FOSCAM

Model: FI9821W

Quick Installation Guide

Indoor HD Pan/Tilt Wireless IP Camera

Black

White

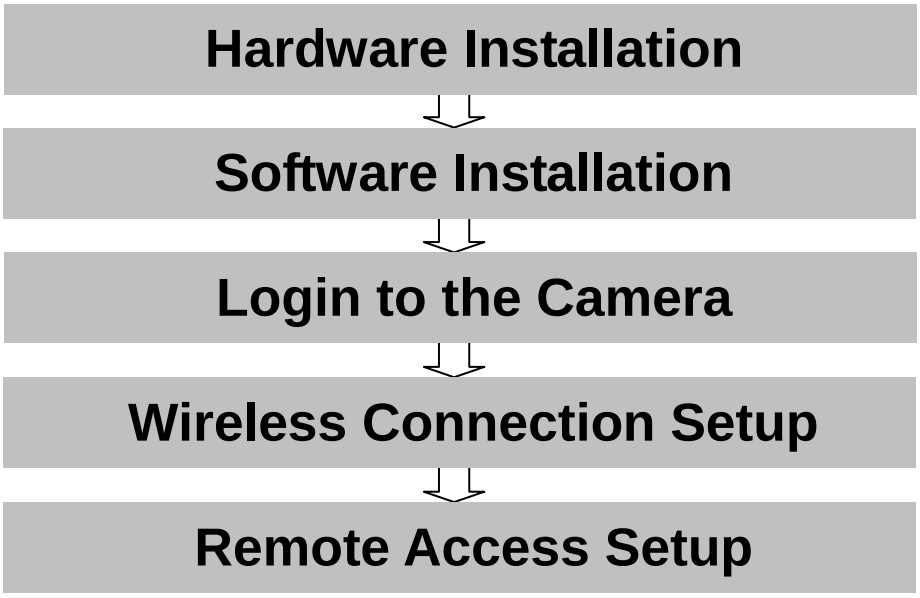
ShenZhen Foscam Intelligent Technology Co., Ltd

Quick Installation Guide For Windows OS

Package Contents

- HD IP Camera FI9821W x 1
- DC Power Adapter (5V-2.0A) x 1
- Network Cable x 1
- Wi-Fi Antenna x 1
- Mounting Bracket x 1
- Quick Installation Guide x 1
- CD-ROM with Setup Software x 1
- Warranty Card x 1

Quick Installation Diagram



Start Installation

1. Hardware Installation

1) **Open the package**. Take the camera out of the box carefully.

2) **Mount the antenna.** Then take the Wi-Fi antenna, mount it on the SMA connector on the back of the camera, screw the antenna into the port, and make the antenna stand vertically.

Figure 1.1 - Mount the antenna

Figure 1.2 – Plug in the network cable

3) **Get the camera connected to the router, and insert the power adapter.**

Use the network cable to connect the camera to the router or the switch in the LAN network at your home or your office. Plug in the power. The green network light at the rear of the camera will blink and the camera will automatically pan/tilt. The red power light will also turn on.

2. Software Installation

Insert the CD into the CD drive of your computer and find the folder“FI9821W”, then go to the folder “For Windows OS”. Copy the IP camera tool to your computer and start the program.

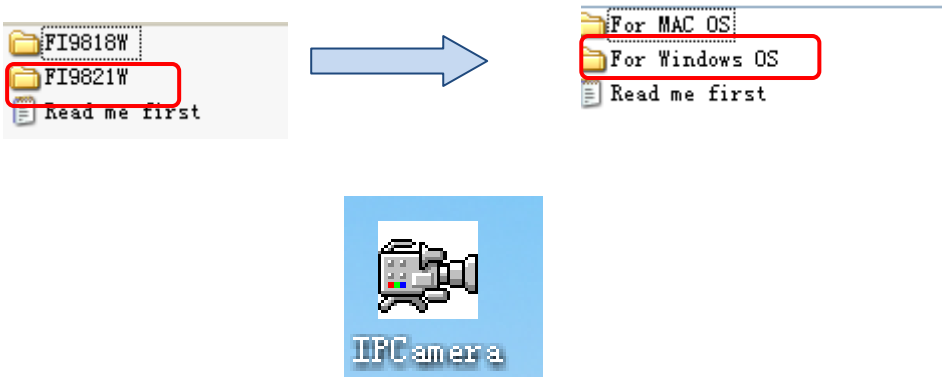


Figure 1.3 – IP Camera Tool icon

3. Login to the Camera

Double click the IP Camera Tool icon and the following screen should appear.

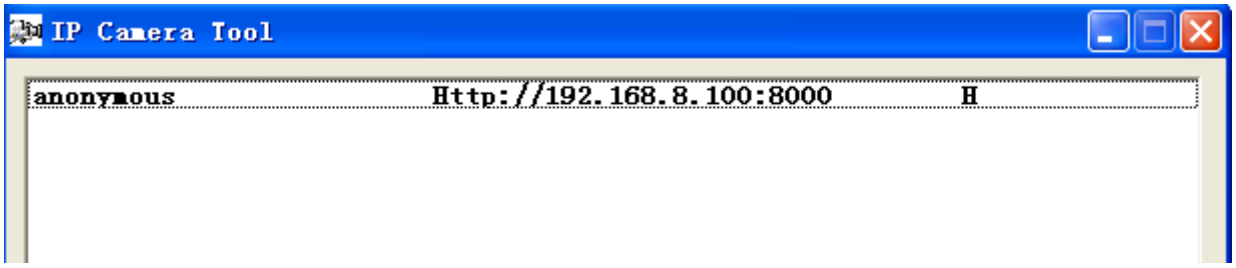


Figure 1.4 - IP Camera Tool for Windows

The IP camera tool should find the camera's IP address automatically after you plug in the network cable. If not, please make sure that DHCP is enabled on your router and that MAC address filtering, firewalls and anti-virus are disabled temporarily until the camera is set up.

Double click the IP address of the camera; your default browser will open to the camera login page.

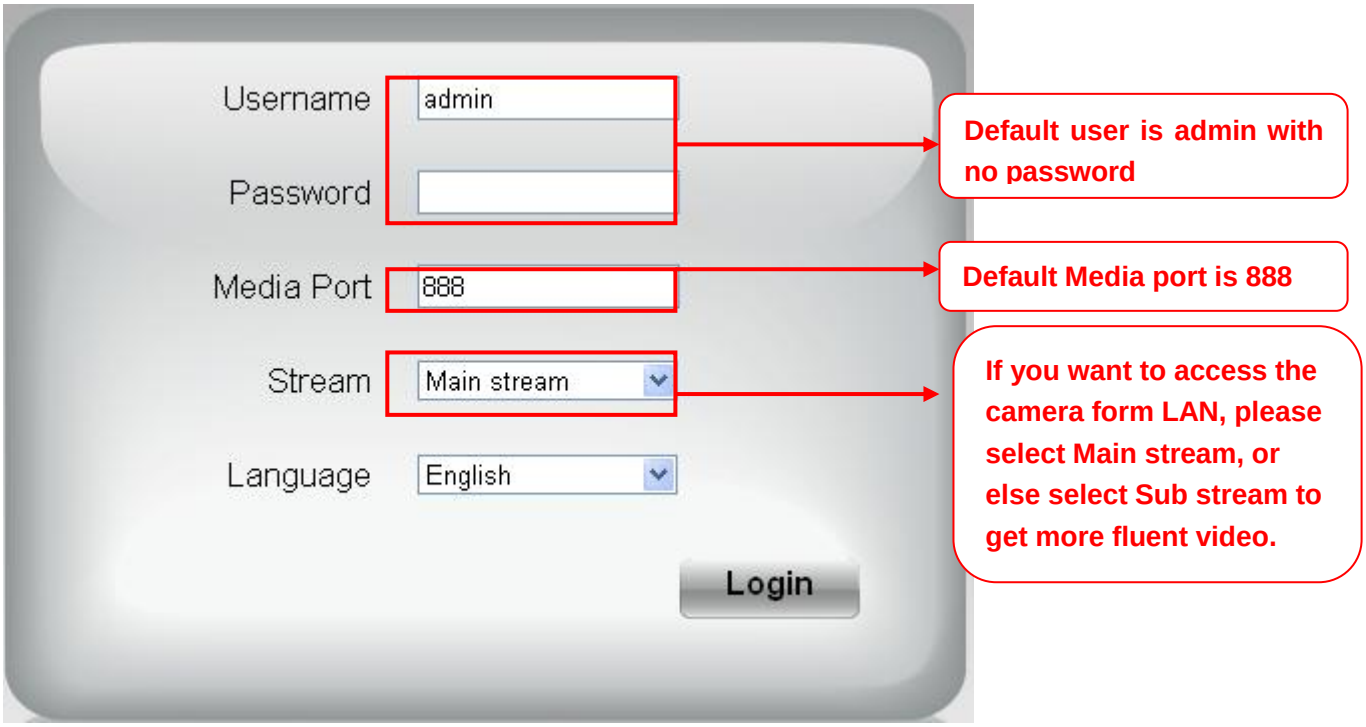


Figure 1.5 - The Login window

If it is your first time logging into the camera, it will prompt you to download the ActiveX plugin.

For Internet Explorer, please go to Chapter 3.1.

For Firefox, please go to Chapter 3.2.

For Google Chrome, please go to Chapter 3.3.

3.1 For Internet Explorer

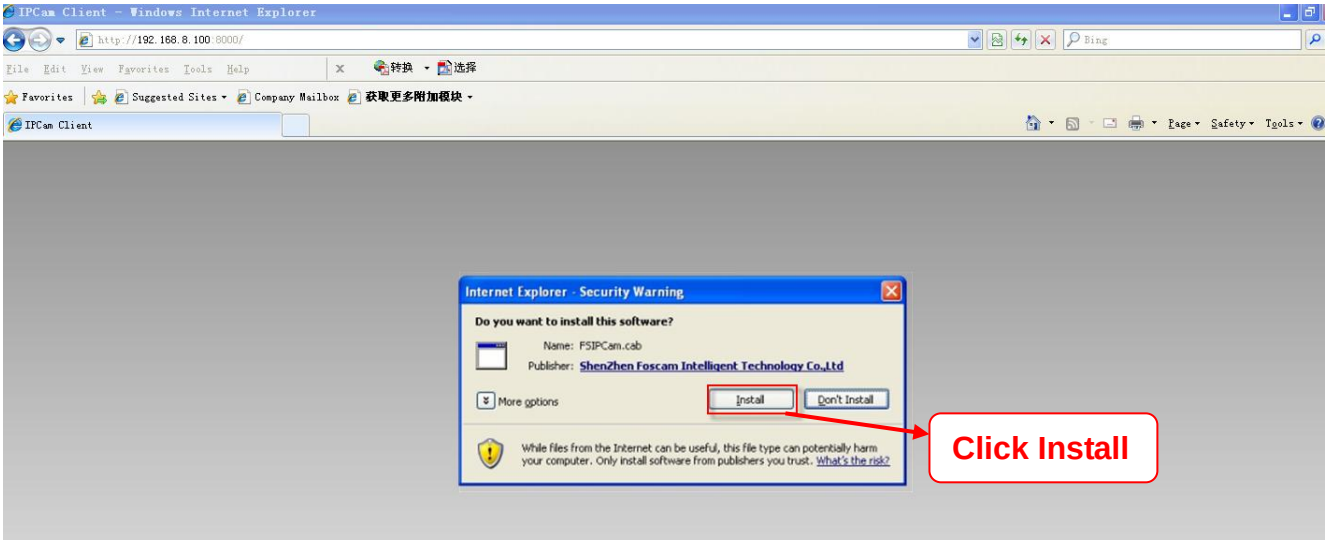


Figure 1.6 - Install the ActiveX plugin (Internet Explorer)

After installing the plugin, refresh the browser and you will be able to see the live video screen.

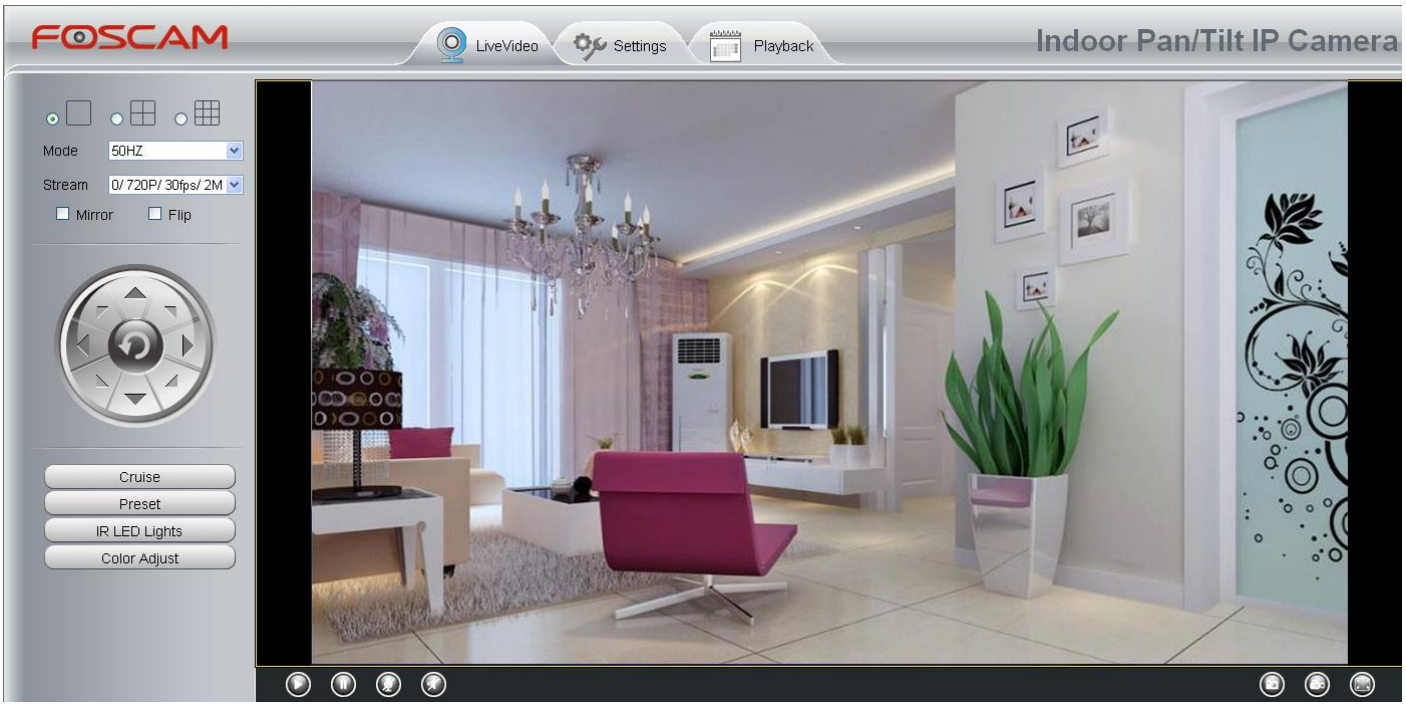


Figure 1.7 – The Live Video Page

3.2 For Firefox

If this is your first time logging in on Firefox, it may prompt you to download the plugin.

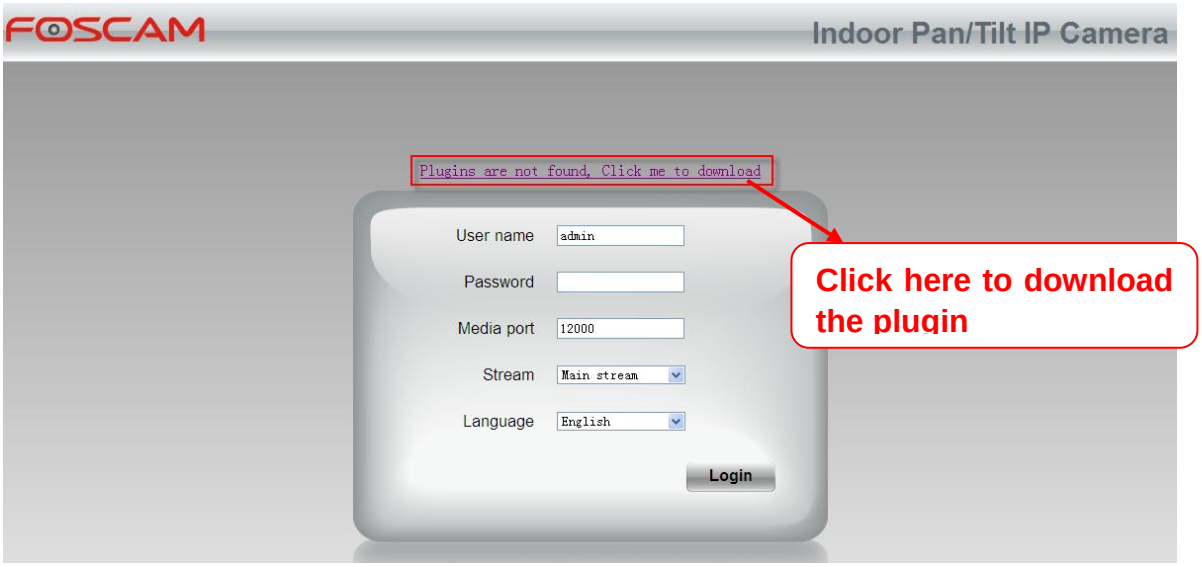


Figure 1.8 - Download the plugin (Firefox)

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

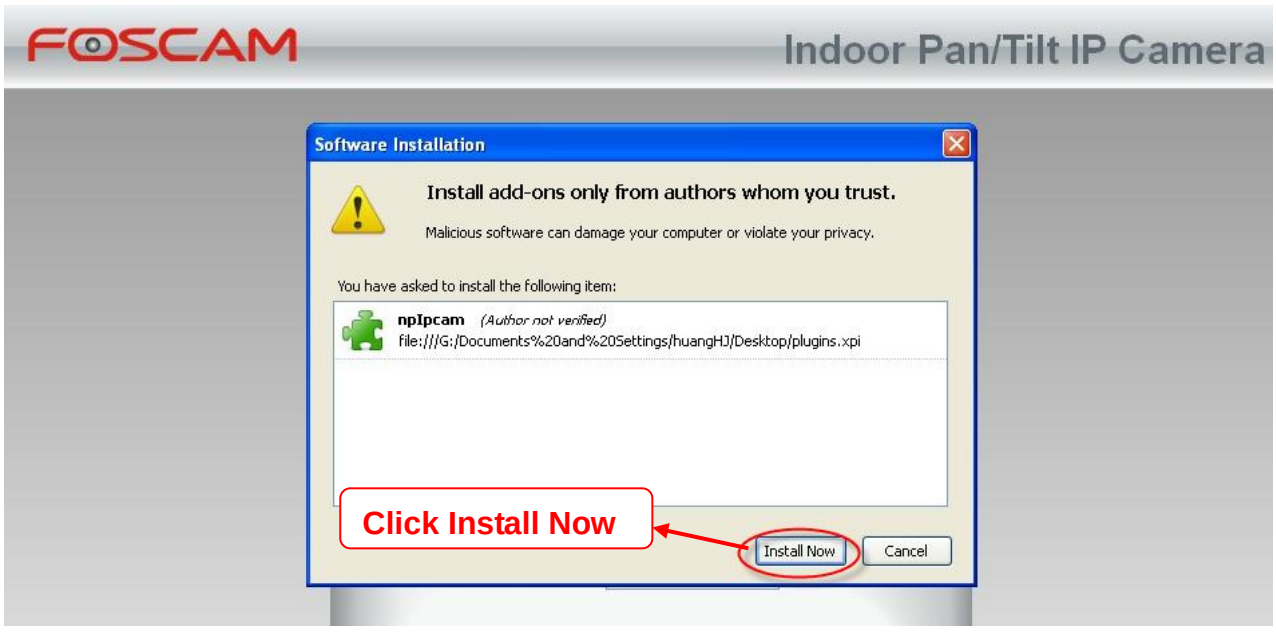


Figure 1.9 - Installing the Firefox plugin

Refresh or reopen Firefox after the plugin installation is successful, then login to the camera again, you will be able to see the live video page **(Figure 1.7).**

3.3 For Google Chrome

If this is your first time logging in to the camera with Google Chrome, it will prompt you to download the plugin as in **Figure 1.8.**

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

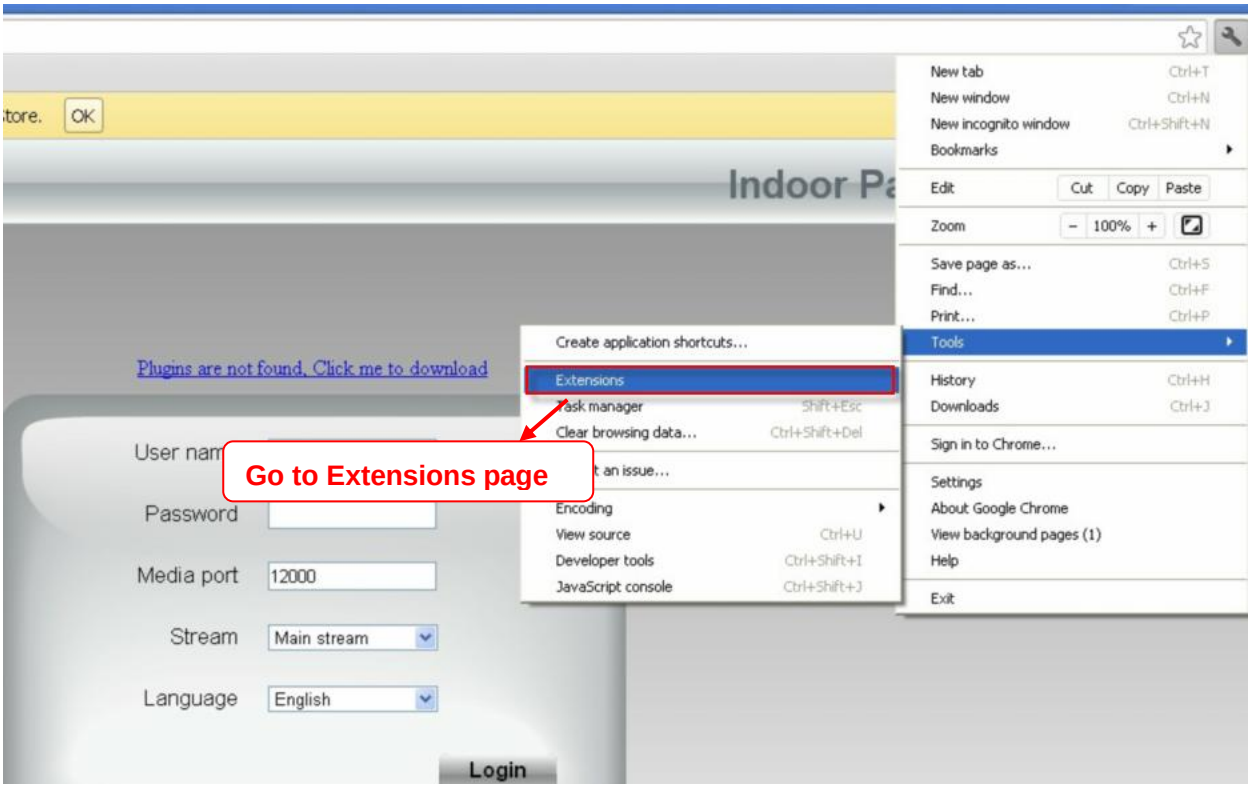


Figure 2.0 – The Extensions page in Google Chrome

Click the “Add” button to install the Plugin.

Figure 2.1 – Installing the plugin on Google Chrome

Reboot the browser and login to the camera again; you will see the live video screen **(Figure 1.7).**

Congratulations! You have succeeded in accessing the camera by a wired connection. Be sure to leave all other menu options alone until finishing the rest of the installation.
If you only see a black screen with a red cross in the center, please try another port number instead of the default “port 88” .You may want to try port 8005, etc.
If you are still unable to see live video, try shutting down any firewall or anti-virus software on your computer.

4. Wireless Connection Setup

Step 1: Choose “**Settings”** on the top of the camera interface, and go to the “**Network”** panel on the left side of the screen**,** then **click “Wireless Settings.”**

Click the **Scan** button and the camera will detect all wireless networks around the area. It should also display your router in the list **(Figure 2.2).**

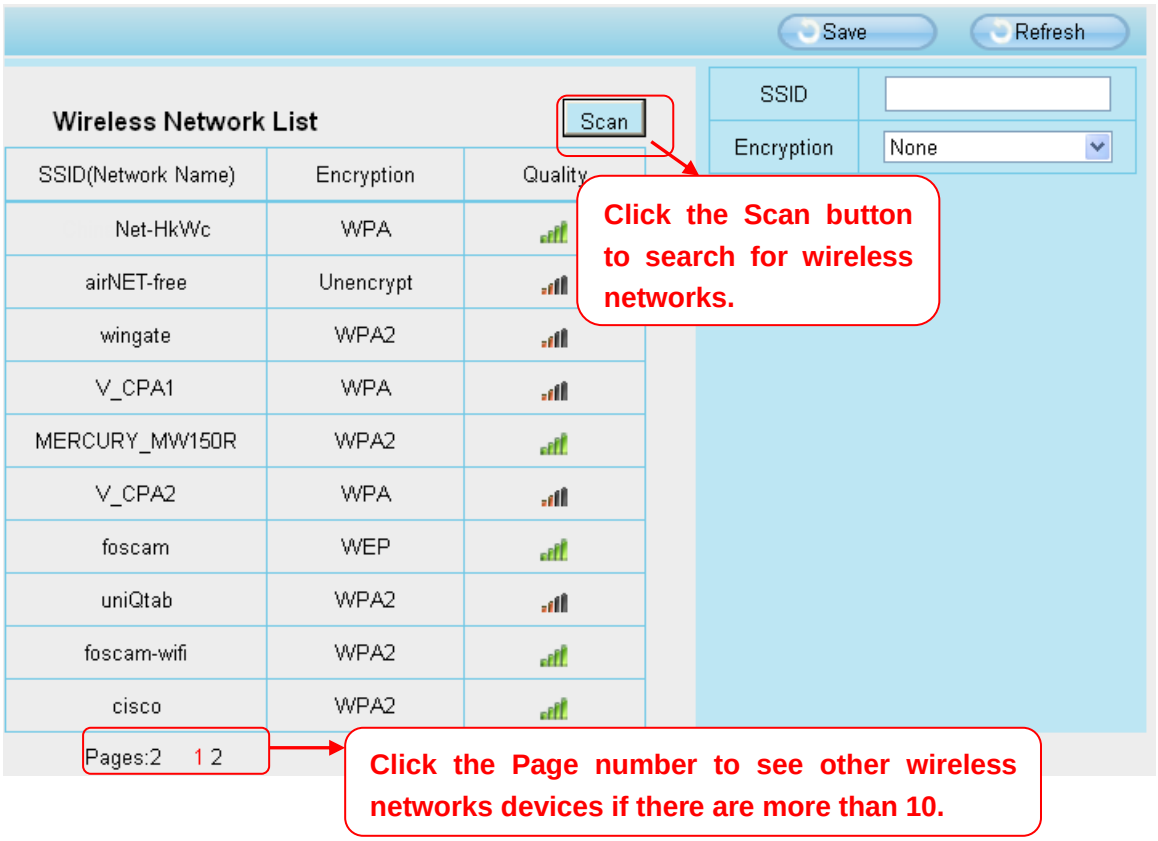


Figure 2.2 - Wireless Settings

Step 2: Click the SSID (name of your router) in the list, the corresponding information related to your network, such as the name and the encryption, will be filled into the relevant fields automatically.

You will only need to fill in the password of your network. Make sure that the SSID, Encryption and the password you filled in are exactly the same for your router.

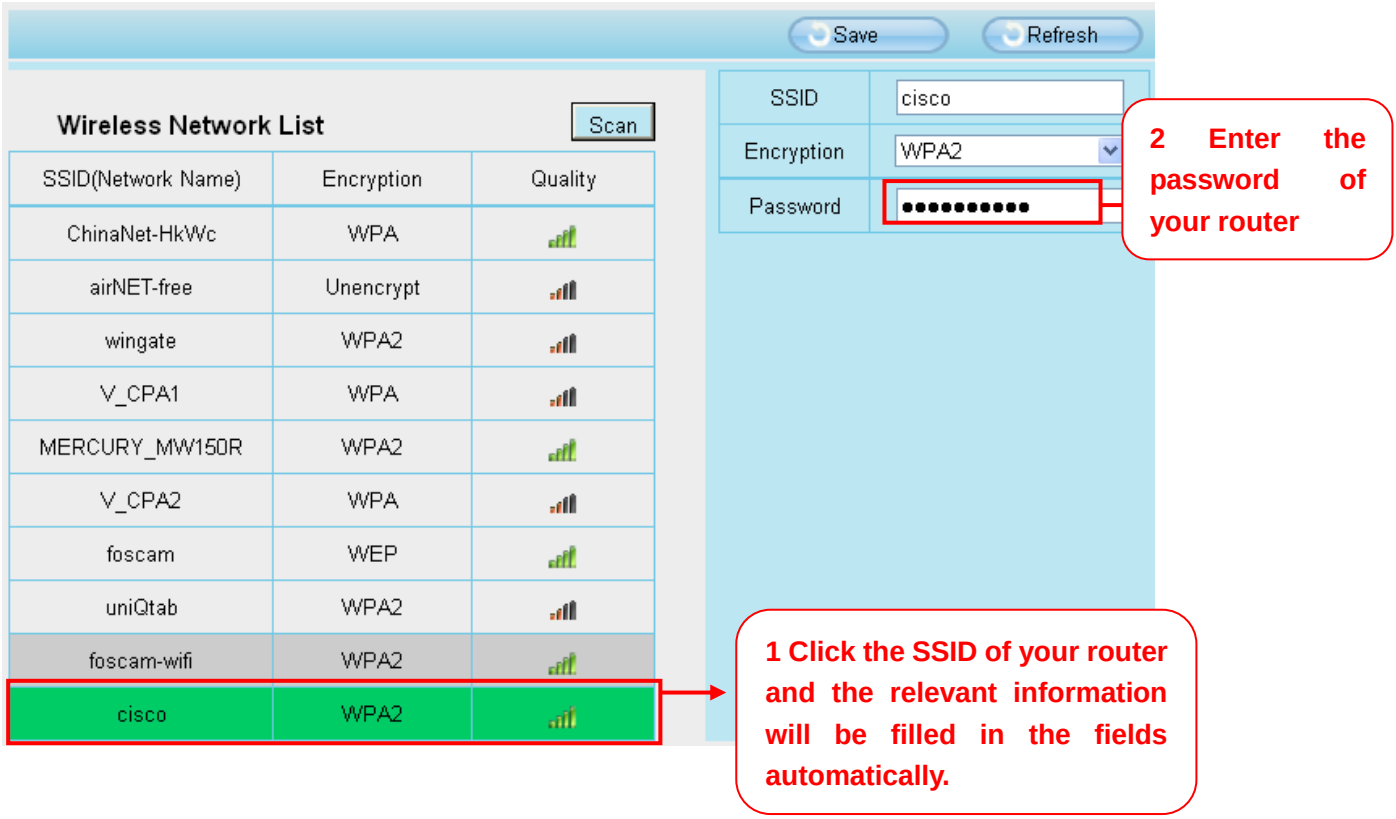


Figure 2.3 - Wireless Settings

Step 3: Please click on the **Save** button after all settings have been entered and disconnect the network cable. Never shut down the power of the camera until the IP camera is able to connect to the wireless network.

The LAN IP address will disappear on the window of IP Camera Tool when the camera is configuring a wireless connection. Wait about 1 minute, the camera should obtain a wireless connection, and the LAN IP of the camera will show again on the window of the IP Camera Tool. The IP address may have changed after the camera receives a wireless connection; we recommend setting a static local IP address if this IP address changes by right clicking the camera in IP Camera Tools, setting a static IP, and pushing OK (see Page 9).
Congratulations! You have set up the wireless connection of the camera successfully.

Note **If you fail to make a wireless connection, please refer to your seller or contact us directly for assistance.**

5. Remote Access Setup

We have been able to access the camera within the LAN network, and have set up a wireless connection, but how do we access the camera via WAN or from outside networks through the internet?

We have to set up Remote Access via Port Forwarding before we can access the camera outside of our own local area network.

What is the HTTP Port and Media Port, how do we change them?

This camera supports HTTP Port and Media Port. The Media port is used to view the camera's video stream, HTTP Port is used to access the camera remotely. If you want to access the camera and view the video, the Media Port and the HTTP Port must both be configured correctly.

1) Default HTTP Port is 88 / Default Media Port is 888

HTTP Port: All cameras have the default HTTP port of 88. For example, if the LAN IP link of the camera is http://192.168.8.102:88, this means that the camera's HTTP port is 88. You can change port 88 to another port if you'd like such as 2000 or 8090, which will not be conflict with other existing ports like 25, 21.Here you can set the port no. between 1 and 65535.

Media Port: When you login to the camera, you can see the Media Port number on the login screen. The default Media Port number is 888. Like HTTP Port, you can change this to anything between 1 and 65535.

Note: The HTTP Port and Media Port must be different; you won't be able to access the camera otherwise.

2) How do we assign a different HTTP port and a static LAN IP address?

Step 1: Open the IP Camera Tool, select the camera you would like to change the port of, right click on the IP address, and click on "Network Configuration", this brings up the network configuration box as shown in **Figure 2.4 and 2.5.**

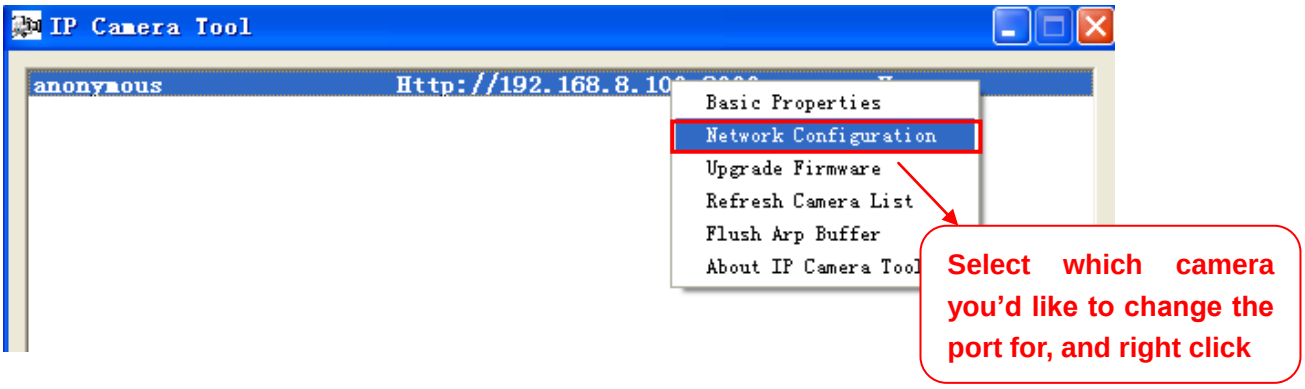


Figure 2.4 – Click on Network Configuration

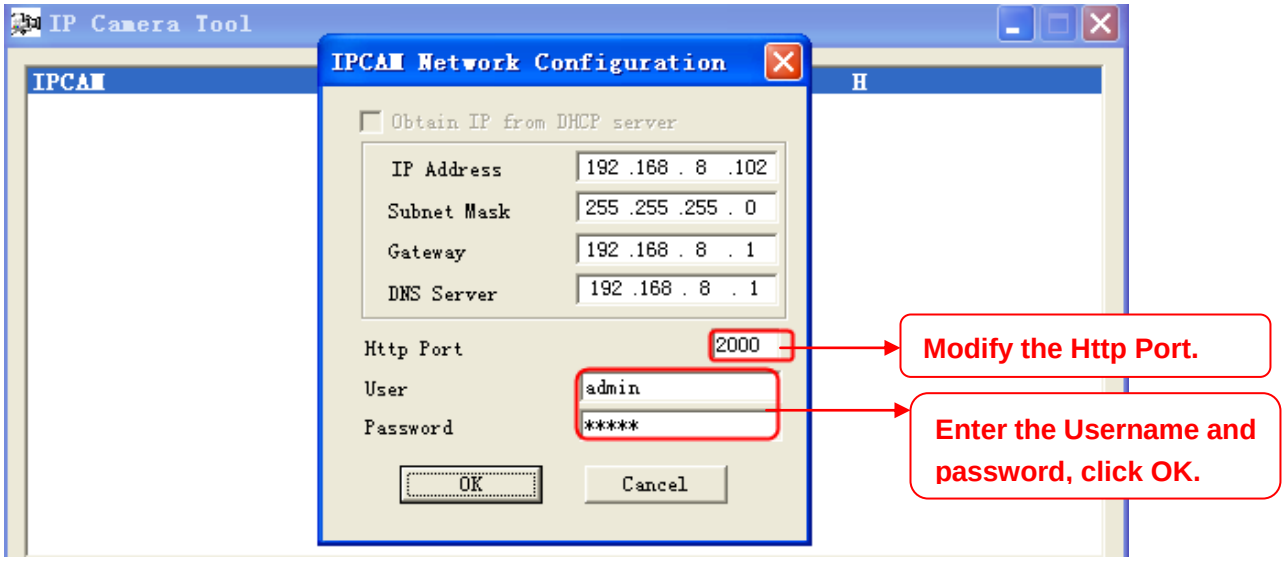


Figure 2.5 – Changing the port in IP Camera Tool.

Step 2: Enter the username and password of the Administrator (default username is admin with a blank password), and click "OK" to apply changes.

Step 3: Wait around 10 seconds, you'll see that the camera's LAN IP address has changed. In our example it was changed to 2000, so we see http://192.168.8.102:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.8.102:2000. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!

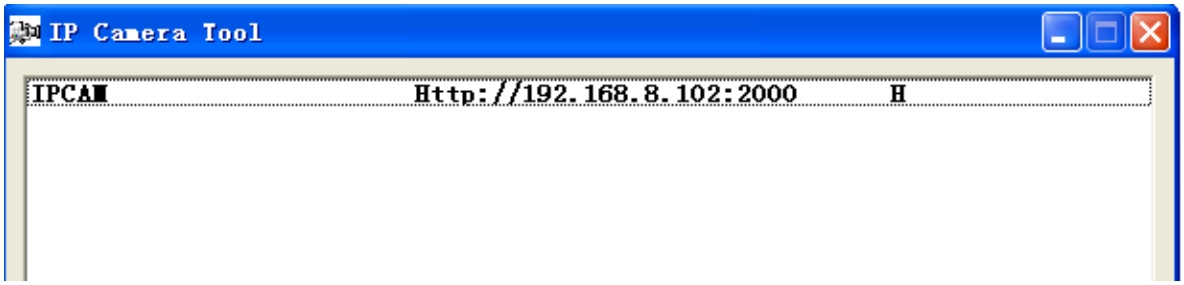


Figure 2.6 – Static IP address and port 2000 set in IP Camera Tool

How do we assign a different Media Port for the camera?

Login to the camera; then click on **Settings** at the top, then click **Network** on the left side. Next, click the **Port** section.

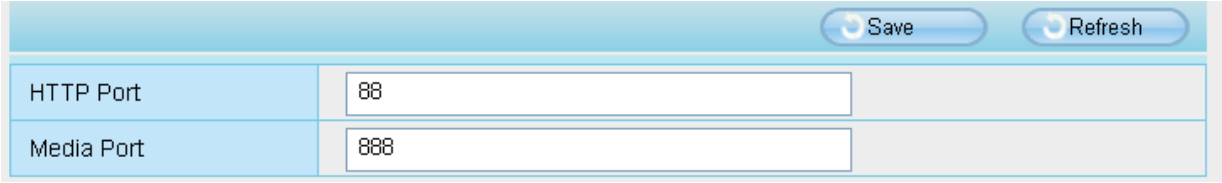


Figure 2.7 – The Port Settings page.

This page allows you to change the Media port and HTTP port, however, remember that the two ports need to be different.

Once you change the Media port, click save to save the settings, you may need to wait about 10 seconds for the information to be updated.

Setting up Remote Access

Firstly, please check to see if your ISP (Internet Service Provider) provides a Static WAN IP address service or a Dynamic WAN IP address service. This guide has been divided into two different sections of setting up remote access, one for Static IP addresses and one for Dynamic IP addresses.

If your ISP provides a Static WAN IP Address please go to Chapter 5.1 (Page 12).

If your ISP provides Dynamic WAN IP Address please go to Chapter 5.2 directly (Page 13).

5.1 Static IP Addresses

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

How to Obtain the WAN IP address from a public website

To obtain your WAN IP address, enter the following URL in your browser: http://www.whatismyip.com.The webpage at this address will show you the current WAN IP.

Figure 2.7 – This is your WAN IP address (external IP address).

Access your IP Camera from the Internet

You can access the IP Camera from the Internet (remote access). Enter the WAN IP address and port number in your standard browser. For example, you would enter http:// 183.37.28.254:85

Note Make sure port forwarding is successful. You can do port forwarding two ways.

1) Login to your router to enable the “UPNP” function. You can then login to the camera as administrator, choose **Network,** and then choose **UPnP** to enable UPnP. Make sure that the status of UPnP reads “UPnP Successful” on the Device Status page.

2) Do port (HTTP port and Media port) forwarding manually. (See Figure 2.8 for further details)

If your router has a Virtual Server, it can do port forwarding. Add the camera’s LAN IP and port which you had set earlier to your router’s port forwarding settings.

Note: If you plug the camera into a router, it will have a dynamic IP address and you need to set DDNS service settings to view it remotely.

5.2 Dynamic IP Addresses

DDNS is a service that allows your IP Camera, especially when assigned with a dynamic IP address, to have a fixed host and domain name. This means that even though your WAN IP address is constantly changing, you will have a fixed hostname you can use to access your cameras at all times. You can access the camera directly from the Internet using the hostname and port number.

What is Port forwarding?

If you have never done port forwarding before, you can open and view the following link to understand the basic concept. Port forwarding allows for outside connections to access a specific device on your network from anywhere in the world. Every router automatically blocks any incoming connections for safety purposes. Using port forwarding, you are telling your router to allow a connection through a certain port (you can think of it as a gateway) into your router. You set this port to a specific device, in our case an IP Camera, so it can be accessed from anywhere in the world.

Click this link to learn more about port forwarding: http://portforward.com/help/portforwarding.htm

How do we configure Port Forwarding?

For this section, we will be using an example:

Let's say the camera's LAN IP address is http://192.168.8.100:2000, and the Media Port is 9200.

Step 1: Login to the router, and go to your router's port forwarding or port triggering menu. Sometimes this is also under the name of Virtual Server or NAT.

Using the Linksys brand router as an example, we would log into the router, and go to the Applications & Gaming menu. We would then click on the "Single Port Forwarding" sub-menu.

Step 2: Create a new column using the LAN IP address & HTTP Port of the camera within the router as shown below, then push OK or Submit to save your settings:

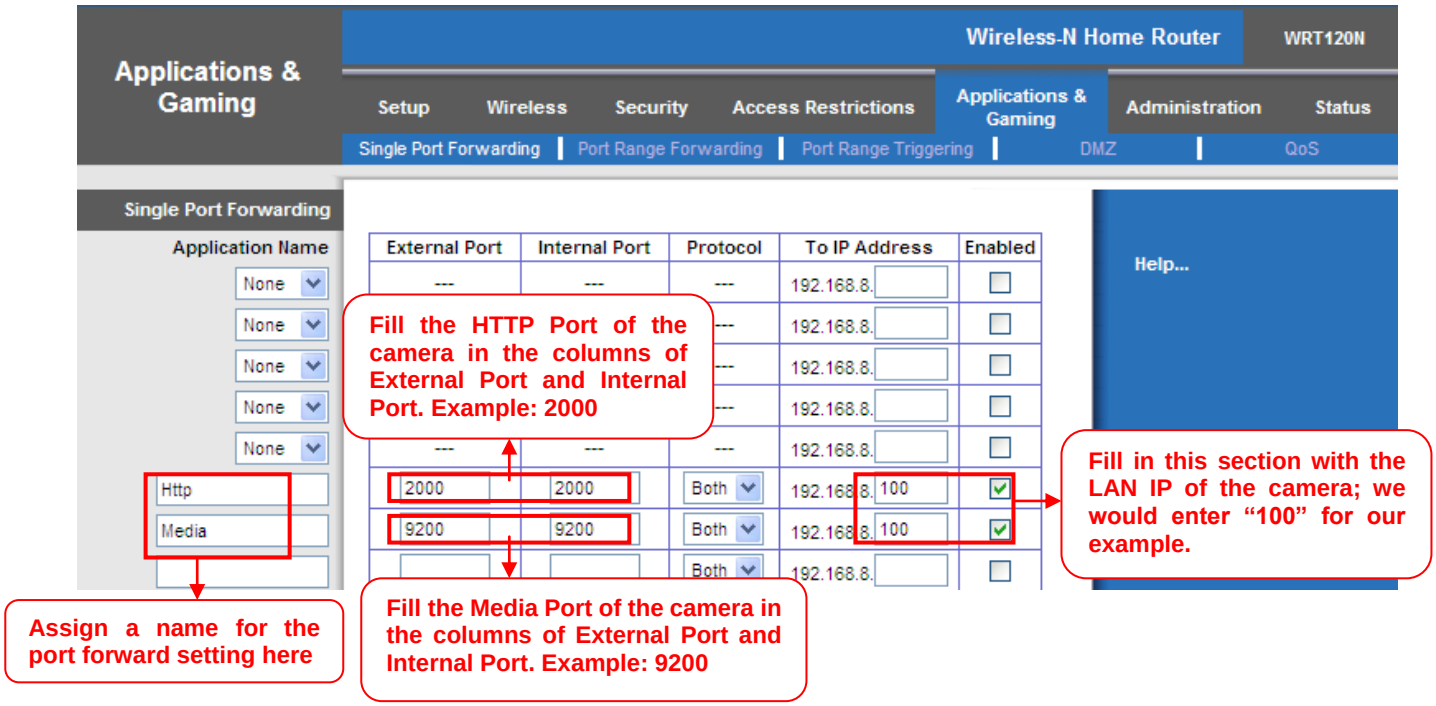


Figure 2.8 - Port forwarding in a Linksys Router

Use the embedded DDNS to access the camera via the Internet

Each Foscam camera has an embedded unique DDNS domain name, the format of this domain name is xxxxxx.myfoscam.org. On the bottom of the camera, you can see the domain name sticker with this information on it.

For example, we can use **test09.myfoscam.org**. In the camera, click Settings at the top, click "Network" on the left, then click "DDNS" to get to the DDNS settings page. Here you can see the unique domain name of your camera.

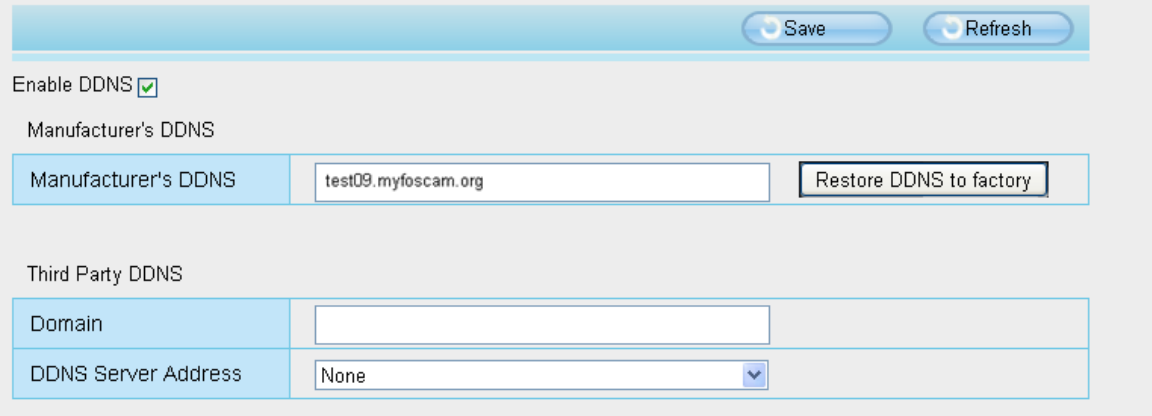


Figure 2.9 – DDNS Settings page

Now you can use "http://**Domain name + HTTP Port"** to access the camera via the Internet.
Take hostname **test09.myfoscam.org and HTTP Port of 2000** for example, the URL link to access the camera via the Internet would be http:// test09.myfoscam.org:2000.

Note

If you want to use a Third Party Domain name, please read the Remote Access section in the User Manual on how to set it.

Congratulations!

You have finished the quick installation guide of the camera. **Please refer to the electronic user manual in the CD-ROM for other settings such as Alarm Settings, Email Settings, User Settings, and much more!**

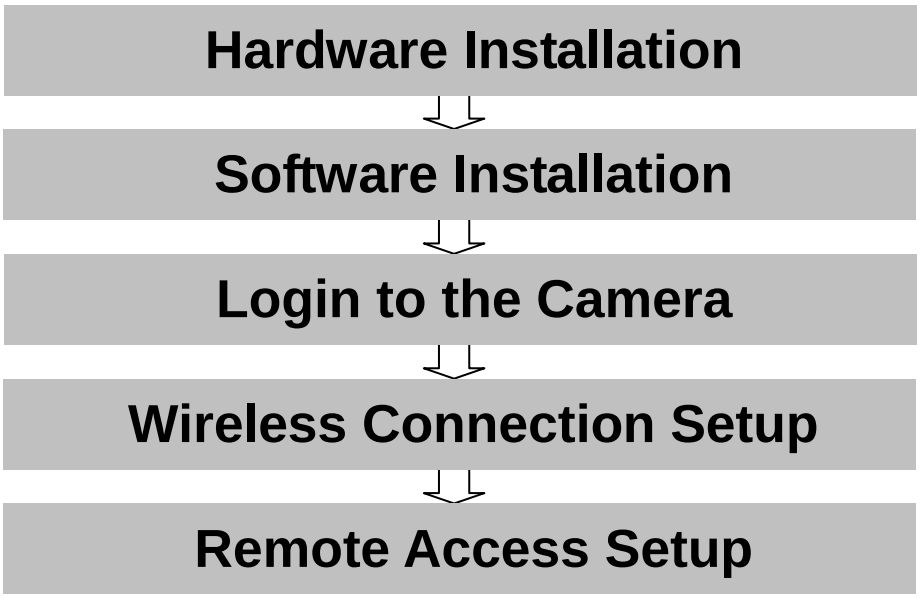
If you have problem with FOSCAM IP camera, please first contact FOSCAM reseller for solving the problems. If our reseller cannot provide service, pls contact our service department: tech@foscam.com .

Quick Installation Guide For MAC OS

Package Contents

- HD IP Camera FI9821W x 1
- DC Power Adapter (5V-2.0A) x 1
- Network Cable x 1
- Wi-Fi Antenna x 1
- Mounting Bracket x 1
- Quick Installation Guide x 1
- CD-ROM with Setup Software x 1
- Warranty Card x 1

Quick Installation Diagram



Start Installation

1. Hardware Installation

1) **Open the package**. Take the camera out of the box carefully.

2) **Mount the antenna.** Take the Wi-Fi antenna, and mount it on the SMA connector on the back of the camera, screw in the antenna, and make the antenna stand vertically.

Figure 1.1 - Mount the antenna

Figure 1.2 - Plug in the network cable

3) **Get the camera connected to the router, and insert the power adapter.**

Use the network cable to connect the camera to the router or the switch in the LAN network at your home or your office. Plug in the power. The green network light at the rear of the camera will blink and the camera will automatically pan/tilt. The red power light will also turn on.

2. Software Installation

Insert the CD into the CD drive of your Mac and find the folder“FI9821W”, then go to the folder “For MAC OS”. Copy the IP camera tool to your MAC and start the program.

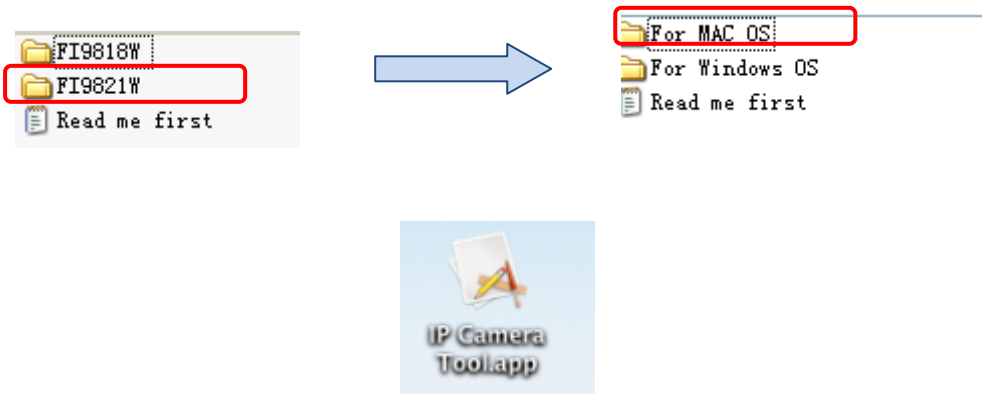


Figure 1.3 – IP Camera Tool Icon for Mac

3. Login to the Camera

Double click the IP Camera Tool icon and the following screen should appear.

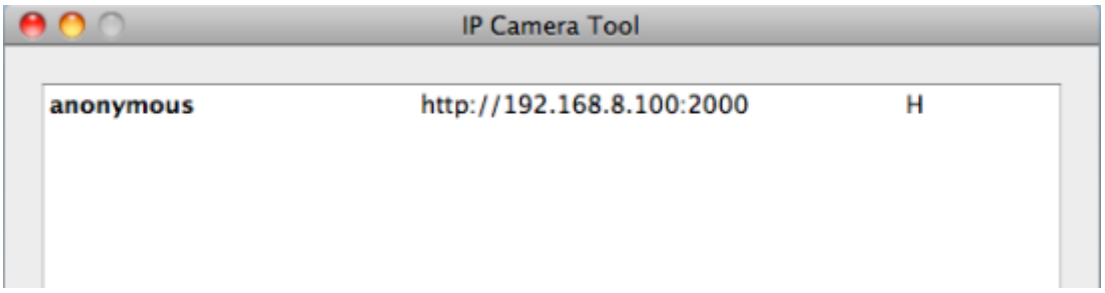


Figure 1.4 - IP Camera Tool for Mac

The IP camera tool should find the camera's IP address automatically after you plug in the network cable. If not, please make sure that DHCP is enabled on your router and that MAC address filtering, firewalls and anti-virus are disabled temporarily until the camera is set up.

Double click the IP address of the camera; Safari will open to the camera login page.

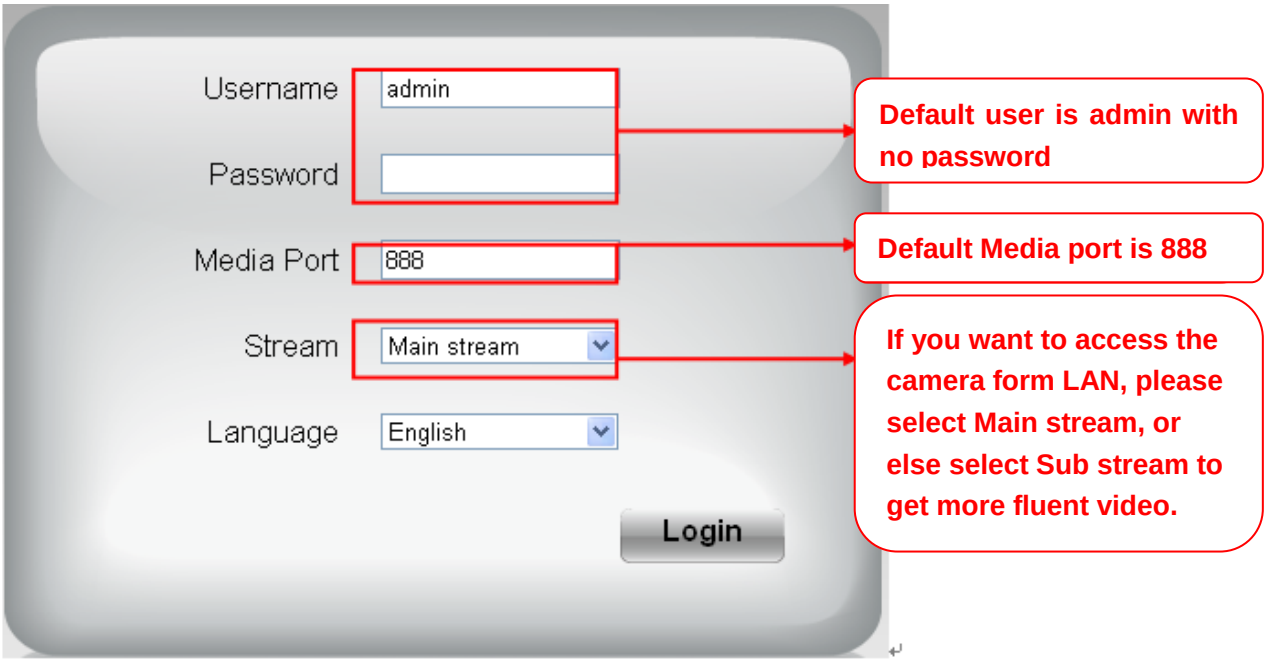


Figure 1.5 - The Login Screen

If it is your first time logging into the camera, it will prompt you to download and install the plugin.

Figure 1.6 - Download the plugin for Safari

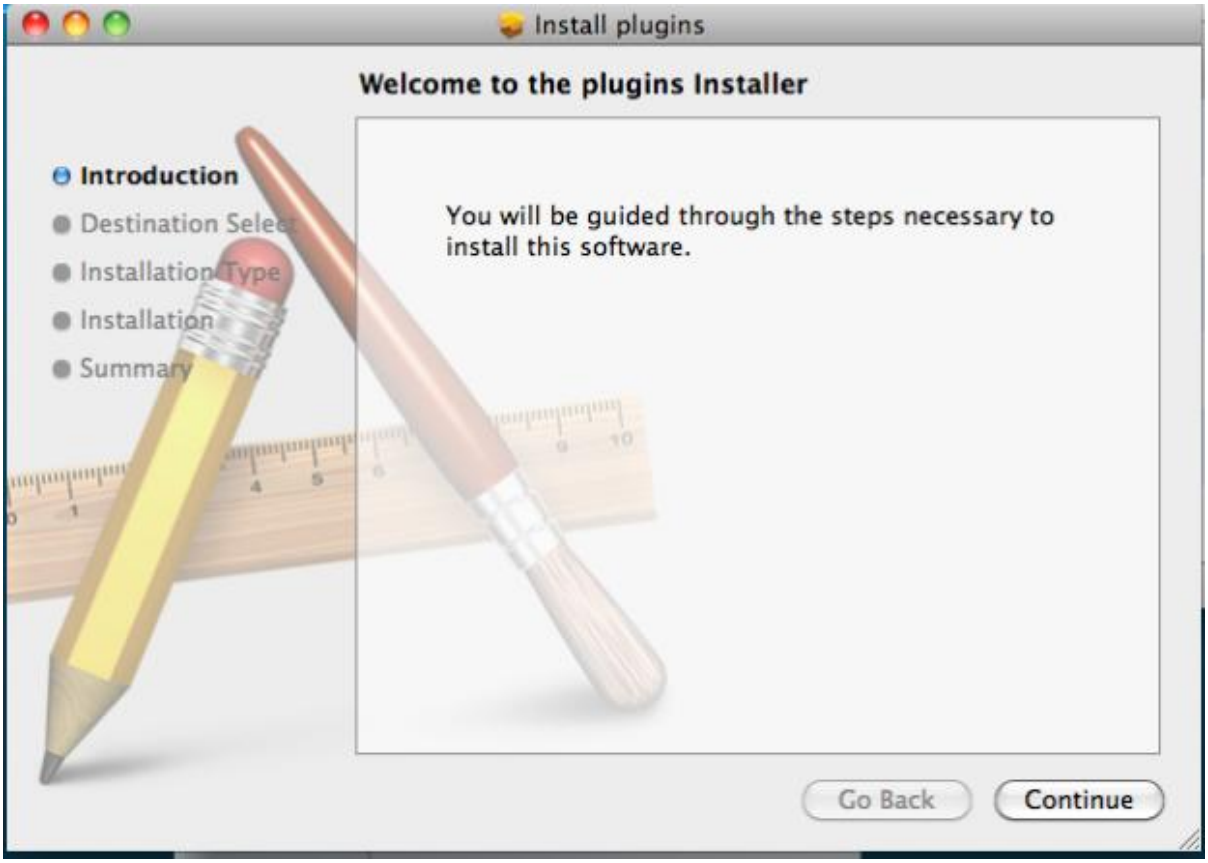


Figure 1.7 - Click Continue to start the installation

During the installation, you may receive a pop-up dialogue asking for your password, enter the login password and allow the plugin to install.

Figure 1.8 - Enter the password to continue the installation

Click **Install** to finish the installation.

After the installation, close and reopen the browser then the plugin will take effect, log into the camera again and you will be able to see the live video screen.

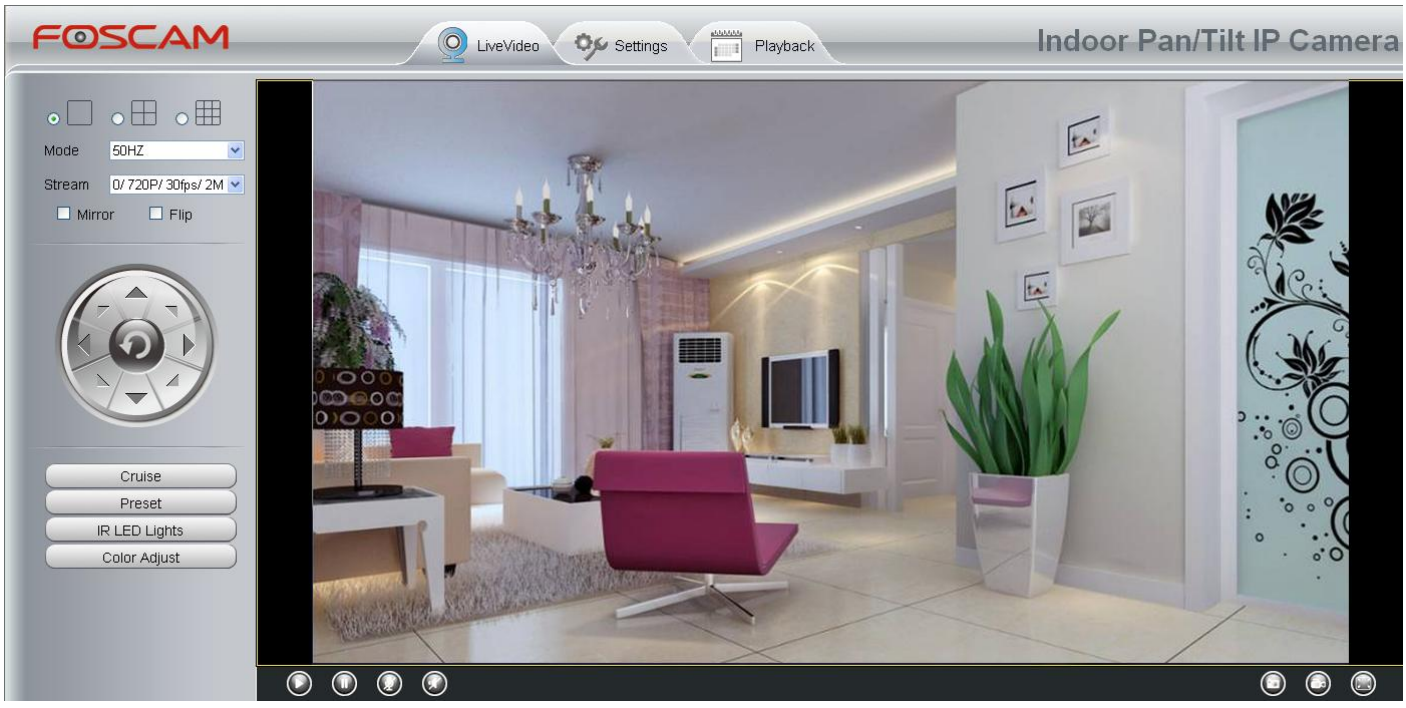


Figure 1.9 – The Live Video Page

If you are still unable to see live video, try shutting down any firewall or anti-virus software on your computer.

NOTE : For MAC OS, here cannot allow Firefox, Google Chrome to access the camera.

4. Wireless Connection Setup

Step 1: Choose "**Settings"** on the top of the surveillance window, and go to the "**Network"** panel on the left side of the screen**,** then **click "Wireless Settings."**

Click the **Scan** button and the camera will detect all wireless networks around the area. It should also display your router in the list **(Figure 2.0).**

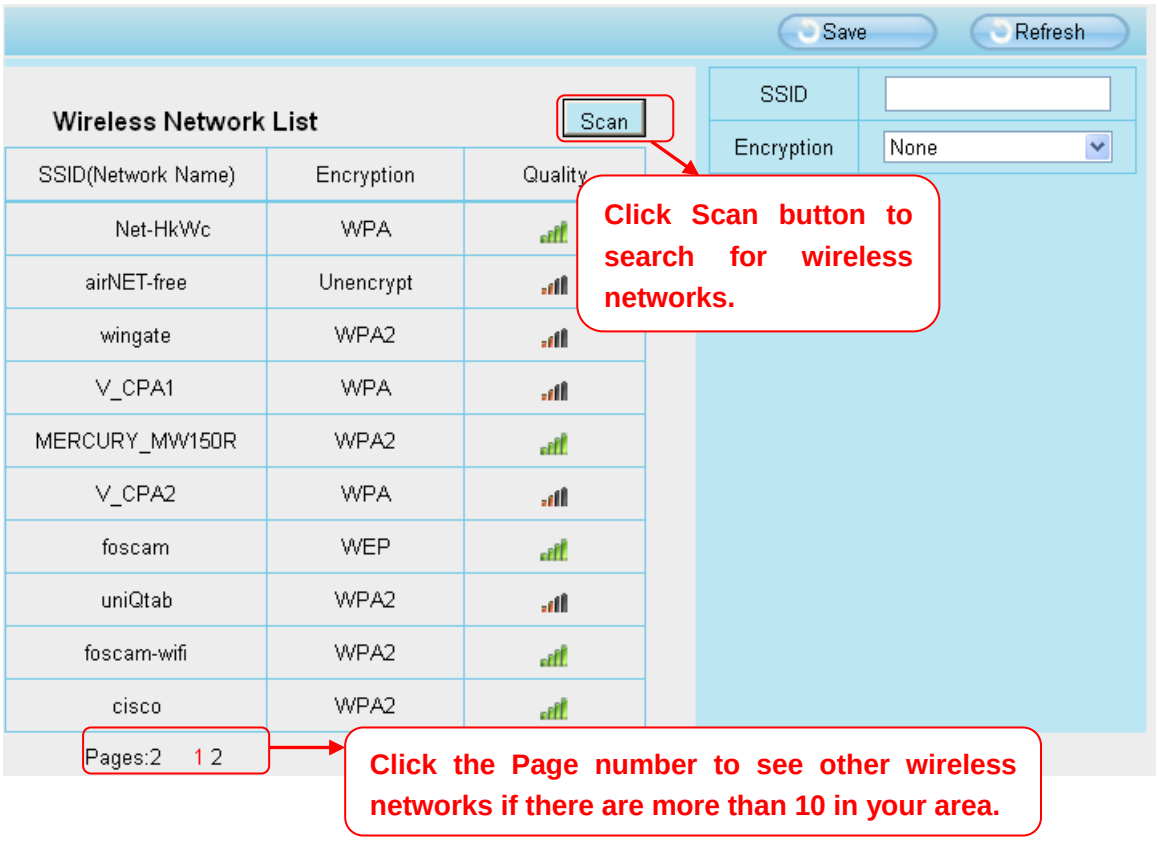


Figure 2.0 - Wireless Settings

Step 2: Click the SSID (name of your router) in the list, the corresponding information related to your network, such as the name and the encryption, will be filled into the relevant fields automatically.

You will only need to fill in the password of your network. Make sure that the SSID, Encryption and password you filled in are exactly the same for your router.

Figure 2.1 - Wireless Settings

Step 3: Please click on the **Save** button after all settings have been entered and disconnect the network cable. Never shut down the power of the camera until the IP camera is able to connect to the wireless network.

The LAN IP address will disappear on the window of IP Camera Tool when the camera gets wireless connection. Wait about 1 minute, the camera will get wireless connection, and the LAN IP of the camera will show again on the window of the IP Camera Tool. The IP address may have changed after the camera receives a wireless connection, we recommend setting a static local IP address if this IP address changes. Congratulations! You have set up the wireless connection of the camera successfully.

Note **If you fail to make a wireless connection, please refer to your seller or contact us directly for assistance.**

5. Remote Access Setup

We have been able to access the camera within the LAN network, and have set up a wireless connection, but how do we access the camera via WAN or via outside networks through the internet?

We have to set up Remote Access via Port Forwarding before we can access the camera outside of our own local area network.

What is the HTTP Port number and Media Port number, how do we change it?

This camera supports HTTP Port and Media Port. The Media port is used to view the camera's video stream, HTTP Port is used to access the camera remotely. If you want to access the camera and view the video, the Media Port and the HTTP Port must both be configured correctly.

Default HTTP Port is 88 / Default Media Port is 888

HTTP Port: All cameras have the default HTTP port of 88. For example, if the LAN IP link of the camera is http://192.168.8.102:88, this means that the camera's HTTP port is 88. You can change port 88 to another port if you'd like such as 2000 or 8090, which will not be conflict with other existing ports like 25, 21.Here you can set the port no. between 1 and 65535.

Media Port: When you login to the camera, you can see the Media Port number on the login screen. The default Media Port number is 888. Like HTTP Port, you can change this to anything between 1 and 65535.

Note: The HTTP Port and Media Port must be different; you won't be able to access the camera otherwise.

How do we assign a different HTTP port and a static LAN IP address?

Step 1: Open the IP Camera Tool, select the camera you would like to change the port of, right click on the IP address, and click on "Network Configuration", this brings up the network configuration box as shown in Figure 2.2 and 2.3.

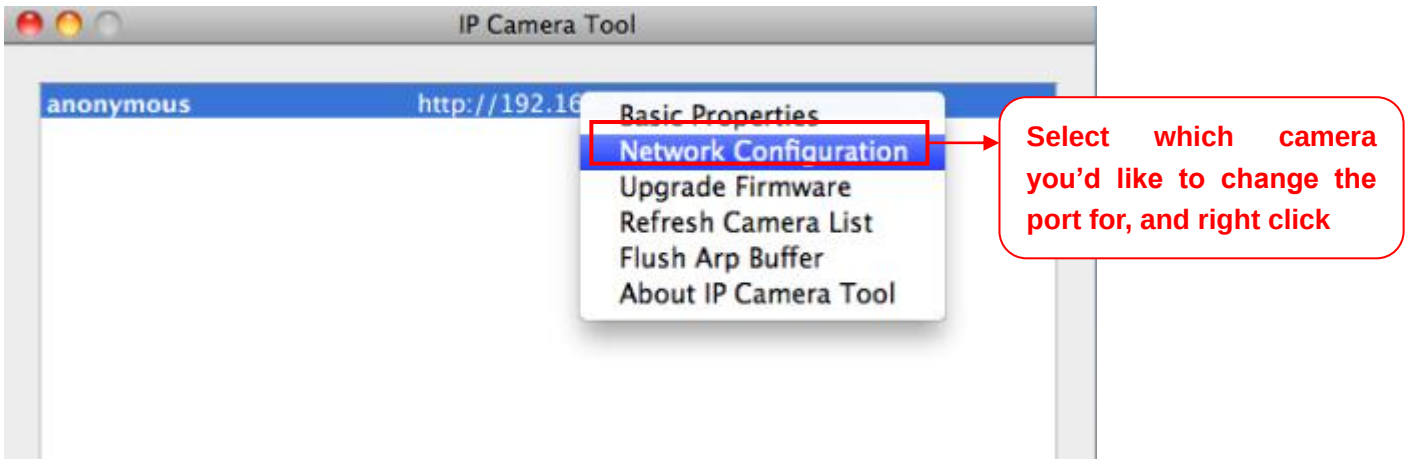


Figure 2.2 – Click on Network Configuration

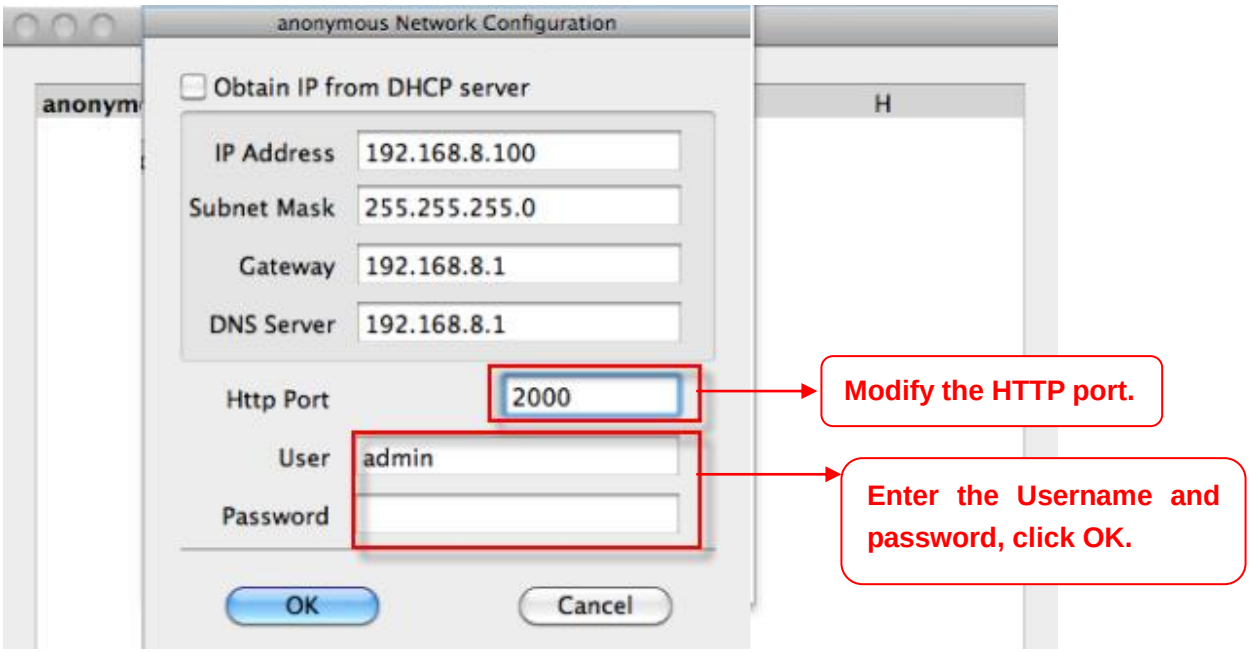


Figure 2.3 – Changing the port in IP Camera Tool

Step 2: Enter the username and password of the Administrator (default username is admin with a blank password), and click “OK” to apply changes.

Step 3: Wait around 10 seconds; you’ll see that the camera’s LAN IP address has changed. In our example it was changed to 2000, so we see http://192.168.8.102:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.8.102:2000. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!

Figure 2.4 – Static IP address and port 2000 set in IP Camera Tool

How do we assign a different Media Port for the camera?

Login to the camera; then click on **Settings** at the top, then click **Network** on the left side. Next, click the **Port** section.

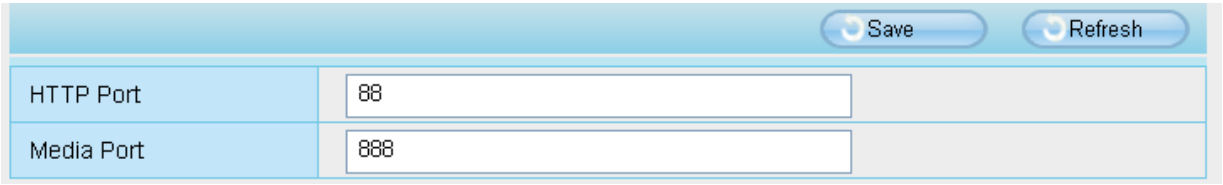


Figure 2.5 – The Port Settings page.

This page allows you to change the Media port and HTTP port, however, remember that the two ports need to be different.

Once you change the Media port, click save to save the settings, you may need to wait about 10 seconds for the information to be updated.

Setting up Remote Access

Firstly, please check to see if your ISP (Internet Service Provider) provides a Static WAN IP address service or a Dynamic WAN IP address service. This guide has been divided into two different sections of setting up remote access, one for Static IP addresses and one for Dynamic IP addresses.

If your ISP provides a Static WAN IP Address please go to Chapter 5.1 (Page 25).
If your ISP provides Dynamic WAN IP Address please go to Chapter 5.2 directly (Page 26).

5.1 Static IP Addresses

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

How to Obtain the WAN IP address from a public website

To obtain your WAN IP address, enter the following URL in your browser: http://www.whatismyip.com.The webpage at this address will show you the current WAN IP.

Figure 2.6 – This is your WAN IP address (external IP address).

Access your IP Camera from the Internet

You can access the IP Camera from the Internet (remote access). Enter the WAN IP address and port number in your standard browser. For example, you would enter http:// 183.37.28.254:85

Note Make sure port forwarding is successful. You can do port forwarding two ways.

1) Login to your router to enable the “UPNP” function. You can then login to the camera as administrator, choose **Network,** and then choose **UPnP** to enable UPnP. Make sure that the status of UPnP reads “UPnP Successful” on the Device Status page.

2) Do port (HTTP port and Media port) forwarding manually. (See Figure 2.7 for further details)

If your router has a Virtual Server, it can do port forwarding. Add the camera’s LAN IP and port which you had set earlier to your router’s port forwarding settings.

Note: If you plug the camera into a router, it will have a dynamic IP address and you need to set DDNS service settings to view it remotely.

5.2 Dynamic IP Addresses

DDNS is a service that allows your IP Camera, especially when assigned with a dynamic IP address, to have a fixed host and domain name. This means that even though your WAN IP address is constantly changing, you will have a fixed hostname you can use to access your cameras at all times.

What is Port forwarding?

If you have never done port forwarding before, you can open and view the following link to understand the basic concept. Port forwarding allows for outside connections to access a specific device on your network from anywhere in the world. Every router automatically blocks any incoming connections for safety purposes. Using port forwarding, you are telling your router to allow a connection through a certain port (you can think of it as a gateway) into your router. You set this port to a specific device, in our case an IP Camera, so it can be accessed from anywhere in the world.

Click this link to learn more about port forwarding: http://portforward.com/help/portforwarding.htm

How do we configure Port Forwarding?

For this section, we will be using an example:

Let's say the camera's LAN IP address is http://192.168.8.100:2000, and the Media Port is 9200.

Step 1: Login to the router, and go to your router's port forwarding or port triggering menu. Sometimes this is also under the name of Virtual Server or NAT.

Using the Linksys brand router as an example, we would log into the router, and go to the Applications & Gaming menu. We would then click on the "Single Port Forwarding" sub-menu.

Step 2: Create a new column using the LAN IP address & HTTP Port of the camera within the router as shown below, then push OK or Submit to save your settings:

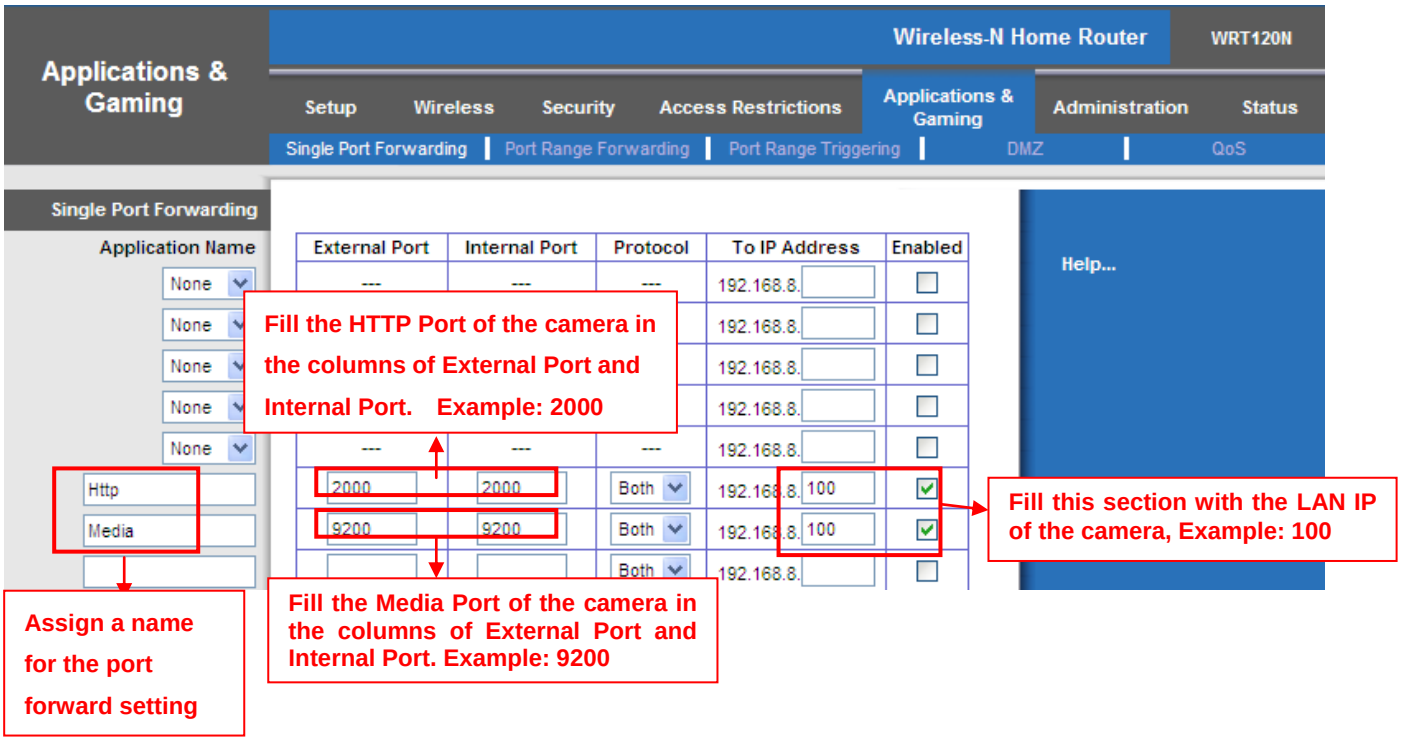


Figure 2.7 – Port forwarding in a Linksys Router

Use the embedded DDNS to access the camera via the Internet

Each Foscam camera has an embedded unique DDNS domain name, the format of this domain name is xxxxxx.myfoscam.org. On the bottom of the camera, you can see the domain name sticker with this information on it.

For example, we can use **test09.myfoscam.org**. In the camera, click Settings at the top, click "Network" on the left, then click "DDNS" to get to the DDNS settings page. Here you can see the unique domain name of your camera.

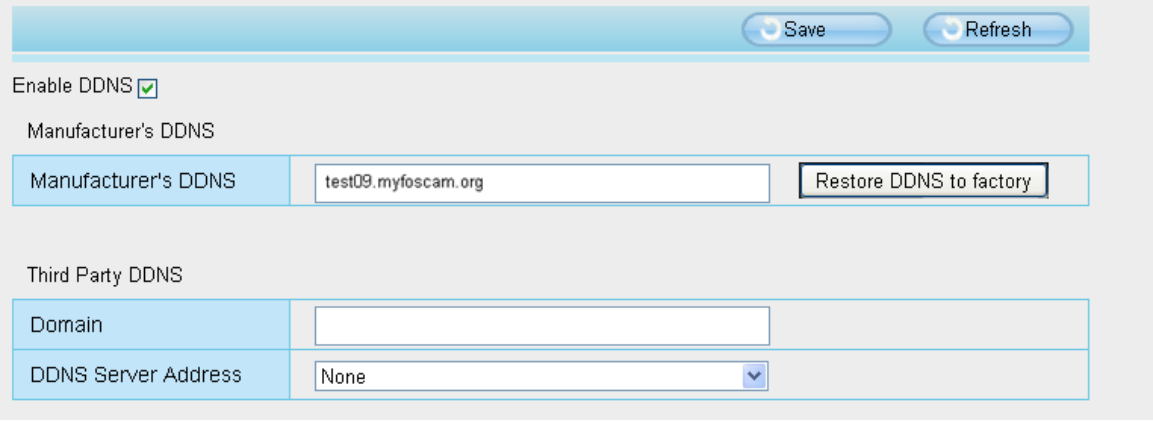


Figure 2.8 – DDNS Settings Page

Now you can use "http://**Domain name + HTTP Port**" to access the camera via the Internet. Take hostname **test09.myfoscam.org and HTTP Port of 2000** for example, the URL link to access the camera via the Internet would be http:// test09.myfoscam.org:2000.

Note

If you want to use a Third Party Domain name, please read the Remote Access section in the User Manual on how to set it.

Congratulations!

You have finished the quick installation guide of the camera. **Please refer to the electronic user manual in the CD-ROM for other settings such as Alarm Settings, Email Settings, User Settings, and much more!**

If you have problem with FOSCAM IP camera, please first contact FOSCAM reseller for solving the problems. If our reseller cannot provide service, pls contact our service department: tech@foscam.com .

ShenZhen Foscam Intelligent Technology Co., Ltd