User Manual

HD Network Camera

AIBASE COLOR

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Statement

Thanks for using our IP cameras, this series are integrated IP cameras developed for network video surveillance, including IP box camera, bullet camera, dome camera, PTZ cameras, etc. A powerful SoC (System on a Chip) is used as the media processor to automate audio and video acquisition, compression,and transmission. The standard H.264/H.265 coding algorithm guarantees a clearer and smoother video transmission. The embedded web server allows users to easily and instantaneously monitor and remotely control front-end cameras from Internet Explorer.

This series of IP cameras are suitable for large and medium-sized enterprises, government projects, shopping malls, chain supermarkets, intelligent buildings, hotels, hospitals, schools and other customer groups, and all kinds of places where remote network video transmission and monitoring will be applied.This product is easy to install and user friendly.

Introduction:

- In this manual, IP cameras refer to network cameras.
- Click indicates click on the left mouse button.
- Double click indicates double click on the left mouse button.
- By default, an IP camera uses DHCP to automatically obtain an IP address; the default IP address is 192.168.1.168.
- Upon initial use, users must set a password as instructed, logging in with the username "admin" (in lowercase) and configuring the password as outlined in Section 4.2.
- The default web port number is 80. The ONVIF port number aligns with the web port number.

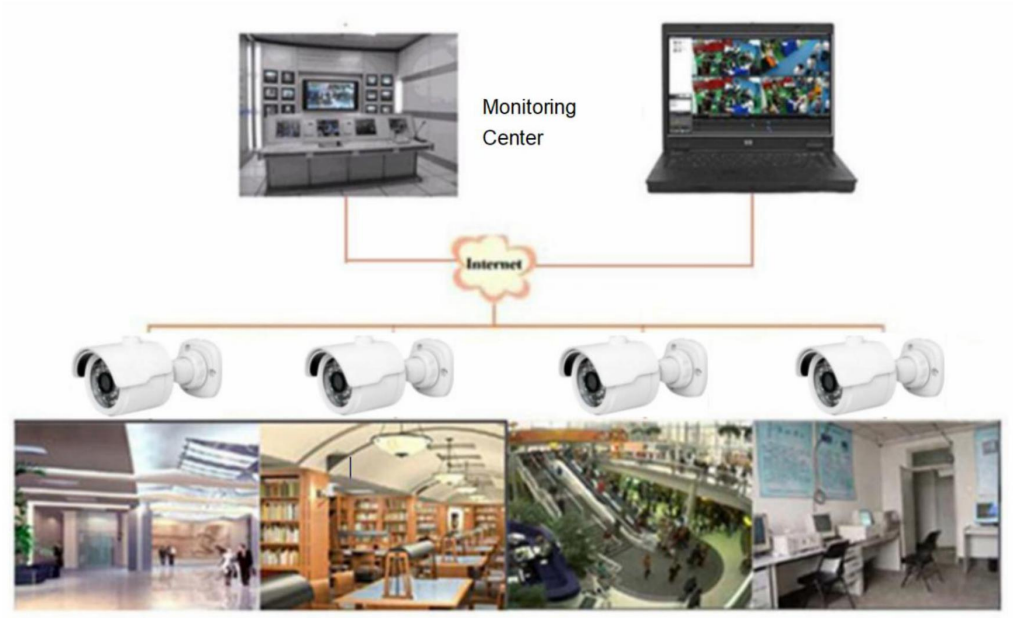
Note:

Some information contained in this manual may different from the actual product.For any problems that cannot be solved using this manual, please feel free to contact our technical support or authorized agent.This manual is subject to change without prior notice.

Chapter 1 Overview

1.1 Scope of application

IP cameras with powerful image processing capabilities can be applied in various public places such as shopping malls, supermarkets, schools, factories and workshops, as well as environments requiring high-definition video images such as banks and traffic control systems, as shown in below picture.



1.2 Product Description

The IP camera is a digital network monitoring camera that can operate independently with a built-in web server, and can be used for real-time monitoring from all over the world by using a web browser or client software.

The IP camera, based on the state-of-the-art digital solution, is an integrated media processing platform for audio/video acquisition, compression and network transmission on a single board.It complies with H.264/H.265 High Profile coding standard.By typing the IP camera's IP address or domain name into a web browser, any remote user can perform real-time monitoring.The IP camera solution is

suitable for residential or commercial environments, as well as a variety of places requiring remote network video surveillance and transmission.The product is easy to install and user friendly.

The IP camera Allow to set multiple users with different permissions for easy management.

The IP camera has the motion detection function, and will actively send E-mail, captured images or alarm video when an event occurs and store the alarm video in the TF card for easy retrieval.

1.3 Operational environment

System: Windows XP/Windows 7/ Windows 8/ Windows 10/ Windows 11/MacOS 10 or above

CPU: Intel I3 or higher

Memory: 2G or higher

Video Memory: 1G or higher

Display: 1024 x 768 or higher resolution

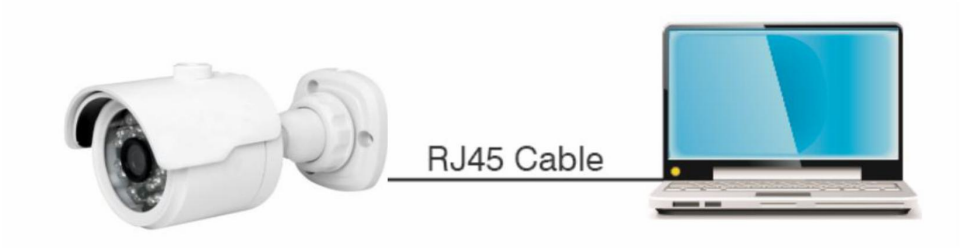
Browser: IE10 and higher version, Chrome 57 and higher version, Firefox 52 and higher version, Edge 41 and higher version, and Safari 12 and higher version.

Chapter 2 Device Connection

You can set up the IP camera in two selectable modes.

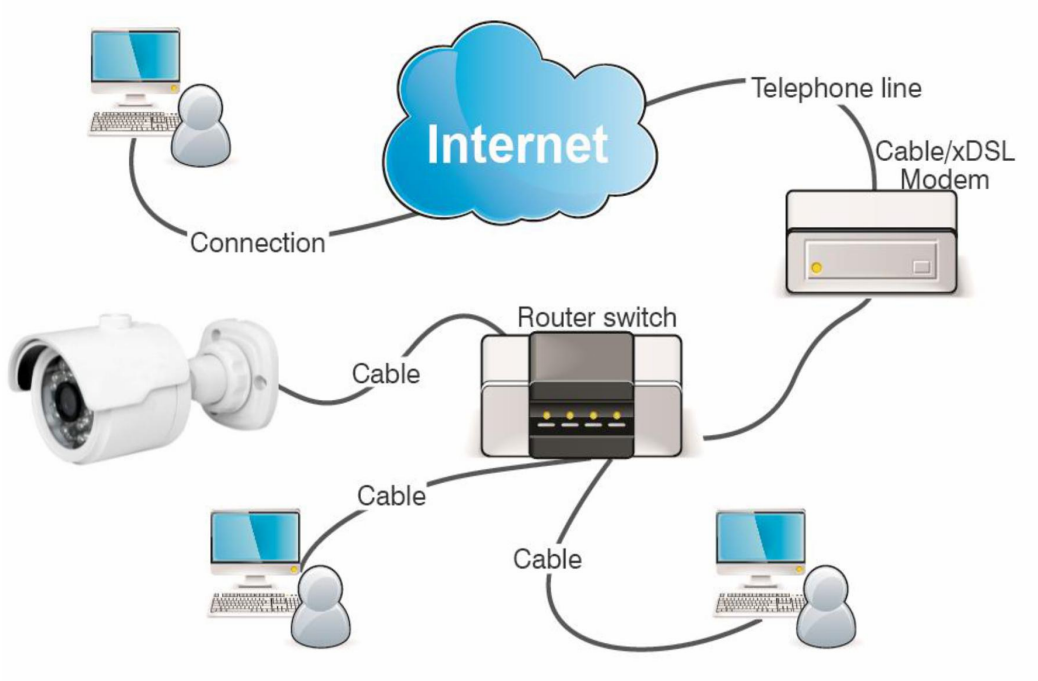
2.1 Connecting to PC

Directly connect an IP camera to a PC through a network cable, connect the power input to the DC 12V adapter, and set the IP addresses of the PC and the IP camera on the same network segment.If the network is running properly, the IP camera will communicate with the PC within one minute after turned on.



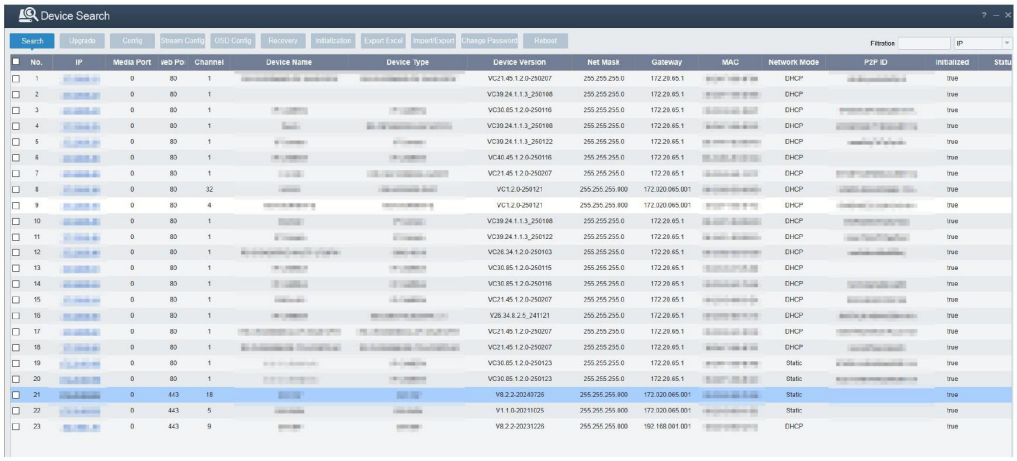
2.2 Connection via router/switch

This connection method is used when an IP camera is connected to the Internet where the IP camera and PC are connected to the LAN ports of a router/switch and the gateway of the camera is set to the IP address of the router.



Chapter 3 Setting the IP Address of an IPC using Device Config Tool

Step 1.Run Device Config Tool , click Search to get the information of the IPCs in this LAN as shown in the figure below, and locate your desired IPC based the P2P or MAC address of the camera.

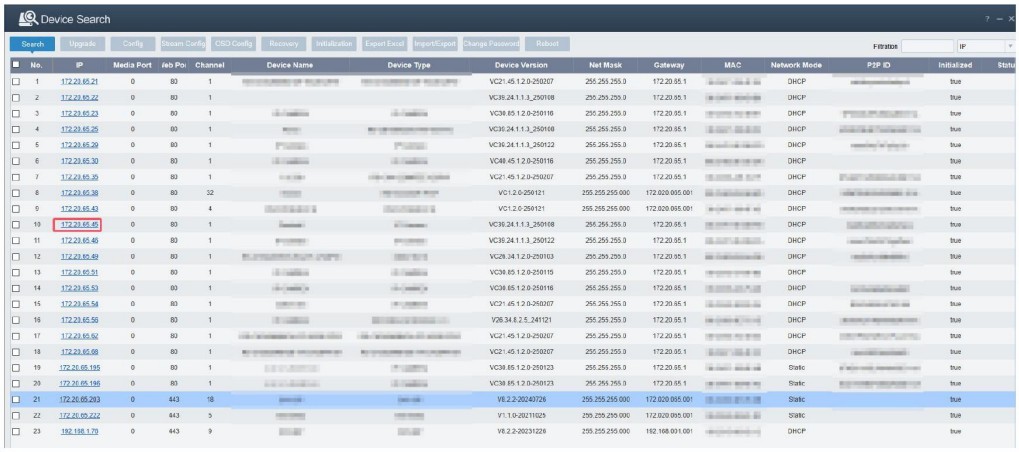


Note: The default IP address of the camera is 192.168.1.168, the default username is admin.

Chapter 4 Login from Web Client

4.1 Accessing Camera from Web Client

Use Device Config Tool to search the IPCs in the current network.As shown in the following figure, directly click an IP address and use your IE browser to login to the corresponding camera.



As an alternative, you can open your IE browser and type the following information into the address bar: **http://ip:web port**.As shown in the figure above, the IP address of the device to be accessed is 172.20.58.41, the web port No.is 80, and the combined URL is **http://172.20.58.41:80**.

Note: In practical applications, the default HTTP access mode is port 80.

4.2 Login for the First Time

Firstly, access the camera from a web client, you need to set a password for the camera in order to complete the activation operation.The web client will display the screen as shown in below picture. Hover over the password entry box to prompt for the password requirement:

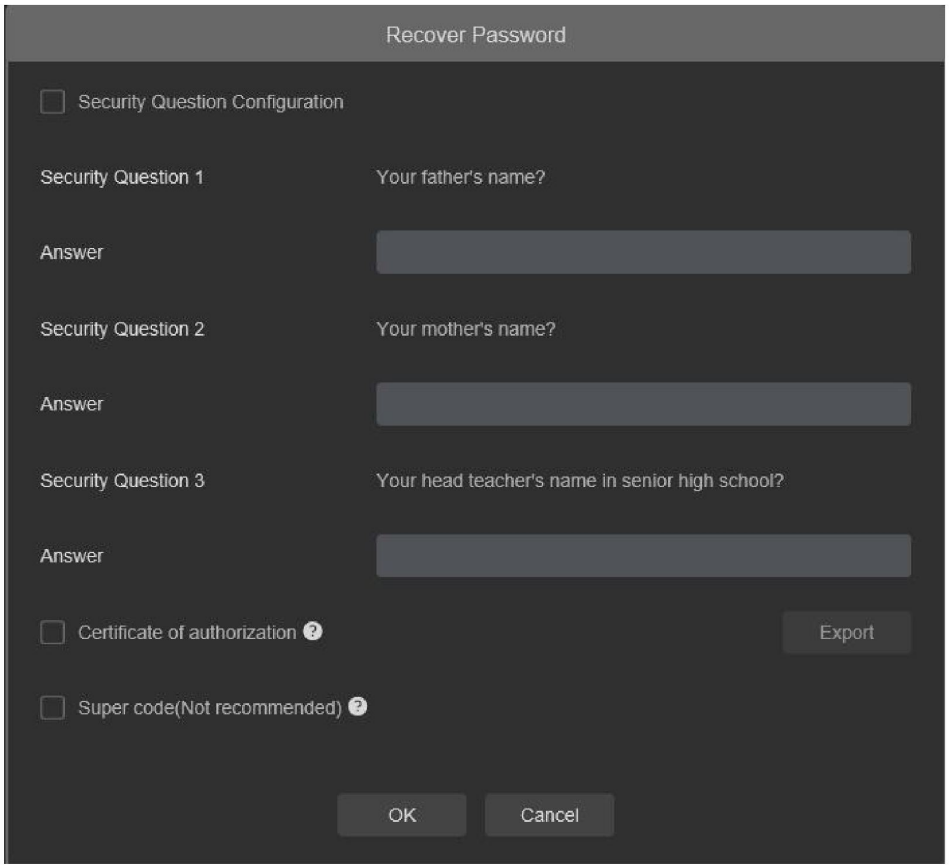
The length of the password should be 8~16 characters.It should contain at least two combinations of upper case letters, lower case letters, numbers and special

characters.

Password and username cannot be set the same.



Set a new password and click OK to save your change. The web client will display the screen as shown in below picture. Users can open the corresponding recover password method by checking the box, or cancel the setting directly without checking the box, and do not enable the recover password function.



① Security Question Configuration: To change the user password by question verification, check the Security Question Configuration, select three questions among 15 questions, and set the answers at a maximum length of 64 characters to recover your password.

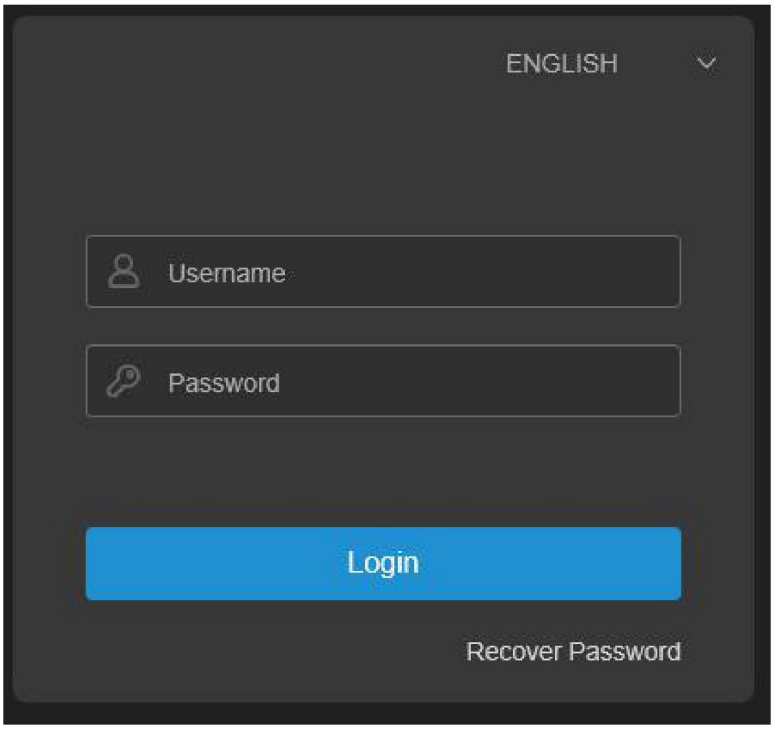
② Certificate of authorization: To change the user password by using a certificate, check the Certificate of authorization, and click Export to download the certificate.txt file.

③ Super code(Not recommended): This method is to calculate a super code allowing to changing the user password by using the MAC address of the camera and camera time.You are not advised to enable this function as the MAC address of the camera is broadcast over the network, and the system time of the camera can be directly obtained when you login from the web client and use Super code to change the user password.

Note: Keep your verification information properly when the recover password function is enabled.

4.3 General login

After accessing from the web client, you will be directed to the login screen as shown in below picture.Then, input your username and password, and click Login to access the operation screen.At the same time, you can select your desired language upon login.



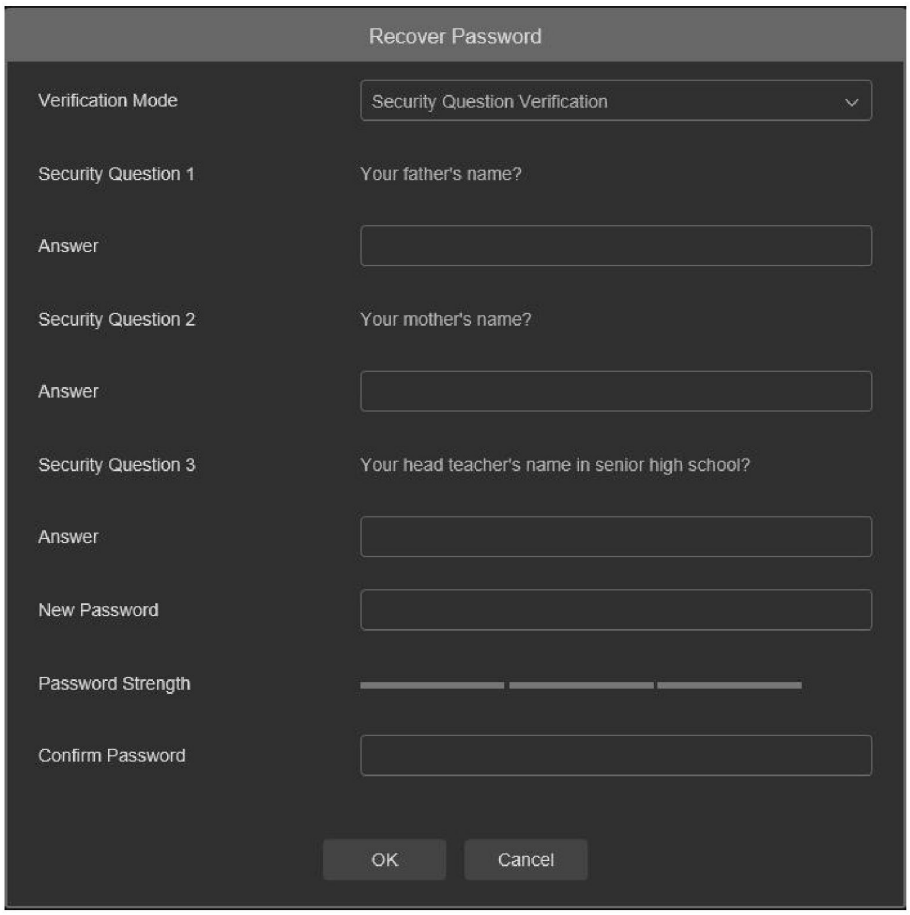
4.4 Recover Password

When the recover password function is enabled, if you forget the login information, you can click Recover Password to enter the Recover Password screen.You can check security question configuration, certificate of authorization, or super code upon first login to recover your password.

4.4.1 Security Question Configuration

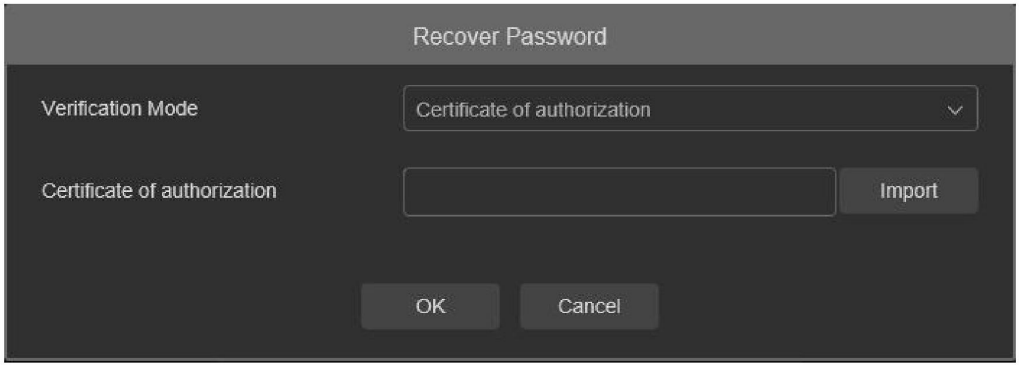
You can change the user password by setting security questions on the Recover

Password screen, as shown in below picture.Fill in the answers to security questions.You can directly change the user password.

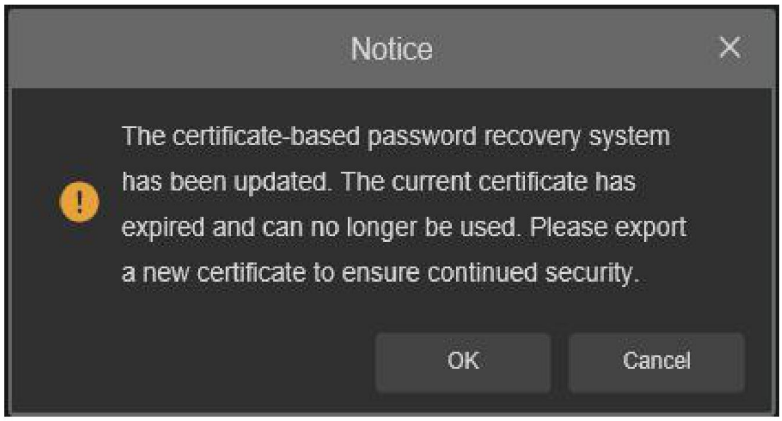


4.4.2 Certificate of Authorization

When you set security questions upon first login, you will be asked to download the certificate.txt when you choose to recover the user password by using Certificate of authorization.On the Recover Password screen, click the Recover Password and import the certificate.txt file to reset the password, as shown in below picture.Click **Import** and select the certificate.txt file.Then, enter a new password to change the user password.

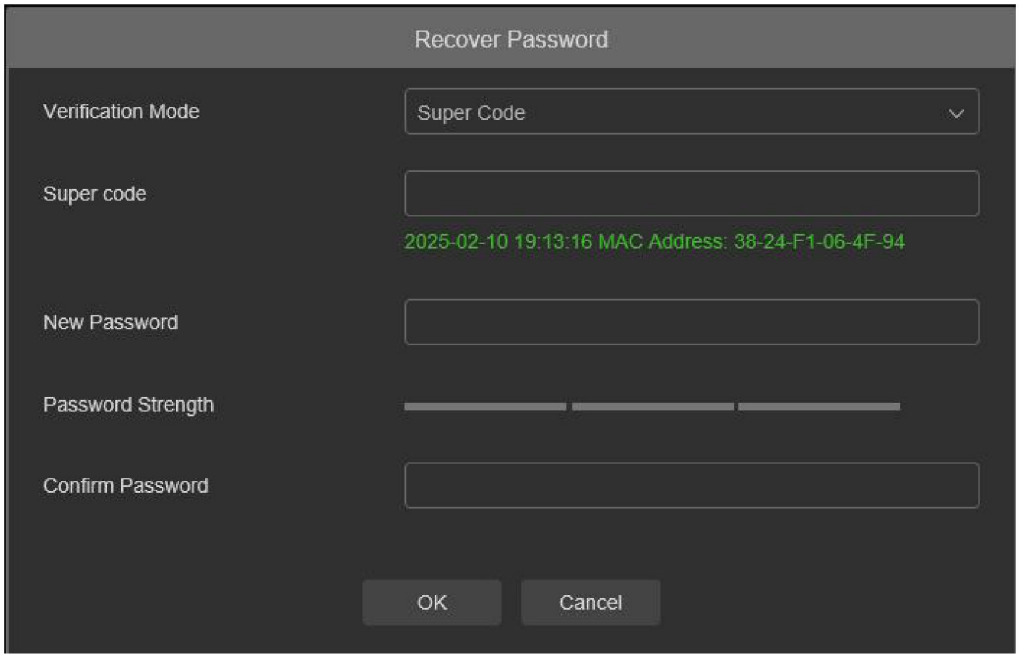


Note: After using this method to change the password, the key file will be invalidated and a pop-up window will prompt the user to re-export the key file after logging. If the user does not choose to re-export the key file, the user will no longer be allowed to change the password by this method after that. The prompt is shown in below picture.



4.4.3 Super Code

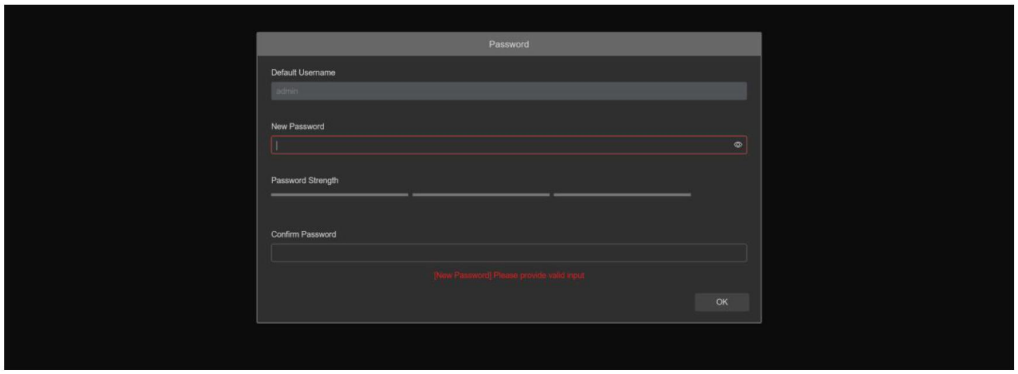
The super code is an insecure way to recover the password.The super code is calculated based on the MAC address of the camera and the time of the super verification code according to certain rules.Then the user password can be changed by entering the verification code.



4.5 Password Expire

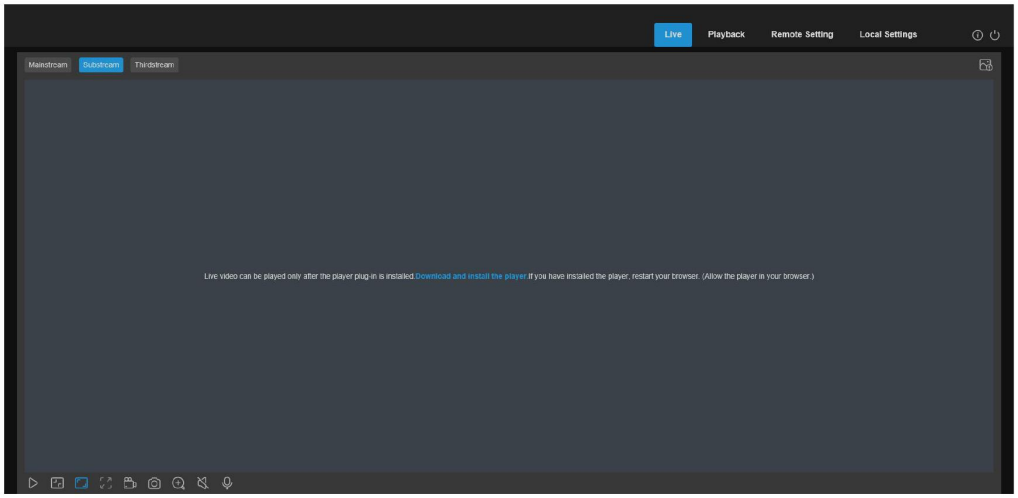
Security risks may arise if you use the same password for a long period of time.To this end, the program records the time when the password was changed last time.The system will ask you whether to change the password again if the current login time is 90 days later after the last password change time.

When you decide to change the password, the screen as shown in below picture.As instructed on the screen, use your old password for verification and set a new password.



Chapter 5 Installing Plug-in

Image can be normally previewed only when the plug-in is installed when you login from your IE browser.Download and install the plug-in as instructed on the screen as shown in below picture.



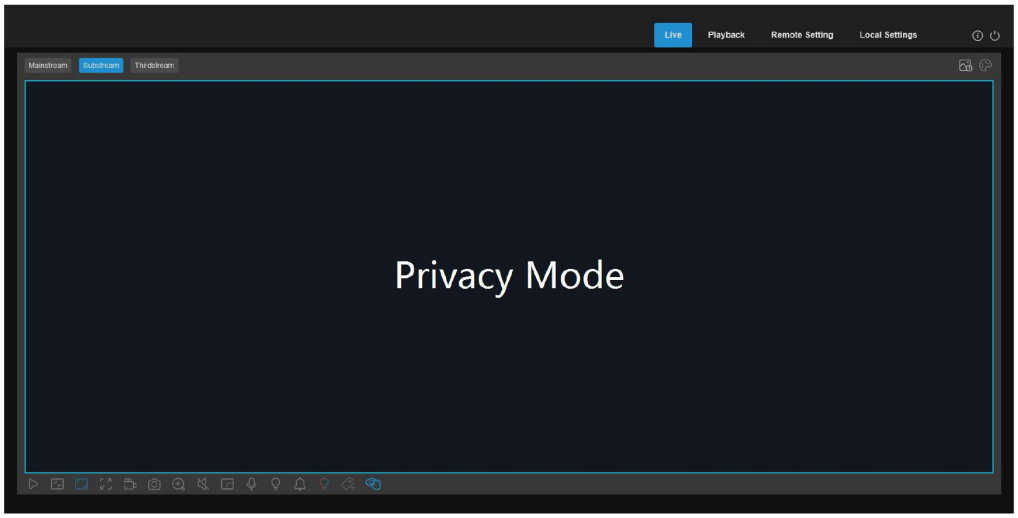
Note: Skip the plugin installation when you access the web client from Safari 12 and higher version, Chrome 57 and higher version, Firefox 52 and higher version, and Edge 41.

Chapter 6 Preview screen

6.1 Live menu

After successful login, the web end enters the login preview interface, whose interface is shown in the following figure.

Note: Functions vary from product to product, please refer to actual.



Stream switch menu: Adjust the current live view quality from the upper-left corner.

Main stream: HD picture, but higher requirements on bandwidth and PC performance.

Sub stream: Moderate requirements on bandwidth and PC performance, but lower picture quality when compared with main stream.

Mobile stream: Lowest requirements on bandwidth and PC performance, and lowest picture quality.

Main switch bar: Switches web function screens.The web client provides four menus: Live, Playback, Remote Setting, Local Settings.

 Info: Display the information about the active user, web version and plugin version.

 Manual Alarm: Enable/disable the manual alarm.(Note: for cameras with I/O function only)

AI alarm: Open the alarm push bar on the right and push images during face detection and human & vehicle detection.

Color: Adjust current image settings, such as image saturation and sharpness.

 PTZ Setting: PTZ settings and re-focusing.

 Exit: Log out of the current login.

 Stop/Play: Play and stop the preview of the current stream.

 Original Proportions: Display the current live view in its original proportion.

 Stretch: Display the current live view in a way that stretches the display area.

 Full Screen: Display the live view in full screen.double-click the screen to enable or disable the function, and press Esc to exit the full screen mode.

Record: Manually record the stream in preview.

Capture: Manually capture the image of the current stream.

Digital Zoom: Zoom in a certain area of the display.

Audio: Enable or disable or adjust the audio in preview.

Voice Intercom: Communicate with the camera.

Light: Manually turn on/off the white light.

Siren: Manually turn on/off the siren.

Warning Light: Enable or disable the red and blue lights

Pixel Counter: Select an area to check its pixel size in the stream.

Add Tag: Add a label, click to add a label.

Fisheye: Enter/exit fisheye mode, pleas check section 6.3.

Privacy Mode: Turn on/off the privacy mode. When it is turned on, the other options in the menu bar will be greyed out.

6.2 Video status

The recording status is a simple indication on the web side of the current alarm

of the camera and whether the recording is normal or not. Multiple alarms can exist at the same time, as described below:

No icon: The device SD card is normal, but no recording is taking place.

R: The camera is recording in general.

H: The SD card is in an abnormal state, please check and confirm the SD card.

M: The camera is in MOTION alarm, but MOTION alarm recording is disabled.

M: The camera is in MOTION alarm and MOTION alarm recording.

I: The camera is in IO alarm, but IO alarm recording is disabled.

I: The camera is in IO alarm and makes IO alarm recordings

PIR: The camera is in PIR alarm, but PIR alarm recording is disabled.

PIR: The camera is in PIR alarm and PIR alarm recording.

S: The camera is in Smart Alarm, but no Smart Alarm recording is disabled.

S: The camera is in Smart alarm and smart alarm recording.

Note: Intelligent alarms include alarms for faces, people & cars, etc.

6.3 Fisheye model

After the fisheye camera enters the fisheye mode, Select different installation methods and display modes to adapt to different installation scenarios to achieve the best results. The interface is shown below.



Installation method: Installation modes, support for ceiling, wall, desktop, tilt four installation modes, in different installation scenarios, choose with the appropriate calibration mode to achieve the best results.

Display Method: Different display modes, including: fisheye image, 360-degree panorama, 180-degree panorama, PTZ image, 3D cylindrical and VR modes, as well as combinations of the above modes with each other, the display modes will be different depending on the installation mode.

Fisheye image: Full-view/wide-angle images obtained through a fisheye lens.

Panoramic image: Fisheye image corrected to a rectangular image.

PTZ image: Corrected close-up image of a selected area in a fisheye/panorama image.

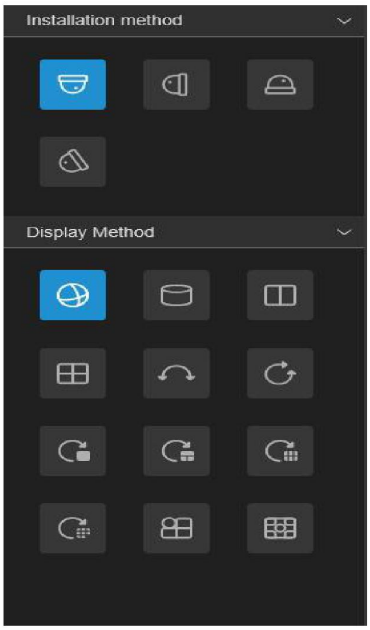
3D Column image: Fisheye image corrected, 3D image in the form of a cylinder.

VR image: Presented in the form of 3D fisheye correction image, using the mouse to drag and drop the operation to change the viewing angle, the use of the scroll wheel can be gradually zoomed in on the view of the image, when the mouse selects a certain area, double-click on the right button of the mouse, roam to the

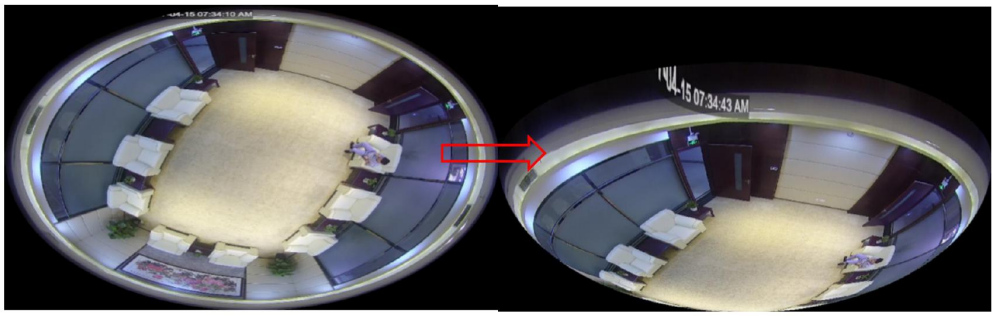
corresponding area and present the PTZ image of the region.

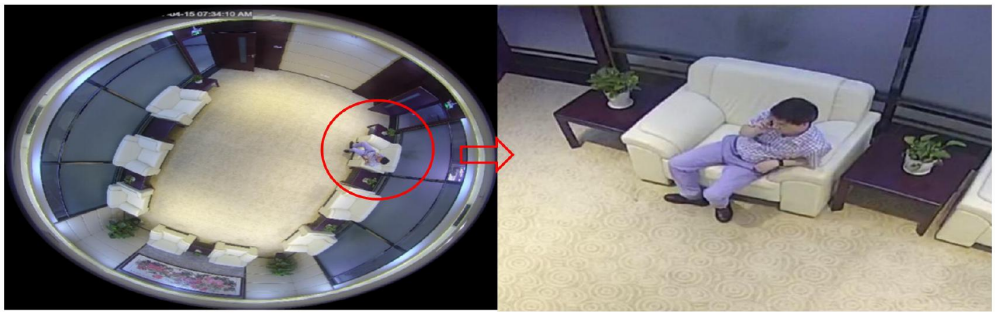
6.3.1 Ceiling mode

Ceiling: Ceiling mounting mode, where the fisheye camera is mounted on the ceiling and other scenarios that require an overhead view. This mounting mode includes 12 different display modes.



VR: VR display mode, use the mouse to drag and drop the operation to change the viewing angle, using the scroll wheel can be gradually enlarged to the view of the image, when the mouse selects a certain area, double-click the left button, roam to the corresponding area, and present the PTZ image of the region, the effect is as shown in the figure:





Cylinder: 3D column display mode, the effect is shown in the figure:



2 PTZ image: two areas of the corrected close-up image display mode, the effect is shown in the figure:



4 PTZ image: four areas of the corrected close-up image display mode, the

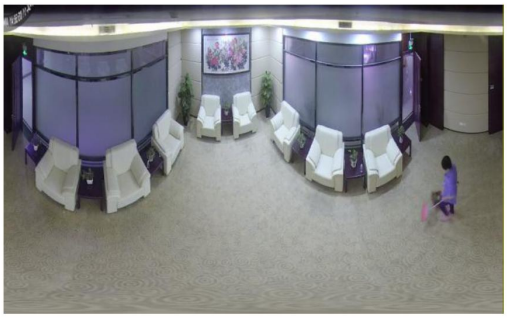
effect is shown in the figure:



180 degree panorama images: 180 degree panorama image display mode, the effect is as shown in the picture:



360 degree panorama images: 360 degree panorama image display mode, the effect is as shown in the picture:



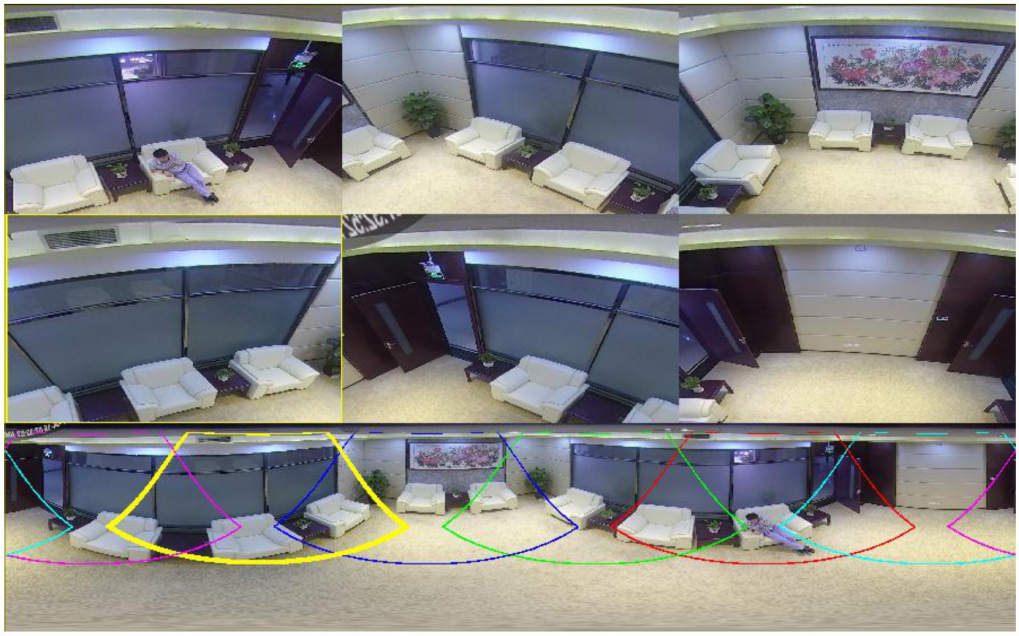
360 Panorama images and PTZ: 360-degree panorama image + a regionally corrected close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its view, the effect is shown in the figure:



360 panoramic images and 3PTZ: 360-degree panoramic images + three areas of corrected close-up images, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



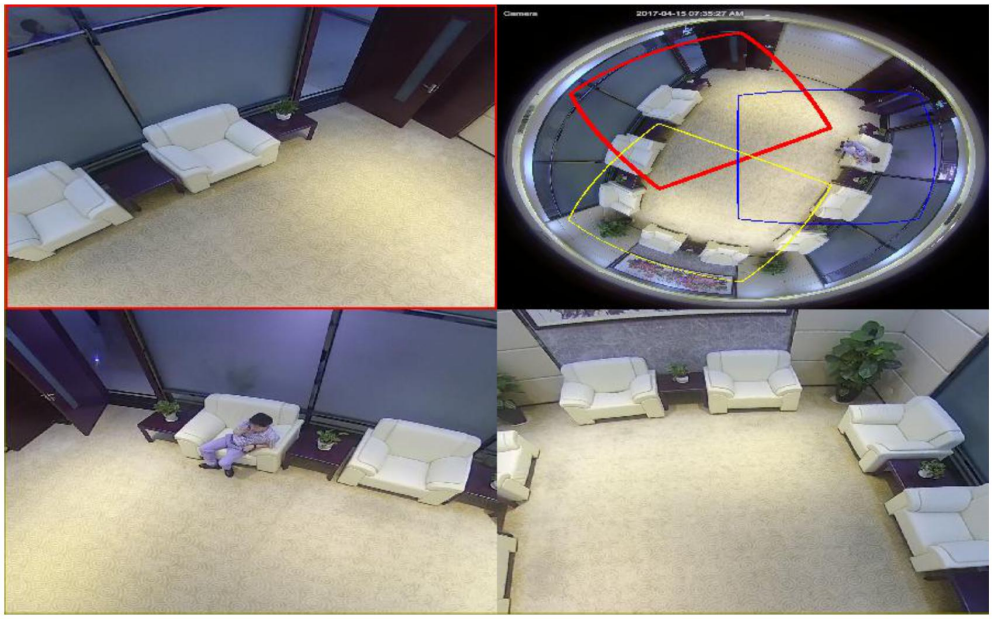
360 panoramic images and 6PTZ: 360-degree panoramic images + six areas of corrected close-up images, different color areas represents a different PTZ view angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



360 panoramic images and 8PTZ: 360-degree panoramic images + eight areas of corrected close-up images, different color areas represent different PTZ view angle range, select the corresponding PTZ line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:

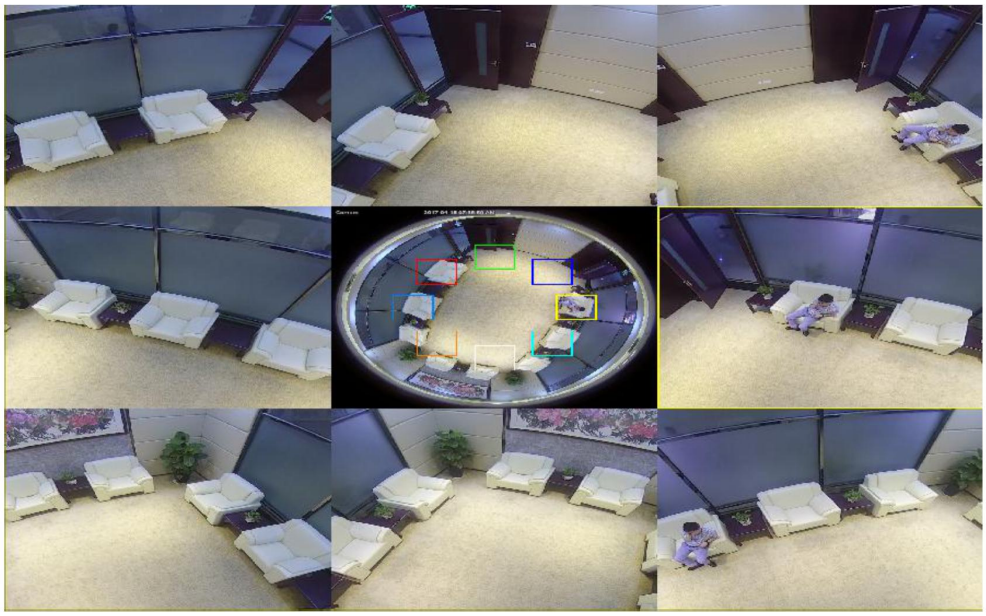


Fisheye and 3PTZ image: Fisheye image + three areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



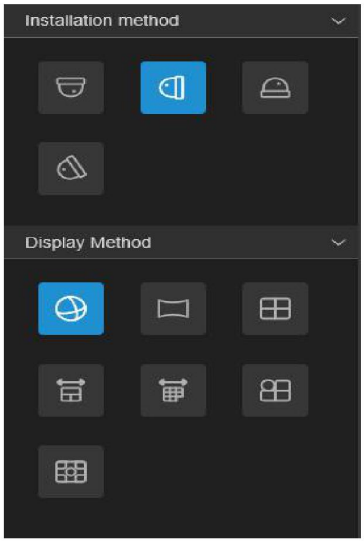
Fisheye and 8PTZ image: fisheye image + eight areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the

corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:

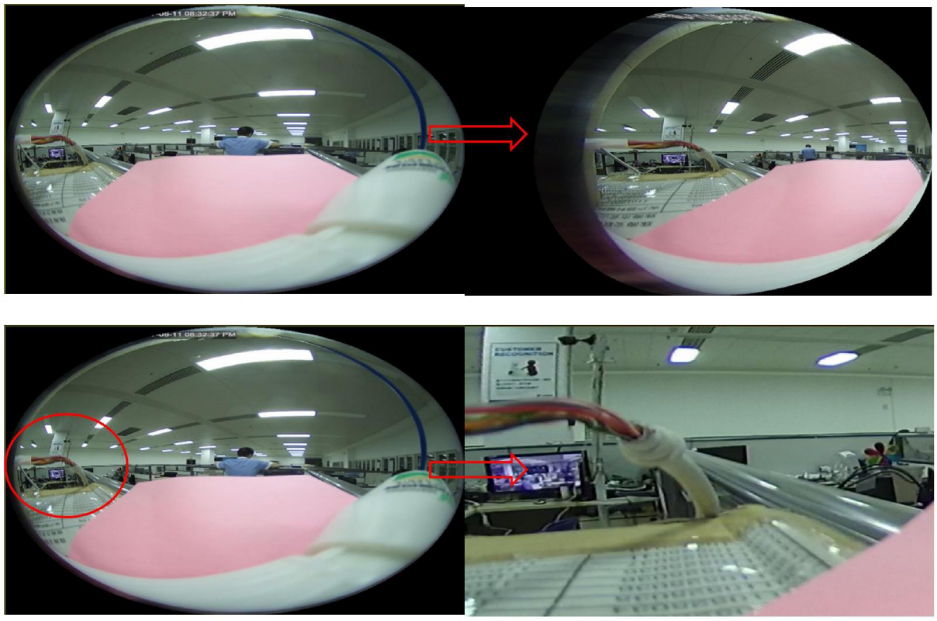


6.3.2 Metope

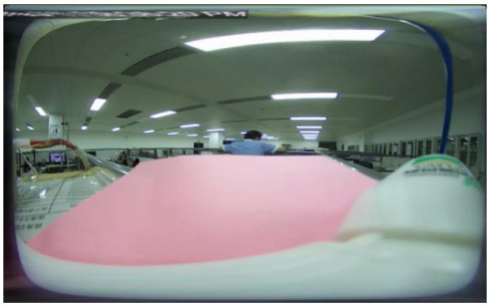
Metope: Wall mounting mode, i.e. in scenarios where the fisheye camera is mounted on a vertical surface such as a wall. This mounting mode includes 7 different display modes.



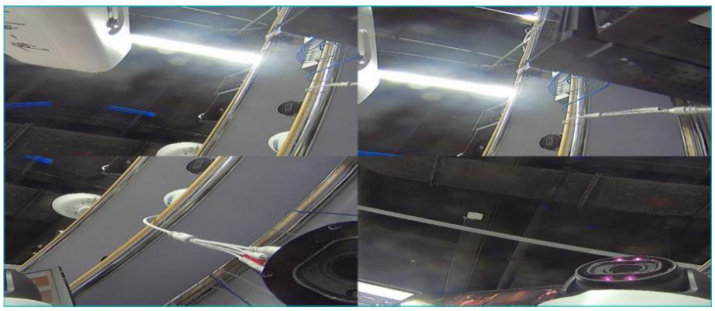
VR: VR display mode, use the mouse to drag and drop the operation to change the viewing angle, using the scroll wheel can be gradually enlarged to the view of the image, when the mouse selects a certain area, double-click the left button, roam to the corresponding area, and present the PTZ image of the region, the effect is shown in the figure:



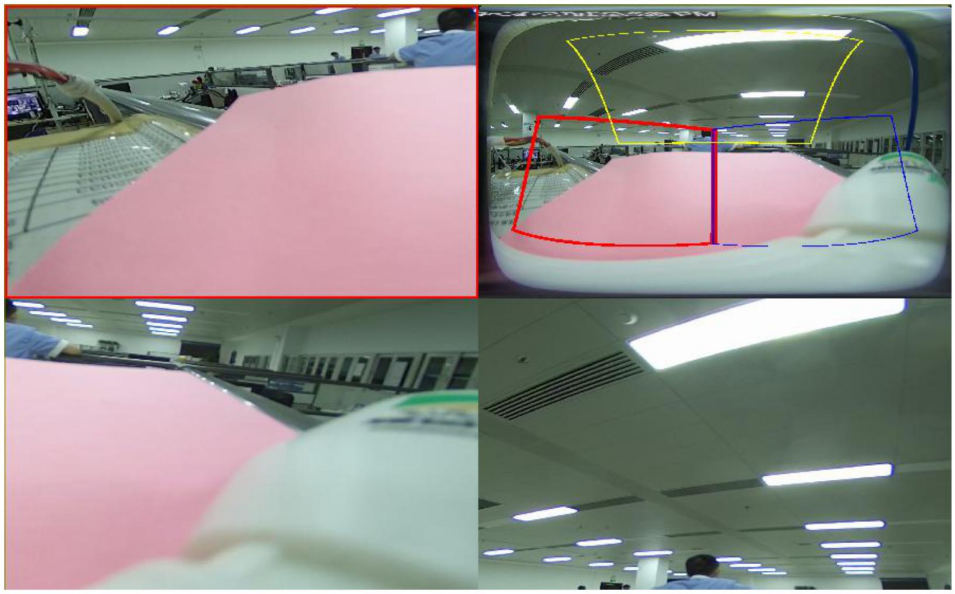
Panorama: Panorama display mode, the effect is as shown in the picture:



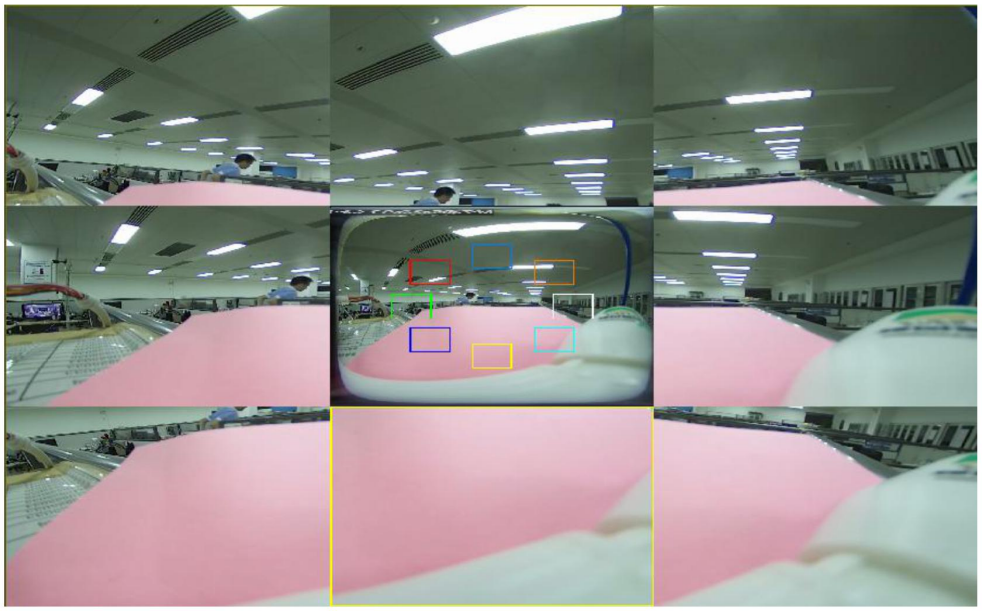
4 PTZ image: The display mode of the close-up image after correction of the four areas, the effect is as shown in the figure:



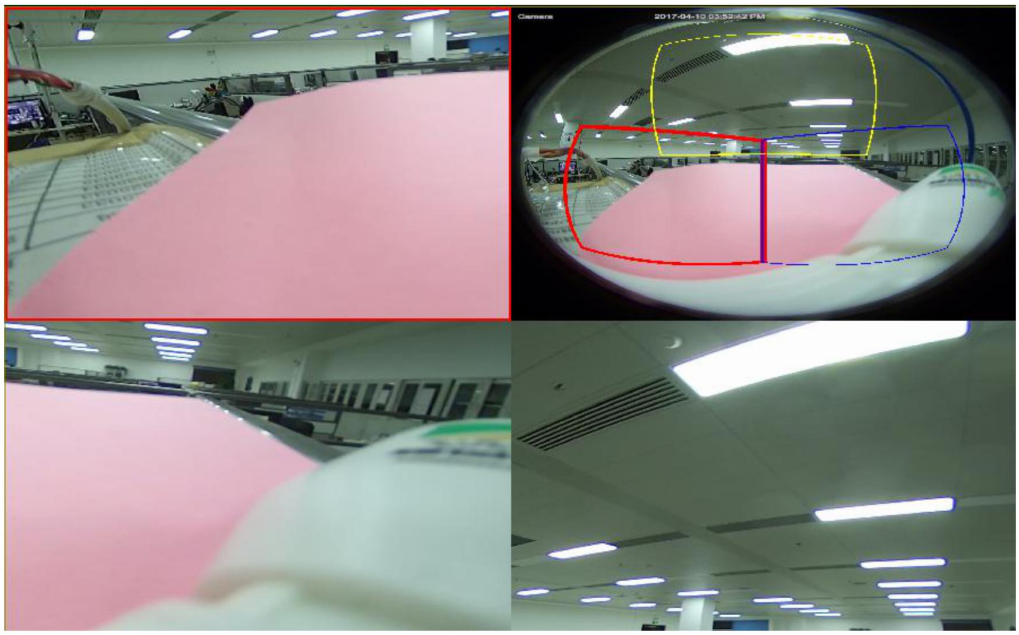
360 panoramic images and 3PTZ: 360-degree panoramic images + three areas of corrected close-up images, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



360 panoramic images and 8PTZ: 360-degree panoramic images + eight areas of corrected close-up images, different color areas represent different PTZ view angle range, select the corresponding PTZ line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



Fisheye and 3PTZ image: Fisheye image + three areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



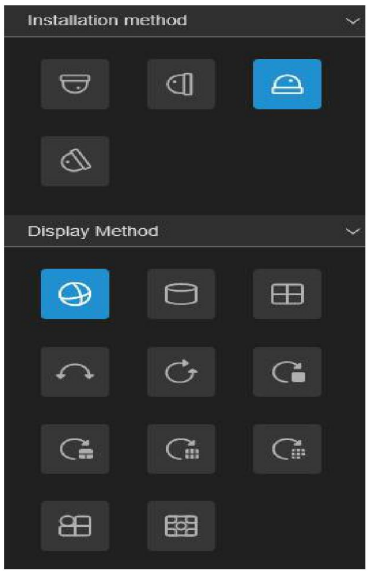
Fisheye and 8PTZ image: fisheye image + eight areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the

corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:

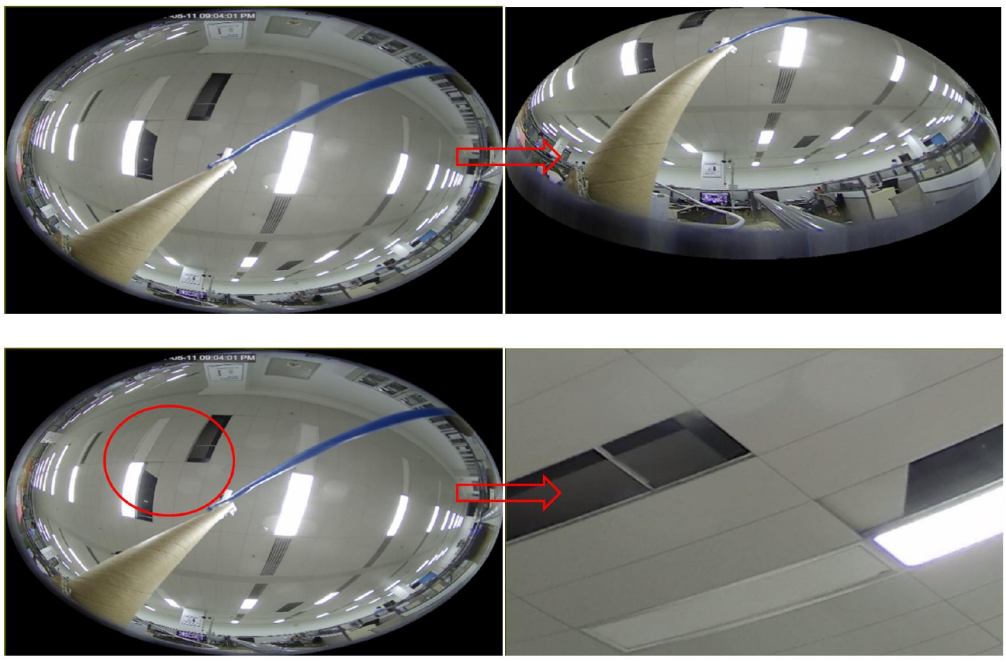


6.3.3 Desktop

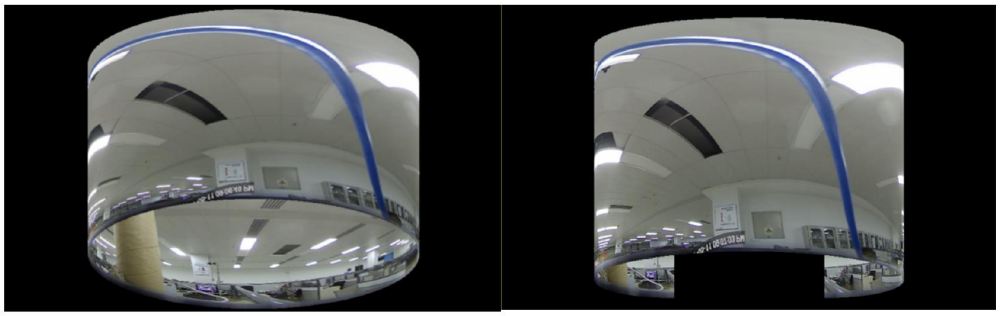
Desktop: Desktop mounting mode, i.e. the fisheye camera is mounted on the desktop/floor in scenarios where you need to look up, e.g. scenarios such as desktop videoconferencing. This installation mode includes 11 different display modes.



VR: VR display mode, use the mouse to drag and drop the operation to change the viewing angle, using the scroll wheel can be gradually enlarged to the view of the image, when the mouse selects a certain area, double-click the left button, roam to the corresponding area, and present the PTZ image of the region, the effect is as shown in the figure:



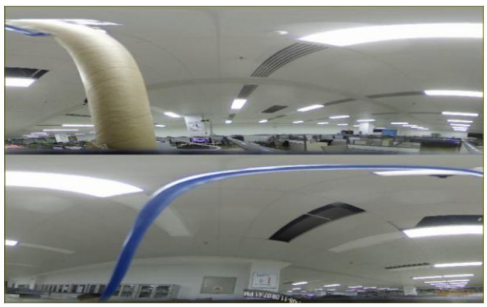
Cylinder: 3D column display mode, the effect is shown in the figure:



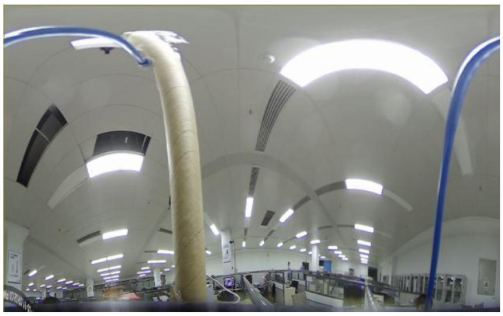
4 PTZ image: The display mode of the close-up image after correction of the four areas, the effect is as shown in the figure:



180 degree panorama images: 180 degree panorama image display mode, the effect is as shown in the picture:



360 degree panorama images: 360 degree panorama image display mode, the effect is as shown in the picture:



360 Panorama images and PTZ: 360-degree panorama image + a regionally corrected close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its view, the effect is shown in the figure:



360 panoramic images and 3PTZ: 360-degree panoramic images + three areas of corrected close-up images, different color areas represent different PTZ view angle range, select the corresponding PTZ line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



360 panoramic images and 6PTZ: 360-degree panoramic images + six areas of corrected close-up images, different color areas represent different PTZ viewing

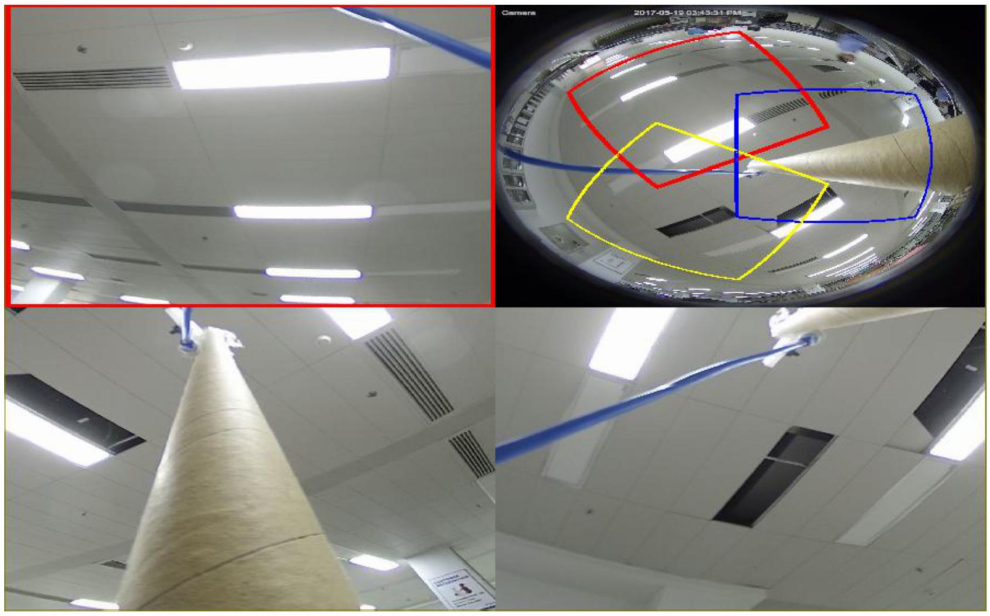
angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



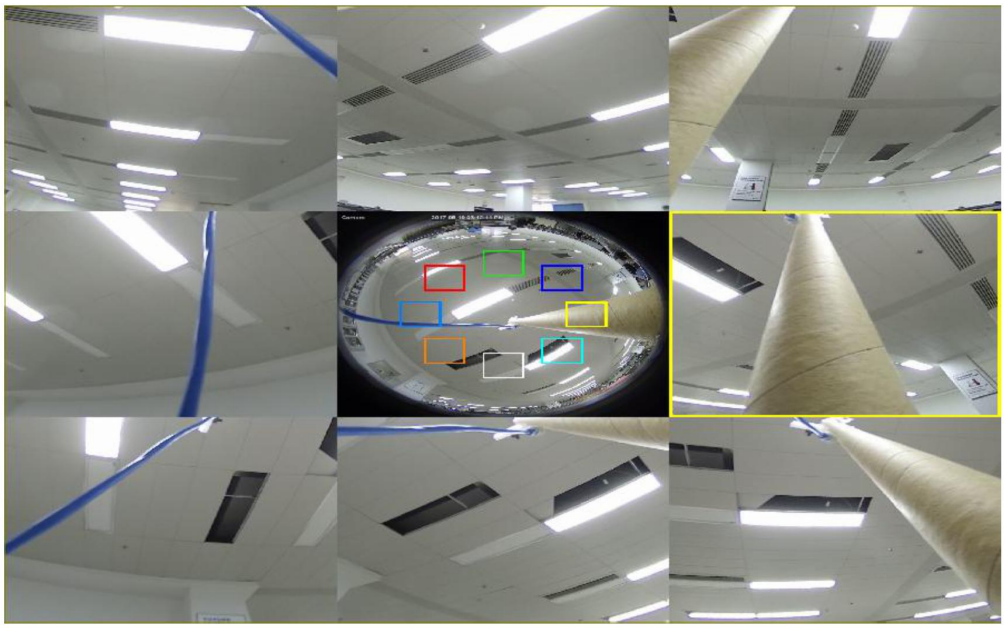
360 panoramic images and 8PTZ: 360-degree panoramic images + eight areas of corrected close-up images, different color areas represent different PTZ view angle range, select the corresponding PTZ line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



Fisheye and 3PTZ image: Fisheye image + three areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:

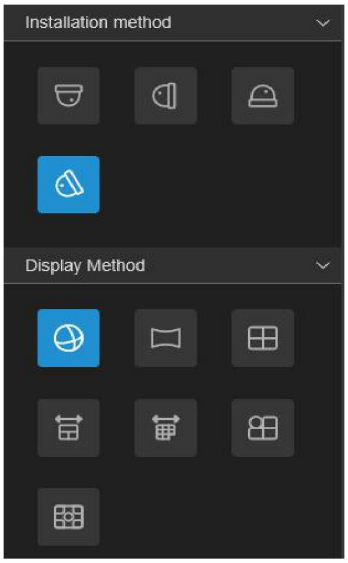


Fisheye and 8PTZ image: fisheye image + eight areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



6.3.4 Tilt

Tilt: Tilt mounting mode, i.e. the fisheye camera is mounted in a scenario where it is at an angle of approximately 25° to a vertical surface such as a wall, e.g. a corner position where two walkways/roads meet. This mounting mode includes 7 different display modes.



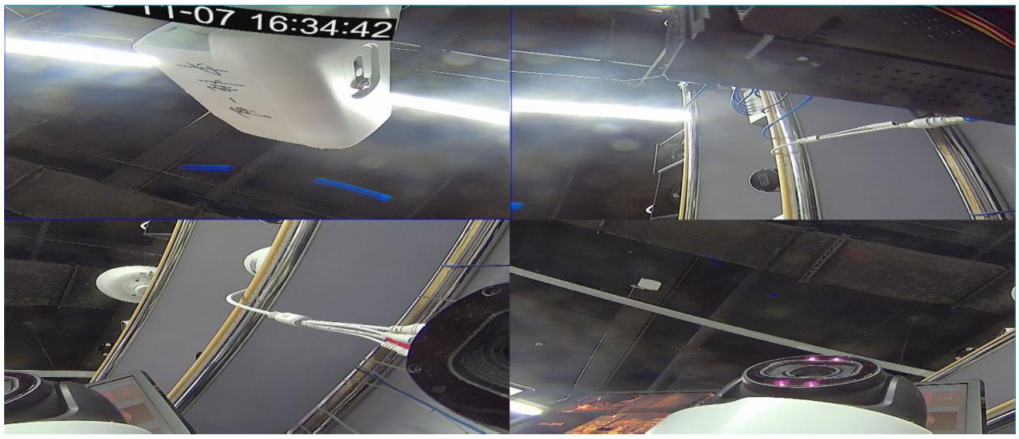
VR: VR display mode, use the mouse to drag and drop the operation to change the viewing angle, using the scroll wheel can be gradually enlarged to the view of the image, when the mouse selects a certain area, double-click the left button, roam to the corresponding area, and present the PTZ image of the region, the effect is shown in the figure:



Panorama: Panorama display mode, the effect is as shown in the picture:



4 PTZ image: The display mode of the close-up image after correction of the four areas, the effect is as shown in the figure:



360 panoramic images and 3PTZ: 360-degree panoramic images + three areas of corrected close-up images, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



360 panoramic images and 8PTZ: 360-degree panoramic images + eight areas of corrected close-up images, different color areas represent different PTZ view angle range, select the corresponding PTZ line range, also drag the reverse to

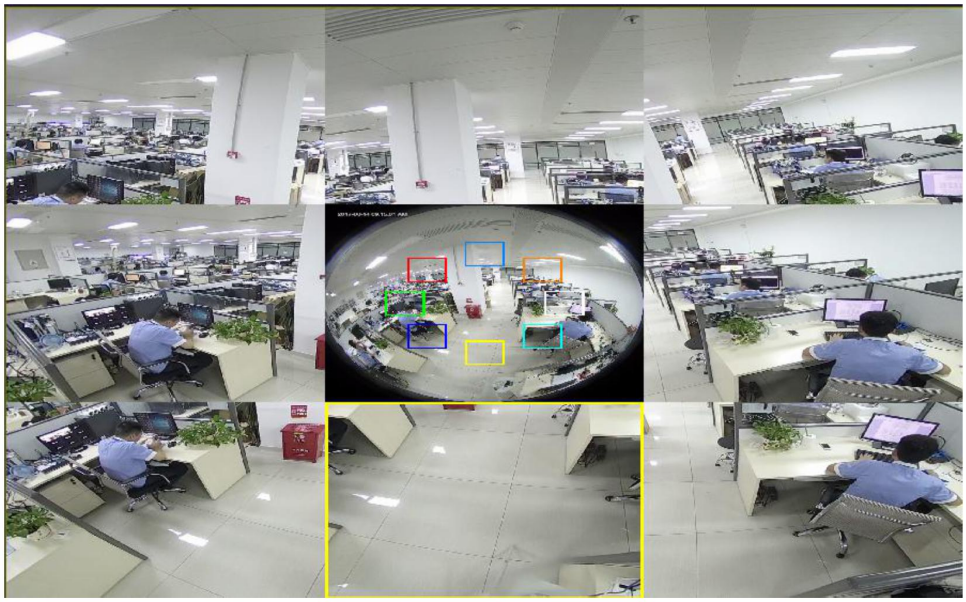
change the position of its perspective, the effect is shown in the figure:



Fisheye and 3PTZ image: Fisheye image + three areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:



Fisheye and 8PTZ image: fisheye image + eight areas of correction close-up image, different color areas represent different PTZ viewing angle range, select the corresponding PTZ drawing line range, also drag the reverse to change the position of its perspective, the effect is shown in the figure:

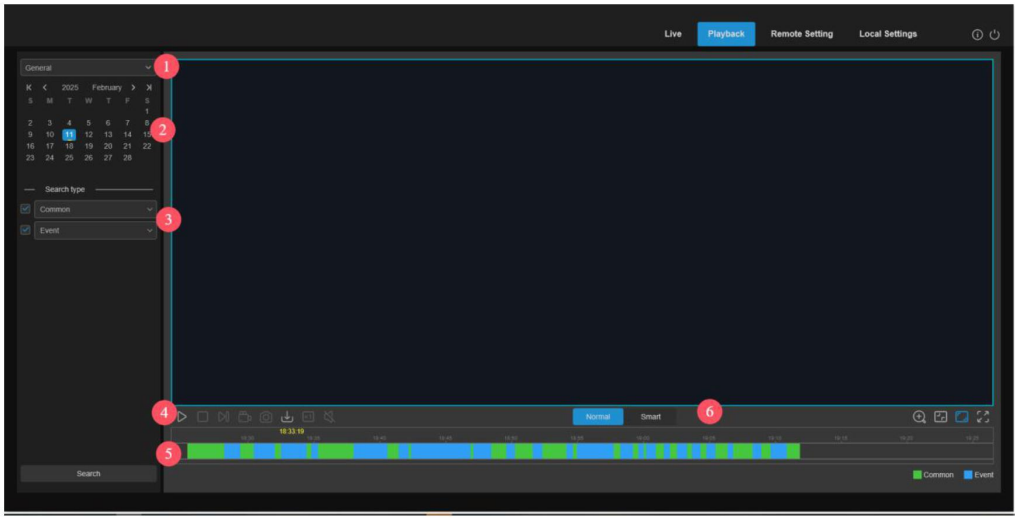


Chapter 7 Playback

Cameras not only need to be able to allow us to see live images, but they also need to be able to save the image information so that it can be retrieved and viewed when needed.

7.1 General playback

The playback function is mainly composed of general video search, AI search function, as shown in the figure below for video search.



1.Switch search mode: Switch search functions, as shown in the figure above. General is selected by default to search for general recording files. switch to AI image search by referring to the following part in this section.

2.Date: Set the date to search for recording files, click Search, you will be prompted with the dates with available recording files.

3.Search type: Display the search types supported by the camera. search for only part of recording files as required.

4.Playback process bar: Display and search for recording files stored in the memory card according to search settings.

Pause/Play: Pause/play streams.

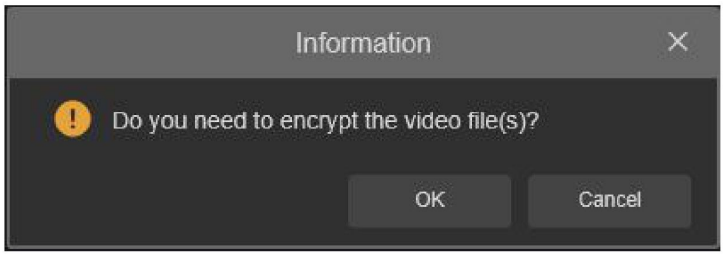
Stop: Stop playing streams.

Forward by One Frame: Play one frame with one click.

Record: Manually record the stream in preview.

Capture: Manually capture the image of the current stream.

Download: Download the searched recording file.(Note: When downloading AVF format records, a Pop-up window will ask if encryption is required.
AVI and MP4 formats will not have a pop-up window.)



Speed: Supports playing at a speed of 1/8, 1/4, 1/2, 1, X2, X4, X8, X16.

Audio: Enable or disable or adjust stream sound.

Add Default Tag: Add a default tag. Default name Tag.

Add Tag: Add a custom tag, customizable the name of the tag, the length of the name is 1~39 characters.

Digital Zoom: Zoom in a certain area of the stream.

Original Proportions: Display the current live view in its original proportion.

Stretch: Display the current live view in a way that stretches the display area.

Full Screen: Display the playback stream in full screen. double-click the screen to enable or disable the function, and press Esc to exit the full screen mode.

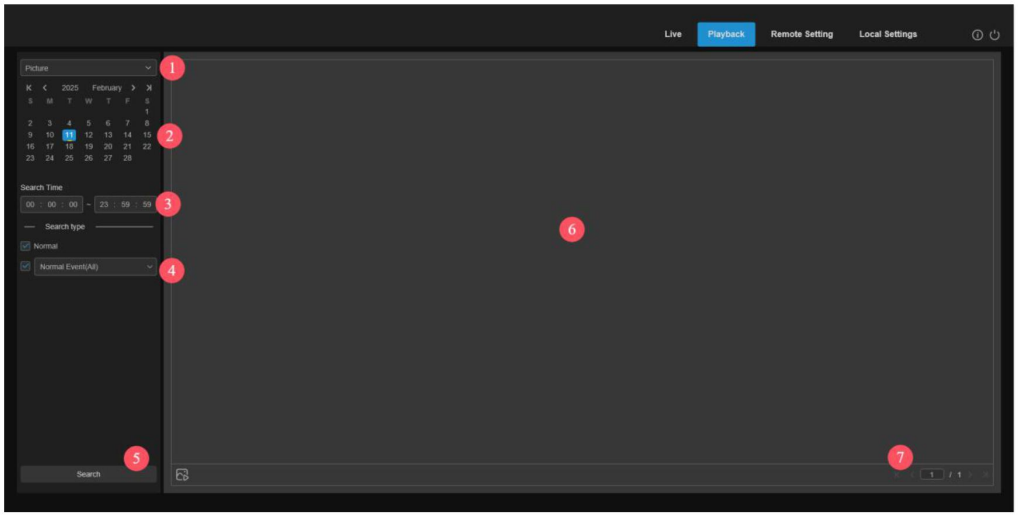
5.Search: Display the video search in the SD card according to the search settings。

6.Normal/Smart search: Switch Normal or Smart search. After selecting Smart search, click the button of human type and car type in the lower left corner, the video progress bar will mark the alarm video triggered by human and car type on the same day in blue. Alarm videos of people and car types include: Pedestrian &

Vehicle, Intrusion, Enter Region, Exit Region and Line Crossing detected videos of people and car types.

7.2 Image search

When the camera turns on the automatic picture capture function, Search and play pictures in this interface.



1.search mode switching: switch the current search function, the current search mode is Picture.

2.Search date: Set the date of searching pictures, click search, it will prompt the date of having video files.

3.search time: set the time to search for pictures, to facilitate users to query the specific time period of the picture.

4.search type: select the type of image capture to search, the default selection of all.

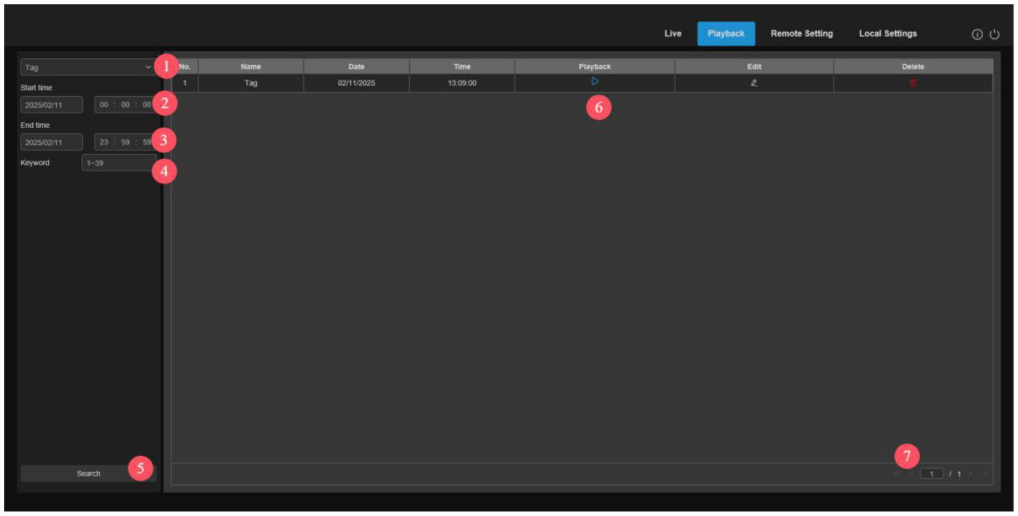
5.Search: Click Search, start searching for pictures.

6.Search results display area: display the pictures searched by the user. When you double-click a picture, it will play the playback video of the time period before and after the picture.

7.search results page: in the lower right corner of the search results can be turned.

7.3 Playback by Tag

This screen allows you to view all previously added tags and edit, playback or delete them.



1. search mode switching: switch the current search function, the current search mode is Tag.

2.Start time: Set the start time of the search tag.

3.End time: Set the end time of the search tag.

4.Keyword: Enter the keyword to search

5. Search: Click Search, start searching.

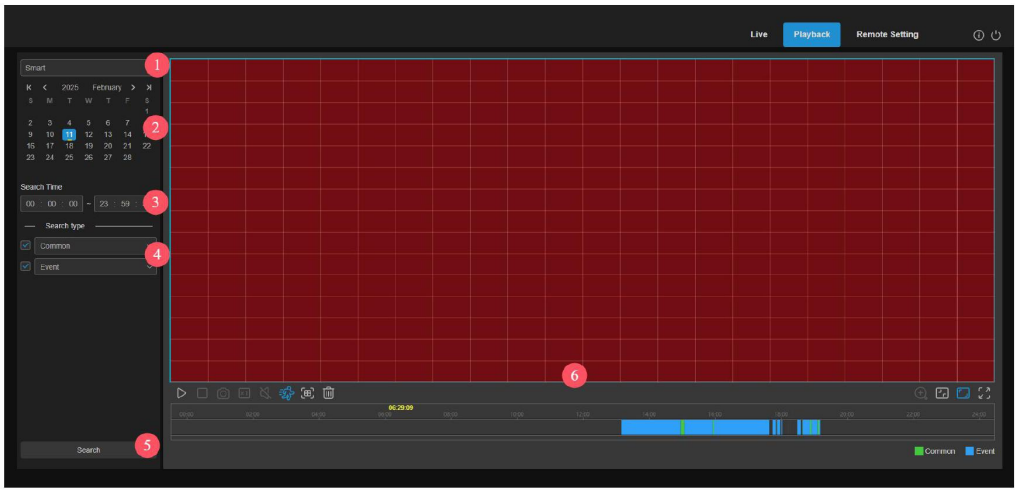
6.the search results display area: display the user set up to meet the search conditions of the search results.

Click button to play back the event; click button to modify the event name; click the Save button to pop up the Modify success prompt box; click button to delete the event.

7. search results page: in the lower right corner of the search results can be turned page

7.4 Smart

Login from a browser without the need of plugin to start smart playback, as shown in the below figure.



This function can identify whether an alarm is triggered by human in daily life.If yes, the alarm will be shown in blue in the playback time bar on the bottom.

1.Switch search mode: Switch the current search function.The current search mode is Smart.

2.Date: Set the date to search for smart events.By clicking Search, you will be prompted with the dates for which recording files are available.

3.Search time: Set the time for searching for events.

4.Search type: Display the search types supported by the camera.search for only part of recording files as required.

5.Search: Click Search to start searching.

6.Search Result Display Area: Display the desired search results.

Stop: Turns off the playback stream.

Capture: manually capture the image of the current stream.

Speed: Variable speed playback, support 1/8, 1/4, 1/2, 1, X2, X4, X8, X16 speed adjustment.

Audio: switch on/off, adjust the sound of the playback stream.

Add Default Tag: Add a default tag. Default name Tag.

Add Tag: Add a custom tag, customizable tag name, name length 1 to 39 characters.

Smart: Click to enter the smart area setting interface.

All: Click All to set the entire screen of the camera as the Smart detection area;

Delete: Click Clear All to clear the entire area.

Digital Zoom: An electronic zoom function that zooms in to show a certain area of the playback stream.

 Original Proportions: Displays the current preview screen in its original proportions.

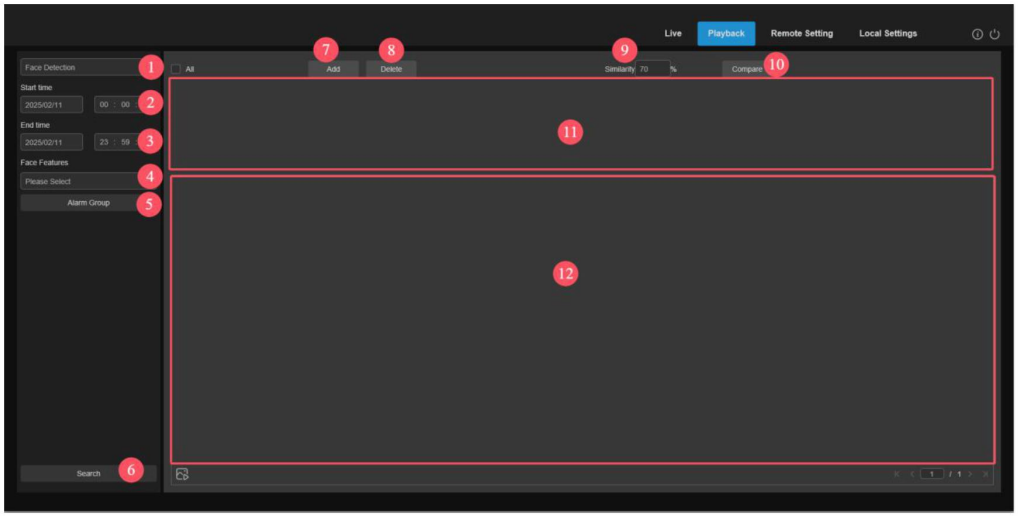
Stretch: displays the current preview screen in a way that spreads the display area.

Full Screen: display the playback stream in full screen, double click the screen to open/close the function, press Esc to exit the full screen when the function is opened.

7.5 AI

7.5.1 Face Search

The camera carries out the face recognition function, stores the acquired face information to the TF card, and saves the image-related information at the same time. When searching, quickly retrieve the face capture that meets the user's requirements and quickly locate the video according to the capture at . The face search playback interface is shown in the following figure.



1.Switch search mode: Switch the current search function.The current search mode is Face Detection.

2.Start time: Set the start time to search for captured faces.

3.End time: Set the end time to search for captured faces.

4.Face Feature: The Face Features box is unchecked by default.When enabled, only face images captured when the face Feature detection function is turned on are searched. The firmware can recognize five face attributes, including gender, age, mask, glasses, and expression.

5.Alarm Group: The camera matches face images to the corresponding group according to the settings of the face database when capturing face images.This setting allow to search for images of only the groups you want.

6.Search: Search for face data according to settings.

7.Add: Add images to the image display area for comparison purpose. add local images and captured images.

8.Delete: Delete currently added images.

9.Similarity: Set the lowest similarity of feature values of matching faces when using the Compare function.

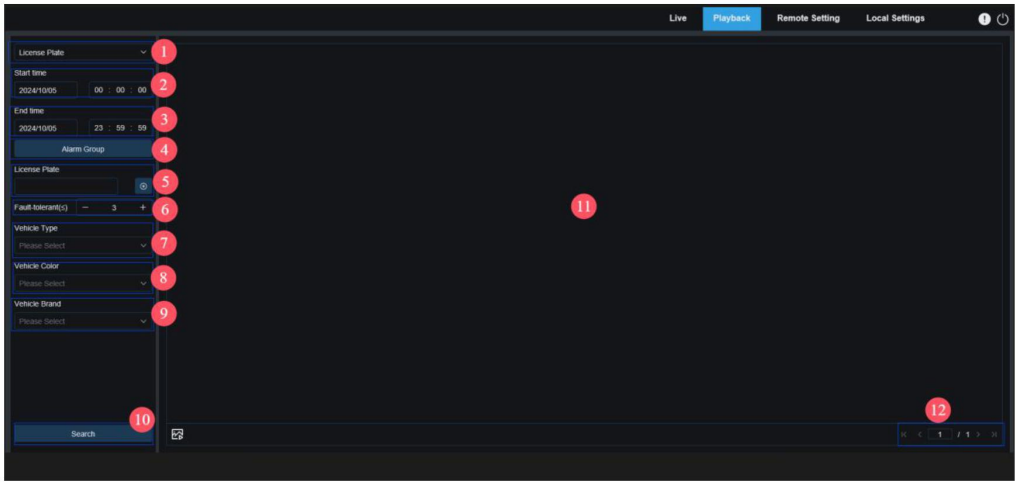
10.Compare: Search for captured faces according to the set search time, group in which captured images are located, and selected reference face image for comparison.

11.Add Image Display Area: Display images that are currently added and available for comparison.

12.Search Result Display Area: On the right side will display captured images searched by using Search and Compare.Double-click the picture will play the video after and before the picture.

7.5.2 License Plate Detection Search

When the License Plate detection function is enabled for the IPC, an alarm will be triggered for recognized License Plates, and images or videos will be recorded for easy search and viewing.The screen is shown in the figure below.



1.Switch search mode: Switch the current search function.The current search mode is License Plate.

2.Start time: Set the start time to search for captured License Plates.

3.End time: Set the end time to search for captured License Plates.

4.Alarm Group: Recognize License Plates by groups in the database.

Note: All images will be searched when no group limitations are set.In this case, the similarity setting takes effect.Unknown License Plates will be ignored when

group limitations are set.

5.License Plate: Filter and query License Plates.

6.Fault-tolerant: Fault-tolerant rate.For example, three characters are set as the querying criteria.When the License Plate number is B594SB in the allow list in the group, an alarm will also be triggered when the vehicle with License Plate number B734KB approaches the surveillance area.That is, a License Plate number has 0-3 characters different from that in the database will be recognized.

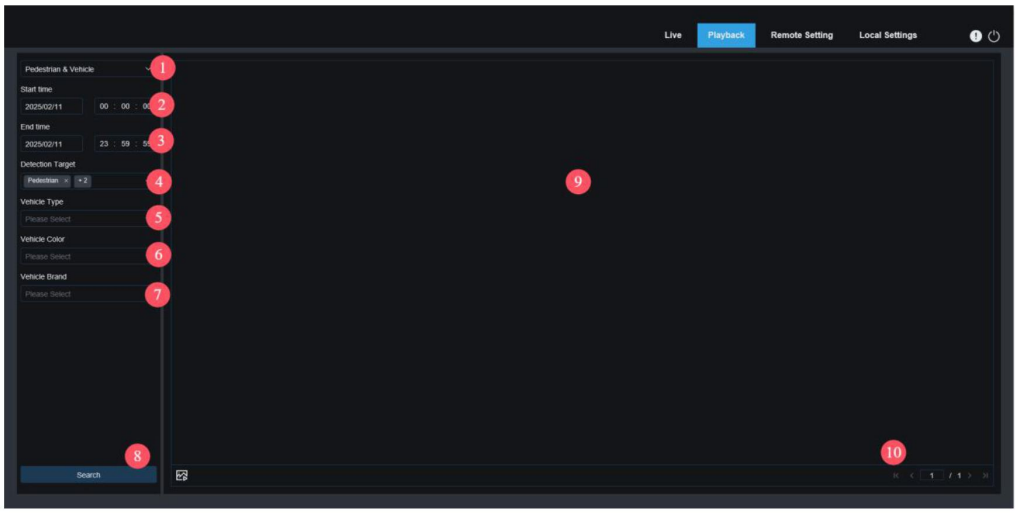
7.Search: Search for captured License Plates according to settings.

8.Search Result Display Area: Display the desired search results.Double-click the picture will play the video after and before the picture.

9.Search results Flip: Scroll through search results at the lower right corner.

7.5.3 Pedestrian and Vehicle Search

Similar to the Face Capture function, the camera can differentiate between people or cars and record them according to the desired situation, which is used to search for the desired record. The interface effect is shown in the figure below.



1.Switch search mode: Switch the current search function.The current search mode is Pedestrian & Vehicle.

2.Start time: Set the start time to search for Pedestrian and Vehicle images.

3.End time: Set the end time to search for Pedestrian and Vehicle images.

4.Detection Type: Select human or vehicle images as needed, or select both.

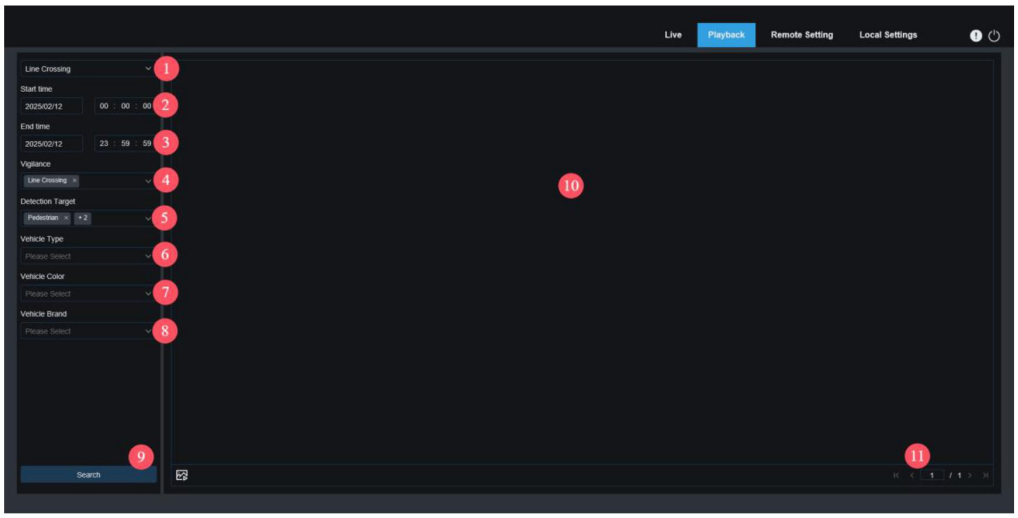
5.Search: Search for Pedestrian and Vehicle images according to search settings.

6.Search Result Display Area: Display the desired search results.Double-click the picture will play the video after and before the picture.

7.Search results Flip: Scroll through search results at the lower right corner.

7.5.4 Line Crossing

With the development of technology, Line Crossing is not only compatible with the old way of alarming targets entering the guarded area, but also adds the function of human-vehicle detection, which alarms only human or vehicle targets and records pictures or video information for easy searching and viewing, and its interface effect is shown in the following figure.



1.Search mode switching: switch the current search function, the current search mode is Line Crossing.

2.Start time: Set the start time of searching for human car shape capture.

3.End time: Set the end time of searching for human car shape capture.

4.Vigilance: Set the way of capturing the alarm triggered as Line Crossing, also set it at the same time.

5.Detection Target: According to the need, set the search of the person or the car to catch the picture, also search at the same time.

6.Vehicle Type: According to the vehicle type to filter the query

7.Vehicle Color: according to the vehicle color to filter the query

8.Vehicle Brand: according to the vehicle brand to filter the query

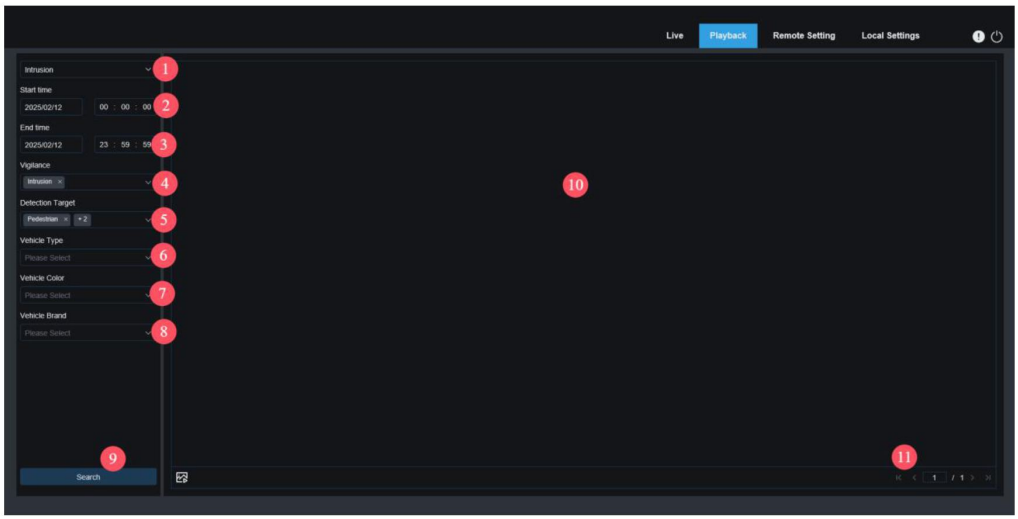
9.Search: according to the search settings to search for humanoid models to capture the map.

10.The search results display area: display the customer's desired search results. Double-click on the picture to access a small period of time before and after the detection of playback.

11.Search results page: in the lower right corner of the search results can be turned.

7.5.5 Intrusion Detection

When the camera enabled the Intrusion function, it will alarm the target that enters into the intrusion of the alert area. Record video or capture picture information for easy search and view.Its interface is shown in the following figure.



1.Switch search mode: Switch the current search function.The current search mode is Intrusion.

2.Start time: Set the start time to search for Intrusion snapshot.

3.End time: Set the end time to search for Intrusion snapshot.

4.Vigilance: Select Intrusion as the capture method.

5.Detection Type: Select Intrusion images as needed, or select both.

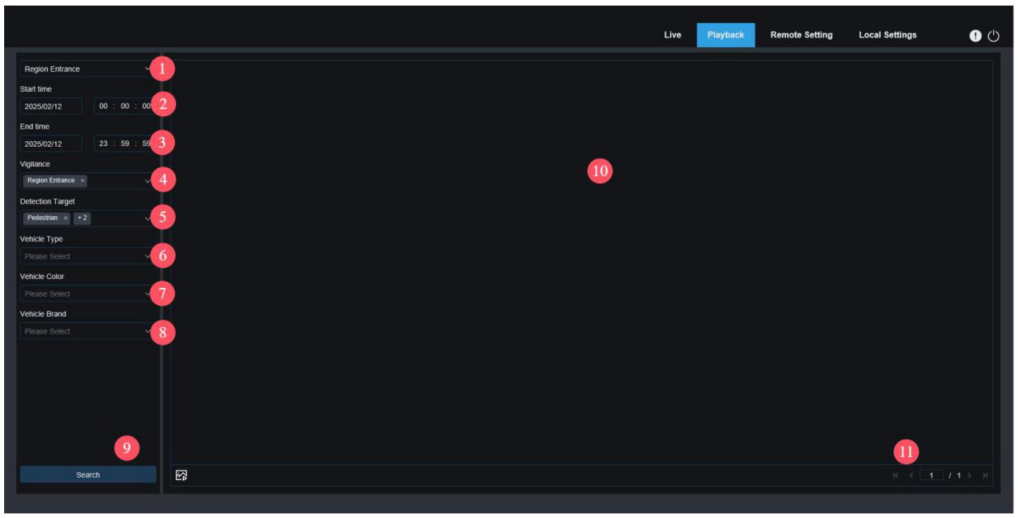
6.Search: Search for Intrusion images according to search settings.

7.Search Result Display Area: Display the desired search results.Double-click the picture will play the video after and before the picture.

8.Search results Flip: Scroll through search results at the lower right corner.

7.5.6 Region Entrance

After the camera opens the entry area detection function, it will alarm the detected targets entering the alert area, record pictures or video information for easy search and view, and its interface effect is shown in the following figure.



1.search mode switching: switch the current search function, the current search mode is Region Entrance.

2.Start time: Set the start time of searching into the area to capture the map.

3.End time: Set the end time of searching into the area to capture the map.

4.Vigilance: Set the way of capturing the alarm triggered to enter the area.

5.Detection Target: According to the need, set the search of the person or the car to catch the picture, also search at the same time.

6.Vehicle Type: According to the vehicle type to filter the query

7.Vehicle Color: according to the vehicle colour to filter the query

8.Vehicle Brand: according to the vehicle brand to filter the query

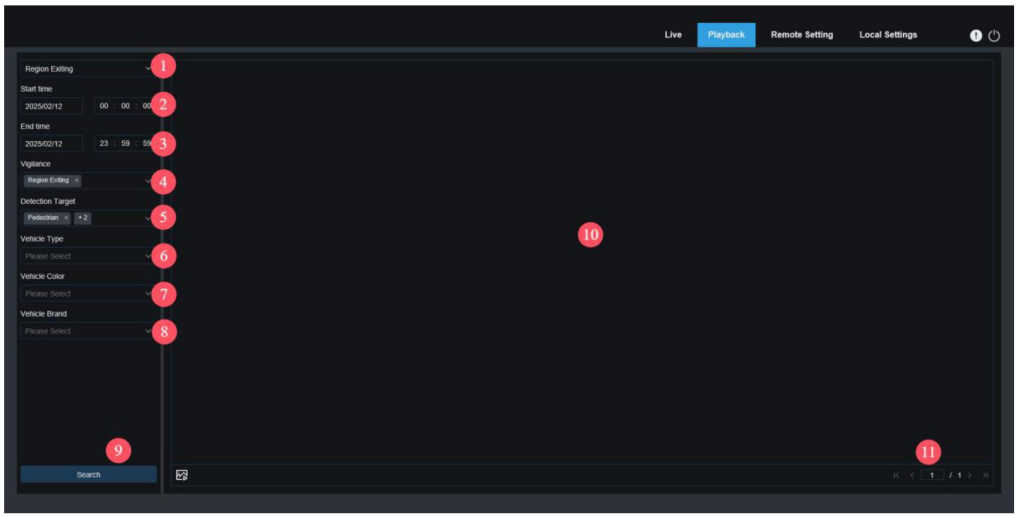
9.Search: according to the search settings to search for humanoid models to capture the picture.

10.The search results display area: display the customer's desired search results. Double-click on the picture to access a small period of time before and after the detection of playback.

11.search results page: in the lower right corner of the search results can be turned.

7.5.7 Region Exiting

When the camera turns on Region Exiting function, Alarm triggered and detect targets leaving the guarded area.Record video or capture picture information for easy search and view.Its interface is shown in the following figure.



1.Switch search mode: Switch the current search function.The current search mode is Region Exiting.

2.Start time: Set the start time to search for Region Exiting images.

3.End time: Set the end time to search for Region Exiting images.

4.Vigilance: Select Region Exiting as the capture method.

5.Detection Type: Select Region Exiting images as needed, or select both.

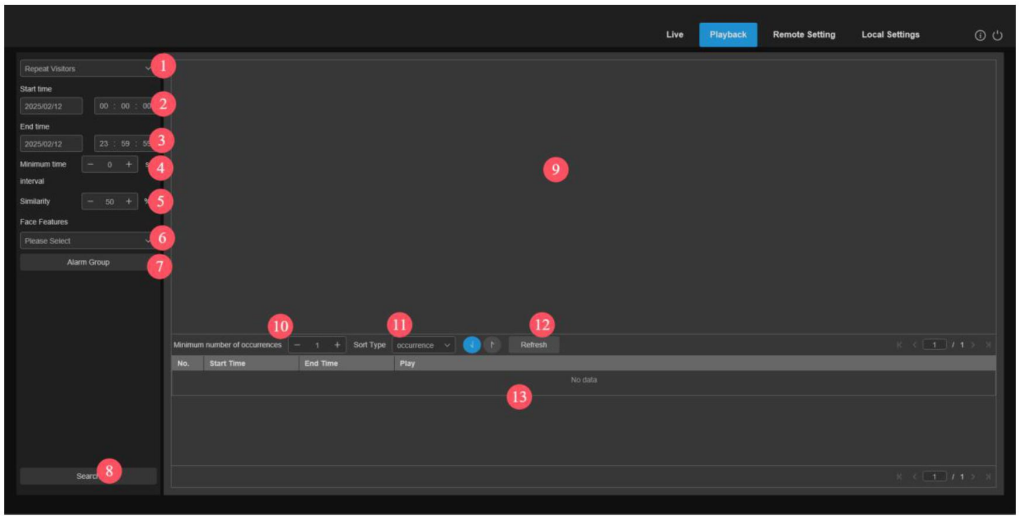
6.Search: Search for Region Exiting images according to search settings.

7.Search Result Display Area: Display the desired search results.Double-click the picture will play the video after and before the picture.

8.Search results Flip: Scroll through search results at the lower right corner.

7.5.8 Repeat Visitors

The face recognition function can not only provide alarms in real time, but also deeply dig into data to meet customer needs.For example, a camera is installed in a certain area of the mall, the repeat visitors function allow to check whether a customer stops to check out goods in this area.also monitor an area to check if a suspected target is frequently seen in that area.The repeat customer function screen is shown in the figure below.



1.Switch search mode: Switch the current search function.The current search mode is Repeat customer.

2.Start time: Set the start time to search for face images.

3.End time: Set the end time to search for face images.

4.Minimum time interval: Set the minimum time interval of capturing the same object twice to increase the search accuracy.

5.Similarity: Set the lowest similarity between other images and the reference image while matching repeat customers. Note: This setting takes effect only when Alarm Group is unchecked for the current function.

6.Face Features: Filter searched images according to facial characteristic values. Note: The search will be applied on all images when this option is not set.When this option is set, only captured images with Face Features enabled are searched.

7.Alarm Group: Identify repeat customers according to group settings in the database. Note: All images will be searched when no group limitations are set.In this case, the similarity setting takes effect.Stranger information will be ignored when group limitations are set.

8.Search: Search for the information of captured images according to settings.

9.Search Result Display Area: Display the search results in a stacked manner.Double-click on the displayed image information will list the stacked images on the bottom, and click on the corresponding image again will jump to its quick playback.

10.Minimum number of occurrences: Filter search results by number of occurrences.You have to click Refresh to update the display.

11.Sort Type: Sort search results chronologically or by capture count in ascending or descending sequence.You have to click Refresh to update the display.

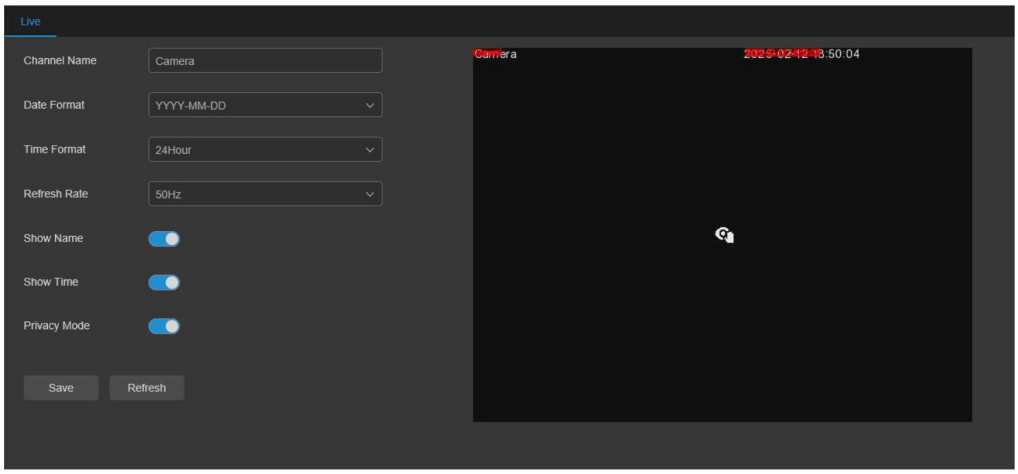
12.Refresh: Refresh the sorting in your IE according to Minimum number of occurrences and Sort Type.

13.Secondary Search Result Display Area: Display captured images of selected objects in the form of event list according to the information selected in the search result display area. click the Play button to go to quick playback.

Chapter 8 Remote Setting

8.1 Preview

The Live interface is to set the channel name, device time, Cross Counting and other intelligent function statistics and image overlay position, its interface is shown in the following figure.



Channel Name: Set the camera channel name

Date Format: Set the date format displayed by the camera OSD, there are three types: MM/DD/YYYYY, YYYY-MM-DD and DD/MM/YYYYY.

Time Format: Set the time format of the camera's OSD display, there are two types: 12-hour and 24-hour.

Refresh Rate: Set the refresh rate of the camera, there are two options, 60Hz and 50Hz, corresponding to N and P system.

Show Name: The preview shows the camera channel name.

Show Time: The preview shows the camera time.

Privacy Mode: Privacy Mode. When Privacy Mode is enabled, there is no image in preview and playback, and the preview image is not displayed in the Settings page.

Show Channel Name Position: Set the position where the channel name is displayed by dragging the channel name on the image.

Display Time Position: Set the position of the channel time display by dragging the channel time on the image.

Display Alarm Statistics Position: Set the position of the channel alarm statistics display by dragging the channel alarm statistics on the image. This setting is only displayed when the function that supports alarm statistics display is turned on.

Save: Save the current changes

Refresh: Retrieve the current interface parameters.

8.2 Image Control

Image control is the direct control to modify the graphic parameters, such as colour-to-black mode , wide dynamic, backlight supplement, etc. The interface is shown in the following figure.

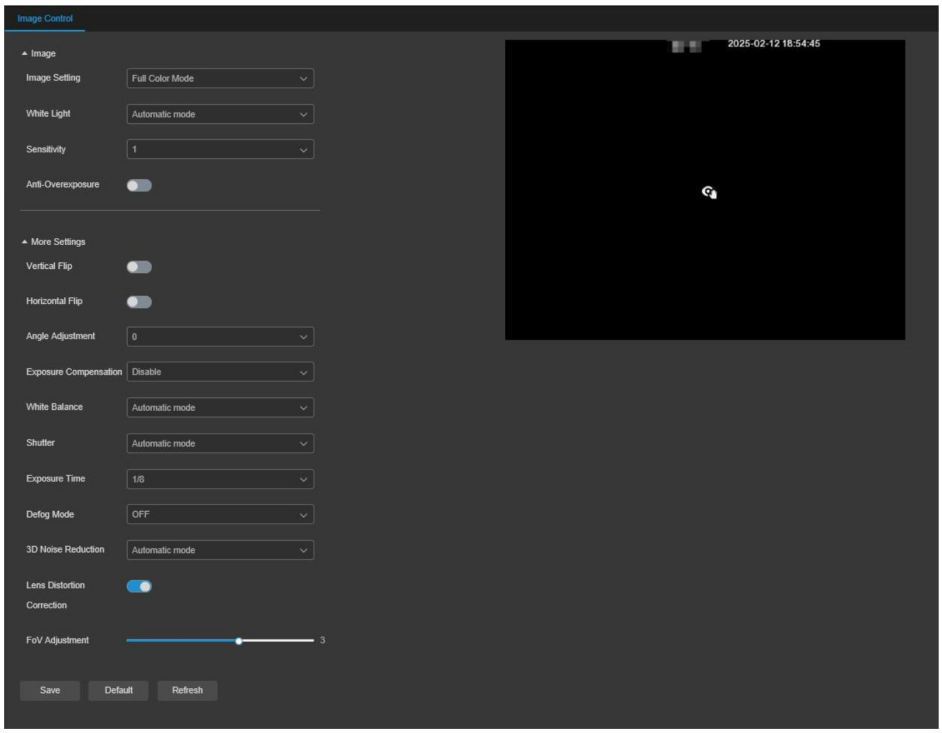


Image Setting: Set the camera image mode, there are 3 modes.

Full Color Mode: The camera is in full Color mode.

Day/Night Mode: The camera is in Day/Night mode.

Smart Illumination: The camera in night vision mode when the camera triggers an alarm will be linked to the warm light for fill light, the image is in color; the end of the alarm the camera back to night vision mode.

White Light: Under Full Color Mode, set the fill light effect of the camera's warm light, there are 4 modes in total.

Automatic mode: automatic mode, the camera automatically adjusts the strength of the fill light according to the ambient illumination.

Manual: Fill in the environment with a fixed brightness value.

Schedule: automatically switch on/off the warm light for fill light by setting the

time schedule.

OFF: Turns off the warm light lamp.

Sensitivity: Sensitivity 0 to 3, the camera's perception of ambient light, the higher the value the more sensitive.

Light Distance: range 0 to 100, **White Light** is the brightness of the fill light in **Manual** mode, the higher the value, the higher the brightness.

IR-CUT Mode: Set the camera **day/night** switching mode under Day/Night Mode, there are 5 modes.

Auto/GPIO Auto: auto control switching mode, color switching black and white by image judgement, black and white conversion color by photosensitive judgement.

Day/Color Mode: Forces color mode without switching between black and white.

Night/Black White Mode: Forces black and white mode without switching color.

Image/Image Mode: Similar to Auto Mode, control the mode of color to black and black to color by image.

Schedule/Schedule(B/W): Switch between black and white and color by schedule setting. To turn on this function, you need to set the start and end time of entering night vision.

IR LED Control: Sets the fill light effect of the camera's IR LED in night vision, with 3 modes.

Smart IR: Intelligent control of infrared lamp fill light intensity, according to the

focal length, whether the screen is over the explosion of dynamic control of infrared lampsThe fill light.

Manual: Manual mode to fill in the light with the set IR lamp brightness.

OFF: No light is used for fill.

Low/High Beam Light: Manually adjust the brightness of the IR lamp (0 to 100, when set to 0 the IR lamp does not light up, and when set to 100 it is the brightest).

Anti-Overexposure: When turned on in all image modes, this function prevents overexposure of images in high-brightness environments.

Corridor Mode: The image is rotated 90 degrees clockwise. (Some models support corridor mode)

Angle Adjustment: Image rotation setting, the camera can be adjusted by this value in certain usage scenarios where the camera is inverted from the preset, e.g. designed to be used upside down, but in reality it is used in a flat position.

Vertical Flip: To make the image of the screen interact up and down.

Horizontal Flip: Mirror mode in horizontal direction so that the images of the screen interact left and right.

Exposure Compensation: Sets how the programme behaves when backlit, with 4 modes:

WDR: Wide Dynamic Range in which the picture is uniformly balanced based on the setting and both light and dark areas can be clearly distinguished.. (DWDR in some models)

HLC: Strong light rejection function, which makes objects in the high light area

clearer in the picture according to the set HLC Level value. (Not supported by some models)

Back Light: Make the dark areas of the screen clearer according to the set BLC Level value and BLC Area.

Disable: No exposure compensation optimisation is performed on the picture frame.

White Balance: White balance setting with two modes:

Automatic mode: Adjust the white light using default parameters

Manual: Actively set the synthetic gained white light of red, green, and blue.

Shutter: Set the length of shutter exposure. (Some models have support for aperture setting; those that do not have support for aperture setting have only automatic and manual modes)

Automatic mode: The programme automatically selects an appropriate exposure time and aperture value according to the currently set Time Exposure and Iris range.

Manual: Directly uses the currently set Time Exposure time and Iris aperture value.

Shutter First: Shutter First is the aperture value obtained by metering the camera with a manually defined shutter.

Iris First: Aperture priority, where the size of the aperture is defined manually and the camera's metering is used to obtain the corresponding shutter value.

Note: The exposure time in shutter manual mode removes the flickerless option, the exposure time in shutter auto mode opens the flickerless option, and if you

switch to manual mode again, the exposure time will automatically switch to 1/100 or 1/120.

Exposure Time: Set the exposure time of the camera, used in combination with Shutter. When the exposure time is long, the image will be overblown, and when the exposure time is short, the image will be dark.

Defog Mode: Defog mode. Turn it on to make the picture clearer in rainy and foggy weather.

3D Noise Reduction: Reduces noise in the image to make the picture clearer, with three modes:

Automatic mode: The camera automatically selects the noise reduction effect according to the algorithm.

OFF: Noise cancellation is not switched on.

Manual: Noise reduction is performed according to the manually set noise reduction coefficient.

DIS: Digital Image Stabilisation, through software algorithms to reduce or eliminate image instability, blurring, etc. caused by equipment jitter, shaking and other factors, so as to make the captured images smoother and clearer, to enhance the viewing experience of the screen, according to the setting of the value of the DIS Level to make the image smoother and clearer (some models support)

Lens Distortion Correction: Distortion correction. Enabled to improve near image distortion. (Supported by some models)

FoV Adjustment: Aberration correction intensity level. Different correction levels

can be selected, ranging from 0 to 5.

Save: Saves the parameters for image editing.

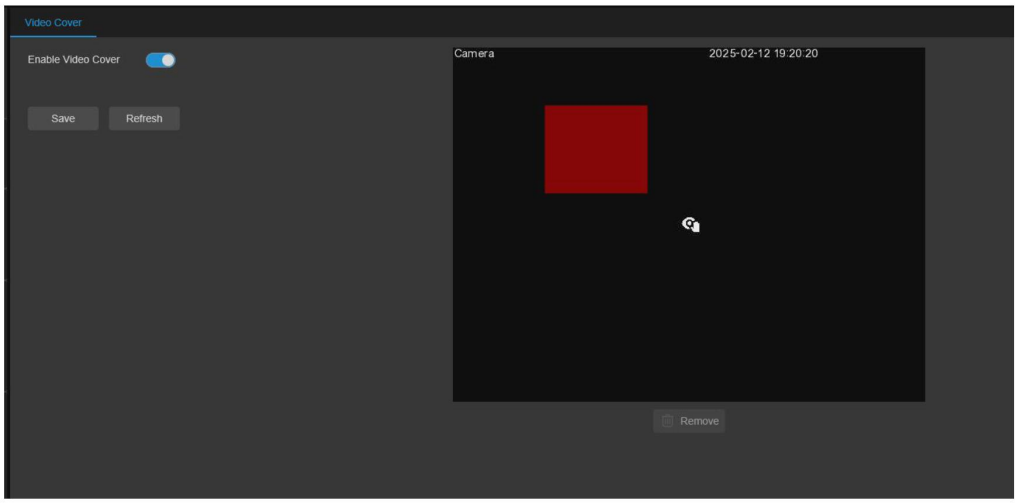
Default: Restores the image control parameters to the default.

Refresh: reacquiring image parameters

8.3 Video Cover

If you want to cover some specific areas of the image screen, this function will allow you to create 4 or 6 (some models support the creation of 6) privacy zones of any size and location.

Enable the switch and select the area where privacy needs to be enabled. The area appears as a "red box". Click on the edge of the red box and drag it to any size to create the privacy area.



Enable: Enable/Disable the Video Cover function.

Video Cover Area Setting: Set the areas to be tampered in the monitoring screen.The tampered blocks are red while setting and will turn to black after they take effect. set four tampering blocks.

Remove: Delete selected video cover blocks.

Note: With the privacy area set, the screen covered by the privacy area is not visible

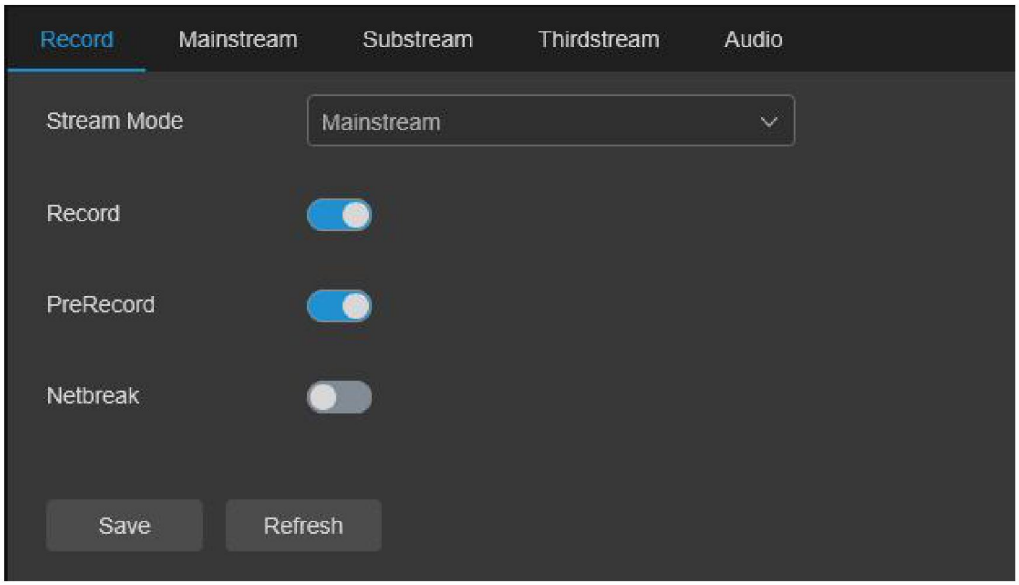
during preview and playback.

8.4 Video parameters

This menu allows the user to configure the parameters of the screen preview and the recording parameters.

8.4.1 Recording parameters

This menu configures the parameters related to system recording



Stream Mode: Select the recording mode. The video stream saved in the SD card. The default is Mainstream.

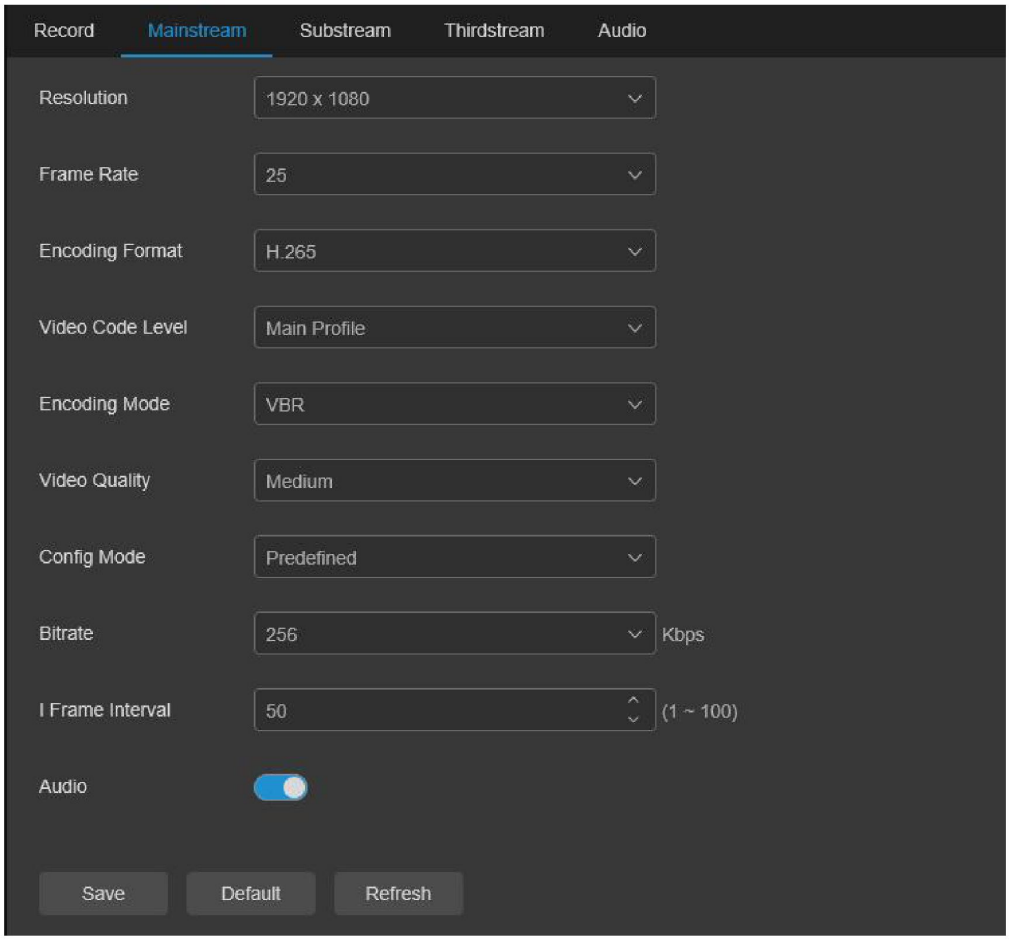
Record: Check to enable recording.

PreRecord: If this option is enabled .The camera will start recording a few seconds before an alarm event occurs. This option is recommended for users whose main type of recording is based on motion detection or I/O alarms.

Netbreak: Event recording is also performed when the network is disconnected or the connection fails.

8.4.2 Coding parameters

This menu allows the user to configure the image quality parameters for recorded video or network transmission. Typically, the Master Stream is the quality of the recorded video that will be saved in the HDD; the Sub Stream is the quality of the preview video that will be accessed remotely (e.g. by web clients and VMS). The Mobile Stream (Mobile Stream can be optionally turned off) defines the quality of the preview viewed via remote access using a mobile device.



Resolution: This parameter indicates the resolution of the recorded image.

Frame Rate: This parameter indicates the number of frames recorded by the camera.

Encoding Format: Channel decoding type, there are H264, H265, H264+, H265+ and MJPEG.

(MJPEG mode exists only in sub-stream mode)

Video Code Level: Video quality level with Bestline, Main Profile and High Profile.

(Main Profile only when H265).

Encoding Mode: Select the bitrate level. For simple scenes, such as a grey wall, Constant Bit Rate (CBR) is appropriate. For more complex scenes, such as busy streets, Variable Bit Rate (VBR) is appropriate.

Config Mode: If you want to set the bitrate yourself, select "User Defined" mode. If you want to select a preset bitrate, select "Preset Mode".

Bitrate: This parameter corresponds to the data transfer speed that the camera uses to record the video. Higher bitrate videos will have better quality.

I Frame Interval: Sets the I frame interval of the camera.

Audio: Enable this option if the user wants to record audio and video at the same time and connect a microphone to the camera or use a camera with audio capabilities.

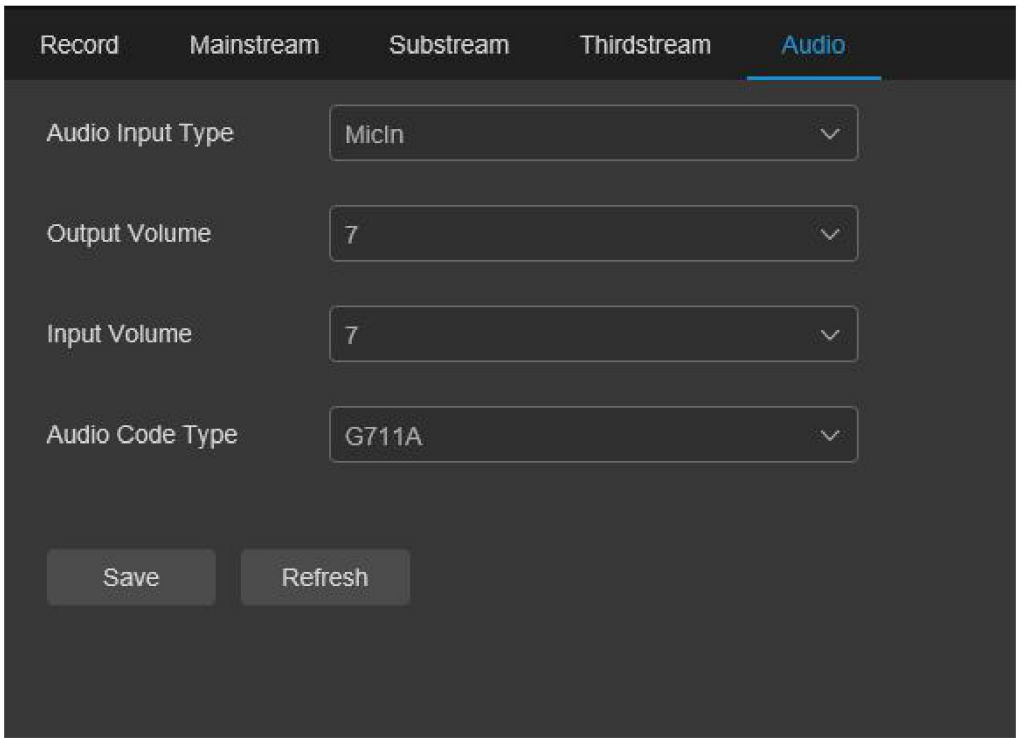
Save: Save the parameters of the video encoding.

Default: restores the video encoding parameters to the default.

Refresh: recapture the video encoding parameters.

8.4.3 Audio Management

This menu sets the volume of the device.



Audio Input Type: select the audio input type, there are MicIn and LineIn. MicIn means the audio is input through the microphone of the device, LineIn means the audio is input through the tail line of the device (supported by some models).

Output Volume: Set the volume of the output audio.

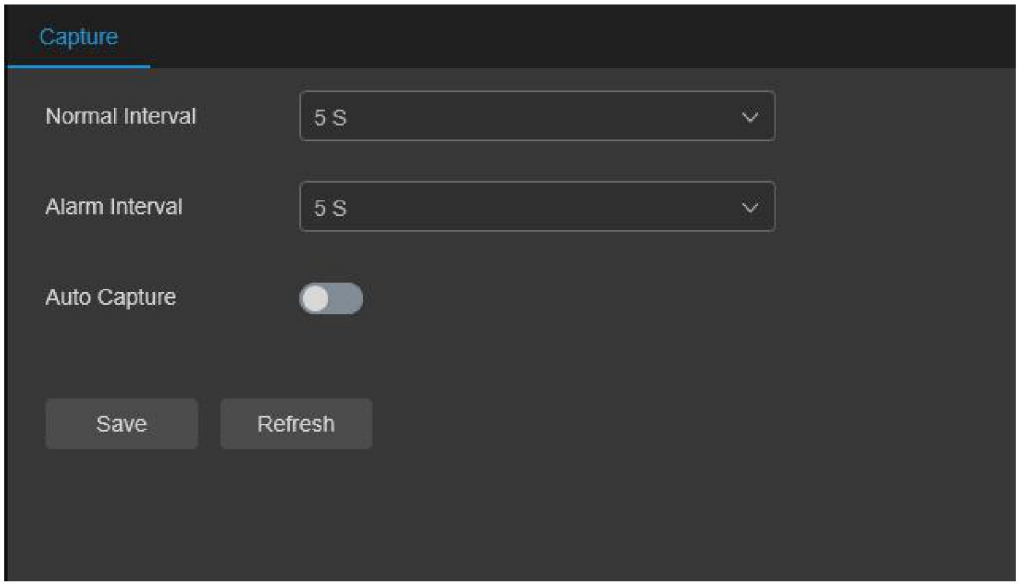
Input Volume: Set the volume of the input audio.

Audio Code Type: Set the audio decoding type, support G711A and G711U.

8.5 Capture settings

This menu allows the user to configure the parameters related to the Auto

Capture function.



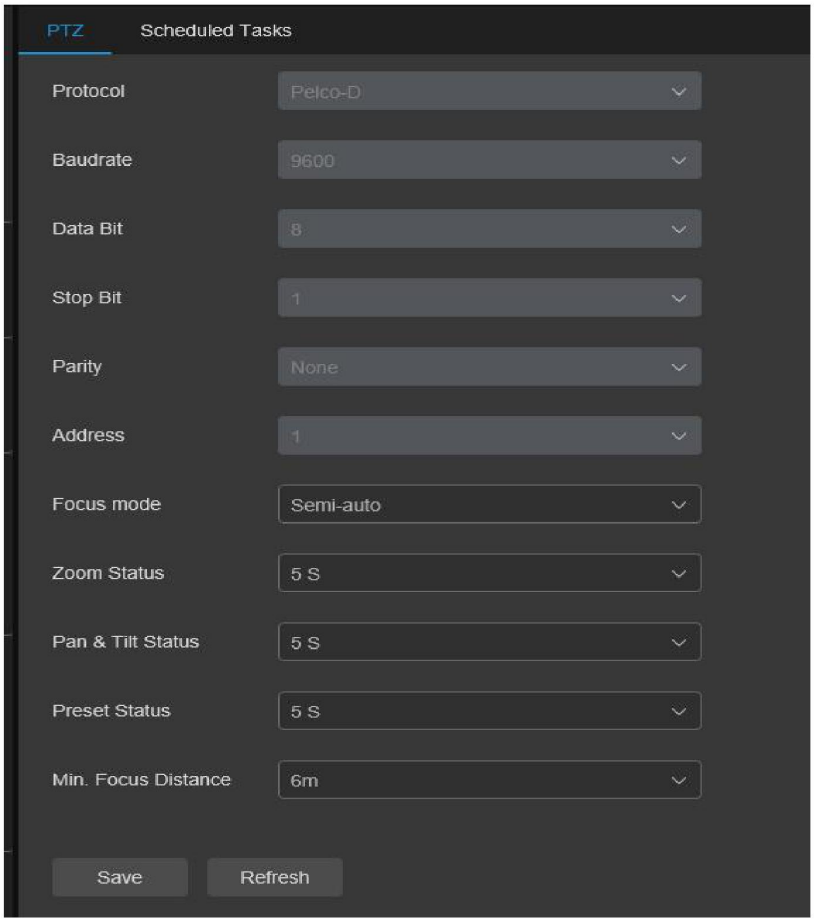
Normal Interval: the interval between captures in normal recording.

Alarm Interval: alarm interval, the time interval to capture images when motion detection is triggered and IO alarm is triggered.

Auto Capture: Enable/disable auto capture.

8.6 PTZ

This menu allows you to configure the PTZ parameters of the PTZ and control the rotation of the PTZ through the RS485 interface. (Supported by some models)



Protocol: Select the communication protocol between PTZ and camera.

Baudrate: The speed at which information is sent from the camera to the head. Make sure that this setting is the same as the speed of the gimbal

DataBit / StopBit: The messages between camera and PTZ are sent in separate packets. DataBit indicates the number of bits sent, while EndBit indicates the end of the packet and the beginning of the next (information) packet. The available

parameters for DataBit are: 8, 7, 6, 5, it is recommended to use the default value 8. The available parameters for StopBit are 1 or 2, it is recommended to use the default value 1.

Parity: If an error occurs. See the documentation for the head unit to configure this setting. (Parity, default None)

Address: address code, when the device is configured with multiple analogue protocols, the address code cannot be repeated

Focus mode:

Fully automatic (Auto): Automatically focuses according to scene changes.

Semi-auto (Semi-auto): After operating the gimbal or zoom, focusing once focuses clear and does not refocus even if the scene changes. The default value is semi-auto.

Manual: Users focus manually through the preview interface focus button, operating the PTZ, zoom and scene changes are not triggered by the focus action.

Zoom Status: The zoom status of the dome, in the lower left corner of the preview interface will show the magnification of the dome lens, choose whether or not to display or how long to display.

Pan & Tilt Status: The azimuth status of the ballbar will be displayed in the lower left corner of the preview interface, choose whether or not to display the ballbar azimuth information in the horizontal and vertical direction, or how long to display it.

Preset Status: The status of the preset point of the ball machine, in the lower left

corner of the preview interface will display the number of the ball machine call preset point, choose whether to display or display how long.

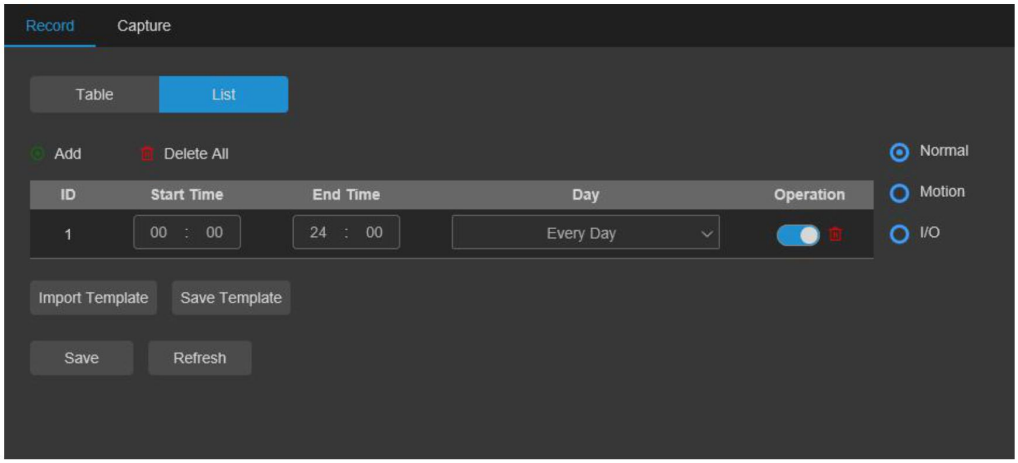
Min.Focus Distance: the minimum focus distance. When the distance from the scene object to the lens is less than the minimum focus distance, the lens will not change the focus of the object, and will preferentially focus on the object which is larger than the "Min.Focus Distance" parameter. For example, when the minimum focus distance is set to 6m, set up a baffle at 1.5m to block part of the field of view of the lens, half of which is distant and half of which is close up, and the camera will focus on the distant view after 6m in priority.

8.7 Schedule Setup

8.7.1 Record Schedule

Set up regular and alarm recording schedules for a set period of time.





Table/List: The schedule is presented in table form or list form. Click on Normal, Motion or I/O on the right side to switch between different types of video schedules.

Select Table form and drag or tick the corresponding time period in the table to set the corresponding time schedule.

Select the List form to set the corresponding time schedule by manually adding rules and entering the start and end time periods.

Add: Adds a schedule rule.

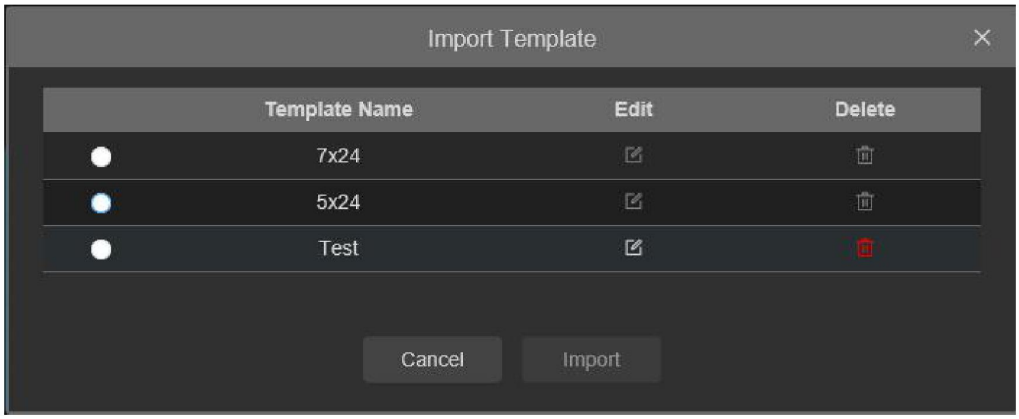
Delete All: Delete all schedule rules.

Start Time: Set the schedule rule start time.

End Time: Set the end time of the schedule rule.

Day: Set the period for the schedule rule to take effect.

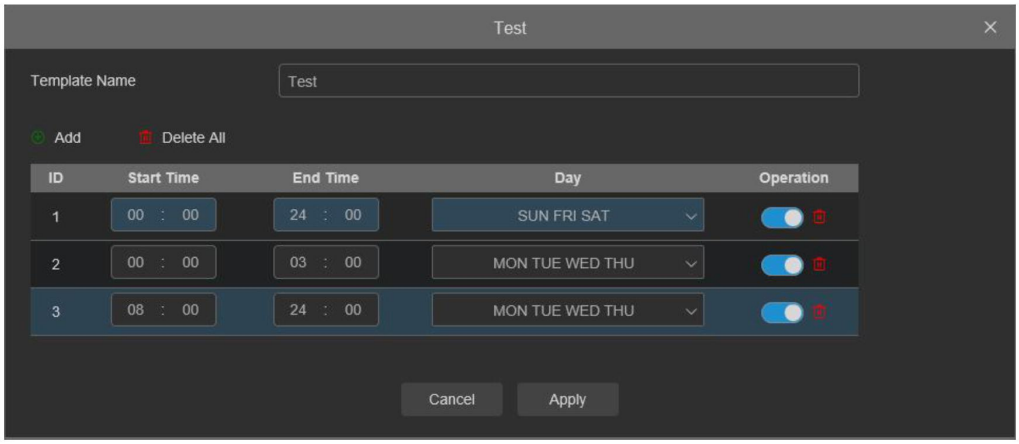
Import Template: Import a custom or system default schedule template.



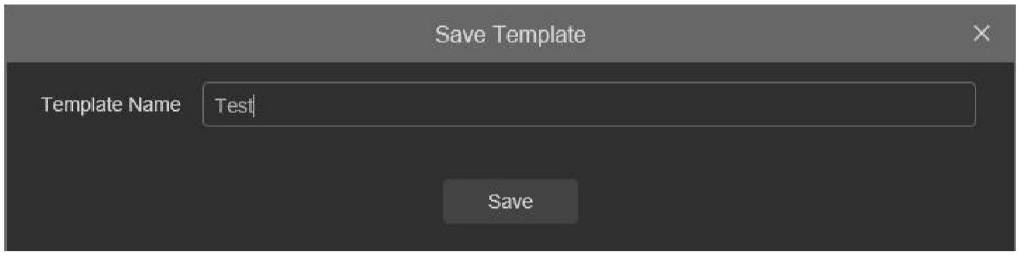
Edit: Edit this schedule template to modify the template name and specific schedule rules.

Delete: Delete this schedule template.

Note: The system supports two schedule templates, 7x24 and 5x24, by default, which cannot be edited or deleted.



Save Template: Save the schedule template, save the currently set schedule rule as a custom template, and import the template in other schedule setting pages.



Save: Save the edited parameters.

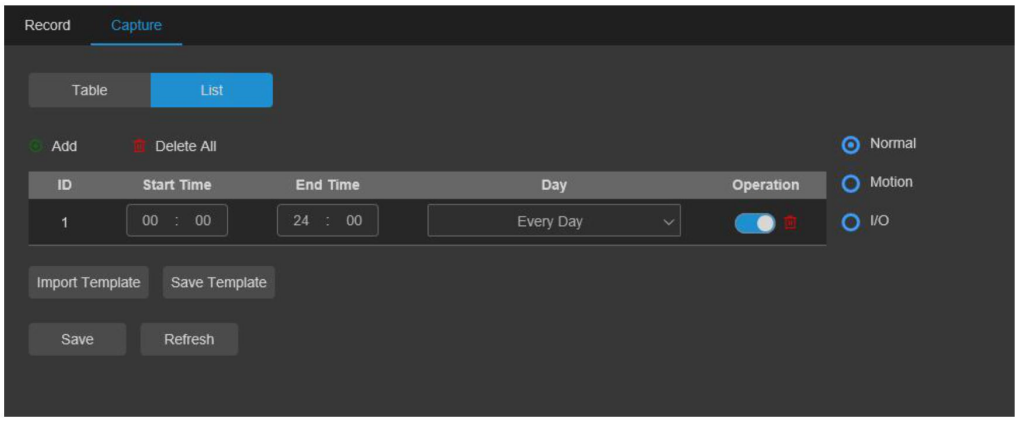
Copy: Copy the parameters to other channels.

Refresh: Retrieve the parameter.

8.7.2 Capture schedule

Set up regular and alarm capture schedules to execute capture actions during the set time period.

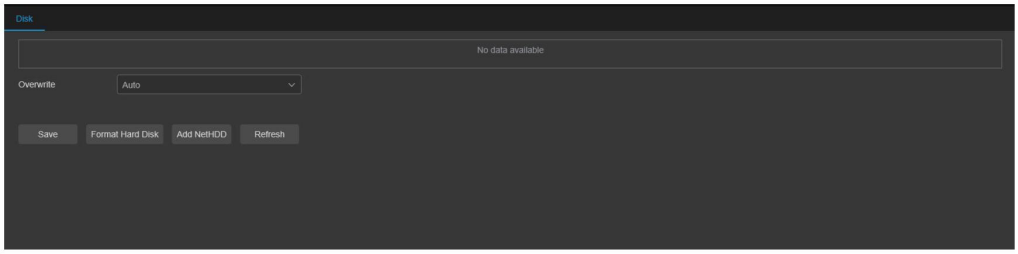




Reference can be made to chapter 8.8.1 Video recording schedule.

8.8 Disk Management

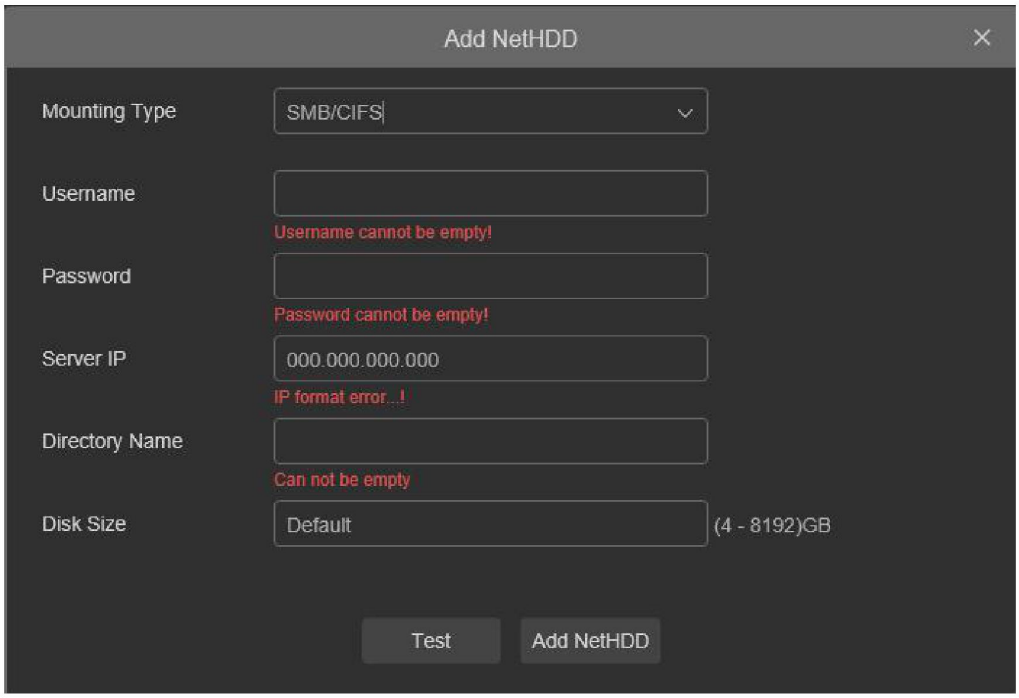
This menu allows the user to check and configure the internal TF card. Formatting is only required for initial access and when replacing a new TF card.



Format Hard Disk: Select the SD card to be format, and then click Format SD Card.To start format , enter your username and password and then click OK.

Overwrite: This option to overwrite old records in the SD card when the SD card is full.If Auto is selected, the oldest data will be automatically overwritten when the SD card is full .Select OFF if you do not want to overwrite any old videos.If this function is disabled, check the status of the SD card periodically to ensure that the SD card is not full.

ADD NetHDD: This function Allow to add a network HDD. After a network HDD (NAS) is configured, connect the NAS to the Internet to record channel videos or capture images.The AI face database can only be stored in the HDD.



Mounting type: There are two options, I ncluding NFS and SMB/CIFS. Among them, NFS does not need username and password, but SMB/CIFS needs.

User Name: Specifies the username of NAS (unavailable in NFS mode).

Password: Specifies the password of NAS (unavailable in NFS mode).

Server IP: Specifies the IP address of NAS.

Directory Name: Specifies the folder where you want to store data in the NAS.

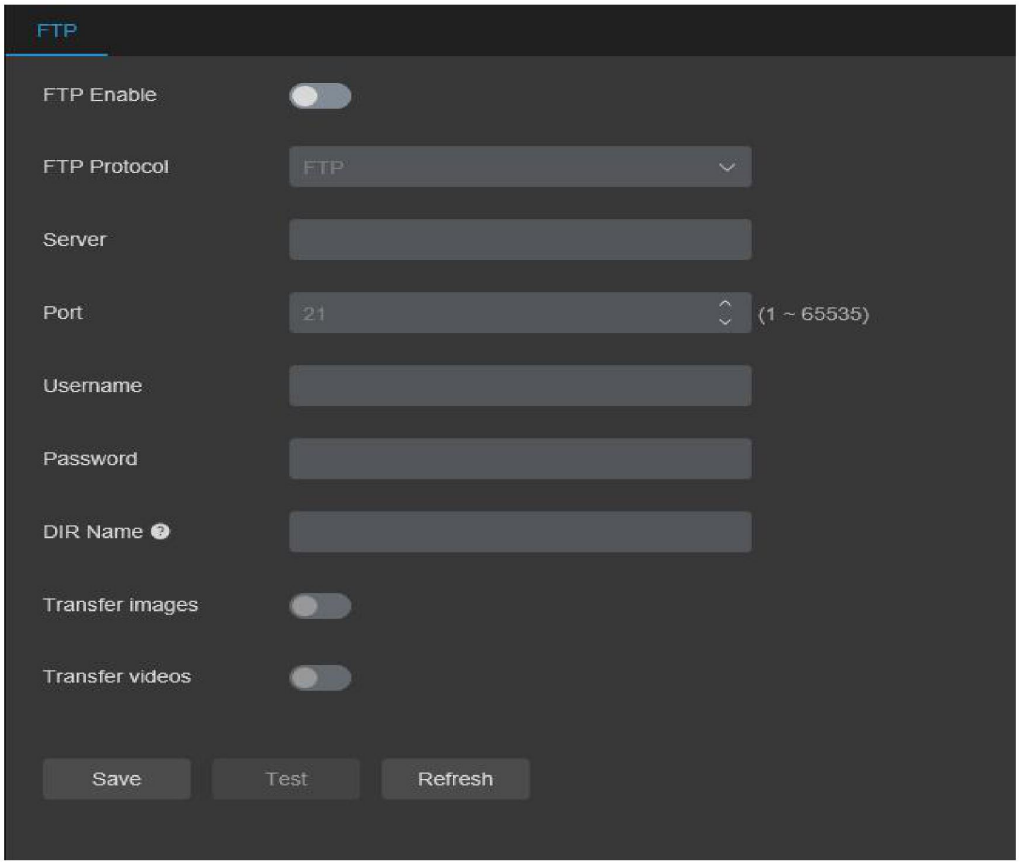
Disk Size: Specifies the size of the network HDD.

Test: Test the connectivity of NAS.

Add NetHDD: Click this option to add NAS.

8.9 FTP server settings

This menu allows the user to enable the FTP server in order to view pictures and videos uploaded from the camera to FTP on the FTP server.



FTP Enable: Click to enable the FTP function.

FTP Protocol: modify the FTP protocol, there are two protocols: FTP and SFTP.

Server: Enter the IP address or domain name of the user's FTP server.

Port: Enter the FTP port.

Username/ Password: Enter the user's FTP server username and password.

Transfer images: When checked, the alarm images will be uploaded to the FTP server.

Transfer Videos: Ticked will upload the alarm video to FTP server.

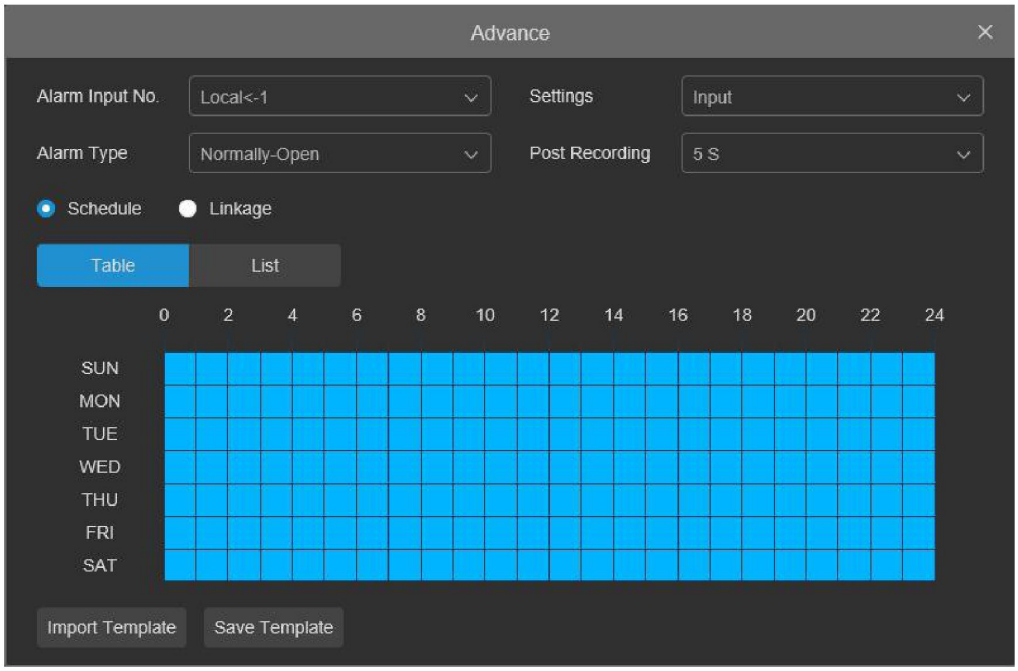
8.10 I/O settings

8.10.1Alarm input settings

This is an optional feature that is only available if the user's device supports I/O sensors and an external I/O alarm device is connected.



To set the I/O input alarm parameters, click Edit to enter the setting page.



Alarm Input No.: Selects the input source for I/O alarms.

Settings: Enables or disables the I/O input alarm function.

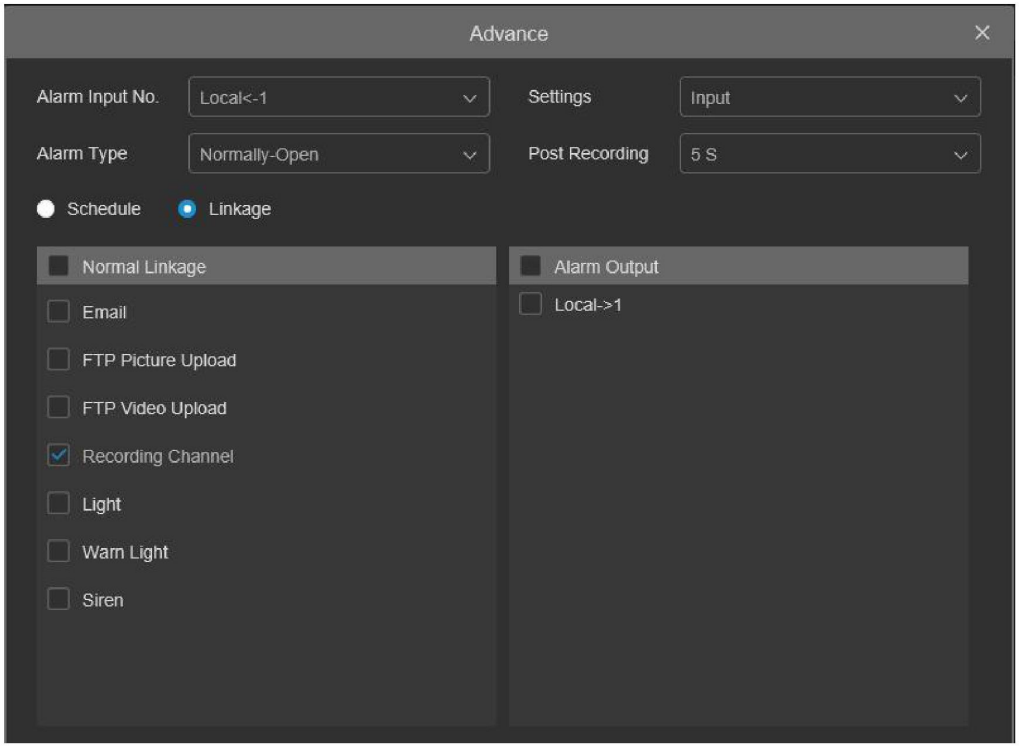
Alarm Type: Select the input alarm type.

Post Recording: Set the length of time the device continues to record after

triggering an alarm, the default is 5 seconds.

Schedule: Set the schedule for the I/O input alarm function to take effect. Refer to 8.8 Schedule Setting.

Linkage: Set the I/O input alarm linkage function.



Email: Sends an email to the configured mailbox when an alert is triggered.

FTP Picture Upload: Uploads the alarm picture to the FTP server after the alarm is triggered.

FTP Video Upload: Uploads the alarm video to an FTP server after the alarm is triggered.

Clicking on the Settings button next to it gives you the option to upload to an FTP server after an alarm is triggered.

Light: When switched on, a warm light will illuminate for warm light deterrence

when an alarm is triggered.

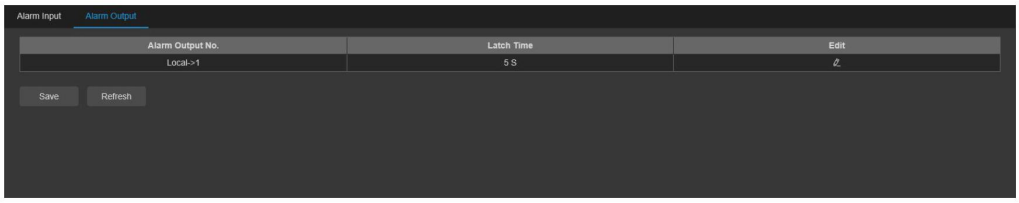
Warn Light: When turned on, a red and blue light will be illuminated as a deterrent when an alarm is triggered.

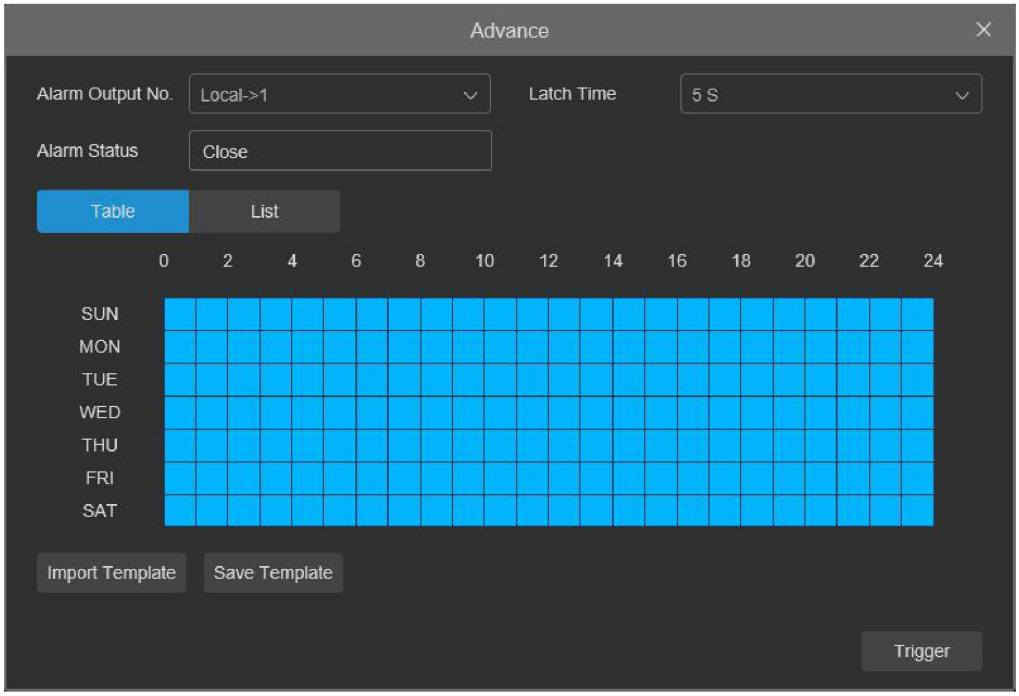
Siren: When on, an alarm will sound for deterrence when triggered.

Alarm Output: Check the alarm output source, the I/O alarm output will be performed when the alarm is triggered. Refer to 8.11.2 Alarm Output Settings.

8.10.2 Alarm output settings

To set the alarm linkage I/O output parameters, click Edit to enter the setting page.





Alarm Output No.: Select the I/O output source for alarm linkage.

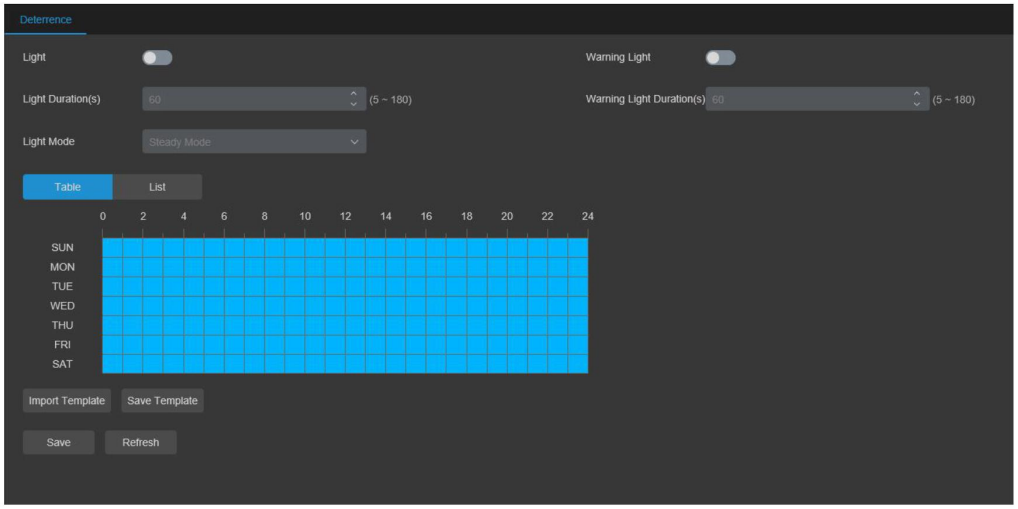
Latch Time: Set the duration of I/O linkage output when the alarm is triggered.

Schedule: Set the schedule for the alarm linkage I/O output function to take effect.

Refer to chapter 8.8 Schedule Setting.

8.11 Deterrence Settings

When the camera supports white light, red and blue light function, this menu can be configured deterrent parameters; when the alarm is triggered linked to the deterrent, the light will be lit in accordance with the configured parameters of the way to alarm. The following figure:



Note: When the camera supports white light and the image control is set to full-color mode, the white light parameters such as Light are greyed out and cannot be set; when the image control is set to day/night mode, this interface parameter can be set; when the image control is set to smart night light mode, the Warning Light parameter is greyed out and cannot be set.

Light: Turns the light warning on or off.

Light Duration (s): The duration of the white light.

Light Mode: Set the white light mode, there are 2 modes:

Steady Mode: Always on mode, the white light is always on when deterring.

Flashing Mode: Flashing mode, the white light flashes at a set frequency during deterrence.

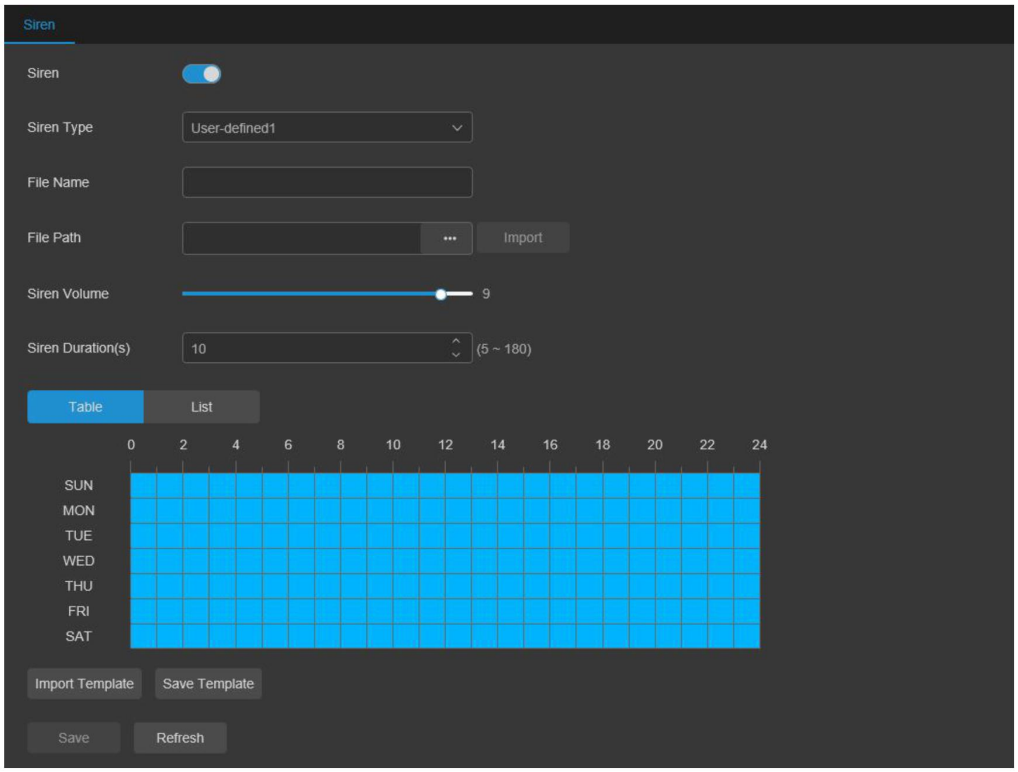
Warning Light: Turns the red and blue warning lights on and off.

Warning Light Duration (s): The duration of the red and blue lights.

Schedule: Setting up the schedule for when the warm-up and red and blue lights will take effect. Refer to 8.8 Schedule Setting

8.12 Siren Settings

When the camera supports siren This menu allows you to configure alarm-related parameters; when the alarm is triggered by the linkage deterrent, the alarm will be automatically turned on for deterrence. The following figure:



Siren: Enables or disables the siren switch.

Siren Type: Changes the audio file of the siren.

Default provides two audio files, in addition to support the import of three custom pcm and wav audio file types, the imported file audio sampling rate can not exceed 8000HZ, the file size can not exceed 256k; selected custom imported audio file on the right side of the Delete button, click on the current audio file can be deleted (Note: Some models support this feature).

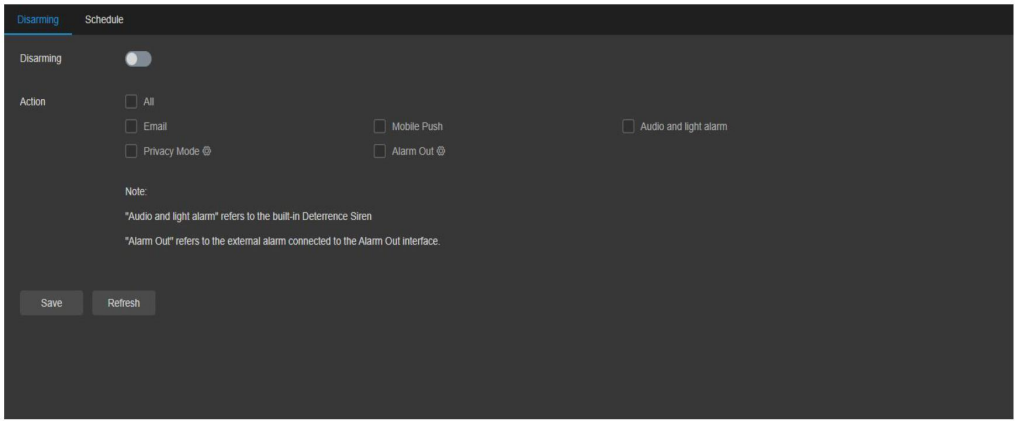
Siren Volume: Alarm sound volume level, supports 1 to 10 adjustable levels.

Siren Duration(s): The duration of the alarm sound, support 5 ~ 180 seconds adjustable.

Schedule: Set the schedule of the effective time of the alarm. Refer to 8.8 Schedule Setting.

8.13 Disarming

Enabling the disarm function can revoke the response of the device to all kinds of alarm linkage, this menu can set the disarm switch, type, schedule and other related parameters.



Disarming: Enables or disables the disarming function.

Action: IPC local alarm linkage type.

All: Select or clear all types.

Email: When disarming function is enabled, tick the mailbox alarm to trigger the alarm without sending alarm email.

Mobile Push: When disarming function is enabled, tick Mobile Push to trigger the alarm, the device will not push the alarm message to **RXCamView** and **CybVu** APPs.

Audio and light alarm: When disarming function is enabled, the alarm is triggered when this option is ticked, and the red and blue lights, warm-up light and siren do not respond.

Privacy Mode: When disarming function is enabled, tick Privacy Mode and IPC will enable privacy mode. (Only multi-channel devices support channel setting)

Alarm Out: When disarming function is enabled, check Alarm Out to trigger alarm, external alarm output device is not effective.

Schedule: Set the schedule for the effective time of disarming. Refer to 8.8 Schedule Setting

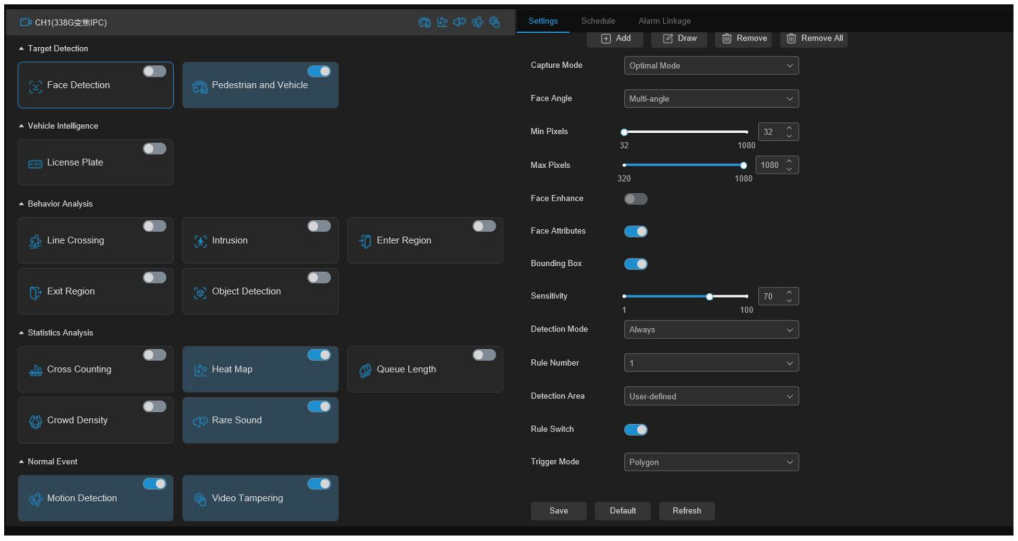
8.14 Event Settings

The camera uses AI intelligent alarm, you need to open the corresponding alarm function in the Setup menu first. Opening the function needs to consume the computing power of the camera, due to the limitations of the performance of the camera. Some of the AI functions do not support simultaneous opening, please

refer to the relevant limitations of the specific model prompt shall prevail.

8.14.1 Face Detection

The face detection function is to detect the face target through the camera first, get the captured image that meets the requirements, then calculate the face feature data of the captured image through the face model algorithm, and then compare it with the face database for alarm. To do this, you need to enable the face detection function first.



Face Detection: Enable the face detection function.

Capture Mode: Set the snap mode. receive push notifications in live view or connect an NVR to check the image effect.The program supports three Snap Modes.

Optimal Mode: The camera only pushes an image that it considers best from detecting an object until the object disappears.

RealTime Mode: When detecting an object, the camera immediately pushes an image, and then pushes the best image when the object disappears.

Capture Interval: set the snap number and the snap and push interval as required.The options for Snap Num include 1, 2, 3, and unlimited.The Snap Frequency ranges from 1s to 255s.For example, when the snap frequency is set to

5s, an image is pushed at 5s, 10s and 15s when the object is detected.

Face Angle: Screen the captured images.That is, only the captured images that meet angle setting will be pushed. There are three mode options.

Frontal View: Only the frontal view of an object is pushed.

Multi Angle: Choose to push images containing only side faces.

Customize: Customize the angle of an object for which images can be pushed. If this function is enabled, Roll Range, Pitch Range, Yaw Range, and Picture Quality options, as well as Frontal Default and Multi Default buttons will be available.

Roll Range: Set the roll range of the captured face image in the 3D model.When the angle does not meet the setting limit, face detection can be carried out but the image will not be pushed.

Pitch Range: Set the pitch range of the captured face image in the 3D model.When the angle does not meet the setting limit, face detection can be carried out but the image will not be pushed.

Yaw Range: Set the yaw angle of the captured face image in the 3D model.When the angle does not meet the setting limit, face detection can be carried out but the image will not be pushed.

Picture Quality: High quality images are good for filtering out detected non-face images.

Frontal Default Apply Mode: Selecting Customize displays the control, setting the values for Push Angle to Range: 30, Pitch Range: 30, Yaw Range: 45, and Picture Quality: 100.

Multi Default Apply Mode: Selecting Customize displays the control, setting the values for Push Angle to Range: 180, Pitch Range: 180, Yaw Range: 180, and Picture Quality: 100.

Min Pixels: Set the minimum recognition pixel frame. The face has to be larger than the set pixel to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel frame, and drag the pixel frame to set it at the same time, and the pixel frame in the image preview disappears when the mouse moves away for 5 seconds.

Max Pixels: Set the maximum recognition pixel frame. The face has to be smaller than the set pixel to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame disappears in the image preview.

Sensitivity: The higher the sensitivity, the missed alarms will decrease, but the false alarms will increase.

Face Enhance: Face Enhance switch to increase the capture effect on moving targets. It also adjusts the brightness according to the face closest to the camera to optimise the capture effect (supported by some models).

Face Attribute: Identify the attributes of the detected faces, including age, gender, mask, glasses, and expression. Note: You need to open this function to use Face Features alarm.

Detection Mode: Filter the performance of detected objects in the camera. There are two mode options.

Hybrid Mode: Allow do face detection for all objects in the view.

Motion Mode: Allow to filter out motionless faces, such as such as portraits and statues in the scene.

Bounding Box: Display face detection box, detect rule line switch (supported by some models).

Trigger Mode: Set the detection rule line type.There are two rule types.

Rectangle: Allow to detect only face objects in the set area.

Line: Face objects are tracked only when the detection line is crossed according to settings.

Detection Area: Setting options are changed when the detection area is used to recognize objects by default. There are two modes.

Full Screen: All areas that can be monitored by the camera are detected.

User-defined: 0nly user-defined boxed areas are detected.

Rule Number: Rule number selection, support to set 4 detection rule areas.

Rule Switch: Rule enable switch, each detection rule has an independent enable switch, associated with the currently selected Rule Number.

Rule Type: The setting item is available only when using the over-line detection mode, and there are two detection trigger modes: A→B and B→A.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

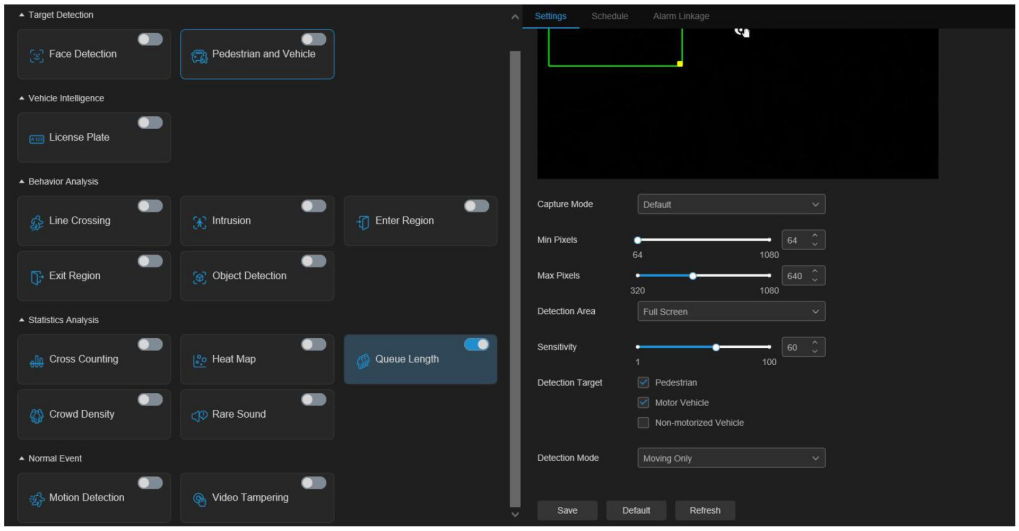
Draw: Manually draw a detection rule in the setting area.

Remove: Removes a detection rule from the setting area.

Remove All: Remove all detection rules in the setting area

8.14.2 Pedestrian and Vehicle

Pedestrian detection and vehicle detection function, used to recognize pedestrian or vehicles in the view, generate an alarm, and record capture images, according function settings.



Pedestrian & Vehicle: Enable Pedestrian & Vehicle detection function.

Capture Mode: set the snap mode. receive push notifications in live view or connect NVR to check the image effect.The program supports three Snap Modes.

Default: The camera pushes only one pedestrian or vehicle image from detecting an object until the object disappears.

RealTime Mode: When detecting an object, the camera immediately pushes one image, and then pushes another image when the object disappears.

Interval Mode: Push pictures for a set number of times according to the set push interval. When using Snapshot Mode as Interval Mode, there are Snapshot Qty and Capture Interval settings:

Snapshot Qty: according to the interval set by Capture Interval, push the image 1, 2, 3, infinite times for the camera thinks it is the same target.

Capture Interval: Push the image according to the set time from the target

appearance or last push time.

Min Pixel: Set the minimum recognition pixel frame. The pedestrian and vehicle has to be larger than the set pixel to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel frame, and drag the pixel frame to set it at the same time, and the pixel frame in the image preview will disappear after the mouse moves away for 5 seconds.

Max Pixel: Set the maximum recognition pixel frame. The pedestrian and vehicle has to be smaller than the set pixel to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Sensitivity: With higher detection sensitivity, pedestrian or vehicle objects can be detected easier, but false alarms may be easily generated.

Detection Target: The options include pedestrian, motor vehicle, non-motorized vehicle, and all.

Detection Mode: Filter object behaviors in the detection area. There are two mode options.

Hybrid Mode: Allow to detect all pedestrians or vehicles in the view.

Motion Mode: Allow to filter out motionless pedestrians or vehicles.

Bounding Box: A detection box that displays the shape of pedestrian vehicle and detects rule line switches.

Detection Area: Detection area setting, there are two modes.

Full Screen: All areas that can be monitored by the camera are detected.

User-defined: detect only the area selected by user-defined box.

Rule Number: Rule Number selection, supports setting 4 detection rules.

Rule Switch: Rule Enable Switch, each rule has its own enable switch, associated with the currently selected Rule Number.

Rule Line Setting Area: When using the custom detection area mode, setting the detection area of 3-8 sides is supported.

Add: Add a default detection rule in the setting area.

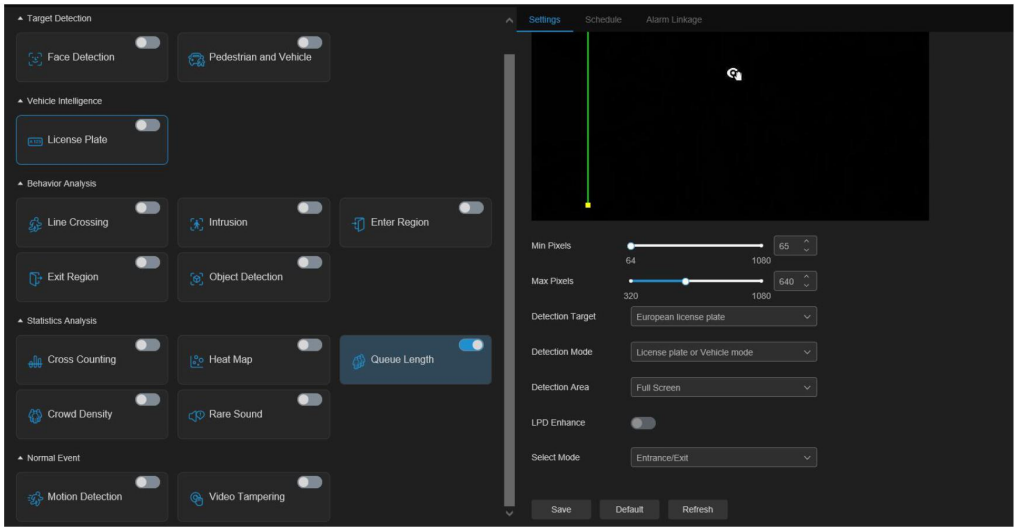
Draw: Manually draw a detection rule in the setting area.

Remove: Removes a detection rule from the setting area.

Remove All: Remove all detection rules in the setting area.

8.14.3 License Plate

License Plate Detection Function by detecting the license plate of the passing vehicle, it identifies whether the vehicle is an unfamiliar vehicle or a vehicle that has been entered into the database and alarms it, so it is necessary to turn on the number plate detection function first.



License Plate: Enable the License Plate detection.

Min pixel: The minimum pixel box, the license plate must be larger than the set minimum pixel to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview will disappear.

Max pixel: Maximum pixel frame, the license plate has to be smaller than the set maximum pixel in order to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview will disappear.

Detection Target: Type of license plates to be detected. There are two type options.
European license plate: License plates in European regions.
American license plate: License plates in American regions.

Detection Mode: Set the detection mode options, there are two kinds as below:

Vehicle priority mode: Vehicle priority mode will detect the vehicle first, and then capture the license plate for analysis.

License plate or Vehicle mode: The license plate will be detected and analysis at the same time when the vehicle is detected.

Bounding Box: Display the detection box and detect the rule line switch.

Detection Area: Set the area for license plate detection, there are two kinds as below:

Full Screen: Detect the whole area monitored by the camera.

User-defined: custom set the detection area.

Rule Switch: Enable switch for the current numbered rule, displayed when setting the custom detection area.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area.

License Plate Enhancement: License Plate Enhancement can only be turned on when the License Plate Detection function is enabled. When License Plate Enhancement is on, the unit will automatically switch to IR-CUT image mode in

Day/Night mode, and the settings for Exposure Compensation, Shutter and Exposure Time will be hidden.

Select Mode: Application scenario selection items for license plate detection, there are three kinds as below:

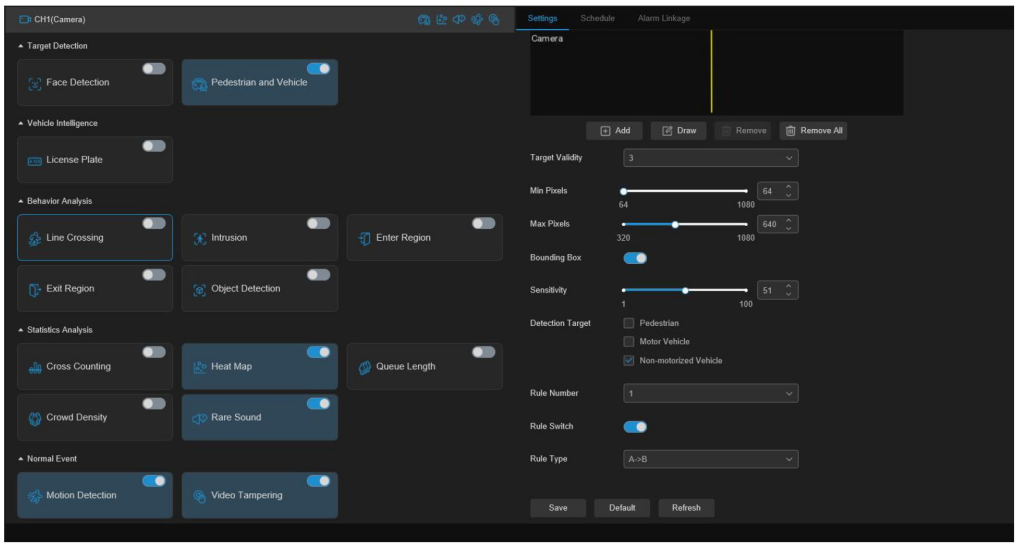
Entrance/Exit: After setting the detection line, the alarm will be triggered when the vehicle passes through the detection area and crosses the detection line.

City Street: After setting the detection line, the alarm will be triggered when the vehicle or license plate passes through the detection area and crosses the detection line.

Alarm Input: Trigger the alarm when the vehicle or license plate is located in the detection area after triggering the I/O input alarm. (Supported by some models).

8.14.4 Line Crossing

The line-crossing detection function detects Pedestrian and vehicles that cross the set virtual line. When a specific target passes through the preset detection line, an alarm signal is generated.



Line Crossing: Enable the Line Crossing detection.

Target Validity: The similarity between the detection target and the set detection type.1 represents a similarity of 80% or more, 2 represents a similarity of 60% or more, 3 represents a similarity of 40% or more, 4 represents a similarity of 20% or more.

Min Pixel: Set the minimum recognition pixel box, the target has to be larger than the set pixel to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel frame, and drag the pixel frame to set it, and the pixel frame disappears in the image preview after the mouse moves away for 5 seconds.

Max Pixel: Set the maximum pixel frame to be recognition, the target has to be smaller than the set pixel to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Sensitivity: The sensitivity is related to the proportion of the detection target entering the area, the larger the sensitivity setting is for crossing the line, the easier it is to trigger the alarm. For example, if it is set to 100%, the alarm will be triggered when the detection target just touches the boundary of the set area. If it is set to 50%, the alarm will be triggered after 50% of the detection target has crossed the boundary of the set area.

Detection Target: set objects for perimeter intrusion detection:

Pedestrian: Line crossing alarm is triggered only for pedestrians.

Motor Vehicle: Line crossing alarm is triggered only for motor vehicles.

Non-motorized Vehicle: Line crossing alarm is triggered only for non-motorized vehicles.

Bounding Box: Display the detection rule line switch.

Rule Number: Rule number selection, Line Crossing function supports to set 4 inspection rule lines.

Rule Switch: Enable switch for rule line, each rule line has its own enable switch, which is related to the currently selected Rule Number.

Rule Type: the rule to be triggered by the rule line, there are three kinds of crossing rules: A→B, B→A and A←→B. The setting is related to the currently selected Rule Number.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

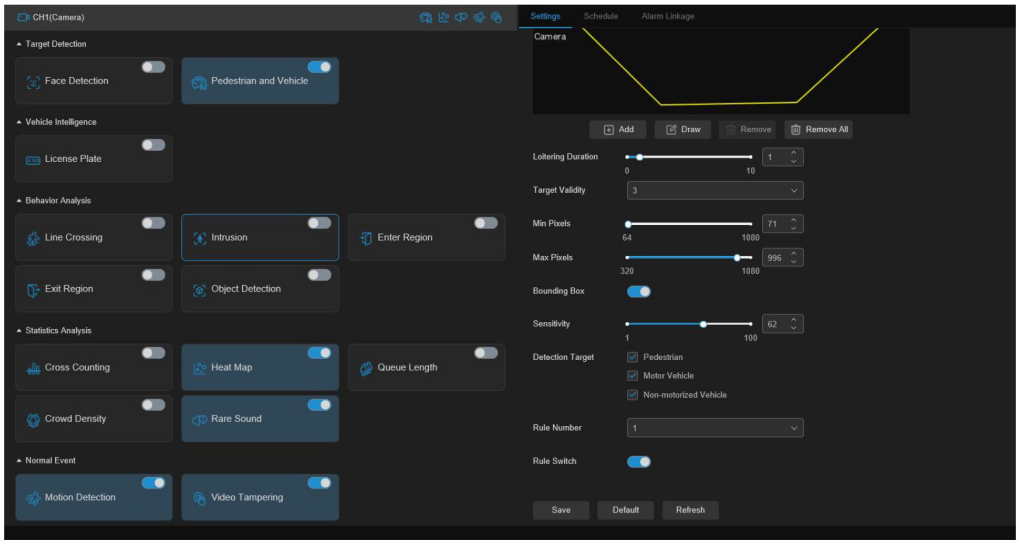
Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area.

Remove All: Remove all rule lines.

8.14.5 Intrusion

Intrusion detection can detect whether there are objects in the video invade the set restricted area, according to the judgement results linkage alarm.



Intrusion: Enable or disable the Intrusion detection function.

Loitering Duration: Indicates that the alarm is generated after the target enters the alert area and stays there continuously for that amount of time. For example, if it is set to 1, the alarm will be triggered immediately after the target has invaded the area for 1s, and the maximum length of time can be set to 10s.

Target Validity: The similarity between the detection target and the set detection type.1 represents a similarity of 80% or more, 2 represents a similarity of 60% or more, 3 represents a similarity of 40% or more, 4 represents a similarity of 20% or more.

Min Pixel: Set the minimum recognition pixel box, the target has to be larger than the set pixel to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel frame, and drag the pixel frame to set it, and the pixel frame disappears in the image preview after the mouse moves away for 5 seconds.

Max Pixel: Set the maximum pixel frame to be recognition, the target has to be smaller than the set pixel to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Sensitivity: Trigger the sensitivity setting for area intrusion detection, the larger the sensitivity setting, the easier it is to trigger the alarm. The larger the sensitivity setting, the more likely the alarm will be triggered. The sensitivity is related to the percentage of the detection target entering the area. For example, if it is set to 100%, the alarm will be triggered when the target just touches the boundary of the

set area. If it is set to 50%, the alarm will be triggered after 50% of the target has already passed the boundary of the set area.

Detection Target: set objects for perimeter intrusion detection:

Pedestrian: Intrusion alarm is triggered only for pedestrians.

Motor Vehicle: Intrusion alarm is triggered only for motor vehicles.

Non-motorized Vehicle: Intrusion alarm is triggered only for non-motorized vehicles.

Bounding Box: Display the detection rule line switch.

Rule Number: Rule number selection, intrusion function supports setting 4 detection rules.

Rule Switch: Enable switch for rule line, each rule line has its own enable switch, which is related to the currently selected Rule Number.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

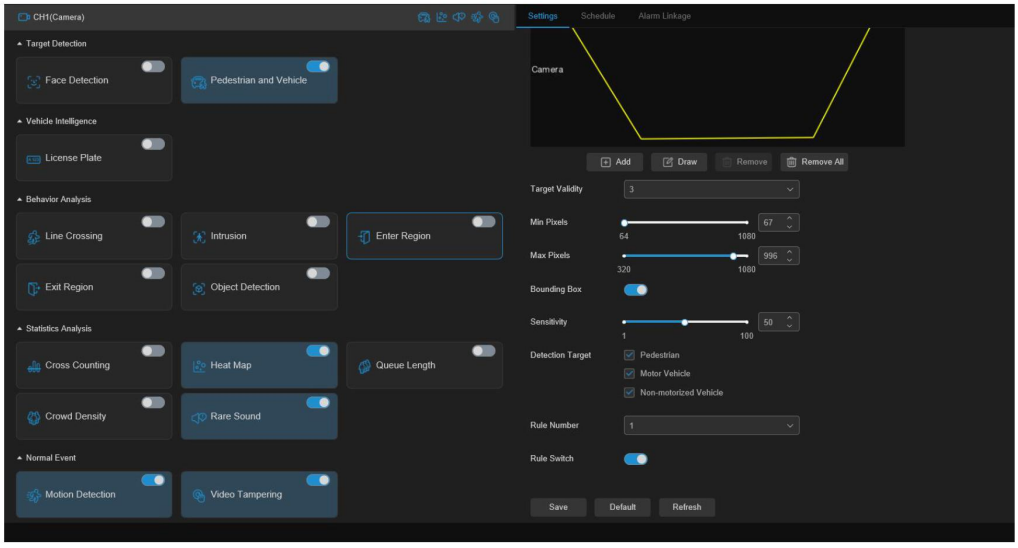
Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area.

Remove All: Remove all rule lines.

8.14.6 Enter Region

Enter Region detection, can detect the target from outside the area into the area, the target generated in the area will not generate alarm, according to the results of the judgement linkage alarm.



Enter Region Enable or disable the Region Entrance detection function.

Target Validity: The similarity between the detection target and the set detection type.1 represents a similarity of 80% or more, 2 represents a similarity of 60% or more, 3 represents a similarity of 40% or more, 4 represents a similarity of 20% or more.

Min Pixel: Set the minimum recognition pixel box, the target must be larger than the set pixels to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel box, and drag the pixel box to set it at the same time, and the pixel box in the image preview will disappear after the mouse moves away for 5 seconds.

Max Pixels: Set the maximum pixel frame to be recognition, the target has to be smaller than the set pixels to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Sensitivity: Trigger the sensitivity setting for area entry detection, the larger the sensitivity setting, the more likely to trigger the alarm. The sensitivity is related to the percentage of the detection target entering the area, For example, if it is set to 100%, the alarm will be triggered when the detection target just touches the boundary of the set area. If it is set to 50%, the alarm will be triggered after 50% of the target has already passed the boundary of the set area.

Detection Target: Set objects for Region Entrance detection.

Pedestrian: Region Entrance alarm is triggered only for pedestrians.

Motor Vehicle: Region Entrance alarm is triggered only for motor vehicles.

Non-motorized Vehicle: Region Entrance alarm is triggered only for non-motorized vehicles.

Bounding Box: Display the detection rule line switch.

Rule Number: Region Entrance function supports setting 4 detection rules.

Rule Switch: Each rule line has its own enable switch, which is related to the currently selected Rule Number.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

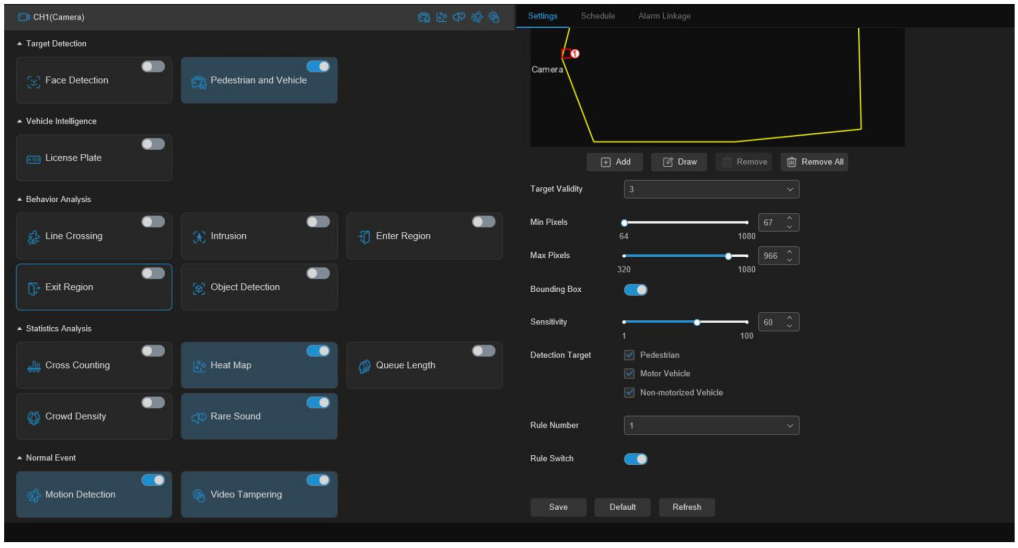
Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area.

Remove All: Remove all rule lines.

8.14.7 Exit Region

Exit Region detection, can detect the target from the area to go outside the area, the target generated outside the area will not generate alarm, according to the results of the judgement linkage alarm.



Exit Region Enable or disable the Region Exiting detection function.

Target Validity: The similarity between the detection target and the set detection type.1 represents a similarity of 80% or more, 2 represents a similarity of 60% or more, 3 represents a similarity of 40% or more, 4 represents a similarity of 20% or more.

Min Pixels: Set the minimum recognition pixel box, the target must be larger than the set pixels to be recognition. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel box, and drag the pixel box to set it at the same time, and the pixel box in the image preview will disappear after the mouse moves away for 5 seconds.

Max Pixels: Set the maximum pixel frame to be recognition, the target has to be smaller than the set pixels in order to be recognition. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Sensitivity: Trigger the sensitivity setting of area region exiting, the larger the sensitivity setting, the more likely to trigger the alarm. Sensitivity correlates with the proportion of the detection target that exits the area. For example, if it is set to 100%, the alarm will be triggered when the detected target has just touched the boundary of the set area. If it is set to 50%, the alarm will be triggered after 50% of the target has already passed the boundary of the set area.

Detection Target: Set objects for perimeter region exiting detection:

Pedestrian: Region Exiting alarm is triggered only for pedestrians.

Motor Vehicle: Region Exiting alarm is triggered only for motor vehicles.

Non-motorized Vehicle: Region Exiting alarm is triggered only for non-motorized vehicles.

Bounding Box: Display the detection rule line switch.

Rule Number: intrusion function supports setting 4 detection rules.

Rule Switch: Each rule line has its own enable switch, which is related to the currently selected Rule Number.

Rule Line Setting Area: According to the parameter setting, set the detection area or detection trigger line in this area.

Add: Add a default detection rule in the setting area.

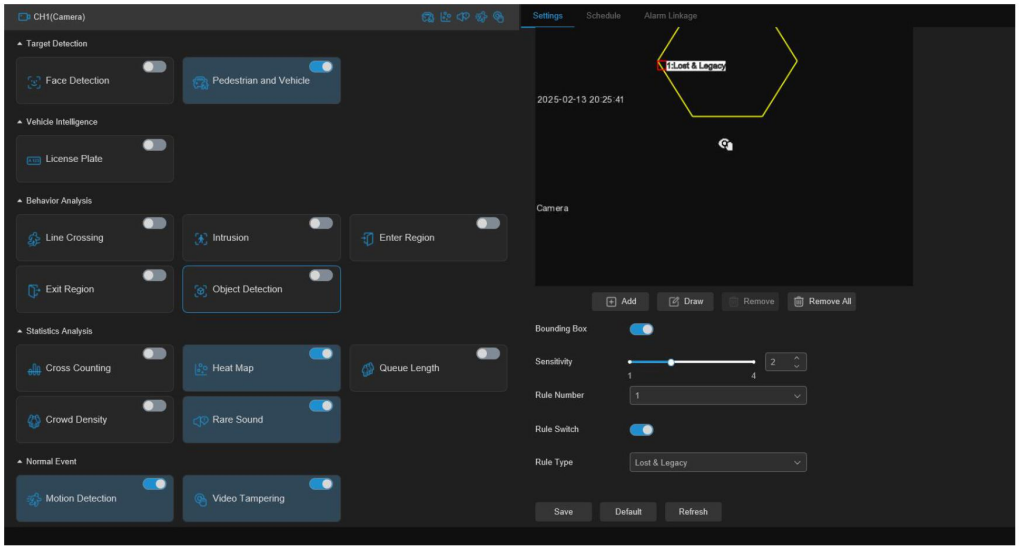
Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area.

Remove All: Remove all rule lines.

8.14.8 Object Detection

Object detection, generating an alarm when an object is found to have been left behind in a supervised scene or when an object is lost.



Object Detection: Enable the Object Detection alarm function switch.

Sensitivity: Filter small interference target settings, the higher the sensitivity, the smaller the detectable object.

Bounding Box: Detection rule line switch.

Rule Number: Support to set 4 detection rules.

Rule Switch: Each rule has an independent enable switch, associated with the currently selected Rule Number.

Rule Type: Set the detection area to be left or lost items to generate an alarm, there are three kinds of rules, Legacy, Lost, Lost & Legacy, and the settings are related to the currently selected Rule Number.

Rule Setting Area: Set, modify and display edited rules.

Add: Add a default detection rule to the setting area.

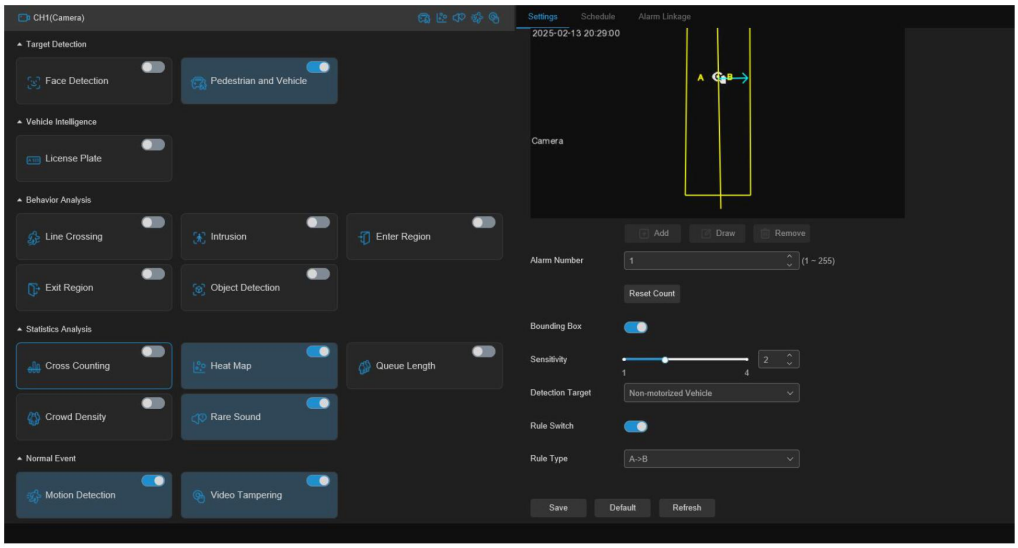
Draw: Manually draw an inspection rule in the setting area.

Remove: Removes the rule selected in the rule setup area.

Remove All: Remove all rules.

8.14.9 Cross Counting

Cross Counting function to make a cross line record of specific objects in the monitoring area. Set the crossing line with two areas AB on both sides of the set line. For example, if the trigger rule of the rule line is A→B, when the object enters from the area of A and passes through the detection line, and leaves the area of B, the count of in is increased by 1. when the object enters from the area of B and passes through the detection line, and leaves the area of A, the count of out is increased by 1. In the case of triggering the increase of the counting, an alarm will be generated only when the in count minus out of the current counting is greater than or equal to the Alarm Number count of the setup, and the interface is shown in the following figure. The interface is shown in the figure below.



Cross Counting: Enable or disable the Cross Counting function.

Sensitivity: Filter small interference target settings, the higher the sensitivity, the smaller the detectable object, can also be used to detect more distant targets in

the scene.

Detection Target: Set the type of target to be recognition by Cross Counting over the line detection, there are 4 modes, switching to save will clear the current count.

Motion: detect all objects, including people, cars, cartons and other objects.

Pedestrian: only identify the target in human form.

Motor Vehicle: Only motorized vehicles are identified.

Non-motorized Vehicle: Identify only non-motorized vehicles.

Alarm Number: Set the conditions for triggering the alarm. The camera will trigger the Cross Counting alarm when the trigger count is updated and the in count minus the out count is greater than or equal to the current setting.

Reset Count: Clear the currently displayed count.

Bounding Box: Detect rule line switch.

Rule Switch: Enable the switch for the current numbered rule line.

Rule Type: set the direction to increase the trigger count of in and out counts, there are two kinds: A→B and B→A. For example, if A→B is selected, the in count will be increased when the monitoring target enters the region A and leaves the region B, and the out count will be increased when the target enters the region B and leaves the region A.

Cross Line Setting Area: Set the rule line for Cross Counting detection in this area.

Add: Add a default detection rule in the setting area.

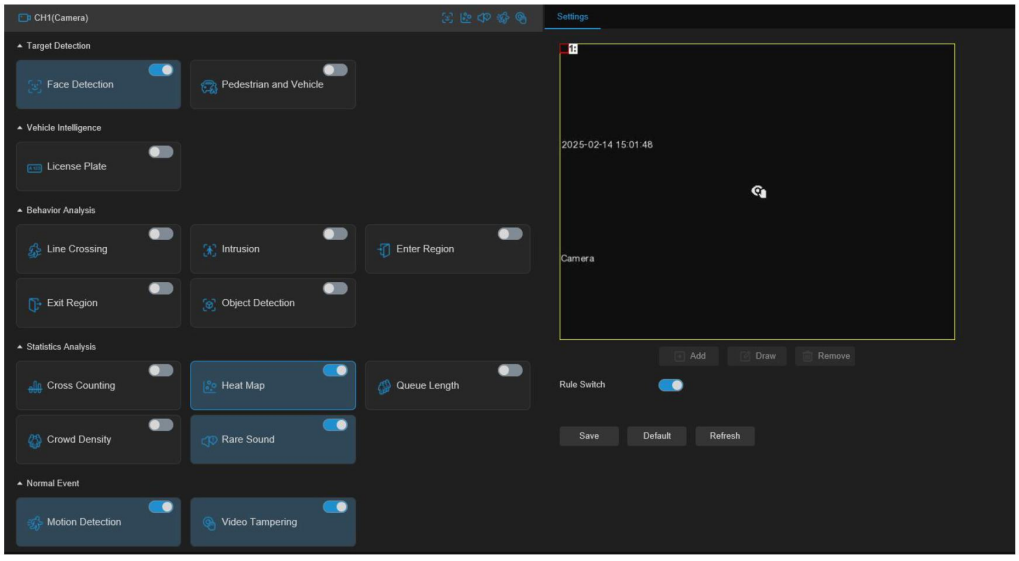
Draw: Draw a detection rule manually in the setting area.

Remove: Removes the rule line selected in the Rule Line Setup area.

Count area: display the count of Cross Counting statistics. refer to section 8.1 to adjust the display position.

8.14.10 Heat Map

Heat map, the user can set all or specific areas, used to detect the specified area of the personnel active information. And the changes will be saved and uploaded at 10-minute intervals. Through the heat map report, the distribution of personnel can be visually presented for both time or space dimensions, which makes it easy to understand the activity level of each area in the scene. This function only supports data recording, not alarm.



Heat Map: Enable or disable Heat Map statistics function.

Rule Switch: Enable the rule switch for the current number.

Monitoring Area Settings: Sets the area where the camera's Heat Map function will count the heat, by default all areas are checked.

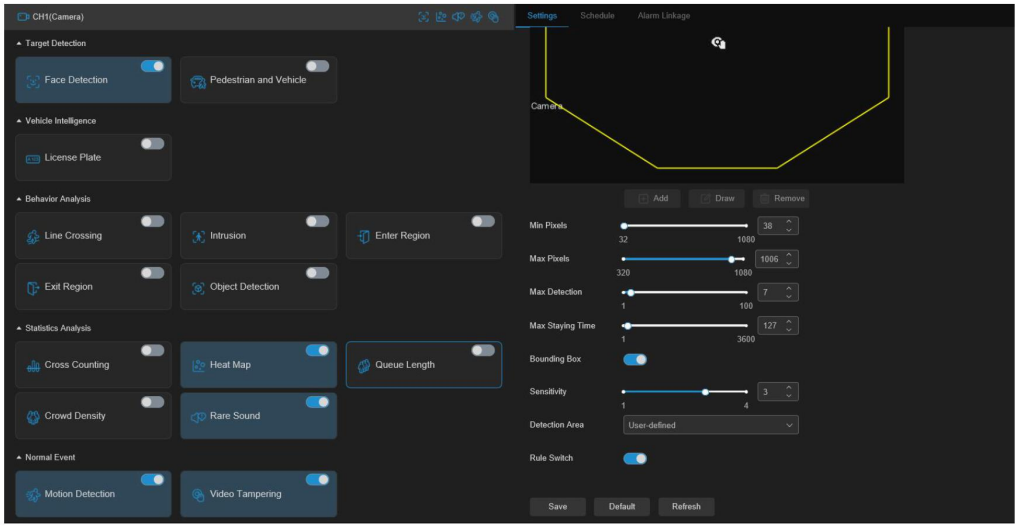
Add: Add a default detection rule to the setting area.

Draw: Manually draw a detection rule in the setting area.

Remove: Removes the rule selected in the Rule Settings area

8.14.11 Queue Length

Queuing detection function, by monitoring the number of people queuing in the set queue area, as well as the queuing waiting time, generates an alarm when the queue is too long or the queuing time is long.



Queue Length: Enable or disable Queue Length detection function.

Min Pixels: Based on the resolution of 1080P, filter out the targets with head smaller than the setting in the screen. When the mouse moves to the progress bar, the image preview on the right side will show the actual size of the pixel frame, and drag the pixel frame to set it at the same time, and the pixel frame in the image preview will disappear after the mouse moves away for 5 seconds.

Max Pixels: Based on the resolution of 1080P, filter out the targets with head larger than the setting in the screen. When the mouse moves to the progress bar, the right

image preview will show the actual size of the pixel frame, and at the same time, drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Max Detection: Maximum value of heads allowed to be detected in the detection area, exceeding this value generates an alarm.

Max Staying Time: the maximum length of time allowed to stay in the detection area, when more than the set length of time, no personnel to leave the detection area to generate an alarm. (This time length statistics from the last person to leave the region to start timing, to reach the set length of time has not yet left the personnel, it will be considered processing timeout, triggering an alarm)

Note: Only when there is a target to leave the detection area to restart counting, the sudden disappearance of the target in the region is ignored. only in the region when there is a detected target to count.

Sensitivity: Filter the smaller interference target settings, the higher the sensitivity, the smaller the target can be detected.

Bounding Box: display the detection box, detect the rule line switch.

Detection Area: Set the area to be detected by the queuing detection function, there are two modes.

Full Screen: Detect the whole area monitored by the camera.

User-defined: Custom the detection area.

Rule Switch: Enable switch for the current numbered rule, displayed when setting the custom detection area.

Detection area setting: Open the setting when opening the custom detection area, support to set the detection area of 3-8 sides.

Add: Add a default detection rule to the setting area.

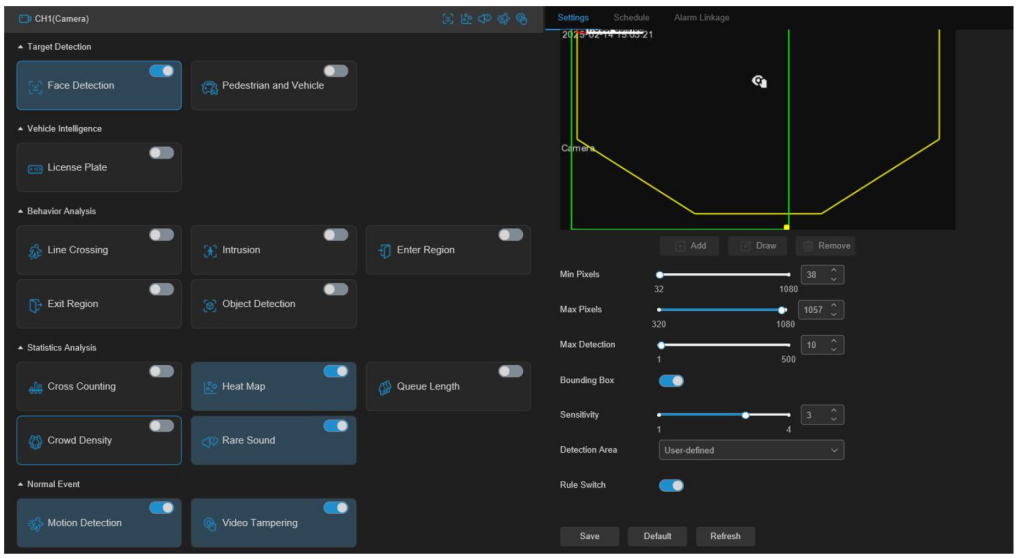
Draw: Manually draw an inspection rule in the setting area.

Remove: Delete the selected rule in the rule setting area.

Count Display Area: Display the number of people in the current monitoring area and the time the queue is waiting for the person who is serving to finish the service, please refer to section 8.1 for the adjustment of the display position.

8.14.12 Crowd Density

Crowd density detection function, through the human figure recognition function to identify the way the human head, identify the number of people appearing in the monitoring area, when the number of people over the preset value to produce an alarm.



Crowd Density: Enable the Crowd Density detection function.

Min Pixels: Based on the resolution of 1080P, filter out the targets with head smaller than the setting in the screen. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview will disappear.

Max Pixels: Based on the resolution of 1080P, filter out the targets with head larger than the setting in the screen. When the mouse moves to the progress bar, the right image preview will show the actual size of the pixel frame, and at the same time, drag the pixel frame to set it, when the mouse moves away for 5 seconds, the pixel frame in the image preview disappears.

Max Detection: the maximum value of head detection allowed in the detection area, exceeding this value generates an alarm.

Sensitivity: filtering smaller interference target settings, the higher the sensitivity, the smaller the target can be detected

Bounding Box: display the detection box, detection rule line switch.

Detection Area: Set the detection area of crowd density detection function, there are two modes:

Full Screen: Detect the whole area monitored by the camera.

User-defined: Custom the detection area.

Rule Switch: The current numbered Rule Enable switch, displayed when setting the custom detection area.

Detection Area Setting: Open the setting when opening the custom detection area,

support to set the detection area with 3-8 sides.

Add: Add a default detection rule to the setting area.

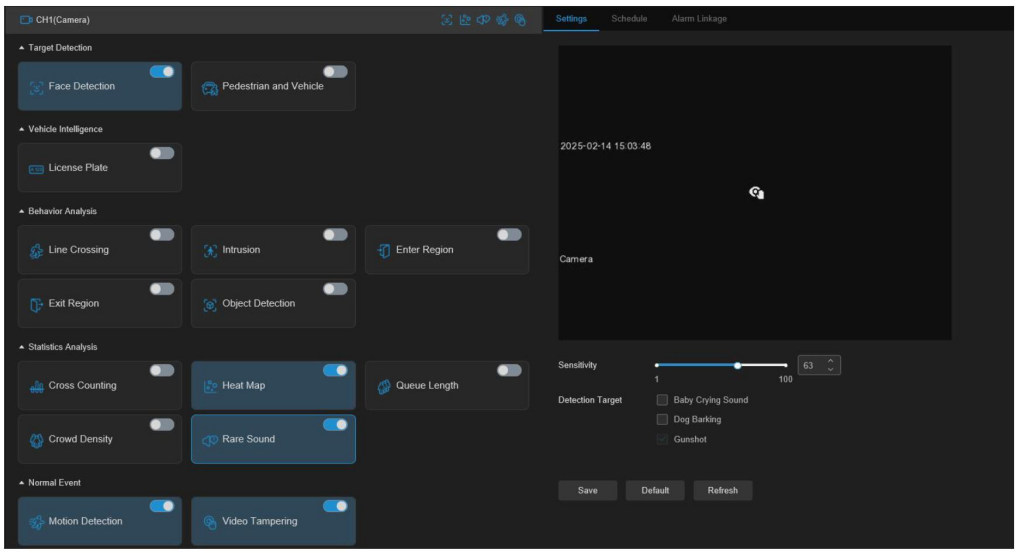
Draw: Manually draw an inspection rule in the setting area.

Remove: Delete the selected rule in the rule setting area.

Count Display Area: Display the number of people in the current monitoring area, please refer to section 8.1 for adjusting the display position.

8.14.13 Rare Sound

Rare Sound detection, according to the needs of the application scene can be set to different detection types, such as children crying, gunshots, dog barking, etc.When the camera detects the set sound alarm.



Rare Sound: Enable or disable Rare Sound detection function.

Sensitivity: Sensitivity, range 1~100.

Detection Target: Detection types.

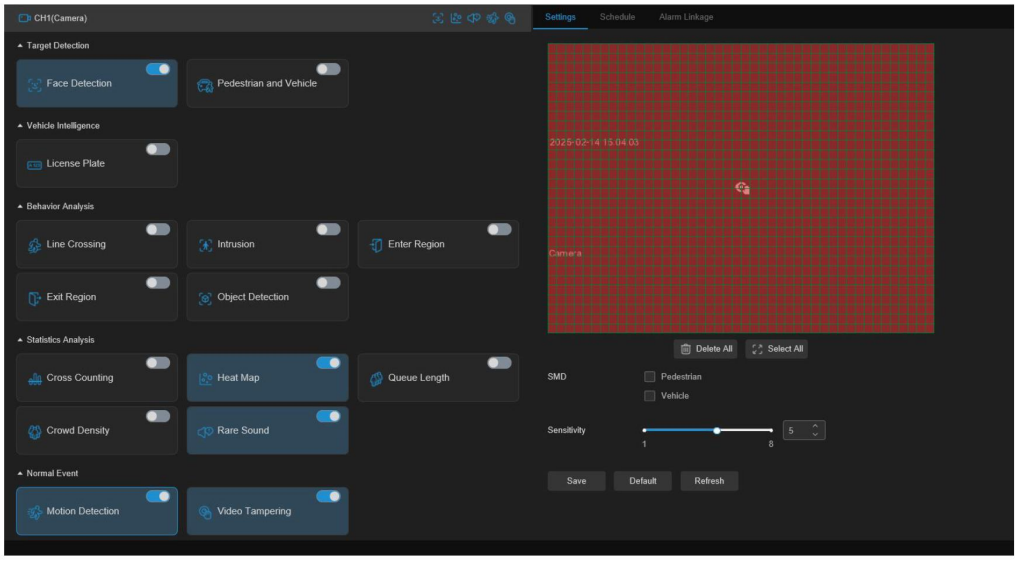
Baby Crying Sound: Check the box to detect baby crying sound.

Dog Barking: Check the box to detect dog barking sound.

Gunshot: Check the box to detect gunshot sound.

8.14.14 Motion Detection

Configure the parameters related to motion detection on this page. When the camera detects motion of a detected target within the frame, the camera will trigger a series of alarms. For example, it will send an email alert containing an additional image of the camera that triggered the alarm to a user-specified email address (if this option is enabled), as well as a push notification via the mobile application.



Drag the left mouse button to delineate the detection zone in the right viewport. Only movements within the zone will trigger the alarm.

Motion Detection: Activate or deactivate motion detection.

SMD: Set the object of motion detection.

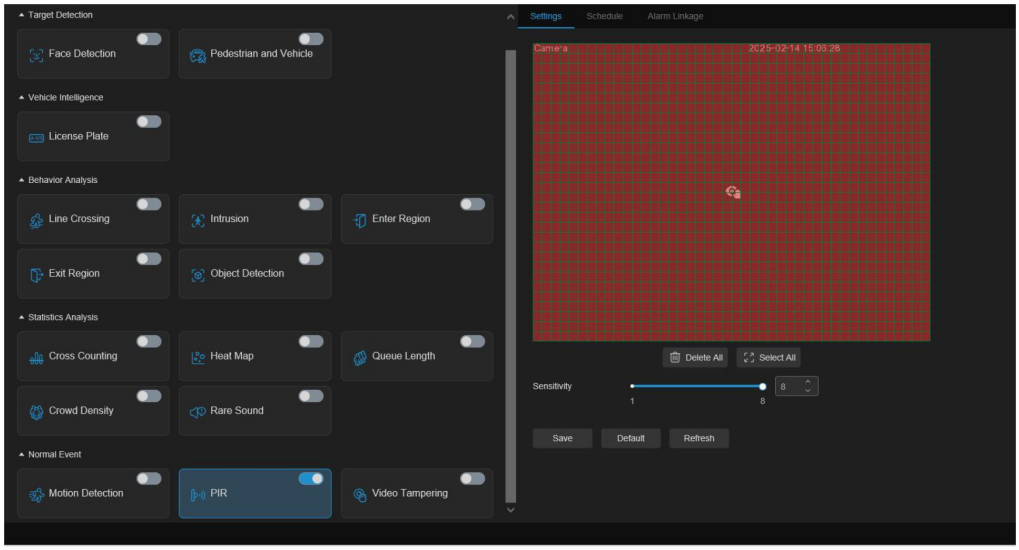
Pedestrian: Only detect the alarm for human targets.

Vehicle: Detect and alarm only vehicle targets.

Sensitivity: Set the sensitivity of motion detection, the larger the value, the more sensitive it is.

8.14.15 PIR

PIR utilises the pyroelectric infrared sensing principle to detect infrared rays emitted by people or animals and convert them into an electrical signal output. The PIR function is widely used in a variety of applications where security monitoring is required, such as homes, offices, shops, etc. It is particularly suitable for those scenarios where low power consumption is required and high sensitivity is required. It is especially suitable for those application scenarios that require low power consumption and high sensitivity. For example, surveillance cameras in the home are often equipped with PIR function, which can automatically record or send alarm messages when human activities are detected. Compared with traditional motion detection, PIR body detection is more accurate and reliable. Motion detection reacts to any changes in the screen, including wind blowing curtains, light changes, etc., which can easily lead to false alarms. PIR body detection only reacts to objects with a heat source, which effectively reduces the possibility of false alarms and is more energy efficient.



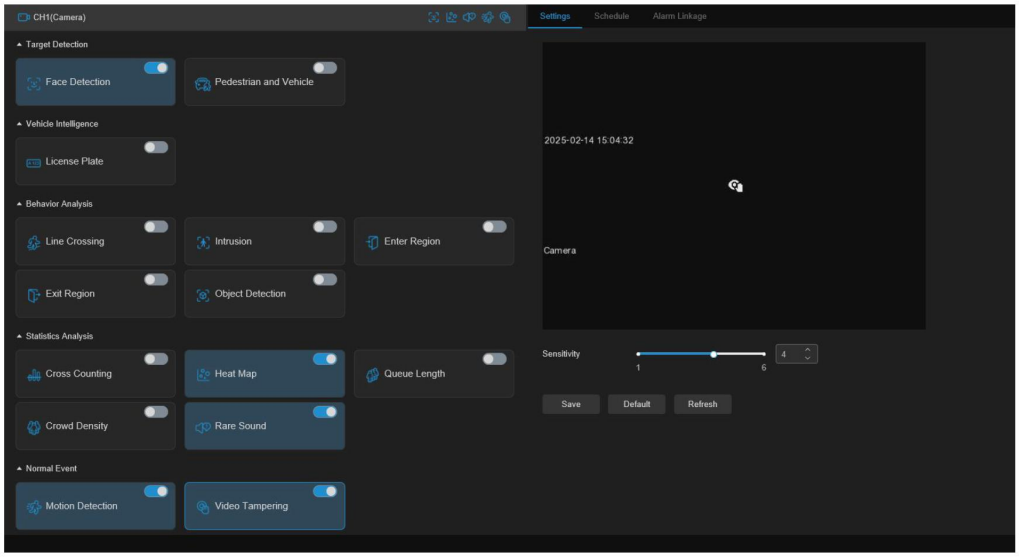
Drag the left mouse button to delineate the detection zone in the right viewport. Only movements within the zone will trigger an alarm.

PIR: Enables or disables the PIR.

Sensitivity: Set the sensitivity of motion detection, the larger the value the more sensitive.

8.14.16 Video Tampering

Detects live view screen occlusion and alerts.

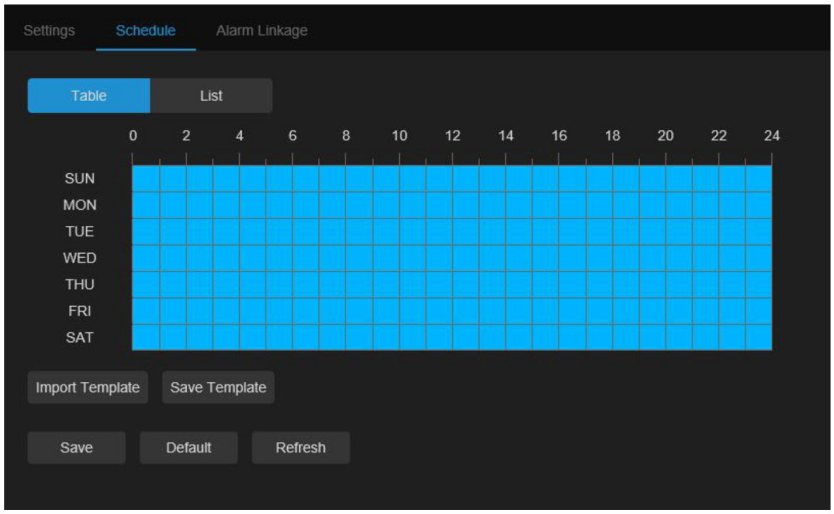


Video Tampering: Switch for camera occlusion detection.

Sensitivity: set the sensitivity of lens occlusion detection, the larger the value the more sensitive.

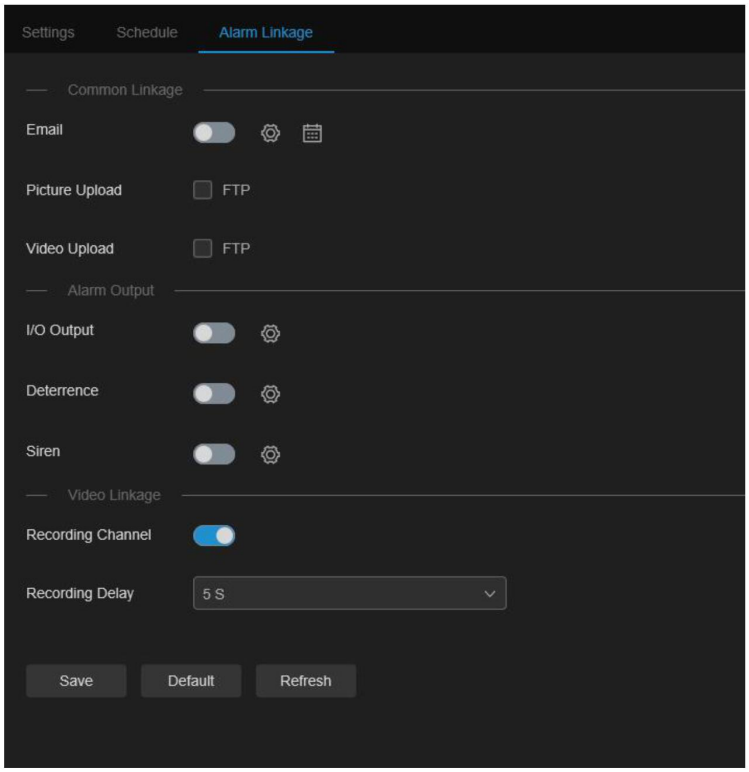
8.14.17 Event Schedule

To set the schedule for each event to take effect, refer to 8.7 Schedule Setup.



8.14.18 Alarm linkage settings

Set the function to be linked when each event triggers an alarm.



Email: Whether the camera sends an email when an event alarm is triggered. Click on the Setup button or the Schedule button on the right to set the email parameters, see 8.17 Email Settings.

Picture Upload: If FTP is checked, the camera sends a picture to the associated FTP server when an event alarm is triggered. The FTP server needs to be associated first. Refer to chapter 8.8 FTP Server Settings. Click on the Setup button on the right to select which channel's corresponding alarm picture should be uploaded to the FTP server.

Video Upload: Check FTP to send the video to the associated FTP server when the

camera triggers an event alarm. An FTP server needs to be associated with the camera first. Refer to 8.8 FTP Server Settings. Click on the Setup button on the right to select which channel should be uploaded to the FTP server.

I/O Output: The alarm output of the camera's linked I/O when the camera triggers an event alarm. Click the Setup button on the right to tick the I/O alarm output source. The output duration and schedule can refer to 8.9.2 Alarm Output Settings.

Deterrence: Light deterrent linkage switch, when alarm is triggered, alarm response will be performed according to the warm light and red and blue light setting parameters in 8.10 Light Deterrence Setting Page. set the parameters directly by clicking the setting button on the right side.

Siren: Siren Deterrent switch, when the alarm is triggered, the alarm response will be made according to the parameter of 8.11 Siren Deterrent Setting Page. set the parameters directly by clicking the setting button on the right side.

Wiegand: Wiegand linkage switch, which transmits to the control system or data centre via the Wiegand interface when a license plate is recognised (supported by some models)

Recording Channel: Recording channel linkage switch, click the right setup button to select the linkage channel. When an alarm is triggered, the selected channel will record the corresponding alarm type.

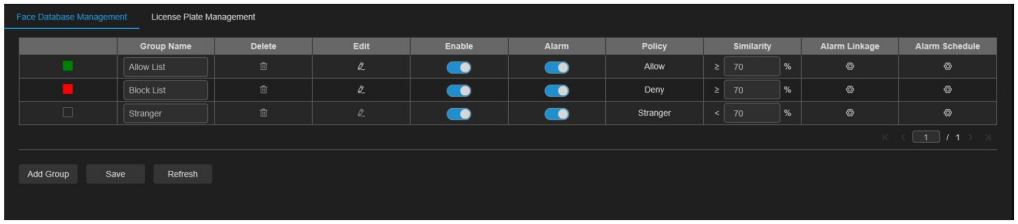
Recording Delay: The delay time for the camera to record after the alarm ends.

8.15 List Management

8.15.1 Face recognition

The face recognition function, which focuses on identifying the identity of the detection target, requires basic data for comparison. The program establishes the database base for face matching through the database management function.

Note: Modifications to the database require a small period of system reloading to take full effect.



Alarm Policy Display: In the camera, it only serves as a policy prompt. Green represents white list, red represents black list, and no color represents stranger group.

Group Name: Edit and modify the current group name, the specific group name will be prompted when the alarm is pushed.

Delete: Delete the group, the first 3 groups are not allowed to delete.

Edit: Open the picture setting of group reference, please continue to the following picture for specific information.

Enable: Face recognition uses grouped data for comparison.

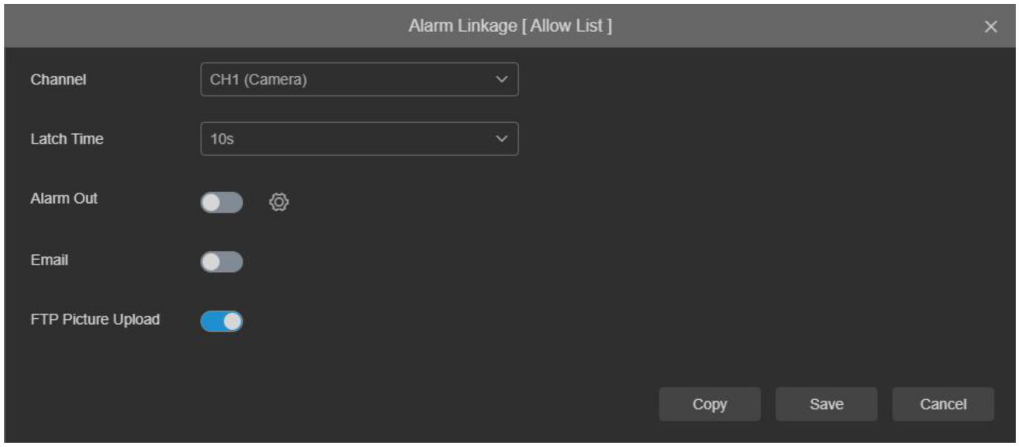
Alarm: Enable alarm response setting master switch.

Police: Alarm policy, the first 3 groups can not be modified, other groups can be

custom as Allow, Deny.

Similarity: When face matching, the similarity is greater than the setting to generate an alarm.

Alarm Linkage: Group alarm setting:



Latch Time: The time that the I/O alarm tail line continues to alarm when the camera acquires a picture and matches it successfully.

Note: The camera must support the I/O output function and the working time is controlled by the corresponding schedule.

Alarm Out: Set the Enable switch.

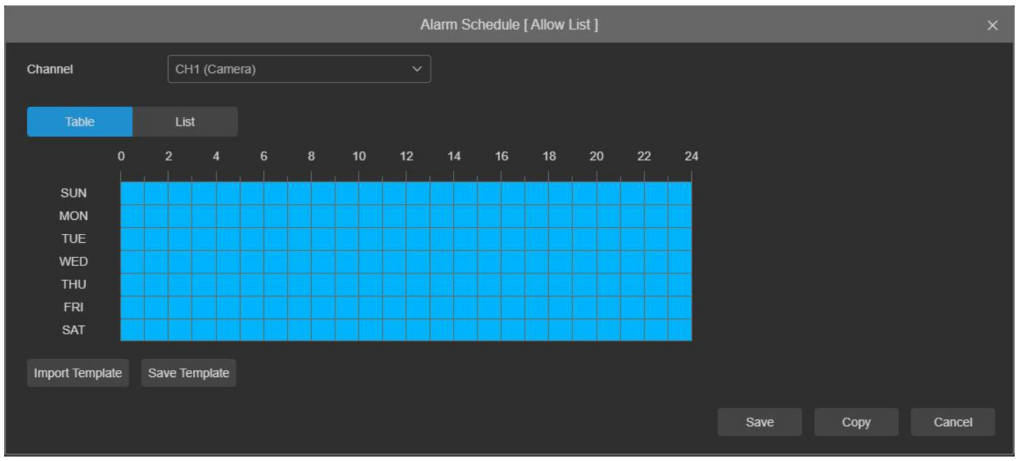
Email: Switch to send an email when the grouped face recognition matches are successful.

FTP Picture Upload: Switch to send the picture to the associated FTP server when the group face recognition match is successful.

Note: At the same time by the schedule control effective time, need to associate FTP server first.

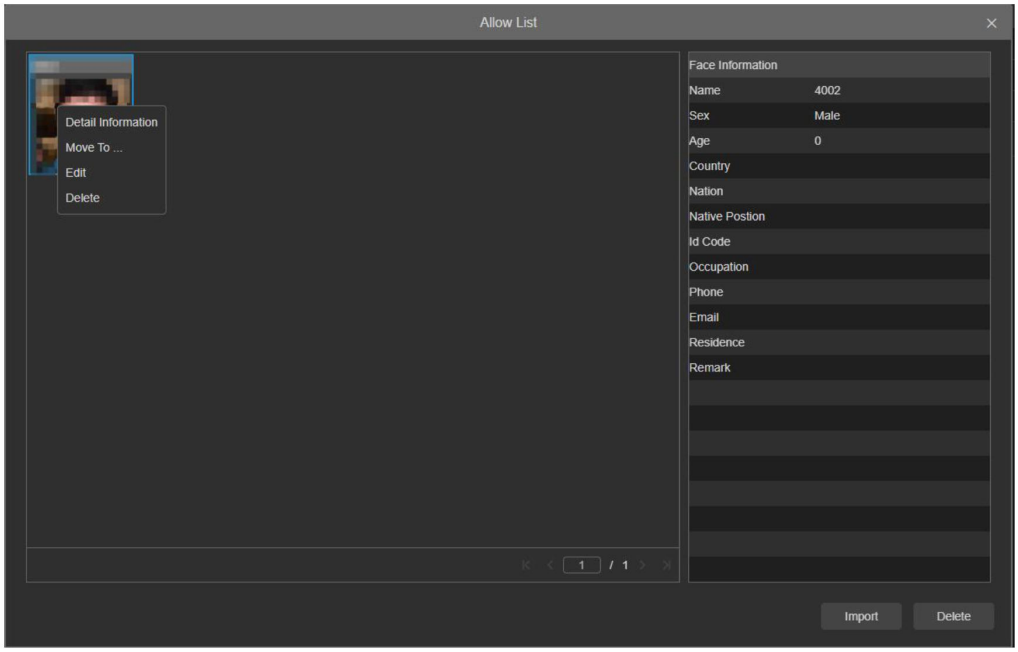
Alarm schedule: Set the effective time of Alarm Out, Email and FTP Picture Upload

for group alarm, please refer to 8.6 Schedule Settings.



Add Group: add a new database group, support up to 16 database groups.

Click Edit icon, set the specific reference data of the corresponding group, the interface is shown in the following figure.



Added Picture Display Area: Displays the current face database pictures that have been added to the group.

Info: Display the editing information of the currently selected picture.

Detail Information: Right mouse button event to view the detail information of the

currently selected picture.

Move To ... : Right mouse button event, move the currently selected image to other group.

Edit: Right mouse button event, open the editing interface of the currently selected picture, re-edit the information.

Delete: right mouse button event, delete the currently selected picture.

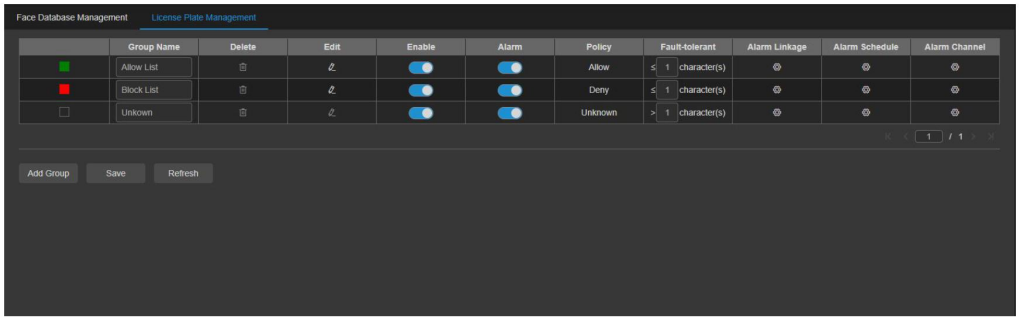
Import: add new face data to the current group, import local pictures or pictures already captured by the camera.

Delete: Deletes face data from the database in a batch, click on the control, then select the pictures to be deleted and click Delete again

8.15.2 License plate recognition

The license plate recognition function, which focuses on identifying the identity of the detection target, requires basic data for comparison. The program establishes the database base for license plate matching through the database management function.

Note: Changes to the database require a small system reload to take full effect.



Alarm strategy display: In the camera, it only serves as a strategy reminder. Green

for white list, red for black list, colourless for unfamiliar license plate list.

Group Name: Edit and modify to show the current group name, the specific group name will be prompted when the alarm is pushed.

Delete: group delete function, the first 3 groups are not allowed to delete.

Edit: Open the picture settings of the grouping reference, for more information, please continue with the content of the following figure.

Enable: license plate recognition using grouped data for comparison.

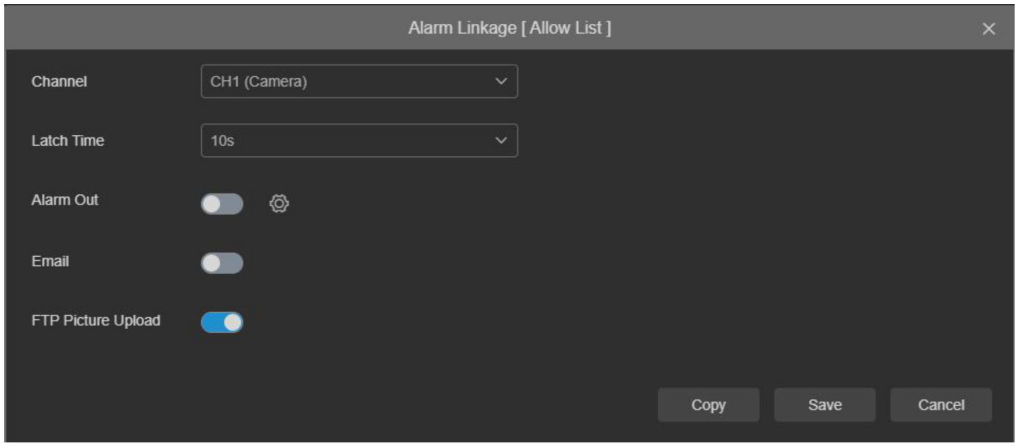
Alarm: Enable alarm response setting master switch.

Police: Alarm policy, the first 3 groups can not be modified, other groups can be customised as Allow, Deny.

Fault-tolerant: Fault-tolerant characters, allows the search results to display the number of inconsistent characters between the license plate number and the set number of characters, the lower the setting, the higher the match of the search results.

Note: If you want to search the target license plate with only few characters, set the error tolerance rate to the maximum, at this time, many irrelevant license plates will be searched, but the search results are sorted by similarity, and the license plates with high similarity are in the front, so that find the desired target license plate.

Alarm Linkage: Group alarm settings:



Latch Time: The time that the IO alarm tail line continues to alarm when the camera acquires a picture and matches it successfully.

Note: The camera must support the IO output function and the working time is controlled by the corresponding schedule.

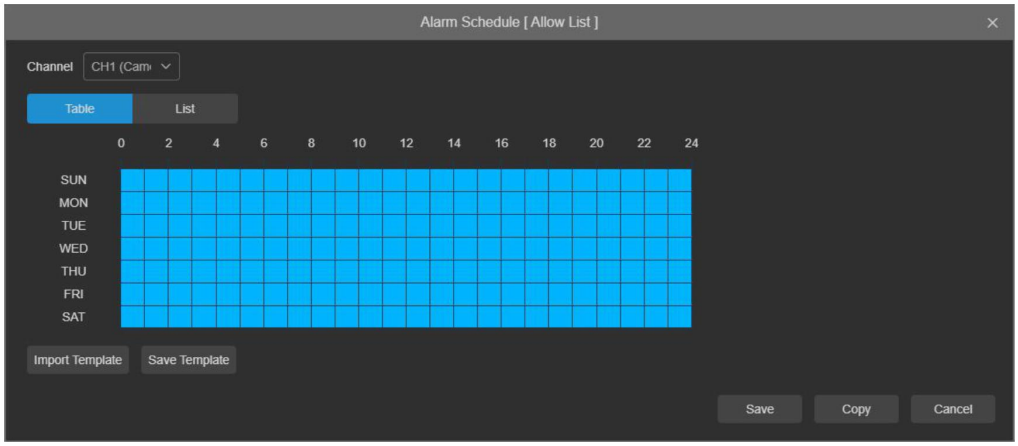
Alarm Out: Set the Enable switch.

Email: Switch to send an email when the grouped face recognition matches are successful.

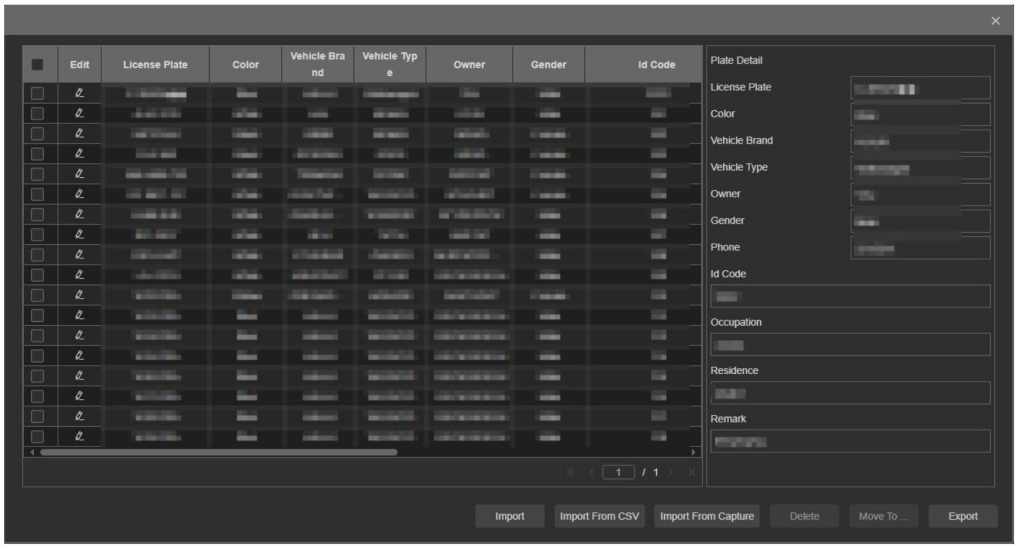
FTP Picture Upload: Switch to send the picture to the associated FTP server when the group face recognition match is successful.

Note: At the same time by the schedule control effective time, you need to associate FTP server first.

Alarm schedule: Set the effective time of Alarm Out, Email and FTP Picture Upload for group alarm, please refer to chapter 8.6 Schedule Settings.



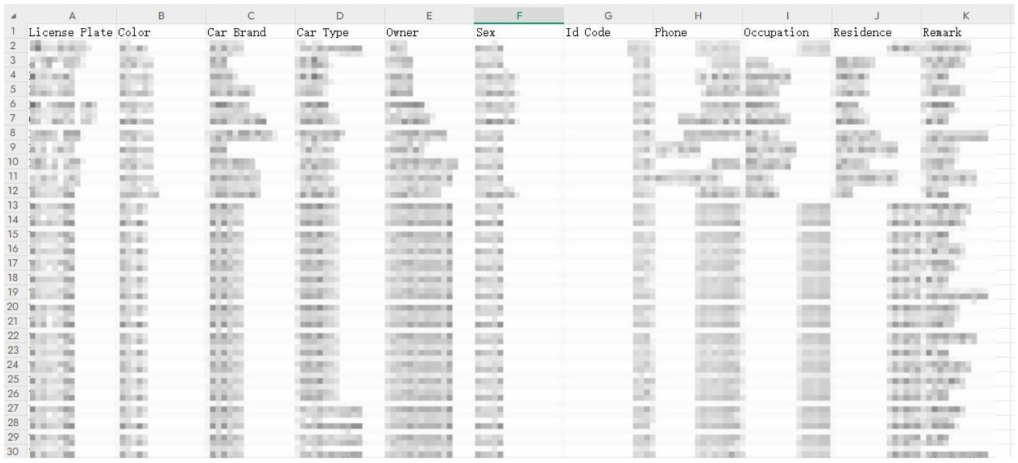
Click the Edit con to set the specific reference data of the corresponding group. The interface is shown in the figure below.



There are three ways to add license plate information: Import, Import From CSV, Import From Local Capture. When you add more than 5000 pieces of data, a pop-up box will appear with the content ‘Add data has reached the upper limit of the group’.

(1) Click Import button to manually add a single license plate.

2) Click Import From CSV button to import single or multiple data from CVS form, the format of CVS form is as below.

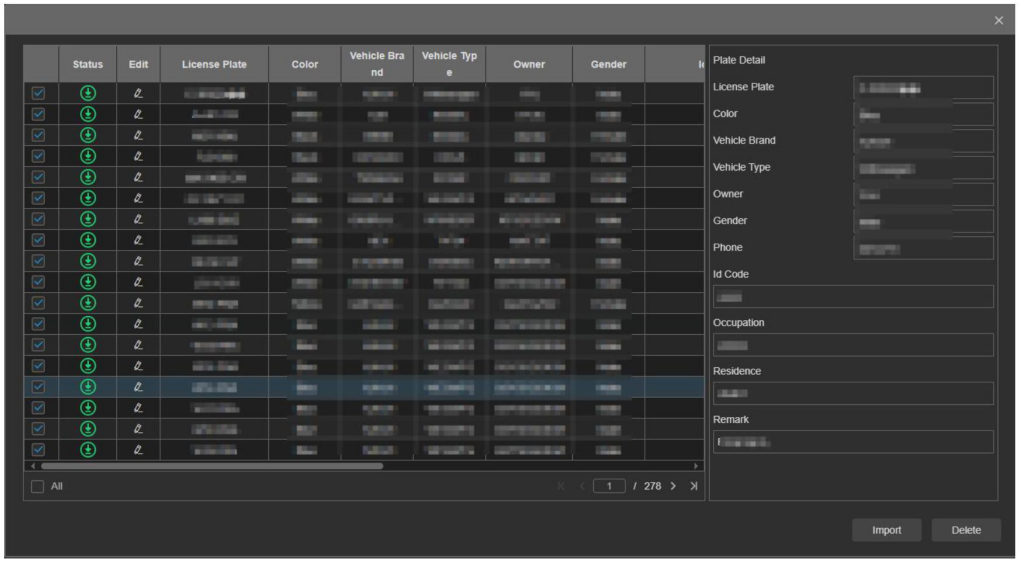


Select the license plate file of CSV you want to import, click import button to add to the group, Delete button to delete the unwanted license plate information.

3) Click **Import From Capture** button to import license plate information from local to database.

Select Date, Duration and Alarm Group and click **Search**, it will search all the license plates saved by all devices in this period.

All: Select all the license plate information.



Click a piece of data to edit the information of this license plate, after editing, click

Save button to save, if the modification is successful.  will become .

4）Delete: Check the checkbox of the license plate information and click the button to delete the license plate information.

(5) Move to...: Tick the checkbox of the license plate information and then click the button to move the license plate information to other groups.

6）Click Export button to export and save the information of the whole group.

Enable: The license plate recognition uses grouped data for comparison.

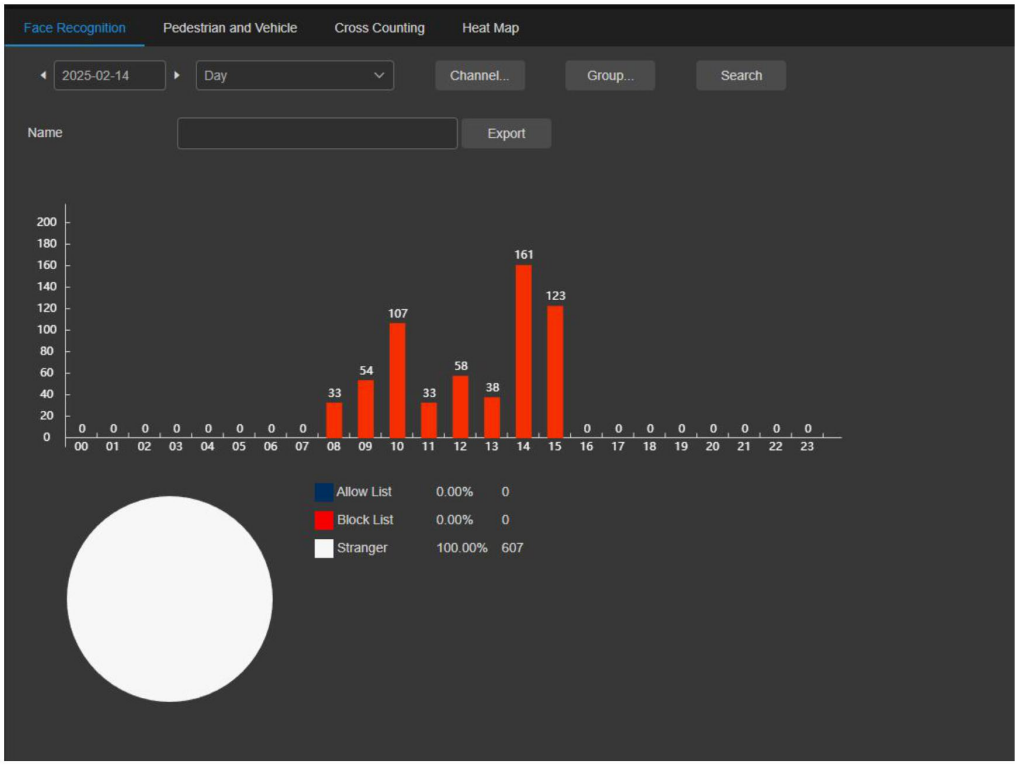
Add Group: Add a new database group, support up to 16 database groups.

8.16 Statistics

AI data statistical analysis function.

8.16.1 Face Recognition

The face capture data statistics analysis function searches and counts the face data saved in the SD card according to the search settings, and its interface is shown in the following figure.



Time: Reference time for search mode.

Search Mode: The data search supports 5 time ranges: Day, Week, Month, Quarter, Year.

Group: The group for searching when searching statistics.

Search: Re-search the data according to the current search settings.

Export: You need to add an export file name to export the current search data using an Excel document.

Display Area: Display the current search results in the form of charts and fan charts below.

8.16.2 Pedestrian & Vehicle

Pedestrian & Vehicle data statistics. Includes alarms for Pedestrian & Vehicle, Line Crossing, Intrusion, Region Entrance, Region Exiting, with the interface shown

below.



Time: The reference time for the search pattern.

Search Mode: Data search supports 5 time ranges: Day, Week, Month, Quarter, Year.

Intelligent: search according to the type of marker at the time of capture acquisition, Pedestrian, Motor Vehicle, Non-motorised Vehicle, Line Crossing [Pedestrian], Line Crossing [Motor Vehicle], Line Crossing [Non-motorised Vehicle], Intrusion [Pedestrian], Intrusion [Motor Vehicle], Intrusion [Non-motorized Vehicle], Region Entrance [Pedestrian], Region Entrance[Motor Vehicle], Region Entrance[Non-motorised Vehicle], Region Exiting[Pedestrian], Region Exiting[Motor Vehicle], Region Exiting [Motor Vehicle], Region Exiting [Non-motorised Vehicle], and a total of 18 types of grips.

Search: Re-search the data based on the current search settings.

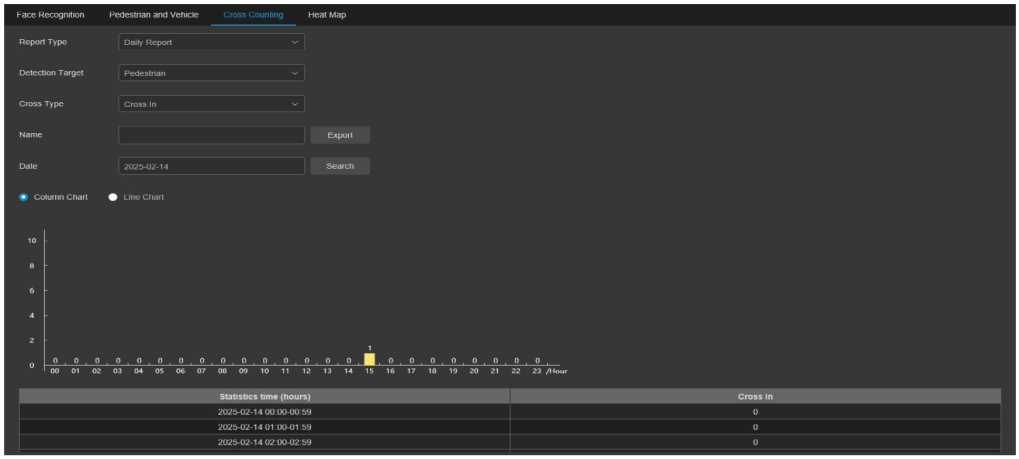
Export: You need to add an export file name to export the current search data

using an Excel document.

Display area: Show the current search results in the form of a graph.

8.16.3 Cross Counting

Cross Counting is a function of searching and counting the data across the line, and its function interface is shown in the figure.



Report Type: The data search supports 4 types of time ranges: Daily report, Weekly report, Monthly report and Annual report.

Detection Target: Set the corresponding alarm model that the data needs, for example, the data triggered by Motion cannot be searched by other types. For example, Motion triggered data cannot be searched by other types. There are three types of models, Motion, Person and Vehicle, corresponding to the function settings.

Cross Type: Search data according to the crossing statistics, there are two types of models: Cross In and Cross Out.

Export: You need to add export file name to export the current search data using Excel file.

System time: the reference time of current Report Type.

Mode: Whether the chart in the icon display area is displayed as a bar chart or a line chart.

Display Area: Show the current search results in the form of charts.

Search: Search data according to the current settings.

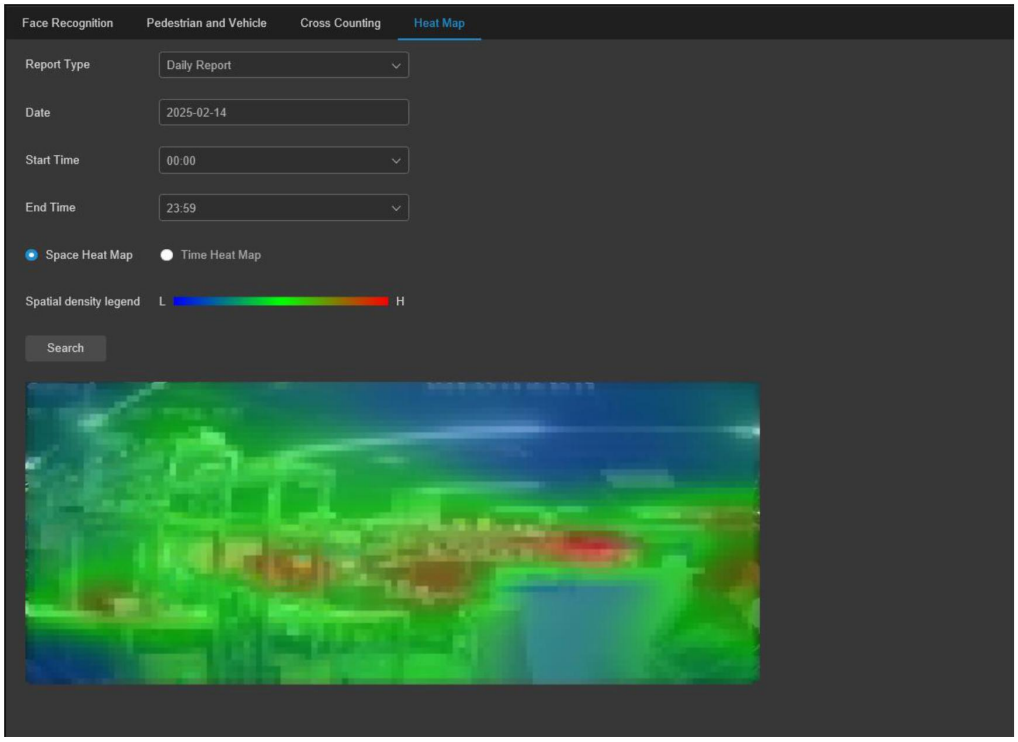
8.16.4 Heat Map

The heat map report allows you to visualise the distribution of people in two dimensions: time or space.

Space heat map: the different areas in the screen of the personnel active situation. The red color is the densest area, i.e. the most active, and the blue color is the least densely populated area.

Time heat map: people's activity at different times in the screen. The vertical coordinate value is the index calculated according to the number of people, stay time and other comprehensive calculation, the larger the value the higher the activity, does not represent the number of people.

The camera must be equipped with a usable SD card, the heat map information will be stored in the SD card, the interface effect is shown in the figure.



Report Type: The data search supports the search of Daily report, Weekly report, Monthly report and Annual report in 4 time ranges.

Date: The date to which the data search refers.

Start Time: only shown in Daily report setting, set the specific hour to start the search.

End Time: Displayed only when setting up a daily report, sets the specific hour at which the search ends.

Mode: Set the way to display the data when searching, there are two ways: graph and table.

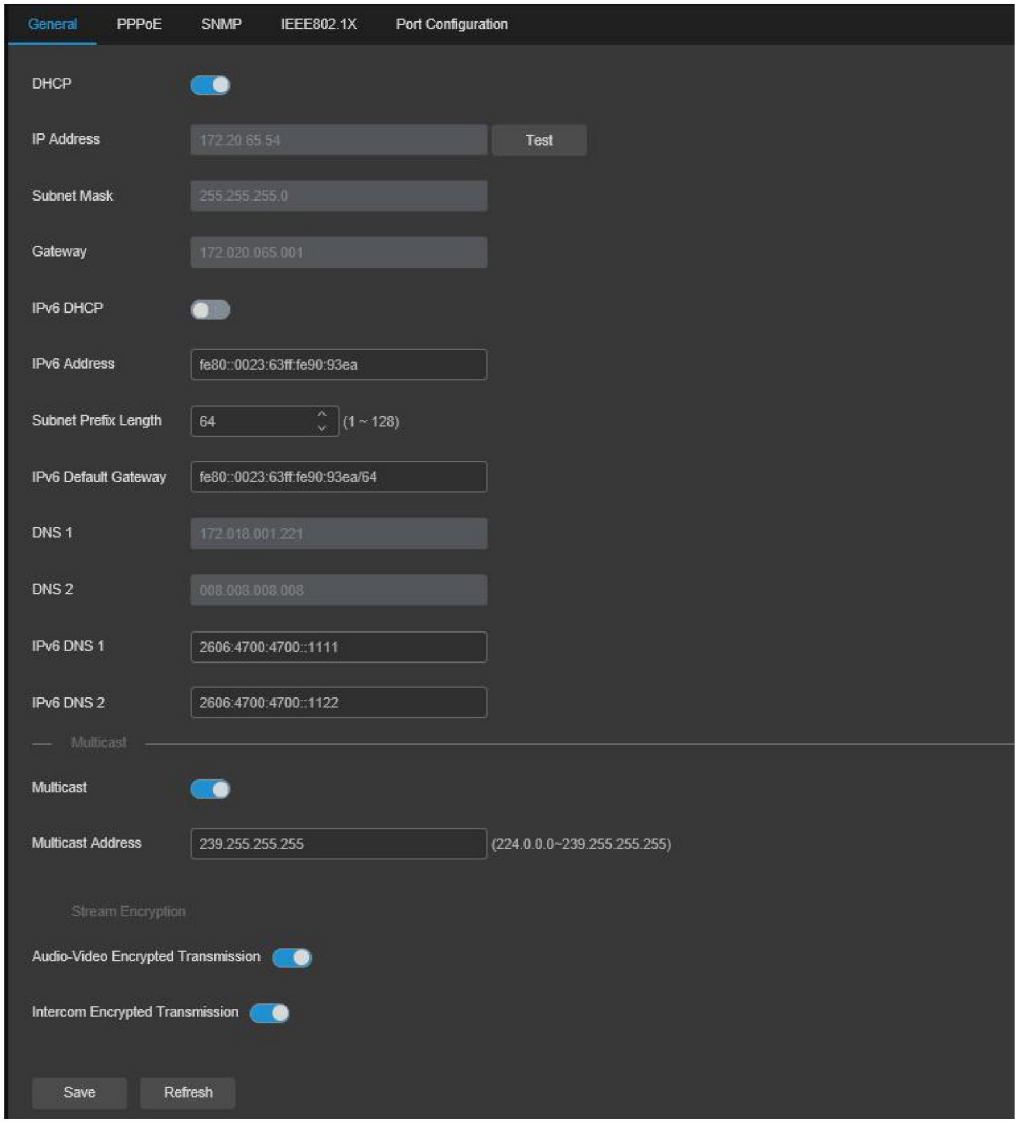
Display Area: display the frequency of changes in the monitoring area in the form of a graph, and display the frequency of changes in the monitoring area in the form of a table for different time periods.

Search: search data according to the current settings.

8.17 Network Settings

This menu allows users to configure network parameters such as PPPoE, DHCP, and SNMP. the most common type is DHCP. unless a static IP is set manually. most of the time the network type is DHCP. if the user needs to authenticate a username and password to connect to the network, select PPPoE.

8.17.1 General settings



If connecting to a router that allows DHCP, tick the DHCP box. The router will automatically assign all network parameters to the device. Unless the following parameters are set manually for the network:

IP Address: The IP address is the identifier of IPC on the network.It consists of four numbers between 0 and 255 separated by periods.for example, "192.168.001.100".
Subnet Mask: A subnet mask is a network parameter that defines the range of IP addresses that can be used in the network.If the IP address is likened to the street you live on, then the subnet mask is the community.A subnet address also consists

of four numbers separated by periods, for example, "255.255.000.000".

Gateway: This address allows IPC to access the network.The format of a gateway address is the same as that of an IP address, for example, "192.168.001.001".

IPv6 Address: The IPv6 address is the identifier of IPC on the network.It consists of eight numbers between 0 and FFFF, separated by colons, for example, "ABCD: EF01: 2345: 6789: ABCD: EF01: 2345: 6789" .

DNS1/DNS2: DNS1 is the active DNS server and DNS2 is the standby DNS server.Usually you just need to enter the DNS1 server address.

Main Stream: If this option is enabled, the main stream can be used for multicast.

Multicast Address: Specify a multicast address.A third-party player can request the camera to send a multicast media stream through the RTSP protocol.

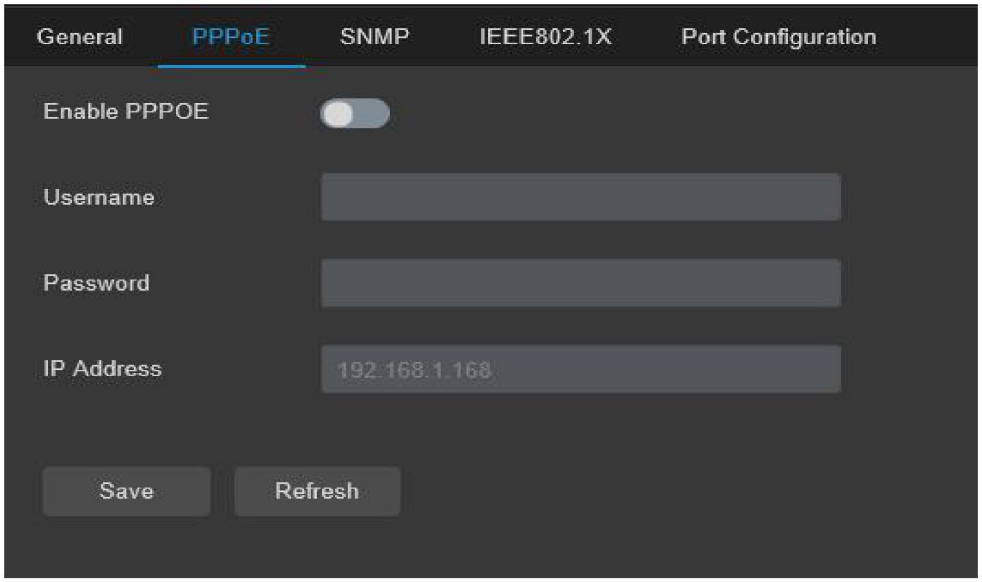
Video Encryption Transmission: Indicates audio/video encryption transmission.

If the IPC is capable of warning you of repeated IP addresses in the same network segment, when IP addresses are repeatedly used, the following message will pop up when you click the 



8.17.2 PPPoE

The device supports networking communication via PPPoE dial-up.

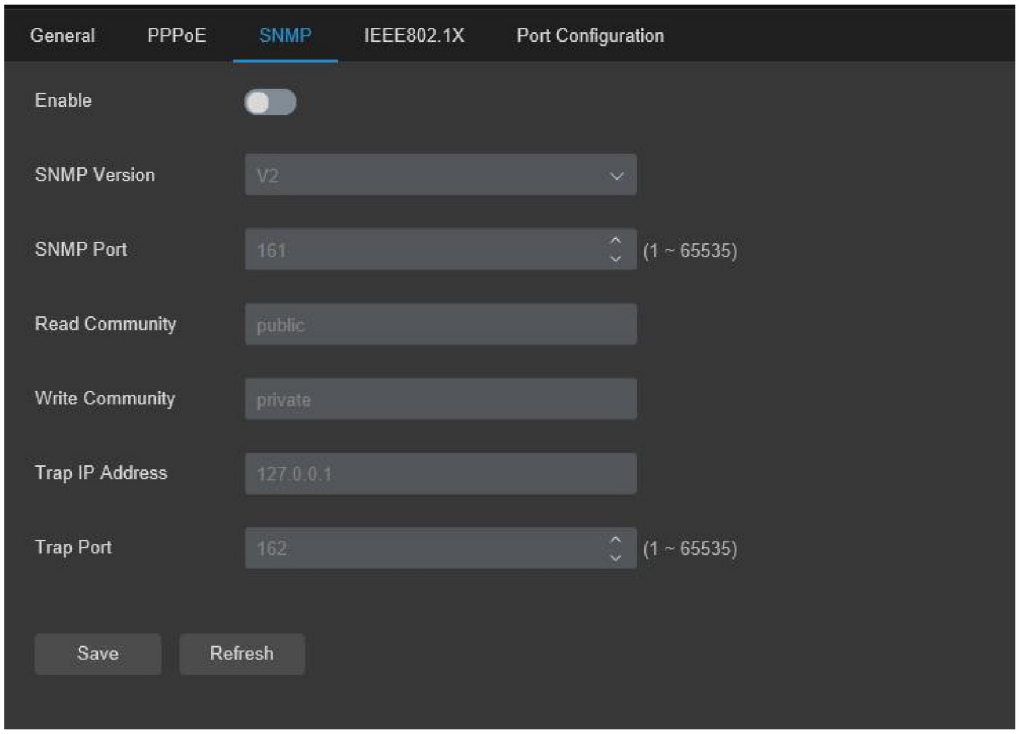


Check the "Enable PPPoE" box and enter the PPPoE username and password.

Click "Save" to save and the system will reboot to activate the PPPoE settings.

8.17.3 SNMP

Simple Network Management Protocol (SNMP) is a standard protocol specifically designed to manage network nodes (servers, workstations, routers, switches, and HUBS, etc.) in an IP network and is an application layer protocol.



Enable: Enable or disable SNMP.

SNMP Version: Set the version of SNMP server, V1, V2 and V3 are available.

SNMP Port: Set the port of the SNMP server.

Read Community: Set the SNMP server Read Community value.

Write Community: Set the SNMP server Write Community value.

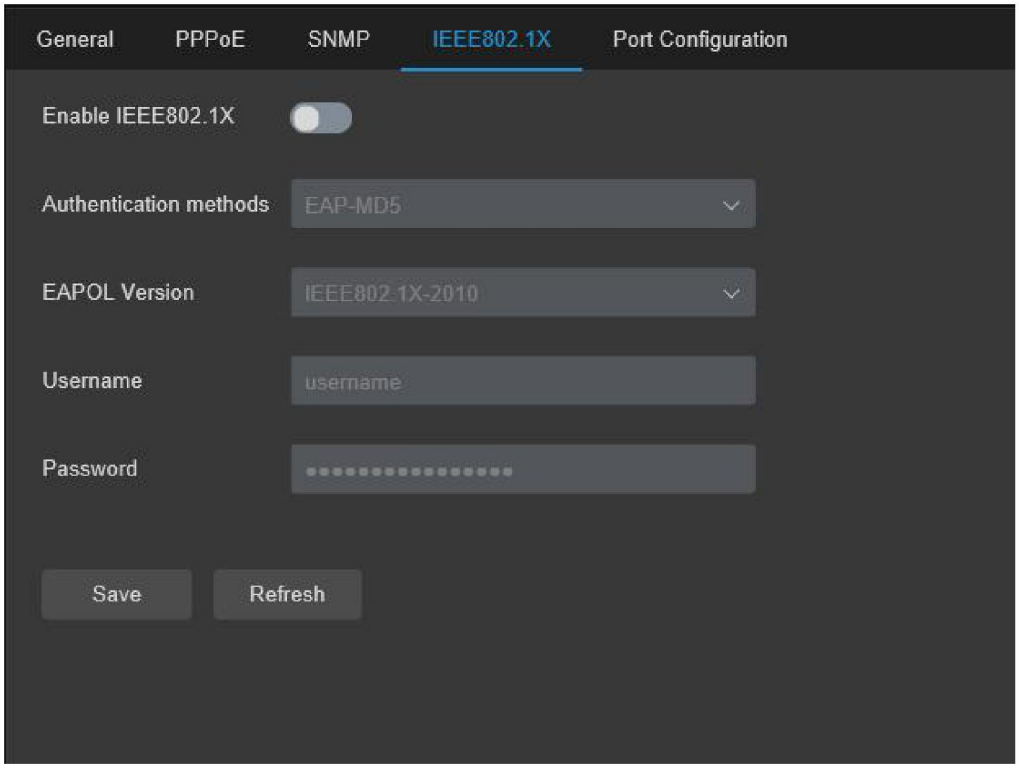
Trap IP Address: Set the SNMP server Trap IP address.

Trap Port: Set the SNMP server Trap port.

8.17.4 IEEE802.1X

The 802.1x protocol is widely used in Ethernet as the access control mechanism for LAN ports, which mainly solves the problems of authentication and security in Ethernet.The 802.1x protocol is a port-based network access control protocol."Port-based network access control" refers to the authentication and

control of accessed user devices at the port level of the LAN access device.User devices connected to the port can access resources on the LAN if they can pass authentication.If it cannot pass authentication, it cannot access resources on the LAN.



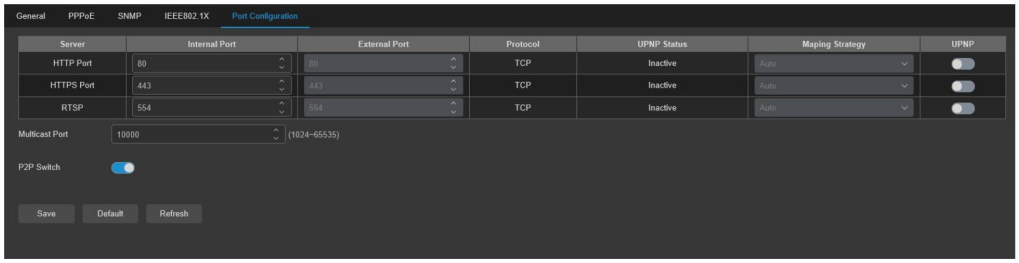
Enable IEEE802.1X: Enable or disable IEEE802.1X.

Authentication Methods: Set the authentication methods of IEEE802.1X.

Username: Set the IEEE802.1X authentication username.

Password: Set the IEEE802.1X authentication password.

8.17.5 Port Settings



HTTP Port: This is the port that the user uses to log in to the camera remotely (e.g. using a web client). If other applications already use port 80, change it.

HTTPS Port: Default value is 443, Https is an HTTP channel aiming at security, which guarantees the security of the transmission process by transmission encryption and authentication on the basis of HTTP.

RTSP Port: The default value is 554, if other applications already use the default port 554, change it.

UPNP: If you want to use Web Client to log in to the device remotely, port forwarding needs to be done in the router. If the user's router supports UPnP, please enable this option. In this case, users do not need to manually configure port forwarding in the router. If the user's router does not support UPnP, please ensure that port forwarding is done manually in the router.

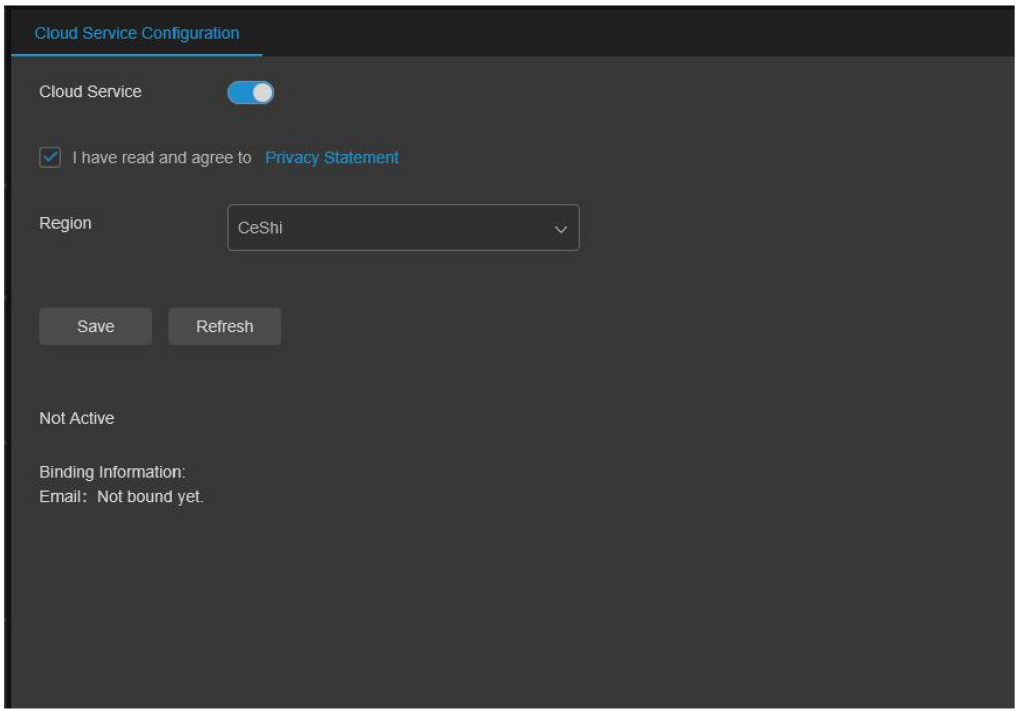
Multicast port: Allows you to set the multicast port.

P2P Switch: P2P switch, P2P will not take effect when it is turned off.

8.18 Cloud Service Setup

By enabling the cloud service function, setting the region you belong to, generating a dynamic QR code, and scanning this QR code using the **CybVu** APP,

add the device to the APP for management.



Cloud Servics: Cloud service switch.

Privacy Statement: To enable the cloud service feature, you need to read and agree to the privacy statement first.

Region: Select cloud service region (must be the same as CybVu APP registered region)

QR code display: after enabling cloud service and setting the region you belong to, dynamic QR code will be generated automatically (the validity of QR code is 300s, after expiry, it will be invalid automatically and you need to get it again). Use CybVu APP to scan the QR code, add the camera to APP for management.

Unbind: Click the Unbind button to unbind the camera from CybVu APP account, the device prompts offline and inaccessible on the APP after unbinding.

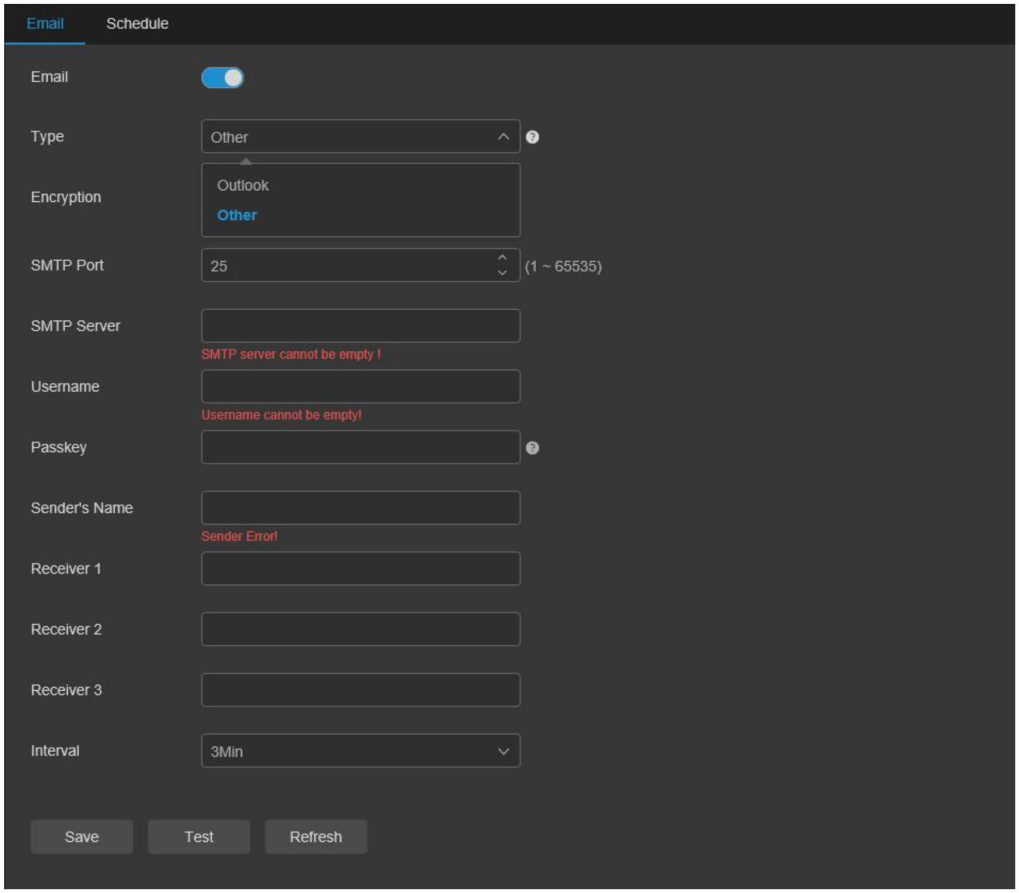
Note: The cloud service function requires communication with the cloud server, so

you need to ensure that the device is connected to the Internet when using this function.

8.19 Mail Settings

8.19.1 Parameter setting

This menu allows the user to configure email settings. To receive system notifications on email when an alarm is triggered and the hard disc is full, complete these settings.



Email: Tick to enable.

Type: mailbox type, there are two types: Outlook and Other.

Encryption: Enable if the user's email server requires SSL or TLS authentication. If you are not sure, set it to "Automatic".

SMTP Port: Enter the SMTP port of the email server.

SMTP Server: Enter the address of the SMTP server for e-mail.

UserName: Enter the user's email address.

Password: Enter the user's email password.

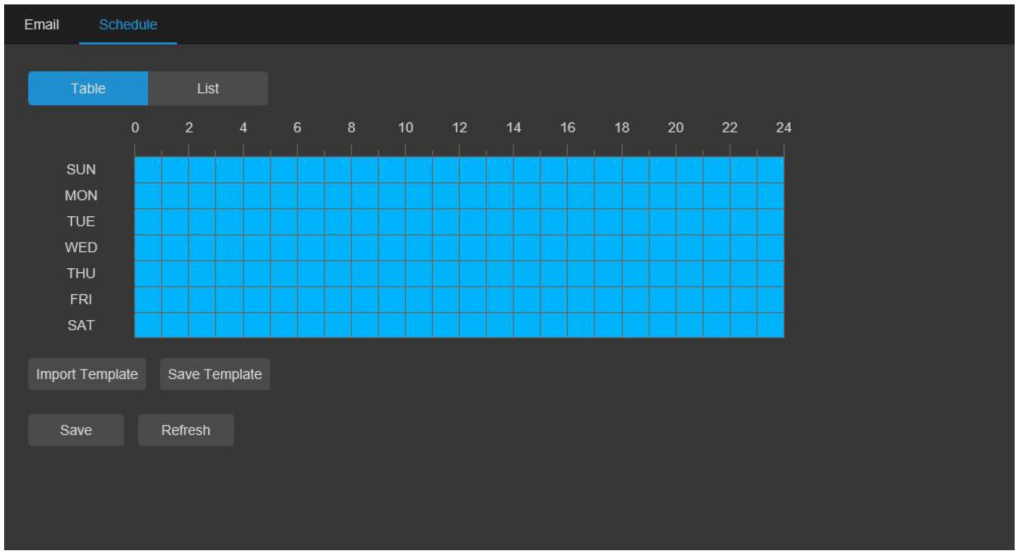
Receiver 1~3: Enter the e-mail address where the user wants to receive event notifications from the camera.

Interval: Configures the time interval between the camera's notification e-mails.

To ensure that all settings are correct, click on "Test Email". An email will be sent to the user's inbox. If the user receives the test email, the configuration parameters are correct.

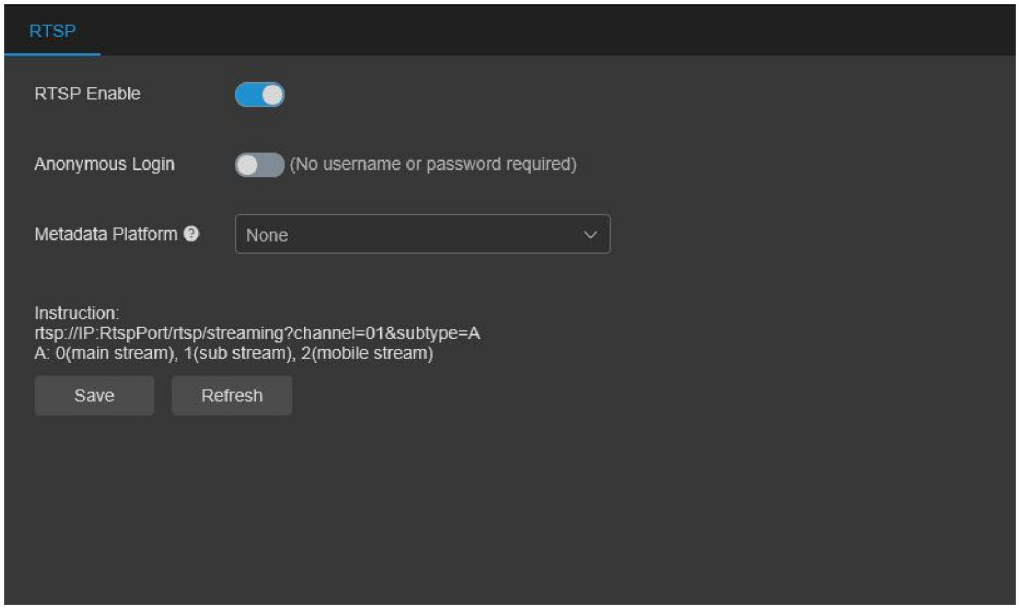
8.19.2 Schedule Setup

Set the schedule for the mail function to take effect, so that the mail function will take effect only during the schedule time period. refer to 8.8 Schedule Settings.



8.20 TSP Protocol Settings

RTSP (Real Time Streaming Protocol), RFC2326, Real Time Streaming Transport Protocol, is an application layer protocol in the TCP/IP protocol family. The protocol defines how a one-to-many application can efficiently transmit multimedia data over an IP network. allows users to view live images through a video player.



RTSP Enable: the RTSP switch. Enable to use the protocol.

Anonymous Login: Anonymous login. When enabled, no authentication is required to use this protocol.

Metadata Platform: Used to control the pushing of event alarm data to the third-party platform when the device is interfaced to the third-party monitoring platform using the onvif protocol.

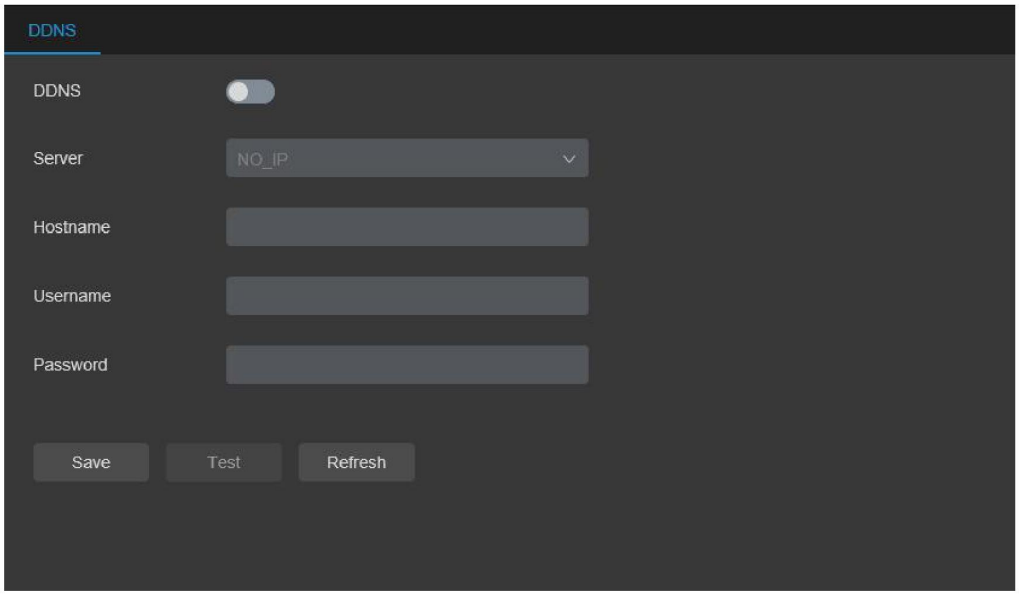
None: no external metadata push

General: Push common format metadata externally, available for third-party platforms without special requirements

Milestone: pushing metadata externally for the Milestone platform

8.21 Dynamic Domain Name Settings

This menu allows the user to configure the DDNS settings. DDNS provides a static address to simplify the remote connection to the camera. To use DDNS, the user first needs to open an account on the webpage of the DDNS service provider.



DDNS: DDNS switch, check to enable DDNS.

Server: Select the preferred DDNS server (DYNDNS, NO_IP, partial support for CHANGEIP, DNSEXIT).

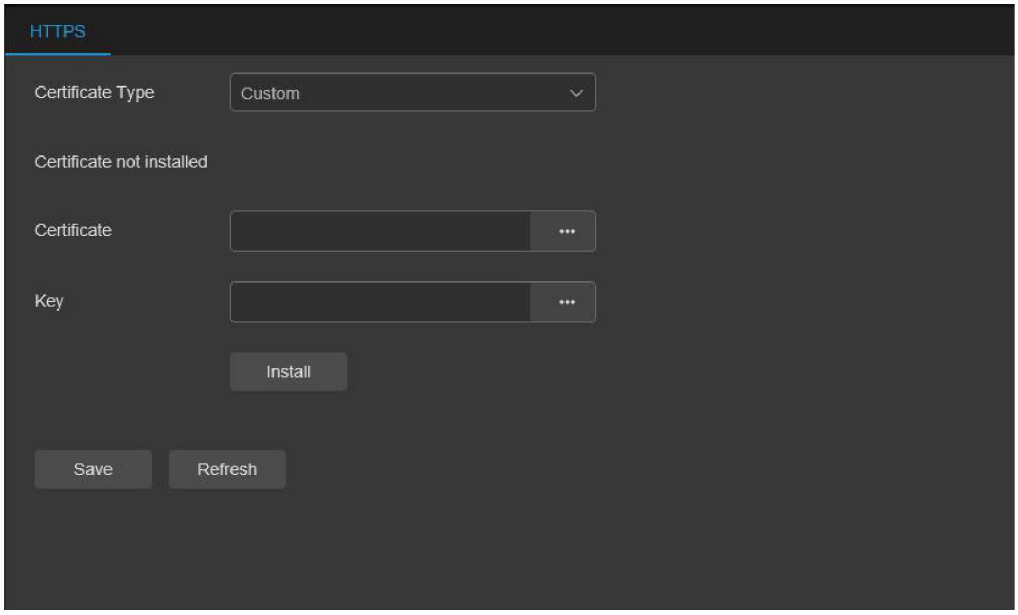
Hostname: Enter the domain name that the user created on the web page of the DDNS service provider. This is the address that the user types in the URL box when they want to connect to the camera remotely via a PC.

User/Password: Enter the user name and password obtained when creating an account on the DDNS service provider's web page.

After entering all parameters, click "Test DDNS" to test the DDNS settings. If the test result is "Network unreachable or DNS error", please check whether the network is normal or the DDNS information is correct.

8.22 HTTPS protocol settings

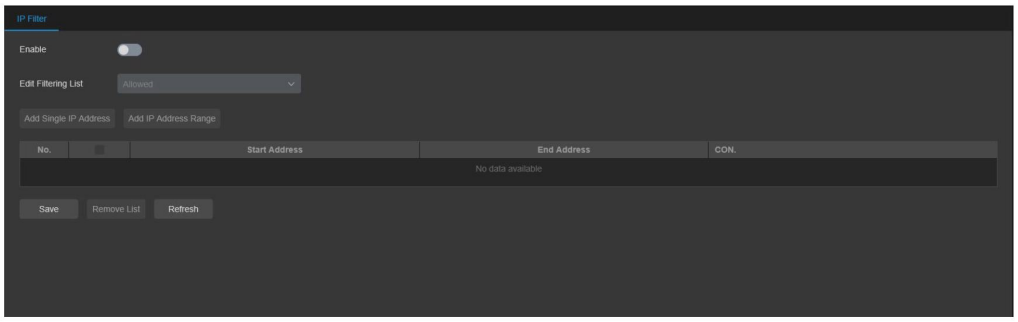
This menu allow to set HTTPS.connect your device over HTTPS.



Certificate Type: There are two options, including default and custom.The Custom option Allow to connect devices using your own certificate.
Certificate: Select a custom certificate when the Custom option is selected.
Key: Select a custom key file when the Custom option is selected.

8.23 IP Filter

The IP Filter function allows you to set a black and white list of connected devices.



Enable: Enable or disable the IP filter. choose to enable the block list or allow list if this option is turned on.

Edit Filtering List: Select the list you want to set (black list or white list).

Single Add: Single Add.

Network Segment Add: Network Segment Add

Start Address: Enter the start address.

End Address: Enter the end address.

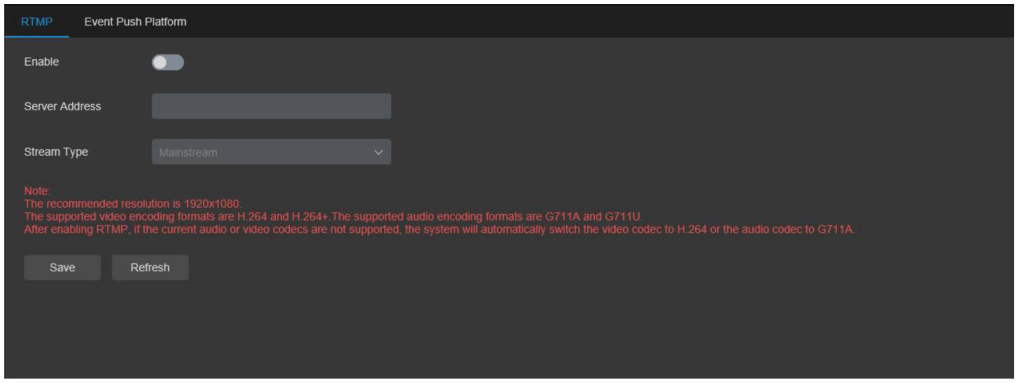
Delete: Delete the added user IP from the black/white list.

8.24 Platform Access

8.24.1 RTMP

RTMP function page, when you turn on the enable switch and fill in the correct server address, push the audio and video stream of the device to the YouTube live

server.



Enable: Enable or disable the RTMP function.

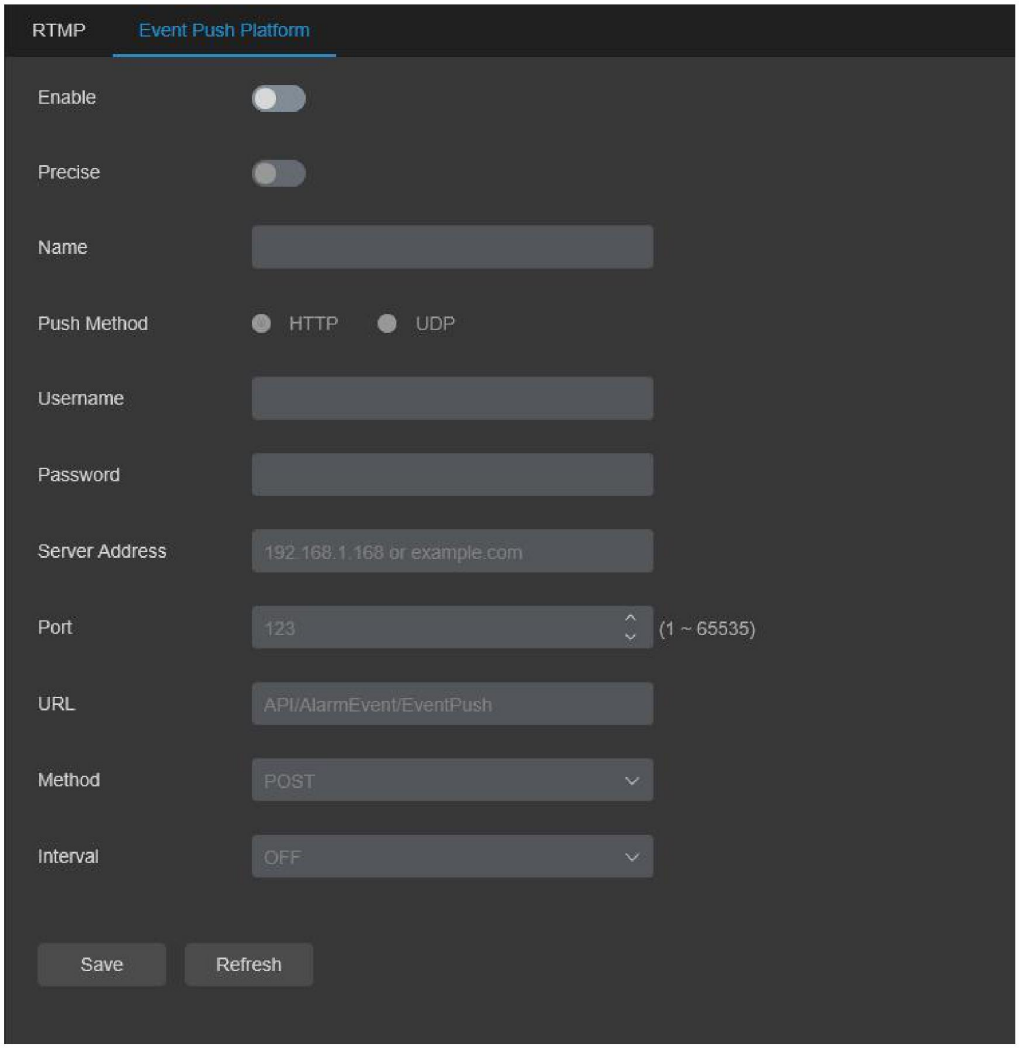
Server Address: The address of the server to be pushed.

Stream Type: Select the video stream to be pushed to the server.

8.24.2 Event Push Platform

Event push is divided into HTTP push method and UDP push method: HTTP method has POST method and GET method; UDP method has unicast, multicast and broadcast three methods. (Note: some models support event push function)

1.HTTP Push



Enable: Enable or disable the Event Push function.

Precise: Enable or disable the Precise function.When on, pushes once when an alarm is triggered and again when the alarm ends.When it is off, it will only push once when the alarm is triggered.

Name: Set the channel name.Do not support Chinese display.

push method: Set the push mode.Both HTTP push mode and UDP push mode are supported.select **HTTP** or **UDP** as required.

Username: Set the username.It can be set to NULL if there is not any.

Password: Set the password.It can be set to NULL if there is not any.

Server Address: Set the server address.

Port: Set the server port.(port number range: 1-65535.)

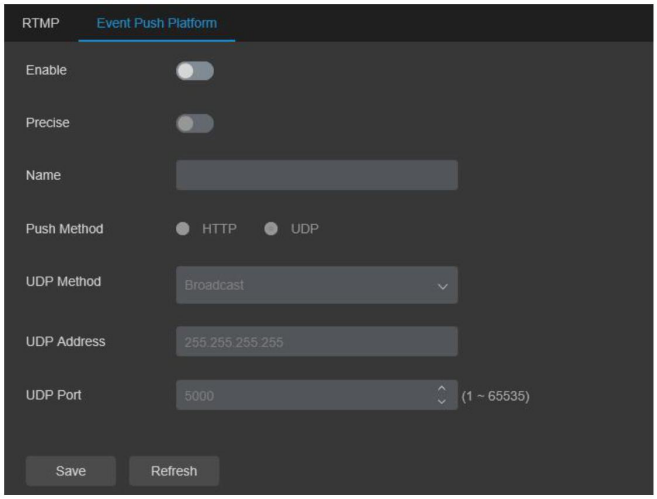
URL: Set the server API.It can be set to NULL if there is not any.

Method: Set the HTTP push method.Both POST and GET methods are

supported.Only the HTTP-POST method supports image push.Other methods push notifications only.The alarm type of image push is the same as that in the alarm column of live view on the Web client.

Interval: Set the keep-alive interval.The keep-alive mechanism ensures that a notification is periodically pushed to the client in accordance with the preset time while normal alarm push is not affected.There is no keep-alive mechanism in UDP mode.

2.UDP Push



Enable: enable or disable the event push function.

Precise: Enable or disable Precise Push. When it is on, push once when alarm is triggered and again when the alarm is over. When it is off, it will only push once when the alarm is triggered.

Name: Channel name, does not support Chinese display.

Push Method: Support HTTP push method and UDP push method. Check HTTP for HTTP push method, check UDP for UDP push method.

UDP Method: UDP push type, supports Unicast, Multicast and Broadcast methods:

Unicast: Enter the IP address and port of the client's UDP server to receive push messages, and only this address can receive messages

Multicast: Multiple client UDP servers on the same network segment using the same UDP address and port can receive the message, while other non-UDP addresses will not receive it.

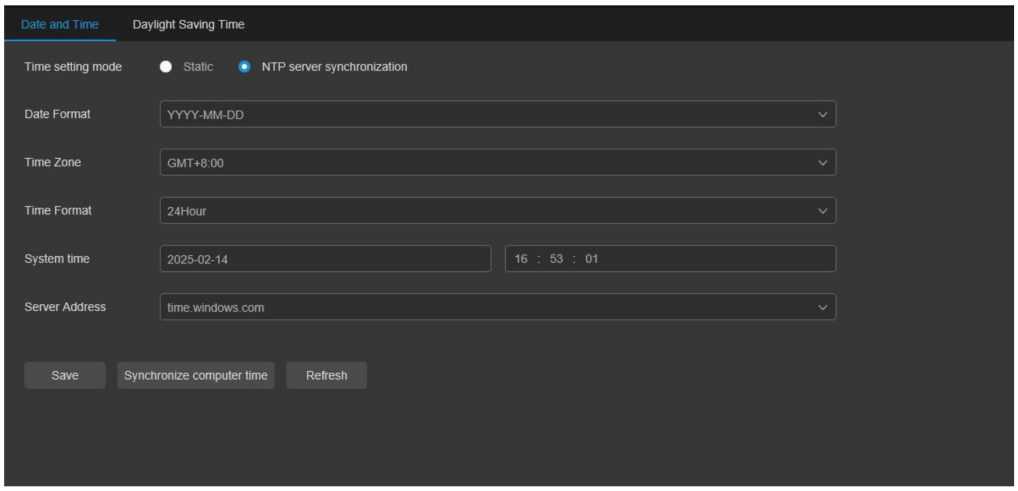
Broadcast: All UDP servers under the same network segment can receive the message.

UDP Address: UDP server address.

UDP Port: UDP server port (port range 1-65535)

8.25 General system setup

8.25.1 Date and time



Time settings mode: time mode, there are static and NTP synchronisation options. The static mode requires you to set the time by yourself, while the NTP synchronisation will be calibrated over the network.

Date Format: Set the date format.

Time Zone: Select the time zone associated with the user's region or city.

Time Format: Select the preferred time format.

System Time: Click in the box to change the date and time.

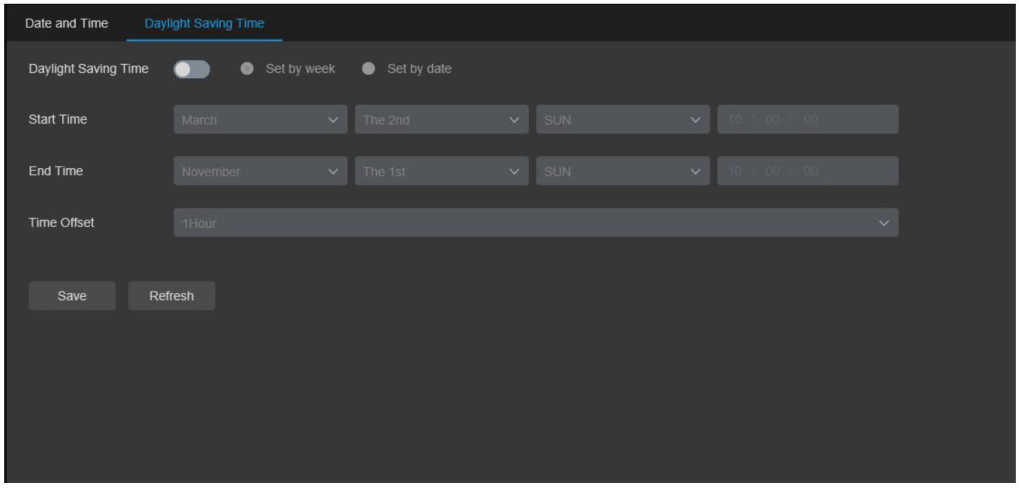
Synchronize computer time: Synchronise time to computer time.

If you select the NTP calibration mode, you cannot set the time manually at this time.

Sever Address: Optional automatic timekeeping site.

8.25.1 Daylight Saving Time

The DST (Daylight Saving Time) feature gives the user the option to add daylight saving time to a specific time zone or region.



Daylight Saving Time: Enable this option if the user's time zone uses daylight saving time.

Set by week: Selects the month, specific day of the week and time when Daylight Saving Time begins and ends. For example, 2: 00 a.m. on the first Sunday of a particular month.

Set by date: Select the date and time when daylight saving time starts and ends.

Start Time / End Time: Set the start time and end time for daylight saving time.

Time Offset: Selects the amount of time Daylight Saving Time adds to the user's time zone. This is the difference between Coordinated Universal Time (UTC) and local time.

8.26 Multi-user management

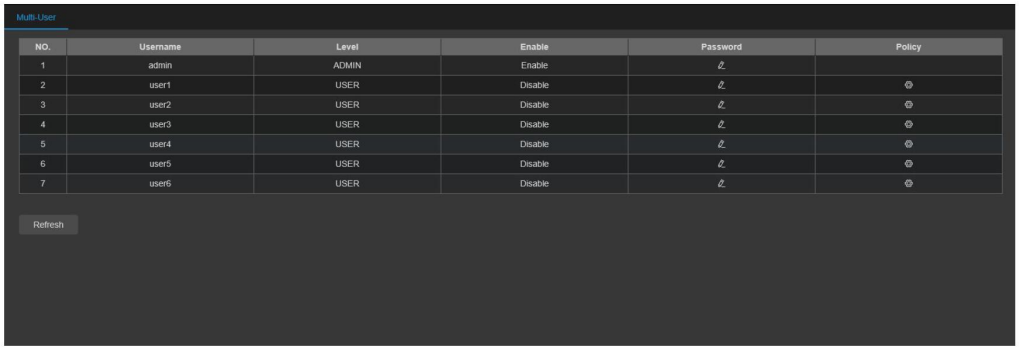
This menu is user configurable with user name, password and user rights.

The system supports the following user types:

ADMIN - System Administrator: The administrator can fully configure the system and change the administrator and user passwords.

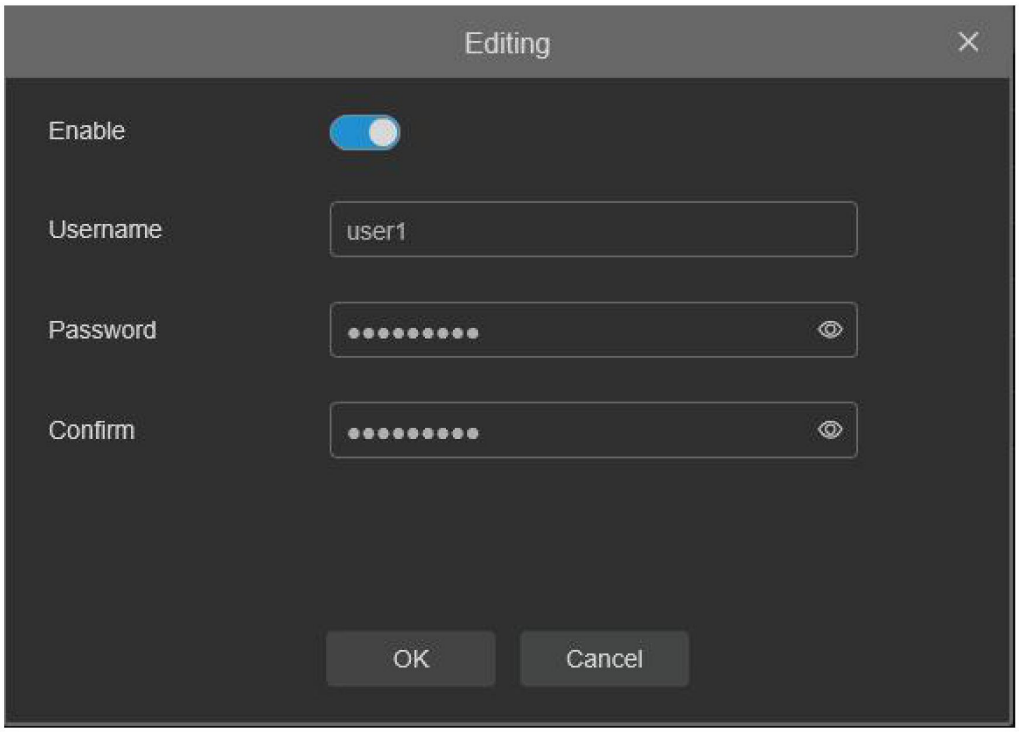
and enable/disable password protection.

USER - Normal User: User can only access Preview, Search, Playback and other functions. Users can set up multiple users with different system access rights.



To change the password for an administrator or user, click the "Password Edit" icon. The password must be 8-16 digits and at least 2 combinations of numbers, uppercase letters, lowercase letters and special characters. Enter the new password again to confirm. Save the new password and the system will ask the

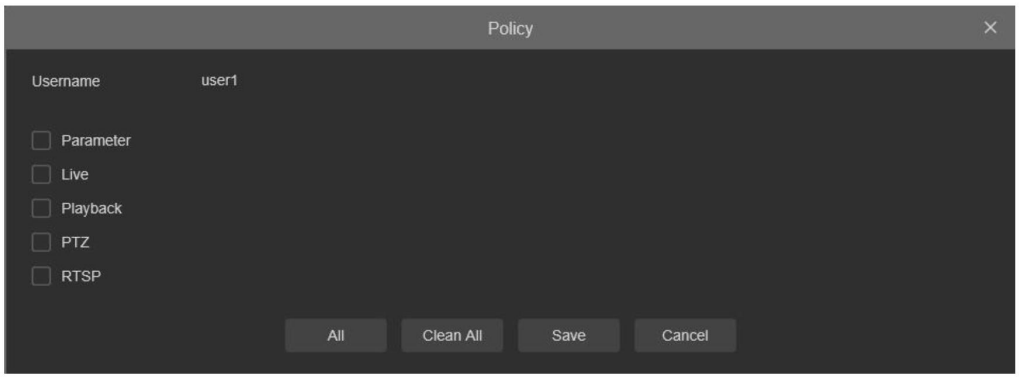
user to enter the old password for authentication.



1. One of the currently inactive users and click the Password Edit icon.
2. Tick "Enable" to enable users.
3. Click "UserName" to edit the user name.
4. Click the field next to Password to enter the desired password.
5. Click the field next to Confirm to re-enter your password.

Click OK. The user will be required to enter the administrator password for authentication.

To set the permissions for sub users: Click enter the Policy page and tick the box corresponding to the function to enable the sub user's permissions in this area. Click All to check all boxes and Clear to clear all boxes.

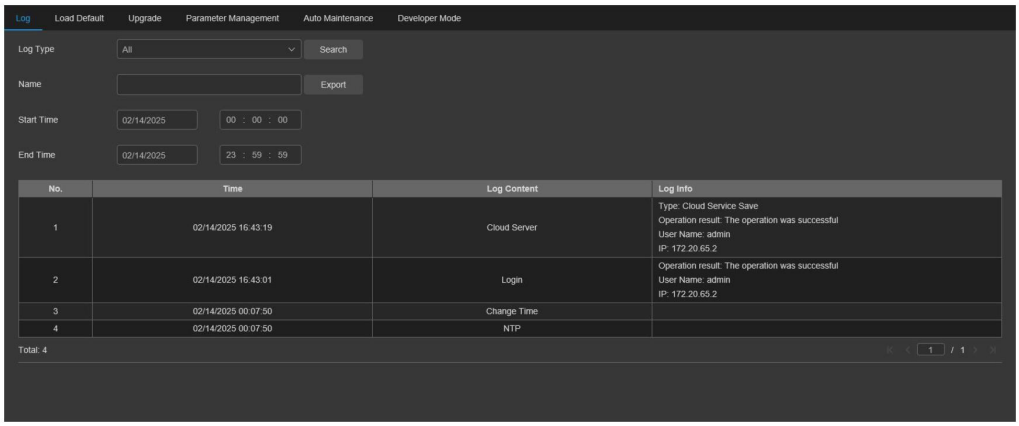


8.27 Maintenance

The system log displays important system events such as motion alerts and system warnings. Users can easily import a backup file of the system log to their computer for a set period of time.

8.27.1 Log management

The system log displays important system events such as motion alerts and system warnings. Users can easily import a backup file of the system log to their computer for a set period of time.



Log Search and Backup.

Select log type of event to search for from the drop-down list next to Log Type, or

select All to view the entire system log for the selected time period. The available types are: System Log, Configuration Log, Warning Log, Account Log, Recording Log, Storage Log, and Network Log.

System: System Settings, Reboot, Auto Reboot, Upgrade, Time Settings, and NTP Calibration.

Configuration: IPC live control , private area settings , recording mode settings , recording plan settings , main stream settings , network settings, Sub Stream settings, email settings, color settings, motion detection settings, hard disk settings, multi-user settings, NTP settings, image control, mobile stream settings, RTSP settings, IP filter settings, restore factory settings, rare sound detection settings, export settings, and import settings. Event Push settings, Capture settings, Deterrent settings, AI settings, FTP settings, DDNS settings, HTTPS settings, audio settings, Siren settings, system maintenance, video masking, IO alarms, cloud service setup.

Alarm: Start of motion detection, end of motion detection.start of I/O alarm, end of I/O alarm.start of Video Tamper , end of Video Tamper. start of Line Crossing, end of Line Crossing.start of Object Detection, end of Object Detection.start of Pedestrian & Vehicle, end of Pedestrian & Vehicle.start of Face Detection, end of Face Detection.start of Cross Counting, end of Cross Counting.start of Crowd Density, end of Crowd Density.start of Queue Length, end of Queue Length.start of License plate detection, end of License plate detection. start of Intrusion, end of Intrusion. start of Region Entrance, end of Region Entrance. start of Region Exiting,

end of Region Exiting, tart of Rare Sound, end of Rare Sound. start of Sound Alarm, end of Sound Alarm.

Account: Log in, log out, lock and switch users.

Recording: Search, playback and backup.

Storage: Format hard disc, hard disc full and hard disc error.

Network: Network down, network up, network error and network mode change.

1. Select the event type to search for from the drop-down list next to **Minor Type** (if ALL is selected for Log Type, this menu will not be available).

2. Enter the export file name in the field next to **Name**. Click Export to create a backup of the syslog.

3. Click the area next to **Start Time** to select the start date and time of the search from the on-screen calendar.

4. Click the area next to **End Time** to select the end date and time of the search from the on-screen calendar.

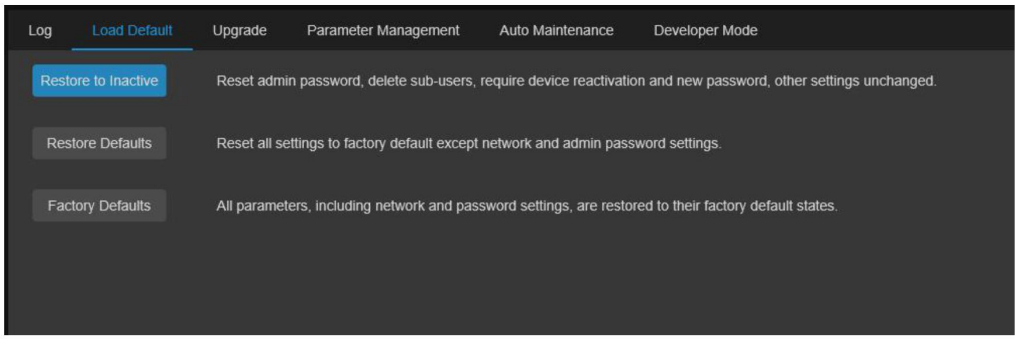
5. Click **Search.**

6. Browse the system log from the selected time period:

7. Use the |< < / > >| button in the lower right corner of the menu to switch between pages of syslog events.

8.27.2 Restoring factory settings

Users can select different reset methods on this page to restore the device's configuration parameters to factory settings. Restoring the factory settings will not format the data of the TF card.



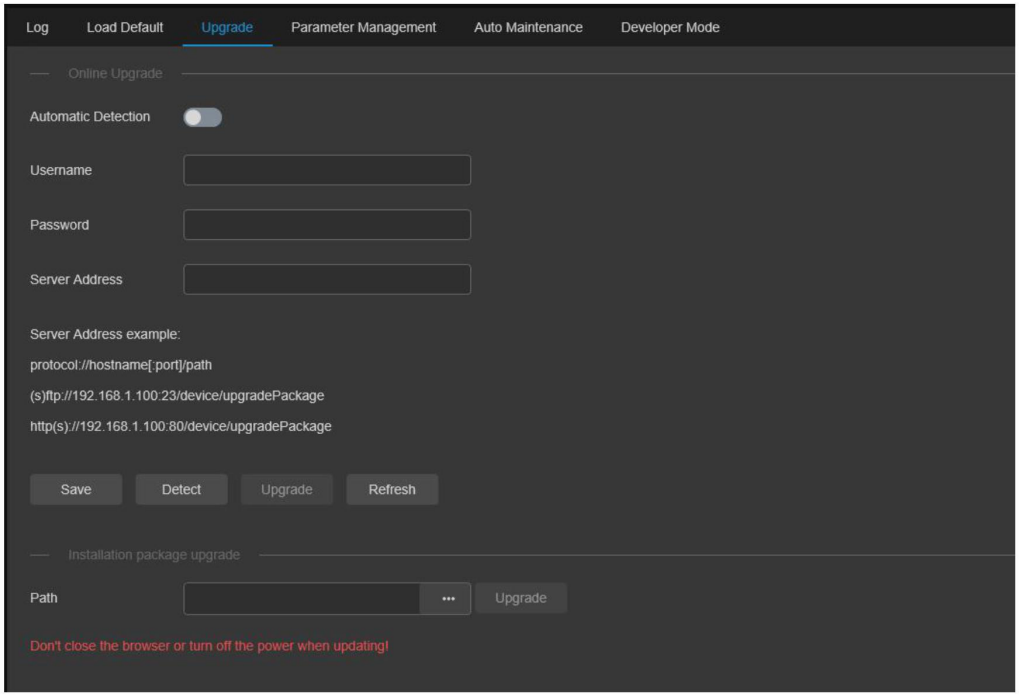
Restore to Inactive: Resets the administrator password, deletes all sub-users, the camera needs to be reactivated, and the parameters of the other pages remain unchanged.

Restore Defaults: Except for the network and administrator password, all other pages are restored to the factory settings.

Factory Defaults: All parameters of the camera are restored to the factory settings.

8.27.3 System upgrades

This menu allows you to upgrade the firmware of your device.



Automatic Detection: Automatic detection. Turn on this button to automatically detect online upgrade files.

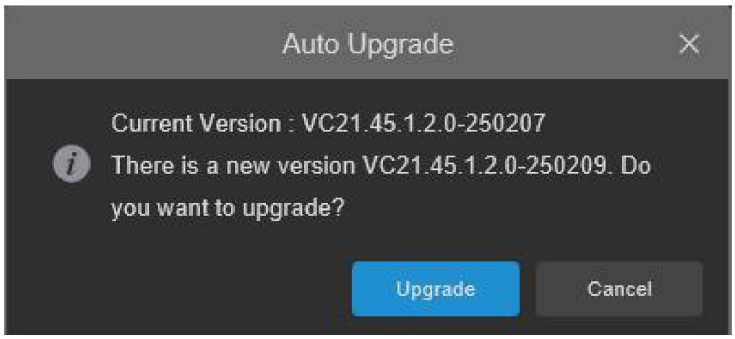
Username: Server username.

Password: The server password.

Server Address: Enter the online upgrade address (HTTP upgrade does not require user name and password).

Save: click this button to save the current setting.

Detect: Detect, after uploading the upgrade file and setting the upgrade path, click Detect to manually detect the online upgrade file. When a new version is detected, a prompt will pop up, as shown below:



Upgrade: Click this button to start the system upgrade.

Place the firmware file (.bin file) on your computer's hard drive.

Click "..." next to "Path" to select the firmware file in your computer.

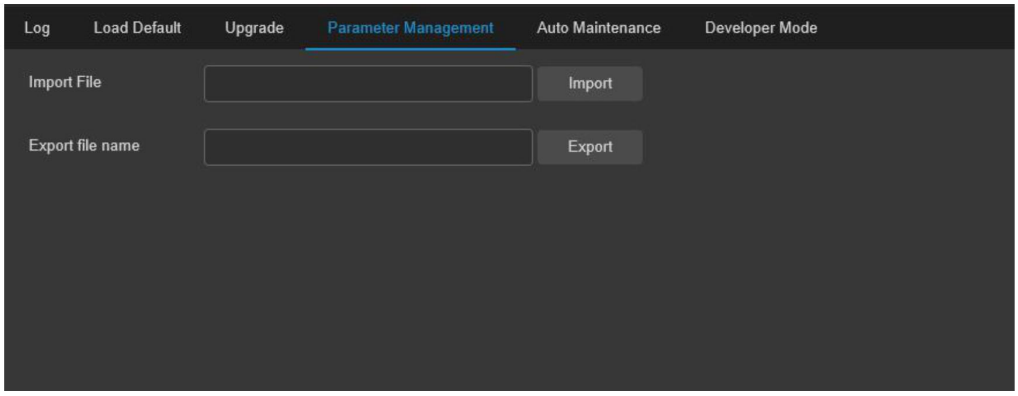
Click the Upgrade button to start the system upgrade. The system upgrade will last about 2-3 minutes, please do not power off the device or close IE during the firmware upgrade process.

Note: If the device needs to detect the latest firmware version of the cloud server, please turn on the cloud service switch to bind CybVu APP and clear the

configuration parameters of online upgrade on this page.

8.27.4 Parameter management

The user can export the configured main menu parameters to a computer or import the exported setup file from the computer to the device.

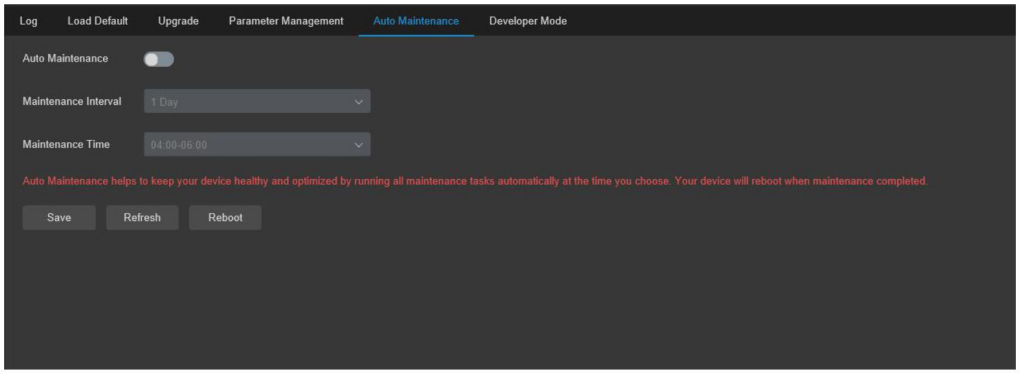


Import Flie: Click on the box to bring up the path window, select the parameter file and click Import to start importing parameters.

Export File Name: Click the box to enter the file name of the exported parameter. Click Export to export the parameters.

8.27.5 Auto Maintenance

The user can export the configured main menu parameters to the computer or import the exported setup file from the computer to the device.



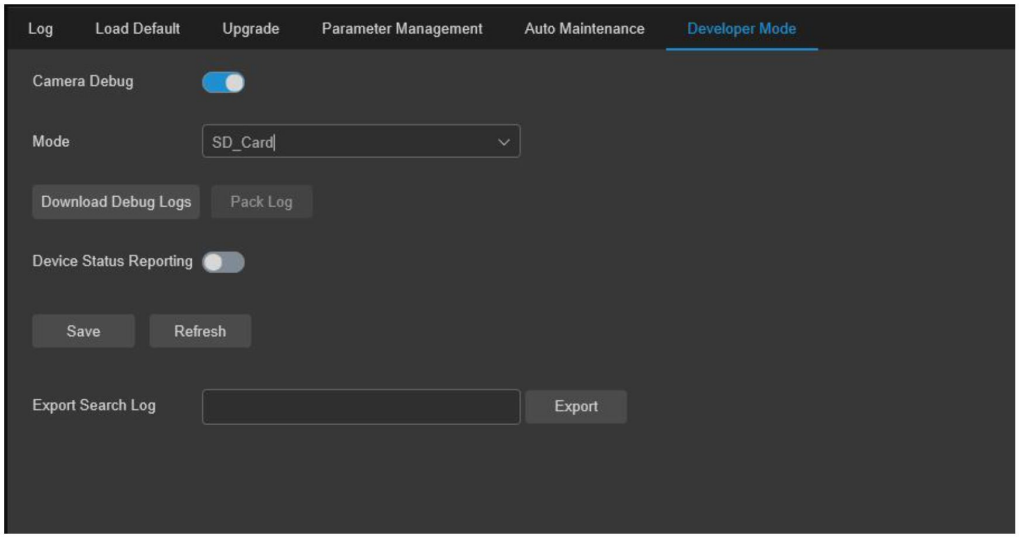
Auto Maintenance: Enables or disables the automatic maintenance feature

Maintenance Interval: Sets the automatic maintenance interval of the camera.

Maintenance Time: Sets the time period for automatic camera maintenance. (Note: the device will reboot at random times during this period)

8.27.6 Developer model

This menu enables developer mode, which is convenient for developers to collect and record log information for device debugging.



Camera Debug: Check to enable.

Mode: Select the mode of collecting and logging debugging information, there are three modes: NVR, SD_Card and FTP.

Download Debug Logs: Export debug information. Select SD_Card mode, click the button, enter the correct password, the device will export the debug information to the local computer.

Pack Log: Pack logs. Select NVR or FTP mode, click this button, the device will upload the pack log information to FTP server.

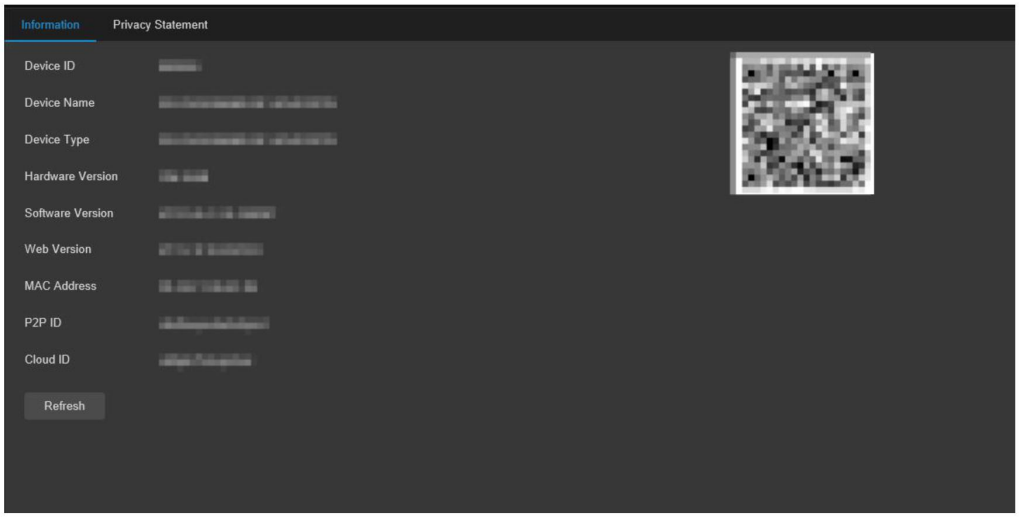
Device Status Reporting: Enable this function to upload the storage status, channel status and device information to P2P server.

Export Search Log: Export the search log. Enter the file name of the log to be exported and click the Export button to export all the log files stored on the device to the local computer.

8.28 System information

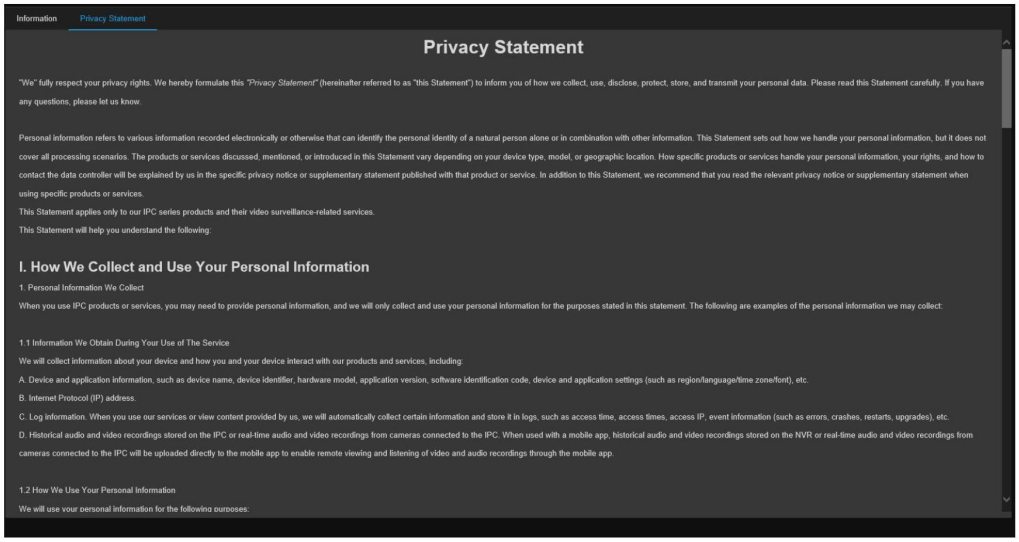
8.28.1 Device information

This menu allows users to view system information, such as device ID, device model name, MAC address, firmware version, etc.



8.28.2 Privacy Statement

Users can view the specifics of the device's privacy agreement on this page.



Chapater 9 Local settings

This menu allows to set the path for storing videos and downloaded and captured image files, as well as the format of videos and captured images.

Note: skip this page when you access the web client from Safari 12 and later, Chrome 57 and later, Firefox 52 and later, and Edge 41.

