User Manual

Model: FI9805E

Table of Contents

1 Overviews 3
1.1 Key Features 3
1.2 PoE (Power over Ethernet) 4
1.3 Read Before Use 4
1.4 Packing Contents 5
1.5 Physical Description 5
2 Surveillance Software GUI 8
2.1 Login Window 8
2.2 Surveillance Window 10
3 Advanced Camera Settings 17
3.1 Device Status 17
3.1.1 Device Information 17
3.1.2 Device Status 18
3.1.3 Session status 18
3.1.4 Log 19
3.2 Basic Settings 20
3.2.1 Camera Name 20
3.2.2 Camera Time 20
3.2.3 Mail Settings 21
3.2.4 User Accounts 23
3.2.5 Multi-Camera 25
3.3 Network 30
3.3.1 IP Configuration 30
3.3.2 PPPoE 32
3.3.3 DDNS 32
3.3.4 UPnP 37
3.3.5 Port 37
3.4 Video 40
3.4.1 Settings 40
3.4.2 On Screen Display 41
3.4.3 Snapshot Settings 43
3.5 Alarm 44
3.5.1 Motion Detection 44
3.5.2 I/O Detection 44
3.6 Record 50
3.7 PTZ 50
3.7.1 Pan/Tilt Speed 50

3.7.2 RS485 configuration....50
3.8 Path Settings....51
3.9 Firewall....53
3.10 System....54
3.10.1 Back up& Restore settings....54
3.10.2 System upgrade....54
3.10.3 Factory Reset....56
3.10.4 Reboot System....56
4 Phone APPs....57
4.1 APP for Android cell phones....57
4.2 APP for iPhones....65
5 APPENDIX....60
5.1 Frequently Asked Questions....72
5.2 Default Parameters....78
5.3 Specification....78
6 OBTAINING TECHNICAL SUPPORT....80

1 Overviews

FOSCAM FI9805E is an integrated PoE Network Camera solution with a color CMOS sensor enabling viewing resolution 1280*720. 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.

FI9805E supports the industry-standard H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth. This camera supports IR-CUT, when light conditions turns poor, the IR cut filter will be automatically removed to accept IR illumination. Meanwhile, the camera switches itself automatically from color to black and white, assuring optimal image quality at all times.

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

More advanced features including two-way audio, pan/ tilt controlled by RS485 protocol, and I/O alarm for external alarm. It is a best solution for outdoor surveillance applications such as courtyards, supermarket, and school. Controlling the IPCAM and managing images are simplified by using the provided web interface across the network.

FOSCAM provides Phone APPs for Android and iPhone users, please search “Foscam ip cam viewer” and install it through APP Store, then you can view your camera directly as a computer.

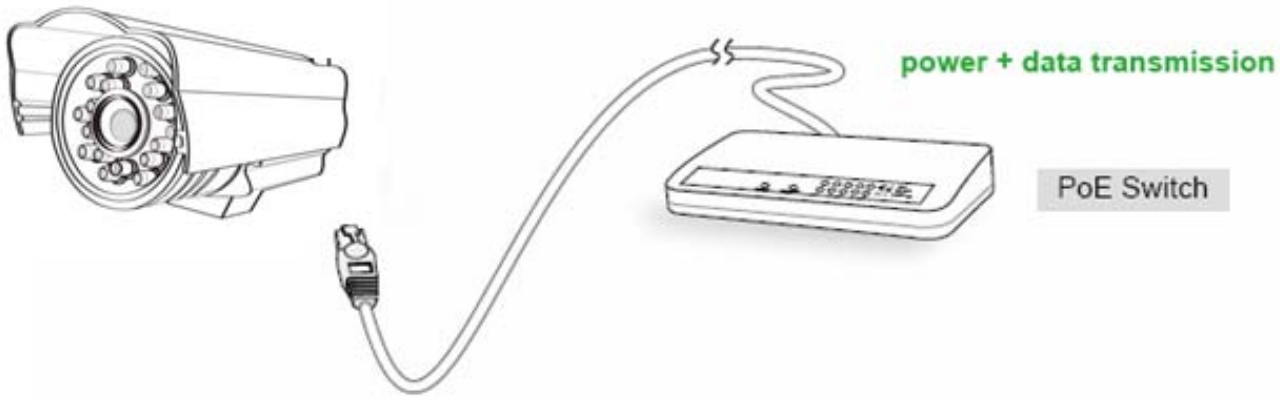
1.1 Key Features

- Standard H.264 video compression algorithm to satisfy the transmission of high definition video in narrow bandwidth network
- High Definition Color CMOS Sensor
- 1.0 Mega-Pixel
- Supports IE/Firefox/Google/Safari browser or any other standard browsers
- Supports IR_CUT and the filter change automatically
- PoE compliant with PoE standards IEEE 802.3af
- Two-way audio
- Provides RS485, various decoder protocols can be built in
- IR night vision (Range:30m)
- Supports external input/output alarm
- Motion and I/O detection activates alarm
- Supports image snapshot
- Embedded FOSCAM DDNS(dynamic domain name service) Service
- 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 Third Party Domain name
- Supports multiple network protocols: HTTP /TCP /IP /UDP /FTP /DHCP /DDNS / UPNP
- Providing Phone APPs for Android and iPhone users

1.2 PoE (Power over Ethernet)

The Network Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable. Such as the following picture: connect the Network Camera to a PoE-enabled router/ switch via Ethernet cable.



1.3 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 Installation Guide to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

1.4 Packing Contents

● IPCAM×1	● CD×1
● DC Power Supply×1	● Warranty Card×1
● Mounting bracket×1(option)	
● Network Cable×1	

1.5 Physical Description

Front Panel

Figure 1.1

1 LENS: CMOS sensor with fixed focus lens

2 Infrared LED: 36 IR LEDs

Interface

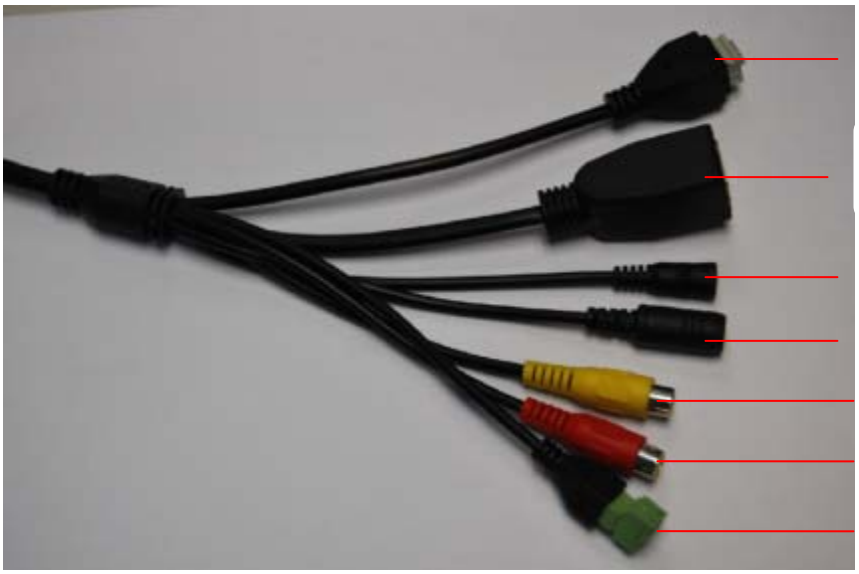


Figure 1.2

1) I/O alarm terminal block

This network camera provides a I/O alarm terminal block which is used to connect to external input / output device.

The pin(there are four number in the terminal block from no. 1 to no. 4) definitions are descripted below:

1– input
2- input
3- output
4- output

This camera supports I/O alarm, you can go to **Settings – Alarm – I/O** page to configure it.

2）LAN

10/100M adaptive Ethernet interface. Through this interface, IPCAM can be connected with various network devices, such as hub, router, etc.

3) 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.

4）Power Interface

Connect the external power adapter, request for 12V/2A power.

5) Audio input interface:

The jack is used to plug external input device such as sound pick up device directly. Here microphone cannot directly insert to the interface, it must connect to commutator first.

6) Audio output interface:

The jack is used to plug external output device such as loud speaker directly. Here microphone cannot directly insert to the interface, it must connect to commutator first.

7) 485 Cradle head interface

This camera supports the standard 485 cradle head protocol. Please configure the RS485 protocol corresponding information first (go to **Settings- PTZ – RS485 Configuration** page and do settings), or else the cradle head may cannot work.

.

Bottom View

There are up to three labels located at the bottom of the camera; this is an important feature of original Foscam cameras. If your camera does not have labels as shown in Figure 1.3, it may be a clone. Cloned Foscam cameras can not use original firmware and are not eligible for warranty or technical services.

Figure 1.3

2 Surveillance Software GUI

Please refer to the Quick Installation Guide if you install the camera at first time. After finishing quick installation, you can take time to learn the operation of the software.

2.1 Login Window

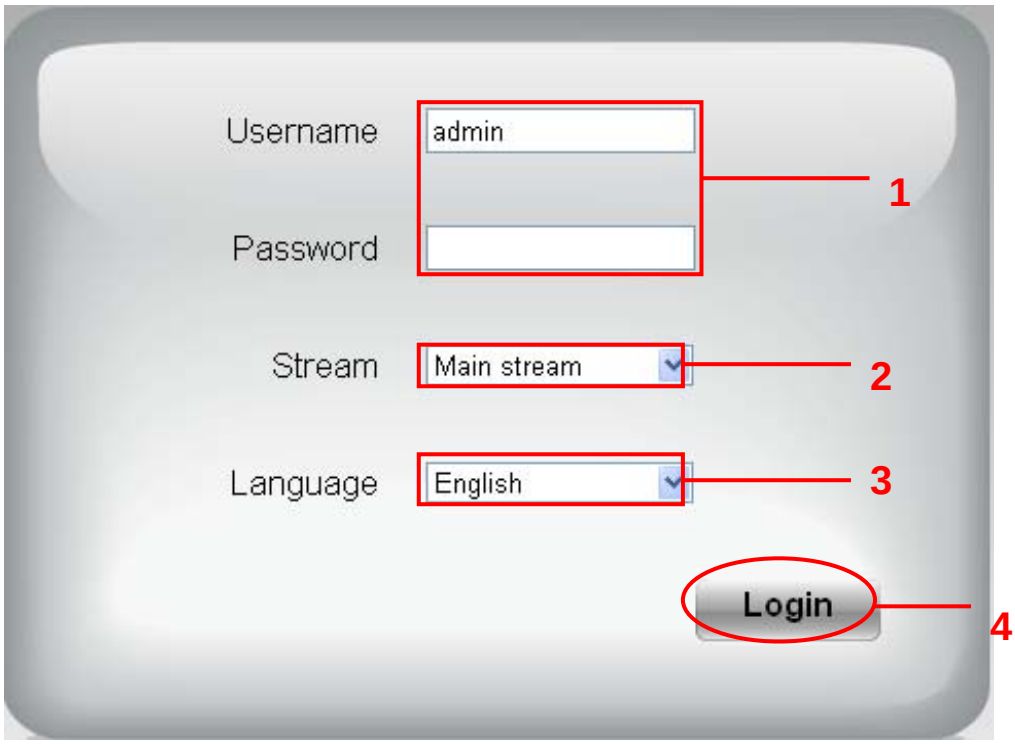


Figure 2.1

Please check the login window above, it was divided to 54sections from no. 1 to 4.

Section1 Enter the User name and password

The default administrator username is admin with no password, please reset the password at first using and prevent unauthorized users login the camera (read chapter 3.2.4 about how to change).

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 badly you'd better select Sub Stream and the video will be more fluency.

Section3 Select the language

You can select the language you need via click on the language dropdown list to switch.

Section4 Login the camera

Click Login button and you will see the surveillance windows.

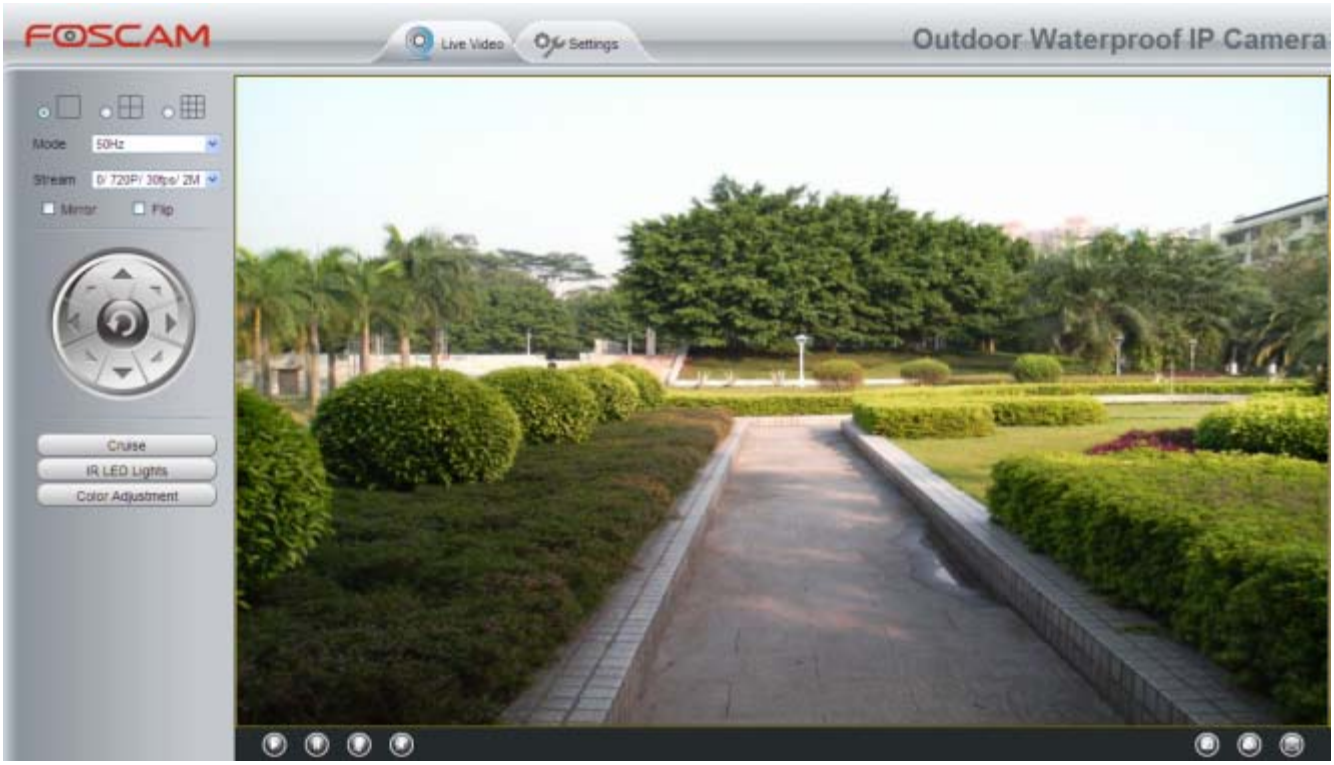


Figure 2.2

2.2 Surveillance Window

Figure 2.3

Section1 FOSCAM Logo/ LiveVideo / Settings buttons

FOSCAM: FOSCAM LOGO

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

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

Section2 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 (read chapter 3.2.5).

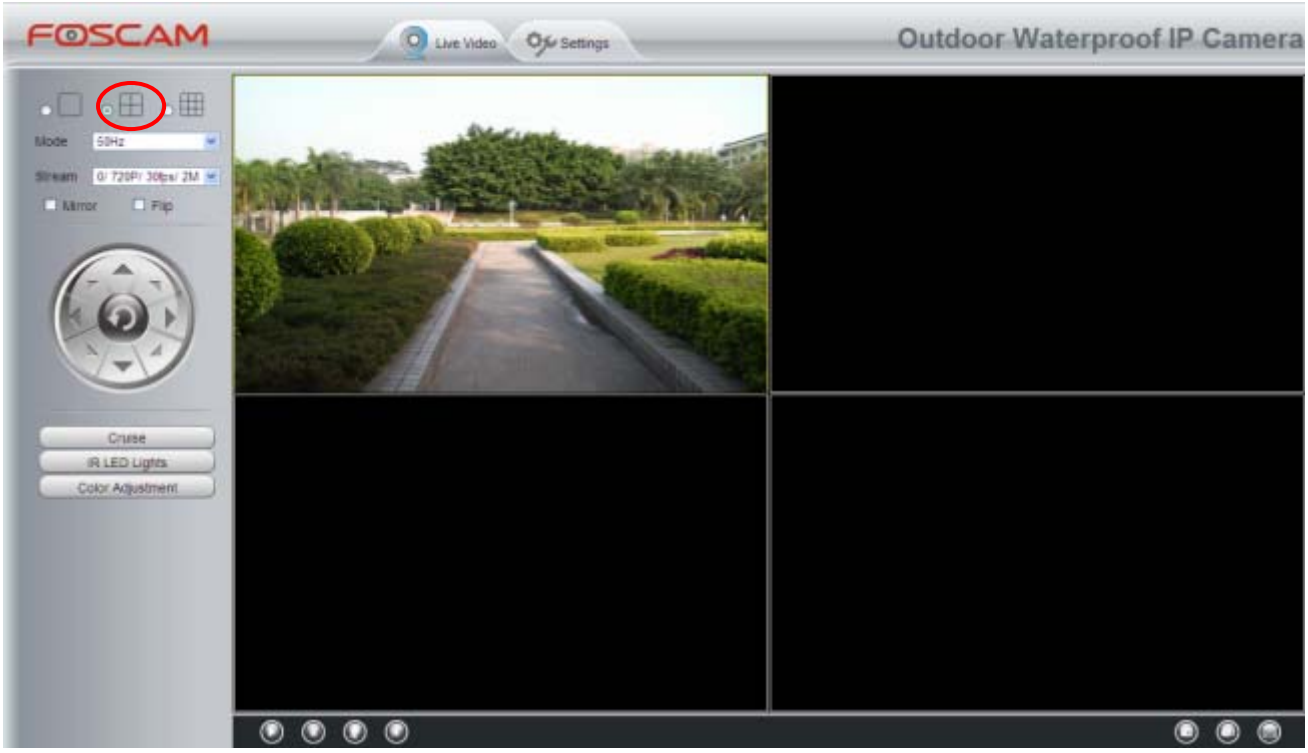


Figure 2.4

Section3 Mode/ Stream / Mirror/ Flip buttons

Mode

1) 50HZ ---------Indoor surveillance (Region: Europe, China)
2) 60HZ ---------Indoor surveillance (Region: USA, Canada)
3) Outdoor-------Outdoor surveillance (Region: All over the world)

There are three options within the menu of Mode: 50HZ, 60HZ and Outdoor. It depends on the frequency of the electricity and surveillance model (indoors & outdoor). Please choose outdoor mode, when the camera was installed outside.

Stream

The default Stream supports four modes: 0/720P/30fps/2M, 1/VGA/25fps/2M, 2/VGA/ 15fps/ 1M and 3/ VGA/10fps/200 The format of the stream type is **Stream type no. / Resolution / Maximum frame rate/ Bit rate**

1) Stream type no. : The number is used to identify the stream type.

2) 720P/ VGA

There are two resolutions, the bigger one is 720P, and the smaller one (VGA) is 640x480 pixels. 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

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.

4) Bit rate

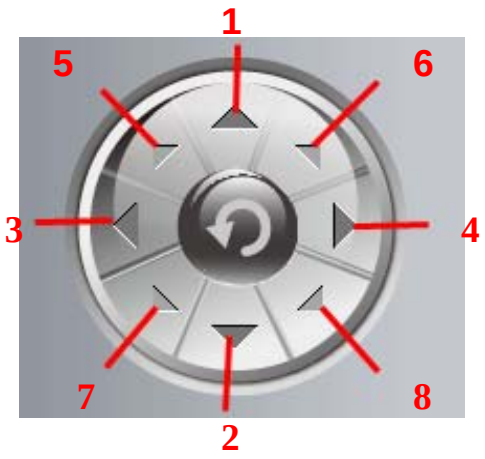
Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video cannot play well.

You can reset the stream type on **Settings-> Video-> Settings** panel (chapter 3.4.1). After changing, please re-login the camera and you can see the modification.

Mirror/ Flip

You can flip the image by enabling Flip button, or mirror the image by enabling Mirror button.

Section4 Pan/Tilt Control



1------Up control button, 2------Down control button,

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

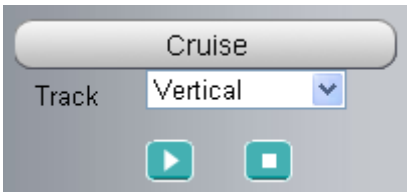
5----- Up-Left control button 6----- Up-Right control button

7----- Down-Left control button 8----- Down-Right control button

Click this button and go to center

Note: Make sure the camera has connected with the outer cradle head and do RS485 protocol successfully (**Settings- PTZ- RS485 Configuration panel**) , or else the pan/ tilt doesn't work.

Section5 Cruise



Here only support two cruise tracks: 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.

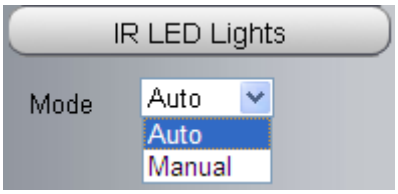
How to do cruise?

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.

Section6 IR LED Lights



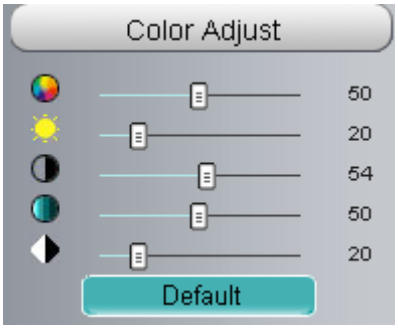
Click IR LED Lights and there are two modes to adjust the infrared led: Auto and Manual .

Auto: Select it and the camera will adjust the infra led (on or off) automatically.

Manual: Select it and adjust the infra led manually (on or off).

Section7 Image quality settings

In this page, you can tune Hue, Brightness, Contrast, Saturation, and Sharpness to get higher quality.



Section8 OSD(On screen display)

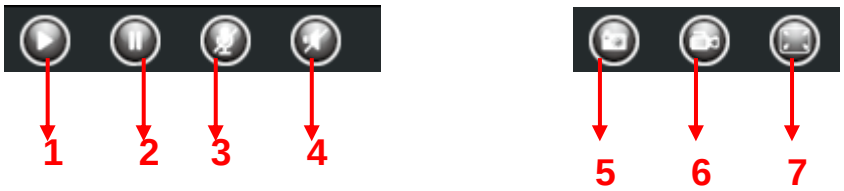
If you have added time and camera name in the video, you can see it in the live window.

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.

Section9 Play/Stop/ Talk/Audio/ 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, Click the icon again and stop audio.

5----- 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.

6----- 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.

7------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 adjust the screen ration, full screen and Zoom up.

Figure 2.6

Keep ration: Select it and the camera will adjust the size of live window based on the computer monitor automatically.

Sometimes there is a black border around the video (Figure 2.7), please select **Keep ration** to get a better visual quality (Figure2.3).

Figure 2.7

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.

Figure 2.8

NOTE:

1 Please make sure the camera has connected with outer cradle head and configured RS485 protocol successfully, or else Screen PTZ doesn't work.

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

3 Advanced Camera Settings

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

3.1 Device Status

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

3.1.1 Device Information

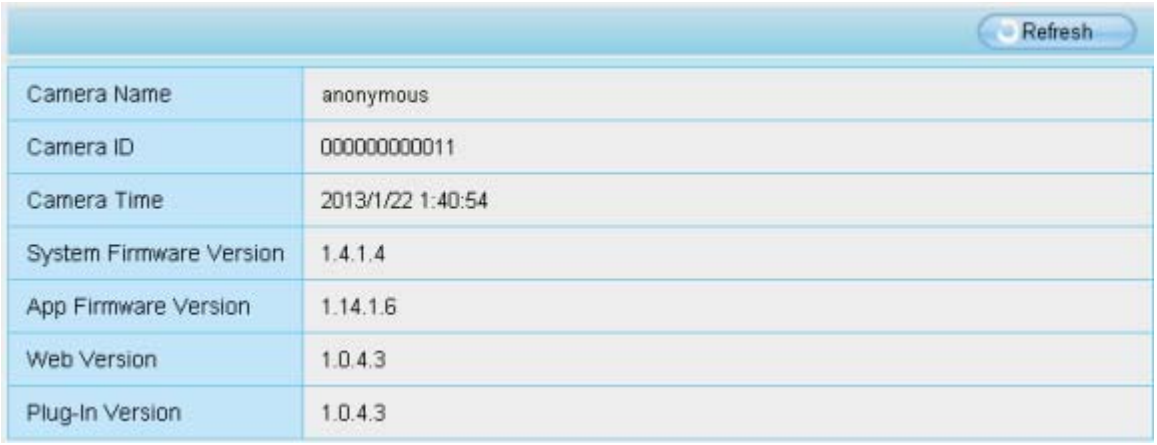


Figure 3.1

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 008414350787, 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.
App Firmware version: Display the application firmware version of your camera.
Web version: Display the web UI version of your camera
Plug-in version: Display the plug-in version of your camera

3.1.2 Device Status

On this page you can see device status such as Alarm status, NTP/DDNS status, WIFI status and so on.

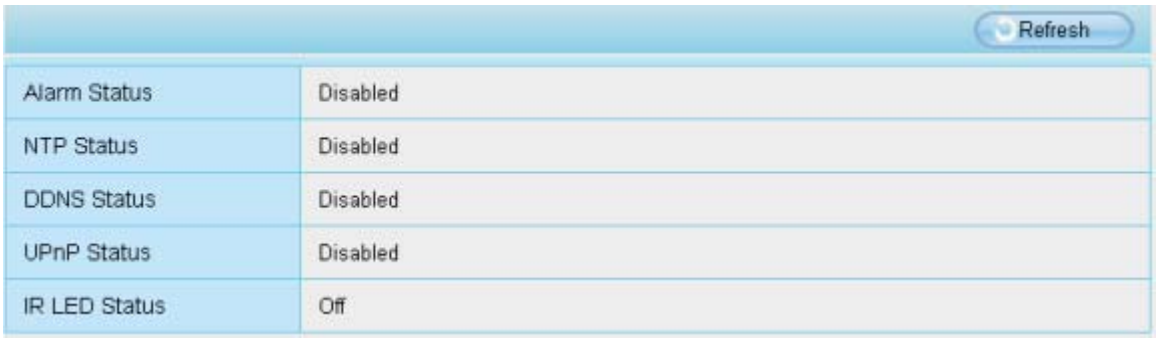


Figure 3.2

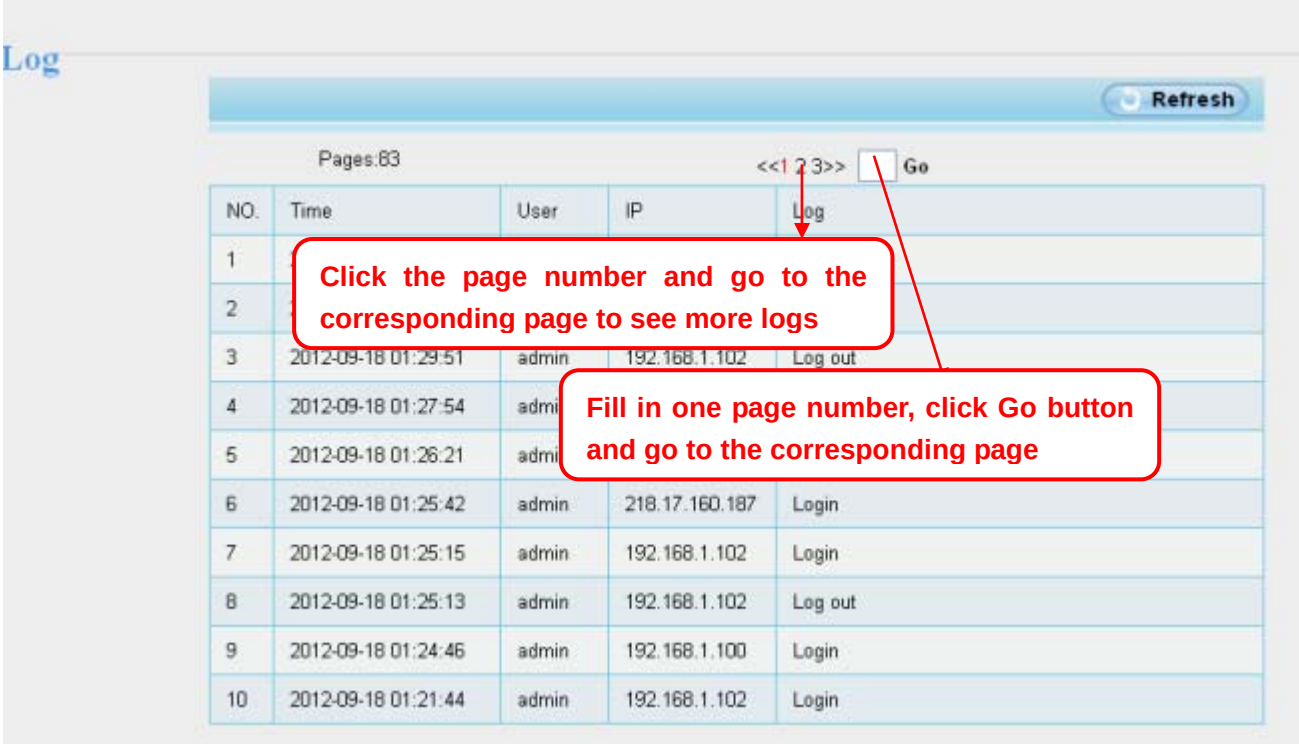
3.1.3 Session status

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

Figure 3.3

3.1.4 Log

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



NO.	Time	User	IP	Log
1				
2				
3	2012-09-18 01:29:51	admin	192.168.1.102	Log out
4	2012-09-18 01:27:54	admi		
5	2012-09-18 01:26:21	admi		
6	2012-09-18 01:25:42	admin	218.17.160.187	Login
7	2012-09-18 01:25:15	admin	192.168.1.102	Login
8	2012-09-18 01:25:13	admin	192.168.1.102	Log out
9	2012-09-18 01:24:46	admin	192.168.1.100	Login
10	2012-09-18 01:21:44	admin	192.168.1.102	Login

Figure 3.4

3.2 Basic Settings

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

3.2.1 Camera Name

Default alias is Anonymous. 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.

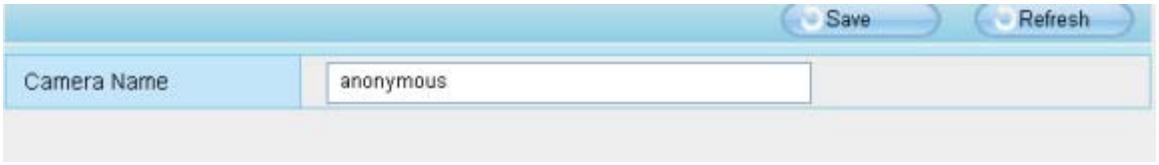


Figure 3.5

3.2.2 Camera Time

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

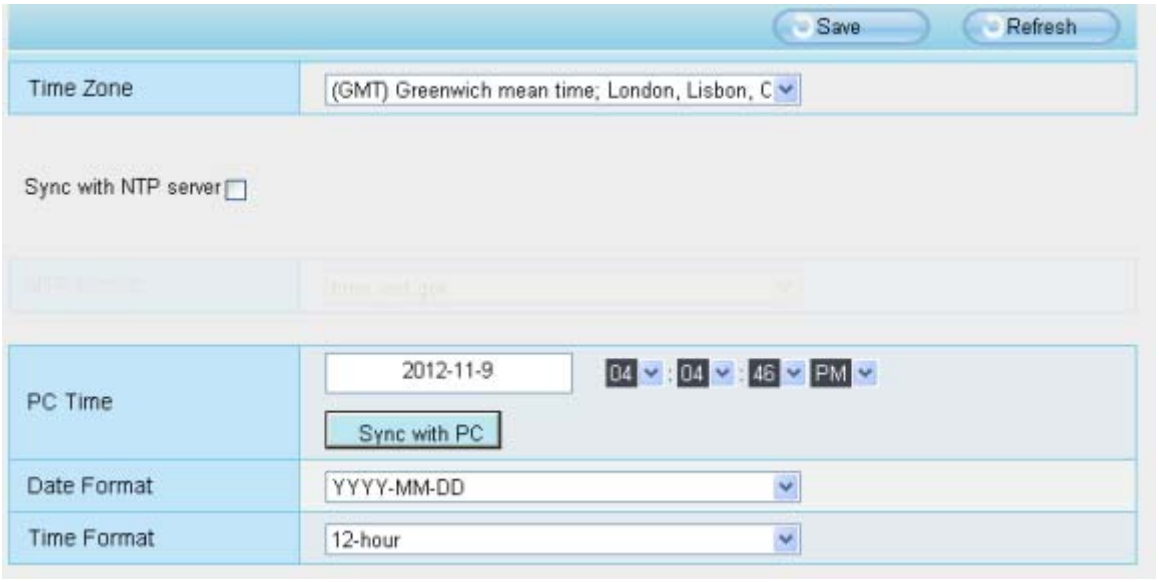


Figure 3.6

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.

Sync with PC: 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.

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

3.2.3 Mail Settings

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

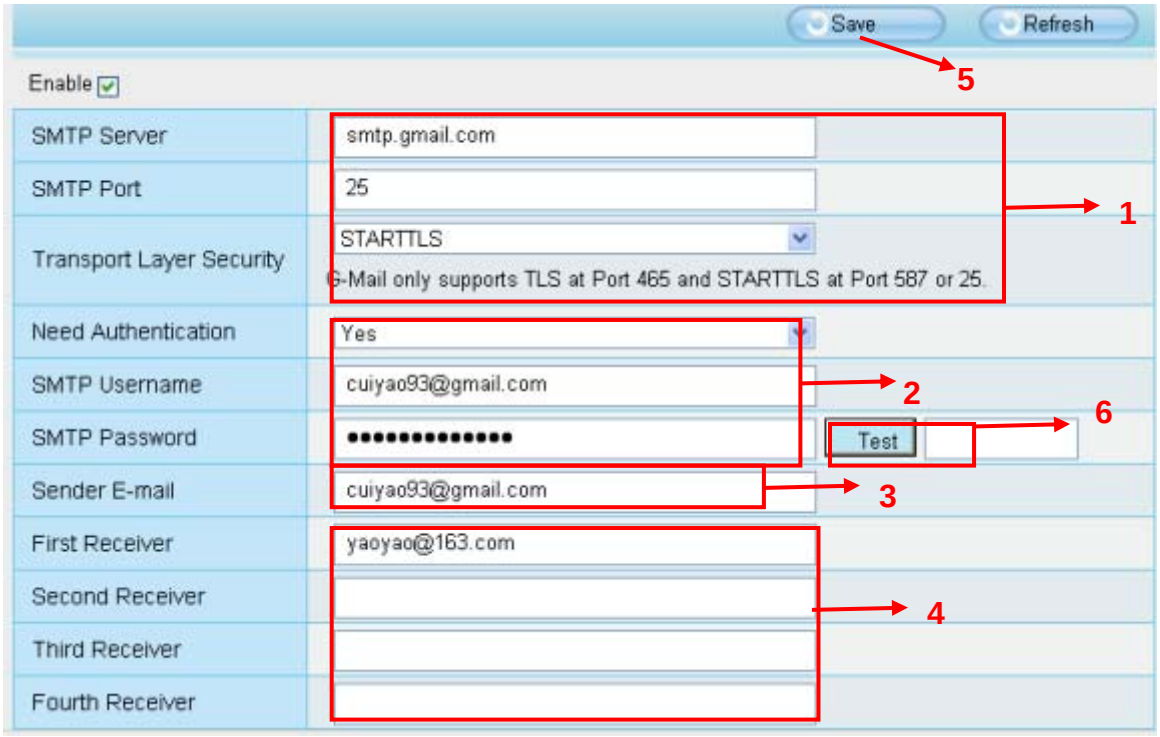


Figure 3.7

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.

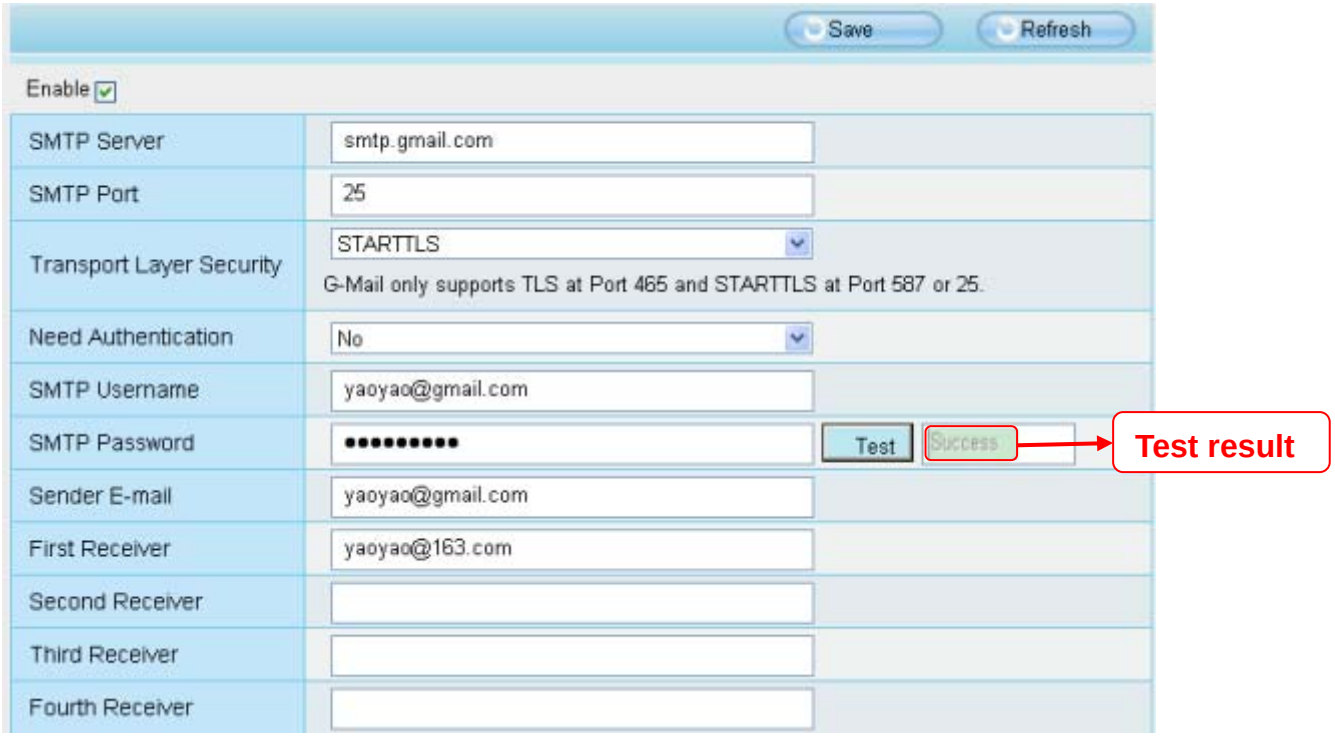


Figure 3.8

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

Figure 3.9

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

3.2.4 User Accounts

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

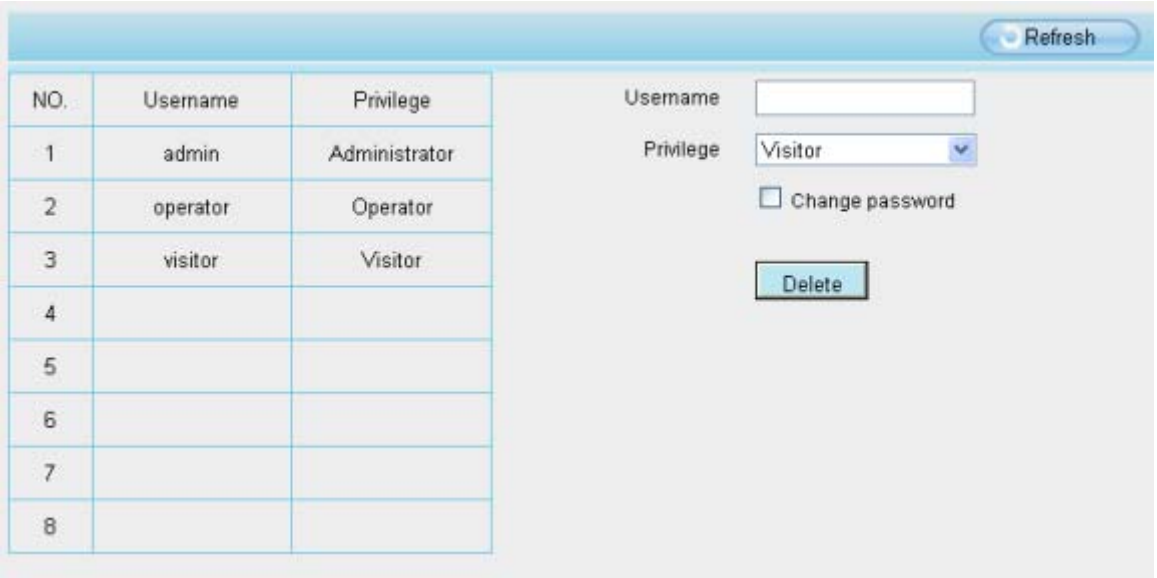


Figure 3.10

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.

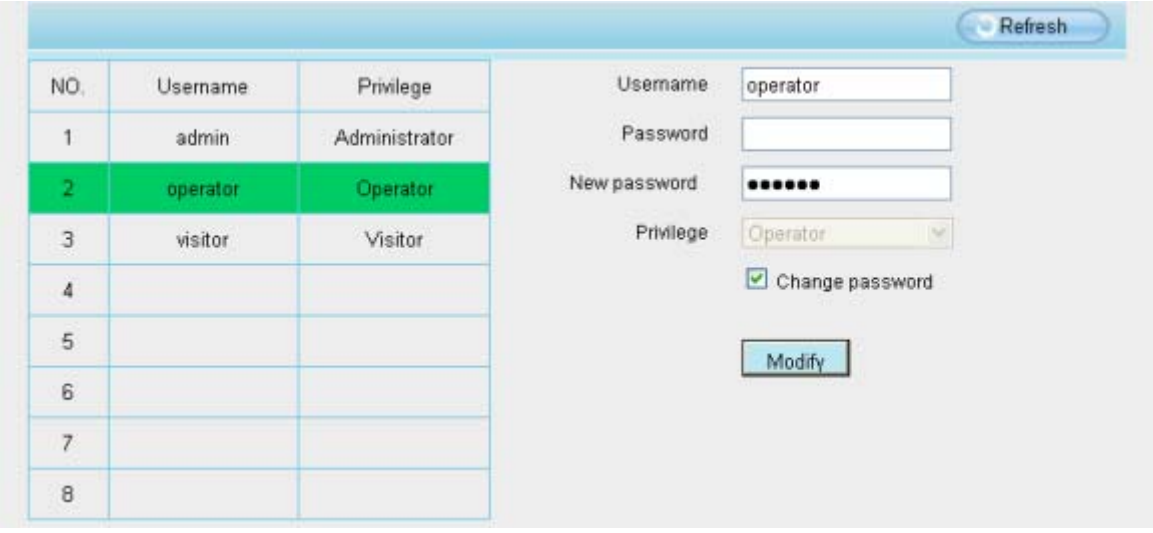


Figure 3.11

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.

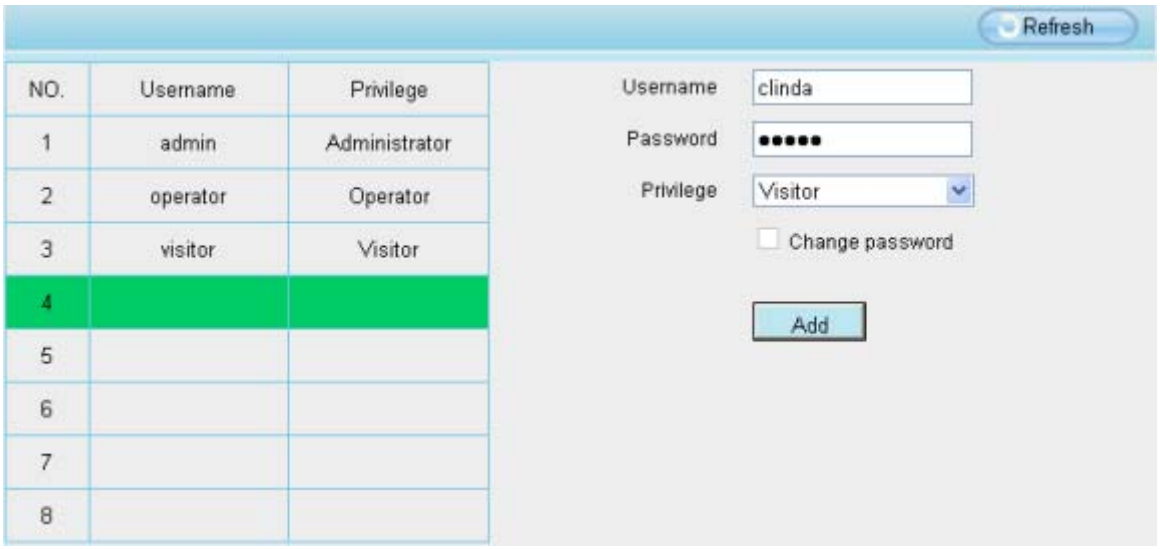


Figure 3.12

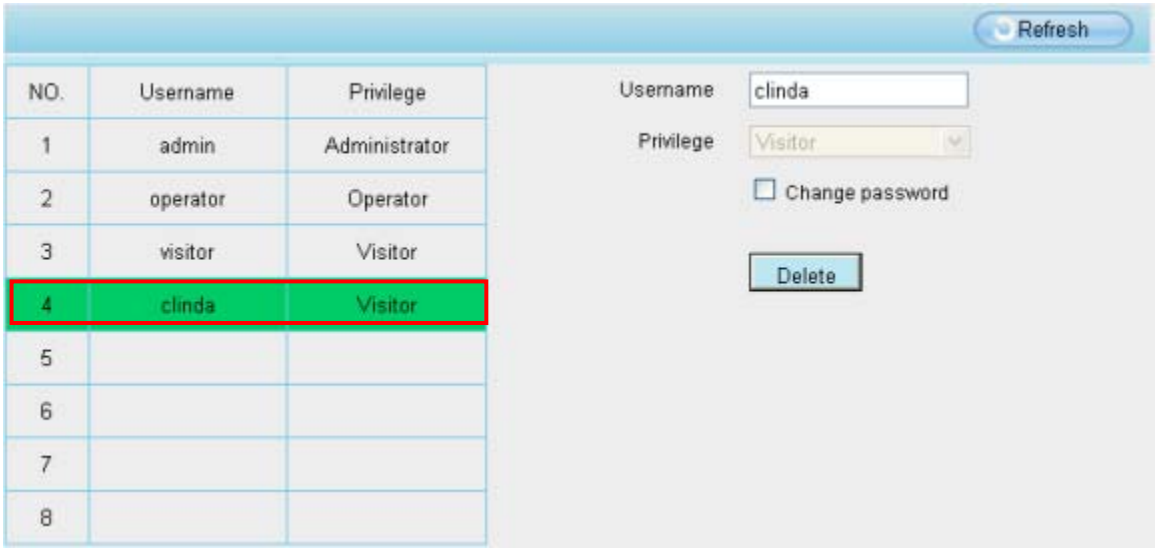


Figure 3.13

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.

3.2.5 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 cams 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 in 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.

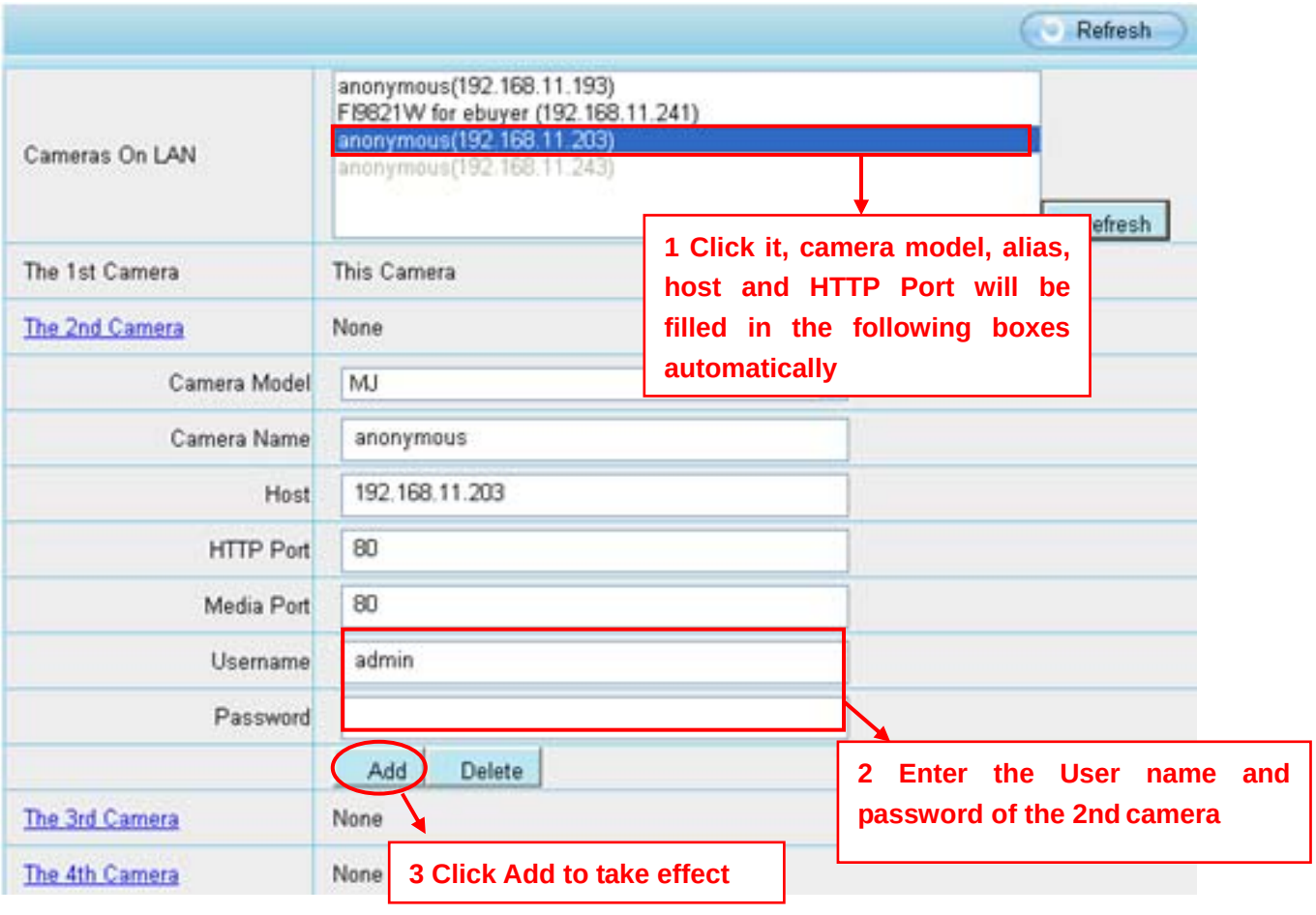


Figure 3.14

Camera Model: Our Company produces two series cameras: MJPEG and H.264.

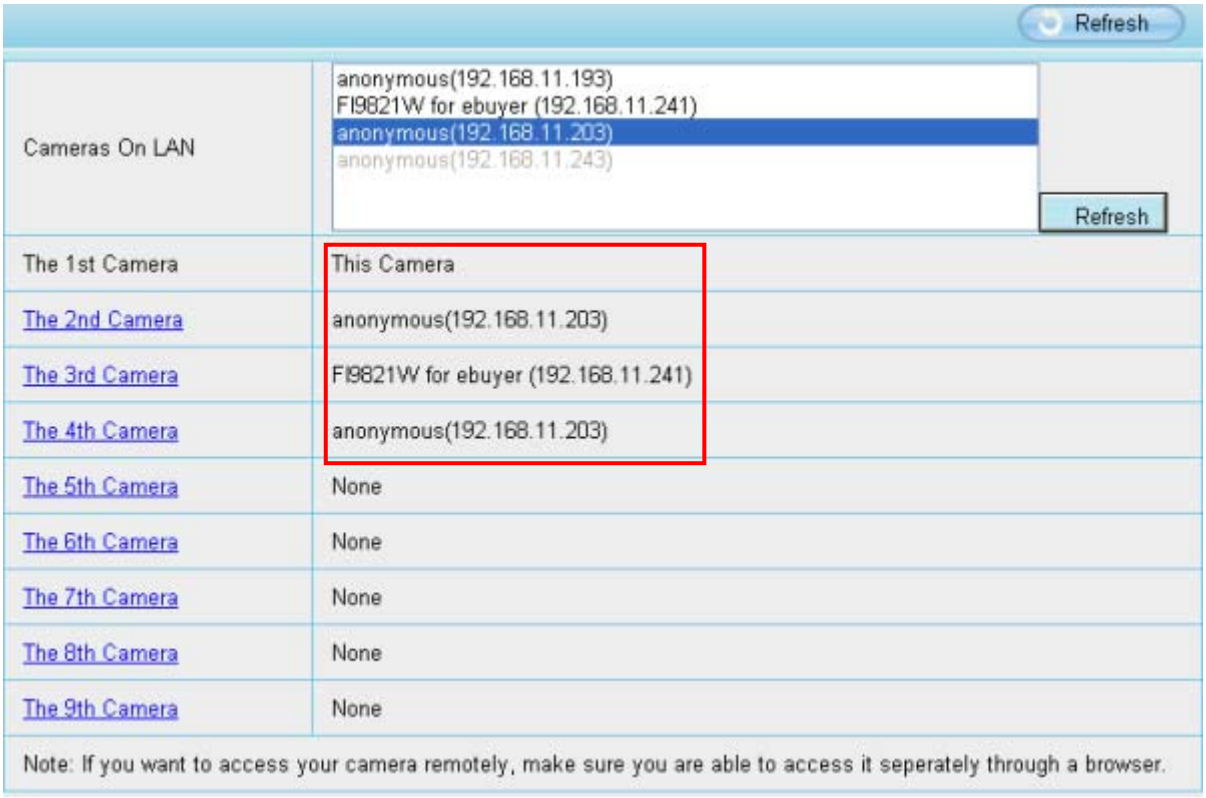


Figure 3.15

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

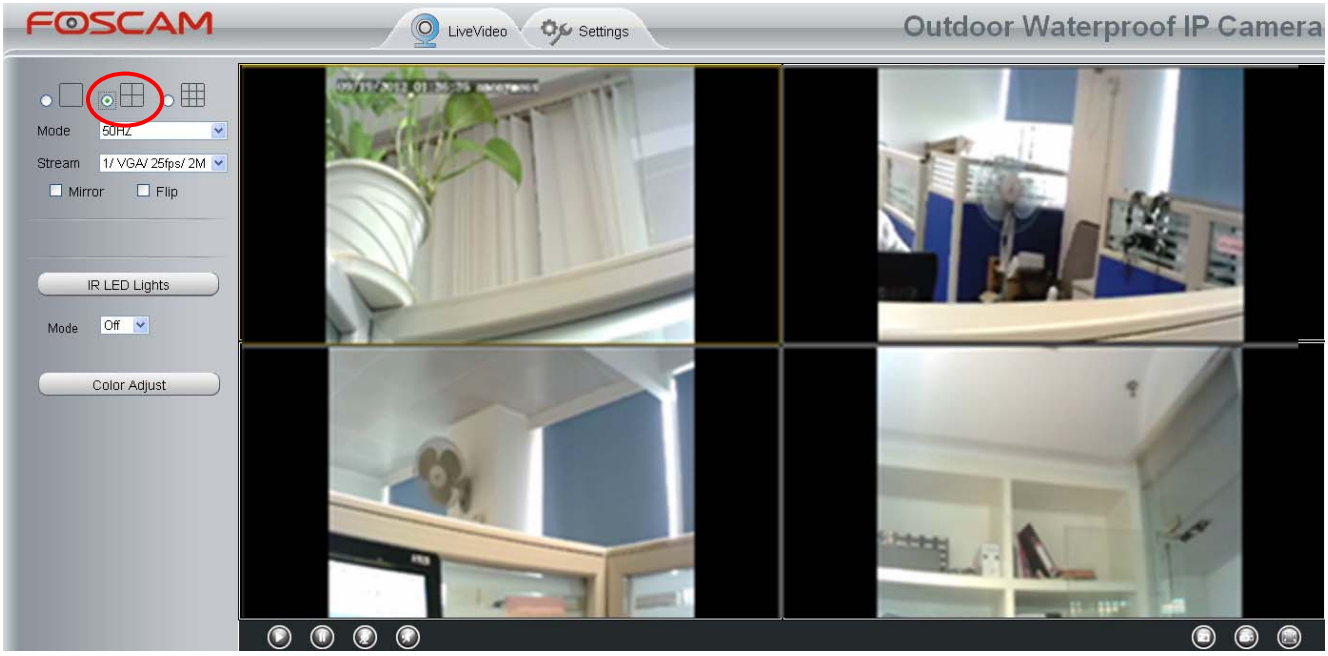


Figure 3.16

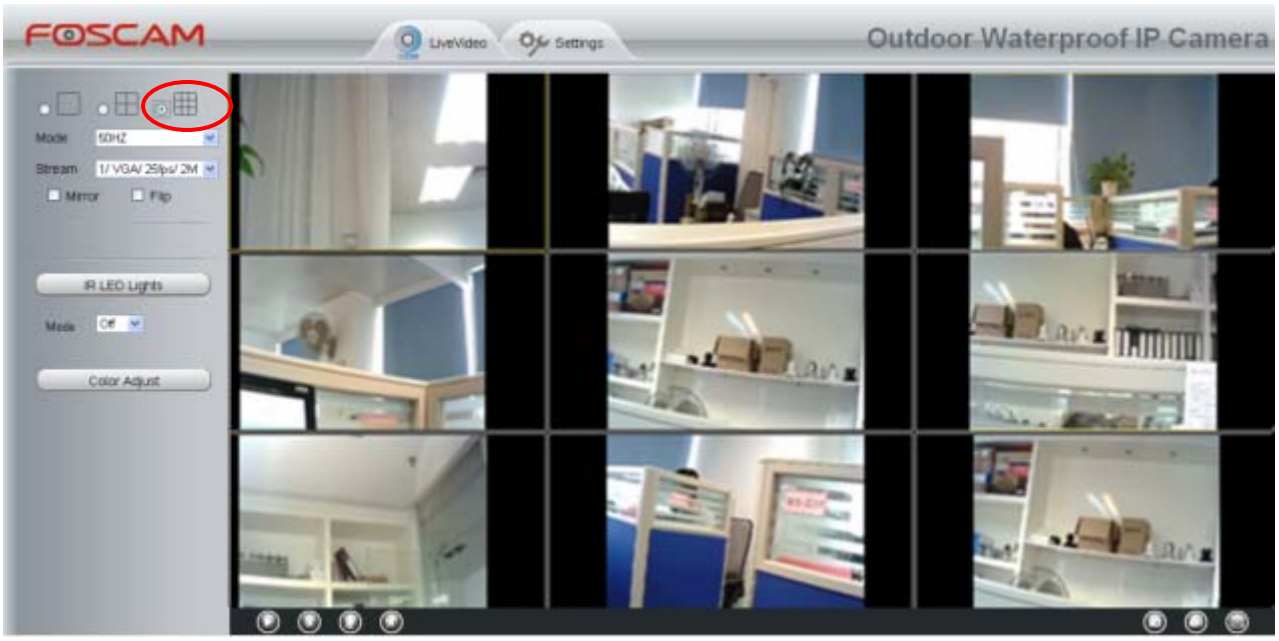


Figure 3.17

Add cameras in WAN

If you want to view all cameras via the internet(remote computer), you will need to add them using DDNS domain name. Firstly, make sure all of the cameras you added can be accessed through the internet. (Read **How to configure DDNS settings** in **chapter 3.3.3**)
Login to the first camera using a DDNS domain name and port.

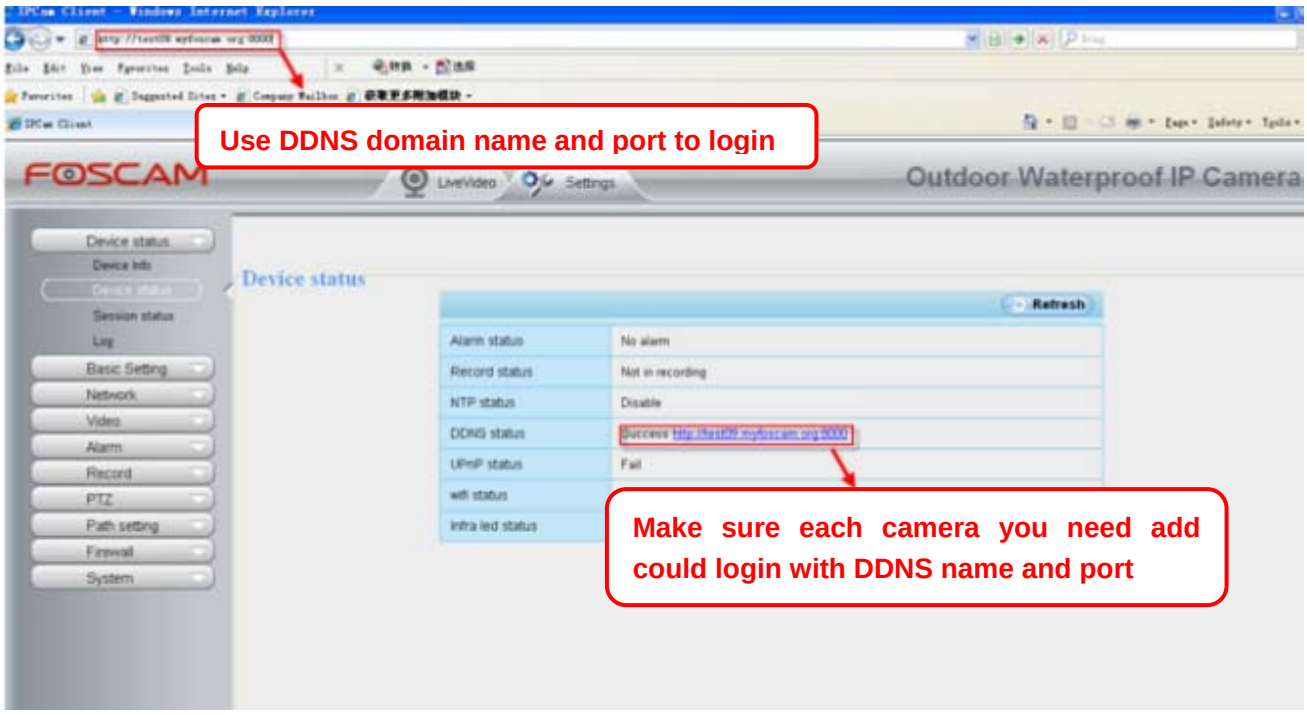


Figure 3.18

Click **Multi-Device Settings**. Choose **The 2nd Device**. Fill in the 2nd camera's name, DDNS domain name, port number. Enter user name and password and then choose Add. (Figure 3.19)

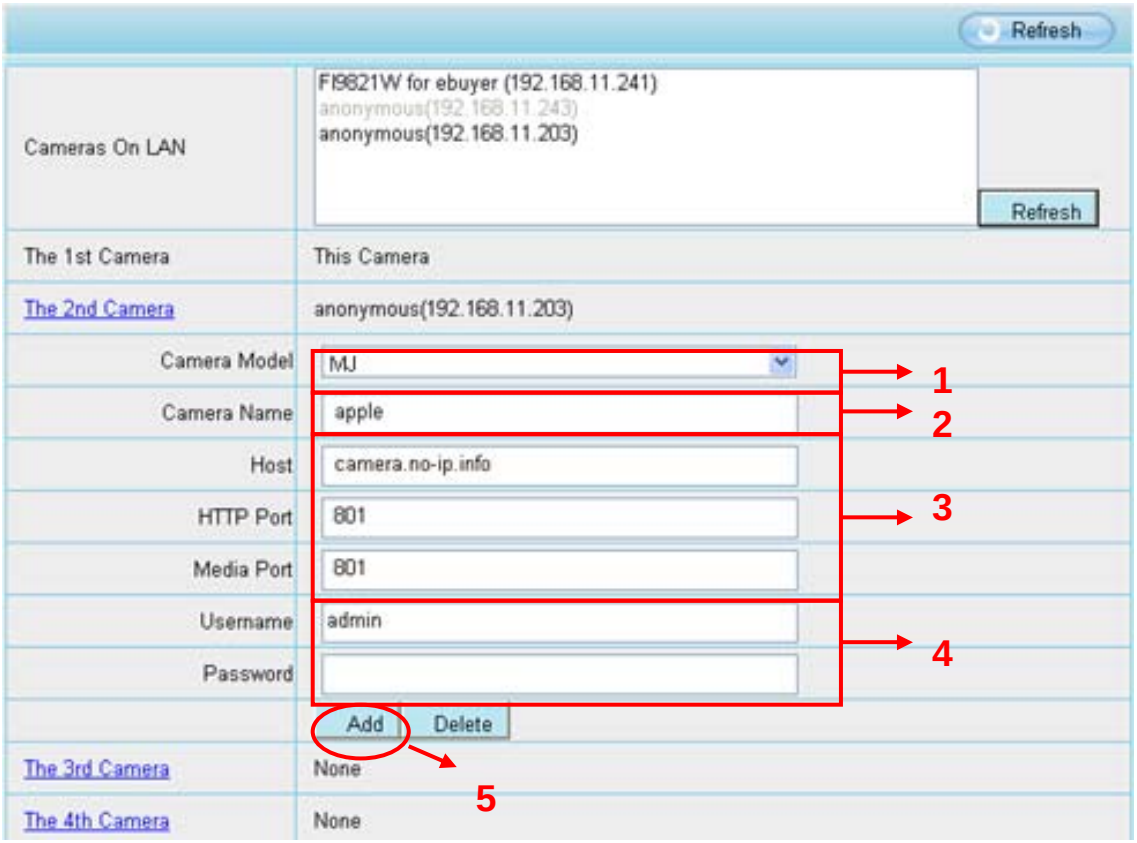


Figure 3.19

1----- The camera model: MJ or H264.
2----- The 2nd camera's name
3----- Fill in the 2nd camera's DDNS host not LAN IP.
4 ---- Enter the 2nd camera's user name and password
5---- Click Add button and to take effect

NOTE: Here the Host must be entered as the second camera's DDNS domain name, not its LAN IP.

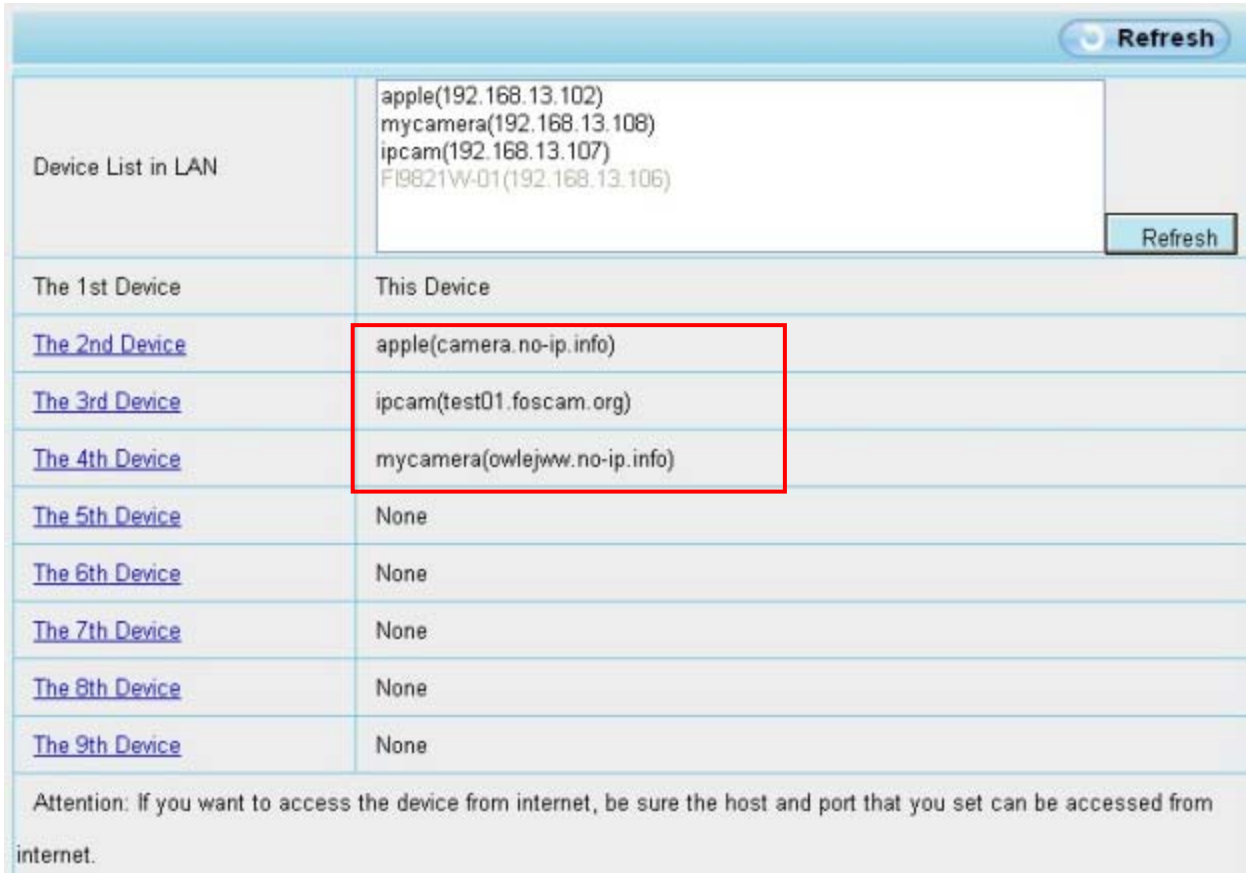


Figure 3.20

Return to video window. You will see all of the cameras accessible through the internet. When you are away from home, you can use the first camera's DDNS domain name and port to view all the cameras via internet.

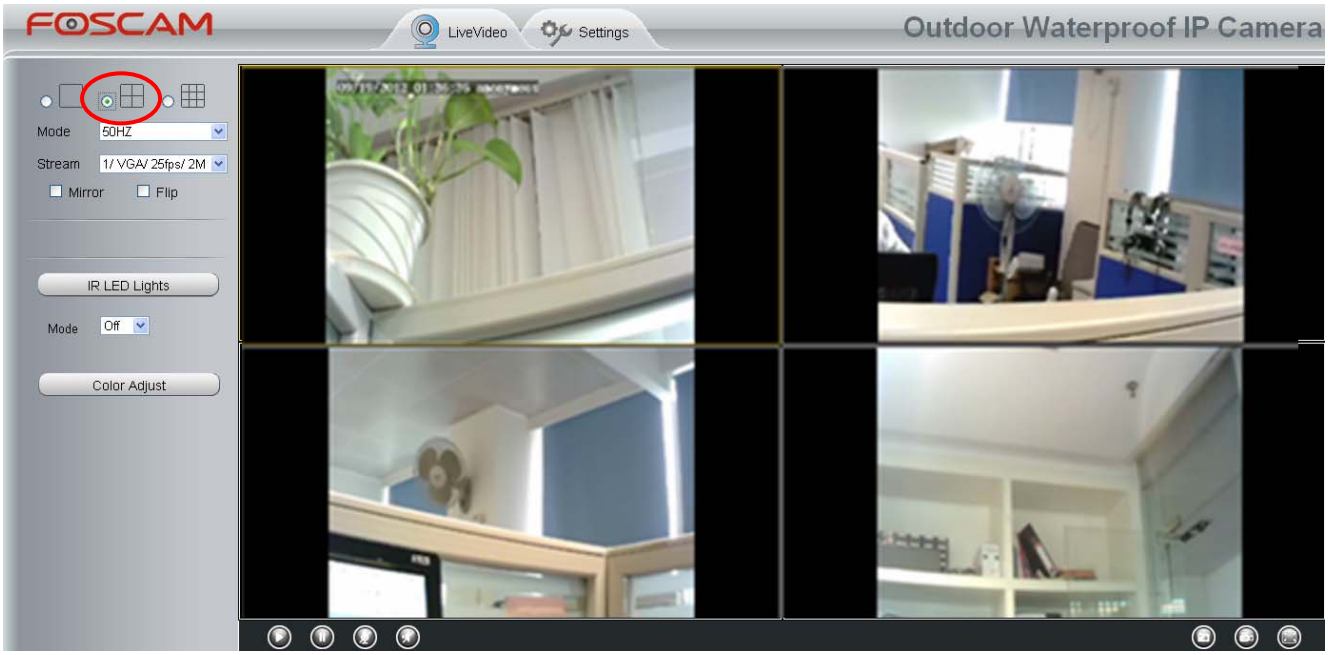


Figure 3.21

3.3 Network

This section will allow you to configure your camera's IP, PPPoE, DDNS, UPnP and Port.

3.3.1 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.

Figure 3.22

Changing settings here is the same as using the IP Camera Tool. (Figure 3.23/3.24)
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**.

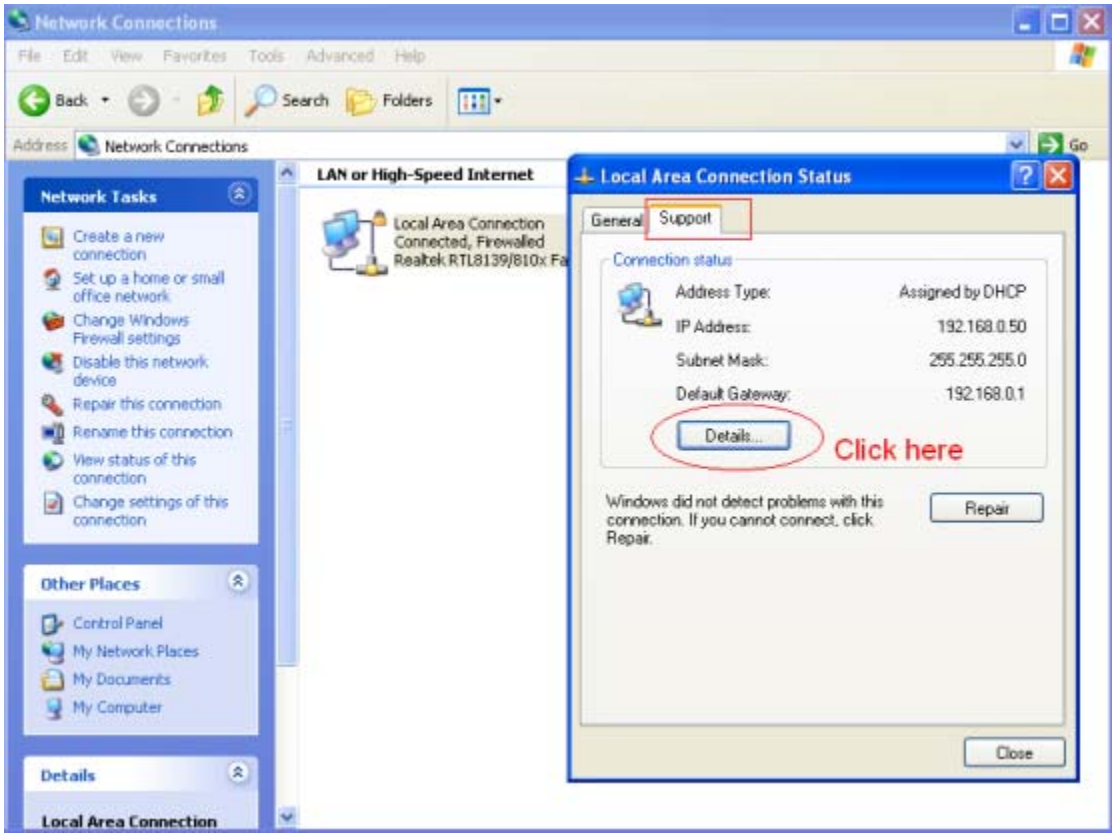


Figure 3.23

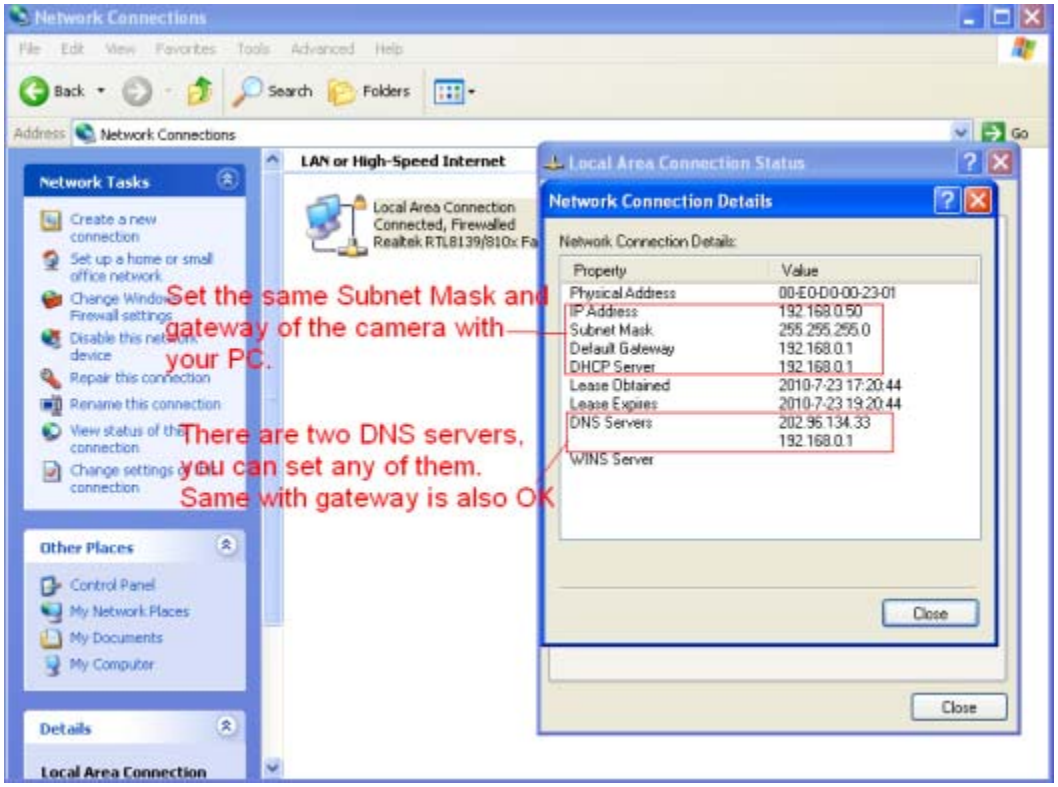


Figure 3.24

If you don’t know the DNS server, you can use the same settings as the Default Gateway.

3.3.2 PPPoE

If you are using a PPPoE connection, enable it and enter the User Name and Password for your PPPoE account.

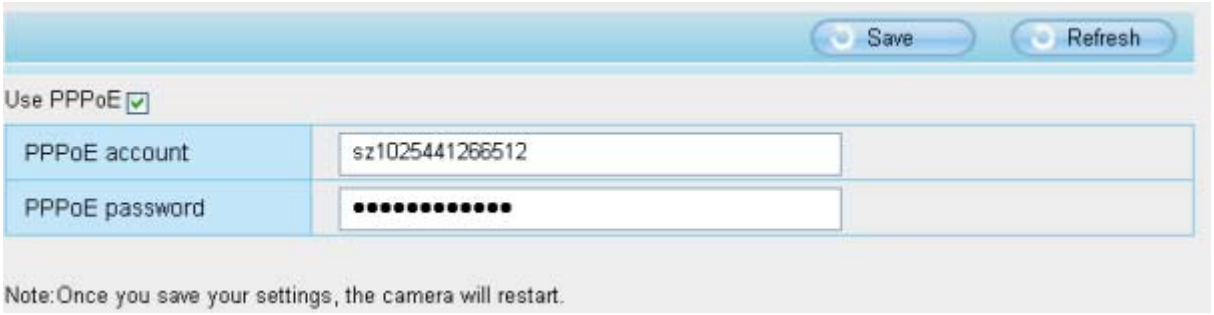


Figure 3.25

3.3.3 DDNS

FOSCAM camera has embedded a unique DDNS domain name when producing, and you can directly use the domain name, you can also use the third party domain name.

FOSCAM domain name

Here take **test09.myfoscam.org** for example. Go to option of **DDNS** on the **Settings->Network** panel, you can see the domain name.

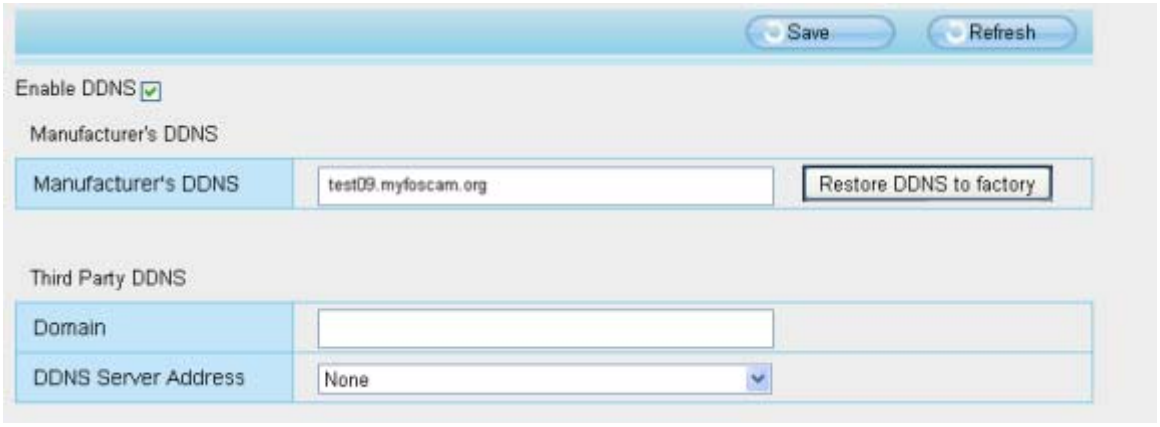


Figure 3.26

Now you can use http:// **Domain name + HTTP Port** to access the camera via internet.
Take hostname **test09.myfoscam.org and HTTP Port no. 8000** for example, the accessing link of the camera via internet would be http:// test09.myfoscam.org:8000

Restore DDNS to factory: If you have configured Third Party DDNS successfully, but you want to use Manufacturer's DDNS again , here click this button and start Manufacturer's DDNS Service.

Third Party Domain Name Settings

User can also use third part DDNS, such as www.no-ip.com. ,www. 3322.com

Here take www.no-ip.com for example:

① **Step 1, Go to the website www.no-ip.com to create a free hostname**

Firstly: Login on www.no-ip.com and click No-IP Free to register.

Figure 3.27

Please register an account step by step according to instructions on www.no-ip.com

After registration, please login your email which used to register. You will receive an email from website, please click the link to activate your ACCOUNT as indicated in email.

Secondly: Login the link with the registered username and password to create your domain name.

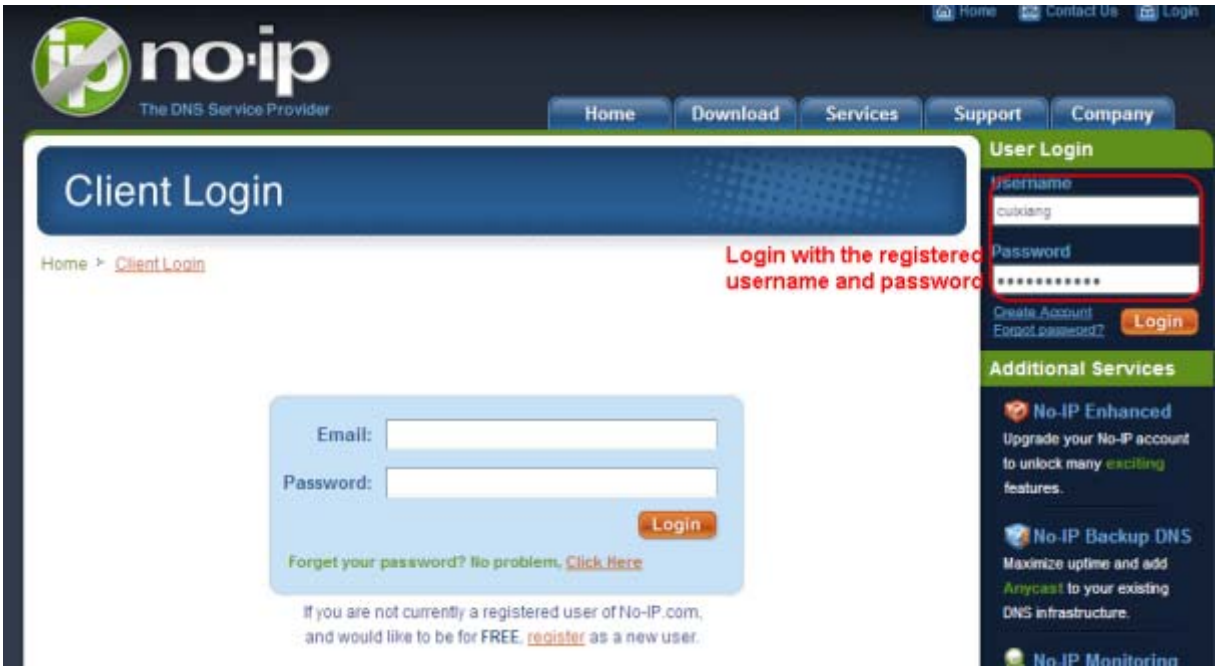


Figure 3.28

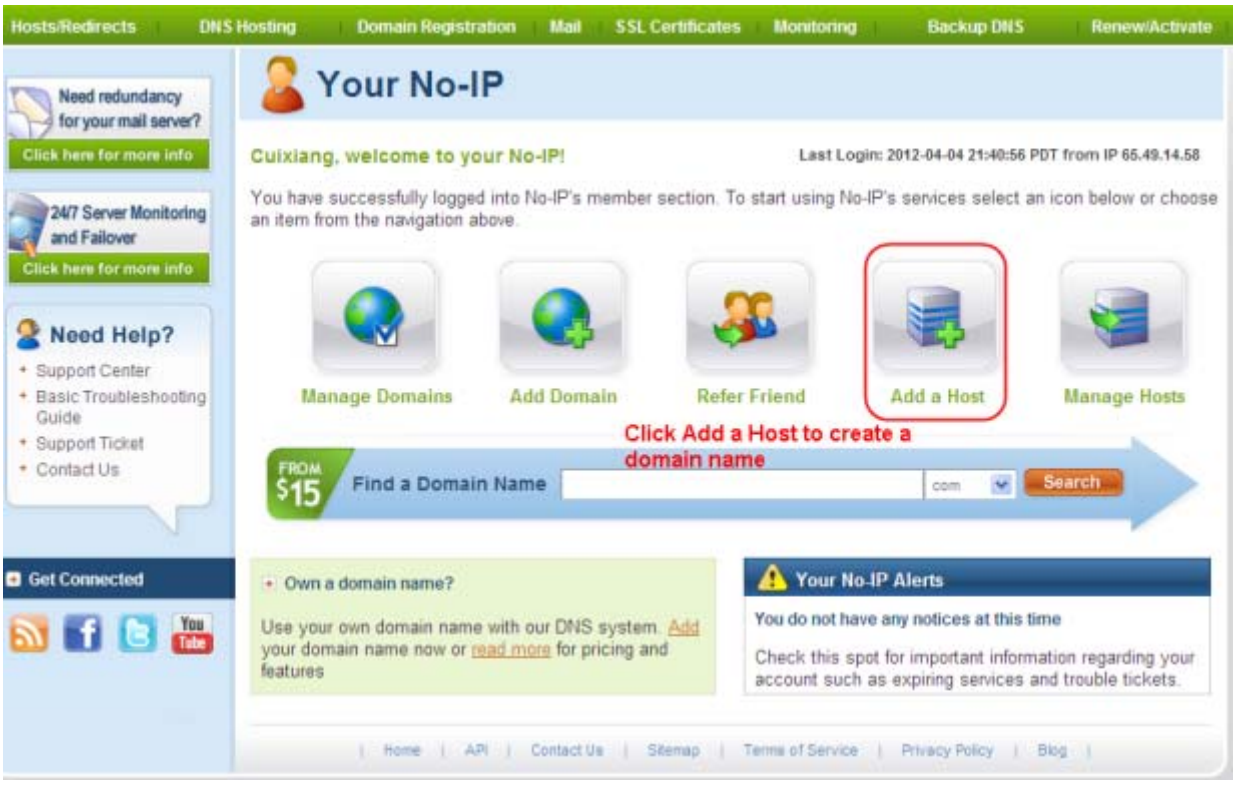


Figure 3.29

Please create the domain name step by step according to instructions on www.no-ip.com

Step 2, DO DDNS Service Settings within the Camera

Please set **DDNS Settings** within the camera by **hostname**, a **user name** and **password** you've got from **www.no-ip.com**

Take **hostname ycxgwp.no-ip.info**, **user name foscam**, **password foscam2012** for example.

Firstly, goes to option of **DDNS Settings** on the administrator panel.

Secondly, select No-Ip as a server..

Thirdly, fill **foscam** as DDNS user, fill password **foscam2012** as DDNS password, fill **ycxgwp.no-ip.info** as DDNS domain and server URL, Then click save to make effect. The camera will restart and to take the DDNS settings effective.

Fourthly, after the restart, login the camera, and go to option of **Device Status** on the administrator panel, and check if the DDNS status is successful.

If failed, please double check if you have input the correct hostname, user name, and password, and try to redo the settings.

Note

If you have set Third Party DDNS successfully ,the Foscam Domain Name will be invalid. The Third Party DDNS and the Foscam Domain Name cannot work at the same time, the last time you configured will take effect.

② Do port forwarding within the router

Example: The camera's LAN IP address is http://192.168.8.100:2000

Firstly, login the router, goes to the menu of **Port Forwarding or Port Trigger** (or named **Virtue Server** on some brands of router). **Take Linksys brand router as an example, Login the router, and goes to Applications & Gaming->Single Port Forwarding.**

Secondly, Create a new column by LAN IP address & HTTP Port No. of the camera within the router showed as below.

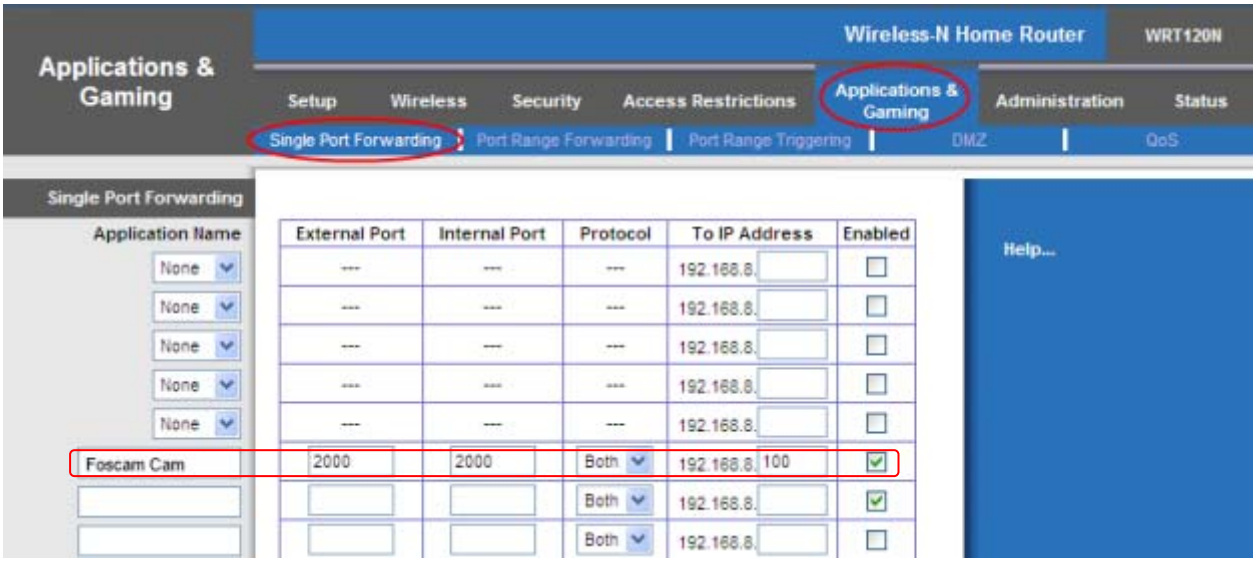


Figure 3.30

③ Use domain name to access the camera via internet

After the port forwarding is finished, you can use **the domain name+ http no.** to access the camera via internet. Take hostname **ycxgwp.no-ip.info and http no. 2000**for example, the accessing link of the camera via internet would be http:// ycxgwp.no-ip.info:2000

3.3.4 UPnP

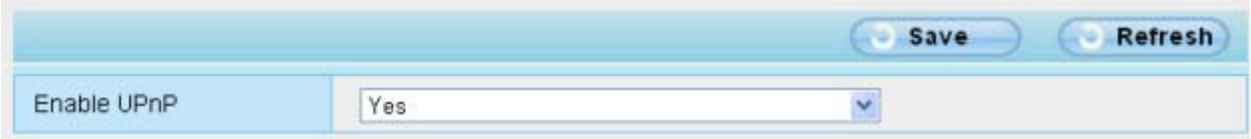


Figure 3.31

The default UPnP status is closed. You can enable UPnP, then the camera's software will be configured for port forwarding. Back to the "Device Status" panel, you can see the UPnP status:

Figure 3.32

The camera's software will be configured for port forwarding. There may be issues with your routers security settings, and sometimes may error. We recommend you configure port forwarding manually on your router (Figure 3.30).

3.3.5 Port

This camera supports HTTP Port / Media Port / HTTPS Port. The Media port is used to view the camera's video stream, HTTP Port is used to access the camera remotely. Here HTTP and Media port share the same port.

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

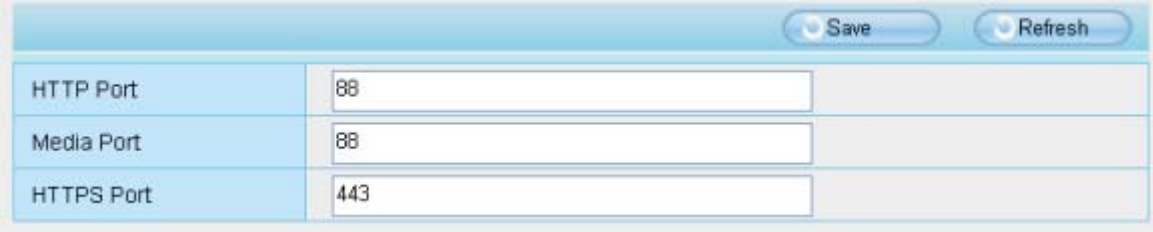


Figure 3.33

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

Sometimes you need to add the url to the Trusted Sites,

Open Internet Explorer if it is not already opened. Click on **Tools**, then click **Internet Options**.

Next, click the **Security** tab, then click the **Trusted sites** button.

Figure 3.34

Another way to change the HTTP port no.

Step 1: Open the IP Camera 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 shown in Figure 3.35 and 3.36.

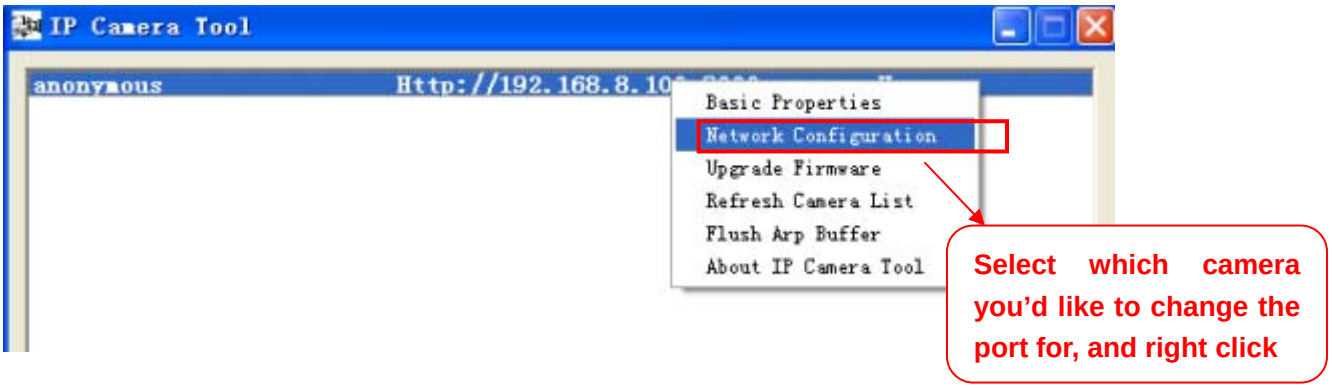


Figure 3.35

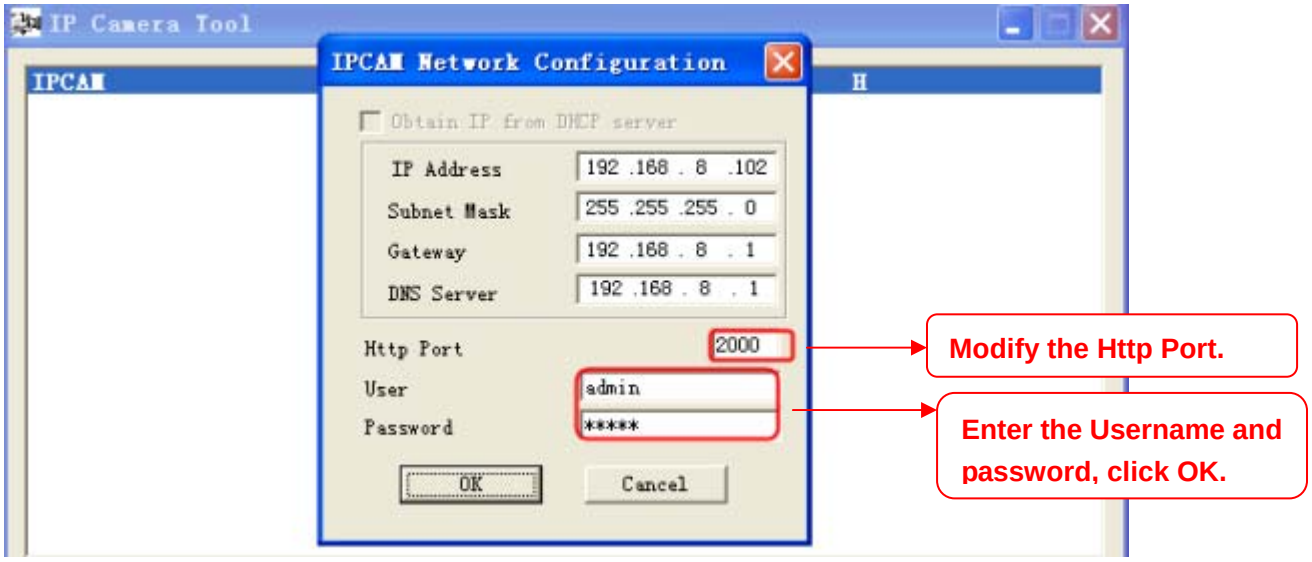
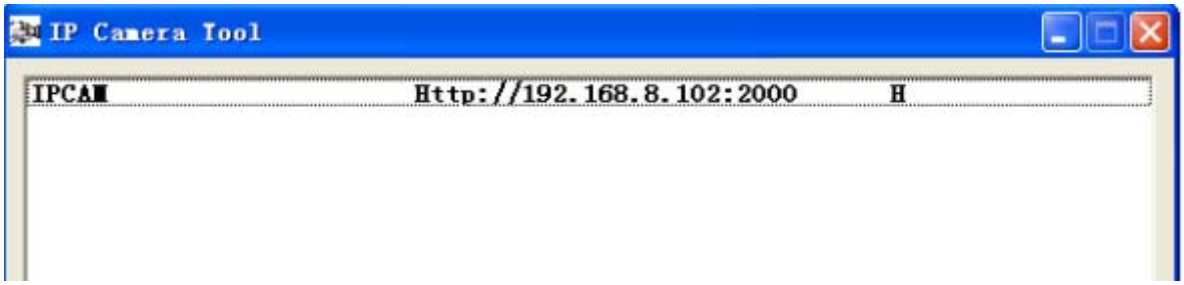


Figure 3.36

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://192.168.8.102:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.8.102:2000. 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!



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

3.4 Video

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

3.4.1 Settings

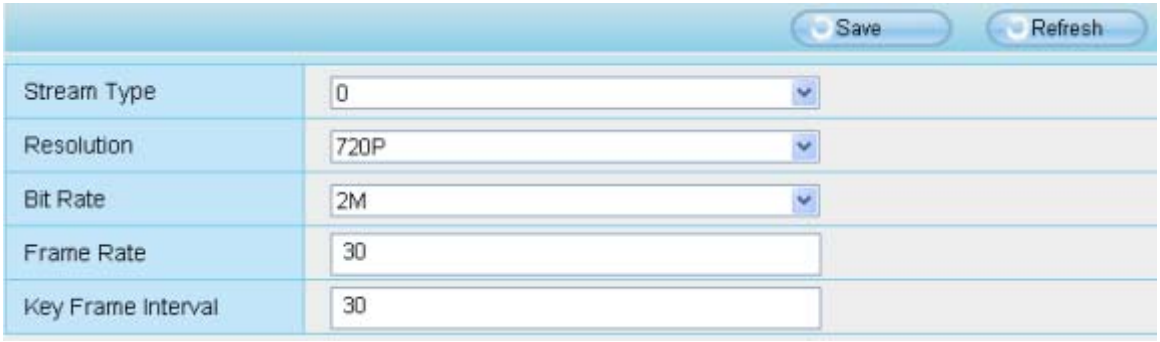


Figure 3.37

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

Resolution: The camera supports two types: 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.

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.

3.4.2 On Screen Display

This page is used to add timestamp and device name on the video.

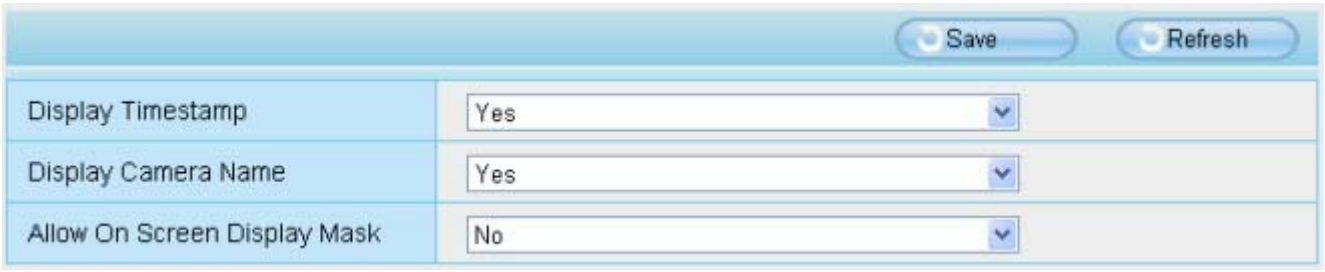


Figure 3.38

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.

Allow On Screen Display mask: There are two options: Yes or NO. Select yes and draw a mask area on the video, the mask area will be black on the video.

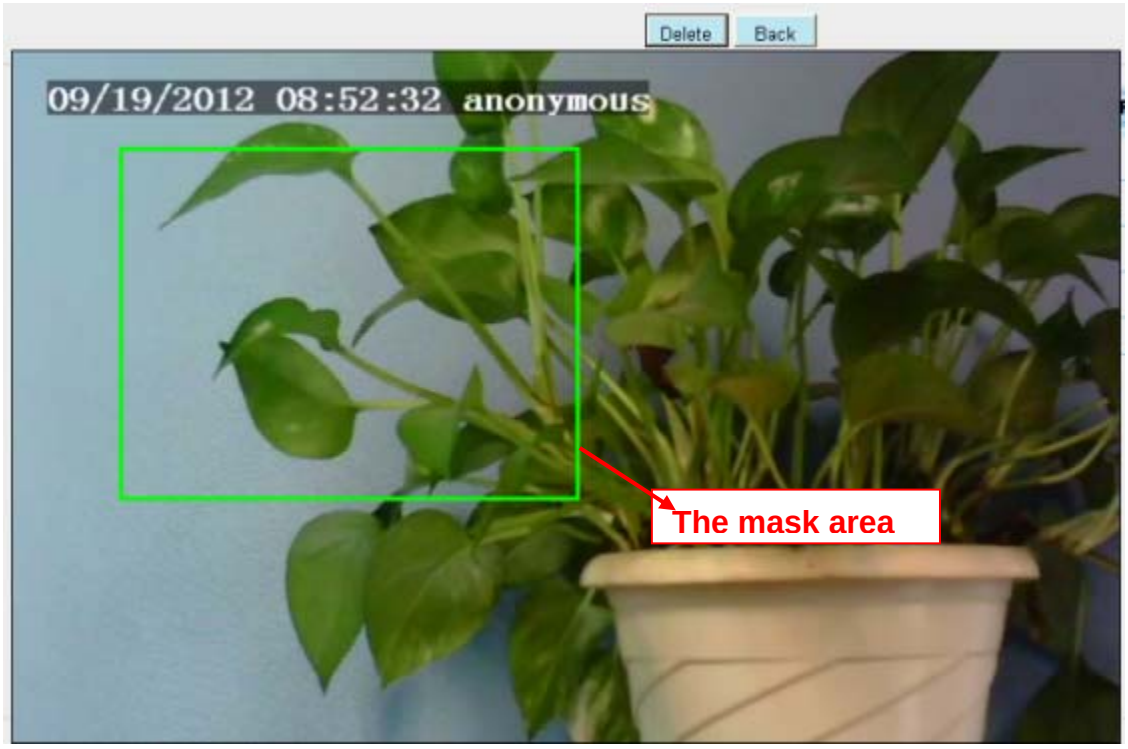


Figure 3.39

Click Back button and return to the OSD page, click Save to take effect.
Back to the surveillance window, you can see the mask area as the following picture:

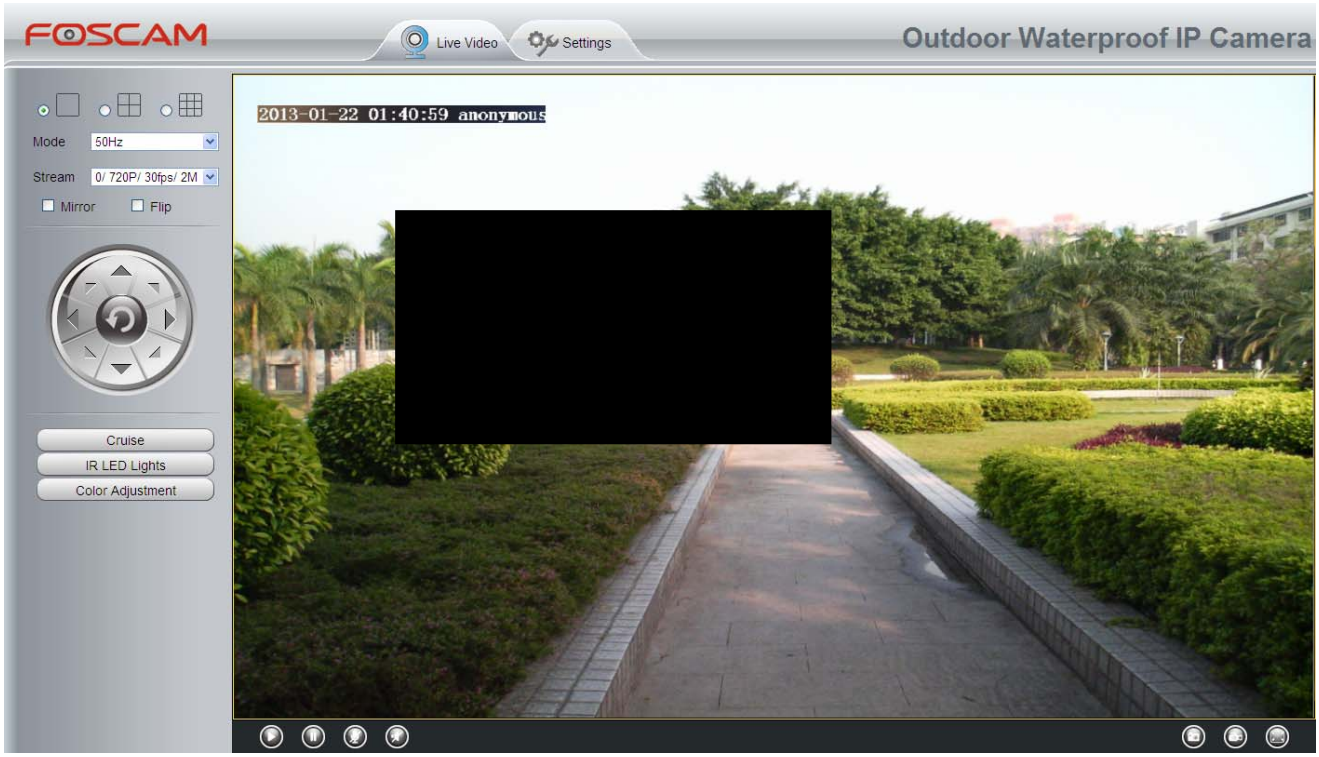


Figure 3.40

3.4.3 Snapshot Settings

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

Figure 3.41

Image Quality: Low, Middle and High. The higher the quality, the picture will be clearer.

Save Path: FTP. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP automatically.

3.5 Alarm

IP Camera supports **Motion Detection Alarm and I/O alarm**, when the motion has been detected, it will send emails, upload images to FTP or adopt other output action.

3.5.1 Motion Detection

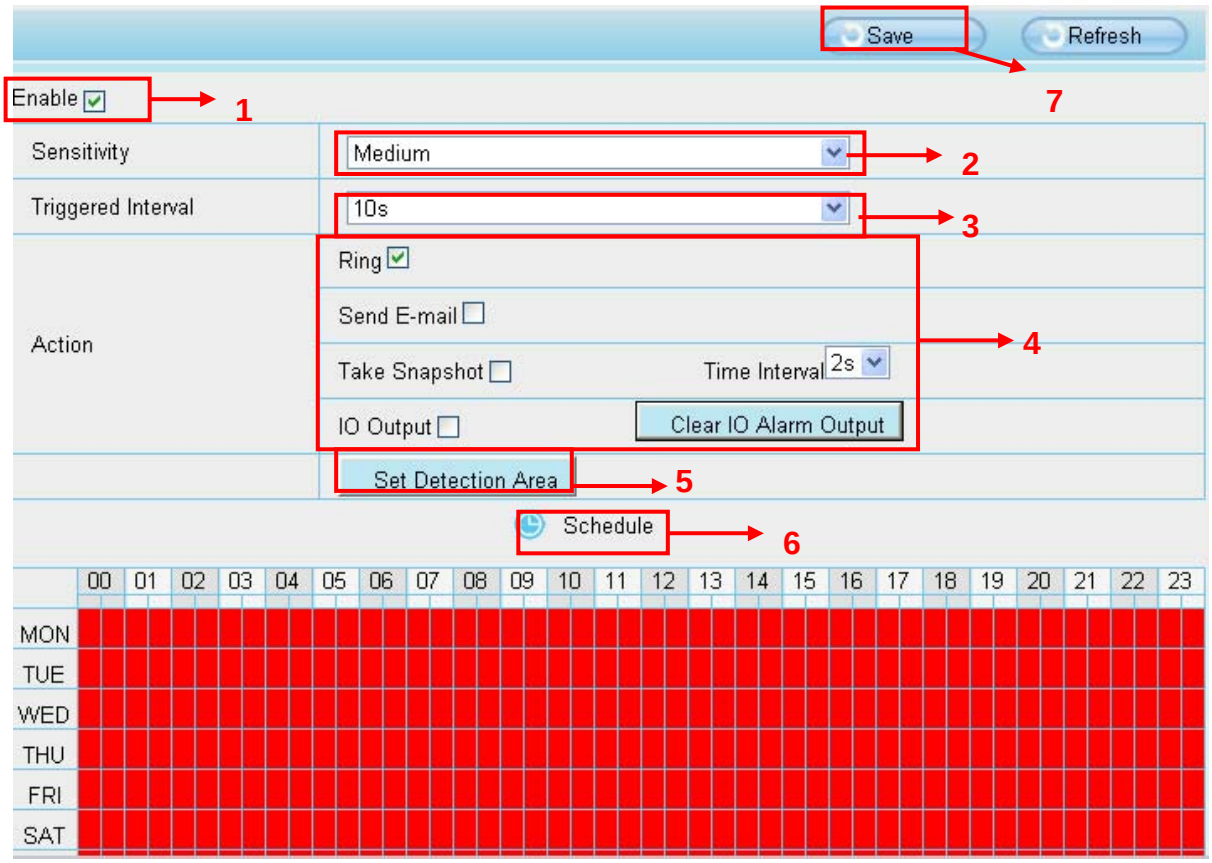


Figure 3.42

To enable motion detection, follow the steps below:

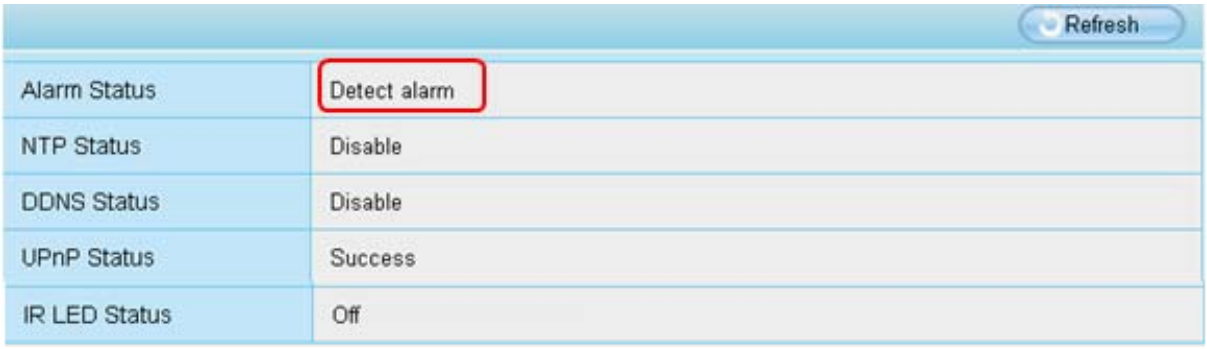
1 Enable **Motion detection**

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 Select the alarm indicators

When the motion has been detected, the alarm status will turn to Detect alarm.



There are four alarm indicators:

A Ring

If the camera has connected with a speaker or other audio output device, then you select Ring, 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 Mail and set **Mail Settings** first. The alarm email cannot contain the alarm picture if you have not selected **Snap picture**.

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. If you select Send Email, at the same time the picture will be send to you as an attachment. 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 I/O Output

If the camera has connected with other alarm output device, when the motion is detected, the alarm output device will take the corresponding action.

5 Set detect 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.

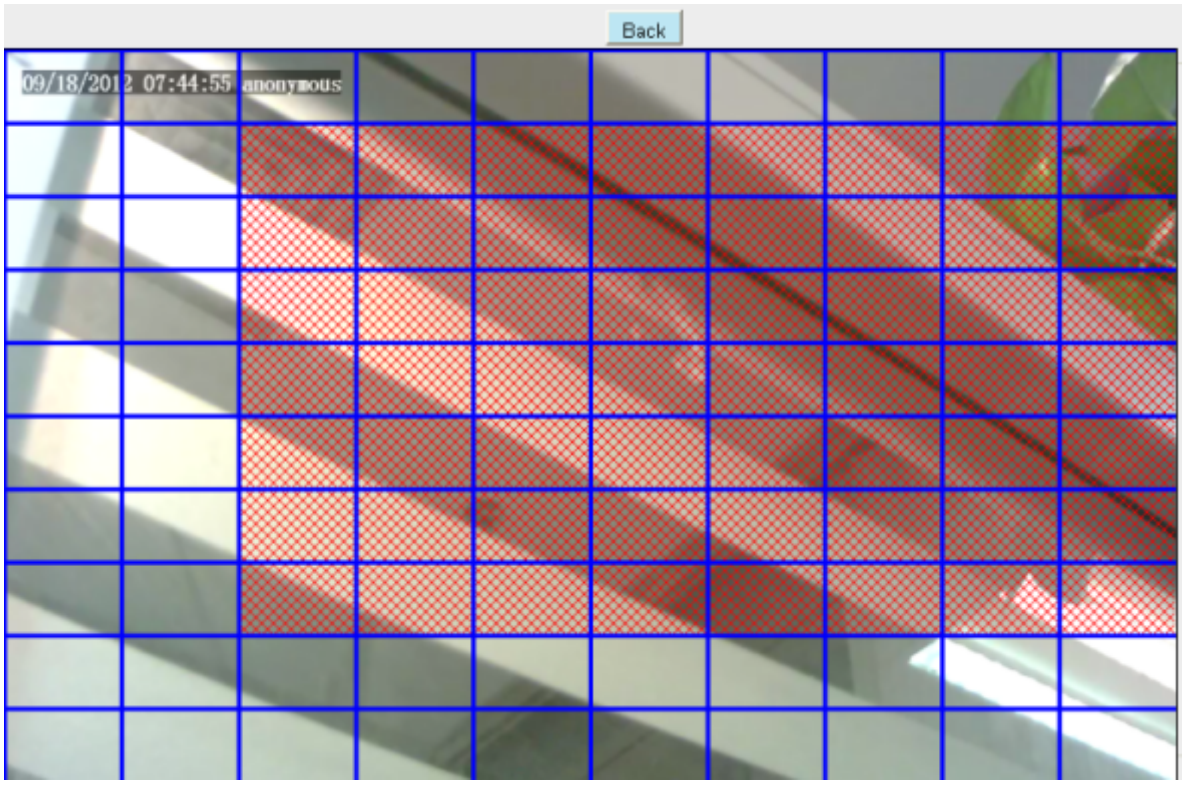


Figure 3.43

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.

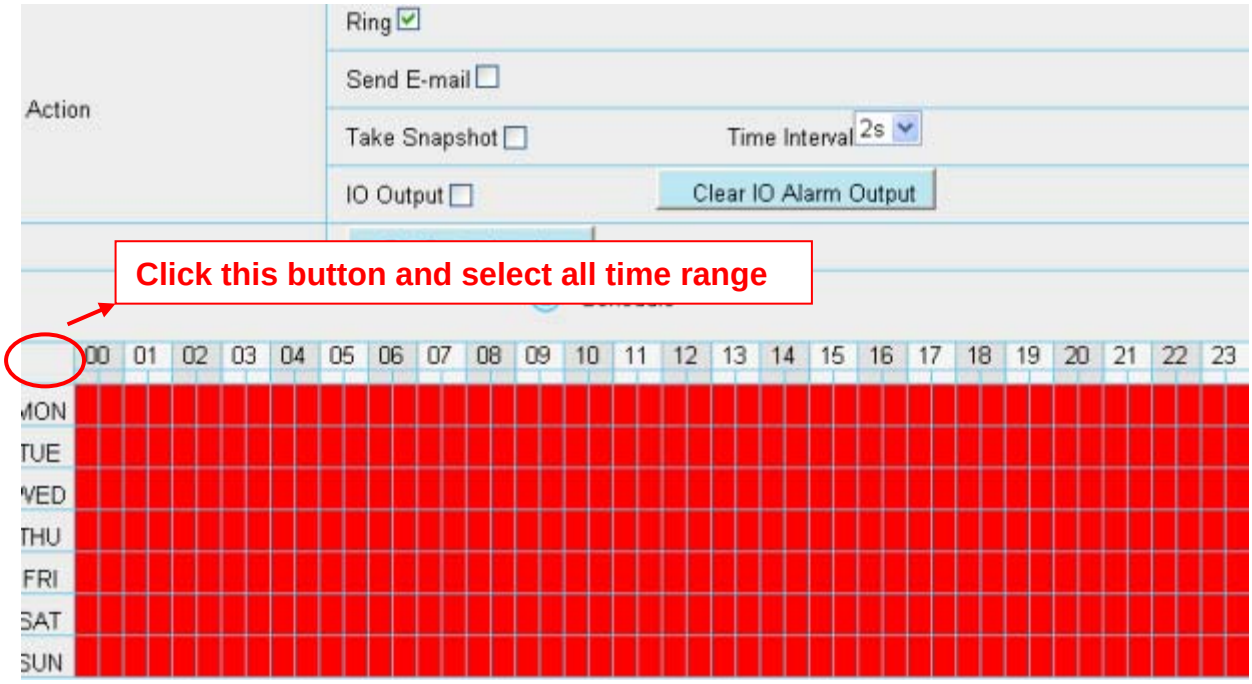


Figure 3.44

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.

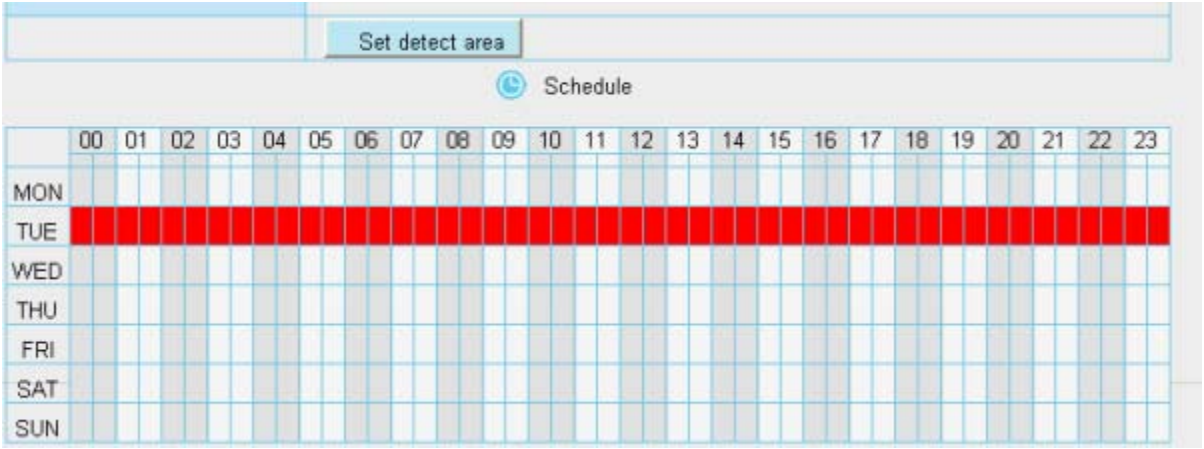


Figure 3.45

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

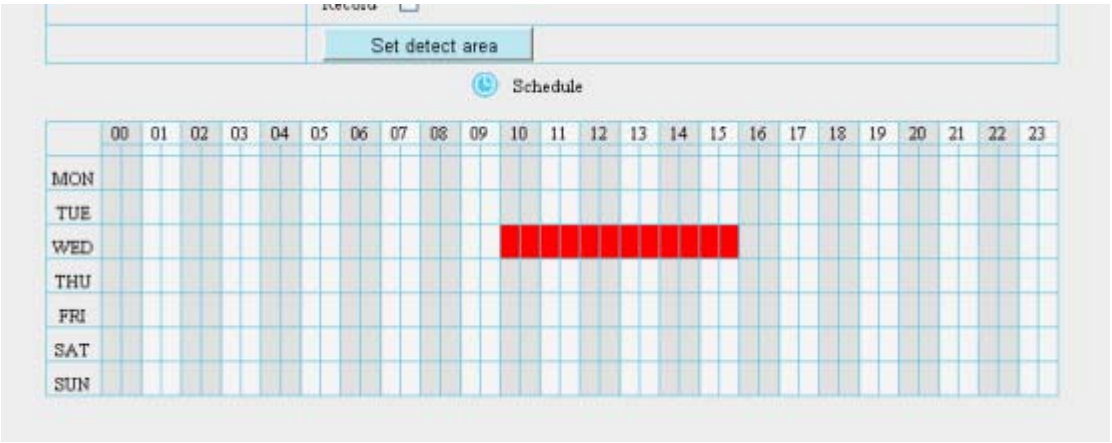


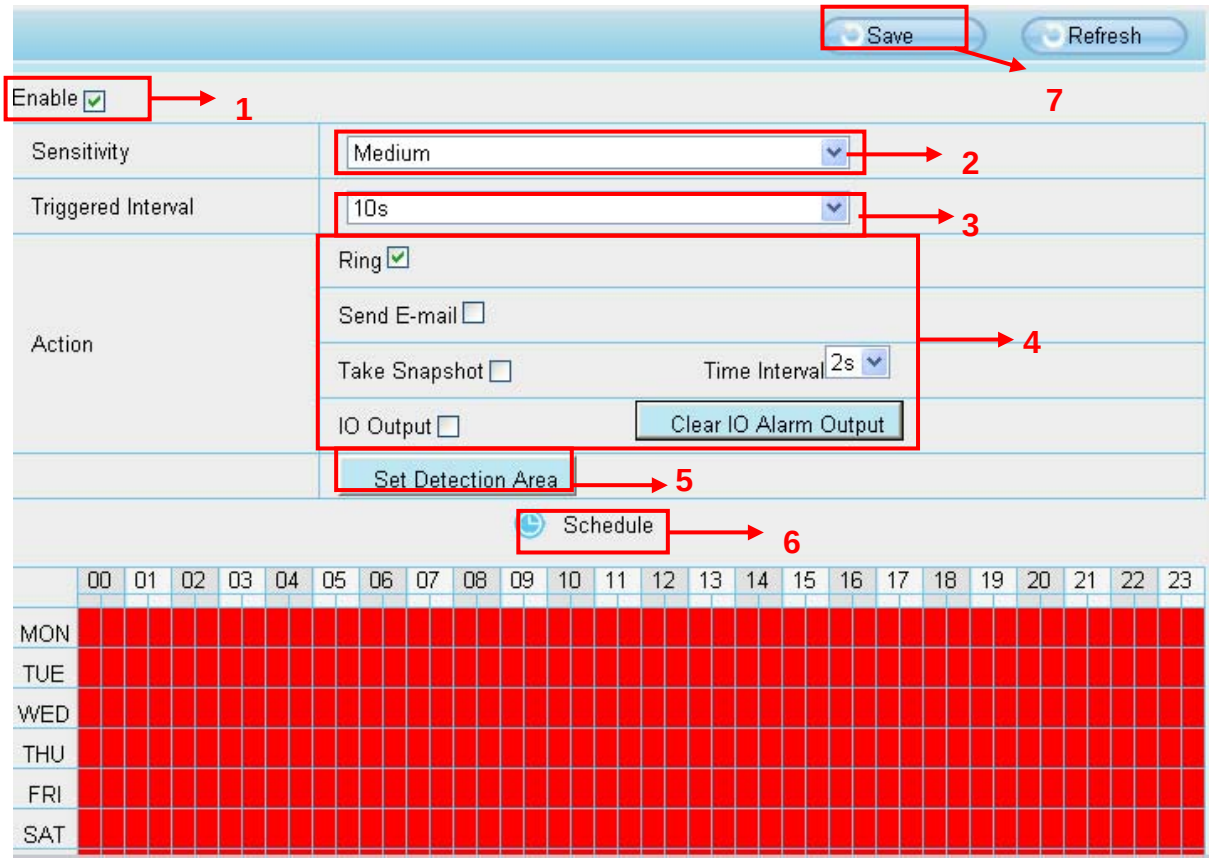
Figure 3.46

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.

3.5.2 I/O Detection

This camera supports I/O terminal block which is used to connected external input/output device. After connection successfully, you can go to this page and do I/O alarm configuration.



To enable motion detection, follow the steps below:

1 Enable **Motion detection**

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.

5 Select the alarm indicators

There are four alarm indicators:

A Ring

If the camera has connected with a speaker or other audio output device, and you select Ring, 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 Mail and set **Mail Settings** first. The alarm email cannot contain the alarm picture if you have not selected **Snap picture**.

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. If you select Send Email, at the same time the picture will be send to you as an attachment. 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 I/O Output

If the camera has connected with other alarm output device, such as sensors and alarms, when the motion is detected, the alarm output device will take the corresponding action.

5 Set detect 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

Here definite alarm schedule.

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.

3.6 Record

On this page you can change the manually recording storage path, the default storage path is C:\IPCamRecord.

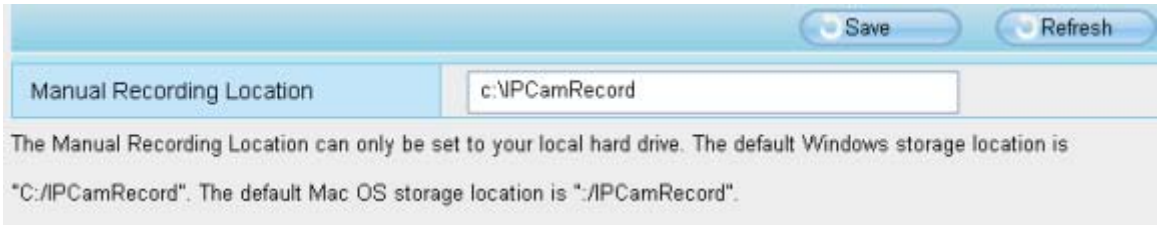


Figure 3.47

3.7 PTZ

This page will allow you to change the pan/tilt speed and the RS485 protocol configuration.

3.7.1 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 .

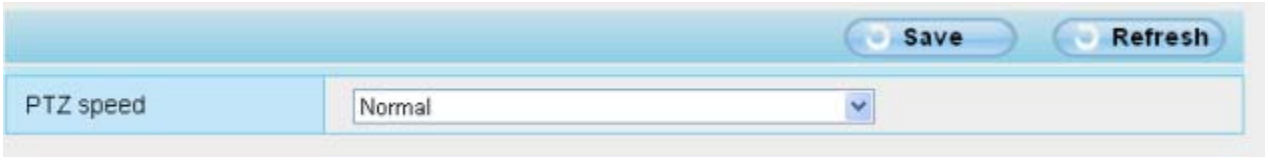


Figure 3.48

3.7.2 RS485 configuration

After the camera has connected with outer cradle head through RS485 interface, you need to configure the RS485 protocol.

Find the related information about the cradle head in the cradle head user manual and fill the following options. Click Save and save your settings.

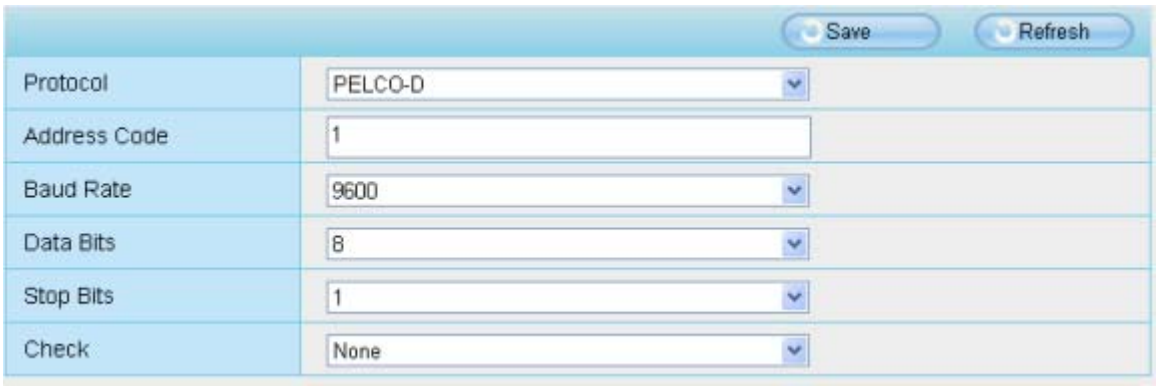


Figure 3.49

3.8 Path Settings

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

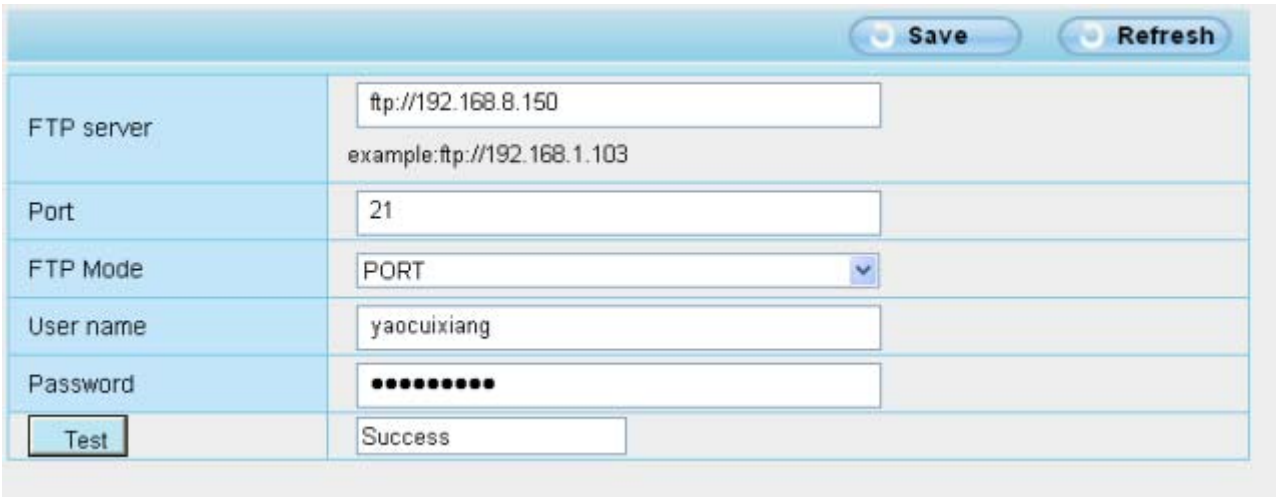


Figure 3.50

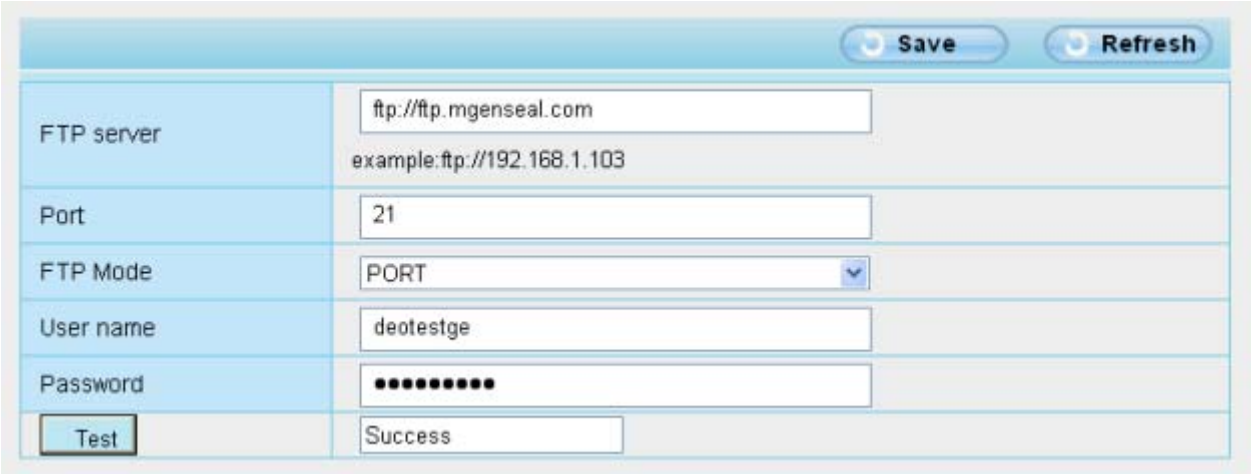


Figure 3.51

FTP server: If your FTP server is located on the LAN, you can set as Figure 3.50.
If you have an FTP server which you can access on the internet, you can set as Figure 3.51.

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.

3.9 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**.

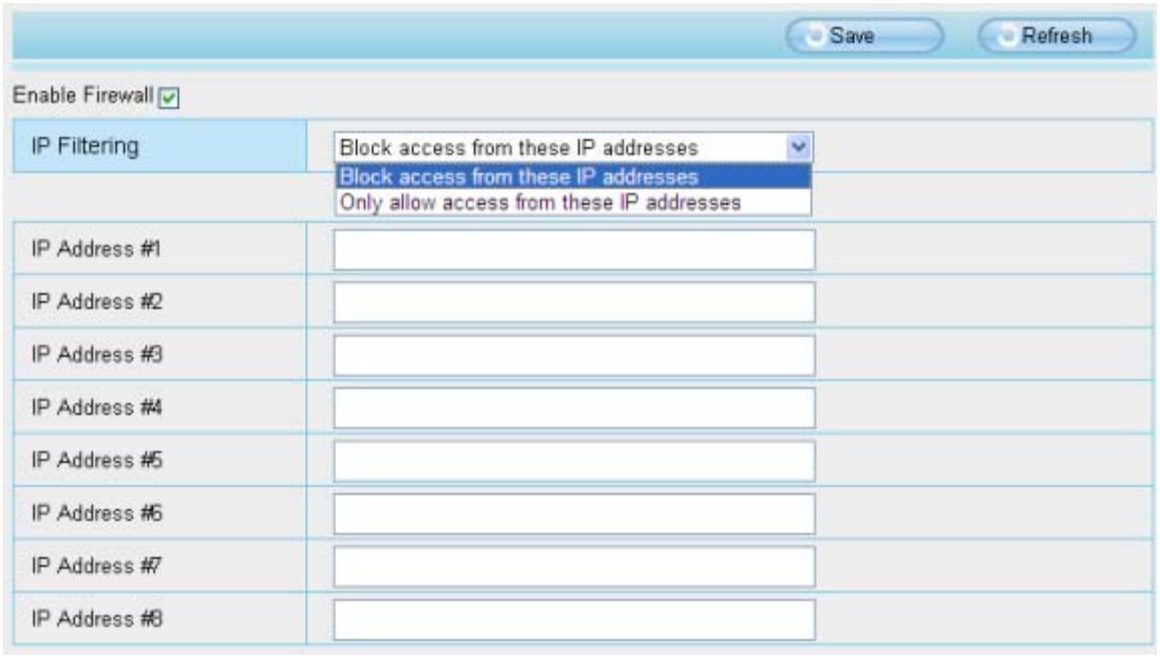


Figure 3.52

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.

3.10 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.

3.10.1 Back up& Restore settings

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.

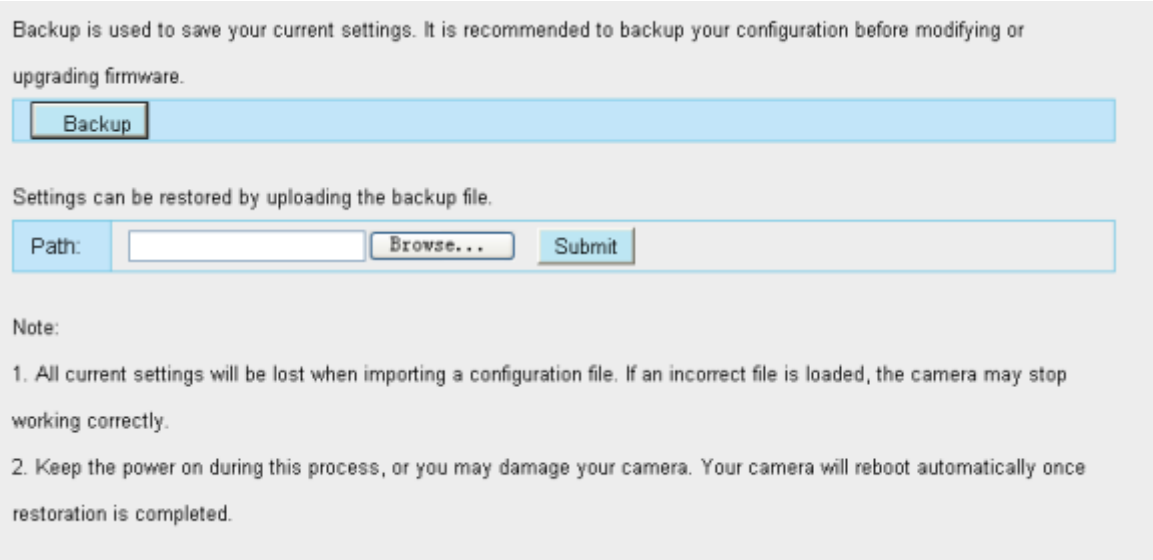


Figure 3.53

3.10.2 System upgrade

Click **Browse**, choose the correct bin file(System firmware or Web UI) and then click **System upgrade**.

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

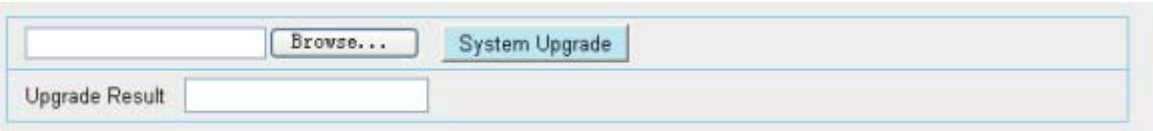


Figure 3.54

If you want to verify the firmware version of you camera, please go to Device Status-→ Device Information Page to check

Upgrade Firmware by IP Camera 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.

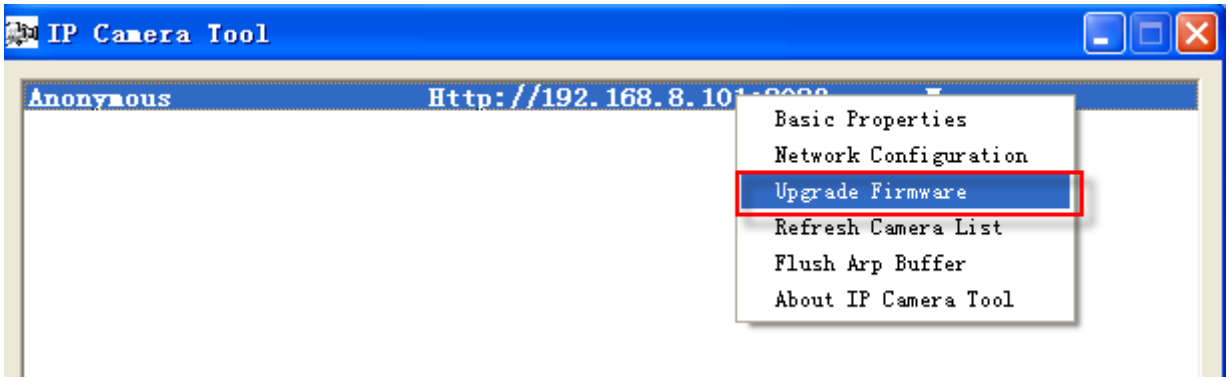


Figure 3.55

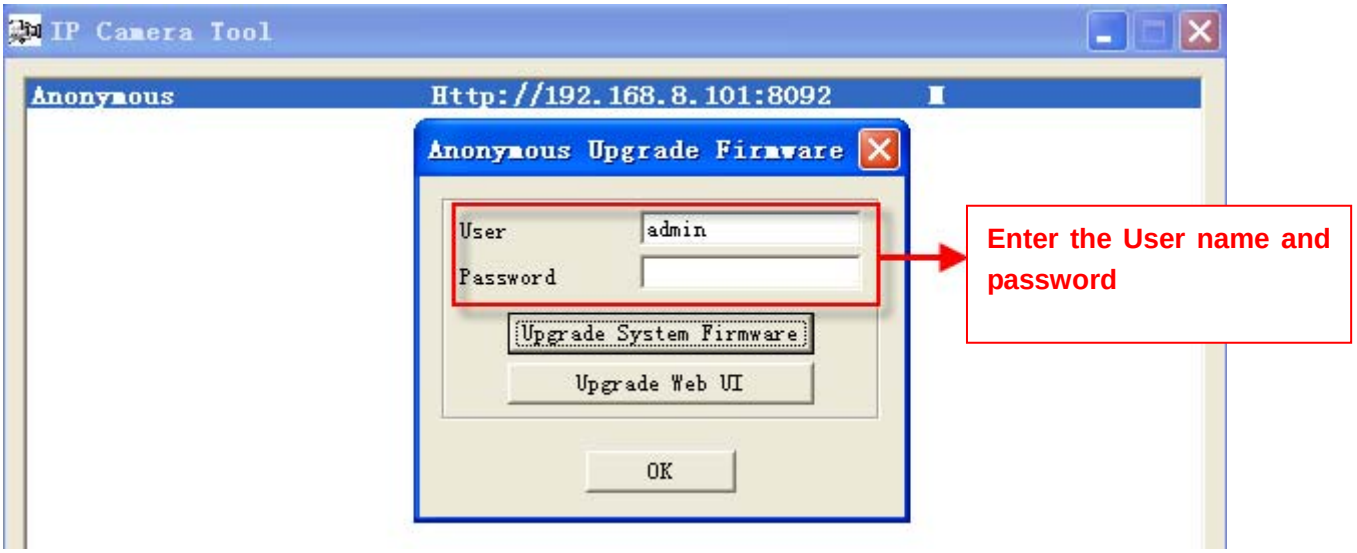


Figure 3.56

CAUTION: If your camera works well with the current firmware, we recommend not upgrading. Please don't upgrade the firmware unnecessarily. Your camera may be damaged if misconfigured during an upgrade.

NOTE:

1) Don't upgrade the firmware through the web UI in WAN, or else the upgrade may be falied.

2) 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.

3) 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.

4) Normally, only Device WEB UI need to be upgrade, please do not try to upgrade the Device Firmware.

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

3.10.3 Factory Reset

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

Figure 3.57

3.10.4 Reboot System

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

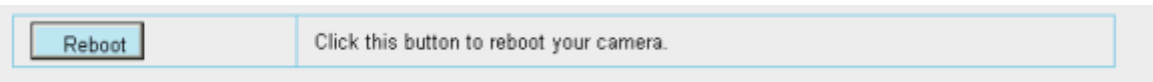


Figure 3.58

4 Phone APPs

With Phone APPs , you can view your camera directly as a computer anywhere, anytime. This section shows the user how to set up the iPhone, and Android mobile phones to view Foscam cameras with Phone APPs.

4.1 APP for Android cell phones

There are two ways to install the phone App :

1) Search the APP “Foscam ip cam viewer” in the Google Play directly if your cell phone has installed Google Play.

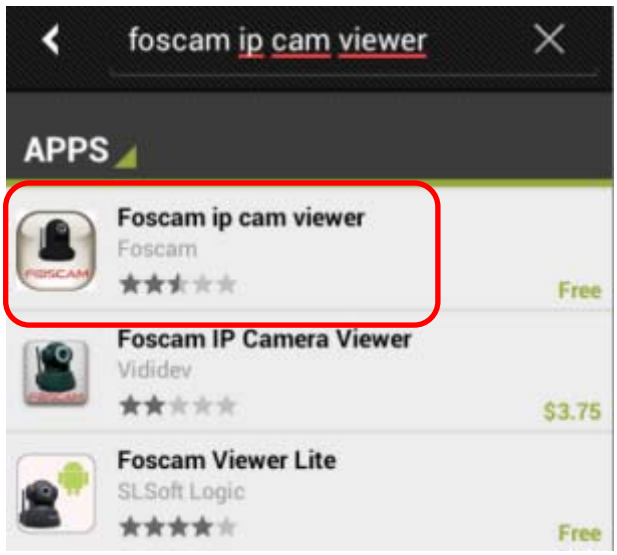
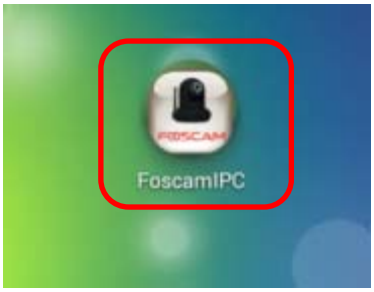


Figure 4.1

Download and install the phone view app, then you can see the shortcut icon in your cell phone screen.



2) Enter http://play.google.com in the URL field of the browser, then search the APP “Foscam ip cam viewer”. Download and install the APP.

Click the shortcut icon

and login Phone APP.

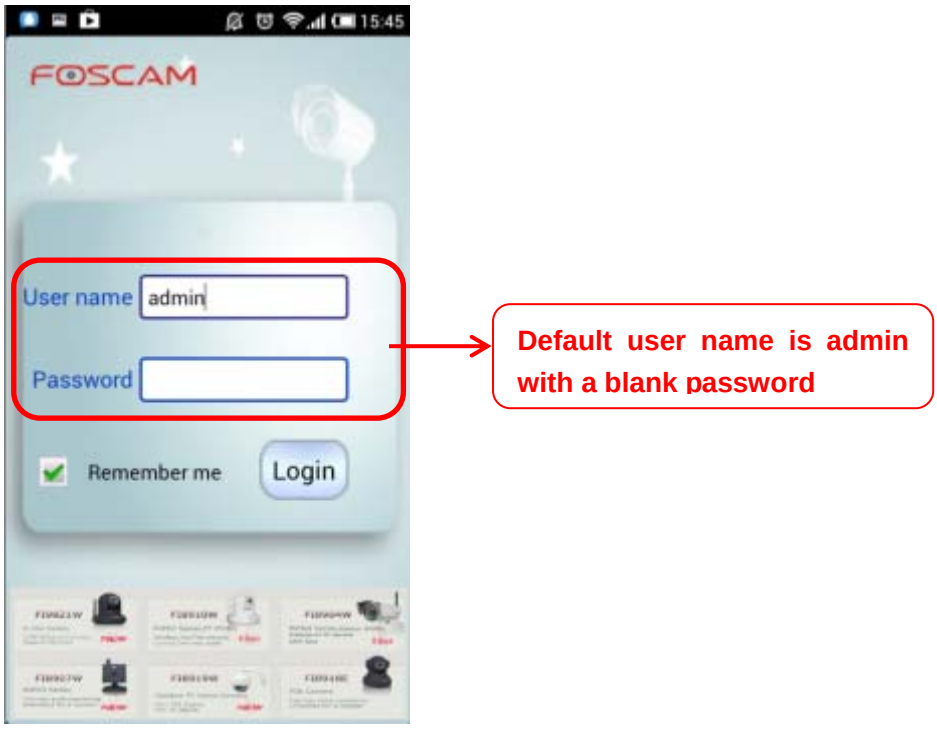


Figure 4.2

Enter the user name and password then click Login button, you can see the following surveillance windows:

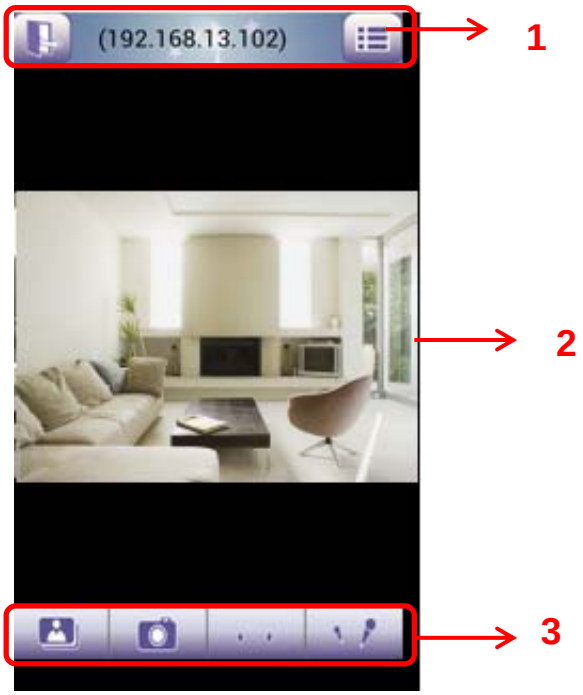


Figure 4.3

The default surveillance window is black, you need to add devices to it and then connect the device.

Please check the login window above, it was divided to 3 sections from no. 1 to 3.

Section1 Exit / Go to Device List Buttons

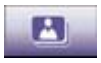
Click this icon and exit Phone App

Click this icon and back to Device List page to add cameras to the software

Section2 Live view window

If the camera supports PT function, here slide on the screen with your finger, the camera will rotate follow your finger direction.

Section3 Playback/ Snapshot/Audio/Talk buttons

 **Playback** Click this icon to play the pictures you have captured.

Snapshot Click it to make snapshot.

Audio button Click it and you will hear sound captured by the camera's built-in microphone. Make sure the camera supports Audio. Click the icon again and stop Audio.

Talk button Click it then talk through your cell phone's microphone which will transmit through the camera's speaker**.** People will hear your talking through the camera's built-in speaker. Make sure the camera supports Talk.

Click the icon again and stop talking.

How to add cameras to the Phone APP

The following steps are required before adding cameras to the APP:

1） Install the IP Camera(s) which wants to be monitored.

2） Login the IP Camera(s) by web browser and set the IP address, port, username & password and make sure the camera can be accessed by browsers.

3） DDNS setting is a plus whenever you want to add the devices by WAN.

Click the button and go to Device List page, this section will show you how to add cameras in LAN or in WAN.

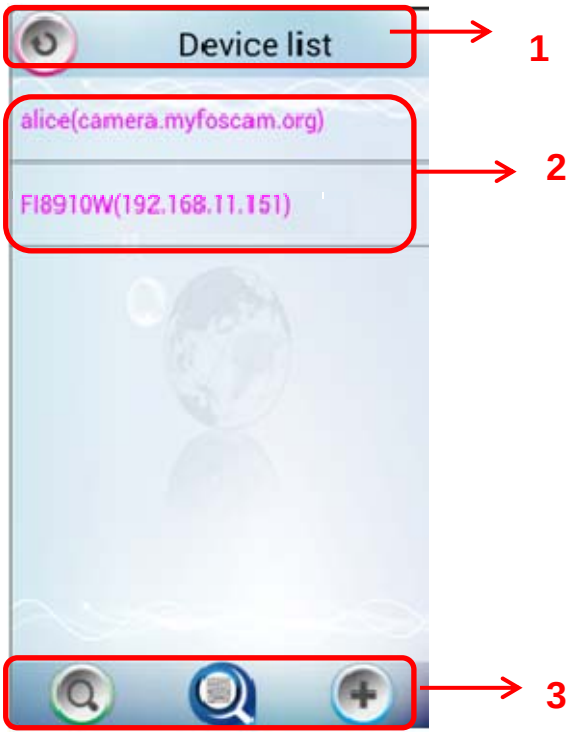


Figure 4.4

Section1 Back button

: Click this icon and back to the surveillance window

Section2 Device List

Here will list all cameras that added to the software.

Section3 Add device buttons

Add device in LAN

: Click this icon and the APP will search all cameras in LAN automatically. Such as the following screen:

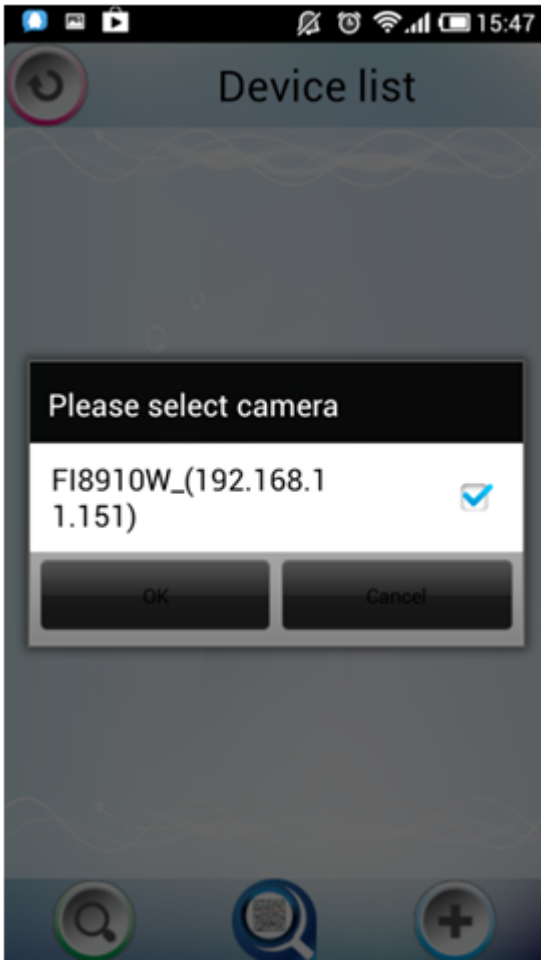


Figure 4.5

Select the camera IP and click OK to add cameras in LAN, then you can see the camera in the Device List.

Add device through scanning UID (User Identification) number

: **UID Scan.** Click this icon and scan the UID no. in the camera body, then the camera can be added to the App.

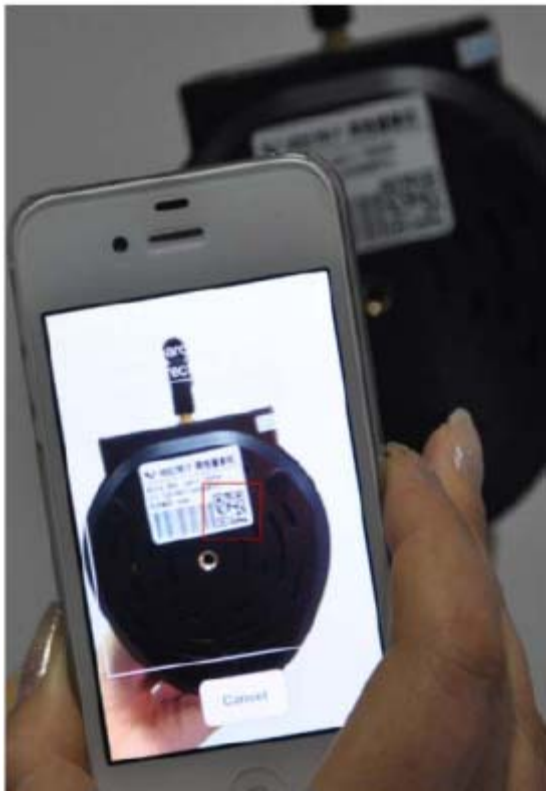


Figure 4.6

Normally each camera has one unique UID and UID is used for PnP function. Now our camera does not support UID number, so here you cannot allow to use UID to add device.

Add device in WAN

: Click this icon and you can add cameras in WAN manually.

Click this icon and it pops up the following screen, here you can add cameras manually.

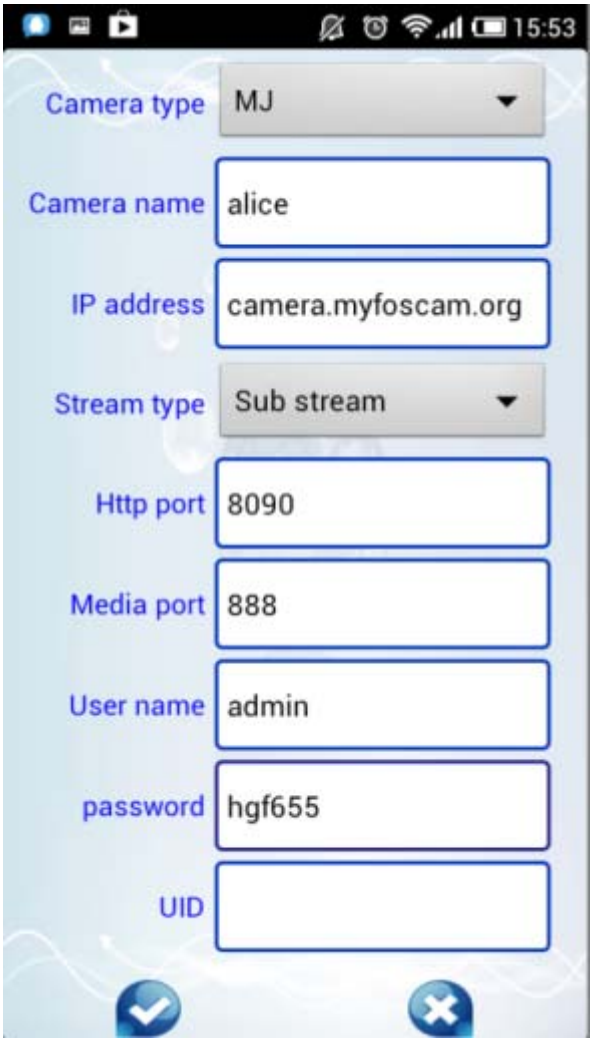


Figure 4.7

Camera Type: Our Company produces two series cameras: MJ and H.264. Here select the camera type that you want to add.

Camera name: The Camera name is a unique name that you can give to your device to help you identify it.

IP address: Fill in the camera's DDNS host or WAN IP not LAN IP.

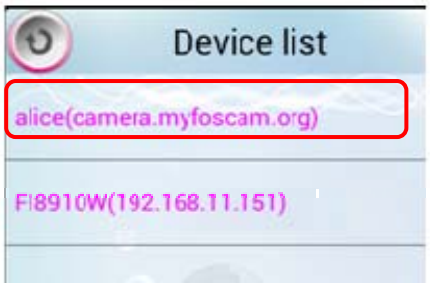
Stream type: It has two types: Main stream and Sub stream. For cell phones, we recommend you to select Sub stream to get more fluent video.

Http / Media port: For MJ cameras, here share the same port.

User name &Password: The camera's user name and password.

UID: If your camera supports UID, here you may fill in the UID no.. Now FOSCAM camera does not support UID.

Click the icon to add camera then you can see the camera in the Device List.



Select one IP address and click it, then you can enter the surveillance window.

Select one IP address in the Device List and press it for a moment, it pop up the following screen:

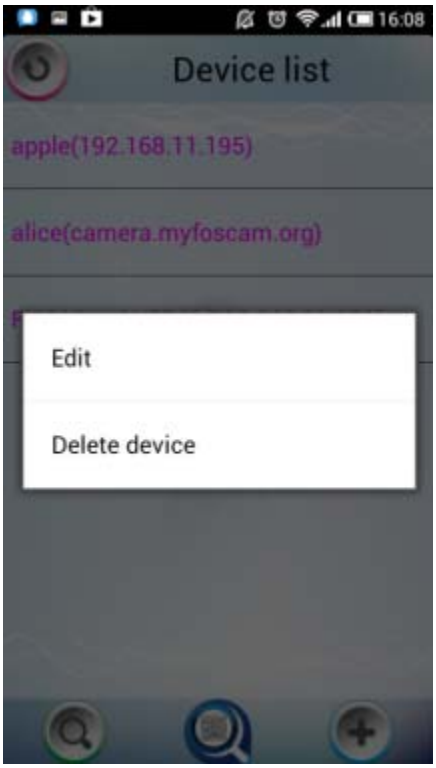


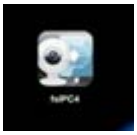
Figure 4.8

Edit: Re- edit the camera's information, such as the Http / Media port, user name and password, and so on. Click Edit and you can go to Add camera page (Figure 4.7).

Delete device: Delete the camera from the Device List.

4.2 APP for iPhones

If you use iPhone, please search the APP “Foscam ip cam viewer” and install it through APP Store, then you can see the shortcut icon in your cell phone screen.



Click the icon and you can go to “ipcam table” page directly:

Figure 4.9

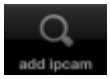
The default device list is null, you need to add cameras to it.

Section1 Camera list

Here will list all cameras that added to the software.

Section2 ipcam table/ add ipcam buttons

Click this icon and back to ipcam table page, here you can see all cameras that have added to the software.



: Click this icon and back to add ipcam page, here you can add cameras in LAN or in

WAN to the software.

How to add cameras to the APP

The following steps are required before adding cameras to the App:

1) Install the IP Camera(s) which wants to be monitored.
2) Login the IP Camera(s) by web browser and set the IP address, port, username & password and make sure the camera can be accessed by browsers.
3） DDNS setting is a plus whenever you want to add the devices by WAN.

If you want to add cameras to the App, please click this icon

go to **“add ipcam”** page(Figure 4.10)**.**

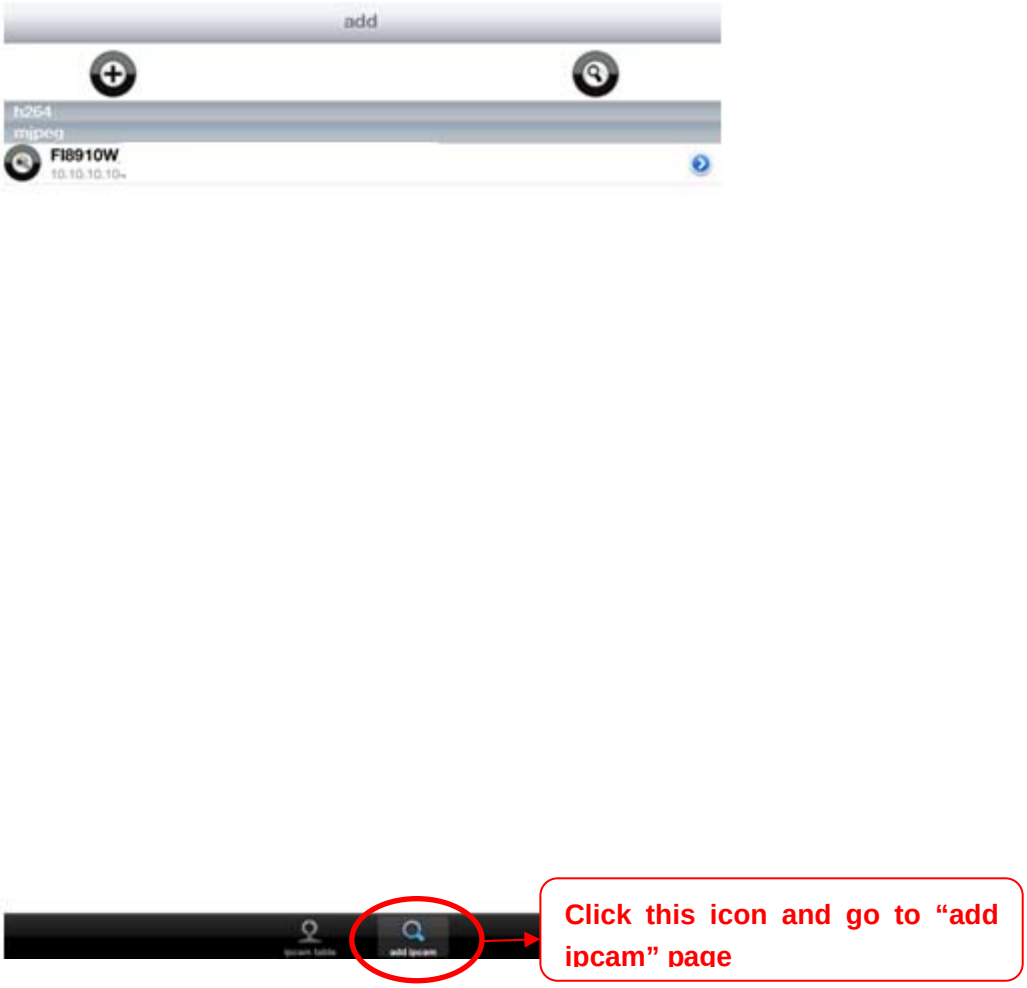


Figure 4.10

Add device in LAN

Click this button and the APP will search all cameras in LAN, then add it to APP automatically .

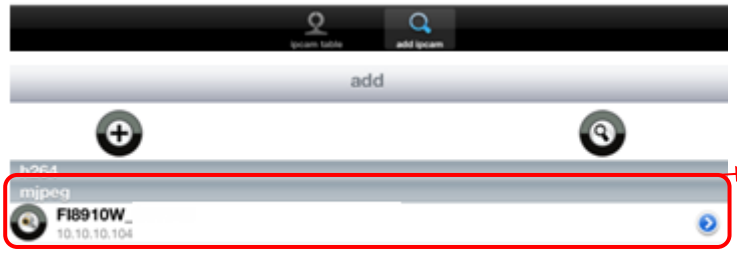


Figure 4.11

There is a icon after the camera name, click it and you can enter the user name, password and web port to login the camera.

Figure 4.12

Add device in WAN

Step 1: Click the Add Camera icon to add cameras manually.

Step 2: Select the camera type: mjpeg or h.284 (Figure 4.13), then enter the camera's basic information like camera name , ip , http/media port, user name, password and so on(Figure 4.14).

Figure 4.13

Figure 4.14a Add H.264 Device Page

Figure 4.14b Add MJPEG Device Page

UID: If your camera supports UID, here you scan UID number. Now FOSCAM camera does not support UID.

Device name: The Device name is a unique name that you can give to your device to help you identify it.

IP address: Fill in the camera's DDNS host or WAN IP not LAN IP.

User &Password: The camera's user name and password.

Media / Web port: For MJPEG cameras, here only support web port.

Stream type: It has two types: Main stream and Sub stream. For cell phones, we recommend you to select Sub stream to get more fluent video.

Step 3: Click Add button ADD to add cameras, then you can see the camera name in the “ip cam table” page.

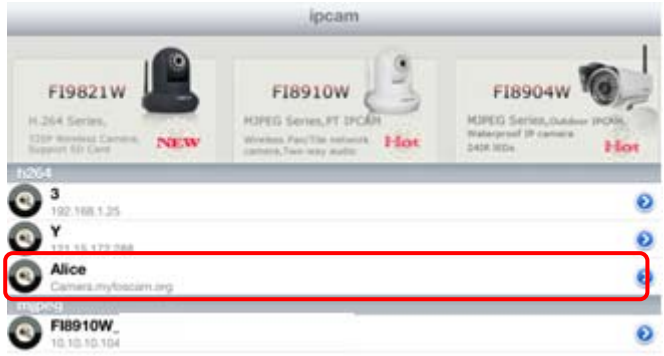


Figure 4.15

Surveillance windows

Back to “ipcam table” page and you can see all cameras that have added. There is a icon after one camera name, click this icon and you can alter the camera’s user name, password, media port and http port.

Figure 4.16

Figure 4.17

Click one camera ip and you can see the live video.

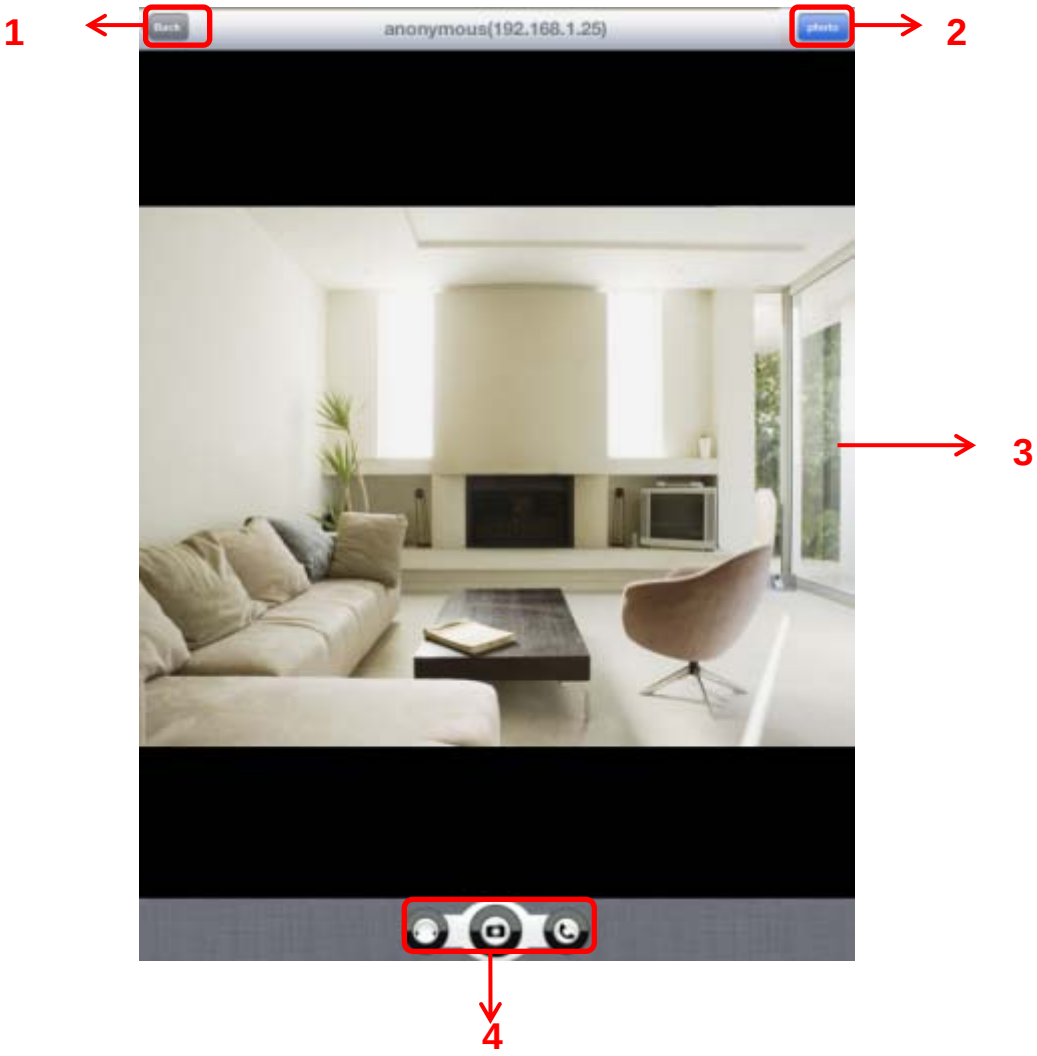


Figure 4.18

Please check the login window above, it was divided to 4 sections from no. 1 to 4.

Section1 Back Button

: Click this icon and back to “ipcam table” page.

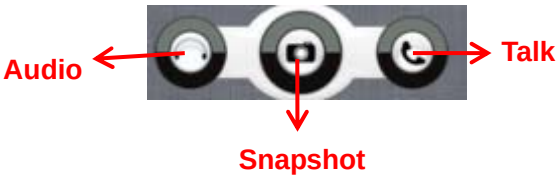
Section2 Photo Button

Click this icon and look the photos you have captured.

Section3 Live view window

If the camera supports PT function, here slide on the screen with your finger, the camera will rotate follow your finger direction.

Section4 Snapshot/Audio/Talk buttons



Snapshot

Click it to make snapshot.

Audio button

Click it and you will hear sound captured by the camera’s built-in microphone. Make sure the camera supports Audio. Click the icon again and stop Audio.

Talk button

Click it then talk through your cell phone’s microphone which will transmit through the camera’s speaker**.** People will hear your talking through the camera’s built-in speaker. Make sure the camera supports Talk.

Click the icon again and stop talking.

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, exchange and network card. If abnormal, check the network connections.

5.1.1 How to download and installl the ActiveX for Firefox users

For the first time login the camera, it may prompt you to download plugin.

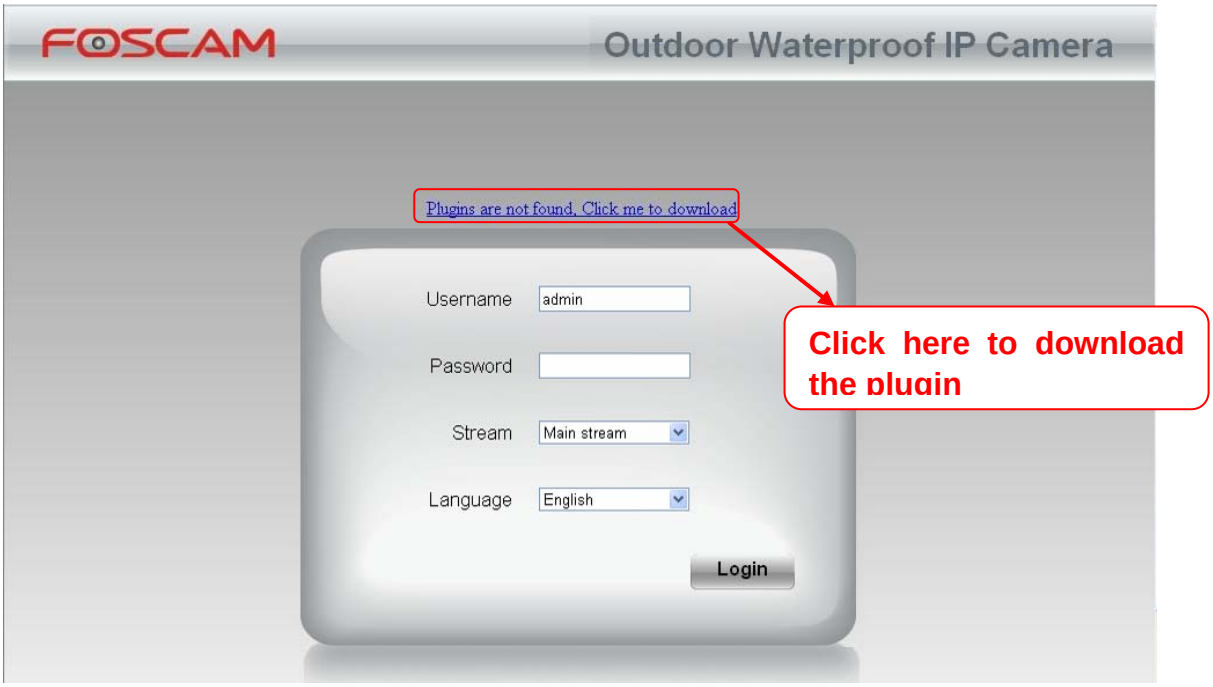


Figure 5.1

Drag the download file to Firefox web page and it will prompt you to install it.

Figure 5.2

Reboot the Firefox after the plugin installation is successfully completely, then re-login the camera again, you can see the surveillance window

NOTE: If you could not view living video after running the ActiveX, only a red cross in the center of the video or just a black screen. Please change another port number to try.
Make sure all firewall or antivirus software on your computer does not block the active download and installation. If you are unable to run the ActiveX control, try shutting down the firewall or antivirus program.

5.1.2 How to download and installl the ActiveX for Google Chrome users

For the first time login the camera, it will prompt you to download the ActiveX.

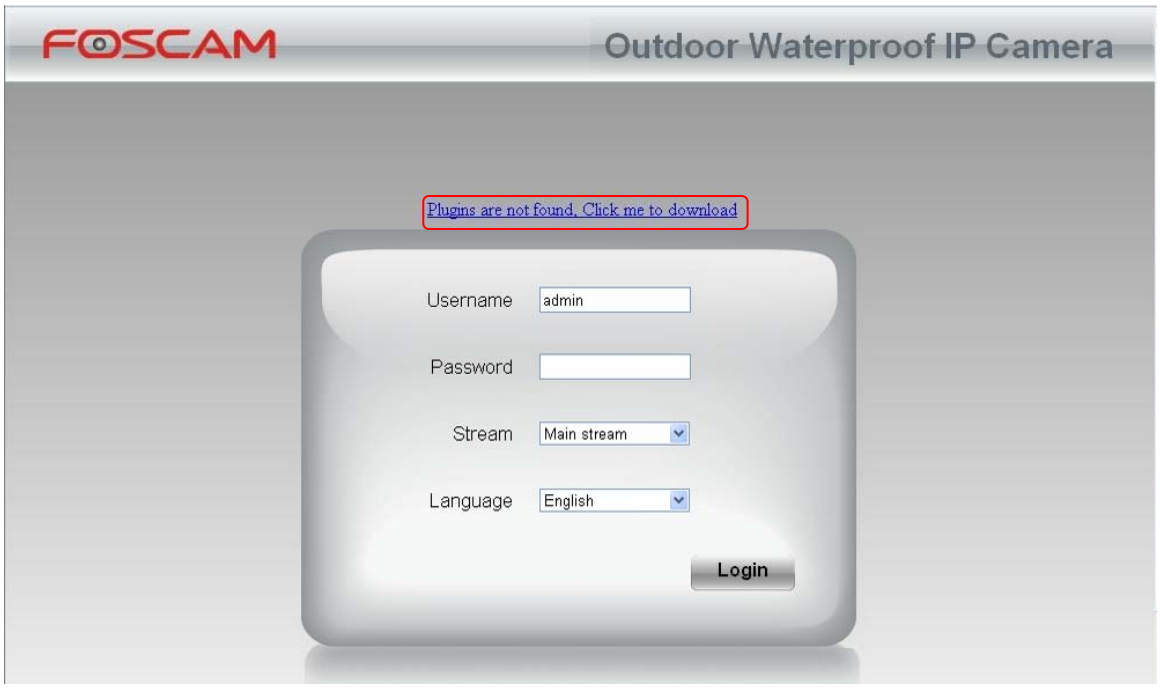


Figure 5.3

Download the plugin and drag it to the **Extensions** page of Google Chrome.

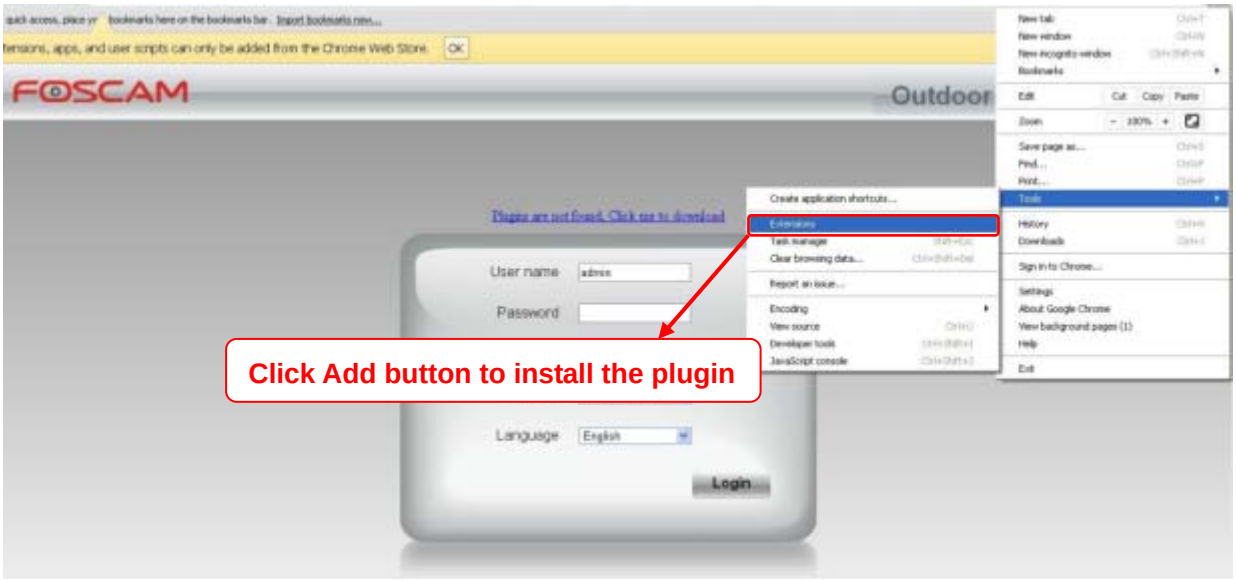


Figure5.4

Click Add button to install the Plugins.

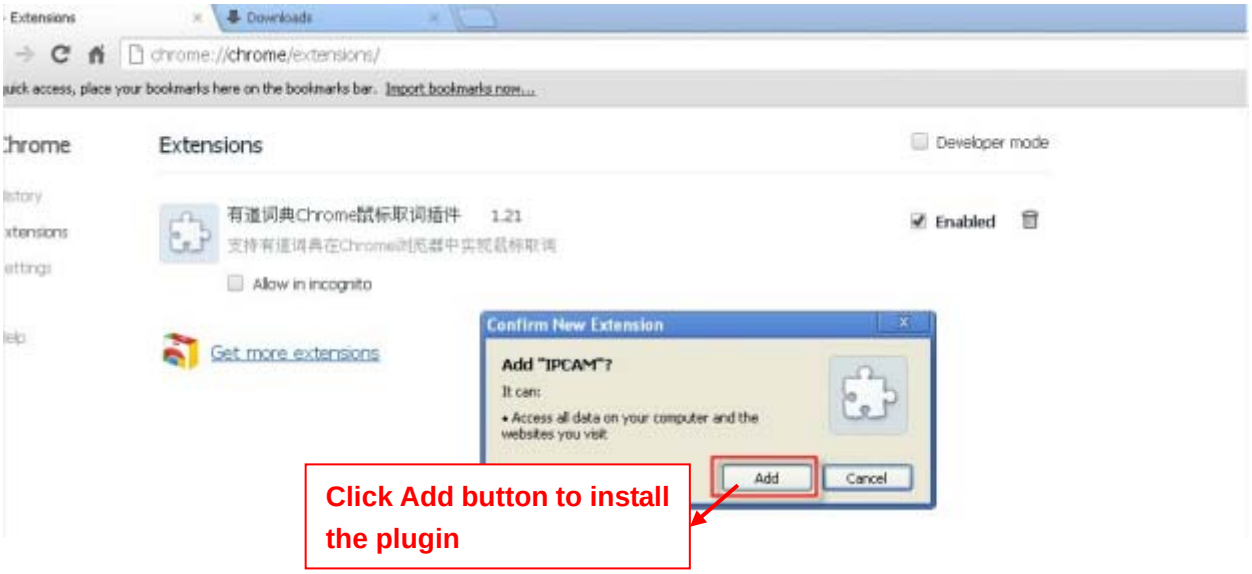


Figure 5.5

Reboot the browser and re-login the camera, you will see the surveillance window.

5.1.3 I have forgotten the administrator password

To reset the administrator password, you had better unplug the network cable firstly. After that, press and hold down the RESET BUTTON about 5 seconds. Releasing the reset button, the password will turn to the factory default.

Default administrator username/password: **admin with blank password**

5.1.4 Subnet doesn't match

Check whether your ipcamera in the same subnet of your computer. The step is **Control Panel→Network Connections→**Dbclick **Local Area Connections** → Choose **General→Properties**.(Figure 3.23/3.24) Check subnet mask, IP address and gateways. When you set IP address please make sure they are in the same subnet. Otherwise you can't access camera.

5.1.5 Camera can not record when I click Record button or I can't change the manually record path

When you use Windows7 or Vista, you may be not able to do manually record or change the record path because of the security settings of computer.
There are two ways to resolve this problem:
(1) Please add the camera as a trusted site to resolve this issue. The steps are
IE browser→Tool→Internet Properties→Security→Trusted sites→Sites→Add

(2) Open IE browser, then right click, select "Run as administrator"

5.1.6 No Pictures Problems

The video streaming is transmitted by the ActiveX controller. If ActiveX controller isn't installed correctly you will see no video image. You can resolve this problem by this way:
Download ActiveX controller and set the safety property of IE in the PC when you view it first time: IE browser→Tool→Internet Proper→Security→Custom Level→ActiveX control and Plug-ins. Three options of front should be set to be "Enable", The ActiveX programs read by the computer will be stored. As follows:
Enable: Download unsigned ActiveX controls
Enable: Initialize and script ActiveX controls not marked as safe
Enable: Run ActiveX controls and plug-ins

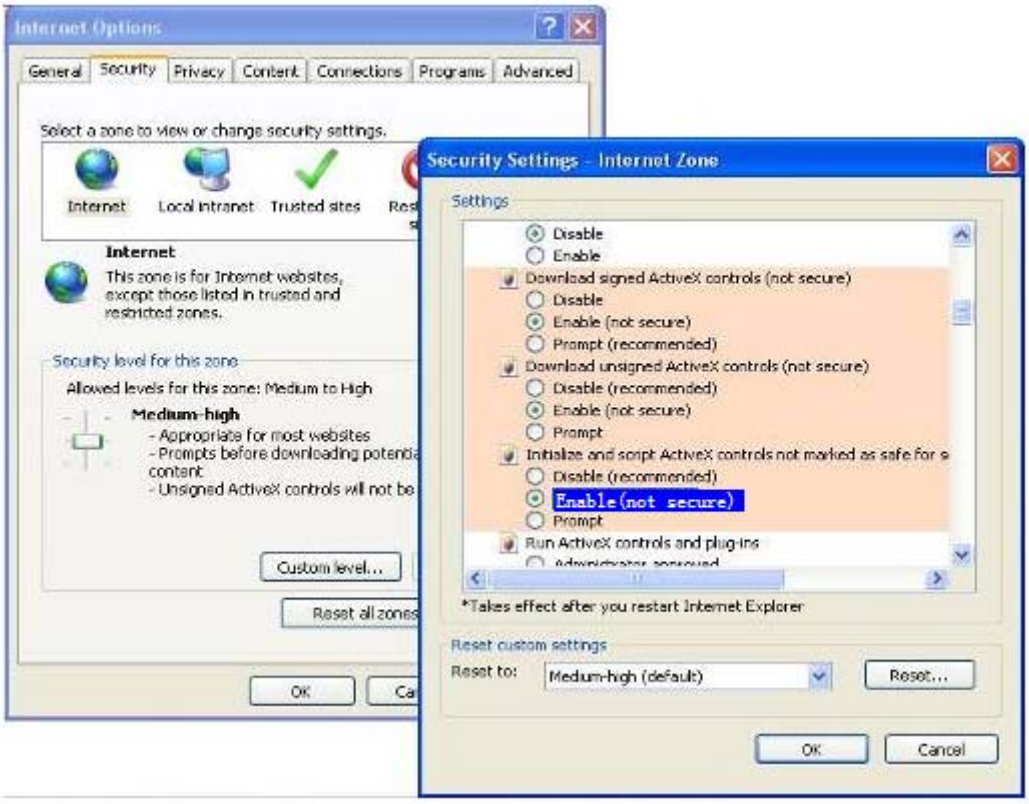


Figure 5.6

If you allow the ActiveX running, but still could not see living video. Please change another port number to try. Don't use port 8000.

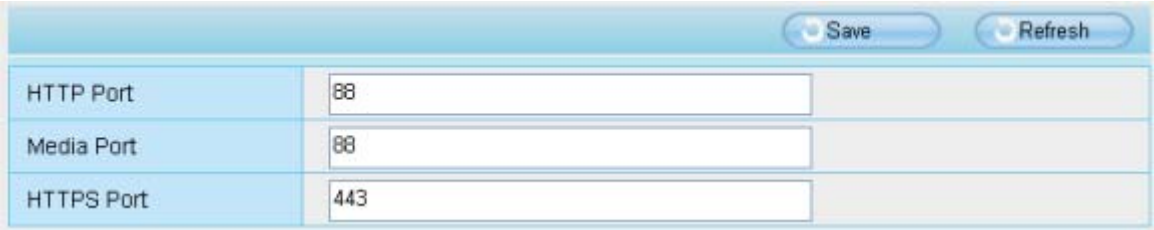


Figure5.7

NOTE: Make sure that your firewall or anti-virus software does not block the camera or ActiveX. If you could not see video, please shut down firewall or anti-virus software to try again.

5.1.7 Can't access IP camera in internet

There are some reasons:
1 ActiveX controller is not installed correctly
2 The port which camera used is blocked by Firewall or Anti-virus software. Please change another port number and try again. (Figure5.7)
3 Port forwarding is not successful(Figure3.30)
Check these settings and make sure they are correct.

5.1.8 UPnP always failed

UPnP only contains port forwarding in our recent software. Sometimes, it may be failed to do port forwarding automatically because of firewall or anti-virus software. It also has much relation with router's security settings. So we recommend you do port forwarding manually. You can view your camera in internet successfully after you do port forwarding manually in your router.

5.2 Default Parameters

Default network Parameters
IP address: obtain dynamically
Subnet mask: obtain dynamically
Gateway: obtain dynamically
DDNS: Embedded FOSCAM DDNS Service

Username and password
Default administrator username: **admin**
Default administrator password: No password

5.3 Specification

Specification		FI9805E
Image Sensor	Image Sensor	High Definition Color CMOS Sensor
	Lens	f : 4mm or 6mm or 8mm
	Mini. Illumination	0.5Lux
Lens	Lens Type	Glass Lens
	IR_CUT	Filter can switch automatically
Audio	Input/Output	Linear Input/Output, which can realize two-way voice the intercom
Video	Image Compression	H.264
	Image Frame Rate	25fps(50Hz), 30fps(60Hz),Down adjustable
	Resolution	720p（1280*720），VGA（640*480）
	View	H.264 dual streaming
	Image adjust	The brightness, contrast, saturation, chromaticity, is adjustable
	Infrared mode	Auto & Manually
	Night visibility	Φ8mm 36 IR LEDs, Night visibility up to 30 meters
Network	Ethernet	One 10/100Mbps RJ-45
	Supported Protocol	TCP/IP、UDP/IP、HTTP、SMTP、FTP、DHCP、DDNS、UPNP、RS485
	Support IP address	static IP address, dynamic IP address

Alarm	Alarm detection	The motion detecting 、 I/O alarm
	Alarm inform	Support Email、FTP、I/O output alarm etc alarm inform way
Hardware Interface	POWER Interface	DC 12V/2.0A (EU,US,AU adapter or other types option, Power Consumption ＜8 Watts
	Audio Input/Output Interface	One audio input jack, One audio output jack.
	Reset Buttons	One Reset
	I/O alarm interface	External Input / output terminal block
	Control Interface	one RS - 485 port, support of transparent channel transmission
PoE	PoE Standard	IEEE 802.3af
	Input Voltage	DC 36V~DC 57V
	Output Voltage	DC 12V
	Output Power	15.4W (Max.)
	Wiring standards	100M BASE-T
Environment	Operate Temper	0° ~ 55°C (32°F ~ 131°F)
	Operate Humidity	10% ~ 80% non-condensing
	Storage Temper	-10°C ~ 60° (14°F ~ 140°F)
	Storage Humidity	0% ~ 90% non-condensing
	Dimension	245(L)X196(W)X112(H)mm.
	Net Weight	900g
	Gross Weight	1150g
PC Requirements	CPU	2.0GHZ or above (suggested 3.0GHz)
	Memory Size	256MB or above (suggested 1.0GHz)
	Display Card	64M or above
	Supported OS	Microsoft Windows 2000/XP/Vista , Win7/Win8, Mac OS
	Browser	IE6 and above version or compatible browser, Firefox, Chrome, Safari or other standard browsers
Software	Upgrade	Upgrade from network
Certification	CE,FCC	

6 OBTAINING TECHNICAL SUPPORT

While we hope your experience with the IPCAM 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: tech@foscam.com .

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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: 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.