

TR530+

User Manual (Updated 02.16.2022)



IMPORTANT NOTICE

- ✧ PLEASE READ THE INSTRUCTIONS IN THIS MANUAL BEFORE INSTALLING THE TR530 TRACKING CAMERA.
- ✧ DO NOT DISASSEMBLE OR MODIFY THE ITEMS BY YOURSELF. CONTACT THE DEALER FOR HELP WHEN THE ITEMS IS FAILED TO WORK.
- ✧ CONNECT THE DEVICES WITH PROPER CABLES.
- ✧ TO REDUCE RISK OF ELECTRIC SHOCK ONLY USE INDOORS.
- ✧ AVOID INSTALLING AT HUMID ENVIRONMENT.

Federal Communication Commission Interference 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.

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

European Community Compliance Statement (Class A)



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2014/30/EU.

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 to correct this interference.

DISCLAIMER

No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

In no event will AVer Information Inc. be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

TRADEMARKS

"AVer" is a trademark owned by AVer Information Inc. Other trademarks used herein for description purpose only belong to each of their companies.

COPYRIGHT

©2019 AVer Information Inc. All rights reserved.

All rights of this object belong to AVer Information Inc. Reproduced or transmitted in any form or by any means without the prior written permission of AVer Information Inc. is prohibited. All information or specifications are subject to change without prior notice.



The mark of Crossed-out wheeled bin indicates that this product must not be disposed of with your other household waste. Instead, you need to dispose of the waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information about where to drop off your waste equipment for recycling, please contact your household waste disposal service or the shop where you purchased the product.

Remote Controller Battery Safety Information

- Store batteries in a cool and dry place.
- Do not throw away used batteries in the trash. Properly dispose 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.

Contact Information

AVer Information Inc.

668 Mission Ct

Fremont, CA 94539

www.averusa.com

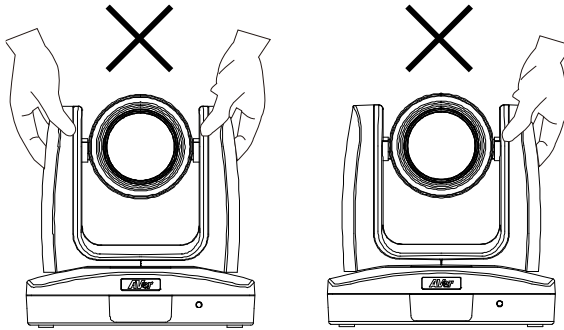
Toll-free: 1(877)528-7824

Local: 1(408)263-3828

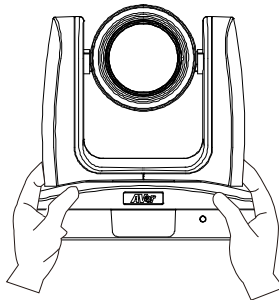
Support.usa@aver.com

WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Warranty will be void if any unauthorized modifications are done to the product.
- Do not drop the camera or subject it to physical shock.
- Use the correct power supply voltage to avoid the damaging 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.
- Hold the bottom of the camera with both hands to move the camera. Do not grab the lens or lens holder to move the camera.



OK



CONTENTS

INTRODUCTION.....	1
Package Contents.....	1
Product Overview.....	2
Dimension	2
Remote Controller	3
CONNECTIONS.....	4
Device Connections	4
RS232 Pin Definition	5
MODE INTRODUCTION	6
Wide Area Mode.....	6
Stage and Segment Mode (FW .51 or above for TR320).....	7
CAMERA SETUP.....	8
Make a Connection to TR530+ via AVer IPCam Utility	11
Enable Tracking Function.....	18
Setup Object Viewing Dimension	19
Tracking Mode Instruction	20
Wide Area Mode.....	21
Setup Priority Zone	21
Setup Shielded Zone	22
Setup Multi-people Detection	23
Stage Mode.....	25
Setup Effective Zone.....	25
Setup Shielded Zone	26
Setup Target Tracking Body.....	27
Setup Multi-people Detection	28

- Segment Mode.....29
 - Setup Effective Zone.....29
 - Setup Shielded Zone32
 - Setup Target Tracking Body.....33
- Preset Setup34
- Upgrade Firmware37
- Using RTSP connection to Camera37

OSD SETUP38

- Before You Begin38
- First Time Use38
 - Trigger OSD Menu.....38
 - Setup IP Address39
- OSD Tree Map41
 - Main.....41
 - Tracking41
 - Camera42
 - Video Format47
 - Advanced Setting.....49
 - Preset49
 - Language.....51
 - Profile.....51
 - Factory Default52
 - Information.....52
 - Hot Key55

FAQ.....56

INTRODUCTION

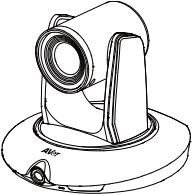

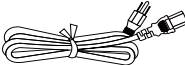

AVer TR530+ is a professional tracking camera which supports 3 tracking methods, namely: Wide area, Stage or Segment mode. The TR530+ uses body motion and image analysis algorithm to track the intended target; the target subject does not need to wear any signal transmitting device. The TR530+ can communicate with most recording systems through RS232 or an IP network interface. The TR530+ has stable system, easy to use, and suitable for classroom, meeting room, and any lecture or course environment.

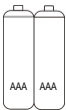
Package Contents

The following items are included in the package.

[Note]

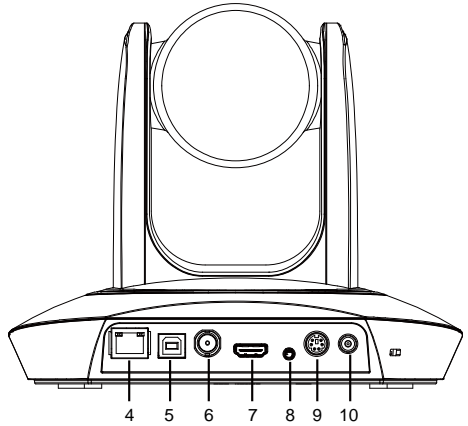
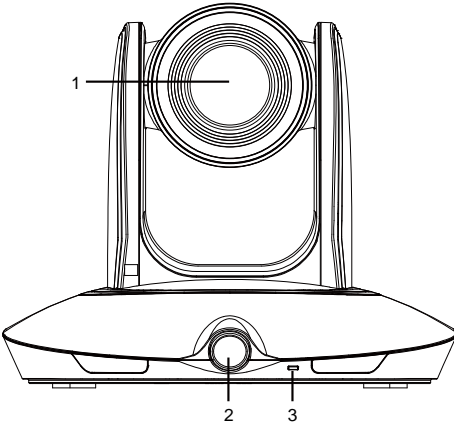
1. Do not disassemble or modify the items by yourself. Contact the dealer for help when the item failed to work.
2. Store the items in a dry place away from moisture.

TR530+ unit	Power adapter	Power cord	RS-232 to D-Sub 9 cable
			
Battery	Quick Guide	Remote Controller	



[Note] The power cord will vary depending on the standard power outlet of the country where it is sold.

Product Overview



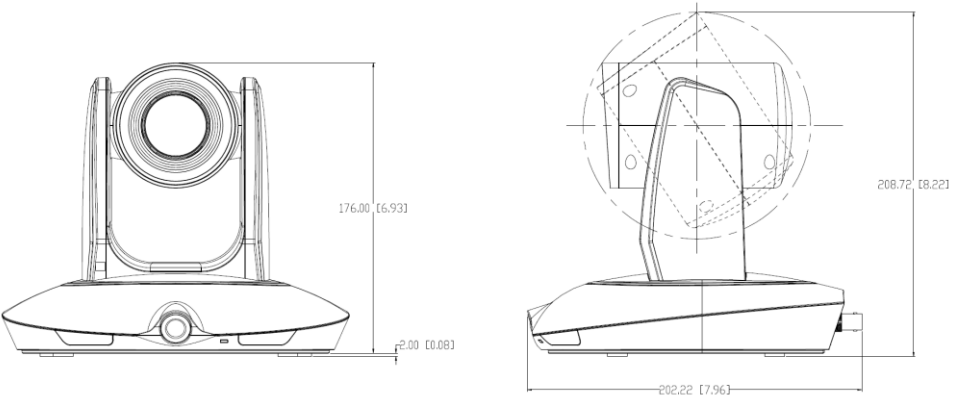
- 1. PTZ camera
- 2. Panoramic camera
- 3. Power indicator
- 4. PoE+ (IEEE 802.3at)
- 5. USB port

- 6. 3G-SDI port(PTZ view) *
- 7. HDMI port(PTZ view)
- 8. Audio in port **
- 9. RS-232 port
- 10. Power jack

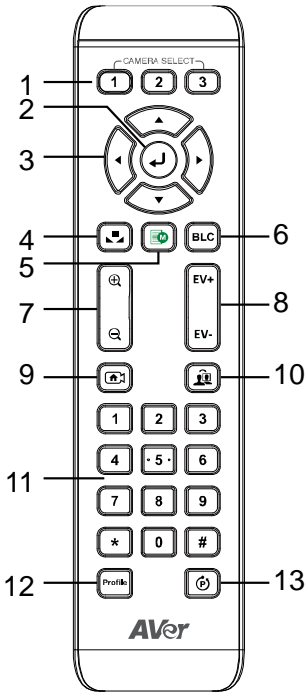
*3G-SDI: No audio out

*Audio input level: 1Vrms(max.)

Dimension



Remote Controller



1. Camera select

[Note] Only channel No.1 is available.
Before you use remote, please press channel 1 first.

2. Enter

3. Camera direction control

4. White balance

5. OSD menu

6. Back light control

7. Zoom in/out

8. Exposure compensation

9. Home position

[Note] Press and hold for 3 seconds to

turn on or turn off the TR530+ unit.

Only supported with TR530+ FW version
0.0.1000.08 and above.

10. Tracking on/off

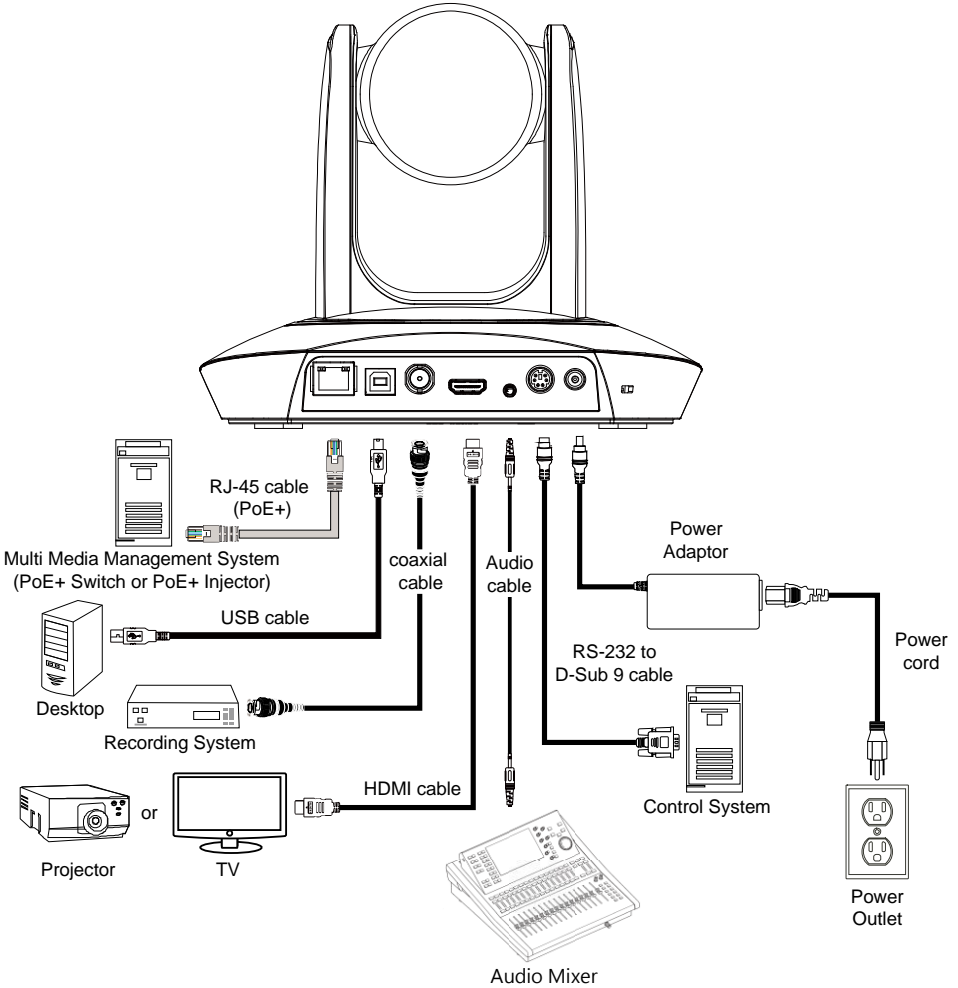
11. Number buttons

12. Profile

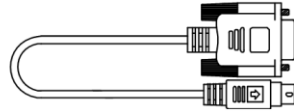
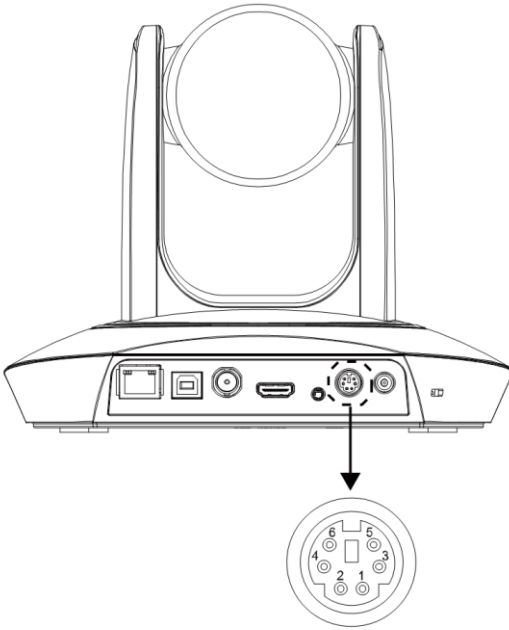
13. Preset

CONNECTIONS

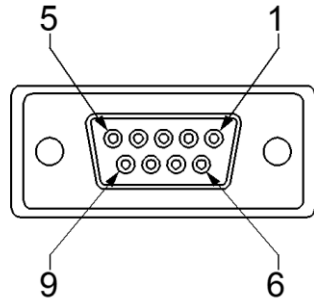
Device Connections



RS232 Pin Definition



DIN6 TO DP9 Cable



DIN6 PIN No.	DP9 PIN No.	I/O Type	Description
1	6	Output	DTR
2	4	Input	DSR
3	--	--	Not Connect
4	2	Output	TXD
5	5	GND	GND
6	3	Input	RXD

MODE INTRODUCTION

Wide Area Mode

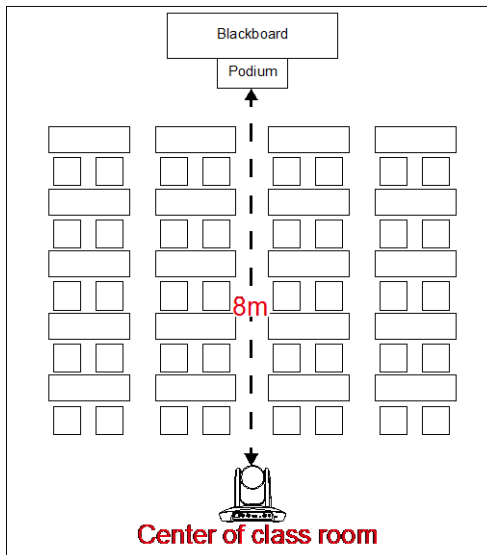
❖ Application

- This mode is suitable for a teacher or a lecturer tracking in normal sized classroom. The algorithm is based on face detection, not facial recognition.
- Regardless if the target is close to or away from TR530+, the tracking camera will automatically zoom in/out to maintain the appropriate size and proportion, when auto zoom is enabled.
- If the tracking target is locked, TR530+ will not be affected by the other moving objects.

❖ Limitation

- This mode is easily affected by the brown objects or the color similar to skin tone. Things like cartons and wood furniture.
- It should be used in a brightly lit environment. If the light level is not enough, it may not be able to properly track the object.
- It should not be used in an environment with high bright contrast. For example, the environment with lots of IFP or projectors in the background. When the target enters or leaves the high bright contrast zone, the TR camera may not be able to track the object properly.

- **Install height range (from floor):** 2 ~ 3m; **2.4m** is suggested.
- **Distance range to podium:** 4~15m; **8m** is suggested.
- **Position:** Center of classroom.



Stage and Segment Mode

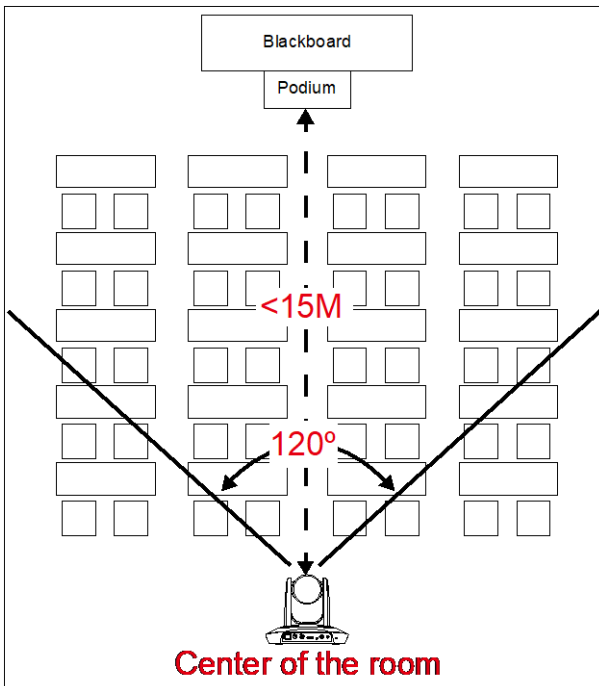
✧ Application

- It's suitable for a more complicated environment due to the utilization of the absolute motion tracking algorithm. The TR530+ will not be affected by the color of wood furniture or any high bright contrast background.
- Suitable for only one person in the tracking zone.

✧ Limitation

- Tracking is only available for horizontal movement. It will not auto zoom in/out for target close to or going away from the TR530+.
- Due to absolute motion tracking, it is unable to check who the target is or who the interference is. It does not have anti-interference ability.
- Due to the FOV limitation, the tracking zone is only available within the 120 degrees provided by the panoramic camera.
- Distance limitation <15M

- **Install height range (from floor):** 2 ~ 3m; **2.4m** is suggested.
- **Distance range to podium:** 4~15m; **8m** is suggested.
- **Position:** Center of the room.




CAMERA SETUP

Setup IP Address

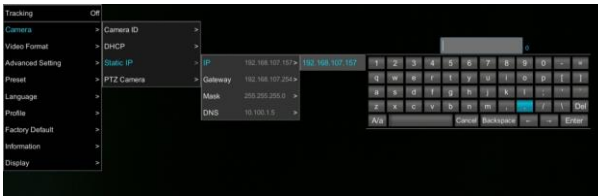
Before setting the AI function, please set the IP address first. There are two ways to setup IP address of the camera. Please follow the steps below to setup the IP address by connecting the camera to an HDMI display. It is important to get the camera onto the network as this is the only way to properly setup and configure the camera for Auto Tracking.

■ Static IP Address


1. After starting-up, press  button on remote control to call setup menu.
2. Use ▲ and ▼ buttons to select the **Camera > Static IP > IP**, then press ► button to enter IP address.

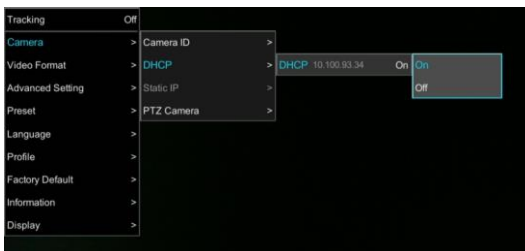
[Note] If DHCP is on, please turn off DHCP before setup static IP address. Go to **Camera > DHCP > DHCP > Off**.

3. To setup gateway and DNS, use ▲ and ▼ to select "Gateway" or "DNS". Then, press ► button to enter the value.

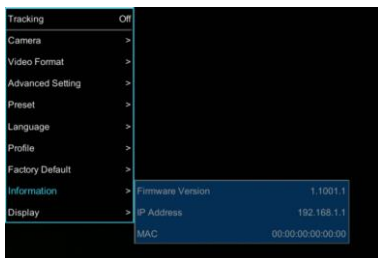


■ Dynamic IP Address

1. After starting-up, press  button on remote control to call setup menu.
2. Use ▲ and ▼ buttons to select the **Camera > DHCP > DHCP > On**, then press ► button to get IP address from local DHCP server.

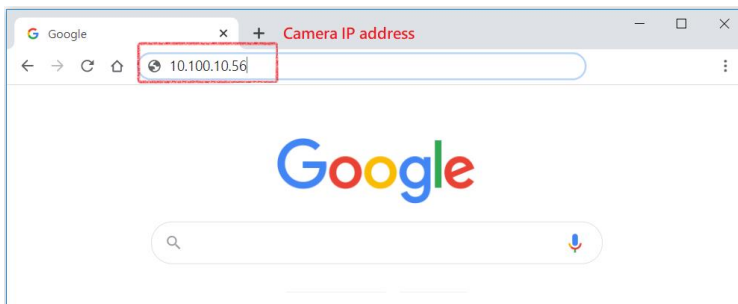



3. Use ▲ and ▼ buttons go to **"Information"** to check the IP address information.

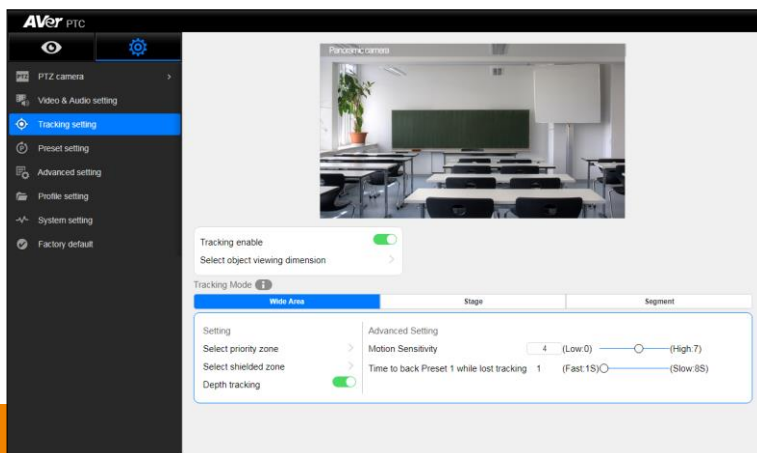


Camera Setup Guide

- For the best experience, we recommend using the Google Chrome browser to access the camera. If you have difficulty getting proper browser response, please clear the browser cache first.
- Key in the Camera IP address into browser and to login into control page.



- After login the web interface (password: **admin**), select “ start setup.



- If you are having problems accessing the camera login page or having intermittent video streaming problems on your browser please upgrade the firmware on the camera to the latest version: <https://averusa.com/pro-av/support/>
- Refer to the video guides on the support site on configuration options and how best to program the camera for your environment.

AVer PTZ Management and other Software

When your camera is all setup on the network, you can download our free camera control and management software AVer PTZ Management. This software enables complete control of its devices on Windows PCs and laptops. And it offers convenient and simultaneous control of up to 128 cameras.

Please check out other software available for download below:

AVer CaptureShare – USB capture, Capture, Recording, Control and More!

AVer PTZ Control Panel – Free APP for your iPad and iPhone with PTZ Camera Control

AVer PTZ OBS Plugin – Plugin for OBS Software

AVer PTZ Link – Enables the TR530+ to perform true Audio Tracking with select Microphones

Download link

USA: <https://www.averusa.com/pro-av/support/>

Make a Connection to TR530+ via AVer IPCam Utility

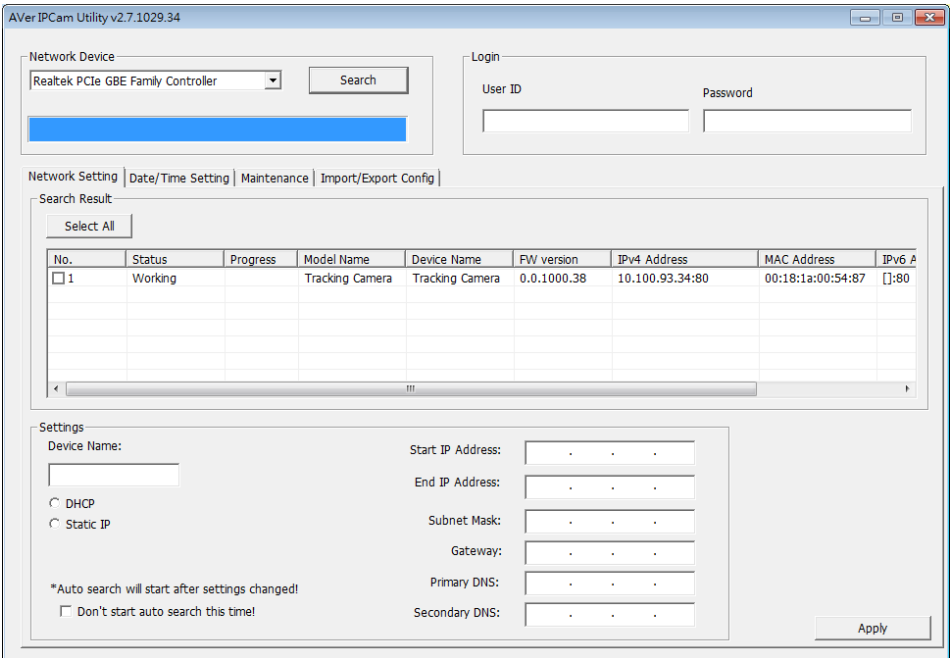
[Note] The TR530+ FW version 0.0.1000.08 and above supports IPCam Utility application.

To find the IP address of your cameras, you can execute the IPCam Utility installer. Follow the below steps to find the IP address of camera.

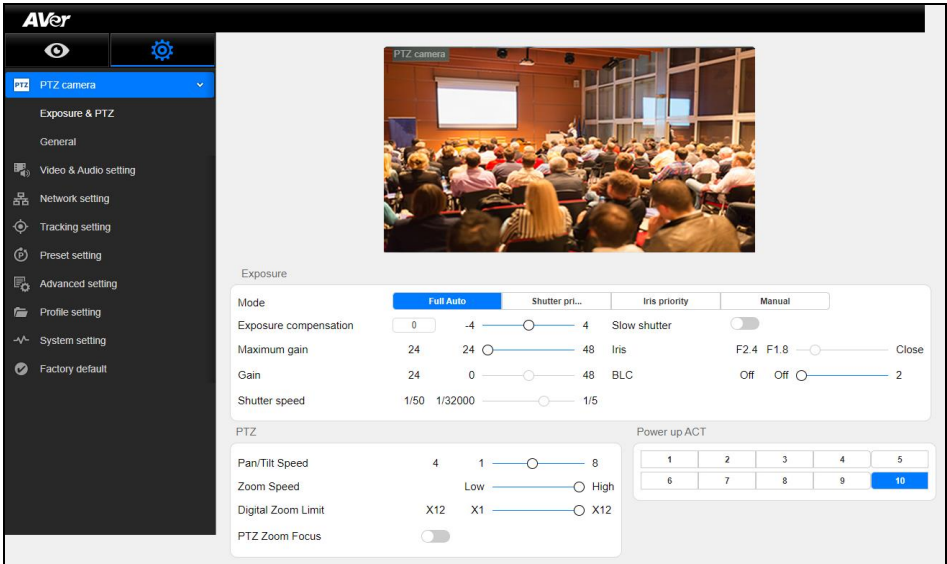
1. Download the IPCam Utility from <https://www.averusa.com/pro-av/support/> (under Software tab).
2. Run the IPCam Utility.
3. Click Search, and all available devices will be listed on the screen.
4. Select a camera from the list.
5. The corresponding fields of IP address will display.
6. Double-click on the IP address of camera from the list can connect to camera through the browser.

[Note] If IPCam utility cannot find the camera, please check following:

1. Please make sure the Ethernet connection of camera is well connected.
2. The camera and PC (IPCam utility) are in the same LAN segment.



PTZ Camera



✧ Exposure

➤ Mode:

- **Full Auto:** The camera automatically determines the shutter speed and the aperture while you can change other settings manually.
- **Shutter Priority:** You can manually change the shutter speed while the aperture is automatically determined by the camera.
- **Iris Priority:** You can manually change the aperture while the shutter speed is automatically determined by the camera.
- **Manual:** You can manually change both the shutter speed and aperture.
- **Exposure Compensation:** With the slider, you can brighten the image by selecting positive exposure compensation while negative exposure compensation for a darker image.
- **Maximum Gain:** After setting the maximum gain, you can have an image with the least noise without overexposure.
- **Gain:** You can use the slider to adjust the value of the gain only under **Manual** mode.
- **Shutter Speed:** You can slide to change the shutter speed.
- **Slow Shutter:** You can have a brighter image after selecting **Slow Shutter**.
- **Iris:** You can use the slider to adjust aperture.
- **BLC:** You can use the slider to adjust backlight compensation only under **Full Auto** mode.

✧ PTZ

- **Pan/Tilt Speed:** You can use the slider to adjust the pan and tilt speed of the camera.
- **Zoom Speed:** You can use the slider to adjust the zoom speed of the camera.
- **Digital Zoom Limit:** You can manually choose a digital zoom level up to 12x.

- **PTZ Zoom Focus:** it is **Off** by default. When **PTZ Zoom Focus** is off, the camera will focus on the presenter once right after the camera stops zooming in/out. When toggled on, the camera will constantly focus on the presenter as he/she walks around, which might cause a blurry image.
- ✧ **Power up ACT:** Select a preset point for the camera to navigate to after the camera is turned on.

PTZ Camera

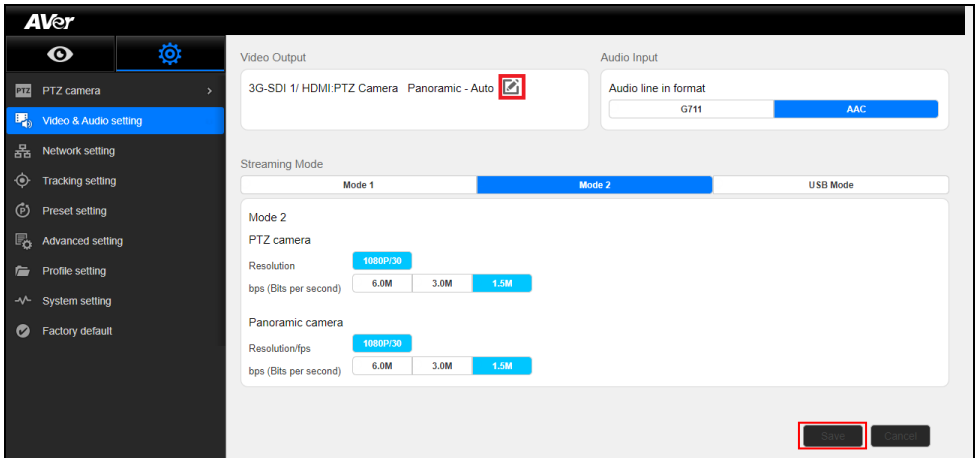
The screenshot displays the AVer PTZ camera web interface. On the left is a navigation menu with options: PTZ camera, Exposure & PTZ, General, Video & Audio setting, Network setting, Tracking setting, Preset setting, Advanced setting, Profile setting, System setting, and Factory default. The main area shows a live PTZ camera view of a lecture hall. Below the view are various settings:

- Contrast:** Slider set to 2 (range 0-4).
- Saturation:** Slider set to 5 (range 0-10).
- Sharpness:** Switched to Middle (range Off-High).
- Noise reduction:** Switched to Low (range Off-High).
- Shading correction - upper left:** Switched to Off (range Off-High).
- Shading correction - upper right:** Switched to Off (range Off-High).
- Shading correction - bottom left:** Switched to Off (range Off-High).
- Shading correction - bottom right:** Switched to Off (range Off-High).
- White balance:** Switched to Auto (Manual option available).
- R Gain:** Slider set to 160 (range 0-255).
- B Gain:** Slider set to 150 (range 0-255).
- Frequency:** Switched to Auto (options: Off, 50Hz, 60Hz, Auto). A note states: "New Setting of Frequency will take effect on Panoramic camera after reboot."

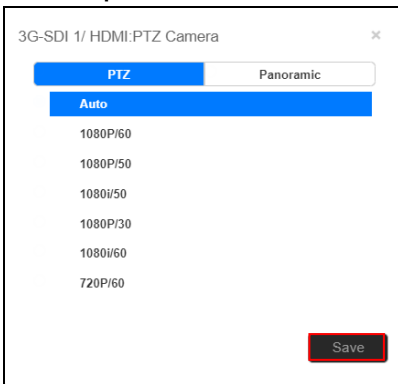
❖ General

- **Contrast:** You can adjust the value of contrast.
- **Saturation:** You can adjust the value of saturation.
- **Sharpness:** You can switch between **Off**, **Low**, **Middle**, and **High**.
- **Noise Reduction:** You can switch between **Off**, **Low**, **Middle**, and **High**.
- **Shading Correction - Upper Left:** You can switch between **Off**, **Low**, **Middle**, and **High** to reduce vignetting for the upper left corner of the image.
- **Shading Correction - Upper Right:** You can switch between **Off**, **Low**, **Middle**, and **High** to reduce vignetting for the upper right corner of the image.
- **Shading Correction - Bottom Left:** You can switch between **Off**, **Low**, **Middle**, and **High** to reduce vignetting for the bottom left corner of the image.
- **Shading Correction - Bottom Right:** You can switch between **Off**, **Low**, **Middle**, and **High** to reduce vignetting for the bottom right corner of the image.
- **White Balance:** Click **Auto** and the camera will automatically adjust its white balance.
- **White Balance:** Click **Manual** and you can adjust **R Gain** and **B Gain**.
 - **R Gain:** Choose a value between 0 and 255.
 - **B Gain:** Choose a value between 0 and 255.
- **Frequency:** You can switch between **Off**, **50Hz**, **60Hz**, and **Auto**. Reboot the camera after altering frequency setting.

Video and Audio Setting



✧ **Video Output:** Click .



Select either the **PTZ** camera or the **Panoramic** camera as the image source and select a combination of resolution and frame rate for the chosen camera. Select **Save**.

✧ **Audio Input**

Audio Line in Format: As the default streaming format, **AAC** provides better sound quality for streaming. Alternatively, you can select **G711** for the video codec.

✧ Streaming Mode

➤ Mode 1

Select either a **PTZ** or **Panoramic** camera for streaming. As there is only one camera, you can enjoy better video quality.

■ PTZ camera

✓ **Resolution/fps:** Choose a combination among **1080P/60**, **1080P/30**, **720P/30**, and **480P/30**.

✓ **Bps (Bits per second):** Choose a bitrate among **6M**, **4M**, or **2M**.

■ Panoramic Camera

✓ **Resolution/fps:** Choose a combination among **1080P/30**, **720P/30**, and **480P/30**.

✓ **Bps (Bits per second):** Choose a bitrate among **6M**, **3M**, or **1.5M**.

➤ Mode 2

Select **Mode 2** to stream 2 cameras simultaneously.

■ PTZ camera

✓ **Bps (Bits per second):** Choose a bitrate among **6.0M**, **3.0M**, or **1.5M**.

■ Panoramic Camera

✓ **Bps (Bits per second):** Choose a bitrate among **6.0M**, **3.0M**, or **1.5M**.

➤ **USB Mode:** There is no streaming for USB Mode.

Select **Save** to finish camera configuration.

Network Setting

Network

DHCP enable

IP address: 10 . 100 . 90 . 15

Netmask: 255 . 255 . 255 . 0

Gateway: 10 . 100 . 90 . 254

DNS: 10 . 100 . 1 . 6

Apply

RTMP Server (PTZ)

Server URL:

Stream Key:


Connect

RTSP (PTZ camera): rtsp://Camera IP:554/live_st1; Panoramic camera: rtsp://Camera IP:8554/live_st2;

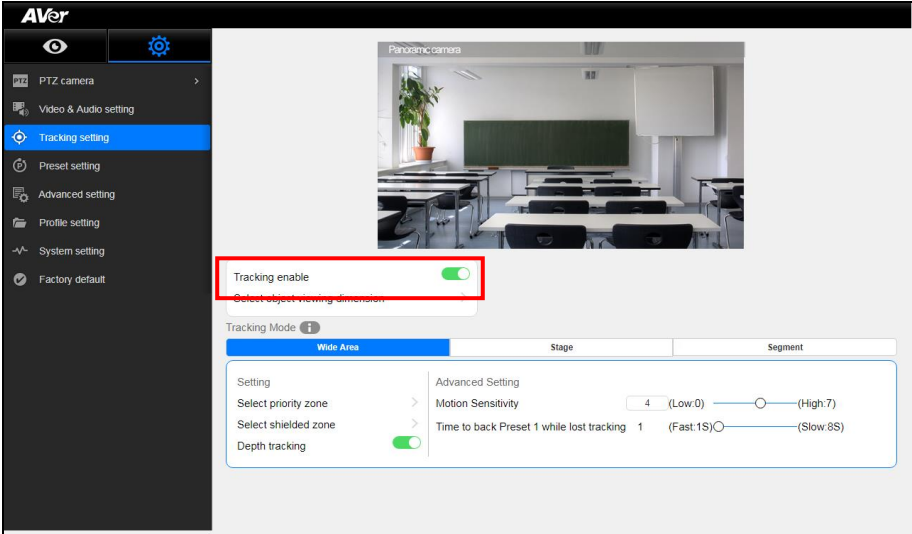
Password Confirmation

- ❖ **DHCP enable:** You can toggle it on and the camera will be assigned with an IP address automatically. You can toggle it off to manually enter **IP address**, **Netmask**, **Gateway**, and **DNS**. Click **Apply**.
- ❖ **RTMP Server (PTZ):** Enter **Server URL** and **Stream Key**. Select **Connect**.
- ❖ **RTSP Password Confirmation:** Toggle on **Password Confirmation** when required to enter password for RTSP.

Enable Tracking Function

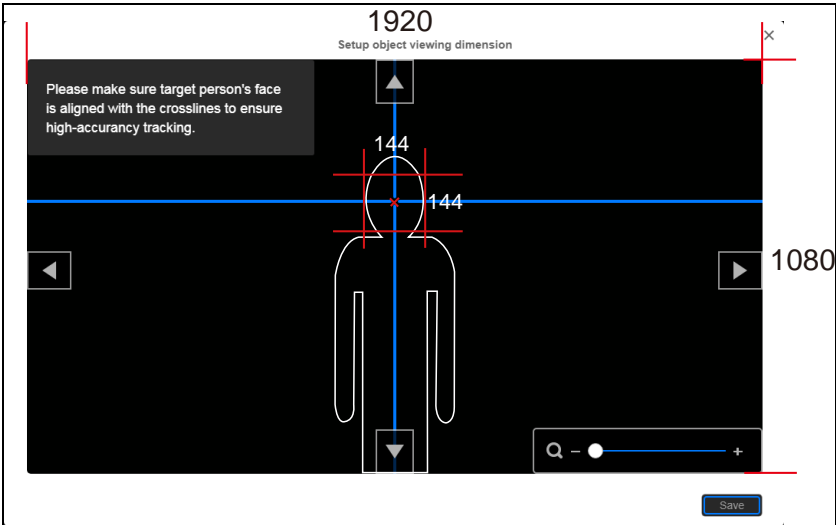
Turn on and off the tracking function. Select  > **Tracking setting** > **Tracking on**. You can also


turn On/Off the tracking function via the camera remote. “two heads icon”



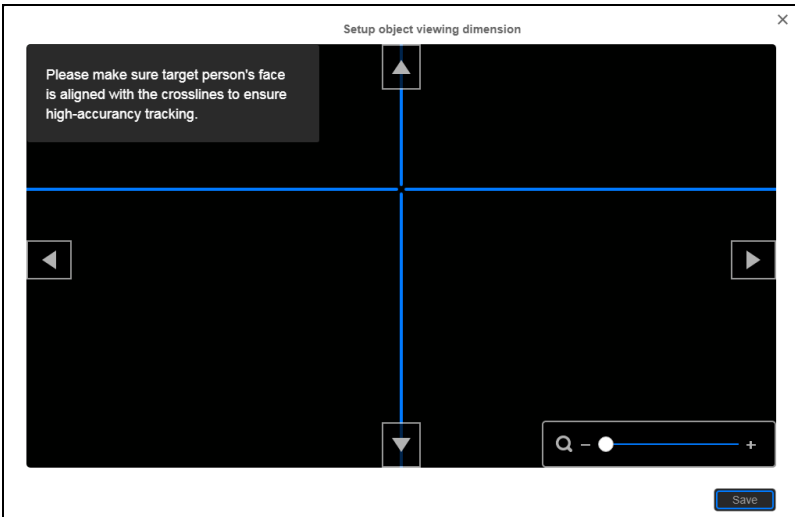
Setup Object Viewing Dimension

Please make sure the target person's face is aligned with the crosslines to ensure high-accuracy tracking. Use the camera and positioning to get the best coverage. Typically you can just use your thumb size as a good yardstick. You should only have to do this once.



To set the object size for tracking select  > **Tracking setting** > **Setup object viewing dimension** (Also see [Object Viewing Dimension Setting](#) chapter).

Use ▲, ▼, ◀, ▶ and zoom in/out to adjust object size. Then, click "**Save**" to save the setting.



Tracking Mode Instruction

To view each tracking mode's brief description, feature, and use environment.

Select  > **Tracking Setting** > **Tracking Mode**  to view tracking mode instruction.

Tracking mode instructions ×			
	Wide area	Stage	Segment
Introduction	Accurately track a chosen target anywhere in a crowd.	Track target in all lighting conditions with high accuracy.	Tracking by segment: stay fixed on one area until target moves to next area.
Features	The person tracking function captures every movement.	Horizontal continuous high-accuracy target tracking.	Track up to 4 fixed locations based on target's position.
Mostly used for	<ul style="list-style-type: none">• Classrooms• Presenters moving through a crowd.	<ul style="list-style-type: none">• Stage presentations• Stage performances• Target projectors behind	<ul style="list-style-type: none">• After school podium.• Classroom podium.• Multiple panels need to be displayed.



Wide Area Mode

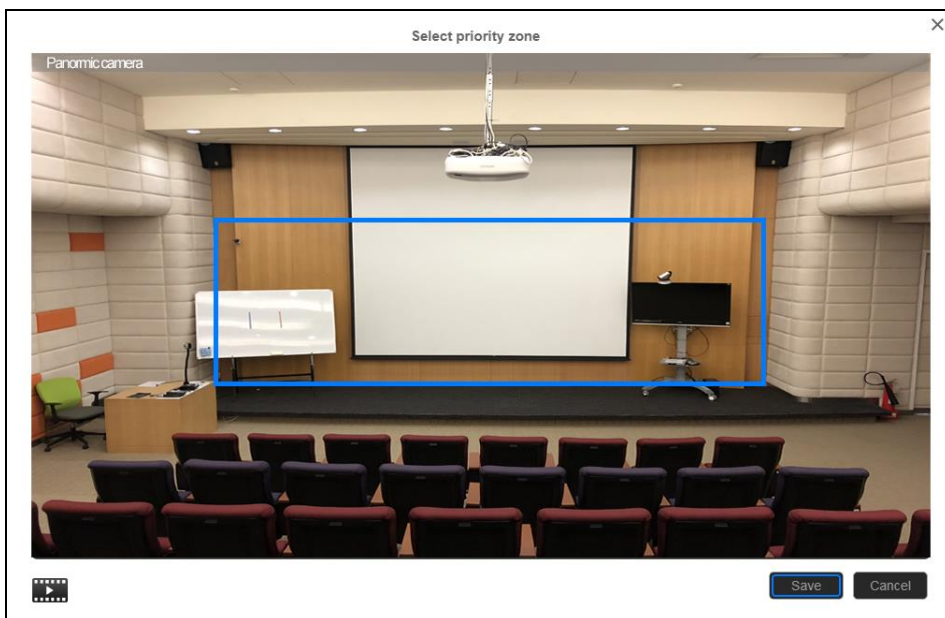
In Wide Area mode, the TR530+ will start tracking when object enters the priority zone and the face of the object is detected.

Setup Priority Zone

If the TR530+ detects motion in the defined zone it will be triggered to start tracking. If a priority zone isn't setup, then, the entire panoramic camera view will be the default active zone.

[Note] The screen of priority zone setting is based on the panoramic camera view.



1. Select  > **Tracking setting** > **Wide Area** > **Select priority zone**.
2. An online tutorial will display. User can watch to learn how to setup tracking zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the Select priority zone screen, drag and select the area that tracking will be triggered once a subject enters the area. To re-select the area, just drag and select another wanted area.
4. Click **"Save"** to save the setting.

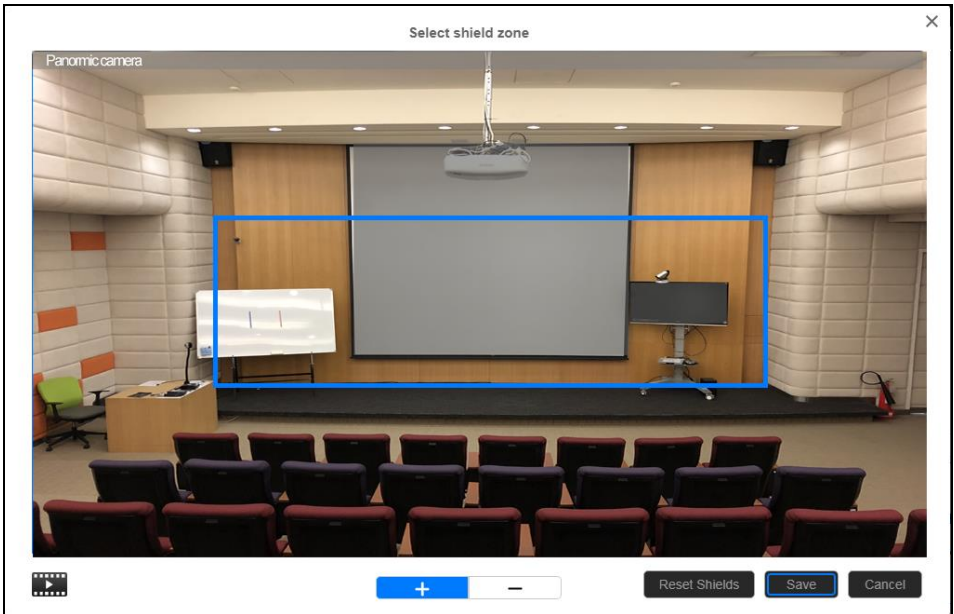


Setup Shielded Zone

Define the area(s) that you don't want the camera to track. The shielded zone(s) are setup to "mask" out motion in the background, up to 8 shielded zones can be set.

[Note] The screen of shielded zone setting is based on panoramic camera view.



1. Select  > **Tracking setting** > **Wide Area** > **Select shielded zone**.
2. An online tutorial will display. User can watch to learn how to setup shielded zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the Shielded tracking zone screen, click the "+" and select the area(s) that you don't want to track (a gray block will show on the screen). In the example below, you should shield the projector screen and the TV that may influence tracking. In fact, you should shield all areas where you think there might be "motion" interference. To delete the shielded zone area, click "-" and select the shield to delete. Or select **"Reset Shields"** to delete all shields.
4. Select **"Save"** to save the setting.

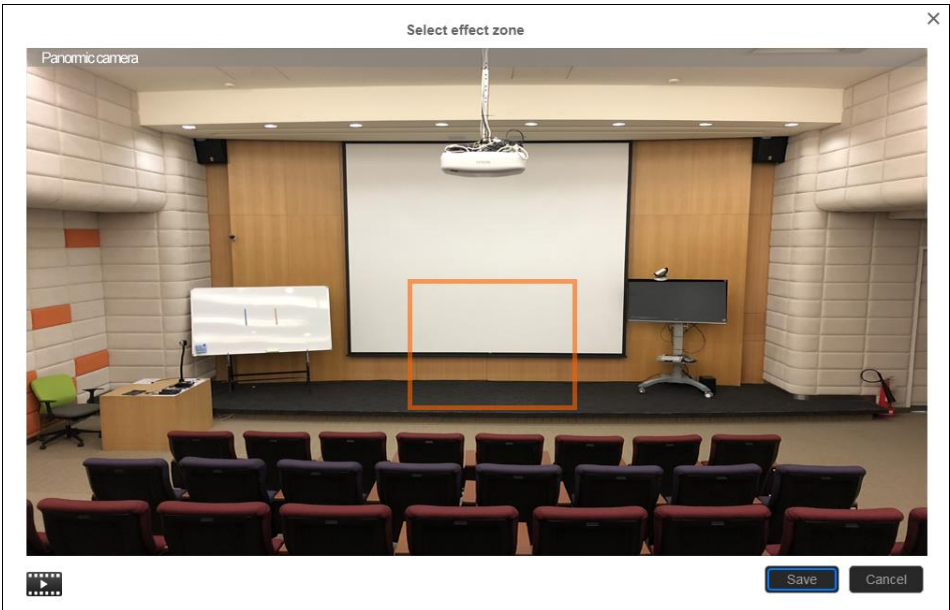


Setup Multi-people Detection

Define the area as a multiple people detection area. The camera will move to preset 2 and stop tracking the original object until the multi-people detection mode is stopped.

[Note] The effective zone setting is based on the panoramic camera view.

1. Select  > **Tracking setting** > **Wide Area** > **Multi-people detection**.
2. Select **“Select effect zone”** to set the multiple people detection area. An online tutorial will display. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the “Select effect zone” screen, drag and set the area to be the designated multiple people detection area (an orange frame will show on screen). To re-set the area, just drag again. Select **“Save”** to save the setting.



4. **Time to go preset 2:** set the time to move the camera to preset 2 after multi-people detection is activated.
5. **Time to back to tracking:** set the time period to back to tracking the main presenter after multi-people detection mode is no longer effective.

Tracking enable

Select Object Viewing dimension >

Tracking Mode ⓘ

Setting	Wide Area	Stage	Segment
Setting	>		
Select priority zone	>		
Select shielded zone	>		
Depth tracking	<input checked="" type="checkbox"/>		
Multi-people detection (go to Preset 2)	<input checked="" type="checkbox"/>		
> Select effect zone	>		
Advanced Setting			
Motion Sensitivity	4 (Low:0) ——— (High:7)		
Time to back Preset 1 while lost tracking	10 (Fast:5S) ——— (Slow:40S)		
Multi-people Detection Setting			
Time to go Preset 2	0 (Fast:0s) ——— (Slow:20s)		
Time to back to tracking	10 (Fast:0s) ——— (Slow:60s)		



Stage Mode

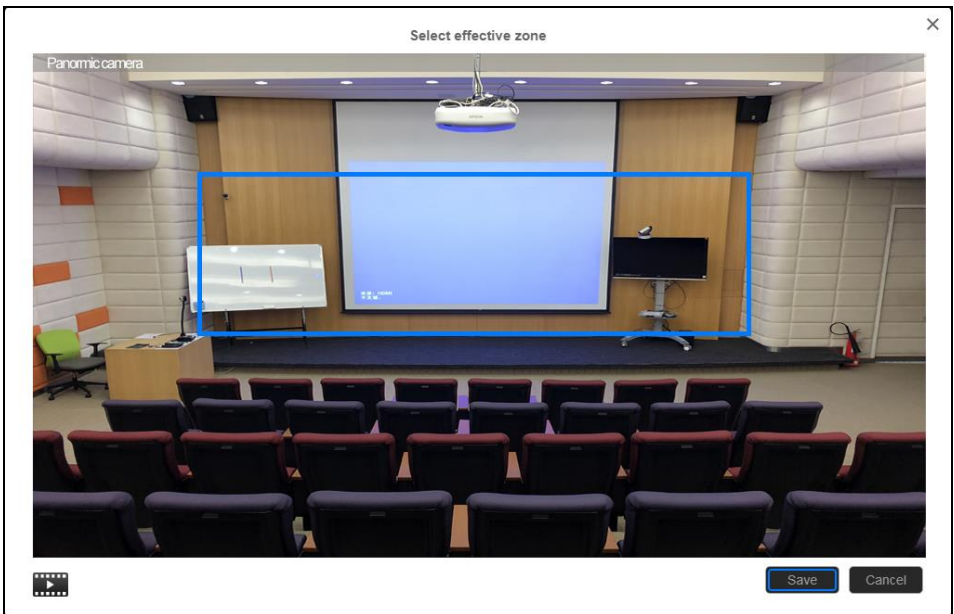
The TR530+ will start tracking when there is an object moving in the effective zone.

Setup Effective Zone

If the TR530+ detects motion in the defined zone tracking will be activated. If the tracking zone isn't setup, then, the entire panoramic camera view will be the default active zone.

[Note] The screen of the effective camera zone setting is based on the panoramic camera view.



1. Select  > **Tracking** > **Stage** > **Select effective zone**.
2. An online tutorial will display. User can watch to learn how to setup tracking zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the Select effective zone screen, drag and select the area that tracking will be triggered once a subject enters the area. To re-select the area, just drag and select another wanted area.
4. Click **"Save"** to save the setting.

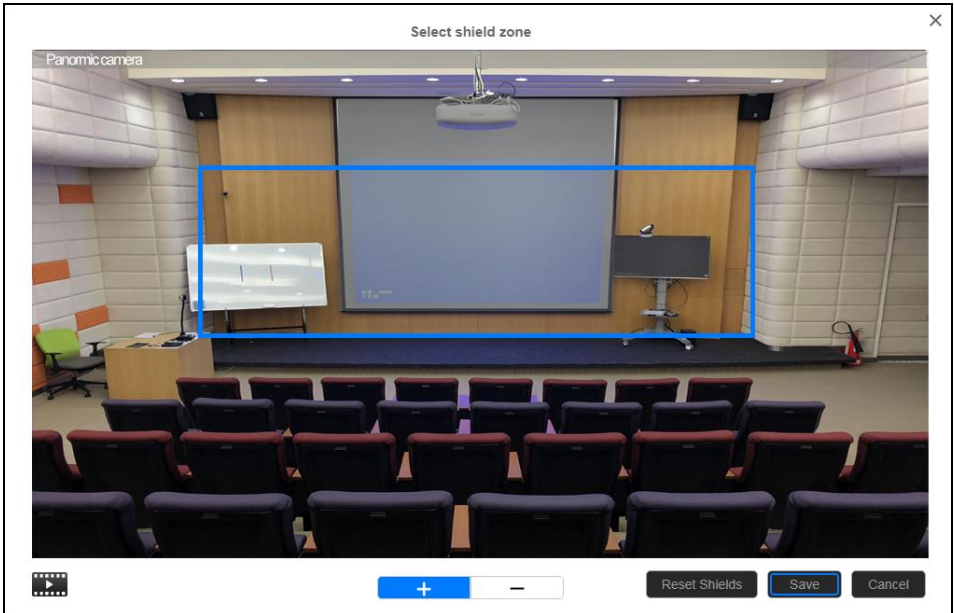


Setup Shielded Zone

Define the area that user doesn't want camera to track. The shield zone should be within the active zone. 8 shield zones can be set.

[Note] The screen of shield zone setting is based on panoramic camera view.



1. Select  > **Tracking setting** > **Stage** > **Select shielded zone**.
2. An online tutorial will display. User can watch to learn how to setup shield zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the Shielded tracking zone screen, click the “+” and select the area(s) that you don't want to track (a gray block will show on the screen). In the example below, you should shield the projector screen and the TV that may influence tracking. In fact, you should shield all areas where you think there might be “motion” interference. To delete the shielded zone area, click “-“and select the shield to delete. Or select **“Reset Shields”** to delete all shields.
4. Select **“Save”** to save the setting.

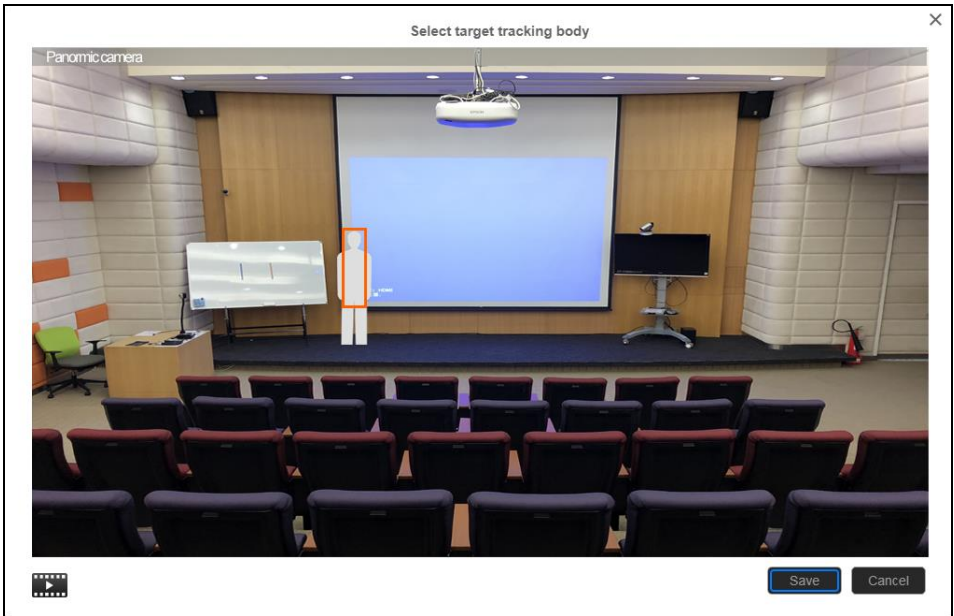


Setup Target Tracking Body

Define the width of the target that needs to be tracked. 1 target zone can be set.


[Note] The screen of the target tracking body is based on the panoramic camera view.

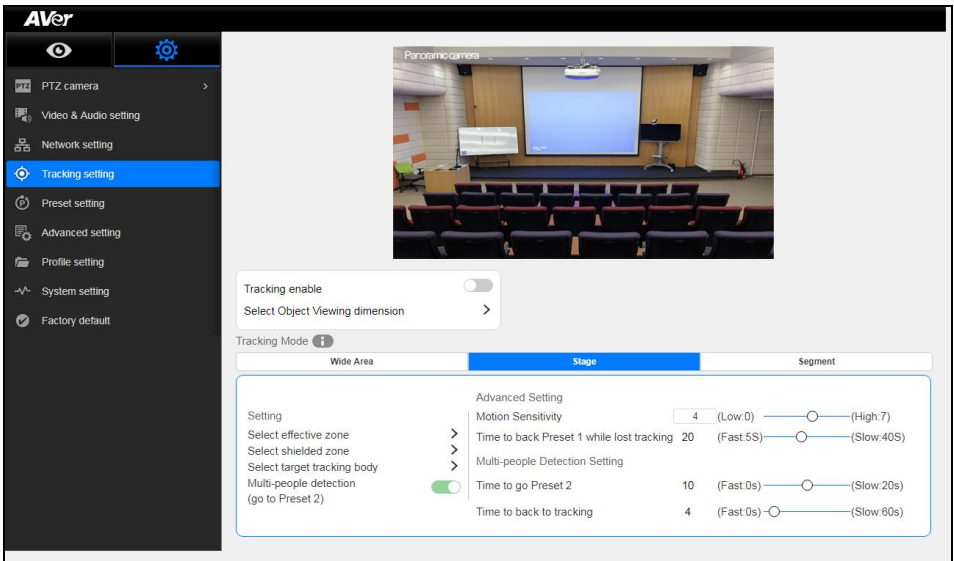
1. Select  > **Tracking setting** > **Stage** > **Select target tracking body**.
2. An online tutorial will display. User can watch to learn how to setup tracking zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In select target tracking body screen, drag and set the width of the object that needs to be tracked (an orange frame will show on the screen). To re-set the width of object, just drag again.
4. Click "**Save**" to save the setting.



Setup Multi-people Detection

When multiple people detection is activated, the camera will move to preset 2 and stop tracking the original object until the multi-people detection mode is stop.

1. Select  > **Tracking setting** > **Stage** > **Multi-people detection**.
2. **Time to go preset 2:** set the time to move the camera to preset 2 after multi-people detection is activated.
3. **Time to back to tracking:** set the time period to back to tracking the main presenter after multi-people detection mode is no longer effective.



The screenshot displays the AVer camera control interface. On the left is a dark sidebar menu with the AVer logo at the top. The menu items are: PTZ camera, Video & Audio setting, Network setting, **Tracking setting** (highlighted in blue), Preset setting, Advanced setting, Profile setting, System setting, and Factory default. The main area shows a live video feed of a stage labeled 'Panoramic camera'. Below the feed are controls for 'Tracking enable' (a toggle switch) and 'Select Object Viewing dimension'. Underneath is the 'Tracking Mode' section with three tabs: 'Wide Area', 'Stage' (selected), and 'Segment'. The 'Advanced Setting' for the 'Stage' mode includes: 'Motion Sensitivity' set to 4 (Low 0 to High 7), 'Time to back Preset 1 while lost tracking' set to 20 (Fast: 5S to Slow: 40S), 'Multi-people Detection Setting' (a sub-section), 'Multi-people detection (go to Preset 2)' which is turned on (green toggle), 'Time to go Preset 2' set to 10 (Fast: 0s to Slow: 20s), and 'Time to back to tracking' set to 4 (Fast: 0s to Slow: 60s).

Segment Mode

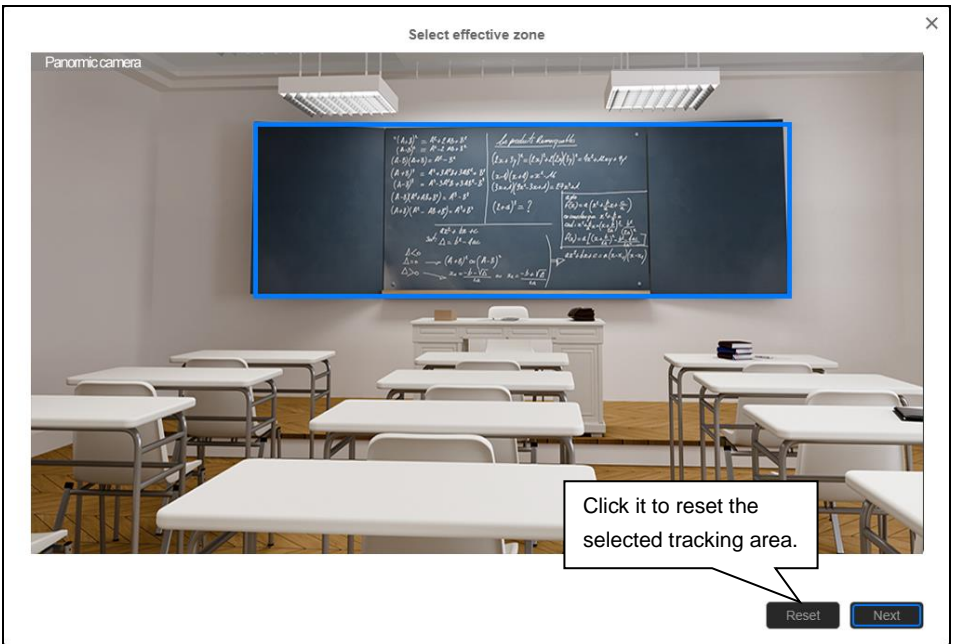
The TR530+ will start tracking when object is moving between the blocks.

Setup Effective Zone

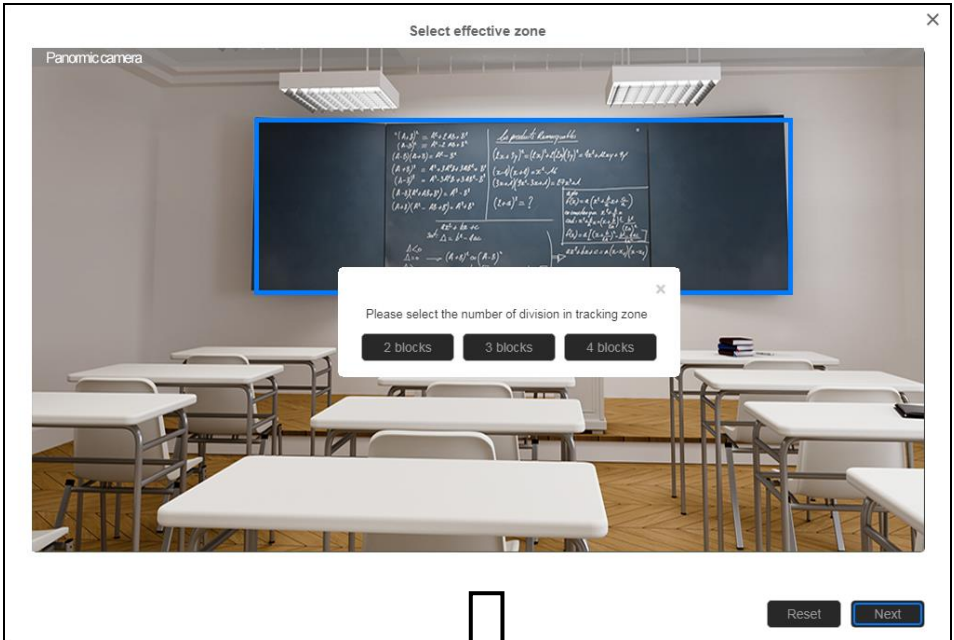
If the TR530+ detects motions in the defined zone it will be triggered to track. If the effective zone isn't setup, then, all the entire panoramic camera view will be the default active zone. The effective zone can be defined from 2 to 4 blocks.

[Note] The size of effective zone setting is based on the panoramic camera view. The Left and Right most edges of the blocks defined will not be able to be adjusted outward, as they are at the outer limits of the "Effective Zone", blue box.

1. Select  > **Tracking setting** > **Segment** > **Select effective zone**.
2. Drag a tracking area on screen (blue frame). Then, click "**Next**" button.

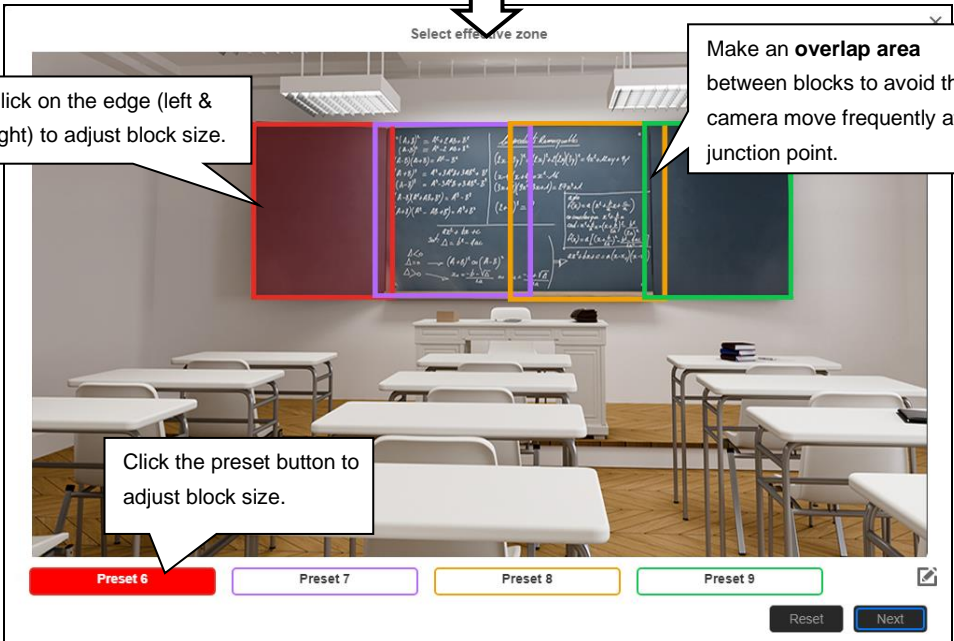


3. Select the tracking zone blocks – 2, 3, or 4 blocks. At least 2 blocks must be set.

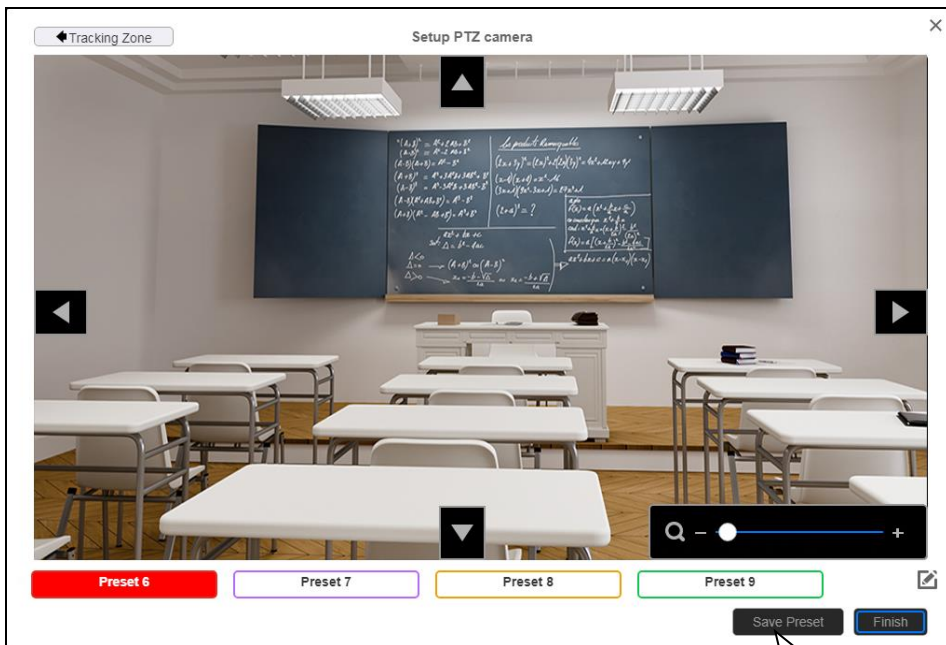


Click on the edge (left & right) to adjust block size.

Make an **overlap area** between blocks to avoid the camera move frequently at junction point.



4. Click **“Next”** to set the position of tracking zone. Click preset button and use ▲, ▼, ◀, ▶, Zoom +/- to adjust to the desire position. Once each preset position is set, click **“Save”** to save the settings.





5. Click **“Finish”** to complete the settings.

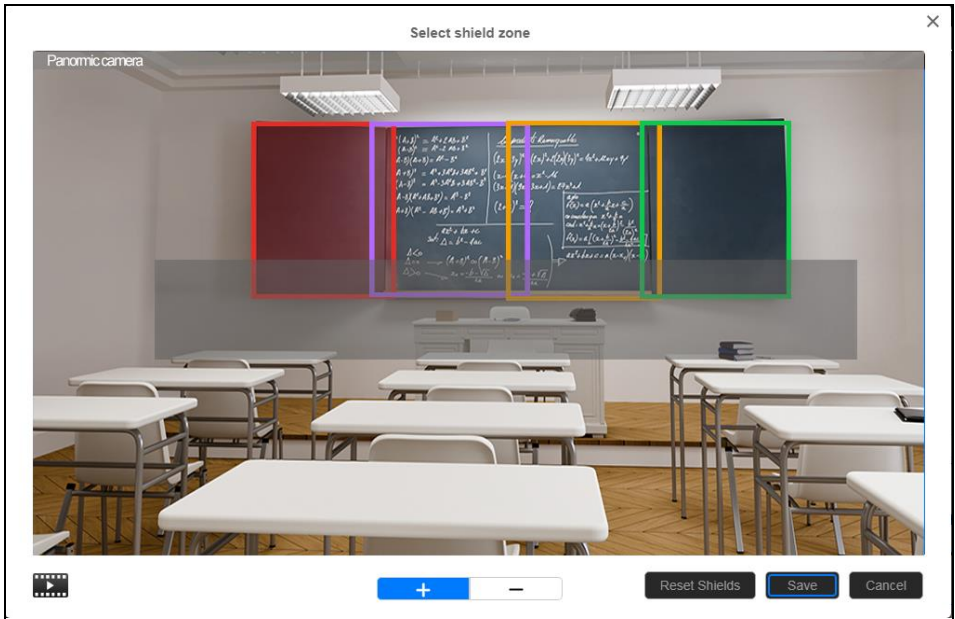
When each time preset position is set, click **“Save”** to save the settings.

Setup Shielded Zone

Define the area that the user doesn't want the camera to track. The shielded zone(s) are setup to "mask" out motion in the background, up to 8 shielded zones can be set.

[Note] The screen of shield zone setting is based on panoramic camera view.



1. Select  > **Tracking setting** > **Segment** > **Select shielded zone**.
2. An online tutorial will display. User can watch to learn how to setup shielded zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the Shielded tracking zone screen, click the "+" and select the area within the tracking zone that don't need to be tracked (a gray block will show on screen). For example: Shield the first row of students. To delete the shield zone area, click "-" and select the shield to delete it. Or select **"Reset Shields"** to delete all shields.
4. Select **"Save"** to save the setting.

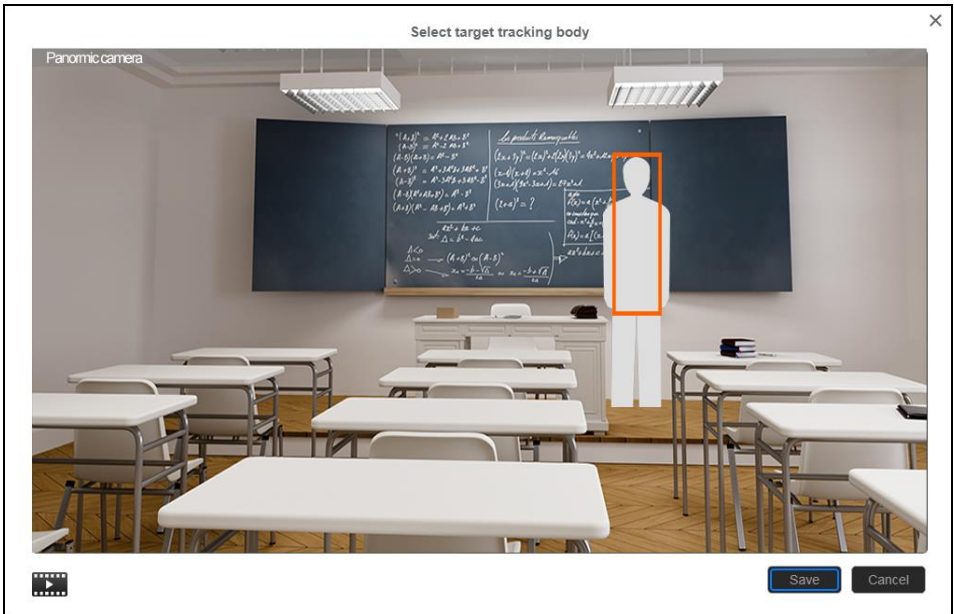


Setup Target Tracking Body

Define the width of the target that needs to be tracked. 1 target zone can be set.


[Note] The screen of target tracking body is based on panoramic camera view.

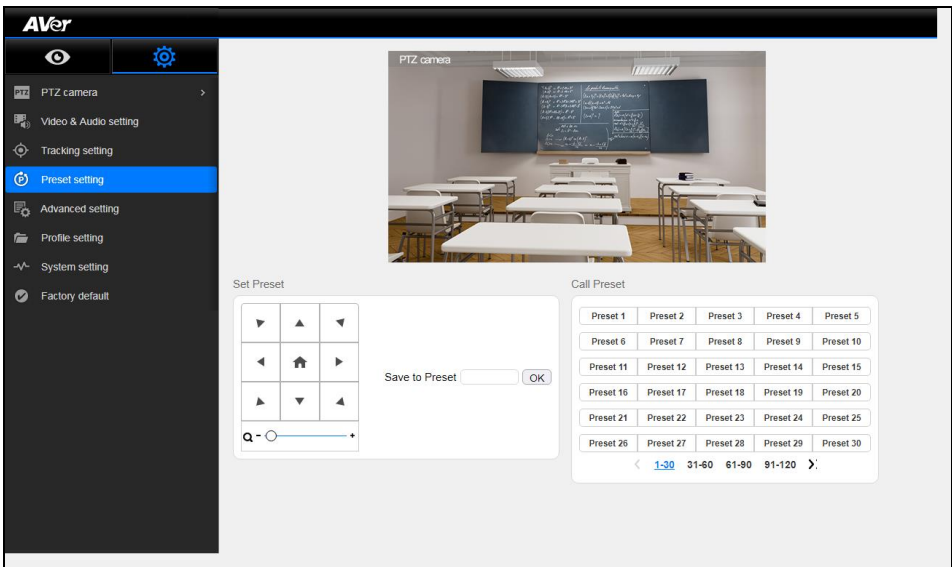
1. Select  > **Tracking setting** > **Segment** > **Select target tracking body**.
2. An online tutorial will display. User can watch to learn how to setup tracking zone. Click **Skip** to stop tutorial. To watch again, select  to play online tutorial.
3. In the select target tracking body screen, drag and set the width of the object that needs to be tracked (an orange frame will show on screen). To re-set the width of the object, just drag again.
4. Click **“Save”** to save the setting.




Preset Setup

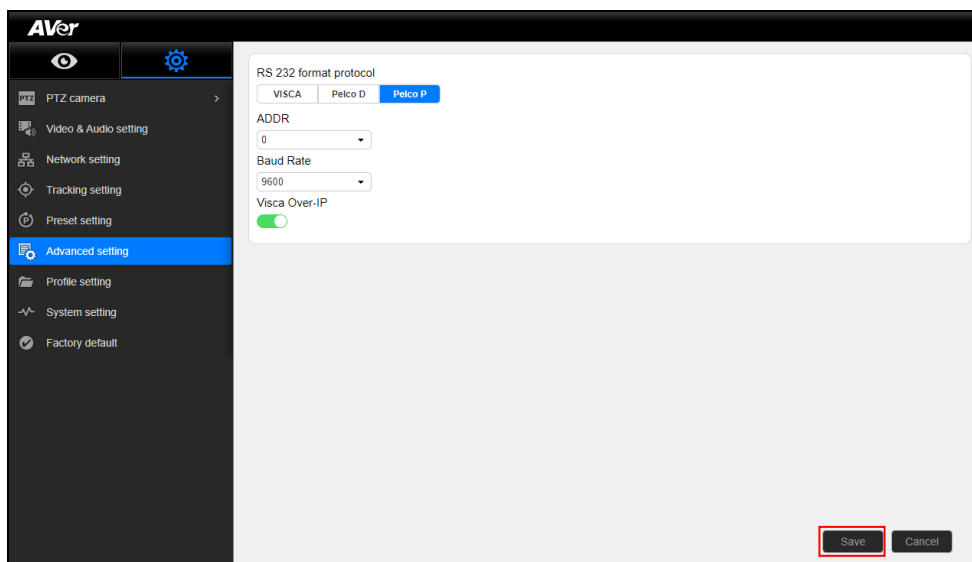
Define the specific location to view when select preset number (1~255). **When TR530+ loses tracking, it will back to the preset 1 position.**

1. Open the browser and enter the IP address of TR530+ to login.
2. Select  > **Preset Setting**.
3. Use the direction control panel to adjust the TR530+ to the desired position.
4. Next, select the preset number in “**Save to Preset**” column and click “**Save**” button to save the preset.



5. Select any preset number in the Call Preset section to re-call that preset location immediately.
6. After calling any preset, the tracking feature will be turned off automatically. Remember to **turn on the tracking** manually. Or press  on remote controller.

Advanced Setting

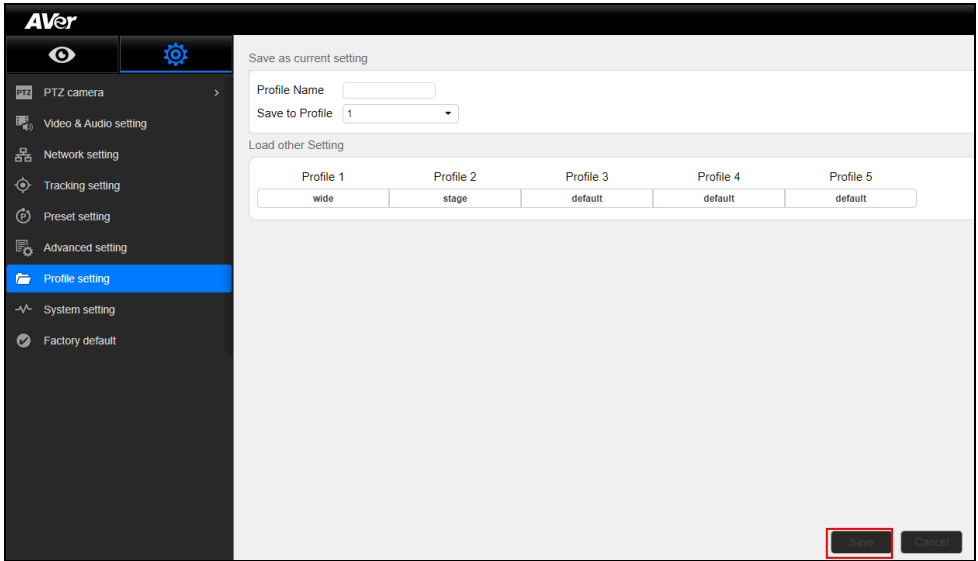


- ✧ **RS232 format protocol:** Select **VISCA**, **Pelco D**, or **Pelco P**.
- ✧ **ADDR:** Select a number from the drop-down list.
- ✧ **Baud Rate:** Select **2400**, **4800**, **9600**, or **115200**.
- ✧ **Visca Over-IP:** You can toggle between on and off states.

Select **Save** to finish camera configuration.

Profile Setting

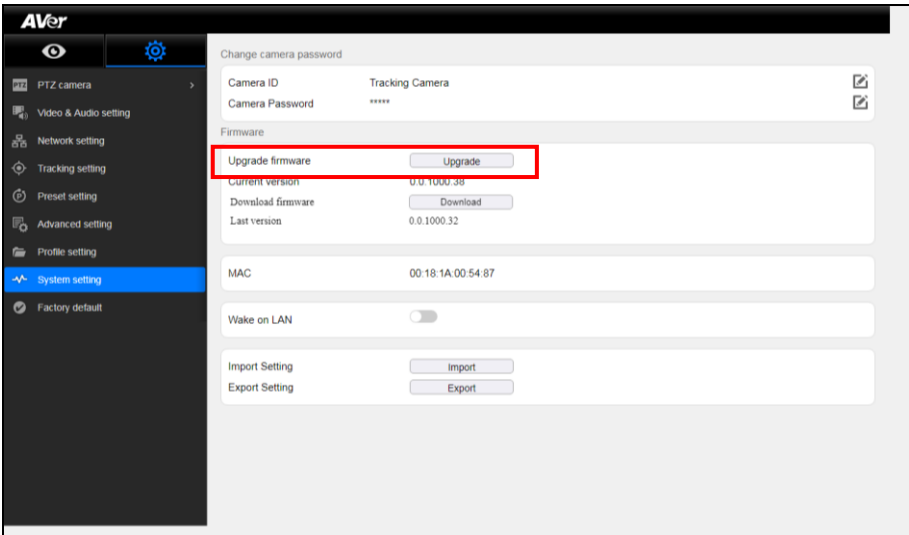
You can save different camera configuration for different scenarios.



- ✧ **Profile Name:** Name the camera setting.
 - ✧ **Save to Profile:** Select a number out of 1 to 5 for the camera setting you just named.
 - ✧ **Load other Setting:** You can load any one of the 5 profiles for camera setting.
- Click **Save** to finish setting.

Upgrade Firmware

1. Download the newest firmware from <https://www.averusa.com/pro-av/support/>. Once downloaded, “un-zip” the file and use the un-zipped version of the *.dat file.
2. Connect to the camera through a Chrome or IE-11 browser.
3. Select **System > Firmware > Upgrade firmware > Upgrade**.
4. Select the firmware and select the “**Upload**” button. This entire process takes about 5 mins.
5. After updating, refresh the browser.



Using RTSP connection to Camera

To use a RTSP player connecting to the camera; please enter the following RTSP URL in your application such as VLC, PotPlayer, or QuickTime.

PTZ camera: rtsp:// IP address of TR530+:554/live_st1

For example: rtsp://192.168.1.1:554/live_st1

Panoramic camera: rtsp://IP address of TR530+:8554/live_st2

For example: rtsp://192.168.1.1:8554/live_st2



OSD SETUP

Before You Begin

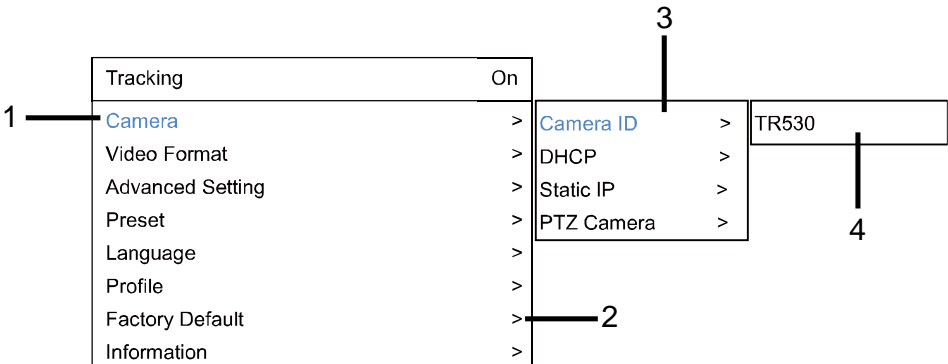
Make sure all connections are securely connected before using the TR530+.

First Time Use

Trigger OSD Menu

Press  button on remote controller to call out the OSD menu. Use **▶** to enter sub-menu, use **▲** and **▼** to move to the selection and use  to confirm the selection. Press **◀** button to go back to the previous level.

1	Blue text indicates the current selection.
2	">" means has sub-menu or value selection.
3	Sub-menu
4	Column for enter value or value selections.




Setup IP Address

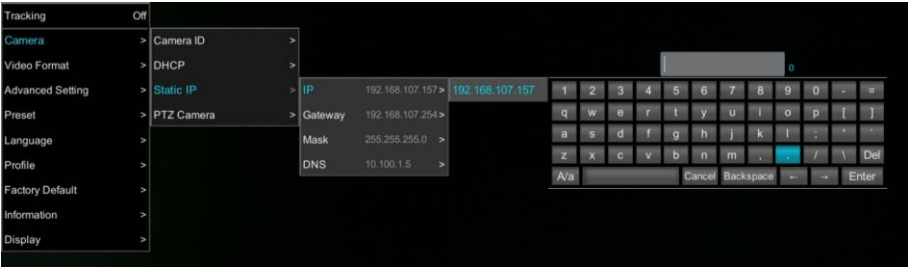
Setup IP address of TR530+.

There are two ways to setup IP address of TR530+. Please follow the steps below to setup the IP address.

■ Static IP Address


Assign a fixed IP address for TR530+.

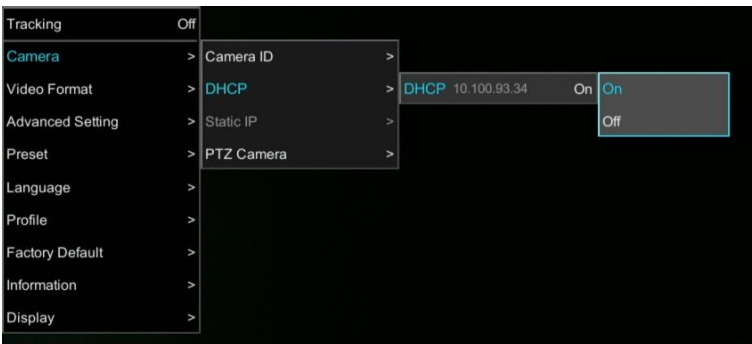
4. After starting-up, press  button on remote control to call out OSD menu.
5. Turn the DHCP off first. Go to **Camera > DHCP > DHCP > Off** then press **▶** or enter button to confirm the selection. The menu selection will switch to **"Static IP"** when DHCP off is applied.
6. Use **▲**, **▼**, Enter button, and on-screen keyboard to setup the **"IP"**, **"Gateway"**, **"Mask"** and **"DNS"**.



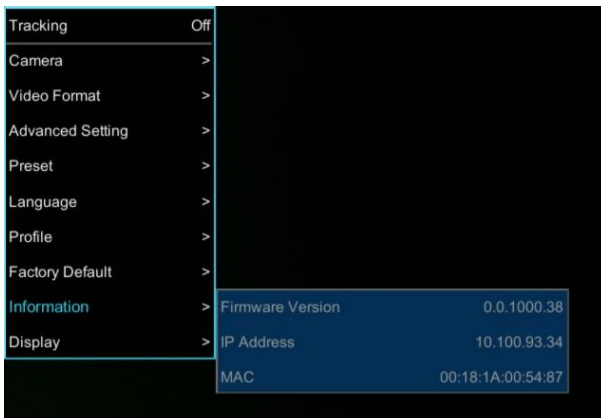
■ Dynamic IP Address(DHCP)

Get IP address from your local DHCP server.

4. After starting-up, press  button on remote control to call out OSD menu.
5. Use **▲** and **▼** buttons to select the **Camera > DHCP > DHCP > On**, then press **▶** or enter button to get IP address from local DHCP server.



6. Use ▲ and ▼ buttons go to “**Information**” to check the IP address information.



The image shows a settings menu on a device. The menu items are listed on the left, and the 'Information' section is expanded to show details on the right. The 'Information' section is highlighted with a blue background.

Tracking	Off
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	> Firmware Version 0.0.1000.38
Display	> IP Address 10.100.93.34
	MAC 00:18:1A:00:54:87

OSD Tree Map

Main

Tracking	On
Camera	>
Video Format	>
Preset	>
Advanced Setting	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Tracking

- User can enable or disable auto-tracking.
- TR530+ will not track an object automatically when the feature is disabled.
- To enable auto-tracking, please select "**On**".
- To disable auto-tracking, select "**Off**".

Tracking	On	On
Camera	>	Off
Video Format	>	
Advanced Setting	>	
Preset	>	
Language	>	
Profile	>	
Factory Default	>	
Information	>	
Display	>	

Camera

In the section, users can change camera ID, network setting and adjust parameter of camera settings.

Tracking	On		
Camera	>	Camera ID	>
Video Format	>	DHCP	>
Advanced Setting	>	Static IP	>
Preset	>	PTZ Camera	>
Language	>		
Profile	>		
Factory Default	>		
Information	>		
Display	>		

Camera ID

To change camera ID, please select **Camera > Camera ID**.

Tracking	On			
Camera	>	Camera ID	>	PTC500+ / PTC115+
Video Format	>	DHCP	>	
Advanced Setting	>	Static IP	>	
Preset	>	PTZ Camera	>	
Language	>			
Profile	>			
Factory Default	>			
Information	>			
Display	>			

DHCP

To enable DHCP, select **Camera > DHCP**.

Tracking	On			
Camera	>	Camera ID	>	
Video Format	>	DHCP	>	DHCP10.1.0.1 ON
Advanced Setting	>	Static IP	>	
Preset	>	PTZ Camera	>	
Language	>			
Profile	>			
Factory Default	>			

Information	>
Display	>

Static IP

To setup network as a static IP, select **Camera > Static IP** (Please set DHCP off before the Static IP setting)

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Camera ID	>
DHCP	>
Static IP	>
PTZ Camera	>

IP 10.1.0.1	>
Mask 255.255.0.255	>
Gateway 10.1.0.1	>
DNS	>

PTZ Camera

To adjust the parameters of PTZ camera, select **Camera >PTZ Camera**.

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Camera ID	>
DHCP	>
Static IP	>
PTZ Camera	>

Camera Mode	Full Auto	>
	Full Auto	>
	Shutter Priority	>
	Iris Priority	>
	Manual	>
White Balance		>
Shading Correction		>
Pan/Tile Speed		1
Zoom Speed		Low
Digital Zoom Limit		12
PTZ Zoom Focus		Off
Power Up		Home
Frequency		Auto
Contrast		2
Saturation		5
Sharpness		Medium
NosieReduction		Medium

Camera Mode

There are 4 different camera modes, you can select one from **Camera > PTZ Camera > Camera Mode**.

<table border="1"> <tr> <td>Camera Mode</td> <td>Full Auto</td> <td>></td> </tr> <tr> <td>Full Auto</td> <td></td> <td>></td> </tr> <tr> <td>Shutter Priority</td> <td></td> <td>></td> </tr> <tr> <td>Iris Priority</td> <td></td> <td>></td> </tr> <tr> <td>Manual</td> <td></td> <td>></td> </tr> <tr> <td>White Balance</td> <td></td> <td>></td> </tr> <tr> <td>Shading Correction</td> <td></td> <td>></td> </tr> </table>	Camera Mode	Full Auto	>	Full Auto		>	Shutter Priority		>	Iris Priority		>	Manual		>	White Balance		>	Shading Correction		>	<table border="1"> <tr> <td>Full Auto</td> <td>></td> </tr> <tr> <td>Shutter Priority</td> <td>></td> </tr> <tr> <td>Iris Priority</td> <td>></td> </tr> <tr> <td>Manual</td> <td>></td> </tr> </table>	Full Auto	>	Shutter Priority	>	Iris Priority	>	Manual	>	<table border="1"> <tr> <td>Slow Shutter</td> <td>Off</td> </tr> <tr> <td>Maximum Gain</td> <td>24dB</td> </tr> <tr> <td>Back Light compens</td> <td>Off</td> </tr> <tr> <td>Exposure</td> <td>0</td> </tr> </table>	Slow Shutter	Off	Maximum Gain	24dB	Back Light compens	Off	Exposure	0
Camera Mode	Full Auto	>																																					
Full Auto		>																																					
Shutter Priority		>																																					
Iris Priority		>																																					
Manual		>																																					
White Balance		>																																					
Shading Correction		>																																					
Full Auto	>																																						
Shutter Priority	>																																						
Iris Priority	>																																						
Manual	>																																						
Slow Shutter	Off																																						
Maximum Gain	24dB																																						
Back Light compens	Off																																						
Exposure	0																																						
<table border="1"> <tr> <td>Pan/Tile Speed</td> <td>1</td> </tr> <tr> <td>Zoom Speed</td> <td>Low</td> </tr> <tr> <td>Digital Zoom Limit</td> <td>12</td> </tr> <tr> <td>PTZ Zoom Focus</td> <td>Off</td> </tr> <tr> <td>Power Up</td> <td>Home</td> </tr> <tr> <td>Frequency</td> <td>Auto</td> </tr> <tr> <td>Contrast</td> <td>2</td> </tr> <tr> <td>Saturation</td> <td>5</td> </tr> <tr> <td>Sharpness</td> <td>Medium</td> </tr> <tr> <td>NosieReduction</td> <td>Medium</td> </tr> </table>	Pan/Tile Speed	1	Zoom Speed	Low	Digital Zoom Limit	12	PTZ Zoom Focus	Off	Power Up	Home	Frequency	Auto	Contrast	2	Saturation	5	Sharpness	Medium	NosieReduction	Medium	<table border="1"> <tr> <td>Full Auto</td> <td>></td> </tr> <tr> <td>Shutter Priority</td> <td>></td> </tr> <tr> <td>Iris Priority</td> <td>></td> </tr> <tr> <td>Manual</td> <td>></td> </tr> </table>	Full Auto	>	Shutter Priority	>	Iris Priority	>	Manual	>	<table border="1"> <tr> <td>Speed</td> <td>1/30</td> </tr> <tr> <td>Maximum Gain</td> <td>24dB</td> </tr> <tr> <td>Exposure</td> <td>0</td> </tr> </table>	Speed	1/30	Maximum Gain	24dB	Exposure	0			
Pan/Tile Speed	1																																						
Zoom Speed	Low																																						
Digital Zoom Limit	12																																						
PTZ Zoom Focus	Off																																						
Power Up	Home																																						
Frequency	Auto																																						
Contrast	2																																						
Saturation	5																																						
Sharpness	Medium																																						
NosieReduction	Medium																																						
Full Auto	>																																						
Shutter Priority	>																																						
Iris Priority	>																																						
Manual	>																																						
Speed	1/30																																						
Maximum Gain	24dB																																						
Exposure	0																																						
	<table border="1"> <tr> <td>Full Auto</td> <td>></td> </tr> <tr> <td>Shutter Priority</td> <td>></td> </tr> <tr> <td>Iris Priority</td> <td>></td> </tr> <tr> <td>Manual</td> <td>></td> </tr> </table>	Full Auto	>	Shutter Priority	>	Iris Priority	>	Manual	>	<table border="1"> <tr> <td>Slow Shutter</td> <td>Off</td> </tr> <tr> <td>Iris</td> <td>F6.8</td> </tr> <tr> <td>Maximum Gain</td> <td>24dB</td> </tr> <tr> <td>Exposure</td> <td>0</td> </tr> </table>	Slow Shutter	Off	Iris	F6.8	Maximum Gain	24dB	Exposure	0																					
Full Auto	>																																						
Shutter Priority	>																																						
Iris Priority	>																																						
Manual	>																																						
Slow Shutter	Off																																						
Iris	F6.8																																						
Maximum Gain	24dB																																						
Exposure	0																																						
	<table border="1"> <tr> <td>Full Auto</td> <td>></td> </tr> <tr> <td>Shutter Priority</td> <td>></td> </tr> <tr> <td>Iris Priority</td> <td>></td> </tr> <tr> <td>Manual</td> <td>></td> </tr> </table>	Full Auto	>	Shutter Priority	>	Iris Priority	>	Manual	>	<table border="1"> <tr> <td>Maximum Gain</td> <td>24dB</td> </tr> <tr> <td>Speed</td> <td>1/30</td> </tr> <tr> <td>Iris</td> <td>F6.8</td> </tr> </table>	Maximum Gain	24dB	Speed	1/30	Iris	F6.8																							
Full Auto	>																																						
Shutter Priority	>																																						
Iris Priority	>																																						
Manual	>																																						
Maximum Gain	24dB																																						
Speed	1/30																																						
Iris	F6.8																																						

White Balance

To adjust white balance value, select **Camera > PTZ Camera > White Balance**.

Camera Mode	Full Auto	>
	Full Auto	>
	Shutter Priority	>
	Iris Priority	>
	Manual	>
White Balance		>
Shading Correction		>
Pan/Tile Speed		1
Zoom Speed		Low
Digital Zoom Limit		12
PTZ Zoom Focus		Off
Power Up		Home
Frequency		Auto
Contrast		2
Saturation		5
Sharpness		Medium
NoisieReduction		Medium

Mode	Auto
------	------

Auto	
One Push	
Manual	6247

Shading Correction

To adjust shading correction, select **Camera > PTZ Camera > Shading Correction** (The option is for the screen corner shadow fixing.)

Camera Mode	Full Auto	>		
	Full Auto	>		
	Shutter Priority	>		
	Iris Priority	>		
	Manual	>		
	White Balance	>		
	Shading Correction	>		
Pan/Tile Speed		1	Upper Left	Off
Zoom Speed		Low	Upper Right	Off
Digital Zoom Limit		12	Bottom Left	Off
PTZ Zoom Focus		Off	Bottom Right	Off
Power Up		Home		
Frequency		Auto		
Contrast		2		
Saturation		5		
Sharpness		Medium		
NosieReduction		Medium		

Video Format

To adjust Video Format, select **Video Format** from OSD menu.

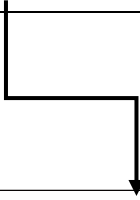
Tracking	On		
Camera	>		
Video Format	>		
Advanced Setting	>	3G-SDI1/HDMI	Auto
Preset	>	3G-SDI2	Auto
Language	>	PIP	0
Profile	>		
Factory Default	>		
Information	>		
Display	>		

PIP Mode

Select picture-in-picture(PIP) mode. To turn off the PIP mode, select mode 0.

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>

3G-SDI1/HDMI	Auto
3G-SDI2	Auto
PIP	0



0 Turn off PIP mode

Select a layout

 1	 3	 5	 7
 2	 4	 6	 8

Advanced Setting


To adjust RS232 protocol, address and baud rate, select **Advance Setting** from OSD menu.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	RS232 Protocol VISCA
Preset	>	Address(ADDRD) 1
Language	>	Baud Rate 9600
Profile	>	VISCA-over-IP off
Factory Default	>	
Information	>	
Display	>	

Preset

TR530+ allows you to set 10 preset locations via remote controller.

■ To set up preset point:


1. Enter OSD and turn off the tracking function.
2. Move camera to the preferred location and zoom distance.
3. Press  bottom > **Preset** > **Set** and use arrow key to assign a preset number and press enter button on remote controller.

[Tip] Shortcut of setting a preset location as following:

Hold on the “P” button until the message shows up. Then, press number you want to set, ex: 1 and press enter.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	
Preset	>	Set 1
Language	>	Call 1
Profile	>	
Factory Default	>	
Information	>	
Display	>	

■ To call a preset location:

Press  bottom > **Preset** > **call** and use arrow key to select which preset number you would like

to recall -> press enter button on remote controller.

[Tip] Shortcut of calling a preset location: press "P" > press number you want to recall, ex: 1.

Language

To change language, go to **OSD menu > Language**.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	
Preset	>	
Language	>	English
Profile	>	繁體中文
Factory Default	>	簡體中文
Information	>	日本語
Display	>	Deutsch
		Francais
		Espanol
		한국어
		Vietnamese

Profile

TR530+ allows you to save 5 profiles.

To set the profile, go to OSD menu > **Set** and use arrow key to assign a number and press enter button.

To call the profile, go to OSD menu > **Apply** and use arrow key to call an assigned number and press enter button.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	
Preset	>	
Language	>	
Profile	>	Set default
Factory Default	>	Apply default
Information	>	
Display	>	

Factory Default

To reset the TR530+ to default setting, go to OSD menu > **Factory Default** > **Yes** and press enter button.

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Yes
No

Information

To check out information on the TR530+, ex: FW version. Go to OSD menu > **Information**.

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Firmware Version	0.0.0002.12
IP Address	10.1.0.1
MAC	FB:5F:4B:61:1F:4F

Display

Enable/disable status message display on screen. Go to OSD menu > **Display**.

Tracking	On
----------	----

Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Status OSD	On	On
Latency Reduction	Off	Off

[Note] If you select **On** for Status OSD, you will see the OSD menu on the HDMI screen. Select **Off** for the OSD menu before you proceed to control the camera.

Latency Reduction

After enabling Latency Reduction, the tracking camera will reboot. Enabling this function will disable Digital Zoom/Noise Reduction/PIP to reduce the latency.


Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>
Display	>

Status OSD	On
Latency Reduction	Off

On
Off

Hot Key

Press certain button on remote controller to perform hot key function.

Button	Action	Function
	Press and hold(3secs)	Power on/off camera. [Note] Only support at TR530+ FW version 0.0.1000.08 and above.
3	Press three times(333)	Enable/Disable tracking function When the hot key takes effect, you will see “tracking on” or “tracking off” on the right bottom side.
6	Press six times(666666)	Enable/Disable AVer Logo When the hot key takes effect, you will see “AVer” logo on the right bottom side.
7	Press seven times(7777777)	Show the tracking indicator When the hot key takes effect, you will see the tracking indicator on the target face. This mode only works in PIP Mode 2.
8	Press eight times(88888888)	Set TR530+ IP address as default IP(192.168.1.168.)
9	Press nine times(999999999)	Password Reset mechanism: When the hot key takes effect, the password of entering Web UI will go back the default “admin”.

FAQ

1. How to define the zoom level of tracking target?

It's determined by Setup Object Viewing Dimension. You should stand on the assigned location as a proportional scale and zoom in/out to the proportion that you want. The following tracking will be based on this proportion.

2. How preset 1 has influence in the tracking settings?

When tracking cam loses the target, the position camera will go back to preset 1.

3. How does tracking work in Wide Area mode?

When a person enters the priority zone, the PTZ camera will move to the position of the object and perform face detection. After the face is detected, the PTZ camera will start following the person.

4. How does tracking work in Segment mode?

The tracking operation only works inside the effective zone. When the object is outside of the effective zone, the camera will stop tracking the object.

5. Will tracking be lost when we use the TR530+ in which the projector is turned on in the background?

Yes, it might happen in "Wide Area mode". But we suggest to use "Stage mode" when the projector is turned on. Stage mode can be used in any lighting conditions.

6. What is the definition of the HOME position?

Home is the default position after the camera boots up. Users can define the position after the camera boots up by going to: WebUI PTZ > PTZ > power up ACT.

7. Are Presets 2 ~ 9 used for anything related to tracking?

If you turn off tracking, the TR530+ becomes a regular PTZ camera. User can manipulate it to assign position via center control system command. Presets 6, 7, 8 and 9 are used for Segment Mode Tracking.

8. This camera supports several profiles; does each profile have different PRESETS?

Each profile has its own preset definition.

9. If we want to stop tracking and to focus on a specific location, what should I do?

Press "P" and the preset number. The camera will go to the assigned location.

10. In Wide area mode, I already masked the areas that might have an item showing a photo of a human being, but why is the camera still going to these areas?

The shielding zone is only for motion shielding. In a complicated environment, we suggest using Stage Mode to overcome this situation.

11. Can I install the camera inverted from the ceiling?

No, the TR530+ camera must be installed vertically, due mainly because of the dual camera design. AVer does sell a specially made mount for this camera for either ceiling or wall mounted options.

12. Does the TR530+ camera support PoE or PoE+?

Yes, please make sure the ethernet switch is capable of PoE+ as the camera needs at least 25Ws of continuous power.

RS232 Command Table

Visca Command Table

Command Set	Command	Command Packet	Comments
IF_Clear		8x 01 00 01 FF	x = Cam address
IF_Clear(broadcast)		88 01 00 01 FF	
CAM_Power	On	8x 01 04 00 02 FF	*RS-232 support, over IP not support
	Off	8x 01 04 00 03 FF	
CAM_Zoom	Stop	8x 01 04 07 00 FF	
	Tele(Variable)	8x 01 04 07 2p FF	p=0 (Low) to 7 (High)
	Wide(Variable)	8x 01 04 07 3p FF	
	Direct	8x 01 04 47 0Y 0Y 0Y 0Y FF	0xYYYY = zoom pos
CAM_Focus	Far(Variable)	8x 01 04 08 2P FF	p=0-F
	Near(Variable)	8x 01 04 08 3P FF	p=0-F
	Auto Focus	8x 01 04 38 02 FF	
	Manual Focus	8x 01 04 38 03 FF	
	One Push	8x 01 04 18 01 FF	
CAM_WB	Auto	8x 01 04 35 00 FF	Normal Auto
	One Push WB	8x 01 04 35 03 FF	One Push WB mode
	Manual	8x 01 04 35 05 FF	Manual Control mode
	One Push	8x 01 04 10 05 FF	One Push WB Trigger
CAM_RGain	Up	8x 01 04 03 02 FF	Manual Control of R Gain
	Down	8x 01 04 03 03 FF	
CAM_Bgain	Up	8x 01 04 04 02 FF	Manual Control of B Gain
	Down	8x 01 04 04 03 FF	
CAM_AE	Full Auto	8x 01 04 39 00 FF	Automatic Exposure mode
	Manual	8x 01 04 39 03 FF	Manual Control mode
	Shutter Priority	8x 01 04 39 0A FF	Shutter Priority Automatic Exposure mode
	Iris Priority	8x 01 04 39 0B FF	Iris Priority Automatic Exposure mode
CAM_Shutter	Bright	8x 01 04 39 0D FF	Bright Mode (Manual control)
	Up	8x 01 04 0A 02 FF	Shutter Setting
	Down	8x 01 04 0A 03 FF	
CAM_Iris	Up	8x 01 04 0B 02 FF	Iris Setting
	Down	8x 01 04 0B 03 FF	
CAM_Bright	Up	8x 01 04 0D 02 FF	Bright Setting
	Down	8x 01 04 0D 03 FF	
CAM_ExpComp	Up	8x 01 04 0E 02 FF	Exposure Compensation Amount Setting
	Down	8x 01 04 0E 03 FF	
CAM_Backlight	On	8x 01 04 33 02 FF	Back Light Compensation ON/OFF
	Off	8x 01 04 33 03 FF	
CAM_Preset	reset	8x 01 04 3F 00 YY FF	YY = preset num(0-0x7F)
	set	8x 01 04 3F 01 YY FF	
	recall	8x 01 04 3F 02 YY FF	
CAM_Menu	On/Off	8x 01 06 06 10 FF	Display ON/OFF
Pan-tilt Drive	Up	8x 01 06 01 VV WW 03 01 FF	VV=pan speed: 0x00-0x0F WW= tilt speed: 0x00-0x0F
	Down	8x 01 06 01 VV WW 03 02 FF	
	Left	8x 01 06 01 VV WW 01 03 FF	
	Right	8x 01 06 01 VV WW 02 03 FF	
	UpLeft	8x 01 06 01 VV WW 01 01 FF	
	UpRight	8x 01 06 01 VV WW 02 01 FF	
	DownLeft	8x 01 06 01 VV WW 01 02 FF	
	DownRight	8x 01 06 01 VV WW 02 02 FF	
	Stop	8x 01 06 01 VV WW 03 03 FF	
	Home	8x 01 06 04 FF	
Reset	8x 01 06 05 FF		
PT_Direct	8x 01 06 02 00 00 0Y 0Y 0Y 0V 0V 0V 0V FF	0xYYYY = pan pos 0xVVVV = tilt pos	
CAM_Track_ON		8x 01 04 7D 02 00 FF	
CAM_Track_OFF		8x 01 04 7D 03 00 FF	
CAM_Profile_Read		8x 01 04 40 01 YY FF	YY = profile num(0x01-0x05)
CAM_Profile_Save		8x 01 04 40 02 YY FF	
CAM_WOL_ON		8x 01 04 7E 02 00 FF	
CAM_WOL_OFF		8x 01 04 7E 03 00 FF	
CAM_PIP_SET		8x 01 04 7F 01 YY FF	YY = pip num(0x01-0x09)
CAM_PIP_OFF		8x 01 04 7F 02 00 FF	

Inquiry Command	Command Packet	Reply Packet	Comments
CAM_PowerInq	8x 09 04 00 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_WBModelInq	8x 09 04 35 FF	y0 50 00 FF	Auto
		y0 50 05 FF	Manual
CAM_RGainInq	8x 09 04 43 FF	y0 50 00 00 0p 0q FF	pq: R Gain
CAM_BGainInq	8x 09 04 44 FF	y0 50 00 00 0p 0q FF	pq: B Gain
CAM_AEModelInq	8x 09 04 39 FF	y0 50 00 FF	Full Auto
		y0 50 03 FF	Manual
		y0 50 0A FF	Shutter Priority
		y0 50 0B FF	Iris Priority
		y0 50 0D FF	Bright
CAM_ShutterPosInq	8x 09 04 4A FF	y0 50 00 00 0p 0q FF	pq: Shutter Position
CAM_IrisPosInq	8x 09 04 4B FF	y0 50 00 00 0p 0q FF	pq: Iris Position
CAM_GainPosInq	8x 09 04 4C FF	y0 50 00 00 0p 0q FF	pq: Gain Position
CAM_BrightPosInq	8x 09 04 4D FF	y0 50 00 00 0p 0q FF	pq: Bright Position
CAM_ExpCompPosInq	8x 09 04 4E FF	y0 50 00 00 0p 0q FF	pq: ExpComp Position
CAM_VersionInq	8x 09 00 02 FF		
PT_Pos_Inq	8x 09 06 12 FF		
Zoom_Pos_Inq	8x 09 04 47 FF		
Preset Inq	8x 09 04 3F FF	y0 50 pp FF	Return the last preset number which has been operated pp:01 - FF

Pelco-P Command Table

PAN AND TILT COMMAND		P/T bit(byte4.0) = 0							
func	STX	ADDR	data1	data2	data3	data4	ETX	checksum	
data	0xA0	0~7F	cmd 1	cmd 2	Pan speed	Tilt speed	0xAF	1~7 XOR	
byte3: command 1		note: speed = 0x00~0x30							
	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0	
	NA	CAM ON	NA	CAM ON/OFF	NA	NA	NA	NA	
		note: power off: byte3.6 = 0 & byte3.4 = 1							
byte4: command 2									
	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0	
	NA	ZOOM Wide	ZOOM Tele	TILT Down	TILT Up	PAN Left	PAN Right	P/T bit 0(always)	
EXTENDED COMMAND SE		P/T bit(byte4.0) = 1							
func	STX	ADDR	data1	data2	data3	data4	ETX	checksum	
Set Preset XX	0xA0	0~7	0x00	0x03	0x00	Preset #	0xAF	1~7 XOR	
Go To Preset XX	0xA0	0~7	0x00	0x07	0x00	Preset #	0xAF	1~7 XOR	
Track ON	0xA0	0~7	0x00	0x65	0x00	0x00	0xAF	1~7 XOR	
Track OFF	0xA0	0~7	0x00	0x67	0x00	0x00	0xAF	1~7 XOR	
WOL ON	0xA0	0~7	0x00	0x69	0x00	0x00	0xAF	1~7 XOR	
WOL OFF	0xA0	0~7	0x00	0x6B	0x00	0x00	0xAF	1~7 XOR	
Read Profile XX	0xA0	0~7	0x00	0x6D	0x00	Profile #	0xAF	1~7 XOR	
Save To Profile XX	0xA0	0~7	0x00	0x6F	0x00	Profile #	0xAF	1~7 XOR	
		note: Preset #: 0x01 ~ 0xFF Profile #: 0x01 ~ 0x05							

Pelco-D Command Table

PAN AND TILT COMMAND		P/T bit(byte4.0) = 0							
	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7		
func	SYNC	ADDR	cmd 1	cmd 2	data1	data2	checksum		
data	0xFF	1~80	cmd 1	cmd 2	Pan speed	Tilt speed	2~6 SUM		
note : speed = 0x00~0x30									
byte3 : command 1									
	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0	
	SENSE ON	NA	NA	NA	CAM ON/OFF	NA	NA	NA	
note : power off : byte3.7 = 0 & byte3.3 =									
byte4: command 2									
	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0	
	NA	ZOOM Wide	ZOOM Tele	TILT Down	TILT Up	PAN Left	PAN Right	P/T bit 0(always)	
EXTENDED COMMAND SE		P/T bit(byte4.0) = 1							
	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7		
func	SYNC	ADDR	data1	data2	data3	data4	checksum		
Set Preset XX	0xFF	1~8	0x00	0x03	0x00	Preset #	2~6 SUM		
Go To Preset XX	0xFF	1~8	0x00	0x07	0x00	Preset #	2~6 SUM		
Track ON	0xFF	1~8	0x00	0x65	0x00	0x00	2~6 SUM		
Track OFF	0xFF	1~8	0x00	0x67	0x00	0x00	2~6 SUM		
WOL ON	0xFF	1~8	0x00	0x69	0x00	0x00	2~6 SUM		
WOL OFF	0xFF	1~8	0x00	0x6B	0x00	0x00	2~6 SUM		
Read Profile XX	0xFF	1~8	0x00	0x6D	0x00	Profile #	2~6 SUM		
Save To Profile XX	0xFF	1~8	0x00	0x6F	0x00	Profile #	2~6 SUM		
note : Preset # : 0x01 ~ 0xFF Profile # : 0x01 ~ 0x05									

Example:

Camera Address: 1

Pan Left at high speed: **FF 01 00 04 3F 00 44**

Pan Right at medium speed: **FF 01 00 02 20 00 23**

Tilt Up at high speed: **FF 01 00 08 00 3F 48**

Tilt Down at medium speed: **FF 01 00 10 20 00 31**

Stop all actions (Pan / Tilt / Zoom / Iris etc.): **FF 01 00 00 00 00 01**

Visca-over-IP Settings

Visca over IP

PORT

Internet protocol	IPv4
Transport protocol	UDP
Port address	52381

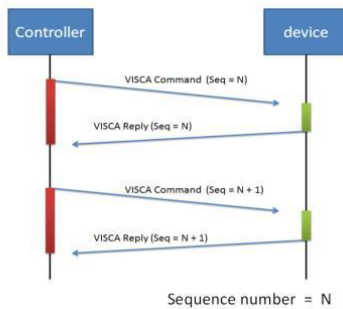
FORMAT

func	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	byte8 ~~~~ byte23
data	Value1	Value2	Payload length 1~16 (0x0001~0x0010)		Sequence number 0X00000000 ~ 0XFFFFFFF			Payload (1 to 16 bytes) VISCA Packet (see page VISCA)	

Payload type

Name	Value1	Value2	Description
VISCA command	0x01	0x00	Stores the VISCA command.
VISCA inquiry	0x01	0x10	Stores the VISCA inquiry.
VISCA reply	0x01	0x11	Stores the reply for the VISCA command or VISCA inquiry

Sequence number



CGI Command Table

CGI List for Video Transmission					
CGI item name	URL	Command	Parameter Name	Parameter value	Description
Get MJPEG stream	http://ip/livestream/livestream?action=get				640x360
Get RTSP stream	rtsp://ip/live_st1				
GET JPEG	/webui?StartStreaming=ActionPTZ				
	/webui?SaveImage=Mod_cram_ptz1.jpg	Mod_cram_ptz1.jpg ~ Mod_cram_ptz4.jpg			
	/Mod_cram_ptz1.jpg				
CGI List for Camera Control					
CGI item name	URL	Command	Parameter Name	Parameter value	Description
up start	/webui?SetPtzf=	1,0,1&(random)			
up end	/webui?SetPtzf=	1,0,2&(random)			
down start	/webui?SetPtzf=	1,1,1&(random)			
down end	/webui?SetPtzf=	1,1,2&(random)			
left start	/webui?SetPtzf=	0,1,1&(random)			
left end	/webui?SetPtzf=	0,1,2&(random)			
right start	/webui?SetPtzf=	0,0,1&(random)			
right end	/webui?SetPtzf=	0,0,2&(random)			
zoom_in start	/webui?SetPtzf=	2,0,1&(random)			
zoom_in end	/webui?SetPtzf=	2,0,2&(random)			
zoom_out start	/webui?SetPtzf=	2,1,1&(random)			
zoom_out end	/webui?SetPtzf=	2,1,2&(random)			
set preset:	/webui?ActiPreset=	1,N&(random)			N : position
load preset:	/webui?SetPtzf=	0,N&(random)			N : position
CGI List for Various Settings					
CGI item name	URL	Command	Parameter Name	Parameter value	Description
exposure value	/webui?Set=	img_expo_expo,3,N&(random)	value	1 ~ 9	N : value
saturation	/webui?Set=	img_saturation,3,N&(random)	value	0 ~ 10	N : value
contrast	/webui?Set=	img_contrast,3,N&(random)	value	0 ~ 4	N : value
Tracking on:	/webui?Set=	trk_tracking,3,1&(random)			
Tracking off:	/webui?Set=	trk_tracking,3,0&(random)			
Reboot	/webui?Set=reboot,3,1&X				X : random value
Factory Reset	/webui?OnePush=C_DEFAULT&X				X : random value
Call Profile	http://ip/webui/ActiProFiles=	call,3,N&(random)			N= Profile number
Save Profile	/webui?ActiProFiles=	save,3,N&(random)			N= Profile number
Set Profile Name	/webui?ActiProNames=	Set,N,(Name)&(random)			N= Profile number
Tracking On/Off Get	/webui?Get=trk_tracking,3&_=X	PTC	- Reply	On trk_tracking=1 Off trk_tracking=0	X : random value
Call Profile	/webui?ActiProFiles=	call,3,N&(random)			N= Profile number
Save Profile	/webui?ActiProFiles=	save,3,N&(random)			N= Profile number
Set Profile Name	/webui?ActiProNames=	Set,N,(Name)&(random)			N= Profile number