

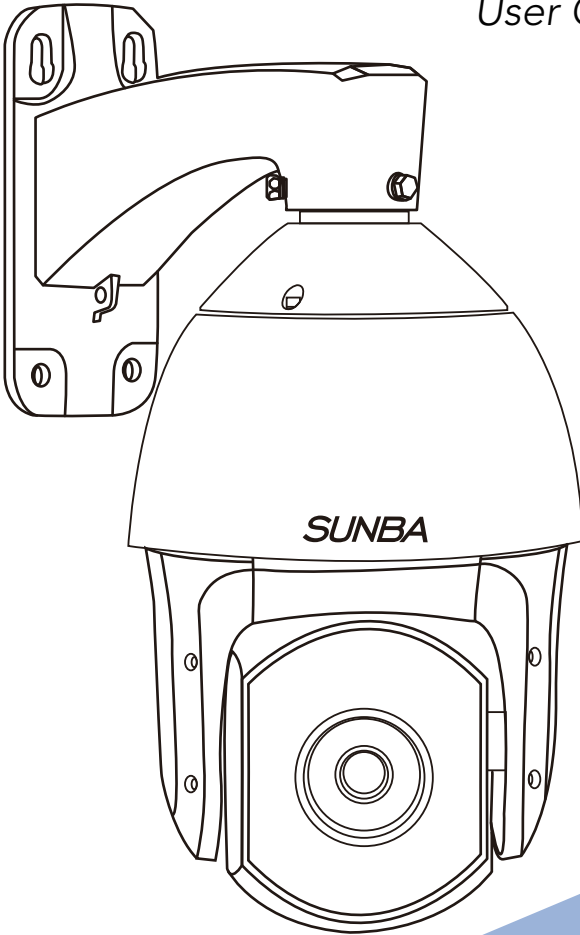
SUNBA®

20X PTZ Camera Network

Dedicated PTZ Camera Professional

User Guide V6.0

Pro Series



2018/09
Version 6.0



Visit <http://guide.sunba.net> 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 locally by directly connecting to the default power adapter from the package before mounting it outside. Stay at least 24 hours to test both daytime and night vision IR LED.

MENU

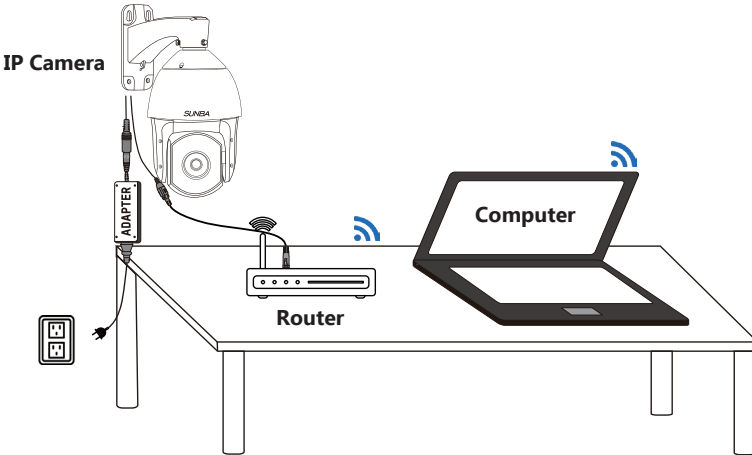
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1. Camera Bench Test



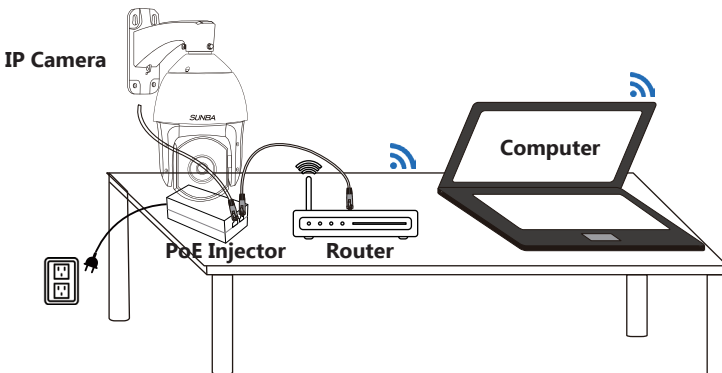
Test the camera on your desk before mounting outside.

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) flickering screen 2) unstable infrared (camera reboots repeatedly) and 3) spinning dome.

Type B: With PoE Injector/Switch



Why Test Locally

The reason you should NOT extend the power cable during the bench test is 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) flickering screen 2) unstable infrared (camera reboots repeatedly) and 3) spinning dome.

Built-in self-test

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. Thanks for your cooperation.



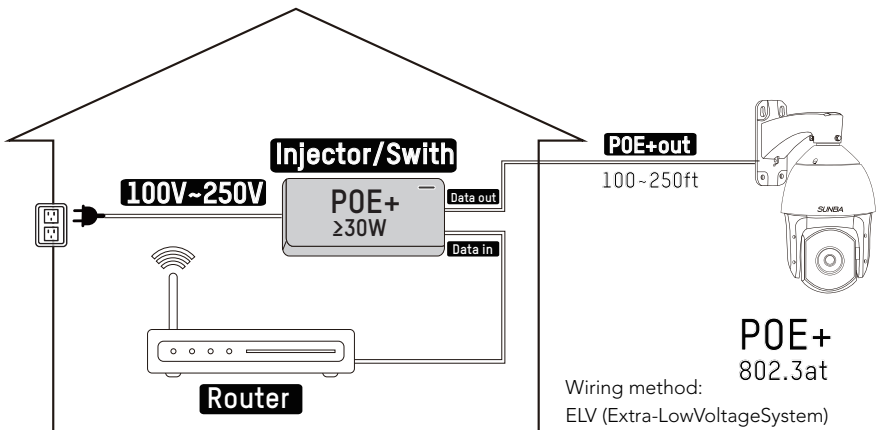
- ✓ Connection Good
 - ✓ Power Good
 - ✓ Video and Control Good
 - ✓ Tested Day and Night
- Guess we are ready to mount it outside.

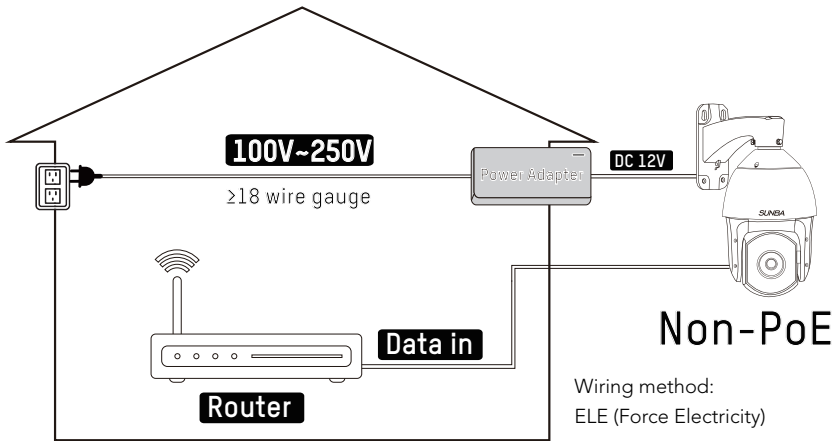
Questions? Ask support@sunba.net

Phase 2: Mounting Outdoor



Good, the camera is working correctly. Now I just need to pick the right extension cable and mount it outside!





2. How to power the camera



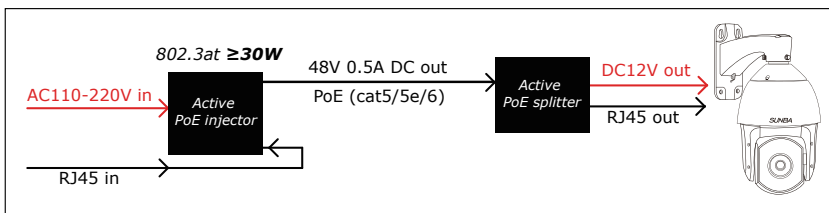
There is an old saying that PTZ cameras are POWER-ful. So do NOT pull the old setup from your bullet and apply it directly to your new PTZ.

2.1 For Non-PoE Camera (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.

2.2 For PoE+Camera :

PoE+IEEE 802.3at standard is required. Note traditional PoE system(802.3af standard) delivers up to 15.4W, which is unable to fully support the camera. Dome cameras, especially with 20 times zoom-in capacity, **have higher power requirements** than bullet cameras or fixed lens cameras. **The PoE+ switch/injector need to meet two key features:**

1.**802.3at**. 2. Delivers at least 30w to the **single port** you are using.

Transmission distance

PoE will also drop power along the Ethernet cable. If you are using a 300 ft long Ethernet cable, you may be at risk. Please try using the Ethernet cable less than 250 ft. The maximum travel distance also depends on the quality of the cable and the maximum power supplied by switch/injector.

NVR's built-in PoE switch

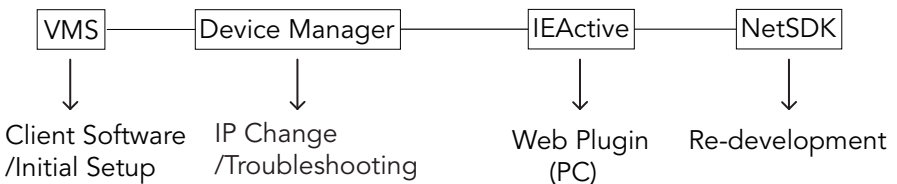
Some NVR has built-in PoE+ switches. However, this is mostly for devices from the same manufacturer (examples such as Dahua and Hikvision). The built-in switch may work for few third party cameras but not all. We thus recommend getting a separate and dedicated PoE+ switch/injector.

Biggest issue when underpower

In the daytime, even 802.3af (conventional PoE system) can provide enough power to the camera. However, in the night time, if you are underpower, the following nightmare begins: low light environment detected -> infrared on -> not enough power -> reboot -> low light environment detected -> infrared on -> not enough power -> reboot (cycling)

3. Software Package

1. Visit: <http://www.sunba.net/en/download/>
2. Select one of the web-drives.
3. Go to English-> Software and download the specific software you want.



4. Camera Initial Configuration



You must first change the camera's IP to match the IP of your router!

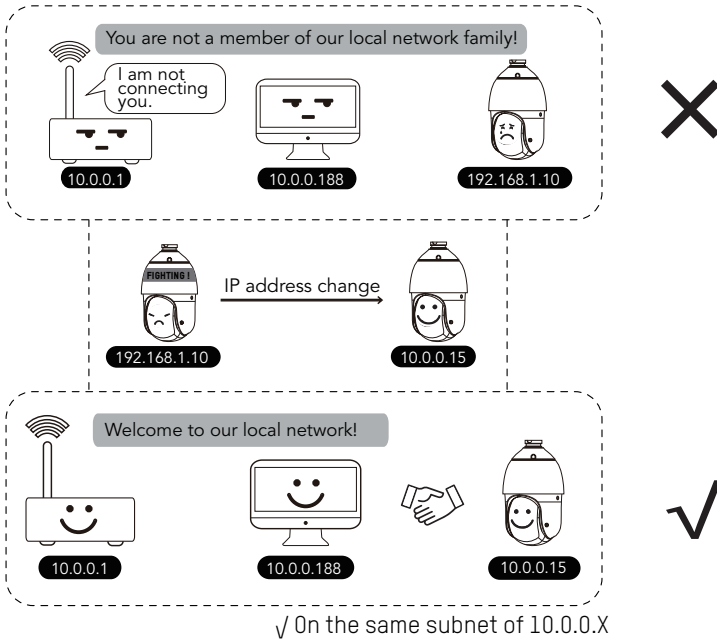
Step 1: Understand the Goal of IP Configuration

Sunba decided to use static IP address instead of DHCP (like many wireless/indoor cameras do) for its high-end PTZ series to ensure connection stability in business application or main projects.

The camera has a default static IP address of 192.168.1.10, and may have to be changed so that the camera is "on the same subnet as your network," which means "the first three octets or segments in the IP address are the same."

For example

X Not on the same subnet



If your router is 10.0.0.1 and your camera is still 192.168.1.10 (default IP), you will NOT be able to access the camera by typing 192.168.1.10 in the web address without changing its IP first.

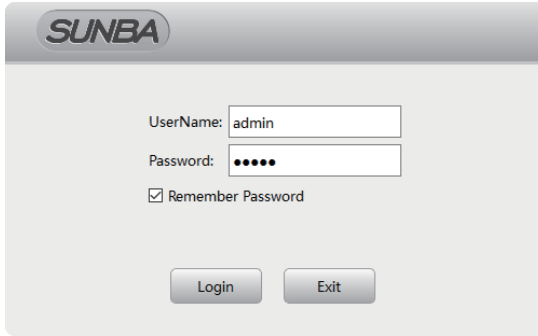
Router IP is usually the same value as the "gateway" (with few exceptions), which the camera's IP will have to match.

Step 2A: Configure the IP Address (Windows User)



Video instruction for PC user: <http://pc.sunba.net>

Please refer to **Chapter 3. Software** and download **"VMS for PC"** under English-> Software. Install and open VMS for PC, input the default software account of "admin/admin", then proceed to the **Device Manager** page.



Click "IPV4 Search" and select the camera with default IP (**192.168.1.10**). Check **"in order to login device, change IP automatically"**, then click "add" to connect the device.

The following devices have been found:

<input type="checkbox"/>	Name	CloudID	IP/Port	Vendor	Group
<input checked="" type="checkbox"/>	192.168.1.10	a5bfdd84697c7...	192.168.0.11:34...	Sunba	De...
<input type="checkbox"/>	192.168.1.17	Not Available	192.168.1.17:80	Onvif	De...

The following devices have been added:

<input type="checkbox"/>	Name	CloudID	IP/Port	Group	Status
--------------------------	------	---------	---------	-------	--------

In order to login device, modify ip automatically

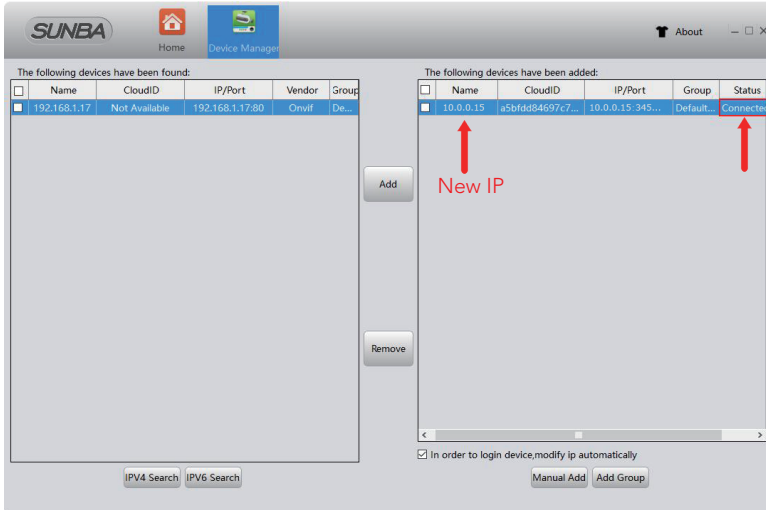
Manual Add Add Group

IPV4 Search IPV6 Search

Try the following if no device shows up:

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

The camera will be automatically connected and changed to a correct IP matching local network. You can modify this IP later.



Step 2B: Configure the IP address (Mac User)

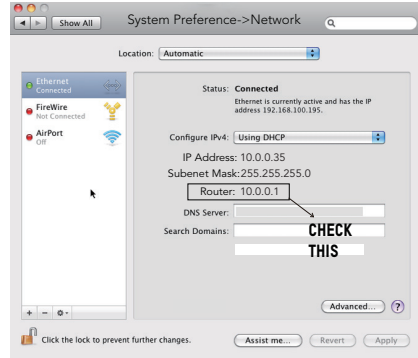
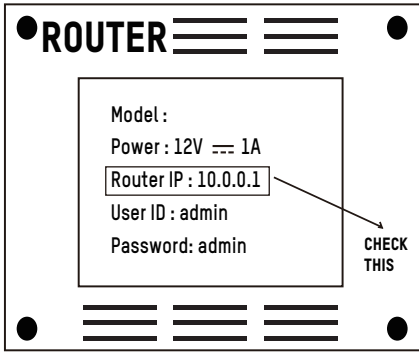
Please refer to **Chapter 3. Software** and download **“VMS for mac”** under English-> Software.

In **VMS for mac**, you must first manually modify the IP of the camera to match the router IP (gateway). Thus, the first step for Mac users is to check the current gateway of your network.

Two quick methods are introduced below.

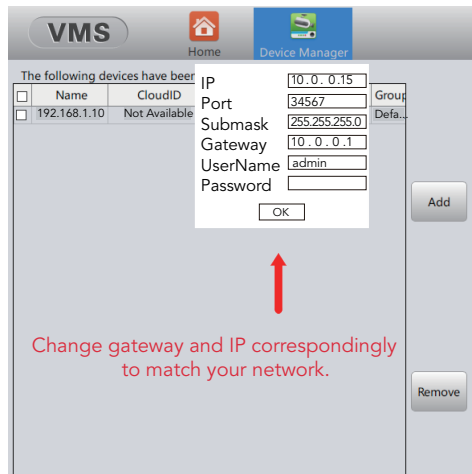
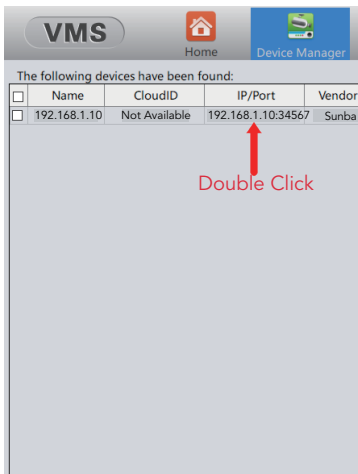


Video instruction for Mac user: mac.sunba.net



Method 1: Check Bottom of Your Router Sticker **Method 2:** Check from your computer.

Then please double click amera IP and modify it to match the gateway you found above. The new IP of the camera must match the first 3 segments of the gateway.



Tricks:

- 1) Make sure the new IP you assigned to the camera is UNIQUE. Make sure only the first 3 segments of camera's IP is the same as the gateway and your computer.
- 2) Do not change the camera's ports until later. The camera's default ports are ONVIF 8899, TCP 34567, HTTP 80 and RTSP 554. Those values must also be unique.

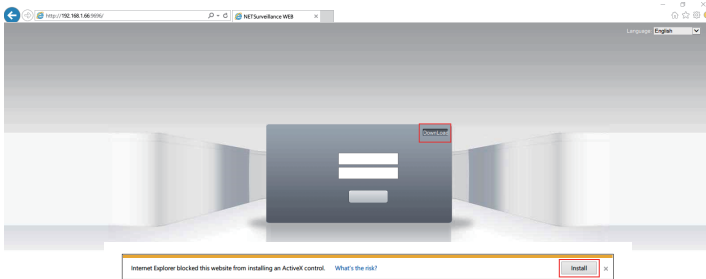
Step 3: Live View

Please go to the “monitor” page.



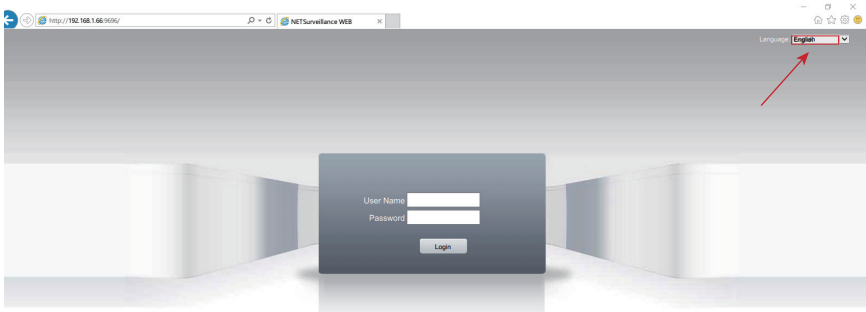
5. Camera Management by Computer

A. Internet Explorer (in Windows)



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

- 1) Enter the IP address of your camera. If you have changed the **http port** of the camera, you need to log in as **IP: http port**.
- 2) Install the web plugin following the request popped by the browser. Please make sure the browser is CLOSED during the installation. If you are unable to download the plugin, please go to download.sunba.net to download the plugin.
- 3) 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.



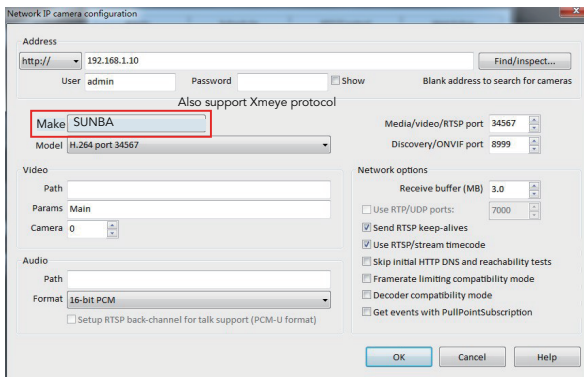
- 4) Enter username and password. The username is admin with no password by default.
- 5) Please **change the admin password** after log in to protect your privacy from Chapter 8.
- 6) Go to <stream menu> and connect with either main stream (better quality, higher network requirements) or sub-stream (extra stream).

Note: our cameras currently do not support Windows 10 Edge Explorer.

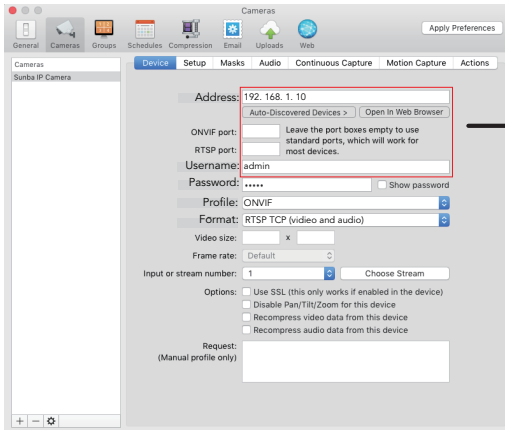
B. VMS for Windows & Mac

Download VMS from CD-ROM: English -> Software -> VMS

Full manual of VMS available from: <https://www.sunba.net/en/download/>



Blue Iris (in Windows)



Fill in the boxes with corresponding network info of your camera

Security Spy (in Mac)

C.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 through 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.

6. Camera Mobile & Remote Access

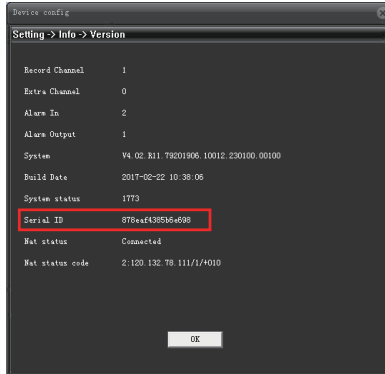
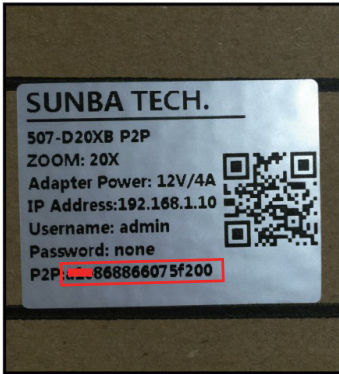
Tips: 📖

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

Type 1: P2P Function (simple setup)

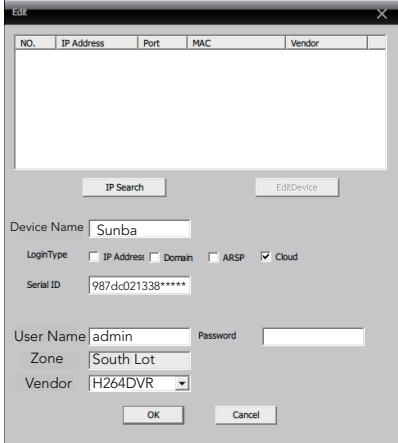
P2P cloud technology enables customers to remotely access, control and configure their cameras through internet even if you are thousands miles away.

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.

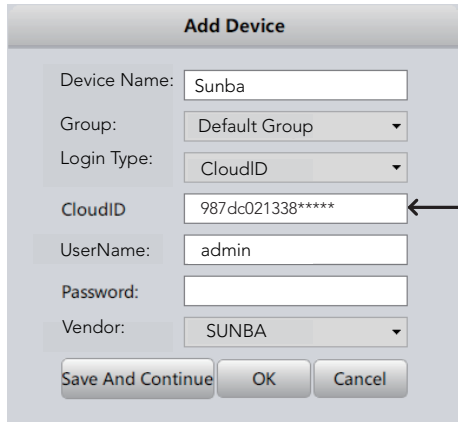


Find Your P2P Code by two methods:
Note P2P Code = Cloud ID = Serial Number

CMS:



VMS for PC:

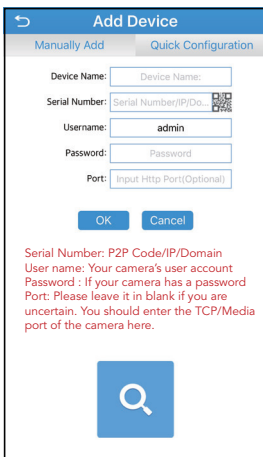
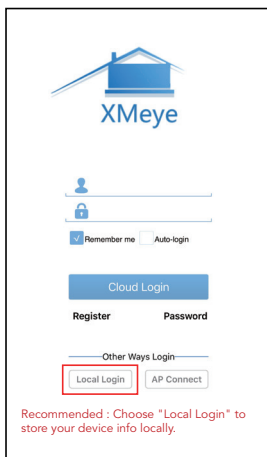


Internet Explorer:

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

Network Environment: WiFi, 3G/4G/LTE; Mobile System: Android, iOS
 Software Name: XMeye/JFeye (download from either Google Market or App store)

If your mobile device is on the same subnet with your camera, you can use the "Search" button to locate the camera.



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 mobile apps such as Tiny Cam or IP Cam Viewer may require you to forward ONVIF and RTSP port as well.

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.

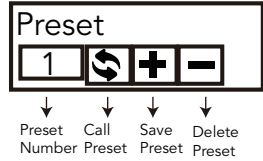
Then please refer to the corresponding manual of your router to establish a VPN for the local network where the camera is connected to.

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.

7. 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

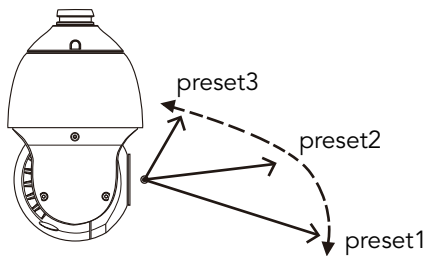
The PTZ camera can travel from one preset to another by order. A patrol is usually named as a tour or a cruise. The total presets included in a patrol can be up to 10. To activate a patrol, first you will need to save corresponding presets you want to tour across. For example, preset 1-10 can be called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





Note: When pressing any direction key, the camera will stop the patrol, scan & pattern.

8. The Full Preset List

Special Preset	Function
0~50 Preset	Conventional Position Preset
XXX + Add Preset	Set preset XXX.
XXX + CALL	Call preset XXX.
95 + CALL	Open the On-Screen-Display menu of the camera
95+CALL followed by 93 + CALL	Shift to English OSD menu
95+CALL followed by 94 + CALL	Shift to Chinese OSD menu
47 + Add Preset	Set the left boundary of frame scan for 507 series
48 + Add Preset	Set the right boundary of frame scan for 507 series
81 + Add Preset	Set the left boundary of frame scan for 601&805&405 series
82 + Add Preset	Set the right boundary of frame scan for 601&805&405 series
82 + CALL	Start frame scan (auto scan from left side to the right side)
84 + Add Preset	Set pattern followed by different action inputs; confirm by clicking "IRIS+" button
84 + CALL	Start pattern
88 + CALL	Patrol from 1 to 10 preset
89 + CALL	Patrol from 11 to 20 preset
90 + CALL	Patrol from 21 to 30 preset
91 + CALL	Patrol from 31 to 40 preset
81 + CALL	360° interval scan for 507 series
98+ CALL	360° continuous scan
93+ CALL	Display preset information from upper left corner
94 + CALL	Hide preset information from upper left corner
100 + CALL	Manually turn IR on (half side on)
101+ CALL	Manually turn IR off
102+ CALL	Set the IR mode to auto (default)
103 + CALL	Manually turn IR on (all side on)
120+ CALL	Display the value of photoreistor for 507 series
121+ CALL	Hide the value of photoreistor for 507 series
83+ CALL	Clear all preset
81+ CALL	Reset the PT position for 601&405 series
92+ CALL	Reset the PTZ dome

9. Camera On-Screen-Display Menu



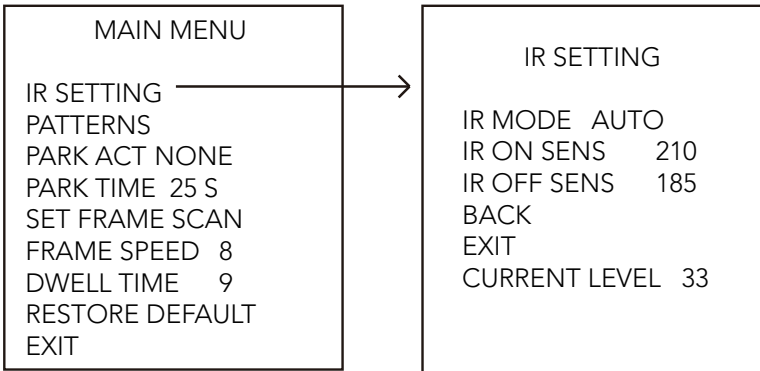
How to activate and control the OSD?

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.

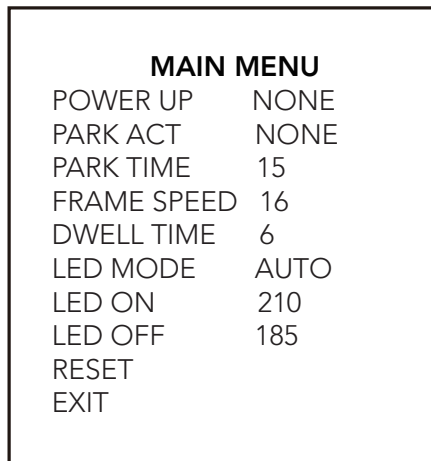


Check OSDlanguage.sunba.net to learn how to switch the display language of the OSD main menu from Chinese to English.

A.601 & 805 & 405 Series:



B.507 & 604 Series:



Use preset 120+call to check the CURRENT LEVEL for 507.

IR MODE

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

2.MANUAL mode: Turn on and off the IR LED manually. This can be accomplished using special presets 100~103 as well. AUTO MODE is selected by default.

IR ON SENS

The threshold for photoresister to turn on the IR LED, default is 210.

IR OFF SENS

The threshold for photoresister to turn off the IR LED, default is 185.

NOTE:

The difference between the LED ON and LED OFF values must be at least 30 to avoid problems of IR LED blinking. Only half side of IR will be on for near view, please zoom in to enable the further view and 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

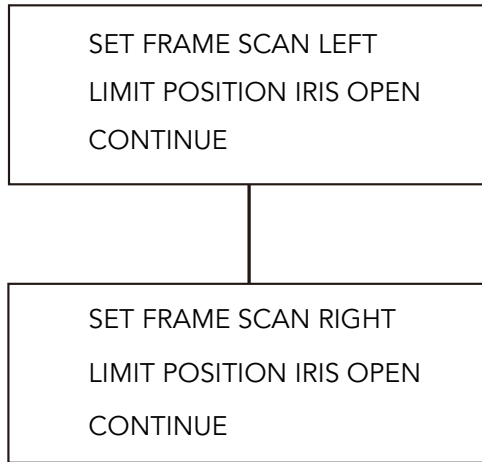
This option is also called the watch function or the defend function of a PTZ camera. The dome will automatically execute a corresponding preset action after a settled idle time (25 seconds is default) if no additional commands are sent from users.

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 (405 & 601 & 805)

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.

DWELL TIME

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

10. Camera Configuration

How to Access the Device Config:

For IE: Click "DeviceCfg"

For VMS: Choose Device Config

For CMS: Make a right click and select "Device Config" (PS: You must add the camera via H264DVR, **not ONVIF**)



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:

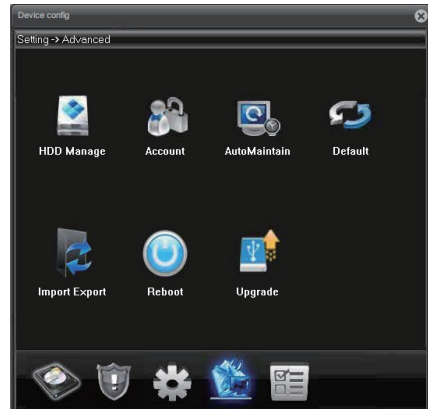
External connection linkage alarms such as infrared sensor etc (not built-in by camera, need additional support in qualified NVR).

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.



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.

Reboot:

Restart the camera.

Upgrade:

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



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.

11. Camera Infrared and Night Vision

How the IR LED works: 

When the IR-LED is on, the video will turn to black and white automatically. IR-LEDs will beam red lights at night. The IR-LED is set to the auto mode by default. Like auto 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.

A.Auto Mode:

The infrared LED will be on automatically when photoresistor of the camera believes the neighboring environment is dark enough (reaches the set threshold IR ON SENS).

IR SETTING	
IR MODE	AUTO
IR ON SENS	210
IR OFF SENS	185
BACK EXIT	
CURRENT LEVEL	33


CURRENT LEVEL = Darkness of installation environment. The larger the value, the darker the surrounding.

LED ON SENS:

The threshold of photoresistor to turn on the IR LED, default is 210.

LED OFF SENS:

The threshold of photoresistor to turn off the IR LED, default is 185.



In Auto Mode, the camera will turn on and off IR LED automatically according to the value of photoresistor. If the value of the ambient environment (CURRENT LEVEL) is \geq the IR ON SENS, then the LED will be turned on automatically, vice versa.

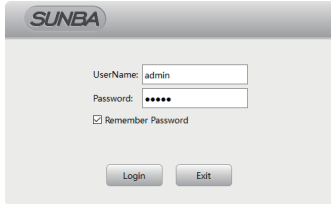
B.Manual Mode:

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

NOTE: Unless you decide to turn the IR off permanently, the difference between the LED ON and LED OFF values must be at least 30 to avoid problems of IR LED blinking. PRESET 103+CALL to manually turn on both sides together.

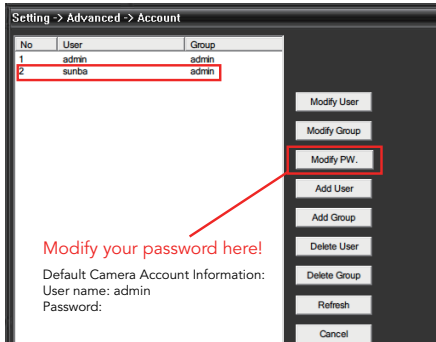
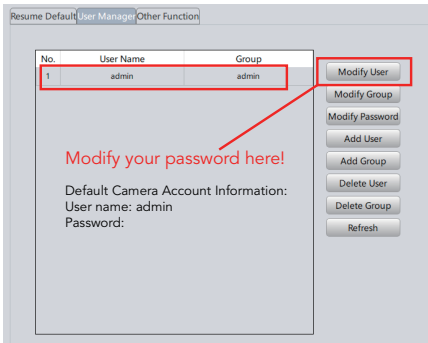
12. Account Management

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.



← 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.



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.

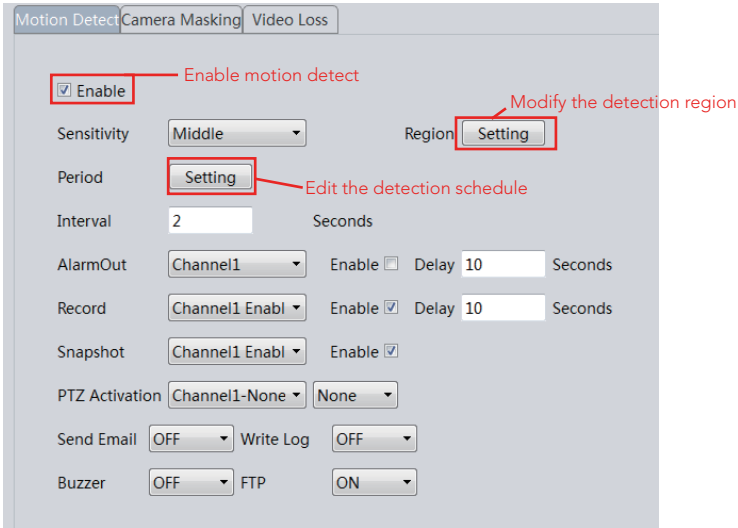
Allow multiple access:

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!!

13. Motion Detection



Alert Format

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 14.

14. 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"/>

TCP/IP	DAS	Cloud	Email	FTP	DDNS	PPPOE	RTSP
<input type="checkbox"/> Enable							
Server Address <input type="text" value="FTP"/>							
Server Port <input type="text" value="21"/>							
<input type="checkbox"/> Anonymous							
UserName <input type="text"/>							
Password <input type="text"/>							
Max File Len <input type="text" value="1024"/> MB							
Remote Path <input type="text"/>							

We would suggest that you control the Max File Length to ensure the stable upload of the file.

Step 3: Enable the motion detection (in Video Detect or Video Motion). See Chapter 13. Then enable the FTP option.

Snapshots: You must also enable snapshot in Video Detect.

Videos: You must also enable record in Video Detect. And you must also 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 (installed 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.

The screenshot shows a configuration window with three tabs: 'Motion Detect', 'Camera Masking', and 'Video Loss'. The 'Motion Detect' tab is active. The settings are as follows:

- Enable
- Sensitivity: Middle (dropdown)
- Region: Setting (button)
- Period: Setting (button)
- Interval: 2 (input) Seconds
- AlarmOut: Channel1 (dropdown) Enable Delay: 10 (input) Seconds
- Record: Channel1 Enabl (dropdown) Enable Delay: 10 (input) Seconds
- Snapshot: Channel1 Enabl (dropdown) Enable
- PTZ Activation: Channel1-None (dropdown) None (dropdown)
- Send Email: OFF (dropdown) Write Log: OFF (dropdown)
- Buzzer: OFF (dropdown) FTP (dropdown) ON (dropdown)

15. Reset the Camera

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

Option 2: Reset camera network setting including ports and IP address. Device Manager → Reset Config

Option 3: Reset/modify camera network setting after lock-up (time out login error)
Download the third party tool called ONVIF Device Manager

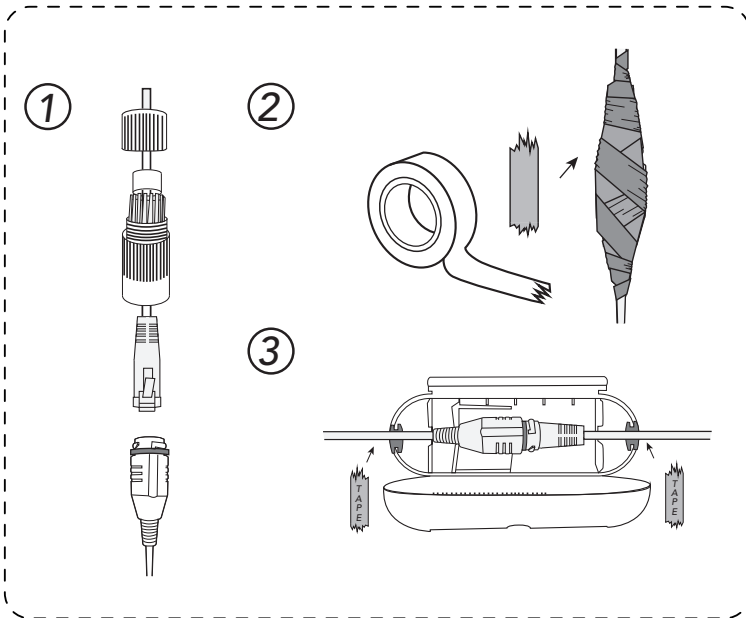
Option 4: Reset the password
Ask support@sunba.net to provide the reset tool and the super password of the day.

Option 5: Telnnet reset
Ask support@sunba.net to schedule a remote TeamViewer session.

16. 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:

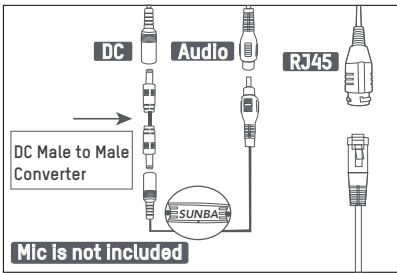


1. Certain models have waterproof ethernet kit shipped together with the camera. To apply the waterproof kit, you have to cut the crystal head, thread the ethernet cable through the waterproof kit, and then finally use crimping tool to add the crystal head back to the cable.
2. Using electrical waterproof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

17. Audio Setting

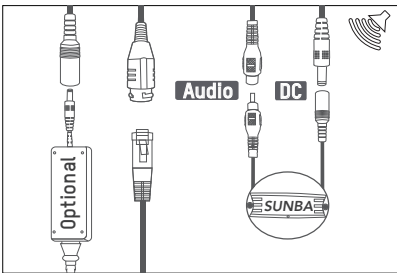
Sunba PTZ cameras don't have built-in audio. You need to add an external microphone to the camera's RCA interface to enable sound pick-up. The cameras require an active microphone, meaning the microphone must be powered. Microphones are not included in the camera package and must be purchased separately.

A. Installation: how to install the microphone by running only one power cable?



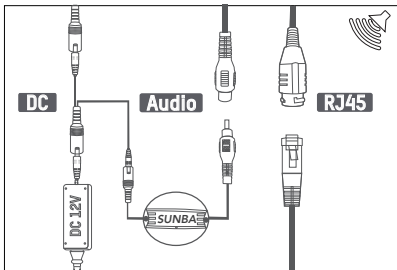
With Sunba 507 PoE Camera

A DC male to male converter (comes with the camera) is necessary in this case to convert the female DC port of the camera into male. Then connect the microphone to the DC port of the camera to draw power from the PoE supply used by the camera.



With Sunba 405/601 PoE Camera

A special DC male port has been made on the camera's end tail to power the microphone. The microphone can directly apply its DC female port to the existing male port without any adapters. In this way, the Mic is actually powered by "borrowing" a few watts supplied to the camera.



With Non-PoE IP Camera

A Y-shape splitter (complimentary in the package) is necessary in this case to divide the DC power from the adapter into two:

- 1) One power stream goes to the camera;
- 2) The other power stream goes to the microphone.

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

Please remember to check the audio option in "Device Config->Encode. "

The screenshot shows the 'Device Config->Encode' window with two columns: 'Main Stream' and 'Extra Stream'. The 'Video/Audio' row has checkboxes for both, with red boxes and arrows pointing to them. The 'Static Encode Config' is set to 'main profile'.

Setting	Main Stream	Extra Stream
Compression	H.264	
Resolution	AHD-H/1080P	D1
Quality	Good	General
FPS	30	25
Stream Control	CBR	VBR
BitRate(Kb/s)	4096	656
I Frame Interval	2	2
Video/Audio	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Static Encode Config	main profile	

Buttons: Apply, OK, Cancel

The screenshot shows the SUNBA software interface. The top bar includes 'SUNBA', 'Home', 'Device Manager', and 'Monitor(1)'. The main area displays a camera feed of a building. A red circle highlights a headset icon in the top right corner of the camera feed, with a text box pointing to it: "click the headset icon to turn on the audio". The 'Devices' panel on the right shows a 'Default Group' with IP addresses 192.168.1.66 and 192.168.1.55. The bottom status bar shows system information: VMS CPU State: 9%, ALL CPU State: 13%, Memory State: 228MB, and a control bar with icons for grid, zoom, and other functions.

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 15% 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

