

User Manual

Model: FI9820W

Indoor HD Pan/Tilt Wireless IP Camera



Black



White

Table of Contents

| | | |
|----------|----------------------------------|-----------|
| 1 | Overviews | 2 |
| 1.1 | Key Features | 3 |
| 1.2 | Read Before Use | 3 |
| 1.3 | Packing Contents | 3 |
| 1.4 | Physical Description | 4 |
| 2 | Surveillance Software GUI | 6 |
| 2.1 | Login Window | 6 |
| 2.2 | Surveillance Window | 9 |
| 3 | Advanced Camera Settings | 16 |
| 3.1 | Device Information | 16 |
| 3.2 | Date & Time Settings | 18 |
| 3.3 | User Settings | 20 |
| 3.4 | Basic Network Settings | 21 |
| 3.5 | Wireless Settings | 27 |
| 3.6 | Remote Access | 27 |
| 3.7 | Email Settings | 28 |
| 3.8 | FTP Settings | 29 |
| 3.9 | Auto Capture | 30 |
| 3.10 | Motion Detection | 30 |
| 3.11 | Alarm | 33 |
| 3.12 | Schedule | 34 |
| 3.13 | Video | 35 |
| 3.14 | Image Settings | 38 |
| 3.15 | Audio | 39 |
| 3.16 | Initialize | 40 |
| 3.17 | Back | 41 |
| 4 | Other Settings | 41 |
| 5 | APPENDIX | 42 |
| 5.1 | Frequently Asked Questions | 42 |
| 5.2 | Third Party Domain Name Settings | 50 |
| 5.3 | Default Parameters | 53 |

| | |
|---|-----------|
| 5.4 Specifications | 54 |
| 6 OBTAINING TECHNICAL SUPPORT..... | 55 |
| 7 Warnings..... | 55 |

1 Overviews

FOSCAM FI9820W 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.

With flexible 300-degree pan and 120-degree tilt, FI9820W gives users more comprehensive control over a monitored site. The FI9820W 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, start-up and to upgrade the firmware.

The camera is designed for indoor surveillance applications such as retail stores, offices or banks. Controlling the IPCAM and managing images are simplified by using the provided web interface across the network utilizing wireless connectivity.

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 SD memory card storage
- ◆ Supports IE/Firefox/Google/Safari browser or any other standard browsers
- ◆ Supports mobile watch
- ◆ Supports WEP,WPA and WPA2 Encryption
- ◆ IR night vision (Range:8m)
- ◆ Supports dual-stream
- ◆ Supports IR-Cut and the filter change automatically
- ◆ Embedded FOSCAM domain name
- ◆ Supports two-way audio / 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
- ◆ Supports multiple network protocols: HTTP /TCP /IP /UDP /FTP /DHCP /DDNS / UPNP /RTSP
- ◆ 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

| | |
|---|------------------------------|
| ● IPCAMx1 | ● CDx1 |
| ● Wi-Fi Antennax1 (only available for wireless model) | ● Quick Installation Guidex1 |
| ● DC Power Supplyx1 | ● Warranty Cardx1 |
| ● Mounting bracketx1(option) | |
| ● Network Cablesx1 | |

1.4 Physical Description

Front Panel



Figure 1.1

Infrared LED: 11 IR LEDs

LENS: CMOS sensor with fixed focus lens. (3.6mm)

WIFI Antenna: Wireless Antenna

Microphone: Built-in microphone

Speaker: Built-in speaker

Rear Panel

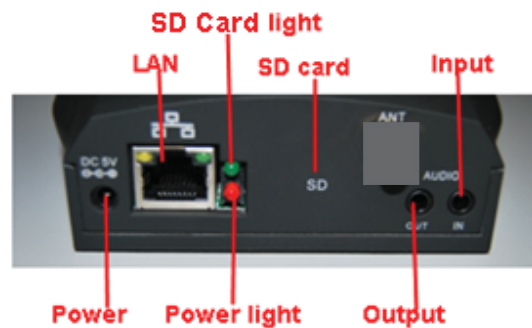


Figure 1.2

LAN: RJ-45/10-100 Base T

Power: DC 5V/2A Power supply

Power Light: If the power adapter works well, the light will turn on.

SD Card Light: If you have plugged in the SD card, the light will turn on

SD card: Supports to 32G

Audio Input: This jack is used to plug an external microphone

Audio Output: This jack is used to plug an external speaker

Bottom View

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



Figure 1.3

Reset button: Press and hold down the RESET BUTTON for 15 seconds. when released the IP camera will be reset back to factory default settings. You must power on the camera before reset.

2 Surveillance Software GUI

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

2.1 Login Window

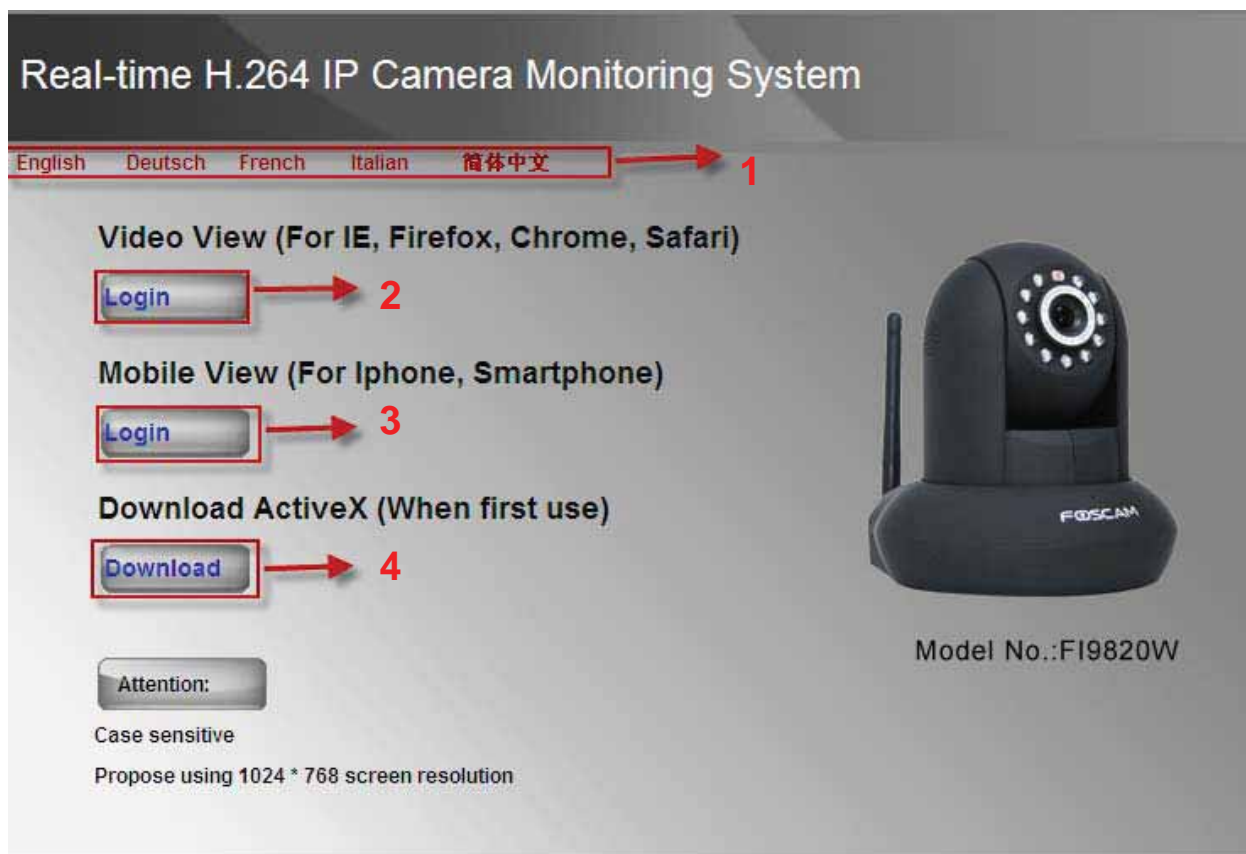


Figure 2.1

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

Section1 Select Language

FOSCAM camera supports up to 5 languages, such as English, Deutsch, French and so on. You can select the language you need via click on the select language bar to switch.

Section2 Video View

If you use PC to login the camera, please choose Video View Mode. Here you can use IE, Firefox, Google Chrome, Safari browsers or other standard browsers to view the live stream.

Section3 Mobile View

If you use Mobile Phone to login the camera, please choose Mobile View Mode.

Section4 Download

For IE users, the ActiveX have been embedded in the IP Camera Tool, so if you have installed

the IP Camera Tool, you need not download again. If you use Firefox, Google Chrome, Safari or others, you should download and install QuickTime Player as the ActiveX from other website.

For remote IE users, first time you use the IPCAM, you may need download and install the ActiveX. (Please read chapter 5.1 in Appendix about how to download and install the ActiveX).

Click the login button under Video View, you will see the video window:

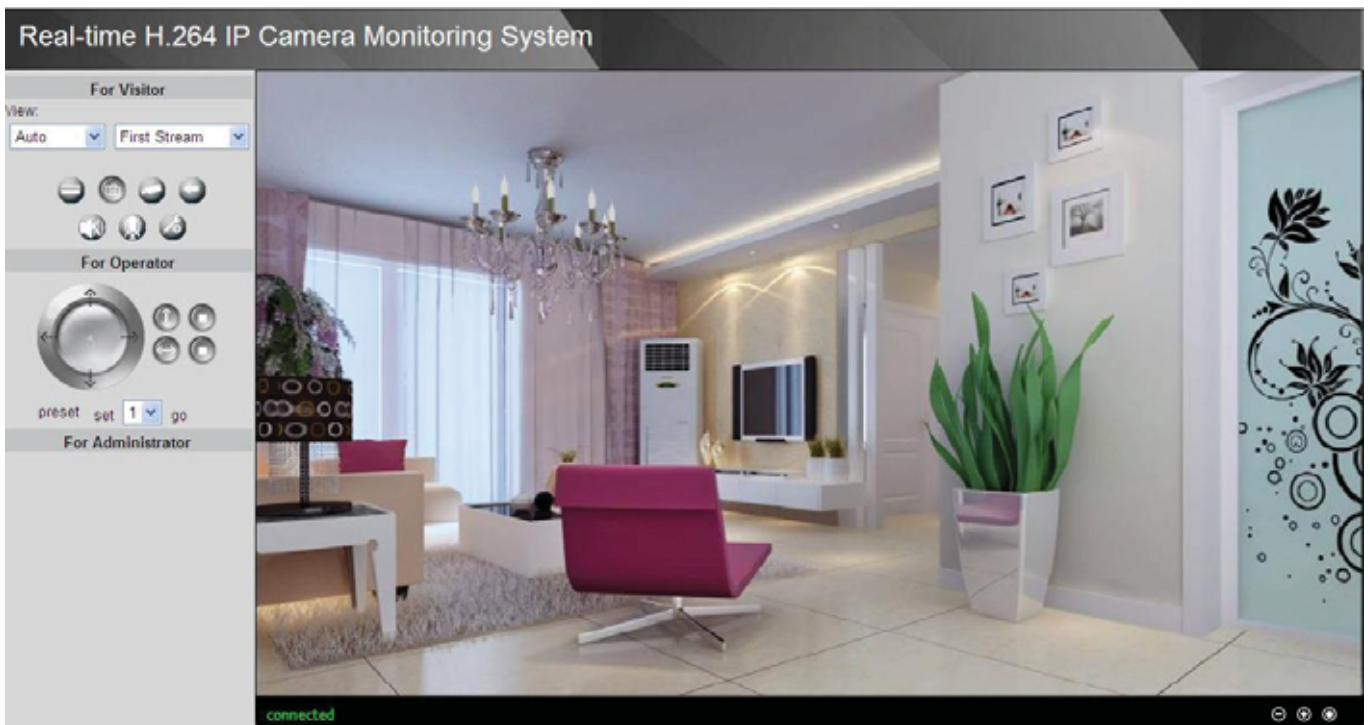



Figure 2.2



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.

For Firefox, Google Chrome and Safari

Install the Quick Time Player and fill in user name and password then login, you will see the living video.



Figure 2.3

2.2 Surveillance Window

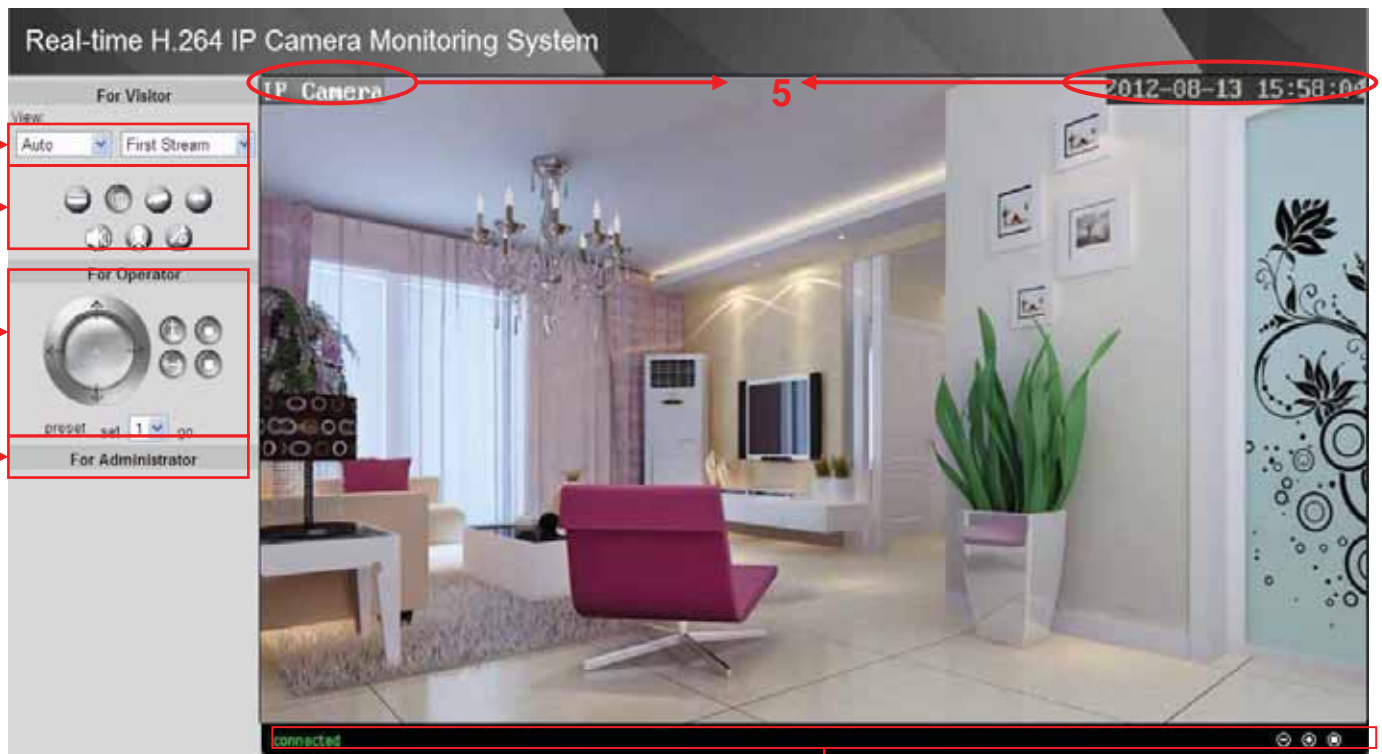



Figure 2.4


Section1 Resolution

The resolution contains five types: 1270*720, 960*540, 640*360, 320*180 and Auto. You can choose First Stream or Second Stream to adjust the view window.

Note: When the network bandwidth is badly, you'd better select Second Stream and the video will be more fluency.

Section2 Snapshot/Record/Playback/Audio/Path Buttons

: **Browse the SD Card:** If the camera has plugged in SD card, click this icon and you can see some information such as the stored files in the SD card, you can read the stored files.

: **Snapshot:** Click this icon, the camera will snap a picture and store it to a predetermined path.



: **Record:** Click the icon. The camera will begin recording and store the recorded file to the folder you set. And the status column will display REC when recording. Click the icon again it will stop recording.



Figure 2.5

 **Playback:** Click the icon, it will pop up a player. And you can see the videos you have stored in the computer.

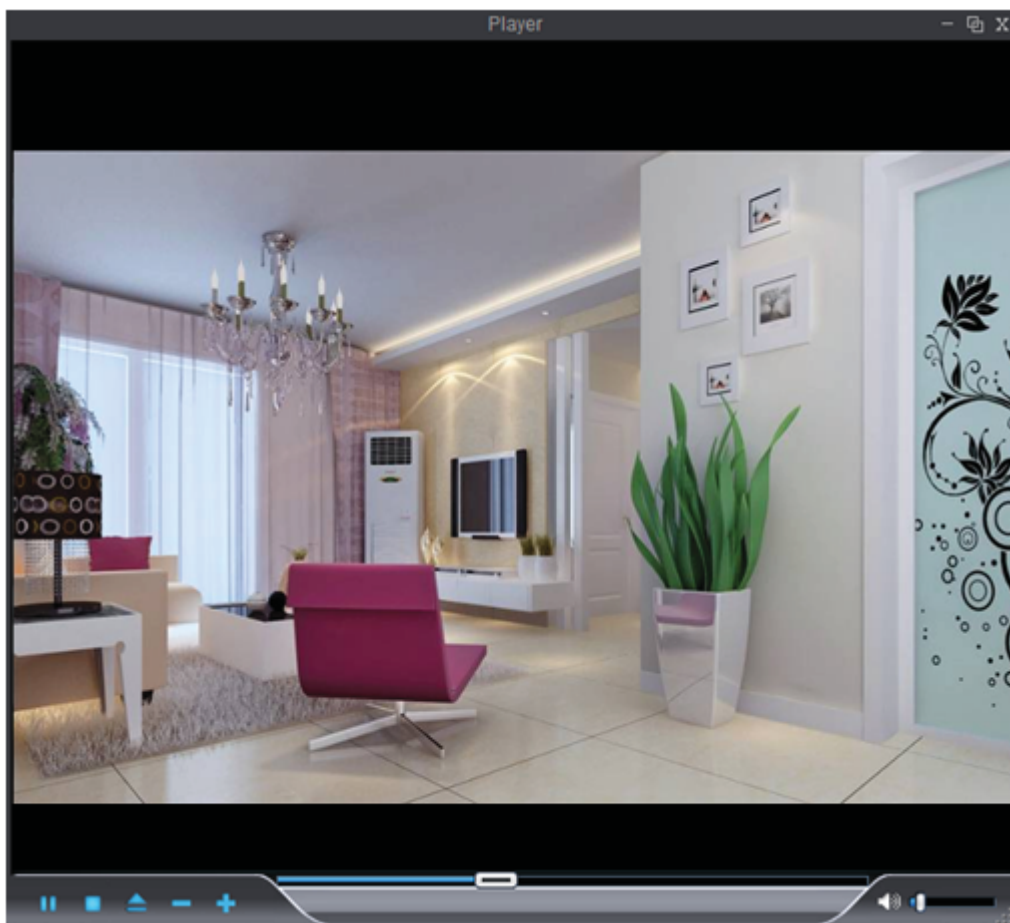




Figure 2.6



Mute Click this icon, the icon will become to  you can hear the sound around the camera by the earphone or speakers that connected with PC.



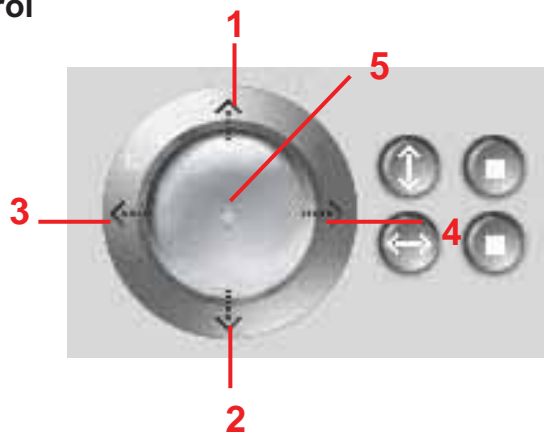
Talk: Click the button and the icon will become to , then talk to the microphone that connected with PC, people around the camera can here your voice. Click the icon again and stop talking.



Path: Setting the storage path of snapshot photos and recording files. The default path is D disk.

**NOTE:**

These settings buttons are controlled by the ActiveX, so Firefox, Google Chrome and Safari will not allow these functions.

Section3 Pan/Tilt Control

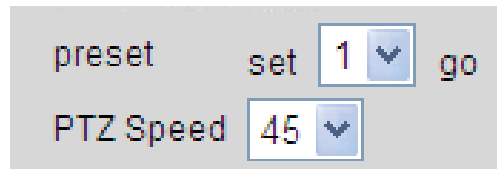
- 1-----Up control button,
- 2-----Down control button,
- 3-----Left control button,
- 4-----Right control button,
- 5-----Go to center



: Click this icon; camera will rotate up and down. Click  to stop.



: Click this icon; camera will rotate left and right. Click  to stop.



- 1) Preset-----Support 8 preset position, which is considered enough for DIY home & small business surveillance market
- 2) Set----- Click Set to save the position you need the camera to remember
- 3) Go----- Click Go to make the camera move the preset position
- 4) Number button from 1 to 8-----You can click the number button with preset position, and the camera will go to the preset position.
- 5) PTZ Speed----- Here you can set the len's moving speed .This function can be used only when the IPCAM is a high-speed camera .It has no affection at a constant speed camera.

How to do preset position?

We can start preset settings from position 1.

Firstly, select no. 1 within the menu of Preset on the panel.

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

Thirdly, click set button to save it as position 1 and you have done preset of position 1.

After that, you can select no. 2 within the menu of Preset on the panel, and move the camera and stop at another place, and set as preset position 2. You can do all the 8 preset positions with this method.

If you want to see the preset position you have set, such as the position 1, only select the set no.1 ,and click go button, the camera will go to position no.1.

Section4 For Administrator

For Administrator-----Path to Administrator Control Panel, Click it, and it will lead to Administrator Control Panel.

Section5 OSD Date/Time

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

Go to For Administrator ---→Video, you can reset it:

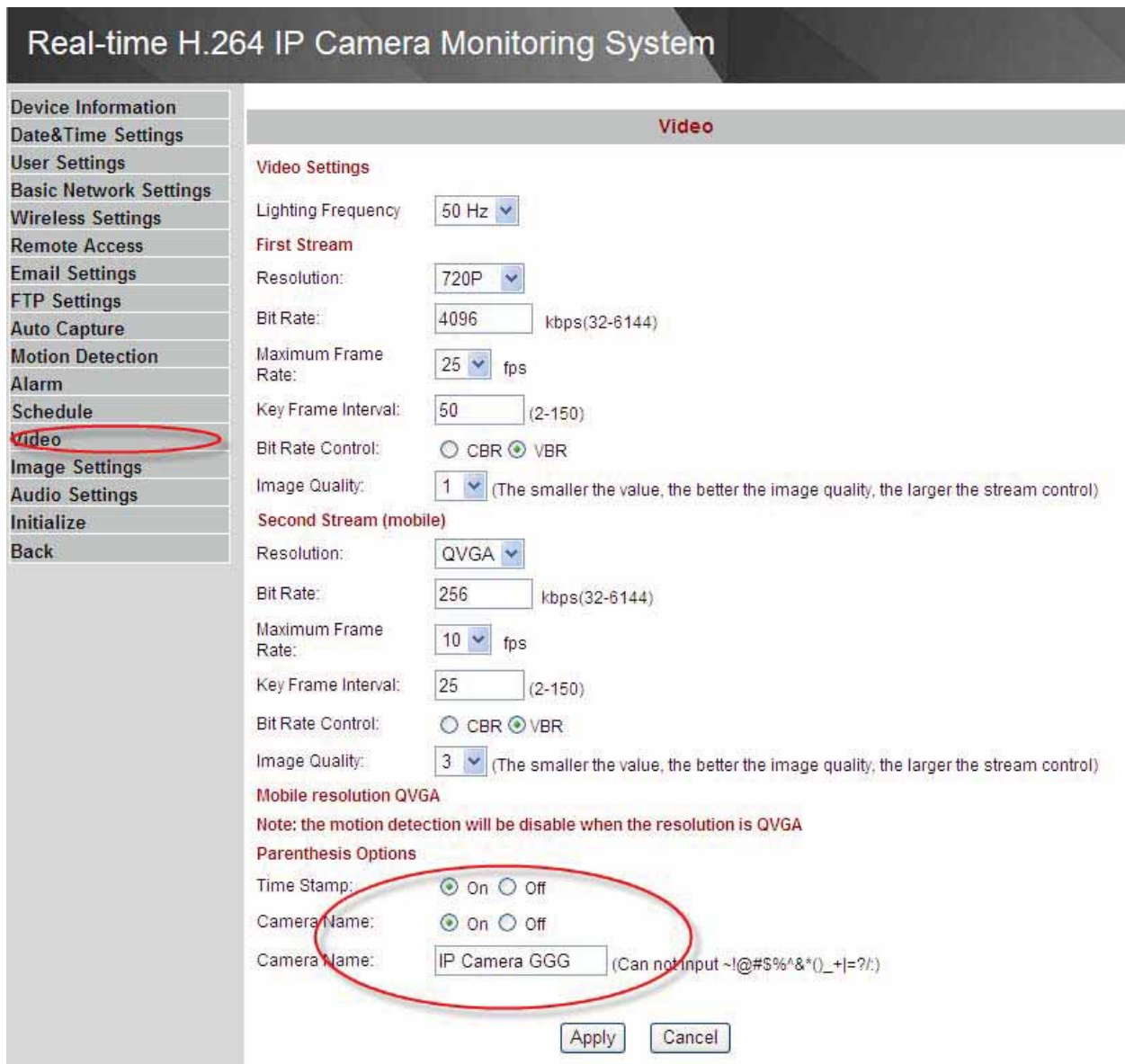


Figure 2.7

Section6 Status Bar



Figure 2.8

There is a status column below the view window (Figure2.8).

- 1) The current state of IPCAM
- 2) After the view has been digital amplified, click the icon, the view will be digital narrowed.
- 3) Click the icon, the view window will be digital amplified.
- 4) Click the icon, the view window will restore the original size.

Onscreen Mouse Control

Click on a place on the screen to indicate the camera move direction you prefer. For example, you can click on the upper-right corner of the screen, and the camera's lens will move toward the upper-right direction.

When the icon has three arrows, the speed of the rotation is fastest. And when the icon has one arrow, the speed is lowest.



Figure 2.9

Put the mouse at the center of the living video, you will see the icon of the magnifying glass (Figure 2.10). Press the left mouse and you can use the optical zoom function.



NOTE:

The camera doesn't support this function because the lens without the optical zoom.



Figure 2.10

Right click on the screen, you can see two graphic display modes: Direct Draw and GDI. The default mode is Direct Draw, and almost graphic card support this mode. But some old graphic card cannot display normally under Direct Draw, you can select GDI to try again.

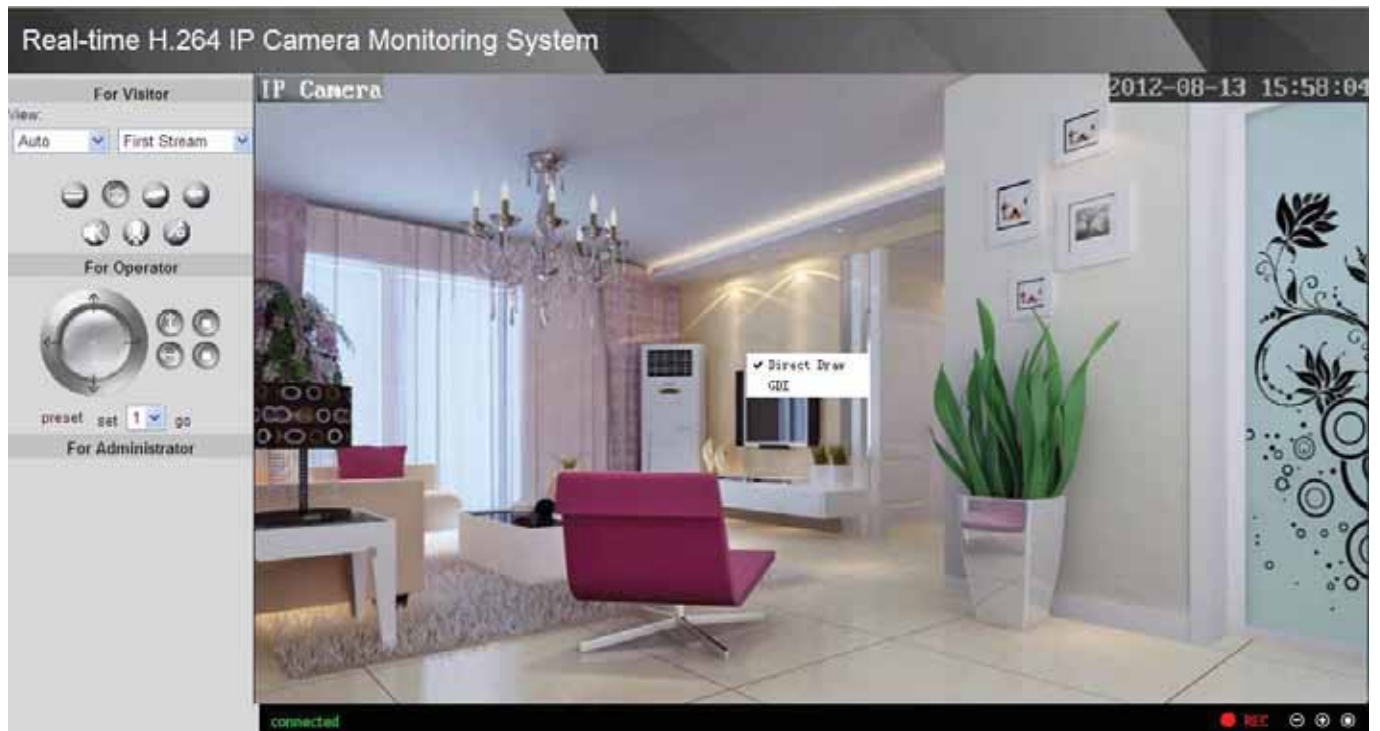


Figure 2.11

 **NOTE:**

Under GDI mode, you cannot see the motion detect region lines when set motion detection. (For more details: read chapter 3.10 **Motion Detection**)

3 Advanced Camera Settings

Click the bar “For Administrator”, goes to Administrator Control Panel to make advanced camera settings.

3.1 Device Information

| Device Information | |
|---------------------------------|---------------------|
| Device ID: | IP Camera |
| Device Type: | C1F0S7Z0N0P0L0 |
| Network Connection: | LAN |
| Current Client: | 1 |
| Device Firmware Version: | V3.2.6.1.1-20120807 |
| Device Embedded Web UI Version: | 98.5.20.5 |
| Mac Address: | 22:22:89:11:22:22 |
| IP Address: | 192.168.8.103 |
| Subnet Mask: | 255.255.255.0 |
| Gateway: | 192.168.8.1 |
| Primary DNS: | 202.96.134.33 |
| Secondary DNS: | 202.96.128.86 |
| Start Time: | 2012-8-13 11:20:34 |
| SD Status: | no devices |

[Browser SD Card ..](#)
[Format SD Card as fat32](#)
[Unplug SD Card](#)

Figure 3.1

Device ID: It displays “IP Camera”. This ID is different from the camera name. You can set any camera name you like for the camera in “For Administrator—> Video—>Parenthesis Options” and the camera name can be showed at the video window, but the device ID will always display “IP Camera”.

Network Connection: LAN or Wireless, If the camera gets wired connection, here will show LAN, if the camera gets wireless connection, here shows Wireless.

Current Client: It shows that how many people are viewing the video. For example, the Current Client shows 1, that means one people are looking the video. If someone have logged in the camera but do not open the video, the Current Client will not change.

Device Firmware Version/Device Embedded Web UI Version: The camera’s software version.

Mac Address: Each camera has its own MAC ID. For example Device ID is 00606E8C5058, the

same MAC ID sticker is found at the bottom/back of the camera.

Another Way:



Double click the the icon "IP Camera.exe", select the camera, right click and select the Basic Properties, you can also see the Firmware Version and MAC Address, such as the following screen:

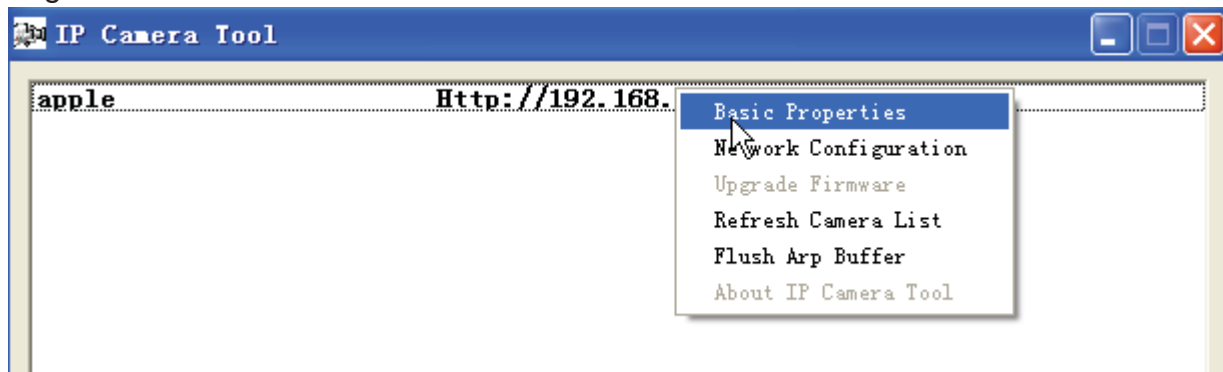


Figure 3.2

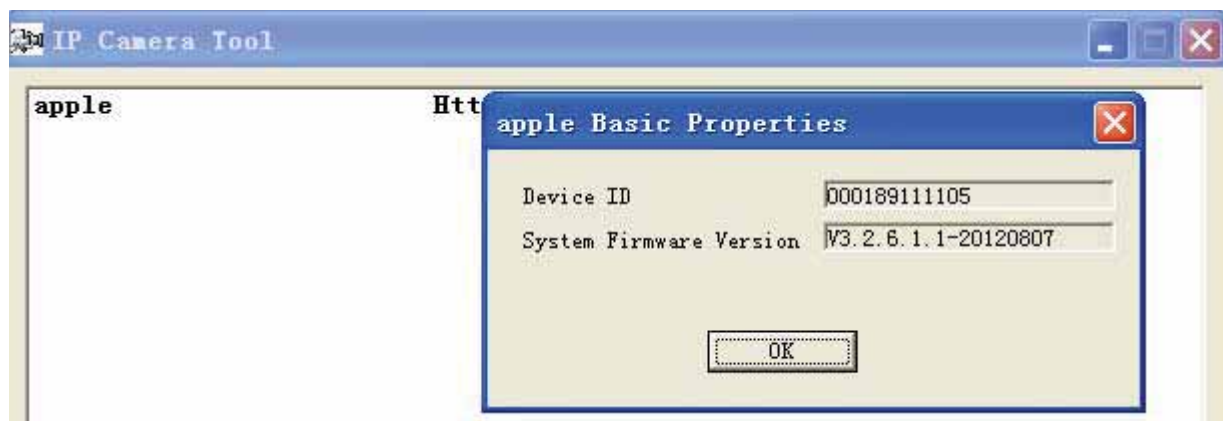


Figure 3.3

SD Status: Some information about the plugged SD Card. If the camera has inserted SD card and it works well, this status column will display the SD card information as the following screen and the SD Card light on the back of the camera will turn on, else it will display "no devices: figure 3.1.

| | |
|-------------|--|
| Start Time: | 2012-4-5 9:10:40 |
| SD Status: | A card. Available space:3349MB Capacity:7581MB |

[Browser SD Card ..](#)
[Format SD Card as fat32](#)
[Unplug SD Card](#)

Browser SD Card: Click it and you can see the stored files if the camera has plugged SD card. You need enter the user name and password again before looking the following screen:

| Index of /sd/ | | |
|-----------------|---------------------|------------------------------|
| Size (KByte) | Date | Name |
| | | [Parent Folder] |
| | 1999-12-04 01:03:36 | [19991204] |
| | 2011-08-18 17:24:50 | [20110818] |
| | 2011-08-19 15:09:08 | [20110819] |
| | 2011-09-20 15:06:46 | [20110920] |
| 8364KB | 2010-10-14 01:49:08 | ???.rar |
| 574KB | 2011-08-25 00:21:56 | ??M-JPEG?????.xls |
| 2523KB | 2011-08-17 17:58:56 | FI86XX??IE?????.xls |
| 12444KB | 2010-05-25 17:27:38 | NVSCenterV6.19.exe |
| 2677KB | 2011-08-26 21:52:04 | S29GL01GP_512P_256P_128P.pdf |
| 708KB | 2011-08-24 17:02:16 | SP3070-3078E_100_061109.pdf |
| 16384KB | 2011-09-15 21:44:06 | Flash16MFCvga0706.bin |
| | 2011-08-15 19:24:28 | [recycler] |
| 1301KB | 2011-08-26 22:44:14 | tlv320aic3101[1].pdf |
| 1179KB | 2011-08-26 22:44:16 | tlv320aic31[1].pdf |
| 999KB | 2011-08-26 22:44:02 | vpv5150am1[1].pdf |
| Total 16 Items. | | |

You can open the stored files and read it.

Format SD card as fat32: Click it and format the SD card.

Unplug SD Card: Click it then unplug SD card safely.

3.2 Date & Time Settings

There are four models for you to adjust time: Manual setting, Sync with computer time, Network Time Protocol and Keep current time, choose one model and adjust the camera time. Then choose Time zone.

Manual settings: The administrator can enter the date and time manually. Note that the date and time format is [yyyy/mm/dd] and [hh:mm:ss].

Network Time Protocol: It is a protocol which synchronizes computer clocks by periodically querying an NTP server.

Interval: The interval time between last time and next time that the camera adjust time with Ntp Server.

Time zone: Select the appropriate time zone from the list.

Date&Time Settings

Current date & time:
2011-09-20 19:47:47

Adjust

Manual setting
Date: 2011-09-20 (yyyy-mm-dd) Time: 19:46:02 (hh:mm:ss)
(1971-01-01 ~ 2036-12-31)

Sync with computer time
PC Time: 2011-09-20 14:46:34

Network Time Protocol ¹
Ntp Server: time.nist.gov
Interval: 01 hours

Keep current setting
Time zone: (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi ²

³

Figure 3.4

If your country implements the Daylight Saving Time, when you select the Time zone, you can see the following screen:

Date&Time Settings

Current date & time:
2011-09-20 19:53:40

Adjust

Manual setting
Date: 2011-09-20 (yyyy-mm-dd) Time: 19:46:02 (hh:mm:ss)
(1971-01-01 ~ 2036-12-31)

Sync with computer time ¹
PC Time: 2011-09-20 14:52:27

Network Time Protocol
Ntp Server: time.nist.gov
Interval: 01 hours

Keep current setting
Time zone: (GMT+10:00) Canberra, Melbourne, Sydney ²

³ Automatically adjust clock for daylight saving time changes

⁴

Figure 3.5

The camera will adjust the daylight saving time automatically if you select “Automatically adjust clock for daylight saving time changes”.

3.3 User Settings

The camera has set up 3-level user permissions, user names are admin, user, guest, and the default passwords are admin, user, guest too.

Different user has different permission. Only admin account can access the For Administrator page. User account can operate For Visitor and For Operator page. Guest account only can do settings under For Visitor.

Please reset the passwords at first using and prevent unauthorized users login the camera.

Click **Apply** to save these settings.

| User Settings | | |
|---------------|----------|------------------|
| User Name | Password | Re-type password |
| admin | ••••• | ••••• |
| user | •••• | •••• |
| guest | •••• | •••• |

Figure 3.6

 **NOTE:**

You cannot change the user names and all passwords cannot be null.

3.4 Basic Network Settings

IP Configuration Type contains two types: Fixed IP Address and Dynamic IP Address. Set the appropriate type for you. Keep the camera in the same subnet of your router or computer.

Fixed IP Address: Select this option to manually assign a static IP address to the Network Camera.

Dynamic IP Address: Select this option to obtain an available dynamic IP address assigned by the DHCP server each time the camera is connected to the LAN.

Basic Network Settings

LAN Settings

IP Configuration Type: Fixed IP Address

IP Address: 192.168.11.253

Subnet Mask: 255.255.255.0

Gateway: 192.168.11.1

DNS Configuration Type: Manual DNS

Primary DNS: 192.168.11.1

Secondary DNS: 202.96.134.133

HTTP

HTTP Port number: 80 (80 or 1024~49151)

RTSP Port number: 554 (554 or 1024~49151)

RTSP Permission checksum: On Off (Note: You need to restart the machine, this setting will only take effect)

Apply Cancel

Figure 3.7

If you want to set a static IP for the camera, you should keep the camera in the same subnet of your router or computer. The DNS Configuration Type has two types: Manual DNS and From DHCP Server. If you don't know the subnet mask, gateway and DNS server, you can check your computer's local area connection. It contains all the information.

The step is **Control Panel**→**Network Connections**→Double click **Local Area Connections** → Choose **General**→**Properties**. You will see all the information in it.

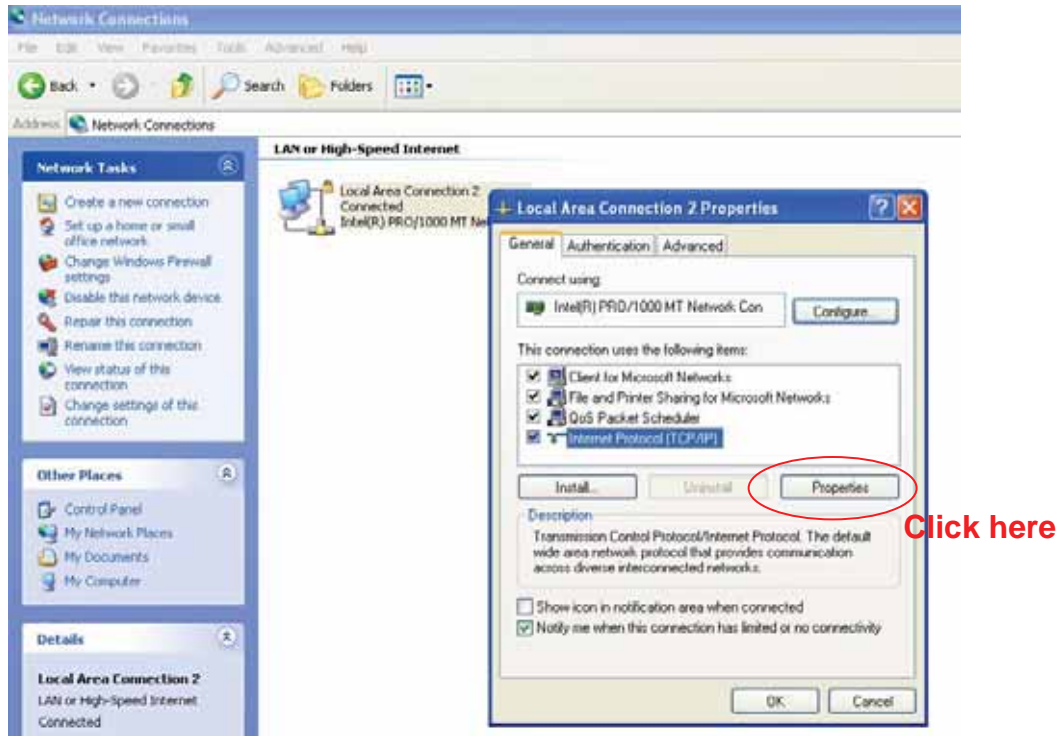


Figure 3.8

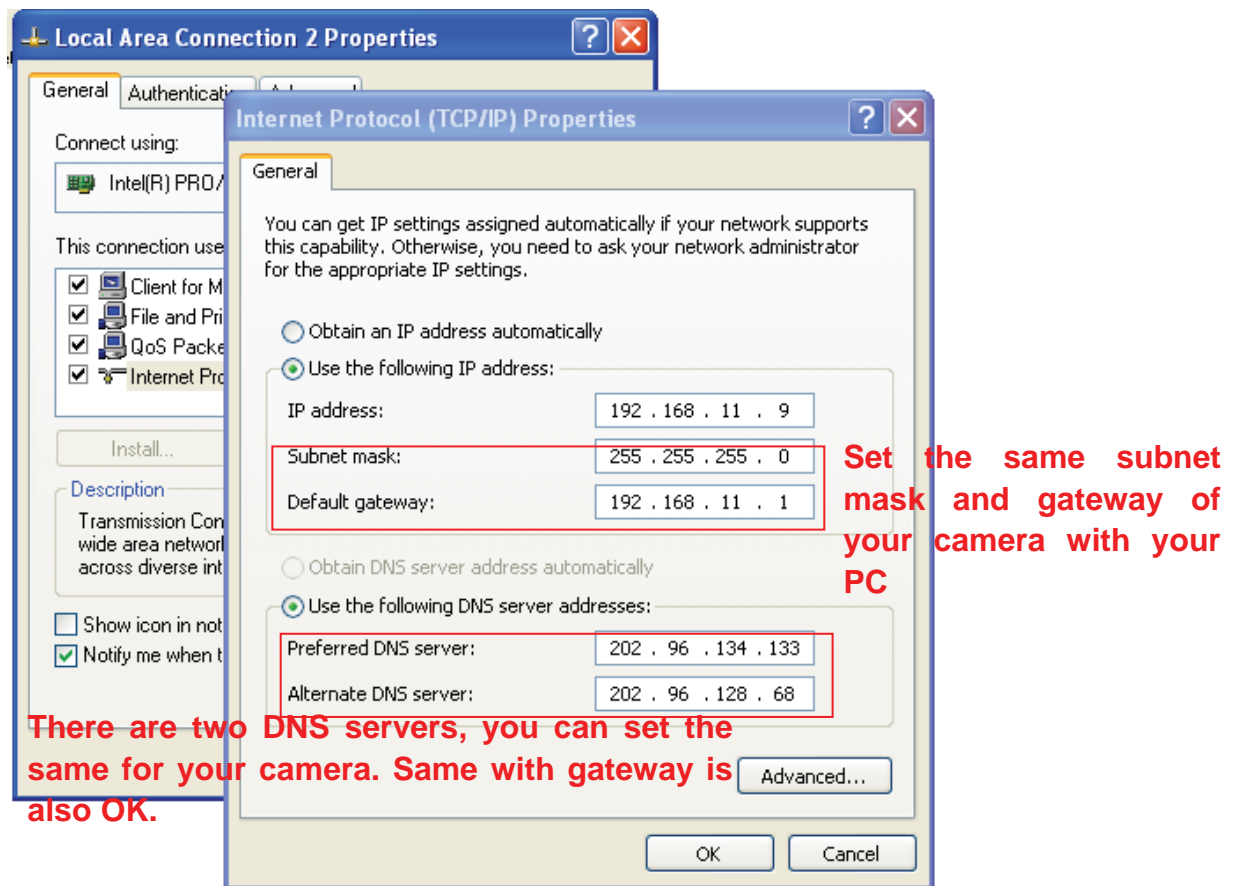


Figure 3.9

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

HTTP Port number: The HTTP Port can be used to access the IPCAM on the LAN. Usually, it is 80. You can set any number between 1024 and 49151 too.

After all settings, click Apply. You will see the following picture, click OK, and re-connect the camera.

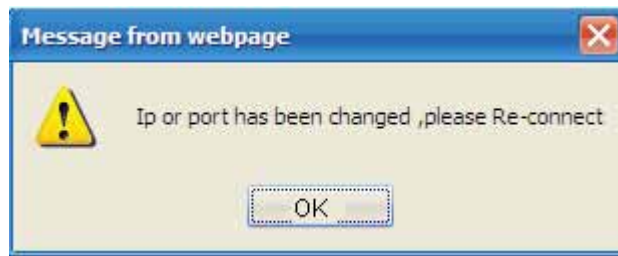


Figure 3.10

RTSP port number: Usually, it is 554. You can set any number between 1024 and 49151 too. Click Apply and the camera will reboot.

Using VLC Player to access the IP Camera

Enter [rtsp:// IP:RTSP port number/11](#) or [rtsp:// IP:RTSP port number/12](#) into the VLC, you can see the real-time preview. WAN IP or LAN IP is OK. If the RTSP port number is 554, you can directly enter the following url: [rtsp:// IP/11](#) or [rtsp://IP/12](#) . The number “11” shows that you will use first stream. The number”12” shows that you will use second stream. For example: Enter [rtsp://192.168.11.169/11](#) in the VLC.

RTSP Permission Checksum

On: Select it and you need to enter the login username and password when you view the real-time preview in the VLC.

Off: Select it and you do not need to enter the login username and password.

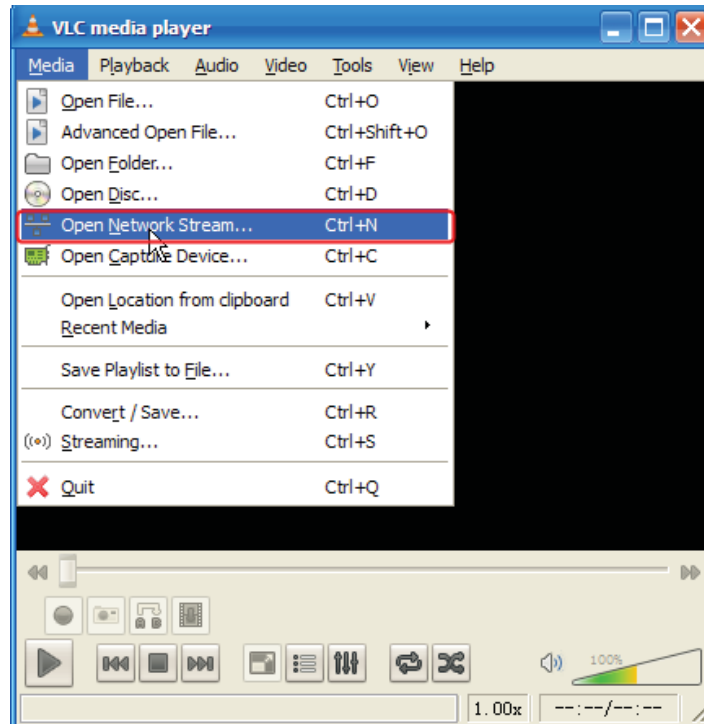


Figure 3.11

Here take LAN IP 192.168.11.169 and RTSP Port no. 554 for example:

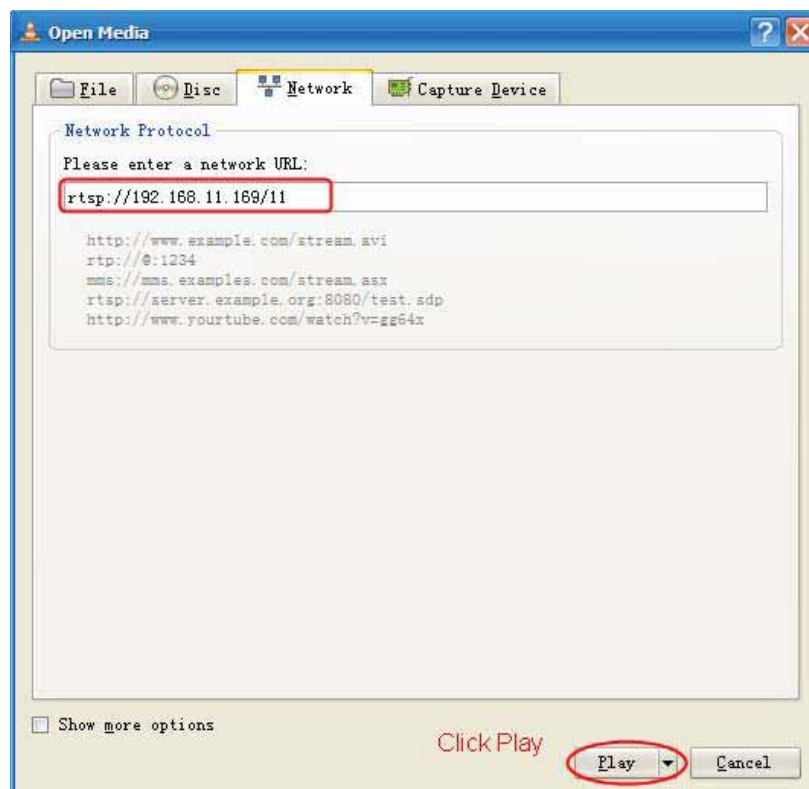


Figure 3.12

You need to enter the user name and password if you select on for RTSP Permission Checksum . Click OK and you can see the real-time preview.

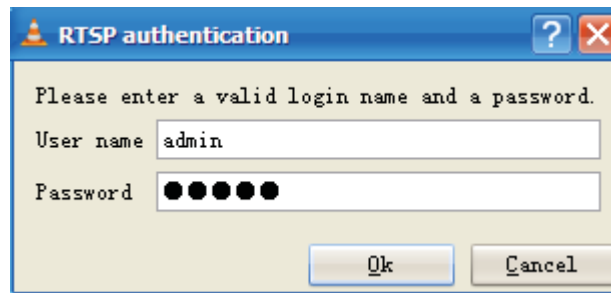


Figure 3.13

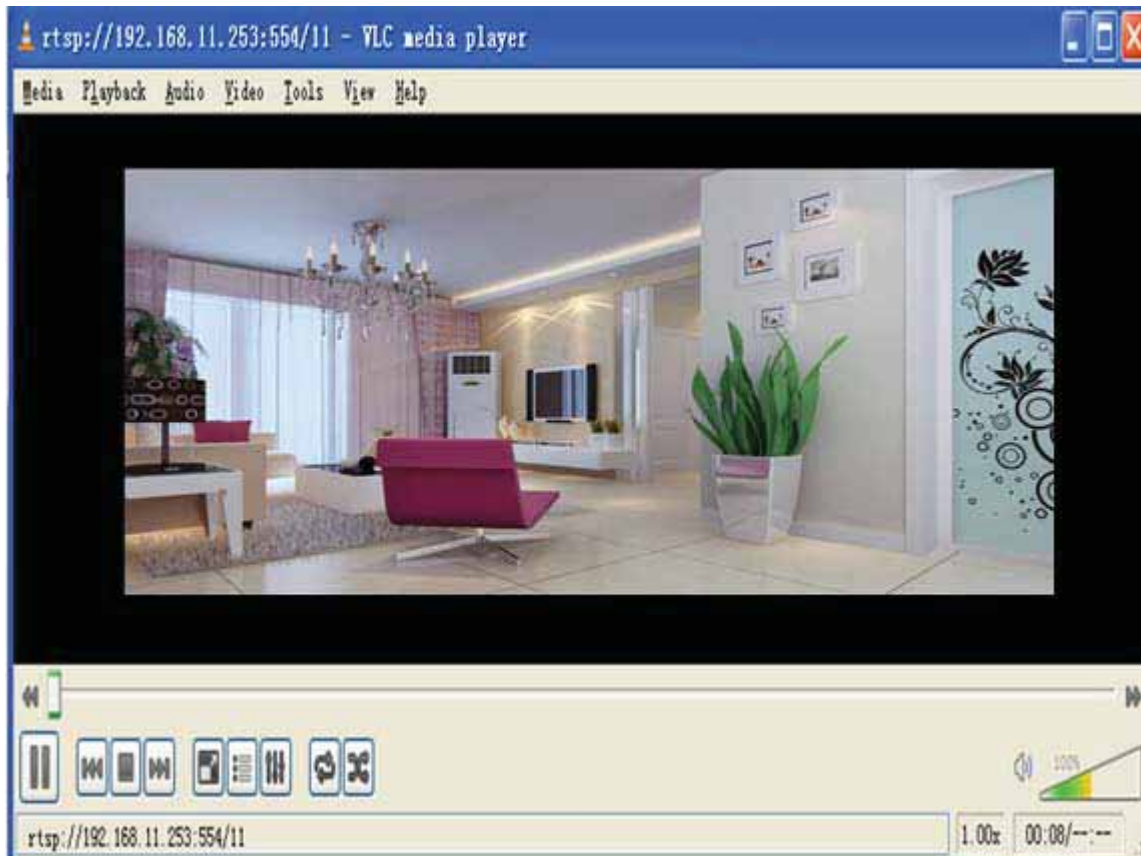


Figure 3.14

**NOTE:**

- 1 You'd better not change the HTTP and RTSP port number at the same time, because you cannot submit successfully.
- 2 After changing the RTSP or HTTP port number, the camera will restart.
- 3 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.

Another way to change the camera's LAN IP and HTTP Port no.

Open the IP Camera Tool, select the camera you want to change the port no, right click on the IP address link, and goes to Option "Network Configuration", it pops up another dialogue showed as the following screen



Figure 3.15

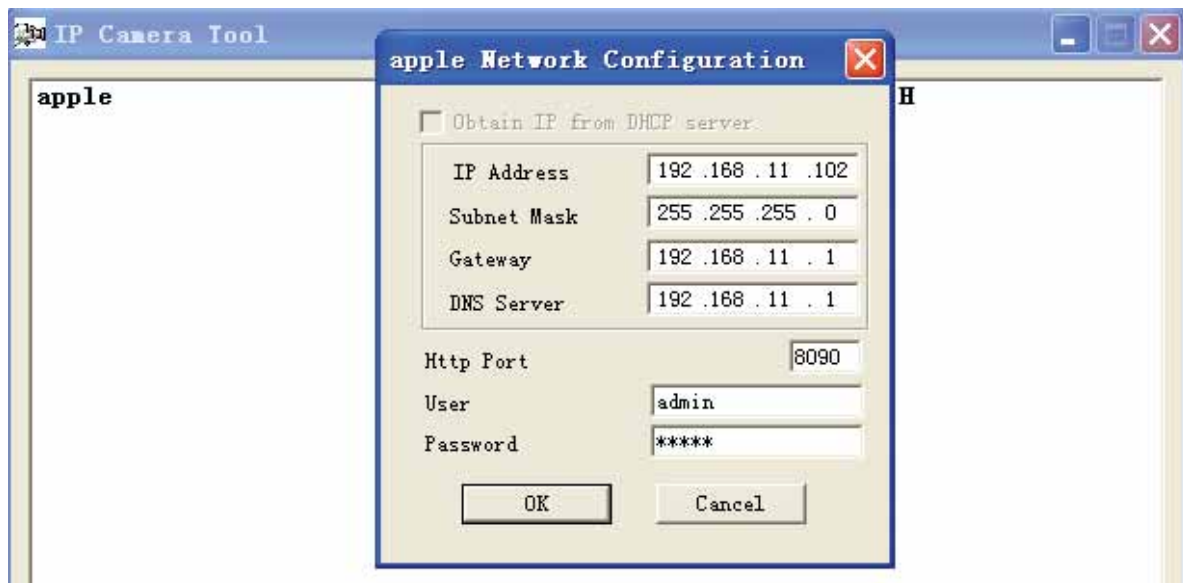


Figure 3.16

IP Address: Fill in the IP address assigned and make sure it is in the same subnet as your computer or router. (I.e. the first three sections are the same)

Subnet Mask: The default subnet mask of the equipment in our LAN is: 255.255.255.0. You can find the subnet mask in the basic information of your router or the locally-attached of your PC.

Gateway: Make sure it is in the same subnet with PC's IP address. The gateway is your router's LAN IP.

DNS Server: IP address of your ISP network provider. You can find the DNS server in your router or check the locally-attached address of your computer. Your PC contains your PC's IP address, gateway and DNS server. Normally, there are two DNS servers. Here you can also set the DNS server the same with gateway.

Http Port: The default Lan port is 80.You can set another port number, such as port 8005, 8100.etc.

User: Default administrator user name is admin

Password: Default administrator password is admin.



NOTE:

If the prompt “Subnet doesn’t match, dbclick to change!” appears, please enable DHCP set camera’s IP address and gateway once again.

3.5 Wireless Settings

Please view how to set Wireless Settings in Quick Installation Guide.

3.6 Remote Access

Please view how to set DDNS Settings in Quick Installation Guide.

Figure 3.17

Upnp Port Forwarding: If you select Enable, that means you allow the IPCAM to open ports on the router automatically so that the video streams can be sent out form a LAN. To utilize of this feature, make sure that your router supports UPNP and it is activated. Usually, we recommend you do it manually. . (for more details: see Figure5.16 in Appendix)

Please click Apply after filling in all the information.

3.7 Email Settings

If you want the camera to send emails when motion has been activated, **Email Settings** will need to be configured.

Figure 3.18

- 1----- Enter the SMTP Server for Sender,
- 2----- SMTP port is usually set as 25. If SMTP server supports SSL, you should choose it.
- 3----- If you select ON, fill in the authentication for sender, mail box for sender must support SMTP
- 4----- Three recipients can be added to receive images.
- 5----- Set the subject and text for the email. The subject and message can not be Chinese characters.
- 6----- Click Apply and all settings take effect.

Trouble Shooting----The email failed to send emails or snapshots

1. Check the mail service settings, and make sure all of them are correct and try it again.
2. Check if the sender email is enabled with SMTP server.
3. Check the mailbox whether should be enabled SSL encryption.

3.8 FTP Settings

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

The screenshot shows the 'FTP Settings' dialog box with the following fields and options:

- Server Address: 192.168.0.50
- Server Port: 21
- User Name: apple
- Password: [masked with 7 dots]
- Passive Mode: On Off
- Path: /

Buttons: Apply, Cancel

Figure 3.19

The screenshot shows the 'FTP Settings' dialog box with the following fields and options:

- Server Address: ftp.megenseal.com
- Server Port: 21
- User Name: videotest@mgenseal.com
- Password: [masked with 7 dots]
- Passive Mode: On Off
- Path: /

Buttons: Apply, Cancel

Figure 3.20

FTP server: If your FTP server is set up in LAN, you can set as Figure 3.19

If you have a FTP server which you can access on the internet, you can set as Figure 3.20.

FTP Port: Usually the port is 21

Path: The path of FTP that you plan to store images.

If the FTP server mode is passive, choose on, or else, choose off.

Click Apply after settings.

3.9 Auto Capture

The camera can capture pictures automatically at interval time if you have set auto capture.



Auto Capture

Snap Interval: minutes

Send Email

Save Picture on the SD card

Figure 3.21

Snap interval: Set snap interval time. The pictures will be stored to the disk you set (you can set the storage path under “For Visitor”).

Send E-mail: Select it, the camera will send email to you with the picture it has captured. Make sure you have set E-mail correctly.

Save Picture on the SD card: Select it and the snapped pictures will be stored to the SD Card. Make sure the camera has plugged in the SD card.

Click Apply after settings.

3.10 Motion Detection

If the user wants to monitor a special region, he should select motion detection.

IP CAM supports four detection regions. Choose the options dialog box before window1, window2, window3, window4 to enable the corresponding areas. For example, choose window1. Then you can see a box with a number at living video (Figure 3.23).

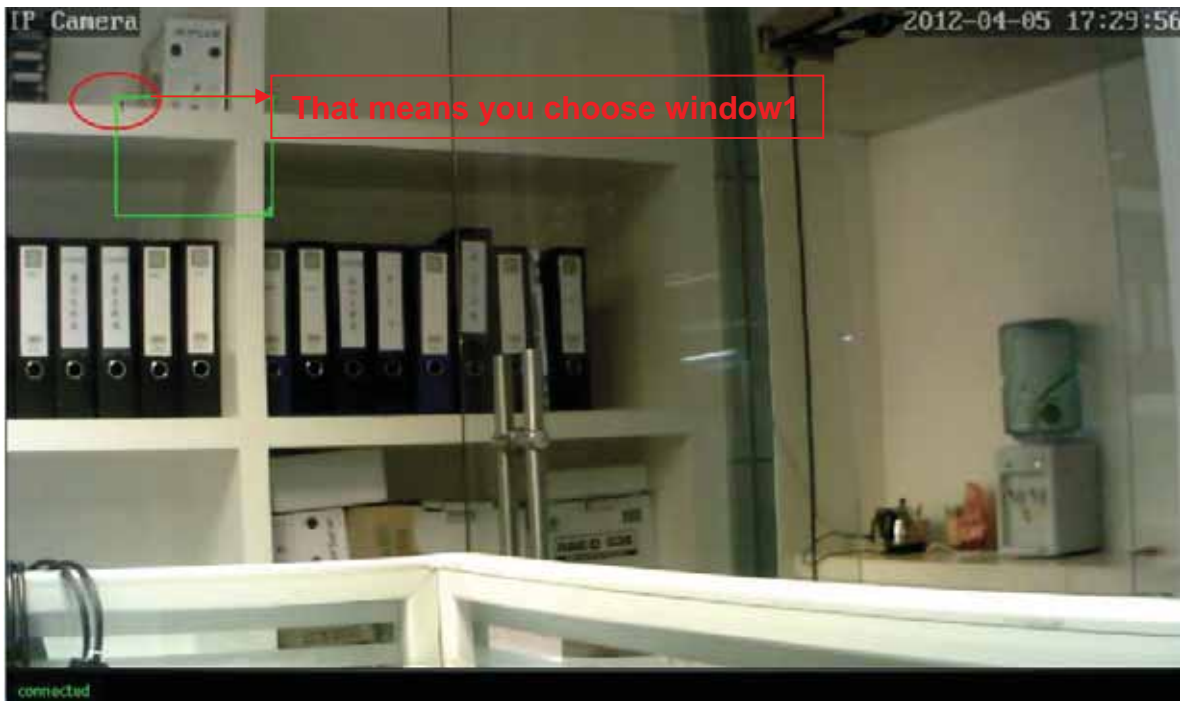


Figure 3.23

Move your mouse on the regional box, you can drag the regional box to any position in the video.

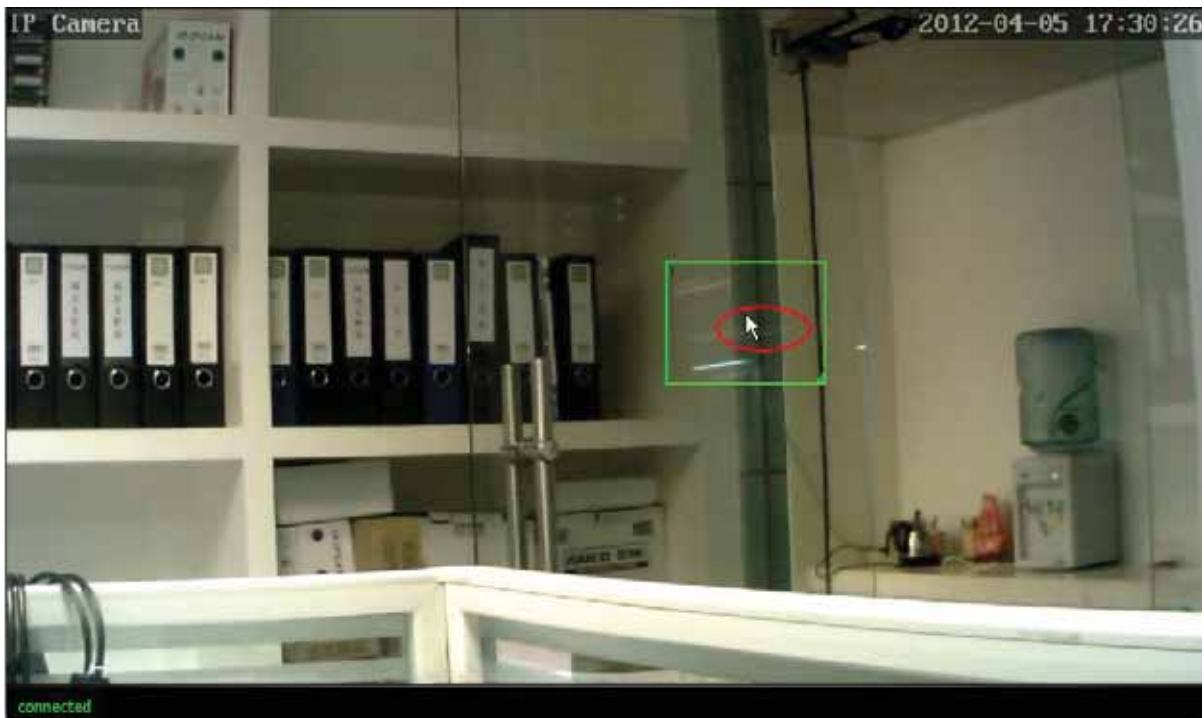


Figure 3.24

Move the mouse to the bottom right corner of the regional box .When the mouse pattern changes to “↘”, you can change the size of the detection area.

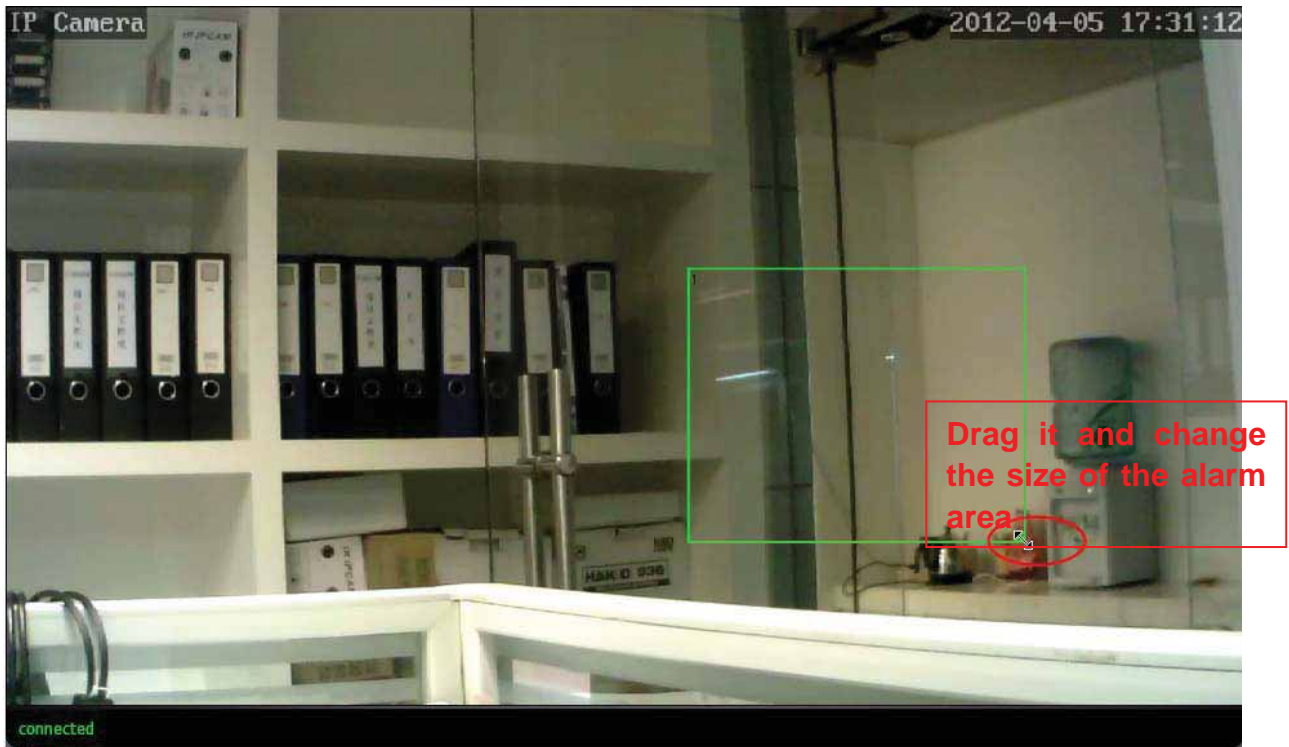



Figure 3.25

Move  right or left and adjust the sensitivity. Click apply after all settings. The regional box will blink with red colour when something moving at your detection area.

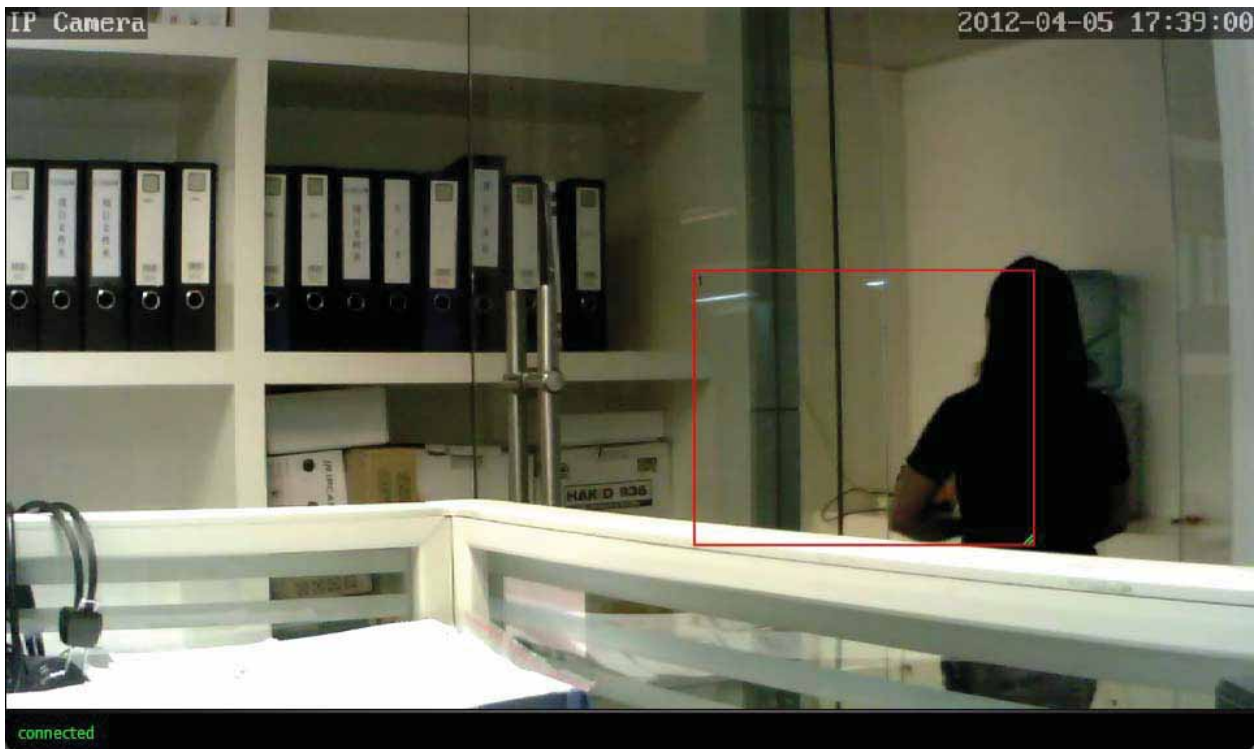


Figure 3.26



NOTE:

- 1 If you select QVGA as the resolution, the camera cannot alarm anytime even when there is something moving.
- 2 If you add the date&time to the video,don't put the detection window on the time area or else the camera will alarm when the time change.
- 3 If you have not set the motion detection area,the camera will not alarm at any time.
- 4 Firefox, Google chrome and Safari doesn't have this function because the activex doesn't support it.
- 5 Right click on the screen, there are two graphic display modes: Direct Draw and GDI. Under the GDI mode, you cannot see the four detection regions when you select the window1/window2/window3/ window4.

3.11 Alarm

Set alarm and It will send email or upload images when motion has been detected.



Figure 3.27

Email Alarm: Select it and camera will send emails when motion is activated. Make sure you have set Email Settings first.

Save Video on the FTP Server: To upload videos to an FTP server when motion is detected. The camera must have plugged SD card,or else you cannot save videos to FTP server because the camera will save videos to SD card first and then the videos on the SD card will be loaded up to FTP server.

Save Picture on the FTP Server: To upload pictures to FTP server when motion is detected.

Save Picture on the SD Card: Save pictures on the SD card when motion is detected. Make sure the camera has plugged in the SD card.

Save Video on the SD card: Save videos on the SD card when motion is detected. Make sure the camera has plugged in the SD card.

Click Apply after settings.

3.12 Schedule

If you want the camera alarm during the time you wish, or all the time, please choose Schedule and set time range for motion alarm.

Schedule

Use the week mode
 Use the work mode
 All times

| day | start1~end1 | start2~end2 | start3~end3 |
|---|-------------------|-------------------|-------------------|
| <input checked="" type="checkbox"/> Sun | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Mon | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Tue | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Wed | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Thu | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Fri | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |
| <input checked="" type="checkbox"/> Sat | 00 : 00 ~ 24 : 00 | 00 : 00 ~ 00 : 00 | 00 : 00 ~ 00 : 00 |

Apply Cancel Clean

Figure 3.28

There are two ways to set the alarm.

1) Alarm at any time when motion is detected.

Select All times and apply you settings, the camera will alarm at any time when motion is detected.

2) Specify an alarm schedule.

If you want the camera to alarm during a specify time, you can select Use the week mode **or** Use the work mode and set time range.

Click apply, the settings what you have done will take effect.

If you click cancel, the settings will come back to the status before your settings.

If you want to reset all time range, click clean.



NOTE:

Please adjust system time before set schedule.

3.13 Video

Video

Video Settings

Lighting Frequency:

First Stream

Resolution:

Bit Rate: kbps(32-6144)

Maximum Frame Rate: fps

Key Frame Interval: (2-150)

Bit Rate Control: CBR VBR

Image Quality: (The smaller the value, the better the image quality, the larger the stream control)

Second Stream (mobile)

Resolution:

Bit Rate: kbps(32-6144)

Maximum Frame Rate: fps

Key Frame Interval: (2-150)

Bit Rate Control: CBR VBR

Image Quality: (The smaller the value, the better the image quality, the larger the stream control)

Mobile resolution QVGA

Note: the motion detection will be disable when the resolution is QVGA

Parenthesis Options

Time Stamp: On Off

Camera Name: On Off

Camera Name: (Can not input ~!@#5%^&*()_+|=?:)

Figure 3.29

Lighting Frequency: Set the lighting frequency consistent with local settings to eliminate image flickering associated with fluorescent lights. There are two modes:50Hz and 60Hz.

Resolution: The camera supports three types: 720P, VGA,QVGA. 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. If you are accessing the camera via internet and want to get more fluent video streaming, please select resolution QVGA.

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.

Maximum 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.

Bit rate control: It has two models: CBR and VBR. If you choose CVR, video encoder will be coding on the basis of bit rate you set. If you choose VBR, video encoder will be coding not only on the basis of bit rate, but also consider video quality.

Parenthesis options: Select this option to add name and time to the live view stream. If you set as following picture (Figure 3.30), you will see the video as Figure3.31. The video name cannot be Chinese characters.

Parenthesis Options

Time Stamp: On Off

Camera Name: On Off

Camera Name: (Can not input ~!@#5%^&*()_+|=?:)

Figure 3.30

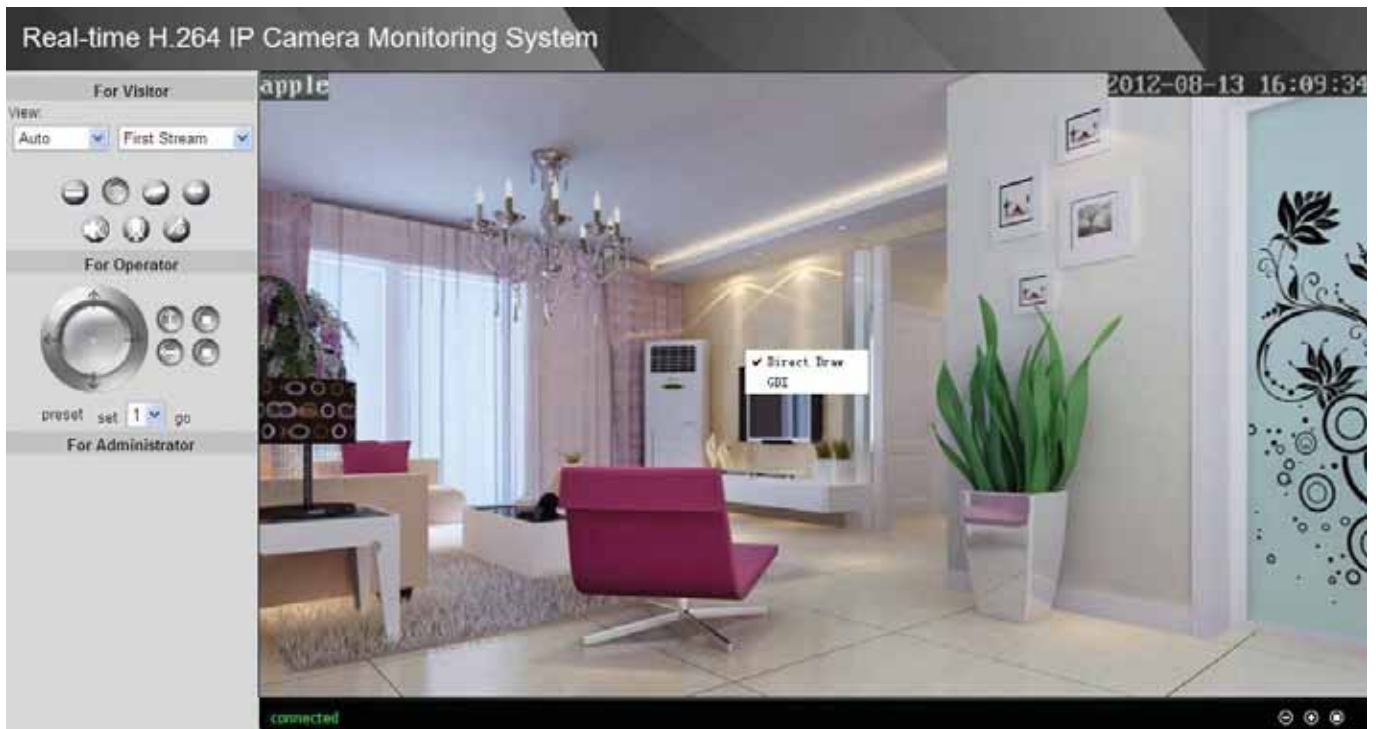


Figure 3.31

3.14 Image Settings

Adjust the quality of the video by setting the image parameters.

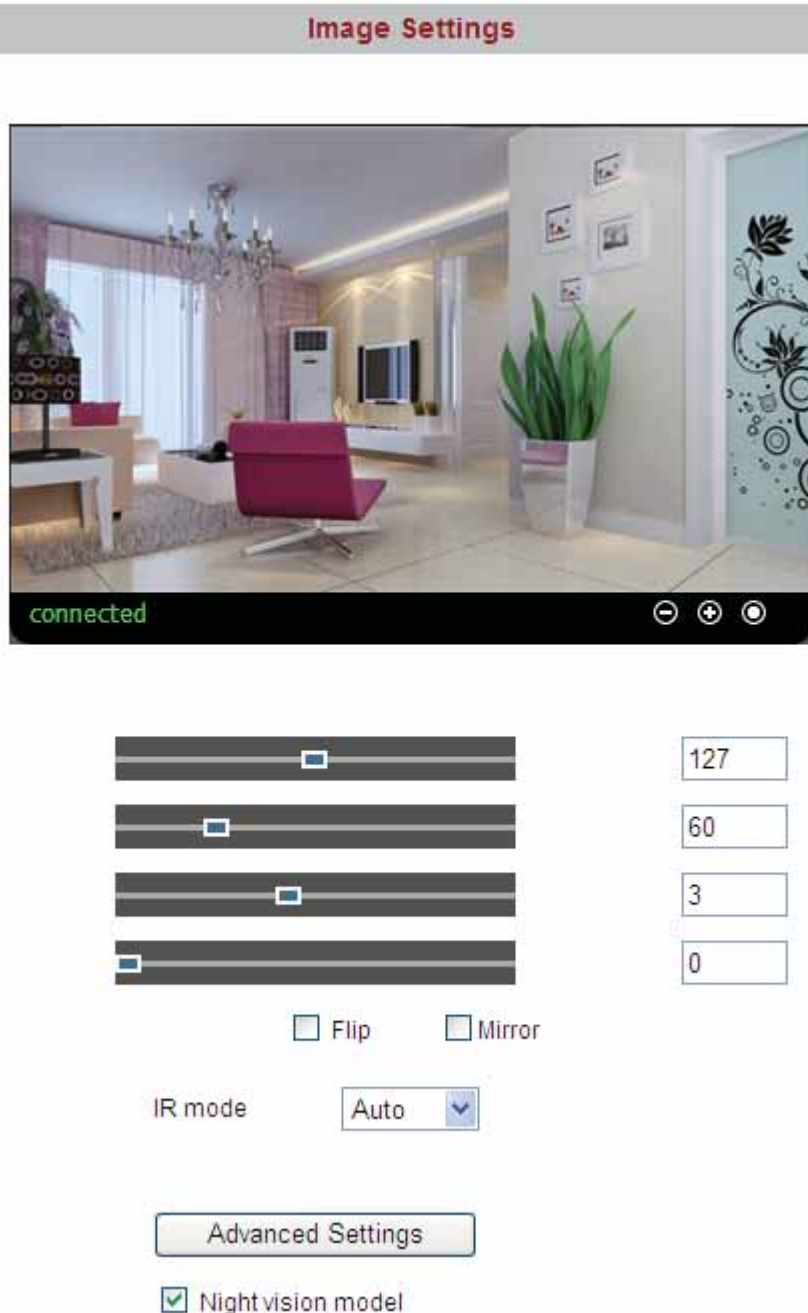


Figure 3.32

Brightness, saturation, contrast and hue are used to adjust the quality of the video. Select the Night vision model, you can set Luminous flux, More larger the luminous flux, more lighter the video will be. Camera will save your settings if you click apply. If you want to quit settings you have done and restore the status before your setting, please click cancel. The function of Default is used to restore the initial settings.

3.15 Audio

Audio Settings

First Stream

Audio Capture: On Off

Audio Type: G711 ▾

Second Stream

Audio Capture: On Off

Audio Input

Input Mode: MIC ▾

Apply Cancel

Figure 3.33

Audio capture

On: Add audio signal when coding. Choose it and the audio will be better.

Off: Not add audio signal when coding.

You can choose whether open audio capture for first stream or second stream.

Audio type

It has two types: G711 and G726. You can choose any one.

Note: If you use Firefox, Google Chrome, Safari, you must choose G711. Because the ActiveX doesn't support G726.

Audio input

MIC: If the audio input interface of the camera has connected with microphone, here you should choose MIC.

Line in: If the audio input interface of the camera has connected with linear audio input signal device, here you should choose Line in.

Which one you choose is decided by the device that connect with audio input interface.

Click Apply, you can see a dialog box as below:



Figure 3.34

Click OK to reboot camera.

If you give up the settings you have done, click cancel to restore the status before your setting.

Back to the “For Visitor” and click the icon , you can here the voice around the camera.

3.16 Initialize

Reboot: Click reboot, the infection is the same as plug the power and re-plug it.

Factory default: Click it, all parameters will return to factory settings.

Backup setting data: If you don't want to quit all parameters that you've set. You can click **save** and all the parameters you set will be stored as a parameters bin file.

Restore: Click browse, choose the correct bin file and then click ok to get all parameters which you set before.

Upgrade: Click **Browse**, choose the correct bin file and then click **OK** to upgrade. Don't shut down the power during upgrade.

The screenshot shows a web interface with a grey header bar containing the word "Initialize" in red. Below the header, there are two main sections. The first section, titled "Initialize" in red, contains four rows of controls: "Reboot:" with a "Reboot" button; "Factory Default:" with a "Factory Default" button; "Backup Setting Data:" with a "Save" button; and "Restore:" with an empty text input field, a "Browse..." button, and an "OK" button. The second section, titled "Firmware Upgrade" in red, contains one row: "Upgrade:" with an empty text input field, a "Browse..." button, and an "OK" button.

Figure 3.35

3.17 Back

This will take you back to the video window.

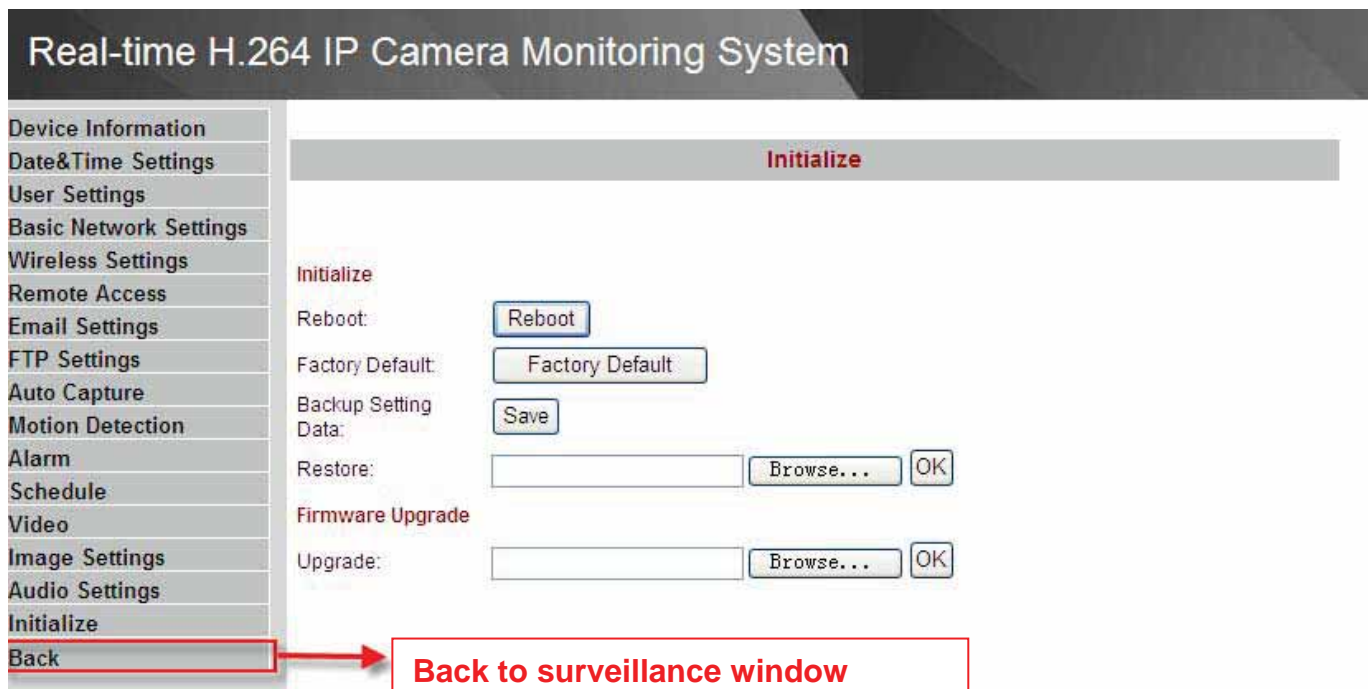


Figure 3.36

4 Other Settings

If the camera has been linked to Internet, set the parameters of the camera and router. Make sure the camera can be accessed by domain name and WAN IP.

For example, the WAN IP is 183.37.54.137, the domain name is ycxgwp.no-ip.info. Then open the mobile IE, enter the following URL, you can login the camera. <http://183.37.54.137/mobile.html> or <http://183.37.54.137/wap.wml> or <http://ycxgwp.no-ip.info/mobile.html> or [http:// ycxgwp.no-ip.info/wap.wml](http://ycxgwp.no-ip.info/wap.wml) .

If the HTTP port num isn't 80, you should add the port num to the URL:

[http://183.37.54.137: portnum/mobile.html](http://183.37.54.137:portnum/mobile.html)

or [http:// ycxgwp.no-ip.info: port num/mobile.html](http://ycxgwp.no-ip.info:portnum/mobile.html)

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 I could not find the IP Camera Tool icon on desktop

If you use Windows7 and could not find the icon on desktop after installing the IP camera tool, please check if the path of the camera software is correct.

For example, if it was pointing to C:\Windows\System32\IPCamera.exe.
Then fix this by pointing the shortcut to the correct path C:\Windows\SysWOW64\IPCamera.exe.
The shortcut should work without any problems.

5.1.2 How to download and install the ActiveX for IE users

Please click  in the Login Window.

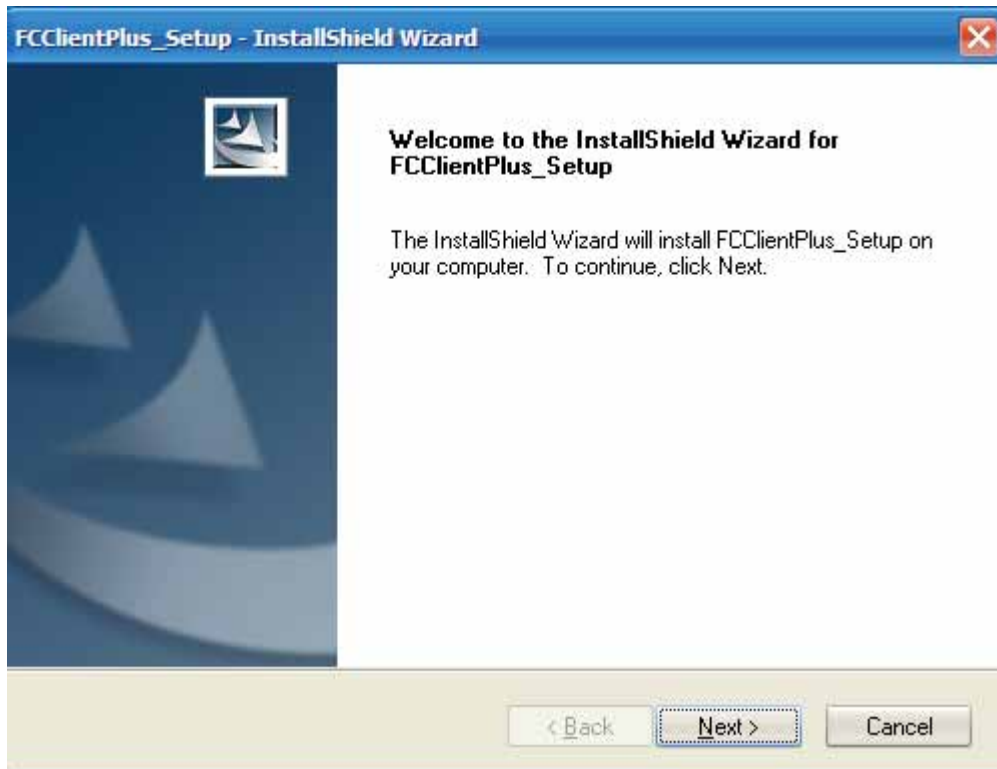


Figure 5.1

Click next.

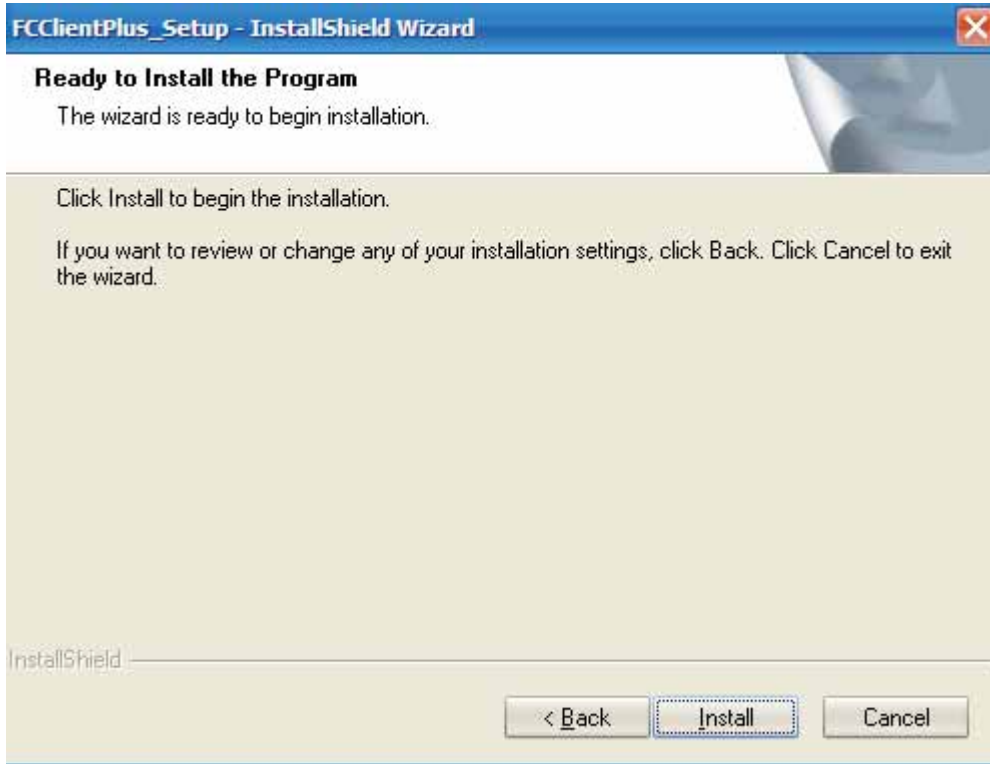


Figure 5.2

Click Install.

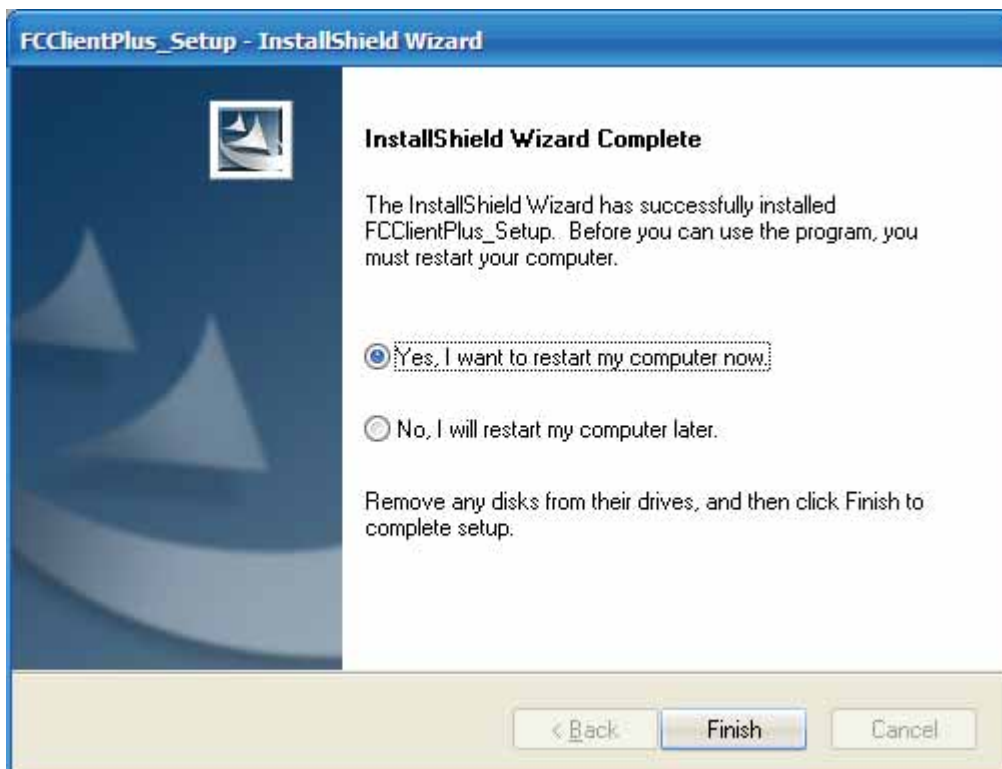


Figure 5.3

Click Finish and the computer restarts upon installation completion.

The first time you login the UI. You may receive an ActiveX prompt as the picture below. (Figure 5.4)

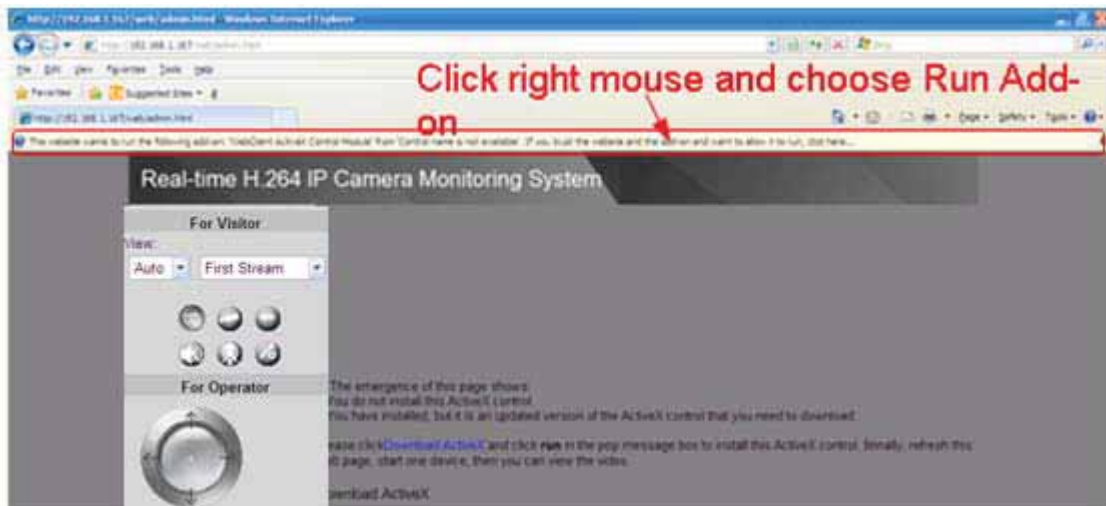


Figure 5.4

Right click on the active prompt and choose **Run Add-on**(Figure 5.5).



Figure 5.5

Select **Run** on the next prompt (Figure 5.5), you will see a live video. (Figure 5.6)

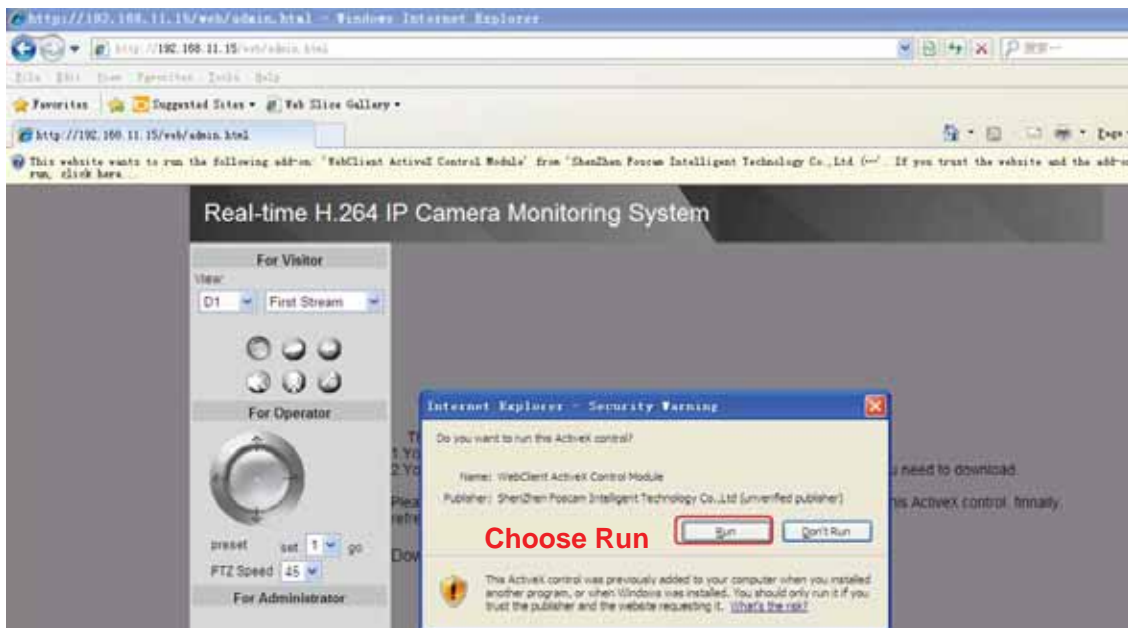


Figure 5.6

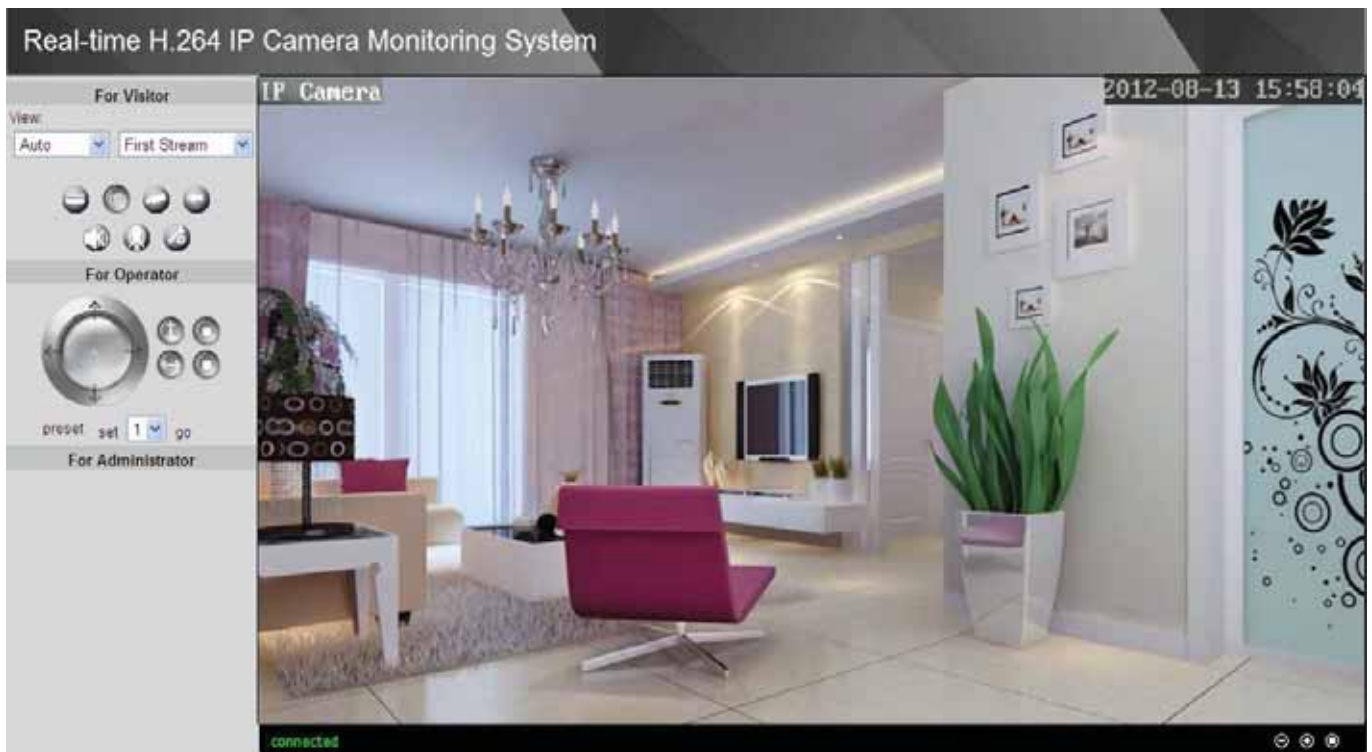



Figure 5.7

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 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 10 seconds. Releasing the reset button, the password will turn to the factory default.

| | |
|---------------------------------------|-----------------|
| Default administrator username: admin | password: admin |
| Default user username: user | password: user |
| Default guest username: guest | password: guest |

5.1.4 Subnet doesn't match

Check whether your ipcamera in the same subnet of your computer. The step is **Control**

Panel→**Network Connections**→**Dbclick Local Area Connections** → Choose

General→**Properties**.(Figure 3.8/3.9) 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 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

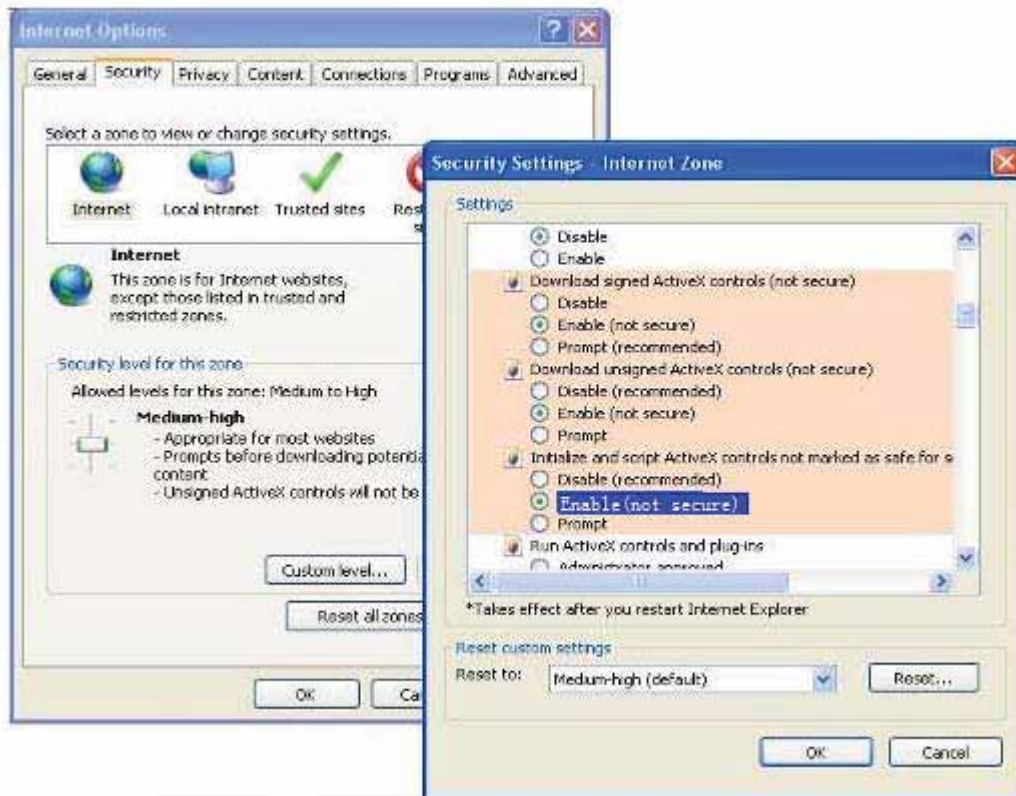


Figure 5.8

If you allow the ActiveX running, but still could not see living video. Please change another port number to try. Don't use port 80, use any port between 1024 and 49151.

| Basic Network Settings | |
|--|---|
| LAN Settings | |
| IP Configuration Type: | Fixed IP Address |
| IP Address: | 192.168.11.129 |
| Subnet Mask: | 255.255.255.0 |
| Gateway: | 192.168.11.1 |
| DNS Configuration Type: | Manual DNS |
| Primary DNS: | 192.168.11.1 |
| Secondary DNS: | 202.96.134.133 |
| HTTP | |
| HTTP Port number: | 80 (80 or 1024-49151) |
| RTSP Port number: | 554 (554 or 1024-49151) |
| RTSP Permission checksum: | <input checked="" type="radio"/> On <input type="radio"/> Off (Note: You need to restart the machine, this setting will only take effect) |
| <input type="button" value="Apply"/> <input type="button" value="Cancel"/> | |

Figure5.9

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.

5.1.6 I cannot see the video on Firefox or Safari or Google chrome?

For Firefox, Safari and Google chrome, you should install Quick Time Player as the ActiveX controller, please configure the ActiveX controller as the following picture:
Select Preferences—QuickTime Preferences...



Figure 5.10

Choose HTTP as the transport protocol.

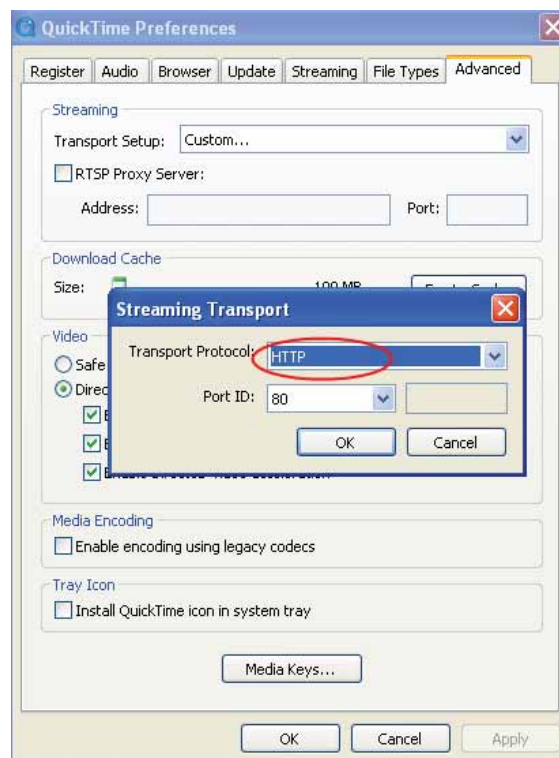


Figure 5.11

Choose Automatic as the Transport Setup, then click OK to save the settings.

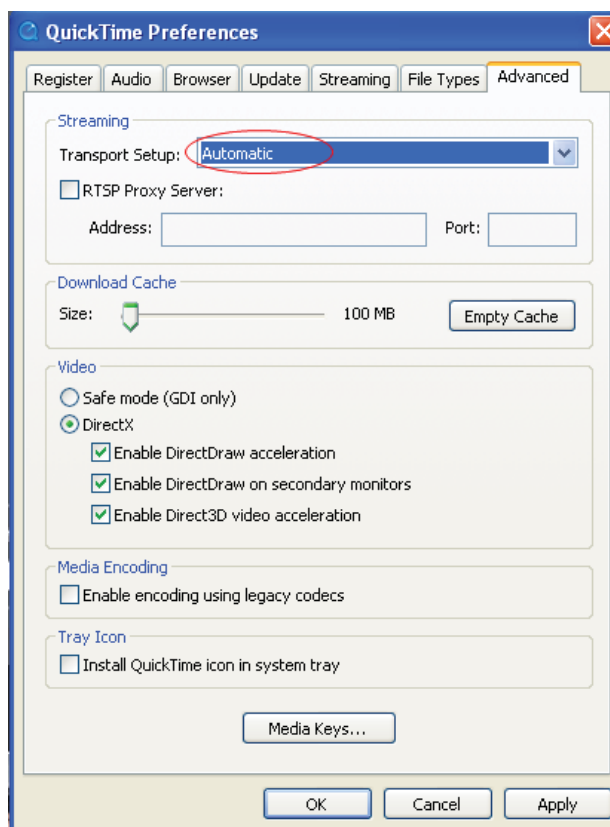


Figure 5.12

5.1.7 Can't access IP camera in internet

There are some reasons:

- 1 ActiveX controller is not installed correctly (Figure5.1-5.6)
- 2 The port which camera used is blocked by Firewall or Anti-virus software. Please change another port number and try again. (Figure5.9)
- 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 Third Party Domain Name Settings

User can also use third part DDNS, such as www.no-ip.com, www.dyndns.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 5.13 Register a user name on www.no-ip.com

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.

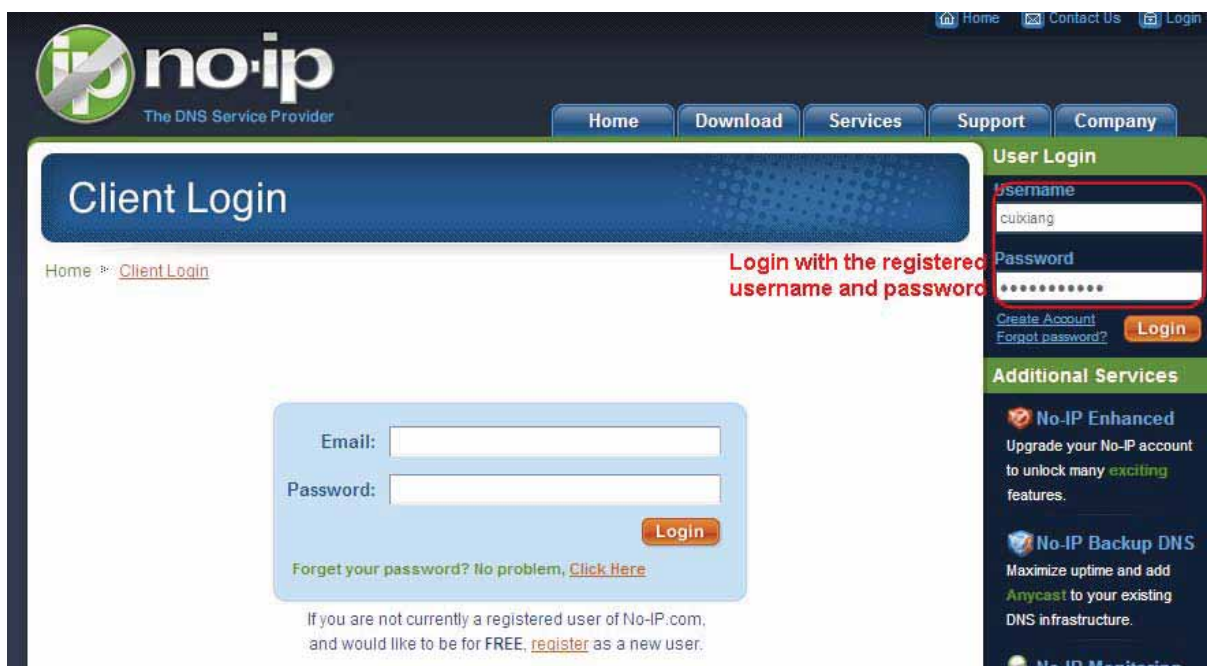


Figure 5.14 Login the link to create a domain name

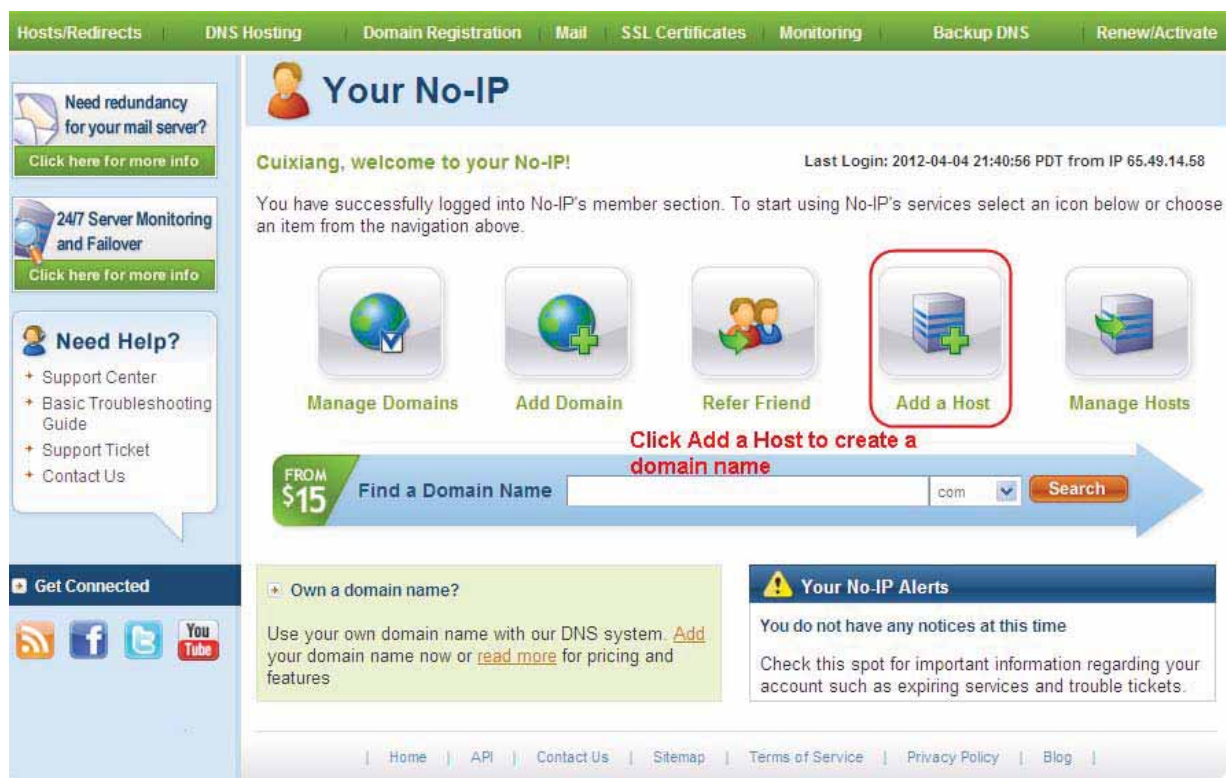


Figure 5.15 Create a domain name

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 Service 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 **Remote Access** on the administrator panel.

Secondly, select No-Ip.com as a server in the **Third Party DDNS**..

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 Info** 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.

② Do port forwarding within the router

Example: The camera's LAN IP address is http://192.168.8.102:2000 ,

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.

LINKSYS[®] by Cisco

Firmware Version: v1.0.01

Wireless-N Home Router WRT120N

Applications & Gaming

Setup Wireless Security Access Restrictions Applications & Gaming Administration Status

Single Port Forwarding | Port Range Forwarding | Port Range Triggering | DMZ | QoS

Single Port Forwarding

Application Name

None

None

None

None

None

IPCAM

| External Port | Internal Port | Protocol | To IP Address | Enabled |
|---------------|---------------|----------|---------------|-------------------------------------|
| --- | --- | --- | 192.168.8. | <input type="checkbox"/> |
| --- | --- | --- | 192.168.8. | <input type="checkbox"/> |
| --- | --- | --- | 192.168.8. | <input type="checkbox"/> |
| --- | --- | --- | 192.168.8. | <input type="checkbox"/> |
| --- | --- | --- | 192.168.8. | <input type="checkbox"/> |
| 2000 | 2000 | Both | 192.168.8.102 | <input checked="" type="checkbox"/> |
| | | | 192.168.8. | <input type="checkbox"/> |
| | | | 192.168.8. | <input type="checkbox"/> |
| | | | 192.168.8. | <input type="checkbox"/> |

Help...

Assign a name as you like here

Fill the Port no. of the camera on the column of External Port and Internal Port

Fill the LAN IP of the camera here, just input the last section

Figure 5.16 Port Forwarding

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](http://ycxgwp.no-ip.info:2000)

5.3 Default Parameters

Default network Parameters

IP address: obtain dynamically

Subnet mask: obtain dynamically

Gateway: obtain dynamically

DDNS: Embedded FOSCAM domain name

Username and password

Default admin username: admin

Default password: admin

Default user username: user

Default password: user

Default guest username: guest

Default password: guest

5.4 Specifications

| ITEMS | | FI9820W |
|---------------------------|--------------------|---|
| Image Sensor | Image Sensor | 1/4"Color CMOS Sensor |
| | Display Resolution | 1280*720 Pixels |
| | Lens | f: 3.6mm, F:2.4 |
| | Mini. Illumination | 0.5Lux |
| Video | Image Compression | H.264 |
| | Resolution | 720p (1280*720) , VGA (640*480) , QVGA (320*240) |
| | View | H.264 dual streaming |
| | View Angle | 67 Degree |
| | Image adjust | The brightness, contrast, saturation , is adjustable |
| | White balance | Automatic, Indoor, outdoor , is adjustable |
| | Infrared mode | Automatic , manual (on/off) |
| | Light Frequency | 50Hz, 60Hz |
| | Night visibility | Φ5mm 11 IR LEDs, Night visibility up to 8 meters |
| | Pan/Tilt Angle | Horizontal:300° & Vertical: 120° |
| Audio | Input/Output | Linear Input/Output, which can realize two-way voice the intercom |
| | Audio Compression | G.711/G.726, Audio sampling Bit rate 128kbps ~ 2.048Mbps |
| Network | Ethernet | One 10/100Mbps RJ-45 |
| | Supported Protocol | TCP/IP、UDP/IP、HTTP、SMTP、FTP、DHCP、DDNS、UPNP |
| | Wireless Standard | WIFI(IEEE802.11b/g/n) |
| | Support IP address | static IP address, dynamic IP address |
| Power | Power Supply | DC 5V/2.0A (EU,US,AU adapter or other types optional) |
| | Power Consumption | 8Watts (Max.) |
| Alarm | Alarm detection | The motion detecting, detection threshold Settings |
| | Alarm inform | Support Email、FTP etc alarm inform way |
| Hardware Interface | SD CARD | SD CARD (Support to 32G) |
| | Audio Input/Output | One audio input jack, One audio output jack. |
| | Reset Buttons | One Reset |
| | Ethernet | One 10/100Mbps RJ-45 |
| | Wireless Interface | WIFI antenna |
| Environment | Operate Temper. | 0° ~ 55°C (32°F ~ 131°F) |
| | Operating Humidity | 10% ~ 80% non-condensing |
| | Storage Temper. | -10°C ~ 60° (14°F ~ 140°F) |
| | Storage Humidity | 0% ~ 90% non-condensing |
| Physical | Dimension | 117(L) x114(W) x129mm(H) |
| | Gross Weight | 814g(Color Box Size:245 x 145 x 165mm) |
| | Net Weight | 348g |
| PC Requirements | CPU | 2.0GHZ or above |
| | Memory Size | 256MB or above |
| | Display Card | 64M or above |

| | | |
|----------------------|----------------------|---|
| | Supported OS | Microsoft Windows 2000/XP/Vista ,Mac OS |
| | Browser | IE6 and above version or compatible browser, Firefox or other standard browsers |
| Software | Upgrade | Upgrade from network |
| | Application Software | H.264 Camera Client.exe |
| Certification | CE,FCC | |

6 OBTAINING TECHNICAL SUPPORT

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

7 Warnings

- 1) changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment
- 2) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for

help.

Power adapter

Manufacturer: Shenzhen Yingyuan Electronics Co.,Ltd

MODEL: SAW - 0502000

INPUT: 100-240V 50-60Hz 0.5 A

OUTPUT: 5V - 2000mA

The antennas used for this transmitter as shown in this filing must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter

Warning statement at the user for keeping 20cm separation distance and the prohibition of operating to a person has been printed on the user manual.

