User Guide V3.5
NDAA Compliant

SUNBA® Performance Series

Network PTZ Camera

Premium Engineering. Durable Outdoor Surveillance.
Ideal for House or Project Site.

2025/09
Version 3.5

Visit **http://performance.sunbatech.com** to access the step by step YouTube video tutorials for setting up Sunba IP PTZ camera.

FCC Verification (U.S.A)

The device has been tested and complies with with limits set by Part 15 of Federal Communication Commission (Class B).

The operation of the device is thus limited by the following two conditions:
1) it might not cause harmful interference to any authorized radio communications, and 2) it must accept any interference it received.

Audio Monitoring Disclaimer

US Code, Title 18. Sec. 2510 & 2511 (2) (d) prohibits audio monitoring unless there are public signs posted giving clear indication that the communication is being monitored. Therefore, it is required to exhibit posting of signage, a disclaimer, on the public entrances and exits, notifying all that “Audio Monitoring on These Premises.”

Sunba provides such warning decal along with every IP camera. It is the responsibility of user to clearly post the decal and verify State law to guarantee any deployment compliance.

MENU

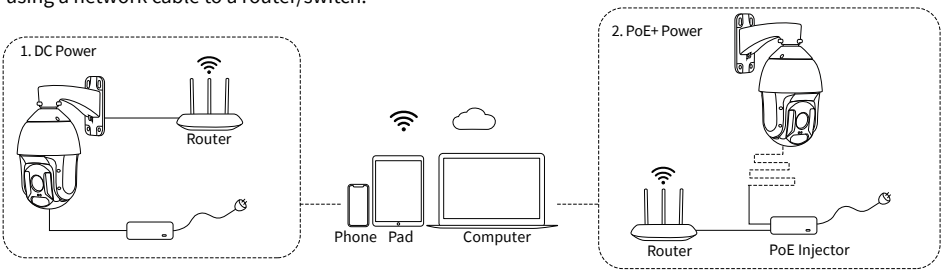
1. Connection and Installtion ---------- 03
   1.1 Connection ---------- 03
   1.2 Micro SD Card Installation ---------- 03
2. Login and Live View ---------- 04
   2.1 Smartphone ---------- 04
   2.2 Web Browser ---------- 04
   2.3 Guard Station Client Tool (Mac & Windows) ---------- 05
3. Network Setting ---------- 07
   3.1 Change IP and fix the IP address of the camera ---------- 07
   3.2 Port Configuration ---------- 07
   3.3 Email Alert ---------- 07
   3.4 FTP Alert ---------- 08
4. Video and Image Setting ---------- 09
   4.1 Video Setting ---------- 09
   4.2 Image Setting ---------- 10
   4.3 OSD Setting ---------- 14
   4.4 RTMP Stream Configuration ---------- 15
5. Account Management ---------- 16
6. Preset and Patrol ---------- 17
   6.1 Preset ---------- 17
   6.2 Patrol ---------- 17
   6.3 Setting home position ---------- 18
   6.4 Special Presets List ---------- 18
7. Remote Access ---------- 19
   7.1 Port Forwarding ---------- 19
   7.2 P2P Cloud ---------- 19
   7.3 RTSP Live Streaming ---------- 21
   7.4 VPN ---------- 21
8. Third Party Compatibility ---------- 21
9. Video Motion Detection ---------- 22
10. Smart Event Configuration ---------- 22
   10.1 Perimeter Protection ---------- 23
   10.2 Object Detection ---------- 25
   10.3 People Counting ---------- 26
   10.4 Auto Tracking ---------- 27
11. Forget Password ---------- 29

1.Connection and Installation

1.1 Connection

WARNING! It is important to perform a pre-installation test (bench-test) indoor prior to outdoor installation.

The camera can be powered by a DC12V power adapter (came with the package) and transmit video data using a network cable to a router/switch.

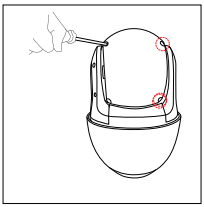


The camera can also be connected to a PoE injector/switch which would let the network cable supply both power and data connection.
Sunba PTZ camera requires the PoE adapter (switch/injector) to support IEEE 802.3at standard, which is also known as PoE+.

1.2 Micro SD Card (TF card) Installation

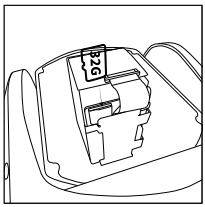
We recommend a TF card with high write speed specifically designed for cameras(class 10 or above), and not exceeding 256GB. TF cards only temporarily store video files, professional video storage still requires NVR or other third-party software for back-end recording.

Pan Tilt Zoom Camera

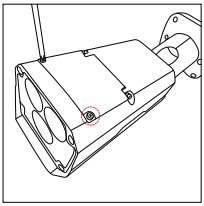


① Remove the 4 screws to take off the camera back cover.

② Insert the TF card as directed by the arrow.

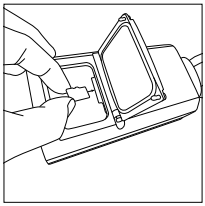


Bullet Camera



① Remove the 4 screws located on the top of the camera.

② Open the top cover, and insert the TF card as directed by the arrow.



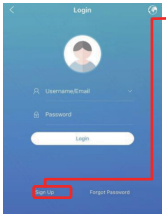
2.Login and Live View

2.1 Smartphone

① Download Guard Viewer App

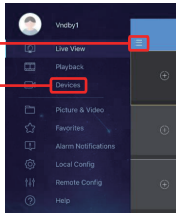
Download on the App Store

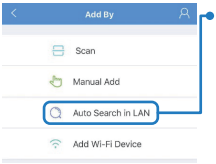
Download on the Google Play



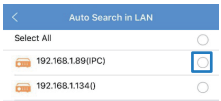
② Sign up a cloud account. Select “international” service zone if asked.

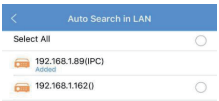
③ Tap to show the sidebar, and go to the Devices option to add device:



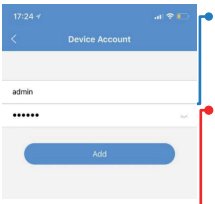


④ You can add device by Auto Search in LAN if your smartphone is connected to the same network as the camera. Select the device that you want to add.



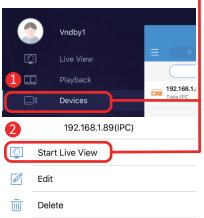


Note: Auto LAN search only works if the http port of the camera remains unchanged (default 80). If the http port has been changed, the camera can only be added manually with its corresponding new port.

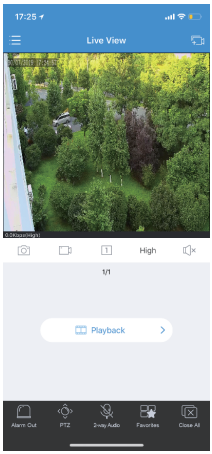


⑤ Enter the username and password of the camera. The default account is admin/123456.

⑥ Go back to the Device list from the side bar, tap the device that was just added and select “Start Live View”.

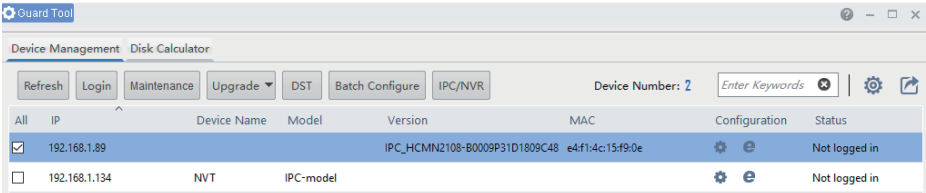


You can control pan tilt zoom, call preset, check TF card status and playback from the app. For details on how to use the smartphone app, please visit: http://gvapp.sunbatech.com



2.2 Web Browser（Web Portal）

① [Windows] Use Guard Tool to identify the IP address of the camera.
[Mac] Use Guard Station (Device Management) to identify the IP address of the camera.



② Then you can go to web browser and input the url address of the camera with the "http://" prefix. For example, http://192.168.1.13

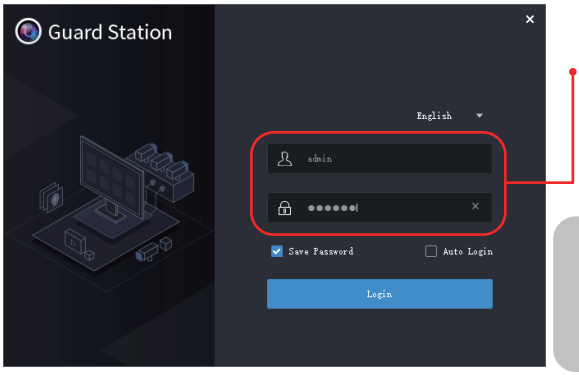
You can login using the credential above and set a customized password later. Please remember your password, which consists of uppercase and lowercase letters, special symbols, and numbers. We recommend that you set up a secure email address for easy password retrieval.

You would be prompted to install the web plugin of the camera if you are using Internet Explorer. Alternatively, you are able to manually download the web plugin from Sunba website: https://sunbatech.com/download/

Chrome and Firefox are Plug-in free (in both Mac and Windows system) , but doesn't currently support record playback in browser. More browser integration will be supported through future firmware upgrade.

2.3 Guard Station Client Tool (Mac & Windows)

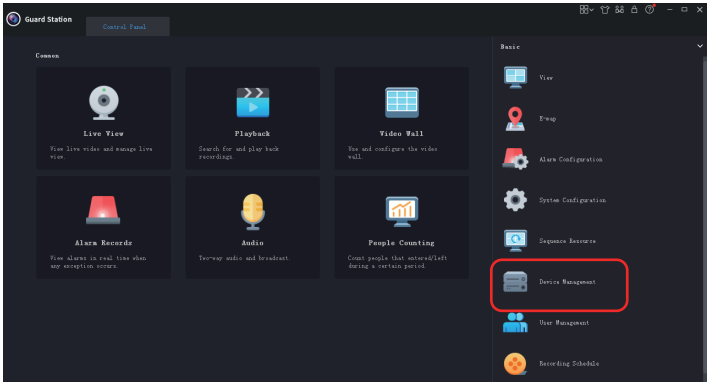
1. Install Guard Station client.



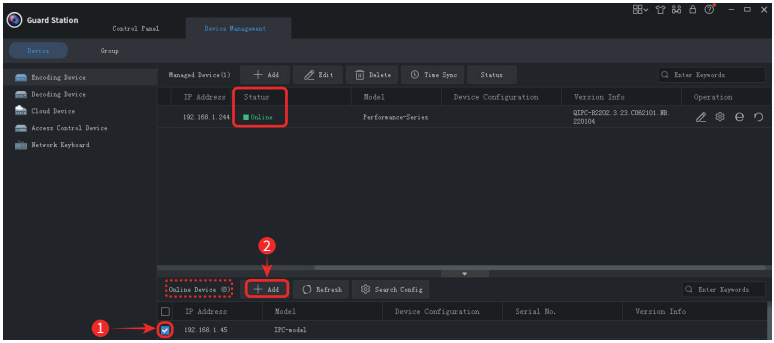
Default Username: admin
Default password: 123456

The client credential is set to protect unauthorized access to the surveillance software/data, and is NOT the same credential for the IP camera.

② Please proceed to the “Device Management” tab to add your IP camera to the client software:

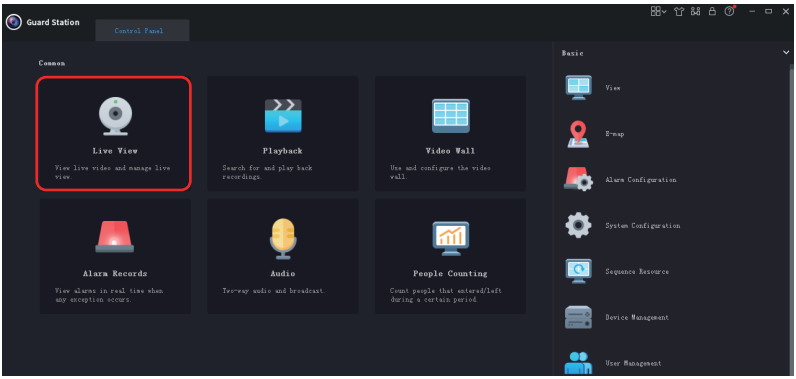


③ The IP camera should automatically display under “Online Device” on the lower section. Select the camera, and click “+Add” to add the camera to the upper section.

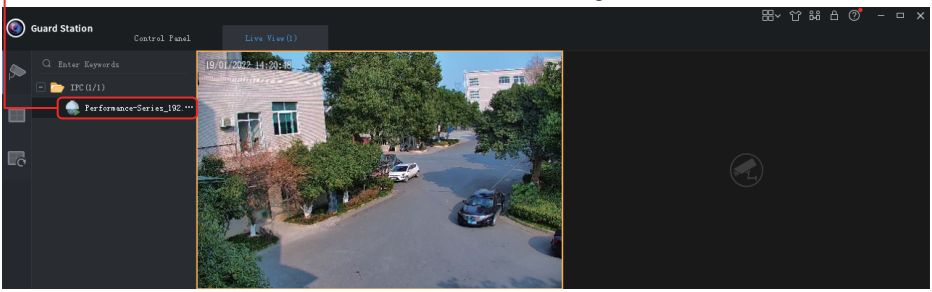


- The camera should show “online” status if it has been successfully connected to the Guard Station client, otherwise please click the pencil icon to modify values to establish a successful connection.

④ Please go to the Live View section under Control Panel:



⑤ Double click the device name on the list to enable live viewing:

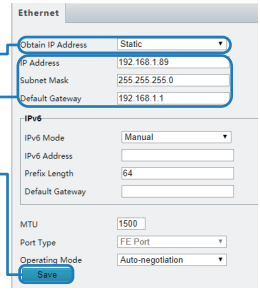


3.Network Setting

3.1 Change IP and fix the IP address of the camera

Click Setup > Network > Network.

- Select Static from the Obtain IP Address drop-down list.
- Enter the IP Address, Subnet Mask, and Defualt Gateway address you would like to modify. Make sure the IP address of the camera is unique on the network.
- Click Save.

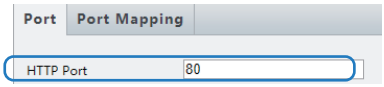


Modify the settings as required. The following table describes some major parameters.

3.2 Port Configuration

Click Setup > Network > Port.

- The HTTP port has default value of 80, and if you change the default HTTP port, the url for logging into the camera must be http://IP:HTTP Port.



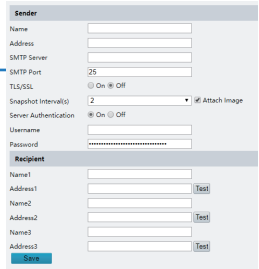
For SUNBA Performance Series IPC, HTTP port is equivalent to the ONVIF port. Please note all ports must have unique value to each other.

3.3 Email Alert

① Click Setup > Network > E-mail.

② After the configuration of E-mail, when alarms are riggered, the camera will send messages with alarm snapshots to the specified E-mail address.

③ Configure relevant parameters of the sender and the recipient. You may end a test email after setting the recipient address. The following table describes some major parameters.



Parameter	Description
TLS/SSL	When enabled, the e-mail will be encrypted using TLS (Transport Layer Security) or Secure Socket Layer (SSL) to protect privacy. irst it tries to send through an SSL connection. If the SMTP server supports SSL, the e-mail will be sent through the SSL connection; otherwise, it tries to send using STARTTLS.
Attach Image	When enabled, the e-mail will contain 3 instant snapshots as attachment according to the number you set via Capture Interval.
Username/ Password	Username and password of the registration email address. The password allows the following special characters \ / : * ? ' " < > | % &

④ Click Save.

3.4 FTP Alert

Click Setup > Storage > FTP.

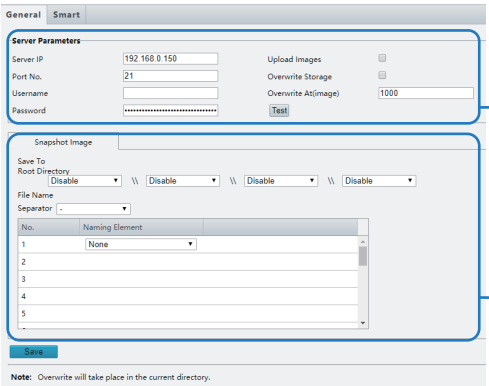
There are two sections of FTP upload.

The general FTP configuration is for snapshots (except for face detection) saved through the general alarm events. The smart FTP configuration is for uploading snapshots taken from smart events such as face capture.

After the configuration of FTP, you will be able to upload snapshots from network cameras to the specified FTP server.

Restrictions on FTP entries:
1.The FTP server must be in numeric format (IP) and doesn't support domain as input.
2.The password of FTP doesn't support special characters.

1 General



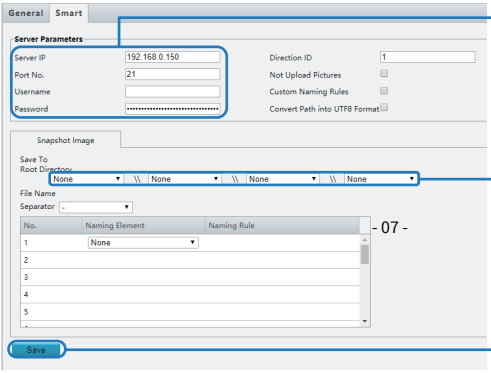
① Click Setup > Storage > FTP. Go to General tab.

② Set the IP address and port for the FTP server, username and password used to upload images to the FTP server, select Upload Images, Overwrite Storage and set Overwrite At (threshold for overwriting images). Some camera models support FTP test. You may test FTP after completing FTP settings correctly.

③ Set the path for saving snapshots on the FTP server and the file name format. For example, set path as Preset No.\\IP Address\\-Date\\Hour(s), and set file name as Preset No.-PTZ Zoom-PTZ Latitude-PTZ Longitude.-jpg.

④ Click Save.

2 Smart



① Set the IP address and port of the FTP server, username and password to upload images to the FTP server.

② Set the path for saving snapshots on the FTP server and the file name format. For example, set path as Preset No.\\IP Address\\Date, and set file name as Preset No.-PTZ Latitude-PTZ Longitude-PTZ Zoom.jpg.

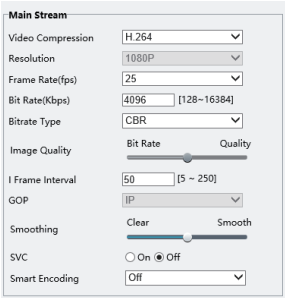
③ Click Save.

4.Video and Image Setting

4.1 Video Setting

You can set video parameters that your camera supports. If available, you may also enable sub-stream and third stream as required.

Click Setup > Video & Audio > Video.

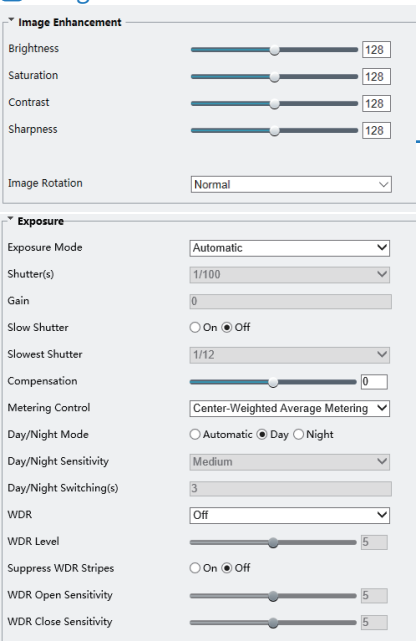


Parameter	Configuration
Video Compression	Three options: H.265, H.264 and MJPEG. Note: The bit rate changes to the default when you change the setting between H.264 and H. 265. The default bit rate for H.265 is half of that for H.264. Video Image Quality cannot be set when Video Compression is set to H.265 or H.264. When Compression set to MJPEG, only three frame rates are available: 1, 3 and 5; and Bit Rate, I Frame Interval, Smoothing and U-Code cannot be set.
Frame Rate	Frame rate for encoding images. Unit: FPS (frame per second). Note: To ensure image quality, note that the frame rate should not be greater than the reciprocal of shutter speed.
Bitrate Type	CBR: Constant Bit Rate, which means that the camera transmits data at a constant data rate. VBR: Variable Bit Rate, which means that the camera adjusts the bit rate dynamically according to image quality.
Image Quality	When Encoding Mode is VBR, you can move the slider to adjust quality level for images. Moving the slider toward Bit Rate decreases the bit rate and may affect image quality. Moving the slider toward Quality increases the bit rate and improves image quality.
I Frame Interval	Interval at which an I frame is encoded. Normally, a shorter I frame interval offers better image quality but consumes more bandwidth.

GOP	Group Of Pictures in MPEG video encoding. This parameter specifies the order in which intra-frames (I frame) and inter-frames are arranged.
SVC	SVC (Scalable Video Coding) can reduce storage without compromising playback quality.
U-Code	Basic Mode: The actual bit rate is around 3/4 of the set bit rate. Advanced Mode: The actual bit rate is around 1/2 of the set bit rate. Note: When U-Code is enabled, video compression only supports H.264 and H.265. MJPEG is not supported. When U-Code is enabled, the capture mode does not support frame rates higher than 30.
Smoothing	Set the extent of smoothing. Choosing Clear means disabling Smoothing. Moving the slider toward Smooth increases the level of smoothing but will affect image quality. Note: In a poor network environment, you can enable smoothing to get more fluent video.

4.2 Image Setting

1 Image Enhancement



① Click Setup > Image > Image and then click Image Enhancement.

② Use the sliders to change the settings. You may also enter values directly. The following table describes some major parameters.

Item	Description
Brightness	Set the degree of brightness of images.
Saturation	The amount of a hue contained in a color.
Contrast	Set the degree of difference between the blackest pixel and the whitest pixel.
Sharpness	Contrast of boundaries of objects in an image.

2 Exposure

① Click Setup > Image > Image and then click Exposure.

② Set the parameters as required. The following table describes some major parameters.

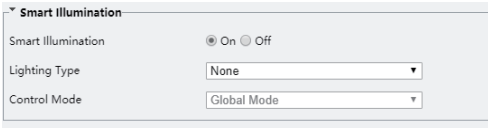
Parameter	Description
Exposure	Select the correct exposure mode to achieve the desired exposure effect. Automatic: The camera automatically adjusts exposure according to the environment.

	Custom: The user sets exposure as needed. Indoor 60Hz: Reduce stripes by limiting shutter frequency. Manual: Finetune image quality by setting shutter, gain and iris manually. Low Motion Blur: Control the minimum shutter to reduce motion blur in faces captured in motion.
Shutter	Shutter is used to control the light that comes into the lens. A fast shutter speed is ideal for scenes in quick motion. A slow shutter speed is ideal for scenes that change slowly. Note: You can set a shutter speed when Exposure Mode is set to Manual or Shutter Priority. If Slow Shutter is set to Off, the reciprocal of the shutter speed must be greater than the frame rate.
Gain (dB)	Control image signals so that the camera outputs standard video signals according to the light condition. Note: You can set this parameter only when Exposure Mode is set to Manual or Gain Priority.
Slow Shutter	Improves image brightness in low light conditions. Note: You can set this parameter only when Exposure Mode is not set to Shutter Priority and when Image Stabilizer is disabled.
Slowest Shutter	Set the slowest shutter speed that the camera can use during exposure. Note: You can set this parameter only when Slow Shutter is set to On.
Compensa-tion	Adjust the compensation value as required to achieve the desired effects. Note: You can set this parameter only when Exposure Mode is not set to Manual.
Metering Control	Set the way the camera measures the intensity of light. Center-Weighted Average Metering: Measure light mainly in the central part of images. Evaluative Metering: Measure light in the customized area of images. Highlight compensation: Ignore the brightness of the overexposed area of images. But selecting this setting will decrease the overall brightness of the image. Face Metering: Adjust image quality in poor lighting conditions by controlling the brightness of captured face in Face scene. Note: You can set this parameter only when Exposure Mode is not set to Manual.
Day/Night Mode	Automatic: The camera outputs the optimum images according to the light condition. In this mode, the camera can switch between night mode and day mode automatically. Night: The camera provides high-quality black and white images using the existing light Day: The camera provides high-quality color images using the existing light.
Day/Night Sensitivity	Light threshold for switching between day mode and night mode. A higher sensitivity means that the camera is more sensitive to the change of light and becomes more easily to switch between day mode and night mode. Note: You can set this parameter only when Day/Night Mode is set to Automatic.

Day/Night Switching(s)	Set the length of time before the camera switches between day mode and night mode after the conditions for switching are met. Note: You can set this parameter only when Day/Night Mode is set to Automatic.
WDR	Enable WDR to distinguish the bright and dark areas in the same image. Note: You can set this parameter only when Exposure Mode is neither Customize nor Manual and when Image Stabilizer is disabled.
WDR Level	After enabling the WDR function, you can improve the image by adjusting the WDR level. Note: Use level 7 or higher when there is a high contrast between the bright and dark areas of the scene. In the case of low contrast, it is recommended to disable WDR or use level 1-6.
Suppress WDR Stripes	When enabled, the camera can automatically adjust slow shutter frequency according to the frequency of light to minimize stripes that may appear in images.

3 Smart Illumination

① Click Setup > Image > Image and then click Image Enhancement.



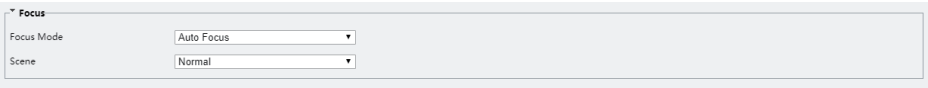
② Select the correct IR control mode and set the parameters. The following table describes some major parameters.

Parameter	Description
Lighting Type	Infrared: The camera uses infrared light illumination. White Light: The camera uses white light illumination (only for cameras support white light). Note: When Control Mode is set to Manual, camera can set illumination level from 0~1000.
Control Mode	Global Mode: The camera adjusts IR illumination and exposure to achieve balanced image effects. Some areas might be overexposed if you select this option. This option is recommended if monitored range and image brightness are your first priority.Overexposure Restrain: The camera adjusts IR illumination and exposure to avoid regional overexposure. Some areas might be dark if you select this option. This option is recommended if clarity of the central part of the image and overexposure control are your first priority. Road: This mode offers strong illumination in whole and is recommended for monitoring wide-ranging scenes, for example, road. Park: This mode offers uniform light and is recommended for monitoring small range scenes with many obstacles, for example, industrial parks. Manual: This mode allows you to manually control the intensity of IR illumination. Indoor: This mode is recommended for application in indoor scenes.

Illumination Level	Set the intensity level of the IR light. The greater the value, the higher the intensity. 0 means that the IR light is turned off. Near-illumination Level: You are recommended to set this parameter first for a wide-angle scene. Mid-illumination Level: You are recommended to set this parameter first if the scene requires an intermediate focal length. Far-illumination Level: You are recommended to set this parameter first if the scene requires a telephoto view. Note: You can set this parameter only when Control Mode is set to Manual.

4 Focus

①Click Setup > Image > Image and then click Focus.



②Select the focus mode as required.

Parameter	Description
Focus Mode	Auto Focus: The camera focuses automatically according to the current light condition. Manual Focus: Manually adjust camera focus as required. One-Click Focus: The camera is triggered to focus once when rotating, zooming or going to a preset. One-Click Focus (IR): In a low light condition such as during night hours or in a dark house, this focus mode achieves better effects with the IR light turned on.
Scene	Normal: Used for common scenes, such as road and industrial park. Long Distance: Used for long-distance monitoring on a road. For example, when the camera is installed over 30 meters high to monitor a distant road intersection.

5 White Balance

White balance is the process of offsetting unnatural color cast in images under different color temperatures so as to output images that best suit human eyes.

① Click Setup > Image > Image and then click White Balance.

② Select a white balance mode as required. The following table describes some major parameters.

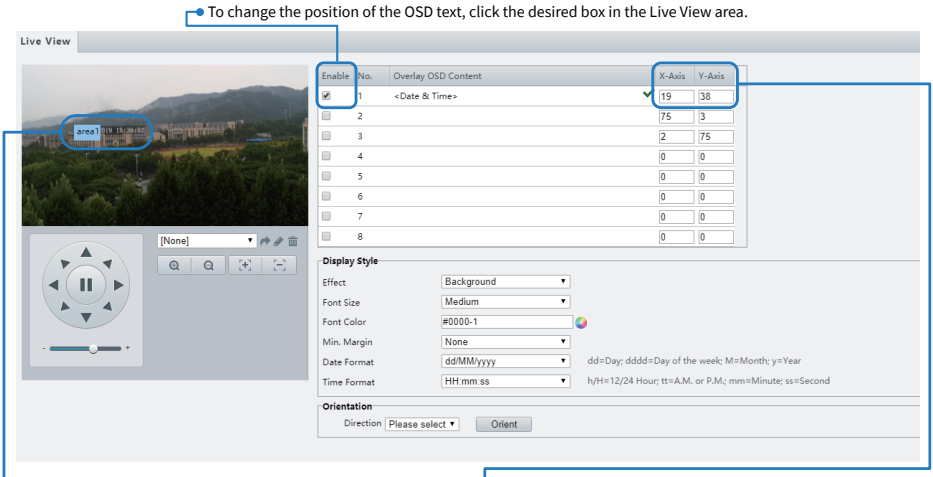
Parameter	Description
White Balance	Adjust the red or blue offset of the image: Auto/Auto2: The camera adjusts the red and blue offset automatically according to the light condition (the color tends to be blue). If the images are still unnaturally red or blue in Auto mode, please try Auto2. still unnaturally red or blue in Auto mode, please try Auto2. Fine Tune: Allow you to adjust the red and blue offset manually. Outdoor: Suitable for outdoor environment with a relatively greater color temperature range. Locked: Lock the current color temperature without change. Sodium Lamp: The camera adjusts red and blue offset automatically according to the light condition (the color tends to be red).
Red Offset	Adjust the red offset manually. Note: You can set this parameter only when White Balance is set to Fine Tune.
Blue Offset	Adjust the red offset manually. Note: You can set this parameter only when White Balance is set to Fine Tune.

4.3 OSD Setting

On Screen Display (OSD) is the text displayed on the screen with video images and may include time and other customized contents.

① Click Setup > Image > OSD.

② Users can customize the position, content and display of the text.



To change the text of the OSD, the drop-down list of Overlay OSD Content provides Time, Preset and Serial Info. You may also select Custom and enter the content you want.

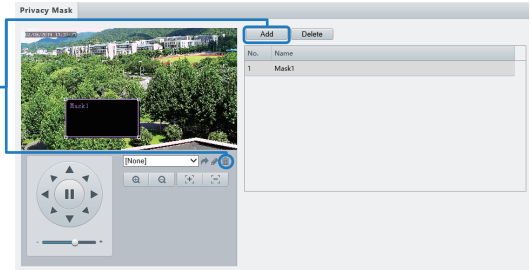
Private Mask

On certain occasions, you may need to set a mask area on the camera image to protect privacy. For example, if you are live broadcasting the camera, and have a private zone you don't want to hide from the audience, you can setup a private mask. Alternatively, if the camera is installed at the bank, you may want to hide the ATM keyboard to protect the privacy of customers. You can set up to 8 private mask zones.

① Click Setup > Image > Privacy Mask.

② Click "Add" to add a privacy mask, and click 🗑 to delete a mask.

- To mask a position: Click the box (with Mask displayed on it) to activate the mask. Move the cursor to the edge of the box until the cursor shows ✥ , drag the box to the intended position.
- To mask an area: Use the mouse to draw a box on the area you want to mask.
- To delete an area: Click the mask on the list, and click "delete".

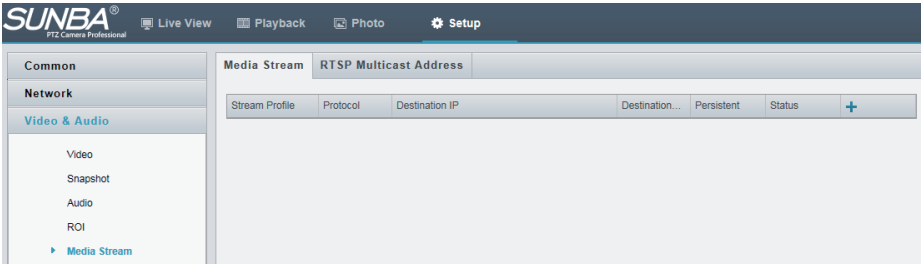


When privacy mask is configured, the intended area is blocked.

4.4 RTMP Stream Configuration

Different from most IP cameras that support only RTSP stream, this camera is able to push RTMP stream directly to YouTube, without using any 3rd party RTSP to RTMP conversion software/server.

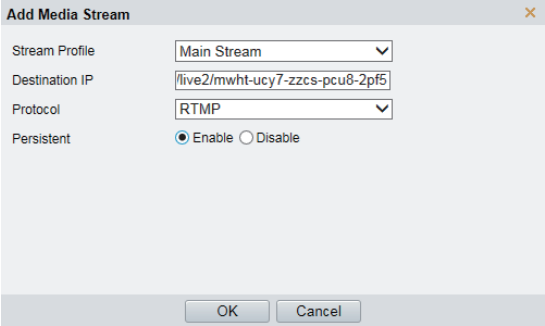
① Click Setup > Video & Audio > Media Stream.



② Click ＋, select the stream type as RTMP, and then set the Destination IP.

For example:
If the YouTube Stream key is "*mwht-ucy7-zzcs-pcu8-2pf5*"
And the YouTube Stream url is *rtmp://a.rtmp.youtube.com/live2*
Please enter the following format:
{Stream URL}/{Stream Key}
In this case, it would be:
rtmp://a.rtmp.youtube.com/live2/mwht-ucy7-zzcs-pcu8-2pf5

If you want the device to establish the media stream that has been configured before automatically after the restart, select Enable for Persistent.



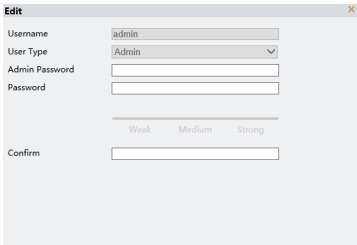
③ To delete a stream, click 🗑.

The Audio Compression is AAC by default, and users can modify it through IE browser (with plug-in) or Guard Tool. Chrome browser does not support, but it's also AAC by default.

Note: If your stream lags a lot or if the stream fails to connect, you should try lowering the bitrate and frame per second. Otherwise the upload bandwidth consumption will be extremely high, preventing the camera from communicating with YouTube server.

Please ignore the bit rate error popup of audio/video.

5.Account Management



Click Common > User.

The camera comes with the default account as follows:
Username: admin
Password: 123456

To modify the password of the account, select the user on the list and click “Edit”. You will be asked to enter your Admin main password in order to assign a new password to the account.

There are two types of users in the system:

1. Administrator: referred to as “admin” in this manual. The default name of the administrator is admin, which cannot be modified. Admin has full permission and can manage all users and devices. Only one admin user is allowed in the system.

2. Common user: referred to as “user” in this manual. User only has permission to play live and recorded video. Up to 32 common users are allowed in the system.

You can add a user on the user management interface (under Setup > Security > User).
After the user is added successfully, you can change the password by entering the new password or delete the user by clearing the username.

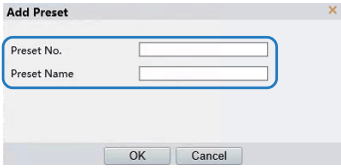
6.Preset and Patrol

6.1 Preset

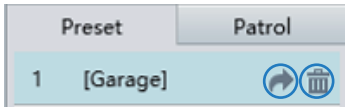
Presets are sets of locations that the camera can memorize and travel to directly when being called. It is available only in pan, tilt and zoom cameras. Each preset location will correspond to a number from the preset list. You can also add text notes for each preset location.

In order for the camera to go to the designated location, you must first “add” a preset, and then “call” it.

To set a preset location, control the PTZ panel and have the camera point to the desired location, then click “Add.” A window will pop out, and you can assign a number and add a name to this specific preset location.



The number and preset name will appear under the preset list. Move the cursor to the preset, and click “ ” to call the preset. Click “ ” to delete the preset.

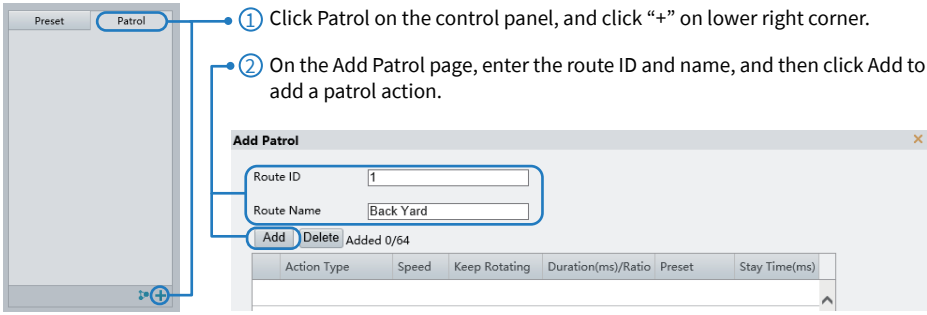


6.2 Patrol

A patrol is the process of travelling through each preset location with designated order (for example, from preset 1 to 10) and dwell time at each preset.

A patrol is also known as a cruise or a tour.

Add a Patrol Route



① Click Patrol on the control panel, and click “+” on lower right corner.

② On the Add Patrol page, enter the route ID and name, and then click Add to add a patrol action.

When action type is set to Go to Preset, up to 64 actions are allowed.
When action type is set to Move Direction and Zoom, only 32 actions are allowed.

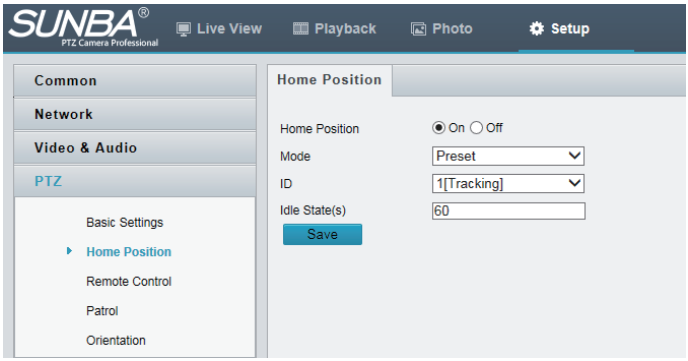
Thus, a patrol action created from the patrol panel include:
- Go to a preset and stay for a certain amount of time before going to the next preset.
- Rotate at the set speed in the set direction for a certain amount of time, zoom and stay at a set position for a certain amount of time, or patrol repeatedly if Keep Rotating is selected.

Note: Guard Station only allows “go to preset” to be set as the actions of patrol. If you want to add versatile actions such as move directions/zooms, it is recommended to use the web interface (Chrome/Firefox/IE).

6.3 Setting Home Position

PTZ camera will return to home position if no operation is made within a specified period.
You need to add presets or a patrol route first. See Add a preset (Chapter 6.1) and Add a patrol route (Chapter 6.2) for details.

1. Click Setup > PTZ > Home Position.
2. Select a mode and ID.
3. Click Save.



6.4 Special Presets List

Special presets are preset numbers associated with advanced commands that cameras can follow to enable settings such as changing infrared LED night vision mode, calibrating camera horizontal and vertical position, etc. You can call the preset directly (no need to “add” a preset as they are pre-existed) according to the List. And you cannot delete any special preset..

Preset Number	Command	Description
81	Clibrate	Calibrate camera horizontal and vertical position. Perform 81+call when the camera stuck in position and cannot pan/tilt further within its claimed range.
83	Clear Preset	Clear all presets
92	Default	Reset the mainboard to factory setting
100	IR ON	Turn on the infrared LED manually
101	IR OFF	Turn off the infrared LED manually
102	IR AUTO	Automatically turn on/off the infrared LED in response to day/night switch
103	IR ALL ON	Turn on both sides of the infrared LED manually

Note: Don't call preset 92 frequently. Frequent default will cause irreversible damage to the camera.

7. Remote Access

7.1 Port Forwarding

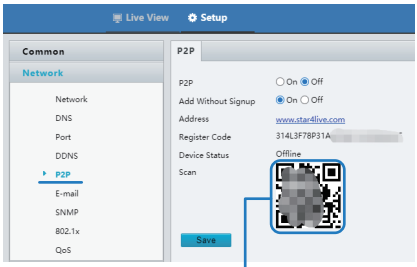
Port forwarding enables remote access by mapping traffic through specific ports to specific device on the LAN (Local Area Network).

For Sunba Performance IP cameras, customers need to forward HTTP Port (80) for live viewing and controlling.

If customers would want to use RTSP live streaming or use 3rd party software that streams over RTSP, then the RTSP port (554) needs to be forwarded as well.

It is recommended to modify the default port for security purpose.

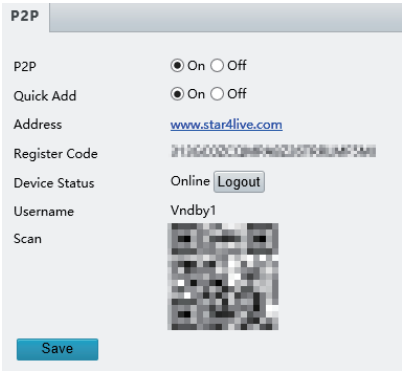
7.2 P2P Cloud



Peer-to-peer cloud is another technology that establishes remote connection with your camera that doesn't require any ports to be opened. Instead, it would form a direct "handshake" between your smartphone and the camera through an authentication server that ensures the device belongs to SUNBA Performance Series camera.

Each Sunba IP camera has a unique P2P Register Code. P2P is supported by smartphone, web interface, and desktop client (Mac & PC).

- Users can find the P2P code via Setup->Network->P2P. The register code corresponds to the P2P code.



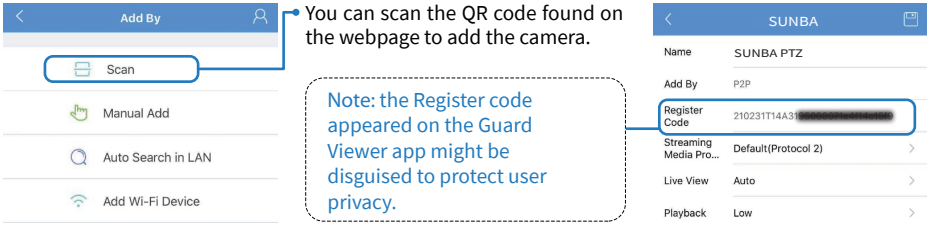
To protect your privacy, please don't share the QR code with others.

To activate the P2P function, please register a cloud account first. The registration option would be available in each of the following client/app below.

Note: one camera can only be connected to one cloud account. Once connected through P2P, the P2P page will display the current cloud user. You must manually logout the current user before connecting using P2P with another cloud account.

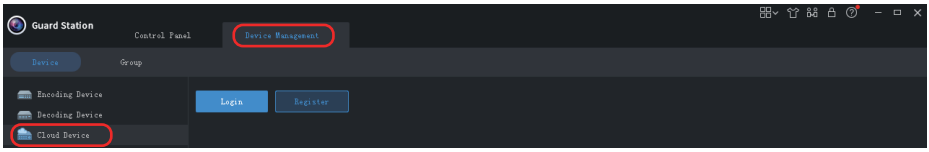
1 Smartphone

In the Guard Viewer app, please register an account first, and then prompt to add device, and select scan.

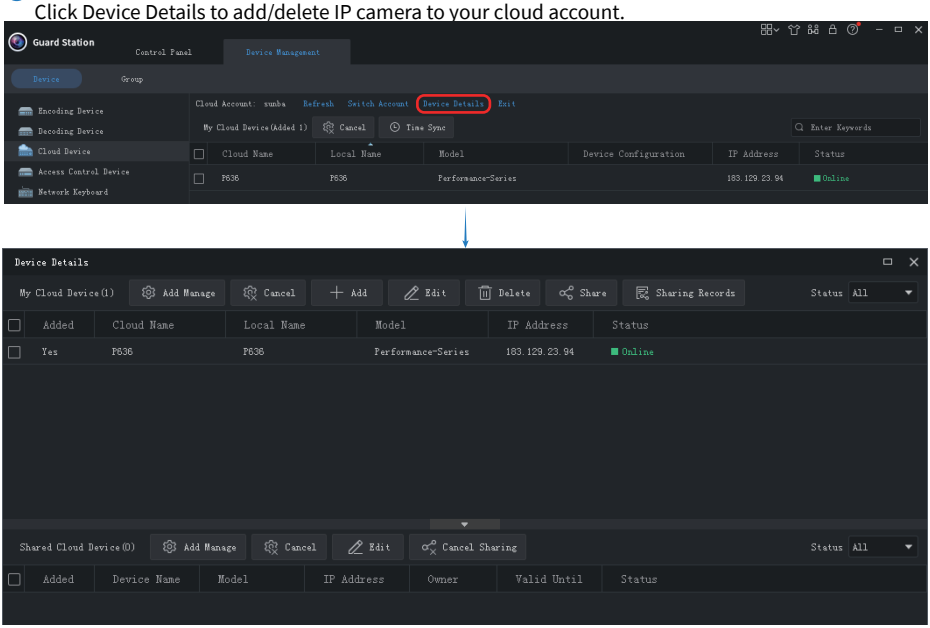


2 Desktop Client

① In the Guard Station client, go to Device Management and select Cloud Device.



② Login to your registered cloud account, and any device associated with the cloud ID will show up. Click Device Details to add/delete IP camera to your cloud account.



7.3 RTSP Live Streaming

Below is the RTSP url of Sunba Performance camera:
rtsp://username:password@IP:Port/media/video1
For example, if the camera has the following parameter:

Username: admin Password: 123456 IP: 192.168.1.10 RTSP Port: 554

Then the url will be as follows:
rtsp://admin:123456@192.168.1.10:554/media/video1

You can use RTSP stream for live viewing, and push the stream using OBS or other 3rd party tools to broadcast over Internet.

7.4 VPN

VPN is currently considered as the most secure way of remote access. For example, the camera installed in London (network A) and you are in your Los Angeles house (network B).

You will need to setup a VPN server in London, and connect to the server using a VPN client in Los Angeles. Once connected, you will be able to access the local network in London where the camera is installed.

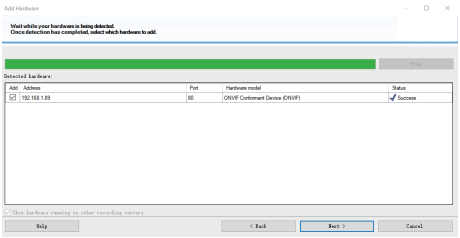
There are many VPN protocols to select from including PPTP, L2TP and OpenVPN etc. Currently, OpenVPN is one of the most popular protocols.

Please refer to your router instruction for detailed steps of setting up a VPN server.

8.Third Party Compatibility

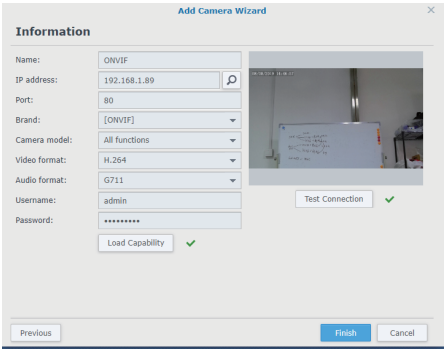
All SUNBA Performance Series cameras are ONVIF compliant with specification 17.12 so it should be compatible with any software that integrates standard ONVIF protocol. Below are examples with some of the most popular 3rd party software.

1 Milestone

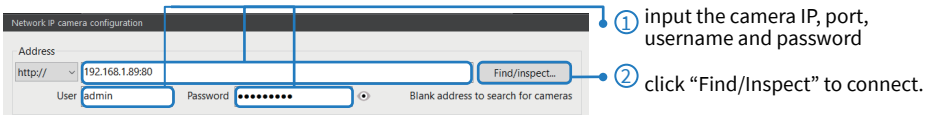


Add the IP camera using ONVIF protocol with corresponding ONVIF (http) port 80. Don't forget to enable PTZ function (if your IPC supports PTZ) in Milestone management client.

2 Synology



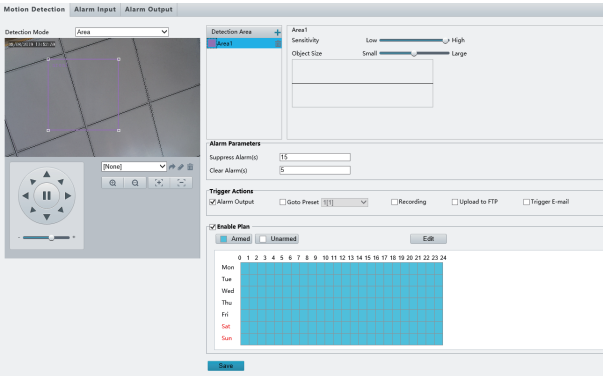
3 Blue Iris



9.Video Motion Detection

Motion detection detects the object motion in a specified rectangular area during a period. You can customize parameters such as a pre-defined detection area, sensitivity of detection, object size, and history for the camera to decide whether to report a motion detection alarm when it detects motion.

Click Setup > Events > Common Alarm > Motion Detection.



- Detection Mode: You can switch between grid detection and area detection. Area detection allows you to customize the detection object size (see below) for each area and grid detection applies to more uniformly sized moving objects.

- Object Size: Object size specifies the minimum ratio of the object's size to the size of the total detection area before an alarm will be reported. That is to say, to detect motion of tiny objects, you need to draw a small box (detection area) in the actual motion area accordingly.
- Alarm Output: This only applies if the camera is connected to external 3rd party alarm device.
- Go to Preset: When motion alarm triggers, the camera will travel to a specific preset location. For details of setting up preset, please refer to Chapter 6.
- Suppress Alarm(s): After an alarm is triggered, the same alarm will not be reported within the set time.
- Clear Alarm(s): After an alarm is triggered,

  a. If the same alarm is not triggered within the set time, the alarm will be cleared and the same alarm can be reported again.

  b. If the same alarm is triggered within the set time, the alarm will not be cleared until the suppress alarm time expires. Then the same alarm can be reported again.
- Recording: Record the motion detection clip to the storage card.

10. Smart Event Configuration

Sunba IP camera supports various types of intelligent alarms including Perimeter Protection, Object Detection, People Counting and Auto Tracking.

Some detections would interfere with each other, and thus cannot be activated simultaneously. Below is the setup of each type of smart detection:
Click Setup > Intelligent > Smart.

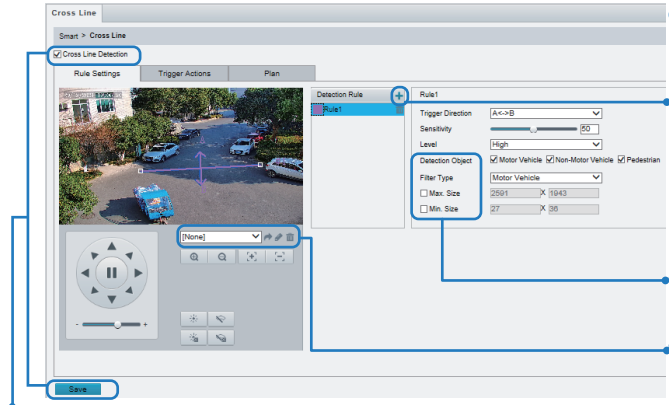
When configuring each smart event, please do not enable the function first. After all settings are completed, click Save, and then enable it. When re-config it, you will also need to disable the function, then re-config, save and enable it. It's to avoid that the camera will continue to perform the function during the setting process, causing interference to the setting.

10.1 Perimeter Protection

Detections included in Perimeter Protection cannot be enabled when the Object Detection, People Counting or Auto Tracking is turned on.

1 Cross Line

Cross line detection detects objects that cross a virtual line in live video and triggers alarm when such an event is detected.



① Select Cross Line and then click ⚙ . Please leave it disabled.

② In the Detection Rule area, click + to add a new line. You can set the sensitivity, level and the direction of line cross that would trigger an alarm.

③ Set Detection Object type and size.

④ Add a pre-designated view as a home position preset, please refer to Chapter 6.3 for detaills.

⑤ Click Save and then enable it.

Set the Trigger Actions and Plan as required.

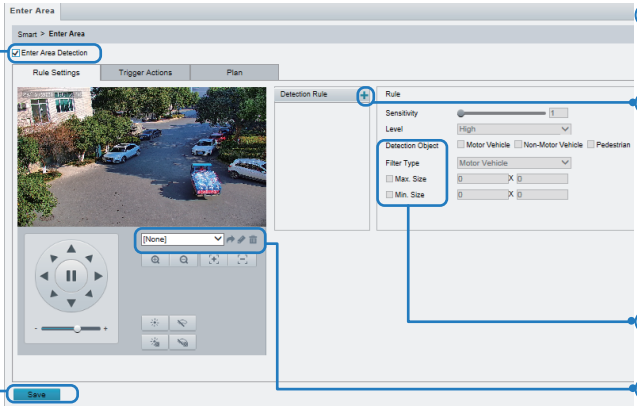
Trigger Actions:

Send E-mail: this will send an email notification for the alarm along with a snapshot. For details, see Chapter 3.3.

Upload Image(Original): this will send snapshots to FTP server once the alarm is triggered. For details, see Chapter 3.4.

2 Enter Area

Enter Area detection detects objects that enter a specified area, and triggers alarm when such an event is detected.



① Select Enter Area and then click ⚙ .
Please leave it disabled.

② In the Detection Rule area, ＋ click to add a new detection area. Drag the borders of the box to set the intended position and range. You can set the sensitivity and level for the camera to decide whether to trigger an alarm.

③ Set Detection Object type and size.

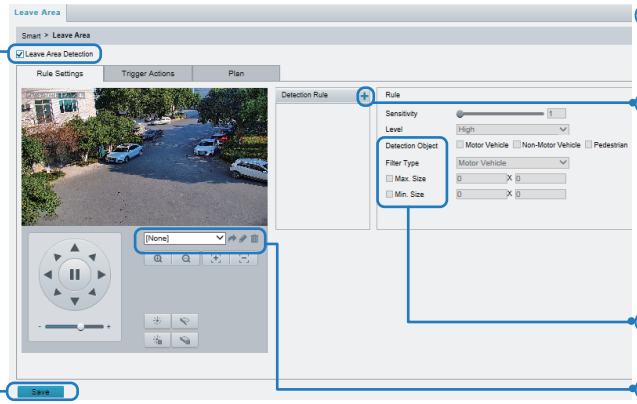
④ Add a pre-designated view as a home position preset, please refer to Chapter 6.3 for detaills.

⑤ Click Save and then enable it.

Set the Trigger Actions and Plan as required.
Trigger Actions:
Send E-mail: this will send an email notification for the alarm along with a snapshot. For details, see Chapter 3.3.
Upload Image(Original): this will send snapshots to FTP server once the alarm is triggered. For details, see Chapter 3.4.

3 Leave Area

Leave Area detection detects objects that leave a specified area, and triggers alarm when such an event is detected.



① Select Leave Area and then click ⚙ .
Please leave it disabled.

② In the Detection Rule area, ＋ click to add a new detection area. Drag the borders of the box to set the intended position and range. You can set the sensitivity and level for the camera to decide whether to trigger an alarm.

③ Set Detection Object type and size.

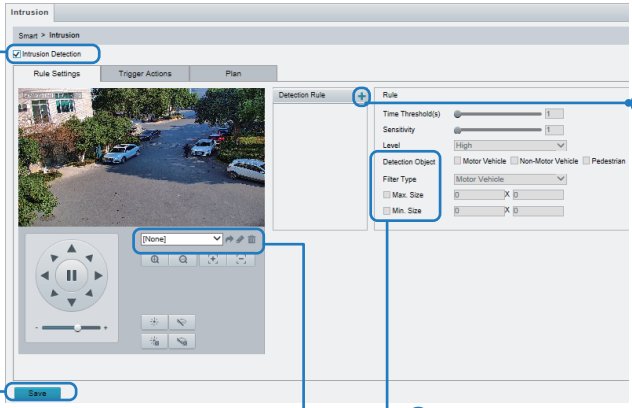
④ Add a pre-designated view as a home position preset, please refer to Chapter 6.3 for detaills.

⑤ Click Save and then enable it.

Set the Trigger Actions and Plan as required.
Trigger Actions:
Send E-mail: this will send an email notification for the alarm along with a snapshot. For details, see Chapter 3.3.
Upload Image(Original): this will send snapshots to FTP server once the alarm is triggered. For details, see Chapter 3.4.

4 Intrusion Detection

Intrusion detection detects objects that enter a specified area in live video and triggers alarm when such an event is detected.



① Select Intrusion and then click ⚙ . Please leave it disabled.

② In the Detection Rule area, + click to add a new detection area. Drag the borders of the box to set the intended position and range. You can set the sensitivity, level and time threshold (minimum time the intruder stays in the detection area before the alarm triggers) for the camera to decide whether to trigger an alarm.

③ Set Detection Object type and size.

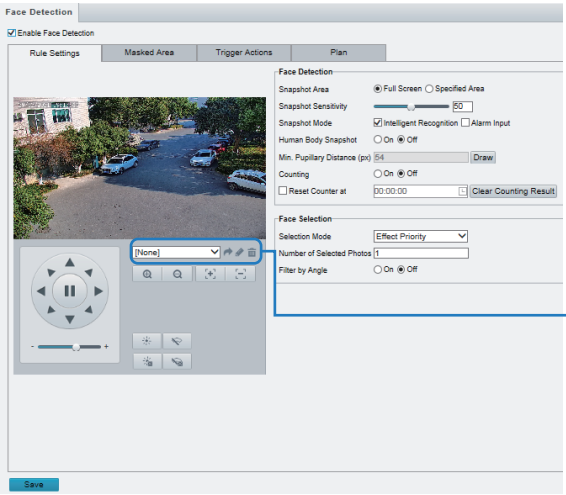
④ Add a pre-designated view as a home position preset, please refer to Chapter 6.3 for detaills.

⑤ Click Save and then enable it.

Trigger Actions:
Upload to FTP: this will send snapshots to FTP server once the alarm is triggered. For details, see Chapter 3.4.
Trigger E-mail: this will send an email notification for the alarm along with a snapshot. For details, see Chapter 3.3.
Intrusion detection cannot be enabled when either of the face capture or people head counting is turned on.

10.2 Object Detection

Face detection detects human faces in the configured area.
Face Detection cannot be enabled when Perimeter Protection, People Counting or Auto Tracking is turned on.



- Select Face Detection and then click . ⚙ Please leave it disabled.

- Add a pre-designated view as a home position preset, please refer to Chapter 6.3 for detaills.

- Detection Area: You can set to detect and capture face appeared in the selected area or in the full screen.
- Set snapshot sensitivity. The greater the value, the higher the sensitivity.
- Set snapshot mode. In Intelligent Recognition, the camera detects and snapshots the object automatically.
- To enable snapshot of human body in the detection area, enable Human Body Snapshot.
- Min Pupillary Distance (px): The minimum pupillary distance of the detection object.
- Counting: Turn on to count the number of faces detected by the IP camera.
- Click Clear Counting Result to clear statistics.
- Configure face selection as required.
- Set the alarm-triggered actions and plan as required.
- Click Save and then enable it.

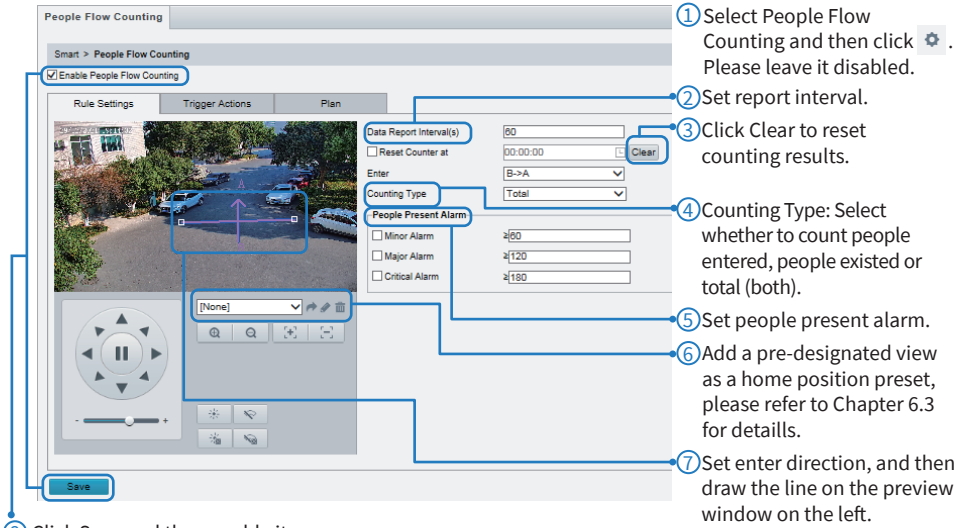
10.3 People Counting

Note: People counting detects human figures in terms of the appropriate ratio between head and shoulder. So it is important the IP camera is mounted high enough and are able to capture the upper part of any human figure.

People Counting cannot be enabled when Perimeter Protection, Face Detection 0r Auto Tracking is turned on.

1 People Flow Counting

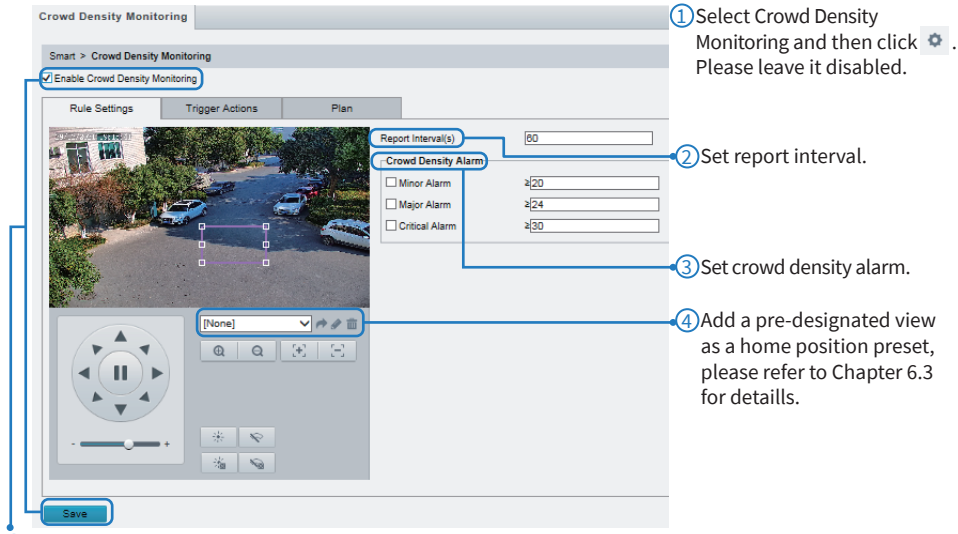
Click Setup > Intelligent > Smart > People Counting.



Set the alarm-triggered actions and plan as required.

2 Crowd Density Monitoring

Click Setup > Intelligent > Smart > People Counting.



⑤ Click Save and then enable it.

Set the alarm-triggered actions and plan as required.

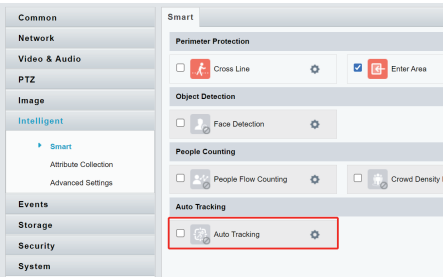
10.4 Auto Tracking

video tutorial https://www.youtube.com/@SunbaTech

A. Smart Rules Trigger Tracking

It is recommended to use smart rules to trigger tracking, which is more accurate and controllable.

When you use smart rules to trigger tracking, please do not check the auto tracking option as below:



Click Setup > Intelligent > Smart > Auto Tracking. And leave it disabled.

Scan me to get video tutorials

When you config a triggered auto tracking under Perimeter Protection rule, please leave Enable Auto Tracking unchecked. After completing the above settings, then go to Smart > Perimeter Protection to select rule type. There are 4 types: Cross Line, Enter Area, Leave Area and Intrusion.

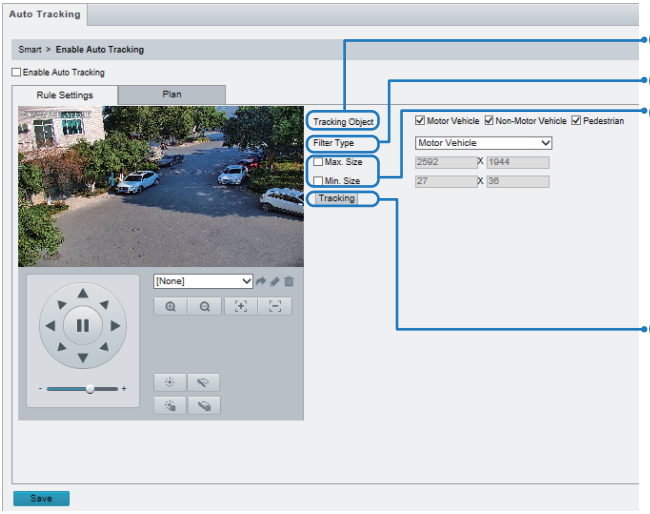
Refer to Chapter 10.1 to complete the settings and click Trigger Actions and select Trigger Tracking.

Note:

Please leave the function disabled first and enable it after completing all settings.

B. Scheduled Preset/View Tracking

If you would like to trigger auto tracking under full pre-designated view rule, please add a pre-designated view as a home position preset for tracking. For example, set the pre-designated view as preset 1, and then add preset 1 to the home position. please refer to Chapter 6.3 for detaills.

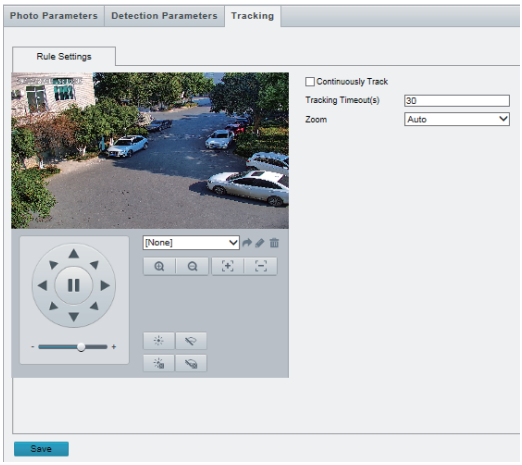


① Select Tracking Object.

② Select Filter Type.

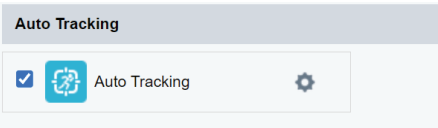
③ Set Max. Size and Min. Size under Filter Type. Only objects within the size range will betracked; others will be filtered and not tracked. The maximum width or height must be greaterthan the minimum width or height.

④ Tracking settings.

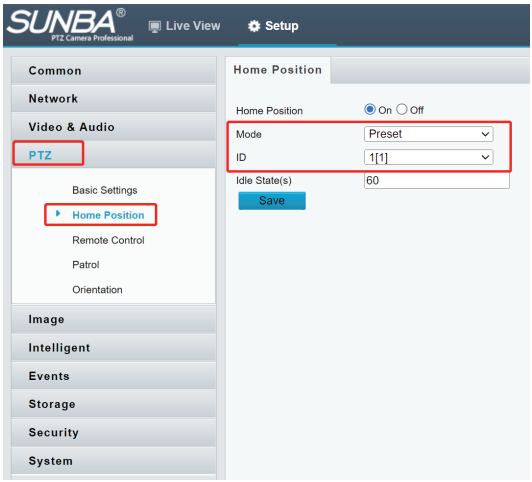


⑤ Rule Settings

- Set tracking timeout (unit: sec) and zoom ratio.
- With Continuously Track selected, the camera continuously tracks an object that triggers the rule until target cannot be detected.
- Click Save.



Click Save and the Enable Auto Tracking after you completed the above settings.



Home position also applies to: A. Smart Rules Trigger Tracking

In the view of tracking the trigger position, it is best to set a preset point (use preset point No. 1 as an example), and enable the home position in the PTZ panel (set preset No. 1 as the initial position), so that after you manually control the PTZ, The camera will automatically return to home position and automatically enable the tracking mode again.

Note: After the tracking object is lost, the camera also will automatically back to the initial tracking position. The function of the home position is to ensure that the camera can back to the initial position every time even someone manually changed the value of the PTZ.

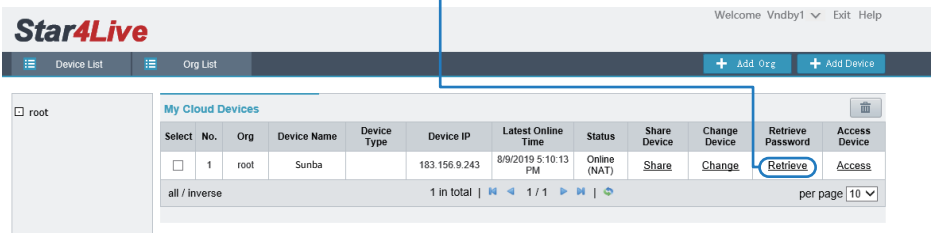
11. Forget Password

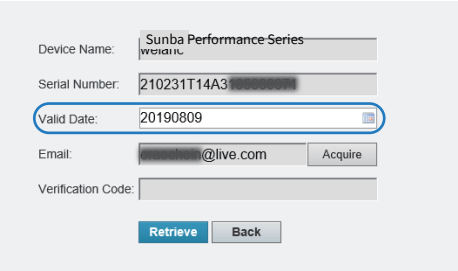
Method A

This method only works if you have a cloud account upfront and the cloud account has added the specific IP camera you want to recover the password.

① Please visit http://star4live.com. Login using your cloud account.

② Click “Retrieve” under Retrieve Password.



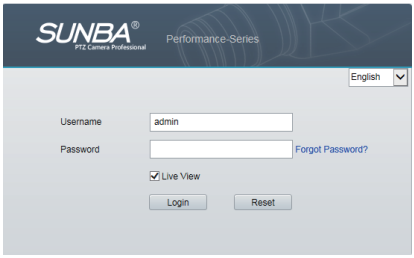


③ Then please enter the “date” of the device and verify your email to obtain a temporary one-time password. Note you must enter the “date” appears on the IP camera, which is not necessarily the same date that you are on. For example, you are in Los Angeles on August 9th 5pm, and the camera is installed in Tokyo, which is already on August 10th.

Entering a wrong date would result in the failure of generating a successful temporary access code.

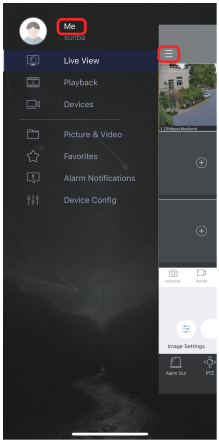
Method B

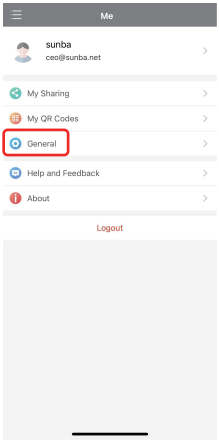
If you set an email address for verification when modifying the initial password, then you can click "forget password" to obtain a temporary access code.

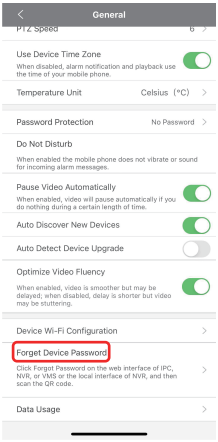


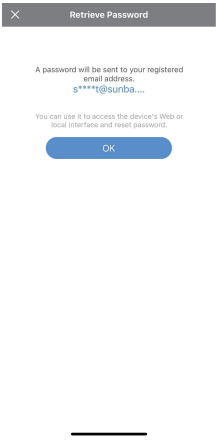
Please scan the QR code through Guard Viewer APP to obtain the security code (for admin only):

Me > General > Forget Device Password









Method C

If both of the above methods fail, please send the model, serial number, proof of purchase and date appears on the IP camera to support@sunba.net for more help.

Warranty Statement

1.This product comes with a 2-year limited warranty in USA (1 year in other regions) and covering parts only. You must pay the labor fee for repair inside the warehouse. However, any parts replacements are always covered and we will be sending you videos & paper instructions on how to fix the unit. Please contact us first within the warranty period to make sure the condition of warranty is met.

2.Our warranty does not extend to any products that are physically damaged or are not under normal operating conditions as a result of misuse or improper installation on the user's end.

Sunba's Return Policy

Return Window
Please return your product within 30 days of your receipt. That's the official deadline the return request must be received. Exception applies for items in resellable conditions.

RMA
We will provide a Returned Merchandise Authorization (RMA) Number for each item that satisfies the return request. Please put your RMA sheet inside the box for reference to expedite the refund process. All products must be returned within 14 days from the RMA issuing date.

Complete Package Rule
Please return the product with its original packaging, including manuals, brackets and toolkit that come with the unit for a full refund. According to Amazon's restocking fee policy, returns with incomplete/materially different package may enable sellers to charge a restocking fee up to 20% subject to the completeness of the package. Therefore, please make sure you keep the package in good condition in the period of valid return window to avoid any additional charge.

Refund
If you didn't receive an automatic refund within 10 days of the receipt of your return, it is either the RMA was not attached to the package or the RMA was lost by the warehouse. In this case, please kindly provide us with your tracking number so that we can match the return package and the refund will be manually processed within 24 hours. Please watch your email notifications.

For any questions, don't hesitate to reach support@sunba.net
SUNBA®Technology