FOSCAM

User Manual

Model: FI9803P

Outdoor HD Wireless IP Camera

Table of Contents

Security Warning

Safeguarding Your Privacy

Foscam cameras require good security practices to safeguard your privacy. You can help protect your camera by changing the default username and/or password. Input a username and/or password that is at least 8 – 10 characters or longer. Try to use a combination of lower-case and upper-case letters as well as numbers and special characters. The more complex the username and password, the harder it will be to guess by an unauthorized user.

You should update your camera regularly at *http://www.foscam.us/firmware.html*. Make sure your camera has the latest firmware installed for your specific camera model. The latest firmware for Foscam cameras utilizes protection against various types of online hacking, cracking, and unauthorized access. Doing so will make your device more secure, may add features, and will contain bug fixes to make your device work faster.

1 Overviews

FOSCAM FI9803P is an integrated wireless IP Camera 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.

FI9803P supports the industry-standard H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth.

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.

The camera is designed 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 utilizing wireless connectivity.

FOSCAM provides Phone APPs for Android and iPhone users, please search “Foscam” 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
- 1.0 Mega-Pixel
- Supports IE/Firefox/Google/Safari browser or any other standard browsers
- Supports WEP,WPA and WPA2 Encryption
- Wi-Fi compliant with wireless standards IEEE 802.11b/g/n
- IR night vision (Range:20m)
- Supports image snapshot
- Supports dual-stream
- Supports IR-Cut and the filter change automatically
- 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
- Supporting Third Party Domain name
- Providing Phone APPs for Android and iPhone users
- Supports multiple network protocols: HTTP /HTTPS/ RTSP/ TCP /IP /UDP /FTP /DHCP /DDNS / UPNP /ONVIF
- Providing Central Management Software to manage or monitor multi-cameras

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

1.3 Packing Contents

● IPCAM×1	● Network Cable×1
● Wi-Fi Antenna×1	● CD×1
● DC Power Supply×1	●Quick Installation Guide ×1
● Mounting bracket×1	● Security Warning Card × 1

1.4 Physical Description

Front Panel

Figure 1.1

1 WIFI Antenna: Wireless Antenna
2 Infrared Lamp Array
3 LENS: CMOS sensor with fixed focus lens
4 Induction IC

Interface

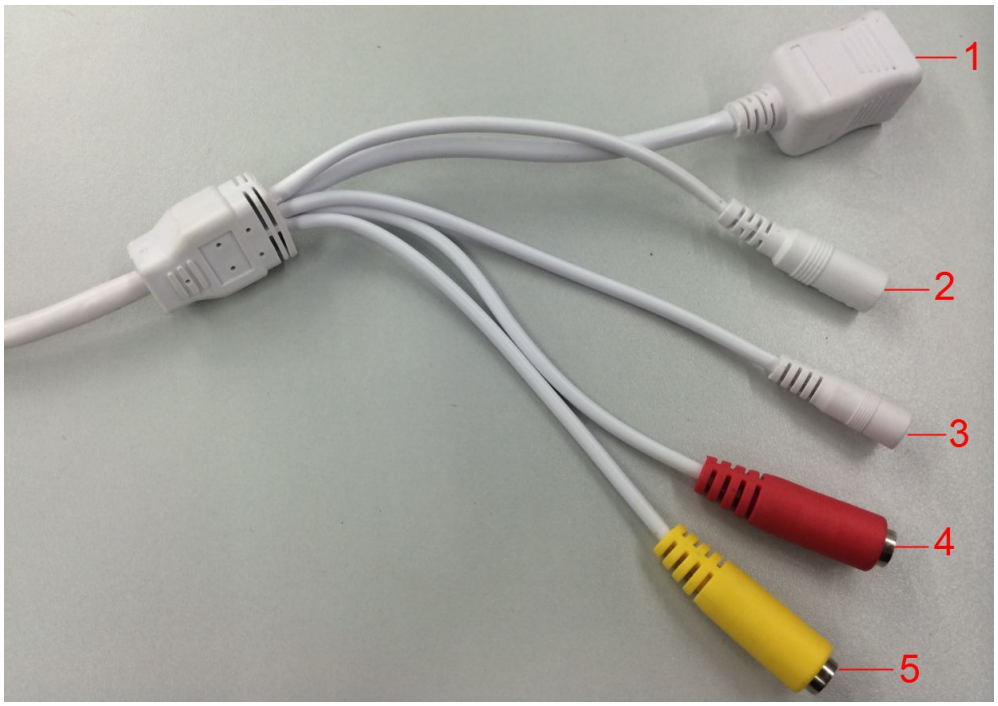


Figure 1.2

1 LAN

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

2 Power Interface

Connect the external power adapter, request for 12V/1A power.

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 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 adapter first.

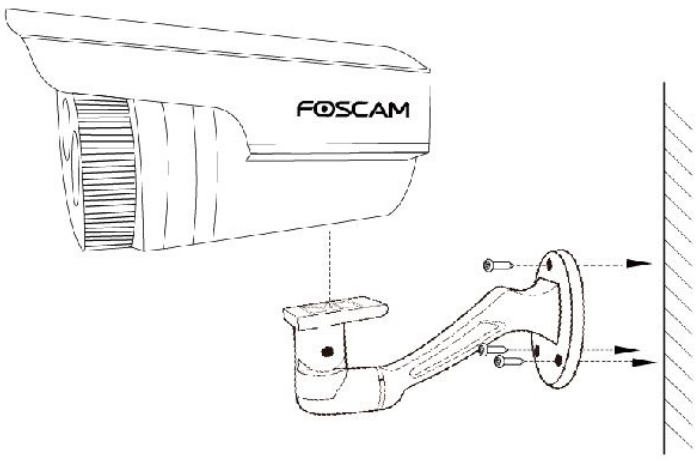
5 Audio input interface:

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 adapter first.

Bottom View

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 Hardware Installation



Step 1: Screw the mount on the wall with the 3 screws provided.

Step2: Install the camera on the mounting bracket with 1 screw to complete installation.

Please Note: The tail line's wall hole must be lower than socket, ensure that the rain will not wet out device through tail line.

2 Accessing the Network Camera

2.1 Hardware Connection & Software Installation

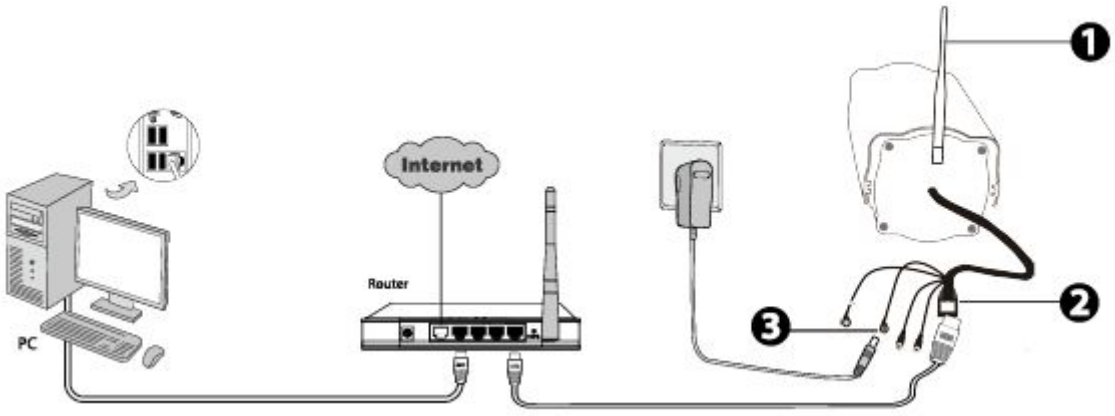


Figure 2.1

1. Mount the antenna and make it stand vertically(Only for the device with external antenna).
2. Connect the camera to the LAN network (Router or Switch) via network cable.
3. Connect the power adapter to the camera.
4. Insert the CD into the CD drive of your computer.
5. Go to the folder “IP Camera Search Tool” and find the folder “For Windows OS”or “For Mac OS”. Copy and paste the IP camera tool file to your computer, or drag it onto your Desktop.

Shortcut icon for Windows OS

Shortcut icon for Mac OS

Notes:

- If your computer (Windows OS) supports autorun function, you can find the corresponding file in the opened control panel.
- If your computer doesn’t have CD drive, you can download the IP camera tool from our website for free.

2.2 Access the Camera in LAN

2.2.1 Wired connection

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 IP Camera Tool icon to run, and it should find the camera's IP address automatically after you plug in the network cable.

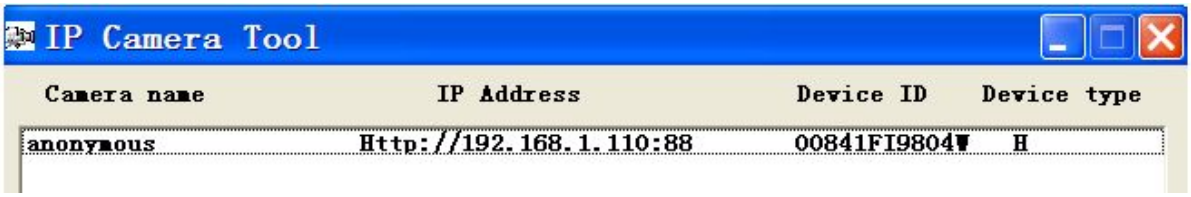


Figure 2.2

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

- **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.

Figure 2.3

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

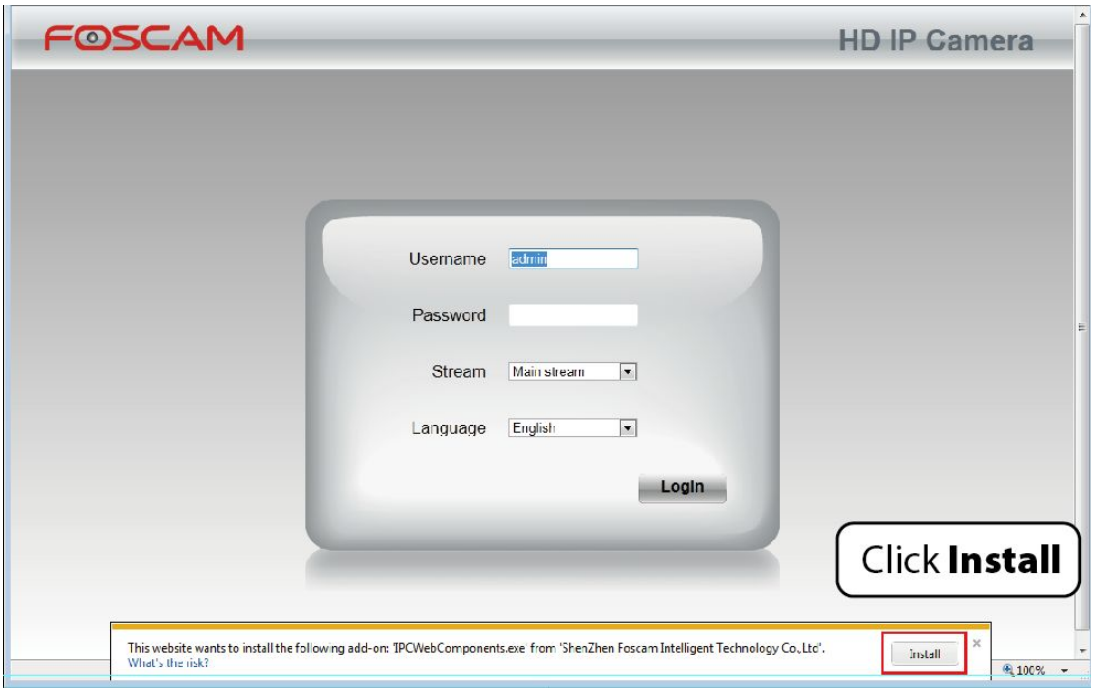


Figure 2.4

2.2.2 Wireless connection

Camera support EZLink wireless connection , please refer to the Quick Installation Guide.

2.3 Access the Camera in LAN

2.3.1 Static IP Addresses

Users who have static IP addresses do not need to set DDNS service settings for remote access. When you have finished connecting the camera using the LAN IP address and port forwarding, you can access the camera directly from the 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 webpage at this address will show you the current WAN IP.

Figure 2.5

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

2.3.2 Remote Access

If you want to access your camera by web browser outside of your LAN, you need to configure following configurations.

1. Choose “Settings” on the top of the camera web page, then go to the “Network > IP Configuration” section on the left side of the screen, then uncheck the Obtain IP DHCP.

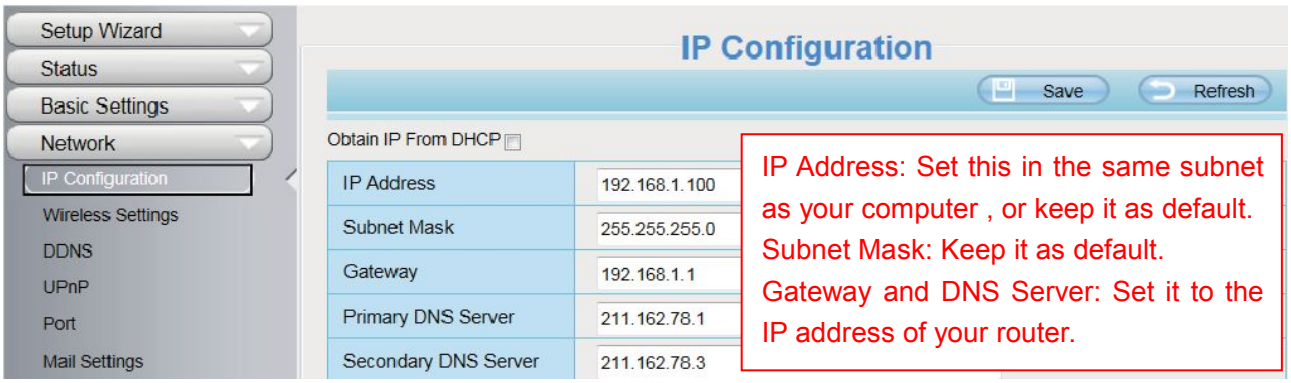


Figure 2.6

2. Enable UPnP and DDNS in the camera’s settings page. We recommend you to use the DDNS by factory default.

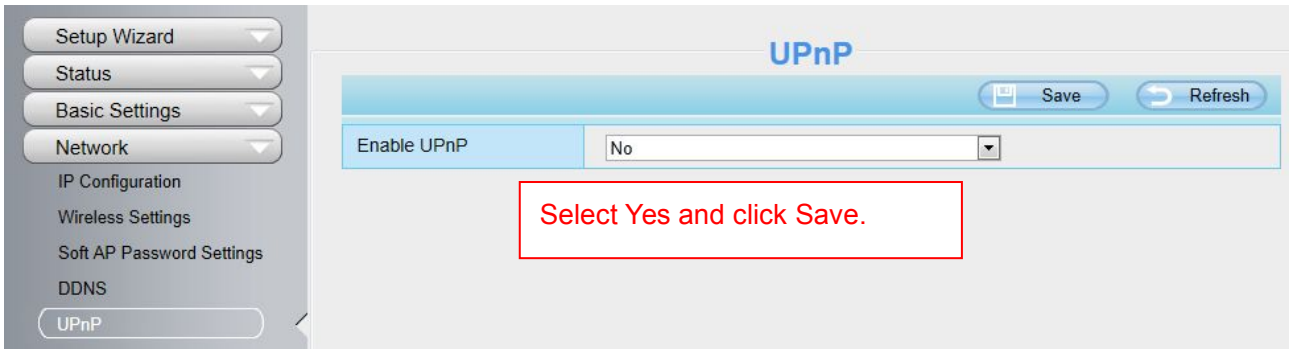


Figure 2.7

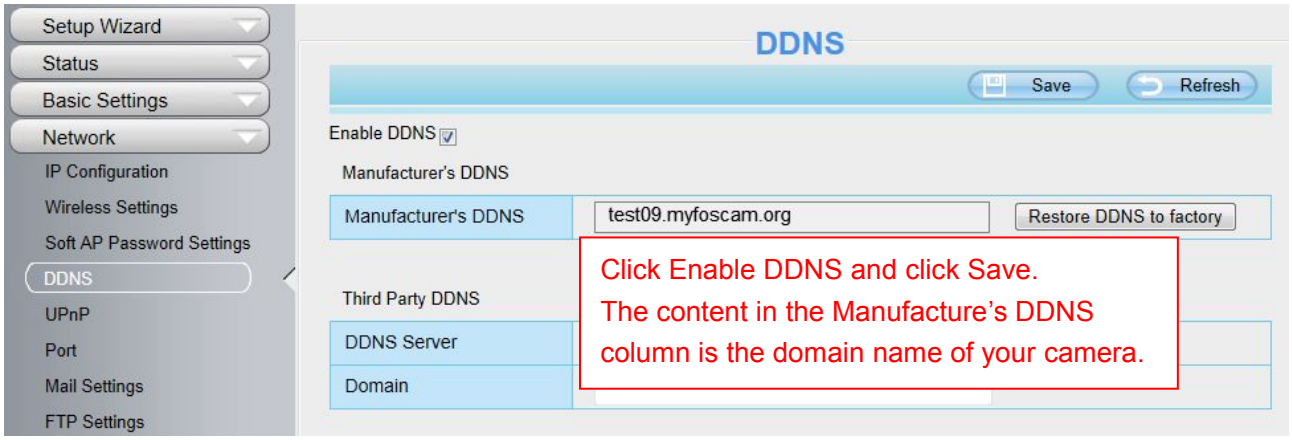


Figure 2.8

3. You can see the port of your camera here. If you want to set Remote Access for several cameras on the same network, you will need to change the HTTPS port for each camera.

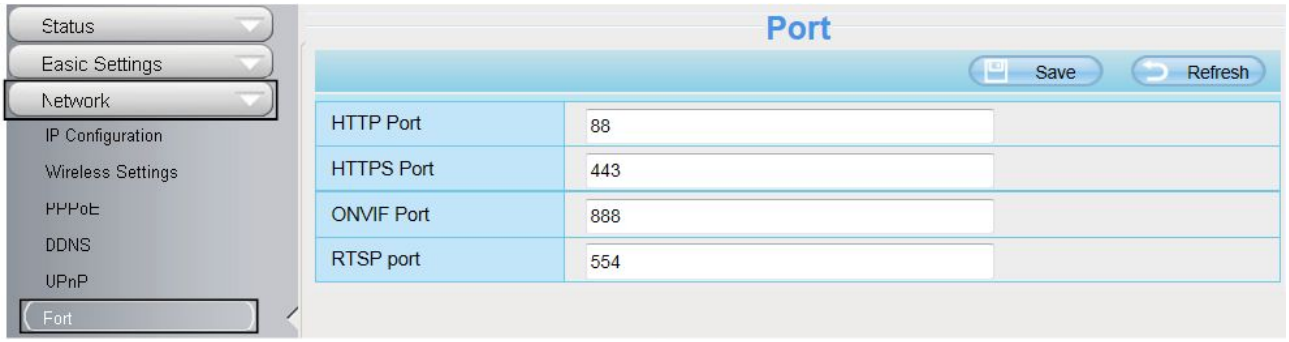


Figure 2.9

4. If the UPnP of the router has been enable, you do not need to perform following steps. Otherwise, you need to select one of the following methods to configure port forwarding on your router. For these steps, we will be using the TP-LINK brand wireless router as an example.

- **If there is a UPnP function in your router：**

Choose "Forwarding > UPnP", make sure that the Current UPnP Status is Enabled.

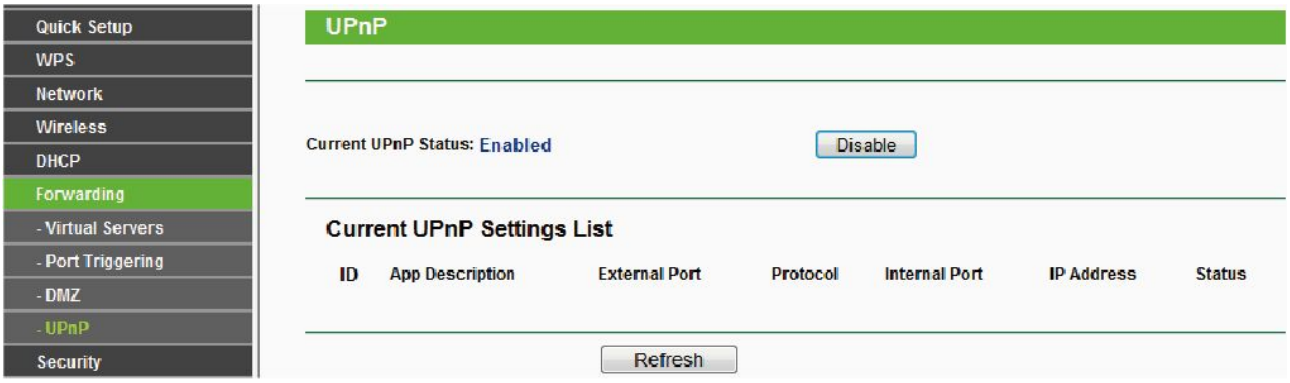


Figure 2.10

- **If there is no UPnP function in your router：**

You need to manually add port(HTTPS port) forwarding, refer to the following steps. You need go to the "Forwarding > Virtual Servers" panel for setup.

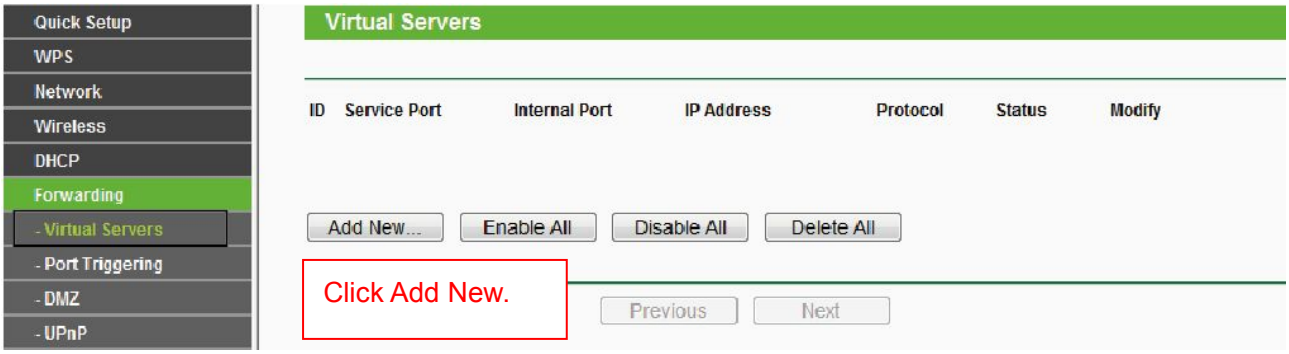


Figure 2.11

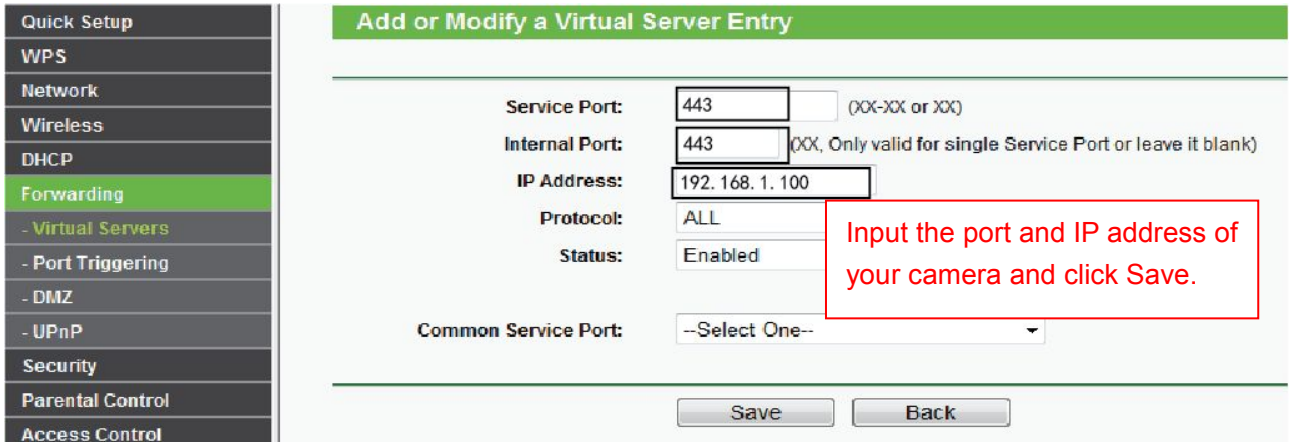


Figure 2.12

Figure 2.13

5. Now you can access your IP camera by https://domain name: HTTPS port via the Internet.

2.4 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:RTSP 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.

Videostream:

Here support some mode.When the network speed is bad, here you had better select videoSub.

For example:

IP: 192.168.1.11

RTSP Port number: 554

User name: admin

Password: 123

Here I can enter one of the following URLs in the VLC.

1) rtsp://admin:123@192.168.1.11:554/videoMain
2) rtsp:// @192.168.1.11:554/videoMain
3) rtsp://:123@192.168.1.11:554/videoMain
4) rtsp://admin@192.168.1.11:554/videoMain

Open the VLC, and go to Media→Open Network Stream option, then enter the URL into VLC.

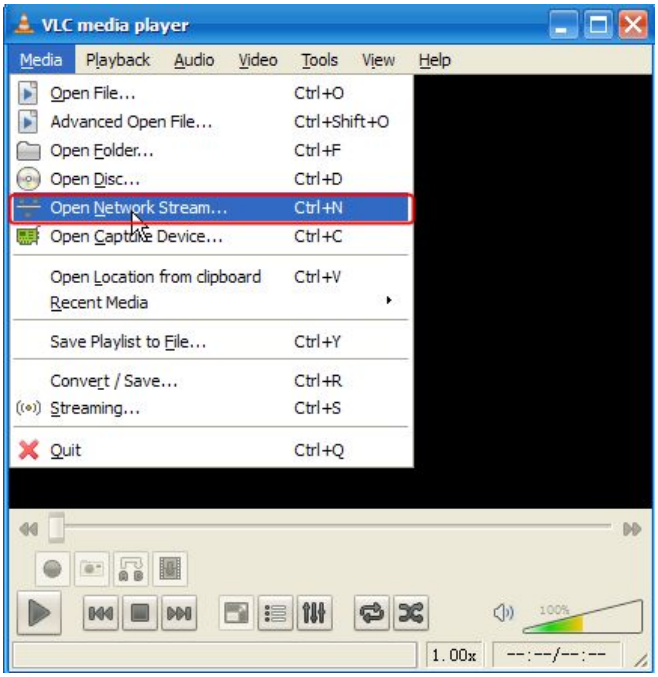


Figure 2.14

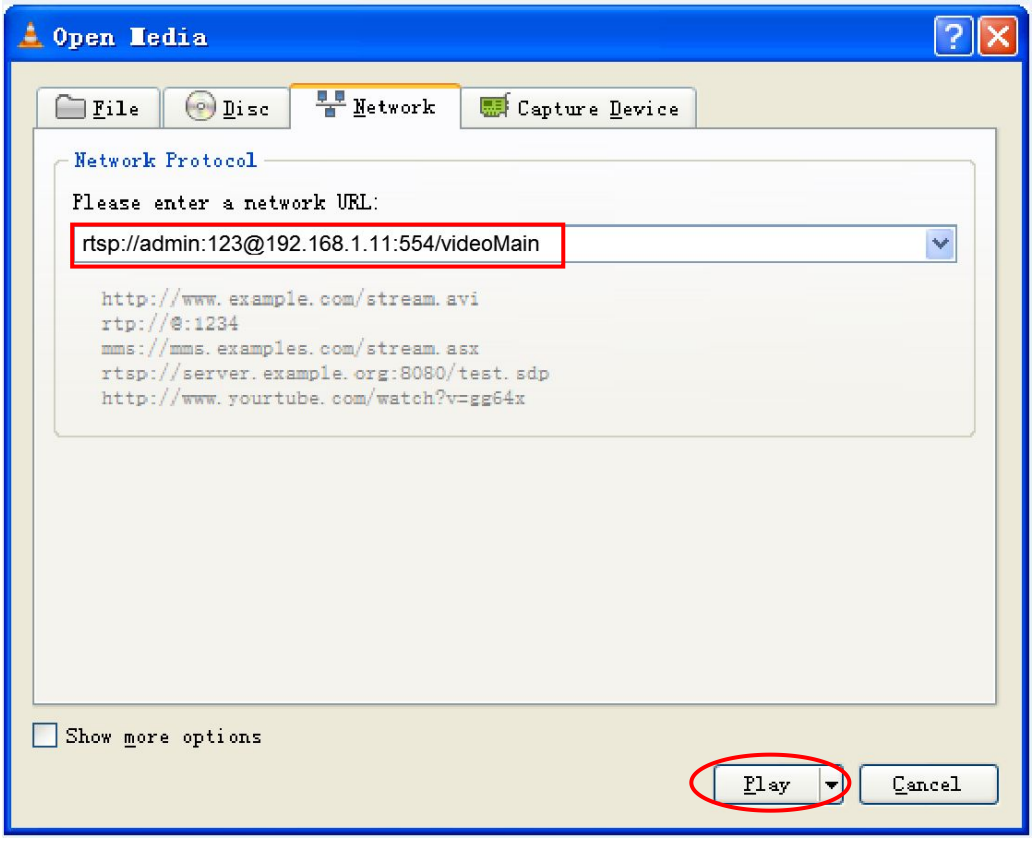


Figure 2.15

Sometimes you may need to enter the user name and password again. Click OK and you can see the real-time preview.

Figure 2.16

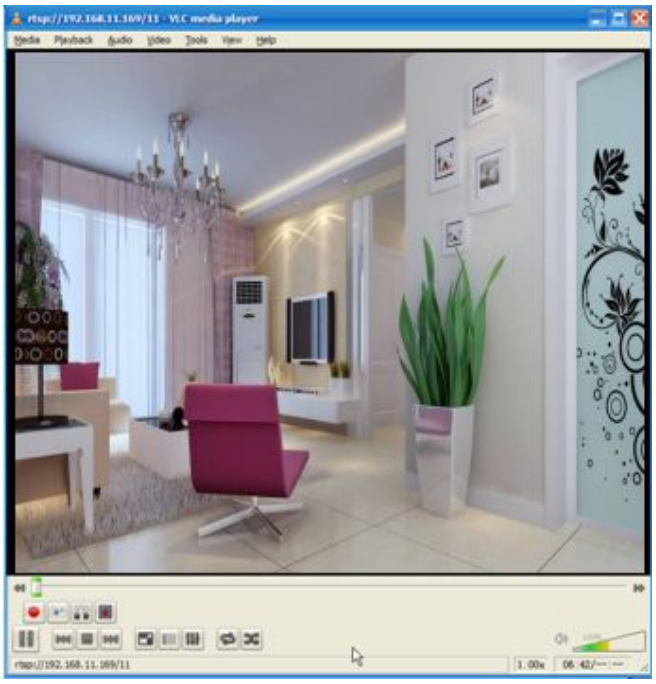


Figure 2.17

If you cannot play the video in the VLC player, please check the port mapping. You can read Quick Installation Guide about How to configure port forwarding.

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.

2.5 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 Surveillance Software GUI

Please refer to the section 2.1 if you install the camera for the first time. You can start to learn about software operation after finish quick installation.

3.1 Login Window

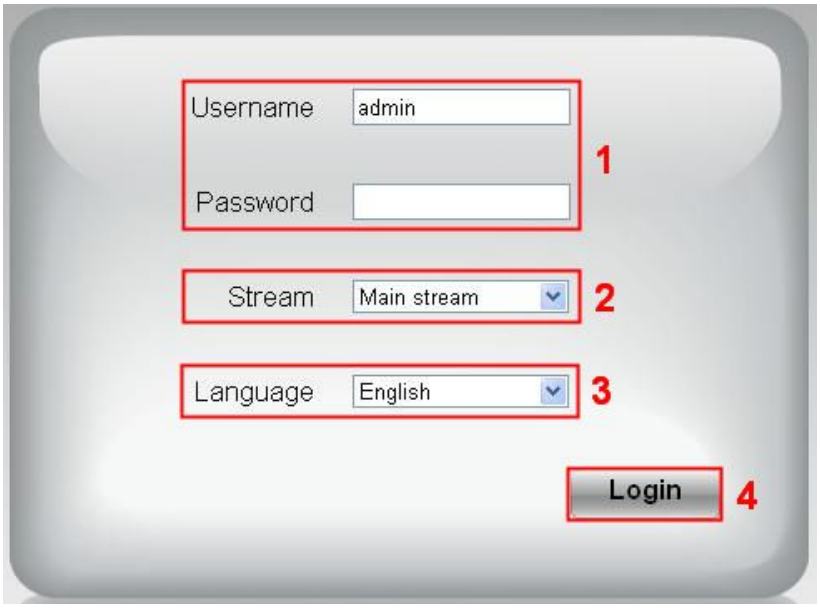


Figure 3.1

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

Section1 Enter the Username 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 .

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 drop-down list to switch.

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 and/or

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.

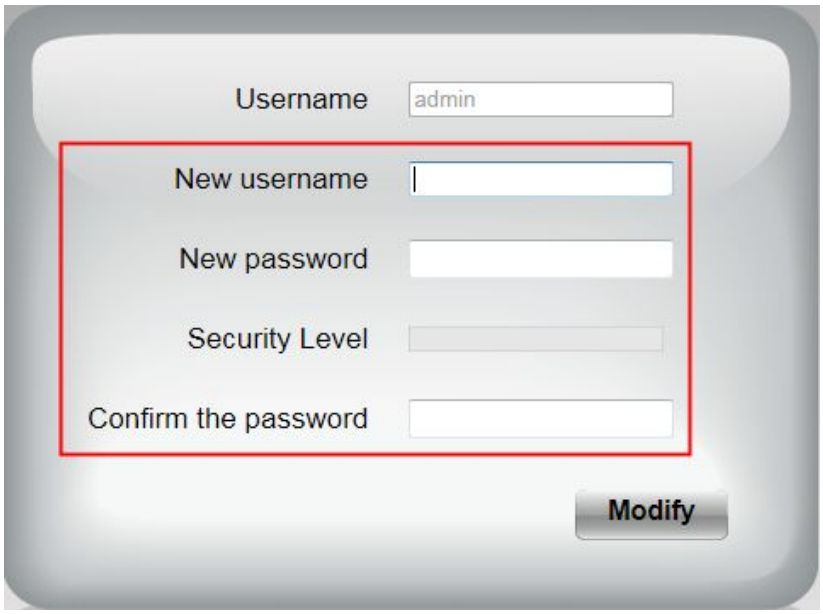


Figure 3.2

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, wireless settings, IP configuration.

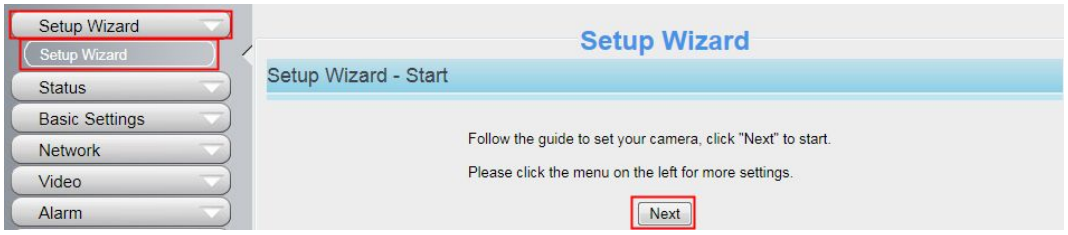


Figure 3.3

Device Name: You could give name for your camera.

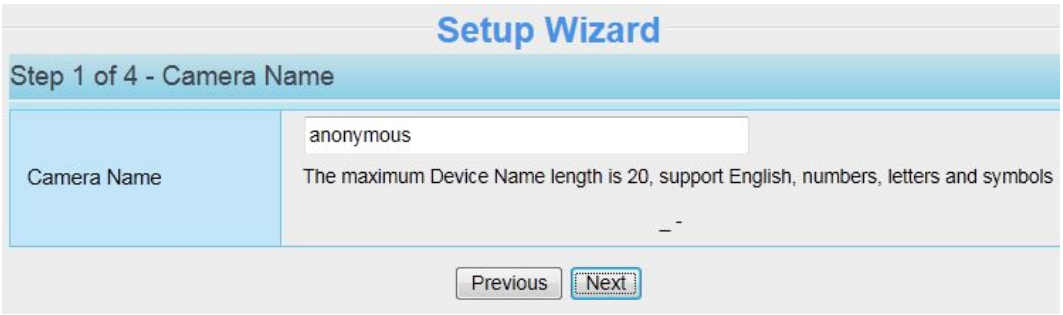


Figure 3.4

System Time: Select the time zone you need to set the date, time,format, etc.

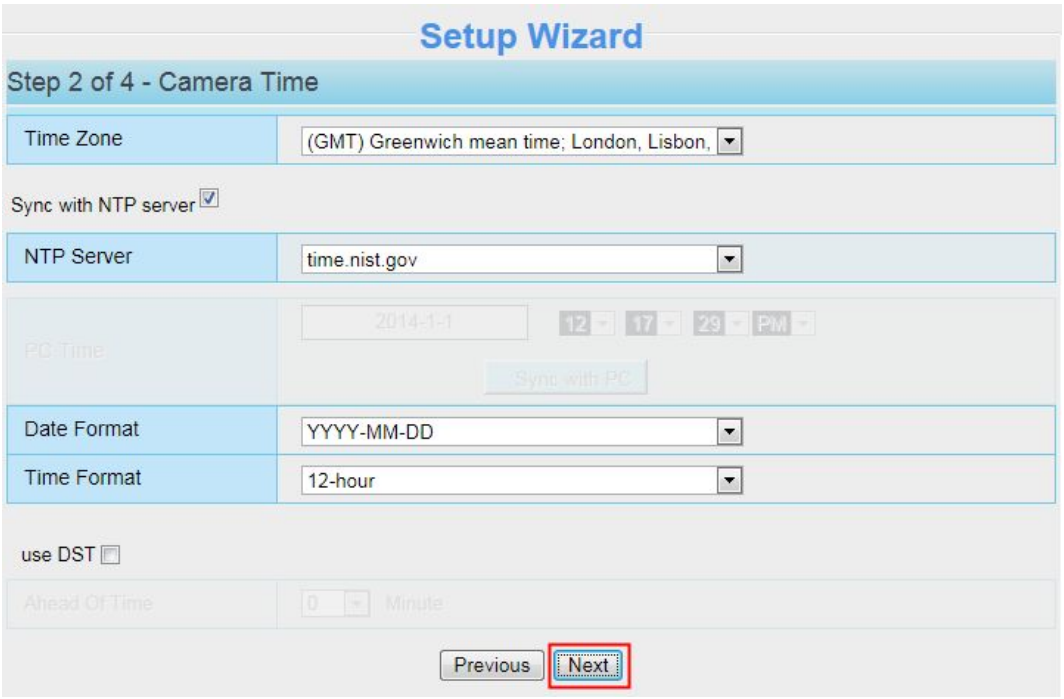


Figure 3.5

Wireless networks: Click “Scan”, find the SSID of your wireless router, select and enter the password.

Figure 3.6

IP: Set IP address of the camera. You could choose to obtain an IP automatically or set the IP address according to your needs.

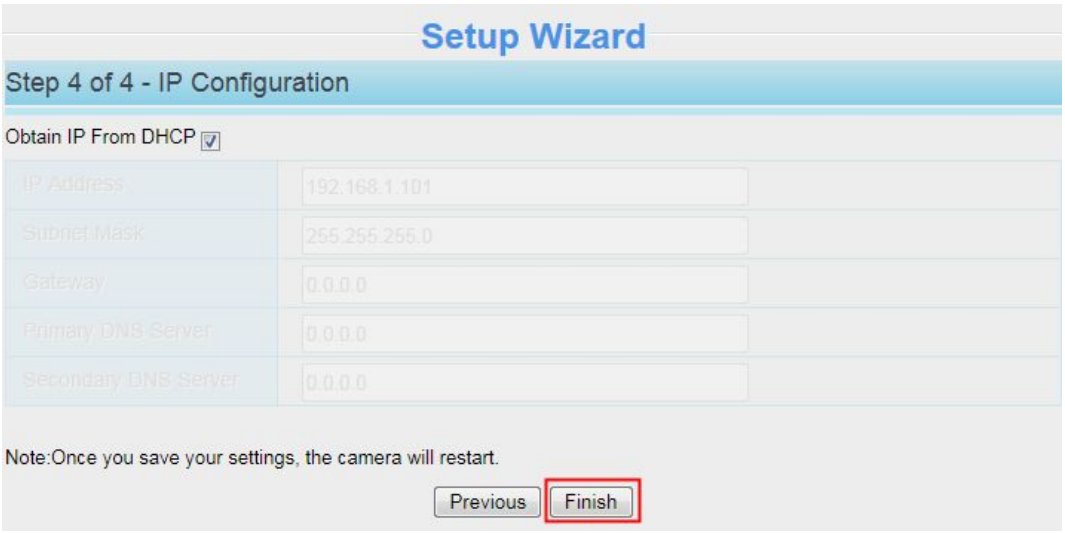


Figure 3.7

NOTE:
It needs about 1 minute to connect the camera to your router.

3.2 Surveillance Window

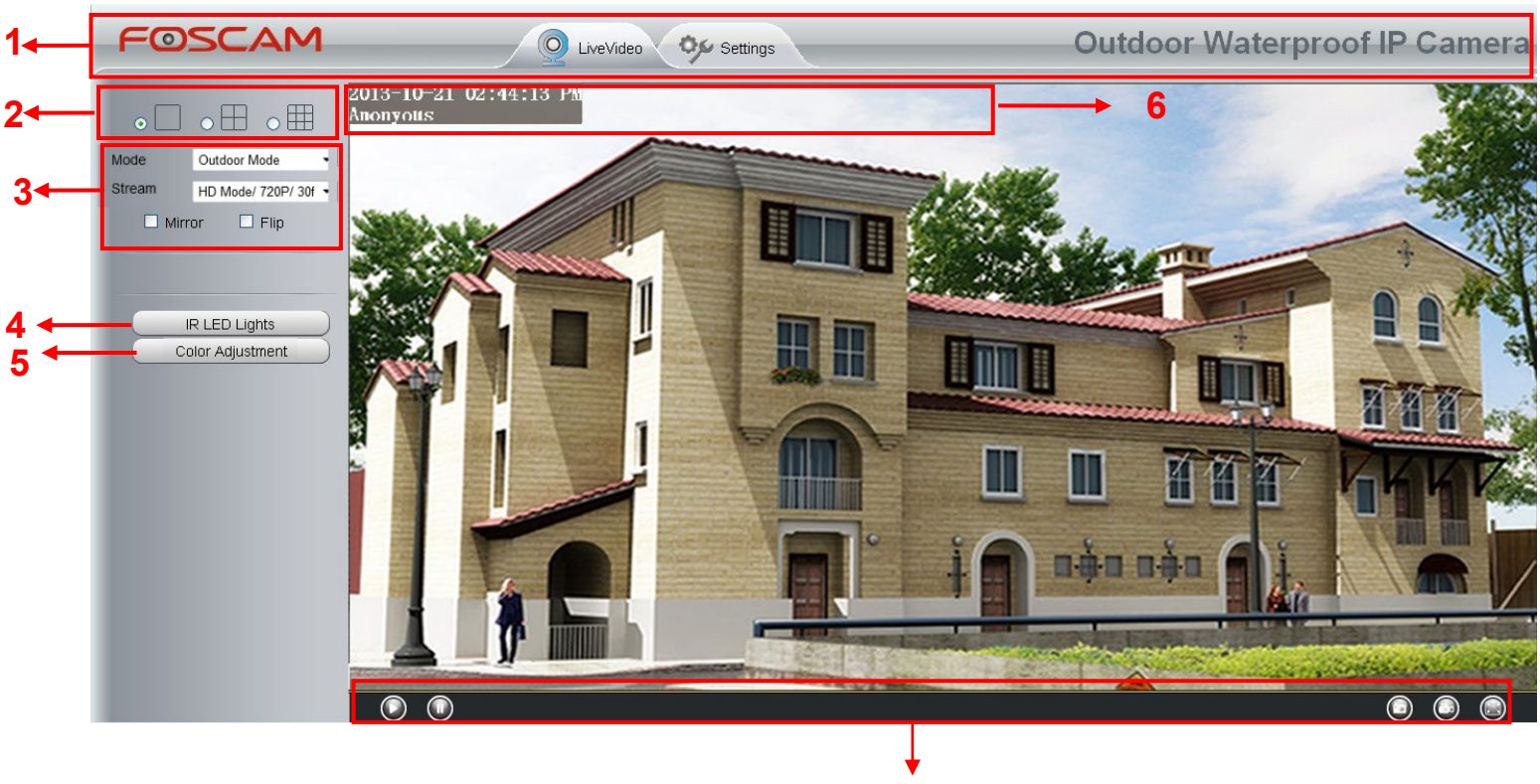


Figure 3.8

Section1 FOSCAM Logo/ Live Video / Settings buttons

FOSCAM: FOSCAM LOGO

: 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.

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 4.3.4).

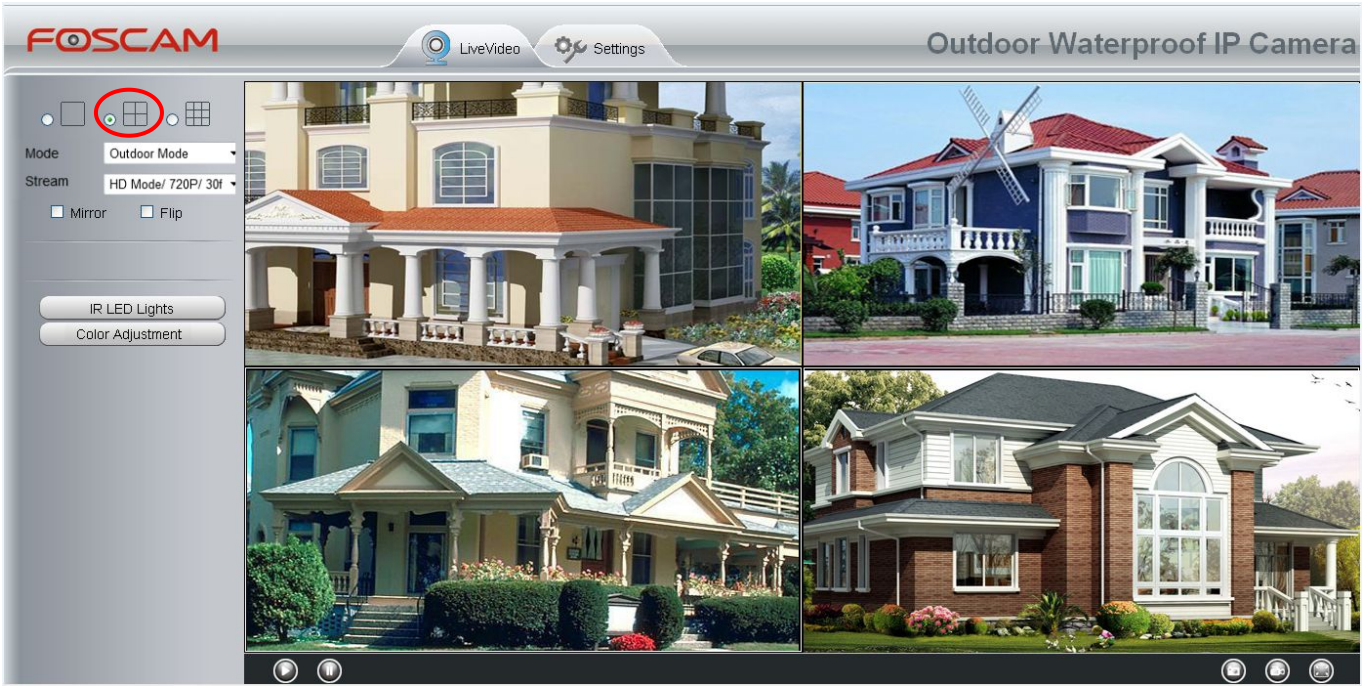


Figure 3.9

Section3 Mode/ Stream / Mirror/ Flip buttons

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/720P/30fps/2M meanings: **Stream type / Resolution / Maximum frame rate/ Bit rate**.

1) Stream type : It is used to 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

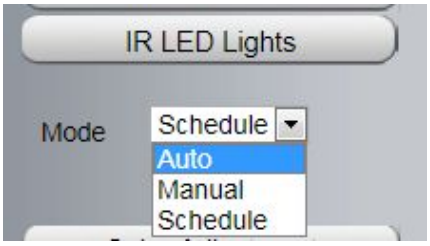
The maximum frame rate is 25fps（VGA）,23fps（720P）. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

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.

Section4 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.

Section5 Image quality settings

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

Section6 OSD

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.

Section7 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----- 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.

4----- 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.

5------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 3.10

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 , please select **Keep ration** to get a better visual quality .

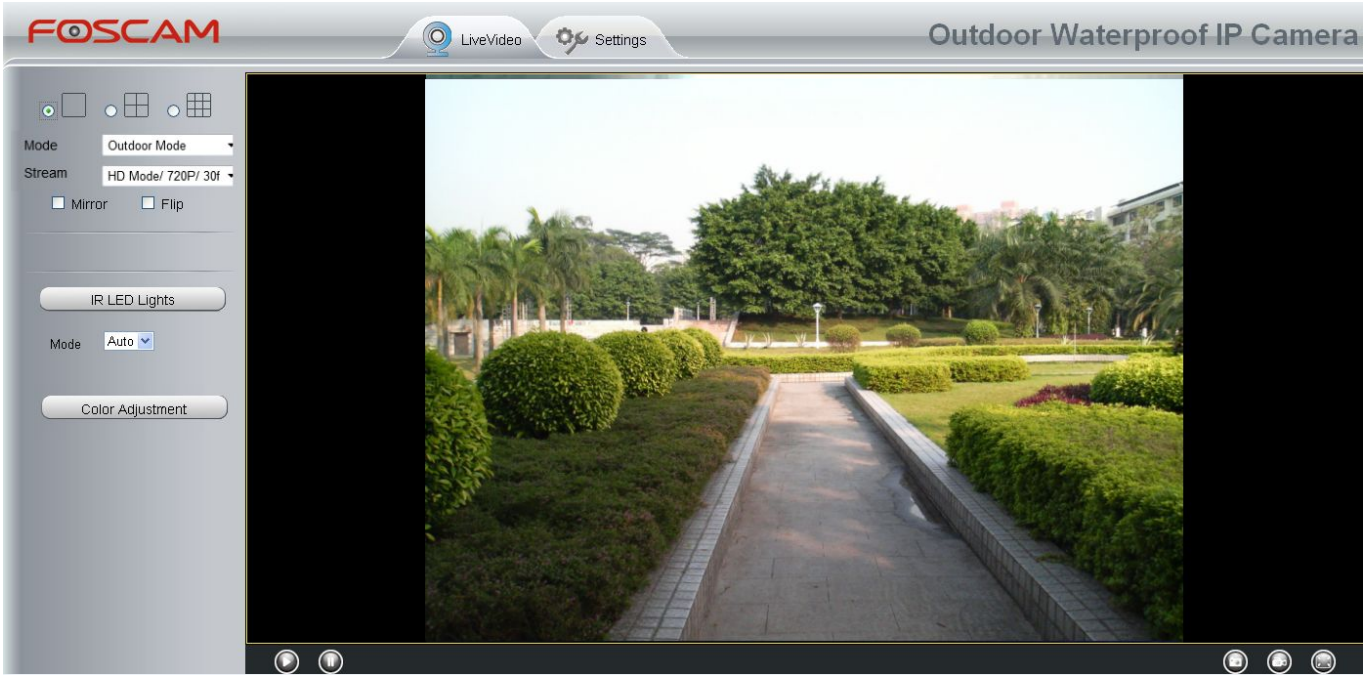


Figure 3.11

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 3.12

NOTE:

1 This camera don't support Pan/Tilt function, so here cannot allow to use Screen PTZ.

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

4 Advanced Camera Settings

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

4.1 Setup Wizard

The way to set it,you could refer to section 3.1.

Figure 4.1

4.2 Device Status

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

4.2.1 Device Information

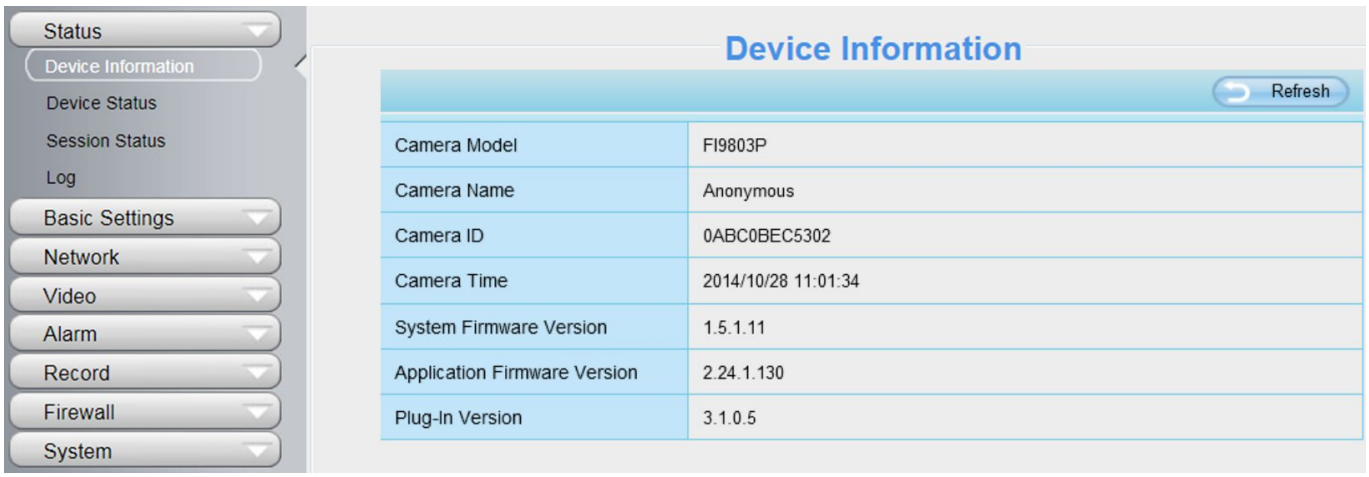


Figure 4.2

Camera Model: Display the model of the camera.
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.

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

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

4.2.2 Device Status

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

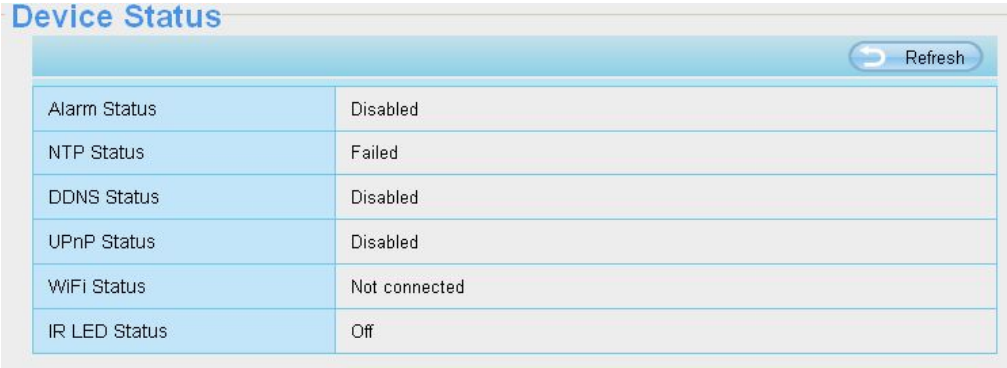


Figure 4.3

4.2.3 Session status

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

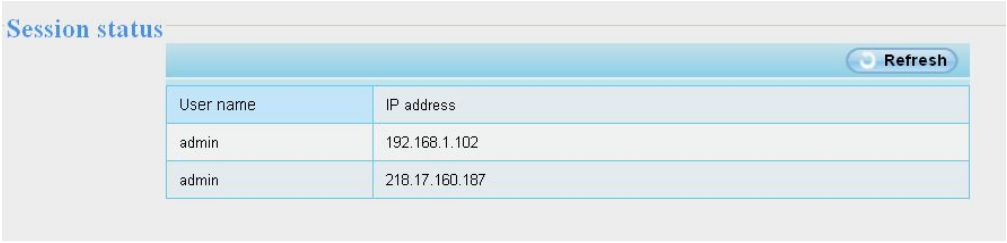
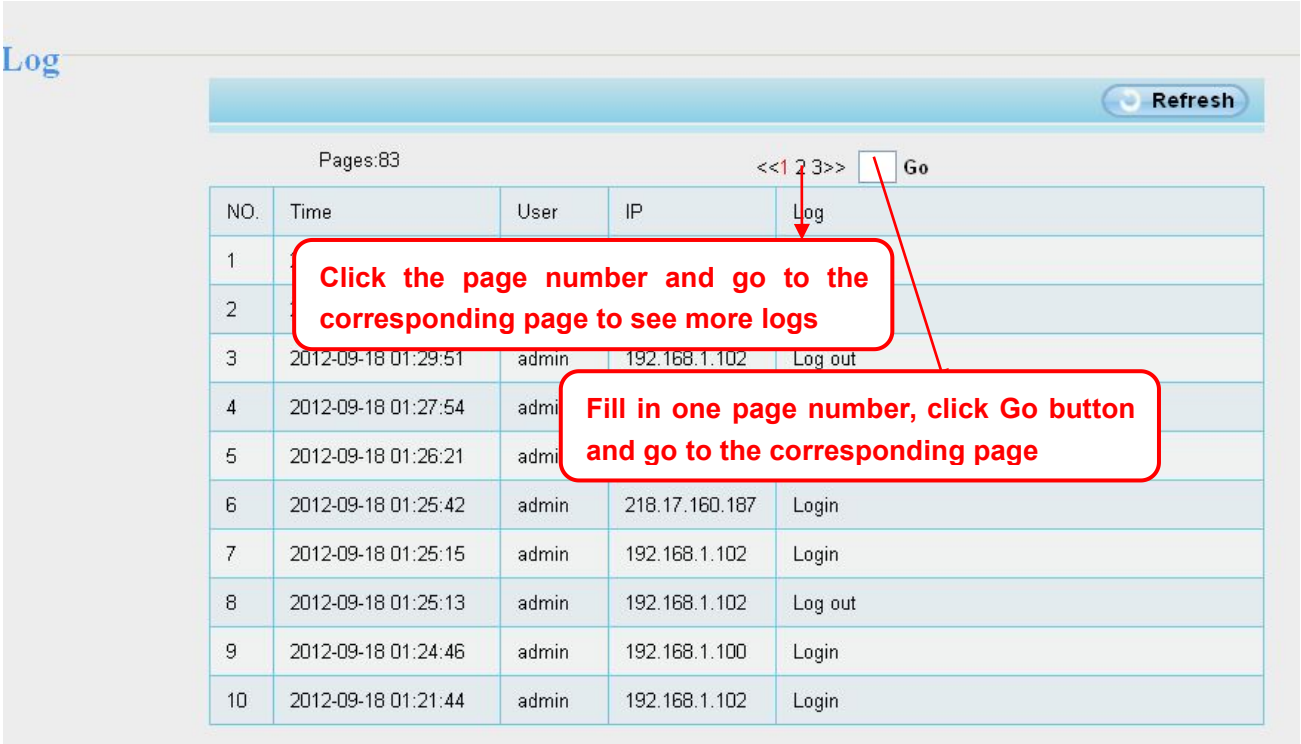


Figure 4.4

4.2.4 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 4.5

Reboot the camera and clear the log records.

4.3 Basic Settings

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

4.3.1 Camera Name

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.

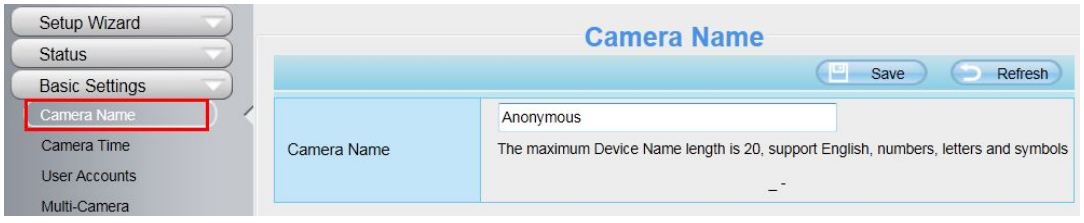


Figure 4.6

4.3.2 Camera Time

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

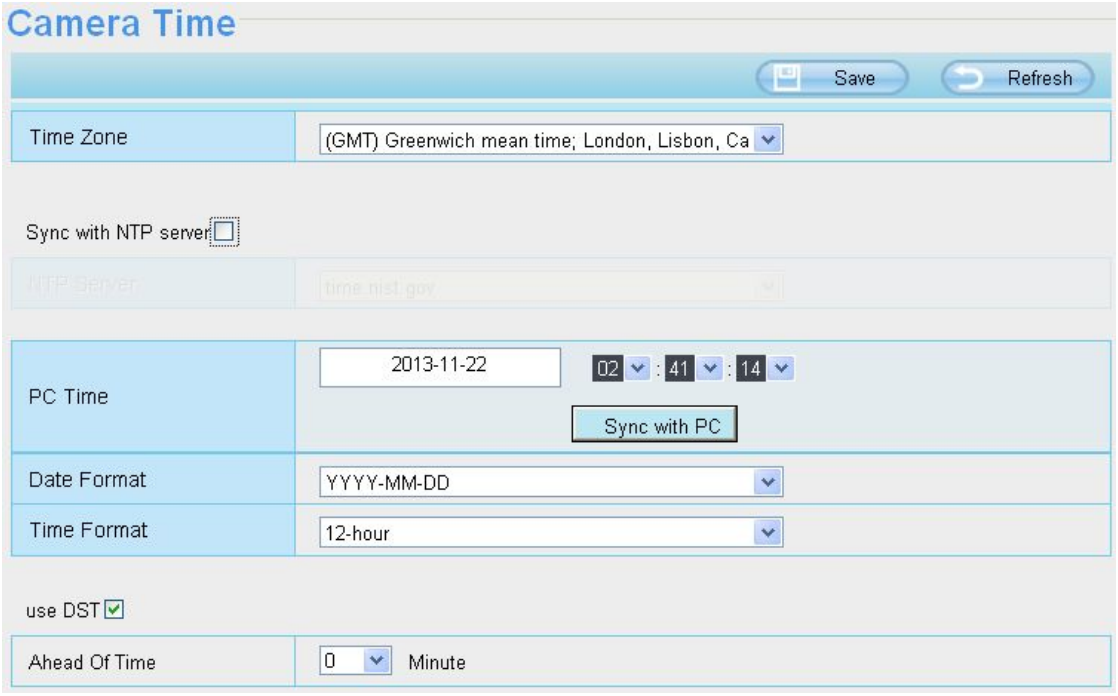


Figure 4.7

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: 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.

4.3.3 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.

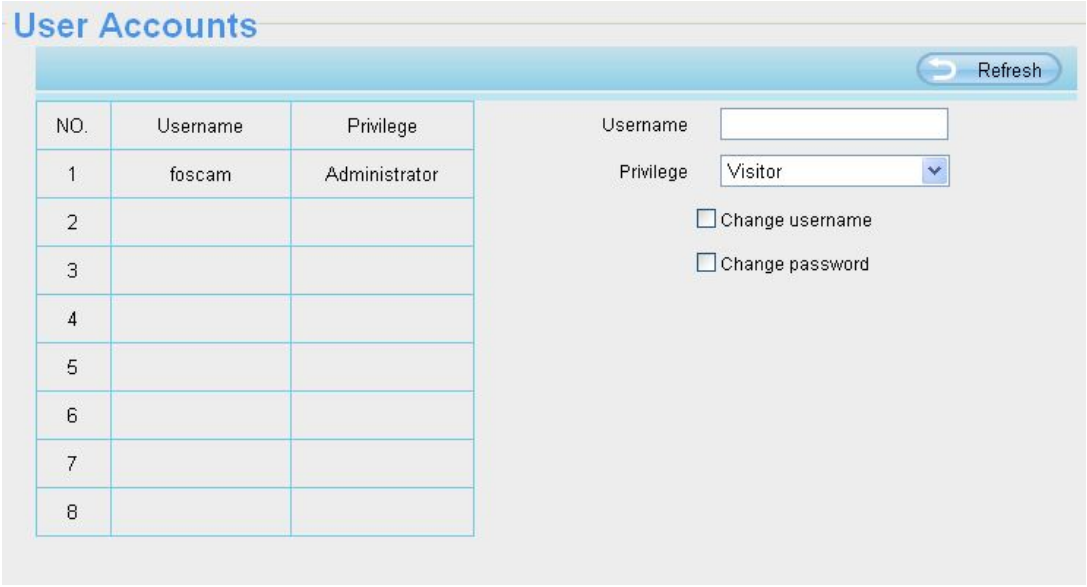


Figure 4.8

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.

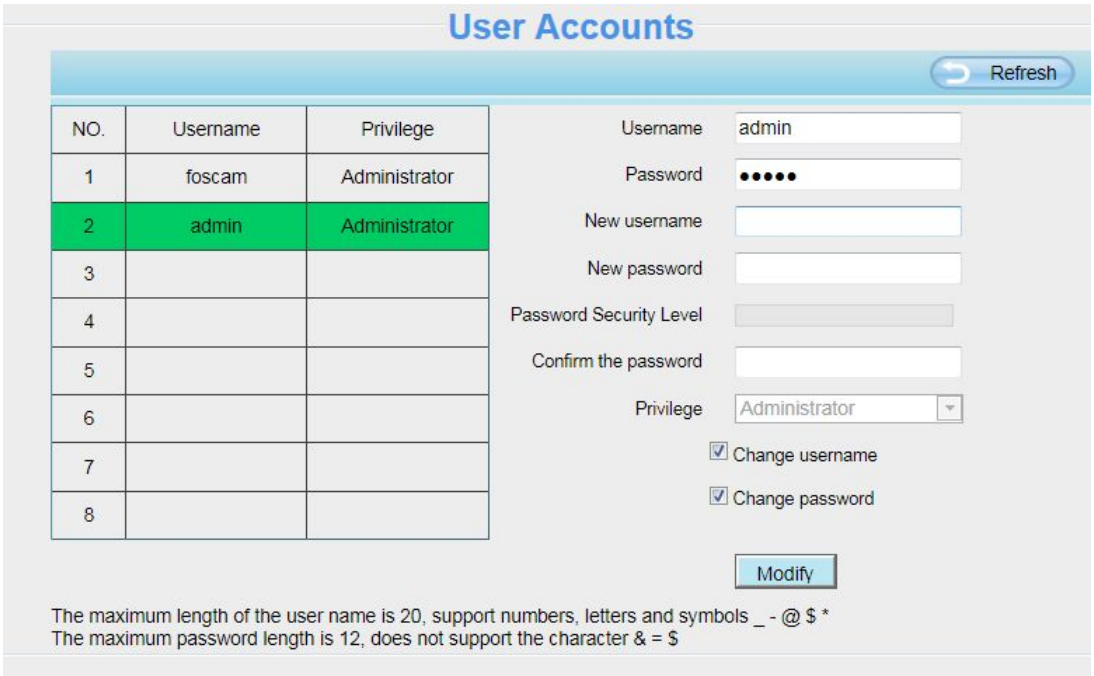


Figure 4.9

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.

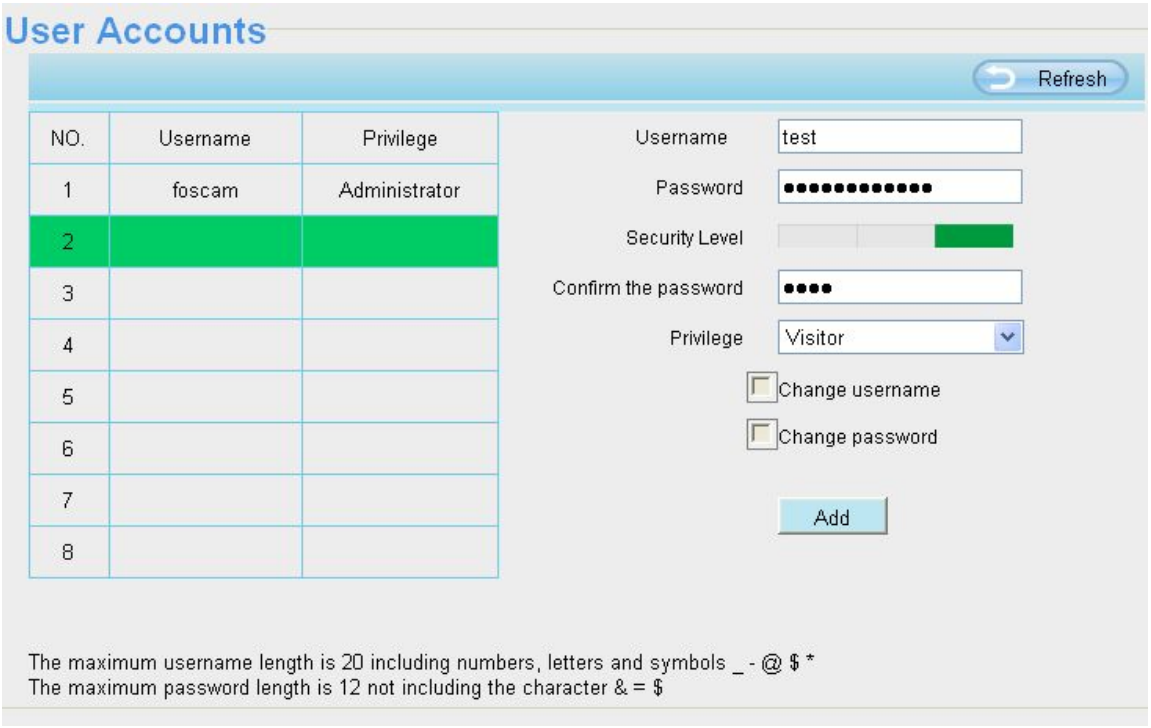


Figure 4.10

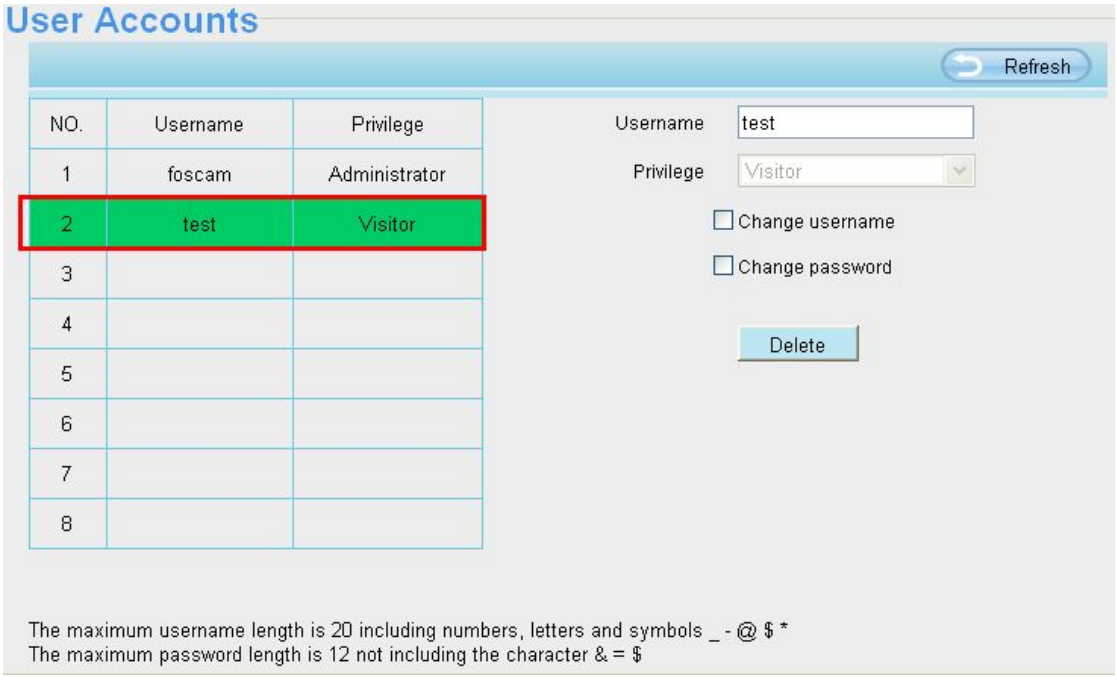


Figure 4.11

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

How to change the username ?

Firstly, select the account which you want to change the username, then select “Change username”, enter the new password, lastly click modify to take effect.

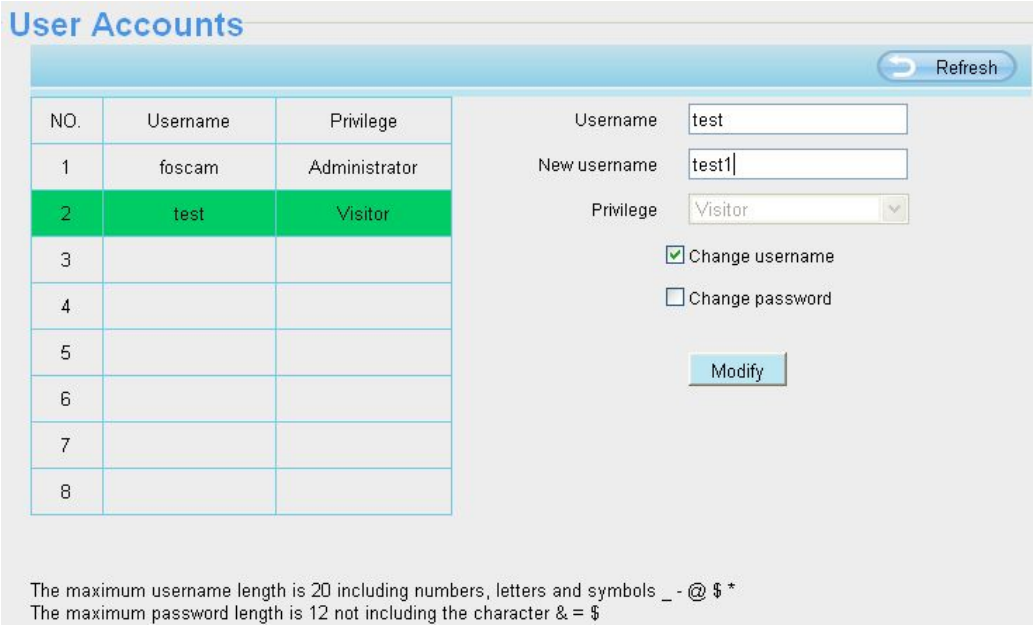


Figure 4.12

NOTE:

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

4.3.4 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 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.

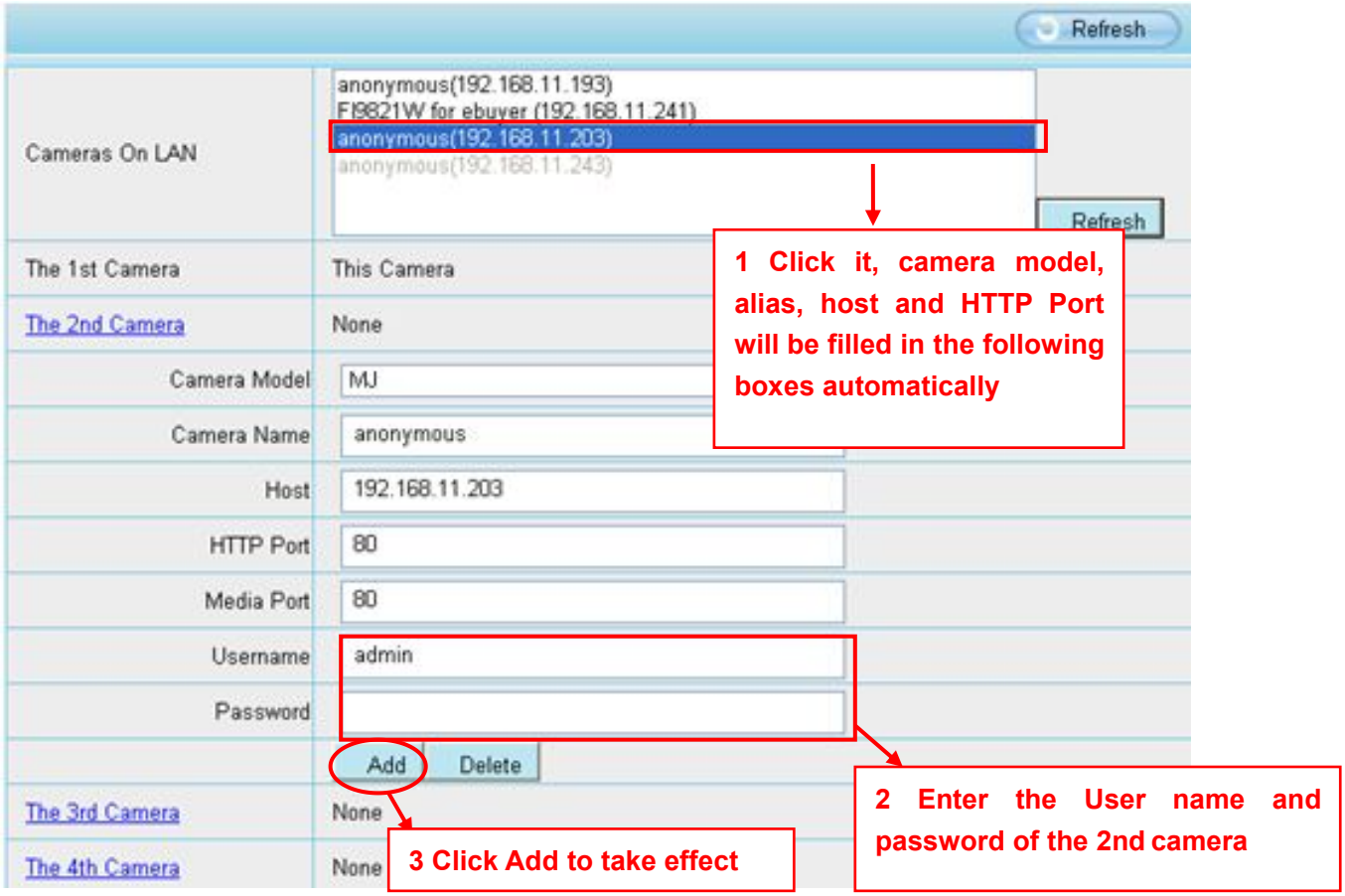


Figure 4.13

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

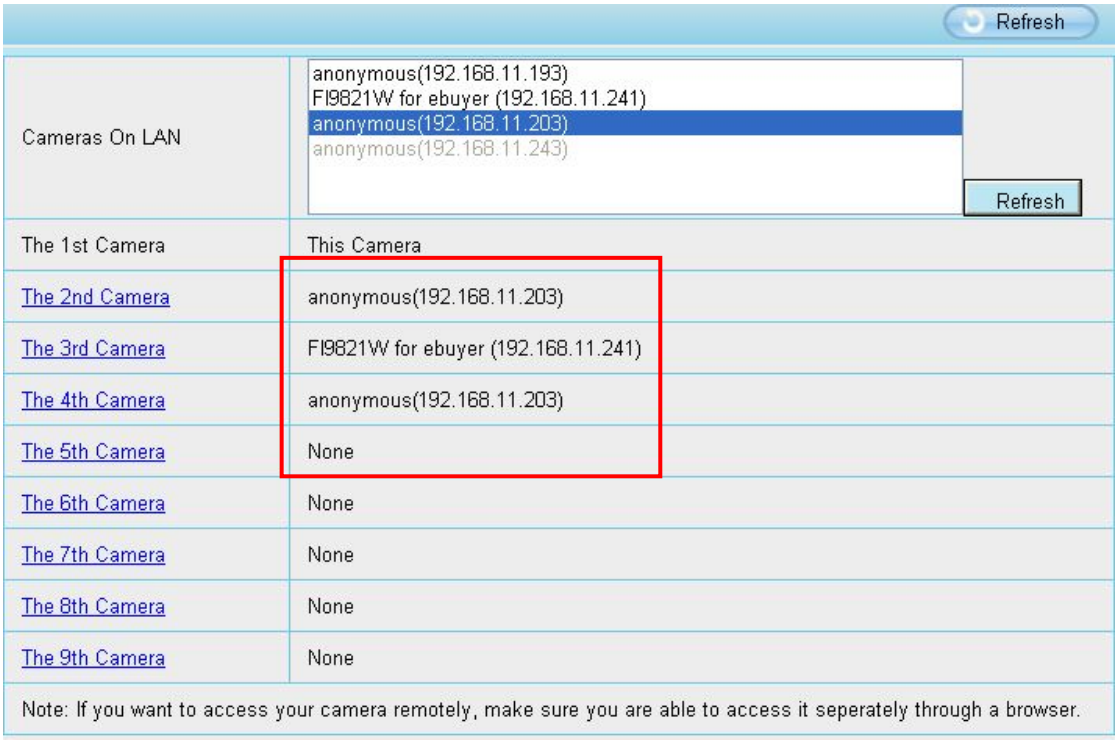


Figure 4.14

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

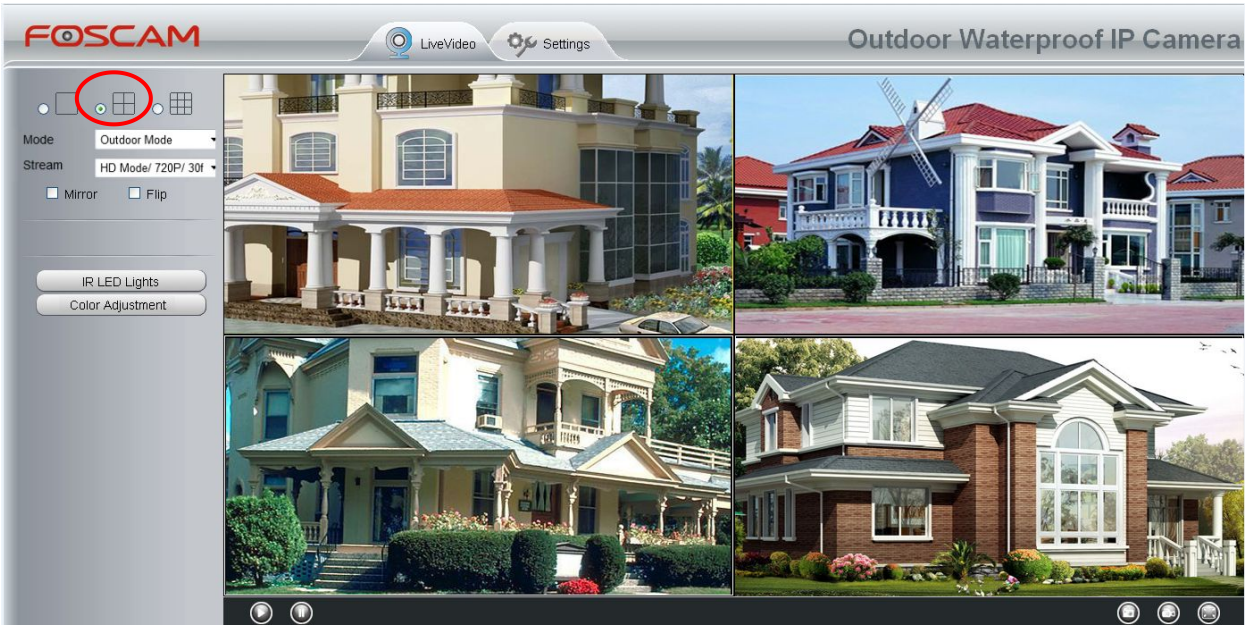


Figure 4.15

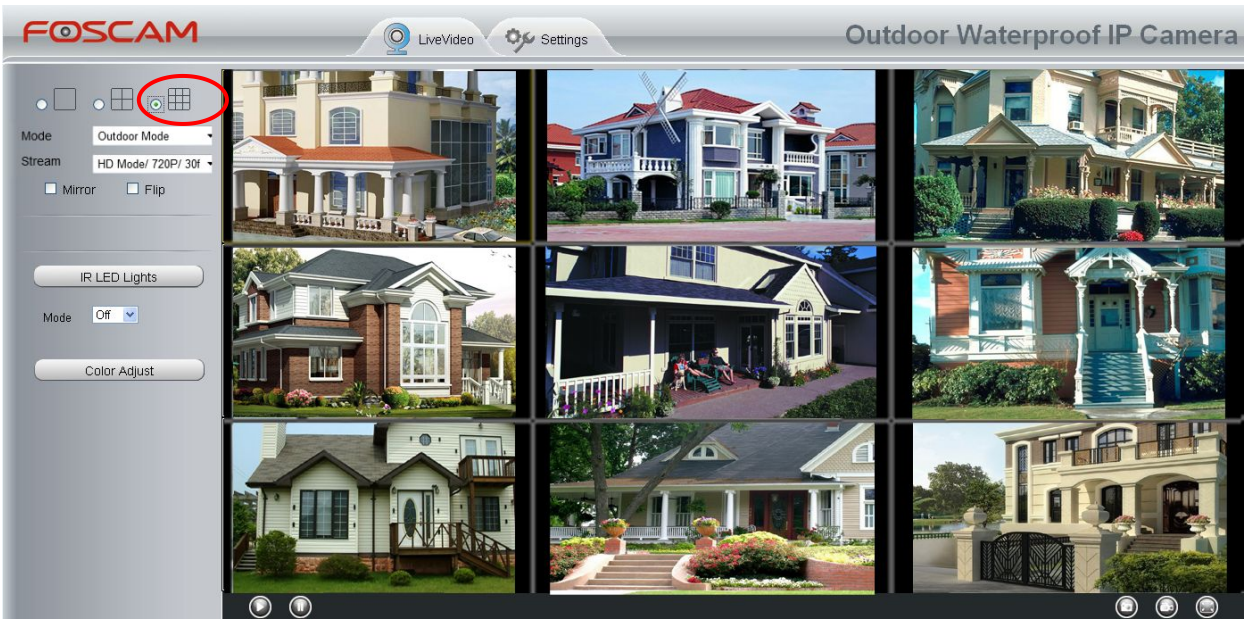


Figure 4.16

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 4.4.4**)

Login to the first camera using a DDNS domain name and port.

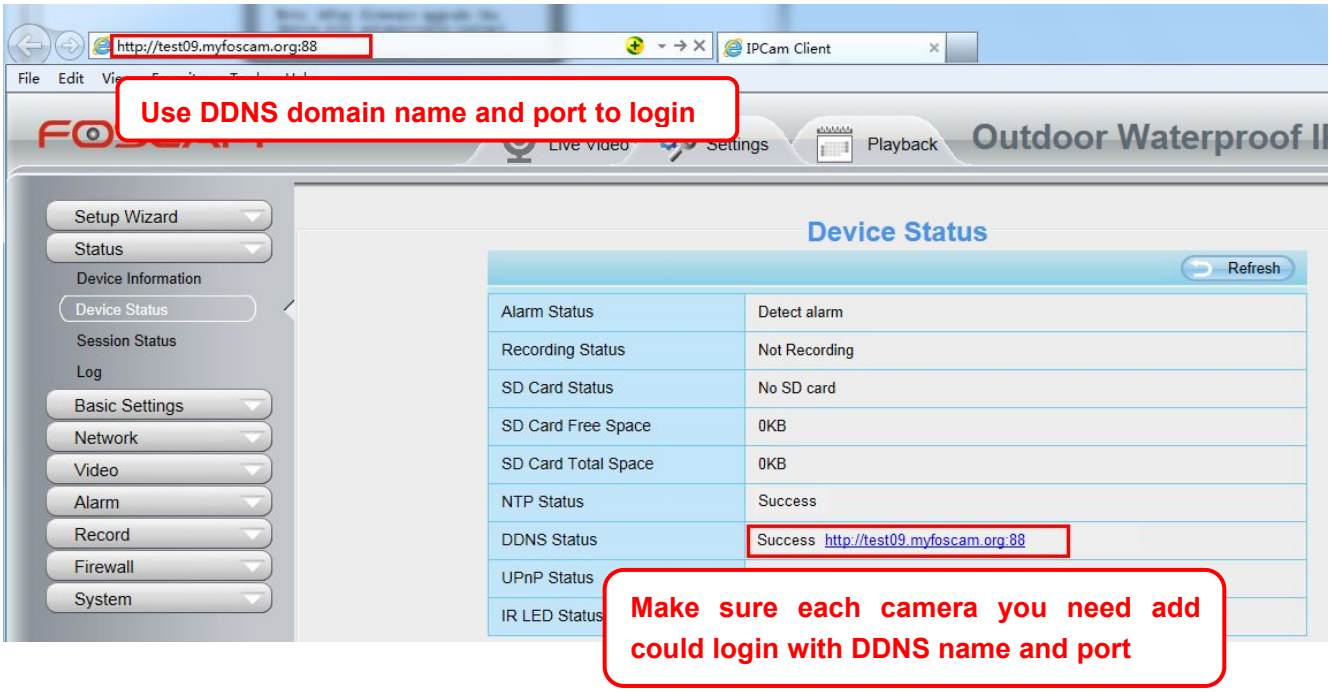


Figure 4.17

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.

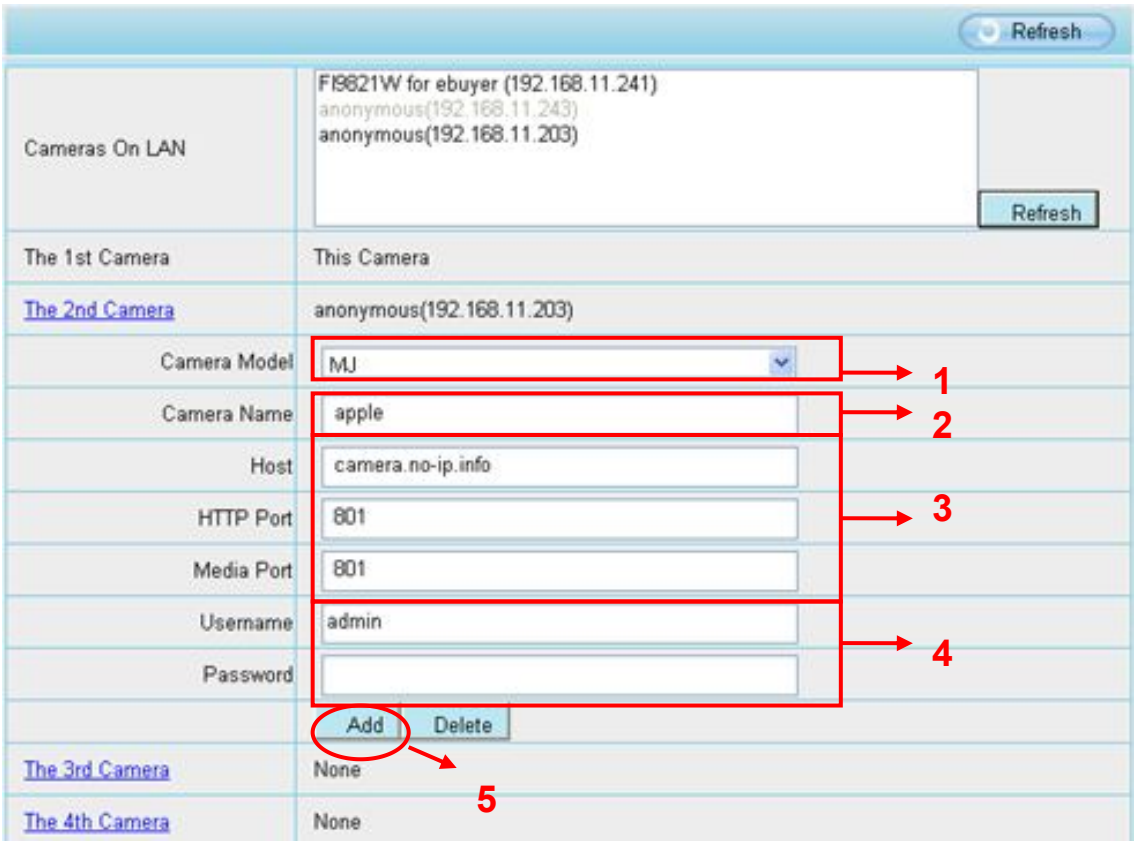


Figure 4.18

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.

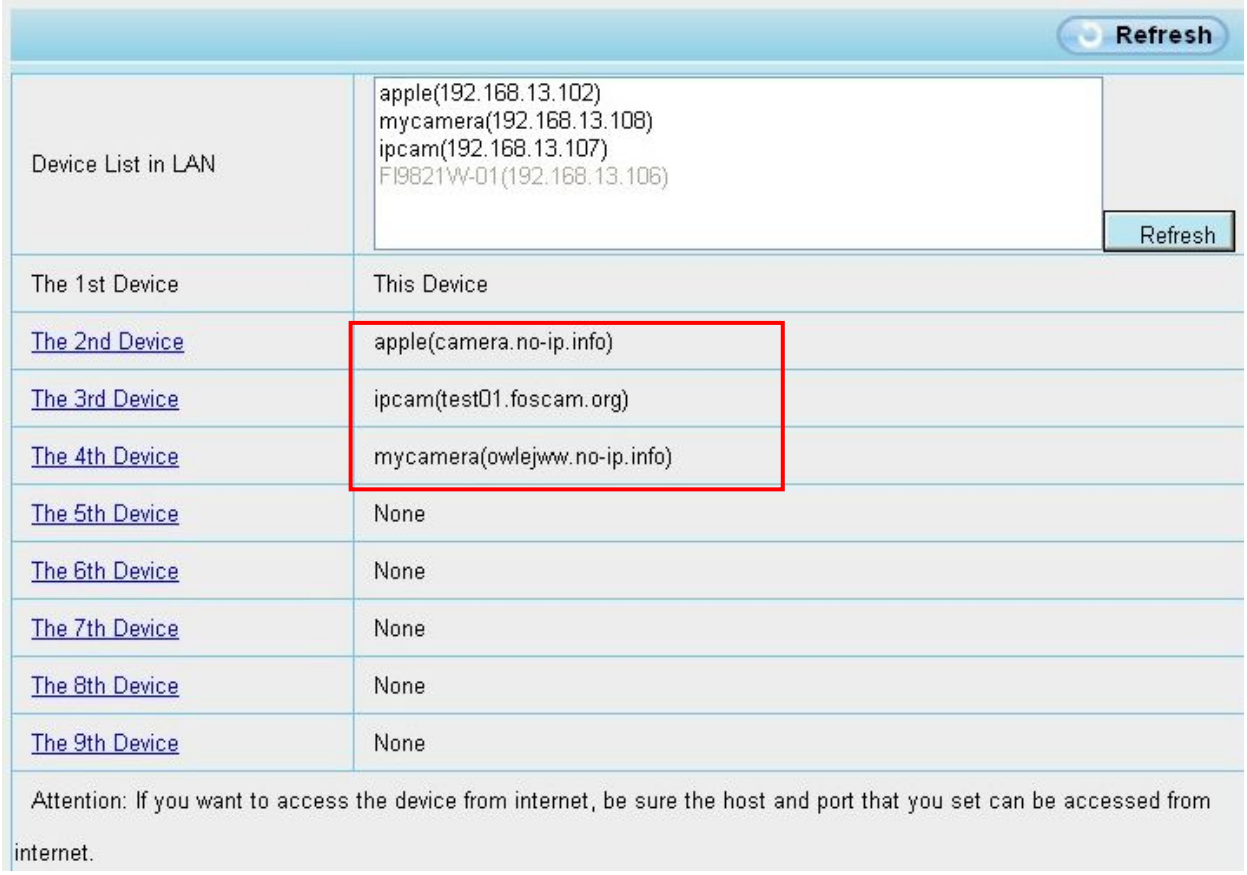


Figure 4.19

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.

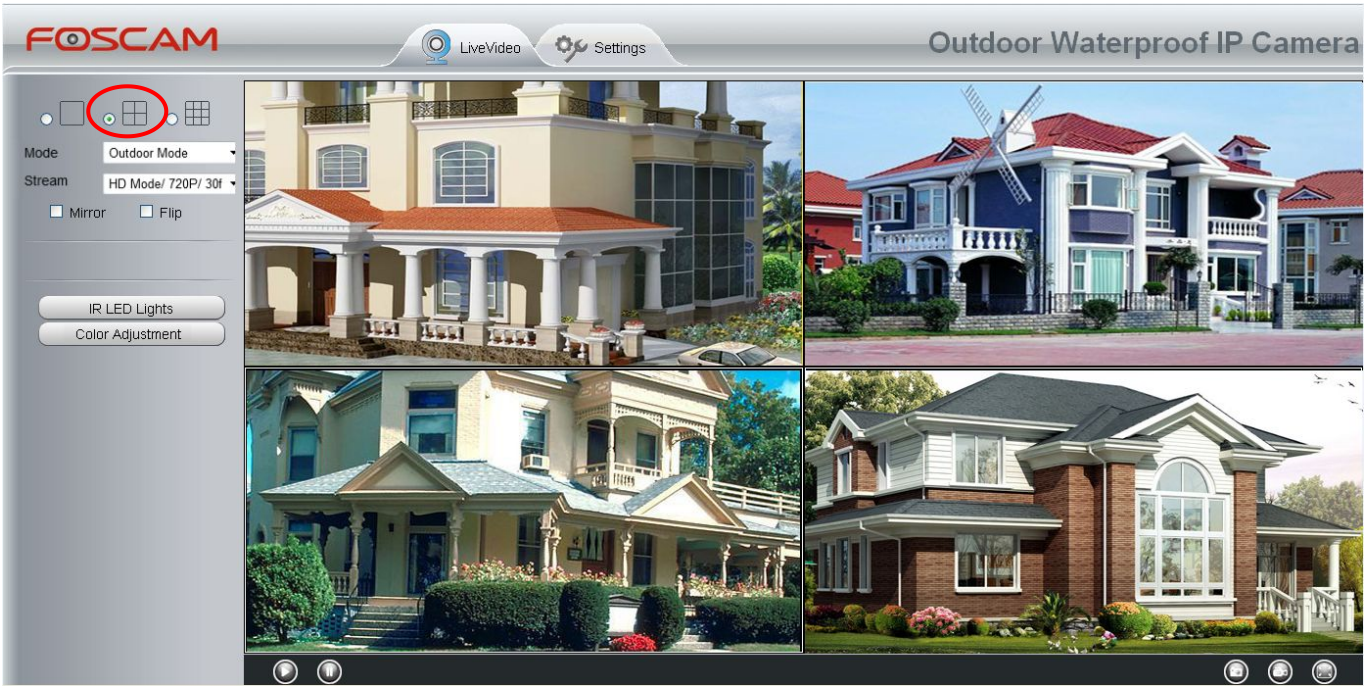


Figure 4.20

4.4 Network

This section will allow you to configure your camera's IP, PPOE, DDNS, Wireless Settings, UPnP, Port, Mail Settings and FTP Settings.

4.4.1 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.

Figure 4.21

Changing settings here is the same as using the IP Camera 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**.

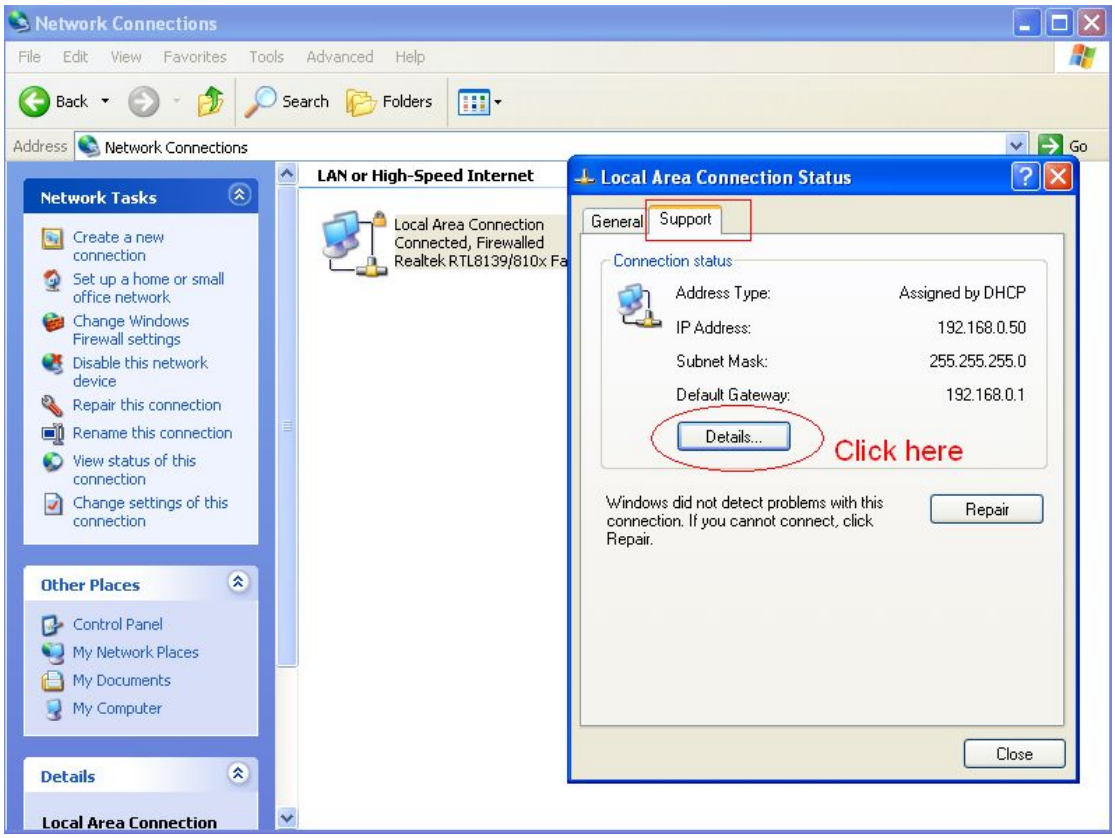


Figure 4.22

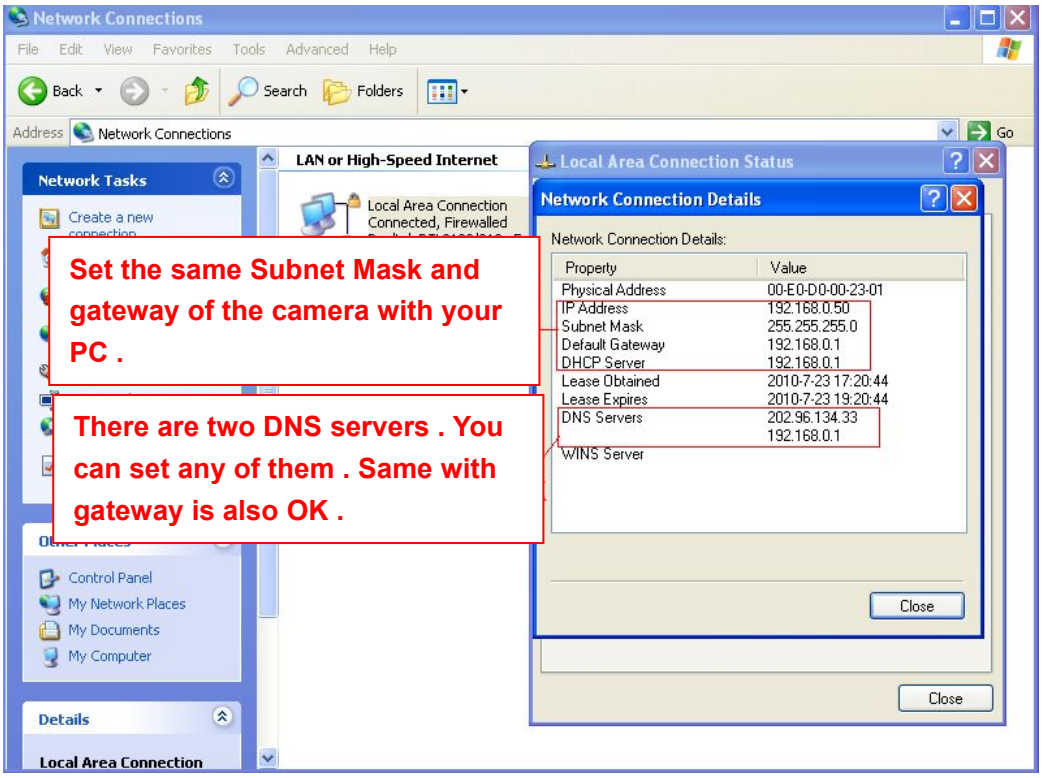


Figure 4.23

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

4.4.2 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.

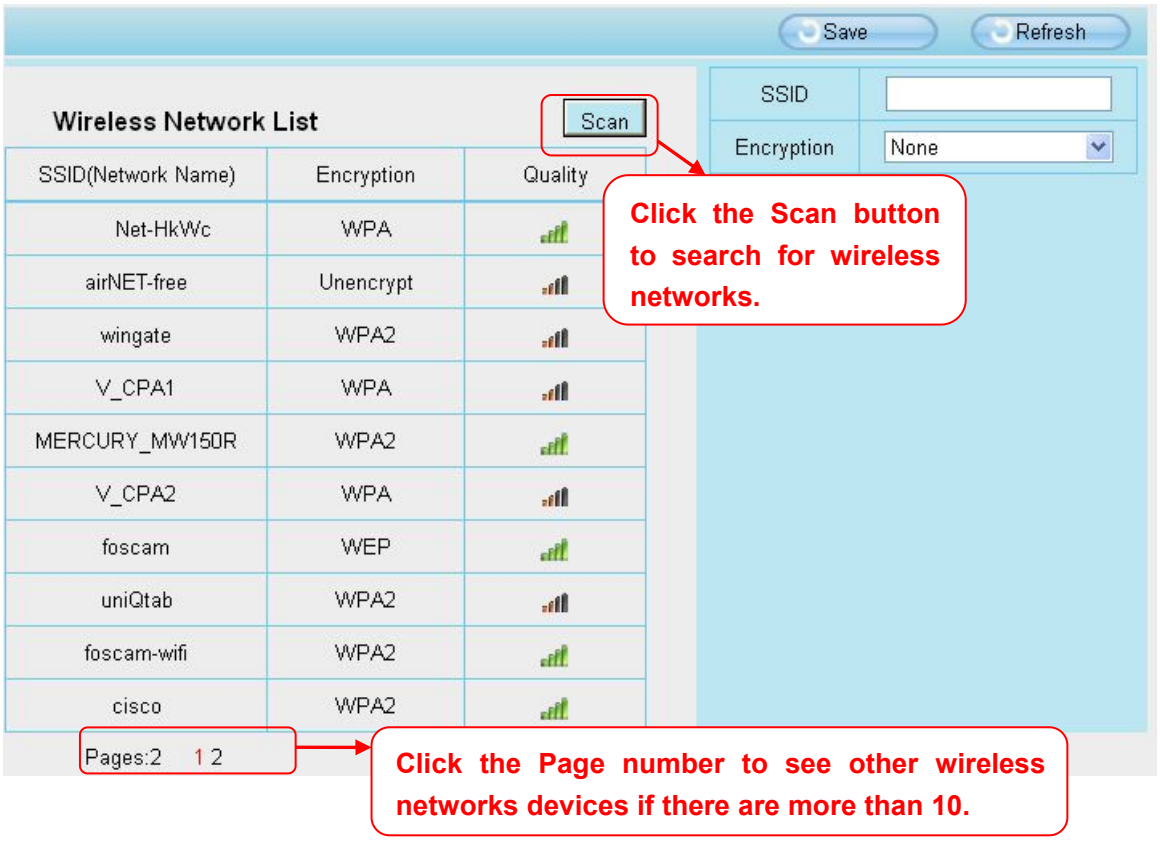


Figure 4.24

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.

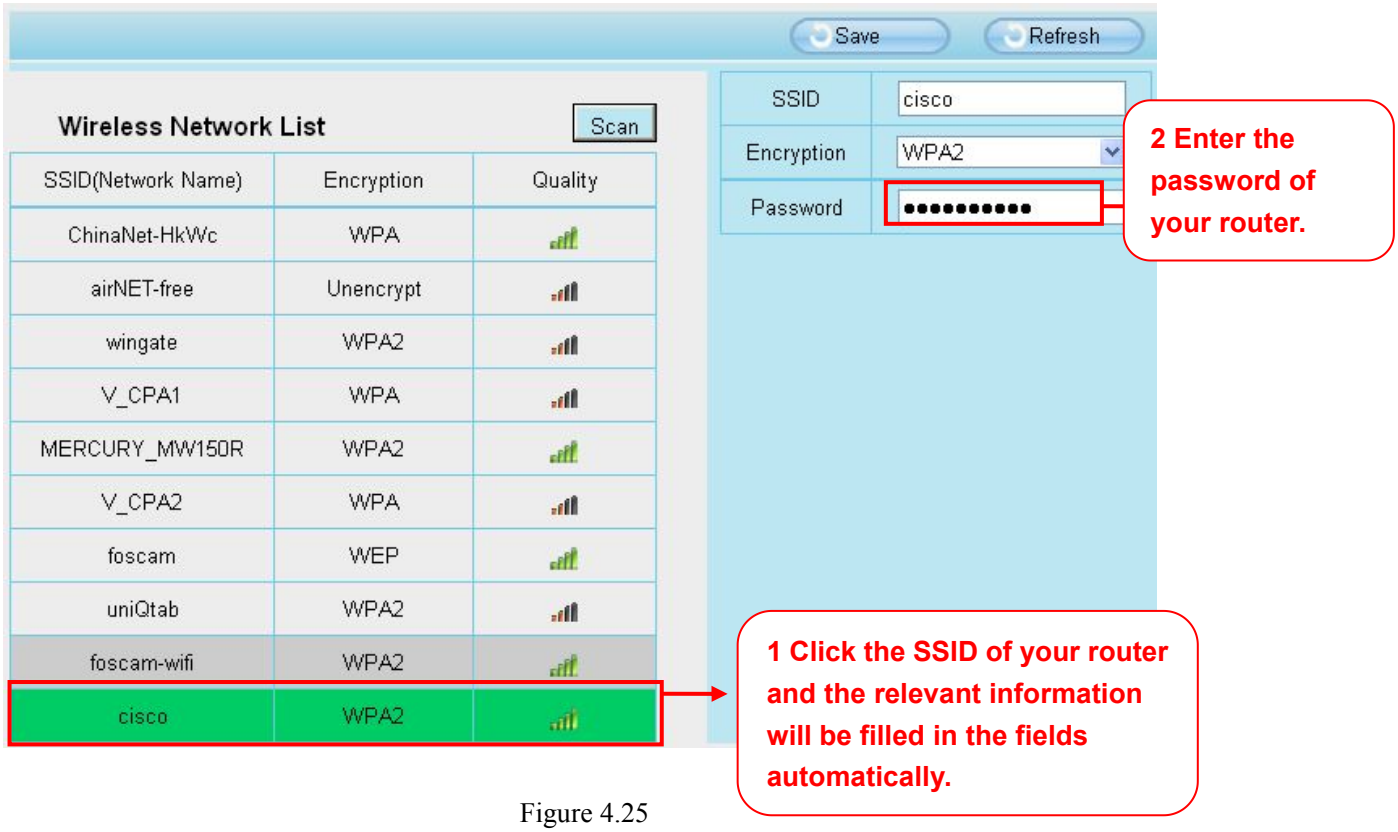


Figure 4.25

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 IP Camera 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 IP Camera 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 IP Camera Tools, 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.

4.4.3 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.

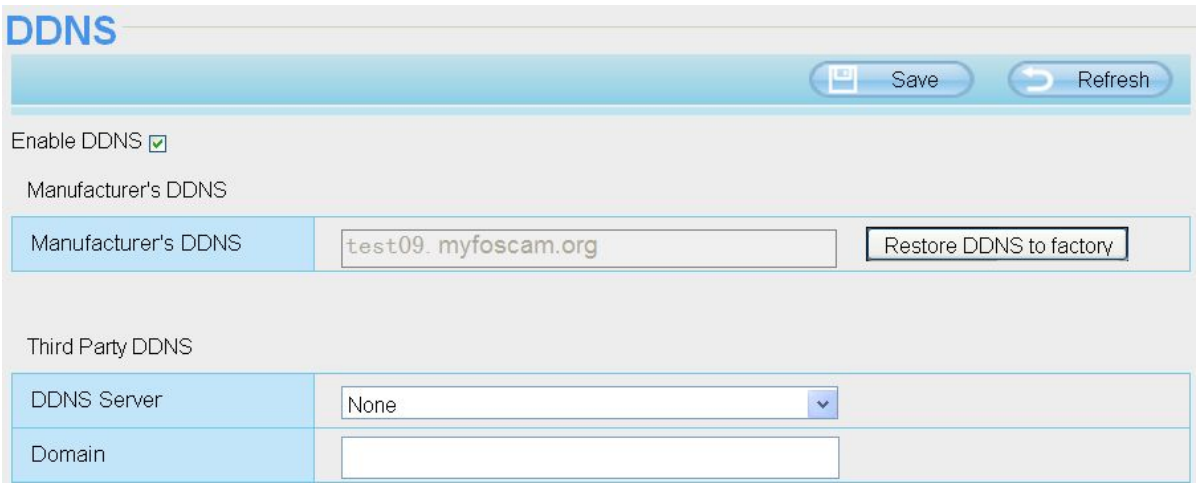


Figure 4.26

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 4.27

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.

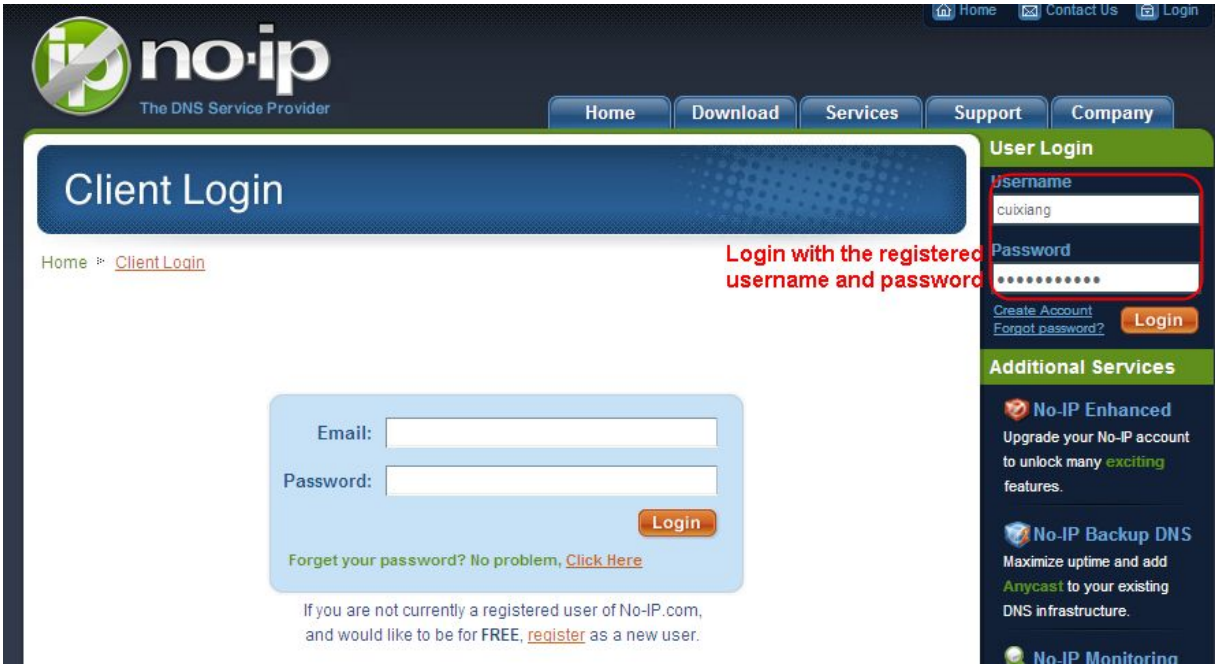


Figure 4.28

Figure 4.29

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.

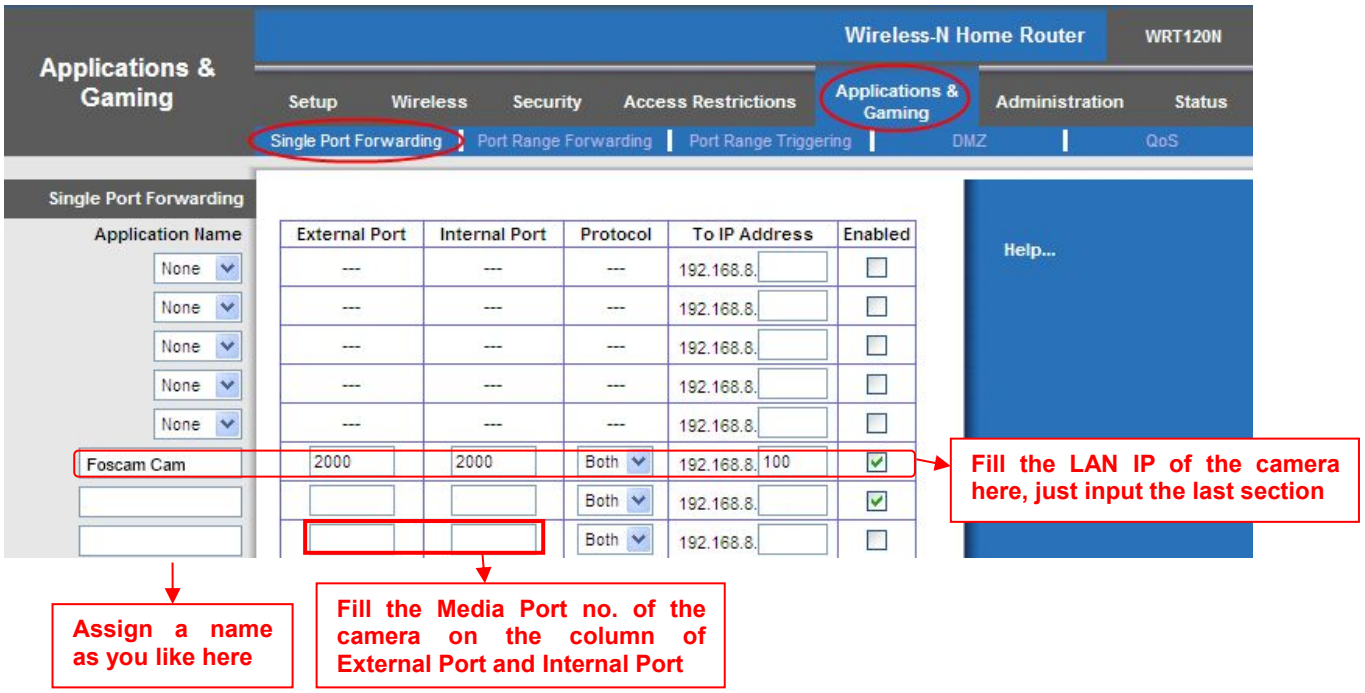


Figure 4.30

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

4.4.4 UPnP

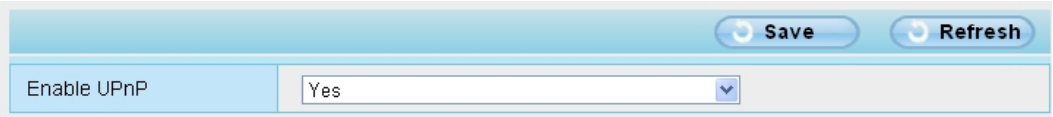


Figure 4.31

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 4.32

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 .

4.4.5 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 and Media port 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.

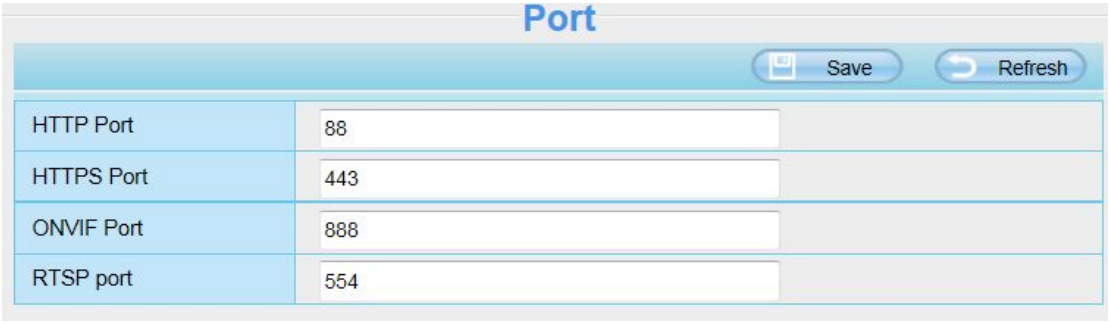


Figure 4.33

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 4.35 and 4.36.

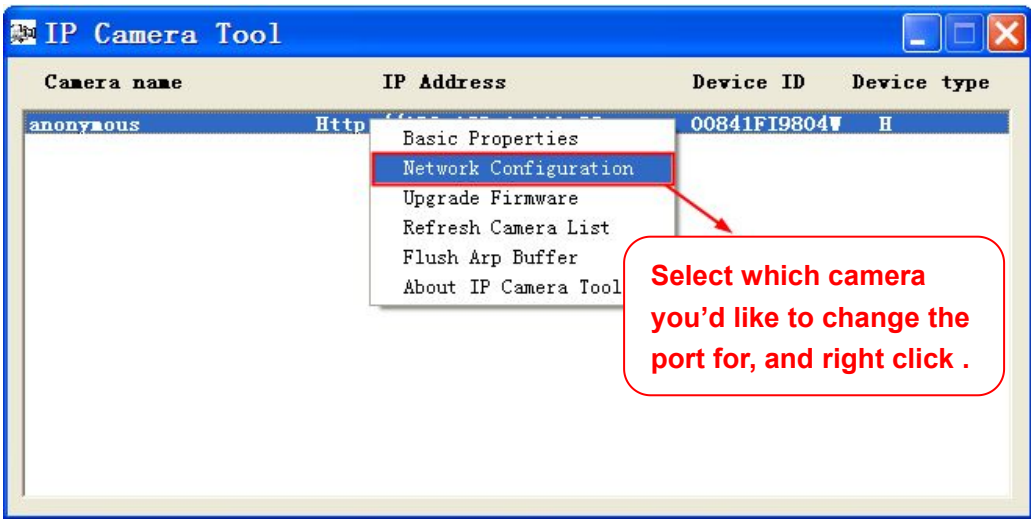


Figure 4.34

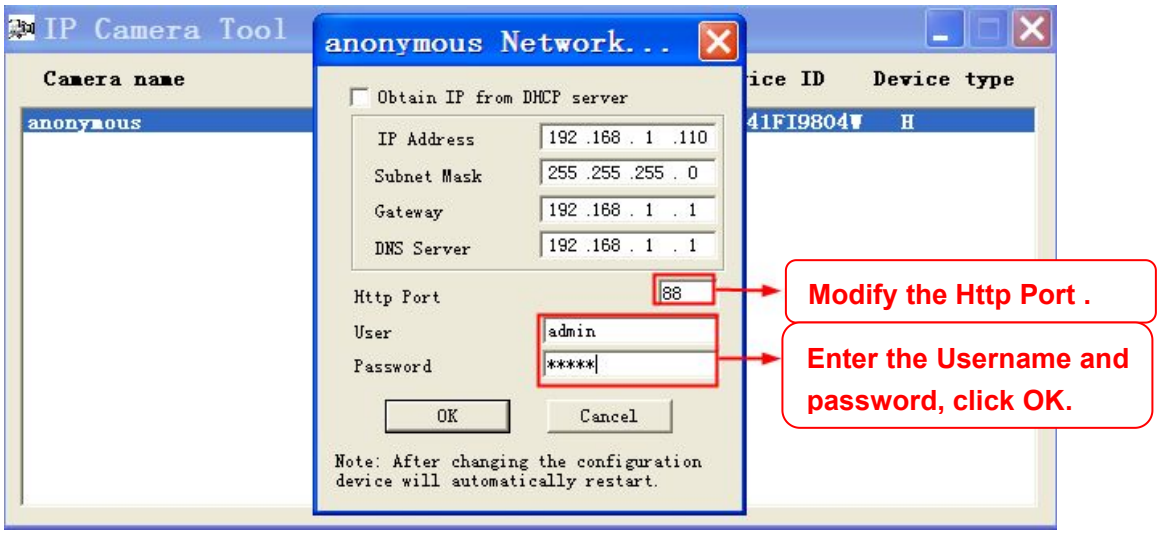


Figure 4.35

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!

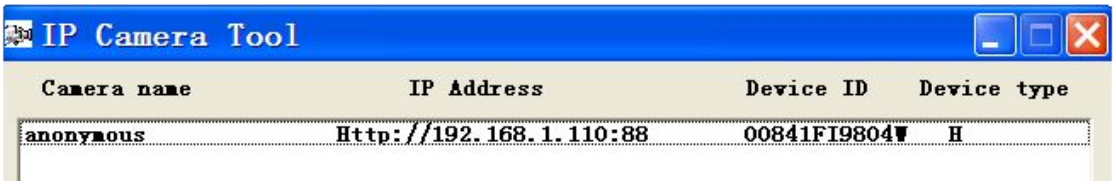


Figure 4.36

NOTE:

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

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.

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

RTSP port: The default port is 554.

4.4.6 Mail Settings

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

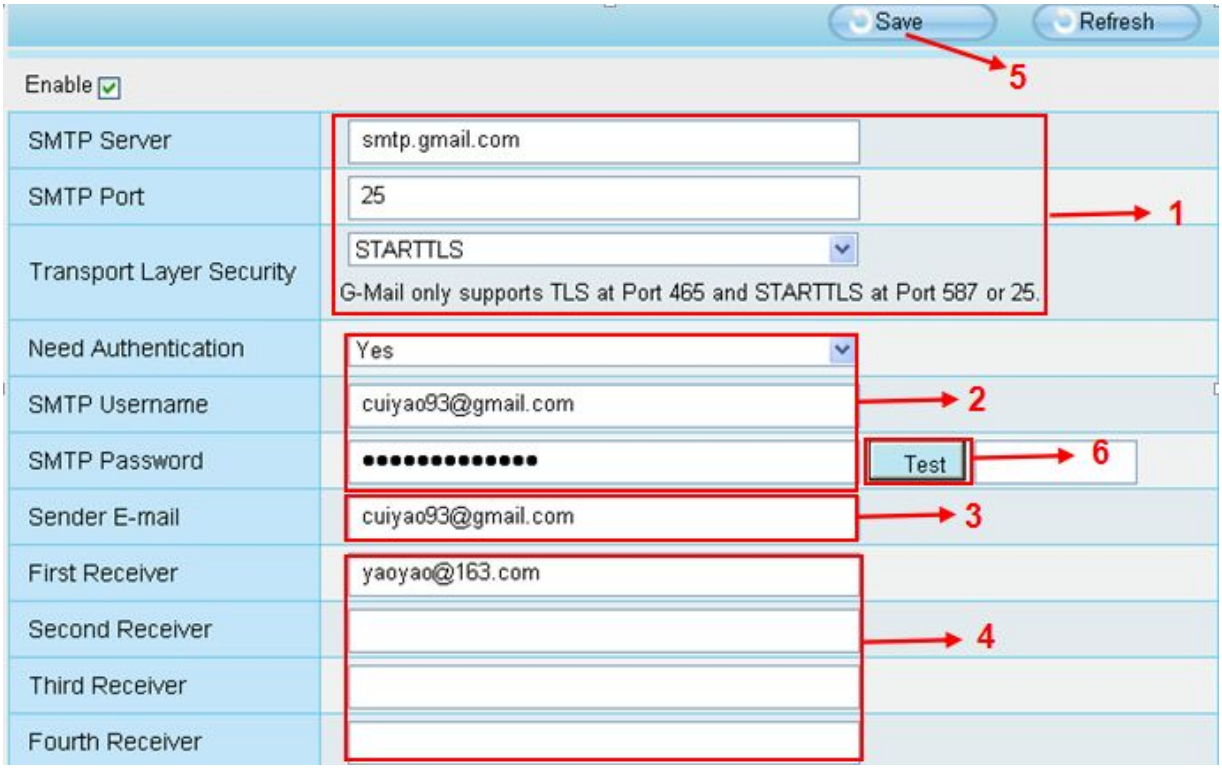


Figure 4.37

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.

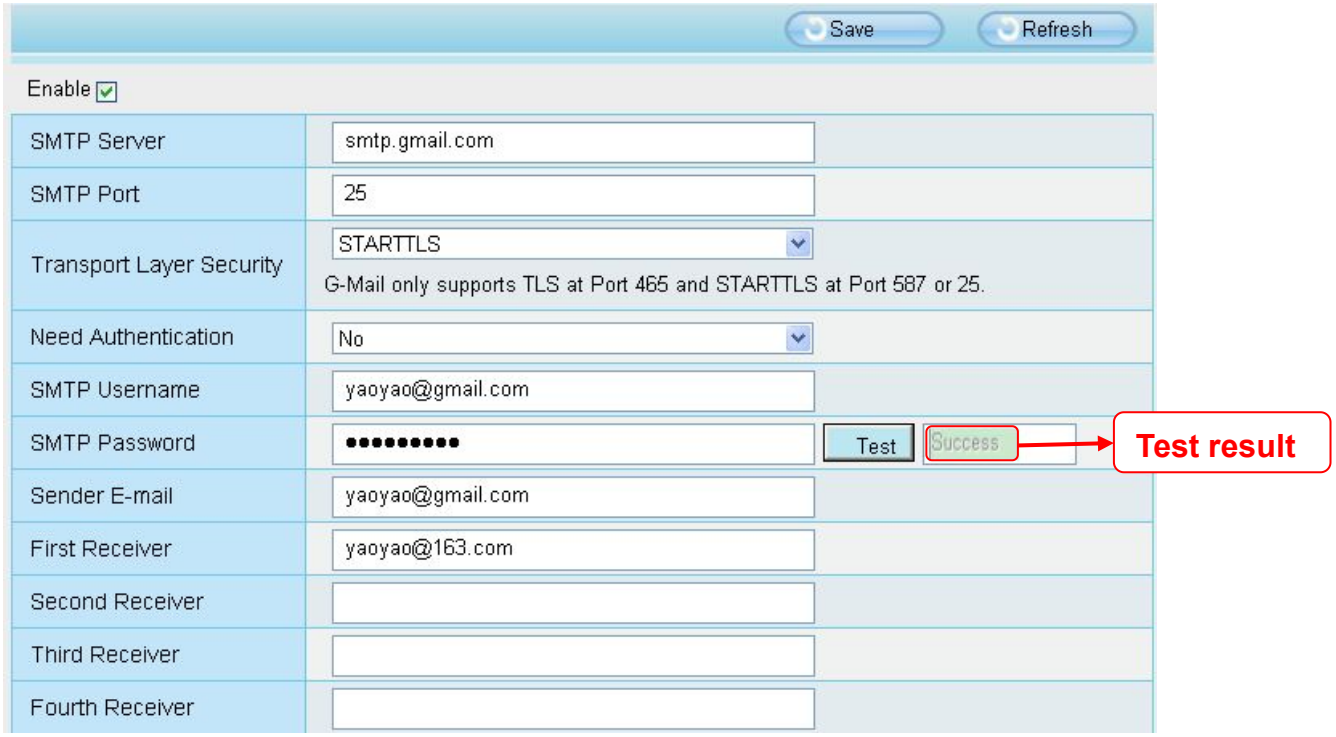


Figure 4.38

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

4.4.7 FTP Settings

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

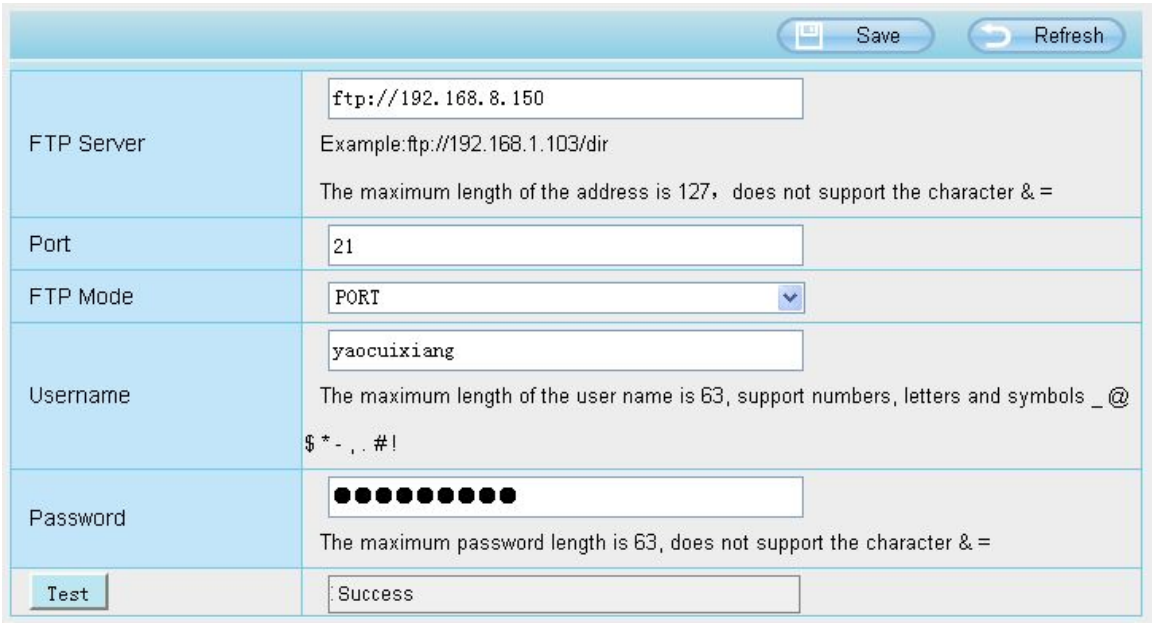


Figure 4.39

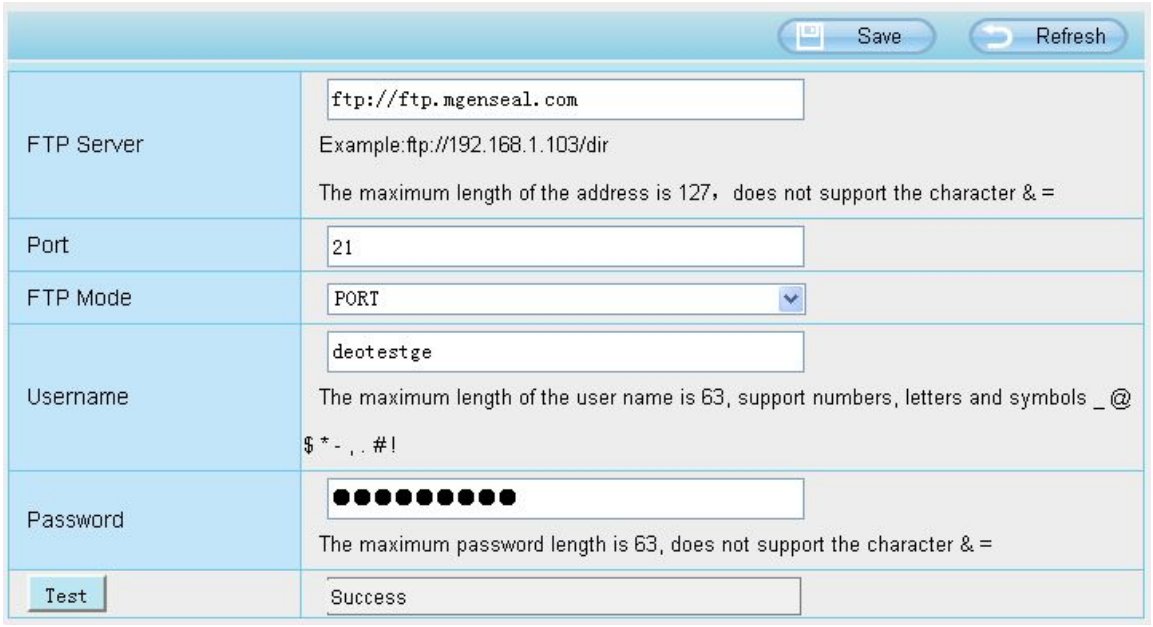


Figure 4.40

FTP server: If your FTP server is located on the LAN, you can set as Figure4.41.

If you have an FTP server which you can access on the internet, you can set as Figure 4.42.

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.

4.4.8 P2P

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

First of all, you need to open the P2P function of the camera at “Settings-->Network-->P2P.”

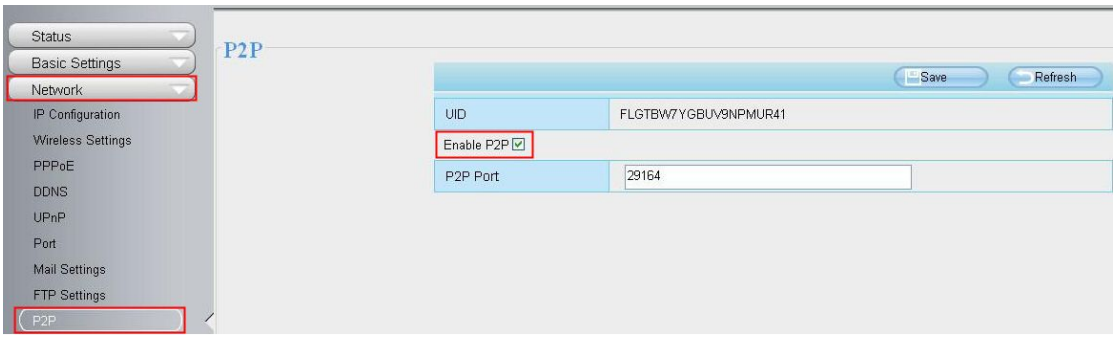


Figure 4.41

4.5 Video

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

4.5.1 Video Settings

There are two ways to set the stream video settings. They are main stream video settings and sub stream video settings.

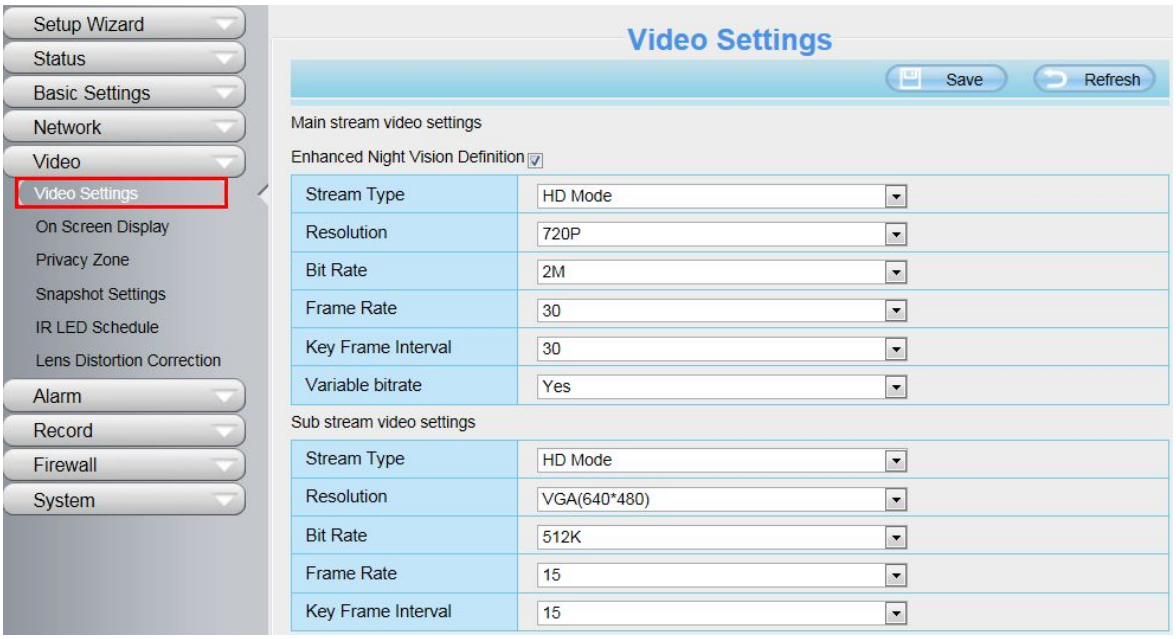


Figure 4.42

Enhanced Night video Definition: The camera will automatically drop the frame to extend the recording time in the night.
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; If select the Smooth Mode, the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well. The Equilibrium Model is a value between HD Mode and Smooth Mode.
Resolution: The camera supports multiple types, For example: 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: 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.

4.5.2 On Screen Display

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

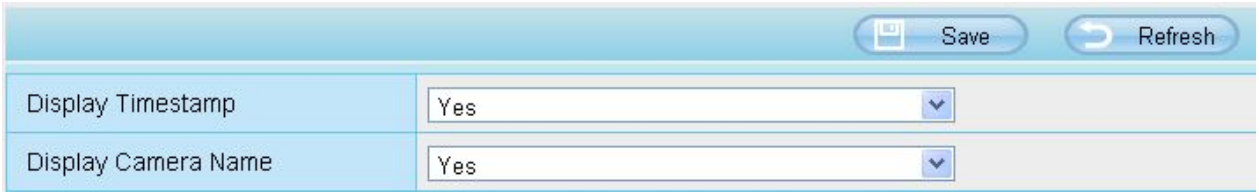


Figure 4.43

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.

4.5.3 Snapshot Settings

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

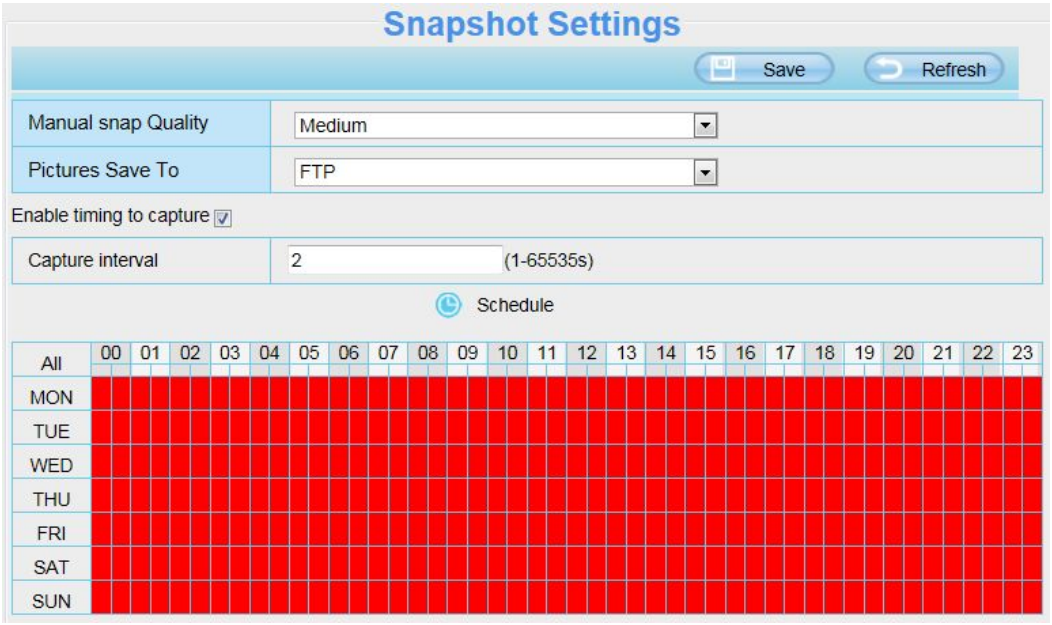


Figure 4.44

Image Quality: Low, Middle and High. The higher the quality, the picture will be clearer.
Alarm Pictures Save Path: FTP. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP automatically.
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.

4.5.4 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.

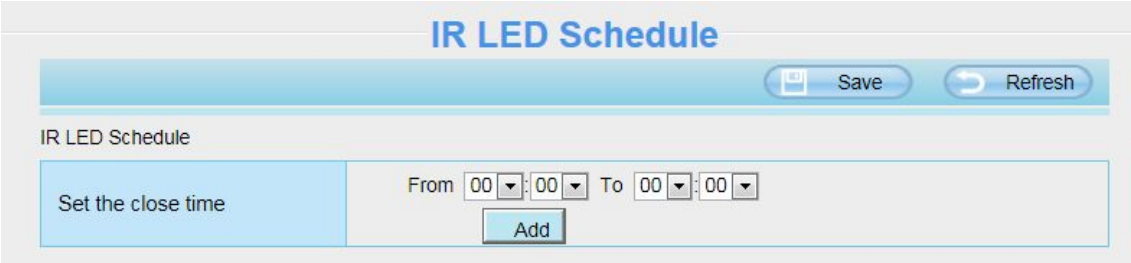


Figure 4.45

4.5.5 Lens Distortion Correction

On this page you can set the distortion correction. There are three options: Low, Medium, High.

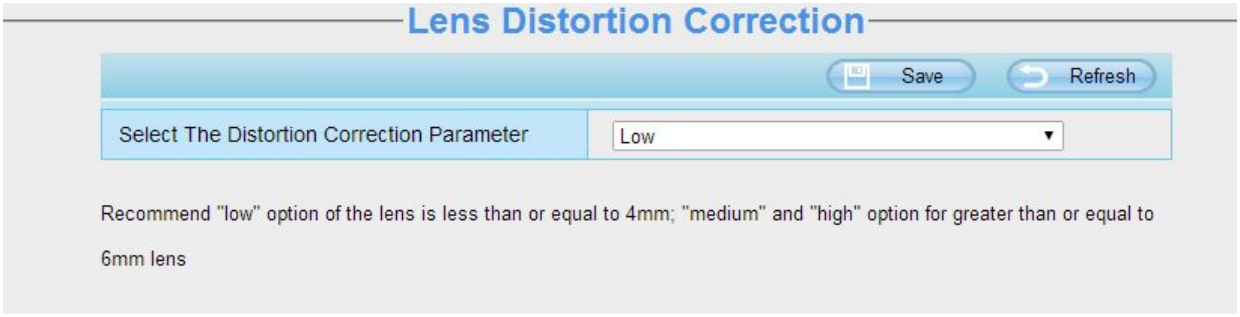


Figure 4.46

If you replace the lens, the image has found distortion, uneven and so on, you can modify the **Select The Distortion Correction Parameter** to calibration images.

4.6 Alarm

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

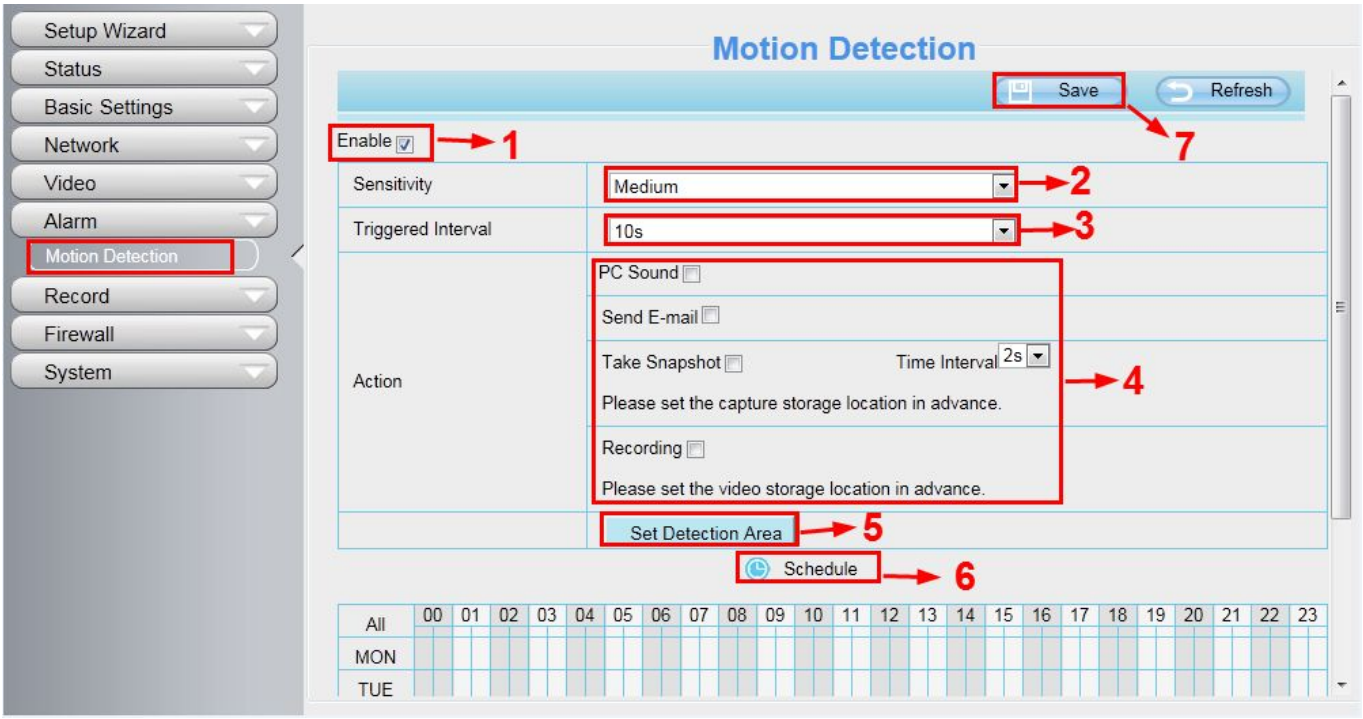


Figure 4.47

To enable motion detection, follow the steps below:

1 Enable Motion detection

2 Sensitivity---- It supports five modes: Lowest, Lower, Low, Medium 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.

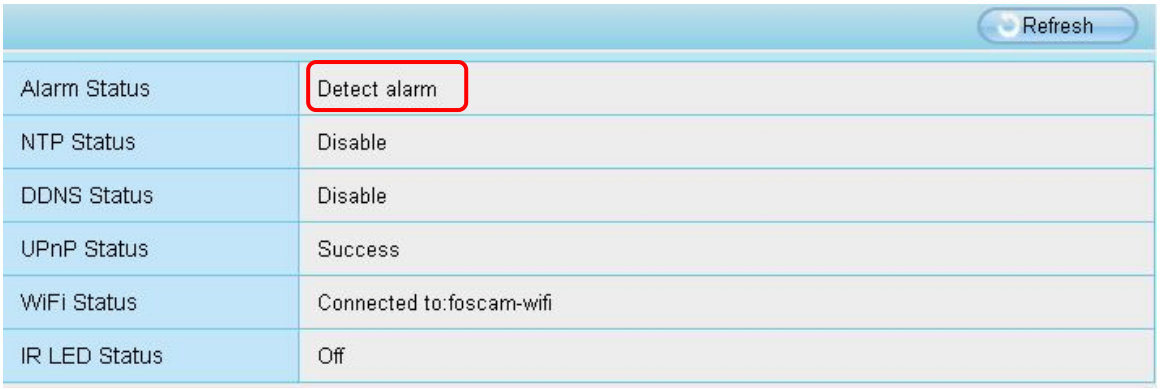


Figure 4.48

There are four alarm indicators:

A PC Sound

If you select PC Sound, when the motion has been detected, the people around the PC 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.

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.

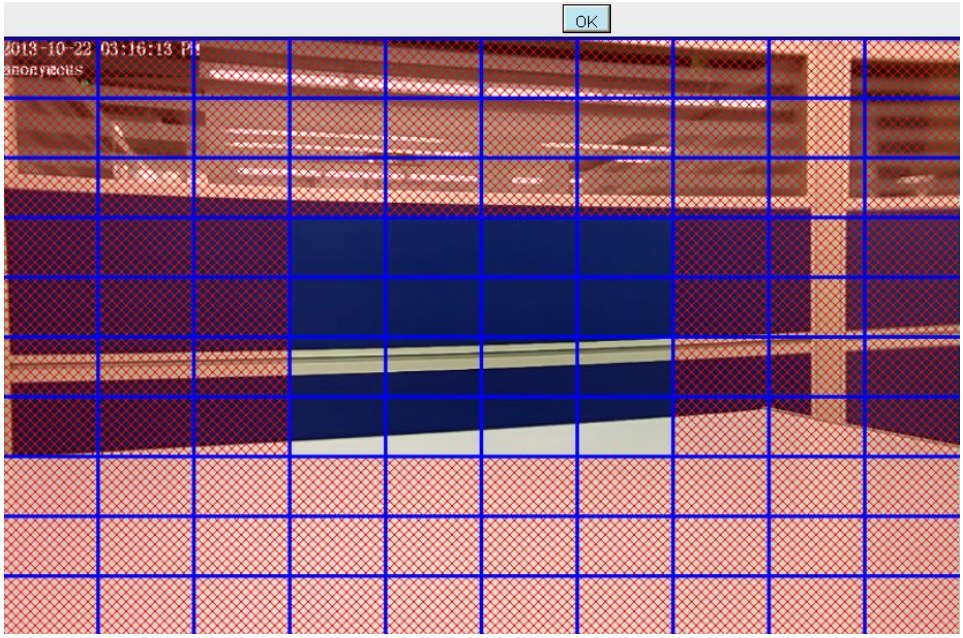


Figure 4.49

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.

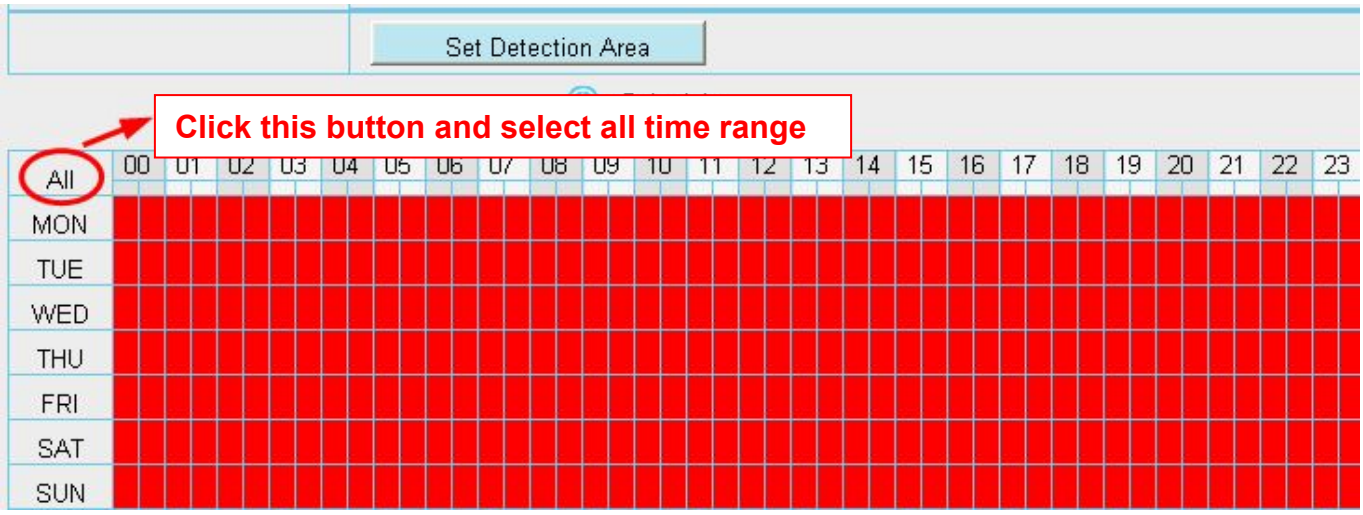


Figure 4.50

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.

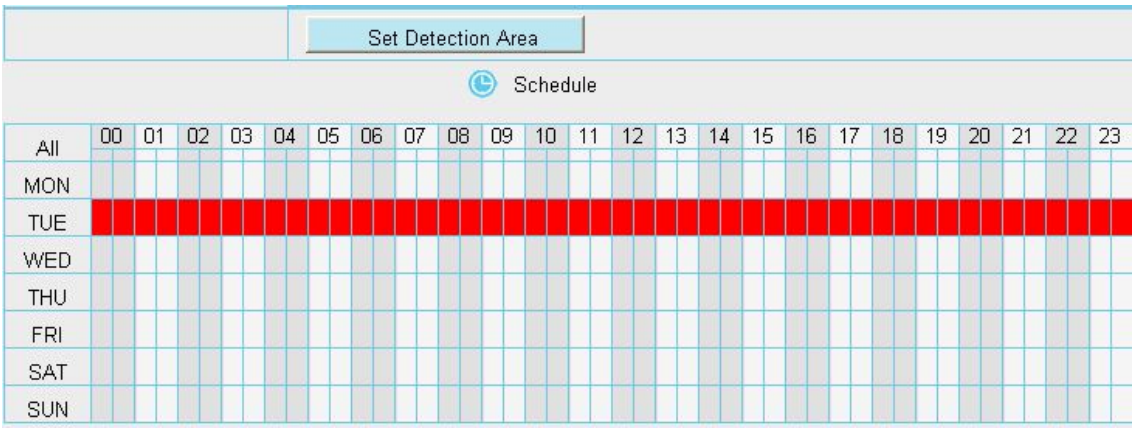


Figure 4.51

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

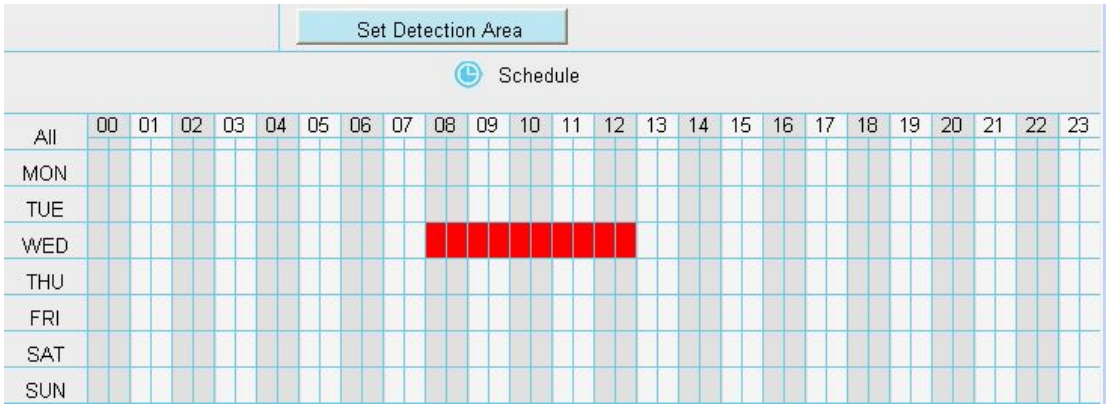


Figure 4.52

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.

4.7 Record

4.7.1 Storage Location

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

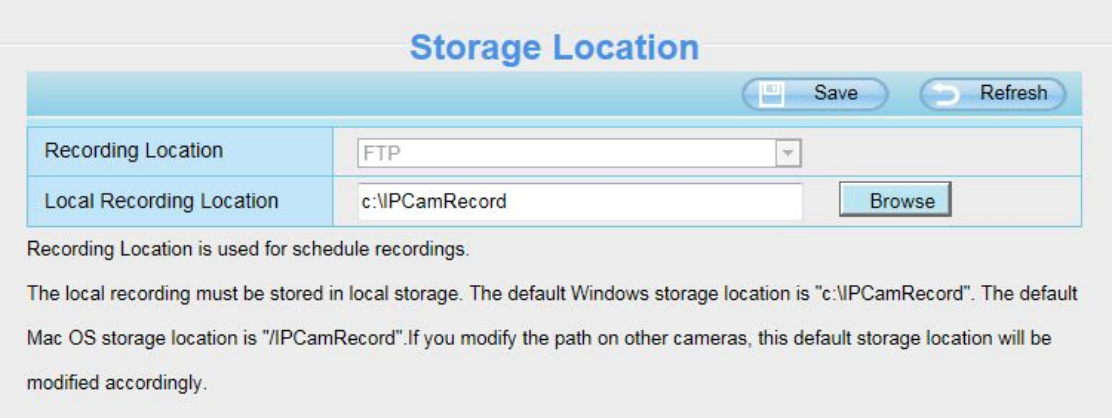


Figure 4.53

Recording Location : FTP.

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.

4.7.2 Alarm Record

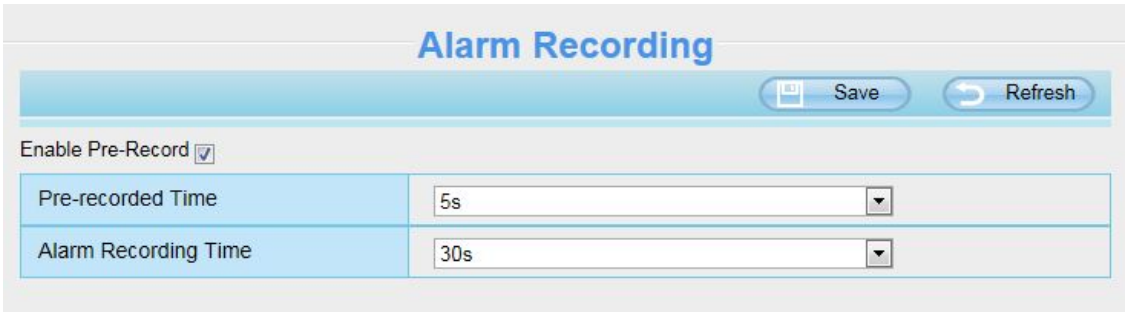


Figure 4.54

4.7.3 Local Alarm Location

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

Figure 4.55

4.7.4 Record Schedule

On this page you can enable schedule record.

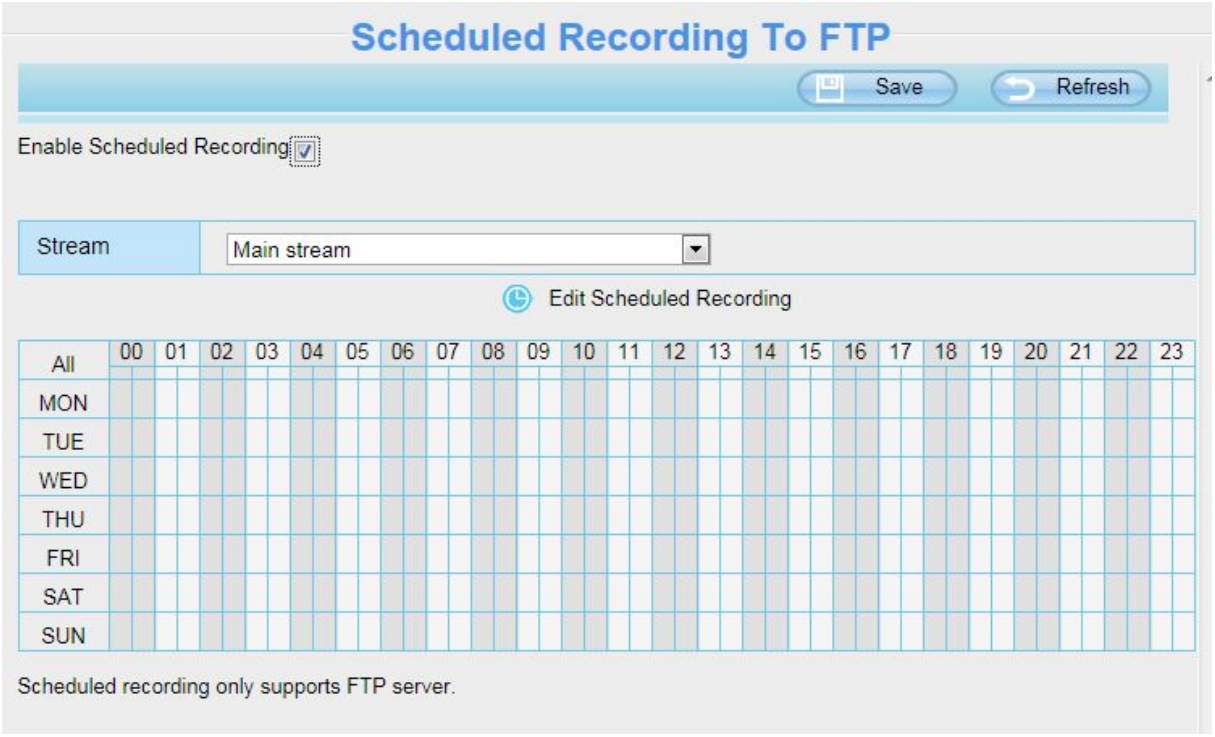


Figure 4.56

Stream: You can select the main stream or sub stream from the drop-down.
You can set the store path of the recording file on the **Storage Location** page.

Click **Save** button to take effect.

4.8 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**.

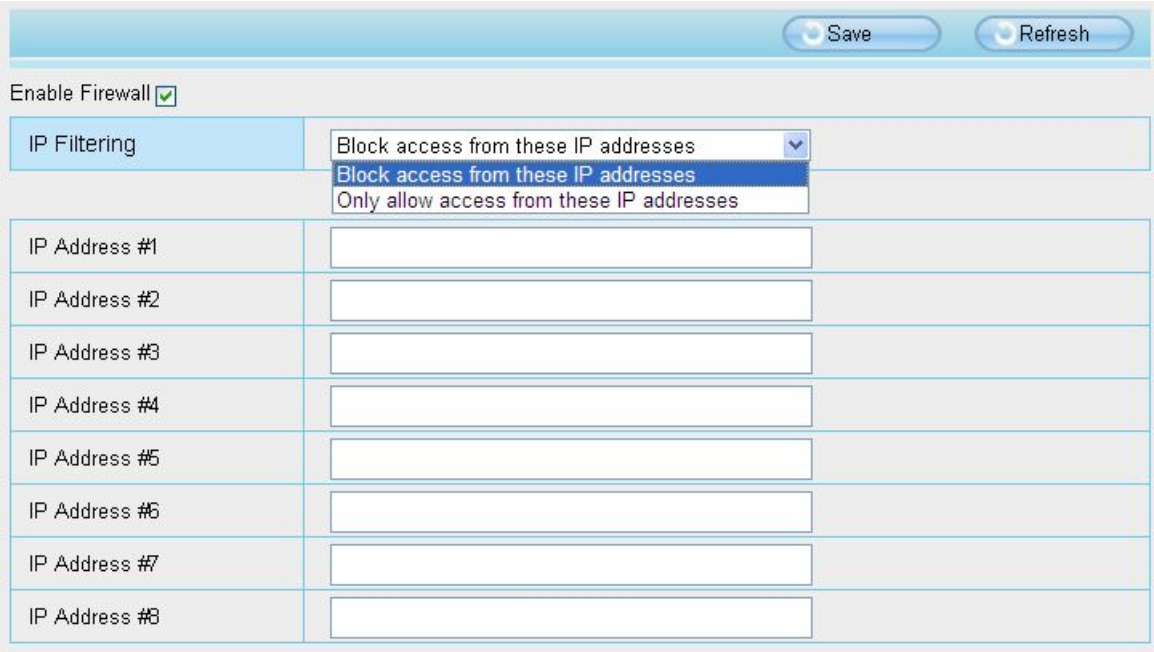


Figure 4.57

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.

4.9 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.

4.9.1 Back-up& Restore

Click **Back-up** 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.

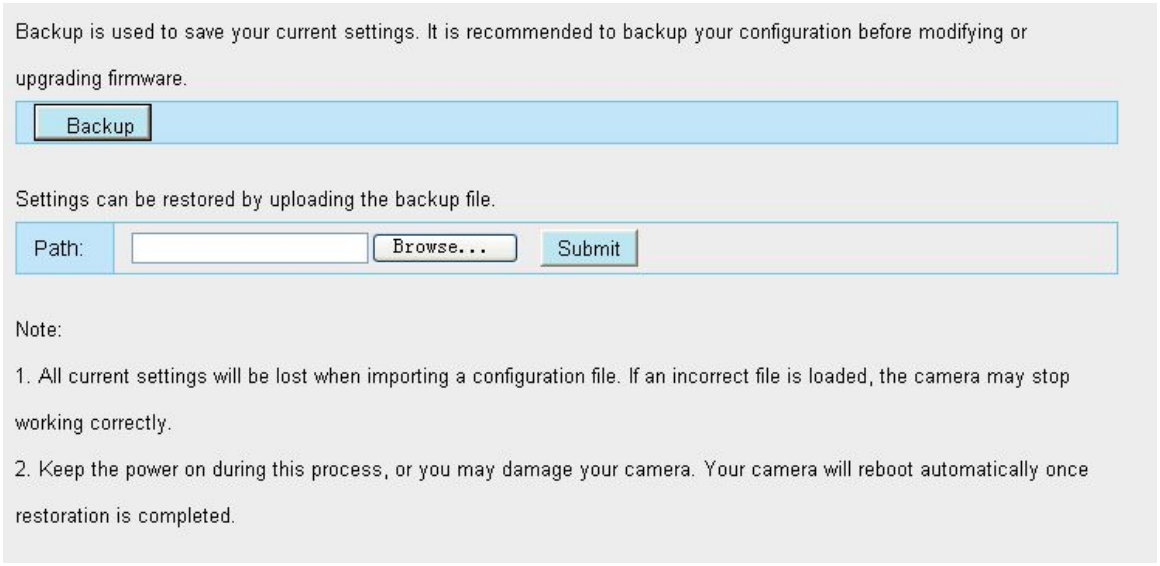


Figure 4.58

4.9.2 System Upgrade

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

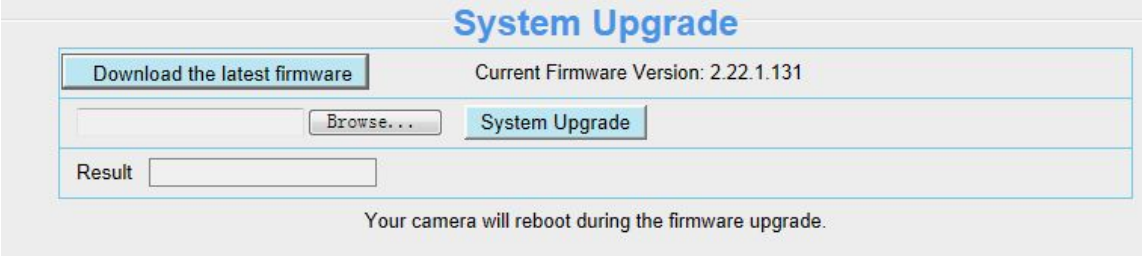


Figure 4.59

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.

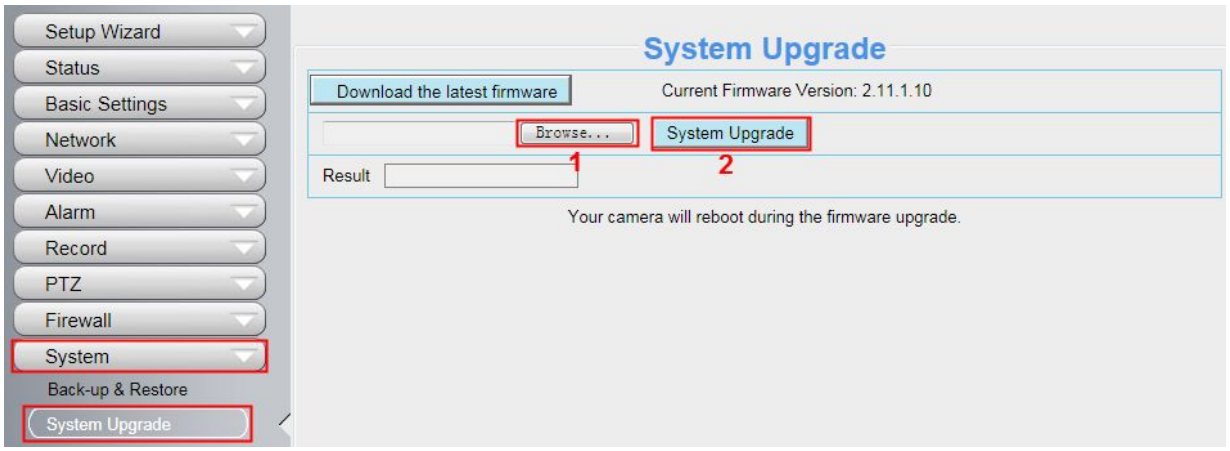


Figure 4.60

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.

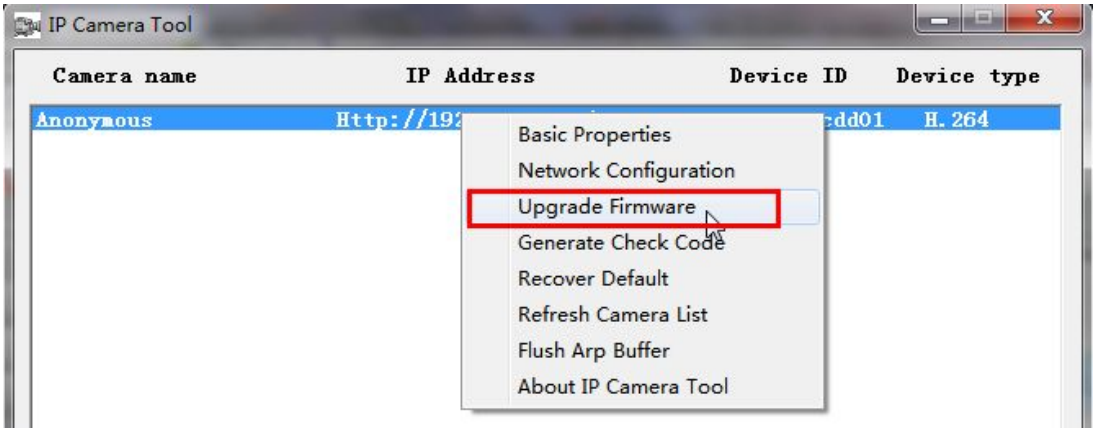


Figure 4.61

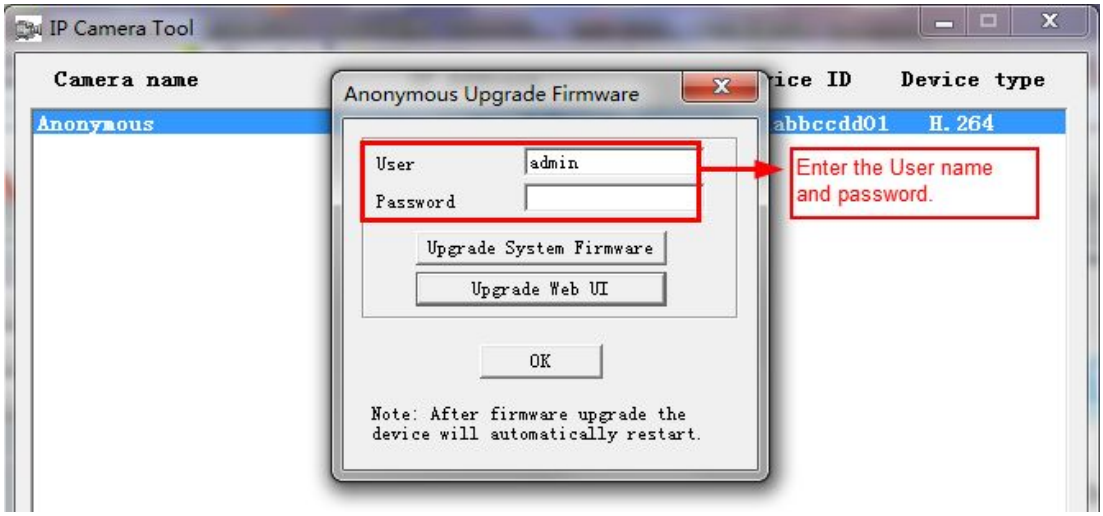


Figure 4.62

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 mis-configured during an upgrade.

NOTE:

1) Don't upgrade the firmware through the web UI in WAN, or else the upgrade may be failed.
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.
6) 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.

4.9.3 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.

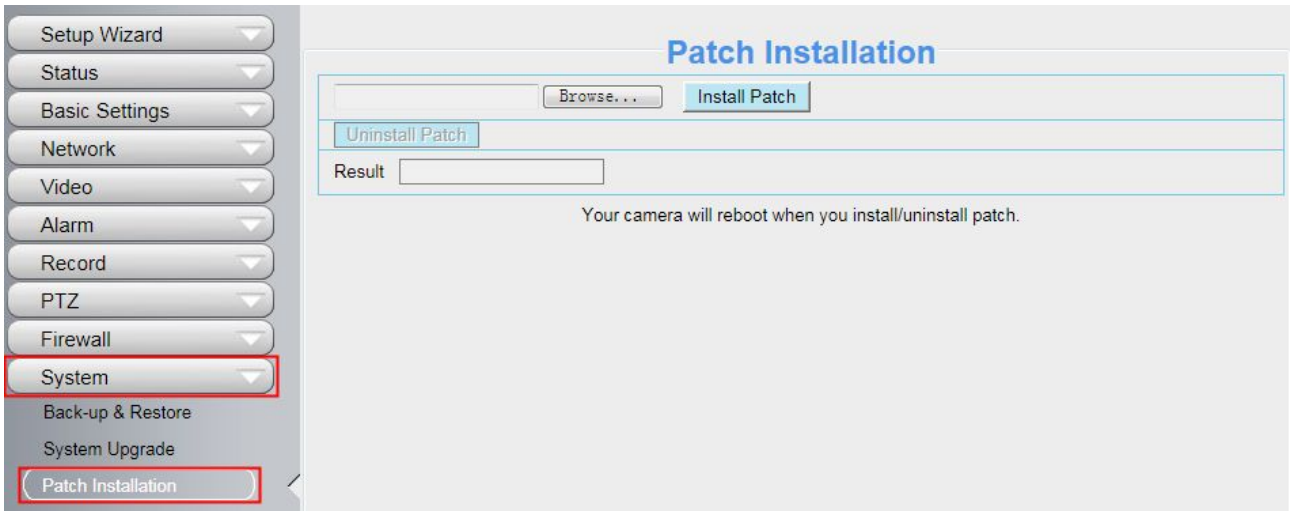


Figure 4.63

4.9.4 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.

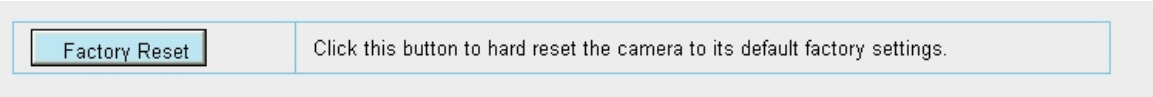


Figure 4.64

4.9.5 Reboot

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

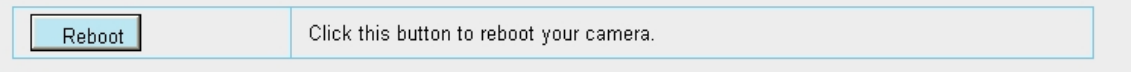


Figure 4.65

5 Appendix

5.1 Frequently Asked Questions

5.1.1 Install the ActiveX of Firefox browser, Google Chrome and IE Chrome.

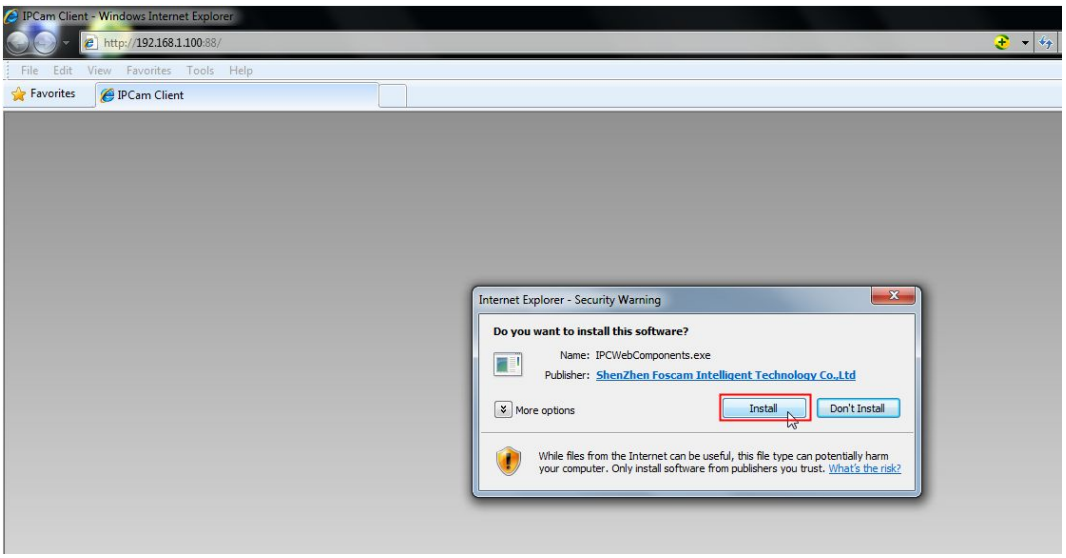


Figure 5.1

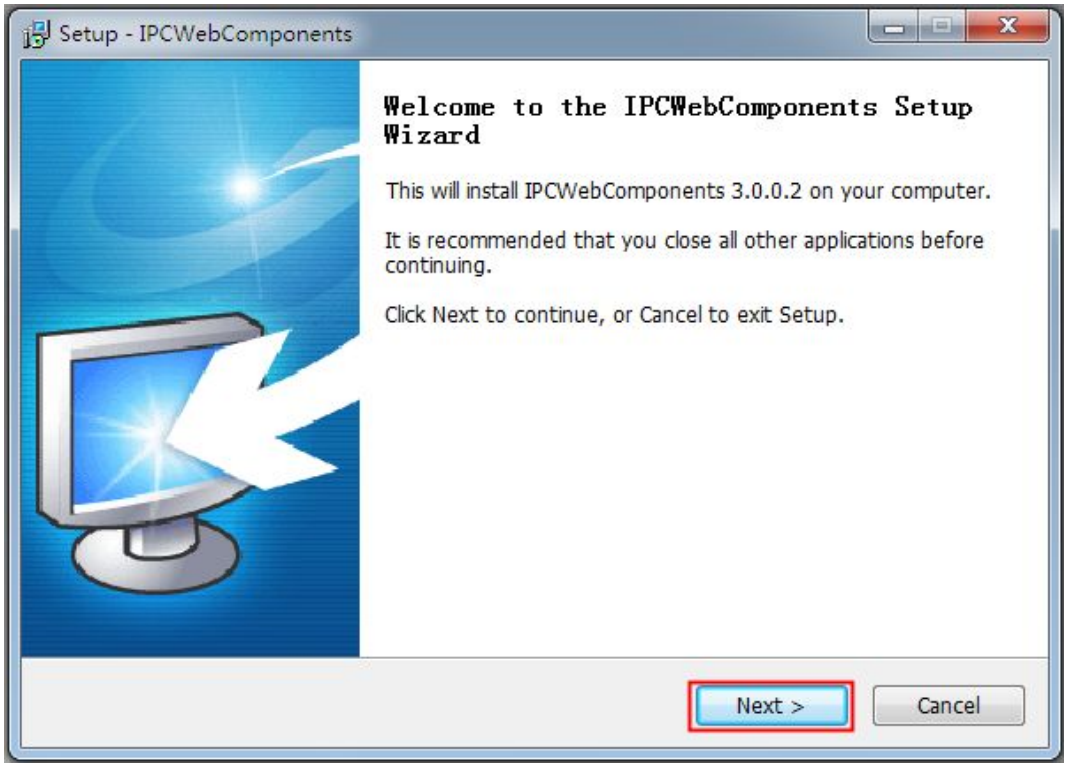


Figure 5.2

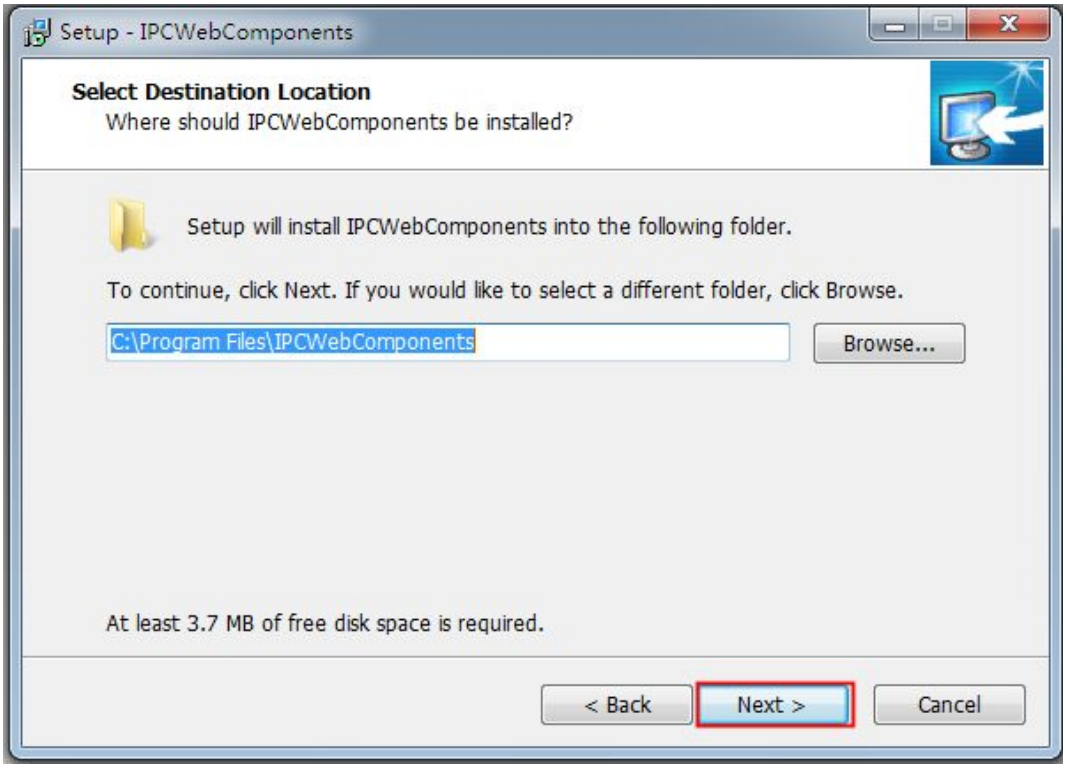


Figure 5.3

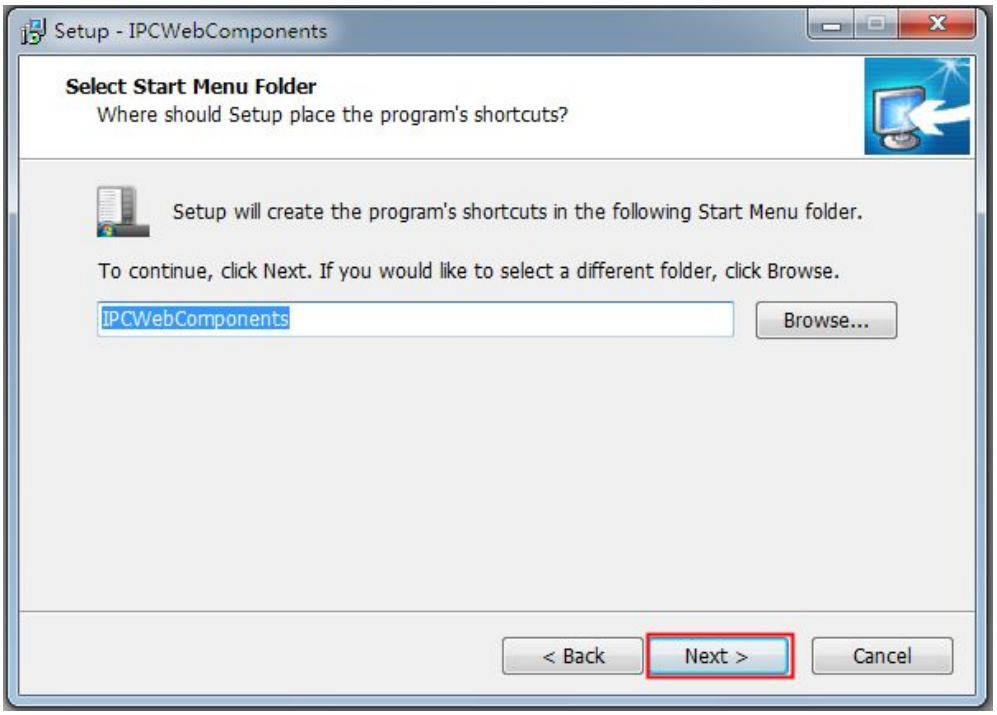


Figure 5.4

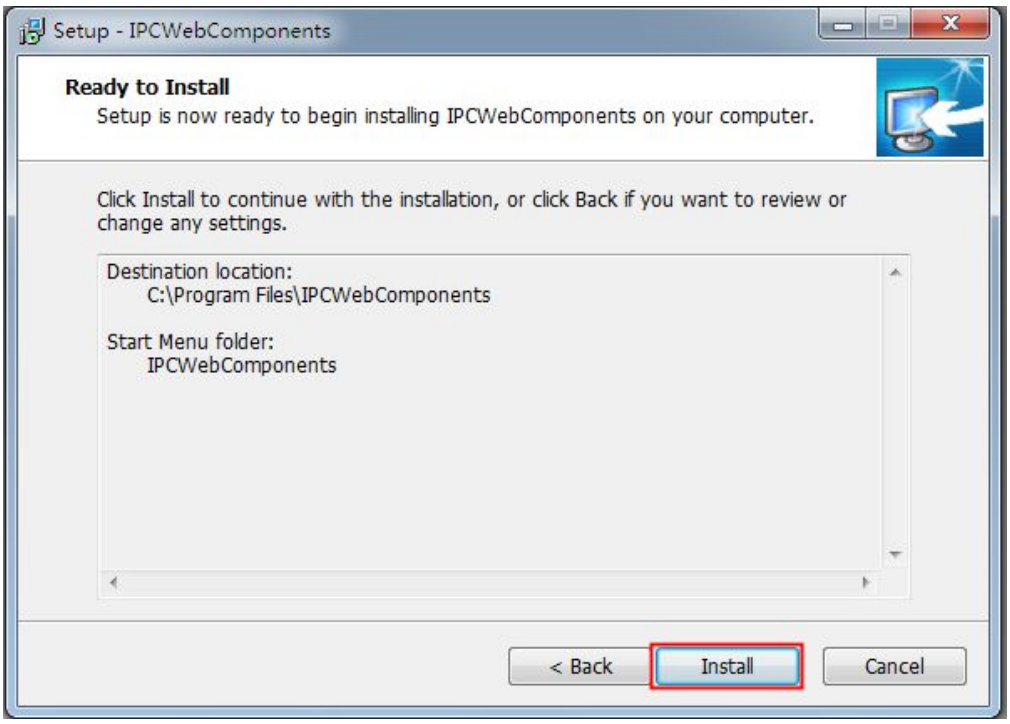


Figure 5.5

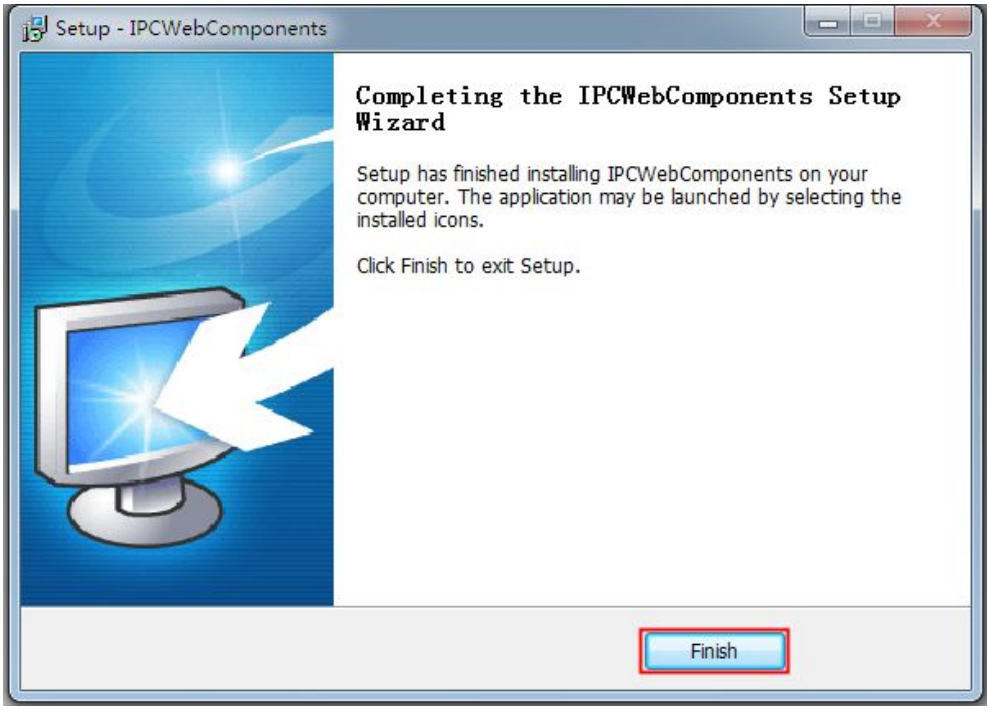


Figure 5.6

5.1.2 Uninstall the ActiveX of Firefox browser, Google Chrome and IE Chrome.

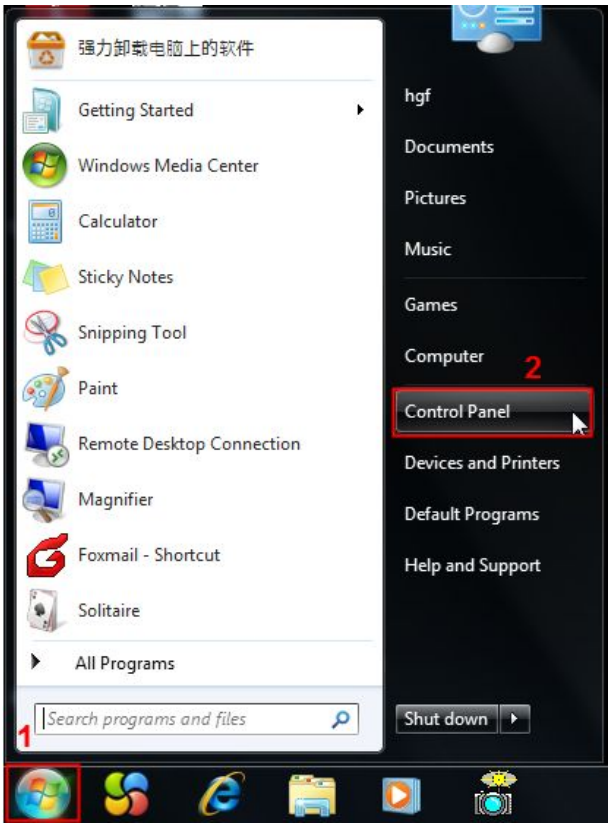


Figure 5.7

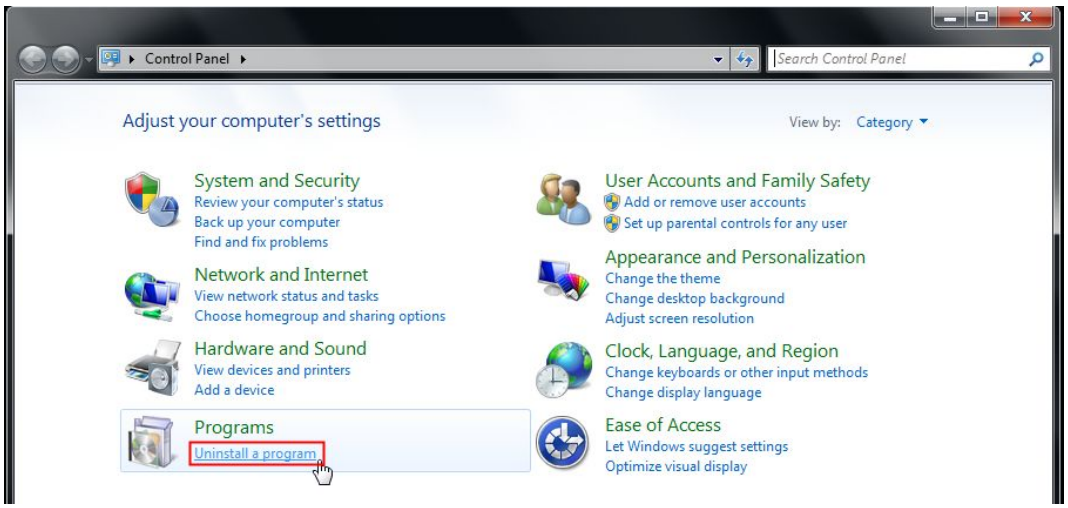


Figure 5.8

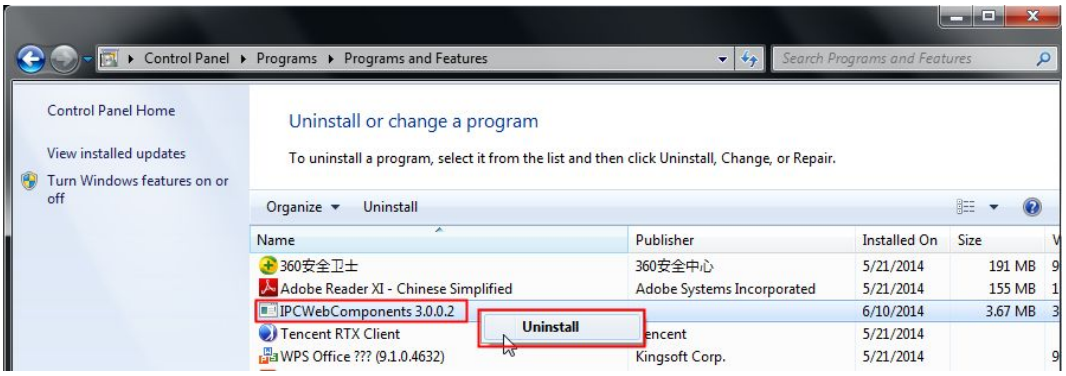


Figure 5.9

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**.

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

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

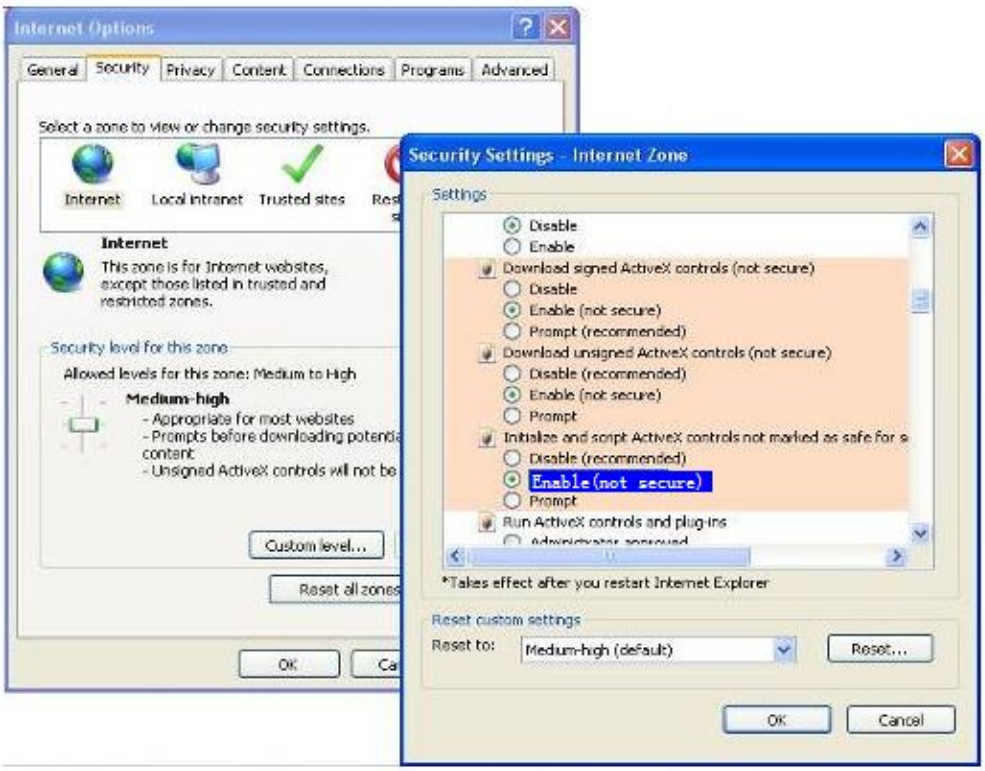


Figure 5.10

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.

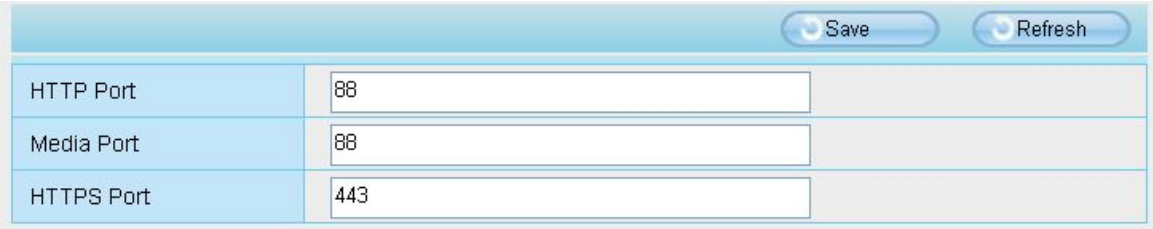


Figure 5.11

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.

3 Port forwarding is not successful.

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.

5.1.9 Camera can not connect wireless

If your camera could not connect wireless after you set wireless settings and plug out the cable. Please check whether your settings are correct or not.
Normally, camera can't connect wireless mainly because of wrong settings.
Make sure broadcast your SSID; use the same encryption for router and camera.

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 username is admin with a blank password

5.3 Specification

ITEMS		FI9803P
Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	1.0 Megapixels
	Min. Illumination	0 Lux (With IR Illuminator)
Lens	Lens Type	Glass Lens
	focal length	f: 2.8mm
	Aperture	F1.2
	Diagonal angle of view	75°
	Horizontal view angle	70°
	Image Compression	H.264
	Frame rate	25fps（VGA）, 23fps（720P）
	Stream	dual stream

Video	Image adjustment	The hue, brightness, contrast, saturation, sharpness are adjustable
	Flip image	flip and mirror
	Infrared mode	Automatic or manual
	Night visibility	With 1 Infrared Lamp Array, Night Vision Range up to 20m
Network	Ethernet	One 10/100Mbps RJ45 port
	Remote Access	P2P, DDNS
	Wireless Standard	IEEE802.11b/g/n
	Network Protocol	IP, TCP, UDP, HTTP, HTTPS, SMTP, FTP, DHCP, DDNS, UPnP, RTSP, ONVIF
System Requirements	Operating System	Microsoft Windows 2000/XP, Vista, 7; Mac OS
	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
	Privacy Block	Set privacy area manually
	User Accounts	Three levels user role
	Firewall	Supports IP Filtering
	Reset	Reset button is available
Power	Power Supply	DC 12V/1.0A
	Power Consumption	4.2 Watts (Max.)
Physical	Dimension(mm)	153(L)x 92(W)x 86(H)
	Net Weight	380g
Environment	Operating Temperature	-20°~ 60°C (-4°F ~ 140°F)
	Operating Humidity	10% ~ 80% non-condensing
	Storage Temperature	-20°C ~ 60° (-4°F ~ 140°F)
	Storage Humidity	0% ~ 90% non-condensing
Certification	IC、CSA、CE, FCC, RoHS	
Warranty	Limited 1-year warranty	

5.4 CE & FCC

Electromagnetic Compatibility (EMC)

FCC Statement

This device compiles with FCC Rules Part 15. Operation is subject to the following two conditions.

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is like to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

FCC Caution

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

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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CE Mark Warning

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

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.

Please contact support via e-mail at **support@foscam.us**. You can also reach technical support at **1-800-930-0949** by following the automated instructions.