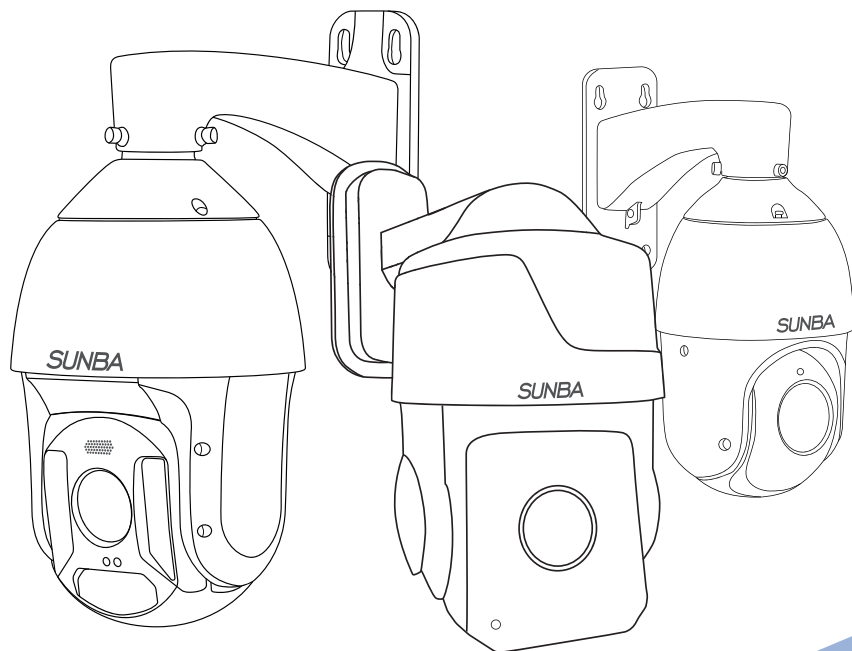


SUNBA[®] Lite Series

Network PTZ Camera

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

User Guide V10.0



2022/06
Version 10.0



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

FCC Warning (U.S.A)

The device has been tested in compliance 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 is not permitted to cause harmful interference to any authorized radio communications, and 2) it must accept any interference it receives.



WARNING: Please test the camera indoor before mounting it outside. Stay at least 24 hours to test both daytime and night vision IR LED.

MENU

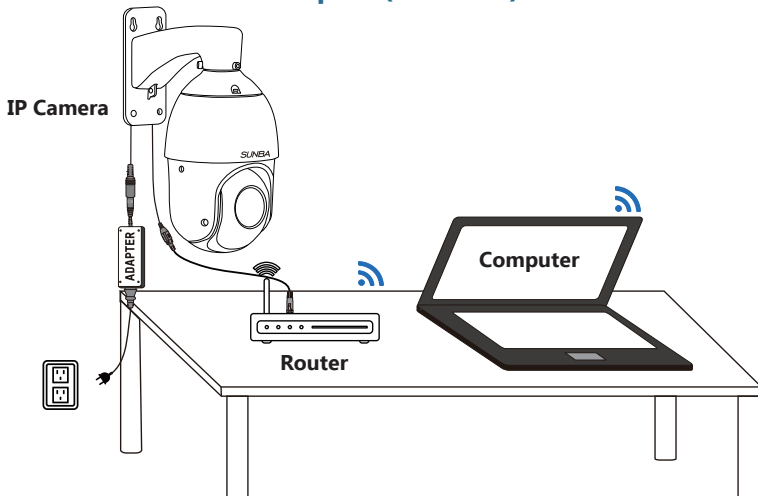
- 1. Camera Bench Test ----- 02
- 2. Camera Setup by Smartphone ----- 03
- 3. Camera Setup by VMS Client ----- 05
- 4. WiFi Application ----- 08
- 5. Mounting Outdoor ----- 12
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1. Camera Bench Test



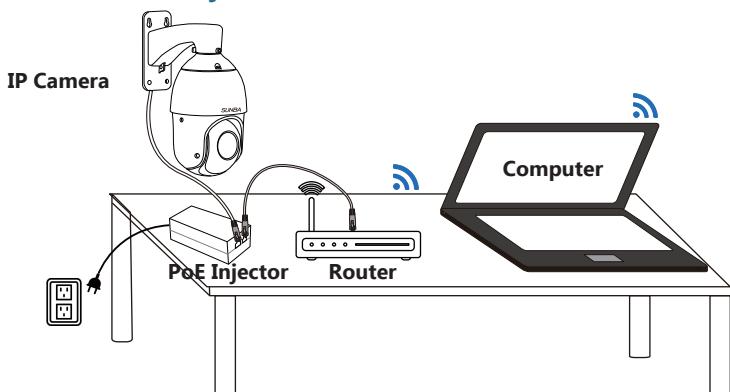
When you take the camera out of the box, please test the camera indoor first before mounting outside.

Type A: With DC12V Aadapter (non-PoE)



Do NOT extend the power cable during the bench test because DC power drops quickly along the transmission. A bench test helps you rule out all problems caused by power supply. Underpower causes problems such as 1) PTZ issues 2) unstable infrared (camera reboots repeatedly) and 3) spinning dome.

Type B: With PoE Injector/Switch



PoE Standard

It is important to note that all Sunba pan tilt zoom cameras require to be powered by PoE+/++ adapters (injector/switch) with 802.3at/bt standard. Conventional PoE standard 802.3af delivers only 15.4W per port and using those adapters would cause underpower.

| Power Gauge (PD) | PoE Standard | Support DC12V Adapter? |
|------------------|--------------|------------------------|
| ≥25W | 802.3at/bt | Yes |

Note: 802.3at is also known as PoE+; 802.3bt is known as PoE++.

What are you testing in this stage?

1. Does the camera rotate when powered up?

When powered up, the speed dome automatically begins a self-diagnostic process during which the camera will pan horizontally and vertically to make sure PTZ, lens and other parts of the camera are functional. Please contact our technical staff if a self-test does not happen on your unit. Please refrain from disassembling the unit before contacting us.

2. Live View and Picture Quality

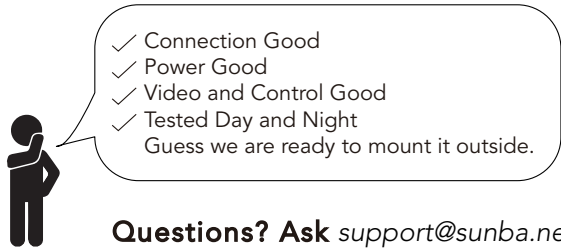
Check the video streaming quality.

3. Pan Tilt and Zoom

Check whether the camera performs the pan, tilt, zoom actions properly.

4. Night Vision

Shield the camera front lens, turn off the lights and draw the curtains to see if the camera is able to automatically turn to infrared night vision mode.



Questions? Ask support@sunba.net

2. Camera Setup by Smartphone

This section will provide the user with information on how to setup the PTZ camera using smartphone for the first time.

video tutorial smartphone.sunba.net



XMEye



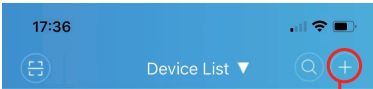
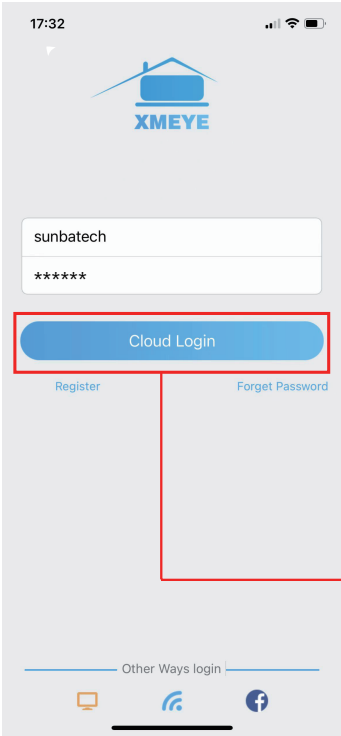
Android



APP
Download



iOS



② Click the "+" icon to add device.

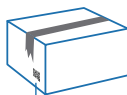
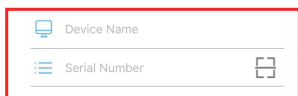
NOTE: iSunba/iSunba Pro/XMEye
These APPs are suitable for
Sunba Lite Series cameras.

① Register to select "Cloud Login" (push notification requires a cloud account to store picture alert).

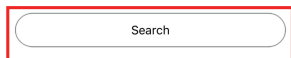


③

Remote or with 4G: manually scan or enter the camera QR code to add device.

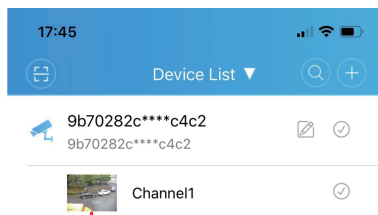


The app automatically shows all Sunba devices in LAN.

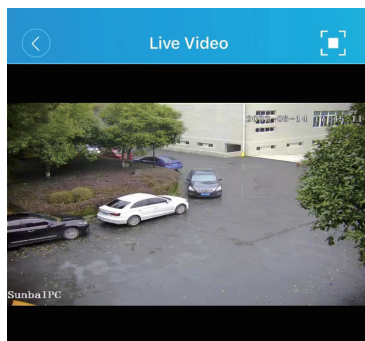


[Forgot your device password?](#)

Use "Search" if your camera and smartphone are connected to the same WiFi.

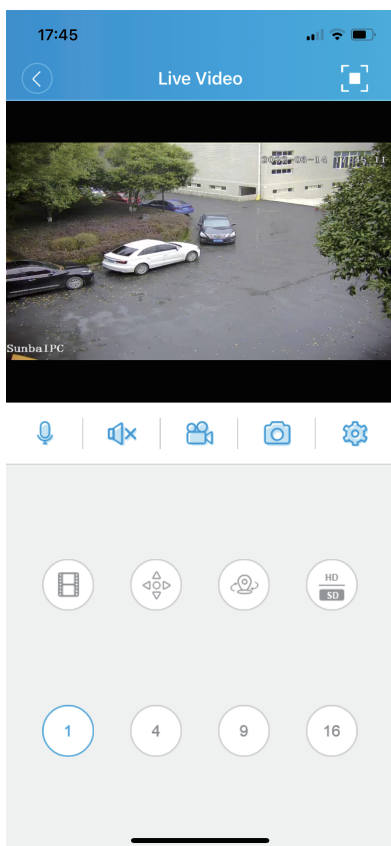


④ Press the camera to watch live view.











⑤ Modify other settings such as password for the camera.

⑥



Control pan, tilt and zoom, watch live view and set/delete/call presets from this page.

-  Press to speak. (device must support speaker)
-  Turn on/off microphone.
-  Record a video and save the clip to your smartphone.
-  Take a snapshot and save the image to your smartphone.
-  Check playback.
-  PTZ control.
-  Switch between HD/SD display.
-  Set/call preset/cruise.

3. Camera Setup by VMS Client

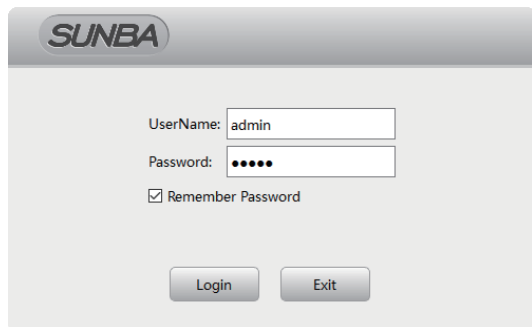
This section will provide the user with information on how to setup the PTZ camera using their computer.

Step 1: Install VMS from the CD-ROM.

Input the default software account below. The account is to ensure no one can have unauthorized access to your surveillance software. This is not the credential for individual IP camera.

VMS for PC: admin/admin

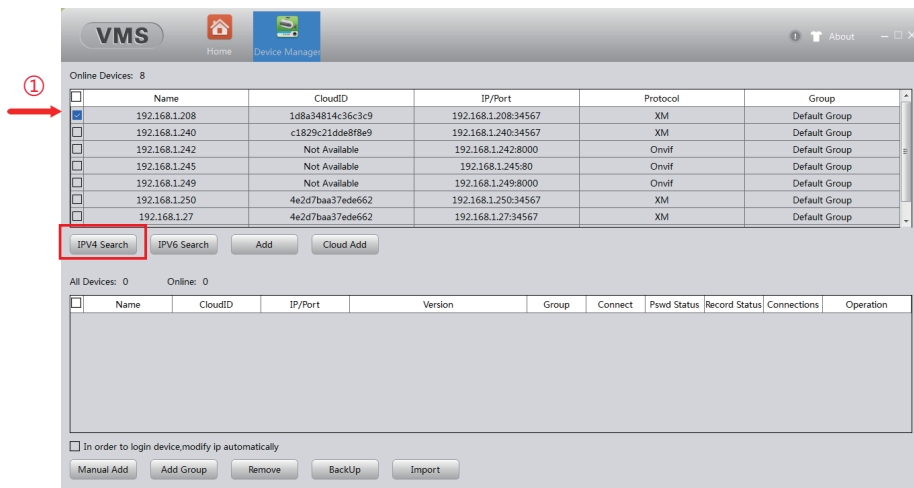
VMS for Mac: admin/(blank)



The image shows the Sunba VMS login window. It has a title bar with the Sunba logo. Below the title bar, there are two input fields: 'UserName:' with the text 'admin' and 'Password:' with eight dots. Below these fields is a checkbox labeled 'Remember Password' which is checked. At the bottom, there are two buttons: 'Login' and 'Exit'.

Step 2: Open the Device Manager page.

Click **"IPv4 Search"** and select the camera, then click **"add"** to connect the device.



The image shows the Sunba VMS Device Manager page. At the top, there is a navigation bar with 'VMS', 'Home', and 'Device Manager' buttons. Below the navigation bar, there is a section titled 'Online Devices: 8'. It contains a table with the following columns: Name, CloudID, IP/Port, Protocol, and Group. The first row is selected, and a red arrow points to the 'IPv4 Search' button below the table. Below the table, there are buttons for 'IPv4 Search', 'IPv6 Search', 'Add', and 'Cloud Add'. Below these buttons, there is a section titled 'All Devices: 0' and 'Online: 0'. It contains a table with the following columns: Name, CloudID, IP/Port, Version, Group, Connect, Pswd Status, Record Status, Connections, and Operation. At the bottom, there is a checkbox labeled 'In order to login device, modify ip automatically' and buttons for 'Manual Add', 'Add Group', 'Remove', 'BackUp', and 'Import'.

| Name | CloudID | IP/Port | Protocol | Group |
|---------------|------------------|---------------------|----------|---------------|
| 192.168.1.208 | 1d8a34814c36c3c9 | 192.168.1.208:34567 | XM | Default Group |
| 192.168.1.240 | c1829c21dde8f8e9 | 192.168.1.240:34567 | XM | Default Group |
| 192.168.1.242 | Not Available | 192.168.1.242:8000 | Omnif | Default Group |
| 192.168.1.245 | Not Available | 192.168.1.245:80 | Omnif | Default Group |
| 192.168.1.249 | Not Available | 192.168.1.249:8000 | Omnif | Default Group |
| 192.168.1.250 | 4e2d7baa37ede662 | 192.168.1.250:34567 | XM | Default Group |
| 192.168.1.27 | 4e2d7baa37ede662 | 192.168.1.27:34567 | XM | Default Group |

Try the following if no device shows up:

- Temporarily disable the firewall;
- Connect the camera directly to your parental router;
- Connect the camera directly to your PC/Mac for testing;
- Contact support@sunba.net

Now the camera status should show **"Connected"**.

VMS Home Device Manager

Online Devices: 7

| Name | CloudID | IP/Port | Protocol | Group |
|---------------|------------------|---------------------|----------|---------------|
| 192.168.1.240 | c1829c21dde8f9e9 | 192.168.1.240:34567 | XM | Default Group |
| 192.168.1.242 | Not Available | 192.168.1.242:8000 | Onvif | Default Group |
| 192.168.1.245 | Not Available | 192.168.1.245:80 | Onvif | Default Group |
| 192.168.1.249 | Not Available | 192.168.1.249:8000 | Onvif | Default Group |
| 192.168.1.250 | 4e2d7baa37ede662 | 192.168.1.250:34567 | XM | Default Group |
| 192.168.1.27 | 4e2d7baa37ede662 | 192.168.1.27:34567 | XM | Default Group |
| 192.168.1.91 | Not Available | 192.168.1.91:80 | Onvif | Default Group |

IPv4 Search IPv6 Search Add Cloud Add

All Devices: 1 Online: 1

| Name | CloudID | IP/Port | Version | Group | Connect | Pswd Status | Record Status | Connections | Operation |
|---------------|------------------|---------------------|---------------------------------------|---------------|-----------|-------------|---------------|-------------|-----------|
| 192.168.1.208 | 1d8a34814c36c3c9 | 192.168.1.208:34... | V5.00.R02.L5330747.10010.349f17.00... | Default Gr... | Connected | | | 0 | |

☐ In order to login device, modify ip automatically

Manual Add Add Group Remove BackUp Import

"Connected" status indicates the camera is online.

Tricks:

The camera's default ports are ONVIF 8899, TCP 34567, HTTP 80 and RTSP 554. Those values must also be unique to each other.

Step 3: Live View

Please go to the **"Live View"** page.

VMS Home Live View(1) Device Manager

click to open PTZ panel

2022-03-17 22:08:17

Devices

- Default Group
- ✓ Main Stream
- Extra Stream
- Close
- Reboot Device
- Edit Device Name
- Sync The System Time
- Task
- Config
- Reset Config
- Logout
- Delete Device

Right click and select "Main Stream" to start live view

SunbaIPC

VMS CPU State: 7%
ALL CPU State: 8%
Memory State: 253MB

ALL 25 36 64

ALL 50

View

4. WiFi Application



This chapter only applies to model 405-ECO WiFi Version .

This section will provide the user with information on how to setup the WiFi connection.

video tutorial wifiset.sunbatech.com

Method A: Search and add the camera by smartphone.

After the camera is powered on and completes the self-test, you can directly search and add the camera via XMEye APP on smartphone.

Attention: Make sure the distance among the camera, phone and the router within 2m.

10:45

Device List

+

1

Click the "+" icon to add device.

10:47

Add Device

Manual Add

WiFi Config

2

Select WiFi Config.

ASUS-2.4G

3

Fill in the correct WiFi password.

OK

*Refers to searching for devices under the same LAN

*Make Indicator Light Blinking Slowly, Try to make sure the distance among the device, phone and the router within 2m

Long time press the SET button until the indicator flash quickly (Part of products are needed to plug hole configuration by thimble)

Select channel

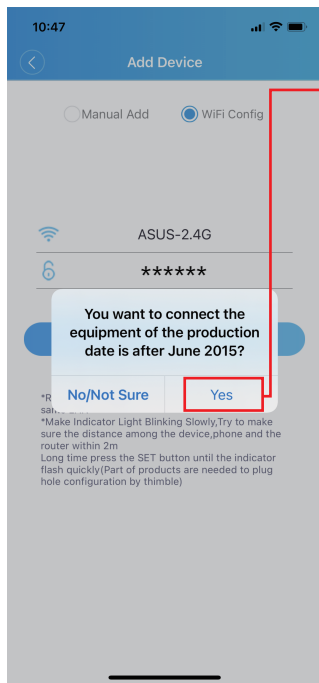
Device

Alarm

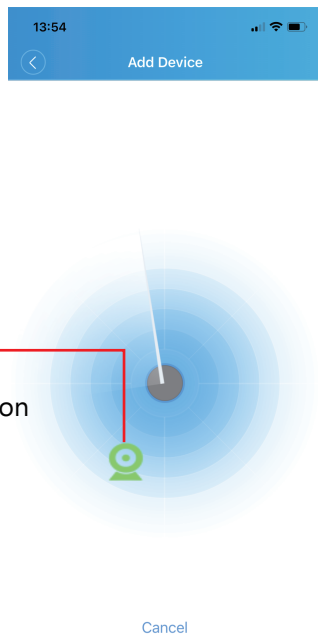
Mobile Storage

My

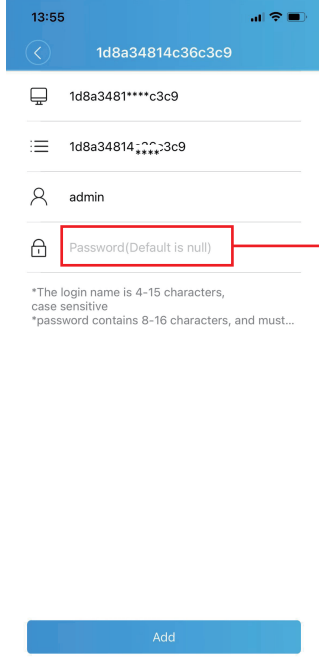
Attention: Make sure your phone is in **2.4GHz WiFi** network, and 5GHz or other network is not supported.



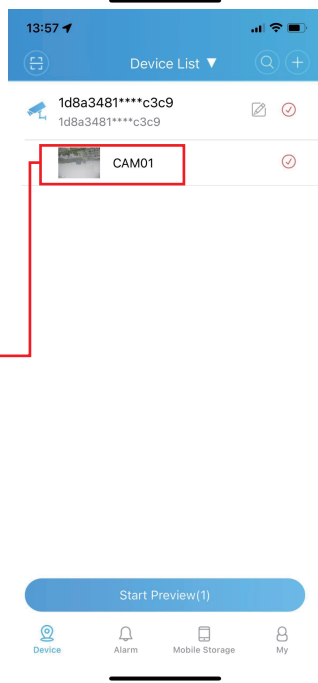
④ Click Yes



⑤ Device searching.
Click the green IPC icon



⑥ Enter password.

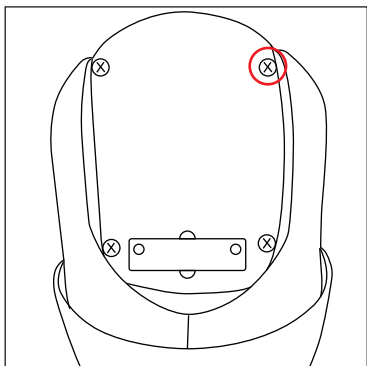


⑦ Click and start live view.

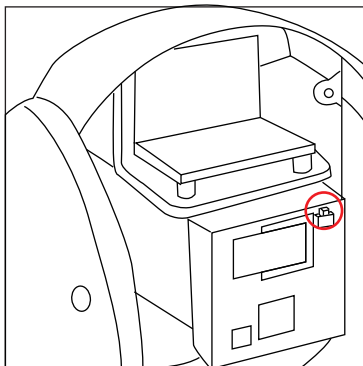
Tips: 

If the search fails, please refer to the following two ways to default the camera, and then refer to the above steps to search again.

1. Please manually press the button to default the camera as shown below

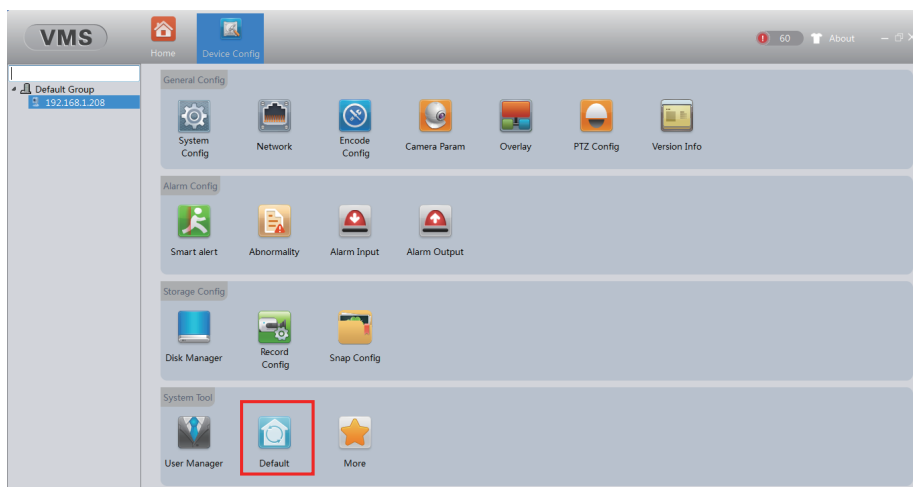


Remove the 4 screws to take off the camera back cover.



Press and hold the black button for about 8~10 seconds.

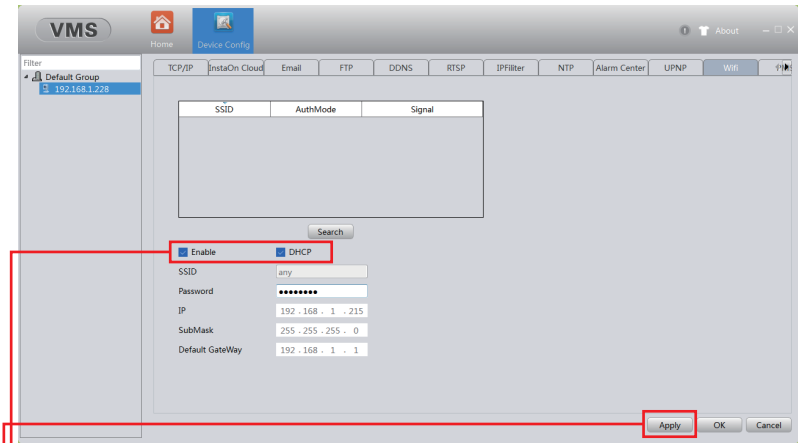
2. You can directly connect the camera with a PC or laptop, and default the camera via VMS/IE browser.



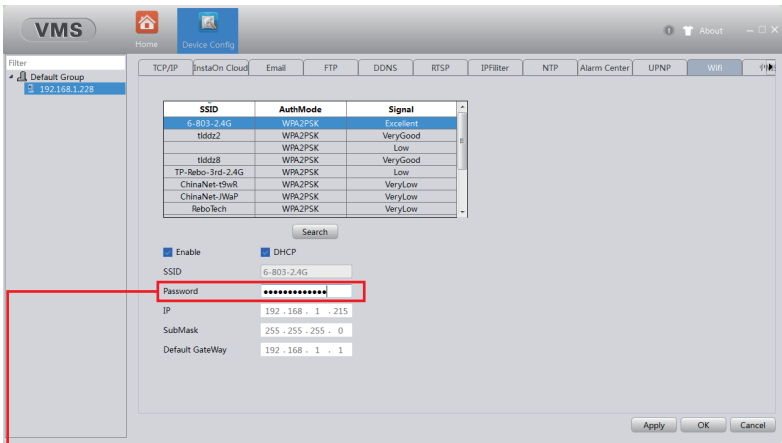
Method B: Enable WiFi function via VMS/IE browser.

Please refer to Chapter 3 and Chapter 6 for the steps to access the camera through the VMS/IE browser.

After adding the camera, please go to Device Config > Network > WiFi
(In Internet Explorer, please go to Device Config > Netservice > WiFi)



- ① Click Enable and enable DHCP.
- ② Click Apply to save the settings.
- ③ Click Search to select a WiFi with stable and strong signal.



- ④ Fill in the correct WiFi password.
- ⑤ Click Apply and OK to save the settings.

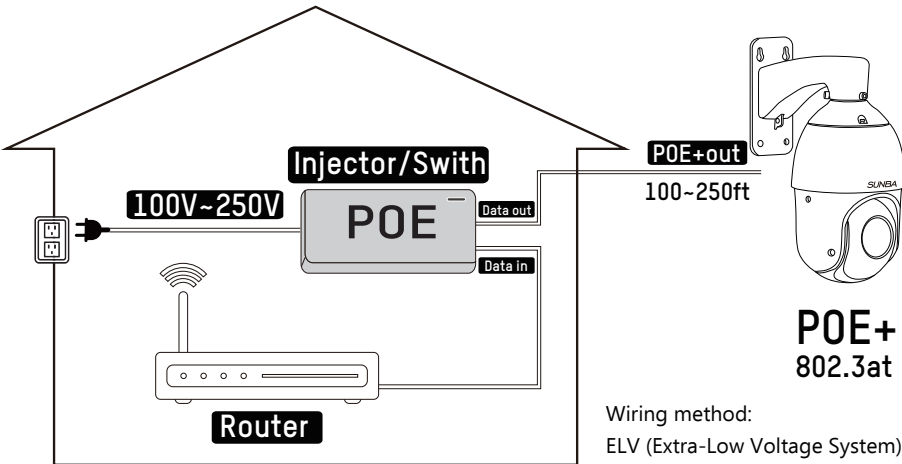
Attention: After checking Enable in the first step, you must click Apply to save the settings, otherwise the WiFi signal will not be searched.

5. Mounting Outdoor

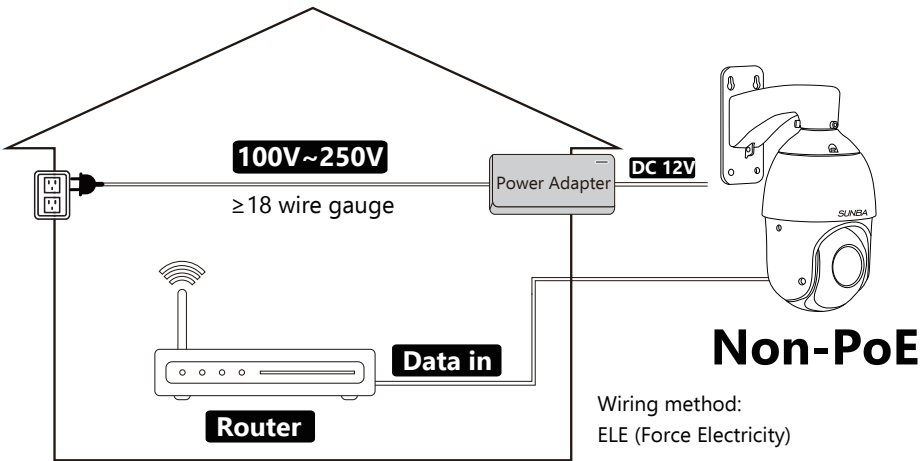


Please complete bench test (see Chapter 1) before mounting the camera outdoor.

Wiring Type A: Power of Ethernet Solution



Wiring Type B: Non-PoE (DC12V) Solution



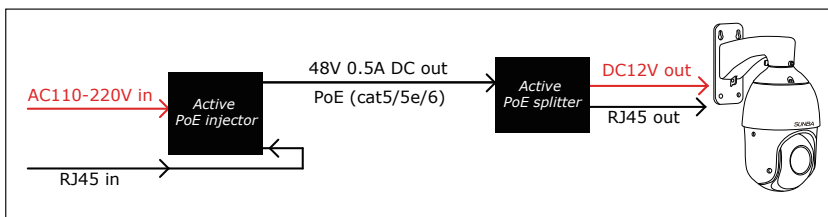
For Non-PoE Application (if you extend the power):

The camera may not work properly if the power reaches the camera is below 12V due to resistance along the extended DC line (distance dependent). If that happens, please make your AC power source near the camera, and connect it with our default adapter you received from the package.

For extension, you can select from AC power extension cable (no distance limit) or thick (≥ 18 AWG) DC power extension cable.

Risk Relevant

- 1.Using 24VAC or higher voltage adapter (16V, 24V) will immediately damage the camera and void the warranty.
- 2.The camera will be exposed to high risks of motherboard damage and void the warranty if you use passive PoE injector/splitter.

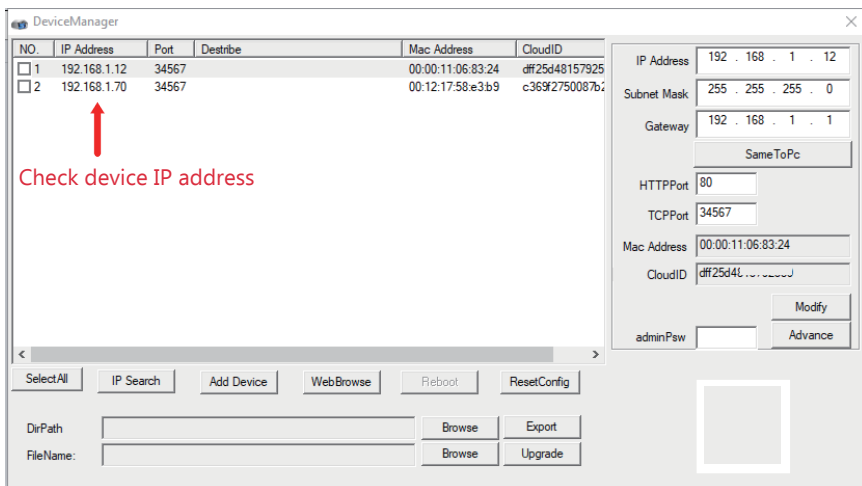


Active PoE Injector/Splitter are **allowed** if you use PoE to power non-PoE camera.

6. Web Access

Step 1: Check Device IP from VMS or Device Manager tool

Users can download VMS or Device Manager from the CD-ROM. Both software will display the current IP of the camera.





You can always download the web plugin separately from Sunba website if it takes too long to download the plugin from popped window.

Step 2: Start a web browser (Internet Explorer)

Enter the IP address of your camera in the location/host field.

If you have changed the default http port (80) of the camera, you need to enter IP: *http port*.

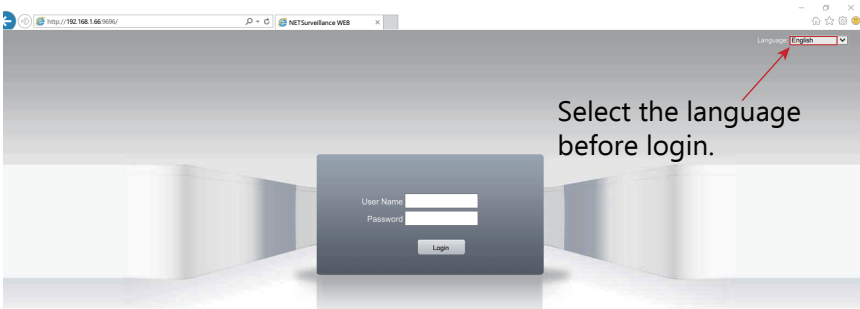
Note: Our cameras currently do not support Windows 10 Edge Explorer. You can follow the tips below to enable Internet Explorer mode in edge browser.

Step 3: Install the web plugin

Download and install the web plugin by clicking the "download" tab or by installing the WebPlugin from the CD-ROM. Please make sure the browser is CLOSED during the installation. If you are unable to download the plugin or if your software disc is damaged during transit, please visit plugin.sunba.net to download the plugin. Restart the browser/computer if the installation does not take effect in 5 mins.

Step 4: Select Language

You can change the language from the upper right corner. Changes only take effect after you successfully install the plugin, otherwise the text will show "?????" or disappear.



Step 5. Enter Username and Password

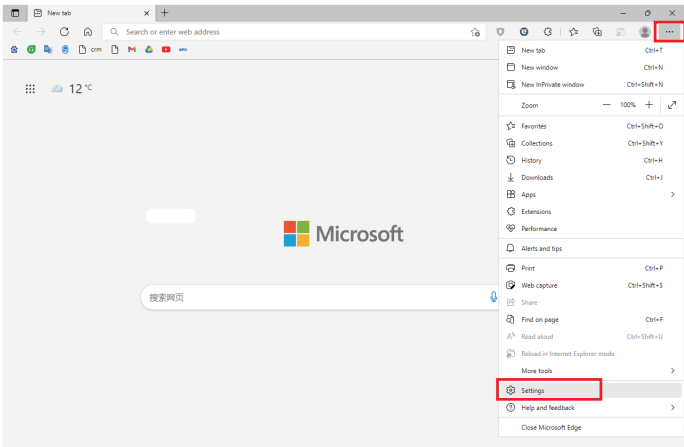
Enter username and password. The username is admin with no password by default. Please **change the admin password** after log in to protect your privacy by referring to Chapter 14.

Step 6. Select Stream

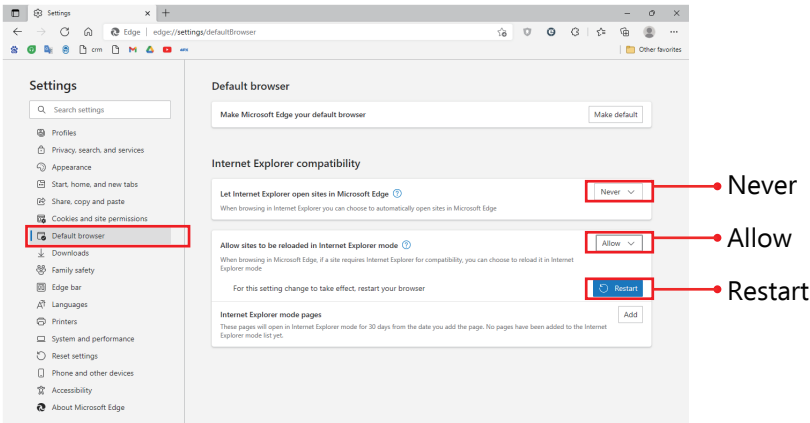
Go to <stream menu> and connect with either main stream (clear, better quality, higher network requirements) or extra stream (fluent, lower network requirements).

Tips: Steps to Enable Internet Explorer Mode in Edge Browser on Windows 10

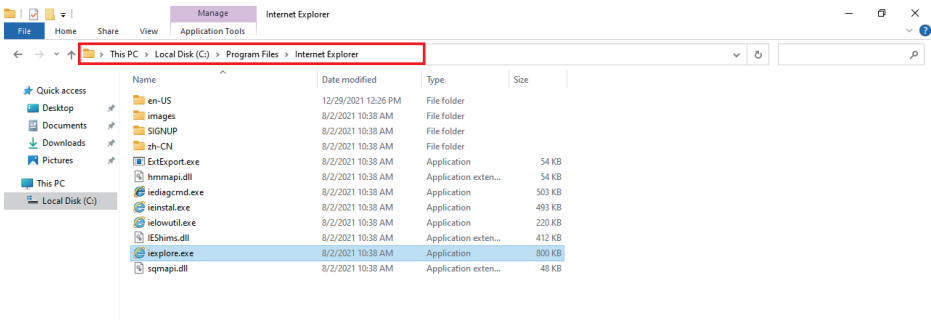
1.Open Edge Browser and click **...**, then click Settings



2.Select Default browser and then select according to the following figure:



3.Search for Internet Explorer in Program Files



7. Assign a static IP

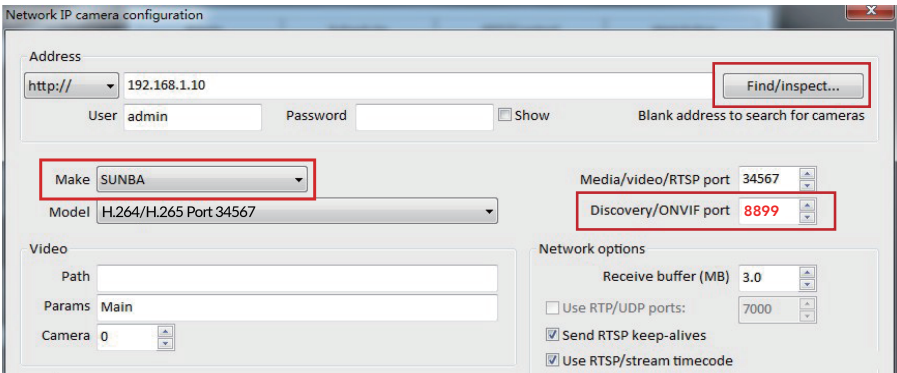
Step 1: Enter Device Config Page of Internet Explorer or VMS, and select the Network tab.

Step 2: Unselect the DHCP option.

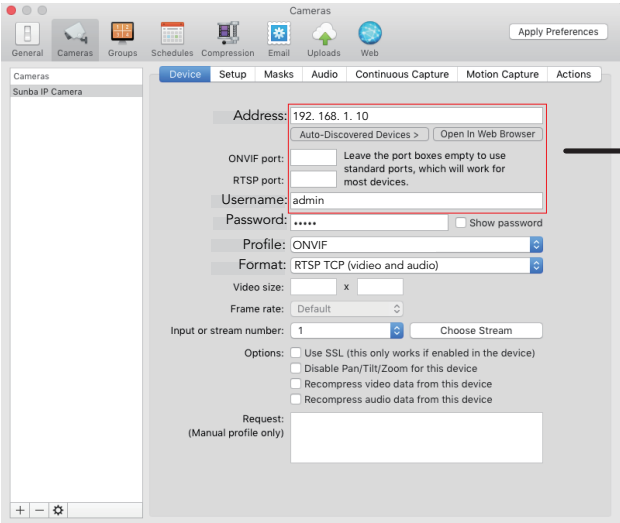
Step 3: Change the camera IP and click "Apply" to save the changes. Power cycle the unit to activate the new setting.

8. Access by 3rd Party Software

This chapter introduces how to add the camera to a selected few popular 3rd party software.



Blue Iris (in Windows)



Fill in the boxes with corresponding network info of your camera. By default, the ONVIF port is 8899 and RTSP port is 554. Make sure the encode is set to H.264.

Security Spy (in Mac)

Other third party IP camera management tools

There are many other IP camera management tools you can use. Above we attached the setting from the most popular software in Windows and Mac. Some software/NVR requires manually adding the camera with the camera's ONVIF protocol and the ONVIF port 8899.

Note : In 3rd party software/NVR, due to the level of customization for ONVIF by different surveillance manufacturers, only ptz, video and recording may work depending on specific ONVIF version.

If you have particular 3rd party software that you would want to use with Sunba PTZ cameras, we are happy to supply resources and assistance we can offer to integrate our protocol. Please contact us via support@sunba.net.

9. Remote Access

Tips: 

Go to Sunba website FAQ page and type keyword "mobile" to gain the setup page for popular smartphone app such as XMEye, TinyCam Pro, IP Cam Viewer.

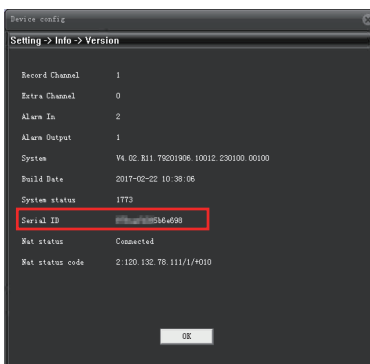
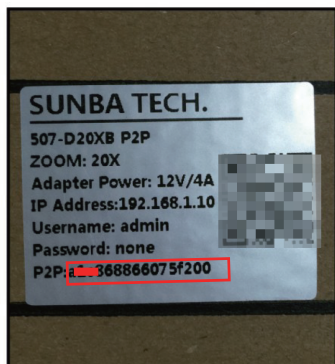
Type 1: Sunba Cloud (P2P)

P2P cloud technology enables customers to remotely access, control and configure their cameras through internet even if you are thousands miles away.

Warning: P2P function may not work if you modify the default media port (34567) of the camera or the DNS of your camera is not on the same subnet as your router. Your NAT status by DeviceConfig->Version needs to be "connected" before you are able to access your camera through P2P.

1) Find Your Sunba Cloud ID:

Note P2P Code = Cloud ID = Serial Number



2) Enter the Cloud ID in Sunba Cloud Platform for remote access:

Internet Explorer:

Please go to xmeye.net and use **"Device Login"**. Enter the cloud ID of the camera and associated username and password.

VMS

Add Device

Device Name:

Group:

Login Type:

CloudID: ←

UserName:

Password:

Vendor:

xmeye.net (Internet Explorer)

By User

By Device

Type 2: Port Forwarding



Please refer to portforward.sunba.net for more instructions.

Please forward BOTH http port (80 by default) and TCP (media) port (34567 by default) and refer to the manual of your router for detailed steps of port forward in order to remotely access using a WAN IP. Other apps such as Tiny Cam or IP Cam Viewer may require you to forward ONVIF and RTSP port as well.

Disclaimer: Though it is a popular method, Sunba does not recommend setting up port forwarding as it opens all ports to the public network and increases chances of information leak.

Type 3: RTSP

Please use the following URL along with any 3rd RTSP service provider:
"rtsp://IP:554/user=admin&password=&channel=1&stream=0.sdp?real_stream" where 0 = mainstream and 1 = substream

For example with the default network setting:

rtsp://192.168.1.10:554/user=admin&password=&channel=1&stream=0.sdp?real_stream

Type 4: VPN (Virtual Private Network)

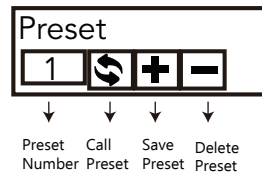
This is recommended for customers who have static IP address and advanced router functions.

First, your router MUST support VPN. Then please refer to the corresponding manual of your router to establish a VPN for the local network where the camera is connected to. For example, the VPN was setup for the router at your home where the camera is installed. Please remember the username and password of the VPN. Then, at any remote location, you can always setup a new network using VPN to remotely access your camera at home.

10. Presets, Patrol and Pattern

Note: For other software please refer to the manual of the third party software.

Enter the number and hit "+" to set/add/save a
Enter the number and hit "-" to delete a preset.
Enter the number and hit "\$" to call a preset.



PTZ Preset Position

Sunba dome cameras can set preset PTZ positions for which cameras can memorize and travel directly by calling the preset. Preset positions are represented by numbers. You need to "add" a preset and then "call" it. You can always "delete" them later.

Special Presets



Check Special Preset via specialpreset.sunba.net

Special presets are preset numbers associated with advanced commands that cameras can follow to modify/enable settings such as changing infrared mode, setting up camera auto scan boundaries etc. You can call the preset directly (no need to “add” a preset as they are pre-existed) according to **The Full Preset List**.

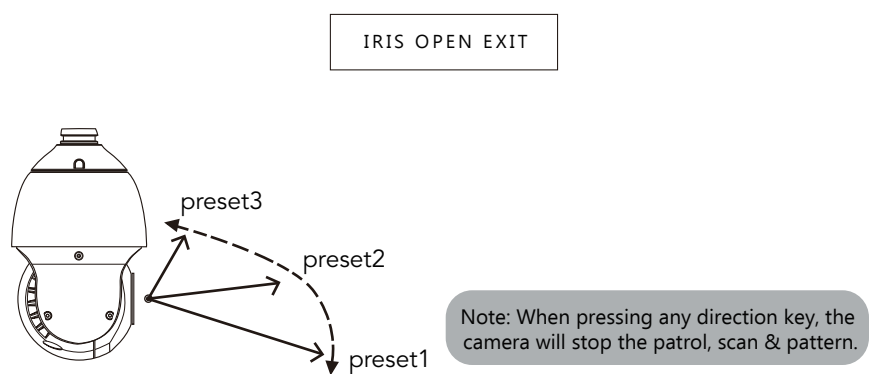
Patrol

The PTZ camera can travel from one preset to another by order. A patrol is usually named as a tour or a cruise. The total presets included in a patrol can be up to 10. To activate a patrol, first you will need to save corresponding presets you want to tour across. For example, preset 1-10 can be called by using special preset 88 (see The Full Preset List).

Pattern

Different from patrol, which enables the camera to travel between different points, patterns are continuous sets of movement that Sunba cameras can perform in a record and replay fashion. Note: Patterns will not be activated unless Motion Detection and Video Blind are disabled.

When using 84 + Add Preset to set a pattern scan, you must use direction & zoom key to set the actions and click Iris+ key to end the pattern setup, prompt as follows:



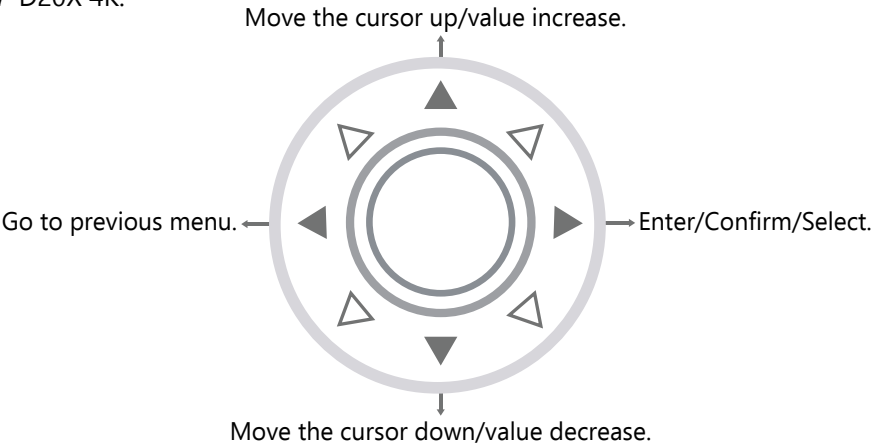
11. The Full Preset List

| Special Preset | Function | OSD Display |
|-----------------------|--|---|
| 0~50 Preset | Conventional Position Preset | |
| XXX + Add Preset | Set preset XXX. | PRESET IS SAVED XX |
| XXX + CALL | Call preset XXX. | PRESET XX |
| 81 + CALL | Reset the PT position | CALIBRATE |
| 47 or 81 + Add Preset | Set the left boundary of frame scan | LEFT BOUNDARY |
| 48 or 82 + Add Preset | Set the right boundary of frame scan | RIGHT BOUNDARY |
| 82 + CALL | Start frame scan (auto scan from left side to the right side) | L&R SCAN |
| 83 + CALL | Clear all preset | CLEAR PRESET |
| 84 + Add Preset | Set pattern followed by different action inputs; confirm by clicking "IRIS+" button | START PATTERN,SET PATTERN XX; COMPLETE |
| 84 + CALL | Start pattern | START PATTERN |
| 88 + CALL | Patrol from 1 to 10 preset | START PATROL1 |
| 89 + CALL | Patrol from 11 to 20 preset | START PATROL2 |
| 90 + CALL | Patrol from 21 to 30 preset | START PATROL3 |
| 91 + CALL | Patrol from 31 to 40 preset | START PATROL4 |
| 92 + CALL | Default | DEFAULT |
| 93 + CALL | Display preset information | |
| 94 + CALL | Hide preset information | |
| 98 + CALL | 360° continuous scan | 360 |
| 100 + CALL | Manually turn IR on (half side on) | IR ON |
| 101+ CALL | Manually turn IR off | IR OFF |
| 102+ CALL | Set the IR mode to auto (default) | IR AUTO |
| 103 + CALL | Manually turn IR on (all side on) | IR ALL ON |
| 120 | Display current bright level | BRIGHT XX |
| 97 + 131 + CALL | IR on sensitivity 190 | IR ON 190 |
| 97 + 132 + CALL | IR on sensitivity 200 | IR ON 200 |
| 97 + 133 + CALL | IR on sensitivity 210 | IR ON 210 |
| 97 + 134 + CALL | IR on sensitivity 220 | IR ON 220 |
| 97 + 135 + CALL | IR on sensitivity 230 | IR ON 230 |
| 97 + 136 + CALL | IR on sensitivity 165 | IR OFF 165 |
| 97 + 137 + CALL | IR on sensitivity 175 | IR OFF 175 |
| 97 + 138 + CALL | IR on sensitivity 185 | IR OFF 185 |
| 97 + 139+ CALL | IR on sensitivity 195 | IR OFF 195 |
| 97 + 140 + CALL | IR on sensitivity 205 | IR OFF 205 |
| 97 + 180 + CALL | Set the Park Action to None | PA NONE |
| 97 + 181 + CALL | Set the Park Action to 360° continuous scann | PA 360 |
| 97 + 182 + CALL | Set the Park Action to frame scan (auto scan from left side to the right side) | PA L&R SCAN |
| 97 + 183 + CALL | Set the Park Action to preset 1 | PA PRESET1 |
| 97 + 184 + CALL | Set the Park Action to preset 8 | PA PRESET8 |
| 97 + 185 + CALL | Set the Park Action to patrol 1 | PA PATROL1 |
| 97 + 186 + CALL | Set the Park Action to patrol 2 | PA PATROL2 |
| 97 + 187 + CALL | Set the Park Action to patrol 3 | PA PATROL3 |
| 97 + 188 + CALL | Set the Park Action to patrol 4 | PA PATROL4 |
| 97 + 189 + CALL | Set the Park Action to pattern | PA PATTERN |

| | | |
|--|--|---|
| 97 + 160 + CALL; 97 + 161 + CALL; 97 + 169 + CALL | Set the Park Action Start Time to 15s; Set the Park Action Start Time to 16s; Set the Park Action Start Time to 24s; | PA DWELL TIME 16 PA DWELL TIME 16 PA DWELL TIME 24 |
| 97 + 170 + CALL; 97 + 171 + CALL; 97 + 179 + CALL | Set the Park Action Start Time to 30s; Set the Park Action Start Time to 35s; (5 second added per preset increment) Set the Park Action Start Time to 75s; | PA DWELL TIME 30 PA DWELL TIME 35 PA DWELL TIME 75 |
| 97 + 200 + CALL; 97 + 201 + CALL; 97 + 215 + CALL | Set the Patrol Dwell Time to 10s; Set the Patrol Dwell Time to 15s; (5 second added per preset increment) Set the Patrol Dwell Time to 85s; | PATROL D TIME 10 PATROL D TIME 15 PATROL D TIME 85 |
| 97 + 225 + CALL; 97 + 226 + CALL; 97 + 229 + CALL | Set the Frame Scan Speed to 6; Set the Frame Scan Speed to 11; (5 speed added per preset increment) Set the Frame Scan Speed to 26; | SCAN SPEED 6 SCAN SPEED 11 SCAN SPEED 26 |

12. Camera OSD Menu

The On-Screen-Display menu is not available on models 405-ECO WiFi and 507-D20X 4K.



How to activate and control the OSD?

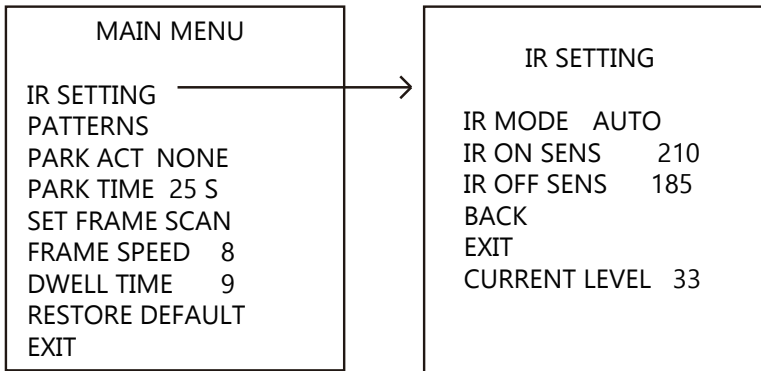


Call to activate the OSD Menu.

Please call preset 95 to open the OSD menu. Use the up and down key to browse and move the cursor, left key to go back to the previous menu, right key to select and confirm.



Check OSDlanguage.sunba.net to learn how to switch the display language of the OSD main menu from Mandarin to English.



IR MODE

A.AUTO: Turn on/off IR LED automatically according to darkness of ambient environment. If the value of the CURRENT LEVEL (darkness) is \geq the IR ON SENS, then the LED will be turned on automatically, vice versa. **Larger CURRENT LEVEL is equivalent to darker environment.** AUTO MODE is selected by default.

B.MANUAL: Turn on and off the IR LED manually. This can be accomplished using special presets 100~103 as well. Please check specialpreset.sunba.net

IR ON SENS

The adjustable darkness threshold to turn on the IR LED, default is 210.

IR OFF SENS

The adjustable darkness threshold to turn off the IR LED, default is 185.

How the IR LED works:

The difference between the LED ON and LED OFF values must be at least 30 to avoid problems of IR LED blinking. Like vehicle lights, only half side of IR will be on for near view (low beam), please zoom in to enable the further view (high beam), which is the other side of the IR. Use preset 103+call to manually turn on both sides together.

PATTERNS

This option has the same function as 84 + Add PRESET. To set up a pattern, you must use direction & zoom key to add actions and Iris+ key to end the setting. Each pattern scan can memorize no more than 31 actions.

Note: If you open the video motion & video blind function the pattern scan will be disabled .

IRIS OPEN EXIT

PARK ACT

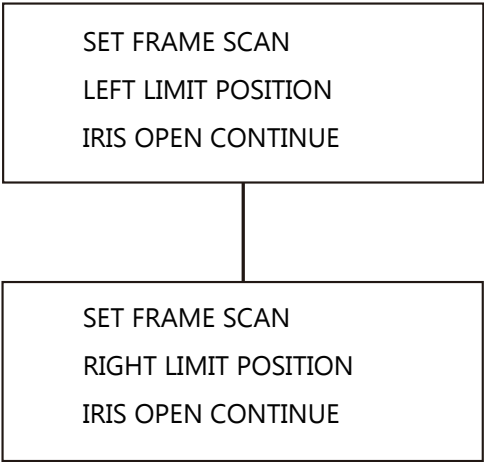
This option is also called the watch function or the defend function of a PTZ camera. The dome will automatically execute a corresponding preset action after a settled idle time (25 seconds is default) if no additional commands are sent from users.

PARK TIME

The waiting time (or idle time) before the camera executes its PARK ACTION (see above). The default is 25 seconds.

SET FRAME SCAN

Set the right and left position of frame scan. Submenu as follows:



This function enables the auto scan of the camera between a set left and right boundary. It can be set using PRESET 81+Add & PRESET 82+Add as well. When setting up the frame scan, direction keys are used to set the position of the boundary. Thus, please click the Iris+ key to confirm your setting.

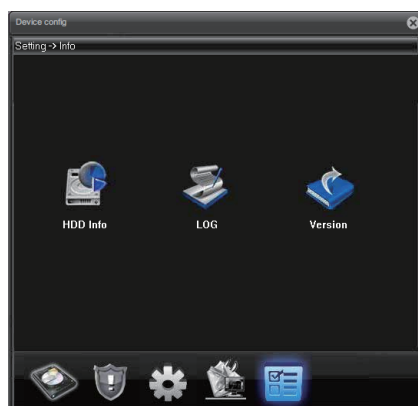
FRAME SPEED

It controls the speed when the dome does the 360° scan or frame scan. (For model 507-D20X 4K only 355°)

DWELL TIME

It represents the residence time the dome stops at each preset during the patrol/auto scan.

13. Camera Configuration



HDD Info:

The information of the storage device (TF card).

LOG:

Access the events, alarm and activity record of camera.

Version:

Check the serial number of the camera, and the build date of the firmware.

Reboot:

Restart the camera.

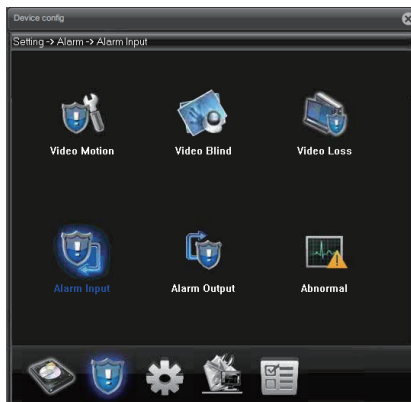
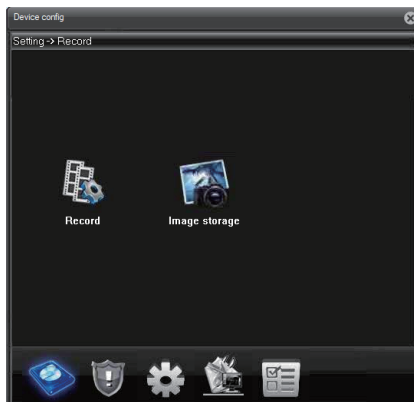
Upgrade:

Upgrade the firmware of the camera. You need to download the upgrade the file ("bin" format) first.

Image Storage: Take timed snapshot and store it to Email, FTP or TF Card (if supported).

Record:

Set camera recording plan and mode. The "manual" and "stop" selection allows you to manually turn on and off, and the "timing" allows you to set the schedule where recording takes place.



Video Motion:

Enable motion detection alert formats (buzzer, email, recording, snapshot & FTP etc), region, and sensitivity. Set motion detection video recording time.

Video Blind:

Set an alarm when the vision of the camera is covered (usually by house breakers using clothes).

Video Loss:

Set an alarm when a video loss happens.

Alarm Input:

External connection linkage alarms such as infrared sensor etc (not built-in by camera, need additional support in qualified NVR).

Alarm Output:

Alarm output can be an external lights, siren, etc. (not built-in by camera, need additional support in qualified NVR).

Abnormal:

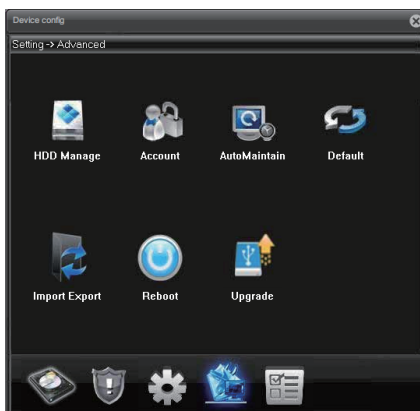
Set an alarm for special events such as storage device access failure or IP conflict with other devices.

How to Access the Device Config:

For IE: Click "DeviceCfg"

For VMS: Choose Device Config

(PS: You must add the camera via Sunba protocol, not ONVIF)



General:

Change system language and date.

Encode:

Change resolution, bit rate and other factors that affect video quality and connectivity. Enable/Disable audio.

Network:

Configure the camera's IP address, gateway, DNS etc.

NetService:

Configure NTP, email alert, WiFi and other services.

GUI Display:

Customize camera name, time title and other display setting.

Camera Parameter:

Configure camera parameter such as exposure level, wide dynamic range, shutter speed, image direction (flip, mirror) etc.

HDD Manage:

Manage the storage device (TF card).

Account: Add, delete and change account info (username/password) and their authority level.

AutoMaintain:

Set the automatic reboot plan and empty the cache of the camera.

Default:

Set the current camera configuration info to the default.

ImportExport:

Import/Export the configuration and log of the camera.

14. Account Management

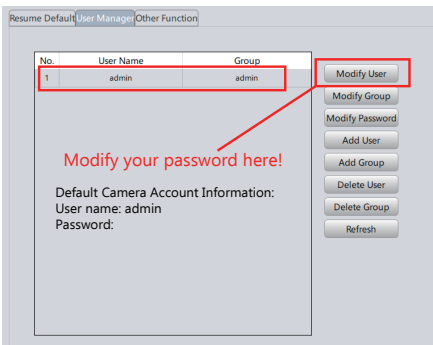
Warning: Camera accounts are NOT the same as VMS software account. When you open VMS, a prompt will ask you to enter password for accessing the VMS program. This account is set to prevent unauthorized use of the VMS software on your desktop.



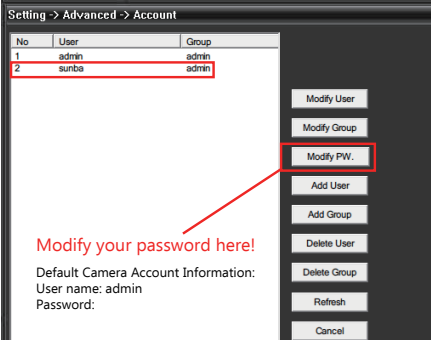
The image shows a login window for VMS Software. It has a title bar with the SUNBA logo. Below the title bar, there are two input fields: 'UserName:' with 'admin' entered and 'Password:' with '*****' entered. There is a checkbox labeled 'Remember Password' which is checked. At the bottom, there are two buttons: 'Login' and 'Exit'.

← Account for VMS Software **NOT** for Camera

Camera accounts can only be managed by its native clients. Third party software will not be able to modify any accounts information as it doesn't have access to the camera's private protocol.



The image shows a 'User Manager' window. It has a title bar with 'Resume Default', 'User Manager', and 'Other Function'. Below the title bar, there is a table with columns 'No.', 'User Name', and 'Group'. The table has one row with '1', 'admin', and 'admin'. To the right of the table, there are buttons: 'Modify User', 'Modify Group', 'Modify Password', 'Add User', 'Add Group', 'Delete User', 'Delete Group', and 'Refresh'. A red box highlights the 'Modify User' button. Below the table, there is a text area with the text 'Modify your password here!'. At the bottom, there is a section titled 'Default Camera Account Information:' with 'User name: admin' and 'Password:'.



The image shows an 'Account' window. It has a title bar with 'Setting -> Advanced -> Account'. Below the title bar, there is a table with columns 'No.', 'User', and 'Group'. The table has two rows: '1' with 'admin' and 'admin', and '2' with 'sunba' and 'admin'. To the right of the table, there are buttons: 'Modify User', 'Modify Group', 'Modify PW.', 'Add User', 'Add Group', 'Delete User', 'Delete Group', 'Refresh', and 'Cancel'. A red box highlights the 'Modify PW.' button. Below the table, there is a text area with the text 'Modify your password here!'. At the bottom, there is a section titled 'Default Camera Account Information:' with 'User name: admin' and 'Password:'.

VMS: Device Config->Tool Manager->User Manager CMS/IE: Device Config-> Account

Group and User Permission:

You can set a group that shares the same level of permission for camera control and view. For example, you can set several users to a "guest" group that has limited control over the camera.

Allow Multiple Access :

Please remember to check the "sharable" or "reusable" option when adding a user if you wish to have the same user account accessed by multiple people.



To protect your account safety, please always remember to modify your default password!

15. Motion Detection

The screenshot shows the 'Motion Detect' configuration tab. It includes checkboxes for 'Enable' and 'HumanoidDetect', both of which are checked. Annotations with red boxes and arrows point to these checkboxes, stating 'Enable motion detect' and 'Enable human detection' respectively. Below the 'Enable' checkbox, there is a 'Sensitivity' dropdown menu set to 'Middle' and a 'Period' dropdown menu with a 'Setting' button next to it. An annotation points to the 'Setting' button, stating 'Edit the detection schedule'. To the right of the 'HumanoidDetect' checkbox, there is a 'Rule' dropdown menu and another 'Setting' button. An annotation points to this 'Setting' button, stating 'Modify the detection region'. Other settings include 'Interval' set to '2' seconds, 'AlarmOut' set to '1', 'Record' set to '1', and 'Delay' set to '10' seconds.

Human Detection: Human-shape detection will filter out other motion objects and have the camera only trigger motion alarms when human-shapes are detected.

Buzzer: Must have a siren connected with the alarm interface of the NVR to enable this option.

Send Email: Enable this and enter your email information via Device Config->NetService (Network in VMS). You can also enable the snapshot option to activate email alert with snapshots.

Write Log: A log will be popped on the screen every time an alert is received.

FTP: See Chapter 17.

Phone Report: Enable this option, register an account in the XMEye app of your smartphone (or via xmeye.net) and activate push notification to receive text alerts.

16. Face Capture

The face capture feature is only supported by specific models (For details, you can contact us via support@sunba.net), and needs to be coupled with the Sunba NVR model F8009SE/F8010SE to be able to capture, store and browse snapshots of human faces. Firmware upgrade might be required to realize this feature. For detailed steps of setup, please refer to the user manual of Sunba NVR.

17. FTP Communication

You can upload motion detection snapshots and videos to your FTP.

Step 1: Please remember to check the "Detect" option in the Snapshot Config or Record Config under Device Config.

Step 2: VMS: Device Config-> Network->FTP
CMS/Browsers: Device Config->NetService->FTP

| Week | All days | General | Detect | Alarm |
|--------------|---------------|-------------------------------------|-------------------------------------|-------------------------------------|
| TimeSection1 | 00:00 - 23:59 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| TimeSection2 | 00:00 - 23:59 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TimeSection3 | 00:00 - 23:59 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TimeSection4 | 00:00 - 23:59 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Motion Detect Camera Masking Video Loss

☒ Enable

Sensitivity: Middle Region: Setting

Period: Setting

Interval: 2 Seconds

AlarmOut: Channel1 Enable ☐ Delay: 10 Seconds

Record: Channel1 Enabl Enable ☒ Delay: 10 Seconds

Snapshot: Channel1 Enabl Enable ☒

PTZ Activation: Channel1-None None

Send Email: OFF Write Log: OFF

Buzzer: OFF FTP ON

Step 3: Enable the motion detection (in Video Detect or Video Motion).

See Chapter 15. Then enable the FTP option.

Snapshots: You must also enable snapshot in Video Detect.

Videos: You must also enable record in Video Detect and have a storage media in order to upload the videos to FTP. Like many other network cameras, you will need to have a TF card (install inside the camera's built-in memory slot) or a NVR as a forwarding transfer station to your FTP. This is required because without storage media, the camera does not have enough RAM to hold large video files before it establishes a connection with your FTP.

18. Reset the Camera

Option 1: Reset the camera parameter and configuration(IE/VMS/CMS)
Device Config → Default

Option 2: Reset the camera parameter and configuration
Press the button inside the camera manually.

(Option 2 is only available for model 405-ECO WiFi version.)

Option 3: Reset camera network setting including ports and IP address
Device Manager → Reset Config

Option 4: Reset/modify camera network setting after lock-up (time out login error)

Download the third party tool called ONVIF Device Manager

Option 5: Reset the password

You can reset the password if you've set up and remembered the security questions for your device in Device Config-Account-Safe Questions.

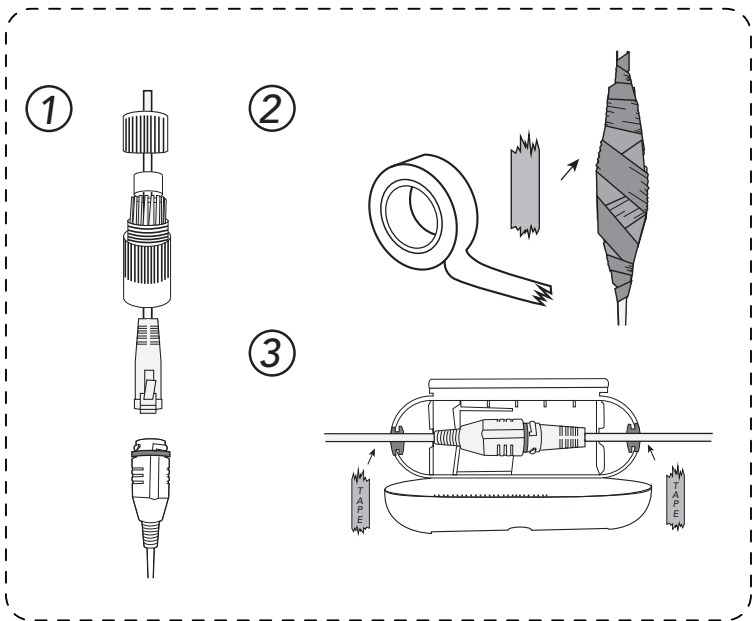
Option 6: Reset Tool (Factory Reset)

Please go to <http://reset.sunba.net> to download the reset tool and send the safety code to Sunba Support Team (support@sunba.net) to retrieve a reset code. The reset code is exclusive for each individual safety code.

19. Cable Waterproof Measures

The camera itself is IP 66 Waterproof Rating. However, the cable connectors may still have exposures to water under different applications. It is always recommended for users to take precautions to protect the cable connectors of the camera.

Below are 3 popular methods:



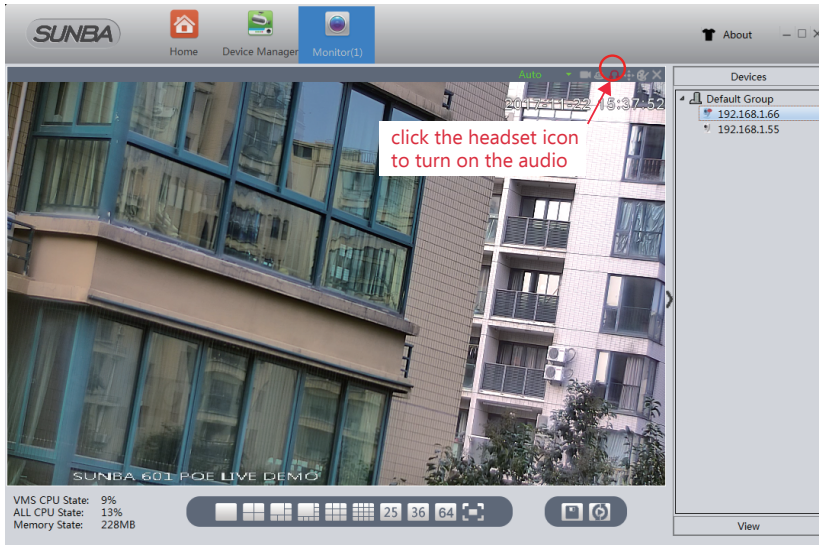
1. Certain models have waterproof ethernet kit shipped together with the camera. To apply the waterproof kit, you have to cut the crystal head, thread the ethernet cable through the waterproof kit, and then finally use crimper tool to add the crystal head back to the cable.
2. Using electrical waterproof tape is one of the most popular ways of protecting connectors from water exposure.
3. Using waterproof connector protector together with some electrical waterproof tapes can be another option.

20. Audio Setting

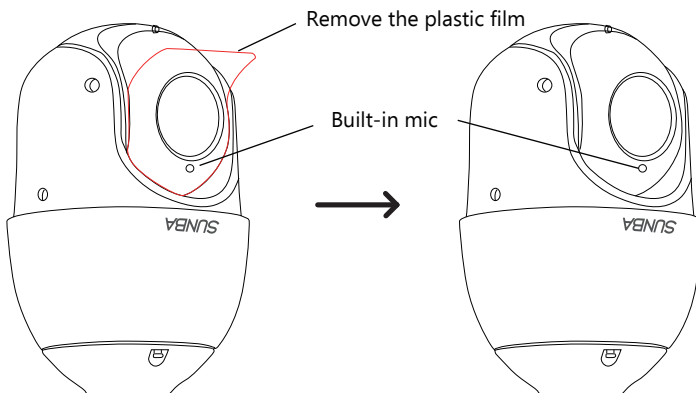
Note: The camera has **built-in microphone** with sound pick-up capacity. There is no need to install additional microphone on this model.

Setup: how to enable the audio at camera after installation?

Please remember to check the audio option in "Device Config->Encode->video/audio->Enable it "



- Please remove the plastic film before installation to get the audio. If the plastic film is not removed, there may be no sound.



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

