# IP Camera User Manual



For further help, please visit www.zmodo.com

## Preface:

Dear customer, thank you for choosing to purchase and use our IP camera products. This series of IP monitoring product is the integrated IP network camera which is researched for network video surveillance monitoring. The series includes network bullet camera, network IR bullet camera, and network dome camera, etc. High performance, monolithic SOC chip is utilized as media processor which integrates video capture, compress and transmission. Standard H.264 main profile encoding algorithm ensures more clear and smooth video transmission. Embedded web server allows user to view real-time footage and remote control via IE browser. This series of IP camera is well suited for home and small business, as well as any situation which needs to apply remote network transmission and remote network control. It's easy to install and operate.

#### Statement:

The content in this manual may be different from the product version you are using. If you met any problem which can't be solved according to this manual, please contact our tech-support or product supplier.

The content will be updated time to time. Our company reserves the right to update without notice.

### Intended Reader:

This manual is mainly suitable for below kinds of engineer: System planner Onsite tech-support and maintenance personnel Administrator for system installation, configuration and maintenance Users for business operation on product functions

### Terms in this manual:

IP Camera or IPC in this manual means network camera including network bullet camera, network dome camera, network PT camera, and network IR camera, etc. Click: Click with left button of mouse.

Double Click: Double click with left button of mouse.

Right click: Right click with right button of mouse.

The []symbol indicates the windows name, menu name, or data table; such as [Download Address].



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**1**Product Introduction

## 1.1Brief Introduction

This product is digitally monitored with a traditional analog camera and web video service. Efficient Linux system, code in flash and small size that's reliable and steady.

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Figure 1-1 Network IP Camera

Figure 1-2 Camera Cable Ports

## 1.2 Main Features

- \* The highest pixels for 30 W, 2M frame rate, real-time image
- \* Advanced video compression standard, high compression rate and flexible operation
- \* 1/4"CMOS sensor, fluid motion pics
- \* Automatic snapshot in all circumstance
- \* One key rescue system, dual stream and mobile phone live monitor
- \* Build-in WEB browser supports IE access
- \* Support multiple user simultaneously, multi-level management ensures high system security.

\* Support motion detection alarm (area, sensitivity configurable) and e-mail alert function

- \* Support online system upgrade by remote control
- $^{\ast}$  Automatic recovery function when the system temporarily loses internet connection.

\* Support PPPOE, DDNS, LAN, and Internet (ADSL, Cable Modem)

## 1.3 Installation Statement

During installation and operation, please pay attention to the following items: 1.When you received the package product, please check the equipment and accessories according to the packing list inside the packing case.



2.Before installation please carefully read this user manual.

3.When you install the IP camera, please close the power source of all the related devices.

4. Check the voltage of the power source, to prevent device damage by mismatching of voltage.

Installation environment: please do not use equipment under high humidity or temperature. Make sure there is good ventilation and no blocking of air-vent. Place it on a flat floor. Do not install it under violent vibration.

### **1.4 Network IP Camera Connection**

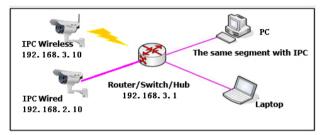


Figure 1-3 Device Connection of Network IP Camera

Step one: Connect the IP Camera to your router or NVR using a network LAN cable.

Step two: Connect the related power adapter to the IP Camera so that the camera powers on.

Step three: Insert the Software CD into the PC computer that is connected to the same local network as the IP Camera.

Note: It can also apply the way of IP Camera directly connecting with PC. Note: When using IE browser to visit IP Camera, the IP of local PC should be in the same segment with the IP of the IPC.

## 2 Log in

When using IE (Internet Explorer) to visit IP camera for the first time, you have to set the security level for ActiveX controls.

Set security level: Open Internet Explorer, enter the IE Tools menu [Tools/Internet Options/Security Settings/Custom Level...], Enable the "Active X Controls and Plugins" and set the IP address of the IP Camera as "Trusted sites".

ternet Options			8	×	Security	Settings -	Internet	Zone	Ľ
General Secur	ity Privacy Content	Connections P	rograms Adva	nced	Settings				
Home page -	45			- 1		Download unsigne	d ActiveX contr	ols	<u>^</u>
To	create home page tab	s, type each addre	ss on its own line	e.		Disable (recom			
	boutblank			~		Enable (not se	cure)		
						Prompt			
						Initialize and script		ils not marked a	s safe for s
	Use current	Use default	Use blank			Disable (recom Enable (not se			
Browsing histr	**					Prompt	cure)		
	lete temporary files, hi	story, cookies, say	ed passwords.			Only allow approve	ed domains to u	se ActiveX with	out prompt
an 💎	d web form information	h-			<u> </u>	Disable			
1	Delete browsing histor	y on exit			(	Enable			
		Delete	Settings	- I		Run ActiveX contro			
		Delete	Settings		(	Administrator	approved		
Search				5		Disable			
) o	ange search defaults.		Settings			Enable     Dromot			~
Tabs					<				> 13
	ange how webpages a	re displayed in	Settings		*Takes ef	fect after you res	tart Internet E	plorer	
					Reset cust	om settings			
Appearance				5	Reset to:	Medium-high (d	lefault)	× (	Reset
Colors	Languages	Fonts	Accessibility						
								OK	Cancel

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Figure 2-1 Security Level Setting

Install ActiveX and plugins: Type the network camera IP address in the IE browser address bar, and press [Enter] to pop out dialog box of install ActiveX. Click [OK] to install.

Log in and Preview: In Login screen, type in network camera username,

password, choosing language and click [OK] to enter the video preview interface. Default:

IP Address: 192.168.0.100

UserName: admin Password: 111111

C Net Viewer D6 Series Web-Program - Windows Internet Explorer		-Tmodo	
G . + Mpp://192.168.100	٩	Your Security - Our Priority	
🛊 🏟 🌈 Net Viewer D6 Series Web-Program 🔤 🔒 🛚 💿	🖶 • 🔂 Page • 🌒 Tools • 🎽	UserName: admin	_
This website wants to run the following add-on: 'REMOTE-1.0Cl' from Unknown publisher'. If y add-on and want to allow it to run, click here			OK
8	Run Activet Control What's the Risk?	Password:	OK
	More information	VideoPort: 8000	
		● 简体中文     ● English	
🔮 Done 🧊 🚱 biternet	₹100% ·		

Figure 2-2 Safety Dialog box

Figure 2-3 Login Interface

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## **3 Preview**



Figure 3-1 Real-time Preview Interface

In the real-time preview interface, the user can control the video channel switch, record, snapshot, full screen preview, image process, image color, direction configuration, and PTZ control.

[Video Channel] Double Click the channel number to open the video channel to view image, right click and choose "Close" to close the video channel.

[Video Stream] Right Click the channel number to choose stream type(main stream or sub stream)

[Record] Right click the image, choose "record" check to start record, remove "record" check to stop record, the video is kept in file catalogue set by video capture.

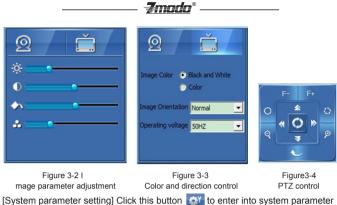
[Capture] Right click the image, choose "capture" to capture photos, the capture photo is kept in catalog set by video capture.

[Full screen preview] Double click the image to full screen preview, double click once again to go back to the original image size.

[Image process] The object of image processing includes brightness 🔅 , contrast 🕦 , saturation 💁 🛃 , use mouse to drag the slider to set these items, as figure 3-2. The "Reset" button to recover the default configuration.

[Color and Direction Configuration] Image color can be black and white or color, the image can be mirrored or reversed as figure 3-3, NSTC or PAL also can be set in this section.

[PTZ control] PTZ control to Upward, downward, left, right, the lens operation includes vary magnification, vary focus, vary iris, etc. as shown in figure 3-4.



[System parameter setting] Click this button it to enter into system parameter setting interface.

[Reboot device] Click this button 🙆 to reboot the device.

## 4 System Setting 4.1 Local Configuration

Device Parameters			×
Local Configuration	Local Video Store Settings Video files packaged time : Video/Capture file storage directory :	30 mins D: VDWVS\ Submit	
Remote Configuration			

Figure 4-1 Local Configuration



[Video files Packing time] Set the file size record time.

[Video/Captured file Storage path] Set file path for local recording and capture. After configuration is finished, click [Submit] button, the configuration will take effect immediately.

## 4.2 Remote configuration

### 4.2.1 Video Setting

·On Screen Display (OSD) control

Device Parameters			×
Local Configuration	Character Overlay	Video Code Video Block	
Remote Configuration			
<b>.</b>			
Video Settings	Total	zmodo	
Network Param	Time Format	MM/dd/yyyy HH:mm:ss	<b>v</b>
Alarm Settings			
<b>.</b>		Submit	
System Info			
Advanced Settings			
<b></b>			
Serial Port Settings			

Figure 4-2 OSD control setting

[Title] Name of video channel will be shown on the up left of the image, maximum 16 characters. Click the check box and it will display OSD. Un-check the check box, and it will not display the title.

[Time format] You can choose whether to display title , date and time, and also you can choose the time format.

After setting the date and time, click the [Submit] button, the setting will take effect immediately.

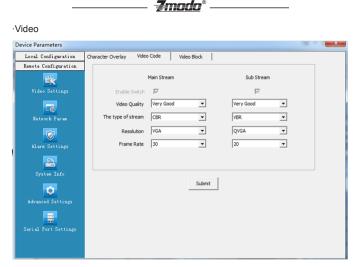


Figure 4-3 Video coding setting

[Video Quality] The user can choose the appropriate desired image quality: Best, Very Good, Good, Common, Not Good.

[Stream Type] Two types: CBR(Constant bit rate)and VBR(Variable bit rate) to choose, CBR enables constant bit rate coding, VBR enables variable bit rate coding.

[Resolution] Sets the image resolution: main stream VGA(640×480=307200 pixel), sub stream QVGA(320×240=76800 pixels).

[Frame rate] set coding frame rate per second. Under not satisfying network situation, you can reduce the frame rate to control the coding bit rate, to ensure the smoothness and continuity of the moving footage.

After setting parameters, click the [Submit] button, the setting will take effect immediately.



#### ·Video shield

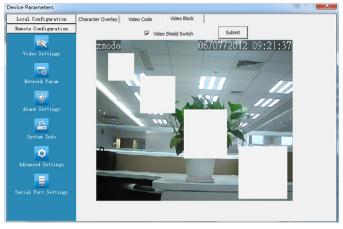


Figure 4-4 Video shield setting

[Video shield switch] Enable or disable the video shield functionality [Shield area setting] User can set shield area by dragging mouse with left key pressed, and cancel the shield box on the shield area by right clicking the mouse. You can choose to shield the whole image, or only shield the part of the image. It can mask up to four areas.

After setting parameters, click the [Submit] button, the setting will take effect immediately.



#### 4.2.2 Network Parameter

·Wired Setting

Device Parameters							x
Local Configuration	Wired Settings Wireless Settin	ngs Listening Port	PPPOE	UPNP(Port automatically maps)	Email	FTP	DDNS
Remote Configuration							
<b></b>	DHCP 🕅						
Video Settings	IP Addr	192 . 168	2.10				
	Subnet Mask	255 . 255 . 2	55.0				
Network Param	Gateway	192 . 168	2.1				
<b></b>	MAC 00	0:02:04:06:08:22					
Alarm Settings	Preferred DNS Addr	8.8.8	8.8	_			
<u>.</u>	Alternate DNS Addr	202 . 96 . 1	28 . 166				
System Info							
0		Submit					
Advanced Settings							
Serial Port Settings							

Figure 4-5 wired network setting

[DHCP] If the router allows DHCP functionality, select DHCP. The IP Camera will obtain IP address automatically from the router. If the router does not allow for DHCP functionality, then the IP address must be obtained manually.

[IP Address] Set wired cable IP address of IP camera device.

[Subnet mask] Default: 255.255.255.0 (suggest user not to change this)

[Gateway] Set gateway IP of IPC, for example if IPC access public network through router, the gateway IP need to be set as the router IP which has accessed the public network.

[Physical address] MAC address of IP camera (suggest user not to change this) [DNS address] If the user has a DDNS account, the DNS address needs to be set as DNS address of the place where the device is belonging to.

After setting parameters, click the [Submit] button, the setting will take effect immediately.

If it is applied in LAN, please make sure IP address does not conflict with the IP address of other devices or computer in the same LAN.

#### ·WIFI setting

Local Configuration	Wired Settings Wire	ess Settings Listeni	ng Port   PPPOE   U	PNP(Port automatic	ally maps) Email FTP DDN
Remote Configuration	Whethe	r to use WIFI 🔽			
<u>i</u>	Whether	to use DHCP			
		IP Addr 19	92 . 168 . 3	. 10	
		Subnet Mask 25	55 . 255 . 255	. 0	
Network Param		Gateway 19	92 . 168 . 3	. 1	
		MAC 7C:	DD:90:08:A0:A1		
Alarm Settings			8.8.8		Submit
<u></u>	Mine Hotspot search res	,	02 . 96 . 128	. 166	Submit
	Hotspot name	Connection status	Hotspot signal	Encrypt	Add Hotspot
0	TP-LINK_4A2DDC ChinaNet-UP2E ChinaNet-LMT9	Connected Disconnected Disconnected	75% 67% 67%	Encrypted Encrypted Encrypted	Refresh Hotspot
	zmodooem D-Link_DIR-600M	Disconnected Disconnected	66% 78%	Encrypted Unencrypted	
Advanced Settings					

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Figure 4-6 IPC WIFI network setting

[Whether to use WIFI] Select this check to open the wifi network function of IPC. [Whether to use DHCP] If the router allows DHCP function, select this type, IP camera will obtain IP address automatically from router.

[IP address] Set wireless IP address of IP camera.

[subnet mask] Set IP address of the current wireless gateway( router/AP), such as 192.168.0.1

[Hotspot adding] After switch to Wifi setting, it will automatically search the hotspot. When hotspot is searching; the name of the wireless router, signal intensity, and the encryption will be listed on the screen. Click on "add hotspot" or double click on an existing hotspot, open" wifi hotspot setting" dialog box as below figure shown:

WIFI Hotspot Setting	gs and an and	M 1 1 1 M	×
Hotspot	TP-LINK_4A2DDC		
Authentication Mode	WPA PSK Encrypted	Ψ	
WEP Index	WEP key 1	<b>~</b>	
Key Format	ASCII	~	
Password	*******		
Esta	blish Connection	Exit	

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Figure 4-7 Wifi Hotspot setting

If entered this screen by double clicking, hotspot will be assigned automatically; if entered this screen by clicking "Add hotspot", user has to type in hotspot, corresponding encryption mode and password. Click [Connect], close the dialog box, and connected or not will be list on the search results list.

If connected, "Connected" will appear after hotspot name; if not, please click "Refresh" to refresh connection status or click this button to search device again. After saving all parameters, click the [Exit] button, the setting will take effect immediately.

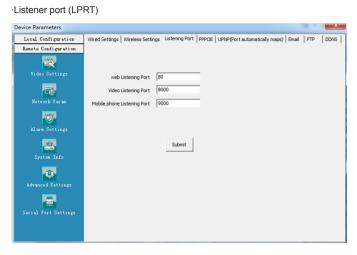
Now pull out network cable, you can access the IP network camera via Wifi. Note: WIFI setting only works to those types with WIFI function.

WIFI mode supported by IP Camera:

802.11b/g protocol (small power WiFi type)

802.11a/b/g/n protocol (large power WiFi type)

To use the wireless function of IP camera, a wireless router is needed such as D-link.



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Figure 4-8 LPRT setting

[Web LPRT] The default port 80(port 80 is recommended), port for download active X, if necessary to change, it should add port number behind IP address during web visit http://ip:port/, such as http://192.168.0.100:/81.

[Video LPRT] default 8000 (8000 is recommended).

[Mobile phone LPRT] default 9000 (9000 is recommended).

After setting all parameters, click the [submit] button, the setting will take effect immediately.

Note: LPRT can be selectable during range of 1024~65535, can't be repeated. Web LPRT can be 80.



#### ·PPP0E

Device Parameters							×
Local Configuration	Wired Settings   Wireless Se	ttings   Listening Port	PPPOE	UPNP(Port automatically maps)	Email	FTP	DDNS
Remote Configuration							
<b>*</b>	Switch						
Video Settings							
<b></b>	User						
	Password						
		1					
<u>.</u>		Submit					
<b>*</b>							
<b>-</b>							

Figure 4-9 PPPOE parameters setting

[Switch] Set to open or close PPPOE dial-up function

[User name] The ADSL dial-up account, obtain from internet service provider [Password] Password of ADSL dial-up account, obtain from internet service provider

After setting all parameters, click the [submit] button, the setting will take effect immediately.



#### ·UNPN (Auto port mapping)

vice Parameters					×
Local Configuration	Wired Settings   Wireless Setting	gs   Listening Port   PPPOE	UPNP(Port automatically maps)	Email   FTP	DDNS
Remote Configuration					
Video Settings	Switch				
	web Mapping Port	3000			
<b>150</b>	Video Mapping Port	3001			
	Mobile Phone Mapping Port	3003			
<b>1</b>					
System Info		Submit			
Advanced Settings					

Figure 4-10 UNPN port mapping setting

[Switch] If in LAN it has server with UPNP functionality, enable this function, the server will automatically forward the set port to public network.

[web mapping port] Set the web port which will be mapping to the server.

[digital mapping port] Set the digital port which will be mapping to the server.

[Mobile phone mapping port] Set the mobile phone port which will be mapping to the server.

After setting all parameters, click the [submit] button, the setting will take effect immediately.

Note: port mapping can be selectable between 1024~65535. It can't be repeated.



#### ·Email

evice Parameters						×
Local Configuration	Wired Settings   Wireless	Settings   Listening Port   PPPOE	UPNP(Port automatically maps)	Email	FTP	DDNS
Remote Configuration						
<b>1</b>	SMTP Server	smtp.gmai.com				
Video Settings	Receive E-mail Address	zmodouser@eptco.com				
Cê	Send E-mail Address	zmodouser@eptco.com				
Network Param	SMTP Password	*****	Submit			
	E-mail Title	alarm message				
	SMTP Port	0				
<u> </u>	SSL	<b>v</b>				
•						

Figure 4-11 Email parameters setting

It is used to set Email address and related parameter of alarm email.

[SMTP Server] send email server address, different email service provider provides different email server address, such as SMTP server of Google email box: smtp.gmail.com

[Email receiving address] Email address to receive the email.

[Email sending address] Email address to send email.

[SMTP password] Log in password for the email box.

[Email title] The title of sending email.

[SMTP Port] Port of SMTP Server, different email server has different port, such as Gmail email server port as 465, enables SSL.

After setting all parameters, click the [submit] button, the setting will take effect immediately.

Common email server configurations:

Yahoo Email server:

SMTP Server: smtp.mail.yahoo.com

SMTP User name:username@yahoo.com

SMTP Port: 465

SSL: Enabled



Device Parameters								×
Local Configuration	Wired Settings   Wireless	Settings   L	istening Port	PPPOE	UPNP(Port automatically ma	ps) Email	FTP	DDNS
Remote Configuration								
<b>**</b>	FTP Server	192.168.2	2.250					
Video Settings	FTP Port	21						
Cē .	User	root						
Network Param	Password	******		_				
Alarn Settings								
System Info			Submit					
Advanced Settings								
Serial Port Settings								

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Figure 4-12 FTP parameters setting

FTP services will send the alarm triggered recording file or captured photo via FTP to certain FTP server.

[FTP server] IP address or HTTP network address of FTP server.

[FTP port] Port of FTP server, default port is 21.

[User] User name of the FTP Server.

[Password] Password of the FTP Server.

After setting all parameters, click the [Submit] button, the setting will take effect immediately.

vice Parameters		
Local Configuration	Wired Settings   Wireless	s Settings   Listening Port   PPPOE   UPNP(Port automatically maps)   Email   FTP
Remote Configuration	Switch	<b>v</b>
Video Settings	Server	3322.org
<b>C</b> ô	DNS	zmodo.3322.org
Network Param	User	zmodo
	Password	*****
Alarm Settings		
System Info		Submit
Advanced Settings		
Serial Port Settings		

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Figure 4-13 DDNS parameter setting

Dynamic DNS setting, through this setting it can bond device with a fixed domain, no matter how public network IP varies, it can visit the device via this domain. User can register a DDNS account on website of 3322.org.

[Switch] Setting open or close DDNS function.

[Server] 3322.org or dynDDNS.org selectable.

[DNS] The device domain which is set by user, such as zmodo.3322.org.

[User] The user name which you registered on DDNS server.

[Password] The password which you registered on DDNS server.

After setting all parameters, click the [Submit] button, the setting will take effect immediately.



#### 4.2.3 Alarm setting

Local Configuration	Mobile Alarm						
lemote Configuration	week	Sunday •	1		Save	Output Port	
<b>談</b>		Start Time	Stop Ti	me –		Port 1	Port 2
Video Settings	Time 1		23:00:00		Switch	Port 3	Port 4
	Time 2	0:00:00	0:00:00		Switch		
	Time 3	0:00:00	0:00:00		Switch	Response Me	thod
	Time 4	0:00:00	0:00:00		Switch	T Audio	Capture
	zmodo	1000	06709720	012 09	:50:20	FTP	🔽 Email
Alarm Settings				Inn		☐ Record	
<u>.</u>					17	Constitution of	
		111	1987	7	me a	Sensitivity	Medium 💌
		1 100				Output Delay	6 💌
	11			3		T Makan I	Detect Switch
Advanced Settings						je houdin	Jedect Smith
						Submit	1
erial Port Settings							
				1000 C			

Figure 4-14 Motion detection setting

[Protection time setting] Set the protection time of motion detection. It can set detail time period of everyday, up to four time periods. Select the time and click the [Save] button, then the time period selection will take into force.

[Motion detection switch] Set open or close of motion detection, enable this switch to edit the motion detection area.

[Motion detection setting] After enable motion detection switch, the setting interface will appear grid line. User only needs to click the little cube on the image to set the motion detection area. Right click the little cube to cancel related area detection.

[Alarm action mode] Set linkage output format after triggered alarm. Sending email is sending motion detection alarm information via email to user, the detailed Email parameter see chapter 4.2.2. There will be no Email alert if user didn't set email parameter previously.

[Sensitivity] The sensitivity of motion detection includes three levels: High, Little high, Mid, and Low.

[Output delay] Set delay time of alarm linkage, time range is limited between 0~30.

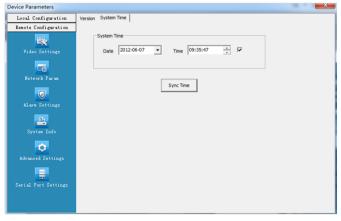
After setting all parameters, click the [submit] button, the setting will take effect immediately.



## 4.2.4 System Information

Device Parameters			
Local Configuration	Version System Time		
Remote Configuration			
<b></b>	Device Name	ZMD-ISV-BFM26NM	
Video Settings	MAC	00:02:04:06:08:22	
	Hardware Version	V.1.0.00-20120418	
Network Param	Software Version	V.1.0.00-20120418	
	Video Channel number	1	
	Audio Channel number	0	
Alarm Settings	Alarm Access number	0	
<u>-</u>	Alarm output	0	
System Info	Wether to support the intercom	NO	
0	Wether to support Local storage	NO	
Advanced Settings			
Serial Port Settings			







[Version] Display device name, system version, video/audio channel number, sensor/alarm input/output, local storage.

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[Time Setting Switch] Enable this switch to manually set the system date and time; disable this switch then the system date and time will be synchronized with local PC only to check the status and can't be configured to disable this switch. After setting all parameters, click the [Sync time] button, the setting will take effect immediately.

#### 4.2.5 Advanced setting

·User management

Local Configuration		Regular Maintenance Softwa	re Update	
Remote Configuration	User Info User Password User types	Root privileges	Add Del Modify	
Network Param	Users List			
<b>1</b>	Number	User	User Privileges	
	1 2	admin user	Root Root	
2	3	user1	Ordinary User	
System Info				
÷.				
Advanced Settings				
Serial Port Settings	,			

Figure 4-17 User management interface

Each IP camera can be set up to have up to 15 users. Admin is the system default super user and cannot be deleted, but the admin password can be changed. User's authority is as following:

Super-User authority: operate and set all the function and parameter of IP camera Common user authority: The common user is allowed to view video, adjust their password and delete their own account. Common users are not granted any additional authorities.

Note: the default user after leaving factory is admin, the password is 111111. Both user names and passwords are case sensitive.

Device Parameters		×
Local Configuration	User Management Regular Maintenance Software Update	
Remote Configuration	Periodic Maintaining	
<b>*</b>	Maintaining 12:00:00	
Video Settings	Mon Tues	
	☐ Wed ☐ Thurs	
Network Param	Fri Sat	
Alarn Settings	V Sun Submit	
System Info	System Maintaing	
Advanced Settings		

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·Periodic maintenance

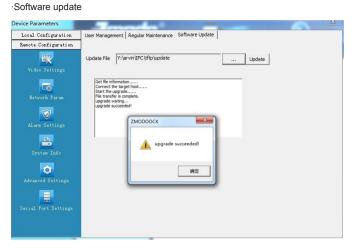
Figure 4-18 Periodic maintenance setting

[Periodic Maintaining] Choose to open periodic maintenance and set maintenance time, detailed maintenance time on everyday can be configured. After setting all parameters, click the [submit]

[Restore factory setting] Click this button to recover all the setting of the device back to factory setting.

[Reboot Device] Click this button to reboot the device.

Note: Periodic maintenance and reboot the device will need to wait for 30 seconds to restore video surveillance.



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[Update File] Click "." to browse for the correct update file (application file: REL-APP, Please not change the file name), click "Update". During the update, it will display update information. After update finished, IP Camera will reboot automatically. Log into the device once again and enter the software update interface to check whether the system version has been updated.

Note: During updating, please do not disconnect the camera from its power source or from the internet connection.



#### 4.2.6 Serial port set up



When IP camera has external RS485 communication or control device (such as a PTZ controller) the user needs to set the RS 485 parameter according to the setting of these external devices. The channel, address, speed, protocol, and bit rate need to be set accordingly. Only all these are set correctly, the external communication device can be used to control the camera.

[Channel] Select the channel of device.

[PTZ protocol] The communication protocol setting, the user can choose Pelco\_D or Pelco\_P. The protocol is the same as that of the PTZ device.

[PTZ speed] Ranging from 1~64

[PTZ address] Ranging from 1~255

[Data Format] The setting of RS485 communication data format includes bite rate, date position, check digit and stop bit.

After setting all parameters, click the [submit] button, the setting will take effect immediately.

## 5 Appendix

#### Appendix 1 Specification

VGA Network Camera				
	Sensor	1/4"CMOS sensor		
	Pixel	640(H)× 480(V)		
	Picture procession	Brightness, contrast, saturation, hue		
	Power	12 V DC @ 300 mA		
Camera	Network interface	RJ45 10/100M		
	Indicator light	Power indicator light /Status Indicator light		
	Antenna	Wifi antenna seat		
	Reset button	Hold pressing the RESET button 5 seconds, the system will clear user's data automatically and restore factory setting		
Develop and the second second	Temperature	-10- 50°C		
Physical parameters	Humidity	20%-80%		
	Video compression	H.264/JPEG		
Video	Video code	640x480/320x240		
Parameters	Sub video code	320x240		
	Frame rate	1~30fps Selectable		

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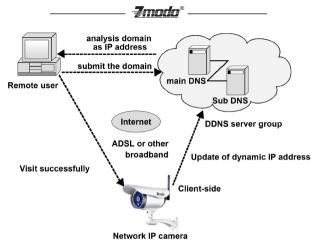
#### ·Appendix 2 System default parameter

User name: admin	password: 111111
Wired cable network	
IP address:192.168.0.100	Subnet mask:255.255.255.0
Gateway:192.168.0.1	DHCP: Close
Wireless network	
IP address:192.168.0.101	Subnet mask 255.255.255.0
Gateway:192.168.0.1	DHCP: Close
Port	
Web LPRT:80	Web mapping port:3000
Video LPRT:8000	Video mapping port:3001
Mobile phoneLPRT:9000	Mobile phone mapping poprt:3003

Appendix 3 Apply for DDNS domain service

#### IP Camera DDNS brief introduction

DDNS dynamic DNS means real-time analysis to a fixed domain and dynamic public network IP address of IP camera. All internet users can visit this IP camera through a certain fixed domain, as shown:



IP Camera DDNS Analysis process

If you would like to assign a DDNS service to your IP Camera, please contact product support for a recommended current DDNS service. Recommended DDNS services will periodically change as a result of support developments or cost changes. Product support will be happy to recommend a current DDNS service.

Log in client-side software  $\rightarrow$  Remote configuration  $\rightarrow$  Network parameter  $\rightarrow$  DDNS setting

Apply for No-IP Domain

The website address of No-IP is: http://www.No-IP.com/

The website interface as following:

-	🙆 Home 🖾 Contact Us 🗃 Login
😥 no ip	
The DNS Service Provider Download Services	
Managed DNS	User Login Username
No-IP Plus, The complete managed DNS Solution	Password
✓ Easy to use interface.    ✓ Complete control over your domain.     ✓ FREE dynamic DNS update client.    ✓ Includes 50 hosts/sub domains.	Create Account Forgot password
Sign Up! More Info	No-IP Enhanced Upgrade your No-IP
FROM Register Your Domain com • Search	account to unlock many exciting features.
No-IP Free POP3 / IMAP Mail Feature Highlight	No-IP Backup DNS Maximize uptime and add Anycast to your existing
	DNS infrastructure.

If you have registered in this website, directly input user name and password, click login enter the website.

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If you have not registered, click Create Account, choose Free DNS, enter the registration interface

#### Step one Registration:

No-IP is Free, Sign up No	w!	
Home 🕨 Free SianUp		
Create Your No-IP Account		
If you already have an account then you can (sign in here)		
About You:		
First Name:		
Last Name:		
Email:		
🔒 Account Information:		
Username:		
Password:		
Confirm Password:		

Follow the step one by one, and fill in the required blank, click the "I Accept, Create my Account" button, then your account has been created, activate your account in your email box, Now you can enter your account in NO-IP website Step two: enter your own account, input domain application information



After enter your own space, you need to apply for your own free domain, now click the button Hosts/Redirects, enter into host management.

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The DNS Service Provider				IP: 115.236.89.138 🦁		
Hosts/Redirects	DNS Hosting	Domain Registration	Mail	SSL Certificates	Monitoring	
Hoste/Redirecte						

Choose Add a Host

Hosts/Redirects	DNS Hosting	Domain Registration	Mail S	SL Certificates	Monitoring	Backup DNS	Renew/Activat
Hosts/Redirects		Manage Host	te				
Add Host	- V= '	manage nos					
<ul> <li>Manage Hosts</li> </ul>							
<ul> <li>Manage Groups</li> </ul>	Current	Hosts: 0 of 3	Ne	ed More Ho	sts? Enhance Y	our Account!	Upgrade Now!
Download Client							
Upgrade to Enhanced	Host		IP/	JRL		Action	
Need redundancy	😪 на	osts By Domain					
for your mail server	?			No Ho	sts		
Click here for more info							Add a Host
							Add a H
24/7 Server Monitorin	g						

Enter the interface of host application:

Hosts/Redirects	DNS Hosting Domain R	Registration Mail SSL Certificates	The DN	S Service Provider	
Hosts/Redirects     Add Host	🗖 🌄 Add a l	host	Hosts/Redirects	DNS Hosting	Dor
<ul> <li>Manage Hosts</li> <li>Manage Groups</li> </ul>	Fill out the following field	ds to configure your host. After you are don	Vocte/Podirocte		
Download Client     Upgrade to Enhanced	Own a domain nam Use your own domain features.		ter your domain name now or read more for	pricing and	
Need redundancy for your mail server	Hostname Informatio	ท			
Click here for more info	Hostname:		zapto.org	* <b>0</b>	
24/7 Server Monitorin and Failover Click here for more info		DNS Host (A)      DNS Host (Round F     Port 80 Redirect	Robin) 🔘 DNS Alias (CNAME)	۲	
Need Help?	IP Address:	115.236.89.138		•	
Support Center	Assign to Group:	- No Group -	<ul> <li>Configure Groups</li> </ul>	•	
Basic Troubleshootin Guide     Support Ticket     Contact Us	g Enable Wildcard:	Wildcards are a Plus / Enhanced feature	. <u>Upgrade Now!</u>	•	

Hostname: the domain name you are applying

Host Type: please choose DNS Host

IP Address: you're outer net IP

Assign to Group: Group distribution (you can choose default value)

Enable Wildcard: you can choose default value

Other parameters choose default value

Application finished. If the following interface showed up it means application is successful, as following

For example, this is the free domain which is just applied successfully: jerry123. zapto.org.

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Hosts/Redirects		La ada		
Add Host	📕 🧺 Manage H	10515		
Manage Hosts				
Manage Groups	Host jerry123.zapto.	org updated. Update will be applied	in approximately 1 minute.	
<ul> <li>Download Client</li> </ul>				
<ul> <li>Upgrade to Enhanced</li> </ul>	Current Hosts: 1 of 3			
	Current Hosts: 1 of 3	Need More Hos	sts? Enhance Your Account!	Upgrade Now!
Need redundancy for your mail server?	Host	IP/URL	Action	
Click here for more info	Host	IP/URL	Action	
Click here for more info	Hosts By Domain			
24/7 Server Monitoring	zapto.org			
and Failover Click here for more info	jerry123.zapto.org	115.236.89.138	🖉 <u>Modity</u>	Kemove
				Add a Host
Need Help?				

#### Step Three: DDNS setting

Device Parameters			×
Local Configuration Wired Settings Wireless	s Settings   Listening Port   PPPOE   UPNP(Port automatically maps)   Email	FTP	DDNS
Remote Configuration	_		
IP: 115.236.89.138			
	No-IP.com		
ain Registration Mail SSL Certificates Monitoring	jerry123.zapto.org		
Network Paran User	jerry123		
Password	******		
Alarn Settings			
<b>.</b>			
System Info	Submit		
Advanced Settings			
Serial Port Settings			

Adjust the IP address of device, the IP address needs to be LAN IP of the router which means the network segment when you enter into the internet in ordinary time.

Local Configuration	Wired Settings	Wireless S	ettings	List	ening	Port	PP	POE	UPNP(Port automatically maps	) Email	FTP	DDNS
Remote Configuration	]											
<b>*</b>		DHCP										
Video Settings		IP Addr	192	• •	168	. :	2 .	10				
	Sul	onet Mask	255	. :	255	. 2	55	0				
Network Param		Gateway	192		168	. :	2	1				
		MAC	00:02	:04:0	6:08:	22						
Alarm Settings	Preferred	DNS Addr	8	÷	8	. (	3	8				
<u>e</u>	Alternate	DNS Addr	202	•	96	. 1	28	166	5			
System Info												
0				Su	bmit	1						
Advanced Settings			-			_						
Serial Port Settings												

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Port mapping setting of D-Link router Type in the IP address of router in browser, to log in the main interface of router management.

				GHz Wirele		
	Home	Advanced	Тоо	ls Stat	tus	Help
	/irtual Server /irtual Server in	s used to allow Intern	et users a	ccess to LAN servi	ces.	
		C Enabled C Di	sabled			
N N	lame			Clear		
e e	rivate IP	i				
	Protocol Type	TCP .				
		TOP .				
P	Private Port					
P	ublic Port					
	chedule	C Always				
			to S	AM • to 00	. : 00 . A	M
		day Sur			🤣 🔇	
	/irtual Server	day Sur	to S	Sun 🔽	Mapply Can	
	/irtual Server Name Virtual Ser	day Sur s List P			Apply Can Schedule	cel Help
	Name	day Sur s List ver FTP 0.	ivate IP	Sun 💌 Protocol	Apply Con Schedule always	cel Help
	Name Virtual Ser	day Sur s List ver FTP 0. ver HTTP 0.	ivate IP 0.0.0	Protocol TCP 21/21	Apply Can Schedule	Cel Help
I I	Name Virtual Ser Virtual Ser	day Sur s List ver FTP 0. ver HTTP 0. ver HTTP 0.	ivate IP 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53	Apply Con Schedule always always	
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser	day Sur s List ver FTP 0. ver HTTP 0. ver HTTPS 0. ver DNS 0. ver DNS 0.	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 63/53 TCP 25/25	Apply Con Schedule always always always always always	cel Help
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser	day Sur s List ver FTP 0. ver HTTP 0. ver DNS 0. ver DNS 0. ver SMTP 0. ver POP3 0.	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 25/25 TCP 10/110	Apply Can Schedule always always always always always always	cel Help
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser	day Sur s List ver FTP 0. ver HTTP 0. ver HTTP 0. ver MTPS 0. ver SMTP 0. ver SMTP 0. ver SMTP 0. ver Felnet 0.	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 25/25 TCP 110/110 TCP 23/23	Apply Can Schedula always always always always always always always always	cel Help
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser IPSec	day Sur s List ver FTP 0. ver HTTP 0. ver TMTP 0. ver SMTP 0. ver SMTP 0. ver POP3 0. ver F0P3 0.	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 25/25 TCP 110/110 TCP 23/23 UDP 500/500	Apply Can Schedule always always always always always always always always always	
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser IPSec PPTP	day Sur s List ver FTP 0. ver MTTP 0. ver MTTP 0. ver DNS 0. ver SMTP 0. ver SMTP 0. ver SMTP 0. ver SMTP 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 25/25 TCP 110/110 TCP 23/23 UDP 500/500 TCP 123/1723	Conception of the second secon	cel Help
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser IPSec PPTP NetMeetin	day Sur s List ver FTP 0 ver HTTP 0 ver TMTP 0 ver SMTP 0 ver SMTP 0 ver POP3 0 ver POP3 0 ver Felnet 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 110/110 TCP 23/23 TCP 110/110 TCP 23/23 TCP 1723/1723 TCP 1723/1723	Comply Com Schedule always always always always always always always always always	
	Name Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser Virtual Ser IPSec PPTP	day Sur rs List ver FTP 0. ver MTTP 0. ver MTTP 0. ver DNS 0. ver SMTP 0. ver SMTP 0. ver SMTP 0. g 0.0	ivate IP 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Protocol TCP 21/21 TCP 80/80 TCP 443/443 UDP 53/53 TCP 25/25 TCP 110/110 TCP 23/23 UDP 500/500 TCP 123/1723	Conception of the second secon	

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To reach port forwarding on a D-Link router, first navigate to the advanced tab. Then, on the left hand side, select virtual server.

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Under name, you can just put down DVR

The private IP is the IP address of the DVR

The private and public ports should be set to the same value, which is the port you're trying to forward.

Be sure to choose always, and hit apply.

Repeat as necessary until all ports are forwarded.

If successfully set DDNS in "network setting" of the IP camera, then you can visit the IP camera by typing your DDNS domain name into an Internet Explorer browser.

