



H.264 Full-HD Fixed Dome IP Camera

ICA-HM131 / ICA-HM131R

User's manual

Version 1.0.0

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CE mark Warning

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

WEEE Warning



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 and have to collect such WEEE separately.

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Revision

User's Manual for PLANET H.264 Full-HD Fixed Dome IP Camera

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Chapter 1

Introduction



Overview

PLANET has announced a H.264 Full-HD Fixed Dome IP camera, ICA-HM131/131R, for meeting the feedback from worldwide market. The ICA-HM131/131R support Full HD recording for high quality image. Integrated the next generation video compression technology – H.264, the ICA-HM131/131R can compress the video size to smaller one for users to transfer the Mega-Pixel image on Internet easily.

The ICA-HM131/131R IP Cameras are innovatively designed for quick and easy installation in drop ceilings without concerning the outlet / socket locations. Power over Ethernet (IEEE 802.3af) supplies power to the cameras via the network, eliminating the need for power cables and reducing installation costs.

Multi-profile stands for video stream simultaneously. The ICA-HM131/131R can deliver clear image with dual H.264/M-JPEG stream video up to 1080p (1920 x 1080 pixels). The IP Cameras use progressive scan, providing full resolution images of moving objects without distortion, in 30 frames per second, perfect for critical areas such as entrances or checkouts that need to be monitored in greater detail.

The ICA-HM131/131R can be managed by PLANET Cam Viewer Plus, the professional management software for multi-camera video surveillance application, to provide monitoring, recording and event management functions. The Cam Viewer Plus enables you to setup a comprehensive and effective surveillance system quickly and easily. With the ICA-HM131/131R managed by the Cam Viewer Plus, it provides an enhanced professional security environment to protect your property and life.

Product Features

- 1/2.7" progressive CMOS
- Dual video stream H.264 and M-JPEG video compression simultaneously
- Supports 1080p Full-HD resolution (1920 x 1080 pixels)
- 30 fps at 1080p Video Resolution (ICA-HM131R)
- Compliant with IEEE 802.3af PoE interface
- 3GPP for 3G mobile remote applications
- Built-in Microphone for one-way audio
- Supports Micro SD card storage
- Easy configuration and management via Windows-based utility or web interface
- DDNS, PPPoE and FTP uploading supports more alternatives in surveillance network

- Motion Detection feature can monitor any suspicious movement in specific area
- Cam Viewer Plus - Central management software supported

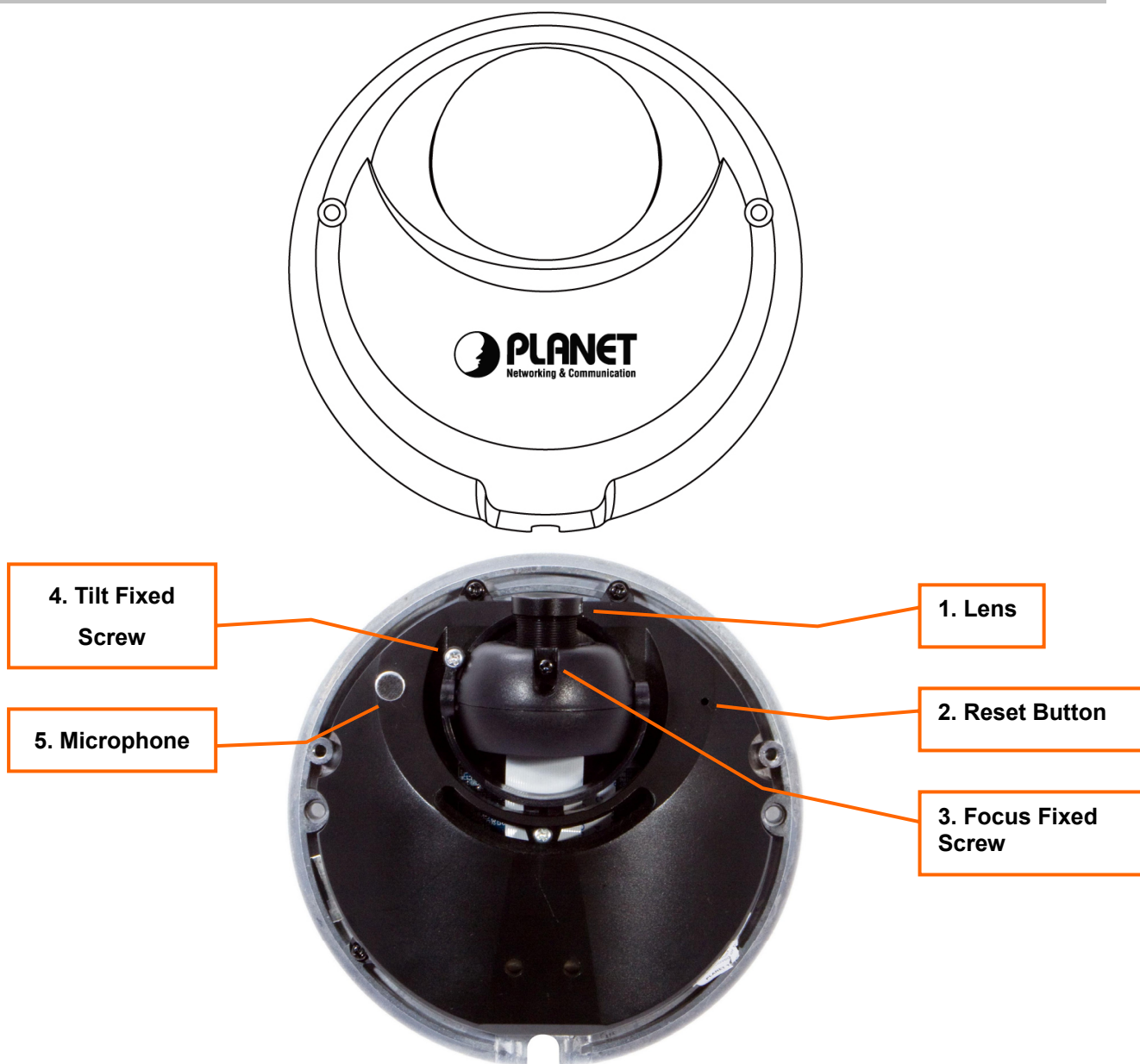
Package Content

The contents of your product should contain the following items:

IP Camera
Quick installation guide
User's manual CD
Accessories Kit

Physical Details

Top View



Top View of ICA-HM131/131R

Item		Description
1	Lens	Rotate the lens right/left to adjust focus
2	Reset Button	Restore to default setting, press the button with a proper tool
3	Focus Fixed Screw	Loosen the screw to adjust the lens
4	Tilt Fixed Screw	Loosen the screw to adjust tilt angle
5	Microphone	The IP Camera has built-in an internal microphone. This microphone is hidden in the internal case.

Side View



Side View of ICA-HM131/131R

Item		Description
1	Micro-SD Card slot	User can insert a micro SD card into this slot for event recording.
2	RJ-45 LAN Socket	The LAN socket is a RJ-45 connector for connections to 10/100Base-TX Fast Ethernet cabling. The LAN socket is compliant with IEEE802.3af standard PoE interface, and IP Camera is necessary supplied power through PoE Switch/Hub device.

Preparations for IP Cameam Setup

Physical Installation Requirement

The notices and introduction on system installation will be described particularly in this chapter. Please follow the description to operate the unit.

In order to prevent the unit from data loss and system damage that caused by a sudden power fluctuation, use of an Uninterruptible Power Supply (UPS) is highly recommended.

2.1 System Requirements

To perform the IP Camera via web browser, please ensure your PC is in good network connection, and meet system requirements as described below for appropriate setup and well view quality.

Items	System Requirement
Personal Computer	1. Intel® Pentium® M, 2.16 GHz or Intel® Core™2 Duo, 2.0 GHz 2. 2 GB RAM or more
Operating System	Windows VISTA or Windows XP
Web Browser	Microsoft Internet Explorer 6.0 or later
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
Viewer	ActiveX control plug-in for Microsoft IE

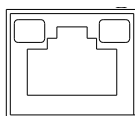
2.2 Ethernet Connection

Please follow the instructions below to connect this IP Camera's Ethernet cable.

2.3 PoE Connection

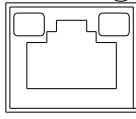
Connect the one end of the Ethernet cable to the network port on the camera, and the other end to Power Sourcing Equipment (PSE) like 802.3af POE Hub/ Injector or 802.3af POE Switch.

Check the status of the link indicator and activity indicator LEDs; if the LEDs are unlit, please check the connections.



Green Link Light indicates good network connection.

Orange Activity Light flashes for network activity indication.



Note

1. The RJ-45 interface only accept IEEE802.3af PSE (Power Source Equipmetns) Any non-standard or passive POE is not allowed to power the system and will damage the IP Camera permanently.
2. You can also consult your local dealer for 802.3af POE PSE devices such as single port injector for single point installation. Or, for mass installation, a Injector Hub for the network that already existed with Ethernet Switches or POE Switch all can be deployed

Chapter 3

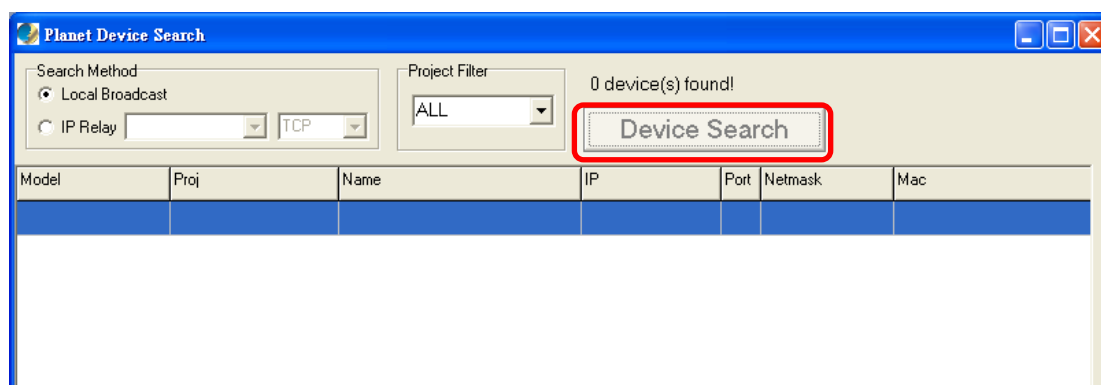
Accessing Camera

3

For initial access to the IP Camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in “DeviceSearch” folder in the supplied CD.

3.1 Device Search Software Setup

Step 1: Double click on the program **Planet Device Search.exe** (see the icon below); its window will appear as shown below. Then click the “Device Search” button.

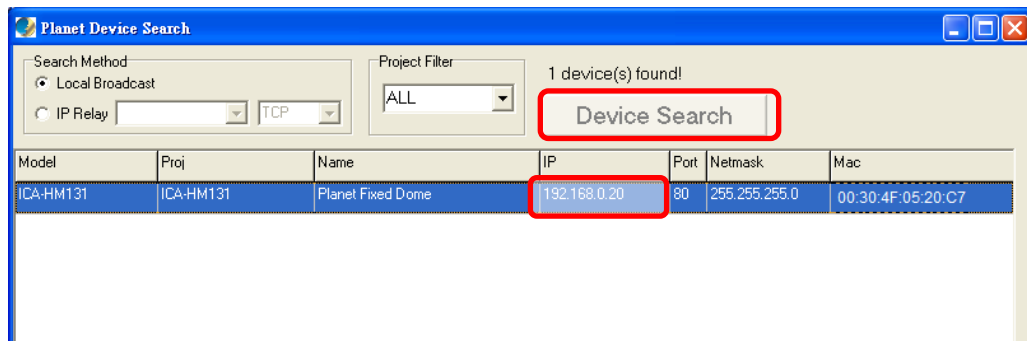


Step 2: The security alert window will pop up. Click “Run” to continue.

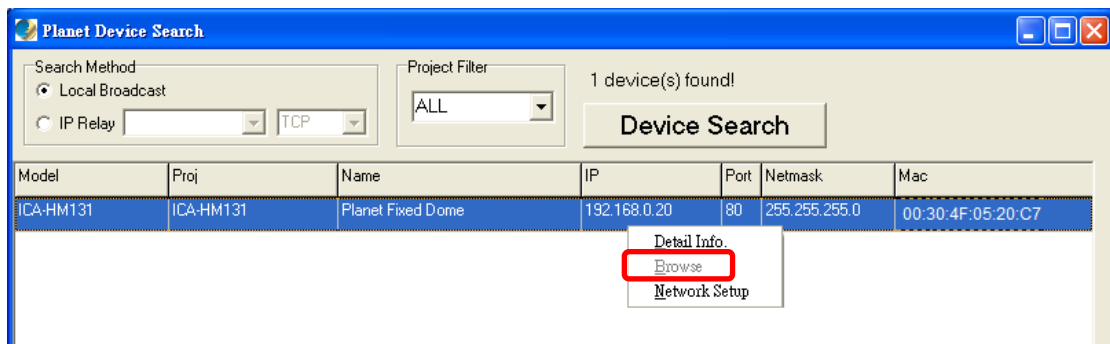


3.2 Device Search

Step 3: Click “Device Search” again, and all the finding IP devices will be listed in the page, as shown in the figure below. The IP Camera’s default IP address is: **192.168.0.20**.



Step 4: Double click or right click and select “Browse” to access the camera directly via web browser.



Step 5: Then the prompt window of request for entering default username and password (as shown below) will appear for logging in to the IP Camera.



The default login ID and password for the Administrator are:

Login ID	Password
admin	null (without password)



NOTE: ID and password are case sensitive.



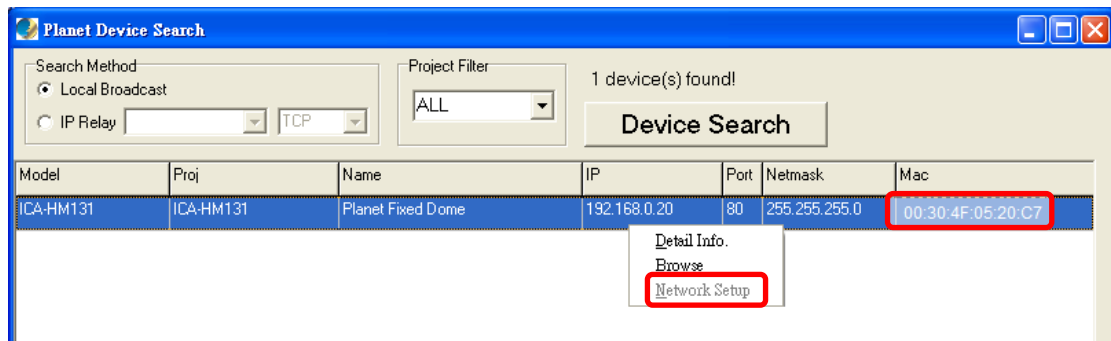
NOTE: It is strongly advised that administrator's password be altered for the security concerns. Refer to section [4.3.2 Security](#) for further details.

Additionally, users can change the IP Camera's network property, either DHCP or Static IP, directly in the device finding list. Refer to the following section for changing the IP Camera's network property.

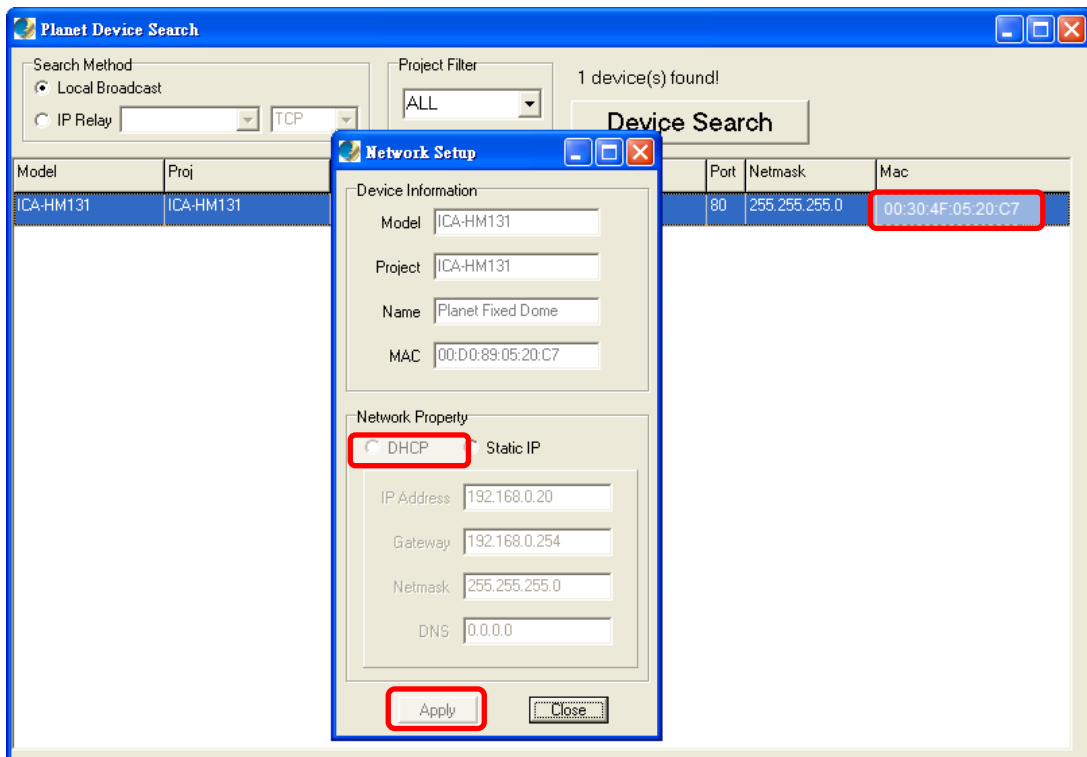
3.3 Example of Changing IP Camera's Network Property

Users can directly change an IP Camera's network property, ex. from static IP to DHCP, in the finding device list. The way to change the IP Camera's network property is specified below:

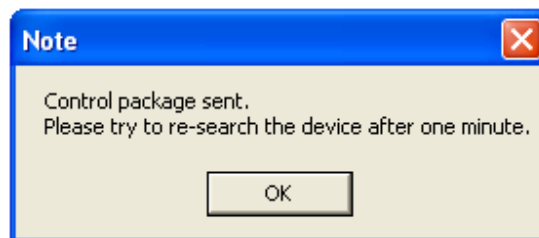
Step 1: In the finding device list, click on the IP Camera that you would like to change its network property. On the selected item, right click and select "Network Setup." Meanwhile, record the IP Camera's MAC address, for future identification.



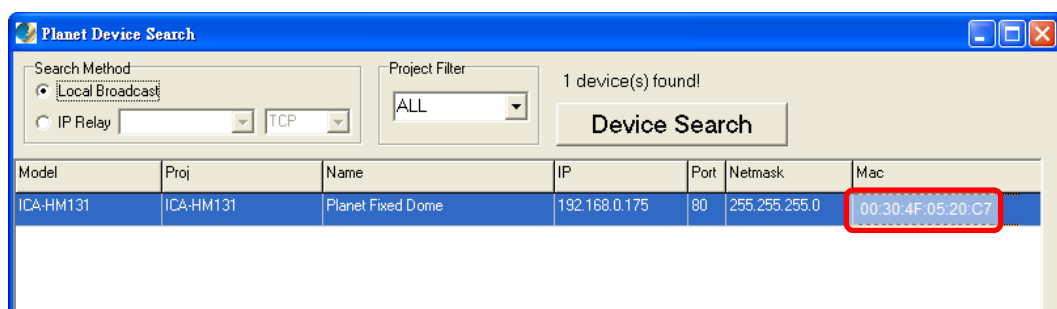
Step 2: The "Network Setup" page will come out. Select "DHCP," and press "Apply" button down the page.



Step 3: Click “OK” on the Note of setting change. Wait for one minute to re-search the IP Camera.



Step 4: Click the “Device Search” button to search all the devices. Then select the IP Camera with the correct MAC address. Double click on the IP Camera, and the login window will come out.



Step 5: Enter User name and Password to access the IP Camera.

3.4 Installing DC Viewer Software Online

For the initial access to the IP Camera, a client program, DC Viewer, will be automatically installed to your PC when connecting to the IP Camera.

If the Web browser doesn't allow DC Viewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (see [Appendix B: Internet Security Settings](#)) to continue the process.

The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser (see the figure below). Right click on the Information Bar and select "Install ActiveX Control..." to allow the installation.



Then the security warning window will pop up. Click "Install" to carry on software installation.

Click "Finish" to close the DC Viewer window when download is finished. For the detailed software download procedure, please refer to [Appendix C: DC Viewer Download Procedure](#).

Once login to the IP Camera, users will see the Home page as shown below:



3.5 Administrator / User Privileges

“Administrator” represents the person who can configure the IP Camera and authorize users access to the camera; “User” refers to whoever has access to the camera with limited authority, i.e. entering Home and Camera setting pages.

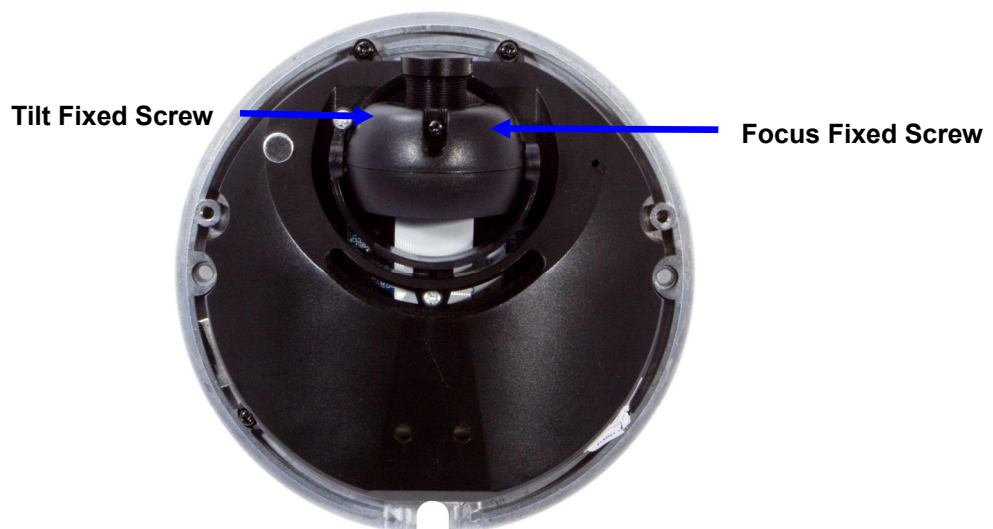
3.6 Lens Adjustment

The image displays on the Home page when successfully accessing to the IP Camera. Adjust the camera's focus to produce a clear image. Please refer to the procedure below.

Step 1: Unscrew the IP Camera's cover.



Step 2: Loosen the focus fixed screw, and rotate the lens counter-/clockwise to adjust focus; loosen the tilt fixed screw, and adjust the camera's tilt angle.



Chapter 4

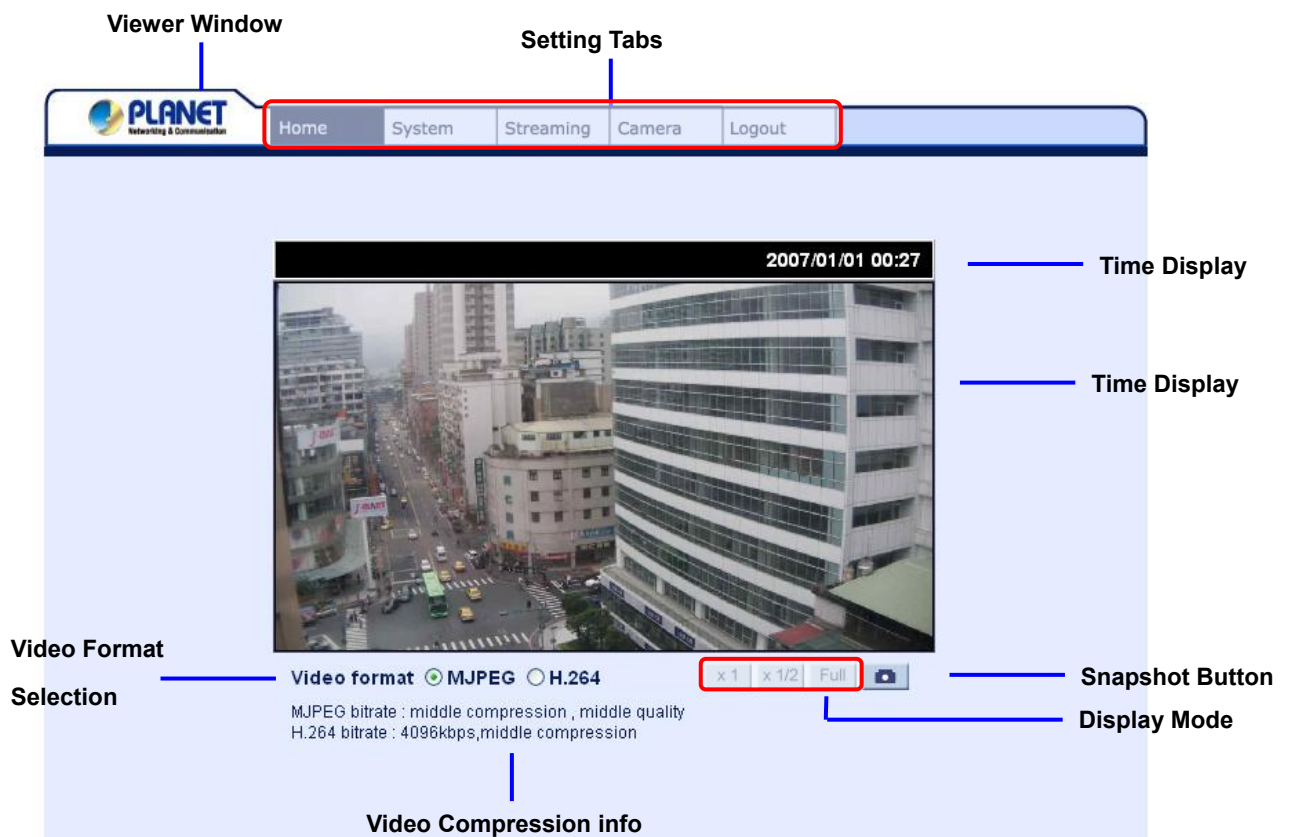
Configuration & Operation

The IP Camera is provided with a user-friendly browser-based configuration interface, and a free bundled CMS (Central Management System) for record and playback video. In this chapter, information about main page introduction, system related settings and camera settings will be described in detail.

For further information about CMS software, please refer to [Chapter 5. CMS Software Introduction](#) and CMS user manual.

4.1 Browser-based Viewer Introduction

The figure below shows the Home page of the IP Camera's Viewer Window.



There are five tabs: Home, System, Streaming, Camera and Logout on the top of the viewer window.

Home

Users can monitor live video of the targeted area.

System setting

The administrator can set host name, system time, root password, network related settings, etc. Further

details will be interpreted in section [4.3 System Related Settings](#).

Streaming setting

The administrator can modify video resolution and rotate type and select audio compression mode in this page.

Camera setting

Users can adjust various camera parameters, including <Exposure>, <White Balance>, <Brightness>, <Sharpness>, <Contrast> and <Digital Zoom>.

Logout

Click on the tab to re-login the IP Camera with another username and password.

4.2 Home Page

In the Home page, there are several function buttons right down the displayed image.



Screen Size Adjustment

Image display size can be adjusted to x1/2 and full screen.

Digital Zoom Control

In the full screen mode, users can implement digital zoom by right clicking the mouse, rotating the mouse wheel (for zoom in/out) and dragging the mouse into any direction.

Snapshot

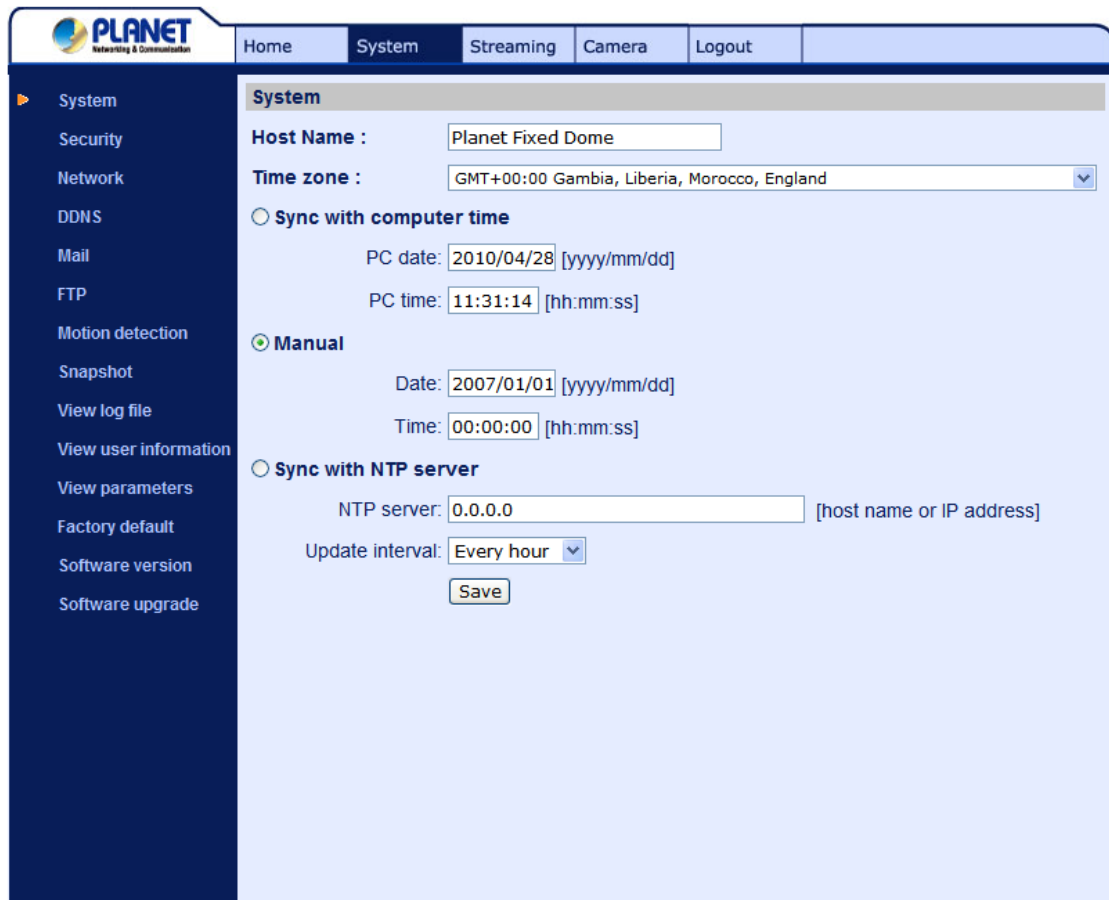
Press the  button, and the JPEG snapshots will automatically be saved in the appointed place. The default place of saving snapshots is: C:\.

4.3 System Related Settings

The figure below shows all categories under the “**System**” tab. Each category in the left column will be explained in the following sections.



NOTE: The “System” configuration page is only accessible by the Administrator.



System

Host Name : Planet Fixed Dome

Time zone : GMT+00:00 Gambia, Liberia, Morocco, England

☐ Sync with computer time

PC date: 2010/04/28 [yyyy/mm/dd]

PC time: 11:31:14 [hh:mm:ss]

☒ Manual

Date: 2007/01/01 [yyyy/mm/dd]

Time: 00:00:00 [hh:mm:ss]

☐ Sync with NTP server

NTP server: 0.0.0.0 [host name or IP address]

Update interval: Every hour

Save

4.3.1 Host Name and System Time Setting

Press the first category: <System> in the left column; the page is shown as below.

PLANET
Networking & Communication

Home System Streaming Camera Logout

System

- Security
- Network
- DDNS
- Mail
- FTP
- Motion detection
- Snapshot
- View log file
- View user information
- View parameters
- Factory default
- Software version
- Software upgrade

System

Host Name : Planet Fixed Dome

Time zone : GMT+00:00 Gambia, Liberia, Morocco, England

☐ Sync with computer time

PC date: 2010/04/28 [yyyy/mm/dd]

PC time: 11:31:14 [hh:mm:ss]

☒ Manual

Date: 2007/01/01 [yyyy/mm/dd]

Time: 00:00:00 [hh:mm:ss]

☐ Sync with NTP server

NTP server: 0.0.0.0 [host name or IP address]

Update interval: Every hour

Save

Host Name

The name is for camera identification. If Motion Detection function is enabled and is set to send alarm message by Mail/FTP, the host name entered here will display in the alarm message.

Time Zone

Select the time zone you are in from the drop-down menu.

Sync With Computer Time

Select the item, and video date and time display will synchronize with the PC's.

Manual

The Administrator can set video date, time and day manually. Entry format should be identical with that shown next to the enter fields.

Sync with NTP server

Network Time Protocol (NTP) is an alternate way to synchronize your camera's clock with a NTP server. Please specify the server you wish to synchronize in the enter field. Then select an update interval from the drop-down menu. For further information about NTP, please see the web site: www.ntp.org.

4.3.2 Security

Click the category: <Security>, and the page is shown as the figure below.

The screenshot shows the PLANET web interface. The top navigation bar includes 'Home', 'System', 'Streaming', 'Camera', and 'Logout'. The left sidebar menu lists various system settings, with 'Security' highlighted. The main content area is titled 'Security' and contains three sections: 'admin Password' with input fields for 'admin password' and 'Confirm password' and a 'Save' button; 'Add User' with input fields for 'User name' and 'User password', checkboxes for 'I/O access' (checked), 'Camera control', and 'Listen', and an 'Add' button; and 'Manage User' with a 'User name' dropdown menu showing '-- no user --' and 'Delete' and 'Edit' buttons.

Root password

Change the administrator's password by inputting the new password in both text boxes. The input characters/numbers will be displayed as dots for security purposes. After clicking <Save>, the web browser will ask the Administrator for the new password for access. The maximum length of the password is 14 digits.



NOTE: The following characters are valid: A-Z, a-z, 0-9, !#\$%&'-.@^_~.

Add user

Type the new user's name and password and click <Add> to add the new user. Both user name and password can be up to 16 characters. The new user will be displayed in the user name list. There is a maximum of twenty user accounts. Each user can be assigned the privileges of “**Camera control**” and/or “**Listen**”.

- **I/O access**

This item supports fundamental functions that enable users to view video when accessing to the camera.

- **Camera control**

This item allows the appointed User to change camera parameters on the Camera Setting page.

- **Listen**

Listen functions allow the administrator hear the sounds in the local site (PC site).



NOTE: The IP Camera does not have the Talk function.

Manage User

Delete user

To delete a user, pull down the user list, and select the user name you wish to delete. Then click <Delete> to remove it.

Edit user

Pull down the user list and select a user name. Click <Edit> to edit the user's password and privilege.



NOTE: It is required to enter the User password as well as select the function open to the user. When finished, click <Save> to modify the account authority.

http://192.168.0.126/lang1/server_editaccount.html - Win...

User name [User]

User password

☒ I/O access ☐ Camera control

☐ Listen

Save Close

4.3.3 Network

Click <Network> in the left column, and the page will display as shown below.

PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
Software upgrade

Network

☐ Get IP address automatically
☒ Use fixed IP address

General

IP address: 192.168.0.20
Subnet mask: 255.255.255.0
Default gateway: 192.168.0.254
Primary DNS: 0.0.0.0
Secondary DNS: 0.0.0.0
Web Server port: 80
Save

Advanced

RTSP port: 554
MJPEG over HTTP port: 8008
Save

UPnP Setting

☒ Enable UPnP
☐ Enable UPnP port forwarding
Friendly name: ICA-HM131
Save

Users can choose to use fixed IP address or dynamic (DHCP) IP address. The following is descriptions for the two ways of setting IP address.

Get IP address automatically (DHCP)

The camera's default setting is "**Use fixed IP address**". Please refer to the previous section [Chapter 3. Accessing Camera](#) for logging in with the default IP address.

If select "**Get IP address automatically**", after the IP Camera restarts, users can search it through the installer program: DeviceSearch.exe, which can be found in "DeviceSearch" folder in the supplied CD.



NOTE: Please make the record of the IP Camera's MAC address, which can be found in the label of the camera, for identification in the future.

Use fixed IP address

To setup static IP address, select "**Use fixed IP address**" and move the cursor to the IP address blank (as indicated below) and insert the new IP address, ex. 192.168.0.250; then go to the Default gateway (explained latter) blank and change the setting, ex. 192.168.0.250. Press "Save" to confirm the new setting.

PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
Software upgrade

Network

☐ Get IP address automatically
☒ Use fixed IP address

General

IP address 192.168.0.20
Subnet mask 255.255.255.0
Default gateway 192.168.0.254
Primary DNS 0.0.0.0
Secondary DNS 0.0.0.0
Web Server port 80
Save

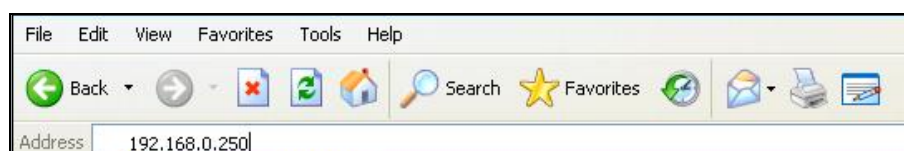
Advanced

RTSP port 554
MJPEG over HTTP port 8008
Save

UPnP Setting

☒ Enable UPnP
☐ Enable UPnP port forwarding
Friendly name ICA-HM131
Save

When using static IP address to login to the IP Camera, users can access it either through “DeviceSearch” software (see [Chapter 3. Accessing Camera](#)) or input the IP address in the URL bar and press “Enter”.



General

- **IP address**

This is necessary for network identification.

- **Subnet mask**

It is used to determine if the destination is in the same subnet. The default value is “255.255.255.0”.

- **Default gateway**

This is the gateway used to forward frames to destinations in different subnet. Invalid gateway setting will fail the transmission to destinations in different subnet.

- **Primary DNS**

Primary DNS is the primary domain name server that translates hostnames into IP addresses.

- **Secondary DNS**

Secondary DNS is a secondary domain name server that backups the primary DNS.

- **Web Server port**

The default web server port is 80. Once the port is changed, the user must be notified the change for the connection to be successful. For instance, when the Administrator changes the HTTP port of the IP Camera whose IP address is 192.168.0.100 from 80 to 8080, the user must type in the web browser “http://192.168.0.100:8080” instead of “http://192.168.0.100”.

Advanced

- **RTSP port**

RTSP port could be set from 1 to 65535. (Normal Setting Port: 554, 1024 ~65535)

- **MJPEG over HTTP port**

The default setting of HTTP Port is 8008; setting range: 1024 ~65535.



NOTE: Be aware to choose the different port from the one set for the web server port.

4.3.4 DDNS

Dynamic Domain Name System (DDNS) allows a host name to be constantly synchronized with a dynamic IP address. In other words, it allows those using a dynamic IP address to be associated to a static domain name so others can connect to it by name.

PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
Software upgrade

DDNS

Dynamic DNS
Use Dynamic DNS If You Want To Use Your DDNS Account.

☐ Enable DDNS

Provider: DynDNS.org(Dynamic) ▼

Host name:

Username/E-mail:

Password/Key:

Save

Enable DDNS

Check the item to enable DDNS.

Provider

Select one DDNS host from the provider list.

Host name

Enter the registered domain name in the field.

Username/E-mail

Enter the username or e-mail required by the DDNS provider for authentication.

Password/Key

Enter the password or key required by the DDNS provider for authentication.

4.3.5 Mail

The Administrator can send an e-mail via Simple Mail Transfer Protocol (SMTP) when motion is detected. SMTP is a protocol for sending e-mail messages between servers. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified and the message text is transferred. The configuration page is shown as follows:

PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
Software upgrade

Mail

SMTP

1st SMTP (mail) server

1st SMTP (mail) server port

1st SMTP account name

1st SMTP password

1st recipient email address

2nd SMTP (mail) server

2nd SMTP (mail) server port

2nd SMTP account name

2nd SMTP password

2nd recipient email address

Sender email address

Save

Two sets of SMTP can be configured. Each set includes SMTP Server, Account Name, Password and E-mail Address settings. For SMTP server, contact your network service provider for more specific information.

4.3.6 FTP

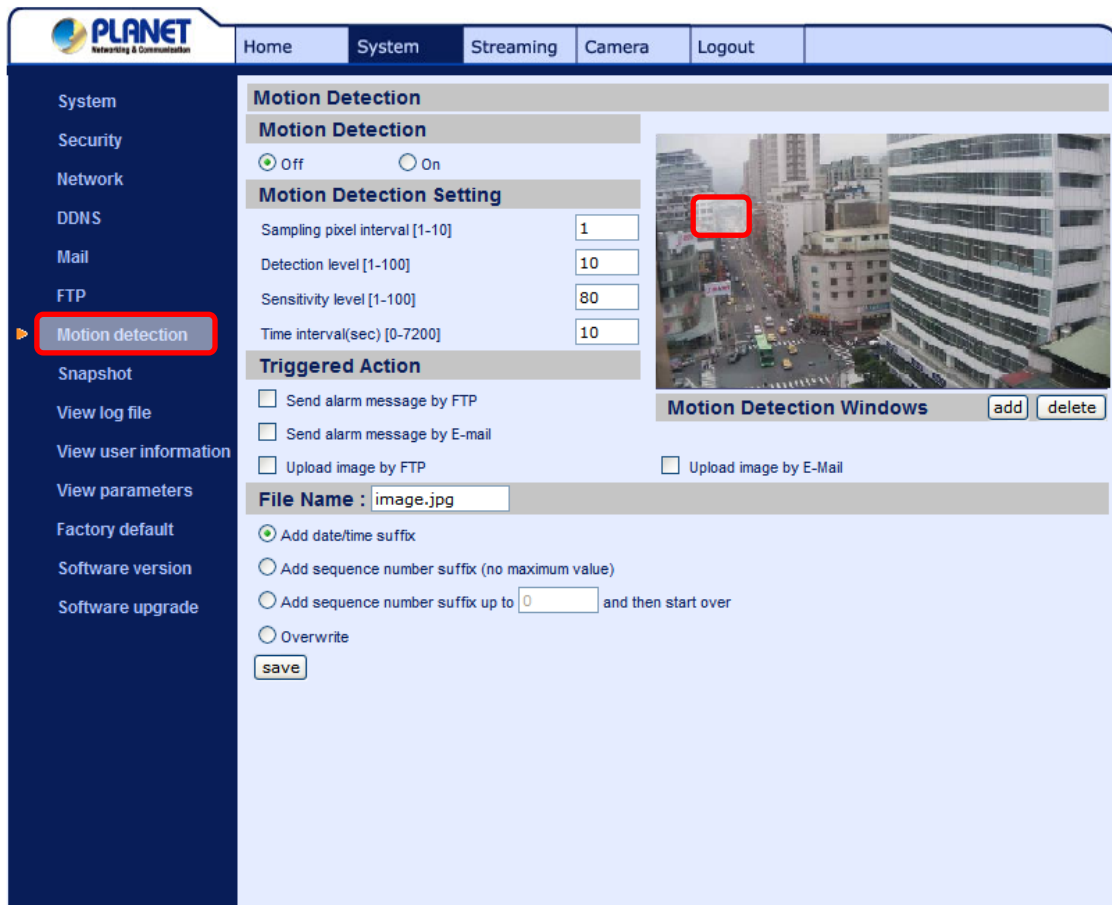
The Administrator can set as sending alarm message to a specific File Transfer Protocol (FTP) site when motion is detected. Users can assign alarm message to up to two FTP sites. The FTP setting page is shown below. Enter the FTP details, which include server, server port, user name, password and remote folder, in the fields. Press “Save” when finished.

The screenshot shows the PLANET web interface. The top navigation bar includes links for Home, System, Streaming, Camera, and Logout. The left sidebar lists various system settings, with 'FTP' highlighted by a red rectangle. The main content area is titled 'FTP' and contains configuration options for two FTP servers. The first server configuration includes fields for 'Built-in FTP server port' (set to 21), '1st FTP server' (empty), '1st FTP server port' (set to 21), '1st FTP user name' (empty), '1st FTP password' (empty), and '1st FTP remote folder' (empty). There is a checkbox for '1st FTP passive mode' which is currently unchecked. The second server configuration includes fields for '2nd FTP server' (empty), '2nd FTP server port' (set to 21), '2nd FTP user name' (empty), '2nd FTP password' (empty), and '2nd FTP remote folder' (empty). There is a checkbox for '2nd FTP passive mode' which is currently unchecked. A 'Save' button is located at the bottom right of the configuration area.

FTP	
Built-in FTP server port	21
1st FTP server	
1st FTP server port	21
1st FTP user name	
1st FTP password	
1st FTP remote folder	
☐ 1st FTP passive mode	
2nd FTP server	
2nd FTP server port	21
2nd FTP user name	
2nd FTP password	
2nd FTP remote folder	
☐ 2nd FTP passive mode	
Save	

4.3.7 Motion Detection

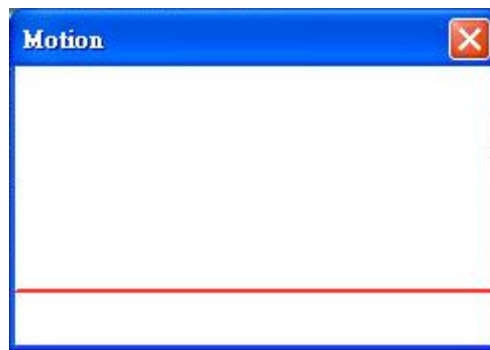
Motion Detection function allows detecting suspicious motion and triggering alarms when motion volume in the detected area reaches/exceeds the determined sensitivity threshold value.



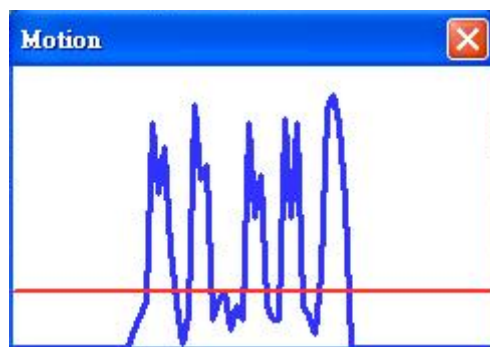
In the Motion Detection setting page, there is a frame (**Motion Detection Window**) displayed on the Live View Pane. The Motion Detection Window is for defining the motion detection area. To change the size of the Motion Detection Window, move the mouse cursor to the edge of the frame and draw it outward/inward. Moving the mouse to the center of the frame can shift the frame to the intended location.

Up **10** Motion Detection Windows can be set. Press the “add” button under the Live View Pane to add a Motion Detection Window. To cancel a Motion Detection Window, move the mouse cursor to the selected Window, and click on the “delete” button.

If Motion Detection function is activated, the pop-off window (Motion) with indication of motion will be shown.



When motion is detected, the signals will be displayed on the Motion window as shown below.



Detailed settings of Motion Detection are described as follows:

Motion Detection

You will be able to turn on/off Motion Detection in System section. Default setting is Off.

Motion Detection Setting

Users could adjust various parameters of Motion Detection in this section.

- Sampling pixel interval [1-100]:

The default value is 10, which means system will take one sampling pixel for every 10 pixel.

- Detection level [1-100]:

The default level is 10. The item is to set detection level for each sampling pixel; the smaller the value, the more sensitive it is.

- Sensitivity level [1-100]:

The default level is 80, which means if 20% or more sampling pixels are detected differently, system will detect motion. The bigger the value, the more sensitive it is. Meanwhile, when the value is bigger, the red horizontal line in the motion indication window will be lower accordingly.

- Time interval (sec) [0-7200]:

The default interval is 10. The value is the interval between each detected motion.

Users could adjust the parameter and level of Motion Detection Settings.

- Sampling pixel interval [1-100]: Default value: 10
- Detection level [1-100]: Default value: 10
- Sensitivity level [1-100]: Default value: 80
- Time interval (sec) [0-7200]: Default value: 10

Total four actions could be selected once the motion is detected.

Triggered Action (Multi-option)

The Administrator can specify alarm actions that will take when motion is detected. All options are listed as follows:

- **Enable Alarm Output**

Check the item and select the predefined type of alarm output to enable alarm relay output when motion is detected.



NOTE: This option is excluded in the IP Camera.

- **Send Alarm Message by FTP/E-Mail**

The Administrator can select whether to send an alarm message by FTP and/or E-Mail when motion is detected.

- **Upload Image by FTP**

Select this item, and the Administrator can assign a FTP site and configure various parameters as shown in the figure below. When motion is detected, event images will be uploaded to the appointed FTP site.

☒ Upload Image by FTP

FTP address FTP1 ▾

Pre-trigger buffer 5 frames ▾

Post-trigger buffer 5 frames ▾

☐ Continue image upload

☒ Upload for sec

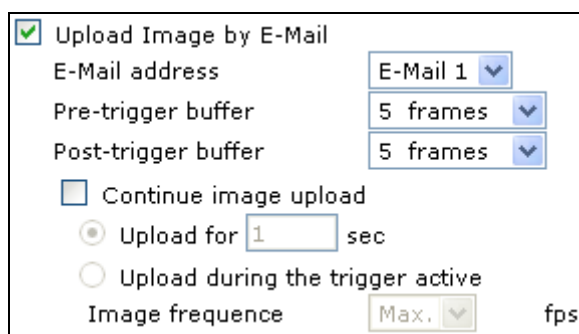
☐ Upload during the trigger active

Image frequency Max. ▾ fps

- **Upload Image by E-Mail**

Select this item, and the Administrator can assign an e-mail address and configure various parameters

as shown in the figure below. When motion is detected, event images will be sent to the appointed e-mail address.



☒ Upload Image by E-Mail

E-Mail address E-Mail 1 ▾

Pre-trigger buffer 5 frames ▾

Post-trigger buffer 5 frames ▾

☐ Continue image upload

☒ Upload for 1 sec

☐ Upload during the trigger active

Image frequency Max. ▾ fps



NOTE: Make sure SMTP or FTP configuration has been completed. See section [4.3.5 Mail](#) and [4.3.6 FTP](#) for further details.

File Name

The uploaded image's filename format can be set in this section. Please select the one that meets your requirements.

Save

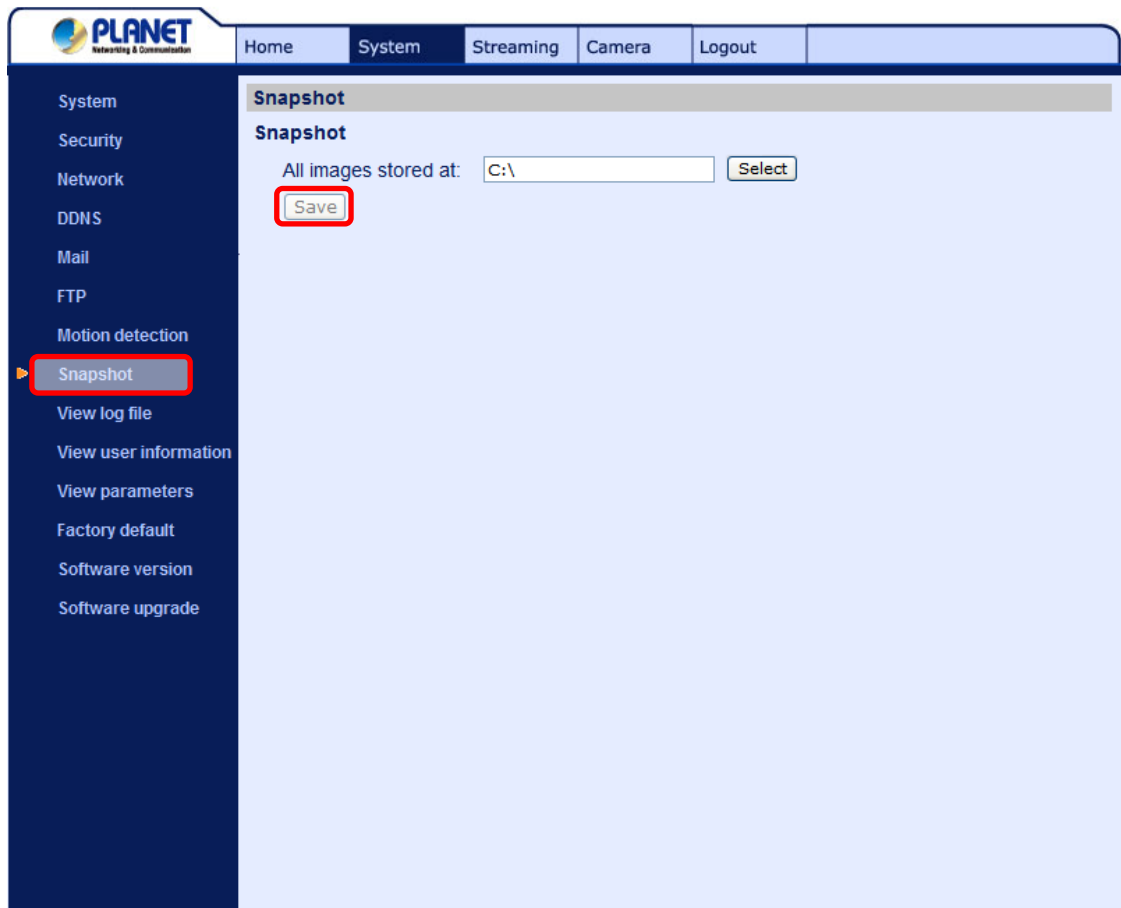
Click the Save button to save all the Motion Detection settings mentioned above.

4.3.8 Snapshot

The IP Camera supports JPEG snapshot function. Users can specify a storage location for the snapshots. The default setting is: C:\. Once confirm the setting, press "Save," and all the snapshots will be saved in the designate location.

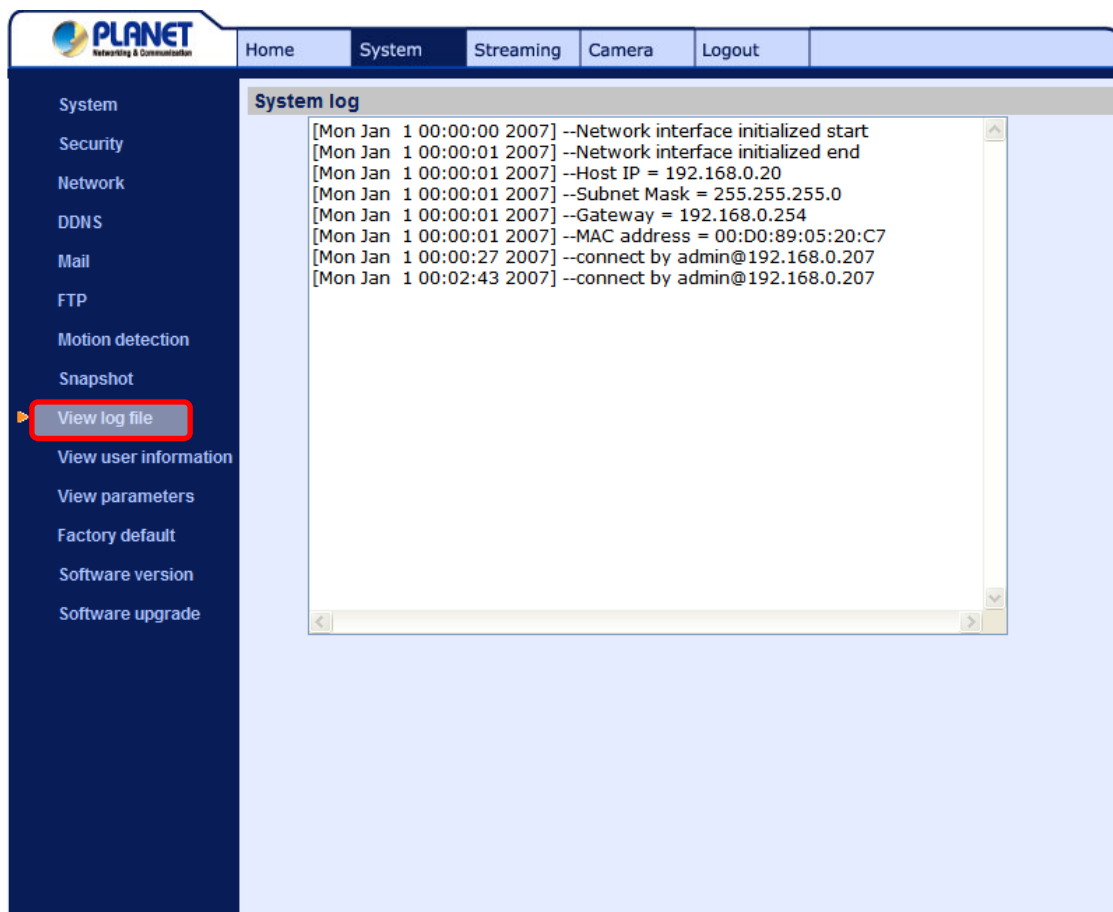


NOTE: Make sure the selected file path contains valid characters such as letters and numbers.



4.3.9 View Log File

Click on the link to view the system log file. The content of the file provides useful information about configuration and connections after system boot-up.



4.3.10 View User Information

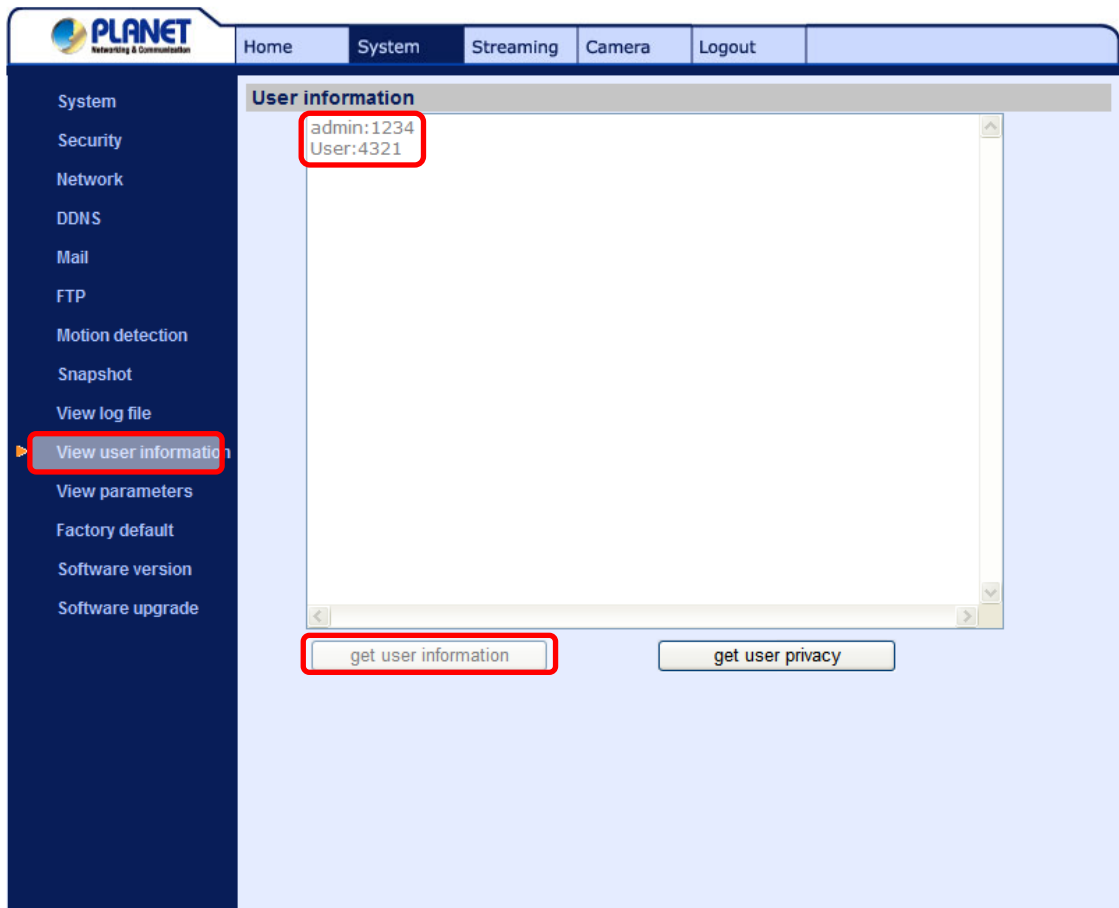
The Administrator can view each added user's login information and privileges (see [4.3.2 Security](#)).

View User Login Information

All the users in the network will be listed in the "User information" zone, as shown below. As the figure below shows:

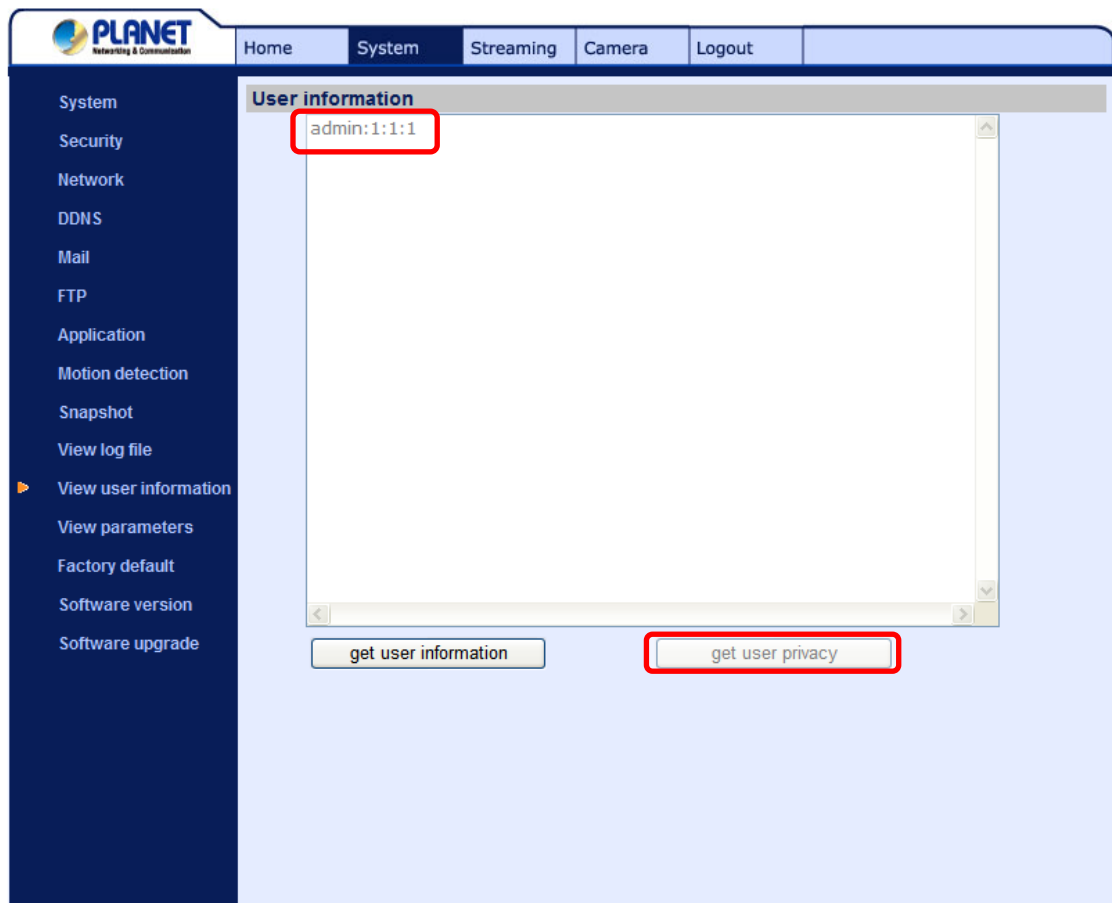
User: 4321

It indicates that one user's login username is: User, and the password is: 4321.



View User Privilege

Press “get user privacy” down the page, and the Administrator can view each user’s privileges.



As the figure above shows:

User: 1:1:1

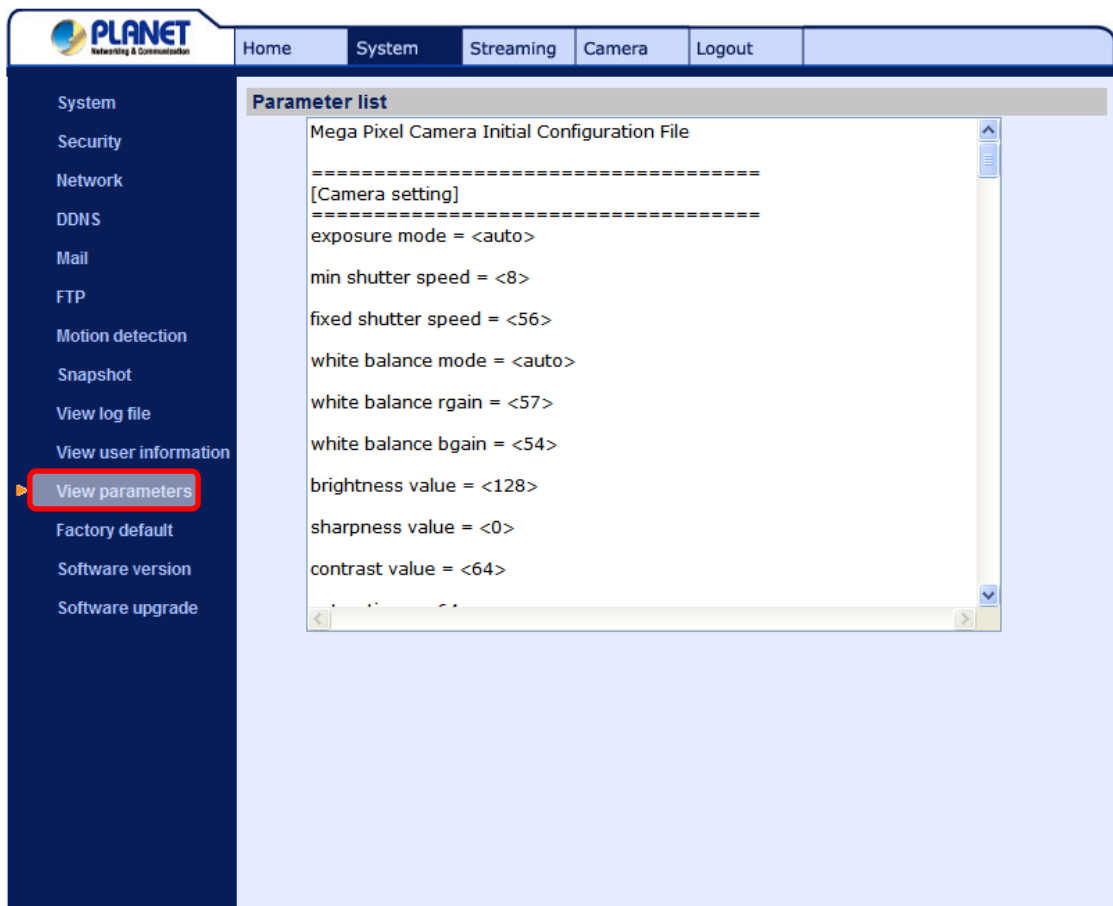
1:1:1= I/O access : Camera control : Listen (see [4.3.2 Security](#))



Therefore, it denotes the user is granted privileges of I/O access, Camera control and Listen.

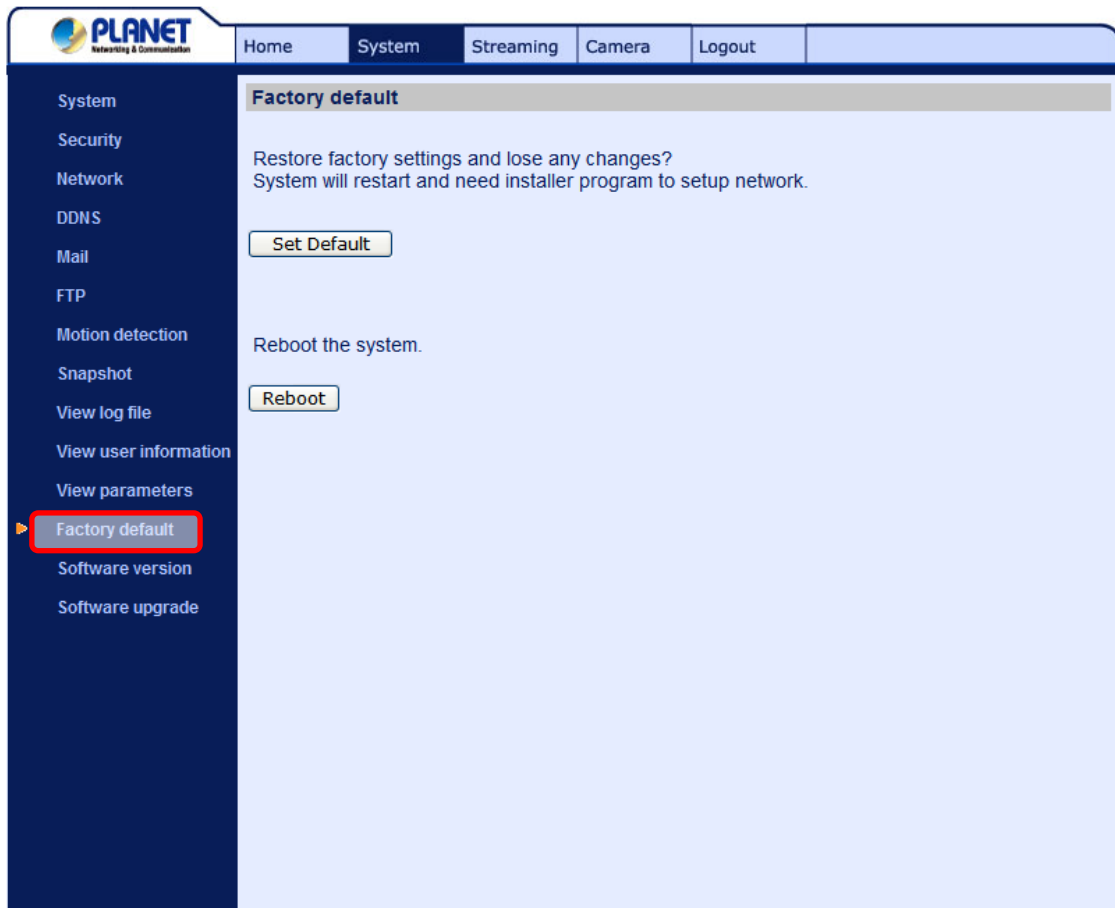
4.3.11 View Parameters

Click on this item to view the entire system's parameter setting.



4.3.12 Factory Default

The factory default setting page is shown as below. Follow the instructions to reset the IP Camera to factory default setting if needed.



Set Default

Click on the “Set Default” button to recall the factory default settings. Then the system will restart in 30 seconds.



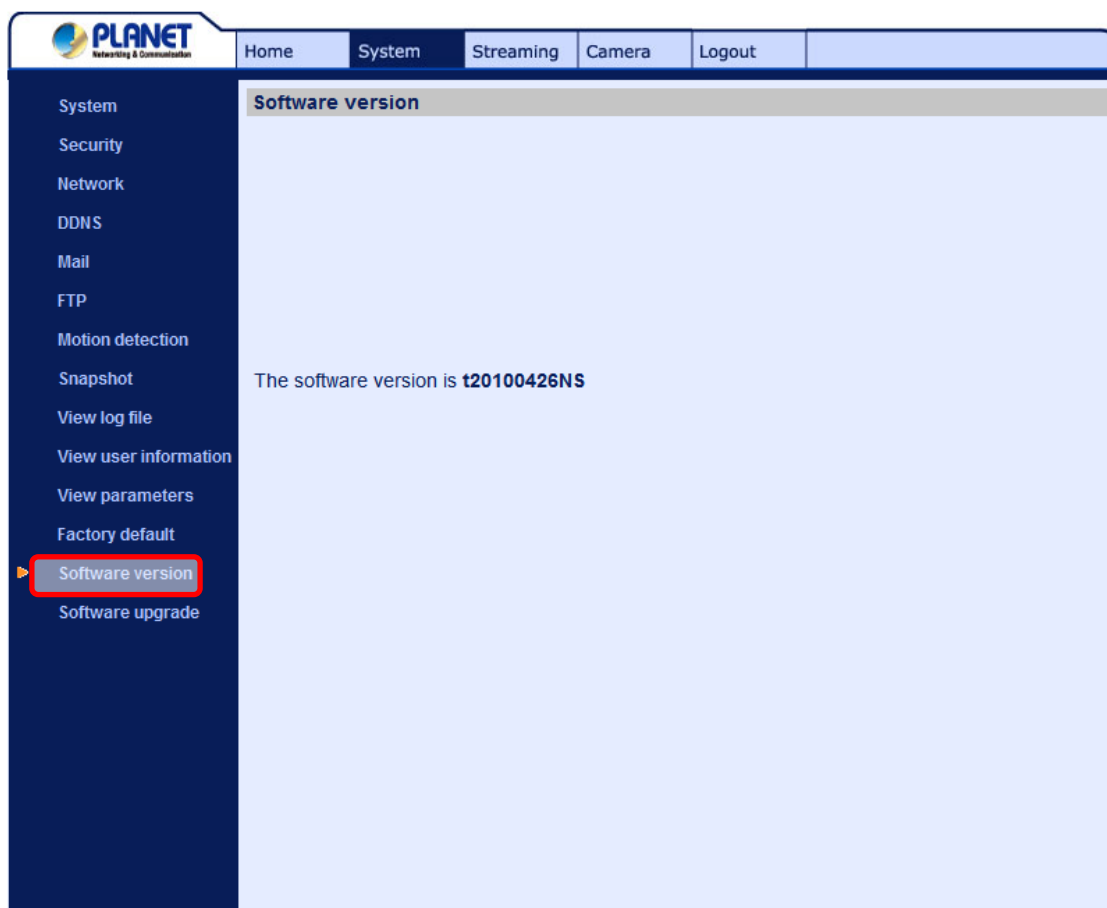
NOTE: The IP address will be restored to default.

Reboot

Click on the “Reboot” button, and the system will restart without changing current settings.

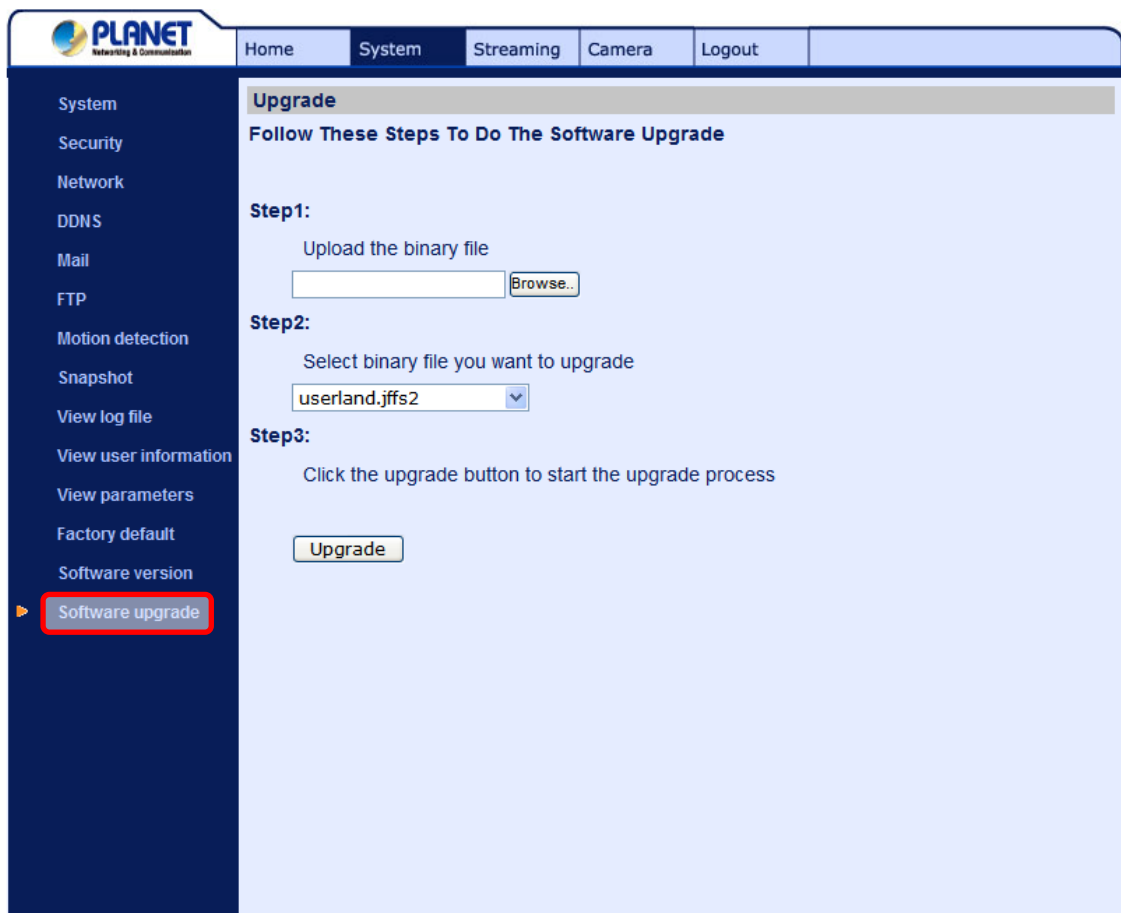
4.3.13 Software Version

The current software version is displayed in the software version page, which is shown as the figure below.



4.3.14 Software Upgrade

Software upgrade can be carried out in the “Software Upgrade” page as shown below.



PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
▶ **Software upgrade**

Upgrade

Follow These Steps To Do The Software Upgrade

Step1:
Upload the binary file

Step2:
Select binary file you want to upgrade
 ▼

Step3:
Click the upgrade button to start the upgrade process



NOTE: Make sure the upgrade software file is available before carrying out software upgrade.

The procedure of software upgrade is like the following:

Step 1: Click “Browse” and select the binary file to be uploaded, ex. Userland.jffs2.

PLANET
Networking & Communication

Home System Streaming Camera Logout

System
Security
Network
DDNS
Mail
FTP
Motion detection
Snapshot
View log file
View user information
View parameters
Factory default
Software version
▶ Software upgrade

Upgrade

Follow These Steps To Do The Software Upgrade

Step1:
Upload the binary file

Step2:
Select binary file you want to upgrade
 ▼

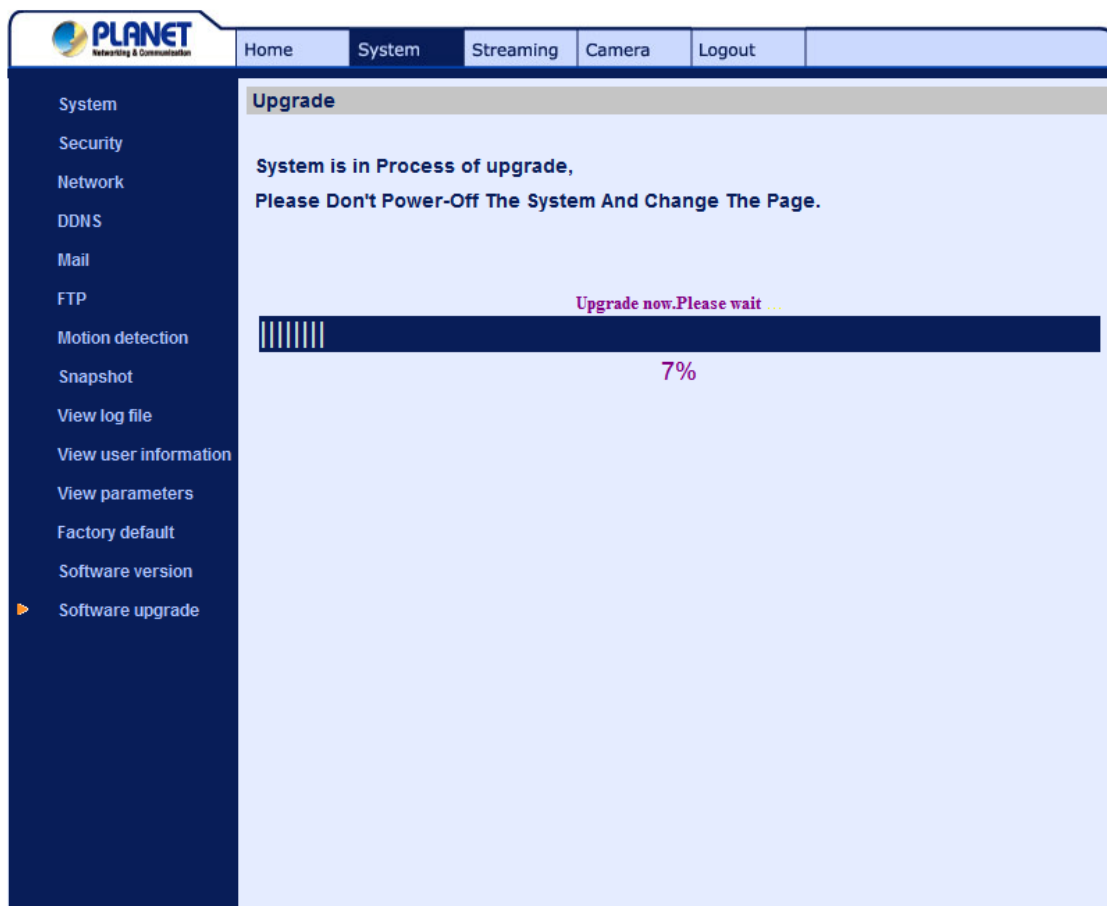
Step3:
Click the upgrade button to start the upgrade process



NOTE: Do not change the upgrade file name, or the system will fail to find the file.

Step 2: Pull down the upgrade binary file list and select the file you want to upgrade; in this case, select “userland.jffs2.”

Step 3: Press “Upgrade”. The system will first check whether the upgrade file exists or not, and then begin to upload the upgrade file. Subsequently, the upgrade status bar will display on the page. When it runs to 100%, the upgrade process is finished.



After the upgrade process is finished, the viewer will return to Home page.

Step 4: Close the video browser.

Step 5: Click "Control Panel", and then double click "Add or Remove Programs." In the "Currently install programs" list, select "DCViewer" and click the button "Remove" to uninstall the existing DC Viewer.

Step 6: Open a new web browser, re-login the IP Camera, and then allow the automatic download of DC Viewer.

4.4 Video and Audio Streaming Settings

Press the tab "Streaming" in the top of the page, and the configurable video and audio items will display in the left column. In Streaming, the Administrator can configure specific video resolution, video compression mode, video protocol, audio transmission mode, etc. Further details of these settings will be specified in the following sections.

4.4.1 Video Resolution and Rotate Type

The video setting page is shown below:

Video Format

The IP Camera provides various video resolution like the following:

- H.264 720p (30fps) + MJPEG 720p (30fps)
- H.264 720p (30fps) + MJPEG D1 (30fps)
- H.264 720p (30fps) + MJPEG CIF (30fps)
- H.264 720p (30fps) + H.264 D1 (30fps)
- H.264 720p (30fps) + H.264 CIF (30fps)
- MJPEG 1080p (15fps)
- H.264 1080p (15fps)
- MJPEG 1080p (30fps); (ICA-HM131R)
- H.264 1080p (30fps); (ICA-HM131R)

Click “Save” to confirm the setting.

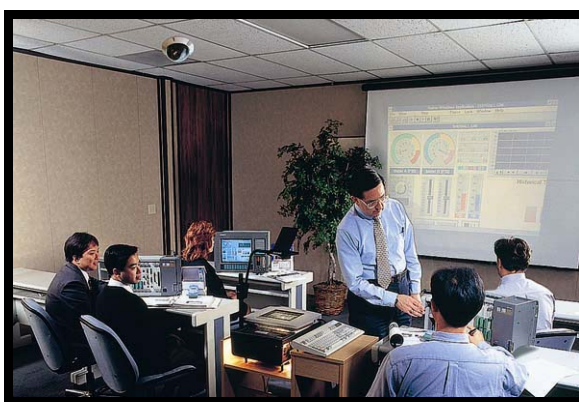
Video Rotate Type

Users can change video display type if necessary. Selectable video rotate types include Normal, Flip, Mirror and 180 degree. Differences among these types are illustrated as below.

Suppose the displayed image of IP Camera is shown as the figure below.



To rotate the image, users can select “Flip”, for instance. Then the displayed image will be reversed as shown below.



The following is descriptions for different video rotate type.

- **Flip**

If select <Flip>, the image will be rotated vertically.

- **Mirror**

If select <Mirror>, the image will be rotated horizontally.

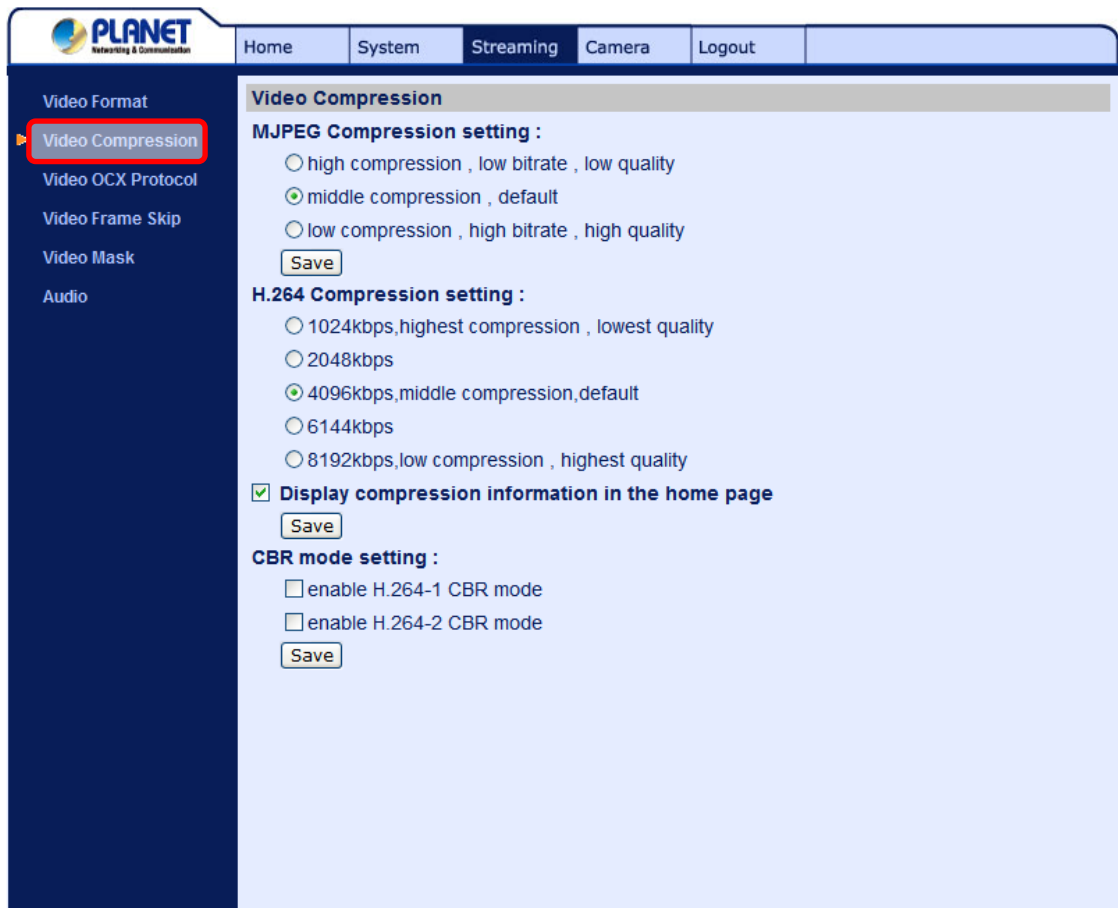
- **180 Degree**

Selecting <180 Degree> will make the image 180° counter-/clockwise inversed.

Click “Save” to confirm the setting.

4.4.2 Video Compression

Users can select a proper MJPEG/H.264 compression mode in the video compression page (see the figure below), depending on the application.



MJPEG compression settings include:

- high compression, low bitrate, low quality
- middle compression, default
- low compression, high bitrate, high quality

H.264 compression settings include:

- 1024kbps, highest compression, lowest quality
- 2048kbps
- 4096kbps, middle compression, default
- 6144kbps
- 8192kbps, low compression, highest quality

Users can also decide whether to display compression information on the Home page.

Click “Save” to confirm the setting.

4.4.3 Video OCX Protocol

In the Video OCX protocol setting page, users can select RTP over UDP, RTP over TCP, RTSP over HTTP or MJPEG over HTTP, for streaming media over the network. In the case of multicast networking, users can select the Multicast mode. The page is shown as follows.

Video OCX protocol setting options include:

- RTP over UDP / RTP over RTSP(TCP) / RTSP over HTTP / MJPEG over HTTP

Select a mode according to your data delivery requirements.

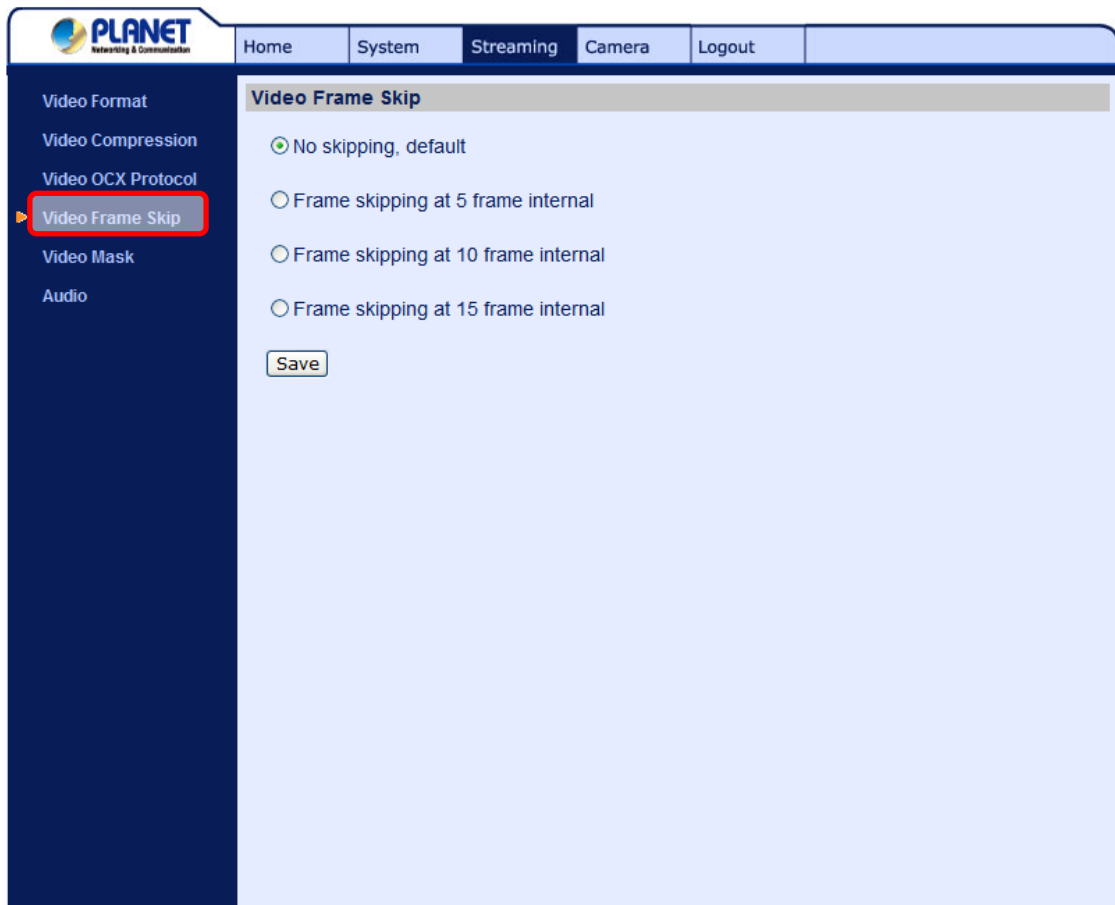
- Multicast Mode

Enter all required data, including multicast IP address, H.264 video port, MJPEG video port, audio port and TTL into each blank.

Click “Save” to confirm the setting.

4.4.4 Video Frame Skip

Video frame skipping is for saving bandwidth if necessary. The setting page is shown as below.



MJPEG/H.264 Frame Skip options include:

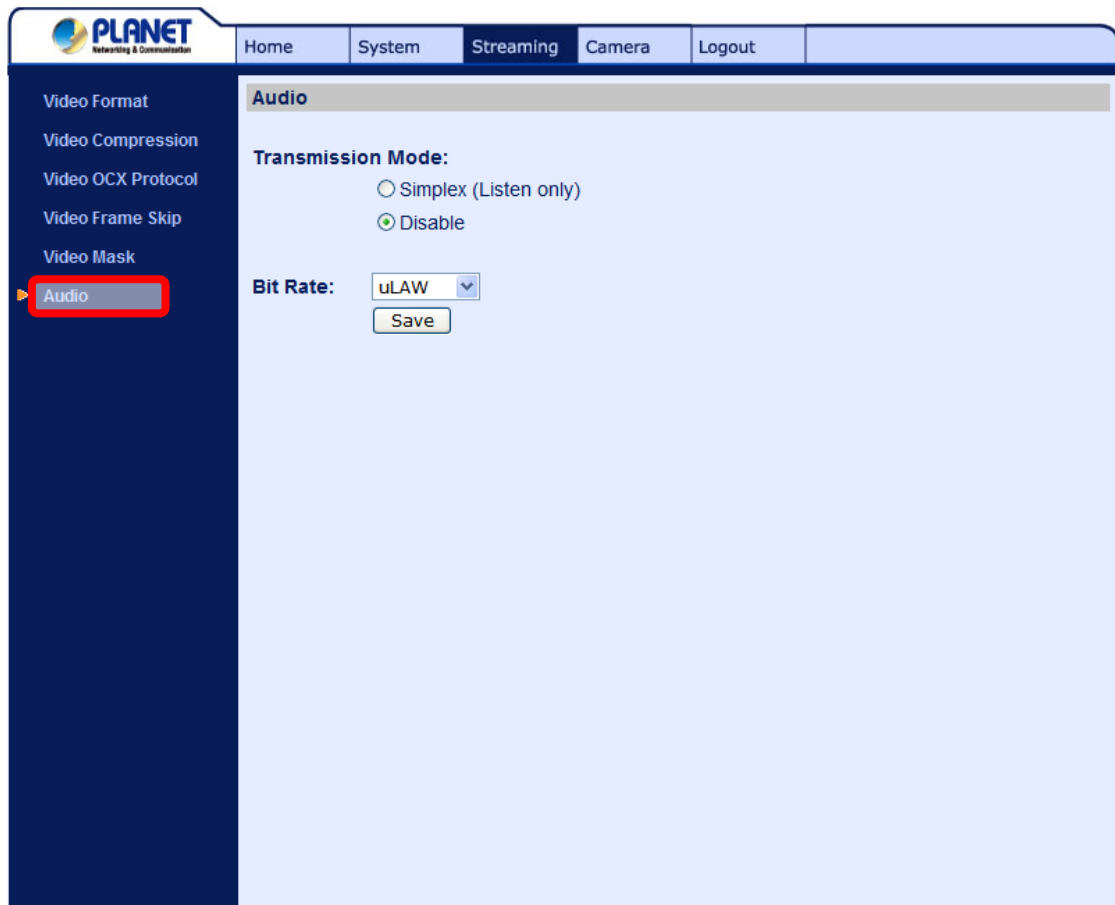
- No skipping, default
- Frame skipping at 5 frame internal (lowest frame loss rate)
- Frame skipping at 10 frame internal
- Frame skipping at 15 frame internal (highest frame loss rate)



NOTE: Higher frame skipping rate will decrease video smoothness.

4.4.5 Audio Mode and Bit Rate Settings

The audio setting page is shown as below. In the Audio page, the Administrator can select one transmission mode and audio bit rate.



Transmission Mode

- Simplex (Listen only)

In the Listen only Simplex mode, the local/remote site can only listen to the other site.

- Disable

Select the item to turn off the audio transmission function.

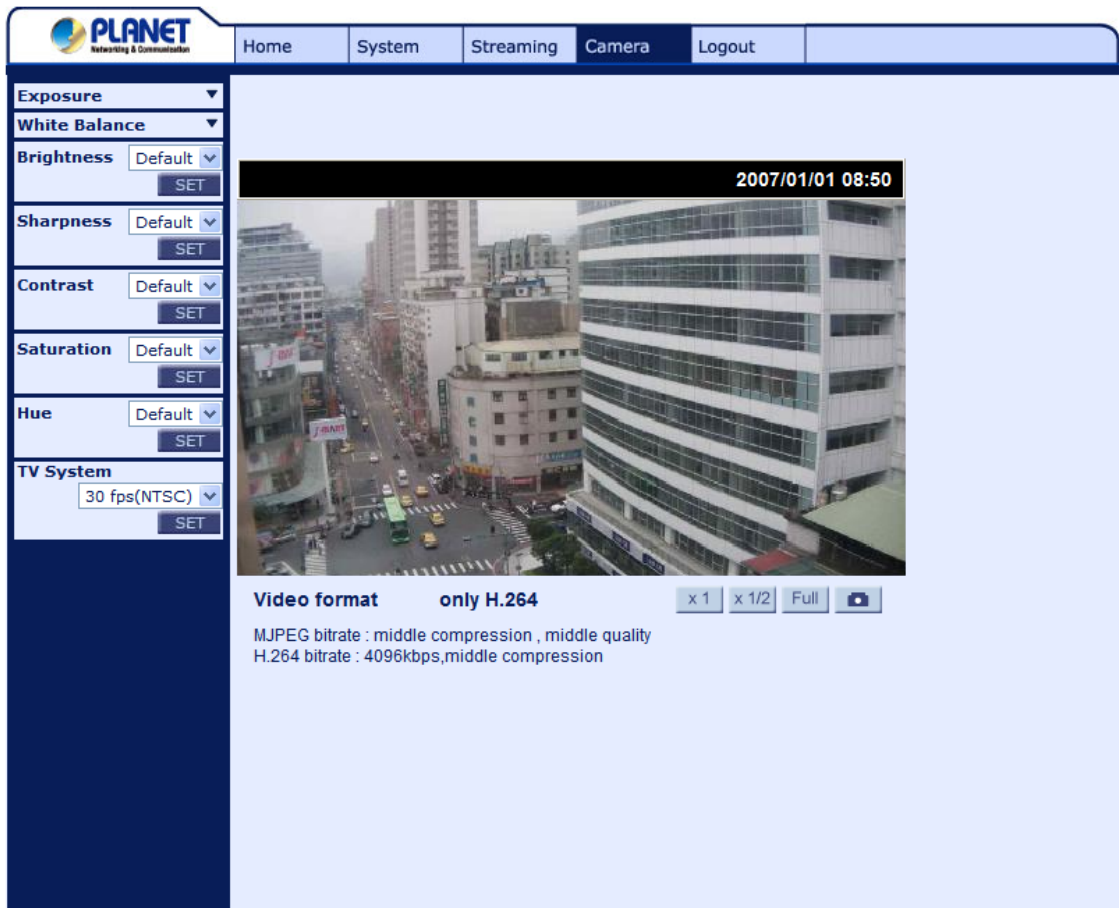
Bit Rate

Selectable audio transmission bit rate include 16 kbps (G.726), 24 kbps (G.726), 32 kbps (G.726), 40 kbps (G.726), uLAW (G.711) and ALAW (G.711). Both uLAW and ALAW signify 64 kbps but in different compression formats. Higher bit rate will let higher audio quality and require bigger bandwidth.

Click “Save” to confirm the setting.

4.5 Camera Settings

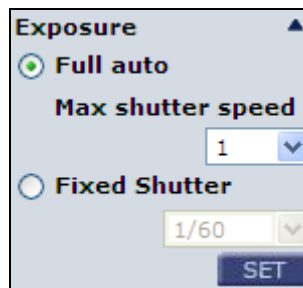
The figure below is the camera configuration page. Details of each parameter setting are described as follows.



NOTE: Camera settings and buttons below the screen vary among different types of camera.

4.5.1 Exposure Setting

The Exposure pull-down menu is shown as follows:



The exposure is the amount of light received by the image sensor and is determined by the width of lens diaphragm opening (iris adjustment), the amount of exposure by the sensor (shutter speed) and other exposure parameters. With this item, users can define how the Auto Exposure function works.

Each exposure mode is specified as follows:

Full Auto Mode

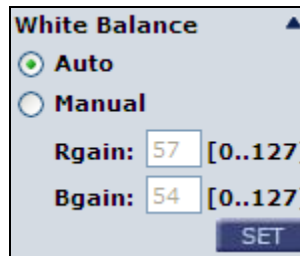
In this mode, the camera's Shutter Speed, IRIS and AGC (Auto Gain Control) control circuits work together automatically to get consistent video output level. The maximum shutter speed is adjustable from 1/30 to 1 sec.

Fixed Shutter Mode

In this mode, fixed shutter speed could be selected from the dropdown menu. The shutter speed range is from 1/10000 to 1 sec. with 19 options. Users could select suitable shutter speed according to the environmental illumination.

4.5.2 White Balance Setting

The White Balance pull-down menu is shown as follows:



A camera needs to find reference color temperature, which is a way of measuring the quality of a light source, for calculating all the other colors. The unit for measuring this ratio is in degree Kelvin (K). Users can select one of the White Balance Control modes according to the operating environment. The following table shows the color temperature of some light sources for reference.

Light Sources	Color Temperature in K
Cloudy Sky	6,000 to 8,000
Noon Sun and Clear Sky	6,500
Household Lighting	2,500 to 3,000
75-watt Bulb	2,820
Candle Flame	1,200 to 1,500

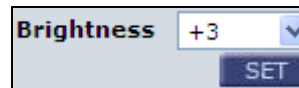
Auto Mode

In this mode, white balance works within its color temperature range and calculates the best-fit white balance.

Manual Mode

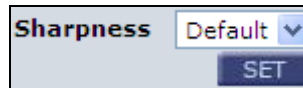
In this mode, users can change the White Balance value manually through adjusting the R gain and B gain. Press <SET> to confirm the new setting.

4.5.3 Brightness Setting



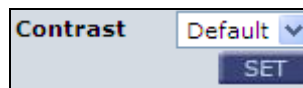
Users can adjust the image's brightness by adjusting the item. The value of Backlight is adjustable from -12 (dim) ~ +13 (brightest). Press <SET> to confirm the new setting.

4.5.4 Sharpness Setting



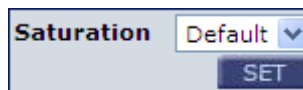
Increasing the sharpness level can make the image looked sharper; especially enhance the object's edge. The value of sharpness is adjustable from +1 ~ +15 (sharpest) besides to default value. Press <SET> to confirm the new setting.

4.5.5 Contrast Setting



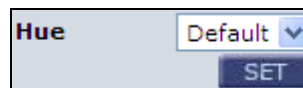
Users can correct the contrast of the entire image via adjusting the Contrast level, ranging from -6 ~ +19.

4.5.6 Saturation



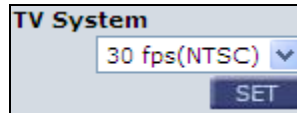
Users can adjust the saturation of color components in an image through the Saturation function, which is adjustable from -6 ~ +19.

4.5.7 Hue



Users can adjust the hue of color components in an image through the Hue function, which is adjustable from -12 ~ +13.

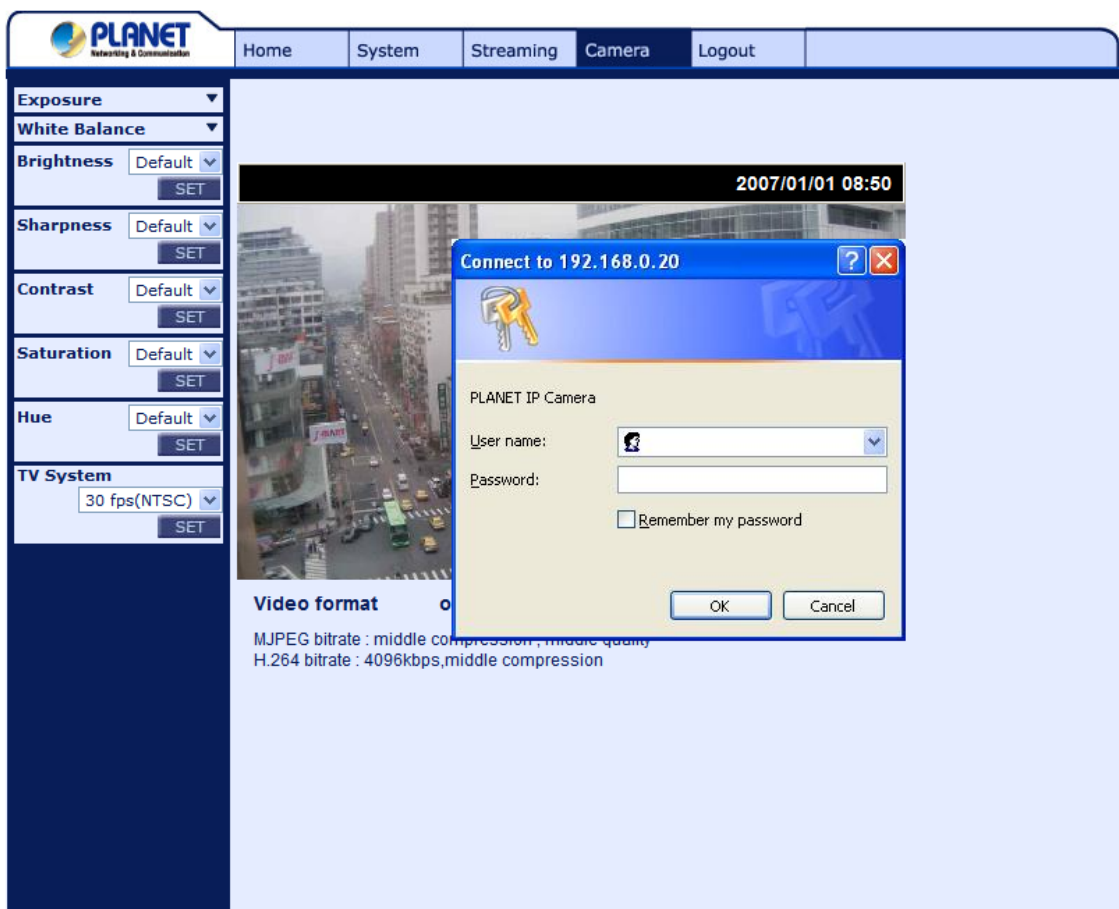
4.5.8 TV System Setup



Select the video format that matches the present TV system.

4.6 Logout

Press the tab "Logout" in the top of the page, and the login window will pop up. This enables login with another user name.



Appendix A: IP Camera Specifications

Product	ICA-HM131		ICA-HM131R	
Video Specification				
Image Sensor	1/2.7" Progressive CMOS			
Lens	4 mm, F1.5			
Minimum illumination	0.2 Lux @ F1.2			
View Angle (Horizontal / Vertical)	66 / 52 Degree			
Scan Method	Progressive			
Video Encoder	H.264 / M-JPEG			
Rate Control	VBR (Variable Bit Rate)			
Video Resolution	H.264 1080p / 720p M-JPEG 1080p / 720p / D1 / CIF			
Frame Rate	15fps for 1080p 30fps for other resolutions		30fps for all resolutions	
Image Control	AWB, AES			
Audio Specification				
Audio Codec	G.711, G.726			
Audio In	Internal Microphone			
Network and Configuration				
Network Interface	1 x RJ-45			
Network Standard	IEEE 802.3 / IEEE 802.3u			
Network Protocol	TCP/IP, UDP, RTP, RTSP, HTTP, ICMP,FTP, SMTP, DHCP, IGMP			
Browser / Software	Microsoft ® Internet Explorer 6.0 or later, Cam Viewer Plus Lite/Pro			
Motion Detection	10 areas definable			
Environment Specifications				
Power Requirement	IEEE 802.3af			
Dimension (W x D x H)	Φ110 x 50 mm			
Weight	180g			
Power Consumption	3.8W max.			
Operating Temperature	0 ~ 50 Degree C			
Operating Humidity	10 ~ 90% (non-condensing)			
Emission	CE, FCC			

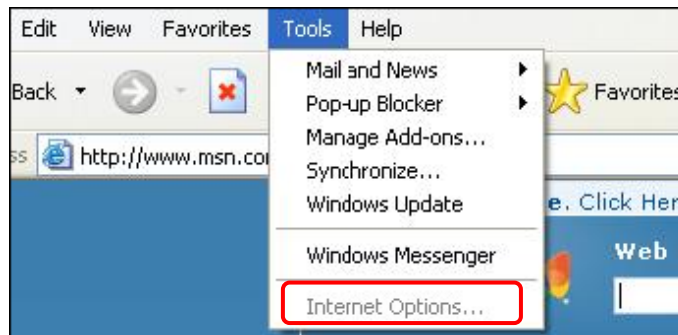
Appendix B: Internet Security Settings

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

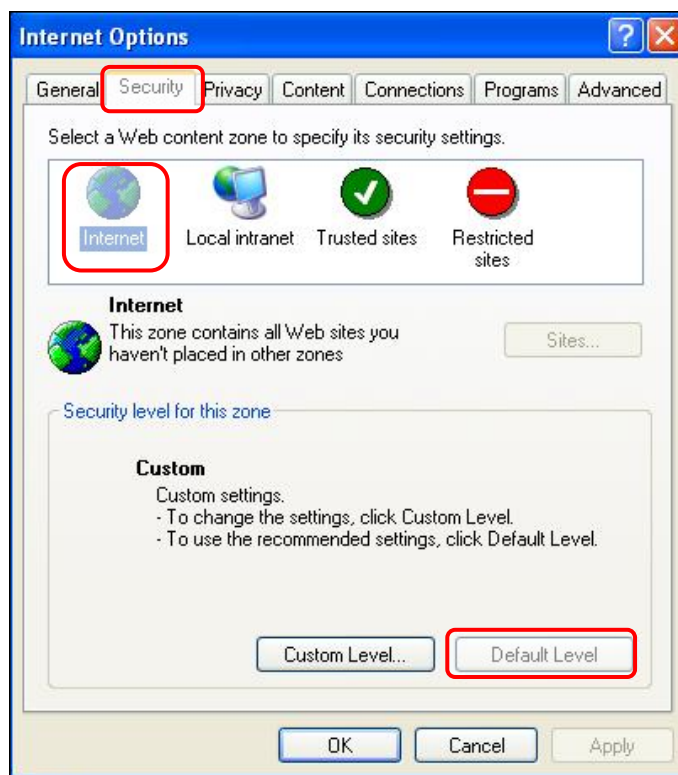
Internet Security Level: Default

Step 1: Start the Internet Explorer (IE).

Step 2: Select <Tools> from the main menu of the browser. Then Click <Internet Options>.



Step 3: Click the <Security> tab, and select <Internet>.

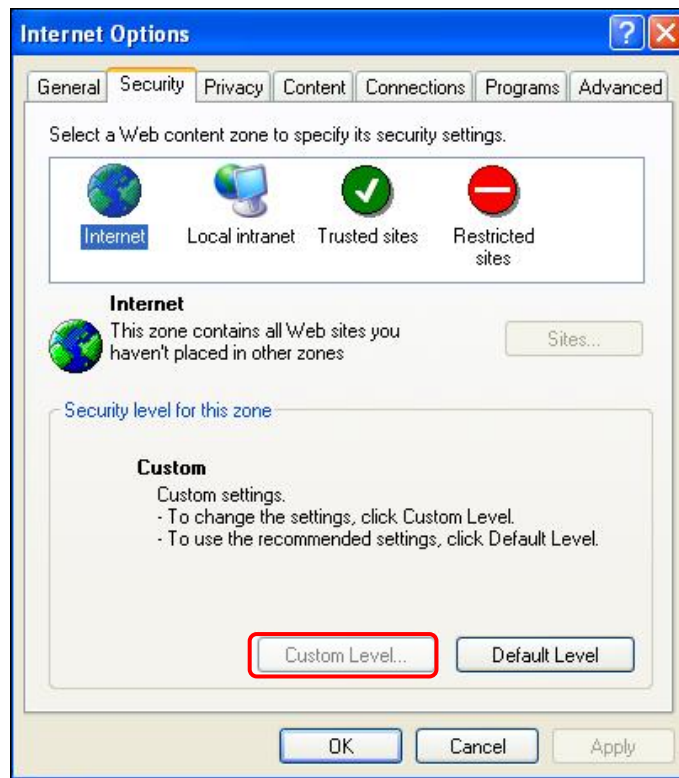


Step 4: Down the page, press “Default Level” (see the figure above) and click “OK” to confirm the setting. Close the browser window, and open a new one later when accessing the IP Camera.

ActiveX Controls and Plug-ins Settings

Step 1~3: Refer to the previous section above.

Step 4: Down the page, press “Custom Level” (see the figure below) to change ActiveX controls and plug-ins settings.



The Security Settings screen is displayed as below:



Step 5: Under “ActiveX controls and plug-ins”, set ALL items (as listed below) to <Enable> or <Prompt>.

ActiveX controls and plug-ins settings:

1. Automatic prompting for ActiveX controls
2. Binary and scrip behaviors
3. Download signed ActiveX controls
4. Download using ActiveX controls
5. Initialize and script ActiveX not marked as safe
6. Run ActiveX controls and plug-ins
7. Script ActiveX controls marked safe for scripting

Step 6: Click <OK> to accept the settings and close the <Security> screen.

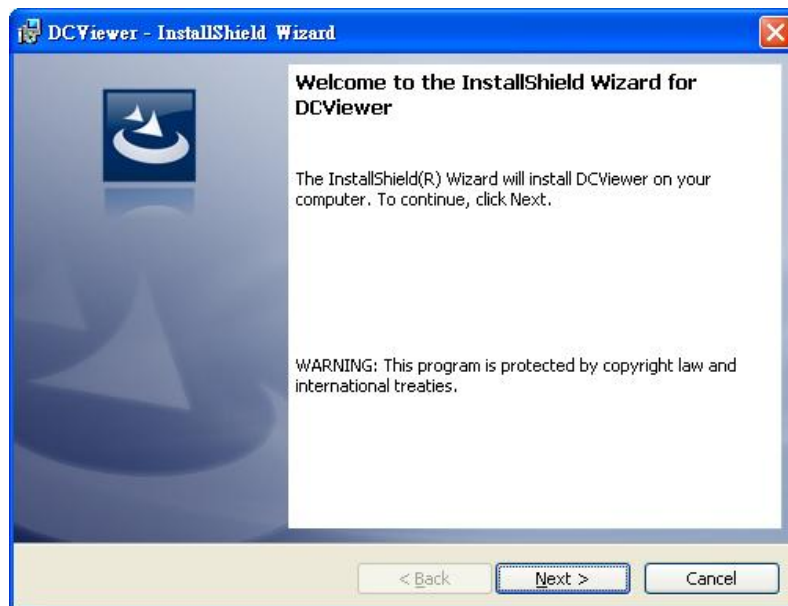
Step 7: Click <OK> to close the Internet Options screen.

Step 8: Close the browser window, and restart a new one later for accessing the IP Camera.

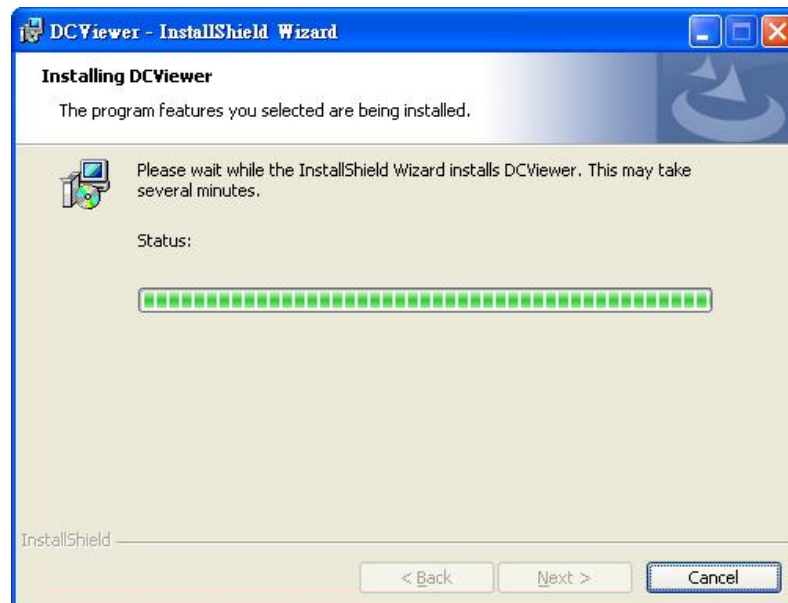
Appendix C: DC Viewer Download Procedure

The procedure of DC Viewer software download is specified as follows.

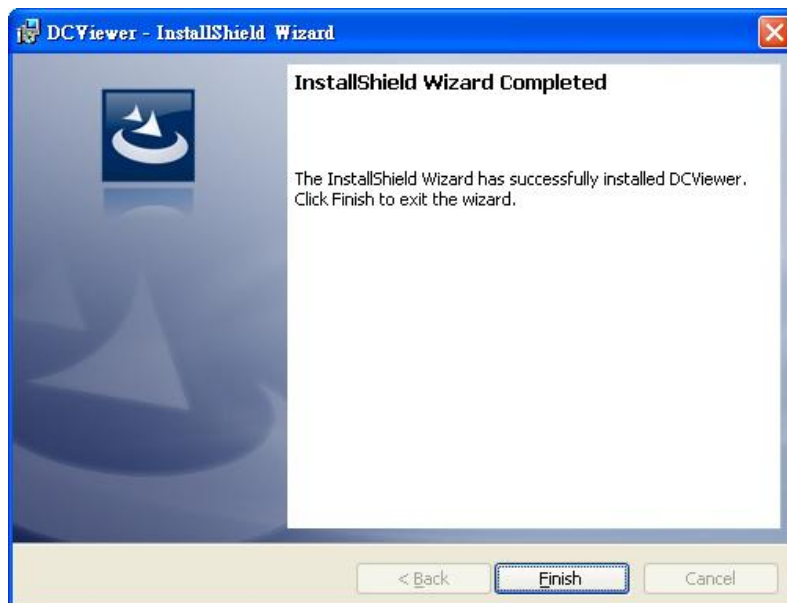
Step 1: In the DC Viewer installation page, click “Next” for starting installing.



Step 2: Setup starts. Please wait for a while until the loading bar runs out.



Step 3: Click “Finish” to close the DC Viewer installation page.



Then, the IP Camera's Home page will display as follows:



Appendix D: Frequently Asked Questions

Q1	[ICA-HM131/131R] How can I know the IP address of IP camera?
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Ans:	The default IP address is 192.168.0.20, and you could use the Device Search utility on the bundled CD to obtain the current IP address of IP camera. Please refer to the user's manual for more detail information.
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Q2	[ICA-HM131/131R] How to supply power to ICA-HM131/131R?
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Ans:	The LAN socket of IP Camera is compliant with IEEE802.3af standard PoE interface, and IP Camera is necessary supplied power through PoE Switch/Hub device.
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Q3	[ICA-HM131/131R] How to adjust the fouce and angle of lens?
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Ans:	Use the L-type spanner in the bundled package to unscrew the cover. Loosen the focus fixed screw, and rotate the lens counter-/clockwise to adjust focus; loosen the tilt fixed screw, and adjust the camera's tilt angle. You could get detail descriptions on the user's manual.
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Q4	[ICA-HM131/131R] How to reset IP camera to default setting?
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Ans:	The Reset button at the side of lens. Use the L-type spanner in the bundled package to unscrew the cover at first, and press the button with a proper tool to default setting.
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Q5	[ICA-HM131/131R] Why there are scroll lines at live video?
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Ans:	Please according to your local TV system and go to [Camera] page to select NTSC or PAL video format.
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