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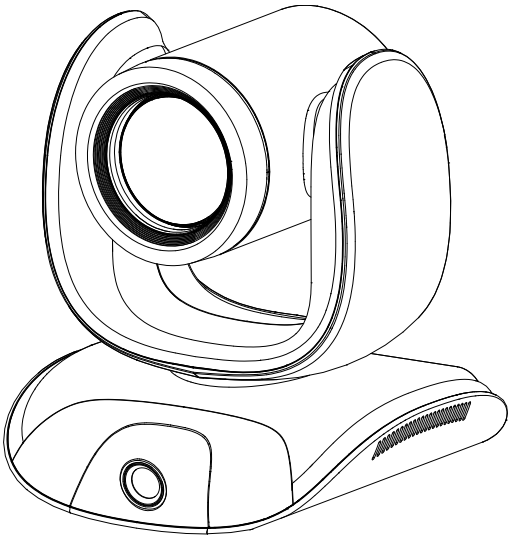
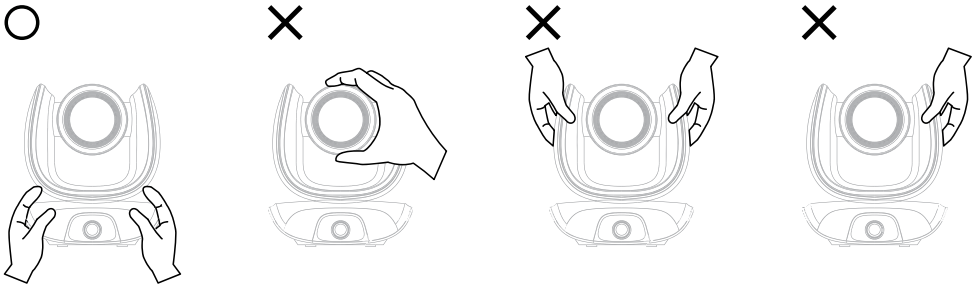


CAM550

User Manual

Warning



- Hold the bottom of the camera with both hands to carry the camera.
  Whether the camera is connected to power or not, do not grab any part of the lens or the lens holder to carry the camera or adjust pan and tilt.
- Do not drop the camera or subject it to physical shock.
- Ensure the power supply voltage is correct before using the camera.
- Do not place the camera where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
- To reduce the risk of fire or electric shock, do not expose the camera to rain or moisture.
  Warranty will be voided if any unauthorized modifications are done to the camera.

Federal Communications Commission Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Warning
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Caution
Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

VCCI-A
この装置は、クラスＡ 機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

(注)本製品同梱の電源ケーブルは、本製品同梱の電源アダプタでのみ使用してください。
本製品同梱の電源ケーブルは、他の電気機器では使用できません。

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Remote Control Battery Safety Information
- Store batteries in a cool and dry place.
- Do not throw away used batteries in the trash. Properly dispose of used batteries through specially approved disposal methods.
- Remove the batteries if they are not in use for long periods of time. Battery leakage and corrosion can damage the remote control. Dispose of batteries safely and through approved disposal methods.
- Do not use old batteries with new batteries.
- Do not mix and use different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
- Do not dispose of batteries in a fire.
- Do not attempt to short-circuit the battery terminals.

遥控器电池安全信息
- 请将电池存放在凉爽与干燥的位置。
- 不要将电量用尽的电池弃置在家庭废弃物中。请将电池弃置在特定回收处，或送回原购买的商店。
- 如果长时间不使用电池，请将其取出。电池漏液与腐蚀可能会损坏遥控器，请以安全方式弃置电池。
- 不可混用新旧电池。
- 不可混用不同类型的电池：碱性、标准（碳锌）或可充电（镍镉）电池。
- 不可将电池弃置于火源中。
- 请勿尝试让电池端子短路。

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Thành phố Hồ Chí Minh 700000, Việt Nam
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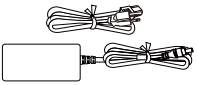
Overview

Package Contents

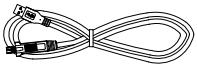
CAM550



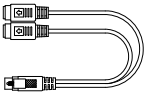
Power Adapter & Power Cord*

Remote Control

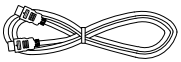
AAA Battery (x2) (US only)



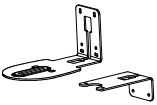
USB 3.1 Type-B to Type-A Cable (3m)



Mini Din 9 to Mini Din 8 RS-232 Adapter Cable



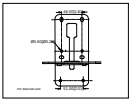
HDMI Cable (3m)



Wall Mount Bracket (x2)

M4 x 8mm Wall Mount Screw (x2)

1/4"-20 L=7.5mm Tripod Screw (x2)

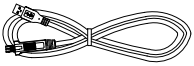


Drill Template

QR Code Card

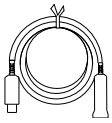
***The power cord may vary based on the country or region where sold.

Optional Accessories*

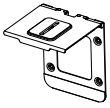


USB 2.0 Type-B to Type-A Cable (5m)

Mini Din 8 to D-Sub 9 Cable



USB 3.1 Extender 10m/20m/30m

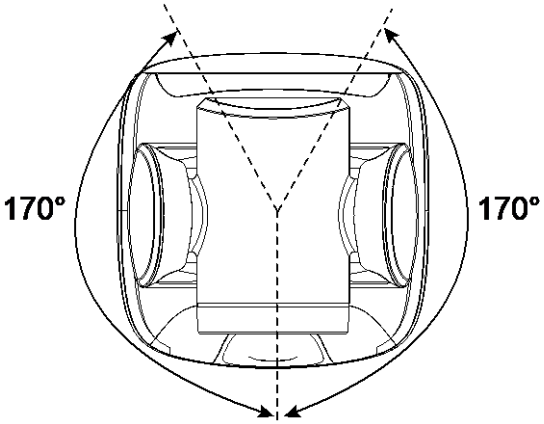


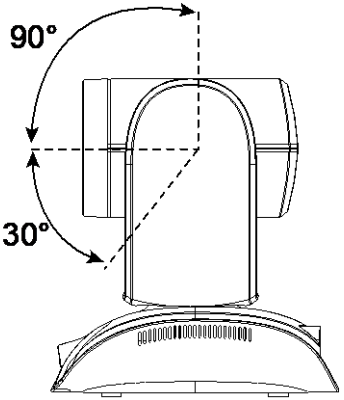
Foldable TV Mount

Ceiling Mount

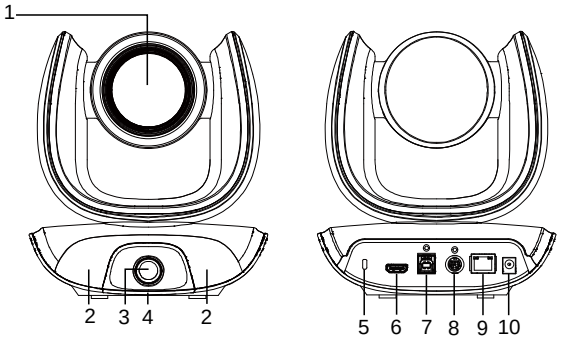
*Optional Accessories may vary based on the country or region where sold.

Pan and Tilt Angle





Parts Info

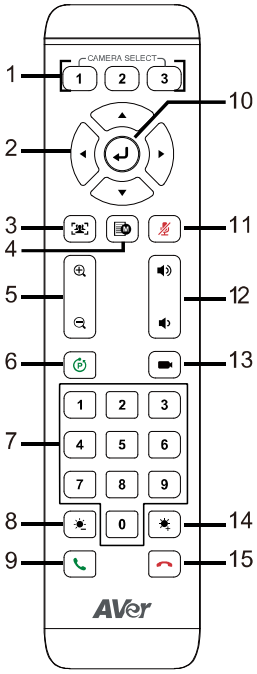


1. Optical Zoom Main Lens
2. IR Sensor
3. AI Lens
4. Status LED
5. Kensington Lock
6. HDMI Port
7. USB 3.1 Type-B Port
8. RS-232 In/Out Port
9. PoE Port
   (compatible with IEEE 802.3at)
10. DC Power Jack

LED Indicator

Color	Status
Solid red	Start-up
Solid orange	Standby
Solid blue	Video on
Flashing orange	Firmware update
Flashing blue for 2 seconds	Gesture control is turned on
Flashing blue for 4 seconds	Performing a gesture command

Remote Control



Name	Function
1. Camera Select	No selection is required by default to operate the camera. ● **Camera Binding** is turned off by default and all three selections can operate the camera. ● To specify a number, go to **Setting** > **Camera Binding** on the web interface or in PTZ App2.
2. Directional Pad	Press once for incremental movement or press and hold for continuous pan or tilt.
3. SmartFrame	Short press to frame entire group on screen and remove excess space. Long press to switch between tracking modes. **Note:** ● The SmartFrame icon appears on video when turned on. To hide the icon, go to the **Setting** tab > **On-Screen Menu** > **Off** on the web interface or in PTZ App2. ● The effective distance is up to 7-10 meters. ● AI functions will be turned off if pan, tilt and zoom controls are used.
4. OSD Menu	Short press to open the OSD menu during HDMI output. Press and hold for 1 second to select a screen layout or picture-in-picutre (PiP).
5. Zoom In/Out	Zoom in or out.
6. Preset 7. Number Pad	● **To save a preset:** Press and hold the **Preset** button until the save message appears on screen, then short press the **Number Pad (0-9)**. ● **To load a preset:** Press and hold the **Preset** button, then short press the **Number Pad (0-9)**.
8. Brightness -	Decrease image brightness.
9. Call/Answer	N/A
10. Enter	Display current AI function during HDMI output.
11. Mute	N/A
12. Volume	N/A
13. Load Preset	With each press, cycle through defined presets.

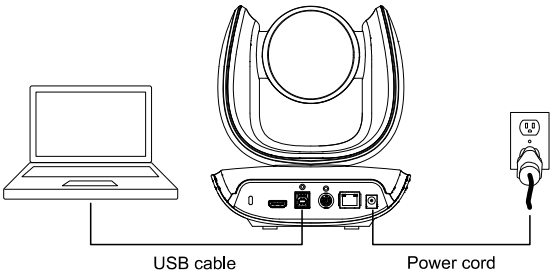
14. Brightness +	Increase image brightness.
15. Hang Up	N/A

Shortcuts

Press and Hold	To
1 for 2 sec	Turn wide dynamic range (WDR) on or off.
5 for 2 sec	Turn SmartFrame on or off.
6 for 2 sec	Change the picture-in-picutre (PiP) position when streaming over USB or IP.
8 for 2 sec	Turn RTMP streaming on or off when RTSP and RTMP are turned on.
9 for 2 sec	Enter sleep mode.
for 6 sec	Reboot.
for 2 sec, then press 1	Turn Preset Link Set 1 on or off.
for 2 sec, then press 2	Turn Preset Link Set 2 on or off.

Connection

Device Connection

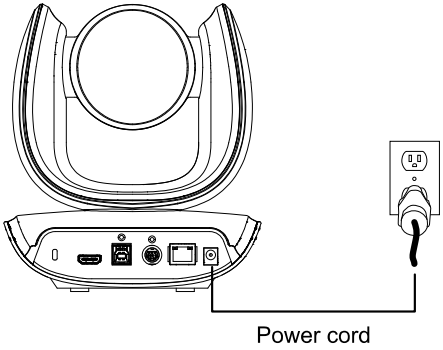


- Use the included USB cable.
- The USB 3.1 port is compatible with USB 2.0.

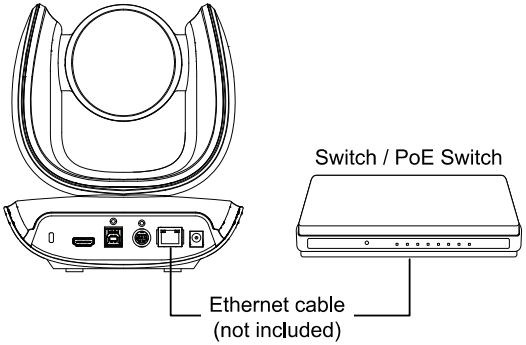
Maximum resolution/fps for USB 2.0 and USB 3.1 ports:

USB 2.0		USB 3.1		HDMI
YUV	M-JPEG	YUV	M-JPEG	
- 640x480 or less, up to 30fps - 720p, up to 10fps	- 1080p/60fps	- Up to 1080p/30fps - 720p/60fps	- Up to 4k/30fps - 1080p/60fps	- 1080p/60fps - 1080p/30fps

Power Connection



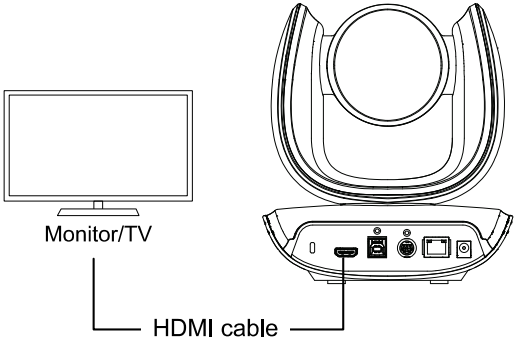
Connect the included power adapter and power cord to a wall outlet.



Or connect a CAT 5e FTP cable (not included) to the PoE Switch or Ethernet.

- The PoE port is compatible with IEEE 802.3at.
- When streaming over IP, use a CAT 5e FTP cable (not included) for a smooth video.

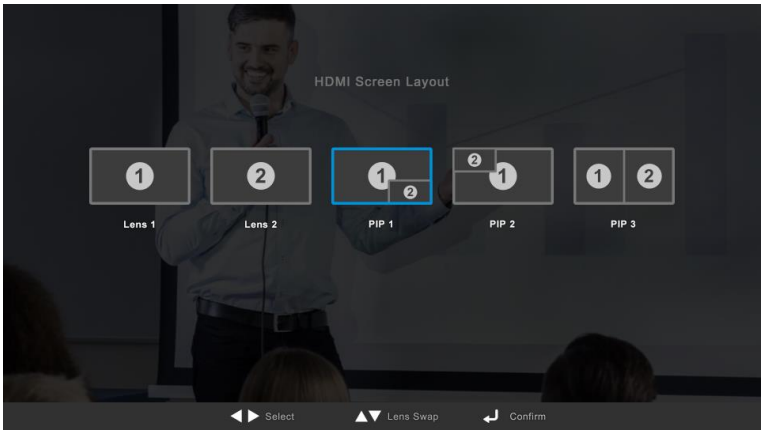
HDMI Connection



Connect with TV or monitor through the HDMI port to display camera video on the screen.
Hold button for 1 second on the Remote Control to call out the screen layout option. Select the camera image layout firstly. The default is PIP1, showing optical zoom lens image as main screen and AI lens image as small view. Under this layout, you can switch two cameras by pressing Up/Down on remote control.

[Note]

The HDMI out function will be automatically disabled when 4K resolution is selected for USB or RTSP streaming. Under this circumstance, please change RTSP and USB streaming from 4K to lower resolution if you want to enable HDMI out.
If your camera is under RTSP 4K resolution, you can press and hold the OSD Menu button on the Remote Control for 1~2 sec. to quickly change the resolution to 1080p and then you can start using the HDMI function.



PIP view

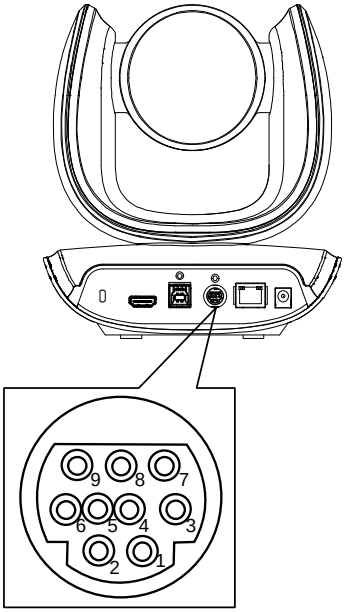
Lens 1 The PTZ camera focuses on speaker

Lens 2 Shows all participants

After choosing the image layout, short press the OSD Menu button on the Remote Control and then the setting page will show up. Press right direction button to enter and configure the parameters of the camera. Short press the OSD button twice or hold it for 1 sec. to leave. The HDMI OSD setting function is the same as Web configuration interface. Please refer Web Settings on page 42 for more details.

RS-232 Connection

RS-232 Pin Definition

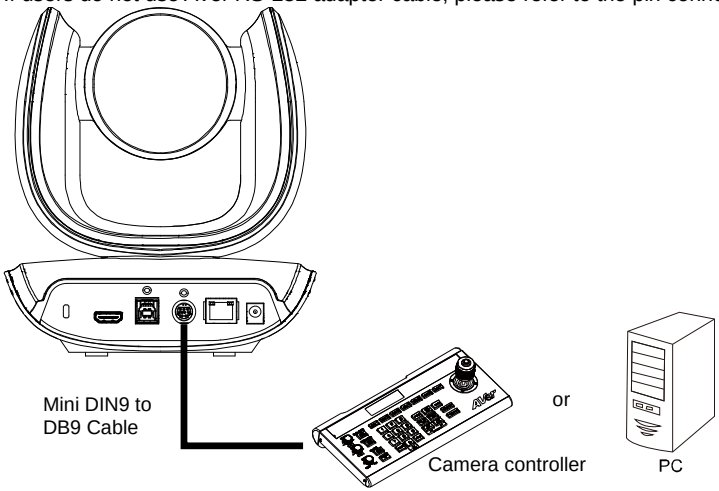


Function	Mini DIN9 Pin #	I/O Type	Signal	Description
VISCA IN	1	Output	DTR	Data Terminal Ready
	2	Input	DSR	Data Set Ready
	3	Output	TXD	Transmit Data
	6	Input	RXD	Receiver Data
VISCA OUT	7	Output	DTR	Data Terminal Ready
	4	Input	DSR	Data Set Ready
	8	Output	TXD	Transmit Data
	9	Input	RXD	Receiver Data
	5	---	---	Not connect

Computer/Keyboard Controller and Camera Connection

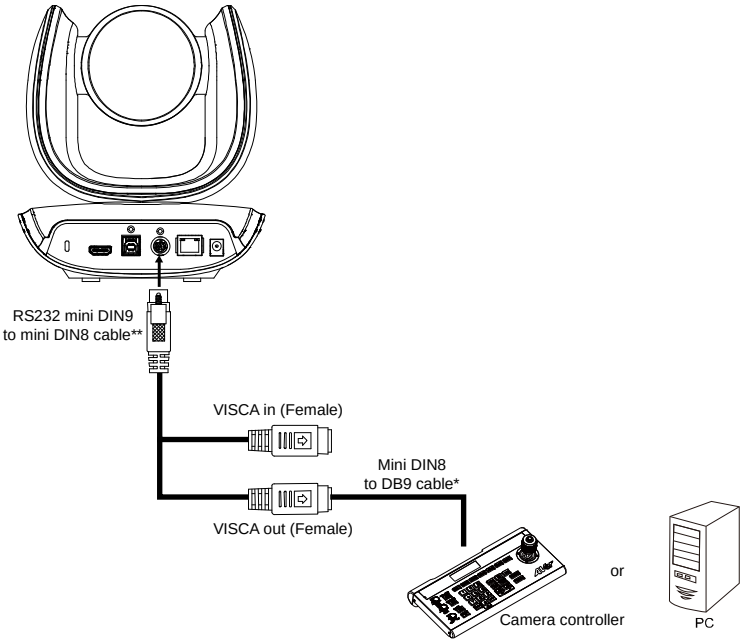
Direct Connection

If users do not use AVer RS-232 adapter cable, please refer to the pin connection shown below.



Mini DIN9		**DB9**
Camera		Camera controller, PC
1. DTR (IN)	→	6. DSR
2. DSR (IN)	→	4. DTR
3. TXD (IN)	→	2. RXD
6. RXD (IN)	→	3. TXD
7. DTR (OUT)		1. DCD
4. DSR (OUT)		5. GND
8. TXD (OUT)		7. RTS
9. RXD (OUT)		8. CTX
		9. RI

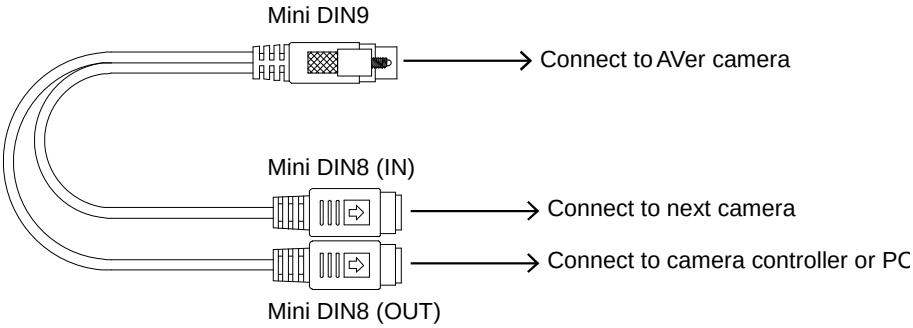
Use the supplied RS-232 mini DIN9 to mini DIN8 cable



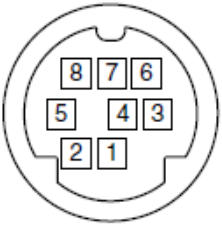
DB9		**Mini DIN8**
Camera controller, PC		Camera
1. DCD		6. GND (IN)
2. RXD	→	3. TXD (IN)
3. TXD	→	5. RXD (IN)
4. DTR	→	2. DSR (IN)
5. GND	→	4. GND (IN)
6. DSR	→	1. DTR (IN)
7. RTS		
8. CTX		1. DTR (OUT)
9. RI		2. DSR (OUT)
		3. TXD (OUT)
		4. GND (OUT)
		5. RXD (OUT)
		6. GND (OUT)

*** Mini DIN8 to D-Sub9 (DB9) cable 064AOTHERBPK is an optional item.**

**** RS-232 mini DIN9 to mini DIN8 Cable Pin Definition**



Mini DIN8 Pin Definition



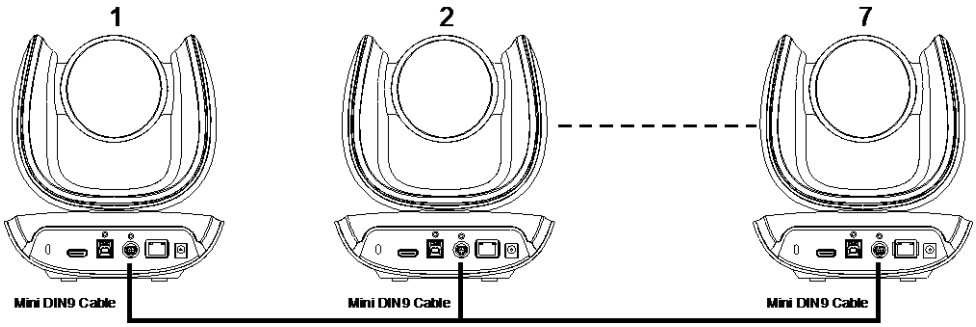
No.	Pin
1	DTR
2	DSR
3	TXD
4	GND
5	RXD
6	GND
7	NC
8	NC

Camera Cascade Connection

Direct Connection

If users do not use AVer RS-232 adapter cable, please refer to the pin connection shown below for cascading cameras.

Total can connect up to 7 cameras.

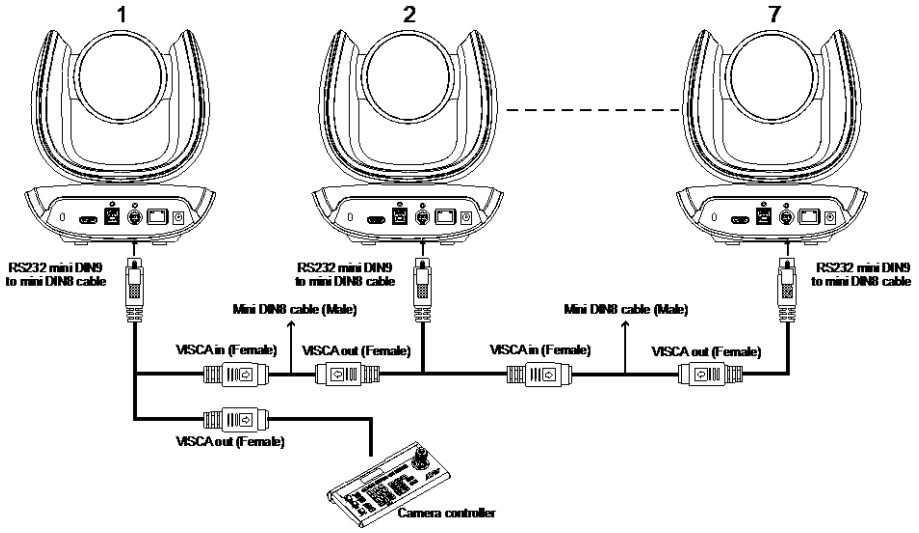


Mini DIN9 Camera 1		**Mini DIN9** Camera 2
1. DTR (IN)		7. DTR (OUT)
2. DSR (IN)		4. DSR (OUT)
3. TXD (IN)		8. TXD (OUT)
6. RXD (IN)		9. RXD (OUT)
7. DTR (OUT)	→	2. DSR (IN)
4. DSR (OUT)	→	1. DTR (IN)
8. TXD (OUT)	→	6. RXD (IN)
9. RXD (OUT)	→	3. TXD (IN)
SHIELD	→	SHIELD

Use the RS-232 mini DIN9 to mini DIN8 cable

Total can connect up to 7 cameras.

To facilitate the camera cascade, users can use AVer RS-232 adapter cable.
Connect camera with AVer mini DIN9 to mini DIN8 adapter cable. Connect the mini DIN8 female side to male mini DIN8 Visca cable (Users have to buy it in the market) and then connect AVer mini DIN9 to mini DIN8 adapter cable again to connect to next camera.



Mini DIN8 Camera 1		**Mini DIN8** Camera 2
1. DTR (IN)		1. DTR (OUT)
2. DSR (IN)		2. DSR (OUT)
3. TXD (IN)		3. TXD (OUT)
4. GND (IN)		4. GND (OUT)
5. RXD (IN)		5. RXD (OUT)
6. GND (IN)		6. GND (OUT)

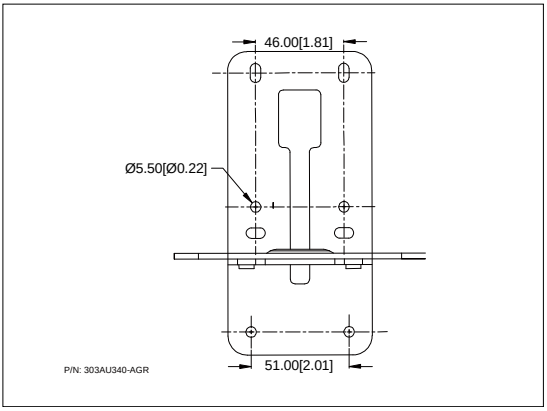
1. DTR (OUT)	→	2. DSR (IN)
2. DSR (OUT)	→	1. DTR (IN)
3. TXD (OUT)	→	5. RXD (IN)
4. GND (OUT)	→	4. GND (IN)
5. RXD (OUT)	→	3. TXD (IN)
6. GND (OUT)		6. GND (IN)

Installation

- The AI lens has a 95-degree field of view but lacks ePTZ functionality.
- Install the camera at a minimum height of 1.5 meters and avoid placing the camera on a table as it may obstruct the AI lens view.
- Keep the camera at least 1.5 meters away from your participants for accurate framing.

Wall Mount Installation

1. Use the drilling paper included in the package to drill the holes in the wall where the user wants to mount the camera.

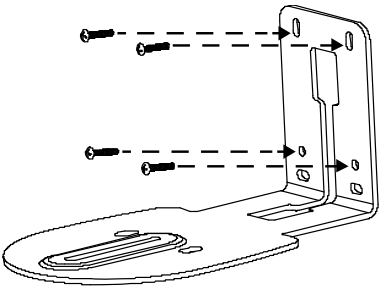


2. Use the screws (not included) to secure the L-mount bracket A on the wall.

   Screw

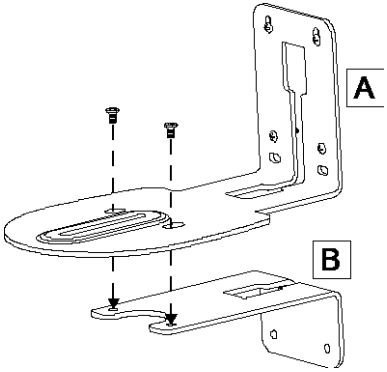
   For Cement wall: M4 x20mm self-tapping screws (x4) + Plastic conical anchor

   For Wooden wall: M4 x20mm self-tapping screws (x4)



3. Then, assemble the L-mount brackets [A] + [B] with screws (included in package).

Screw size: M4 x8mm (x2)

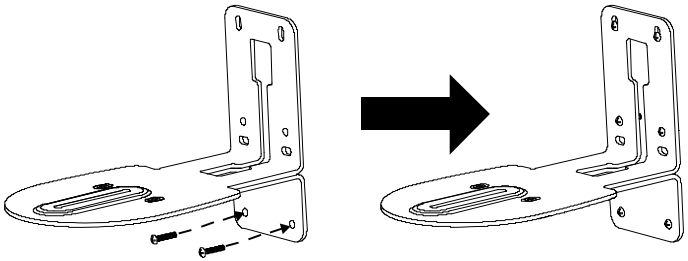


4. After assembling the L-mount brackets, use the screws (not included) to secure the lower part of L-mount brackets on the wall.

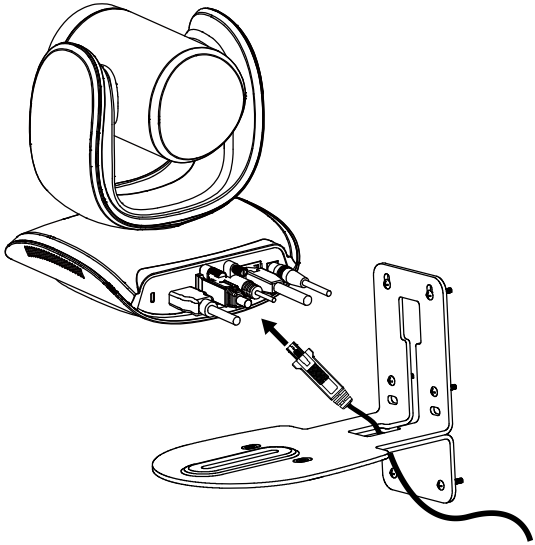
Screw

For Cement wall: M4 x20mm self-tapping screws (x2) + Plastic conical anchor

For Wooden wall: M4 x20mm self-tapping screws (x2)

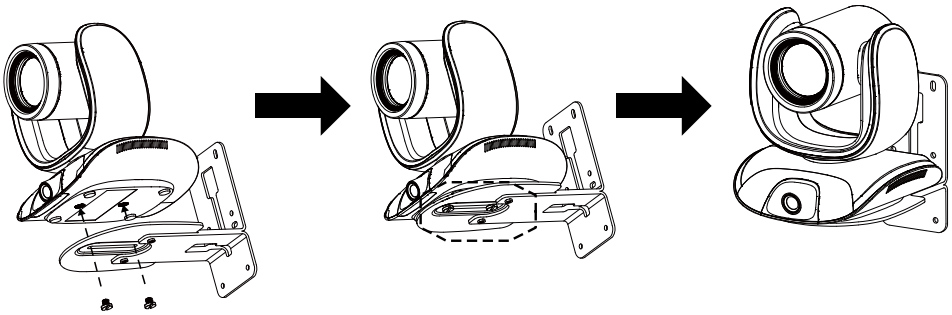


5. Pass the cables through the hole on the L-mount bracket and connect the cables to corresponding connection ports.



6. Use the remaining screws (included in package) to secure the camera on the L-mount bracket.

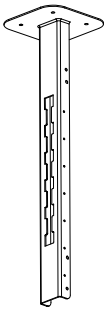
Screw: 1/4”-20 L=7.5mm (x2)



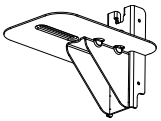
Ceiling Mount Installation (Optional)

Use the ceiling mount bracket to install the camera to the ceiling.

Package Content



Mount bracket x 1



Camera bracket x 1

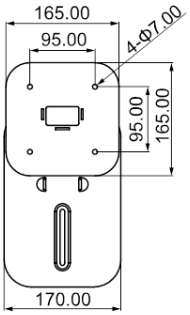
Back cover x 1

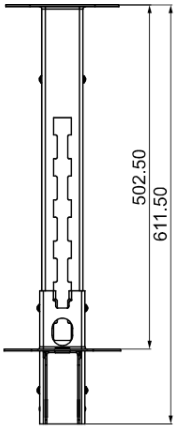
Screw (M4*8) x 8

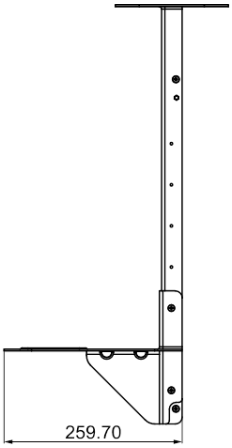
Washer x 8

Dimension

Unit=mm







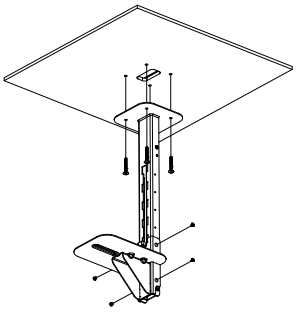
To mount the camera to the ceiling:

1. Drill the hole on the ceiling. Use screw to secure the mount bracket on the ceiling.

   Screw: 4 M6 x 50mm (Not included in package)

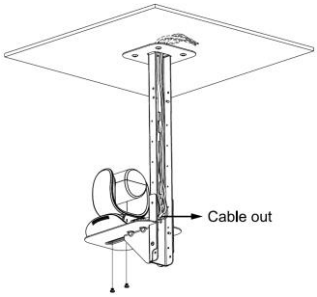
2. Use the supplied screws with washers to secure the camera bracket to the mount bracket.

   Screw: 4 M8 x 4 + 4 Washer



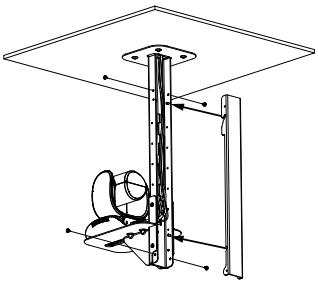
3. Connect all cables on the camera and pass all cables out through the hole on the mount bracket. Then, secure the camera on the camera bracket.

   Screw: 2 UNC-1/4"-20 (Not included in package)

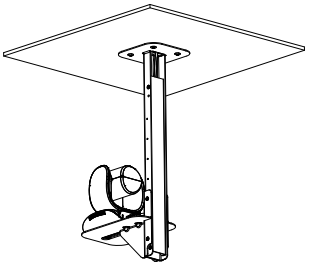


4. Organize all cables to go out from top or bottom of mount bracket.
5. Then, secure the back cover with screws and washer.

   Screw: 4 M8 x 4 + 4 Washer



6. Completed.



To mount the camera to the calcium silicate ceiling:

1. Please purchase support bracket for supporting camera mount bracket on calcium silicate ceiling. Then, secure the support bracket on the light steel frame structure.

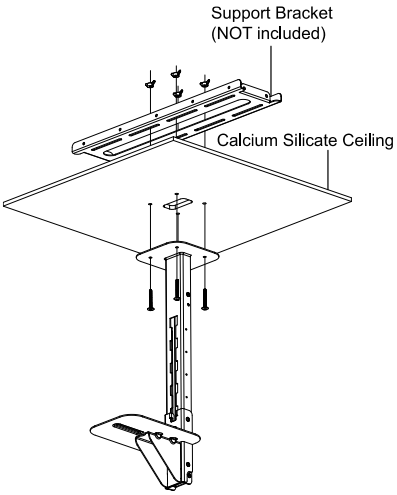
2. Drill the hole on the calcium silicate ceiling. Open a hole on the calcium silicate ceiling to allow camera cables to pass through.

3. Then, secure the mount bracket, calcium silicate ceiling and support bracket together.

   Screw: 4 Wingnut + 4 M6x50mm (Not included in package)

4. Use the supplied screws with washers to secure the camera bracket to the mount bracket.

   Screw: 4 M8 x 4 + 4 Washer



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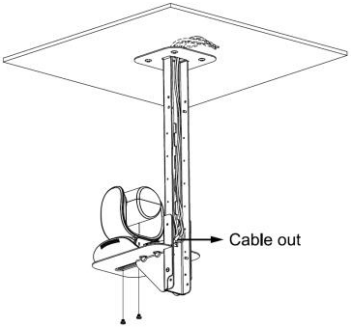
5. Connects all cables on the camera and pass all cables through the hole on the mount bracket. Organize all cables to pass through the hole on the ceiling. Also, the cable can go out from top or bottom of mount bracket.

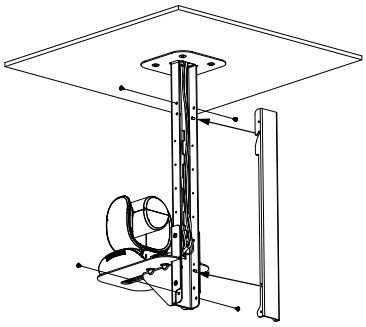
6. Then, secure the camera on the camera bracket.

   Screw: 2 UNC-1/4"-20 (Not included in package)

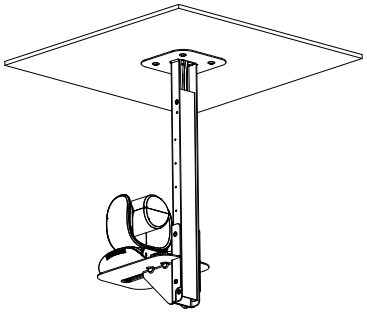


7. Next, secure the back cover with screws and washer.

   Screw: 4 M8 x 4 + 4 Washer

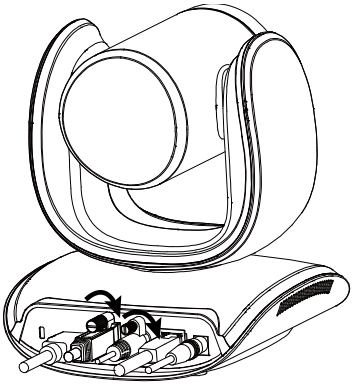


8. Completed.



Secure the Cables

Plug in your USB cable or RS-232 cable and tighten the cable screw to secure.



Get Started

Make a Video Call

The CAM550 is a plug-n-play camera.

1. Connect your CAM550 to a computer using the included USB cable.
2. Open your video conferencing software such as Microsoft® Teams, Skype and Zoom.
3. Set the CAM550 as your primary camera on your video conferencing software.

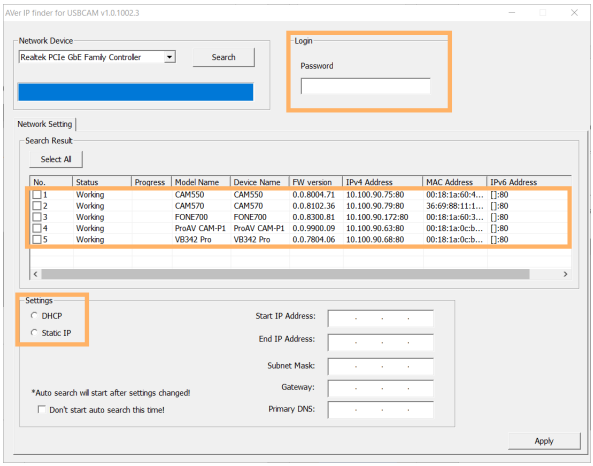
Web Interface

Access the Web Interface

You can access your camera's web interface and change the default static IP to DHCP using the following software:

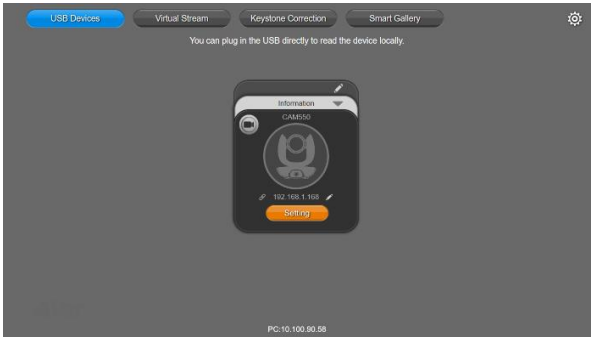
- AVer IP Finder
- PTZApp 2

AVer IP Finder



1. Download and install AVer IP Finder to your computer from AVer Download Center. (https://www.aver.com/download-center).
2. Make sure your camera and computer are connected to the same network.
3. Open AVer IP Finder. Click **Search**.
4. To change the default static IP **192.168.1. 168** to DHCP, select your camera's checkbox from the list of devices.
5. Enter the default password **aver4321**.
6. Select **DHCP**.
7. Click **Apply**. AVer IP Finder will seach for devices again and your camera's IP address will change.
8. Double-click on your device row to access the web interface.
9. For first-time login, enter the default password **aver4321**. You'll be prompted to set up a new account and password.
   - Use 6-10 characters, upper and lowercase letters, numbers and special characters (* ! % + = , - _ ^ / @ . ~).
   - If you forgot your password, use PTZApp 2 to reset the password to the default password **aver4321**.

PTZApp 2

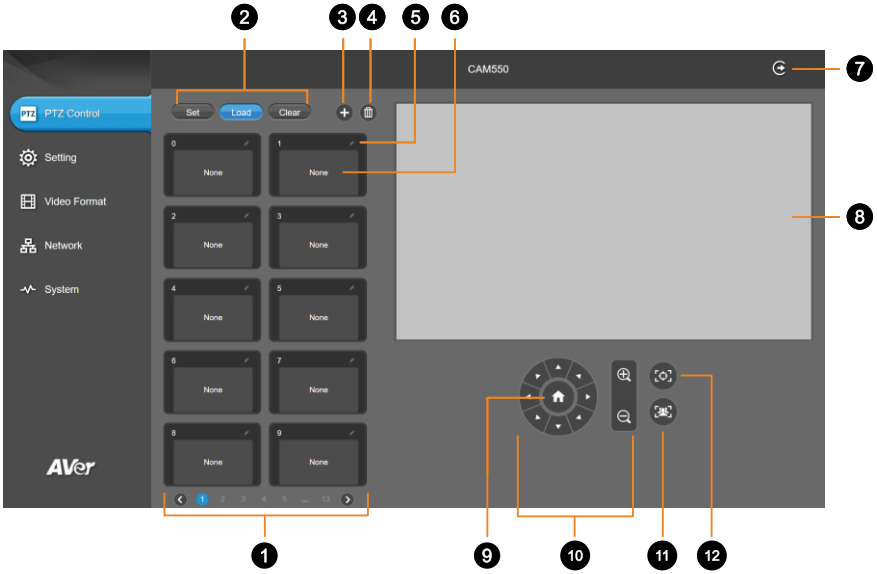


1. Download and install PTZApp 2 to your computer from AVer Download Center. (https://www.aver.com/download-center).
2. Make sure your camera and computer are connected to the same network.
3. Double-click the PTZApp 2 icon to open PTZApp 2 in your browser.
   - Recommended browser: Chrome 76 and above, Firefox 69 and above.
4. Connect your camera to your computer using the included USB cable. When PTZApp 2 detects a USB-connected camera, a camera card will appear under the **USB Devices** page.
5. Click the pencil icon on the camera card to change the default static IP **192.168.1. 168** to DHCP.
6. Select **DHCP** and click **Confirm**.
   - Deselect the circle icon to keep your network setting in DHCP.

7. Click the link icon on the camera card to access the web interface.
8. For first-time login, enter the default password **aver4321**. You'll be prompted to set up a new account and password.
   - Use 6-10 characters, upper and lowercase letters, numbers and special characters (* ! % + = , - _ ^ / @ . ~).
   - If you forgot your password, use PTZApp 2 to reset the password to the default password **aver4321**.

PTZ Control

Overview of PTZ Control



1. **Presets 0-9**

2. **Preset Function Buttons**
Save, load and clear a preset.

3. **Add Available Presets**
There are 10 available presets 0-9 by default. Click the plus icon to add up to 128 available presets.

4. **Delete Available Presets**
Click a trashcan icon to delete available presets.

5. **Name**
Click the pencil icon to name a preset.

6. **Preset Thumbnail**

7. **Log Out**
Log out of your account and close the web interface.

8. **Live View**

9. **Pan-Tilt Reset**
Reset the pan-tilt position to the center.

10. **Directional Pad and Zoom**

11. **SmartFrame**
Click the SmartFrame icon to frame entire group on screen and remove excess space.

Note: The SmartFrame icon appears on video when turned on. To hide the icon, go to the **Setting** tab > **On-Screen Menu** > **Off** on the web interface.

12. **One-Touch Focus**
Click to autofocus once.

Save, Load and Clear a Preset

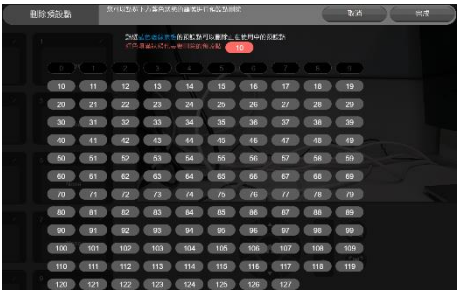
To save a preset:

1. Use the pan, tilt and zoom controls to position your camera.
2. Select **Set**, then a preset number to save that position.
3. Select **Yes** when prompted. A thumbnail of your preset will appear.

Add and Delete Available Presets (Presets 10-127)

There are 10 available presets 0-9 by default.
Click the plus icon to add up to 128 available presets, or click the trashcan icon to delete available presets.

Add



Delete

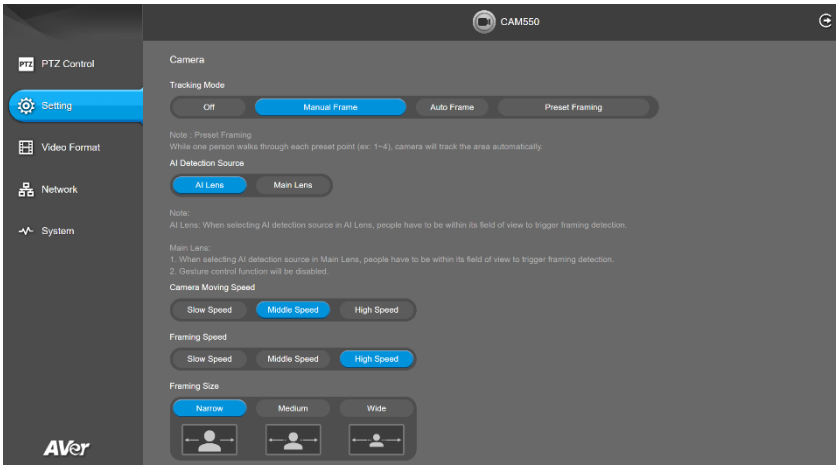
To add an available presets:

1. Select the plus icon, then select the preset numbers you want to add.
2. Select **Done**.

To delete an available preset:

1. Select the trashcan icon, then select the preset numbers you want to delete.
2. Select **Done**.

Setting



Camera

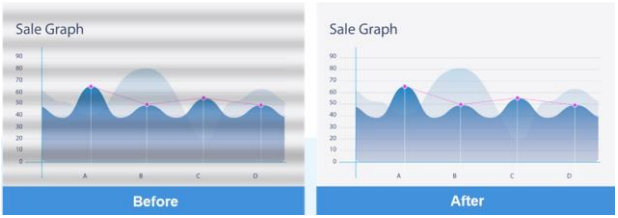
Item	Description
Tracking Mode	Select a tracking mode. Refer to <Tracking Mode> for details.
AI Detection Source	Select a lens to perform for AI detection. Entire group must fit inside the selected lens's field of view.
Camera Moving Speed	Select a camera moving speed.
Framing Speed	Select a duration before auto frame: ● **Slow:** 5 seconds before auto frame. ● **Middle:** 3 seconds before auto frame. ● **High:** 1 second before auto frame.
Framing Size	Select a framing size to include or remove excess space on either side of the subject.
Gesture Control	Turn Gesture Control on or off. ● AI lens must be set as **AI Detection Source**. ● The effective distance is up to 5 meters. ● Click the question mark icon to see a list of gesture commands or refer to <Gesture Control> for details.
Autofocus	Automatically focus after each pan, tilt and zoom, or automatically focus continually.
Camera Focus	Adjust the focal length manually by dragging the slider or automatically.
Home Position	Select a home position that your camera moves to when powered on.
Sleep Position	Select a home position that your camera moves to when

	entering standby mode.
Sleep Timer	Set a duration before standby mode. ● When transmitting video over USB, RTSP or RTMP, the camera won't enter standby mode.
On-Screen Menu	Turn On-Screen Menu on or off. ● **Load Preset Off:** Displays all statuses except load preset.
Camera Binding	No selection is required by default to use the remote to operate the camera. ● **Camera Binding** is turned off by default and all three selections on the remote control can operate the camera. ● To specify a number, go to **Setting** > **Camera Binding** on the web interface or in PTZ App2.
Save Preset	Turn Save Preset on or off. ● When Save Preset is turned off, you won't be able to save presets using the remote control, web interface, hotkeys or VISCA commands.

PIP

Item	Description
PIP Layout	Turn picture-in-picture (PiP) on to see live view from both lenses.
HDMI Screen Layout	Select a layout for HDMI output. Click the arrows button to switch the position of the smaller video.
USB / IP Streaming Screen Layout	Select a layout for streaming over USB and IP. Click the arrows button to switch the position of the smaller video.

Image

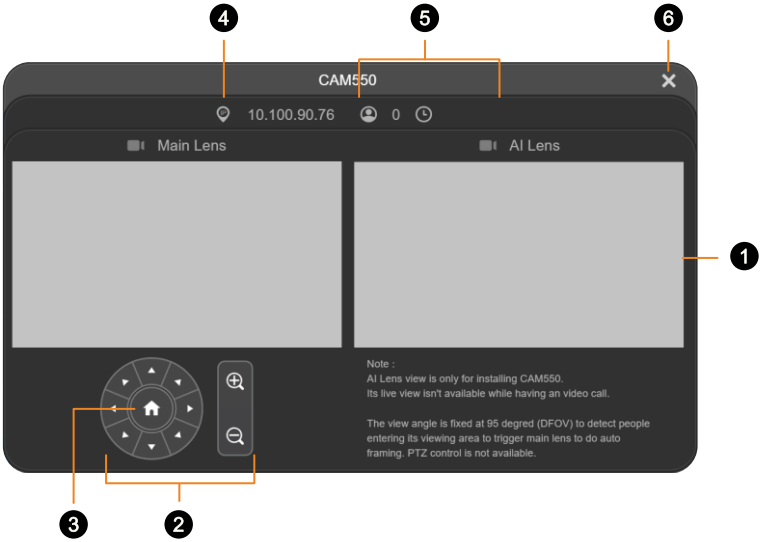
Item	Description
Image Flip	Flip the image vertically. ● When **Image Flip** is turned on, **AI Detection Source** will default to the main lens, expecting an upside down installation.
Image Mirror	Flip the image horizontally.
WDR	Turn wide dynamic range (WDR) on or off.
Flicker Decrease on IFP / Monitor	Turn Flicker Decrease on IFP / Monitor on or off. 
Frequency	Select a frequency.
Main Lens 1 / AI Lens 2	Select a lens to set up **White Balance**, **Noise Reduction**, **Brightness**, **Sharpness** and **Saturation**. These settings will only apply to the selected lens.
White Balance	Select a white balance setting: ● **Manual:** Adjust the white balance manually by dragging the slider. ● **Auto:** Adjust the white balance automatically.
Noise Reduction	Adjust noise reduction level.
Brightness	Adjust brightness level.
Sharpness	Adjust sharpness level.
Saturation	Adjust saturation level.
Low Light Compensation	Turn Low Light Compensation on or off.
Low Resolution under 720p (except 848*480)	Enable to transmit video in 720p or lower.
Enlarge Total Zoom Up to 24x	Enable or disable Enlarge Total Zoom Up to 24x. The default is 18X.
Video Frame Rate	Select a video frame rate.

RS-232

Item	Description
ADDR	Select your settings to set up an RS-232 connection.
Baud Rate	
Protocol	
VISCA over IP	

Overview of the Floating Live View

- The floating live view opens automatically on .**Setting**, **Video Format**, **Network** and **System** tabs.
- To open the floating live view again after closing, click on the camera icon on top of **Setting**, **Video Format**, **Network** and **System** tabs.



1. **Live View**

2. **Directional Pad and Zoom**

3. **Pan-Tilt Reset**

Reset the pan-tilt position to the center.

4. **IP Address**

5. **Head Count and Video Transmission Duration**

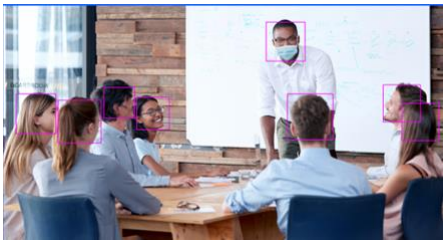
Click the head count icon to display head count and the duration of your video transmission. Click the icon again to hide the information.

6. **Close**

Click the X icon to close the floating live view and stop transmitting video.

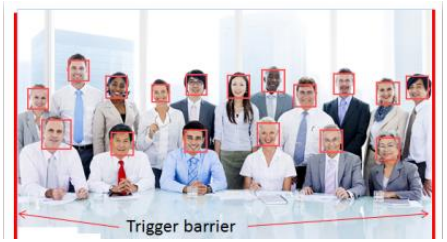
Tracking Mode

Manual Frame



Frames manually using the SmartFrame button to frame entire group on screen once.

Auto Frame



Frames entire group on screen automatically. If no one is in view, the camera will default to preset 0.

- The camera auto frames every time a subject enters or leaves the screen.
- If Auto Frame happens too frequently, set a duration before auto frame in the **Setting** tab > **Framing Speed**.
- You can set either AI lens or main lens as AI detection lens in the **Setting** tab > **AI Detection Lens**.

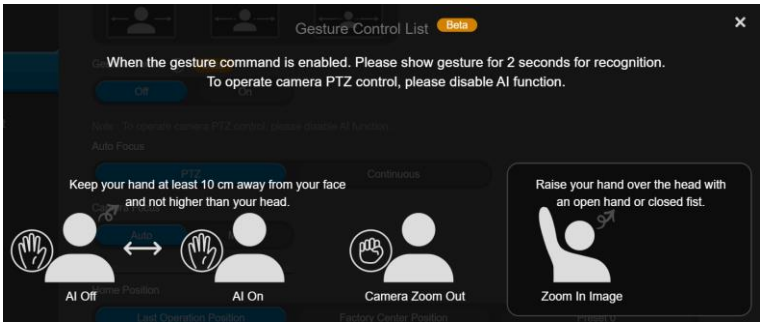
Preset Framing

Frames the presenter in real time as they move using presets. If no one is within the presets, the camera will default to group framing.

- Make sure you have defined presets. Presets 1-9 are available. Preset 0 defaults to the home position.
- Define overlapping presets for a smooth transition. When the presenter exits the previous preset, the camera will follow and move to the next preset.
- When multiple presenters are within presets, the preset with the smaller number takes priority.

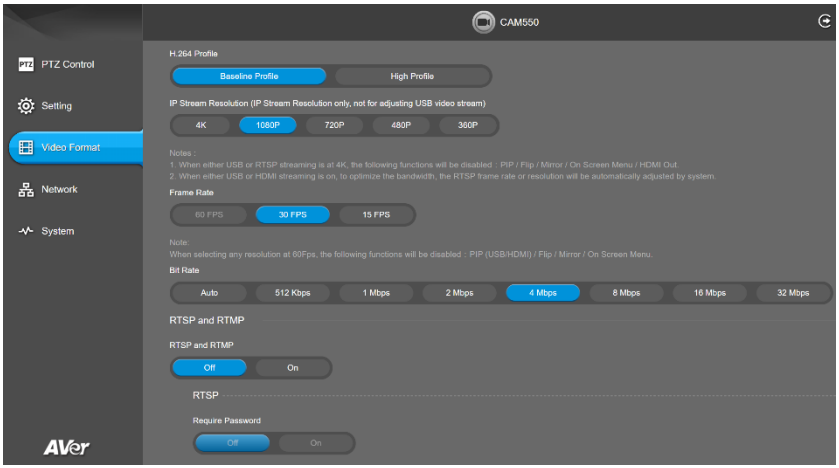
Gesture Control

- Turn on Gesture Control in the **Setting** tab > **Gesture Control**.
- AI lens must be set as AI detection lens. You must be inside the AI lens field of view.
- The effective distance is up to 5 meters.



Gesture	Description
Turn Auto Frame on or off	Place your hand next to your face with your palm open and facing the camera for 2-3 seconds to turn Auto Frame on or off. Keep your hand 10cm away from your face.
Zoom In	Raise your hand over your head for 2-3 second to zoom in. • **Tracking Mode** will be turned off when you zoom in or out with gestures. To turn on Tracking Mode again, do one of the following: 1. Use gesture to turn on Auto Frame. 2. Long press the SmartFrame button on the remote control to switch between tracking modes. 3. Web interface: go to the **Setting** tab > **Tracking Mode**. 4. PTA App 2: go to the **Setting** tab > **Tracking Mode**.
Zoom Out	Place your fist next to your face with your fist facing the camera for 2-3 seconds to zoom out. Keep your fist 10cm away from your face. • **Tracking Mode** will be turned off when you zoom in or out with gestures. To turn on Tracking Mode again, do one of the following: 1. Use gesture to turn on Auto Frame. 2. Long press the SmartFrame button on the remote control to switch between tracking modes. 3. Web interface: go to the **Setting** tab > **Tracking Mode**. 4. PTA App 2: go to the **Setting** tab > **Tracking Mode**.

Video Format

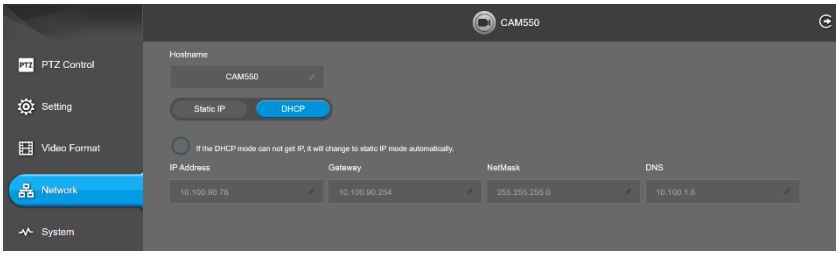


Item	Description
H.264 Profile	Select a profile for streaming live.
IP Stream Resolution	Select a resolution for streaming over IP.
Frame Rate	Select a frame rate.
Bit Rate	Select a bit rate. ● To live stream on Facebook, we recommend a bit rate under 4Mbps.

RTSP and RTMP

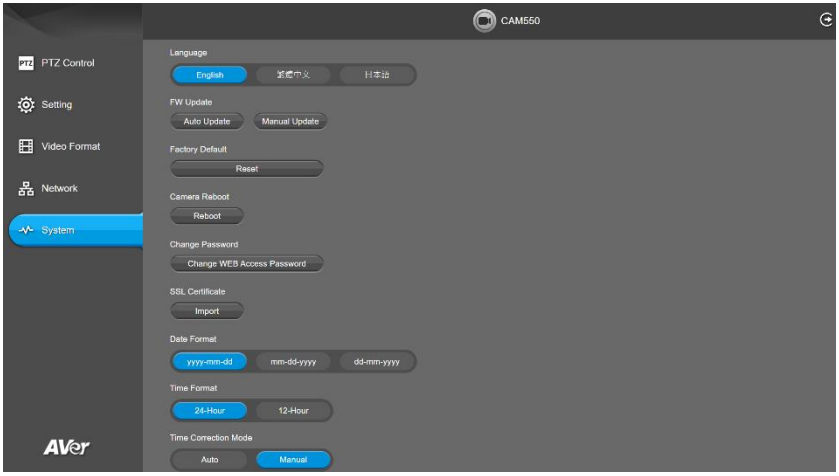
Item		Description
RTSP and RTMP		Turn RTSP and RTMP on or off.
RTSP	Require Password	Turn Require Password on or off.
	Set RTSP Access Password	Set or change an RTSP access password.
	RTSP URL Address	Displays RTSP URL address.
RTMP	Server URL	Copy and paste your video platform's server URL and stream key.
	Stream Key	
	Start Using RTMP	Click **Start** to start streaming, **Stop** to stop streaming.

Network



Item	Description
Hostname	Click the pencil icon to edit a hostname. Use upper and lowercase letters and numbers.
Static IP, DHCP	Set up static IP or DHCP. ● Deselect the circle icon to keep your network setting in DHCP.

System



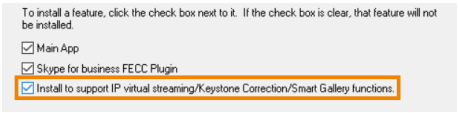
Item	Description
Language	Select a language for the web interface.
Firmware Update	Update your camera's firmware. ● **Auto Update:** Checks and updates online. ● **Manual Update:** Update the firmware using a file offline. **Note:** The camera will reboot and the connection will be lost. Please wait a few minutes and keep the power cable connected. Unplugging the cable during this process may damage the device.
Factory Default	Reset your camera to factory default settings. You can choose to keep the IP address by selecting the checkmark. ● If you forgot your password, use PTZApp 2 to reset the web interface password to the default **aver4321**.
Camera Reboot	Reboot the camera.
Change Password	Change the web interface password. ● Use 6-10 characters, upper and lowercase letters, numbers and special characters (* ! % + = , - _ ^ / @ . ~). ● If you forgot your password, use PTZApp 2 to reset the web interface password to the default **aver4321**.
SSL Certificate	Upload an SSL certificate.
Date Format	Select a date format.
Time Format	Select a time format.
Time Correction Mode	Select a time correction mode. ● **Auto:** Enter your Network Time Protocol (NTP) server URL to synchronize the clock. The default NTP server is located in the US. ● **Manual:** Click the pencil icon to set up the clock.

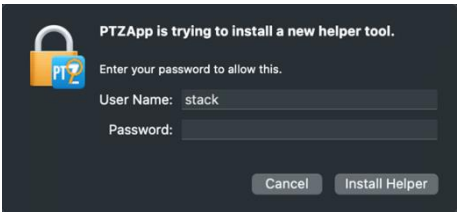
Allow Providing of Anonymous Usage Data	Opt-in or opt-out of providing usage data.
Information	Displays your camera information such as IP address.

PTZApp 2

Install PTZApp 2

1. Download PTZApp 2 to your computer from the official website (https://communication.aver.com/model/ptzapp2) or AVer Download Center. (https://www.aver.com/download-center).
2. Double-click the downloaded .exe file.
3. Follow the instructions displayed on the setup wizard to install PTZApp 2.
4. You'll be prompted to install plug-ins for additional features.
   Besides **Main App**, also select **Install to support IP virtual streaming…** on Windows or authorize with your username and password on Mac.

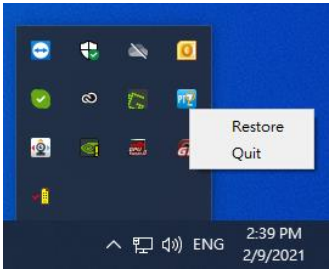




Windows Mac

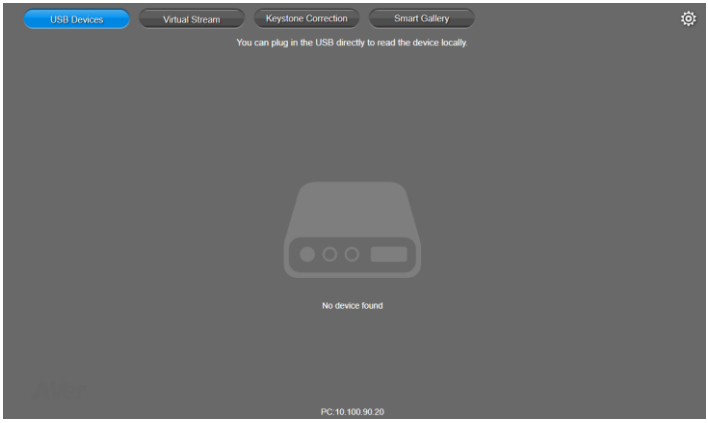
Open and Quit PTZApp 2

1. Double-click the PTZApp 2 icon to open PTZApp 2 in your browser.
2. Connect your camera to your computer using the included USB cable. When PTZApp 2 detects a USB-connected camera, a camera card will appear under the **USB Devices** page.
3. Click **Setting** on your camera card for pan, tilt and zoom controls, presets, and advanced settings.
4. To quit PTZApp 2, click the **Show Hidden Icons** arrow on the taskbar, right-click the PTZApp 2 icon, and select **Quit**.
5. If you can't open PTZApp 2 after installation, click the **Show Hidden Icons** arrow on the taskbar, right-click the PTZApp 2 icon, and select **Restore**.

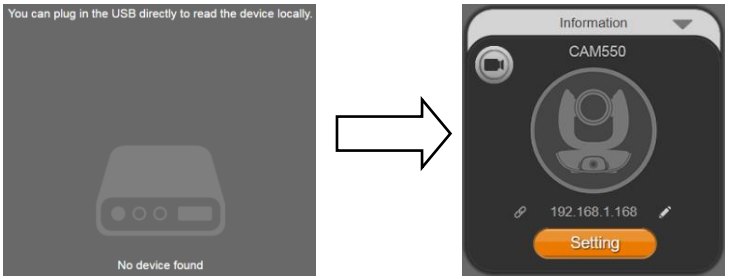


Use PTZApp 2 with USB Devices

1. Run your video application and make a video call.
2. During your video call, you can use the PTZApp 2 to pan, tilt and zoom the camera in/out and enable/disable the WDR, brightness, and sharpness feature.
3. Launch PTZApp 2 ( ) and it will open in Chrome browser automatically.

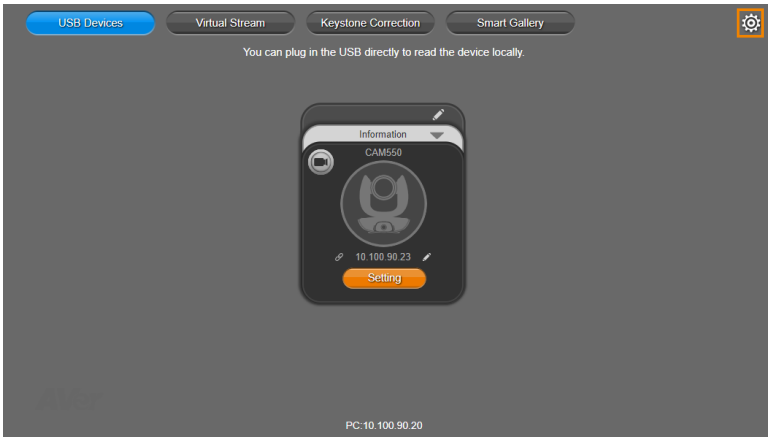


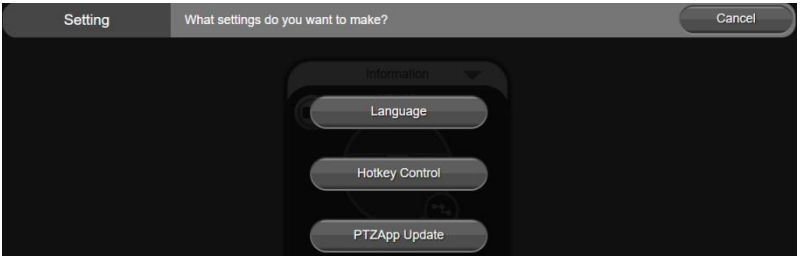
4. Choose “USB device” and connect CAM550 to PC/laptop with USB cable. When the camera is detected, the product card will show up.



5. Set up IP address. The camera default IP address is **192.168.1.168**. Click pencil icon ( ) to edit IP address.

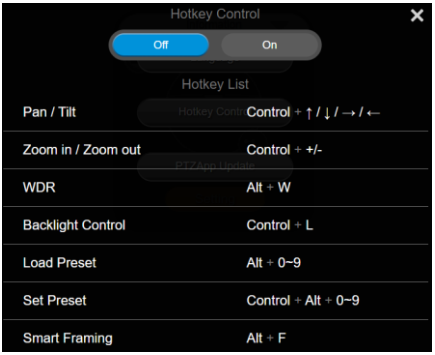
6. Click the setting icon to change Language, Hotkey Control, and PTZApp 2 Version.





- **Language:** Select desired language and click the check icon to confirm the selection.

- **Hotkey Control:** User can control the camera by using keyboard. This is a general list for all AVer USB Cameras. Backlight control equals to WDR function in CAM550.



- **PTZApp Update:** Get current PTZApp 2's version number and do auto update here.

7. **Information:** Click the drop-down triangle icon to review the information of camera. To minimize the information, click the triangle or the bottom area of the information icon.

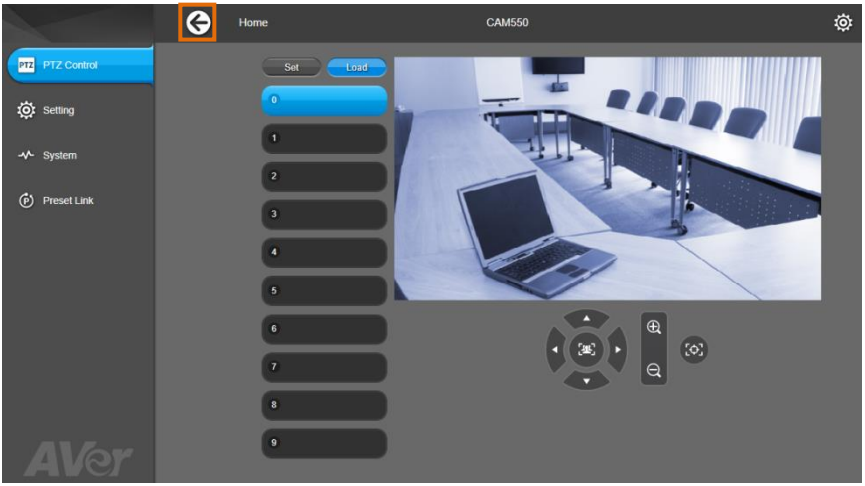
8. **Camera:** Click the camera icon to view the camera live view. IP address is displayed as well. Click the X icon to close the camera live view. If the live video did not appear, please check the camera and the laptop/PC connection to make sure all are correct and well connected.

- **Full Screen:** PTZApp 2 can switch to full screen mode. Click " " icon and video screen will switch to full screen mode. In full screen mode, user can use direction panel to control camera direction. Click " " icon to go back to normal screen view.

- **People Count and Stream Interval:** Click the icon to show people count number and stream interval. Click the or icon to hide the stream interval.

- **Control Panel:** To control the camera direction, zoom in and out during your video call.

9. **Setting:** Click **"Setting"** button to set up parameters of the camera and speakerphone. Click arrow icon to leave the Setting page.

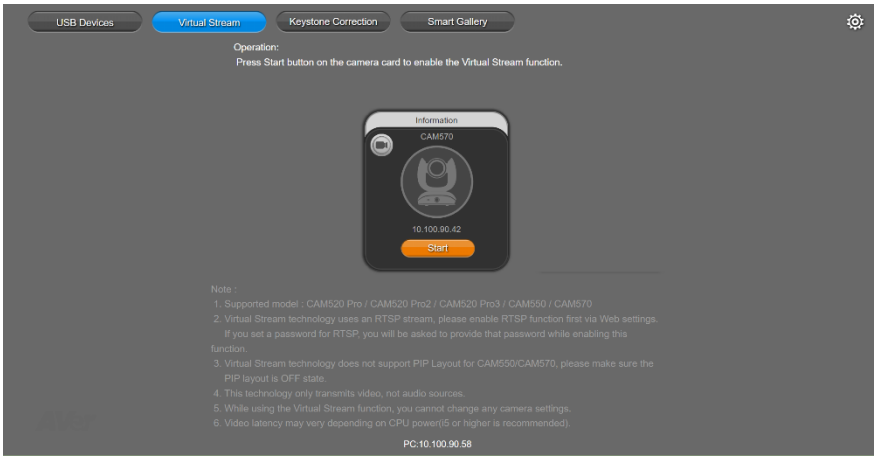


- **PTZ Control:** Use control panel to set up preset positions.
  Most settings are the same as those on the web interface. Refer to <PTZ Control> in the Web Interface chapter for details.
- **Setting:** To set up parameters of the camera.
  Most settings are the same as those on the web interface. Refer to <Setting> in the Web Interface chapter for details.
- **System:** To set up system.
  Most settings are the same as those on the web interface. Refer to <System> in the Web Interface chapter for details.

Virtual Stream

Virtual Stream allows you to send camera video over IP networks to video conferencing software such as Teams, Skype and Zoom.

- Video latency may vary depending on your CPU. We recommend Intel Core i5 or higher.
- Video Stream transmits video only.



To start a virtual stream:

1. Make sure your camera and computer running the video conferencing software are connected to the same network.
2. Make sure you have enabled your camera's RTSP setting on its web interface.
3. Go to **Virtual Stream** > click **Start** on your camera card.
4. Enter the RTSP password when prompted, if any.
5. Open your video conferencing software. Choose **AVer USB VCam** as the video source, not your camera model name.
6. For pan, tilt and zoom controls, use a remote control or VISCA commands.

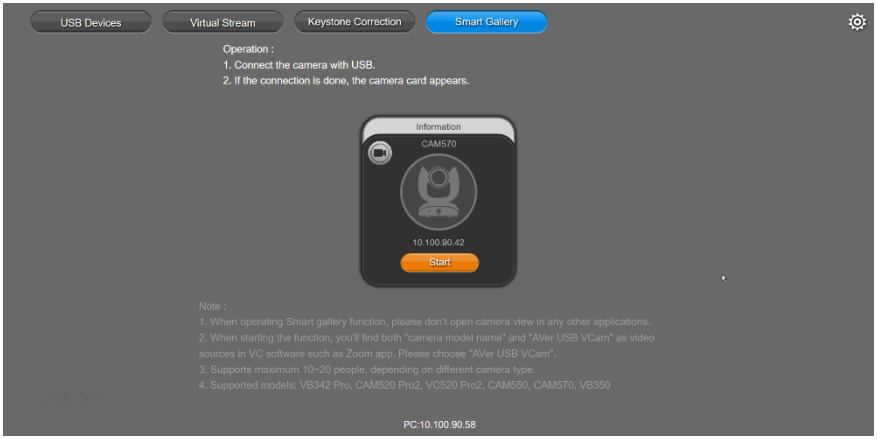
To stop a virtual stream:

Click **Stop** on your camera card.

Smart Gallery

Smart Gallery creates a close-up frame for each participants and present them in a single stream composited gallery.

- Smart Gallery supports 10-20 people depending on your AVer camera model.
- To create better close-ups, allow some space between participants.
- To set up your camera, stop Smart Gallery, return to **USB Devices** page, and then click **Setting** on your camera card.



To use Smart Gallery:

1. Connect your camera to the computer with a USB cable.
2. Go to **Smart Gallery** > click **Start** on your camera card.
3. Select a layout.

4. Open your video conferencing software. Choose **AVer USB VCam** as the video source, not your camera model name.

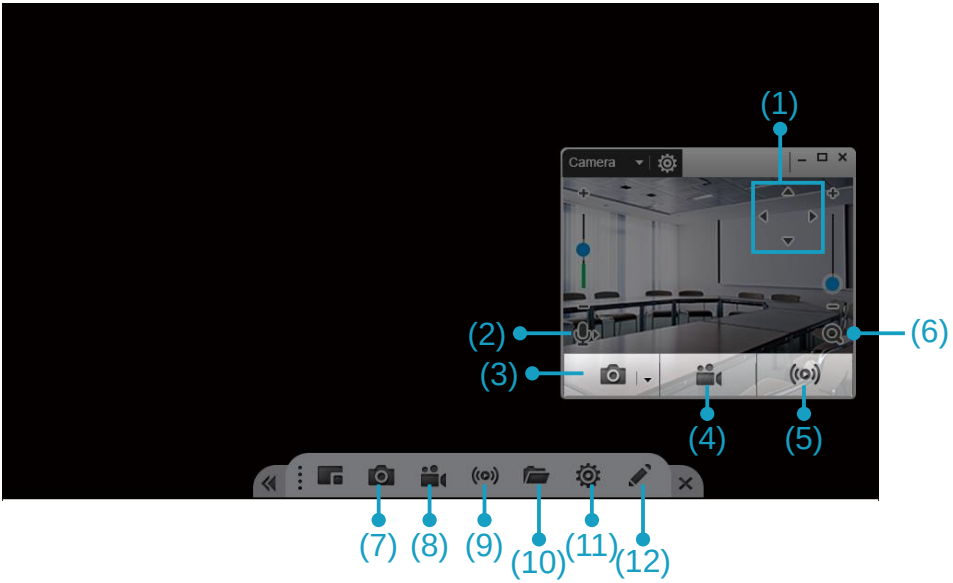
To stop using Smart Gallery:

Click **Stop** on your camera card.

EZLive

Please go to http://www.aver.com/download-center to download the AVer EZLive software. After downloading, double-click on the file and follow the on-screen instructions to complete the installation.

Use AVer EZLive

During a video call, EZLive can help user to do:

(1) Camera ePTZ
(2) Volume control for the speaker connected
(3) Capture camera's still images
(4) Record video
(5) Live stream to Youtube, Livehouse.in, USTREAM…etc.
(6) Camera Zoom in/out
(7) Capture PC screen shot
(8) Record PC screen video
(9) Set up livestream
(10) Open file management to retrieve photos and video files
(11) Livestream setting
(12) Drawing tool