

# **Network PTZ Camera**

Dedicated PTZ for Residential and Small Business

### User Guide V8.0



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.

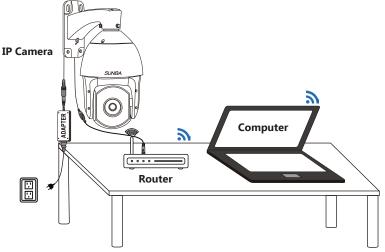
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### **1. Camera Bench Test**

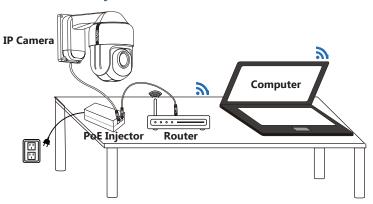
When you take the camera out of the box, please test the camera indoor first before mounting outside.

#### 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 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	Yes

Note: 802.3at is also 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

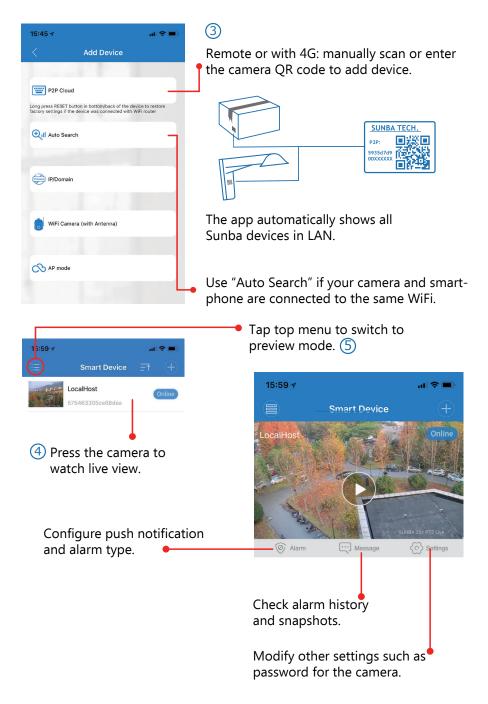
Shield the camera front lens, turn off the lights and draw the curtains to see if the camera is able to automatically turn to infrared night vision mode.

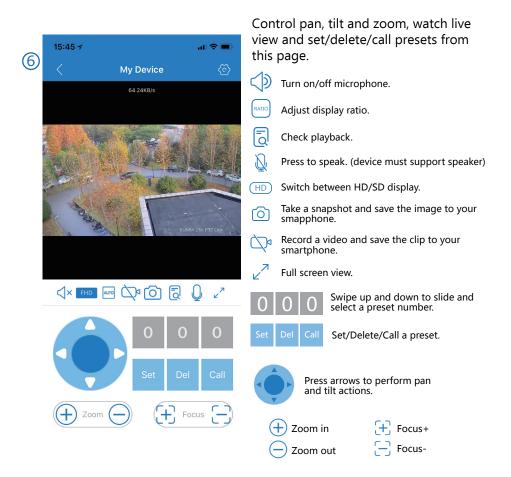


# 2. Camera Setup by Smartphone

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







### 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)

SUNBA
UserName: admin
Password:
Remember Password
Login Exit

#### Step 2: Open the Device Manager page.

Click "**IPV4 Search**" and select the camera, then click "**add**" to connect the device.

		SUNBA	A) 🙆	Device Manage	1						T	About	- 🗆 ×
	Th	e following devi	ces have been foun	d:				The	following dev	rices have been adde	d:		
1		Name	CloudID	IP/Port	Vendor	Group			Name	CloudID	IP/Port	Group	Status
$\rightarrow$	•			192.168.0.11:34	Sunba	De							
		192.168.1.17	Not Available	192.168.1.17:80	Onvif	De							
							Add						
							Remove						
								<					>
				8				🗌 In	order to login	device,modify ip au	tomatically		
			IPV4 Search	IPV6 Search						Manual Add	Add Group		

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

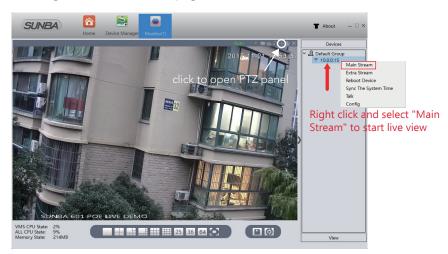
Now the camera status should show "Connected".

	SUNB	A A	Device Manage	er						T	About	– – ×
Th	e following devi	ces have been found	d:				Th	e following dev	ices have been adde	ed:		
	Name	CloudID	IP/Port	Vendor	Group			Name	CloudID	IP/Port	Group	Status
	192.168.1.17	Not Available	192.168.1.17:80	Onvif	De			192.168.1.70	c369f2750087b	192.168.1.70:34	Default	Connect
								192.168.1.12	dff25d4815792	192.168.1.12:34	Default	Connect
		IPV4 Search	IPV6 Saarch			Add	<	n order to login	the ca			cates
		IPV4 Search	IPV6 Search					n order to login		Add Group		

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**

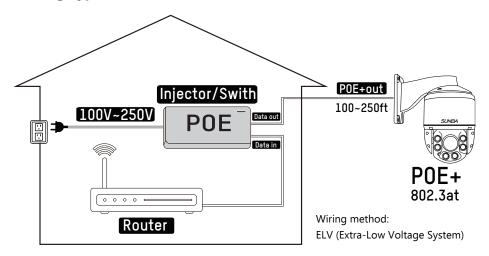
Please go to the "monitor" page.



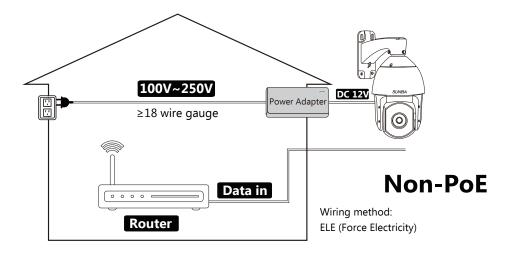
### 4. Mounting Outdoor

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):

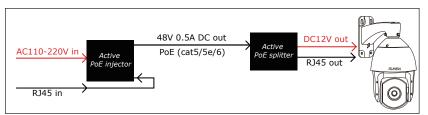
The camera may not work properly if the power reaches the camera is below 12V due to resistance along the extended DC line (distance dependent). If that happens, please make your AC power source near the camera, and connect it with our default adapter you received from the package.

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

#### **Risk Relevant**

1.Using 24VAC or higher voltage adapter (16V, 24V) will immediately dam-age 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.

## 5. 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.

😗 Dev	viceManager							×
NO.	IP Address	Port	Destribe		Mac Address	CloudID		192 . 168 . 1 . 12
	192.168.1.12	34567			00:00:11:06:83:24	dff25d48157925	IP Address	132 . 100 . 1 . 12
<b>□</b> 2	192.168.1.70	34567			00:12:17:58:e3:b9	c369f2750087b2	Subnet Mask	255 . 255 . 255 . 0
	1						Gateway	192 . 168 . 1 . 1
	•							SameToPc
Che	eck device	IP a	ddress				HTTPPort	80
							TCPPort	34567
							Mac Address	00:00:11:06:83:24
							CloudID	dff25d4815792589
								Modify
<							adminPsw	Advance
	1					>		
Selec	tAll IP Sea	rch	Add Device	WebBrowse	Reboot	ResetConfig		n en
DirPa	th				Browse	Export		
FileN	ame:				Browse	Upgrade		

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.

#### 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 <u>plugin.sunba.net</u> 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).

### 6. Assign a static IP

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



Step 2	: Unse	lect the	DHCP	option.
--------	--------	----------	------	---------

Interface	Wired Interface	Enable DHCP	
IP	192.168.1 .70		J
Submask	255.255.255.0		
Gateway	192.168.1 .1		
Primary DNS	192.168.1 .1		
Secondary DNS	8.8.8		
TCP Port	34567	Http Port 80	Onvif Port 8899
MAC Address	00:12:17:58:e3:b9		
Enable High Speed Download			
Network Transmission Policy	TransMission •		

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

### 7. Access by 3rd Party Software

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

http://	• 19	2.168.1.10			Find/inspect
ι	Jser ad	min	Password	Show Blank addres	s to search for camera
Make	SUNB4	l .	•	Media/video/RTSP po	rt 34567 🗼
Model	H.264	/H.265 Port 34	567	Discovery/ONVIF po	rt 8899
Video				Network options	
Path				Receive buffer (MR	3) 3.0
Params	Main			Use RTP/UDP ports:	7000
Camera	0	*		Send RTSP keep-alives	
				☑ Use RTSP/stream timecod	le
Audio				Skip initial HTTP DNS and	reachability tests
Path				Framerate limiting comp	atibility mode
Format	16-bit	PCM		Decoder compatibility me	ode
	Setu	p RTSP back-ch	nannel for talk support (PCM-U	J format)	tSubscription

**Blue Iris (in Windows)** 

	Cameras	
- E 🔩 🕮 🥅 🛒 💌	Apply Prefere	ences
General Cameras Groups Schedules Compression Ema	il Uploads Web	
Cameras Device Setup Mas	ks Audio Continuous Capture Motion Capture Acti	ons
Sunba IP Camera		
Address	192. 168. 1. 10	. Fill in the boxes with
	Auto-Discovered Devices > Open In Web Browser	
ONVIF port:	Leave the port boxes empty to use standard ports, which will work for	<ul> <li>corresponding</li> </ul>
RTSP port: Username		network info of your
Password		
		camera. By default, the
Profile:		ONVIF port is 8899
	RTSP TCP (vidieo and audio)	
Video size:	x	and RTSP port is 554.
Frame rate:		Make sure the encode
Input or stream number:		is set to H.264.
Options:	Use SSL (this only works if enabled in the device) Disable Pan/Tilt/Zoom for this device	IS SEL LO H.204.
	Recompress video data from this device	
	Recompress audio data from this device	
Request: (Manual profile only)		
(manual prome only)		
+ - 🌣		

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 diffrent 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.

### 8. Remote Access

/ Tips: 🗐	I
Go to Sunba website FAQ page and type keyword "mobile" to	l
gain the setup page for popular smartphone app such as iSunba,	1
TinyCam Pro, IP Cam Viewer.	İ
``	

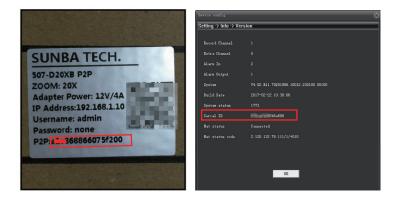
#### Type 1: Sunba Cloud (P2P)

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	xmeye.net (Ir	nternet Explorer)
	Add Device	By User	By Device
Device Name:	Sunba		
Group:	Default Group 🔹	P87dc021338	*****
Login Type:	CloudID		
CloudID	987dc021338****	😰 admin	
UserName:	admin	Password	
Password:			
Vendor:	SUNBA 🗸	Verify	N Sam
Save And Conti	inue OK Cancel	Login a	and Preview

#### **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: <u>"rtsp://IP:554/user=admin&password=&channel=1&stream=0.sdp?real\_stream"</u> where 0 = mainstream and 1 = substream For example with the default network setting: <u>rtsp://192.168.1.10:554/user=admin&password=&channel=1&stream=0.sdp?real\_stream=0.sdp?real\_stream</u>

#### Type 4: VPN (Virtual Private Network)

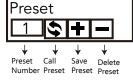
This is recommended for customers who have static IP address and advanced router functions.

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.

## 9. Presets, Patrol and Pattern

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

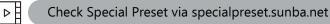
Enter the number and hit "+" to set/add/save a Enter the number and hit "-" to delete a preset. Enter the number and hit "\$" to call a preset.



#### **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**



Special presets are preset numbers associated with advanced commands that cameras can follow to modify/enable settings such as changing infrar--ed 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) accord--ing to **The Full Preset List.** 

#### Patrol

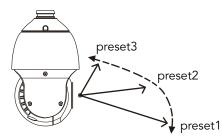
The PTZ camera can travel from one preset to another by order. A patrol is usually named as a tour or a cruise. The total presets included in a patr--ol can be up to 10. To activate a patrol, first you will need to save correspond-ing presets you want to tour across. For example, preset 1-10 can be called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





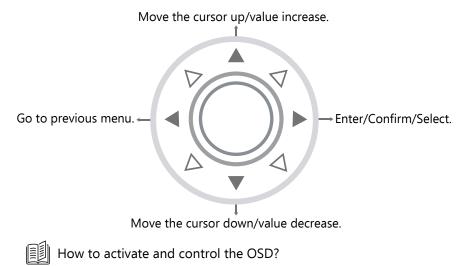
Note: When pressing any direction key, the camera will stop the patrol, scan & pattern.

### **10. 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 (Switch from unreadable ASCII characters to standard English OSD display. )			
81 + Add Preset	Set the left boundary of frame scan			
82 + Add Preset	Set the right boundary of frame scan			
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			
98+ CALL	360° continuous scan			
93+ CALL	Display preset information			
94 + CALL	Hide preset information			
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 photoresister			
121+ CALL	Hide the value of photoresister			
83+ CALL	Clear all preset			
81+ CALL	Reset the PT position			

### 11. Camera OSD Menu

The On-Screen-Display menu is only available on Sunba 20X/25X PTZ cameras.



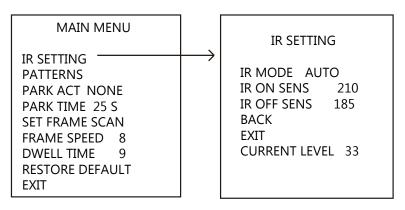
Preset **-**

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 dis--play 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 <u>specialpreset.sunba.net</u>

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

#### **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 .

#### PARK ACT

IRIS OPEN EXIT

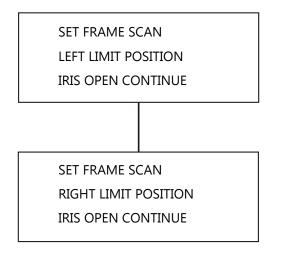
This option is also called the watch function or the defend function of a PTZ camera. The dome will automatically execute a corresponding preset action after a settled idle time (25 seconds is default) if no additional commands are sent from users.

#### 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.

#### DWELL TIME

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

### **12. 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:

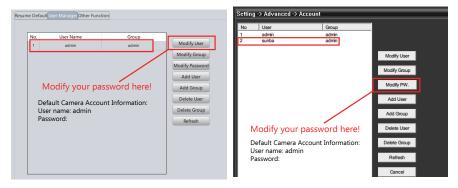
Import/Export the configuration and log of the camera.

### **13. 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.

SUNBA	
UserName: admin Password: ••••• Premember Password	ccount for VMS Software <b>OT</b> for Camera
Login Exit	

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!

## **14. Motion Detection**

Motion Detect <mark>Ca</mark>	mera Masking	Video Loss					
	_				Ena	able huma	an detection
🗹 Enable	E	nable motion de	etect	Humanoid	Detect		
Sensitivity		Middle		Rule		Setting	
Period		Setting Edit t	he detectio	on schedule	Ν	🖌 Nodify the	e detection region
Interval		2	Seconds				
AlarmOut		1			Delay	10	Seconds
Record		1					
Delay		10	Seconds				
Snapshot		1					
PTZ Activat	ion	Channel1-None -	None -				
Send Email	ON	Write Log	ON •				
Buzzer	OFF	▼ FTP	OFF •	Phone Report	ON •	Alarm Sou	Ind OFF •
SoundPlayT	уре	Alert area,please leav	/e		•		

**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 15.

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

### **15. Face Capture**

The face capture feature is only supported by Sunba 405-D20X V2, 601-D20X V2, 305-D4X, 405-ECO, and VF-4X, and needs to be coupled with the Sunba NVR model 2008SE to be able to capture, store and browse snapshots of human faces. Firmware upgrade might be required to realize this feature. For detaileed steps of setup, please refer to the user manual of Sunba NVR.

# **16. 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

TimeSection1 00:00 23:59 Image: Constraint of the stable stable upload of the file.   TimeSection3 00:00 23:59 Image: Constraint of the stable upload of the file.   TCP/IP DAS Cloud Email   Server Address FTP   Server Port 21   Anonymous We would suggest that you control the Max File Len gloud of the file.   Password Password	Week	All days	•		General	Detect	Alarm
TimeSection3 00:00   00:00 23:59   TimeSection4 00:00   23:59   1     Cloud   Enable   Server Address   FTP   Server Port   21   Anonymous   UserName   File Length to ensure the stable upload of the file.   Password	TimeSection1	00:00	•	23:59 📮			
TimeSection4 00:00   Cloud Email   TCP/IP DAS   Cloud Email   FTP DDNS   PPPOE RTSP     Server Address   FTP   Server Port   21   Anonymous   UserName   File Length to ensure the stable upload of the file.   Password   Max File Len   1024	TimeSection2	00:00	•	23:59 💂			
TCP/IP       DAS       Cloud       Email       FTP       DDNS       PPPOE       RTSP <ul> <li>Enable</li> <li>Server Address</li> <li>FTP</li> <li>Server Port</li> <li>21</li> <li>Anonymous</li> <li>We would suggest that you control the Max</li> <li>File Length to ensure the stable upload of the file.</li> <li>Password</li> <li>Max File Len</li> <li>1024</li> <li>MB</li> </ul>	TimeSection3	00:00	•	23:59 🜲			
Enable  Server Address FTP  Server Port 21  Anonymous  UserName File Length to ensure the stable upload of the file.  Password  Max File Len 1024 MB	TimeSection4	00:00	•	23:59 📮			
Remote Path	Enable     Server Address     Server Port     Anonymous     UserName     Password     Max File Len	FTP 21	We	would sugges	it that you c	ontrol the	Max

**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.

Motion DetectCame	Motion Detect Camera Masking Video Loss					
🗹 Enable						
Sensitivity	Middle   Region Setting					
Period	Setting					
Interval	2 Seconds					
AlarmOut	Channel1   Enable Delay 10 Seconds					
Record	Channel1 Enable Tenable Delay 10 Seconds					
Snapshot	Channel1 Enabl 🔻 Enable 🗹					
PTZ Activation	n Channel1-None  None					
Send Email	OFF   Write Log OFF					
Buzzer	DFF TP ON T					

### 17. Reset the Camera

**Option 1:** Reset the camera parameter and configuration(IE/VMS/CMS) Device Config  $\rightarrow$  Default

**Option 2:** Reset camera network setting including ports and IP address Device Manager  $\rightarrow$  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

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

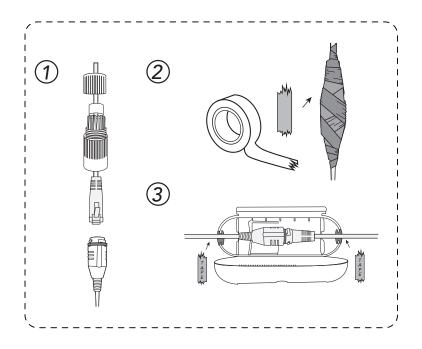
#### **Option 5:** Reset Tool (Factory Reset)

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.

## **18. 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:



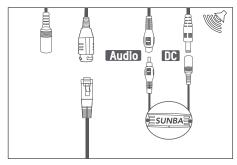
- 1. Certain models have waterproof ethernet kit shipped together with the camera. To apply the waterproof kit, you have to cut the crystal head, thread the ethernet cable through the waterproof kit, and then finally use crimper tool to add the crystal head back to the cable.
- 2. Using electricial waterproof 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.

## **19. Audio Setting**

**NOTE:** This chapter for reference only, **specific products in kind prevail.** 305-D4X and 601-D25X have built-in microphone with sound pick-up capacity. There is no need to install additional microphone on this model.

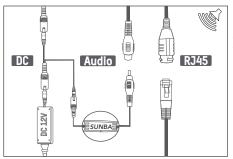
Other models (such as 405-D20X, 405-ECO, 601-D20X and 406-D20X) don't have built-in microphone. You need to add an external microphone to the camera's RCA interface to enable sound pick-up. The cameras require an active microphone, meaning the microphone must be powered. Microphones are not included in the camera package and must be purchased separately.

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



#### **PoE Solution**

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 on the camera. In this way, the Mic is actually powered by "borrowing" a few watts supplied to the camera.



#### **Non-PoE Solution**

A Y-shape slippter (not included with the camera) 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."

	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		
Static Encode Config	main profile 🔻	
		Apply OK Cancel



### **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

