

3 Megapixel

NETWORK CAMERA

User Manual

Please read this instruction carefully for correct use of the product and preserve it for reference purposes

- 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.

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1 Introduction

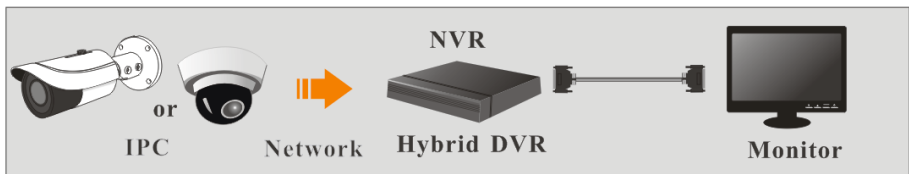
This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and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

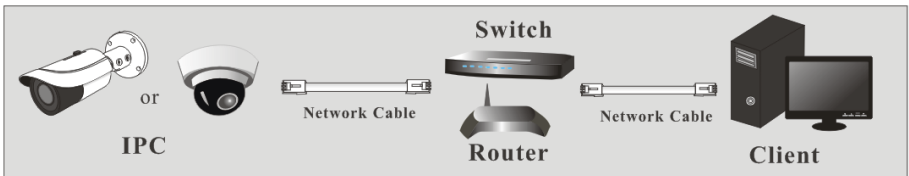
You may connect IP-Cam via LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

2.1 LAN

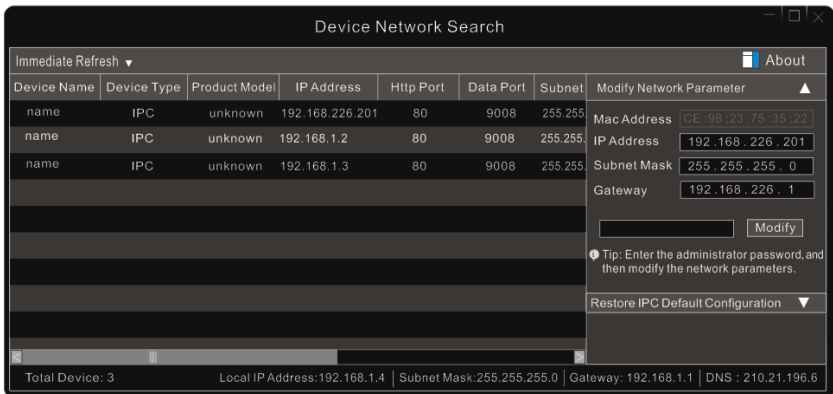
In LAN, there are two ways to access IP-Cam: 1. access through IP-Tool; 2. directly access through IE browser.

2.1.1 Access through IP-Tool

Network connection:

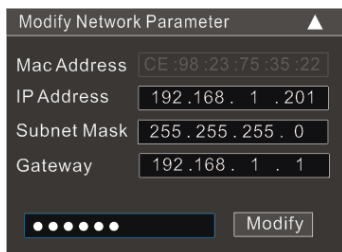


- ① Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.
- ② Double click the IP-Tool icon on the desktop to run this software as shown below:



- 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**

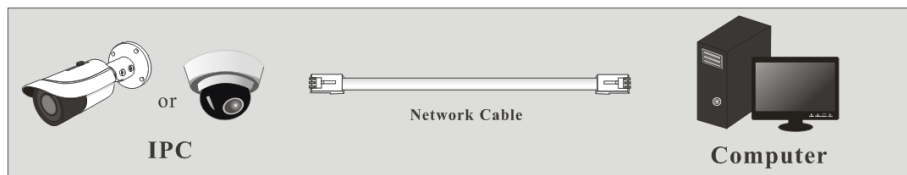
Subnet Mask: **255.255.255.0**

Gateway: **192.168.226.1**

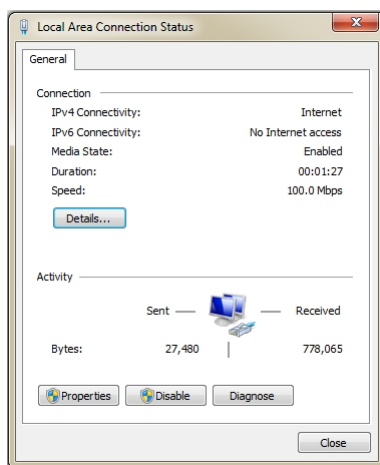
HTTP: **80**

Data port: **9008**

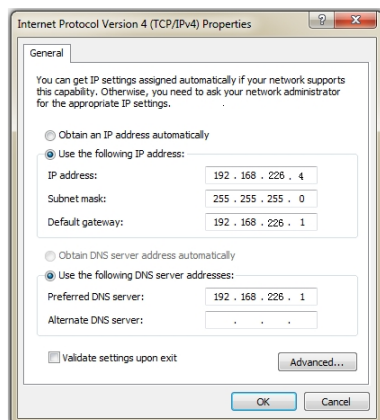
You may use the above default settings when you log in the camera for the first time. You may directly connect the camera to the computer through network cable.



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.



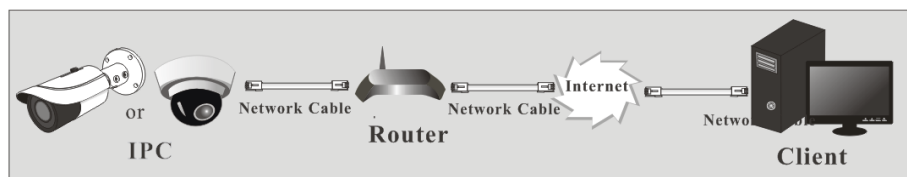
Select “Properties” and then select internet protocol according to the actual situation (for example: IPv4). Next, click “Properties” button to set the network of the PC.



- 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.

Network basic config	
HTTP Port	80
Data Port	9008
RTSP Port	554

Port Setup

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

IP Config

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address:

Subnet Mask: Gateway:

☐ Obtain DNS server address automatically

☒ Use the following DNS server

Preferred DNS server: Alternate DNS server:

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".

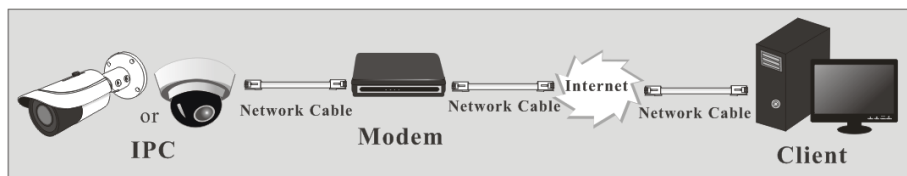
Port Range					
Application	Start	End	Protocol	IP Address	Enable
1	9007	to 9008	Both	192.168.1.201	<input checked="" type="checkbox"/>
2	80	to 81	Both	192.168.1.201	<input checked="" type="checkbox"/>
3	10000	to 10001	Both	192.168.1.166	<input type="checkbox"/>
4	21000	to 21001	Both	192.168.1.166	<input type="checkbox"/>

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.

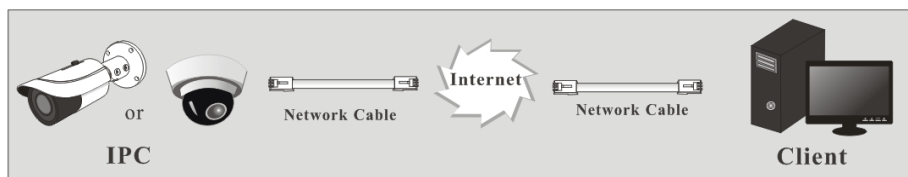


③ Go to Config → Network Config → DDNS Config menu. Before you configure the DDNS, please apply for a domain name first. Please refer to 4.4.5 DDNS Configuration for detail information.

④ Open the IE browser and input the domain name and http port to access.

➤ Access through static IP

Network connection



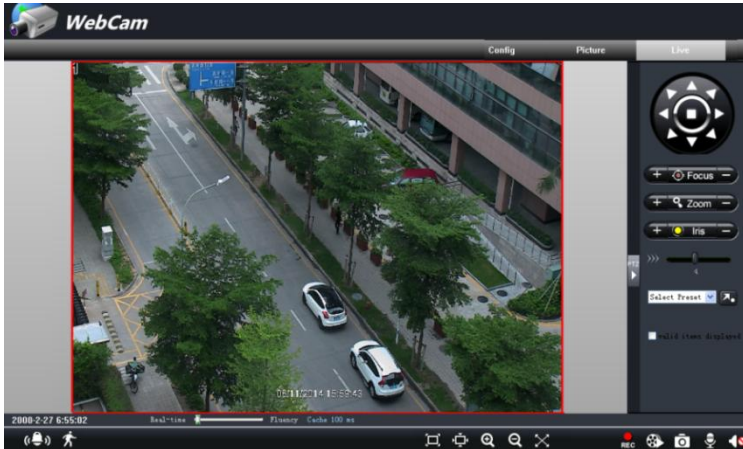
The setting steps are as follow:

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.

3.1 The Remote Preview Interface



Icon	Description	Icon	Description
	Motion alarm indicator icon		Sensor alarm indicator icon
	Fix size		Start/Stop record
	Actual size		Playback
	Zoom in		Snap
	Zoom out		Talk
	Full screen		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.

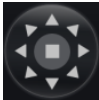




System information: Display the device information: device name, firmware version, software build date, kernel version and hardware version.

```
1 2048x1536 25fps
2 704x576 25fps
3 704x576 25fps
Turn off the live
```



```
Enable audio
Full Screen
Online User
System Information
```

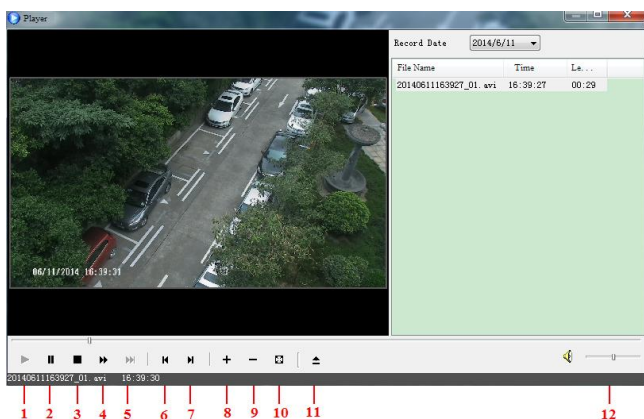
Click PTZ extended button to unfold PTZ control panel. In remote preview interface, you can view the image from every direction by controlling PTZ panel.

The descriptions of the control panel are as follows:

Button	Description
	▲ to rotate the dome upwards ; ▼ to rotate the dome downwards; ◀ to rotate the dome towards left; ▶ to rotate the dome towards right ; ↖ to rotate the dome diagonally up-left; ↗ to rotate the dome diagonally up-right; ↙ to rotate the dome diagonally down-left; ↘ to rotate the dome diagonally down-right; ■ to stop rotating the dome.
	Drag the scroll bar to adjust rotating speed of the dome.
	Focus button. Click + button to have long focus and click - to have short focus so that you can adjust the image clearly.
	Zoom button. Click + to zoom in the image; click - to zoom out the image.
	Iris button. Click + to increase light of the dome; click - to decrease light of the dome.


3.2 Playback

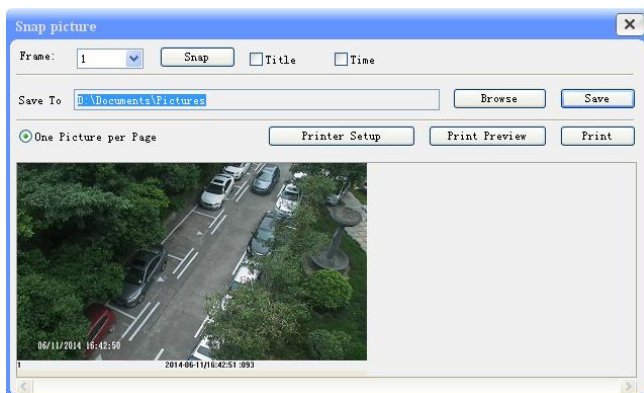
Before you play the record files, please make sure you have recorded. You can click  button to record. Then click  button to pop up a video player. Double click the record file to play the video as shown below.



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

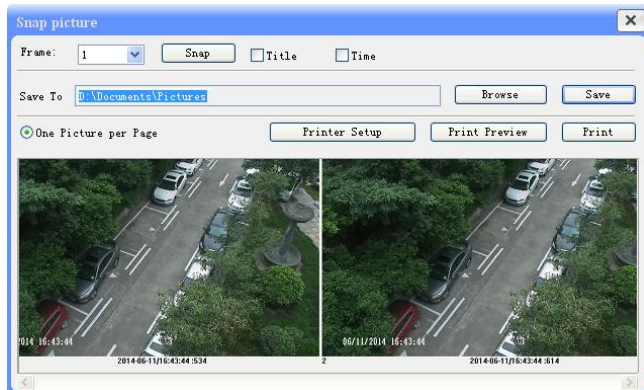
Select the picture number, and then click “Snap”  icon as shown below:



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, PTZ 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 three submenus: Basic Information, Date & Time and SD card.

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.

Setting steps:

1. Clicking the “Config” icon will appear the menu list.
2. Clicking the “Basic Information” will pop up a window as shown below:
3. Input the name of the device in the “Device name” text box.
4. Press the “Save” button to save the settings.

System Information			
Software Version	<input type="text" value="3.4.2.1"/>	Software Build Date	<input type="text" value="2015-9-25 (YYYY-MM-DD)"/>
Kernel Version	<input type="text" value="20150923"/>	Hardware Version	<input type="text" value="1.3"/>
MAC	<input type="text" value="00:18:AE:58:9A:21"/>	Onvif Version	<input type="text" value="2.3"/>
Device name	<input type="text" value="IP Camera"/>	Maximum number of	<input type="text" value="10"/>

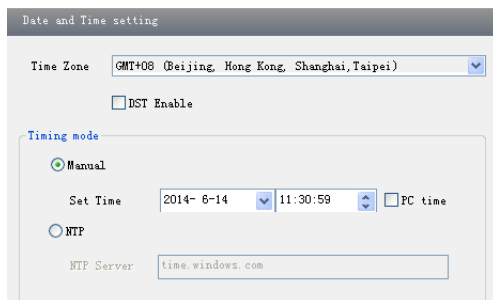
Please refer to the following table for parameters and instructions of server basic configuration.

Parameter	Meaning
Software version	The software of the device
Software build date	The software build date of the device
Kernel version	The kernel version of the device
Hardware version	The hardware version of the device
Mac Address	MAC address of device
Maximum number of user	Support max 10 users to access
Device name	Name of the device.

4.1.2 Date & Time

Setting steps:

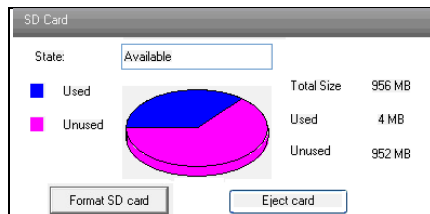
1. Go to System Config→Date & Time menu as shown below.



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

4.1.3 SD Card

1. Go to “System Configuration” → “SD Card” as shown below:



The first time you used the SD card, you should click “Format SD card”.

Click “Eject card” to stop writing data to SD card. Then the SD card can be ejected safely.



Note: Using of SD card function should be coordinated with motion or sensor alarm. When alarm is triggered, the system will automatically snap picture and save the picture into SD card.

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. You may enable the image mirror, image flip, image rotation function.
 ☞ Please make the camera side installation and select 90° or 270° rotation in the image rotation column if you want to enable the corridor mode.
6. Set day-night mode, sensitivity and infrared mode.
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.

	Resolution	Frame rate	Bitrate type	Video quality	Bitrate	I Frame Interval	Video Encoding Profile
1	2048x1536	25	CBR	Highest	4096 Kbps	120	H264 High Profile
2	704x576	25	CBR	Highest	1024 Kbps	120	H264 High Profile
3	704x576	25	CBR	Highest	768 Kbps	120	H264 High Profile

Alarm Picture Size: 704x576
 Video encode slice split: ☒
 Audio Encoding: G.711A
 Audio In Type: LIN

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: H264 and H265 are optional. Higher quality of image can be transferred under limited network bandwidth by using H265 video encoding, however, higher quality of the hardware is required.

Profile: Baseline, main/high profile are optional. Baseline profile is mainly used in interactive application with low complexity and delay. Main/high profile is mainly used for higher coding requirement.

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

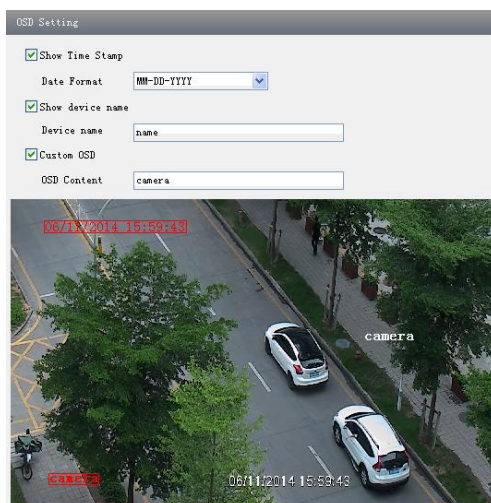
Video encode slice split: If enabled, you may get more fluency image even though using the low-performance PC.

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

Audio In Type: MIC and LIN are selectable.

4.2.3 OSD Configuration

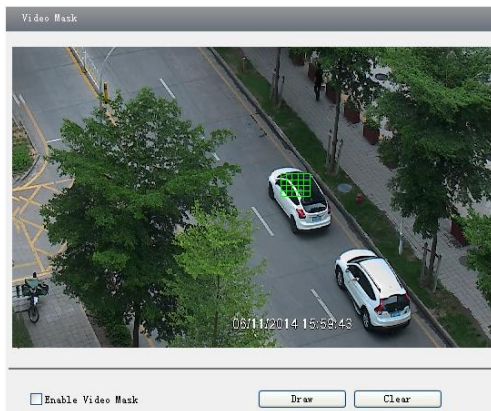
Go to “Video Config” → “OSD Config” menu to display the interface as shown below.



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.



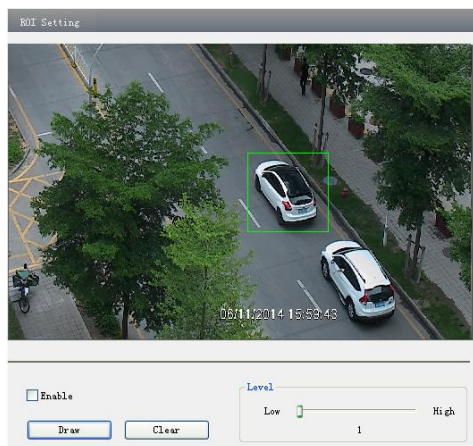
Clear the video mask:

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

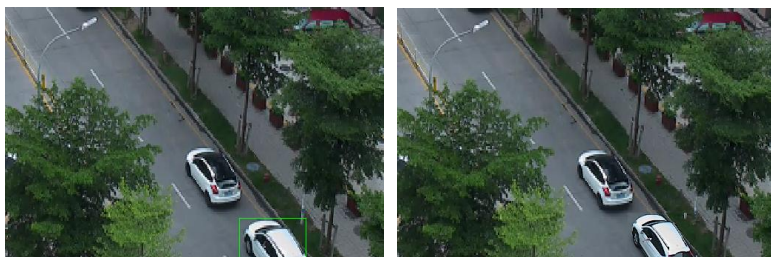
4.2.5 ROI Configuration

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 PTZ Configuration

PTZ Configuration includes two submenus: Protocol and Preset.

4.3.1 Protocol

1. Go to “PTZ Configuration”→ “Protocol” interface as shown below:

Protocol Config

☒ Enable / Disable PTZ Controls

Protocol:

Address:

Baud Rate:


2. Input the protocol, address and baud rate according to the speed dome.


4.3.2 Preset Configuration

1. Go to “PTZ Configuration”→ “Preset” to see an interface as shown below:

PTZ Preset Setting

03/12/2014 15:49:06





+

+

+

+

+

+

+

+

Speed

4
















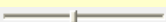
Available Position

Go to

Delete

Current Position

Add

Button	Meanings
	 to rotate the dome upwards;  to rotate the dome downwards;  to rotate the dome towards left;  to rotate the dome towards right;  to stop rotating the dome.
	Focus button. Click  button to have long focus; click  button to have short focus.
	Zoom button. Click  button to zoom in the locale picture ; click  button to zoom out the locale picture.
	Iris button. Click  button to increase light of the dome; click  button to decrease the light of the dome.
	Drag the scroll bar to adjust rotating speed of the dome.

2. Input the preset number and set its position by controlling PTZ control panel and then click Add button to add preset point into the Available position list.

3. Select the preset in the pull down list of the Available position and click Go to button to move the dome to this preset point; click Delete button to delete the checked preset point.

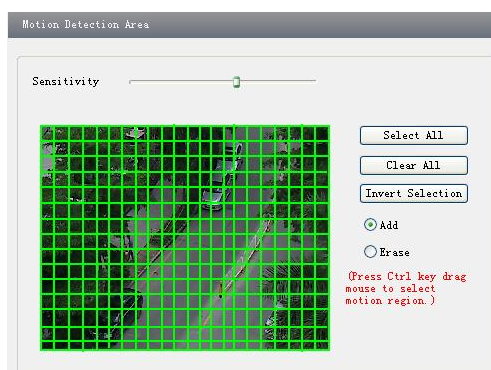
4. After finishing setting, click Save button to save the settings.

4.4 Alarm Configuration

Alarm configuration includes seven submenus: Motion Detection Area, Motion Detection Trigger, Motion Detection Schedule, Alarm Input Trigger, Alarm Input Schedule, Alarm Out and Alarm Server.

4.4.1 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.



4.4.2 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 motion based alarm is activated.
3. Set alarm holding time.

4. Set alarm trigger options.

Alarm Out: If selected, this would trigger the external relay output on detecting a motion based alarm.

Trigger Snap: If selected, the system will snap images on an alarm and save them in SD card.

Trigger Email: If the email and attach picture checkbox is checked (Email address shall be set first in the Mail config interface), the triggered snap pictures and event will be sent into those address.

Trigger FTP: If “Uploading picture” is checked, 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.

4.4.3 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.

4.4.4 Alarm Input Trigger

1. Enter “Alarm Configuration”→“Alarm Input Trigger” to see a screen as shown below:

Sensor alarm setting

Sensor:

Sensor Name: Alarm Type:

☐ Enable alarm Alarm Holding:

Trigger alarm out

☐ Alarm out1

☒ Trigger snap

☐ Trigger Email

☐ Trigger FTP

Apply settings to:

2. Select the sensor at the “Sensor” pull down list and set the sensor name and alarm type: NO and NC.

3. Enable alarm and select alarm holding time.

4. Set alarm trigger options. The setting steps are the same as that of motion detection trigger. Please refer to motion detection trigger chapter for details.

5. Apply settings to all by clicking “Copy” button to quickly set the same settings for all sensors.

4.4.5 Alarm Input Schedule

Go to “Alarm Configuration”→“Alarm Input Schedule” as shown below:

Sensor schedule setting

Sensor:

Week Schedule

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun	[Green bar]																								
Mon	[Green bar]																								
Tue	[Green bar]																								
Wed	[Green bar]																								
Thu	[Green bar]																								
Fri	[Green bar]																								
Sat	[Green bar]																								

Holiday Schedule

Date:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Holiday	[Green bar]																								

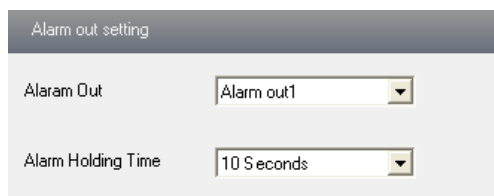
Copy settings

Apply settings to:

1. Select the sensor.
2. The following setup steps are similar to Motion Detection Schedule's. Please refer to Motion Detection Schedule chapter for more details.

4.4.6 Alarm Out

1. Go to "Alarm configuration"→ "Alarm output" as shown below:



Alarm out setting

Alarm Out Alarm out1

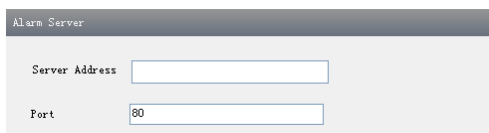
Alarm Holding Time 10 Seconds

2. Select alarm holding time and alarm name at the "Alarm out" and "Alarm holding time" pull down list box respectively.
3. Press the "Save" button to save the settings.

4.4.7 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

4.5 Network Configuration

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

4.5.1 Port

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

Network basic config

HTTP Port	88
Data Port	9008
RTSP Port	554

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.

4.5.2 IP Address

1. Go to “Network Configuration”→ “IP Address”.

IP Config

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address: 192 . 168 . 12 . 154

Subnet Mask: 255 . 255 . 255 . 0 Gateway: 192 . 168 . 12 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server

Preferred DNS server: 192 . 168 . 226 . 1 Alternate DNS server: 8 . 8 . 8 . 8

PPPoE Config

☐ PPPoE

User Name: Password:

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.

4.5.3 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.

4.5.4 IP Notify

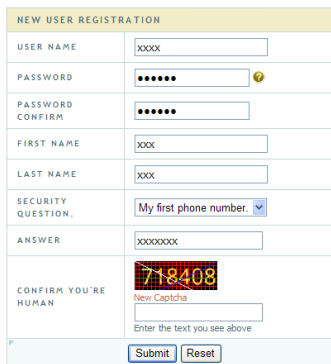
1. Go to “Network Configuration” → “IP Notify” to see a tab as shown below.
2. If the “Enable notifying change of IP” is selected, when the IP address of the device is changed, a new IP address will be sent to the appointed mailbox automatically; If “FTP” is selected, when the IP address of the device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

4.5.5 DDNS Configuration



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

2. Apply for a domain name. Take WWW. dvrddns.com for example.

Input www.dvrddns.com in the IE address bar to visit its website. Then click “Registration” button to register as shown below.



NEW USER REGISTRATION

USER NAME	<input type="text" value="xxxx"/>
PASSWORD	<input type="password" value="*****"/> 
PASSWORD CONFIRM	<input type="password" value="*****"/>
FIRST NAME	<input type="text" value="xxxx"/>
LAST NAME	<input type="text" value="xxxx"/>
SECURITY QUESTION	<input type="text" value="My first phone number."/> 
ANSWER	<input type="text" value="xxxxxxxx"/>
CONFIRM YOU'RE HUMAN	<div>718408</div> <div>New Captcha</div> <input type="text"/> <div>Enter the text you see above</div>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Create domain name.

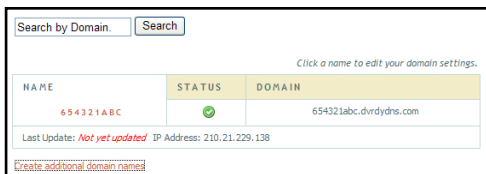


You must create a domain name to continue.

Domain name must start with (a-z, 0-9). Cannot end or start, but may contain a hyphen and is not case-sensitive.


.dvrddns.com

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



Search by Domain.

Click a name to edit your domain settings.

NAME	STATUS	DOMAIN
654321ABC		654321abc.dvrddns.com

Last Update: *Not yet updated* IP Address: 210.21.229.138

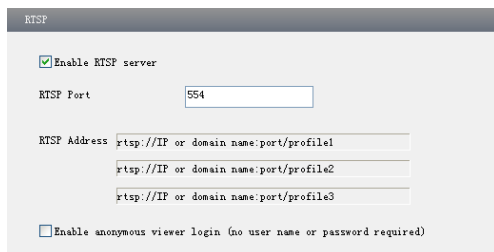
[Create additional domain names](#)

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.

4.5.6 RTSP

Go to “Network Configuration”→ “RTSP” interface as shown below.

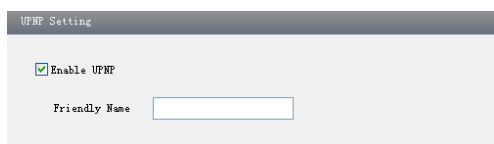


The RTSP configuration interface has a title bar 'RTSP'. It contains a checkbox 'Enable RTSP server' which is checked. Below it is a text field 'RTSP Port' with the value '554'. There are three text fields for 'RTSP Address' with placeholder text 'rtsp://IP or domain name:port/profile1', 'rtsp://IP or domain name:port/profile2', and 'rtsp://IP or domain name:port/profile3'. At the bottom is a checkbox 'Enable anonymous viewer login (no user name or password required)' which is unchecked.

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

4.5.7 UPNP

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



The UPNP Setting interface has a title bar 'UPNP Setting'. It contains a checkbox 'Enable UPNP' which is checked. Below it is a text field 'Friendly Name' which is empty.

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.

4.5.8 Mail configuration

Go to “Network Configuration” → “Mail configuration” interface.



The Mail config interface has a title bar 'Mail config'. It contains several text fields: 'From Email:' with 'test10007@gmail.com', 'User Name:' with 'test10007@gmail.com', 'Password:' with masked characters, 'Server address:' with 'smtp.gmail.com', and 'SMTP Port:' with '25'. There is a 'Secure Connection' dropdown menu set to 'not required'. Below these fields are three buttons: 'Use default' and 'test your account settings'. At the bottom, there is a section for 'Receival email address:' with a text input field and two buttons: 'Add' and 'Delete'.

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's 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.

4.5.9 FTP Setting

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

Server name	Server address	Port ...	User Name	Upload path:

Buttons: Add, Modify, Delete, Test

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

4.6 Advanced Configuration

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

4.6.1 User Configuration

Go to Advanced configuration → User Configuration interface.

Add user:

1. Clicking “Add” button pops up “Add user” dialog box.

User Name:	User Type:	Binding MAC
admin	Administrator	00:00:00:00:00:00

Add Delete Modify

User Configuration

Add User

User Name : 111

Password : •••••

Confirm Password : •••••

User Type : Normal user

☒ binding MAC address:

User PC MAC: 00 : 00 : 00 : 00 : 00 : 00

OK Cancel

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 “00:00:00:00:00:00”, 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

☒ change password

User Name : 111 Password : •••••

New Password: ••••• Confirm: •••••

☒ binding MAC address

User PC MAC: 00 : 00 : 00 : 00 : 00 : 00

OK Cancel

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.
5. 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

4.6.2 Security Configuration

1. Go to Advanced Configuration→Security Configuration to see a tab shown below.

The screenshot displays two configuration panels. The top panel, titled 'IP address filter setting', has a checked 'Enable IP address filtering' checkbox. Below it, the 'Deny the following IP address' radio button is selected, accompanied by a large empty list box and 'Add' and 'Delete' buttons. To the right, the 'Allow the following IP address' radio button is unselected, with a corresponding empty input field. The bottom panel, titled 'MAC filter setting', also has a checked 'Enable MAC address filtering' checkbox. It features the same 'Deny the following MAC address' radio button and list box controls, and the 'Allow the following MAC address' radio button with a corresponding input field showing '00 : 00 : 00 : 00 : 00 : 00'.

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.

4.6.3 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.

4.6.4 Reboot

Go to Advanced configuration—Reboot to see an interface as shown below

Click “Reboot” button to reboot the device.

4.6.5 Upgrade

Go to Advanced Configuration—Upgrade interface as shown below.

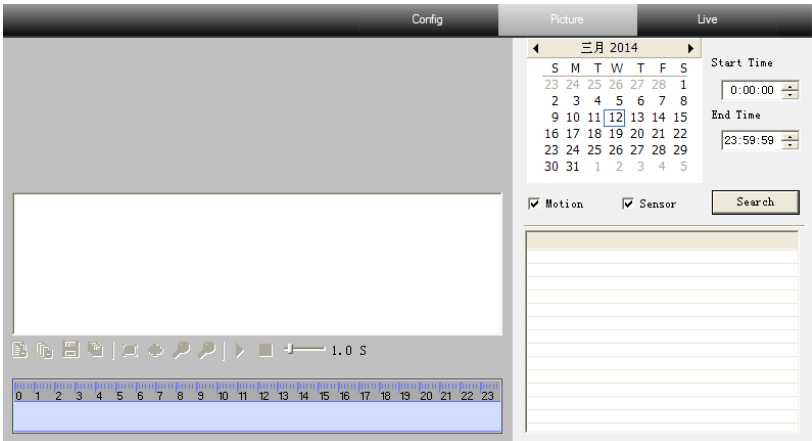
1. Click “Browse” button to select the save path of the upgrade file.

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.

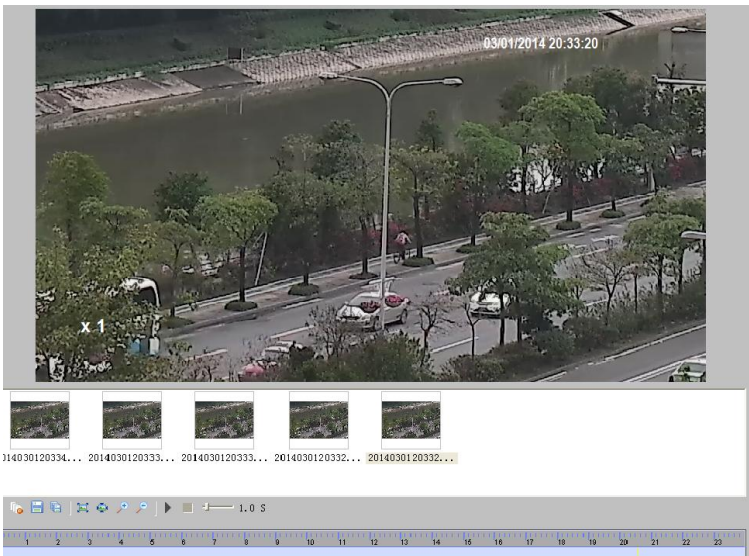
Notice: You can't disconnect to PC or close the IP-CAM during upgrade.












5 Video Search

Click “Picture” icon and search the images saved in the SD card.



1. Set time: Select date in the “Calendar” and choose the start and end time.
2. Choose event “Motion” or “Sensor”.
3. Click “Search” button to search the picture.
4. Double click a filename or select a filename and then click “View” button in the list box to view captured pictures.



Item	Buttons	Explanations
1		Close: Select certain picture and click this button to close this picture.
2		Close all: Click this button to close all pictures viewing.
3		Save: Click this button to select the save path of the picture file on the PC for saving the current picture.
4		Save all: Click this button to select the save path of the picture files on PC for saving all pictures.
5		Fit size: The picture will fit on screen by clicking this button.
6		Actual size: Click this button to display the actual size of the picture as required.
7		Zoom in: Click this button to amplify the picture.
8		Zoom out: Click this button to zoom out the picture.
9		Slide play: Click this button to play the picture in slide show mode.
10		Stop: Click this button to stop slide show.
11		Play speed: Play speed of the slide show.

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. 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.

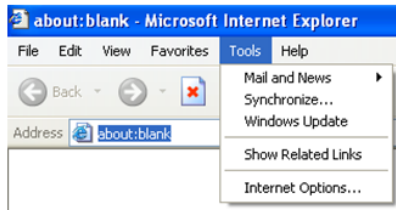
Q: IP tool cannot search devices, why?

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....

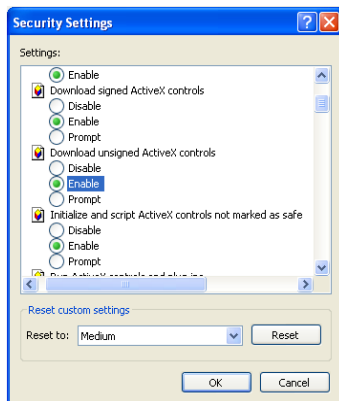
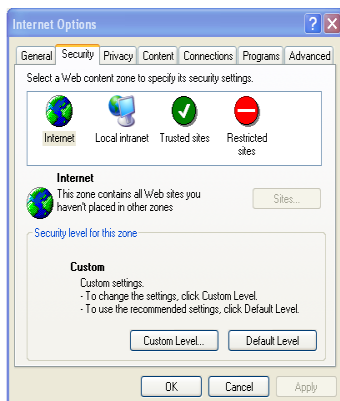


② Select Security-----Custom Level....

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.



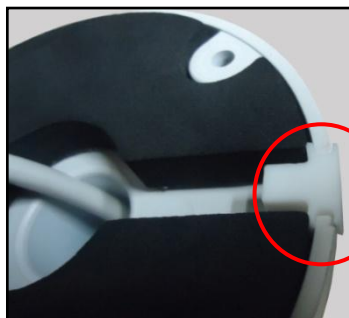
Q: No sound can be heard, why?

A: Audio input device is not connected. Please connect and try again.

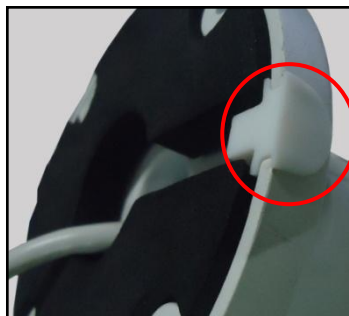
B: Audio function is not enabled at the corresponding channel. Please enable this function.

Appendix 2 Installation of Water-proof Rubber Plug

In order to improve the water-proof effect, the rubber plugs are attached to some network bullet cameras. You may mount the rubber plugs to the mounting base of the camera as required when installing. The installation instructions are as follows.



Please mount the rubber plug to the gap of the mounting base.



Please let the camber surface of the rubber plug mount outside.

Appendix 3 Specifications

Specification /Model		Network Box Camera
Camera	Image Sensor	1/2.8 " CMOS
	Image Size	2048×1536
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	DC drive
	Min. Illumination	Color: 0.01lux@ F1.2, AGC ON: 0 lux with IR; B/W: 0.001lux@ F1.2, AGC ON
	Lens Mount	C/CS
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
Image	Video Compression	H.265/H.264/MJPEG
	H.265 Type	Main Profile @Leve4.1 High Tier
	Video Bit Rate	64Kbps~8Mbps
	Resolution	3MP (2048×1536), 1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 2048×1536 (1~30fps)/ 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 2048×1536 (1~25fps)/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
	Video	CVBS output (BNC ×1)
	Auido	MIC IN×1; MIC OUT×1
	Storage	Support SD card, up to 64GB
	RS485	Support
	Alarm	1CH alarm input; 1 CH alarm output
Fuction	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to10 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	SD card storage; network remote storage
	Smart Alarm	Motion alarm; sensor alarm
	Power	DC12V/PoE (AC24V optional)
	Power Consumption	< 2.5W(ICR OFF)
	Operating Environment	Temperature: -20°C~50°C; Humidity: 10%~90%
	Dimension (mm)	W70 mm × D145mm × H60 mm
	Weight (net)	400g
	Installation	Wall mounting

Specification /Model		50m IR Water-proof Bullet Network Camera		70m IR Water-proof Bullet Network Camera	
Camera	Image Sensor	1/2.8 " CMOS			
	Image Size	2048×1536			
	Electronic Shutter	1/25s~1/100000s			
	Auto Iris	Fixed Iris			
	Min. Illumination	0.01lux@F1.2, AGC ON: 0 lux with IR			
	Lens	8mm@F1.6, angle of view: 37° ; (6mm, 12mm optional)	2.8~12mm@F1.4, angle of view: 78.5°~30°	12mm@F1.6, angle of view: 24° ; (8mm, 16mm optional)	2.8~12mm@F1.4, angle of view: 78.5°~30°
	Lens Mount	CS	Ø14	CS	Ø14
	Day&Night	ICR			
	WDR	Digital WDR			
	Digital NR	3D DNR			
	Angle Adjustment	Any angle			
Image	Video Compression	H.265/H.264/MJPEG			
	H.265 Type	Main Profile @Leve4.1 High Tier			
	Video Bit Rate	64Kbps~8Mbps			
	Resolution	3MP (2048×1536), 1080P, 720P, D1, CIF, 480×240			
	Main Stream	60Hz: 2048×1536 (1~30fps)/ 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 2048×1536 (1~25fps)/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			
	Video	CVBS output (BNC×1)			
	Auido	MIC IN×1; MIC OUT×1			
	Storage	Support TF card, up to 64GB		Support SD card, up to 64GB	
	RS485	Support			
	Alarm	1CH alarm input; 1 CH alarm output			
Fuction	Remote Monitoring	IE browser, CMS remote control			
	Online Connection	Support simultaneous monitoring for up to10 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	TF card storage; network remote storage		SD card storage; network remote storage	
	Smart Alarm	Motion alarm; sensor alarm			
Others	IR Distance	30~50 m		50~70 m	
	Protection Grade	IP66			
	Power	DC12V/PoE			
	Power Consumption	< 2.5W(ICR OFF); < 7W(ICR ON)		< 2.5W(ICR OFF); < 9W(ICR ON)	
	Operating Environment	Temperature: -20℃~50℃; Humidity: 10%~90%			
	Dimension (mm)	Ø 109mm×284mm		Ø 109mm×360mm	
	Weight (net)	1093g			
	Installation	Wall mounting; pendent mounting			

Specification /Model		Vandal-proof Dome Netowrk Camera			
Camera	Image Sensor	1/2.8 " CMOS			
	Image Size	2048×1536			
	Electronic Shutter	1/25s~1/100000s			
	Auto Iris	Fixed Iris			
	Min. Illumination	0.01lux@F1.2, AGC ON: 0 lux with IR		Color: 0.01lux@ F1.2, AGC ON: 0 lux with IR; B/W: 0.001lux@ F1.2, AGC ON	
	Lens	6mm@F1.6, angle of view: 50° ; (3.6mm, 8mm optional)	2.8~12mm@F1.4, angle of view: 78.5°~30°	6mm@F1.6, angle of view: 50° ; (3.6mm, 8mm optional)	2.8~12mm@F1.4, angle of view: 78.5°~30°
	Lens Mount	CS	Ø14	CS	Ø14
	Day&Night	ICR			
	WDR	Digital WDR			
	Digital NR	3D DNR			
	Angle Adjustment	Pan: 0°~360°; Tilt: 0°~77°; Rotation:0°~360°			
Image	Video Compression	H.265/H.264/MJPEG			
	H.265 Type	Main Profile @Leve4.1 High Tier			
	Video Bit Rate	64Kbps~8Mbps			
	Resolution	3MP (2048×1536), 1080P, 720P, D1, CIF, 480×240			
	Main Stream	60Hz: 2048×1536 (1~30fps)/ 1920×1080(1~30fps)/1280×720(1~30fps) 50Hz: 2048×1536 (1~25fps)/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			
	Video	CVBS output (BNC ×1)			
	Auido	MIC IN×1; MIC OUT×1			
	Storage	Support TF card, up to 64GB			
	RS485	Support			
	Alarm	1CH alarm input; 1 CH alarm output			
Fuctionion	Remote Monitoring	IE browser, CMS remote control			
	Online Connection	Support simultaneous monitoring for up to10 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	TF card storage; network remote storage			
	Smart Alarm	Motion alarm; sensor alarm			
Others	IR Distance	20~30 m		NO	
	Protection Grade	IP66&IK10			
	Power	DC12V/PoE			
	Power Consumption	< 3W(ICR OFF); < 5.5W(ICR ON)			
	Operating Environment	Temperature: -20℃~50℃; Humidity: 10%~90%			
	Dimension (mm)	Ø 150mm×114mm			
	Weight (net)	1249g			
	Installation	Pendent mounting (wall mounting available with junction box and bracket)			