

# Model: FI9821W

# **Quick Installation Guide**

# Indoor HD Pan/Tilt Wireless IP Camera



Black

White

For Windows OS ----- Page 1 For MAC OS ----- Page 16

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.

🔊 IP Camera Tool		
anonynous	Http://192.168.8.100:8000	H

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.

Username	admin			Default user is admin with
Password				no password
Media Port	888			Default Media port is 888
Stream	Main stream	~		If you want to access the camera form LAN, please
Language	English	~		select Main stream, or else select Sub stream to get more fluent video.
			Login	

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

🍯 IPCam Client - Windows Internet Exp	lorer			_ 8
🔆 💽 🗢 🙋 http://192.168.8.100:8000/			💌 🗟 😽 🗙 🔎 Bing	٩
File Edit View Favorites Tools Help	× 😪转换 - 🚮选择			
🚖 Favorites   🍰 🔊 Suggested Sites 🕶 🔊 Compe	my Mailbox 🙋 获取更多附加模块 -			
🏉 IPCam Client			🚹 • 🖬 • 🖃 🖷	🖣 🔹 Page 🕶 Safety 🕶 Tools 🕶 🔞
	Internet Explorer Do you want to in Publishe & More gations While files your comp	Security Warning  stall this software?      FSIPCam.cab      ShenZhen Foscam Intelligent Technology Co.Ltd      Instal      port Instal  from the Internet can be useful, this fife type can potentially harm uter. Only install software from publishers you trust. <u>What's the risk</u>		

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.

Plugins are not found, Click me to downlo	ad
User name admin	
Password	Click here to download
Media port 12000	the plugin
Stream Main stream 💌	
Language English	
Logi	n

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.

										ŝ	2
tore.	ОК						New tab New window New incognito win Bookmarks	dow	Ctrl+	Ctrl+T Ctrl+N Shift+N	,
-	-	_		_		Indoor Pa	Edit	Cut	Copy	Paste	
					Create application shortcut	s	Save page as Find Print Tools			Ctrl+S Ctrl+F Ctrl+P	•
		Plugins are not	found, Click me to	<u>download</u>	Extensions Task manager	Shift+Esc	History Downloads			Ctrl+H Ctrl+J	
		User nam	Go to Extens	sions pa	Clear browsing data	Ctrl+Shift+Del	Sign in to Chrome.	••			_
		Password			Encoding View source Developer tools	Ctrl+U Ctrl+Shift+I	About Google Chro View background p Help	ome bages (1)			
		Media port	12000		JavaScript console	Ctrl+Shift+3	Exit	_	_	_	
		Stream	Main stream	*							
		Language	English	Logi	n						

Figure 2.0 – The Extensions page in Google Chrome

Click the "Add" button to install the Plugin.

Extensions	× Downloads ×	
⇒ C fi	C chrome://chrome/extensions/	
juick access, place y	your bookmarks here on the bookmarks bar. Import bookmarks now	
:hrome	Extensions	Developer mode
listory xtensions ettings	有道词典Chrome鼠标取词插件 1.21 支持有道词典在Chrome浏览器中实现鼠标取词 □ Allow in incognito	✓ Enabled Imit
lelp	Get more extensions  Get more extensions  Add "II It can: Access websites	lew Extension X CAM"? all data on your computer and the you visit
	Click Add but install the plug	ion to

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).** 

			Save Refresh
Wireless Network	List	S	can SSID Encryption None
SSID(Network Name)	Encryption	Quality	
Net-HkWc	WPA	at	Click the Scan button
airNET-free	Unencrypt	.aff	networks.
wingate	WPA2	att.	
V_CPA1	WPA	.atl	
MERCURY_MVV150R	WPA2	etl.	
V_CPA2	WPA	in.	
foscam	WEP	.eff.	
uniQtab	WPA2	.att	
foscam-wifi	WPA2	.eff.	
cisco	WPA2	.eff.	
Pages:2 12	Click t	he Page	number to see other wireless
	networ	ks devices	s if there are more than 10.

Figure 2.2 - Wireless Settings

<u>Step 2:</u> 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.

			Save Refresh
Wireless Network	List	Scan	SSID cisco
SSID(Network Name)	Encryption	Quality	password of
ChinaNet-HkWc	WPA	att	Password your router
airNET-free	Unencrypt	.at	
wingate	WPA2	at .	
V_CPA1	WPA	.atl	
MERCURY_MW150R	WPA2	ett	
V_CPA2	WPA	at .	
foscam	WEP	att	
uniQtab	WPA2	.atl	
foscam-wifi	WPA2	ett	1 Click the SSID of your router
cisco	WPA2	ail	and the relevant information will be filled in the fields
			automatically.

Figure 2.3 - Wireless Settings

<u>Step 3:</u> 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 <u>http://192.168.8.102:88</u>, 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?

<u>Step 1:</u> 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

🐉 IP Camera Tool				
IPCAL	IPCAN Network C	onfiguration 🛛 🔀	Н	
	🗖 Obtain IP from	DHCP server		
	IP Address	192 .168 . 8 .102		
	Subnet Mask	255 .255 .255 . 0		
	Gateway	192 .168 . 8 . 1		
	DNS Server	192 .168 . 8 . 1		
	Http Port	2000	<b></b>	Modify the Http Port.
	Vser	admin		
	Password	*****		Enter the Username and
	OK	Cancel		password, click OK.

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.

		Save	Refresh
HTTP Port	88		
Media Port	888		

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 <u>http:// 183.37.28.254:85</u>

**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: <u>http://portforward.com/help/portforwarding.htm</u>

### 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 <u>http://192.168.8.100:2000</u>, and the Media Port is 9200.

<u>Step 1:</u> 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.

<u>Step 2:</u> 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:

Amulia diana 8				Wireles	s-N Hor	me Router	WRT120N
Gaming	Setup Wireless Security	Acces	ss Restrictions	Applicatio Gamin	ns& g	Administration	Status
	Single Port Forwarding Port Range For	rwarding	Port Range Trigger	ing	DMZ		QoS
Single Port Forwarding							
Application Name	External Port Internal Port P	Protocol	To IP Address	Enabled		11-1-	
None 💌			192.168.8.			neip	
None 💌	Fill the HTTP Port of the		192.168.8.				
None 💌	camera in the columns of External Port and Internal		192.168.8.				
None 💌	Port. Example: 2000		192.168.8.				
None 💌			192.168.8.		Fil	l in this secti	on with the
Http	2000 2000 1	Both 💌	192.168 <mark>.8.</mark> 100		LA	N IP of the	camera; we
Media	9200 9200 8	Both 💌	192.168 8. 100	~	WC	ould enter "1 ample	00" for our
		Both 🗸	_192.168.8.				
Assign a name for the port forward setting here	Fill the Media Port of the ca the columns of External P Internal Port. Example: 920	imera in Port and 0		. 1			

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 <u>xxxxx.myfoscam.org.</u> 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.

	Save Refresh
Enable DDNS 🔽	
Manufacturer's DDNS	
Manufacturer's DDNS	test09.myfoscam.org Restore DDNS to factory
Third Party DDNS	
Domain	
DDNS Server Address	None

#### Figure 2.9 – DDNS Settings page

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

### 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. <u>Please refer to the electronic user</u> <u>manual in the CD-ROM</u> for other settings such as <u>Alarm Settings</u>, <u>Email Settings</u>, <u>User</u> <u>Settings</u>, 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: <u>tech@foscam.com</u>.

# **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.

0 🖰 🔿	IP Camera Tool	
anonymous	http://192.168.8.100:2000	н
F	igure 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.

Username	admin		Default user is admin with
Password			
Media Port	888		Default Media port is 888
Stream	Main stream 💌	]	If you want to access the camera form LAN, please
Language	English 💌		select Main stream, or else select Sub stream to
		Login	get more fluent video.

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.

00	IPCam Client	
< > 🖄 🖭 🕑 + 😚 Cnto.com/		C Google
6-9 []] IIII Apple中国 Google 地图 YouTube	Nikipedia 新闻▼ 热门▼ banner.jpg	
FOSCAM		Indoor Pan/Tilt IP Camera
	Plugins are not found, Click me to a         User name         admin         Password         Media port       9200         Stream       Main stream         Language       English	download Click here to download the plugin

Figure 1.6 - Download the plugin for Safari

00	🥪 Install plugins
	Welcome to the plugins Installer
<ul> <li>Introduction</li> <li>Destination Sele</li> <li>Installation Typ</li> <li>Installation</li> </ul>	You will be guided through the steps necessary to install this software.
• Summary	atmilianta alanga ang
1	
12-	Go Back Continue

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.

00	_	🥪 Install plugins	
⊖ Int ⊖ De		Type your password to allow Installer to mak changes.	puter.
ln: Ins Su		Name: apple Passwor <mark>c</mark> :	Type in your password
ատարութ	▶ Details	(Cancel) (OK	
1	-		
2		Go	Back 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)**.

			Save Refresh
Wireless Network	List	Scan	SSID Encrution
SSID(Network Name)	Encryption	Quality	
Net-HkWc	WPA		k Scan button to
airNET-free	Unencrypt		vorks.
wingate	WPA2	al	
V_CPA1	WPA	.aff	
MERCURY_MW150R	WPA2	at	
V_CPA2	WPA	af	
foscam	WEP	att	
uniQtab	WPA2	at	
foscam-wifi	WPA2	at	
cisco	WPA2	ail	
Pages:2 1 2	Click t	he Page num	ber to see other wireless
	networ	ks if there are	more than 10 in your area.

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.

			Save Refresh
Wireless Network	List	Scan	SSID cisco
SSID(Network Name)	Encryption	Quality	password of
ChinaNet-HkWc	WPA	all	Password your router.
airNET-free	Unencrypt	at	
wingate	WPA2	att	
V_CPA1	WPA	at	
MERCURY_MW150R	WPA2	.ell	
V_CPA2	WPA	al	
foscam	WEP	.eff.	
uniQtab	WPA2	al .	
foscam-wifi	WPA2	eff.	Click the SSID of your router
cisco	WPA2	atl	be filled in the fields

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 <u>http://192.168.8.102:88</u>, 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?

**<u>Step 1</u>**: 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.

mtp.//192.10	Basic Properties	Select which camer
	Network Configuration	you'd like to change th
	Upgrade Firmware	you u like to change th
	Refresh Camera List	port for, and right click
	About IP Camera Tool	

Figure 2.2 – Click on Network Configuration

000	anonym	ous Network Configuration	
anonym	Obtain IP fro	DHCP server	н
1	IP Address	192.168.8.100	
	Subnet Mask	255.255.255.0	
	Gateway	192.168.8.1	
	DNS Server	192.168.8.1	
	Http Port	2000	Modify the HTTP port.
	User	admin	
	Password		Enter the Username and password, click OK.
	ОК	Cancel	

Figure 2.3 – Changing the port in IP Camera Tool

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

<u>Step 3:</u> 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!

0	0	IP Camera Tool		
	anonymous	http://192.168.8.100:2000	Н	

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.

		Save	Refresh
HTTP Port	88		
Media Port	888		

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: <u>http://www.whatismyip.com</u>.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:

Applications & Gaming					Wireless-N Home Router WRT120N			
		Setup Wireless Security Acces			ss Restrictions Application Gamin		ons & Administration Status	
		Single Port Forwa	rding Port Range	Forwarding	Port Range Trigger	ring	DMZ	QoS
Single Port Forward	ding							
Application Na	ame	External Por	t Internal Port	Protocol	To IP Address	Enabled		
None	~				192.168.8.		neip	
None	~	Fill the HTTP I	Port of the cam	era in	192.168.8.			
None 💉 the columns of External Port and			192.168.8.					
None 💊 In		nternal Port. Example: 2000			192.168.8.			
None	~		<b>▲</b>		192.168.8.			
Http		2000	2000	Both 💌	192.168.8. 100		Fill this section with the L	
Media		9200	9200	Both 💙	192.168.8. 100		of the camera, Exa	ample: 100
				Both 🗸	192.168.8.			
Assign a name for the port		Fill the Med the column Internal Por	Fill the Media Port of the camera in the columns of External Port and Internal Port. Example: 9200			· i — i		
orward setting								

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 xxxxx.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.

	Save Refresh
Enable DDNS 🔽	
Manufacturer's DDNS	
Manufacturer's DDNS	test09.myfoscam.org Restore DDNS to factory
Third Party DDNS	
Domain	
DDNS Server Address	None

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: <u>tech@foscam.com</u>.

ShenZhen Foscam Intelligent Technology Co., Ltd

