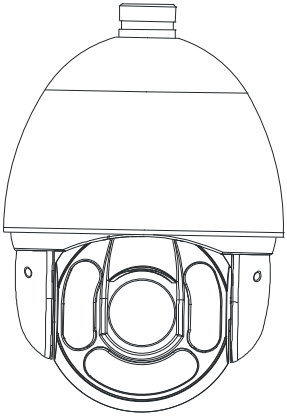
IP Speed Dome Camera

User Manual



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

Disclaimer

- This manual is provided for user reference only, without legal restraint.
- This content of this manual is subject to change without prior notice, and the updates will be added into the new version of this manual.
- This manual may contain several technically incorrect places or printing errors, please feel free to let us know. We will readily improve or update the precuts or procedures described in the manual.

Notes on Safety

- Please use the specified power supply to connect (supports DC12V/5A).
- 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 in correct 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. Otherwise, it may cause moisture condensation inside the clear dome due to temperature difference between internal and external of the dome camera.

Contents

Chapter 1 Introduction....1
1.1 Overview....1
1.2 Interfaces and Parts....1
Chapter 2 Installation....2
2.1 Install Camera....2
2.2 Connection....2
Chapter 3 IE Connection....4
3.1 LAN....4
3.1.1 Access through IP-Tool....4
3.1.2 Directly Access through IE....5
3.2 WAN....7
Chapter 4 Remote Preview....8
4.1 Remote Preview....8
4.2 Playback....9
4.3 Snap....10
Chapter 5 Menu Setup....12
5.1 System Information....12
5.2 System Setup....13
5.2.1 Auto PT Flip....13
5.2.2 Language....13
5.2.3 RS485 Setup....13
5.2.4 Home Position Setup....14
5.3 Camera Setup....14
5.3.1 Camera Control....14
5.3.2 Image Setup....15
5.3.3 Focus Near Limit....16
5.3.4 Zoom Speed....16
5.3.5 DZoom....16
5.3.6 Video Format....16
5.4 Dome Function....16
5.4.1 Patrol Setup....16
5.4.2 Task Setup....17
5.4.3 Alarm Setup....18

5.4.4 Trace Setup 19
5.4.5 Day & Night 20
5.4.6 Privacy Mask 20
5.4.7 IR Sensitivity 20
5.5 Display Setup 21
5.6 Load Default 21
Chapter 6 Remote Configuration 22
6.1 System Configuration 22
6.1.1 Basic Information 22
6.1.2 Date & Time Configuration 22
6.1.3 SD Card 23
6.2 Video Configuration 23
6.2.1 Camera Configuration 24
6.2.2 Video Stream 24
6.2.3 Time Stamp 25
6.3 PTZ Configuration 25
6.3.1 Preset Configuration 25
6.3.2 Cruise Configuration 26
6.3.3 Upgrade PTZ 27
6.4 Alarm Configuration 27
6.4.1 Motion Detection Area 27
6.4.2 Motion Detection Trigger 28
6.4.3 Motion Detection Schedule 28
6.4.4 Alarm Input Trigger 29
6.4.5 Alarm Input Schedule 30
6.4.6 Alarm Out 31
6.5 Network Configuration 31
6.5.1 Port 31
6.5.2 Wired 31
6.5.3 Server Configuration 32
6.5.4 IP Notify 33
6.5.5 DDNS Configuration 33
6.5.6 RTSP 35
6.5.7 UPNP 36

6.5.8 Mail Setting 36
6.5.9 FTP 37
6.6 Advanced Configuration 38
6.6.1 User Configuration 38
6.6.2 Security Configuration 39
6.6.3 Configure Backup & Restore 40
6.6.4 Reboot Device 41
6.6.5 Upgrade 41
Chapter 7 Video Search 42
Chapter 8 IP-Tool 44
Chapter 9 Q & A 47
Chapter 10 Specifications 49
Appendix Preset Description 50

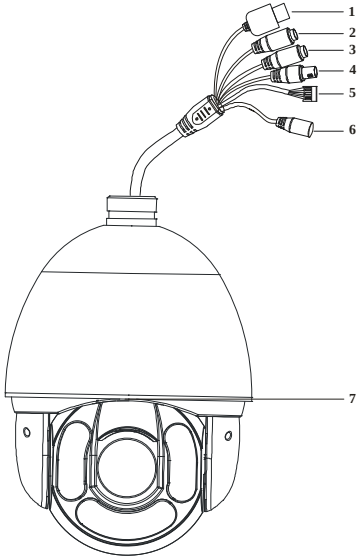
Chapter 1 Introduction

1.1 Overview

This IP speed dome camera is front-end equipment used for video capture. Its digital flip technology makes omni-directional and non-blind-spot monitoring into reality. It utilizes most advanced technologies, such as video encoding and decoding technology, and complies with the TCP/IP protocol, SoC., etc, to ensure this system more stable and reliable. This unit consists of two parts: the IP-CAM device and central management software (short for CMS). This CMS centralizes all devices together via internet or LAN and establishes a sound surveillance system to realize unified management and remote operation to all devices in one network.

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.

1.2 Interfaces and Parts



1 LAN	2 HP Audio Out	3 MIC In
4 Video Out	5 Alarm In/Out/RS485	6 Power
7 SD Card Slot		

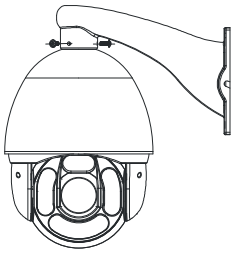
Chapter 2 Installation

2.1 Install Camera

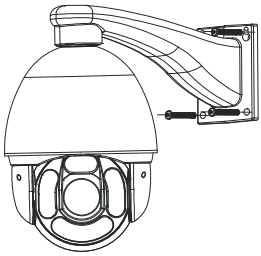
Caution： Please make sure the wall is able to bear the dome camera's weight.
Please make sure the dome camera is powered off during installation.

The installation steps are as follows:

① Drill four screw holes on the wall according to the drill template as shown.
② Install the speed dome. Route the cable and then fix the speed dome to the mount with the screws as shown in Fig 1.
③ Fix the mount to the wall with the screws as shown in Fig 2.

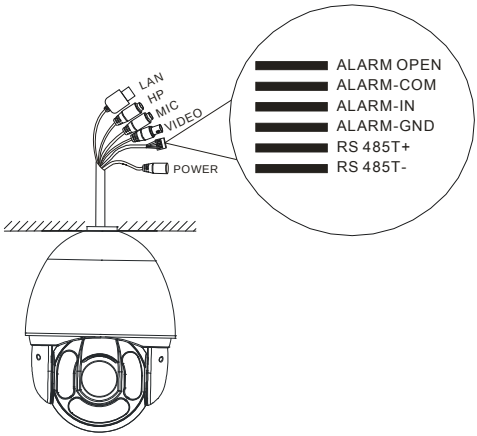


(Fig 1)

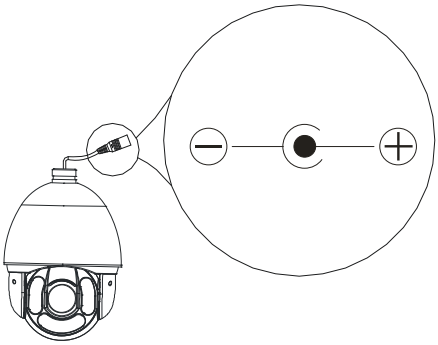


(Fig 2)

2.2 Connection



- **Power Connection**



DC12V

Alarm Connection:

Alarm Input:

a) There are one independent alarm input ports (ALM-IN) and one grounding port (ALM-GND).

b) There are three alarm input status: “OFF/NC/NO”. If “OFF” is selected, the system will not check the status of the ALM-IN and ALM-GND. If “NO” is selected, connect DC 5V~DC12V voltage between the alarm input port ALM-IN and the grounding port (ALM-GND) to trigger the alarm. If “NC” is selected, disconnect the voltage between alarm input ports (ALM-IN) and grounding port (ALM-GND) to trigger the alarm.

Alarm Output:

a) Supports 1 CH alarm output including OPEN and COM connections.

b) Options: OFF, IN1. If the OFF is selected, no alarm can be output. If IN1 are selected, the alarm can be output only when the corresponding alarm input triggers the alarm.

c) One passive switch for user to connect alarm devices.

RS485 Connection:

You can connect keyboard to control the speed dome through the RS485 interface

Chapter 3 IE Connection

IP-Cam can be connected through LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

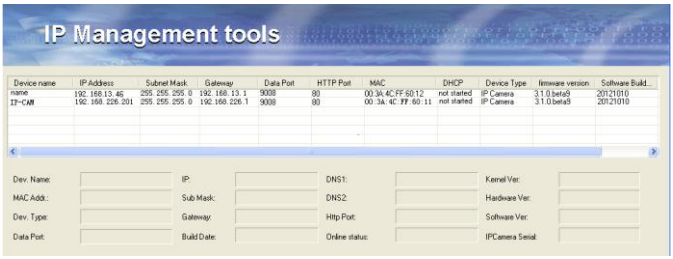
3.1 LAN

In LAN, there are two ways to access IP-CAM：① Access through IP-Tool；② Directly Access through IE Browser.

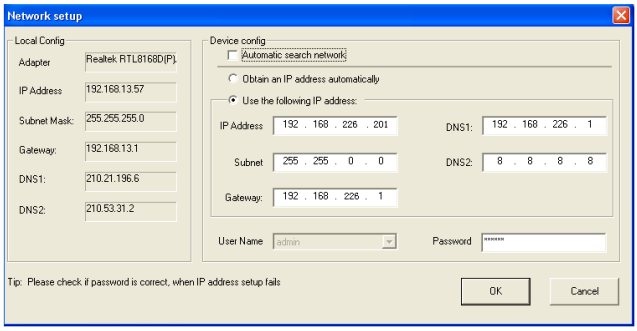
3.1.1 Access through IP-Tool

Step 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.

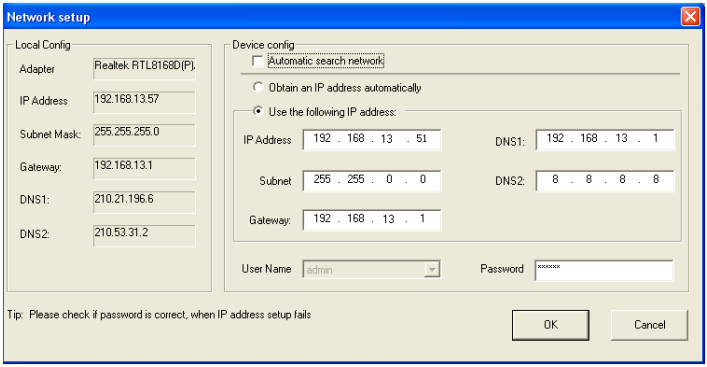
Step 2: Use IP-Tool to modify the network of IP-Cam. Then, double click the  icon on the desktop to run this software as shown below:



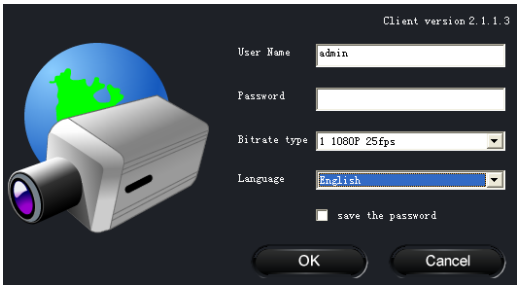
After starting IP-Tool and clicking the IP-Cam in the list, you can check the information of IP-Cam. If you cannot confirm which one is yours, please shut off the electricity of the IP-Cam and then power on it. When shutting off the power, the device information will disappear. When powering on, the device information will emerge. Well, this device is the used device. Right click the device information and select “network setup”. Then the network setup window will pop up as shown below:



For example, the IP address of this computer is 192.168.13.57. So, please modify the IP address and Gateway of the IP-Cam which must be in the same local network with the computer's. After modifying, please input the user name and password and then click "OK" button to save the setting.



Note: The default user name is: admin. The default password is: 123456.
The new IP address of this device will display after modification.
Step 3: Use the IP-Tool to login the IP-Cam.
Right-click the IP address and select "browse with IE". Then the system will pop up the IE browser to connect IP-Cam as shown below. IE browser will auto download the Active X control. After finishing the installation of the Active X control, a login window will pop up.



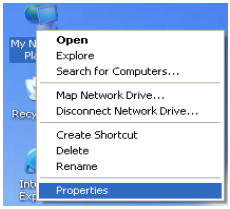
Input User name and password and then click "OK" button to login.
Note: You can also use the modified IP address of the IP-Cam. Input the IP address in the IE browser bar and then click "Enter" to access IP-Cam. The default user name is admin. The default password is 123456.

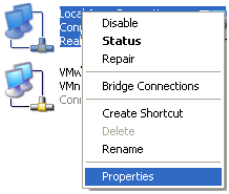
3.1.2 Directly Access through IE

The default network settings are as shown below:
IP address: **192.168.226.201**
Subnet Mask: **255.255.255.0**

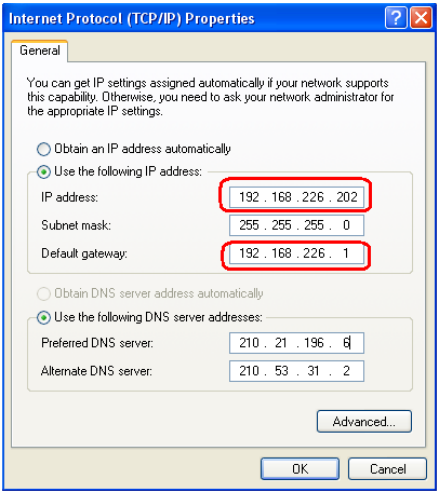
Gateway: **192.168.226.1**
HTTP: **80**
Data port: **9008**
The first time you used the network speed dome, you should connect the device with the above default settings.

Step 1: Manual set up the IP address of the PC, the network segment should be as same as the default settings of IP-CAM. Right click "My Network Places" icon on the desktop and then select "Properties" as shown in the left figure. Right click "Local Area Connection" at the popup window, followed by selecting "Property" as shown in the right figure.





Select "Internet Protocol (TCP/IP)" in the "General" tabs. Then click "Properties" to manual input network address information of the PC in the pop up window. Refer to the following figure:

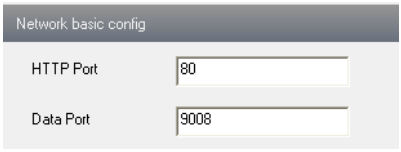


Step 2: Open the IE Browser and input the default address of IP-CAM and confirm. Then the IE browser will download Active X control automatically.
Step 3: After downloading Active X control, the login dialog box will pop up as below:
Step 4: Input user name and password in the login dialog box and click "OK" button to enter into the live interface. You can manage and setup the IP-CAM, such as change IP address etc.

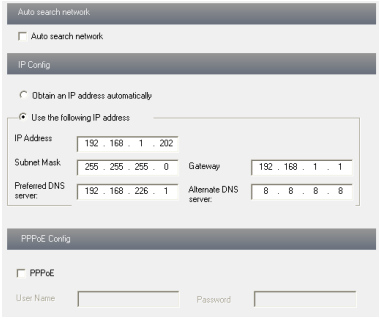
3.2 WAN

Access through router or virtual server

Step1: Make sure the network of the camera is well connected in the LAN. Then set the HTTP port of the camera.

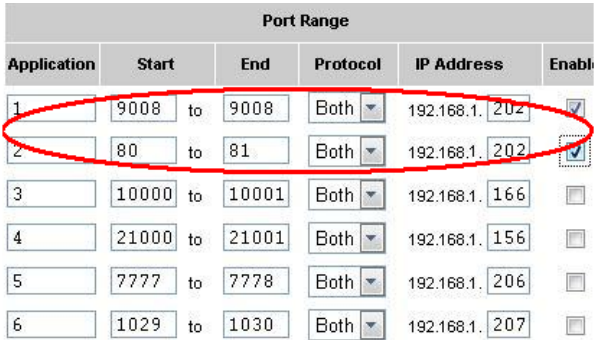


Port Setup



IP Setup

Step 2: Enter into the router's management interface through IE browser and forward the IP address and port of IP-CAM in the "virtual server" (The name depends on the router).



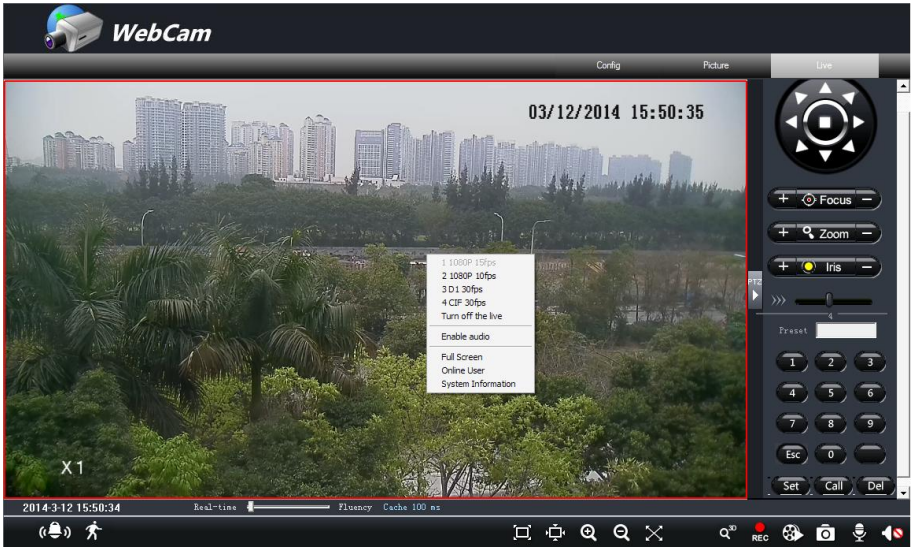
Router Setup

Step 3: Open the IE browser and input its WAN IP and http port to access.

Chapter 4 Remote Preview

4.1 Remote Preview

After you log in, you will see the following window.



The descriptions of the icon on 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		Open/close audio
	Move the cursor to view the live image in all directions after you click this button. Additionally, hold and drag the left mouse button to zoom in the live image.		

Right click mouse to appear a pull-down list:
Stream: 1080P, 720P, D1, CIF.
Turn off the live: Click this item to close the current live preview.
Enable audio: Enable remote audio transmission.

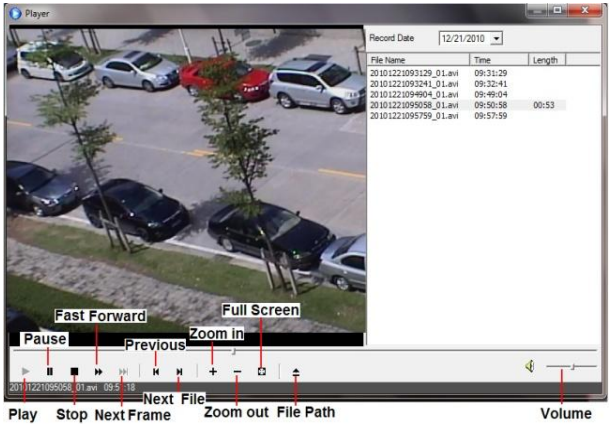
Full screen: To open full screen display. Double click or click right mouse to return to the previous interface.
Online user: To display the number of the online users accessing the device.
System information: Display the device information.
Click PTZ extended button to unfold PTZ control panel. In remote 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.

Enter digital number and then click【Call】button to call the preset. If wrong, click【ESC】to clear and enter the right number again. Enter digital number and click【Del】to delete the preset. Enter digital number and move the dome to adjust the position of the preset and then click【Set】to set the preset.

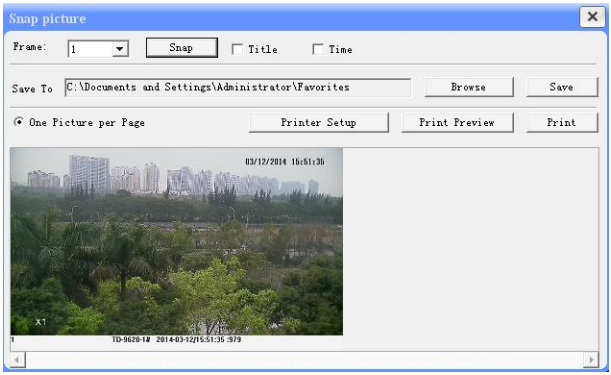
4.2 Playback

Click  icon to see the following window:
After selecting the record date, the record files will be displayed in the record file list box. Double click a certain record file to playback or check a certain file. Then click Play button to play.



4.3 Snap

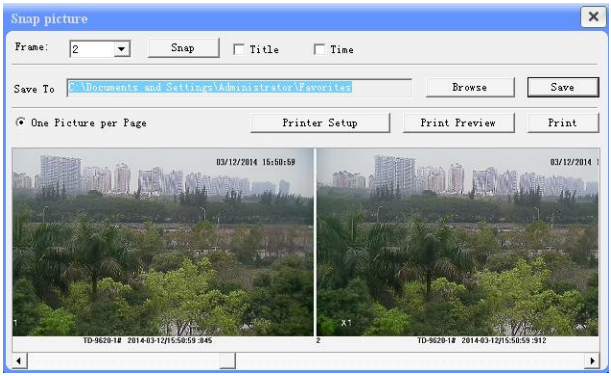
Select the picture number and then click “Snap” icon as shown below:



To capture multiple pictures:

Step 1: Select the picture number from frame pull down list box, such as 2.

Step 2: check “Title” and “Time” to show capture title and time on the captured pictures simultaneously.



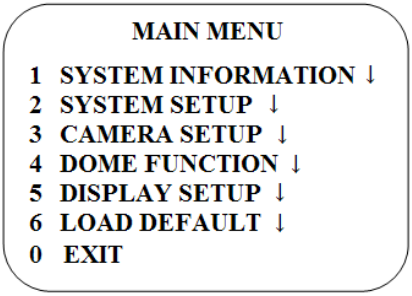
Step 3: Click “Browse” to set saving path and then click “Save” to save pictures to HDD on the computer;

Step 4: Click “Snap” button to take snapshots.

Step 5: Drag the scroll bar to view all snapped pictures.

Chapter 5 Menu Setup

Under the PTZ control panel of IE remote preview interface, click number 9 and 5 and then click [Call] button to Call No.95 preset. Now, you can see main menu setup as shown below.



After you enter the main menu interface, you can select the menu by clicking the direction button (▲▼◀▶).

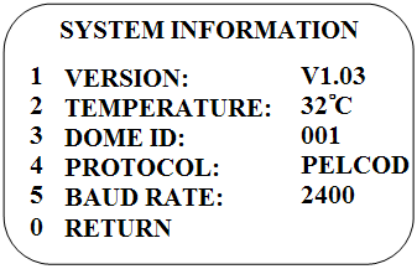
▲▼ : To select menu by moving up and down.

◀ : To return to the menu on the left.

▶ : To confirm to enter sub-menu or to select the menu on the right.

5.1 System Information

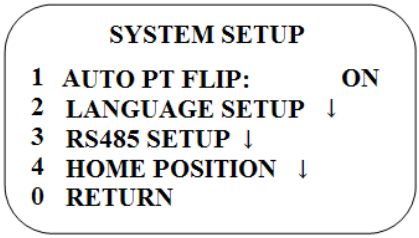
Select System Setup by clicking ▲ or ▼ button and then click ▶ button to enter System Information menu as shown below:



You can check the software version, system temperature, dome ID, dome protocol and baud rate here.

5.2 System Setup

Select System Setup by clicking ▲ or ▼ button and then click ▶ button to enter into System Setup as shown below:



5.2.1 Auto PT Flip

Select Auto PT Flip and then click ▶ to setup the menu on the right; click ▲ or ▼ button to select On/Off. If "On" is selected, please click ◀ button to return to the menu on the left and click ▼ button to select Return. Next, click ▶ button to return to the main menu. Then click ▼ button to select Exit. Now, you will see the remote preview interface. (The ways to go into sub-menu, return or exit to the main menu in the following settings are similar to the above-mentioned steps. The following contents will not introduce it in detail).

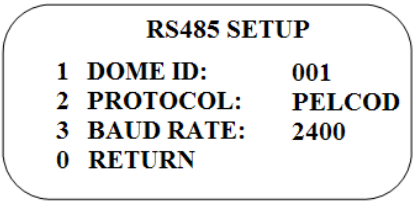
After you exit the main menu, press and hold ▼ button to let the speed dome move to the bottom so that the dome will auto flip.

5.2.2 Language

This device supports English and Chinese Menu.

5.2.3 RS485 Setup

Select RS485 Setup to enter the following sub-menu:



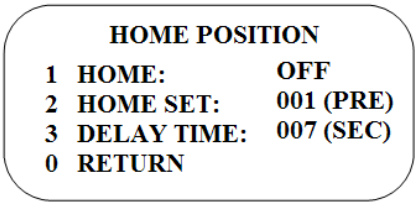
【Dome ID】: The available range is from 001 to 255.

【Protocol】: PELCOD or PELCOP is selectable.

【Baud Rate】: Options: 1200, 2400,4800 or 9600.

5.2.4 Home Position Setup

Enter Main Menu→System Setup→Home Position Menu as shown below:



The setting steps:

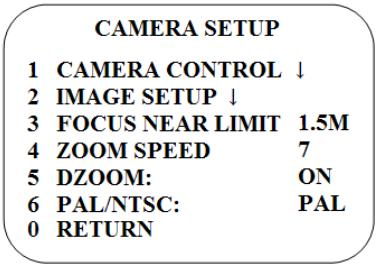
Enable the home position function and select the preset which should be set in advance. Then select delay time (range from 007s to 180s) and exit the menu.

When the stand-by time of the dome camera exceeds the delay time, the camera will automatically execute the command to monitor the selected preset.

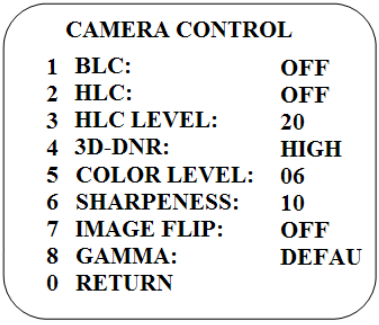
5.3 Camera Setup

After you enter camera setup menu, you will see the following screen.

Camera setup includes the settings of camera control, image setup, focus near limit, zoom speed, DZoom and PAL/NTSC.



5.3.1 Camera Control



【BLC】: When the background light is so stronger that the foreground is dark, the brightness of the whole image will improve thereby enhancing the visibility of the foreground image if the BLC function is enabled.

【HLC】: If enabled, the darker part will be lightened, while the highlight part will be suppressed.

【HLC Level】: Range from 00~20.

【3D-DNR】: Reduce the noise of the brightness and chroma of the image in low illumination condition.

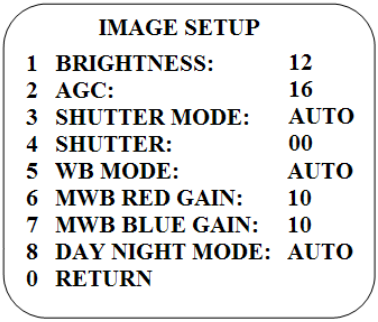
【Color Level】: Adjust the screen color.

【Sharpness】: Set the image definition.

【Image Flip】: Flip the image.

【Gamma】: Measurement of the contrast of an image.

5.3.2 Image Setup



【Brightness】: Range from 0（darkest）~20（brightness）.

【AGC】: The larger the number is, the higher the brightness and the more the noises of the image are.

【Shutter Mode】: Two modes can be optional. Manual & Auto.

【Shutter】: The lower the value of camera shutter is, the brighter the image is. It is available only when the shutter mode is set to manual mode.

【WB Mode】: White Balance Mode. There are two options you can choose including auto and manual. You can select the mode according to different lighting condition.

【MWB Red Gain】: The operation is effective only when the white balance is in manual mode.

【MWB Blue Gain】: The operation is effective only when the white balance is in manual mode.

【Day Night Mode】：Three options: Auto, Day & Night.

- ❖ Auto：Camera will automatically switch the mode between day and night as per the ambient illumination.
- ❖ Night：The camera will be night mode at all time. You'd better use this mode at night.
- ❖ Day: The camera will be day mode at all time. You'd better use this mode in daytime.

5.3.3 Focus Near Limit

Set the nearest distance of focus.

5.3.4 Zoom Speed

Adjust zoom speed.

5.3.5 DZoom

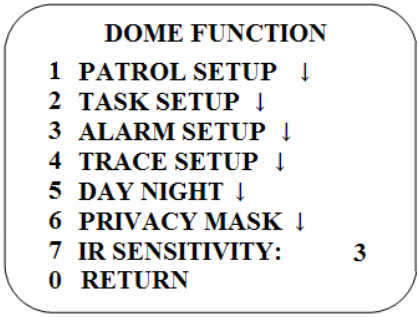
To turn on/off the digital zoom. After enabling digital zoom mode, digital zoom will be increased on the basis of optical zoom.

5.3.6 Video Format

To choose video format: PAL or NTSC.

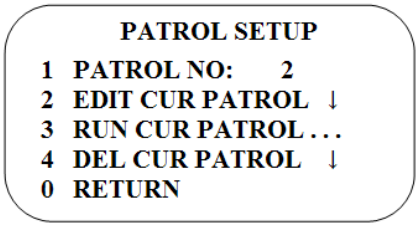
5.4 Dome Function

Dome function includes seven sub-menus: Patrol Setup, Task Setup, Alarm Setup, Trace Setup, Day Night, Privacy Mask and IR Sensitivity.



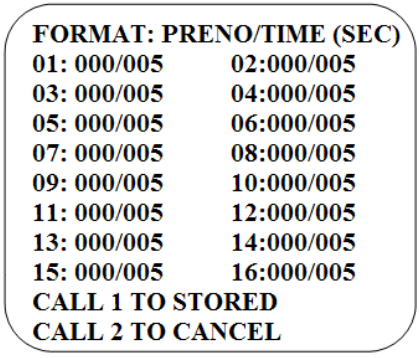
5.4.1 Patrol Setup

Enter Main Menu→Dome Function→Patrol Setup as below:



In this interface, by programming presets in patrol list in advance, the system will keep calling those presets at the set time in sequence when executing patrol command so that non-stop monitoring between multiple important positions can be achieved.

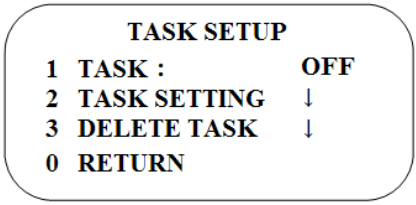
Setting Steps are as follows:
Step 1: Select the patrol number.
Step 2: Edit the current patrol. This camera supports 8 patrols and 16 presets for each patrol. Enter “Edit Current Patrol” menu as shown below:



Set the preset and time. The preset ranges from 001 to 255 and the dwell time is from 05s to 240s.
Step 3: Run the current patrol. The camera will automatically keep running according to the patrol you set until new command is received. The corresponding operating information will display on the screen when the camera is running.
Step 4: Call preset 1 to save the setting.

5.4.2 Task Setup

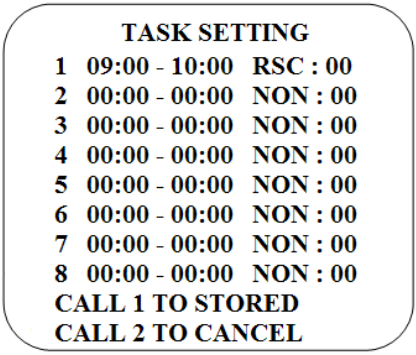
Enter Main Menu→Dome Function→Task Setup Menu as shown below:



By dividing 24 hours into several periods and appointing different commands for each period, the camera system will automatically execute the commands according to the set time if there is no operation.

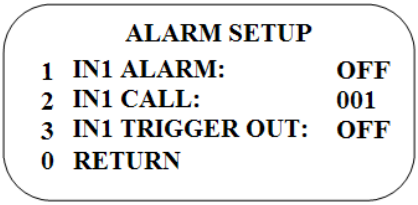
Setting Steps:
Step 1: Enable the task.
Step 2: Edit task. Set the task time and type.
Time Format: Start Time – End Time. The tasks will be automatically executed in chronological order.
Task Type: RST, ASC, PRE, PAT, TRA.

☞ **Note**: The home position function will be disabled if enabling task setting.



5.4.3 Alarm Setup

Enter Main Menu→Dome Function→Alarm Setup as shown below:

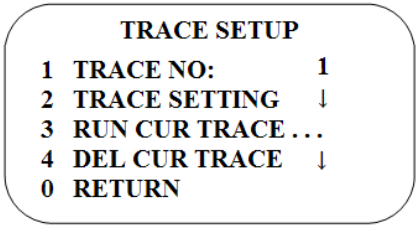


Setting Steps:
Step 1: Enable “IN1 Alarm”. This means the first channel is allowed to input alarm, otherwise it is prohibited to input alarm.
Step 2: Select the preset that the system will call on IN1 alarm. When the first channel alarm is triggered, the camera will automatically monitor the selected preset.
Step 3: Set up alarm output.

Note: If the dome is on the menu state on an alarm, any command is negative.

5.4.4 Trace Setup

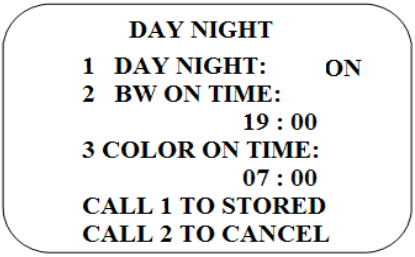
Enter Main Menu→Dome Function→Trace Setup Menu as shown below:



This function is used to memorize the operation to PTZ, zoom and focus so that repeating operation progress can be realized by running trace.
Setting Steps:
Step 1: Choose the trace number.
Step 2: Edit the trace. Enter the trace setting menu. Control the dome movement by direction button and then call preset 1 to save the setting. Each trace can record up to 180s. If the time exceeds 180s, the system will automatically save the operation data and return to the previous menu. In addition, 360 commands can be record for each trace at most. If exceeding 360 commands, the system will automatically save the first 360 commands and then exit the current menu. The recording time is related to the operating frequency. The more frequent the operation is, the shorter the memory time is.
Step 3: Select “RUN CUR TRACE…” to perform the command.

5.4.5 Day & Night

Enter the Main Menu→Dome Function→Day Night menu as below:

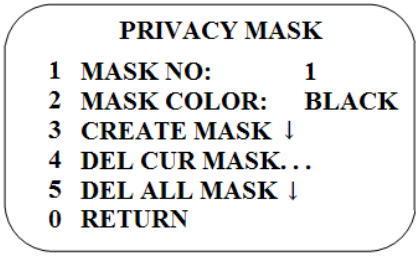


Enable "Day & Night" and respectively set the B/W time and color time. Call preset 1 to save the setting. Then the camera will automatically switch from B/W to color at the set time.

☞ **Note**: Day & Night Mode will be disabled in image setup if enabling this function.

5.4.6 Privacy Mask

Enter the Main Menu→Dome Function→Privacy Mask menu as below:



【Mask NO.】: Set the current mask area. 8 mask areas can be set at most.

【Mask Color】: Select the color to mask.

【Create Mask】: Go into the "Create Mask" sub-menu and then set the mask area by moving the direction buttons on the live interface. After that, call preset 1 to save this mask area.

【Delete Current Mask】: Select this menu to delete the current mask area.

【Delete All Mask】: Select this menu to delete all mask areas.

5.4.7 IR Sensitivity

Set the level of the IR sensitivity. The higher the value is, the more the sensitivity is.

5.5 Display Setup

Enable or disable the display of the system temperature and zoom on the live image.

5.6 Load Default

There are three menus including master reset, master clear and system reboot.

【Master Reset】: Restore the camera state and active menu to factory default but do not clear those parameters such as preset patrol.

【Master Clear】: Restore the camera to factory default.

【System Reboot】: Reboot the camera.

Chapter 6 Remote Configuration

Functions of remote configurations include: System Configuration, Video Configuration, PTZ Configuration, Alarm Configuration, Network Configuration and Advanced Configuration. You should firstly select the menu on the left, and then setup the relative parameters. When one user configures parameters of a certain device, other users can not setup this device.

6.1 System Configuration

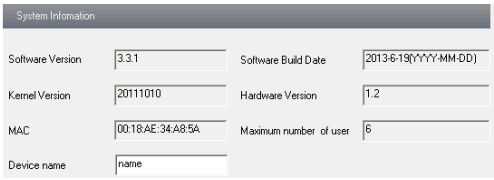
The “System configuration” includes three submenus: Basic Information, Date & Time and SD card.

6.1.1 Basic Information

In the Basic Information interface, you can setup the device name and 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:

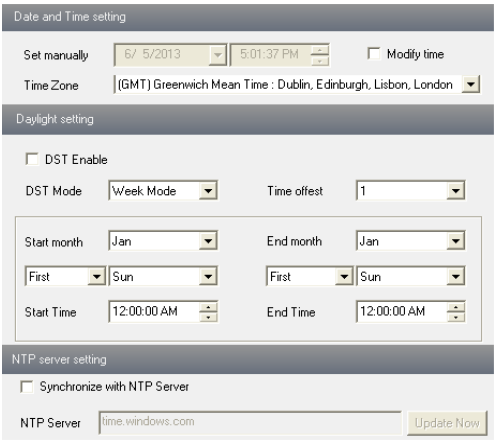


Parameter	*Meaning*
Software version	The software of the device
Software build date	The software build date of the device
Kernel version	The kernel version of the device
Hardware version	The hardware version of the device
Mac Address	MAC address of device
Maximum number of user	Support max 6 users to access
Device name	Name of the device.

6.1.2 Date & Time Configuration

Setting steps:

1. Enter into "System Configuration" →“Date & Time”.

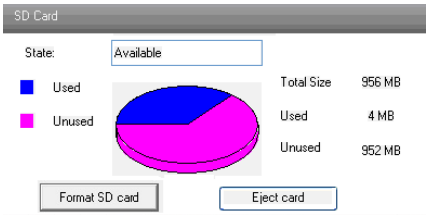


2. Select “Modify Time " to self-define time. Choose "Time Zone" according to your location.
3. Enable DST and set DST mode and time.
4. Setup time by selecting the “Synchronize with NTP Server”.
5. Press the "Save" button to save the settings.

6.1.3 SD Card

Setting steps:

1. Enter into "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 alarm. When alarm is triggered, the system will automatically snap picture and save the picture into SD card.

6.2 Video Configuration

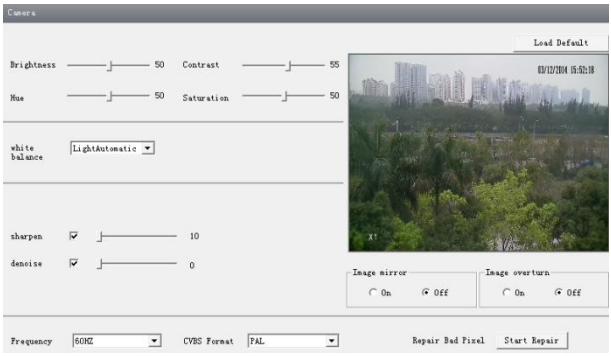
Camera Configuration includes three submenus: Camera Configuration, Video Stream and

Time Stamp.

6.2.1 Camera Configuration

Setting steps:

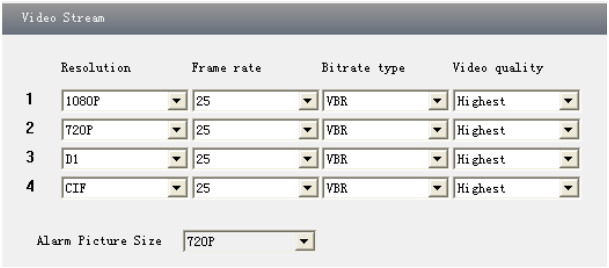
1. Enter into "Video Configuration "→ "Camera" interface as shown below:



2. Adjust Brightness, Contrast, Hue and saturation of the picture.
3. Select white balance mode.
4. Sharpen, denoise, frequency and CVBS format are adjustable.
5. Enable the image mirror and image overturn function.
6. Repair bad pixel by clicking “Start Repair” button.
7. Press the "Save" button to save the settings.

6.2.2 Video Stream

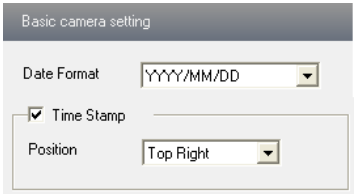
Enter into "Video configuration"→ "Video Stream" to see an interface as shown below:



In this interface, you can set up the resolution, frame rate, bitrate type and video quality and so on subject to the network bandwidth.

6.2.3 Time Stamp

Enter into "Video configuration"→"Time Stamp" to display the interface as shown below:



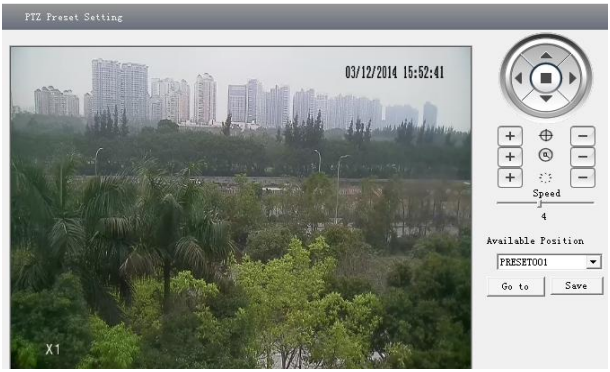
Here you can set date format and the position of the time stamp shown in the live image.

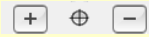
6.3 PTZ Configuration

PTZ Configuration includes three submenus: Preset, Cruise and Update PTZ Configuration.

6.3.1 Preset Configuration

1. Enter into "PTZ Configuration"→"Preset" to see an interface as shown below:



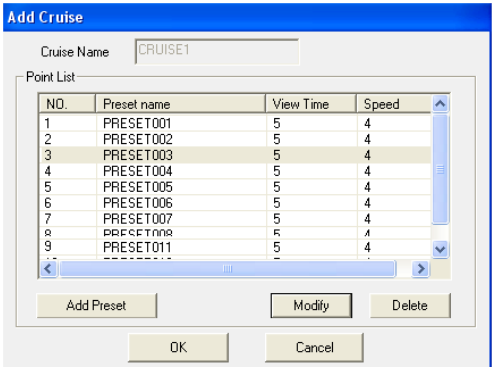
Button	Meanings
	to rotate the dome upwards; to rotate the dome downwards; to rotate the dome towards left; to rotate the dome towards right; to stop rotating the dome.
	Focus button. Click button to have long focus; click button to have short focus.
	Zoom button. Click button to zoom in the locale picture ; 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.

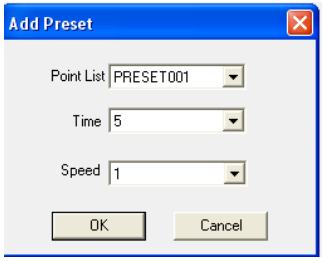
2. Select the preset and move the dome by controlling the PTZ control panel on the right to set the position of this preset. Then click “Set” button to confirm its position.
3. Click “Save” button to save the settings.
4. Select the preset and click “Go to” to check the position of the preset.

6.3.2 Cruise Configuration

Enter into "PTZ Configuration"→"Cruise" to display an interface as shown below:

There are 8 cruise lines by default. Choose a cruise and click “Modify” button to pop up a window as below:



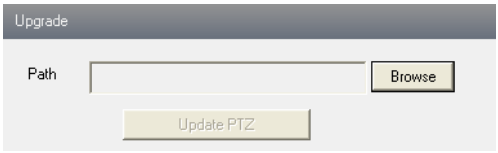


You can add 16 presets into this cruise at most. Select the preset and click “Modify” to change

the preset. Click “Delete” button to delete this preset point.
4. Press the "Save" button to save the settings.

6.3.3 Upgrade PTZ

Enter into "PTZ Configuration"→"Update PTZ" to display an interface as shown below:



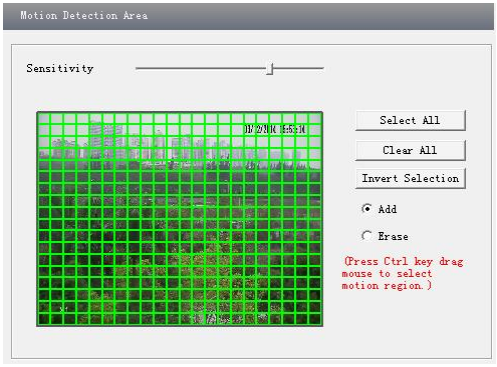
Acquire the upgrade software from the supplier and save it in your PC. Then click “Browse” button here to find your upgrade software and then click “Update PTZ” button to upgrade.

6.4 Alarm Configuration

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

6.4.1 Motion Detection Area

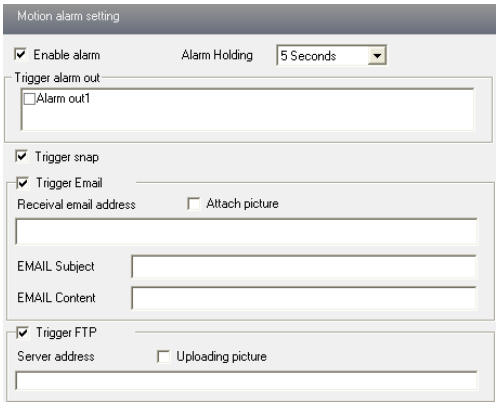
1. Enter into “Alarm configuration"→"Motion Detection Area" to see an interface as shown below:



2. Move the "Sensitivity" scroll bar to setup the motion trace sensitivity.
3. Check "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.After you finish settings, press the "Save" button to save the settings.

6.4.2 Motion Detection Trigger

1. Enter into “Alarm Configuration"→ "Motion Detection Trigger" to display an interface as below:
2. Check "Enable alarm" check box to activate motion based alarm.



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.

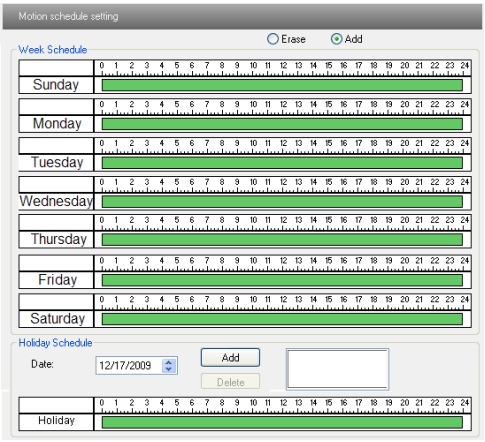
Trigger Email: If the email and attach picture checkbox is checked (Email address shall be set first in the Mail config interface), the triggered snap pictures and event will be sent into those addresses.

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.

6.4.3 Motion Detection Schedule

A window will show as below by entering into “Alarm configuration"→ "Motion Detection schedule" menu.



Week schedule

Set the alarm time from Monday to Sunday for alarm everyday in one week.

Note: The lengthwise means one day of a week; the rank means 24 hours of a day. Mouse clicks on the pane to set the alarm hours. Green means selected area. Blank means unselected area.

"Add": add the schedule for a special day.

"Erase": delete holiday schedule.

Day schedule

Set alarm time for alarm in some time of a 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.

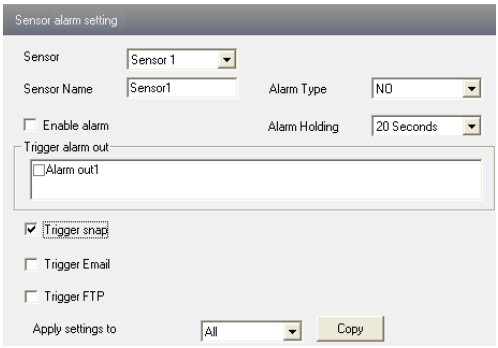
2. Select a date in the list box on the right side, and press "Erase" to remove the schedule on that day.

Press the "Save" button to save the settings.

Note: Holiday schedule is prior to Week schedule.

6.4.4 Alarm Input Trigger

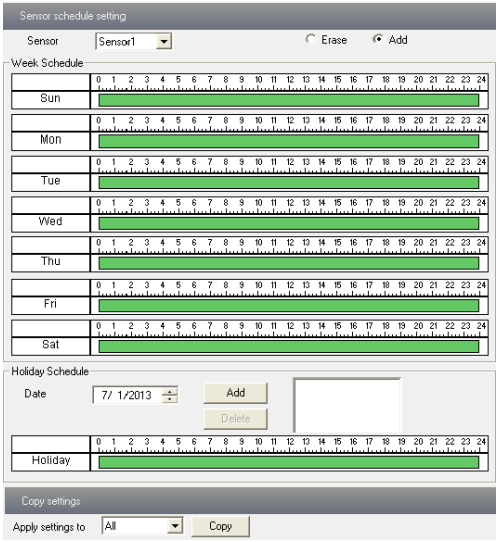
1. Enter “Alarm Configuration"→"Alarm Input Trigger" to see a screen as shown below:



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 with that of motion detection trigger. Please refer to motion detection trigger chapter for details.
5. Apply settings to all by clicking “Copy” button, which can quickly set the same settings for all sensors.

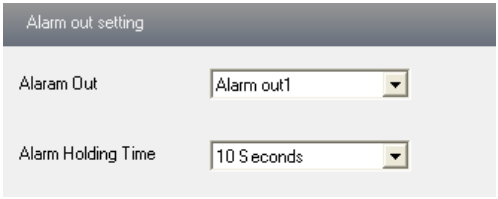
6.4.5 Alarm Input Schedule

Enter into “Alarm Configuration"→“Alarm Input Schedule” as shown below:
1. Select the sensor at the "Sensor" pull down list
2. The following setup steps are similar to Motion Detection Schedule’s. Please refer to Motion Detection Schedule chapter for more details



6.4.6 Alarm Out

1. Enter into “Alarm configuration"→"Alarm output" as shown below:



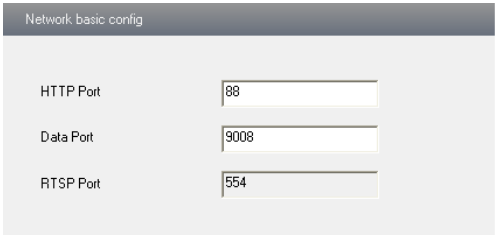
2. Select alarm holding time and alarm name at the "Alarm out” and “Alarm holding time” pull down list box respectively.
3. Press the "Save" button to save the settings

6.5 Network Configuration

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

6.5.1 Port

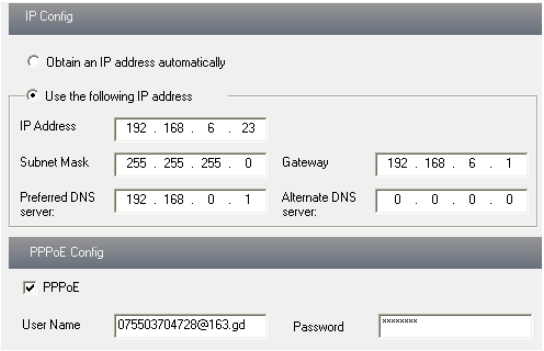
1. Enter into "Network config"→"Port" to see the interface as shown below:



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.

6.5.2 Wired

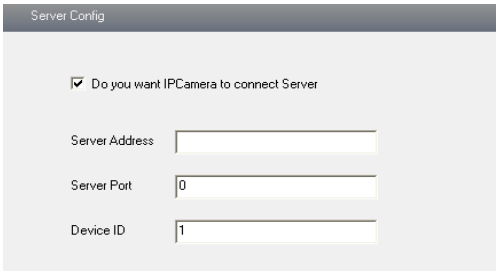
1. Enter into "Network Configuration"→"Wired" to see a tab shown below:



2. There are two Options for setup IP: obtain an IP address auto by DHCP protocol and use the following IP address, please choose one of options for your requirements.
3. Use the following IP address: display the IP address, subnet mask, gateway and DNS of the device.
4. PPPOE: Manual input the user name and password for dial-up internet.
Firstly, Login IE clients, enter user name and password of PPPoE, save the setting and exit. Secondly, setup IP address change notice. Then the device will dial-up internet automatically.
5. Press the "Save" button to save the settings.

6.5.3 Server Configuration

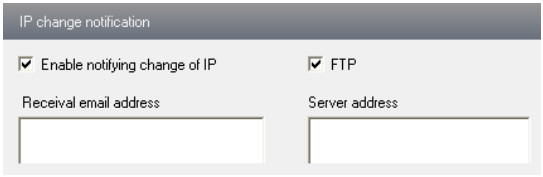
Enter into “Network Configuration”→ “Server Config”.



1. Check “Do you want IP Camera to connect Server.
2. Check the IP address and port of the transfer media server in the ECMS/NVMS. Then enable the auto report in the ECMS/NVMS when adding a new device. Then input the remaining information of the device in the ECMS/NVMS. After that, the system will auto allot a device ID. Please check it in the ECMS/NVMS.
3. Input the above-mentioned server IP, server port and device ID in the responding boxes. Click “save” button to save the settings.

6.5.4 IP Notify

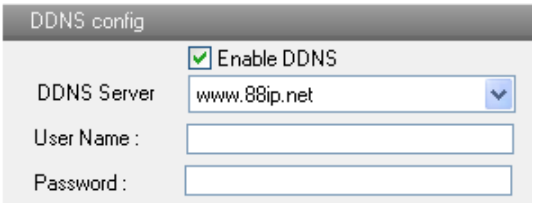
1. Enter into “Network Configuration”→”IP Notify” to see a tab as below.



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 is changed, a new IP address will be sent to FTP server.

6.5.5 DDNS Configuration

1. Enter into "Network Configuration"→"DDNS Configuration" tab as below:



Note: The steps to band a domain name for video surveillance server are as follows. Firstly, register a user name and a password to log on the website of service supplier, and then apply for a domain name online for the server. After that, you can visit the server through inputting the domain name at IE terminal.

2. Press the "Save" button to save the settings.
Please refer to the following table for parameters and instructions of DDNS configuration.

Parameter	*Meaning*
DDNS server	Address of the website which provided by domain name supplier. The optional: www.dns2p.net ， www.88ip.net ， www.meibu.com ， www.dyndns.com，www.no-ip.com，www.3322.org and mintdns type.
User name	Log in the website of domain name supplier
Password	Log in the website of domain name supplier

1. Apply the Domain Name (Take dns2p for example)

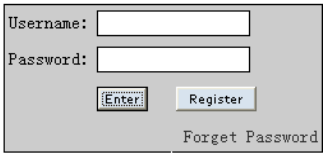
(1) Register in the Web

Register dialog box

Step 1: Fill in the blank of IE address with ‘www.dns2p.com’.
Step 2: Click to enter the website.
Step 3: Click "New User" in the right of homepage to register. For example: User ID is ‘abc’, and password is ‘123456’. The register dialog display as above.

(2) Login

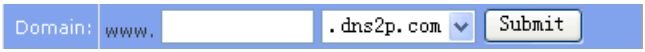
Step 1: Return to homepage after successful registration.
Step 2: Click "Account Manager" on the right of homepage to login.
Step 3: Input the username and password with the information that you have registered.
Step 4: Click "Enter" key after filling in the textbox.



Log in

(3) Domain Setup

Step 1: Click "Domain Management" on the left to set the domain.



Domain setup

Step 2: Input the domain in the textbox. For example, you set ‘IP-CAMERA’ as the domain.
Step 3: Click "Submit" button, the system will pop up a dialog box to show that the domain is added successfully.

2. Setup in the IP-CAMERA

(1) DOMAIN

Domain is set in '1. Apply the Domain Name'. According to the example above, the domain is 'WWW. IP-CAMERA.dns2p.com'.

(2) USER ID

Username of registered which is set in '(1) Register in the Web'. According to the example above, user ID is 'abc'.

(3) PASSWORD

Password is set in '(1) Register in the Web'. According to the example above, password is '123456'.

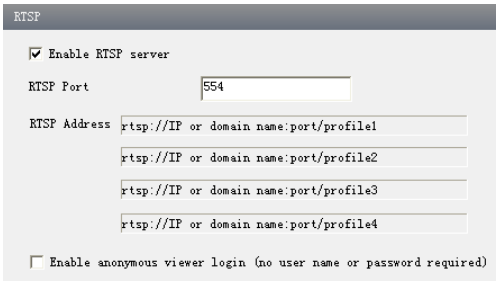
Note: If the connection fails, press the "INFO" button. Now the system will display: 'DDNS NONE'. Then you need to check network and information above and try again.

3. Application

Connect IP-CAMERA to the Network Client. Enter into DDNS configuration interface from IE login, check "Enable DDNS", choose the DDNS server, like "www. dns2p.com" and then input the username and password applied above. After that, click "Save" button to save the settings. Next, enter the domain name in the IE browser bar to access the device. If the device is in the local network, please forward your IP address and http port in the router prior to login.

6.5.6 RTSP

Enter into "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. Check "enable anonymous viewer login…".

Application: This device supports VLC player. You should download the VLC player from the relevant website. Then choose "File" in the menu bar of the player and click "Open URL". Input the RTSP address in URL column and click "OK" button. Now, you can see the live

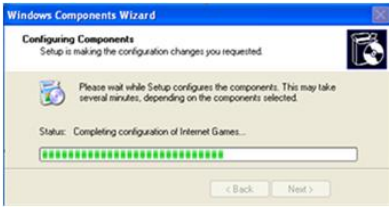
image in the VLC player.

6.5.7 UPNP

Enter into “Network Configuration”→ “UPNP” interface as shown below:
Select “Enable UPNP” and then input friendly name.

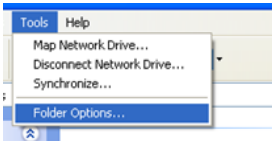
Enable UPNP

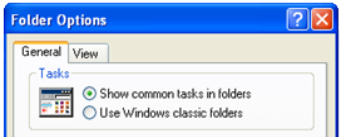
Double-click the “My Network Places” icon on the desktop in PC and select “Show icons for networked UPnP devices” in the “Network Tasks” list box. Then an information window will pop up. Click “YES” button to see a “Windows Components Wizard” dialog box as shown below. Then press “Next” to continue. After the installation of configuring components is complete, the UPnP icons will display. Double-click the icon to connect the remote surveillance login interface through IE.



If “Show icons for networked UPnP devices” can’t display in the “Network Tasks” list box, please follow the below operation:

- Click “Tools”-- “Folder options”
- Check the “Show common tasks in folders” in the “Tasks” check box, UPnP icon will display.





6.5.8 Mail Setting

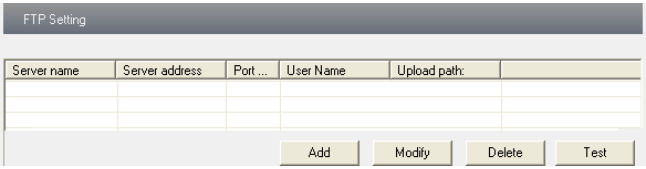
Enter into “Network Configuration” → “Mail Setting” interface. Please refer to below picture.

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 setup, user 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.

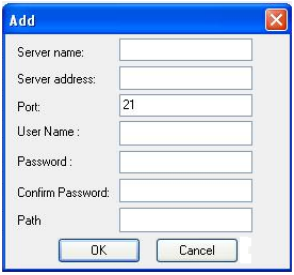
☞ **Note**: If you change the static IP into PPPoE and select mailbox, there will be an e-mail sent to users' mail box for notifying a new IP address.

6.5.9 FTP

Enter into Network Configuration→FTP interface; please refer to below picture.



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. Refer to the following picture:
Modify: Your can click this button to change some information of the FTP server
Delete: Select certain FTP account; Click this button to delete this account
Test: Select certain FTP account; Click this button to test its valid or not.
Please refer to the following table for parameters and instructions of FTP configuration.



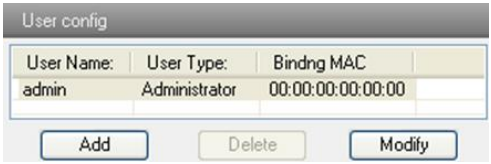
Parameter	*Meaning*
Server name	The name of the FTP server
Server address	The address of the FTP server
Port	The port number of the FTP server
User name	The user name of the FTP server
Password	The password of the FTP server
Path	The save path for FTP files

6.6 Advanced Configuration

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

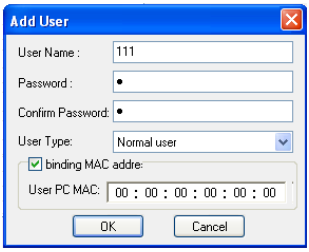
6.6.1 User Configuration

Enter into "User Configuration" interface. Refer to the following picture:



Add user:

1. Clicking "Add" button pops up "Add user" dialog box as shown below:

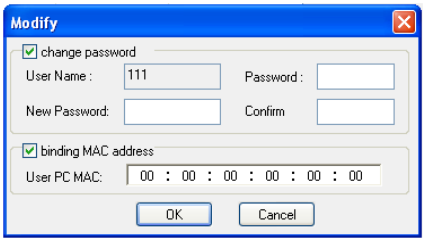


After binding physical address to the IP-CAM, you can access the device on this PC only. If the MAC address was ““00:00:00:00:00:00” which means it can be connected to any computers.

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.



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 user's password and binding MAC address successfully.

Delete user:

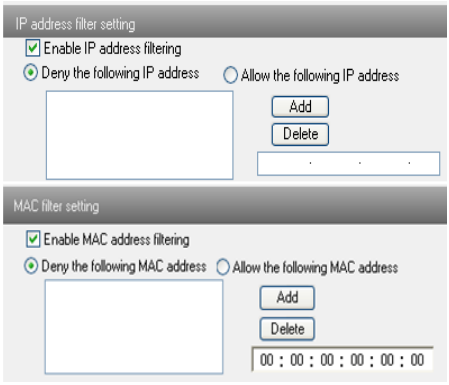
1. Select the user which needs to delete in the user configuration list box.
2. Clicking "Delete" button will pop up a confirm dialog box. Then click "OK" to delete the user.

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 setup according to actual MAC address of server.
Password	Password to log in the client terminal
Confirm Password	Password to log in the client terminal

6.6.2 Security Configuration

Enter into Advanced Configuration→Security Configuration to see a tab shown below:



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”.

Select the IP address which needs to be deleted from the IP address list box and click “delete” button to delete that IP address.

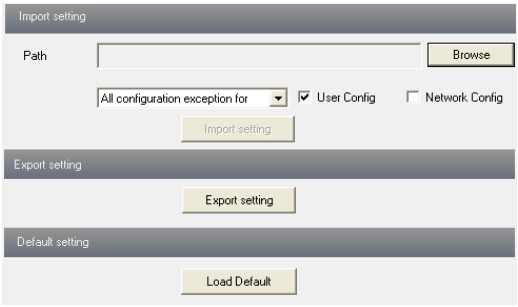
Check “Enable MAC address” check box, select “Deny the following IP address”, input MAC address in the MAC address list box and click “Add” button. Then this MAC address will display in the list box; the operation step of “Allow the following MAC address” is the same with “Deny the following IP address”.

Select the MAC address which needs to be deleted from the MAC address list box and click “delete” button to delete that MAC address.

Click "save" button to save the above setting.

6.6.3 Configure Backup & Restore

Enter into Advanced Configuration→Configure Backup & Restore Interface.



- **Import & Export Configuration**:

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

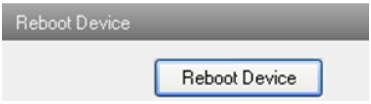
1. Click “Browse” to select save path for import or export information on PC.
2. User can import or export all setting information to PC, but those two settings “user configuration” and “network configuration” are exceptional.

- **Default Configuration**

Click “Load default” button to restore all system settings to default status.

6.6.4 Reboot Device

Enter into Advanced configuration—Reboot device to see an interface as shown below:
Click “Reboot device” button to reboot the device.



6.6.5 Upgrade

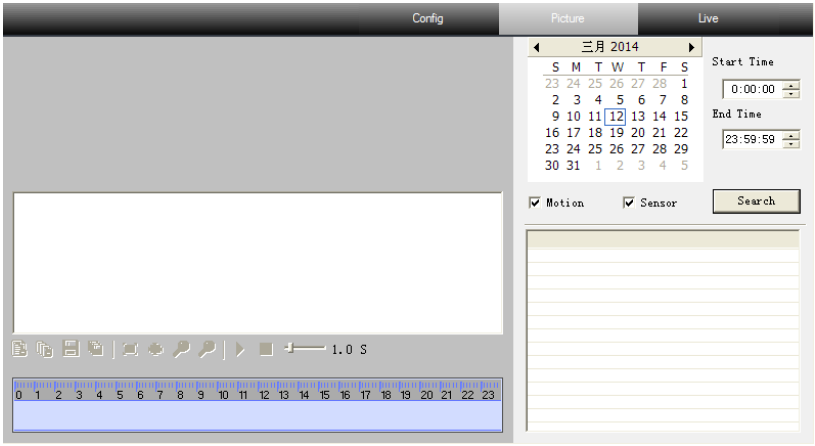
Enter into Advanced Configuration—Upgrade interface.

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.

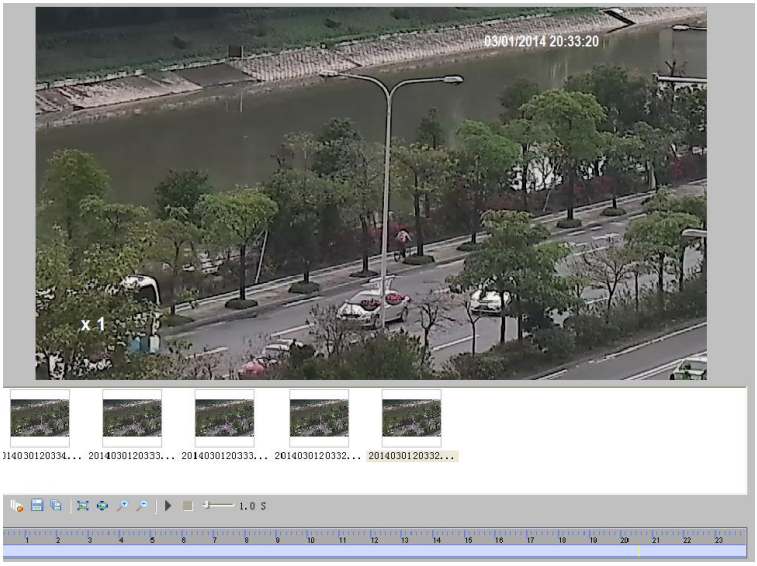
Caution! You can’t disconnect to PC or close the IP-CAM during upgrade.

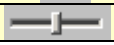
Chapter 7 Video Search

Click “Picture” icon and search the images which 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

Chapter 8 IP-Tool

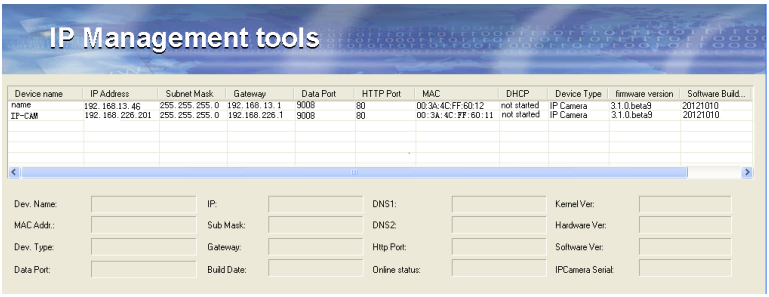
Updating through IP-Tool

Note: Do not cut off power supply and internet when updating; If the device is unable to start because of the failure of upgrade, it needs to retrofit.

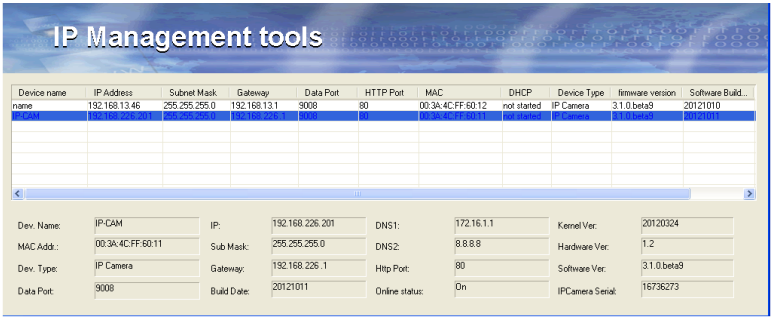
- **Modify IP address**

Acquire the IP-Tool from the supplier and then double click the IP-Tool icon 

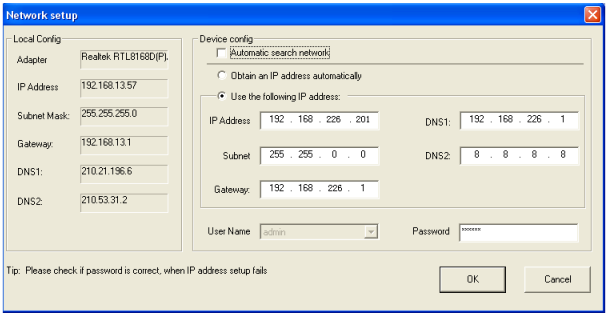
to run this software. Then the device can be searched; if the device can't be searched, please check whether the PC and the device connect to the network or not.



Click the device to check its detail information as shown below:



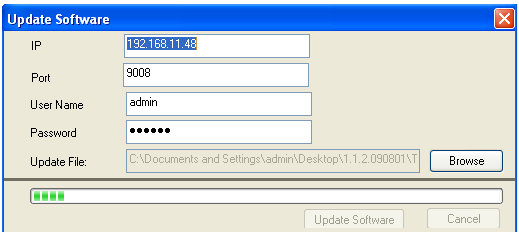
When upgrading the software and kernel, the IP address of PC and device should be at the same network segment. If the network segment is different, user should change the IP address by right clicking the device and then select "network setup". Modify IP address dialog box will appear as follows:



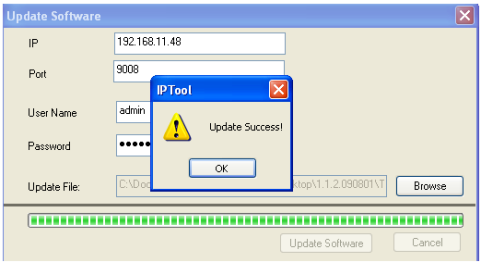
Modify IP address and click OK button to exit the dialog box. After that, IP-Tool will display the new IP address.

- **Upgrade Software**

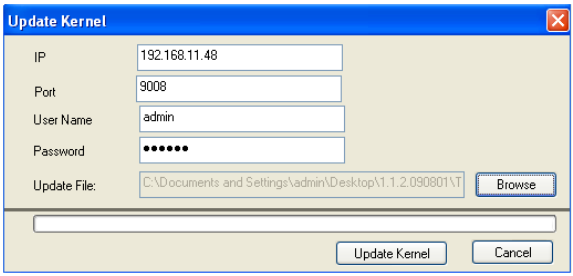
Select the device; right click "Update software". Click "Update" to start upgrading, the progress bar will display as below. When upgrading, please do not disconnect PC and the device and make sure the power is on.



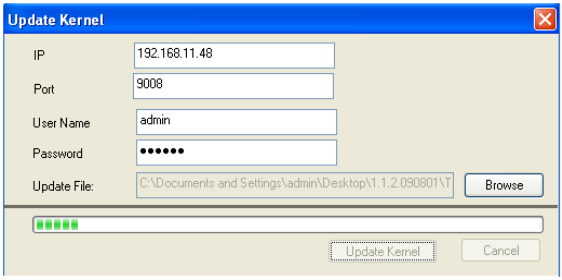
After finishing upgrading, a massage box will pop up as below:



Click OK button to exit the update dialog box, and then the device will restart automatically. Select the device and right click it to select "Update kernel". This will bring up a dialog box as below:



Input the relevant information and click “Browse” button to choose your update file. After that, click “Update Kernel” button to start updating. When upgrading, do not disconnect PC to device and make sure the power is on. The update progress bar will display as below:



After finishing upgrading, a message box will pop up. After a while, the device will restart automatically.

Chapter 9 Q & A

1. Q: I forget the password. How can I do?

A：Reset the system to the factory default setting by IP-Tool or contact the dealer.
Default IP: 192.168.226.201
User name: admin
Password: 123456

2. Q：The devices can't connect through IE browser. Why?

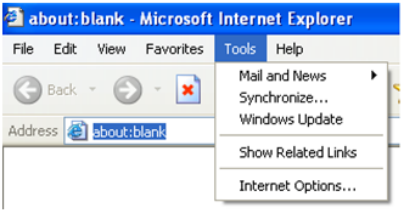
A: ① Network doesn't connect well. Please check the connection and make sure it is connected well.
② IP is not available. Reset the valid IP.
③ Web port number has been revised: contact administrator to get the correct port number.
④ Exclude the above reasons. Restore the default setting by IP-Tool.
Note: The default IP: 192.168.226.201，mask number: 255.255.255.0

3. Q：IP tool cannot search devices. How can I do?

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

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

A. IE browser blocks ActiveX. Please do setup following below.
① Open IE browser. Click Tools-----Internet Options….



② Select Security------Custom Level….Refer to Fig 4-1.
③ Enable all the sub options under "ActiveX controls and plug-ins". Refer to Fig 4-2.

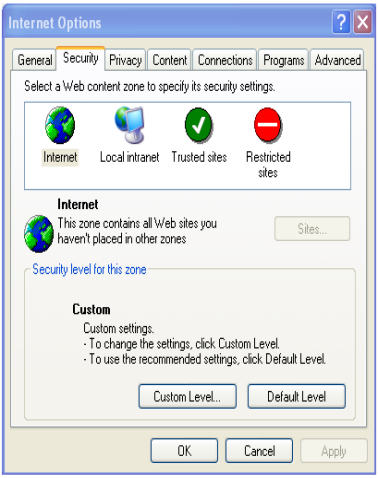


Fig 4-1

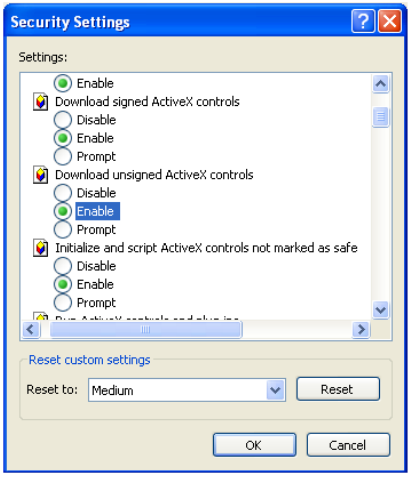


Fig 4-2

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

5. Q：Why does the device fail to sound?

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

6. Q：Why does the device connect to wireless abnormally?

A: Check the statues of wireless router. Please make sure the router is open.
Check the router and the device port. Please make the router setup is matched with device port.

7. Q: How to do when the device is unable to start normally when upgrading?

If the device is unable to start normally when upgrading, please rename the files suffixed with .tar as updatepack.tar and copy it to the root directory of SD card. Restart the device and then the device will upgrade automatically from the SD card. After finishing upgrading, the user can search the IP address of IP Cam in the IP Tool.

Chapter 10 Specifications

Model	2 Mega Pixel High Speed IP Camera
Image Sensor	1/3” CMOS
Effective Pixel	1920 x 1080
Horizontal Resolution	1000TVL
Low Illumination	0.5 Lux (Day), 0.1Lux(Night), 0.005Lux(DSS ON)
Lens	20xZoom, f = 4.7~94mm, F1.6~F3.5
	12 xZoom, f = 5.3~62.6mm, F1.8~F2.1
Pan Range	360 °endless rotation
Pan Speed	Preset speed: 160 °/s
Tilt Range	0~90 °
Tilt Speed	Preset speed: 120 °/s
Preset	255
Patrol	8
Trace	4
Time Task	8
Scan	2
Alarm Input	1 CH
Alarm Output	1 CH
Resolution	1920x1080,1280x720,640x480,320x240,160x120
Frame Rate	Max 30 fps
Storage	SD card local storage, network remote storage
Audio	MIC IN*1； MIC OUT*1
Network Protocol	TCP/IP, DHCP, PPPoE, DDNS, SMTP, UPnP，RTSP,NTP
Network Port	10Base-T/100Base-TX, RJ45
Remote Surveillance	IE Browse、CMS remote control
Online Users	Max 6
Protection Level	IP66 Weather-proof; 4KV lightening protection; surge protection
Power Supply	DC12V5A
Power Consumption	35W（max 50W, heater on）
Working Environment	-20℃~60℃, 10%~90% humidity

Appendix Preset Description

Call Preset	Call NO.90 Preset	Run trace 1
	Call NO.91 Preset	Run patrol 1
	Call NO.92 Preset	Run patrol 2
	Call NO.93 Preset	Run patrol 3
	Call NO.94 Preset	Run patrol 4
	Call NO.95 Preset	OSD menu
	Call NO.97 Preset	Enable random scan
	Call NO.99 Preset	Enable P-P SCAN
Set Preset	Set NO. 91 Preset	Set random scan, task auto call the beginning point
	Set NO. 92 Preset	Set left border of P-PSCAN
	Set NO. 93 Preset	Set right border of P-PSCAN

A0