iCAM-760D

7.37 MP Dual Lens Panoramic Dome Network Camera

User's Manual

Version 2.0

ICP DAS CO., LTD.

泓格科技股份有限公司

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Latest edited by: Eva Li; V. 2.0, 08/2020

Contents

Revision History

Revision History Table

Doc. Version	Revision Description	Date
2.0	Modify List of Version 2.0: 1. The new website of ICP DAS is online in May 2020, so change the links in this manual to the new webpages. 2. ICP DAS Homepage: http://www.icpdas.com/ 3. iCAM Products Website: http://www.icpdas.com/en/product/guide+IIoT+IO_Sensor+IP_Camera	20200818
1.0	Initial Official Release: 1. For Chapter 1, add features, hardware picture and specifications. 2. Add Section 2.2 about how to install microSD card into the camera. 3. Add Section 4.3.5 WISE Tab for communicating the camera with the WISE controller to perform a WISE Surveillance Solution. 4. For Chapter 3, the “ePTZ function” now can display in all 4 Display Mode, modify the related descriptions. 5. For Chapter 1 to 5, modify its description for more detail and clear.	2017/08/10

Read Me First!

Important Notes

This User Manual is intended for administrators and users of the iCAM-760D Dual Lens Panoramic Dome Network Camera, including instructions for using and managing the camera on your network. The use of surveillance devices may be prohibited by law in your country or area. It is therefore the user's responsibility to ensure that the operation of such devices is legal before installing this unit for its intended use.

Before the Dome Network Camera is installed, carefully read and follow all the safety and operating instructions to avoid damage due to faulty assembly and installation. This also ensures that the device is used properly as intended.

Heed All Warnings

- **Do not drop or hit the device.**

  Sensitive electronics inside the camera are vulnerable to excessive impact.

- **Do not install the device under high temperature (less than 45°C) environment.**

  Excessive heat could damage the equipment.

- **Do not cover device with any object or install it in a poorly ventilated vicinity.**

  Overheating could damage the camera.

- **Do not expose the device to rain or moisture. Do not touch the power connection with wet hand.**

  Risk of short circuit, electric shock, or fire

- **Do not damage the power cord or leave it under pressure.**

  Risk of fire or circuit electric shock

- **To reduce the risk of electric shock or damage, do not remove the front or back cover.**

  There is no user-serviceable parts inside. Misusage, improper, or negligent handling could damage the device. Refer to qualified service personnel from our distibutor/dealer for any device related trouble shooting need.

- **Do not continue to operate the device if it appears to malfuntion.**

Contact qualified service personnel from our distibutor/dealer for help.

- **Installation of the product should be made by qualified service personnel or system installers from our distibutor/dealer.**

1 Introduction

iCAM-760D is a Dual Lens Panoramic Dome Network Camera featured with 7.37 Mega Pixel resolutions totally. Also this model has superior H.264-AVC performance and rich functions.

iCAM-760D includes a D/N fish-eye lens for 360° panoramic wide angle view without blind spot; and another D/N Fix-focal dual lens to view a wide/Tele area. With independent eWDR both sensors could view in extremely bright or dark environments. It is very suitable to install in public office, entrance, transportation and shop without the need to install multiple cameras.

Base on this hardware's video processing ability, **iCAM-760D** provides user various 3840 x 1920 video layout including Original View, Double Broad View, Triple View and Quad View. The ePTZ function, including preset point without moving parts, can replace part of traditional PTZ camera and thus save lot of traditional mechanical Pan/Tilt maintain cost.

Further functions include Auto Pan, Auto Patrol, two-way audio, DI/DO alarm application and microSD / microSDHC / microSDXC 64 GB card support for local storage application.

Features:

- 2 x 5 Megapixel Progressive CMOS Sensor
- Smooth 15 fps@High 7.3 Megapixels Resolution (3840 x 1920)
- H.264/MJPEG Dual Codec
- 1.05 mm non-liner Fisheye Lens + 6/8/12/16 mm Fixed-focal Lens
- Removable IR Cut, Day & Night Function for Both Sensors
- eWDR Image Enhancement for Extreme Lighting Condition (too Bright/Dark)
- Various Display Modes Selectable for Different Applications
- ePTZ, Auto Pan, Auto Patrol Function on Fisheye Lens

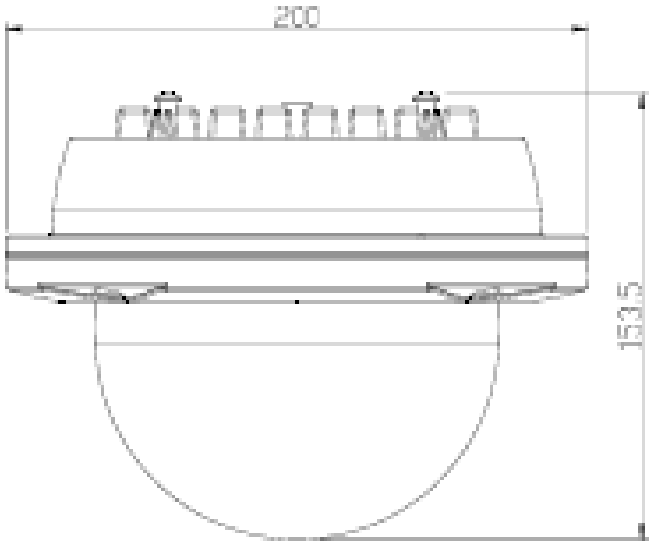
- Two-way Audio
- Built-in microSD/microSDHC / microSDXC Card Slot for On Board Storage
- Weather-proof IP66-rated Outdoor Housing
- Built-in 802.3af Compliant PoE
- ONVIF 2.2 Compliant for interoperability

1.1 Hardware Overview

iCAM-760D

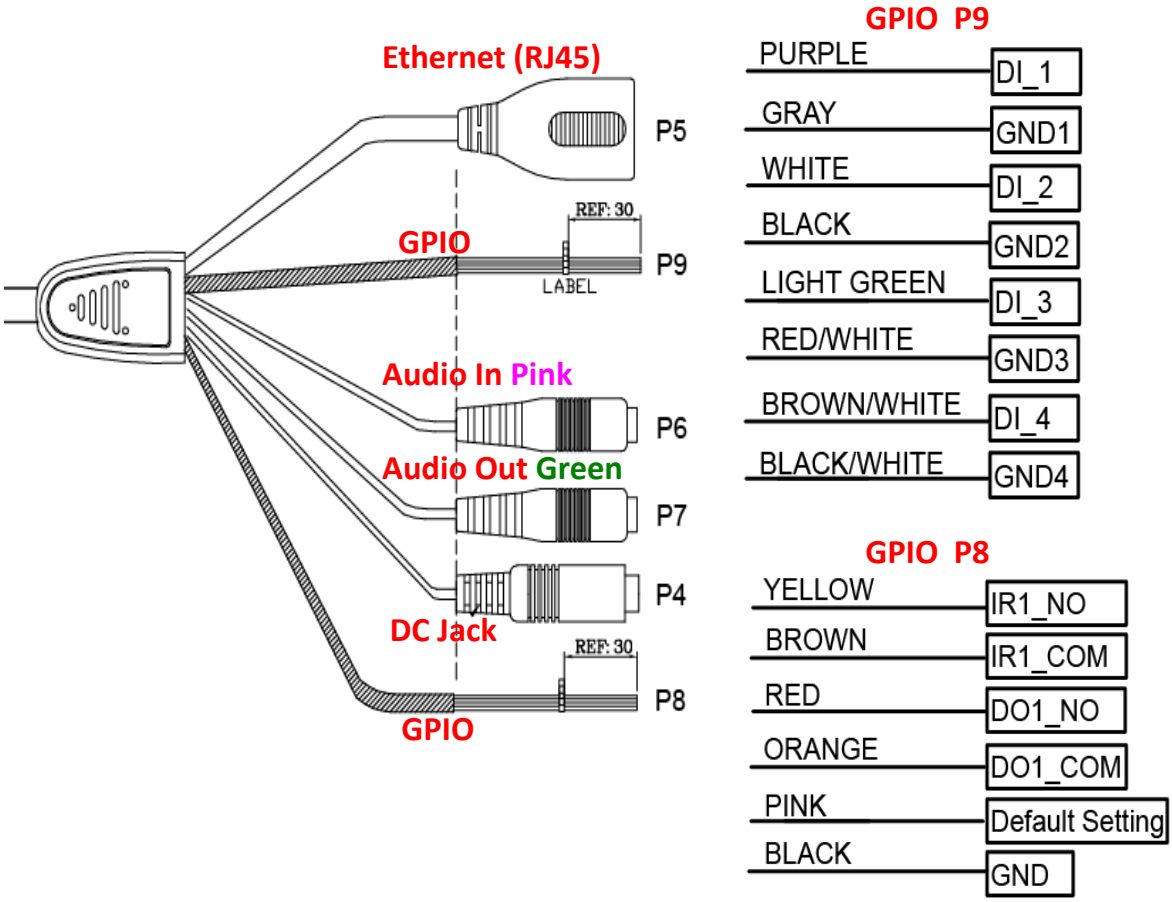
iCAM-760D with outdoor 6" dome housing

Dimensions



Cable Connections:

iCAM-760D provides some connections with outside devices. User can make the connectors to support Audio, DC Jack or Terminal Block for GPIO (This model does not support for IR board).
Please refer to following table of the pins definition respective.



1.2 Specifications

Model	iCAM-760D
System Information	
CPU	Multimedia SoC (System-on-Chip)
NOR Flash	16 MB
RAM	512 MB
Camera Features	
Image Sensor	1/2.5” Progressive CMOS sensor in 2592 x 1944 Resolution
Maximum Resolution	7.37 MEGA: 3840x1920 @15fps
Fixed-Focal Lens Type	1/2.5”, f = 6/8/12/16 mm, F1.6, Fix-Iris, Horizontal angle of view: 54°/ 41°/ 28°/ 22
Panoramic Lens Type	1/2.5”, f = 1.05 mm, F2.8 , Fix-Iris, Angle of view: 186±4° (D/H/V)
Shutter Time	1/100,000 to 1s
WDR Technology	eWDR Enhanced
Day/Night	Removable IR-cut filter for Day &Night Function
Minimum illumination	1.9 Lux @F2.8 (Color) ; 0.1 Lux @F2.8 (B/W)
External IR Illuminators (optional)	Effective Range up to 10 meter, 60/120/180 Degree IR IP66 / 8W / DC12V
On-board Storage	Built-in microSD card slot, support microSDHC/microSDXC 64GB or above
Video	
Compression	H.264 / MJPEG
Display Mode	360° Source View + Fixed-focal View 180° Double Broad View + Fixed-focal View 180° Triple View + Fixed-focal View Quad View + Fixed-focal View
Maximum Streams	Two simultaneous streams Stream 1: 3840x1920@15fps Stream 2: 480x240@15fps
S/N Ratio	Above 39 dB
Dynamic Range	100 dB

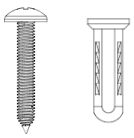
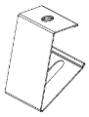
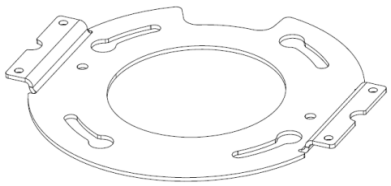
Model	iCAM-760D
Video Streaming	Adjustable resolution, quality and bitrate
Image Settings	Adjustable image size, quality and bitrate Configurable brightness, saturation, exposure control, sharpness, contrast, white balance, auto shutter control, auto gain control, noise reduction, EV luminance control, flip & mirror, privacy masks, time stamp, text overlay
Audio	
Audio Capability	Audio input/output (full duplex)
Compression	G.711u
Interface	External microphone input
Network	
Users	Live viewing for up to 10 clients
Protocols	HTTP, HTTPS, TCP/ IP, IPv4, UDP, SMTP, FTP, DHCP, DDNS, NTP, DNS, ARP, RTSP, RTP, UPnP, ONVIF (Profile S), Multicast
Protection	Multiple user access levels with password protection, IP address filtering
Interface	10 Base-T/100 BaseTX Ethernet(RJ-45)
ONVIF	Ver.2.2 and above
Intelligent Video	
Motion Detection	Ten-windows video motion detection
Alarm and Event	
Alarm Triggers	Video motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification
Alarm Events	Event notification using digital output, HTTP, SMTP, FTP and NAS server File upload via HTTP, SMTP, FTP and NAS server
General	
Connectors	RJ-45 cable connector for Network/PoE connection Audio input / output Digital input *4 / Digital output *1
LED Indicator	System power and status indicator
Power Input	PoE, IEEE 802.3af, Class1

Model	iCAM-760D
	DC 12V
Power Consumption	9.6W
Dimensions	200x153.5mm
Weight	Net :1.9kg
Casing	Indoor IP54 Outdoor Weather-proof IP66-rated housing
Safety Certifications	CE, FCC Class B, LVD
Operating Temperature	Starting : -10°C ~ 50°C Working: -40°C ~ 50°C
Operating Humidity	10% ~ 80%
System Requirements	
Operating System	Microsoft Windows 10/8/Vista/XP
Web Browser	Mozilla Firefox 7 ~ 52, Internet Explorer 7 ~ 11
Other Players	VLC: 1.1.11 or above

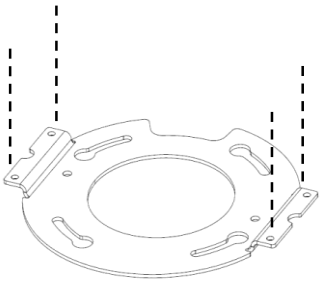
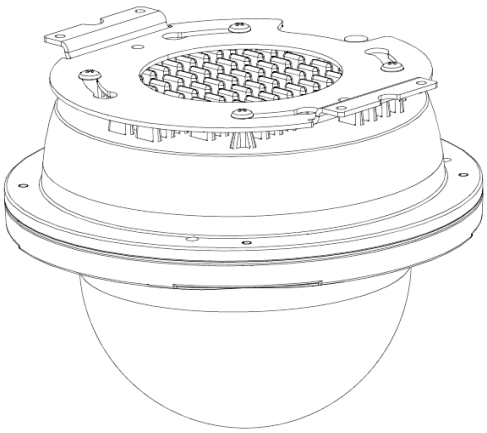
2 Installation and Setup

2.1 Install Camera and Fix it on the Bracket

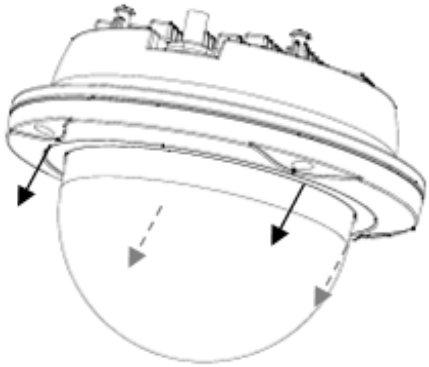
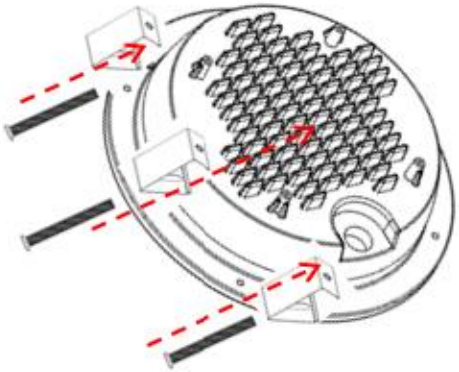
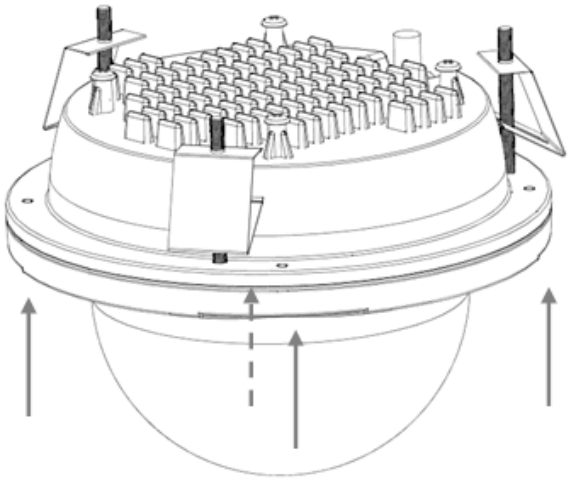
1. Please check if below components are all included in the box.

NO.	A-1	B-1	A-2	B-2
Quantity	3	4 / 4	3	1
Screws				

2. Wall Mount & Ceiling Mount Installation

Step 1	Install the Bracket (B-2) by applying the Screw (B-1) * 4 pcs.
	
Step 2	Align and insert the 4 screw pins to the 4 anchor points of the bracket correspondingly. Rotate clockwise to fix the camera.
	

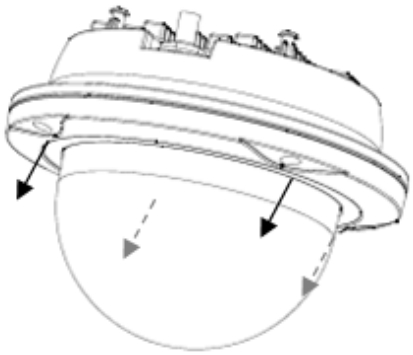
3. In-Ceiling Mount Installation.

Step 1	Loose the 4 screws of cover and remove the cover.
	
Step 2	Take Screw (A-1) * 3 pcs. Insert each screw through the pan and then the Bracket (A-2).
	
Step 3	Concurrently squeeze the Bracket (A-2) * 3 pcs into the ceiling mezzanine. Tighten the 3 screws to securely fasten the camera. Finally, install the camera cover.
	

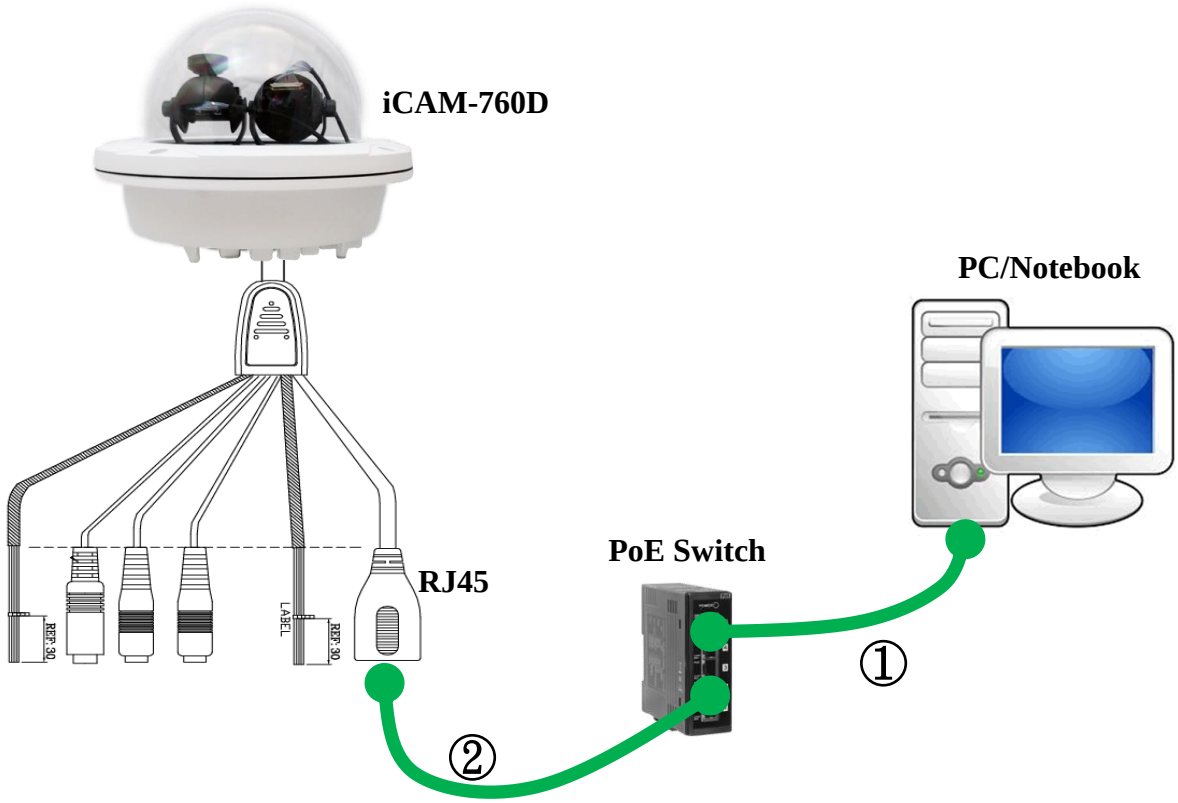
2.2 Install microSD Card

The iCAM-760D built-in microSD card slot supports microSDHC / microSDXC 64 GB or above for local storage application.

The user can prepare a microSD card to install into the camera via the following steps.

Step 1	Loose the 4 screws of cover, remove the cover, and find the microSD card slot as the following picture.
	 
Step 2	Insert the microSD card into the slot. Finally, install the cover back to the camera.
	

2.3 Connecting Camera to Network



1) Be sure that your PC or laptop has connected to your local Ethernet network.

2) Be sure that IP Camera has connected to your local networking via the LAN port (RJ45) on the cable. For this PoE model, user can use PoE Switch as power supply.

3) Use CAM FINDER software utility in CD to set up the camera (see 2.4 Configuring Camera via CAM FINDER), or directly set up the camera via the Microsoft IE browser using the following default IP information:

IP: 192.168.255.2 (Default Username/Password: admin/admin)
Submask: 255.255.0.0
Gateway address: 192.168.0.1
DNS Server address: 8.8.8.8

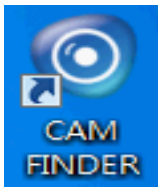
2.4 Configuring Camera via CAM FINDER

The user can configure iCAM by default IP address or via the software utility.

The default IP Address configuring: see 2.3 Connecting Camera to Network

The software utility ***CAM FINDER*** is in the attached Software Package CD.

The ***CAM FINDER*** is used to find and configure network cameras on the LAN. This utility is useful for conveniently configuring the network settings of the device, or for finding a device once the network settings have been modified.



The ***CAM FINDER*** programs are located in the Software **iCAM CD** provided together with the device. Please insert the CD into the PC CD-ROM Drive, open the folder **"Software_Utility"** and then **"CAM FINDER"**. Launch the **CAM FINDER** setup file **"setup.exe"** and complete the installation step by step.

iCAM CD Path: \Software_Utility\Cam Finder setup.exe

The latest version of the **CAM FINDER** software program is available on the **iCAM** product website:

http://www.icpdas.com/en/product/guide+IIoT+IO_Sensor+IP__Camera

Or directly download from the following FTP path:

http://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=iCAM

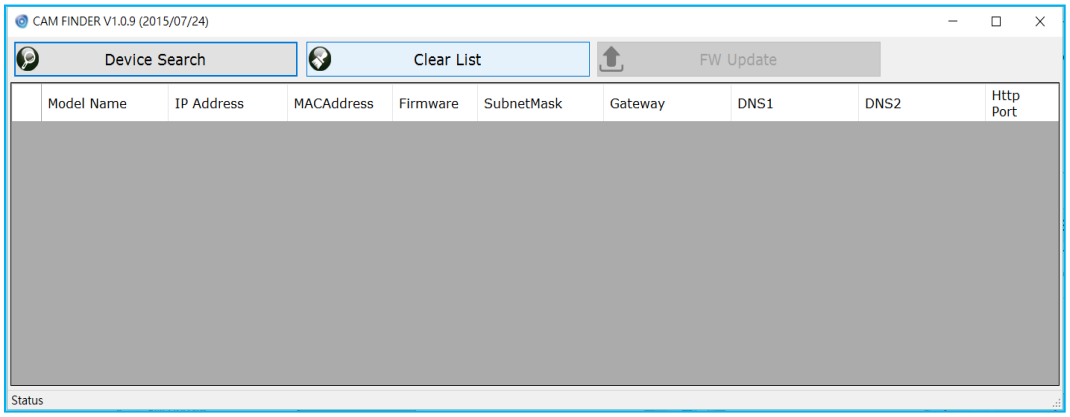
NOTE

1. In order to ensure CAM FINDER utility has the best compatibility with Camera, kindly please ask for distributor/dealer's help to get the latest version downloading.

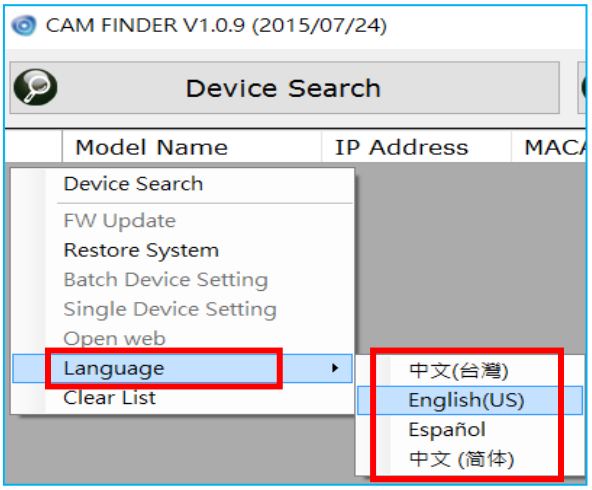
2. In order to ensure Camera will be assigned IP Address properly, please confirm the following things.
   - Always consult your network administrator in order to avoid using a previously assigned IP address.
   - Check if the Camera is powered on and correctly connected to the network.
   - In order to connect to the Web-based user interface of the camera, the host PC must be in the same subnet. For more information about subnets, please consult your network administrator.

Once CAM FINDER has been successfully installed on the PC/notebook, double click the CAM FINDER icon on the Desktop of PC or choose **"Start＞All Programs＞CAM FINDER"** path to run the software.

The **CAM FINDER** window is showing as the following picture.

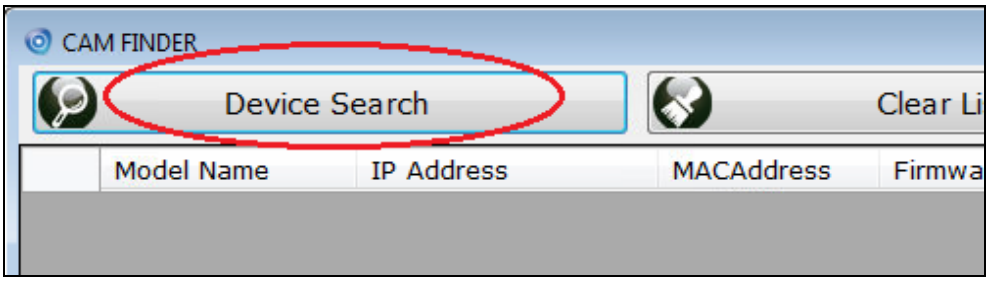


If want to change the **software language**, please click the right key of mouse on the gray area and select the [Language] to choose one language from the [Traditional Chinese], [English], [Spanish] and [Simplified Chinese].

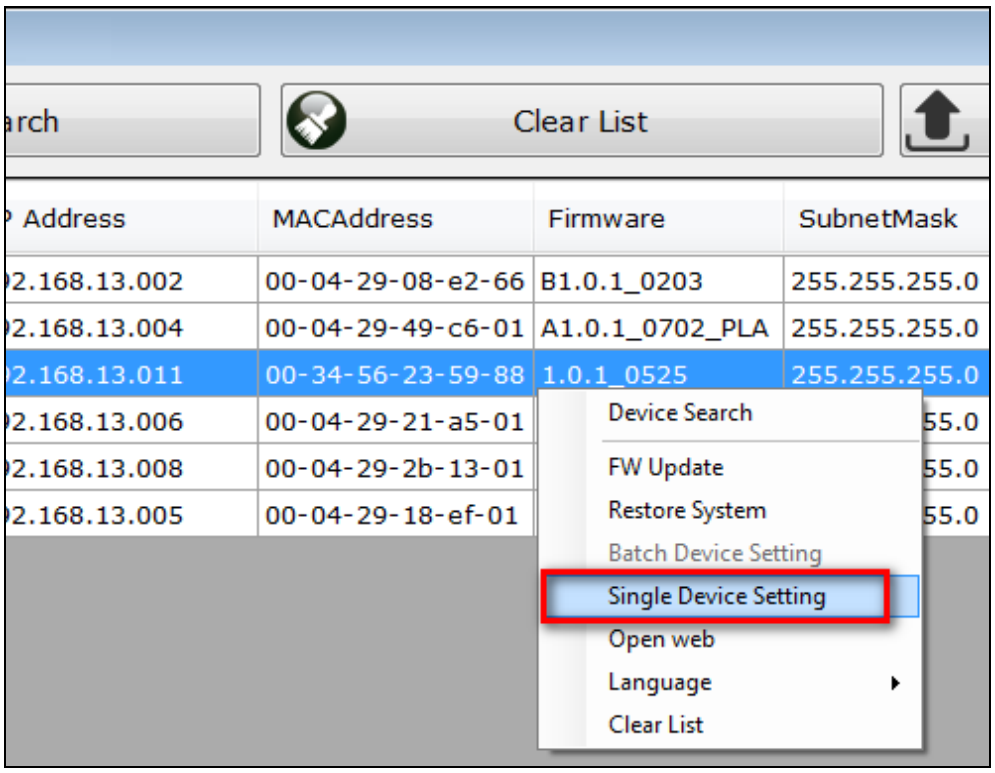


2.4.1 Use CAM FINDER to Assign IP Address

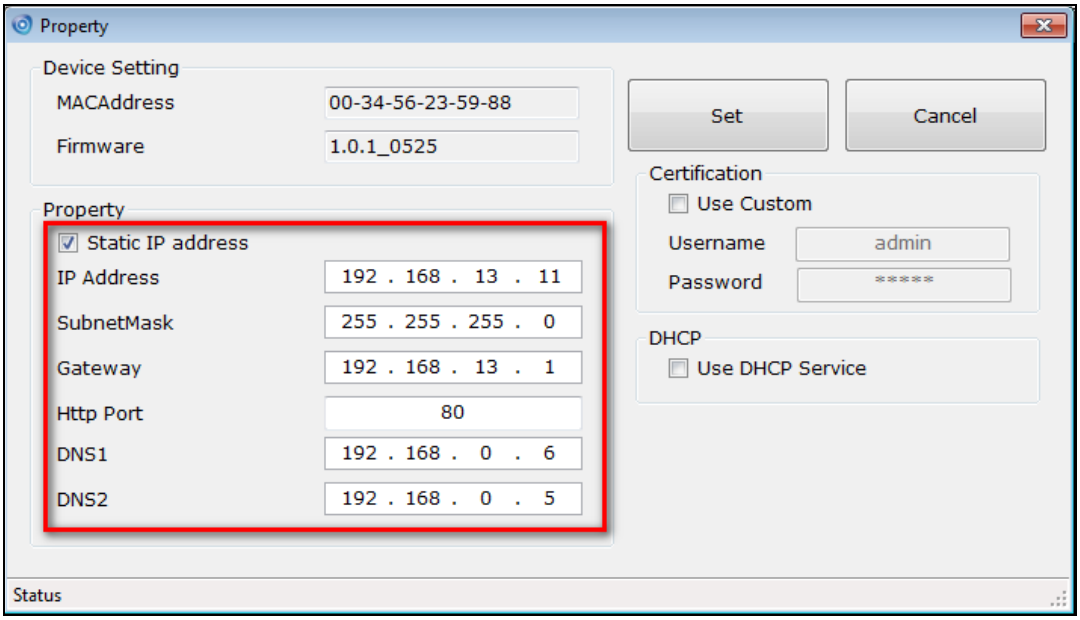
1. Click the **[Device Search]** to search the camera on the network.



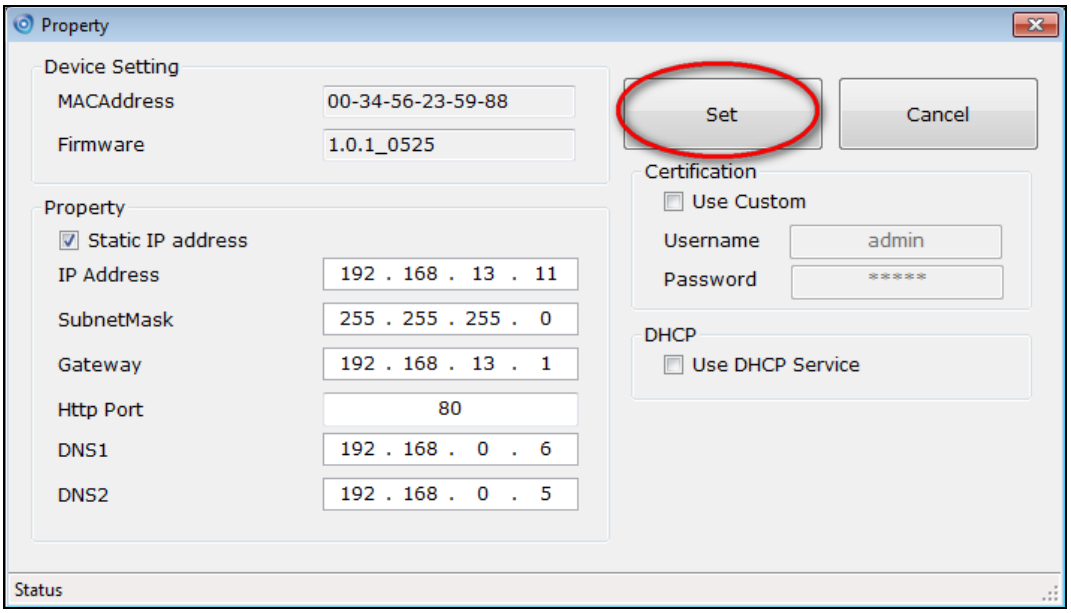
2. Under your selected item, double-click the left Mouse button or Right-click the Mouse button to open the Property Page of the **[Single Device Setting]**.



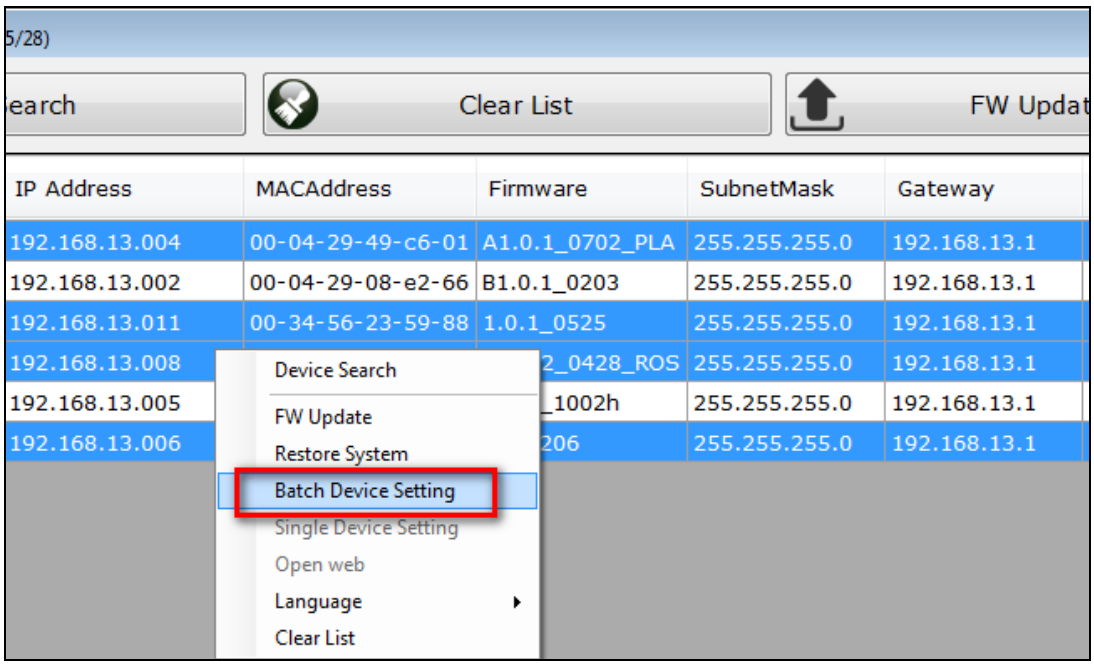
3. Check **[Static IP address]** item to select the network connection method of the camera.

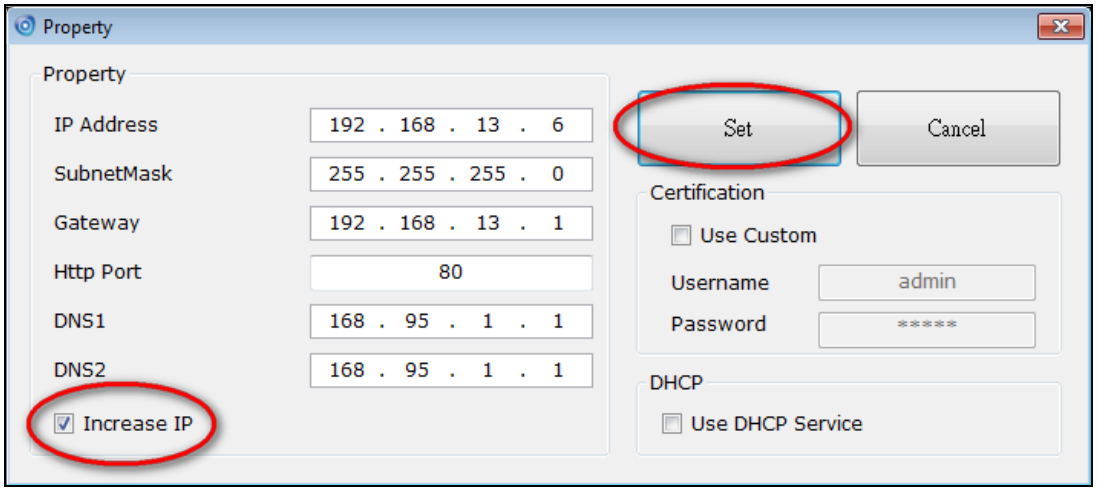


4. After modifying the camera properties, click **[Set]** button to save and enable the configuration modifications.



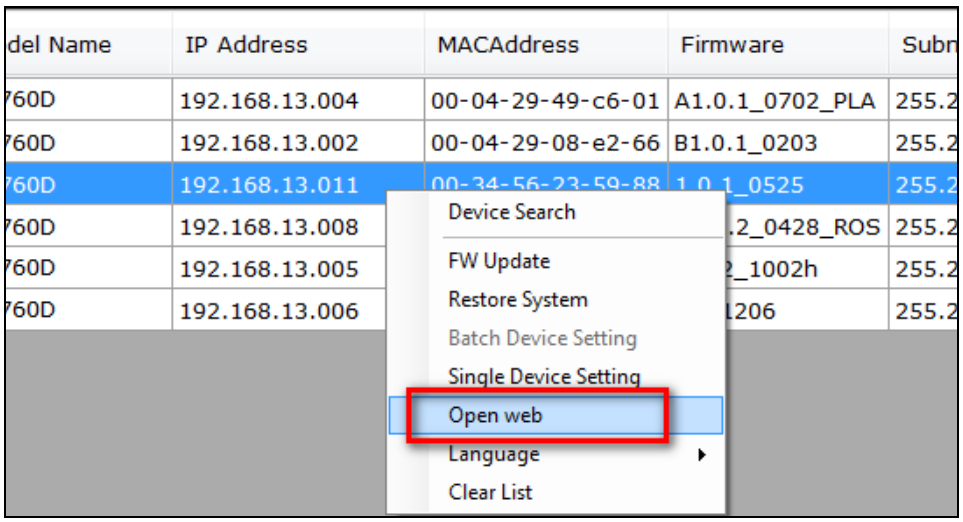
5. This Utility can batch modify IP address automatically. Use “Ctrl” or “Shift” key on the keyboard to choose several Camera Devices. Then click the **[Batch Device Setting]** to configure them together.



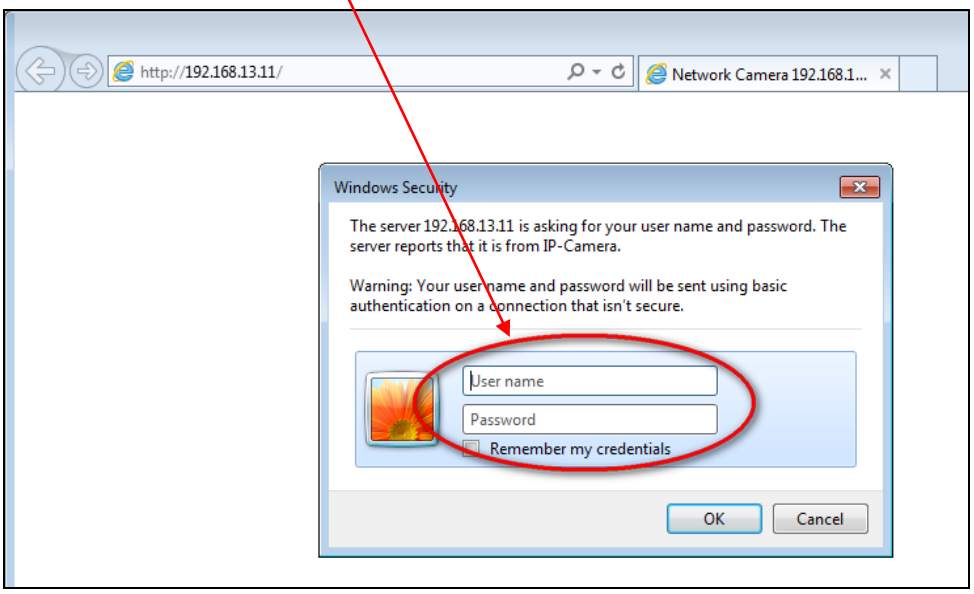


2.4.2 Open the Web-based UI of the Camera

1. To access the Web-based UI of the selected unit, run the **[Open Web]** on the select item from the CAM Finder software window.

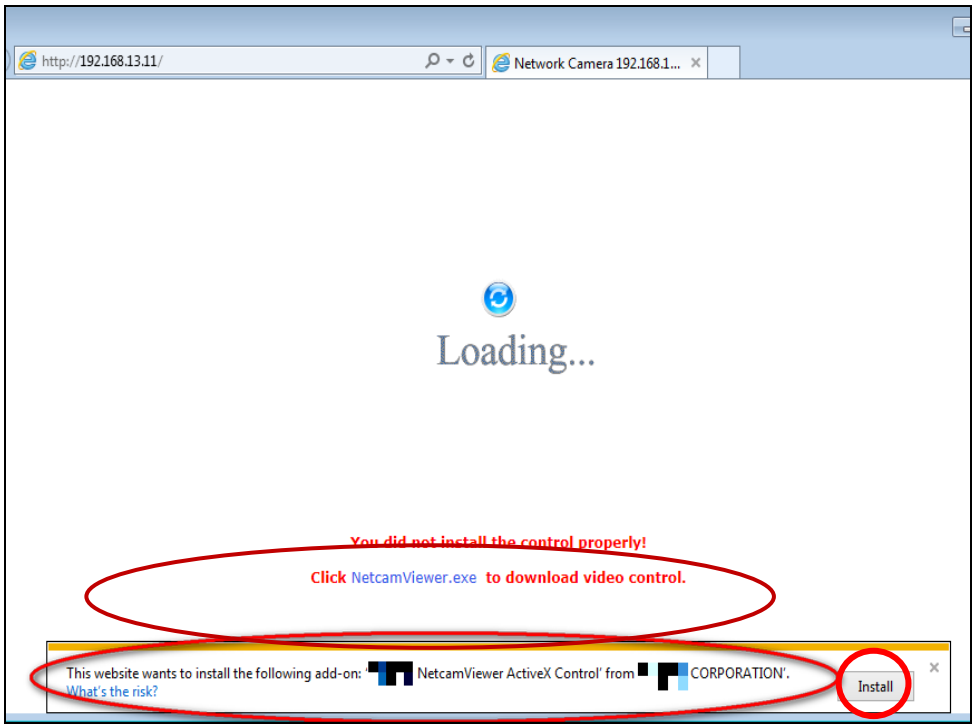


2. Manual input the username and password for the login authentication of camera webpage. For the first time login of setting or using, please use the default username ***admin***, password ***admin*** .

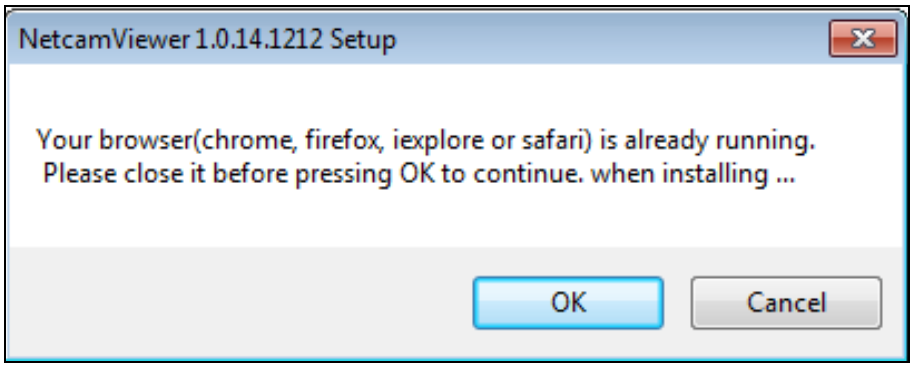


NOTE:
Use of Microsoft IE browser is recommended as it offers a better compatibility.

3. For first time user, there will be a prompt to install the **NetcamViewer** and allow the ActiveX control. Comply with the ActiveX installation as they are needed to view the video stream and some other operations.
   Besides, use of Microsoft IE browser is recommended as it offers a better compatibility.
   Please click the NetcamViewer hyper-link to download and install it.

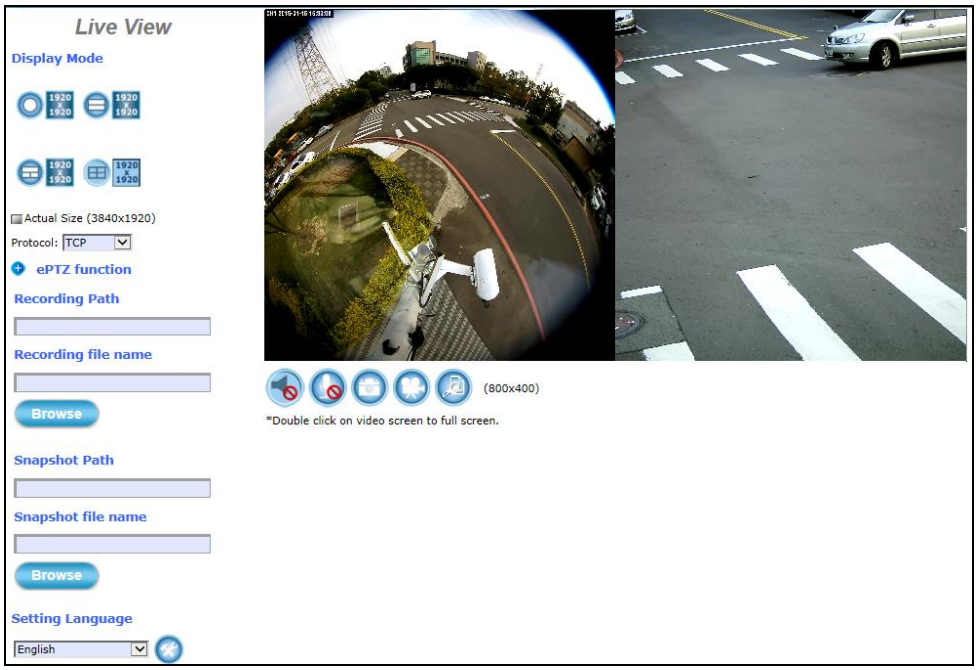


NOTE:
Please also note to close all browser applications before NetcamViewer web component installation.



4. If the camera and browser components have been configured correctly, the default Web browser will open to the Live View page of the selected camera.

   * Username and password is required. (Default is admin / admin)



Verify and Complete the Installation from Your Browser

If your IE Browser can't get the ActiveX download properly, you may have to temporarily lower your security settings to perform a one-time-only installation of the ActiveX component onto your workstation, as described below:

1. From the IE Browser menu, select
   [Tool] -> [Internet Options] -> [Security] -> [Custom Level]

2. Set the security level to **Low** and click **[OK]**.

3. Enter the IP address again in the IE Browser to install the ActiveX. Don't forget to restore the security level after the ActiveX installation.

3 Live View UI Settings

In this chapter, you may change and reconfigure the Camera Live View UI (User Interface) to suit your need via PC/notebook.

First, open the Camera Web UI by the below steps, or refer to Chapter 2.4.2 Open the Web-based UI of the Camera for detail descriptions.

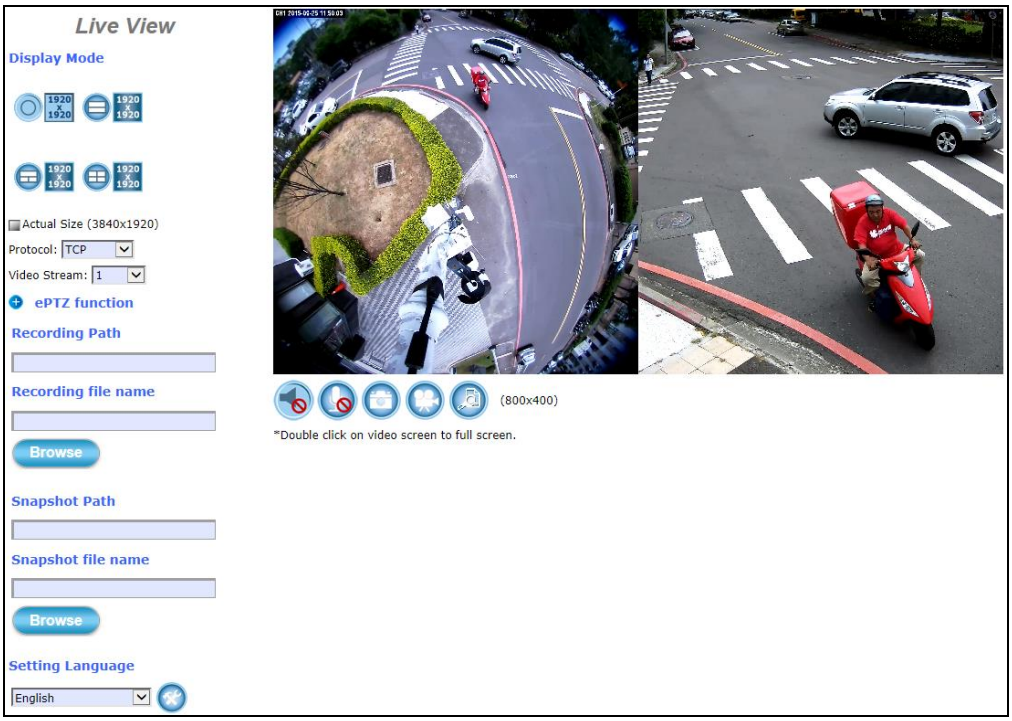
1) Execute your Web Browser and then manually enter the Camera Device's IP address gotten via **CAM FINDER** utility.

NOTE

- *For the first time user, there will be a prompt to install the ActiveX control. Conply with the ActiveX installation as it is needed to view the video stream and some other operations.*
- *Use of Microsoft IE browser is recommended as it offers a better compatibility.*

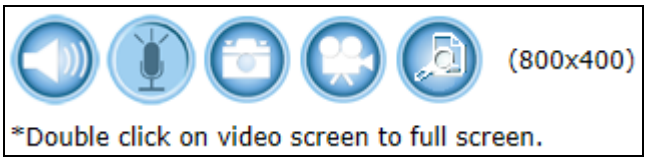
2) Then the "Windows Security" dialog displays. Enter a username and password. You may enter "**admin**" for both. Click **OK** button when completed.
(**Note** that same Browser with different version or different vendor Browser will behave different dialog window. Below picture is belonging to IE Browser's diagram.)

3) The “Live View Setting” window will then display offering all the necessary set up tools for changing the live view reconfigurations. The functions of each of these tools are explained in the following sections.



3.1 Quick Access Buttons

The following buttons provide the basic interactive functions between the Camera and the host computer as described below.

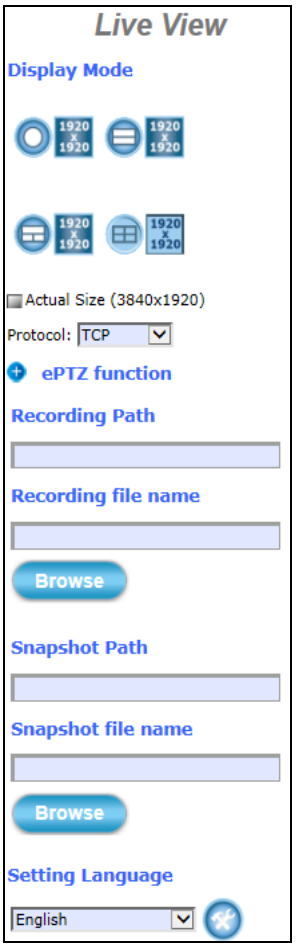


	**Mute:**	Click this button to turn **on/off** the Windows speaker of the host computer/NB. If turn it to the "Mute" status, the ActiveX will not let the IP CAM voice stream output to the Speaker of the PC/NB.
	**Chatting:**	Click this button to **enable/disable** Chatting function to someone facing the network Camera from the computer. For ideal voice reception, the distance of the person on view, should be kept within 2 meters from the Camera.
	**Snapshot:**	Click this button to capture still images taken from the Camera and save them in the host computer/NB.
	**Record:**	Click this button to record live video clips from the Camera into your computer/NB.
	**Digital Zoom:**	Digital "zoom in" & "zoom out" to the particular area of the live view; and the particular area also could be moved wherever you want to see. To display the whole live view into full screen mode, double click the mouse left button on the video; and press "ESC" key on the keyboard could exit full screen view. 

3.2 Camera Live View UI Setting Tools

The **Live View** UI setting tools (the below figure) offer a variety of methods in changing the live view configurations of the Camera.

Overview of Live View UI



Display Mode:

With the part of fisheye lens, the Camera can offer 4 live view display modes: Original, Double Broad, Triple and Quad View.

ePTZ function:

The ePTZ function will show up when the Double-Broad, Triple or Quad ePTZ display mode is selected. Click the "ePTZ function" to display the ePTZ setting tools.

Recording Path / Recording file name:

Specify a storage destination path for the video and define a base filename for the video you are going to record.

Snapshot Path / Snapshot file name:

Specify a storage destination path for the snapshot images and define a base filename for the snapshots you are going to capture.

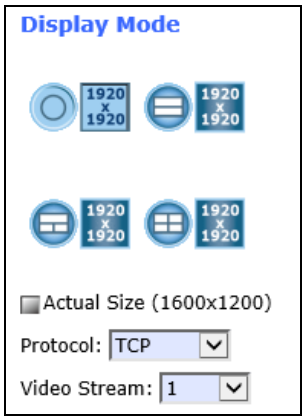
Setting Language:

Select the default language of the user-interface.

Setup button:

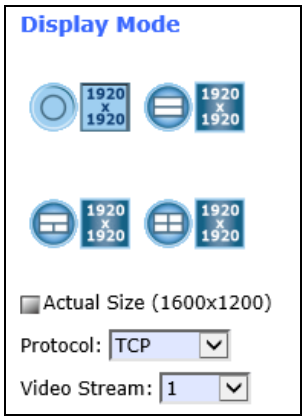
Click **Setup** button can change or update more Camera settings, including Video & Audio, System, Network, Event, Local Storage and Remote Storage.

■ Display Mode:



With the part of fisheye lens, the Camera can offer the following live view display modes**:**

	**Original View** (360 degree Full View)  *360° Panoramic View* + *Fixed-focal View*
	**Double-Broad View** (180 degree Ultra Wide Angle View x 2)  *180° Panoramic View* + *Fixed-focal View*
	**Triple View** (180 degree Ultra Wide Angle View + Twin ePTZ View)  *180° Triple View* + *Fixed-focal View*
	**Quad View**  *Quad View* + *Fixed-focal View*



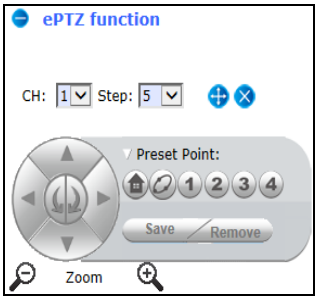
Actual Size: Check to show the live view display resolution in actual size (1600 x 1200). The default is in "uncheck" status (800 x 400).

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

Video Stream: Two kinds of resolutions are available to let user choose; check higher or lower streaming would be suitable for user's network environment.

■ ePTZ function:

: Click this **ePTZ function** button to display the ePTZ setting pane tools as shown and explained below. Different Display Mode will show different ePTZ setting pane.



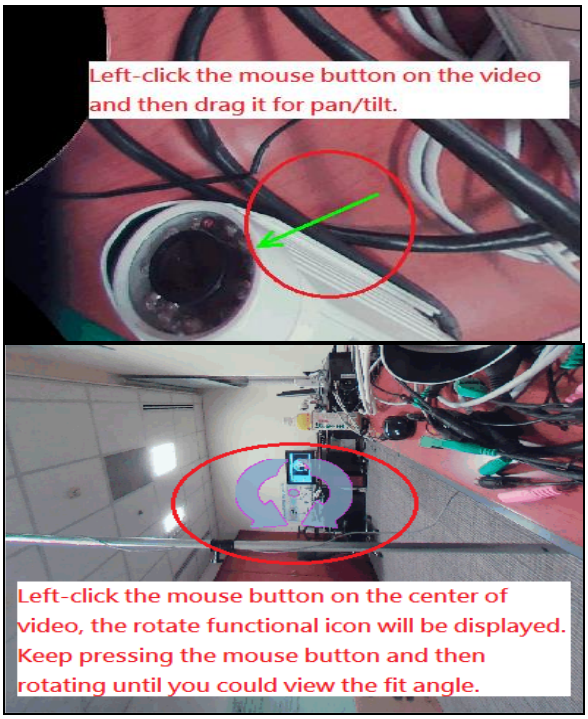
: Click either buttons to close the "ePTZ function" pane.

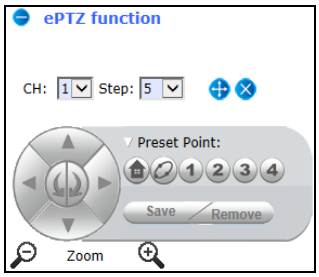
: Click and drag/drop this button to move ePTZ pane to a convenient location in the window.

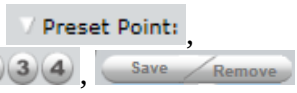
CH: Select the ePTZ channel or display window (1, 2, 3 or 4) to implement ePTZ setting.

Step: Adjust and set the speed of live view panning motion.

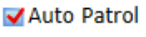
Directional/Rotate/Home Buttons: Use to manually pan or rotate the scene to select and zoom a specific area (1 of 4 maximum) to be monitored. To reset the scene back to its original status, click the Home button. You can also directly click the mouse button on the video to drag for pan and tilt, roll the mouse wheel for zoom a selected area.





Preset Point: 

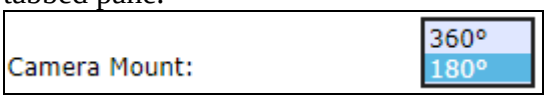
After panning and zooming, assign the selected area a Preset Point (1 to 4) and click **Save** button to store the setting. The pre-defined point of view areas will be monitored in sequence. To cancel the selection, click **Remove** button.

Auto Patrol: While Preset Points are set, you could **check** 

function to execute. Then the camera view would automatically start to go to the preset locations in sequence (1->2->3->4) with the configured **Time** and **Speed** value. Uncheck it, Auto Patrol function would stop.

Auto Pan: Click  button to enable Auto Pan function, then selected CH window would start to pan automatically. Camera could use this function to monitor any larger space without manual panning. While Auto Pan is running, the button is as the below camera snapshot pictures  .

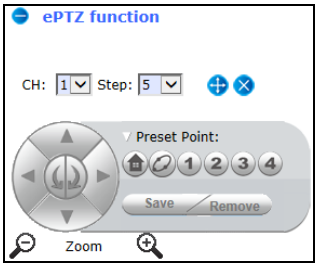
The panning direction is depended on the **Camera Mount** setting of Camera **Video** tabbed pane.



※ While **Camera Mount** is set to 360°, camera live-view would rotate with **anti-clockwise** direction.

If **Camera Mount** is set to 180°, camera live-view would pan **from left to right** direction.

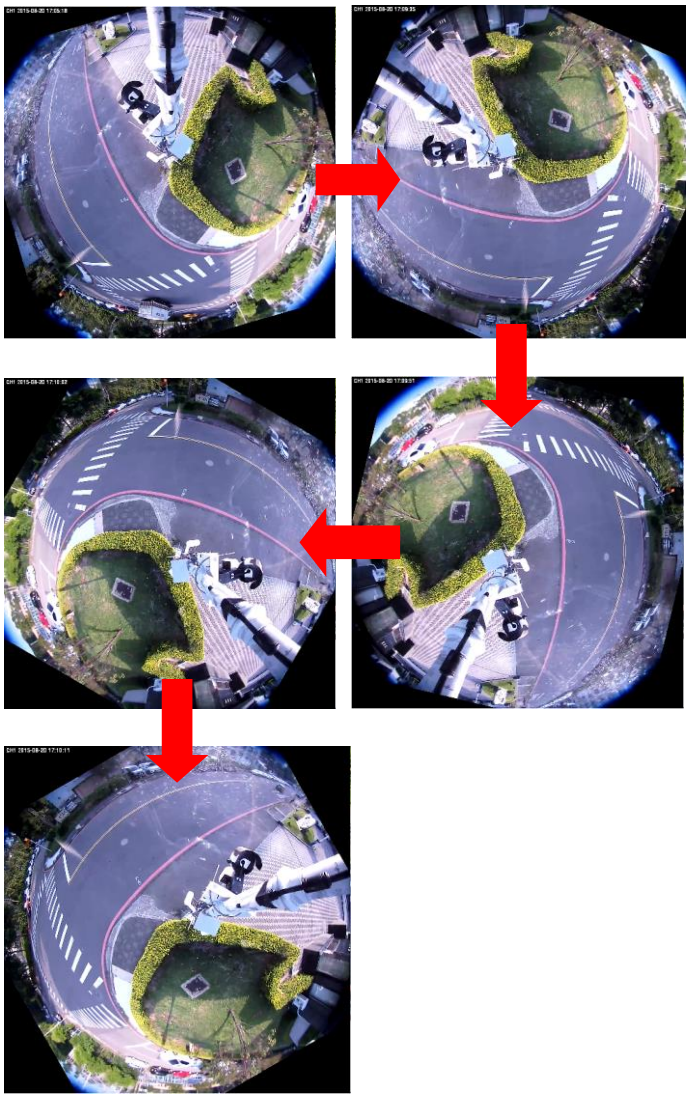
(See the next 2 pages)

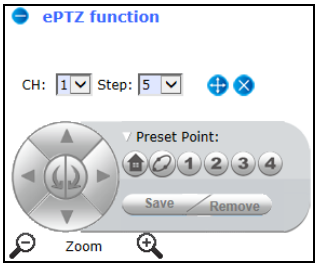


Auto Pan: (continue)

360° rotate with anti-clockwise:

※ While **Camera Mount** is set to 360°, camera live-view would rotate with **anti-clockwise** direction.

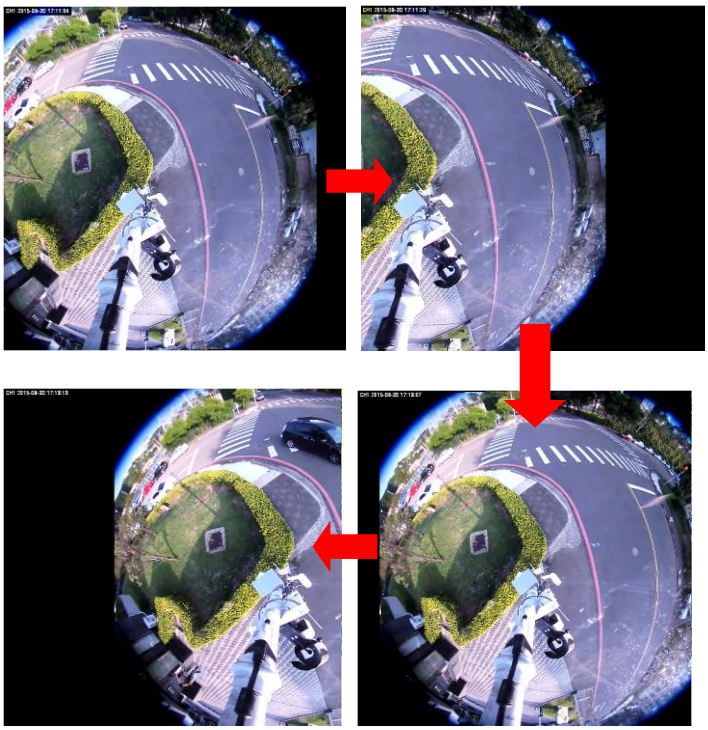




Auto Pan: (continue)

- 180° Pan from left to right direction:

If **Camera Mount** is set to 180°, camera live-view would pan **from left to right** direction.



Zoom Button: Click  button to zoom-in and  button to zoom-out the selected scene. Zoom setting is saved with the selected pre-defined point of view area.

■ Recording / Snapshot / Setting Language:

Browse: 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. EX: set as "office123". It will auto-expand date & time for each saved video filename as "office123 _20170510_102808.avi".

: To start recording, click the **Recording** button in the Quick Access Button area.

Browse: 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. EX: set as "night456". It will auto-expand date & time for each saved snapshot file as "night456 _20170510_102808.jpg".

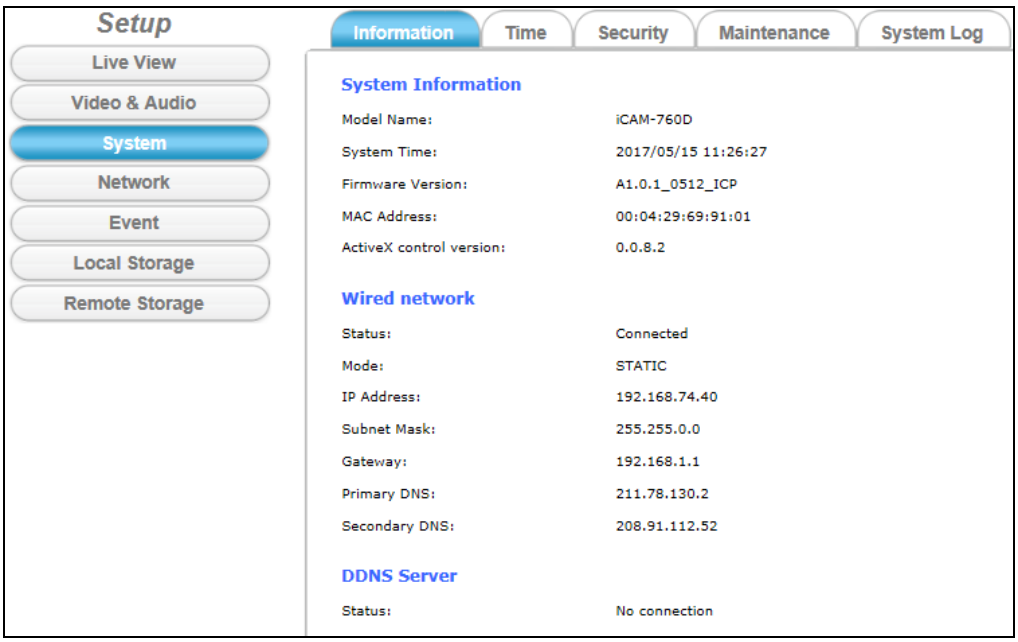
: To start capturing snapshots, click the **Snapshot** button in the Quick Access Button area.

Setting Language: Select the default language of the user-interface.

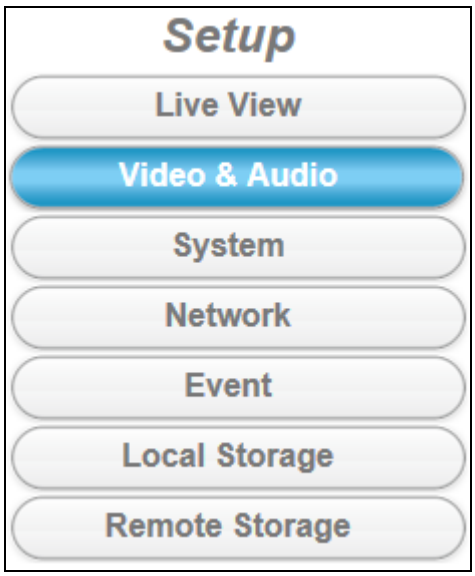
■ Setup:

Setup: Click **Setup** button can change or update more Camera settings, including Video & Audio, System, Network, Event, Local Storage and Remote Storage.

As you get familiar with features and functions of your Camera, you may want to change or update a number of its settings to further upgrade its performance. This can be accomplished by clicking the **Setup** button (indicated in the above figure). The **Setup** dialog (see following figure) will then display to provide the range of setup categories you will be able to change.



4 Setup



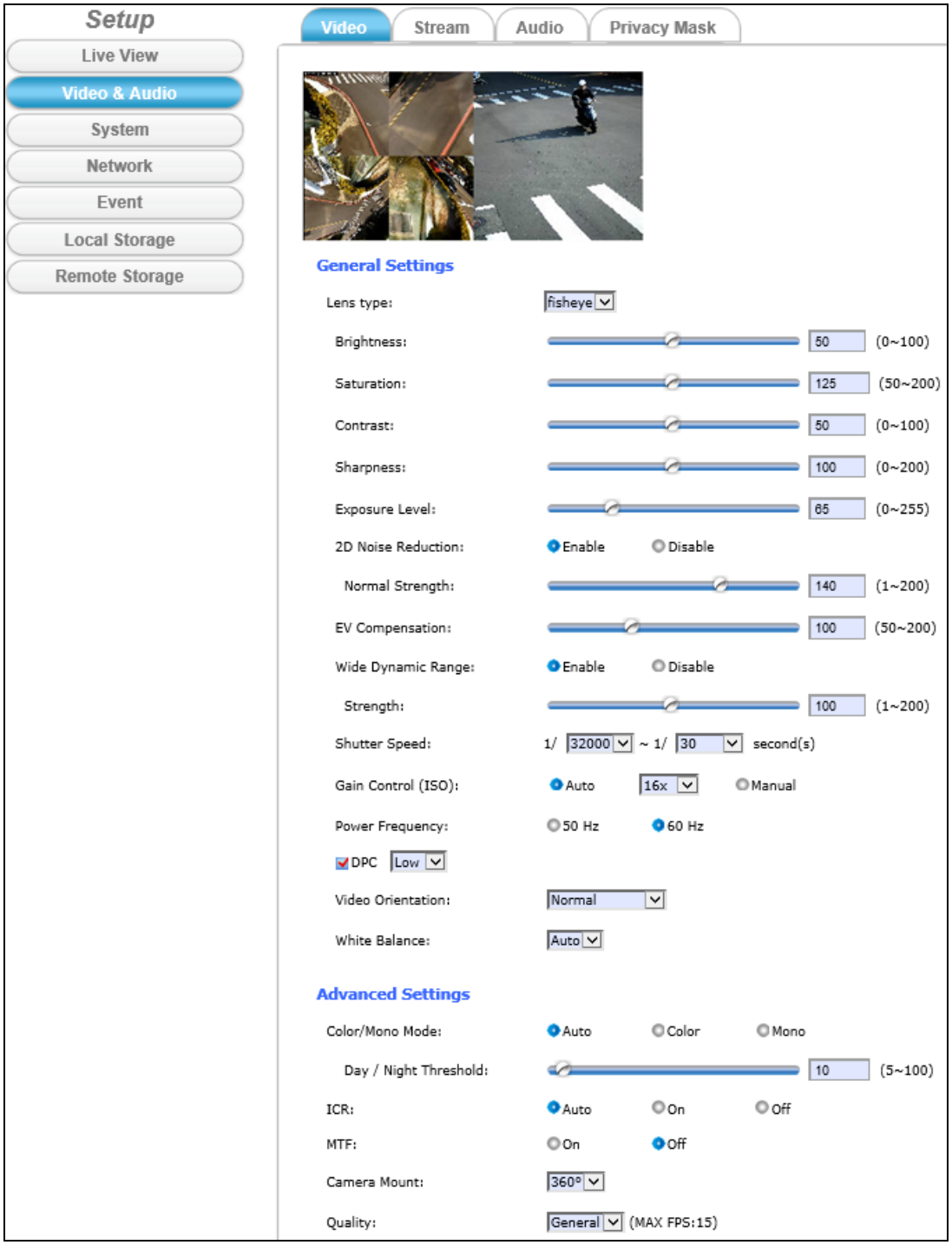
NOTE

For "Live View" setup execution, please refer to the previous chapter "Live View UI Settings"

4.1 Video & Audio Setup

Clicking the **Video & Audio** button will display tabbed panes for defining Camera video, stream, audio and privacy mask functions.

4.1.1 Video Tab

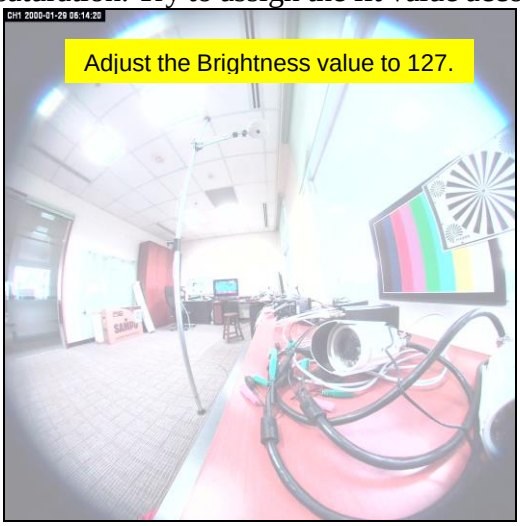


The **Video** tabbed pane lets you to perform live adjustments and improvement of the Camera captured video effect relative to the target environment.

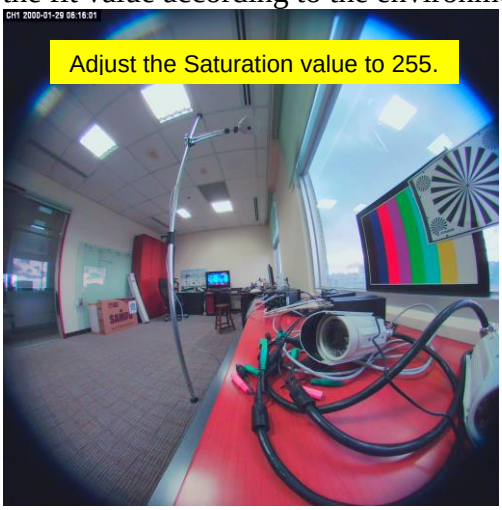
General Settings:

Lens type: There are “fisheye” and “fixed” 2 lens types.

Brightness: The luminance of the captured image apart from its hue or saturation. Try to assign the fit value according to the environment

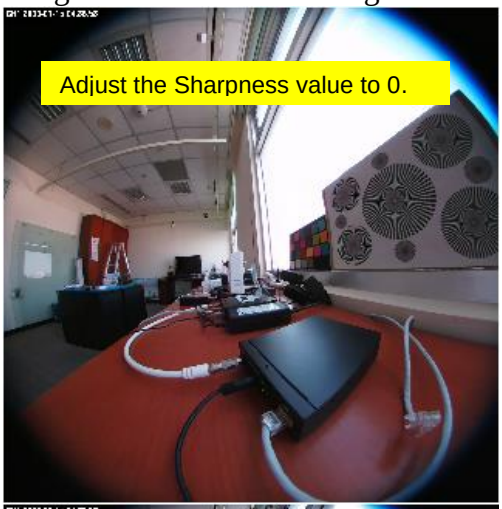


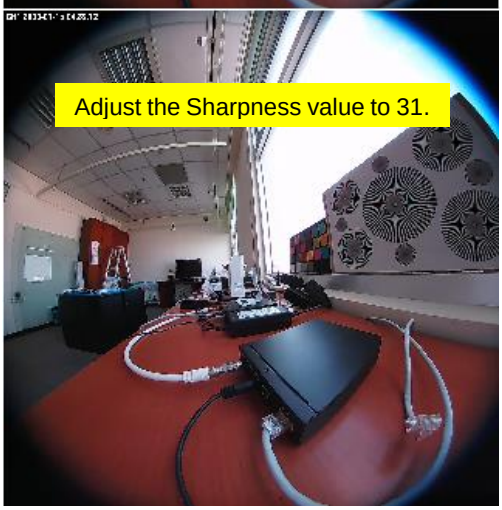
Saturation: The degree of intensity and purity of a specific color. Try to assign the fit value according to the environment.



Contrast: The brightness ratio of the lightest to the darkest part of the video image. Try to assign the fit value according to the environment.

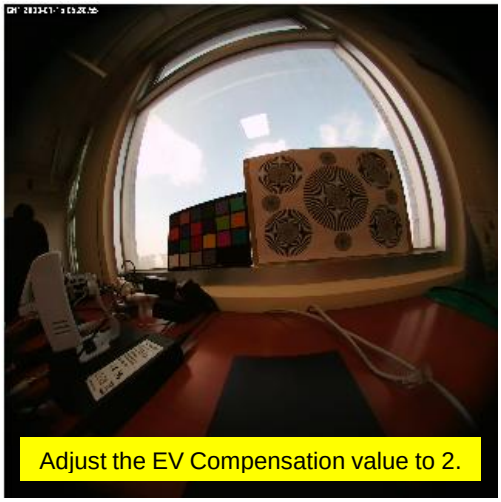
Sharpness: Sharpness can be defined as edge contrast. So when we increase sharpness, we increase the contrast only along/near edges. Try to assign the fit value according to the environment.

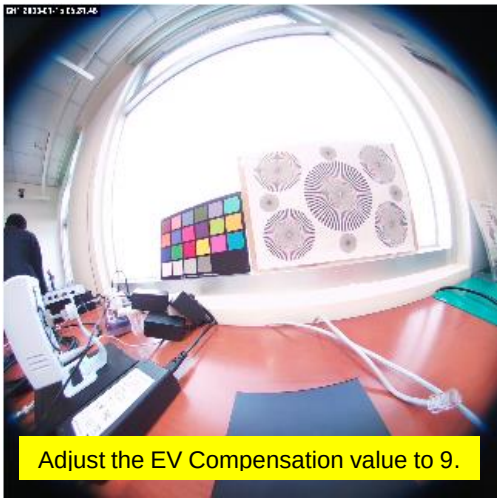




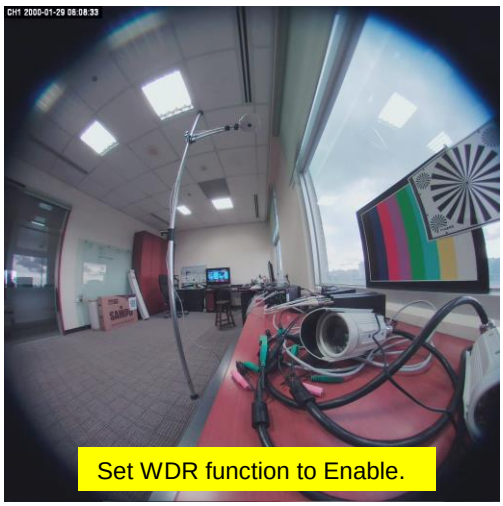
2D Noise Reduction/Pre-Noise Reduction: Both of them are one kind of technology to provide clearer video with less noise under poor lighting conditions, making it easier to identify people or objects. Try to set them according to the stream quality.

EV Compensation: Exposure Compensation is a feature of a camera that allows you to adjust the exposure value manually. You may increase or decrease the amount of brightness or darkness of your picture through sliding the bar. Try to assign the fit value according to the environment.

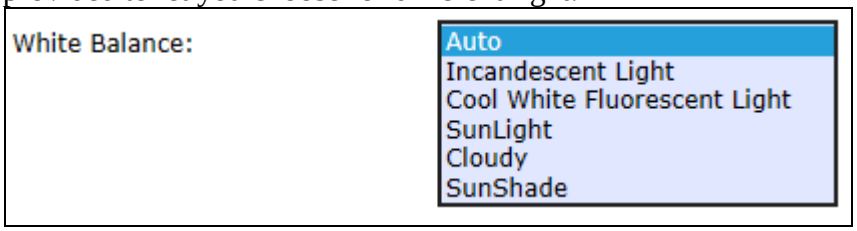




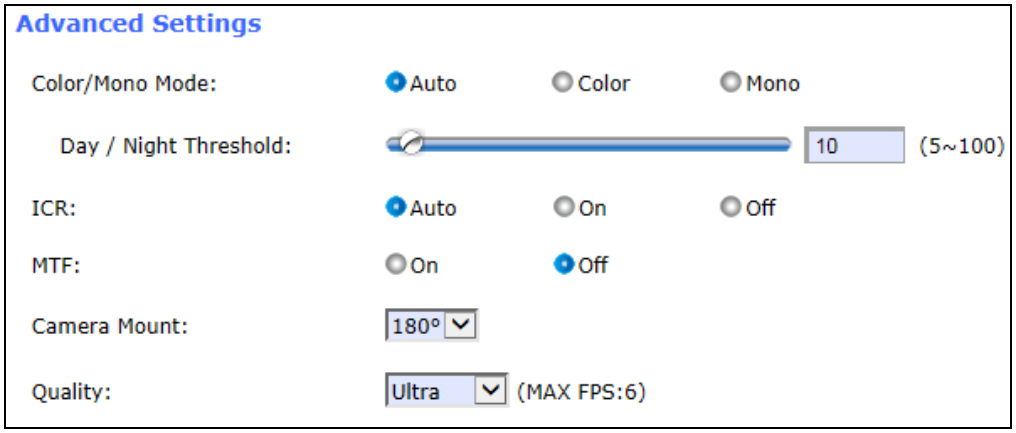
Wide Dynamic Range: Enable this function could let camera provide clear images even under backlighting.



White Balance: Because camera doesn't have ability to automatically adjust different color (temperature) to the environment, six templates are provided to let you choose for different light.



Below there are **Advanced Settings** adjustments, you could set image parameters of Fixed Lens and Fisheye Lens respectively.



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.

MTF: Turn on this function could higher sharpness and contrast; the image quality would be improved.

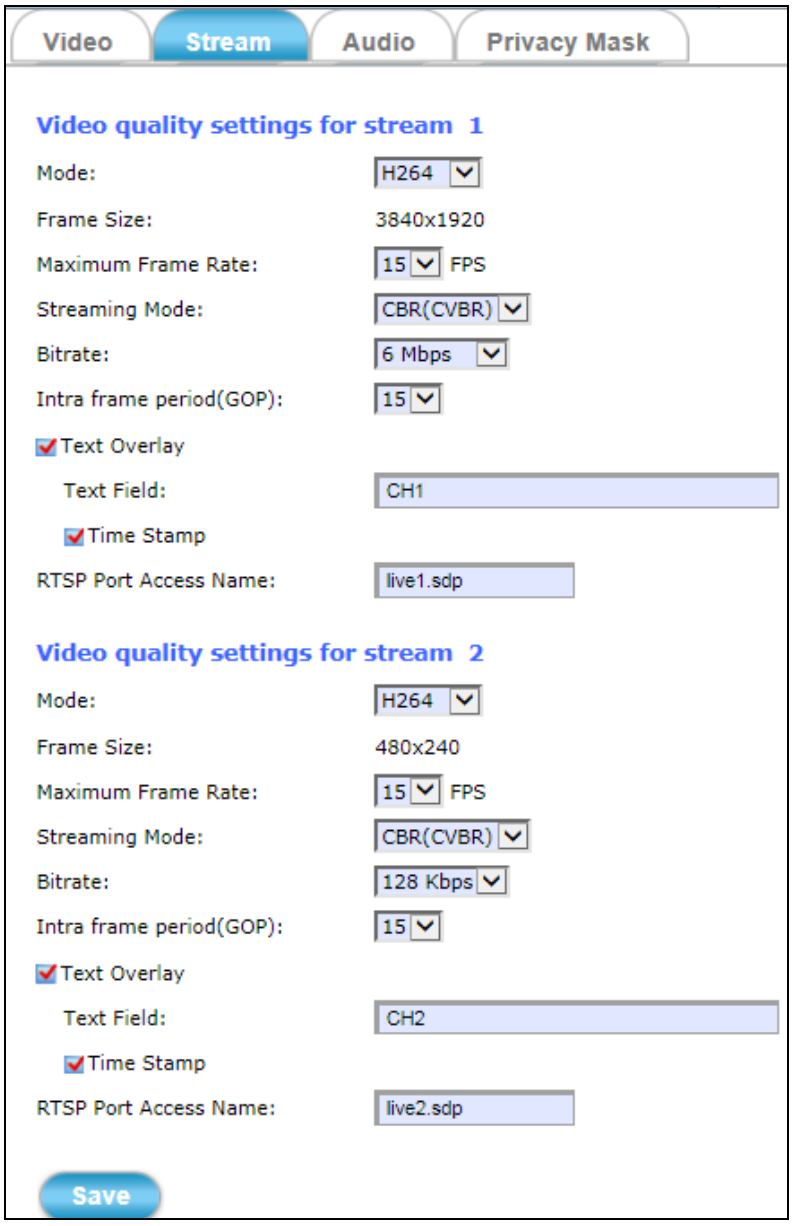
When MTF is off, you could see:

When MTF is on, you could see:

Camera Mount: Two camera mounting types (**360˚ / 180˚**) could be chosen.

4.1.2 Stream Tab

The **Stream** tabbed pane (see below figure) provides the adjustments for the video quality of the Camera streaming function.



NOTE

If the "Event Alarm Setting" (see Section 4.4.2 & 4.4.3) 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.

The **Video quality setting for stream #** items on this pane are as follows**:**

Mode: Two modes of encoding options are offered; “H264” and “MJPEG”.

Frame Size: 3840x1920 resolution is set.

Maximum Frame Rate: Available rate options are; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 15 frames per second (FPS).

Steaming Mode: Two choices of streaming modes are offered; “CBR (CVBR)”, “CBR (VQCB)” and “VBR (variable bit rate)”. Where the CBR includes:

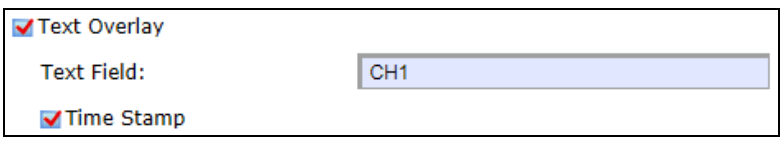
- **CVBR:** If the provided bit rate is not exceeded, the video is encoded with provided quality factor. If it exceeds, the video quality will be varied to meet the provided bit rate while the frame rate is kept constant.
- **VQCB:** The video quality and the frame rate will be variable to meet the provided bit rate.

Quality/Bitrate: The options for streaming mode quality are expressed differently between VBR (showing **Quality**) and CBR (showing **Bitrate**)**:**

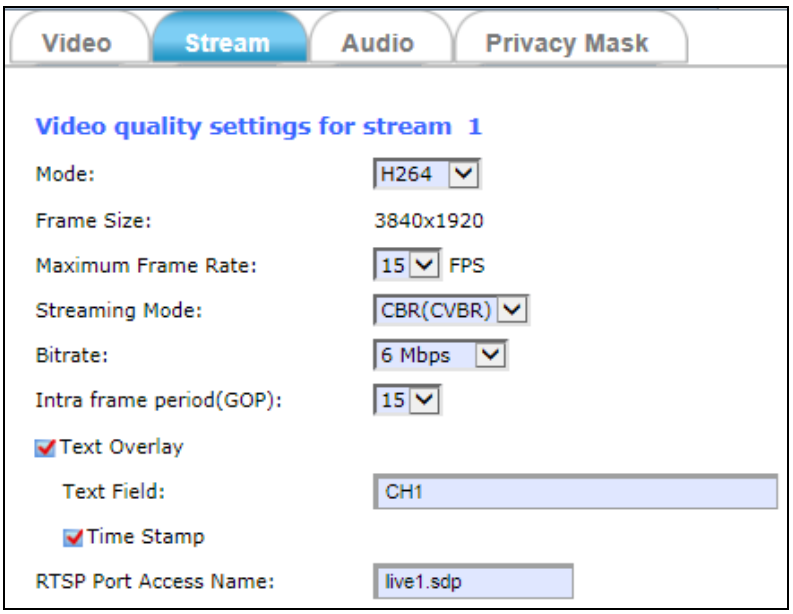
- **Quality:** Standard, Good, & Detailed
- **Bitrate:** 64K bps, 128K bps, 184K bps, 200K bps, 256K bps, 384K bps, 512K bps, 768K bps, 1M bps, 1.5M bps, 2M bps, 3M bps, 4M bps, 5M bps, 6M bps, 8M bps and 10M bps.

Intra frame period (GOP): Available choices are; 1, 2, 3, 4, 5, 6, 8, 10, 15, 20, 25, 30, 40, 50 & 60 frames per period. This function will let you choose how long distance between two I-Frames. Lager 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, Chinese word isn’t support) 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**"



Save After setups are completed, click **Save** button to implement the settings.

4.1.3 Audio Tab

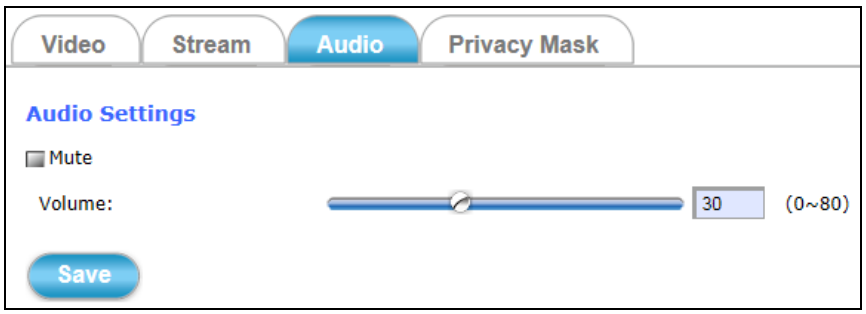


Figure 4-5 "Audio" Tabbed Pane

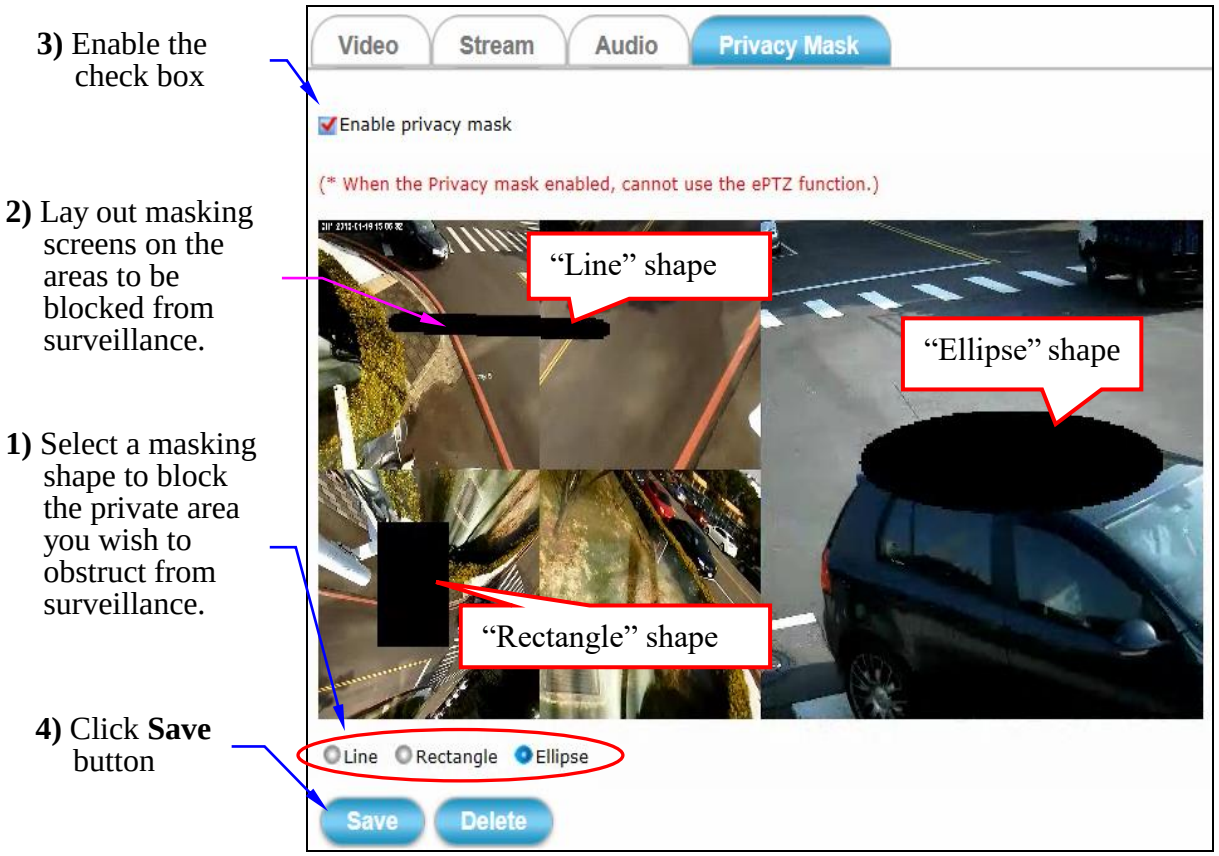
The **Audio** tabbed pane provides the following audio adjustments to your Camera audio interface**:**

Mute: Enable or disable mute function of the Camera's Audio-In signal.

Volume: 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.

After setups are completed, click **Save** button to implement the settings.

4.1.4 Privacy Mask Tab



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

■ **The steps to block the private area from surveillance:**

1) Select the masking shape, e.g., "Line," "Rectangle," or "Ellipse" (see figure above) you wish to use as screen to block the area from surveillance.
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.
3) Once the masking screen is acceptable, click the **Enable Privacy Mask** check box.

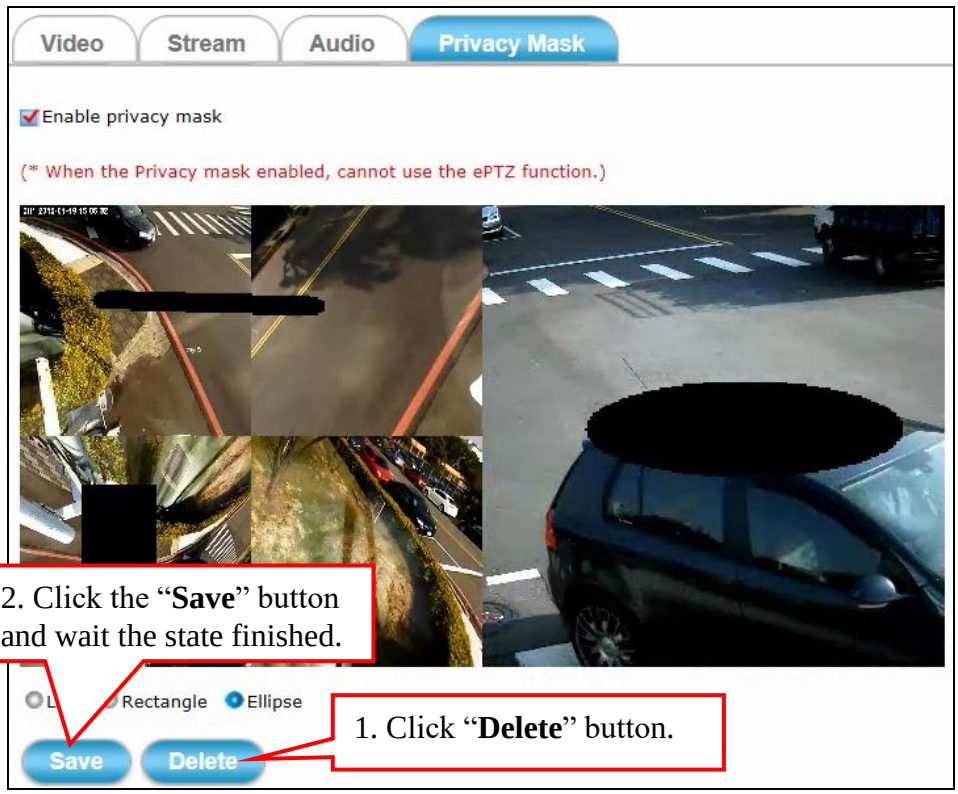
4) Click on the **Save** button. This will turn the laid out screen into solid block.

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

■ **The steps to disable and remove the masking screens:**

1) Click **Delete** button.

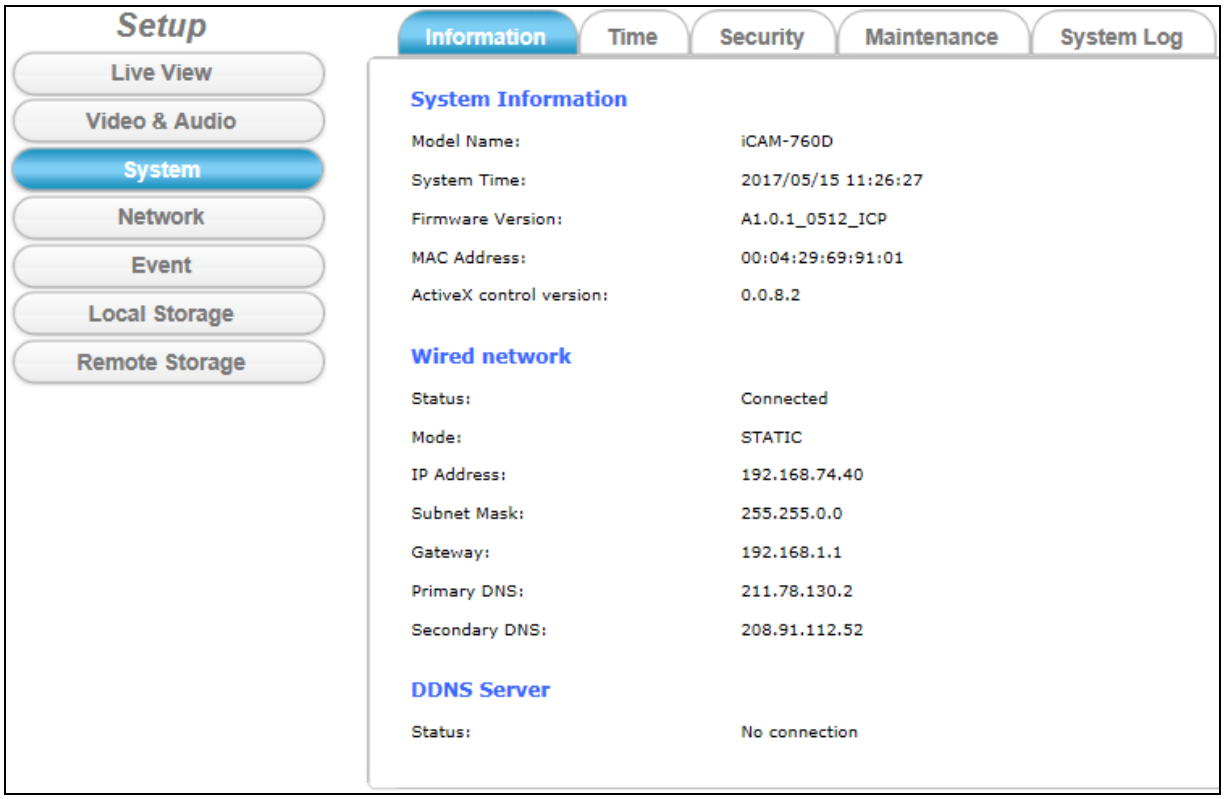
2) Click **Save** button and wait a while. Then the screen is permanently removed.



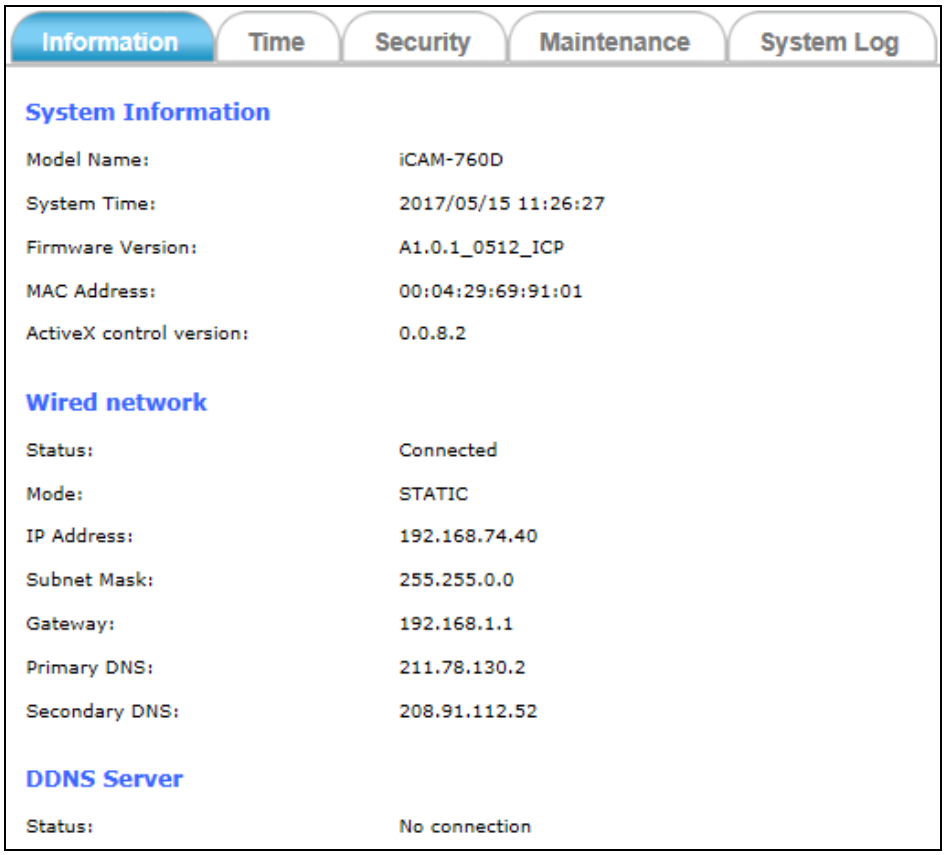
3) To permanently disable the **Privacy Mask** function, disable the **Enable Privacy Mask** check box

4.2 System Setup

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

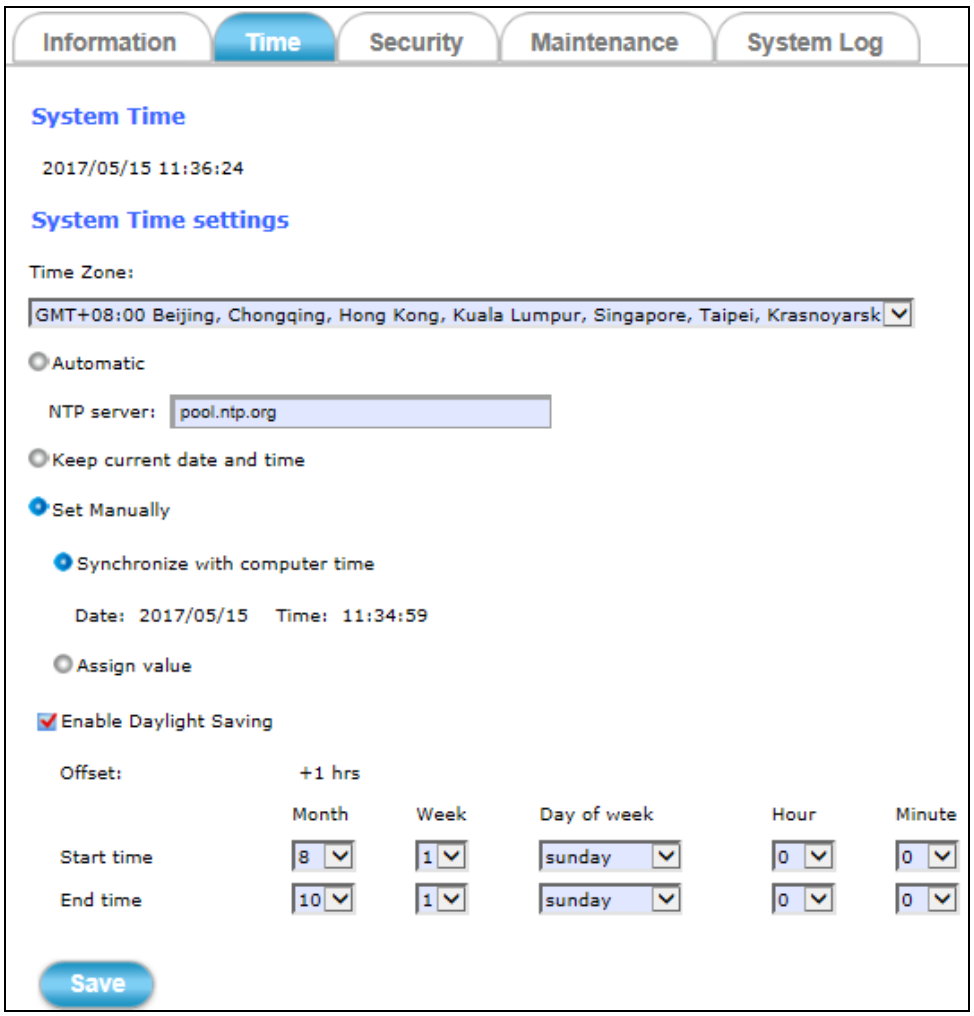


4.2.1 Information Tab



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

4.2.2 Time Tab



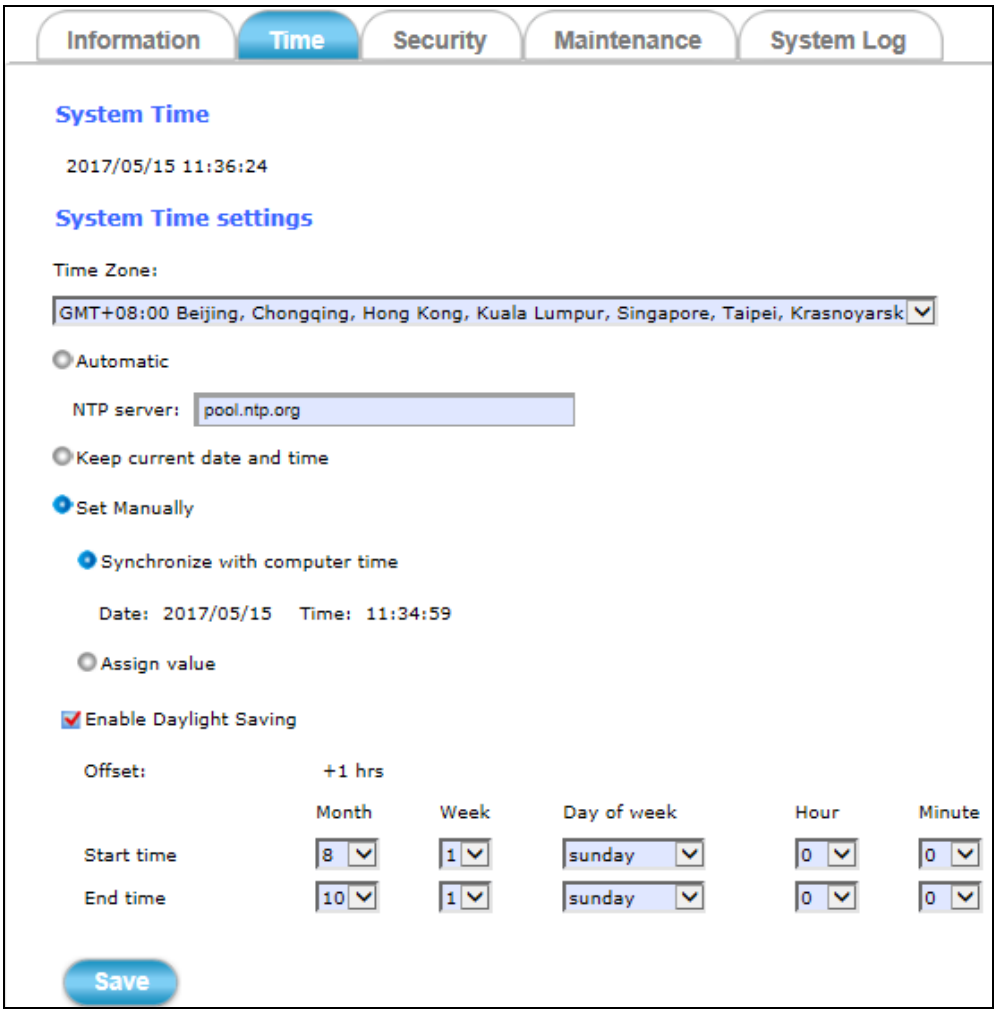
The **Time** tabbed pane is where you set up the clock of your Camera to synchronize with your local time. Where:

System Time settings: 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 your manually entered 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:

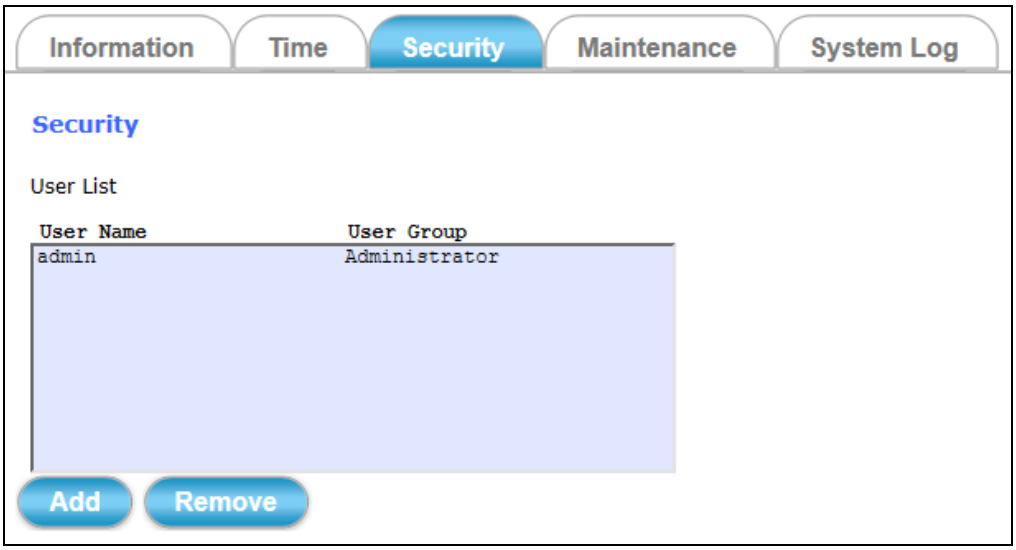
◎ **Synchronize with the computer Time:** Select this option to manually synchronize the Network Camera clock (date and time) with that of the local host computer.

◎ **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.

Save After setups are completed, click **Save** button to apply the settings.

4.2.3 Security Tab



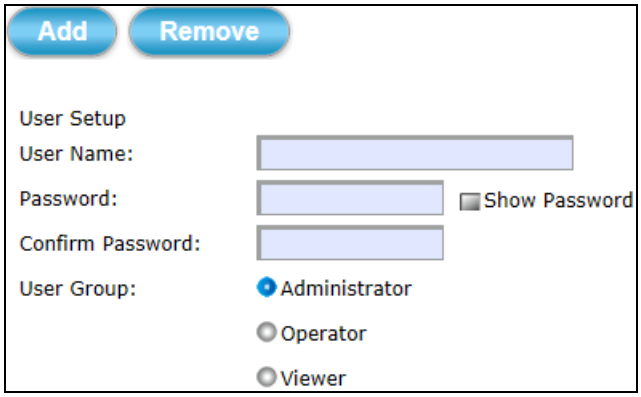
The **Security** tabbed pane allows you to add new Camera User Name and change Password and the surveillance status or User Group.

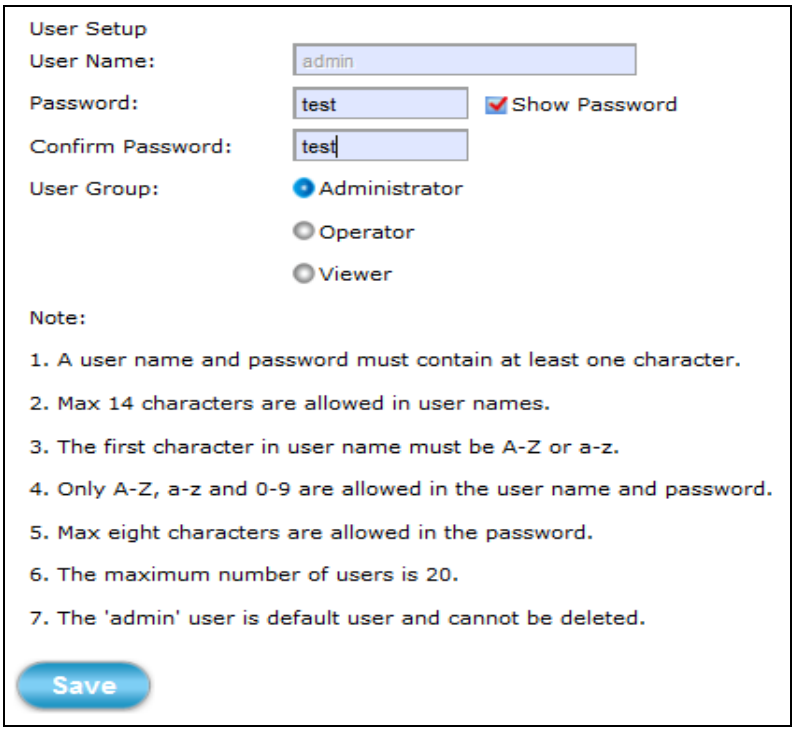
Where:

User List: The Admin/Administrator is a permanent default setting and cannot be removed nor changed. Hence, new User Name/Group settings are only added below the default setting.

Add/Remove: Click **Add** button can expand the security setup items to access and change the security setting status.
Click **Remove** button can remove the added security setting.

Click the **Add** button to access the security setup dialog.





Where:

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).

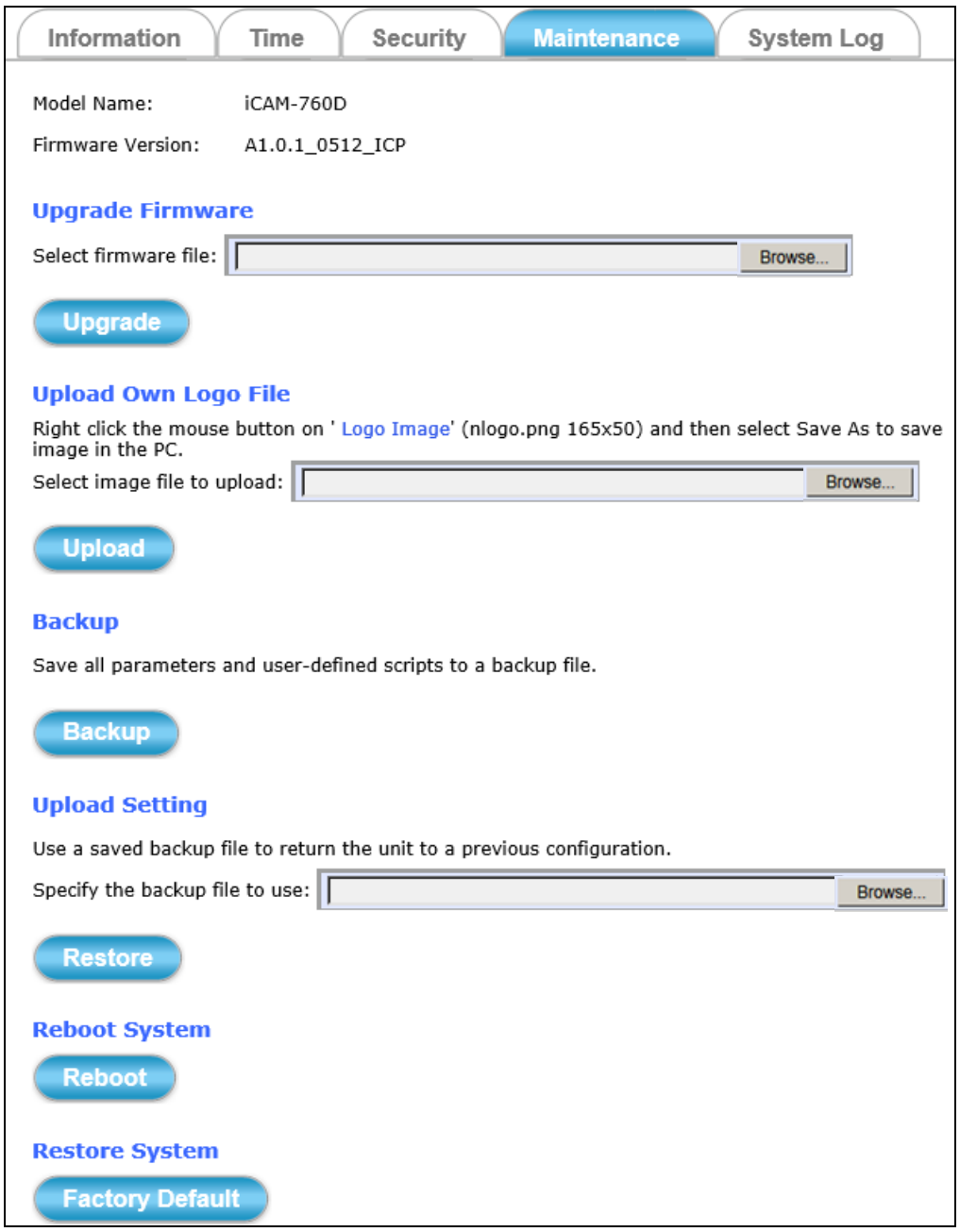
Show Password: Displays the decoded password when check box is enabled.

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.

After setups are completed, click **Save** button to apply the settings.

4.2.4 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.

※ Please specify the correct firmware version mapped with your camera to upgrade, or there will be danger to damage camera system.

Upgrade Firmware: Download the latest firmware file from the website. And upgrade firmware 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.

※ **In Appendix chapter, there will be more detailed steps to guide you how to update camera firmware step by step.**

Upload Own Logo File: Prepare and save the Logo Image file in the PC. Then Follow the below steps to replace Web UI Logo with it.

1) Click the **Browse** button to access and select the Logo Image file from the PC.

2) Click the **Upload** button to process Logo replacing.

When upload process is completed, it's strongly recommended to close and restart Web Browser.

Backup: Clicking the **Backup** button allows you to manually save Camera's parameters and user settings into a **config_backup.tar.gz** file.

Upload Setting: This function allows user to restore Camera's backup setting by executing the below steps:

1) Click the **Browse** button to access and select saved **config_backup.tar.gz** file from the PC.

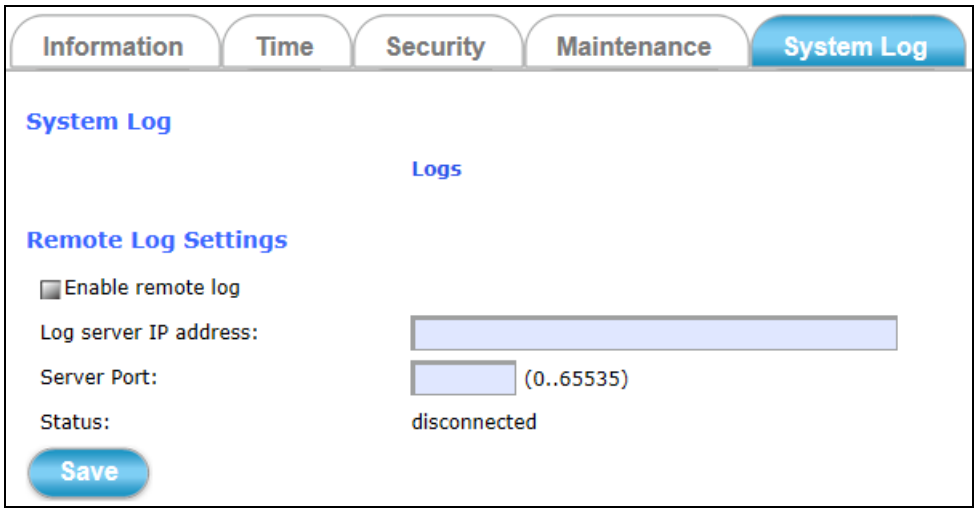
2) Click the **Restore** button to process Camera configuration restore.

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 proceed to restore step, there'll be a dialog window popped and then ask if you would like to keep "**Network setting**" parameters.

Besides, all configured data in the "**System Time**", "**Security**" and "**Maintenance**" tab will be remained current**.**

4.2.5 System Log Tab



The **System Log** tabbed pane allows you to see Camera's basic log on another browser page or Remote Log Server.
Where**:**

Logs: Click "**Logs**" and then there will be another browser page opening and then displaying Camera's basic log lists.

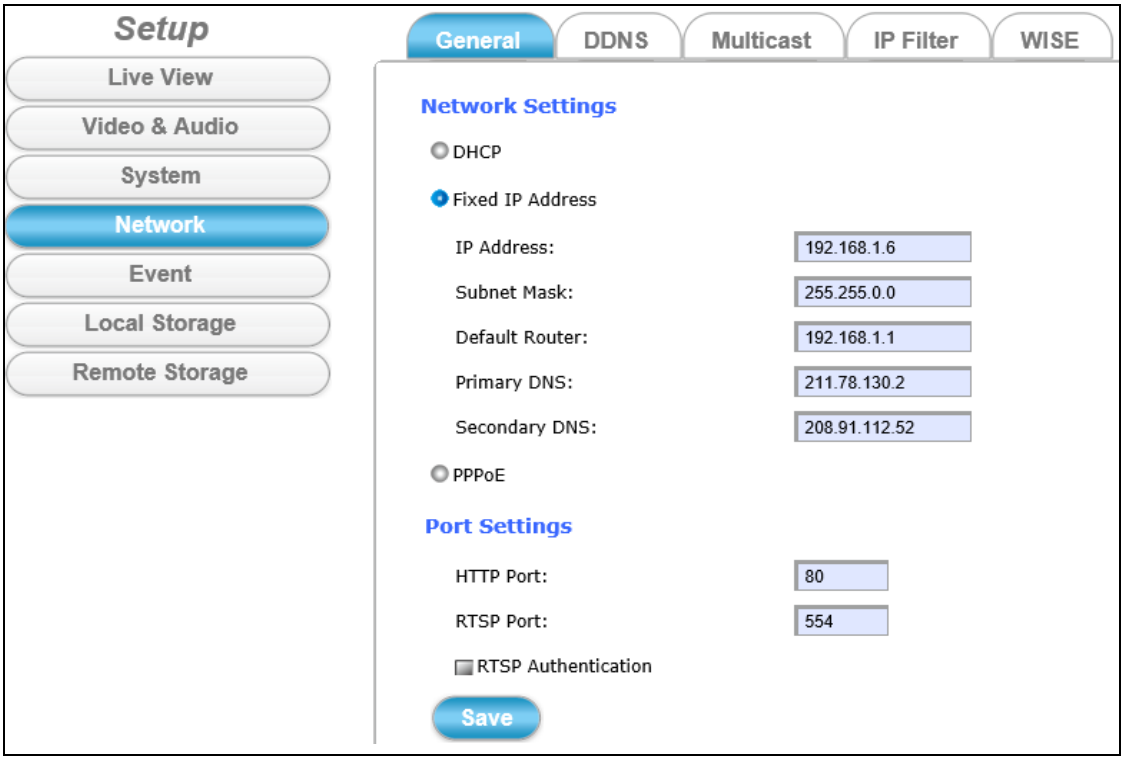
Remote Log Settings: Check "Enable remote log" selection first; and then manual entering IP address & port setting of Remote Log Server.

Status: The **Status** would shows "connected" or "disconnected". The connected or disconnected of **Status** tell you if the IP Address of Remote Log Server is existence or not.

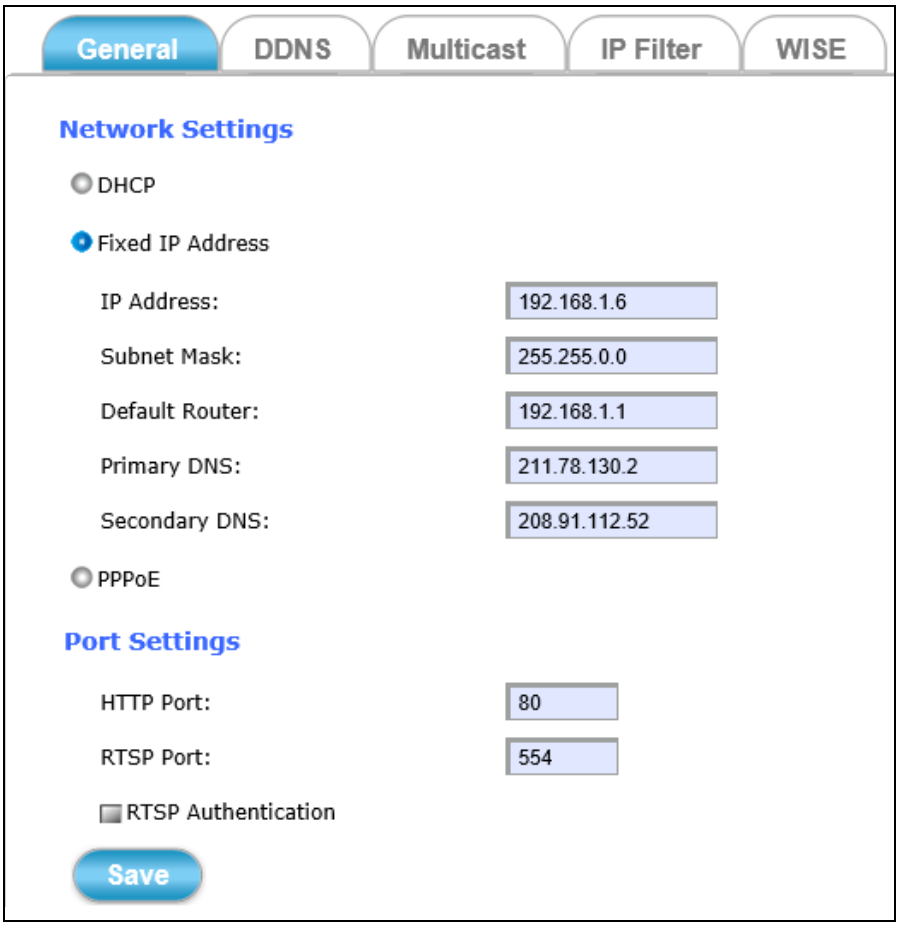
After setups are completed, click **Save** button to apply the settings.

4.3 Network Setup

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



4.3.1 General Tab



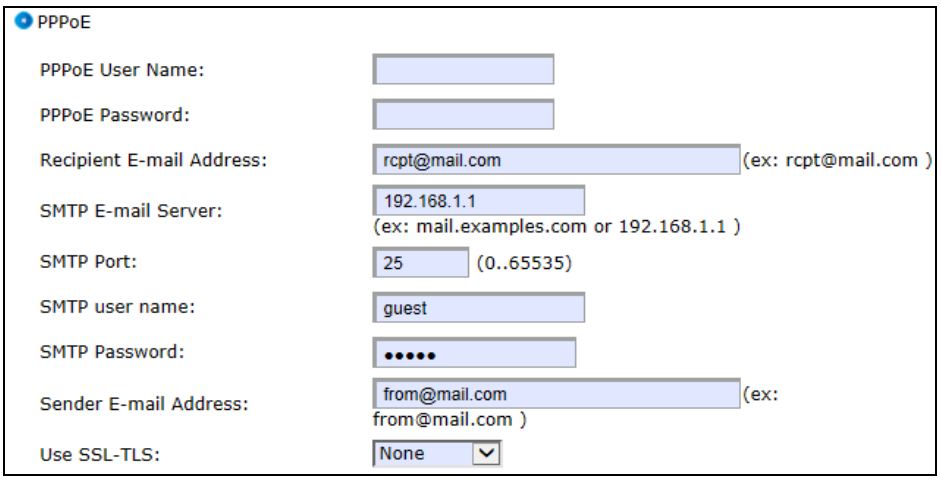
The **General** tabbed pane (shown above) allows you to redefine the network and port protocol settings of the Network Camera. Where**:**

Network Settings:

◎ **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.

※ As for the settings of SMTP Service, kindly please contact with your E-mail service provider. After you confirm all parameters are correct and working properly, you may enter them into the text area manually.

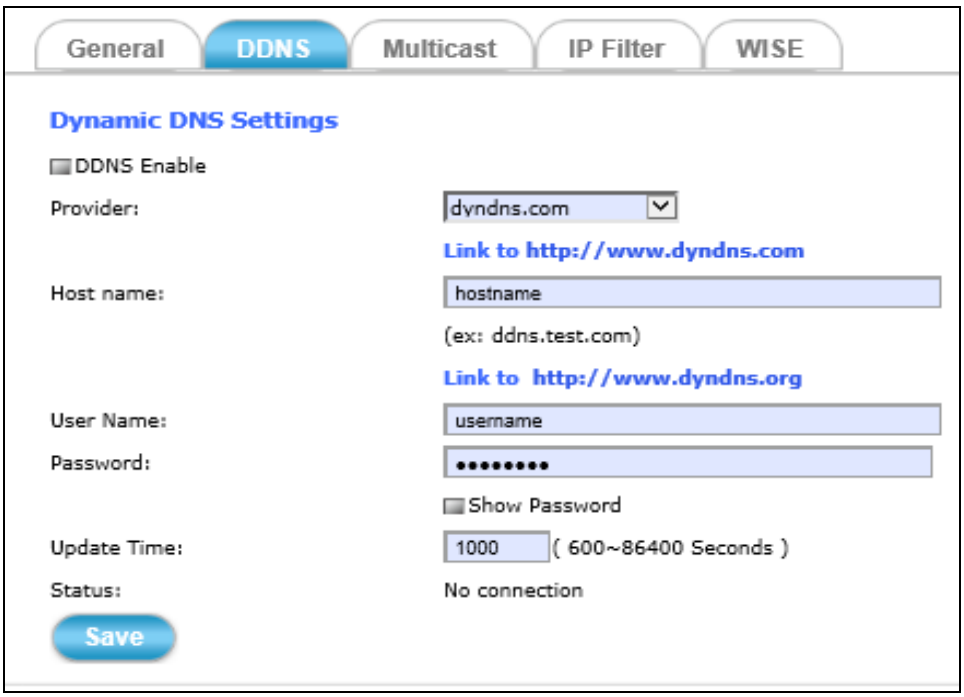
Port Settings:

◎ **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.

After setups are completed, click **Save** button to apply the settings.

4.3.2 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.

Where**:**

DDNS Enable: Enable the check box to support DDNS function.

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.

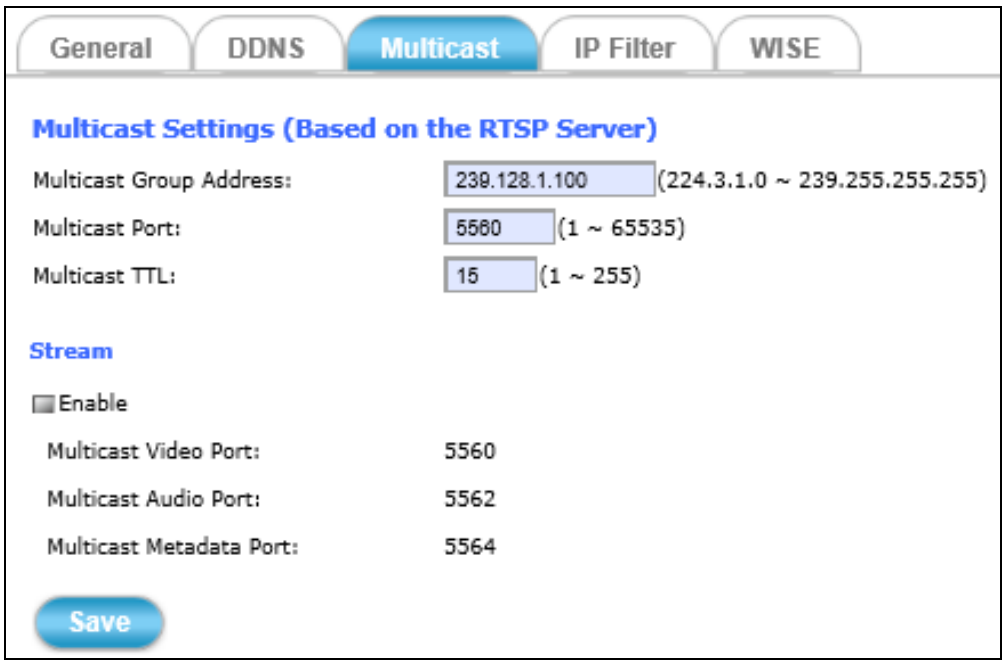
User Name/Password: Account authentication for logging into the website of DNS Service Provider.

Show Password: Enabled check box to display password in decoded format.

Update Time: Define a time interval for the device to periodically update and check its access status with website of DNS Service Provider.

After setups are completed, click **Save** button to apply the settings.

4.3.3 Multicast Tab



The **Multicast** tabbed pane allows you to open Camera's UDP Multicast Streaming function.

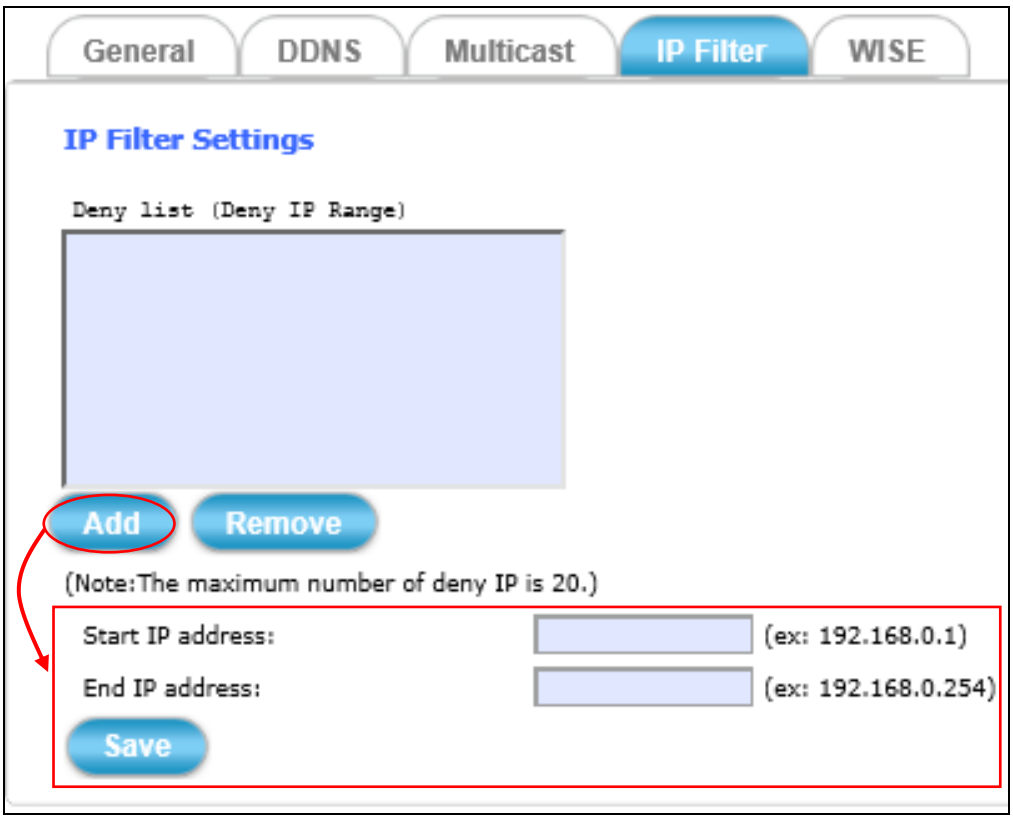
By default, Camera's live stream belongs to RTSP Protocol. It means camera has to send an individual streaming for each client wish to see the videos. So the more the client number is, the larger the network bandwidth required and the bigger loading of the camera.

In other words, the camera can send just one streaming and each client can receive the streaming with Multicast Protocol.
Even with the client number increasing, the network bandwidth is still the same loading with one camera.

Enable: Check the "**Enable**" box to open ***UDP Multicast Streaming*** function of stream.

After checking the "Enable" box to open this function, click **Save** button to apply the settings.

4.3.4 IP Filter Tab



The **IP Filter** tabbed pane could let you configure device IP list which is denied access to this camera.

Where**:**

Add: After clicking **Add** button, there will be IP address input field expanding.

Start IP address: Fill in the first address of IP range which you would like to deny its access to camera.

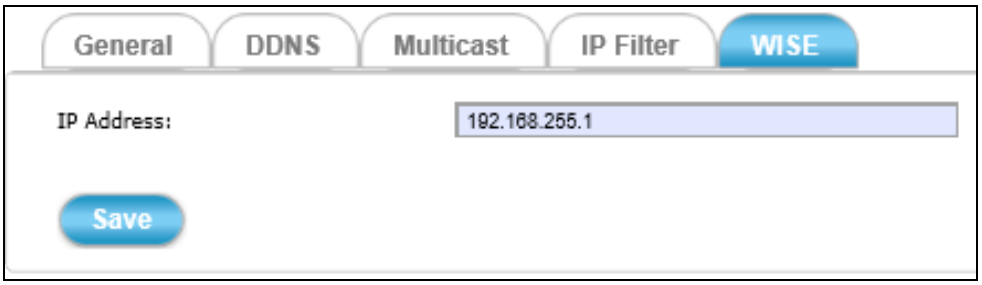
End IP address: Fill in the last address of IP range which you would like to deny its access to camera.

※ please note that total device numbers listed in the Deny list would be limited to 20.

Filling the IP range, then click **Save** button to implement the settings.

If you would like to re-open the access right of those listed device, select it from the list and then click **Remove** button to apply the settings.

4.3.5 WISE Tab



The **WISE** tabbed pane allows you to communicate the iCAM camera with WISE controller to perform a WISE surveillance system.

ICP DAS WISE surveillance solution integrates logic control, I/O, camera and data log in one single WISE controller. WISE allows two-way interactions between the I/O and the camera; it enables to record a piece of video or to take images when there is an event triggered by either I/O condition or ROI (Region of Interest) by camera. In this way, the storage size can be reduced significantly and the connection between I/O event and Video/Image can be built for easy query. Refer to http://www.icpdas.com/en/product/guide+IIoT+IO_Sensor+WISE__I_O__Module#564 .

Where:

IP Address: Fill in the IP address of WISE-5231.
When the IP address is set, the CGI command is automatically sent to the WISE-5231 when an event occurs in this camera.

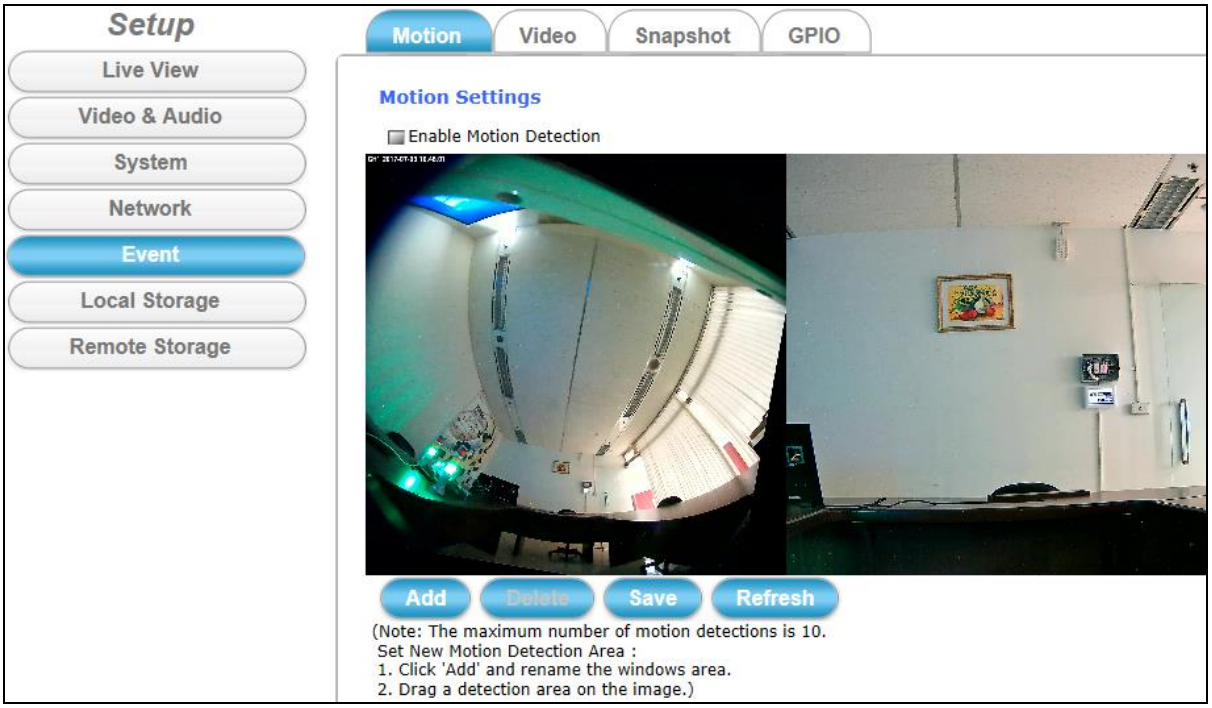
After setups are completed, click **Save** button to apply the settings.

4.4 Event Setup

Clicking the **Event** button will display the tabbed panes (see figure below) for defining event recording of the Camera.

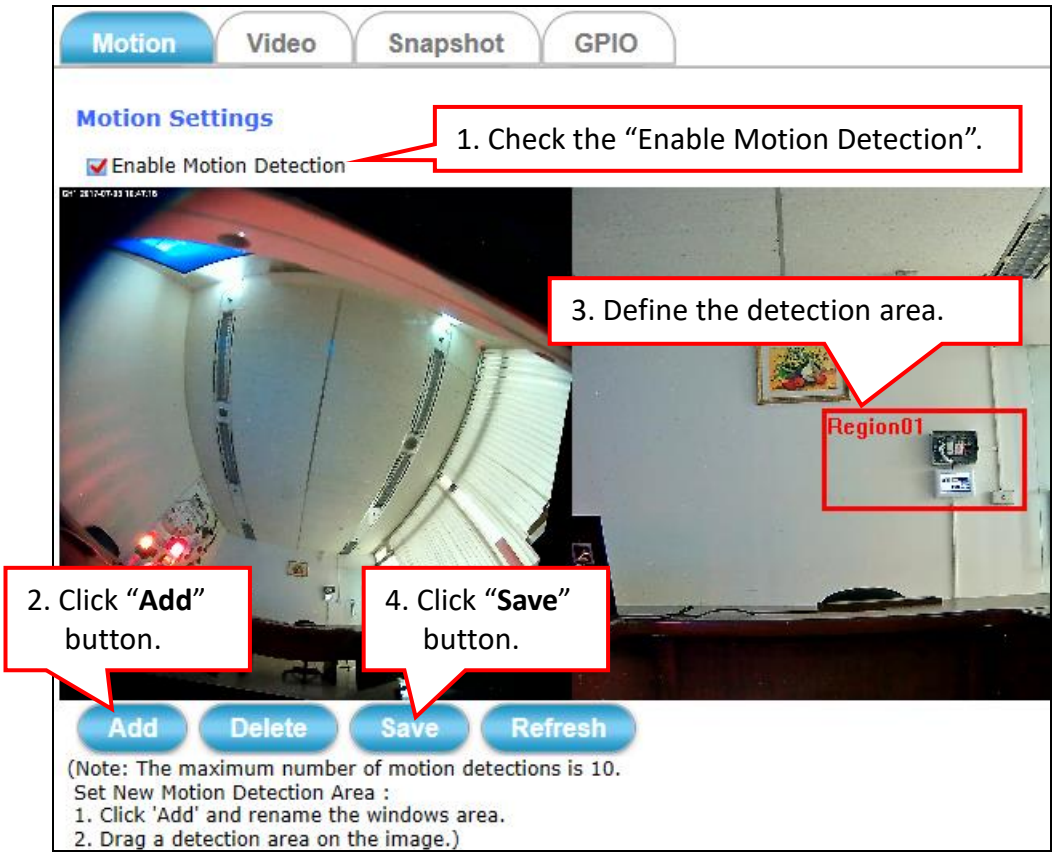
The iCAM-760D is equipped with a card slot for microSD /microSDHC / microSDXC 64GB memory card.

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.



4.4.1 Motion Tab

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



■ **Set up the motion detection areas:**

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

2) Click **Add** button and a default area **Region01** will pop-up on the screen.

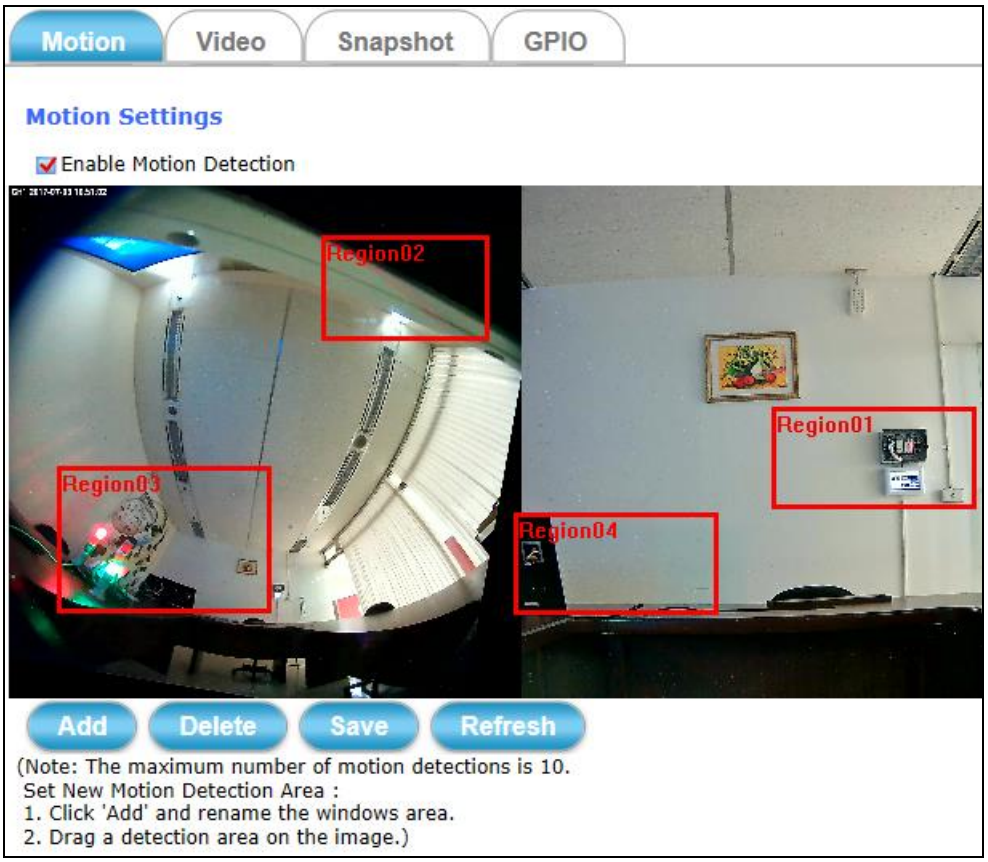
3) Click and hold inside the area to drag it to the location where you want to focus detection. Resize the frame by dragging its corners or borders.

4) Click the **Save** button to apply the function.

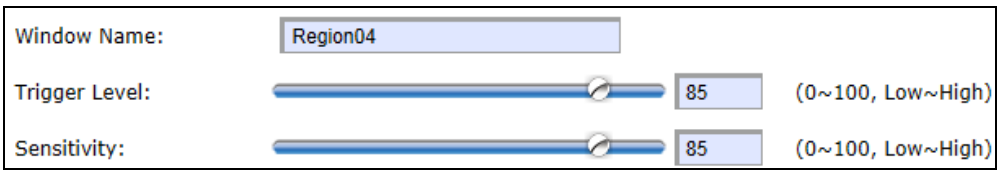
5) Repeat the above steps to add more detection areas.

NOTE

*Total defined motion detection areas cannot exceed **10** regions.*



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



7) To delete an area that is no longer needed but was previously saved, click on the unwanted area and click **Delete** button. The area will disappear after a while.

8) To delete multiple areas that are not yet saved, directly click the **Refresh** button instead of deleting them individually. The **Refresh** button will automatically clears all unsaved frames.

4.4.2 Video Tab

The **Video** tabbed pane sets the video recording trigger method.

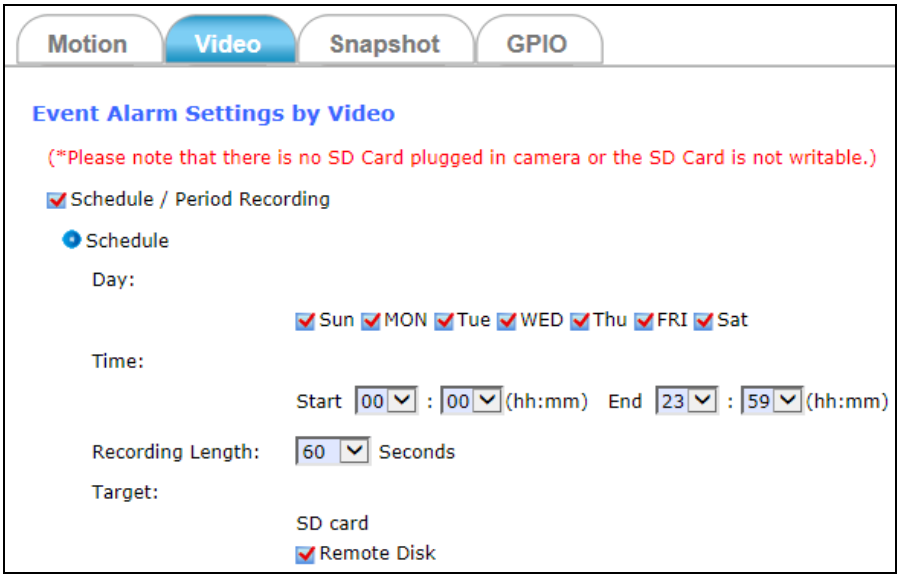
The Video recording trigger methods:
1. Schedule
2. Period
3. Motion
4. GPIO Input

The settings about the Video event triggered
1. **Recoding Length**:
2. **Time Lapse**:
3. **Target**: defining the video record file target destination.

■ **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.

Recording Length: Each recording time-span is in accordance with the setting value of the Recording Length (in seconds).

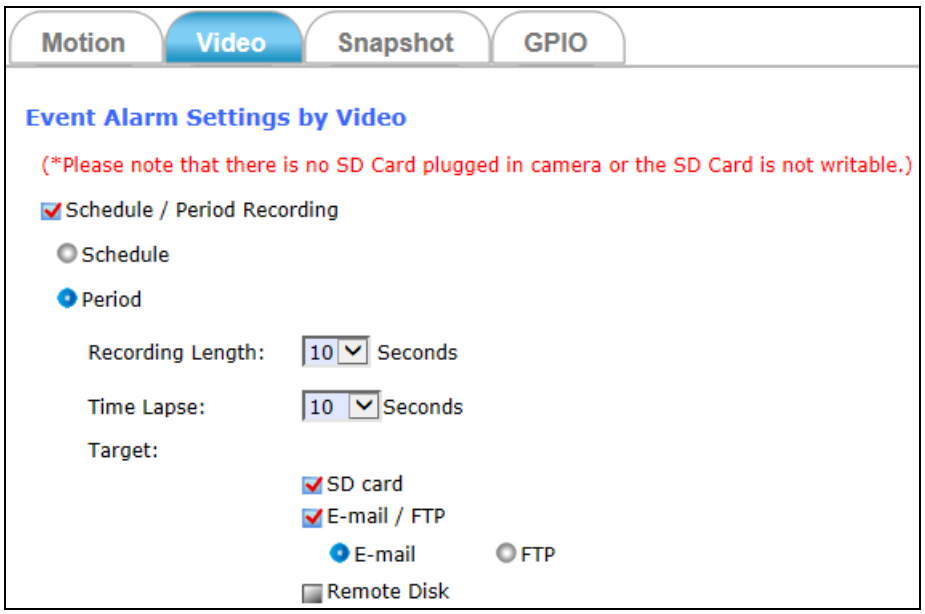
Target: The video record is stored in the SD card, Remote Disk as selected or through both of them.



■ **Period:** This method will trigger the Camera video surveillance/recording operation for a defined **Time Lapse** (in seconds) whenever motion is detected.

Recording Length: Each recording time-span is in accordance with the setting value of the Recording Length (in seconds).

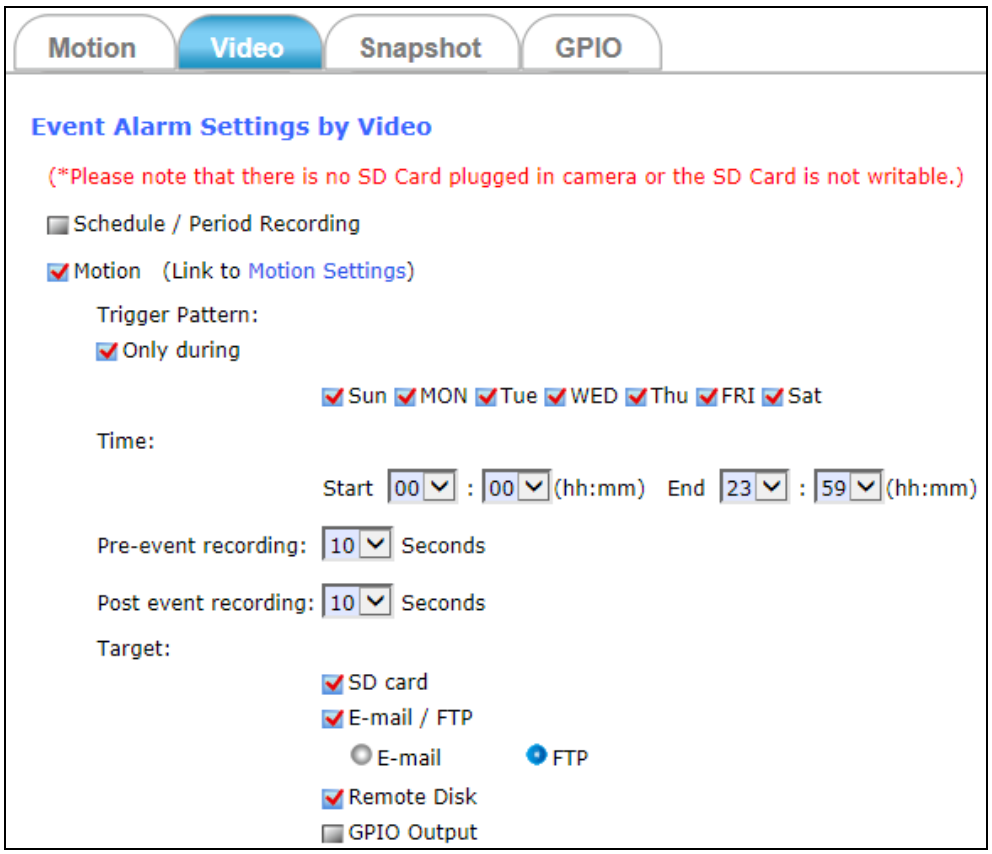
Target: The video record is stored in the SD card, to host by E-mail/FTP, Remote Disk as selected or through both of them.



■ **Motion:** This method will trigger the Camera video surveillance/recording operation whenever motion is detected within the defined days of the week and at the time of the set days.

Recording Length: Each recording time-span is in accordance with the total value of Pre-event recording and Post-event recording (in seconds).

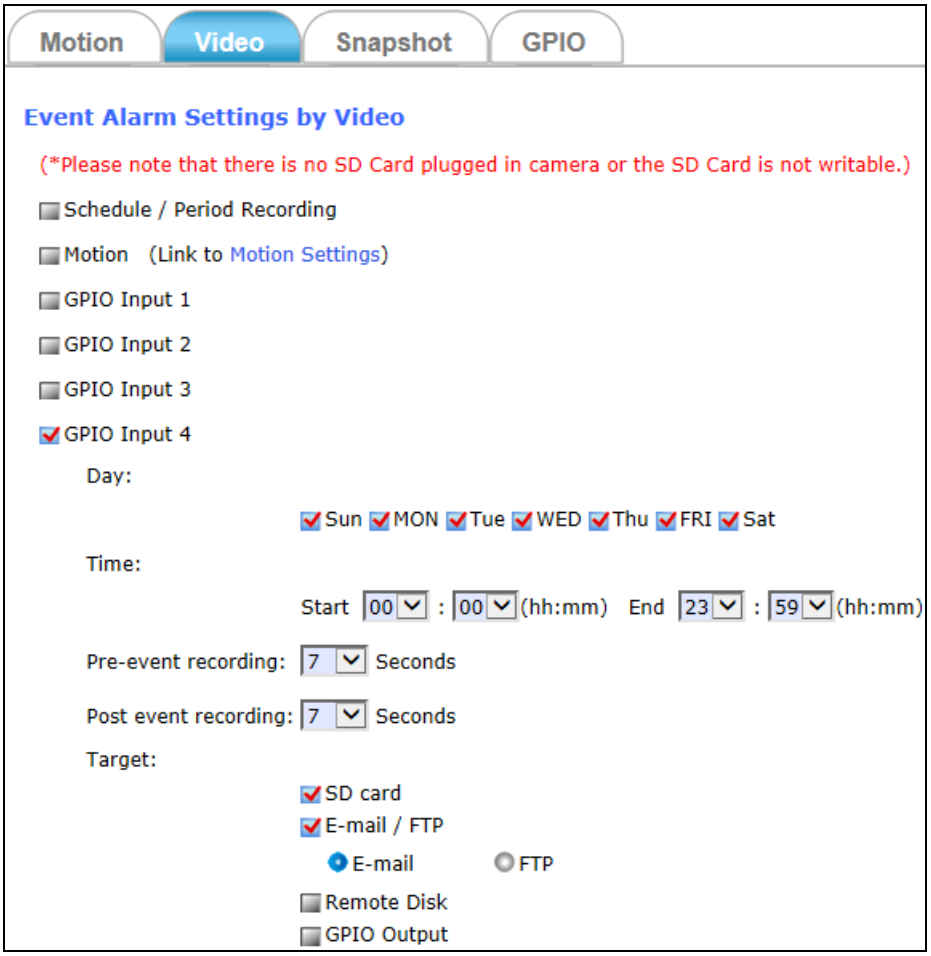
Target: The video record may be stored in the SD card, Remote Disk, provided to host by E-mail/FTP, activated GPIO Output Port as selected or through all of them.



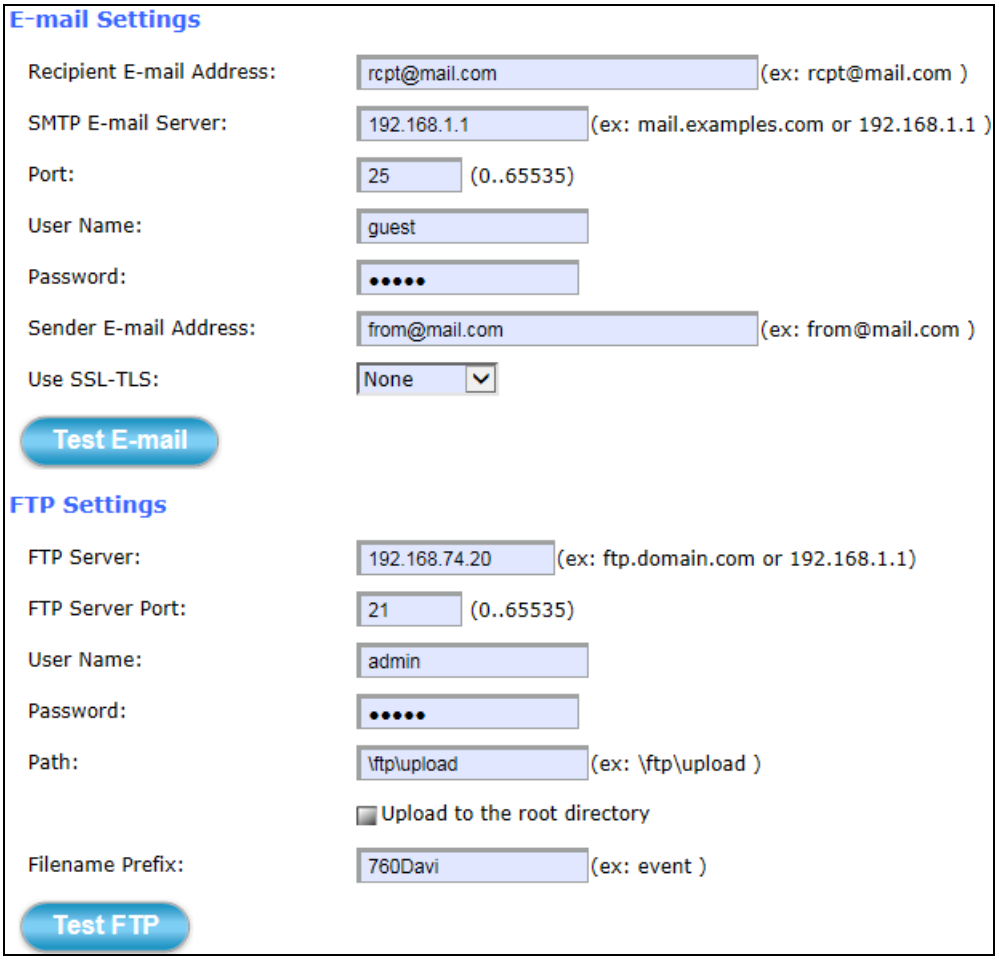
■ **GPIO Input:** On the defined days of the week and at certain time of the set days, the Camera will be triggered by its GPIO Input Signal when its state changes.
(As for the more GPIO Signal setting, you may refer to 4.4.4 GPIO Tab).

Recording Length: Each recording time-span is in accordance with the total value of Pre-event recording and Post-event recording (in seconds).

Target: The video record may be stored in the SD card, Remote Disk, provided to host by E-mail/FTP, activated GPIO Output Port as selected or through all of them.



When E-mail/FTP target is selected, the following items need to set and test.



E-mail Settings: As for the settings of SMTP Service, kindly please contact with your E-mail service provider. After you confirm all parameters are correct and working properly, you may enter them into the text area manually.

FTP Settings: As for the settings of FTP Service, kindly please contact with your FTP service provider. While all parameters filled in Windows FTP Transferring Utility are correct and working properly under your Laptop or other PC, you may enter them into the text area manually.

◎ **Filename Prefix:** the filename will show as “Prefix” “date” “time”.
EX: Set the Prefix as “760Davi”, and the file name will show as “760Davi_20170615151326.jpg”. The files are saved in folders named by date and sub-folders named by time.

After setups are completed, click **Save** button to apply the settings.

4.4.3 Snapshot Tab

The **Snapshot** tabbed pane sets the Camera to take snapshot images when event is triggered.

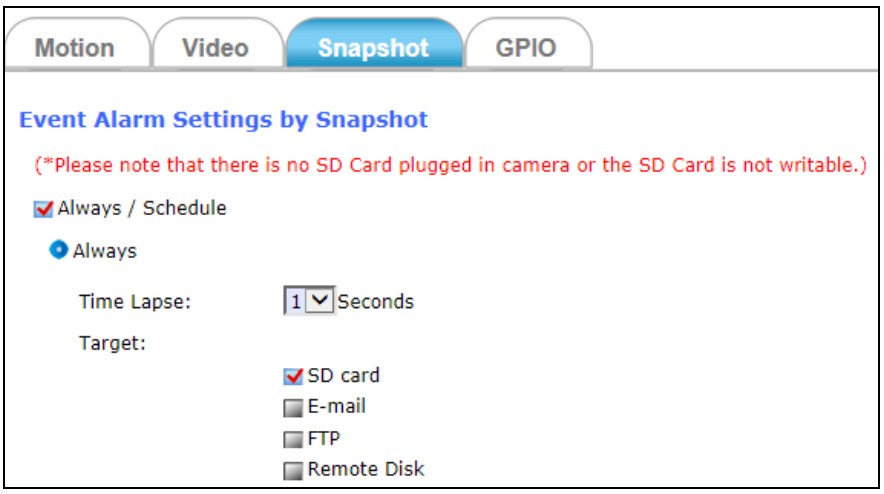
The Snapshot event trigger methods:
1. Always
2. Schedule
3. Motion
4. GPIO Input

The settings about the Snapshot event triggered
1. **Time Lapse**: scheduled time and capture interval
2. **Number:** single snapshot or 6 snapshots
3. **Target**: defining the video record file target destination.

■ **Always:** Under this method, the Camera automatically continuous to capture snapshots of the area under surveillance at every 1, 2 or 3 seconds interval.

Time Lapse: Snapshot is triggered at every 1, 2 or 3 seconds intervals.

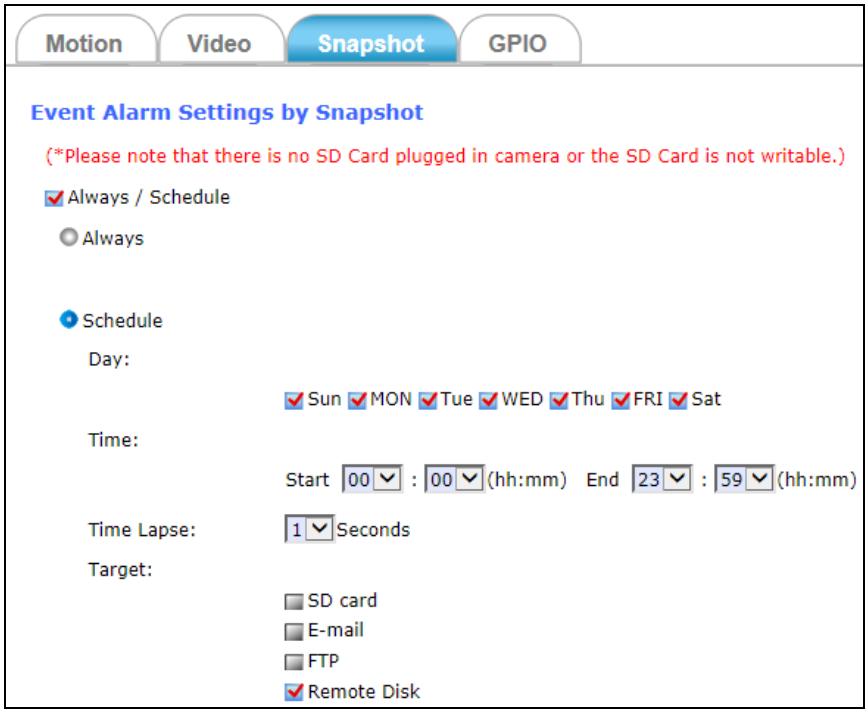
Target: The stream of accumulated snapshots may be stored in the SD Card, Remote Disk, sent to host by E-mail, FTP as preferred or through all of them.



■ **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.

Time Lapse: Snapshot is triggered at every 1, 2 or 3 seconds intervals.

Target: The stream of accumulated snapshots may be stored in the SD Card, Remote Disk, sent to host by E-mail, FTP as preferred or through all of them.

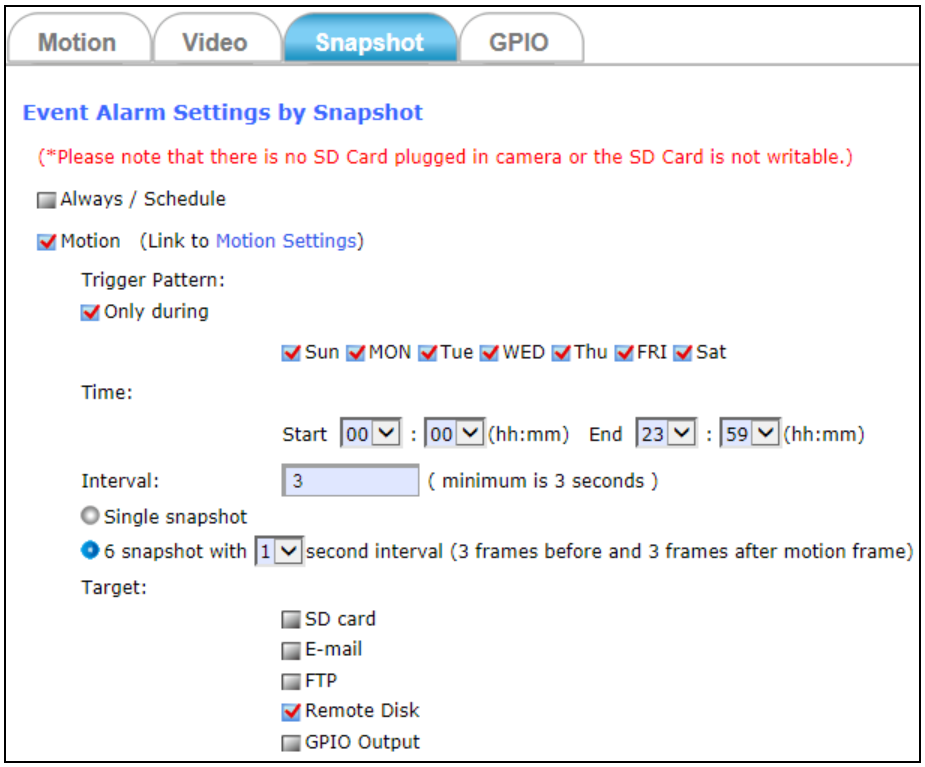


■ **Motion:** This method will trigger the Camera snapshot operation according to the set time interval (in seconds) whenever motion is detected within the defined days of the week and at the time of the set days. Single or 6 snapshots may be captured as defined.

Interval: the Time Lapse; Snapshot is triggered at every setting interval time that minimum 3 seconds.

Number: Single snapshot or 6 snapshots with the setting interval (1 or 2 seconds).

Target: The stream of accumulated snapshots may be stored in the SD Card, Remote Disk, sent to host by E-mail, FTP, activated GPIO Output Port as preferred, or through all of them.

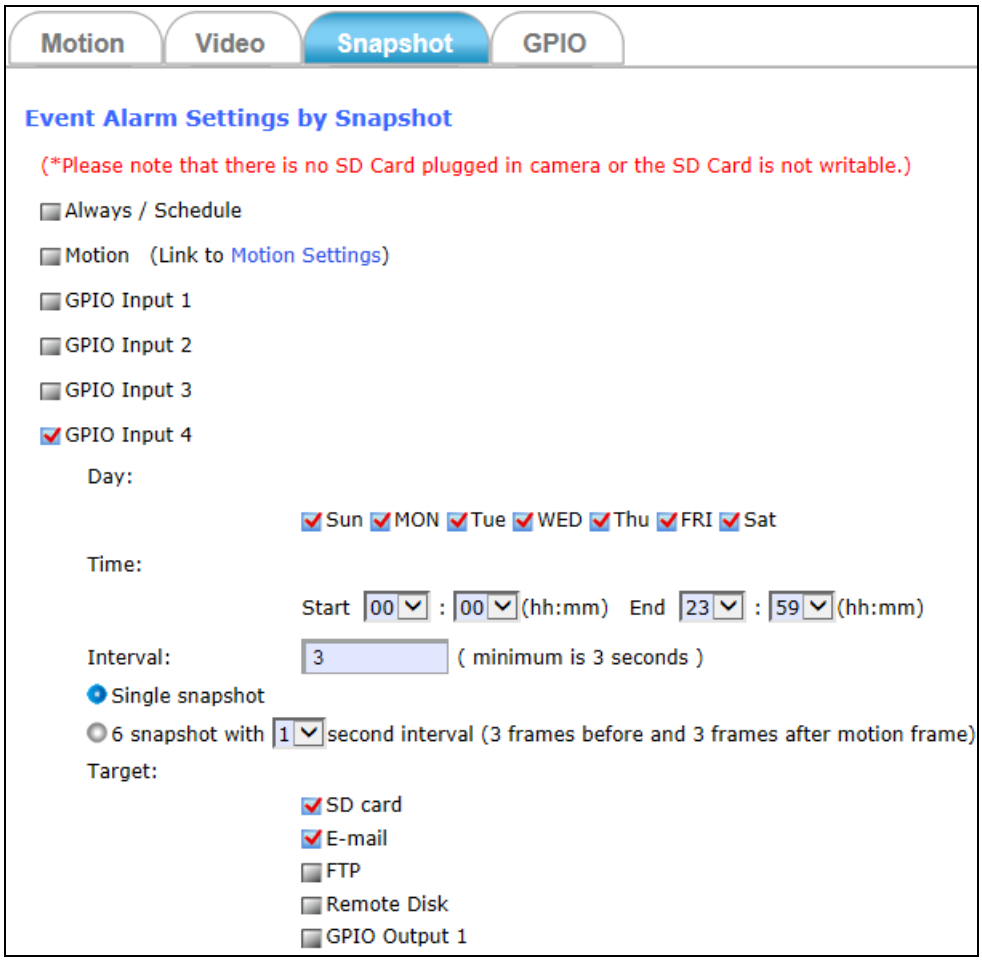


■ **GPIO Input:** This method will trigger the Camera snapshot operation according to the set time interval (in seconds) whenever GPIO Input Signal is detected within the defined days of the week and at the time of the set days.
(As for the more GPIO Signal Settings, you may refer to 4.4.4 GPIO Tab)

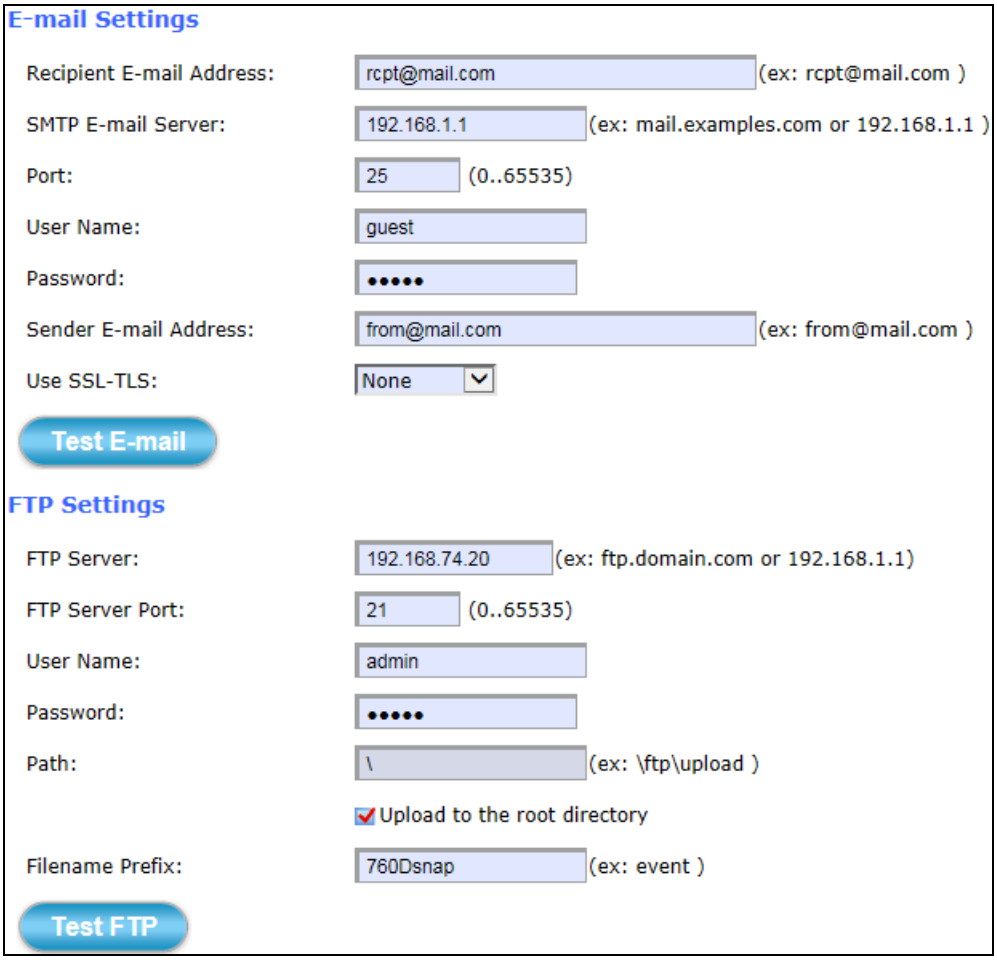
Interval: the Time Lapse; Snapshot is triggered at every setting interval time that minimum 3 seconds.

Number: Single snapshot or 6 snapshots with the setting interval (1 or 2 seconds).

Target: The stream of accumulated snapshots may be stored in the SD Card, Remote Disk, sent to host by E-mail, FTP, activated GPIO Output Port as preferred, or through all of them.



When E-mail/FTP target is selected, the following items need to set and test.



E-mail Settings: As for the settings of SMTP Service, kindly please contact with your E-mail service provider. After you confirm all parameters are correct and working properly, you may enter them into the text area manually.

FTP Settings: As for the settings of FTP Service, kindly please contact with your FTP service provider. While all parameters filled in Windows FTP Transferring Utility are correct and working properly under your Laptop or other PC, you may enter them into the text area manually.

◎ **Filename Prefix:** the filename will show as “Prefix” “date” “time”.
EX: Set the Prefix as “760Dsnap”, and the file name will show as “760Dsnap_20170615151326.jpg”. The files are saved in folders named by date and sub-folders named by time.

After setups are completed, click **Save** button to apply the settings.

4.4.4 GPIO Tab

The **GPIO** tabbed pane allows you to set GPIO Input Signal condition.

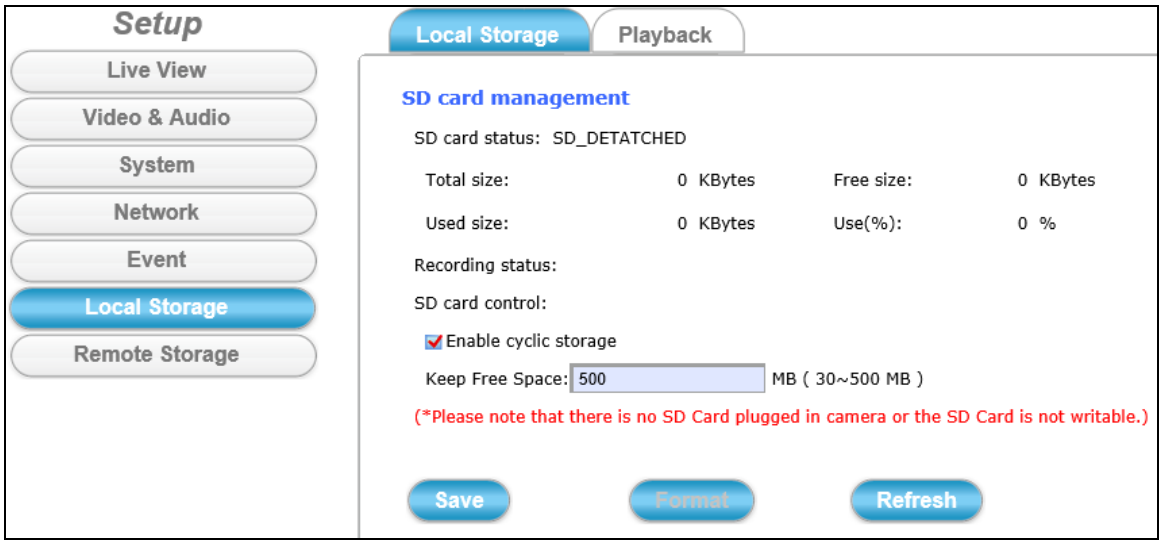
GPIO Input: The Trigger Pattern can decide which kind of pattern would trigger event successfully (Low to High, High to Low or State change).

GPIO Output: To set how long (in seconds) GPIO Output Device would be kept active high status.

Then click the **Save** button to take effect the change.

4.5 Local Storage Setup

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.

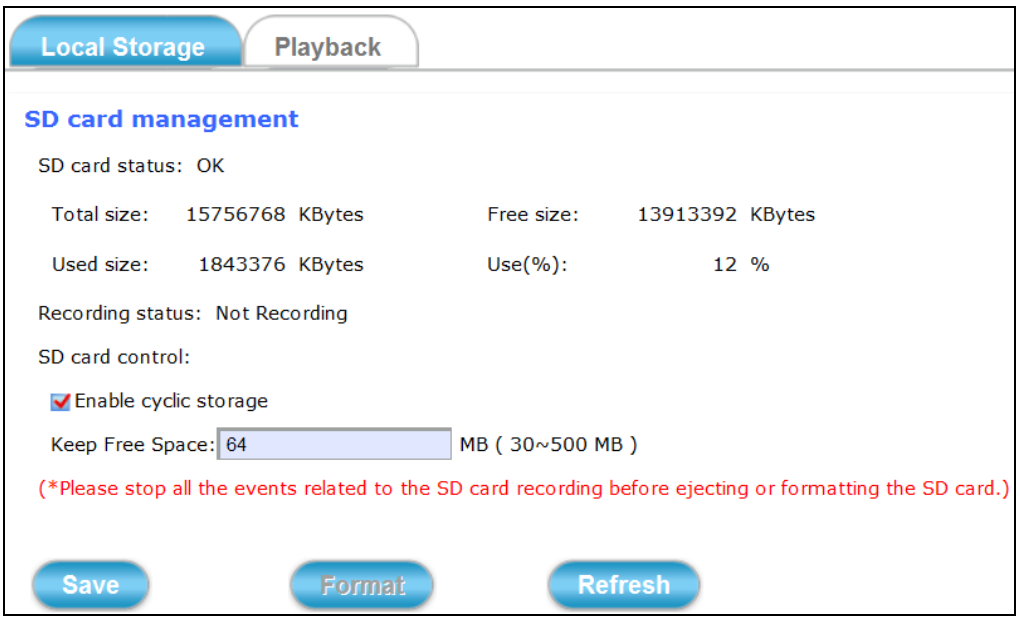
NOTE

*Do **NOT** remove the micro SD card while Camera is in recording process.*

4.5.1 Local Storage Tab

The **Local Storage** tabbed pane displays the SD card status. It shows the SD card total capacity (Total size), available memory (Free size), used memory (Used size) and used memory ratio (Use(%)).

It also display the current Camera operation condition (Recording status) and provide "SD card control" option where user can select to allow the Camera to auto-overwrite earlier files in order to maintain the defined "Keep Free Space" memory size.



Enable cyclic storage: Enable check box to allow auto-overwrite of earlier files in order to maintain the defined "Keep Free Space" memory size.

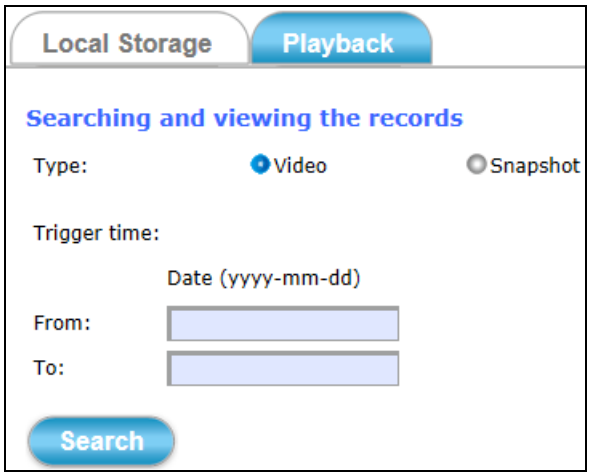
Save : Click **Save** button to save changes to the SD card control setting.

Format : Click **Format** button to format the SD memory card (* Take note of the message in red).

Refresh : Click **Refresh** button to refresh the SD card information.

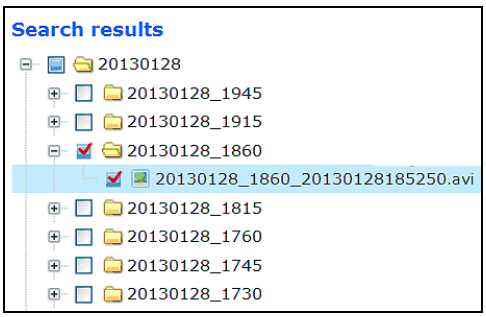
4.5.2 Playback Tab

The **Playback** tabbed pane allows user to playback video and snapshot files stored in the SD memory card.

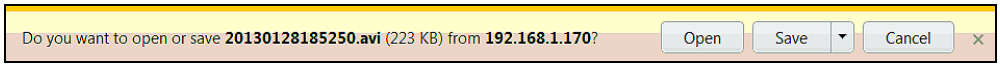


These files were saved using the Event setup for video (see Section 4.4.2) and snapshots (Section 4.4.3) with the **SD card** check box enabled. Playback of the stored videos or snapshots is performed from files recorded on particular date range as explained in the following figure.

1) Select **Type:** Click "Video" or "Snapshot" files to playback.
2) Set **Trigger Time**: Search for the files in the SD card to playback by defining the files recording date range.
3) Click **Search** button: the files recorded within the date range will display below.



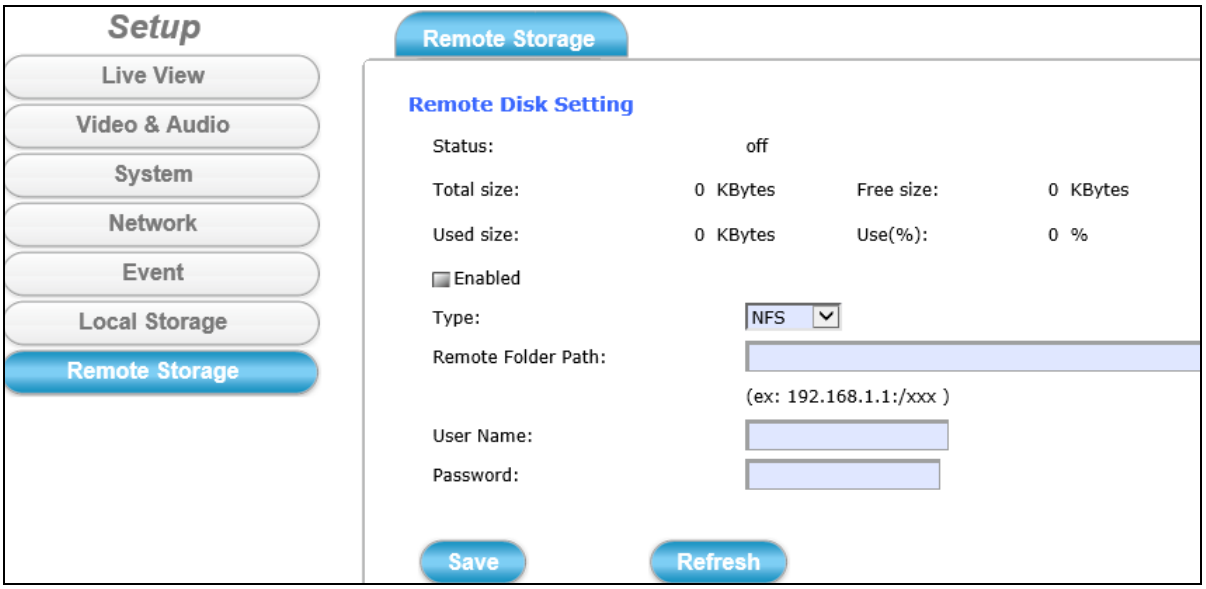
4) Select the file to playback and enable the corresponding check box. The dialog strip below will then pops up.



5) Click **Open** button will playback the file.
   Click **Save** button will save file to a designated folder.

4.6 Remote Storage Setup

Clicking the **Remote Storage** button will display the following tabbed panes to provide information of Remote Disk.



4.6.1 Remote Storage Tab

The **Remote Storage** tabbed pane displays the Remote Disk information of NFS/SMBFS Server. It shows the total capacity (Total size), available memory (Free size), used memory (Used size) and used memory ratio (Use(%)) of server disk.

Enabled: Check **Enabled** box to start Remote Disk Recording.

Type: NFS and SMBFS two kind of Remote Server are provided.

Remote Folder Path: If **NFS Server type** is selected, shared folder path will be filled in like **"192.168.1.1:/xxx"** syntax;
if **SMBFS Server type** is selected, shared folder path will be filled in like **"192.168.1.1/xxx"** syntax.

User Name: Fill in the username for authentication of Remote Server.

Password: Fill in the password for authentication of Remote Server.

: Click **Save** button to save changes to the setting of Remote Server.

: Click **Refresh** button to refresh the server disk's information.

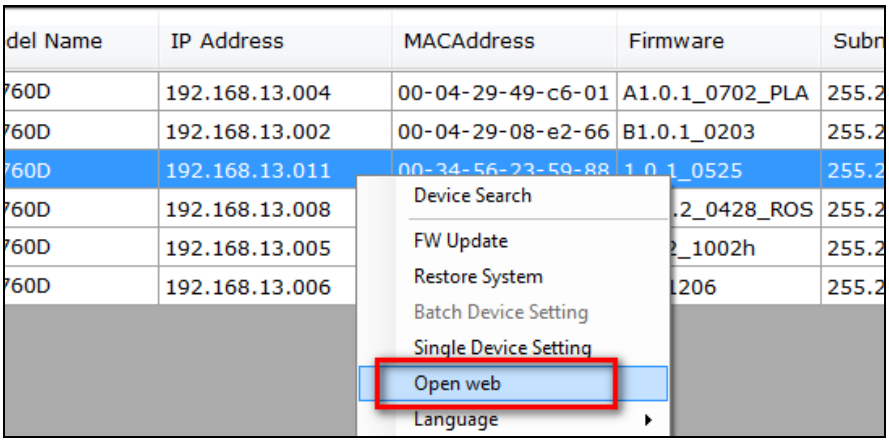
5 Appendix

5.1 Firmware Upgrade and Trouble Shooting

This section mainly will instruct you how to update camera firmware step by steps and trouble shooting ().

1. Find the camera and open its Web-based UI via CAM FINDER utility.

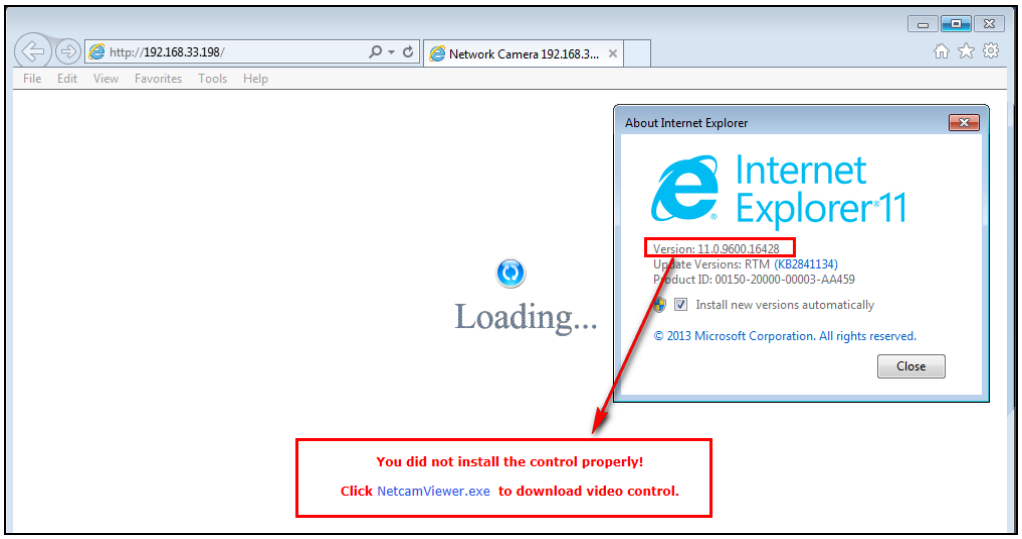
(Don't know the CAM FINDER? Refer to **Chapter 2.4**)



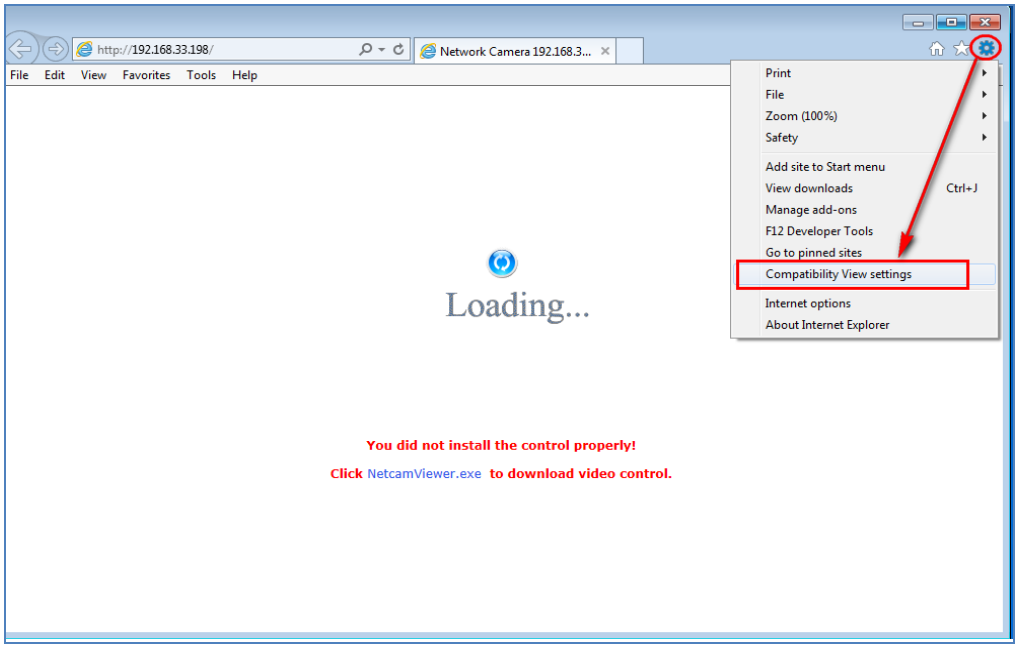
In this step, you may have following troubles:

- **If** below picture is always popped even NetcamViewer is downloaded and installed successfully in your PC.

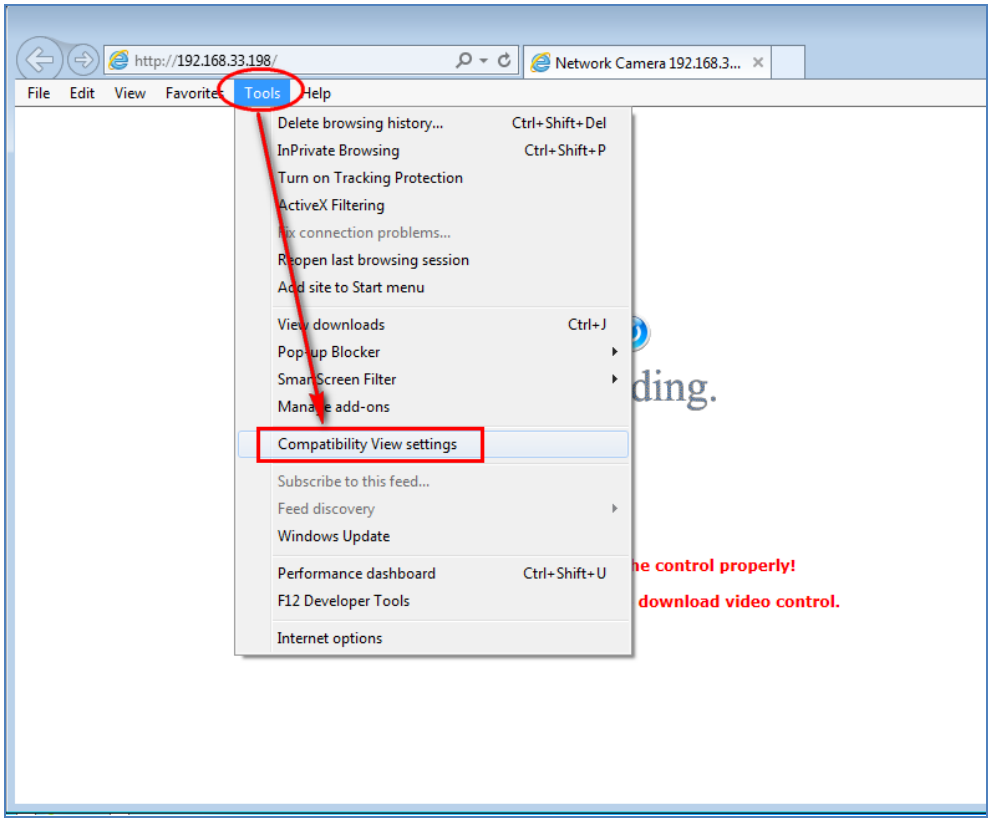
  Please help to **check if your IE Browser version is 11 first.**
  If it is yes, please kindly refer to the below steps to enable Compatible View settings of IE 11 Browser.



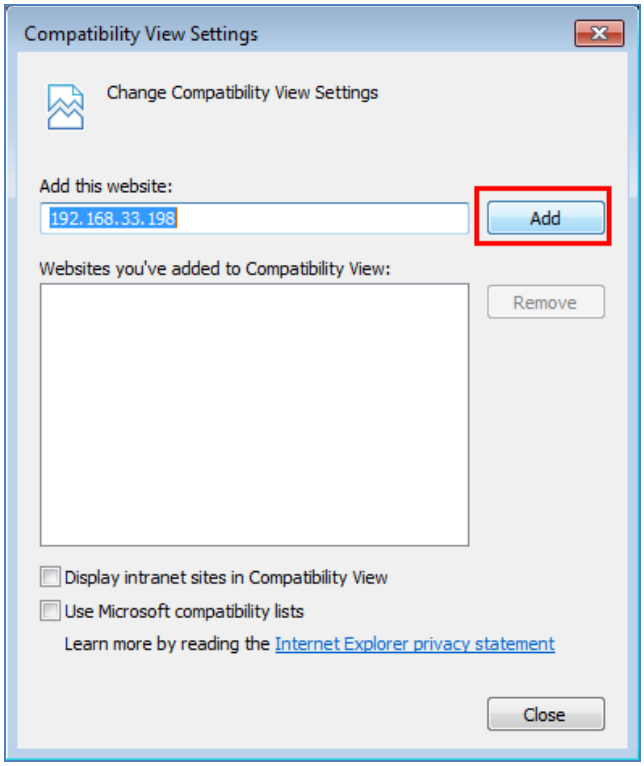
Find Tools icon and then select **Compatibility View settings**.



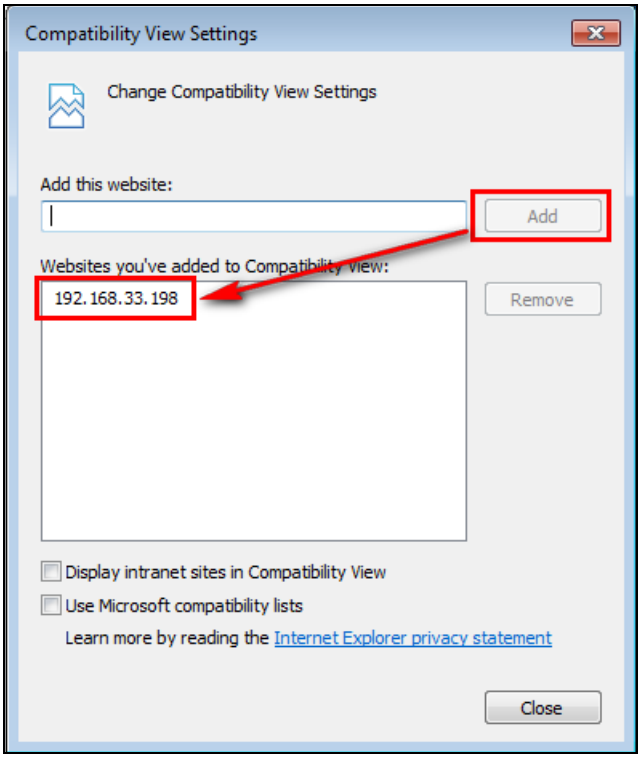
Or



Click **Add** button to add camera webpage as a compatible website.

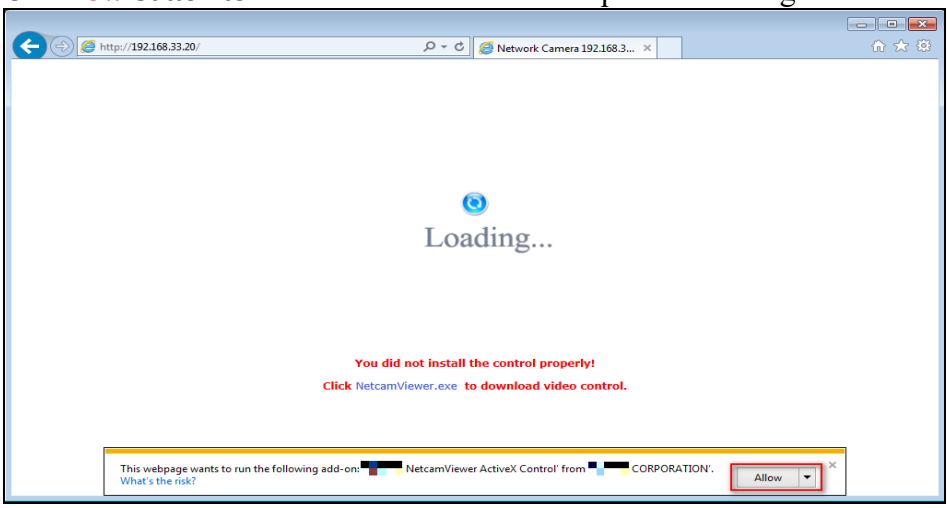


After successful adding, camera webpage should be set as compatible view website.

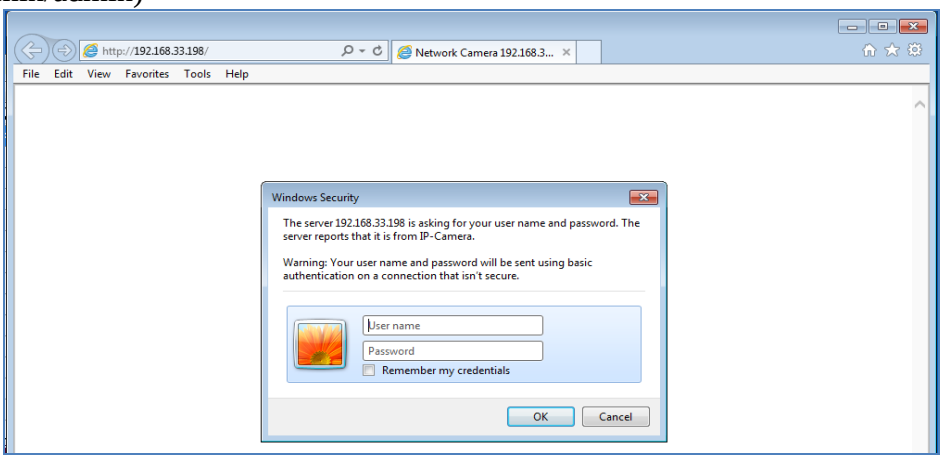


Then camera webpage would be refreshing real-time and starting to load camera webpage.

Click **Allow** button to enable NetcamViewer component running…



Manual enter camera's username/password to pass authentication. (Default: admin/admin)

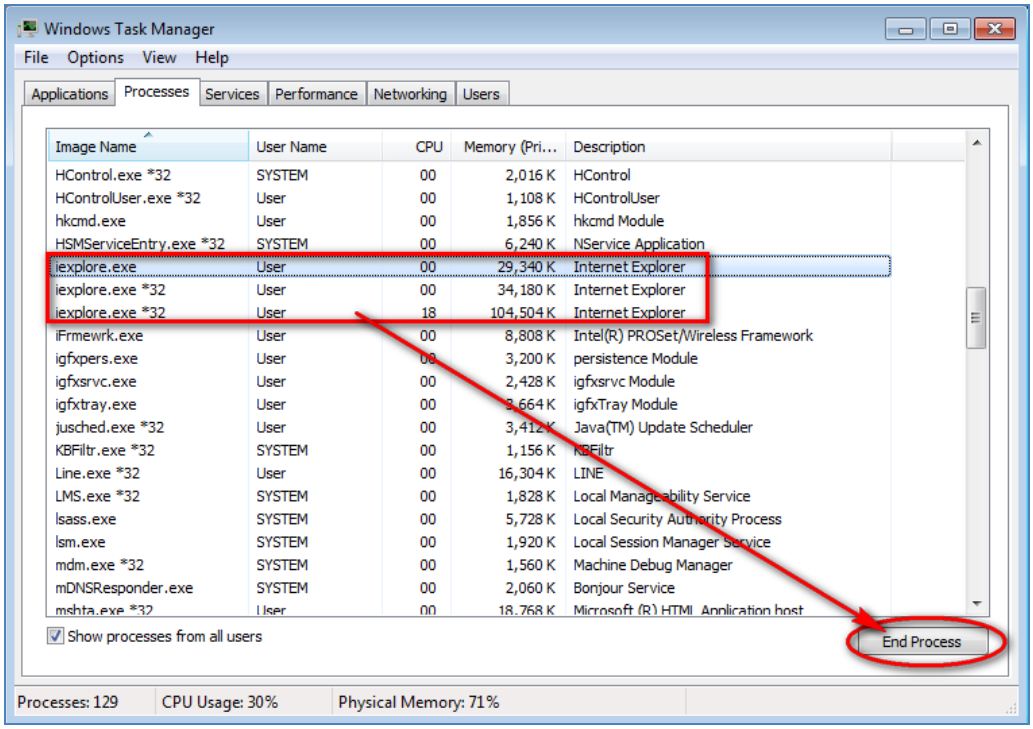


Camera live stream is successful playing in IE11 Browser

➢ **If** during the NetcamViewer installation, the error message **"opening file for writing C:\Windows\sytem32\LibPMD.dll"** is always popped, kindly please turn off all browser windows, include CDWizard application, and then try NetcamViewer installation again.

So before NetcamViewer installation, please make sure there's no "iexplore" process running in Windows Task Manager Window.

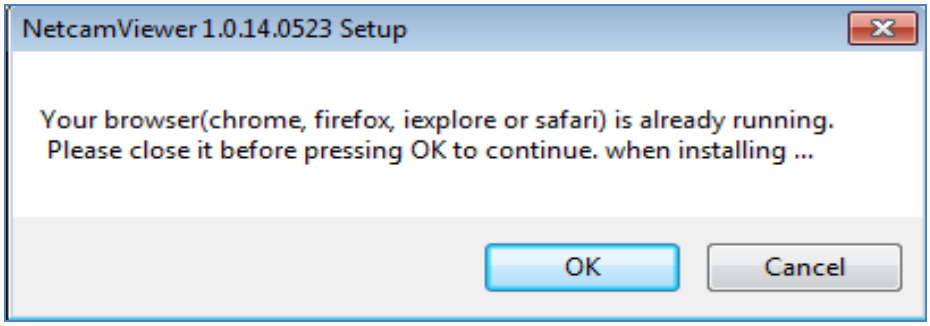
If there is "iexplore" process existing, select **"End Process"** to force its stop.

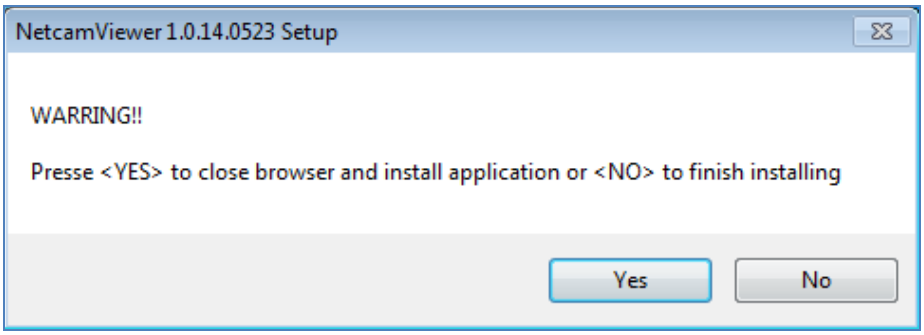


➢ During NetcamViewer installation, you may see below prompt windows are always popped.

This will mainly remind you to ***close all running browser applications*** and then press **"OK"** button to continue NetcamViewer installation.

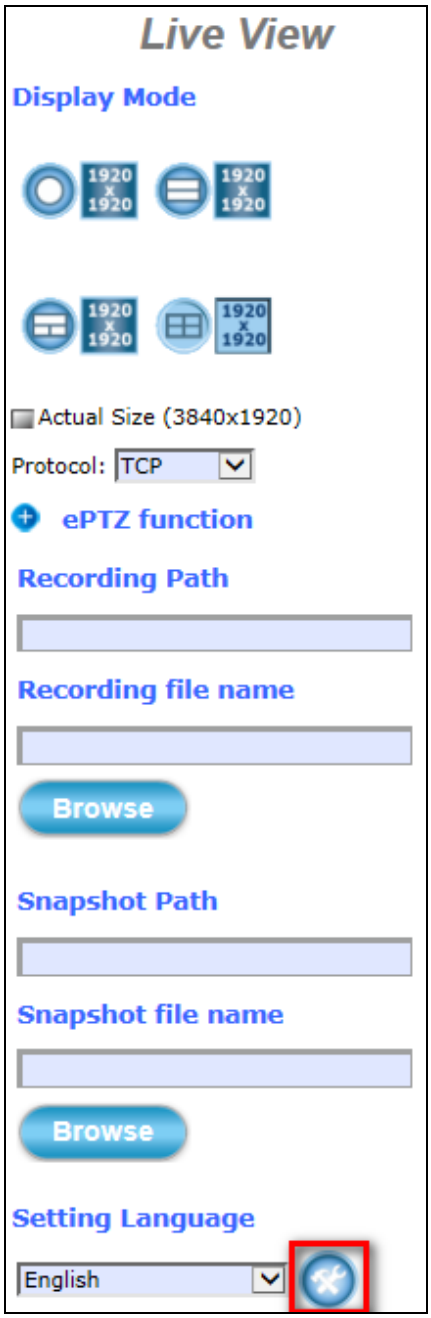
Or these two windows will pop continuously until all browsers are closed.



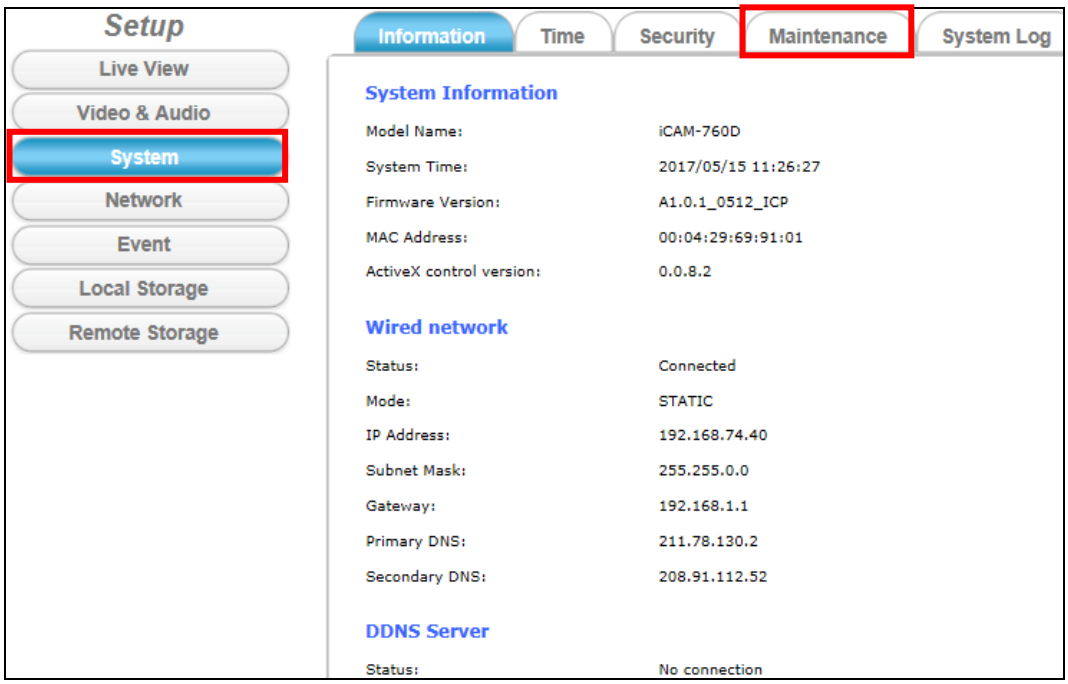


2. Manual input username and password of the camera to pass login authentication of camera webpage. (Default username and password are admin and admin.)

3. After Live View page is entering successfully, find the **"SETUP"** button. Clicking it could change or update more Camera settings.

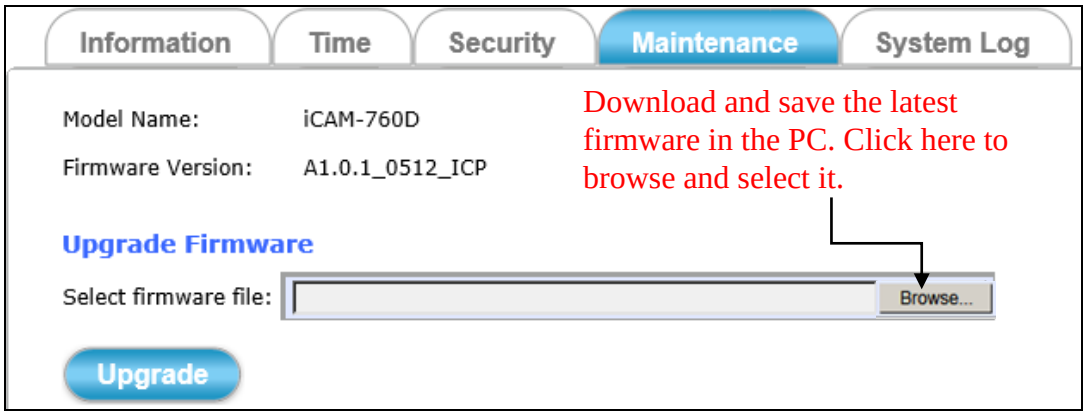


4. Find **Maintenance** Tab of Camera Setup **System** Webpage. – Chapter 4.2.4.



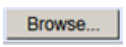
5. In order to have the best performance with Camera, kindly please ask for distributor/dealer's help to get ***the latest firmware version*** downloading.

6. After downloading it, click the **Browse** button to open the file open dialog for firmware choosing.

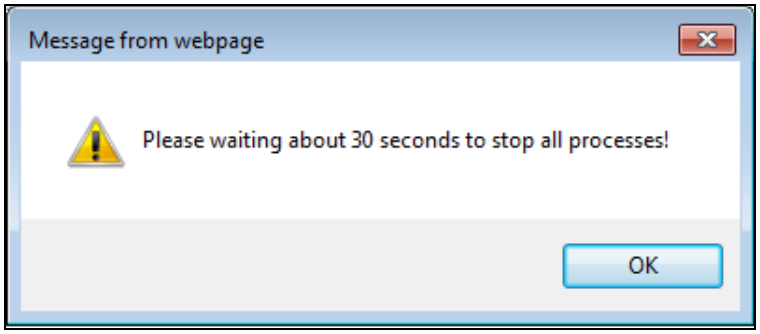


Select the ***appropriate*** firmware file from its folder in PC and then click **Open** button to choose it.

※ Please specify the correct firmware version mapped with your camera to upgrade, or there will be danger to damage camera system.

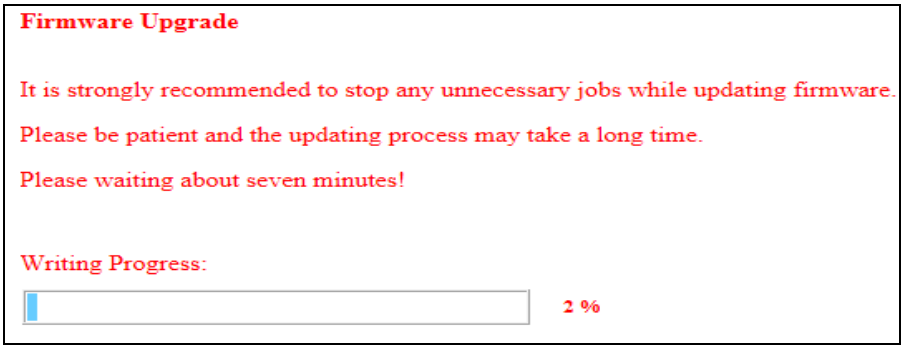


7. Click the **Upgrade** button and then one prompt window will pop to tell you "wait about 30 seconds to stop all processes!"



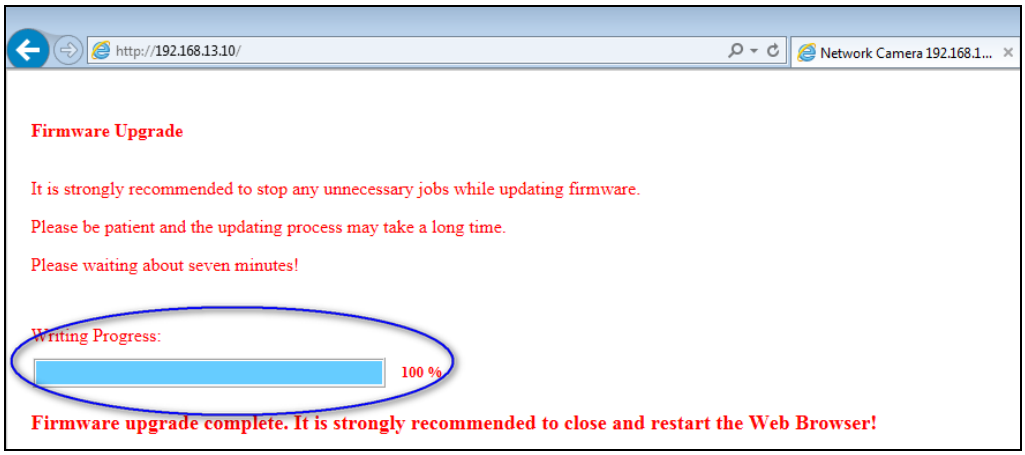
8. Click the **OK** button to exit the window. Then you will see Camera Webpage is reloading, it means all processes of camera are stopping at the same time.

9. After all processes are stopped, the camera will start to upgrade the firmware you chose.

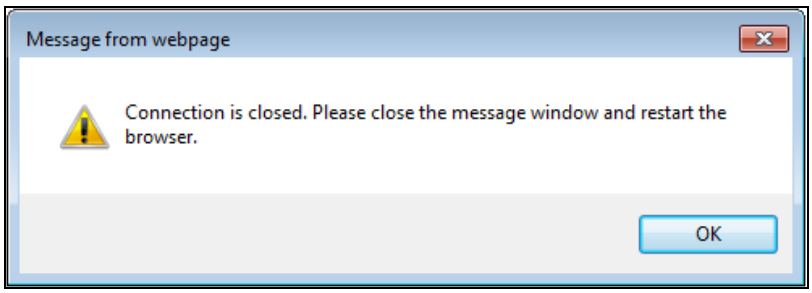


10. **Please don't power off camera or do any unnecessary jobs during firmware upgrade.**

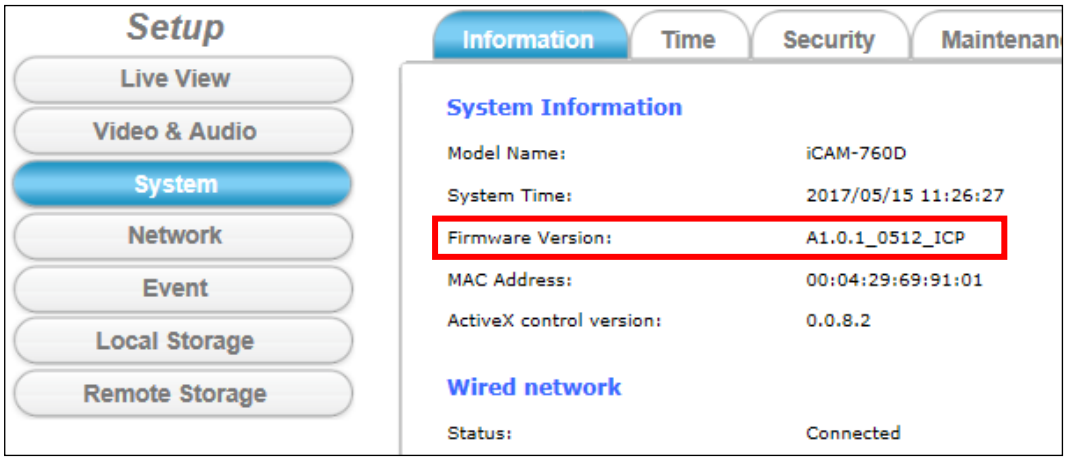
Until the process goes to 100%, there will be messages popped to suggest you restart the Web Browser.



11. While the **OK** button is clicked, the camera webpage connection will be closed. And then you have to re-login again.



12. After camera Web-based UI is re-login successfully, go to **Information** Tab of Camera Setup Webpage to check if the firmware version is different with before; or check if the firmware version is the same with distributor/dealer provided.



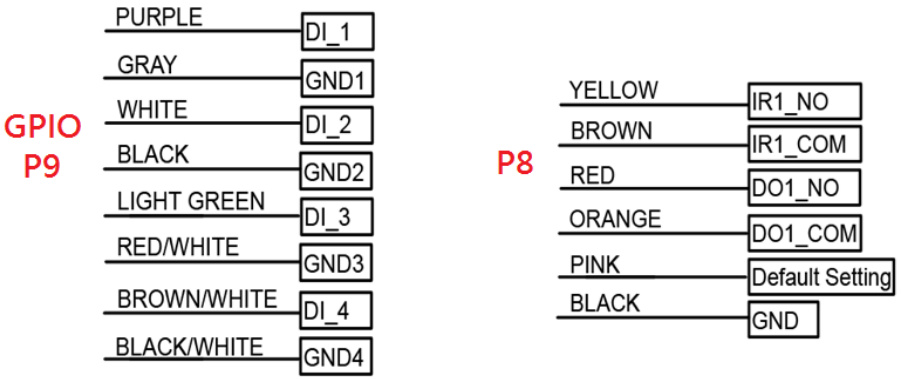
5.2 How to let camera to do Hardware Reset

In some cases, such as user forget login username & password they've changed before; or modify some settings to cause camera displayed image improperly; or camera system is no response & hang to the user's operation… etc., you may need to let camera to do Hardware Reset. After that, camera could reboot, operate and re-configure. The default iCAM setting after reset:

IP: 192.168.255.2 (Default Username/Password: admin/admin)
Submask: 255.255.0.0
Gateway address: 192.168.0.1
DNS Server address: 8.8.8.8

The hardware reset steps are as the following:

1) Please make sure camera is power on first.
2) Refer the below GPIO pin definition table; connect **Default Setting** and **GND** pins to short, remove the connection 10 seconds later.



3) While RJ45 Green LED Indicator is flashing quickly, means camera Hardware Reset Loading is processing now……

   Please don't power off camera or do any unnecessary jobs during this 3 minutes interval time; camera would reboot and continue streaming automatically.