

OPERATION GUIDE

MANUAL

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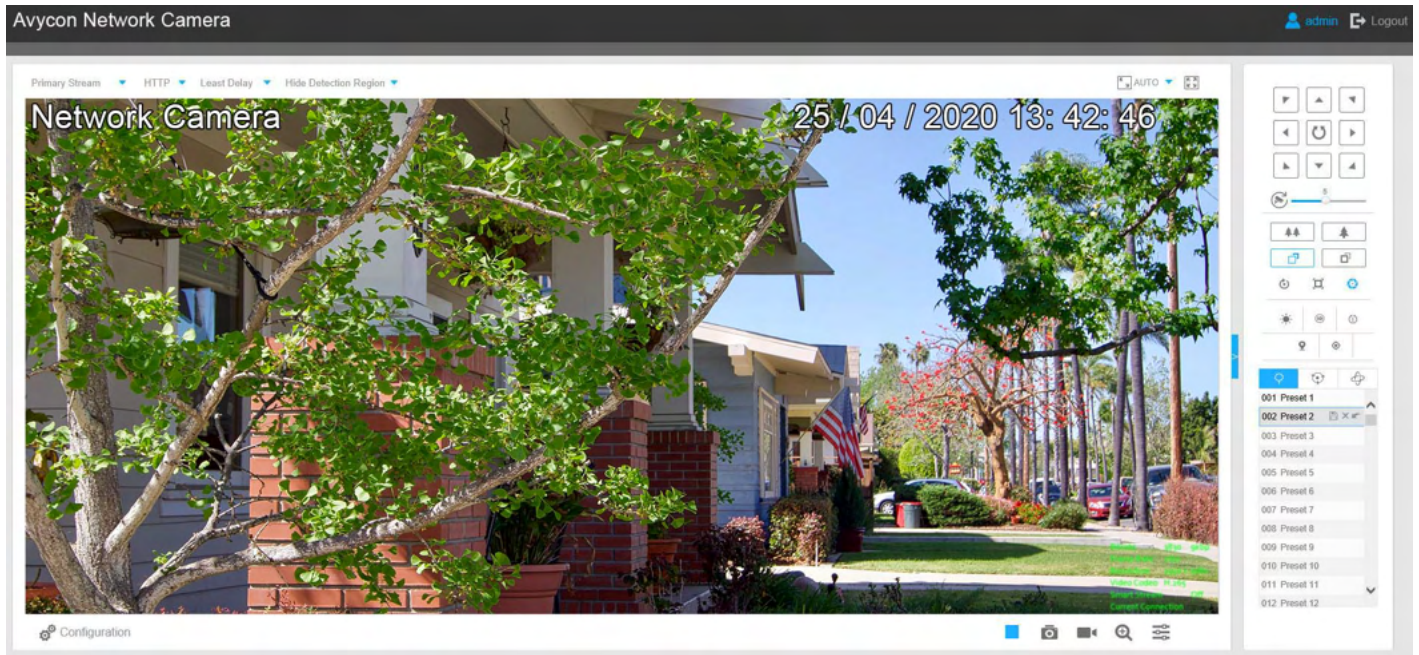
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Thank you for purchasing this AVYCON IP Network Camera. This guide provides basic instructions on installing and accessing this IP Network Camera. For more details, please refer to the User Manual.

System Operation Guide

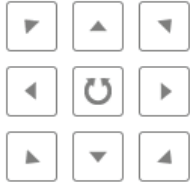
Live Video







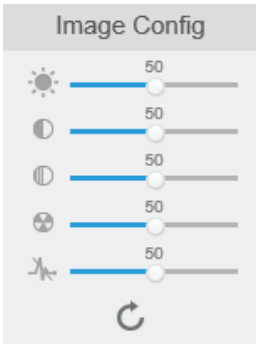


After logging in to the network camera web GUI successfully, the user is allowed to view live video as follows.





















Operations on Live View Page

Table 1: Description of the buttons

No.	Parameter	Description
1	 <p>PTZ Control</p>	Navigation key is used to control the direction. The rotation key is used for auto-rotation.

No.	Parameter	Description
1	 PTZ speed	To adjust the speed of pan/tilt movements, from 1 to 10
2		Click to zoom in and zoom out
3		Click to focus near or far from the lens.
4		Lens Initialization, Auxiliary Focus, and Auto Iris
5		Lighting For 30s: Click to open/ close the White LED for lighting 30s.
		3D Positioning: Click to enable/ disable 3D positioning.
		One-touch Patrol: Click to carry out the patrol.
		Auto Home: Click to enable Auto Home.
		Manual Tracking: Click to track the moving objects.
	 Image Config	Brightness: Adjust the brightness of the scene.
		Contrast: Adjust the color and light contrast.
		Saturation: Adjust the Saturation of the image. Higher Saturation makes colors appear more "pure" while the lower one appears more "wash-out".
		Sharpness: Adjust the Sharpness of the image. Higher Sharpness sharps the pixel boundary and makes the image looks "more clear"
		3D DNR: Adjust the noise reduction level
		Default: Restore brightness, contrast and saturation to default settings
6	 Configuration	Click to access the configuration page.
7		Choose the Stream (Primary/Secondary/Tertiary)to show on the current video window.


No.	Parameter	Description
8		<p>Only available for camera whose software version is 43 or above.</p> <p>Web Components: Support Firefox, Safari, Chrome (Chrome version 44 or below); need to install the component to display the view.</p> <p>MJPEG: Support to display the view on Firefox, Safari, Chrome (Chrome version 45 or above);</p> <p>Note: IE choose Web Components mode for default, in this case, it will not show the options</p>
9		<p>TCP: More reliable connection</p> <p>UDP: More instantaneous connection, but if you cannot get the live view successfully, please turn IT into a TCP connection.</p> <p>HTTP: Faster and safer connection especially in the Internet environment.</p>
10		<p>Least Delay: The most instantaneous mode</p> <p>Balanced: A balanced mode between Least Delay and Best Fluency maintains the fluency while keeping an acceptable delay.</p> <p>Best Fluency: The most fluent mode.</p>
11	 AUTO Window Size	Click to display images at a window size.
12	 100% Real Size	Click to display images in real size.
13	 Full Screen	Click to display images full-screen.
14	 Recording	When recording, the icon will turn red.
15	 Alarm	When an alarm of Smart Event was triggered, the icon appears.

No.	Parameter	Description
16	 Alarm	When an alarm of Motion Detection was triggered, the icon appears.
17	 Alarm	When other alarms were triggered, except for the two kinds of alarms above, the icon appears.
18		Start/Stop live view
19	 Capture	Click to capture the current image and save it to the configured path. The default path is C:\VMS\+-1\IMAGE-MANUAL.
20	 Start Recording	Click to start recording the video and save it to the configured path. The default path is C:\VMS\+-1\MS_Record. Click again to stop recording.
21	 Play Audio	Enable Audio Input/Output. It can also be set on the Audio configuration page.
22	 Saving Path Setting	Set the saving path for captured images and video recordings of operating on the live view.
23	 Enable Digital Zoom	When enabled, you can zoom in in a specific area of the video image with your mouse wheel.
24	 Start Talking	When it is enabled, you can start real-time talking.
25		Click to select system language.

3D Positioning

3D Positioning allows users to use mouse clicking and dragging to control the PTZ.

Steps:

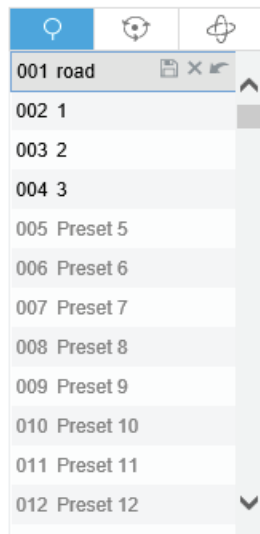
1. Click  on the toolbar of Live View interface.
2. Operate the 3D positioning function
 - Left-click a position of the Live View, the corresponding position will be moved to the center of the Live View.
 - Hold down the left mouse button and drag the mouse to the lower-right or upper right on the Live View, you can see a blue rectangle. The corresponding position will be moved to the center of the Live View and Zoom in.
 - Hold down the left mouse button and drag the mouse to the lower-left or upper left on the Live View, you can see a blue rectangle. The corresponding position will be moved to the center of the Live View and Zoom out.
 - The Bigger the rectangle is, the smaller zoom in/out will be acted.

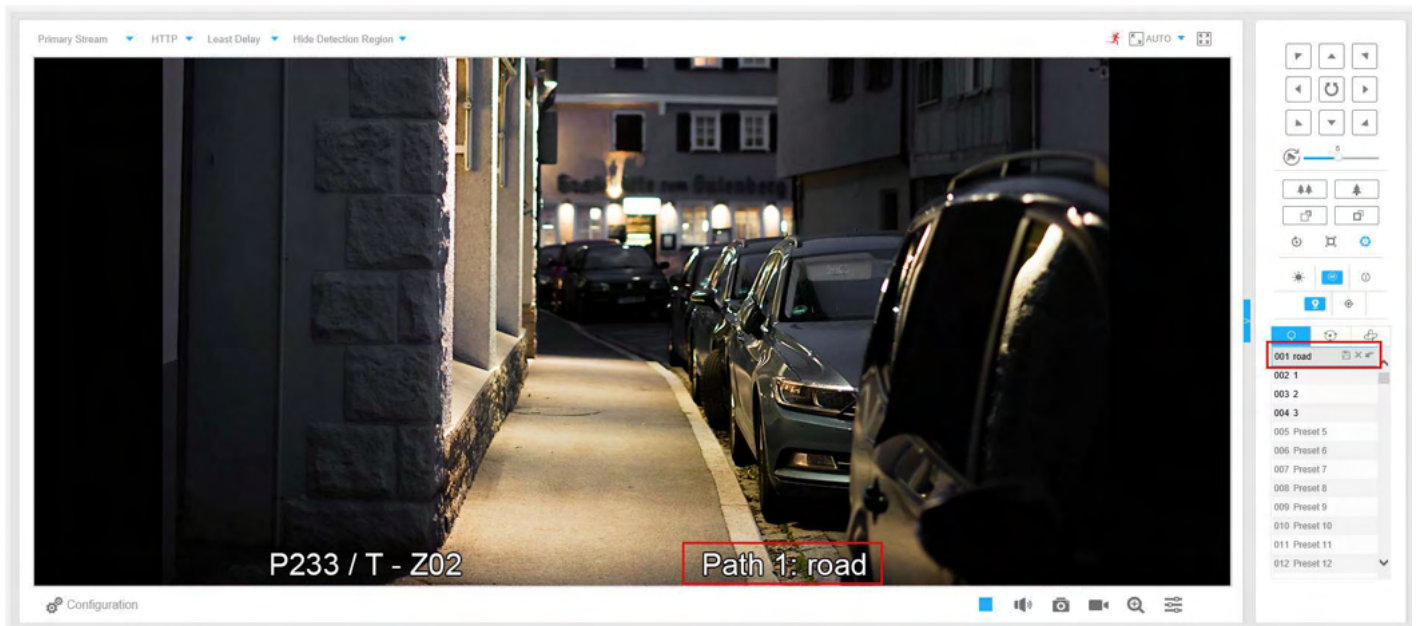
Set / Call a Preset / Patrol / Pattern

A preset is a predefined image position. You can click the call button from the preset list to quickly go to the desired image position.

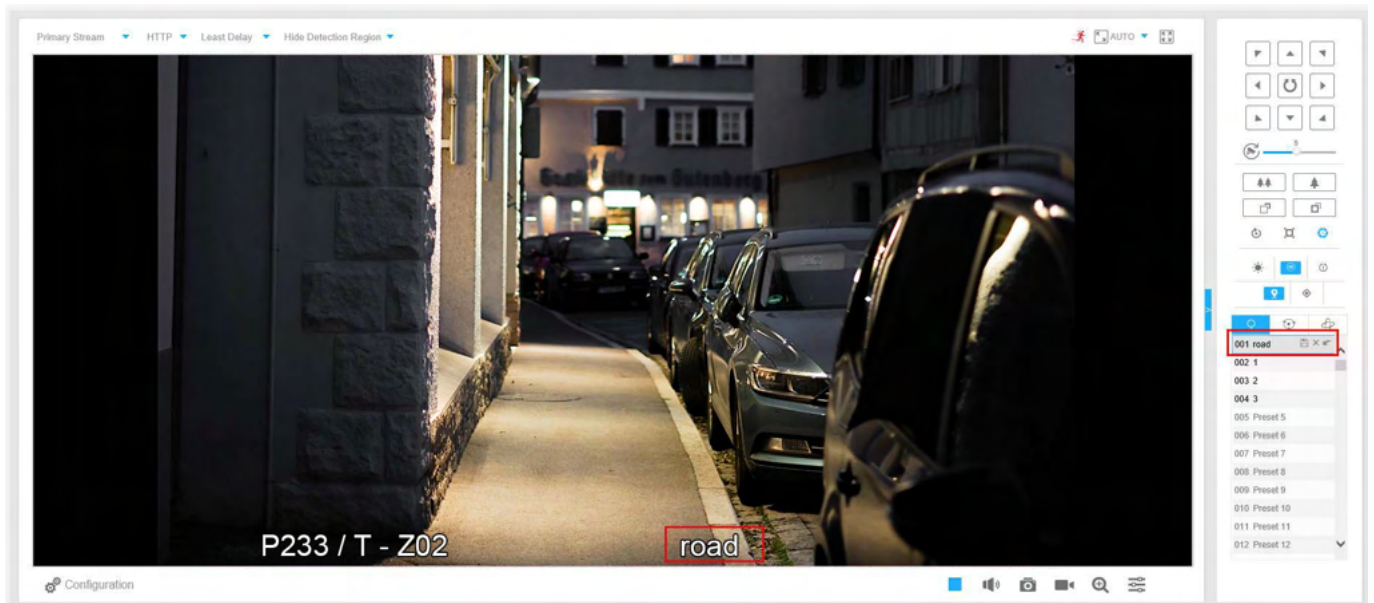
Set a preset:

Step 1: In the PTZ control panel, select a preset number from the preset list, and you can also customize the preset name displayed on the screen. The patrol name displayed on the screen will also be customized if you customize the preset name and set a patrol as shown below:






	Preset	Speed	Time(s)
01	1	30	15
02	2	30	15
03	3	30	15



Step 2: Use the PTZ control buttons to move the lens to the interested position

Step 3: Click  to save the setting of the current preset

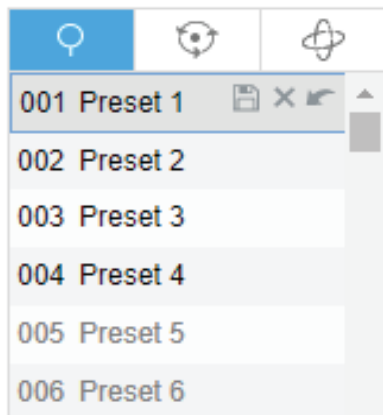
Step 4: Click  to delete the chosen preset.

Note:

Up to 300 presets can be configured (18 presets are not modifiable).

Calling a preset:

Select a defined preset from the preset list and click  to call the preset.

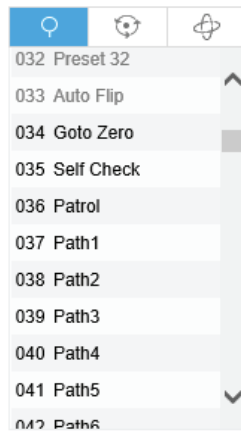


Note:

The following presets are predefined with special commands. You can only call them but can't configure them. For example, preset 037 is the "Self Check". If you call the preset number 037, the PTZ camera will start the self-check function at once.

Table 2: Special Presets

Special Preset	Function	Special Preset	Function
33	Auto Flip(Speed Dome only)	42	Path 6
34	Goto Zero	43	Path 7
35	Self Check	44	Path 8
36	Patrol	45	Pattern 1
37	Path1	46	Pattern 2
38	Path2	47	Pattern 3
39	Path3	48	Pattern 4
40	Path4	49	Stop Scan
41	Path5	50	Auto Scan





Set / Call a patrol

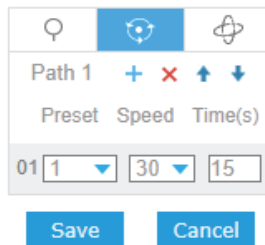
A patrol is a memorized series of preset functions. It can be configured and called on the patrol setting list. You can customize up to 8 patrols and it can be configured with 48 presets. Before configuring the patrol, you should make sure that the presets you want to add to the patrol have been defined.

Set a patrol

Step 1: In the PTZ control panel, click  to enter the patrol settings interface.

Step 2: Select a patrol number, the setting icon will appear , click it.


Step 3: Click  to add presets to this patrol, as shown in Figure.



Step 4: Configure the preset number, patrol speed, and patrol time

Table 3: Description of Patrol Settings

Name	Description
Patrol Speed	The speed of moving from one preset to another.
Patrol Time	The duration staying on one patrol point. The PTZ camera moves to another patrol point after the set patrol time.

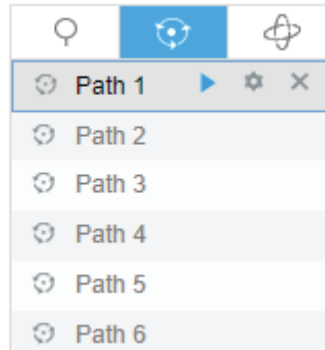
Step 5: Click  to save the patrol settings.

Note:

- Patrol Speed only works in Patrol mode.
- Patrol Time should be 15~120s for Mini PTZ Bullet and 0~120s for Speed Dome.

Call a patrol:

In the PTZ control panel, select a defined patrol from the patrol list, and click  to call the patrol, as shown below.



Note:

The three buttons behind the Patrol list means: Play, Set and Delete.

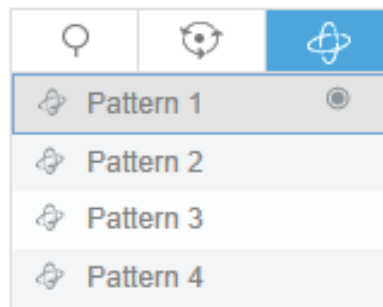
Set / Call a pattern

The three buttons behind the Patrol list means: Play, Set and Delete.

Set a pattern:


Step 1: In the PTZ control panel, click  to enter the pattern settings interface.

Step 2: Select a pattern number from the pattern list as shown in the figure below.



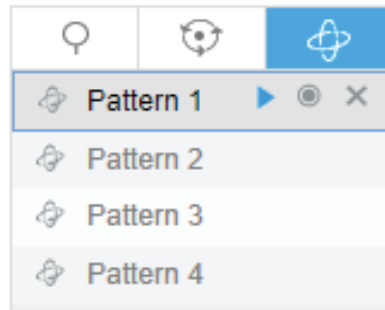
Step 3: Click  to activate recording the panning, tilting and zooming actions.

Step 4: Use the PTZ controller buttons to move the lens to an interesting position.

Step 5: Click  to save all the pattern settings.

Note:

The percentage the of number on the OSD is the remaining space of pattern. Start with 100% and run out of 0%.



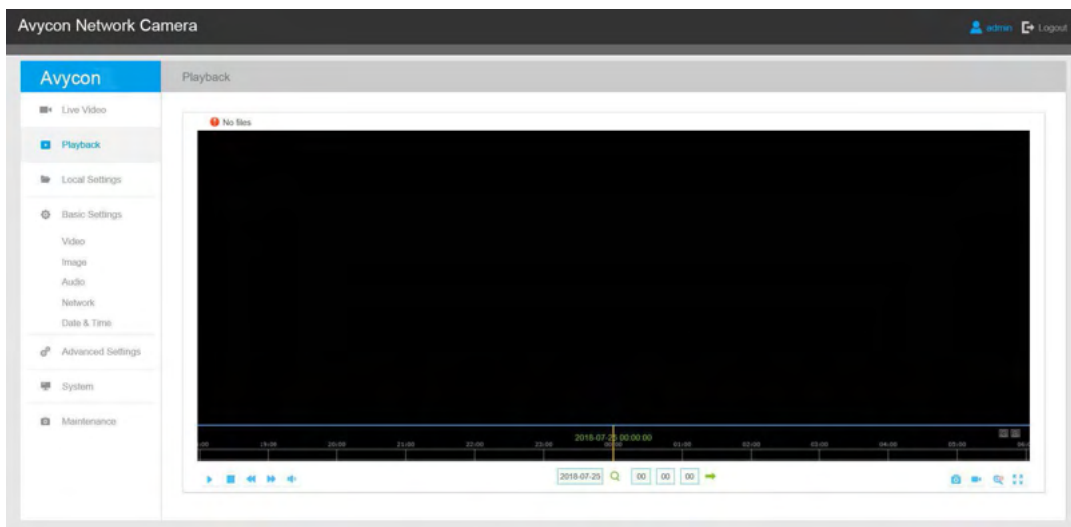
Note:

The three buttons behind the Pattern list mean: Play, Record and Delete. When configuring the pattern, pan, and tilt are valid but the limit stops and auto flip will be invalid. Also, 3D Positioning operation is not supported.

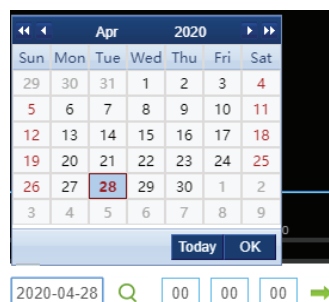
Playback

This section explains how to view the recorded video files stored in SD cards or NAS.

Step 1: Click Playback on the menu bar to enter playback interface.



Step 2: Click the date button, choose the date when the date window pops up.



Note:

- The date with bright red means current date; one with a dark red number and white background means weekend day; one with a dark red number and blue background means that the date is selected now.
- It supports Plugin-free Playback function which allows to preview the playback without installing plugin in Firefox (Version 65 and above) & Google Chrome (Version 69 and above). You need to configure the browser properties before using this function. Please refer to for more browser configuration.

Step 3: Click  to play the video files found on this date.

The toolbar on the bottom of playback interface can be used to control playing progress.

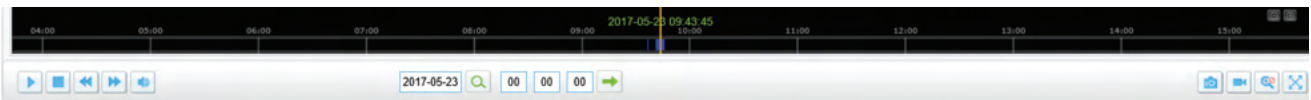


















Table 4: Description of the buttons

Button	Operation
	Play
	Pause
	Stop
	Speed Down
	Speed Up
	Audio On / Off
	Search
	Go To
	Time Narrow / Expand
	Start / Stop Recording
	Snapshot
	Zoom On / Off
	Full Screen

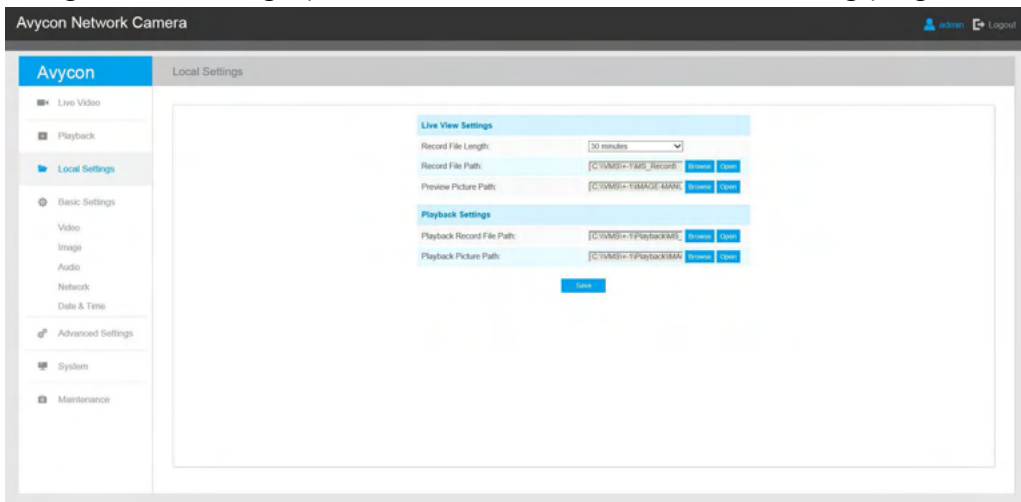
Note:

Drag the progress bar with the mouse to locate the exact playback point. You can also input the time and click  to locate the playback point in the Set Playback Time field. You can also click  /  to zoom out/in the progress bar.



Local Settings

Record File Length and storage path can be customized in this setting page.



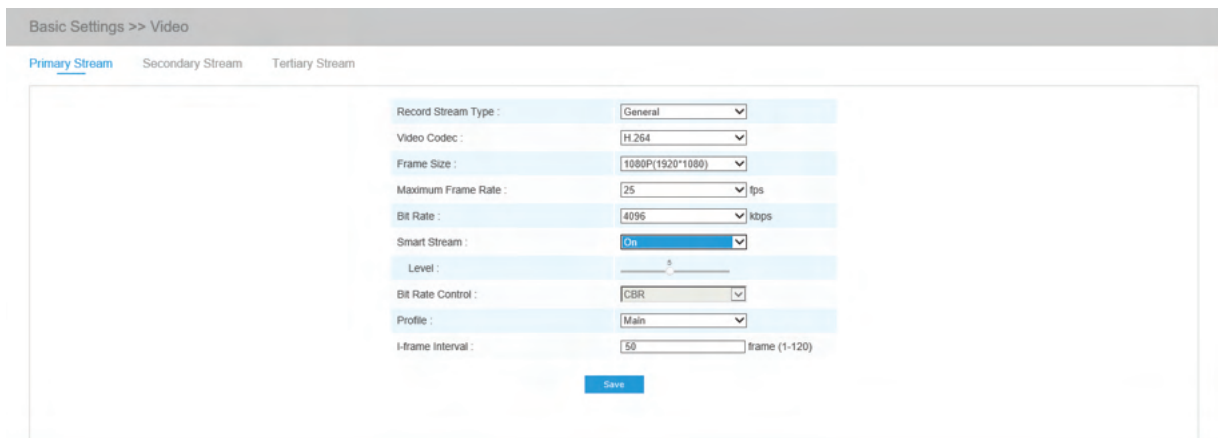
Basic Setting

Video

Stream parameters can be set in this module, adapting to different network environments and demands.

Primary Stream Settings

Record Stream Type (General)



Record Stream Type (Event)

Basic Settings >> Video

Primary Stream Secondary Stream Tertiary Stream

Record Stream Type :	Event
Enable Event Stream :	<input checked="" type="checkbox"/>
Video Codec :	H.264
Frame Size :	1080P(1920*1080)
Maximum Frame Rate :	25 fps
Bit Rate :	4096 kbps
Smart Stream :	Off
Bit Rate Control :	CBR
Profile :	Main
I-frame interval :	50 frame (1-120)

Save

Secondary Stream Settings

Basic Settings >> Video

Primary Stream **Secondary Stream** Tertiary Stream

Enable :	<input checked="" type="checkbox"/>
Video Codec :	H.265
Frame Size :	640*480
Maximum Frame Rate :	25 fps
Bit Rate :	512 kbps
Smart Stream :	On
Level :	5
Bit Rate Control :	CBR
Profile :	Main
I-frame interval :	50 frame(1-120)

Save

Tertiary Stream Settings

Basic Settings >> Video

Primary Stream Secondary Stream **Tertiary Stream**

Enable :	<input checked="" type="checkbox"/>
Video Codec :	H.264
Frame Size :	640*480
Maximum Frame Rate :	25 fps
Bit Rate :	1024 kbps
Smart Stream :	On
Level :	5
Bit Rate Control :	CBR
Profile :	Main
I-frame interval :	50 frame(1-120)

Save

Table 5: Description of the buttons

Parameter	Function Introduction
Record Stream Types	<p>General & Event are available only for Primary Stream. General refers to continuous record video, while Event includes events that can trigger alarms, such as Motion, Exception, LPR, and so on.</p> <p>This item can separately set different bit rates and frame rates for different Recording Stream Types. If the user chooses Event, the video will be recorded according to the configuration of video stream type when an event happens, thereby greatly reducing the recording storage space.</p>
Enable Event Stream	This item is optional only if you selected the Event.
Video Codec	H.265/H.264/MJPEG are available
Frame Size	<p>Options include 5M(2592*1944)(only for 5MP Mini PTZ Bullet and 5MP Speed Dome), 4M(2592*1520)(only for 5MP Mini PTZ Bullet and 5MP Speed Dome), 3M(2304*1296), 1080P(1920*1080), 1.3M(1280*960), 720P(1280*720), D1 (704*576).</p> <p>For Secondary Stream, it includes 704*576, 640*480, 640*360, 352*288, 320*240, 320*192, 320*176.</p> <p>For Tertiary Stream, it include 1920*1080, 1280*720, 704*576, 640*480, 640*360, 352*288, 320*240, 320*192, 320*176.</p>
Maximum Frame Rate	Maximum refresh frame rate of per second
Bit Rate	Set the bitrate to 32~16384 Kbps. The higher value corresponds to the higher video quality, and the higher bandwidth is required as well.

Parameter	Function Introduction
Smart Stream	<p>Smart Stream mode remarkably reduces the bandwidth and the data storage requirements for network cameras while ensuring the high quality of images, and it is a 10-level adjustable codec.</p> <p>It is optional to turn On/Off Smart Stream mode.</p> <p>Level: Level 1~10 are available to meet your need.</p>
Bit Rate Control	<p>CBR: Constant Bitrate. The rate of CBR output is constant</p>
	<p>VBR: Variable Bitrate. VBR files vary the amount of output data per time segment</p>
Image Quality	<p>Low/Medium/High are available, this item is optional only if you select VBR.</p>
Profile	<p>The option is for H.264, Main/High/Base can be selected according to your needs</p>
I-frame Interval	<p>Set the I-frame interval to 1~120, 50 for the default. The number must be a multiple of the number of frames.</p>
JPEG Quality	<p>Low/Medium/High/Higher are available, this item is optional only if you selected the MJPEG of the number of frames.</p>

Note:

The options of Frame Size are variable according to the model selected.

Image

Display information, enhancement of image and Day/Night setting can be set in this module. OSD (On Screen Display) content and video time can be displayed to rich the image information.

Display

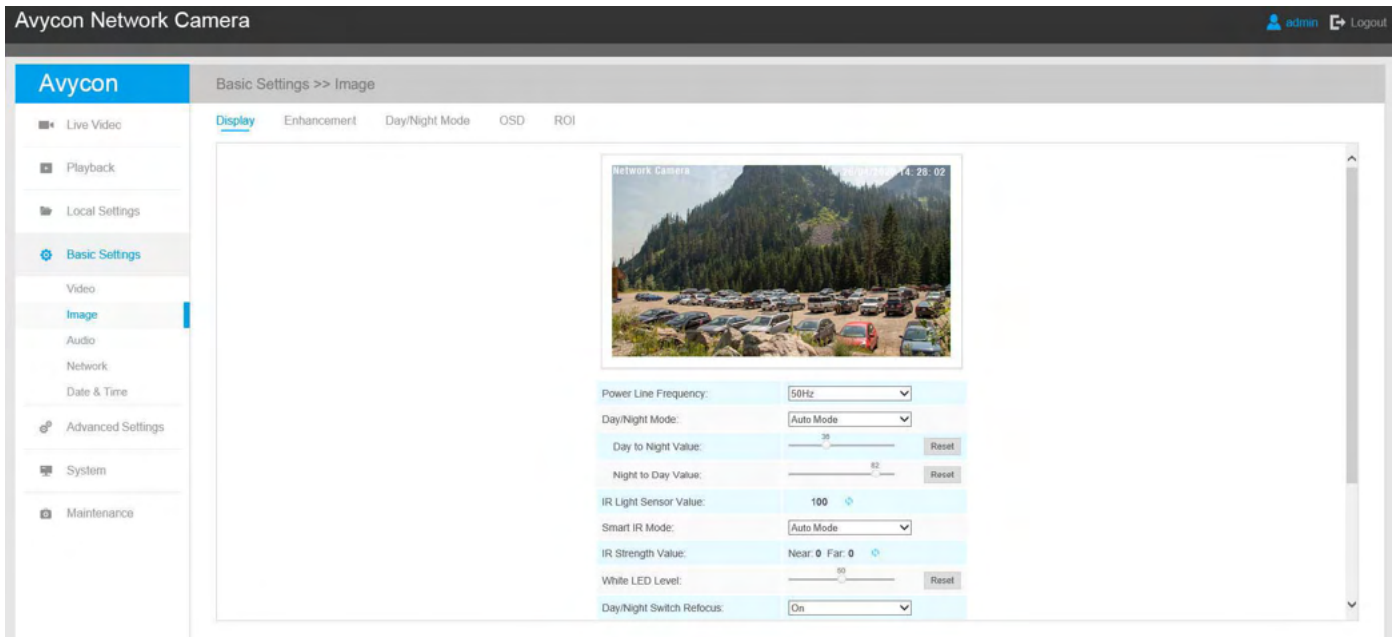


Table 6: Description of the buttons

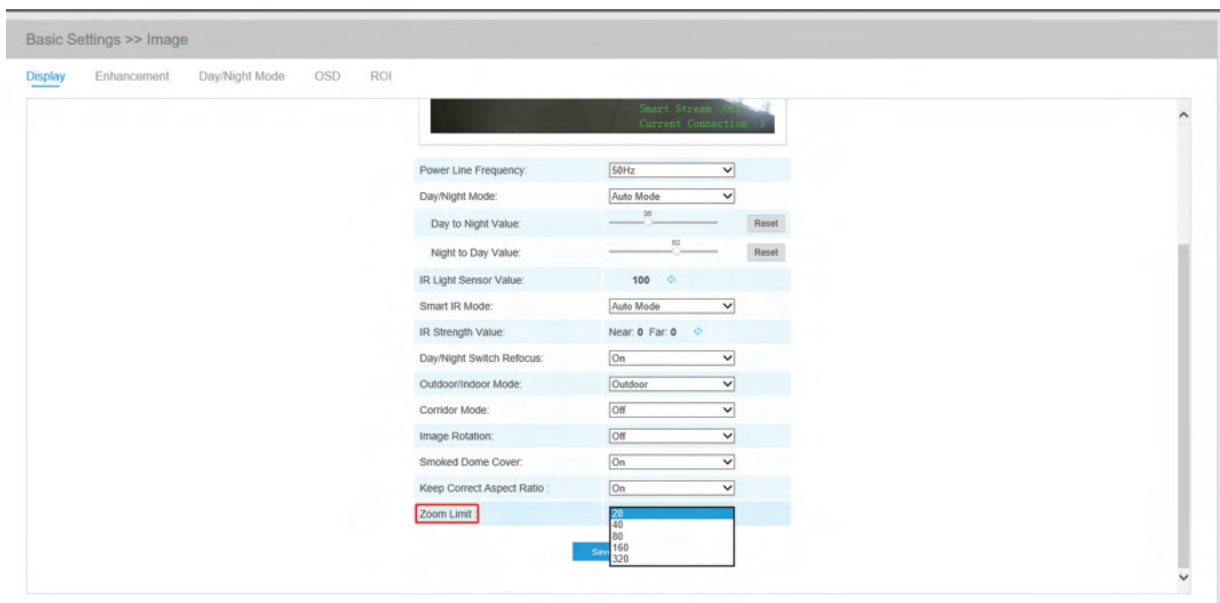
Parameter	Function Introduction
Power Line Frequency	60Hz flicker for 30fps camera model and 50Hz flicker for 25fps camera model
Day/Night Mode	<p>There are several parameters; such as Exposure Level, Maximum Exposure Time, IR-CUT Interval, and etc, that associated with this mode.</p> <p>Night Mode: Shown in live view based on Night Mode settings.</p> <p>Day Mode: Shown in live view based on Day Mode settings</p> <p>Auto Mode: Shown in live view based on environment, set the sensitivity for switching Day Mode to Night Mode, or Night Mode to Day Mode.</p> <p>Customize: Shown in live view based on your own settings' time to start/end Night Mode</p>

Parameter	Function Introduction
Day To Night Value	This is the sensitivity for switching Day Mode to Night Mode. When IR Light Sensor Current Value is lower than this value, it will switch Day Mode to Night Mode.
Night To Day Value	This is the sensitivity for switching Night Mode to Day Mode. When IR Light Sensor Current Value is higher than this value, it will switch Night Mode to Day Mode.
IR Light Sensor Value	The current value of the IR light sensor.
Smart IR Mode	<p>With the combination of the High Beam and Low Beam, The IR LEDs technology has been upgraded to provide better image clarity and quality regardless of the object distance. Also, the Low Beam and High Beam's brightness can be adjusted manually or automatically based on the Zoom ratio. Moreover, with the IR anti-reflection panel, the infrared light transmittance is highly increased.</p> <p>Support to set the strength of the IR to Auto Mode or Customize to achieve the best effect.</p> <p>Speed Dome has 8 LED lights, 4 are High Beams and 4 are Low Beams.</p> <p>And Mini PTZ Bullet has 4 LED lights, 2 are High Beams and 2 are Low Beams.</p>
Near view level	Adjust the light strength of Low-Beams LED light level from 0 to 100.
Far view level	Adjust the light strength of High-Beams LED light level from 0 to 100.
IR Strength Value	The current value of Low-Beams LED and High-Beams LED light value.
Day/Night Switch Refocus	With this option enabled, the camera will refocus when switching between day mode and night mode.
Outdoor/Indoor Mode	Select the indoor or outdoor mode to meet your needs and the night mode.,

Parameter	Function Introduction
Corridor Mode	<p>There are three options available, you can select one to meet your need</p> <p>Off: Keep the image in the normal direction</p> <p>Clockwise 90°: Rotate the image by 90° clockwise</p> <p>Anticlockwise 90°: Rotate the image by 90° anticlockwise</p>
Image Rotation	<p>There are four options available, you can select one to meet your need</p> <p>Off: Keep the image in normal direction</p> <p>Rotating 180°: Upside down the image</p> <p>Flip Horizontal: Flip the image horizontally</p> <p>Flip vertical: Flip the image vertically</p>

Note:

The PTZ Network Camera which has an optical zoom of 20X or above can support the Zoom Limit function. Take the 20X Mini PTZ Dome camera as an example037, the PTZ camera will start the self-check function at once.



Enhancement

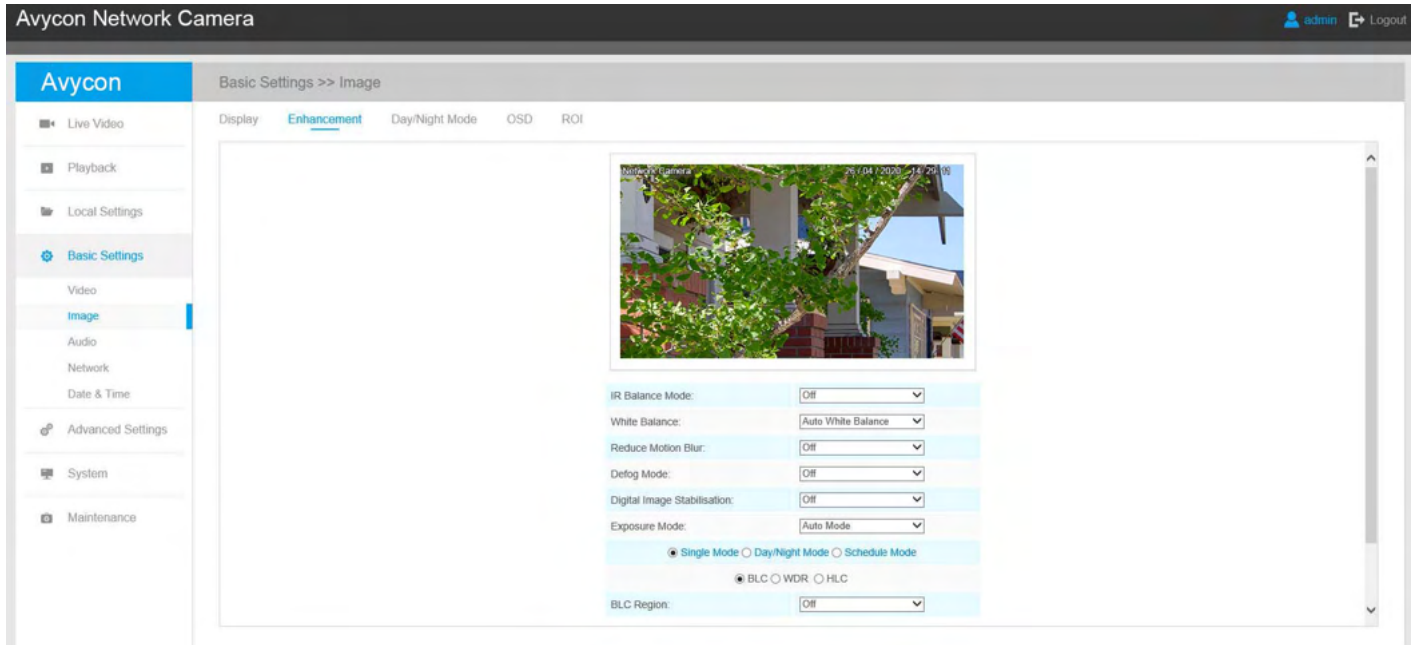


Table 7: Description of the buttons

Parameter	Function Introduction
IR Balance Mode	<p>There is an option to turn On/Off the IR LED.</p> <p>IR Balance Mode would avoid the problem of overexposure and darkness, and the IR LED will change according to the actual illumination.</p>

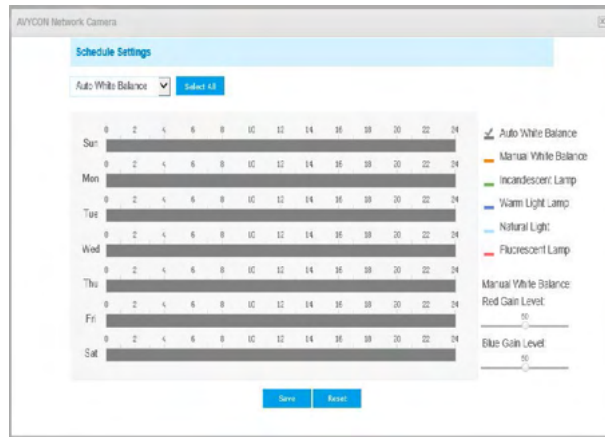
Parameter	Function Introduction
White Balance	<p>To restore white objects, removed color distortion caused by the light of the environment</p> <p>Auto White Balance: This option will automatically enable the White Balance function</p> <p>Manual White Balance: This option is only for H.265 series. Set Red Gain Level and Blue Gain Level manually.</p> <p>Incandescent Lamp: Select this option when light is similar with incandescent lamp</p> <p>Warm Light Lamp: Select this option when light is similar with warm light lamp</p> <p>Natural Light: Select this option when there is no other light but natural light</p> <p>Fluorescent Lamp: Select this option when light is similar with Fluorescent Lamp</p> <p>Schedule mode: Select this option that you can customize the schedule to enable/disable above modes</p>
Reduce Motion Blur	<p>Enable this function to reduce the motion blur of objects effectively.</p> <p>You can adjust the deblur level from 1 to 100.</p>
Defog Mode	<p>This mode helped the image look better when effect in foggy weather.</p>
Digital Image Stabilization	<p>Decrease the blur and shakiness of the image.</p>

Parameter	Function Introduction
Exposure Mode	<p>Auto Mode, Manual Mode, and Schedule Mode are available.</p> <p>Auto Mode: The camera will adjust the brightness according to the light environment automatically.</p> <p>Manual Mode: The camera will adjust the brightness according to the value you set, you can set the exposure time from 1~1/100000s, the higher the value is, the brighter the image is.</p> <p>Schedule Mode: You can customize the schedule to enable/disable Auto Mode and Manual Mode.</p>
Single Mode	Set single mode for BLC/WDR/HLC.
Day/Night Mode	Support BLC/WDR/HLC both Day Enhancement Mode/Night Enhancement Mode. These mode are separate.
Schedule Mode	Set schedule mode for BLC/WDR/HLC.
BLC Region	<p>Off, Customize, and Centre are available (in single mode, only enable when WDR is disable)</p> <p>Off: Calculate the full range of view and offer appropriate light compensation.</p> <p>Customize: This option enables you to customize inclusive or exclusive region manually.</p> <p>Centre: This option will automatically add an inclusive region in the middle of the window and give the necessary light compensation.</p>

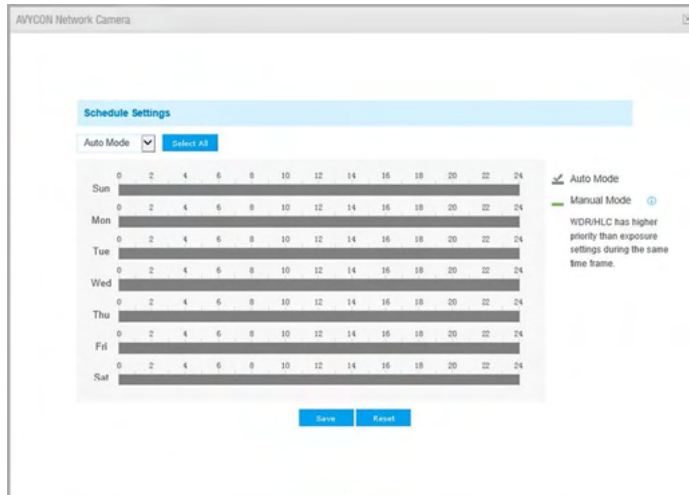
Parameter	Function Introduction
Wide Dynamic Range	<p>This function which can capture and display both bright and dark areas in the same frame enables details of objects in both bright and dark areas to be visible.</p> <p>Off: Disable WDR function.</p> <p>On: Enable the WDR, there are Low/High/Auto three levels</p> <p>Customize: Customize the schedule to enable/disable the WDR function and set the levels with Low/High/Auto</p>
Wide Dynamic Level	Set WDR with Low/High/Auto level
Anti-flicker Level	Reduce flickers that appear on screen in some lighting conditions and there are 10 levels of anti-flicker adjustments.
Anti-flicker Level	<p>This function is only for H.265 series to adjust the brightness to a normal range when the light is strong.</p> <p>Off: Disable HLC function</p> <p>General Mode: Enable the general mode of HLC, and has a setting for HLC Level.</p> <p>Enhanced Mode: Enable the enhanced mode of HLC, and has a setting for HLC Level.</p>
HLC Level	Select level for HLC
Day Enhancement Mode	BLC/WDR/HLC are available.
Night Enhancement Mode	BLC/WDR/HLC are available.
Schedule Setting	Customize the schedule to enable/disable BLC/ WDR/ HLC mode

Note:

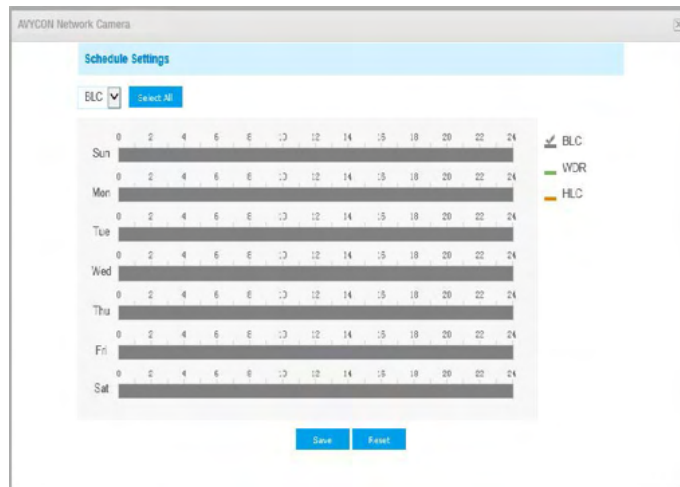
- You can customize the schedule to enable/disable the different White Balance modes.



- You can customize the schedule to enable/disable the different exposure modes.



- You can customize the schedule to enable/disable **BLC/WDR/HLC** mode.



- WDR/HLC has a higher priority than exposure settings at the same time frame.
- Defog Image



- HLC Image



Day /Night Mode

Avycon Network Camera admin Logout

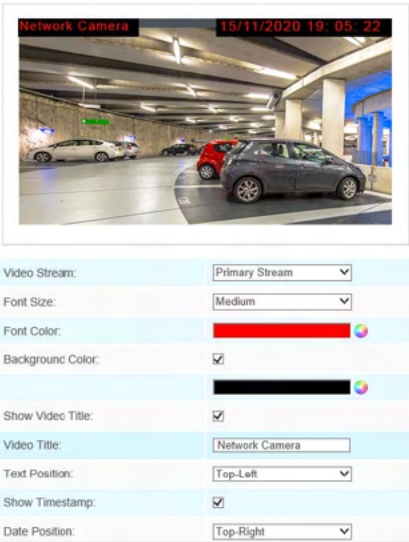
Basic Settings >> Image

Display Enhancement **Day/Night Mode** OSD ROI

Day/Night Mode									
Day/Night Mode	Exposure Level	Minimum Shutter	Maximum Shutter	Limit Gain Level	IR-CUT Latency	IR-CUT	LED	Color Mode	
Night Mode:	5	1/25	1/1000000	100	5s	Off	IR LED On	B/W	
Day Mode:	5	1/25	1/1000000	100	5s	On	All LED Off	Color	

Schedule Mode									
Timer	Exposure Level	Minimum Shutter	Maximum Shutter	Limit Gain Level	IR-CUT Latency	IR-CUT	LED	Color Mode	
<input type="checkbox"/> 00:00 - 24:00	5	1/25	1/1000000	100	5s	Off	All LED Off	B/W	
<input type="checkbox"/> 00:00 - 24:00	5	1/25	1/1000000	100	5s	Off	All LED Off	B/W	
<input type="checkbox"/> 00:00 - 24:00	5	1/25	1/1000000	100	5s	Off	All LED Off	B/W	
<input type="checkbox"/> 00:00 - 24:00	5	1/25	1/1000000	100	5s	Off	All LED Off	B/W	
<input type="checkbox"/> 00:00 - 24:00	5	1/25	1/1000000	100	5s	Off	All LED Off	B/W	

Table 9: Description of the buttons

Parameter	Function Introduction
Video Stream	Enable to set OSD for primary stream and secondary stream
Font Size	Smallest/Small/Medium/Large/Largest/Auto are available for title and date.
Font Color	Enable to set a different color for title and date.
Background Color	<p>Enable to set different colors for display information background on-screen You can set different colors for font and background of the image, then the image OSD will show as below:</p>  <p>The screenshot shows a video stream of a parking garage. The OSD overlay consists of a black bar at the top with white text. The left side contains the text 'Network Camera' and the right side contains the timestamp '15/11/2020 19:05:22'. Below the video, there is a settings panel with the following options:</p> <ul style="list-style-type: none"> Video Stream: Primary Stream (dropdown) Font Size: Medium (dropdown) Font Color: Red (color picker) Background Color: [checked] (checkbox) with a black color bar and color picker Show Video Title: [checked] (checkbox) Video Title: Network Camera (text input) Text Position: Top-Left (dropdown) Show Timestamp: [checked] (checkbox) Date Position: Top-Right (dropdown)
Show Video Title	Check the checkbox to show the video title
Video Title	Able to customize the OSD content.
Text Position	OSD display can be position on the image.
Show Timestamp	Check the checkbox to display date on the image.
Date Position	Date display can position on the image.
Date Fomat	Can format the date
Copy to Other Streams	Able to copy the settings to other streams.

ROI

Region of interest (often abbreviated ROI), is a selected subset of samples within a dataset identified for a particular purpose. Users can select up to 8 key regions of a scene to transmit through separate streams for targeted preview and recording.

By using AVYCON ROI technology, more than 50% of the bit rate can be saved, therefore less bandwidth is demanded and the storage usage is reduced. So according to this, you can set a small bit rate for high resolution.

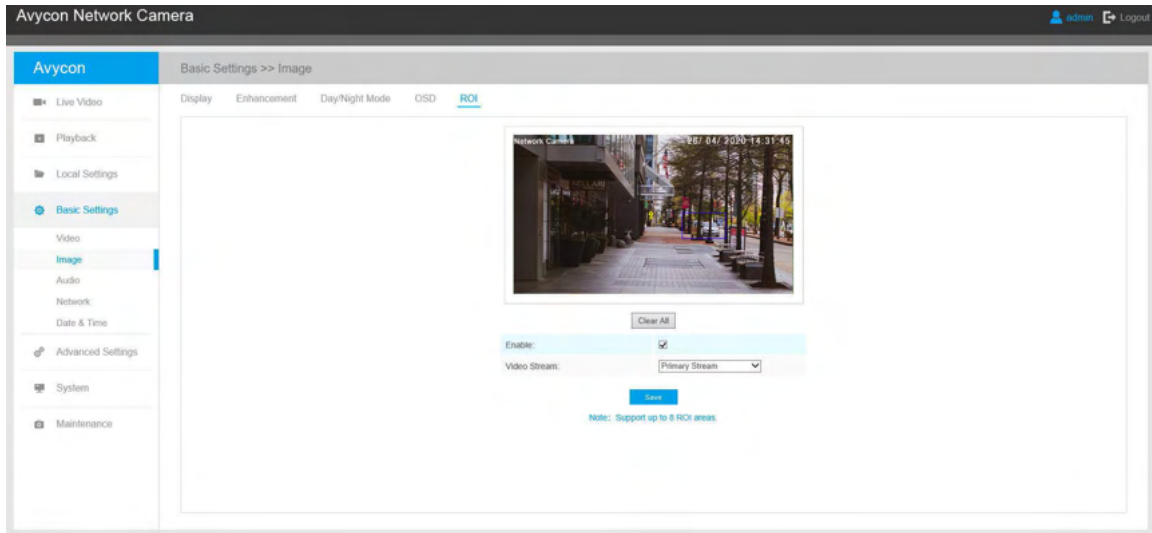


Table 10: Description of the buttons

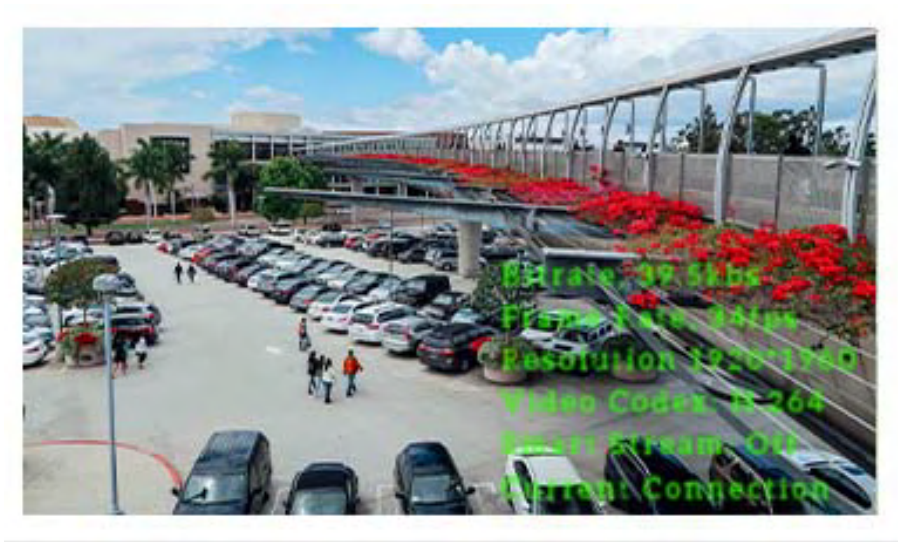
Parameter	Function Introduction
Enable	Check the checkbox to enable the ROI function.
Clear All	Clear all areas you drew before.
Video Stream	Choose the Video Stream

Note:

You can set a low bit rate. For example, you can set a bit rate with 512Kbps and a resolution with 1080P, thus you can see the image quality of ROI is more clear and more fluent than the other region.

Audio

This audio function allows you to hear the sound from the camera or transmit your sound to the camera side. Two-way communication is also possible to be achieved with this feature. The alarm can be triggered when the audio input is above a certain alarm level you set, and configured audio can be played when an alarm occurs.



Enable Audio:	<input checked="" type="checkbox"/>
Audio Mode:	Both Audio Input & Output

Audio Input

Denoise:	<input type="checkbox"/>
Encoding:	AAC LC
Sample Rate:	48KHz
Audio Bit Rate:	144kbps
Input Gain:	<input type="range" value="79"/>

Audio Output

Auto Gain Control:	<input checked="" type="checkbox"/>
Output Volume:	<input type="range" value="78"/>

Save

Table 11: Description of the buttons

Parameter	Function Introduction
Enable Audio	Check on the check box to enable audio feature
Audio Input	<p>Denoise: Set it as On/Off. When you set the function on, the noise detected can be filtered.</p> <p>Encoding: G.711-ULaw, G.711-ALaw, AAC LC, G.722 and G.726 are available</p> <p>Audio Bit Rate: The function is available only for AAC LC, and supports up to 256kbps</p> <p>Sample Rate: 8KHz, 16KHz, 32KHz, 44.1KHz, and 48KHz are available</p> <p>Input Gain: Input audio gain level, 0-100</p> <p>Alarm Level: Alarm will be triggered if voice alarm is enabled and input gained volume is higher than the alarm level, 1-100</p>
Audio Output	<p>Auto Gain Control: This function is only for H.265 series, improve the quality of audio</p> <p>Output Volume: Adjust volume of output</p>

You can upload up to 5 audio files manually to Flash or SD Card on the Audio web page and you can also edit the audio file's name when upload.

The screenshot shows a web interface for audio file management. At the top, there is a dropdown menu for 'Audio File Storage Type' set to 'Flash'. Below this is a section titled 'Audio File Upload' containing an input field for 'Audio File Name', a 'Browse...' button for selecting the audio file, and an 'Upload' button. At the bottom, there is a table with the following content:

ID	Audio File Name	Delete
1	audio	

Note: Only support '.wav' audio files with codec type PCM/PCMU/PCMA, 64kbps or 128kbps bitrate and no more than 500k!

Note:

Only support '.wav' audio files with codec type PCM/PCMU/PCMA, 64kbps or 128 kbps and no more than 500k.

Network

TCP/IP

The screenshot shows a network configuration form with the following fields and values:

- Get IPv4 address automatically
- Use fixed IPv4 address
- IP Address: 192 . 168 . 8 . 156 [Test]
- IPv4 Subnet Mask: 255 . 255 . 252 . 0
- IPv4 Default Gateway: 192 . 168 . 8 . 1
- Preferred DNS Server: 8 . 8 . 8 . 8
- IPv6 Mode: Manual
- IPv6 Address: [Empty]
- IPv6 Prefix: [Empty]
- IPv6 Default Gateway: [Empty]

A blue "Save" button is located at the bottom center of the form.

Table 12: Description of the buttons

Parameter	Function Introduction
Get IPv4 Address Automatically	Get an IP address from the DHCP server automatically.
Use fixed IP address	<p>IPv4 Address: An address that used to identify a network camera on the network.</p> <p>IPv4 Subnet Mask: It is used to identify the subnet where the network camera is located.</p> <p>IPv4 Default Gateway: The default router address</p> <p>Preferred DNS Server: The DNS Server translates the domain name to IP address</p> <p>IPv6 Mode: Choose a different mode for IPv6: Manual/Route Advertisement/ DHCPv6</p> <p>IPv6 Address: IPv6 Address used to identify a network camera on the network</p> <p>IPv6 Prefix: Define the prefix length of IPv6 address</p> <p>IPv6 Default Gateway: The default router is IPv6 address.</p> <p>MTU: Maximum Transmission Unit. The default value is 1500. You can customize the value from 1200 to 1500 as needed.</p>

Note:

The Test button is used to test if the IP is conflicting.

HTTP

Table 13: Description of the buttons

Parameter	Function Introduction
HTTP Enable	Start or stop using HTTP.
HTTP Port	Web GUI login port by default is 80 which is the same as ONVIF port.
HTTPS Enable	Start or stop using HTTPS
HTTPS Port	Web GUI login port via HTTPS, the default is 443
HTTP Settings	Upload and set the SSL certificate.




Table 14: HTTP URL are as below:

Parameter	Function Introduction
HTTP Enable	Start or stop using HTTP
HTTP Port	Web GUI login port, the default is 80, the same with ONVIF port
HTTPS Enable	Start or stop using HTTPS
HTTPS Port	Web GUI login port via HTTPS by default is 443.
HTTP Settings	Upload and set the SSL certificate.

Table 14: HTTP URL are as below

Stream	URL
Main Stream	http://username:password@IP:port/ipcam/mjpeg.cgi
Secondary Stream	http://username:password@IP:port/ipcam/mjpeg.cgi
Tertiary Stream	http://username:password@IP:port/ipcam/mjpeg.cgi

RTSP

RTSP Port:	<input type="text" value="554"/>	
Playback Port:	<input type="text" value="555"/>	
RTP Packet:	<input type="text" value="Better Compatibility"/>	
Multicast Group Address:	<input type="text" value="239 . 6 . 6 . 6"/>	
QoS DSCP(0~63):	<input type="text" value="0"/>	

Save

Table 15: Description of the buttons

Stream	URL
RTSP Port	The port of RTSP by default is 554.
Playback Port	Playback Port The port of playback by default is 555.
RTP Packet	The two options are Better Capability and Better Performance. If your camera's image messes up, please switch these two options.
Multicast Group Address	Support multicast function
QoS DSCP	The valid value range of the DSCP is 0-63.

Table 16: RTSP URL are as below:

Stream	URL
Main Stream	rtsp://username:password@IP:port/main
Secondary Stream	rtsp://username:password@IP:port/sub
Tertiary Stream	rtsp://username:password@IP:port/third

Note:

- Get the format of RTSP URL by clicking " ⓘ " on the right side of RTSP Port.
- Get the playback tip by clicking " ⓘ " on the right side of Playback Port.
- DSCP refers to the Differentiated Service Code Point; and the DSCP value is used in the IP header to indicate the priority of the data.
- A reboot is required for the settings to take effect.
- The tertiary stream is only equipped on camera whose model with "-A" or "-B".

UPnP

Universal Plug and Play (UPnP) is a networking architecture that provides compatibility among networking equipment, software and other hardware devices. The UPnP protocol allows devices to connect seamlessly and to simplify the implementation of networks in the home and corporate environments. With the function enabled, you don't need to configure the port mapping for each port, and the camera is connected to the Wide Area Network via the router.

The screenshot shows a configuration interface for UPnP. At the top, there is a checkbox for "Enable UPnP:" which is currently unchecked. Below this is a section titled "Port Mapping" with a sub-header "Port Mapping". Underneath, there is a checkbox for "Enable Port Mapping:" which is also unchecked. Below that, there are two fields: "Name:" with a text input containing "UPnP" and "Type:" with a dropdown menu set to "Auto". At the bottom of the form is a blue "Save" button.

Protocol Name	External Port	Internal Port	Status
HTTP	21202	80	Invalid
RTSP	23202	554	Invalid
Playback	25202	555	Invalid

Table 17: Description of the buttons

Stream	URL
Enable	Check the checkbox to enable the UPnP function.
Enable Port Mapping	Check the checkbox to enable the Port Mapping.
Name	Name The name of the device that is detected online so it can be edited.
Type	<p>Auto: Automatically obtain the corresponding HTTP and RTSP port, without any settings.</p> <p>Manual: You need to manually set the appropriate HTTP port and RTSP Port. When choose Manual, you can customize the value of the port number by yourself</p>

DDNS:

DDNS allows you to access the camera via domain names instead of IP address. It manages to change IP address and update your domain information dynamically. You need to register an account from a provider.

DDNS is not running

Enable DDNS:	<input type="checkbox"/>
Provider:	<input style="width: 90%;" type="text" value="▼"/>
External HTTP Port :	<input style="width: 90%;" type="text"/>
External RTSP Port:	<input style="width: 90%;" type="text"/>
External Playback Port:	<input style="width: 90%;" type="text"/>
DDNS URL:	

Note: Recommend to enable and configure UPnP ports which can be used directly in DDNS.

Save

Table 18: Description of the buttons

Parameters	Function Introduction
Enable DDNS	Check the checkbox to enable DDNS service
Provider	Get support from DDNS provider. You can also customize the provider for DDNS.
Hash	A string used for verifying, only for "freedns.afraid.org"
User name	Account name from the DDNS provider, unavailable for "freedns.afraid.org"
Password	Account password, unavailable for "freedns.afraid.org"
Host name	DDNS name enabled in the account

Note:

- Please do the Port Forwarding of HTTP Port and RTSP Port before you use Avycon DDNS.
- Make sure that the internal and the external port number of RTSP are the same.

Email

Alarm video files can be sent to specific mail account through SMTP server. You must configure the email settings correctly before using it.

Enable:	<input type="checkbox"/>
User Name:	<input type="text" value="hdipnc"/>
Sender Email Address:	<input type="text" value="hdipnc@sina.com"/>
Password:	<input type="password" value="*****"/>
Email Server:	<input type="text" value="smtp.sina.com"/>
Email Port:	<input type="text" value="25"/>
Recipient Email Address1:	<input type="text" value="user@domain.com"/>
Recipient Email Address2:	<input type="text"/>
Encryption:	<input type="radio"/> SSL <input type="radio"/> TLS
Snapshot Settings	
Alarm Snapshot File Name:	<input type="text" value="Customize"/> <input type="button" value="Reset"/>
	<input type="text" value="&Device. &Y&M&D. &h&m"/> <input type="button" value="Reset"/>
	<input type="text" value="Network Camera_2021061"/> <input type="button" value="Reset"/>
Timing Snapshot File Name:	<input type="text" value="Add prefix"/> <input type="text"/>
<input type="button" value="Save"/> <input type="button" value="Test"/>	

Table 19: Description of the buttons

Parameters	Function Introduction
Enable	Check the checkbox to enable Email function.
User Name	The sender's name is usually the same as the account name.
Sender Email Address	Email address can send video files and is attached
Password	The password of the sender.
SMTP Server	The SMTP server IP address or host name (EX. smtp.gmail.com)
SMTP Port	The default TCP/IP port for SMTP is 25(not secured). For SSL/TLS port, it depends on the mail of the user.
Recipient Email Address 1	Email address can receive video files.
Recipient Email Address 2	Email address can receive video files.
Encryption	Check the checkbox to enable SSL or TLS if it is required by the SMTP server.
Alarm Snapshot File Name	Default(YYYY-MM-DD) / MM-DD-YYYY / DD-MM-YYYY / Add prefix/Overwrite with the base file name/ Customize is available.
Timing Snapshot File Name	Default(YYYY-MM-DD) / MM-DD-YYYY / DD-MM-YYYY / Add prefix/Overwrite with the base file name/ Customize is available.

Note:

You can refer to the following file name tip to customize the file name.

- File Name Tip:
- &Device - Device Name
- &Y - Year
- &M - Month
- &D - Day
- &h - hour
- &m - minute
- &s - second
- && - &

FTP

Alarm video files can be sent to a specific FTP server. You must configure the FTP settings correctly before using it.

FTP Server Settings	
Server Address:	<input type="text" value="192.168.5.1"/>
Server Port:	<input type="text" value="21"/>
User Name:	<input type="text" value="admin"/>
Password:	<input type="password" value="*****"/>
FTP over SSL/TLS(FTPS):	<input type="checkbox"/>
FTP Storage Settings	
Storage Path:	<input type="text" value="Child Directory"/>
Parent Directory:	<input type="text" value="Date"/>
Child Directory:	<input type="text" value="IP Address"/>
Alarm Action File Name:	<input type="text" value="Customize"/>
Video File Name:	<input type="text" value="YYYY-MM-DD"/>
Image File Name:	<input type="text" value="YYYY-MM-DD"/>
Timing Snapshot File Name:	<input type="text" value="Default(YYYY-MM-DD)"/>
Pre-record:	<input type="text" value="0 second"/>
<input type="button" value="Save"/> <input type="button" value="Test"/>	

Table 20: Description of the buttons

Parameters	Function Introduction
Server Address	FTP server address
Server Port	The port of the FTP server is generally 21.
User Name	User name used to log in to the FTP sever.
Password	User password
Storage Path	Storage Path where video and image will be uploaded to the FTP server. Four FTP storage path types are available, including Root Directory, Parent Directory, Child Directory, and Customize.
Parent Directory	Choose IP Address/ Device Name/ Date as the folder name of Parent Directory, or customize the folder name.

Parameters	Function Introduction
Child Directory	Choose IP Address/ Device Name/ Date as the folder name of Child Directory, or customize the folder name.
Multilevel Folder Name	If the storage path is more than two levels, enter the Multilevel FTP storage path manually.
Alarm Action File Name	Choose the default(YYYY-MM-DD) or customize the alarm action file name.
Video File Name	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DDYYYY/DD-MM-YYYY/ Add prefix are available.
Image File Name	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DDYYYY/ DD-MM-YYYY/ Add prefix are available.
Timing Snapshot File Name	The Default(YYYY-MM-DD) / MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite has the base file name are available.

Note:

- Parent Directory will be under Root Directory, and Child Directory will be under Parent Directory.
- You can refer to the following file name tip to customize the file name.

File Name Tip:

&Device - Device Name

&Y - Year

&M - Month

&D - Day

&h - hour

&m - minute

&s - second

&& - &

VLAN

A virtual LAN (VLAN) is any broadcast domain that is partitioned and isolated in a computer network at the data link layer (OSI layer 2). LAN is an abbreviation of local area network. VLANs allow network administrators to group hosts together even if the hosts are not on the same network switch. This can greatly simplify network design and deployment because VLAN membership can be configured through software. Without VLANs, grouping hosts according to their resource needs necessitates the labor of relocating nodes or rewiring data links.

VLAN Enable:	<input checked="" type="checkbox"/>
VLAN ID(1~4094):	<input type="text" value="1"/>
VLAN IP:	<input type="text" value="."/>
VLAN Netmask:	<input type="text" value="."/>
VLAN Gateway:	<input type="text" value="."/>

Save

Note:

How to set up VLAN in switches, please refer to your switches user manual.

PPPoE

This camera supports the PPPoE auto dial-up function. The camera gets a public IP address by ADSL dial-up after the camera is connected to a modem. You need to configure the PPPoE parameters of the network camera.

Enable PPPoE:	<input type="checkbox"/>
Dynamic IP:	<input type="text" value="0.0.0.0"/>
User Name:	<input type="text"/>
Password:	<input type="text"/>
Confirm Password:	<input type="text"/>

Save

Note:

- The obtained IP address is dynamically assigned via PPPoE, so the IP address always changes after rebooting the camera. To solve the inconvenience of the dynamic IP, you need to get a domain name from the DDNS provider (e.g. DynDns.com).
- The user name and password should be assigned by your ISP.

SNMP

You can set the SNMP function to get camera status, parameters, and alarm-related information and manage the camera remotely when it is connected to the network.

Before setting the SNMP, please download the SNMP software and manage to receive the camera information via SNMP port. By setting the Trap Address, the camera can send the alarm event and exception messages to the surveillance center.

The screenshot shows a configuration page for SNMP. It is divided into three main sections:

- SNMP v1/v2:** Contains checkboxes for 'SNMP V1 Enable' and 'SNMP V2c Enable'. Below these are text input fields for 'Write Community' (with 'public' entered) and 'Read Community' (with 'private' entered).
- SNMP v3:** Contains a checkbox for 'SNMP V3 Enable'. Below it are text input fields for 'Read Security Name' and 'Write Security Name', and dropdown menus for 'Level of Security' (both set to 'no auth, no priv').
- SNMP Port:** A text input field for 'SNMP Port' with the value '161' entered.

A 'Save' button is located at the bottom center of the form.

Table 21: Description of the buttons

Parameter	Function Introduction
SNMP v1/2/3	For the version of SNMP, please select the version of your SNMP software. SNMP v1: Provide no security SNMP v2: Require password for access SNMP v3: Provide encryption and the HTTPS protocol must be enabled
Write Community	Input the name of Write Community
Read Community	Input the name of Read Community
Read Security Name	Input the name of Read Security Community
Level of Security	There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)
Write Security Name	Input the name of Write Security Community
Level of Security	There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)
SNMP Port	The port of SNMP by default is 161.

Note:

- The settings of SNMP software should be the same as the settings you configure here.
- A reboot is required for the settings to take effect.

802.1x

The IEEE 802.1X standard is supported by the network cameras, and when the feature is enabled, the camera data is secured. User authentication is needed when connecting the camera to the network protected by the IEEE 802.1X.

Enable 802.1x:	<input checked="" type="checkbox"/>
Protocol:	EAP-MD5
Eapol Version:	1
User Name:	<input type="text"/>
Password:	<input type="password"/>
Confirm Password:	<input type="password"/>

Save

Bonjour

Bonjour is based on Apple's multicast DNS service. Bonjour devices can automatically broadcast their service information and listen to the service information of other devices.

If you don't know the camera information, you can use the Bonjour service on the same LAN to search for network camera devices and then to access the devices.

Enable Bonjour:	<input checked="" type="checkbox"/>
Bonjour Name:	MS-C2962-FPB-1CC316210991

Save

RTMP

Real-Time Messaging Protocol (RTMP) was initially a proprietary protocol for streaming audio, video, and data over the Internet, between a Flash player and a server. RTMP is a TCP-based protocol that maintains persistent connections and allows low-latency communication. It can realize the function of the live broadcast so that customers can log in to the camera wherever there is a network.

Enable RTMP:	<input checked="" type="checkbox"/>
Stream Type:	Secondary Stream ▼
Server Address:	rtmp://a.rtmp.youtube.com/

[Save](#)

For more information, please refer to Troubleshooting-How to Use RTMP for Live Broadcast

Note:

- For YouTube live broadcast, if you use a newly created account to live broadcast, you need to wait for 24hrs to activate the account for using the live function.
- For RTMP, since G.711 is not available for YouTube, you can only play video from Avycon network cameras with H.264 video coding and AAC audio coding on YouTube.
- Server Address in Network Camera RTMP interface needs to be filled with the format: rtmp://<Server URL >/< Stream key >, remember it needs '/' to connect between < Server URL > and <Stream key >.

More

Here you can set more functions, like Push Message Settings and ONVIF Settings.

Push Message Settings

Push Message Settings	
Enable Push Message:	<input checked="" type="checkbox"/>
Push Event Type:	Edit

When enabling the Push Message function, you can click [Edit](#) to choose the types of Events' message which will be pushed to Avycon App as shown below:

Push Event Type	
<input checked="" type="checkbox"/> All	
<input checked="" type="checkbox"/> Motion Detection	<input checked="" type="checkbox"/> Region Entrance
<input checked="" type="checkbox"/> Region Exiting	<input checked="" type="checkbox"/> Advanced Motion Detection
<input checked="" type="checkbox"/> Tamper Detection	<input checked="" type="checkbox"/> Line Crossing
<input checked="" type="checkbox"/> Loitering	<input checked="" type="checkbox"/> Human Detection
<input checked="" type="checkbox"/> People Counting	<input checked="" type="checkbox"/> Object Left/Removed
<input checked="" type="checkbox"/> Face Detection	

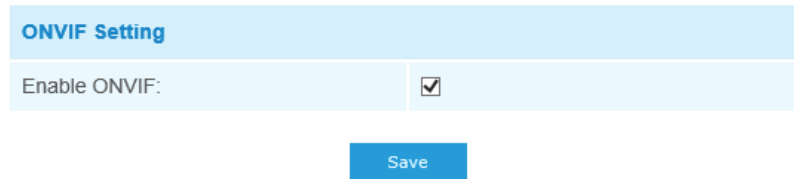
[Save](#)

Note:

here must be **Opened Alarm Push** of corresponding cameras in M-sight Pro APP

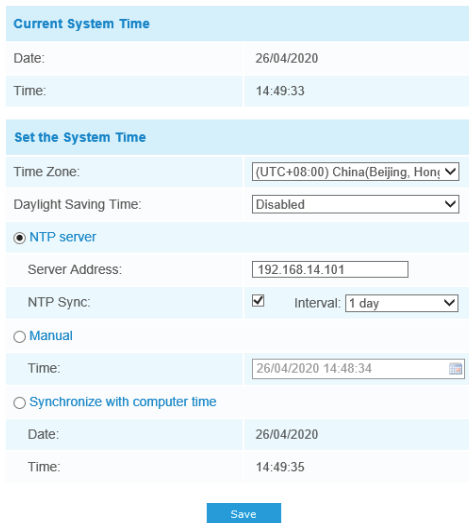
ONVIF Settings

Here you can choose whether to enable or disable the camera ONVIF function. If the camera ONVIF function is enabled, it can be searched out, added, and connected by third-party software through ONVIF protocols. Generally, the default status of the ONVIF function is enabled.



The screenshot shows a light blue header with the text "ONVIF Setting". Below it, there is a form with a label "Enable ONVIF:" followed by a checked checkbox. At the bottom of the form is a blue button labeled "Save".

Date & Time



The screenshot displays a "Date & Time" configuration page. It is divided into two main sections: "Current System Time" and "Set the System Time".

- Current System Time:** Shows "Date: 26/04/2020" and "Time: 14:49:33".
- Set the System Time:** Includes a "Time Zone:" dropdown menu set to "(UTC+08:00) China(Beijing, Hong Kong)", a "Daylight Saving Time:" dropdown menu set to "Disabled", and three radio button options:
 - NTP server (selected):** Includes a "Server Address:" text box with "192.168.14.101", an "NTP Sync:" checked checkbox, and an "Interval:" dropdown menu set to "1 day".
 - Manual:** Includes a "Time:" text box with "26/04/2020 14:48:34" and a calendar icon.
 - Synchronize with computer time:** Includes "Date: 26/04/2020" and "Time: 14:49:35".

A blue "Save" button is located at the bottom of the form.

Current System Time

Current date&time of the system

Set the System Time

Table 23: Description of the buttons

Parameter	Function Introduction
Time Zone	Choose a time zone for your location
Daylight Saving time	Enable the daylight saving time
NTP server	Input the address of NTP server
NTP Sync	Regularly update your time according to the interval time
NTP Sync	Regularly update your time according to the interval time
Synchronize with computer time	Synchronize the time with your computer

Advanced Settings

Storage

Before you start:

To configure record settings, please make sure that you have the network storage device within the network or the SD card inserted in your camera. Choose the storage mode according to your needs.

Storage Management

SD Card:

SD Card Settings

Total Size:0M Free Size:0M Used Size:0M
Format

Note: Please insert SD card.

Table 23: Description of the buttons

Parameter	Function Introduction
Format	Format SD card, the files in SD card will be removed
Mount/Unmount	Mount/Dismount SD card
Delete	Enable cyclic storage, when the free disk space reaches a certain value, it will automatically delete the files at a certain percentage according to your settings.

Storage Management

The network disk should be available within the network and properly configured to store the recorded files, etc.

NAS (Network-Attached Storage) means it connects the storage devices to the existing network and provides data and files services.

NAS Settings

Server Address:

File Path:

Mounting Type:

NFS ▼

Add

Table 24: Description of the buttons

Parameter	Function Introduction
Server Address	IP address of NAS server
File Path	Input the NAS file path, e.g. "\path".
Mounting Type	NFS and SMB/CIFS are available. And you can set the user name and password to guarantee security if SMB/CIFS is selected.

Note:

Up to 5 NAS disks can be connected to the camera.

Record Settings

Storage Settings

Enable Recycle Storage:

Pre-record:

[Save](#)

Schedule Settings

	Sun	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	Mon																										
	Tue																										
	Wed																										
	Thu																										
	Fri																										
	Sat																										

[Edit](#)

Table 25: Description of the buttons

Parameter	Function Introduction
Enable Recycle Storage	Enable/Disable Recycle Storage, if you enable this option, it will delete the files when the free disk space reaches a certain value.
Pre-record	Reserve the record time before the alarm, 0~10 sec.
Schedule Settings	Click the Edit button to edit record schedule

Note:

SD Card or NAS are available.

Snapshot Settings

Snapshot Settings

Enable Timing Snapshot:

Interval:

Save Into Storage: (Please mount storage device.)

File Name:

Upload Via FTP:

Upload Via SMTP:

Schedule Settings

Sun	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Mon																										
Tue																										
Wed																										
Thu																										
Fri																										
Sat																										

Table 26: Description of the buttons

Parameter	Function Introduction
Snapshot Settings	<p>Enable Timing Snapshot: Check the checkbox to enable the Timing Snapshot function.</p> <p>Interval: Set the snapshots in the interval. Input the number and choose the unit(millisecond, second, minute, hour, day)</p> <p>Note: The interval must be between 1 and 604800.</p> <p>Save Into Storage: Save the snapshots into SD card or NAS, and choose the file name to add time suffix or overwrite the base file name.</p> <p>Save Into NAS: Save the snapshots into NAS, and choose the file name to add time suffix or overwrite the base file name.</p> <p>Upload Via FTP: Upload the snapshots via FTP.</p> <p>Upload Via SMTP: Upload the snapshots via SMTP.</p> <p>Note: If you choose to add a time suffix, every snapshot picture will be saved, but if you choose to overwrite the base filename, only one latest picture will be saved. When you choose add overwrite the base file name to SD Card or NAS, will create a file named "Snapshot" to place the snapshot.place the snapshot.</p>
Schedule Settings	Click the Edit button to edit record schedule.

Explorer

Files will be seen on this page when they are configured to save into an SD card or NAS. You can set a time schedule every day for recording videos and save video files to your desired location.

Note:

Files are visible once SD card is inserted. Don't insert or pull out SD card when power on.

Video files are arranged by date. Set file type and start/end time to search out files. Each day files will be displayed under the corresponding date, from here you can copy and delete files etc. You can visit the files in SD card by ftp, for example, ftp://username:password@192.168.5.190 (user name and password are the same as the camera account and the IP followed is the IP of your device.).

Show entries Download

<input type="checkbox"/>	File Name	Start Time	End Time	Type	Size
Please mount storage device first!					

File Search

Main Type:

Sub Type:

Start Time:

End Time:

Showing 0 to 0 of 0 entries First Previous Next Last

Security

User

Manage Privilege

Allow Anonymous Viewing:

Security Question

Security Question:

Account Management

ID	User Name	Privilege
1	admin	Administrator

Admin Password:

User Level:

User Name:

Password:

Confirm:

User Privilege

<input checked="" type="checkbox"/> All	
<input checked="" type="checkbox"/> Live Video	<input checked="" type="checkbox"/> Playback
<input checked="" type="checkbox"/> Local Settings	<input checked="" type="checkbox"/> Video Settings
<input checked="" type="checkbox"/> Audio Settings	<input checked="" type="checkbox"/> Image Settings
<input checked="" type="checkbox"/> Network Settings	<input checked="" type="checkbox"/> RTSP Access
<input checked="" type="checkbox"/> Date & Time	<input checked="" type="checkbox"/> Event Settings
<input checked="" type="checkbox"/> Storage Settings	<input checked="" type="checkbox"/> Storage Format
<input checked="" type="checkbox"/> Security Settings	<input checked="" type="checkbox"/> SIP Settings
<input checked="" type="checkbox"/> Logs	<input checked="" type="checkbox"/> System
<input checked="" type="checkbox"/> Maintenance	

Note: You can only add 20 users

Table 27: Description of the buttons

Parameter	Function Introduction
Manage Privilege	<p>Allow anonymous viewing: Check the checkbox to enable visits from those who don't have an account of the device.</p>
Security Question	<p>Click the "Edit" button to set three security questions for your camera. In case you forget the password, you can click the "Forget Password" button on the login page to reset the password by answering three security questions correctly.</p> <div data-bbox="867 653 1216 911" data-label="Form"> </div> <p>There are twelve default questions below, you can also customize the security questions.</p> <div data-bbox="794 1014 1289 1262" data-label="List-Group"> <ul style="list-style-type: none"> What's your father's name? What's your favorite sport? What's your mother's name? What's your mobile number? What's your first pet's name? What's your favorite book? What's your favorite game? What's your favorite food? What's your lucky number? What's your favorite color? What's your best friend's name? Where did you go on your first trip? Customized Question </div>
Account Management	<p>Click the "Add" button, it will display the Account Management page. You can add account to the camera by entering Admin Password, User Level, User Name, New Password, Confirm and edit user privilege by clicking <input type="checkbox"/>. The added account will be displayed in the account list.</p> <p>Admin Password: You can add an account only after you enter the correct admin password.</p> <p>User Level: Set the privilege for the account.</p> <p>User Name: Input user name for creating an account.</p> <p>Password: Input password for the account.</p> <p>Confirm: Confirm the password.</p> <p>You can edit and delete the account in the account list under the admin account. For the default admin account, you can only change the password, and it cannot be deleted.</p>

Note:

- Support up to 20 users, including a default user and 19 custom added users.
- The operator privilege is all checked by default.
- For camera firmware version 4X.7.0.69 or above, it removes the default admin password and allows you to set a password when logging in for the first time. It also supports the set-up of the security questions for the devices. Users can reset the password by answering the correct security questions in case of forgetting the password, which is more convenient for users.

Online User

Here real-time status of user logging in camera will be shown.

Online User				
Refresh				
No.	User Name	User Level	IP Address	User Login Time
1	admin	Administrator	192.168.7.110	2021-02-20 10:12:29
2	admin	Administrator	192.168.7.79	2021-02-20 09:16:06
3	admin	Administrator	192.168.7.25	2021-02-19 17:12:02

Table 28: Description of the buttons

Parameters	Function Introduction
Refresh	FTP server address
No.	Record serial number of the user logging in camera. Note: <ul style="list-style-type: none">• There are at most 30 records shown on the list.• There is only one record if the same user logging on camera by the same IP address
User Name	Name of user logging in camera.
User Level	Level of user logging in camera.
IP Address	Device IP address where user logging in camera web located.
User Login Time	Camera system time of user logging in camera.

Access List

General Settings

Maximum Number of Concurrent Streaming: 9

IP Access List

Rule: Single

IP Address:

Add

Enable Access List Filtering:

Filter Type: Allow Deny

Save

Table 29: Description of the buttons

Parameters	Function Introduction
General Settings	Maximum number of concurrent streaming: Select the maximum number of concurrent streaming. Options include with No Limit, 1~10.
IP access list	Rule: Single, Network, and Range are available. IP address: Input the address to get the access to the device.
Enable access list filtering	Able to access or restrict access for some IP address.
Filter type	Access or restrict access

Security Service

SSH Settings

Enable SSH:

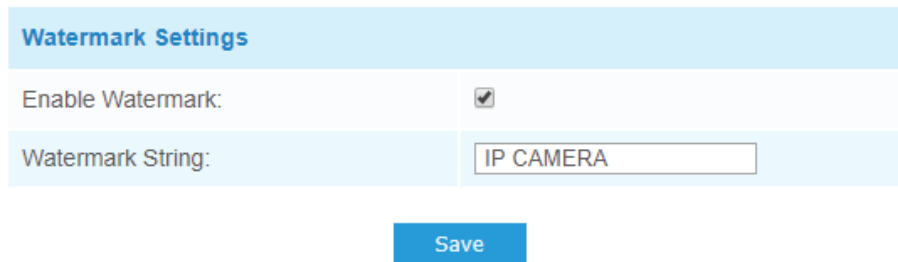
SSH Port: 6022

Save

Table 30: Description of the buttons

Parameter	Function Introduction
SSH Settings	Secure Shell (SSH) has many functions: it can replace Telnet and also provides a secure channel for FTP, POP, even for PPP.

Watermark



The screenshot shows a 'Watermark Settings' form. It has a light blue header with the title 'Watermark Settings'. Below the header, there are two rows of settings. The first row is 'Enable Watermark:' followed by a checked checkbox. The second row is 'Watermark String:' followed by a text input field containing the text 'IP CAMERA'. Below the form is a blue 'Save' button.

Watermarking is an effective method to protect the information security, realizing anti-counterfeiting traceability and copyright protection. Avycon network cameras support the Watermark function to ensure information security.

About

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SIP

The Session Initiation Protocol(SIP) is a signaling communications protocol; which, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol(IP) networks. This page allows users to configure SIP related parameters. Avycon network cameras can be configured as a SIP endpoint to call out when an alarm is triggered, or allow a permitted number to call in to check the video if the video IP phone is used. To use this function, the settings in the SIP page must be configured properly. There are two ways to get video through SIP, one is to dial the IP address directly, the other is account registration mode. the details are as follows:

Method 1: IP Direct mode

Dial on the camera's IP address directly through SIP phone, so you can see the video.

Note:

SIP phone and the camera should in the same network segment.

Method 2: Account registration mode

- Before using the SIP, you need to register an account for the camera from the SIP server.
- Register another user account for the SIP device from the same SIP server.
- Call the camera User ID from the SIP device, you will get the video on the SIP device.

SIP Settings

Unregistered

Enable:

Register Mode: Enable

User ID: 500

User Name: sipclient

Password: *****

Server Address: 192.168.5.101

Server Port: 5060

Connection Protocol: UDP

Video Stream: Secondary Stream

Max Call Duration: 1800 s
(0 means no limitation.)

Note: SIP supports Direct IP call.

Save

Table 31: Description of the buttons

Parameter	Function Introduction
Unregistered/Registered	SIP registration status. Display "Unregistered" or "Registered"
Enable	Start or stop using SIP
Register Mode	Choose to use Enable mode or Disable mode . Enable mode means to use SIP with register account. Disable mode refers to use SIP without register account, just use the IP address to call.
User ID	SIP ID
User Name	SIP account name
Password	SIP account password
Server Address	Server IP address
Server Port	Server port
Connection Protocol	UDP/TCP
Video Stream	Choose the video stream
Max Call Duration	The max call duration when use SIP

Note:

SIP supports Directly IP call.

Alarm Phone List

Phone Type:	<input type="text" value="Phone Number"/>
To Phone Number:	<input type="text"/>
Remark Name:	<input type="text"/>
Duration:	From <input type="text" value="00"/> : <input type="text" value="00"/> To <input type="text" value="24"/> : <input type="text" value="00"/>

Table 32: Description of the buttons

Parameter	Function Introduction
Phone Type	Phone Number(Call by phone number) & Direct IP Call(Check to accept peer to peer IP call).
To Phone Number/IP Address	Call by phone number or IP address.
Remark Name	Display name.
Duration	The time schedule to use SIP.

White List

Phone Type:	<input type="text" value="Phone Number"/>
Phone Number:	<input type="text"/>

Enable White List Number Filter:	<input type="checkbox"/>
----------------------------------	--------------------------

Table 33: Description of the buttons

Parameter	Function Introduction
Phone Type	Phone Number(Call by phone number) & Direct IP Call
To Phone Number/IP Address	Including the phone number or IP address on the white list.
Enable White List Number Filter	When enabled, only the designated phone number or IP address can visit.

PTZ

PTZ Settings provides you to configure the functions and parameters about Pan/Tilt/Zoom.

PTZ parameters mainly include the Basic parameters, Auto Home, PTZ Limits, Initial Position(Mini PTZ Bullet), Privacy Mask, Scheduled Tasks, Auto Tracking, Config Clear, RS485(Speed Dome).

Basic

PTZ OSD	
Zoom Status:	5 seconds <input type="text"/>
Pan & Tilt Status:	5 seconds <input type="text"/>
Preset Status:	5 seconds <input type="text"/>
Patrol Status:	Always Open <input type="text"/>
Pattern Status:	Always Open <input type="text"/>
Auto Scan Status:	Always Open <input type="text"/>
Preset	
Preset Freezing:	<input type="checkbox"/>
Speed	
Preset Speed:	5 <input type="text"/>
Manual Speed:	Medium <input type="text"/>
Patrol	
Patrol Recovering:	<input type="checkbox"/>
Patrol Recovery Time(5-720s):	10 <input type="text"/> s

Focus	
Focus Mode:	Semi-Auto
Minimum Focus Distance:	1 meter
Power Off Memory	
Set Resume Time:	Disable
Dehumidifying	
Fan Working Mode:	General
Save	

Table 34: Description of the buttons

Parameter	Function Introduction
PTZ OSD	You can configure the OSD parameter. You can also set the Zoom status OSD, Pan&Tilt Status, Preset Status with Always Close/Always Open/2s/5s/10s, and Patrol Status, Pattern Status, Auto Scan Status with Always Open/ Always Close.
Preset	If you enabled Preset Freezing , the live view of the preset position will be shown directly instead of showing both the moving path to the position and the live view. It can also reduce the use of bandwidth in the digital network system.
Speed	Preset Speed: It determines the speed of calling presets. Level 1~10 are available.
	Manual Speed: it is only for Speed Dome, and it determines the PTZ speed of Manually control. Low/ Medium/ High are available.
	Scan Speed: it is only for Speed Dome, and it determines the speed of Auto-Scan. Levels 1~10 are available.
Patrol	Patrol Recovering: Click to enable Patrol Recovering.
	Patrol Recovery Time: Set time for Patrol Recovering, which is between 5 to 720 seconds.

Parameter	Function Introduction
Focus	<p>Focus Mode: Three focus modes are available: Auto/ Semi-Auto/ Manual.</p>
	<p>Minimum Focus Distance: Set the minimum focus distance to adjust the step length of each focus. 1 meter, 1.5 meters, 3 meters, 6 meters, 10 meters, and 20 meters are available. The default minimum focus distance is 1 meter.</p>
Power Off Memory	<p>If the camera stop working for a longer time than pre-defined, its position of it will be recorded. And it will resume to the position after going back to the normal work from power off. You can set the resume time to 30 seconds, 60 seconds, 300 seconds, or 600 seconds to record its position.</p>
Dehumidifying	<p>Fan Working Mode: Three fan working modes are available: General/Enhancement/ Constant.</p> <p>General: The fans are turned on from 4am to 7am and 5pm to 8pm every day.</p> <p>Enhancement: The fans are turned on from 5pm to 7am every day.</p> <p>Constant: The fans work 24 hours a day.</p>



Enable:	<input checked="" type="checkbox"/>
Latency Time(5-720s):	<input type="text" value="5"/> s
Auto Home Mode:	<input type="text" value="Preset"/>
Auto Home Mode Number:	<input type="text" value="Current Location"/> <input type="button" value="Call"/>

Storage Management

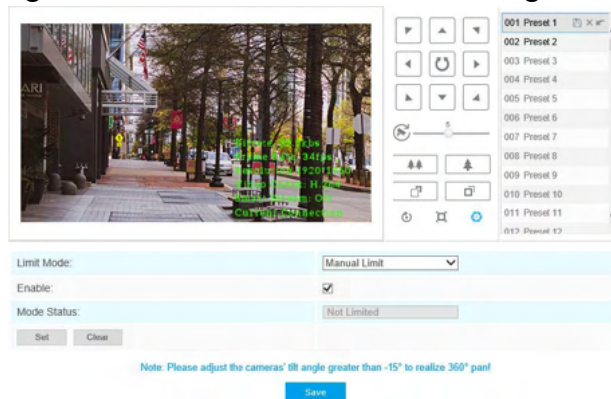
Auto Home allows the PTZ camera to return to a predefined Home Position automatically after a period of latency time. Check the checkbox to enable the Auto Home mode.

Table 35: Description of the buttons

Parameter	Function Introduction
Latency Time	Set a latency time to trigger Auto Home mode, 5-720s.
Auto Home Mode	Preset: A preset point will take effect when triggering the Auto Home
Auto Home Mode Number	Select a predefined preset in the list, press "Call" to check the location. Also go to support to select current location.

PTZ Limit

The PTZ camera can be programmed to move within the configurable PTZ Limits(Left/Right).



Step 1: Check the checkbox to enable the PTZ Limit function.

Step 2: Choose the limit mode for Manual limit or scanning limit.

Manual Limit:

When Manual limit stops are set, you can operate the PTZ control panel manually only in the limited surveillance area.

Scan Limit:

When Scan limit stops are set, the auto scan is performed only in the limited surveillance area.

Step 3 : Click the PTZ controller buttons to set the left/right limit stops; you can also call the defined presets and set them as the limits of the PTZ camera.

Step 4: Click **Set to Save the Limits** or **Clear to Clear the Limits**.

Initial Position

You can configure the Initial Position for PTZ cameras as a zero point.

Step 1: Click the PTZ control buttons as the Initial Position of the Mini PTZ bullet, you can also call a defined preset and set it as the Initial Position.

Step 2: Click Set to save the position as the **Initial Position**.

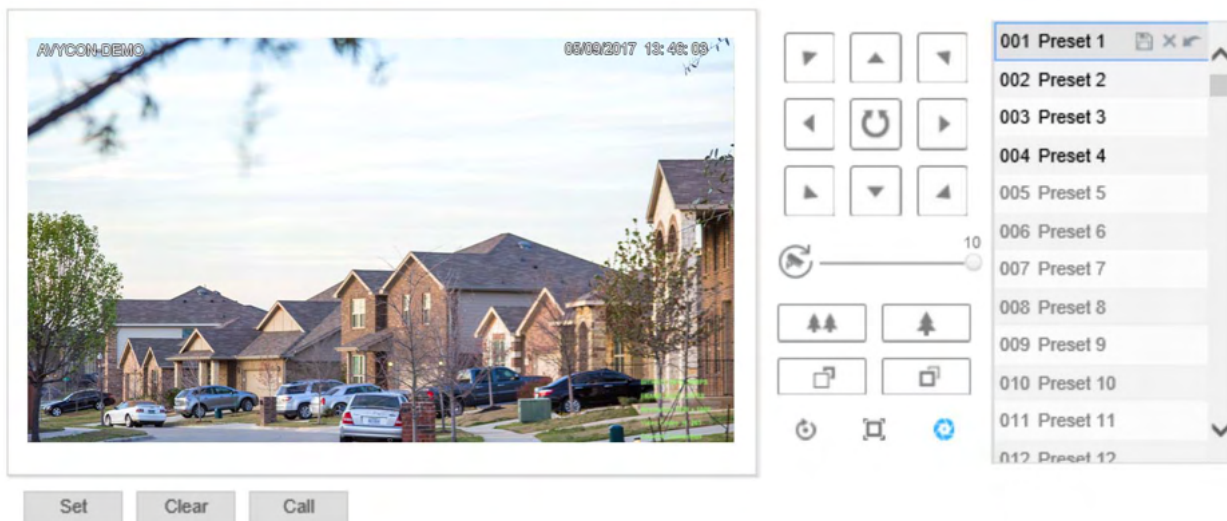


Table 36: Description of the buttons

Parameter	Function Introduction
Set	Click to set the Current Position as a Initial Position
Clear	Clear the Initial Position to default settings.
Call	Click to call the Initial Position .

Privacy Mask

Privacy mask enables to cover certain areas on the live video to prevent certain spots in the surveillance area from being viewed and recorded. The mask area does not move as the lens moves. You can set 28 mask areas at most, which include 24 mask areas and 4 mosaic areas.

Privacy Mask

You can set 24 mask areas at most.

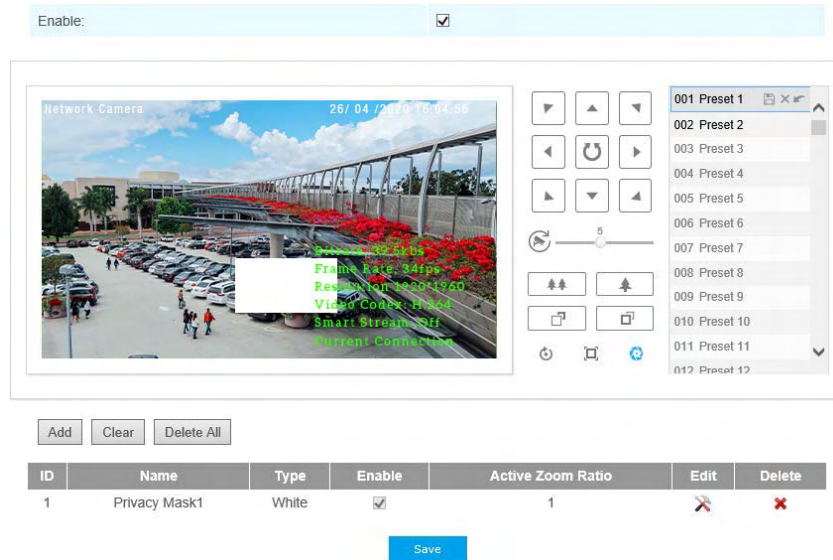


Table 37: Description of the buttons

Parameter	Function Introduction
Enable	Check the checkbox to enable the Privacy Mask Function
Add	Add the current drawing area as Privacy Mask .
Clear	Clear the current drawing area.
Clear All	Clear all areas you drew before.
Name	Support to customize the name of Privacy Mask.
Type	Select the color for the privacy areas. There are eight colors available: White, Black, Blue, Yellow, Green, Brown, Red, Violet
Active Zoom Ratio	Set the value of Active Zoom Ratio according to your need. The mask will only appear when the zoom ratio is greater than the predefined value.

Mosaic type of Privacy Mask (Optional)

You can set 28 mask areas at most, which includes 24 mask areas and 4 mosaic areas. The mosaic type can maintain the continuity of the picture and improve the visual effect.

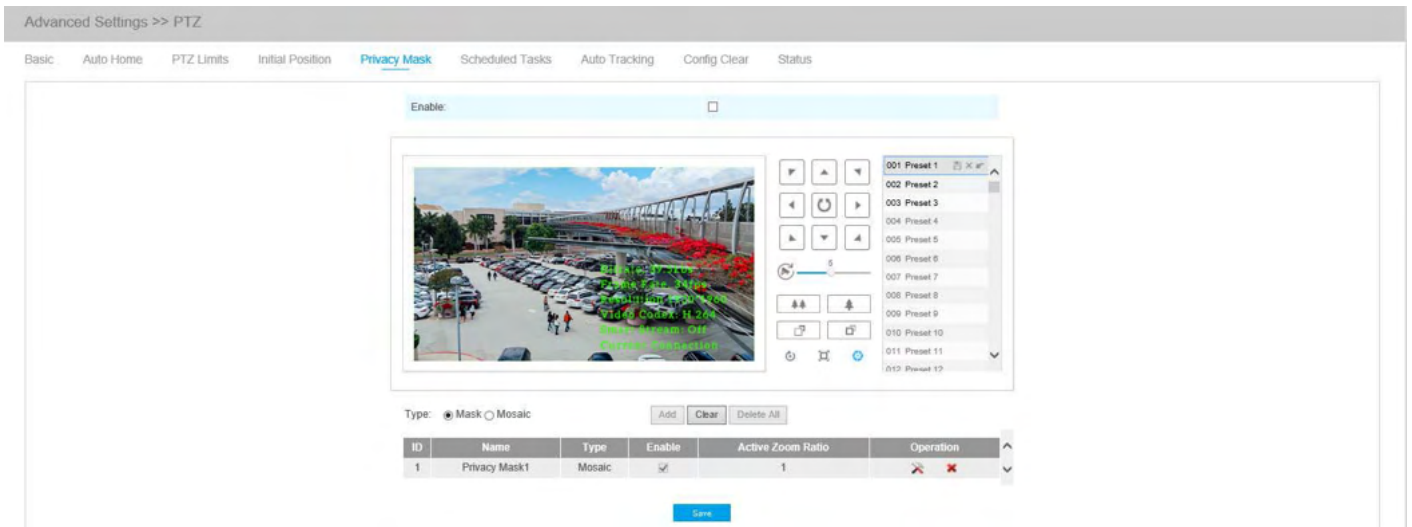




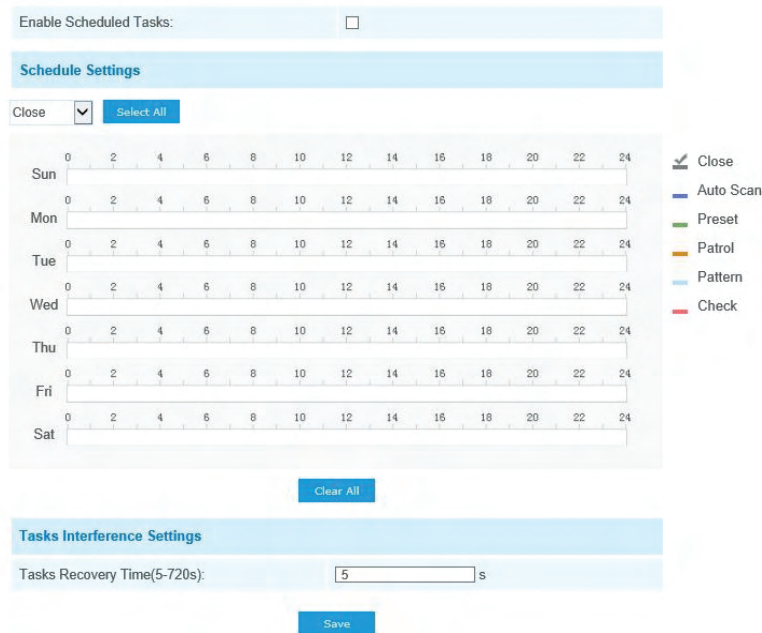
Table 38: Description of the buttons

Parameter	Function Introduction	
Type	Select the type to use for the privacy areas, there are two types available: Mask and Mosaic	
Operation		Change the color of Mask area, there are eight colors available: White, Black, Blue, Yellow, Green, Brown, Red, and Violet
		Delete the Privacy Mask Area

Schedule Tasks

You can configure the PTZ camera to perform a certain action automatically in a user-defined time period.

Step 1: Enter the Scheduled Task Settings interface:



Enable Scheduled Tasks:

Schedule Settings

Close

Sun 0 2 4 6 8 10 12 14 16 18 20 22 24

Mon 0 2 4 6 8 10 12 14 16 18 20 22 24

Tue 0 2 4 6 8 10 12 14 16 18 20 22 24

Wed 0 2 4 6 8 10 12 14 16 18 20 22 24

Thu 0 2 4 6 8 10 12 14 16 18 20 22 24

Fri 0 2 4 6 8 10 12 14 16 18 20 22 24

Sat 0 2 4 6 8 10 12 14 16 18 20 22 24

Tasks Interference Settings

Tasks Recovery Time(5-720s): s

- Close
- Auto Scan
- Preset
- Patrol
- Pattern
- Check

Step 2: Check the checkbox to Enable **Scheduled Task**.

Step 3: Set the **Schedule and Task Details**.

Step 4: Set the **Task Recovery Time**(from 5 to 720 seconds). You can set the time(a period of inactivity) before the PTZ camera starts the schedule and task details.

Step 5: Click button to save all the configurations..

Note:

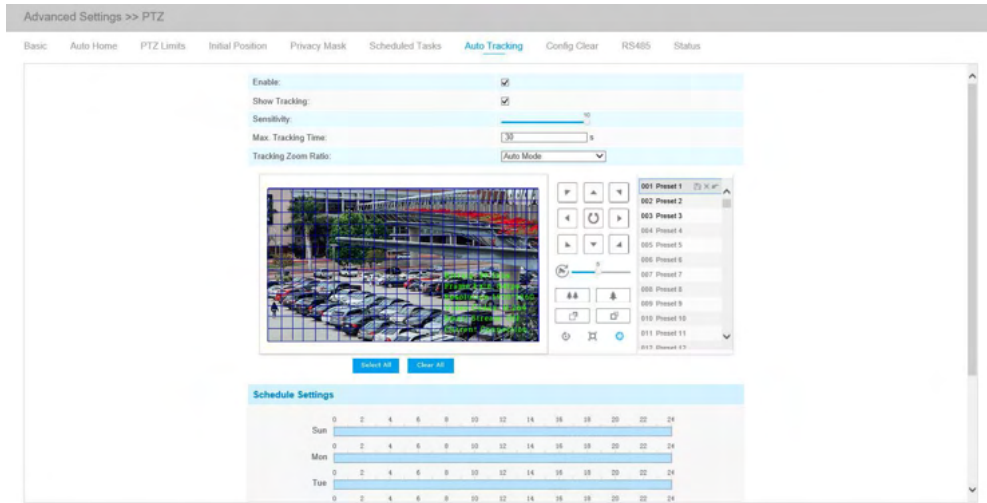
The time of each task cannot be overlapped. Up to 10 tasks can be configured for each day.

The **Scheduled Tasks function** is prior to the **Auto Home function**. When these two functions are set at the same time, only the Scheduled Tasks function takes effect.

You can click button to select or close all schedule of different kinds of tasks.

Auto Tracking

PTZ series cameras support to track the moving objects automatically after you configure this function.



Step 1: Check the checkbox to enable **Auto Tracking**.

Step 2: Enable **“Show Tracking”** to show tracking in **Auto Tracking Function**.

Step 3: Set **Detecting Sensitivity**.

Step 4: Set **Max. Tracking Time** which must be between 5~300s. The camera will stop tracking when the tracking time is used up.

Step 5: Set **Tracking Zoom Ratio** including Auto Mode and Customize. The camera will automatically adjust tracking zoom ratio when Auto Mode is chosen. When Customize is chosen, user needs to set the tracking zoom ratio first by adjusting zoom button, then camera will automatically track the moving objects according to customized tracking zoom ratio and the object's proportion in the picture at the moment. At the same time, the object will always keep the same proportion in the picture during the tracking process.

Step 6: Set **Auto Tracking Schedule**.

Step 7: Draw the screen to set the detection region.

Step 8: Set **Auto Tracking Schedule**.

Note:

Please turn off Auto Home before using **Auto Tracking**.

Config Clear

Clear All:	<input type="checkbox"/>
Clear All Presets:	<input type="checkbox"/>
Clear All Patrols:	<input type="checkbox"/>
Clear All Patterns:	<input type="checkbox"/>
Clear All Auto Homes:	<input type="checkbox"/>
Clear All PTZ Limits:	<input type="checkbox"/>
Clear Initial Position:	<input type="checkbox"/>
Clear All Privacy Masks:	<input type="checkbox"/>
Clear All Scheduled Tasks:	<input type="checkbox"/>

Save

Here you can clear PTZ configurations, including all PTZ configurations, Presets, Patrols, Patterns, Auto Homes, PTZ Limits, Initial Position(Mini PTZ Bullet), Privacy Masks, and Scheduled Tasks.

RS485

Protocol:	<input checked="" type="radio"/> Pelco-D <input type="radio"/> Pelco-P
Baudrate:	9600
Data Bit:	8
Stop Bit:	1
Parity:	None
Flow Control:	None
PTZ Address:	1

Save

Here you can clear configure the RS485 serial port to control the PTZ of Speed Dome. Protocol, Baudrate, Data Bit, Stop Bit, Parity, Flow Control, PTZ Address should be exactly the same as those of the control device.

Note:

This function is only for Speed Dome.

Logs:

The logs contain information about the time and IP that has accessed the camera through the web.

Show entries

Time	Main Type	Sub Type	Param	User	IP	Detail
2017-09-04 13:35:41	Operation	RTSP Session Stop	-	-	192.168.8.50	stop one session.
2017-09-04 13:29:18	Operation	RTSP Session Start	-	-	192.168.8.50	start one session.
2017-09-04 13:29:14	Operation	RTSP Session Stop	-	-	192.168.8.50	stop one session.
2017-09-04 13:28:54	Operation	RTSP Session Start	-	-	192.168.8.50	start one session.
2017-09-04 13:28:53	Operation	Login Remotely	-	admin	192.168.8.50	-
2017-09-04 05:50:00	Information	IR-CUT On	-	-	-	-
2017-09-03 18:35:25	Information	IR-CUT Off	-	-	-	-
2017-09-03 05:43:58	Information	IR-CUT On	-	-	-	-
2017-09-02 18:37:57	Information	IR-CUT Off	-	-	-	-
2017-09-02 05:41:22	Information	IR-CUT On	-	-	-	-
2017-09-01 18:43:37	Information	IR-CUT Off	-	-	-	-
2017-09-01 17:00:57	Operation	RTSP Session Stop	-	-	192.168.8.50	stop one session.
2017-09-01 16:55:24	Event	Motion Detection Stop	-	-	-	-
2017-09-01 16:55:19	Operation	RTSP Session Start	-	-	192.168.8.50	start one session.
2017-09-01 16:55:17	Operation	RTSP Session Stop	-	-	192.168.8.50	stop one session.

Showing 1 to 30 of 1,221 entries First Previous 1 2 3 4 5 ... 41 Next Last Go

Log Search

Main Type:

Sub Type:

Start Time:

End Time:

Save Period:

Table 39: Description of the buttons

Parameter	Function Introduction
Main Type	There are five main log types: All Type, Event, Operation, Information, Exception, and Event.
Sub Type	On the premise of the main type has been selected, select the subtype to narrow the range of logs.
Start Time	The time log starts.
End Time	The time log ends.
Log Export	Export the logs.
Save Period	Set the period of log saving, there are eight options to choose: Permanent and 30/60/120/180/240/300/360 Days.
Go	Input the number of logs' page.

Event

Basic Event

Motion Detection

Step 1: Check the checkbox to enable the **Motion Detection**.

Step 2: Select the **Detection Mode**.

Step 3: Set **Motion Region**.

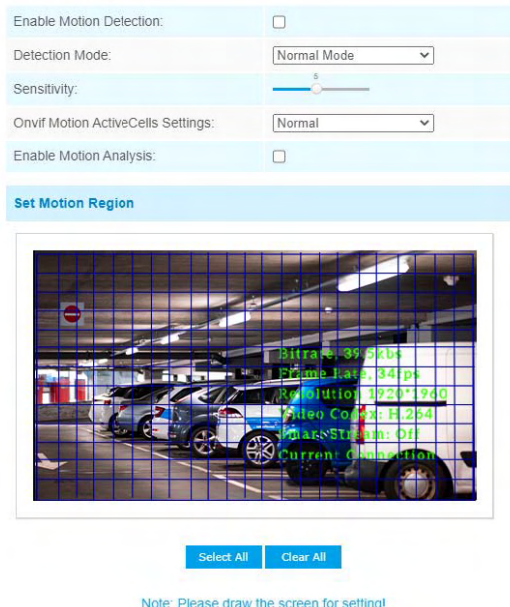


Table 40: Description of the buttons

Parameter	Function Introduction
Enable Motion Detection	Check the checkbox to enable Motion Detection function .
Detection Mode	Normal Mode and Advanced Mode are available for the option. When Advanced Mode is selected, users can configure up to 4 detection regions and sensitivity for each detection region.
Onvif Motion ActiveCells Settings	Normal and Compatible are available for the option. If the setting of motion region of the third-party software is different from ours, please set this option to Compatible.
Enable Motion Analysis	When Motion Analysis is enabled, the moving region will turn yellow so that the user can know exactly where the motion occurred. Note: Only support when HTTP is selected in Live View.

Parameter	Function Introduction
Select All	Click the button, the motion in the area will be detected.
Clear All	Click the button, the area drawn before will be removed.
Sensitivity	Sensitivity level, 1~10

Step 4: Set **Motion Detection Schedule**.

Schedule Settings

[Edit](#)

Step 5: Set **Alarm Action**.

Alarm Action

Save Into Storage:	<input type="checkbox"/> File Format: Record Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot Snapshot (Please enable the Email.)
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>
White LED:	<input type="checkbox"/>
PTZ Motion:	<input checked="" type="checkbox"/>

Table 41: Description of the buttons

Parameter	Function Introduction
Save Into Storage	Save alarm recording files into SD Card or NAS.
Upload Via FTP	Upload the recording files via FTP.
Upload Via SMTP	Upload the files via SMTP.
External Output	If the camera equips with External Output, you can enable the action after configuring the trigger duration.
Play Buzzer	If the camera equips with Buzzer, you can check the checkbox to enable the function.function.configuring to trigger duration.
Alarm to SIP Phone	Support to call the SIP phone after enable the SIP function.function.configuring the trigger duration.
HTTP Notification	Support to pop up the alarm news to specified HTTP URL. Note: <ul style="list-style-type: none"> ● Three HTTP notifications at most can be added to the same event. ● HTTP Notification supports Basic & Digest authentication.
White LED	When the alarm is triggered, White LED will turn on to warn the detected objects (Only for Mini PTZ Bullet).
PTZ Motion	When the motion alarm triggered, PTZ Motion allows the camera move the lens to the motion triggered position and zoom in.
Call Preset/ Call Patrol/Call Pattern (only for External Input)	When the motion alarm triggered, the specified preset /patrol/pattern can be called.

Note:

The HTTP notification function is just one way for the camera to send messages to VMS Software. And it's the VMS that defines what the messages mean and decides what to do after receiving this kind of message. So, we can use the HTTP Notification function of our cameras only if the VMS supports this kind of message format.

Here will take the Digifort as an example to introduce the HTTP Notification function.

The following are the detailed steps of setting for HTTP Notification in Digifort VMS and we came.

Step 1: Enable **Alarm**, set **Motion Region**, and **Detection Schedule**.

Step 2: Check the HTTP Notification as **Alarm Action**, and fill the fields. Then save the alarm setting. You can add up to three HTTP notifications to the same event.

HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	5 (0-900) s
URL:	192.168.8.75:8601/Interface/Cameras/MotionDetection/Notify?Camera=annie
User Name:	admin
Password:	*****

HTTP User Name: admin (the user name of your camera)

HTTP Password: ms1234 (the password of your camera)

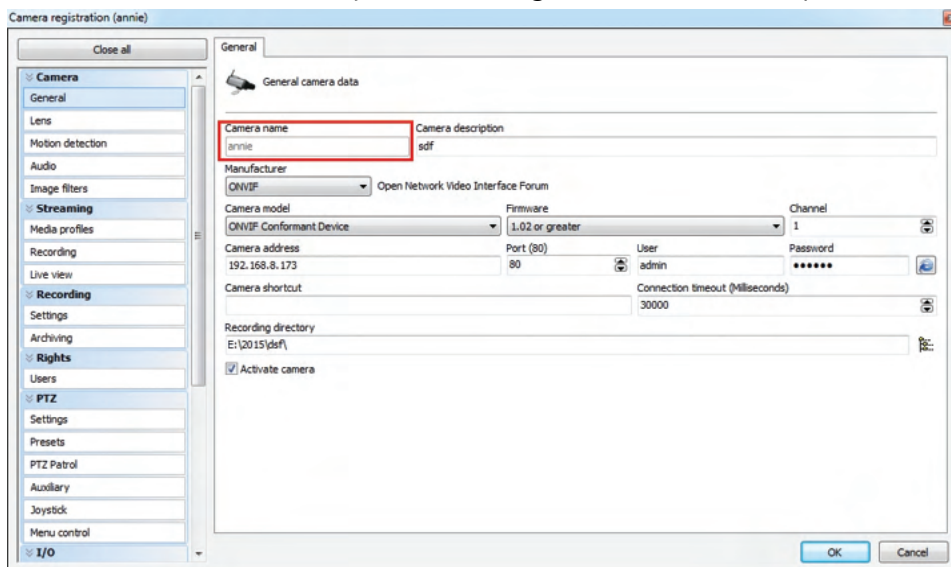
HTTP Notification URL:

http://IP:8601/Interface/Cameras/MotionDetection/Notify?Camera=CameraName

IP refers to the PC's IP where the Digifort installed.

8601 is the port for Motion signal in Digifort.

CameraName is the camera name you set in Digifort VMS, like the picture shown below.

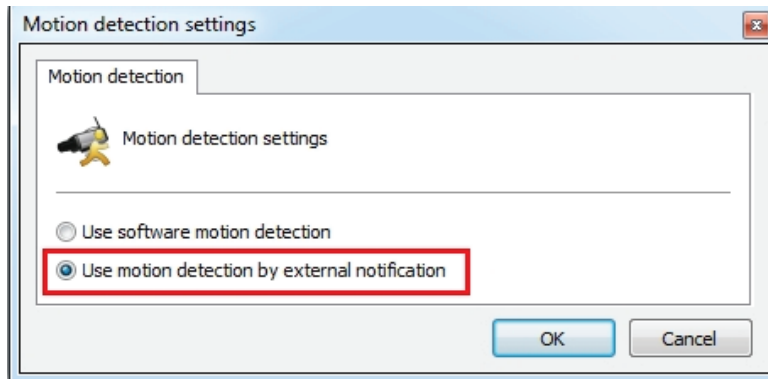


Example:

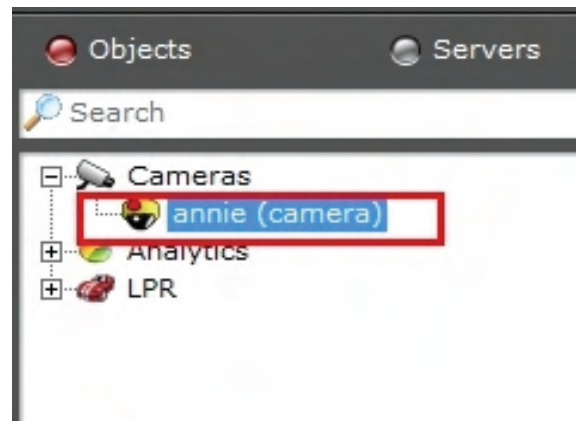
<http://192.168.8.75:8601/Interface/Cameras/MotionDetection/Notify?Camera=annie>,

This URL format is exactly supported by Digifort VMS, so we can set as above to our cameras and get it work well.

Step 3: Choose “**use motion detection**” by external notification.



Step 4: If successful, you can see the device icon turns yellow in the Surveillance when the camera is under **Motion Detection Alarm**.



So, it's the VMS Software which decides whether we can use this function successfully.

Step 5: Set **Alarm Settings**.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	30 seconds
Audio Action Settings:	Edit
Play Audio Interval:	Auto

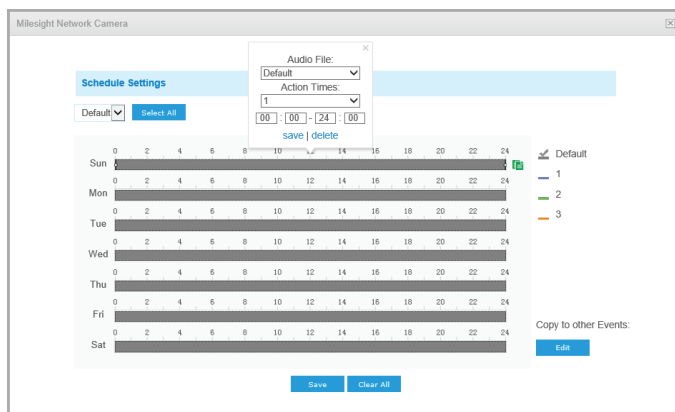
[Save](#)

Table 42: Description of the buttons

Parameter	Function Introduction
Record Video Sections	Six different periods are available(5, 10, 15, 20, 25, 30 sec).
Snapshot	The number of snapshot, 1~5.
Snapshot Interval	This cannot be edited unless you choose more than 1 to Snapshot.
External Output Action Time	Length of time an alarm lasts, this cannot be edited unless you enable the External Output on the Alarm Action firstly.
Audio Action Settings	Set the audio schedule to trigger different audio files and action times in different time, which is corresponded to alarm action.
Play Audio Interval	Auto/ 10 seconds/ 30 seconds/ 1 minute/ 5 minutes/ 10 minutes are available.
White LED Flash Mode	Twinkle: The White LED will continuous flashing before recovered. Always: The White LED will always open before recovered.
White LED Flash Time	The duration of flash. Twinkle from 1 second to 10 seconds; Always from 1 second to 60 seconds.
Proportional Zoom Times	Support to zoom proportionally when PTZ Motion is triggered.
PTZ Motion Recovery Time	The duration of one alarm must be longer than flash time.

Note:

- Recovery time should not be less than flash time.
- You can customize the schedule of Audio Action.



Audio Alarm

Enable the Audio before using **Audio Alarm function**.

Enable Audio Alarm:	<input type="checkbox"/>
Alarm Threshold:	<input type="range" value="25"/>
Audio Sample Value:	<input type="text" value="0"/> <input type="button" value="↺"/> <input type="button" value="↻"/>



Schedule Settings

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/> (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/>
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot <input type="button" value="v"/> (Please enable the Email.)
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>

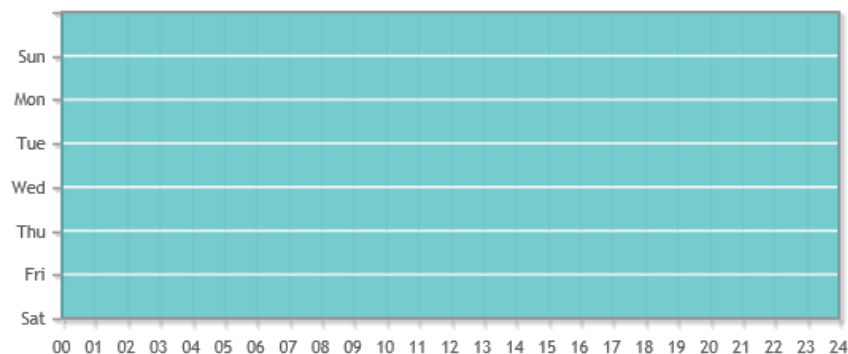
Alarm Setting	
Record Video Sections:	5 seconds <input type="button" value="v"/>
Snapshot:	3 <input type="button" value="v"/>
Snapshot Interval:	1 <input type="button" value="v"/> second <input type="button" value="v"/>
Email Triggered Interval:	Auto <input type="button" value="v"/>
External Output Action Time:	30 seconds <input type="button" value="v"/>
Audio Action Settings:	<input type="button" value="Edit"/>
Play Audio Interval:	Auto <input type="button" value="v"/>

Refer to the table in **Motion Detection** chapter for the meanings of the items, here will not repeat again.

External Input

Enable External Input:	<input type="checkbox"/>
------------------------	--------------------------

Schedule Settings



Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/> (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/>
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot <input type="button" value="v"/> (Please enable the Email.)
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>

Alarm Setting	
Record Video Sections:	5 seconds <input type="button" value="v"/>
Snapshot:	3 <input type="button" value="v"/>
Snapshot Interval:	1 <input type="text"/> second <input type="button" value="v"/>
Email Triggered Interval:	Auto <input type="button" value="v"/>
External Output Action Time:	30 seconds <input type="button" value="v"/>
Audio Action Settings:	<input type="button" value="Edit"/>
Play Audio Interval:	Auto <input type="button" value="v"/>

Refer to the table in **Motion Detection** chapter for the meanings of the items, here will not repeat again.

External Output

External Output	
Normal Status:	<input type="radio"/> Open <input checked="" type="radio"/> Grounded
Current Status:	Grounded

Please set the **Normal Status** first, since the **Current Status** is different with **Normal Status**, it then will lead to the alarm.

Exception

Alarm Type	<input type="checkbox"/> Network Disconnected <input type="checkbox"/> IP Address Conflict <input checked="" type="checkbox"/> Record Failed <input type="checkbox"/> SD Card Full <input type="checkbox"/> SD Card Uninitialized <input type="checkbox"/> SD Card Error <input type="checkbox"/> No SD Card
Enable Record Failed Alarm:	<input type="checkbox"/>
Alarm Action	
Upload Via FTP:	<input type="checkbox"/> File Format: <input type="text" value="Record"/>
Upload Via Email:	<input type="checkbox"/> File Format: <input type="text" value="Snapshot"/> (Please enable the Email.)
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please configure the Audio Action Settings and Audio Interval.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>
Alarm Setting	
Record Video Sections:	<input type="text" value="5 seconds"/>
Snapshot:	<input type="text" value="3"/>
Snapshot Interval:	<input type="text" value="1"/> <input type="text" value="second"/>
Email Triggered Interval:	<input type="text" value="Auto"/>
External Output Action Time:	<input type="text" value="30 seconds"/>
Audio Action Settings:	<input type="button" value="Edit"/>
Play Audio Interval:	<input type="text" value="Auto"/>
<input type="button" value="Save"/>	

Table 43: Description of the buttons

Parameters	Function Introduction
Alarm Type	Network Disconnected, IP Address Conflicted, Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error, and No SD Card are available. Check the checkbox to enable the alarm type you selected.

Parameters	Function Introduction
Alarm Action	<p>Save Into Storage: Save alarm recording files into SD Card.</p> <p>Upload Via Email: Upload alarm recording files via email. This option is available for Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error, and No SD Card.</p> <p>External Output: If the camera equips with External Output, you can enable the action after configuring the trigger duration.</p> <p>Play Audio: If the camera equips with Speaker, you can enable the action after configuring the audio speaker.</p> <p>Alarm to SIP Phone: Support to call the SIP phone after enable the SIP function.</p> <p>HTTP Notification: Enable the HTTP Notification.</p> <p>HTTP Notification URL: There are three types of HTTP Notification URLs, including URL1, URL2 , and URL3.</p> <ul style="list-style-type: none"> ● Enable: Check the checkbox to enable a kind of HTTP Notification URL. ● Trigger Interval: Trigger Interval of camera can push information to some Thirdparty devices. ● HTTP Method: There are two HTTP push methods, including Post and Get. ● URL: Camera can use the API URL to send face detection information to back-end devices when the detected face is captured. The format of the API URL depends on the back-end devices, including server, port and other required formats. Enterprise, the format of the API URL is as follows: <i>http://VMS server IP: VMSPort/api/httpEvent</i> <p>Note: It supports HTTPS for HTTP Post.</p> <ul style="list-style-type: none"> ● User Name: Receiver name. ● Password: Receiver Password. <p>Play Buzzer: If the camera equips with Buzzer, you can check the checkbox to enable the function.</p> <p>White LED: The White LED could flash as a warning signal when the alarm triggered if the camera equipped with it(only for Mini PTZ Bullet).</p>

Parameters	Function Introduction
	<p>Record Video Sections: Six different periods are available(5, 10, 15, 20, 25, 30 sec)</p> <p>Snapshot: The number of snapshot is 1~5.</p> <p>Snapshot Interval: This cannot be edited unless you choose more than 1 to Snapshot</p> <p>Email Triggered Interval: Auto / 10 seconds / 20 seconds / 40 seconds / 60 seconds / 100 seconds / 5 minutes / 15 minutes / 30 minutes / 1 hour / 8 hours / 12 hours / 24 hours are available. This cannot be set unless when you choose Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error, or No SD Card and check the Upload via Email checkbox of related Alarm type</p> <p>External Output Action Time: Length of time an alarm lasts, this cannot be edited unless when you enable the External Output on the Alarm Action firstly.</p> <p>Audio Action Settings: Set the audio schedule to trigger different audio files and action times in different time. This will corresponded to alarm action.</p> <p>Play Audio Interval: Auto/ 10 seconds/ 30 seconds/ 1 minute/ 5 minutes/ 10 minutes are available; this cannot be edited unless when you check the Play Audio checkbox firstly.</p> <p>White LED Flash Mode: "Twinkle" and "Always" are available.</p> <p>White LED Flash Time: The duration of flash. "Twinkle" from 1 second to 10 seconds; "Always" from 1 second to 60 seconds</p> <p>White LED Effective Mode: Always, Light Environment and Customize are available. Always Mode allows you to keep White LED always on. Light Environment Mode allows you to set the Effective Light Intensity so it can turn on White LED basing on Current Light Intensity. Customize Mode allows to set the start time and the end time to control White LED.</p>

VCA Event:

Smart Event uses VCA(Video Content Analysis) technology, which provides advanced, accurate smart video analysis for Avycon network cameras. Powered by an AI chip, the new generation of video analytics is capable of recognizing vast attributes of human, vehicle, and object pattern recognition models. As vehicle and human-related events are very important in security monitoring, filtering is supported to better optimize efficiency.

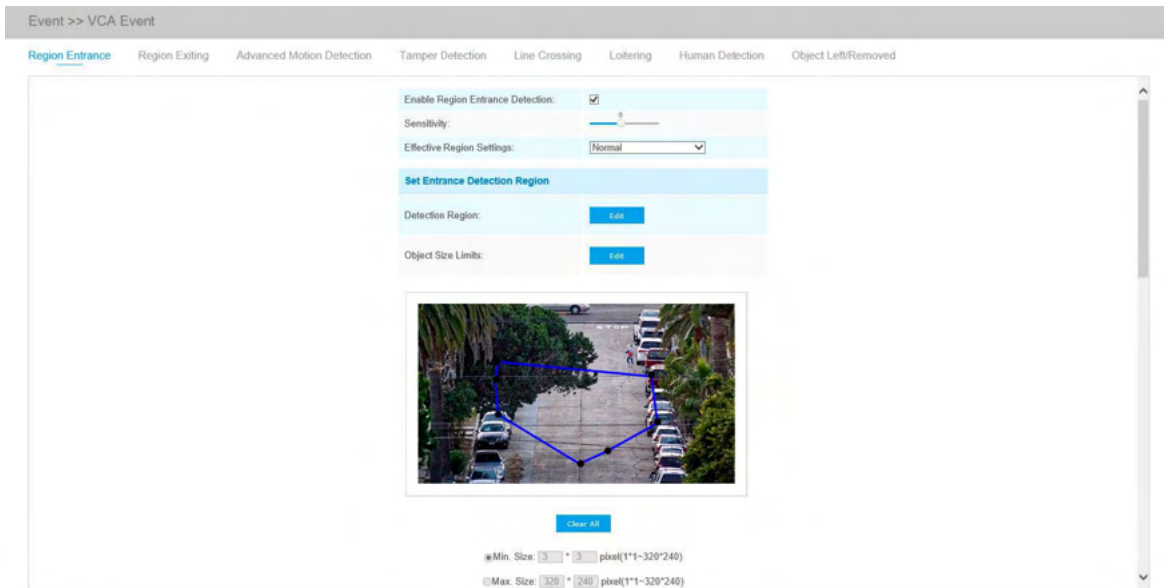
Note:

here are AI and non-AI cameras in Avycon network cameras.

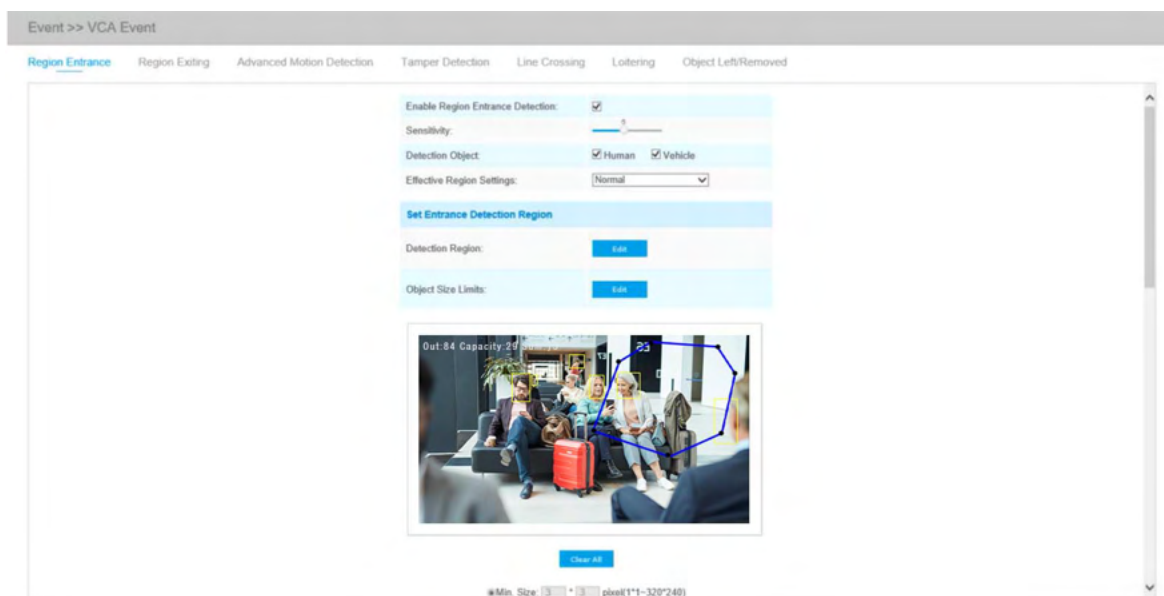
Region Entrance

Region entrance helps to protect a special area from the potential threat of a suspicious person's or object's entrance. An alarm will be triggered when objects enter the selected regions by enabling region entrance.

Region Entrance Interface (for non-AI cameras)



Region Entrance Interface (for AI cameras)



Step 1: Enable region entrance detection and set detecting sensitivity. Choose detection object: Check the Human or Vehicle attribute, and the camera will alarm once detecting people or vehicles and triggering related events.

Note:

All AI Cameras support this function.

Step 2: Set entrance detection region. If you choose **Normal Mode**, it supports configuring the detection region for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring the detection region for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Table 44: Description of the buttons

Parameter	Function Introduction
Minimum Size	Draw the screen or input pixel number to set the minimum size of the detected object. When the object is smaller than this size, it will not be detected. The default minimum size is 3*3.
Maximum Size	Draw the screen or input pixel number to set the maximum size of the detected object. When the object is larger than this size, it will not be detected. The default maximum size is 320*240.

Step 3: Set **Detection Schedule**.

Step 4: Set **Alarm Action**. When enabling PTZ **Auto Tracking and Region Entrance Detection**, camera.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Auto Tracking:	<input checked="" type="checkbox"/> (Please enable the Auto Tracking.)

Step 5: Set alarm settings. If you enable External Output and choose Constant External Output Action Time, then the objects will enter the selected regions. External Output Action alarm time will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

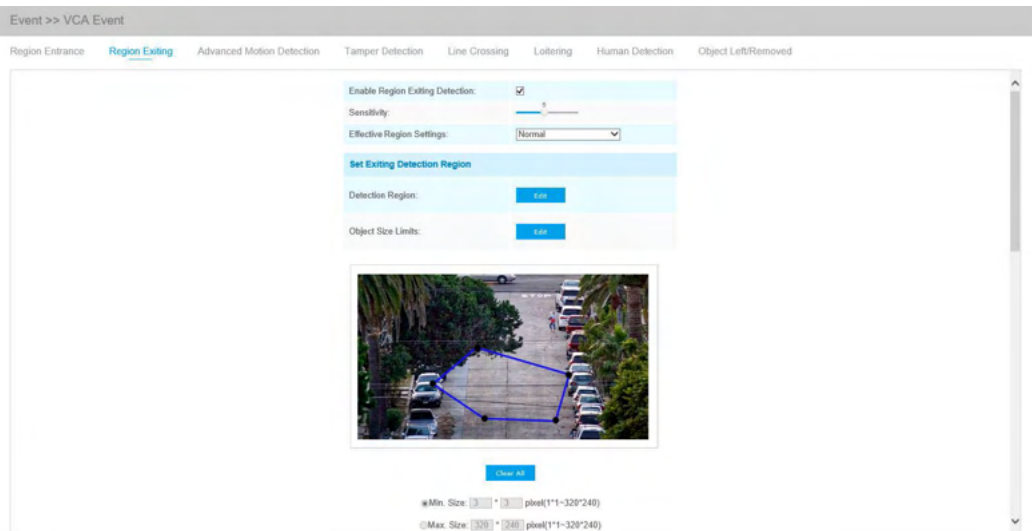
Note:

- Please enable Auto Tracking on the PTZ interface first.
- PTZ Auto Tracking is checked by default.

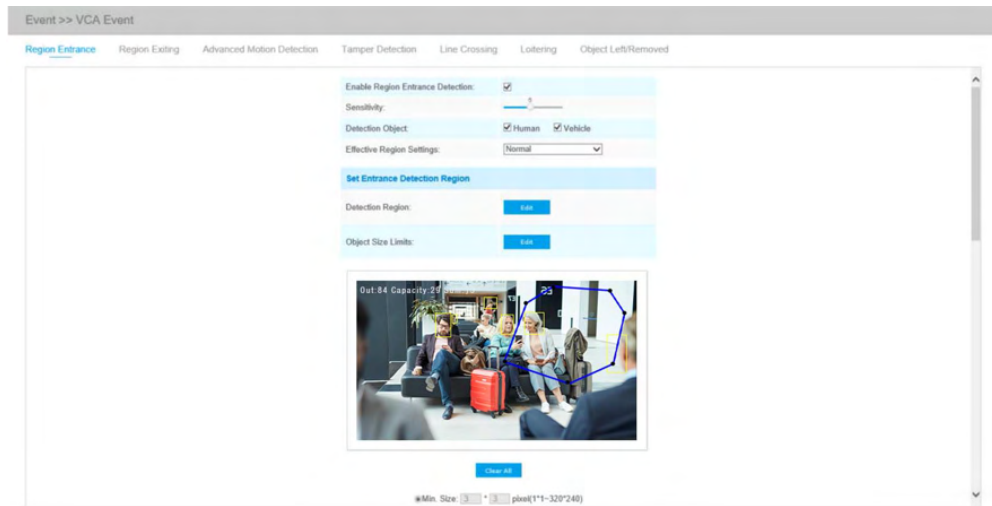
Region Exiting

Region exiting is to make sure that any person or object won't exit the area that is being monitored. Any exit of people or objects will trigger an alarm.

Region Exiting Interface (for non-AI cameras)



Region Exiting Interface (for non-AI cameras)



Step 1: Enable region exiting detection and set detecting sensitivity. Choose **Detection Object**. Check Human or Vehicle attribute, and the camera will alarm once detecting people or vehicle and triggering related events; will automatically track objects and trigger an alarm if objects enter the selected regions.

Note:
All AI Cameras support this function.

Step 2: Set Exiting Detection Region. If you choose **Normal Mode**, it supports configuring the detection region for the current area. If you choose **Advanced Mode** (Only for PTZ series), it supports configuring the detection region for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Step 3: Set **Detection Schedule**.

Step 4: Set **Alarm Action**. When enabling **PTZ Auto Tracking and Region Exiting Detection**, camera will automatically track objects and trigger an alarm if any person or objects exit the area that is being monitored.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Auto Tracking:	<input checked="" type="checkbox"/> (Please enable the Auto Tracking.)

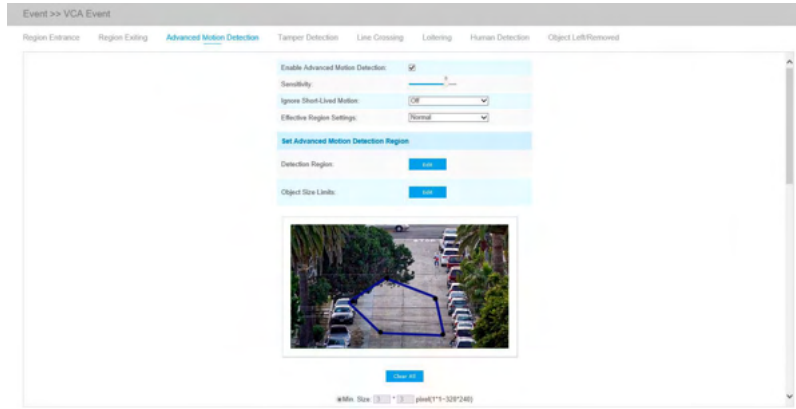
Step 5: Set **Alarm Settings**. If you enable External Output and choose **Constant External Output Action Time**, when objects exit the selected regions, **External Output Action** alarm time will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

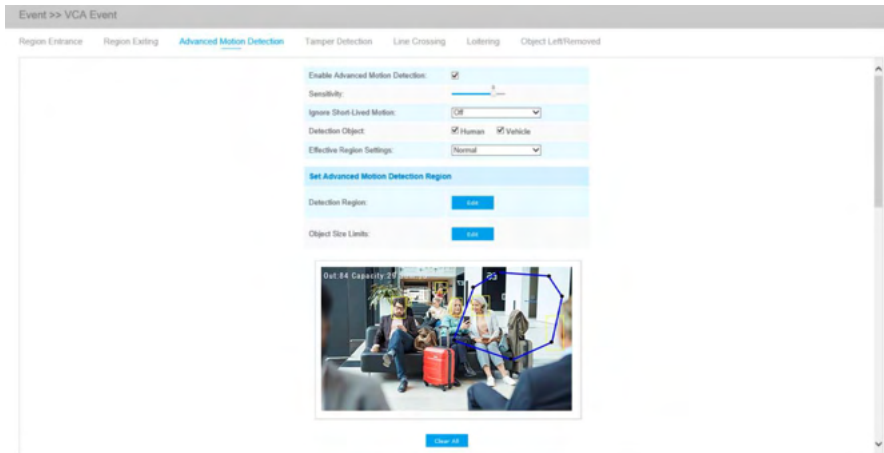
Advanced Motion Detection

Different from traditional motion detection, Avycon advanced motion detection can filter out **"noise"** such as lighting changes, natural tree movements, etc. When an object moves in the selected area, it will trigger alarm.

Advanced Motion Detection Interface (for AI cameras)



Advanced Motion Detection Interface (for AI cameras)



Step 1: Enable **Region Detection** and set **Detecting Sensitivity**.

Step 2: Set Ignore **Short-Lived Motion time**. If you set the time, when the moving duration of an object is within the setting time, the alarm will not be triggered. Choose detection object. Check Human or Vehicle attribute, and the camera will alarm once detecting people or vehicle and triggering related events

Note:

All AI Cameras support this function.

Step 3: Set **Advanced Motion Detection Region**. If you choose **Normal Mode**, it supports configuring the detection region for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring the detection region for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Step 4: Set **Detection Schedule**.

Step 5: Set **Alarm Action**.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Motion:	<input type="checkbox"/>

Step 6: Set alarm settings. If you enable **External Output** and choose **Constant External Output Action Time**, when object motion time is longer than the Ignore Short-Lived Motion time which you set in the selected regions, **External Output Action** alarm time will be always constant till the alarm is released.

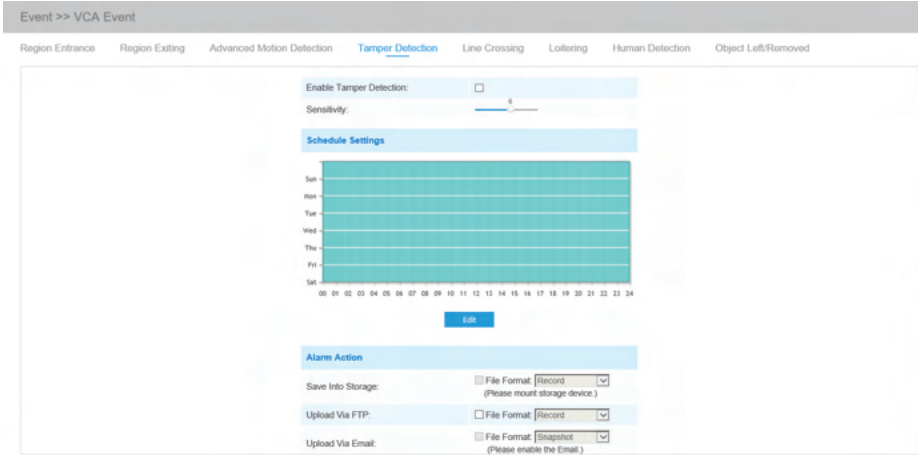
Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant
Audio Action Settings:	
Play Audio Interval:	Auto

Note:

- The sensitivity can be configured to detect various movement according to different requirements. When the level of sensitivity is low, slight movement won't trigger the alarm.
- Ignore Short-Lived Motion time is to avoid false alarm caused by instant object movement within time setting.

Tamper Detection

Tamper Detection is used to detect possible tampering like the camera being unfocused, obstructed or moved. This functionality alerts security staff immediately when any above mentioned actions occur.



Step 1: Enable **Tamper Detection** and set **Detecting Sensitivity**.

Step 2: Set **Detection Schedule**.

Step 3: Set **Alarm Action**.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	

Step 4: Set **Alarm Settings**. If you enable **External Output** and choose **Constant External Output Action Time**, when possible tampering is detected, **External Output Action** alarm time will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 2px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	s(1~999)
Play Audio Interval:	Auto

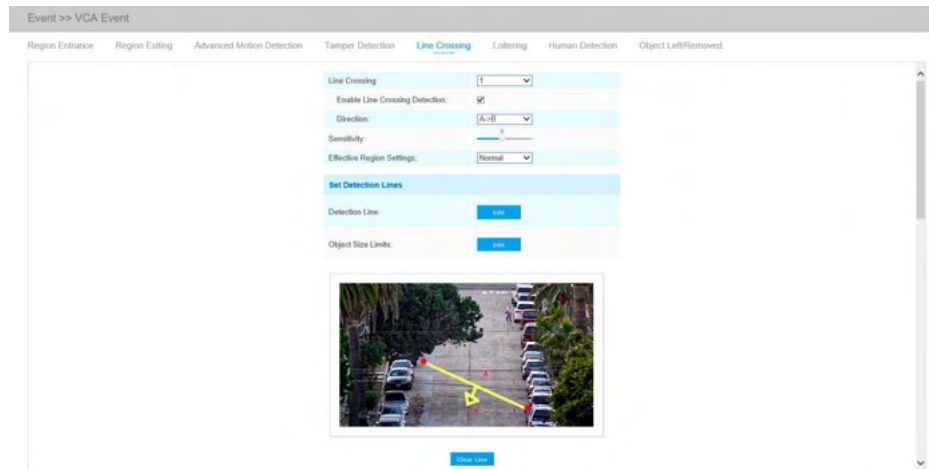
Note:

The algorithm supports defocus detection in Tamper Detection function.

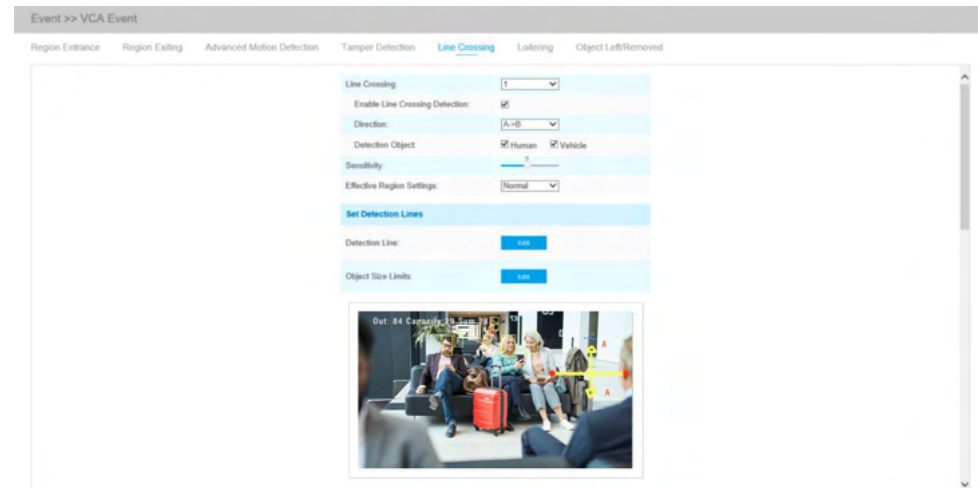
Line Crossing

Line Crossing Detection is designed to work in a most indoor and outdoor environments. An event will be triggered every time the camera detects objects crossing a defined virtual line.

Advanced Motion Detection Interface (for AI cameras)

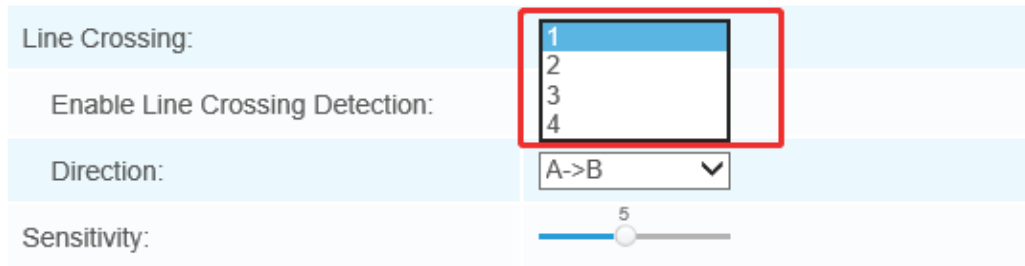


Advanced Motion Detection Interface (for AI cameras)



Settings steps are shown as follows:

Step 1: Choose a **line number**.



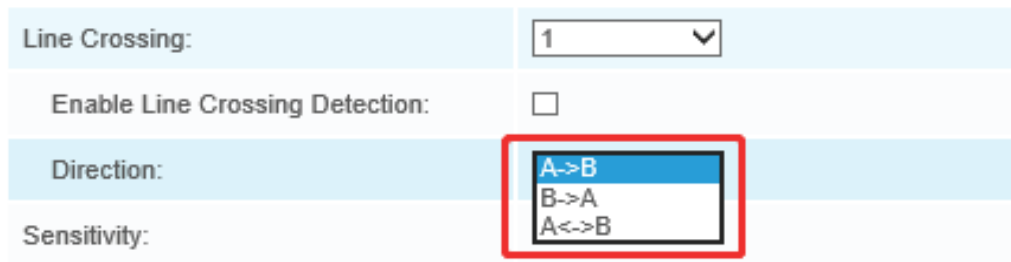
Line Crossing: 1
2
3
4

Enable Line Crossing Detection:

Direction: A->B

Sensitivity: 5

Step 2: Enable **Line Crossing Detection** and define its direction.



Line Crossing: 1

Enable Line Crossing Detection:

Direction: A->B
B->A
A<->B

Sensitivity:

Choose Detection Object. Check Human or Vehicle attribute, and the camera will alarm once detecting people or vehicle and triggering related events.

Note:

All AI Cameras support this function.

Step 3: Set **Detecting Sensitivity**.

Step 4: Draw detection lines. If you choose **Normal Mode**, it supports configuring the detection lines for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring different detection lines for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Step 5: Set **Detection Schedule**.

Step 6: Set **Alarm Action**. When enabling PTZ Auto Tracking, the camera will automatically track objects and trigger an alarm if detecting objects crossing a defined virtual line.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Auto Tracking:	<input checked="" type="checkbox"/> (Please enable the Auto Tracking.)

Step 7: Set **Alarm Settings**. If you enable **External Output** and choose **Constant External Output Action Time**, when objects cross a defined virtual line, **External Output Action Alarm time** will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

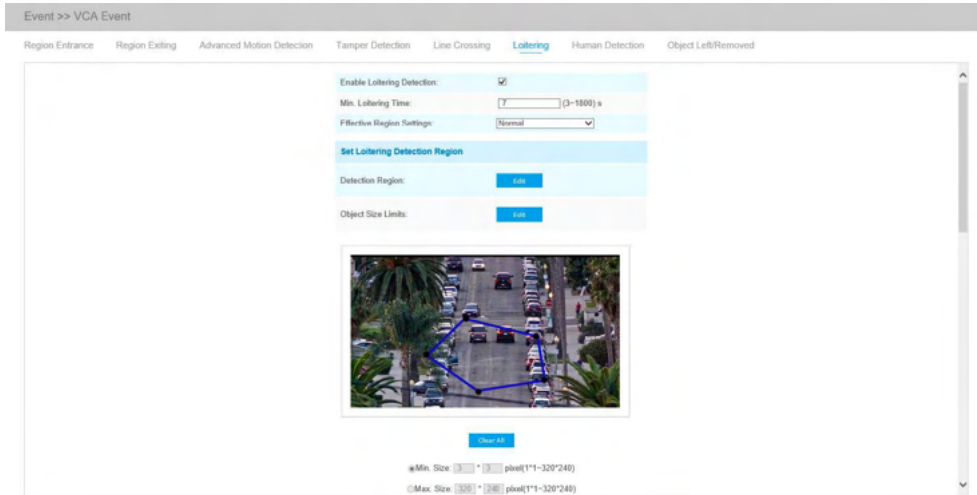
Note:

Avycon network cameras allow to set up to four lines at a time. There are three direction modes to choose for triggering the alarm. "A→B" means when there is any object crossing the line from the "A" side to the "B" side, the alarm will be triggered. "B→A" vice versa. "A ↔ B" means that the alarm will be triggered when objects cross the line from either side.

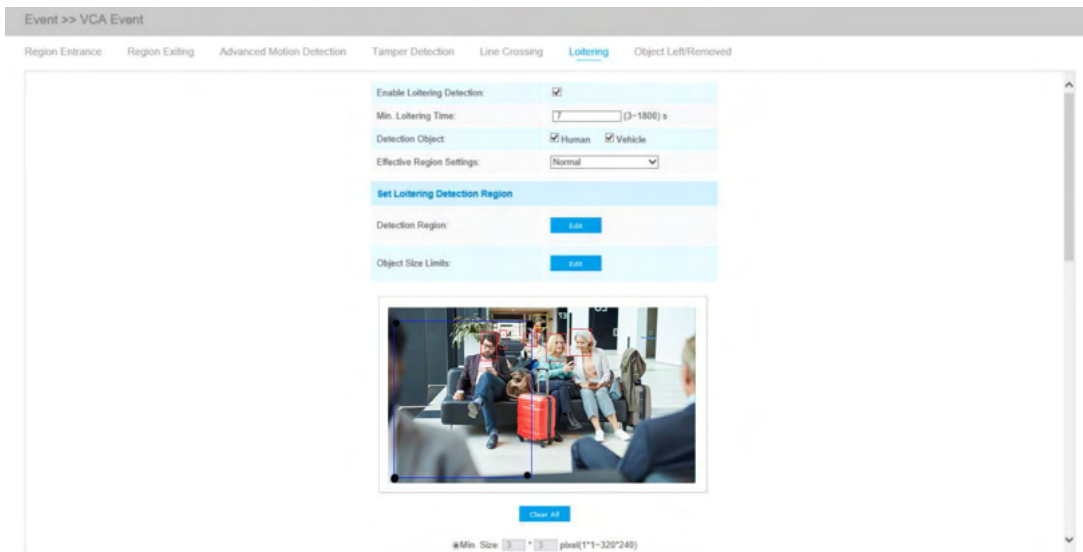
Loitering

When objects are loitering in a defined area for a specific period of time, it would trigger an alarm.

Loitering Interface(for non-AI cameras)



Loitering Interface(for AI cameras)



Step 1: Enable **Loitering Detection** and set **Minimum Loitering Time**. Choose **Detection Object**. Check Human or Vehicle attribute, and the camera will alarm once detecting people or vehicle and triggering related events.

Note:

This function is supported for all AI cameras.

Step 2: Set **Loitering Detection Region**. If you choose **Normal Mode**, it supports configuring the detection region for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring the detection region for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Step 3: Set **Detection Schedule**.

Step 4: Set **Alarm Action**. When enabling PTZ Auto Tracking and Loitering Detection, the camera will automatically track objects and trigger an alarm if objects have been loitering in a defined area for more than the Min. Loitering Time.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Auto Tracking:	<input checked="" type="checkbox"/> (Please enable the Auto Tracking.)

Step 5: Set **Alarm Settings**. If you enable **External Output** and choose **Constant External Output Action Time**, when objects loiter in the selected regions, **External Output Action alarm** time will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

Note:

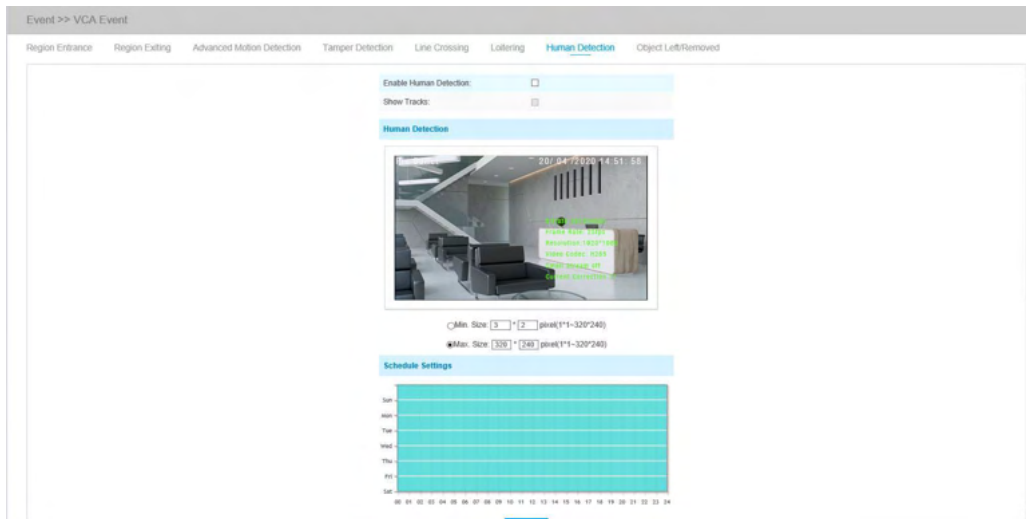
After setting minimum loitering time from 3s to 1800s, any objects loitering in the selected area over the minimum loitering time will trigger the alarm.

Human Detection

Human detection is used for figuring out whether an object is a human or not. When Human detection is enabled is when there is an object appearing in the detecting area, an ID will show on the frame. If the object is a person, it will mark as **"person"**. When the Show Tracks is enabled, the tracks of the moving object will show on the screen.

Note:

Human Detection tab is no longer displayed separately for all AI cameras.



Step 1: Enable **Human Detection**.

Step 2: Check **Show Tracks**.

Step 3: Set **Object Size Limits**.

Step 4: Set **Schedule Settings**.

Step 5: Set **Alarm Action**. When enabling PTZ Auto Tracking, camera will mark as **"person"** and automatically track the person if the detected object is a person.

Alarm Action	
Save into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>
White LED:	<input type="checkbox"/>
PTZ Auto Tracking:	<input checked="" type="checkbox"/>

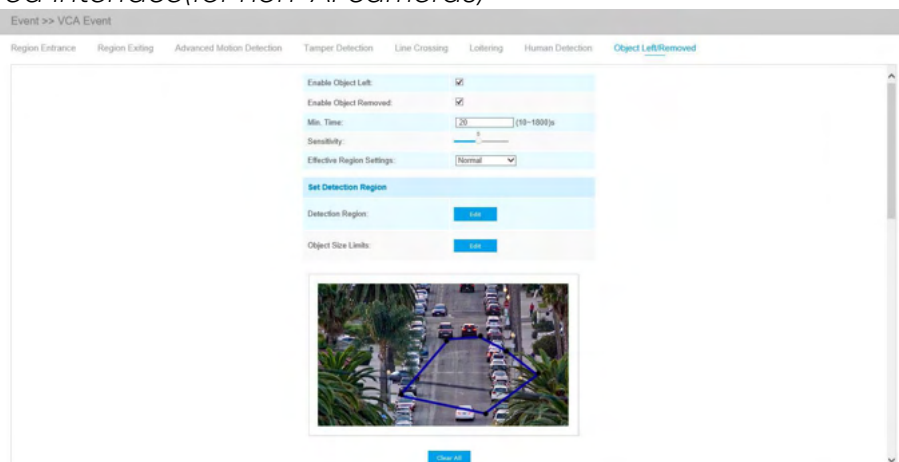
Step 6: Set Alarm Settings. If you enable External Output and choose Constant External Output Action Time, when detected object is marked as **“person”**, External Output Action alarm time will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 2px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

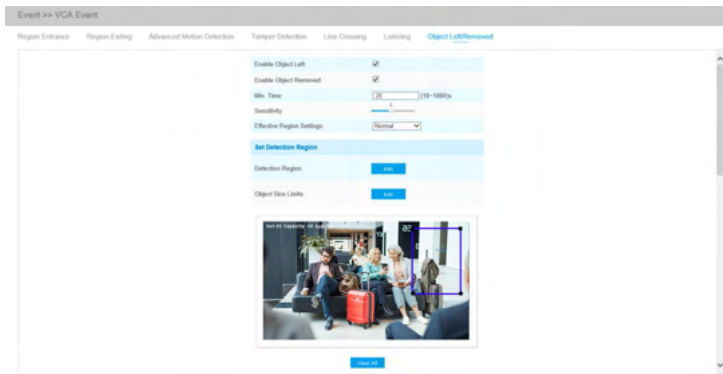
Object Left/Removed

Object Left can detect and prompt an alarm if an object is left in a pre-defined region. Object Removed can be detected and prompt an alarm if an object is removed from a pre-defined region.

Object Left/Removed Interface(for non-AI cameras)



Object Left/Removed Interface(for AI cameras)



Step 1: Enable Object Left or Object Removed(Or you can enable both features at the same time)

Step 2: Set **Minimum Time**

Step 3: Set **Detecting Sensitivity**

Step 4: Set **Detection Region**. If you choose **Normal Mode**, it supports configuring the detection region for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring the detection region for different PTZ presets (Only support Preset 1~4 so far). And set object size limits.

Step 5: Set **Detection Schedule**.

Step 6: Set **Alarm Action**. When enabling PTZ Auto Tracking, camera will automatically track objects and trigger an alarm if an object is left or removed in a defined area.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Snapshot (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	
PTZ Auto Tracking:	<input checked="" type="checkbox"/> (Please enable the Auto Tracking.)

Step 7: Set alarm settings. If you enable External Output and choose Constant External Output Action Time, when an object is left/removed from the selected regions, External Output Action alarm time will be always constant till the alarm is released.

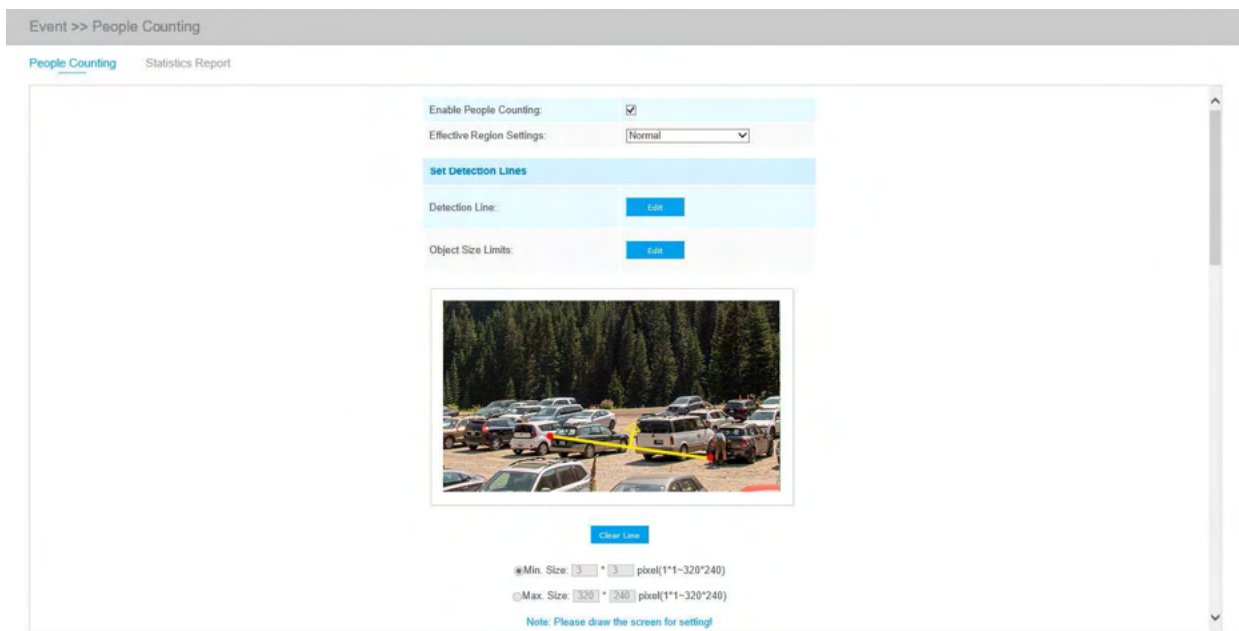
Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant
Audio Action Settings:	
Play Audio Interval:	Auto

Note:

After setting minimum time from 3s to 1800s, any objects are left in the selected area or removed from the selected area over the minimum time will trigger the alarm.

People Counting

People Counting is able to count how many people enter or exit during the setting period.



Settings steps are as shown below:

Step 1: Enable **People Counting**.

Step 2: Set **Detection Line** and **Object Size Limits**. If you choose **Normal Mode**, it supports configuring the detection line for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring the detection line for different PTZ presets(Only support Preset 1~4 so far).

Step 3: Set **Detection Schedule**.

Step 4: Set **Counting OSD**.

Counting OSD	
Show Video Title:	<input checked="" type="checkbox"/>
Font Size:	Small <input type="button" value="v"/>
Font Color:	<input type="color" value="#00aaff"/> <input type="button" value="c"/>
Text Position:	Top-Left <input type="button" value="v"/>

The OSD of the people counting supports manual reset and automatic zeroing.

Counting Reset:	<input type="button" value="Reset"/> <input type="checkbox"/> Reset the statistics report together?
Enable Auto Reset:	<input checked="" type="checkbox"/>
Day:	Everyday <input type="button" value="v"/>
Time:	00:00:00 <input type="button" value="c"/>

Step 5: Set alarm trigger. Alarm will be triggered when the thresholds reaches to a certain value from 1 to 9999.

Alarm Trigger	
Enable Alarm	<input checked="" type="checkbox"/>
Thresholds:	<input type="checkbox"/> In: <input type="text" value="9999"/> <input type="checkbox"/> Out: <input type="text" value="9999"/> <input type="checkbox"/> Capacity: <input type="text" value="9999"/> <input type="checkbox"/> Sum: <input type="text" value="9999"/>

Step 6: Set Alarm Action.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	
User Name:	
Password:	

Step 7: Set alarm settings. If you enable **External Output** and choose **Constant External Output Action Time**, when the thresholds reach to a certain value you set, **External Output Action Alarm Time** will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	Customize (1-999)
Audio Action Settings:	
Play Audio Interval:	Auto

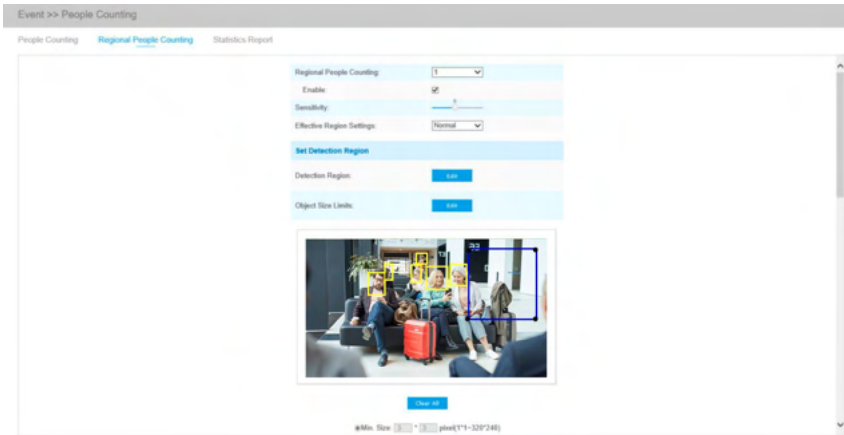
Save

Note:

Crossing along the direction of the arrow will record as **"In"**, opposite is **"Out"**.

Regional People Counting

When enabling Regional People Counting, users can check the real-time number of people and the time of each person's stay in the detection region.



Settings steps are as shown below:

Step 1: Enable **Region People Counting**.

Step 2: Set **Detection Region** and **Object Size Limits**.

Step 3: Set **Detection Schedule**.

Step 4: Set Alarm Trigger. Alarm will be triggered when the thresholds exceeds the certain value.

Alarm Trigger	
Max. Stay:	<input checked="" type="checkbox"/> 60
Min. Stay:	<input checked="" type="checkbox"/> 1
Max. Length of Stay:	<input checked="" type="checkbox"/> 30 s

Step 5: Set **Alarm Action**.

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot (Please enable the Email.)
External Output:	<input type="checkbox"/> (Please configure the External Output Action Time.)
Play Audio:	<input type="checkbox"/> (Please enable the Audio Speaker.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post
Snapshot:	<input type="checkbox"/>
URL:	undefined
User Name:	undefined
Password:	••••••••

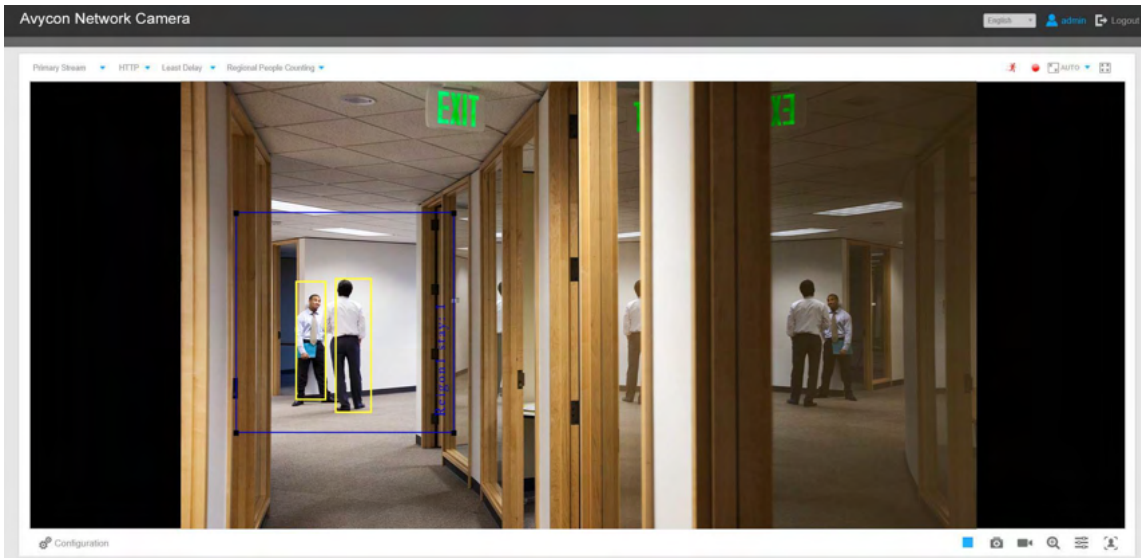
Step 6: Set **Alarm Settings**. If you enable **External Output** and choose **Constant External Output Action Time**, when the thresholds exceed the certain value you set, **External Output Action Alarm Time** will be always constant till the alarm is released.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 2px;"> Customize 10 seconds 30 seconds 1 minute 5 minutes 10 minutes Constant </div>
Audio Action Settings:	
Play Audio Interval:	Auto

[Save](#)

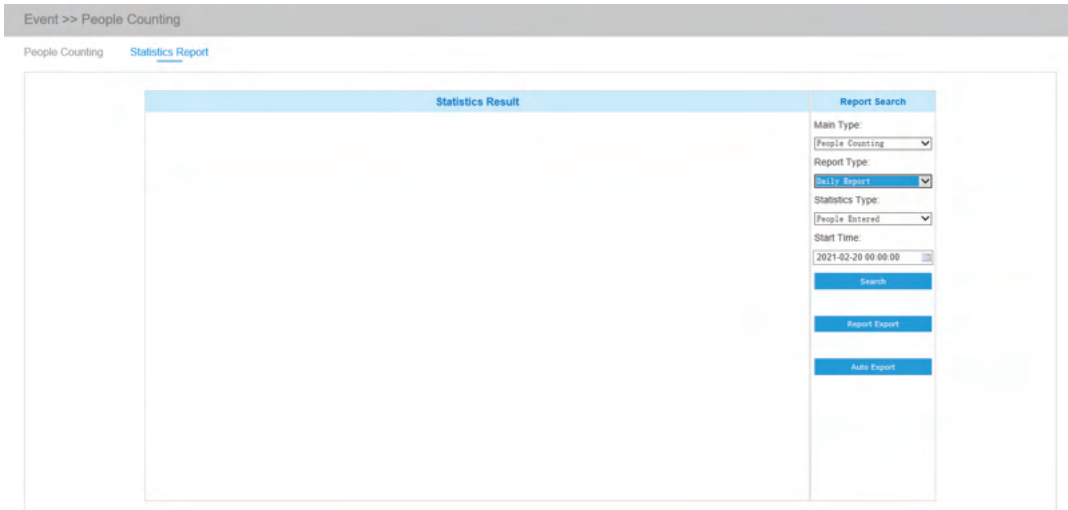
Note:

- Users can check the real-time number of people and the time of each person's stay in the detection region on Live View interface.
- For **Regional People Counting**, please make sure your camera model is **MS-CXXXX-XXC**.
- Support up to 4 detection regions for **Regional People Counting**.



Statistics Report




The results during the enabling period will be displayed on **"Statistics Report"** interface.



Step 1: Select **Main Type**

Step 2: Select **Report Type** including Daily Report, Weekly Report, Monthly Report and Annual Report.

Step 3: Select **Statistics Type** including People Entered, People Exited, and Sum.

Step 4: Select **Start Time**, then click  button, the camera will automatically count the data for the day/ week/ month/ year (based on the report type selected by the user) from the start time and generate the corresponding report. Moreover, you can also click  or  to switch display mode of Statistics Report as shown below.

People Counting-Statistics Report (Line Chart)



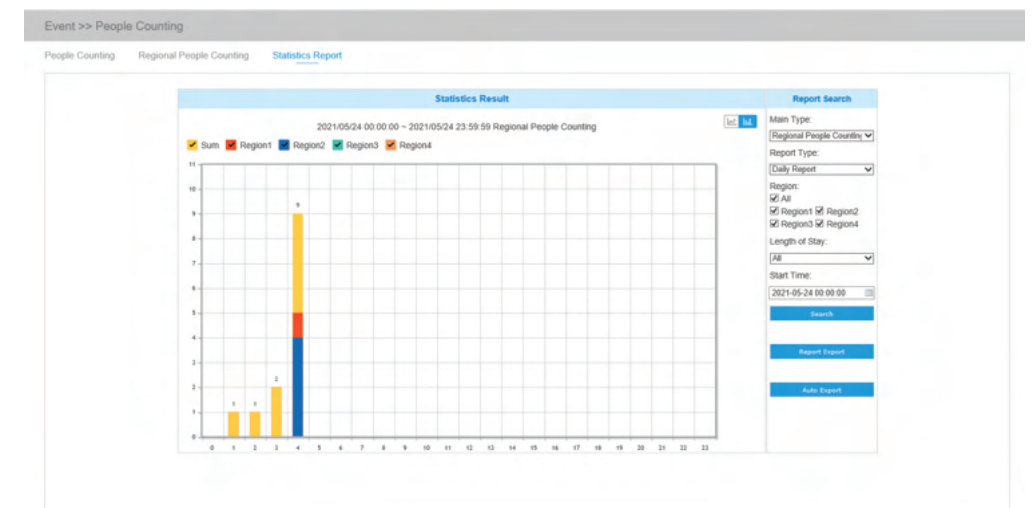
People Counting-Statistics Report (Bar Chart)



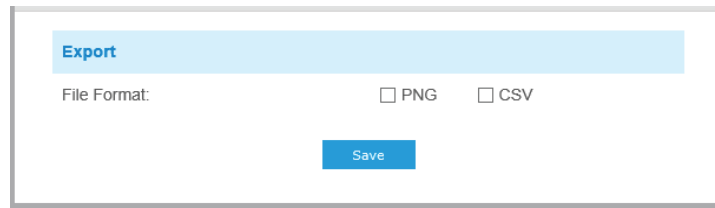
Regional People Counting-Statistics Report (Line Chart)



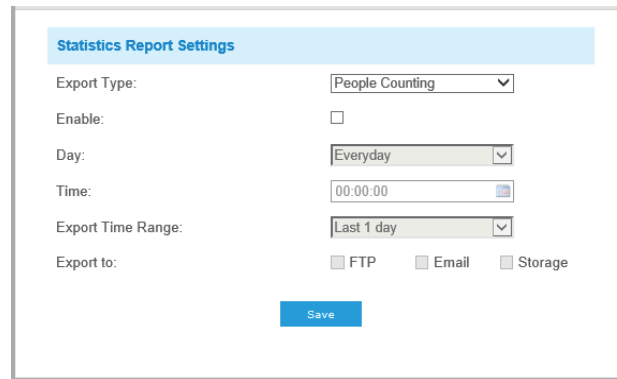
Regional People Counting-Statistics Report (Bar Chart)



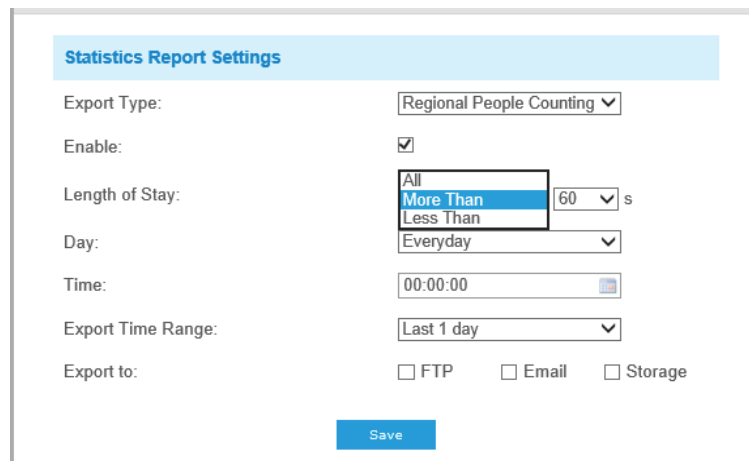
Step 5: Click **Report Export** button to pop up the Export window as shown below, and you can choose File Format to export the report to local.



Step 6: Click **Auto Export** button to pop up the **Statistics Report Settings** as shown below.



- **Set Export Type:** User can check People Counting. When **People Counting** is checked, the gray item becomes editable as shown below.
- **Set Day:** User can choose Everyday to export daily reports, while choosing others to export reports on a specific day of the week.



- **Set Time:** User can choose the time of day to export the **Statistics Report** automatically, click the calendar icon to pop up the following Quick Selection.

- **Set Export Time Range**

Day (Choose Everyday)

The screenshot shows the 'Statistics Report Settings' form. The 'Export Type' is set to 'People Counting'. The 'Enable' checkbox is checked. The 'Day' is set to 'Everyday'. The 'Time' is set to '00:00:00'. The 'Export Time Range' dropdown is open, showing 'Last 1 day' selected and 'Export All' as an option. The 'Export to' section has three checkboxes: 'FTP', 'Email', and 'Storage', all of which are currently unchecked. A blue 'Save' button is located at the bottom center of the form.

Day (Choose Week)

The screenshot shows the 'Statistics Report Settings' form. The 'Export Type' is set to 'Regional People Counting'. The 'Enable' checkbox is checked. The 'Length of Stay' is set to 'All'. The 'Day' dropdown is open, showing a 'Quick Selection' menu with time intervals: '00:00:00', '00:00:15', '00:00:30', '00:00:45', and '00:00:59'. The 'Time' field is set to '00:00:00'. The 'Export Time Range' is set to 'All'. The 'Export to' section has three checkboxes: 'FTP', 'Email', and 'Storage', all of which are currently unchecked. A blue 'Save' button is located at the bottom center of the form.

Set the destination path of the automatically exported report. The report can be exported to FTP/ Email/Storage automatically as the form of an Excel spreadsheet according to the day, time and export time range you set. Then click **"Save"**.

The screenshot shows the 'Statistics Report Settings' form. The 'Export Type' is set to 'People Counting'. The 'Enable' checkbox is checked. The 'Day' is set to 'Everyday'. The 'Time' is set to '00:00:00'. The 'Export Time Range' is set to 'Last 1 day'. The 'Export to' section has three checkboxes: 'FTP', 'Email', and 'Storage'. The 'Storage' checkbox is checked, while 'FTP' and 'Email' are unchecked. A blue 'Save' button is located at the bottom center of the form.

Note:

If the current **Statistics Report** is generated, it will be saved as a csv form.

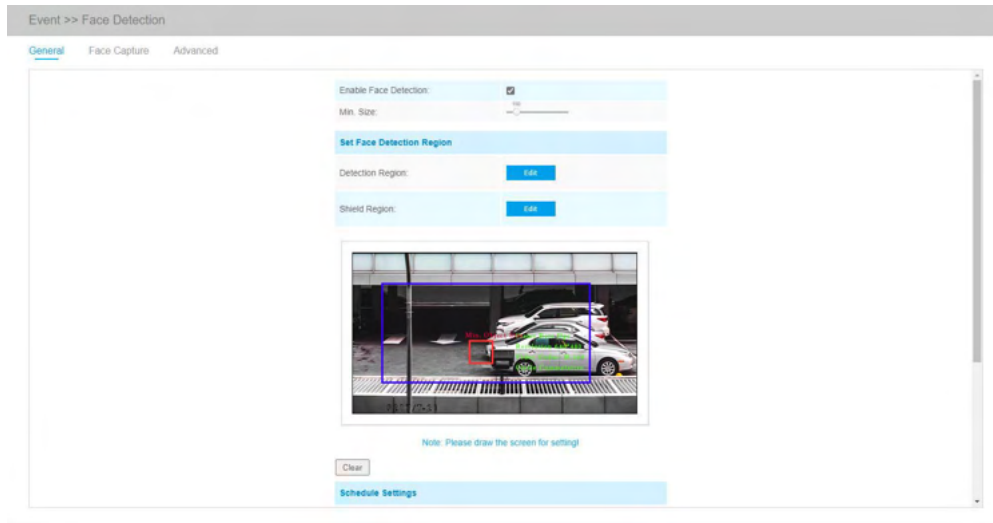
Face Detection (Optional)

The **Face Detection** function can detect the face appearing in the drawn area and support saving face snapshots into Storage, upload via FTP or Email, display in Live View.

General

Note:

Currently Face Detection is only supported by AI cameras.



Settings steps are as shown below:

Step 1: Enable **Face Detection**

Step 2 : Set **Min. Object Size**.

Step 3: Set **Detection Region**, you can drag the detection region to adjust the size. Only faces in this region will be detected.

Step 4: Set **Shield Region** is to make faces in some places of detection region be not detected. The faces can be set to be not detected in some places of detection region via setting the Shield Region. You can draw a Shield Region in the preview interface firstly, then click the **"Add"** button. There are at most four Shield Region drawn are available.

Step 5: Set **Detection Schedule** and click **"Save"**.

Face Capture

Here you can make configurations for face capture snapshots.

Face Capture Configuration

Capture Mode:	Quality Priority ▾
Capture Quality:	1
Snapshot Type:	Face Only ▾ <input checked="" type="checkbox"/> Background
Snapshot:	1 ▾
Record Video Sections:	30 seconds ▾
Save Into NAS:	<input type="checkbox"/> File Format: Snapshot ▾
Upload Via FTP:	<input type="checkbox"/> File Format: All ▾
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot ▾

Face Detection Message Post Settings

Enable Face Detection Message Post:	<input checked="" type="checkbox"/>
Post Type:	HTTP ▾
HTTP Notification URL:	URL 1 ▾
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Post ▾
Snapshot:	<input type="checkbox"/>
URL:	<input type="text"/>
User Name:	Leah
Password:	••••••••

Save

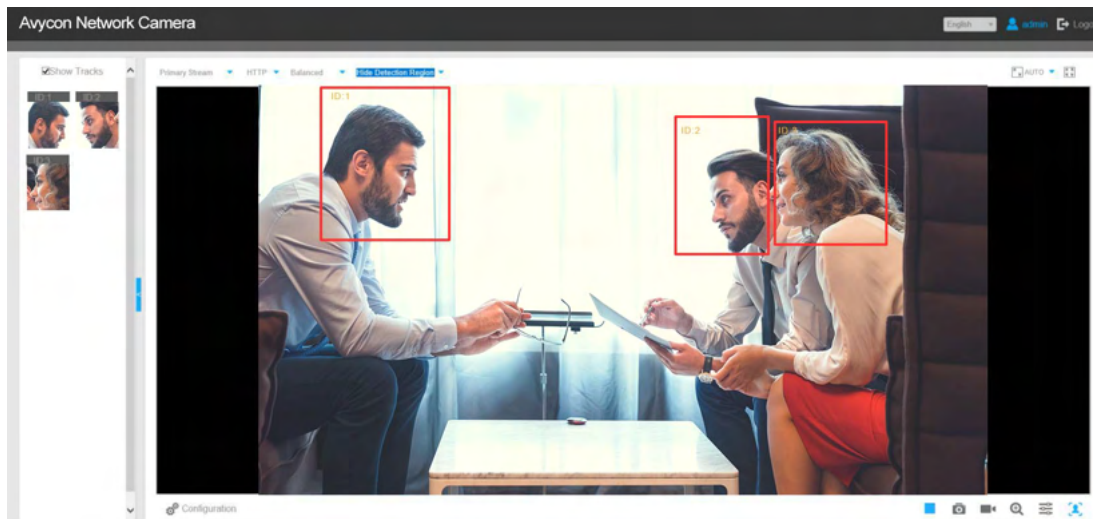
Table 45: Description of the buttons

Parameter	Function Introduction
Capture Mode	<p>Auto Mode, Quality Priority, Timeliness Priority, Customize are available.</p> <p>Auto Mode: In this mode, it will push a face screenshot based on screenshot quality and push speed when the face is detected.</p> <p>Quality Priority: In this mode, it will push a face screenshot of the best quality when the face is detected.</p> <p>Timeliness Priority: In this mode, when the face is detected, it will push a face screenshot in the shortest amount of time.</p> <p>Customize: In this mode, you can customize some detect conditions, including Snapshot Interval, Oblique Face Angle Limit, Pitching Face Angle Limit, Side Face Angle Limit, Blur Limit.</p>
Snapshot Interval	<p>80 milliseconds, 200 milliseconds, 500 milliseconds, 1 second, 2 seconds and 4 seconds are available.</p> <p>Note: Optional for Customize mode.</p>
Oblique Face Angle Limit	<p>Set Oblique Face Angle Limit to 1~180. The larger the value, the larger angle the oblique face that can be detected.</p> <p>Note: Optional for Customize mode</p>
Pitching Face Angle Limit	<p>Set Pitching Face Angle Limit to 1~180. The larger the value, the larger angle the pitching face that can be detected.</p> <p>Note: Optional for Customize mode</p>
Side Face Angle Limit	<p>Set Side Face Angle Limit to 1~180. The larger the value, the larger angle the side face that can be detected.</p> <p>Note: Optional for Customize mode</p>

Parameter	Function Introduction
Blur Limit	Set Blur Limit to 1~10. The larger the value, the more blurred the face can be detected. Note: Optional for Customize mode.
Snapshot Type	Face Only, Upper Body, Whole Body are available. Face Only: Capture the screenshot of the face only. Upper Body: Capture the screenshot of the upper body. Whole Body: Capture the screenshot of the whole body. If you check the " Background " option, it will take another screenshot of the entire image.
Snapshot	Set the number of screenshot to 1~5. It will take screenshot based on the snapshot interval you set.
Record Video Sections	Six different periods are available(5, 10, 15, 20, 25, 30 sec).
Save Into NAS	Save the alarm files into NAS .
Upload Via FTP	Upload the alarm files via FTP .
Upload Via Email	Upload the alarm files via Email.
Enable Face Detection Message Post Settings	Check the checkbox to enable Face Detection Message Post . It will push information to some third-party devices or compatible software. Information can be pushed by TCP or HTTP.
Post Type	Information can be pushed by TCP or HTTP.
HTTP Notification URL	There are three types of HTTP Notification URL, including URL1, URL2 , and URL3.
Enable	Check the checkbox to enable a kind of HTTP Notification URL.
Trigger Interval	Trigger Interval of the camera pushing information to some third-party devices.
HTTP Method	There are two HTTP push methods, including Post and Get.

Parameter	Function Introduction
Snapshot	Choose whether to push information with snapshot to some third-party devices or software. Note: This option is available just for URL1.
Record Video Sections	The camera can use the API URL to send face detection information to back-end devices when the detected face is captured. The format of the API URL depends on the back-end devices, including server, port, and other required formats. For example, if you want to send information to Avycon VMS Enterprise, the format of the API URL is as follows: http://VMS server IP: VMS Port/api/httpEvent Note: It supports HTTPS for HTTP Post
User Name	Receiver name.
Password	Receiver Password.

Camera will detect faces in Live View according to the region and conditions you set. If you check the **"Show Tracks"** option, it will display the face screenshot with the ID on the left side of Live View.



Advanced

Here you can enable **Attribute Recognition** and can configure the attributes you want to detect. Or you can enable the **Face Privacy Mode** for Face Detection.

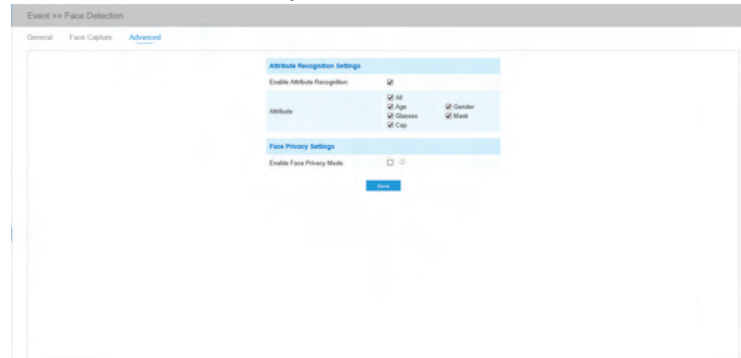
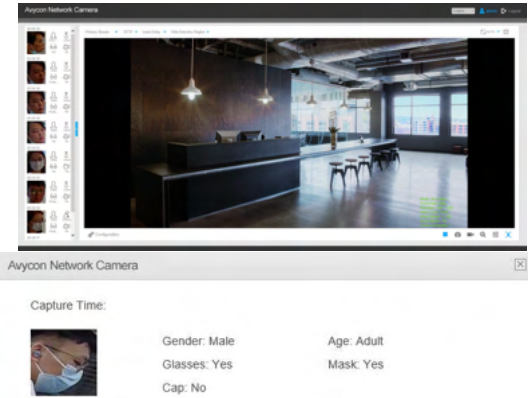
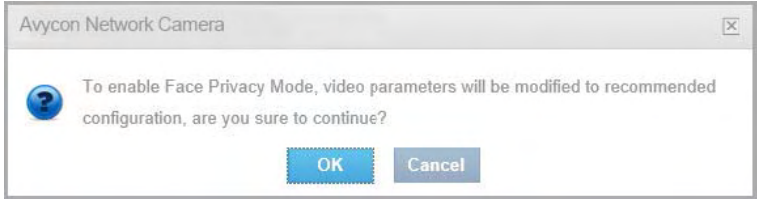
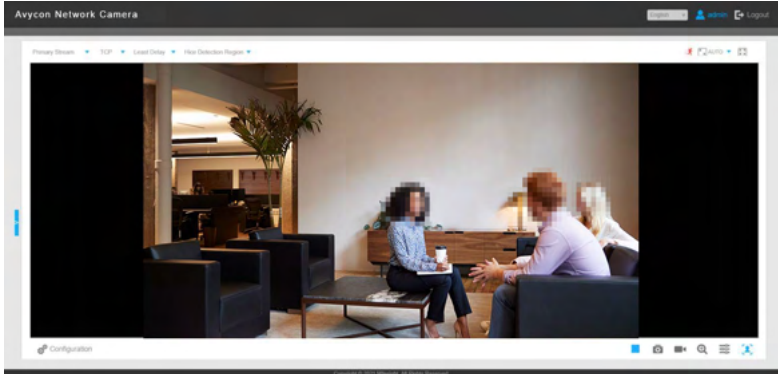


Table 45: Description of the buttons

Parameter	Function Introduction
<p>Capture Mode</p>	<p>When Attribute Recognition is enabled, the attributes of detected faces will be displayed on the left side of the Live View interface. The attributes include Age, Gender, Glasses, Mask, and Cap. Attribute Recognition meets the needs of users in some special scenarios, which improves user experience.</p> <p>Note:</p> <ul style="list-style-type: none"> Please make sure the face detection function is enabled. Make sure the Capture Mode Option is set to Quality Priority. Attribute Recognition function cannot be used together with Face Privacy function. Make sure your camera model is MS-CXXXX-XXC. (Except for LPR Camera Series) 

Parameter	Function Introduction
Attribute	<p>Users can choose the attributes as needed.</p> <p>All: Select or deselect all attributes in one click.</p> <p>Age: Recognize the age according to the face, the types including Child (Age 0-17), Adult (Age 18-59), Elderly (Age more than 59).</p> <p>Gender: Recognize the gender according the face, the types including Male and Female.</p> <p>Glasses: Recognize whether a person is wearing glasses or not.</p> <p>Mask: Recognize whether a person is wearing a mask or not.</p> <p>Cap: Recognize whether person is wearing cap or not</p> <p>Note: Unrecognized or abnormally recognized attributes will be displayed as "-".</p>
Enable Face Privacy Mode	<p>When Face Privacy Mode is enabled, the detected faces in the face detection area will be mosaic automatically. The size of the mosaic is related to that of the detected faces, and users can customize the size of the detected faces as needed. The Face Privacy function meets the needs of users in some special scenarios, which greatly protects people's portrait rights.</p> <p>Note: #Please make sure the face detection function is enabled. #To enable Face Privacy Mode, video parameters should be:</p> <ul style="list-style-type: none"> ● H.265 video codec (all streams) ● Primary Stream: 1080P@25fps ● Secondary Stream: 704*576@25fps ● Tertiary Stream: Disabled

Parameter	Function Introduction
<p>Enable Face Privacy Mode</p>	<p>You can change video parameters to the recommended configuration in the pop-up window:</p>  <p>#Face Capture/Face Detection Message Post/Attribute Recognition are not available in Face Privacy Mode.</p> <p>#Make sure your camera model is MS-CXXXX-XXC. (Except for LPR Camera Series)</p> 

LPR (Optional)

Live Video

Avycon LPR Camera supports a professional LPR Live View interface, it can show the real-time the license plates recognition results and displays the snapshots of detected license plates, which realizes a stand-alone LPR solution.



LPR mode of Live View interface (Non-AI Series)

No.	Time	License Plate	Plate Type	Vehicle Speed	Direction	Detection Region
6	2020-04-13 16:57:11	8FHP774	Visitor	-	-	1
5	2020-04-13 16:57:10	NERB1118	Visitor	-	-	1
4	2020-04-13 16:57:05	NERB1118	Visitor	-	-	1
3	2020-04-13 16:57:02	NERB1111	Visitor	-	-	1
2	2020-04-13 16:57:02	NERB1118	Visitor	-	-	1
1	2020-04-13 16:57:01	NERB1111	Visitor	-	-	1

LPR mode of Live View interface (AI Series)

No.	Time	License Plate	Plate Type	Vehicle Speed	Direction	Detection Region
6	2020-04-13 16:57:11	8FHP774	Visitor	-	-	1
5	2020-04-13 16:57:10	NERB1118	Visitor	-	-	1
4	2020-04-13 16:57:05	NERB1118	Visitor	-	-	1
3	2020-04-13 16:57:02	NERB1111	Visitor	-	-	1
2	2020-04-13 16:57:02	NERB1118	Visitor	-	-	1
1	2020-04-13 16:57:01	NERB1111	Visitor	-	-	1

Note:

For Snapshot/Recording ( / ), you can click to capture/record the current image/video, but only when you using the IE browser with plugin, it will automatically be saved to the configured path on your PC and pop up the corresponding folder. If you using the Chrome /Firefox/Safari/Edge browser in Plugin-Free Mode, it will not automatically pop up the corresponding folder to show you the details.

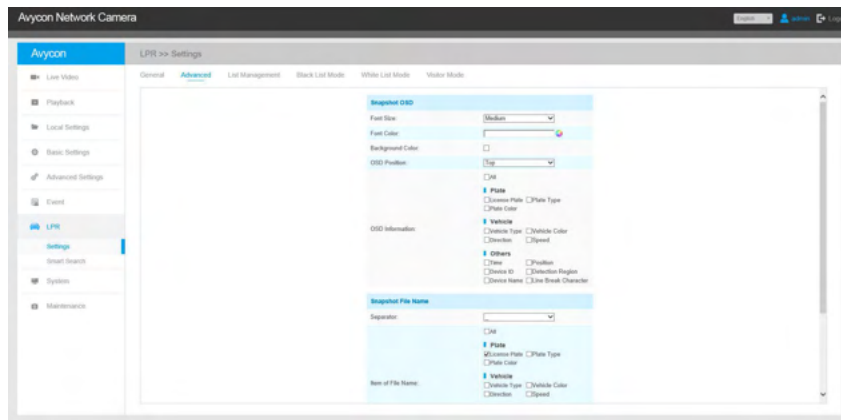
Settings

The LPR function will automatically detect and capture license plate in real time and compares to a predefined list, then takes appropriate action such as generating an alert once the license plate is on the predefined black list.

Note:

- LPR is optional for 12X AF Motorized Pro Bullet, Mini PoE PTZ Bullet, ABF Pro Box, Vandal-proof Motorized Mini Bullet, Motorized Pro Bullet Network Camera, Mini Bullet Network Camera.
- Currently we have three LPR versions, LPR1, LPR2 and LPR3. LPR1 is for Asian regions, PR2 is for European regions and the former Soviet Union and LPR3 is for Korea.
- There is only Basic Event under Event Tab for LPR cameras.

General



Step 1: Enter the license and click **"Save"**. When the License Status changes to Valid, the camera can start detecting the license plates.

Note:

Only LPR2 and LPR3 need to enter a license to activate the LPR function.

Step 2: The LPR Night Mode supports the optimal LPR night recognition effect by adjusting different parameter levels. You can choose Customize to set effective time manually, or choose Auto Mode which can automatically switch to night mode according to illumination intensity.

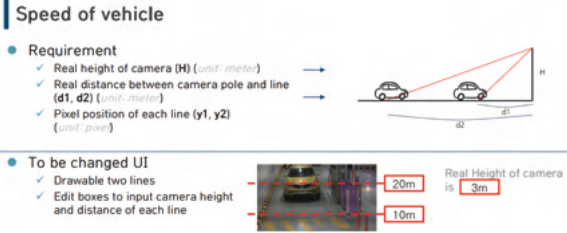
Customize Mode

Auto Mode

Step 3: Check the checkbox “Enable License Plate Recognition”, you can draw the screen to select area interested.

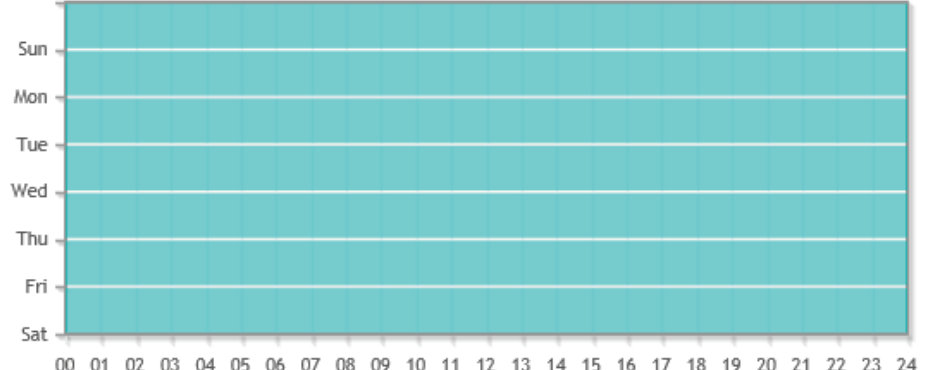
Table 47: Description of the buttons

Parameters	Function Introduction
License (Only for LPR2 and LPR3)	Generated by camera’s information
License Status (Only for LPR2 and LPR3)	Show present license status, including Valid and Invalid.
Processing Resolution	Resolution of the stream for LPR analysis, including 1920*1280, 1280*720, 640*360, 320*176.
Country/ Region (Only for LPR1)	Select country/ region to detect the license plate.
Country/ Region (Only for LPR1)	Select country/ region to detect the license plate.
Enable Day/Night Detection Mode (Only for LPR3)	With this option enabled, the camera will enable different detection modes according to Day/Night mode .

Parameter	Function Introduction																				
<p>Enable Vehicle Speed Detection (Only for LPR3)</p>	<p>With this option enabled, the camera will detect the vehicle's speed and display results on the Smart Search interface.</p> <p>You need to draw two lines(Line 1 and Line 2) on the live view, and fill in the Camera Installation Height. Horizontal Distance 1 and Horizontal Distance 2, the camera will combine the lines you draw and the data filled to calculate the vehicle speed.</p> <p>Camera Installation Height: The real height of camera.</p> <p>Horizontal Distance 1: The real distance between camera pole and line 1.</p> <p>Horizontal Distance 2: real distance between camera pole and line 2.</p> <div data-bbox="808 976 1372 1207"> <p>Speed of vehicle</p> <ul style="list-style-type: none"> Requirement <ul style="list-style-type: none"> Real height of camera (H) (unit: meter) Real distance between camera pole and line (d1, d2) (unit: meter) Pixel position of each line (y1, y2) (unit: pixel) To be changed UI <ul style="list-style-type: none"> Drawable two lines Edit boxes to input camera height and distance of each line  </div>																				
<p>Enable Vehicle Speed Detection (Only for LPR3)</p>	<p>Draw the screen to select the area interested, then click "Add" button to add the area, only four recognition areas can be added.</p> <p>You can edit the name of the area or delete the area in the list below.</p> <table border="1" data-bbox="803 1470 1360 1606"> <thead> <tr> <th>ID</th> <th>Name</th> <th>Edit</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ROI_1</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>ROI_2</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>ROI_3</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>ROI_4</td> <td></td> <td></td> </tr> </tbody> </table> <p>Note: Only license plates larger than 150 pixels can be recognized.</p>	ID	Name	Edit	Delete	1	ROI_1			2	ROI_2			3	ROI_3			4	ROI_4		
ID	Name	Edit	Delete																		
1	ROI_1																				
2	ROI_2																				
3	ROI_3																				
4	ROI_4																				
<p>Enable Vehicle Speed Detection (Only for LPR3)</p>	<p>Click the "Clear" button to clear the area being drawn.</p>																				
<p>Enable Vehicle Speed Detection (Only for LPR3)</p>	<p>Click the "Delete All" button to delete all the added areas.</p>																				

Step 4: Schedule Settings: You can draw the schedule by clicking Edit button.

Schedule Settings



00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

[Edit](#)

Step 5: Set Detection Settings and LPR Message Post Settings.

Detection Settings

Detection Trigger:	<input type="text" value="Always"/>
Confidence Level:	<input type="range" value="4"/>
Repeat Plate Checktime:	<input type="text" value="0"/> <input type="text" value="millisecond"/> (0~60000ms)
Features Identification:	<input type="checkbox"/> All <input type="checkbox"/> Direction <input type="checkbox"/> Detection Region <input type="checkbox"/> Region

LPR Message Post Settings

Enable LPR Message Post:	<input checked="" type="checkbox"/>
Post Type:	<input type="text" value="HTTP"/>
HTTP Method:	<input type="text" value="Post"/>
Snapshot Type:	<input type="text" value="All"/>
HTTP Notification URL:	<input type="text"/>
User Name:	<input type="text"/>
Password:	<input type="text"/>

Table 48: Description of the buttons

Parameter	Function Introduction
Detection Trigger	<p>Always: In this mode, the camera will always detect license plates.</p> <p>Alarm Input: In this mode, the camera will only detect license plates during Alarm Input is being triggered.</p>
Confidence Level (Only for LPR1 and LPR2)	<p>You can set the confidence level from 1 to 10.</p> <p>When the confidence level of the license plate is higher than the set confidence level, it will push the license plate image to the Smart Search interface.</p>
Repeat Plate Checktime	<p>Set the time interval for repeatedly reading license plates to effectively avoid duplicate identification of parking vehicles.</p> <p>You can set the Repeat Plate Check time from 0 to 60min or 0 to 60000ms.</p>
Feature Identification	<p>Check Region(Only for LPR2), Direction Region, Direction, or All to enable Feature Identification, it will display the corresponding information on the Smart Search interface.</p>
Enable LPR Message Post	<p>Check the checkbox to enable LPR Message Post. It will push information to some third-party devices or software that are compatible with ours.</p>
Post Type	<p>Information can be pushed by RTSP, TCP, or HTTP.</p>
HTTP Method	<p>There are two HTTP push methods, including Post and Get.</p>
Snapshot Type	<p>Three kinds of the snapshot can be chosen: All, License Plate, and Full Snapshot. When you choose All, License Plate Snapshot and Full Snapshot will be pushed.</p> <p>Note: This option is available just for the Post HTTP Method.</p>
HTTP Notification URL	<p>LPR camera can use the API URL to send LPR information to back-end devices when the license plate is recognized. API URL format fills as below: http://IP:Port/api/lpr?</p>
User Name	<p>Receiver name</p>
Password	<p>Receiver Password</p>

Note:

License Plate Serial Format function supports formulating identification rules and can automatically do further processing. The filter license plates in non-compliant formats do achieve more intelligent and accurate license plate recognition.

Settings

Add Delete All

ID	License Plate Character Count	License Plate Serial Format	Enable	Edit	Delete
0	ALL	*	<input type="checkbox"/>		
1	6	AA111A	<input checked="" type="checkbox"/>		
2	7	AA111A*	<input checked="" type="checkbox"/>		

Filter out results with incorrect character count

A - Letters Only
1 - Numbers Only
* - Unrestricted Type
Example:AA111*

Save

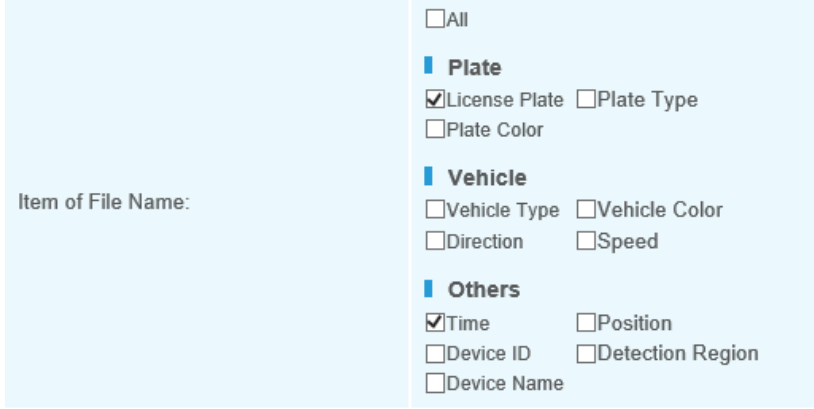
Advanced



In the interface, you can set display information on a snapshot of license plate recognition, and also customize the file name of snapshots which are uploaded via FTP or Email or stored on local LPR Picture File Path.

The screenshot shows the 'Avycon Network Camera' interface with the 'LPR >> Settings' page open. The 'Advanced' tab is active. Under 'Snapshot OSD', there are settings for Font Size (Medium), Font Color, Background Color, and OSD Position (Top). Below this, there are sections for 'Plate', 'Vehicle', and 'Others' with various checkboxes. The 'Snapshot File Name' section includes a Separator dropdown and another 'Item of File Name' section with checkboxes for License Plate, Plate Type, Plate Color, Vehicle Type, Vehicle Color, Direction, and Speed.

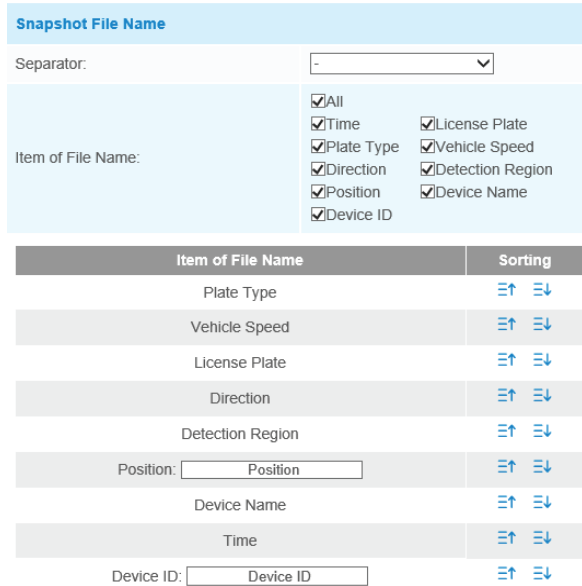
Table 49: Description of the buttons



















Parameter	Function Introduction
Font Size	<p>Small/Medium/Large is available for OSD information.</p> <p>Note: Snapshot OSD font size and Image OSD font size have corresponded.</p>
Font Color	<p>Enable to set different color for OSD information.</p> <p>Note: Snapshot OSD font color and Image OSD font color are corresponded.</p>
Background Color	<p>Check the checkbox to select the background color of snapshot OSD information.</p> <p>Note: The background color cannot be the same as the font color.</p>
OSD Position	<p>Check the checkbox to show OSD information position.</p>
OSD Information	<p>Customize the OSD content. You can set OSD Information as shown below:</p> <div data-bbox="786 1083 1338 1367" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p>OSD Information:</p> <ul style="list-style-type: none"> <input type="checkbox"/> All <input checked="" type="checkbox"/> Plate <ul style="list-style-type: none"> <input type="checkbox"/> License Plate <input type="checkbox"/> Plate Type <input type="checkbox"/> Plate Color <input checked="" type="checkbox"/> Vehicle <ul style="list-style-type: none"> <input type="checkbox"/> Vehicle Type <input type="checkbox"/> Vehicle Color <input type="checkbox"/> Direction <input type="checkbox"/> Speed <input checked="" type="checkbox"/> Others <ul style="list-style-type: none"> <input type="checkbox"/> Time <input type="checkbox"/> Position <input type="checkbox"/> Device ID <input type="checkbox"/> Detection Region <input type="checkbox"/> Device Name <input type="checkbox"/> Line Break Character </div> <p>When license plate is recognized and the alarm is triggered, the snapshot of license plate recognition will show as below:</p> <div data-bbox="889 1482 1260 1713" style="text-align: center; margin: 10px 0;"> </div>
Separator	<p>"-", "_", " " and Space are available for File Name Separator format. The default separator is "-".</p>

Parameter	Function Introduction
Item of File Name	<p>You can customize the snapshot file name according to the items chosen.</p> 

Each time an item is checked, the list will add the item row, including the item name and sorting operation. You can click  and  button to sort these items and choose a separator to connect these items' names. Also, the content of Position and Device ID items can be customized.

When you check all items, the function interface will show as below:



Item of File Name	Sorting
Plate Type	 
Vehicle Speed	 
License Plate	 
Direction	 
Detection Region	 
Position: <input type="text" value="Position"/>	 
Device Name	 
Time	 
Device ID: <input type="text" value="Device ID"/>	 

Note: The file name of full-snapshot will be preceded by a number of 4.

Note:

You need to check at least one item.

For example, you can choose items, separators, and items sorting as below:

Snapshot File Name

Separator:

Item of File Name:

- All
- Time License Plate
- Plate Type Vehicle Speed
- Direction Detection Region
- Position Device Name
- Device ID

Item of File Name	Sorting
Time	⇅
License Plate	⇅

Note: The file name of full-snapshot will be preceded by a number of 4.

[Save](#)

Once the license plate is recognized, the snapshot will be uploaded via FTP or Email or stored on your local LPR Picture File Path. Then, You can see the snapshot file name which you customize as shown below:

Full-snapshot Recognized successfully



420201116021739_8FHP774

Full-snapshot Recognized failed



420201116021729_##774N

Full-snapshot Recognized successfully



20201116021729_8FHP774

License plate snapshot Recognized failed



20201116021729_##774N

Note:

If the item checked is not recognized successfully, then the item will be displayed with the specific symbol "#".

The file name of full-snapshot will be preceded by a number of 4.

List Management

Add the license plates to this interface as **Black or White type** (Black/White List), and then you can set the alarm action for these license plates in the corresponding black list mode or white list mode interface. When these license plates are detected, the camera will respond accordingly to your settings.

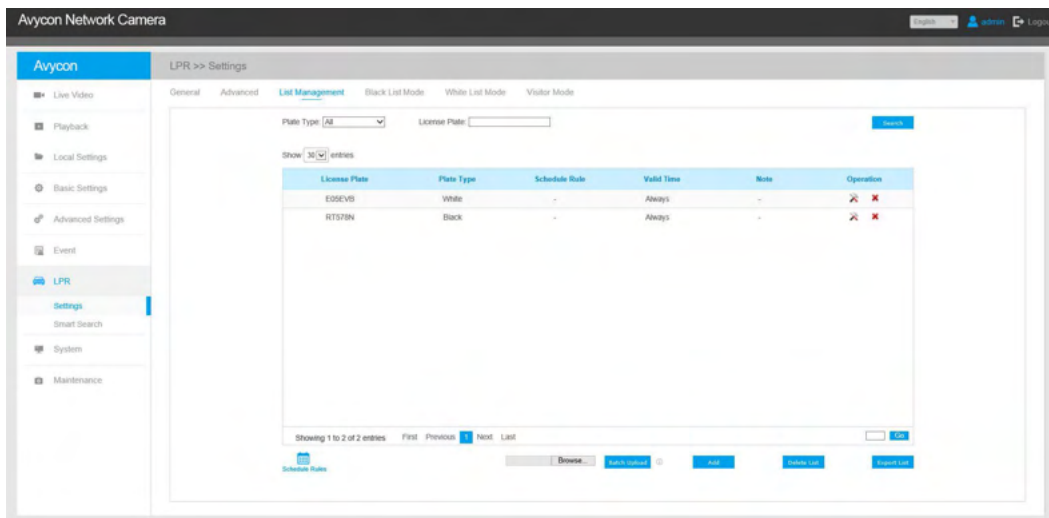


Table 50: Description of the buttons

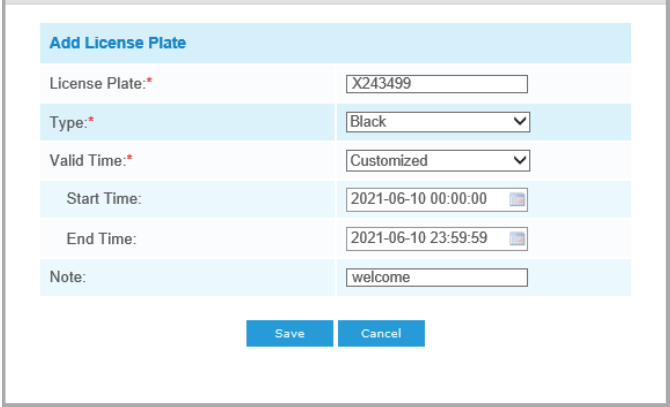
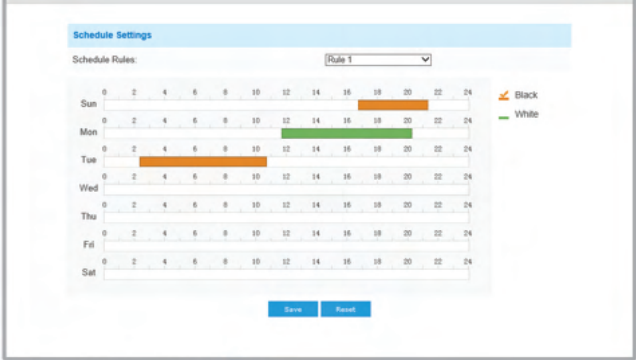
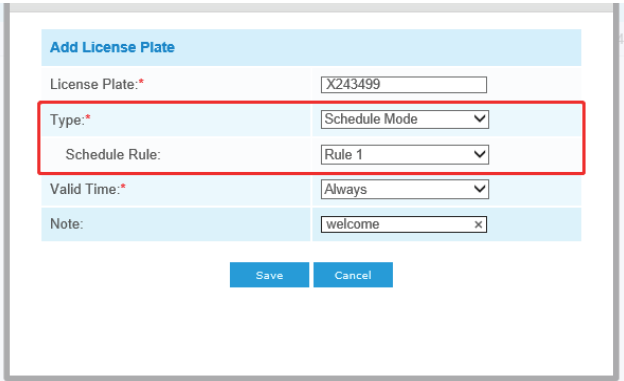
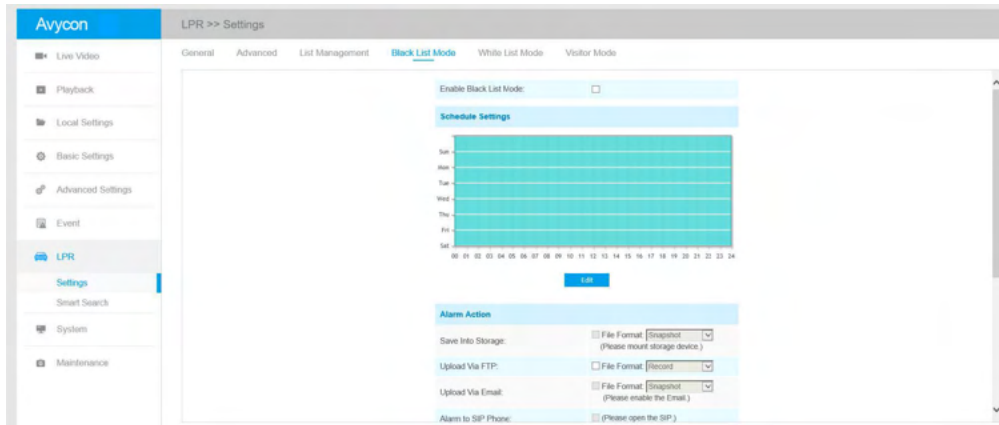
Parameter	Function Introduction
Add License Plate	<p>Select the license plate type as black or white, enter the license plate, click the "Add" button, the license plate will be added successfully.</p> 
Batch Upload	<p>You can add a CSV form with the license plate you want to add, click the "Browse" button to import the form to this interface, click the "Upload" button, the license plates will be added successfully.</p> <p>Note: You can first download the template as a reference in this interface.</p>
List Search	<p>Select Plate Type or directly enter the license plate number, click the "Search" button, the corresponding license plate will be displayed in the list below.</p>
Export List	<p>Click the "Export List" button to export the license plate in the current list to a CSV form locally.</p>
Delete List	<p>Click the "Delete List" button to delete all the license plates in the current list.</p>

Table 50: Description of the buttons

Parameter	Function Introduction
<p>Schedule Rules</p>	<p>Click the "Schedule Rules" button to customize a rule.</p>  <p>And then set the license plate to "Schedule Mode" and choose a custom "Schedule Rule" that can configure the license plate as Black List or White List at different times.</p>  <p>Note: Support setting up to 4 "Schedule Rules" for "Schedule Mode".</p>

Note:
It supports adding 1000 Black List and White List.

Black List Mode



Step 1: Check the checkbox to enable **Black List Mode**.

Step 2 : **Schedule Settings**. You can draw the schedule by clicking Edit button.

Step 3: Set **alarm action**.

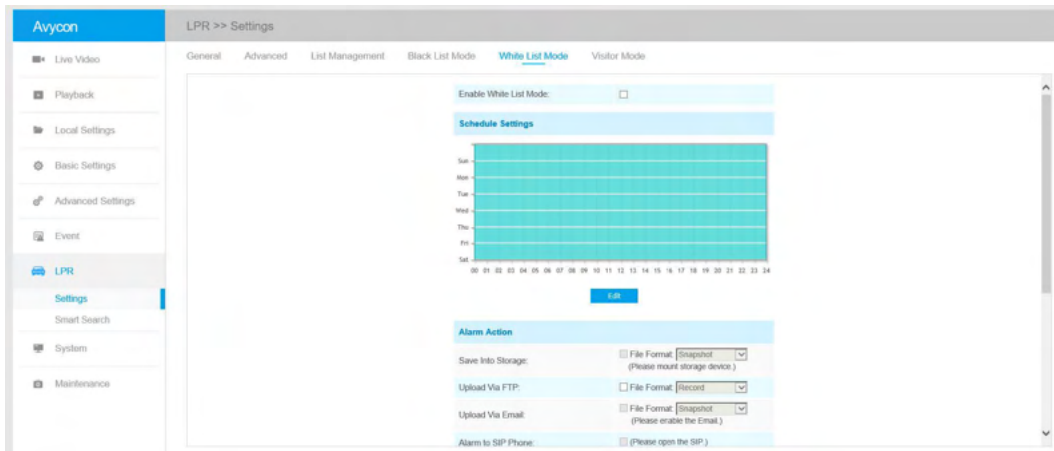
Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Snapshot ▼ (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record ▼
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot ▼ (Please enable the Email.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>

Step 4: Set **alarm settings**.

Alarm Setting	
Record Video Sections:	5 seconds ▼
Snapshot Type:	License Plate ▼
Snapshot:	1 ▼
Snapshot Interval:	1 second ▼
Email Triggered Interval:	Auto ▼
External Output Action Time:	30 seconds ▼
Play Audio Interval:	Auto ▼

After that, when a license plate marked as **"black"** is detected, the camera will respond accordingly to your settings.

White List Mode



Step 1: Check the checkbox to enable **White List Mode**.

Step 2: Schedule Settings. You can draw the schedule by clicking Edit button.

Step 3: Set **alarm action**.

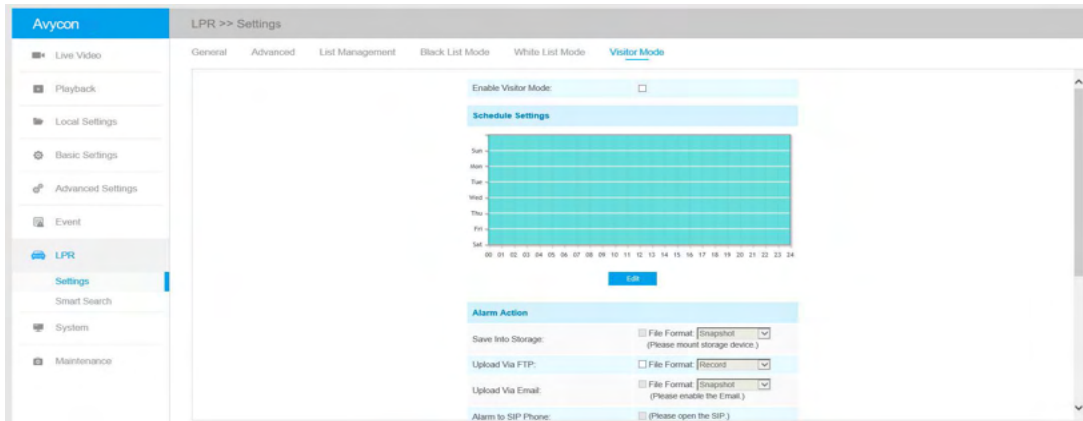
Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Snapshot (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot (Please enable the Email.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>

Step 4: Set **alarm settings**.

Alarm Setting	
Record Video Sections:	5 seconds
Snapshot Type:	License Plate
Snapshot:	1
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	30 seconds
Play Audio Interval:	Auto

After that, when a license plate marked as **"White"** is detected, the camera will respond accordingly to your settings.

Visitor Mode



Step 1: Check the checkbox to enable **Visitor Mode**.

Step 2: Schedule Settings: You can draw the schedule by clicking Edit button.

Step 3: Set **alarm action**

Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: <input type="text" value="Snapshot"/> (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: <input type="text" value="Record"/>
Upload Via Email:	<input type="checkbox"/> File Format: <input type="text" value="Snapshot"/> (Please enable the Email.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>

Step 4: Set **alarm settings**.

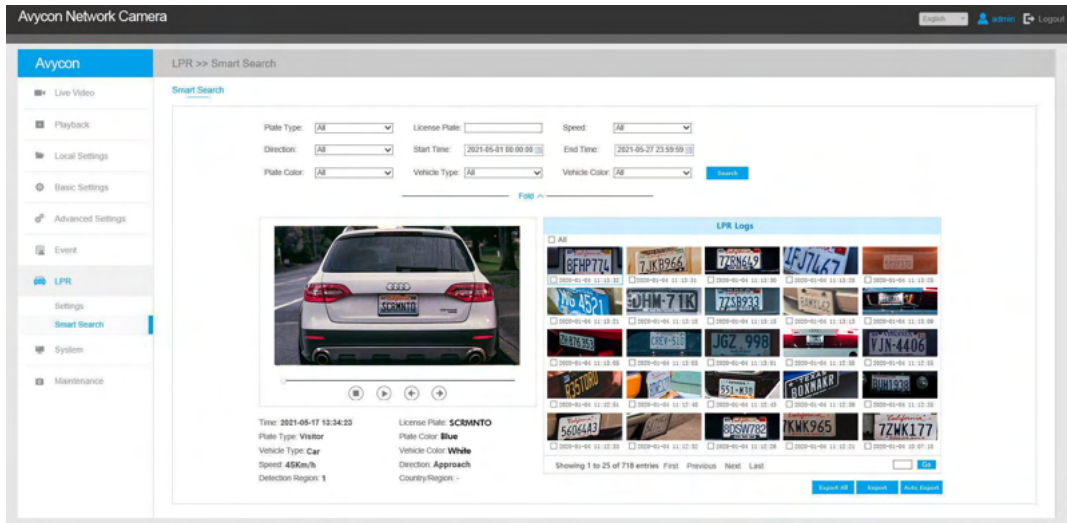
Alarm Setting	
Record Video Sections:	<input type="text" value="5 seconds"/>
Snapshot Type:	<input type="text" value="License Plate"/>
Snapshot:	<input type="text" value="1"/>
Snapshot Interval:	<input type="text" value="1"/> <input type="text" value="second"/>
Email Triggered Interval:	<input type="text" value="Auto"/>
External Output Action Time:	<input type="text" value="30 seconds"/>
Play Audio Interval:	<input type="text" value="Auto"/>

After that, when a license plate that is not marked as "Black" or "White" is detected, the camera will respond accordingly to your settings.

Smart Search

The real-time detection results will be displayed on the right side of the Smart Search page, including detected time, live screenshot, and license plate.

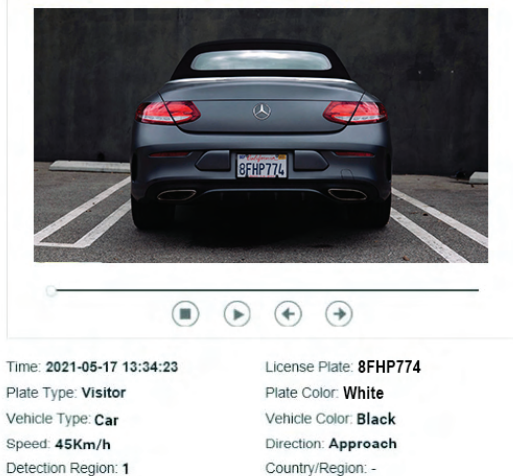
Step 1: Select Plate Type or directly enter the license plate number and then select Start Time and End Time. The related license plate information will be displayed as below by one click on the **“Search”** button.



Note:

- It supports displaying 4,000 logs.
- Only when there is an SD Card or NAS has been set on the storage management, then the logs can be stored and show on the Smart Search page.
- For Plate Color/Vehicle Color Recognition and Vehicle Type Classification, please make sure your model is **MS-CXXXX-XXC**.

Step 2: Click on the thumbnail photo under the LPR Logs, then the license plate details will be shown as below :



Step 3: Click the "Export" or "Export All" button to export the desired files in the current list to a local folder.

Export

Export File: Plate List Video Picture
 Plate List(With pictures)

Video File Format:

Step 4: Click the "Auto Export" button to automatically export the logs to FTP, Email or Storage.

Log Settings

Enable Auto Export Logs:

Day:

Time:

Export Time Range:

Export to: FTP Email Storage

System

All information about the hardware and software of the camera can be checked on this page..

System

Device Name:	<input type="text" value="Network Camera"/>
Product Model:	MS-C2942-B
Hardware Version:	V1.2
Software Version:	40.7.0.78
MAC Address:	1C:C3:16:23:8D:13
Device Information:	SD010ES2p0N6
Alarm Input:	2
Alarm Output:	2
Uptime:	4 days 17 minutes
QR Code:	 Please scan this QR code on App to get a remote view.

Table 51: Description of the buttons

Parameter	Function Introduction
Device Name	The device name can be customized. It will be seen in filenames of video files.
Product Model	The product model of the camera.
Hardware Version	The hardware version of the camera.
Software Version	The software version of the camera can be upgraded.
MAC Address	Media Access Control address
Device Information	The device information, including information about alarm I/O and clipper chip.
Alarm Input	The number of the Alarm Input interface.
Alarm Output	The number of the Alarm Output interface
Up Time	The elapsed time since the last restart of the device.

Note:

The Alarm Input/Alarm Output will appear only when the camera has an alarm input/output interface.

Maintenance

System Maintenance

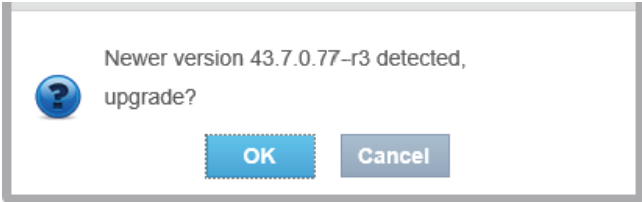
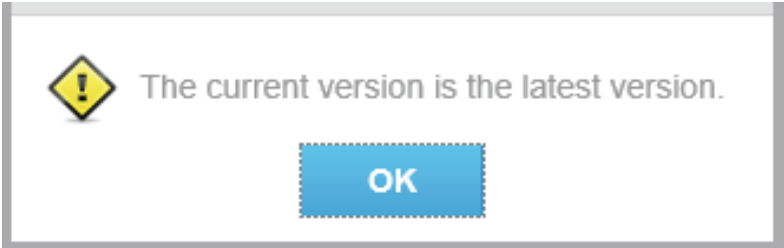
System Upgrade	
Software Version:	43.7.0.77
Local Upgrade:	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upgrade"/> <input type="checkbox"/> Reset after Upgrading
Online Upgrade:	<input type="button" value="Check"/>

Note: Do not disconnect the power of the device during the upgrade.

Maintenance	
Reset <input checked="" type="checkbox"/> Keep the IP Configuration <input checked="" type="checkbox"/> Keep the User Information	<input type="button" value="Reset"/>
Export Diagnose Information:	<input type="button" value="Export"/>
Export Config File:	<input type="button" value="Export"/>
Config File:	<input type="text"/> <input type="button" value="Browse..."/>
Import Config File:	<input type="button" value="Import"/>

Reboot	
Reboot the Device:	<input type="button" value="Reboot"/>

Table 52: Description of the buttons

Parameter	Function Introduction
System Upgrade	<p>Software Version: The software version of the camera.</p> <p>Local Upgrade: Click the "Browse" button and select the upgrading file, then click the "Upgrade" button to upgrade. After the system reboots successfully, the update is done.</p> <p>You can check "Reset after Upgrading" to reset the camera after upgrading it.</p> <p>Online Upgrade: Click the "Check" button to check the current latest firmware version on our website, and then click "OK" to upgrade to this version.</p> <p>It will prompt "The current version is the latest version" if your camera is already the latest version.</p> <div data-bbox="727 976 1365 1176" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;">  <p>Newer version 43.7.0.77-r3 detected, upgrade?</p> <p>OK Cancel</p> </div> <p>It will prompt "The current version is the latest version" if your camera is already the latest version.</p> <div data-bbox="669 1339 1448 1585" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;">  <p>The current version is the latest version.</p> <p>OK</p> </div> <p>Note: Do not disconnect the power of the device during the update. The device will be restarted to complete the upgrade.</p>

Parameter	Function Introduction
Maintenance	<p>Reset settings: Click "Reset" button to reset the camera to factory default settings.</p> <p>Keep the IP Configuration: Check this option to keep the IP configuration when resetting the camera.</p> <p>Keep the User information: Check this option to keep the user information when resetting the camera.</p> <p>Export Diagnose Information: Click this button to export logs and system information of the device operation status.</p> <p>Note: The file format is ".txt".</p> <p>Reset settings: Click this button and a window will pop up as shown below:</p> <div data-bbox="902 921 1294 1203" data-label="Image"> </div> <p>You need to enter and confirm the password again, then click the save button to export the configuration file.</p> <p>Import Config File: Click this button, then a window will pop up and you can click "OK" to update the configuration.</p> <p>It will pop up a window to prompt "Input the password of config file", then enter the password and click the save button to import configuration file.</p> <div data-bbox="893 1577 1304 1806" data-label="Image"> </div> <p>Note: Export and import the same configuration file. Password must be the same..</p>

Parameter	Function Introduction
Reboot	Click "Reboot" button to restart the device immediately

Auto Reboot

Set the date and time to enable the **Auto Reboot function**, the camera will reboot automatically according to the customized time in case of that camera overload after running a long time.

Auto Reboot Settings

Enable Auto Reboot:

Day:

Time:

[Save](#)

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