



# Fisheye Network Camera User Manual

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# Chapter 1. Introduction

Thank you for purchasing our product. If there is any questions or requests, please do not hesitate to contact your dealer.

This Manual explains how to use and manage Milesight network cameras on your network. Previous experience of networking will be of use when using the products. Please read this manual carefully before operation and retain it for future reference.

This manual may contain several technically incorrect places or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual. We will readily improve or update the products or procedures described in the manual.

## *1.1 Copyright Statement*

This manual may not be reproduced in any form or by any means to create any derivative such as translation, transformation, or adaptation without the prior written permission of Milesight Technology Co., Ltd (Hereinafter referred to as Milesight).

Milesight reserves the right to change this manual and the specifications without prior notice. The latest specifications and user documentation for all Milesight products are available on our official website [www.milesight.com](http://www.milesight.com)

## *1.2 Industry Canada ICES-003 Compliance*

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## *1.3 Safety Instruction*

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. The precaution measures are divided into “Warnings” and “Cautions”

**Warnings:** Serious injury or death may be caused if any of these warnings is neglected.

- This installation must be conducted by a qualified service person and should strictly comply with the electrical safety regulations of the local region

- To avoid risk of fire and electric shock, do keep the product away from rain and moisture before installed.
- Do not touch components such as heat sinks, power regulators, and processors, which may be hot
- Source with DC/AC 12V or PoE
- Please make sure the plug is firmly inserted into the power socket
- When the product is installed on a wall or ceiling, the device should be firmly fixed
- If the product does not work properly, please contact your dealer. Never attempt to disassemble the camera by yourself

**Cautions:** Injury or equipment damage may be caused if any of these cautions are neglected.

- Make sure that the power supply voltage is correct before using the camera
- Do not store or install the device in extremely hot or cold temperatures, dusty or damp locations, and do not expose it to high electromagnetic radiation
- Only use components and parts recommended by manufacturer
- Do not drop the camera or subject it to physical shock
- To prevent heat accumulation, do not block air circulation around the camera
- Laser beams may damage image sensors. The surface of image sensors should not be exposed to where a laser beam equipment is used
- Use a blower to remove dust from the lens cover
- Use a soft, dry cloth to clean the surface of the camera. Stubborn stains can be removed using a soft cloth dampened with a small quantity of detergent solution, then wipe dry
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes
- Save the package to ensure availability of shipping containers for future transportation

## *1.4 EU Conformity Statement*

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury(Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

# Chapter 2. Product Description

## *2.1 Product Overview*

Milesight provides a consistent range of cost-effective and reliable network cameras to fully meet your requirements. Based on embedded Linux operating system, Milesight network cameras could be easily accessed and managed either locally or remotely with great reliability. With built-in high-performance DSP video processing modules, the cameras pride on low power consumption and high stability. They support state-of-the-art H.265/ H.264/ MJPEG video compression algorithm and industry-leading HD dual-stream technology to achieve the highest level of video image quality under the limited network resources. It is fully functional, supporting for flexible and comprehensive alarm linkage mechanism, day and night auto switch and privacy masking, etc.

In practical applications, Milesight network cameras could either work independently in the LAN, or be networked to form a powerful safety monitoring system. It is widely used in fields such as finance, education, industrial production, civil defense, health care for security's sake.

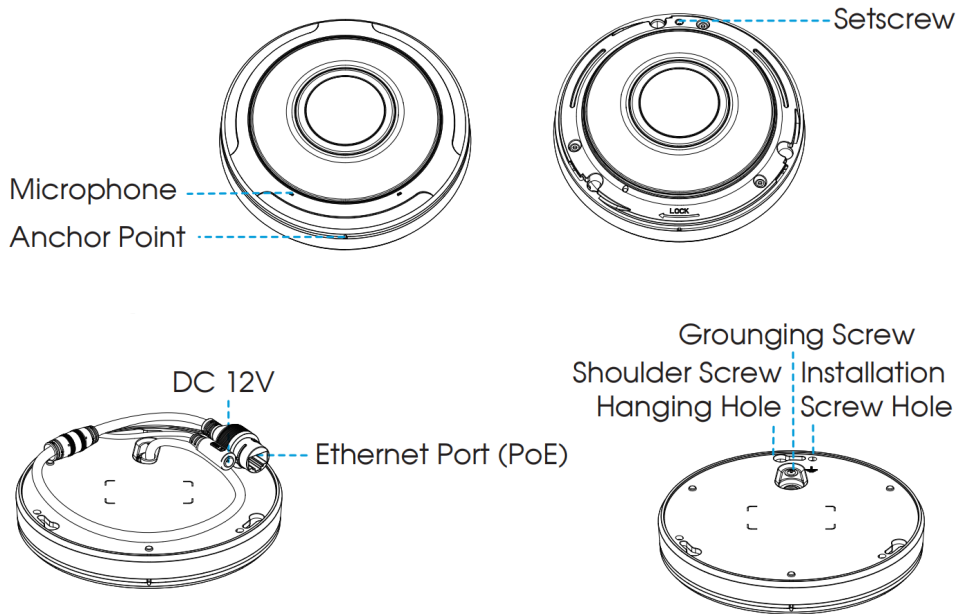
## *2.2 Key Features*

- 70% ~80% bandwidth saved by 10-level adjustable H.265+
- Up to 25fps@4000×3000
- Support AI Video Analytics
- Support Hardware Dewarping and Software Dewarping
- Support Heat Map function
- Support Auto Tracking function
- 11 display modes to meet various needs
- Equipped with Audio I/O and Alarm I/O
- IK10-rated vandal-proof metal cover, and IP67-rated weather-proof housing
- Streamlined design, exquisite appearance
- Easy to blend in with the installation environment
- Based on Linux OS with high reliability
- Support ONVIF Profile G & Q & S & T
- Support Plugin-Free mode
- Support activation and set-up of the security questions for cameras(V4x.7.0.69 or above)
- ICR filter with auto switch, true day/night
- UPnP protocol for the easy management of cameras
- Support Milesight DDNS
- Motion Detection, Privacy Masking, Network Fault Detection and ROI
- FTP upload, SMTP upload, SD card record and SIP function
- G.711/AAC audio compression capability

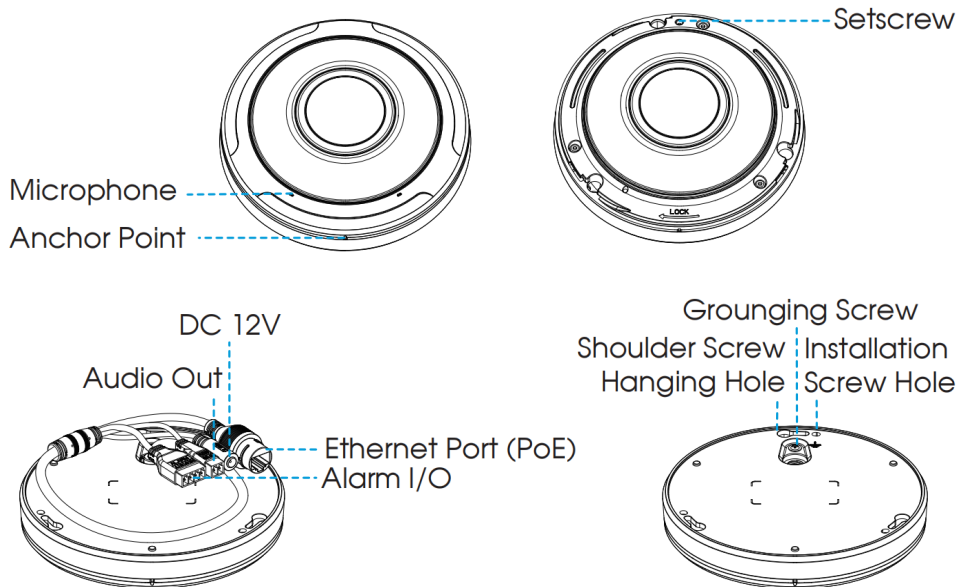
- Three-privilege levels of users for flexible management
- Micro SD/SDHC/SDXC card local storage support, expand the edge storage

## 2.3 Hardware Overview

### 1. 5MP Fisheye Network Camera



### 2. 12MP (AI) Fisheye Network Camera

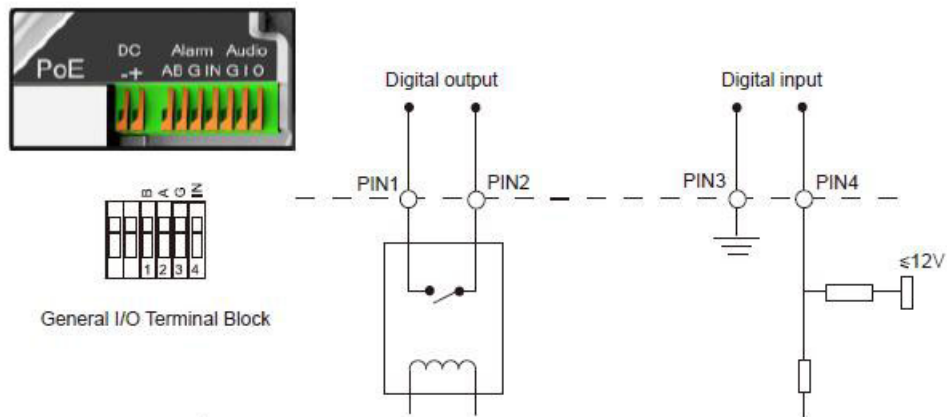


### Note:

- DC 12V and PoE are available for power supply.
- Built-in SD card slot can be seen after rotating open the cover, removing the 3 screws and open the front panel.

## 2.4 How to Connect to Alarm Interface

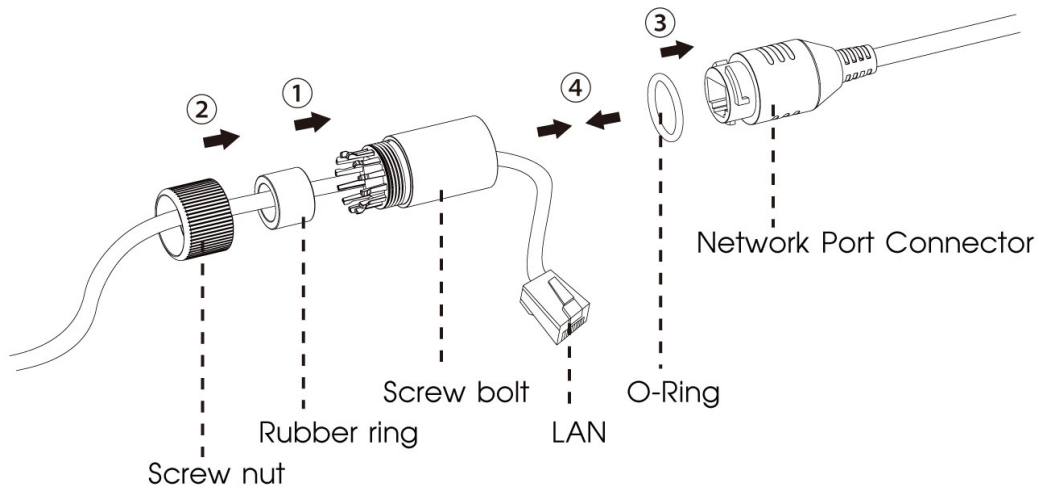
External interface of camera is as the following, you can refer to the picture to install the external alarm device:



- PIN1: Alarm Output NC/NO 24V DC 1A
- PIN2: Alarm Output NC/NO 24V DC 1A
- PIN3: Alarm Input NC/NO  $\leq 12V$
- PIN4: Alarm Input NC/NO  $\leq 12V$

## 2.5 How to Connect the Water-proof Connector





Step1: Get the network cable through the screw nut, rubber ring and the screw bolt.

Step2: Insert the rubber ring into the screw bolt.

Step3: Connect the screw nut to the screw bolt.

Step4: Place the O-Ring on the network port connector.

Step5: Connect the RJ45 to the network port connector, and tighten the screw bolt and the connector.

## 2.6 System Requirements

**Operating System:** Windows XP/Vista/7/8/10/Server 2000/Server 2008

**CPU:** 1.66GHz or higher

**RAM:** 1G or higher

**Graphic memory:** 128MB or more

**Internet protocol:** TCP/IP (IPv4/IPv6)

**Web Browsers:** Internet Explorer 8.0 and above version, Mozilla Firefox, Google Chrome and Safari.

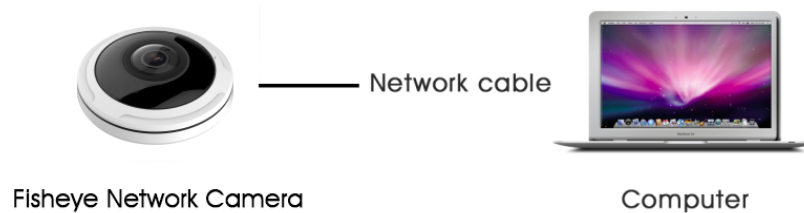
# Chapter 3. Network Connection

## 3.1 Setting the Camera over the LAN

Connecting the camera to a switch or a router is the most common connection method. The camera must be assigned an IP address that is compatible with its LAN.

### 3.1.1 Connect the Camera to the PC Directly

In this method, only the computer connected to the camera will be able to view the camera. The camera must be assigned a compatible IP address to the computer. Details are shown as the following figure.



### 3.1.2 Connect via a Switch or a Router

Refer to the following figure to set network camera over the LAN via the switch or router.



## 3.2 Dynamic IP Connection

**Connecting the network camera via a router**

Step1: Connect the network camera to a router;

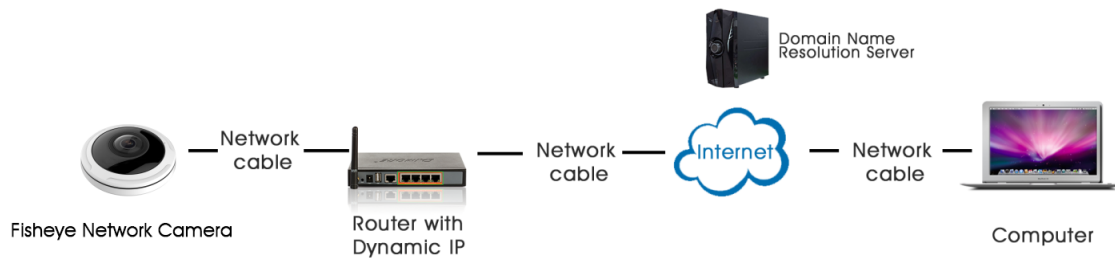
Step2: On the camera, assign a LAN IP address, the Subnet mask and the Gateway;

Step3: On the router, set port forwarding. E.g. 80, 8000 and 554 ports. The steps for port forwarding vary depending on different routers. Please look up the router's user manual for assistance with port forwarding;

Step4: Apply a domain name from a domain name provider;

Step5: Configure the DDNS settings in the setting interface of the router;

Step6: Visit the camera via the domain name.



# Chapter 4. Accessing the Network Camera

The camera must be assigned an IP address to be accessible.

## *4.1 Assigning An IP Address*

The Network Camera must be assigned an IP address to be accessible. The default IP address of Milesight network cameras is 192.168.5.190.

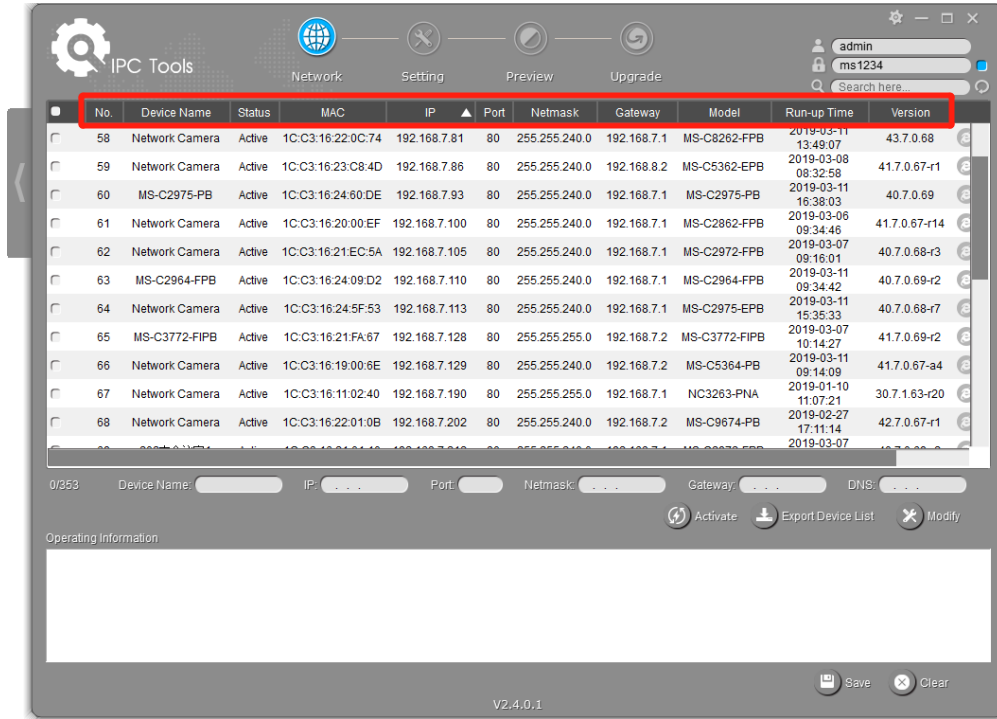
You can either change the IP address of the camera via Smart Tools or browser. Please connect the camera in the same LAN of your computer.

### *4.1.1 Assigning An IP Address Using Smart Tools*

Smart Tools is a software tool which can automatically detect multiple online Milesight network cameras in the LAN, set IP addresses, and manage firmware upgrades. It's recommended to use when assigning IP addresses for multiple cameras.

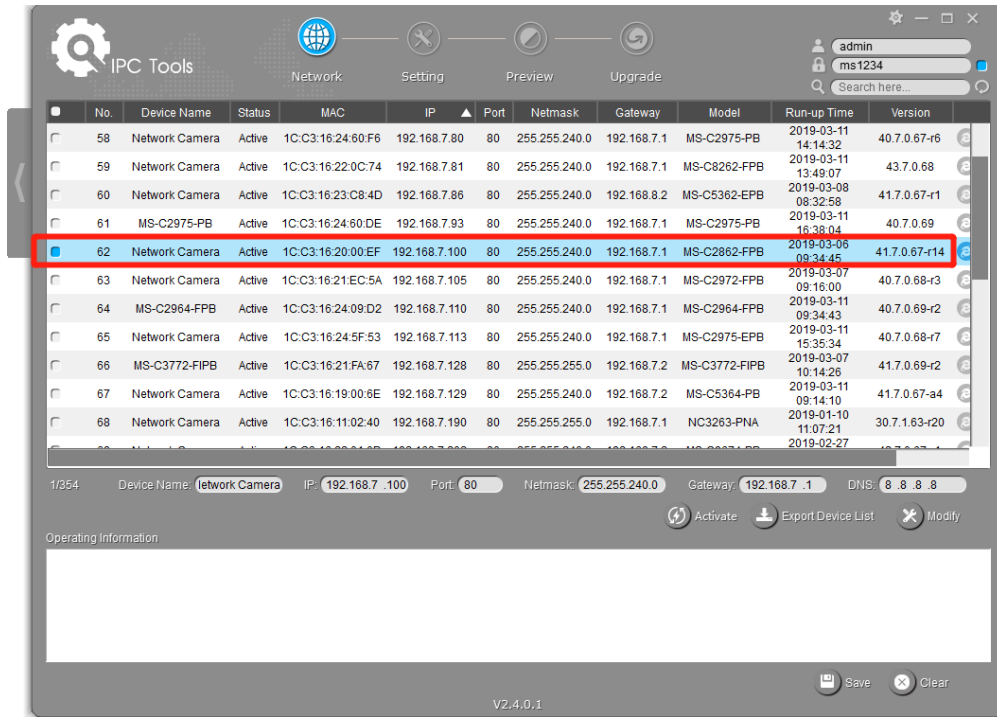
**Step1:** Install Smart Tools (The software could be downloaded from our website);

**Step2:** Start Smart Tools, click the IPC Tools page, then enter the device information, such as IP address, MAC address, Status, Port number, Netmask, and Gateway, then all related Milesight network cameras in the same network that will be displayed. Details are shown as the figure below;

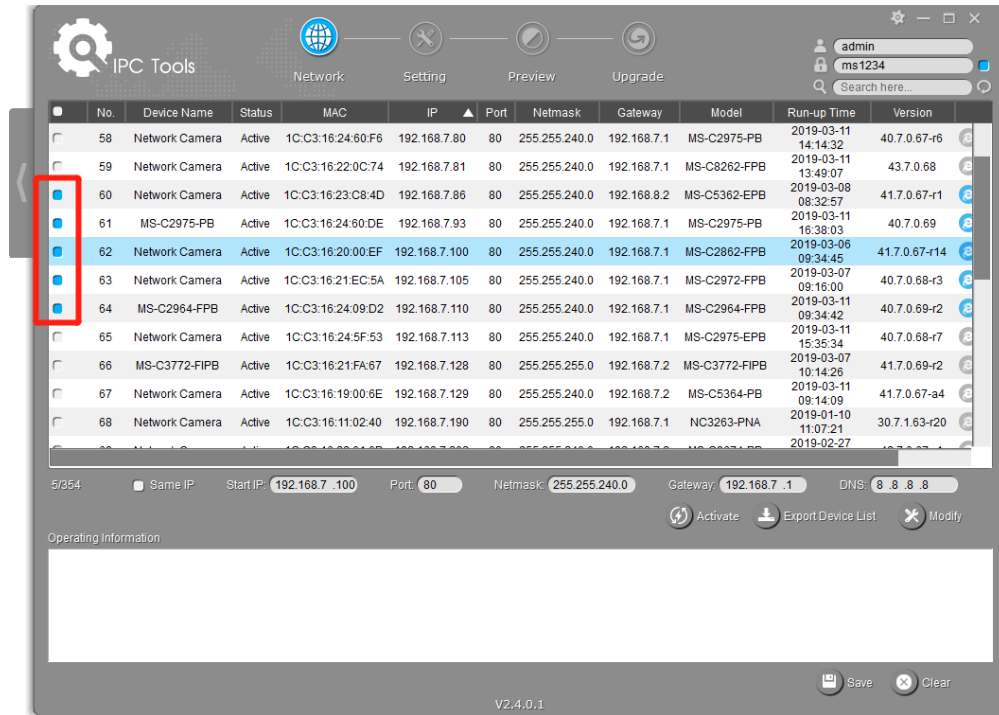


**Step3:** Select a camera or multiple cameras according to the MAC addresses;

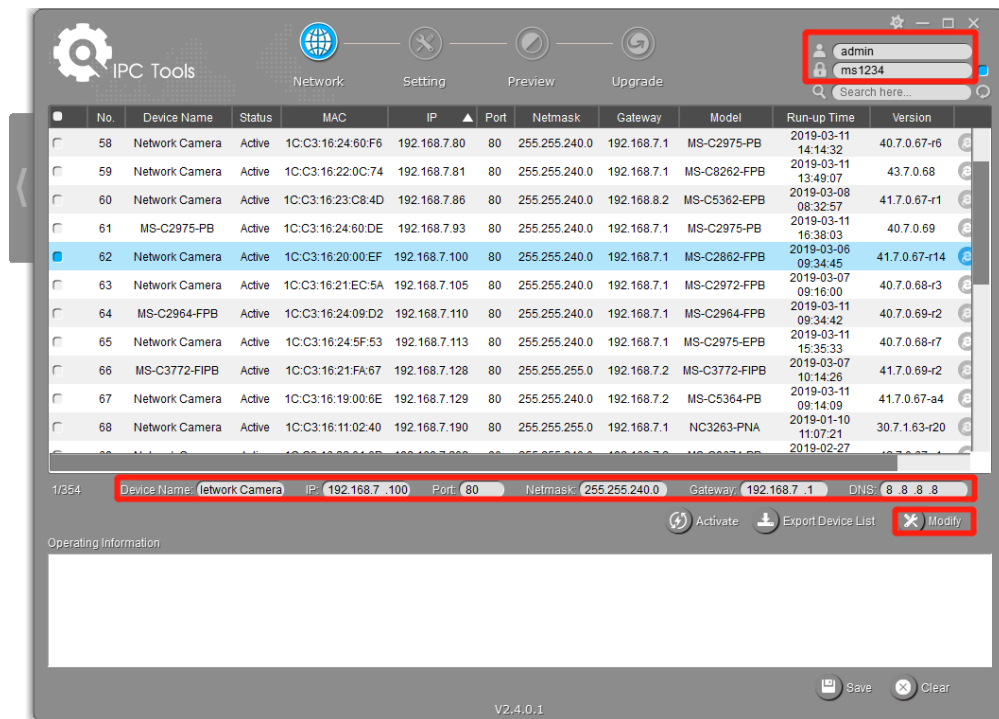
*Select single camera:*




*Select multiple cameras:*



**Step4:** If the selected camera shows "Active" in the status bar, you can directly type the User Name and Password (Camera with version lower than 4x.7.0.69 is using admin/ms1234 by default), change the IP address or other network values, and then click "Modify" button;

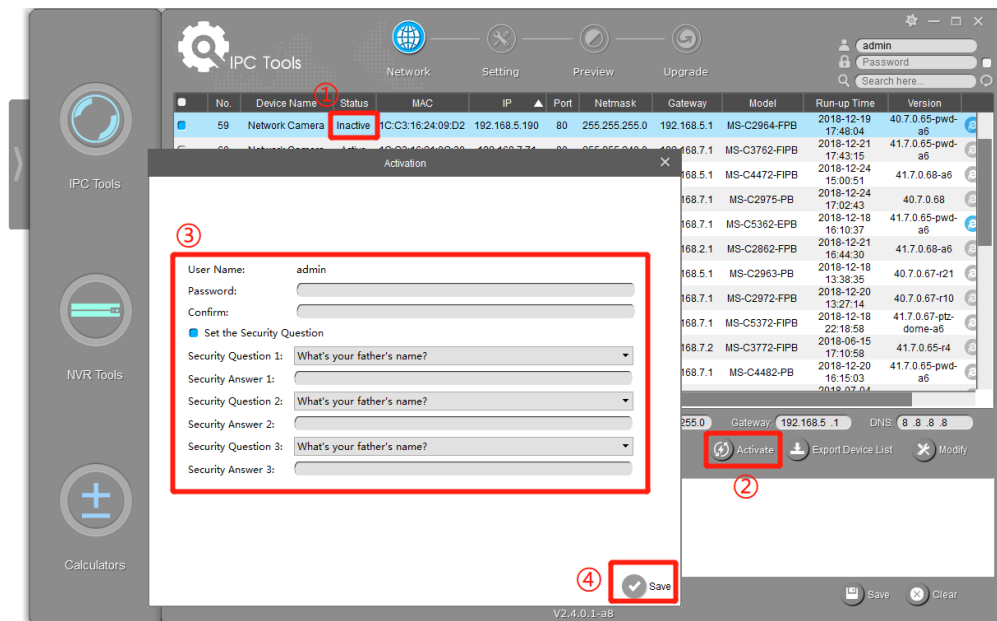


If the selected camera shows "Inactive" in the status bar (Camera with version V4x.7.0.69 or

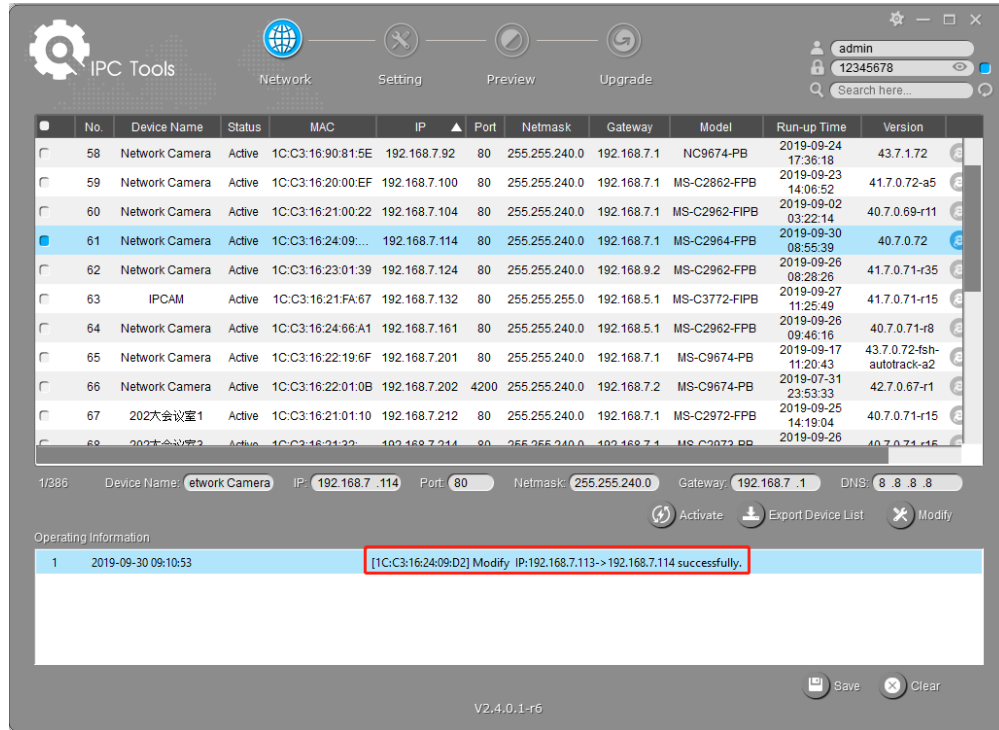
above), click  to set the password when using it for the first time. You can also set the security questions when activating the camera in case that you forget the password (You can reset the password by answering three security questions correctly). Click 'Save' and it will show that the activation was successful.

 **Note:**

- Password must be 8 to 32 characters long, contain at least one number and one letter.
- You need to upgrade Smart Tools version to V2.4.0.1 or above to activate the camera.



After activation, you can change the IP address or other network values, and then click "Modify" button.



Step6: By double clicking the selected camera or the browser of interested camera, you can access the camera via web browser directly. The Internet Explorer window will pop up.



More usage of Smart Tools, please refer to the *Smart Tools User Manual*.

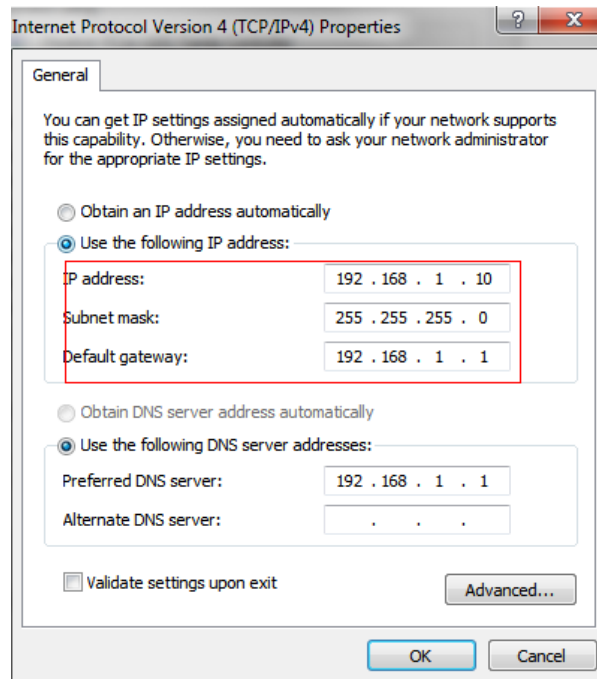


### 4.1.2 Assign An IP Address via Browser

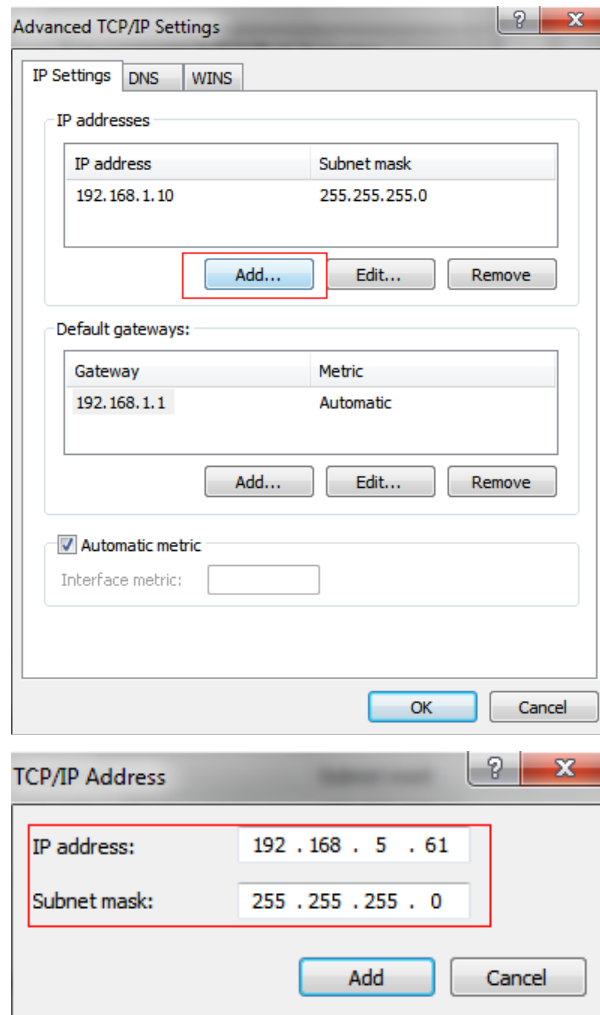
If the network segment of the computer and that of the camera are different, please follow the steps to change the IP address:

**Step1:** Change the IP address of computer to 192.168.5.0 segment, here are two ways as below:

a. Start→Control Panel→Network and Internet Connection→Network Connection→Local Area Connection, and double click it;



b. Click “Advanced”, and then click “IP settings”# “IP address”# “Add”. In the pop-up window, enter an IP address that in the same segment with Milesight network cameras ( e.g. 192.168.5.61, but please note that this IP address shall not conflict with the IP address on the existing network);



**Step2:** Start the browser. In the address bar, enter the default IP address of the camera:<http://192.168.5.190>;

**Step3:** If the camera's firmware version is lower than V4x.7.0.69, it will directly display the login page, enter the user name and password when the LOGIN page appears;

- Default user name: admin
- Default password: ms1234



If the camera's firmware version is V4x.7.0.69 or above, you need to set the password first when using it for the first time. And you can also set three security questions for your device after activation. Then, you can log in the device with You can log in to the camera with the username(admin) and a custom password.

 **Note:**

- Password must be 8 to 32 characters long, contain at least one number and one letter.
- You can click the “forget password” in login page to reset the password by answering three security questions when you forget the password, if you set the security questions in advance.

**Step4:** After login, please select “Configuration” → “Basic Settings” → “Network” → “TCP/IP”. The Network Settings page appears (Shown as below Figure);

**Step5:** Change the IP address or other network values. Then click “Save” button;

**Step6:** The change of default IP address is completed.

## 4.2 Accessing from the Web Browser

The camera can be used with the most standard operating systems and browsers. The recommended browsers are Internet Explorer, Firefox, Chrome, Microsoft Edge, Safari.

## 4.2.1 Access with Plugin

Currently you can only access the camera with plugin via Internet Explorer.

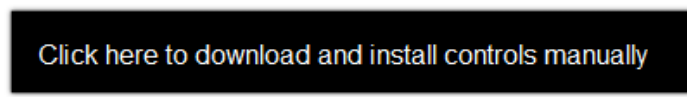
### Access over IE Browser

Before using the browser to get access to your camera, you need to install the MsActiveX firstly. You can refer the steps as follows:

**Step1:** Launch the IE browser and enter the IP address of the camera;

**Step2:** Enter the User Name and Password and click “Login”;

**Step3:** At the first time to log in the device, the browser will prompt to install Controls, please click “Click here to download and install controls manually” as shown in the figure below;

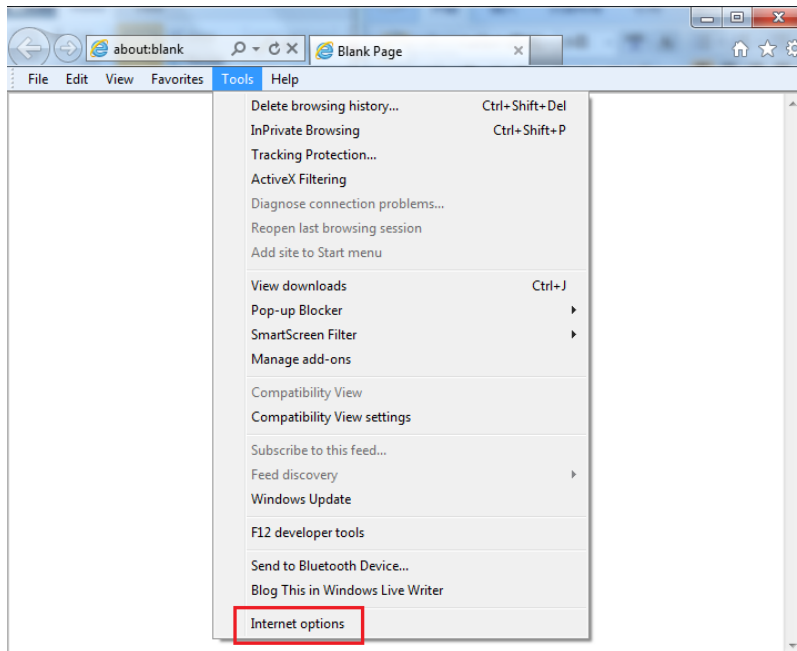


 **Note:** During installing the controls, please keep the browsers close.

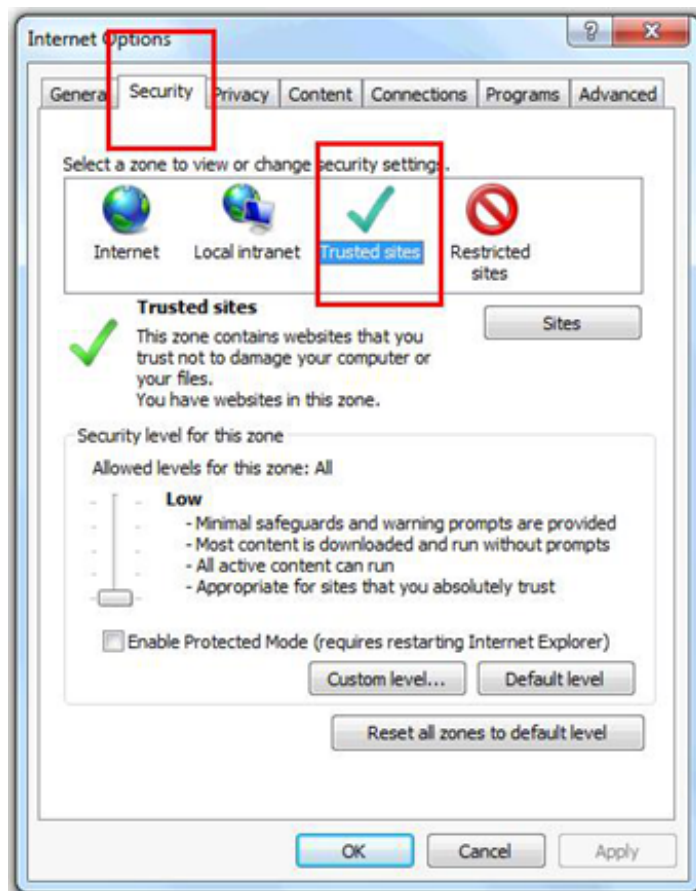
**Step4:** Follow the prompts to install the Controls, when it's finished, it will pop out a window as shown in the figure below. Please click “Finish” and refresh the browser, then you will see the video.

If IE9 or higher version browser is used, it is suggested that the Milesight network cameras web link should be added as a trusted site. See the instructions as follows:

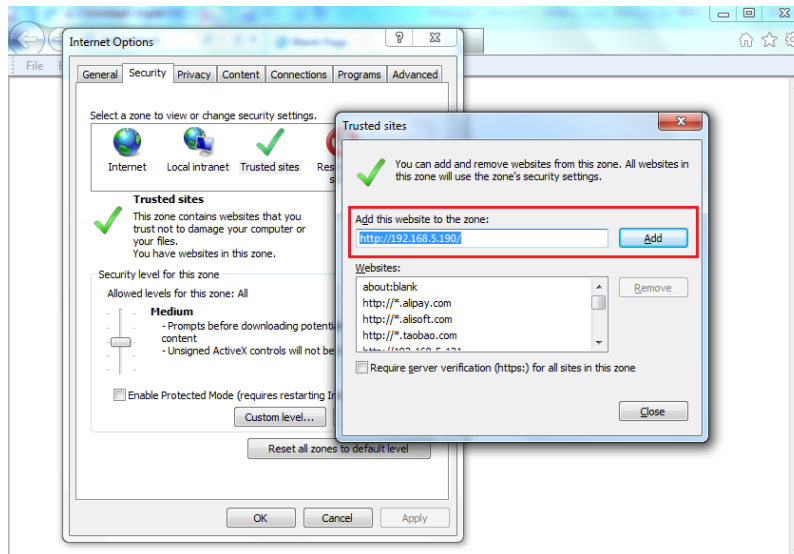
**Step1:** Start the IE9 or higher version browser, and select “Tools”→“Internet Options”;



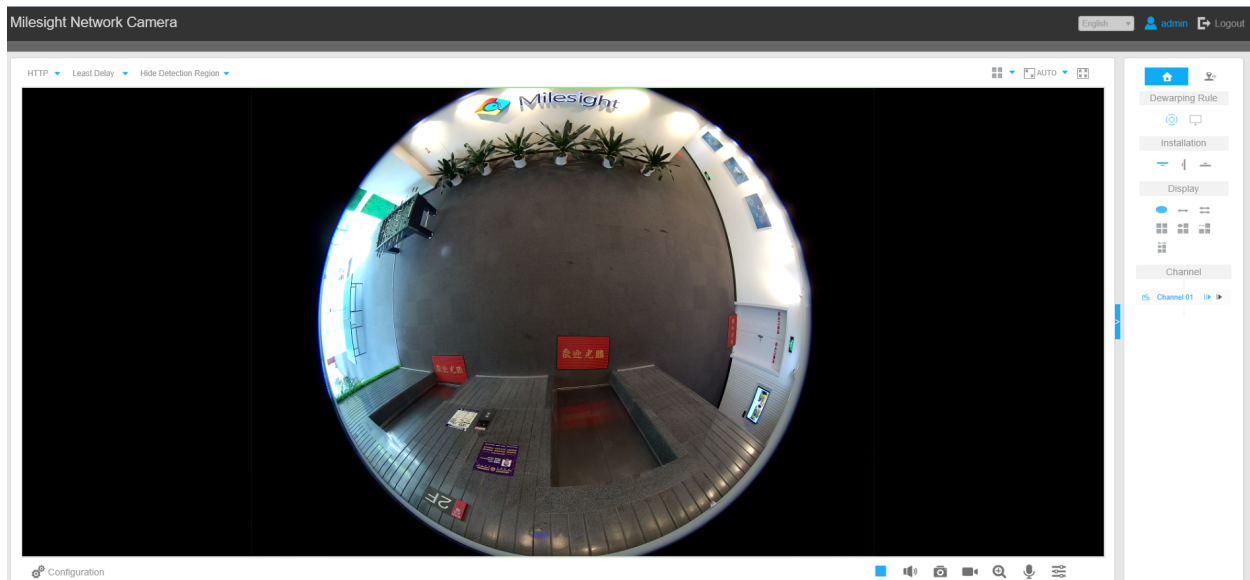
**Step2:** Select “Security” to “Trusted”;



**Step3:** Enter the IP address of the camera in the blank and click “Add”;



**Step4:** Enter the IP address. After logging on network camera’s web GUI successfully, user is allowed to view live video as follows.



### 4.2.2 Access without Plugin

As browser security becomes more and more important, some browsers don’t support installing plugin. In order to normally preview the video on the browser, The camera was upgraded to support Plugin-Free Mode. In Plugin-Free Mode, you can preview the video on the browser without plugin. Currently Plugin-Free Mode is supported in Firefox & Google Chrome & Safari & Edge browser for

Windows system, MAC system, iOS system and Android system. Both H.265&H.264 video codec are supported in Plugin-Free Mode for camera, and it will play the secondary stream by default.

#### Note:

- You need to upgrade camera to V4x.7.0.70 or above to use Plugin-Free Mode.
- For the firmware which below V4x.7.0.74, please upgrade the Network Camera to V4x.7.0.74 or above (Please upgrade the browser to the latest version).
- For V4x.7.0.74 or above, you can enjoy Plugin-Free Mode without any configuration about the browser (Please upgrade the browser to the latest version).

You can preview the video without plugin by selecting Plugin-Free Mode in Live View interface.



It supports previewing the video in Live View and other setting interfaces.

### 4.3 Accessing from Milesight VMS (Video Management Software)

Milesight VMS(ONVIF compatible) is a handy and reliable application designed to work with network cameras in order to provide video surveillance, recording settings and event management functions. The interface of Milesight VMS is very easy to use, intuitive, with easy access to the most common activities, such as viewing live video, searching through recordings and exporting videos and snapshots. It's able to be integrated with other devices through ONVIF. It is designed to work on

Windows XP/ 7/ 8/ Vista/ Server 2000/ Server 2008. The software could be downloaded from our website [www.milesight.com](http://www.milesight.com).

Please install Milesight VMS; then launch the program to add the camera to the channel list. For detailed information about how to use the software, please refer to user manual of Milesight VMS.



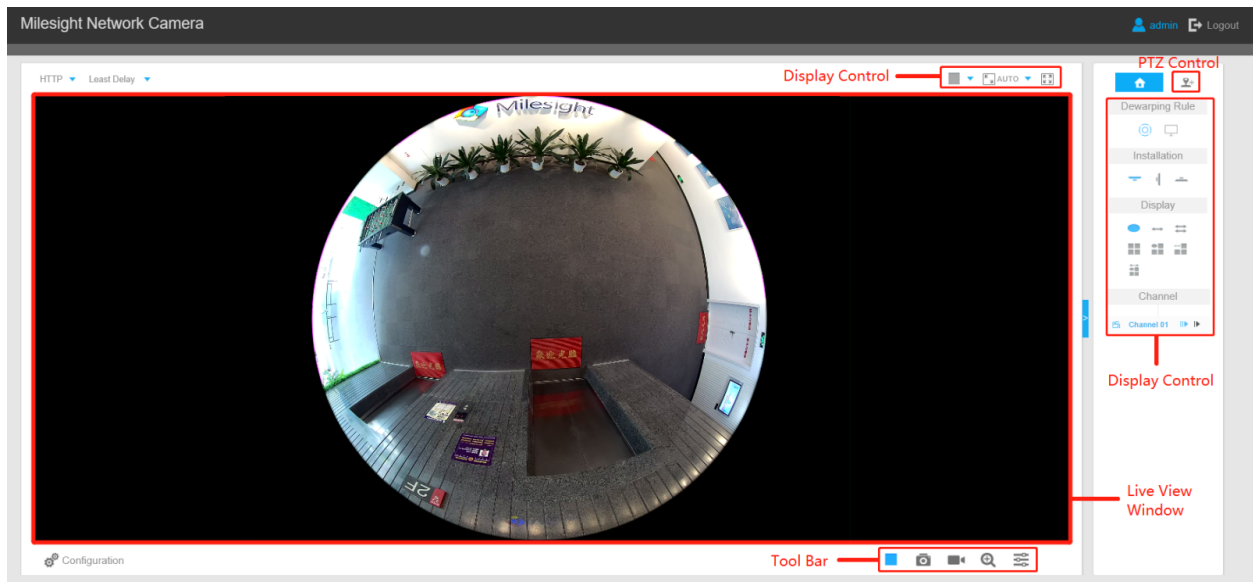


# Chapter 5. System Operation Guide

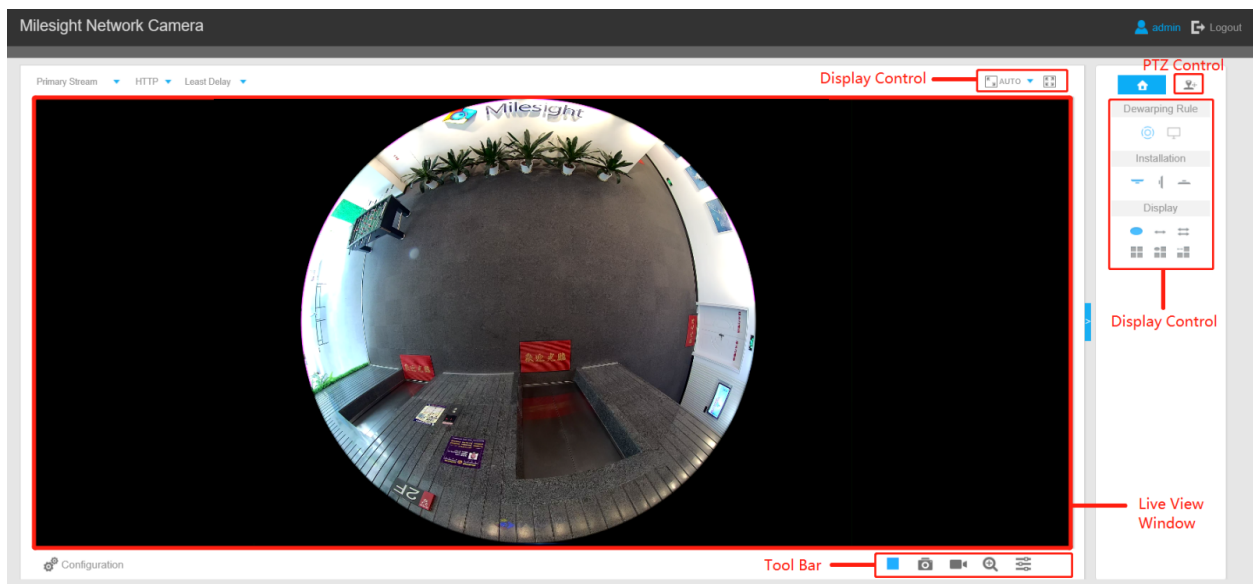
## 5.1 Live Video

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

Live view interface (Multi-Channel Mode):



Live view interface (Bundle-Stream Mode):



















### 5.1.1 Operations on Live View Page






#### Display Control

Display Control allows you to select install type, display mode, window screen and channel of live view.

**Table 1. Description of Display Control buttons**

Item	Parameter	Description
Dewarping Rule	 On-board Dewarping	Click to select on-board dewarping mode.
	 Client-side Dewarping	Click to select client-side dewarping mode.
Installation	 Ceiling Mounting	Click to select ceiling mounting.
	 Wall Mounting	Click to select wall mounting.
	 Flat Mounting	Click to select flat mounting.
Display	 10	Select live view of original fisheye view.
	 1P	Select live view of 360° panoramic view.
	 2P	Select live view of two 180° panoramic views.

Item	Parameter	Description
	 4R	Select live view of four regional views.
	 1O3R	Select live view of one original fisheye view and three regional views.
	 1P3R (Only for Hardware Dewarping)	Select live view of one 360° panoramic view and three regional views.
	 1O1P3R (Only for Multi-Channel Mode of Hardware Dewarping)	Select live view of one original fisheye view, one 360° panoramic view and three regional views.
	 1P1R (Only for Software Dewarping)	Select live view of one 360° panoramic view and one regional view.
	 1P4R (Only for Software Dewarping)	Select live view of one 360° panoramic view and four regional views.
	 1P6R (Only for Software Dewarping)	Select live view of one 360° panoramic view and six regional views.
	 1O8R (Only for Software Dewarping)	Select live view of one original fisheye view and eight regional views.

Item	Parameter	Description
Channel	 (Only for Multi-Channel Mode)	Click to play this channel on any window of live view.
Window	 Window Layout (Only for Multi-Channel Mode)	Click to set window layout to “1*1”/ “2*2”/ “1+4”.
	 Window Size	Click to display images at a window size.
	 Real Size	Click to display images at a real size.
	 Full Screen	Click to display images at full-screen.

#### Note:


- Original fisheye view: the whole wide-angle view of the fisheye camera is displayed.
- Panoramic view: the round fisheye image is transformed to rectangular image by certain calibration methods.
- Regional view: the close-up view of defined area in the original fisheye view or panoramic view.
- Select the Installation, Display mode and the most appropriate Window Layout in sequence.





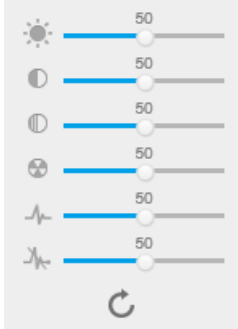
### Live View Window

Display live video on the window.

### Tool Bar

**Table 2. Description of Tool Bar buttons**

No.	Parameter	Description
1		Start/Stop all live view

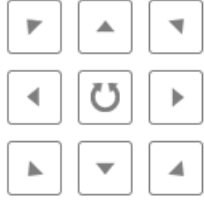



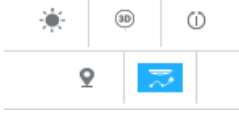



No.	Parameter	Description
2	 Capture	Click to capture the current image and save to the configured path. The default path is C:\VMS\+-1\ IMAGE-MANUAL
3	 Start Recording	Click to start recording video and save to the configured path. The default path is C:\VMS\+-1\VMS_Record. Click again to stop recording
4	 Saving Path Settings	Set the saving path for captured images and video recordings of operating on the live view
5	 Enable Digital Zoom	When enabled, you can zoom in in a specific area of video image with your mouse wheel <b>Note:</b> For the -PA model in the AI series, Enable Digital Zoom is not supported for the panoramic view of 1P3R mode.
6	 Image Config	<b>Brightness:</b> Adjust the Brightness of the scene
		<b>Contrast:</b> Adjust the color and light contrast
		<b>Saturation:</b> Adjust the Saturation of the image. Higher Saturation makes colors appear more "pure" while lower one appears more "wash-out"
		<b>Sharpness:</b> Adjust the Sharpness of image. Higher Sharpness sharpens the pixel boundary and makes the image looks "more clear"
		<b>2D DNR/3D DNR:</b> Adjust the noise reduction level
		<b>Default:</b> Restore brightness, contrast and saturation to default settings

**Note:** It will capture images and record videos of first channel by default, you can also capture images and record videos of specified channel manually.

## PTZ Control










PTZ Control allows you to use pan/tilt/zoom/preset/patrol function of PTZ, and set PTZ speed.

**Table 3. Description of PTZ Control buttons**

No.	Parameter	Description
1	 <p>PTZ Control</p>	<p>Navigation key is used to control the direction. The rotation key is used for auto-rotation.</p>
	 <p>PTZ Speed</p>	<p>To adjust the speed of pan/tilt movements, from 1 to 10</p>
2		<p>Click to zoom in and zoom out</p>
3		<p>Click to focus near or far of the lens.</p>
4		<p><b>Lighting For 30s:</b> Click to open/ close the White LED for lighting 30s.</p>
		<p><b>3D Positioning:</b> Click to enable/ disable 3D positioning.</p>
		<p><b>One-touch Patrol:</b> Click to carry out the patrol.</p>
		<p><b>Auto Home:</b> Click to enable Auto Home.</p> <p><b>Auto Tracking:</b> With this option enabled, the camera can perform the digital Pan/Tilt/Zoom to track the moving objects automatically.</p> <p> <b>Note:</b></p> <ul style="list-style-type: none"> <li>• Auto Tracking is only supported in <b>regional views</b>.</li> <li>• Auto Tracking is only supported in <b>ceiling mounting mode of on-board dewarping mode</b>.</li> </ul>
5	 <p>Preset</p>	<p>Enable to set 255 preset positions for each regional view channel</p>
6	 <p>Patrol</p>	<p>Enable to set 8 patrol paths for each regional view channel</p>

## Other

**Table 4. Description of other buttons/icons**

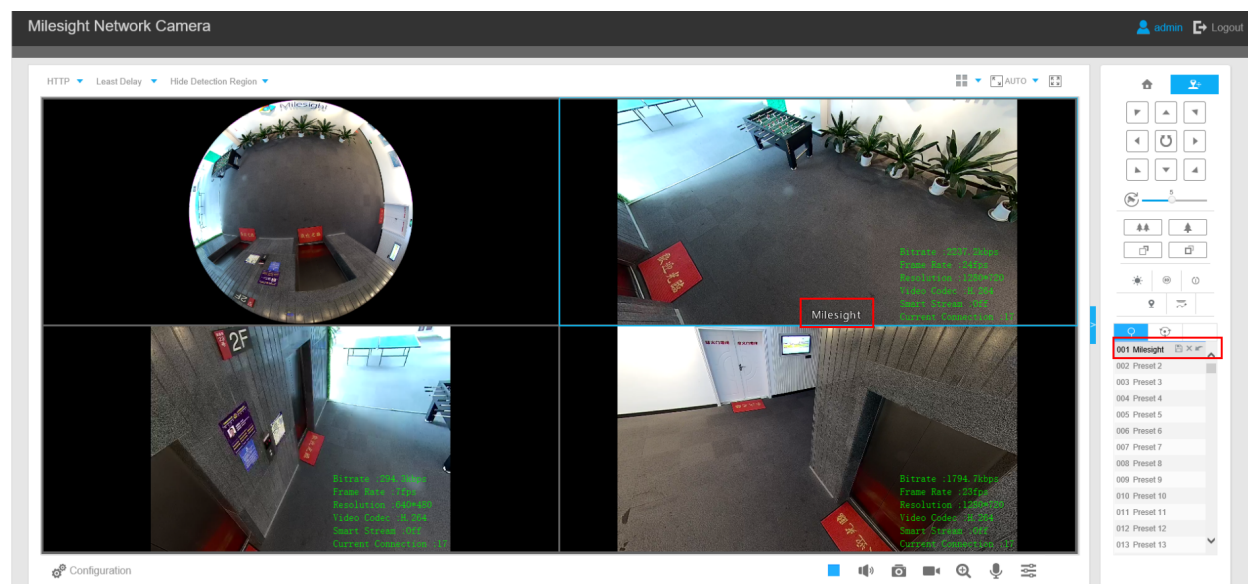
No.	Parameter	Description
1	 (Only for Bundle-Stream Mode)	Choose <b>Primary Stream/Secondary Stream</b> to show on the current video window
2		<b>TCP</b> : More reliable connection; <b>UDP</b> : More instantaneous connection, but if you cannot get the live view successfully, please turn into TCP connection. <b>HTTP</b> : Faster and safer connection especially in Internet environment.
3		<b>Least Delay</b> : The most instantaneous mode in the three modes; <b>Balanced</b> : A balanced mode between Least Delay and Best Fluency, maintains the fluency while keeps an acceptable delay; <b>Best Fluency</b> : The most fluent mode in the three modes.
4		<b>Configuration</b> : Click to access the configuration page.
5	 Recording	When recording, the icon will turn red.
6	 Alarm	When an alarm of Smart Event was triggered, the icon appears
7	 Alarm	When an alarm of Motion Detection was triggered, the icon appears
8	 Alarm	Except for the two kinds of alarms above, when other alarms were triggered, the icon appears
9		Click to select system language

### 5.1.2 Set / Call a Preset / Patrol / Pattern

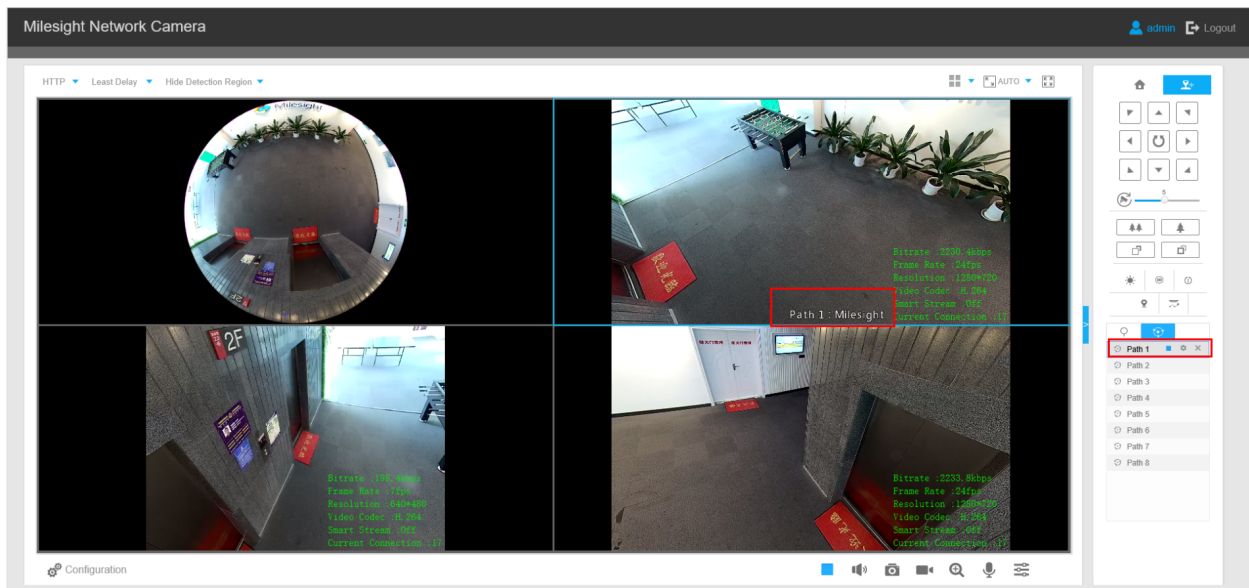
A preset is a predefined image position. You can click the call button from the preset list to quickly go to the desired image position.

#### Set a preset:


Step1: 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 preset name and set a patrol as shown below;








Step2: Use the PTZ control buttons to move the lens to the interested position;

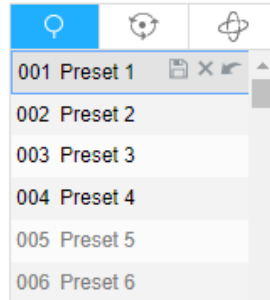
Step3: Click  to save the setting of the current preset;

Step4: Click  to delete the chosen preset.

 **Note:** Up to 300 presets can be configured (for each regional view channel).

### Calling a preset:

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





## Set / Call a patrol

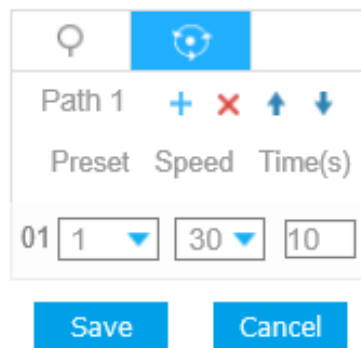
A patrol is a memorized series of preset function. It can be configured and called on the patrol setting list. You can customize up to 8 patrols and it can be configured with 48 presets. Before configuring the patrol, you should make sure that the presets you want to add to the patrol have been defined.

### Set a patrol:

Step1: In the PTZ control panel, click  to enter the patrol settings interface;

Step2: Select a patrol number, the setting icon will appear , click it;

Step3: Click  to add presets to this patrol, as shown in Figure;



Step4: Configure the preset number, patrol speed and patrol time;

**Table 5. 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.

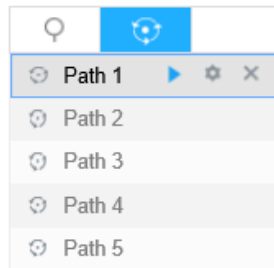
Step5: Click **Save** to save the patrol settings.

**Note:**

- Patrol Speed only works in Patrol mode.
- Patrol Time should be 0~120s.

**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.



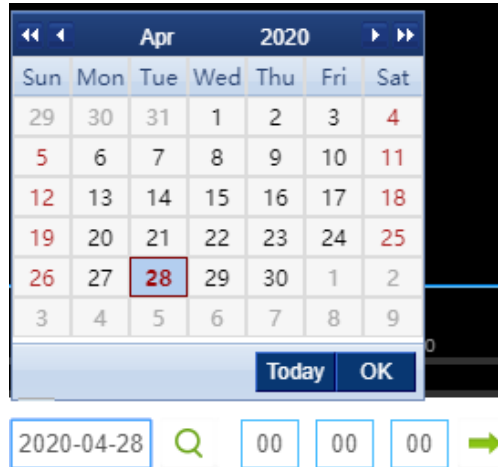
**Note:** The three buttons behind the Patrol list means: Play, Set and Delete.

## 5.2 Playback

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


Step1: Click **Playback** on the menu bar to enter playback interface;

Step2: Click the date button, choose the date when date window pops up;

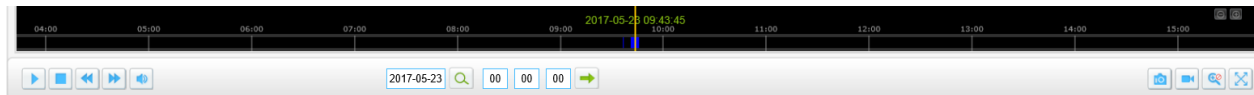


**Note:**





- 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.










Step3: Click  to play the video files found on this date.

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





**Table 6. Description of the buttons**


Button	Operation
	Play
	Pause
	Stop
	Speed Down

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

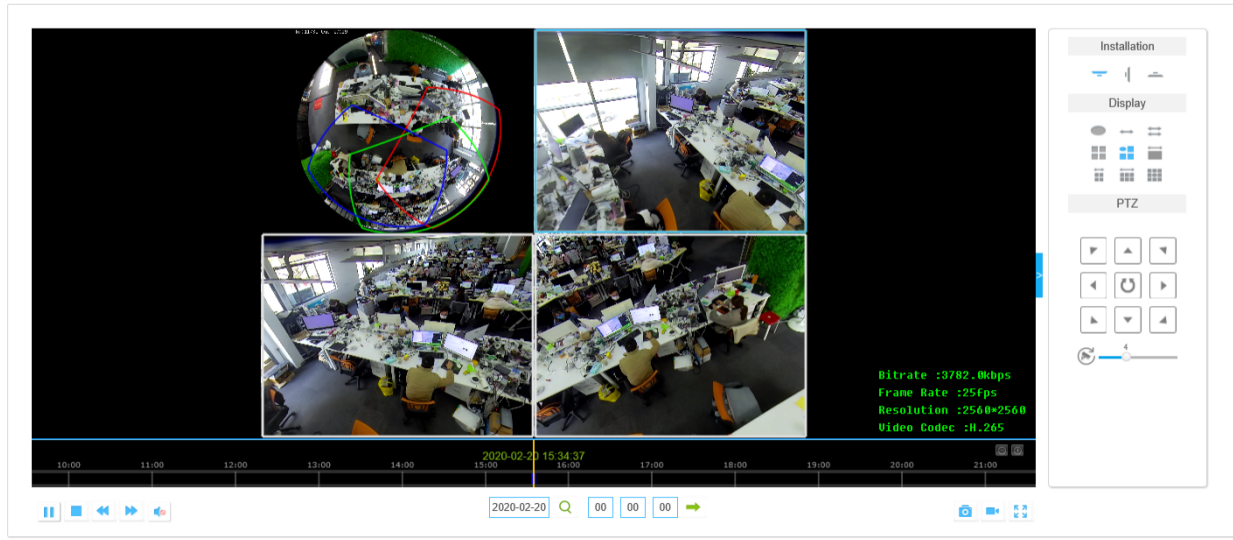
 **Note:**

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** filed. You can also click  to zoom out/in the progress bar.



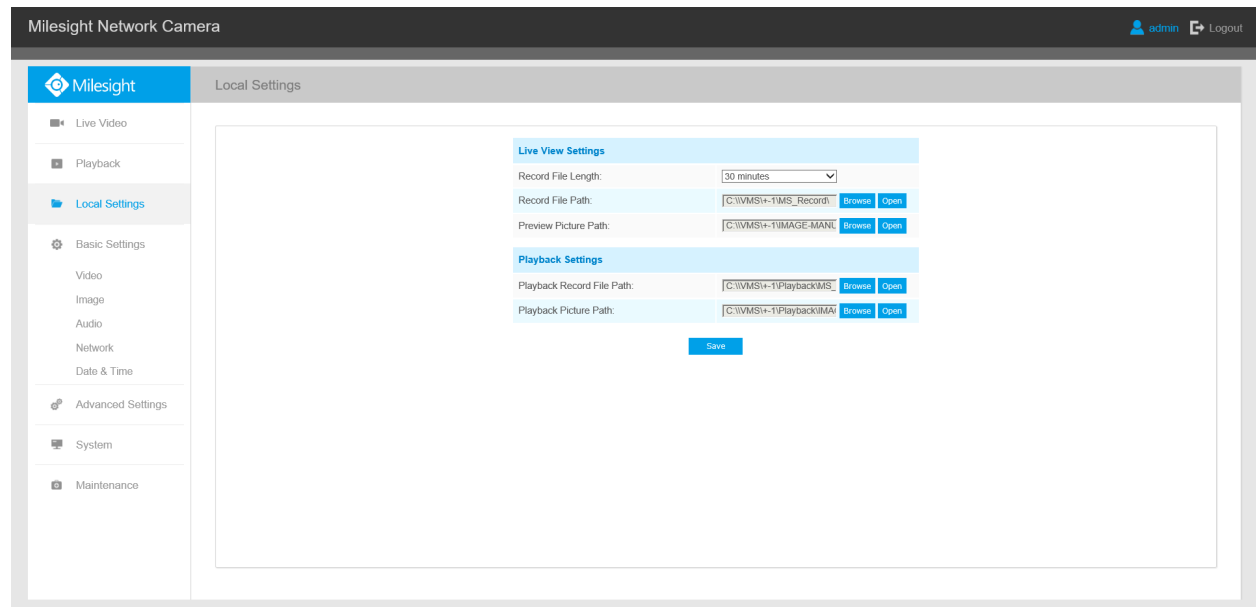
Step4: If the recording contains the original fisheye view(10), it supports client-side dewarping based on the original view in the playback interface. Click  to play the video files, then you can select different installation modes and display modes as shown below. It also supports PTZ function for panoramic view and regional views.

Playback



### 5.3 Local Settings

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





Basic Settings >> Video

Display Mode: ● -- ≡ ≡ ≡ ≡

Primary Stream    Secondary Stream

Record Stream Type :	General
Video Codec :	H.265
Frame Size :	1280*1280
Maximum Frame Rate :	30 fps
Bit Rate :	2048 kbps
Smart Stream :	Off
Bit Rate Control :	VBR
Image Quality :	High
Profile :	Main
I-frame Interval :	60 frame (1-120)

**Save**

**Bundle-Stream Mode (Event):**

Basic Settings >> Video

Display Mode: ● -- ≡ ≡ ≡ ≡

Primary Stream    Secondary Stream


Record Stream Type :	Event
Enable Event Stream :	<input checked="" type="checkbox"/>
Video Codec :	H.265
Frame Size :	1280*1280
Maximum Frame Rate :	25 fps
Bit Rate :	4096 kbps
Smart Stream :	Off
Bit Rate Control :	VBR
Image Quality :	High
Profile :	Main
I-frame Interval :	50 frame (1-120)

**Save**

**Table 7. Description of the buttons**

Parameters	Function Introduction
<p>Channel (Only for Multi-Channel Mode)</p>	<p>The number of channels are variable according to the selected display mode.</p> <p>1O and 1P display one channel.</p> <p>2P displays two channels.</p> <p>4R, 1O3R and 1P3R display four channels.</p> <p>1O1P3R displays five channels.</p>
<p>Display Mode</p>	<p>1O/1P/2P/4R/1O3R/1P3R are available</p>



Parameters	Function Introduction
Stream Type (Only for Multi-Channel Mode)	Primary Stream/Secondary Stream are available.
Record Stream Type	<p><b>General &amp; Event</b> are available only for Primary Stream of Bundle-Stream Mode and Channel 01 of Multi-Channel Mode. General refers to continuously recording video, while Event includes events that can trigger alarms, such as Motion, Exception, Audio Alarm and so on.</p> <p>This item can separately set different bit rate and frame rate for different Recording Stream Types. If user chooses <b>Event</b>, video will be recorded according to the configuration of video stream type when an event happens, thereby greatly reducing the recording storage space.</p>
Video Codec	H.265/H.264 are available.
Frame Size	<p><b>For Multi-Channel Mode:</b></p> <p>4000*3000, 3000*3000, 2560*2560, 1920*1920, 1280*1280, 1280*960, 1024*1024, 720*720, 320*320, are available frame size for original fisheye view in 1O.</p> <p>2560*2560, 2560*640, 1920*1920, 1920*480, 1280*1280 are available frame size for original fisheye view in 1O3R and 1O1P3R.</p> <p>3000*752, 2560*, 2560*640, 1920*480, 1280*320, 960*240 are available frame size for 360° panoramic view in 1P, 1P3R and 1O1P3R.</p> <p>2560*640, 1920*480 are available frame size for 360° panoramic view in 1O1P3R</p> <p>3000*1680, 2688*1520, 2592*1460, 1920*1080, 1280*720 are available frame size for two 180° panoramic views in 2P.</p> <p>1920*1080, 1280*720, 640*480 are available frame size for regional view.</p> <p><b>For Bundle Stream Mode:</b></p> <p>4000*3000, 3000*3000, 2560*2560, 2592*1944, 1944*1944, 1920*1920, 1536*1536, 1280*1280 are available frame size for 1O.</p> <p>3000*752, 2592*648, 2560*640, 1920*480, 1280*320 are available frame size for 1P.</p> <p>3000*1680, 2688*1520, 2592*1460, 1920*1080, 1280*720 are available frame size for 2P.</p> <p>4000*3000, 3840*2160, 3072*1728, 2592*1944, 2304*1296 are available frame size for 4R, 1O3R and 1P3R.</p> <p> <b>Note:</b> For the -PA model in the AI series, it supports up to 3000*3000 of Frame Size.</p>

<b>Parameters</b>	<b>Function Introduction</b>
<b>Maximum Frame Rate</b>	Maximum refresh frame rate of per second it is variable according to the display mode selected.
<b>Bit Rate</b>	Set the bitrate to 32~16384 Kbps. The higher value corresponds to the higher video quality, and the higher bandwidth is required as well.
<b>Smart Stream</b>	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.  It is optional to turn On/Off Smart Stream mode.  <b>Level:</b> Level 1~10 are available to meet your need.
<b>Bit Rate Control</b>	<b>CBR:</b> Constant Bitrate. The rate of CBR output is constant
	<b>VBR:</b> Variable Bitrate. VBR files vary the amount of output data per time segment
<b>Image Quality</b>	<b>Low/Medium/High</b> are available, this item is optional only if you select VBR.
<b>Profile</b>	The option is for H.264, Main/High/Base can be selected according to your needs.
<b>I-frame Interval</b>	Set the I-frame interval to 1~120, 50 for the default. The number must be a multiple of the number of frames.

### 5.4.2 Image

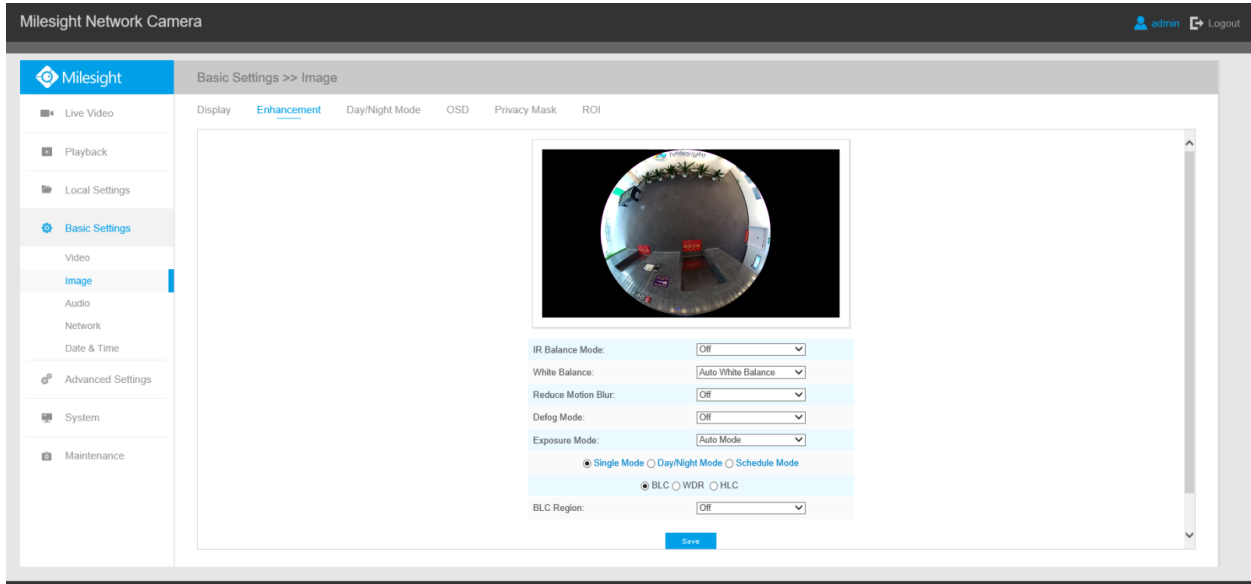
Display information, enhancement of image and Day/Night setting can be set in this module. OSD (On Screen Display) content and video time can be displayed to rich the image information.

#### Display




<b>Parameters</b>	<b>Function Introduction</b>
<b>Smart IR Mode</b>	<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.</p> <p>Customize mode is available.</p> <p>Support to set the strength of the IR to <b>Auto Mode</b> or <b>Customize</b> to achieve the best effect.</p>
<b>Near view level</b>	Adjust the light strength of Low-Beams LED light level from 0 to 100.
<b>Far view level</b>	Adjust the light strength of High-Beams LED light level from 0 to 100.
<b>IR Strength Value</b>	The current value of Low-Beams LED and High-Beams LED light value
<b>Day/Night Switch Refocus</b>	With this option enabled, the camera will refocus when switching between day mode and night mode.
<b>Outdoor/Indoor Mode</b>	Select indoor or outdoor mode to meet your needs
<b>Corridor Mode</b>	<p>There are three options available, you can select one to meet your need</p> <p><b>Off:</b> Keep the image in normal direction</p> <p><b>Clockwise 90°:</b> Rotate the image by 90° clockwise</p> <p><b>Anticlockwise90°:</b> Rotate the image by 90° anticlockwise</p>
<b>Image Rotation</b>	<p>There are four options available, you can select one to meet your need</p> <p><b>Off:</b> Keep the image in normal direction</p> <p><b>Rotating 180°:</b> Upside down the image</p> <p><b>Flip Horizontal:</b> Flip the image horizontally</p> <p><b>Flip vertical:</b> Flip the image vertically</p>

## Enhancement



**Table 9. Description of the buttons**

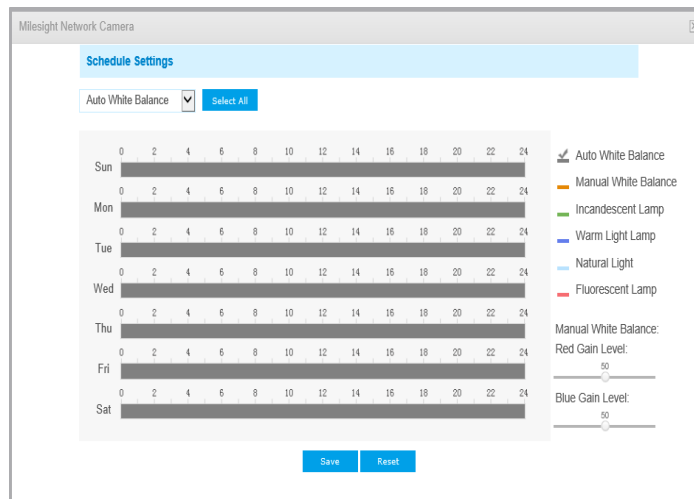
Parameters	Function Introduction
<p><b>IR Balance Mode</b></p>	<p>There is an option to turn On/Off the IR LED.</p> <p>IR Balance Mode would avoid the problem of overexposure and darkness, and the IR LED will change according to the actual illumination.</p>
<p><b>White Balance</b></p>	<p>To restore white objects, removed color distortion caused by the light of the environment</p> <p><b>Auto White Balance:</b>This option will automatically enable the White Balance function</p> <p><b>Manual White Balance:</b> This option is only for H.265 series. Set Red Gain Level and Blue Gain Level manually.</p> <p><b>Incandescent Lamp:</b> Select this option when light is similar with incandescent lamp</p> <p><b>Warm Light Lamp:</b> Select this option when light is similar with warm light lamp</p> <p><b>Natural Light:</b> Select this option when there is no other light but natural light</p> <p><b>Fluorescent Lamp:</b> Select this option when light is similar with Fluorescent Lamp</p> <p><b>Schedule mode:</b> Select this option that you can customize the schedule to enable/disable above modes</p>
<p><b>Reduce Motion Blur</b></p>	<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>

Parameters	Function Introduction
<b>Defog Mode</b>	<p>Better image effect in foggy weather.</p> <p> <b>Note:</b> Defog Mode is not supported for the -PA model in the AI series.</p>
<b>Exposure Mode</b>	<p>Auto Mode, Manual Mode and Schedule Mode are available.</p> <p><b>Auto Mode:</b> The camera will adjust the brightness according to the light environment automatically;</p> <p><b>Manual Mode:</b> 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><b>Schedule Mode:</b> You can customize the schedule to enable/disable Auto Mode and Manual Mode.</p>
<b>Single Mode</b>	Set single mode for BLC/WDR/HLC.
<b>Day/Night Mode</b>	Support BLC/WDR/HLC on Day Enhancement Mode/Night Enhancement Mode separately.
<b>Schedule Mode</b>	Set schedule mode for BLC/WDR/HLC.
<b>BLC Region</b>	<p>Off, Customize, and Centre are available (in single mode, only enable when WDR is disable)</p> <p><b>Off:</b> Calculate the full range of view and offer appropriate light compensation</p> <p><b>Customize:</b> This option enables you to customize inclusive or exclusive region manually</p> <p><b>Centre:</b> This option will automatically add an inclusive region in the middle of the window and give the necessary light compensation</p>
<b>Wide Dynamic Range</b>	<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><b>Off:</b> Disable WDR function</p> <p><b>On:</b> Enable the WDR, there are <b>Low/High/Auto</b> three levels</p> <p><b>Customize:</b> Customize the schedule to enable/disable the WDR function and set the levels with Low/High/Auto</p>
<b>Wide Dynamic Level</b>	Set WDR with Low/High/Auto level

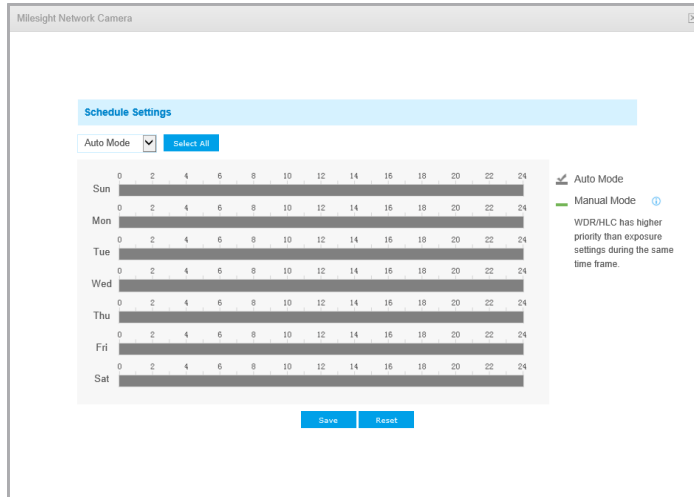
Parameters	Function Introduction
<b>Anti-flicker Level</b>	Reduce flickers that appear on screen in some lighting conditions and there are 10 levels of anti-flicker adjustments
<b>High Light Compensation</b>	This function is only for H.265 series to adjust the brightness to a normal range when the light is strong, refers to Figure 4-4-11  <b>Off:</b> Disable HLC function  <b>General Mode:</b> Enable the general mode of HLC, and there is a setting for HLC Level  <b>Enhanced Mode:</b> Enable the enhanced mode of HLC, and there is a setting for HLC Level
<b>HLC Level</b>	Select level for HLC
<b>Day Enhancement Mode</b>	BLC/WDR/HLC are available.
<b>Night Enhancement Mode</b>	BLC/WDR/HLC are available.
<b>Schedule Setting</b>	Customize the schedule to enable/disable <b>BLC/WDR/HLC</b> mode

 **Note:**

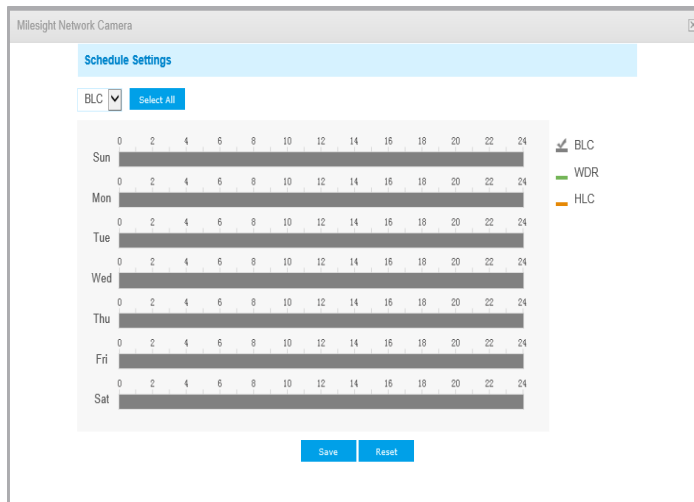
- You can customize the schedule to enable/disable the difference White Balance modes.



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



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



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



- HLC Image.





## Day/Night Mode

Milesight Network Camera admin Logout

Basic Settings >> Image

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

Day/Night Mode									
Day/Night Mode	Exposure Level	Minimum Shutter	Maximum Shutter	Limit Gain Level	IR-CUT Latency	IR-CUT	IR LED	Color Mode	
Night Mode:	5	1/30	1/1000000	100	10s	Off	On	BW	
Day Mode:	5	1/30	1/1000000	100	10s	On	Off	Color	

Schedule Mode									
<input type="checkbox"/>	Timer	Exposure Level	Minimum Shutter	Maximum Shutter	Limit Gain Level	IR-CUT Latency	IR-CUT	IR LED	Color Mode
<input type="checkbox"/>	00:00:00 - 24:00:00	5	1/30	1/1000000	100	10s	Off	Off	BW
<input type="checkbox"/>	00:00:00 - 24:00:00	5	1/30	1/1000000	100	10s	Off	Off	BW
<input type="checkbox"/>	00:00:00 - 24:00:00	5	1/30	1/1000000	100	10s	Off	Off	BW
<input type="checkbox"/>	00:00:00 - 24:00:00	5	1/30	1/1000000	100	10s	Off	Off	BW
<input type="checkbox"/>	00:00:00 - 24:00:00	5	1/30	1/1000000	100	10s	Off	Off	BW

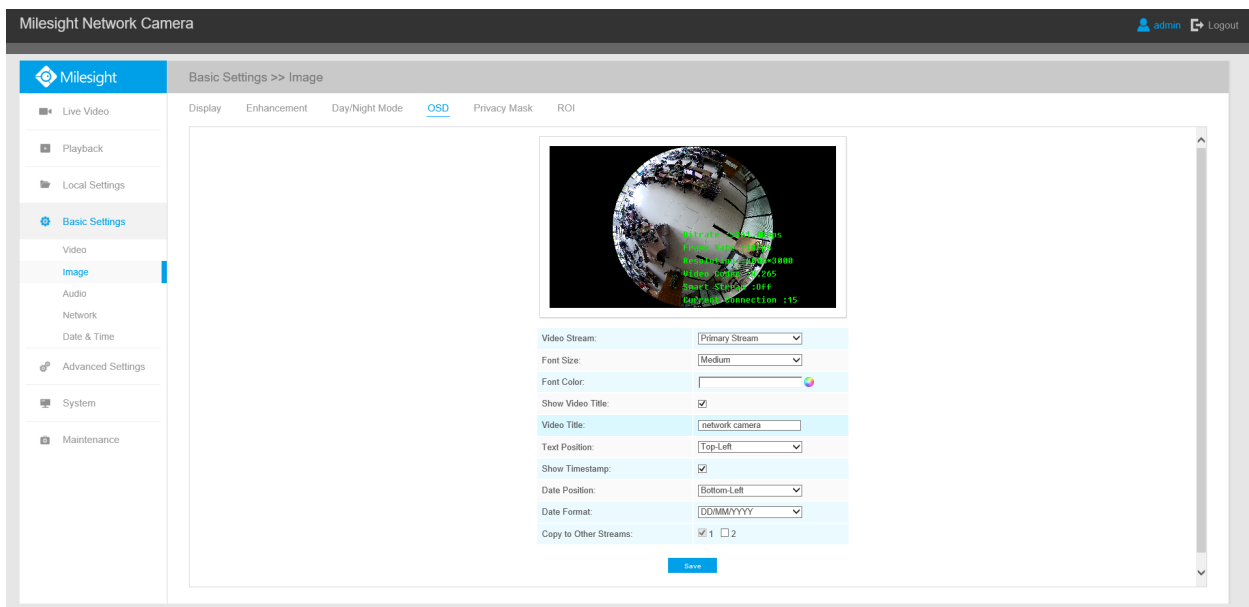
[Save](#) [Reset](#)

**Table 10. Description of the buttons**

Parameters	Function Introduction
<b>Exposure Level</b>	Level 0~10 are available to meet your need
<b>Minimum Shutter</b>	Minimum Shutter is the same as Maximum Exposure Time. Set the minimum Shutter to 1~1/100000s
<b>Maximum Shutter</b>	Maximum Shutter is the same as Minimum Exposure Time. Set the maximum Shutter to 1~1/100000s
<b>IR-CUT Latency</b>	The interval time of switching one mode to another
<b>IR-CUT</b>	Turn on or turn off IR-CUT


Parameters	Function Introduction
<b>IR LED</b>	Turn on or turn off IR-LED
<b>Color Mode</b>	Select B/W or Color mode under Day/Night mode
<b>Schedule Mode</b>	Here you can customize your special demands for different time, then the Day mode and Night mode will switch automatically according to your settings

## On Screen Display(OSD)



**Table 11. Description of the buttons**

Parameters	Function Introduction
<b>Video Stream</b>	Enable to set OSD for primary stream and secondary stream
<b>Font Size</b>	Smallest/Small/Medium/Large/Largest/Auto are available for title and date
<b>Font Color</b>	Enable to set different color for title and date

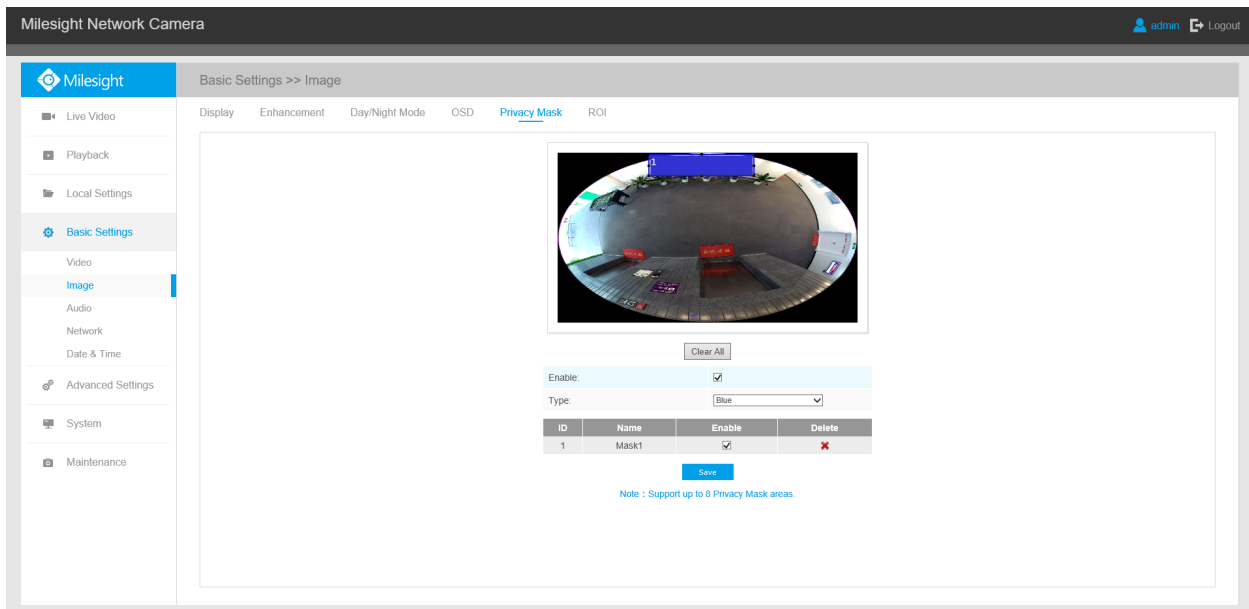
Parameters	Function Introduction																		
<p><b>Background Color</b></p>	<p>Enable to set different colors for display information background on screen</p> <p>You can set different colors for font and background of image , then the image OSD will show as below:</p> <div data-bbox="570 495 1243 894" style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <table border="1" data-bbox="561 915 1252 1381" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Video Stream:</td> <td>Primary Stream <input type="button" value="v"/></td> </tr> <tr> <td>Font Size:</td> <td>Medium <input type="button" value="v"/></td> </tr> <tr> <td>Font Color:</td> <td><span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/></td> </tr> <tr> <td>Background Color:</td> <td><input checked="" type="checkbox"/> <span style="background-color: black; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/></td> </tr> <tr> <td>Show Video Title:</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Video Title:</td> <td>Network Camera <input type="text"/></td> </tr> <tr> <td>Text Position:</td> <td>Top-Left <input type="button" value="v"/></td> </tr> <tr> <td>Show Timestamp:</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Date Position:</td> <td>Top-Right <input type="button" value="v"/></td> </tr> </table>	Video Stream:	Primary Stream <input type="button" value="v"/>	Font Size:	Medium <input type="button" value="v"/>	Font Color:	<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/>	Background Color:	<input checked="" type="checkbox"/> <span style="background-color: black; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/>	Show Video Title:	<input checked="" type="checkbox"/>	Video Title:	Network Camera <input type="text"/>	Text Position:	Top-Left <input type="button" value="v"/>	Show Timestamp:	<input checked="" type="checkbox"/>	Date Position:	Top-Right <input type="button" value="v"/>
Video Stream:	Primary Stream <input type="button" value="v"/>																		
Font Size:	Medium <input type="button" value="v"/>																		
Font Color:	<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/>																		
Background Color:	<input checked="" type="checkbox"/> <span style="background-color: black; width: 20px; height: 10px; display: inline-block;"></span> <input type="button" value="c"/>																		
Show Video Title:	<input checked="" type="checkbox"/>																		
Video Title:	Network Camera <input type="text"/>																		
Text Position:	Top-Left <input type="button" value="v"/>																		
Show Timestamp:	<input checked="" type="checkbox"/>																		
Date Position:	Top-Right <input type="button" value="v"/>																		
<p><b>Show Video Title</b></p>	<p>Check the checkbox to show video title</p>																		
<p><b>Video Title</b></p>	<p>Customize the OSD content</p>																		
<p><b>Text Position</b></p>	<p>OSD display position on the image</p>																		
<p><b>Show Timestamp</b></p>	<p>Check the checkbox to display date on the image</p>																		
<p><b>Date Position</b></p>	<p>Date display position on the image</p>																		

Parameters	Function Introduction
<b>Date Format</b>	The format of date
<b>Copy to Other Streams</b>	Copy the settings to other streams

## 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.

You can set 24 mask areas at most.



**Table 12. Description of the buttons**

Parameters	Function Introduction
<b>Enable</b>	Check the checkbox to enable the Privacy Mask function
<b>Clear All</b>	Clear all areas you drew before
<b>Type</b>	Select the color to use for the privacy areas, there are eight colors available: White, Black, Blue, Yellow, Green, Brown, Red and Violet

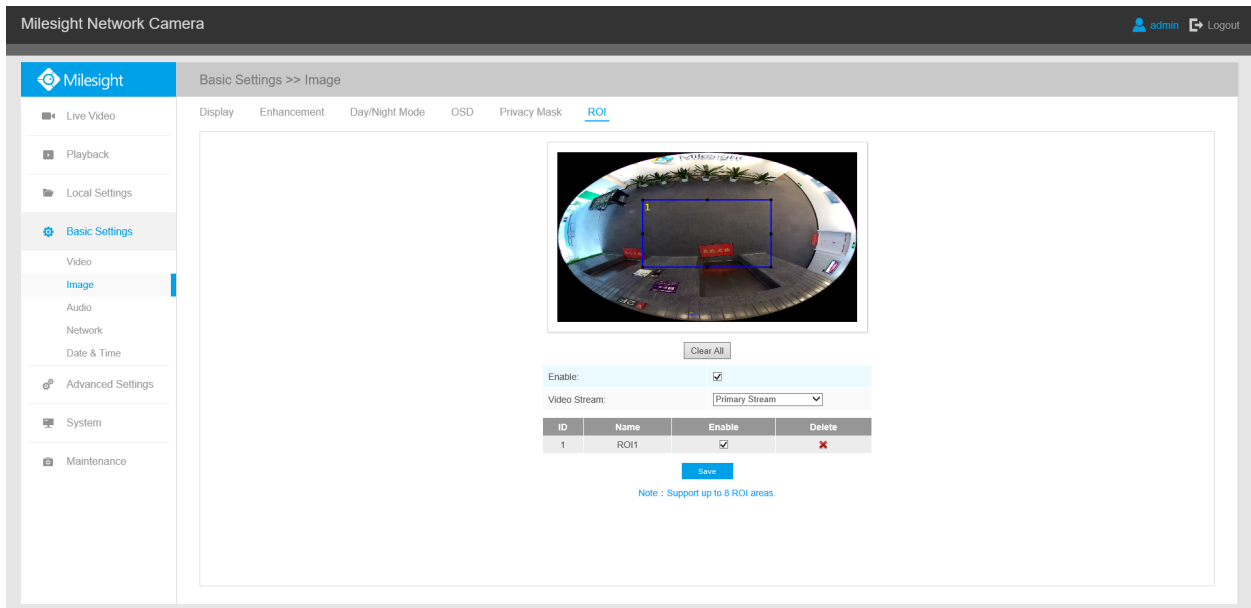
**Note:**

- You can only set the Privacy Mask area on Fisheye View channel.
- For the -PA model in the AI series, it only supports black color for Privacy Mask.

**ROI**

Region of interest(often abbreviate 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 Milesight ROI technology, more than 50% of bit rate can be saved and therefore less bandwidth demanded and the storage usage reduced. So according to this, you can set a small bit rate for high resolution.

**Table 13. Description of the buttons**

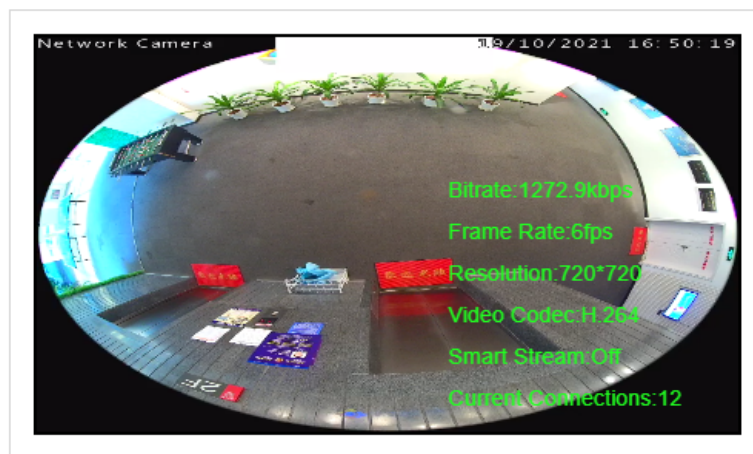
Parameters	Function Introduction
<b>Enable</b>	Check the checkbox to enable the ROI function
<b>Clear All</b>	Clear all areas you drew before
<b>Video Stream</b>	Choose the Video Stream

**Note:**

- You can set a low bit rate. For example, you can set a bit rate with 512Kbps and a resolution with 1080P, then you can see the image quality of ROI is more clear and fluent than the other region.
- You can set the ROI area separately for different channels base on display mode in live view.
- For the -PA model in the AI series, ROI function cannot be enabled when the resolution is higher than 8MP.

### 5.4.3 Audio

This audio function allows you to hear the sound from the camera or transmit your sound to the camera side. A two-way communication is also possible to be achieved with this feature. 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
<b>Audio Input</b>	
Denoise:	<input type="checkbox"/>
Encoding:	AAC LC
Sample Rate:	48KHz
Audio Bit Rate:	144kbps
Input Gain:	<input type="range" value="79"/>
<b>Audio Output</b>	
Auto Gain Control:	<input checked="" type="checkbox"/>
Output Volume:	<input type="range" value="78"/>
<input type="button" value="Save"/>	

**Table 14. Description of the buttons**

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

Audio File Storage Type:


**Audio File Upload**

Audio File Name:

Audio File:

ID	Audio File Name	Delete
1	audio	<input type="button" value="✘"/>

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.

### 5.4.4 Network

#### TCP/IP

Get IPv4 address automatically

Use fixed IPv4 address

IP Address:

IPv4 Subnet Mask:

IPv4 Default Gateway:

Preferred DNS Server:

IPv6 Mode:

IPv6 Address:


IPv6 Prefix:

IPv6 Default Gateway:

Table 15. Description of the buttons



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

HTTP Enable:	<input checked="" type="checkbox"/>
HTTP Port:	<input type="text" value="80"/>
HTTPS Enable:	<input checked="" type="checkbox"/>
HTTPS Port:	<input type="text" value="443"/>

**HTTPS Settings**

Installed Certificate:

Attributes:

```

Awarded to:
C=US, H/IP=IPC
Issuer:
C=US, H/IP=IPC
Period of Validity:
Dec 18 06:46:09 2019 ~
Sep 12 06:46:09 2022
            
```

Installation Type:

Create a Private Certificate:




**Table 16. Description of the buttons**

Parameters	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, the default is 443
HTTP Settings	Upload and set the SSL certificate.

**Table 17. 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/mjpegcif.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 18. Description of the buttons**

Parameters	Function Introduction
RTSP Port	The port of RTSP, the default is 554
Playback Port	Playback Port The port of playback, the default is 555
RTP Packet	There are Better Compatibility and Better Performance two options, if your camera's image mess up, please switch this option
Multicast Group Address	Support multicast function
QoS DSCP	The valid value range of the DSCP is 0-63

**Table 19. RTSP URL for Bundle-Stream Mode are as below:**

Stream	URL
Main Stream	<a href="rtsp://IP:RTSP Port/main">rtsp://IP:RTSP Port/main</a>
Secondary Stream	<a href="rtsp://IP:RTSP Port/sub">rtsp://IP:RTSP Port/sub</a>

**Table 20. RTSP URL for Multi-Channel Mode are as below:**

Stream	URL
Channel 01	<a href="rtsp://IP:RTSP Port/main">rtsp://IP:RTSP Port/main</a>
Channel 02	<a href="rtsp://IP:RTSP Port/sub">rtsp://IP:RTSP Port/sub</a>
Channel 03	<a href="rtsp://IP:RTSP Port/third">rtsp://IP:RTSP Port/third</a>
Channel 04	<a href="rtsp://IP:RTSP Port/forth">rtsp://IP:RTSP Port/forth</a>
Channel 05	<a href="rtsp://IP:RTSP Port/fifth">rtsp://IP:RTSP Port/fifth</a>

**Note:**

- Get the format of RTSP URL by clicking “ ⓘ ” on the right side of RTSP 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.

**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.

Enable UPnP:

**Port Mapping**

Enable Port Mapping:

Name:

Type:

Protocol Name	External Port	Internal Port	Status
HTTP	<input type="text" value="21202"/>	<input type="text" value="80"/>	Invalid
RTSP	<input type="text" value="23202"/>	<input type="text" value="554"/>	Invalid
Playback	<input type="text" value="25202"/>	<input type="text" value="555"/>	Invalid

**Table 21. Description of the buttons**

Parameters	Function Introduction
<b>Enable</b>	Check the checkbox to enable the UPnP function
<b>Enable Port Mapping</b>	Check the checkbox to enable the Port Mapping
<b>Name</b>	The name of the device detected online can be edited
<b>Type</b>	<p><b>Auto:</b> Automatically obtain the corresponding HTTP and RTSP port, without any settings</p> <p><b>Manual:</b> 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:	ddns.milesight.com ▼
External HTTP Port :	80
External RTSP Port:	554
External Playback Port:	555
DDNS URL: http://ddns.milesight.com/210C1E	

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

Save

You can choose “ddns.milesight.com” as provider for DDNS. After enabling it, you can access the device via the URL “http://ddns.milesight.com/MAC address”.

**Table 22. Description of the buttons**

Parameters	Function Introduction
<b>Enable DDNS</b>	Check the checkbox to enable DDNS service
<b>Provider</b>	Get support from DDNS provider: ddns.milesight.com, freedns.afraid.org, dyndns.org, www.no-ip.com, www.zoneedit.com. You can also customize the provider for DDNS.
<b>Hash</b>	A string used for verifying, only for "freedns.afraid.org"
<b>User name</b>	Account name from the DDNS provider, unavailable for "freedns.afraid.org"
<b>Password</b>	Account password, unavailable for "freedns.afraid.org"
<b>Host name</b>	DDNS name enabled in the account

 **Note:**

- Please do the Port Forwarding of HTTP Port and RTSP Port before you use Milesight 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
<b>Snapshot Settings</b>	
Alarm Snapshot File Name:	<input type="text" value="Customize"/> <input type="button" value="Reset"/>
	<input type="text" value="&amp;Device_&amp;Y&amp;M&amp;D_&amp;h&amp;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="text"/>
	<input type="button" value="Save"/> <input type="button" value="Test"/>

**Table 23. Description of the buttons**

Parameters	Function Introduction
Enable	Check the checkbox to enable Email function
User Name	The sender's name. It is usually the same as the account name

Parameters	Function Introduction
<b>Sender Email Address</b>	Email address to send video files attached emails
<b>Password</b>	The password of the sender
<b>SMTP Server</b>	The SMTP server IP address or host name(e.g. smtp.gmail.com)
<b>SMTP Port</b>	The default TCP/IP port for SMTP is 25(not secured). For SSL/TLS port, it depends on the mail you use
<b>Recipient Email Address1</b>	Email address to receive video files
<b>Recipient Email Address2</b>	Email address to receive video files
<b>Encryption</b>	Check the checkbox to enable SSL or TLS if it is required by the SMTP server.
<b>Alarm Snapshot File Name</b>	Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with the base file name/ Customize are available.
<b>Timing Snapshot File Name</b>	Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with the base file name/ Customize are 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 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"/>

Save
Test

**Table 24. Description of the buttons**

Parameters	Function Introduction
Server Address	FTP server address
Server Port	The port of the FTP server. Generally it is 21
User Name	User name used to log in to the FTP sever
Password	User password

Parameters	Function Introduction
<b>Storage Path</b>	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.
<b>Parent Directory</b>	Choose IP Address/ Device Name/ Date as the folder name of Parent Directory, or customize the folder name.
<b>Child Directory</b>	Choose IP Address/ Device Name/ Date as the folder name of Child Directory, or customize the folder name.
<b>Multilevel Folder Name</b>	If the storage path is more than two levels, enter Multilevel FTP storage path here manually.
<b>Alarm Action File Name</b>	Choose the default(YYYY-MM-DD) or customize the alarm action file name.
<b>Video File Name</b>	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DD-YYYY/ DD-MM-YYYY/ Add prefix are available.
<b>Image File Name</b>	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DD-YYYY/ DD-MM-YYYY/ Add prefix are available.
<b>Timing Snapshot File Name</b>	Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with 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 labour 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="."/> <input type="text" value="."/> <input type="text" value="."/>
VLAN Netmask:	<input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/>
VLAN Gateway:	<input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/>

[Save](#)

 **Note:** How to set up VLAN in switches, please refers 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.

SNMP v1/v2	
SNMP V1 Enable:	<input type="checkbox"/>
SNMP V2c Enable:	<input type="checkbox"/>
Write Community:	<input type="text" value="public"/>
Read Community:	<input type="text" value="private"/>
SNMP v3	
SNMP V3 Enable:	<input type="checkbox"/>
Read Security Name:	<input type="text"/>
Level of Security:	<input type="text" value="no auth,no priv"/>
Write Security Name:	<input type="text"/>
Level of Security:	<input type="text" value="no auth,no priv"/>
SNMP Port	
SNMP Port:	<input type="text" value="161"/>

**Table 25. Description of the buttons**

Parameters	Function Introduction
<b>SNMP v1/2/3</b>	The version of SNMP, please select the version of your SNMP software. <b>SNMP v1:</b> Provide no security <b>SNMP v2:</b> Require password for access <b>SNMP v3:</b> Provide encryption and the HTTPS protocol must be enabled
<b>Write Community</b>	Input the name of Write Community
<b>Read Community</b>	Input the name of Read Community
<b>Read Security Name</b>	Input the name of Read Security Community
<b>Level of Security</b>	There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)
<b>Write Security Name</b>	Input the name of Write Security Community
<b>Level of Security</b>	There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)
<b>SNMP Port</b>	The port of SNMP, the 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 and 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="text"/>
Confirm Password:	<input type="text"/>

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 which maintains persistent connections and allows low-latency communication. It can realize the function of 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 live function.
- For RTMP, since G.711 is not available for YouTube, so you can only play video from Milesight 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:	<a href="#">Edit</a>

When enabling the Push Message function, you can click [Edit](#) to choose the types of Events' message which will be pushed to M-sight Pro 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:** There must be Opened Alarm Push of corresponding cameras in M-sight Pro APP.

### ONVIF Settings

Here you can choose whether to enable or disable camera ONVIF function. If 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 ONVIF function is enabled.

ONVIF Setting	
Enable ONVIF:	<input checked="" type="checkbox"/>

Save



### 5.4.5 Date&Time

Current System Time	
Date:	26/04/2020
Time:	14:49:33
Set the System Time	
Time Zone:	(UTC+08:00) China(Beijing, Hongk
Daylight Saving Time:	Disabled
<input checked="" type="radio"/> NTP server	
Server Address:	192.168.14.101
NTP Sync:	<input checked="" type="checkbox"/> Interval: 1 day
<input type="radio"/> Manual	
Time:	26/04/2020 14:48:34
<input type="radio"/> Synchronize with computer time	
Date:	26/04/2020
Time:	14:49:35
<input type="button" value="Save"/>	

#### Current System Time

Current date&time of the system

#### Set the System Time

**Table 26. Description of the buttons**

Parameters	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

Parameters	Function Introduction
NTP Sync	Regularly update your time according to the interval time
Manual	Set the system time manually
Synchronize with computer time	Synchronize the time with your computer

## 5.5 Advanced Settings

### 5.5.1 Storage

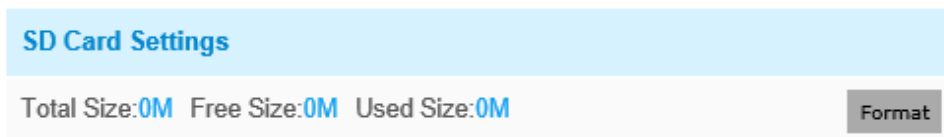
#### Before you start:

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:



Note: Please insert SD card.

Table 27. Description of the buttons

Parameters	Function Introduction
Format	Format SD card, the files in SD card will be removed
Mount/UnMount	Mount/Dismount SD card

Parameters	Function Introduction
Delete	Enable cyclic storage, when the free disk space reach at a certain value, it will automatically delete the files at certain percentage according to your settings

### NAS:

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

NAS (Network-Attached Storage), connecting the storage devices to the existing network, provides data and files services.

**NAS Settings**

Server Address:


File Path:

Mounting Type:

Add

**Table 28. Description of the buttons**

Parameters	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 the security if SMB/CIFS is selected

 **Note:** Up to 5 NAS disks can be connected to the camera.

### Record Settings

### Storage Settings

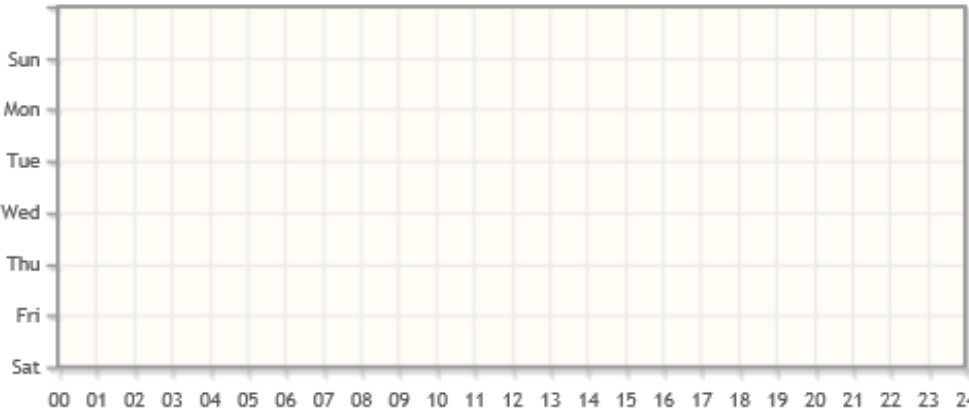
Enable Recycle Storage:

Pre-record:

0 second ▼

Save

### Schedule Settings



Edit

**Table 29. Description of the buttons**

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

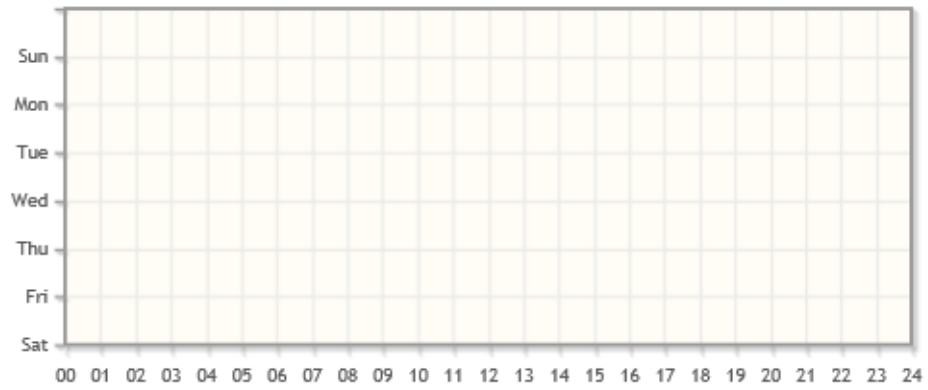
**Note:** SD Card or NAS are available.

## Snapshot Settings

Snapshot Settings	
Enable Timing Snapshot:	<input type="checkbox"/>
Interval:	<input type="text" value="1"/> <input type="text" value="hour"/>
Save Into Storage:	<input type="checkbox"/> (Please mount storage device.)
File Name:	<input type="text" value="Add Time Suffix"/>
Upload Via FTP:	<input type="checkbox"/>
Upload Via SMTP:	<input type="checkbox"/>



Save

### Schedule Settings



Edit

**Table 30. Description of the buttons**

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

## Explorer

Files will be seen on this page when they are configured to save into SD card or NAS. You can set 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

## 5.5.2 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

Save

**Table 31. Description of the buttons**

<b>Parameters</b>	<b>Function Introduction</b>
<b>Manage Privilege</b>	Allow anonymous viewing: Check the checkbox to enable visit from whom doesn't have account of the device



Parameters	Function Introduction
<p style="text-align: center;"><b>Security Question</b></p>	<p>Click "Edit" button to set three security questions for your camera. In case that you forget the password, you can click "Forget Password" button on login page to reset the password by answering three security questions correctly.</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p style="text-align: center; color: #0070C0; margin: 0;"><b>Security Question Settings</b></p> <p>Admin Password: <input type="text"/></p> <p>Security Question1: <input type="text" value="What's your father's name?"/> ▼</p> <p>Answer1: <input type="text"/></p> <p>Security Question2: <input type="text" value="What's your father's name?"/> ▼</p> <p>Answer2: <input type="text"/></p> <p>Security Question3: <input type="text" value="What's your father's name?"/> ▼</p> <p>Answer3: <input type="text"/></p> <p style="text-align: center; margin-top: 10px;"><input type="button" value="Save"/></p> </div> <p>There are twelve default questions below, you can also customize the security questions.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="background-color: #0070C0; color: white; padding: 2px;">What's your father's name?</p> <p>What's your favorite sport?</p> <p>What's your mother's name?</p> <p>What's your mobile number?</p> <p>What's your first pet's name?</p> <p>What's your favorite book?</p> <p>What's your favorite game?</p> <p>What's your favorite food?</p> <p>What's your lucky number?</p> <p>What's your favorite color?</p> <p>What's your best friend's name?</p> <p>Where did you go on your first trip?</p> <p>Customized Question</p> </div>

Parameters	Function Introduction
Account Management	<p>Click “Add” button, it will display Account Management page. You can add an 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><b>Admin Password:</b> You can add an account only after you enter the correct admin password.</p> <p><b>User Level:</b> Set the privilege for the account.</p> <p><b>User Name:</b> Input user name for creating an account.</p> <p><b>Password:</b> Input password for the account.</p> <p><b>Confirm:</b> 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 to set a password when logging in for the first time. It also supports 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 32. Description of the buttons**

Parameters	Function Introduction
Refresh	Click to get latest status of user accessing to camera.
No.	Record serial number of user logging in camera.  <b>Note:</b> <ul style="list-style-type: none"> <li>• There are at most 30 records shown at the list.</li> <li>• There is only one record if the same user logging on camera by the same IP address.</li> </ul>
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:

**IP Access List**

Rule:

IP Address:

Enable Access List Filtering:

Filter Type:  Allow  Deny

**Table 33. Description of the buttons**

Parameters	Function Introduction
General Settings	<b>Maximum number of concurrent streaming:</b> Select the maximum number of concurrent streaming. Options include No Limit, 1~10
IP access list	<b>Rule:</b> Single, Network and Range are available <b>IP address:</b> 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:

[Save](#)

**Table 34. Description of the buttons**

Parameters	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

**Watermark Settings**

Enable Watermark:

Watermark String:

[Save](#)

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

## About

### Open Source Software Licenses

[View Licenses](#)


User can view some open source software licenses about the camera by clicking the View Licenses button.

## 5.5.3 SIP

The Session Initiation Protocol(SIP) is a signaling communications protocol, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol (IP) networks. This page allows user to configure SIP related parameters. Milesight network cameras can be configured as SIP endpoint to call out when alarm triggered; or allow permitted number to call in to check the video if the video IP phone is used. To use this function, the settings in 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.

### Method2: 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:	<input type="checkbox"/>
Register Mode:	Enable <span style="float: right;">▼</span>
User ID:	500
User Name:	sipclient
Password:	••••••••
Server Address:	192.168.5.101
Server Port:	5060
Connection Protocol:	UDP <span style="float: right;">▼</span>
Video Stream:	Secondary Stream <span style="float: right;">▼</span>
Max Call Duration:	1800 s (0 means no limitation.)

Note: SIP supports Direct IP call.

[Save](#)

**Table 35. Description of the buttons**

Parameters	Function Introduction
<b>Unregistered/Registered</b>	SIP registration status. Display "Unregistered" or "Registered"
<b>Enable</b>	Start or stop using SIP
<b>Register Mode</b>	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.
<b>User ID</b>	SIP ID
<b>User Name</b>	SIP account name
<b>Password</b>	SIP account password

Parameters	Function Introduction
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 36. Description of the buttons**

Parameters	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:	Phone Number ▼
Phone Number:	<input type="text"/>
<b>Add</b>	
Enable White List Number Filter:	<input type="checkbox"/>
<b>Save</b>	

**Table 37. Description of the buttons**

Parameters	Function Introduction
Phone Type	Phone Number(Call by phone number) & Direct IP Call
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

### 5.5.4 Fisheye

**PTZ:**

<b>PTZ OSD</b>	
Zoom Status:	5 seconds ▼
Preset Status:	5 seconds ▼
Patrol Status:	Always Open ▼
Auto Scan Status:	Always Open ▼
<b>Save</b>	

**Table 38. Description of the buttons**

Parameters	Function Introduction
Zoom Status	Support to set display time of Zoom Status OSD. 2 seconds/5 seconds/10 seconds/Always Open/Always Close are available.



Parameters	Function Introduction
<b>Preset Status</b>	Support to set display time of Preset Status OSD. 2 seconds/5 seconds/10 seconds/Always Open/Always Close are available.
<b>Patrol Status</b>	Support to set display time of Patrol Status OSD. Always Open/Always Close are available.
<b>Auto Scan Status</b>	Support to set display time of Auto Scan Status OSD. Always Open/Always Close are available.

**General:**

**Dewarping Configuration**


Field of View:

Transfer Mode:  ⓘ

**Table 39. Description of the buttons**

Parameters	Function Introduction
<b>Field of View</b>	Support optional Field of View on fisheye camera. <b>Normal:</b> With this option enabled, all views will maintain the original viewing angle. <b>Original View Larger:</b> With this option enabled, the original view(10) will have a larger viewing angle, and the other views will maintain the original viewing angle. <b>All View Larger:</b> With this option enabled, all views will have a larger viewing angle.

Parameters	Function Introduction
Transfer Mode	<p>Support to choose Bundle-Stream Mode or Multi-Channel Mode to meet different needs.</p> <p><b>Bundle-Stream Mode:</b> the Bundle-Stream Mode combines all the channels into one and sends to NVR or VMS, which is easy for compatibility.</p> <p><b>Multi-Channel Mode:</b> the Multi-Channel Mode sends all the original channels to NVR or VMS, so the channels can be modified separately.</p>

 **Note:** We recommend Bundle-Stream mode with Milesight NVR.

## Logs

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

**Log Search**

Main Type:

Sub Type:

Start Time:

End Time:

Save Period:

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

**Table 40. Description of the buttons**

Parameters	Function Introduction
Main Type	There are five main log types: <b>All Type, Event, Operation, Information, Exception, Event</b>


Parameters	Function Introduction
<b>Sub Type</b>	On the premise of main type has been selected, select the sub type to narrow the range of logs
<b>Start Time</b>	The time log starts
<b>End Time</b>	The time log ends
<b>Log Export</b>	Export the logs
<b>Save Period</b>	Set the period of log saving, there are eight options to choose: <b>Permanent</b> and <b>30/60/120/180/240/300/360 Days</b>
<b>Go</b>	Input the number of logs' page

## 5.6 Event

### 5.6.1 Basic Event

#### Motion Detection

Step1: Check the checkbox to enable the motion detection;

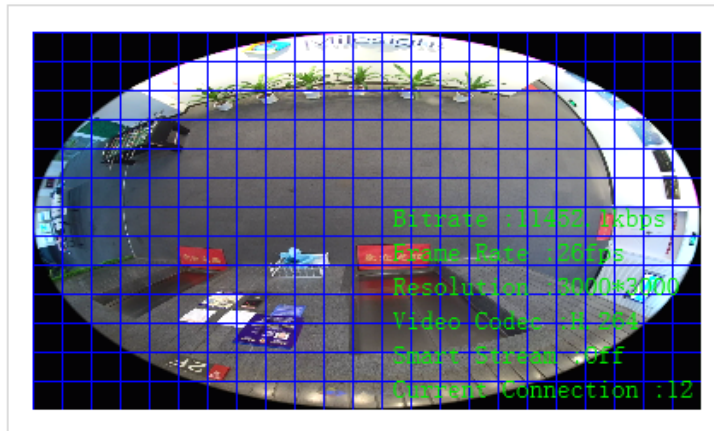
 **Note:** Currently, the motion detection is only supported in 1O, 1P, and 4R of bundle-stream mode.

Step2: Select the detection mode;

Step3: Set motion region;

Enable Motion Detection:	<input checked="" type="checkbox"/>
Detection Mode:	Normal Mode
Sensitivity:	5
Onvif Motion ActiveCells Settings:	Normal
Enable Motion Analysis:	<input type="checkbox"/> (Only support when HTTP is selected in Live View.)

**Set Motion Region**


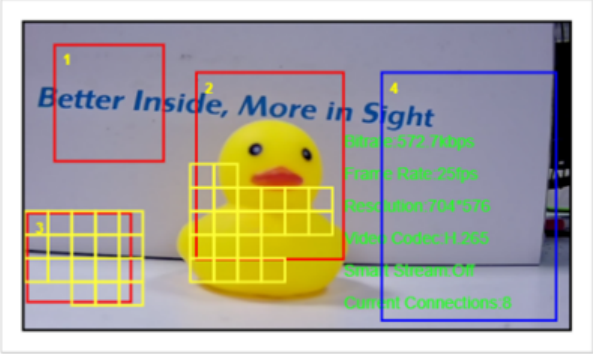


Select All Clear All

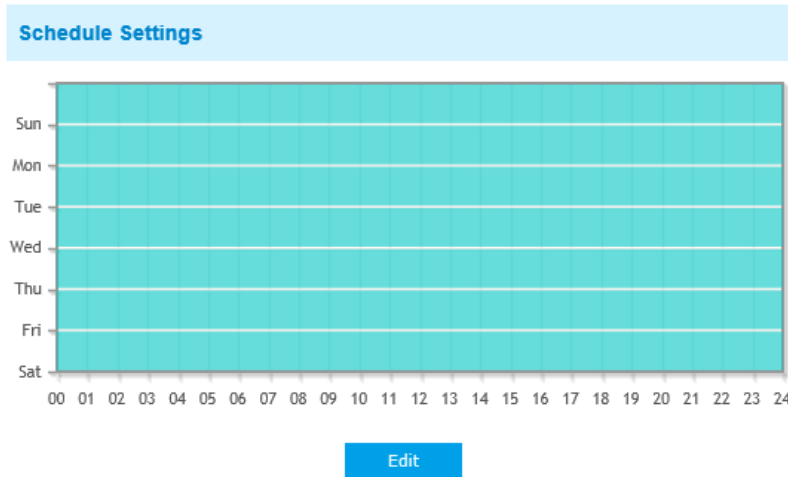
Note: Please draw the screen for setting!

**Table 41. Description of the buttons**

Parameters	Function Introduction
<b>Enable Motion Detection</b>	Check the checkbox to enable Motion Detection function
<b>Detection Mode</b>	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.
<b>Onvif Motion ActiveCells Settings</b>	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

Parameters	Function Introduction
<p><b>Enable Motion Analysis</b></p>	<p>When Motion Analysis is enabled, the moving region will turn yellow so that the user can know exactly where the motion occurred.</p> <p> <b>Note:</b> Only support when HTTP is selected in Live View.</p> 
<p><b>Select All</b></p>	<p>Click the button, the motion in the area will be detected</p>
<p><b>Clear All</b></p>	<p>Click the button, the area drawn before will be removed</p>
<p><b>Sensitivity</b></p>	<p>Sensitivity level, 1~10</p>


Step4: Set motion detection schedule;




Step5: Set alarm action;

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"/>

**Table 42. Description of the buttons**

Parameters	Function Introduction
<b>Save Into Storage</b>	Save alarm recording files into SD Card or NAS
<b>Upload Via FTP</b>	Upload the recording files via FTP
<b>Upload Via SMTP</b>	Upload the files via SMTP
<b>External Output</b>	If the camera equips with External Output, you can enable the action after configuring the trigger duration
<b>Play Audio</b>	If the camera equips with Speaker, you can enable the action after configuring the audio speaker
<b>Play Buzzer</b>	If the camera equips with Buzzer, you can check the checkbox to enable the function.
<b>Alarm to SIP Phone</b>	Support to call the SIP phone after enable the SIP function.
<b>HTTP Notification</b>	Support to pop up the alarm news to specified HTTP URL.  <b>Note:</b> <ul style="list-style-type: none"> <li>• Three HTTP notifications at most can be added to the same event.</li> <li>• HTTP Notification supports Basic &amp; Digest authentication</li> </ul>

 **Note:** The **HTTP notification** function is just one way for 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 messages. 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 detail steps of setting for HTTP Notification in Digifort VMS and our cameras.

Step1: Enable Alarm, set Motion Region and detection Schedule;

Step2: 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)

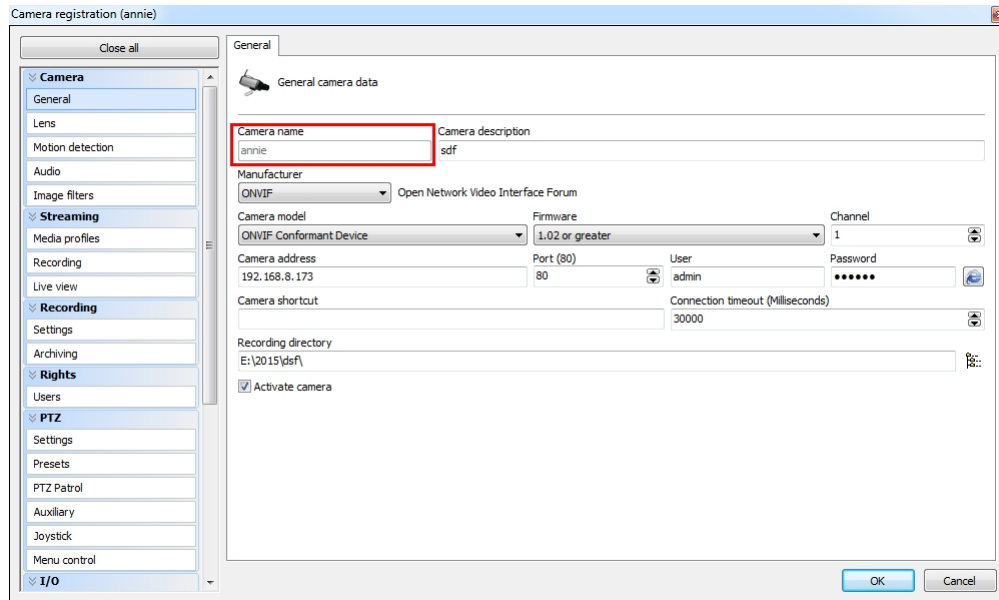
HTTP Notification URL:

<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.

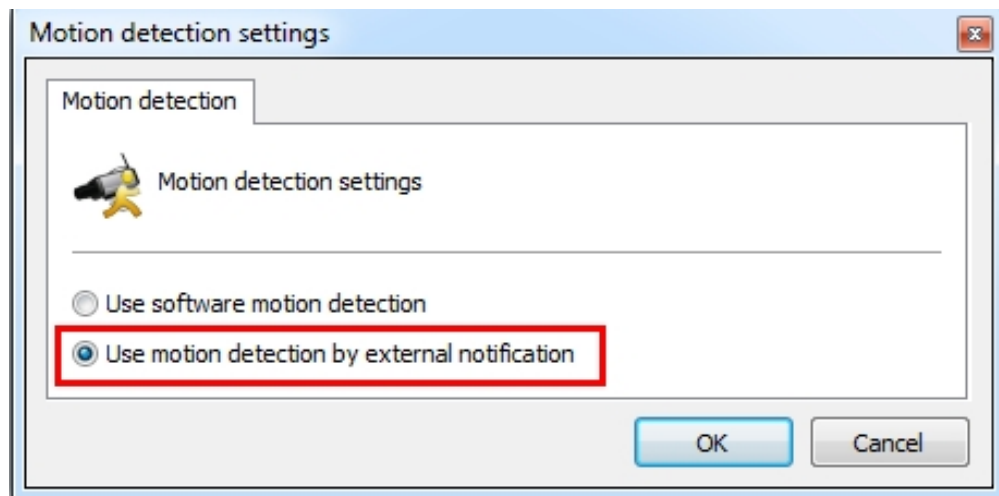


Example:

<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.**

Step3: choose use motion detection by external notification;



Step4: 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.

Step5: Set alarm settings.

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"/>

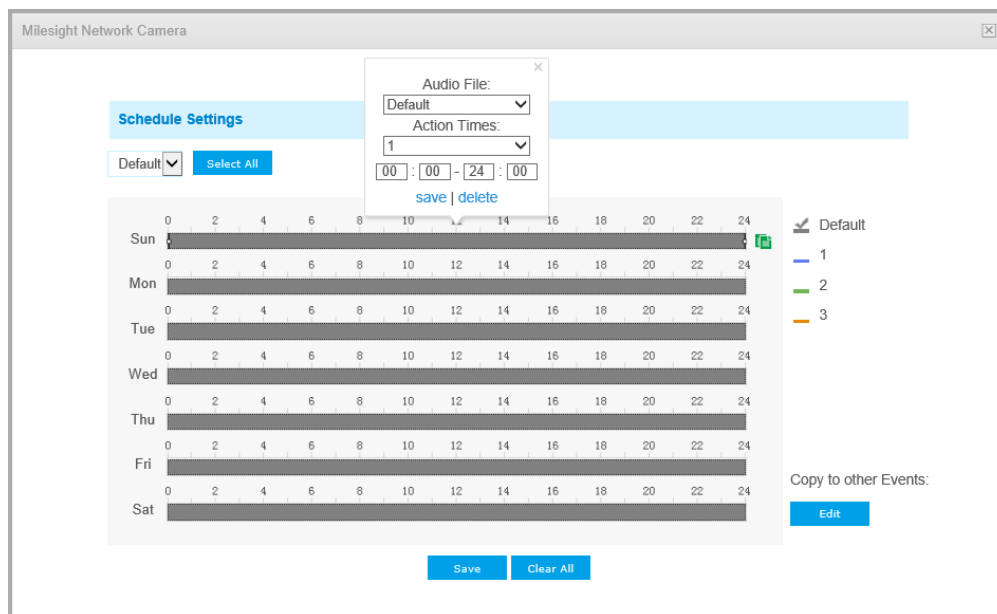
**Table 43. Description of the buttons**

Parameters	Function Introduction
<b>Record Video Sections</b>	Six different periods are available(5, 10, 15, 20, 25, 30 sec)
<b>Snapshot</b>	The number of snapshot, 1~5
<b>Snapshot Interval</b>	This cannot be edited unless you choose more than 1 to Snapshot
<b>External Output Action Time</b>	Length of time an alarm lasts, this cannot be edited unless you enable the External Output on the Alarm Action firstly.

Parameters	Function Introduction
<b>Audio Action Settings</b>	Set the audio schedule to trigger different audio files and action times in different time, which is corresponded to alarm action.
<b>Play Audio Interval</b>	Auto/ 10 seconds/ 30 seconds/ 1 minute/ 5 minutes/ 10 minutes are available.

 **Note:**

- You can customize the schedule of Audio Action.



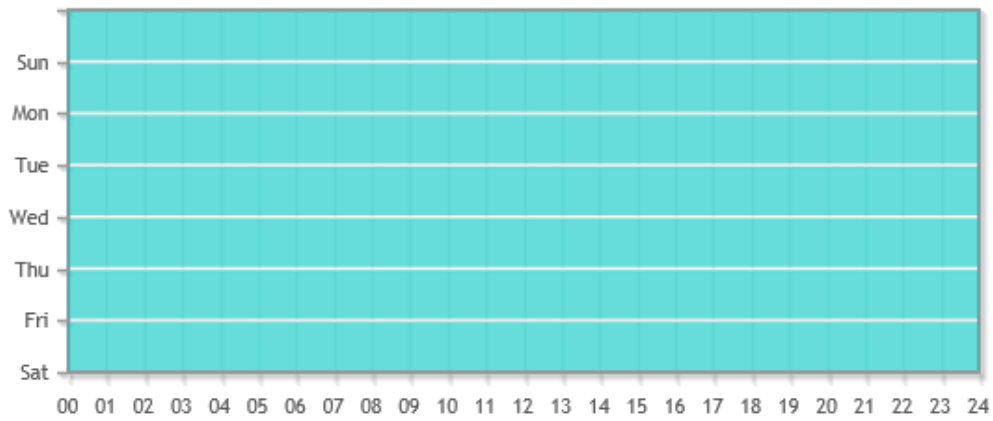
## Audio Alarm

Enable the Audio before using Audio Alarm function.

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



### Schedule Settings



Edit

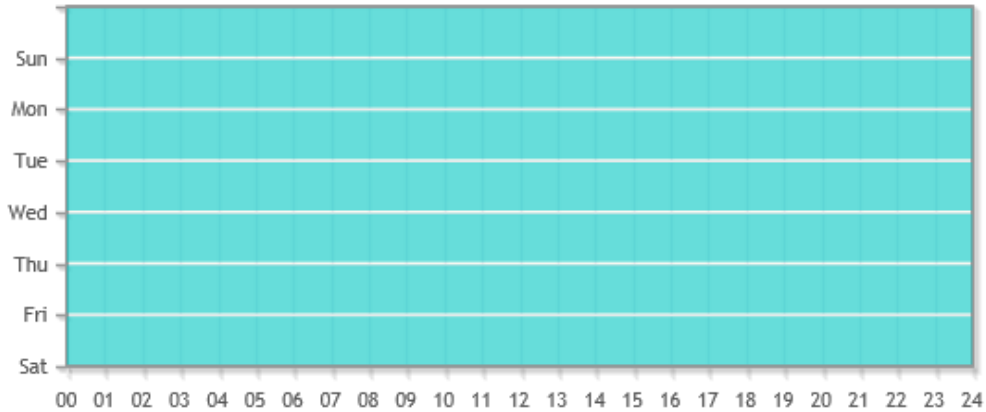
Alarm Action	
Save Into Storage:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/> (Please mount storage device.)
Upload Via FTP:	<input type="checkbox"/> File Format: Record <input type="button" value="v"/>
Upload Via Email:	<input type="checkbox"/> File Format: Snapshot <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 Input

Enable External Input:

### Schedule Settings



Edit

### 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** firstly, when the **Current Status** is different with **Normal Status**, it will lead to the alarm.


### Exception

<b>Alarm Type</b>	<input type="checkbox"/> Network Disconnected <input type="checkbox"/> IP Address Conflict <input checked="" type="checkbox"/> <b>Record Failed</b> <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"/>
<b>Alarm Action</b>	
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 configure the Audio Action Settings and Audio Interval.)
Alarm to SIP Phone:	<input type="checkbox"/> (Please open the SIP.)
HTTP Notification:	<input type="checkbox"/>
<b>Alarm Setting</b>	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	30 seconds
Audio Action Settings:	<a href="#">Edit</a>
Play Audio Interval:	Auto

[Save](#)


**Table 44. Description of the buttons**

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

Parameters	Function Introduction
<p><b>Alarm Action</b></p>	<p><b>Save Into Storage:</b> Save alarm recording files into SD Card</p> <p><b>Upload Via Email:</b> 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><b>External Output:</b> If the camera equips with External Output, you can enable the action after configuring the trigger duration</p> <p><b>Play Audio:</b> If the camera equips with Speaker, you can enable the action after configuring the audio speaker</p> <p><b>Alarm to SIP Phone:</b> Support to call the SIP phone after enable the SIP function.</p> <p><b>HTTP Notification:</b> Enable the HTTP Notification</p> <p><b>HTTP Notification URL:</b> There are three types of HTTP Notification URL, including URL1, URL2 and URL3.</p> <ul style="list-style-type: none"> <li>• <b>Enable:</b> Check the checkbox to enable a kind of HTTP Notification URL.</li> <li>• <b>Trigger Interval:</b> Trigger Interval of camera pushing information to some third-party devices.</li> <li>• <b>HTTP Method:</b> There are two HTTP push methods, including Post and Get.</li> <li>• <b>URL:</b> 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 Milesight VMS Enterprise, the format of the API URL is as follows: http://VMS server IP: VMS Port/api/httpEvent</li> </ul> <p> <b>Note:</b> It supports HTTPS for HTTP Post.</p> <ul style="list-style-type: none"> <li>• <b>User Name:</b> Receiver name.</li> <li>• <b>Password:</b> Receiver Password.</li> </ul>



Parameters	Function Introduction
Alarm Setting	<p><b>Record Video Sections:</b> Six different periods are available(5, 10, 15, 20, 25, 30 sec)</p> <p><b>Snapshot:</b> The number of snapshot, 1~5</p> <p><b>Snapshot Interval:</b> This cannot be edited unless you choose more than 1 to Snapshot</p> <p><b>Email Triggered Interval:</b> 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 <b>Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error</b> or <b>No SD Card</b> and check the Upload via Email checkbox of related Alarm type</p> <p><b>External Output Action Time:</b> Length of time an alarm lasts, this cannot be edited unless when you enable the External Output on the Alarm Action firstly</p> <p><b>Audio Action Settings:</b> Set the audio schedule to trigger different audio files and action times in different time, which is corresponded to alarm action</p> <p><b>Play Audio Interval:</b> 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>

 **Note:** Make sure to set up your email information in advance.

### 5.6.2 VCA Event

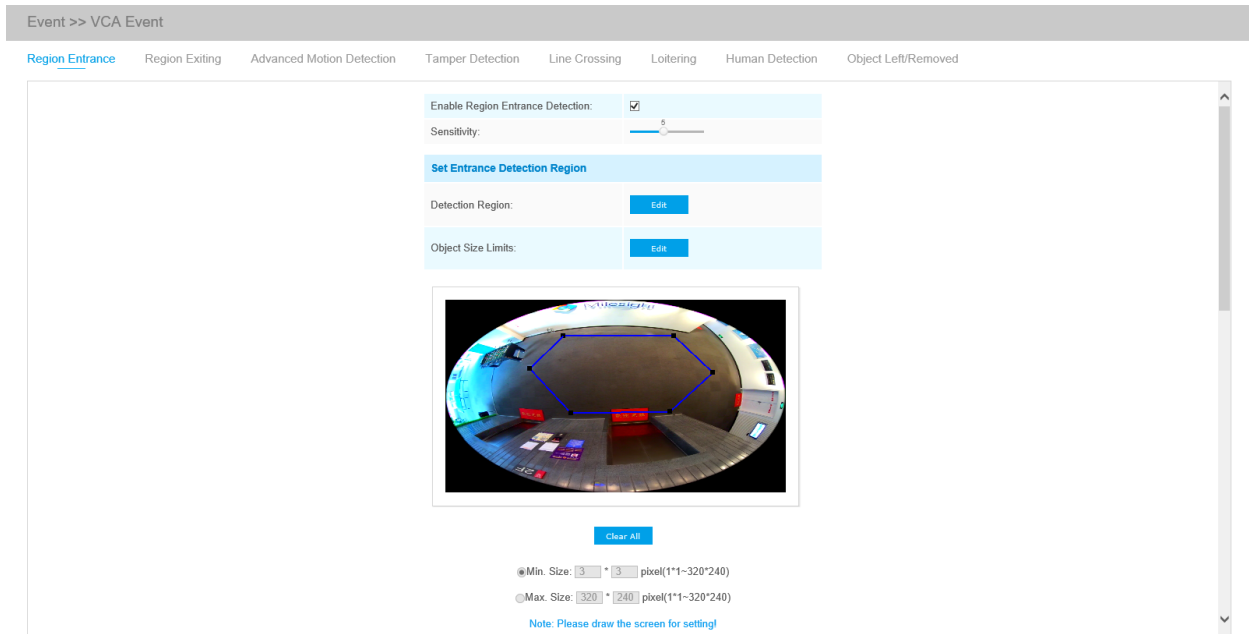
Smart Event uses Milesight VCA(Video Content Analysis) technology, which provides advanced, accurate smart video analysis for Milesight network cameras. Powered by AI chip,the new generation video analytics is capable of recognizing vast attributes of human, vehicle, and object pattern recognition models.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

 **Note:**

- There are AI and non-AI cameras in Milesight network cameras.
- Smart Event of fisheye camera only supports in 1O mode of Bundle-Stream mode and 1O, 1O3R, 1O1P3R mode of Multi-Channel mode.
- Image Rotation function is not supported for the -PA model in the AI series. When installing the camera, please make sure the image is displayed in a forward-facing position after dewarping.

### Region Entrance

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



Step1: Enable region entrance detection and set detecting sensitivity;

Step2: Set Entrance Detection region and object size limits;

**Table 45. Description of the buttons**

Parameters	Function Introduction
<b>Minimum Size</b>	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.
<b>Maximum Size</b>	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.

Step3: Set detection schedule;

Step4: 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:	

Step5: Set alarm settings. If you enable External Output and choose Constant External Output Action Time, when objects 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:	s(1~999)
Play Audio Interval:	Auto

## 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.

Event >> VCA Event

Region Entrance   **Region Exiting**   Advanced Motion Detection   Tamper Detection   Line Crossing   Loitering   Human Detection   Object Left/Removed

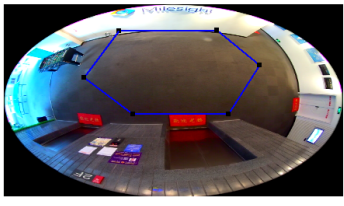
Enable Region Exiting Detection:

Sensitivity:

**Set Exiting Detection Region**

Detection Region:

Object Size Limits:



Min. Size:  \*  pixel(1\*1~320\*240)

Max. Size:  \*  pixel(1\*1~320\*240)

Note: Please draw the screen for setting!

Step1: Enable region exiting detection and set detecting sensitivity;

Step2: Set Exiting Detection region and object size limits.

Step3: Set detection schedule;

Step4: 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:	

Step5: 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, Milesight 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.

Event >> VCA Event

Region Entrance
Region Exiting
Advanced Motion Detection
Tamper Detection
Line Crossing
Loitering
Human Detection
Object Left/Removed

Enable Advanced Motion Detection:

Sensitivity:

Ignore Short-Lived Motion:

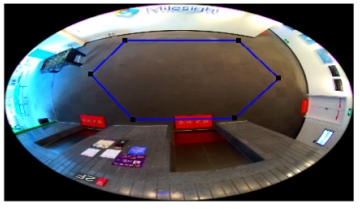
0

100

**Set Advanced Motion Detection Region**

Detection Region: Edit

Object Size Limits: Edit



Clear All

● Min. Size:  \*  pixel(1\*1-320\*240)

○ Max. Size:  \*  pixel(1\*1-320\*240)

Step1: Enable region detection and set detecting sensitivity;

Step2: 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;

Step3: Set Advanced Motion Detection region and object size limits;

Step4: Set detection schedule;

Step5: Set alarm action;

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"/>
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 <input type="button" value="v"/>
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 <input type="button" value="v"/> (0-900) s
HTTP Method:	Post <input type="button" value="v"/>
Snapshot:	<input type="checkbox"/>
URL:	<input type="text"/>
User Name:	<input type="text"/>
Password:	<input type="text"/>

Step6: 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 <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:	<div style="border: 1px solid black; padding: 2px;">           Customize            10 seconds            30 seconds            1 minute            5 minutes            10 minutes            Constant         </div> <input type="button" value="v"/> s(1~999)
Audio Action Settings:	
Play Audio Interval:	Auto <input type="button" value="v"/>

 **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.

Event >> VCA Event

Region Entrance   Region Exiting   Advanced Motion Detection   **Tamper Detection**   Line Crossing   Loitering   Human Detection   Object Left/Removed

Enable Tamper Detection:

Sensitivity:

**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	[Teal shaded area]																								
Tue	[Teal shaded area]																								
Wed	[Teal shaded area]																								
Thu	[Teal shaded area]																								
Fri	[Teal shaded area]																								
Sat	[Teal shaded area]																								

[Edit](#)

**Alarm Action**

Save Into Storage:  File Format: Record  
(Please mount storage device.)

Upload Via FTP:  File Format: Record

Upload Via Email:  File Format: Snapshot  
(Please enable the Email.)

Step1: Enable Tamper Detection and set detecting sensitivity;

Step2: Set detection schedule;


Step3: 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:	

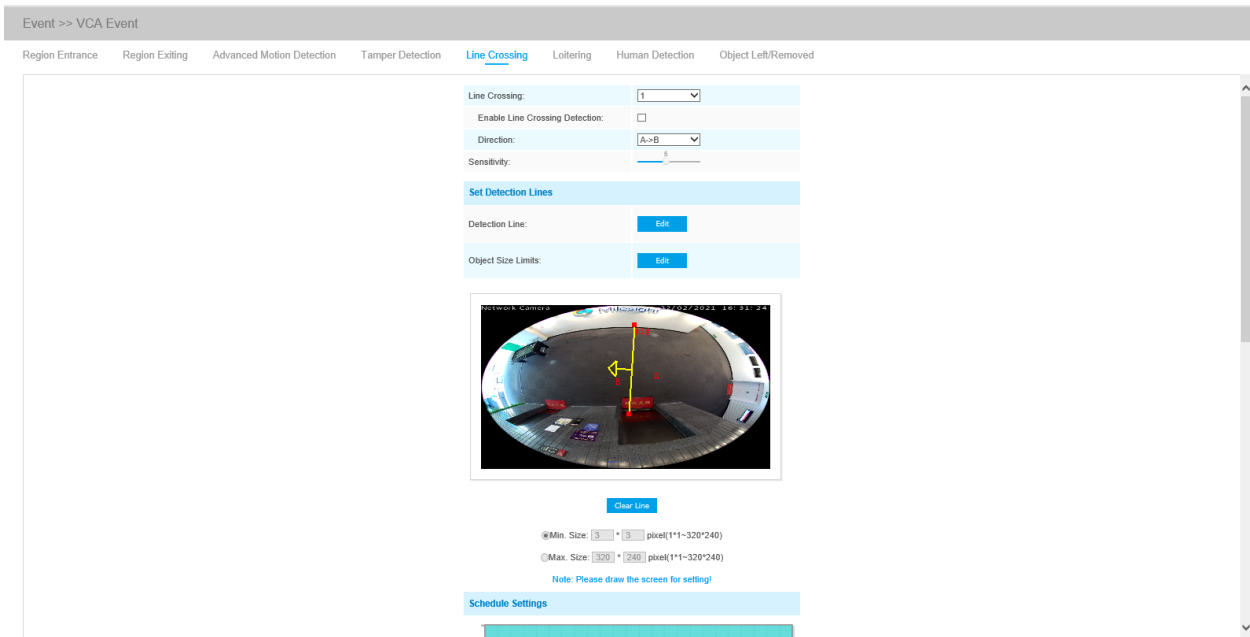
Step4: Set alarm settings. If you enable External Output and choose Constant External Output Action Time, when possible tampering is detected, External Output Action alarm time will be always constant till the alarm is released.

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: 5px;">                     Customize                      10 seconds                      30 seconds                      1 minute                      5 minutes                      10 minutes                      Constant                 </div>
Audio Action Settings:	
Play Audio Interval:	Auto

 **Note:** The algorithm supports defocus detection in Tamper Detection function.

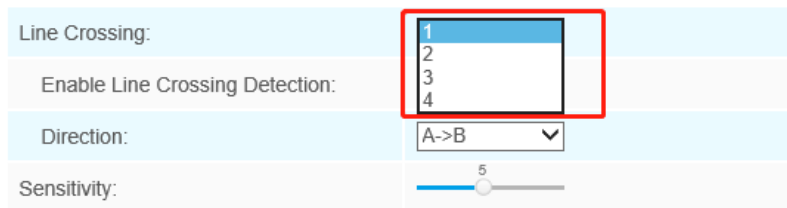
## Line Crossing

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

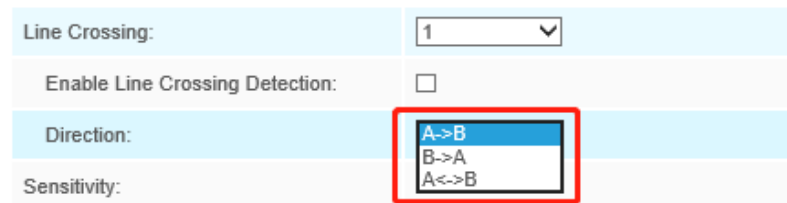


Settings steps are shown as follows:

Step1: Choose a line number;



Step2: Enable Line Crossing Detection and define its direction;



Step3: Set detecting sensitivity;


Step4: Draw detection lines and set object size limits;

Step5: Set detection schedule;

Step6: Set alarm action.

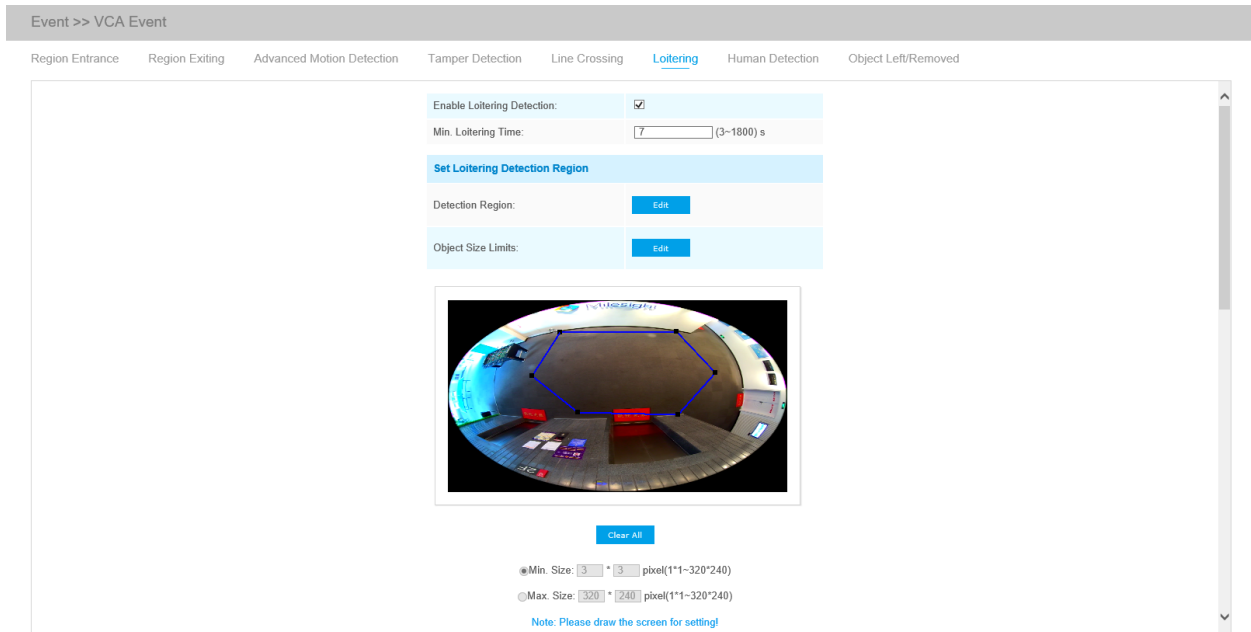
Step7: Set alarm settings. If you enable External Output and choose Constant External Output Action Time, when objects cross a defined virtual line, External Output Action alarm time will be always constant till the alarm is released.

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: 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:** Milesight network cameras allows to set up to four lines at a time. There are three direction modes to choose for triggering 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 line from either side.

## Loitering

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



Step1: Enable loitering detection and set minimum loitering time;

Step2: Set loitering detection region and object size limits;

Step3: Set detection schedule;

Step4: Set alarm action.

Step5: 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.

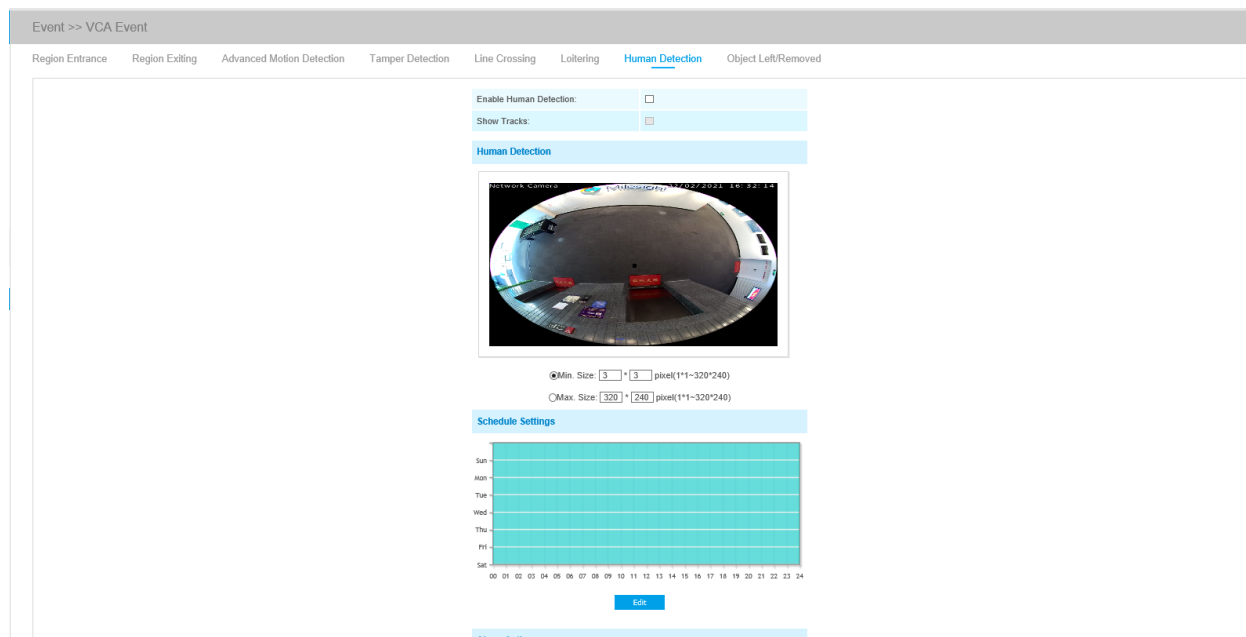
Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;">                     Customize                      10 seconds                      30 seconds                      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. Once human detection is enabled, 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.



Step1: Enable Human Detection;

Step2: Check Show Tracks;

Step3: Set object size limits;

Step4: Set schedule settings;

Step5: 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"/>

Step6: 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: 5px;">                     Customize                      10 seconds                      30 seconds                      1 minute                      5 minutes                      10 minutes                      Constant                 </div>
Audio Action Settings:	(1~999)
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 detect and prompt an alarm if an object is removed from a pre-defined region.

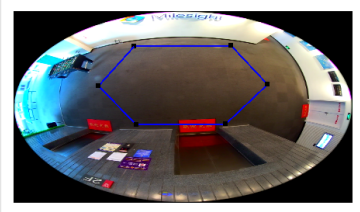
Event >> VCA Event

Region Entrance   Region Exiting   Advanced Motion Detection   Tamper Detection   Line Crossing   Loitering   Human Detection   [Object Left/Removed](#)

Enable Object Left:	<input checked="" type="checkbox"/>
Enable Object Removed:	<input checked="" type="checkbox"/>
Min. Time:	<input type="text" value="20"/> (10-1800)s
Sensitivity:	<input type="text" value="5"/>

**Set Detection Region**

Detection Region:	<input type="button" value="Edit"/>
Object Size Limits:	<input type="button" value="Edit"/>



Min. Size:  \*  pixel(1\*1-320\*240)

Step1: Enable Object Left or Object Removed(Or you can enable both features at the same time);

Step2: Set minimum time;

Step3: Set detecting sensitivity;

Step5: Set detection schedule;

Step6: Set alarm action.

Step7: 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:	<div style="border: 1px solid black; padding: 5px;">                     Customize                      10 seconds                      30 seconds                      1 minute                      5 minutes                      10 minutes                      Constant                 </div>
Audio Action Settings:	(1~999)
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.

### 5.6.3 People Counting

#### People Counting

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

Event >> People Counting

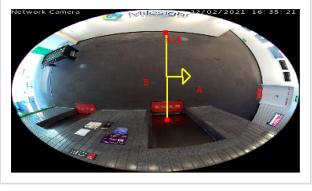
People Counting
Statistics Report

Enable People Counting:

**Set Detection Lines**

Detection Line: Edit

Object Size Limits: Edit



Clear Line

Min. Size:  \*  pixel(1\*1~320\*240)

Max. Size:  \*  pixel(1\*1~320\*240)

Note: Please draw the screen for setting!

**Schedule Settings**

Sun	
Mon	
Tue	
Wed	



Settings steps are as shown below:

Step1: Enable People Counting;

Step2: Set detection line and object size limits.

Step3: Set detection schedule;

Step4: 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="#00B0F0"/>
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="v"/>

Step5: 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"/>


Step6: 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:	

Step7: 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.

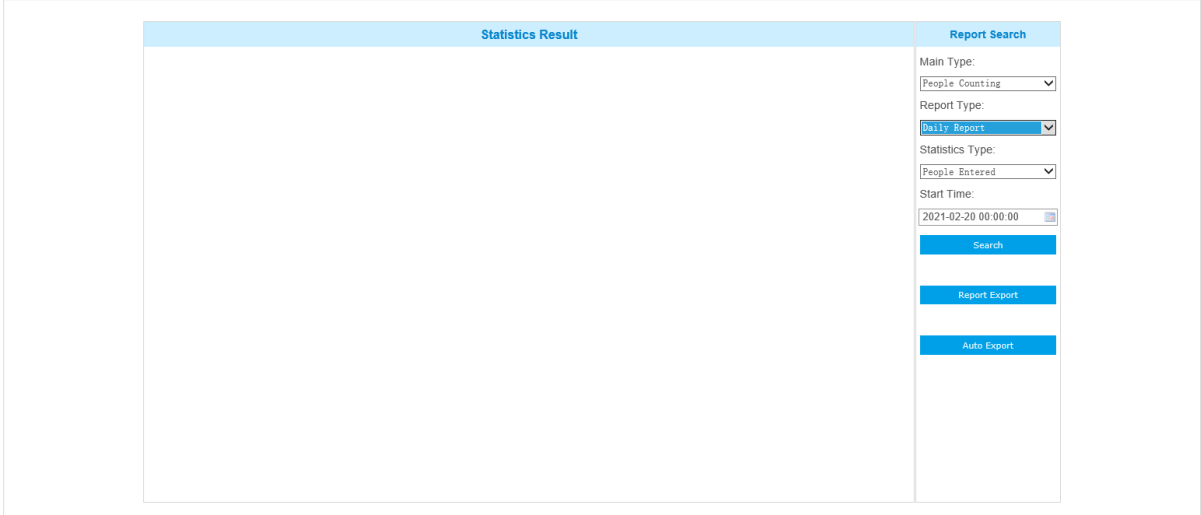
Alarm Setting	
Record Video Sections:	5 seconds
Snapshot:	3
Snapshot Interval:	1 second
Email Triggered Interval:	Auto
External Output Action Time:	<div style="border: 1px solid black; padding: 5px;">                     Customize                      10 seconds                      30 seconds      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

Save

 **Note:** Crossing along the direction of the arrow will record as “In”, opposite is “Out”.

## Statistics Report




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



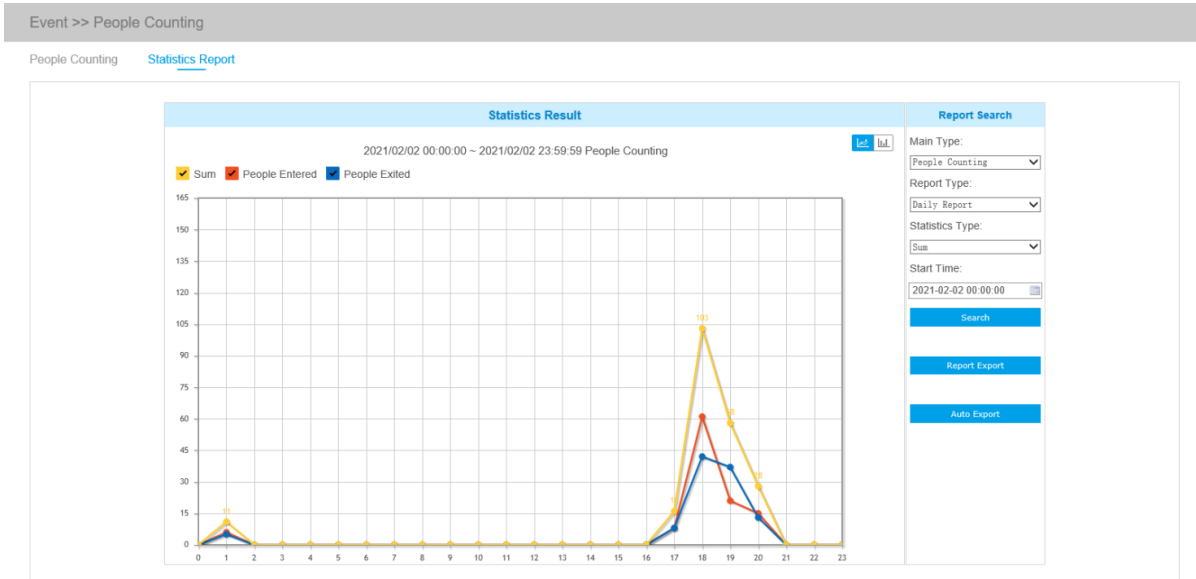
Step 1: Select Main Type;

Step2: Select Report Type including Daily Report, Weekly Report, Monthly Report and Annual Report;

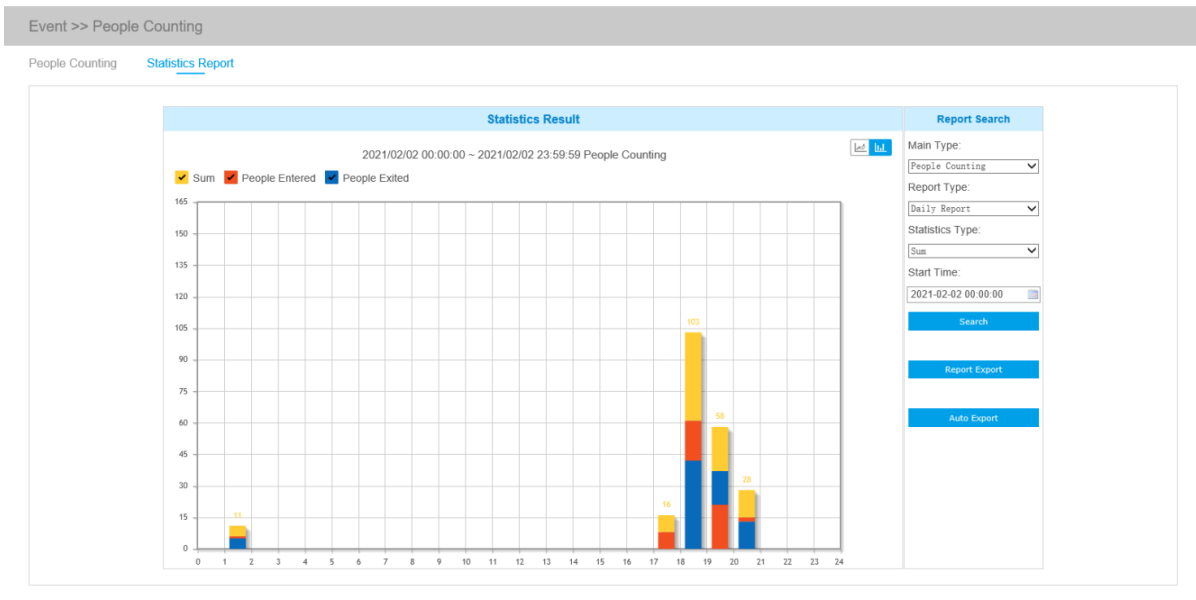
Step3: Select Statistics Type including People Entered, People Exited and Sum;

Step4: 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)*

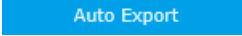


Step5: Click **Report Export** button to pop up the Export window as shown below, and you can choose File Format to export the report to local.

**Export**

File Format:  PNG  CSV

Save

Step6: Click  button to pop up the Statistics Report Settings as shown below.

**Statistics Report Settings**

Export Type: People Counting ▼

Enable:

Day: Everyday ▼

Time: 00:00:00

Export Time Range: Last 1 day ▼

Export to:  FTP  Email  Storage

Save

- 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;

**Statistics Report Settings**

Export Type: Regional People Counting ▾

Enable:

Length of Stay:   
 All   
 More Than 60 s   
 Less Than

Day: Everyday ▾

Time: 00:00:00 📅

Export Time Range: Last 1 day ▾

Export to:  FTP  Email  Storage

Save

- 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;

**Statistics Report Settings**

Export Type: Regional People Counting ▾

Enable:

Length of Stay: All ▾

Day:   
 Everyday   
 Sunday   
 Monday   
 Tuesday   
 Wednesday   
 Thursday   
 Friday   
 Saturday

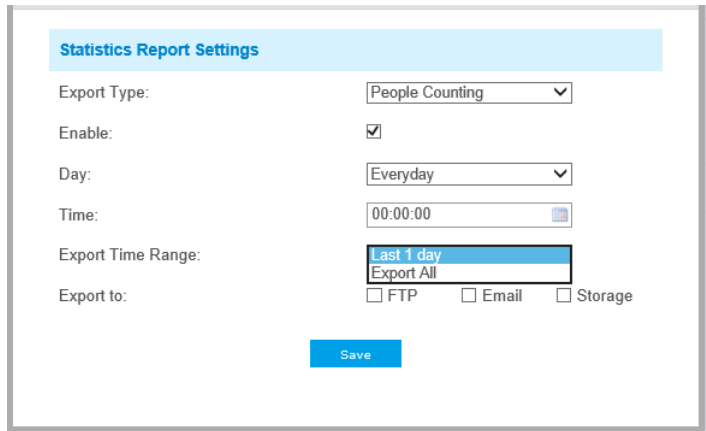
Export Time Range: Last 1 day ▾

Export to:  FTP  Email  Storage

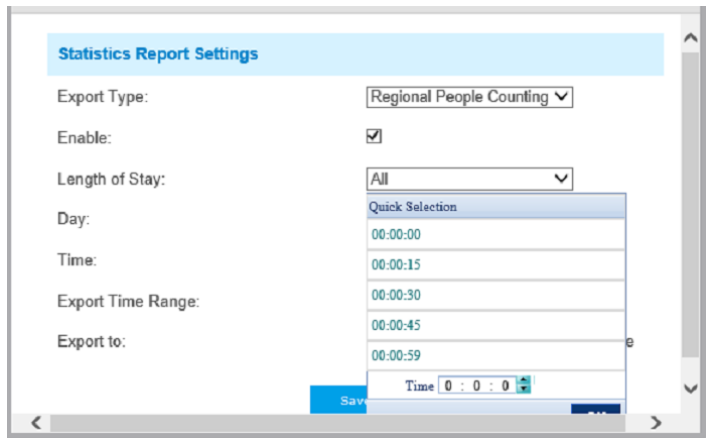
Save

- Set Export Time Range;


*Day (Choose Everyday)*



*Day (Choose Week)*



- 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”.

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

### 5.6.4 Heat Map

Heat Map function can analyze customers movement to reveal insights for better business management with the intuitive and accurate statistical analysis results in time or space pattern as needed.

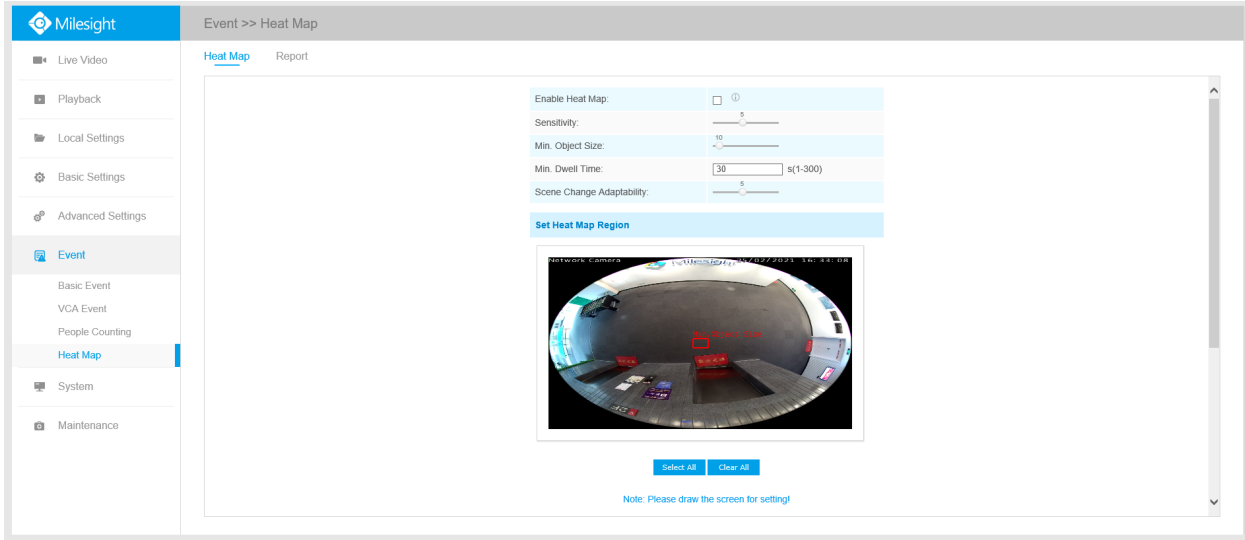
 **Note:**

- Currently Heat Map is only supported in the original view of 360° Panoramic Fisheye Network Camera and the dewarping view of 180° Panoramic Mini Bullet Network Camera and 180° Panoramic Mini Dome Network Camera.
- Please upgrade the camera to V43.7.0.75 or above to use Heat Map function.
- Only allowed to view reports within 7 days without a SD card or NAS.

#### Heat Map

Step1: After log in the web, go to “**Advanced Settings**”→ “**Heat Map**“. Check the checkbox “**Enable Heat Map**”, then set the Heat Map settings as shown below.






**Table 46. Description of the buttons**

Parameters	Function Introduction
<b>Sensitivity</b>	Level 1~10 are available, the default level is 5. The higher the sensitivity, the easier it is for moving objects to be recorded in the results.
<b>Min. Object Size</b>	Set the minimum object size from 1 to 100, the default value is 10. Objects smaller than this value will not be recorded in the result.
<b>Min. Dwell Time</b>	Set the minimum dwell time from 1 to 300, the default value is 30. If the object stays in the area longer than the set "Minimum Dwell Time", it will not be recorded in the result.
<b>Scene Change Adaptability</b>	Level 1~10 are available, the default level is 5. Scene Change Adaptability indicates the camera's adaptability to scene changes, which can increase the accuracy of detection. The camera better adapts to faster changing scenes if the value is higher.

Step2: Set Heat Map Region. Draw the screen to set the detection area. You can click **"Select All"** button to select all areas, or **"Clear All"** button to remove the current drawn area.

### Set Heat Map Region

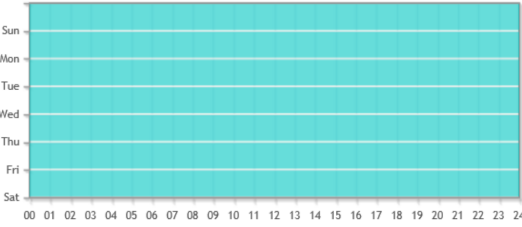


Select All
Clear All

**Note: Please draw the screen for setting!**

Step3: Schedule Settings. You can draw the schedule by clicking “**Edit**” button. And then click “**Save**” or “**Reset**” after finishing setting.

#### Schedule Settings



Edit

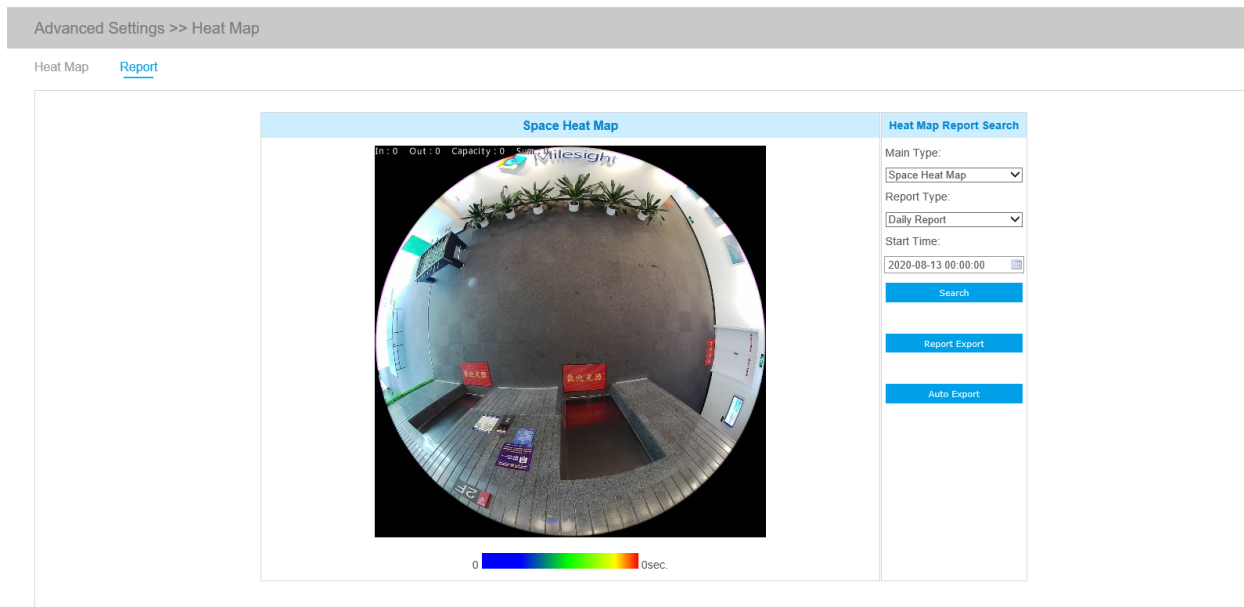
#### Time Schedule

☑	Period1	Period2	Period3	
☑Sunday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Monday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Tuesday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Wednesday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Thursday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Friday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>
☑Saturday	00 ▾   00 ▾   24 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	00 ▾   00 ▾   00 ▾   00 ▾	<a href="#">Copy to Other Days</a>

Save
Reset

## Report

The results will be displayed on “**Report**” interface.



Step1: Select Main Heat Map Type.

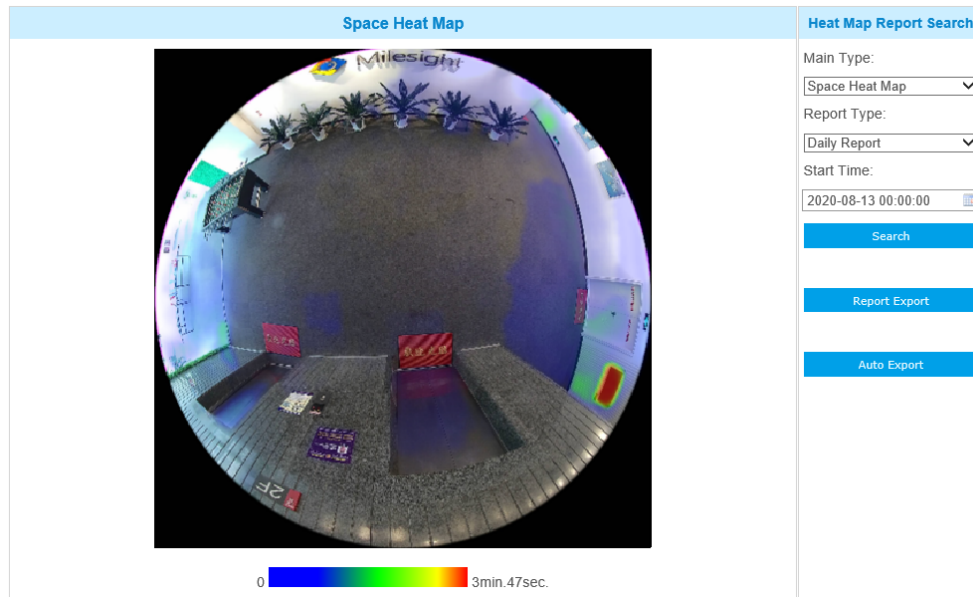
**[Space Heat Map]:** Space Heat Map will be presented as a picture with different color. Different colors represent different heat values. Red represents the highest and blue represents the lowest.

**[Time Heat Map]:** Time heat map will be presented as a line chart to show the heat at different times.

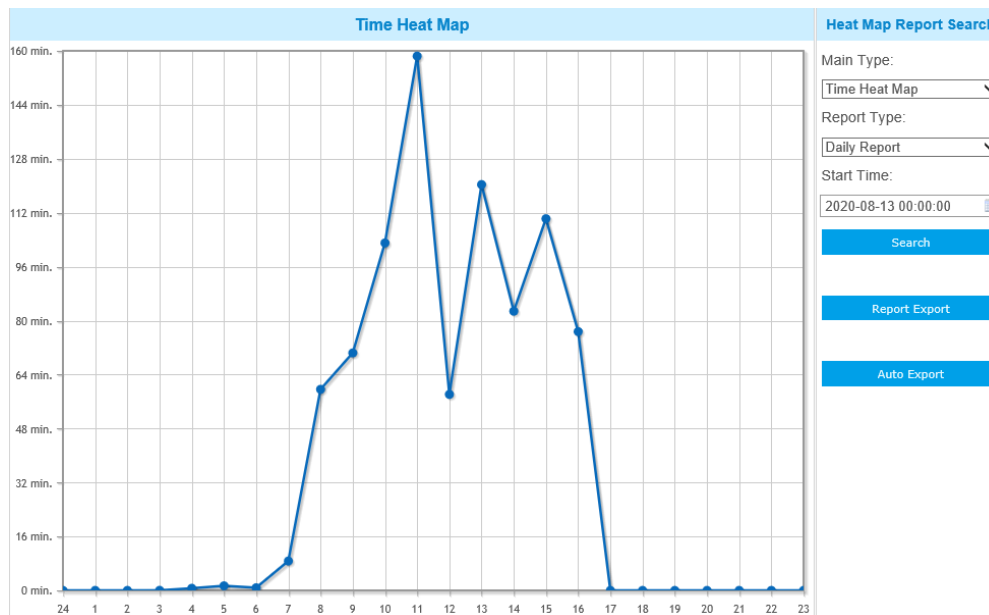
Step2: Select Report Type including Daily Report, Weekly Report, Monthly Report and Annual Report.

Step3: Select Start Time, then click the **“Search”** 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 as shown below.

*Space Heat Map*



*Time Heat Map*

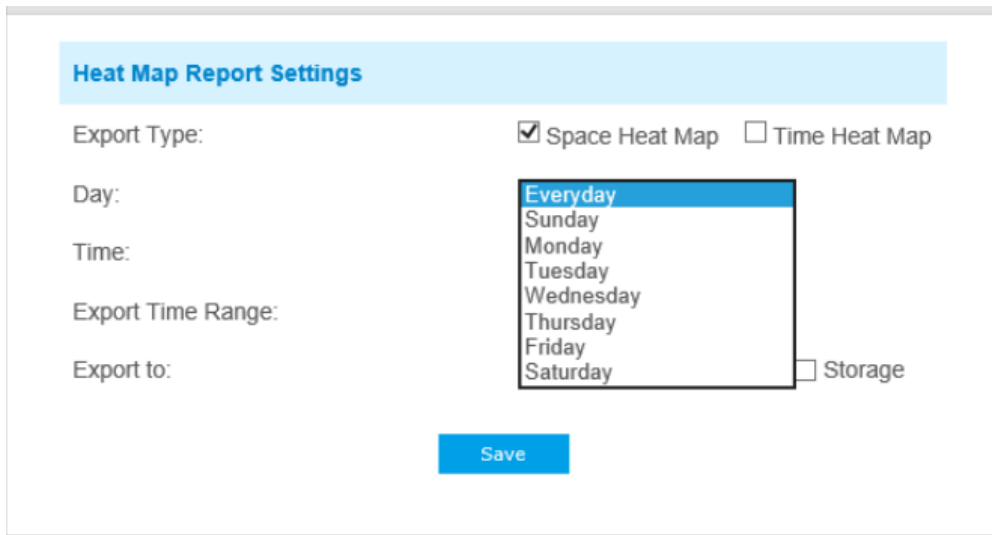


Step4: Click the "**Report Export**" button to export the report to local.

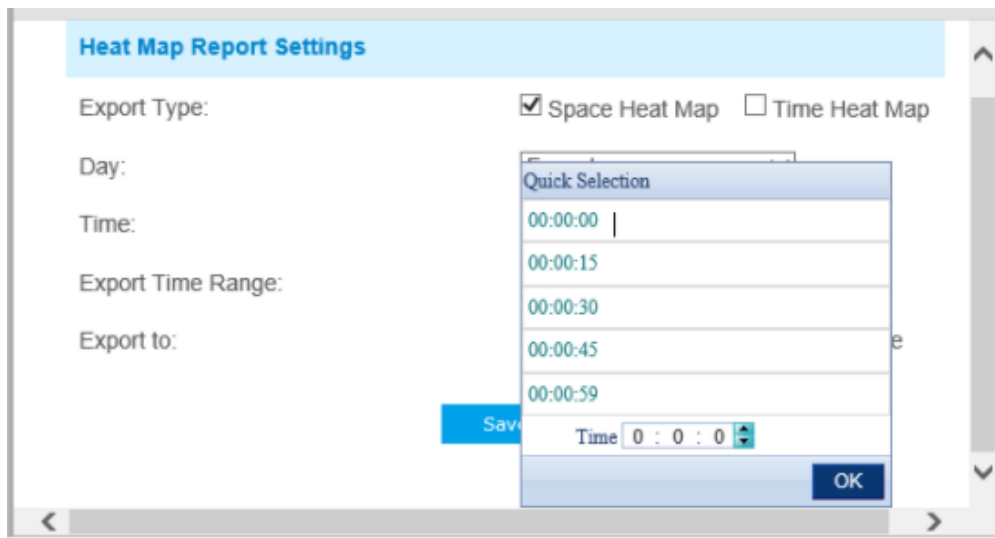
Step5: Click the "**Auto Export**" button to pop up the Heat Map Report Settings as shown below.

- Set Export Type. User can check Space Heat Map or Time Heat Map or both. When either Space Heat Map or Time Heat Map 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 heat map automatically, click the calendar icon to pop up the following Quick Selection;



- Set Export Time Range.

Day (Choose Everyday)

**Heat Map Report Settings**

Export Type:  Space Heat Map  Time Heat Map

Day:

Time:

Export Time Range:

Export to:  FTP  Email  Storage

*Day (Choose Week)*

**Heat Map Report Settings**

Export Type:  Space Heat Map  Time Heat Map

Day:

Time:

Export Time Range:

Export to:  FTP  Email  Storage

- 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 or a picture according to the day, time and export time range you set. Then click “Save”.

### Heat Map Report Settings

Export Type:  Space Heat Map  Time Heat Map


Day:

Time:

Export Time Range:

Export to:  FTP  Email  Storage

If the current Space Heat Map is generated, it will be saved as a png image. If the current Time Heat Map is generated, it will be saved as a csv form.

 **Note:** The automatically exported report of the Space Heat Map only can be used on MS-CXX74-PB.

## 5.7 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-C9674-PB
Hardware Version:	V1.0
Software Version:	43.7.0.78
MAC Address:	1C:C3:16:22:0D:8D
Device Information:	SJ001EQ370N2
Alarm Input:	1
Alarm Output:	1
Uptime:	2 days 4 hours 21 minutes
QR Code:	 <p>Please scan this QR code on App to get a remote view.</p>


Save

**Table 47. Description of the buttons**

Parameters	Function Introduction
<b>Device Name</b>	The device name can be customized. It will be seen in file names of video files
<b>Product Model</b>	The product model of the camera
<b>Hardware Version</b>	The hardware version of the camera
<b>Software Version</b>	The software version of the camera can be upgraded
<b>MAC Address</b>	Media Access Control address



<b>Parameters</b>	<b>Function Introduction</b>
<b>Device Information</b>	The device information, including information about alarm I/O and clipper chip
<b>Alarm Input</b>	The number of Alarm Input interface
<b>Alarm Output</b>	The number of Alarm Output interface
<b>Up Time</b>	The elapsed time since the last restarted of the device

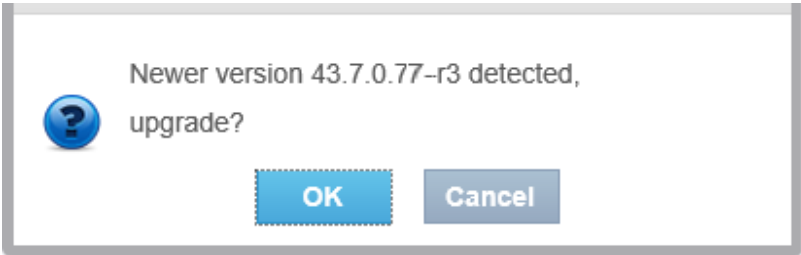
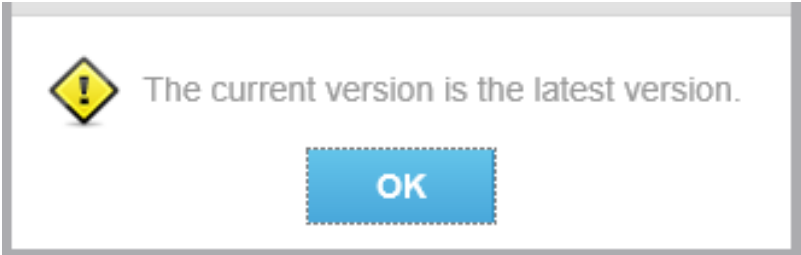


 **Note:** The Alarm Input/Alarm Output will appear only when the camera have alarm input/output interface.



## *5.8 Maintenance*

### *5.8.1 System Maintenance*

System Upgrade	
Software Version:	43.7.0.77
Local Upgrade:	<input type="text"/> Browse... <input type="button" value="Upgrade"/> <input type="checkbox"/> Reset after Upgrading
Online Upgrade:	<input type="button" value="Check"/>
<p>Note: Do not disconnect the power of the device during the upgrade.</p>	
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"/> Browse...
Import Config File:	<input type="button" value="Import"/>
Reboot	
Reboot the Device:	<input type="button" value="Reboot"/>

**Table 48. Description of the buttons**

Parameters	Function Introduction
<p style="text-align: center;"><b>System Upgrade</b></p>	<p><b>Software Version:</b> The software version of the camera.</p> <p><b>Local Upgrade:</b> 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 "<b>Reset after Upgrading</b>" to reset the camera after upgrading it.</p> <p><b>Online Upgrade:</b> 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="592 709 1388 961" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;">  <p style="text-align: center;">Newer version 43.7.0.77-r3 detected, upgrade?</p> <p style="text-align: center;"> <input type="button" value="OK"/> <input type="button" value="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="592 1077 1388 1329" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;">  <p style="text-align: center;">  <span style="font-size: 1.2em;">The current version is the latest version.</span> </p> <p style="text-align: center;"> <input type="button" value="OK"/> </p> </div> <p> <b>Note:</b> Do not disconnect the power of the device during the update. The device will be restarted to complete the upgrading.</p>



Parameters	Function Introduction
<p style="text-align: center;"><b>Maintenance</b></p>	<p><b>Reset settings:</b> Click “Reset” button to reset the camera to factory default settings</p> <p><b>Keep the IP Configuration:</b> Check this option to keep the IP configuration when resetting the camera.</p> <p><b>Keep the User information:</b> Check this option to keep the user information when resetting the camera.</p> <p><b>Export Diagnose Information:</b> Click this button to export logs and system information of the device operation status.</p> <p> <b>Note:</b> The file format is “.txt”.</p> <p><b>Export Config File:</b> Click this button and a window will pop up as shown below:</p> <div data-bbox="592 760 1188 1159" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">File Encryption Configuration <span style="float: right;">✕</span></p> <p>Input the encryption password:</p> <input style="width: 100%;" type="text"/> <p>Confirm:</p> <input style="width: 100%;" type="text"/> <p style="text-align: center;"> <span style="background-color: #007bff; color: white; padding: 5px 15px; margin-right: 10px;">Save</span> <span style="background-color: #6c757d; color: white; padding: 5px 15px;">Cancel</span> </p> </div> <p>You need to enter and confirm password again, then click save button to export configuration file.</p> <p><b>Import Config File:</b> 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 password and click save button to import configuration file.</p> <div data-bbox="592 1428 1188 1722" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">File Decryption <span style="float: right;">✕</span></p> <p>Input the password of config file:</p> <input style="width: 100%;" type="text"/> <p style="text-align: center;"> <span style="background-color: #007bff; color: white; padding: 5px 15px; margin-right: 10px;">Save</span> <span style="background-color: #6c757d; color: white; padding: 5px 15px;">Cancel</span> </p> </div> <p> <b>Note:</b> Export and import the same configuration file. Password must be the same.</p>

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

### 5.8.2 Auto Reboot

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

**Auto Reboot Settings**

Enable Auto Reboot:	<input type="checkbox"/>
Day:	Everyday 
Time:	00:00:00 

Save

# Chapter 6. Services

Milesight Technology Co., Ltd provides customers with timely and comprehensive technical support services. End-users can contact your local dealer to obtain technical support. Distributors and resellers can contact directly with Milesight for technical support.

Technical Support Mailbox: [support@milesight.com](mailto:support@milesight.com)

Web: <http://www.milesight.com>

Online Problem Submission System: <http://www.milesight.com/service/feedback.asp>

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