



**Indoor Wireless/Wired
HD P2P Network Camera
(with H.264 image compression)**

Model XX59A

User Manual



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1. INTRODUCTION

It is recommended that you first read the Quick Setup Guide. This shows you how to set up your camera using Peer to Peer (P2P). This setup method is extremely fast and easy, and will get you set up in a matter of minutes. You can then refer to this Owner's Manual for more advanced features.

IMPORTANT NOTICE

The various screens throughout this owner's manual will look different depending on the browser you use. Full functionality is available when using Internet Explorer (IE) with ActiveX (OCX) installed. Limited functionality is available with other browsers, such as Safari, Chrome, and Firefox.

Please Read this manual carefully, according to the browser you are using.

This is an integrated wireless IP Camera solution. It combines a high quality digital Video Camera with network connectivity and a powerful web server to bring clear pictures to your Desktop from anywhere on your local network or over the Internet.

The main function of the camera is to transmit remote video over IP network. The high quality video image can be transmitted with 30fps speed on the LAN/WAN by using H.264, MJPEG compression technology.

It is based on the TCP/IP standard, build-in WEB server which supports Internet Explorer. Therefore the management and maintenance of your camera becomes simple by using the network to achieve the remote configuration, start-up and to upgrade firmware.

You can use your IP Camera to monitor your home or your office. Also, controlling and managing images are simple by visiting the web site.

1.1 Features

- ☆ Powerful high-speed video protocol processor
- ☆ High-sensitivity 1/4" CMOS sensor
- ☆ Picture total 1000K pixels (1 megapixel)
- ☆ Supports Pan and Tilt (PT) control, Pan 270°, Tilt 120°
- ☆ Optimized H.264 MJPEG video compression for transmission
- ☆ Multi-level user management and passwords definition
- ☆ Embedded Web Server for users to visit by IE
- ☆ Supports wireless network (WI-FI/802.11/b/g/n)
- ☆ Supports Dynamic IP (DDNS) and UPNP LAN and Internet (ADSL, Cable Modem)
- ☆ Gives an alarm in case of motion detection
- ☆ Supports image snapshot
- ☆ Supports multiple protocols: TCP/IP HTTP DNS DHCP PPPoE SMTP FTP SSL TFTP NTP ARP/RARP NFS RTSP RTP RTCP.
- ☆ Supports WEP/WPA/WPA2 encryption
- ☆ Supports IE, Firefox, Safari, and Google chrome browsers

1.2 Packing List

- IP Camera
- Wi-Fi Antenna
- User Manual & Quick Setup Guide
- DC Power Supply
- CD
- Network Cable
- Mounting bracket

1.3 Product Views

1.3.1 Rear View



1.3.2 Bottom View



Note QR code label for easy P2P setup. (See Quick Setup Guide).

1.4 PC System Requirements

System configuration requirements:

CPU: 2.06 GHZ or above.

Memory: 256M or above.

Network Card: 10M or above.

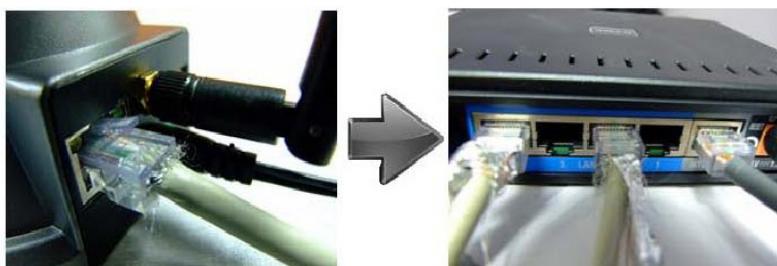
Display Card: 64M or above memory.

Recommended Operating system: Windows XP, Windows Vista, Windows 7.

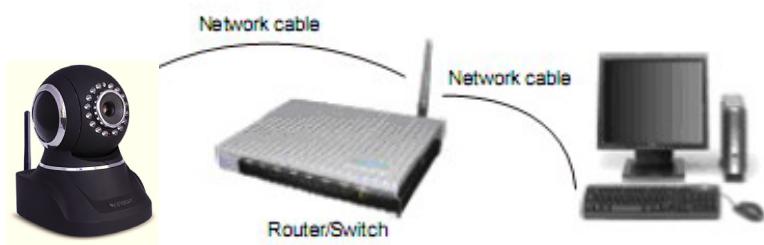
1.5 Hardware Installation

Follow the steps below to set up your camera hardware.

1. Install the Wi-Fi antenna.
2. Plug the power adaptor into the camera and into an AC outlet.
3. Plug the network cable into the camera and router/switch.



4. It takes approx 30 seconds to boot up the camera, then you will find the IP address from **Search IP Cam Tool** (Figure 1.5).
5. When the power is on and the network cable is connected, the green LED on the rear panel will stay on.
The yellow LED will keep flashing, and the Indicator LED on the front of the camera will flash.
(The indicator LED can be controlled by software).



2. INSTALLATION AND SETTINGS

System Requirement:

Operating System: Windows 2000 / XP / Vista / 7 / 8

Network Protocol: TCP/IP

Network Structure: Applies to all network connections 10/100M LAN platform

Browser: Internet Explorer 6.0 or above. Firefox, Google, Safari, or Chrome.

2.1 Network Connection

Intranet and Extranet Connection Reference:

Extranet means public IP (i.e. The Internet), Intranet means private IP. If your IP belongs to the follow range, then it's a private IP :

Category A: 10.0.0.0 - 10.255.255.255

Category B: 172.16.0.0 - 172.31.255.255

Category C: 192.168.0.0 - 192.168.255.255

Intranet Connection: The IP camera and your computer (device) should be under the same network environment, and both of the IPs should be under the same subnet, pictured as below:

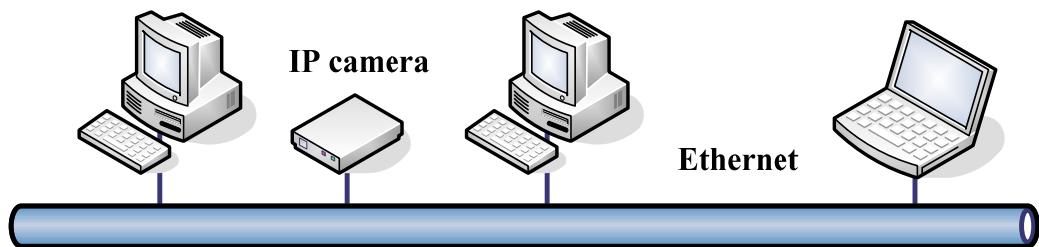


Figure 1.0

Extranet Connection: there are 2 ways as below:

(1). IP camera connects to the Internet via a router, here camera's IP is a private IP, client needs to connect to the IP camera through a router, with port forwarding to be connected correctly, as below:

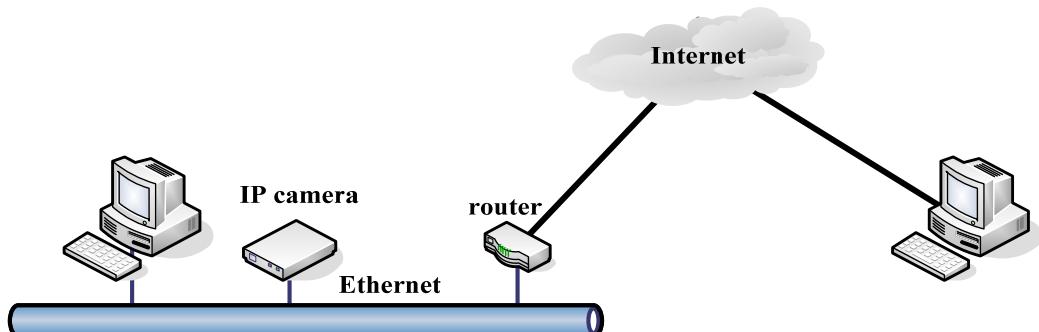


Figure 1.1

(2). IP camera connects to the Internet directly, if it's a fixed IP provided by your ISP, just input it. If it's a dynamic IP, then input the account and password provided by your ISP for broadband connection.

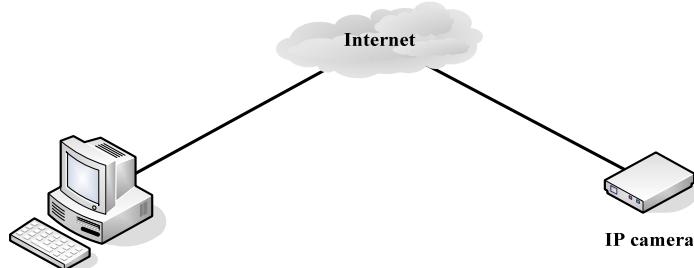


Figure 1.2

2.2 Browser Settings (For IE only)

OCX will be downloaded automatically when you login to the IP Camera, but you might have to set the IE browser to enable the OCX to be downloaded automatically after signing in. Steps as below:

1. Close the firewall of your computer.
2. Change the ActiveX settings, open your **IE** browser, select **Tools** then **Internet Options** then **Security** then **Custom Level** (See Figure 1.3).

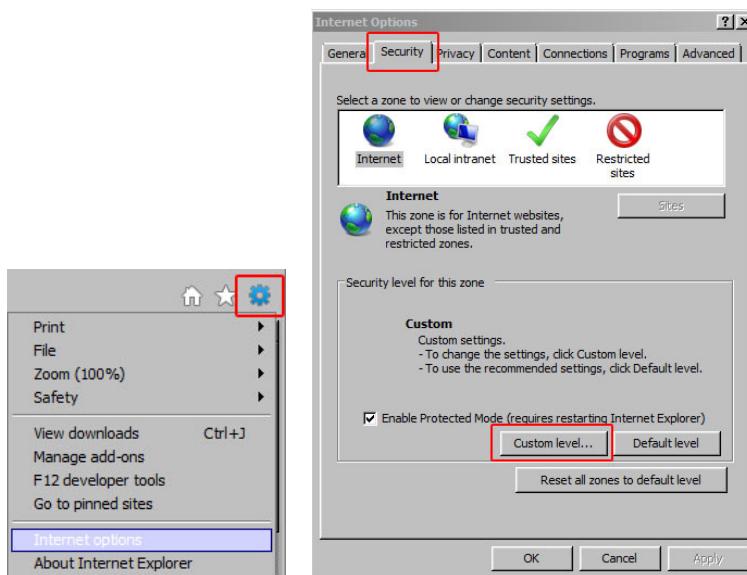


Figure 1.3

Then set the **ActiveX controls and plug-ins**. Set the ActiveX options to **Enable** or **Prompt** as indicated in Figure 1.4.

Note especially:

Prompt: Download unsigned ActiveX controls

Prompt: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins

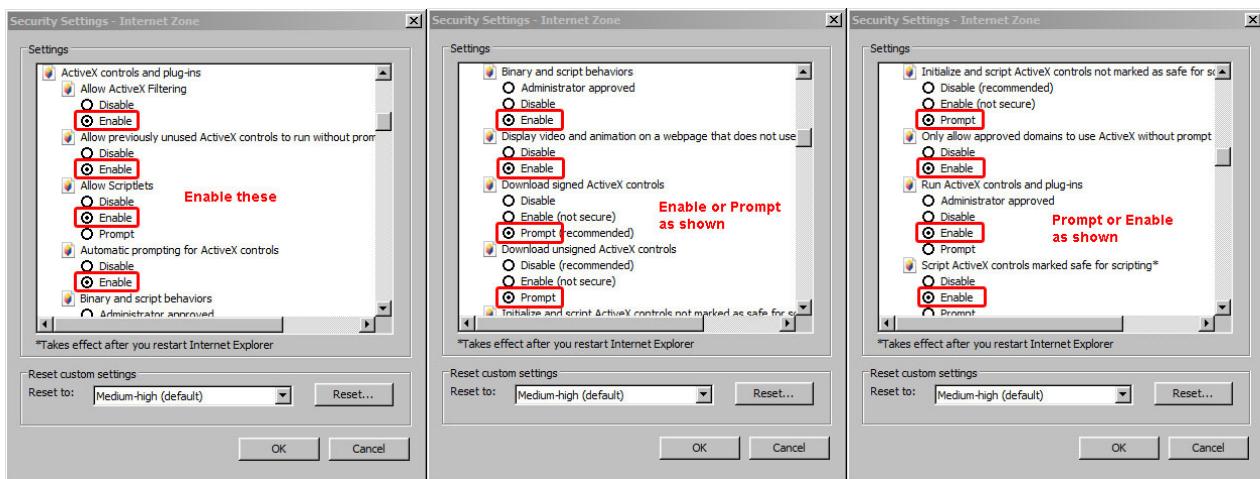


Figure 1.4

Click OK and restart the browser.

You can also click the **Start** menu then **Internet Explorer**, and choose **Internet attributes**, or via **Control Panel** select **Internet Explorer** to access Security settings.

NOTE: Make sure that your firewall or anti-virus software doesn't block the software or ActiveX. If you couldn't see live video, please close your firewall or anti-virus software, and try again.

2.3 UPnP Service

UPnP could help you to find your camera's IP more quickly. For Window XP, from **Control Panel > Add or remove applications > Add or remove Windows component > Network service > Detailed data > UPnP users interface**, the factory default settings is disabled. Enable it, then it can allow your operating system to support UPnP.

You can also click the **Start** menu then **Internet Explorer**, and choose **Internet attributes**, or via **Control Panel** select **Internet Explorer** to access Security settings.

2.4 SearchIPCam IP Address Search Tool (shown for IE browser below)

Step 1: Use tool **SearchIPCam.exe** to find IP address of LAN.

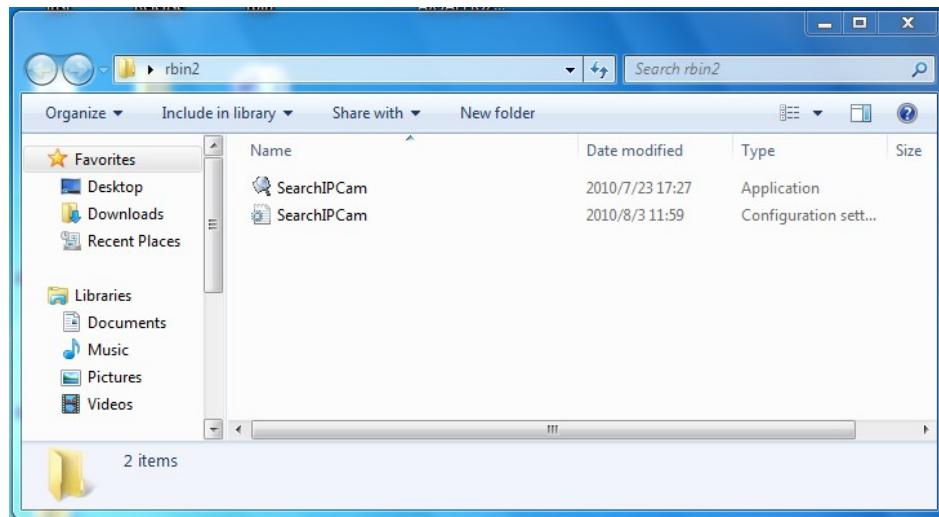
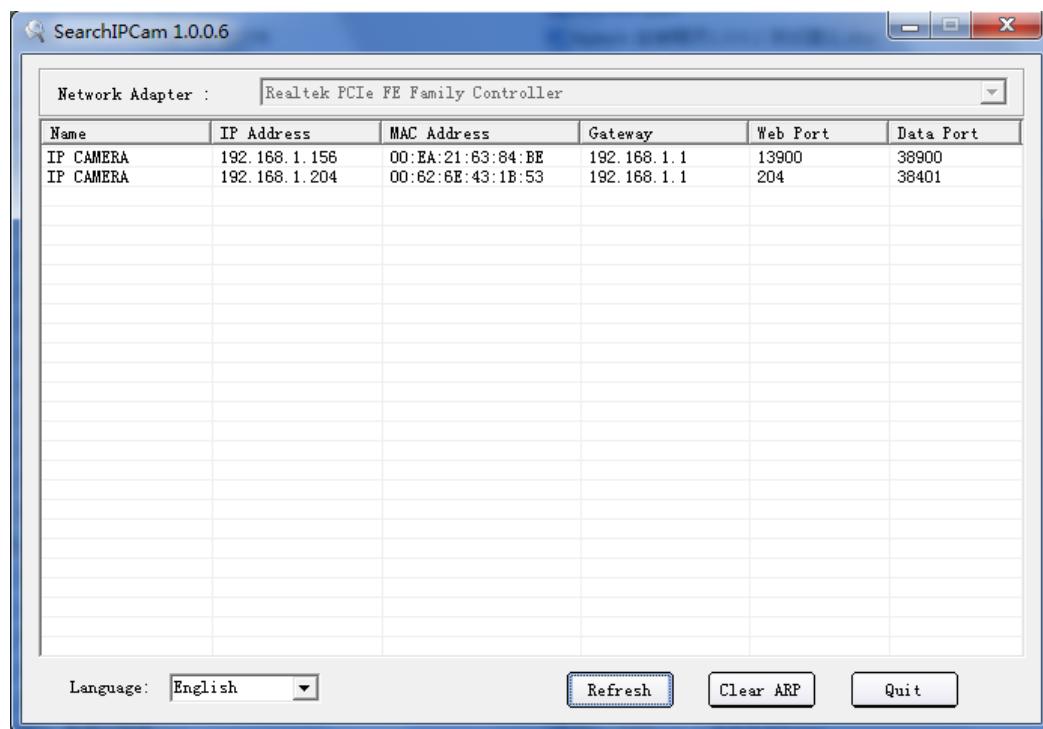


Figure 1.5

Step 2: Double click **Search IPCam** on your desktop, the camera's IP & MAC address will be displayed. If you want to search again, click **Search**.



Name	IP Address	MAC Address	Gateway	Web Port	Data Port
IP CAMERA	192.168.1.156	00:EA:21:63:84:BE	192.168.1.1	13900	38900
IP CAMERA	192.168.1.204	00:62:6E:43:1B:53	192.168.1.1	204	38401

Language: English

Refresh

Clear ARP

Quit

Figure 1.6

Step 3: Double-click the IP address of your camera to enter the login interface.



Figure 1.7

2.5 Install the OCX ActiveX (For IE only)

Install the OCX ActiveX for the first time login; click the **Load OCX** icon on the right bottom,

Download the OCX file, then double click to install it automatically.

After OCX installed fully, then input the user name and password to login the camera.

2.5.1 For other Browsers, e.g., Safari, Firefox, Chrome, there is no need to install the ActiveX control, see below:

The default IP address for each camera is 192.168.1.155. You can run the browser, and input the IP address directly into your browser to login to the camera.

NOTE: If the IP address of the computer is different from the camera you should change the IP address of the computer to the same as the camera. Connect the IP Camera to the computer via network cable. To change the address right-click on the camera listed in the Search IP Cam program and select **Network Configuration** then make sure **DHCP** is checked and click OK. The camera will reboot and show a new IP address different from that of the default. Then double-click the camera, and the login screen below will pop-up:



Figure 1.8

3. SOFTWARE OPERATION

1 Software operation for IE Browser

Choose your desired language, input correct user name and password, then click **Login**

User name: admin **Password:** leave blank, i.e. no password.



Figure 1.9

Language English Choose languages here

Mobile Phone For mobile phone login

For OCX installation (IE only)

Click to login the IE interface as below:



Figure 2.0

2 Software Operation For Chrome, Firefox, Safari:

Choose the suitable language, input correct user name and password, then click **Login**

User name: admin **Password:** leave blank, i.e. no password.

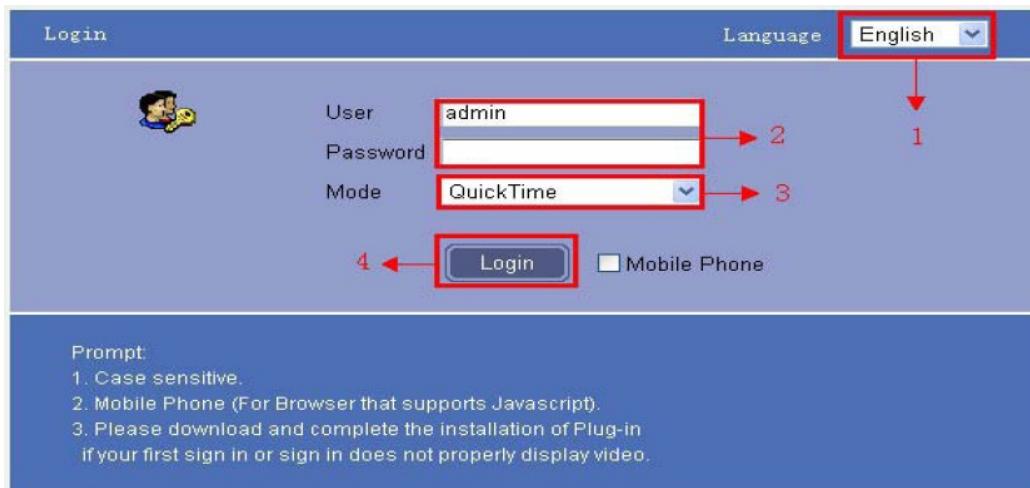
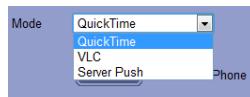


Figure 2.1



Choose the login mode.

QuickTime: Choose QuickTime, login to the camera directly. if there is prompt for installing the QuickTime player, just download and install it.

Sever Push: For Firefox, Chrome, or Safari browser.

VLC: If you use VLC, should download the VLC player first.

During the VLC installation, you must enable Mozilla plug-in as the picture shows below:

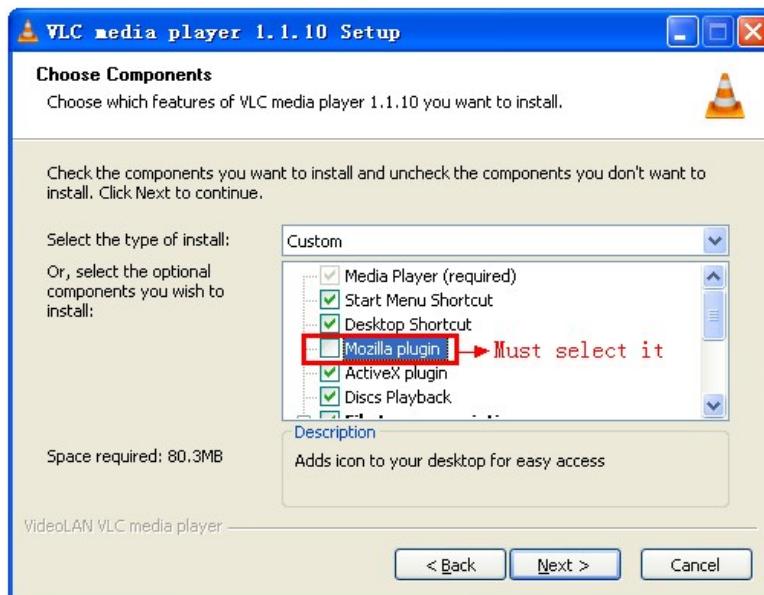


Figure 2.2

Language English Choose languages here

Mobile Phone For mobile phone login

Login

Click to login using other browsers (excluding IE).

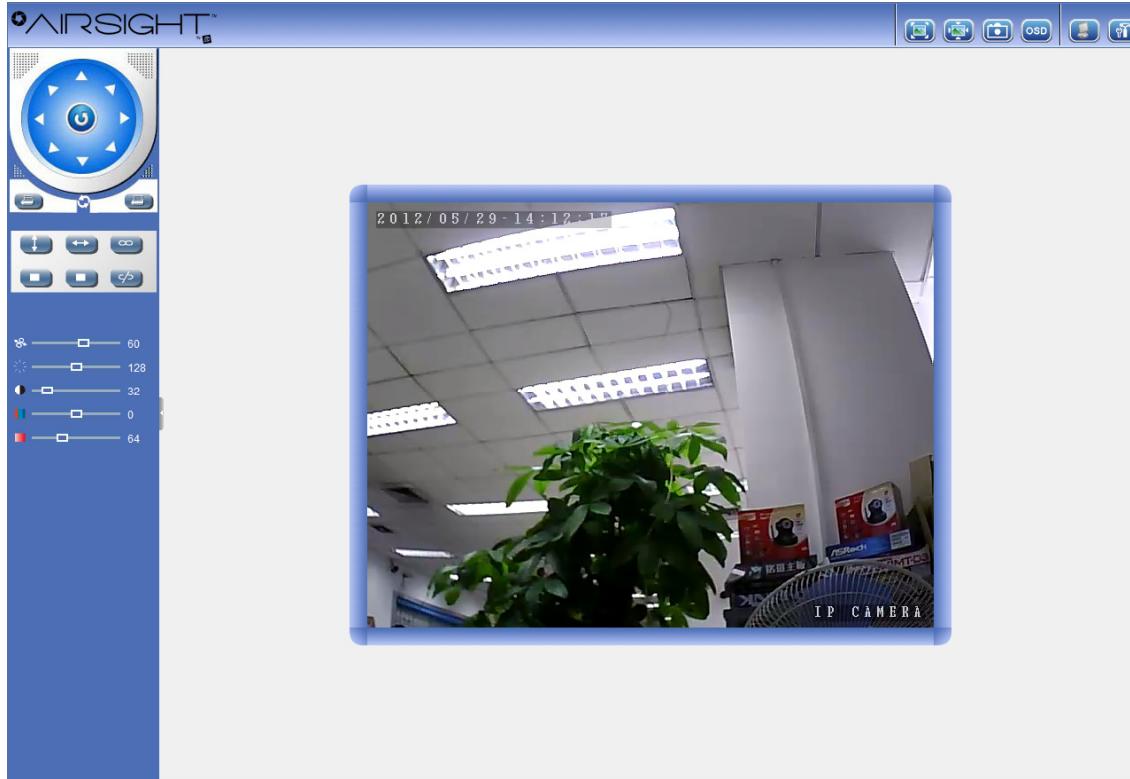


Figure 2.3

3.1 Functions

3.1.1 Three main functions (For IE):



Figure 2.4



Live video: Click it, back to live video window from **Playback** or **Params settings**



Playback: Click to query and playback the video files (**Details see 5 Playback**)



Params Settings: Setting the camera's parameters (**Details see 4 Params settings**)

3.1.2 Two main functions (For Safari, Chrome, Firefox)



Figure 2.5



Live video: Click it, back to live video window from **Playback** or **Params settings**



Params Settings: Setting the camera's parameters (**Details see 4 Params settings**)

3.2 For Live Video (for IE browser)

3.2.1 TOP Menu:



Figure 2.6



Play: Play the live video.



Stop: Stop the live video.



Listen: Click it to enable listen function, the icon will change to green color  can hear the live audio from camera via PC if audio is ON. Click it again, will stop listen function.



Talk: Click it to enable talk function, the icon will change to green color  can talk between PC and camera if audio device connected. Click it again, will stop talk function.



Capture: Click to take snapshot, the picture be saved in the PC to its appointed path as JPG format, and pop-up the prompt as below:

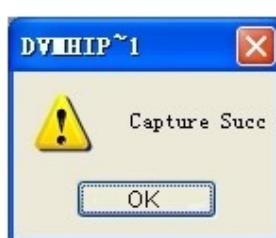


Figure 2.7



Record: Click to start record manually, the icon will change to green color  Record file will be saved in the PC to its appointed path as AVI format. Click it again, will stop record function.



Clear Alarm: Click to stop the alarm manually when there is an alarm triggered, and pop-up prompt as below:



Figure 2.8



OSD Settings: Click it will pop-up the OSD settings interface, including OSD Color, Frequency, Image Mirror and Flip.



Figure 2.9

OSD: Means “On-Screen Display”

OSD Color: Including Disabled, Black, Red, Green, Blue, Purple, Gray, Silver, Yellow, Olive, Turquoise, White, Light Blue etc.



Figure 3.0

Frequency: Including 50HZ, 60HZ, Outdoor.

50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for the users who want to use this camera to monitor an outdoor environment (through a window).

NOTE: The camera should only be used in a indoor environment.

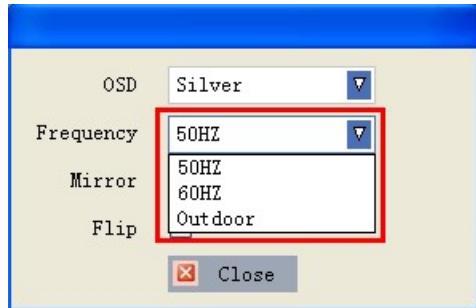


Figure 3.1

Mirror and Flip

Mirror: Select this checkbox to see a mirror image. Uncheck it to go back to normal.

Flip: Select this checkbox to flip the image upside down. Uncheck it to go back to normal.

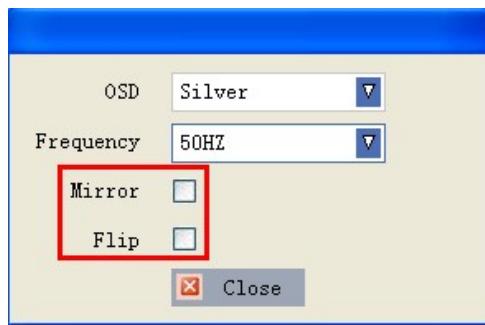


Figure 3.2

NOTE: You can choose Mirror and Flip function if you set up the camera in a special position, upside down for example.

 **Full Screen:** Click it, shift to full screen mode, double click left mouse or click the icon  on the left bottom to exit full screen mode.

3.2.2 Live Video for Safari, Chrome, Firefox:

3.2.2.1 TOP Menu For QuickTime Mode:



Figure 3.3

 **Capture:** Click to take snapshot, the picture be saved in the PC to its appointed path as JPG format, will pop-up the snapshot, right click the picture to save it.

 **OSD Settings:** Click it will pop-up the OSD settings interface, including OSD Color, Frequency, Image Mirror and Flip.

OSD	Green <input type="button" value="▼"/>
Mirror	<input type="checkbox"/>
Flip	<input type="checkbox"/>
Frequency	50HZ <input type="button" value="▼"/>

Figure 3.4

OSD: Means “On-Screen Display”

OSD Color: Including Disabled, Black, Red, Green, Blue, Purple, Gray, Silver, Yellow, Olive, Turquoise, White, Light Blue etc.

OSD	Green <input type="button" value="▼"/> Disabled Black Red Green Blue Purple Gray Silver Yellow Olive Turquoise White Light Blue
Mirror	
Flip	
Frequency	

Figure 3.5

Frequency: Including 50HZ, 60HZ, Outdoor.

50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for the users who want to use this camera to monitor an outdoor environment (through a window).

NOTE: The camera should only be used in an indoor environment.

Frequency	50HZ <input type="button" value="▼"/> 50HZ 60HZ Outdoor
-----------	--

Figure 3.6

Mirror and Flip

Mirror: Select this checkbox to see a mirror image. Uncheck it to go back to normal.

Flip: Select this checkbox to flip the image upside down. Uncheck it to go back to normal.

OSD	Green <input type="button" value="▼"/>
Mirror	<input type="checkbox"/>
Flip	<input type="checkbox"/>
Frequency	50HZ <input type="button" value="▼"/>

Figure 3.7

NOTE: You can choose Mirror and Flip function if you set up the camera in a special position, e.g., upside down.

3.2.1.2 Top Menu For VLC Mode:



Figure 3.8



Adaptive size of the display. Click it, will get adaptive size



The true size of the display. Click it, will back to the true size.



Capture: Click to take a snapshot, the picture will be saved to your PC to its appointed path in JPG format, it will pop-up the snapshot, right click the picture to save it.



OSD Settings: Click it will pop-up the OSD settings interface, including OSD Color, Frequency, Image Mirror and Flip.

3.2.1.3 Left Side Menu For IE browser

There are some basic operation icons listed on the left side menu as below:

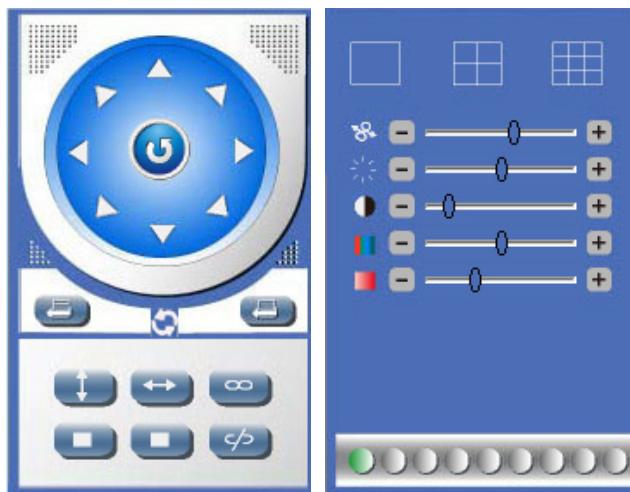


Figure 3.9

PT Control: Set Pan/Tilt as upward, downward, leftward, rightward, up-left, down-left, up-right, down-right, etc directions.



Center: Click this icon, the camera will pan/tilt, then stop at the center. Normally it will rotate 1 rotation.



Up: Click this icon, camera will move up, you can click one by one or hold it to control the movement.



Down: Click this icon, camera will move down, click it step by step or hold on to control the movement

NOTE: It is the same operation as left, right, up-left, up-right, down-left, down-right etc.

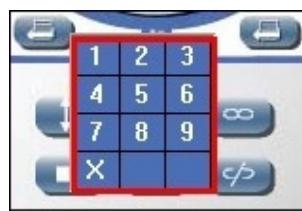


Figure 4.0

 **Set Preset:** It supports 9 preset positions. First, control the camera to rotate to the special position you need to set, click **Set Preset** button  it will pop-up a dialog frame (Figure 4.0), choose any number (1-9).

 **Call Preset:** It supports 9 preset positions. If you want to monitor an important area quickly and precisely, just click **Call Preset Position** button  it will pop-up a dialog frame (Figure 4.0), choose the number, then the camera will rotate to the preset position automatically.

If you want to use **Call Preset**, you have to **Set Preset** first.

NOTE: if you set different positions with a same number, the camera will record the last position setting only.



Cruise: Preset cruise, camera can cruise according to the different presets you set.



Click this icon, the camera will rotate up and down, i.e., vertical tilt, click to stop it



Click this icon, the camera will rotate left and right, i.e., horizontal pan, click to stop it



Click this icon, IO output Switch ON. Click to set it OFF.



Figure 4.1



Click this one, you can view the main channel of the camera you login to, move the mouse to the icon, the



frame will change to red color .



Click this one; you can view 4 Channels of cameras that are connected, from CH1 to CH4. Move the mouse



to the icon, the frame will change to red color .



Click this one; you can view 9 Channels of cameras that are connected, from CH1 to CH9. Move the mouse



to the icon, the frame will change to red color .

NOTE: If you want to view 4/9 channels, you should set the Multi-Device firstly (See section 4.13 Multi-Device Settings).

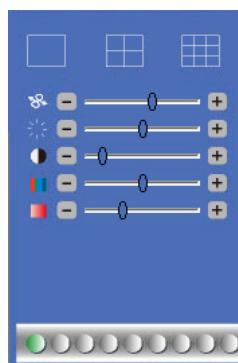


Figure 4.2



PTZ speed: set value from 1 to 100, click the icon, it will change back to the factory settings.



Brightness: set value from 0 to 255, click the icon, it will change back to the factory settings.



Contrast: set value from 0 to 255, click the icon, it will change back to the factory settings.



Hue: set value from -128 to 127, click the icon, it will change back to the factory settings.



Saturation: set value from 0 to 200, click the icon, it will change back to the factory settings.



Figure 4.3

There are 9 icons  at the bottom of the user interface which show the status of each channel of the camera.

-  **Gray color:** means there is no device connected to the main device from this channel.
-  **Green color:** means the device is connected for this channel, and it works OK.
-  **Red color:** means the device for this channel is recording.
-  **Yellow color:** means this channel is set in multi-device already, but it fails to connect to the main device.

3.2.1.4 Left Side Menu for Safari, Chrome, Firefox:

There are some basic operation icons listed on the left side menu as below:

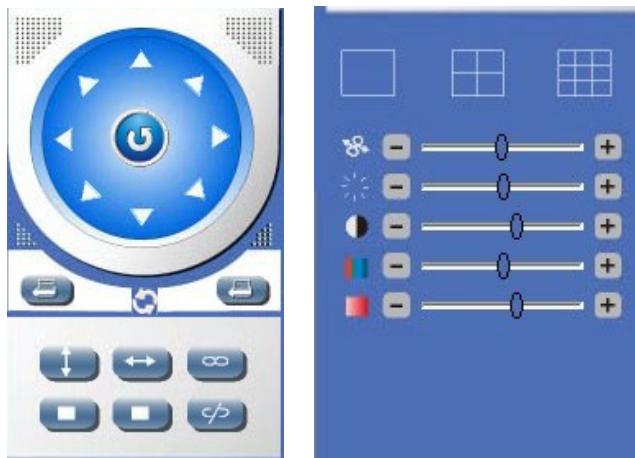


Figure 4.4

PT Control: Set Pan/Tilt as upward, downward, leftward, rightward, up-left, down-left, up-right, down-right, etc.

-  **Center:** Click this icon, the camera will pan/tilt, then stop at the center. Normally it will rotate 1 rotation.
-  **Up:** Click this icon, camera will move up, you can click step by step or hold it to control the movement.
-  **Down:** Click this icon, camera will move down, click it step by step or hold on to control the movement.

NOTE: It is the same operation as left, right, up-left, up-right, down-left, down-right etc.



Figure 4.5

Set Preset: It supports 9 preset positions. First, control the camera to rotate to the special position you need to set, click **Set Preset** button it will pop-up a dialog frame (Figure 4.5), choose any number (1-9).

Call Preset: It supports 9 preset positions. If you want to monitor an important area quickly and precisely, just click **Call Preset Position** button it will pop-up a dialog frame (Figure 4.5), choose the number, then camera will rotate to the preset position automatically.

If you want to use **Call Preset**, you have to **Set Preset** first.

NOTE: If you set different positions with a same number, camera will record the last position setting only.

Cruise: Preset cruise, camera can cruise according to the different presets you set.

Click this icon, the camera will rotate up and down, i.e., vertical tilt, click to stop it.

Click this icon, the camera will rotate left and right, i.e., horizontal pan, click to stop it.

Click this icon, IO output Switch ON. Click to set it OFF.

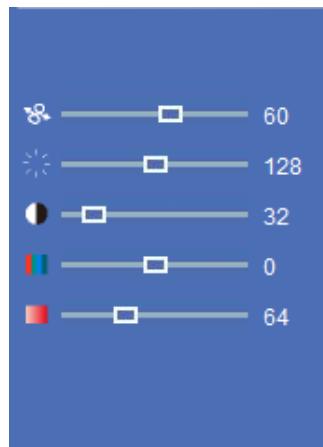


Figure 4.6

PTZ speed: set value from 1 to 100, click the icon to go back to the factory settings.

Brightness: set value from 0 to 255, click the icon to go back to the factory settings.

Contrast: set value from 0 to 255, click the icon to go back to the factory settings.

Hue: set value from -128 to 127, click the icon to go back to the factory settings.

Saturation: set value from 0 to 200, click the icon, it will back to factory settings.

4. PARAMS SETTINGS

4.1 Device Info.

Click **Params Settings** icon  select **Device info**, it will show the basic information such as **Device ID**, **Device Client**, **Device Host**, **Description**, **IP Address**, **UPNP Status**, **DDNS Status** etc.

Default device name is **IP Camera**, users can change the camera's description here, picture as below:

4.1.2 For IE, the display will look as below:



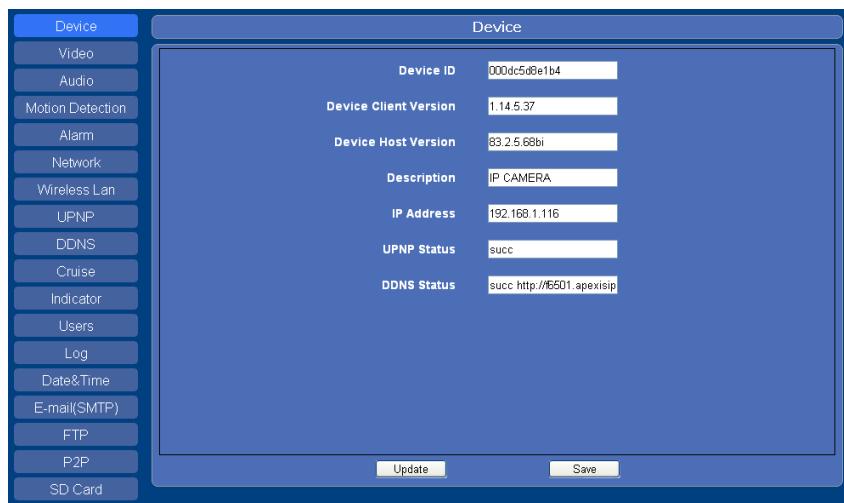
The screenshot shows the 'Device Info' configuration page of the Network Video Server. The left sidebar lists various settings like Device Info, Video Info, Audio Settings, etc. The main panel displays the following fields:

Device ID	00127b63ff19
Device Client Version	6.11.5.12
Device Host Version	8.1.5.55
Description	IP CAMERA
IP Address	192.168.1.167
UPNP Status	Normal
DDNS Status	Normal http://b8082.gipcam.com:80

Buttons for Save and Refresh are located on the right.

Figure 4.7

4.1.3 For Safari, Chrome, Firefox, the display will look as below:



The screenshot shows the 'Device Info' configuration page of the Network Video Server. The left sidebar lists various settings like Device, Video, Audio, etc. The main panel displays the following fields:

Device ID	000d5d8e1b4
Device Client Version	1.14.5.37
Device Host Version	83.2.5.68b1
Description	IP CAMERA
IP Address	192.168.1.116
UPNP Status	SUCC
DDNS Status	SUCC http://f6501.apexisip

Buttons for Update and Save are located at the bottom.

Figure 4.8

4.2 Video Info.

Click **Video Info** to enter the interface as below:

4.2.1 For IE, the display will look as below:

The screenshot shows the 'Video Info' configuration page. On the left, a sidebar lists various device settings: Device Info, Video Info (selected), Audio Settings, Motion Detection, Alarm Settings, Basic Network Settings, Wireless Lan Settings, UPNP Settings, Cruise Settings, Indicator Settings, User Manage, Log, Date Time Settings, Multi-Device Settings, Mail Service Settings, FTP Service Settings, P2P Settings, SD-Card Info, Local Settings, and System Tool. The main area is titled 'Main-Stream' and contains four configuration fields: Resolution (1280*720), Frame Rate (25), Bit Rate (1 Mb/s), and Image Quality (Pretty good). Below it is a 'Sub-Stream' section with similar fields: Resolution (640*368), Frame Rate (25), Bit Rate (384Kb/s), and Image Quality (Standard). At the bottom, there are checkboxes for 'Main-Stream' (checked) and 'Sub-Stream' (unchecked), and two buttons: 'Save' and 'Update'.

Figure 4.9

4.2.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows the 'Video' configuration page. It has a similar structure to Figure 4.9, with a sidebar on the left and configuration sections for Main-Stream, Sub-Stream, and Initial-Stream. The Main-Stream section includes fields for Resolution (1280*720), Frame Rate (25), Bit Rate (1Mb/s), and Image Quality (Pretty good). The Sub-Stream section includes fields for Resolution (640*368), Frame Rate (25), Bit Rate (384Kb/s), and Image Quality (Standard). At the bottom, there are checkboxes for 'Main-Stream' (checked) and 'Sub-Stream' (unchecked), and two buttons: 'Update' and 'Save'.

Figure 5.0

There are two options for stream, **Main-Stream** and **Sub-Stream**, you can set the stream based on the actual operation environment, for example, if the bandwidth is good enough, set Main-Stream as Initial-Stream, or choose Sub-Stream if better.

Set the parameters of **Main-Stream** and **Sub-Stream** as below:

Resolution: 1280 x 720, 640 x 368, 320 x 208 optional.

Frame Rate: Set the frame rate according to the bandwidth. Frame rate could be **Auto** or **from 1 fps to 30 fps (Real time)**. If the network situation is not ideal, you can reduce the frame rate to control the coding rate, make the moving pictures smoother.

Bit Rate: Higher bite rate means better quality images, but takes more bandwidth, so adjust the settings according to the actual bandwidth available. The range of bit rate from 128 Kbps ~ 4 Mbps.

For IE, the display will look as below:

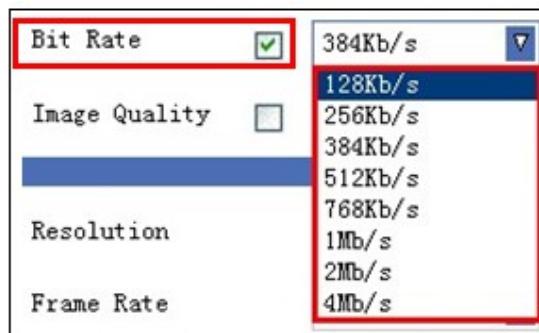


Figure 5.1

For Safari, Chrome, Firefox, the display will look as below:

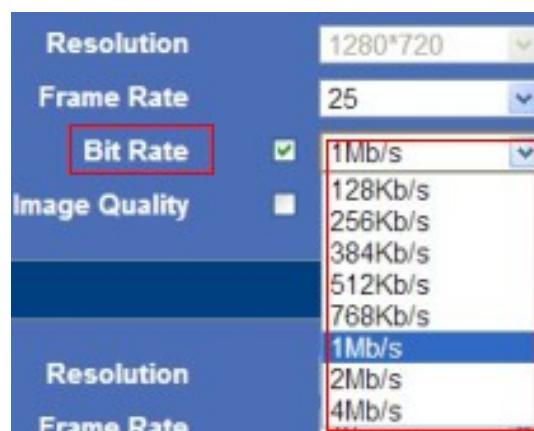


Figure 5.2

Image Quality: Better image quality, higher bit rate value, but it will take more bandwidth, the image quality parameters could be set as below:

For IE, the display will look as below:

The screenshot shows a configuration interface for video streams. It is divided into three sections: Main-Stream, Sub-Stream, and Initial-Stream.

- Main-Stream:** Resolution: 1280*720, Frame Rate: 25, Bit Rate: 1Mb/s, Image Quality: Medium (selected).
- Sub-Stream:** Resolution: 640*368, Frame Rate: 25, Bit Rate: 384Kb/s, Image Quality: Medium (selected).
- Initial-Stream:** Contains checkboxes for Main-Stream (checked) and Sub-Stream (unchecked), and two buttons: Save and Update.

Figure 5.3

For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows a configuration interface for video streams, similar to Figure 5.3 but with a different visual style.

- Main-Stream:** Resolution: 1280*720, Frame Rate: 25, Bit Rate: 1Mb/s, Image Quality: Medium (selected).
- Sub-Stream:** Resolution: 640*368, Frame Rate: 25, Bit Rate: 384Kb/s, Image Quality: Medium (selected).
- Initial-Stream:** Contains checkboxes for Main-Stream (checked) and Sub-Stream (unchecked), and two buttons: Update and Save.

Figure 5.4

NOTE: You can select Bit Rate and Image Quality here (Low, Medium, High).

4.3 Audio Settings

Click **Audio Settings** to enter the interface:

4.3.1 For IE, the display will look as below:

The screenshot shows the **>Audio Settings** interface. On the left is a sidebar with navigation links: Device Info, Video Info, **Audio Settings** (selected), Motion Detection, Alarm Settings, Basic Network Settings, and Wireless Lan Settings.

The main panel contains the following settings:

Built-in headset	<input checked="" type="checkbox"/>
External headset	<input type="checkbox"/>
Microphone Volume	5
Speaker Volume	10

At the bottom right are Save and Update buttons.

Figure 5.5

4.3.2 For Safari, Chrome, Firefox, the display will look as below:

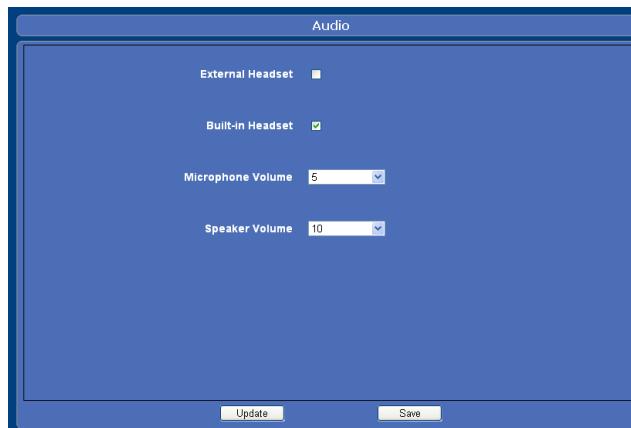


Figure 5.6

Built-in headset: Choose built-in MIC as the audio input device.

External headset: Choose external headset as the audio input device.

Microphone volume: Adjust device microphone volume here.

Speaker volume: Adjust device speaker volume here.

4.4 Motion Detection

- **Alarm output:** Select it to enable alarm output, unselect to stop.
- **SD-Card Record:** Select it to enable record to SD card, unselect to stop.
- **Send E-mail:** Select it to enable E-mail alert function, unselect to stop. (Mail service details see 4.14).
- **FTP Upload:** Select it to enable FTP upload function, unselect to stop. (FTP details see 4.15).

Click **Save** to save all the settings.

Click **Update** to refresh the settings.

4.4.1 Motion Detection settings for IE browser:

Click **Motion Detection** to enter the interface:

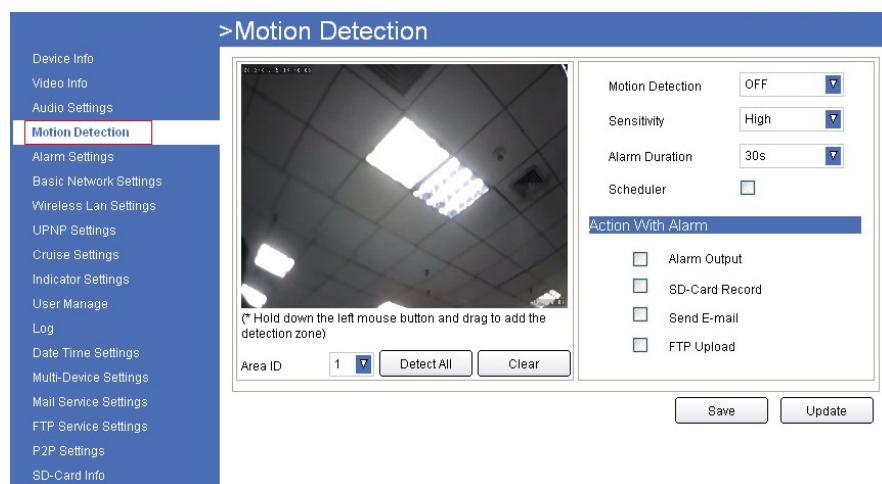


Figure 5.7

Motion Detection Zone Armed:

Can set all zones to be armed, or a specified zone to be armed.

Before setting a specified zone, you should set **Motion Detection** to **ON**, then press left mouse, drag the mouse onto video area to set the detection zone, and save it, supports 3 areas.

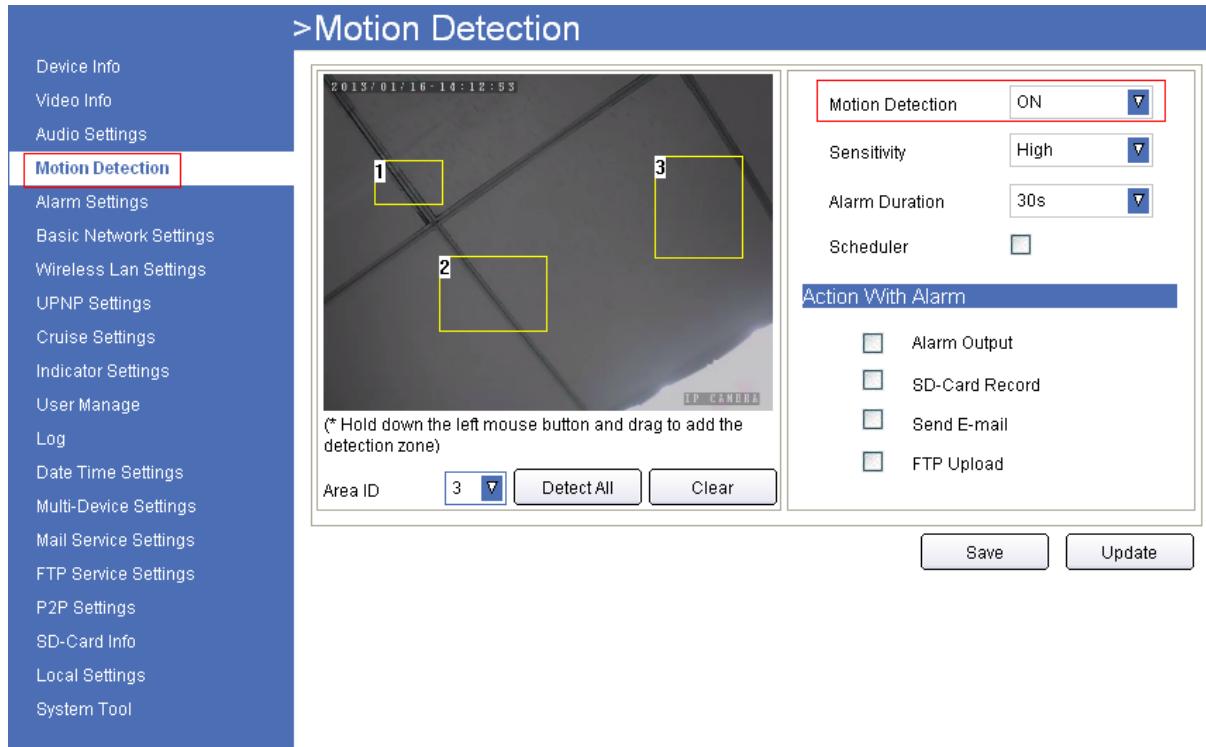


Figure 5.8

- **Detect All:** Setting the whole video window as the motion detect armed zone.
- **Clear:** Clear all armed zone.
- **Motion Detection:** Set motion detection armed function ON/OFF.

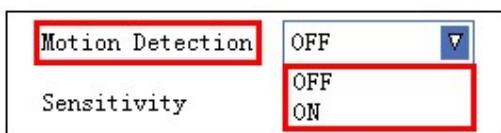


Figure 5.9

- **Sensitivity:** Set detection sensitivity as Low, Middle, High, Higher, Highest.

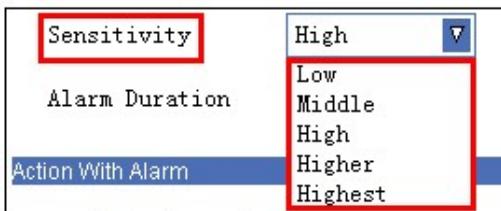


Figure 6.0

- **Alarm Duration:** Set each alarm duration, can be forever, 5s, 10s, 15s, 30s, 60s.

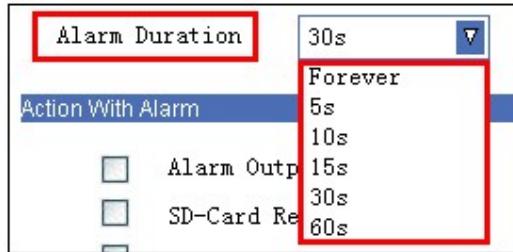


Figure 6.1

Action with Alarm

These are actions optional for motion detection.

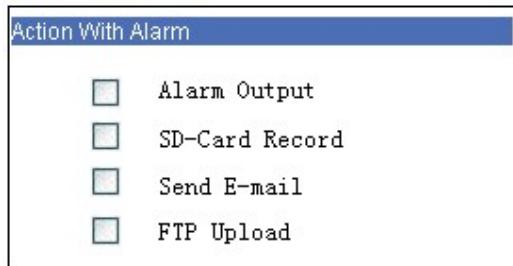


Figure 6.2

Scheduler

Set motion detection under your own schedule here.

Check **Scheduler**, a calendar is shown, set your schedule, click **Save** to finish settings, and click **Update** to refresh the camera.

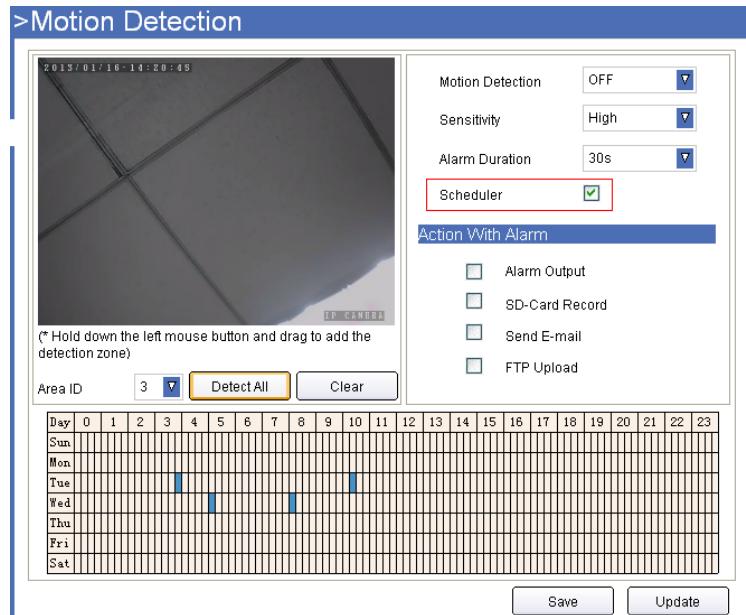


Figure 6.3

4.4.2 Motion Detection Settings for Safari, Chrome, Firefox:

Click **Motion Detection** to enter the interface:

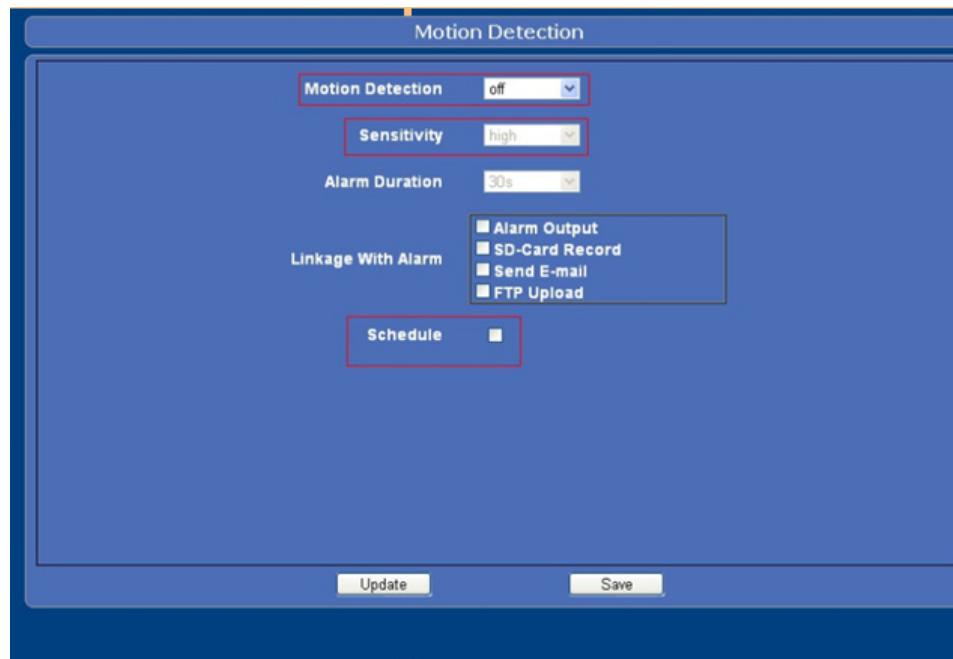


Figure 6.4

- **Motion Detection:** Set motion detection armed function ON/OFF.



Figure 6.5

- **Sensitivity:** Set detection sensitivity as Low, Middle, High, Higher, Highest.

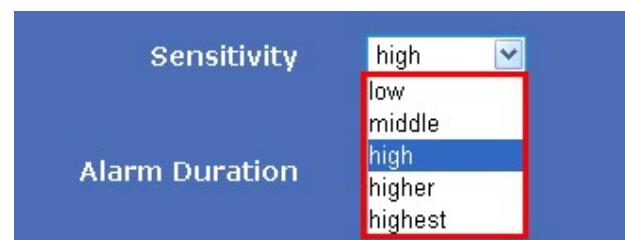


Figure 6.6

- **Alarm Duration:** Set each alarm duration, can be Forever, 5s, 10s, 15s, 30s, 60s.

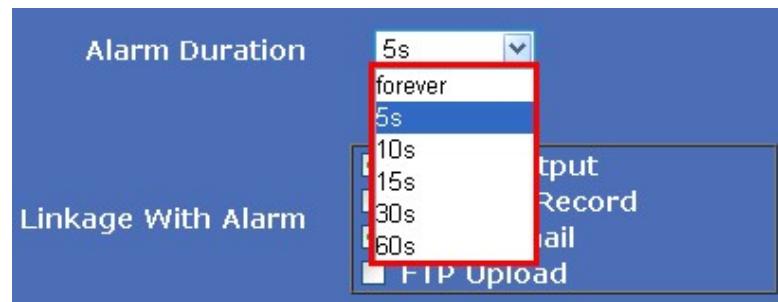


Figure 6.7

Linkage with Alarm

These are actions optional for motion detection.

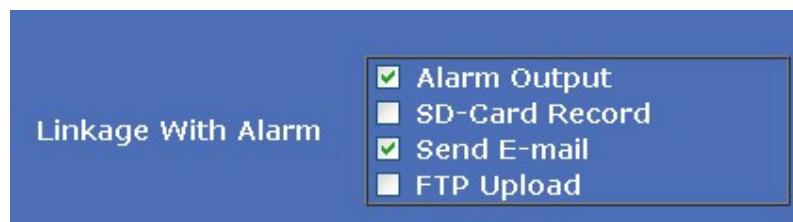


Figure 6.8

Scheduler

Set motion detection under your own schedule here.

Check **Schedule**, a calendar is shown, set your schedule, click **Save** to finish settings, and click **Update** to refresh the camera.

Motion Detection																								
Motion Detection	off																							
Sensitivity	high																							
Alarm Duration	30s																							
Linkage With Alarm																								
<input checked="" type="checkbox"/> Alarm Output <input type="checkbox"/> SD-Card Record <input checked="" type="checkbox"/> Send E-mail <input type="checkbox"/> FTP Upload																								
<input checked="" type="checkbox"/> Schedule																								
Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun																								
Mon																								
Tue																								
Wed																								
Thu																								
Fri																								
Sat																								
<input type="button" value="Update"/> <input type="button" value="Save"/>																								

Figure 6.9

4.5 Alarm Settings

Alarm output: Select it to enable alarm output, unselect to stop.

SD-Card Record: Select it to enable record to SD card, unselect to stop.

Send E-mail: Select it to enable E-mail alert function, unselect to stop. (Mail service details see 4.14).

FTP Upload: Select it to enable FTP upload function, unselect to stop. (FTP details see 4.15).

Click **Save** to save all the settings.

Click **Update** to refresh the settings.

4.5.1 Alarm Settings for IE

Click **Alarm Settings** to enter the interface:

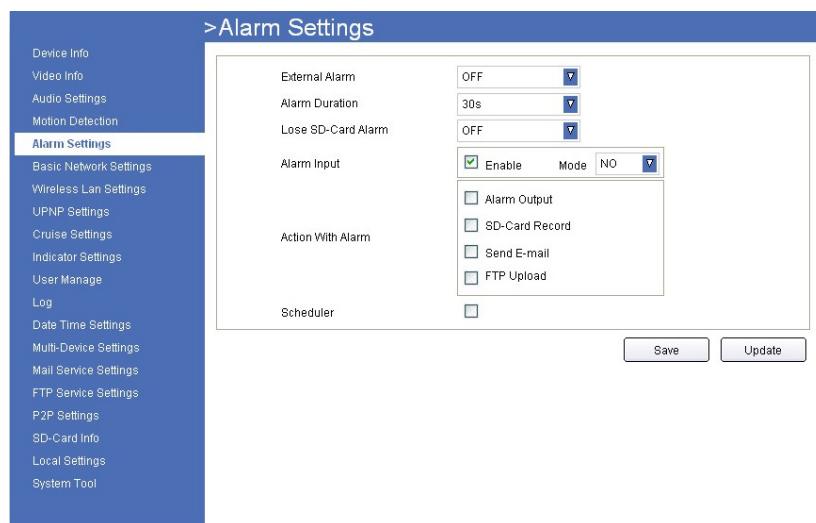


Figure 7.0

- **External Alarm:** Set external alarm function ON/OFF.

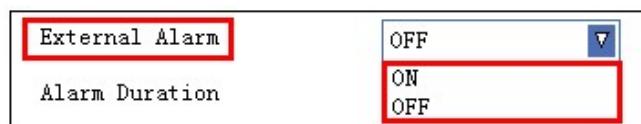


Figure 7.1

- **Alarm Duration:** Set external alarm output duration (Relay close time), can be Forever, 5s, 10s, 15s, 30s, 60s.



Figure 7.2

- **Lose SD-Card Alarm:** Set alarm triggered ON/OFF if the SD-Card is lost.

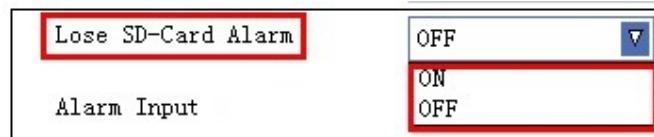


Figure 7.3

- **Alarm Input:** Set alarm input ON/OFF, it supports NO/NC external alarm device, choose the correct mode to make sure it works well.



Figure 7.4

• Action with Alarm

These are actions optional for external alarm triggered.

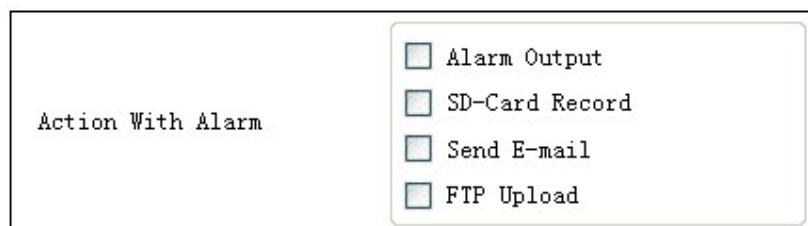


Figure 7.5

Scheduler

Set Alarm under your own schedule here.

Check **Enable** and **Scheduler**, a calendar is shown, set your schedule, click **Save** to finish settings, and click **Update** to refresh the camera.

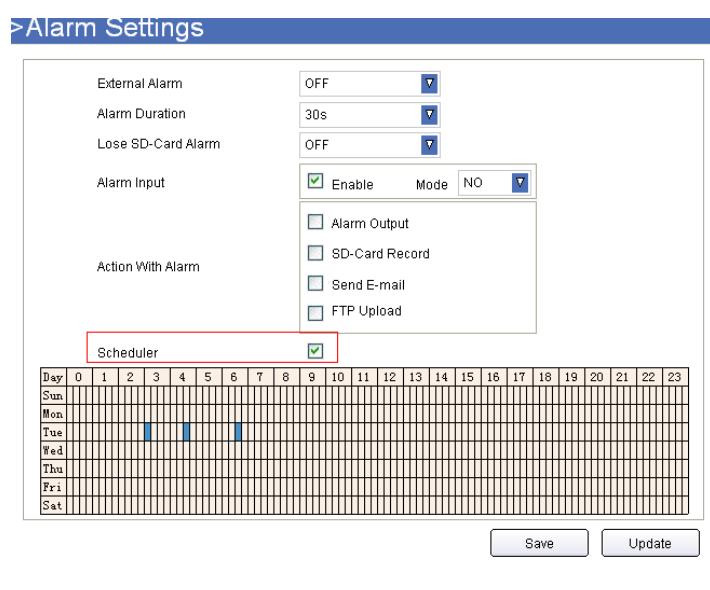


Figure 7.6

4.5.2 Alarm Settings for Safari, Chrome, Firefox

Click **Alarm** to enter the interface:

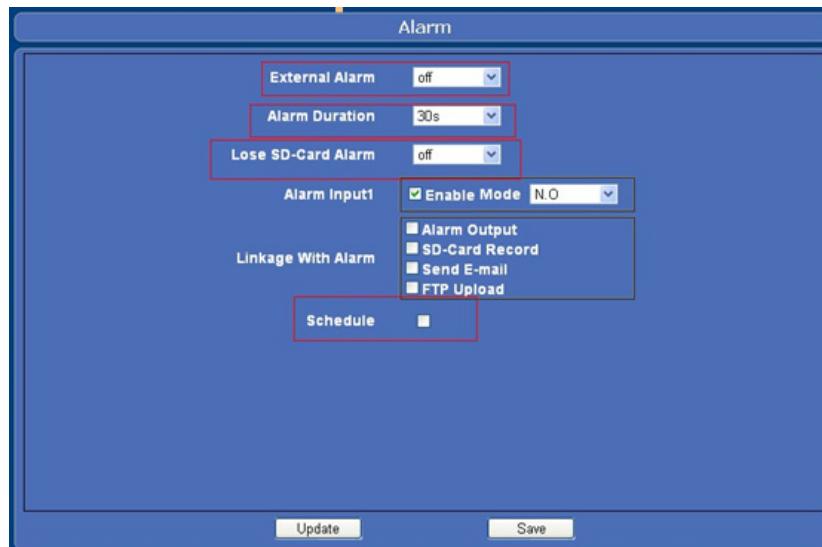


Figure 7.7

- **External Alarm:** Set external alarm function ON/OFF.

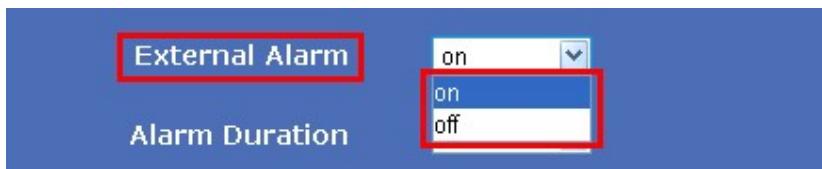


Figure 7.8

- **Alarm Duration:** Set external alarm output duration (Relay close time), can be Forever, 5s, 10s, 15s, 30s, 60s.



Figure 7.9

- **Lose SD-Card Alarm:** Set alarm triggered ON/OFF if the SD-Card is lost (removed).



Figure 8.0

- **Alarm Input:** (Refers to the I/O input 1). Set alarm input ON/OFF, (it supports NO/NC external alarm device), choose the desired mode.



Figure 8.1

• Action with Alarm

These are actions optional for external alarm triggered.



Figure 8.2

Scheduler

Set Alarm under your own schedule here.

Check **Schedule**, a calendar is shown, set your schedule, click **Save** to finish settings, and click **Update** to refresh camera.

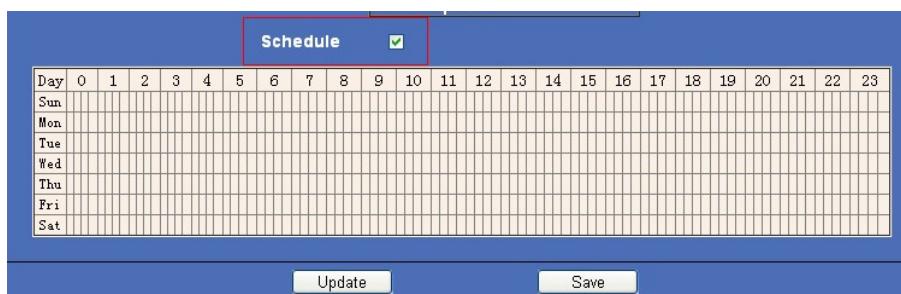


Figure 8.3

4.6 Basic Network Settings

Click **Basic Network Settings** to enter the interface:

- **Media Port:** Default is 38401.
- **Web Port:** Default is 80.
- **ONVIF Port:** Default is 2012. (Camera supports ONVIF, version 2.0, so you can connect to your additional devices that support the ONVIF protocol.)
- **RTSP Port:** Default is 554.
- **IP Address:** Set the IP address of camera.
- **Subnet Mask:** Default is 255.255.255.0.
- **Gateway:** Set the gateway of IP camera. If the camera connects to an extranet via a router, then the gateway is the router's IP.

NOTE: Don't change the **Media Port**, **Web Port**, **ONVIF Port**, **RTSP Port** if not necessary.

4.6.1 For IE, the display will look as below:

>Basic Network Settings

Device Info	
Video Info	
Audio Settings	
Motion Detection	
Alarm Settings	
Basic Network Settings	
Wireless Lan Settings	
UPNP Settings	
Cruise Settings	
Indicator Settings	
User Manage	
Log	
Date Time Settings	
Multi-Device Settings	
Mail Service Settings	
FTP Service Settings	
P2P Settings	
SD-Card Info	

Network Type: DHCP

Media Port: 38401

Web Port: 80

ONVIF Port: 2012

RTSP Port: 554

DNS Server: 192 . 168 . 1 . 248

MAC Address: 00:11:22:33:4A:5A

Enable DDNS: Close

DDNS Server Type: Factory DDNS

DDNS User: abc

DDNS Password: ***

DDNS Host Name: abc.cipcam.com

Figure 8.4

4.6.2 For Safari, Chrome, Firefox, the display will look as below:

Network

Network Type	Dynamic
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554
DNS Server	192.168.1.1
MAC Address	00:11:22:33:4A:5A

Update Save

Figure 8.5

Network Type: There are three modes: **Static Address, DHCP, PPPoE.**

For IE, the display will look as below:

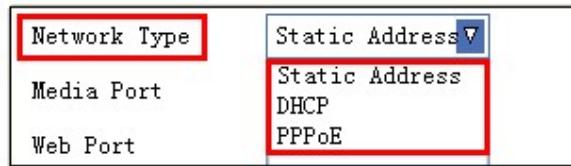


Figure 8.6

For Safari, Chrome, Firefox, the display will look as below:

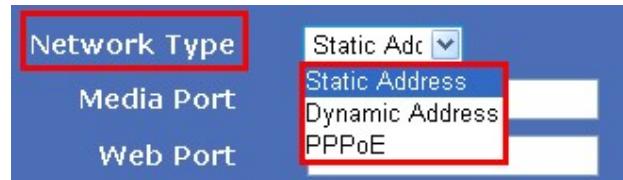


Figure 8.7

4.6.1 Static Address

Set network parameters manually

4.6.1.1 For IE, the display will look as below:

Network Type	Static Address
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554
IP Address	192 . 168 . 1 . 15
Subnet Mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 1 . 1

Figure 8.8

4.6.1.2 For Safari, Chrome, Firefox, the display will look as below:

Network Type	Static Adc
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554
IP Address	192.168.1.155
Subnet Mask	255.255.255.0
Gateway	192.168.1.1

Figure 8.9

4.6.2 DHCP

Choose DHCP, the camera will get IP address automatically.

4.6.2.1 For IE, the display will look as below:

Network Type	DHCP
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554

Figure 9.0

4.6.2.2 For Safari, Chrome, Firefox, the display will look as below:

Network Type	Dynamic /
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554

Figure 9.1

- **Media Port:** Default is 38401.

- **Web Port:** Default is 80.

ONVIF Port: Default is 2012. (Camera supports ONVIF, version 2.0, so you can connect to your additional devices that support the ONVIF protocol.)

- **RTSP Port:** Default is 554.

NOTE: Don't change the Media Port, Web Port, ONVIF Port, RTSP Port if not necessary.

4.6.3 PPPoE

Set parameters here to enable PPPoE function.

4.6.3.1 For IE, the display will look as below:

Network Type	PPPoE
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554
Enable PPPoE	Close
PPPoE User	abc
PPPoE Password	***
PPPoE IP Addr	153.24.65.1

Figure 9.2

4.6.3.2 For Safari, Chrome, Firefox, the display will look as below:

Network Type	PPPoE
Media Port	38401
Web Port	80
ONVIF Port	2012
RTSP Port	554
Enable PPPoE	close
PPPoE User	abc
PPPoE Password	***
PPPoE IP Address	153.24.65.1

Figure 9.3

- **Media Port:** Default is 38401.

- **Web Port:** Default is 80.

ONVIF Port: Default is 2012. (Camera supports ONVIF, version 2.0, so you can connect to your additional devices that support the ONVIF protocol.)

- **RTSP Port:** Default is 554.

- **Enable PPPoE:** Choose Open to enable PPPoE function.

- **PPPoE User:** The account provided by ISP

- **PPPoE Password:** The password provided by ISP.

- **PPPoE IP Addr.** If PPPoE dial-up succeed, it will display the IP address distributed by your ISP.

NOTE: Don't change the **Media Port**, **Web Port**, **ONVIF Port**, **RTSP Port** if not necessary.

For IE, the display will look as below:

DNS Server	192.168.1.1
MAC Address	00:11:22:33:02:03

Figure 9.4

For Safari, Chrome, Firefox, the display will look as below:

DNS Server	192.168.1.1
MAC Address	00:11:22:33:44:5

Figure 9.5

- **DNS Server:** Set DNS server.
- **MAC Address:** MAC address of the IP Camera.

If you don't know **Subnet Mask**, **Gateway**, **DNS Server**. Please check the Local Area Connection Status of your computer; it contains all this information, steps as below:

1. Control Panel > Network Connections > Local Area Connections > Support > Details

2. Find the local connection icon  from taskbar, left click it, choose **Support > Details**

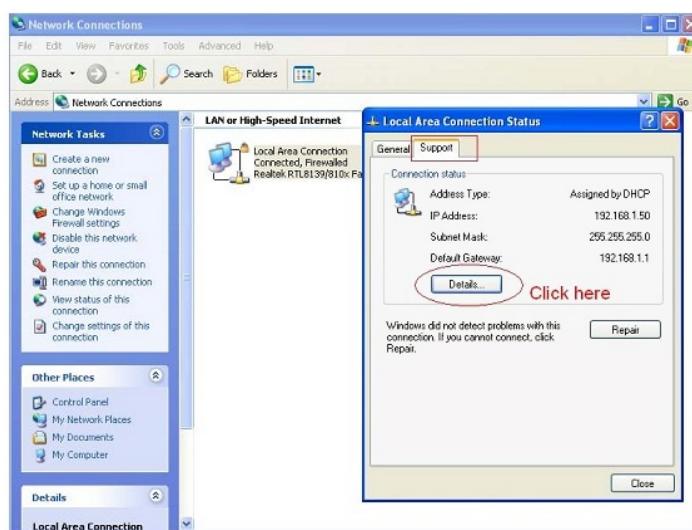


Figure 9.6

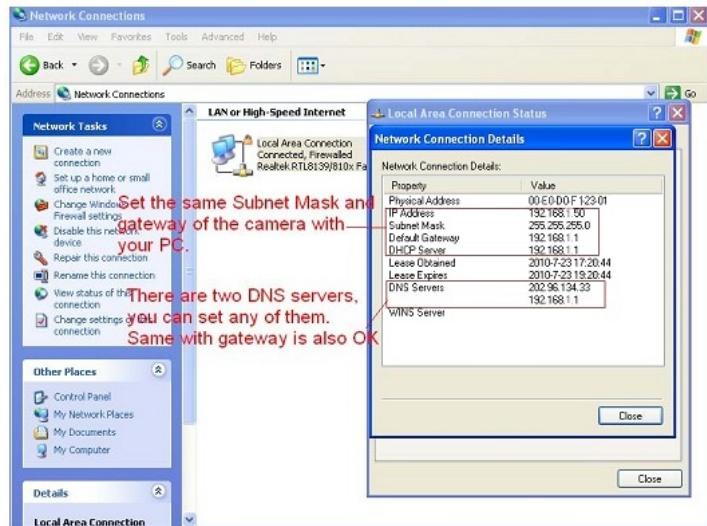


Figure 9.7

If you don't know the DNS Server, you can set it the same as Gateway.

4.6.4 DDNS: Enable DDNS function.

4.6.4.1 For IE, the display will look as below:

Enable DDNS	<input type="button" value="Open"/>
DDNS Server Type	Factory DDNS
DDNS User	abc
DDNS Password	***
DDNS Host Name	abc.aipcam.com

Figure 9.8

4.6.4.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows a web-based configuration interface for DDNS settings. The title bar says "DDNS". The form contains the following fields:

- Enable DDNS: open
- DDNS Service Type: Factory DDNS
- DDNS User: f6501
- DDNS Password: (redacted)
- DDNS Hostname: f6501.apexisip.com

At the bottom are two buttons: "Update" and "Save".

Figure 9.9

There are 2 options:

Factory DDNS: This domain is provided by the manufacturer.

Third Party DDNS: This domain is provided by a 3rd party, such as Dyndns, 3322 etc.

- **Enable DDNS:** Set DDNS function ON/OFF.
- **DDNS Server Type:** Set DDNS server type, such as factory DDNS or third party DDNS server provider.
- **DDNS User:** Registered user name from DDNS server. (If you use factory DDNS, it can't be modified.)
- **DDNS Password:** Registered password from DDNS server. (If you use factory DDNS, it can't be modified.)
- **DDNS Host Name:** Domain name set by user. (If you use factory DDNS, it can't be modified.)

For the third party DDNS, you have to register an account first, keep the user, password, host, then input it.

NOTE: Only one DDNS can be chosen, for example, if you use manufacturer's DDNS, the 3rd one won't work, if you use a 3rd DDNS, the manufacturer's one won't work.

4.7 Wireless Lan Settings

Click **Wireless Lan Settings** to enter the interface:

4.7.1 For IE, the display will look as below:

The screenshot shows the 'Wireless Lan Settings' interface. On the left, a sidebar lists various settings: Device Info, Video Info, Audio Settings, Motion Detection, Alarm Settings, Basic Network Settings, **Wireless Lan Settings** (which is selected and highlighted with a red border), UPNP Settings, Cruise Settings, Indicator Settings, User Manage, Log, Date Time Settings, Multi-Device Settings, Mail Service Settings, FTP Service Settings, P2P Settings, SD-Card Info, Local Settings, and System Tool. The main area is titled '>Wireless Lan Settings'. It contains a table with columns: SSID, Network Type, Encryption, and Authentication. Below the table, there are input fields for 'Using Wireless Lan' (checkbox checked), 'SSID' (set to 'a'), 'Network Type' (set to 'Infra'), and 'Encryption' (set to 'None'). At the bottom right are 'Save' and 'Update' buttons.

Figure 10.0

4.7.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows the 'Wireless Lan Settings' interface. A search bar at the top contains a list of wireless networks: TRENDnet [infra null open-system], ace [infra tkip wpa-psk] (which is selected and highlighted with a brown background), TENDA [infra wep open-system], and sz-atc [infra aes wpa2-psk]. Below the search bar is a 'Search' button. The main configuration area includes: 'Using Wireless Lan' (checkbox checked), 'SSID' (set to 'ace'), 'Network Type' (set to 'Infra'), 'Safe Mode' (set to 'TKIP'), 'Encryption' (set to 'WPA-PSK'), and a 'Key' input field.

Figure 10.1

Click the icon **Search** to scan the wireless network in this environment automatically.

Using Wireless Lan: Set Wi-Fi ON/OFF.

SSID: the ID of Wireless network, it should be the same SSID as the connected Wi-Fi router.

Network Type: Two modes:

1. **Infra** (Infrastructure Mode), if using normal AP, choose **Infra** mode.
2. **Ad-Hoc** Mode. If using point-to-point transmission, choose **Ad-Hoc** mode.

The factory setting is **Infra**.

- **Encryption:** WEP, TKIP, AES optional.
- **Authentication:** **WEP:** Open System or Share Key. **TKIP (AES):** WPA-PSK or WPA2-PSK.
- **Select Key:** Choose the channel of WEP share Key.
- **Key:** Input the key the same as the settings in your router.

All the Wi-Fi encryption mode settings should be the same as your Wi-Fi router, and different encryption has different authentication menu.

4.8 UPNP Settings

Click **UPNP Settings** to enter the interface:

4.8.1 For IE, the display will look as below:



Figure 10.2

4.8.2 For Safari, Chrome, Firefox, the display will look as below:



Figure 10.3

Enable UPNP: Set UPNP function ON/OFF.

Select it to enable UPNP, then the camera will do port forwarding automatically.

It's helpful for using DDNS, if your router support UPNP, then you no need do port forwarding in router.

NOTE: Here UPNP only for port forwarding now. It has much relation with security settings of your router, make sure the UPnP function of router is ON.

ATTENTION: If your router doesn't support UPNP function, it may show error information. So we recommend you do port forwarding manually in your router.

4.9 Cruise Settings

Click **Cruise Settings** to enter the interface:

4.9.1 For IE, the screen will be as below:

Set to make the camera cruise all the time for your selected area.

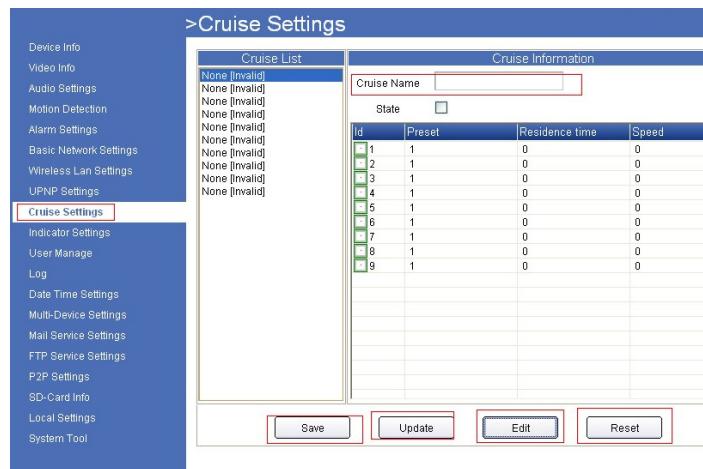


Figure 10.4

1. Set the Cruise Name:
2. Enable State:
3. Select each ID, it will change to blue when you select it, then click Edit to edit States, Preset ID, Residence time and Speed, then click OK to finish settings.
Note: Do not set multiple preset IDs to the same setting.
4. Click **Save** to finished settings.
5. After clicking **Save**, you need to go to the video interface, and set Preset. (Set preset details see 3.4 Left side Menu, and find preset setting according to your browser.)
6. After you set Preset, click the Cruise Icon, and choose the **Cruise Name** you set, click **Update**. The camera will start cruising. Choose **Stop Cruise** to stop it.

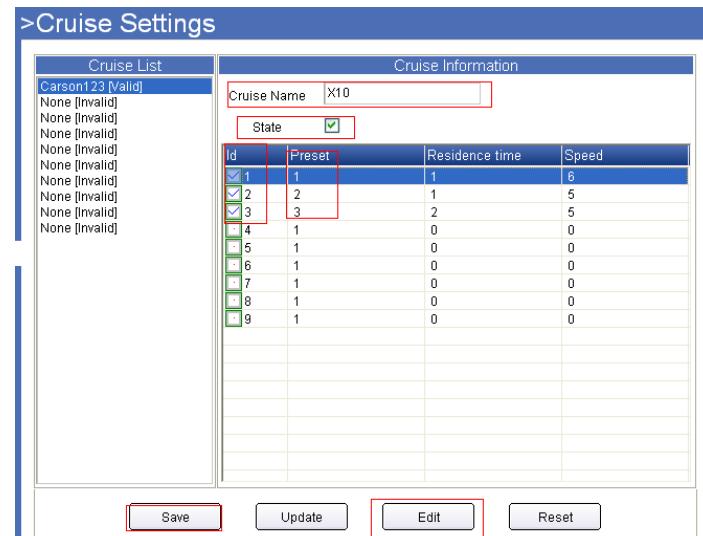


Figure 10.5

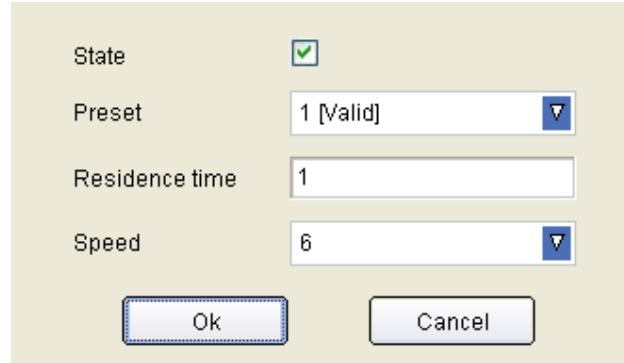


Figure 10.6

Click the Cruise icon and choose the **Cruise Name** you set, click **Update** to start cruising. Choose **Stop Cruise** to stop cruising.

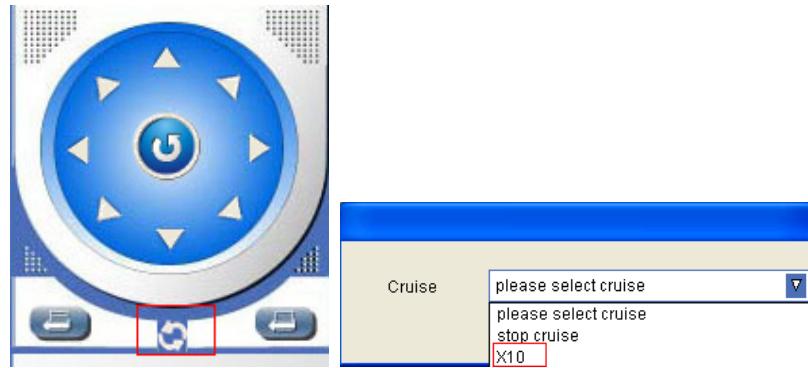


Figure 10.7

4.9.2 For Safari, Chrome, Firefox, the display will look as below:

Set to make the camera cruise all the time for your selected area.

The interface has a sidebar on the left with options: Device, Video, Audio, Motion Detection, Alarm, Network, Wireless Lan, UPNP, DDNS, Cruise (selected), Indicator, Users, Log, Date&Time, E-mail(SMTP), FTP, P2P. The main panel is titled 'Cruise' and shows a 'Cruise List' table and a 'Cruise Information' table.

Cruise Information			
Name	X10	Status	<input checked="" type="checkbox"/>
Serial Number	Preset	Residence time	Speed
1	1 [valid]	1	6
2	2 [valid]	1	5
3	3 [valid]	2	5
4	1 [valid]	0	0
5	1 [valid]	0	0
6	1 [valid]	0	0
7	1 [valid]	0	0
8	1 [valid]	0	0
9	1 [valid]	0	0

Buttons at the bottom: Update, Save, Reset.

Figure 10.8

1. Click **Cruise** to enter the interface, and set the **Name**, enable **Status**, enable **Serial Number**, Choose **Preset ID**, set **Residence time** and **Speed**. Then click **Update** to finish settings.
2. Go back to the video interface, and Set Presets (for details see Left Side Menu in sections 3.2.1.3 and 3.2.1.4, and find preset settings according to your browser type).
3. After you set Preset, click the Cruise Icon, and choose the **Cruise Name** you set, the camera will start cruising. Choose **Stop Cruise** to stop cruising.



Figure 10.9

4.10 Indicator Settings

You can turn on, adjust, or turn off the indicator here. Click **Save** then **Update** to finish settings.

4.10.1 For IE, the display will look as below:



Figure 11.0

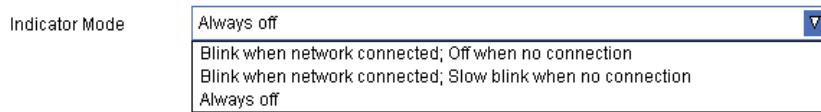


Figure 11.1

4.10.2 For Safari, Chrome, Firefox, the display will look as below:

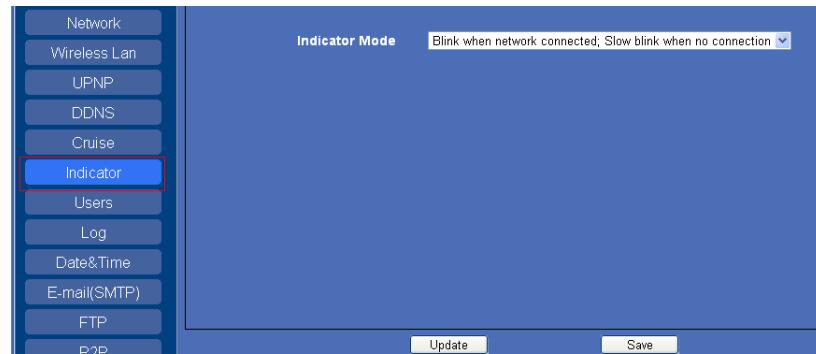


Figure 11.2



Figure 11.3

4.11 User Manage

Click **User Manage** to enter the interface:

4.11.1 For IE, the display will look as below:

>User Manage		
Device Info		
Video Info		
Audio Settings		
Motion Detection		
Alarm Settings		
Basic Network Settings		
Wireless Lan Settings		
UPNP Settings		
Cruise Settings		
Indicator Settings		
User Manage		
Log		
Date Time Settings		
Multi-Device Settings		

Figure 11.4

4.11.2 For Safari, Chrome, Firefox, the display will look as below:

Serial Number	User	Password	Rights
1	admin	*****	Super Admin
2	v12	***	Administrator
3	abc	***	Operator
4	w	*	Visitor
5			Administrator
6			Administrator
7			Administrator
8			Administrator
9			Administrator
10			Administrator

Figure 11.5

Every camera supports 10 users, and every user can be divided into four grades including **Super Administrator**, **Administrator**, **Operator**, **Visitor**.

Click **Add**, will pop-up the window as below:

For IE, the display will look as below:

The screenshot shows a Windows-style 'Add' dialog box. At the top, it says 'Add'. Below that, there are three input fields: 'UserName' with the placeholder 'input a name', 'Rights' with a dropdown menu currently set to 'Administrator', and 'Password'. To the right of the 'Rights' dropdown, there is a red arrow pointing to the dropdown menu with the text 'choose level'. At the bottom left is a 'submit' button with a green checkmark icon. To its right are two buttons: 'Ok' and 'Cancel'.

Figure 11.6

Super Administrator: Every device has a super administrator, it has the highest permission, can set all the parameters.

Administrator: Lower permission than super administrator, it can set most of the parameters except adding or editing other administrator accounts.

Operator: Lower permission than administrator, can do some operation such as pan/tilt control and set some parameters.

Visitor: The lowest permission, only can view live video, can't control the pan/tilt, parameter settings etc.

4.11 Log

Click **Log** to enter the interface:

4.11.1 For IE, the display will look as below:

>Log				
Device Info	User	IP Address	Time	Type
Video Info	admin	192.168.1.197	2013/01/15 15:25:23	Login In
Audio Settings	root	DEVICE	2013/01/11 19:20:08	Power On
Motion Detection	root	DEVICE	2013/01/11 19:20:32	Power Off
Alarm Settings	admin	192.168.1.220	2013/01/11 19:19:59	Login Out
Basic Network Settings	admin	192.168.1.129	2013/01/11 19:19:57	Login In
Wireless Lan Settings	admin	192.168.1.220	2013/01/11 19:19:49	Login Out
UPNP Settings	admin	192.168.1.220	2013/01/11 19:19:34	Login In
Cruise Settings	admin	192.168.1.129	2013/01/11 19:18:57	Login In
Indicator Settings	root	DEVICE	2013/01/11 19:17:08	Power On
User Manage	admin	192.168.1.220	2013/01/11 18:57:47	Login In
Log	admin	192.168.1.220	2013/01/11 18:53:10	Login Out
	admin	192.168.1.220	2013/01/11 18:52:59	Set Config
	admin	192.168.1.220	2013/01/11 12:10:46	Login In
Date Time Settings	root	DEVICE	2013/01/11 12:06:09	Power On
Multi-Device Settings	root	DEVICE	2013/01/11 12:06:09	Power Off
Mail Service Settings	admin	192.168.1.58	2013/01/11 08:01:45	Set Config
FTP Service Settings	admin	192.168.1.58	1970/01/01 08:01:45	Login In
P2P Settings	root	DEVICE	1970/01/01 08:00:14	Power On
SD-Card Info	root	DEVICE	1970/01/01 08:00:12	Power Off
Local Settings	root	192.168.1.155	1970/01/01 08:00:28	Power On
System Tool	root	192.168.1.155	1970/01/01 08:00:01	Power On

Figure 11.7

4.11.2 For Safari, Chrome, Firefox, the display will look as below:

User	IP Address	Time	Type
admin	192.168.1.85	1970/01/01 08:31:44	Login Out
admin	192.168.1.85	1970/01/01 08:28:12	Set Config
admin	192.168.1.85	1970/01/01 08:17:32	Login In
admin	192.168.1.220	1970/01/01 08:06:08	Login In
admin	192.168.1.220	1970/01/01 08:05:34	Login Out
admin	192.168.1.220	1970/01/01 08:02:28	Login In
admin	192.168.1.220	1970/01/01 08:02:23	Login Out
admin	192.168.1.85	1970/01/01 08:01:03	Login In
admin	192.168.1.27	1970/01/01 08:00:52	Login In
admin	192.168.1.220	1970/01/01 08:00:36	Login In
admin	183.37.229.203	2011/07/13 19:03:08	Set Config
admin	183.37.229.203	2011/07/13 19:02:33	Login In
admin	183.37.229.203	2011/07/13 19:02:22	Login Out
admin	183.37.229.203	2011/07/13 19:01:17	Set Config
admin	183.37.229.203	2011/07/13 19:01:04	Login In
admin	192.168.1.220	2011/07/13 19:00:53	Login Out
admin	192.168.1.220	2011/07/13 19:00:43	Login In
admin	192.168.1.220	2011/07/13 18:59:26	Login Out
root	192.168.1.222	2011/07/13 18:59:26	Power Off
admin	192.168.1.220	2011/07/13 18:57:53	Login In

Figure 11.8

Record user information, including account, date, time, visitor IP address etc.

4.12 Date Time Settings

Click Date Time Settings to enter the interface:

4.12.1 For IE, the display will look as below:

The screenshot shows a web-based configuration interface for date and time settings. At the top, a blue header bar contains the text '>Date Time Settings'. Below this, the main content area has a light gray background. It contains four input fields: 'DateTime' with the value '1970-01-01 08:08:06', 'Time Zone' set to 'GMT+8', 'Time Mode' set to 'NTP Time', and 'NTP Server' set to 'clock1.redhat.com'. To the right of these fields are two buttons: 'Save' and 'Update'.

Figure 11.9

4.12.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows a web-based configuration interface for date and time settings. The background is a solid blue color. At the top center, it displays 'Datetime 1970-01-01 9:16:09'. Below this, there are three sections: 'Time Zone Settings' with a dropdown menu showing 'GMT+8', 'Timing Mode' with a dropdown menu showing 'NTP Timing', and 'NTP Server' with a dropdown menu showing 'clock1.redhat.'. The 'NTP Server' section is highlighted with a red rectangular border.

Figure 12.0

Date Time: Display the current date and time

Time Zone: Set the current time zone

Time Mode: Can choose PC Time or NTP Time.

For IE, the display will look as below:

The screenshot shows a close-up of the 'Time Mode' and 'NTP Server' sections from Figure 11.9. The 'Time Mode' dropdown is set to 'NTP Time'. Below it, the 'NTP Server' dropdown is open, showing two options: 'NTP Time' and 'PC Time'. The 'NTP Time' option is highlighted with a red rectangular border.

Figure 12.1

For Safari, Chrome, Firefox, the display will look as below:

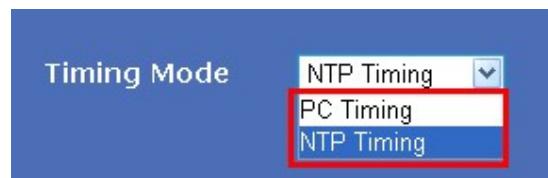


Figure 12.2

NTP Server: Choose the relevant NTP sever when set time mode as NTP Time.

4.13 Multi-Device Settings for IE browser

Note: Multi-Device only can be set under IE Browser, for Firefox, Safari, Chrome, you cannot see these setting, as they do not support ActiveX.

Click **Multi-Device Settings** to enter the interface:

The screenshot shows the "Multi-Device Settings" interface. On the left, a sidebar lists various settings: Device Info, Video Info, Audio Settings, Motion Detection, Alarm Settings, Basic Network Settings, Wireless Lan Settings, UPNP Settings, Cruise Settings, Indicator Settings, User Manage, Log, Date Time Settings, Multi-Device Settings (highlighted with a red box), Mail Service Settings, FTP Service Settings, P2P Settings, SD-Card Info, Local Settings, and System Tool. The main area has two tables. The top table is for hosts, with columns Host, Web Port, and Media Port. The bottom table lists devices with columns Id, Host, Web Port, Media Port, UserName, and Password. Row 1 is selected, indicated by a checked checkbox in the Id column. Buttons for Search, Add, Save, Update, Edit, and Delete are visible at the bottom.

Id	Host	Web Port	Media Port	UserName	Password
1	Local	--	--	--	--
2	None				
3	None				
4	None				
5	None				
6	None				
7	None				
8	None				
9	None				

Figure 12.3

Click **Search**, all the cameras connected in the Lan will be listed, then select a number from the bottom window, click edit, will pop-up a parameter settings window:

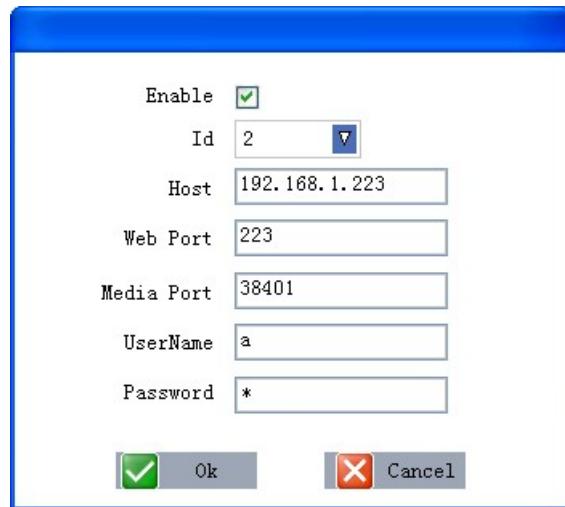


Figure 12.4

Choose the ID, input host, web port, media port, username, and password manually, click OK to submit.

4.14 Mail Service Settings

Click **Mail Service Settings** to enter the interface:

4.14.1 For IE, the display will look as below:

The screenshot shows a configuration interface for Mail Service Settings. The top bar has a blue header with the text '>Mail Service Settings'. Below the header, there are several input fields and buttons. The fields include: 'Enable Smtp' (checkbox checked), 'Addresser' (text box 'abc'), 'Outbox' (text box 'abc@163.com'), 'Inbox' (text box containing 'support4@abc.com.cn') with left and right arrows for navigation, 'SMTP Server' (text box 'smtp.163.com'), 'SMTP Port' (text box '25'), 'Auth User' (checkbox checked), 'SMTP User' (text box 'abc'), and 'SMTP Password' (text box '*****'). To the right of these fields are three buttons: 'Save', 'Update', and 'Test'. A yellow message bar at the bottom says 'Please save at first, and then test'.

Figure 12.5

4.14.2 For Safari, Chrome, Firefox, the display will look as below:

Enable E-mail	<input type="checkbox"/>	
Addresser	bulova	
Outbox	bulova@yeah.net	
Inbox1	support4@abc.com.cn	
Inbox2	support5@abc.com.cn	
Inbox3	support6@abc.com.cn	
SMTP Server	smtp.yeah.net	
SMTP Port	25	
Auth User	<input checked="" type="checkbox"/>	
SMTP User	bulova	
SMTP Password	*****	
Please save at first, and then test		
<input type="button" value="Update"/>	<input type="button" value="Save"/>	<input type="button" value="Test"/>

Figure 12.6

Enable Smtp: Set e-mail function ON/OFF.

Addresser: Set sender's name.

Outbox: Set sender's email address.

Inbox: Set receiver's email box. (Supports 3 emails simultaneously)

Add email address

Delete email address which selected.

SMTP Server: The sender's SMTP server.

SMTP Port: The sender's SMTP Port, usually is 25, some SMTP servers have their own port, e.g., the smtp port for Gmail is 465.

Auth User: Verify the user settings.

SMTP User: Set sender's user name.

SMTP password: Set sender's password.

4.15 FTP Service Settings

Set FTP service, Snapshots will be delivered to appointed FTP server when alarmed.

Click **FTP Service Settings** to enter the interface:

4.15.1 For IE, the display will look as below:

The screenshot shows a configuration page for an FTP server. The fields are as follows:

Enable FTP	<input type="checkbox"/>
FTP Server	192.168.1.153
FTP Port	21
FTP User	abc
FTP Password	***
Upload Folder	/var/ftp/test
FTP Mode	PORT
Upload Image Now	<input type="checkbox"/>
Upload Interval(Seconds)	0

Buttons at the bottom right include Save, Update, and Test. A yellow bar at the bottom center says "Please save at first, and then test".

Figure 12.7

4.15.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows the same configuration page as Figure 12.7, but with a blue background. The fields are identical to those in Figure 12.7.

Figure 12.8

Enable FTP: Set FTP function ON/OFF.

FTP Server: Set FTP server address.

FTP Port: Set the port of FTP server, default is 21.

FTP User: Set the user name of FTP server.

FTP Password: Set the password of FTP server.

Upload Folder: Set the path of remote FTP server. Make sure that the folder you plan to store images exists. (The camera cannot create the folder itself). Also, the folder must be erasable.

FTP Mode: It supports standard (POST) mode and passive (PASV) mode.

Click save to submit, click test to check the settings.

Upload Image Now: Enable it to start uploading.

Upload Interval (Seconds): Set upload interval time here, for example: when set to 2, the camera will upload every 2 seconds.

NOTE: When alarmed, there will be 3 snapshots sent to the FTP server every 1 second.

4.16 P2P settings

The XX59A camera supports Peer to Peer (P2P) technology for easy setup.

P2P-1: The P2P ID is provided from the factory, and is shown on the bottom of the camera, each P2P ID is different.

User Name: default—admin (for P2P-1 only)

Password: default—000000 (for P2P-1 only)

P2P-2: You can set another P2P ID here, but you may need to purchase a P2P ID from a third party company, so we don't suggest you do that.

4.16.1 For IE, the display will look as below:

The screenshot shows the 'P2P Settings' page. On the left, a sidebar lists various camera configuration options: Device Info, Video Info, Audio Settings, Motion Detection, Alarm Settings, Basic Network Settings, Wireless Lan Settings, UPnP Settings, Cruise Settings, Indicator Settings, User Manage, Log, Date Time Settings, Multi-Device Settings, Mail Service Settings, and FTP Service Settings. The 'P2P Settings' option is highlighted. The main content area is titled '>P2P Settings'. It contains two sections: 'P2P-1' and 'P2P-2'. In the 'P2P-1' section, the 'GUID' field is populated with 'EL89ATRP9AU79H6PWZWT', 'UserName' is 'admin', and 'Password' is '*****'. In the 'P2P-2' section, there are empty fields for 'UserName', 'Password', and 'Host'. At the bottom right are 'Save' and 'Update' buttons.

Figure 12.9

4.16.2 For Safari, Chrome, Firefox, the display will look as below:

The screenshot shows the 'P2P' settings page. The top navigation bar has 'P2P' in the center. Below it, the title is 'P2P'. The main content area is titled 'P2P-1'. It displays the 'GUID' as 'EL89ATRP9AU79H6PWZWT', 'User' as 'admin', and 'Password' as '*****'. Below this, under 'P2P-2', are three empty input fields labeled 'User', 'Password', and 'Host Address'. At the bottom are 'Update' and 'Save' buttons.

Figure 13.0

4.17 SD Card Info.

Click **SD-Card Info** to enter the interface:

4.17.1 For IE, the display will look as below:

>SD-Card Info

Device Info	Device Name	<input type="text"/>
Video Info	Total Size	<input type="text"/> KB
Audio Settings	Free Space	<input type="text"/> KB
Motion Detection	Format	
Alarm Settings	Update	
Basic Network Settings		
Wireless Lan Settings		
UPNP Settings		
Cruise Settings		
Indicator Settings		
User Manage		
Log		
Date Time Settings	Open Auto cover	<input type="checkbox"/>
Multi-Device Settings	Open Pre-recording	<input type="checkbox"/>
Mail Service Settings	Alarm capture to SD card	<input type="checkbox"/>
FTP Service Settings	Pre-recording Time	3 <input type="button" value="▼"/> Seconds
P2P Settings	Record Stream	Main-Stream <input type="button" value="▼"/>
SD-Card Info	Manual Rec	ON <input type="button" value="▼"/>
Local Settings	Manual Rec Pack Time	10 <input type="button" value="▼"/> Minutes
System Tool	Save	
	Update	

Figure 13.1

4.17.2 For Safari, Chrome, Firefox, the display will look as below:

Device Name	<input type="text"/>
Total Size	0 <input type="text"/> KB
Available Space	0 <input type="text"/> KB
Status	Pullout <input type="text"/>
Format <input type="button"/> Update <input type="button"/>	
Enable Auto Overwrite	<input type="checkbox"/>
Enable Pre-Record	<input type="checkbox"/>
Alarm Capture to SD-Card	<input type="checkbox"/>
Pre-Record Time	3 <input type="button" value="▼"/> Second
Record stream	Main-Stream <input type="button" value="▼"/>
Manual Rec	open <input type="button" value="▼"/>
Manual Record Pack Time	10 <input type="button" value="▼"/> Minute
Save <input type="button"/> Update <input type="button"/>	

Figure 13.2

Device Name: Display the name of SD card.

Total Size: Display the total size of SD card

Free Space/Available Space: Display the free space of SD card

State: Display the state of SD card.

Format: Click it to delete all data and format the SD card. (All data will be lost if formatted).

Open Auto cover: Set SD card auto cover when it's full.

Open Pre-recording: Set Pre-recording function (Record the video before alarm triggered).

Pre-recording Time: Set the Pre-recording time, can be from 1 to 6 seconds.

Record Stream: Choose the stream here.

Manual Rec.: Set as Open, this means when you click record, the SD card will also start recording at the same time.

Manual Rec. Pack Time: Set the record time. Min: 10 mins, Max: 60 mins.

4.18 Local Settings for IE browser

Note: Local Settings shows under IE ActiveX mode only.

Click **Local Settings** to enter the interface:

Enable Alarm Audio	<input type="checkbox"/>
Enable Alarm Rec	<input type="checkbox"/>
Alarm Rec Time	1 Minute
Manual Rec Pack Time	30 Minutes
Record Path	D:\RecFiles
Capture Path	D:\CapFiles
Download Path	D:\LoadFiles

Figure 13.3

Enable Alarm Audio: Set audio ON/OFF once alarmed.

Enable Alarm Rec: Set alarm record function ON/OFF.

Alarm Rec Time: Set alarm record duration time, can be 30s, 1min, 2min, 3min, 5min.

Manual Rec Pack Time: Set the manual record file pack time, can be 30min, 1h, 2h, 3h, 5h.

Record Path: Set the path for record file saved.

Capture Path: Set the path for snapshot saved.

Download Path: Set the path to download video from the SD Card to your PC. You can then search for these in

Playback mode.

4.19 System Tool

Click **System Tool** to enter the interface:

4.19.1 For IE, the display will look as below:

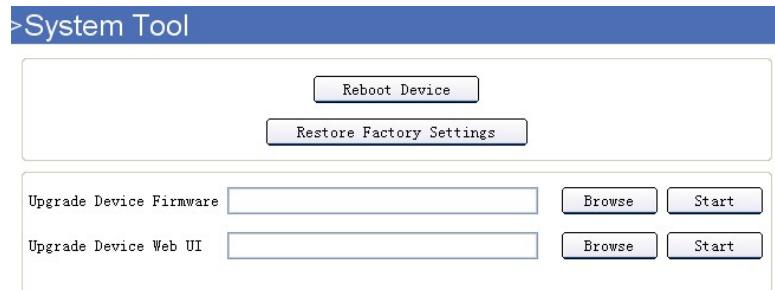


Figure 13.4

4.19.2 For Safari, Chrome, Firefox, the display will look as below:

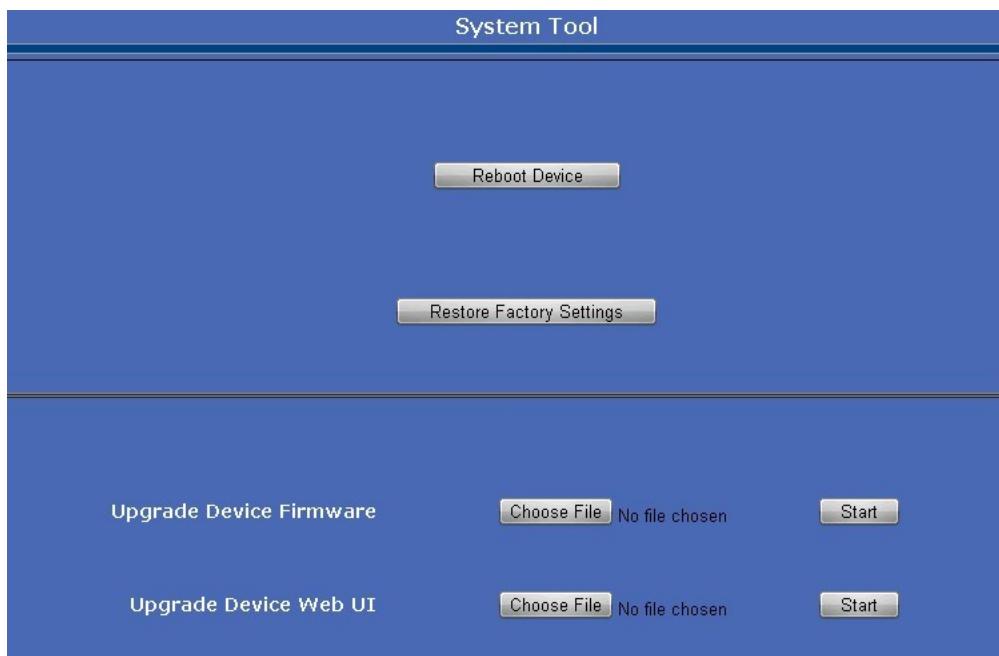


Figure 13.5

- **Reboot Device:** Click to Reboot the camera.
- **Restore Factory Settings:** Click it, all the parameters will be set back to factory settings.
- **Upgrade Device Firmware:** Click **Browse/Choose File**, choose the correct system file for upgrade, then click **Start**.
- **Upgrade Device Web UI:** Click **Browse/Choose File**, choose the correct Web UI file for upgrade, then click **Start**.

IMPORTANT: Make sure you use the correct upgrade file, you must keep the power on when upgrading, wired mode is suggested. Note, wrong operation or incorrect upgrade file may damage the device.

5. PLAYBACK for IE browser only

Note: Playback function shows under IE ActiveX mode only.

Click  login the playback interface, this is for SD Card files playback.

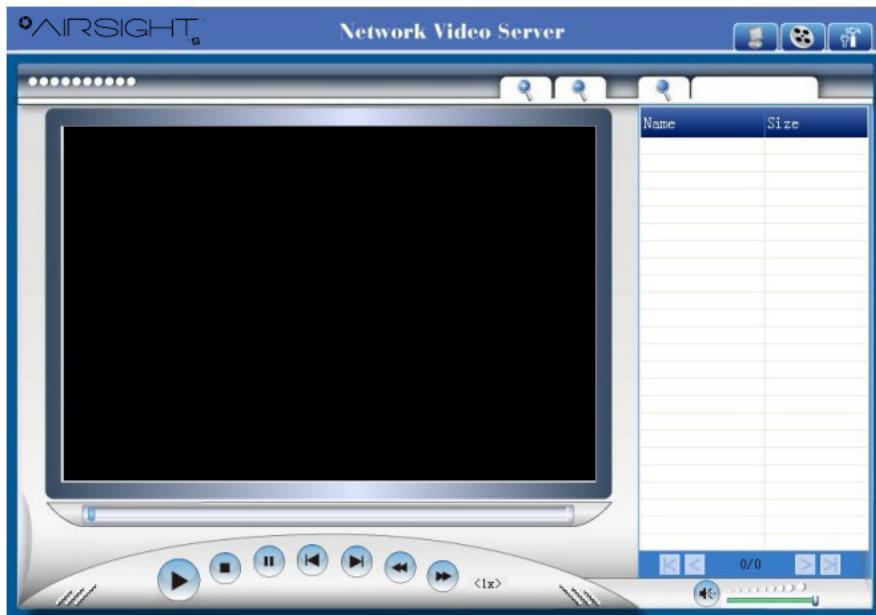


Figure 13.6

Click search icon, will pop-up a window for search file, set the mode or time, click OK to submit, then all the correlative files will be listed on the right side.

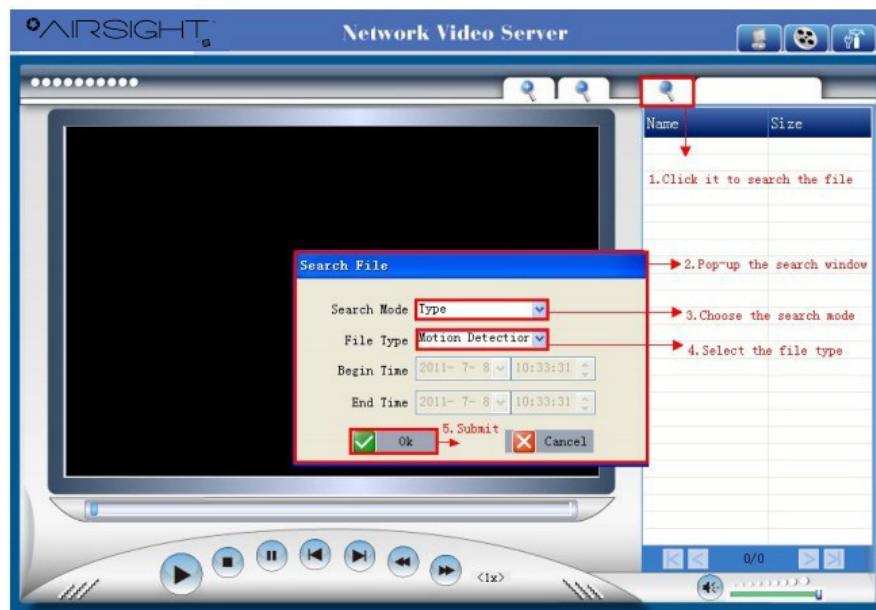


Figure 13.7

Search Mode: There are 4 search modes optional.

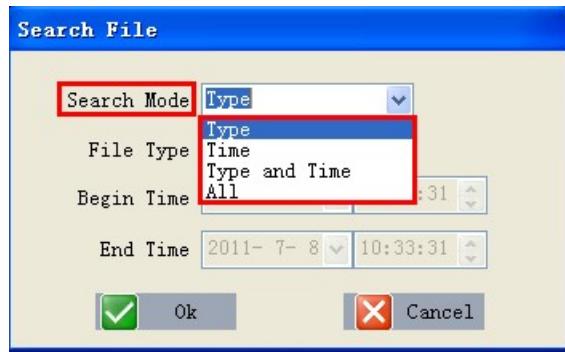


Figure 13.8

1. **Type:** means search by the file type.

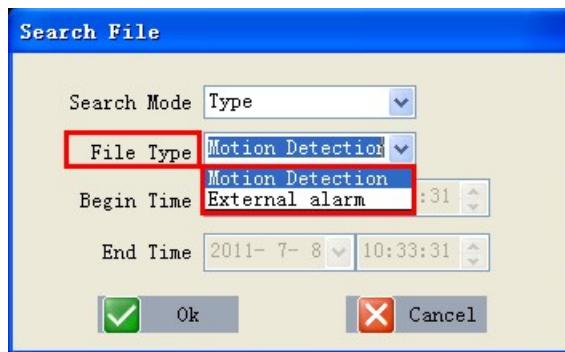


Figure 13.9

2. **Time:** means search by the appointed record time.

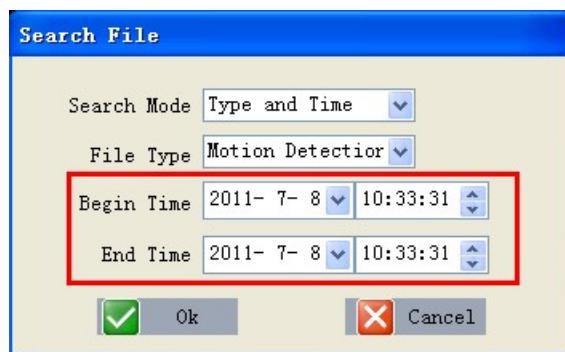


Figure 14.0

3. **Type and Time:** means search by both file type and appointed record time.

4. **All:** means all the files.

After searching, files will be listed on the right side window, choose the file, double click it or click play icon  to start replay. You can check the replay file information here, and do other operations such as **Stop**, **Pause**, **Previous**, **Next**, **Fast Backward**, **Fast Forward** etc.



Figure 14.1

Image Enlarge and Reduce

During playback, users can enlarge the image to see the video details, it supports 2X, 4X, 8X zoom.

Click the enlarge icon, will pop-up a window to choose the zoom in type.

Click the reduce icon, will zoom out the image.

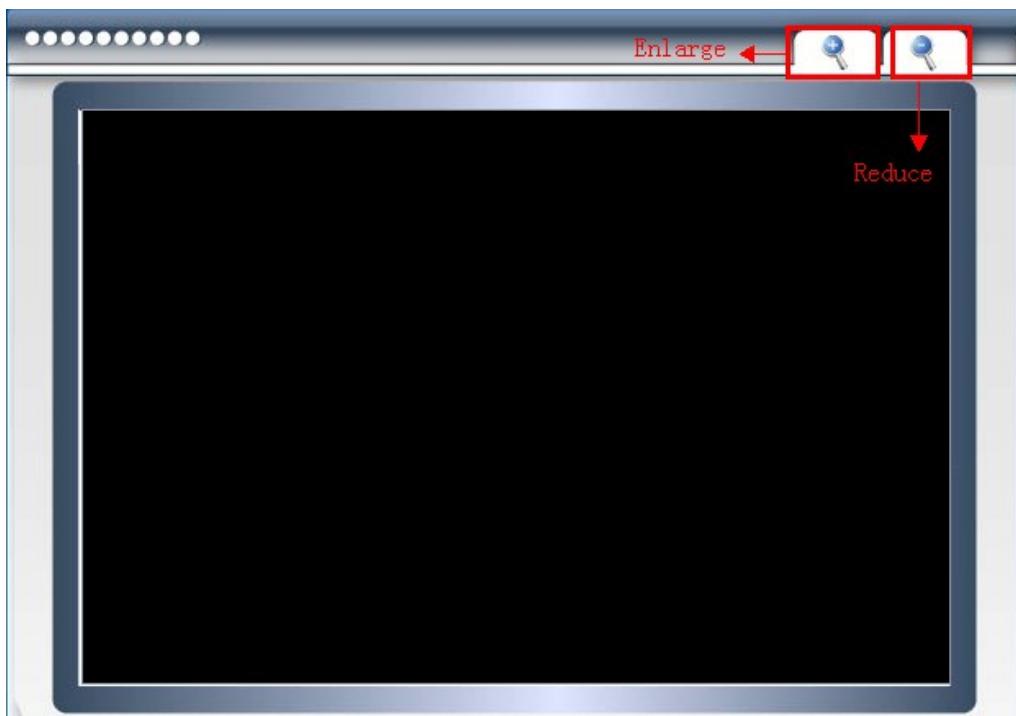


Figure 14.2

Audio:

During playback, you can adjust the volume, drag the volume icon on the right bottom side.



Figure 14.3

6. FREQUENTLY ASKED QUESTIONS

1. I have forgotten the administrator username and/or password

There is a [RST] button on the rear panel, keep the power on, hold the reset button for 30 seconds, it will restore back to factory default settings as below:

Username: admin

Password: none, i.e. no password set

NOTE: Please don't press **RST** button unless you are sure you want to do it.

2. There is no picture displayed in IE browser (For IE only)

It maybe the ActiveX problem,

If using the IE browser for the first time, you should install the ActiveX control, details as below:

Before login, click the ActiveX icon  at the right side of interface to download, save the file, run it to install the ActiveX.

3. Fail to visit IP camera via IE after upgrading (For IE Only)

Solution: Clear the browser buffer.

Steps: Open **IE** > click **Tools** > **Internet Options** > **General** > **Delete** > **Internet temporary files**, delete the cookies and temporary files, then click **OK** and re-login.

4. The video is not smooth

Possible reason 1: The frame rate value is too small.

Solution: Increase the frame rate value.

Possible reason 2: Too many users are connecting to the device.

Solution: Close some connection or reduce the video frame rate.

Possible reason 3: Network bandwidth is too low, lots of lost packets.

Solution: Reduce the video frame rate or video compression bit rate.

5. Fail to visit IP camera via IE browser

Possible Reason 1: Network is disconnected.

Solution: Connect your PC to network, check whether the network works well or not. Check if there's a problem with the cable connection, or network problem caused by PC virus.

Possible reason 2: IP Address has been occupied by other devices.

Solution: Stop the connection between IP camera and network; connect the IP camera to PC.

Directly reset IP address according to the proper operations recommended.

Possible reason 3: IP addresses are in different subnets.

Solution: Check IP address, Subnet masking and Gateway.

Possible reason 4: Physical address of network conflicts with the IP camera.

Solution: modify the physical address of IP camera.

Possible Reason 5: Web port has been modified.

Solution: Contact as Network Administrator to obtain related information.

Possible Reason 6: Unknown.

Solution: Press RESET to restore to factory settings then connect it again, the default IP address is 192.168.1.155, subnet mask is 255.255.255.0

6. The color of image is abnormal (Green or other color)

Sometimes the IP camera images cannot be displayed properly because of different graphics cards, the images appears to be green or other colors, then you should run the program “Config.exe” from the downloaded OCT files. (or run C:\windows\system32\Config.exe) to set the following parameters for the display buffer: auto-detection, used display card memory or system memory, then run IE, connect IP camera again.

7. There is no voice while monitoring

Possible Reason 1: No audio input connection.

Solution: Check audio connection of the host.

Possible Reason 2: the relative audio option of IP camera is OFF.

Solution: Check audio parameter settings to see if you have set the audio option ON, but without external audio input.

8. Image processing doesn't work properly

Possible Reason 1: System problem, DirectX function is disabled, which will cause slow display of images and abnormal color.

Possible Reason 2: Hardware problem, graphics card doesn't support image acceleration and hardware zooming functions. (For hardware issue, the only solution is to change your graphics card).

Solution: Install DirectX image driver, then click **Start > Run > input dxdiag**, set enable **DirectDraw, Acceleration Direct3D, Acceleration AGP, Texture Acceleration**, functions.

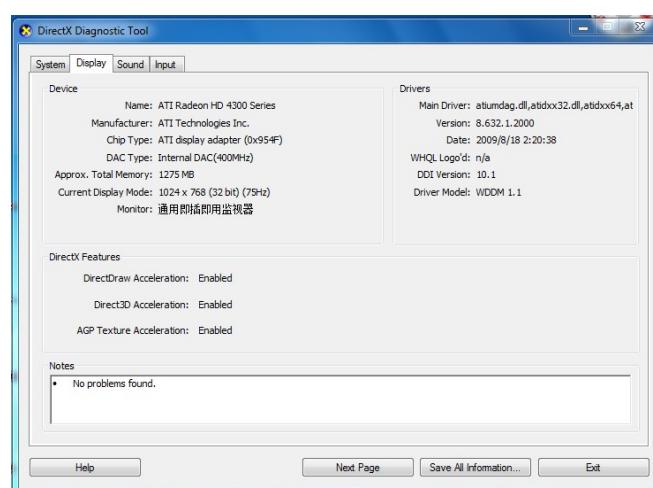


Figure 14.4

Note: If you are unable to do it, it means your DirectX is not installed properly or hardware doesn't support this function.

9. Fail to use DDNS

Possible Reason 1: The PC or IP Camera can't connect to the internet.

Solution: Check the internet connection and settings.

Possible Reason 2: Port forward is not set in router.

Solution: Set the port forward of extranet in router correctly.

For example, if IP Camera address is: 192.168.1.100, Media port is 38401, Web port is 85, factory DDNS is <http://test.aipcam.com>.

Set Port Forwarding in the router.

This is an important step. You need to set port forwarding in your router, to refer to the IP of your camera correctly, for DDNS to work. There are so many kinds of routers, so it's difficult to show fixed steps, but here are some samples of different router's port forwarding settings, just for reference:

TP-LINK:

1. Login to the router.



2. Choose **Forwarding**, select **Virtual Servers**

3. Click the Add New button, pop-up below:

A screenshot of a 'Virtual Server Entry' configuration window. It has fields for 'Service Port' (set to '80'), 'IP Address' (set to '192.168.1.100'), 'Protocol' (set to 'ALL'), and 'Status' (set to 'Enabled'). Below these are dropdown menus for 'Common Service Port' (set to 'Select One') and 'Protocol' (set to 'Select One'). At the bottom are 'Save' and 'Return' buttons.

Figure 14.5

Fill in the service port (**don't use 80**), IP address of the camera, then click Save

NOTE: The port and IP address should be the same as the camera.

Fill in the **web port**, for example port 85, IP address as 192.168.1.100, click Save.

(1) Repeat step 3 above, it will pop-up the window again, fill in the **media port** as 38401, IP address as 192.168.1.100, then save.

(2) Then check the **Device Info – DDNS Status**

It will show DDNS: <http://test.aipcam.com:85> , input this link in IE, then you can visit this camera remotely.

BELKIN:

1. Login to the router.
 2. Choose **Firewall**, select **Virtual Servers**
 3. Input the port (**don't use 80**) and IP address, then click save.
- NOTE:** The port and IP address should be the same as the camera.

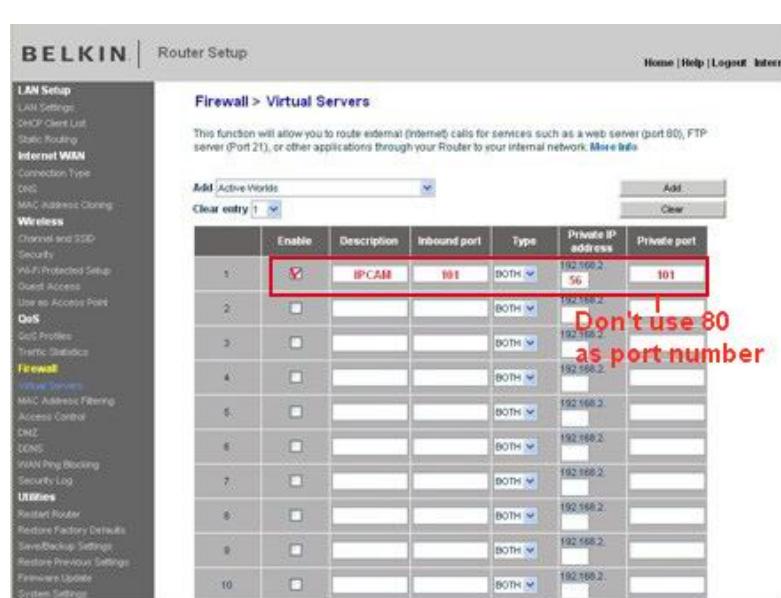


Figure 14.6

DLINK:

1. Login to the router.
2. Choose **Advanced**, select **Virtual Servers**
3. Input the port, IP address, Protocol, then click save.

NOTE: The **public port & private port** should be the same as camera's port, choose the protocol to be **both**.

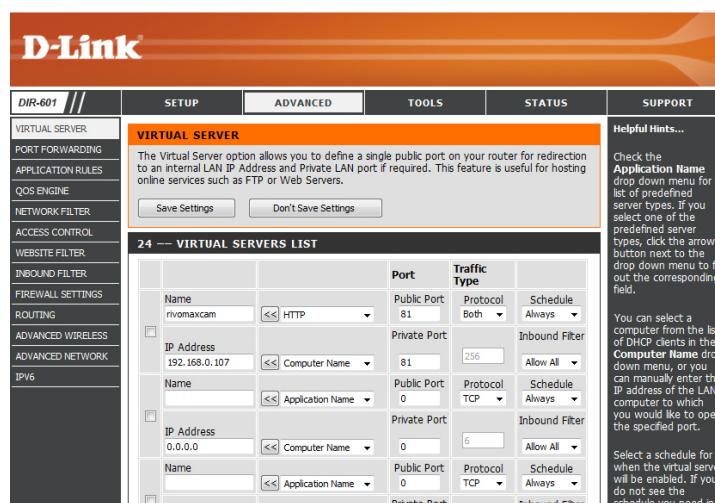


Figure 14.7

7. SPECIFICATIONS

Image Sensor	Image Sensor	1/4" Color CMOS Sensor
	Display Resolution	1280 x 720 Pixels (1000K Pixels, i.e. 1 Megapixel)
	Lens	f: 4.2 mm, F:2.0 (IR Lens)
	Mini. Illumination	0.5 Lux
	Viewing Angle	60 Degree
Audio	Input	Built-in Microphone/1 channel audio input
	Output	1 channel audio output
	Audio Compression	ADPCM
Video	Image Compression	H.264, MJPEG
	Image Frame Rate	30fps (VGA),30fps (QVGA)
	Resolution	1280 x 720 (VGA), 640 x 368 (VGA), 320 x 208 (QVGA)
	Flip Mirror Images	Vertical / Horizontal
	Light Frequency	50Hz, 60Hz
	Video Parameters	Brightness, Saturation, Contrast, Hue
Communication	Ethernet Interface	Build in 10/100Mbps,Auto MDI/MDIX , RJ-45
	Supported Protocol	TCP/IP HTTP DNS DHCP PPPoE SMTP FTP SSL TFTP NTP ARP/RARP NFS RTSP RTP RTCP
	Compress rate level	128Kbps~4Mbps
	Wireless Standard	IEEE 802.11b/g/n
	Data Rate	802.11b: 11Mbps (max.), 802.11g: 54Mbps (max.), 802.11n: 150Mbps (max.)
	Wireless Security	WEP & WPA WPA2 Encryption
Physical	Pan/Tilt Angle	Horizontal: 270° & Vertical: 120°
	Infrared Light	10 IR LEDs, Night visibility up to 15 meters
	Alarm Input	1 Channel on/off Input
	Alarm Output	1 Channel relay Output
Power	Power Supply	DC 5V/2.0A (EU,US,AU adapter or other types optional)
	Power Consumption	7 Watts (Max.)
Environment	Operate Temper.	0° ~ 55°C (14°F ~ 131°F)
	Operating Humidity	20% ~ 85% non-condensing
	Storage Temper.	-10°C ~ 60° (14°F ~ 140°F)
	Storage Humidity	0% ~ 90% non-condensing
PC System Requirements	CPU	2.0GHZ or above (suggested 3.0GHz)
	Memory Size	256MB or above (suggested 1.0GHz)
	Display Card	64M or above
	Supported OS	Microsoft Windows 2000/XP/Vista/7
	Browser	IE6.0/7.0/8.0/Firefox/Safari/Google chrome or other standard browsers
Certification	CE, FCC, RoHS	

8. OBTAINING TECHNICAL SUPPORT

We hope your experience with your IP network camera is enjoyable, but if you experience any issues or have any questions that this User's Guide has not answered, please visit www.x10.com/support, e-mail support@x10.com or call 1-888-384-0969.

If your camera does not support some special functions shown in this manual, please contact our technical support team to obtain the latest Firmware and WEB UI file for upgrading.

FCC Caution

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by unplugging the equipment, try to correct the interference by one or more of the following measures.

- Reorient the antenna of the radio/TV experiencing the interference.
- Relocate the equipment with respect to the radio/TV.
- Move the equipment away from the radio/TV.
- Plug the equipment into an outlet on a different electrical circuit from the radio/TV experiencing the interference.
- If necessary, consult your local dealer for additional suggestions.

NOTE: Modifications to this product will void the user's authority to operate this equipment.

X10 AIRSIGHT 90 Day Limited Warranty

X10.com, a division of Authinx Inc., warrants this product to be free from defective material and workmanship for a period of 90 days from the original date of purchase at retail. X10 agrees to repair or replace, at its sole discretion, a defective product if returned to X10 within the warranty period and with proof of purchase. If service is required under this warranty:

Call 1-888-384-0969, visit www.x10.com, or email support@x10.com