2 Megapixel

NETWORK CAMERA

User Manual

- Please use the specified power supply to connect.
- Do not attempt to disassemble the camera; in order to prevent electric shock, do not remove screws or covers.
- There are no user-serviceable parts inside. Please contact the nearest service center as soon as possible if there is any failure.
- Avoid from incorrect operation, shock vibration, heavy pressing which can cause damage to product.
- Do not use corrosive detergent to clean main body of the camera. If necessary, please use soft dry cloth to wipe dirt; for hard contamination, use neutral detergent. Any cleanser for high grade furniture is applicable.
- Avoid aiming the camera directly towards extremely bright objects, such as, sun, as this may damage the image sensor.
- Please follow the instructions to install the camera. Do not reverse the camera, or the reversing image will be received.
- Do not operate it incase temperature, humidity and power supply are beyond the limited stipulations.
- Keep away from heat sources such as radiators, heat registers, stove, etc.
- Do not expose the product to the direct airflow from an air conditioner.
- This is product instructions not quality warranty. We may reserve the rights of amending the typographical errors, inconsistencies with the latest version, software upgrades and product improvements, interpretation and modification. These changes will be published in the latest version without special notification.
- When this product is in use, the relevant contents of Microsoft, Apple and Google will be involved in. The pictures and screenshots in this manual are only used to explain the usage of our product. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google belong to the above-mentioned companies.
- This manual is suitable for IR water-proof network camera. All pictures and examples used in the manual are for reference only.

Table of Contents

I	Int	roduction		I
2	IE	Remote A	ccess	2
	2.1	LAN		2
	2	2.1.1	Access through IP-Tool	2
	2	2.1.2	Directly Access through IE	3
	2.2	WAN		5
3	Re	mote Prev	iew	8
	3.1	The Rea	mote Preview Interface	8
	3.2	Playbac	k	9
	3.3	Snap Pi	ctures	. 10
4	Re	mote Live	Surveillance	. 11
	4.1	System	Configuration	
	4	1.1.1	Basic Information	. 11
	4	1.1.2	Date & Time	. 11
	4.2	Video C	Configuration	. 11
	4	1.2.1	Camera	. 12
	4	1.2.2	Video Stream	. 12
	4	1.2.3	OSD Configuration	. 13
	4	1.2.4	Video Mask	. 14
	4	1.2.5	ROI Configuration	. 14
	4.3	Alarm (Configuration	. 15
	4	1.3.1	Motion Detection Area	. 15
	4	1.3.2	Motion Detection Trigger	. 16
	4	1.3.3	Motion Detection Schedule	
	4	1.3.4	Alarm Server	
	4.4	Networ	k Configuration	. 17
	4	1.4.1	Port	. 18
	4	1.4.2	IP Address	. 18
	4	1.4.3	Server Configuration	
	4	1.4.4	IP Notify	. 19
	4	1.4.5	DDNS Configuration	. 19
	4	1.4.6	RTSP	.21
	4	1.4.7	UPNP	.21
	4	1.4.8	Mail configuration	.21
	4	1.4.9	FTP Setting	. 22
	4.5	Advanc	ed Configuration	. 23
	4	1.5.1	User Configuration	
	4	1.5.2	Security Configuration	. 24
	4	1.5.3	Configure Backup & Restore	
	4	1.5.4	Reboot	. 25
	4	1.5.5	Upgrade	. 26

Network Camera User Manual

Appendix		27
Appendix 1	Q & A	27
Appendix 2	Specifications	28

1 Introduction

This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and reliable.

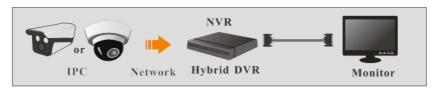
This product is widely used in banks, telecommunication systems, electricity power departments, law systems, factories, storehouses, uptowns, etc. In addition, it is also an ideal choice for surveillance sites with middle or high risks.

Main Features

- ICR auto switch, true day/night
- 3D DNR, digital WDR
- ROI coding
- Support smart phone, iPad, remote monitoring

Surveillance Application







2 IE Remote Access

You may connect IP-Cam via LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

2.1 LAN

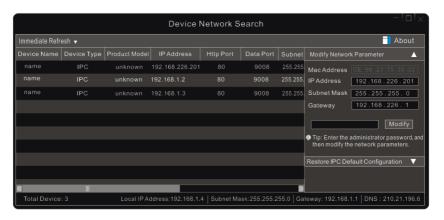
In LAN, there are two ways to access IP-Cam: 1. access through IP-Tool; 2. directly access through IE browser.

2.1.1 Access through IP-Tool

Network connection:

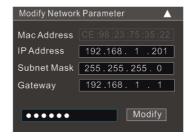


- ① Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.
- $\ensuremath{\textcircled{2}}$ Double click the IP-Tool icon on the desktop to run this software as shown below:



③ Modify the IP address. The default IP address of this camera is 192.168.226.201. Click the information of the camera listed in the above table to show the network information on the right hand. Modify the IP address and gateway of the camera and make sure its network address is in the same local network segment as the computer's. Please modify the IP address

of your device according to the practical situation.



For example, the IP address of your computer is 192.168.1.4. So the IP address of the camera shall be changed to 192.168.1.X. After modification, please input the password of the administrator and click "Modify" button to modify the setting.



The default password of the administrator is "123456".

④ Double click the IP address and then the system will pop up the IE browser to connect IP-CAM. IE browser will auto download the Active X control. After downloading, a login window will pop up as shown below.



Input the username and password to log in.



The default username is "admin"; the default password is "123456".

2.1.2 Directly Access through IE

The default network settings are as shown below:

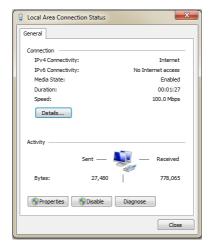
IP address: **192.168.226.201** Subnet Mask: **255.255.255.0** Gateway: **192.168.226.1**

HTTP: 80
Data port: 9008

You may use the above default settings when you log in the camera for the first time. You may directly connect the camera to the computer through network cable.



① Manually set the IP address of the PC and the network segment should be as the same as the default settings of the IP camera. Open the network and share center. Click "Local Area Connection" to pop up the following window.



Select "Properties" and then select internet protocol according to the actual situation (for example: IPv4). Next, click "Properties" button to set the network of the PC.



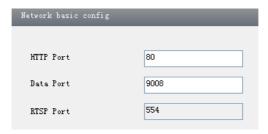
- ② Open the IE browser and input the default address of IP-CAM and confirm. The IE browser will download Active X control automatically.
- 3 After downloading Active X control, the login dialog box will pop up.
- 4 Input the default username and password and then enter to view.

2.2 WAN

Access through the router or virtual server



① Make sure the camera is well connected via LAN and then log in the camera via LAN and go to Config→Network Config→Port menu to set the port number.



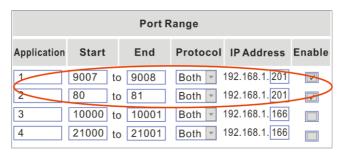
Port Setup

② Go to Config → Network Config → IP Address menu to modify the IP address.



IP Setup

③ Go to the router's management interface through IE browser to forward the IP address and port of the camera in the "Virtual Server".



Router Setup

④ Open the IE browser and input its WAN IP and http port to access.

> Access through PPPoE dial-up

Network connection



You may access the camera through PPPoE auto dial-up. The setting steps are as follow:

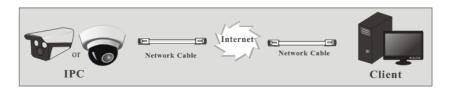
- ① Go to Config→Network Config→Port menu to set the port number.
- ② Go to Config →Network Config→IP Address menu. Check "PPPoE" and then input the user name and password which you can get from your internet service provider.



- ③ Go to Config →Network Config→DDNS Config menu. Before you configure the DDNS, please apply for a domain name first. Please refer to 4.4.5 DDNS Configuration for detail information.
- ④ Open the IE browser and input the domain name and http port to access.

Access through static IP

Network connection



The setting steps are as follow:

- ① Go to Config→Network Config→Port menu to set the port number.
- ② Go to Config →Network Config→IP Address menu to set the IP address. Check "Use the following IP address" and then input the static IP address and other parameters.
- ③ Open the IE browser and input its WAN IP and http port to access.

3 Remote Preview

3.1 The Remote Preview Interface



1	People icon	6	Full screen
2	Fix size	7	Start recording
3	Actual size	8	Playback
4	Zoom in	9	Snap
5	Zoom out	10	Enable audio

• When motion detection alarm is triggered, the people icon will turn red. Right click to pop up a pull-down list as shown below:



Stream: Three streams are optional.

Turn off the live: Click this item to close present live preview.

Enable audio: Open the volume.

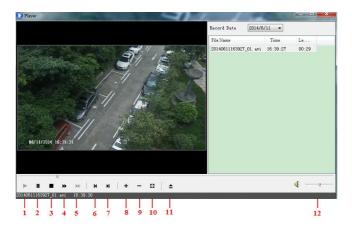
Full screen: The live preview picture will be full-screen display. Double click or click right mouse to return to the previous interface.

Online user: Display the current user connecting to the device.

System information: Display the device information: device name, firmware version, software build date, kernel version and hardware version.

3.2 Playback

Before you play the record files, please make sure you have recorded. You can click button to record. Then click button to pop up a video player. Double click the record file to play the video as shown below.



1	Play	5	Next frame	9	Zoom out
2	Pause	6	The previous file	10	Full screen
3	Stop	7	The next file	11	Path
4	Forward	8	Zoom in	12	Volume

3.3 Snap Pictures

Select the picture number, and then click "Snap" oicon as shown below:



Single Snap

Snap multiple pictures:

Select the picture number from Frame pull down list box, such as 2, and check "Title" and "Time" to show capture title and time on the snap pictures simultaneously.



Multi-picture Snap

4 Remote Live Surveillance

Functions of remote configurations include: System Configuration, Video Configuration, Alarm Configuration, Network Configuration and Advanced Configuration. You should select the menu on the left, and then set up the relative parameters.

4.1 System Configuration

The "System configuration" includes two submenus: Basic Information and Date & Time.

4.1.1 Basic Information

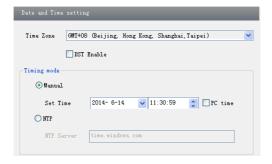
In the "Basic Information" interface, you can set up the device name and can also check the relative information of the server.



4.1.2 Date & Time

Setting steps:

1. Go to System Config→Date & Time menu as shown below.



- 2. Set time zone.
- 3. Enable DST mode as required.
- 4. Set time. You may set time manually or enable NTP.

4.2 Video Configuration

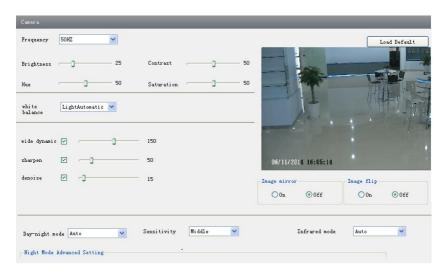
Camera Configuration includes five submenus: Camera, Video Stream, OSD Config, Video

Mask and ROI Config.

4.2.1 Camera

Setting steps:

1.Go to "Video Configuration" → "Camera" interface as shown below.



- 2. You may adjust frequency, brightness, contrast, hue and saturation of the picture.
- 3. Select white balance mode.
- 4. Wide dynamic, sharpen and denoise are adjustable.
- 5. Set day-night mode, sensitivity, infrared mode and exposure type.
- 6. You may enable the image mirror and image overturn function.
- 7. Press the "Save" button to save the settings.

4.2.2 Video Stream

Go to "Video configuration"→ "Video Stream" to see an interface as shown below.



Three video streams can be adjustable.

Resolution: The higher the resolution is, the clearer the image is.

Frame rate: The higher the frame rate is, the more fluency the video is. However, more storage room will be taken up.

Bitrate type: Including CBR and VBR. CBR means that no matter how changeable the video resources are, the compression bitrate keeps constant. This will not only facilitate the image quality better in a constant bitrate but also help to calculate the capacity of the recording. VBR means that the compression bitrate can be adjustable according to the change of the video resources. This will help to optimize the network bandwidth.

Video Quality: When VBR is selected, you need to choose image quality. The higher the image quality you choose, the more bitrate will be required.

Bitrate: Please choose it according to the actual network situation.

I Frame interval: It is recommended to use the default value. If the value is over high, the read speed of the group of pictures will be slow resulting in the quality loss of the video.

Video encoding profile: Baseline and main profile are optional. Baseline profile is mainly used in interactive application with low complexity and delay. Main profile is mainly used for higher coding requirement.

Alarm picture size: Please select it according to the actual situation.

Video encode slice split: If enabled, you may get more fluency image even though using the low-performance PC.

Audio Encoding: G.711A and G.711U are selectable.

Audio In Type: MIC and LIN are selectable.

4.2.3 OSD Configuration

Go to "Video Config" → "OSD Config" menu to display the interface as shown below.



You may set time stamp, device name and custom OSD here. Drag the time stamp and custom OSD to set their position. Then press the "Save" button to save the settings.

4.2.4 Video Mask

Go to "Video Config" → "Video Mask" menu to display the interface. You can set 4 mask areas at most.



To set up video mask

- 1. Enable video mask.
- 2. Click "Draw" button and then drag the mouse to draw the video mask area.
- 3. Click "Save" button to save the settings.
- 4. Return to the live to see the following picture.



Clear the video mask:

Go to video mask menu and then click "Clear" button to delete the current video mask area.

4.2.5 ROI Configuration

To set up ROI

1. Go to Video Config→ROI Config menu.



- 2. Check "Enable" and then click "Draw" button.
- 3. Drag the mouse to set the ROI area.
- 4. Set the level.
- 5. Click "Save" button to save the settings.

Now, you will see the selected ROI area is clearer than other areas especially in low bitrate condition.



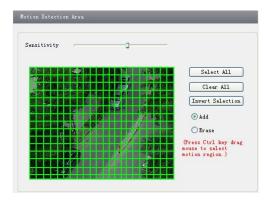


4.3 Alarm Configuration

Alarm configuration includes four submenus: Motion Detection Area, Motion Detection Trigger, Motion Detection Schedule and Alarm Server.

4.3.1 Motion Detection Area

- 1. Go to "Alarm configuration" → "Motion Detection Area" to see an interface as below.
- 2. Move the "Sensitivity" scroll bar to set up the motion trace sensitivity.
- 3. Check the "Add", press the "Ctrl" button and move mouse to select the motion detection area. Select "Erase" and move the mouse to clear all motion detection area.
- 4. Press the "Save" button to save the settings.



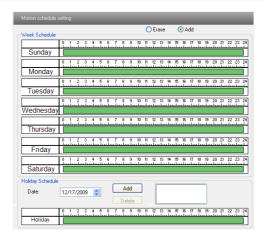
4.3.2 Motion Detection Trigger

- 1. Go to "Alarm Configuration" → "Motion Detection Trigger" to display an interface as shown below.
- 2. Check "Enable alarm" check box. Then all functions under this interface will be activated.
- 3. Trigger Email: Check "Attach picture" and the triggered snap pictures will be sent into the address.
- 4. Trigger FTP: Check "Uploading picture". Then the triggered snap pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.
- 5. Press the "Save" button to save the settings.



4.3.3 Motion Detection Schedule

Go to "Alarm configuration" → "Motion Detection schedule" interface as shown below.



Week schedule

You can set the alarm time from Monday to Sunday for alarm everyday in one week.

Add: Add the schedule for a special day.

Erase: Delete holiday schedule.

Day schedule

You can set alarm time for alarm in some time of special day, such as holiday.

- 1. Select a date at the "Date" pull down list, press "Add" button to add that date to the list box on the right side and then move the scroll bar to set the schedule of that day.
- 2. Select a date in the list box on the right side, and press "Erase" to remove the schedule on that day.

Press the "Save" button to save the settings.

Note: Holiday schedule is prior to Week schedule.

4.3.4 Alarm Server

Go to "Alarm configuration"→ "Alarm Server" interface as shown below.

You may input the alarm server address and port. When the alarm happens, the camera will automatically transfer the alarm event to the alarm server. If the alarm server is not used, there is no need for you to configure here.

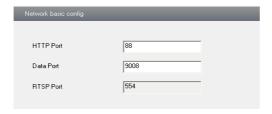
Alarm Server				
Server Address				
Port	80			

4.4 Network Configuration

Network configuration includes nine submenus: Port, IP Address, Server Configuration, IP Notify, DDNS Config, RTSP, UPNP, Mail configuration and FTP.

4.4.1 Port

1. Go to "Network config" → "Port" to see the interface as shown below.



- 2. Input port number for IE access in the "HTTP Port" textbox.
- 3. Input the port number for audio & video transmission in the "Data Port" textbox.

4.4.2 IP Address

1. Go to "Network Configuration"→ "IP Address".



There are two options for IP setup: obtain an IP address auto by DHCP protocol and use the following IP address. You may choose one of options as required.

Use the following IP address: display the IP address, subnet mask, gateway and DNS of the device.

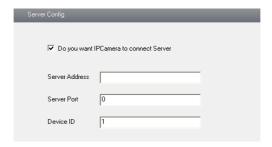
PPPoE: User needs to input the user name and password for dial-up internet.

Firstly, log in IE clients and then enter user name and password of PPPoE, save the setting and exit. Secondly, set up IP address change notice. Thirdly, connect with Modem. Then the device will dial up internet automatically.

Press the "Save" button to save the settings.

4.4.3 Server Configuration

Go to "Network Configuration"→ "Server Config".



- 1. Check "Do you want IP Camera to connect Server".
- 2. Check the IP address and port of the transfer media server in the CMS/NVMS. Then enable the auto report in the CMS/NVMS when adding a new device. Next, self-define the device ID and input the remaining information of the device in the CMS/NVMS.
- 3. Input the above-mentioned server IP, server port and device ID in the responding boxes.
- 4. Click "Save" button to save the settings.

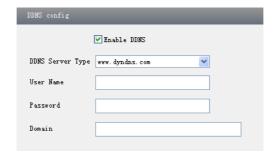
4.4.4 IP Notify

- 1. Go to "Network Configuration" → "IP Notify" to see a tab as shown below.
- 2. If the "Enable notifying change of IP" is selected, when the IP address of the device is changed, a new IP address will be sent to the appointed mailbox automatically; If "FTP" is selected, when the IP address of the device was changed, a new IP address will be sent to FTP server.



4.4.5 DDNS Configuration

1. Go to "Network Configuration" → "DDNS Configuration" tab as shown below.



2. Apply for a domain name. Take WWW. dvrdydns.com for example. Input www.dvrdydns.com in the IE address bar to visit its website. Then click "Registration" button to register as shown below.



Create domain name.



After you successfully request your domain name, you will see your domain in the list.



- 3. Select the server type and then input the username, password and domain name you apply for in the DDNS configuration interface.
- 4. Click "Save" button to save the settings.

4.4.6 RTSP

Go to "Network Configuration" → "RTSP" interface as shown below.



- 1. Select "Enable RTSP server".
- 2. RTSP Port: Access Port of the streaming media. The default number is 554.
- 3. RTSP Address: The RTSP address you need to input in the media player.
- 4. You can also choose to enable anonymous viewer login.

4.4.7 UPNP

Go to "Network Configuration" → "UPNP" interface as shown below. Select "Enable UPNP" and then input friendly name.



Then double click "Network" icon on the desktop of the PC to see an icon with the friendly name and IP address of the camera. You may quickly access the device by double clicking this icon.

4.4.8 Mail configuration

Go to "Network Configuration" → "Mail configuration" interface.

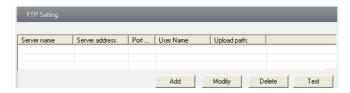


- 1. From Email: sender's e-mail address.
- 2. User name and password: sender's user name and password.
- 3. Server address: SMTP name of sender.
- 4. Select the secure connection type at the Secure Connection pull down list according to user' actual needs.
- 5. Receival email address list: add email address into the list.
- 6. Receival email address: receiver's e-mail address
- 7. After all parameters set up, you can click "Test your account settings". If email sent successful, a "Test Successful" window will pop up, if not, users can try other email addresses or check the setting.

Notice: If you change the static IP into PPPoE and select mailbox, there will be an e-mail sent to your mail box for notifying a new IP address.

4.4.9 FTP Setting

Go to Network Configuration→FTP Setting interface as shown below.



- 1. Add: Click Add button to input FTP server's server name, address, port number, user name, password, and upload path, click OK to confirm the setting.
- 2. Modify: Click this button to change some information of the FTP server.
- 3. Delete: Select certain FTP account. Click this button to delete this account.
- 4. Test: Select certain FTP account. Click this button to test its validity.

Please refer to the following table for parameters and instructions of FTP configuration.



Parameter	Meaning
Server name	The name of the FTP server
Server address	The address of the FTP server
Port	The port number of the FTP server
User name	The user name of the FTP server
Password	The password of the FTP server
Path	The save path for FTP files

4.5 Advanced Configuration

Advanced configuration includes five submenus: User Configuration, Security Configuration, Configure Backup & Restore, Reboot and Upgrade.

4.5.1 User Configuration

Go to Advanced configuration → User Configuration interface.

Add user:

1. Clicking "Add" button pops up "Add user" dialog box.



User Configuration



Add User

Note: After binding physical address to the IP-CAM, you can access the device on this PC in network only. If the MAC address is "00:00:00:00:00", it means the camera can be connected to any computers.

- 2. Input user name in "User Name" textbox (only letters).
- 3. Input characters in "Password" and "Confirm Password" textbox (letters or numbers).
- 4. Input the MAC address of the PC in "Binding MAC address" textbox.
- 5. Click "OK" button and then the new added user will display in the user list.

Modify user:

- 1. Select the user which needs to modify password and physical address in the user configuration list box.
- 2. Clicking "Modify" button will pop up "Modify user" dialog box as shown below.



Modify User

- 3. Input original password of this user in the "Password" text box.
- 4. Input new password in the "New password" and "Confirmation" text box.
- Input computer's physical address which is used to access the server in the "User PC MAC" text box.
- 6. Click "OK" button to modify password and binding MAC address successfully.

Delete user:

- 1. Select the user which needs to delete in the user configuration list box.
- 2. Clicking "Delete" button will pop up a confirm dialog box. Then click "OK" to delete the user.

Note: The default super administrator cannot be deleted.

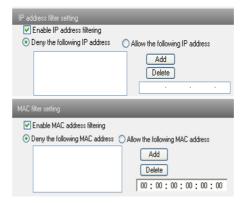
Parameter	Meaning
User Name	User name to operate the logon client end
User Type	Type of users, normal user, advanced user and super administrator
Binding MAC address	The MAC addresses of user access the server which should set up according to actual MAC address of server.
Password	Password to log in the client terminal
Confirm Password	Password to log in the client terminal

4.5.2 Security Configuration

- 1. Go to Advanced Configuration → Security Configuration to see a tab shown below.
- 2. Check "Enable IP address" check box, select "Deny the following IP address", input IP address in the IP address list box and click "Add" button. Then this IP address will display in the list box; the operation step of "Allow the following IP address" is the same with "Deny the following IP address"
- 3. Select the IP address which needs to be deleted from the IP address list box and click "Delete" button to delete that IP address
- 4. Check "Enable MAC address" check box, select "Deny the following IP address", input MAC address in the MAC address list box and click "Add" button. Then this MAC address will display in the list box; the operation step of "Allow the following MAC address" is the same with "Deny the following IP address".
- 5. Select the MAC address which needs to be deleted from the MAC address list box and

click "Delete" button to delete that MAC address.

6. Click "Save" button to save the above setting.



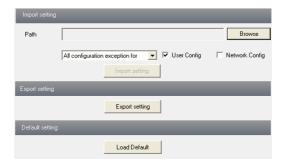
4.5.3 Configure Backup & Restore

Go to Advanced configuration→Configure Backup & Restore Interface.

• Import & Export Configuration:

You can import or export the setting information from PC or to device.

- 1. Click "Browse" to select save path for import or export information on PC.
- 2. You can import or export all setting information to PC, but those two settings "User Configuration" and "Network Configuration" are exceptional.



Default Configuration

Click "Load default" button to restore all system settings to the default status.

4.5.4 Reboot

Go to Advanced configuration—Reboot to see an interface as shown below. Click "Reboot" button to reboot the device.



4.5.5 Upgrade

Go to Advanced Configuration—Upgrade interface as shown below.



- 1. Click "Browse" button to select the save path of the upgrade file.
- 2. Click "Upgrade server firmware" button to start upgrading the application program.
- 3. The device will restart automatically.
- 4. After you successfully update the software, click "OK" button to close IE and then re-open IE to connect IP-CAM.

Notice: You can't disconnect to PC or close the IP-CAM during upgrade.

Appendix 1 Q & A

Q: How to find my password if I forget it?

A: Reset the device to the default factory settings.

Default IP: 192.168.226.201

User name: admin Password: 123456

Q: Fail to connect devices through IE browser, why?

A: Network is not well connected. Please check the connection and make sure it is connected well.

B: IP is not available. Reset the valid IP.

C: Web port number has been revised: contact administrator to get the correct port number.

D: Exclude the above reasons. Recover default setting by IP-Tool. Note: Default IP: 192.168.226.201, mask number: 255.255.255.0

Q: IP tool cannot search devices, why?

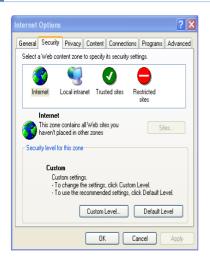
A: It may be caused by the anti-virus software in your computer. Please exit it and try to search device again.

Q: IE cannot download ActiveX control. How can I do?

- a. IE browser blocks ActiveX. Please do setup as below.
- ① Open IE browser. Click Tools-----Internet Options....



- 2 Select Security-----Custom Level....
- 3 Enable all the sub options under "ActiveX controls and plug-ins".





- 4 Then click OK to finish setup.
- b. Other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.

Q: No sound can be heard, why?

- A: Audio input device is not connected. Please connect and try again.
- B: Audio function is not enabled at the corresponding channel. Please check AUDIO item to enable this function.

Appendix 2 Specifications

Speci	ification /Model	20m IR Water-proof	30m IR Wa	ter-proof Bullet		
Бресі	incation/iviodei	Bullet Network Camera	Network Camera			
	Image Sensor	1/2.7 " CMOS				
	Image Size	1920×1080				
	Electronic Shutter	1/25s~1/100000s				
	Auto Iris	Fixed Iris				
	Min. Ilumination	0.05lux@F1.2, AGC ON: 0 lux with IR				
Camera	Lens	3.6mm@F1.6, angle of view: 77°; (2.8mm, 6mm optional)	3.6mm@F1.6, angle of view: 77°; (2.8mm, 6mm optional)	2.8~12mm@F1.4, angle of view: 89°~34°		
	Lens Mount	M12	M12	Ø 14		
	Day&Night	ICR				
	WDR	Digital WDR				
	Digital NR	3D DNR				
	Angle Adjustment	Any angle				
	Video Compression	H.264/MJPEG				
	H.264 Type	Baseline profile/main profile/high profile	2			
	Video Bit Rate	128Kbps~6Mbps				
	Resolution	1080P, 720P, D1, CIF, 480×240				
Image	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)				
	Image Settings	Saturation, Brightness, Chroma, Contr		ast, Wide Dynamic, Sharpen, NR, etc. adjustable		
	image Settings	through client or web browser				
	ROI	Support				
Interfaces	Network	RJ45				
	Auido	MIC IN×1				
	Remote Monitoring	IE browser, CMS remote control				
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission				
Fucntion	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP				
	Interface Protocol	ONVIF, GB-T/28181-2011				
	Storge	Network remote storage				
	Smart Alarm	Motion alarm				
	IR Distance	10~20 m	20~30 m	20~30 m		
	Protection Grade	IP66				
	Power	DC12V/PoE				
	Power Consumption	< 3.5W(ICR OFF); < 6W(ICR ON)				
Others	Opterating Environment	Temperature: -20°C~50°C; Humidity: 10%~90%				
	Dimension (mm)	Ø 64mm×183mm	Ø 87mm×219mm			
	Weight (net)	366g 578g				
	Installation	Wall mounting; pendent mounting				

Specification /Model		50m IR Water-proof Bullet	50m LED IR Array Network		
		Network Camera	Camera		
	Image Sensor	1/2.7 " CMOS			
	Image Size	1920×1080			
	Electronic Shutter	1/25s~1/100000s			
	Auto Iris	Fixed Iris			
	Min. llumination	0.05lux@F1.2, AGC ON: 0 lux with IR			
Camera	Lens	2.8~12mm@F1.4, angle of view: 89°~34°	3.6mm@F1.6, angle of view: 77°; (2.8mm, 6mm, 8mm optional)		
	Lens Mount	Ø 14	M12		
	Day&Night	ICR			
	WDR	Digital WDR			
	Digital NR	3D DNR			
	Angle Adjustment	Any angle	Pan: 0°~300°; Tilt: 0°~70°		
	Video Compression	H.264/MJPEG			
	Н.264 Туре	Baseline profile/main profile/high profile			
	Video Bit Rate	128Kbps~6Mbps			
	Resolution	1080P, 720P, D1, CIF, 480×240			
Image	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)			
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser			
	ROI	Support			
Interfaces	Network	RJ45			
	Auido	MIC IN×1			
	Remote Monitoring	IE browser, CMS remote control			
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission			
Fucntion	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP			
	Interface Protocol	ONVIF, GB-T/28181-2011			
	Storge	Network remote storage			
	Smart Alarm	Motion alarm			
	IR Distance	30~50 m			
	Protection Grade	IP66			
	Power	DC12V/PoE	DC12V (PoE power supply optional)		
	Power Consumption	< 3.5W(ICR OFF); < 6.5W(ICR ON)			
Others	Opterating Environment	Temperature: -20°C~50°C; Humidity: 10%~90%			
	Dimension (mm)	Ø 109mm×284mm	W80mm × D203mm × H80mm		
	Weight (net)	1042g	647g		
	Installation	Wall mounting; pendent mounting	Wall mounting		

Specification /Model		Water-proof Mini Dome Network Camera
	Image Sensor	1/2.7 " CMOS
	Image Size	1920×1080
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	Fixed Iris
	Min. llumination	0.05lux@F1.2, AGC ON: 0 lux with IR
Camera	Lens	3.6mm@F1.6, angle of view: 77°; (2.8mm, 6mm optional)
	Lens Mount	M12
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Pan: 0°~240°; Tilt: 0°~68°; Rotation: 0°~220°
	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	1080P, 720P, D1, CIF, 480×240
Image	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
interfaces	Auido	MIC IN×1
	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission
Fucntion	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF, GB-T/28181-2011
	Storge	Network remote storage
	Smart Alarm	Motion alarm
	IR Distance	10~20 m
	Protection Grade	IP66&IK10
	Power	DC12V/PoE
	Power Consumption	< 3 W(ICR OFF); < 4W(ICR ON)
Others	Opterating	Temperature: -20°C~50°C; Humidity: 10%~90%
	Environment	reinperature20 C~30 C; Frumidity: 10%~90%
	Dimension (mm)	Ø 116mm×91mm
	Weight (net)	606g
	Installation	Pendent mounting (wall mounting available with junction box and bracket)

Speci	fication /Model	Water-proof Dome Network Came	era		
	Image Sensor	1/2.7 " CMOS			
	Image Size	1920×1080			
	Electronic Shutter	1/25s~1/100000s			
	Auto Iris	Fixed Iris			
	Min. llumination	0.05lux@ F1.2, AGC ON: 0 lux with IR	Color: 0.05lux@ F1.2, AGC ON: 0 lux with IR; B/W: 0.01lux@ F1.2, AGC ON		
Camera	Lens	2.8~12mm@F1.4, angle of view: 89°~34°			
	Lens Mount	Ø 14			
	Day&Night	ICR			
	WDR	Digital WDR			
	Digital NR	3D DNR			
	Angle Adjustment	Pan: 0°~360°; Tilt: 0°~77°; Rotation: 0°~360	0		
	Video Compression	H.264/MJPEG			
	Н.264 Туре	Baseline profile/main profile/high profile			
	Video Bit Rate	128Kbps~6Mbps			
	Resolution	1080P, 720P, D1, CIF, 480×240			
Image	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)			
	T 0 "	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable			
	Image Settings	through client or web browser			
	ROI	Support			
Interfaces	Network	RJ45			
	Auido	MIC IN×1			
	Remote Monitoring	IE browser, CMS remote control			
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission			
Fucntion	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP			
	Interface Protocol	ONVIF, GB-T/28181-2011			
	Storge	Network remote storage			
	Smart Alarm	Motion alarm			
	IR Distance	20~30 m	NO		
	Protection Grade	IP66&IK10			
	Power	DC12V/PoE			
	Power Consumption	< 3 W(ICR OFF); < 5.5W(ICR ON)			
Others	Opterating	Temperature: -20°C~50°C; Humidity: 10%~90%			
	Environment	Ø 150114			
	Dimension (mm)	Ø 150mm×114mm			
	Weight (net)	956g			
	Installation	Pendent mounting (wall mounting available with junction box and bracket)			

Specification /Model		20m IR Water-proof Dome Network Camera
	Image Sensor	1/2.7 " CMOS
	Image Size	1920×1080
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	Fixed Iris
	Min. Ilumination	0.05lux@F1.2, AGC ON: 0 lux with IR
Camera	Lens	3.6mm@F1.6, angle of view: 77°; (2.8mm, 6mm optional)
	Lens Mount	M12
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Any angle
	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	1080P, 720P, D1, CIF, 480×240
Image	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
	Auido	MIC IN×1
	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission
Fucntion	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF, GB-T/28181-2011
	Storge	Network remote storage
	Smart Alarm	Motion alarm
	IR Distance	10~20 m
	Protection Grade	IP66
	Power	DC12V (PoE power supply optional)
	Power Consumption	< 3 W(ICR OFF); < 5W(ICR ON)
Others	Opterating	Temperature: -20°C~50°C; Humidity: 10%~90%
	Environment	Temperature. 20 C 30 C, Trummury. 10/0-70/0
	Dimension (mm)	Ø 87mm×108mm
	Weight (net)	427g
	Installation	Pendent mounting (wall mounting available with junction box and bracket)

Specification /Model		30m IR Water-proof Dome Network Camera
Camera	Image Sensor	1/2.7 " CMOS
	Image Size	1920×1080
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	Fixed Iris
	Min. llumination	0.05lux@F1.2, AGC ON: 0 lux with IR
	Lens	2.8~12mm@F1.4, angle of view: 89°~34°
	Lens Mount	Ø 14
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Any angle
Image	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
	Auido	MIC IN×1
Fucntion	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF, GB-T/28181-2011
	Storge	Network remote storage
	Smart Alarm	Motion alarm
Others	IR Distance	20~30 m
	Protection Grade	IP66
	Power	DC12V/PoE
	Power Consumption	< 3 W(ICR OFF); < 5.5W(ICR ON)
	Opterating Environment	Temperature: -20°C~50°C; Humidity: 10%~90%
	Dimension (mm)	Ø 109mm×130mm
	Weight (net)	701g
	Installation	Pendent mounting (wall mounting available with junction box and bracket)