

# **User Manual**

## Model: FI9816P

## Indoor HD Pan/Tilt Wireless IP Camera with P2P

(For Windows & Mac OS)



Black



White

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## **Security Warning**

## **Safeguarding Your Privacy**

Foscam cameras require good security practices to safeguard your privacy. You can help protect your camera by changing the default username and/or password. Input a username and/or password that is at least 8 – 10 characters or longer. Try to use a combination of lower-case and upper-case letters as well as numbers and special characters. The more complex the username and password, the harder it will be to guess by an unauthorized user.

You should update your camera regularly at *http://www.foscam.us/firmware.html*. Make sure your camera has the latest firmware installed for your specific camera model. The latest firmware for Foscam cameras utilizes protection against various types of online hacking, cracking, and unauthorized access. Doing so will make your device more secure, may add features, and will contain bug fixes to make your device work faster.

## **1** Overview

FOSCAM Indoor HD Pan/Tilt Wireless IP Camera with P2P is an integrated wireless IP Camera with a color CMOS sensor enabling viewing in High Definition resolution. It combines a high quality digital video camera, with a powerful web server, to bring clear video to your desktop and mobile devices from anywhere on your local network or over the Internet.

Thanks to the P2P easy access technology, you don't need to do complicated Port Forwarding and DDNS settings, you just need to scan the QR code on the bottom of the camera to connect it on smart phone, or input the UID on CMS software to do remote access.

With flexible 300-degree pan and 120-degree tilt, FOSCAM IP Camera gives users more comprehensive control over a monitored site. The camera supports H.264 video compression technology, dramatically reducing file size and saving network bandwidth.

The camera is based on the TCP/IP standard. There is a WEB server inside which could support Internet Explore. Therefore the management and maintenance of your device is simplified by using the network to access the website of your camera.

The camera is designed for indoor surveillance applications such as home, retail store and office. Controlling the camera and managing images are simplified by using the provided web interface across the network utilizing wired or wireless connectivity.

FOSCAM provides Smart Phone APP for Android and iPhone users, please search and install please search and install Foscam App named **Foscam** on App Store and Google Play, then you can view your camera anywhere, anytime on your smart mobile devices.

Please note to change your default username and password once you have initially logged into your Foscam camera. Changing your default user settings enables better protection against any types of attacks against your camera.

## **1.1 Key Features**

- Standard H.264 video compression algorithm to satisfy the transmission of high definition video in narrow bandwidth network
- P2P feature for easy access
- Megapixel HD video
- Pan 300 degree, tilt 120 degree
- Supports IE/Firefox/Google/Safari browser
- Supports WEP, WPA-PSK and WPA2-PSK Encryption
- Wireless connection is compliant with IEEE 802.11b/g/n Wi-Fi, up to 150Mbps
- IR night vision (Range: 8m)
- Supports image snapshot
- Supports dual-stream
- Supports SD Card storage up to 32GB
- Supports IR-Cut auto switch
- Embedded free FOSCAM DDNS(dynamic domain name service) Service
- Supporting the Third Party Domain Name Service
- Supports two-way audio
- Multi-level users management with password protection
- Motion detection alert via email or upload image to FTP
- Providing free Android and iPhone APP for viewing live video
- Providing free Central Management Software to manage and monitor multiple cameras

## 1.2 Read Before Use

Please first verify that all contents received are complete according to the Package Contents listed below. Before the IP Camera is installed, please carefully read and follow the instructions in the Quick Installation Guide to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

## **1.3 Package Contents**

• IP Camera × 1	DC Power Adapter × 1
• Wi-Fi Antenna × 1	<ul> <li>Mounting bracket × 1</li> </ul>
Ethernet Cable × 1	• CD×1
Quick Installation Guide × 1	Security Warning Card × 1

## **1.4 Physical Description**

#### Front Panel



1.Speaker: Built-in speaker

2.LENS: Fixed focus lens.

3.Infrared LED: Infrared LEDs for night vision

4. Microphone: Built-in microphone

#### **Rear Panel**





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1.LAN: 10/100 Mbps RJ-45 port for wired connection

2.Power: DC 5V/2A Power supply

3.Network Light: The LED will blink slowly in wired connection, blink two times faster in wireless connection, blink four times faster when WPS

4. Power Light: If the power supply works fine, the light will turn on

5.WPS: Push the WPS button on the camera and wireless router in 1 minutes, the camera will connect the wireless router automatically, in WPS process, the Network Light will blink very fast

6. Micro SD card Slot: Supports up to 32GB Micro SD card for storing the video

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

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

9.Antenna: Used to connect external wireless antenna

#### **Bottom View**



Figure 1.3

1. Mounting Port: Port for mounting bracket

2.Reset Button: Push and hold for more than 5 seconds to set the camera to factory default

## 1.5 SD Card

This camera supports Micro SD Card and the max size of SD card must be under 32G.

When you plug in the Micro SD card during the camera work process, please reboot the camera again, or else the SD Card may be cannot work well.

Go to the **Settings→Status→Device Status** page, you can see the SD card status.

Setup Wizard	$\overline{}$	Device Status						
Status								
Device Information			( Refresh					
Device Status	$\supset \langle$	Alarm Status	Disabled					
Session Status		Recording Status	Not Recording					
Log		SD Card Status	No SD card					
Basic Settings								
Network	$\overline{}$	SD Card Free Space	ОКВ					
Video	$\overline{}$	SD Card Total Space	ОКВ					
Alarm		NTP Status	Disabled					
Record		DDNS Status	Disabled					
PTZ		UPnP Status	Disabled					
Firewall		WiEi Otatua	Networked					
System		WiFi Status	Not connected					
		IR LED Status	Off					

Figure 1.4

The default storage path of alarm record files is SD card, when the available size of SD card is less than 256M, the old record files will be deleted automatically.

## 2 Access the IP Camera

## 2.1 Hardware Connection & Software Installation



Figure 2.1

- 1. Mount the antenna and make it stand vertically.
- 2. Connect the camera to the LAN network (Router or Switch) via network cable.
- 3. Connect the power adapter to the camera.
- 4. Insert the CD into the CD drive of your computer.
- 5. Go to the folder "IP Camera Search Tool" and find the folder "For Windows OS" or "For Mac OS". Copy and paste the IP camera tool file to your computer, or drag it onto your Desktop.



P Camera Toolagp

Shortcut icon for Windows OS

Shortcut icon for Mac OS

Notes:

- If your computer (Windows OS) supports autorun function, you can find the corresponding file in the opened control panel.
- If your computer doesn't have CD drive, you can download the IP camera tool from our website for free.

This chapter explains how to access the camera through browser and RTSP player.

## 2.2 Access the Camera in LAN

The camera supports HTTP and HTTPS protocols, you can access the camera in two ways.

#### (1) http:// LAN IP + HTTP Port NO.

The default HTTP port NO. is 88. Double click the IP Camera Tool icon to run, and it should find the camera's IP address automatically after you plug in the network cable.

🔉 IP Camera Too	1		
Camera name	IP Address	Device ID	Device type
IPCAN	Http://192.168.11.220:88	00626E4D8A55	H
	Figure 2.2		

Double click the IP address of the camera; the camera login page should be open in your default browser.

#### (2) https:// LAN IP + HTTPS Port NO.

The default HTTPS port NO. is 443. You can use the URL to access the camera: https:// LAN IP + HTTPS port NO.

Go to Settings - Network - Port panel, you can see and change the HTTP and HTTPS port NO.

		Save Refresh
HTTP Port	88	
HTTPS Port	443	
ONVIF Port	65533	



#### NOTE:

When logging in for the first time, you will need to download and install the add-on.

FOSCAM		HD IP Camera
	Username admin	
	Password	E
	Stream Main stream	
	Language English	
	Login	
		Click Install
This website wants to install the following ad What's the risk?	d-on: 'IPCWebComponents.exe from 'ShenZhen Foscam Intelligent Technolog	gy Co, Ltd'.

Figure 2.4

There are two ways of wireless connection: EZLink or WPS.

## WPS (WI-FI Protected Set-up)

Before using WPS wireless connection, you need to:

- Make sure that your wireless router has the WPS function, and has been properly connected to the Internet.
- WPS button on the wireless router is typically located on the front panel or rear panel.TP-LINK router's WPS button is called QSS (Quick Security Setup).
- Make sure that the ethernet cable and the camera is disconnected.



• Press and hold the WPS button for three seconds. The Network light of the camera begins to twinkle at high frequency. (every 0.4 seconds)

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- Press and hold the WPS button for three seconds on your wireless router **within 60 seconds**. Then the camera will automatically create a secure wireless connection to your router in about 60 seconds.
- The IP Camera Tool will search the camera's LAN IP. Make sure the PC and the camera share the same subnet.

#### NOTE :

The security mode of router cannot be WEP, or else the WPS settings may be failed.

## 2.3 Access the Camera in WAN

### 2.3.1 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.



#### 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.

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.

#### 2.3.2 Remote Access

If you want to access your camera by web browser outside of your LAN, you need to configure following configurations.

1. Choose "Settings" on the top of the camera web page, then go to the "Network > IP Configuration" section on the left side of the screen, then uncheck the Obtain IP DHCP.

Setup Wizard	)	IP Configuration						
Status		Save Refresh						
Basic Settings	)		Jave Sitesi					
Network	Obtain IP From DHCP		IP Address: Set this in the same subne					
IP Configuration	IP Address	192.168.1.100						
Wireless Settings	Subnet Mask	as your computer , or keep it						
DDNS UPnP	Gateway	192.168.1.1	Subnet Mask: Keep it as default.					
Port	Primary DNS Server	211.162.78.1	Gateway and DNS Server: Set it to the					
Mail Settings	Secondary DNS Server	211.162.78.3	IP address of your router.					



2. Enable UPnP and DDNS in the camera's settings page. We recommend you to use the DDNS by factory default.

Status	UDeD		
Basic Settings	UPnP		
Network			Save Refresh
IP Configuration	Enable UPnP	Yes	
Wireless Settings			
PPPoE		Select Yes and click Save.	
DDNS			
UPnP A	<		

Figure 2.7

Status	DDNG					
Basic Settings	DDNS					
Network					Save	Refresh
IP Configuration	Enable DDNS 🔽					
Wireless Settings	Manufacturer's DDNS					
PPPoE	Manufacturer's DDNS	cg8881.	myfoscam.org		Restore	DDNS to factory
			Click Enab	le DDNS an	d click Save	e.
Port	Third Party DDNS		The conter	nt in the Man	ufacture' s	
Mail Settings	DDNS Server	no-ip	column is t	the domain r	name of you	ir camera.



3. You can see the port of your camera here. If you want to set Remote Access for several cameras on the same network, you will need to change the HTTPS port for each camera.

Easic Settings			Save Refresh
Network	HTTP Port	88	
Wireless Settings	HTTPS Port	443	
PPPoE	ONVIF Port	888	
DDNS UPnP	RTSP port	554	



4. If the UPnP of the router has been enable, you do not need to perform following steps. Otherwise, you need to select one of the following methods to configure port forwarding on your router. For these steps, we will be using the TP-LINK brand wireless router as an example.

#### • If there is a UPnP function in your router:

Choose "Forwarding > UPnP", make sure that the Current UPnP Status is Enabled.

Quick Setup	UPnP					
WPS						
Network						
Wireless	Current UDeD Statue: Carebiad		Die			
DHCP	Current UPnP Status: Enabled		Dis	able		
Forwarding						
- Virtual Servers	Current UPnP Setting	s List				
- Port Triggering	D App Description	External Port	Protocol	Internal Port	IP Address	Status
- DMZ		External Fort	ridiocor	internal Port	I Address	Status
- UPnP						
Security		Refresh	]			

Figure 2.10

#### • If there is no UPnP function in your router:

You need to manually add port(HTTPS port) forwarding, refer to the following steps. You need go to the "Forwarding > Virtual Servers" panel for setup.

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Quick Setup		/irtual Serve	rs				
WPS							
Network		Conside Dest	Internal Deat	ID Address	Destand	Ct-true	N
Wireless	ID	Service Port	Internal Port	IP Address	Protocol	Status	Modify
DHCP							
Forwarding							
- Virtual Servers		Add New	Enable All	Disable All	Delete All		
- Port Triggering							
- DMZ	0	Click Add N	lew.	Previous	Next		
- UPnP				11011000	Hom		

Figure 2.11

Quick Setup	Add or Modify a Virtual S	erver Entry	
WPS			
Network	Service Port:	443	(XX-XX or XX)
Wireless			
DHCP	Internal Port:		K, Only valid for single Service Port or leave it blank)
Forwarding	IP Address:	192. 168. 1. 100	
- Virtual Servers	Protocol:	ALL	Input the port and IP address of
- Port Triggering	Status:	Enabled	your camera and click Save.
- DMZ			your camera and click Save.
- UPnP	Common Service Port:	Select One	· · · · · · · · · · · · · · · · · · ·
Security			
Parental Control		Save	Back
Access Control		Jave	Dack

Figure 2.12

Status						
Quick Setup	Virtual Server	s				
QSS						
Network	ID. Camina Dart	Internal Dect	ID Address	Dratesal	Status	Madifa
Wireless	ID Service Port	Internal Port	IP Address	Protocol	Status	Modify
DHCP	1 443	443	192.168.1.100	ALL	Enabled	Modify Delete
Forwarding						
- Virtual Servers				He	re you ha	ave finished the
- Port Triggering	Add New	Enable All	isable All 🛛 🗌 Delet	te All Po	rt Forwar	ding setup.
- DMZ						<b>U</b>
- UPnP		D	New	+		
Cooucitu		P	revious Nex	1		
		Fig	jure 2.13			

5. Now you can access your IP camera by https://domain name: HTTPS port via the Internet.

## 2.4 Using the VLC player

This camera supports RTSP streaming, here you can view the camera using VLC player.

RTSP URL <a href="http://fusername][:password]@IP:portnumber/videosream">http://fusername][:password]@IP:portnumber/videosream</a>

The part in the square brackets may be omitted.

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#### user name & password:

The user name and password to access the camera. This part can be omitted.

#### IP:

WAN or LAN IP address.

#### Port number:

RTSP port number.

#### Videostream:

Here support three mode: videoMain, videoSub and audio. When the network speed is bad, here you had better select videoSub. If you select audio, you can only hear the sound but cannot see the video.

#### For example:

**IP:** 192.168.1.11

#### RTSP Port number: 554

User name: admin

#### Password: 123

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

- 1) rtsp://admin:123@192.168.1.11:554/videoMain
- 2) rtsp:// @192.168.1.11:554/videoMain
- 3) rtsp://:123@192.168.1.11:554/videoMain
- 4) rtsp://admin@192.168.1.11:554/videoMain

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

۵.	VLC	media play	yer						×
Me	dia	Playback	Audio	<u>V</u> ideo	Tools	View	Help		
D	Ор	en File			Ctrl+O				
D	Ad	vanced Oper	File		Ctrl+Sh	ift+0			
	Op	en <u>F</u> older			Ctrl+F				
0	Op	en <u>D</u> isc…			Ctrl+D				
—	Op	en <u>N</u> etwork S	Stream		Ctrl+N				
	Op	en <u>C</u> aptlike [	Device	6	Ctrl+C				
		en <u>L</u> ocation f cent Media	from <mark>c</mark> lipb	oard	Ctrl+V	•			
	Sav	ve Playlist to	<u>F</u> ile		Ctrl+Y				
	Cor	nve <u>r</u> t / Save			Ctrl+R				
((•))	Str	eaming			Ctrl+S				
×	Qui	it			Ctrl+Q				
4					111	ø	<b>C</b>	(h) 100%	

Figure 2.14

🛓 Open Iedia	? 🗙
File     Disc     Metwork     Capture Device       Network Protocol     Please enter a network URL:	
rtsp://admin:1230192.168.1.11:554/videoMain http://www.example.com/stream.avi rtp://0:1234 mms://mms.examples.com/stream.asx rtsp://server.example.org:8080/test.sdp http://www.yourtube.com/watch?v=gg64x	
Show more options	el

Figure 2.15

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

🛓 RTSP au	thentication	1	? 🛿
Please ent	er a valid	login name and	l a password.
User name	admin		
Password			
		Qk	Cancel
	Figu	ire 2.16	



Figure 2.17

If you cannot play the video in the VLC player, please check the port mapping. You can read Quick Installation Guide about How to configure port forwarding.

#### NOTE:

If you modify the camera's username or password, you had better reboot the camera, or else the new username and password cannot take effect when you enter the authentication in the VLC.

## 2.5 IP camera connection to the server

Device supports ONVIF 2.2.1 protocol, You can easily access the NVR with ONVIF or server with ONVIF.

## **3 Surveillance Software GUI**

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

## 3.1 Login Window

Username	admin	
Password		
Stream	Main stream	2
Language	English	3
		Login 4
_		

Figure 3.1

#### Section1 Enter the User name and password

The default administrator username is admin with no password, please reset the password at first using and prevent unauthorized users login the camera (read chapter 3.2.4 about how to change).

#### Section2 Stream

The camera supports two stream modes: Main stream and Sub stream. If you want to access the camera form LAN, here you can select Main stream. If you want to access the camera from Internet, here we recommend Sub stream.

#### NOTE:

When the network bandwidth is badly you'd better select Sub Stream and the video will be more fluency.

#### Section3 Select the language

You can select the language you need via click on the language drop-down list to switch.

#### Section4 Login the camera

Click Login button and you will see the surveillance windows.(If login the camera for the first time, the page that modify the username and password will appears.)

#### NOTE:

When setting up your camera for the first time, it will request that you modify the default username and/or password if both are still set to default. Input the new username and password, click "Modify" to complete the modification. You will now use the new username and password to login to the camera in the future.

Username	admin
New username	1
New password	
Security Level	
Confirm the password	

Figure 3.2

Enter the New Username, New password and Confirm the password. Click **Modify** button, you will see the login page again.

## 3.2 Setup Wizard

After logging in for the first time, you will go to "Setup Wizard" automatically. Here you can set the basic parameters of camera, such as camera name, camera time, wireless settings, IP configuration.

Setup Wizard	Setup Wizard
Status	Setup Wizard - Start
Basic Settings	
Network	Follow the guide to set your camera, click "Next" to start.
Video	Please click the menu on the left for more settings.
Alarm	Next

Figure 3.3

**Device Name:** You could give name for your camera.

	Setup Wizard
Step 1 of 4 - Came	era Name
	Anonymous
Camera Name	The maximum Device Name length is 20, support English, numbers, letters and symbols
	Previous
	Fig. 1. 0. 1

Figure 3.4

System Time: Select the time zone you need to set the date, time, format and so on.

p 2 of 4 - Came	ra lime
Time Zone	(GMT -08:00) Pacific Standard(US and Canada
ync with NTP server 🕅	
NTP Server	time.nist.gov
	2014-10-30 12 × 52 × 25 × PM ×
Date Format	YYYY-MM-DD
Time Format	12-hour
DOT	
use DST 🔽	

Wireless networks: Click "Scan", find the SSID of your wireless router, select and enter the password.

	5	Setup Wiz	ard		
tep 3 of 4 - Wireless	s Settings				
Wireless Network	List	1 Scan		SSID	FOSCAM-docdev
SSID(Network Name)	Encryption	Quality	1	Encryption	WPA/WPA2
Tenda_373678	WPA/WPA2	all	3	Password	•••••
dlink-chenchen2.4G	WPA/WPA2	cill.		The maximum pa	assword length is 63, includir
TP_LINK_TEST	WPA2	ail		number	s, letters and symbols
FOSCAM-docdev	WPA/WPA2	aff	2		
	1	Figure 3.	6		

**IP:** Set IP address of the camera. You could choose to obtain an IP automatically or set the IP address according to your needs.

ain IP From DHCP 👿	

Figure 3.7

## 3.3 Surveillance Window



Figure 3.8

#### Section1 FOSCAM Logo/ Live Video / Settings/Playback buttons



FOSCAM LOGO



Path to surveillance window. Click this button and back to the surveillance window

Settings : Path to Administrator Control Panel, Click it, and it will lead to Administrator Control Panel and

do advanced settings.



: Click this button and back to the Playback panel to view the stored audio files stored in the

SD Card.

#### Section2 Multi-Device Window



The firmware inside the camera supports up to maximum of 9 cameras being monitoring at the same time. You can add other cameras in multi-device setting .

#### Section3 Mode/ Stream / Mirror/ Flip buttons

#### Mode

1) 50HZ -----Indoor surveillance (Region: Europe, China)

2) 60HZ -----Indoor surveillance (Region: USA, Canada)

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#### 3) Outdoor Mode-----Outdoor surveillance

#### <u>Stream</u>

The default stream supports multiple modes, For example: HD Mode/VGA/15fps/512K meanings: Stream type / Resolution / Maximum frame rate/ Bit rate. (Different models support different specific mode.)

#### Bit rate.

1) Stream type: It is used to identify the stream type.

#### 2) Resolution

There are two resolutions, the bigger one is 720P, and the smaller one (VGA) is 640x480 pixels. The bigger the resolution, the better of the image quality is. If you are accessing the camera via internet and want to get more fluent video streaming, please select resolution VGA.

#### 3) Maximum frame rate

You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

#### 4) Bit rate

Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

You can reset the stream type on Settings-> Video-> Video Settings panel.

Setup Wizard	-	Video Settings	
Status Basic Settings			Save Refresh
Network	Main stream video settings		
Video	Enhanced Night Vision Definition	n 🔽	
(Video Settings	Stream Type	HD Mode	
On Screen Display	Resolution	720P	
Snapshot Settings	Bit Rate	2M	T
IR LED Schedule	Frame Rate	23	<b>•</b>
Alarm	Key Frame Interval	20	•
Record PTZ	Variable bitrate	Yes	
Fiz	Sub stream video settings		
System	Stream Type	HD Mode	•
	Resolution	QVGA(320*180)	•
	Bit Rate	200K	•
	Frame Rate	15	•
	Key Frame Interval	45	•

Figure 3.9

After changing, please re-login the camera and you can see the modification.

#### Section4 Pan/Tilt Control



- 1 ---- Up control button
- 3 ---- Left control button
- 5 ---- Up-Left control button
- 7 ---- Down-Left control button
- 2 ---- Down control button
- 4 ---- Right control button
- 6 ---- Up-Right control button
- 8 ---- Down-Right control button



Click this button and go to center

#### Section5 Cruise / Preset settings Cruise Settings



The default cruise tracks have two types: Vertical and Horizontal.

Vertical: The camera will rotate from up to down. Horizontal: The camera will rotate from left to right.

Start cruise. Stop cruise.

If you want to define or change the cruise trace, please go to Settings---> PTZ---> Preset Settings panel.

#### How to do cruise?

Firstly: Select one track in the track drop-down list



**Secondly:** Click Start cruise button, the camera will cruise following the predefined path. **Thirdly:** Click stop button and finish cruising.

#### **Preset settings**



IPCAM supports 16 preset positions, which is considered enough for DIY home & small business surveillance

market

The default preset position is TopMost, BottomMost, LeftMost, RightMost, you can add other preset positions.



Add Click this icon to save the position you need the camera to remember

**Delete** Select one preset position and click this button to delete it.

**GO** Select one preset position in the preset drop-down list and click Go to make the camera move the preset position

#### How to do preset position?

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

**Secondly,** click to save it. If you want to reset the preset position, click Cancel. After that, you can move the camera and stop at another place, and set another preset position. You can do all the 16 preset positions with this method.

If you want to see one preset position you have set, only select the preset position name from the preset

drop-down list, and click go 🔄 button, the camera will go to the preset position.

#### Section6 IR LED Lights



Click Infra led and there are three modes to adjust the infrared led: Auto, Manual and Schedule.

Auto: Select it and the camera will adjust the infra led (on or off) automatically.

Manual: Select it and you can turn on or turn off the infra led manually.

Schedule: Select it and the IR led light will be off at the schedule period. If you want to define or change the IR led lights schedule time, please go to Settings--->Video---> IR LED Schedule page.

#### Section7 Image quality settings

In this page, you can tune Hue, Brightness, Contrast, Saturation, and Sharpness to get higher quality.



#### Section8 OSD

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

Go to Settings--->Basic settings--->Camera name panel, and you can change another device name. The default device name is anonymous.

Go to Settings --->Basic settings--->Camera time panel and adjust the device time.

Go to Settings--->Video--->On Screen Display panel, you can add or no add OSD.

#### Section9 Play/Stop/ Talk/Audio/ Snap/ Record/ Full screen button



1-----Play Click it to play the video of the camera

2-----Stop Click it to stop the video of the camera



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

4----- Audio Click this icon, the icon will become to

you can hear the sound around the camera by the

Foscam Digital Technologies

earphone or speakers that connected with PC.

**5----- Snapshot** Click it to make snapshot and it pop-up a window which picture you snapshot, right click in the window and save the picture to anywhere you want.

**6----- Record** Click the icon and the camera start recording, you can see a green dot in the live window. Click again and stop recording. The default storage path is C:\IPCamRecord. You can change the storage path: Go to Settings- >Record->Storage Location panel.

**7-----Full Screen** Click it to make full-screen, or you can double click the surveillance screen to make full-screen. Double click again and exit full-screen.

#### **Onscreen Mouse Control**

Right click the mouse and you can adjust the screen ration, full screen and Zoom up.



Figure 3.10

**Keep ration:** Select it and the camera will adjust the size of live window based on the the computer monitor automatically. Sometimes there is a black border around the video, please select Keep ration to get a better visual quality .

Full Screen: Select it and Click it to make full-screen, press ESC and exit full-screen.

Zoom up: Select it and you can see a bigger screen than before.

**First Method:** Here is a convenient and fast solution to Zoom up/down screen by clicking Video Screen and adjusting Mouse pulley, or by press the CTRL key and click the mouse left button.

**Second Method:** Click it and the live view will be digital zoomed up, then click Zoom Down and the live view back to original size.



Figure 3.11

When you select the Full Screen, then click right mouse, there is a **Screen PTZ** button.



Figure 3.12

Click the **Screen PTZ** button and put the mouse on the screen to indicate the camera move direction you prefer, press the left mouse, the camera will move to the corresponding direction. Loosen the mouse and stop moving. Press Esc button or double click right mouse and cancel the function.

**NOTE:** For Mac OS, the plugin cannot support Onscreen Mouse Control, so you cannot allow to use it.

## **4 Advanced Camera Settings**

Click the button "Settings", goes to Administrator Control Panel to make advanced camera settings.

## 4.1 Status

Status contains four columns: Device Information, Device Status, Session Status and Log, it will show you various information about your camera.

## **4.1.1 Device Information**

Setup Wizard Status Device Information	Device Information			
Device Status	Camera Model	FI9816P		
Session Status	Camera Name	FI9816P		
Log	Camera ID	C4D6553A2359		
Basic Settings	Camera Time	2014/11/19 16:09:00		
Video	System Firmware Version	1.9.1.11		
Alarm	Application Firmware Version	2.51.1.30		
Record	Plug-In Version	3.0.0.4		
PTZ				
Firewall				
System				



Camera Model: The camera model NO.

**Camera Name:** The Device Name is a unique name that you can give to your device to help you identify it. Click **Basic Settings** and go to **Camera name** panel where you can change your camera name. The default device name is anonymous.

**Camera ID:** Display the wired MAC address of your camera. For example Device ID is 000C5D00008, the same MAC ID sticker is found at the bottom of the camera.

**Camera Time:** The system time of the device. **Click Basic Settings** and go to **Camera time** panel and adjust the time.

System Firmware version: Display the System Firmware version of your camera.

Application Firmware version: Display the application firmware version of your camera.

Plug-in version: Display the plug-in version of your camera.

## 4.1.2 Device Status

On this page you can see device status such as Alarm status/ Record Status ,DDNS status ,WIFI status and so on.

Setup Wizard		Device Status			
Device Information	Refres				
Device Status	Alarm Status	Disabled			
Session Status	Recording Status	Not Recording			
Log	SD Card Status	No SD card			
Basic Settings	SD Card Free Space	0KB			
Network	SD Card Total Space	0KB			
Video	NTP Status	Disabled			
Record	DDNS Status	Disabled			
PTZ					
Firewall	UPnP Status	Disabled			
System	WiFi Status	Not connected			
	IR LED Status	Off			

Figure 4.2

### 4.1.3 Session Status

Session status will display who and which IP is visiting the camera now.

Status Device Information Device Status		Session Status
Session Status	Username	IP Address
Log Basic Settings	foscam	172.16.3.10



### 4.1.4 Log

The log record shows who and which IP address accessed or logout the camera and when.

Device Information				Log		
Device Status					C Refres	
Session Status		Pages:50			<<1 2 3>> Go	
Log )	NO.	Time	User	IP	Log	
Basic Settings	)	2014-01-09 14:12:35	root	127.0.0.1	Detected motion alarm	
Network	)					
Video		k the page nun	nber a	and go to th	ected motion alarm	
Alarm	corr	esponding pag	je to s	see more lo	gs. cted motion alarm	
Alarm Record	) <b>Corr</b>	2014-01-09 14:11:24	je to scan		USE off line	
				n 192.168.8.2	User off line	
Record	) 4 5	2014-01-09 14:11:24 2014-01-09 14:11:13	foscan	n 192.168.8.2	Charles Concernent	
Record PTZ	4	2014-01-09 14:11:24 2014-01-09 14:11:13 2014-01-09 14:11:12	fosca fosca	Fill in one	page number, click Go button	
Record PTZ Firewall	) 4 5	2014-01-09 14:11:24 2014-01-09 14:11:13	foscan	Fill in one	User off line	
Record PTZ Firewall	4	2014-01-09 14:11:24 2014-01-09 14:11:13 2014-01-09 14:11:12	fosca fosca	Fill in one	page number, click Go button	
Record PTZ Firewall	4 5 6 7	2014-01-09 14:11:24 2014-01-09 14:11:13 2014-01-09 14:11:12 2014-01-09 14:10:49	fosca fosca fosca root	Fill in one and go to	page number, click Go button the corresponding page.	

Figure 4.4

Reboot the camera and clear the log records.

## 4.2 Basic Settings

This section allows you to configure your camera's Name, Time, Mail, User account and Multi-Device.

#### 4.2.1 Camera Name

Default alias is anonymous. You can define a name for your camera here such as apple. Click Save to save your changes. The alias name cannot contain special characters.





### 4.2.2 Camera Time

This section allows you to configure the settings of the internal system clocks for your camera.

		Save Save	Refresh
Time Zone	(GMT) Greenwich mean time;	London, Lisbon, 💌	
Sync with NTP server			
PC Time	2014-1-9 Sync with	14 ▼ : 17 ▼ : 52 ▼ PC	
Date Format	YYYY-MM-DD		
Time Format	24-hour	•	
use DST			
Ahead Of Time	0 Minute		

Figure 4.6

**Time Zone:** Select the time zone for your region from the drop-down menu.

**Sync with NTP server:** Network Time Protocol will synchronize your camera with an Internet time server. Choose the one that is closest to your camera.

Sync with PC: Select this option to synchronize the date and time of the Network Camera with your computer. Manually: The administrator can enter the date and time manually. Note select the date and time format. use DST: Select the use DST, then select the daylight saving time from the drop-down menu. Click Save button and submit your settings.

#### NOTE:

If the power supply of camera is disconnect, you need set the camera's time again.

#### **4.2.3 User Accounts**

Here you can create users and set privilege, **visitor, operator** or **administrator**. The default user account is admin, with a blank password. You can enter the users accounts of visitor, operator and administrator Manually.

				- Refre
NO.	Username	Privilege	Username	
1	foscam	Administrator	Privilege	Administrator
2	admin	Administrator	E	Change username
3				Change password
4				
5				
6				
7				
8				

Figure 4.7

### How to change the password of administrator?

Firstly, select the account of administrator, then select "Change password", enter the old password and the new password, lastly click modify to take effect.

Refr	0				
	user	Username	Privilege	Username	10.
	•••••	Password	Administrator	foscam	1
	•••••	New password	Administrator	user	2
		Security Level			3
	•••••	Confirm the password			4
<b>-</b>	Administrator	Privilege			5
	Change username	Ē			6
	Change password				7
	Modify	ſ			8

Figure 4.8

### How to add account ?

Select one blank column, then enter the new user name, password and privilege, last click Add to take effect. You can see the new added account on the Account list.

				Refresh
NO.	Username	Privilege	Username	user
1	foscam	Administrator	Password	••••
2	admin	Administrator	Password Security Level	Low security level.
3			Confirm the password	•••••
4			Privilege	Administrator
5				Change username
6		S:		Change password
7				Add
8				Auu



			C Refree
NO.	Username	Privilege	Username user
1	foscam	Administrator	Privilege Administrator -
2	admin	Administrator	Change username
3	user	Administrator	Change password
4			Delete
5			
6			
7			
8			

Figure 4.10

**Delete** : Select the account which you want to delete, then click Delete button to take effect.

#### Note:

The default admin account cannot be deleted, but you can add other administrator users.

#### 4.2.4 Multi-Camera

If you want to view multi-surveillance screens on one window, you need to login one camera, and set it as the main device, and do Multi-Device Settings, add other cameras to the first one camera. Before you do multi-cams settings, you need to assign different port such as 81, 82, 83, 84, 85, 86, 87, 88 to the cameras if there is 8 cams installed.

The firmware within the camera can support a maximum of 9 devices monitoring all at the same time. This page you can both add FOSCAM MJPEG and H.264 series cameras to the first camera and view

multi-surveillance screen on one window.

#### Add cameras in LAN

In Multi-Device Settings page, you can see all devices searched in LAN. The 1st Device is the default one. You can add more cameras in the list in LAN for monitoring. The camera's software supports up to 9 IP Cameras online simultaneously. Click **The 2nd Device** and click the item in the **Device List in LAN**, the Alias, Host and Http Port will be filled in the boxes below automatically. Enter the correct username and password then click **Add**. Add more cameras in the same way.

Basic Settings	Cameras On LAN	FI9821P(172.10	71)
Camera Time		EOSCAM(172 ) anonymous(17)	
User Accounts	The 1st Camera	This Camera	
Multi-Camera	The 2nd Camera	None	1 Click it, camera model, alias,
Network	Camera Mo	del H264	host and HTTP Port will be
Video	Camera Na	ime anonymous	filled in the following boxes
Record	н	lost 172.16.0.179	automatically .
PTZ	HTTP F	Port 80	L
Firewall	Media F	Port 80	
System	Usema	ame admin	
	Passw	ord	N N
3 Click Add	to take effect .	Add	Delete
	The 3rd Camera	None	2 Enter the User name and
	The 4th Camera	None	password of the 2nd camera .

Figure 4.11

**Camera Model:** Our Company produces two series cameras: MJPEG and H.264. Here will show you which series the camera belongs to.

Cameras On LAN	anonymous(192.168.11.193) FI9821W for ebuyer (192.168.11.241) anonymous(192.168.11.203) anonymous(192.168.11.243)	
		Refresh
The 1st Camera	This Camera	
<u>The 2nd Camera</u>	anonymous(192.168.11.203)	
<u>The 3rd Camera</u>	FI9821W for ebuyer (192.168.11.241)	
The 4th Camera	anonymous(192.168.11.203)	
<u>The 5th Camera</u>	None	
<u>The 6th Camera</u>	None	
<u>The 7th Camera</u>	None	
The 8th Camera	None	
The 9th Camera	None	

Figure 4.12

Back to **Surveillance Windows**, and click Four Windows option, you will see four cameras you added.



Figure 4.13



Figure 4.14

#### Add cameras in WAN

If you want to view all cameras via the internet(remote computer), you will need to add them using DDNS domain name. Firstly, make sure all of the cameras you added can be accessed through the internet. (**Read How to configure DDNS settings in chapter 4.3.4**)

Login to the first camera using a DDNS domain name and port.

			P B 🔶 X 🖓 Bing	
SCAM Q LiveVideo 🔗 Settings 📊 Playback		ngs Playback	Indoor Pan/Tilt IP Ca	
Device Status Device Information Device Status Session Status	_		Refresh	
Log	Alarm Status	Disabled		
Basic Setting	Record Status	Not Recording		
Network	SD Card Status	No SD card		
Video	SD Card Free Space	Ok		
Alarm Contemporate	SD Card Total Space	Ok		
	NTP Status	Disable		
	DDNS Status	Success http://test09.myfoscam.org;88		
	UPnP Status	Success		
	WiFi Status		h comoro vou nood	
			h camera you need	
	IR LED Status		n with DDNS name	

Figure 4.15
Click **Multi-Device Settings**. Choose **The 2nd Device**. Fill in the 2nd camera's name, DDNS domain name, port number. Enter user name and password and then choose Add. (Figure 4.16)

		Refresh
Cameras On LAN	FI9821W for ebuyer (192.168.11.241) anonymous(192.168.11.243) anonymous(192.168.11.203)	Refresh
The 1st Camera	This Camera	
The 2nd Camera	anonymous(192.168.11.203)	
Camera Model	MJ ····································	
Camera Name	apple	2
Host	camera.no-ip.info	
HTTP Port	801	3
Media Port	801	
Usemame	admin	
Password		
	Add Delete	
The 3rd Camera	None 5	
The 4th Camera	None	

Figure 4.16

- 1 ---- The camera model: MJ or H264.
- 2 ---- The 2nd camera's name
- 3 ---- Fill in the 2nd camera's DDNS host not LAN IP

#### NOTE:

The MJ series have the same HTTP Port NO. and Media Port NO.

- 4 ---- Enter the 2nd camera's user name and password
- 5 ---- Click Add button and to take effect

#### NOTE:

Here the Host must be entered as the second camera's DDNS domain name, not its LAN IP.

Device List in LAN	apple(192.168.13.102) mycamera(192.168.13.108) ipcam(192.168.13.107) FI9821W-01(192.168.13.106)	Refresh
The 1st Device	This Device	
The 2nd Device	apple(camera.no-ip.info)	
The 3rd Device	ipcam(test01.foscam.org)	
The 4th Device	mycamera(owlejww.no-ip.info)	
The 5th Device	None	
The 6th Device	None	
The 7th Device	None	
The 8th Device	None	
The 9th Device	None	

Figure 4.17

Return to video window. You will see all of the cameras accessible through the internet.

When you are away from home, you can use the first camera's DDNS domain name and port to view all the cameras via internet.



Figure 4.18

# 4.3 Network

This section will allow you to configure your camera's IP, PPPoE, DDNS, Wireless Settings, UPnP and Port.

## **4.3.1 IP Configuration**

If you want to set a static IP for the camera, please go to **IP Configuration** page. Keep the camera in the same subnet of your router or computer.

	IP Configuration
	Save Refresh
Obtain IP From DHCP	
IP Address	172.16.0.94
Subnet Mask	255.255.0.0
Gateway	0.0.0.0
Primary DNS Server	0.0.0.0
Secondary DNS Server	0.0.0.0
Note:Once you save your settin	use the camera will restart
Note:Once you save your settin	gs, the cantera will restart.



Changing settings here is the same as using the IP Camera Tool.

It is recommended that you use the subnet mask, gateway and DNS server from your locally attached PC. If you don't know the subnet mask, gateway and DNS server, you can check your computer's local area connection as follows:

Control Panel  $\rightarrow$  Network Connections  $\rightarrow$ Local Area Connections  $\rightarrow$ Choose Support  $\rightarrow$  Details.



Figure 4.20

S Network Connections		_ 🗆 🗙
File Edit View Favorites Tools Advanced Help		
🚱 Back 🔻 🕥 🔸 🎓 🖉 Search 💫 Folders 🔟 -		
Address 🔕 Network Connections	Cic.	✓ → 60
LAN or High-Speed Internet	👍 Local Area Connection Status	<b>?</b> ×
Network Tasks (S)	Network Connection Details	2
Set up a home or small	Property Value	
<ul> <li>Change WindowSet the same Subnet Mask an Firewall settings</li></ul>	Subnet Mask 255.255.25	
device your PC. Repair this connection	Default Gateway         192.168.0.1           DHCP Server         192.168.0.1           Lease Obtained         2010.7.23.17:20:44	
View status of the There are two DNS servers,	Lease Expires 2010-7-23 19:20:44 DNS Servers 202.96.134.33 192.168.0.1 WINS Server	
☑ Change settings ờ ⊕⊌ can set any of them. connection Same with gateway is also O	×	
Other Places		
Control Panel		Close
Computer My Computer		
Details	(	Close
Local Area Connection		

Figure 4.21

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

## **4.3.2 Wireless Settings**

**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.

				Save Ref
Wireless Network	List	Scan	SSID	
SSID(Network Name)	Encryption	Click the	Coop button	None
wjx	Unencrypt		e Scan button h for wireless	sword length is 63, in
wangbarrytest	WPA/WPA2	network		id symbols ~ $! @ # * ($
NETGEAR19	WPA2	all		<>?`-;'./
TP-LINK_YF	WPA/WPA2	att		
TP-LINK_gaw	WPA/WPA2	atl		
TP-LINK_jingyuan	WPA2	atl		
FAST_BD9A08	Unencrypt	.itl.		
TP-LINK_B18958	Unencrypt	all		
cisco-8621	WPA/WPA2	all		
TP-LINK_wyy	WPAWPA	ak the Deve a	umber to occ	other wireless



**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.

	W	ireless Se	ttings
			Save Refresh
Wireless Network L	ist	Scan	SSID TP-LINK_51BAB4
SSID(Network Name)	Encryption	Quality	Encryption WPA/WPA2
TP-LINK_B18958	Unencrypt	all	Password
TP-LINK_liyo	WPA/WPA2	at	The maximum password length is 63, does not
maqb	WPA/WPA2	all	supr 2 Enter the password
TP-LINK_YF	WPA/WPA2	att	of your router .
Network-9F8700E207022	WPA/WPA2	att	
TP-LINK_51BAB4	WPA/WPA2	aff	1 Click the SSID of your router and the relevant information
TP-LINK_wyy	WPA/WPA2	atl	will be filled in the fields
wjx	Unencrypt	att	automatically.
zhwwang_1	WEP	att	
TP-LINK_B2637A	Unencrypt	at	



**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 Figure4.36). Congratulations! You have set up the wireless connection of the camera successfully.

#### NOTE:

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

### 4.3.3 DDNS

FOSCAM camera has embedded a unique DDNS domain name when producing, and you can directly use the domain name, you can also use the third party domain name.

### **FOSCAM** domain name

Here take <u>test09.myfoscam.org</u> for example. Go to option of **DDNS** on the **Settings->Network** panel, you can see the domain name.

	DDNS	
		Save Refresh
Enable DDNS 📝		
Manufacturer's DDNS		
Manufacturer's DDNS	test09.myfoscam.org	Restore DDNS to factory
Third Date: DDN0		
Third Party DDNS		
DDNS Server	None	-
Domain		

Figure 4.24

Now you can use http:// **Domain name + HTTP Port** to access the camera via internet.

Take hostname **test09.myfoscam.org** and HTTP Port NO. 800 for example, the accessing link of the camera via internet would be <u>http://test09.myfoscam.org:800</u>

**<u>Restore DDNS to factory:</u>** If you have configured Third Party DDNS successfully, but you want to use Manufacturer's DDNS again , here click this button and start Manufacturer's DDNS Service.

## **Third Party Domain Name Settings**

User can also use third part DDNS, such as www.no-ip.com. ,www. 3322.com Here take <u>www.no-ip.com</u> for example: ① Step 1, Go to the website <u>www.no-ip.com</u> to create a free hostname Firstly: Login on <u>www.no-ip.com</u> and click No-IP Free to register.



Figure 4.26

#### Please register an account step by step according to instructions on www.no-ip.com

After registration, please login your email which used to register. You will receive an email from website, please click the link to activate your ACCOUNT as indicated in email.

#### Secondly: Login the link with the registered username and password to create your domain name.



Figure 4.27



Figure 4.28

Please create the domain name step by step according to instructions on www.no-ip.com

Step 2, DO DDNS Service Settings within the Camera

Please set **DDNS Settings** within the camera by **hostname**, a **user name** and **password** you've got from **www.no-ip.com** 

Take hostname ycxgwp.no-ip.info, user name <u>foscam</u>, password <u>foscam2012</u> for example.

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

Secondly, select No-Ip as a server..

**Thirdly**, fill **<u>foscam</u>** as DDNS user, fill password **<u>foscam2012</u>** as DDNS password, fill **<u>ycxgwp.no-ip.info</u>** as DDNS domain and server URL, Then click save to make effect. The camera will restart and to take the DDNS settings effective.

**Fourthly**, after the restart, login the camera, and go to option of <u>Device Status</u> on the administrator panel, and check if the DDNS status is successful.

If failed, please double check if you have input the correct hostname, user name, and password, and try to redo the settings.

#### NOTE:

If you have set Third Party DDNS successfully ,the Foscam Domain Name will be invalid. The Third Party DDNS and the Foscam Domain Name cannot work at the same time, the last time you configured will take effect.

#### 2 Do port forwarding within the router

Example: The camera's LAN IP address is <u>http://192.168.1.110:88</u>, Media port no. is 9200.

Firstly, login the router, goes to the menu of Port Forwarding or Port Trigger (or named Virtue

Server on some brands of router). Take Linksys brand router as an example, Login the router, and goes to Applications & Gaming->Single Port Forwarding.

**Secondly,** Create a new column by LAN IP address & HTTP Port No. of the camera within the router showed as below.



Figure 4.29

### 3 Use domain name to access the camera via internet

Foscam Digital Technologies

After the port forwarding is finished, you can use the <u>domain name+ http NO.</u> to access the camera via internet. Take hostname <u>ycxgwp.no-ip.info</u> and <u>http NO. 2000</u> for example, the accessing link of the camera via internet would be <u>http:// ycxgwp.no-ip.info:2000</u>

### 4.3.4 UPnP

	UPnP			
		E s	ave	Refresh
Enable UPnP	Yes	•		
	Enable UPnP		Enable UPoP	Enable UPoP Ves

Figure 4.30

The default UPnP status is closed. You can enable UPnP, then the camera's software will be configured for port forwarding. Back to the "Device Status" panel, you can see the UPnP status:

Status Device Information		Device Status
Device Status		Refresh
Session Status	Alarm Status	No alarm
Log	Recording Status	Not Recording
Basic Settings	SD Card Status	SD card
Network	SD Card Free Space	1.5GB
Video	•	14.6GB
Alarm	SD Card Total Space	14.030
Record	NTP Status	Disabled
PTZ	DDNS Status	Success http://test09.myfoscam.org
Firewall	UPnP Status	Success
System	WiFi Status	Not connected
	IR LED Status	Off

Figure 4.31

The camera's software will be configured for port forwarding. There may be issues with your routers security settings, and sometimes may error. We recommend you configure port forwarding manually on your router .

### 4.3.5 Port

This camera supports HTTP Port / HTTPS Port/ ONVIF Port. HTTP Port is used to access the camera remotely. If you want to access the camera and view the video.

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

	Port	
		Save Refresh
HTTP Port	88	
HTTPS Port	443	
ONVIF Port	888	
RTSP port	554	



### Another way to change the HTTP port NO.

**Step 1:** Open the IP Camera Tool, select the camera you would like to change the port of, right click on the IP address, and click on "Network Configuration", this brings up the network configuration box as shown in Figure 4.33 and 4.34.

🕸 IP Camera Tool		
Camera name	IP Address	Device ID Device type
anonyaous	Http Basic Properties Network Configuration Upgrade Firmware Refresh Camera List Flush Arp Buffer About IP Camera Tool	00841FI9804

Figure 4.33

IP Camera Tool	anonymous N	etwork 🔀			
Camera name	🖵 Obtain IP from	DHCP server	ice ID	Device type	
anonymous	IP Address Subnet Mask Gateway DNS Server	192 .168 . 1 .110         255 .255 .255 . 0         192 .168 . 1 . 1         192 .168 . 1 . 1	41F19804	н	
	Http Port	88	Moo	dify the Http Port	•
	Vser Password OK	admin  *****  Cancel		er the Username sword, click OK.	
	Note: After changin device will automat				

Figure 4.34

**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://192.168.1.110:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.1.110:2000 . 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!

IP Camera To	ol			
Camera name	IP Address	Dewice ID	Device	type
anonynous	Http://192.168.1.110:2000	00841F19804W	H	



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

**ONVIF port:** By default, the ONVIF port is set to 888. Also, they can be assigned with another port number between 1 and 65535(except 0 and 65534). But make sure they can not be conflict with other existing ports.

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

RTSP port: The default port is 554.

### 4.3.6 Mail Settings

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

il Settings	5	
n Settings	Save Refresh	
Enable 🔽		
SMTP Server	smtp.gmail.com SMTP server address supports English, numbers and @	
SMTP Port	25	-
Transport Layer Security	STARTTLS G-Mail only supports TLS at Port 465 and STARTTLS at Port 587 or 25. Hotmail only supports STARTTLS at Port 587 or 25.	
Need Authentication	Yes	
SMTP Username	test123@gmai.com The maximum length of the user name is 63, support numbers, letters and symbols @ \$ * -	
SMTP Password	The maximum password length is 32, does not support the character & =	
Sender E-mail	test123@gmai.com	6
First Receiver	test@163.com The maximum length of the receiver is 63, support numbers, letters and symbols @ \$ * -	
Second Receiver	tset@hotmail.com	
Third Receiver		
Fourth Receiver		



1-----SMTP Server/ Port /Transport Layer Security Enter SMTP server for sender. SMTP port is usually set as 25. Some SMTP servers have their own port, such as 587 or 465, and Transport Layer Security usually is None. If you use Gmail, Transport Layer Security must be set to TLS or STARTTLS and SMTP Port must be set to 465 or 25 or 587, which port you choose should be decided by which Transport Layer Security you select.

2-----SMTP Username/ password ID account and password of the sender email address

3-----Sender E-mail Mailbox for sender must support SMTP

**4----- Receiver** Mailbox for receiver need not support SMTP, you can set 4 receivers

5-----Save Click Save to take effect

6-----Test Click Test to see if Mail has been successfully configured.

Click **Test** to see if Mail has been successfully configured.

Mail Settings		
		Save
	Enable 💌	
	SMTP Server	smtp.gmail.com
		SMTP server address supports English, numbers and @ _, -
	SMTP Port	25
	Transport Layer Security	STARTTLS  G-Mail only supports TLS at Port 465 and STARTTLS at Port 587 or 25. Hotmail only supports STARTTLS at Port 587 or 25.
	Need Authentication	Yes
	SMTP Username	test123@gmai.com The maximum length of the user name is 63, support numbers, letters and symbols @ \$ * -
	SMTP Password	The maximum password length is 32, does not support the character & =
	Sender E-mail	test123@gmai.com
	First Receiver	test@163.com The maximum length of the receiver is 63, support numbers, letters and symbols @ \$ * -
	Second Receiver	tset@hotmail.com
	Third Receiver	
	Fourth Receiver	

Figure 4.37

If the test success, you can see the **Success** behind the Test, at the same time the receivers will receive a test mail.

If the test fails with one of the following errors after clicking **Test**, **verify** that the information you entered is correct and again select **Test**.

1) Cannot connect to the server

2) Network Error. Please try later

3) Server Error

4) Incorrect user or password

5) The sender is denied by the server. Maybe the server need to authenticate the user, please check it and try again

6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server

7) The message is denied by the server. Maybe because of the anti-spam privacy of the server

8) The server does not support the authentication mode used by the device

### 4.3.7 FTP Settings

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

	Save Refres
	ftp://192.168.1.103/dir
FTP Server	Example:ftp://192.168.1.103/dir The maximum length of the address is 127, does not support the character & =
Port	21
FTP Mode	PORT
Username	test The maximum length of the user name is 63, support Simplified Chinese, numbers, letters and symbols _ @ \$ * - , . # !
Password	•••• The maximum password length is 63, including numbers, letters and symbols ~ ! @ # _{}:"  <> ?`-;'./
Test	

Figure 4.38

	FTP Settings
	Save Refres
	ftp://ftp.mgenseal.com
FTP Server	Example:ftp://192.168.1.103/dir
	The maximum length of the address is 127, does not support the character & =
Port	21
FTP Mode	PORT
	test
Username	The maximum length of the user name is 63, support Simplified Chinese, numbers,
	letters and symbols _ @ \$ * - , . # !
	••••
Password	The maximum password length is 63, including numbers, letters and symbols ~ ! @ $\sharp$
	_{}:" <>?`-;'./
Test	

Figure 4.39

FTP server: If your FTP server is located on the LAN, you can set as Figure 3.54.

If you have an FTP server which you can access on the internet, you can set as Figure 3.55.

**Port**: Default is port 21. If changed, external FTP client program must change the server connection port accordingly.

**FTP Mode:** Here supports two modes: PORT and PASV.

Username/password: The FTP account and password.

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Click Save to take effect.

Click **Test** to see if FTP has been successfully configured.

### 4.3.8 P2P

#### Access the IP Camera by Smart Phone (Android or iOS operating system)

First of all, you need to open the P2P function of the IP Camera at "Settings-->Network-->P2P".

	P2P	
		Save Refresh
UID	F3GTBJ6PTNUL8MPMYRE1	
Enable P2F		
P2P Port	59656	

Figure 4.40

# 4.4 Video

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

## 4.4.1 Video Settings

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

	Video Settings	
		Save Refresh
Main stream video settings		
Enhanced Night Vision Definit	ion 📝	
Stream Type	HD Mode	
Resolution	720P	
Bit Rate	2M	
Frame Rate	23	•
Key Frame Interval	20	•
Variable bitrate	Yes	
Sub stream video settings		
Stream Type	HD Mode	
Resolution	QVGA(320*180)	•
Bit Rate	200K	•
Frame Rate	15	•
Key Frame Interval	45	•

#### Figure 4.41

Stream type: There are four types to identify different streams you have set.

**Resolution:** The camera supports two types: 720P, VGA. The higher the resolution is, the clearer video will become. But the code flux will become larger too, and it will take up more bandwidth.

**Bit rate:** Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

**Frame rate:** You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

**Key Frame Interval:** The time between last key frame and next key frame. The shorter the duration, the more likely you will get a better video quality, but at the cost of higher network bandwidth consumption.

**Variable Bitrate:** The two options are Yes and NO. Select Yes the bit rate is variable, and the highest value isn't higher than Bit Rate Value (2Mbps). Select NO and the bit rate is constant with Bit Rate Value (2Mbps).

### 4.4.2 On Screen Display

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

Display Timestamp	Yes	•
Display Camera Name	Yes	



**Display Timestamp:** There are two options: Yes or NO. Select Yes and you can see the system date on the video,

**Display Camera Name:** There are two options: Yes or NO. Select Yes and you can see the device name on the video.

## 4.4.3 Snapshot Settings

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

								S	na	ps	hc	ot S	Set	tin	gs									
																Œ	1	Save	$\bigcirc$	e	5	Refr	esh	)
Manua	l sna	p Qu	ality			Me	dium									•								
Picture	s Sa	ve T	0			FT	2									•								
nable tir	ning	to ca	pture	<b>V</b>	14																			
Capture	e inte	rval				2					(1-	6553	85s)											
					16				(	S	cheo	dule												
All	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								
SUN																								

Figure 4.43

Manual snap Quality: Low, Middle and High. The higher the quality, the picture will be clearer.

**Pictures Save To:** FTP or SD Card. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP automatically. If select SD Card as the save path, make sure the camera has inserted

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in the SD card.

#### Enable timing to capture

To enable capture interval, follow the steps below:

- 1 Select Enable timing to capture
- 2 Capture interval: The interval time between two captures.

#### **3** Select the capture time

• Capture anytime

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will capture.

• Specify an capture schedule

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

- Press the left mouse and drag it on the time boxes, you can select the serial area,
- 4 Click Save button to take effect.

### 4.4.4 IR LED Schedule

On this page you can set the schedule time for switching IR LED lights. When parameter Mode is set to the **Schedule** on the **Live Video** window, at these schedule time, the IR LED lights will be turned off.

	IR LED Schedule	
	Save Refresh	
IR LED Schedule		
Set the close time	From 00 •:00 • To 00 •:00 •	

Figure 4.44

# 4.5 Alarm

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





#### To enable motion detection, follow the steps below:

#### Step 01: Enable Motion detection

**Step 02: Sensitivity**---- It supports five modes: Lowest, Lower, Low, Medium and High. The higher the sensitivity, the camera will be more easily alarmed. Select one motion sensitivity.

**Step 03: Trigger interval**--- The interval time between two motion detections. Here supports 5s/6s/7s/8s/9s/10s/11s/12s/13s/14s/15s. Select one interval time.

#### Step 04: Select the alarm indicator

When the motion has been detected, the alarm status will turn to Detect alarm.

	Refresh
Alarm Status	Detect alarm
Record Status	Recording
SD Card Status	SD card
SD Card Free Space	3.0G
SD Card Total Space	3.6G
NTP Status	Disable
DDNS Status	Success <u>http://test09.myfoscam.org:88</u>
UPnP Status	Success
WiFi Status	Connected to:foscam-wifi
IR LED Status	Off

Figure 4.46

#### There are four alarm indicators:

#### A Camera Sound and PC Sound

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

#### **B Send E-mail**

If you want to receive alarm emails when motion is detected, you must select Send E-mail and set Mail Settings first.

#### C Take Snapshot

If you select this checkbox, when the motion has been detected, the camera will snap the live view window as a still picture and load it to the FTP. Make sure you have set FTP and set FTP as the storage path in Video->Snapshot settings panel.

Capture interval: The interval time between two pictures.

#### D Record

If you select this checkbox, when the motion has been detected, the camera will record automatically and store the record files to the SD Card. Make sure the camera has inserted SD card and you have set the SD card as the Alarm record files storage path, please go to **Record—> Storage location** page to verify this settings. The default alarm record time is 30s and pre-alarm record time is 5s, please go to **Record—> Alarm Record** page and change the alarm time settings.

#### Step 05: Set detect area

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



Figure 4.47

### Step 06: Alarm Schedule

 $(\ensuremath{\underline{1}})$  Alarm anytime when motion is detected

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will alarm.





### 2 Specify an alarm schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, when something moving in the detection area, the camera will alarm.



Figure 4.49

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



Figure 4.50

#### Step 07: Click Save button to take effect.

When the motion has been detected during the detection time in the detection area, the camera will alarm and adopt the corresponding alarm indicators.

#### NOTE:

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

# 4.6 Record

This section will allow you to change the record files storage path and the record time.

### 4.6.1 Storage Location

On this page you can change the alarm and manually recording storage path.

ŦΡ	Save S	Refresh
тр	•	
::\IPCamRecord	Browse	
cal storage. The default Window	vs storage location is "c:\IPCamRecord"	
	al storage. The default Windov	ordings and schedule recordings. al storage. The default Windows storage location is "c:\IPCamRecord" ord".If you modify the path on other Foscam cameras, this default stora

Figure 4.51

**Recording Location**: SD card. When the camera alarmed, it will store the alarm files to the SD card. Make sure the camera has been inserted the SD card. On this page, you can see the available space of the SD card.

**Local Recording Location:** For Windows OS, the location recording path is c:/ IPCamRecord, you can change another one. For MAC OS, the manual recording path is: / IPCamRecord.

## 4.6.2 Alarm Record

	Alarm Recording		
		Save	Refresh
Enable Pre-Record			
Pre-recorded Time	5s		
Alarm Recording Time	30s	-	

This page you can change the Pre-record time and Alarm record time.

Figure 4.52

The default Pre-recorded time is 5s and the alarm record time is 30s, you can change another time, click Save button to take effect.

## 4.6.3 Local Alarm Record

This page you can enable the local alarm record and Local Alarm record time.

	Local Alarm Re	ecording	
		Save Save	Refresh
Enable Local Alarm Recording 🕼			
Local Alarm Recording Time	30s	•	

Figure 4.53

## 4.6.4 Schedule Recording

#### When the video is selected as FTP, the device supports scheduled recording.

When the parameter **Recording Location** is set **SD Card** on the **Storage Location** page, you can configure parameters as shown in follow figure.

	Storage Loca	ation
		Save Refresh
Recording Location	FTP	
Local Recording Location	c:\IPCamRecord	Browse



### When the video is selected as SD card, the device supports pumping frame recording.

When the parameter **Recording Location** is set **SD Card** on the **Storage Location** page, you can configure parameters as shown in follow figure.

	Storage Loc	ation
		Save Refresh
Decention Location	SD card	
Recording Location	2	372.2 MB / 7.4 GB
Local Recording Location	c:\IPCamRecord	Browse

S	cheduled Record	ding To SD Card
		Save Refresh
Enable Scheduled Recording		
Enable Long-time recording	No	•
Frame Rate	30	¥.
Record full strategy	Cover	
Audio Record	No	
Stream	Main stream	
	🕒 Edit Sche	eduled Recording
All 00 01 02 03 04	05 06 07 08 09 10 11	1 12 13 14 15 16 17 18 19 20 21 22 23
MON		
TUE		
WED		
THU		
FRI		

**Frame Rate:** There are six frame selections, such as 1/30, 4/30, 8/30, 15/30, 24/30, 30/30. Recommended default is 4/30. The greater the Frame rate is, the sharper picture quality is, and the greater of storage space is, the shorter the storage time is.

**Record full strategy:** When the SD card is full, you can choose to cover the previous recording, or stop recording.

Audio Record: You can choose "yes" or "no".

#### NOTES:

- Scheduled recording only supports video saved to the SD card or FTP server.
- The schedule recording will stop while alarm recording is beginning, and it will continue automatically after alarm recording end.
- You can refer to "alarm schedule." in "Alarm" about editing the time of recording Schedule.

### 4.6.5 SD Card Management

This camera supports SD Card and the max size of SD card must be under 32G.

When you plug in the SD card during the camera work process, please reboot the camera again, or else the SD Card may be cannot work well.

This page you can check the SD card information.

SD Card Status	SD card SD Card Management
SD Card Free Space	1.5GB
SD Card Total Space	14.6GB

Figure 4.54

Go to the **Settings**→ **Status**→**Device Status** page, you can see the SD card status.

	Device Status	
		C Refresh
Alarm Status	No alarm	
Recording Status	Not Recording	
SD Card Status	SD card	
SD Card Free Space	1.5GB	
SD Card Total Space	14.6GB	
NTP Status	Disabled	
DDNS Status	Disabled	
UPnP Status	Failed	
WiFi Status	Not connected	
IR LED Status	Off	

Figure 4.55

The default storage path of alarm record files is SD card, when the available size of SD card is less than 256M, the old record files will be deleted automatically.

# 4.7 PTZ

This page will allow you to change the pan/tilt speed and do cruise tracks settings.

## 4.7.1 Pan/Tilt Speed

There are five PT speed types: very fast, fast, normal, slow and very slowly. Select the desired PT speed type and click save button .

	Pan & Tilt Speed		
		Save	Refresh
Pan & Tilt Speed	Normal	•	

Figure 4.56

## 4.7.2 Cruise Settings

This section explains how to add/ delete one cruise track.

		Cruise Sett	ings	
				Refresh
Cruise Mode	Cruise tin	ne 🛛	•	
Cruise time	15 Minute	e [	-	
	Save			
Cruise Tracks	Vertical		Add	Delete Save
Preset point			Cruise trac	-
			Preset po	
TopMost BottomMost			TopMo BottomM	
LeftMost				
RightMost		Add		
		Delete		
		Up		
		Down		

Figure 4.57

### **Setting the Cruise Mode**

There are two cruise mode: Cruise time and Cruise Loops.

Cruise time: Select Cruise time from Cruise Mode drop-down, then you can set the Cruise time of the

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camera.

**Cruise Loops**:Select **Cruise Loops** from **Cruise Mode** drop-down, you can set the **Cruise Loops** of the camera.

Click **Save** to take effect.

Cruise Mode	Cruise time		
Cruise time	15 Minute		
	Save		
Cruise Mode	Cruise Loops		
Cruise Loops	loops		
	Save		

Figure 4.58

### Manage the Cruise Track

There are two default cruise tracks: Vertical and Horizontal. Vertical: The camera will rotate from up to down Horizontal: The camera will rotate form left to right.

Add: Add one cruise track, then click save button.Delete: Select one cruise track and delete it.Save: After you modify the Dwell time, you should click Save button to take effect.

## Example: How to do add cruise tracks ?

Firstly, Click Add button and enter a descriptive name to identify the cruise track.

**Secondly:** On the lower left of the page, you can see all preset points you have added. Select one preset point and click Add button, you can see the preset point has been added to the cruise track on the cruise track page. You need to add two or more preset points to the cruise track.

		Crui	se Settir	igs	
					Refresh
Cruise Mode	Cr	uise time			
Cruise time	15	Minute	•		
		Save			
	test			ОК Са	ncel
Cruise Tracks	The	new added	track name	inglish, numbers, lett	ers and symbols
Preset point				Cruise track	
				Preset point	Dwell time
TopMost				BottomMost	1 Sec
BottomMost		_		LeftMost	2 Sec
LeftMost RightMost			Add	Here you can	see the preset point
1 Select one prese	t point.	2 Click Ad	dd button.		ed to one track. And
			Up	you can set th	e stay time.
			Down		

Figure 4.59

Thirdly: Click OK button and the cruise track will take effect.

You can add other cruise track as the same method.

For example: I have added three preset points to the "track 1", that means : When I select the "track 1" on the surveillance window, the camera moves as the following track: upright then Right Most last downleft.

You can add preset on the left of the surveillance window.



BottomMost RightMost 1 Sec LeftMost 1 Sec	upright downleft		Delete Up	The cruise trac the "track 1" .	cks have added to
Preset point Cruise track Preset point Dwell time Upright SottomMost I Sec	RightMost		Add		
Preset point Cruise track Preset point Dwell time TopMost Upright 1 Sec	LeftMost				
Preset point Cruise track	TopMost				
				Preset point	Dwell time
The maximum length of name is 20, supports English, numbers, letters and symbols	Preset point			Cruise track	
	Cruise Tracks	The maximum len	gth of name is 20, sup	ports English, numbers, lett	ers and symbols

Figure 4.60

After add the cruise track, back to the surveillance window, click Cruise, here you can see all cruise tracks you have added.



Figure 4.61

There are other buttons between the Preset points and Cruise track, you can use these buttons to adjust the order of preset points or add/delete one preset points in one cruise track.

		Preset point	Dwell time
TopMost BottomMost		upright RightMost	1 Sec 1 Sec
LeftMost		downleft	1 Sec
RightMost	Add		
upright downleft	Delete	]	
	Up	1	
	Down	1	



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Add: Select one preset points and add it to the selected cruise track.Delete: Select one preset points you have added to one cruise track, click delete.Move up/ down: Select one cruise track, adjust the order of preset points in one cruise track.

Attention: Considering the life time and thermal issue of the motor, it's not recommend to do long-time cruise.

## 4.7.3 Start-Up Options

Here section will allow you to set the stop position after the camera reboots. It supports three modes: Disable Start-Up, Go To Home Position and Go To Preset Position.

Disable Start-Up: When rebooting, the camera will not pan / tilt.

**Go To Home Position:** When rebooting, the camera will pa Providing Central Management Software to manage or monitor multi-cameras n / tilt and stops at center.

**Go To Preset Position:** Select one preset position and save it. When rebooting, the camera will pan/ tilt and stops at the preset position you have set.

	Start-Up Options		
		Save	Refresh
Start-Up Option	Go To Home Position	•	
Start-Up Option	Go To Home Position	•	

Figure 4.63

# 4.8 Firewall

This section explains how to control the access permission by checking the client PC's IP addresses. It is composed of the following columns: **Block access from these IP addresses** and **Only allow access from these IP addresses**.

	IP Filtering	
		Save Refresh
Enable Firewall		
IP Filtering	Block access from these IP addresses	
IP Address #1		
IP Address #2		
IP Address #3		
IP Address #4		
IP Address #5		
IP Address #6		
IP Address #7		
IP Address #8		



Enable firewall, If you select Only allow access from these IP addresses and fill in 8 IP addresses at most, only those clients whose IP addresses listed in the **Only allow access from these IP addresses** can access the Network Camera. If you select **Block access from these IP addresses**, only those clients whose IP addresses are in the IP list cannot access the Network Camera.

Click **Save** to take effect.

# 4.9 System

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

### 4.9.1 Back-up& Restore

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

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

	Back-up & Restore
Backup is used to sav	e your current settings. It is recommended to backup your configuration before modifying or
upgrading firmware.	
Backup	
Settings can be restor	red by uploading the backup file.
Path:	Browse Submit
Note:	
1. All current settings	will be overwritten when importing a configuration file. If a bad configuration file is uploaded the
camera may not work	
2. Do not turn off the p	power during the config import, avoid to damage the Camera. The loading process takes about 50
seconds, the camera	will reboot automatically.

Figure 4.65

## 4.9.2 System Upgrade

Click "Download the latest firmware", you will see the following screen. And click "save" to save the firmware on your computer locally.

Setup Wizard	System Upgrade
Basic Settings	Download the latest firmware Current Firmware Version: 2.11.1.10
Network	Browse System Upgrade
Video	Result
Alarm	
	Your camera will reboot during the firmware upgrade.
Record	
PTZ	
Firewall	
System	
Back-up & Restore	
System Upgrade	
Patch Installation	
Factory Reset	
Reboot	
Do you want to open o	or save FI9816P.zip (6.88 MB) from www.foscam.com? Open Save  Cancel × Cancel ×

Figure 4.66

Your current firmware version will be displayed on your screen. You may go to the **Status**  $\rightarrow$  **Device Information** page to check for the latest firmware versions available.

Click **Browse**, choose the correct bin file and then click **System upgrade**.

Don't shut down the power during upgrade. After upgrading, you can see the upgrade result.

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	System Upgrade
Download the latest firmware	Current Firmware Version: 2.11.1.10
Browse	System Upgrade
Result	2
Your ca	mera will reboot during the firmware upgrade.

Figure 4.67

## Upgrade Firmware by IP Camera Tool



Double click the IP Camera Tool shot icon

, select the Camera IP that you want to upgrade the firmware. Then select Upgrade Firmware and enter the username and password, choose the firmware file, and upgrade.

Camera name	IP	IP Address		Device type
nonynous	Http://	Basic Properties Network Configuration	-0841FI9804	▼ H
		Upgrade Firmware		
		Refresh Camera List	-	
		Flush Arp Buffer		
		About IP Camera Tool		
			_	

Figure 4.68
IP Camera Tool	
Camera name	anonymous Upgrad 🗙 vice ID Device type
anonymous	User       admin         Password       Enter the User name and password         Upgrade System Firmware       Upgrade Web UI         OK       OK         Note: After firmware upgrade the device will automatically restart.       Here the upgrade the device will automatically restart.

Figure 4.69

**CAUTION:** If your camera works well with the current firmware, we recommend not upgrading. Please don't upgrade the firmware unnecessarily. Your camera may be damaged if mis-configured during an upgrade.

#### NOTES:

- 1) Please ensure you have download the correct firmware package for your camera before upgrading. Read the upgrade documentation (readme.txt file) in the upgrade package before you upgrade.
- 2) Upon downloading the firmware check the sizes of the .bin files. They must match the size in the readme.txt file. If not, please download the firmware again until the sizes are the same. Your camera will not function correctly if a corrupt .bin file is used.
- 3) Normally, only Device WEB UI need to be upgrade, please do not try to upgrade the Device System Firmware.
- 4) Never shut down the power of the camera during upgrade until the IP camera restart and get connected.
- 5) After upgrade successfully, please uninstall the old plugin and re-install it, then reset the camera to the default factory settings before using the camera.

#### NOTE:

The firmware of FI9821P V2 can not be used in FI9821P. For the model of your device, please refer to the MAC stickers on bottom of your device.

#### **4.9.3 Patch Installation**

Click "Browse" to select the correct patch file, and then click "Install Patch" to install the patch. Do not turn off the power during it installing. After installing is complete, you will receive a system prompt.

	F	Patch Installation	
	Browse	Install Patch	
Uninstall Patch			
Result	Vour camer	a will reboot when you install/uninstall patch	

Figure 4.70

## 4.9.4 Factory Reset

Click All reset and all parameters will return to factory settings if selected. This is similar to press the Reset button on the bottom of the camera.



Figure 4.71

## 4.9.5 Reboot

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



Figure 4.72

# 5 Playback

On this page you can view the record files stored in the SD card.





SD card Directory

: The storage path of record files

All records 👻: Here supports three types: current day, current month and All records. Another way, Time

select the time on the time&date manually.



All records 🗹 : The type of records files, Here supports two typs: Normal record, Alarm record and Type All records.

Q Click this button to search all record files satisfy the conditions you selected.

Continuous Play: Select the checkbox to play continuously all the record files.

#### Section 2 Search record files

On this panel you can see all record files satisfy the conditions you set.

#### Section 3 Play/Stop/Audio/Full screen buttons

Please select one record file before use these buttons.



Click this button to play the record files



Open or stop audio



Click this button to make full screen, and double click left mouse to exit full screen.

# **6** Appendix

## 6.1 Frequently Asked Questions

#### NOTE:

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

## 6.1.1 Install the add-on of Firefox browser, Google Chrome and IE Chrome.

File Edit View Favorites Tools Help	IPCam Client - Windows Internet Explorer     The provided HTML Representation of the provided HTM		€ <b>▼</b> 49
Internet Explorer - Security Warning          Do you want to install this software?         Name: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology Co.Ltd         Wore options	File Edit View Favorites Tools Help		
Do you want to install this software?         Image: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: Ima	🚖 Favorites 🏾 🏉 IPCam Client		
Do you want to install this software?         Name: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: More options			
Do you want to install this software?         Name: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: More options			
Do you want to install this software?         Name: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: More options			
Do you want to install this software?         Image: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: Ima			
Do you want to install this software?         Image: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: Ima			
Do you want to install this software?         Image: IPCWebComponents.exe         Publisher: ShenZhen Foscam Intelligent Technology CoLtd         Image: Ima			
Name: IPCWebComponents.exe         Publisher:       ShenZhen Foscam Intelligent Technology Co.,Ltd         Image: ShenZhen Foscam Intelligent Technology Co.,Ltd <td< th=""><th></th><th>Internet Explorer - Security Warning</th><th>× )</th></td<>		Internet Explorer - Security Warning	× )
Publisher: <u>ShenZhen Foscam Intelligent Technology Co.,Ltd</u> More options Install U Don't Install		Do you want to install this software?	
More options  Install  Don't Install			
		Publisher: <u>ShenZhen Foscam Intelligent Technology Co.,Ltd</u>	
While mes from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. <u>What's the risk?</u>			
		While thes from the Internet can be useful, this file type can potentially har your computer. Only install software from publishers you trust. What's the	m <u>risk?</u>

Figure 7.1



Figure 7.2

j号 Setup - IPCWebComponents	
Select Destination Location Where should IPCWebComponents be installed?	R.
Setup will install IPCWebComponents into the following folder. To continue, click Next. If you would like to select a different folder, c	
C:\Program Files\IPCWebComponents	Browse
At least 3.7 MB of free disk space is required.	
< Back Next	> Cancel

Figure 7.3

Setup - IPCWebComponents	
Select Start Menu Folder Where should Setup place the program's shortcuts?	C.
Setup will create the program's shortcuts in the following St To continue, click Next. If you would like to select a different folder,	
IPCWebComponents	Browse
- Back Ne	vt > Cancel
< Back Nex	xt > Cancel

Figure 7.4

Ready to Install		1
Setup is now ready to begin installing IPCV	NebComponents on your computer.	6
Click Install to continue with the installation change any settings.	n, or click Back if you want to review or	
Destination location: C:\Program Files\IPCWebComponents	e .	*
Start Menu folder:	,	
IPCWebComponents		
		+
4		*

Figure 7.5



Figure 7.6

## 6.1.2 Uninstall the add-on of Firefox browser, Google Chrome and IE Chrome.



Figure 7.7



Figure 7.8

😌 🔿 – 💽 🕨 Control Panel	<ul> <li>Programs          <ul> <li>Programs and Features</li> </ul> </li> </ul>	✓ 43 Searce	h Programs and Feat	tures P
Control Panel Home View installed updates 🛞 Turn Windows features on or	Uninstall or change a program To uninstall a program, select it from the list a	nd then click Uninstall, Change, or Rep	air.	
off	Organize 👻 Uninstall			•
	Name	Publisher	Installed On	Size
	→ 360安全卫士	360安全中心	5/21/2014	191 MB
	😕 Adobe Reader XI - Chinese Simplified	Adobe Systems Incorporated	5/21/2014	155 MB
	IPCWebComponents 3.0.0.2		6/10/2014	3.67 MB
	Tencent RTX Client     Uninstal	encent	5/21/2014	
	📲 WPS Office ??? (9.1.0.4632)	Kingsoft Corp.	5/21/2014	

Figure 7.9

### 6.1.3 I have forgotten the administrator password

To reset the administrator username and password, press and hold down the RESET BUTTON for 5 seconds. Upon releasing the reset button, wait for 20 seconds, the camera will reboot and the username and password will return to the factory default administrator username and password. Please power on the camera before reset .

Default administrator username: **admin** Default administrator password: **No password** 

### 6.1.4 Camera can not record

Camera can not record when I click Record button or I can't change the manually record path.

When you use Windows7 or Vista, you may be not able to do manually record or change the record path because of the security settings of computer.

There are two ways to resolve this problem:

- (1) Please add the camera as a trusted site to resolve this issue. The steps are
- IE browser  $\rightarrow$  Tool  $\rightarrow$  Internet Properties  $\rightarrow$  Security  $\rightarrow$  Trusted sites  $\rightarrow$  Sites  $\rightarrow$  Add
- (2) Open IE browser, then right click, select "Run as administrator"

## 6.1.5 Subnet doesn't match

Check whether your ipcamera in the same subnet of your computer. The step is Control Panel(Network Connections  $\rightarrow$  Dbclick Local Area Connections  $\rightarrow$  Choose General  $\rightarrow$  Properties.(Figure 3.23/3.24) Check subnet mask, IP address and gateways. When you set IP address please make sure they are in the same subnet. Otherwise you can't access camera.

### 6.1.6 No Pictures Problems

The video streaming is transmitted by the ActiveX controller. If ActiveX controller isn't installed correctly you will see no video image. You can resolve this problem by this way:

Download ActiveX controller and set the safety property of IE in the PC when you view it first time: IE browser  $\rightarrow$ Tool $\rightarrow$ Internet Proper $\rightarrow$ Security $\rightarrow$ Custom Level $\rightarrow$ ActiveX control and Plug-ins. Three options of front should be set to be "Enable", The ActiveX programs read by the computer will be stored. As follows:

Enable: Download unsigned ActiveX controls

Enable: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins

	Security Settings - Internet Zone	1
Internet Local intranet Trusted sites Rest S Internet This zone is for Internet websites, except those listed in trusted and restricted zones. Security level for this zone Allowed levels for this zone: Medium to High	Oisable     Disable     Deveload signed ActiveX controls (not secure)     Disable     Disable     Disable (not secure)     Prompt (recommended)     Disable (recommended)     Disable (recommended)     Disable (not secure)     Prompt     Initialee and sorpt ActiveX controls not marked as safe for s     Disable (recommended)     Disable (recommended)     Disable (not secure)     Prompt     Initialee (recommended)     Disable (not secure)     Prompt	and a second
Custom level Rasst all zones OK Ca	Run ActiveX controls and plug-ins     Adverted and supported     Adverted and supported and supported     Adverted andverted and supported     Adverted and supported     Adverted	

Figure 7.10

If you allow the ActiveX running, but still could not see living video. Please change another port number to try.

#### Don't use port 88.

	Port	
		Save Refresh
HTTP Port	88	
HTTPS Port	443	
ONVIF Port	888	
RTSP port	554	



#### NOTE:

Make sure that your firewall or anti-virus software does not block the camera or ActiveX. If you could not see video, please shut down firewall or anti-virus software to try again.

## 6.1.7 Can't access IP camera in internet

There are some reasons:

1、ActiveX controller is not installed correctly

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

3、Port forwarding is not successful

Check these settings and make sure they are correct.

## 6.1.8 UPnP always failed

UPnP only contains port forwarding in our recent software. Sometimes, it may be failed to do port forwarding automatically because of firewall or anti-virus software. It also has much relation with router's security settings. So we recommend you do port forwarding manually. You can view your camera in internet successfully after you do port forwarding manually in your router.

#### 6.1.9 Camera can not connect wireless

If your camera could not connect wireless after you set wireless settings and plug out the cable. Please check whether your settings are correct or not.

Normally, camera can't connect wireless mainly because of wrong settings.

Make sure broadcast your SSID; use the same encryption for router and camera.

### 6.1.10 Can't see other cameras listed

Can't see other cameras listed in multi-device when using remote access.

If you want to view all the cameras via the WAN, verify that each camera added in the multi-device settings can be accessed by using the DDNS name and port number. Use the DDNS domain name not the camera's LAN

IP. (For more details see: How to add cameras in WAN)

## 6.2 Default Parameters

#### **Default network Parameters**

IP address: obtain dynamically Subnet mask: obtain dynamically Gateway: obtain dynamically DDNS: Embedded FOSCAM domain name **Username and password** Default username is admin with a blank password

## 6.3 Specifications

TEMS		FI9816P
Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	1280 x 720 (1Megapixels)
	Min. Illumination	0 Lux (With IR Illuminator)
	Lens Type	Glass Lens
Lens	focal length	f:2.8mm
Lens	Aperture	F2.4
	Angle of View	70°
	Image Compression	H.264
	Image Frame Rate	30fps maxmium, downward adjustable
		720P(1280 x 720), VGA(640 x 480), VGA(640 x 360),
	Resolution	QVGA(320 x 240), QVGA(320 x 180)
	Stream	dual stream
Video	Image adjustment	The hue, brightness, contrast, saturation, sharpness are
		adjustable
	Flip image	flip and mirror
	Infrared mode	Automatic or manual
	Pan/Tilt Angle	Horizontal:300° & Vertical: 120°
	Night visibility	11pcs IR-LEDs, night vision range up to 8 metres
		Supports two-way audio
Audio	Input/Output	Built-in Mic & Speaker
Audio		3.5mm audio jack for external Mic & Speaker
	Audio Compression	PCM/G.726
Network	Ethernet	One 10/100Mbps RJ45 port
	Wireless Standard	IEEE802.11b/g/n
		IEEE802.11b: 11Mbps(Max.);
	Data Rate	IEEE802.11g: 54Mbps(Max.);
		IEEE802.11n: 150Mbps(Max.).
	Wireless Security	WEP, WPA, WPA2

	WPS	Supports WPS one button push wireless connection
	Network Protocol	IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、DDNS、 UPnP、RTSP、WPS
	Remote Access	P2P, DDNS
		Microsoft Windows XP, Vista, 7, 8;
	Operating System	Mac OS
System		iOS、Android
System Requirements		Microsoft IE7 and above version or compatible browser;
Requirements	Browcor	Mozilla Firefox;
	Browser	Google Chrome;
		Apple Safari.
	Motion Detection	Alarm via E-Mail, upload alarm snapshot to FTP
	User Accounts	Three levels user role
Other Features	Firewall	Supports IP Filtering
	Storage	Micro SD card and local storage
	Reset	Reset button is available
Devuer	Power Supply	DC 5V/2.0A
Power	Power Consumption	7.5 Watts (Max.)
	Dimension(LxWxH)	110(L)*103(W)*127(H) mm
Physical	Gross Weight	680g
	Net Weight	310g
Environment	Operating Temperature	-20° ~ 55° C (-4° F ~ 131° F)
	Operating Humidity	20% ~ 85% non-condensing
	Storage Temperature	-20° C ~ 60° (-4° F ~ 140° F)
	Storage Humidity	0% ~ 90% non-condensing
Certification	CE, FCC, RoHS	
Warranty	Limited 1-year warranty	

Attention: Power adapter should be used between  $0^{\circ}$ -40 $^{\circ}$ , and 5%-90% relative humidity.

## 6.4 CE & FCC

Electromagnetic Compatibility (EMC) FCC Statement



This device compiles with FCC Rules Part 15. Operation is subject to the following two conditions.

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful

interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is like to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

#### **FCC Caution**

Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **CE Mark Warning**

CE

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

# **7 Obtaining Technical Support**

While we hope your experience with the IPCAM network camera is enjoyable and easy to use, you may experience some issues or have questions that this User's Guide has not answered. Please contact support via e-mail at **support@foscam.us**. You can also reach technical support at **1-800-930-0949** by following the automated instructions.

