the edge of the display;



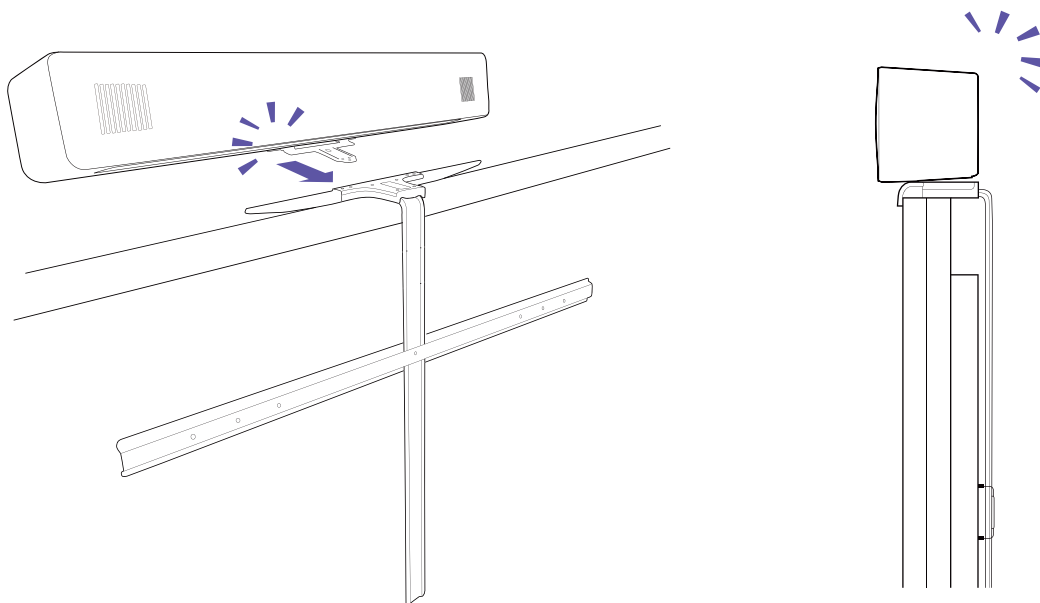
5) Tighten the screw at the center of the TV bracket;



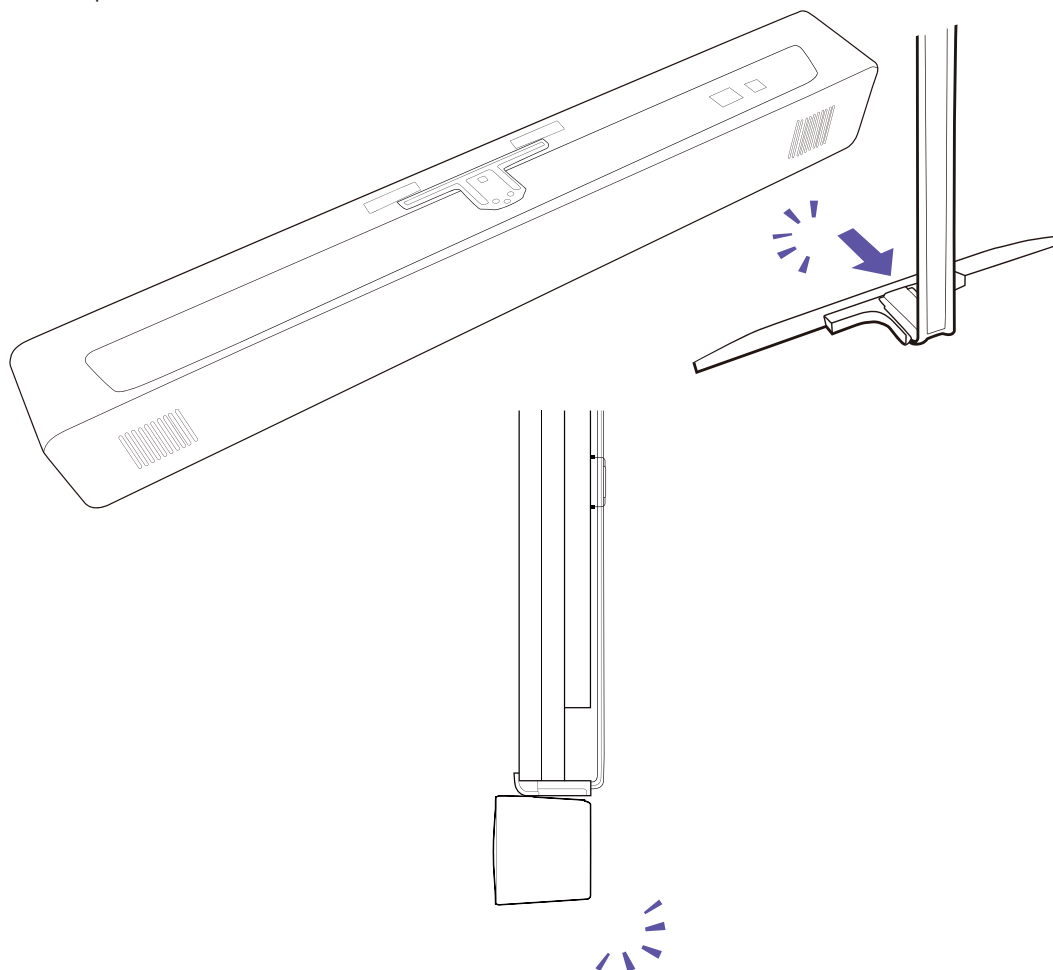
6) Tighten the screw at the T-shaped buckle;



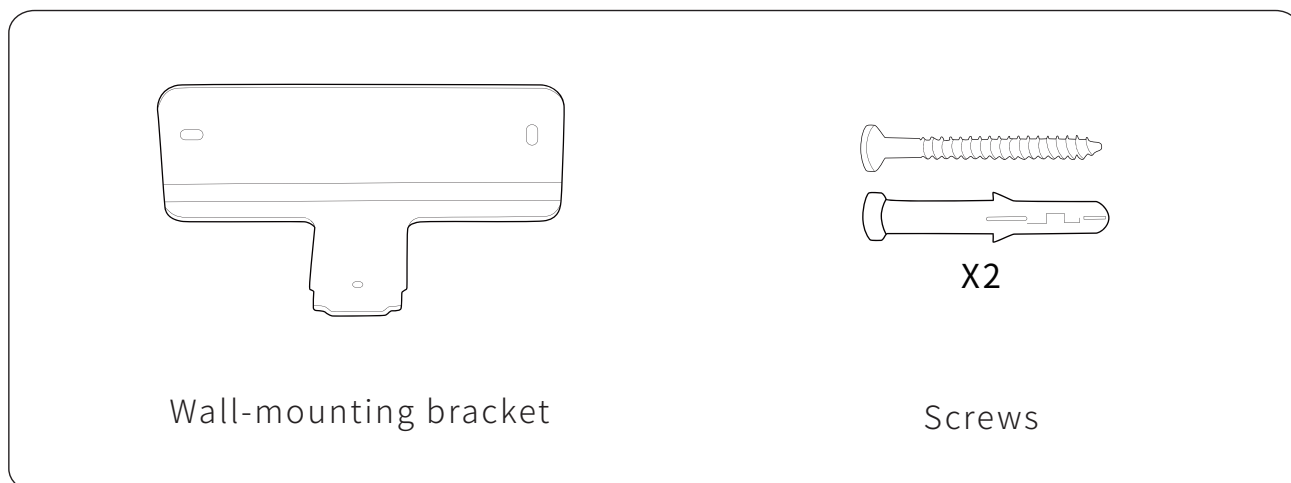
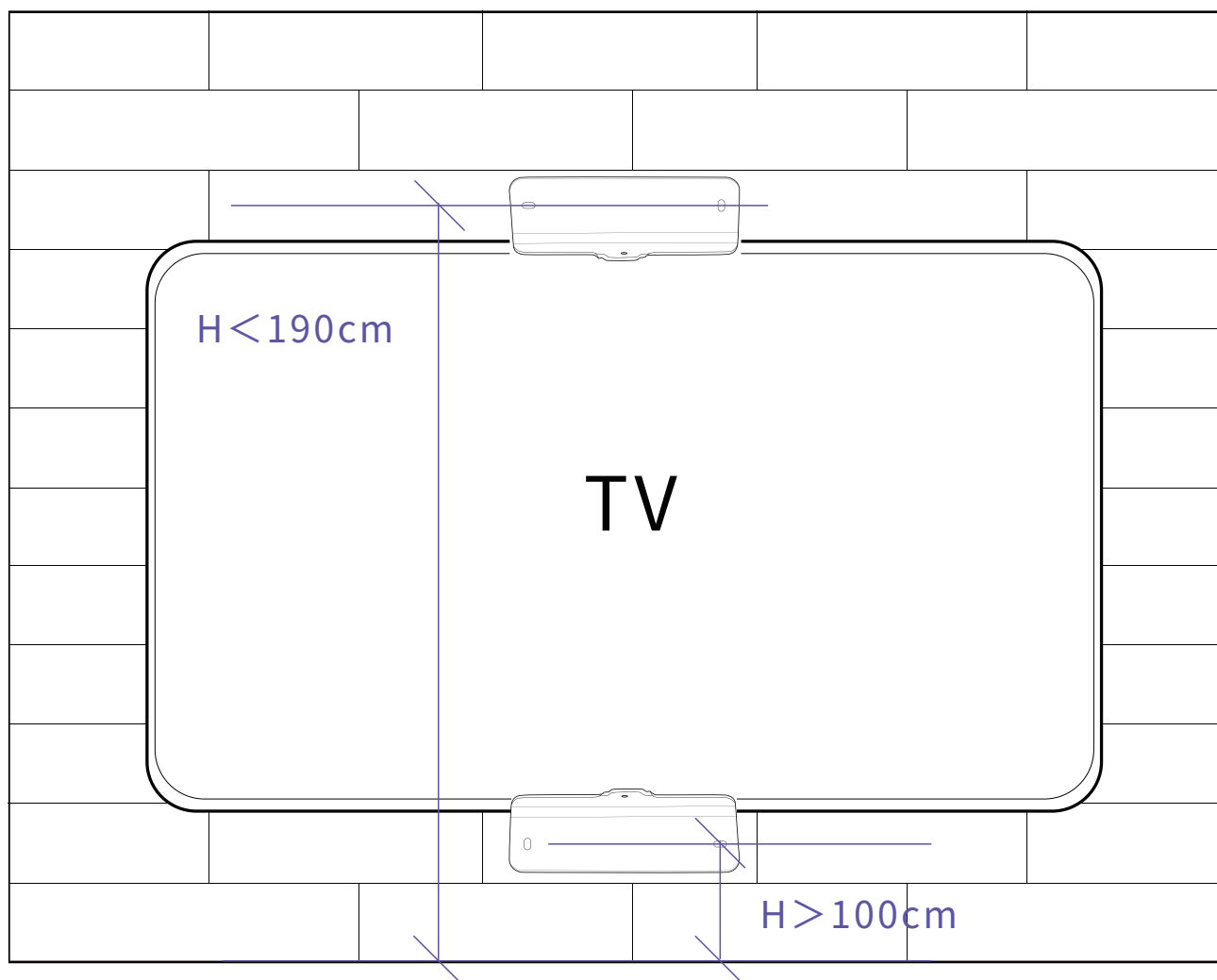
7) Insert the device into the T-tab.



*If you choose to install it under the screen, you need to flip the device vertically 180° and insert the T shaped tab.



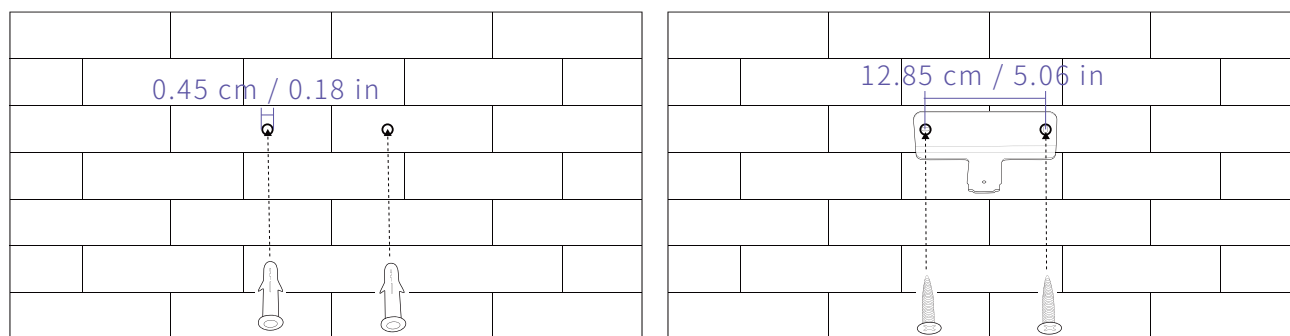
4.1.3 Wall Mounting (optional)



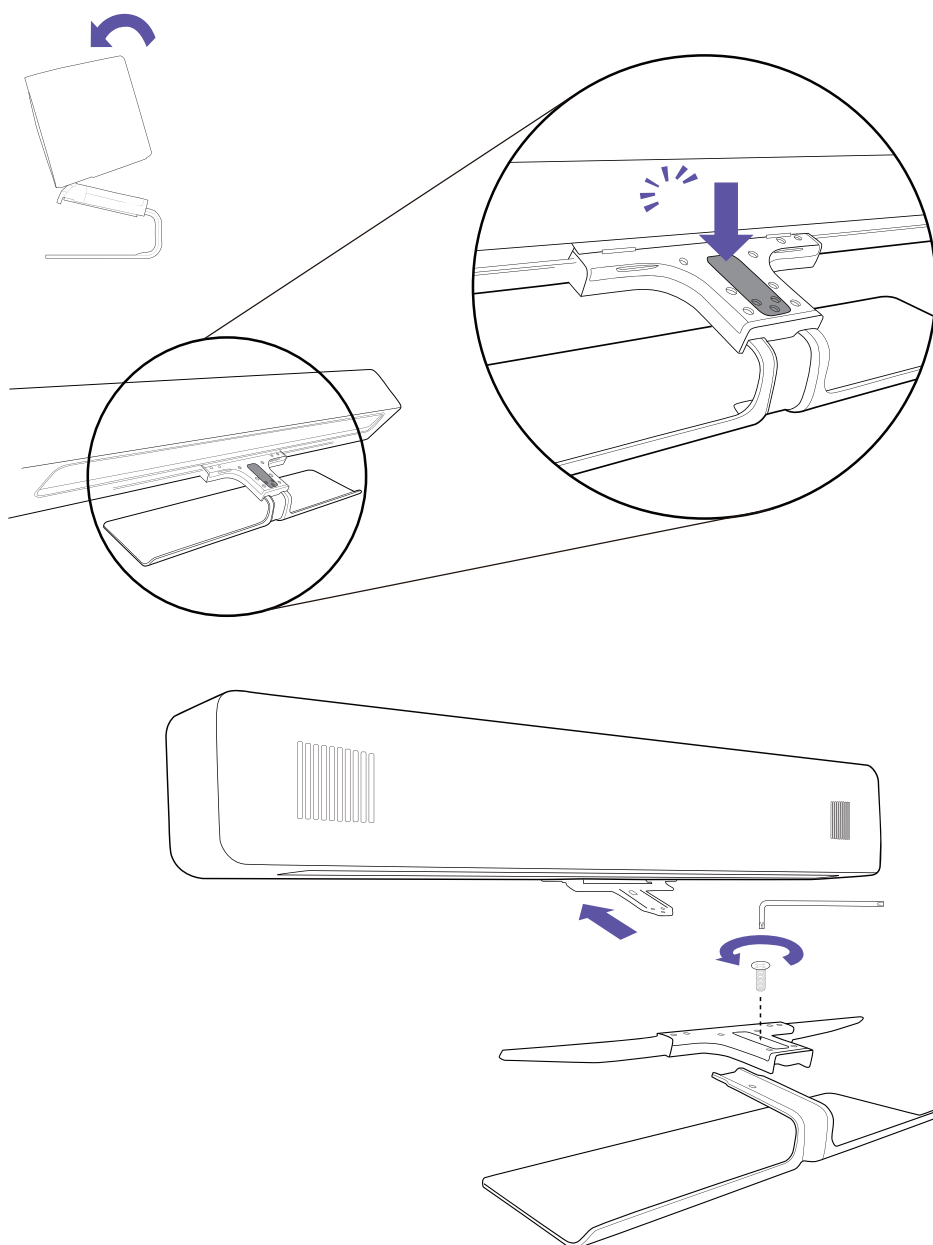
*Due to the size and quality of the product, it is important to install the wall mount system safely according to the installation instructions below.

- (1) The wall and mounting hardware must be able to safely support the product.
- (2) The wall-mounted system must be installed by qualified personnel who comply with national and local building codes.

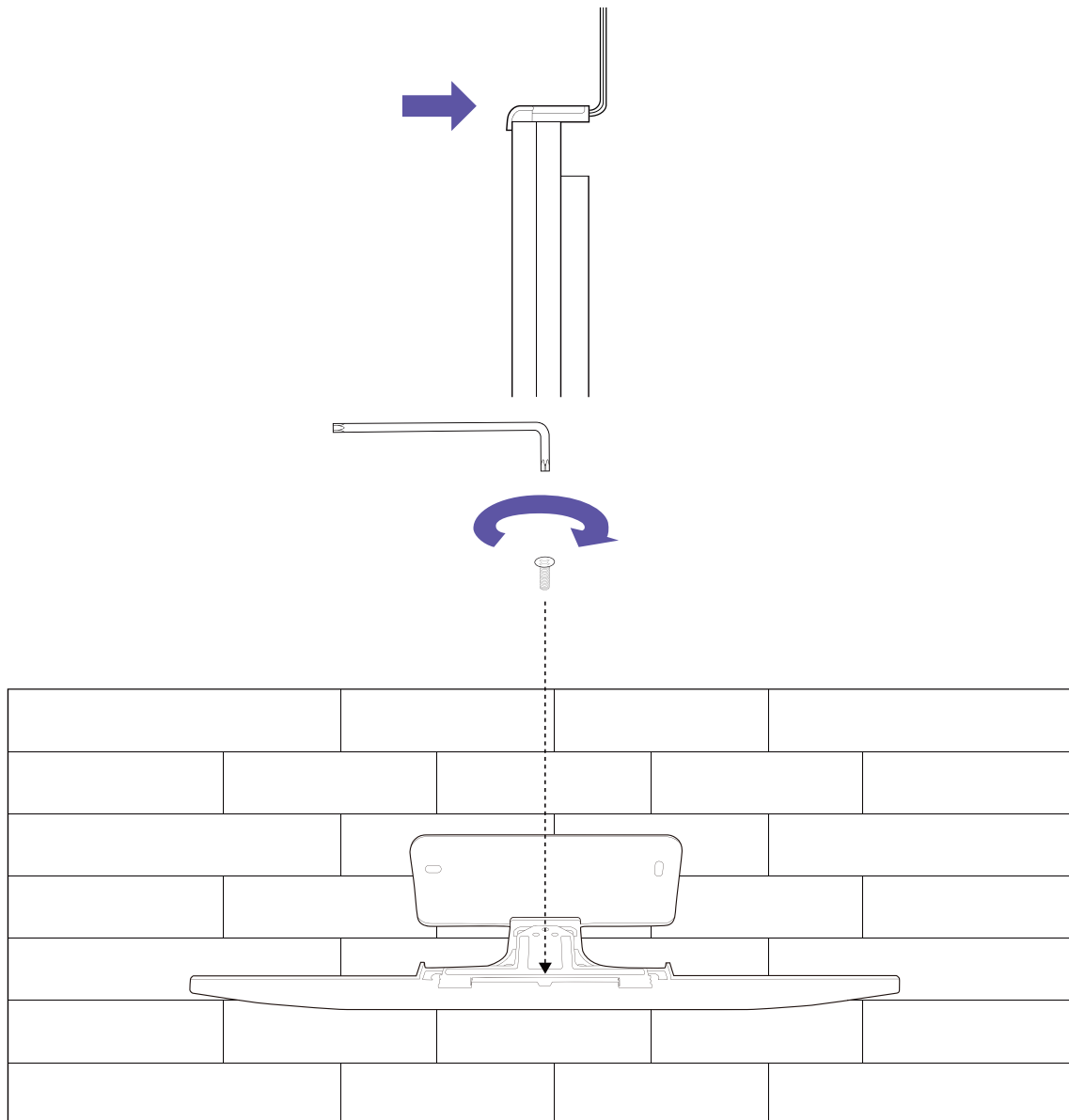
1) Fix the wall mount bracket to a suitable position on the wall;



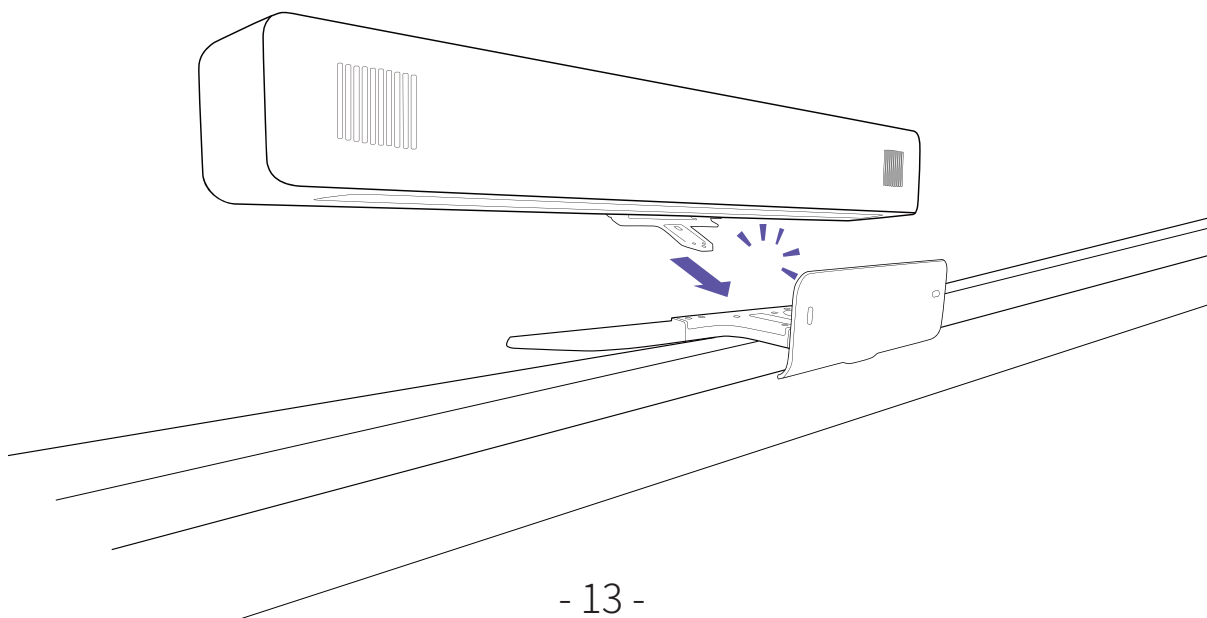
2) Press the shrapnel to remove the device, use a screwdriver to unscrew the screw at the connection between the T-bracket and the desktop stand, and pull out the T-bracket;



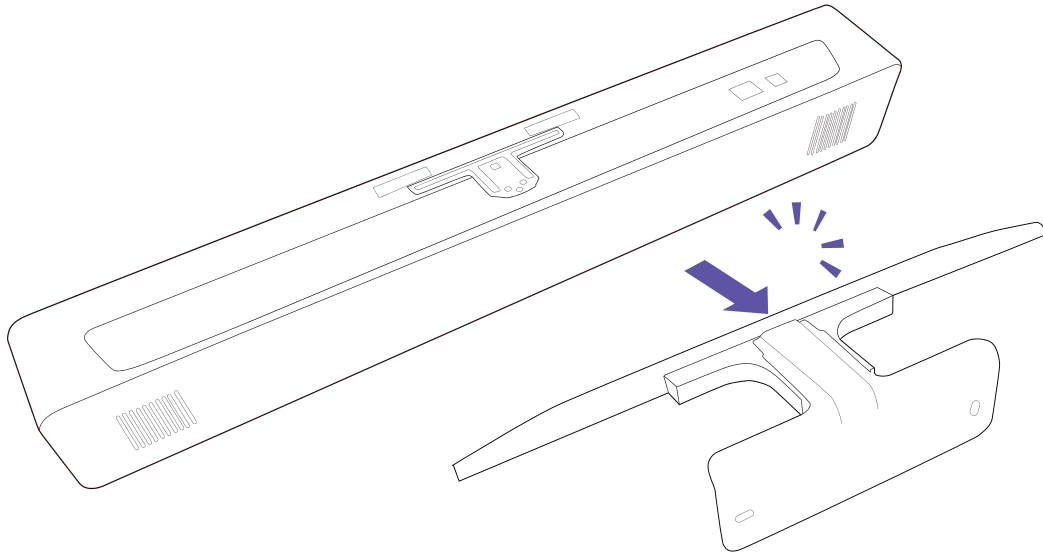
3) Adjust the T-tab to the appropriate position and tighten the screw at the center;



4) Insert the device into the T-shaped buckle.



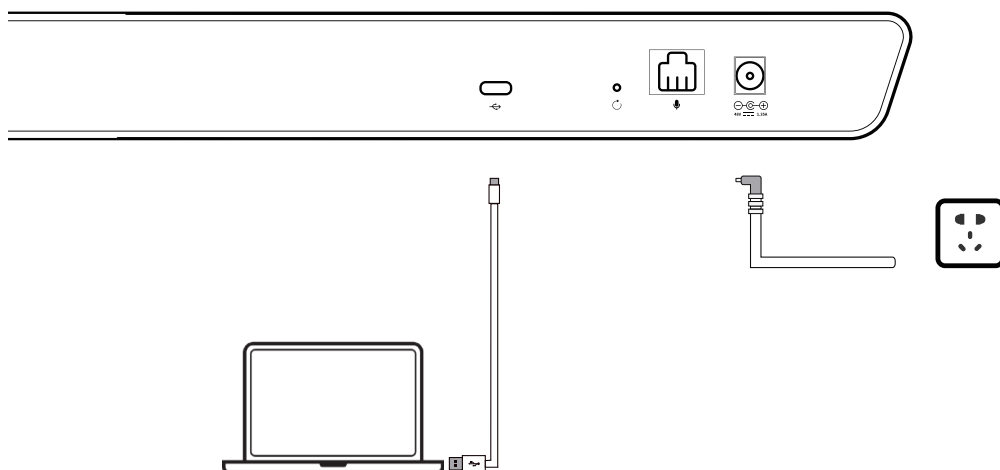
*If you choose to install it under the wall, you need to flip the device vertically 180° and insert the T-shaped tab.



4.2 Connection

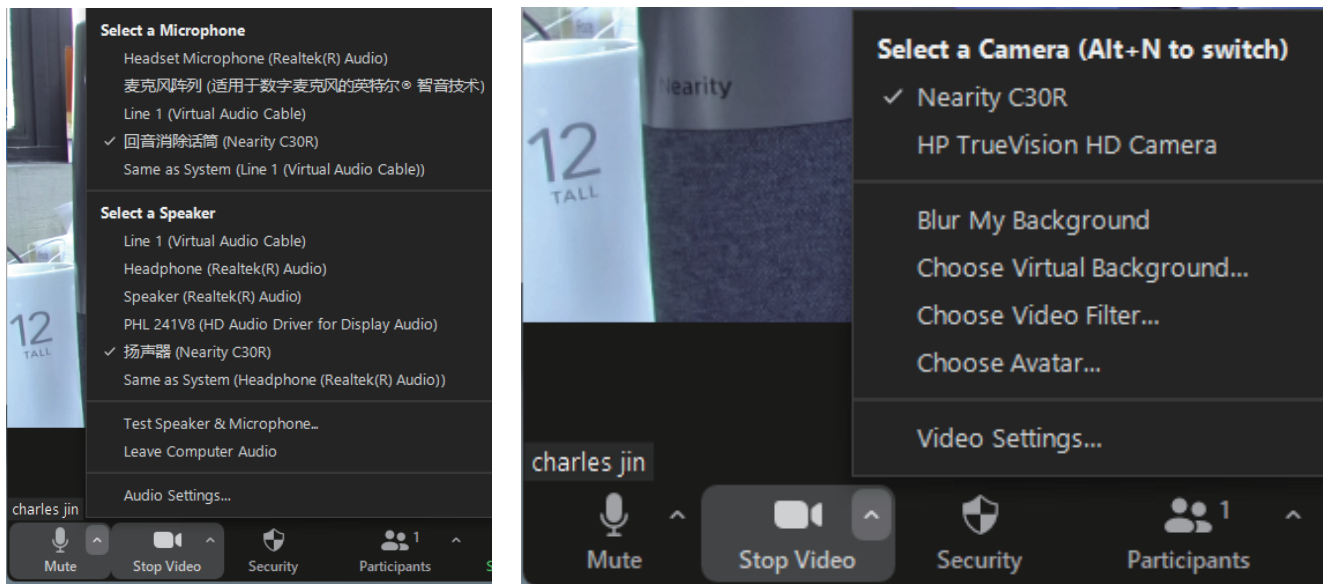
4.2.1 Connect to PC/Laptop

- 1) Insert the power cord into the corresponding port on the C30R, and connect the external power supply.
- 2) The Status LED light will display yellow when the C30R is powered on.
- 3) Connect the C30R to the computer using a USB type-C data cable. The Status LED light will turn white.



4) Check on the VC client if the device is connected successfully.

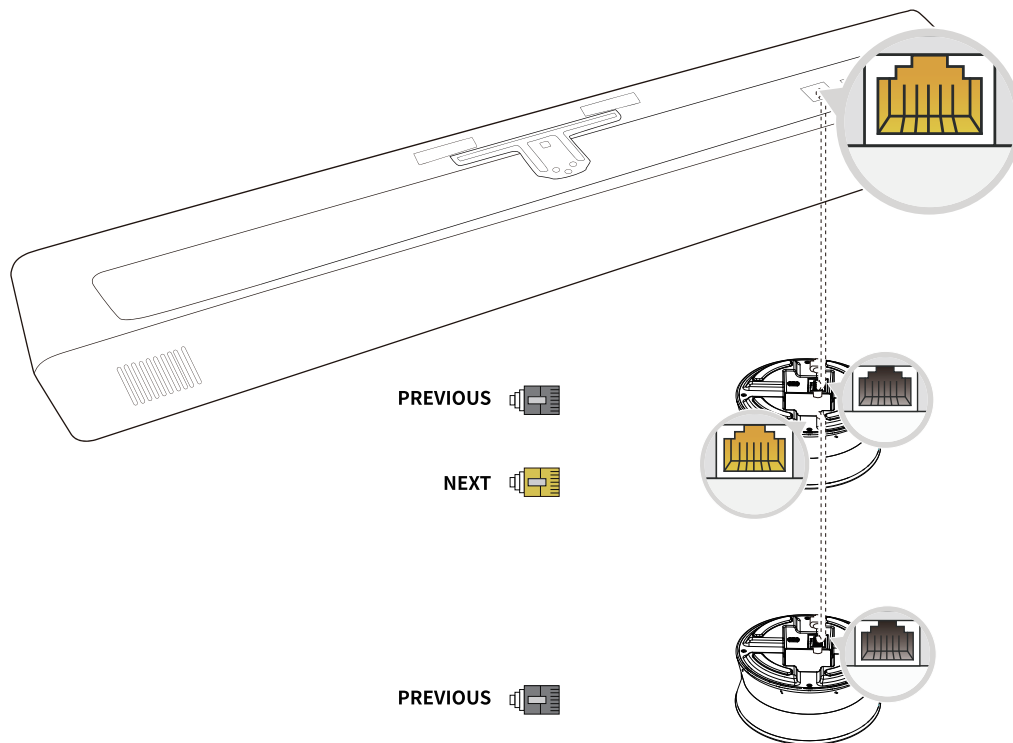
Example: in Zoom client



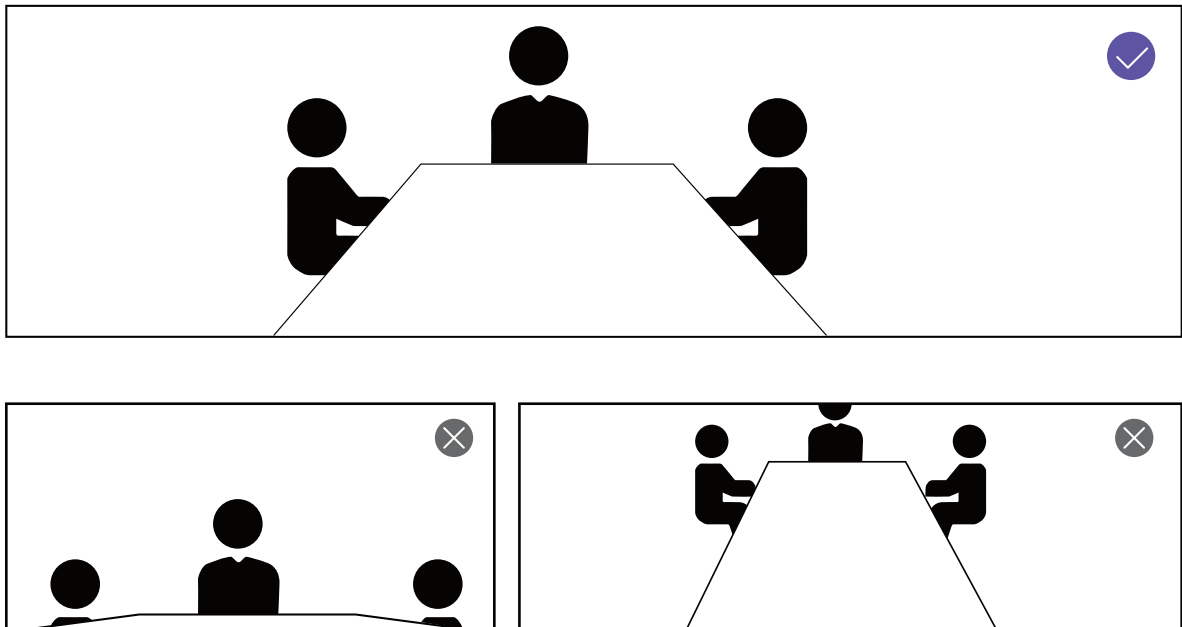
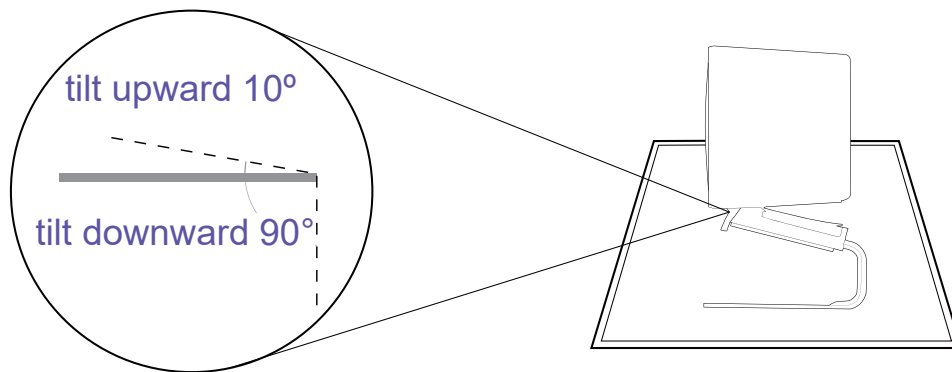
4.2.2 Connect to A20 (Daisy-chain)

- 1) Complete the connection of C30R;
- 2) Connect C30R to the A20 via Ethernet cable, indicator of C30R will show white, indicator of A20 will show blue.

*Up to four A20 can be daisy chained to cover a larger conference rooms.



4.3 Adjusting the Camera Tilt Angle

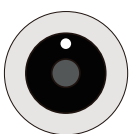


4.4 LED Indicators

4.4.1 Camera Indicator



When the camera is not turned on, the Camera LED light is off.



When the camera is working, the Camera LED light shows white.

4.4.2 Status Indicator



1) To be connected

When the adapter is powered on, the Status LED light shows yellow.



2) Connected

When the USB connection is established, the Status LED light turns white.



3) Mute Mode

When the microphone is muted, the Status LED light turns red.



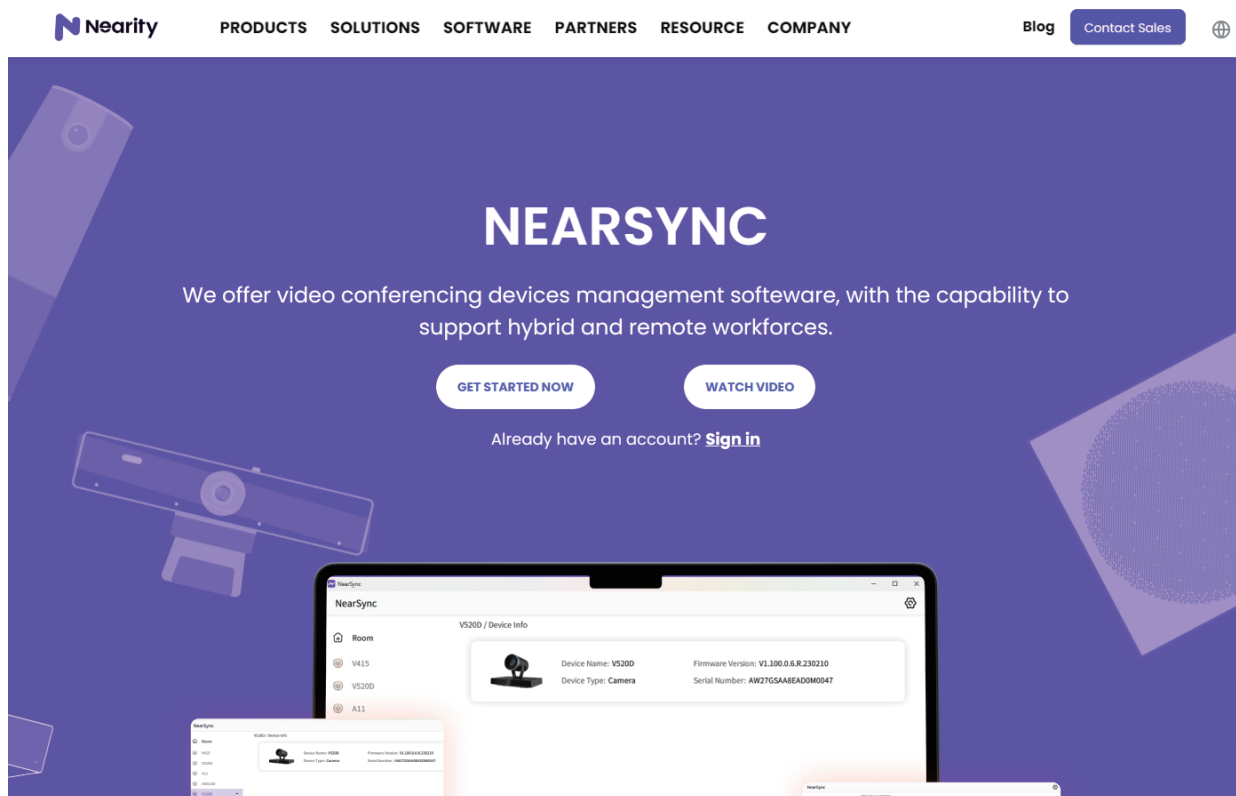
4) Update Mode

When a firmware update is in progress, the Status LED light flashes blue.

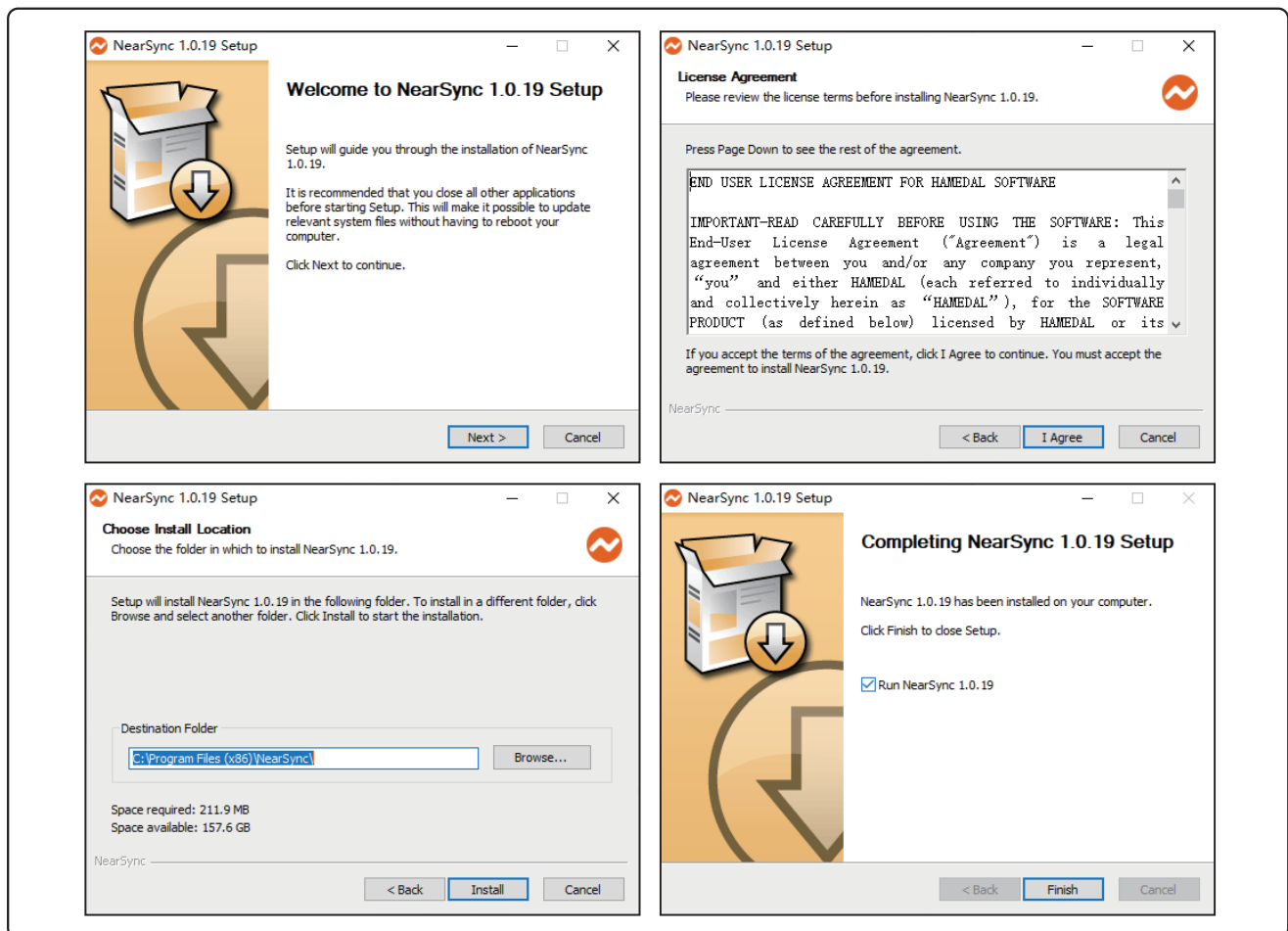
● 5. Operation on Nearsync

5.1 Downloading link

Download the Nearsync on the official website. <https://nearity.co/resources/dfu>

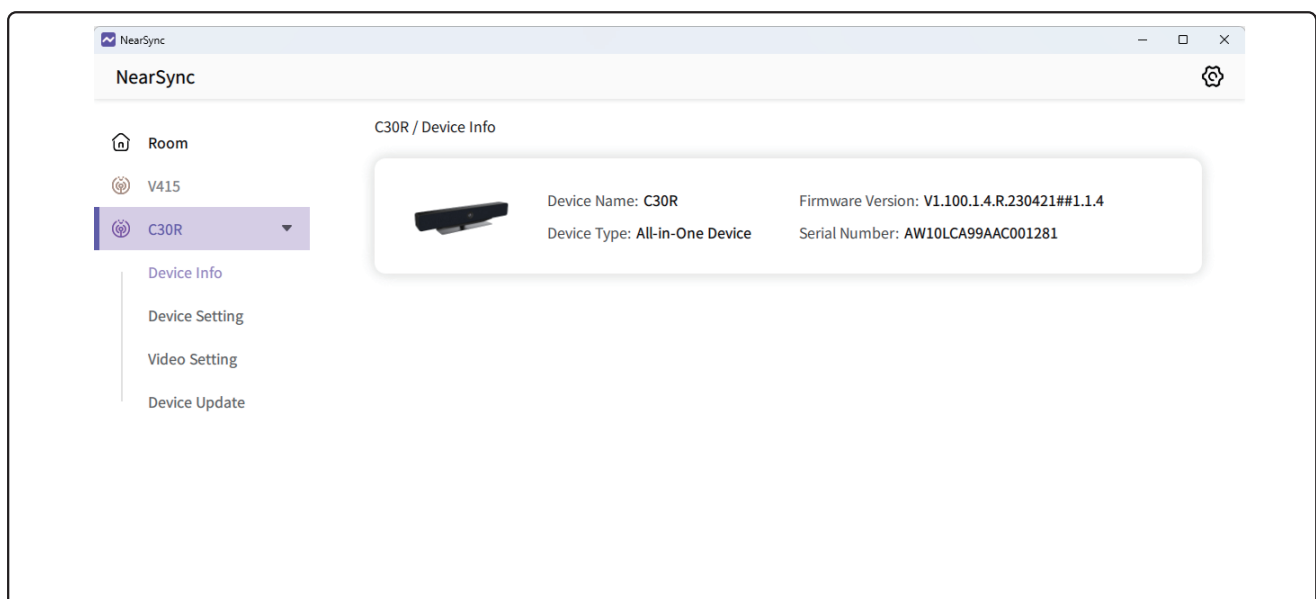


5.1.1 Install Nearsync



5.1.2 Device information

When the C30R is powered on and connected to the computer via USB, the device manager automatically recognizes the device information.



1. The page include the information as follows.
2. Product picture, model, firmware version, device type, SN.

5.2 Downloading link

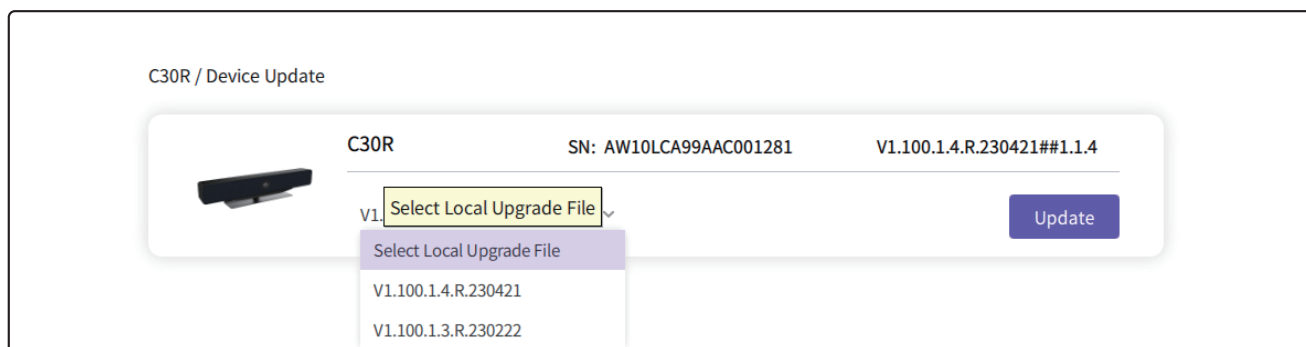
5.2.1 Online Upgrade



1. Click the drop-down menu to check the latest firmware.
2. Select the firmware version you want to update.
3. Click Update to start. When updating finishes, the device will restart automatically.

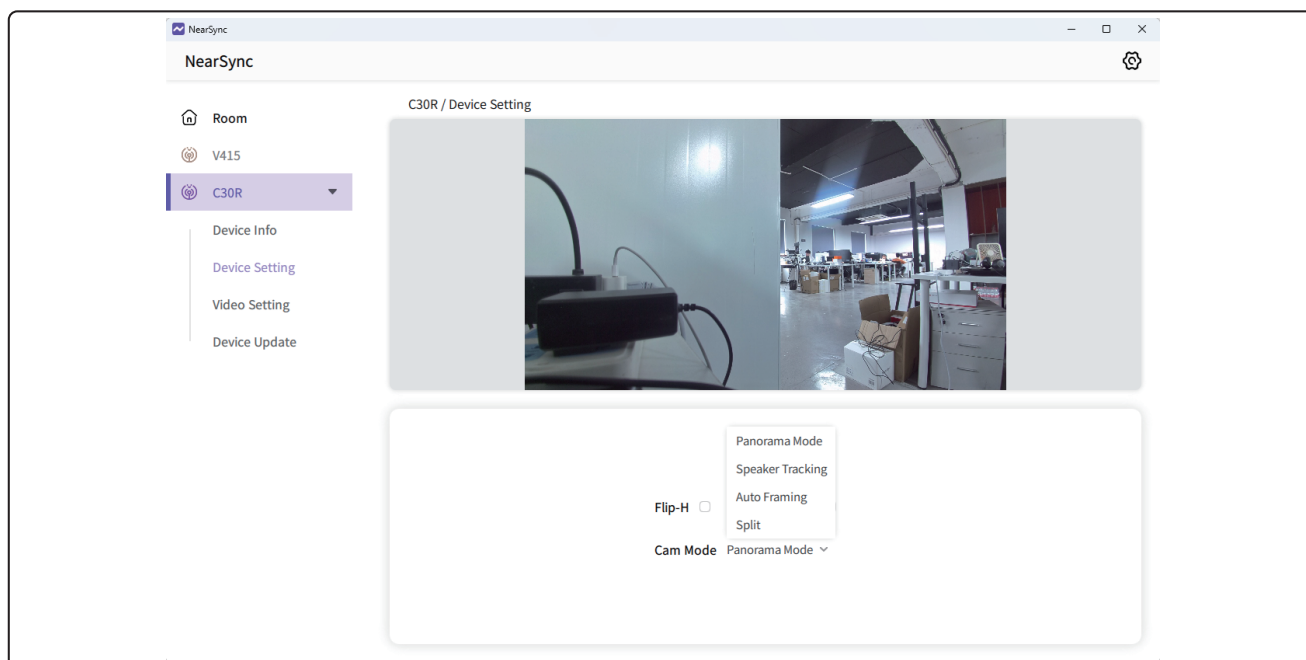
5.2.2 Local update

Sometimes we need to customize the firmware version according to the current room sound environment. Ensure you've already gotten the firmware from our technical team before you start the local update.



1. Click the drop-down menu. Select local upgrade file.
2. Choose the file on your PC/Laptop
3. Click Update to start. When updating finishes, the device will restart automatically.

5.3 Device Setting

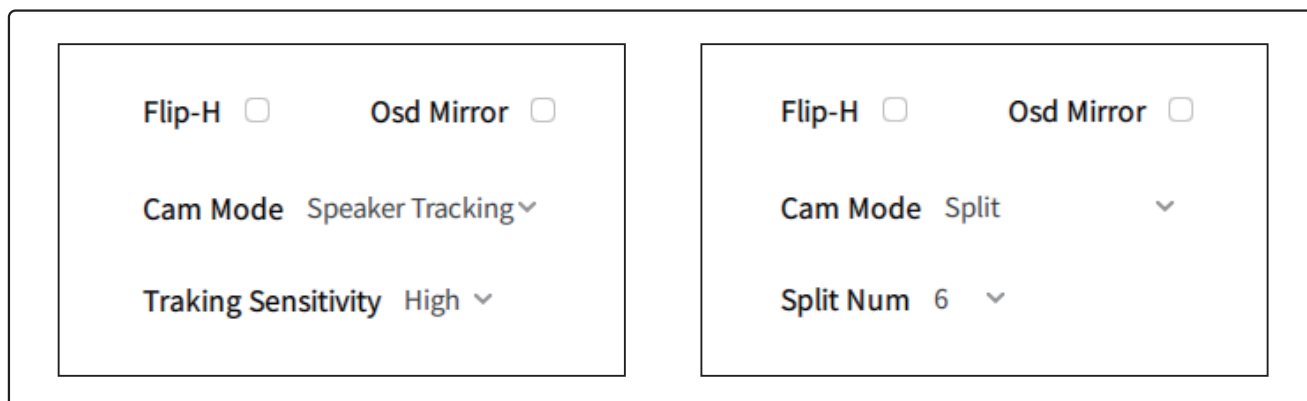


1. Flip-H: turn the image upside down
2. OSD Mirror: flip the OSD horizontally
3. Power Line Freq: choose the correct frequency according to the local power line.(ex. USA frequency is 60Hz; China frequency is 50Hz)
4. Mode Selection: switch the device functions. There are 4 modes that we can switch for the C30R:

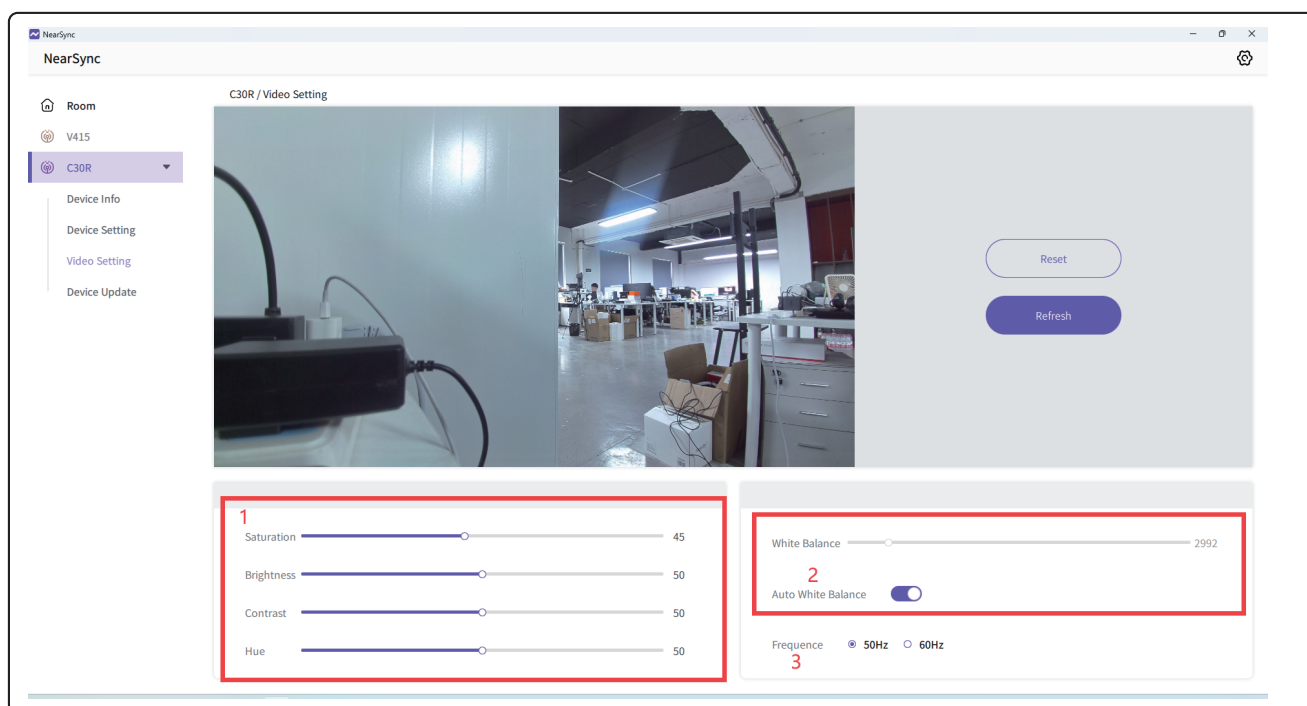
Auto-framing/Speaker Tracking/Panorama Shot/Split (Close-up group).

And in the Speaker Tracking mode, you can choose the sensitivity: Low/Medium/High; in the Split mode, you can choose the number of people in the image:2/3/4/5/6.

(As Mentioned in Chapter 3, we can also use the Remote Control to switch these functions)



5.4 Video Setting



1. According to the on-site environment of the meeting room, we can adjust the corresponding image effect by moving the sliders on each function bar.
2. Auto/Manual white balance. When using the Auto White Balance mode, the sliders will be gray and cannot be moved.
3. Switch flicker frequency 50/60Hz.

● 6. Product Specifications

	Technical Specifications
Camera Characteristics	Aperture: F/1.8
	Sensor: Sony 1/2.8 inches CMOS, Maximum resolution: 8MP
	6x digital zoom
	FOV(D):120°
	FOV(H): 110°
	FOV(V): 75°
	Automatic white balance and exposure supported
	3D noise suppression
	4K UHD image
	Aspect ratio: 16:9
	YUV: max of 480P@30fps MJPEG: max of 1080P@30fps H264: max of 2160P@30fps
	Speaker tracking
	Close-up group
	Auto-framing
Microphone Characteristics	5 MEMS microphone array
	Effective pickup distance: 5m(16ft)
	Sensitivity: -38dBV/Pa 94dB SPL@1kHz
	SNR: 63dBV/Pa 94dB SPL@1kHz,A-weighted
Speaker Characteristics	Rated output power: 4Ω/5W
	Speaker frequency response: 160Hz ~20kHz
	Speaker volume: 80±3dB @1m
	THD≤3%

Audio Features	Direction of Arrival(DOA) supported
	Beamforming
	AI noise suppression
	Full-duplex
	Reverb and Echo cancellation
	Automatic Gain Control(AGC)
Daisy-chain	Compatible with A20 via UTP cable
Physical Characteristics	Height: 81mm(3.2 inches) Width: 570mm(22 inches) Depth: 77mm(3 inches)
	Net weight: 2010g(70.9 oz)
	Color: Lunar Rock Gray
	Mounting Options: Desktop stand(default) TV bracket(optional) / Wall bracket(optional)
Power and Connectivity	External power supply: DC 48V/1.35A
	Compatible operating systems: Windows/Mac/Linux
	USB 2.0 Type-C
Packing List	1x C30R
	1x USB cable
	1x Power adapter
	1x Remote control
	1x User manual

* The above specifications are subject to change without notice

● 7. FAQ

Q: How to improve the sensitivity of Nearity C30R when using speaker tracking function?

A: Nearity C30R supports adjusting the voice tracking response time, which works for speaker tracking function. That can be set through the Nearity Device Manager tool or using the remote control.

Q: Why is the sound different from different angles when facing the Nearity C30R?

A: This is normal. When facing the front of the device, the left side of the Nearity C30R's lens is designed as a speaker, and the right side is designed as a microphone.

Q: Is the Microphone in the C30R still working when Daisy-chain with A20?

A: C30R's microphone is not available when cascaded with A20s. This is because the sound pickup effect of C30R and A20 is different. When the sound is taken by both C30R and A20 at the same time, it will cause the pickup to be unstable. So we disable the C30R's microphone on purpose when it cascades with A20.

Q: What's the maximum height that we can install the C30R?

A: C30R support Desktop, Wall-mounting, and TV mounting. And it's always applied to the small meeting room. To ensure the best audio and video experience, we highly recommend installing the C30R less than 1.8m(6ft).

● 8. Caution

Please read and follow all the safety instructions carefully.

1. Use the provided cable to charge the device.
2. Unauthorized dismantlement and strong impact may damage the device.
3. Keep the device away from high-temperature environments, heat sources, strong magnetic, or electric fields.
4. Do not immerse the device in water or any other liquid. Store it in a dry and cool place.
5. Constant high volume sounds can harm human hearing.
6. Dispose of packaging materials, devices, batteries, and other electronic components properly.
7. Do not dismantle, crush, or throw the battery into fire.
8. The packaging and the device contain small components that can be dangerous to children. Please keep them out of children's reach.
9. The device can be an interference source for other electronic devices and medical equipment.