PLANET
Networking & Communication

User's Manual

2 Mega-pixel PoE / Wireless Fish-Eye IP Camera

► **ICA-8200 / ICA-W8200**

www.PLANET.com.tw

Copyright

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

FCC Caution

To assure continued compliance, for example, use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it.

However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

WEEE Regulation

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste; they should be collected separately.

Revision

User's Manual of PLANET PoE / Wireless Fish-Eye IP Camera
Model: ICA-8200 /ICA-W8200
Rev: 1.00 (September, 2014)
Part No. EM-ICA-8200_W8200

Table of Contents

Chapter 1. Product Introduction

1.1 Package Contents

The package should contain the following items:

- IP Camera Unit x 1
- Power Adapter x 1
- Quick Installation Guide x 1
- User's Manual CD x 1
- Wall Mount Kit x 1
- Mounting Label x 1
- GPIO Connector x 1

Note	
	1. If any of the above items are missing, please contact your dealer immediately. 2. Using the power supply that is not the one included in the Internet Camera packet will cause damage and void the warranty for this product.

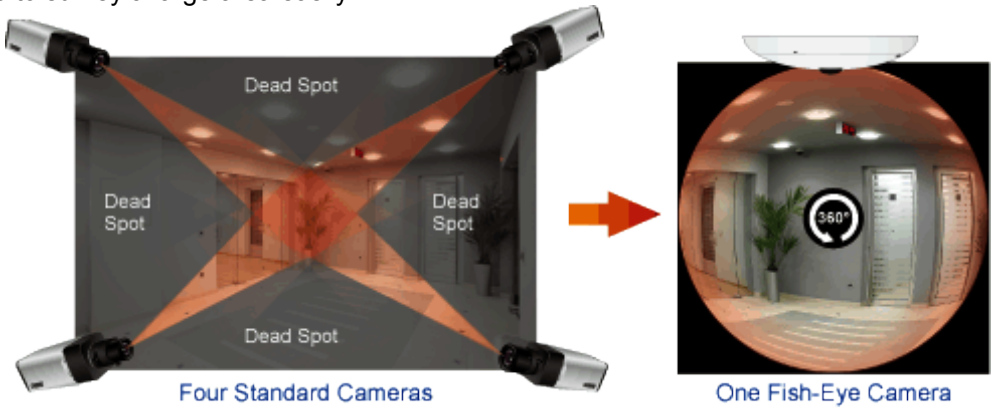
1.2 Overview

Compact Panoramic Camera for Wide View Surveillance

PLANET ICA-8200 series 2 mega-pixel PoE/Wireless Fish-Eye IP Camera supports H.264, MPEG-4 and JPEG compression formats and delivers excellent picture quality in up to 1440 x 1440 pixels at 15 frames per second (fps). Incorporating the professional 2 mega-pixel resolution sensor, the ICA-8200 series provides high-quality images and panorama function with quad view to enable images of monitoring and recording from four different angles to be displayed simultaneously. It offers 180° panoramic view by wall mount installation and 360° surround view in deployment of ceiling mount. Therefore, users do not need to install multiple IP cameras and hence save tremendous installation and maintenance costs. Moreover, the unique design makes it the ideal solution to surveillance applications in boutiques, stores, restaurants, indoor public areas, etc.

Full Surveillance with 360º Surround View

Furthermore, the ICA-8200 series is a fish-eye camera that allows you to monitor all angles of a location using just one camera and thus it saves lots of the traditional mechanical Pan/Tilt maintenance cost. The distorted hemispherical image of the fish-eye camera will be converted into the conventional rectilinear projection. Without installing any software, you can watch live view and utilize functions such as motion detection and camera tampering through the Web interface using a web browser. Distortion correction feature of the ICA-8200 series can fix the camera video so you can use e-PTZ to zoom in, zoom out, and pan across your camera's video to survey a large area easily.



Exceptional Image Quality

Together with powerful image processing attributes like Wide Dynamic Range and Dimensional Noise Reduction technology, the ICA-8200 series is able to filter the intense backlight surrounding a subject and remove noises from video signal. Thus, the ICA-8200 series offers an extremely sharp and clear image quality even under any challenging lighting conditions.

Day & Night Surveillance

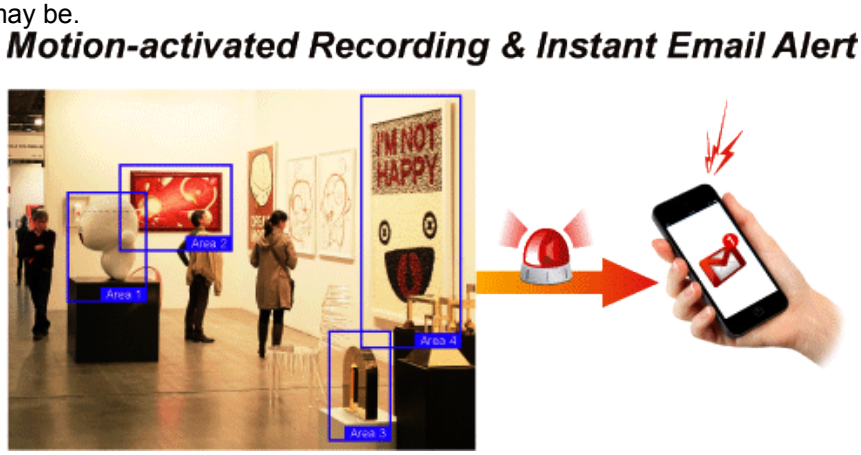
The ICA-8200 series features an automatic, removable infrared-cut filter, which enables the camera to provide color video when there is sufficient light, and black and white video in dark conditions. The camera is able to maintain clear images 24 hours a day.

Advanced Event Management

The ICA-8200 series provides surveillance functions including DI/DO alarm, micro SD card support for local storage, and 2-way audio that enables audio communication between local and remote ICA-8200 series sites by connecting the external microphone and speaker. It can also be applied in video conferencing via the 2-way audio features.

Motion Detection & Alarms

It is easy to configure motion detection windows by the web management interface of camera. Users can have total control in determining the object and sensitivity of these motion detection windows. The ICA-8200 series is able to send email notifications, alerts and snapshots to any dedicated email account. This will alert the user of any event in real time, no matter where the recipient may be.



Flexible Installation and Power Functionality (For ICA-8200)

The ICA-8200 incorporates IEEE 802.3af Power over Ethernet technology and can be powered from a PoE switch or PoE injector via the network, which eliminates the need for power cables and reduces installation costs. The ICA-8200 is ONVIF-compliant and therefore interoperable with other brands in the market, greatly supporting users to integrate with their existing surveillance network. In addition, the ICA-8200 includes 64-CH central management software for efficient monitoring. The ICA-8200 is indisputably the top choice for reliable and high performance surveillance.

High Quality Streaming via 11n Wireless Connectivity (For ICA-W8200)

The ICA-W8200 adopts IEEE 802.11n wireless technology to communicate at maximum wireless signal rate and ensures secure transmission with WEP and WPA encryptions. It allows you to stream high-quality video to remote sites and mobile devices. A Site Survey feature also allows you to view and connect to nearby wireless networks with ease. Complying

with ONVIF, the ICA-W8200 is therefore interoperable with the third brand camera in the market, which greatly supports users to integrate with their existing surveillance network. It also includes 64-CH central management software for ease of maintenance and remote monitoring. The ICA-W8200 is indisputably the top choice for reliable and high performance surveillance.

1.3 Features

➢ **Camera**

- Fish-Eye Lens to bring 360° / 180° panoramic wide angle view
- 1/2.5" 2 mega-pixel progressive scan CMOS sensor
- Unique Fish-Eye hardware correction technology
- 1.9 lux minimum illumination at F2.0
- 9 different video modes including digital PTZ function
- Removable IR-cut filter for Day & Night function

➢ **Video / Audio**

- H.264 and M-JPEG video compression simultaneously
- Simultaneous multi-stream support
- H.264 high profile, main profile and baseline
- Up to 15fps for 1440 x 1440 resolutions
- 2DNR to improve picture quality at low lux
- WDR Enhancement function strengthens visibility under extremely bright or dark environments
- 2-way audio support with enhanced audio quality

➢ **Network and Configuration**

- Compliant with IEEE 802.3af PoE interface for flexible deployment (For ICA-8200)
- IEEE 802.11b/g/n wireless LAN with WEP and WPA encryptions (For ICA-W8200)
- Auto MDI/MDI-X supported
- UPnP® support for network setup and configuration
- RTSP / UPnP / 3GPP / HTTPS protocols selectable

➢ **Easy Installation and Management**

- Advanced e-PTZ, including preset point
- 10 motion detection areas / E-mail and FTP alert
- Micro SD card local video recording supported
- Digital Input/Output for integration with sensors and alarms
- Cam Viewer 3 Central Management Software supported

1.4 Product Specifications

Product	ICA-8200	ICA-W8200
Camera		
Image Device	1/2.5" 2 mega progressive scan CMOS image sensor	
Lens	FOV=180±5°(D/H/V), F=2.0, f=1.25mm Mechanical IR-cut filter Angle of view : 360 degrees view angle	
Min Illumination	1.9 lux @ F2.0, without IRE (Color) 0.1 lux @ F2.0, without IRE (B/W)	
Effective Pixels	1440 x 1440 pixels	
Video		
Video Encoder	H.264 / M-JPEG / MPEG	
Video Resolution	H.264: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480 M-JPEG: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480 MPEG4: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480	
Frame Rate	Up to 15fps for 1440 x 1440 resolutions	
Image Setting	Day / Night Mode 2D / 3D noise reduction WDR Brightness, Saturation, Contrast, Sharpness Rotate/Mirror Text, time and date overlay	
Streaming	Streaming over UDP, TCP, or HTTP M-JPEG streaming over HTTP (server push) Controllable frame rate and bandwidth Constant and variable bit rate (M-JPEG / H.264) Simultaneously multi-profile streaming ROI	
Rate Control	CBR (Constant Bit Rate) VBR (Variable Bit Rate)	
UI Layout	Source view (1O) 180° Single broad view (1P wall) 360° Panoramic view (1P ceiling) 360° Quad view (4R) 360° Double broad view (2P) 180° Triple view (1P2R)	

	360° Triple view (1P2R) Triple with Source view (102R) Quad with Source view (103R)	
Audio		
Audio Streaming	2-way audio	
Audio Compression	RTSP: G.711 64kbps	
Microphone	Built-in microphone	
Speaker	Built-in speaker	
Network and Configuration		
Network Standard	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.11b/g/n
Network Protocol	HTTP, HTTPS, TCP/ IP, IPv4, UDP, SMTP, FTP, DHCP, DDNS, NTP, DNS, ARP, RTSP, RTP, UPnP, ONVIF (Profile S), Multicast	
Security	Password Protection, Https encryption, User accesslog	
Users	Depending on streaming data rate used	
System Integration		
Application Programming Interface	Open API for software integration ONVIF	
Alarm Triggers	Intelligent video motion detection	
Alarm Events	File upload via FTP, e-mail or Micro SD card Notification via e-mail	
Environment		
Power Requirements	12V DC, 2A IEEE 802.3af Power over Ethernet Class 3	12V DC, 2A
Power Consumption	Max. 6W	
Operating Temperature	0 ~ 50 degrees C	
Operating Humidity	20 ~ 80% (non-condensing)	
Weight	324g	
Dimensions (Φ x H)	194 x 49 mm	
Emission	CE, FCC	
Connectors	10/100 Mbps Ethernet, RJ-45 DC power jack Terminal block for 1 alarm input and 1 output Audio in Audio out Micro SD/SDHC card (max. 32GB, Class 6) Factory default reset button	

Chapter 2. Hardware Interface

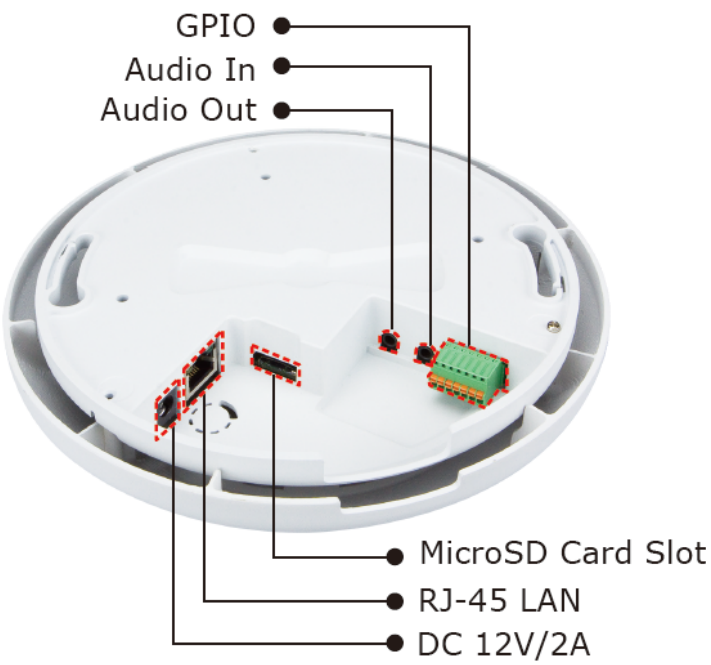
2.1 Physical Descriptions

Dimensions (Φ x H)	194 x 49 mm
Weight	324g (gross weight)

➢ **Front Panel**

Interface	Description
Light Sensor	It is for detecting the IP camera environment that illuminates. When the camera is in night mode, the IR-cut filter is switched off, giving more sensitive to infrared light.
Mic	The IP camera has a built-in internal microphone. This microphone is hidden in the pinhole located on the front panel.
Reset Button	This button is hidden in the pinhole. Please refer to the user's manual for more information.
Speaker	The IP Camera has a built-in internal speaker. This speaker is hidden in the pinhole located on the front panel.

➢ **Bottom Panel**



Interface	Description
Power Jack	The input power is 12V DC.
RJ-45 LAN socket	Connection to PC or Hub/Switch. It is connected to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-way protocol can detect or negotiate the transmission speed of the network automatically. Please use CAT-5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.
Micro SD Card Slot	The IP camera has a built-in micro SD card slot that accepts micro SD memory card for image / video event recording.
Audio Out	The loud speaker of the IP camera features voice alert and two-way audio.
Audio In	The IP camera that comes with a microphone.
GPIO	The 7-pin terminal block includes 4 input ports and 1 output port.

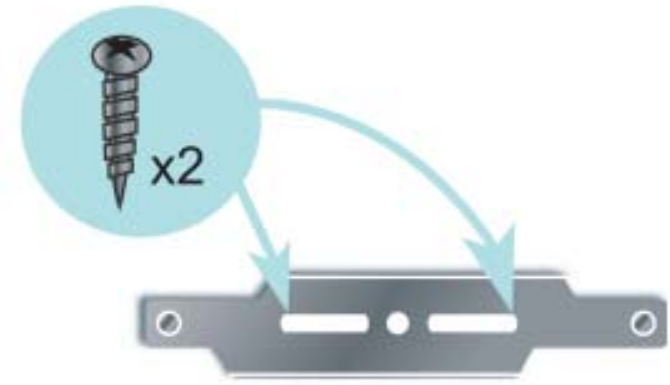
➢ **Terminal block for I/O connectors**

Pin	Function	Description
1	GND	**Digital Input:** Only one set is designed for this camera model. The internal device is also a photo-coupled electrical relay, and the external device can be simply an On/Off switch. Each set of On/Off switch can be connected as one trigger source. **Digital Output:** Each digital output pin to COM is a photo-coupled relay on Normal Open status. External device can directly connect to the terminals. However, the current that will go through the 2 nodes must not exceed 130mA. An external “Relay” can also be connected to the terminals as an implementation. In this case, current (or/and voltage) limitation is specified by the external relay.
2	DI	
3	GND	
4	DO_COM	
5	DO_NO2	
6	DO_COM	
7	DO_NO1	

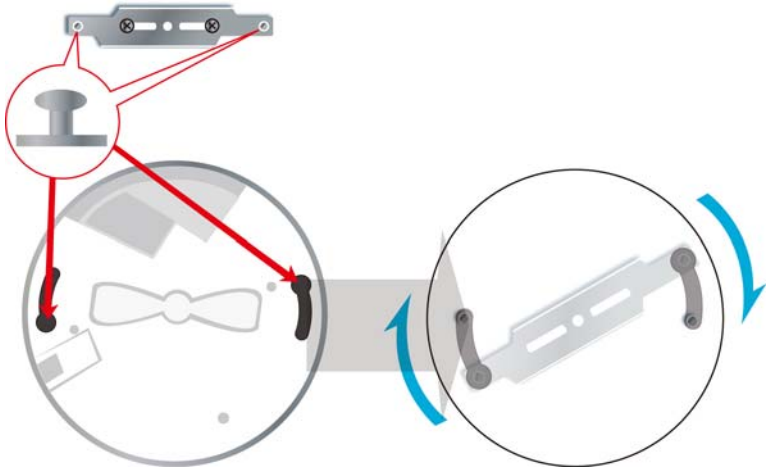
2.2 Hardware Installation

2.2.1 Wall/Ceiling Mounting Installation

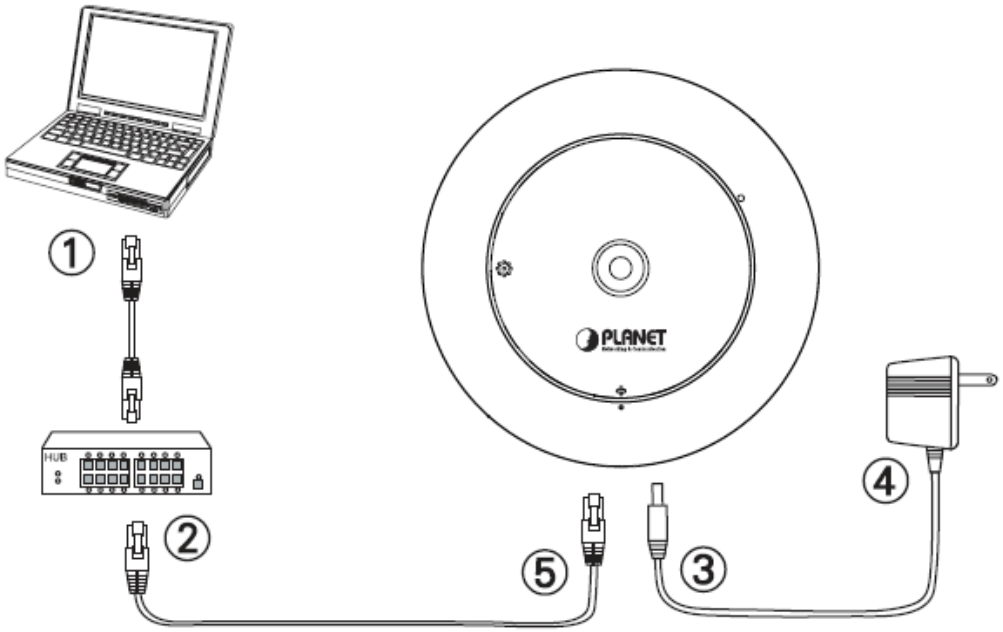
Step 1. Stick the given mounting label at the installation location.
Step 2. Take the wall mount bracket, put it on the target place and fix it with the supplied screws (total of 2).



Step 3. Load the camera into the wall mount. Be sure the camera is mated with two fixed screws, and rotate the camera clockwise to lock it in position.



2.2.2 Network Installation



Step 1. Prepare a PC with Ethernet link to the network

Step 2. Connect an Ethernet cable
Connect LAN port (RJ-45) of the IP camera to a network switch. As for the ICA-8200, when this switch is a PoE device, you can ignore the next step.

Note	As for the ICA-8200, if there is an IEEE 802.3af PoE switch in your network, you can connect the IP camera's LAN cable to this PoE switch to obtain power. The power adapter is unnecessary when the IP camera is powered by PoE switch.

Step 3. Attach the power supply
Plug the power adapter into the IP camera and connect the other end to the power outlet.

Note	Only use the power adapter supplied with the IP camera; otherwise, the product may be damaged.

Step 4. Plug Power on 100V ~ 240V

Ensure the power adaptor specification matches the power system (100 ~ 110V AC or 220 ~ 240V AC) and connect the adaptor to the outlet.

Step 5. Check LED status
The Power LED is defined to identify the IP camera status. When the IP camera is booting, the LED will flash, and while the IP camera is ready, the LED will be green.

Step 6. Adjust lens focus
Clockwise or counter-clockwise rotation can be adjusted for the focus of the IP camera lens.

2.3 Initial Utility Installation

This chapter shows how to quickly set up your H.264 camera. The camera is with the default settings. However, to help you find the networked camera quickly, the windows utility PLANET

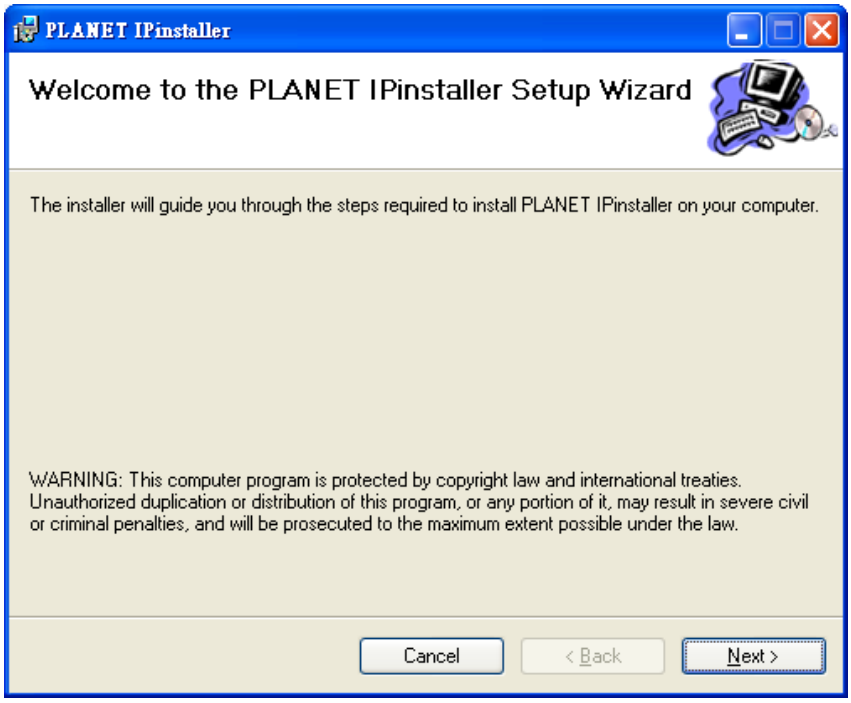
IPInstaller can search the cameras in the network that will help you to configure some basic setting before you start advanced management and monitoring.

Step 1. Insert the bundled CD into the CD-ROM drive to launch the auto-run program. Once completed, a welcome menu screen will appear.

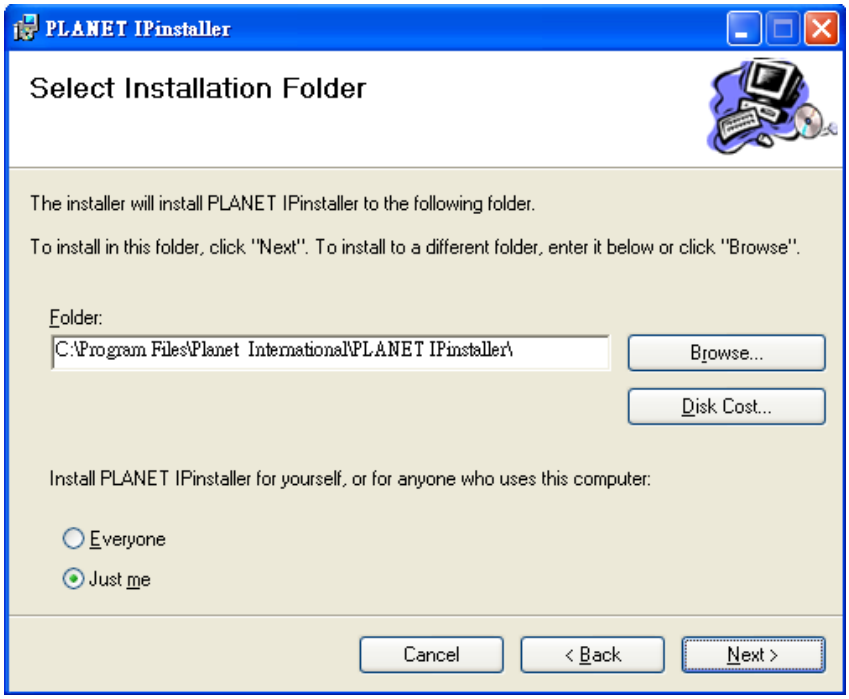
Step 2. Click the "IPInstaller" hyperlink; you will see the dialog box as follows:

Note	If the welcome screen does not appear, click "Start" at the taskbar. Then, select "Run" and type "D:\Utility\IPInstaller \ Planet IPinstaller.msi"; assume D is your CD-ROM drive.

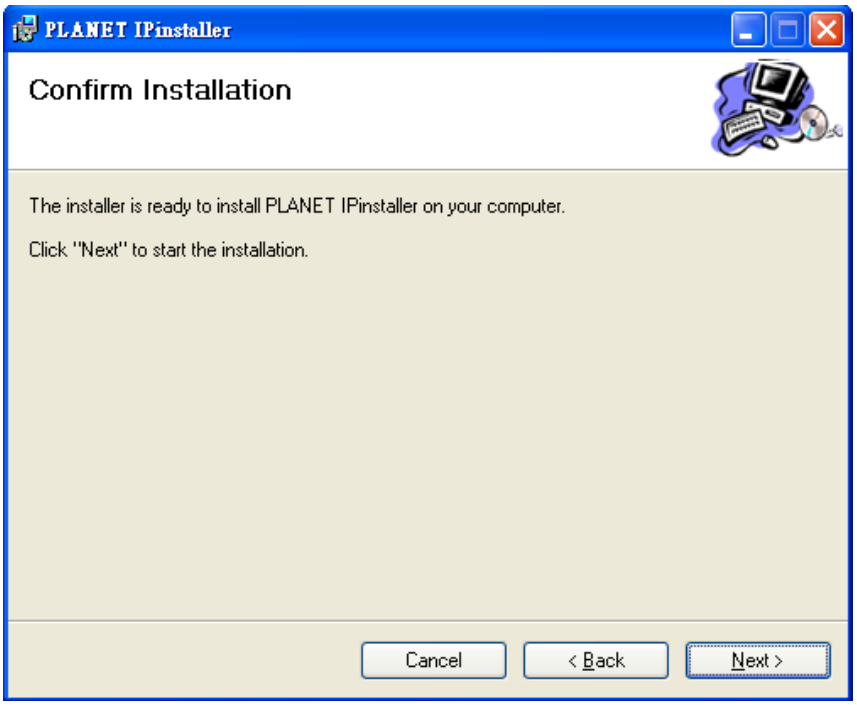
Step 3. The "Welcome to the Install Shield Wizard for PLANET IPInstaller" prompt will display on the screen and click "**Next**" to continue.



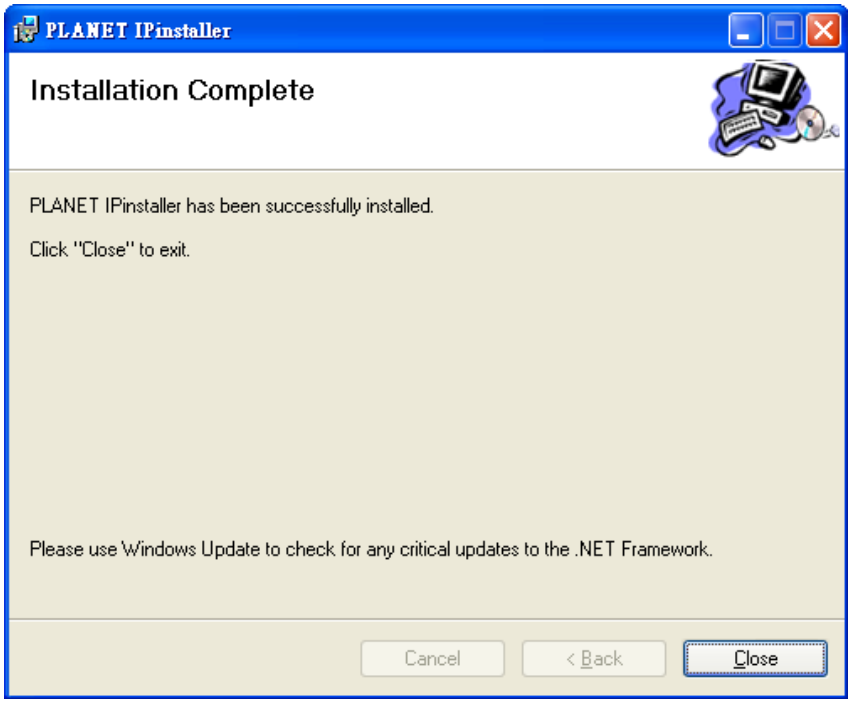
Step 4. Please click "**Next**" to install with original settings, or you may click "**Change…**" button to modify the install folder and then press "Next" to continue.



Step 5. Please click "**Next**" to start the installation.



Step 6. Please click "**Close**" to complete the installation and launch program immediately.



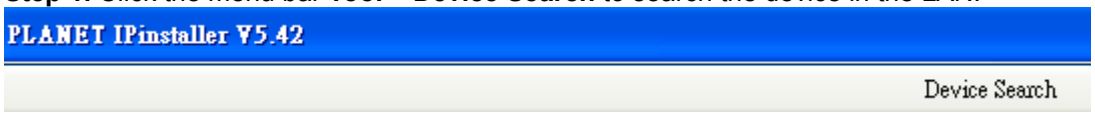
2.4 Preparation

When you install the camera in a LAN environment, you may execute PLANET IPInstaller to discover camera's IP address and set up related parameters in the camera.

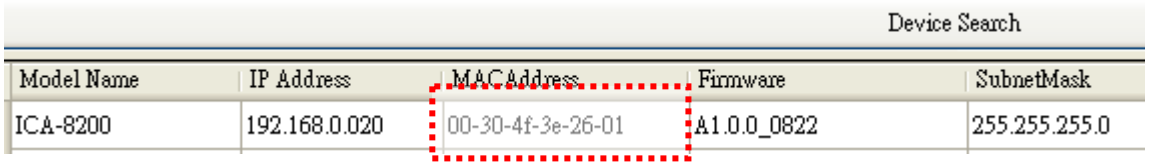
2.4.1 Configuring Network by PLANET IPInstaller

Please click "**Device Search**" button. PLANET IPInstaller will list all networked IP cameras in the LAN. If the IP camera is not found, you may check whether this IP camera is connected to the network properly and press the search button again.

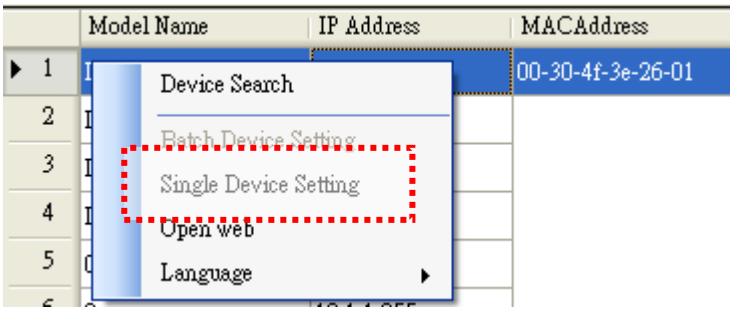
Step 1. Click the menu bar **Tool > Device Search** to search the device in the LAN.



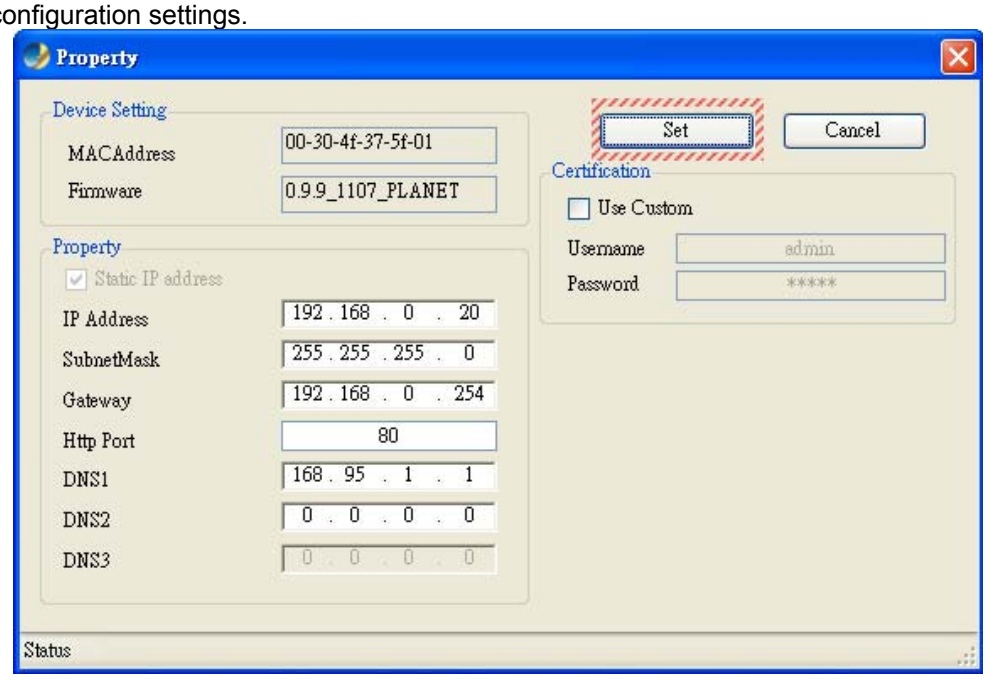
Step 2. Select an IP camera with the MAC address which corresponds to the IP camera to be configured.



Step 3. Double-click the item to open the Property Page or click the **menu bar > Single Device Setting.**



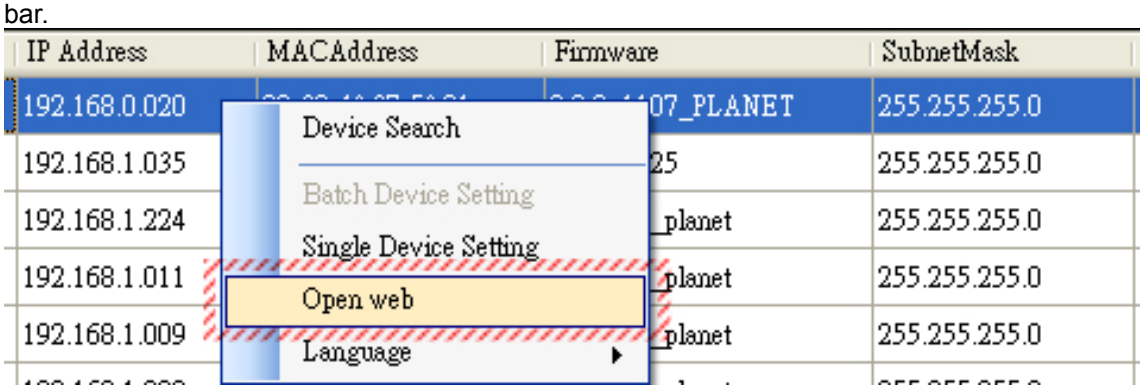
Step 4. After filling out the desired settings in the properties, click on "**Set**" button to complete the configuration settings.



2.4.2 Opening the Web-based UI of Select Camera

If IPInstaller finds the IP camera, please select the device you want to view and click the "**Open Web**" button. Then you can see the video from the IP camera directly.

To access the Web-based UI of the selected unit, run the **menu bar > Open web** on the menu bar.



If the Internet camera is configured correctly, the default Web browser will open to the home page of the selected device.

If you find your browser is opened and automatically connected to the camera Home Page, it means you've assigned an IP Address to the unit successfully. Now you can close the IP Installer and start to use your camera.

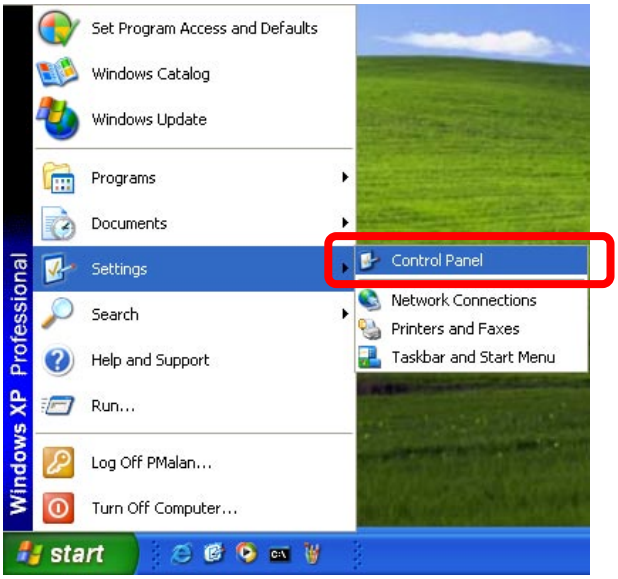
2.5 Using UPnP of Windows XP or 7

2.5.1 Windows XP

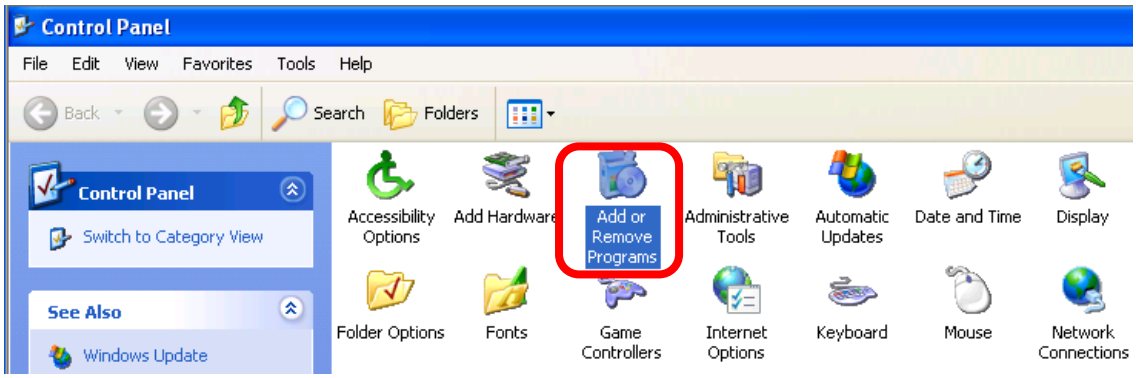
UPnP™ is short for Universal Plug and Play, which is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This device is an UPnP enabled device. If the operating system, Windows XP, of your PC is UPnP enabled, the device will be very easy to configure. Use the following steps to enable UPnP settings only if your operating system of PC is running Windows XP.

Note	Please note that MS Windows 2000 does not support UPnP feature.

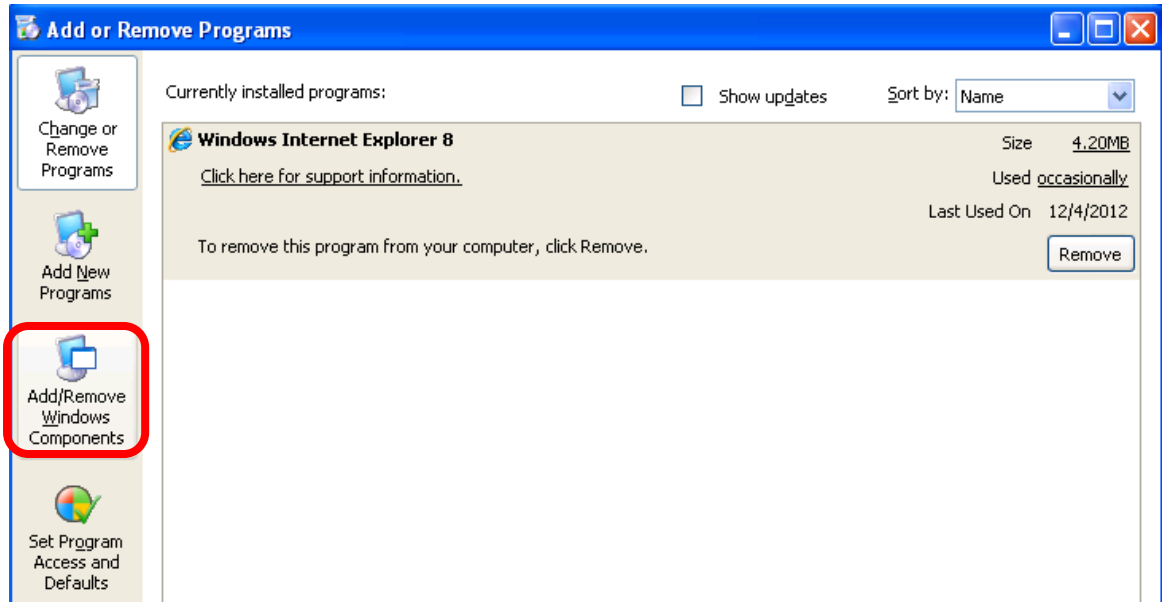
Go to **Start > Settings**, and Click **Control Panel**.



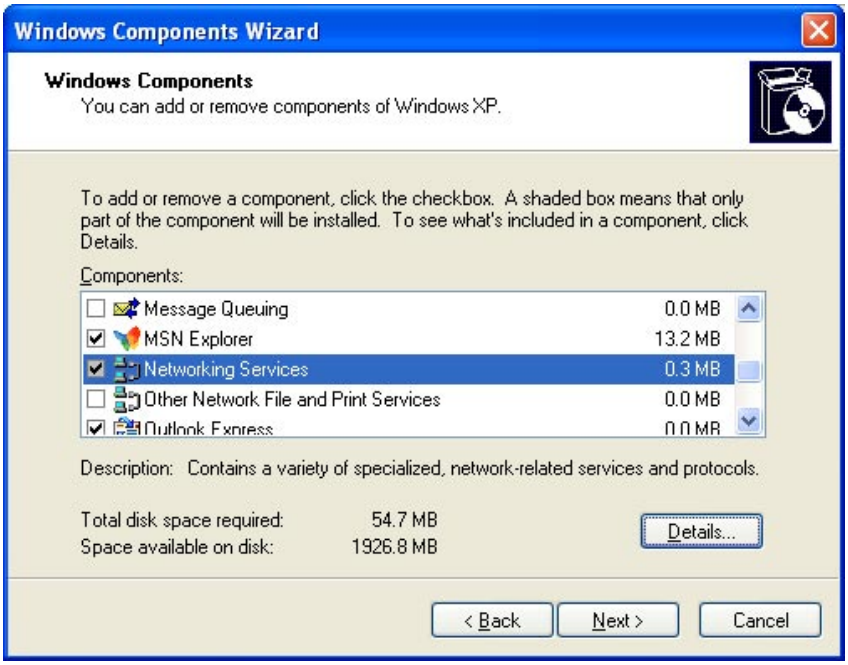
The "**Control Panel**" will display on the screen and double-click "**Add or Remove Programs**" to continue.



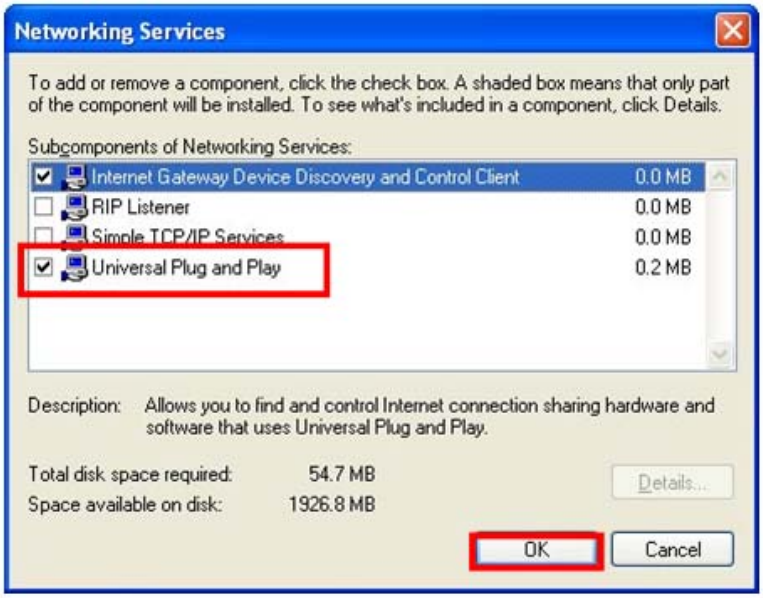
The “Add or Remove Programs” will display on the screen and click **Add/Remove Widows Components** to continue.



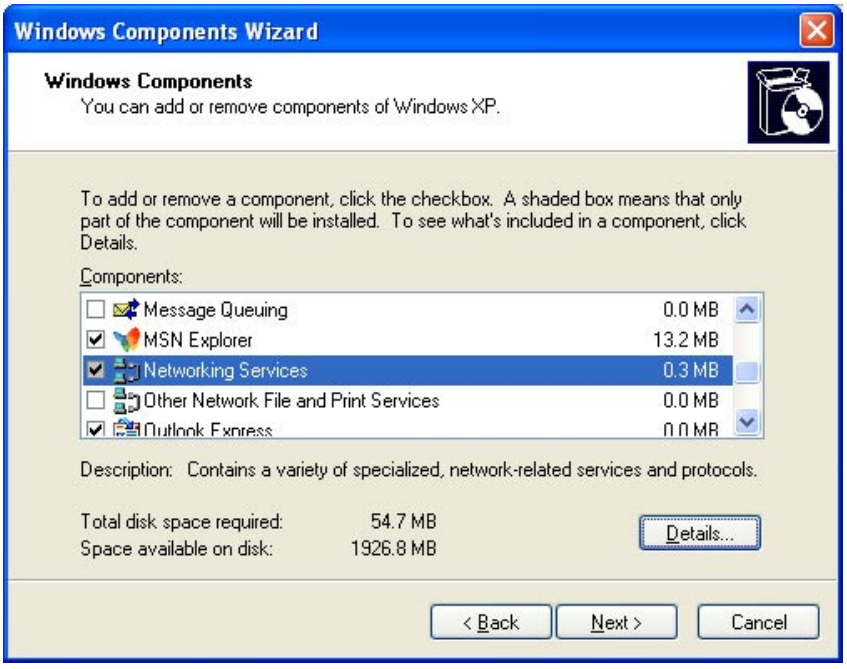
The following screen will appear, select “**Networking Services**” and click “**Details**” to continue.



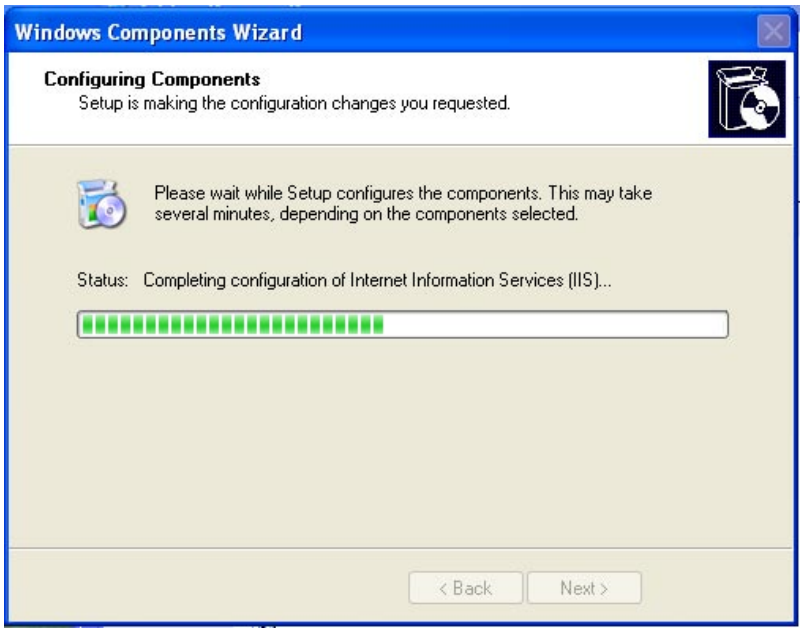
The “Networking Services” will display on the screen, select “**Universal Plug and Play**” and click “**OK**” to continue.



Please click "**Next**" to continue.

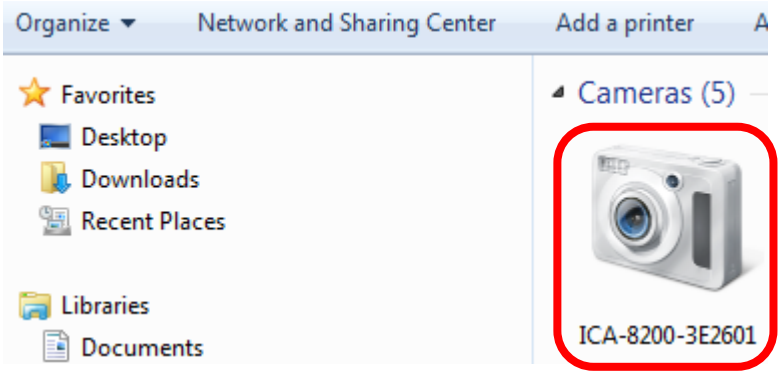


The program will start installing the UPnP automatically. You will see the pop-up screen below. Please wait while setup configures the components.



Please click "**Finish**" to complete the UPnP installation

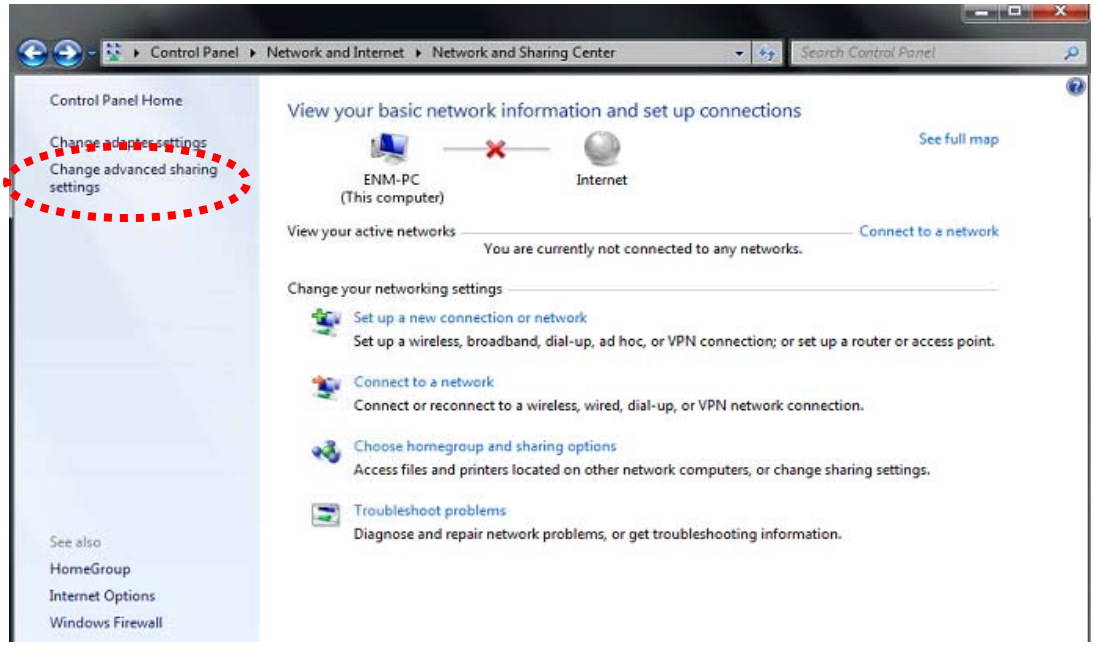
Double-click "**My Network Places**" on the desktop, the "My Network Places" will display on the screen and double-click the UPnP icon with Internet camera to view your device in an Internet browser.

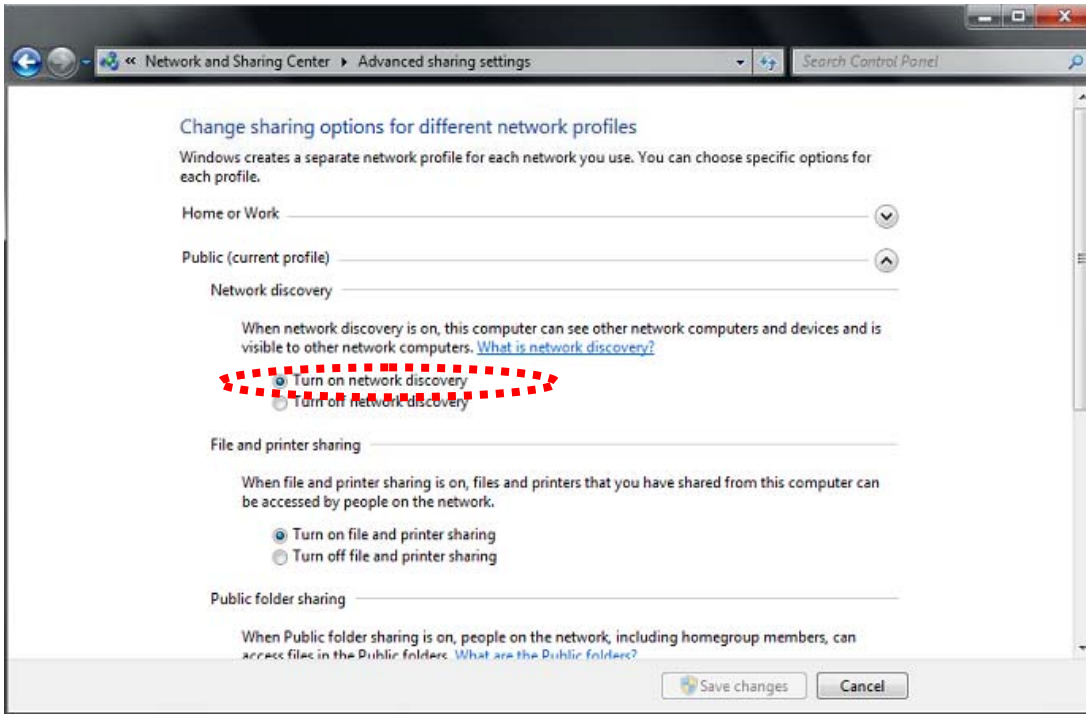


2.5.2 Windows 7

Go to **Start > Control Panel > Network and Internet > Network and Sharing Center**, if network discovery is off; click the arrow button to expand the section.

Click Turn on network discovery, and then click Apply. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.





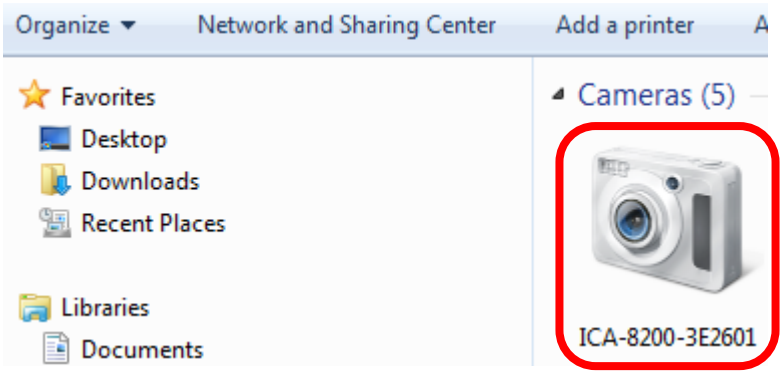
2.6 Setup ActiveX to use the Internet Camera

The Internet camera Web pages communicate with the Internet camera using an ActiveX control. The ActiveX control must be downloaded from the Internet camera and installed on

your PC. Your Internet Explorer security settings must allow for the web page to work correctly. To use the Internet camera, user must set up his IE browser as follows:

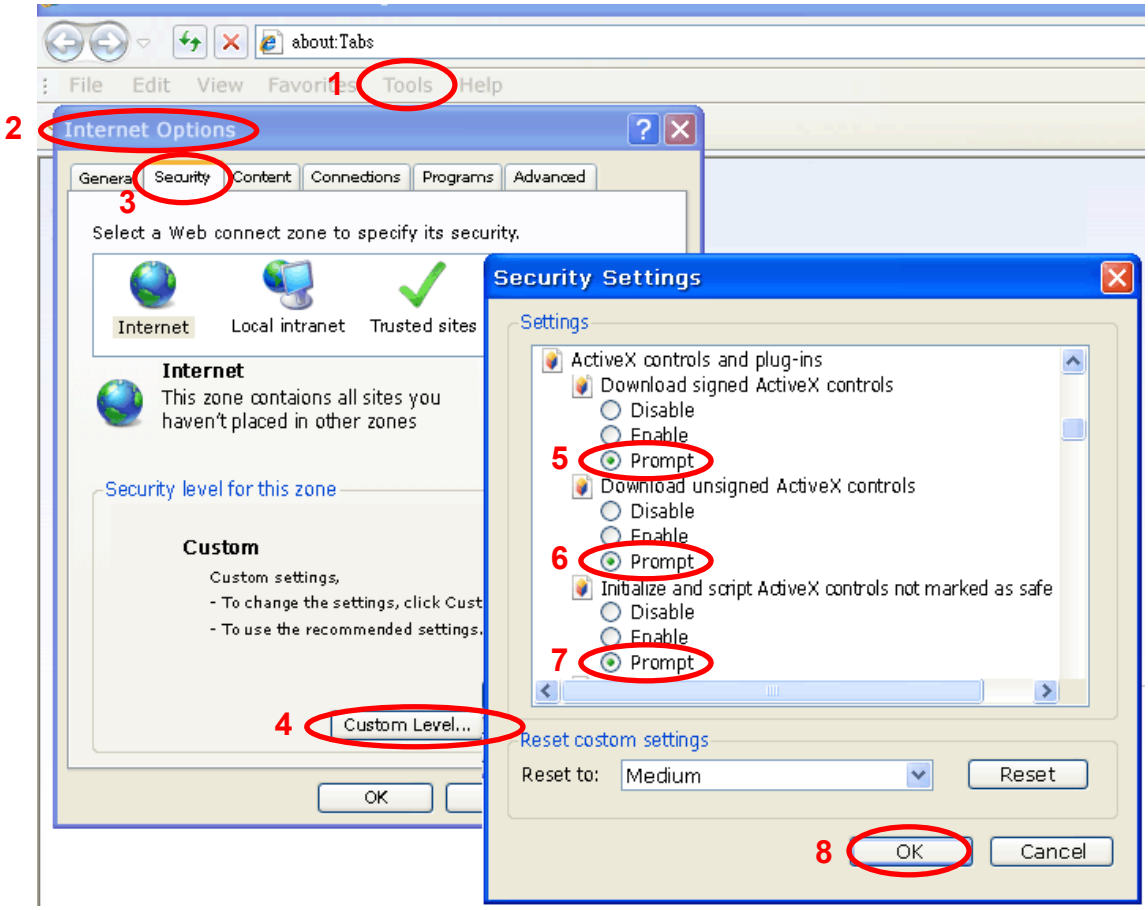
2.6.1 Internet Explorer 6 for Windows XP

From your IE browser ➔ **"Tools" ➔ "Internet Options…" ➔ "Security" ➔"Custom Level…"**, please set up your "Settings" as follows:



Set the first 3 items

- *Download the signed ActiveX controls*
- *Download the unsigned ActiveX controls*
- *Initialize and script the ActiveX controls not masked as safe to Prompt*



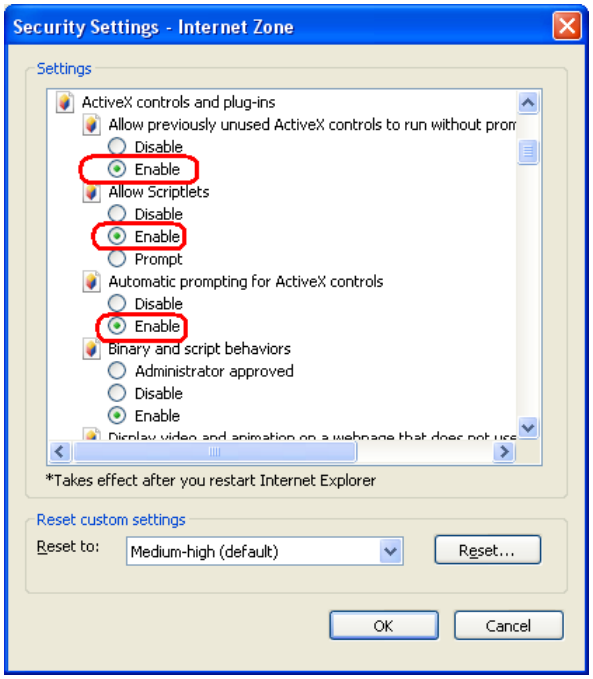
By now, you have finished your entire PC configuration for Internet camera.

2.6.2 Internet Explorer 7 for Windows XP

From your IE browser ➔ **"Tools"** ➔ **"Internet Options…"** ➔ **"Security"** ➔**"Custom Level…"**, please set up your "Settings" as follows:

Set the first 3 items

- *Allow previously unused ActiveX control to run…*
- *Allows Scriptlets*
- *Automatic prompting for ActiveX controls*



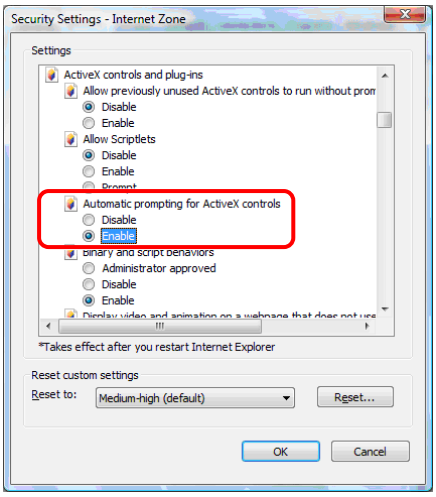
By now, you have finished your entire PC configuration for Internet Camera.

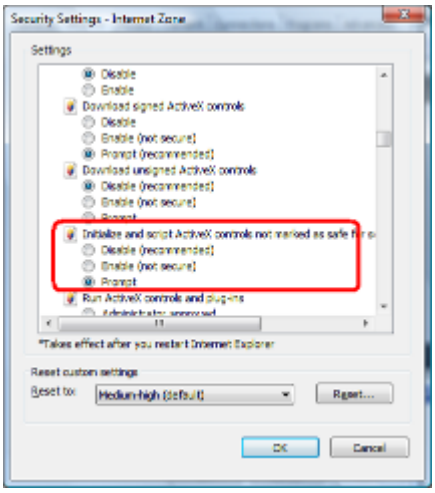
2.6.3 Internet Explorer 7 for Windows Vista

From your IE browser ➔ **"Tools"** ➔ **"Internet Options…"** ➔ **"Security"** ➔ **"Internet"** ➔**"Custom Level…"**, please set up your "Settings" as follows:

- *Enable "Automatic prompting for ActiveX controls"*

• *Prompt "Initialize and script active controls not marked…."*

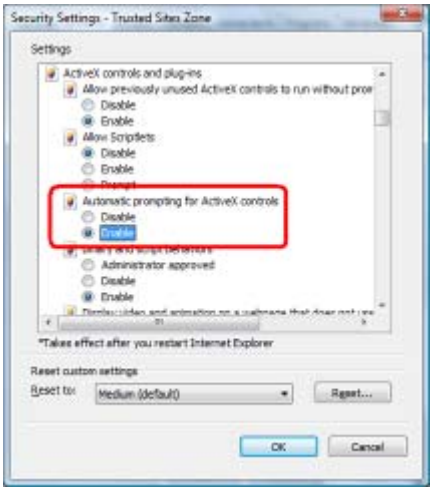


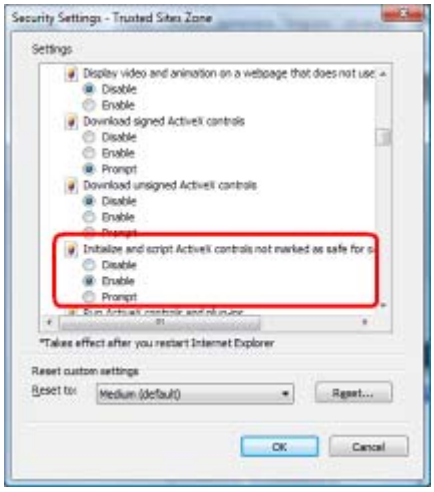


From your IE browser ➔ **"Tools" ➔ "Internet Options…" ➔ "Security" ➔ "Trusted Sites" ➔"Custom Level…"**, please set up your "Settings" as follows:

• *Enable "Automatic prompting for ActiveX controls"*

• *Prompt "Initialize and script active controls not marked…."*





By now, you have finished your entire PC configuration for Internet camera.

Chapter 3. Web-based Management

This chapter provides setup details of the Internet camera's Web-based Interface.

3.1 Introduction

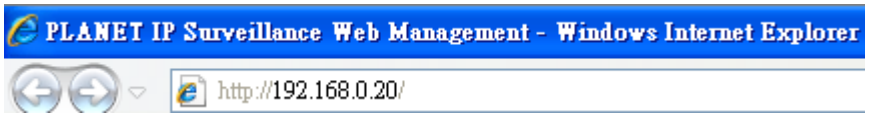
The Internet camera can be configured with your Web browser. Before configuring, please make sure your PC is under the same IP segment with Internet camera.

3.2 Connecting to Internet Camera

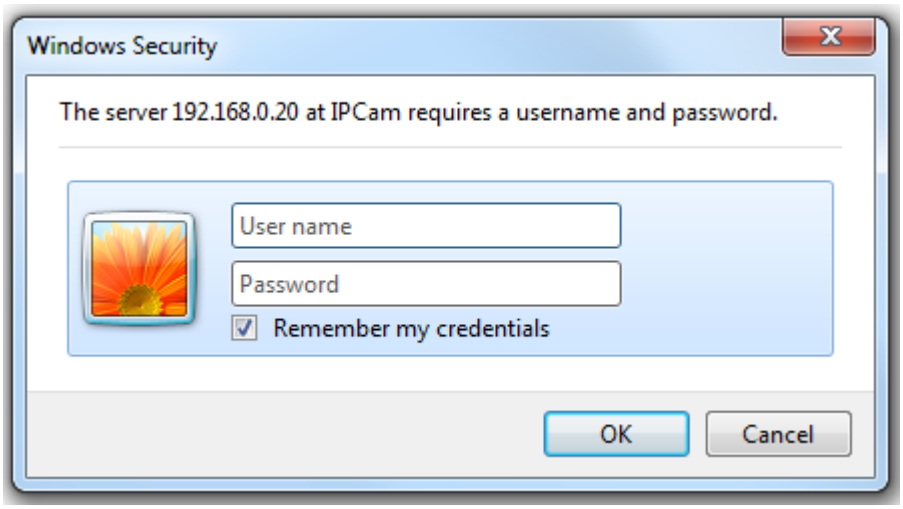
A. Use the following procedures to establish a connection from your PC to the Internet Camera.

B. Once connected, you can add the camera to your Browser's Favorites or Bookmarks.

Start the Web browser on the computer and type the IP address of the camera.
The Default IP: "**http://192.168.0.20**"



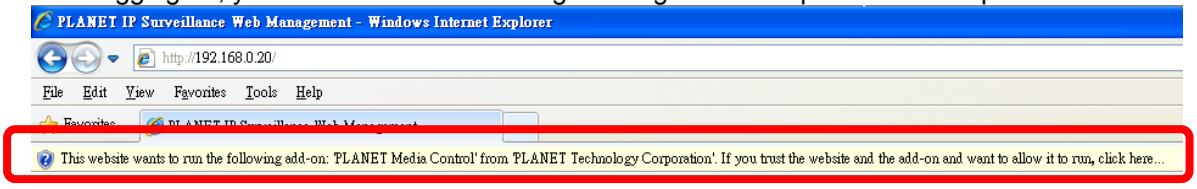
The login window of Internet camera will appear,
Default login **username** and **password** are: **admin** and **admin**



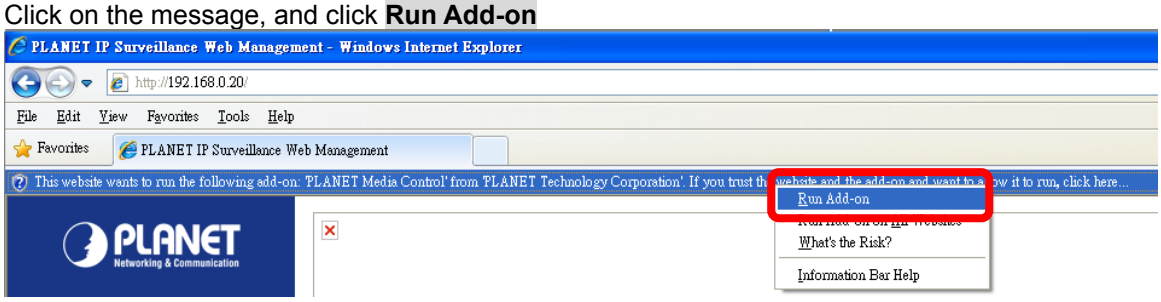
Note

If the User Name and Password have been changed with PLANET IPInstaller, please enter the new User Name and Password here.

After logging on, you should see the following messages at the top of Internet Explorer:



Click on the message, and click **Run Add-on**



When you see this message, click **Run**' to install required ActiveX control

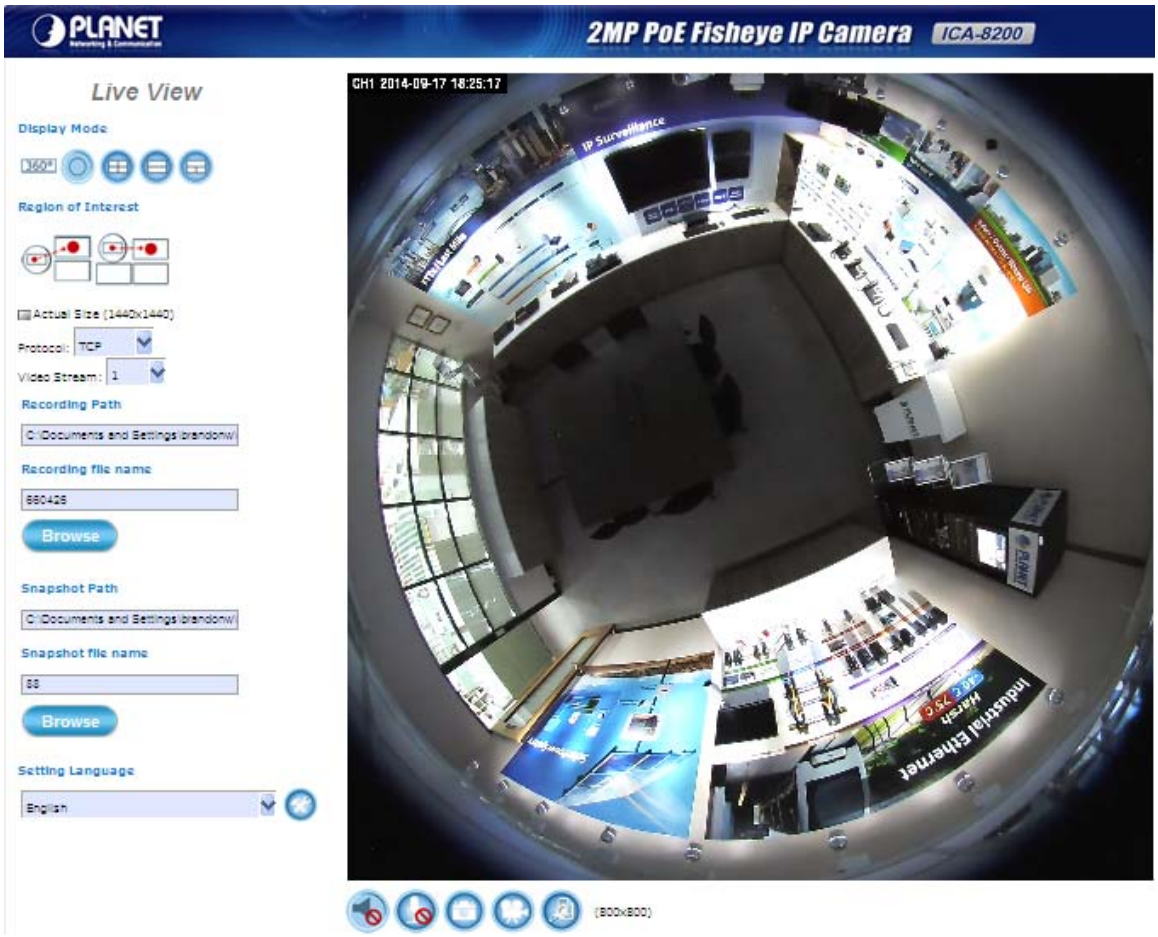
After the ActiveX control is installed and run, the first image will be displayed.

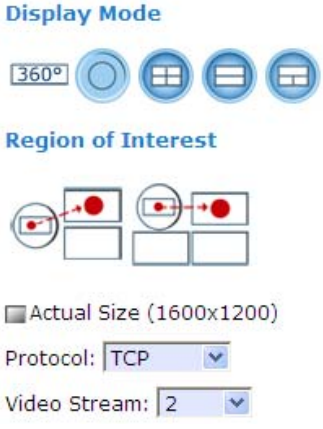
You should be able to see the images captured from the Internet camera on the web page now. For advanced functions, please refer to instructions given in the following chapters.

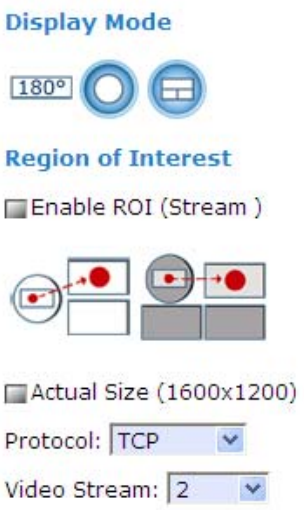
Note	If you log in the camera as an ordinary user, setting function will be not available. If you log in the camera as the administrator, you can perform all the settings provided within the device.

3.3 Live View

Start-up screen will be as follows no matter you are an ordinary user or an administrator.



Button	Description
	**Ceiling Mode** With its fisheye lens (360º panoramic view), the Camera can offer the following live view display modes: 360° Panoramic view (1P ceiling) Source view (1O) 360° Quad view (4R) 360° Double broad view (2P) 360° Triple view (1P2R) When the 4R, 2P or 1P2R PTZ display mode is selected, click the **ePTZ function** tool to display the PTZ setting tools as shown and explained below. **Wall Mode** With its fisheye lens (180º wide angle panoramic view), the Camera can offer the following live view display modes:

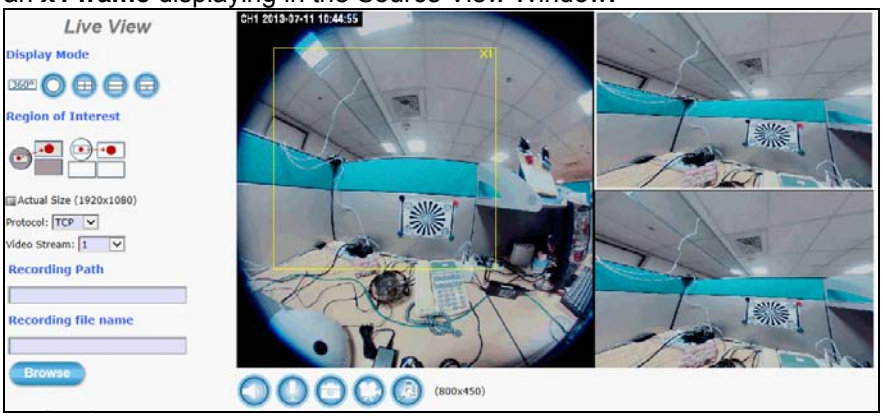


180°	180° Single broad view (1P wall)
	Source view (1O)
	180° Triple view (1P2R)

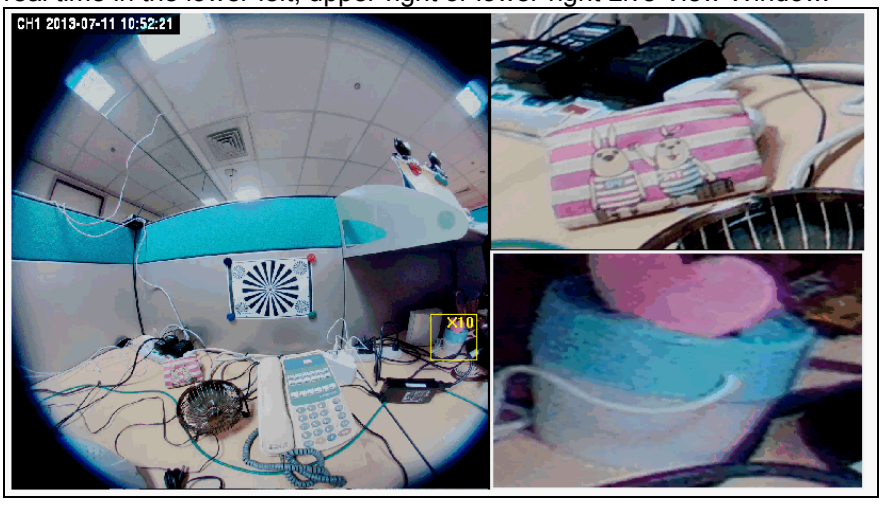
When the 1P2R PTZ display mode is selected, click the **ePTZ function** tool to display the PTZ setting tools.

ROI Function

Two operation modes (Triple and Quad with Source View) are supported. For the first time use, you may left-click the mouse button under the lower-left, upper-right or lower-right Live View Window. Then you could see an **x1 frame** displaying in the Source View Window**.**

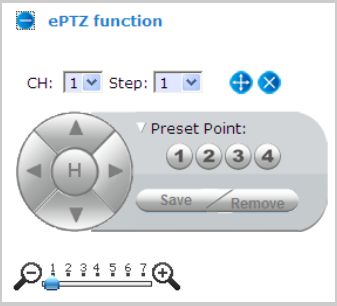
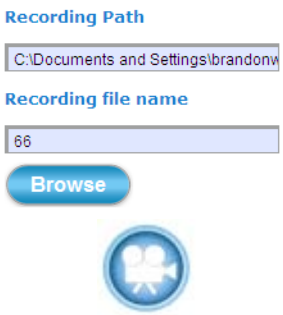
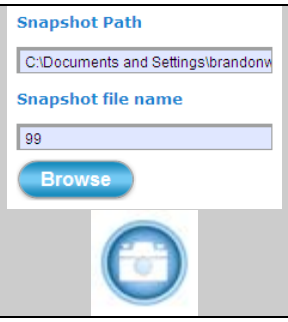
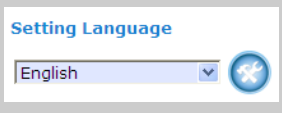


Scrolling the mouse wheel could change region's magnifying power (x1 to x10); and dragging the frame with mouse could move the amplified region. At the same time, you can also see region's amplification effect displayed real time in the lower-left, upper-right or lower-right Live View Window.



Protocol: Option for TCP or UDP transmission protocol with H.264/MPEG4/MJPEG streaming is available.

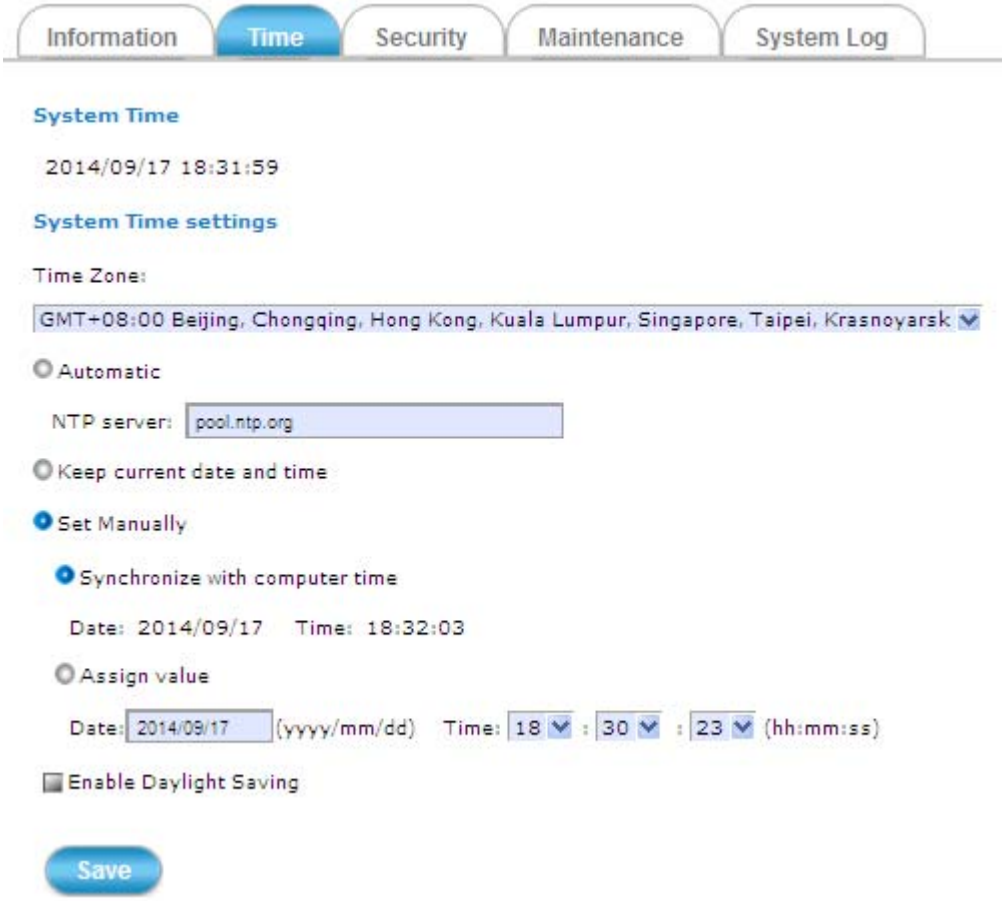
Video Stream: Two simultaneous streaming is supported for live viewing.

	**CH:** Select the PTZ channel or display window (1 or 2) to implement PTZ setting. **Step:** Adjust and set the speed of live view panning motion. **Directional Buttons:** They are used to manually pan the scene to select and zoom a specific area (1 of 4 maximum) to be monitored. To reset the scene back to its previous status, click the center **Home** (**H)** button. You can also directly click on the video to pan, zoom, and tilt a selected area. **Preset Point:** After panning and zooming, assign the selected area a Preset Point (1 to 4) and click **Save** button to store the setting. The pre-defined point of view areas will be monitored in sequence. To cancel the selection, click **Remove** button. **Zoom Slider:** Drag slider to zoom-in and zoom-out the selected scene. Zoom setting is saved with the selected pre-defined point of view area.
	Click **Browse** button to define Recording Path and Recording Filename for the video you are preparing to record. **Recording Path:** Specify a storage destination path for the video you are going to record. **Recording file name:** Define a base filename for the video recordings you are going to take. The base filename will auto-expand for each saved video recording. To start recording, click the **Recording** button.
	Click **Browse** button to define Snapshot Path and Snapshot Filename for the snapshots you are preparing to capture. **Snapshot Path:** Specify a storage destination path for the snapshot images you are preparing to capture. **Snapshot file name:** Define base filename for the snapshots you going to capture. The base filename will auto-expand for each saved snapshot. To start capturing snapshots, click the **Snapshot** button.
	**Mute:** Turn On/Off the host computer speaker.
	**Talk:** Click this button to talk to someone facing the network Camera from your computer. For ideal voice reception, the distance of the person on view should be kept within 2 meters from the Camera.
	**Digital Zoom:** Digital “zoom in” and “zoom out” of a particular area of the live view. To display the whole live view into full screen, double-click on the video.
	**Setting Language:** Select the default language of the user-interface. **Setup:** The Setup dialog will then display to provide the range of setup categories you will be able to change.

3.4 System Configuration

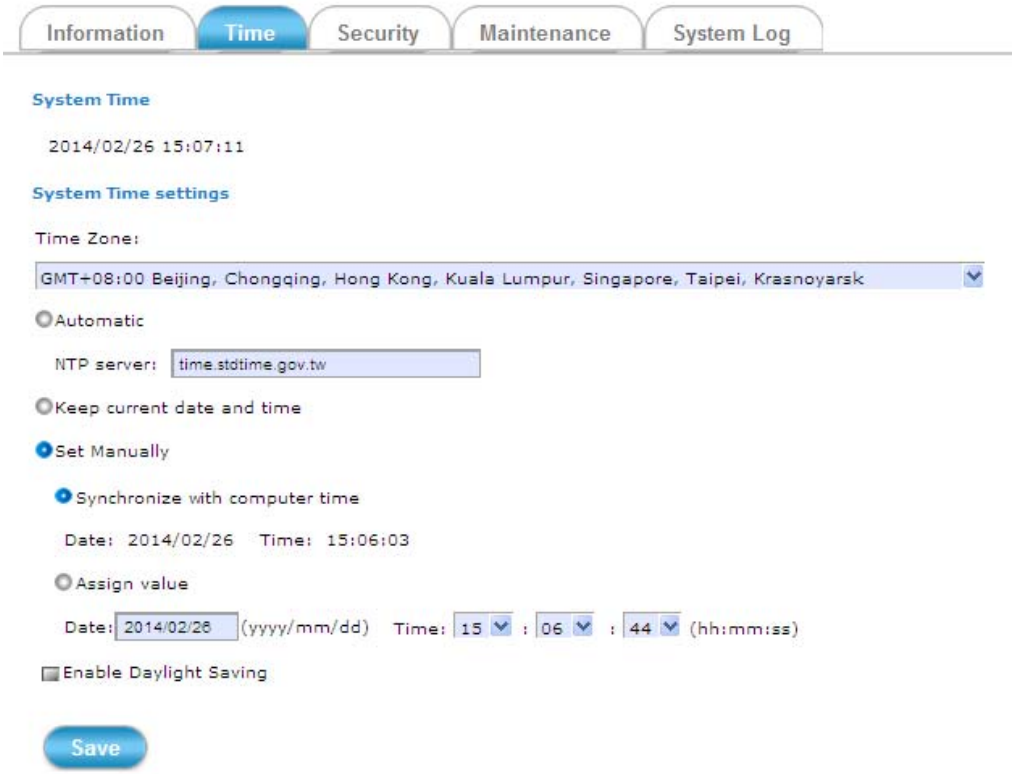
Clicking the **System** button will display the following tabbed panes relative to system configurations.

3.4.1 Information Tab



The information tabbed pane provides the existing system status of the camera which includes Model Name, System Time, Firmware Version, MAC Address, ActiveX Control Version, Wired Network, Wireless Network and DDNS Server Status.

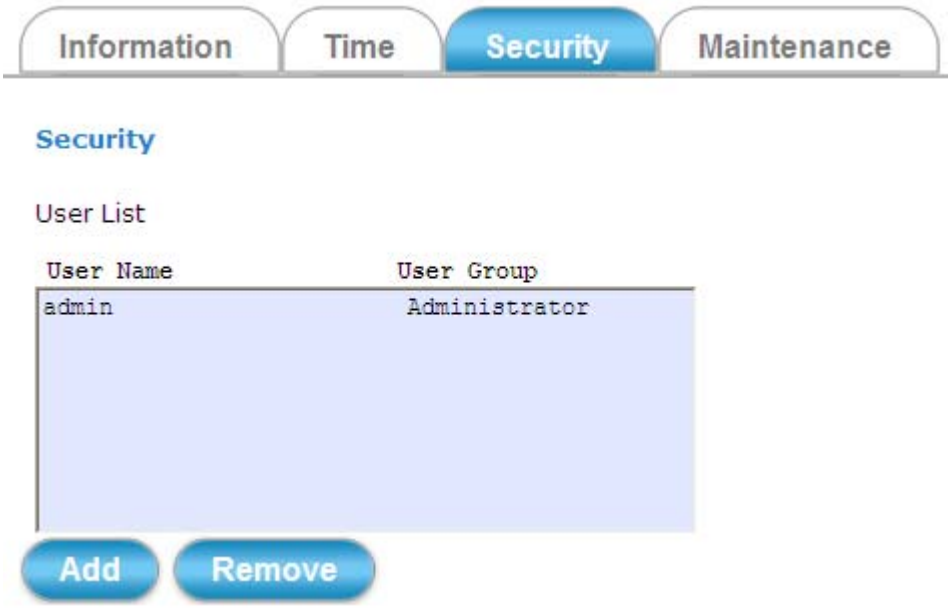
3.4.2 Time Tab



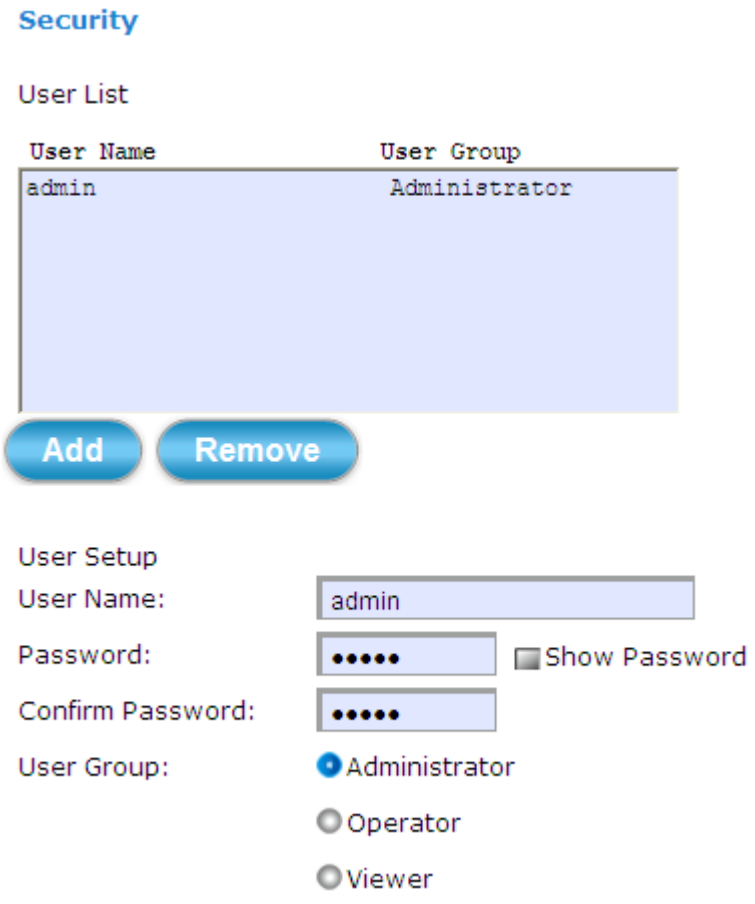
The **Time** tabbed pane is where you set up the clock of your Camera to synchronize with your local time. Where:

System Time	The Network camera current date and time is applied and displayed here based on the setup status of the System Time Settings as detailed below.
Time Zone	Select the applicable Time Zone of your city in reference to Greenwich Mean Time.
Automatic	Select this item if you want to automatically synchronize the camera clock with that of Network Time Protocol (NTP) Server.
Keep Current Date and Time	Select this option in lieu of automatic synchronization if the camera is not connected to NTP Server and uses its own embedded clock.
Set Manually	**Synchronize with the PC Time:** Select this option to manually synchronize the Network Camera clock (date and time) with that of the local host computer. **Assign value:** Select this option to enter the date and time manually.
Enable Daylight Saving	Select this option only when applicable at your location. Two setup settings; the **Start time** and **End time** are needed to implement the feature.

3.4.3 Security Tab



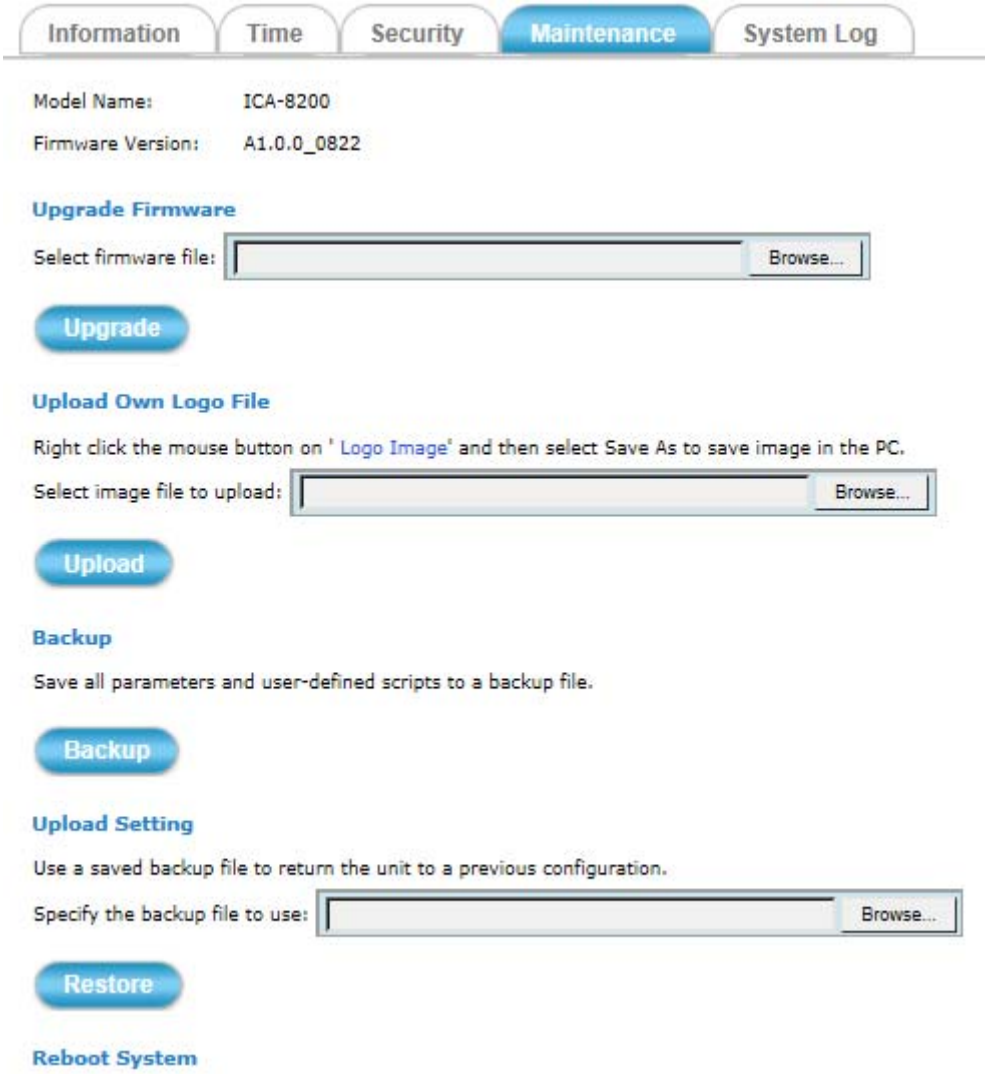
The **Security** tabbed pane allows you to add new camera User Name and change Password and the surveillance status or User Group. Click the **ADD** button to access the security setup dialog (shown below).



User Name	Enter the new user name to be added into the list (see Note 4 of dialog for proper entry).

Password	Enter the new password (see Note 4 of dialog for proper entry).
Confirm Password	Enter the password again for authentication (encoded display).
Show Password	Displays the decoded password when check box is enabled.
User Group	Three group options are available, namely: **Administrator:** User is allowed to change camera settings and perform all camera functions. **Operator:** User is allowed to login "Live View" Webpage and perform all functions within this page. Except changing video and audio settings of camera live stream, other adjustments of camera parameter are prohibited. **Viewer:** User is only allowed to login "Live View" Webpage and perform all functions within this page. Changing camera settings is prohibited.

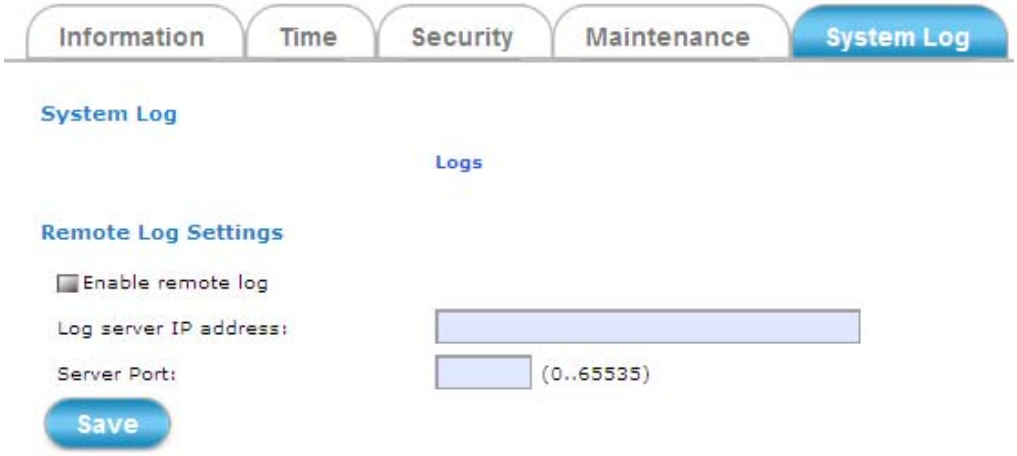
3.4.4 Maintenance Tab



The **Maintenance** tabbed pane allows you to upgrade the firmware with the latest version and to restore the Network camera settings to factory default.

Select Firmware File	Download the latest firmware file from the website by executing the following steps**:** 1) Click the **Browse** button to access and select the appropriate firmware file from its folder. 2) Click the **Upgrade** button. The Network camera will then start to upgrade the existing firmware. When upgrade is completed, the camera will reboot automatically.
Reboot System	Clicking the **Reboot** button allows you to manually reboot the Network camera.
Restore System	Clicking the **Factory Default** button will restore the Network camera to its factory default settings status. Before camera system proceeds to restore step, there'll be a dialog window popped and then ask if you would like to let the following three settings remain current**:** ◎ Network setting ◎ Username/Password ◎ System clock (time & date)

3.4.5 System Log

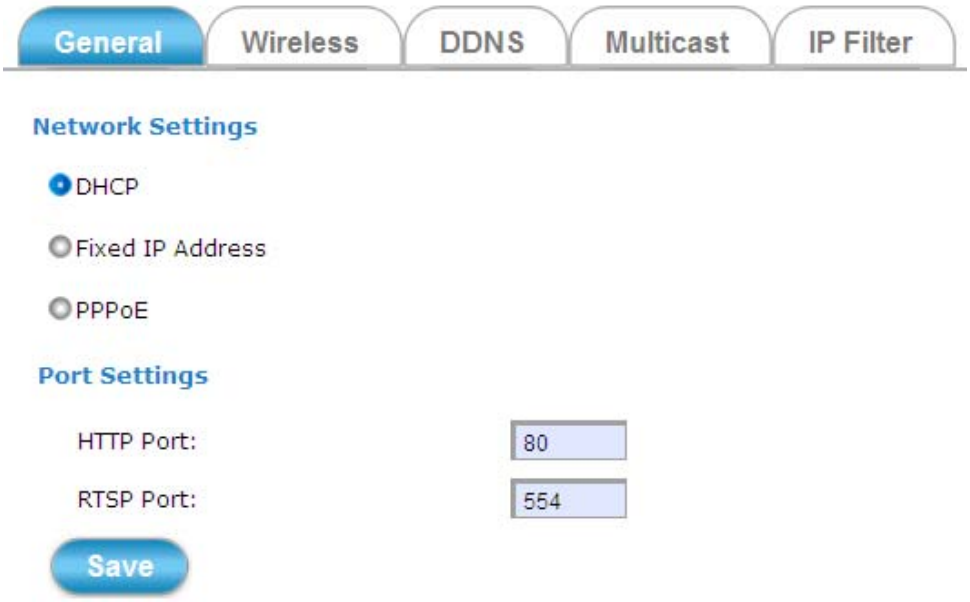


You can collect information about the system, hardware and security event of you IP camera.

3.5 Network Setup Execution

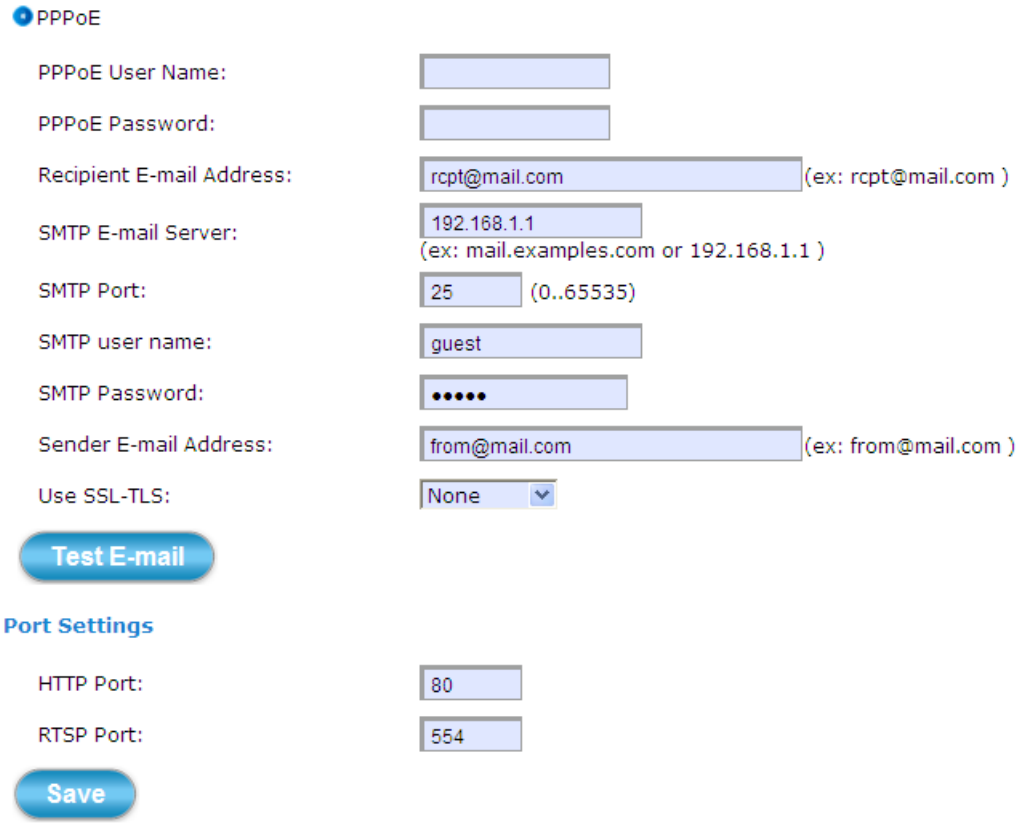
Clicking the **Network** button will display the following tabbed panes on configuring camera connection with the network.

3.5.1 General Tab



The **General** tabbed pane (shown above) allows you to redefine the network and port protocol settings of the Network camera.

DHCP	This option obtains the available dynamic IP address assigned by the DHCP server each time the camera is connected to the network.
Fixed IP Address	This option manually assigns a static IP address to the Network camera.
PPPoE	Select this option to set PPPoE account & password.



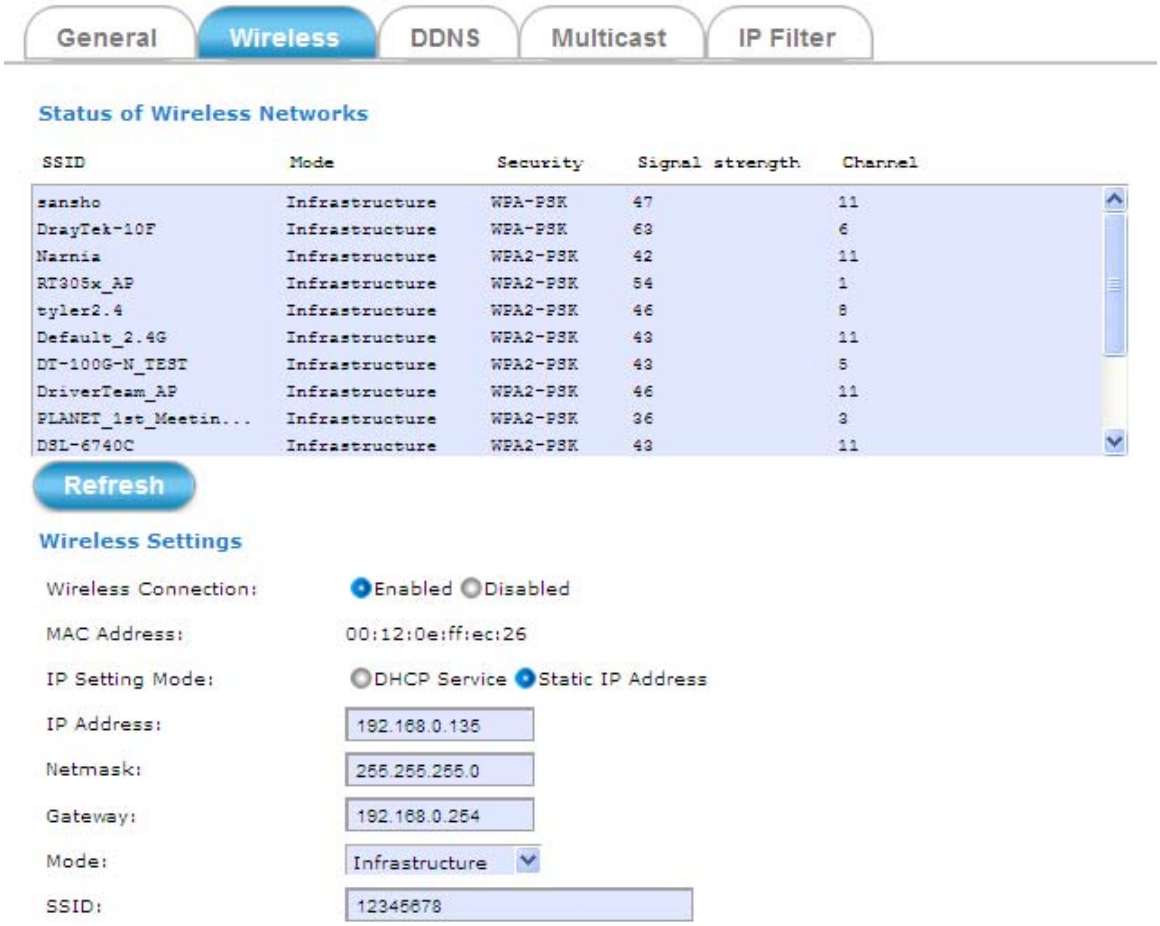
While PPPoE protocol is selected, you may have to enter some more information such as the above picture.

While camera IP is changed dynamically because of PPPoE Network connection, its new IP Address will be sent to “Sender E-mail Address” through SMTP service. So you won’t worry about the difficulty in camera’s Webpage access.

Note	As for the settings of SMTP service, kindly please contact your e-mail service provider. After all parameters are confirmed to be correct and working properly, you may enter them into the text area manually.

Port Settings:
HTTP Port: Re-define the existing HTTP Port number in the text box.
RTSP Port: Re-define the existing RTSP Port number in the text box.

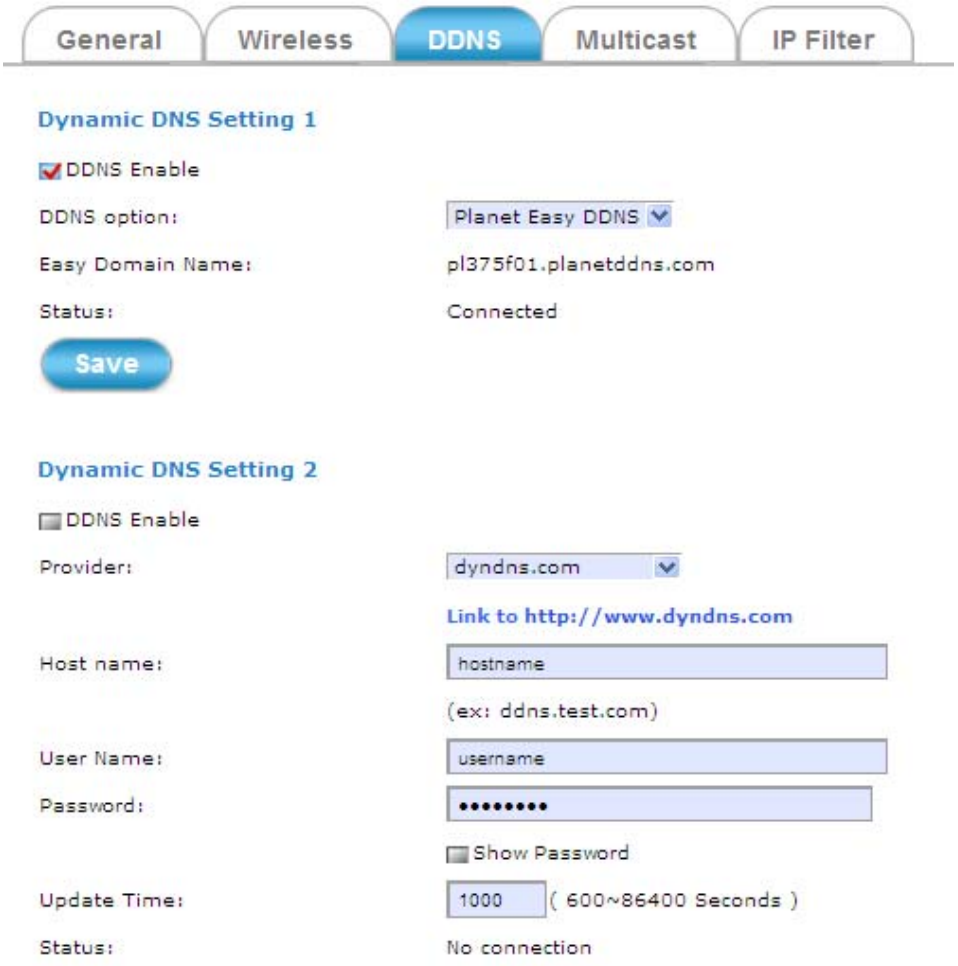
3.5.2 Wireless Tab (ICA-W8200 only)



The **Wireless** tabbed pane provides search and display of available wireless networks from which you can select the most suitable one for your camera.

Status of Wireless Networks	Displays the list of wireless networks (access points) currently available; grouped under SSID, Mode, Security, and Signal Strength categories. Click the **Refresh** button to refresh the list for possible additional list of wireless networks not previously available.
Wireless Setting	Defines the configurations to enable the camera to connect to the selected wireless network. Clients in the same network group are able to access to this camera through wireless connection.
WPA-PSK Setting	Defines the Wi-Fi Protected Access setting in Pre-Shared Key mode relative to the selected wireless network.

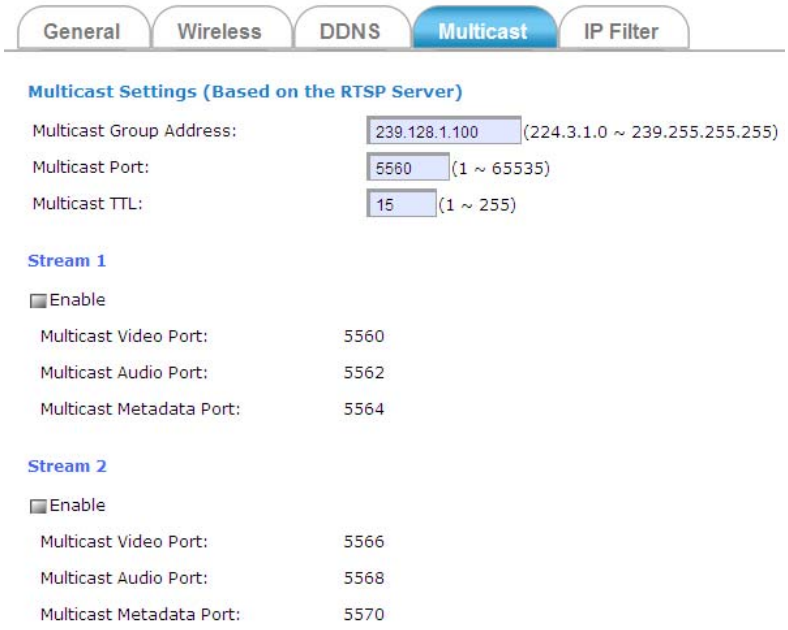
3.5.3 DDNS Tab



The **DDNS** tabbed pane allows you to configure the Dynamic Domain Name System of your network device with a host name instead of the IP Address.

DDNS Enable	Enable the check box to support DDNS function. This model adds Planet easy DDNS that when this function is enabled, its hostname with PLANET DDNS will occur, and six of MAC will be ended automatically. User don't go to web of www.planetddns.com to apply new account.
Host Name	Enter the host name which you registered and got through DNS Service Provider. The assigned host name is used to access the network device instead of IP Address.
User Name/Password	Account authentication for logging into the website of DNS Service Provider.
Update Time	Define a time interval for the device to periodically update and check its access status with website of DNS Service Provider.

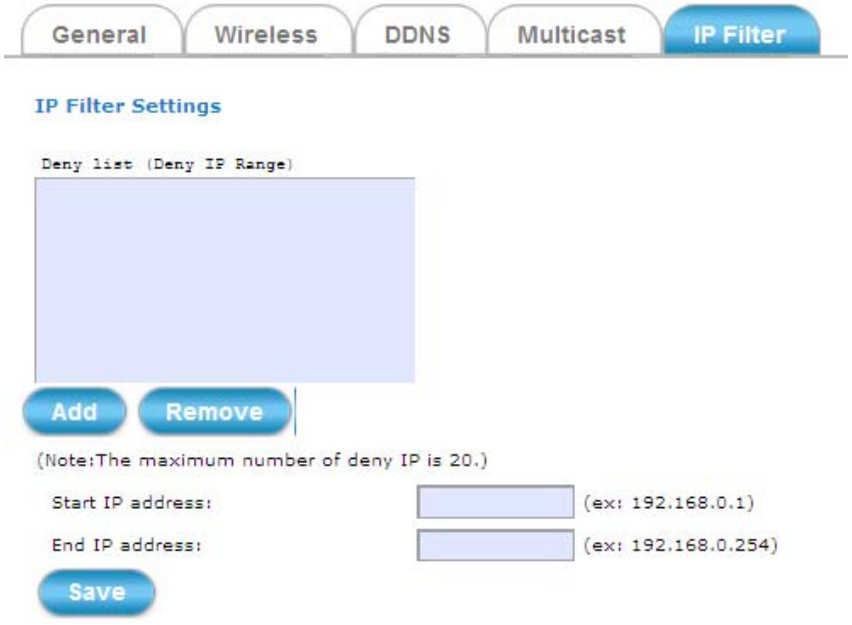
3.5.4 Multicast Tab



Multicast is a bandwidth conservation technology. This function allows several users to share the same packet sent from IP camera. To use Multicast, appoint IP Address and port here. TTL means the life time of packet. The larger the value is, the more users can receive the packet.

To use Multicast, be sure to enable the function "Force Multicast RTP via RTSP" in your media player. Then key-in the RTSP path of your camera: "rtsp:///(IP address)/" to receive the multicast.

3.5.5 IP Filter Tab

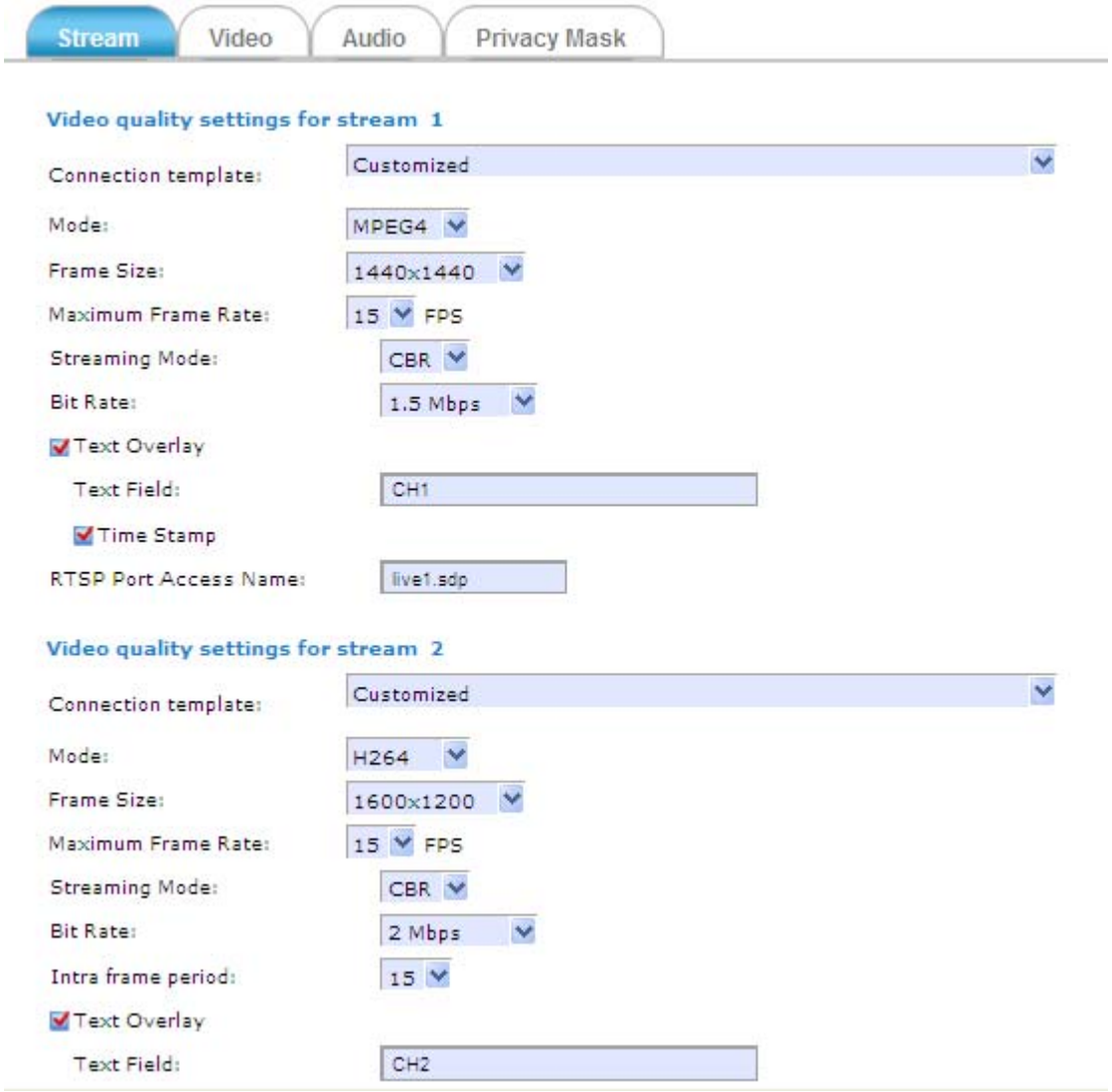


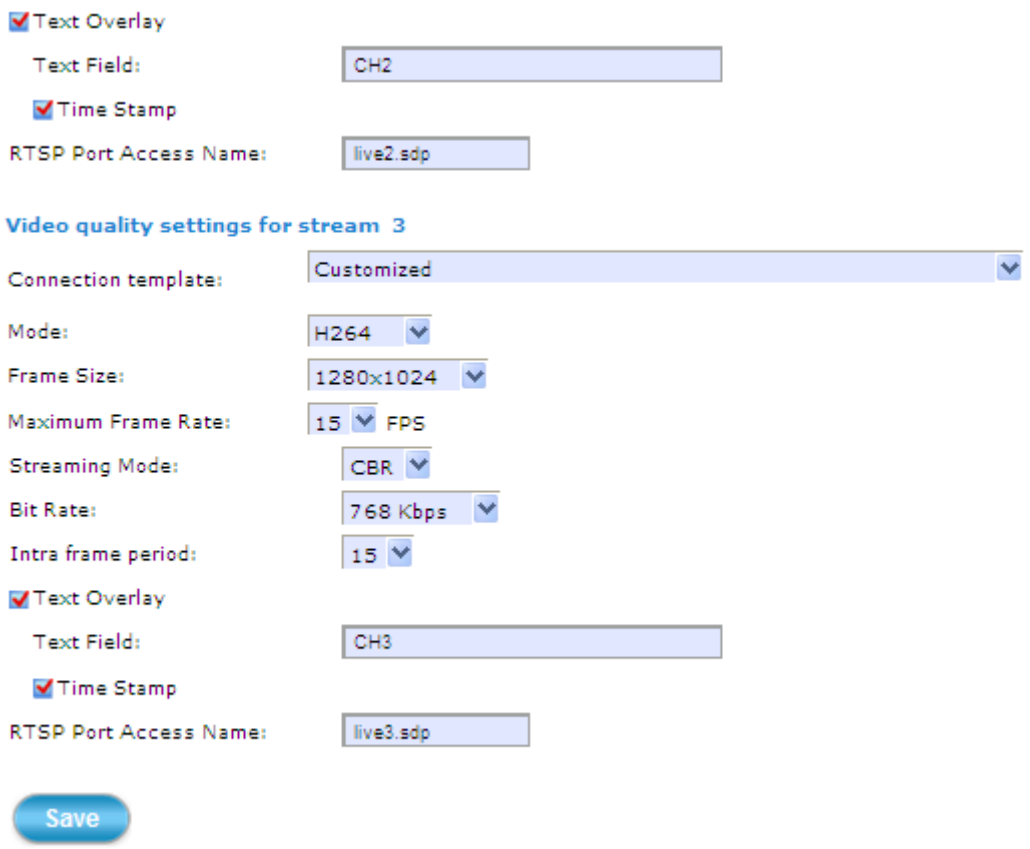
You can enter different user's IP addresses which can be allowed or denied by the device.

3.6 Video and Audio Setup Execution

Clicking the **Video & Audio** button will display the following tabbed panes for defining camera streaming, video, and audio functions.

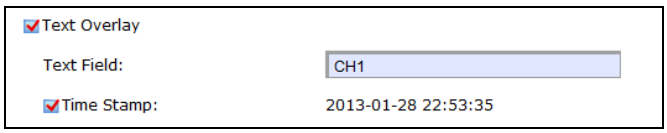
3.6.1 Stream Tab





The **Stream** tabbed pane (see the above figure) provides the adjustments for the video quality of the camera streaming function. The pane offers the following three modes of video quality setting**:**

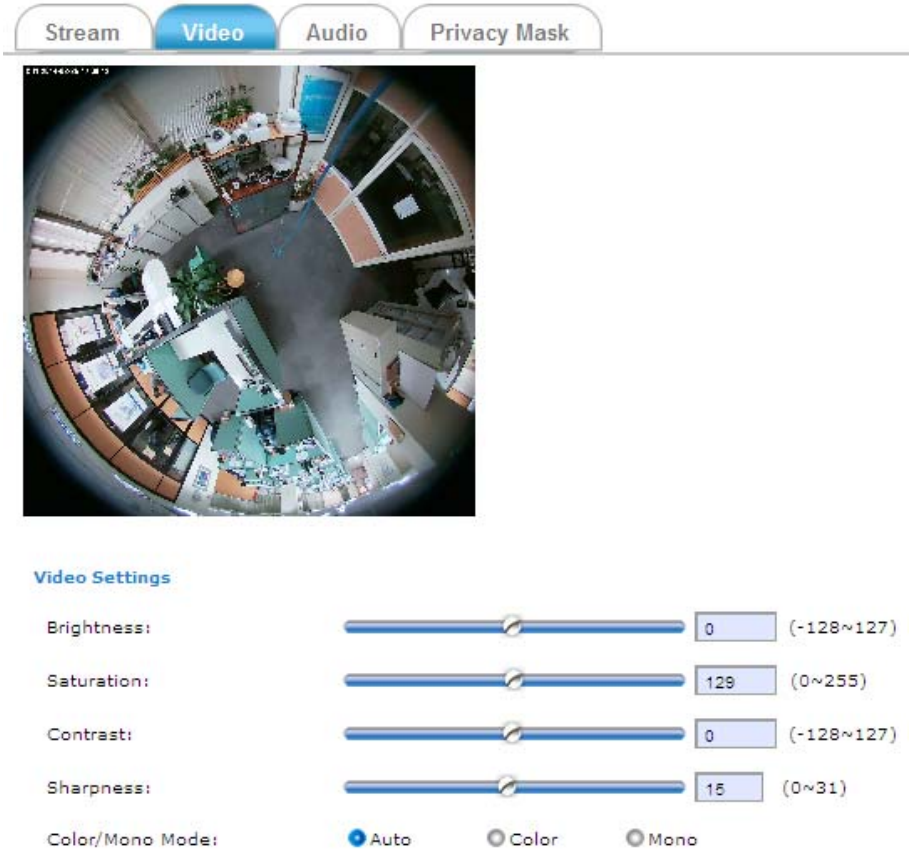
Connection Template	Four option modes are available: “Fast,” “General,” “Low,” and “Customized” modes.
Mode	Three modes of encoding options are offered: “H264”, “MPEG4”, and “MJPEG”.
Frame Size	Three types of streamed frame resolutions are available for selection: 1920 x 1920 / 1920 x 1080 / 1600 x 1200 / 1440 x1080 / 1280 x 1024 / 800 x 600 / 640 x 480 / 320 x 240.
Maximum Frame Rate	Available rate options are: 5, 8, 10, 15, 20, 25 and 30 frames per second (FPS).
Steaming Mode	Two choices of streaming modes are offered: “VBR (variable bit rate)” and “CBR (constant bit rate)”.
Quality	The options for streaming mode quality are expressed differently between VBR and CBR**:** **VBR:** Standard, Good and Detailed **CBR:** 1M bps, 1.5M bps, 2M bps, 3M bps, 4M bps, 5M bps, 6M bps, 8M bps, 10M bps and 12M bps.
Intra Frame Period	Available choices are: 5, 8, 10, 15, 20, 25, 30, 40, 50 and 60 frames per period. This function will let you choose how long distance between two I-Frames.

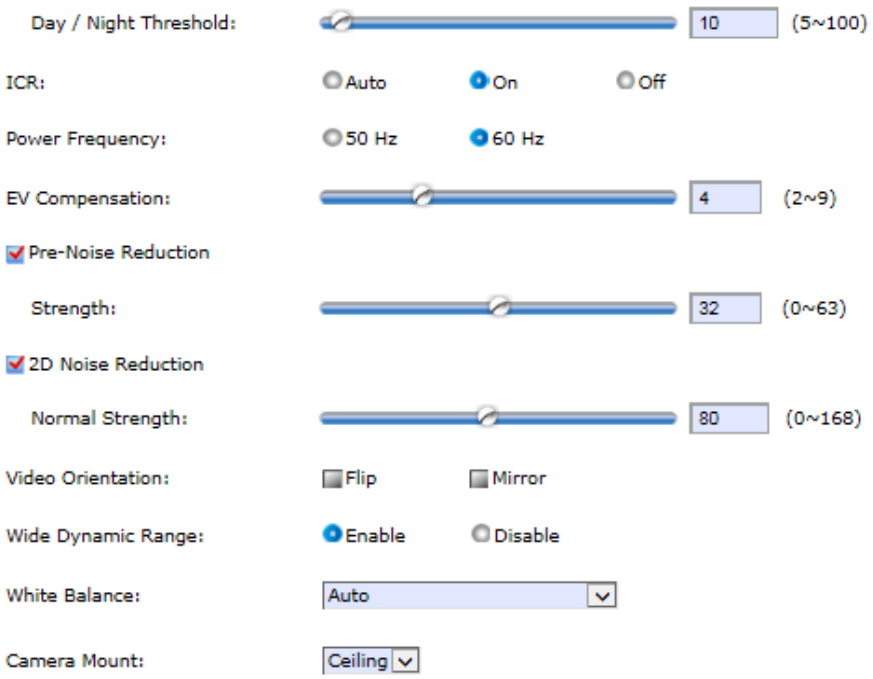
	Larger value means longer distance between two I-Frames and this selection is suitable for the stable Network Bandwidth Environment; so we suggest the smaller value selection is proper to the worse Network Bandwidth Environment.
Text Overlay	When enabled, each streamed frame will be overlaid with the Camera ID (text field) and stamped with date/time (if enabled) as illustrated below. 
RTSP Port Access Name	When RTSP or VLC media-player is used, the port can be renamed with easy to remember pathname. For example, the default RTSP Port Access Name is live1.sdp ; it means your playback stream name would be "**RTSP://camera's IP address/live1.sdp**"

Note

If the "Video Event Alarm Setting by Video" is enabled, an alert message will display requiring you to disable the feature first before proceeding to change the Streaming settings. Otherwise, adjustments to video quality streaming settings **cannot** be accomplished.

3.6.2 Video Tab



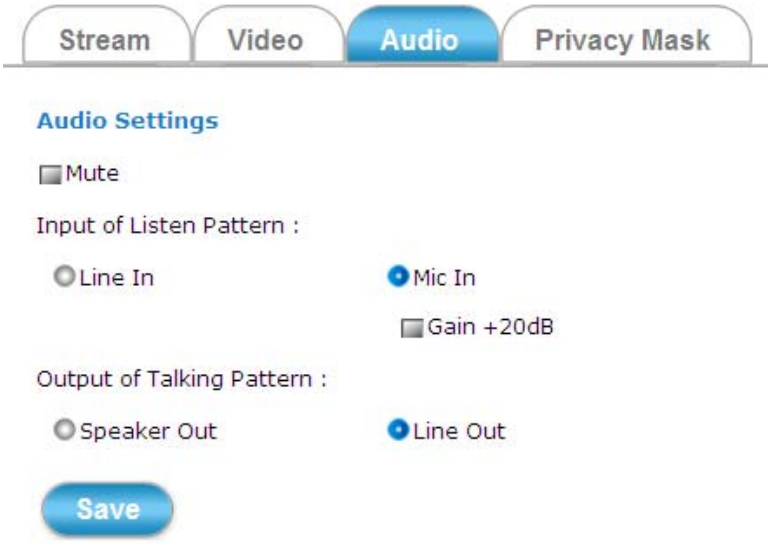


The **Video** tabbed pane lets you perform live adjustments and improvement of the camera captured video effect relative to the target environment. If you experience difficulty in implementing the adjusted parameters, it is recommended that you use the default setting by pressing the **Reset** button (see figure below) at the back of the camera.

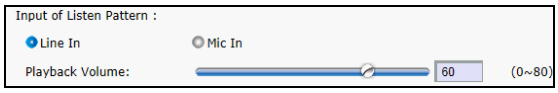
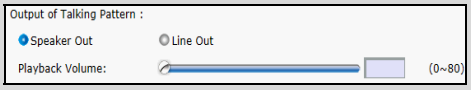
Brightness	The luminance of the captured image apart from its hue or saturation.
Saturation	The degree of intensity and purity of a specific color.
Contrast	The brightness ratio of the lightest to the darkest part of the video image.
Sharpness	The sharpness of camera.
Day/Night Threshold	Set the illumination lux value (5 ~ 100) to auto-trigger the camera into “day” or “night” mode relative to luminance of the area under surveillance. When the environment luminance becomes higher than the set lux value, the camera will auto switch to “day” or “color” mode. Otherwise, it will remain at “night” or “mono” mode.
ICR	User can turn Auto or setting for fix mode. This function is very useful under low illumination environment.
Power Frequency	Frequency of power line: 50 or 60Hz
EV Compensation	It can increase or decrease the amount of brightness or darkness of your image.
2D Noise	It can remove or lower unwanted noise and preserve fine details and edges.
Wide Dynamic Range	This function is to provide clear images even under back light circumstances. The higher “Strength” level will adjust contrast compensation stronger.
White Balance	Adjust the white balance according to the environment

Camera Mount	3 kinds of format to choose from: Wall, Ceiling and Hi-FPS.

3.6.3 Audio Tab

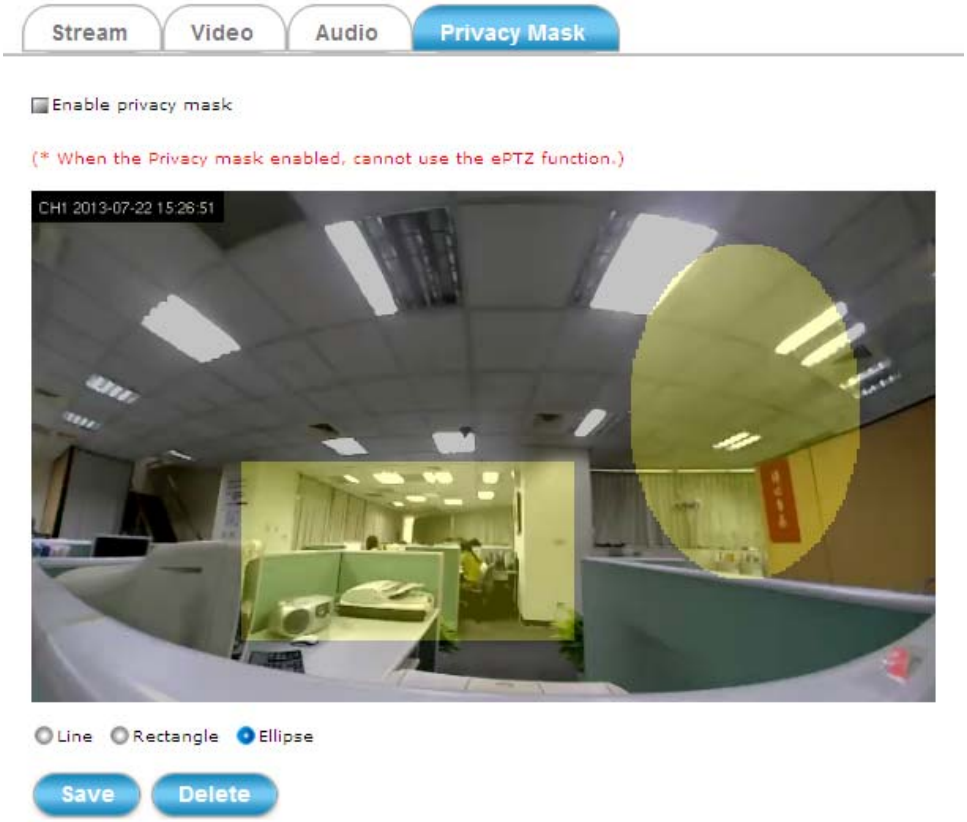


The **Audio** tabbed pane provides the following audio adjustments to your camera microphone and speaker**:**

Mute	Enable or disable mute function of the camera microphone.
Input of Listen Pattern	**Line In**  Plug an audio source device into the Audio-In port of camera. And its playback volume could be adjusted by moving the slider to the left to decrease; and to the right to increase the volume. **Mic In**  Connect a microphone to the Audio-In port of camera; be noted to use an active microphone (normally with power supplier on microphone) for this application. Enable or disable **Microphone booster** function of the Camera microphone. Enabling this function will amplify the signal from the microphone jack.
Output of Talking Pattern	**Speaker Out**  Built-in speaker's volume could be adjusted by moving the slider to the left to decrease; and to the right to increase the volume. **Line Out**

Connect a loud speaker to the Audio-Out port of camera. This is for voice alerting and two-way audio. Be noted to use an active speaker (normally with power supplier on speaker) for this application.

3.6.4 Privacy Mask Tab



The **Privacy Mask** tabbed pane allows you to mask or block private areas from surveillance for privacy reason.

■ To block a private area from surveillance, follow the procedure below:

Step 1. Initially select the masking shape, e.g., “Line,” “Rectangle,” or “Ellipse” you wish to use as screen to block the area from surveillance.

Step 2. Click and drag the mouse cursor to lay out a masking screen on the area you wish to block, and then release the mouse right button. Notice that the laid out screen turns into phantom block.

Step 3. If the laid out screen needs correction, click **Delete** button and redo the masking screen lay out process.

Step 4. Once the masking screen is acceptable, click the **Enable Privacy Mask** check box followed by clicking on the **Save** button. This will turn the laid out screen into solid block.

■ To disable masking and remove the screen, do the following**:**

Step 1. Click **Delete** button.

Step 2. Click **Save** button and wait a while. Then the screen is permanently removed.

Step 3. To permanently disable the **Privacy Mask** function, disable the **Enable Privacy Mask** check box.

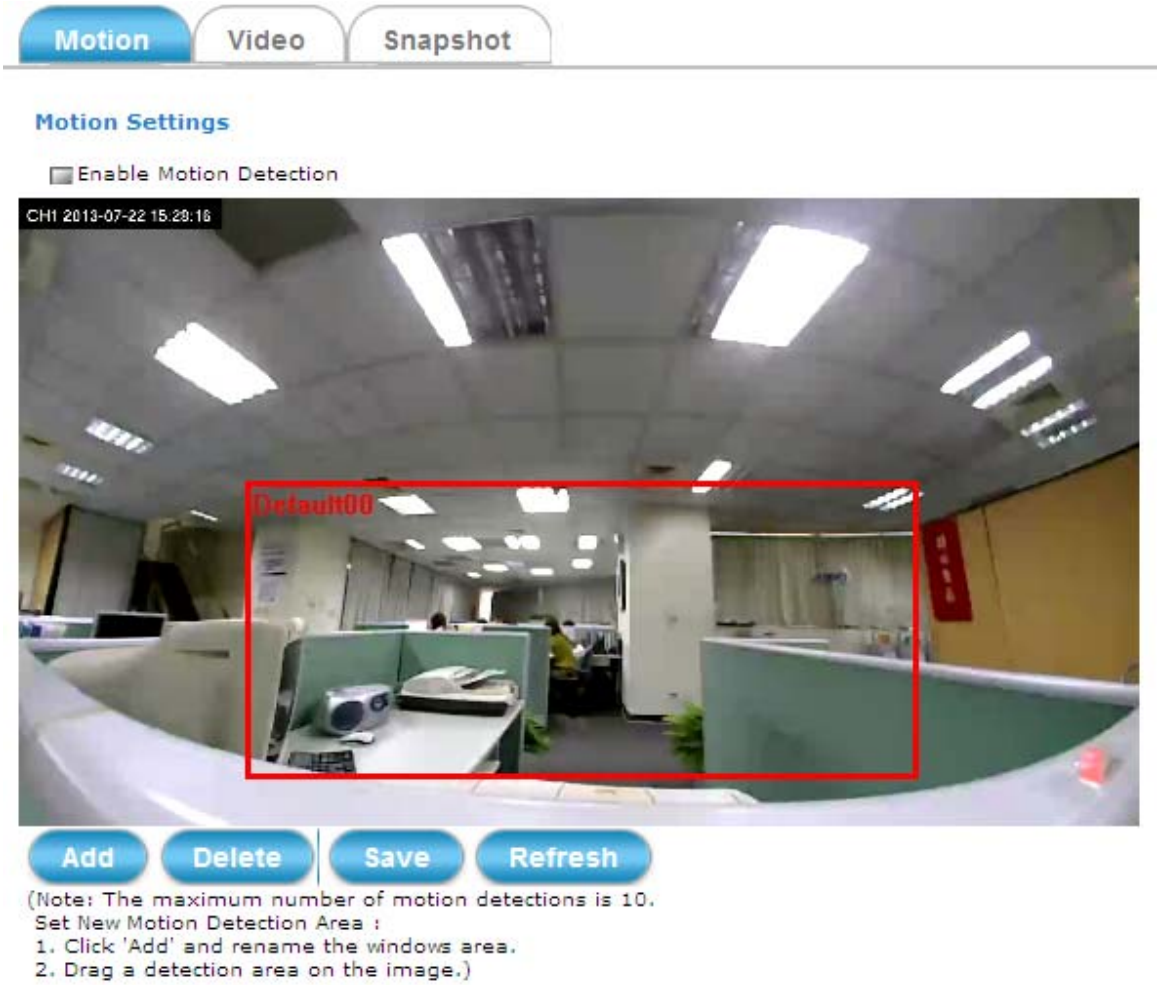
3.7 Event Setup Execution

Clicking the **Event** button will display the tabbed panes (see figure below) for defining event recording of the Camera. The ICA- 8500/ICA-W8200 is equipped with a card slot for micro-SD/SDHC memory card.

This storage card is utilized to store recording of local video and still JPEG images taken in response to set events. The recording operation of events is triggered according to the defined schedules

3.7.1 Motion Tab

From the **Motion** tabbed pane, you can define specific target areas within the scope of surveillance to focus the motion detection function.



■ Defining a single motion detection area:

Step 1. Enable the **Enable Motion Detection** check box.

Step 2. Click **Add** button and a default frame will pop-up on the screen.

Step 3. Click and hold inside the frame to drag it to the location where you want to focus detection. Resize the frame by dragging its corners or borders.

Step 4. Click the **Save** button to apply.

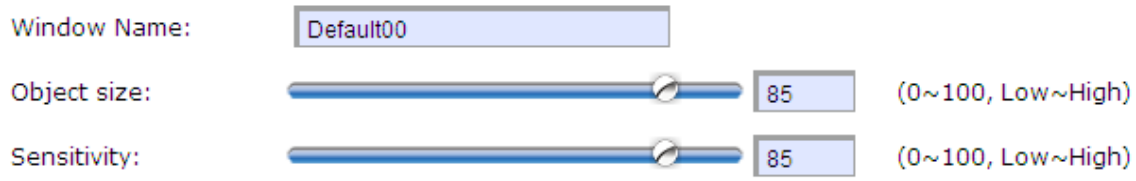
■ Defining multiple motion detection areas:

Step 1. After satisfactory positioning of the first detection area as described above, click the **Add** button again. A second default frame will pop-up on the screen. Drag and resize the frame at the desired location.

Step 2. Repeat the above step to add more detection area frames.

Note	Total defined motion detection areas cannot exceed 10 frames.

Step 3. To assign unique names to each framed location for easy identification, click on the frame and a **Window Name** text box with the default name of the selected frame will appear at the bottom of the pane (see figure below). Enter a new name and click the **Save** button. Wait for a while for the change to take effect.



Step 4. To delete a frame that is no longer needed but was previously saved, click on the unwanted frame and click **Delete** button. The frame will disappear after a while.

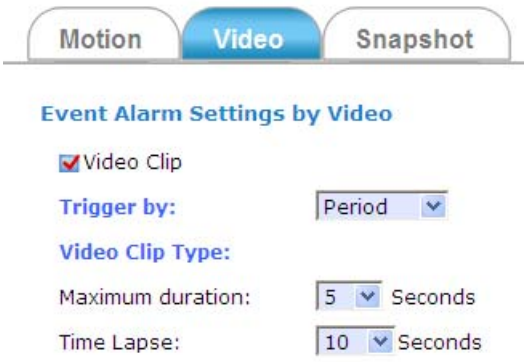
Step 5. To delete multiple frames that are not yet saved, directly click the **Refresh** button instead of deleting them individually. The **Refresh** button will automatically clear all unsaved frames.

3.7.2 Video Tab

The Video tabbed pane sets the video recording trigger method to use when motion is detected by the Camera. The four methods available for selection are Period, Schedule, Motion, and GPIO, each of which can be set up with user scheduled recording time and duration, as well as defining the video record file target destination.

Note	Only the ICA-8200/W8200 enables Motion/PIR to trigger video recording and bind into CloudLync Cloud Service with Google account. The recorded video files in the SD memory card will be uploaded and backed up to your Google Drive synchronously.

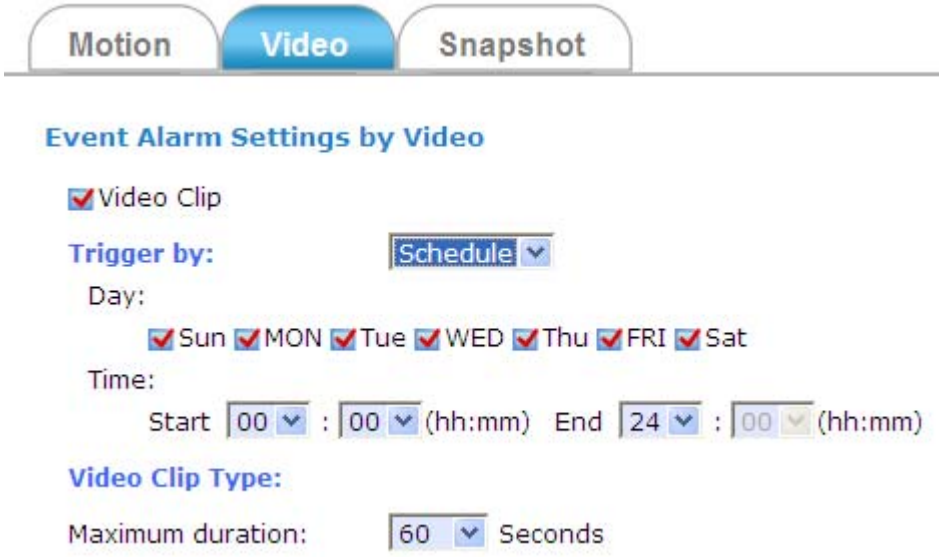
■ Trigger by Period



Period	This method will trigger the camera video surveillance/recording operation for a defined duration (in seconds) whenever motion is detected. The video record may be sent to host by e-mail or stored

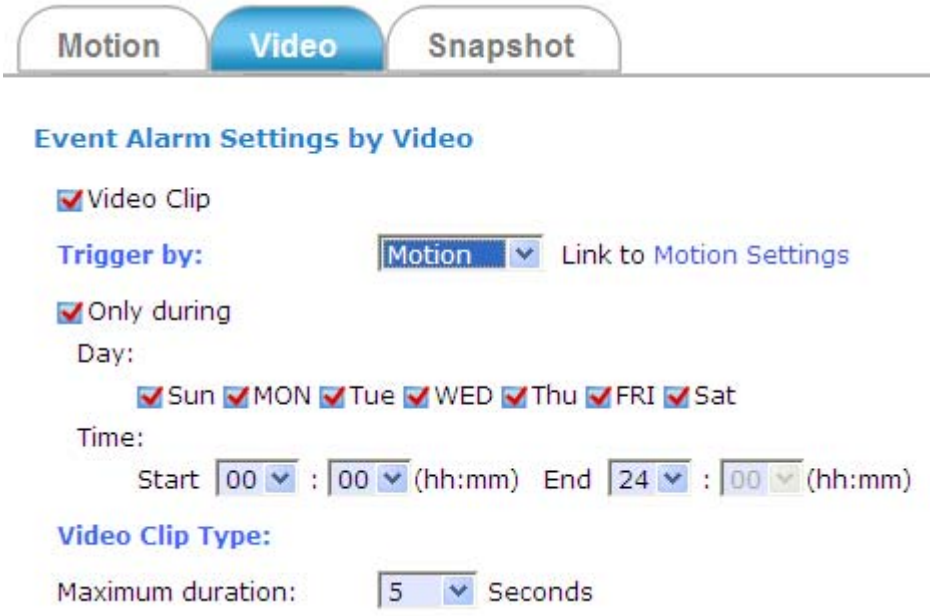
	in the SD card as selected.

■ **Trigger by Schedule**



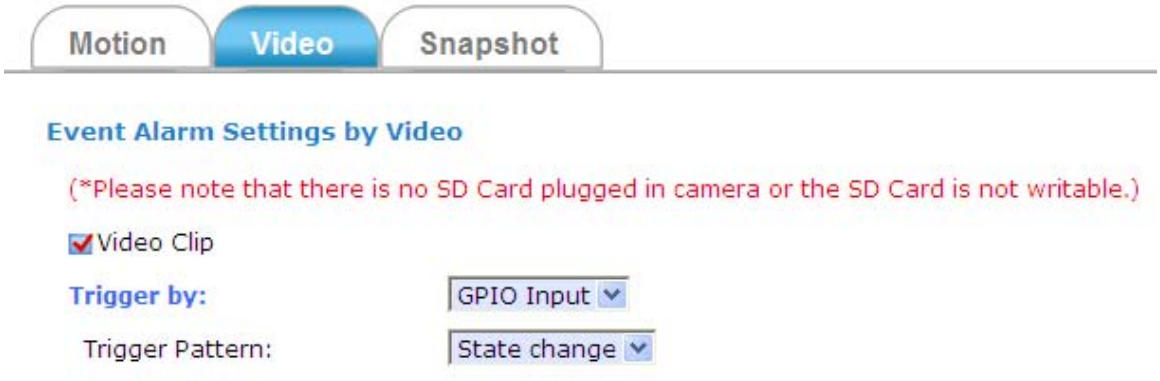
Schedule	This method activates the camera video surveillance/recording operation continuously when the defined days of the week and set time of the set days are met. Motion is ignored with this method. Each recording time-span is in accordance with the set duration (in seconds) and the video record is stored in the SD card.

■ **Trigger by Motion**



Motion	This method will trigger the camera video surveillance/recording operation according to the set duration (in seconds) whenever motion is detected within the defined days of the week and at the time of the set days. The video record may be sent to host by e-mail or stored in the SD card as selected.

■ **Trigger by GPIO**



GPIO	On the defined days of the week and at certain time of the set days, the Camera will trigger its GPIO Input Signal when its state changes. Recording duration can be set in seconds and the video record may be provided to host by e-mail/FTP, stored in the SD card, activated GPIO Output Port or through all of them.

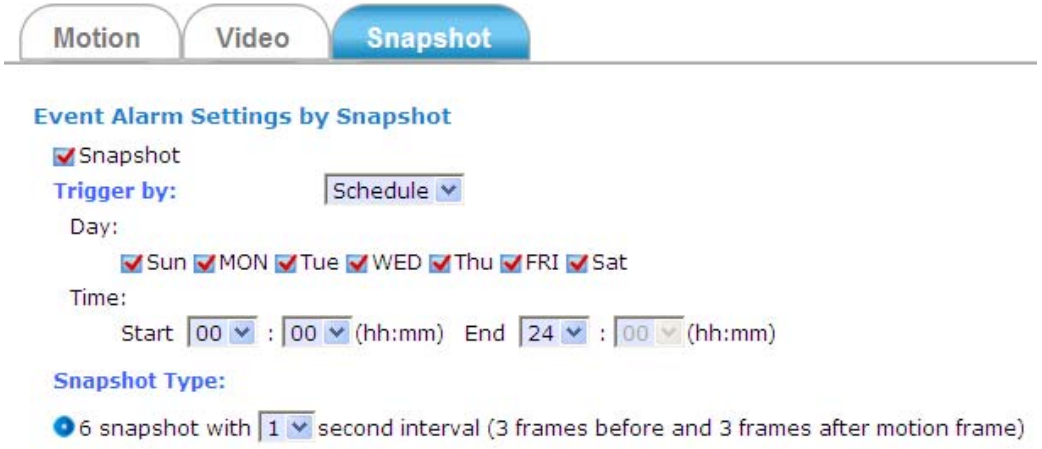
3.7.3 Snapshot Tab

The Snapshot tabbed pane sets the camera to take snapshot images when motion is detected. The four methods available for selection are Always, Schedule, Motion, and GPIO, each of which can be set up with user scheduled recording time and duration, as well as defining the video record file target destination.

■ **Trigger by Always**

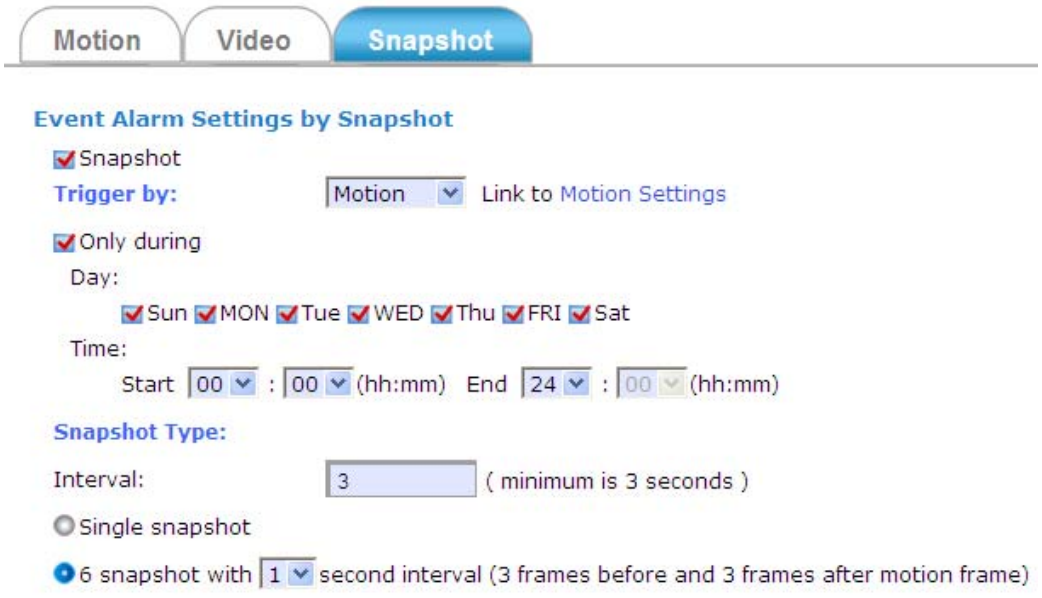
Always	Under this method, the camera automatically continues to capture 6 snapshots of the area under surveillance at every 1 or 2 seconds at intervals. Three previous snapshot frames are collected from the Camera buffer and 3 snapshot frames are captured live. The stream of accumulated snapshots may be sent to host by e-mail or FTP, or stored in the SD card as preferred.

■ **Trigger by Schedule**



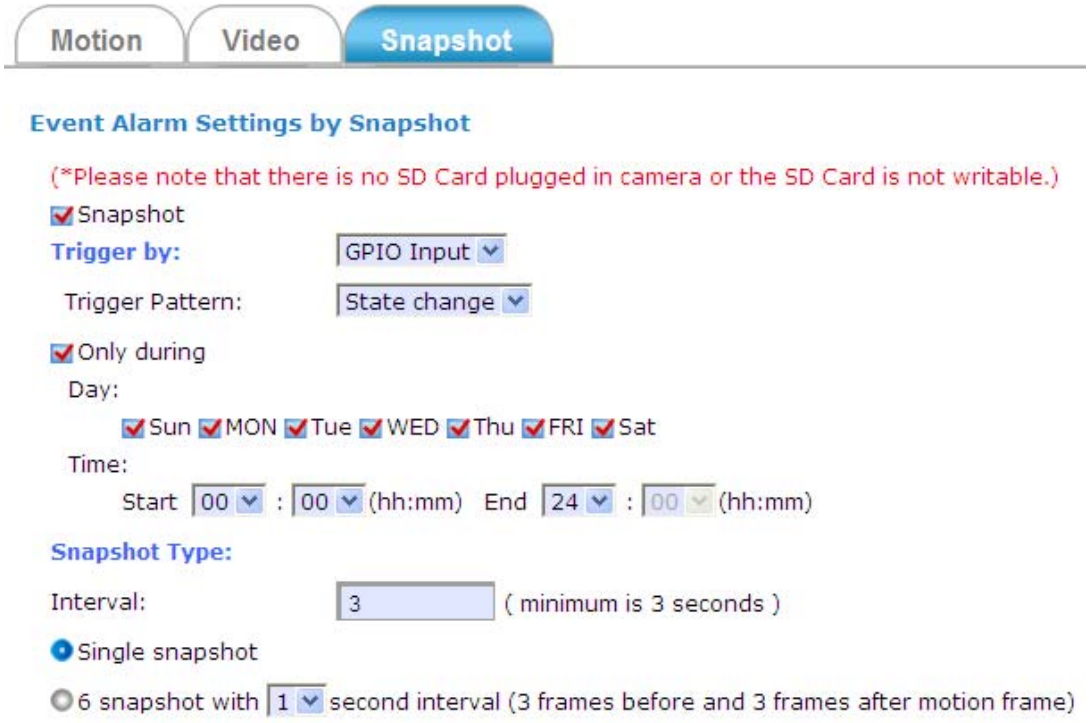
Schedule	This method activates the camera snapshot operation continuously when the defined days of the week and set time of the set days are met. The camera will continuously capture 6 snapshots of the area under surveillance at every 1 or 2 seconds at intervals. Three previous snapshot frames are collected from the camera buffer and 3 snapshot frames are captured live. The stream of accumulated snapshots may be sent to host by e-mail or FTP, or stored in the SD card as preferred.

■ **Trigger by Motion**



Motion	This method will trigger the camera snapshot operation according to the set time interval (in seconds) whenever motion is detected within the defined days of the week and at the time of the set days. Single or 6 snapshots may be captured as defined. The stream of accumulated snapshots may be sent to host by e-mail or FTP, or stored in the SD card as preferred.

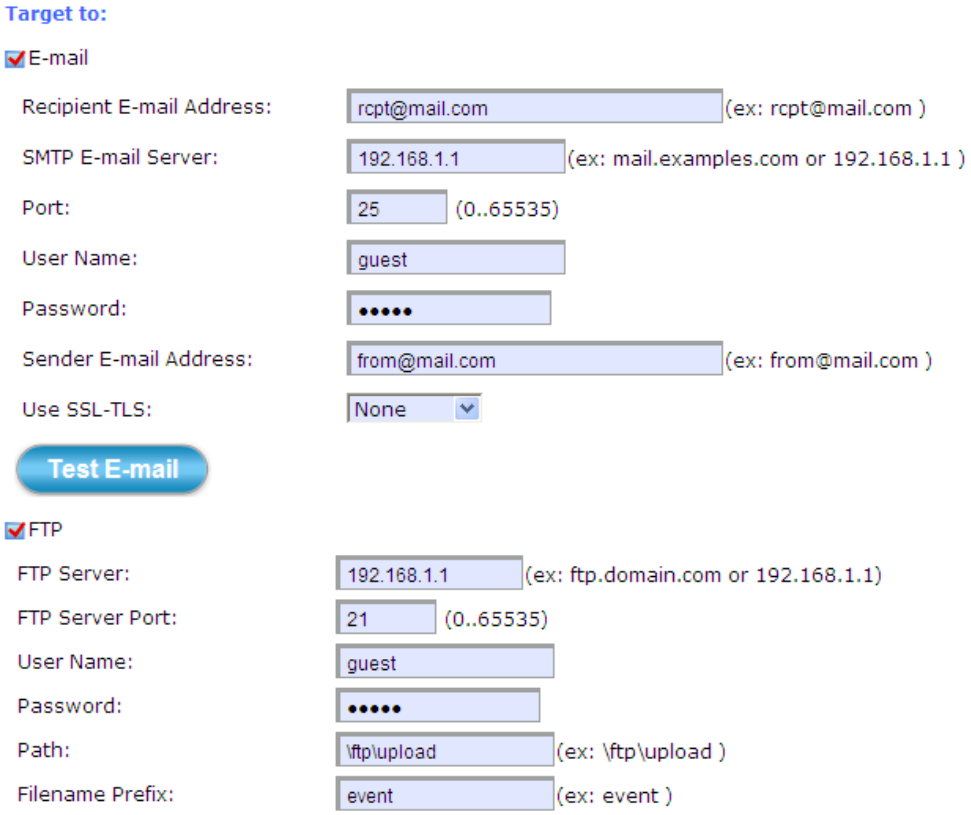
■ **Trigger by GPIO**



GPIO	On the defined days of the week and at certain time of the set days, the Camera will trigger its GPIO Input Signal according to the set time interval (in seconds) when its state changes. Single or 6 snapshots may be captured at a time as defined.

■ **Trigger to E-mail, FTP, SD card**

The stream of accumulated snapshots may be sent to host through e-mail or FTP, or stored in the SD card per selection or through all 3 available methods. When selected, the setup dialog for these methods will display as illustrated in the following figure.



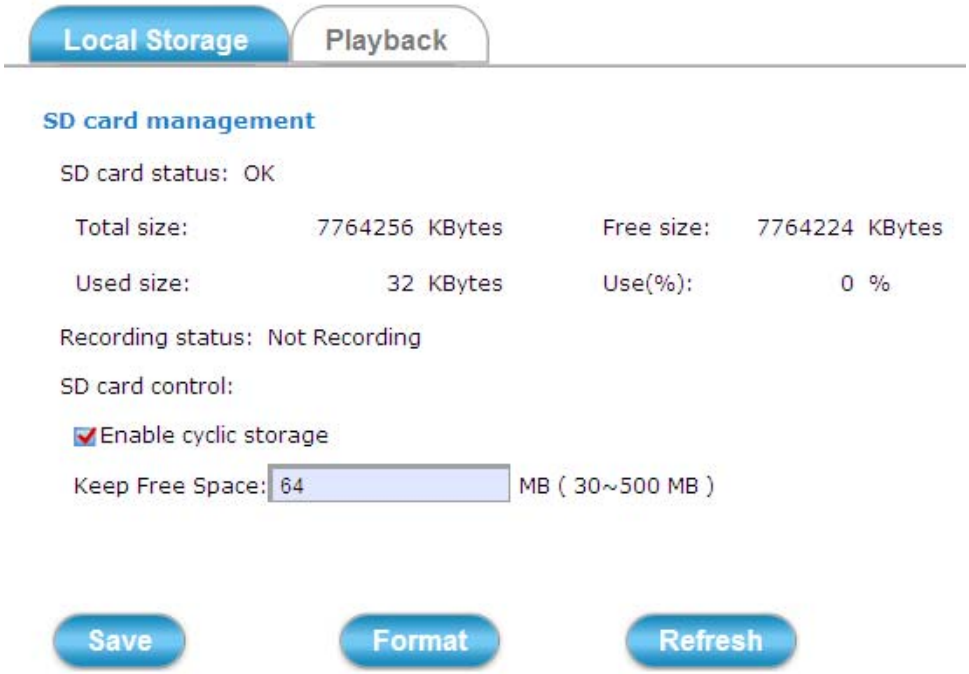
Note

1. As for the settings of SMTP service, kindly please contact your e-mail service provider. After all parameters are confirmed to be correct and working properly, you may enter them into the text area manually.
2. As for the settings of FTP Service, kindly please contact your FTP service provider. While all parameters filled in Windows FTP Transferring Utility are correct and working properly via your Laptop or other PC, you may enter them into the text area manually.

3.8 Local Storage Setup Execution

Clicking the **Local Storage** button will display the following tabbed panes to provide information on existing local storage, such as disk size info, type, and status. If recording is in progress when clicking the **Local Storage** button, a warning message will occur.

3.8.1 Local Storage Tab

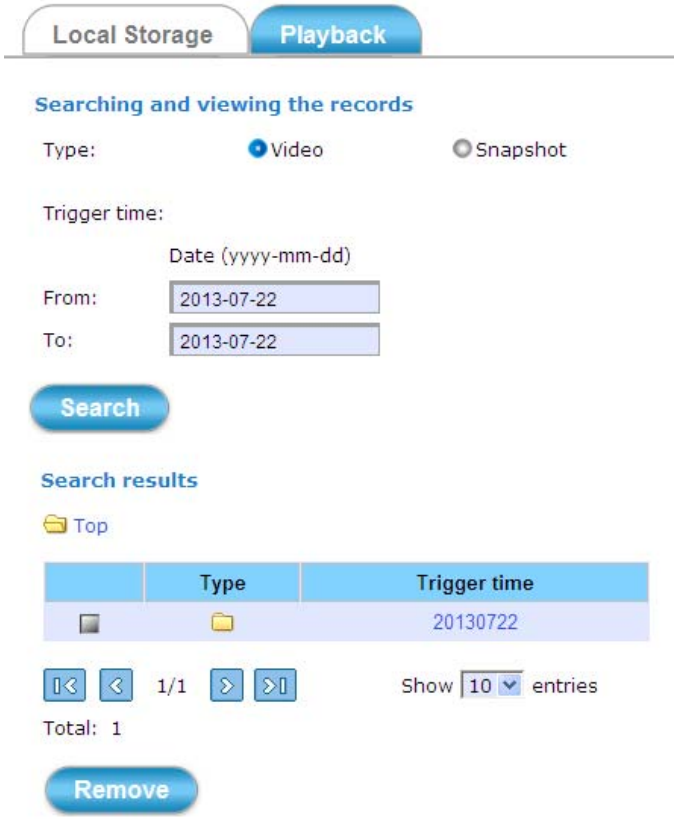


Save	Click this button to save changes to the SD card control setting.
Format	Click this button to format the SD memory card (take note of the message in red).
Refresh	Click this button to refresh the webpage.

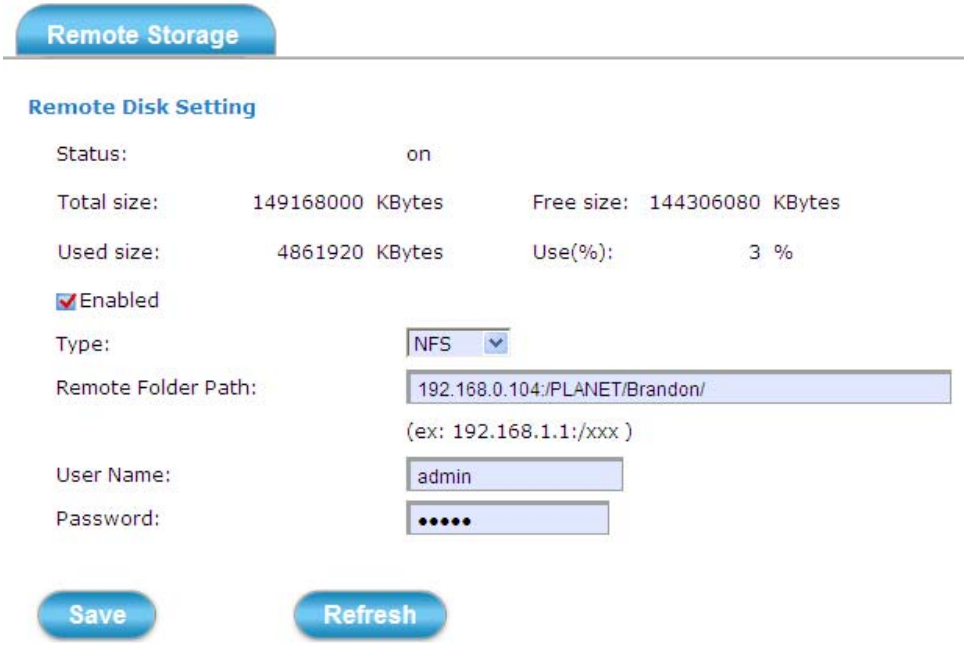
3.8.2 Playback Tab

The **Playback** tabbed pane allows user to play back video and snapshot files stored in the SD memory card. These files are saved using the event setup for video and snapshots with the **SD card** check box enabled.

Playback of the stored videos or snapshots is performed from files recorded on particular date range as explained in the following figure.



3.9 Remote Storage



The device also can send motion stream to specified SAMBA and NFS server. Most of the time, the SAMBA and NFS server will be another PC or NAS server.

Appendix A: Ping IP Address

The Ping (stands for Packet Internet Groper) command is used to detect whether a specific IP address is accessible by sending a packet to the specific address and waiting for a reply. It's also a very useful tool to confirm the installation of Internet camera, or if the IP address conflicts with any other device over the network.

If you want to make sure the IP address of Internet camera is right, utilize the Ping command as follows:

Start a DOS window.

Type ping x.x.x.x, where x.x.x.x is the IP address of the Internet camera.

The replies, as illustrated below, will provide an explanation to the problem.

If you want to detect any other device that conflicts with the IP address of Internet camera, you also can utilize the Ping command but you must disconnect the Internet camera from the network first.

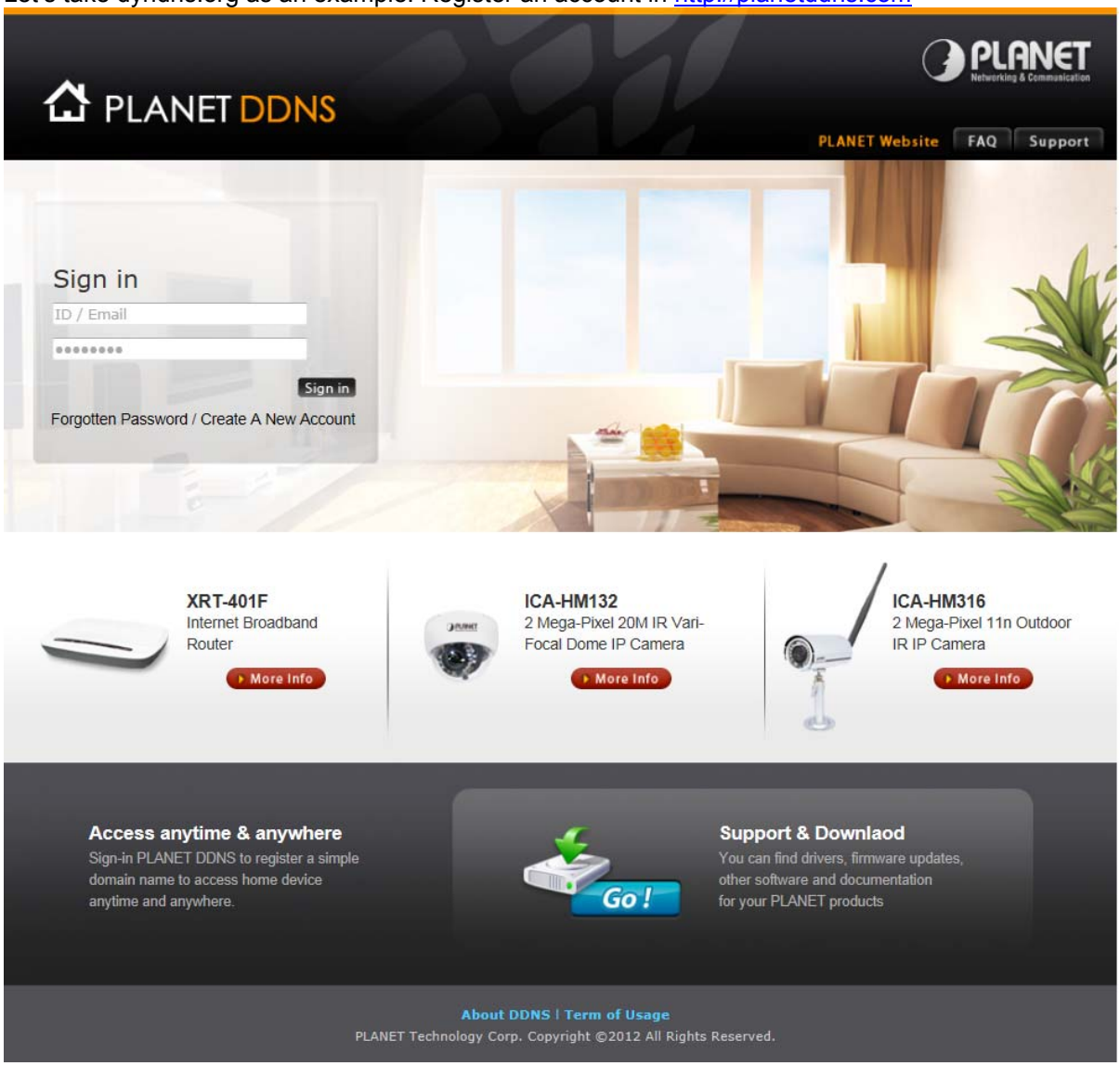
Appendix B: DDNS Application

Configure PLANET DDNS with the following steps:

Step 1. Enable DDNS option through accessing Web page of NAS

Step 2. Select on DDNS server provided, and register an account if you have not used yet.

Let's take dyndns.org as an example. Register an account in http://planetddns.com



Appendix C: Configuring Port Forwarding Manually

The device can be used with a router. If the device wants to be accessed from the WAN, its IP address needs to be set up as fixed IP address. The port forwarding or Virtual Server function of router also needs to be set up. This device supports UPnP traversal function. Therefore, user could use this feature to configure port forwarding of NAT router first. However, if user needs to configure port forwarding manually, please follow the steps below:

Manually installing the device with a router on your network is an easy 3–step procedure as shown below:

1. Assign a local/fixed IP address to your device
2. Access the router with your Web browser
3. Open/Configure Virtual Server Ports of your router

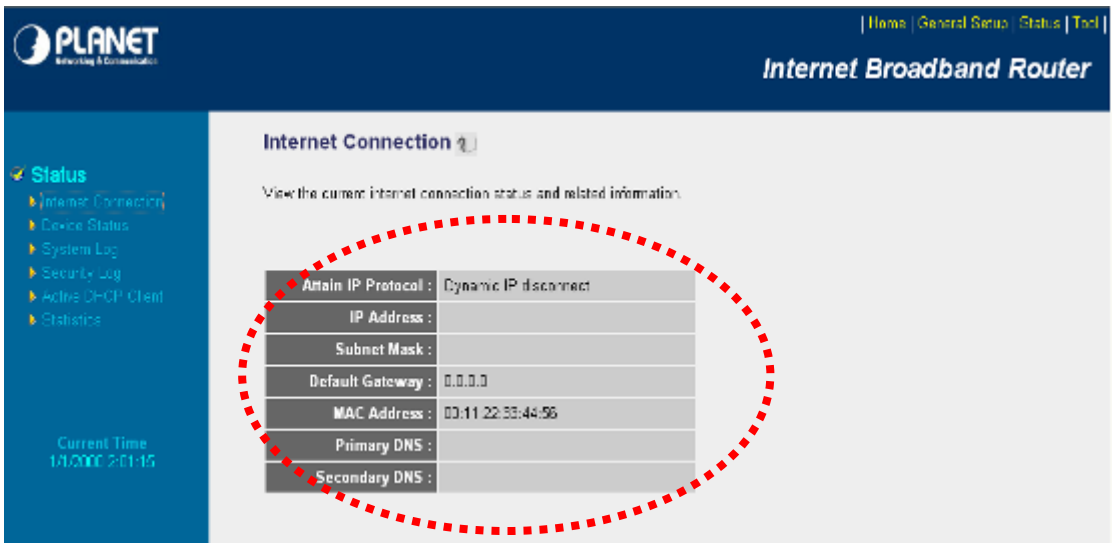
1. Assign a local/fixed IP address to your device

The device must be assigned a local and fixed IP address that allows it to be recognized by the router. Manually set up the device with a fixed IP address, for example, *192.168.0.100*.

2. Access the Router with Your Web browser

The following steps generally apply to any router that you have on your network. PLANET WNRT-620 is used as an example to clarify the configuration process. Configure the initial settings of the router by following the steps outlined in the router's **Quick Installation Guide**.

If you have cable or DSL service, you will most likely to have a dynamically assigned WAN IP address. 'Dynamic' means that your router's WAN IP address can be changed from time to time depending on your ISP. A dynamic WAN IP address identifies your router on the public network and allows it to access the Internet. To find out what your router's WAN IP address is, go to the **Status** screen on your router and locate the WAN information for your router. As shown on the following page the WAN IP address will be listed. This will be the address that you will need to type in your Web browser to view your camera over the Internet. Be sure to uncheck the **Reset IP address at next boot** button at the top of the screen after modifying the IP address. Failure to do so will reset the IP address when you restart your computer.



Your WAN IP address will be listed here.

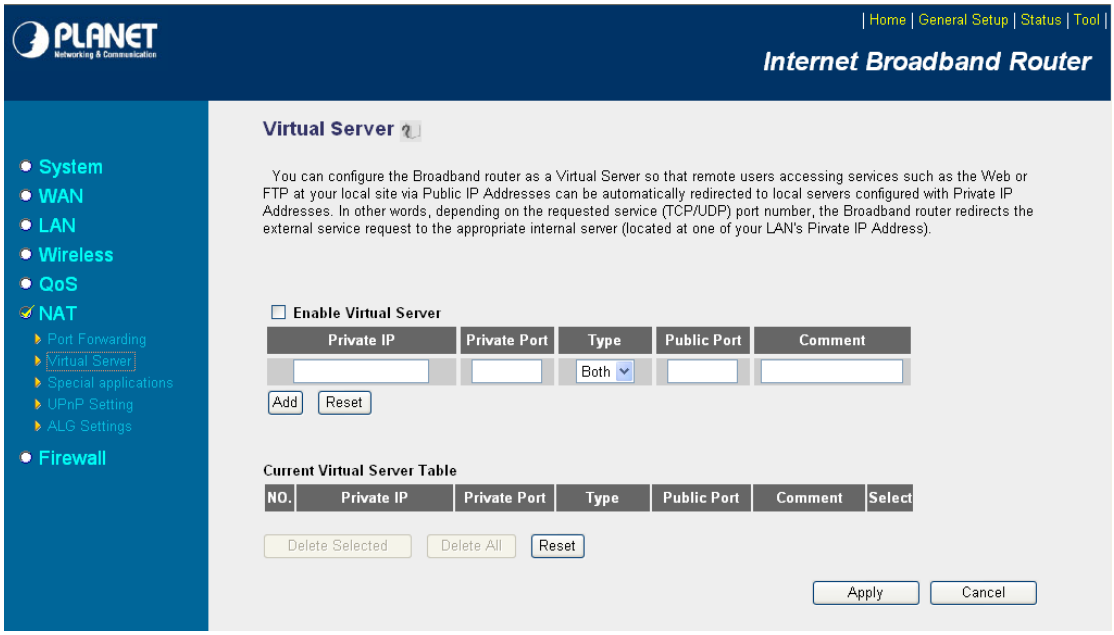
3. Open/set Virtual Server Ports to enable remote image viewing

The firewall security features built into the router and most routers prevent users from accessing the video from the device over the Internet. The router connects to the Internet over a series of numbered ports. The ports normally used by the device are blocked from access over the Internet. Therefore, these ports need to be made accessible over the Internet. This is accomplished using the **Virtual Server** function on the router. The Virtual Server ports used by the camera must be opened through the router for remote access to your camera.
Follow these steps to configure your router's Virtual Server settings

- Click **Enabled**.
- Enter a unique name for each entry.
- Select **Both** under **Protocol Type** (**TCP** and **UDP**)
- Enter your camera's local IP address (e.g., **192.168.0.100**, for example) in the **Private IP** field.
- If you are using the default camera port settings, enter **80** into the **Public** and **Private Port** section, and click **Add**.

A check mark appearing before the entry name will indicate that the ports are enabled.

Note	Some ISPs block access to port 80. Be sure to check with your ISP so that you can open the appropriate ports accordingly. If your ISP does not pass traffic on port 80, you will need to change the port the camera uses from 80 to something else, such as 8080. Not all routers are the same, so refer to your user manual for specific instructions on how to open ports.



Enter valid ports in the **Virtual Server** section of your router. Please make sure to check the box on this line to enable settings. Then the device can be accessed from WAN by the router's WAN IP address.

By now, you have finished your entire PC configuration for this device.

Appendix D: Troubleshooting & Frequently Asked Questions

Features	
The video and audio codec is adopted in the device.	The device utilizes H.264 and M-JPEG triple compression to provide high quality images. Where H.264 is standard for video compression, M-JPEG is standard for image compression. The audio codec is defined as u-Law for RTSP streaming.
The maximum number of users accessing device simultaneously.	The maximum number of users is limited to 10. However, it also depends on the total bandwidth accessed to this device from clients. The maximum data throughput of the device is around 20~25Mbps for UDP mode and 10Mbps for HTTP mode. Therefore, the actual number of connected clients is varying by streaming mode, settings of resolution, codec type, frame rate and bandwidth. Obviously, the performance of the each connected client will slow down when many users are logged on.
The device can be used outdoors or not.	The device is not weatherproof. It needs to be equipped with a weatherproof case for outdoor use. However, when equipped with a weatherproof case, it might disable the audio function of the device.
Installing this device	
Status LED does not light up.	Check and confirm that the DC power adaptor, included in the package, is used. Secure the power connector and re-power it on.
The network cabling is required for the device.	The device uses Category 5 UTP cable allowing 10 and/or 100 Base-T networking.
The device will be installed and work if a firewall exists on the network.	If a firewall exists on the network, port 80 is open for ordinary data communication. The HTTP port and RTSP port need to be opened on the firewall or NAT router.
Use the username and password for the first time or after factory default is reset.	Username = **admin**; password = **admin**. Note that it's all case sensitivity.
Forgot the username and password	Follow the steps below. 1. Unplug the power jack to turn off the power of the camera. 2. Insert a pin into the reset hole. Press the button until instructed to release. 3. Plug in the power jack to turn on device; in about few seconds the status LED will have a quick flash. 4. Release the button (remove the pin from the reset hole). The camera should now be back to factory default.
Forgot the IP address of the device.	Check IP address of device by using the IPInstaller program or by UPnP discovery or set the device to default by Reset button.
PLANET IPInstaller program cannot find the device.	● Re-power the device if the unit cannot be found within 1 minute. ● Do not connect device over a router. IPInstaller program cannot

	detect device over a router. ● If IP address is not assigned to the PC which is running IPInstaller program, then the program cannot find device. Make sure that IP address is assigned to the PC properly. ● Antivirus software on the PC might interfere with the setup program. Disable the firewall of the antivirus software during the setting up of this device. ● Check the firewall setting of your PC or Notebook.
Internet Explorer does not seem to work well with the device	Make sure that your Internet Explorer is version 8.0 or later. If you are experiencing problems, try upgrading to the latest version of Microsoft's Internet Explorer from the Microsoft Webpage.
PLANET IPInstaller program fails to save the network parameters.	Network may have trouble. Confirm the parameters and connections of the device.
UPnP NAT Traversal	
Cannot work with NAT router	Maybe NAT router does not support UPnP function. Please check user's manual of router and turn on UPnP function.
Some IP cameras are working while others are not	Maybe too many Internet cameras have been installed on the LAN, and then NAT router is out of resource to support more cameras. You can turn off and on NAT router to clear out of date information inside router.
Accessing this device	
Cannot access the login page and other Web pages of the network camera from Internet Explorer	● Maybe the IP address of the Internet camera is already being used by another device or computer. To confirm this possible problem, disconnect the network camera from the network first, and then run the ping utility to check it out. ● Maybe due to the network cable. Try correcting your network cable and configuration. Test the network interface by connecting a local computer to the network camera via a crossover cable. ● Make sure the Internet connection and setting are OK. ● Make sure that entering the IP address of Internet Explorer is correct. If the Internet camera has a dynamic address, it may have changed since you last checked it. ● Network congestion may prevent the Web page from appearing quickly. Wait for a while. The IP address, subnet mask of the PC and network camera must be in the same class of the private IP address on the LAN. ● Make sure the http port used by the network camera, default=80, is forwarded to the network camera's private IP address. ● The port number assigned to your Internet camera might not be available via Internet. Check your ISP for available port. ● The proxy server may prevent you from connecting directly to the network camera. Do not use the proxy server while setting up. ● Confirm that Default Gateway address is correct. ● The router needs Port Forwarding feature. Refer to your router's manual for details.

	● Packet Filtering of the router may prohibit access from an external network. Refer to your router's manual for details. ● Access the network camera from the Internet with the global IP address of the router and port number of network camera. ● Some routers reject the global IP address to access the network camera on the same LAN. Access with the private IP address and correct port number of network camera. ● When you use DDNS, you need to set Default Gateway and DNS server address. ● If it's not working after the above procedure, reset network camera to default setting and install it again.
Image or video does not appear on the main page.	● When the PC connects to Internet camera for the first time, a pop-up **Security Warning** window will appear requiring to download ActiveX Controls. When using Windows XP or Vista, log on with an appropriate account that is authorized to install applications. ● Network congestion may prevent the image screen from appearing quickly. You may choose lower resolution to reduce the required bandwidth.
How to check whether the device's ActiveX is installed on your computer	Go to C:\Windows\Downloaded Program Files and check to see if there is an entry for the file "PControl". The status column should show "Installed". If the file is not listed, make sure your Security Settings in Internet Explorer are configured properly and then try reloading the device's home page. Most likely, the ActiveX control did not download and install correctly. Check your Internet Explorer security settings and then close and restart Internet Explorer. Try to browse and log in again.
Internet Explorer displays the following message: "Your current security settings prohibit downloading ActiveX controls".	Set up the IE security settings or configure the individual settings to allow downloading and scripting of ActiveX controls.
The device works locally but not externally.	● Might be caused from the firewall protection. Check the Internet firewall with your system or network administrator. The firewall may need to have some settings changed in order for the device to be accessible outside your LAN. ● Make sure that the device isn't conflicting with any other Web server running on your LAN. ● Check the configuration of the router settings to allow the device to be accessed outside your local LAN. ● Check the bandwidth of Internet connection. If the Internet bandwidth is lower than target bit rate, the video streaming will not work correctly.
Image Transfer on e-mail or FTP does not work.	● Default Gateway and DNS server address should be set up correctly. ● If FTP does not work properly, ask your ISP or network administrator about the transferring mode of FTP server.

Video quality of the device	
The focus on the camera is bad.	The lens is dirty with dust accumulated. Fingerprints, dust, stain, etc. on the lens can degrade the image quality.
The color of the image is poor or strange.	● Adjust White Balance. ● To ensure the images you are viewing are the best they can be, set the Display property setting (color quality) to 16bit at least and 24 bit or higher if possible within your computer. ● The configuration on the device image display is incorrect. You need to adjust the image related parameters such as brightness, contrast, hue and sharpness properly.
Miscellaneous	
Cannot play the recorded H.264 file	Please install VLC player to play the H.264 file recorded by the device.

For the following equipment:

*Type of Product : 2 Mega-pixel PoE Fish-Eye IP Camera /
5 Mega-pixel PoE Fish-Eye IP Camera
*Model Number: : ICA-8200 / ICA-8500

* Produced by:
Manufacturer‘s Name : **Planet Technology Corp.**
Manufacturer‘s Address : **10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)**

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2004/108/EC) and Low Voltage Directive (2006/95/EC).
For the evaluation regarding the Electromagnetic Compatibility, the following standards were applied:

EN55022	2010 ClassB
IEC 61000-3-2	2005+A1:2008+A2:2009
IEC 61000-3-3	2008
EN55024	2010
IEC 61000-4-2	2008
IEC 61000-4-3	2006+A1:2007+A2:2010
IEC 61000-4-4	2012
IEC 61000-4-5	2005
IEC 61000-4-6	2008
IEC 61000-4-8	2009
IEC 61000-4-11	2004
EN 60950-1	2006 + A11:2009 + A1:2010 + A12:2011

Responsible for marking this declaration if the:

☒ **Manufacturer** ☐ **Authorized representative established within the EU**

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)**

Person responsible for making this declaration

Name, Surname **Jonas Yang**

Position / Title : **Product Manager**

Taiwan	**26th Aug., 2014**	
Place	*Date*	*Legal Signature*

PLANET TECHNOLOGY CORPORATION

e-mail: sales@planet.com.tw http://www.planet.com.tw
10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel:886-2-2219-9518 Fax:886-2-2219-9528

For the following equipment:

*Type of Product: : 2 Mega-Pixel Wireless Fish-Eye IP Camera /
5 Mega-Pixel Wireless Fish-Eye IP Camera
*Model Number: : ICA-W8200 / ICA-W8500

* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231,. Taiwan (R.O.C.)

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2004/108/EC), Low Voltage Directive (2006/95/EC), and R&TTE Directive (1999/5/EC).
For the evaluation regarding the Electromagnetic Compatibility, the following standards were applied:

EN55022	2010 ClassB
IEC 61000-3-2	2005+A1:2008+A2:2009
IEC 61000-3-3	2008
EN55024	2010
IEC 61000-4-2	2008
IEC 61000-4-3	2006+A1:2007+A2:2010
IEC 61000-4-4	2012
IEC 61000-4-5	2005
IEC 61000-4-6	2008
IEC 61000-4-8	2009
IEC 61000-4-11	2004
EN 60950-1	2006 + A11:2009 + A1:2010 + A12:2011
EN 301 489-1 V1.9.2	2011
EN301 489-17 V2.2.1	2012
EN 300 328 V1.7.1	2006-10

Responsible for marking this declaration if the:

☒ **Manufacturer** ☐ **Authorized representative established within the EU**

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)**

Person responsible for making this declaration
Name, Surname **Jonas Yang**

Position / Title : **Product Manager**

Taiwan *Place*

26th Aug., 2014 *Date*

Legal Signature

EC Declaration of Conformity

English	Hereby, **PLANET Technology Corporation,** declares that this **Product Wi-Fi** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	**Lietuviškai**	Šiuo **PLANET Technology Corporation,**, skelbia, kad **Product Wi-Fi** tenkina visus svarbiausius 1999/5/EC direktyvos reikalavimus ir kitas svarbias nuostatas.
Česky	Společnost **PLANET Technology Corporation,** tímto prohlašuje, že tato **Product Wi-Fi** splňuje základní požadavky a další příslušná ustanovení směrnice 1999/5/EC.	**Magyar**	A gyártó **PLANET Technology Corporation**, kijelenti, hogy ez a **Product Wi-Fi** megfelel az 1999/5/EK irányelv alapkövetelményeinek és a kapcsolódó rendelkezéseknek.
Dansk	**PLANET Technology Corporation,** erklærer herved, at følgende udstyr **Product Wi-Fi** overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF	**Malti**	Hawnhekk, **PLANET Technology Corporation,** jiddikjara li dan **Product Wi-Fi** jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC
Deutsch	Hiermit erklärt **PLANET Technology Corporation,** dass sich dieses Gerät **Product Wi-Fi** in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)	**Nederlands**	Hierbij verklaart , **PLANET Technology orporation,** dat **Product Wi-Fi** in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Eesti keeles	Käesolevaga kinnitab **PLANET Technology Corporation,** et see **Product Wi-Fi** vastab Euroopa Nõukogu direktiivi 1999/5/EC põhinõuetele ja muudele olulistele tingimustele.	**Polski**	Niniejszym firma **PLANET Technology Corporation,** oświadcza, że **Product Wi-Fi** spełnia wszystkie istotne wymogi i klauzule zawarte w dokumencie „Directive 1999/5/EC”.
Ελληνικά	*ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ* , **PLANET Technology Corporation,** *ΔΗΛΩΝΕΙ ΟΤΙ ΑΥΤΟ* **Product Wi-Fi** *ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ*	**Português**	**PLANET Technology Corporation,** declara que este **Product Wi-Fi** está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Español	Por medio de la presente, **PLANET Technology Corporation,** declara que **Product Wi-Fi** cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE	**Slovensky**	Výrobca **PLANET Technology Corporation,** týmto deklaruje, že táto **Product Wi-Fi** je v súlade so základnými požiadavkami a ďalšími relevantnými predpismi smernice 1999/5/EC.
Français	Par la présente, **PLANET Technology Corporation,** déclare que les appareils du **Product Wi-Fi** sont conformes aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	**Slovensko**	**PLANET Technology Corporation,** s tem potrjuje, da je ta **Product Wi-Fi** skladen/a z osnovnimi zahtevami in ustreznimi določili Direktive 1999/5/EC.
Italiano	Con la presente , **PLANET Technology Corporation,** dichiara che questo **Product Wi-Fi** è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	**Suomi**	**PLANET Technology Corporation,** vakuuttaa täten että **Product Wi-Fi** tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Latviski	Ar šo **PLANET Technology Corporation,** apliecina, ka šī **Product Wi-Fi** atbilst Direktīvas 1999/5/EK pamatprasībām un citiem atbilstošiem noteikumiem.	**Svenska**	Härmed intygar, **PLANET Technology Corporation,** att denna **Product Wi-Fi** står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

PLANET TECHNOLOGY CORPORATION

e-mail: sales@planet.com.tw http://www.planet.com.tw
10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel:886-2-2219-9518 Fax:886-2-2219-9528