Figure 4.2

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.

4.3.3 PPPoE

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

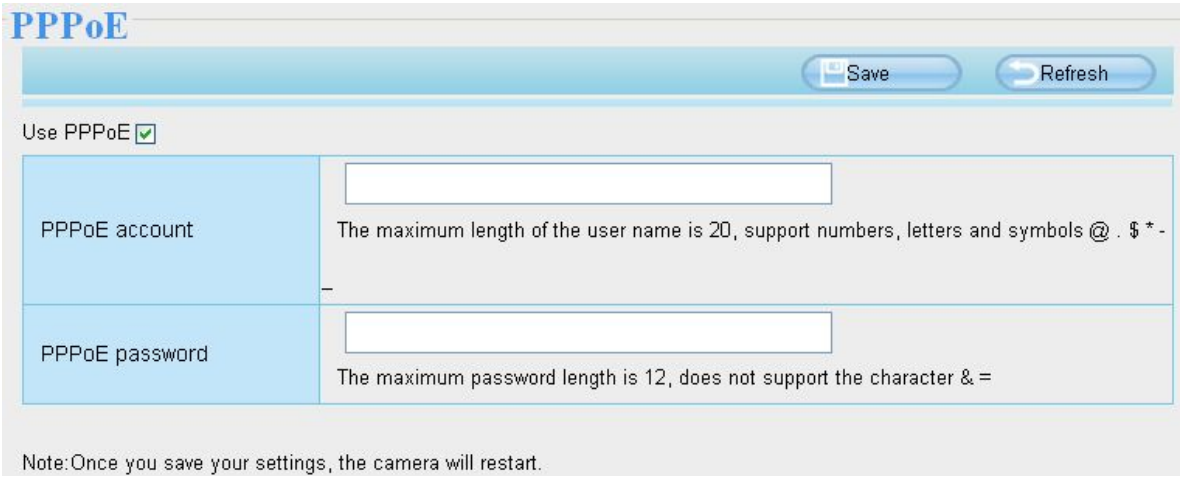


Figure 4.23

4.3.4 DDNS

The 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.

IPCAM domain name

Here take **cp4911.myipcamera.org** for example. Go to option of DDNS on the **Settings->Network** panel, you can see the domain name.

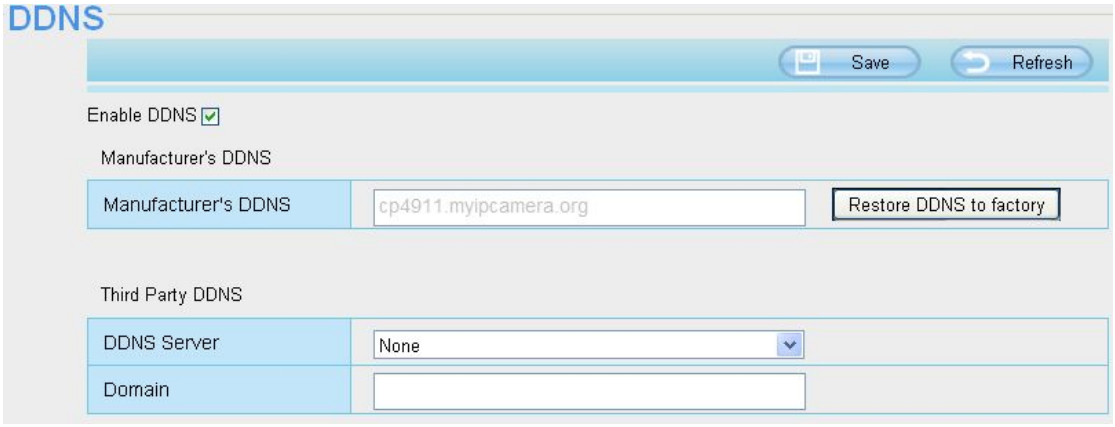


Figure 4.24

Now you can use **http:// Domain name + HTTP Port** to access the camera via internet.
Take hostname **cp4911.myipcamera.org** and HTTP Port no. 8000 for example, the accessing link of the camera via internet would be **http://cp4911.myipcamera.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 4.25

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.

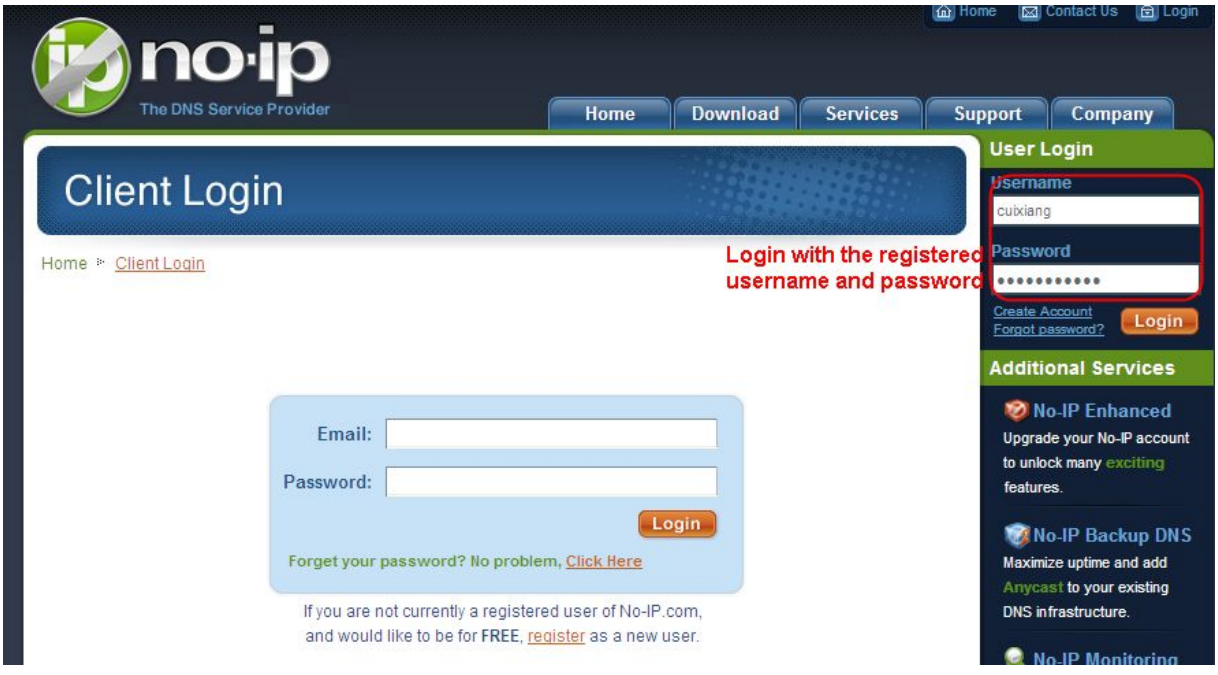


Figure 4.26

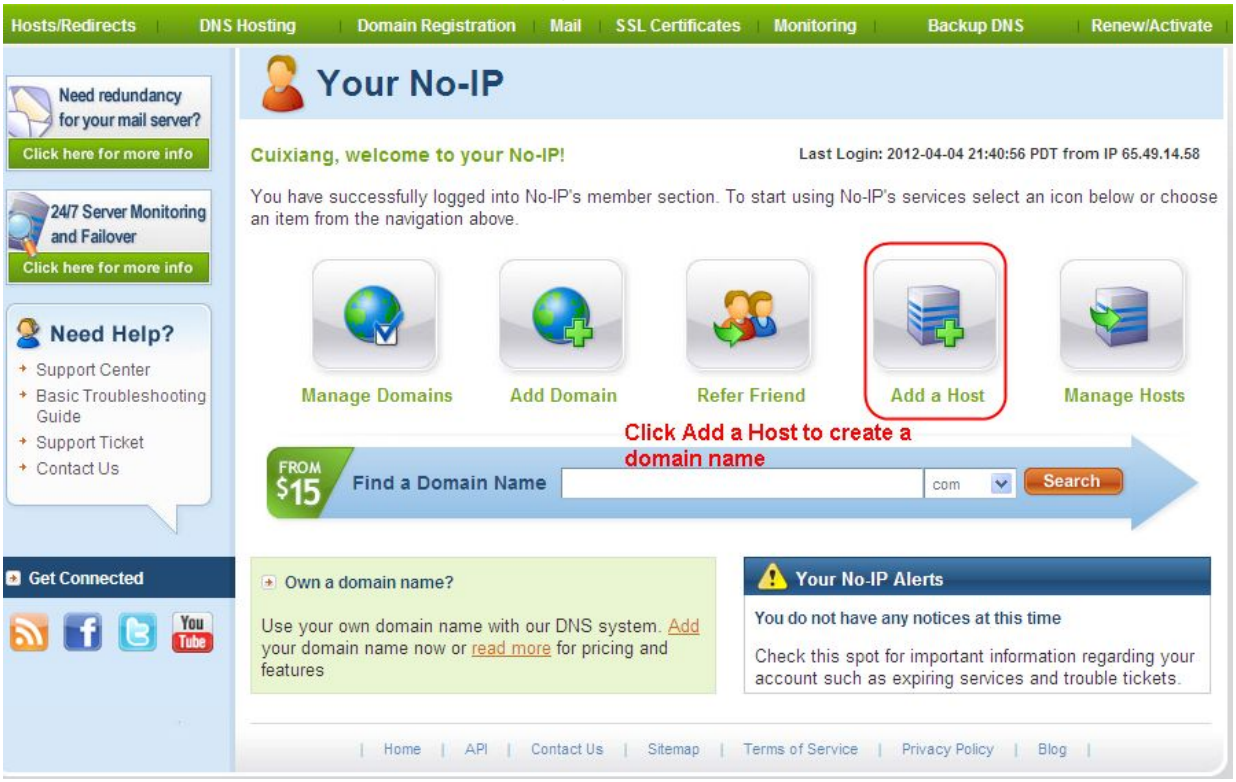


Figure 4.27

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 **test**, password **test2012** for example.

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

Secondly, select No-Ip as a server.

Thirdly, fill test as DDNS user, fill password test2012 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 IPCAM Domain Name will be invalid. The Third Party DDNS and the IPCAM 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.

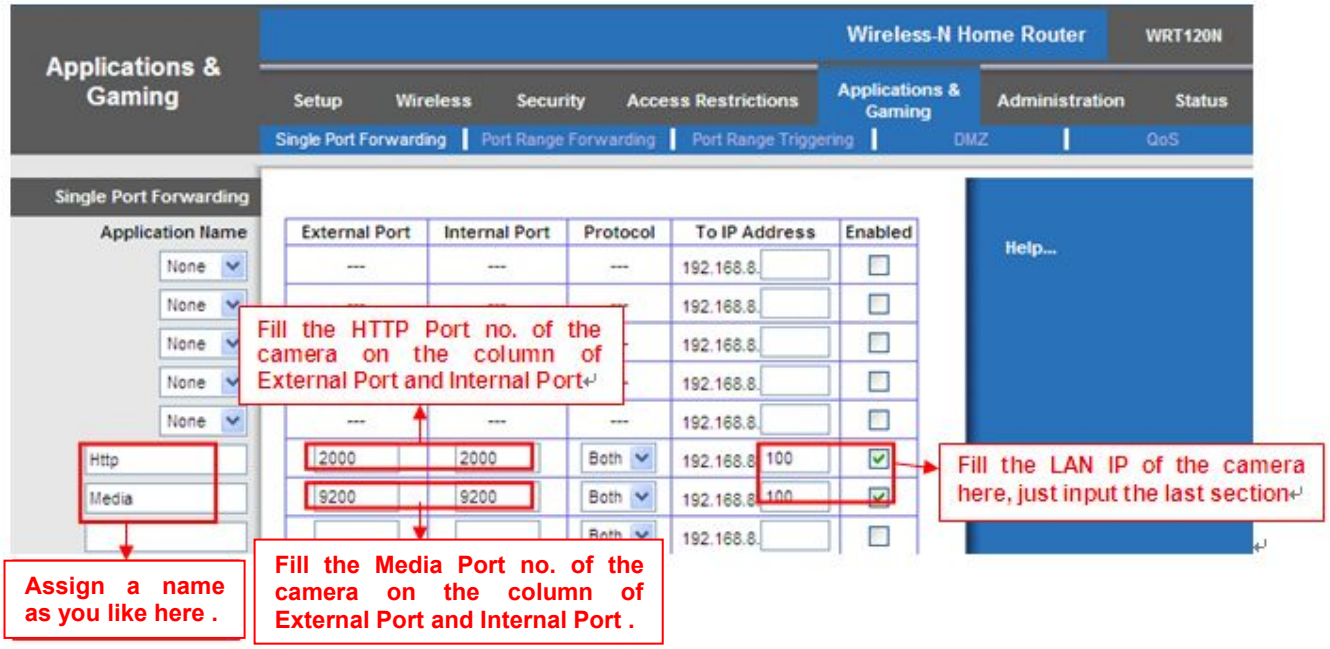


Figure 4.28

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. 2000for example, the accessing link of the camera via internet would be http:// ycxgwp.no-ip.info:2000

4.3.5 UPnP

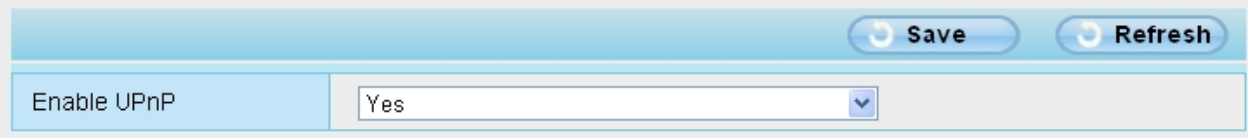


Figure 4.29

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 4.30

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 4.30).

4.3.6 Port

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

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

Figure 4.31

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 4.34 and 4.35.

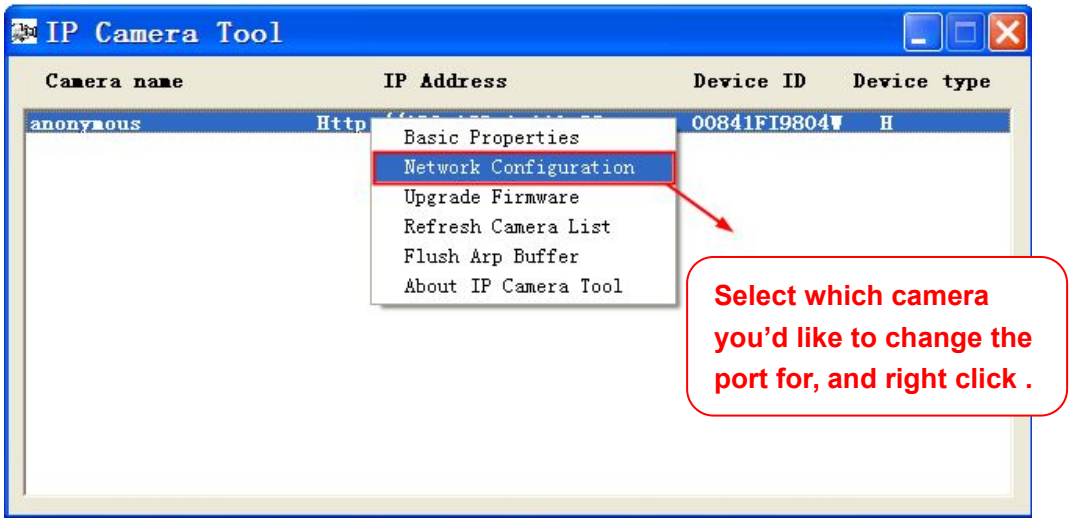


Figure 4.32

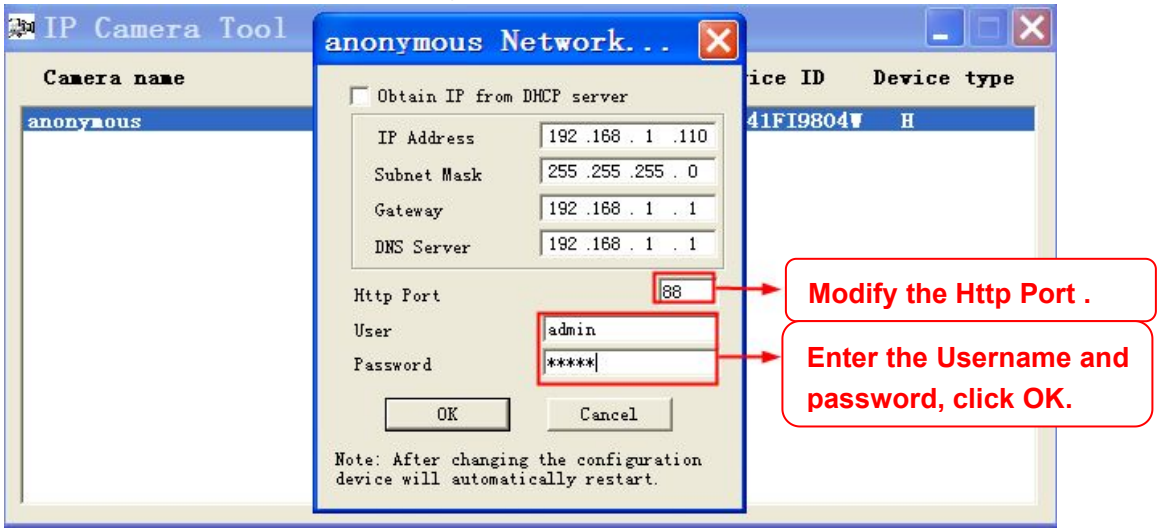


Figure 4.33

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!

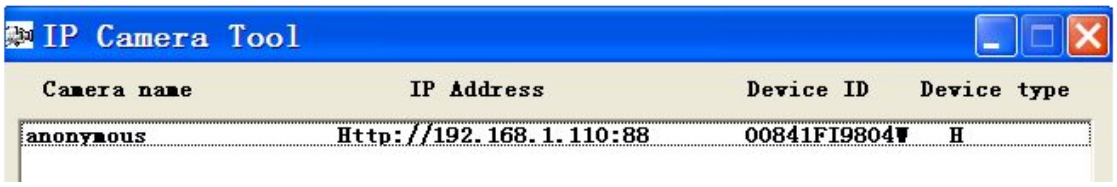


Figure 4.34

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

HTTPS port: The default port is 443. You can use the url to access the camera: https:// IP + HTTPS port.
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 4.35

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.
RTSP function
RTSP URL rtsp:// [user name][:password]@IP:HTTP 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 three mode: videoMain, videoSub and audio. When the network speed is bad, here you had better select videoSub. If you select audio, you can only hear the sound but cannot see the video.

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

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

1. rtsp://admin:123@192.168.1.11:88/videoMain
2. rtsp:// @192.168.1.11:88/videoMain
3. rtsp://:123@192.168.1.11:88/videoMain
4. rtsp://admin@192.168.1.11:88/videoMain

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

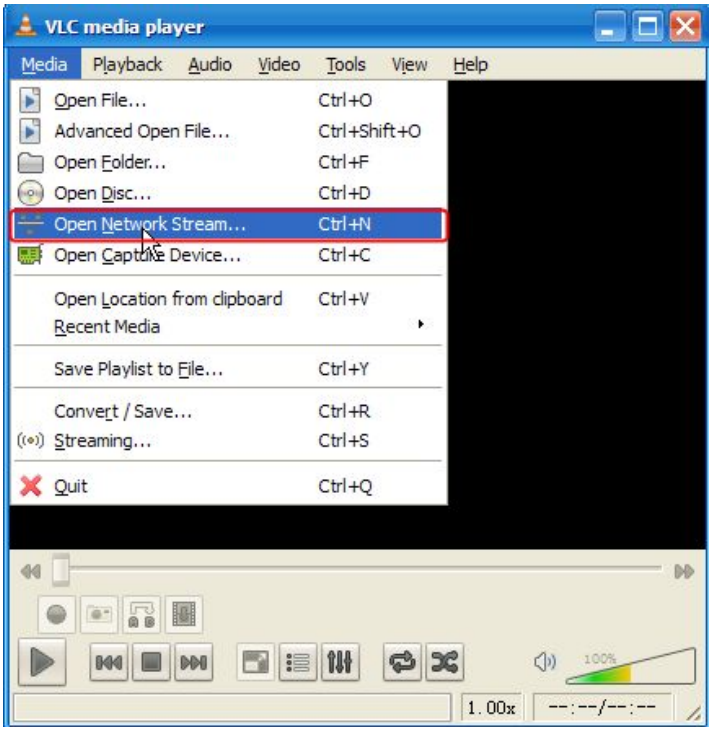


Figure 4.36

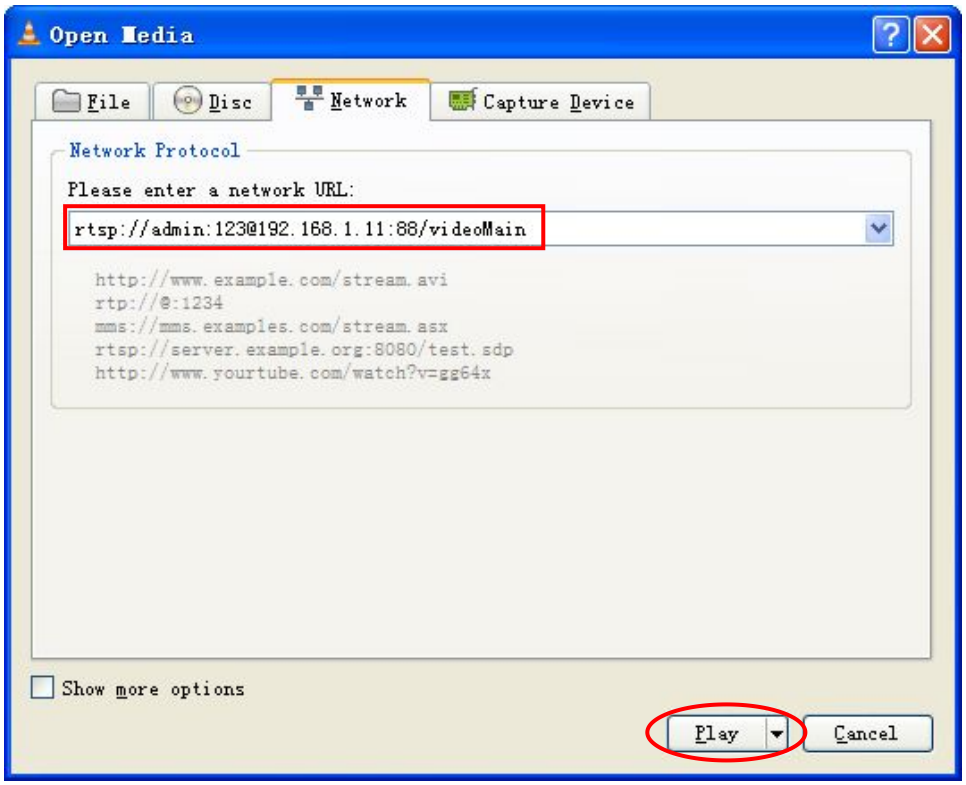


Figure 4.37

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

Figure 4.38

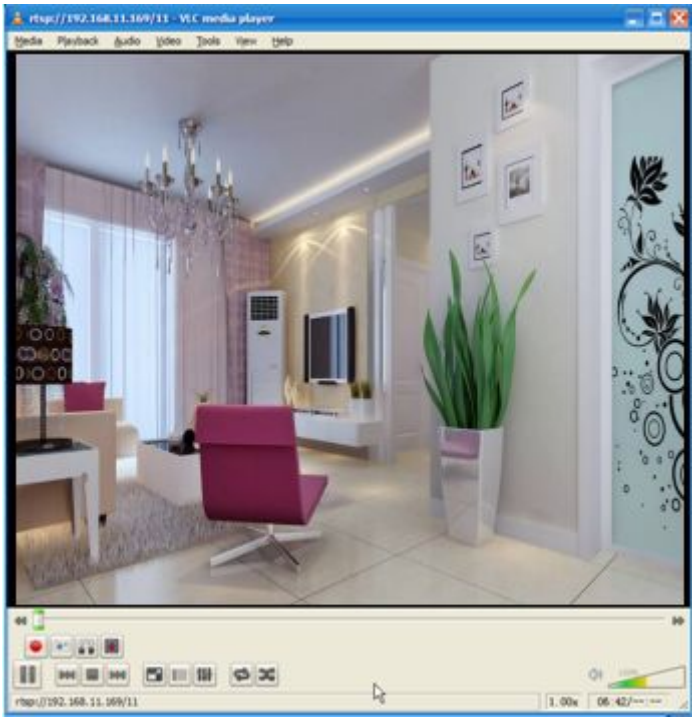


Figure 4.39

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.

4.3.7 Mail Settings

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

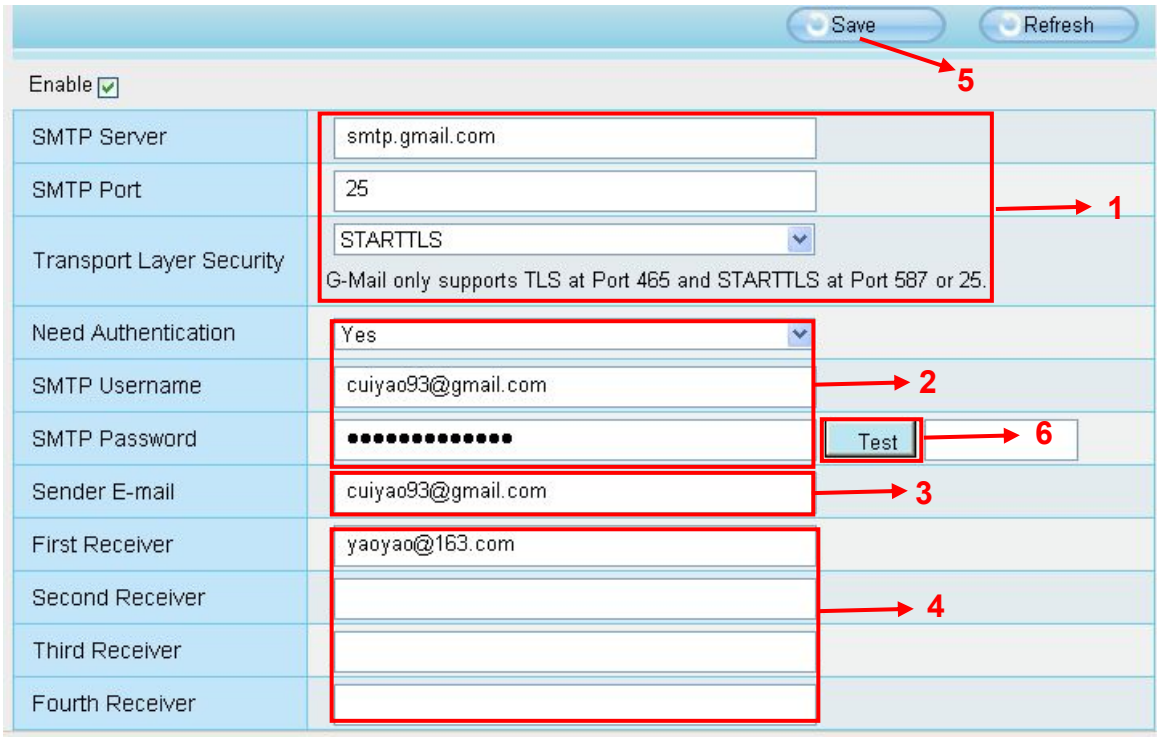


Figure 4.40

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.

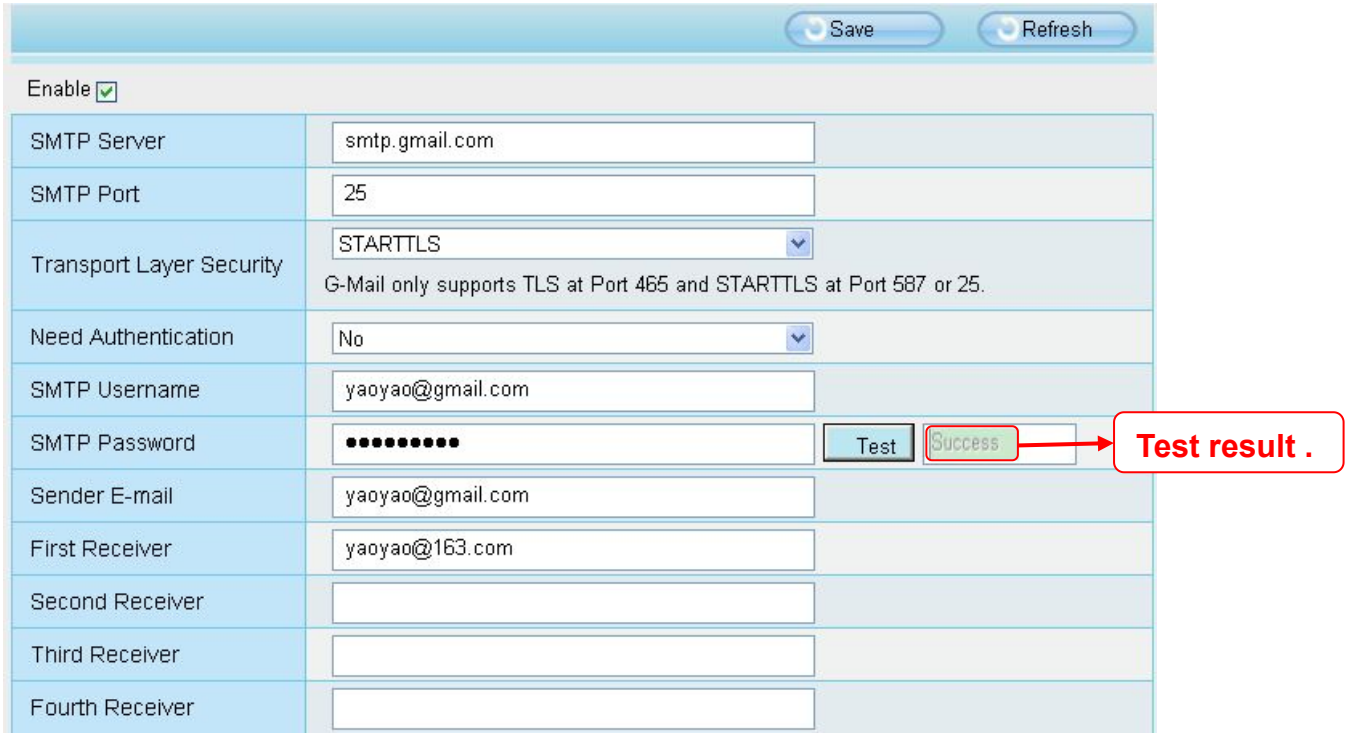


Figure 4.41

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

4.3.8 FTP Settings

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

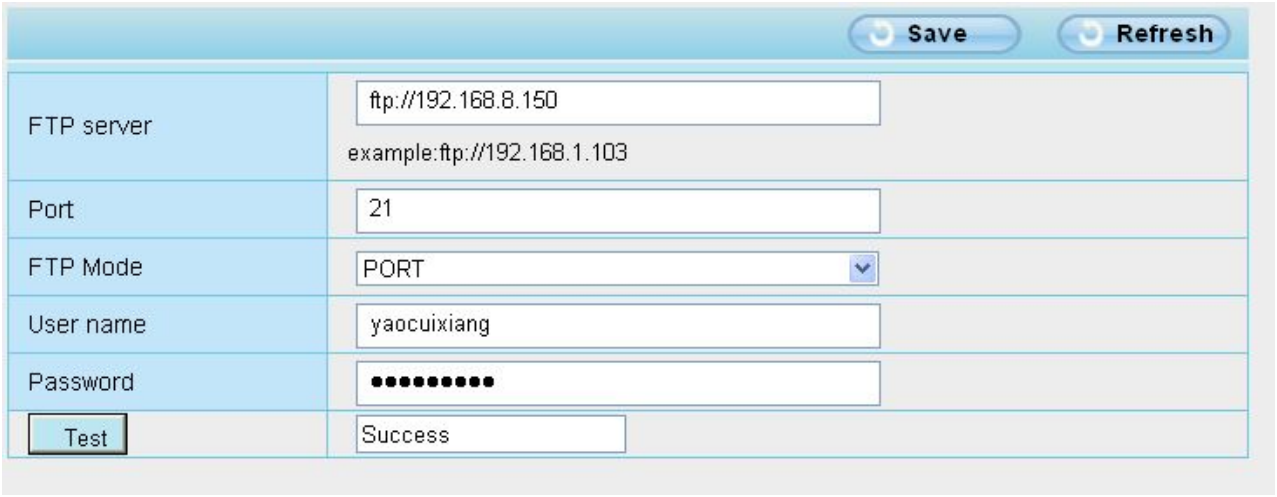


Figure 4.42

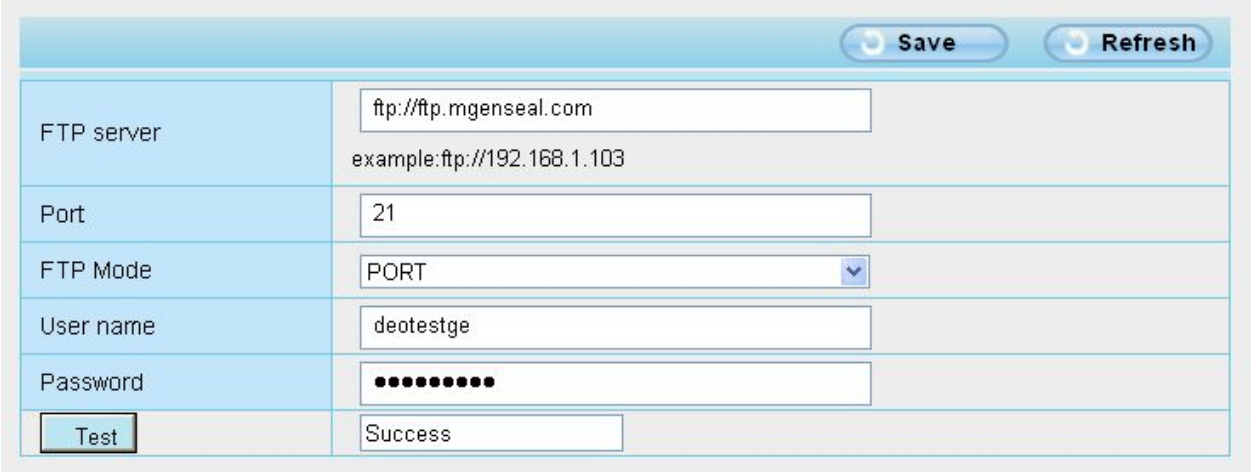


Figure 4.43

FTP server: If your FTP server is located on the LAN, you can set as Figure 4.48.
If you have an FTP server which you can access on the internet, you can set as Figure 4.49.
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.

4.3.9 P2P

Access the IP Camera by Smart Phone (Android or iOS operating system)
First of all, you need to open the P2P function of the IP Camera at “Settings-->Network-->P2P”.

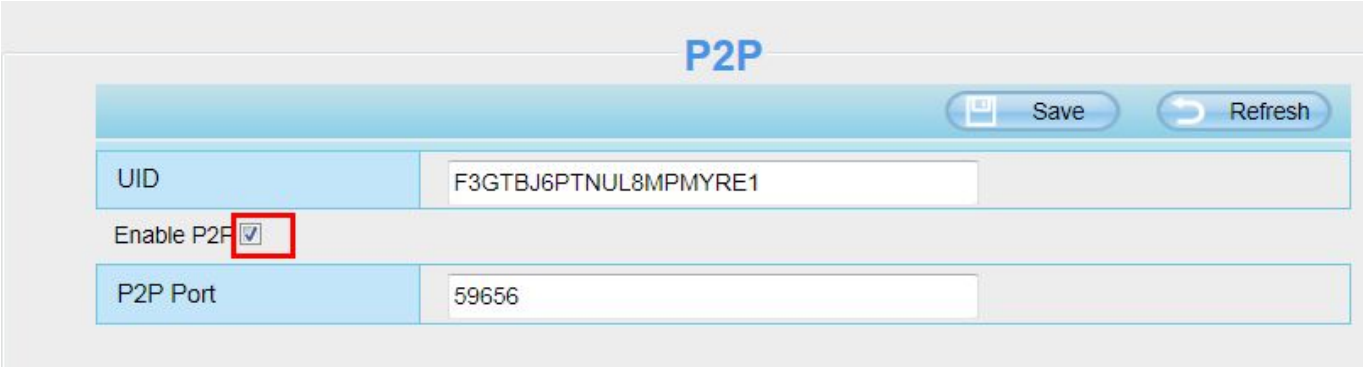


Figure 4.3

Search and install **IPCam Viewer** on Google Play for Android devices, search and install **IPCam_Viewer** on APP Store for iOS devices.

If you want to know more details of the iOS APP or Android APP, see the *iOS App User Manual* or *Android APP User Manual*.

4.4 Video

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

4.4.1 Video Settings

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

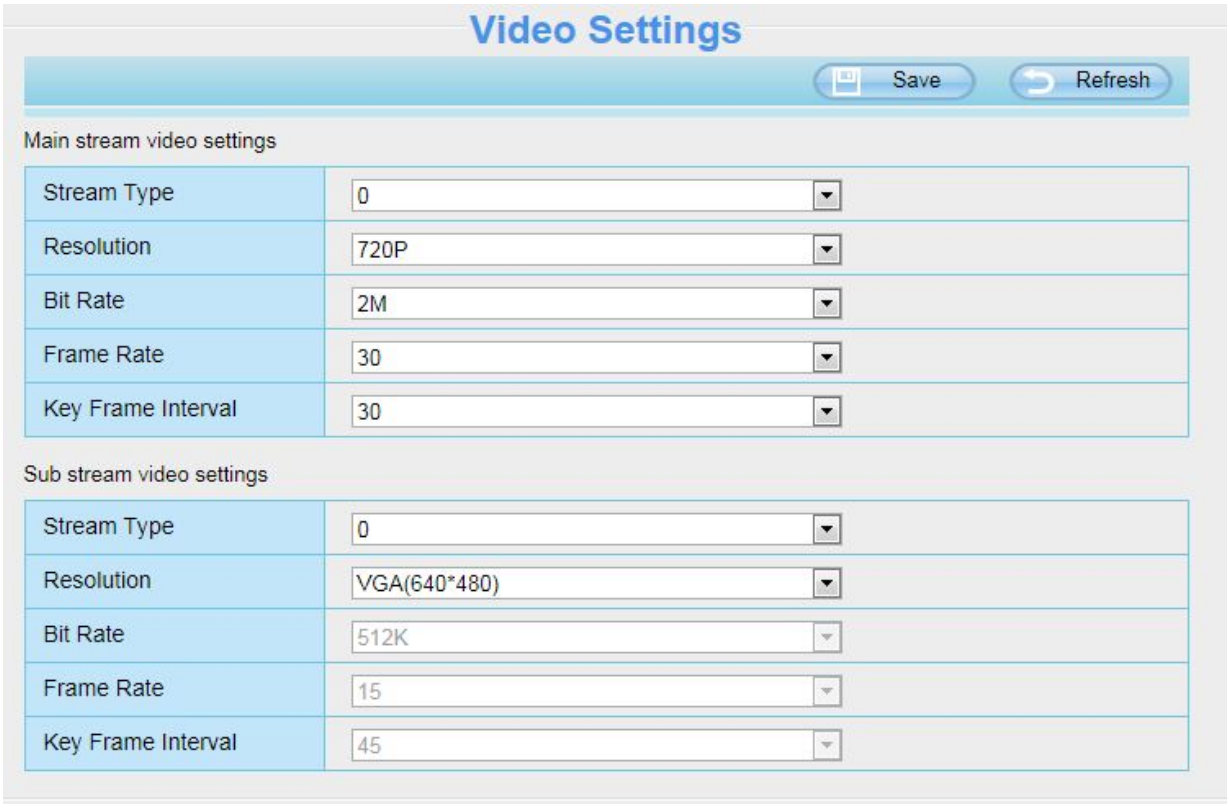


Figure 4.44

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.

4.4.2 On Screen Display

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

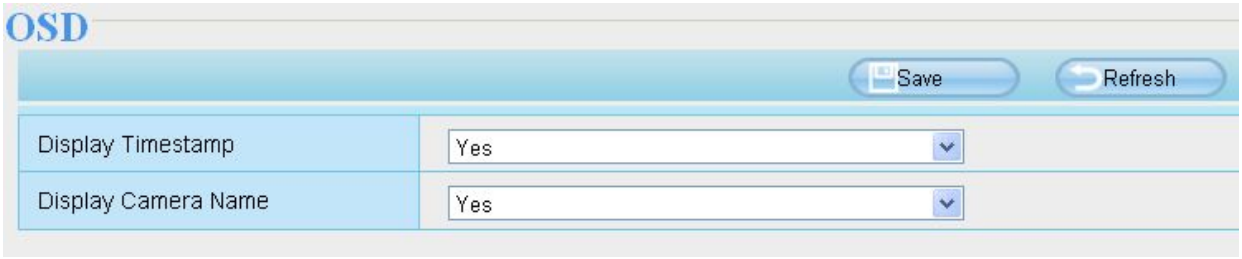


Figure 4.45

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,

4.4.3 Privacy Zone

This page is used to add privacy zone on the video.

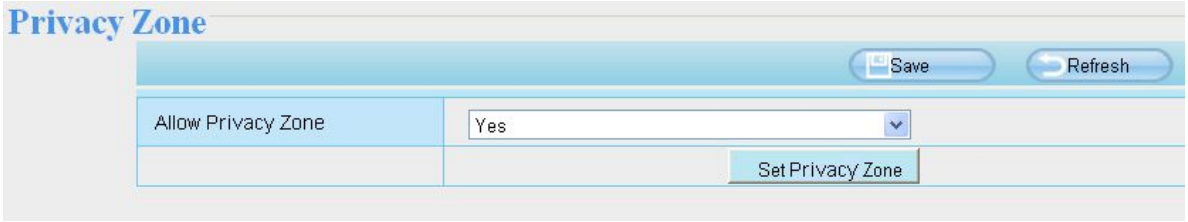


Figure 4.46

There are two options: Yes or NO. Select Yes, then click “Set Privacy Zone” and draw a privacy area on the video, the privacy area will be black on the video.

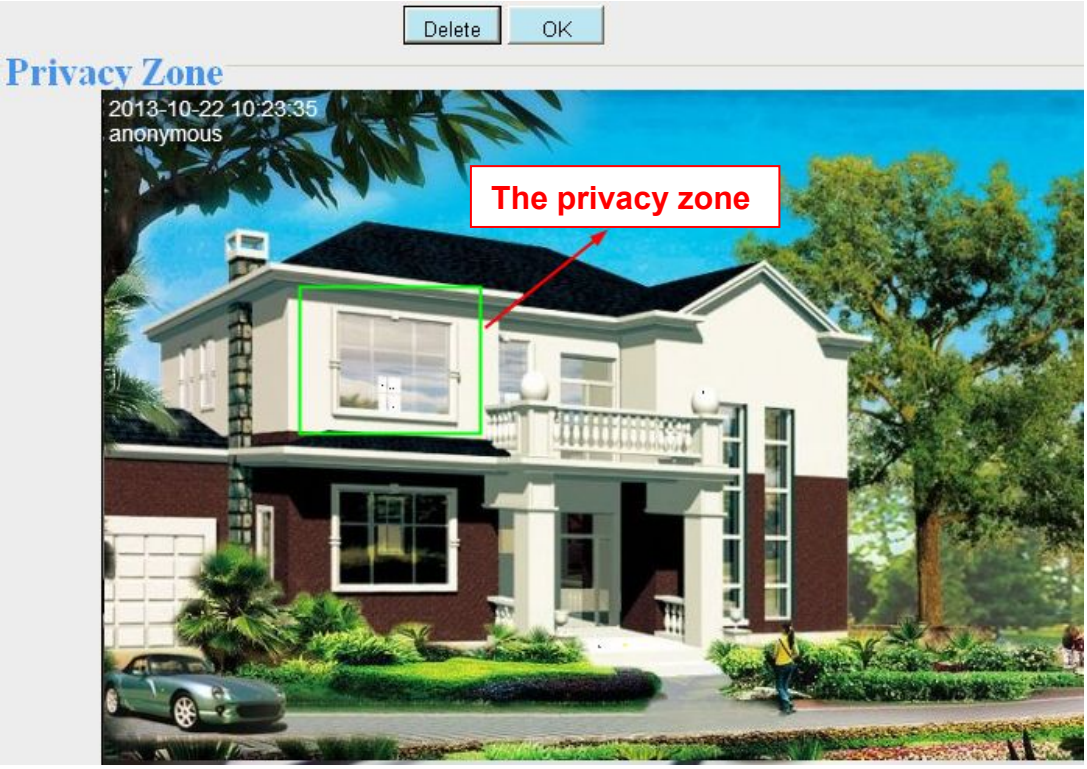


Figure 4.47

Click **OK** button and return to the **Privacy Zone** page, click Save to take effect.

Back to the surveillance window, you can see the privacy area as the following picture:

Figure 4.48

4.4.4 Snapshot Settings

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

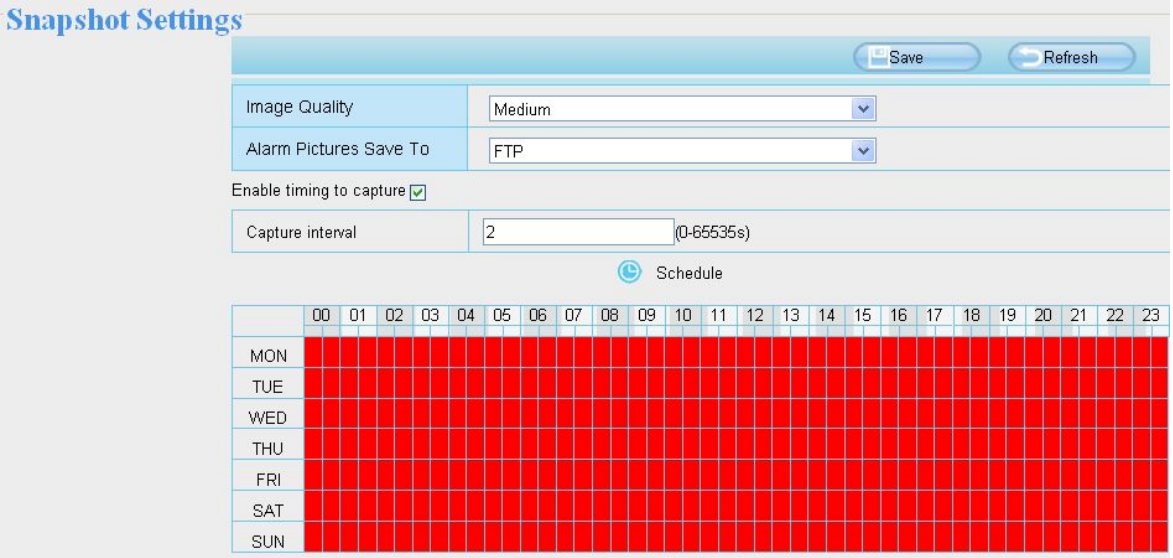


Figure 4.49

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

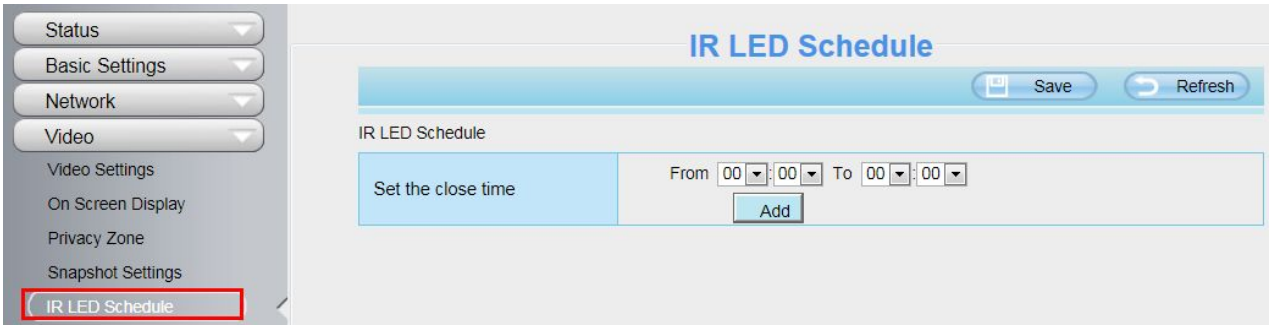
  Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, the camera will capture.

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

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

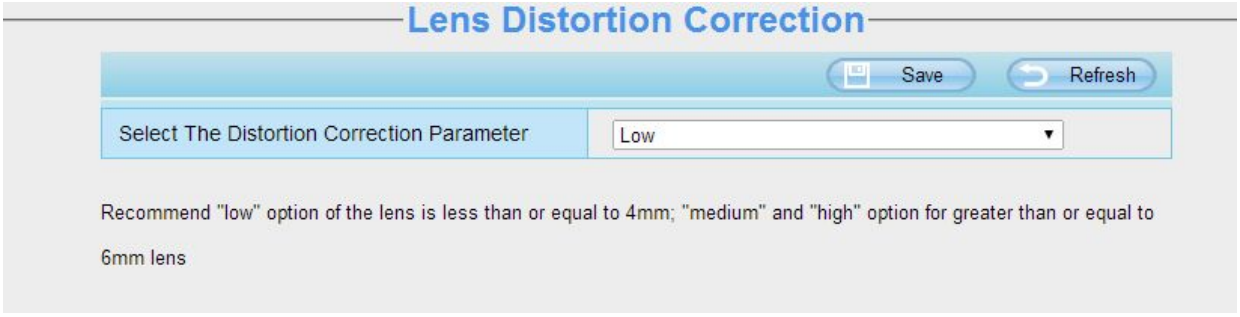
4.4.5 IR LED Schedule

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.



4.4.6 Lens Distortion Correction

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



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.

4.5 Alarm

4.5.1 Motion Detection

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

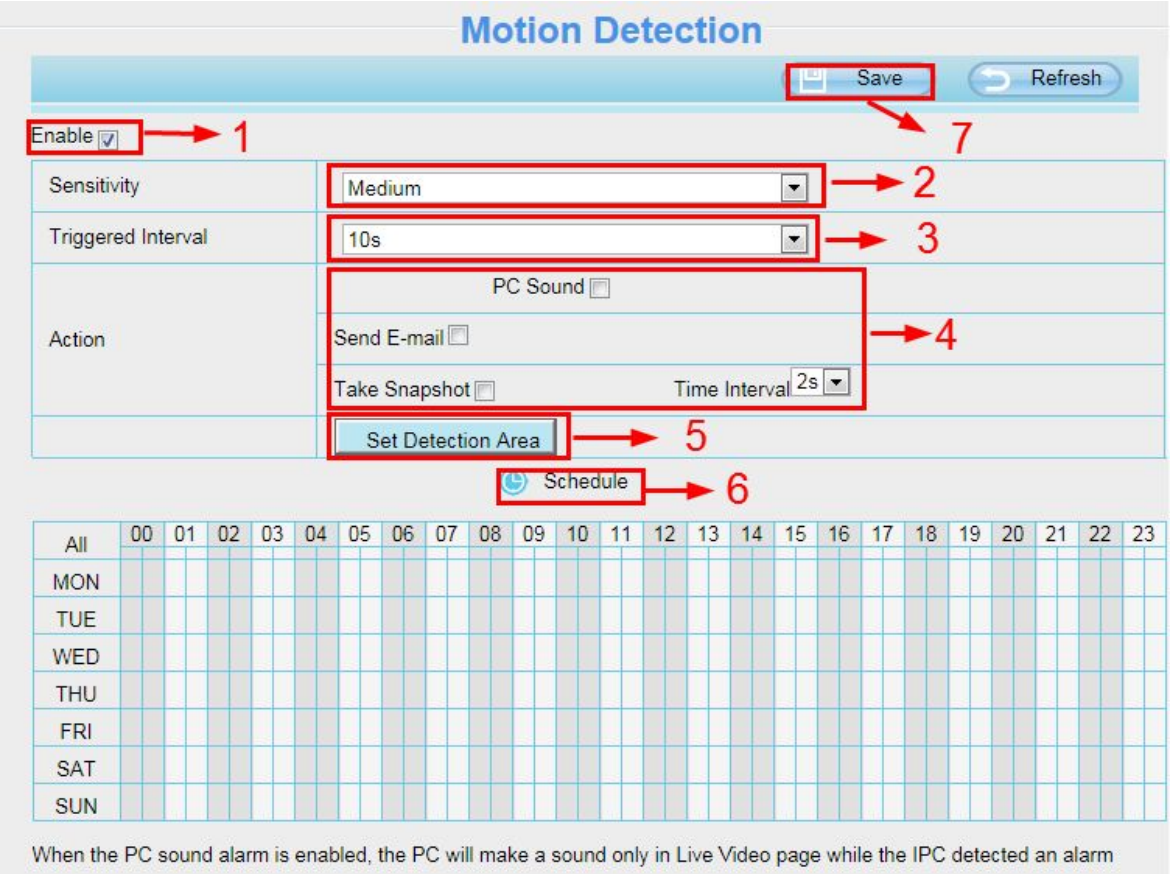


Figure 4.50

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.

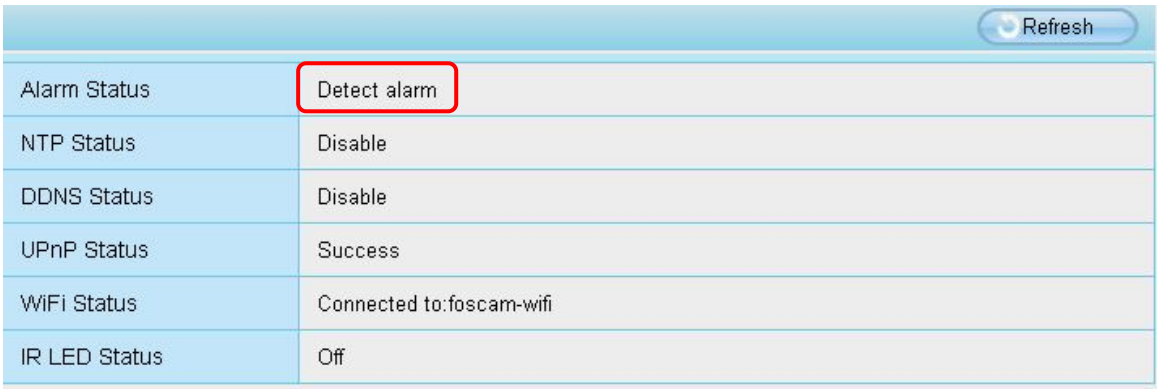


Figure 4.51

There are three alarm indicators:

A PC Sound

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

B Send 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 Snap picture

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.

5 Set Detection Area

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

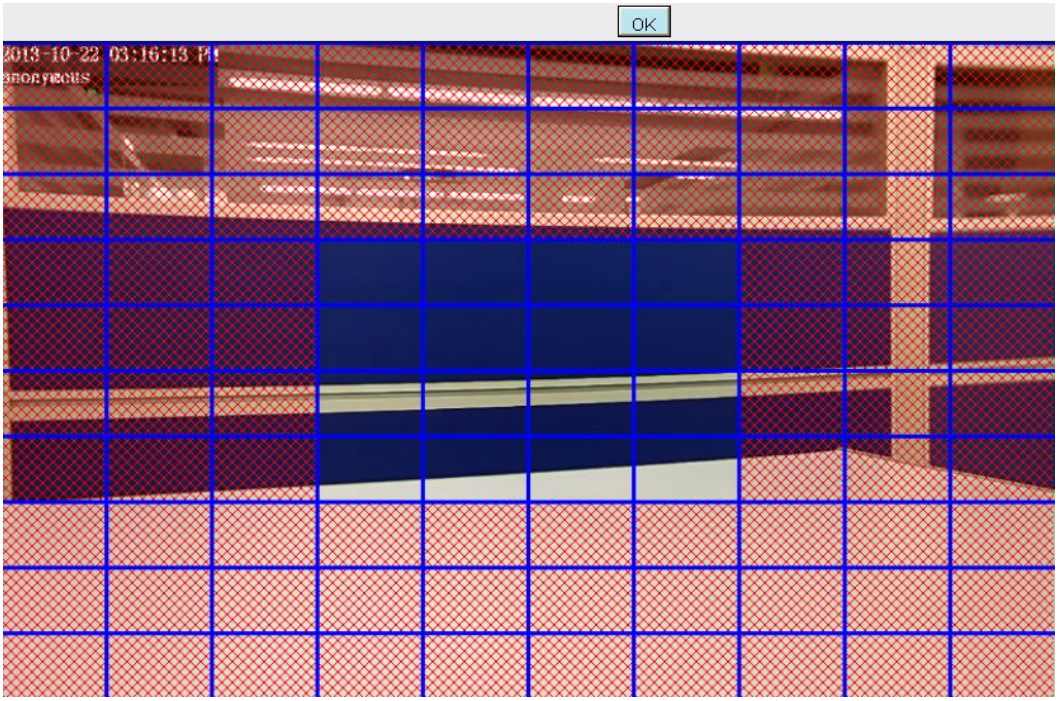
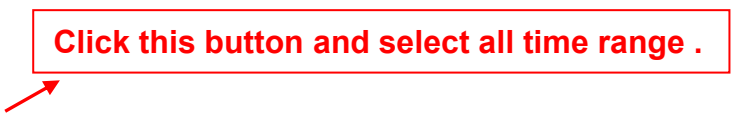


Figure 4.52

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.



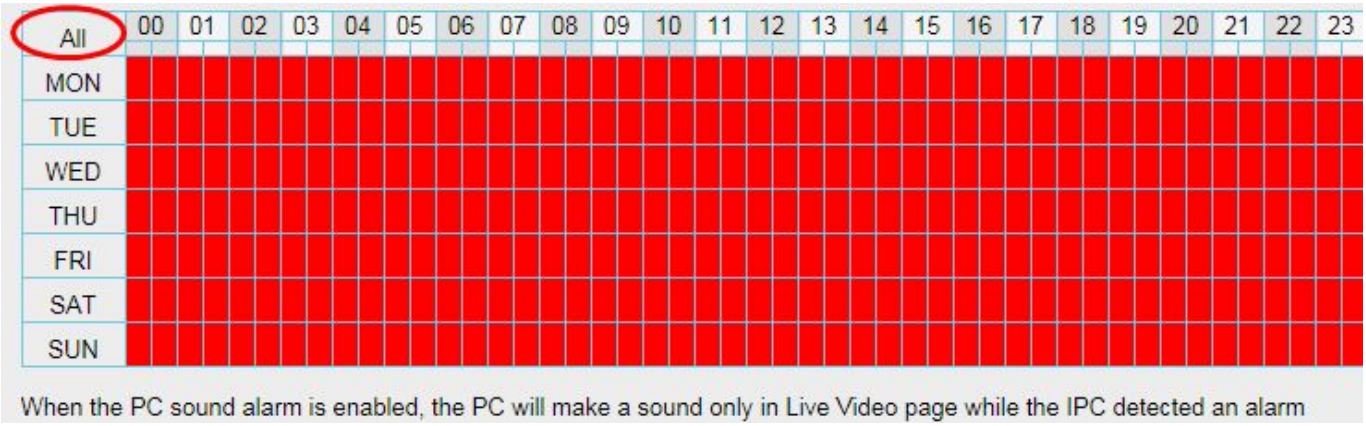


Figure 4.53

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.

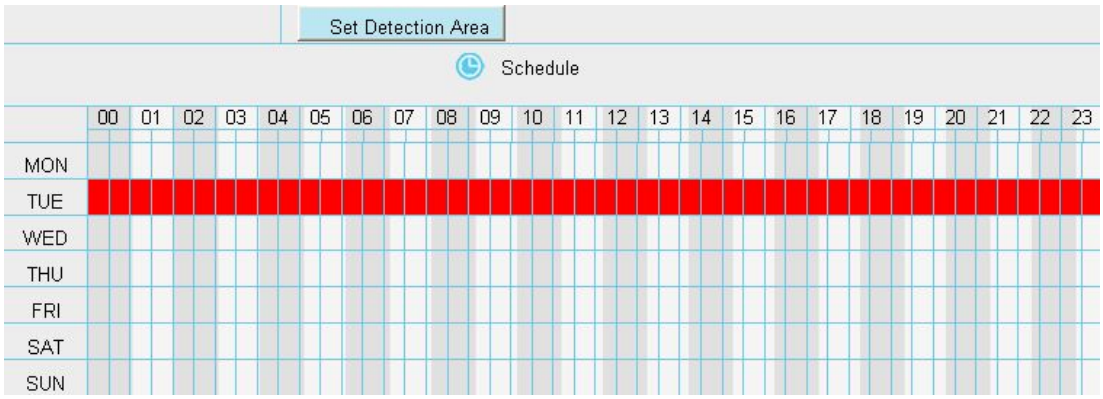


Figure 4.54

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

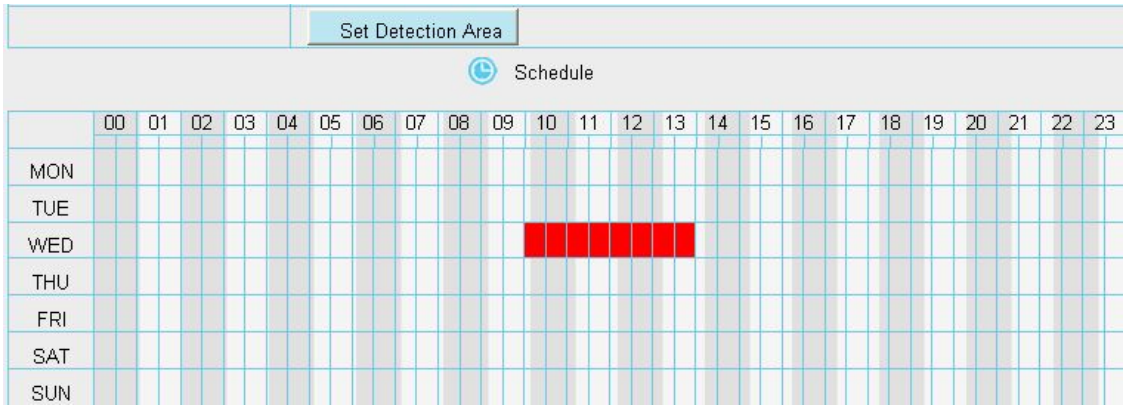


Figure 4.55

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

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

4.6 Record

4.6.1 Storage Location

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

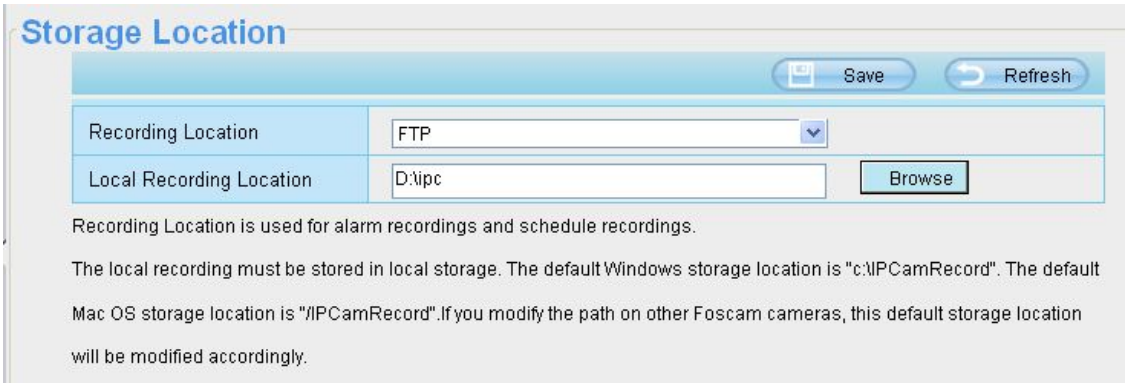


Figure 4.56

4.6.2 Local Alarm Location

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

Figure 4.57

4.6.3 Record Schedule

On this page you can enable schedule record.

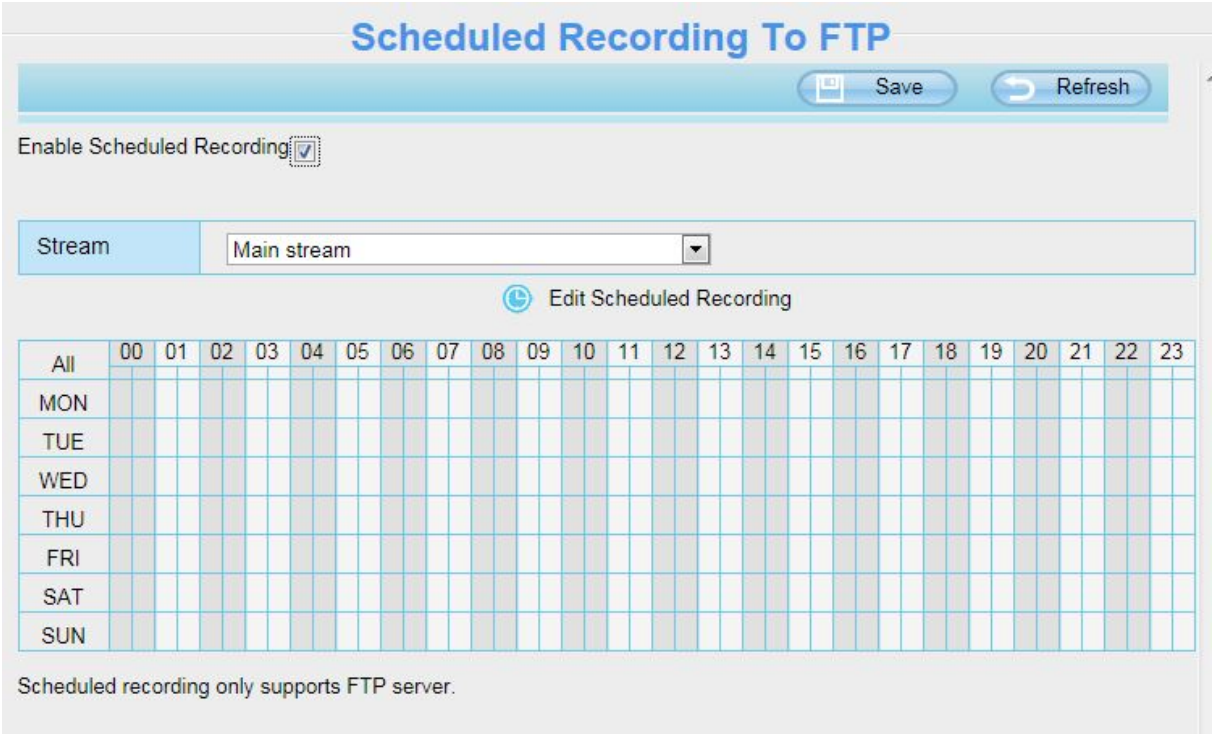


Figure 4.58

4.7 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.

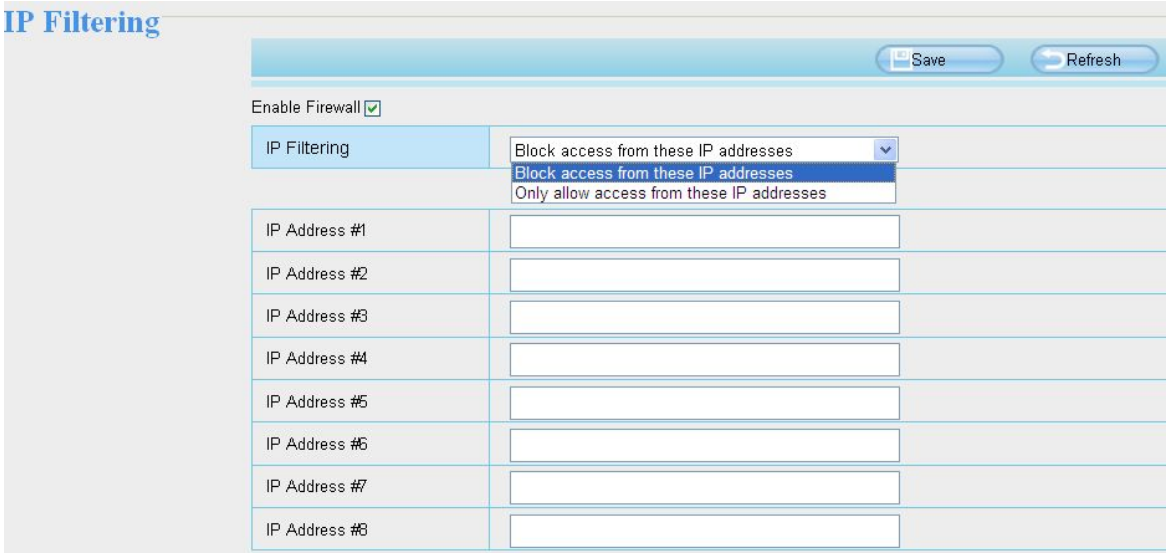


Figure 4.59

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.

4.8 System

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

4.8.1 Back-up& Restore

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

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

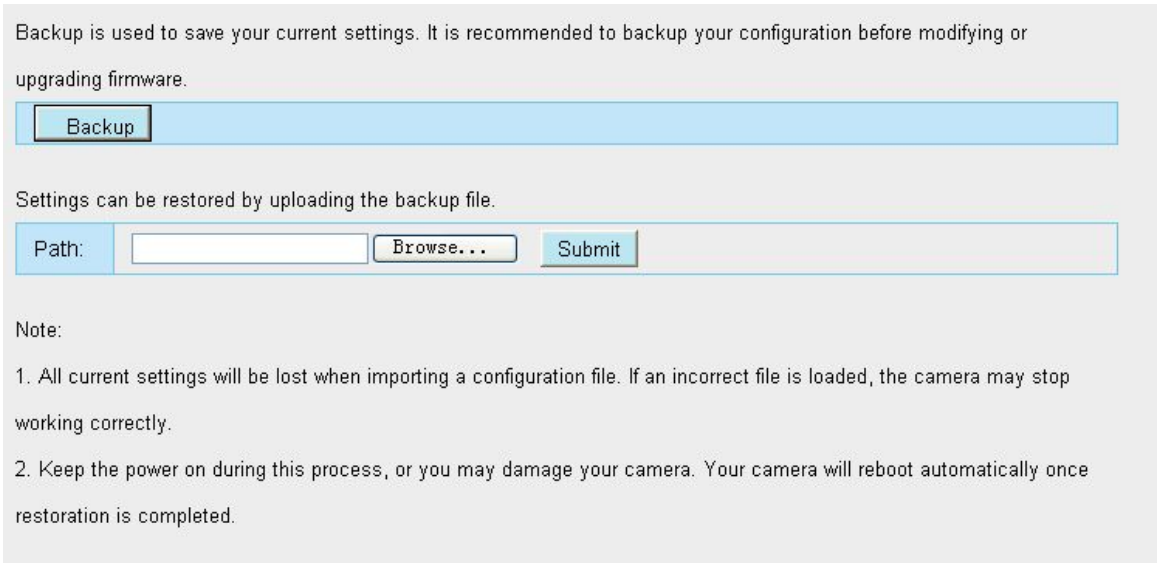


Figure 4.60

4.8.2 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.

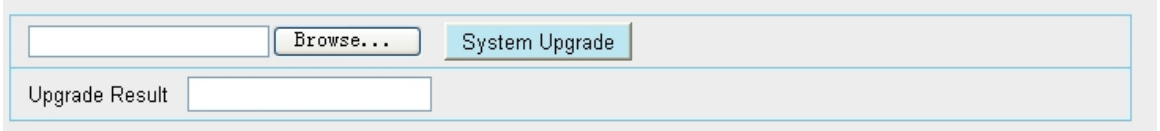


Figure 4.61

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.

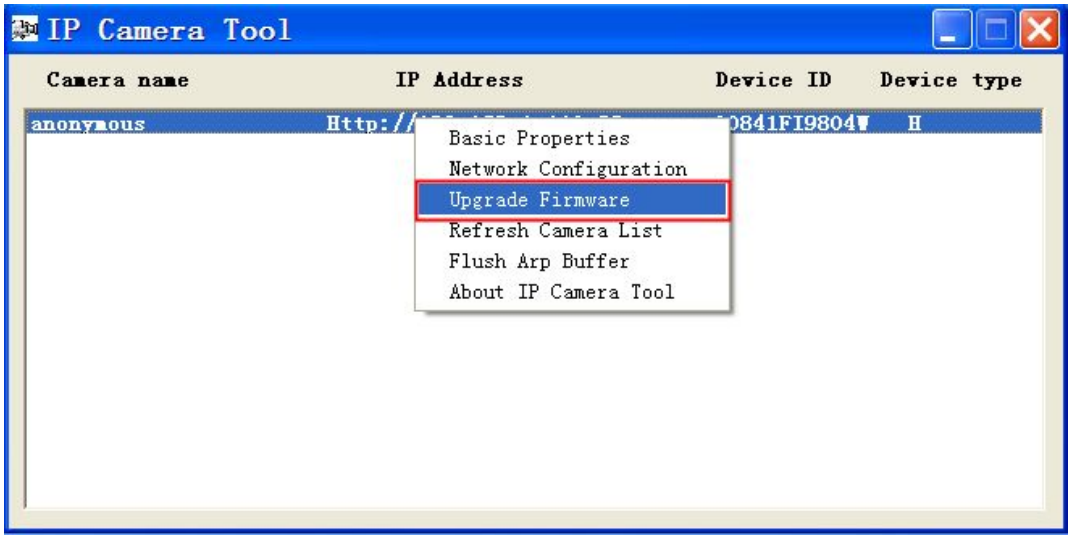


Figure 4.62

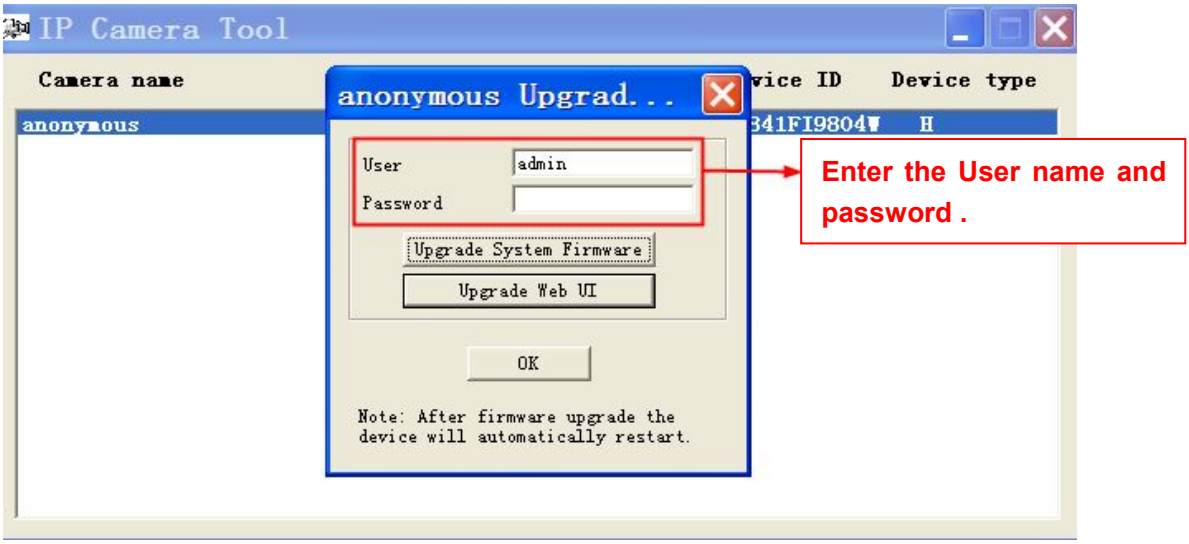


Figure 4.63

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 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.

4.8.3 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.

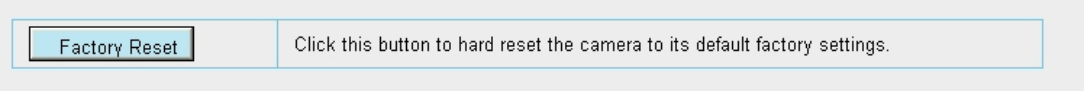


Figure 4.64

4.8.4 Reboot

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

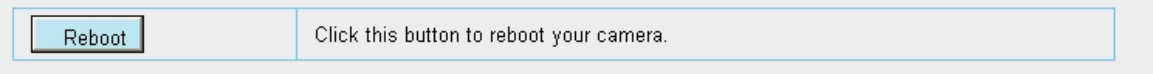


Figure 4.65

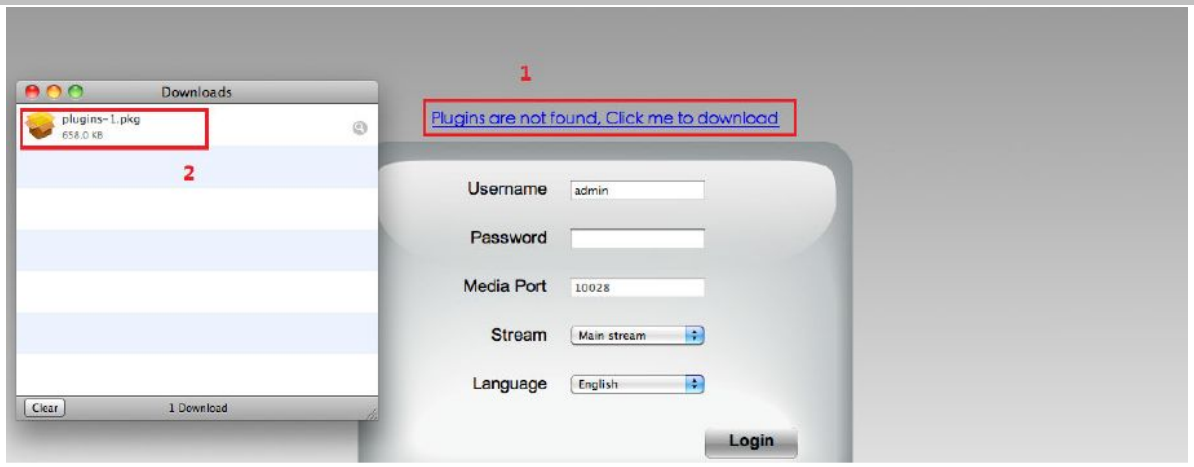
5 APPENDIX

5.1 Frequently Asked Questions

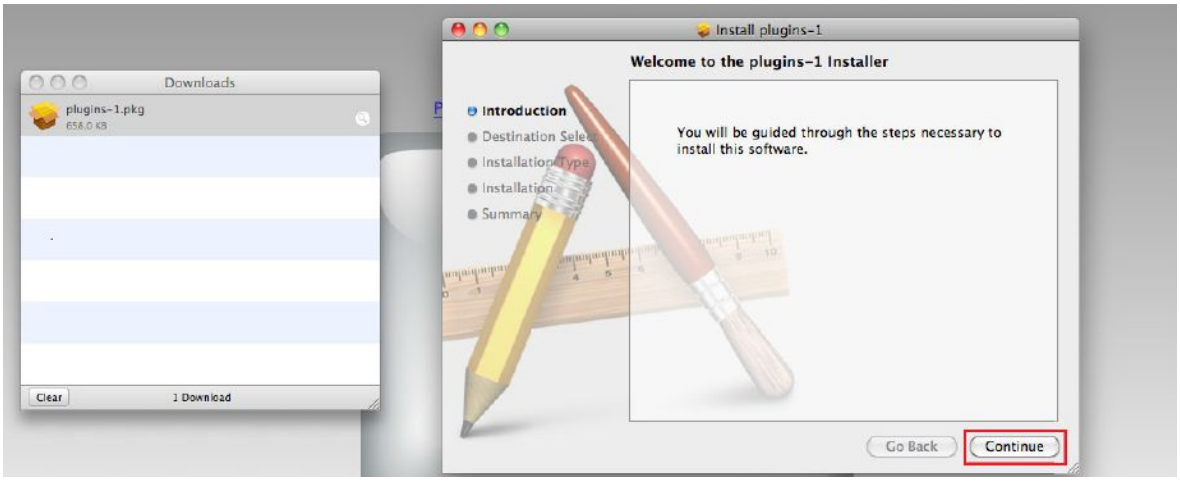
NOTE: Any questions you would meet, please check Network connections firstly. Check the working status revealed by the indicators on the network server, hub, exchange and network card. If abnormal, check the network connections.

5.1.1 How to install the plug-in for Safari

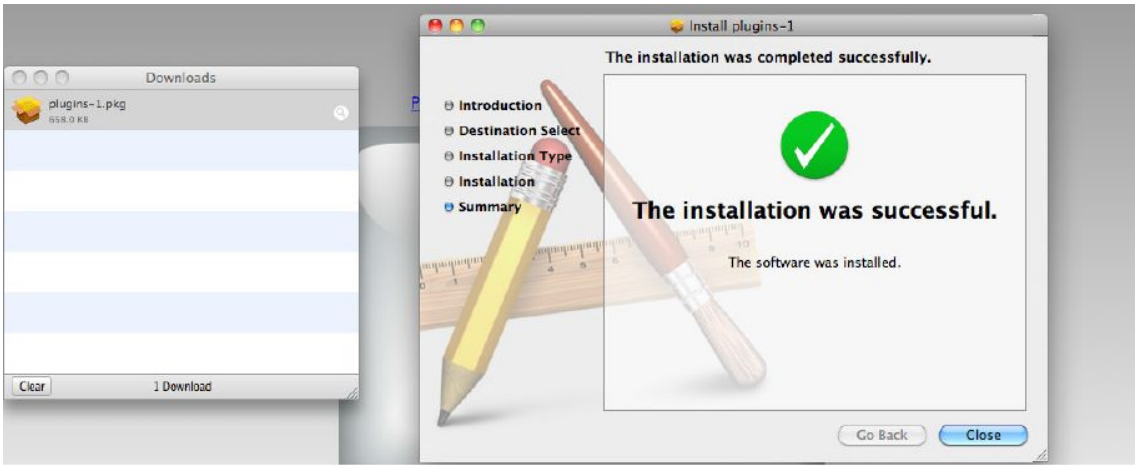
1. Download the plug-in when you login your camera at the first time.



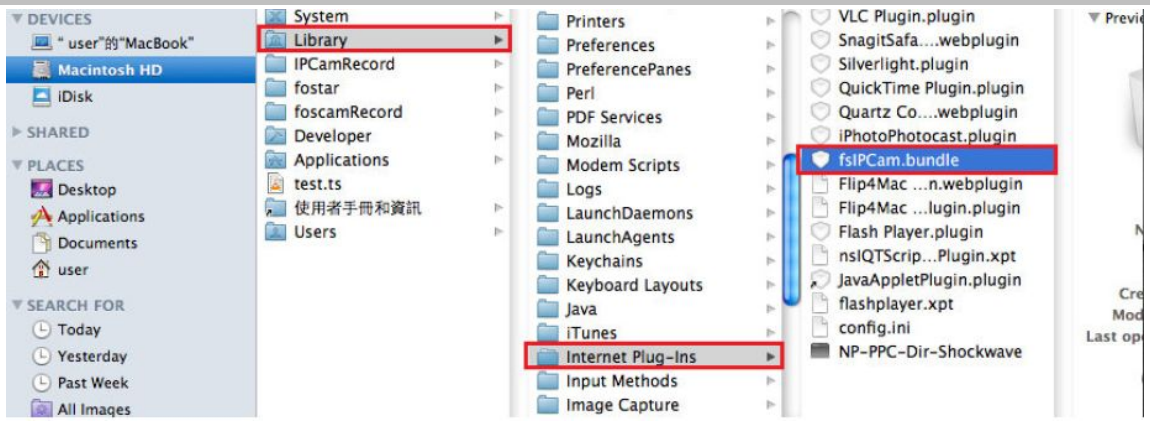
2. Double click the plug-in to install it.



3. Continue to finish the installation, and then it will be successful.



4. Please check if the plug-in was successfully installed or not.



5. Restart Safari to enable the plug-in.

5.1.2 How to download and install the ActiveX for Firefox users

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

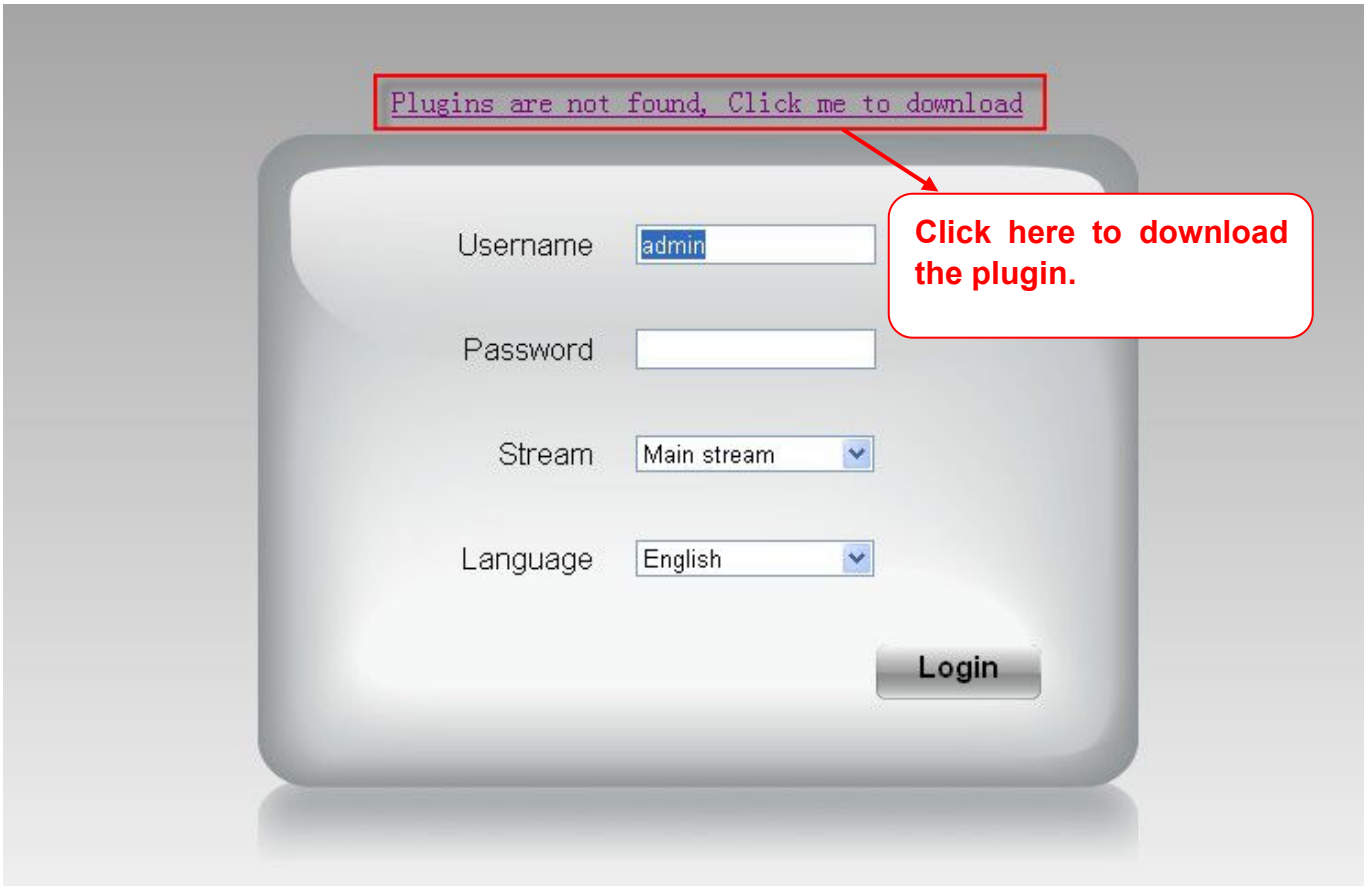


Figure 6.1

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

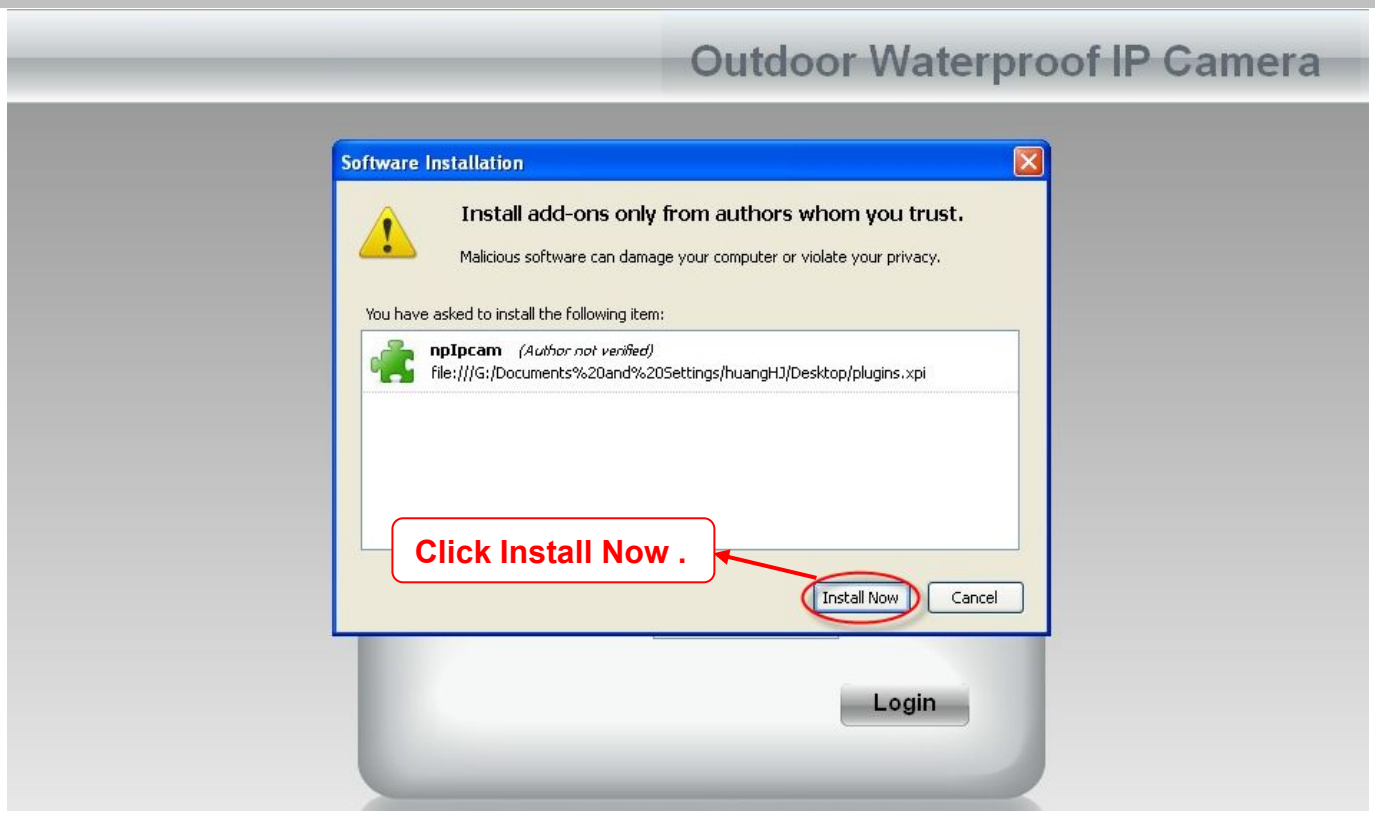


Figure 6.2

Reboot the Firefox after the plugin installation is successfully completely, then relogin 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.

5.1.3 How to download and install the ActiveX for Google Chrome users

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

Figure 6.3

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

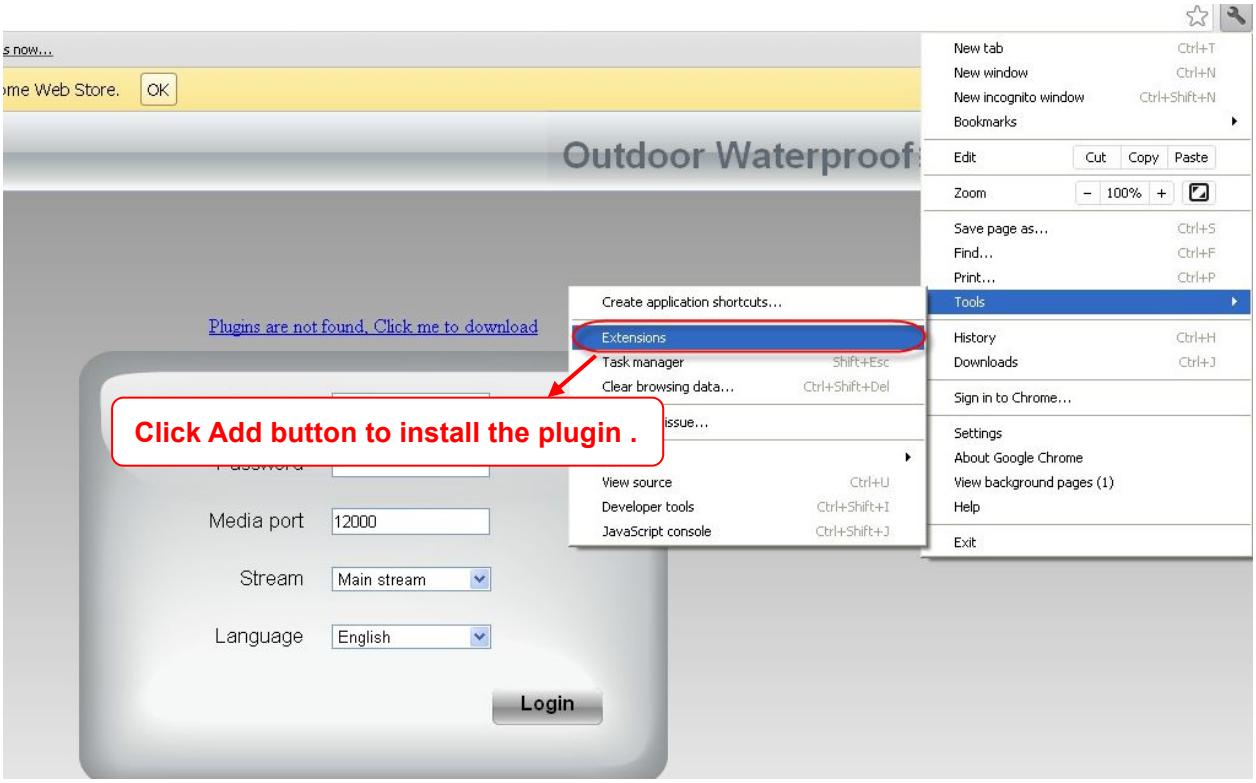


Figure6.4

Click Add button to install the Plugins.

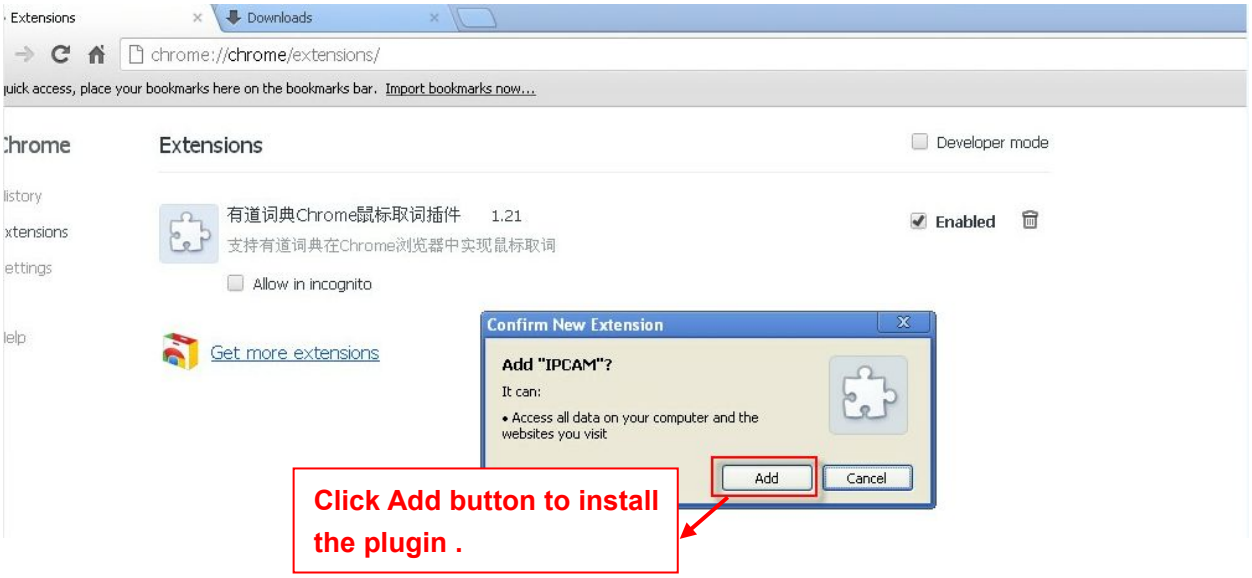


Figure 6.5

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

5.1.4 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**

5.1.5 Subnet doesn't match

Check whether your ip camera in the same subnet of your computer. The step is **Control Panel -- Network Connections -- Dbclick Local Area Connections -- Choose General -- Properties**.(Figure 4.23/4.24)
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.

5.1.6 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"

5.1.7 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

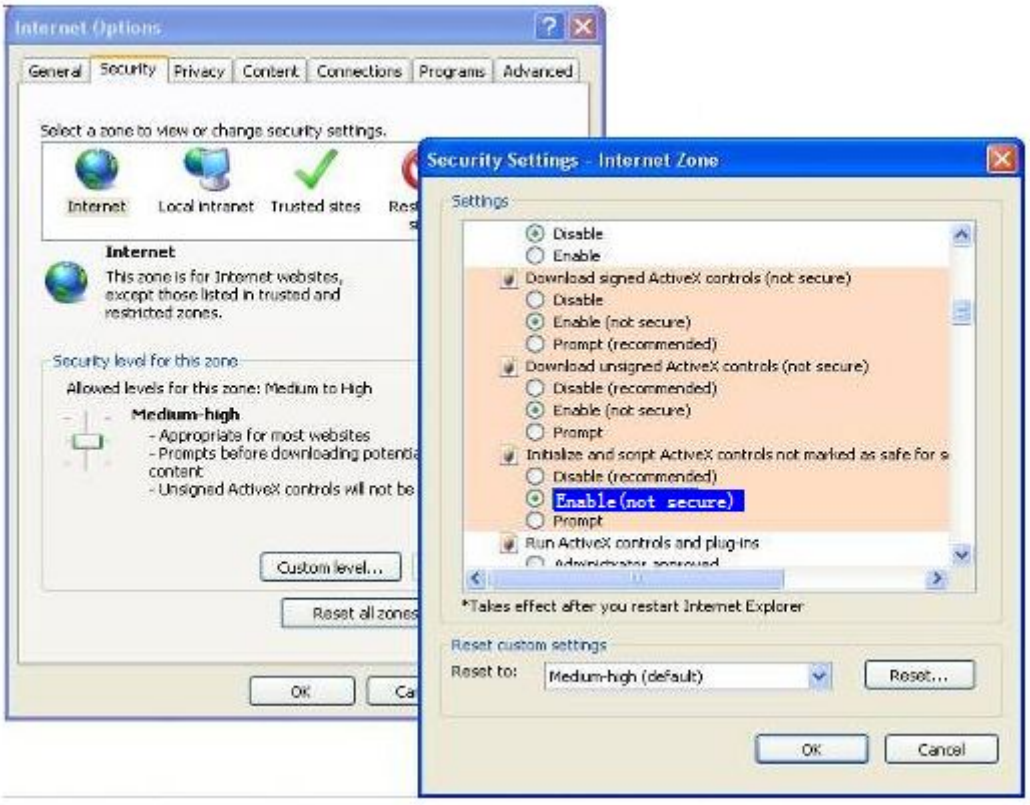


Figure 6.6

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.

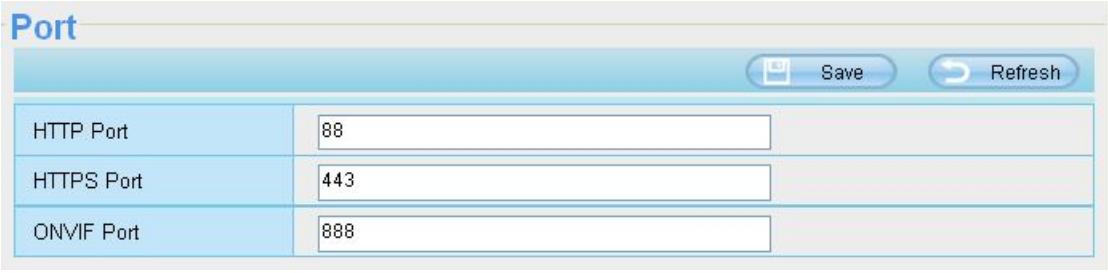


Figure 6.7

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.

5.1.8 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. (Figure6.7)
3 Port forwarding is not successful(Figure4.30)
Check these settings and make sure they are correct.

5.1.9 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.

5.1.10 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.

5.1.11 Remove the plug-in

Remove the plug-in from IE

If you need to remove the plug-in from IE, please open an IE page.
Go to Tools-->Manage Add-ons-->Show All add-ons-->then find the ocxIPcam Control, double click to remove it.
Camera will prompt you to install the latest one when next logging.
(Do not login your camera during the deleting, or the plug-in won't removed caused it is running.)

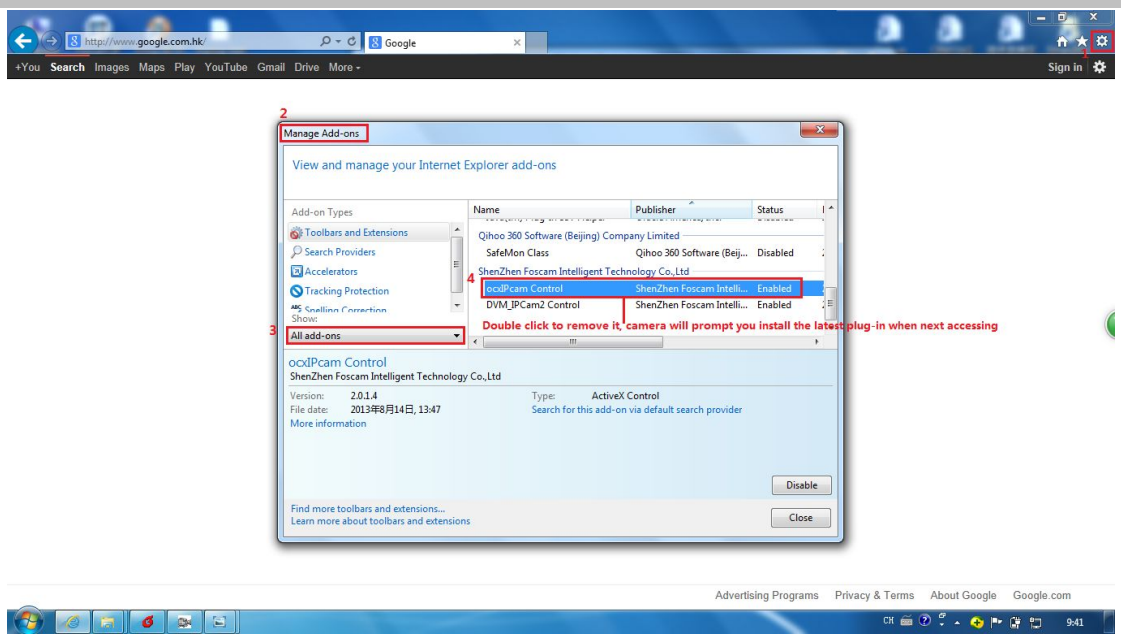


Figure 6.8

Remove the plug-in on Safari

If you need to remove the plug-in from Safari, please open a Finder window.
From the Finder menu bar click Go ---> Go to Folder
Copy then paste the following:
Library/Internet Plug-Ins
Click Go then move to the Internet Plug-Ins.
Find the fsIPCam.bundle file, and delete it.
Camera will prompt you to install the latest one when next logging.

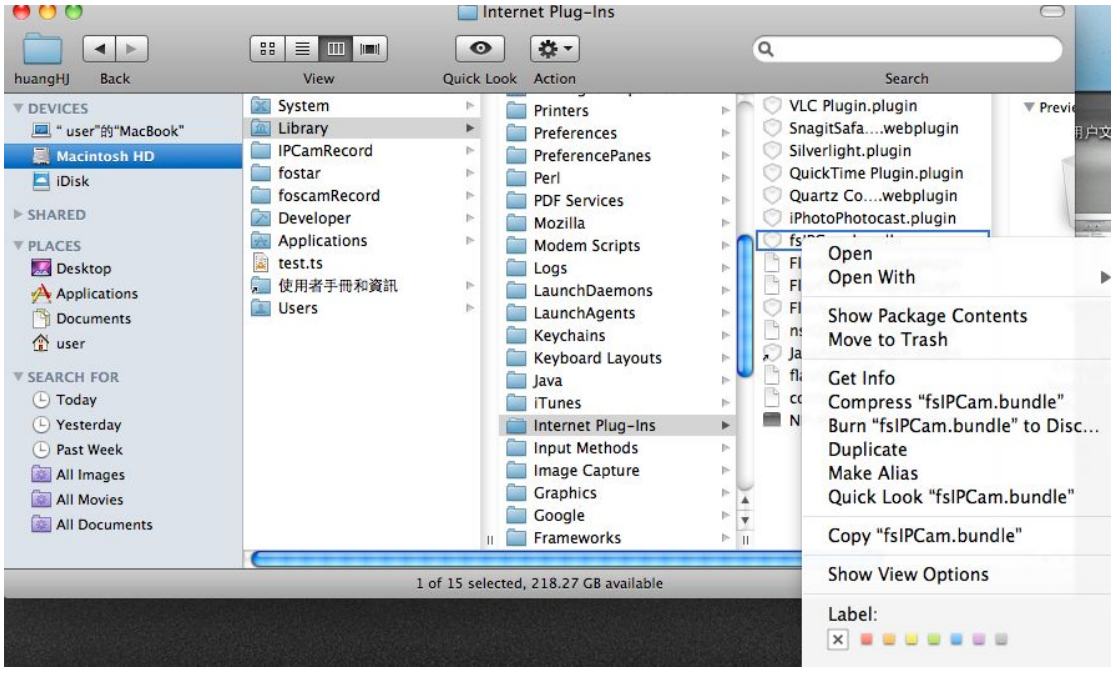


Figure 6.9

Remove the plug-in from Chrome

If you need to remove the plug-in from Google Chrome, please open a new tab.
Click **Customize and Control Google Chrome**, then go to **Tools** ---> **Extensions**.
Find the IPCAM extension, and click the junk icon to remove it.
Camera will prompt you to install the latest one when next logging.

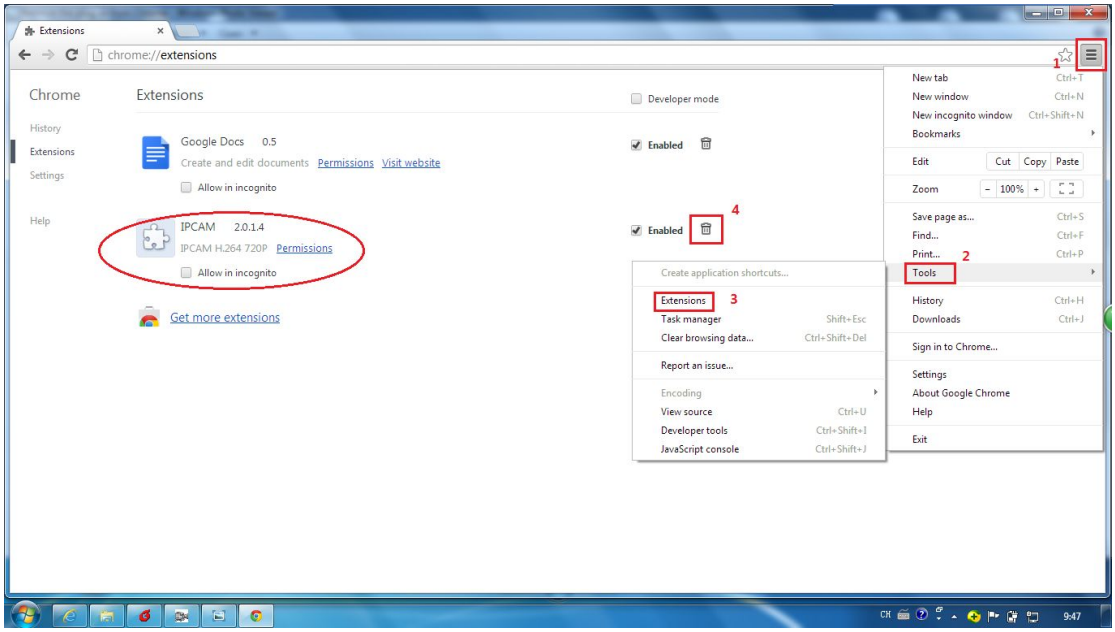


Figure 6.10

Remove the plug-in from Firefox

If you need to remove the plug-in from Firefox, please open a new tab.
Click the **Firefox** icon on the top right, then go to **Add-ons**.
Find the npIpcam 2.0.1.x, and click the **Remove** button to delete it.
Please follow a restart to take the change effect.
Camera will prompt you to install the latest one when next logging.

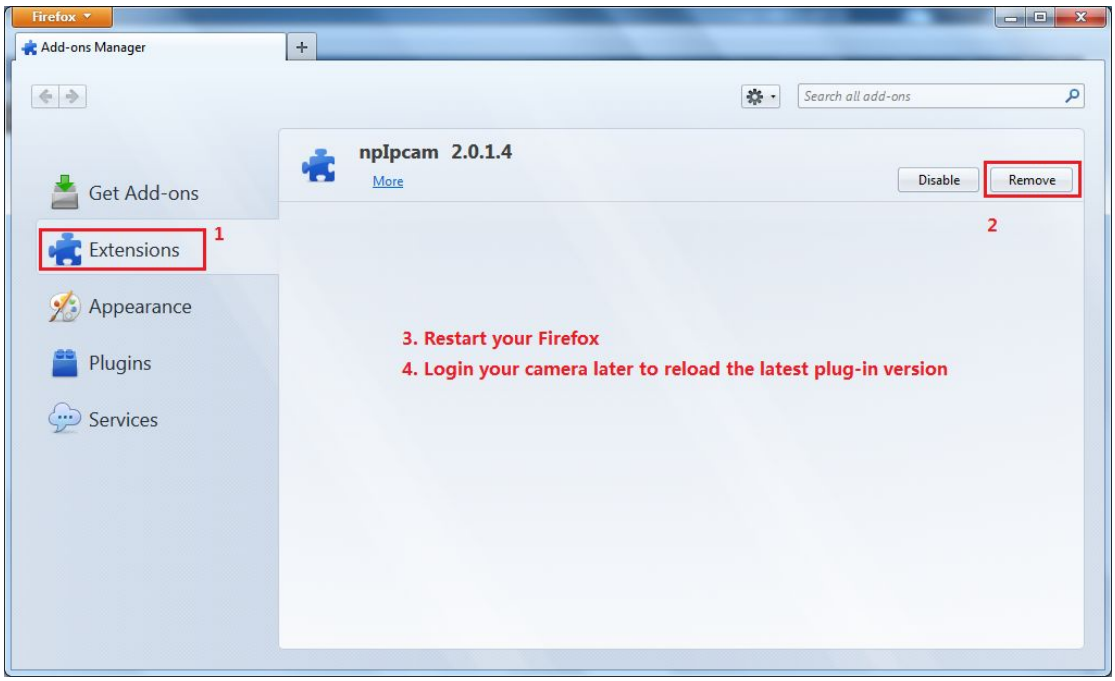


Figure 6.11

5.2 Default Parameters

Default network Parameters
IP address: obtain dynamically
Subnet mask: obtain dynamically
Gateway: obtain dynamically
DDNS: Embedded IPCAM DDNS Service
Username and password
Default admin username: admin with a blank password

5.3 Specification

ITEMS		FC5511E
Image Sensor	Image Sensor	High Definition Color CMOS Sensor
	Lens	f : 4mm
	Mini. Illumination	0 Lux (With IR Illuminator)
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	960p(1280 x 960), 720p(1280 x 720), VGA(640 x 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, ONVIF
	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, 7 Mac OS iOS, Android
	Browser	IE6 and above version or compatible browser, Firefox, Chrome, Safari or other standard browsers
Software	Upgrade	Upgrade from network
Certification	CE, FCC, RoHS	

ITEMS		FC5412P
Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	1280 x 720 (1.0M Pixels)
	Min. Illumination	0 Lux (With IR Illuminator)
Lens	Lens Type	Glass Lens
	focal length	f:4mm，2.8mm/6mm Opention
	Aperture	F1.2
	Angle of View	70°
Video	Image Compression	H.264
	Image Frame Rate	30fps(60Hz), 25fps(50Hz), downward adjustable
	Resolution	720P(1280 x 720), VGA(640 x 480), VGA(640 x 360), QVGA(320 x 240), QVGA(320 x 180)
	Stream	dual stream
	Image adjustment	The hue, brightness, contrast, saturation, sharpness are adjustable
	Flip image	flip and mirror
	Infrared mode	Automatic or manual
	Night visibility	With 2 Infrared Lamp Array, Night Vision Range up to 30m
Network	Ethernet	One 10/100Mbps RJ45 port
	Wireless Standard	IEEE802.11b/g/n
	Data Rate	IEEE802.11b: 11Mbps(Max.); IEEE802.11g: 54Mbps(Max.); IEEE802.11n: 150Mbps(Max.).
	Wireless Security	WEP, WPA, WPA2
	Network Protocol	IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、DDNS、UPnP、RTSP、ONVIF
System Requirements	Operating System	Microsoft Windows 2000/XP, Vista, 7,8; Mac OS
	Browser	Microsoft IE7 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(LxWxH)	208(L)x 107(W)x 92(H)
	Net Weight	780g
Environment	Operating Temperature	-20° ~ 55°C (-4°F ~ 131°F)
	Operating Humidity	10% ~ 80% non-condensing
	Storage Temperature	-20°C ~ 60° (-4°F ~ 140°F)

	Storage Humidity	0% ~ 90% non-condensing
Certification	CE, FCC, RoHS	

ITEMS		**FC5413P**
Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	1280 x 720 (1.0M Pixels)
	Min. Illumination	0 Lux (With IR Illuminator)
Lens	Lens Type	Glass Lens
	focal length	f:4mm，2.8mm/6mm Opention
	Aperture	F1.2
	Angle of View	70°
Video	Image Compression	H.264
	Image Frame Rate	30fps(60Hz), 25fps(50Hz), downward adjustable
	Resolution	720P(1280 x 720), VGA(640 x 480), VGA(640 x 360), QVGA(320 x 240), QVGA(320 x 180)
	Stream	dual stream
	Image adjustment	The hue, brightness, contrast, saturation, sharpness are adjustable
	Flip image	flip and mirror
	Infrared mode	Automatic or manual
	Night visibility	With 2 Infrared Lamp Array, Night Vision Range up to 30m
Network	Ethernet	One 10/100Mbps RJ45 port
	Wireless Standard	IEEE802.11b/g/n
	Data Rate	IEEE802.11b: 11Mbps(Max.); IEEE802.11g: 54Mbps(Max.); IEEE802.11n: 150Mbps(Max.).
	Wireless Security	WEP, WPA, WPA2
	Network Protocol	IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、DDNS、UPnP、RTSP、ONVIF
System Requirements	Operating System	Microsoft Windows 2000/XP, Vista, 7,8; Mac OS
	Browser	Microsoft IE7 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(LxWxH)	199(L)x 118(W)x 96(H)

	Net Weight	550g
Environment	Operating Temperature	-20° ~ 55° C (-4° F ~ 131° F)
	Operating Humidity	10% ~ 80% non-condensing
	Storage Temperature	-20° C ~ 60° (-4° F ~ 140° F)
	Storage Humidity	0% ~ 90% non-condensing
Certification	CE, FCC, RoHS	

Attention: Power adapter should be used between -20℃-40℃, and 20%-90% relative humidity.

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.

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

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.

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.

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.