VITEK

VT-TPTZ25HRAN-4PNL
VT-TPTZ25HRAN-8PNL
VT-TPTZ32HRAN-8PNS

Transcendent GEN IV IP PTZ Cameras with A.I. Facial Recognition and Auto-Tracking

PRODUCT MANUAL

KEY FEATURES

- 4 or 8 MegaPixel Progressive Scan CMOS Starlight Sensors
- 25X or 32X Optical Zoom with Real-Time Auto Zoom Tracking
- Transcendent GEN IV Advanced Analytics
- Real-Time Auto Zoom Tracking, powered by A.I.
- A.I. Facial Detection with up to 95% accuracy
- Intelligent A.I. Auto-tracking & Classification of People, Cars, and Cycles
- Up to 650' IR Range
- 1 Ch. Audio In + Out / 1 Ch. Alarm In + Out
- IP66 Ingress Protection + IK10 Impact Rating
- NDAA Compliant
- 3-Year Warranty

PLEASE NOTE:
Complete User Guide, Software, Tools, and Updates are available online. Scan the QR Code or visit:
https://www.vitekcctv.com

About This Manual

- This manual is provided for user reference only, without legal restraint.
- This manual is available for many models. Some functions introduced in the manual may be not available for some models. Please take the real models as the standard.
- This content of this manual is subject to change without prior notice, and the updates will be added into the new version of this manual.
- This manual may contain several technically incorrect places or printing errors, please feel free to let us know. We will readily improve or update the procedures described in the manual.

Notes on Safety

- Please use the specified power supply to connect.
- Do not attempt to disassemble the camera; in order to prevent electric shock, do not remove screws or covers.
- There are no user-serviceable parts inside. Please contact the nearest service center as soon as possible if there is any failure.
- Avoid from incorrect operation, shock vibration, heavy pressing which can cause damage to product.
- Do not use corrosive detergent to clean main body of the camera. If necessary, please use soft dry cloth to wipe dirt; for hard contamination, use neutral detergent. Any cleanser for high grade furniture is applicable.
- Avoid aiming the camera directly towards extremely bright objects, such as, sun, as this may damage the image sensor.
- Please follow the instructions to install the camera. Do not reverse the camera, or the reversing image will be received.
- Do not operate it in case temperature, humidity and power supply are beyond the limited stipulations.
- Keep away from heat sources such as radiators, heat registers, stove, etc.
- Do not expose the product to the direct airflow from an air conditioner. Otherwise, it may cause moisture condensation inside the clear dome due to temperature difference between internal and external of the dome camera.

Disclaimer

- With regard to the product with internet access, the use of product shall be wholly at your own risks. Our company shall not be responsible for abnormal operation, privacy leakage or other damages resulting from cyber-attack, hacker attack, virus inspection, or other internet security risks; however, Our company will provide timely technical support if necessary.
- Surveillance laws vary from country to country. Check all laws in your local region before using this product for surveillance purposes. We shall not take the responsibility for any consequences resulting from illegal operations.

Regulatory Information

FCC Information

1. FCC compliance

The products have be tested and found in compliance with the council FCC rules and regulations part 15 subpart B. These limits are designed to provide reasonable protection against harmful interference. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. The user will be required to correct the interface at his own expense in case the harmful interference occurs.

2. FCC conditions:

Operation of this product is subject the following two conditions: (1) this device may not cause harmful interface, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE Information

CE The products have been manufactured to comply with the following directives.

EMC Directive 2014/30/EU

RoHS

The products have been designed and manufactured in accordance with Directive EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

2012/19/EU (WEEE directive): The Directive on waste electrical and electronic equipment (WEEE Directive). To improve the environmental management of WEEE, the improvement of collection, treatment and recycling of electronics at the end of their life is essential. Therefore, the product marked with this symbol must be disposed of in a responsible manner.

Directive 94/62/EC: The Directive aims at the management of packaging and packaging waste and environmental protection. The packaging and packaging waste of the product in this manual refers to must be disposed of at designated collection points for proper recycling and environmental protection.

REACH(EC1907/2006): REACH concerns the Registration, Evaluation, Authorization and Restriction of Chemicals, which aims to ensure a high level of protection of human health and the environment through better and earlier identification of the intrinsic properties of chemical substances. The product in this manual refers to conforms to the rules and regulations of REACH. For more information of REACH, please refer to DG GROWTH or ECHA websites.

Table of Contents

Chapter 1 Introduction

This series of PTZ cameras is used for video capturing. This series adopts state of the art video processing chips, integrated with the most advanced technologies (like video encoding and decoding technology) to make the image transmission more stable and smooth. Moreover, the built-in WEB server of this series improves the performance of the traditional surveillance system so that users can easily operate and monitor the PTZ.

- HD network video output
- H.264/H.265 image compression format
- TCP/IP, DHCP, DDNS, NTP, RTSP, SMTP, FTP, PPPoE
- SD card local storage, network remote storage
- Web GUI menu
- Support selected area magnification and PTZ function.
- Provide standard SDK, easy to integrate with other digital systems
- IP66/IP67 ingress protection, TVS4~8KV lightning protection, surge protection (depending on models)
- Intelligent Analytics: Line Crossing (human/vehicle classification), region intrusion/entrance/exiting (human/vehicle classification), Target Counting, face detection, auto-tracking, etc. (For all these smart functions, depending on models)

Chapter 2 Network Connection

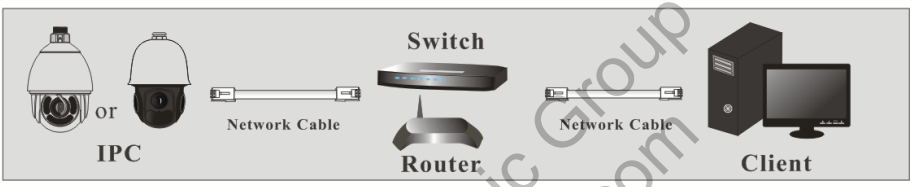
Connect IP-CAM via LAN or WAN using Internet Explorer. The details are as follows:

2.1 LAN

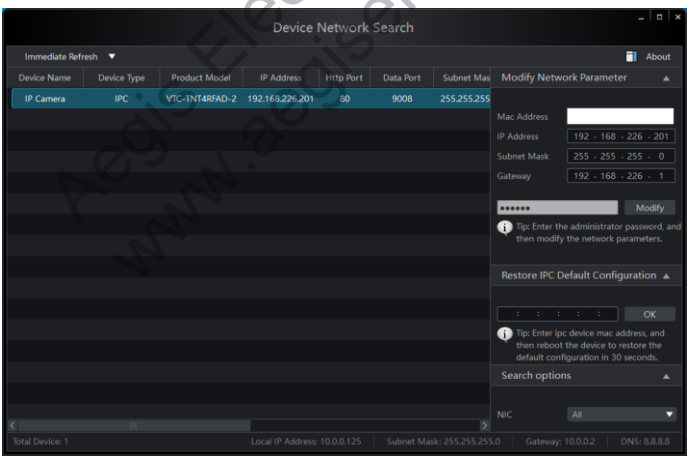
LAN, there are two ways to access the IP- CAM:
1. Access it through IP-Tools
2. Direct access through IE browser/Edge in IE Mode.

2.1.1 Access through IP-Tool

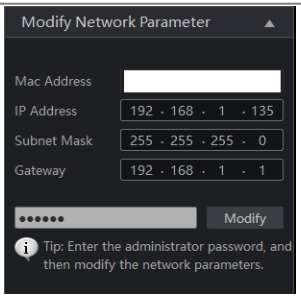
Network connection:



① Make sure the PC and IP-Cam are connected to the LAN and IP-Tool is installed in the PC.
② Double click the IP-Tool icon on the desktop to run this software as shown below:



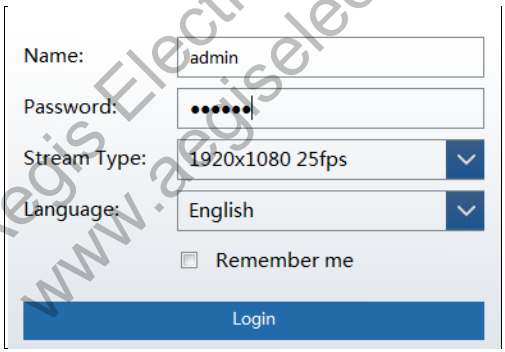
③ Modify the IP address. The default IP address of this camera is 192.168.226.201. Click the information of the camera listed in the above table to show the network information on the right side. Modify the IP address and gateway of the camera and make sure its network address is in the same local network segment as the computers. Please modify the IP address of your device according to the practical situation.



For example, the IP address of your computer is 192.168.1.4. so the IP address of the camera would be changed to 192.168.1.X. After modifying, please enter the password of the administrator and click "Modify" to modify the setting.

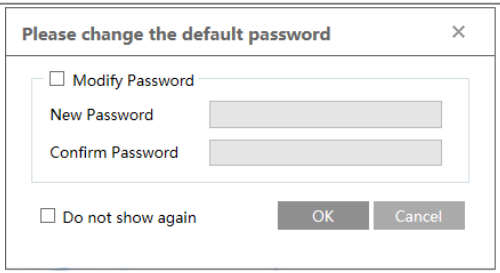
The default password of the administrator is "***123456***".

④ Double click the IP address and then the system will open IE browser/Edge in IE Mode to connect the IP-CAM. Follow the directions to download and install the applicable plug-in. After that, go to the login interface as shown below.



Enter the username and password to log in.

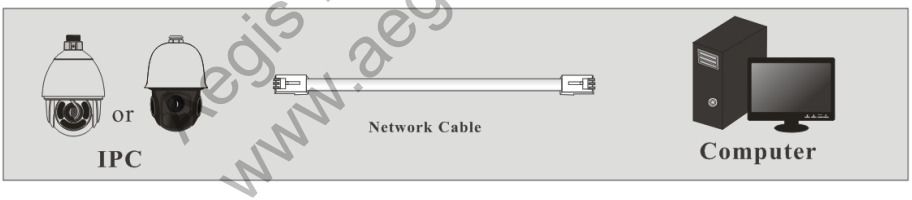
The default username is "***admin***"; the default password is "***123456***".



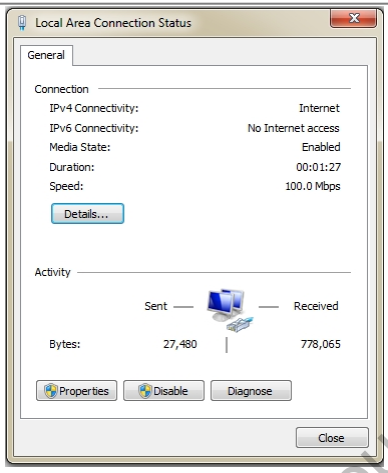
The system will prompt the above-mentioned textbox to ask you to change the default password. It is strongly recommended to change the default password for account security. If “Do not show again” is checked, the textbox will not appear next time. You can click “ok” to skip this and keep the password default.

2.1.2 Directly Access through IE/Edge Browser in IE Mode

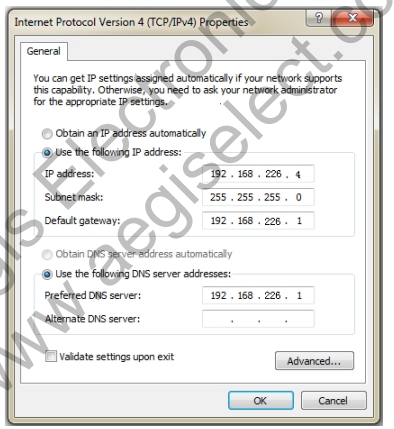
The default network settings are as shown below:
IP address: **192.168.226.201**
Subnet Mask: **255.255.255.0**
Gateway: **192.168.226.1**
HTTP: **80**
Data port: **9008**
Use the above default settings when you log into the camera for the first time. You may directly connect the camera to the computer through a network cable.



① Set the IP address of the PC and make sure the network segment is the same as the default settings of the IP camera. Open the network and share center. Click “Local Area Connection” to pop up the following window.



Select “Properties” and then select internet protocol according to the actual situation (for example: IPv4). Next, click “Properties” to set the network of the PC.



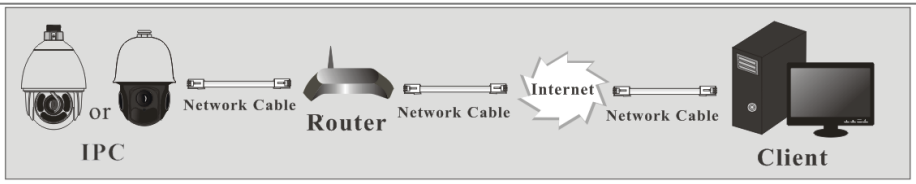
② Open IE browser/Edge in IE mode and enter the default address of IP-CAM and confirm.

③ Follow directions to download and install the plugin.

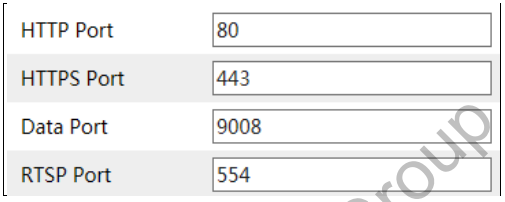
④ Enter the default username and password and then enter to view.

2.2 WAN

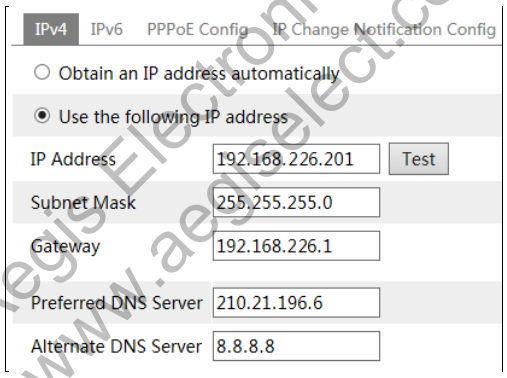
- **Access through the router or virtual server**



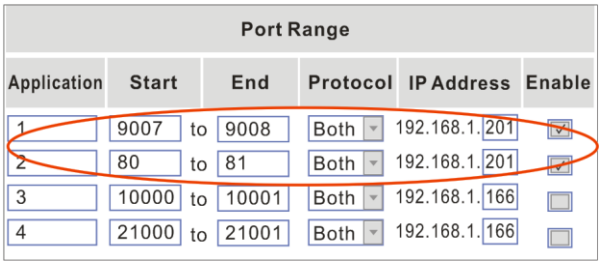
① Make sure the camera is connected via LAN and then log into the camera via LAN and go to Config→Network →Port menu to set the port number.



② Go to Config →Network → TCP/IPv4 menu to modify the IP address.



③ Go to the router's management interface through IE browser/Edge in IE Mode to forward the IP address and port of the camera in the "Virtual Server".

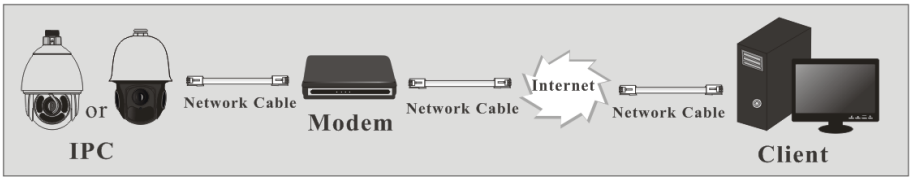


Router Setup

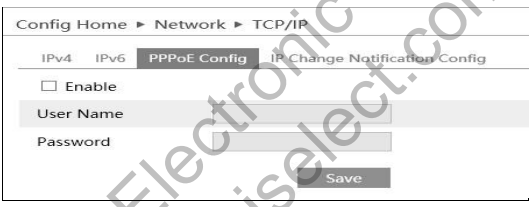
④ Open IE browser/Edge in IE Mode and enter its WAN IP and http port to access.

➢ **Access through PPPoE dial-up**

Network connection



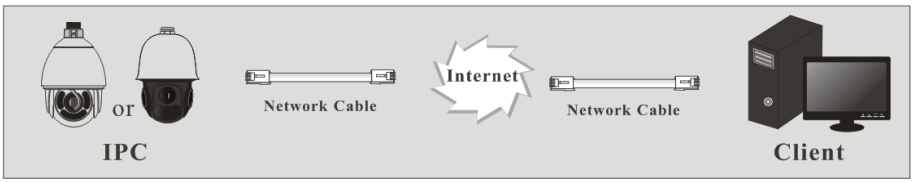
You can access the camera through PPPoE auto dial-up. Follow the steps below:
① Go to Config→Network →Port menu to set the port number.
② Go to Config →Network →TCP/IPv4 menu. Check "PPPoE Config" and then enter the username and password which you can get from your internet service provider.



③ Go to Config →Network →DDNS menu. Before you configure the DDNS, please apply for a domain name first. Please refer to 5.6.4 DDNS Configuration for detail information.
④ Open IE browser or Edge in IE Mode and enter the domain name and http port to access.

Access through static IP

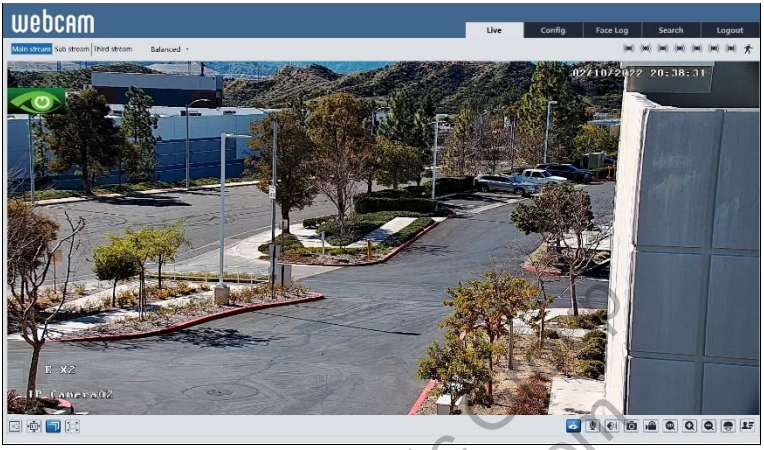
Network connection



Follow the steps below:
① Go to Config→Network →Port menu to set the port number.
② Go to Config →Network →TCP/IPv4 menu to set the IP address. Check "Use the following IP address" and then enter the static IP address and other parameters.
③ Open IE browser or Edge in IE Mode and enter its WAN IP and http port to access.

Chapter 3 Live View

After you log in, you will see the following window.



The descriptions of the icon on the remote preview interface are as follows:

Icon	Description	Icon	Description
	Original size		Color abnormal indicator
	Fit correct scale		Abnormal clarity indicator
	Auto (fill the window)		Scene change indicator
	Full screen		Line crossing indicator
	Start/stop live view		Sensor alarm indicator (only some models support)
	Start/stop two-way audio		Intrusion indicator
	Enable/disable audio		Motion alarm indicator
	Snapshot		Region entrance indicator
	Start/stop local recording		Region exiting indicator
	Zoom in		Face detection indicator
	Zoom out		Target counting indicator
	PTZ control		SD card recording indicator
	Face Detection		One click PTZ control

 : After clicking 3D move mouse to anywhere in the live view image and left click once and camera will position that area to the center of the image, also left click and drag to have camera zoom into that area

- The smart alarm indicators will flash only when the camera supports these functions, and the corresponding events are enabled.
- In full screen mode, double click on the mouse to exit or press the ESC key on the keyboard.

Click  to show PTZ control panel. In Live view interface, you can view the image from every direction by controlling PTZ panel.

The descriptions of the control panel are as follows:

Icon	Description	Icon	Description
	Move upper left direction		Move upper right direction
	Move up		Stop movement
	Move left		Move right
	Move lower left direction		Move lower right direction
	Move upper left direction		Speed adjustment
	Zoom out		Zoom in
	Focus -		Focus +
	Iris -		Iris +
	Auto scan		Wiper (only some models support)
	Light		Radom scan
	Group scan		Preset
	Cruise		Track

Select preset and click  to call the preset. Select and set the preset and then click  to save the position of the preset. Select the set preset and click  to delete it. Select cruise and click  to start cruise.

Chapter 5 Remote Configuration

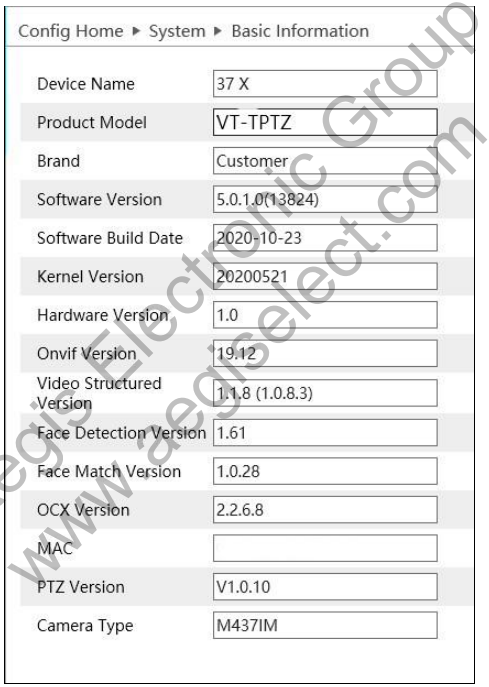
In the Webcam client, choose “Config” to go to the configuration interface.
Note: Wherever applicable, click “Save” to save the settings.

5.1 System Configuration

The “System configuration” includes four sub-menus: Basic Information, Date and Time, Local Config and SD Card.

5.1.1 Basic Information

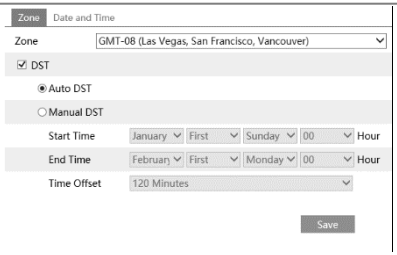
In the Basic Information interface, you can check the relative information of the device.



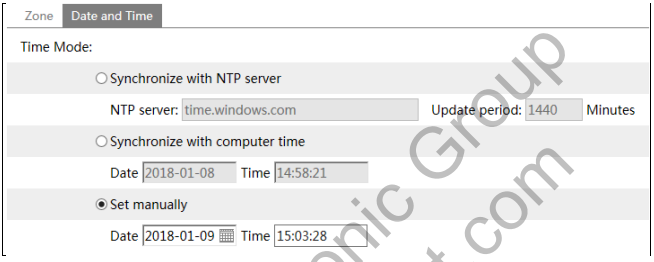
Some versions may support device ID and QR code. Having P2P enabled (see Network Configuration-P2P), the network camera can be quickly added to mobile surveillance client by scanning the QR code or entering device ID.

5.1.2 Date and Time Configuration

Go to Config→System→Date and Time. Please refer to the following interface.

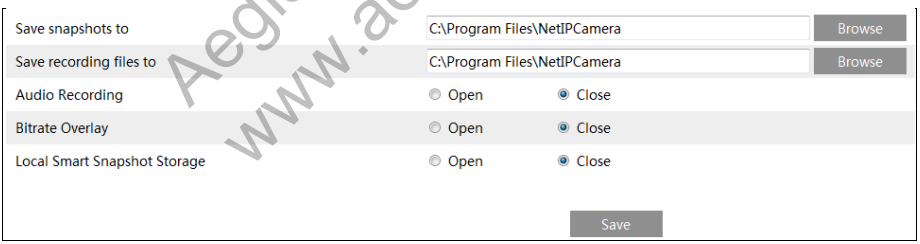


Select the time zone and DST as required.
Click the "Date and Time" tab to set the time mode.



5.1.3 Local Config

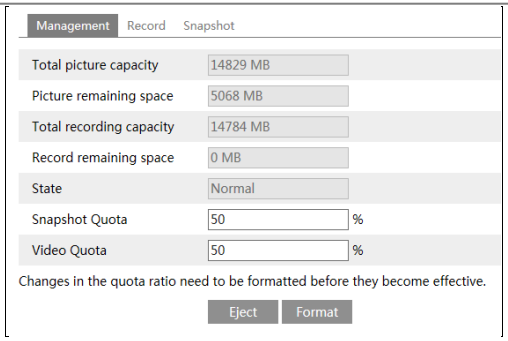
Go to Config→System→Local Config to set up the storage path of captured pictures and recorded videos on the local PC. There is also an option to enable or disable bitrate display in recorded files.



Additionally, "Local smart snapshot storage" can be enabled or disabled here. If enabled, captured pictures triggered by smart events (like line crossing detection, region intrusion, etc.) will be saved to the local PC.

5.1.4 Storage

Go to Config→System→Storage to go to the interface as shown below.

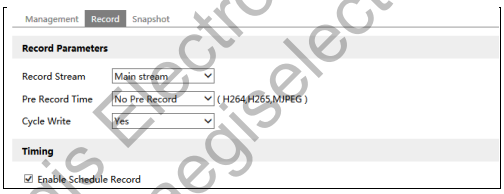


- **SD Card Management**

Click "Format" to format the SD card. All data will be cleared by clicking this button.
Click "Eject" to stop writing data to SD card. Then the SD card can be ejected safely.
Snapshot Quota: Set the capacity proportion of captured pictures on the SD card.
Video Quota: Set the capacity proportion of record files on the SD card.

- **Schedule Recording Settings**

1. Go to Config→System→Storage→Record to go to the interface as shown below.



2. Set record stream, pre-record time, cycle writing.
Pre Record Time: Set the time to record before the actual recording begins.

3. Set schedule recording. Check "Enable Schedule Record" and set the schedule.

Weekly schedule

Set the alarm time from Monday to Sunday for a single week. Each day is divided in one-hour increments. Green means scheduled. Blank means unscheduled.

"Add": Add the schedule for a special day. Drag the mouse to set the time on the timeline.

"Erase": Delete the schedule. Drag the mouse to erase the time on the timeline.

Manual Input: Click it for a specific day to enter specific start and end times. This adds more granularities (minutes).

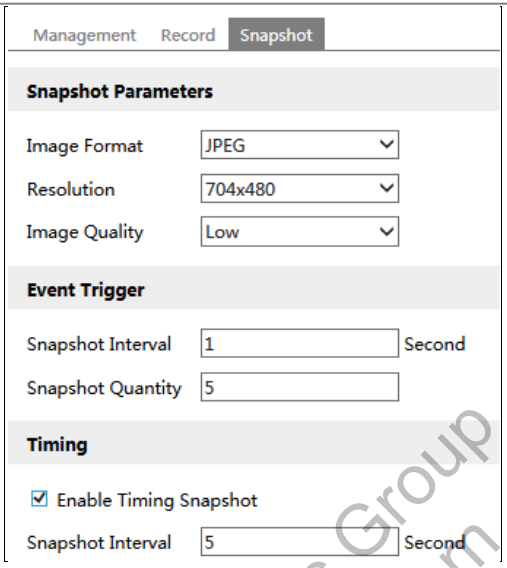
Day schedule

Set the alarm time for alarm a special day, such as a holiday.

Note: Holiday schedule takes priority over weekly schedule.

- **Snapshot Settings**

Go to Config→System→Storage→Snapshot to go to the interface as shown below.



Set the format, resolution and quality of the image saved on the SD card and the snapshot interval and quantity and the timing snapshot here.

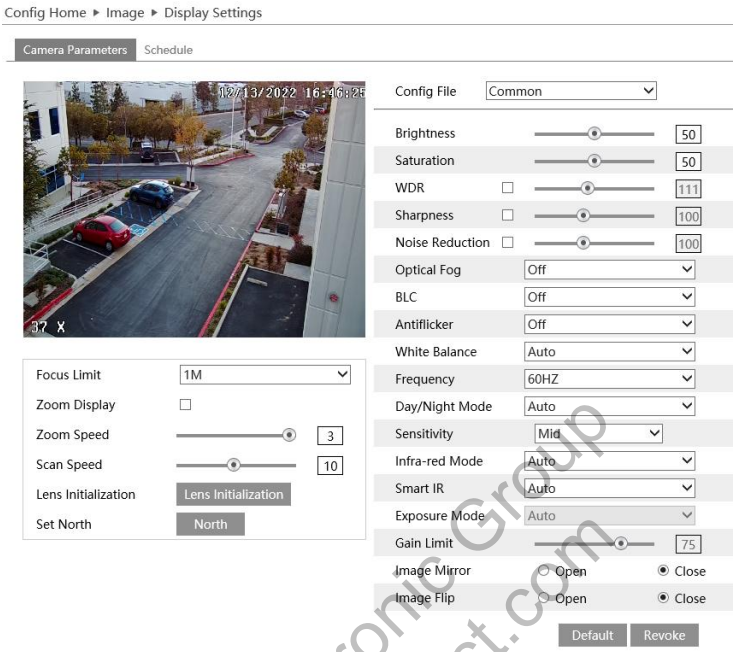
Snapshot Quantity: The number you set here is the maximum quantity of snapshots. The actual quantity of snapshots may be less than this number. Supposing the occurrence time of an alarm event is less than the time of capturing pictures, the actual quantity of snapshots is less than the set quantity of snapshots.

Timing Snapshot: Enable timing snapshot first and then set the snapshot interval and schedule. The setup steps of schedule are the same as the schedule recording (See Schedule Recording).

5.2 Image Configuration

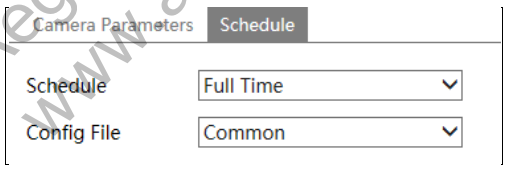
5.2.1 Display Settings

Go to Image→Display interface as shown below. The image's brightness, contrast, hue and saturation and so on for common, day and night mode can be set up separately. The image effect can be quickly seen by switching the configuration file.

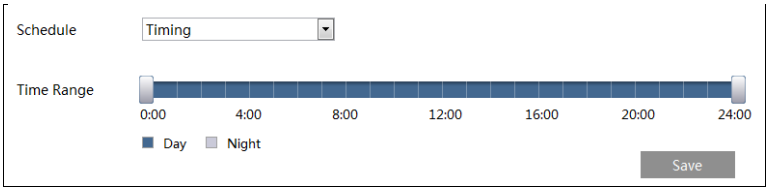


Please set the above parameters as needed (See Chapter 4.3 for more detail).

Schedule Settings of Image Parameters:
Click the "Schedule" tab as shown below.



Set full time schedule for common, day, night mode and specified time schedule for day and night. Choose "Timing" in the drop-down box of schedule as shown below.

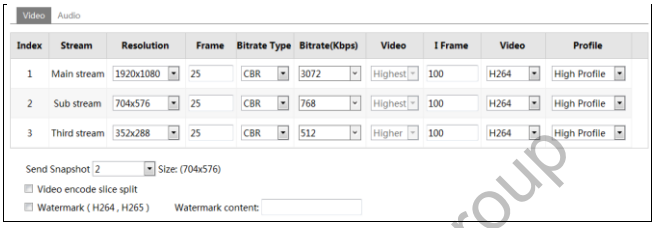


Drag " " icons to set the time of day and night. Blue means daytime and blank means nighttime.

If the current mode of camera parameters is set to schedule, the image configuration mode will automatically switch between day and night according to the schedule.

5.2.2 Video / Audio Configuration

Go to Image→Video / Audio interface as shown below. In this interface, set the resolution, frame rate, bitrate type, video quality, I-frame, Video compression and profile depending on the network conditions.



Click the "Audio" tab to go to the interface as shown below.

Three video streams can be adjustable.

Resolution: The size of image.

Frame rate: The higher the frame rate, the smoother the video.

Bitrate type: You can choose CBR or VBR. Bitrate is related to image quality. CBR means that no matter how much change is seen in the video scene, the compression bitrate will be kept constant. VBR means that the compression bitrate will be adjusted according to scene changes. For example, for scenes that do not have much movement, the bitrate will be kept at a lower value. This can help optimize the network bandwidth usage.

Bitrate: It can be adjusted when the mode is set to CBR. The higher the bitrate, the better the image quality will be.

Video Quality: It can be adjusted when the mode is set to VBR. The higher the image quality, the more bitrate will be required.

I Frame interval: It determines how many frames are allowed between a "group of pictures". When a new scene begins in a video, until that scene ends, the entire group of frames (or pictures) can be considered as a group of pictures. If there is not much movement in the scene, setting the value higher than the frame rate is fine, potentially resulting in less bandwidth usage. However, if the value is set too high, and there is a high frequency of movement in the video, there is a risk of frame skipping.

Video Compression: You can choose H264 or H26. If H.265 is chosen, make sure the client

system is able to decode H.265.
Profile: For H.264. Baseline, main and high profiles are the options.
Send Snapshot: How many snapshots to generate for an event.
Video encode slice split: If this function is enabled, the image can be smooth even when using a low-performance PC.
Watermark: When playing back local recorded video in the search interface, a watermark can be displayed. To enable it, check the watermark box and enter the watermark text.
Audio Encoding: G711A and G711U are selectable.
Audio Type: LIN or MIC is optional.

5.2.3 OSD Configuration

Go to Image→OSD interface as shown below.

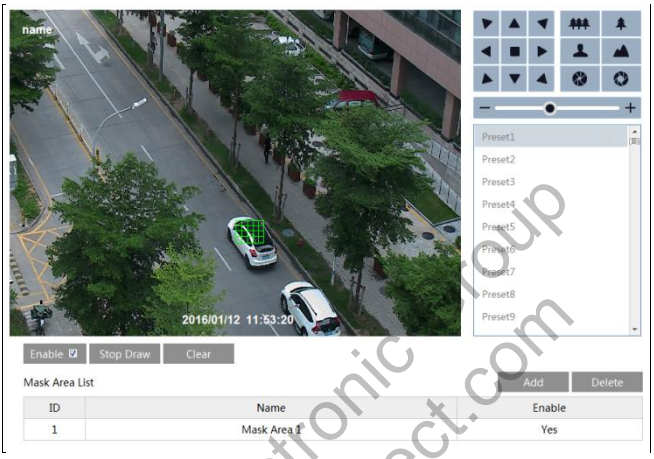
Set time stamp, device name, OSD content and picture overlap here. After enabling the corresponding display and entering the content, drag them to change their position. Then click the "Save" button to save the settings.
Show Azimuth: Show the PTZ moving direction on the live view interface.
Show Run Status: Show the PTZ control status on the live view interface. For example, if preset 2 is called, "PRE:002" it will be shown on the live view interface.
Picture Overlap Settings:
Check "OSD Content1", choose "Picture Overlay" and click "Browse" to select the overlap picture. Then click "Upload" to upload the overlap picture. The pixel of the image shall not exceed 200*200, or it cannot be uploaded.

5.2.4 Video Mask

Go to Image→Video Mask interface as shown below. A maximum of 4 zones can be set up. Only some models support this function. If your PTZ camera doesn't support it, please skip the following instructions.
To set up video mask:
1. Enable video mask.

2. Click the “Draw Area” button and then drag the mouse to draw the video mask area.
3. Click the “Save” button to save the settings.
4. Return to live view to verify that the area that was drawn is shown as blocked out.

To clear the video mask:
Click the “Clear” button to delete the current video mask area.



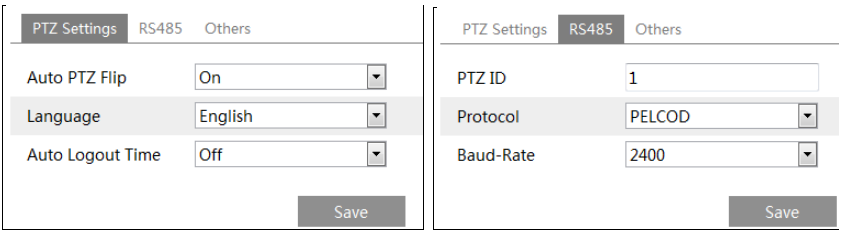
To delete mask area:
1. Select the mask area in the mask area list.
2. Click “Delete” to delete this mask area.

5.3 PTZ Configuration

5.3.1 PTZ and Password Setting

- PTZ Setting

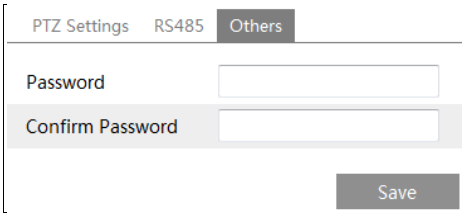
Go to Config→PTZ→Setting. This will let you see the following submenu.



In this submenu, PTZ flip, language, auto logout time can be set.
If your model support RS485 interface, you may configure the communication setting for keyboard control.

- Password Setting

If a password is set, you must enter the password every time you go to the menu of the PTZ by calling preset NO. 95. Go to Config→PTZ→Setting→Others. You can set a password for the PTZ menu.



5.3.2 Restore

This allows you to reset and clear. Please refer to Chapter 4.6 for more details.

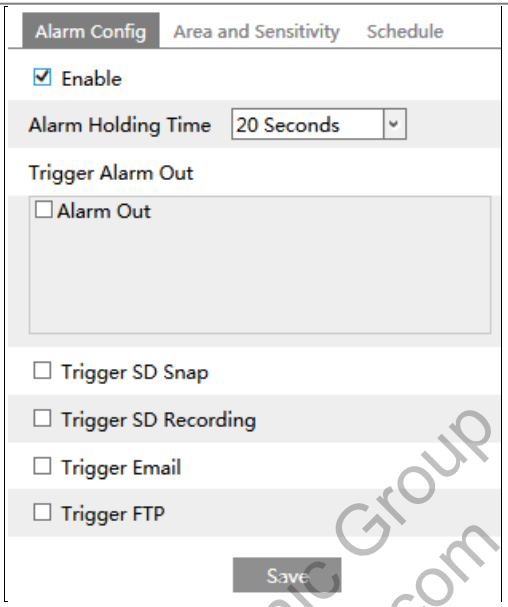
5.3.3 PTZ Function

PTZ function includes preset setup, cruise setup, group setup, track setup, task setup, alarm setup, home position setup and wiper setup. Please refer to Chapter 4.4 Dome Function for more details.

5.4 Alarm Configuration

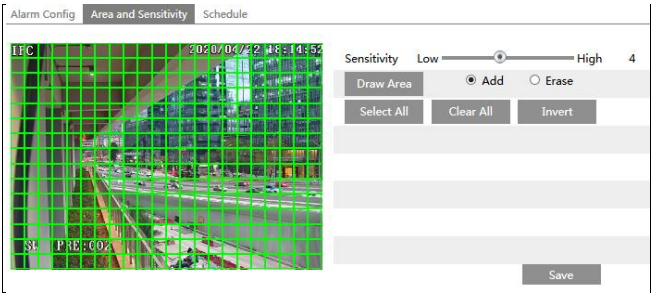
5.4.1 Motion Detection

Go to Alarm→Motion Detection to set motion detection alarm.



Check "**Enable**" check box to activate motion-based alarms. If unchecked, the camera will not trigger motion-based recording to the NVR or CMS, even if there is motion in the video.
Alarm Holding Time: Refers to the interval of time between instances of detected motion. For instance, if the alarm holding time is set to 20 seconds, once the camera detects motion, it will trigger the alarm and not detect any other motion for 20 seconds. If more motion is detected during this period, it will be considered a continuous event rather than multiple motion events.
Trigger Audio Alarm: If selected, the warning voice will play when a motion based alarm is detected. (Please set the warning voice first. See Audio Alarm for details).
Alarm Out: If selected, an external relay output that is connected to the camera is activated when a motion-based alarm is detected. (This function is only available for the models with the alarm output interface; some models may support two alarm output interfaces).
Trigger SD Card Snapshot: If selected, the system will capture images when motion is detected and save the images to an SD card in the camera.
Trigger SD Card Recording: If selected, video will be recorded on an SD card when motion is detected.
Trigger Email: If "Trigger Email" and "Attach Picture" are checked (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent to those addresses.
Trigger FTP: If "Trigger FTP" and "Attach Picture" are checked, the captured pictures will be sent to a FTP server address. Please refer to FTP configuration section for more details.

2. Set motion detection area and sensitivity. Click the "Area and Sensitivity" tab to go to the interface as shown below.



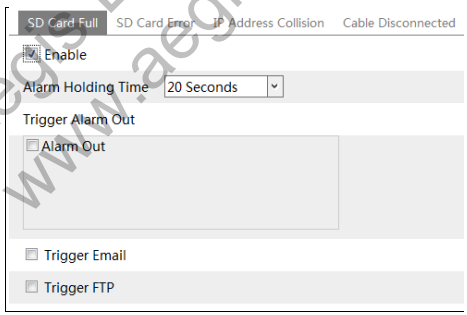
Move the “Sensitivity” scroll bar to set the sensitivity. Higher sensitivity value means that motion will be triggered more easily.
Select “Add” and click “Draw”. Drag the mouse to draw the motion detection area; Select “Erase” and drag the mouse to clear motion detection area.
After that, click the “Save” to save the settings.

3. Set the schedule for motion detection. The schedule setup steps of the motion detection are the same as the schedule recording setup (See Schedule Recording).

5.4.2 Other Alarms

- **SD Card Full**

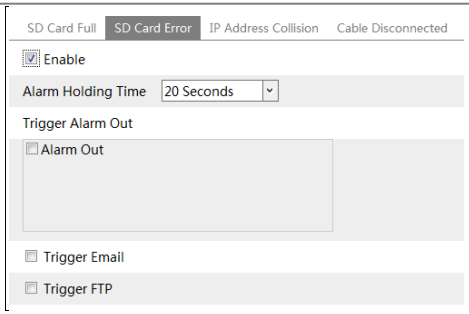
1. Go to Config→Alarm→Anomaly→SD Card Full.



2. Click “Enable” and set the alarm holding time.
3. Set alarm trigger options. The setup steps are the same as motion detection. Please refer to motion detection chapter for details.

- **SD Card Error**

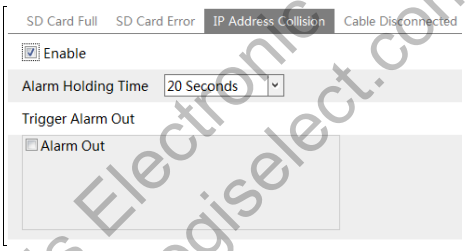
When there are some errors in writing SD card, the corresponding alarms will be triggered.
1. Go to Config→Alarm→Anomaly→SD Card Error as shown below.



2. Click “Enable” and set the alarm holding time.
3. Set alarm trigger options. Trigger alarm out, Email and FTP. The setup steps are the same as motion detection. Please refer to motion detection chapter for details.

- **IP Address Conflict**

1. Go to Config→Alarm→Anomaly→IP Address Collision as shown below.

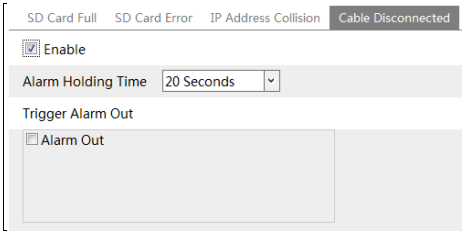


2. Click “Enable” and set the alarm holding time.
3. Trigger alarm out. When the IP address of the camera conflicts with the IP address of other devices, the system will trigger the alarm out.

Note: This function is only available for some models.

- **Cable Disconnection**

1. Go to Config→Alarm→Anomaly→Cable Disconnected as shown below.

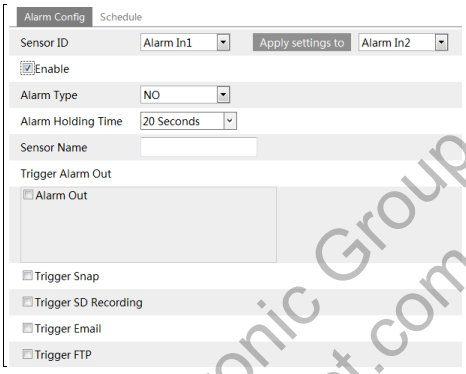


2. Click “Enable” and set the alarm holding time.
3. Trigger alarm out. When a camera is disconnected, the system will trigger the alarm out.

Note: This function is only available for some models.

5.4.3 Alarm Input

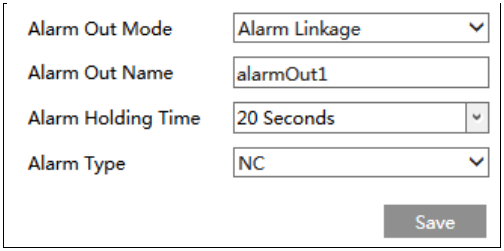
Only some models support this function. If your device doesn't support it, please skip the following instructions.
To set sensor alarm (alarm in):
Go to Config→Alarm→Alarm In interface as shown below.



1. Set Sensor ID (available for models with two or more alarm input interfaces).
2. Click "Enable" and set alarm type, alarm holding time and sensor name.
3. Set alarm trigger options. These setup steps are the same as motion detection. Please refer to motion detection chapter for details.
4. Apply settings to other sensors (if applicable).
5. Click "Save" to save the settings.
6. Set the schedule for the sensor alarm. The setup steps of the schedule are the same as the schedule recording setup. (See Schedule Recording).

5.4.4 Alarm Out

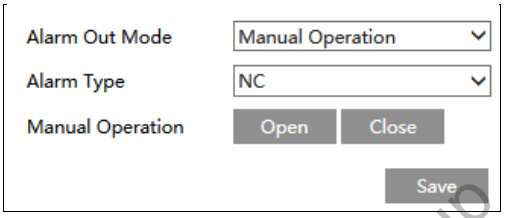
Only some models support this function. If your device doesn't support it, please skip the following instructions.
Go to Config→Alarm→Alarm Out.



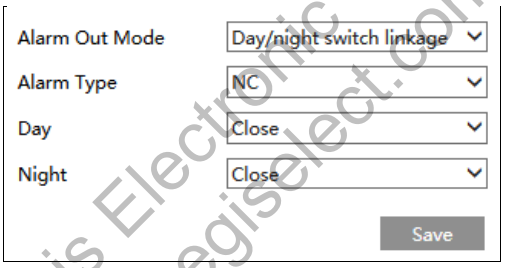
Alarm Out Mode: You can choose alarm linkage, manual operation, day/night switch linkage and timing.

Alarm Linkage: Having selected this mode, select alarm out name, alarm holding time at the "Alarm Holding Time" pull down list box and alarm type.

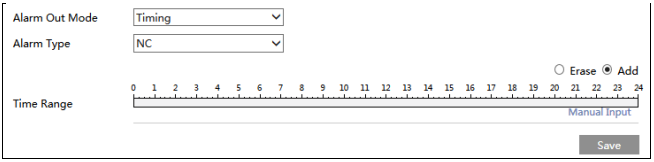
Manual Operation: Having selected this mode, select the alarm type and click "Open" to trigger the alarm out immediately; click "Close" to stop alarm.



Day/Night Switch Linkage: Having selected this mode, select the alarm type and then choose to open or close alarm out when the camera switches to day mode or night mode.



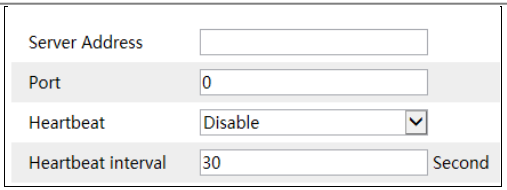
Timing: Select the alarm type. Then click "Add" and drag the mouse on the timeline to set the schedule of alarm out; click "Erase" and drag the mouse on the timeline to erase the set time schedule. After this schedule is saved, the alarm out will be triggered during the specified time.



5.4.5 Alarm Server

Go to Alarm→Alarm Server interface as shown below.

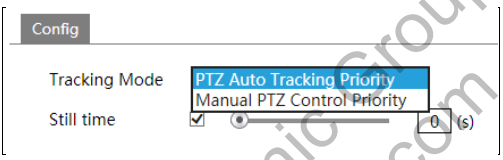
Set the server address, port, heartbeat, and heartbeat interval. When an alarm occurs, the camera will transfer the alarm event to the alarm server. If an alarm server is not needed, there is no need to configure this section.



5.4.6 Smart Tracking

(Only some models support this function)

Smart Tracking: When people or vehicle cross an alarm line or intrude into predefined areas, the PTZ camera can automatically track them, and the target image will be automatically zoomed in and centered on the screen until the target disappears from the screen. After that, the PTZ camera will return to the pre-defined detection area.



Tracking Mode: Your options are PTZ Auto Tracking Priority or Manual PTZ Control Priority.

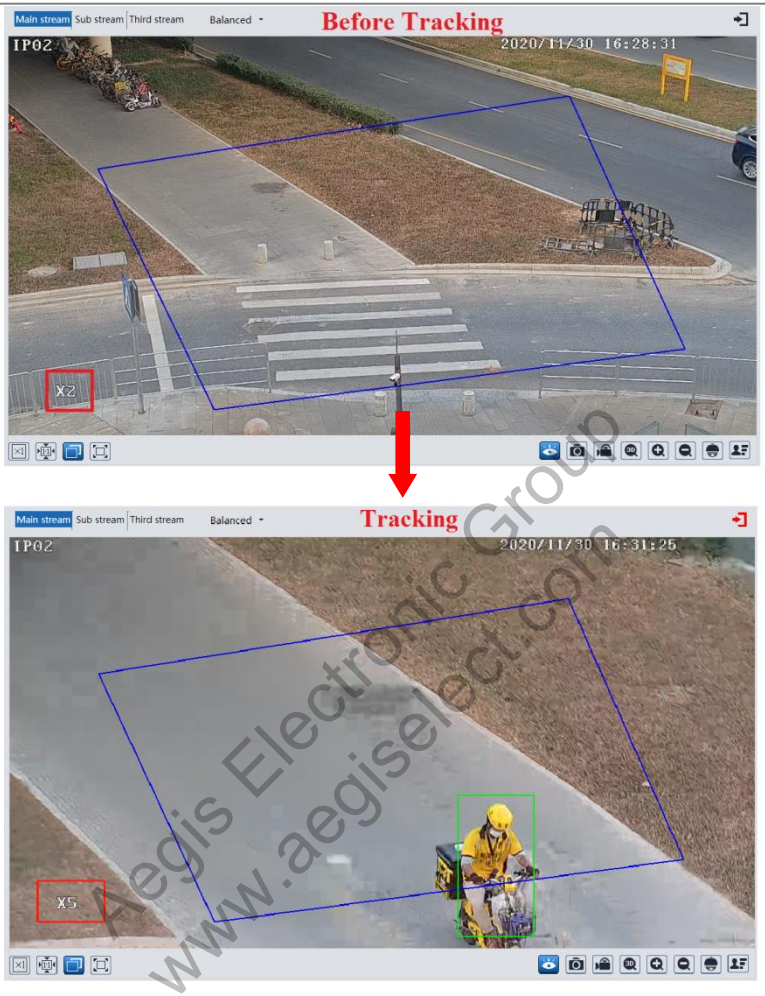
PTZ Tracking Priority: if this mode is selected, after enabling "Trigger track" in one of the following events, you cannot control PTZ by clicking the buttons on the PTZ control panel in the live view interface.

Manual PTZ Control Priority: if this mode is selected, after enabling "Trigger track" in one of the following events, you can control PTZ by clicking the buttons on the PTZ control panel in the live view interface during the process of smart tracking. After you stop controlling for 5 seconds, the PTZ camera will return to the pre-defined detection area and start tracking again when detecting a target.

Still time: If enabled and the time is set, when a target keeps still, or target tracking is complete and there is no target appearing in the detection area during the set time, the PTZ camera will return to the pre-defined area. Of course, during this time, if there are targets moving, the PTZ will continue tracking. If it is not enabled, when the target keeps still or there is no target appearing in the detection area for 5 seconds, the PTZ camera will return to the pre-defined area.

How to set smart tracking:

1. Click Config→Alarm→Smart Tracking to go to the smart tracking interface. Select the tracking mode and set the still time as needed.
2. Click Config→Event. Select the event as needed. For example, intrusion, enable intrusion detection, select detection target and then check "Trigger Track". After that click "Save" to save the settings. Then set the alarm area and schedule (See 5.5.3 intrusion for details).
3. Go back to the live view interface to view smart tracking.



5.5 Event Configuration

For more accuracy, here are some recommendations for installation.

- Cameras should be installed on stable surfaces, as vibrations can affect the accuracy of detection.
- Avoid pointing the camera at reflective surfaces (like shiny floors, mirrors, glass, lake surfaces and so on).
- Avoid places that are narrow or have too many shadows.
- Avoid scenario where the object's color is similar to the background color.
- At any time of day or night, please make sure the image of the camera is clear and with adequate and even light, avoiding overexposure or too much darkness on both sides.

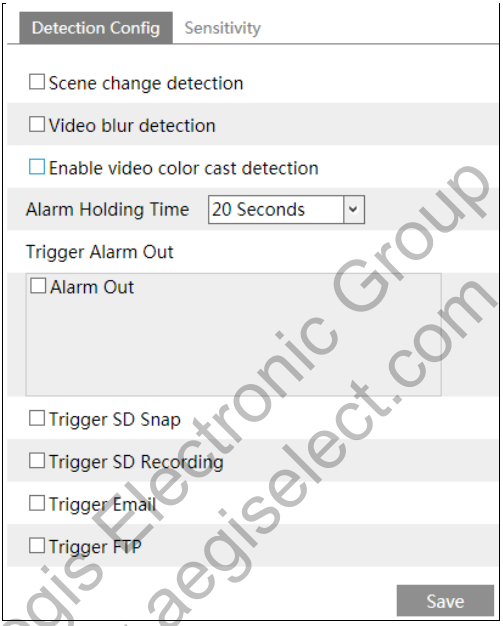
Note: The following functions are only available when the PTZ camera stops moving.

5.5.1 Exception

This function can detect changes in the surveillance environment affected by the external factors.

To set exception detection:

Go to Config→Event→Exception interface as shown below.



1. Enable the applicable detection as desired.

Scene Change Detection: Alarms will be triggered if the scene of the video has changed.

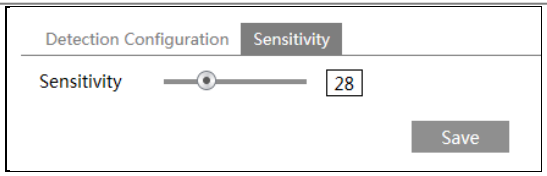
Video Blur Detection: Alarms will be triggered if the video becomes blurry.

Abnormal Color Detection: Alarms will be triggered if the image has abnormal color deviation.

2. Set the alarm holding time and alarm trigger options. The setup steps are the same as motion detection. Please refer to motion detection section for details.

3. Click "Save" button to save the settings.

4. Set the sensitivity of exception detection. Click "Sensitivity" tab to go to the interface as shown below.



Drag the slider to set the sensitivity value or directly enter the sensitivity value in the textbox. Click "Save" to save the settings.

The sensitivity value of Scene Change Detection: The higher the value is, the more sensitive the system responds to the amplitude of the scene change.

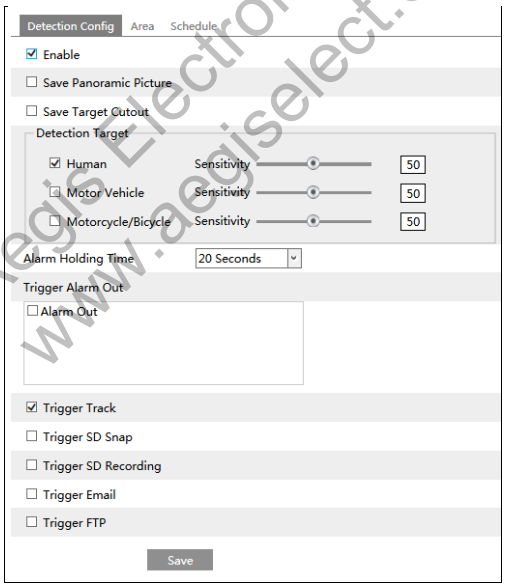
The sensitivity value of Video Blur Detection: The higher the value is, the more sensitive the system responds to the blurriness of the image.

The sensitivity value of Video Color Cast Detection: The higher the value is, the more sensitive the system responds to the obscuring of the image.

5.5.2 Line Crossing Detection

Line Crossing: Alarms will be triggered if the target crosses the pre-defined alarm lines.

Go to Config→Event→Line Crossing interface as shown below.



- **Detection Configuration**:

1. Enable line crossing detection and select the snapshot type and the detection target.

Save Panoramic Picture: If it is enabled, then detected panoramic pictures will be captured and saved to the SD card when a targets cross the alarm line.

Save Target Cutout: If it is enabled, the detected target cutout pictures will be captured and

saved to the SD card when the targets cross the alarm line.

Note: To save snapshots to the local PC, please enable "Local Smart Snapshot Storage" in the local config interface first. To save snapshots to the SD card, please install an SD card first.

Detection Target:

Human: Select it and then alarms will be triggered if someone crosses the pre-defined alarm lines.

Motor Vehicle: Select it and then alarms will be triggered if a vehicle with four or more wheels (e.g. a car, bus or truck) crosses pre-defined alarm lines.

Motorcycle/Bicycle: Select it and then alarms will be triggered if a non-motor vehicle (e.g., a motorcycle or bicycle) crosses the pre-defined alarm lines.

The three types of objects can be selected simultaneously. Please select the detection objects as needed. If no object/target is selected, alarms will not be triggered even if line crossing detection is enabled.

2. Set the alarm holding time.

3. Set alarm trigger options.

Alarm Out: If selected, this would trigger an external relay output that is connected to the camera on detecting a target crossing the alarm line.

Trigger Track: if enabled, the PTZ camera will automatically track a target that crosses the alarm line and the target's image will be automatically zoomed in and centered on the screen until the target disappears on the screen. After that, the PTZ camera will return to the pre-defined detection area.

Trigger SD Snap: If selected, the system will capture images when a target crosses the alarm line and save the images to an SD card.

Trigger SD Recording: If selected, video will be recorded to an SD card when a target crosses the alarm line

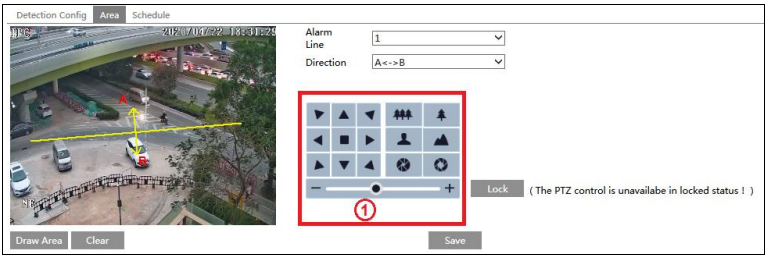
Trigger Email: If "Trigger Email" and "Attach Picture" are checked (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.

Trigger FTP: If "Trigger FTP" is checked, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.

4. Click "Save" button to save the settings.

- **Area Configuration**

1. Click the "Area and Sensitivity" tab to go to the interface as shown below.



2. Set the alarm line number and direction. Up to 4 lines can be added. Multiple lines cannot be added simultaneously.

Direction：A<->B, A->B and A<-B optional. This indicates in what direction the intruder/vehicle crossing over the line will trigger an alarm.

A<->B: The alarm will be triggered when the intruder/vehicle crosses over the alarm line from B to A or from A to B.

A->B: The alarm will be triggered when the intruder/vehicle crosses over the alarm line from A to B.

A<-B: The alarm will be triggered when the intruder/vehicle crosses over the alarm line from B to A.

Note: The PTZ will not be controlled if you click "Lock" here. Click "Unlock" and then click the buttons of area ① to move the PTZ camera.

4. Click the "Draw Area" button and then drag the mouse to draw a line in the image. Click the "Stop Draw" button to stop drawing. Click the "Clear" button to delete the lines. Click the "Save" button to save the settings.

After that, the camera will automatically return to this detection area after auto human/vehicle tracking.

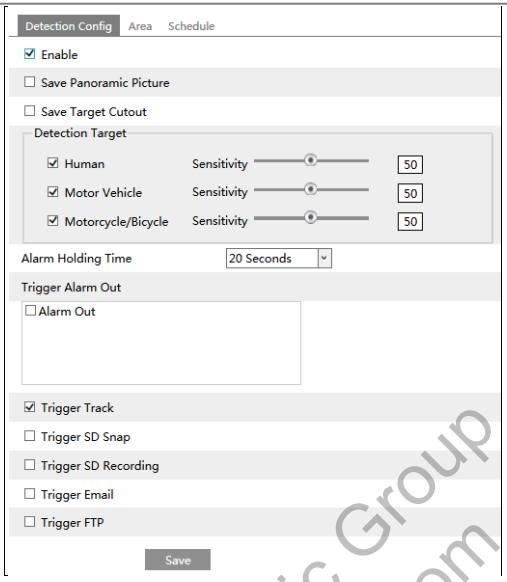
- **Schedule Configuration**

Set the schedule of the line crossing alarm. The setup steps of the schedule are the same as the schedule recording setup (See Schedule Recording).

5.5.3 Intrusion

Intrusion: Alarms will be triggered if the target intrudes into the pre-defined areas.

Go to Config→Event→Intrusion interface as shown below.

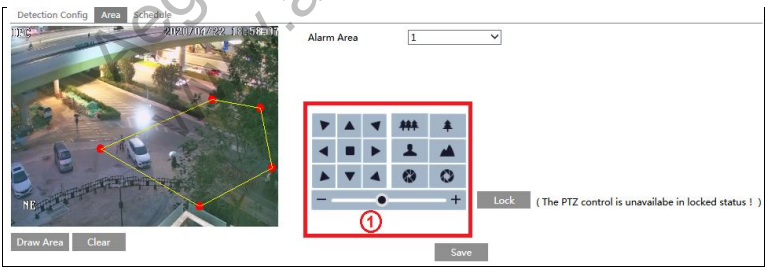


- **Detection Configuration**

Enable intrusion detection, select the snapshot type and the detection target and set the alarm holding time and alarm trigger options. The detection setup steps are the same as line crossing detection. Please refer to the detection configuration of line crossing detection for details.

- **Area Configuration**

1. Click the "Area" tab to go to the interface as shown below.



2. Set the alarm area number on the right side. Up to 4 alarm areas can be added.
3. Set the detection area by clicking the buttons of area ① and then click "Lock" to lock the area.

Note: The PTZ will not be controlled if you click "Lock" here. Click "Unlock" and then click the buttons of area ① to move the PTZ camera.

4. Click the "Draw Area" button and then click around the area where you want to set as the alarm area in the image on the left side (the alarm area should be a closed area). Click the "Stop Draw" button to stop drawing. Click the "Clear" button to delete the alarm area. Click

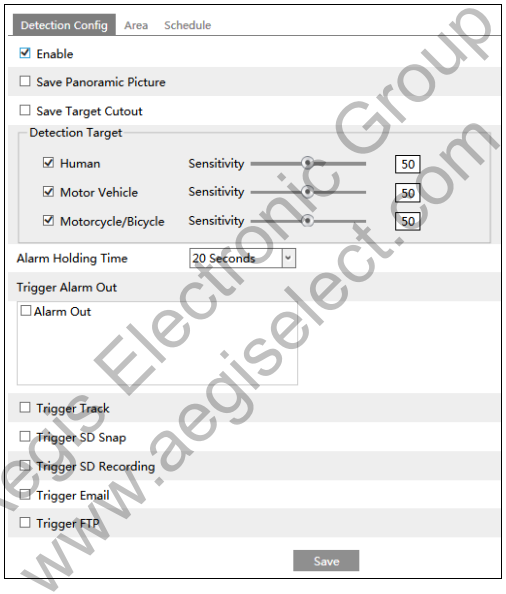
the “Save” button to save the settings.
After that, the camera will automatically return to this detection area after auto human /vehicle tracking.

- **Schedule Configuration**

Set the schedule of the intrusion detection. The setup steps of the schedule are the same as schedule recording setup (See Schedule Recording).

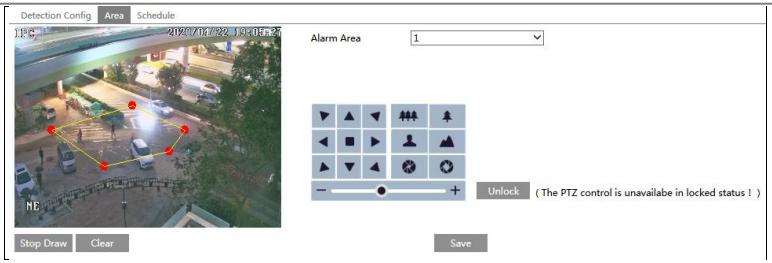
5.5.4 Region Entrance

Region Entrance: Alarms will be triggered if the target enters the pre-defined areas.
Go to Config→Event→Region Entrance interface as shown below.



1. Enable region entrance detection, select the snapshot type and detection target and set the alarm holding time and alarm trigger options. The detection setup steps are the same as line crossing detection. Please refer to the detection configuration of line crossing detection for details.

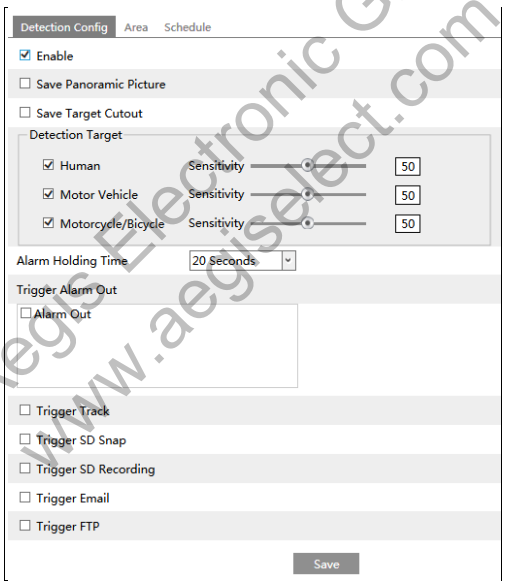
2. Set the area of region entrance detection. The area setup steps are the same as intrusion detection. Please refer to the area configuration of intrusion detection for details.



3. Set the schedule of the region entrance detection. The setup steps of the schedule are the same as schedule recording setup (See Schedule Recording).

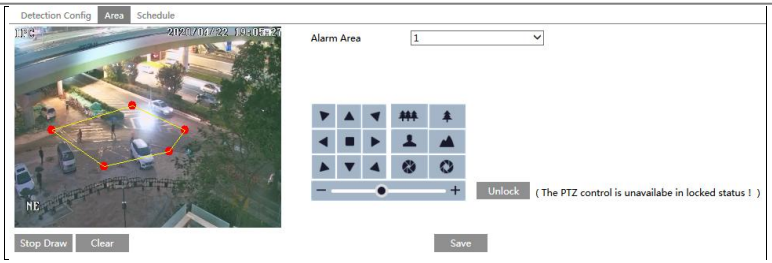
5.5.5 Region Exiting

Region Exiting: Alarms will be triggered if the target exits from the pre-defined areas.
Go to Config→Event→Region Exiting interface as shown below.



1. Enable region exiting detection, select the snapshot type and the detection target and set the alarm holding time and alarm trigger options. The detection setup steps are the same as line crossing detection. Please refer to the detection configuration of line crossing detection for details.

2. Set the area of region entrance detection. The area setup steps are the same as intrusion detection. Please refer to the area configuration of intrusion detection for details.

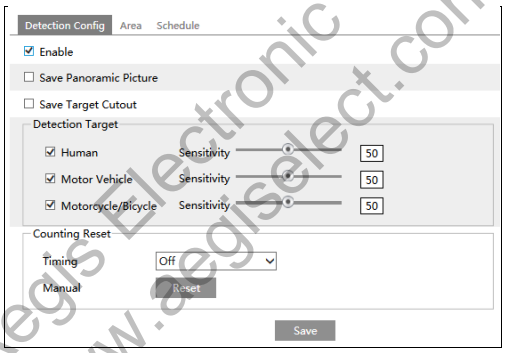


3. Set the schedule of the region exiting detection. The setup steps of the schedule are the same as schedule recording setup (See Schedule Recording).

5.5.6 Target Counting

This function is to calculate the number of the people or vehicles crossing an alarm line through detecting, tracking and counting the shapes of the people or vehicles.

1. Go to Config→Event→Target Counting as shown below.



2. Enable target counting and select the snapshot type and the detection target.

Save Panoramic Picture: If it is enabled, panoramic pictures will be captured and saved to the SD card when a target crosses the pre-defined alarm line.

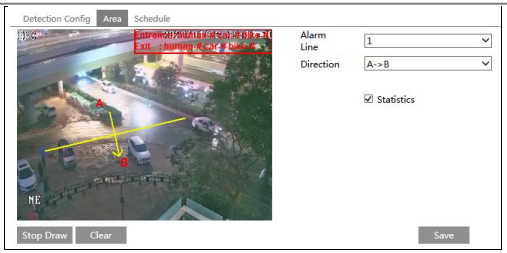
Save Target Cutout: If it is enabled, cutout pictures of the target will be captured and saved to the SD card when a target crosses the pre-defined alarm line.

Note: To save snapshots to the local PC, please enable “Local Smart Snapshot Storage” in the local config interface first. To save snapshots to the SD card, please install an SD card first.

Detection Target: Select a target to detect. You can select human, motor vehicle and motorcycle/bicycle.

Counting Reset: The current number of the target counting can be reset. You can choose to reset the counting daily, weekly or monthly. Click “Reset” to manually reset the current number of crossing line people/car/bike counting.

3. Set the area for target counting. Click the “Area” tab to go to the interface as shown below.



Set the alarm line number and direction. Only one alarm line can be added.

Direction: You can select A->B and A<-B. The direction of the arrow is the direction you want to detect the target entering the area.

Click the "Draw Area" button and then drag the mouse to draw a line in the image. Click the "Stop Draw" button to stop drawing. Click the "Clear" button to delete the lines.

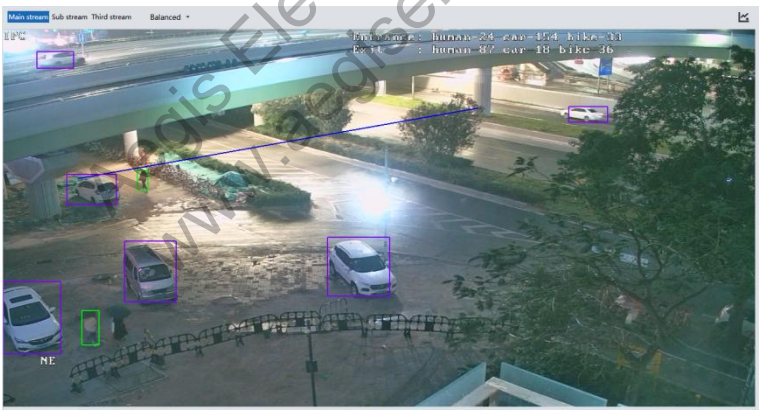
Statistics: If enabled, you can see the statistical information in the live view interface. If disabled, the statistical information will not be displayed in the live view interface.

Check "Statistics" and then move the red box to change the position of the statistical information displayed on the screen. Click the "Save" button to save the settings.

Note: If the OSD content4 is enabled, it will be disabled after you enable "Statistics".

4. Set the schedule of the target counting. The setup steps of the schedule are the same as schedule recording setup (See Schedule Recording).

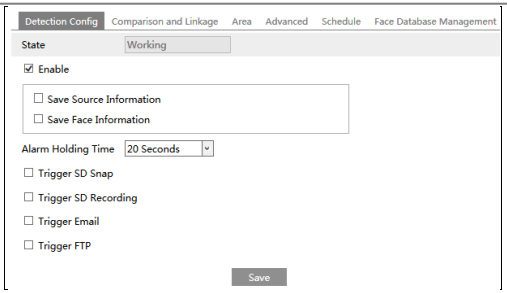
5. View the statistical information in the live view interface.



5.5.7 Face Comparison

The setting steps are as follows.

1. Go to Config→Event→Face Comparison interface.



2. Enable the face detection function.

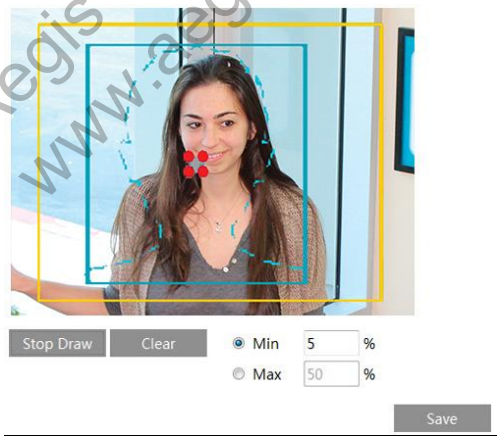
Save Source Information: if checked, the whole picture will be saved to the SD card when detecting a face.

Save Face Information: if checked, a close up picture of the captured face will be saved to the SD card when detecting a face.

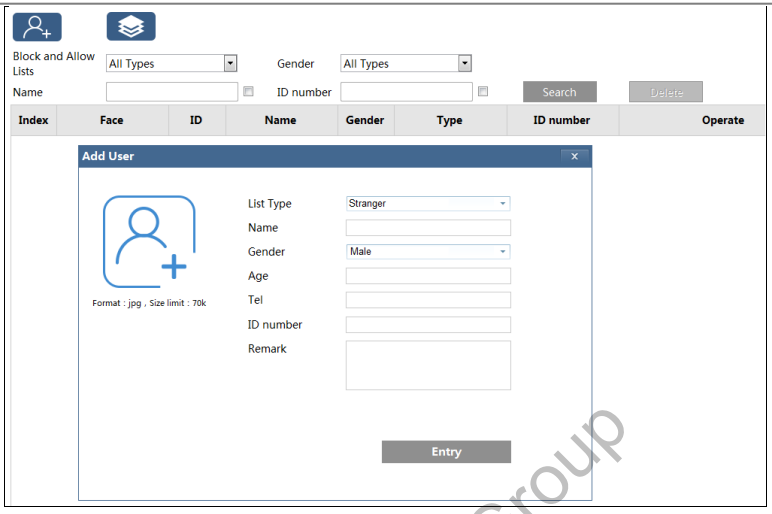
Note: To save images to the local PC, please enable the local smart snapshot storage first (Config→System→Local Config). To save images to the SD card, please install an SD card and enable "Trigger Snap" first.

3. Set alarm holding time and alarm trigger options.

4. Set alarm detection area. Click "Draw Area" and drag the border lines of the rectangle to modify its size. Move the rectangle to change its position. Click "Stop Draw" to stop drawing the area. Click "Clear" to clear the area. Then set the detectable face size by defining the maximum value and the minimum value (The default size range of a single face image occupies from 3% to 50% of the entire image).



5. Face database management: click "Face Database Management" tab. This will enter the following interface.



There are four ways to add face pictures.

① Adding face pictures one by one

Click to pop up an adding user box. Then click to select a face picture saved on the local PC. Please select the picture according to the specified format and size limit. After that, fill out the relevant information of the face picture and click "Entry" to add.

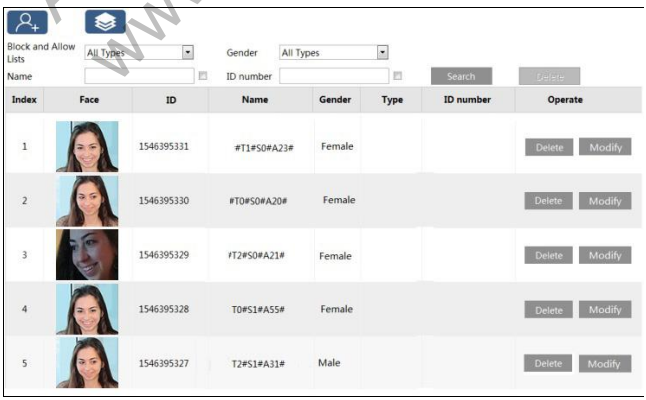
① Adding multiple face pictures at a time

Click and then add multiple face pictures once according to the prompted rules.

③ Add face pictures by using face album management tool

④ Add the captured picture in live mode (See ***Add captured face pictures to the face database***).

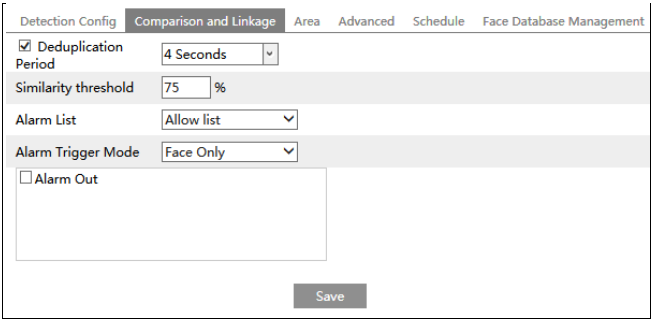
After adding face pictures, you can search them by name, gender, ID number and so on.



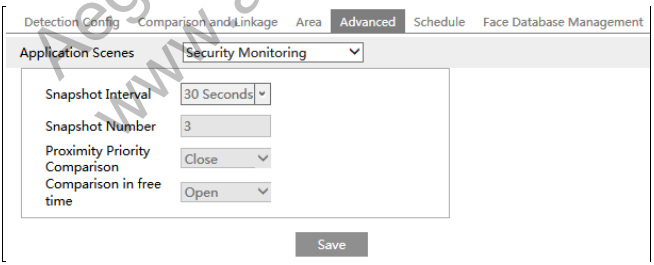
Click "Modify" to change people information and click "Delete" to delete this face picture.

6. Set face comparison trigger options. Click "Comparison and Linkage" to go to the following

interface.



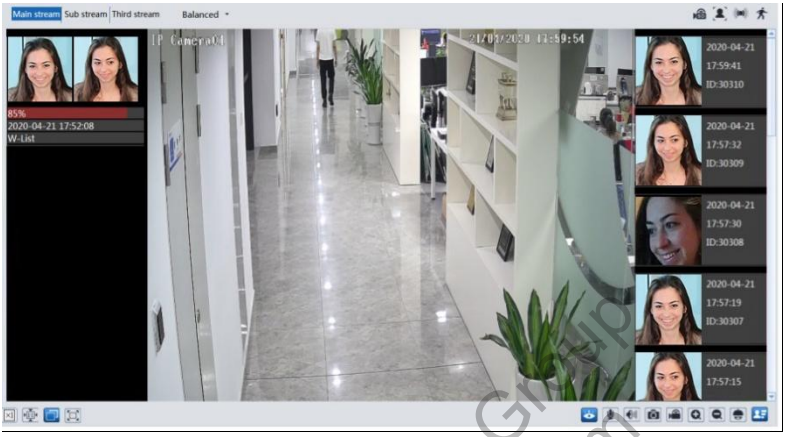
Deduplication Period: During the set period repeated comparison results will be deleted.
Similarity threshold: When the similarity of a captured face picture and a face picture added into the face database exceeds the similarity threshold, it will trigger the alarm.
Alarm List: Select an alarm list. For example, if you select "Stranger", the system will automatically search the matched face picture from "Stranger" list/group when detecting a face and both face pictures will appear on the left in the face comparison interface.
Alarm Trigger Mode: Face only mode. When the captured face picture is matched successfully, alarms will be triggered.
Alarm Output: if enabled, this will trigger alarm output when a captured face is matched successfully.
7. Set the schedule of the face detection and comparison. The setup steps of the schedule are the same as schedule recording setup (See Schedule Recording).
8. Advanced configuration.



Application Scenes: "Access control", "security monitoring" or "customize" can be selected.
Snapshot Interval: If 5 seconds is selected, the camera will capture the same target once every 5 seconds during its continuous tracking period.
Snapshot Number: If the snapshot number is enabled and set (e.g. 3), the camera will capture the same target once every 5 seconds and it will capture this target 3 times at most during its continuous tracking period. If the snapshot number is disabled, the camera will capture the same target once every 5 seconds until the target disappears in the detected area.

- **Face Match View**

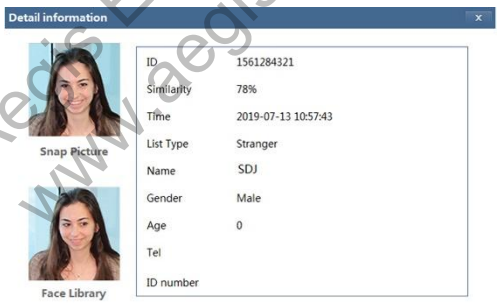
After all face comparison settings are set successfully, enter the live view interface. Click  to view the captured face pictures and face comparison information.



Area ①: captured face pictures; area ②: face comparison area

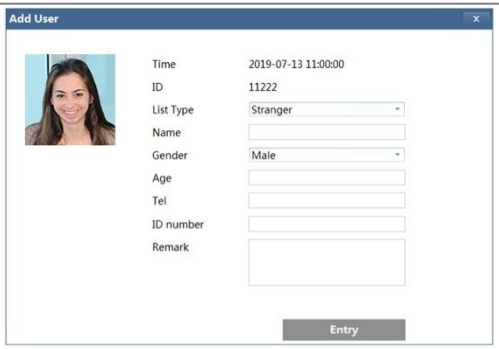
- **View the comparison details.**

In area ②, click the compared face picture to bring up the following window. In this interface, you can view the detailed comparison information.



- **Add captured face pictures to the face database.**

Click a captured picture in area ①. This will bring a face picture adding box.

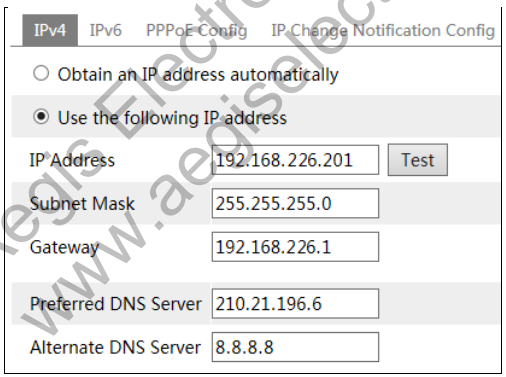


Fill out the relevant information and click “Entry” to add this face picture.

5.6 Network Configuration

5.6.1 TCP/IPv4

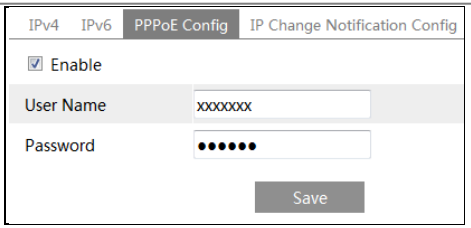
Go to Config→Network→TCP/IP interface as shown below. There are two ways for network connection.



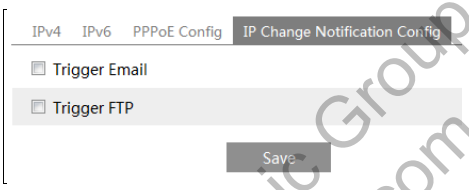
Use IP address (take IPv4 for example)-There are two options for IP setup: obtain an IP address automatically by DHCP and use the following IP address. Please choose one of the options as needed.

Test: Test the effectiveness of the IP address by clicking this button.

Use PPPoE-Click the “PPPoE Config” tab to go to the interface as shown below. Enable PPPoE and then enter the username and password from your ISP.



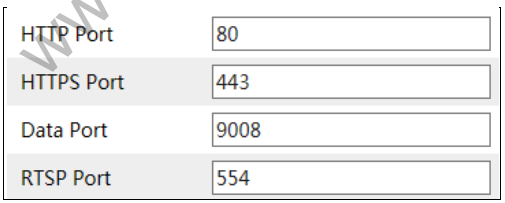
Either method of network connection can be used. If PPPoE is used to connect, the camera will get a dynamic WAN IP address. This IP address will change frequently. To be notified, the IP change notification function can be used.
Click “IP Change Notification Config” to go to the interface as shown below.



Trigger Email: when the IP address of the device is changed, the new IP address will be sent to the email address that has been set up.
Trigger FTP: when the IP address of the device is changed, the new IP address will be sent to FTP server that has been set up.

5.6.2 Port

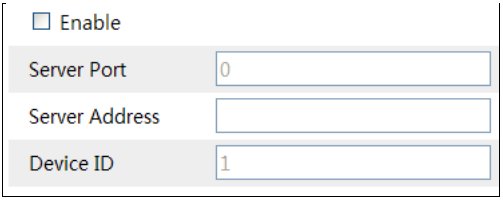
Go to Config→Network→Port interface as shown below. HTTP port, Data port and RTSP port can be set.



HTTP Port: The default HTTP port is 80. It can be changed to any port which is not occupied.
HTTPS Port: The default HTTPs port is 443. It can be changed to any port which is not occupied.
Data Port: The default data port is 9008. Please change it as necessary.
RTSP Port: The default port is 554. Please change it as necessary.

5.6.3 Central Server

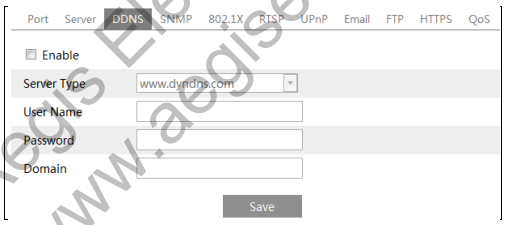
This function is mainly used for connecting network video management system.



1. Check “Enable”.
2. Check the IP address and port of the transfer media server in the ECMS/NVMS. Then enable the auto report in the ECMS/NVMS when adding a new device. Next, enter the remaining information of the device in the ECMS/NVMS. After that, the system will automatically allot a device ID. Please check it in the ECMS/NVMS.
3. Enter the above-mentioned server address, server port and device ID in the corresponding boxes. Click “Save” to save the settings.

5.6.4 DDNS Configuration

If the camera is set up with a DHCP connection, DDNS should be set for the internet.
1. Go to Config→Network→ DDNS.



2. Apply for a domain name. Take www.vitekivpddns.com for example.
Enter www.vitekivpddns.com in Internet Explorer’s address bar to visit its website. Then Click the “Registration” button.

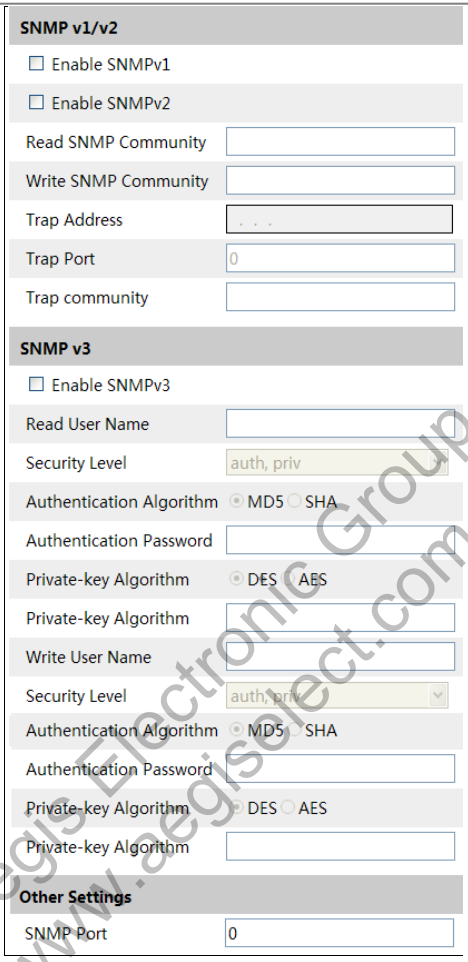
Create domain name.

After the domain name is successfully applied for, the domain name will be listed as below.

3. Enter the username, password, domain you apply for in the DDNS configuration interface.
4. Click “Save” to save the settings.

5.6.5 SNMP

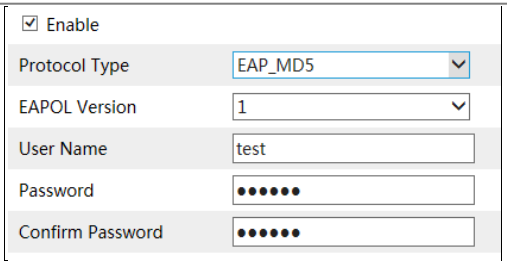
To get camera status, parameters and alarm information and remotely manage the camera, the SNMP function can be used. Before using SNMP, please install an SNMP management tool and set the parameters of the SNMP, such as SNMP port, trap address.
1. Go to Config→Network→SNMP.



2. Check the corresponding version checkbox (Enable SNMPv1, Enable SNMPv2, Enable SNMPv3) according to the version of the SNMP software that will be used.
3. Set the values for “Read SNMP Community”, “Write SNMP Community”, “Trap Address”, “Trap Port” and so on. Please make sure the settings are as the same as the settings of the SNMP software.
Note: Please use the correct version in accordance with what security level you required. The higher the version is, the higher the level of the security is.

5.6.6 802.1X

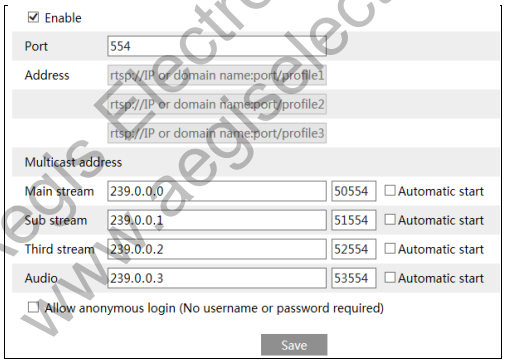
IEEE802.X which is an access control protocol manages the device’s connection with the local network by authentication. The setup steps are as follows:



To use this function, the camera should be connected to a switch supporting 802.1x protocol. The switch can be used as an authentication system to identify the device on a local network. If the camera connected to the network interface of the switch has passed the authentication of the switch, it can be accessed via the local network.
Protocol type and EAPOL version: Please use the default settings.
User name and password: The user name and password must be the same as the user name and password applied for and registered in the authentication server.

5.6.7 RTSP

Go to Config→Network→RTSP.



Select “Enable” to enable the RTSP function.
Port: Access port of for streaming media. The default number is 554.
RTSP Address: The RTSP address (unicast) format that can be used to play the stream in a media player.

Multicast Address
Main stream: The address format is
“rtsp://IP address: rtsp port/profile1?transportmode=mcast”.
Sub stream: The address format is
“rtsp://IP address: rtsp port/profile2?transportmode=mcast”.
Third stream: The address format is

"rtsp://IP address: rtsp port/profile3?transportmode=mcast".

Audio: Having entered the main/sub stream into VLC player, the video and audio will play automatically.

If "Allow anonymous login…" is checked, there is no need to enter the username and password to view the video.

If "auto start" is enabled, the multicast received data should be added into a VLC player to play the video.

Note:1. This camera supports local play through VLC player. Enter the RTSP address (unicast or multicast, e.g., rtsp://192.168.226.201:554/profile1?transportmode=mcast) in VLC player to realize the simultaneous play with the web client.

2. The IP address mentioned above cannot be the address of IPv6.

3. Avoid the use of the same multicast address in the same local network.

4. When playing the video through the multicast streams in VLC player, please pay attention to the mode of VLC player. If it is set to TCP mode, the video cannot be played.

5. If the coding format of the video of the main stream is MJPEG, the video may be distorted at some resolutions.

5.6.8 UPnP

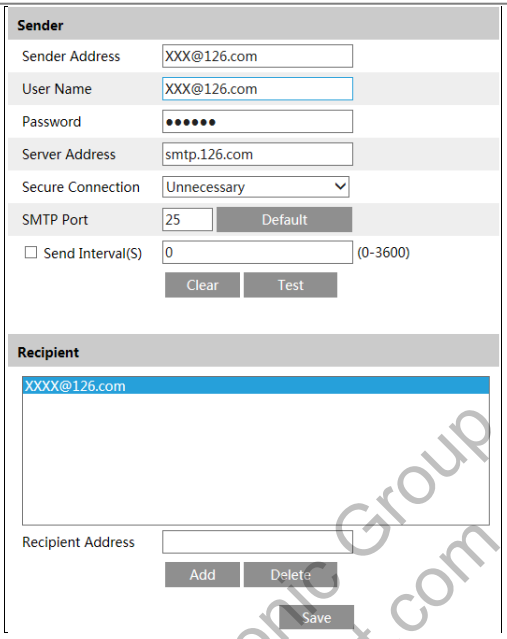
If this function is enabled, the camera can be quickly accessed through LAN.

Go to Config→Network→UPnP. Enable UPNP and then enter UPnP name.

5.6.9 E-mail

If you need to trigger Email when an alarm happens or IP address is changed, please set the Email here first.

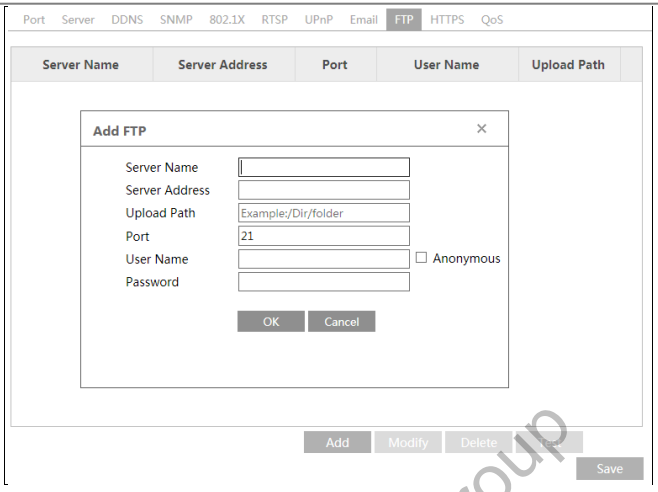
Go to Config→Network →Email.



Sender Address: sender's e-mail address.
Username and password: sender's username and password.
Server Address: The SMTP IP address or host name.
Select the secure connection type at the "Secure Connection" pull-down list according to what's required.
SMTP Port: The SMTP port.
Send Interval(S): The time interval of sending email. For example, if it is set to 60 seconds and multiple motion detection alarms are triggered within 60 seconds, they will be considered as only one alarm event and only one email will be sent. If one motion alarm event is triggered and then another motion detection alarm event is triggered after 60 seconds, two emails will be sent. When different alarms are triggered at the same time, multiple emails will be sent separately.
Click "Test" to test the connection of the account.
Recipient Address: receiver's e-mail address.

5.6.10 FTP

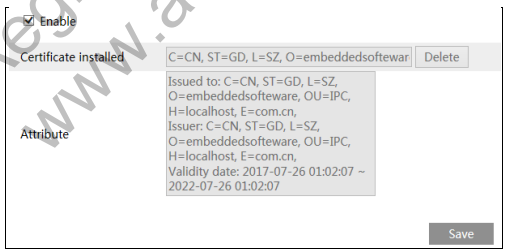
After an FTP server is set up, captured pictures from events will be uploaded to the FTP server.
Go to Config→Network →FTP.



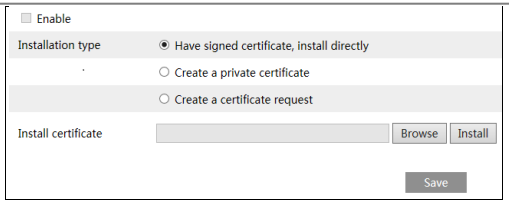
Server Name: The name of the FTP server.
Server Address: The IP address or domain name of the FTP.
Upload Path: The directory where files will be uploaded to.
Port: The port of the FTP server.
Use Name and Password: The username and password that are used to login to the FTP server.

5.6.11 HTTPS

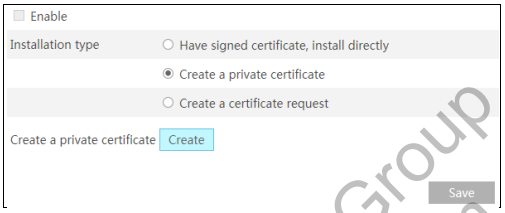
HTTPs provides authentication of the web site and protects user privacy.
Go to Config →Network→HTTPS as shown below.



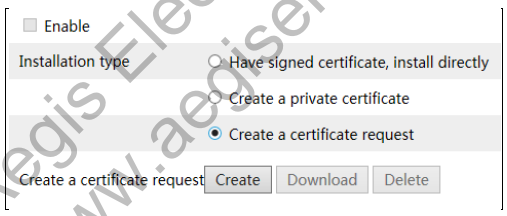
There is a certificate installed by default as shown above. Enable this function and save it. Then the camera can be accessed by entering https://IP: https port via the web browser (e.g., https://192.168.226.201:443).
A private certificate can be created if users don't want to use the default one. Click "Delete" to cancel the default certificate. Then the following interface will be displayed.



* If there is a signed certificate, click “Browse” to select it and then click “Install” to install it.
* Click “Create a private certificate” to enter the following creation interface.



Click “Create” to create a private certificate. Enter the country (only two letters available), domain (camera’s IP address/domain), validity date, password, province/state, region and so on. Then click “OK” to save the settings.
* Click “Create a certificate request” to enter the following interface.



Click “Create” to create the certificate request. Then download the certificate request and submit it to the trusted certificate authority for signature. After receiving the signed certificate, import the certificate to the device.

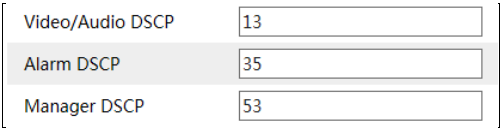
5.6.12 P2P (Optional)

If this function is enabled, the network camera can be quickly accessed by adding the device ID in a mobile surveillance client or CMS/NVMS client via WAN. Enable this function by going to Config→Network→P2P interface.
Note: This function is only available for some specified models.

5.6.13 QoS

QoS (Quality of Service) function is used to provide different quality of services for different network applications. When there is low bandwidth, the router or switch will sort the data streams and transfer them according to their priority to solve network delays and congestion

when using this function.
Go to Config→Network→QoS.

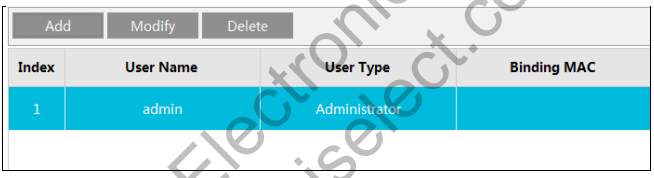


Video/Audio DSCP: The range is from 0 to 63.
Alarm DSCP: The range is from 0 to 63.
Manager DSCP: The range is from 0 to 63.
Generally speaking, the larger the number is, the higher the priority is.

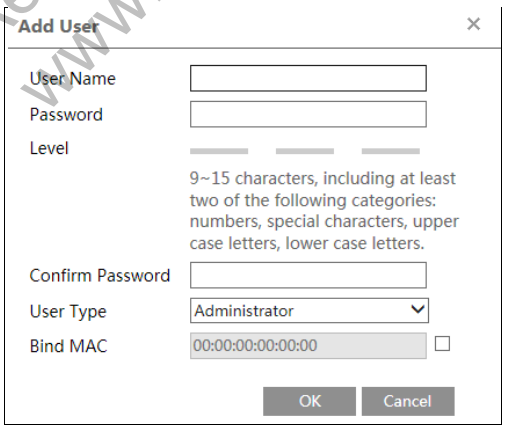
5.7 Security Configuration

5.7.1 User Configuration

Go to Config→Security→ User.



Add user:
1. Click “Add” to pop up the following textbox.



2. Enter user name in “User Name” textbox.
3. Enter the password in the “Password” and “Confirm Password” textbox. Please set the

password according to the requirement of the password security level (Go to Config→Security→Security Management→Password Security interface to set the security level).

4. Choose the user type. Administrator has all permissions. Normal users can only view the live video. Advanced user has the same permissions as an Administrator except for; user, backup settings, factory reset, and upgrading the firmware.

5. Enter the MAC address of the PC in "Bind MAC" textbox.

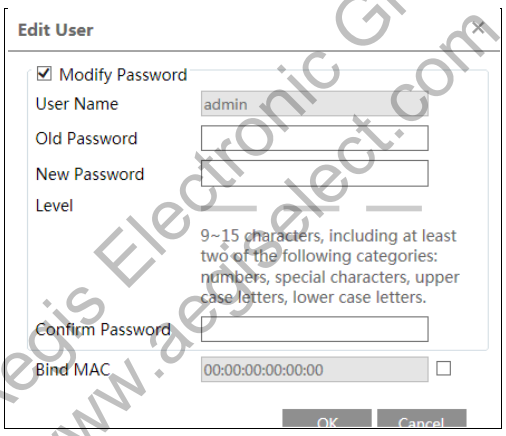
If this option is enabled, only the PC with the specified MAC address can access the camera for that user.

6. Click "OK" and then the newly added user will be displayed in the user list.

Modify user:

1. Select a user to modify password and MAC address if necessary in the user configuration list box.

2. The "Edit user" dialog box pops up by clicking "Modify".



3. Enter the old password of the user in the "Old Password" text box.

4. Enter the new password in the "New password" and "Confirm Password" text box.

5. Enter computer's MAC address as necessary.

6. Click "OK" to save the settings.

Note: To change the access level of a user, the user must be deleted and added again with the new access level.

Delete user:

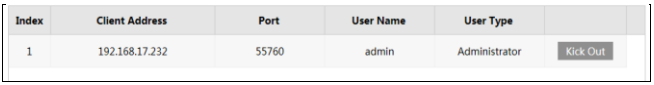
1. Select the user to be deleted in the user configuration list box.

2. Click "Delete" to delete the user.

Note: The default administrator account cannot be deleted.

5.7.2 Online Video User

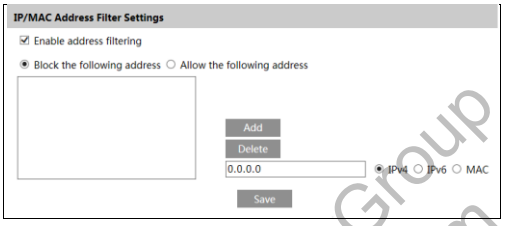
Go to Config→Security→Online User to view the user who is viewing the live video.



An administrator user can kick out all the other users (including other administrators).

5.7.3 Block and Allow Lists

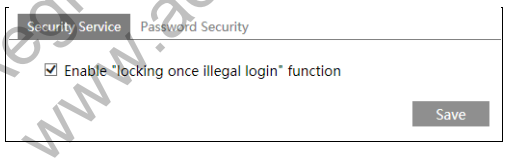
Go to Config→Security→Block and Allow Lists as shown below.



The setup steps are as follows:
Check the "Enable address filtering" check box.
Select "Block/Allow the following address", IPv4/IPv6/MAC and then enter IP address or MAC address in the address box and click "Add".

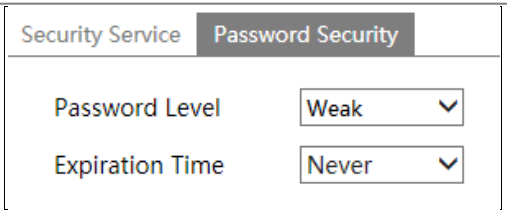
5.7.4 Security Management

Go to Config→Security→Security Management as shown below.



In order to prevent against malicious password unlocking, "locking once illegal login" function can be enabled here. If this function is enabled, login failure after trying six times will make the login interface locked. The camera can be logged in again after a half hour or after the camera reboots.

- **Password Security**

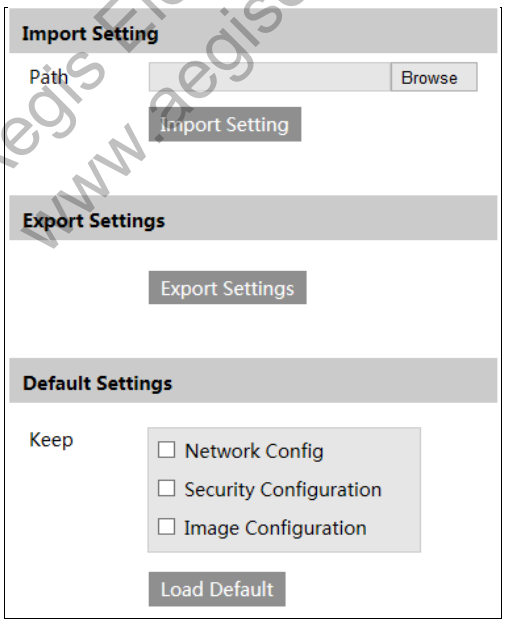


Please set the password level and expiration time as needed.
Password Level: Weak, Medium or Strong.
Weak level: Numbers, special characters, upper or lower case letters can be used. You can choose one of them or any combination of them when setting the password.
Medium Level: 9~15 characters, including at least two of the following categories: numbers, special characters, upper case letters, lower case letters.
Strong Level: 9~15 characters. Numbers, special characters, upper case letters and lower-case letters must be included.
For your account security, it is recommended to set a strong password and change your password regularly.

5.8 Maintenance

5.8.1 Backup & Restore

Go to Config→Maintenance→Backup & Restore.



- **Import & Export Settings**

Configuration settings of the camera can be exported from one camera into another camera.
1. Click “Browse” to select the save path for import or export information on the PC.
2. Click “Import Setting” or “Export Setting”.

- **Default Settings**

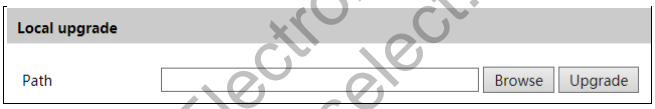
Click “Load Default” to restore all system settings to the default factory settings except those you want to keep.

5.8.2 Reboot Device

Go to Config→Maintenance→Reboot.
Click “Reboot” to reboot the device.
Timed Reboot Setting:
If necessary, the camera can be set up to reboot on a time interval. Enable “Time Settings”, set the date and time and then click “Save” to save the settings.

5.8.3 Upgrade

Go to Config→Maintenance→Upgrade. In this interface, you can update the camera’s firmware.

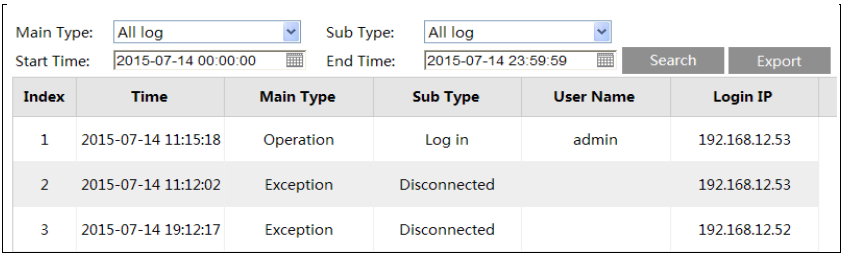


1. Click “Browse” to select the save path of the upgrade file
2. Click “Upgrade” to start upgrading the firmware.
3. The device will restart automatically

Caution! Do not close the browser or disconnect the camera from the network during the upgrade.

5.8.4 Log

To query and export log.
1. Go to Config→Maintenance→Operation Log.



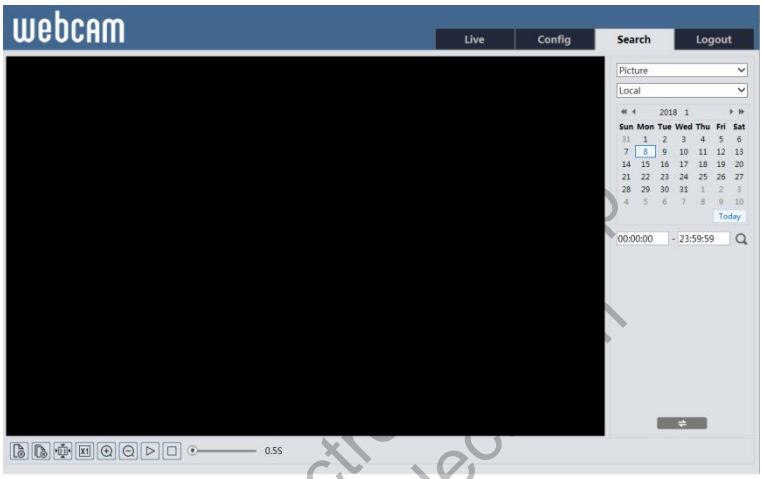
Index	Time	Main Type	Sub Type	User Name	Login IP
1	2015-07-14 11:15:18	Operation	Log in	admin	192.168.12.53
2	2015-07-14 11:12:02	Exception	Disconnected		192.168.12.53
3	2015-07-14 19:12:17	Exception	Disconnected		192.168.12.52

2. Select the main type, sub type, start and end time.
3. Click “Query” to view the operation log.
4. Click “Export” to export the operation log.

Chapter 6 Playback

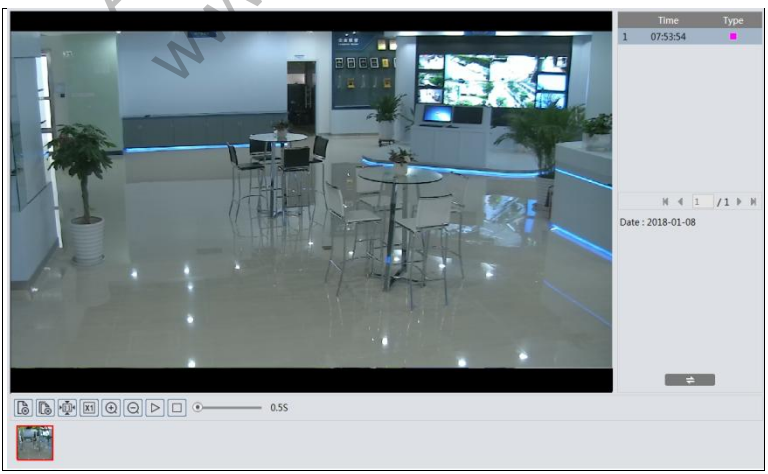
6.1 Image Search

Click Search to go to the interface as shown below. Images that are saved on the SD card can be found here.



- **Local Image Search**

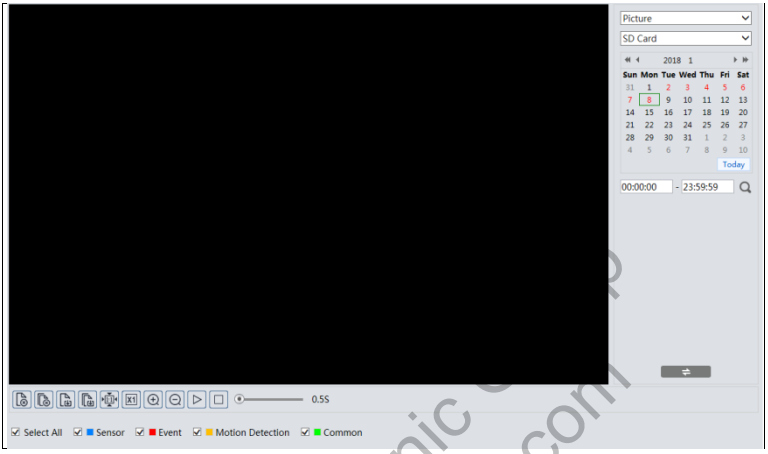
1. Choose “Picture”—“Local”.
2. Set time: Select date and choose the start and end time.
3. Click to search the images.
4. Double click a file name in the list to view the captured photos as shown above.



Click ⇌ to return to the previous interface.

- **SD Card Image Search**

1. Choose “Picture”—“SD Card”.



2. Set time: Select date and choose the start and end time.
3. Choose the alarm events at the bottom of the interface.
4. Click 🔍 to search the images.
5. Double click a file name in the list to view the captured photos.

Click ⇌ to return to the previous interface.

The descriptions of the buttons are shown as follows.

Icon	Description	Icon	Description
	Close: Select an image and click this button to close the image.		Close all: Click this button to close all images.
	Save: Click this button to select the path for saving the image on the PC.		Save all: Click this button to select the path for saving all pictures on the PC.
	Fit size: Click to fit the image on the screen.		Actual size: Click this button to display the actual size of the image.
	Zoom in: Click this button to digitally zoom in.		Zoom out: Click this button to digitally zoom out.
	Slide show play: Click this button to start the slide show mode.		Stop: Click this button to stop the slide show.
5.5S	Play speed: Play speed of the slide show.		

6.2 Video Search

6.2.1 Local Video Search

Click Search to go to the interface as shown below. Videos that were recorded locally to the PC can be played in this interface.

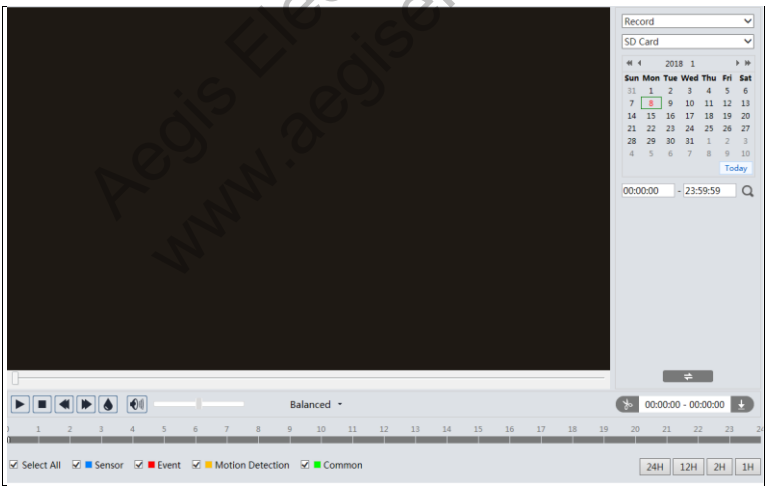
1. Choose “Record”—“Local”.
2. Set search time: Select the date and choose the start and end time.
3. Click to search the images.
4. Double click on a file name in the list to start playback.

Icon	Description	Icon	Description
	Play button. After pausing the video, click this button to continue playing.		Pause button
	Stop button		Speed down
	Speed up		Watermark display
	Enable / disable audio; drag the slider to adjust the volume after enabling audio.		

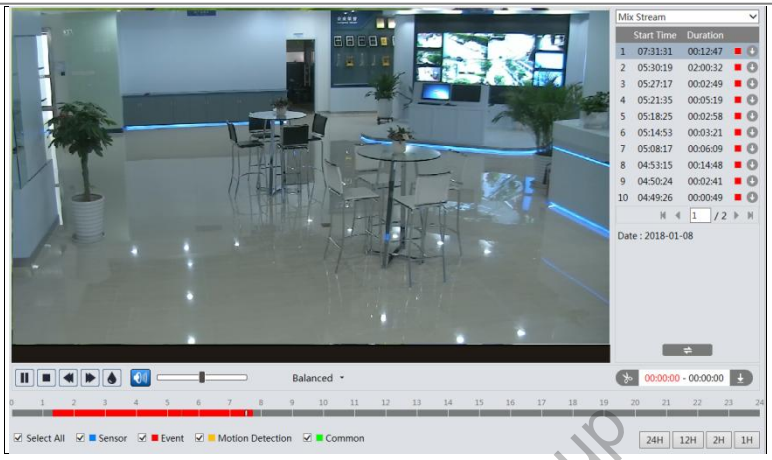
6.2.2 SD Card Video Search

Click Search to go to the interface as shown below. Videos that were recorded on the SD card can be played in this interface.

1. Choose “Record”—“SD Card”.
2. Set search time: Select the date and choose the start and end time.
3. Click  to search the images.



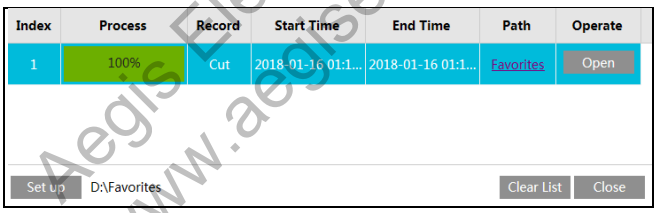
4. Select the alarm events at the bottom of the interface.
5. Select mix stream (video and audio stream) or video stream as needed.
6. Double click on a file name in the list to start playback.



The timetable can be shown in 24H/12H/2H/1H format by clicking the corresponding buttons.

Video clip and downloading

1. Search the video files according to the above-mentioned steps.
2. Select the start time by clicking on the timetable.
3. Click  to set the start time and then this button turns blue ().
4. Select the end time by clicking on the time table. Then click  to set the end time.
5. Click  to download the video file in the PC.



Click “Set up” to set the storage directory for video files.

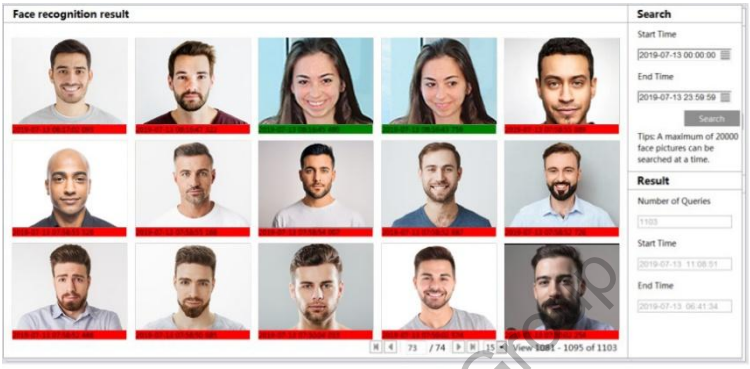
Click “Open” to play the video.

Click “Clear List” to clear the downloading list.

Click “Close” to close the downloading window.

Chapter 7 Face Match Result Search

Click “Face Log” tab to go to the face recognition result search interface.
Set the start time and end time and click “Search” to view the face recognition result.



Red time tag means no comparison result. Green time tag means there is a comparison result. Click the picture with green time tag and then the face comparison information can be viewed as shown below.

Chapter 8 Q & A

1. Q: I forget the password. How can I reset it?

Reset the system to the factory default setting or contact the dealer.
Default IP: 192.168.226.201
Username: admin
Password: 123456

2. Q: The devices can't connect through IE browser or Edge in IE Mode. Why?

① Network is not connected correctly. Please check the connection and make sure it is set up correctly.
② IP is not available. Reset the chosen IP address or set to DHCP.
③ Web port number has been revised: contact administrator to get the correct port number.
④ If not the above reasons. Restore the default setting by IP-Tool.

Note: The default IP: 192.168.226.201，mask number: 255.255.255.0

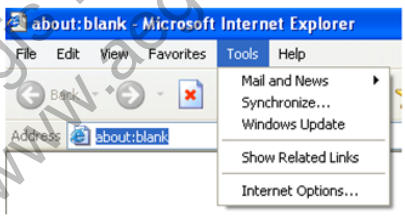
3. Q: IP tool cannot search devices. What can I do?

It may be caused by anti-virus software in your computer. Please exit it and try to search for the device again.

4. Q: IE/Edge in IE Mode cannot download ActiveX control. What can I do?

IE browser/Edge in IE mode blocks ActiveX. Please follow the below steps.

① Open IE browser/Edge in IE Mode. Click Tools-----Internet Options….



② Select Security------Custom Level….Refer to Fig 4-1.
③ Enable all the sub options under "ActiveX controls and plug-ins". Refer to Fig 4-2.

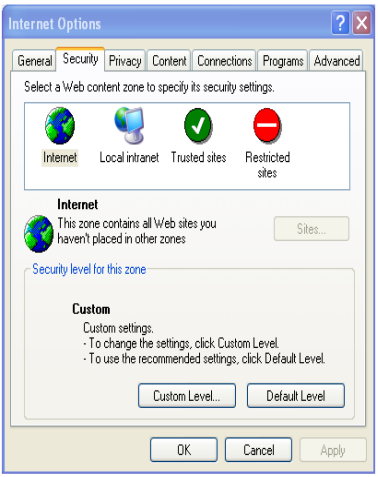


Fig 4-1

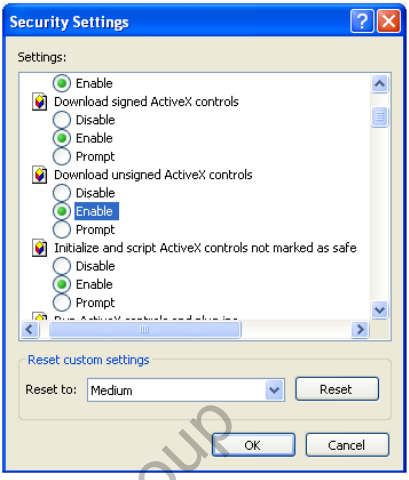


Fig 4-2

④ Then click OK to finish setup.

If other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.

5. Q: Why does the device fail to play sound?

The audio input device is possibly not connected. Please connect and try again.

The audio function is not enabled at the corresponding channel. Please check AUDIO setting to enable this function.

6. Q: What do I do when the device is unable to start normally when upgrading?

If the device is unable to start normally when upgrading, please rename the files suffixed with .tar as updatepack.tar and copy it to the root directory of SD card. Restart the device and the device will upgrade automatically from the SD card. After finishing upgrading, the user can search the IP address of IP Cam in the IP Tool.

Appendix Preset Description

Call Preset	Call NO.90 Preset	Run track 1
	Call NO.91 Preset	Run cruise 1
	Call NO.92 Preset	Run cruise 2
	Call NO.93 Preset	Run cruise 3
	Call NO.94 Preset	Run cruise 4
	Call NO.95 Preset	OSD menu
	Call NO.97 Preset	Enable random scan
	Call NO.99 Preset	Enable P-P SCAN
	Call NO.100 Preset	Wiper ON
	Call No.101 Preset	Wiper OFF
Set Preset	Set NO. 91 Preset	Set random scan; task auto call the beginning point
	Set NO. 92 Preset	Set left border of P-PSCAN
	Set NO. 93 Preset	Set right border of P-PSCAN
	Set NO.94 Preset three times	Set the boundary value of the near and middle infrared light
	Set NO.95 Preset three times	Set the boundary value of the middle and far infrared light

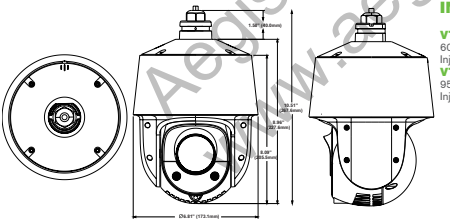
VT-TPTZ25HRAN-4PNL SPECIFICATIONS:

Image Sensor	1/2.7" BSI (Backside-Illuminated) and NRI (Near-Infrared Sensing) Progressive Scan STARLIGHT CMOS Sensor
Pixel Size	2.0um
Effective Pixels	2884(H) × 1624(V)
Resolution	4.0 MegaPixel (2560) Resolution @ 30fps
Min. Illumination	Color: 0.01 Lux @ (F1.65 AGC On) B/W: 0.002 Lux @ (F1.65 AGC On), 0 Lux w/IR
Image setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, (Adjusted by Client)
Shutter Speed	60Hz (NTSC): 1/30s ~ 1/30,000s, 50Hz (PAL): 1/25s ~1/25,000s
White Balance	Auto / Manual / Indoor / Outdoor
Day / Night	True Day/Night via ICR Cut Filter + Schedule [Auto/Manual Gain Control]
Iris Control	Auto / Manual
SNR	≥52dB
DNR	XD-DNR (3D-DNR / 2D-DNR) - Auto/Manual
WDR	True WDR (120dB)
IR Type / Distance	Smart IR - Up to 525' IR Range (160M)
Smart IR	Yes
Image Enhancement	Backlight Compensation (BLC), Highlight Compensation (HLC)
Privacy Mask	4 Areas, up to 4 Masks in a Single Frame
Overlay Features	Picture: Custom Logo on video [128x128px], 24bit BMP, OSD: Max 15 Character / Line, 8 Lines, White or Red Font
Lens / Focal Length	4.8~120mm Lens (25x Optical Zoom) w/3.6s Zoom Speed, and Digital Zoom
Zoom Speed	Approx. 3.6s (Optical Zoom, Wide Tele)
Field of View (FOV)	Horizontal: 55°~2.4° / Vertical: 33°~1.4° / Diagonal: 61.5°~2.8° (Wide-tele) **All listed speeds + / - 5%
Working Distance	Wide: 1.0m ~ INF, Tele: 1.5m ~ INF
Aperture Range	F1.65 ~ F3.8 (wide-tele)
Iris Type	Auto DC-IRIS, 16 Stops
IR Cut type	Removable IR Cut filter
D.O.R.I. (US) **D.O.R.I. (Metric)**	**Detect** (8px/ft): 7874', **Observe** (19px/ft): 3124', **Recognize** (38px/ft): 1575', **Identify** (76px/ft): 787' **Detect** (25px/M): 2400M, **Observe** (63px/M): 952M, **Recognize** (125px/M): 480M, **Identify** (250px/M): 240M
Pan Range / Speed	360° Endless, Configurable from .1°/s ~ 200°/s; Preset speed: 240°/s
Tilt Range / Speed	-10°~90° [Auto-Flip] / Configurable, from 0.1/s~200°/s, Preset speed: 240°/s
PTZ Features	Proportional Zoom, Pwr-Off Memory, 3D Position, PTZ Position Display
Preset / Cruise	360 / 8 Cruises, Up to 16 Presets for Each Cruise
Tracks	4 Tracks, Record Time Over 3 Minutes for Each Track
Scheduled Tasks	Preset / Cruise / Track / Random Scan / Boundary Scanning / Dome Reboot
Max Resolution	2560x1440 (16:9 Aspect Ratio)
Main Stream	30fps: 2560×1440,1920×1080,1280×960,1280×720
Sub Stream / Third Stream	Sub: 60Hz: 30fps (704 × 480, 640 × 480, 352 × 240) / Third: 30fps @ 1920×1080 (1080p) and Lower
Video Compression (Standards)	H.265+/H.265/H.264+/H.264/MJPEG (H.265: H.265 / HEVC Codec MP, Level 5.0, H.264: H.264/AVC codec BP/MP/HP, Level 5.1)
Video Bit Rate	64Kbps to 8Mbps
Audio Compression / Bit Rate	G.711A/U / 64Kbps
Deep Learning Engine	Supports Face Recognition (FR) up to 15 Human Faces / Sec (max), Human/Vehicle Detection
Smart Auto Tracking	Auto Tracking (supports tracking specified target types such as human and vehicle), Manual Tracking
Basic Event Detection	Motion detection, Video Tampering, Exception (Network Disconnected, IP Address Conflict, SD Card Full / Error)

VT-TPTZ25HRAN-4PNL SPECIFICATIONS:

Smart Event Detection	Trip Wire (+ Bi-Directional), Intrusion / Line Crossing / Region Entering + Exiting, Support Alarm Triggering by Specified Target Types (Human / Vehicle), Un-attended Baggage, Object Removal, Auto / Manual Smart Tracking
Gen. IV Advanced Analytics	Face Detection (15 faces simultaneously), Detect, Track, Capture + Vehicle / Non Vehicle Detection & Tracking
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, DHCP, PPPoE
Audio Interface	1 Audio Input (MIC in), 1 Audio Output, Line Level, Impedance, 600Ω
Alarm Interface	1 Alarm Input (Dry Contact); 1 Alarm Output
Alarm Linkage	Alarm Actions, Including Preset, Cruise, Track, Memory Card Video Record, Trigger Recording, Upload to FTP/Memory, Card, Send Email
Live View Connections	Up to 6 Simultaneous Live View Connections
User/Host	Up to 16 users, 3 levels: Administrator, Advanced and Normal Users
Security Measures	User Authentication (ID and PW), Host authentication (MAC address); HTTPS encryption., IEEE802.1x port-based net account control; IP address filtering
Web Browser	Internet Explorer (IE) - Plug-in Required, Edge in IE Mode
API	ONVIF, Third-Party Integration
CVBS (BNC), RS485	NA
On-Board Storage	Built-in microSD/SDHC/SDXC card slot, up to 256GB
Network Interface	1 RJ45 10M/100M Adaptive Ethernet (Support PoE+ 802.3.at)
Thermal / Weather Management	Internal Heater and Fan + Quick Spin Water Removal
Reset Button	YES
Working Environment	-40°F~140°F (-40°C~60°C), 90% RH [STORAGE CONDITIONS: -40°F~158°F (-40°C~70°C), 95% RH]
Cold Start	-22F / - 30°C (30 Minutes Waiting Time), 90% RH
Weather / Impact / Protection	IP66 + IK10 (Excl. Glass Window), 6000V (Lightning, Surge, and Voltage Transient Protection)
Power	12VDC @ 3amps, PoE+ (23W with IR on, PTZ on, Heater + Fan on) ***Power Supply Included, **PoE Injector Required for PoE Power**
Dimensions and Weight	6.81" × 10.51" (173mm × 268mm), NET: 4.85lb (2.2kg) / SHIPPING: 7.50lb (3.4kg)

VT-TPTZ25HRAN-4PNL DIMENSIONS:



OPTIONAL POE INJECTORS

VT-POE60
60 Watt POE Mid-Span Injector, 4-Pair Compliant

VT-POE95
95 Watt POE Mid-Span Injector, 4-Pair Compliant

INCLUDED POWER SUPPLY:

A 12VDC 3amp Power Supply is included.

VT-TPTZ25HRAN-4PNL OPTIONAL MOUNTS:

VT-TPT20HR-FM
Semi-flush Mount for VT-TPTZ25HRAN-4PNL

VT-TPT25HR-WMG
Optional Universal Wall Mount for Transcendent IP PTZs

VT-TPT20HR-PM
Optional Ceiling/Pedestal Mount for Transcendent IP PTZs

VT-TPLMT-W
Transcendent Universal Pole Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TCNMT-W
Transcendent Universal Corner Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TWM36
Optional 3' (1M) Extended Wall Mount - White

VT-TPLM36
Optional 3' (1M) Extended Pole Mount Bracket - White

VT-TCNM36
Optional 3' (1M) Extended Corner Mount Bracket - White

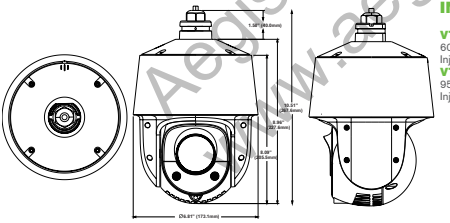
VT-TPTZ25HRAN-8PNL SPECIFICATIONS:

Image Sensor	1/2.8" Sony STARVIS® STARLIGHT Progressive Scan CMOS Sensor
Resolution	8.0 MegaPixel (3840 × 2160) Resolution @ 30fps
Min. Illumination	Color: 0.01 Lux @ (F1.65 AGC On) B/W: 0.002 Lux @ (F1.65 AGC On), 0 Lux w/IR
Image Setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, (Adjusted by Client)
Shutter Speed	1/1s ~ 1/100,000s
White Balance	Auto / Manual / Indoor / Outdoor
Day / Night	Auto / Manual + Schedule
Gain Control	Auto / Manual
Iris Control	Auto / Manual
SNR	≥55dB
DNR	XD-DNR (3D-DNR / 2D-DNR) - Auto/Manual
WDR	True WDR (120dB)
IR Type / Distance	Smart IR - Up to 492' IR Range (150M)
Smart IR	Yes
Image Enhancement	Backlight Compensation (BLC), Highlight Compensation (HLC)
Privacy Mask	4 Areas, up to 4 Masks in a Single Frame
Overlay Features	Picture: Custom Logo on video [128x128px], 24bit BMP, OSD: Max 15 Character / Line, 8 Lines, White or Red Font
Lens / Focal Length	4.8~120mm Lens (25x Optical Zoom) w/3.6s Zoom Speed, and Digital Zoom
Zoom Speed	Approx. 3.6s (Optical Zoom, Wide Tele)
Field of View (FOV)	Horizontal: 55°~2.4° / Vertical: 33°~1.4° / Diagonal: 61.5°~2.8° (Wide-tele) **All listed speeds + / - 5%
Working Distance	Wide: 1.0m ~ INF, Tele: 1.5m ~ INF
Aperture Range	F1.65 ~ F3.8 (wide-tele)
Iris Type	DC-IRIS(Hall sensor, 16 Stops), F1.65 ~ F3.8 (wide-tele)
IR Cut type	Removable IR Cut filter
D.O.R.I. (US)	**Detect** (8px/ft): 8930', **Observe** (19px/ft): 3543', **Recognize** (38px/ft): 1772', **Identify** (76px/ft): 886'
D.O.R.I. (Metric)	**Detect** (25px/M): 2722M, **Observe** (63px/M): 952M, **Recognize** (125px/M): 540M, **Identify** (250px/M): 270M
Pan Range / Speed	360° Endless, Configurable from .1°/s ~ 200°/s; Preset speed: 240°/s
Tilt Range / Speed	-10°~90° [Auto-Flip] / Configurable, from 0.1/s~200°/s, Preset speed: 240°/s
PTZ Features	Proportional Zoom, Pwr-Off Memory, 3D Position, PTZ Position Display
Preset / Cruise	360 / 8 Cruises, Up to 16 Presets for Each Cruise
Tracks	4 Tracks, Record Time Over 3 Minutes for Each Track
Scheduled Tasks	Preset / Cruise / Track / Random Scan / Boundary Scanning / Dome Reboot
Max Resolution	3840 × 2160
Main Stream	60Hz: 30fps:3840 × 2160,2560 × 1440,1920 × 1080,1280 × 960,1280 × 720 50Hz: 25fps: 3840 × 2160,2560 × 1440,1920 × 1080,1280 × 960,1280 × 720
Sub Stream	60Hz: 30fps (704 × 480, 640 × 480, 352 × 240) 50Hz: 25fps: (704 × 576, 640 × 480, 352 × 288)
Third Stream	60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG
Compression Standards	H.265: HEVC Codec MP, Level 5.0, H.264: AVC codec BP/MP/HP, Level 5.1
Video Bit Rate	64Kbps to 16Mbps
Audio Compression / Bit Rate	G.711A/U / 64Kbps
Deep Learning Engine	Supports Face Recognition (FR) up to 15 Human Faces / Sec (max), Human/Vehicle Detection
Smart Auto Tracking	Auto Tracking (supports tracking specified target types such as human and vehicle), Manual Tracking
Basic Event Detection	Motion detection, Video Tampering, Exception (Network Disconnected, IP Address Conflict, SD Card Full / Error)

VT-TPTZ25HRAN-8PNL SPECIFICATIONS:

Smart Event Detection	Trip Wire (+ Bi-Directional), Intrusion / Line Crossing / Region Entering + Exiting, Support Alarm Triggering by Specified Target Types (Human / Vehicle), Un-attended Baggage, Object Removal, Auto / Manual Smart Tracking
Gen. IV Advanced Analytics	Face Detection (15 Faces Simultaneously), Detect, Track, Capture + Vehicle / Non Vehicle Detection & Tracking
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, DHCP, PPPoE
Audio Interface	1 Audio Input (MIC in), 1 Audio Output, Line Level, Impedance, 600Ω
Alarm Interface	1 Alarm Input (Dry Contact); 1 Alarm Output
Alarm Linkage	Alarm Actions, Including Preset, Cruise, Track, Memory Card Video Record, Trigger Recording, Upload to FTP/Memory, Card, Send Email
Live View Connections	Up to 6 Simultaneous Live View Connections
User/Host	Up to 16 users, 3 levels: Administrator, Advanced and Normal Users
Security Measures	User Authentication (ID and PW), Host authentication (MAC address); HTTPS encryption., IEEE802.1x port-based net account control; IP address filtering
Web Browser	Internet Explorer (IE) - Plug-in Required, Edge in IE Mode
API	ONVIF, Third-Party Integration
CVBS (BNC), RS485	NA
On-Board Storage	Built-in microSD/SDHC/SDXC card slot, up to 256GB
Network Interface	1 RJ45 10M/100M Adaptive Ethernet (Support PoE+ 802.3.at)
Thermal / Weather Management	Internal Heater and Fan + Quick Spin Water Removal
Reset Button	YES
Working Environment	-40°F~140°F (-40°C~60°C), 90% RH [STORAGE CONDITIONS: -40°F~158°F (-40°C~70°C), 95% RH]
Cold Start	-22F / - 30°C (30 Minutes Waiting Time), 90% RH
Weather / Impact / Protection	IP66 + IK10 (Excl. Glass Window), 6000V (Lightning, Surge, and Voltage Transient Protection)
Power	12VDC @ 3amps (3000mA), PoE+ (24W with IR on, PTZ) ***Power Supply Included, **PoE Injector Required for PoE Power**
Dimensions and Weight	6.81" × 10.51" (173mm × 268mm), NET: 4.85lb (2.2kg) / SHIPPING: 7.50lb (3.4kg)

VT-TPTZ25HRAN-8PNL DIMENSIONS:



OPTIONAL POE INJECTORS

VT-POE60
60 Watt POE Mid-Span Injector, 4-Pair Compliant

VT-POE95
95 Watt POE Mid-Span Injector, 4-Pair Compliant

INCLUDED POWER SUPPLY:

A 12VDC 3amp Power Supply is included.

VT-TPTZ25HRAN-8PNL OPTIONAL MOUNTS:

VT-TPT20HR-FM
Semi-flush Mount for VT-TPTZ25HRAN-4PNL

VT-TPT25HR-WMG
Optional Universal Gasket Wall Mount for Transcendent IP PTZs

VT-TPT20HR-PM
Optional Ceiling/Pedestal Mount for Transcendent IP PTZs

VT-TPLMT-W
Transcendent Universal Pole Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TCNMT-W
Transcendent Universal Corner Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TWM36
Optional 3' (1M) Extended Wall Mount - White

VT-TPLM36
Optional 3' (1M) Extended Pole Mount Bracket - White

VT-TCNM36
Optional 3' (1M) Extended Corner Mount Bracket - White

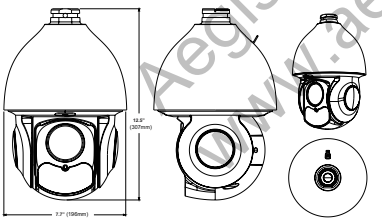
VT-TPTZ32HRAN-8PNS SPECIFICATIONS:

Image Sensor	1/2.8" Sony STARVIS® Progressive Scan Starlight CMOS Sensor
Resolution	8.0 MegaPixel (3840 × 2160) Resolution @ 30fps
Min. Illumination	Color: 0.01 Lux @ (F1.2 AGC On) B/W: 0.002 Lux @ (F1.2 AGC On), 0 Lux w/IR
Image setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, (Adjusted by Client)
Shutter Speed	60Hz: 1/30s - 1/30,000s, 50Hz: 1/25s - 1/25,000s
White Balance	Auto / Manual / Indoor / Outdoor
Day / Night	Auto / Manual + Schedule
Gain Control	Auto / Manual
Iris Control	Auto / Manual
SNR	≥52dB
DNR	XD-DNR (3D-DNR / 2D-DNR) - Auto/Manual
WDR	True WDR (120dB)
IR Range	Up to 656' IR Range (200M), Dual Stack 850nm IR Array
Smart IR	Yes
Image Enhancement	Backlight Compensation (BLC), Highlight Compensation (HLC)
Privacy Mask	4 Programmable Areas, Up to 8 Masks In the Same Frame
Overlay Features	Picture: Custom Logo on video [128×128px], 24bit BMP
On-Screen Display	Max 15 Character / Line, 8 Lines, White or Red Font
Lens / Focal Length	4.8~154mm Lens (32× Optical Zoom)
Zoom Speed	Approx. 4.6s (Optical Zoom, Wide Tele)
Field of View (FOV)	Horizontal: 61.3°~2.18° / Vertical: 36°.9~1.22° / Diagonal: 68.4°~2.5° (Wide-tele) **All listed speeds + / - 5%
Working Distance	Wide: 1.0m ~ INF, Tele: 1.5m ~ INF
Iris	F1.2 ~ F4.4 (wide-tele)
IR Cut type	Removable IR Cut filter
D.O.R.I. f=154mm (US)	**Detect** (8px/ft): 11575', **Observe** (19px/ft): 4593', **Recognize** (38px/ft): 2296', **Identify** (76px/ft): 1148'
D.O.R.I. f=154mm (Metric)	**Detect** (25px/M): 3528M, **Observe** (63px/M): 1400M, **Recognize** (125px/M): 700M, **Identify** (250px/M): 350M
D.O.R.I. f=4.8mm (US)	**Detect** (8px/ft): 453.5', **Observe** (19px/ft): 179.7', **Recognize** (38px/ft): 90.8', **Identify** (76px/ft): 45.4'
D.O.R.I. f=4.8mm (Metric)	**Detect** (25px/M): 138M, **Observe** (63px/M): 54.8M, **Recognize** (125px/M): 27.8M, **Identify** (250px/M): 13.8M
Pan Range / Speed	360° Endless, Configurable from .5°/s ~ 120°/s; Preset speed: 150°/s
Tilt Range / Speed	-5°~90° (Auto-Flip) / Configurable, from .5°/s ~ 120°/s; Preset speed: 150°/s
PTZ Features	Proportional Zoom, Pwr-Off Memory, 3D Position, PTZ Position Display
Preset / Cruise	360 / 8 Cruises, Up to 16 Presets for Each Cruise
Tracks	4 Tracks, Record Time Over 3 Minutes for Each Track
Scheduled Tasks	Preset / Cruise / Track / Random Scan / Boundary Scanning / Dome Reboot
Max Resolution	3840 × 2160
Main Stream	60Hz: 30fps:3840 × 2160,2560 × 1440,1920 × 1080,1280 × 960,1280 × 720 50Hz: 25fps: 3840 × 2160,2560 × 1440,1920 × 1080,1280 × 960,1280 × 720
Sub Stream	60Hz: 30fps (704 × 480, 640 × 480, 352 × 240) 50Hz: 25fps: (704 × 576, 640 × 480, 352 × 288)
Third Stream	60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG
Compression Standards	H.265: HEVC Codec MP, Level 5.0, H.264: AVC codec BP/MP/HP, Level 5.1
Video Bit Rate	64Kbps to 16Mbps
Audio Compression / Bit Rate	G.711A/U / 64Kbps
Deep Learning Engine	Supports Face Recognition (FR) up to 15 Human Faces / Sec (max), Human/Vehicle Detection

VT-TPTZ32HRAN-8PNS SPECIFICATIONS:

Smart Auto Tracking	Auto Tracking (supports tracking specified target types such as human and vehicle), Manual Tracking
Basic Event Detection	Motion detection, Video Tampering, Exception (Network Disconnected, IP Address Conflict, SD Card Full / Error)
Smart Event Detection	Trip Wire (+ Bi-Directional), Intrusion / Line Crossing / Region Entering + Exiting, Support Alarm Triggering by Specified Target Types (Human / Vehicle), Un-attended Baggage, Object Removal, Auto / Manual Smart Tracking
Gen. IV Advanced Analytics	Face Detection (15 Faces Simultaneously), Detect, Track, Capture + Vehicle / Non Vehicle Detection & Tracking
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, DHCP, PPPoE
Audio Interface	1 Audio Input (MIC in), 1 Audio Output, Line Level, Impedance, 600Ω*
Alarm Interface	1 Alarm Input (Dry Contact); 1 Alarm Output
Alarm Linkage	Alarm Actions, Including Preset, Cruise, Track, Memory Card Video Record, Trigger Recording, Upload to FTP/Memory, Card, Send Email
Reset Button	Yes
Live View Connections	Up to 6 Simultaneous Live View Connections
User/Host	Up to 16 users, 3 levels: Administrator, Advanced and Normal Users
Security Measures	User Authentication (ID and PW), Host authentication (MAC address); HTTPS encryption., IEEE802.1x port-based net account control; IP address filtering
Web Browser	Internet Explorer (IE) - Plug-in Required, Edge in IE Mode
Network Interface	1 RJ45 10M/100M Adaptive Ethernet, Support PoE++(802.3.bt)
API	ONVIF, Third-Party Integration
CVBS (BNC), RS485	NA
On-Board Storage	Built-in microSD/SDHC/SDXC card slot, up to 256GB
Thermal Management	Internal Heater and Fan, Hot Air Blows on Glass to Remove Frost, Ice, Remove Water-Droplets w/ Quick Spinning
Lens Wiper	NA
Working Environment	-40°C ~ 65°C (-40°F ~ 149°F), Cold start at - 30°C (0.5 Hour Warm-up Time), ≤90%RH Non-condensing
Weather Rating / Protection	IP66, 6000V (Lightning, Surge, and Voltage Transient Protection)
Impact Protection	IK10 (Excluding Glass Window)
Power	DC24V/24VAC@ 2.5amps, PoE++ (34W with IR on, PTZ Working) ***Power Supply Included, PoE Injector Required for PoE Power***
Dimensions and Weight	7.7" × 12.5" (196mm × 307mm), 8.3 lb (3.7kg)

VT-TPTZ32HRAN-8PNS DIMENSIONS:



OPTIONAL POE INJECTORS

VT-POE60
60 Watt POE Mid-Span Injector, 4-Pair Compliant

VT-POE96
95 Watt POE Mid-Span Injector, 4-Pair Compliant

INCLUDED POWER SUPPLY:

A 24VDC 2.5amp Power Supply is included.

VT-TPTZ32HRAN-8PNS OPTIONAL MOUNTS:

VT-TPT25HR-WMG
Optional Universal Wall Mount for Transcendent IP PTZs

VT-TPT20HR-PM
Optional Ceiling/Pedestal Mount for Transcendent IP PTZs

VT-TPLMT-W
Transcendent Universal Pole Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TCNMT-W
Transcendent Universal Corner Mount Adapter - White (requires VT-TPT25HR-WMG)

VT-TWM36
Optional 3' (1M) Extended Wall Mount - White

VT-TPLM36
Optional 3' (1M) Extended Pole Mount Bracket - White

VT-TCNM36
Optional 3' (1M) Extended Corner Mount Bracket - White

Transcendent Network IP Keyboard Controllers for VT-TPTZ Series PTZ's Also Available!

VT-TKBD23

Transcendent VMS-Integrated Android Based Network IP Keyboard Controller with 10.1" LCD Display & 4D Vector Operation

- 10.1" Capacitive Touch Screen, powered by Google Android OS
- Supports Viewing Images on Touch Screen or Outputting Images on the External Monitor via HDMI Interface
- H.264 / H.265 Decoding
- ONVIF Protocol Supported
- Up to 1024 devices can be Added

VT-TKBD11

Transcendent VMS-Integrated Network IP Keyboard Controller with LCD Display and 4D Vector Operation

- Integrates with Transcendent VMS
- Supports Remote Configuration by Web Client
- Supports PTZ Mode and Platform Mode
- Controls up to 256 PTZ Cameras in PTZ Mode
- NDAA Compliant

LIMITED PRODUCT WARRANTY

This VITEK product carries a three (3) year limited warranty. VITEK warrants to the purchaser that products manufactured by VITEK are free of any rightful claim of infringement or the like, and when used in the manner intended, will be free of defects in materials and workmanship for a period of three (3) years, or as otherwise stated above, from the date of purchase by the end user. This warranty is nontransferable and extends only to the original buyer or end user customer of a VITEK Authorized Reseller.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, willful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way or the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact your local VITEK Reseller should servicing become necessary.

VITEK makes no warranty or guarantee whatsoever with respect to products sold or purchased through unauthorized sales channels. Warranty support is available only if product is purchased through a VITEK Authorized Reseller.

CLASS A DIGITAL DEVICE (INDUSTRIAL & COMMERCIAL ENVIRONMENT)
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to CE and 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 radio frequency 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.

VITEK®
INDUSTRIAL VIDEO PRODUCTS, INC
28492 CONSTELLATION ROAD VALENCIA, CA 91355
WWW.VITEKCCTV.COM

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