IP Camera User Manual

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1.User Manual brief introduction

Thank you for choosing our network ip camera. The manual can help you to use the camera correctly. Some descriptions maybe aren't perfect. If you meet unsolvable problems according to this manual,please contact the product supplier.The camera's software,hardware and shell will update ,we will be subject to change without notice.But we will released updated notice on our website,please pay attention to it.

1.1 Appointment

Please obey this manual strictly to use the camera.

1.2 Cautions

Before using the camera, please read all the safety instructions as below carefully then install .

1.2.1 Installation environment

The camera can be installed indoor ,if outdoor, please add waterproof components and lightning protection equipment;

Working temperature limited to 0 ℃ ~ 50 ℃ between, humidity limited to 5% ~ 90% (non-condensable)

Banned in inflammable, explosive environment install and use;

Avoid installing in strenuous vibration place, do not put other equipment on the camera;

Avoid installing near a strong field of electronic equipment that could cause the unit cannot be normal use and even damage;

To ensure the normal radiating of camera, should avoid the poor ventilation places or high temperature environment;

Use wireless ip cameras, should try to avoid or reduce transmission range of obstacles

1.22 Transporting and carrying

The camera package has aseismatic design and testing, ensure ip cameras will not be accidental breaking during transport, in handling this unit, it is best to use original package. Avoid moving the camera between extreme cold and hot place, Avoid machine internal dewing, affect the service life of equipment.

1.23 Maintenance and protection

Non-professional maintenance personnel, do not tear open the camera, avoid damage and shock

Please use the original configuration of the power adapter, use unauthorized power adapter can damage of the camera.

Please do not touch canera's lens, it will leave fingerprint on it that cause image blurring;

Do not put liquid in the unit, lest cause machines internal short circuit or fire. The camera software upgrade process cannot without electricity, otherwise it will damage it, the software prior to upgrade, It is best to restart camera, and ensure the external no other users are visiting.

1.24 Packing list

Item	Quantity
IP Camera	1 piece
Wi-Fi Antenna	1 piece (only wireless IPCAM user)
CD	1 piece（Include User Manual、IP camera tool）
DC Power Supply(5V 2A)	1 piece
Network Cable	1 piece
Mounting bracket	1 piece (option)

Optional : One Wire for alarm input/output

NOTE: Contact us immediately in the case of any damaged or short of contents.

2 Products overview

IPCAM is an integrated wireless IP Camera solution. It combines a high quality digital video Camera with network connectivity and a powerful web server to bring clear to your desktop from anywhere on your local network or over the Internet.

The basic function of IPCAM is transmitting remote video on the IP network. The high quality video image can be transmitted with 30fps speed on the LAN/WAN by using MJPEG hardware compression technology.

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 become more simply by using network to achieve the remote configuration, start-up and upgrade firmware.

You can use this IPCAM to monitor some special places such as your home and your office. Also controlling the IPCAM and managing image are simple by clicking the website through the network.

NOTE: You can use the IP Camera Step by Step(details: 3).

2.1.1 Features

- Powerful high-speed video protocol processor
- High-sensitivity 1/4" CMOS sensor
- 300K Pixels
- IR night vision(Range:3~5m)
- Optimized MJPEG video compression for transmission
- Multi-level users management and passwords definition
- Embeded Web Server for users to visit by IE
- Support wireless network (Wi-Fi/802.11/b/g)mobile
- Supporting Dynamic IP (DDNS)and UPnP LAN
- Giving alarm in cause of motion detection
- Support one-way (I/O) alarm connection
- Supporting image snapshot
- Support multiple network protocols:
  HTTP/TCP/IP/UDP/STMP/DDNS/SNTP/DHCP/FTP
- Support remote system update

2.1.2 Advanced Features

Multi-Protocol support and Transportation

IPCAM supports Multi-Protocol such as TCP/IP, SMTP and HTTP. Sending the image to your mailbox automatically when the IPCAM is triggered.

Motion Detection

Your may use the internal Motion Detection function or external sensor to trigger images recording and transportation.

Alarm sensor input/output

The detection sensor sends an alarm and records it by itself when there is a fire or accident. A message as an email is send to you by this sensor. (The input/output discreteness can be chosen)

DDNS support

Using the IPCAM in the condition which including ADSL and IP change often is more convenient,

because IPCAM provides dynamic DNS function.

Advanced User Management

Only allowing authorized users access to real-time images of the IP Camera.

2.2 Product views

2.2.1 Front views

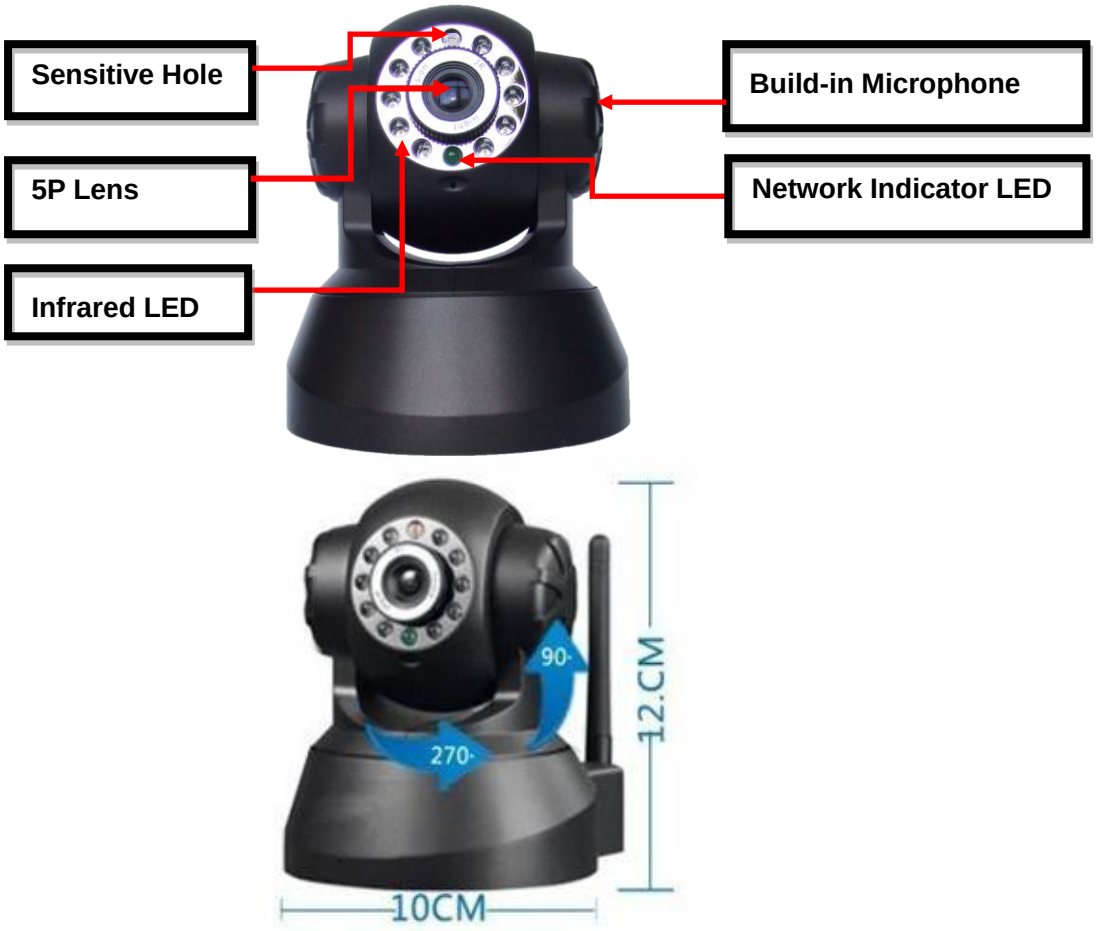


Figure 1.1

1. **Sensitive Hole: According to outside of light decide whether open infrared LED**
2. **Infrared LED**
3. **Network Indicator LED**

   Network Indicator LED's three conditions:

   1) **Slow blink(about every two seconds once),IPCAM is searching network**
   2) **Blink (about once or twice per second),IPCAM is using wired network**
   3) **Fast blink(about three or four times per second),IPCAM is using wireless network**
4. **Lens :CMOS Sensor .You can turn around the lens manually to adjust the focus range**
5. **Build-in Microphone**

Warning: please don't forcibly manual translation/lifting cameras, because it is likely that damaged internal component!:

2.2.2 Interface

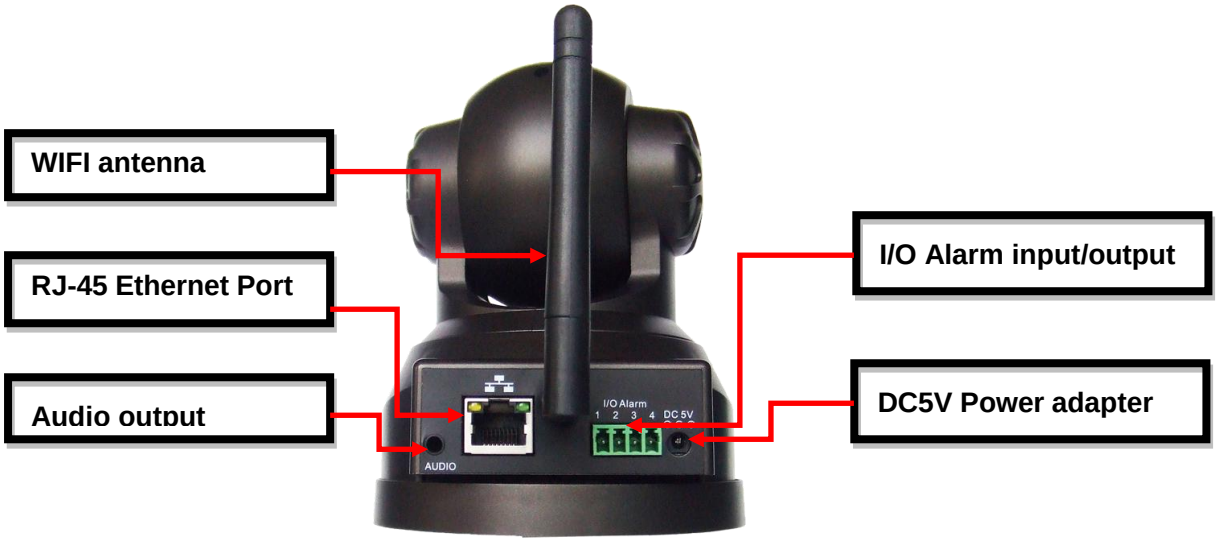


Figure 1.2

LAN : RJ-45/10-100 Base T

DC5V : 5V/2A Power supply

I/O PINS: 1) Output(GND) **2)**Output (+5V) **3)**Alarm input **4)**Input (GND) (you can see 3.5.6 For more information)

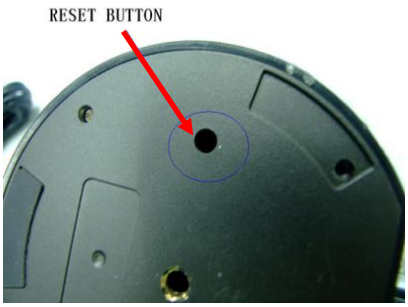


Figure 1.3

RESET BUTTON: Press and hold down the RESET BUTTON for 5 seconds.Release the power button

and IP camera will be reset back to the factory default parameter

2.3 PC System Requirements

System configuration requirements: (Example for view four IP Camera)

CPU: 2.06GHZ or above Memory: 256M or above

Network Card: 10M or above Display Card: 64M or above memory

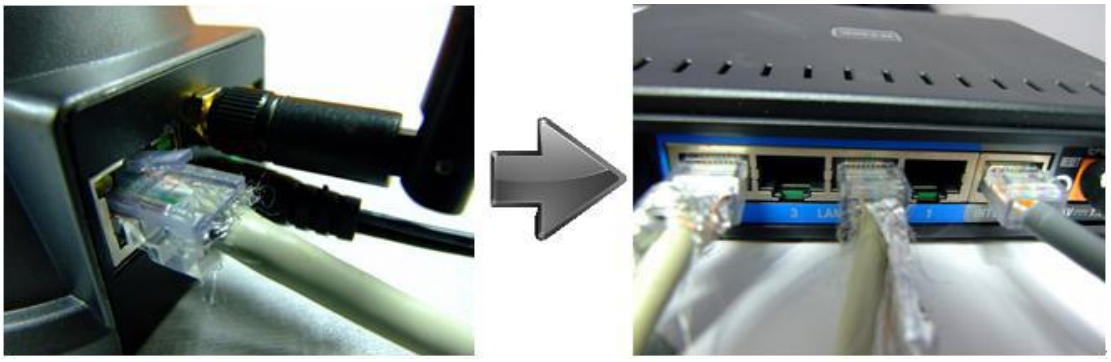
Recommendable Operating System: Windows2000， Windows XP，VISTA,WIN7

Support web browser: IE. FireFox. Google etc .

2.4 Hardware Instruction

Follow the steps below to set up your camera hardware. Make sure to follow each step carefully to ensure
that the camera operates properly.

1) Plug the network cable into the camera and then into your Cable/DSL router.
2) Plug the power adapter into the camera and then into the power outlet.



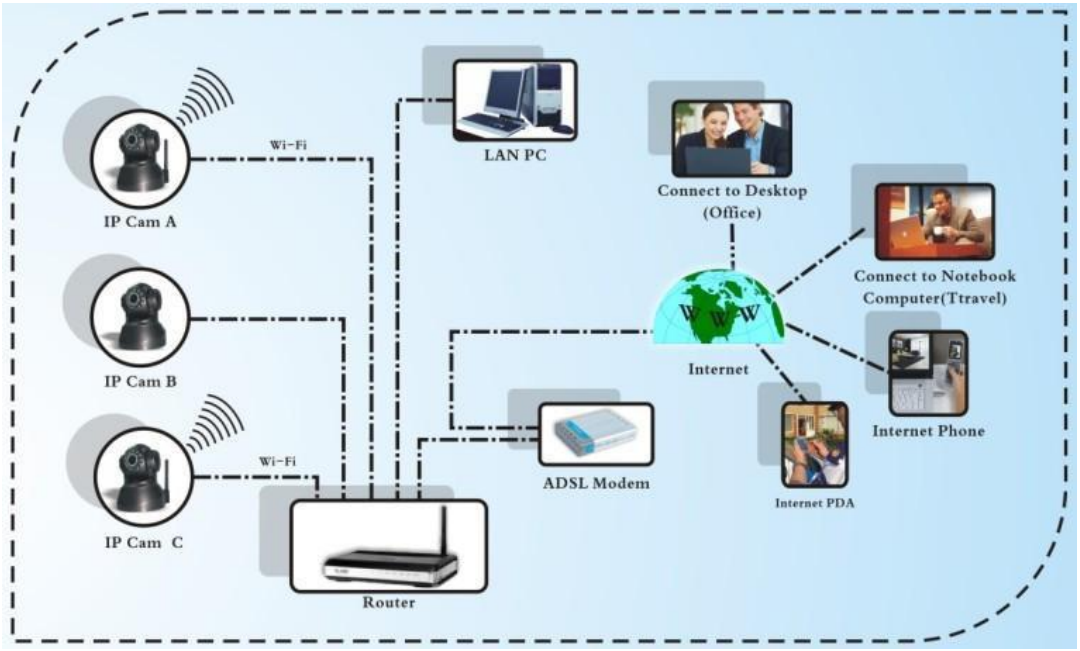


Figure 1.4

CAUTION: Make sure to only use the power adapter supplied with IPCAM. Using a non-approved power adapter may damage the camera.

3) The camera takes approximately 30 seconds to start up before it displays an IP address on the **IP Camera Tool**(details: 3.1).

4) When the camera is powered and network cable plug correctly.It's head will turn around and the Network Indicator LED is blank.

2.5 Software installation

Software installation is the key to the successful use of this product.

1 Open the CD,find the software as instruction;

Figure 1.5

3 Click **IPCamSetup.exe** and install the software as instruction

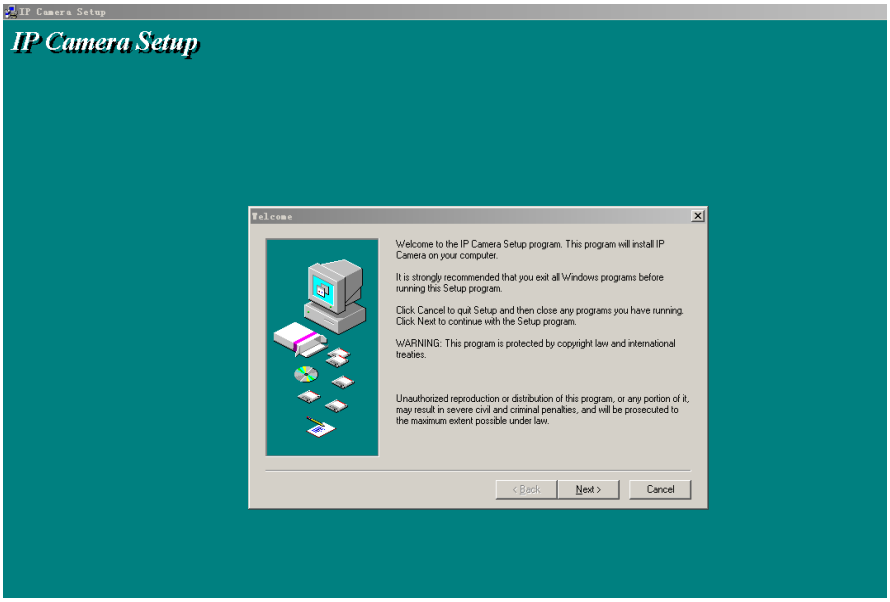


Figure 1.6

3 .Click **Next**

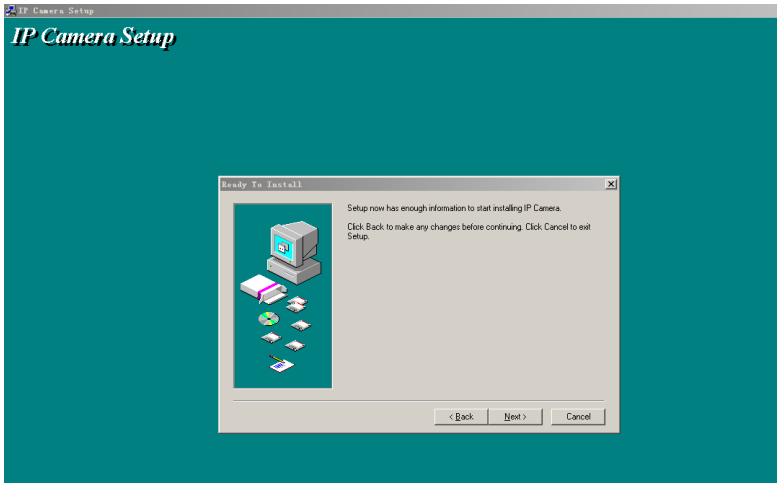


Figure 1.7

4.Click **Next**

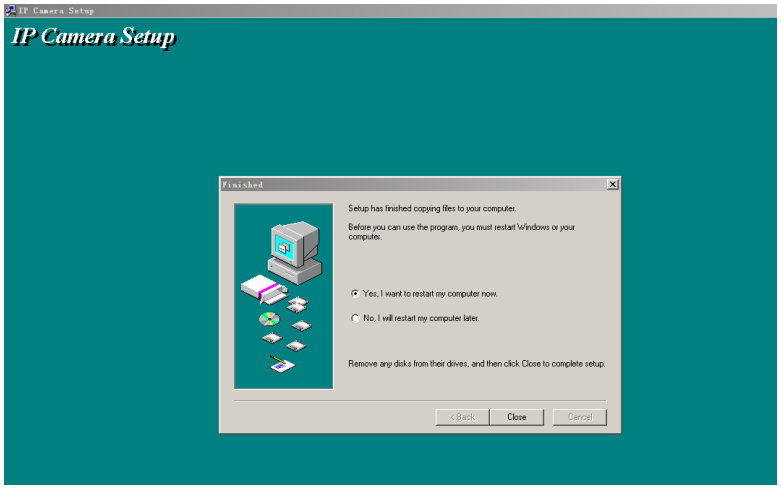
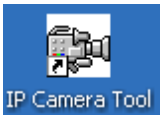


Figure 1.8

5.Choose **restart t**hen click **Close**

The computer restarts upon installation completion and an icon 

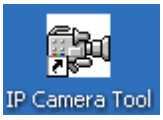
appears on the desktop automatically.

NOTE: Before installing and using the product, please read the following precautions carefully and make sure they are fully understood.

Use only the power adapter attached with the product. Use of unauthorized power adapter may cause damage to your IP Camera. IP Camera terminal shall be installed in an indoor environment.

3 SOFTWARE OPERATION

3.1IP Camera Tool

When the Device has been mounted properly, you can double click the icon “IP Camera Tool” 

and a dialog box as Figure 1.9 will pop up.

Figure 1.9

Note: The software searches IP Servers automatically over LAN.

There are 3 cases:

1 No IP Camera found within LAN. After about 1 minute search, the Result Field will show “not found IP Server” and the program shut automatically;

2 IP Cameras having been installed within LAN. All the IP Cameras will be listed and the total number is displayed in the result field as shown in Figure 2.0.

3 The IP Cameras installed within LAN do not share the same subnet with the monitoring PC. A prompt as shown in result field (prompt: Subnet doesn’t match,dbclick to change!). Click the left mouse button to choose the prompt and click the right mouse, choose **Network Configuration** to set the IP address of the Camera to the same subnet as LAN.

Five Options

Choose the IP Camera list and Click right mouse button,there are five options,Basic Properties, Network Configuration, Upgrade Firmware, Refresh Camera List, Flush Arp Buffer as shown Figure 2.0.

Figure 2.0

Basic Properties

There are some device information in the Basic Properties, such as **Device ID, System Firmware Version, Web UI Version**

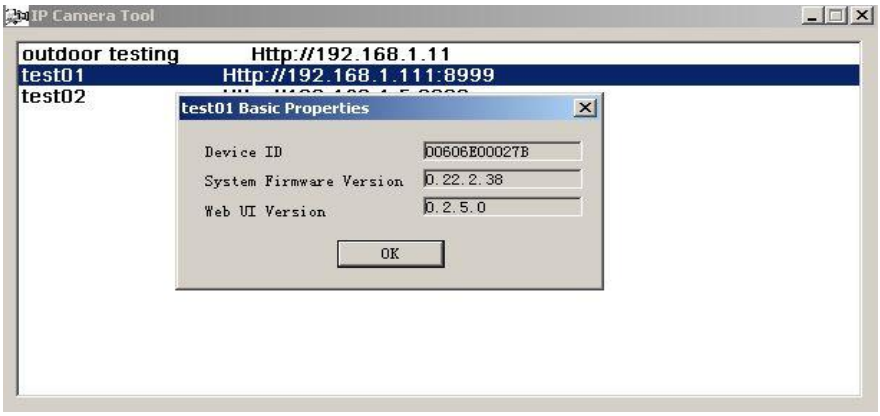


Figure 2.1

Network Configuration

In this page, you can configure the Network parameter.

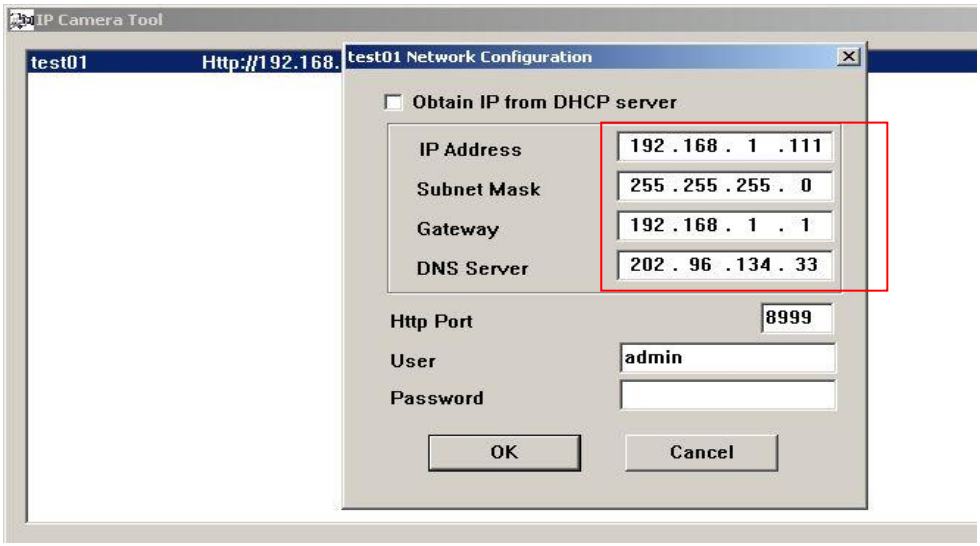


Figure 2.2

IP address: Fill in the IP address assigned and make sure it is in the same subnet as the gateway.(i.e.the first three sections are the same)

Mask: The default subnet mask of the equipment is: 255.255.255.0

Gateway: Make sure it is in the same subnet with PC IP address. Default Gateway address is 192.168.1.1

DNS: IP address of IPS network provider.

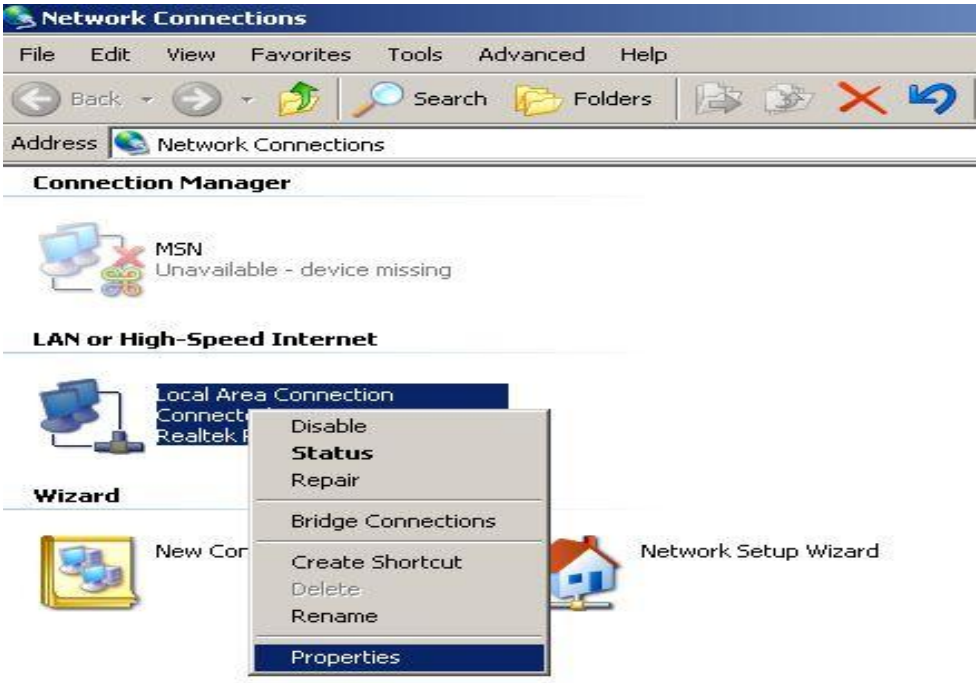


Figure 2.3

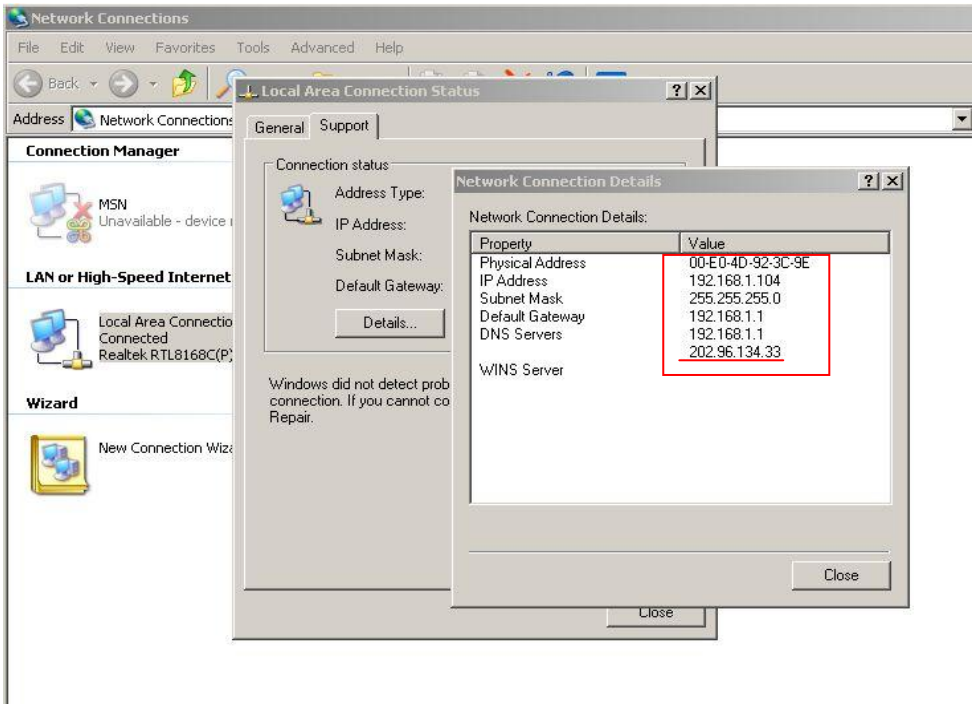


Figure 2.4

Port: LAN port assigned for the equipment, usually 80

User & Password : Default administrator username/password: admin/No password

Enable **Using DHCP** the system will assign a reasonable IP address for your equipment only if your gateway supports DHCP (It is the case with most gateways).

DHCP checkbox: if checked, the device will obtain IP from DHCP server (To be make sure the Router which the device connect with has DHCP function).

NOTE: when the prompt ”subnet doesn’t match, double click to change!”, please set the IP Camera IP address once again.

- **Upgrade Firmware**

Enter the correct User and Password to upgrade system Firmware and Web UI.

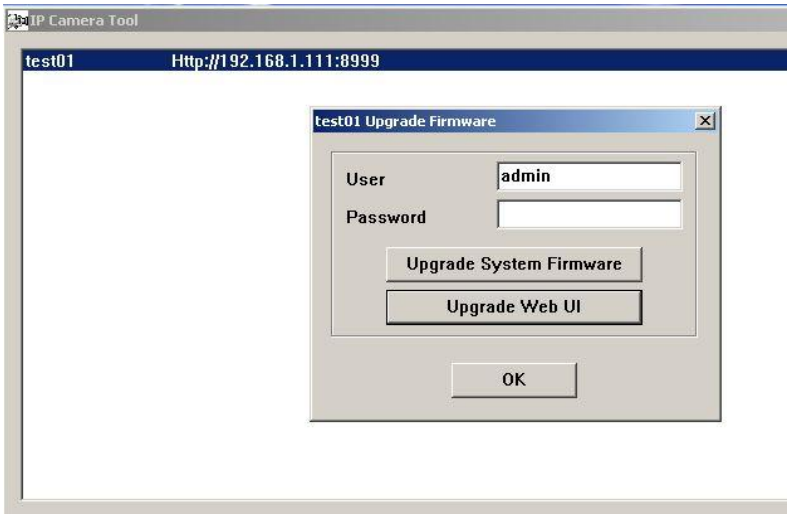


Figure 2.5

- **Refresh Camera List**

Refresh camera list manually.

- **Flush Arp Buffer**

When cable network and wireless network of the device both are fixed IP address. There is a problem you may encounter is can search the camera IP but can’t open the camera web page.you may try to use flush arp buffer.

3.2 Camera Login

You can access the camera :

1.through **IP Camera Tool**

or **IE** directly.

Double click the IP address of the IP Camera listed(Figure 2.0).IE will be opened

automatically and display the camera login page.

2. Access the camera by IE browser directly, type in the camera's IP address. for example.

1)By IE browser as below:

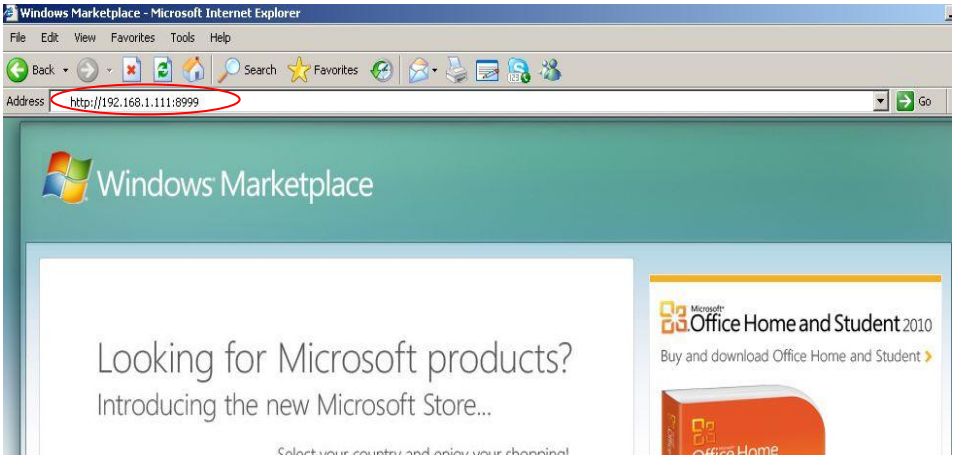


Figure 2.6

• The Camera Login page pop-up.

Figure 2.7

enter your account and password on the login page as shown in Figure 2.6. By default, administrator's username is: **admin** and no password.

Figure 2.8

Click “**Sign in**” to enter the monitoring page(Figure 2.8).You can set the username and password as Administrator, Operator or Visitor.

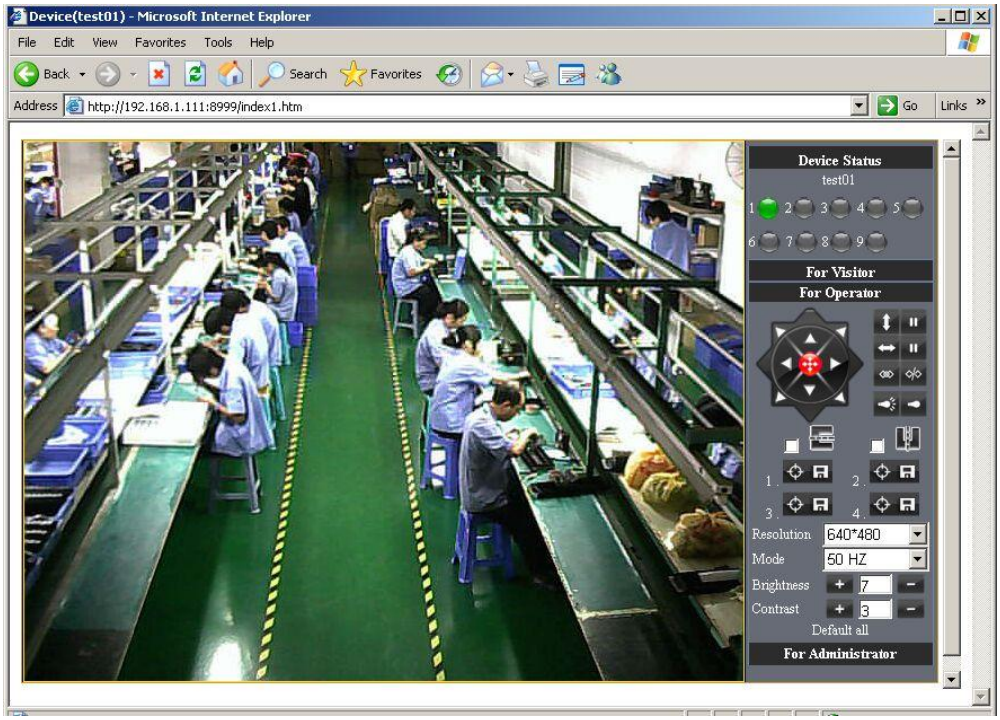


Figure 2.9

2） By Mozilla Firefox browser as below:

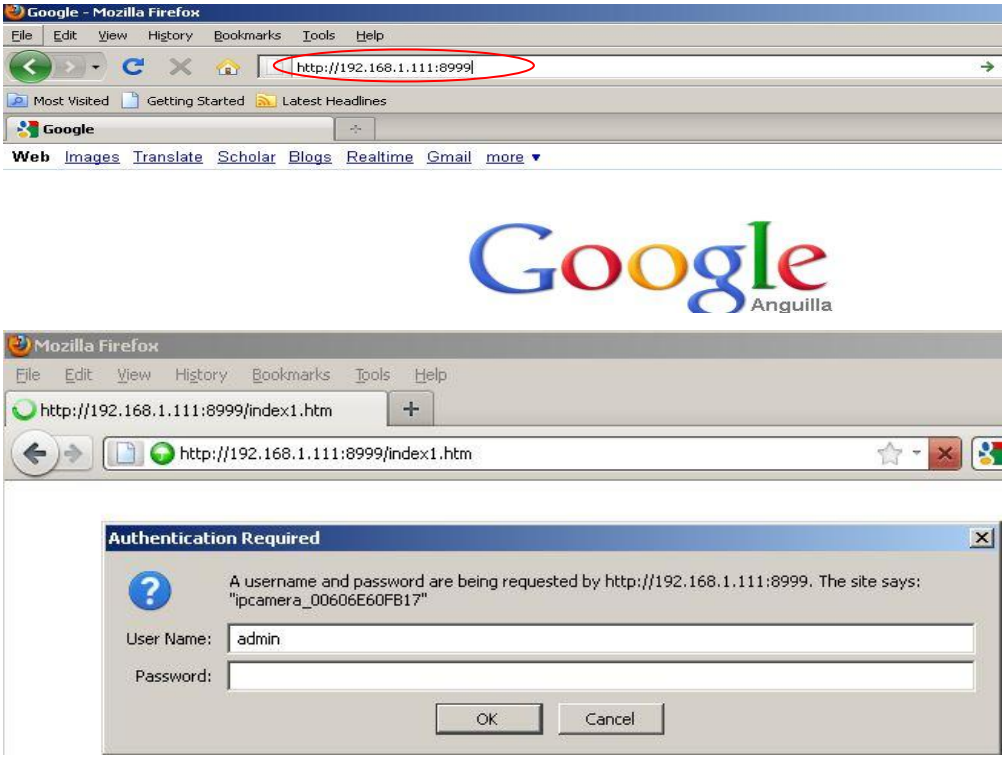


Figure 3.0

The Camera Login page pop-up.

Figure 3.1

Click **sign in,Server Push Mode's** functions are less than **ActiveX**

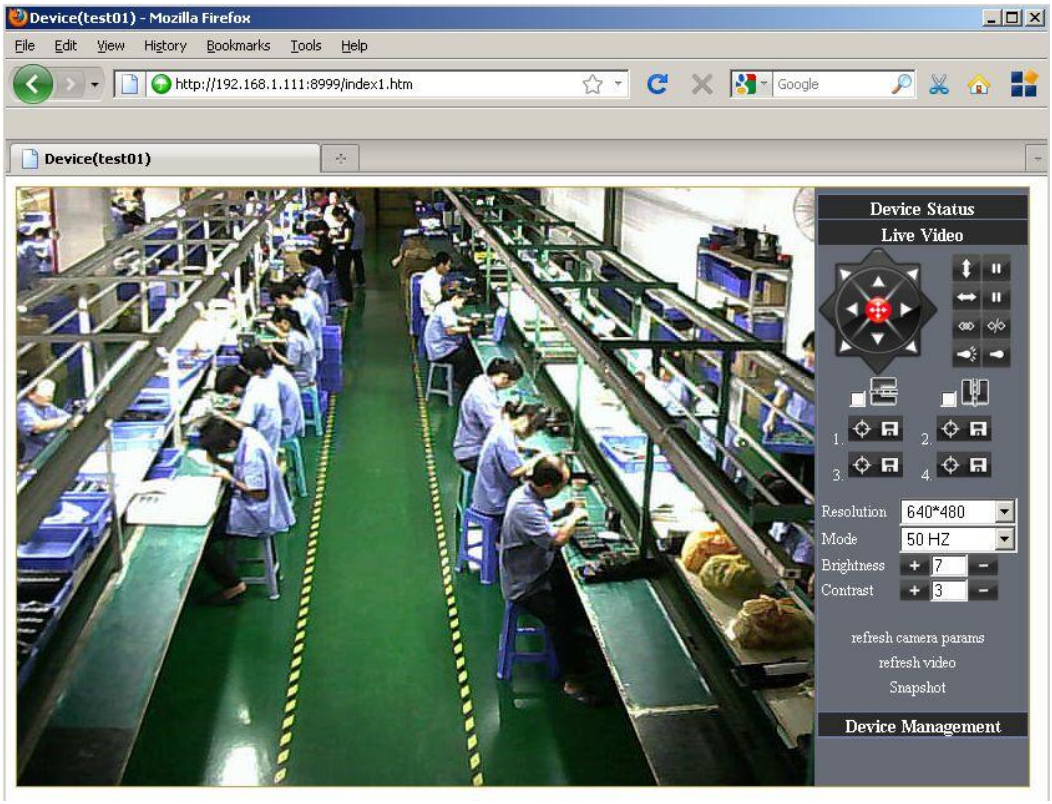


Figure 3.2

3）. with mobile phones equipped with special tools wap browser visit IPCAM with computer access similar as follows:

Popup equipment connect interface:

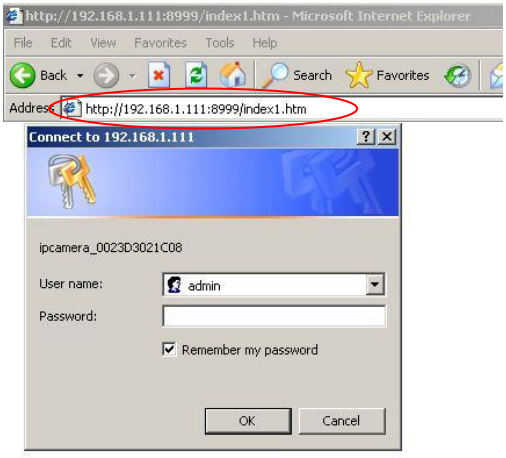


Figure3.3

Click **Sign in**

Figure 3.4

Also can browse ip camera by inputting ip address to browser:

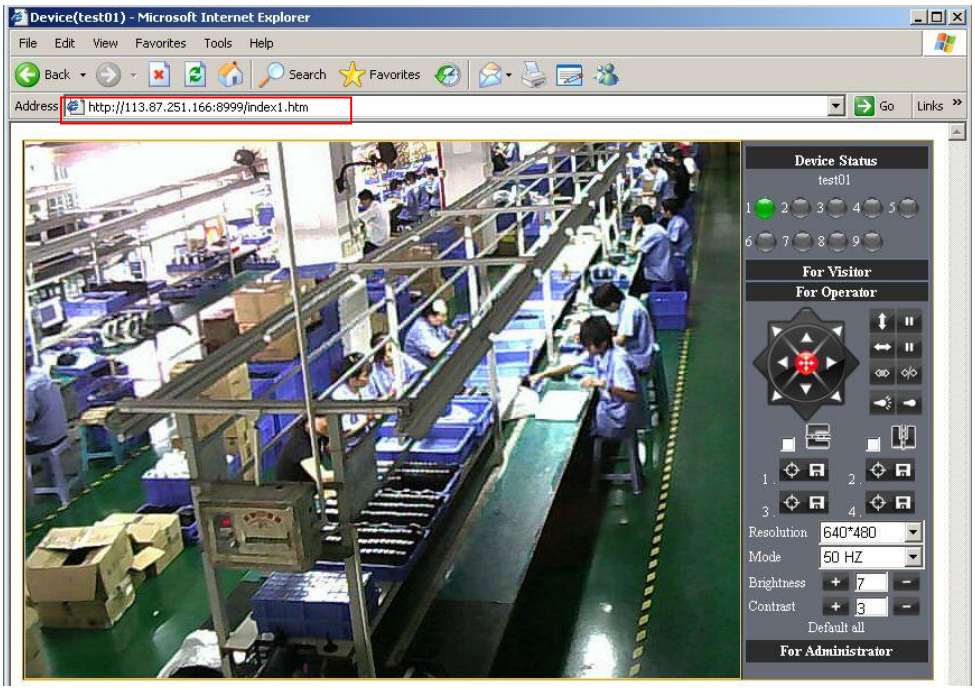


Figure 3.5

3.3 For Visitor

For example: if is bright ,the first route is on Detection(Motion Detection).

Figure 3.6

If you want to detect 4 views , need to click this ico .The first you should add more deivce.see details in **3.5.1 Multi-Device Settings.**

OSD: Display date and time on the video. You can disable the OSD function or choice other color.

(OSD:on-screen display)

Snapshot: Click ico to snap the picture.

REC: Click ico into REC mode, is stop.

Audio:Click ico into Audio mode, can listen the voice in monitoring range..

Talk: Click ico into Talk mode, Visitor can talk with whom is in the monitoring range.

Note:

the record file name is: ***device Alias_ Current time.Avi***

For example: *IPCAM_20081211134442.Avi*

It means the device alias is IPCAM and its record's end time is : At 13:44:42 on December 11, 2008.When use **motion detection** and checked **Send Mail on Alarm.** The name of the picture received in mailbox is like this: ***device id(Alias)_ Current time.jpg***

For example: *00606E576A02(IPCAM)_m20081216212745.jpg*

It means the device ID is 00606E576A02, the device alias is IPCAM and its picture's time is : At 21:27:45 on December 16, 2008

3.4 For operator

When login as operator or administrator,you can enter the **For Operator.**

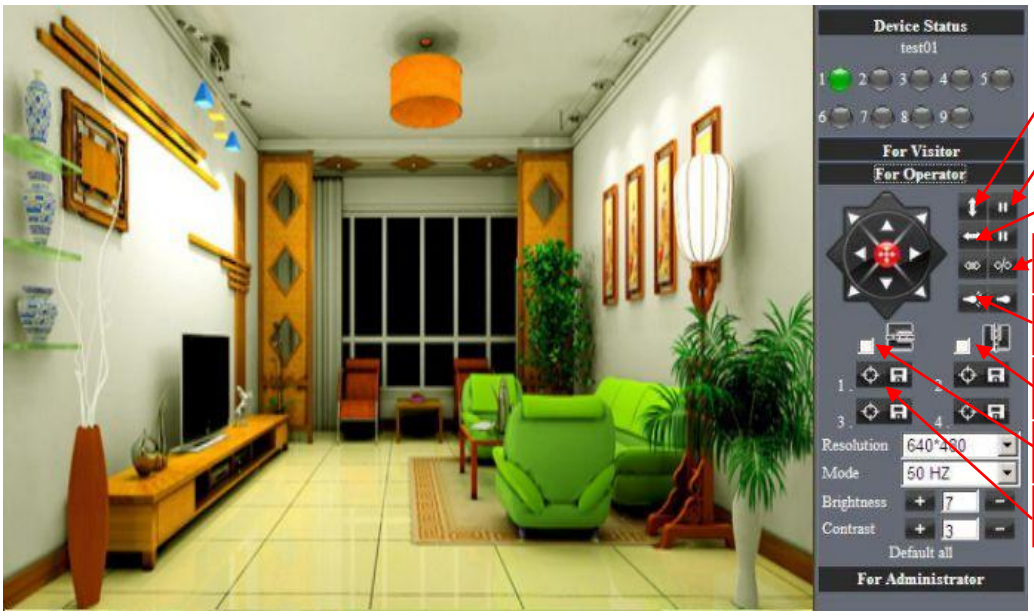


Figure 3.7

Direction control: click the different arrow will get different direction view.

Vertical patrol

Horizontal patrol

Stop patrol

I/O output Switch on /off.(see 3..5.6 for more information)

Image fluctuation flip

Image around flip

Set Preset

Resolution: VGA（640 X 480）/ QVGA(320 X 240)

Mode: 50Hz/60Hz/Outdoor

- **color parameter：Click + or − can adjust brightness and contrast .**

3.5 For Administrator

When you login as administrator, "**For Administrator**" is enabled.

Device Info: You can find the information about Device ID,Firmware Version and Embeded Web UI Version.

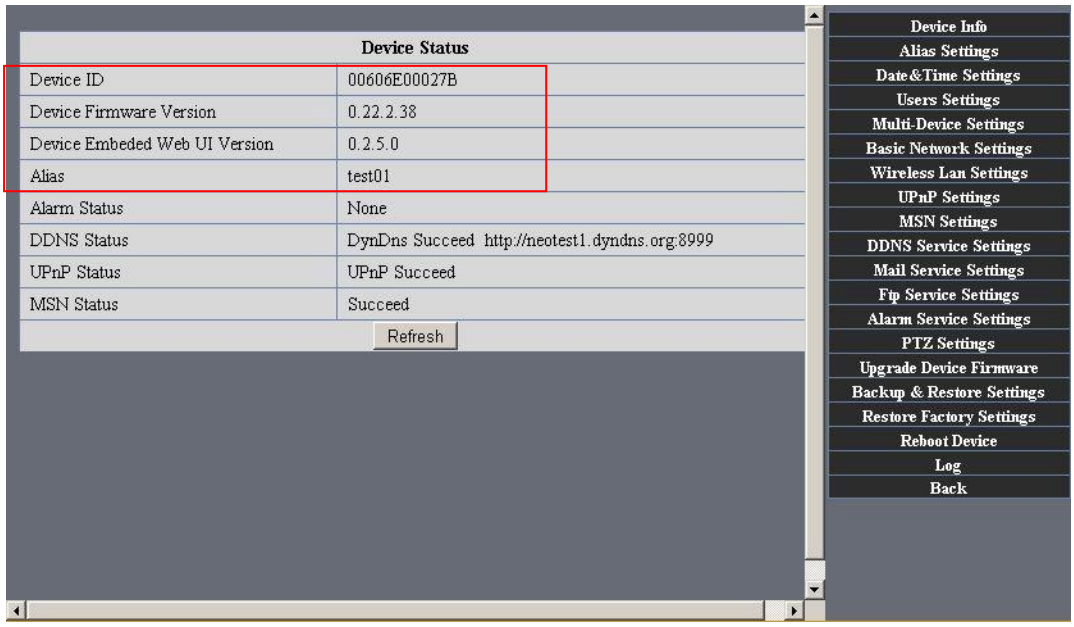


Figure3.8

Alias Settings: You can Input the new name as you like.

Data &Time Settings: Data &Time Settings page.

Users Settings: Eight accounts are acceptable for this system. Here the eight users can configure their user names and password as Administrator, Operator or Visitor.

- **Visitor:** In this mode, you can only view.
- **Operator:** You can control the direction of IP Camera and set some parameter.
- **Administrator:** You can setup the advanced configurations of the IP Camera.

UpnP Settings: If you access IP Camera, to be make sure **UpnP Status** is Succeed.

Upgrade Device Firmware: Upgrade Device Firmware and device embeded web UI software in this page.

Restore Factory Settings: Restore factory settings of the device.

Reboot Device: Reboot the device.

Back: Back to Monitoring Mode.

3.5.1 Multi-Device Settings

- Add cameras in LAN

In the Multi-Device Settings page, you can see all devices searched in LAN. The 1st Device is this device in default. You can add more cameras list in LAN for monitoring.

This Web software supports up to 4 IP Cameras online simultaneously. Click "**The 2ND Device**" and Double click the item in the "**Device List in LAN**", Alias、Host and Http Port will fill in automatically. Enter the correct username and password then click "**add**".Add more cameras in the same way.

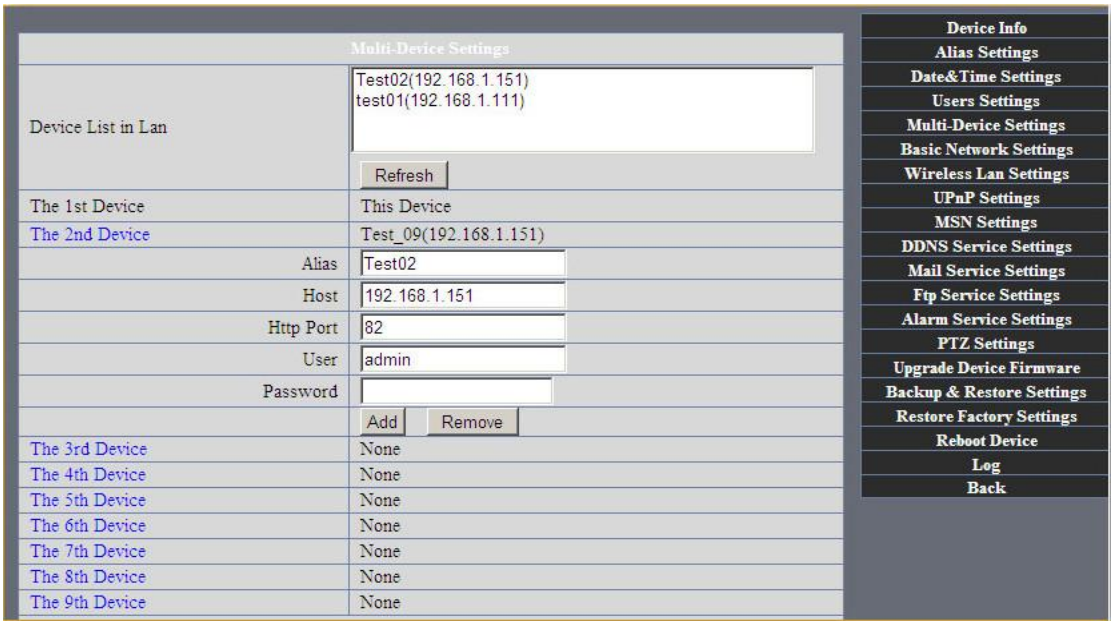


Figure3.9

- Add cameras in the Internet

Firstly, make sure the camera added can access in the Internet with the IP address or DDNS domain. Like this:http:/219.133.200.165: 83 or http://IPCAM.dyndns.org:9008 You can enter the **Host**: 219.133.200.165 **port**: 83 or **Host**: IPCAM.dyndns.org **port**: 81.Enter the correct username and password then click "**add**". Add more cameras in the same way as shown in Figure3.9

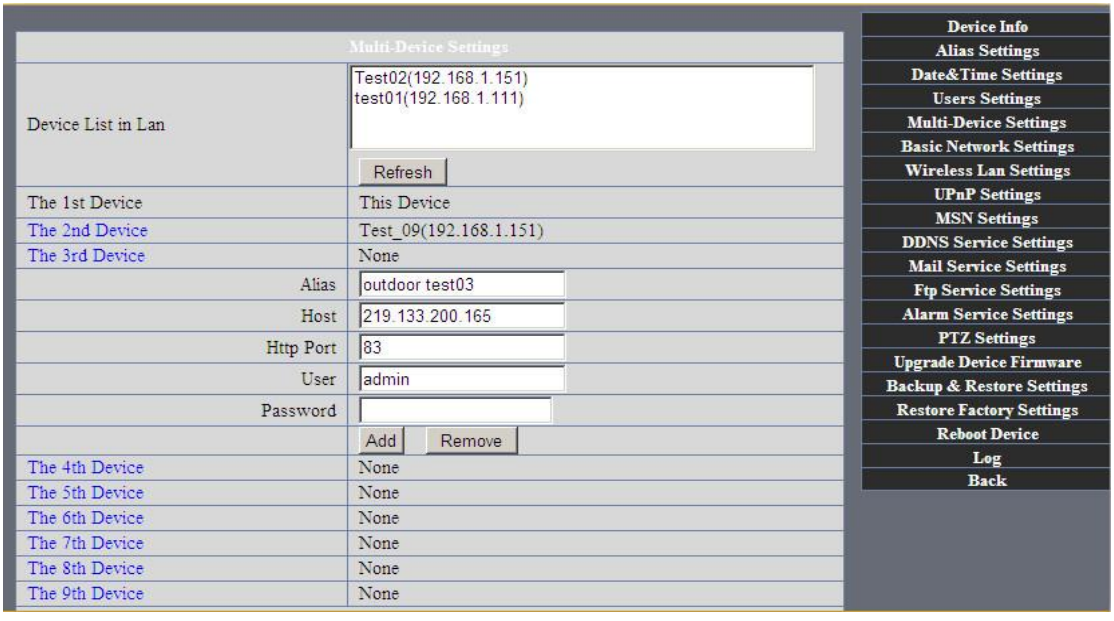


Figure4.0

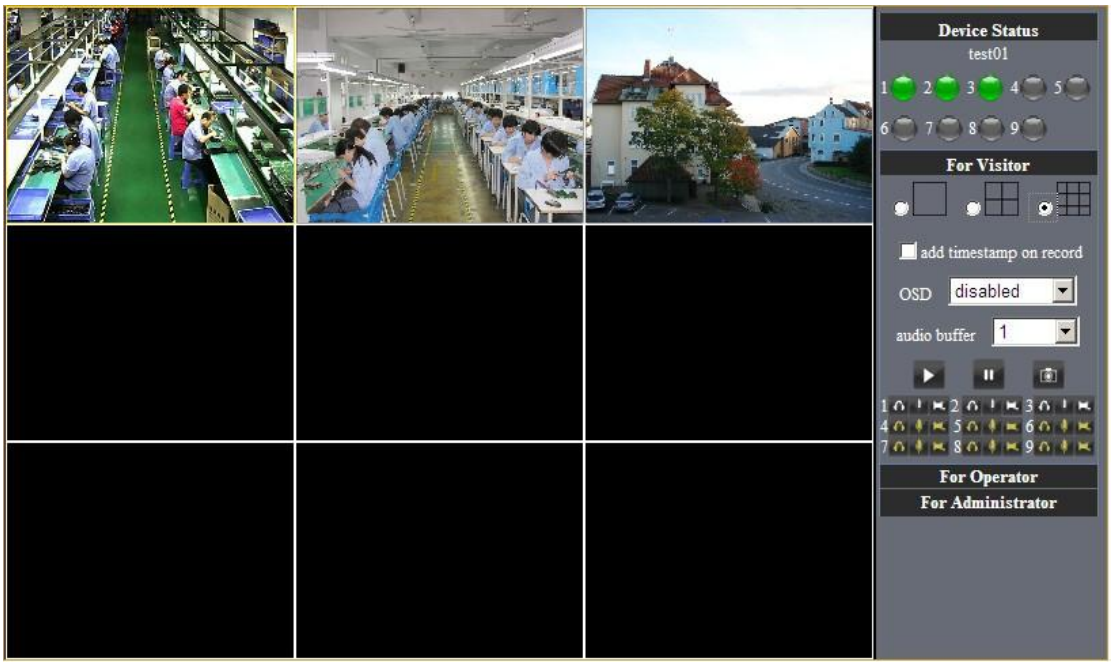


Figure4.1

3.5.2 Network Settings

- Basic Network Settings

If the router that the IP camera connect has DHCP function, you can choice “Obain IP from DHCP Server”else fill in the network parameters manually.

Http Port: In most cases, you can leave this value as 80, however, if your Internet Service Provider blocks this port, you may switch to another port number such as 8999.

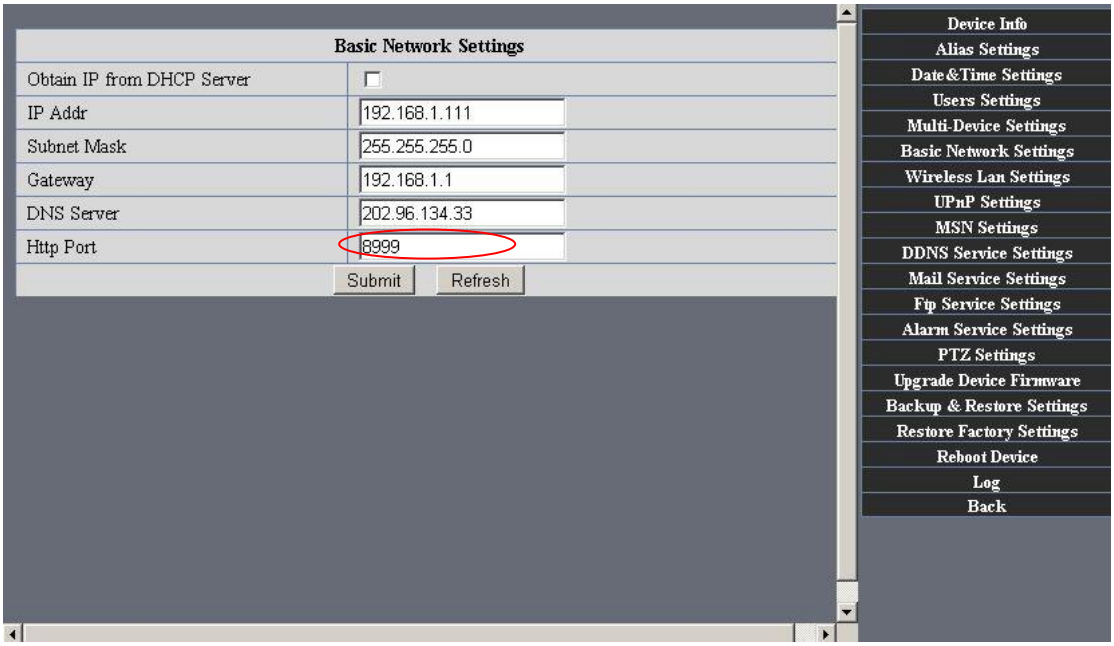


Figure4.2

- Wireless LAN Settings

1) Please enter the wireless net setting page of the wireless Router to find out SSID, Channel(less than 10), Encryption Authentication as below:

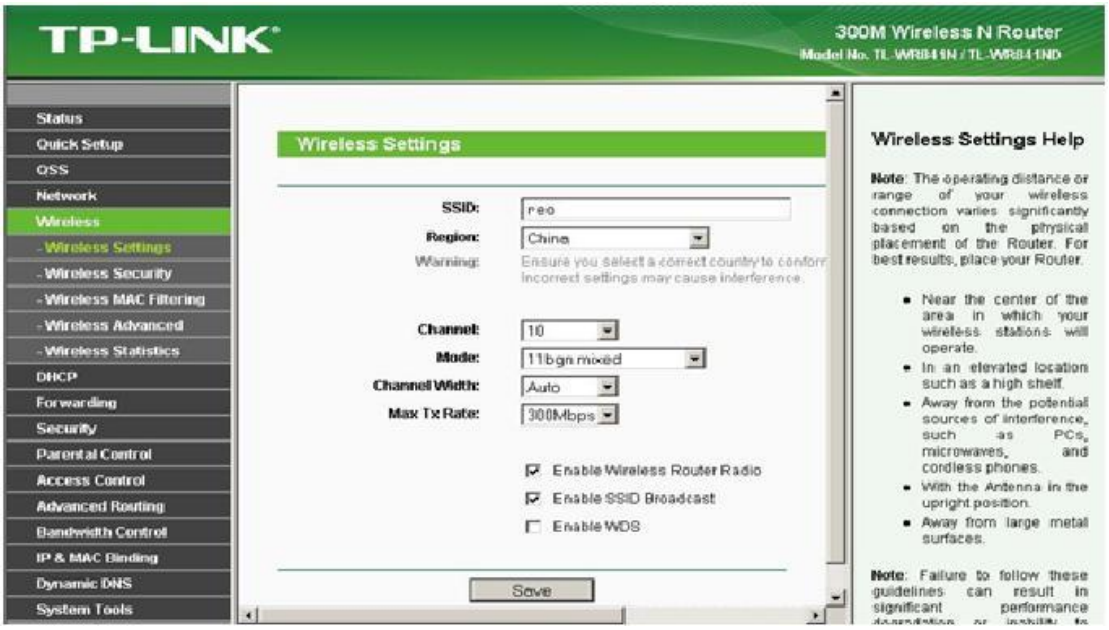


Figure 4.3

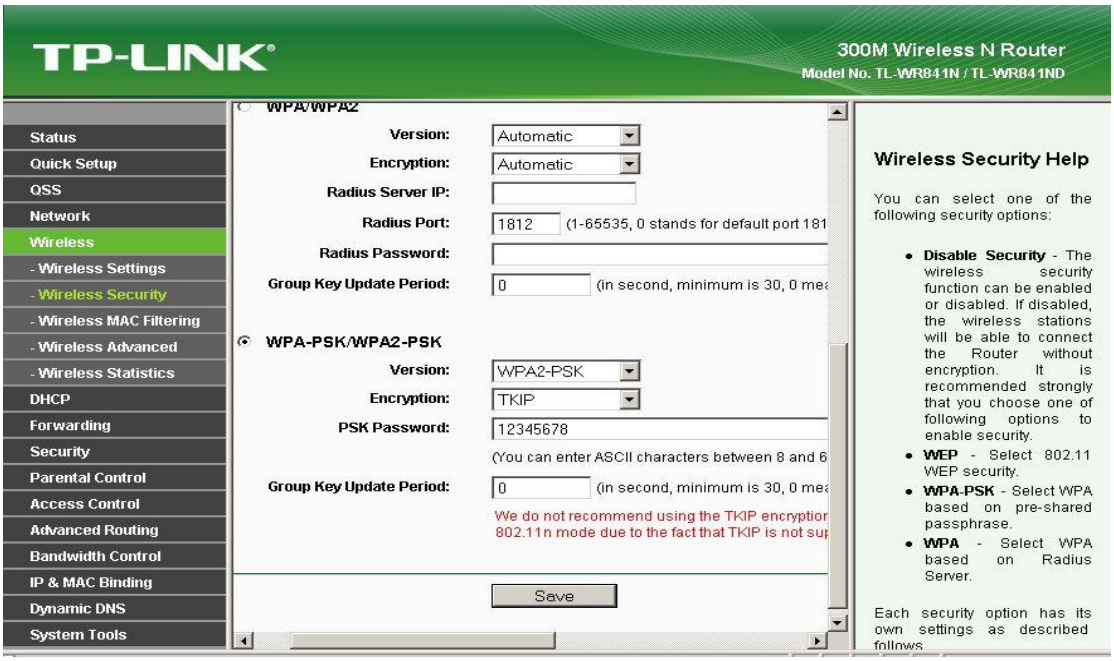


figure4.4

2) As Administrator to **Login** camera, open wireless LAN Settings page, fill in every setting(ensure keep the same as router's), and then pulled out of the cable, wireless network function can be used. For example: as shown in figure4.4

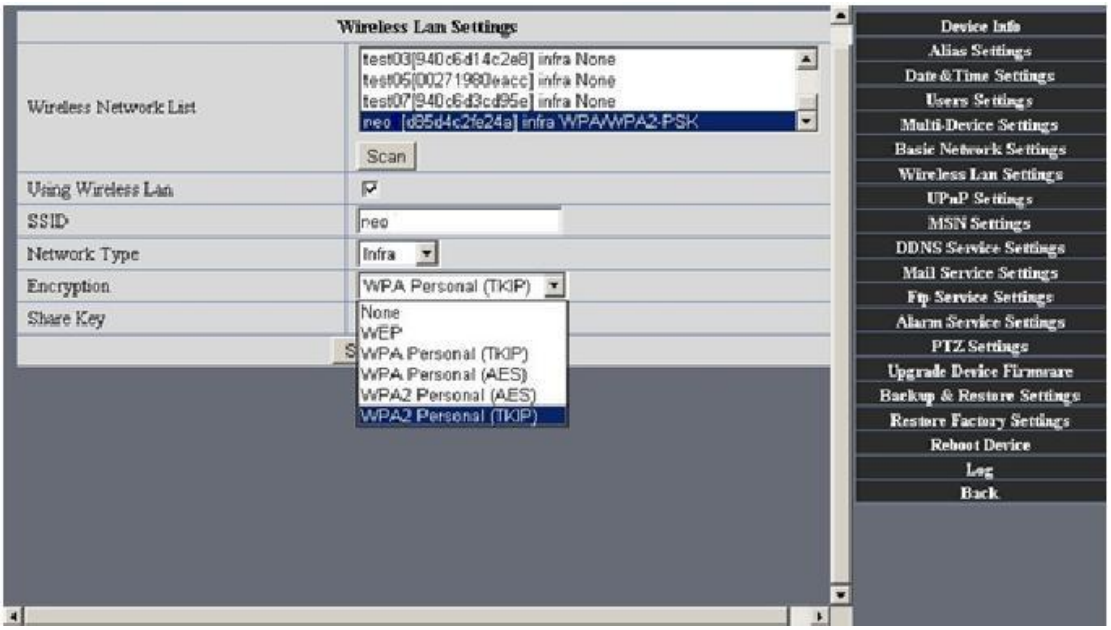


Figure4.5

- **Adhoc** point to point Wireless connection Setting

1）Open the basic network setting interface,check the device status

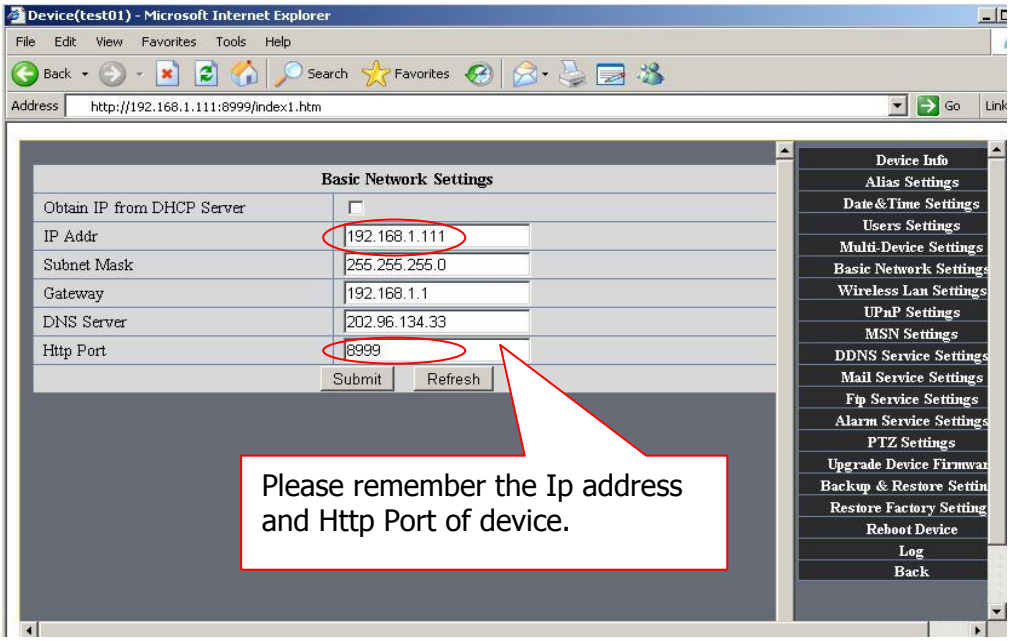


Figure4.6

2）Open the wireless lan setting interface, choose Adhoc for network type, you can define SSID such as 001

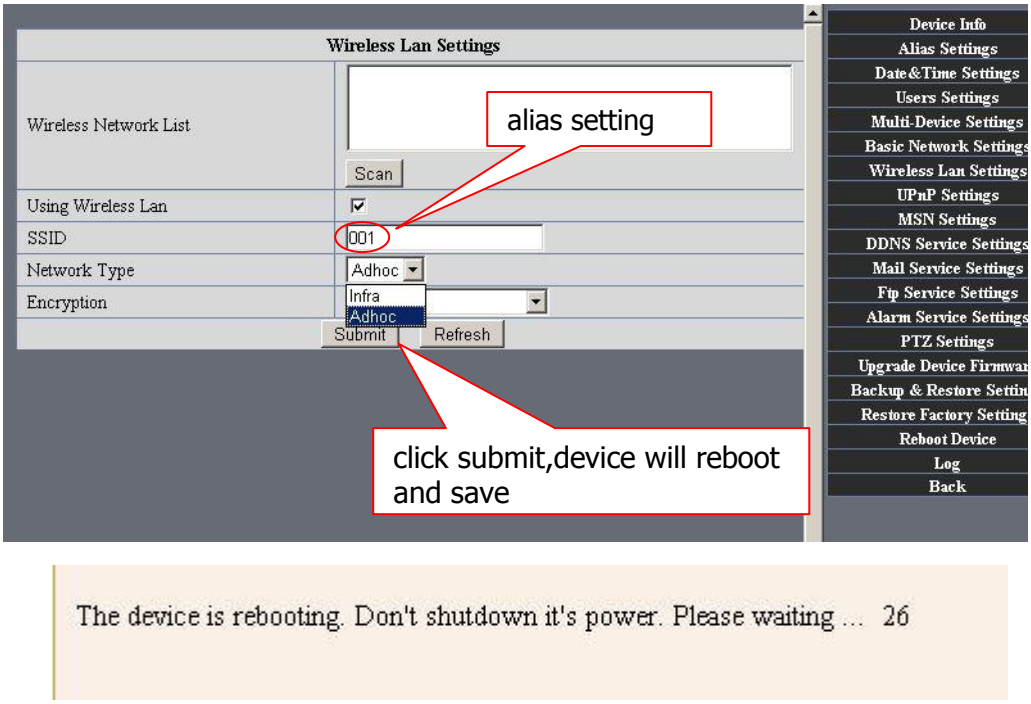


Figure4.7

3）Unplug the RJ45 from IP camera .Use laptop or other devices which are with wifi function(include smart phone,ipad and so on) searching the SSID you defined on proccess 2,then make a connection.

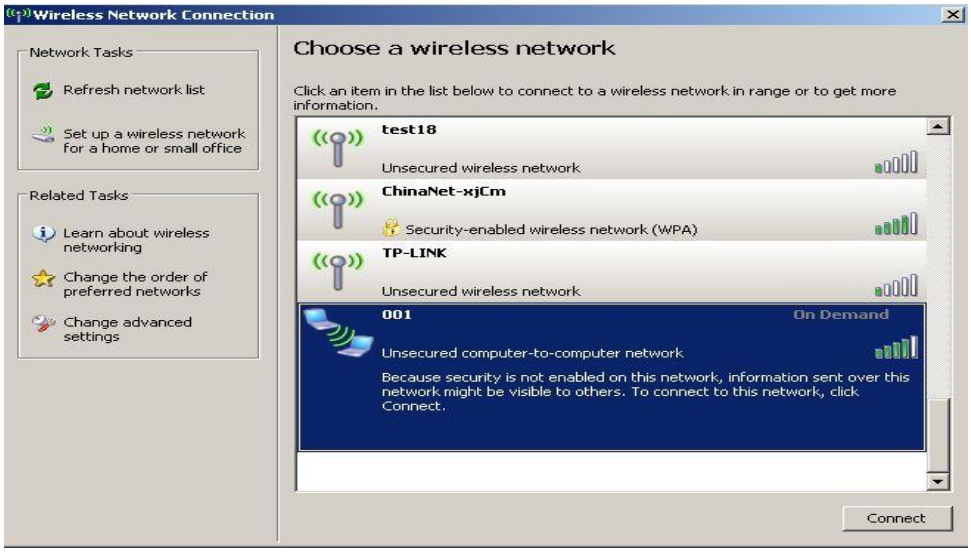


Figure4.8

- Click wireless network and check the link status of ip camera.Please note IP address of your connected laptop must be the subset of your ip camera .if not, please reset the ip address of your laptop manually.

Figure4.9

4）Now we can use the ip camera tool or enter ip address of camera derectly in browser blank to visit

1. visit by ip camera tool ：

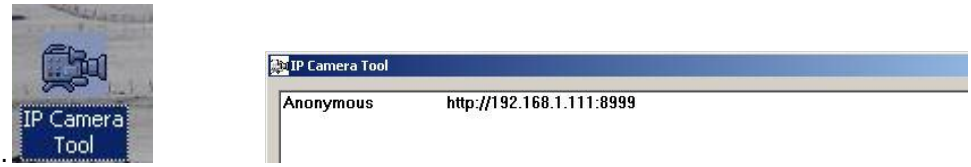
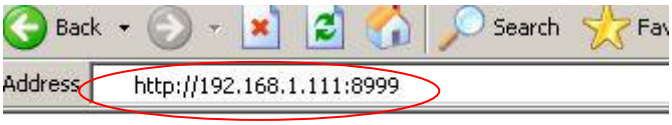


Figure5.0

2. Visit by ip address：



- Enter user name and password in the login interface

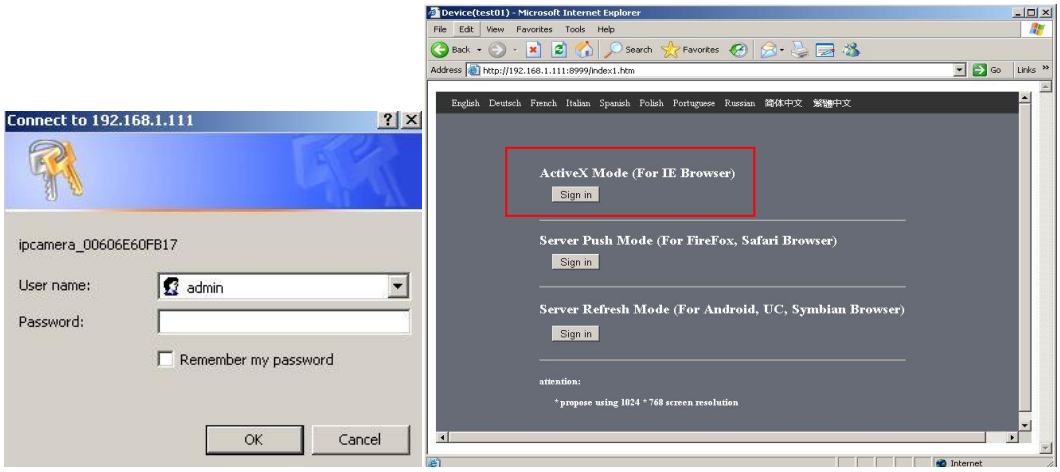


Figure5.1

- Click login to visit device .Scheme as bellow

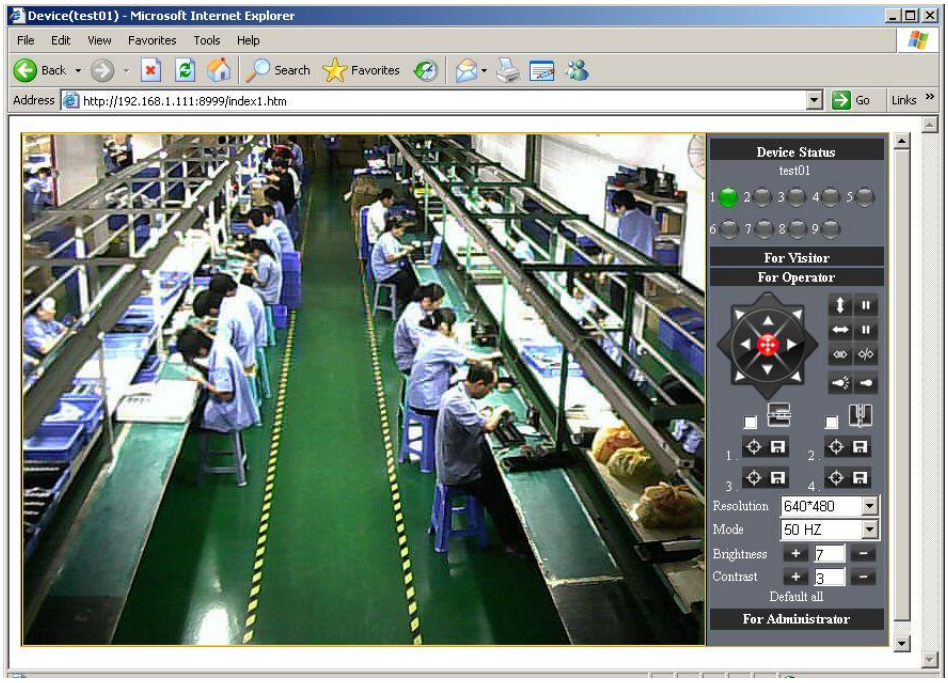


Figure5.2

- mobile phone ,ipad or other wireless device can also visit by entering the ip address of camera in browser blank

  • Enter ip address in the browser

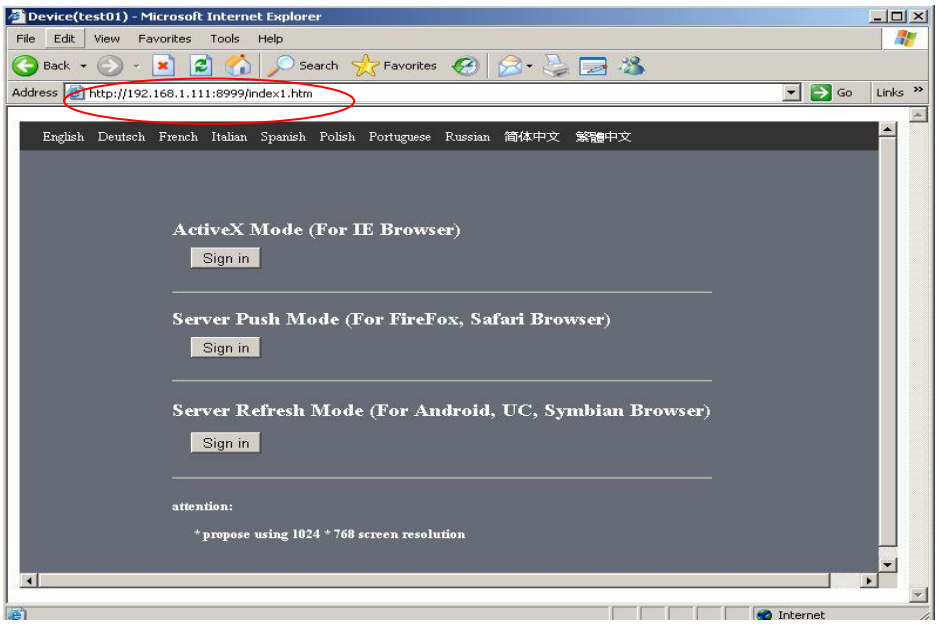


Figure5.3

• Enter user name and password in the login interface

• Click “Sign in” and visit

Figure 5.4

3.5.3 UpnP and MSN settings

1) UpnP setting:

If you wanna browse by Internet,you have to use UpnP to Map Port,check this function then click Submit button.

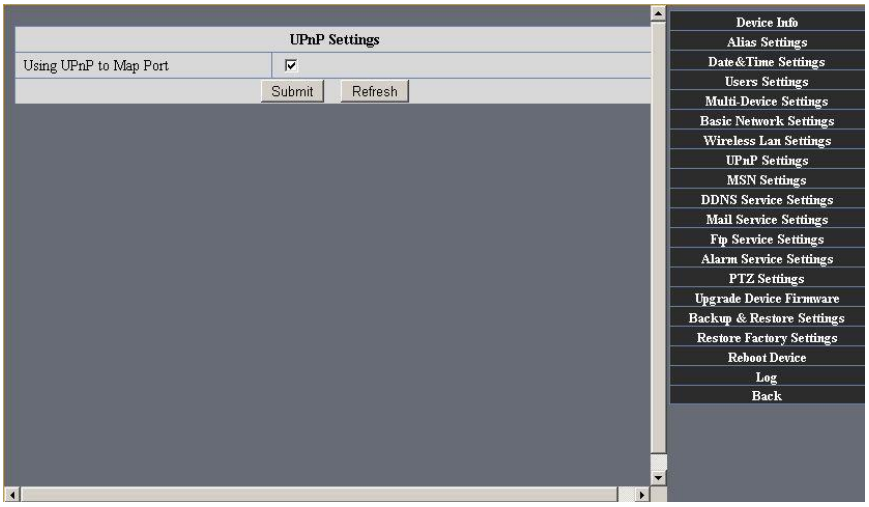


Figure 5.5

2) MSN Settings

Fill in your MSN account and password, then add account which need to receive IPCAM'S ip address to IPCAM'S MSN list (Figure 4.6),click submit then you'd better restart IP camera. After it ,login your MSN to add IPCAM's MSN account to MSN List that you can receive IPCAM's ip address.

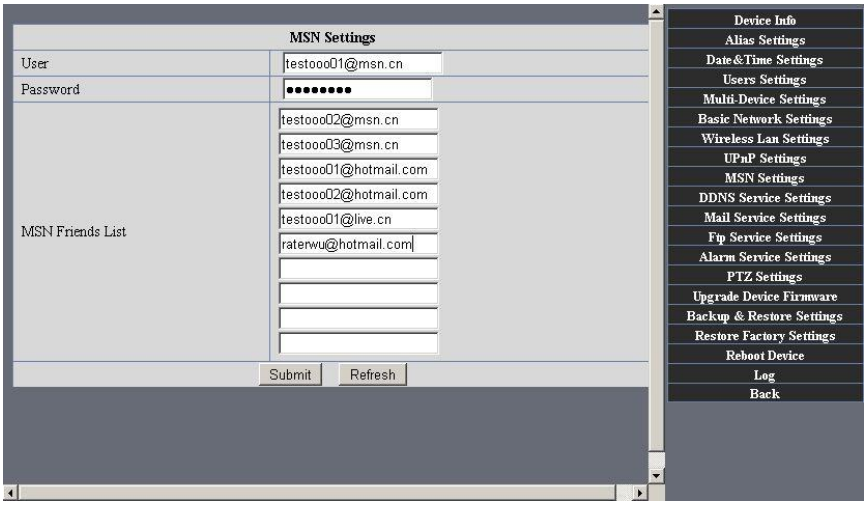


Figure5.6

First login and click "add contacts " choose Add Contact ,then fill IPCAM's MSN account in "instant messaging address" ,click next then send offers.

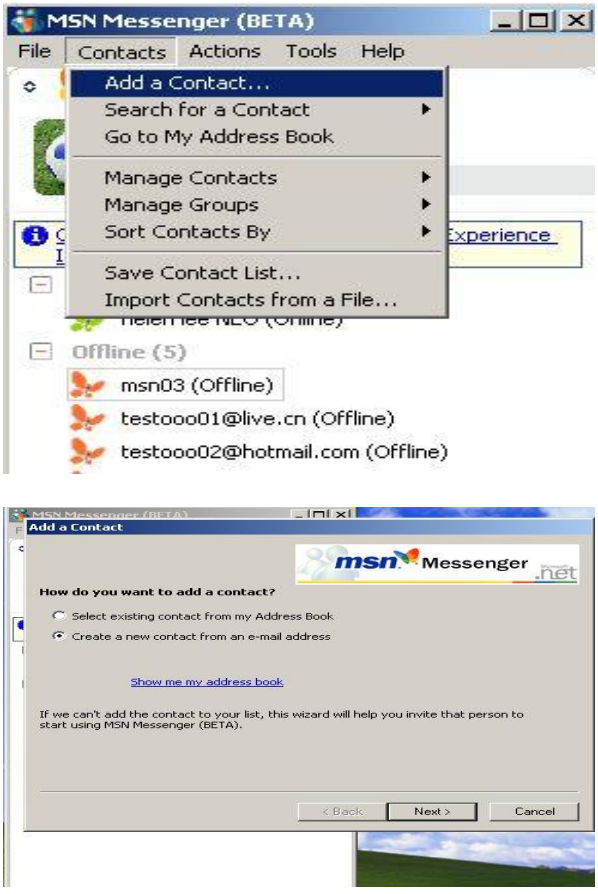
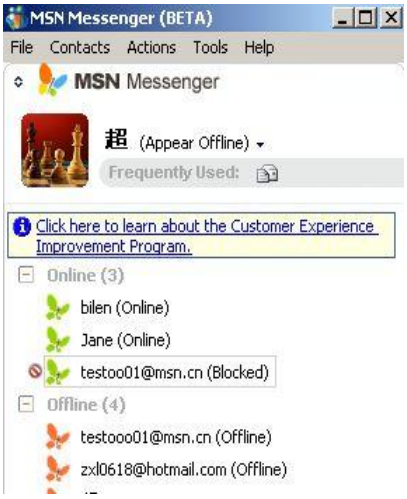


Figure5.7

Next：

Figure5.8



. Figure5.9

When IPCAM's MSN account shows online you can chat with it, input path command "url?" camera account will show its IP address in chatting box promptly as below :

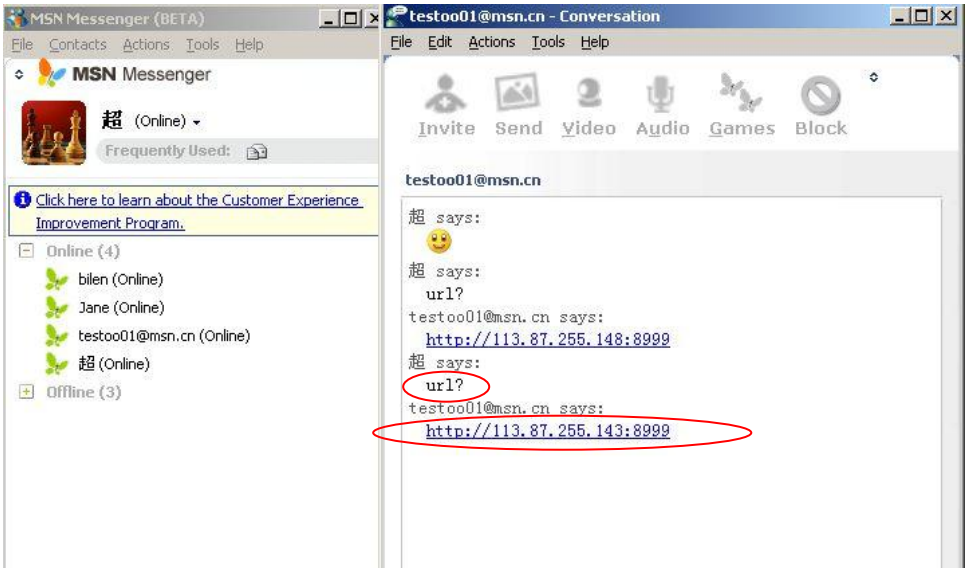


Figure6.0

You can input the IP address to browser then can browse ip camera as below:

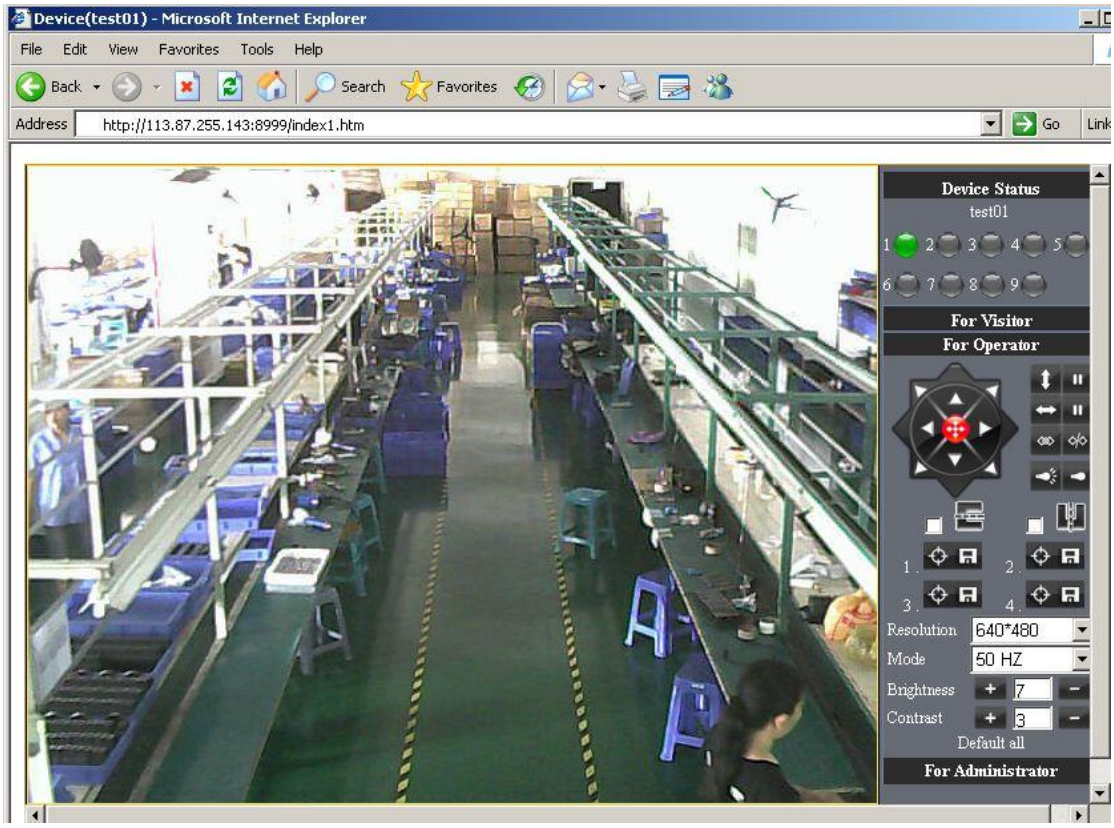


Figure 6.1

Attention:You should fill MSN account in IPCAM first.

3.5.4 DDNS Service Settings

DDNS Service: The system supports protocols from some DDNS providers: Dyndns.org. System support DDNS ,such as topipcam.org，peanut shell，3322.org，DynDNS provided IP.（manufacturer had aleady give every device a DDNS address,which is installed in device）

User and Password: the user name and password used when applying for the domain name. (details:4.5)

DDNS Host: the Domain Name

DDNS or Proxy Server: If you access the DDNS host through a proxy, you should input the Proxy IP.

DDNS or Proxy Port: Proxy Port

1）Device had distributed one DDNS to every product.which was sticked the bottom of the product. Such as：

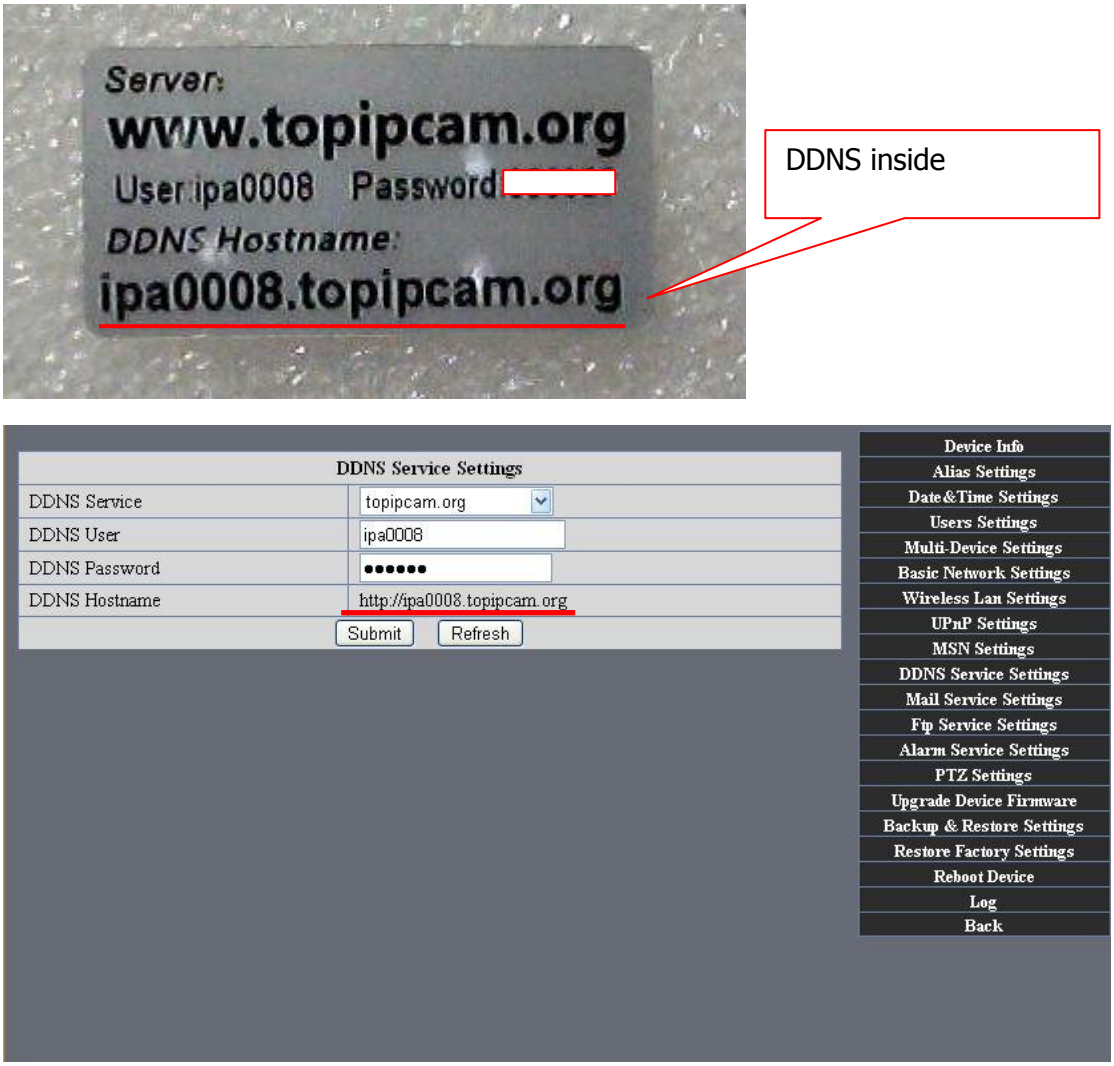


Figure 6.2

2）user who needed also can fill the DDNS they applied for by themself：

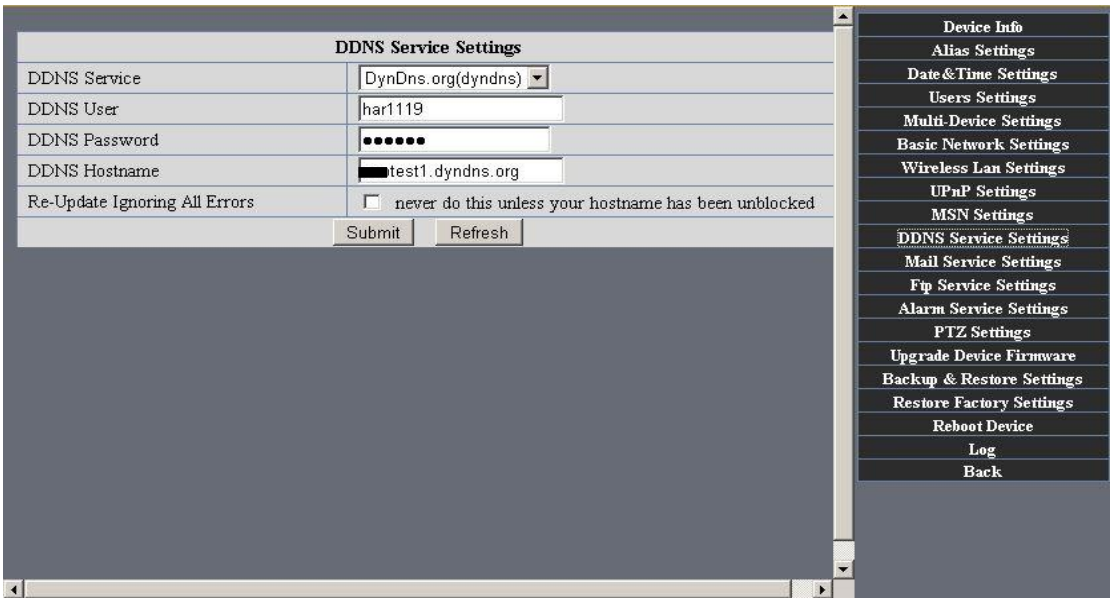


Figure 6.3

3.5.5 Mail and FTP Service

Note: When **Alarm Service Settings**—> **Send Mail on Alarm** is check, the Mail Service takes effect.

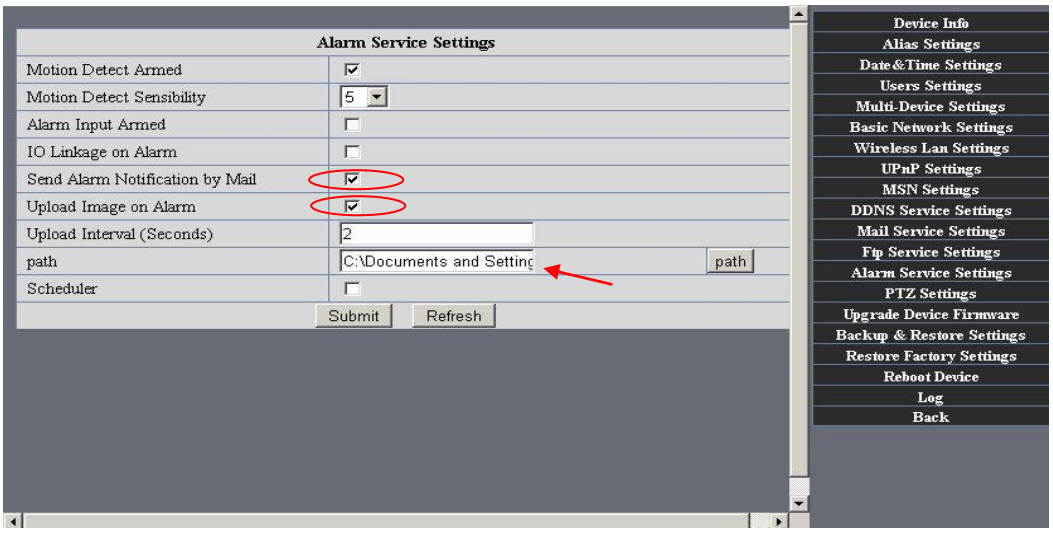


Figure 6.4

Configure the E-mail box to receive and send mails. The E-mail box is used for receiving the images sent after alarm and the system IP address after successful dial-up.

Sender: This device use the sender mailbox to send mails.

Receiver: To receive the mail from the Sender. You can set up to 4 receiver mailbox.

SMTP Server: the SMTP server for the sender mailbox

Need Authentication: if the sender mailbox need authentication, you should check it then input the SMTP username & Password.

Mail test: Please set the Mail parameter and click "Submit" first. There are Mail test result.

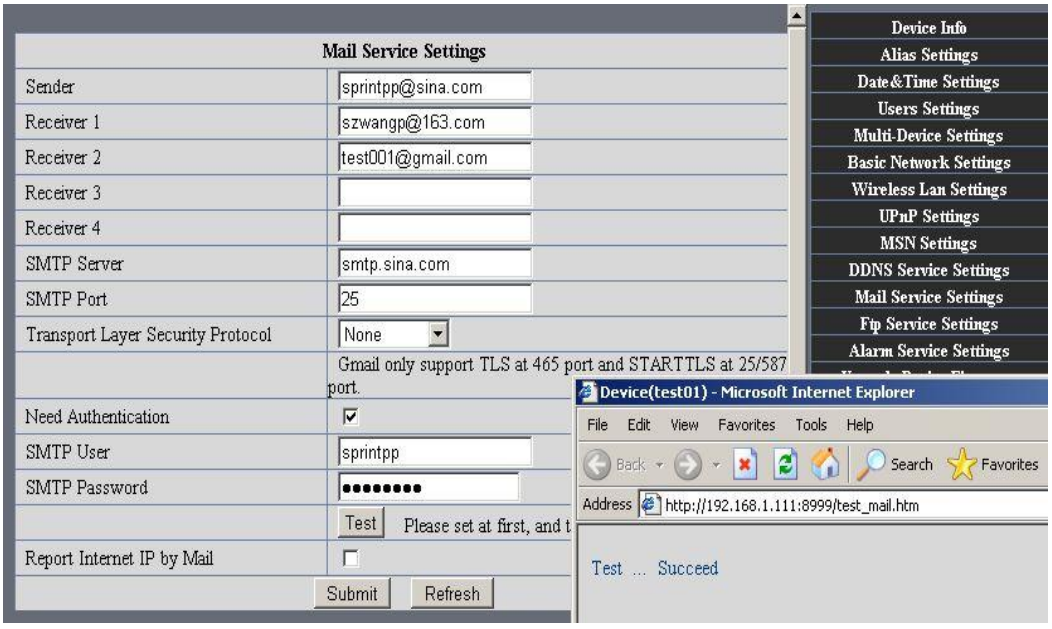


Figure 6.5

Gmail also set as the same:

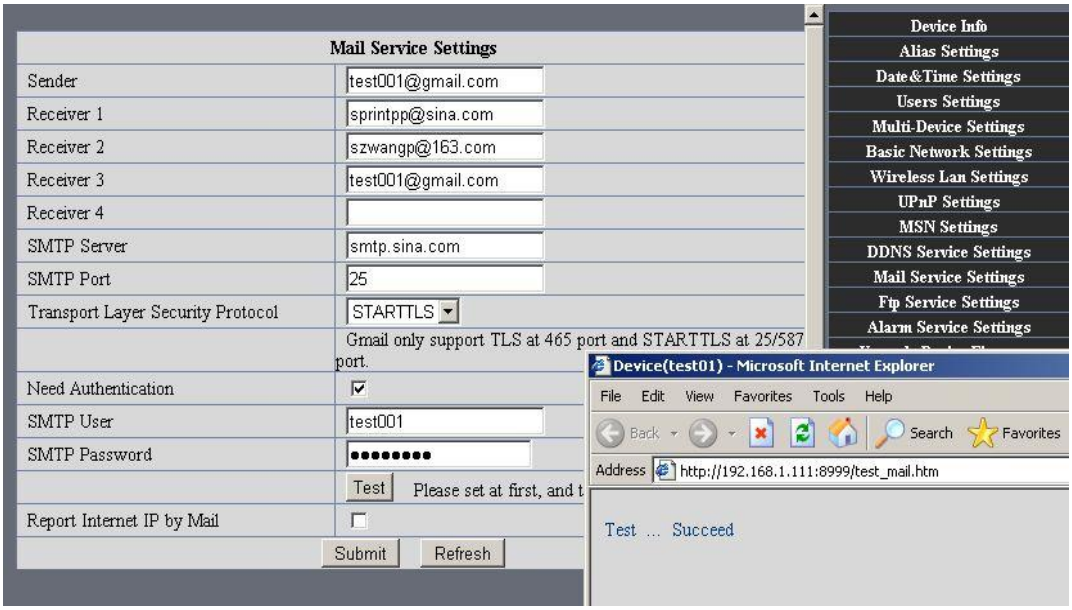


Figure6.6

1 Can not 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

Report Internet IP by Mail: When ipcam port or Internet IP changed, it will send the internet IP by mail.(for example: IPCAM 's url is http://119.123.207.96:9002). Make sure the port is map to the router correctly by UPNP or Virtual Map function.

2)FTP Server use and settings

If you already have an FTP Server （ipcam. com）and email ipcam ,you can fill the parameters as below:

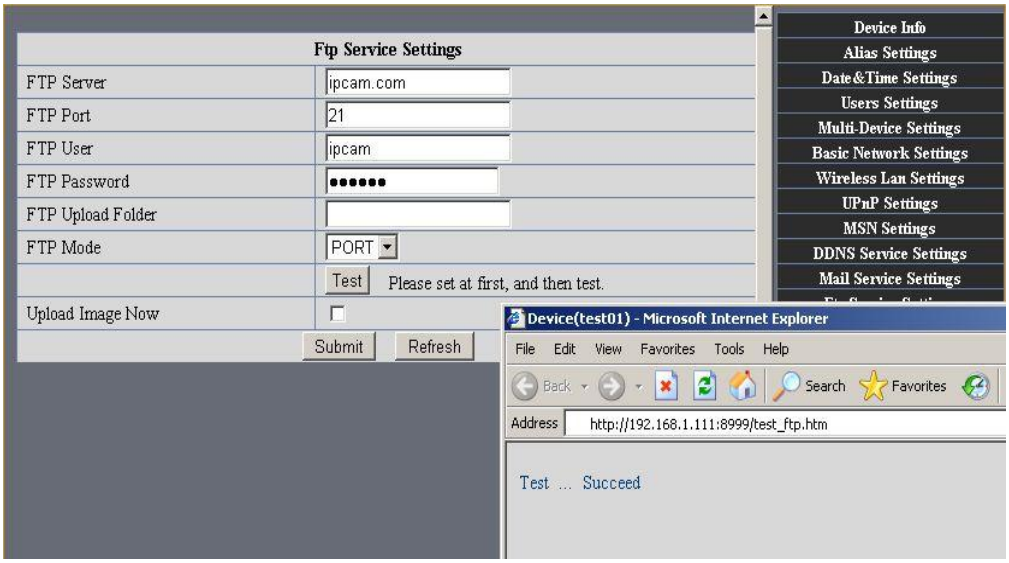


Figure 6.7

FTP Server of LAN as below:

1. Creat an account

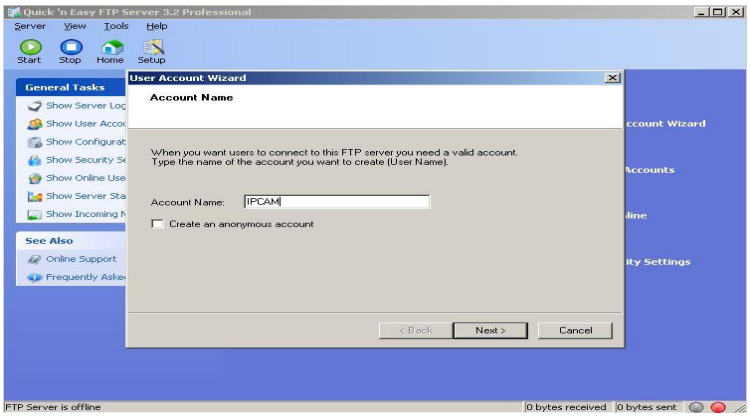


Figure 6.8

2. Step by step setting until finish it.

Figure 6.9

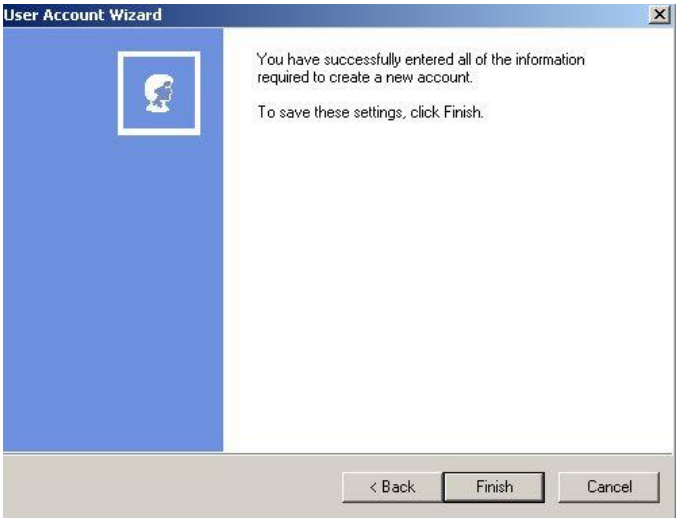
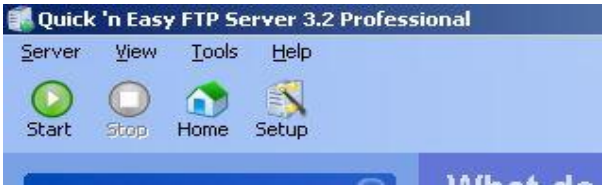


Figure7.0

3. Start Server



Continue to finish it

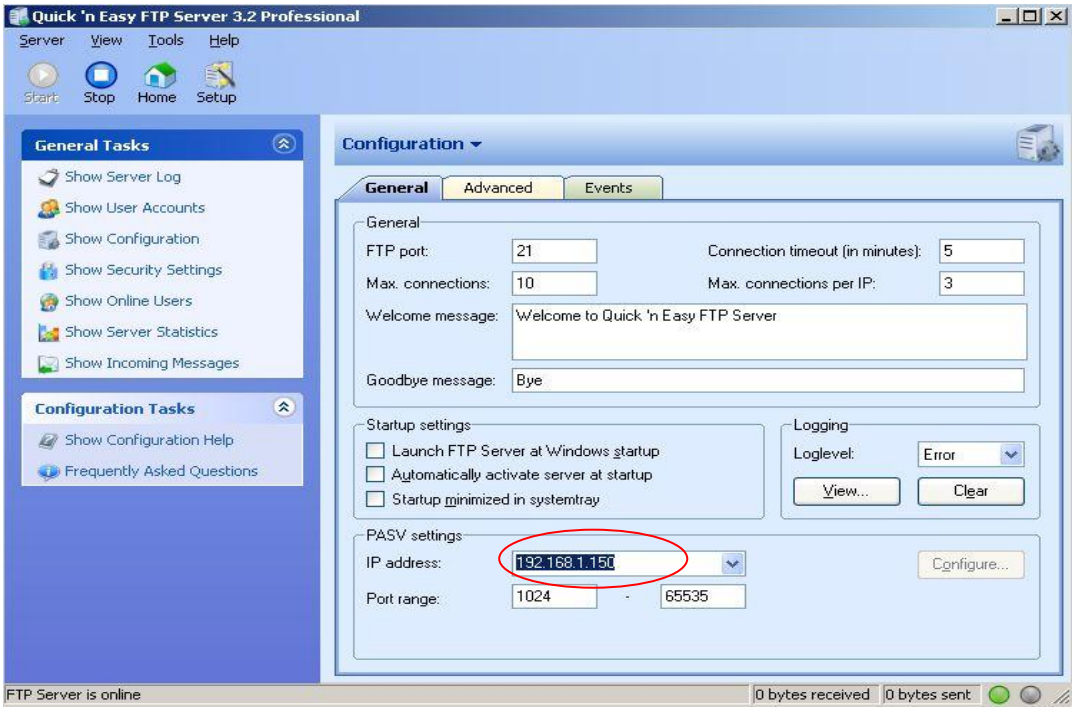


Figure7.1

4. IPCAM'S account can be used.

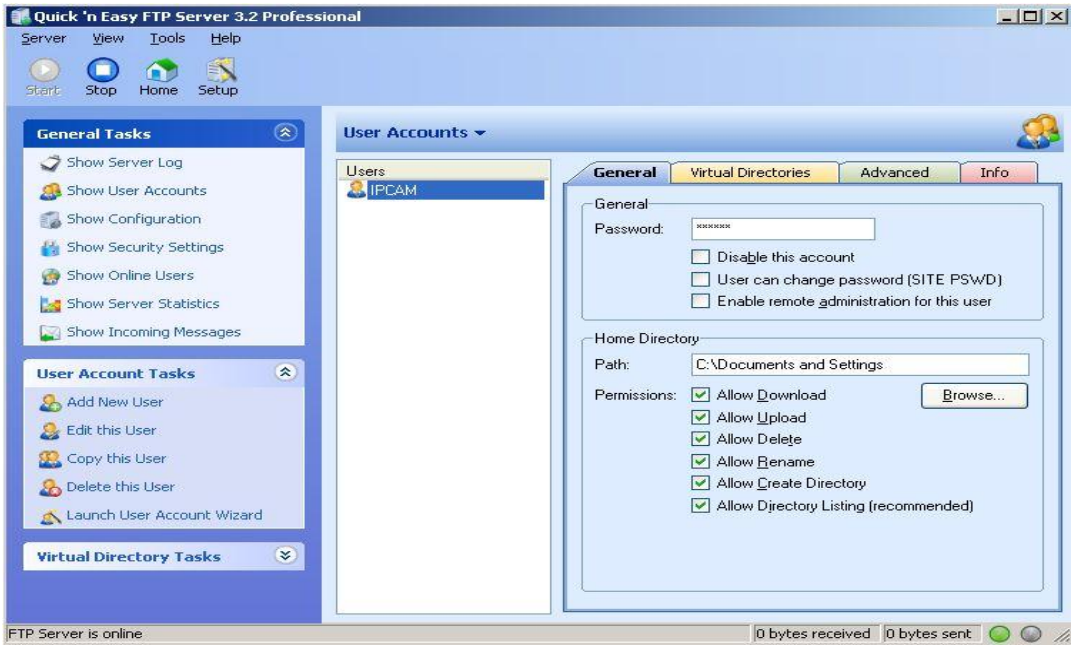


Figure 7.2

5. IP camera's FTP Server set

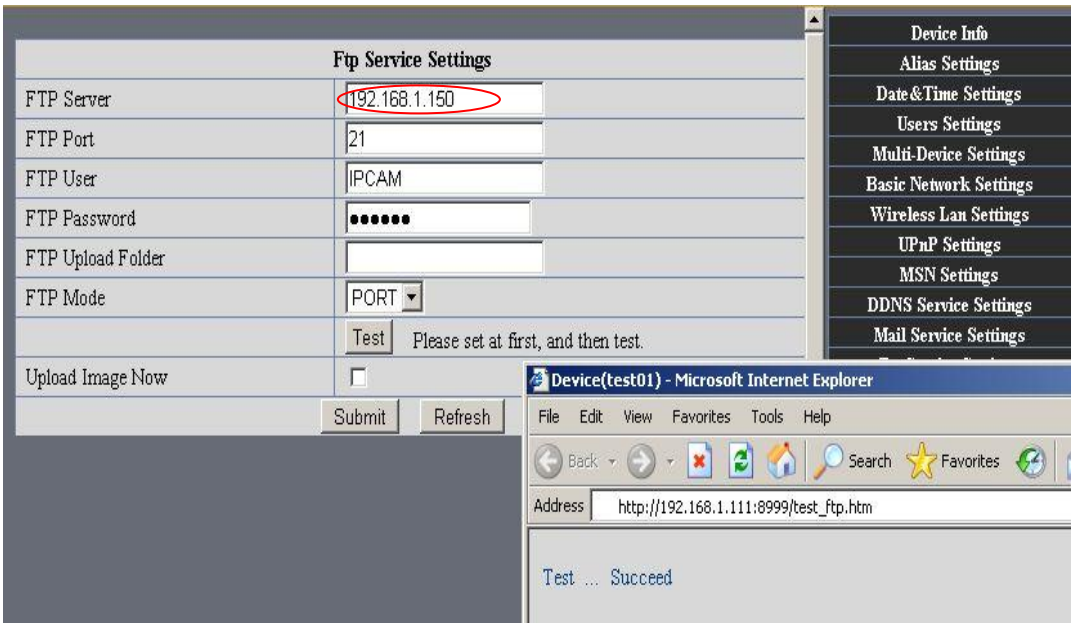


Figure7.3

6. Set up and complete testing is successful,when it alarms, IP camera will upload pictures to the FTP server Settings of main directory path (as shown)

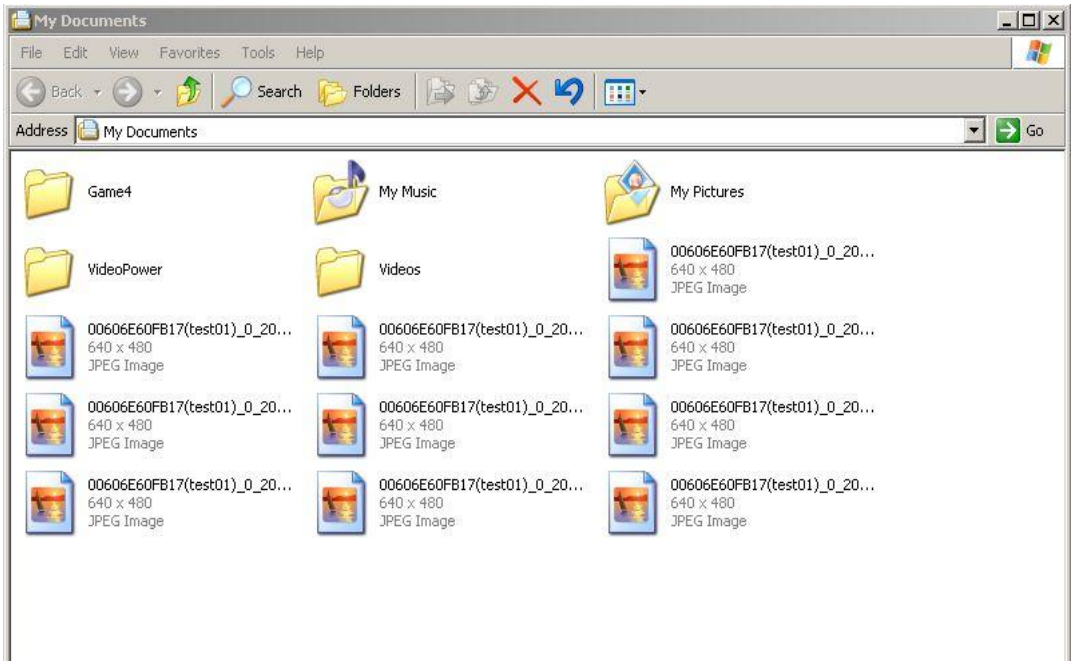


Figure7.4

FTP Server: the FTP server address.

FTP port: the port usually is 21

FTP Mode: support standard(POST) mode and passive(PASV) mode.

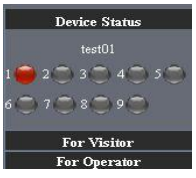
Upload Image Now: it will upload image now when checkbox is not checked. When checked, you can input upload interval(Seconds)

3.5.6 Motion Detection

Enter Alarm Service Settings page to configure Motion Detection function.

Motion Detect Armed

When you enable motion detect armed, the camera can be triggered to send email alerts and record images. In the camera monitoring page, the green icon turn to red and an alert sound you will hear,



Motion Detect Sensibility

you can choose High, Medium, Low

I/O PINS:1) Output(+5V) **2)** Output **3)** Alarm input **4)** Input (GND)

Alarm Input Armed

Input Pins: The input pins can be used for 1-way external sensor input. For example, you may connect a Person Infrared Sensor (PIR) to it for motion detection. When external sensor triggered, IPCAM can be programmed to send an email with picture or control the internal relay output.

If you link a external alarm with Pin3 and Pin4,when enable alarm input armed, external alarm is enabled.

IO Linkage on Alarm

Enable IO linkage on alarm,Pin1 will output +5V when alarm triggered, and output LOW when alarm release automatically.

Switch on/off buttons control Pin1 output manually.

Send Mail on Alarm

Sent picture and mail inform to customer's e-mail after alarmed.(firstly you should finish the Mail Service Settings.)

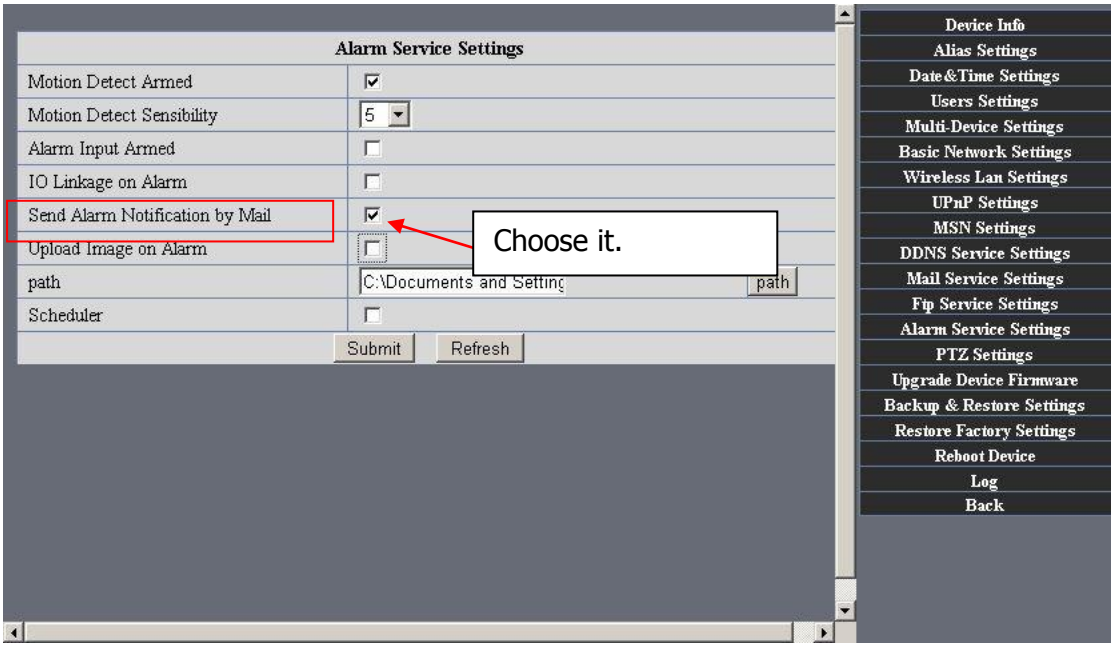


Figure7.5

Upload Image on Alarm

Enable upload image on alarm and set upload interval(Seconds).

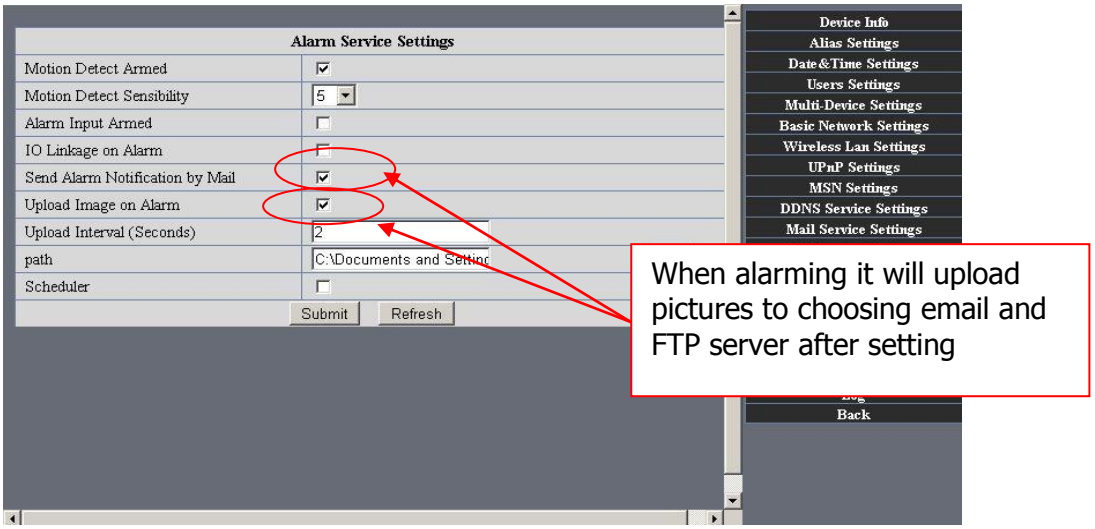


Figure7.6

REC automatically and save to PC

When you enable motion detect and open the camera monitoring page on the PC. If there is an alarm triggered, REC will start automatically for several seconds and save to the PC.

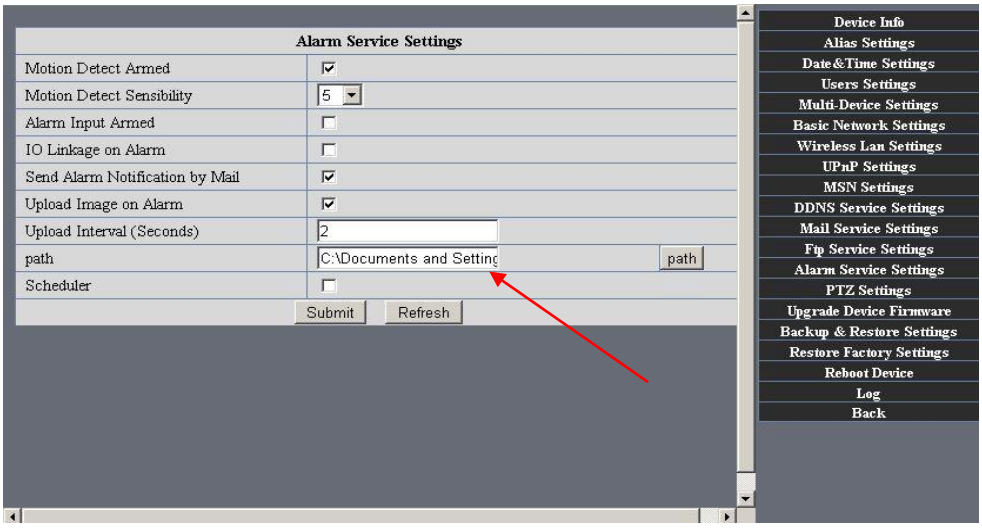


Figure7.7

REC save to pc's position

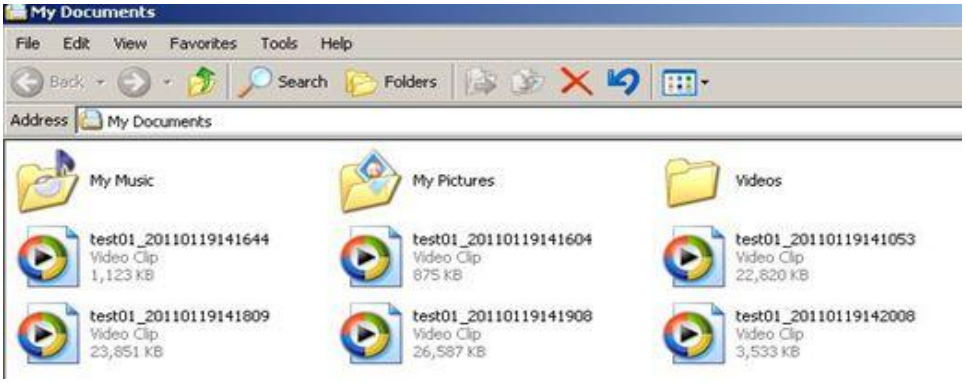


Figure7.8

4 HOW TO USE

4.1 Step by step to use

Follow the instructions below to get started after the Camera has been mounted properly.When the IP camera powered on, it will rotate itself and stop to the center.

1) Use Network cable connect IP Camera to LAN.

2) Enter **IP Camera Tool**

to set the basic configuration.(details: 3.1)

3) When IP address of the Camera listed in the Result Field of the **IP Camera Tool,** it means the basic configuration is completed.

4) set the safety property of IE in the PC when you view it first time.(details: 5.1.3)

5) Camera login(details:3.2)

6) Now you can use the IP Camera as Visitor, Operator or Administration in the LAN.

4.2 Setting Wi-Fi of IP Camera

1) To use the wireless functions of the IP Camera,a wireless router like linksys is required.

2) Enter the wireless router setup page(you may see the *wireless router user manual*).To Find out the **SSID, Channel(less than 10), Security Way**(NONE,WEP),**Authentication Type**,**encryption**.

3) Enter **Wireless LAN Settings** to input contents gotten from the wireless router then click **Submit** to reboot the device.

NOTE: This product only supports **WEP** encryption.

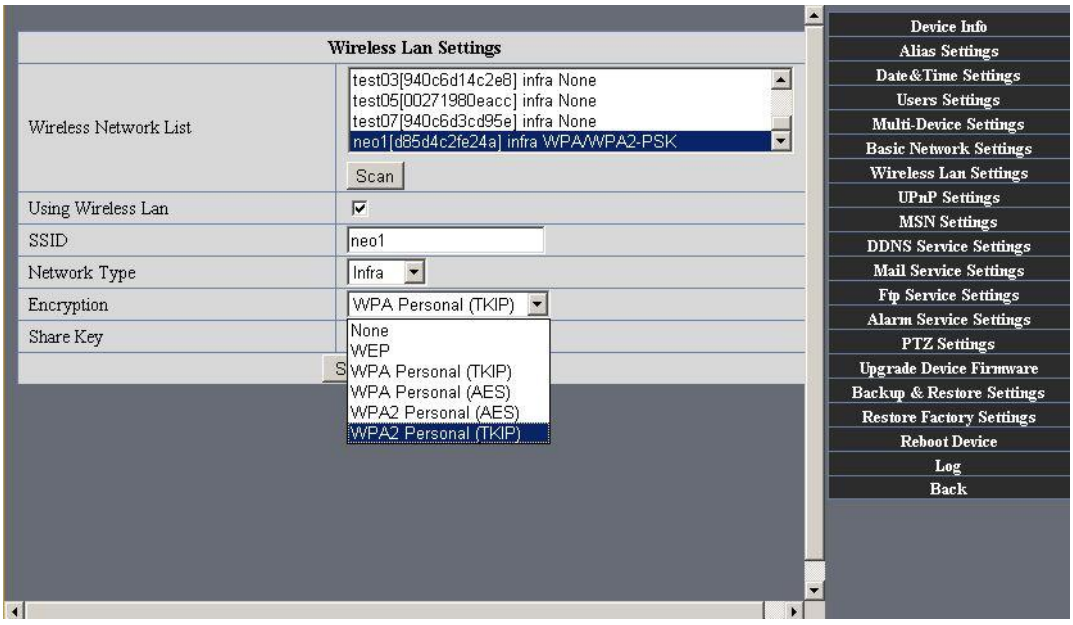


Figure7.9

4) Wait at least 30 seconds to unplug the ethernet cable, then unplug the power supply.

5) Plug the power supply making sure that the ethernet is not connected

6) After around 30 seconds, if the LED blinks ,it indicates it is working in wifi mode

7) Camera login.(details:3.2)

4.3 Using a router to access the Internet

Using a router to access the Internet by shared ADSL If a router is set for dial-up Internet access,it is not required to set ADSL dial-up account and password on the IP Camera.

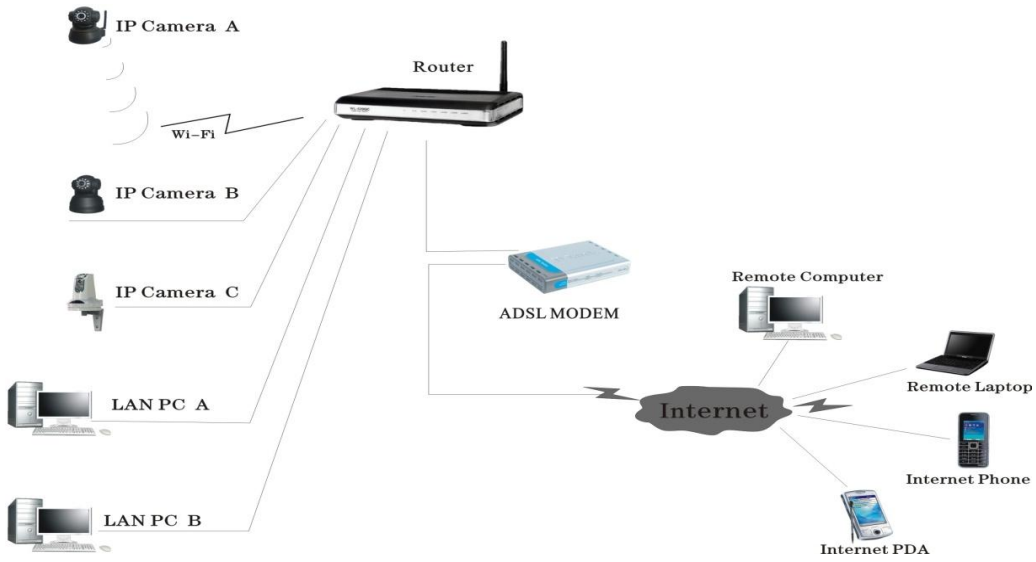


Figure8.0

1) Use Network cable connect IP Camera to the LAN.

2) Enter **IP Camera Tool** to set the basic configuration.(details:3.1)

3) login the Camera homepage as Administration

4) Enter **DDNS Settings Page** and ennable DDNS service.Click **<submit>** and the device will reboot.(detail:3.5.4)

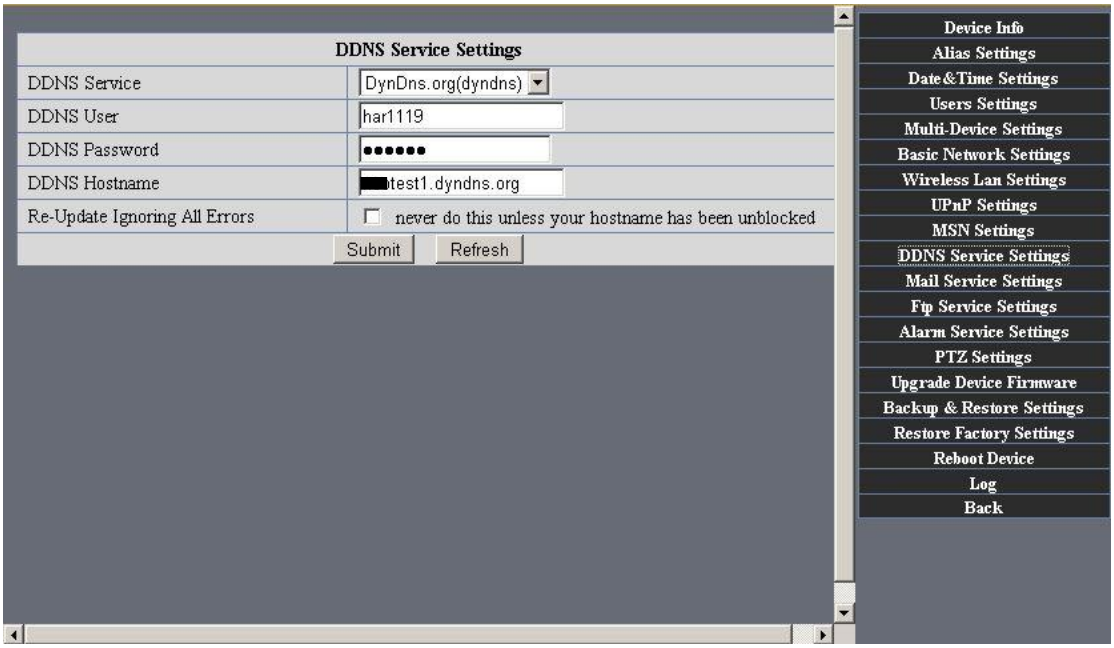


Figure8.1

5）How to use DDNS service (detail:4.5)

6) You can access the Camera from Internet by domain name.

4.4 Static IP user

Static IP user is not need to use DDNS for remote access. When finished the setting of the IP Camera in LAN, you can access the Camera directly from Internet by the WAN IP. You can obtain the WAN IP by two ways.

Obtain the WAN IP from some Website

You can discover this easily by opening on a computer using the same connection as the IP camera and entering this address: http://www.whatismyip.com.The page at this address will show you the current WAN IP.

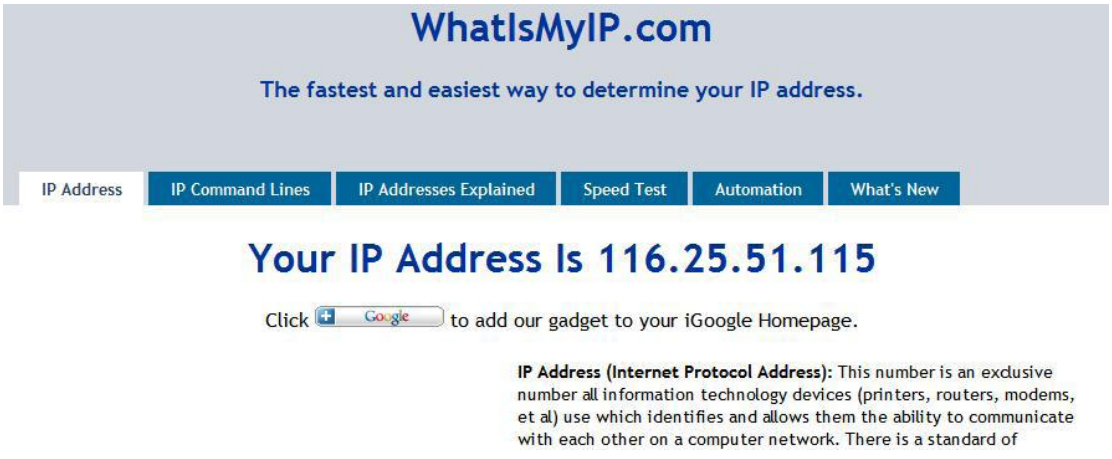


Figure8.2

According to MSN and IP camera built-in account access (details:3.53)

Obtain the WAN IP address from the router

Take the WRT54G router of LINKSYS for example,

1) Obtain the IP address of the router(LAN gateway address),user name and password for logon to the router from the network administrator,

2) Enter the LAN IP address of the router(LINKSYS WRT54G default:192.168.1.1) in the address bar of the IE to log on to the router; Open the **Status** page to find out the WAN address of the router. In this example, the address is 116.25.51.115.(Figure7.1)

Figure8.3

Access the IP Camera from the Internet

User can access the IP Camera from the Internet, Enter WAN IP address + port number in the IE to access IP Camera. For example, Http:// 116.25.51.115:8999

Note: Make sure the Port mapping is success. You can do port mapping by two ways:

- Enter setting page of the router which IPCAM connect with to enable UPNP function. Enter IPCAM "**UPnP Settings**" to enable UPNP and make sure the state is "UPnP success".
- If your router has the Virtual Map function. Enter router setting page, add IP CAM's IP and port to the Virtual map list.

4.5 How to use DDNS

When use ADSL, the IP Camera will connect to the Internet through ADSL automatically. For each ADSL reconnection, ISP will re-assign a new IP address for the IP Camera to facilitate the access. DDNS(Dynamic Domain Name Server) can map the dynamic IP address of an IP Camera to a fixed domain name. Therefore, we can access the IP Camera by the fixed domain name whether the IP address changes or not. The IP address is not necessary when you using the DDNS via the domain name to find your network.

1) Go to the website which Provides free domain name, register and apply a free domain name. such as http://www.dyndns.com(details:5.1.6).
2) login the Camera homepage as Administration and enter "**DDNS Service Settings**" page input the name, password and Host(details: 3.5.4) .Then click **<SUBMIT>** and reboot Device.
3) Re-login the Camera homepage and enter"**DDNS Service Settings**"page to check the **DDNS Status** is **DynDns Succeed** or not**.**
4) Enter"**UPnP Settings**"page,the **UPnP Status** should be **UPnP Succeed.**If the status is not **Succeed,** you may enter "**Basic Network Settings**" page to change Http Port (details: 3.5.2). Then click **<SUBMIT>** and reboot Device.
5) Re-login the Camera homepage to check and make sure the **DDNS Status** and **UPnP Status** is **Succeed**.

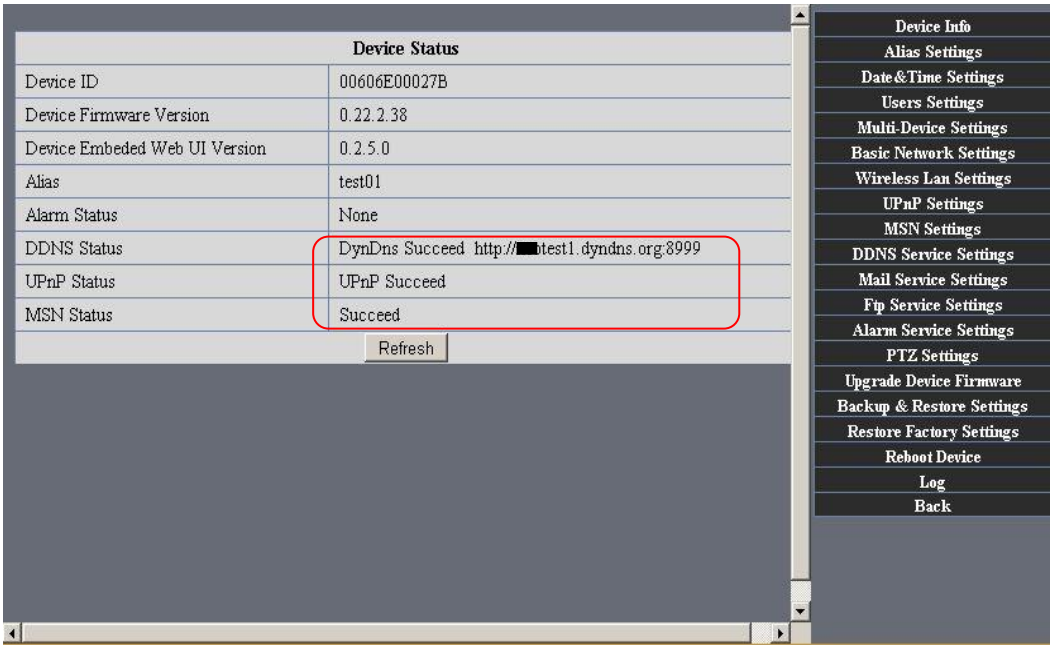


Figure8.4

6) You only need to enter the domain name(domain name+Port number http://[redacted]test1.dyndns.org:8999) in the IE address bar ,the browser will visit the IP Camera.Wait for several minutes and the IP Camera will dial up to access the Internet automatically, and the communication with the DDNS server is established successfully. In the way, the user can access the IP Camera from a WAN by using the DDNS domain name.

If the gateway settings and DDNS settings have been completed,ener the DDNS dynamic domain name(for example, (http://[redacted]test1.dyndns.org:8999),do not add www.) in the address bar of the IE to access the IP Camera.If multiple IP Cameras are connected to the same router,enter DDNS dynamic domain + port number(for example, http://[redacted]test1.dyndns.org:90)) in the address bar of the IE to access different IP Cameras.

You will view the pictures as below:

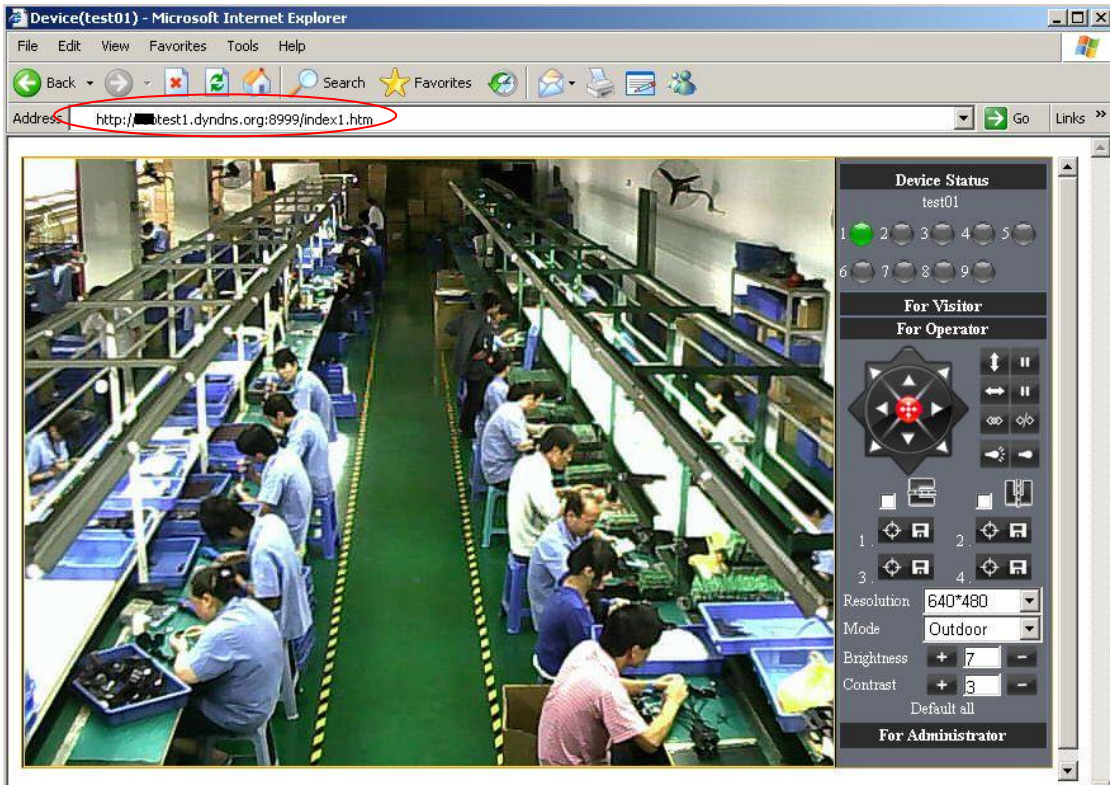


Figure 8.5

Figure 8.6

Add more devices:

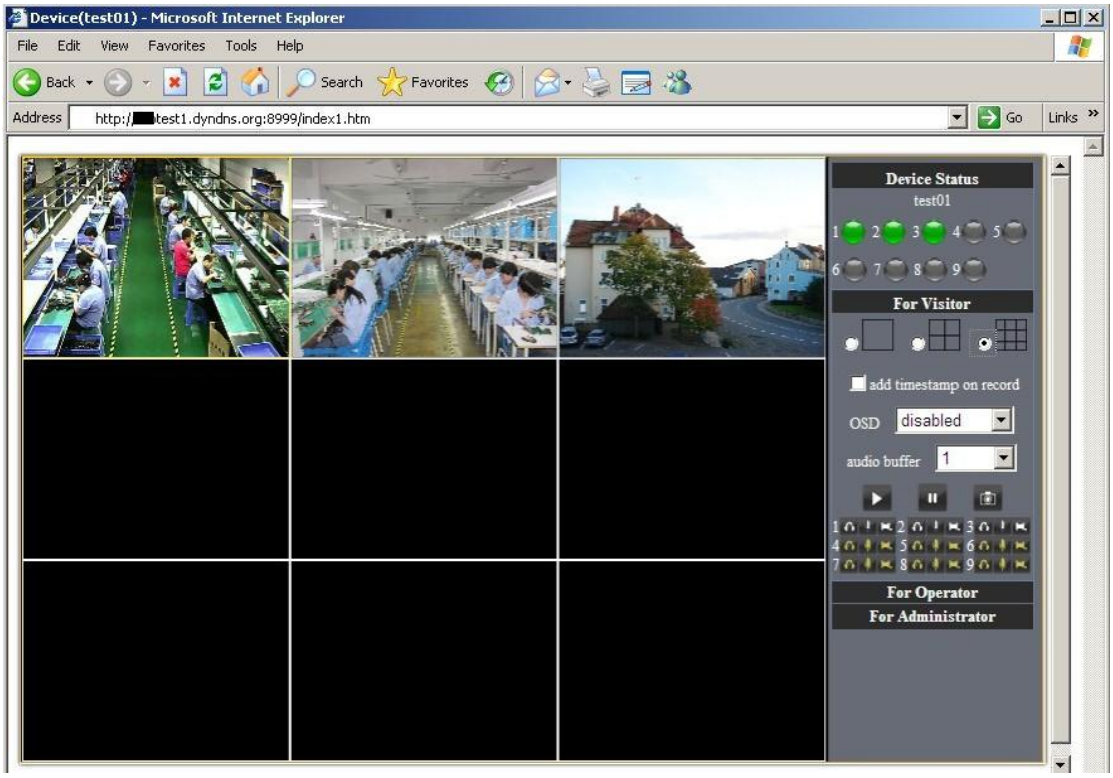


Figure8.7

5 APPENDIX

5.1 Frequently Asked Questions

Note:

1) Any question you would meet, please check Network connections firstly.

2) 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 have forgotten the administrator username and/or password.

To reset the administrator username and password, Press and hold down the RESET BUTTON for 5 seconds. Release the power button and the username and password will be reset back to the factory default administrator username and password.

Default administrator username: **admin**

Default administrator password: **No password**

5.1.2 IP Address configuration

Check whether IP address of the IP Camera server shares the same subnet as your work station: Click My Computer > Control Panel>Network & Dial-up Connections > LAN > Attributes >Internet Protocols (TCP/IP), and check IP Address and Subnet Mask. Make sure they are in the same subnet when configuring IP Camera IP address manually.Unable to access IP Camera via web browser

5.1.3 Network Configuration

Double Check to ensure that your HTTP server software is configured and running properly. If you're running any firewall software, make sure it's allowing inbound connections to port 80,Also, if you happen to be using a cable/DSL router, make sure you've set up port forwarding properly. (consult your router's documentation for more information) .If none of these seem to be the problem, it's also possible that your ISP is blocking inbound connections to port 80 –many IPSs have done this because of internet worms such as Code Red, If this is the case, you 'll have to setup your HTTP server on an alternate port (such as 8080).

5.1.4 No pictures Problems with ActiveX Controller

The video streaming is transmitted by the ActiveX controller. If ActiveX controller isn't installed correctly ,you will see no video image. There are two way to solve this problem:

1） Install "IP Camera Tool", ActiveX controller is installed simultaneity （recommendable）.

2）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 plu-ins

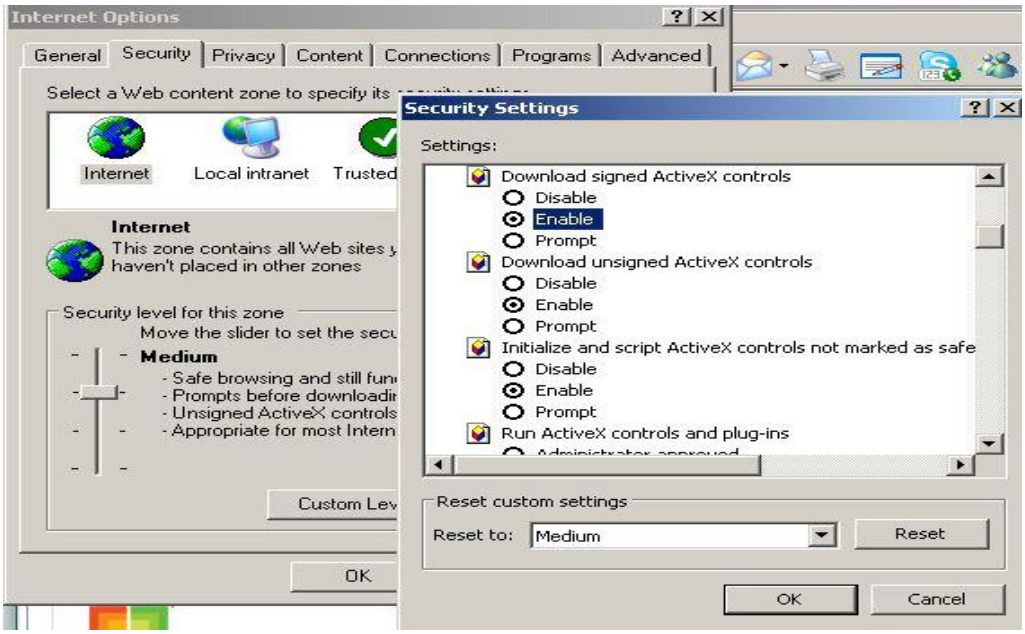


Figure 8.4

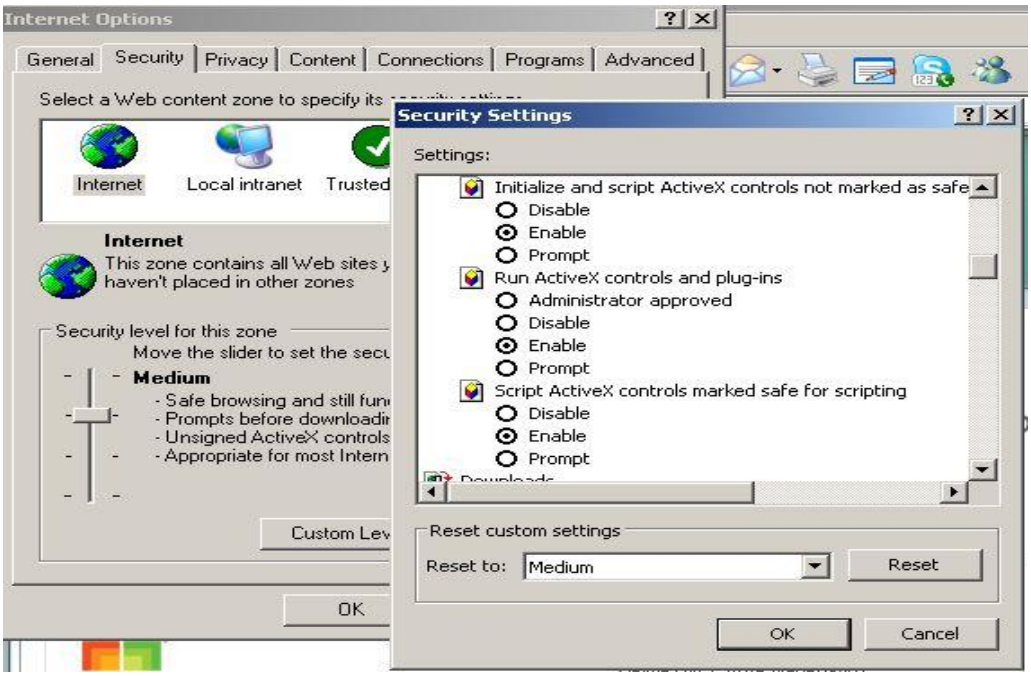


Figure8.8

5.1.5 Problems with network bandwidth

The image frame rate is subjected to the following factors: 1.network bandwidth; 2. PC performance,network environment and display preference setting (brightness, theme, etc.); 3. the number of visitors (Too many visitors will slow down the image frame rate.); 4. choice of switch or hub (Use a switch for multiple IP Camera Servers rather than a HUB.).

5.1.6 For example: Register procedure from a DDNS web

1.Users use DDNS management system first time.Users need to apply account to manage and inquire the domain state.

Step1: enter http://www.dyndns.com/ and **Create Account.(** Fill in Domain Name **.dyndns.org** then Click **Add)**

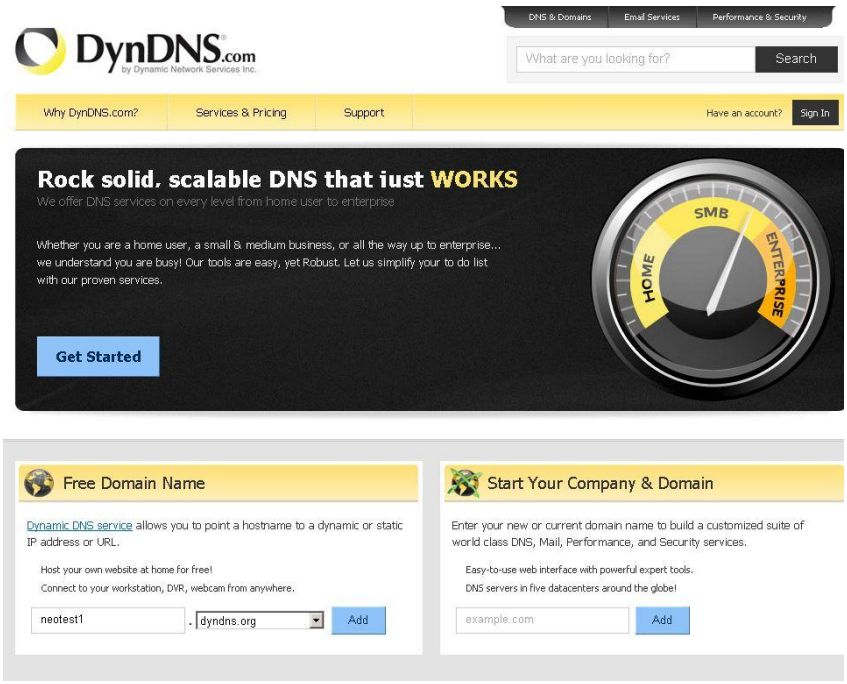


Figure8.9

Step2: enter your information

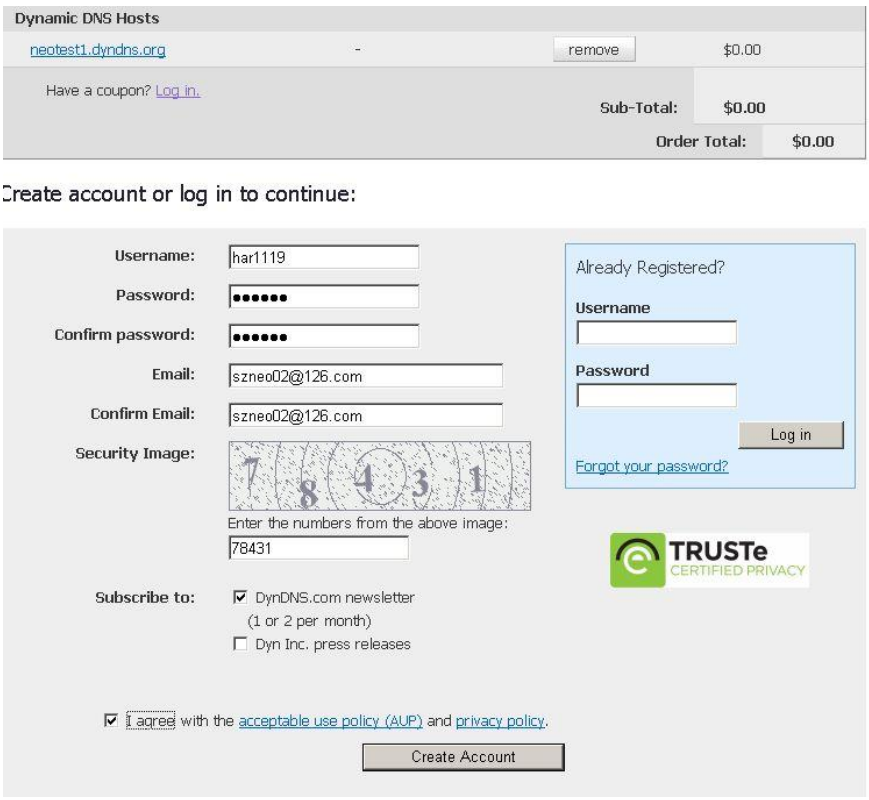


Figure9.0

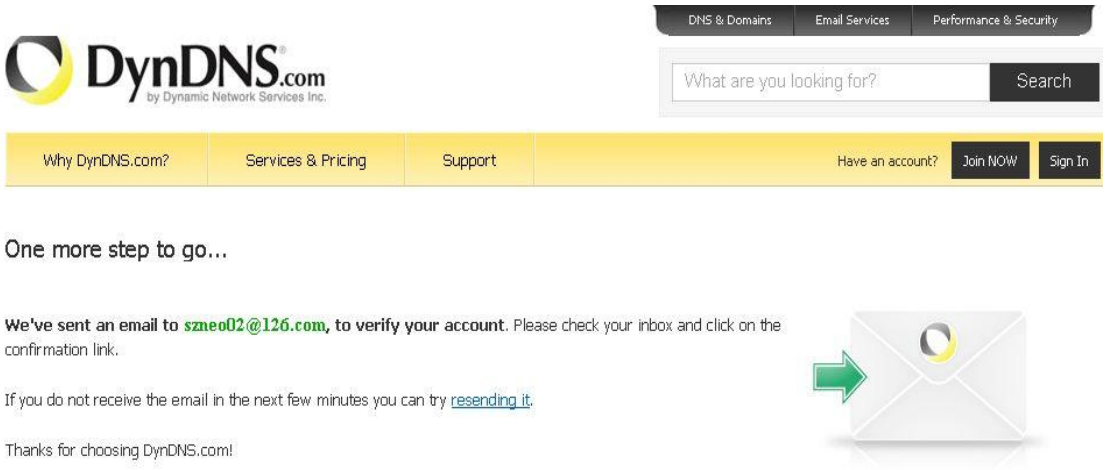


Figure9.1

Step3: After a minute, you will receive an E-mail from **DynDNS Support** and it will give you a confirmation address

(e.g. https://www.dyndns.com/confirm/create/e-YS60Gz9oBASMm7rbO6AA

Your DynDNS.com Account 'har1119' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

https://www.dyndns.com/confirm/create/e-YS60Gz9oBASMm7rbO6AA

Our basic service offerings are free, but they are supported by our paid services. See http://www.dyndns.com/services/ for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely,
The DynDNS.com Team
Dynamic Network Services Inc.

Figure9.2

Step4: Open the link to active your Domain Name as below.

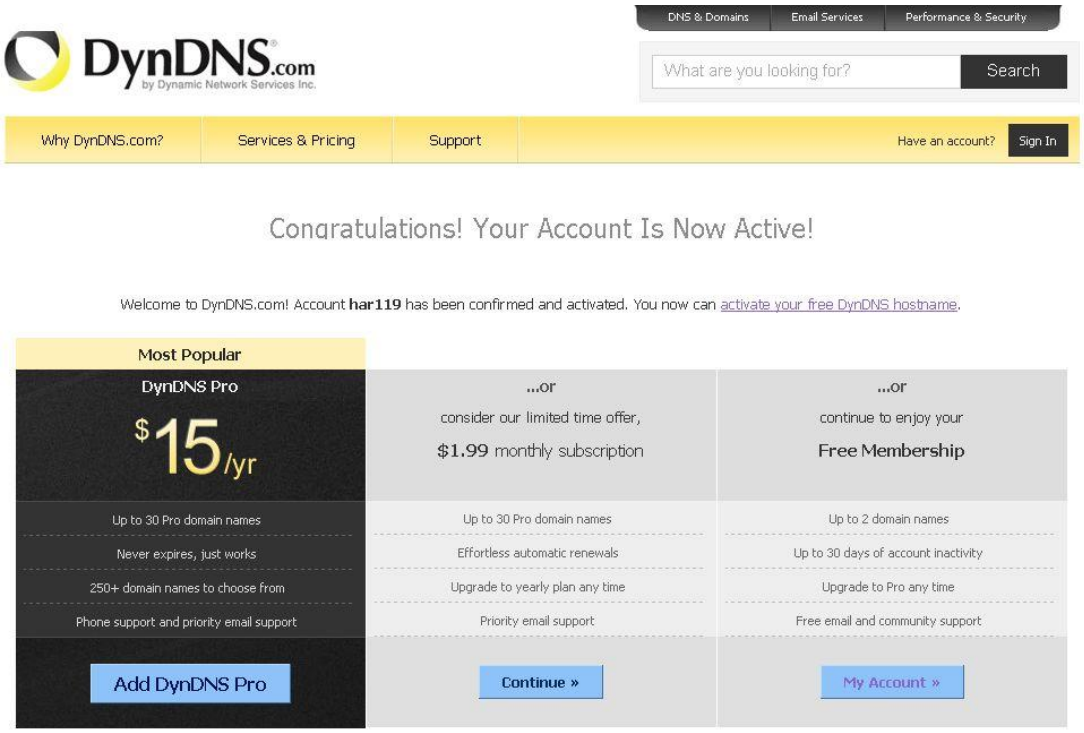


Figure9.3

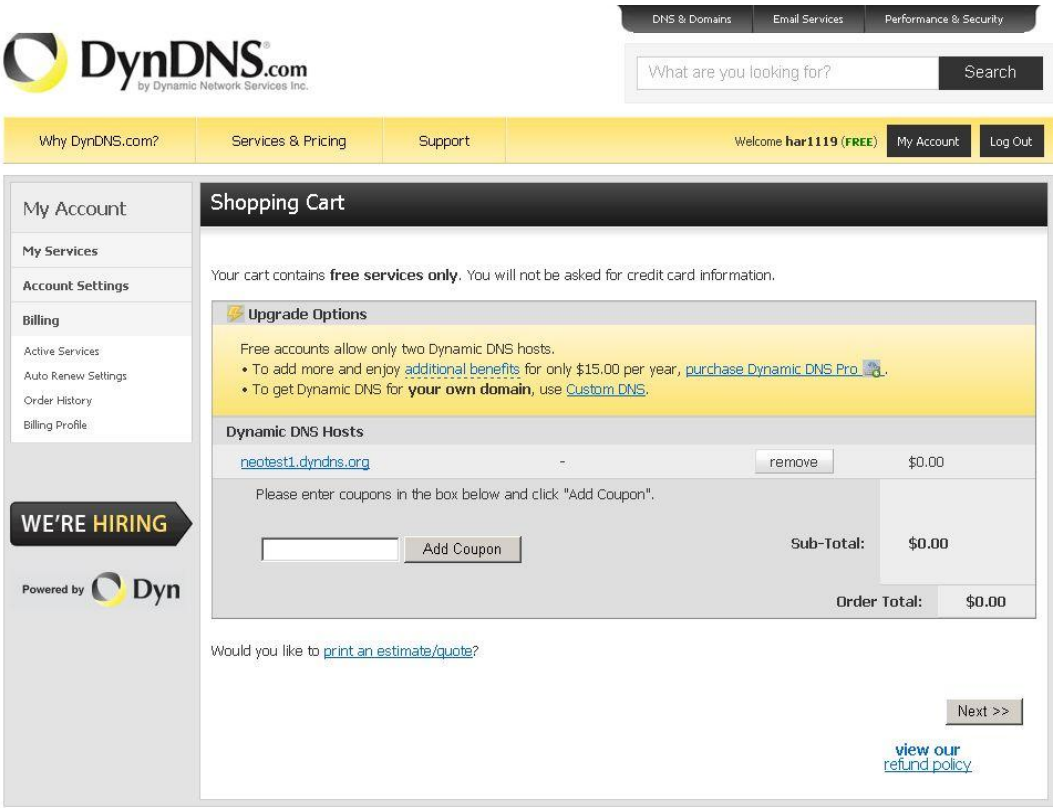


Figure9.4

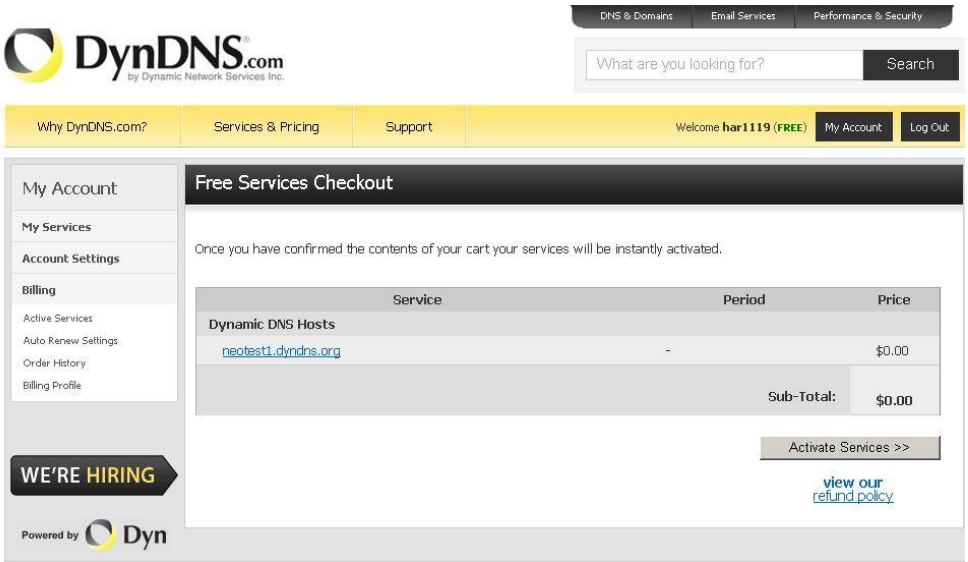


Figure9.5

Step6: Now you obtained a Dynamic Domain Name(Figure 8.4),and can use it in the **DDNS Service Settings**(details: 3.5.4)

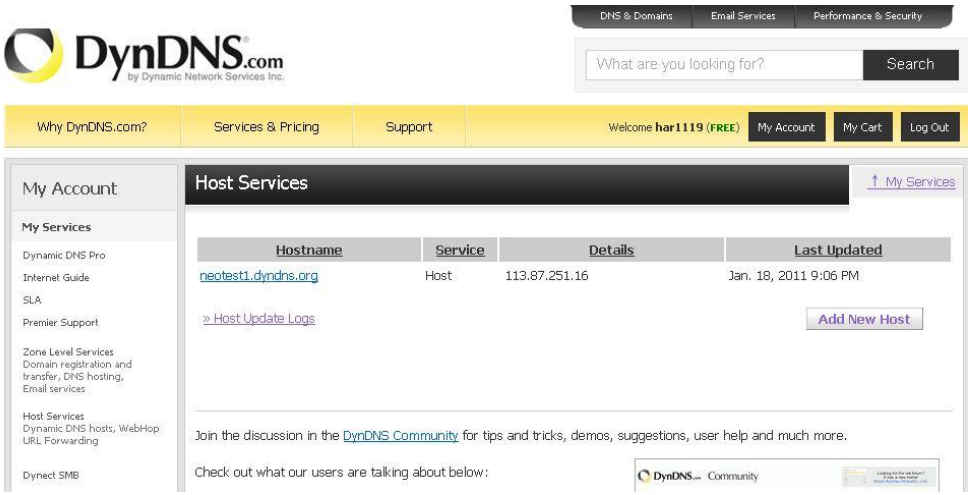


Figure 9.6

2. Fill the DDNS account you applied in DDNS Settings，If it success,it will show as below

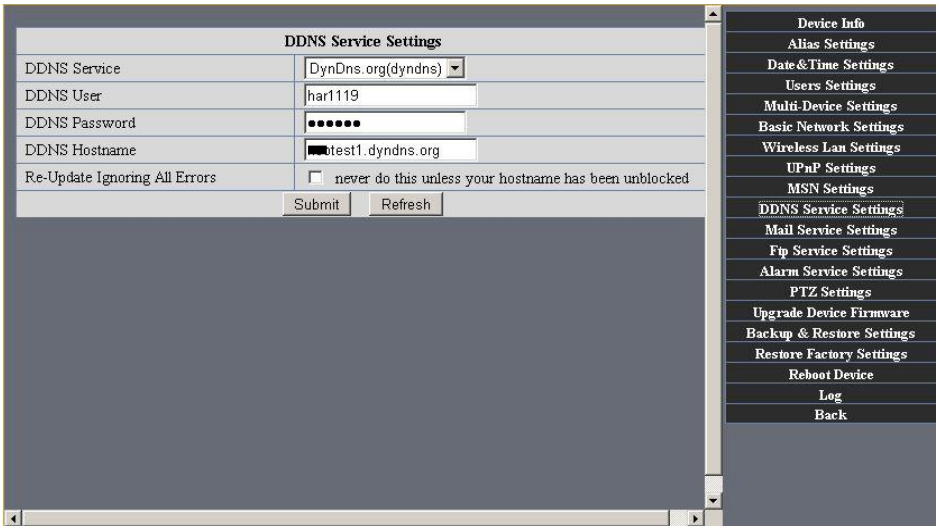


Figure 9.7

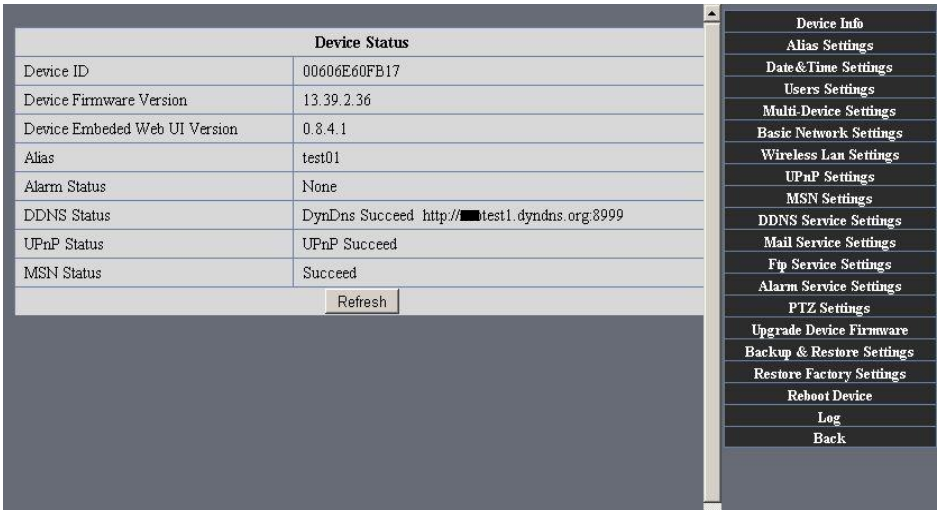


Figure9.8

3. **How to test whether DDNS is on-line?**

   Click Start > Running >input CMD then click Enter,test DDNS by PING as below:

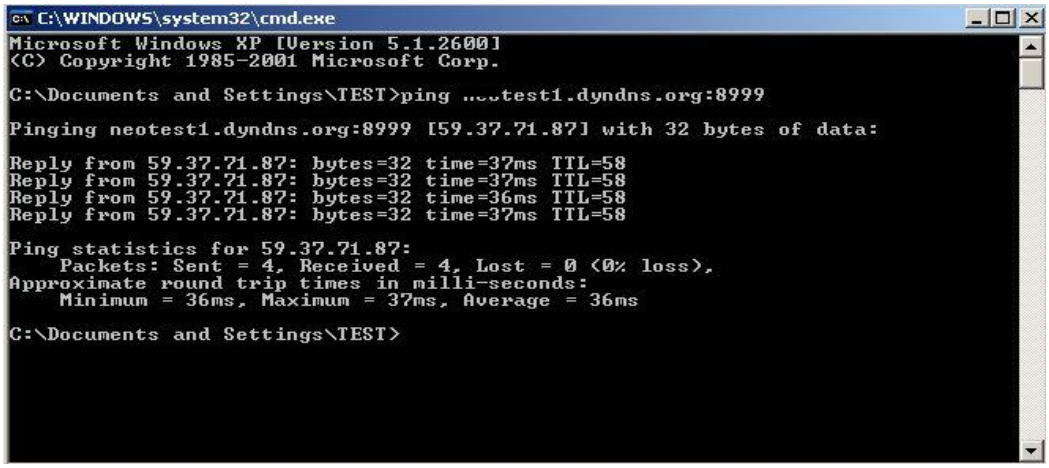


Figure 9.9

The DDNS can return the web response information by PING.It tells you that DDNS is on-line.If DDNS failed to update!There should be two reasons:1)DDNS parameter Settings incorrectly.2) DNS address configuration is wrong.

DDNS Service Operation:Creat Account > Login/Management > Setting up DDNS > Configurate IPCAM parameter

5.1.7 Why pop-up the prompt ”Fail to connect to the device…”?

This prompt only appeared in the case of using multiple cameras.

Enter the **Multi-Device Settings** page(login as administrator) to check the Device setting is correct or not.

When one of the multiple cameras disconnected, the color changed to yellow and pop-up the prompt“Fail to connect to the device…”.

Figure 10.0

5.1.8 Can’t access the IPCAM in the internet?

There are some reasons:

1 ActiveX controller is not installed correctly(see more details:5.1.4).

2 The port IPCAM used is blocked by Firewall or Anti-virus software. Please change a port number and try again.

3 Port mapping is not success. You can do port mapping by two ways:

- Enter setting page of the router which IPCAM connect with to enable UPnP function. Enter IPCAM “**UPnP Settings**” to enable UPnP and make sure the state is “UPnP success”.
- If your router has the Virtual Map function. Enter router setting page, add IPCAM’s IP and port to the Virtual map list.

When use ADSL, the IP is dynamic. You should set DDNS(see more details 3.5.4 & 5.1.6) and also make sure port mapping success.

5.2 Operate common problem solving

IP camera tool can’t find the camera?

Except of the camera broken

1. **Make sure the cable connector no problem, recommend connector (AMP),it is with international standard. Another note, IPCAM’s data transmission channel require higher than computer’s, so maybe the computer can run normally but IPCAM can’t, Please press heavily when**

making the cable connector.

2. Confirm the power supply normally. First, check whether power indication light turn on or not, If it is on,then check the yellow light on RJ45 Port (power indication light) and green light (network indication light) are on or not.If they are on,so power supply and cable runs normally.
3. Confirm all the firwall and antivirus software are close.The firewall often block unrecognized data so if the firewall is running ,so maybe the IPCAM TOOL can't find the device.Suggest to close firewall and antivirus software temporarily before searching.

How to solve the camera blank screen?

1. Check if you are using the wrong power adaptor.please use original one.
2. Close antivirus software.

How to solve the camera can't login by Internet?

1. Check if you set DDNS success or not?
2. Check the current IPCAM's port number is the same as router's?They need to keep same.

Can't view the monitoring picture

1. Reason: can't connect with network
   Solution:Check if the network connect well, exclude cable fault and PC virus cause network fault until can be used between PC and PING.
2. Reason:IP address occupy by other device
   Solution: Choose automatic gain
3. Reason: IP address located within different subnet
   Solution: Check IPCAM'S ip address and subnet mask address and gateway settings.
   Reason:Web port has been modified
   Solution:contact network administrator to obtain port information.
4. Reason:unknown
   Solution:Press reset button to factory default state,then reconnecting.systen default to gain ip address automatic,subnet mask is 255.255.255.0

5.3 IPCAM special use

5.31 Use vlc player and mplayer to play ip camera audio data prompt.

(parameter: /videostream.asf?user=&pwd=&resolution=&rate=）

Show as below:

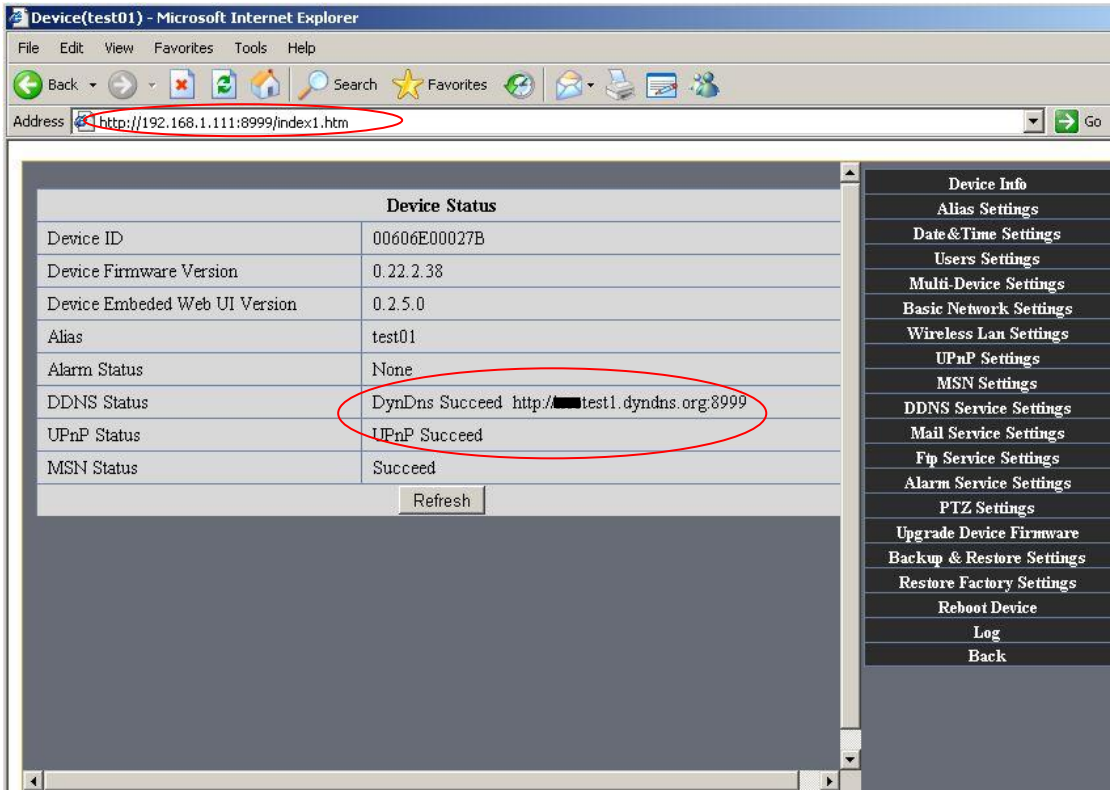


Figure 10.1

As figure 8.8 shows IPCAM current ip address is http://192.168.1.111:8999 Internet ip address is http://[redacted]1.dyndns.org:8999，you can view video of IPCAM by inputting ip address.

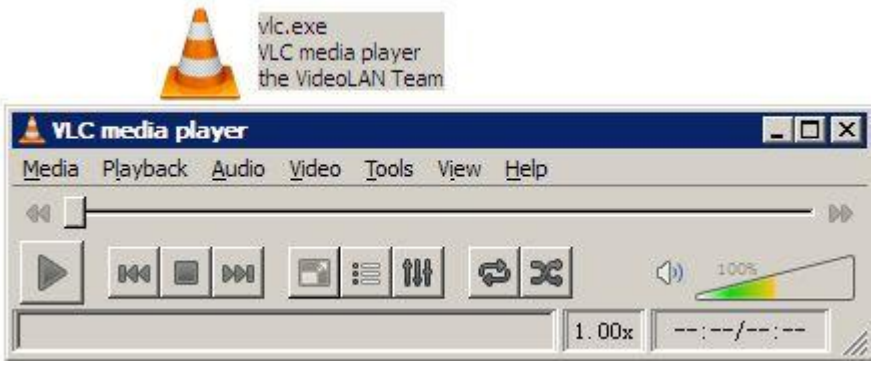


Figure 10.2

Open broadcast position by "VLC media player":

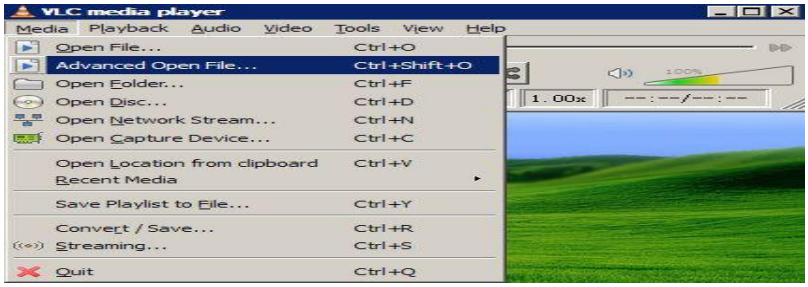


Figure10.3

LAN broadcast address:

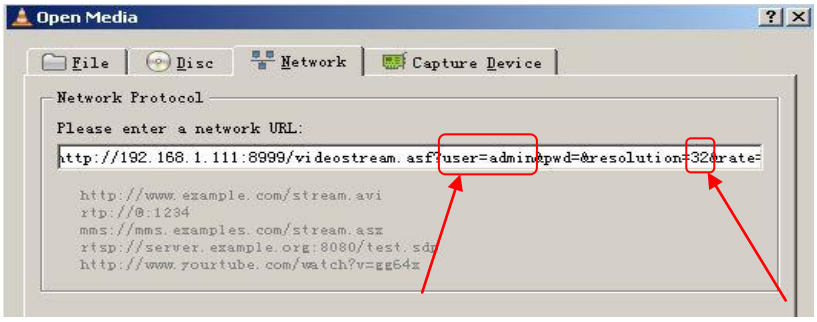


Figure10.4

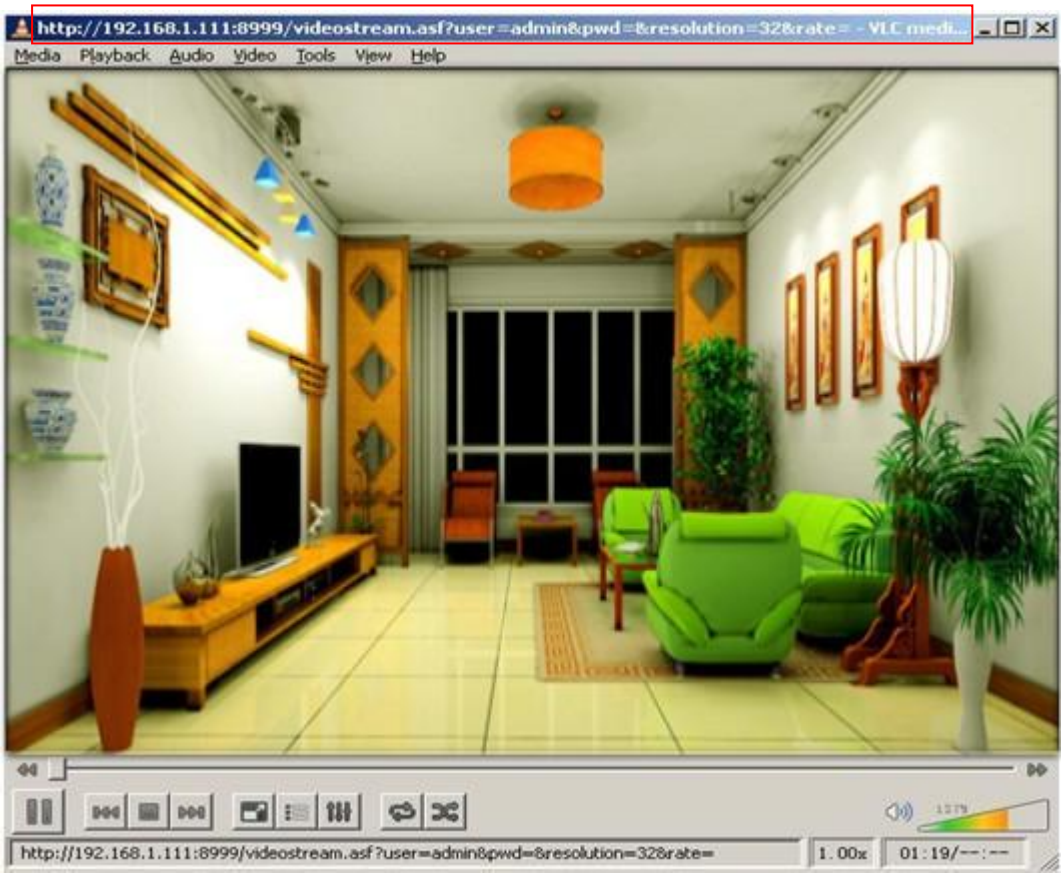


Figure 10.5

Open the Internet play position:

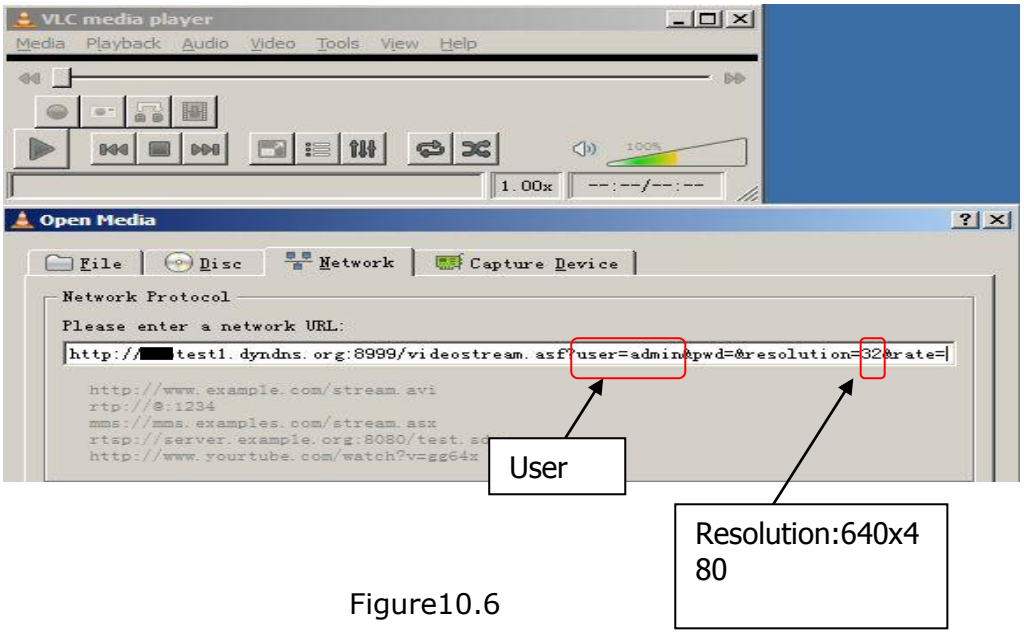


Figure10.6

Watch ip camera send streaming format video as show below:

Figure 10.7

5.32 Set the camera miscellaneous parameters

Grammar:

/set_misc.cgi?led_mode=&ptz_center_onstart=&ptz_auto_patrol_interval =&ptz_auto_patrol _type=& ptz_patrol_h_rounds=& ptz_patrol_v_rounds=& ptz_disable_preset=&user=&pwd=&next

Parameter:

led_mode：0：mode;1:mode;2: turn off indicator light

ptz_center_onstart：

ptz_auto_patrol_interval： =0：doesn't auto patrol interval

ptz_auto_patrol_type：0：None;1:horizontal; 2:vertical;3:horizontal &vertical

ptz_patrol_h_rounds：

ptz_patrol_v_rounds：

ptz_patrol_rate：

ptz_patrol_up_rate：

ptz_patrol_down_rate：

ptz_patrol_left_rate：

ptz_patrol_right_rate：

ptz_disable_preset：

5.4 Default Parameters

Default network Parameters

IP address: dynamic obtain

Subnet mask:255.255.255.0

Gateway: dynamic obtain

DHCP: Disabled

DDNS: Disabled

Username and password

Default administrator username: **admin**

Default administrator password : No password

5.5 Specification

Product Specifications

ITEM		IP CAM (NIP-02BGPWA2)
Image Sensor	Mage sensor	1/5″ Color CMOS Sensor
	Display	640 x 480 (300K Pixels)
	Lens	f:3.6mm, F:2.4 (IR Lens)
	Mini.illumination	0.5 Lux
Lens	Lens Type	Glass Lens
	Viewing Angle	60 Degree
Audio	Microphone	Audio of two way
Domain name	Server	MSN server/ DDNS server
Video	Image Compression	MJPEG
	Image Frame Rate	15 FPS(VGA),30FPS(QVGA)
	Resolution	640 x 480(VGA), 320 x 240(QVGA)
	Flip Mirror Images	rtical / Horizontal
	mode	50Hz, 60Hz or Outdoor
	Video Parameters	Brightness, Contrast
Communication	Ethernet	One 10/100Mbps RJ-45
	Supported Protocol	HTTP/DHCP/IP/TCP/UDP/FTP/SMTP/DDNS/PPPoE/UPnP
	Mobilephone monitor	Support Iphone/Ipad/3G phone/smartphone
	Wireless Standard	IEEE 802.11b/g
	Wireless Standard	802.11b:11Mbps(max.) 802.11g:54Mbps(max.)
	Wireless Security	64/128-bitWEP Encryption
Physical	Pan/Tilt Angle	Horizontal:270° & Vertical: 120°
	Infrared Light	10 IR LEDs, Night visibility up to 15 Mete
	Product size	100(L) x100(W) x125mm(H)
	Gross Weight	646.5g/pcs (packing size:196x165x123mm)
	Net Weight	254.7g/pcs (only product)
Power	Specification	DC 5V/2.5A 1.8 meter
	Power Consumption	5 Watts
Environment	Operate Temper	0° ~ 55° C (14° F~122° F)
	Operating Humidity	20% ~ 85% non-condensing
	Storage Temper	-10° C ~ 60° (14° F ~140° F)
	Storage Humidity	0% ~ 90% non-condensing
PC Requirements	CPU	2.0GHZ or above (suggested 3.0GHz)
	Memory Size	512MB or above (suggested 1.0GB)
	Display card	64M or above
	Supported OS	Microsoft Windows XP/Vista/Windows7
	Browser	Internet Explorer6.0 and above or compatible browser Safari, Google Chrome ,Firefox, etc
Certification	CE, FCC, RoHS	
Warranty	Limited 1-year warranty	