FOSCAM®
home security

User Manual

Outdoor IP Security Camera

Model: SD2

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Table of Contents

Security Warning

- Please change the password of your camera regularly, using a combination of numbers, letters and special characters.

- We recommend that you regularly update your camera to the latest available software and firmware versions to help ensure the best experience for your camera.

1 Overview

Foscam Outdoor IP Security Camera is an integrated IP Camera with a color CMOS sensor enabling viewing in High Definition resolution.It combines a high quality digital video camera, with a powerful web server, to bring clear video to your desktop from anywhere on your local network or over the Internet.

The IP Camera supports the industry-standard H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth.

The IP Camera is based on the TCP / IP standard. There is a WEB server inside which could support Internet Explorer. Therefore the management and maintenance of your device is simplified by using the network to achieve the remote configuration and start-up.

The camera is designed for outdoor surveillance applications such as courtyards, supermarket, and school. Controlling the IP camera and managing images are simplified by using the provided web interface across the network utilizing connectivity.

1.1 Key Features

◆ Standard H.264 video compression algorithm to satisfy the transmission of high definition video in narrow bandwidth network
◆ 2.0 Mega-Pixel
◆ Supports IE / Firefox / Google / Safari browser or any other standard browsers
◆ Supports WPA and WPA2 Encryption
◆ Supports Pan & Tilt
◆ Supports 4x Optical Zoom
◆ 6pcs Infrared-LEDs, night vision range up to 50 metres (164ft)
◆ Supports image snapshot
◆ Supports dual-stream
◆ Supports 2.4G/5G dual band, IEEE802.11b/g/n/ac
◆ Supports IR-Cut and the filter change automatically
◆ Supports remote viewing & record from anywhere anytime
◆ Multi-level users management with password protection
◆ Motion detection alert via email or upload image to FTP
◆ Supports multiple network protocols: IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、RTSP、ONVIF
◆ Providing Video Management Software to manage or monitor multi-cameras
◆ Supports Wide Dynamic Range
◆ Supports sound detection
◆ Supports IP Filtering
◆ Supports Alexa
◆ Supports Google Assistant
◆ Supports 128G Micro SD Card Storage(External)

1.2 Read before Use

Please first verify that all contents received are complete according to the Package Contents listed below. Before the Network Camera is installed, please carefully read and follow the instructions in the Quick Setup Guide to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

1.3 Packing Contents

|	
● IP Camera × 1	● Power Adapter × 1
● Quick Setup Guide × 1	● Ethernet Cable× 1
● Mounting Plate × 1	● Wi-Fi Antenna× 1
● Screwdriver × 1	

1.4 Physical Description
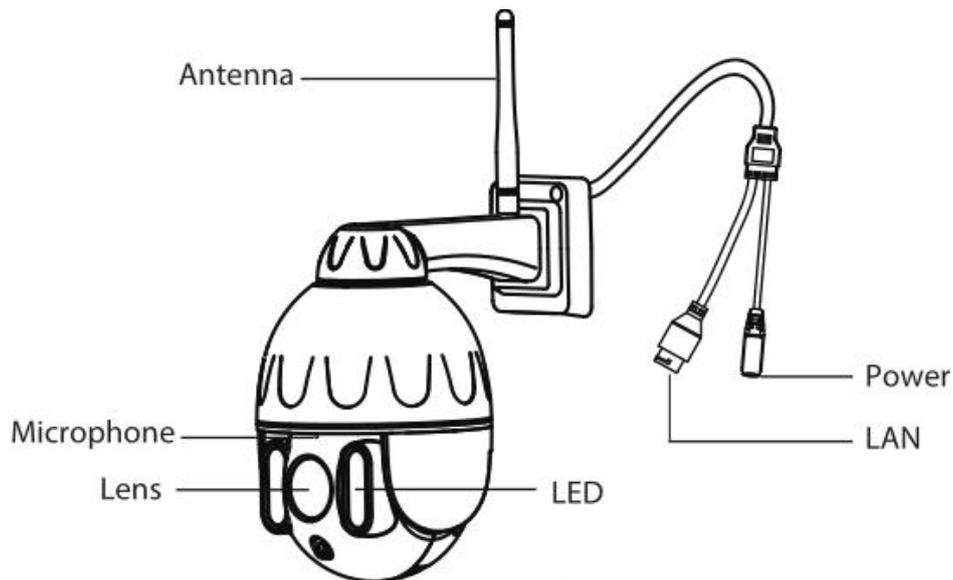
LED: 6pcs Infrared-LEDs, night vision range up to 50 metres / 164ft.
Lens: High Definition Color CMOS Sensor sensor with zoom lens.
Antenna: Wireless Antenna
Power: Connect the external power adapter, request for 12V / 2A power.
LAN: 10/100M adaptive Ethernet interface. Through this interface, IP camera can be connected with various network devices, such as hub, router, etc.
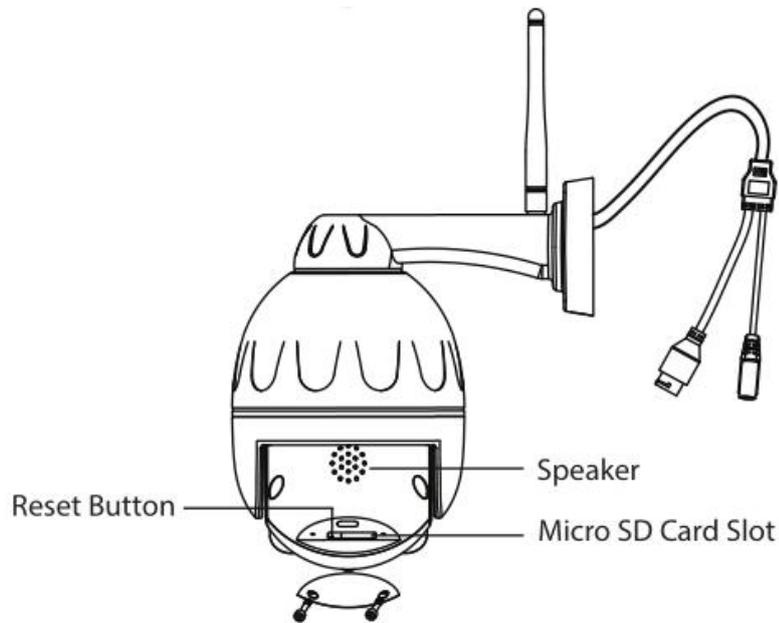
Reset Button

Press and hold on the reset button for 5 seconds. Releasing the reset button, the password will back to the factory default administrator password. The default administrator user is admin with no password.

Micro SD Card slot: Supports up to 128GB SD card for storing the video.

Speaker: Built-in speaker.

NOTE: There are up to two labels located at the bottom of the camera, this is an important feature of original Foscam cameras. If your camera does not have labels, it may be a clone. Cloned Foscam cameras can not use original firmware and are not eligible for warranty or technical services.

1.5 SD Card Management
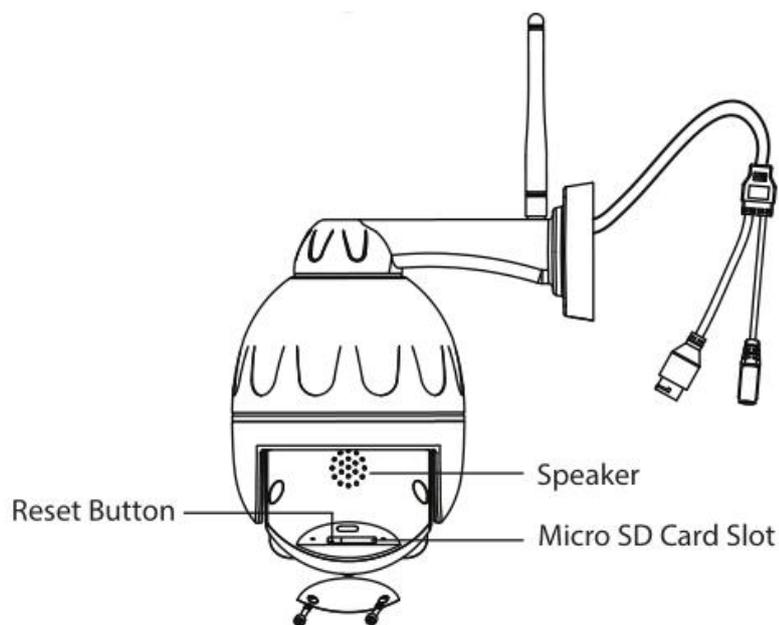
The record files of the IP camera can be stored in the Micro SD Card.

This camera supports Micro SD Card and the max size of Micro SD card must be under 128G.

You need open the cover, then plug the Micro SD card into Micro SD card slot inside the IP camera.

When you plug in the Micro SD card during the camera work process, please reboot the camera again, or else the Micro SD Card may be cannot work well.When you re-install the cover, please ensure the tightness with the camera.

Warning: Please lock the cover in time after installing the Micro SD card to avoid water or water vapor fall into the equipment then cause damage or lens fog.

1.6 Wall Installation

Please refer to the *Quick Setup Guide*.

NOTE: Ensure that the rain or water will not reach the connector ports at the end of the pig tail wiring. These connectors are not weather-resistant.

The cable of an outdoor camera should, from the position where the cable is divided into several cables, be fitted dry. Install the cable into a waterproof junction box (1) or bring the cable indoors (2).
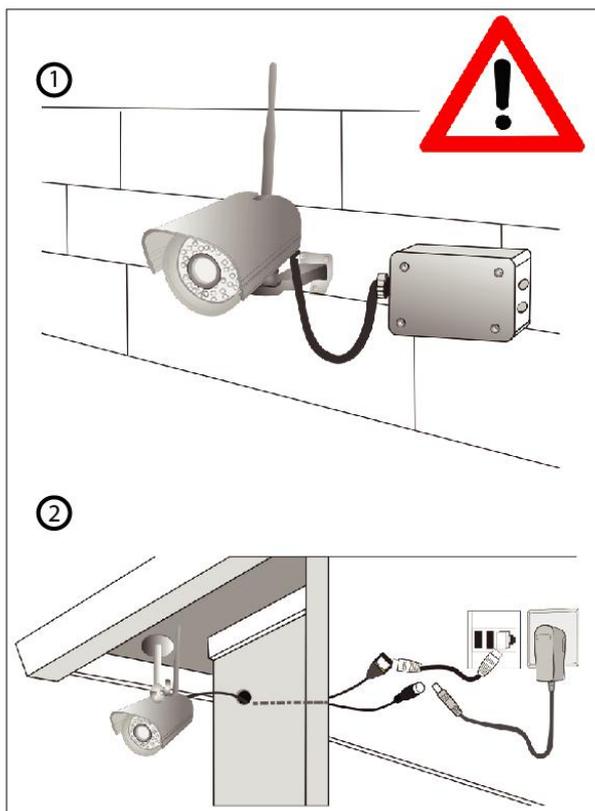
2 Access the IP Camera in Foscam App

## 2.1 Setting Up Your Camera:Wired Connection via Foscam App

Scan the QR code below to download and install the Foscam APP.

Note: For the best experience, please update the APP to the latest version!

Wired Connection

1. Please tighten the antenna clockwise and make sure it is in a vertical position.
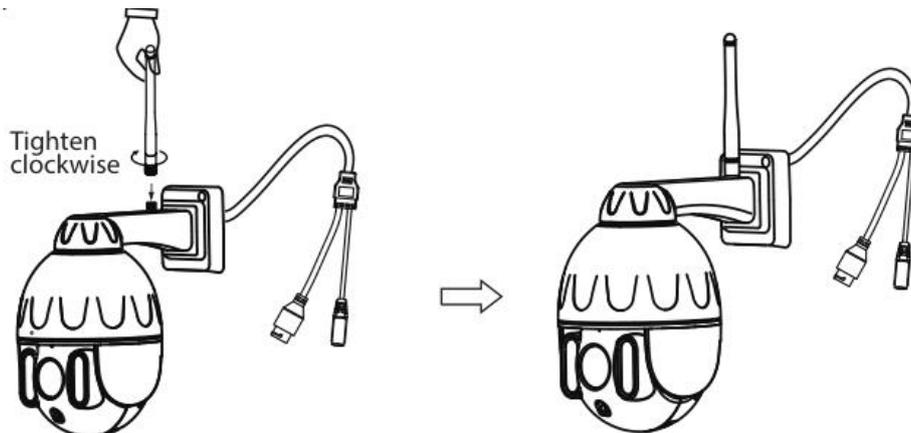

2. Connect the camera to your router with an Ethernet cable.
3. Plug the power adapter into the camera, and then wait for about 1 minute.
4. Make sure your smart phone is connected to the same WiFi network as the camera.
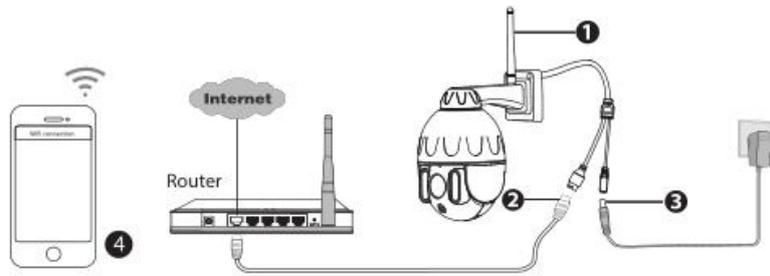
Tips: The camera supports dual-band 2.4GHz and 5GHz WiFi networks, so you can choose the channel with the stronger signal to use. For example, choose your SSID: XXXXX_2.4G or XXXXX_5G.

5. Open the foscam APP and please register a Foscam account, or sign in if you have one already.

6. After logging into Foscam APP, select "**Tap to add a camera**" or "**+**" icon on the upper right corner, then select "**Scan the QR code**" and scan the QR code that labeled at the bottom of your camera.

| Tap + icon | Select "Scan the code" | Scan the QR code which is located at the bottom of your camera. |
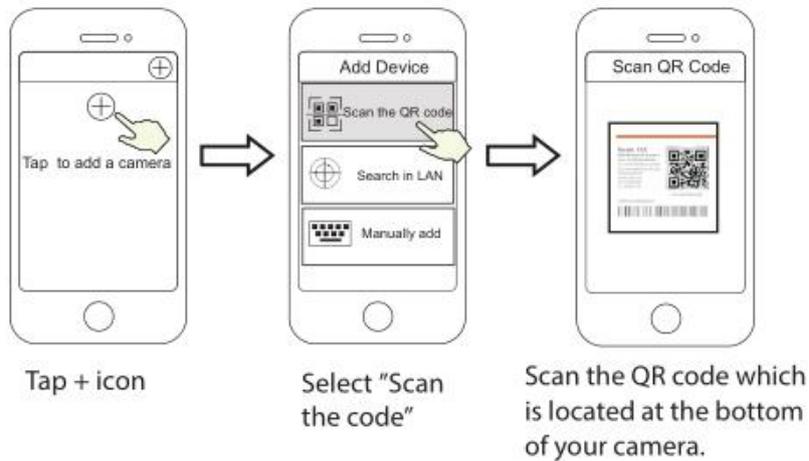
7. There are two options in the following steps, please pay attention to choose the corresponding adding method.

7.1 Please wait for a few seconds, you can tap "Confgure WiFi" in "Confgure WiFi" interface, then select

your WiFi network and enter your WiFi's password. After, you can set the camera name and tap "Save" in "Set name" interface.

Configure WiFi   Select your WiFi   Camera added
                  Network and enter   successfully and
   your WiFi's password   name has been set
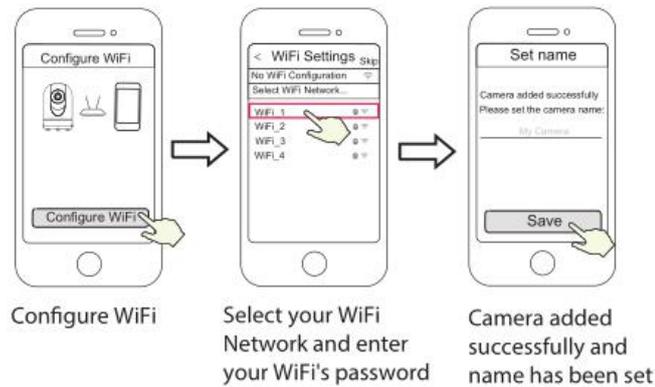
Note: It is strongly recommended that you choose to configure WiFi at this step.

7.2 Please wait for a few seconds, you can tap "Configure WiFi" in "Configure WiFi" interface, then you tap "Skip" in the "WiFi Settings" interface. After, you can set the camera name and tap "Save" in "Set name" interface.

Configure WiFi   Tap" Skip"   Camera added successfully
                                and name has been set
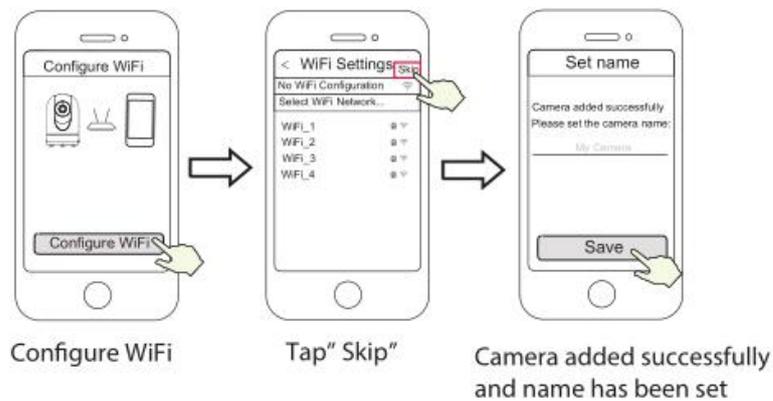
Note: If the adding process fails, please reset your camera and try adding again according to the above method.

Reset Button
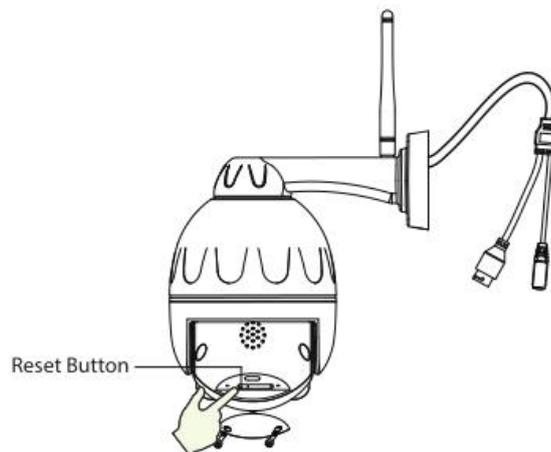
8. Tapping on the play button in the video box will jump to the "Camera Login" setting interface. For your security, please set a new username and password for your camera before viewing live video.

Tap " ▶ "

Set a new username
and password
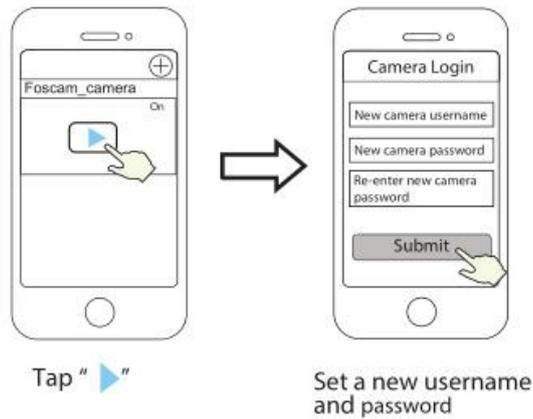
9. After completing the above steps, you can begin using your camera.
Note: If you choose installation step 7.2, please refer to the following steps for configuring WiFi . After setting your WiFi, you can unplug your network cable and the camera works normally.

Configure WiFi

If you selected "Skip" in step 7, click play to enter the camera credentials interface > Tap the " ⚙ "
button > tap "WiFi Settings" > select your WiFi network and enter your WiFi's password. After setting up successfully, you can view live video without the Ethernet cable.

Tap ⚙ button

Select"WiFi Settings"

Select your WiFi
Network and enter
your WiFi's password
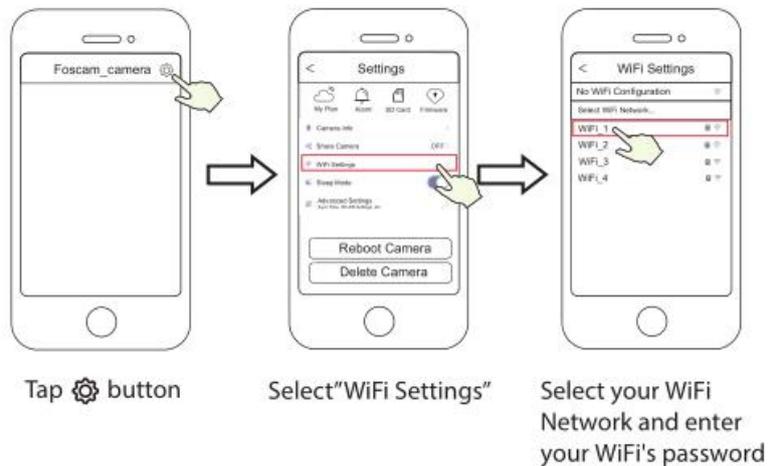
2.2 Foscam APP Surveillance Window

Please refer to the <u>section 2.1.1</u> if you install the camera for the first time. You can start to learn about software
operation after finish quick installation.When you launch the Foscam App, the devices page displays.

Menu ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

Add Device

You maybe need Cloud Service.What do you think?

Cloud Service

Alerts

Camera Name ⎯⎯⎯⎯⎯⎯⎯⎯ Villa

Album

Camera Date&Time ⎯⎯⎯⎯

Watch Live
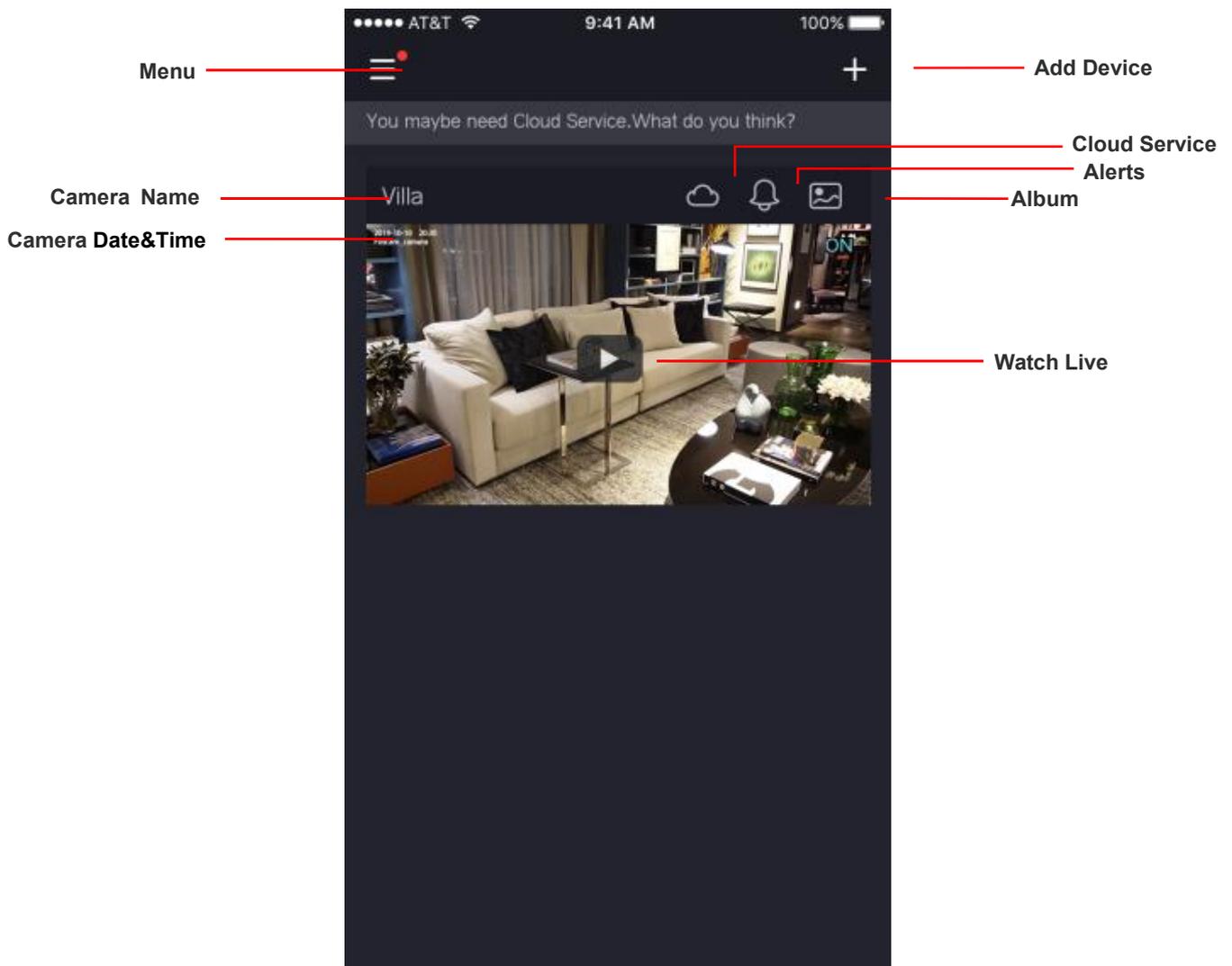
**Camera Name:** A camera name which is displayed in the Foscam Cloud Service.

You can rename your camera's name by tap Live [▶] > Camera Settings [⚙] > Camera Info [📷] .

OSD: Including camera name and camera time, camera name can not be renamed but camera time can be in synchronized with the phone.

Sync Time: Tap **Live** [▶] > **Camera Settings** [⚙] > **Sync Time** [🕐] .

2. 3 Watch Live

Tap **Live** [▶] to view and listen to a live video
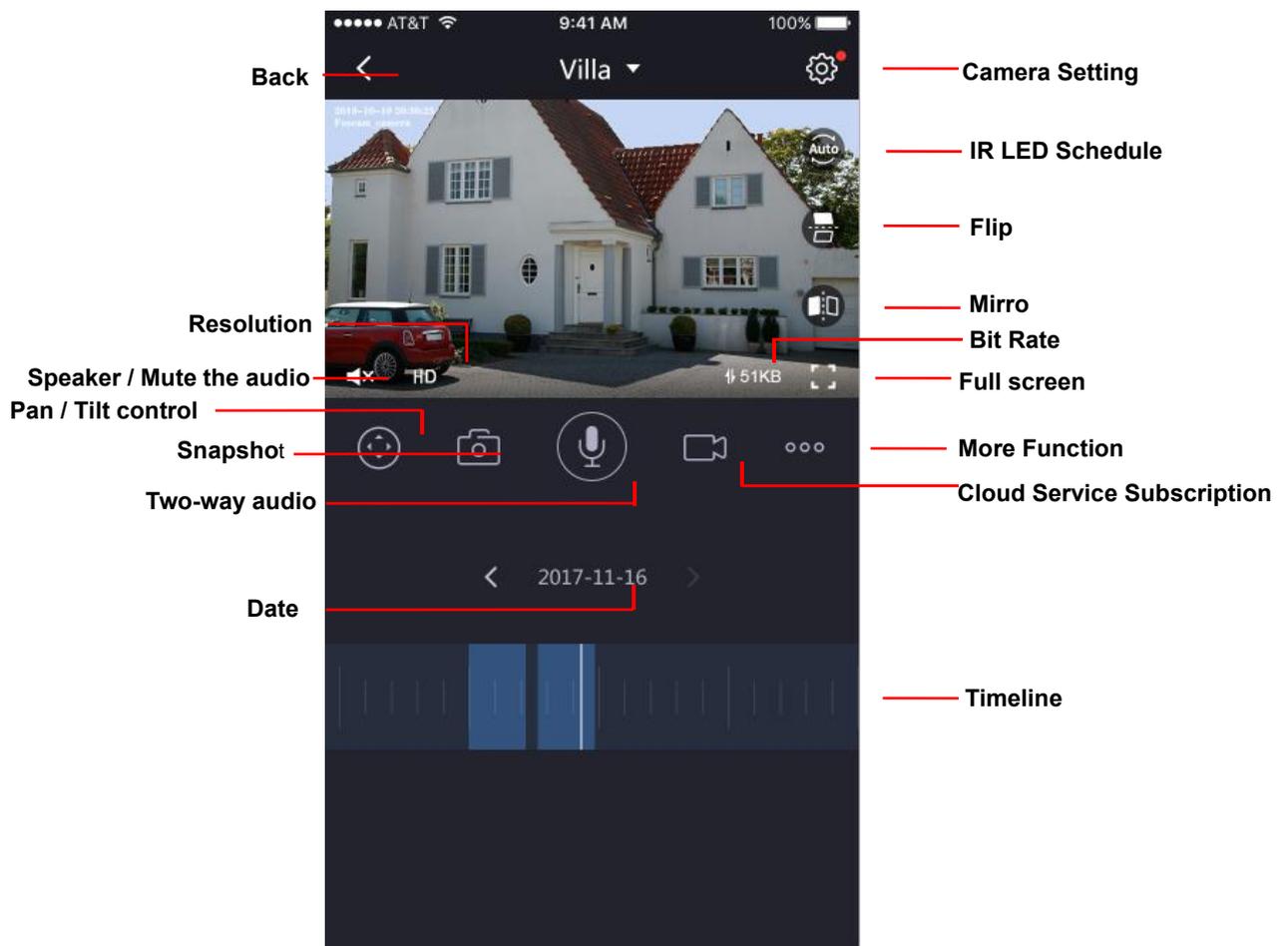
Back: To stop viewing and listening to the live feed, tap the **Back**

Resolution: There are three types to identify different streams you have set. If select the FHD Mode, the clearer video will become, and it will take up more bandwidth; If select the SD Mode, the video will not be as cleaar as FHD Mode, and it will take up less bandwidth. The HD Model is a value between FHD Mode and SD Mode.

Bit Rate: Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

On this screen, you can listen to a live stream, record clips, take a snapshot, activate two-way talk or full screen.

If you want to catch the smaller details, pinch and drag any image as you do with photos on your smartphone

IR LED Schedule: On this page, you can enable/disable the IR LED, and set the IR auto switch or you can schedule it.

Auot: As default, the IR-Cut auto switch is ON, it means that the IR LED will be OFF during 9:00~18:00, and the IR LED will be ON at the other time.

Day: it means that the IR LED will be OFF all the time.

Night: it means that the IR LED will be ON all the time.

Schedule: You can schedule the time to turn the IR LED OFF/ON.

3 Access the Camera in the Web

3.1 Hardware Connection & Software Installation
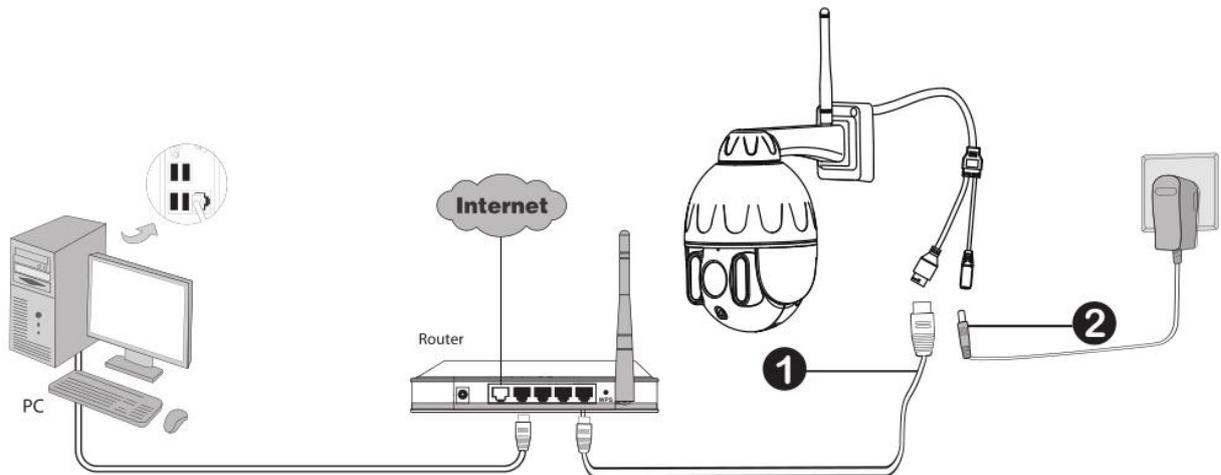
1. Connect the camera to the LAN network (Router or Switch) via network cable.
2. Please connect the power adapter to the camera.
3. Visit Foscam official website http://www.foscam.com , select "Support > Download Center > Software Tools", then you can find the "Equipment Search Tool", download the tool to your computer, the icon shows as below:

NOTES:
- If your computer (Windows OS) supports autorun function, you can find the corresponding file in the opened control panel.

3.2 Access the Camera in LAN

The camera supports HTTP and HTTPS protocols, you can access the camera in two ways.

(1) Http:// LAN IP + Http Port No.

The default HTTP port NO. is 88. Double click the Search Tool icon to run, and it should find the camera's IP address automatically after you plug in the network cable.

Double click the IP address of the camera; the camera login page should be open in your default browser.

(2) Https:// LAN IP + Https Port no.

The default HTTPS port NO. is 443. You can use the URL to access the camera: https:// LAN IP + HTTPS port NO.

Go to **Settings > Network > Port** panel, you can see and change the HTTP and HTTPS port NO.

NOTE: When logging in for the first time, you will need to download and install the add-on.

3.3 Access the Camera in WAN

Static IP Addresses

Users with static IP addresses after you have finished connecting the camera using the LAN IP address and port forwarding, you can access the camera directly from Internet using the WAN IP address and port number

How to Obtain the WAN IP address from a public website ?

To obtain your WAN IP address, enter the following URL in your browser:
http://www.whatismyip.com.The web page at this address will show you the current WAN IP.

Access your IP Camera from the Internet

You can access the IP Camera from the Internet (remote access). Enter the WAN IP address and port number in your standard browser. For example, you would enter http:// 183.37.28.254:88

3.4 Using the VLC Player

This camera supports RTSP streaming, here you can view the camera using VLC player.

RTSP URL   rtsp:// [user name][:password]@IP:port number/videosream

The part in the square brackets may be omitted.
user name & password:
The user name and password to access the camera. This part can be omitted.
IP: WAN or LAN IP address.
port number: If there is the RSTP port number on the Port page, you must only use RTSP port number. otherwise, you must only use http port number.
Videostream: Here support two modes: videoMain and videoSub. When the network speed is bad, here

you had better select videoSub.

For example:
IP: 192.168.1.11
Port number: 88
User name: admin
Password: 123

Here I can enter one of the following URLs in the VLC.
1. rtsp://admin:123@192.168.1.11:88/videoMain
2. rtsp:// @192.168.1.11:88/videoMain
3. rtsp://:123@192.168.1.11:88/videoMain
4. rtsp://admin@192.168.1.11:88/videoMain

Open the VLC, and go to Media　Open Network Stream option, then enter the URL into VLC.
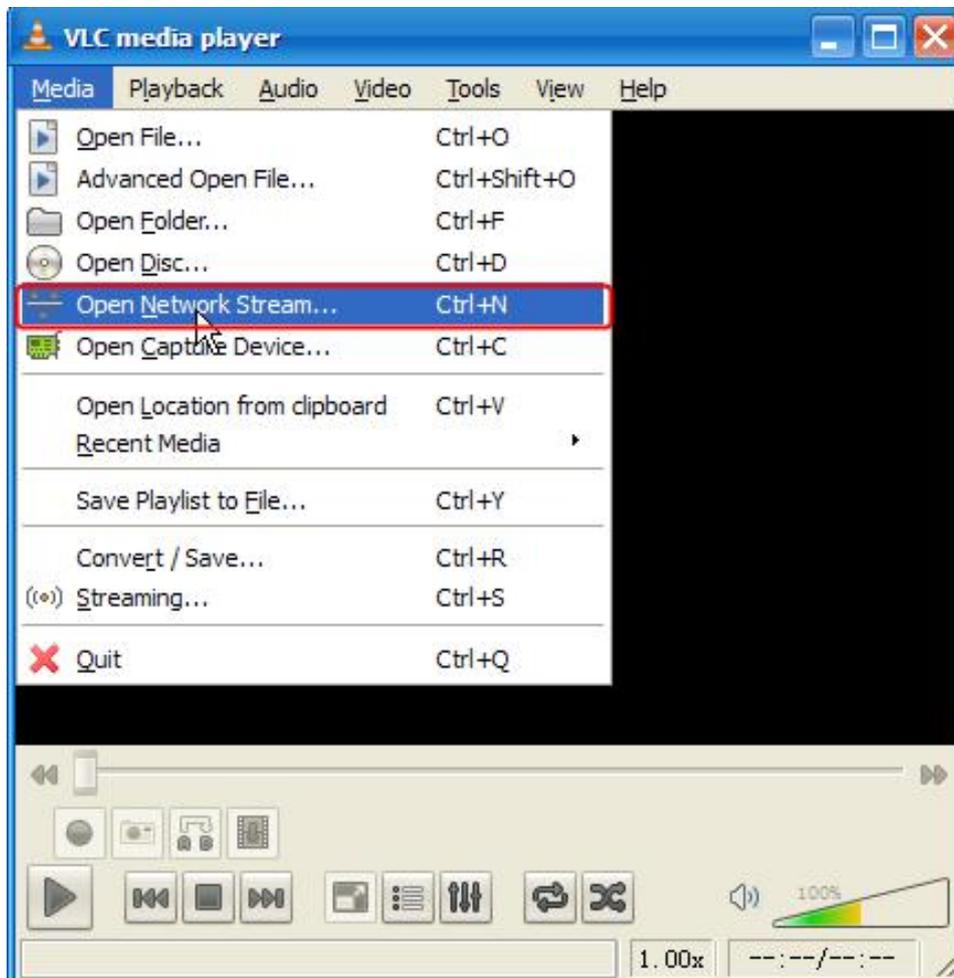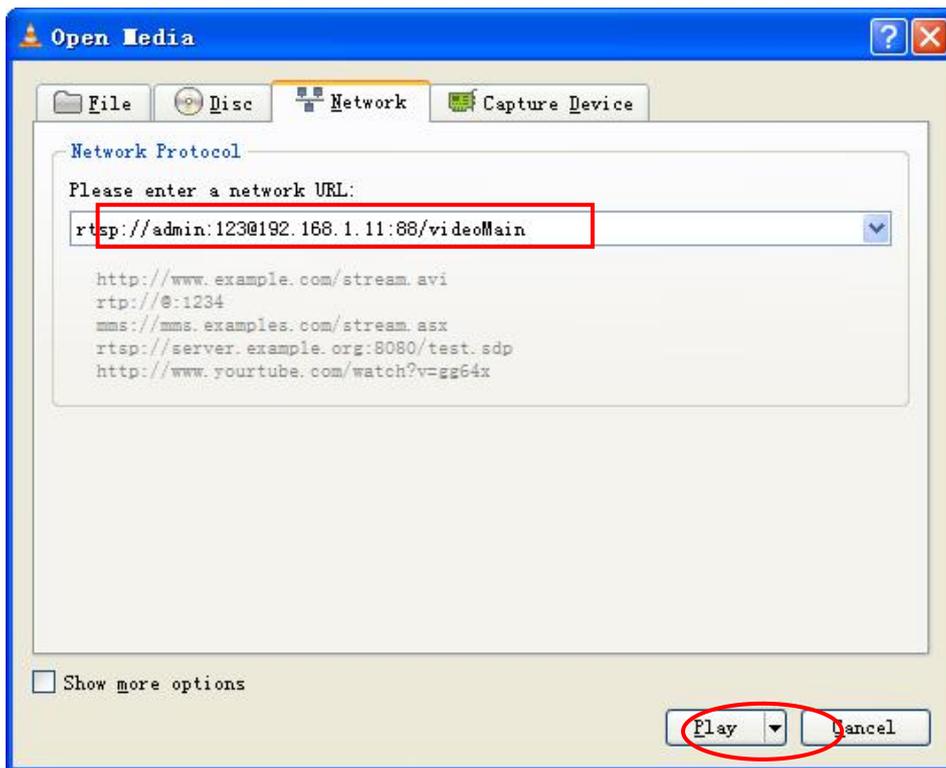
Sometimes you may need to enter the user name and password again. Click OK and you can see the real-time preview.
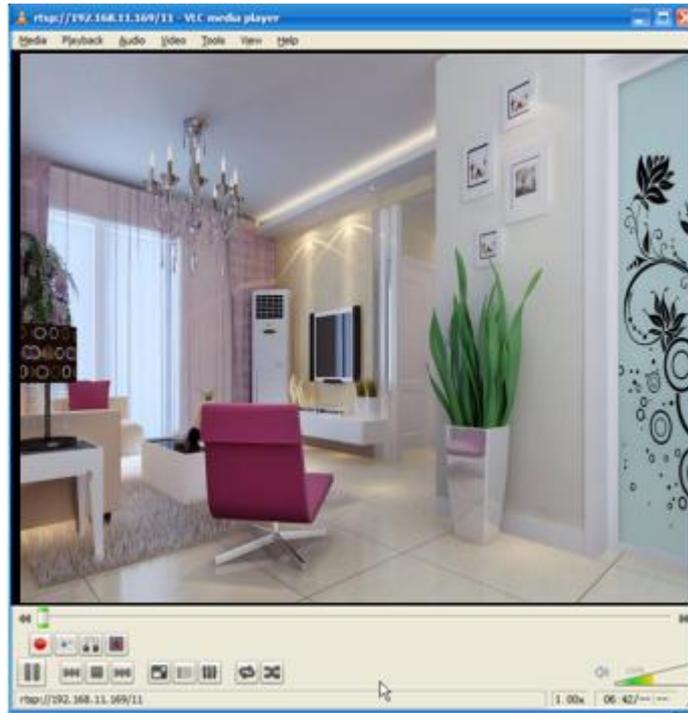
NOTE: If you modify the camera's username or password, you had better reboot the camera, or else the new username and password cannot take effect when you enter the authentication in the VLC.

3.5 IP Camera Connection to the Server

Device supports ONVIF 2.2.1 protocol,You can easily access the NVR with ONVIF or server with ONVIF.

3.6 Surveillance Software GUI

Please refer to the 3.1 Hardware Connection & Software Installation if you install the camera for the first time. You can start to learn about software operation after finish quick installation.

3.6.1 Login Window
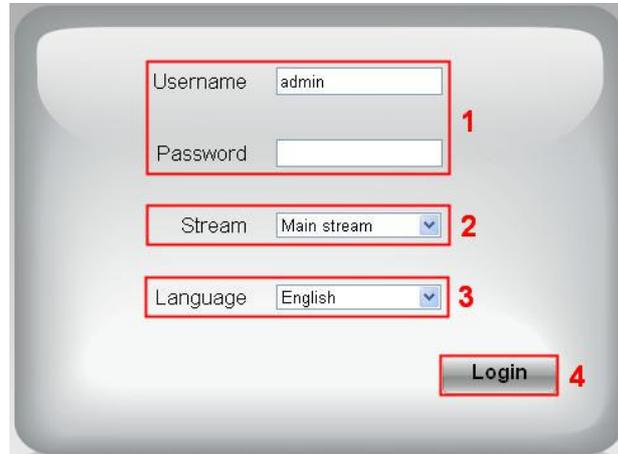
Section1   Enter the Username and password

The default administrator username is admin with no password, please change the password at first using and prevent unauthorized users login the camera.

Section2   Stream

The camera supports two stream modes: Main stream and sub stream. If you want to access the camera form LAN, here you can select Main stream. If you want to access the camera from Internet, here we recommend sub stream.

NOTE: When the network bandwidth is bad you'd better select Sub Stream and the video will be more fluent.

Section3   Select the language

You can select the language you need by clicking on the language dropdown list.

Section4   login the camera

Click **Login** button.

NOTE: When setting up your camera for the first time, it will request that you modify the default username / password if both are still set to default. Input the new username and password, click **Modify** to complete the modification. You will now use the new username and password to login the camera in the future.

After logging in for the first time, you will go to **Setup Wizard** automatically. Here you can set the basic parameters of camera, such as camera name, camera time, IP configuration.

Country: Select the country.

Device Name: You could give name for your camera.

System Time: Select the time zone you need to set the date, time,format, etc.
IP: Set IP address of the camera. You could choose to obtain an IP automatically or set the IP address according to your needs.
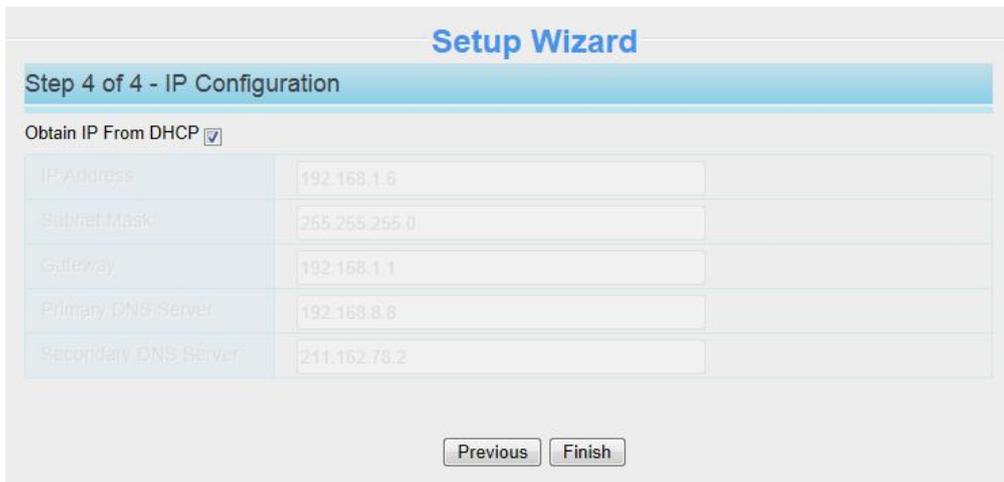
Click **Finish** to finish setting.

3.6.2 Surveillance Window
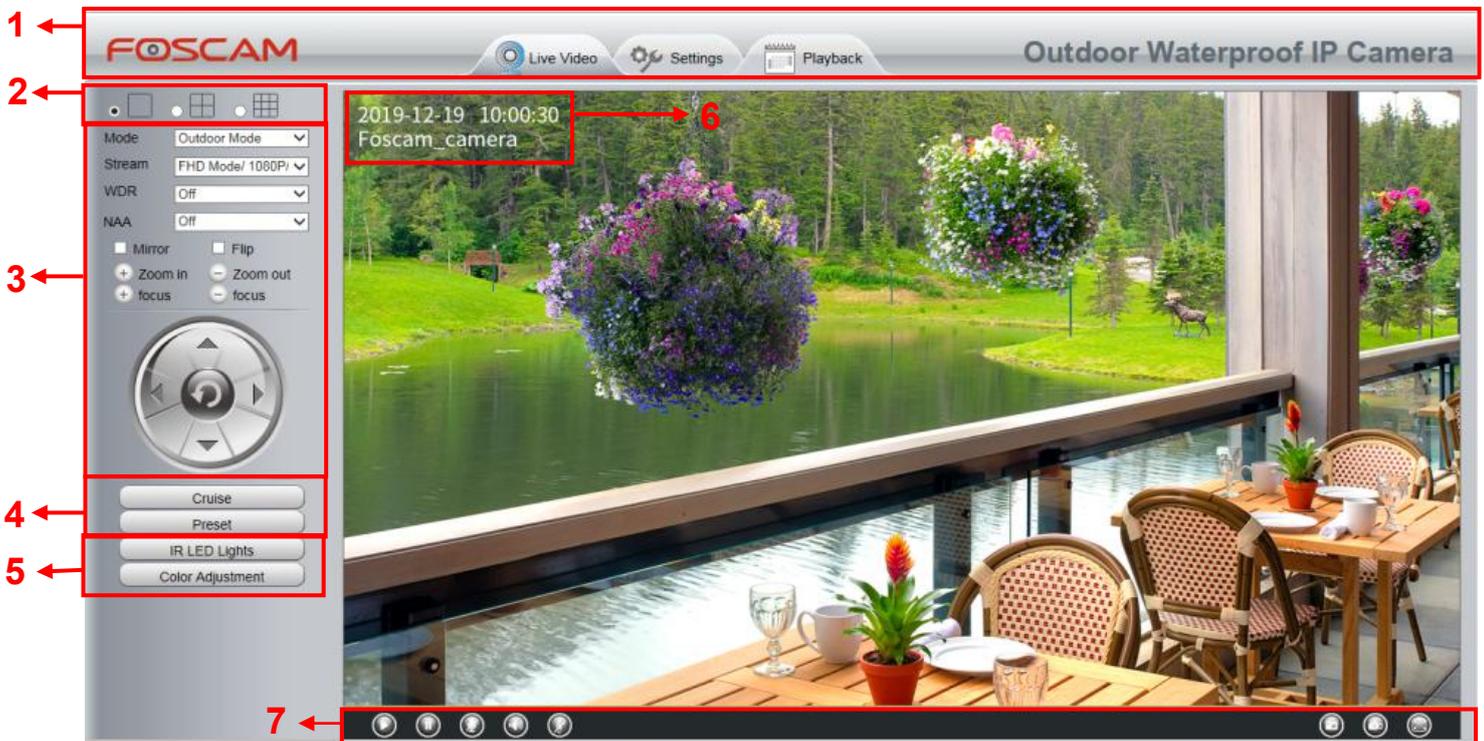
Section 1 Live Video / Settings Buttons / Playback

 : Path to surveillance window. Click this button and back to the surveillance window

 : Path to Administrator Control Panel. Click it, and it will lead to Administrator Control Panel and do advanced settings.

 : Path to playback window, click it to search / playback the records.

Section 2 Multi-Device Window
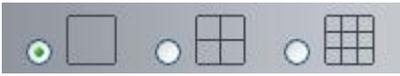
The firmware inside the camera supports up to maximum of 9 cameras being monitoring at the same time. You can add other cameras in multi-camera panel.

Section 3   Mode / Stream / WDR / NAA / Mirror / Flip Buttons / Zoom in / out

Mode

1) 50Hz ---------Indoor surveillance (Region: Europe, China)

2) 60Hz ---------Indoor surveillance (Region: USA, Canada)

3) Outdoor Mode------Outdoor surveillance

Stream

The default stream supports multiple modes, For example: HD Mode / 1080P / 25fps / 4M meanings: **Stream type / Resolution / Maximum frame rate / Bit rate**. (Different models support different specific mode.)

1) Stream type no. Identify the stream type.

2) Resolution

The bigger the resolution, the better of the image quality is. If you are accessing the camera via internet and want to get more fluent video streaming, please select resolution VGA.

3) Maximum frame rate

The maximum frame rate is 30 fps. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video. The maximum frame rate for each model is different.

4) Bit Rate

Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video cannot play well.

You can reset the stream type on **Settings** > **Video** > **Video Settings** panel.
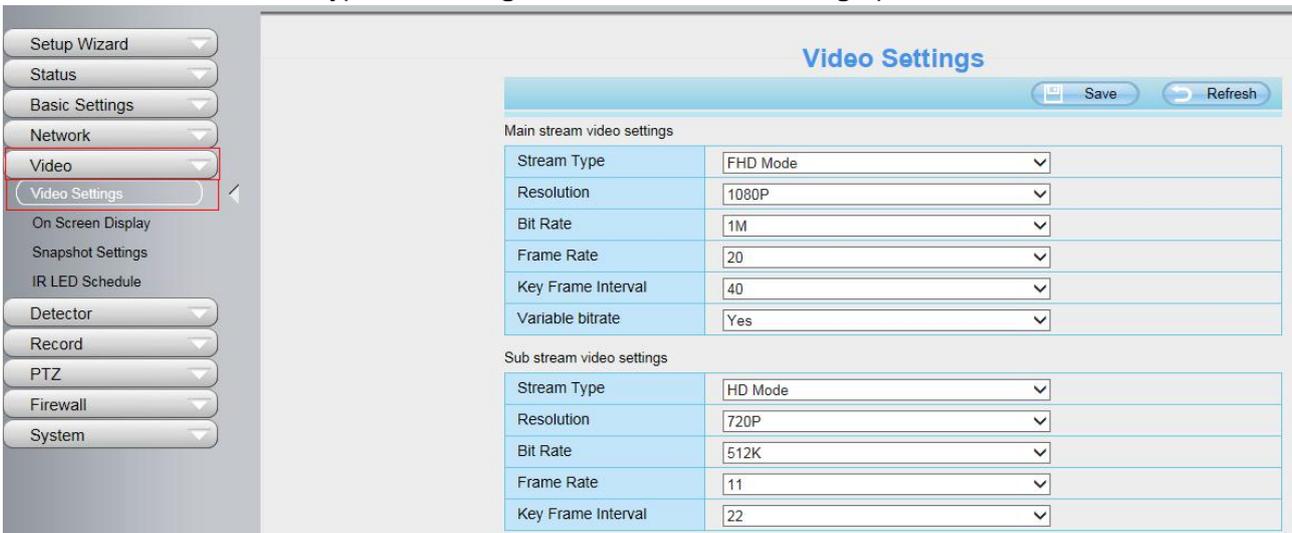
WDR: WDR stands for High Dynamic Range. It usually refers to the method of capturing images having "greater dynamic range between the lightest and darkest areas of an image than current standard digital

imaging methods or photographic methods". You can select **On** from the dropdown list under sunlight or with bright background.

NAA: NAA (Network Auto-Adaptability) can make IP Camera changing the real-time rate to adapt different network conditions, which can supply better preview experience. It is OFF as default.

Zoom In or Zoom Out

Device Support 4x zoom feature, click [+] or [−] ,The focal length of the camera lens will be larger or shrink, you can adjust the focus distance to the target object size, access to high-definition screen.

Zoom Control

[+ Zoom in]   Zoom in the camera's lens.

[− Zoom out]   Zoom out the camera' lens.

You can adjust the speed of the lens' zoom in **Settings--PTZ--Pan & Tilt Speed--Zoom speed** panel**.**
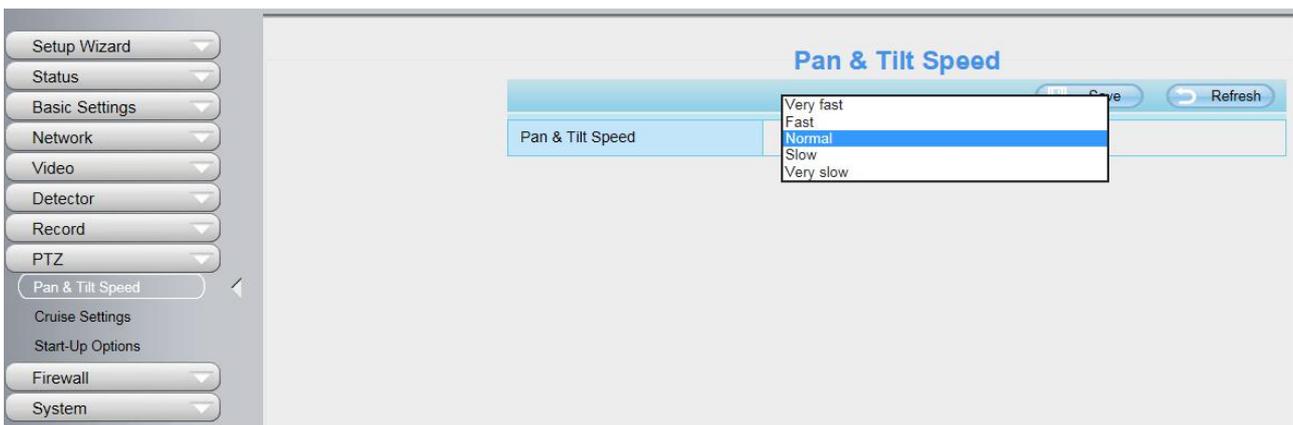
Pan/Tilt Control

1----- Up control button,   2-----Down control button,
3------Left control button,   4------Right control button

[⟲]   Click this button and go to center

Section 4 **Cruise / Preset settings**
Cruise Settings

The default cruise tracks have two types: Vertical and Horizontal.

Vertical: The camera will rotate from up to down.
Horizontal: The camera will rotate from left to right.

: Start cruise.   : Stop cruise.

If you want to define or change the cruise trace, please go to **Settings** ➔ **PTZ Preset Settings** panel.

How to do cruise?
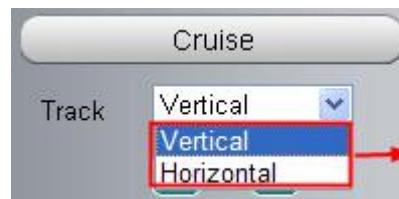
Firstly: Select one track in the track dropdown list.

Secondly: Click Start cruise button, the camera will cruise following the predefined path.
Thirdly: Click stop button and finish cruising.

Preset settings

IPCam supports 16 preset positions, which is considered enough for DIY home & small business surveillance market
The default preset position is Topmost, Bottom most, Left most, right most, you can add other preset positions.

 Add   Click this icon to save the position you need the camera to remember

 Delete Select one preset position and click this button to delete it.

 GO Select one preset position in the preset drop-down list and click Go to make the camera move the preset position

How to do preset position?

Firstly, move the camera and stop at a desired place where you want make preset position.

Secondly, click button and enter a descriptive name for the preset position. The preset position cannot contain special characters. Then click OK to save it. If you want to reset the preset position, click Cancel.

After that, you can move the camera and stop at another place, and set another preset position. You can do all the 16 preset positions with this method.

If you want to see one preset position you have set, only select the preset position name from the preset drop-down list, and click go button, the camera will go to the preset position.

Section 5 IR LED Lights / Color Adjustment

IR LED Lights

Click Infra led and there are three modes to adjust the infrared led: Auto, Manual and Schedule.
Auto: Select it and the camera will adjust the infra led (on or off) automatically.
Manual: Select it and turn off the infra led manually.

Schedule: Select it and the IR led light will be off at the schedule period. If you want to define or change the IR led lights schedule time, please go to **Settings > Video > IR LED Schedule** page.

Color Adjustment
In this page, you can tune Hue, Brightness, Contrast, Saturation, and Sharpness to get higher quality.
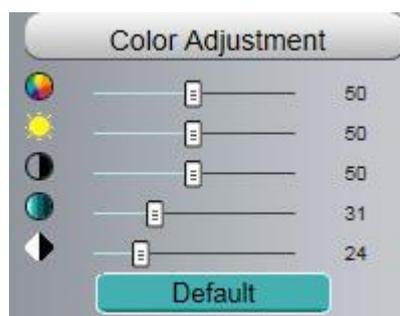
If you have added time and camera name in the video, you can see it in the live window.

Go to **Settings > Basic settings > Camera name** panel, and you can change another device name. The default device name is anonymous.

Go to **Settings > Basic Settings > Camera time** panel and adjust the device time.

Go to **Settings > Video > On Screen Display** panel, you can add or no add OSD.

Section 7 Play / Stop / Snap / Record / Full screen button

1------Play Click it to play the video of the camera
2------Stop Click it to stop the video of the camera

3------ Talk Click the button and the icon will become to , then talk to the microphone that connected with PC, people around the camera can hear your voice if the camera has connected with audio output device. Click the icon again and stop talking.

4------ Audio Click the button and the icon will become to , you can hear the sound around the camera if the camera has connected with other audio input device through the Audio Input port of the camera, Click the icon again and stop audio.

5----- Volume click it to open the volume control.

6----- Snap Click it to make snapshot and it pop up a window which picture you snapshot, right click in the window and save the picture to anywhere you want.

7----- Record Click the icon and the camera start recording, you can see a green dot in the live window. Click again and stop recording. The default storage path is C:\IPCamRecord. You can change the storage path: Go to **Settings > Record > Storage Location** panel.

8------Full Screen Click it to make full-screen, or you can double click the surveillance screen to make full-screen. Double click again and exit full-screen.

Onscreen Mouse Control

Right click the mouse and you can full screen and Zoom up.
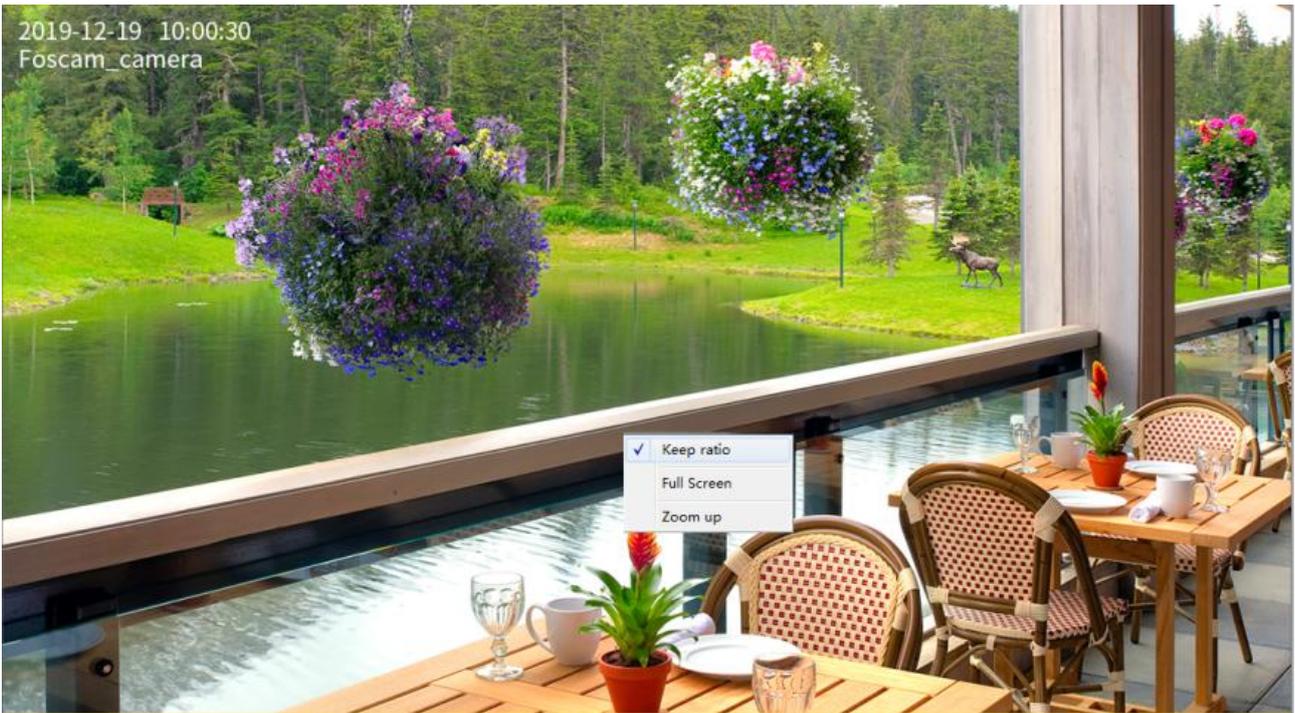
Full Screen: Select it and Click it to make full-screen, press ESC and exit full-screen.

Zoom Up / Down: Click it and the live view will be digital zoomed up, then click Zoom Down and the live view back to original size.

NOTE: For Mac OS, the plugin cannot support Onscreen Mouse function, so you cannot allow to use it.

3.7 Advanced Camera Settings

Click the button **Settings**, goes to Administrator Control Panel to make advanced camera settings.

3.7.1 Setup Wizard

After logging in for the first time, you will go to "Setup Wizard" automatically. Here you can set the basic parameters of camera, such as the camera name, camera time, IP configuration and so on.
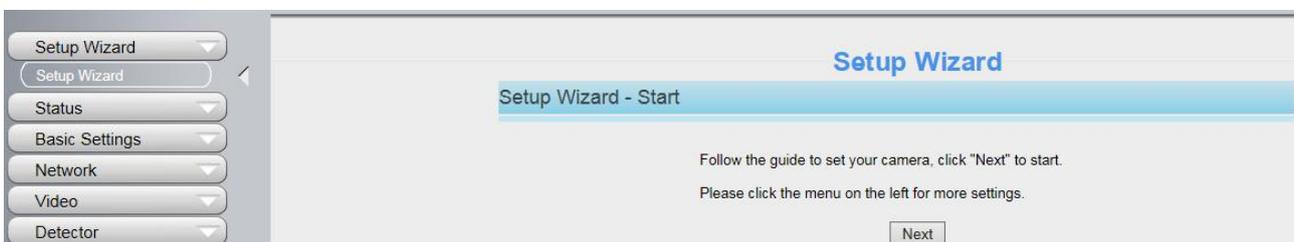
3.7.2 Status

Status contains four columns: Device Information, Device Status, Session Status and Log, it will show you various information about your camera.

3.7.2.1 Device Information

Camera Name: The Device Name is a unique name that you can give to your device to help you identify it. Click Basic Settings and go to Device Name panel where you can change your camera name. The default device name is anonymous.

Camera ID: Display the MAC address of your camera. For example Device ID is A0E6EC012F32, the same MAC ID sticker is found at the bottom of the camera.

Camera Time: The system time of the device. Click Basic Settings and go to Camera Time panel and adjust the time.

System Firmware Version: Display the System Firmware version of your camera.

Application Firmware Version: Display the application firmware version of your camera.

Plug-In Version: Display the plug-in version of your camera

3.7.2.2 Device Status

On this page you can see device status such as Alarm status, NTP status, IR LED Status and so on.

3.7.2.3 Session Status

Session status will display who and which IP is visiting the camera now.
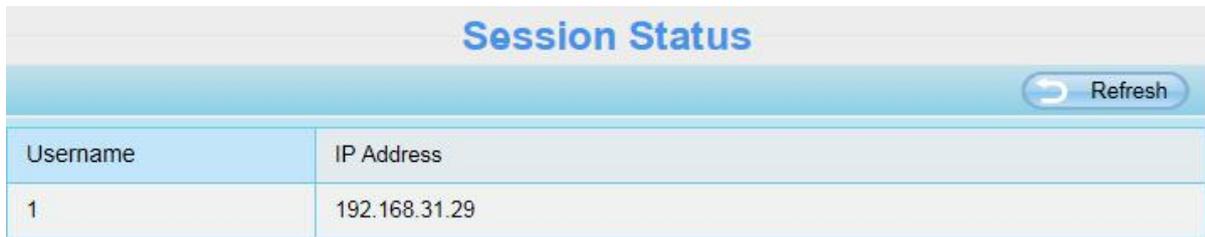
Username	IP Address
1	192.168.31.29

3.7.2.4 Log

The log record shows who and which IP address accessed or logout the camera and when.

Pages:5   <<1 2 3>>   Go
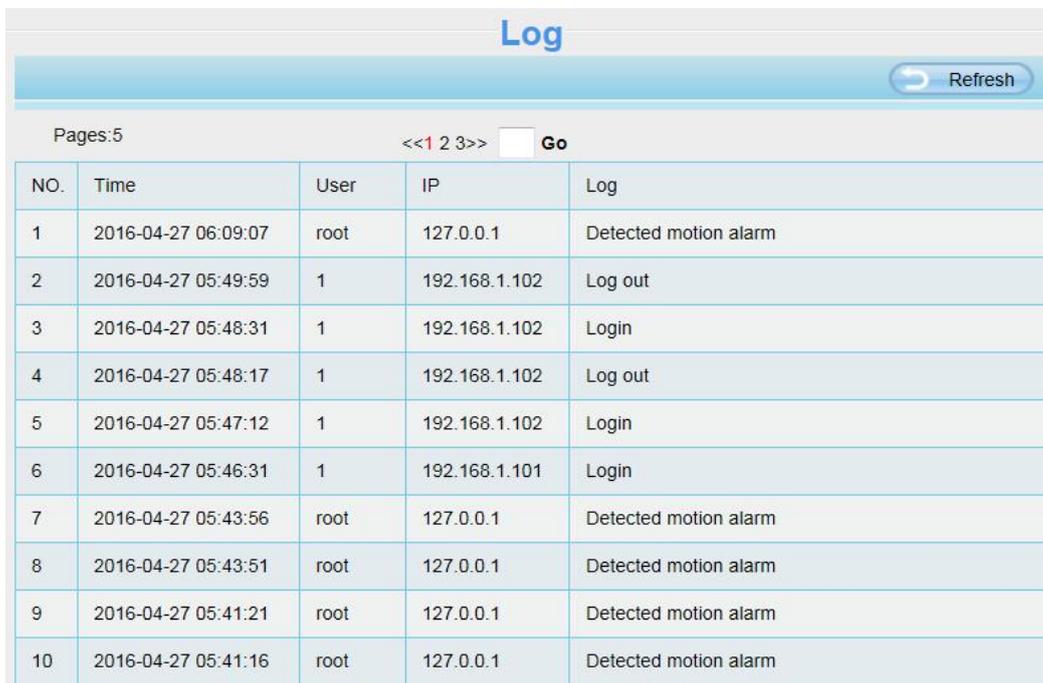
NO.	Time	User	IP	Log
1	2016-04-27 06:09:07	root	127.0.0.1	Detected motion alarm
2	2016-04-27 05:49:59	1	192.168.1.102	Log out
3	2016-04-27 05:48:31	1	192.168.1.102	Login
4	2016-04-27 05:48:17	1	192.168.1.102	Log out
5	2016-04-27 05:47:12	1	192.168.1.102	Login
6	2016-04-27 05:46:31	1	192.168.1.101	Login
7	2016-04-27 05:43:56	root	127.0.0.1	Detected motion alarm
8	2016-04-27 05:43:51	root	127.0.0.1	Detected motion alarm
9	2016-04-27 05:41:21	root	127.0.0.1	Detected motion alarm
10	2016-04-27 05:41:16	root	127.0.0.1	Detected motion alarm

Reboot the camera and clear the log records.

3.7.3 Basic Settings

This section allows you to configure your Camera Name, Camera Time, Mail, User Accounts and Multi-Device.

3.7.3.1 Camera Name

Default alias is Foscam_camera. You can define a name for your camera here such as apple. Click **Save** to save your changes. The alias name cannot contain special characters.
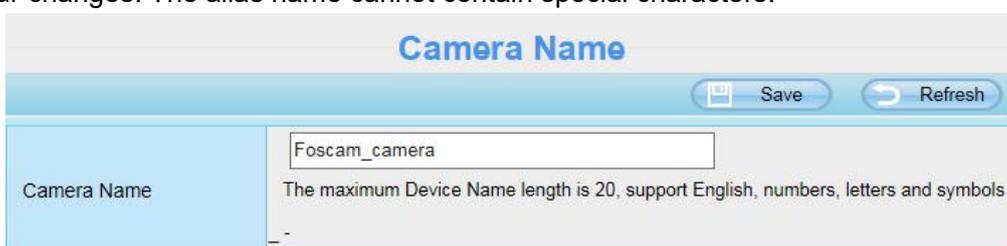
Camera Name	Foscam_camera The maximum Device Name length is 20, support English, numbers, letters and symbols

3.7.3.2 Camera Time

This section allows you to configure the settings of the internal system clocks for your camera.

Time Zone: Select the time zone for your region from the drop-down menu.

Sync with NTP server: Network Time Protocol will synchronize your camera with an Internet time server. Choose the one that is closest to your camera.

Sync with PC/Terminal: Select this option to synchronize the date and time of the Network Camera with your computer.

Manually: The administrator can enter the date and time manually. Please select the date and time format.

use DST: Select the **use DST,** then select the daylight saving time from the drop-down menu.

Click Save button to submit your settings.

NOTE: If the power supply of camera is disconnect, you need set the camera's time again.

3.7.3.3 User Accounts

Here you can create users and set privilege, **visitor**, **operator or administrator**. The default administrator user accounts are admin with a blank password.

How to change the password?

Firstly, select the account which you want to change the password, then select **Change password**, enter the old password and the new password, lastly click modify to take effect.

How to add account ?

Select one blank column, then enter the new user name, password and privilege, last click Add to take effect. You can see the new added account on the Account list.

User Accounts

NO.	Username	Privilege
1	1	Administrator
2		
3		
4		
5		
6		
7		
8		

Username Test
Password •••••••
Security Level
Confirm the password •••••••
Privilege Visitor

Add

The maximum username length is 20, including numbers, letters and symbols _ - @ $ *
Password should be 6-12 numbers, letters, symbols combination，support ~ ! @ # % ^ * ( ) _ + { } : "| < > ? ` - ; ' \ , . /

User Accounts

NO.	Username	Privilege
1	1	Administrator
2	Test	Visitor
3		
4		
5		
6		
7		
8		

Username Test
Privilege Visitor
☐ Change username
☐ Change password

Delete

The maximum username length is 20, including numbers, letters and symbols _ - @ $ *
Password should be 6-12 numbers, letters, symbols combination，support ~ ! @ # % ^ * ( ) _ + { } : "| < > ? ` - ; ' \ , . /

Delete: Select the account which you want to delete, then click Delete button to take effect.

NOTE: The default administrator account cannot be deleted, but you can add other administrator users.

3.7.3.4 Multi-Camera

If you want to view multi-surveillance screens on one window, you need to login one camera, and set it as the main device, and do Multi-Device Settings, add other cameras to the first one camera. Before you do multi-cams settings, you need to assign different port such as 81, 82, 83, 84, 85, 86, 87, 88 to the cameras if there is 8 cameras installed.
The firmware within the camera can support a maximum of 9 devices monitoring all at the same time.
This page you can both add FOSCAM MJPEG and H.264 series cameras to the first camera and view multi-surveillance screen on one window.

Add Cameras on LAN

In Multi-Device Settings page, you can see all devices searched in LAN. The 1st Device is the default one. You can add more cameras in the list in LAN for monitoring. The camera's software supports up to 9 IP Cameras online simultaneously. Click The **2nd Device** and click the item in the Device List in LAN, the Alias, Host and Http Port will be filled in the boxes below automatically. Enter the correct username and password then click **Add**. Add more cameras in the same way.


Camera Model: Our Company produces two series cameras: MJPEG and H.264. Here will show you which series the camera belongs to.

Cameras On LAN	anonymous(192.168.11.193) FI9821W for ebuyer (192.168.11.241) anonymous(192.168.11.203) anonymous(192.168.11.243)	Refresh
The 1st Camera	This Camera	
The 2nd Camera	anonymous(192.168.11.203)	
The 3rd Camera	FI9821W for ebuyer (192.168.11.241)	
The 4th Camera	anonymous(192.168.11.203)	
The 5th Camera	None	
The 6th Camera	None	
The 7th Camera	None	
The 8th Camera	None	
The 9th Camera	None	
Note: If you want to access your camera remotely, make sure you are able to access it seperately through a browser.		

Back to **Surveillance Windows**, and click Four Windows option, you will see four cameras you added.
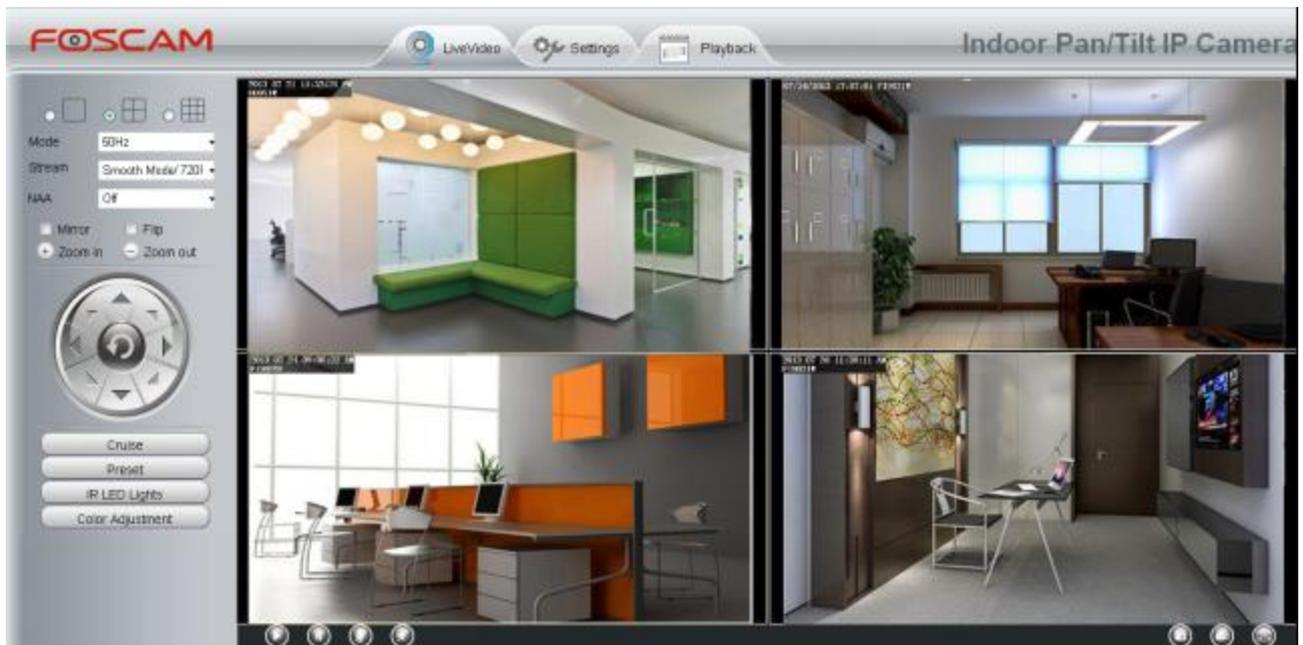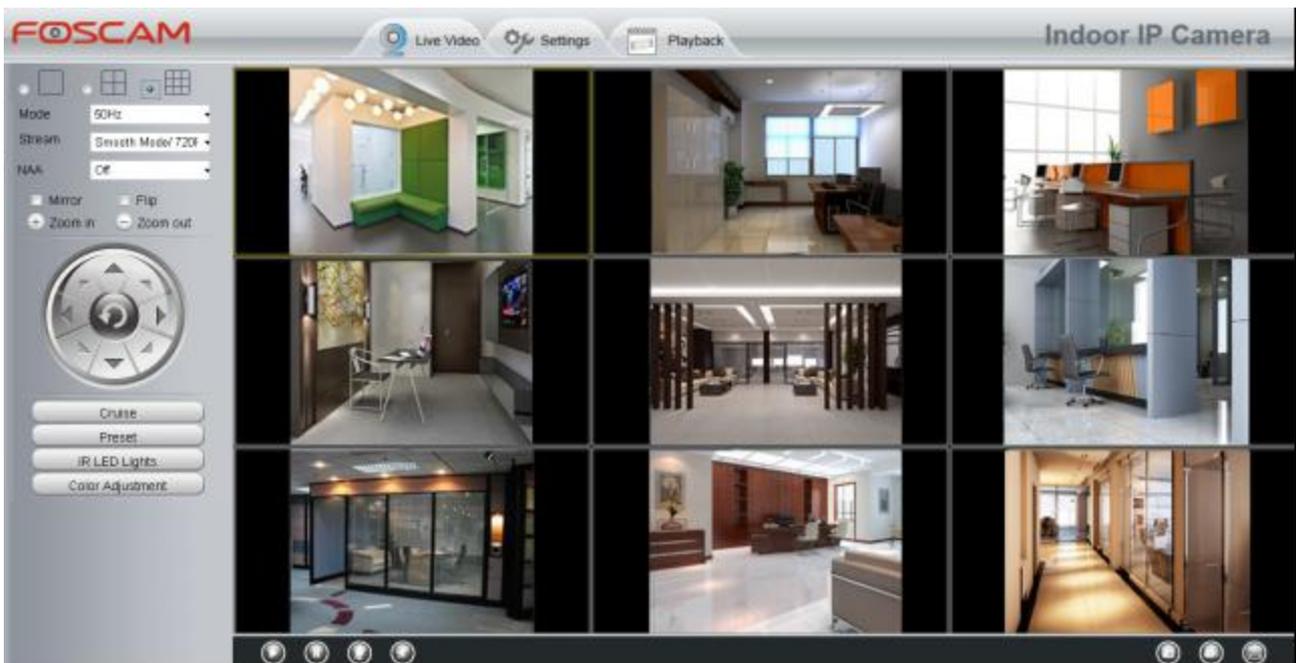
3.7.3.5 Status Light

You can enable or disable status light.

3.7.3.6 Voice Prompt

On this page, you can enable or disable voice prompt. Select "Yes" to enable or select "No" to disable.
If select "Yes", you can hear the voice prompt after connect the audio output device.
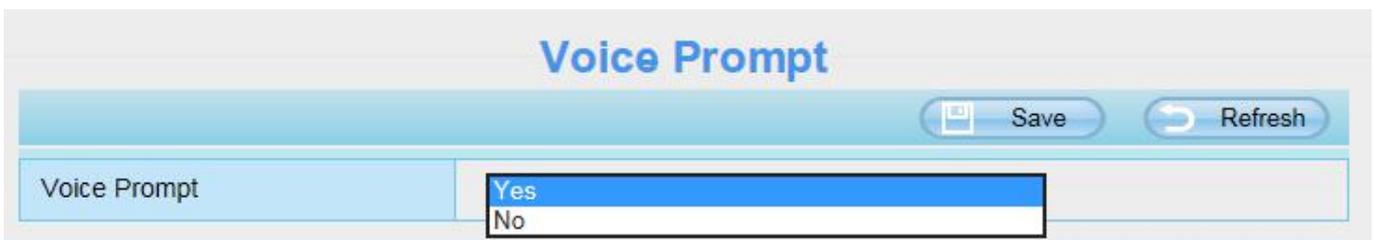
3.7.4 Network

This section will allow you to configure your camera's IP, Port, Mail Settings and FTP Settings and so on.

3.7.4.1 IP Configuration

If you want to set a static IP for the camera, please go to **IP Configuration** page. Keep the camera in the same subnet of your router or computer.
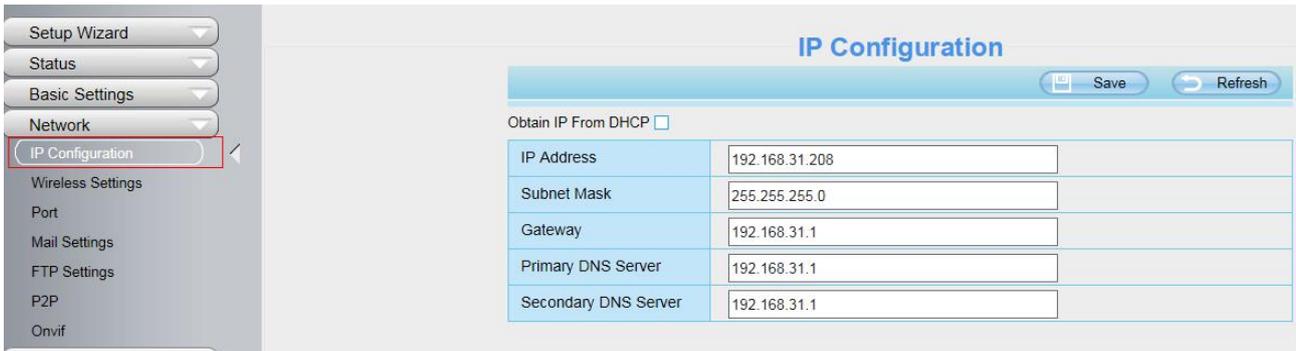
Changing settings here is the same as using the Equipment Search Tool.

It is recommended that you use the subnet mask, gateway and DNS server from your locally attached PC. If you don't know the subnet mask, gateway and DNS server, you can check your computer's local area connection as follows:

Control Panel > Network Connections > Local Area Connections > Choose Support > Details.
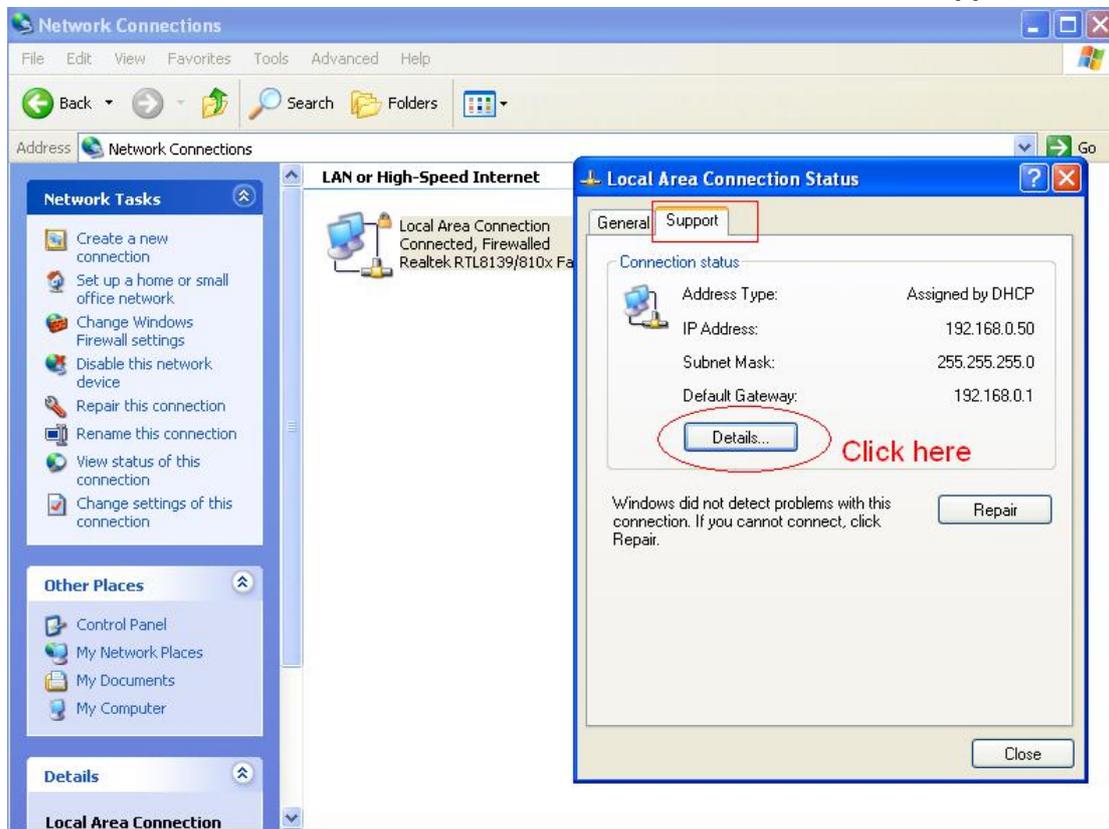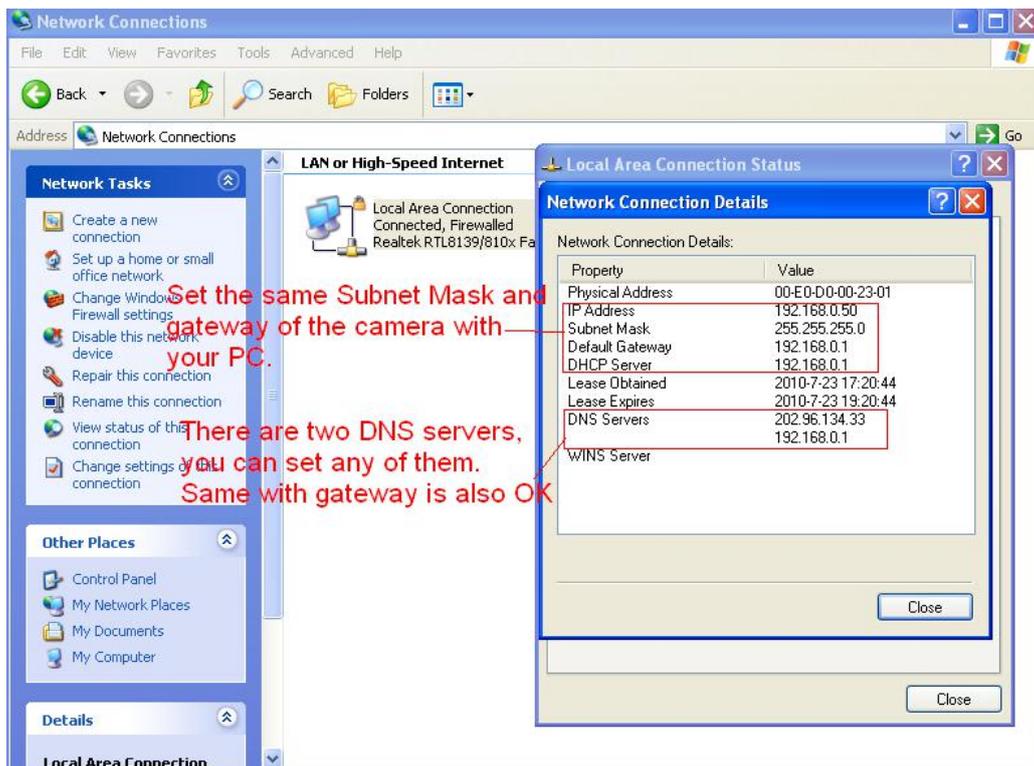
If you don't know the DNS server, you can use the same settings as the Default Gateway.

3.7.4.2 Wireless Settings

Step 1: Choose **"Settings"** on the top of the camera interface, and go to the **"Network"** panel on the left side of the screen, then click **"Wireless Settings."**

Click the **Scan** button and the camera will detect all wireless networks around the area. It should also display your router in the list.
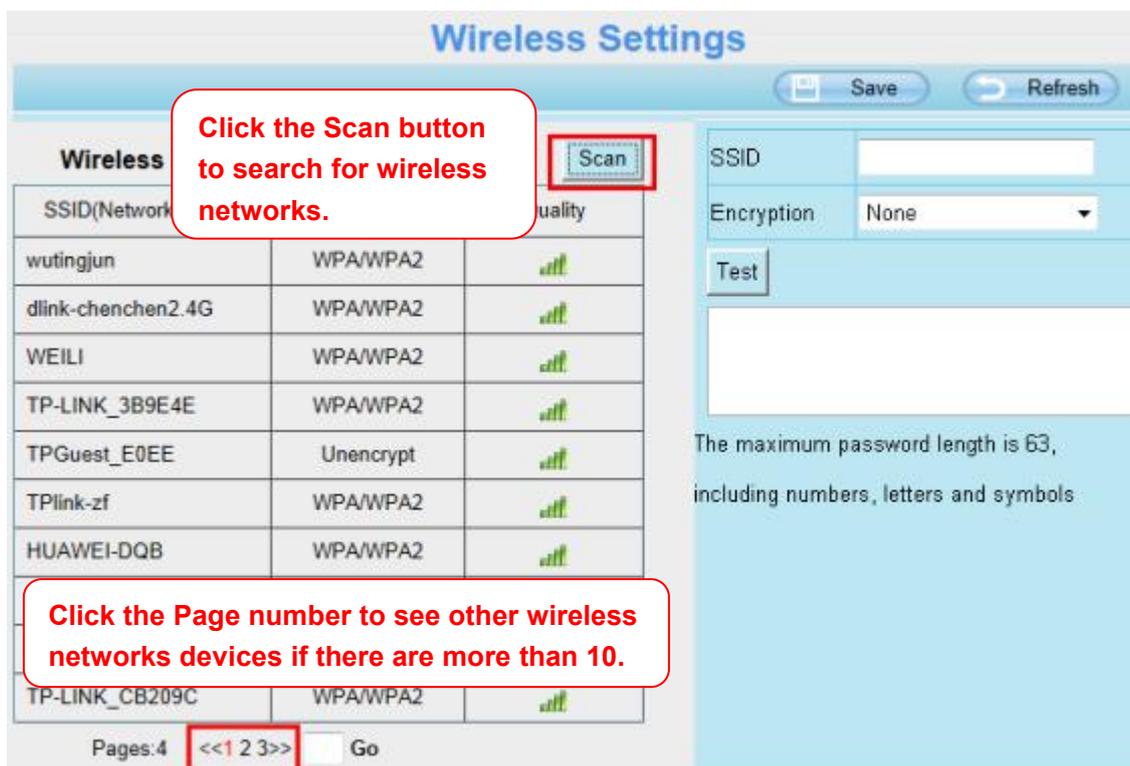
Step 2: Click the SSID (name of your router) in the list, the corresponding information related to your network, such as the name and the encryption, will be filled into the relevant fields automatically.

You will only need to fill in the password of your network. Make sure that the SSID, Encryption and the password you filled in are exactly the same for your router.
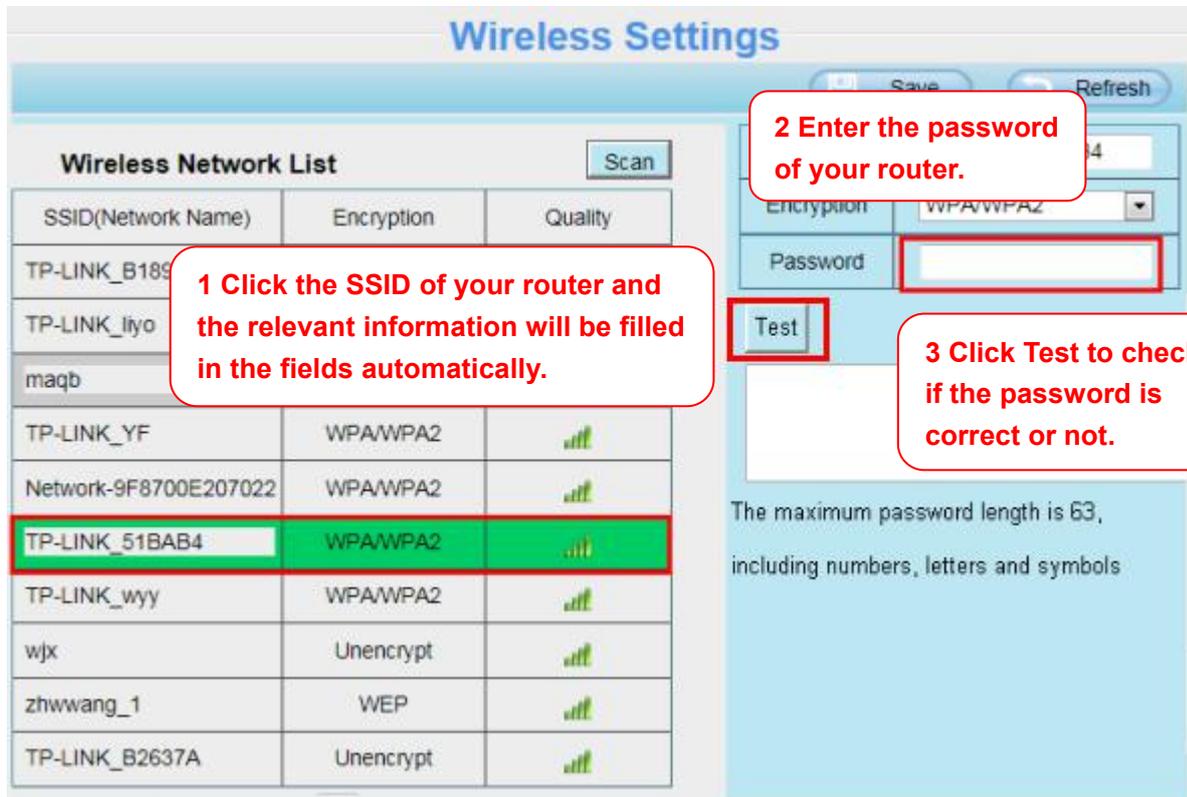
Step 3: Please click on the **Save** button after all settings have been entered and disconnect the network cable. Never shut down the power of the camera until the IP camera is able to connect to the wireless network.

The LAN IP address will disappear on the window of Equipment Search Tool when the camera is configuring a wireless connection. Wait about 1 minute, the camera should obtain a wireless connection, and the LAN IP of the camera will show again on the window of the Equipment Search Tool. The IP address may have changed after the camera receives a wireless connection; we recommend setting a static local IP address if this IP address changes by right clicking the camera in Equipment Search Tool, setting a static IP, and pushing OK.
Congratulations! You have set up the wireless connection of the camera successfully.

NOTE :
  If you fail to make a wireless connection, please refer to your seller or contact us directly for assistance.

3.7.4.3 Port

This camera supports HTTP Port. HTTP Port is used to access the camera remotely. If you want to access the camera and view the video, the HTTP Port must both be configured correctly.

HTTP port: By default, the HTTP is set to 88. Also, they can be assigned with another port number between 1 and 65535. But make sure they can not be conflict with other existing ports like 25, 21.

Another way to change the HTTP port NO.

Step 1: Open the Equipment Search Tool, select the camera you would like to change the port of, right click on the IP address, and click on "Network Configuration", this brings up the network configuration box as flowing figures.
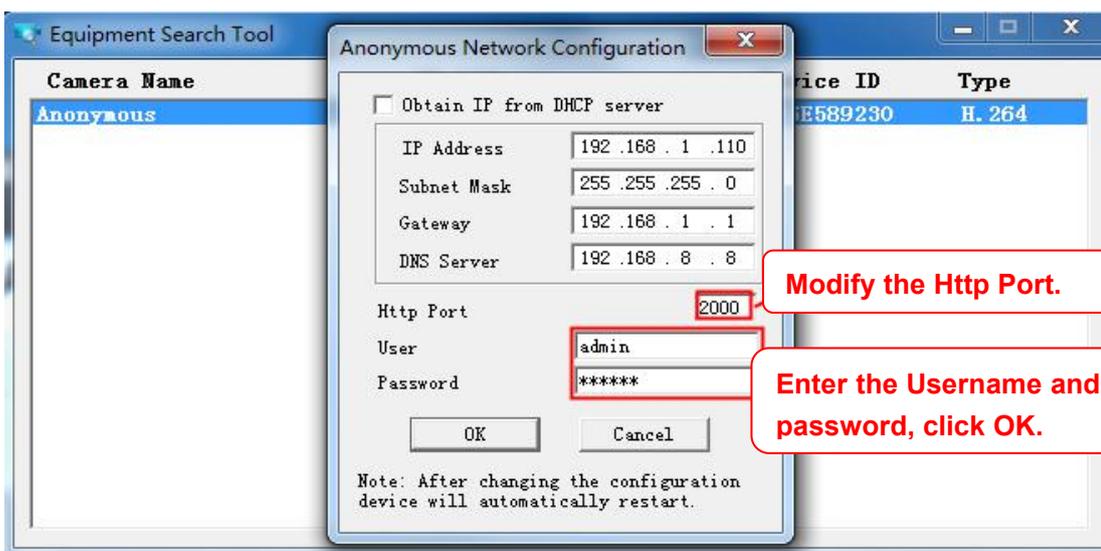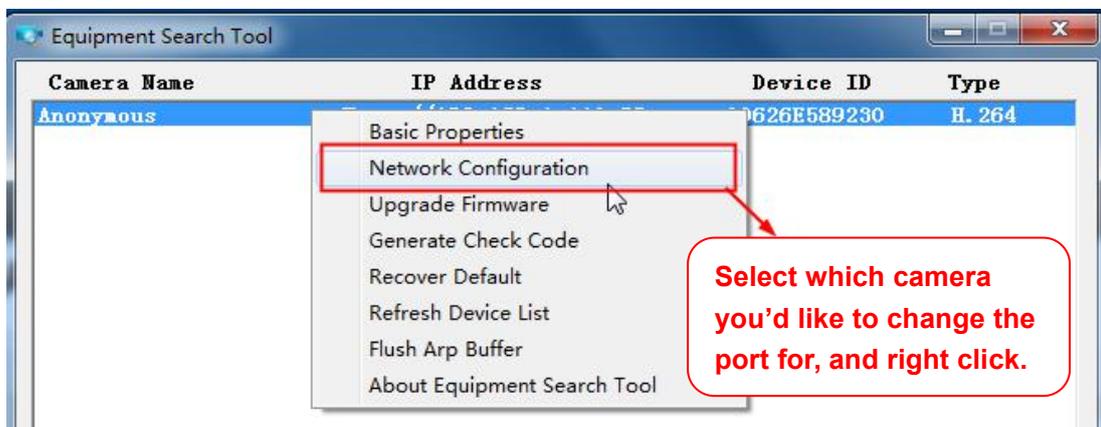
Step 2: Enter the username and password of the Administrator (default username is admin with a blank password), and click "OK" to apply changes.

Step 3: Wait around 10 seconds, you'll see that the camera's LAN IP address has changed. In our example it was changed to 2000, so we see http://192.168.1.110:2000 in Equipment Search Tool. Also,

the LAN IP address is now fixed at a static IP address of http://192.168.1.110:2000. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!

If the camera cannot be accessed, please make sure the port forwarding is succeed.

HTTPS port: The default port is 443. You can use the url to access the camera: **https:// IP + HTTPS port.**

ONVIF port: By default, the ONVIF port is set to 888. Also, they can be assigned with another port number between 1 and 65535(except 0 and 65534). But make sure they can not be conflict with other existing ports.

3.7.4.4 Mail Settings

If you want the camera to send emails when motion has been detected, here Mail will need to be configured.

1----- SMTP Server / Port / Transport Layer Security   Enter SMTP server for sender. SMTP port is usually set as 25. Some SMTP servers have their own port, such as 587 or 465, and Transport Layer Security usually is None. If you use Gmail, Transport Layer Security must be set to TLS or STARTTLS and SMTP Port must be set to 465 or 25 or 587, which port you choose should be decided by which

Transport Layer Security you select.

2-----SMTP Username / password   ID account and password of the sender email address

3----- Sender E-mail   Mailbox for sender must support SMTP

4----- Receiver   Mailbox for receiver need not support SMTP, you can set 4 receivers

5----- Save   Click Save to take effect

6----- Test   Click Test to see if Mail has been successfully configured.

Click Test to see if Mail has been successfully configured.

If the test success, you can see the Success behind the Test, at the same time the receivers will receive a test mail.

If the test fails with one of the following errors after clicking Test, verify that the information you entered is correct and again select Test .

1) Cannot connect to the server.

2) Network Error. Please try later.

3) Server Error.

4) Incorrect user or password.

5) The sender is denied by the server. Maybe the server need to authenticate the user, please check it and try again.

6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server.

7) The message is denied by the server. Maybe because of the anti-spam privacy of the server.

8) The server does not support the authentication mode used by the device.

3.7.4.5 FTP Settings

If you want to upload record images to your FTP server，you can set **FTP Settings.**

FTP server: If your FTP server is located on the LAN, you can set as Figure as above.

If you have an FTP server which you can access on the internet, you can set as below.

Port: Default is port 21. If changed, external FTP client program must change the server connection port accordingly.

FTP Mode: Here supports two modes: PORT and PASV.

Username / password: The FTP account and password.

Click Save to take effect.

Click Test to see if FTP has been successfully configured.

3.7.4.6 P2P

Access the camera by smart phone (Android or iOS operating system), please refer to the *Quick Setup Guide.*

First of all, you need to open the P2P function of the camera at **Settings > Network > P2P**.
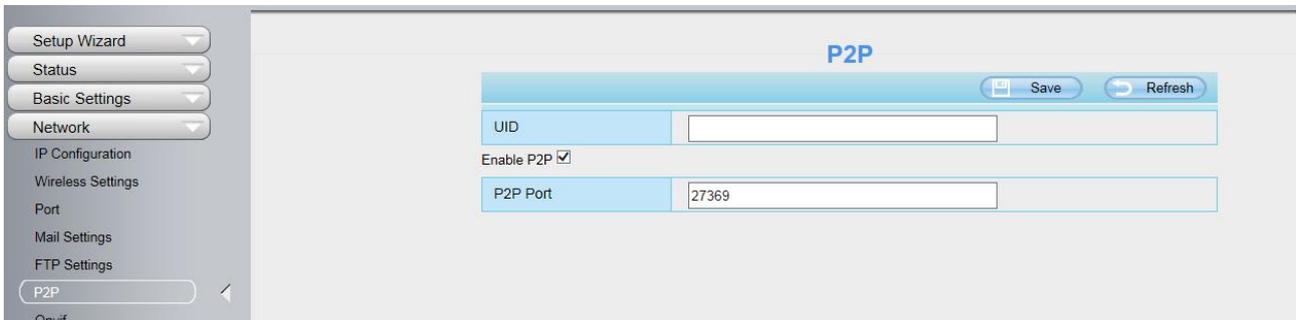
3.7.4.7 Onvif

By default, the ONVIF port is set to 888. Also, they can be assigned with another port number between 1 and 65535(except 0 and 65534). But make sure they can not be conflict with other existing ports.
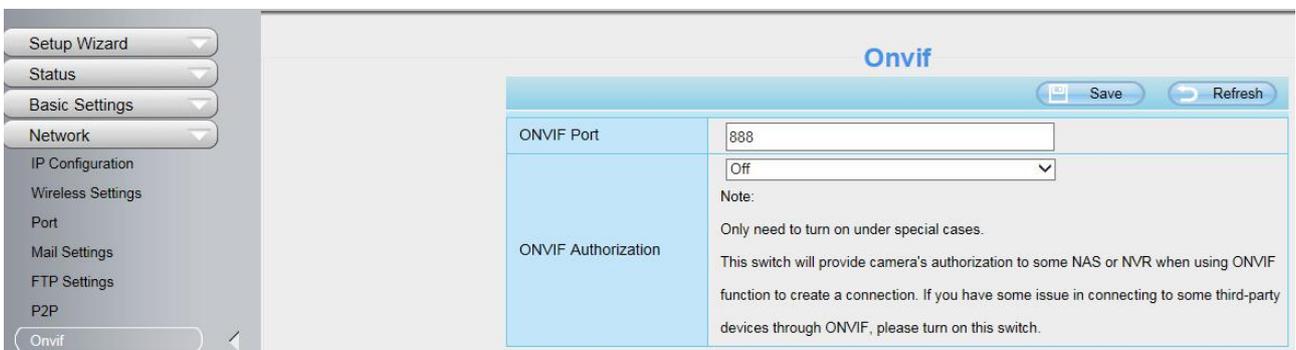
3.7.5 Video

This section allows you to configure Video stream settings, On screen display and Snapshot settings.

3.7.5.1 Video Settings

There are two ways to set the stream video settings. They are main stream video settings and sub stream video settings.
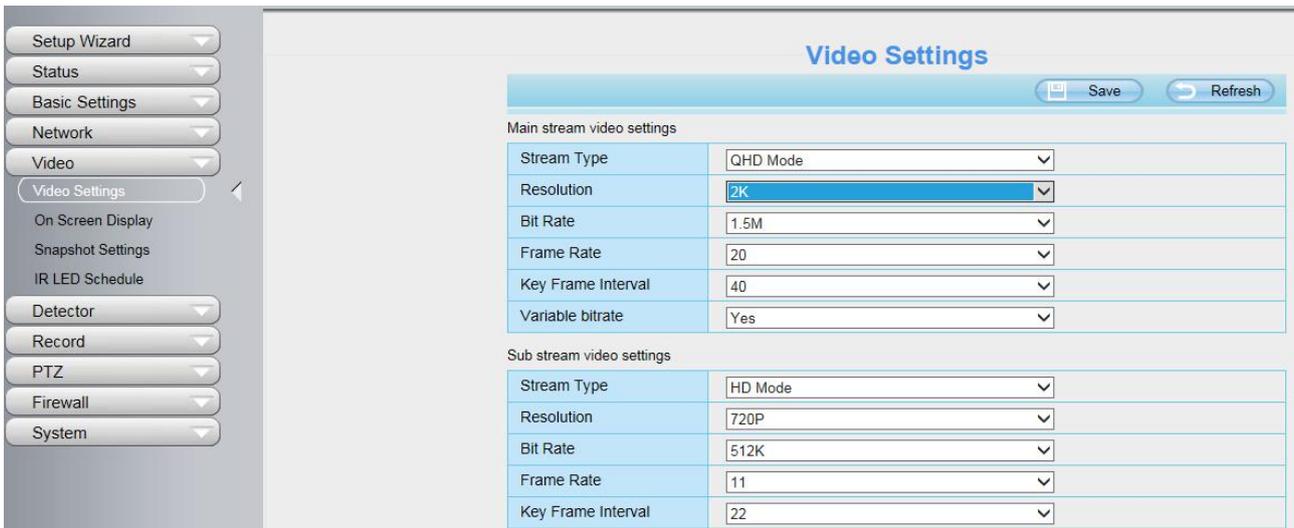
Stream Type: There are four types to identify different streams you have set. If select the HD Mode, the clearer video will become, and it will take up more bandwidth.

Resolution: The camera supports multiple types, For example: 2K, 1080P, 720P, VGA. The higher the resolution is, the clearer video will become. But the code flux will become larger too, and it will take up more bandwidth. (Different models support different specific types.)

Bit Rate: Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

Frame Rate: Note that a larger frame size takes up more bandwidth. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.The maximum frame rate for each model is different.

Key Frame Interval: The time between last key frame and next key frame. The shorter the duration, the more likely you will get a better video quality, but at the cost of higher network bandwidth consumption.

Variable bitate:Tthe camera will change the video bit rate according to the situation, but will not more than the maximum parameter "Bit Rate". You can select "Yes" or "No" " to turn on and off Variable Bitate

3.7.5.2 On Screen Display
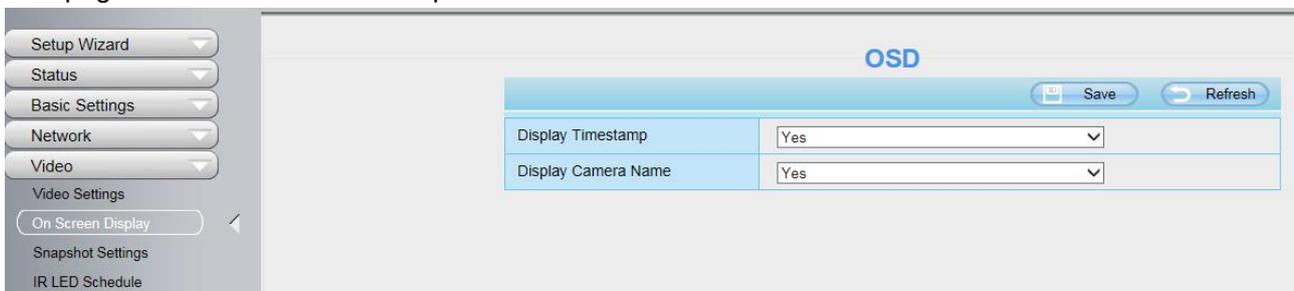
This page is used to add timestamp and device name on the video.

Display Timestamp: There are two options: Yes or NO. Select Yes and you can see the system date on the video.

Display Camera Name: There are two options: Yes or NO. Select Yes and you can see the device name

on the video.

3.7.5.3 Snapshot Settings

In this page you can set the snapshot pictures' image quality and the storage path.

Manual snap Quality: Low, Middle and High. The higher the quality, the picture will be clearer.
Pictures Save To: FTP or SD card. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP or SD card automatically.
If you select the FTP, you can set the file name which the picture save to. For example: file name is "NAME", the snapshot picture is "NAME_20150605-180000.jpg".

Enable timing to capture
To enable capture interval, follow the steps below:
1 Select **Enable timing to capture**
2 Capture interval: The interval time between two captures.
3 Select the capture time
- Capture anytime
  Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will capture.
- Specify an capture schedule
  Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, the camera will capture.
- Press the left mouse and drag it on the time boxes, you can select the serial area,
4 Click **Save** button to take effect.

3.7.5.4 IR LED Schedule

On this page you can set the schedule time for switching IR LED lights. When parameter Mode is set to the **Schedule** on the Live **Video** window,   At these schedule time, the IR LED lights will be turned off.

3.7.6 Detection

This section allows you to configure Motion Detection and Motion Sound Detection.

3.7.6.1Motion Detection

IP Camera supports **Motion Detection Alarm**, when the motion has been detected, it will send emails or upload images to FTP.
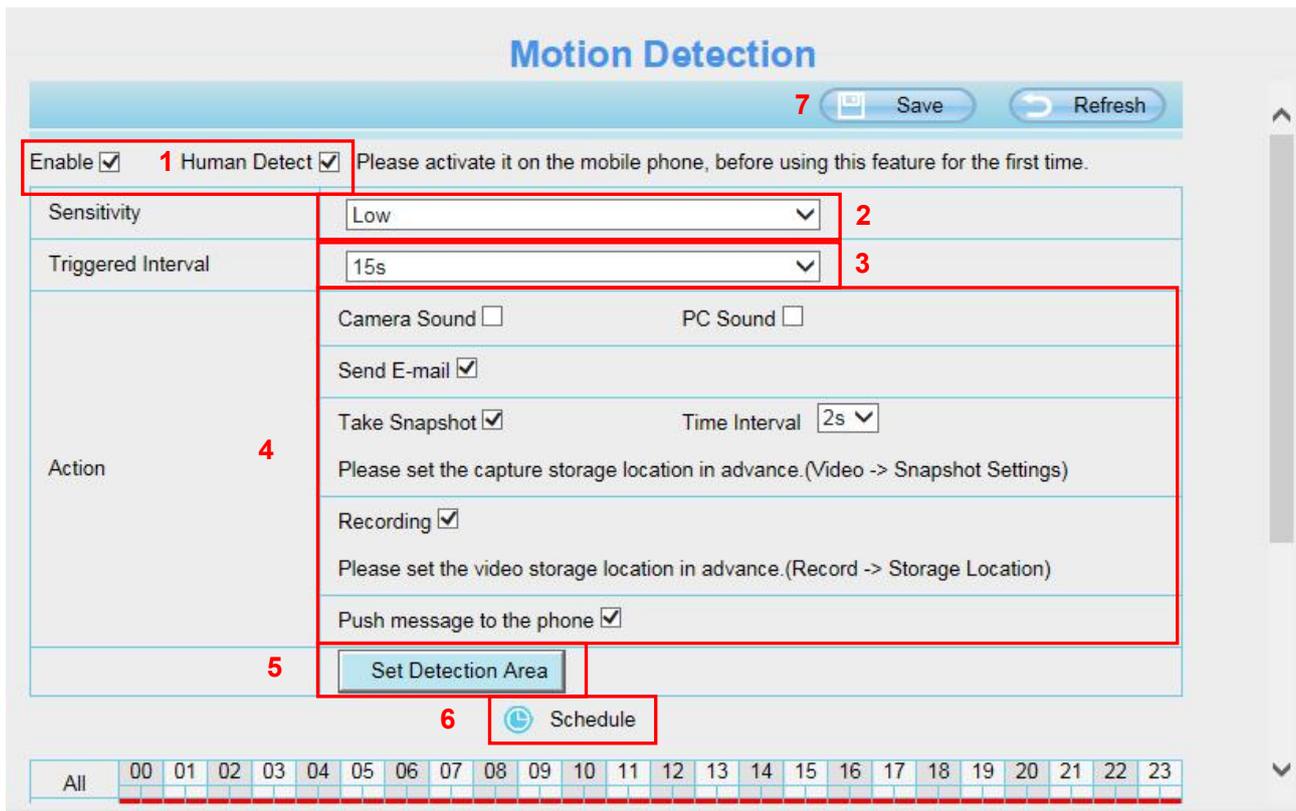
To enable motion detection, follow the steps below:

1 Enable Motion detection and Human Detect

2 Sensitivity--- The higher the sensitivity, the camera will be more easily alarmed. Select one motion sensitivity.

3 Trigger interval--- The interval time between two motion detections. Here supports 5s / 6s / 7s / 8s / 9s / 10s / 11s / 12s / 13s / 14s / 15s. Select one interval time.

4 There are some alarm indicators:

A Camera Sound and **PC Sound**

If the camera has connected with a speaker or other audio output device, if you select Camera Sound or PC Sound, when the motion has been detected, the people around the camera will hear beep alarm sound.

B Send E-mail

If you want to receive alarm emails when motion is detected, you must select Send E-mail and set Mail Settings first.

C Take Snapshot

If you select this checkbox, when the motion has been detected, the camera will snap the live view window as a still picture and load it to the FTP. Make sure you have set FTP and set FTP as the storage path in Video > Snapshot settings panel.

Time interval: The interval time between two pictures.

D Recording

If you select this checkbox, when the motion has been detected, the camera will recording and load it to the FTP server. Make sure you have set FTP and set FTP as the storage path in Video > Snapshot settings panel.

E Push message to the phone

If you select this checkbox, when the motion has been detected, the camera will push the message to the phone which has been connected the camera.

5 Set Detection Area

Click set detect area and it pop up a window, then you can draw the detection area. Click Back button after settings. When something moving in the detection area, the camera will alarm.

6 Alarm Schedule

① Alarm anytime when motion is detected

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will alarm.

② Specify an alarm schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, when something moving in the detection area, the camera will alarm.

③ Press the left mouse and drag it on the time boxes, you can select the serial area,

When the PC sound alarm is enabled, the PC will make a sound only in Live Video page while the IPC detected an alarm

7 Click Save button to take effect. When the motion is detected during the detection time in the detection area, the camera will alarm and adopt the corresponding alarm indicators.

NOTE: You must set the detection area and detection schedule, or else there is no alarm anywhere and anytime.

3.7.6.2Sound Detection

When the ambient sound over a certain decibel ,the sound alarm will be triggered.

If the Sensitivity is set to "High", the camera will detect the sound whose more than 55db.
If the Sensitivity is set to "Medium", the camera will detect the sound whose more than 65db.
If the Sensitivity is set to "Low", the camera will detect the sound whose more than 75db.

If the Sensitivity is set to "Lower", the camera will detect the sound whose more than 85db.

If the Sensitivity is set to "Lowest", the camera will detect the sound whose more than 95db.

3.7.7 Record

3.7.7.1 Storage Location

Recording Location: SD card, FTP.

● SD card: The video will be saved in SD card. **Make sure the camera has been inserted the SD card**. On this page, you can see the available space of the SD card.

● FTP: The video will be saved in FTP. Please refer to 3.7.4.5 FTP Settings.

Local Recording Location: For Windows OS, the manual recording path is C:/ IPCamRecord, you can change another one. For MAC OS, the manual recording path is: / IPCamRecord.

Enter the local folder: Click here,you can enter the local folder.

3.7.7.2 Alarm Recording
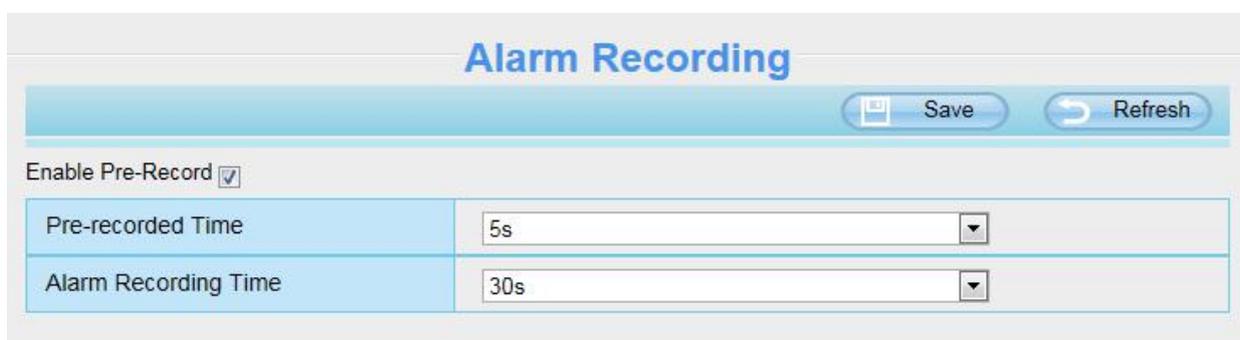
3.7.7.3 Local Alarm Recording

On this page you can enable local alarm record, and select the local alarm record time.

3.7.7.4 Schedule Recording

When the video is selected as FTP, the device supports scheduled recording.
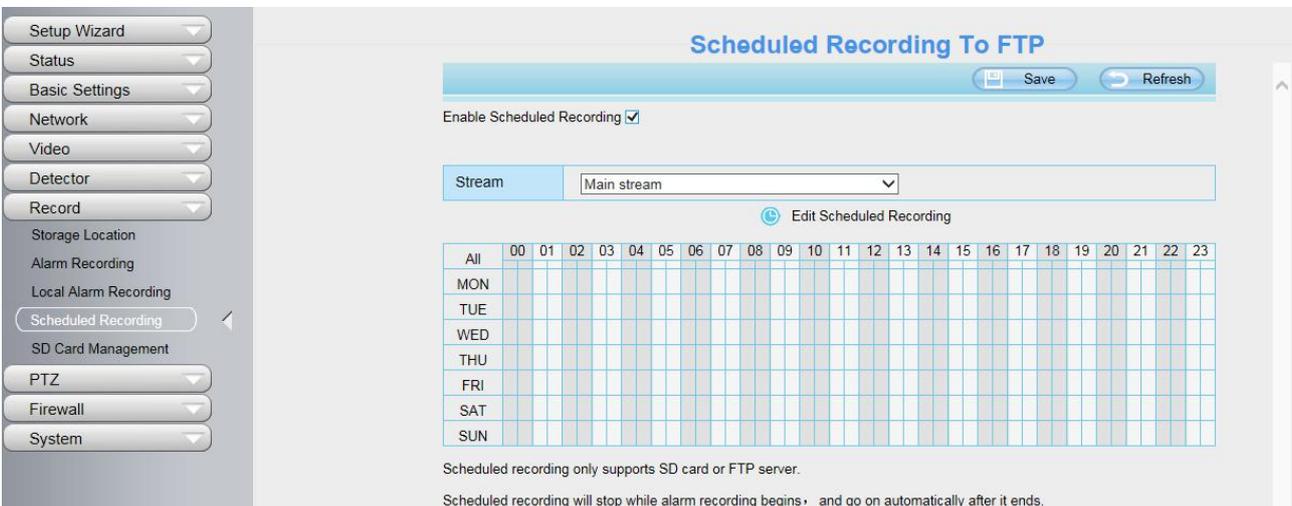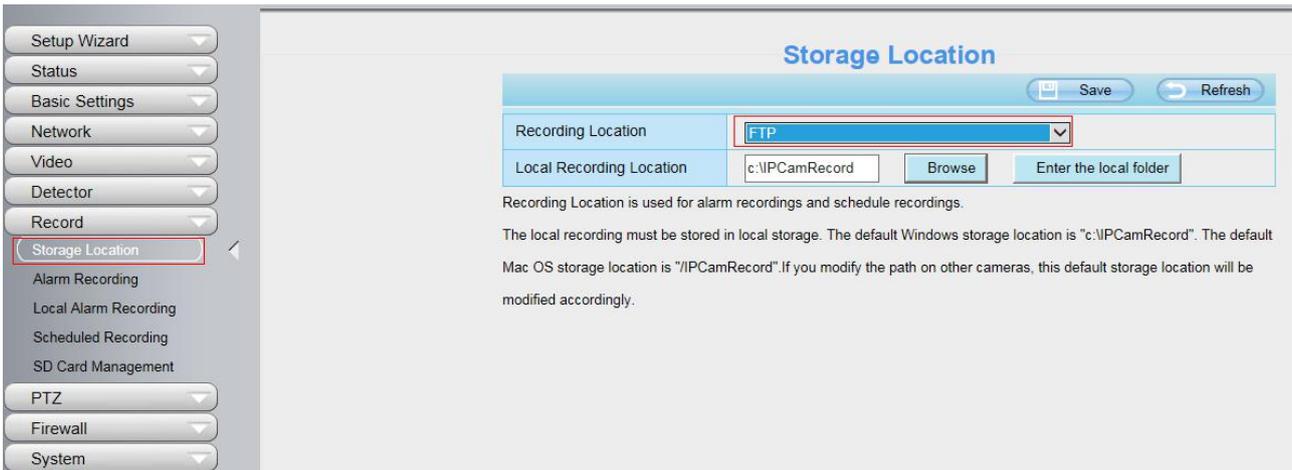
When the video is selected as SD card, the device supports pumping frame recording.
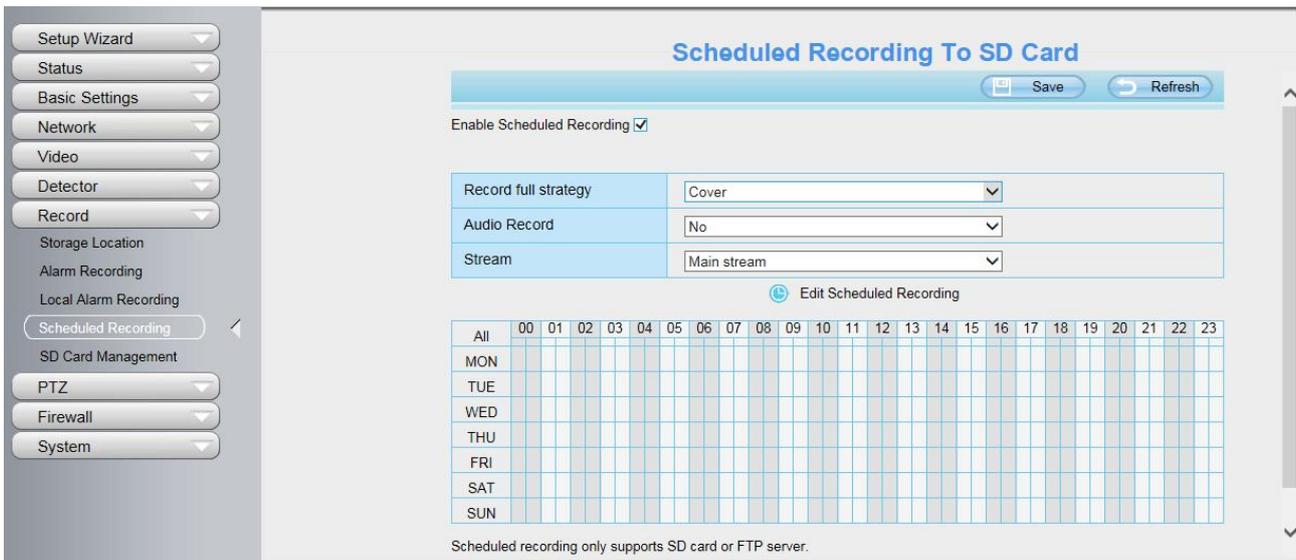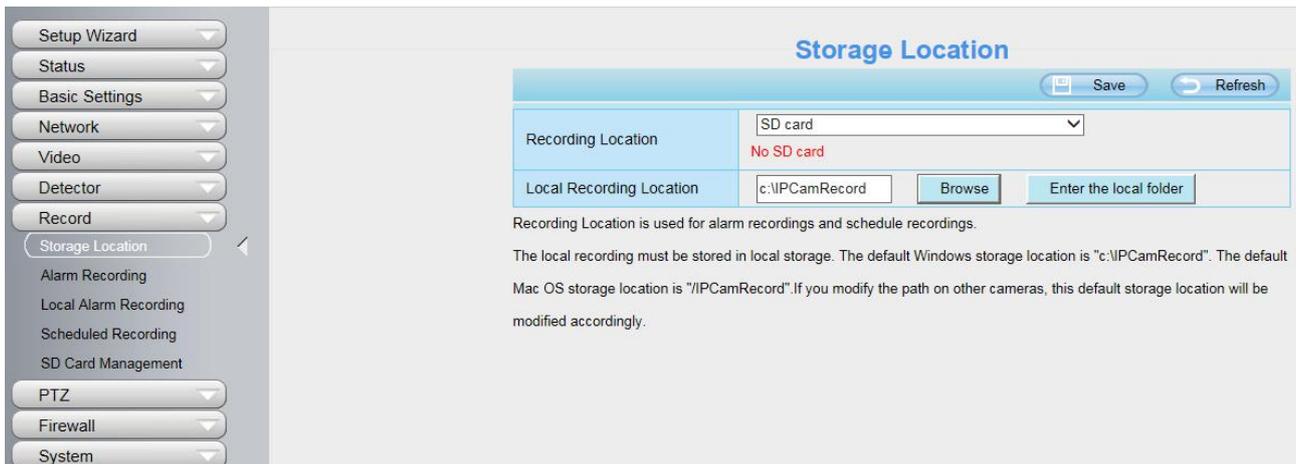
Record frame: There are six frame selections, such as 1 / 30, 4 / 30, 8 / 30, 15 / 30, 24 / 30, 30 / 30. Recommended default is 4 / 30. The greater the Frame rate is, the sharper picture quality is, and the greater of storage space is, the shorter the storage time is.

Record full strategy: When the SD card is full, you can choose to cover the previous recording, or stop recording.

NOTES:
● Scheduled recording only supports video saved to the SD card or FTP server.
● The schedule recording will stop while alarm recording is beginning, and it will continue automatically after alarm recording end.
● You can refer to 3.7.6.1 Motion Detection > 5 Alarm Schedule. in **Alarm** about editing the time of recording Schedule.

3.7.7.5 SD Card Management

The SD card Slot inside the camera, if you want to install or remove the Micro SD card, you need to open the camera.
When you plug in the Micro SD card during the camera work process, please reboot the camera again, or else the SD Card may be cannot work well.

Go to the **Settings** > **Status** > **Device Status** page, you can see the SD card status.

The default storage path of alarm record files is SD card, when the available size of SD card is less than 256M, the old record files will be deleted automatically.

3.7.8 PTZ

This page will allow you to change the pan/tilt speed and do cruise tracks settings.

3.7.8.1 Pan & Tilt Speed

There are five Pt speed types: very fast, fast, normal, slow and very slowly. Select the desired PTZ speed type and click save button.
There are three zoom speed types: fast, normal, slow.
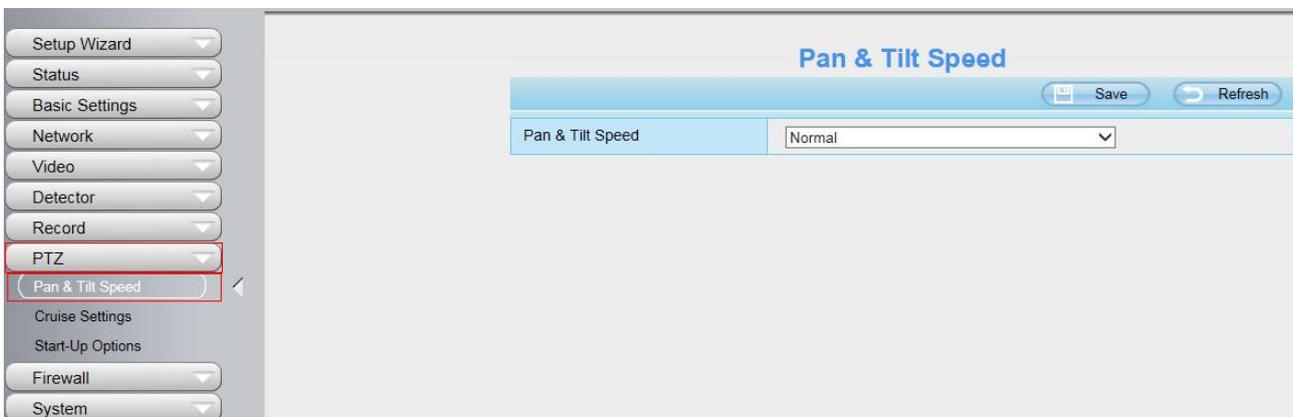
3.7.8.2 Cruise Settings
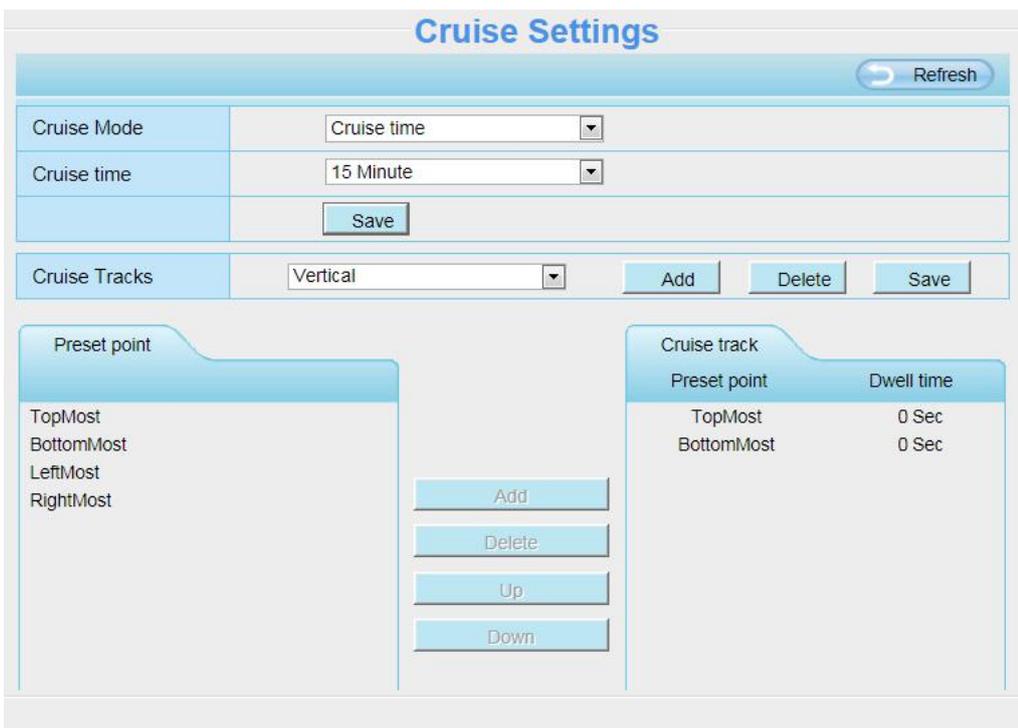
This section explains how to add/ delete/ alter one cruise track.

Setting the Cruise Mode

Cruise mode: Cruise time.

Cruise time: Select **Cruise time** from **Cruise Mode** drop-down, then you can set the **Cruise time** of the camera.

Click **Save** to take effect.

Cruise Mode	Cruise time ▾
Cruise time	15 Minute ▾
	Save

Manage the Cruise Track

There are two default cruise tracks: Vertical and Horizontal.

Vertical: The camera will rotate from up to down

Horizontal: The camera will rotate form left to right.

Add: Add one cruise track, then click save button.

Delete: Select one cruise track and delete it.

Save: After you modify the **Dwell time**, you should click **Save** button to take effect.

Example

How to do add cruise tracks ?

Firstly, Click Add button and enter a descriptive name to identify the cruise track.

Secondly: On the lower left of the page, you can see all preset points you have added. Select one preset point and click Add button, you can see the preset point has been added to the cruise track on the cruise track page. You need to add two or more preset points to the cruise track.

Thirdly: Click **OK** button and the cruise track will take effect.

You can add other cruise track as the same method.

For example: I have added three preset points to the "track 1", that means : When I select the "track 1" on the surveillance window, the camera moves as the following track: upright then Right Most last down left.
You can add preset on the left of the surveillance window.

Add the preset.

The cruise tracks have added to the "track 1".
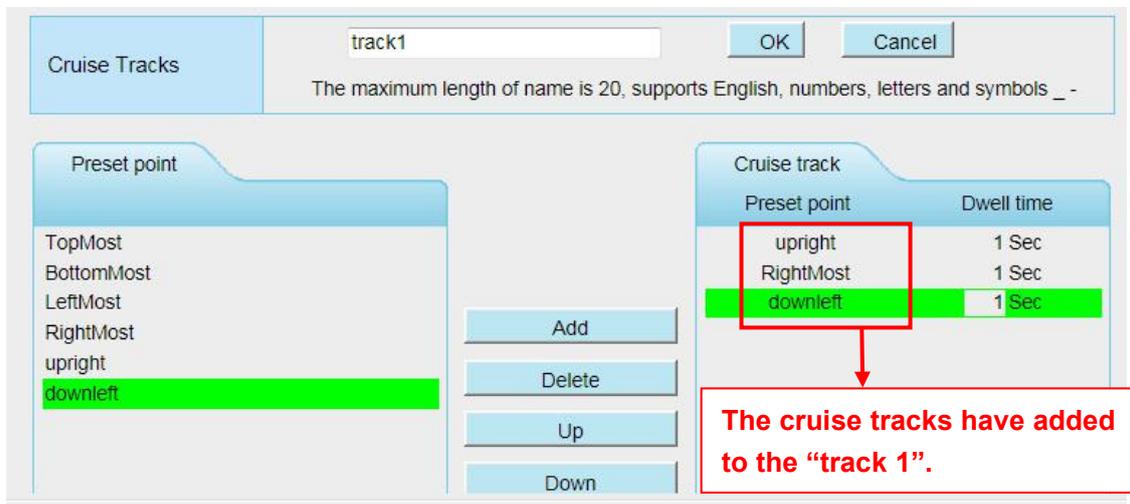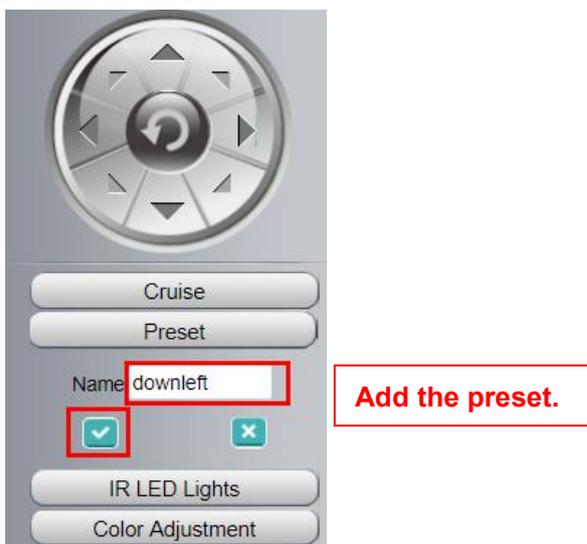
After add the cruise track, back to the surveillance window, click Cruise, here you can see all cruise tracks you have added.

There are other buttons between the Preset points and Cruise track, you can use these buttons to adjust the order of preset points or add/delete one preset points in one cruise track.

Add: Select one preset points and add it to the selected cruise track.
Delete: Select one preset points you have added to one cruise track, click delete.
Move up/ down: Select one cruise track, adjust the order of preset points in one cruise track.

Attention:
Considering the life time and thermal issue of the motor, it's not recommend to do long-time cruise.

3.7.8.3 Start-Up Options

Here section will allow you to set the stop position after the camera reboots.
It supports two modes: Go to home position and Go to preset point.
No self test: When rebooting, the camera will not pan / tilt.
Goto home position: When rebooting, the camera will pa Providing Central Management Software to manage or monitor multi-cameras n / tilt and stops at center.
Go to Preset point: Select one preset position and save it. When rebooting, the camera will pan/ tilt and stops at the preset position you have set.
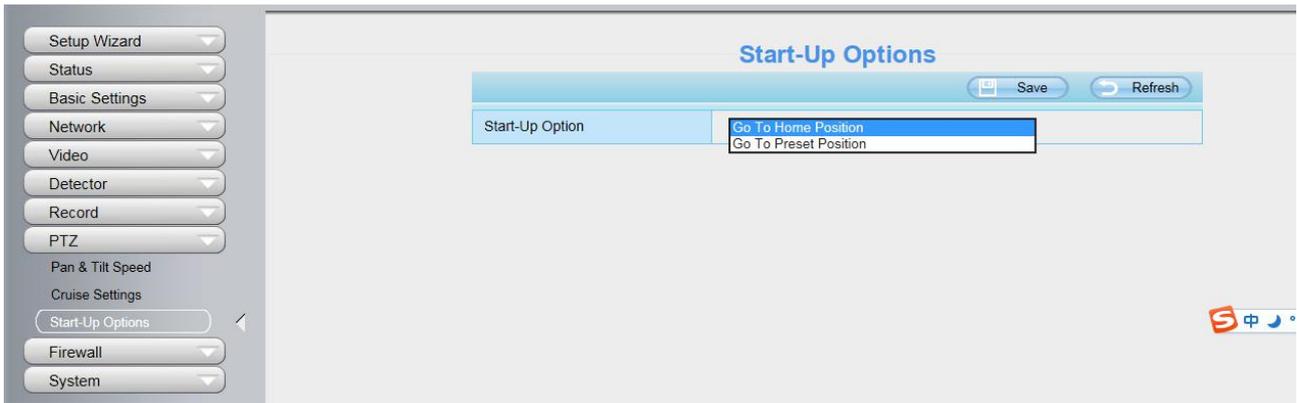
3.7.9 Firewall

This section explains how to control the access permission by checking the client PC's IP addresses. It is composed of the following columns: **Block access from these IP addresses** and **Only allow access from these IP addresses**.

Enable firewall, If you select Only allow access from these IP addresses and fill in 8 IP addresses at most, only those clients whose IP addresses listed in the Only allow access from these IP addresses can access the Network Camera. If you select Block access from these IP addresses, only those clients whose IP addresses are in the IP list cannot access the Network Camera.

Click **Save** to take effect.

3.7.10 System

In this panel, you can backup/restore your camera settings, upgrade the firmware to the latest version, restore the camera to default settings and reboot the device.

3.7.10.1 Back-up & Restore

Click Backup to save all the parameters you have set. These parameters will be stored in a bin file for

future use.

Click Browse and select the parameters file you have stored, then click Submit to restore the restore the parameters.

Backup is used to save your current settings. It is recommended to backup your configuration before modifying or upgrading firmware.

> Backup

Settings can be restored by uploading the backup file.

Path: | | Browse... | Submit

Note:

1. All current settings will be lost when importing a configuration file. If an incorrect file is loaded, the camera may stop working correctly.

2. Keep the power on during this process, or you may damage your camera. Your camera will reboot automatically once restoration is completed.

3.7.10.2 System Upgrade

Click **Download the latest firmware**, you will see the following screen. And click **Save** to save the firmware on your computer locally.

Your current firmware version will be displayed on your screen. You may go to the **Status** > **Device Information** page to check for the latest firmware versions available.
Click **Browse**, choose the correct bin file and then click **System upgrade**.
Don't shut down the power during upgrading. After upgrading, you can see the upgrade result.

Setup Wizard
Status
Basic Settings
Network
Video
Detector
Record
PTZ
Firewall
System
Back-up & Restore
System Upgrade
Patch Installation
Factory Reset
Reboot
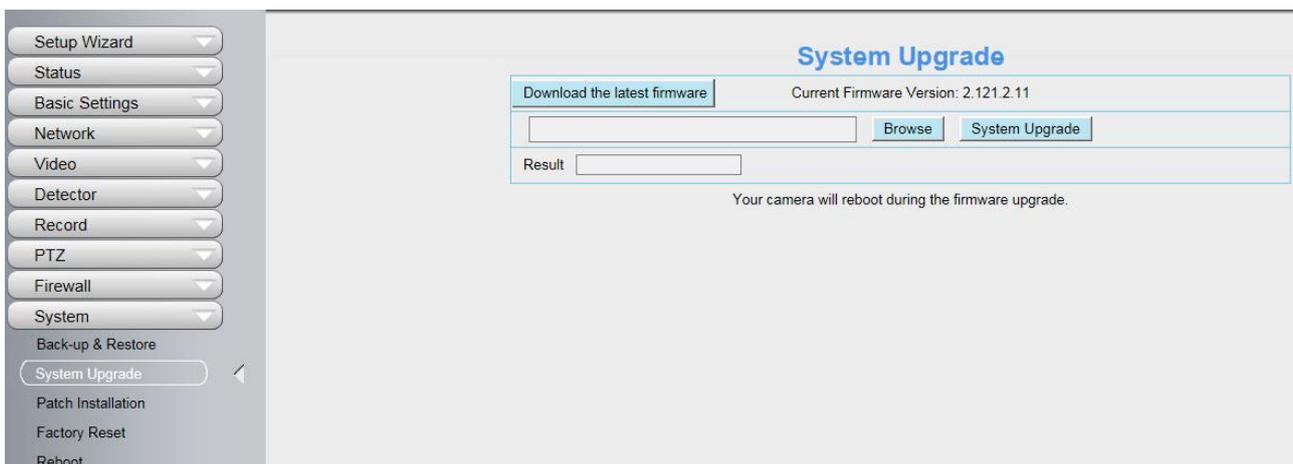
System Upgrade

Download the latest firmware   Current Firmware Version: 2.121.2.11

| | Browse | System Upgrade |
Result | |

Your camera will reboot during the firmware upgrade.

Upgrade Firmware by Equipment Search Tool

Double click the Equipment Search Tool shot icon   , select the Camera IP that you want to

upgrade the firmware. Then select Upgrade Firmware and enter the username and password, choose the firmware file, and upgrade.

CAUTION:

We recommend that you regularly update your camera to the latest available software and firmware versions to help ensure the best experience for your camera.

NOTE:

1) Please ensure you have download the correct firmware package for your camera before upgrading. Read the upgrade documentation (readme.txt file) in the upgrade package before you upgrade.

2) Upon downloading the firmware check the sizes of the .bin files. They must match the size in the readme.txt file. If not, please download the firmware again until the sizes are the same. Your camera will not function correctly if a corrupt .bin file is used.

3) Never shut down the power of the camera during upgrade until the IP camera restart and get connected.

4) After upgrade successfully, please clear the cache of browser, uninstall the old plugin and re-install it, then reset the camera to the default factory settings before using the camera.

3.7.10.3 Patch Installation

Click **Browse** to select the correct patch file, and then click **Install Patch** to install the patch. Do not turn off the power during it installing. After installing is complete, you will receive a system prompt.
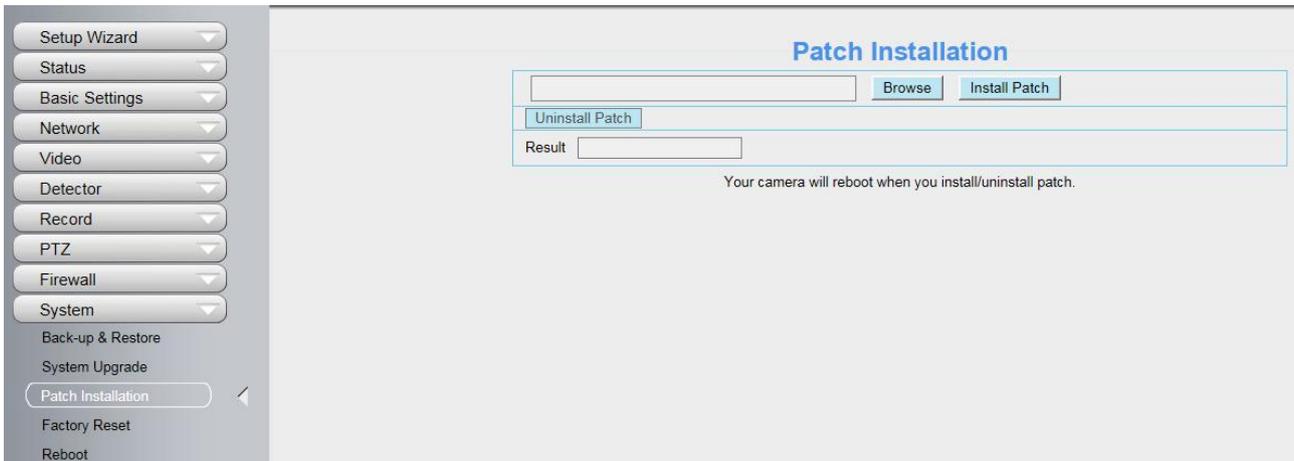
3.7.10.4 Factory Reset

Click **Factory Reset** button and all parameters will return to factory settings if selected.
The default administrator username is admin with a blank password.
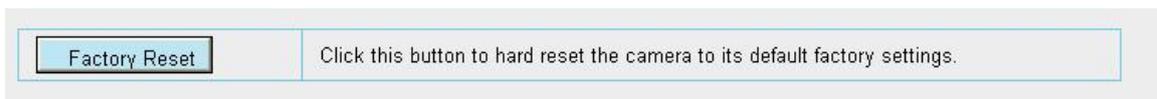
3.7.10.5 Reboot

Click **Reboot** to reboot the camera. This is similar to unplugging the power to the camera.
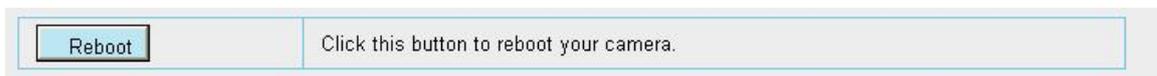
3.8 Playback

On this page you can view the record files stored in the SD card.
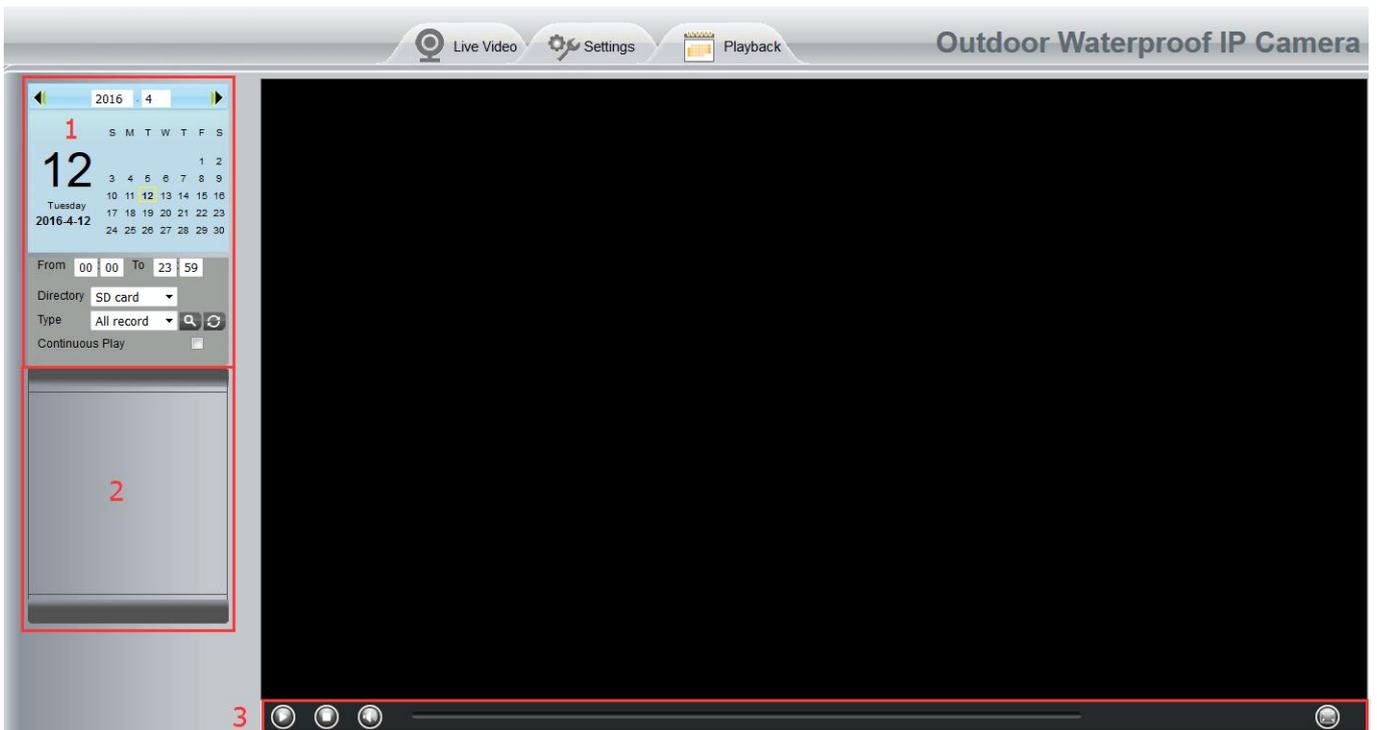
Section 1   Define the Record files time and Type

: The storage path of record files

: Here supports three types: current day, current month and All records. Another

way, select the time on the time&date manually.

: The type of records files, Here supports two types: Normal record, Alarm

record and All records.

: Click this button to search all record files satisfy the conditions you selected.

Continuous Play: Select the checkbox to play continuously all the record files.

Section 2   Search record files

On this panel you can see all record files satisfy the conditions you set.

Section 3   Play / Stop / audio / Full screen Buttons

Please select one record file before use these buttons.

Click this button to play the record files.

Click this button to stop the record files.

Click this button to audio on / mute.

Click this button to make full screen, and double click left mouse to exit full screen.

4 Surveillance Software Foscam VMS

4.1 Hardware Connection & Software Installation
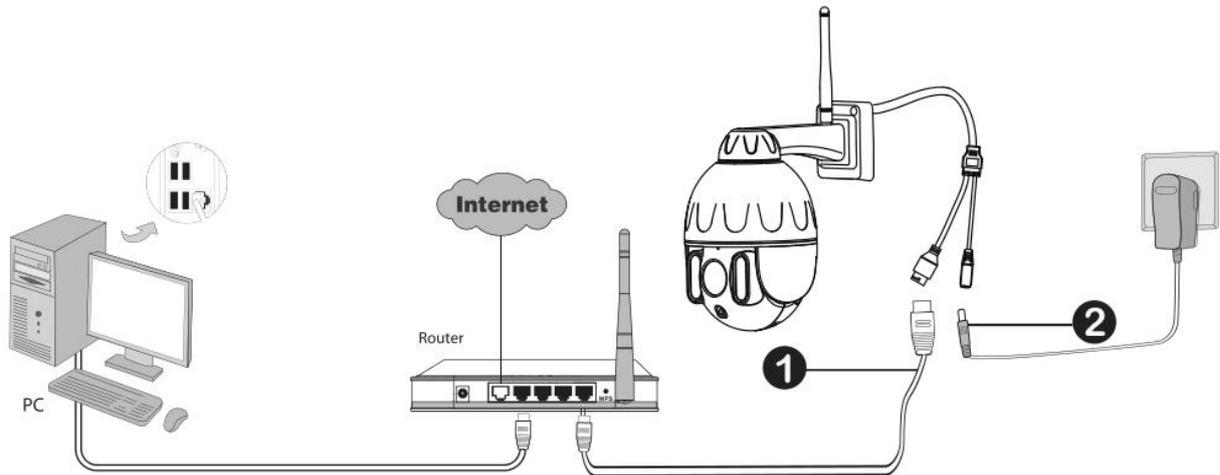
1. Connect the camera to the LAN network (Router or Switch) via network cable.
2. Visit Foscam official website foscam.com/vms , then you can find the "FoscamVMS", Please download it

4.2 Software Installation

1) Double click the software and follow the setup wizard to install the program.
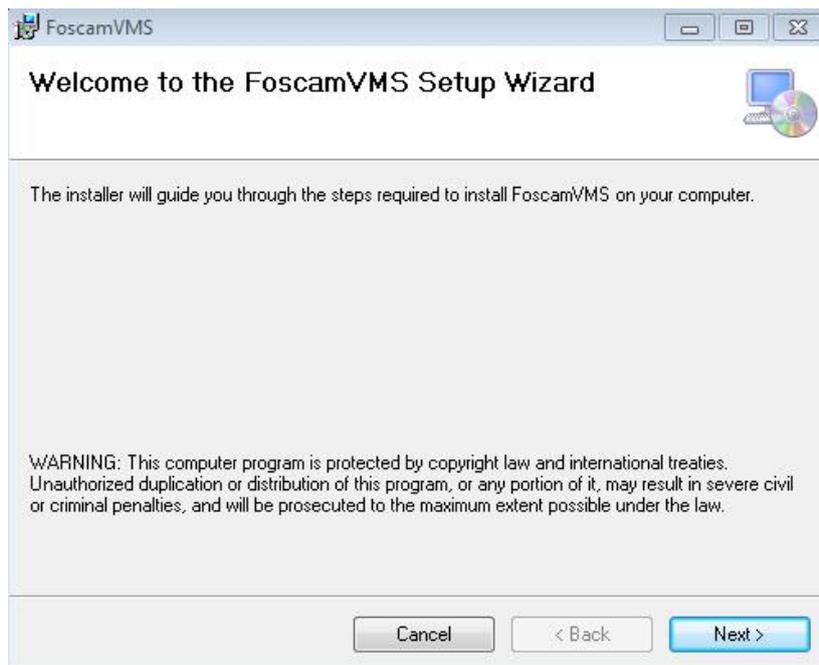
2) The FoscamVMS icon will appear on the desktop automatically after a successful installation.

Note:

Sometimes the program will be treated as virus, so before installing, please add the software as trusted program on your computer.

4.3 Create Acount

For your privacy and security, you can create a lacal adminstrator account.

you haven't created a local administator account, please click Create Account to create.

After creating a local administrator account, you can:

1. Use the account to log in to the client to ensure information security.

2. Create sub-accounts and assign different permissions for management.
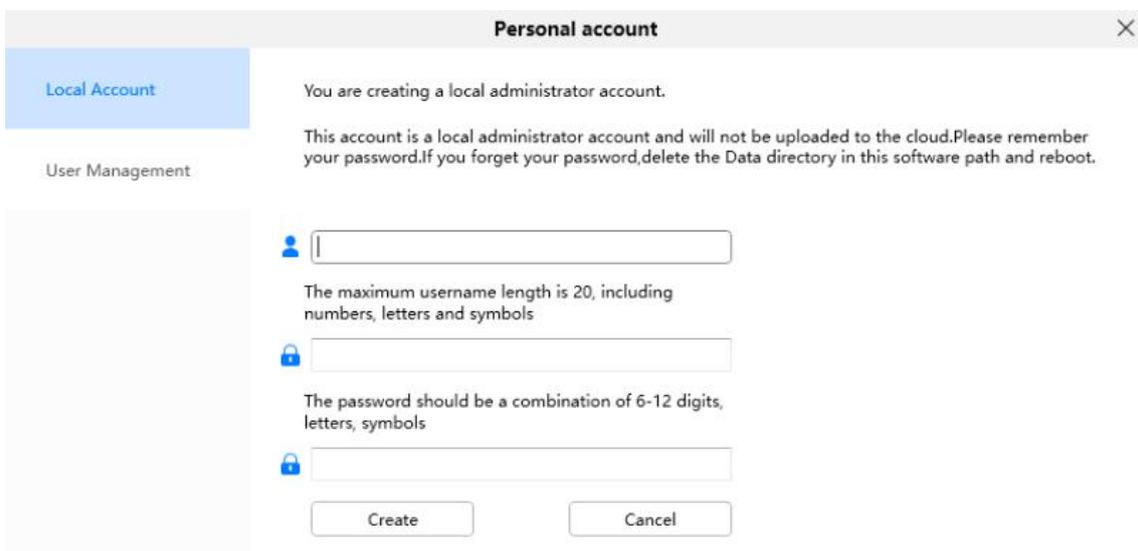
4.4 Add Device

4.4.1 LAN Add
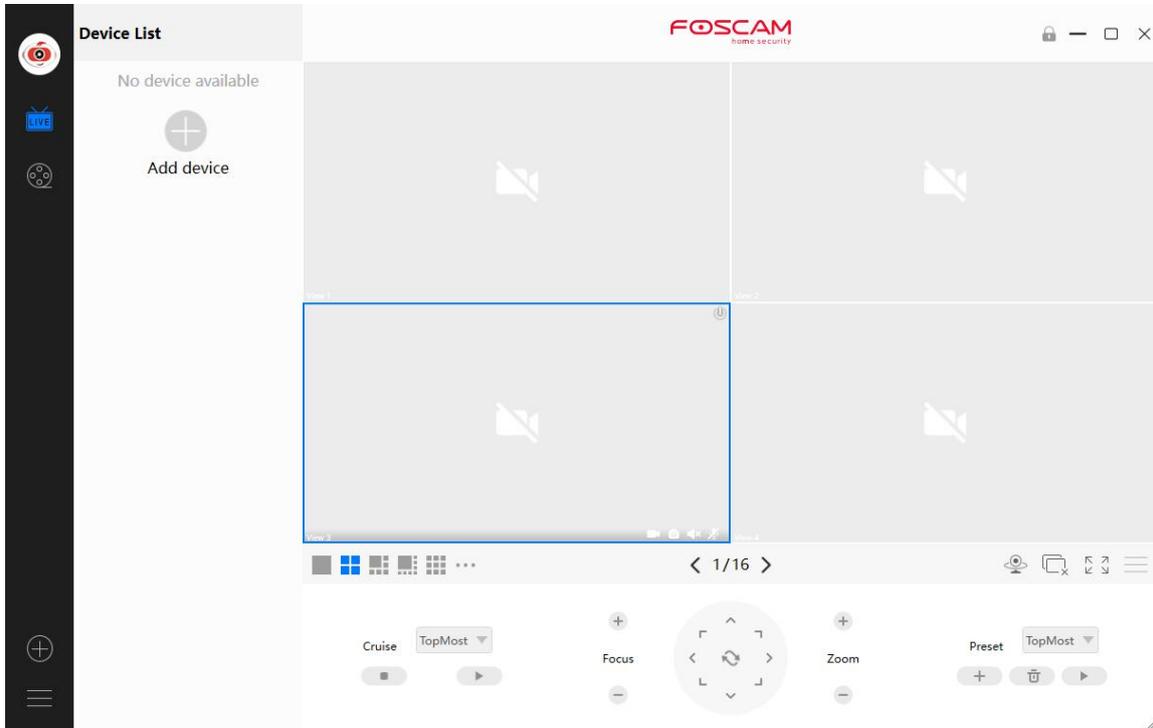
Click **Add Device** ⊕ button, then follow below steps:

Step1 Select the device type , the default type is All.

Step2 Click the IP address of the camera on the list.

Step3 Click Add

Step4 Enter the username and password of the camera.

Please Note: Make sure the camera and PC are both in the same Local Area Network (LAN).

4.4.2 Manual LAN via IP

You can add the camera use manual LAN also. Click the Manual LAN first, then follow below steps:

Step1 Select the **IP address**

Step2 Enter the IP and Port (IP and port can be viewed in Add Device)

Step3 Click Add.

Step4 Enter the username and password of the camera.

4.4.3 Manual LAN via UID

You can add the camera use manual LAN also. Click the Manual LAN first, then follow below steps:

Step1 Select the **UID**

Step2 Enter the UID (located on your camera)

Step3 Click Add.

Step4 Enter the username and password of the camera.

4.5 Surveillance Software GUI
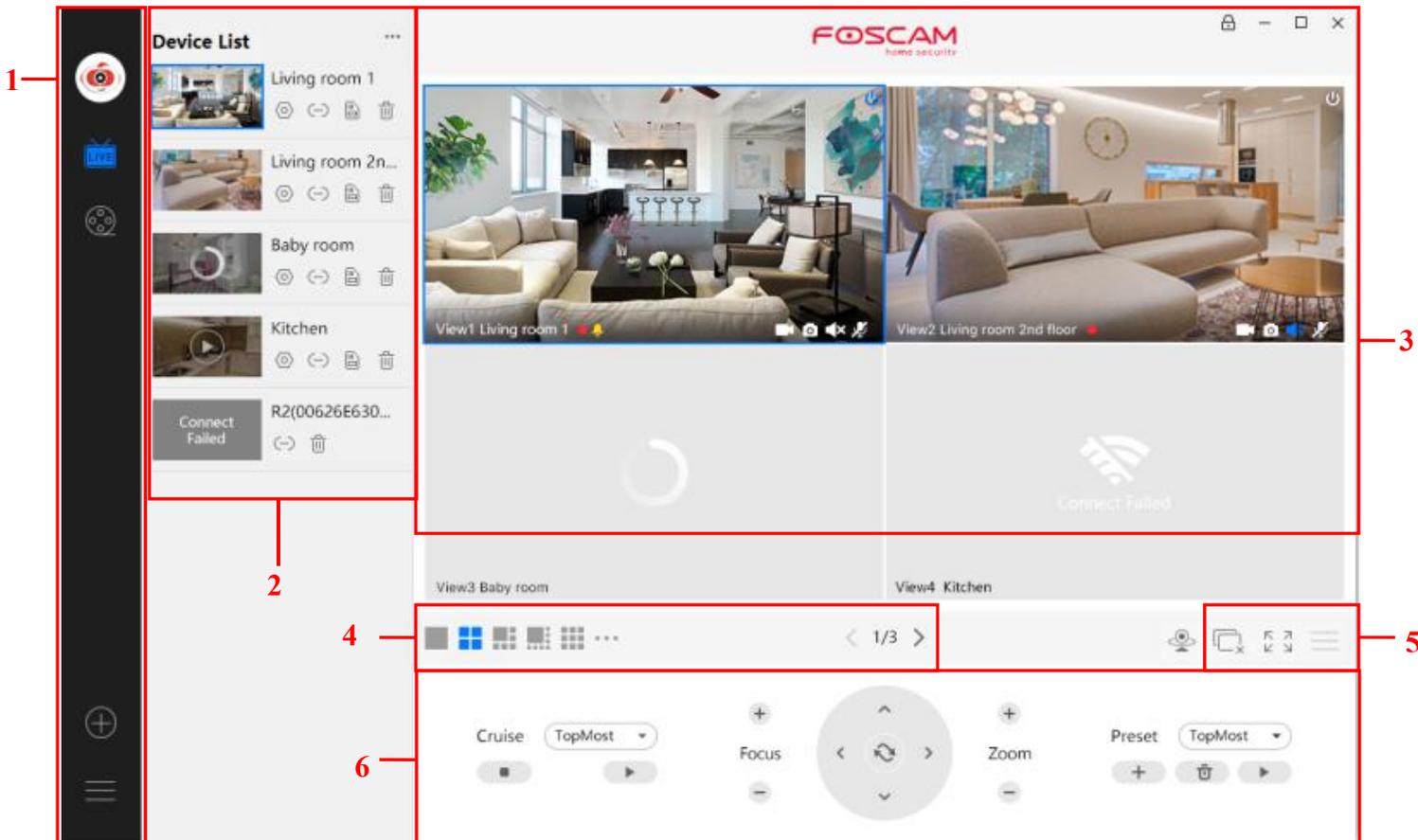
First time you login the software, the whole video window is gray, you need to connect the cameras and add cameras to it.

Section1 Menu Bar

 Path to surveillance window. Click this button enter to Device List and back to the surveillance window.

 Playback the video recording, you can choose playback type and play video on local or SD card.

 Add Device, please refer chapter 3.4 for the detail setting.

 More, You can Setting Personal Account, Preference, Left Bar and Switch Account.

Section2 Left Bar

Left Bar of Live: You can view the list of connected cameras

1----- Setup

Click the button Settings, goes to **Device Settings** Control Panel to make advanced camera settings.

2-----Device Connection Account

Click the button Settings, goes to connection Settings

3-----SD Card

If you have an SD card on your device, click this button to enter the SD directory

4-----Delete

Click the button, Delete the device.

Section3 Live Window
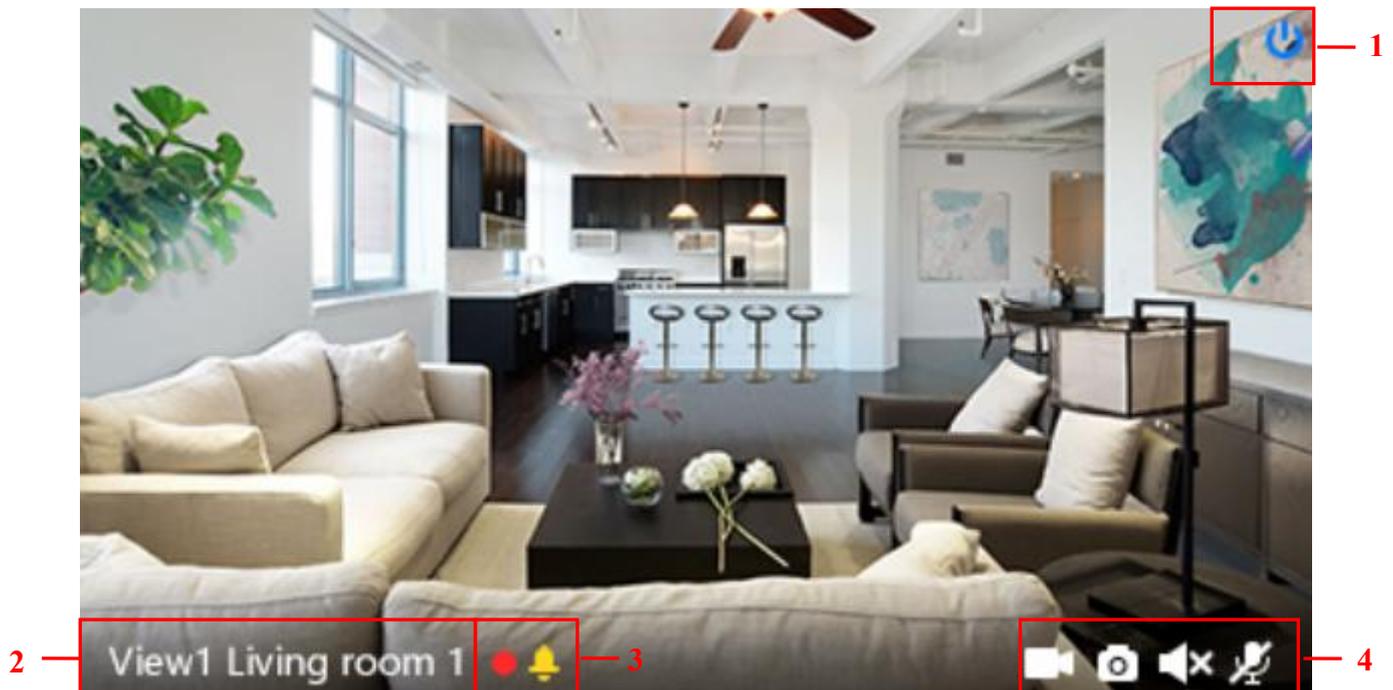
1-----Close

Click the icon to close this channel live window

2-----Device Name

Show view channel and camera name.

3-----Recording and Alarm status

![red icon] This icon will turn to red, it indicates that the camera is recording

![yellow icon] This icon will turn to yellow, the motion is detected during the detection time in the detection area,

the camera alarm and adopt the corresponding alarm indicators

4----- Record / Snap Shot / Sound / Talk button

Record   Snap Shot   Sound   Talk

Record ----- Click it and do manually recording. When recording, icon 1 will turn to blue. Click it again and stop recording. The recording files will be stored to C disk automatically

Snap Shot ----- Click it to make snapshot. After snapshot, the button banner will prompt **Captured Successfully**. And you can find the picture on default path C:\VMS_CAPTURE

SnapShot   ✕

Success, Picture:
C:\VMS_CAPTURE
\MDS2010_A0E6FB6FAB01\20191014
\2019-10-14__17_15_46.bmp

Sound ----- Click the icon then you will hear sound captured by the camera's built-in microphone. You may need to plug in earphones or enable the computer speakers to hear from the camera's microphone. Make sure the camera supports audio. Click again and stop audio.

Talk ----- Click the button, then talk to the microphone that connected with PC, people around the camera can here you voice. Click the icon again and stop talking.

Section4 The number of split-screen

Click this button to select the number of split-screen on one page.

The client can monitor many cameras at one page, here you can choose the display number. The maximum number is 36.

Section5 Live Cruise / Close All / Full Screen / Hide Bar

Live Cruise ----- Click this button to Live Cruise, you can click ⊕ button to add a loop page for live

Cruise or click ⊖ button to reduce the loop page for live Cruise.

Close All ----- Click this button to close all the cameras

Full Screen ----- Click this button to enter full screen, Click this button to enter full screen, then click to exit full screen.

Hide Bar ----- Click this button, Hide and show Pan / Tilt control Bar

Section6 Cruise / Focus buttons / Pan / Tilt control / Zoom buttons/ Preset

● **Cruise Settings**

The default cruise tracks have two types: Vertical and Horizontal.

Vertical: The camera will rotate from up to down.
Horizontal: The camera will rotate from left to right.

▶ :Start cruise. ■ : Stop cruise.

If you want to define or change the cruise trace, please go to **Device Settings → PTZ → Cruise Settings** panel.

How to do cruise?
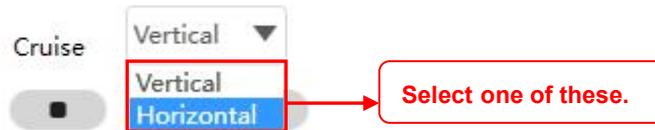
Firstly: Select one track in the track dropdown list.

Secondly: Click Start cruise button, the camera will cruise following the predefined path.
Thirdly: Click stop button and finish cruising.

● **Zoom in" or "Zoom out"**

Click ＋ or － ,The focal length of the camera lens will be larger or shrink, you can adjust the focus distance to the target object size, access to high-definition screen.

Focus: Optical zoom
Zoom: Magic Zoom

● **Pan/Tilt Control**
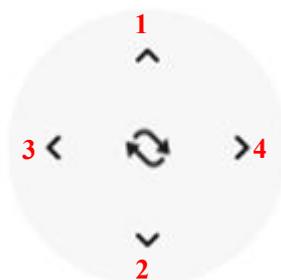
1----- Up control button,   2-----Down control button,

3------Left control button,   4------Right control button,

Click this button and go to center

Preset settings

Preset [TopMost ▼]

+ 🗑 ▶

IP Camera supports 16 preset positions, which is considered enough for DIY home & small business surveillance market

The default preset position is Topmost, Bottom most, Left most, right most, you can add other preset positions.

+ Add   Click this icon to save the position you need the camera to remember

🗑 Delete   Select one preset position and click this button to delete it.

▶ GO   Select one preset position in the preset drop-down list and click Go to make the camera move the preset position

How to do preset position?

Firstly, move the camera and stop at a desired place where you want make preset position.

Secondly, click **+** button and enter a descriptive name for the preset position. The preset position cannot contain special characters. Then click OK to save it. If you want to reset the preset position, click Cancel.

After that, you can move the camera and stop at another place, and set another preset position. You can do all the 16 preset positions with this method.

If you want to see one preset position you have set, only select the preset position name from the preset drop-down list, and click go **▶** button, the camera will go to the preset position.

4.6 Advanced Camera Settings

Click ⬡ the button, goes to Device Settings to make advanced camera settings.

4.6.1 Status

Status contains two columns: Device Information and Logs, it will show you various information about your camera.

4.6.1.1 Device Information
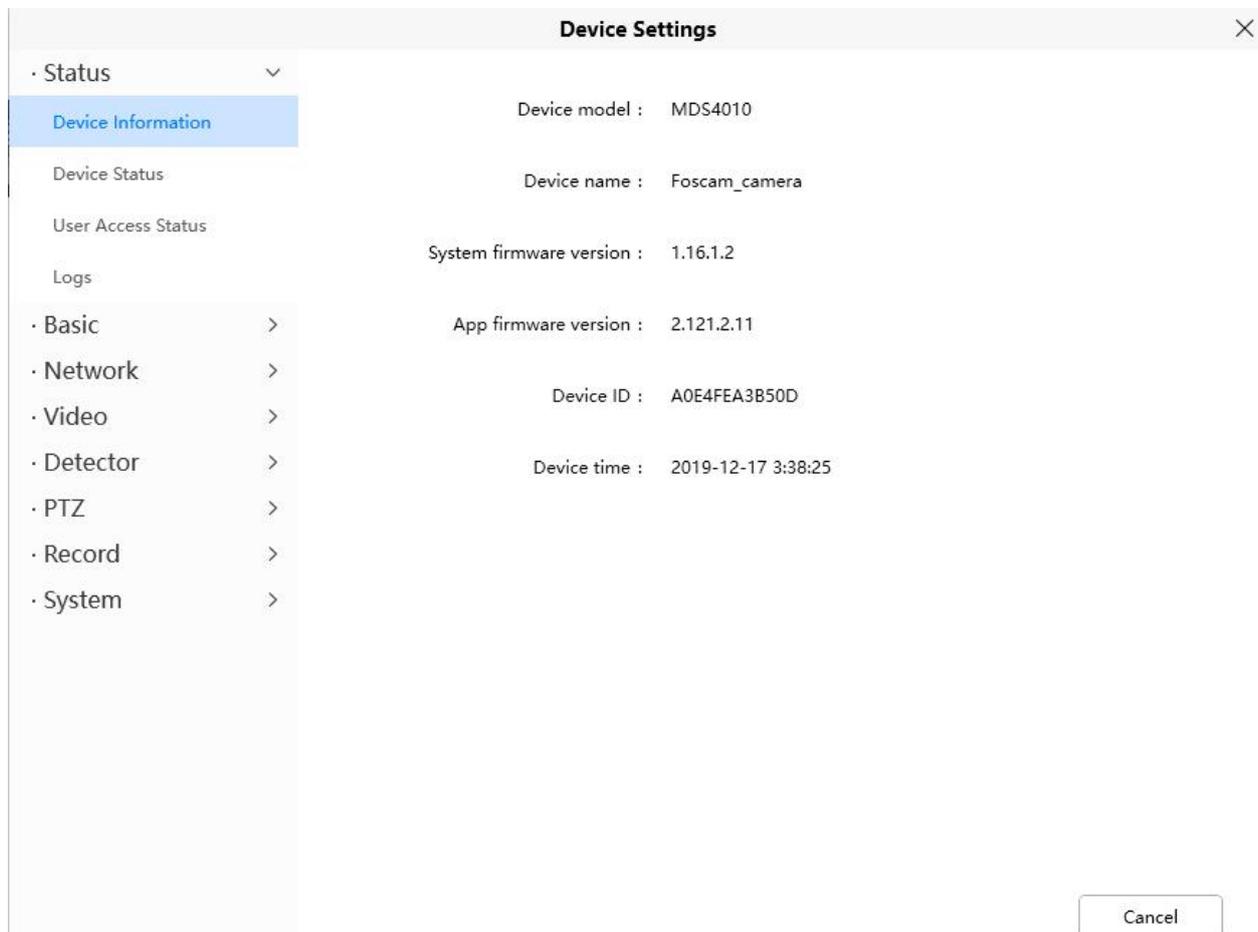
Device Model: The model of the device.

Device Name: The Device Name is a unique name that you can give to your device to help you identify it. Click Basic Settings and go to Camera Name panel where you can change your camera name. The default device name is Foscam_camera.

System Firmware Version: Display the System Firmware version of your camera.

App Firmware Version: Display the application firmware version of your camera.

Device ID: Display the MAC address of your camera. For example Device ID is 00626EE96E3C, the same MAC ID sticker is found at the bottom of the camera.

Device Time: The system time of the device. Click Basic Settings and go to Device Time panel and adjust the time.

4.6.1.2 Device Status

On this page you can see device status such as Alarm status, NTP status, IR LED Status and so on.

4.6.1.3 User Access Status

Session status will display who and which IP is visiting the camera now

4.6.1.4 Logs

The log record shows who and which IP address accessed or log out the camera.

No.	Time	User	IP	Log
1	9/16/2019 12:23:57 AM	root	127.0.0.1	Motion Detection
2	9/16/2019 12:22:46 AM	root	127.0.0.1	Motion Detection
3	9/16/2019 12:22:13 AM	root	127.0.0.1	Motion Detection
4	9/16/2019 12:21:49 AM	root	127.0.0.1	Motion Detection
5	9/16/2019 12:21:24 AM	root	127.0.0.1	Motion Detection
6	9/16/2019 12:20:21 AM	root	127.0.0.1	Motion Detection
7	9/16/2019 12:20:10 AM	root	127.0.0.1	Motion Detection
8	9/16/2019 12:19:57 AM	root	127.0.0.1	Motion Detection
9	9/16/2019 12:19:35 AM	root	127.0.0.1	Motion Detection
10	9/16/2019 12:19:12 AM	root	127.0.0.1	Motion Detection
11	9/16/2019 12:18:32 AM	root	127.0.0.1	Motion Detection
12	9/16/2019 12:18:21 AM	root	127.0.0.1	Motion Detection
13	9/16/2019 12:18:03 AM	root	127.0.0.1	Motion Detection
14	9/16/2019 12:16:40 AM	root	127.0.0.1	Motion Detection
15	9/16/2...			Detection
16	9/16/2...			Detection
17	9/16/2...			Detection
18	9/16/2019 12:14:29 AM	root	127.0.0.1	Motion Detection
19	9/16/2019 12:14:10 AM	root	127.0.0.1	Motion Detection
20	9/16/2019 12:11:00 AM	root	127.0.0.1	Motion Detection

Total 6 Pages

Click the page number and go to the corresponding page to see more logs

Full in one page number, click go GO button and go to the corresponding page.

4.6.2 Basic

This section allows you to configure your Device Name, Time, User Accounts, Status Light and Voice Prompt.

4.6.2.1 Camera Name

Default alias is Foscam_camera. You can define a name for your camera here such as apple. Click Save to save your changes. The alias name cannot contain special characters.

Camera Name : Foscam_camera

The maximum lenght of device name is 20, support English, numbers, letters and symbols: _-

4.6.2.2 Device Time

This section allows you to configure the settings of the internal system clocks for your camera.

Time Zone: Select the time zone for your region from the dropdown menu.

Sync with NTP server: Network Time Protocol will synchronize your camera with an Internet time server. Choose the one that is closest to your camera.

Use DST: Select the **use DST** (Daylight Saving Time, to set the clock ahead of the real-time), then set the start time and end time of the DST, select the daylight saving time from the drop-down menu at last.

Click **Save** button and submit your settings.

4.6.2.3 User Accounts

Here you can create users and set privilege, visitor, operator or administrator. The default administrator user accounts are administrator with a blank password.

How to change the password?

Firstly, select the account which you want to change the password, then select **Change password**, enter the old password and the new password, lastly click modify to take effect.
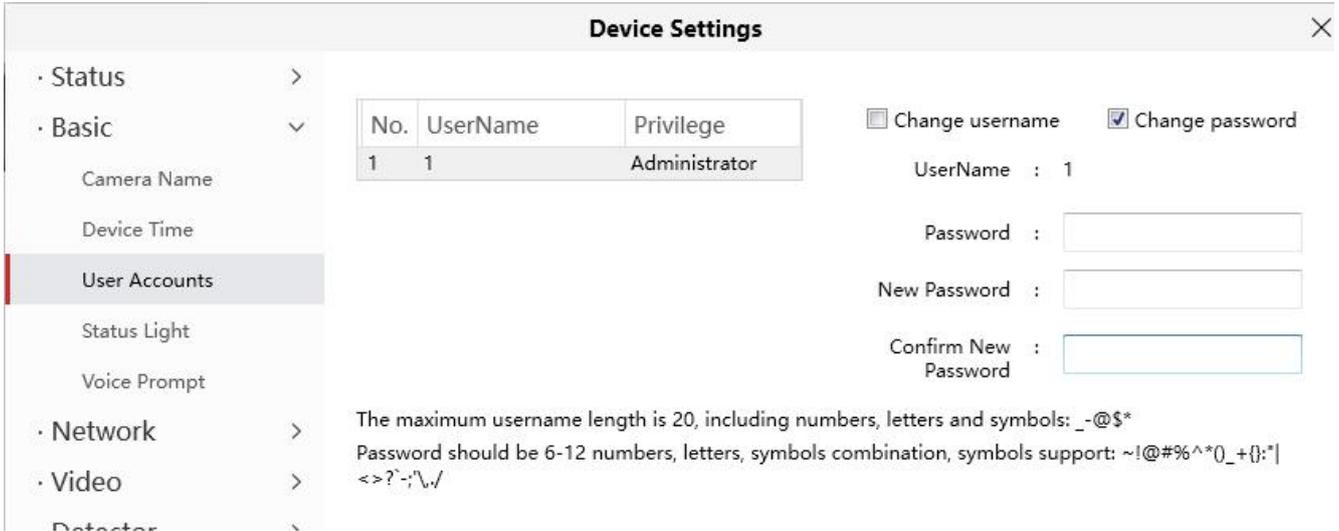
How to change the username?

Select the account which you want to change the username, then select Change username, enter the new username and the password, lastly click modify to take effect.
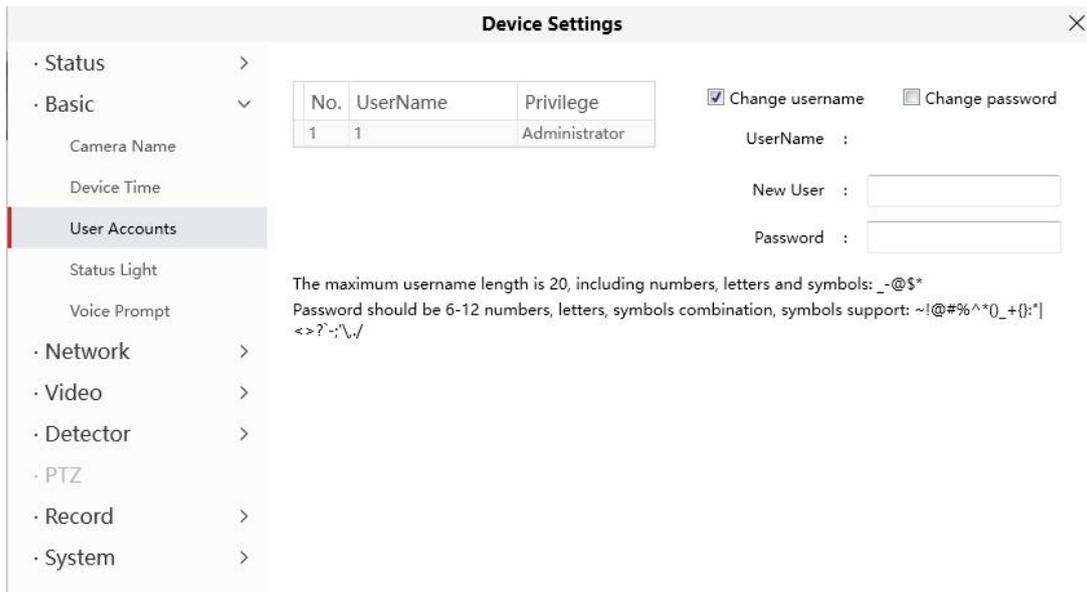
4.6.2.4 Status Light

If you have a power and network status light on your camera, you can turn it on and off with this feature. This camera don't have the status light described above.
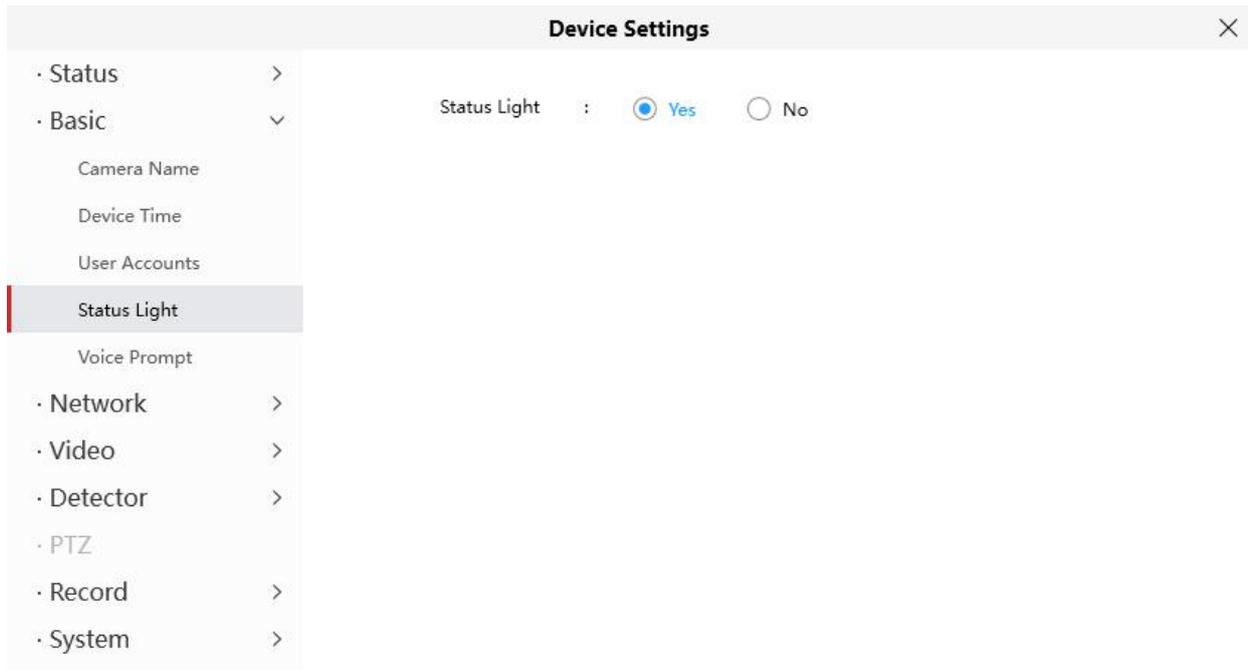
4.6.2.5 Voice Prompt

You can set the voice prompt on the camera to turn on and off if you connect an external audio device.
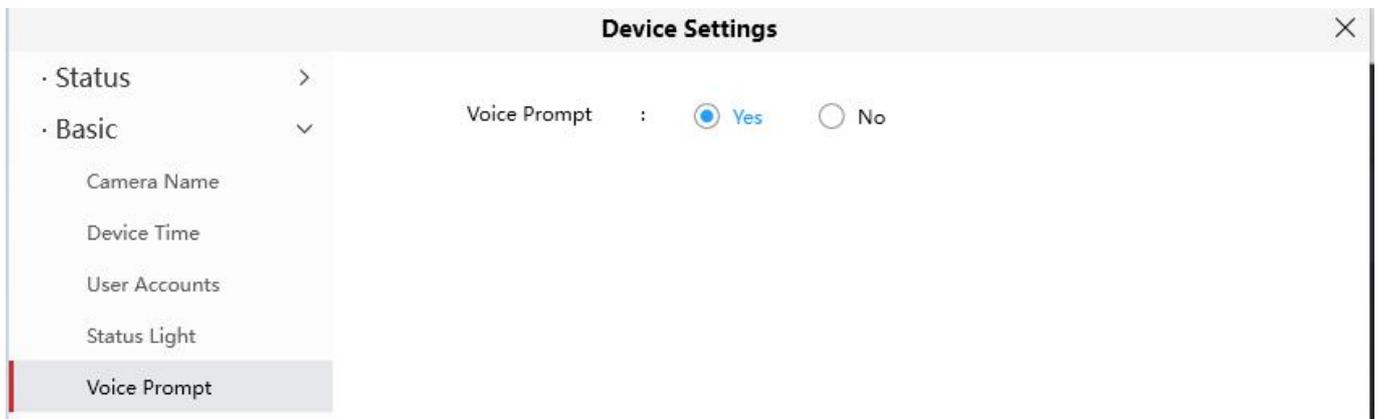
4.6.3 Network

This section will allow you to configure your camera's information.

4.6.3.1 IP

If you want to set a static IP for the camera, please go to **IP** page. Keep the camera in the same subnet of your router or computer.
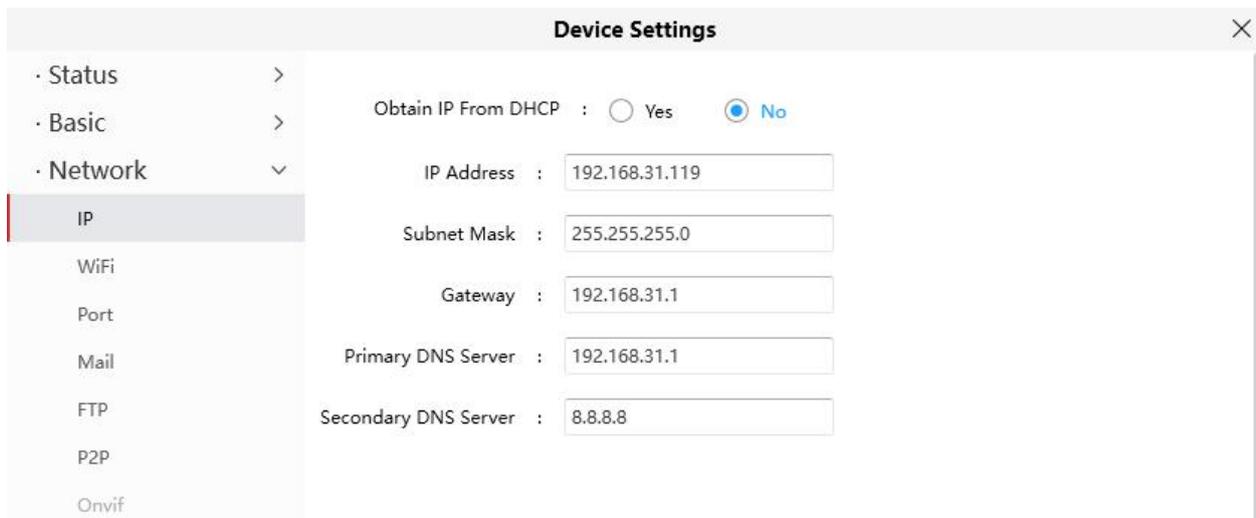
It is recommended that you use the subnet mask, gateway and DNS server from your locally attached PC. If you don't know the subnet mask, gateway and DNS server, you can check your computer's local area connection as follows:

Control Panel--Network Connections--Local Area Connections --Choose Support--Details.
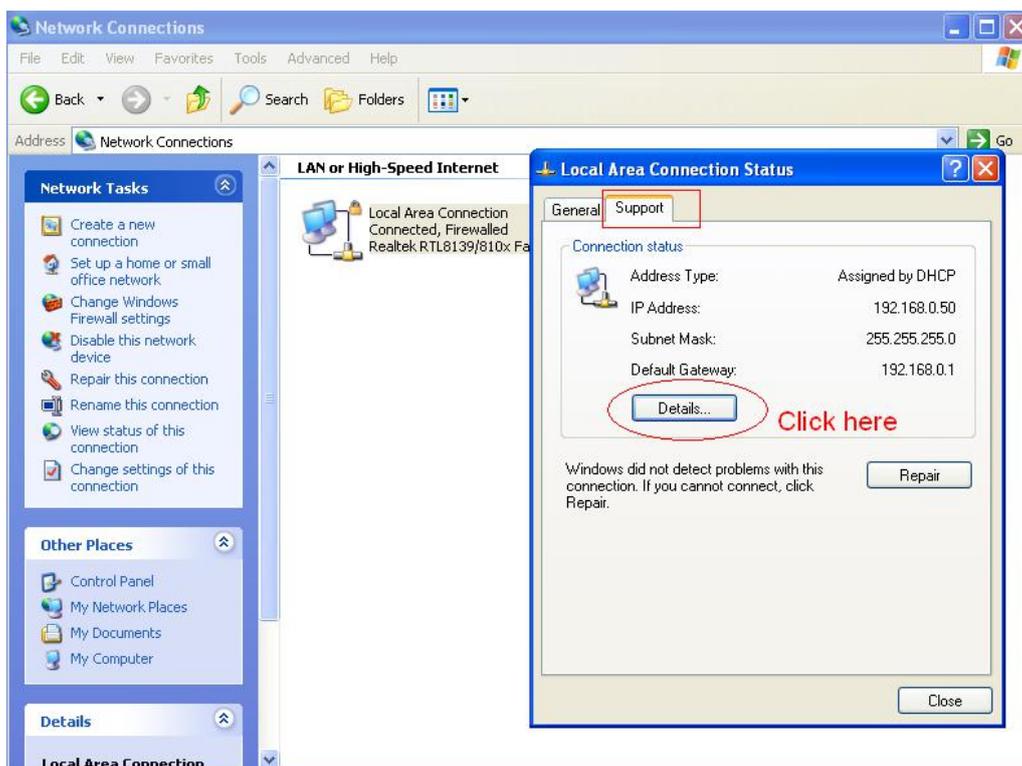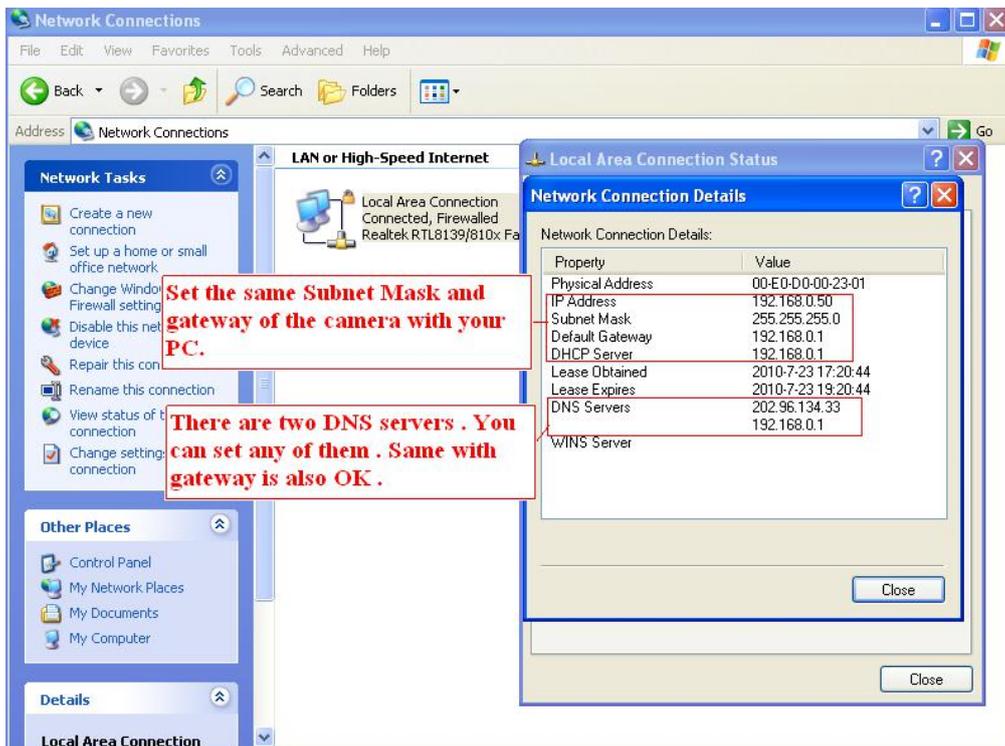
If you don't know the DNS server, you can use the same settings as the Default Gateway.

4.6.3.2 WiFi

Step 1: Click the ⟳ button and the camera will detect all wireless networks around the area. It should also display your router in the list.

Device Settings   ✕

· Status   >

· Basic   >

· Network   ⌄

   IP

   WiFi

   Port

   Mail

   Ftp

   P2P

   Onvif

· Video   >

· Detector   >

· PTZ   >

· Record   >

· System   >

Wireless network : ↻

No.	SSID		
1	A123		
2	AA	WPA/WPA2	87
3	Xiaomi_49AB_5G	WPA/WPA2	87
4	foscam_hsy	WPA/WPA2	81
5	TP-LINK_8D1864	WPA2	78
6	FYC	WPA/WPA2	77
7	foscam_zzy	WPA/WPA2	77
8	foscam1111	WPA/WPA2	75
9	QC7	WPA/WPA2	73
10	zsh	WPA/WPA2	73
11	qiu	WPA/WPA2	70
12	FOSCAM_9-2	WPA2	69
13	Bowen	WPA/WPA2	65
14	TP-LINK_88C2	WPA/WPA2	65
15	TP-LINK_A376	WPA/WPA2	65
16	PRODUCT	WPA/WPA2	61
17	zhengxin	WPA/WPA2	61
18	qhssc01	WPA2	61
19	FOSCAM	WPA/WPA2	61
20	Foscam8	WPA/WPA2	61
21	TP-LINK_BFF5	WPA/WPA2	57
22	Xiaomi_49AB	WPA/WPA2	55
23	qhssc02	WPA2	51
24	MIG MIG MIG MIG	WPA/WPA2	45

Total : 30

Click the ↻ **button to search for wireless networks.**

SSID :   [   ]

Encryption :   [None   ▼]

Password :   [   ]

Test :   [Test   ]

Saved :   ↻

[Save]   [Cancel]

Step 2: Click the SSID (name of your router) in the list, the corresponding information related to your network, such as the name and the encryption, will be filled into the relevant fields automatically.

You will only need to fill in the password of your network. Make sure that the SSID, Encryption and the password you filled in are exactly the same for your router.

Device Settings

Wireless network :

No.	SSID	Encryption	Quality
1	A123	WPA/WPA2	91
2	AA	WPA/WPA2	87
3	Xiaomi_49AB_5G	WPA/WPA2	87
4	foscam_hsy	WPA/WPA2	81
5	TP-LINK_8D1864	WPA2	78
6	FYC	WPA/WPA2	77
7	foscam_zzy	WPA/WPA2	77
8	foscam1111	WPA/WPA2	75
9	QC7	WPA/WPA2	73
10	zsh	WPA/WPA2	73
11	qiu	WPA/WPA2	70
12	FOSCAM_9-2	WPA2	69
13	Bowen	WPA/WPA2	65
14	TP-LINK_88C2	WPA/WPA2	65
15	TP-LINK_A376	WPA/WPA2	65
16	PRODUCT	WPA/WPA2	61
17	zhengxin	WPA/WPA2	61
18	qhssc01	WPA2	61
19	FOSCAM	WPA/WPA2	61
20	Foscam8	WPA/WPA2	61
21	TP-LINK_BFF5	WPA/WPA2	57
22	Xiaomi_49AB	WPA/WPA2	55
23	qhssc02	WPA2	51
24	MIG_MIG_MIG_MIG	WPA/WPA2	45

Total : 30

2 Enter the password of your router .

Encryption : WPA/WPA2 ▼

Password :

Test : Test

Saved :

3 Click Test to check if the password is correct or not.

1 Click the SSID of your router and the relevant information will be filled in the fields automatically.

Save   Cancel

Step 3: Please click on the Save button after all settings have been entered and disconnect the network cable. Never shut down the power of the camera until the IP camera is able to connect to the wireless network.

The LAN IP address will disappear on the window of Add Device when the camera is configuring a wireless connection. Wait about 1 minute, the camera should obtain a wireless connection, and the LAN IP of the camera will show again on the window of Add Device The IP address may have changed after the camera receives a wireless connection; we recommend setting a static local IP address if this IP address changes by right clicking the camera in Equipment Search Tool, setting a static IP, and pushing OK . Congratulations! You have set up the wireless connection of the camera successfully.

NOTE: If you fail to make a wireless connection, please refer to your seller or contact us directly for assistance.

4.6.3.3 Port

This camera supports HTTP Port / HTTPS Port/ ONVIF Port. HTTP Port is used to access the camera remotely.

HTTP port: By default, the HTTP is set to 88. Also, they can be assigned with another port number between 1 and 65535. But make sure they can not be conflict with other existing ports like 25, 21.

82
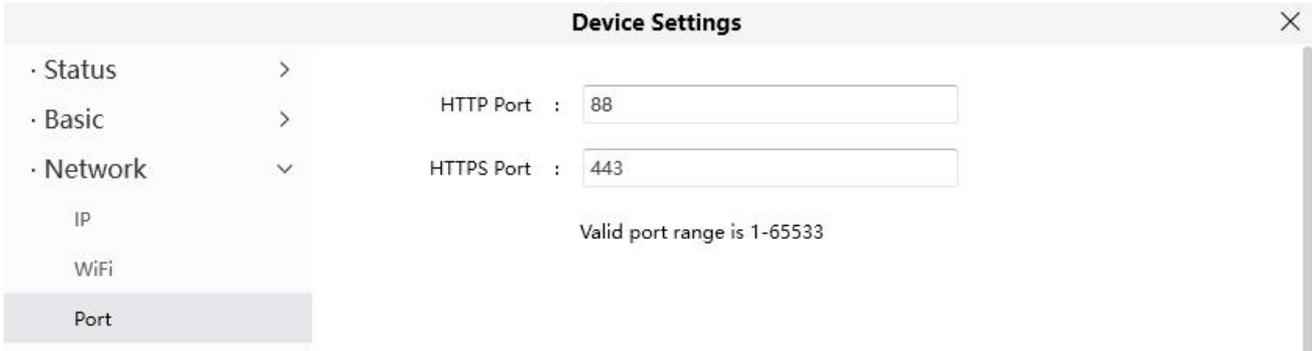
4.6.3.4 Mail Settings

If you want the camera to send emails when motion has been detected, here Mail will need to be configured.

1----- SMTP Server/ Port /Transport Layer Security   Enter SMTP server for sender. SMTP port is usually set as 25. Some SMTP servers have their own port, such as 587 or 465, and Transport Layer Security usually is None. If you use Gmail, Transport Layer Security must be set to TLS or STARTTLS and SMTP Port must be set to 465 or 25 or 587, which port you choose should be decided by which Transport Layer Security you select.

2----- SMTP Account/ password   ID account and password of the sender email address

3----- E-mail Sender　Mailbox for sender must support SMTP

4----- Receiver　Mailbox for receiver need not support SMTP, you can set 4 receivers

5----- Save　Click Save to take effect

6----- Test　Click Test to see if Mail has been successfully configured.

Click **Test** to see if Mail has been successfully configured.

If the test success, you can see the Success behind the Test, at the same time the receivers will receive a test mail.

If the test fails with one of the following errors after clicking Test, verify that the information you entered is correct and again select Test .

1) Cannot connect to the server

2) Network Error. Please try later

3) Server Error

4) Incorrect user or password

5) The sender is denied by the server. Maybe the server need to authenticate the user, please check it and try again

6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server

7) The message is denied by the server. Maybe because of the anti-spam privacy of the server

8) The server does not support the authentication mode used by the device.

4.6.3.5 FTP

If you want to upload record images to your FTP server, you can set **FTP.**

84
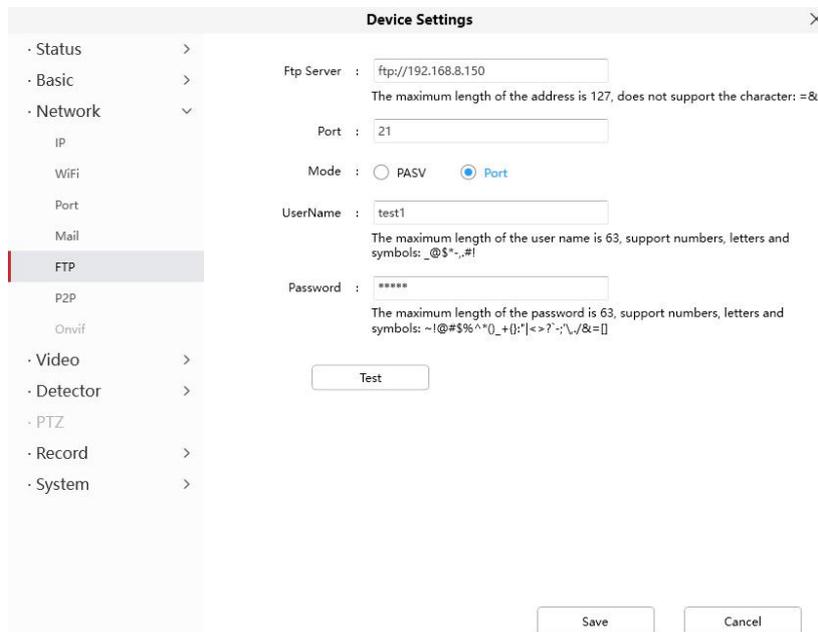
FTP server: If your FTP server is located on the LAN, you can set as Figure a.

If you have an FTP server which you can access on the internet, you can set as Figure b.

Port: Default is port 21. If changed, external FTP client program must change the server connection port accordingly.

Mode: Here supports two modes: PORT and PASV.

Username / password: The FTP account and password.

Click **Save** to take effect.

Click **Test** to see if FTP has been successfully configured.

4.6.3.6 P2P

Access the camera by smart phone (Android or iOS operating system)

First of all, you need to open the P2P function of the camera at ⚙ **> Network > P2P**.
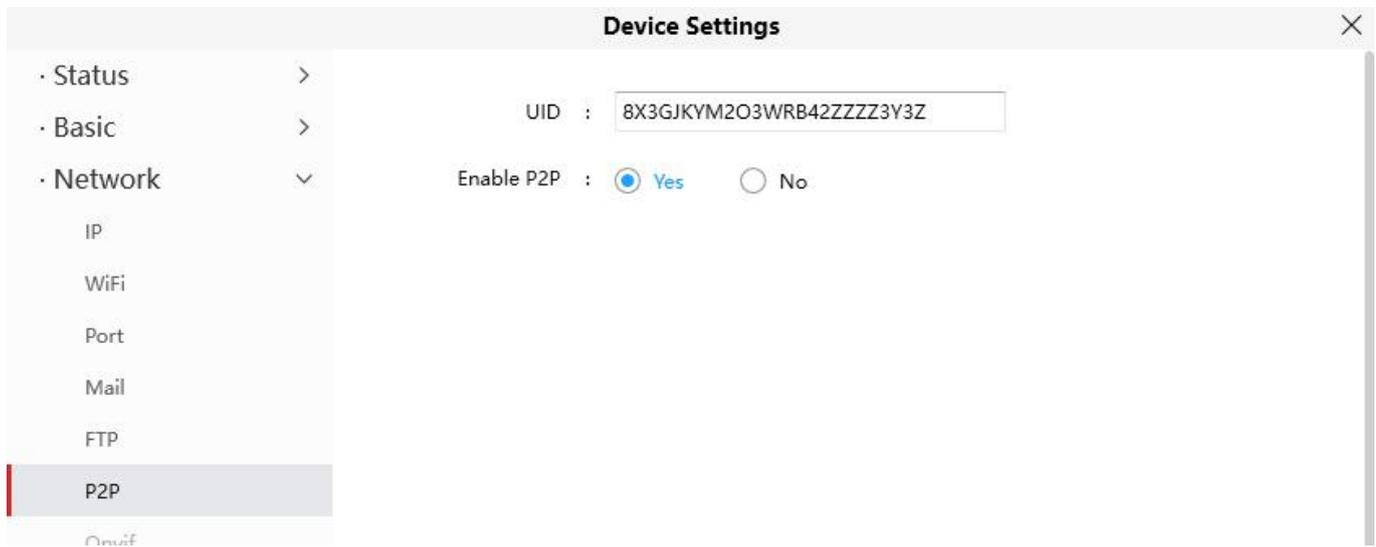
4.6.3.7 Onvif

By default, the ONVIF port is set to 888. Also, they can be assigned with another port number between 1 and 65535 (except 0 and 65534). But make sure they can not be conflict with other existing ports.
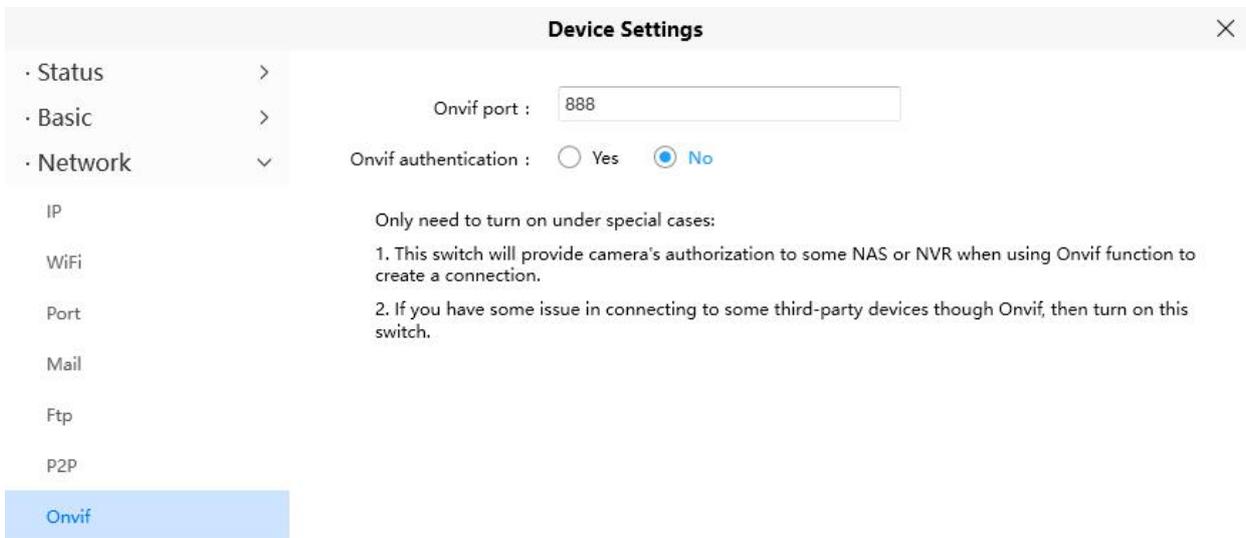
4.6.4 Video

This section allows you to configure Video Encode settings, On screen display, Snapshot and IR LED settings.

4.6.4.1 Video Encode

This is main Encode video settings.

Stream type: There are four types to identify different streams you have set.

Resolution: The camera supports multiple types, For example: 1080P, 720P, VGA. The higher the resolution is, the clearer video will become. But the code flux will become larger too, and it will take up more bandwidth. (Different models support different specific types.)

Bit Rate: Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

Frame Rate: Note that a larger frame size takes up more bandwidth. When the video format is 50Hz, the maximum frame rate is 25 fps. When the video format is 60Hz, the maximum frame rate is 30 fps. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

Key Frame Interval: The time between last key frame and next key frame. The shorter the duration, the more likely you will get a better video quality, but at the cost of higher network bandwidth consumption.

Variable Bitrate: Select the Bit rate type to constant or variable. If select Yes, the camera will change the video bit rate according to the situation, but will not more than the maximum parameter "Bit Rate"; If select **No**, the Bit Rate is unchanged.

4.6.4.2 On Screen Display
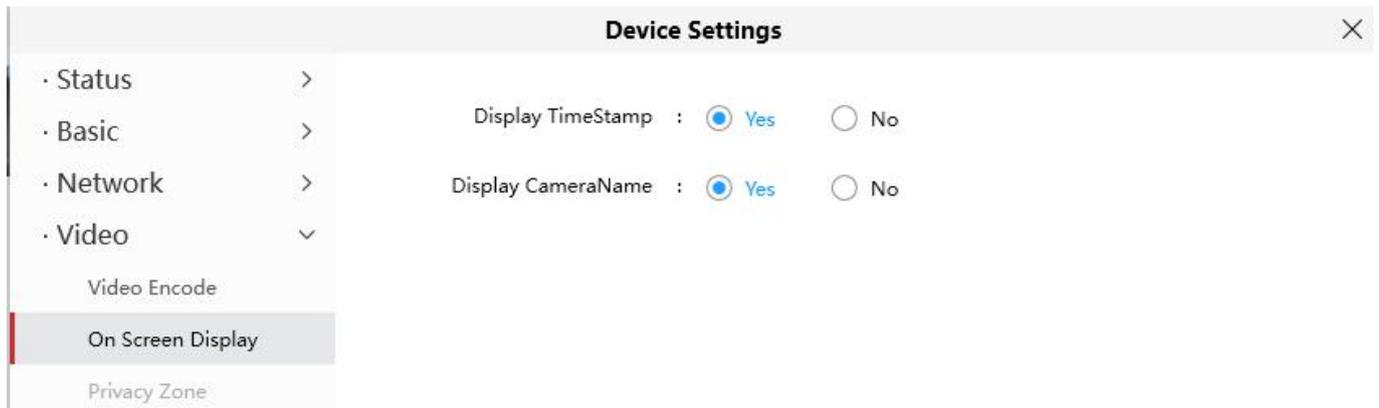
This page is used to add timestamp and device name on the video.

Display Timestamp: There are two options: Yes or NO. Select Yes and you can see the system date on the video,

Display Camera Name: There are two options: Yes or NO. Select Yes and you can see the device name on the video.

4.6.4.3 Snapshot

On this page you can set the snapshot pictures' image quality and the storage path.
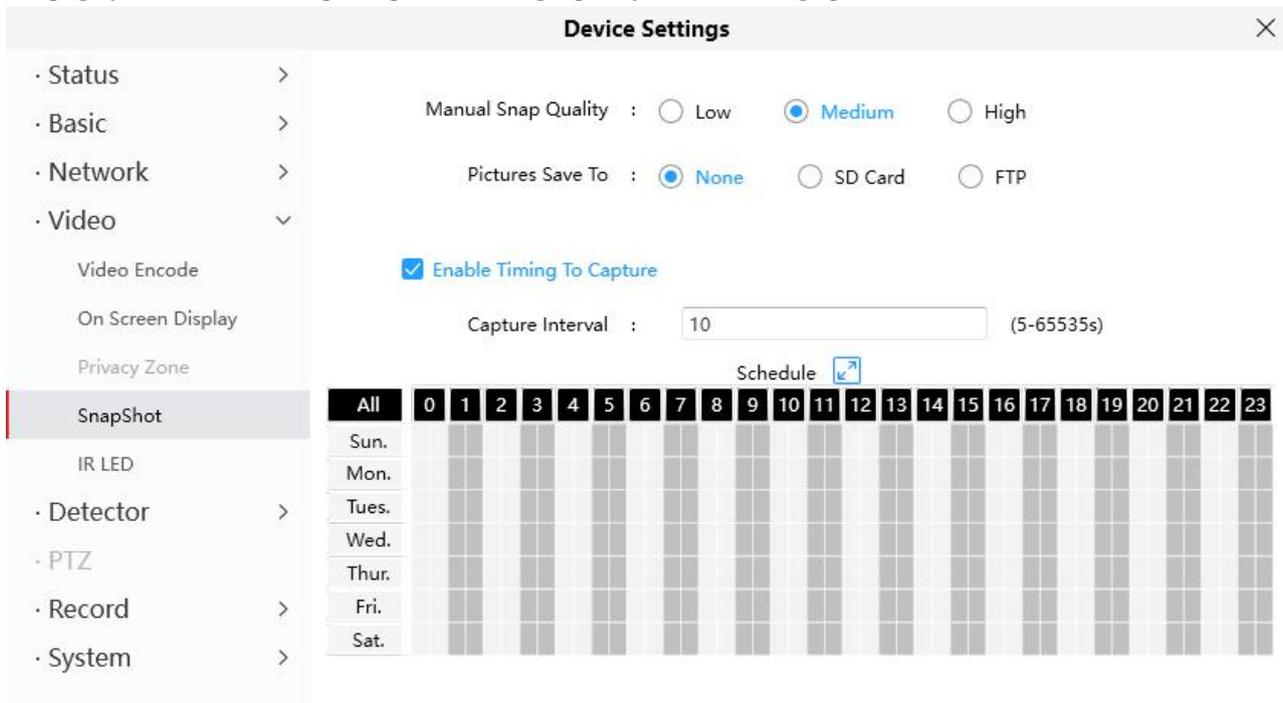
Manual Snap Quality: Low, Middle and High. The higher the quality, the picture will be clearer.

Pictures Save To: FTP. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP automatically. If you select the FTP, you can set the file name which the picture save to.

Enable Timing to Capture

To enable capture interval, follow the steps below:

1 Select **Enable timing to capture**

2 Capture interval: The interval time between two captures.

3 Select the capture time

● Capture anytime

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will capture.

● Specify an capture schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, the camera will capture.

● Press the left mouse and drag it on the time boxes, you can select the serial area,

4 Click **Save** button to take effect.

4.6.4.4 IR LED

There are three modes to set the IR LED lights.

Auto: The default mode is auto. On this mode, IR LED lights will be switched automatically depended on the brightness of enviroment.

Manual: On this mode, you can click **On** option to turn on the IR LED lights, and click **Off** option to turn off the IR LED lights.

Schedule: On this mode, IR LED lights will be turned off during the setting schedule .You can set the period of time during which the infrared lamp is turned off to prevent your baby from being influenced during sleep. You can also turn off the infrared lamp on the video preview page at any time.

4.6.4.5 Color Adjustment

You can adjust the settings to your liking.

4.6.5 Detector

4.6.5.1 Motion Detection

IP Camera supports **Motion Detection Alarm**, when the motion has been detected, it will send emails or upload images to FTP.

To enable motion detection, follow the steps below:

1 Enable Detection Switch

2 Sensitivity---- It supports three modes: Low, Middle and High. The higher the sensitivity, the camera will be more easily alarmed. Select one motion sensitivity.

3 Trigger Interval----The interval time between two motion detections. Here supports 5s/6s/7s/8s/9s/10s/11s/12s/13s/14s/15s. Select one interval time.

4 Snap Interval---- The interval time between two pictures.

5 Select the alarm indicators

There are some alarm indicators:

A Camera Sound

If you select Camera Sound, when the motion has been detected, the people around the Camera will hear beep alarm sound, if the device is connected with the audio output device.

B PC Sound

If you select PC Sound, when the motion has been detected, the people around the PC will hear beep alarm sound.

C Send E-mail

If you want to receive alarm emails when motion is detected, you must select Send E-mail and set Mail Settings first.

D Recording

If you select this checkbox, when the motion has been detected, the camera will recording and load it to the FTP server. Make sure you have set FTP and set FTP as the storage path in Video->Snapshot settings panel .

E Take Snapshot

If you select this checkbox, when the motion has been detected, the camera will snap the live view window as a still picture and load it to the FTP. Make sure you have set the storage path in **Video > Snapshot Settings** panel.

F Push message to the phone

If you select this checkbox, when the motion has been detected, the camera will push the message to the phone which has been connected the camera.

6 Alarm Schedule

1. Alarm anytime when motion is detected

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will alarm.

2. Specify an alarm schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, when something moving in the detection area, the camera will alarm.

3. Press the left mouse and drag it on the time boxes, you can select the serial area,

7 Click Save button to take effect. When the motion is detected during the detection time in the detection area, the camera will alarm and adopt the corresponding alarm indicators.

NOTE: You must set the detection area and detection schedule, or else there is no alarm anywhere and anytime.

4.6.5.2 Sound Detection

When the ambient sound over a certain decibel ,the sound alarm will be triggered.

To enable motion detection, follow the steps below:

1 Enable Detection Switch

2 Sensitivity---- It supports three modes: Low, Middle and High. The higher the sensitivity, the camera will be more easily alarmed. Select one motion sensitivity.

3 Trigger Interval----The interval time between two motion detections. Here supports 5s/6s/7s/8s/9s/10s/11s/12s/13s/14s/15s. Select one interval time.

4 Snap Interval---- The interval time between two pictures.

5 Select the alarm indicators

There are some alarm indicators:

A Camera Sound

If you select Camera Sound, when the sound has been detected, the people around the Camera will hear beep alarm sound, if the device is connected with the audio output device.

B PC Sound

If you select PC Sound, when the sound has been detected, the people around the PC will hear beep alarm sound.

C Send E-mail

If you want to receive alarm emails when motion is detected, you must select Send E-mail and set Mail Settings first.

D Recording

If you select this checkbox, when the sound has been detected, the camera will recording and load it to the FTP server. Make sure you have set FTP and set FTP as the storage path in Video->Snapshot settings panel

.

E Take Snapshot

If you select this checkbox, when the sound has been detected, the camera will snap the live view window as a still picture and load it to the FTP. Make sure you have set the storage path in **Video > Snapshot Settings** panel.

F Push message to the phone

If you select this checkbox, when the sound has been detected, the camera will push the message to the phone which has been connected the camera.

6 Alarm Schedule

4.   Alarm anytime when sound is detected

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will alarm.


5.   Specify an alarm schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, when something sound in the detection area, the camera will alarm.

6. Press the left mouse and drag it on the time boxes, you can select the serial area,

7 Click Save button to take effect. When the sound is detected during the detection time in the detection area, the camera will alarm and adopt the corresponding alarm indicators.

NOTE: You must set the detection area and detection schedule, or else there is no alarm anywhere and anytime.

4.6.6 PTZ

This page will allow you to change the pan/tilt speed and do cruise tracks settings.

4.6.6.1 PTZ Parameters

Pan & Tilt Speed: There are five PT speed types: very fast, fast, normal, slow and very slowly. Select the desired PTZ speed type and click save button.
Start-up Option: Here section will allow you to set the stop position after the camera reboots.

It supports two modes: Go to home position and Go to preset point.

Disable Start-up: When rebooting, the camera will not pan / tilt.

Goto home position: When rebooting, the camera will pa Providing Central Management Software to manage or monitor multi-cameras n / tilt and stops at center.

Go to Preset pointion: Select one preset position and save it. When rebooting, the camera will pan/ tilt and stops at the preset position you have set.

4.6.6.2 Cruise Settings

This section explains how to add/ delete/ alter one cruise track.

Setting the Cruise Mode

Cruise mode: Cruise time.

Cruise time: Select Cruise time from Cruise Mode drop-down, then you can set the Cruise time of the camera.

Click **Save** to take effect.

Manage the Cruise Track

There are two default cruise tracks: Vertical and Horizontal.

Vertical: The camera will rotate from up to down

Horizontal: The camera will rotate form left to right.

Add: Add one cruise track, then click save button.

Delete: Select one cruise track and delete it.

Save: After you modify the **Dwell time**, you should click **Save** button to take effect.

Example

How to do add cruise tracks ?

Firstly, Click Add button and enter a descriptive name to identify the cruise track.

Secondly: On the lower left of the page, you can see all preset points you have added. Select one preset point

and click Add button, you can see the preset point has been added to the cruise track on the cruise track page. You need to add two or more preset points to the cruise track.

Thirdly: Click **Save** button and the cruise track will take effect.

You can add other cruise track as the same method.

For example: I have added three preset points to the "track 1", that means : When I select the "track 1" on the surveillance window, the camera moves as the following track: upright then Right Most last down left.
You can add preset on the left of the surveillance window.

After add the cruise track, back to the surveillance window, click Cruise, here you can see all cruise tracks you have added.

There are other buttons between the Preset points and Cruise track, you can use these buttons to adjust the order of preset points or add/delete one preset points in one cruise track.

> : Select one preset points and add it to the selected cruise track.

< : Select one preset points you have added to one cruise track, click delete.

Attention:
Considering the life time and thermal issue of the motor, it's not recommend to do long-time cruise.

4.6.7 Record

4.6.7.1 Storage Management

On this page you can choose Record Storage Path. The record storage path default is No Path
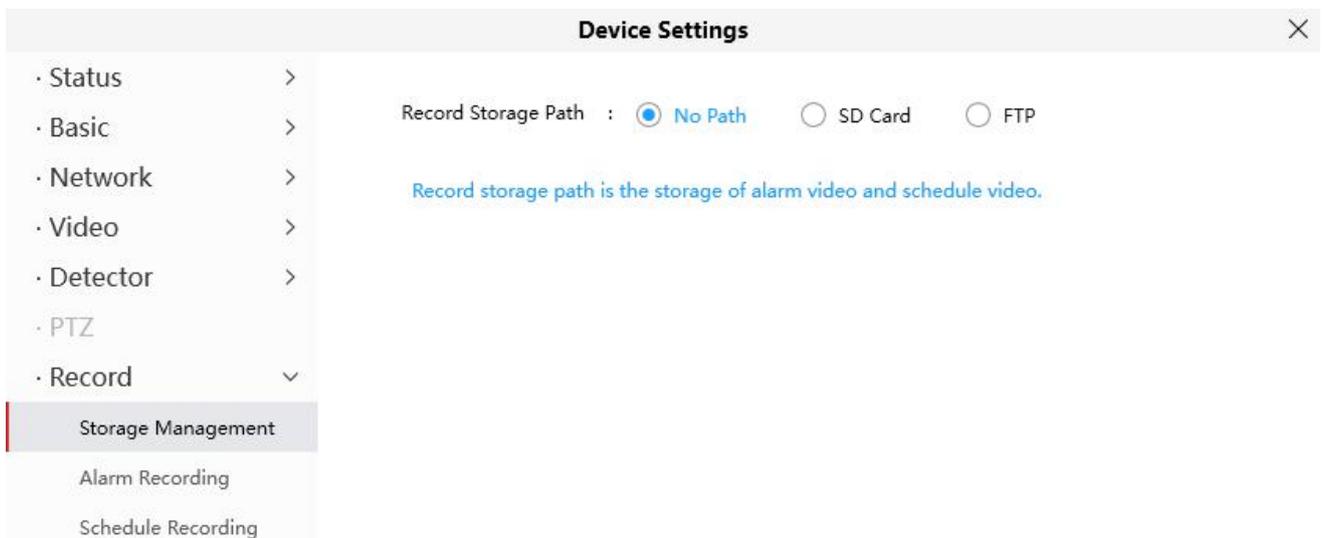
4.6.7.2 Alarm Recording

On this page you can configure the Alarm-recording Time, Enable pre-recorded time and Pre-Record Time.
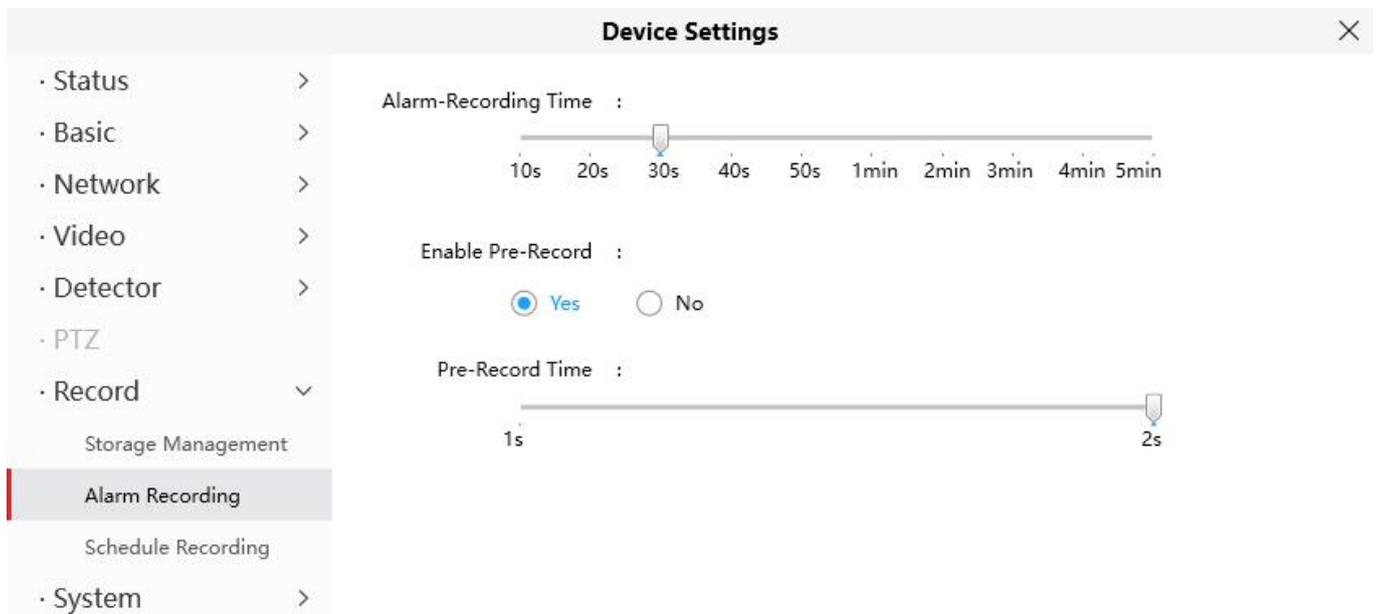
4.6.7.3 Schedule Recording

On the page you can configure the schedule record.
Note: Schedule Recording only supports FTP server. Schedule Recording can only be enabled after the recording path is set Please set the path in the storage management.
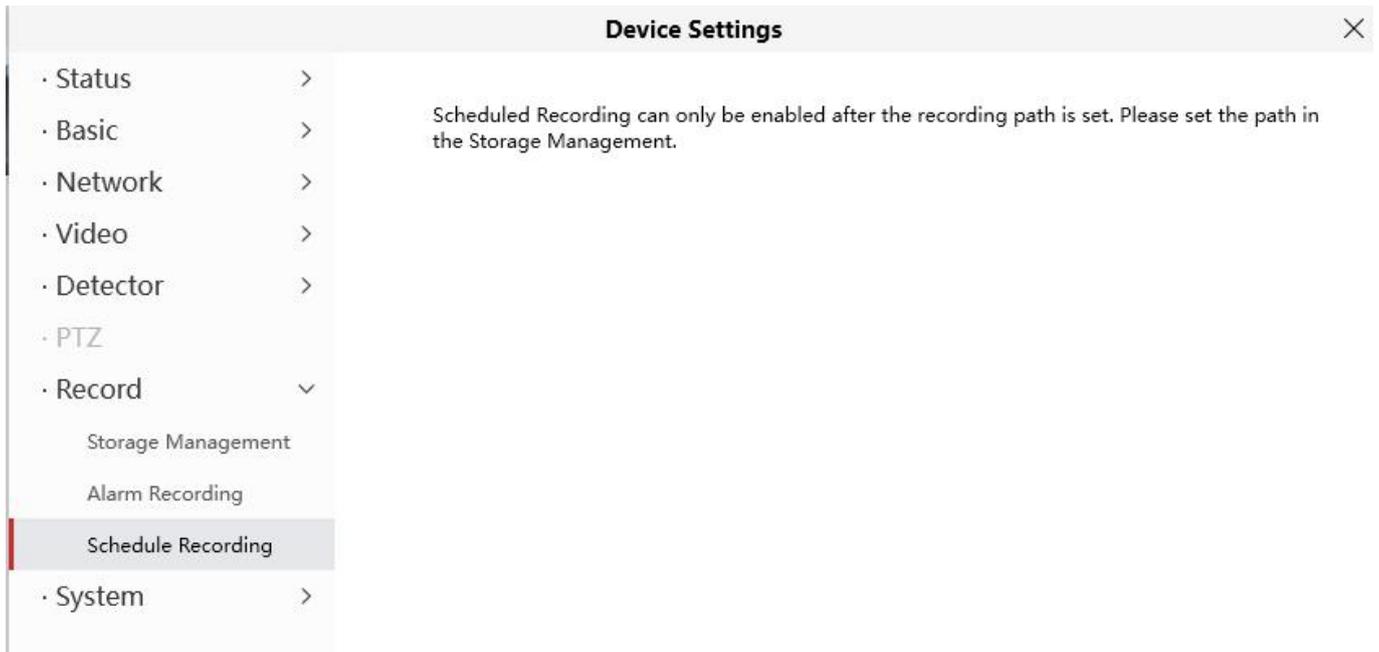
Click **Save** button to take effect.

4.6.8 System

In this panel, you can back up/restore your camera settings, upgrade the firmware to the latest version, restore the camera to default settings and reboot the device.

4.6.8.1 Back-up & Restore

Click Backup to save all the parameters you have set. These parameters will be stored in a bin file for future use.

Click Browse and select the parameters file you have stored, then click Submit to restore the restore the parameters.
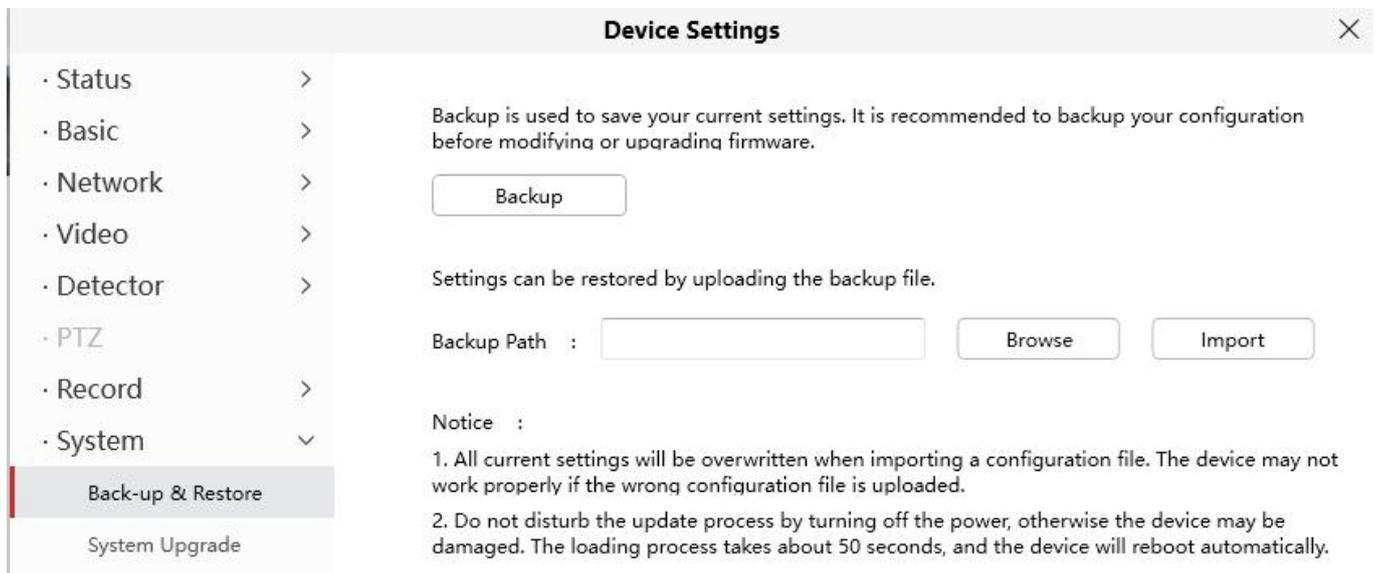
4.6.8.2 System Upgrade

Click **Download the Latest Firmware**, you will see the following screen. And click **Save** to save the firmware on your computer locally.
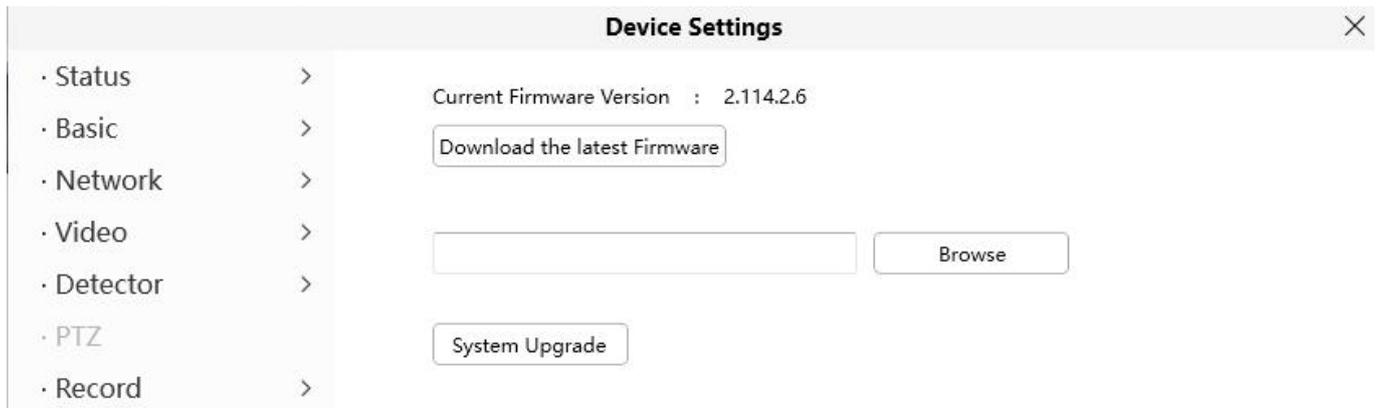
Your current firmware version will be displayed on your screen. You may go to the **Status > Device Information** page to check for the latest firmware versions available.

Click **Browse**, choose the correct bin file and then click **System upgrade**.

Don't shut down the power during upgrade. After upgrading, you can see the upgrade result.

Upgrade Firmware by Equipment Search Tool

Double click the IP Camera Tool shot icon , select the Camera IP that you want to upgrade the firmware.

Then select Upgrade Firmware and enter the username and password, choose the firmware file, and upgrade.

CAUTION: We recommend that you regularly update your camera to the latest available software and firmware versions to help ensure the best experience for your camera.

NOTE:

1) Please ensure you have download the correct firmware package for your camera before upgrading. Read the upgrade documentation (readme.txt file) in the upgrade package before you upgrade.

2) Upon downloading the firmware check the sizes of the .bin files. They must match the size in the readme.txt file. If not, please download the firmware again until the sizes are the same. Your camera will not function correctly if a corrupt .bin file is used.

3) Never shut down the power of the camera during upgrade until the IP camera restart and get connected.

4) After upgrade successfully, please clear the cache of browser, uninstall the old plugin and re-install it, then reset the camera to the default factory settings before using the camera.

4.6.8.3 Patch Installation

Click "**Browse**" to select the correct patch file, and then click "**Install Patch**" to install the patch. Do not turn off the power during it installing. After installing is complete, you will receive a system prompt.
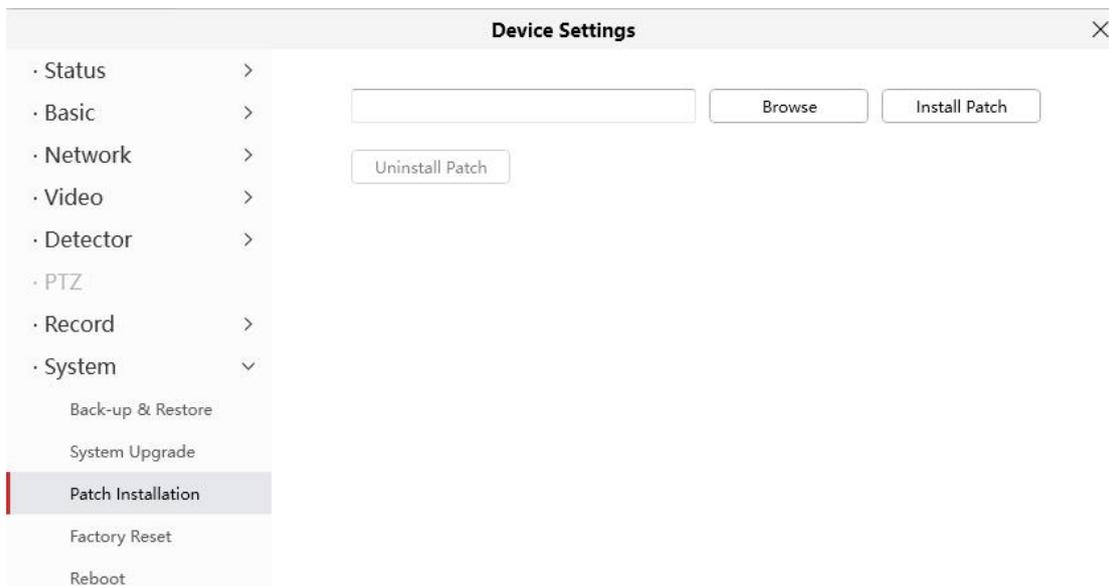
4.6.8.4 Factory Reset

Click **Factory Reset** button and all parameters will return to factory settings if selected.
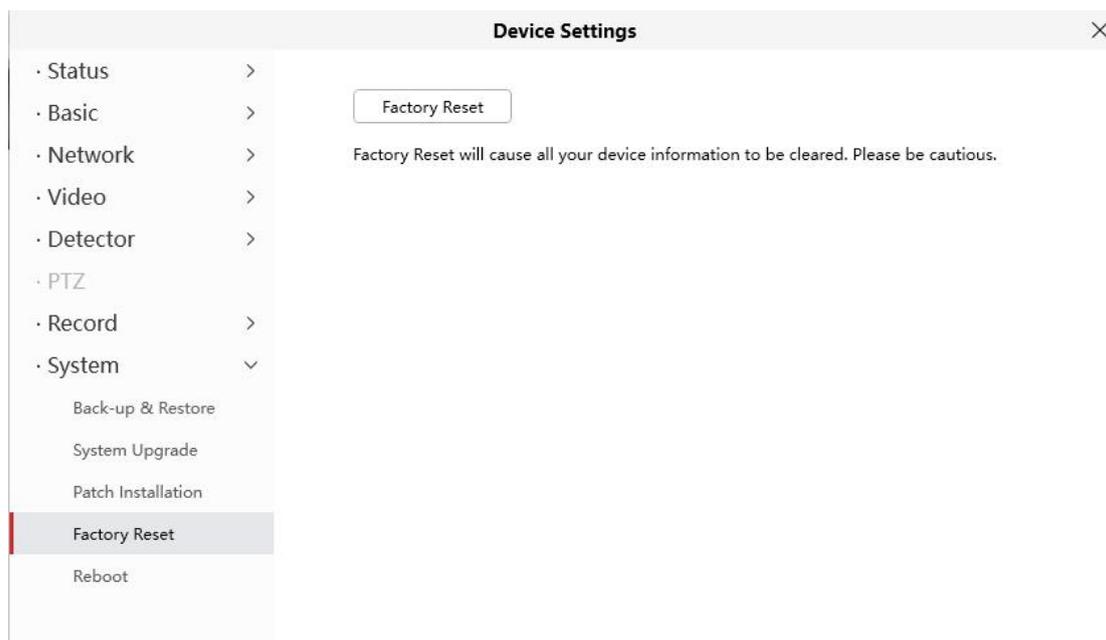
4.6.8.5 Reboot

Click **Reboot** to reboot the camera. This is similar to unplugging the power to the camera.
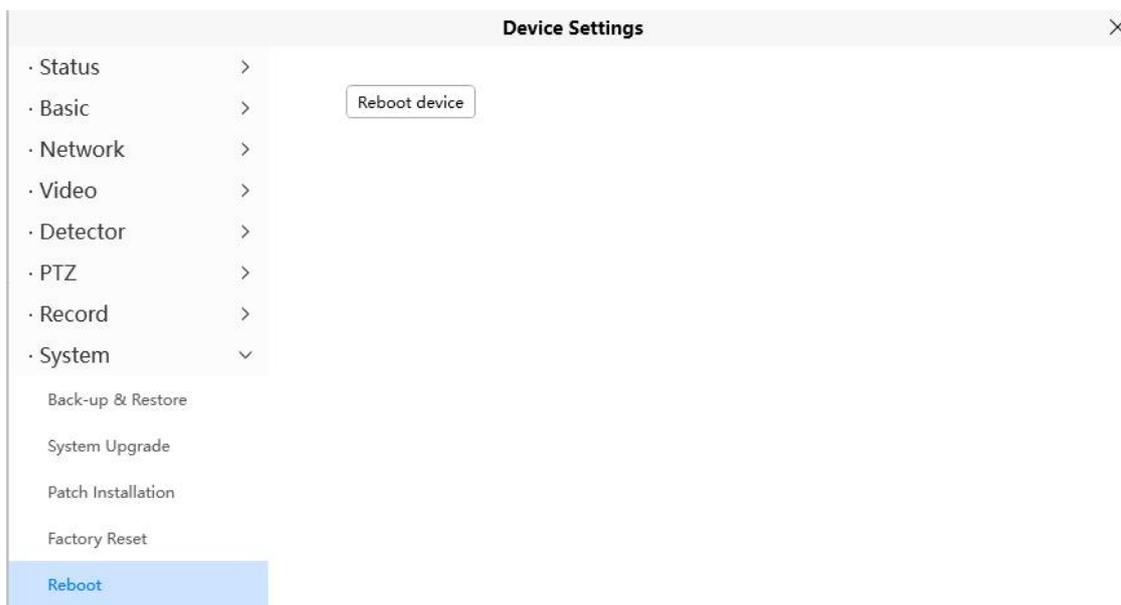
5 Appendix

5.1 Frequently Asked Questions

NOTE: Any questions you would meet, please check Network connections firstly. Check the working status revealed by the indicators on the network server, hub, and exchange. If abnormal, check the network connections.

5.1.1 Unable to connect to router wirelessly

After setup wireless configuration, and input the wireless password correctly, save the settings. Normally, after you disconnect the Ethernet cable, wait for few minutes camera will show up again in Equipment Search Tool (or show up in router's DHCP client list/LAN list) with a new IP address. That indicates your camera's connected wirelessly.

If not, please follow below steps to help camera connect wirelessly.
Step1: Please make sure wireless signal is strong enough to connect with.
(1) Make sure the camera antenna is fixed well;
(2) Best to keep the distance between the camera and router in 2~3 meters while setup;
(3) There's no interference or obstacles from house appliance or walls;

Step2: Please check if your wireless password contains special characters.
Remove special character in SSID and wireless password to have a try.

Step 3: Reboot camera and router to have a check.
If above are all confirmed, power off and on the camera and router may help camera to connect.

Step 4: Please log-in the router and check if the MAC filter feature is enabled.
Camera has wired and wireless MAC, they are different. If your router has wireless MAC filtering turned on, it'll block camera to connect. Please turn it off, or add camera's MACs in the allow list.

Step 5: Please change the wireless channel, and the wireless encryption of router to have a try.
Change channel helps reduce influence from nearby WiFi networks, you can try 3,6,or 11 for example. As for encryption, suggest use WPA2/PSK AES.

Step6: At last reset camera to default, and please try re-configure the wireless settings again.

5.1.2 Forgot camera's user name and password

Camera can be hard reset to default settings, when you forgot camera's login user name and password. Below are the steps:
(1) Keep power on camera;

(2) Press and hold reset button of camera for 30 second, till it reboots. Reset button is on bottom, or back, or end cords of the camera.

(3) Once reset, camera will be restored to default settings. And default username / password will then become admin / random password on the MAC sticker. Please save your MAC sticker.

5.1.3 How to setup alarm recording to SD card

For the cameras that support Micro SD card, we can save alarm recording on SD card and below are the steps to set it up:

Step 1: Setup the Motion Detection Settings

Please go to **Device Settings** > **Detector** > Motion Detection menu.

(1) Click **ON** for the Detection swich.

(2) Choose **Recording** for the Action.

(3) Set the Detection Area

(4) Set a Schedule.

(5) Click **Save** to save the settings.

Note:

1) Please DO NOT forget to set the alarm schedule, the alarm schedule is red.

2) Please make sure your camera time is correct.

3) Please DO NOT forget to set the alarm area, the detected area is covered by the red grids. Or for some models you can setup 3 detection zones in total.

Step 2: Setup the Storage Location

Go to **Device Settings** > **Record** > **Storage Location**, and set the "Recording Location" to "SD card and click **Save**.
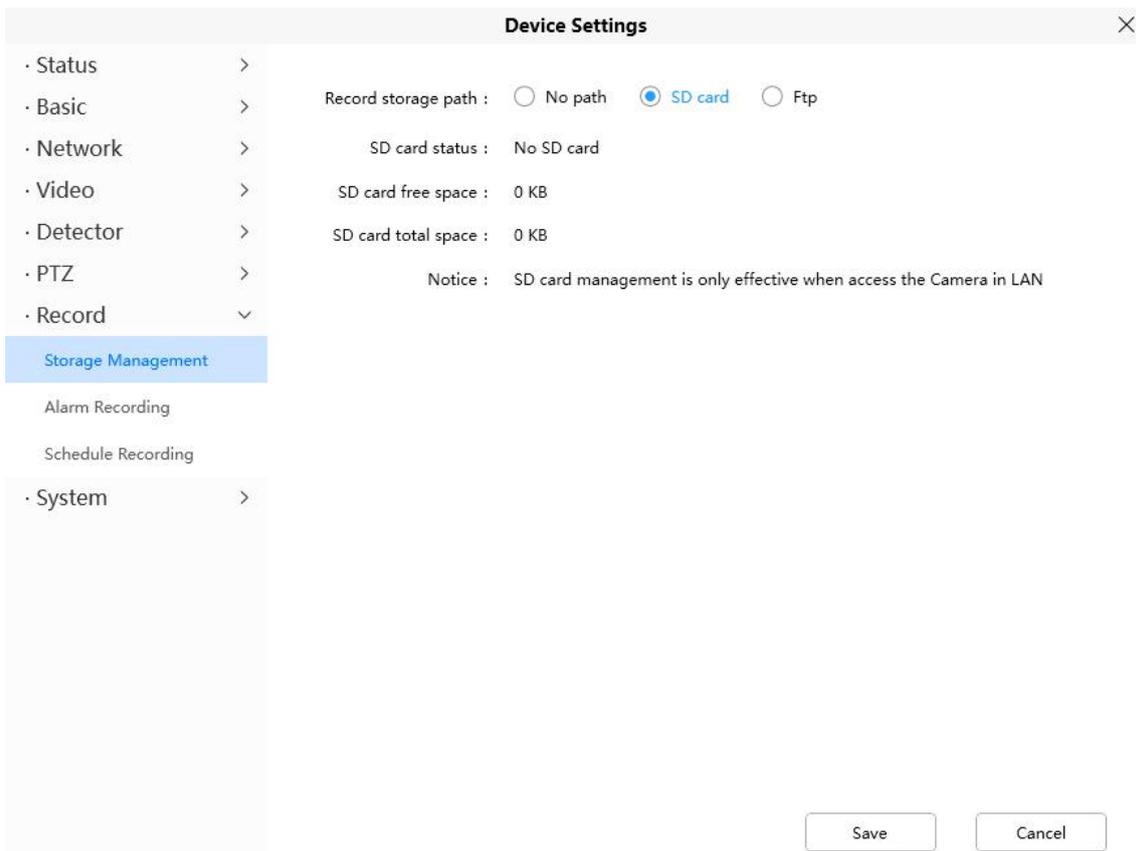
Note:

SD card needs format correctly so it'll be identified by camera, and has enough space for saving the recordings. It's suggested to use FAT32 for 4G~128G SD card.

5.1.4 How to setup alarm Emails

Setup alarm Emails, when camera detects a motion it'll send Email with snapshot to inform about the motion alarm. Steps as below.

Step 1: Setup Mail Settings

Before you set, please make sure that your email for sender enabled SMTP. And get your Email SMTP server, SMTP port, TLS information ready.

Please go to **Device Settings** > **Network** > **Mail** menu to setup your email firstly.
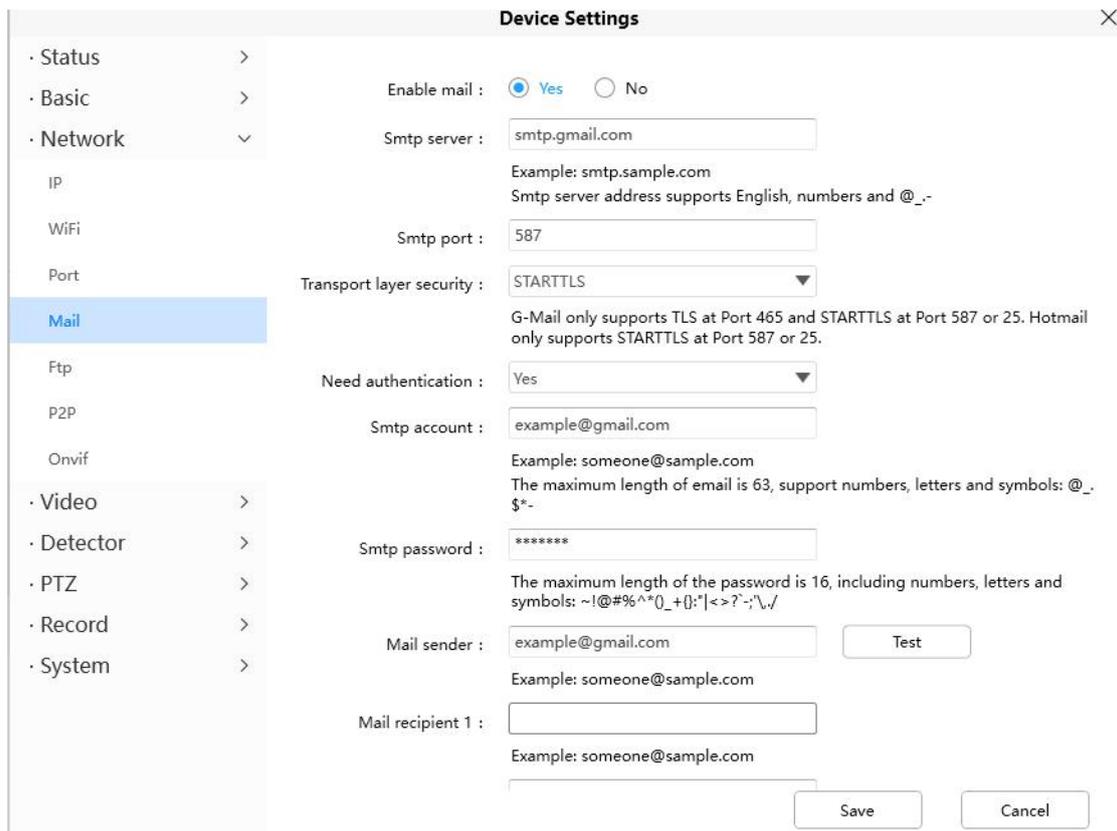
Note:

(1) Please make sure that your sender email supports SMTP;

(2) Please click on **Save** before you click on **Test**;

(3) Make sure the test result is success.

(4) After succeed, you will receive a test email in the mailbox of Sender.

Step 2: Setup the Motion Alarm Settings

Please go to **Device Settings** > **Detector** > **Motion Detection** menu:

1. Click **On**,

2. Choose **Send E-mail** for the alarm action,

3. set your detection area,

4. Set your schedule.
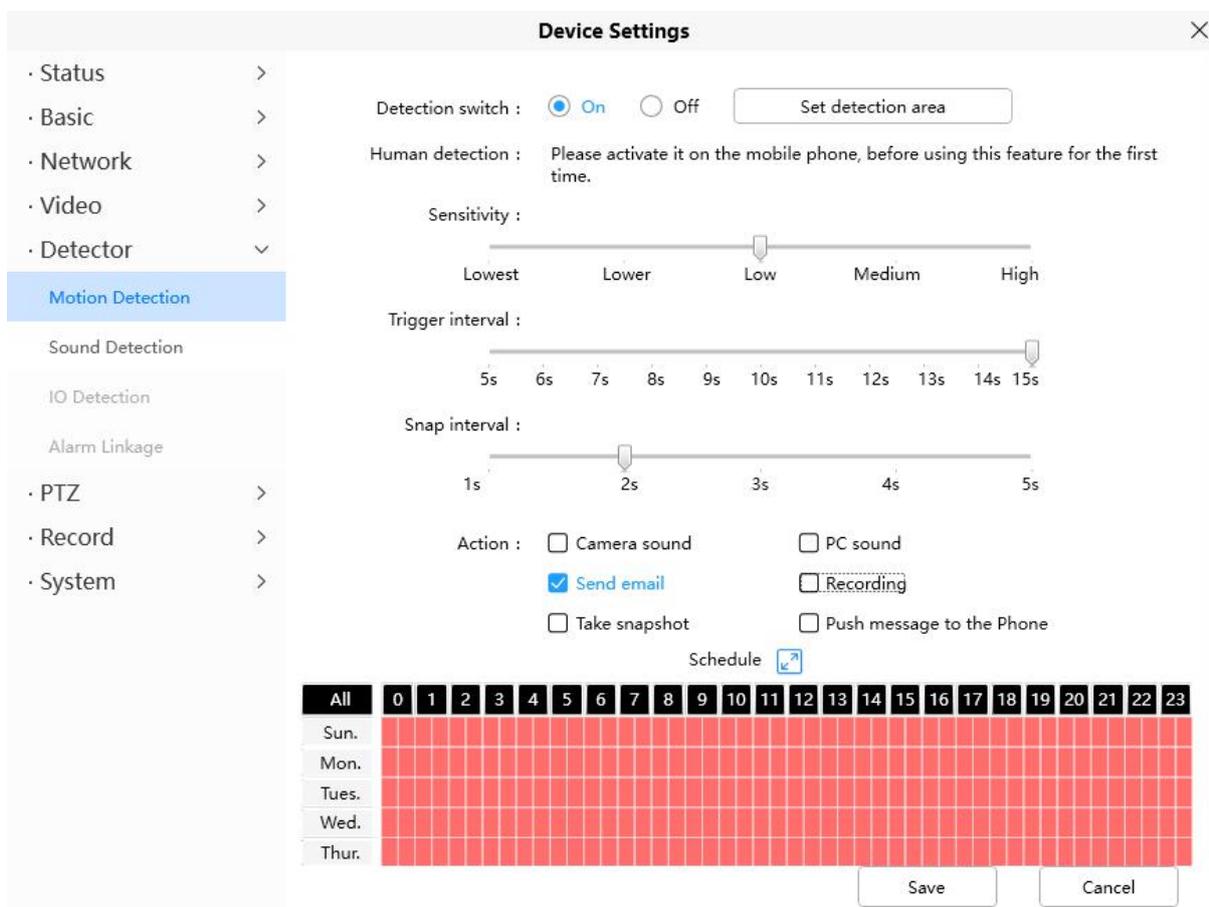
Do not forget to click on **Save** after you finish settings.

If there is motion trigger, camera will alarm and you can receive alarm emails.

Note:

(1) Please DO NOT forget to set the alarm schedule, the alarm schedule is red.

(2) Please make sure your camera time is correct.

(3) Please DO NOT forget to set the alarm area, the detected area is covered by the red grids. Or for some models you can setup 3 detection zones in total.

5.1.5 Unable to connect camera remotely using Foscam app

Foscam P2P cameras allow users to connect camera remotely using Foscam app without extract setup like port forwarding. When it unable to connect remotely, below tips can help app establish the connection:

(1) Update app and camera's firmware to latest version,

(2) Power off the camera then power back on,

(3) Delete camera from app then re-add it back, also lower camera's resolution.

5.1.6 Camera is added by others

When use myfoscam.com cloud or Foscam app, one camera can only be added to one account at the same time. To solve error "This camera has already been added by another account" when add camera to Foscam app or cloud, please send a clear photo of camera's model sticker to Foscam support email support@foscam.com to unbind it.

More FAQs are available here:
https://www.foscam.com/faqs/index.html

5.2 Default Parameters

Default network parameters

IP address: obtain dynamically

Subnet mask: obtain dynamically

Gateway: obtain dynamically

Username and password

Default admin username: admin with a random password

5.3 Specification

Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	2.0MegaPixels
	Min. Illumination	0 Lux (With IR Illuminator)
Lens	Lens Type	Glass Lens
	Focal Length	f: 2.8-12mm
	Aperture	F1.7~F3.0
	Angle of View	Horizontal: 99.6°~30.6° Diagonal : 117.59°~35.1°
Video	Image Compression	H.264
	Image Frame Rate	25fps（1080P）/15fps（720P）/, downward adjustable
	Resolution	1080P(1920x1080),720P(1280 x 720), VGA(640 x 480), QVGA(320 x 240)
	Stream	Dual stream
	Image Adjustment	The hue, brightness, contrast, saturation, sharpness are adjustable
	Flip Image	flip and mirror
	Infrared Mode	Automatic and manual
	IR Range	6pcs Infrared-LEDs, night vision range up to 50 metres
Network	Ethernet	One 10/100Mbps RJ45 port
	Remote Access	P2P
	Data Rate	IEEE802.11b: 11Mbps(Max.); IEEE802.11g: 54Mbps(Max.); IEEE802.11n: 150Mbps(Max.). IEEE802.11ac: 433Mbps(Max.).
	Wireless Standard	2.4G/5G dual band, IEEE802.11b/g/n/ac
	Network Protocol	IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、RTSP、ONVIF
System Requirements	Operating System	Microsoft Windows XP, 7, 8;Mac OS;iOS、Android

	Browser	Microsoft IE8 and above version or compatible browser; Mozilla Firefox, Google Chrome, Apple Safari
Other Features	Motion Detection	Alarm via E-Mail, upload alarm snapshot to FTP
	Sound Detection	Supports sound detection
	User Accounts	Three levels user role
	Firewall	Supports IP Filtering
	AI	AI humen detection
	Firewall	Supports IP Filtering
	Storage	Micro SD card, FTP and local storage
	Intelligent Assistant	Suppports Alexa, Google Assistant
	Reset	Reset button is available
Power	Power Supply	DC 12V / 2.0A
	Power Consumption	20 Watts (Max.)
Physical	Dimension (L * W * H)	180mm * 111mm * 180mm / 5.9in * 3.64in * 5.9in
	Net Weight	1000g g/ 2.20b
Environment	Operating Temperature	-20°C ~ 60° (-4°F ~ 140°F)
	Operating Humidity	20% ~ 85% non-condensing
	Storage Temperature	-20°C ~ 60° (-4°F ~ 140°F)
	Storage Humidity	0% ~ 90% non-condensing
Certification	FCC、CE、RoHS、IP66	

5.4 CE & FCC

Electromagnetic Compatibility (EMC)
FCC Statement

FCC Warning
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: - Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver. -Connect the

equipment into an outlet on a

circuit different from that to which the receiver is connected. -Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

5.5 WARRANTY

FOSCAM values your business and always attempts to provide you the very best of service.

No limited hardware warranty is provided by FOSCAM unless your FOSCAM product ("product") was purchased from an authorized distributor or authorized reseller. Distributors may sell products to resellers who then sell products to end users. No warranty service is provided unless the product is returned to an authorized return center in the region where the product was first shipped by FOSCAM or to the point-of-purchase, which may have regional specific warranty implications.

If you purchase your FOSCAM product from online store, please contact the point-of-purchase and ask for return / replacement / repair service.

Limited Hardware Warranty

FOSCAM products are warranted to be free from manufacturing defects in materials and workmanship starting from the shipping date of FOSCAM.

This limited hardware warranty does not cover:

- Software, including the software added to the products through our factory-integration system, software,etc.
- Usage that is not in accordance with product instructions.
- Failure to follow the product instructions.
- Normal wear and tear.

Return Procedures

- Please read FOSCAM warranty policy & policy of your reseller first before sending items back to point-of-purchase.
- Customer must first contact point-of-purchase to obtain a Return Merchandise Authorization (RMA) number before returning the product. If the product you received is suspected to be defective and the product warranty has not expired, The RMA number will allow your reseller to track your return much easier and help them expedite processing your request.

- After receiving your RMA case number, pack the item(s) very well with the original box and all the original accessories included such as power adapters, brackets, cables, manuals.
- Write your RMA number and the return reason (the problem of the product) on the warranty card along with the complete package to send them back.

Replacement Services
- **If customers ask for replacement service, please contact point-of-purchase and follow their policy.**
- Our technicians will inspect all items returned for replacement requests. If the retuned product is found in working order, we will return the same item received. However customers shall be responsible for all shipping & handling charges incurred for getting the units back to customers.
- If returned products are found defective, we will replace the product and assume the shipping cost for sending back the replacement unit to customers.
- If for any reason, we are unable to provide a replacement of the original returned item(s). You will have a choice for a "Substitute" item at the same equal value.
- We do not provide exchange and replacement due to normal hardware upgrade according the market after 14 days after the product is delivered.
- Our technicians will test the product before send out the replacement, any other demand for more than two times replacement for the same product during replacement limit will be rejected.
- **Replaced products are warranted from the balance of the former warranty period.**

Warranty Forfeiture
- Warranty is void if purchase from unauthorized distributor or reseller.
- **Warranty is void if trade-mark, serial tags, product stickers have been removed, altered or tampered with.**
- Warranty is void for mishandling, improper use, or defacing the product.
- Warranty is void for physical damage, altered, either internally or externally, improper or inadequate packaging when returned for RMA purposes.
- Warranty is void if damage has resulted from accident, dismantle, abuse, or service or modification by someone other than the appointed vendor, souse, fission or the spare part has been over the period of warranty.
- Warranty is void if product is damaged due to improper working environment or operation. (For example, improper temperature, humidity, unusual physical or electrical stress or interference, failure or fluctuation of electrical power, static electricity, using wrong power adapter, etc.)
- Warranty is void if damaged by the use of parts not manufactured or sold by FOSCAM.
- Damage caused by improper installation of third-party products.
- Warranty is void if damaged for irresistible cause, such as earthquake, fire, lightning, flood, etc.
- Product beyond limited warranty.

Shipping Fee
- If products are defective or damaged under normal use or operation in the replacement limit, distributors or resellers are responsible for the shipping cost the product back to customers, customers should assume the shipping cost send the product to the point-of-purchase.
- During replacement limit, if customers ask for replacement due to the product does not fit for customer's personal expectation, customers should responsible for both shipping fee.
- Customers shall be responsible for both shipping fee if their product beyond the replacement limit but still in warranty limit.

Repair Service Out Of Warranty

- FOSCAM provide extra repair service for product that out of warranty, it is chargeable. The total fee contains device cost and service fee. Device cost (including accessories) is the standard uniform price provide by FOSCAM.
- Different region may have different service fee, please contact the point-of-purchase to confirm that before you ask for this service.
- Our technicians will quote the total price after detect the product, If customers refused to repair after the quotation, customers need pay for the test fee, $3.5 / hour. If agree with the quotation, test will be free.
- Repaired product out of warranty will obtains 3-month warranty from the date of the product back to customers.

Limitation of Liability

- FOSCAM is not responsible for other extra warranty or commitment promised by resellers, if your reseller promised some extra commitment or warranty; please ask for written documents to protect your rights and interests.
- FOSCAM does not offer refunds under any circumstances. Please contact the point-of-purchase and follow their refund / return policy.
- FOSCAM shall not be liable under any circumstances for any consequential, incidental, special or exemplary damages arising out of or in any connection with this agreement or the products, including but not limited to lost profits, or any claim based on indemnity or contribution, or the failure of any limited or exclusive remedy to achieve its essential purpose or otherwise. Purchaser's exclusive remedy, as against FOSCAM, shall be the repair or replacement of defective parts. If FOSCAM lists a product on its website specification in error or that is no longer available for any reason, FOSCAM reserves the right to explain it without incurring any liability.

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5.6 Statement

You are advised to be cautious in daily life, keep personal account information carefully, do not share personal account easily. Change passwords of your account and equipment periodically, and upgrade equipment firmware to strengthen security consciousness.

Our company makes no warranty, implied or otherwise, that this product is suitable for any particular purpose or use. You need to abide by the relevant laws and regulations of the use restrictions when using Foscam cameras. Our company takes no responsibility of illegal activities by using our products.

Our company takes no responsibility of the loss by force majeure, such as failure or faults of telecom system or the Internet network, computer viruses, malicious attacks of hackers, information damage or loss, and faults of computer system.

Foscam company does not need to take any responsibility of the special, incidental or corresponding loss by the products of our company or any software provide by our company, including but not limited to operating loss, profit or purpose. The company only takes the responsibility applicable to national and local legal

requirements.

Our company takes no responsibility of the loss caused by the following at ant time:

1) loss of purchases;

2) loss of intangible property damage, such as data, programs;

3) loss of compensation claimed by third-party customers.

Delete images, format the memory card or other data storage devices does not completely remove the original image data. You can restore deleted files from discarded the storage device by commercial software, but which will potentially lead to personal image data used maliciously by others. The privacy of the data security belongs to user responsibility, the company takes no responsibility.

Parts mentioned in this statement should not be understood by the configuration description of the product purchased by the customer, the product configuration must accord to the specific models purchased by the customer.

Without the prior written permission of Foscam company, all the contents of relevant operating instructions manual affiliated to the product must not be reproduced, transmitted, transcribed or stored in a retrieval system, or translated into other languages.

Our company will reserve the right to improve and modify the product and corresponding manuals. The company reserves the right of final interpretation on our products.

6 Obtaining Technical Support

While we hope your experience with the IP camera network camera is enjoyable and easy to use, you may experience some issues or have questions that this User's Guide has not answered.
If you have problem with FOSCAM IP camera, please first contact FOSCAM reseller for solving the problems.
If our reseller cannot provide service, please contact our service department:
support@foscam.com

CE Certificate statement Website: *https://www.foscam.com/company/ce-certificate.html*

Exporter and Importer Information Opened to Public: https://www.foscam.com/company/open-information.html

Manufacturer: Shenzhen Foscam Intelligent Technology Co., Ltd
Addr: Room 901-902, Building 1B, Xingke 1st Street, Shenzhen International Innovation Valley, Nanshan Dist., Shenzhen, 518055, China