User Manual

IP SPEED DOME CAMERA

V1.3K_1608

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This is a 1/2.9" 2M Type Exmor CMOS Sensor IP camera with a built-in web server. The user can view real-time video via IE browser. It supports H.264+, H.264, and JPEG video compression, providing smooth and high video quality.

With a user-friendly interface, it is an easy-to-use IP camera for security applications.

i. Warnings, Cautions and Copyright

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION

	CAUTION	
	RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

COPYRIGHT

THE TRADEMARKS MENTIONED IN THE MANUAL ARE LEGALLY REGISTERED TO THEIR RESPECTIVE COMPANIES.

ii. Product Specifications

Main Features:

- 2 Megapixel Real Time 30x Zoom Module
- H.264+/ H.264/JPEG Compression
- Bandwidth Savings up to 50%
- ROI Function
- Smart IR
- IR LED Built in 150M Available
- Digital Wide Dynamic Range
- True Day/Night Function – IR Cut Filter (ICR)
- 360° Continuous Pan and 90° Tilt
- Power over Ethernet(60W compliant)
- 2-Way Audio
- IP66
- -20°C ~ 60°C Temperature Range for Weather Conditions
- -40°C ~ 60°C Temperature Range for Weather Conditions (Optional , with Heater)
- Built-in SD Card Slot for On-board Storage(Optional)
- Support iPhone/Android/Mac
- Quadruple Streaming
- SDK for Software Integration
- Free Bundle 36 ch Recording Software

Hardware	
CPU	Multimedia SoC
RAM	256MB
Flash	32MB
Image Sensor	1/2.9" 2M Type Exmor CMOS Sensor
Sensitivity	0.005 lux(B/W), 0.05 lux(Color)
Lens Type	30x optical zoom
Focal Length	F=4.5mm (WIDE) to 135 mm (TELE)

Maximum Aperture	F1.6 ~ F4.4
View Angle	2°~59°(H), 1°~40°(V)
Pan / Tilt Range	Pan: 360° / Tilt: 90°Auto Flip
Manual Control Speed	Pan: 0.42°~25.8°/s / Tilt: 0.31°~18.69°/s
Preset(Patrol) Speed	Pan:240°/s Tilt:200
Preset Accuracy	<±0.15°
Preset Points	256
Preset Focus Mode	Auto / Manual
Patrol	8 groups with 24 point
Auto Pan	Yes
Auto Recovery	Pending Time, Action
Cruise	Yes, 8 groups
Home Position	Yes
Point To Go	Yes
Auto Electronic Shutter	Auto / Shutter Mode
AE – Iris priority	N/A
AE – Shutter priority	Flickerless, 1/1 ~ 1/5000
AE – Manual mode	N/A
BLC	N/A
Day & Night Mode	Auto / Color / B/W / Time Mode with auto ICR
Day & Night Level	1 ~ 5
Day & Night Delay	4 ~ 60 sec
Sense Up	N/A
DNR Mode	Off / Low / Middle / High
WDR Mode	Off / Low / Middle / High
Video Orientation	Off / Flip / Mirror / Rotate
White Balance	Auto / Indoor / Outdoor / Fine shade 7500K / Cloudy weather 6000K / Fluorescent light 4200K / Halogen light 3200K / Electric light bulb 2900K
R-Gain	N/A
B-Gain	N/A
Sharpness	-4 ~ 4
Exposure Compensation	-6 ~ 6
Defog	Off / On
OSD	Off / On
Contrast	-4 ~ 4
Saturation	-4 ~ 4
Focus Distance	N/A
Privacy Mask	16

I/O	4 DI / 1 DO
Audio	G.711(64K) and G.726(32K,24K) Audio Compression Input : 3.5mm phone jack Output: 3.5mm phone jack Support 2-way audio
Power Source	DC36V / PoE
Power Consumption	Normal: Starting/Working Temperature: -20°C ~ 60°C 36V DC Power consumption Max: 50W PoE Power consumption Max: 50W With Heater(Optional) Starting/Working Temperature: -40°C ~ 60°C 36V DC Power consumption Max: 55W PoE Power consumption Max: 55W
Dimensions	227.1mm (φ) X 346.2mm(H)
Weight	5300 g
IR LEDs	
LEDs	9 Units High Power
IR Distance	150M
Network	
Ethernet	10/ 100 Base-T
Network Protocol	IPv6, IPv4, HTTP, HTTPS, SNMP, QoS/DSCP, Access list, IEEE 802.1X, RTSP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA, Bonjour
System	
Video Resolution	1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps
Video Adjust	Auto Electronic Shutter、Day & Night Mode、Day & Night Level、Day & Night Delay、DNR Mode、WDR Mode、Video Orientation、White Balance、Sharpness、Exposure Compensation、Defog、OSD、Contrast、Saturation
Quadruple Streaming	Yes
Image Snapshot	Yes
Full Screen Monitoring	Yes
Compression Format	H.264+/ H.264 / M-JPEG
Video Bitrate Adjust	CVBR, VBR
Motion Detection	Windows area
Triggered Action	Mail, FTP, Samba , Google driver , Dropbox, Save to SD

	card(Optional)
Pre/ Post Alarm	Yes, configurable
Security	Password protection, IP address filtering, HTTPS encrypted data transmission, 802.1X port-based authentication for network protection, QoS/DSCP
Firmware Upgrade	HTTP mode, can be upgraded remotely
Micro SD Card Management (Optional)	
Recording Trigger	Motion Detection, IP check, Network break down (wire only), Schedule, DI
Video Format	AVI, JPEG
Video Playback	Yes
Delete Files	Yes
Client System Requirement	
OS	Windows 7, XP, Microsoft IE 6.0 or above, Chrome, Safari, Firefox
Mobile Support	iOS 8.0 or above, Android 4.0.4 or above.
Suggested	Intel Dual Core 2.53G,RAM: 1024MB, Graphic card: 128MB

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION.

* Monitor Settings

1. Right-Click on the desktop. Select **Properties**

2. Change color quality to highest (**32bit**).
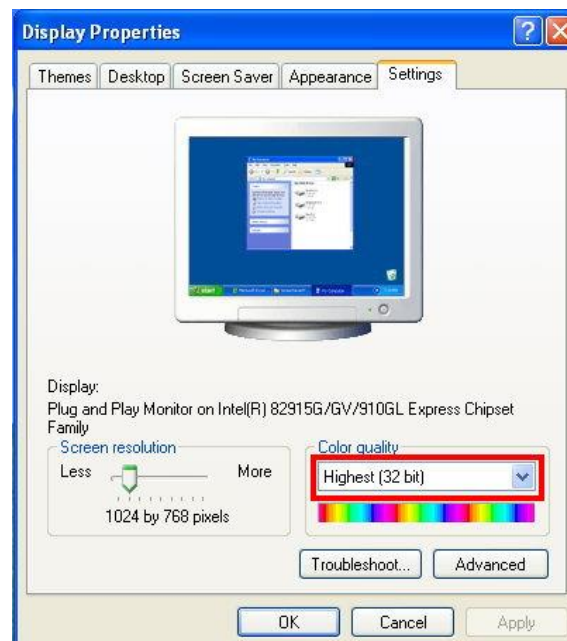
* Hardware Installation

Camera Without Wall Mount

346.2

227.1

143.9

Camera With Wall Mount

385.4

227.1

342.8

9
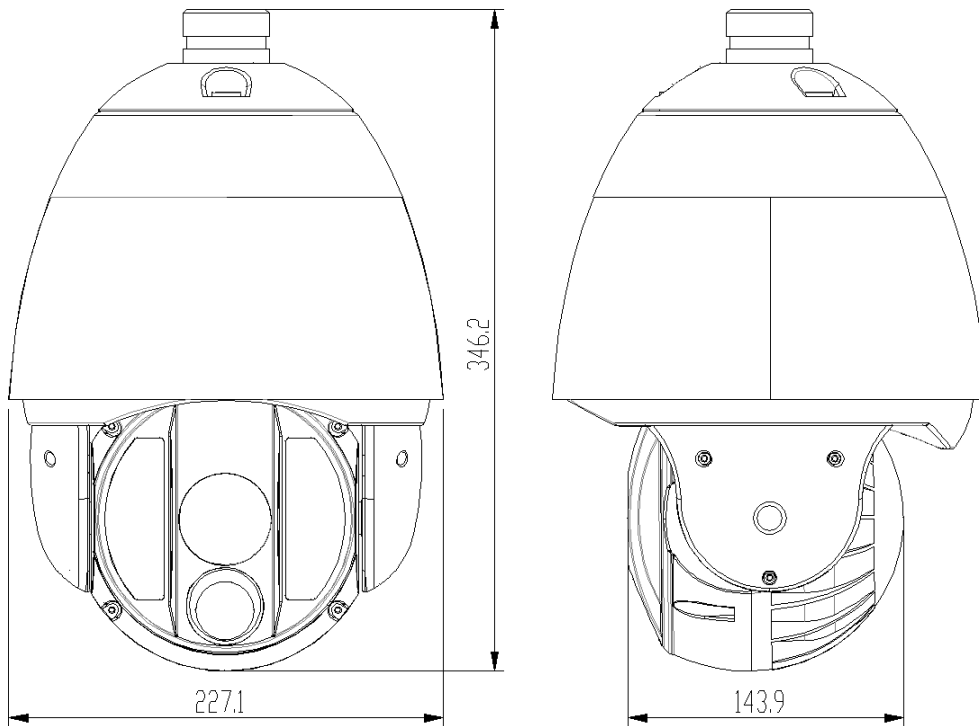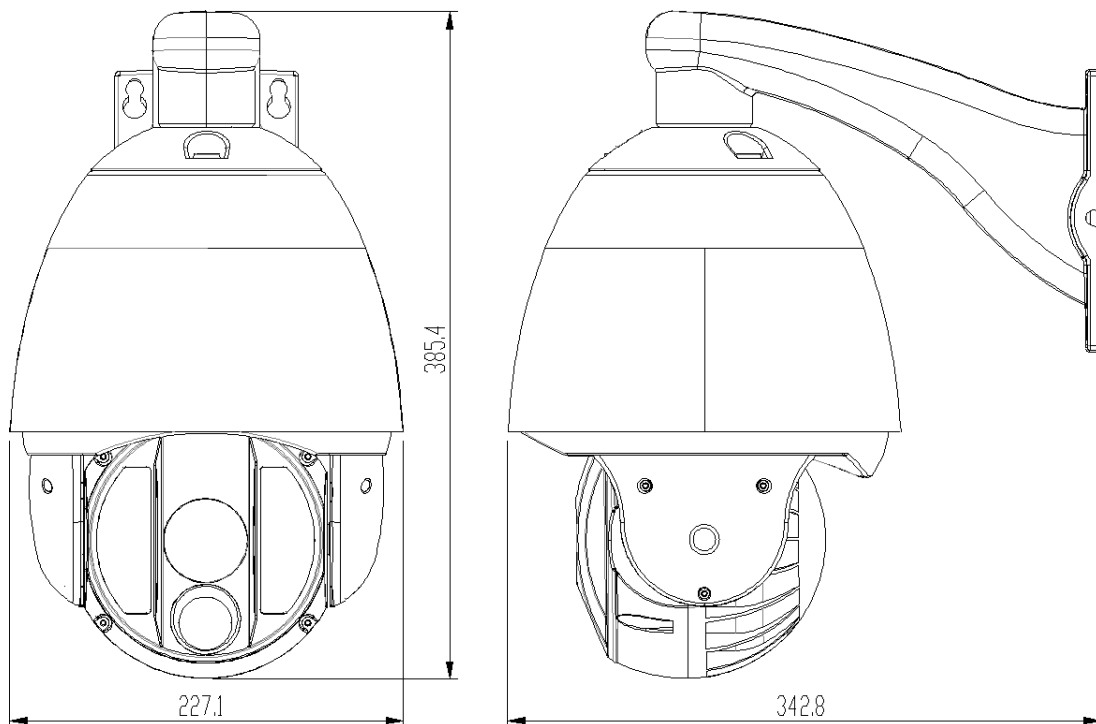
1. **Mount the Camera Inside the Housing (Optional)**

   The camera in the package is already assembled. Please be sure its cable connects thoroughly from the camera body through inside the mount, and goes right behind the mounted surface to reach connectors for power supply and internet connection.
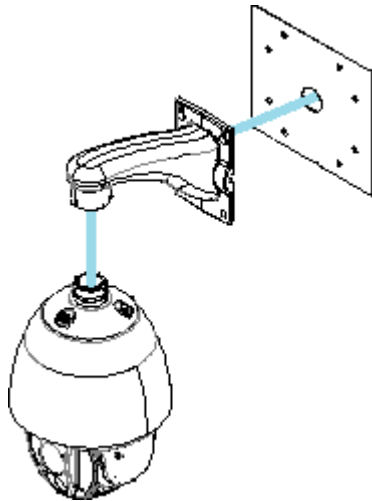
   | **Wall Mount** | **Ceiling Pendant Mount** |

2. **Various Mount Demonstration (Optional)**

   It is essential to protect the camera connection with a junction box regarding its environment conditions.   Please settle the cables inside the junction box first before properly installing the camera.

   Wall Mount +junction box   **Ceiling Pendant Mount +junction box**
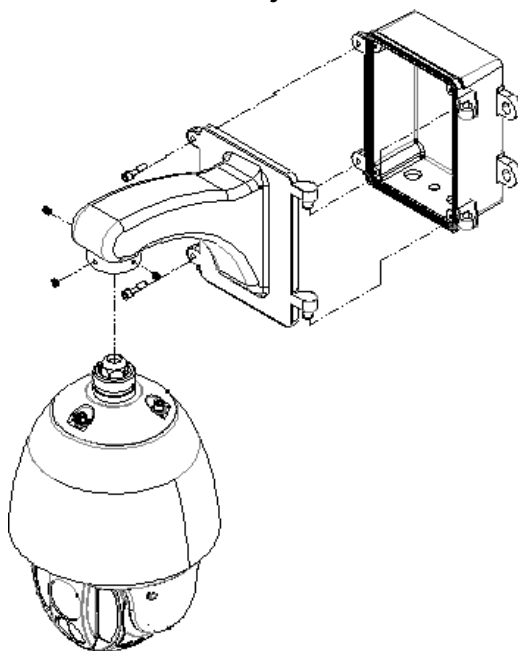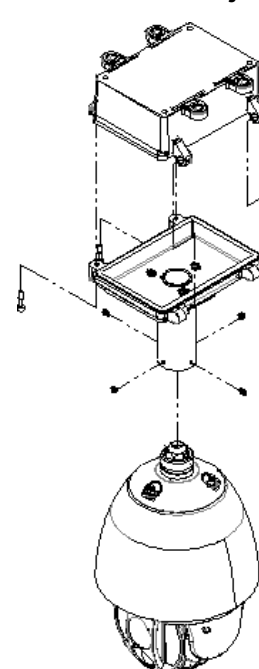
3. Dome Camera with Wall Mount Installation Steps

A.

B. Mounting

C.
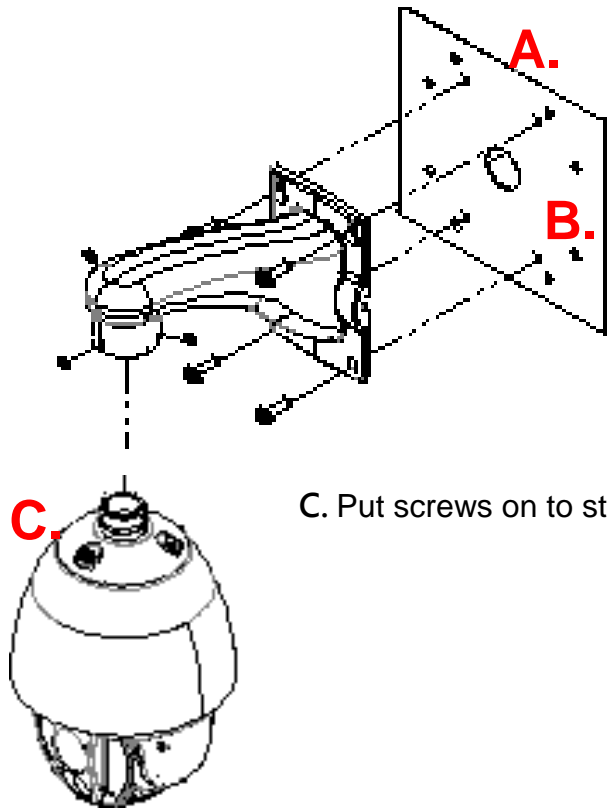
A. Ensure the mounted surface is solid enough to support the weight of the whole camera hardware.

B. Drill holes through the mounting surface for allowing cables through.

C. Put screws on to stiff the camera.

4. Various Mount Demonstration (Optional)

Corner Mount (Facing Out)   Corner Mount (Facing In)
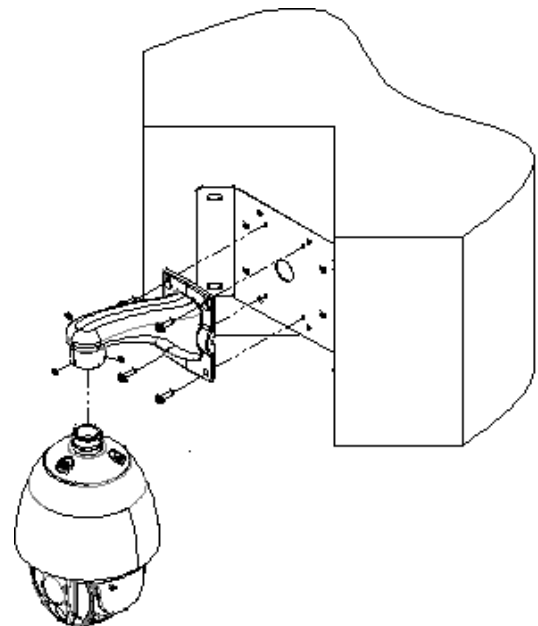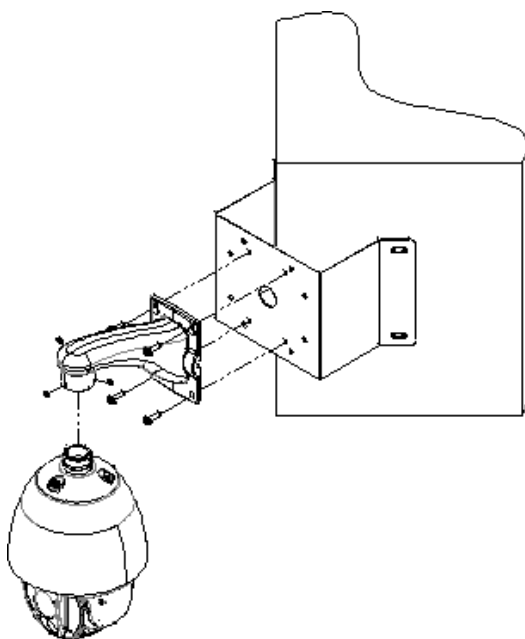
Pole Mount   Straight Tube Mount+ Junction Box
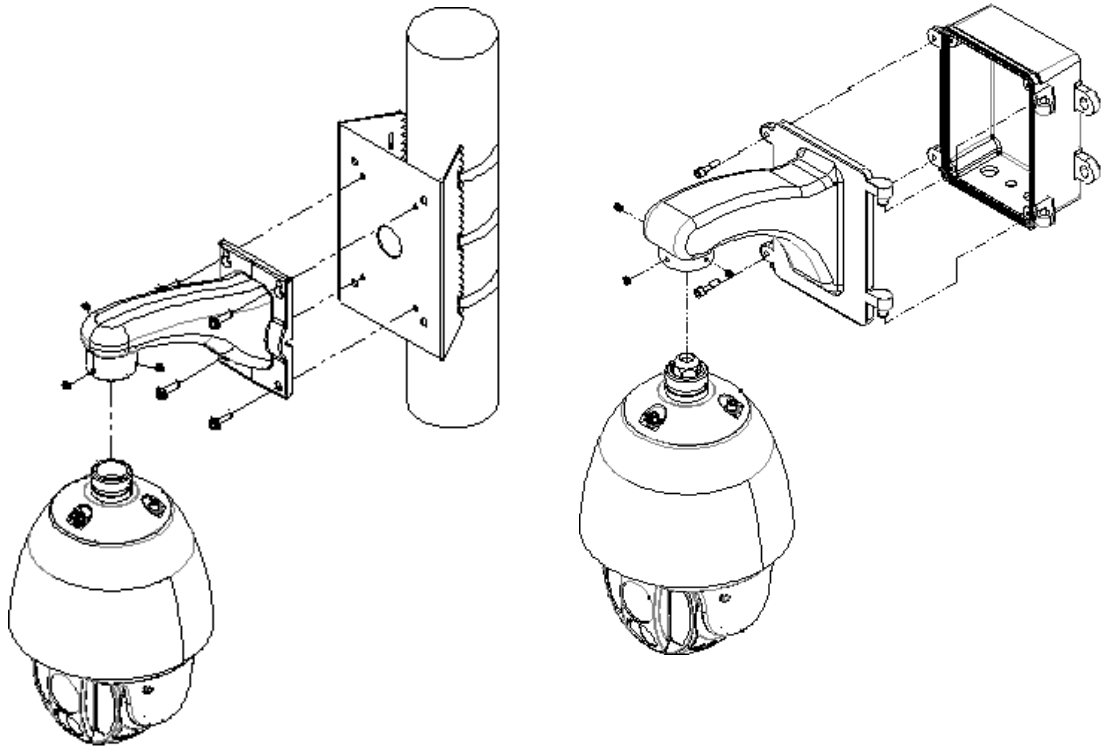
5. Connector Instruction

The camera connectors are as below. Connect the power and the Ethernet cable with the camera, and set it according to your network environment.
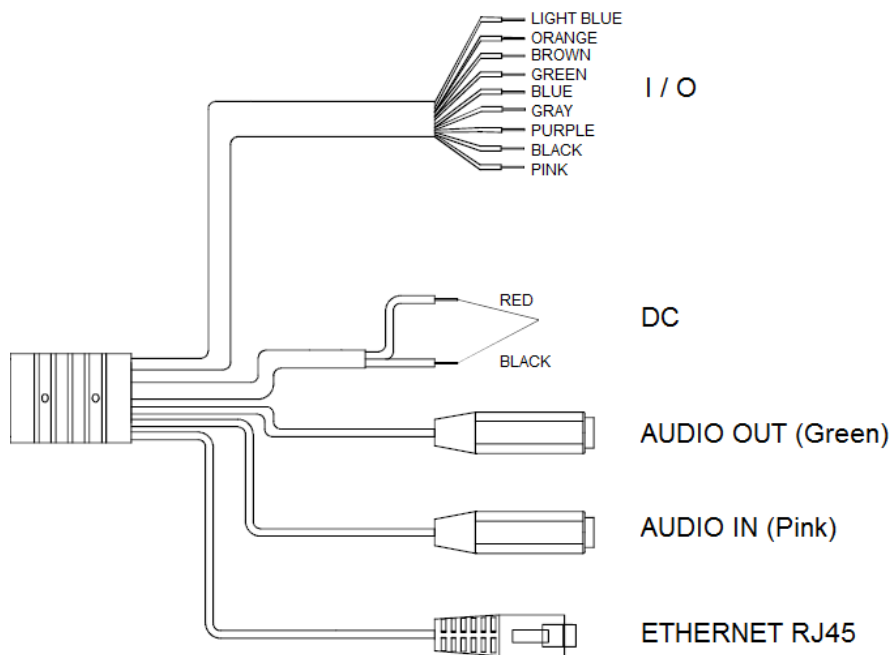
6. Power Cable Connection Setup

Connect the power cable with the DC cables in red & black to switch on & supply power to the camera.

a. Take out the power adaptor attached with the camera package. Have the adaptor plugged unto a power source to enable the power through.

b. Have the cable wires of the adaptor ready, and identify the DC cables from the camera are displayed in red & black.
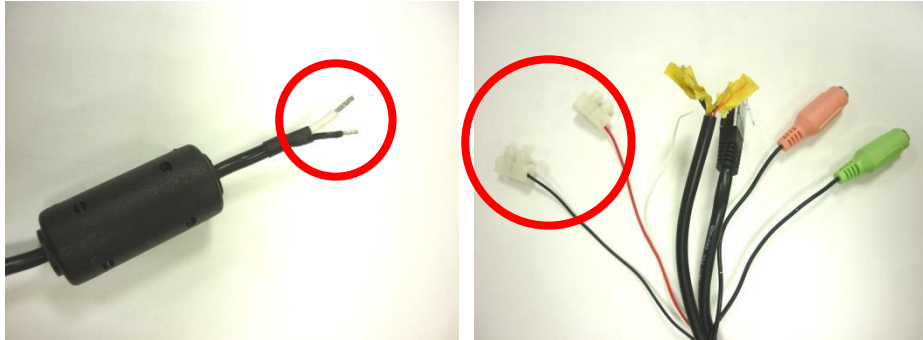
c. Loosening the screws closest to the receiving end (circled below) to make room for the DC cable wires to fit into each outlet.
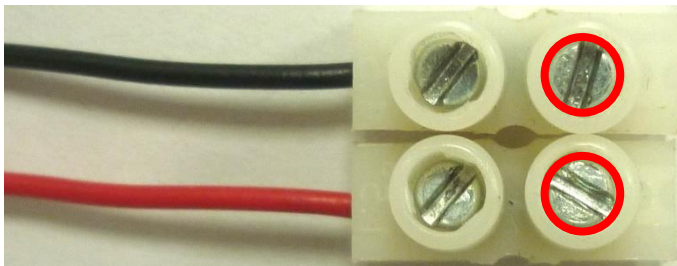
Ensure **only** the outlet screws from the receiving end are loosened.
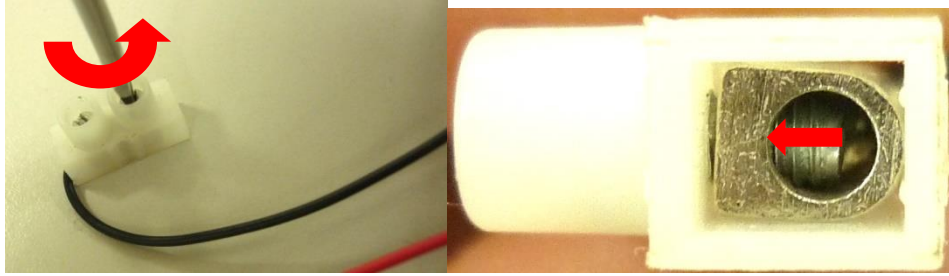
d. Place the cable wire inside the outlet (make sure the black matches black, white matches red), and turn the screwdriver clockwise to tighten the connection.
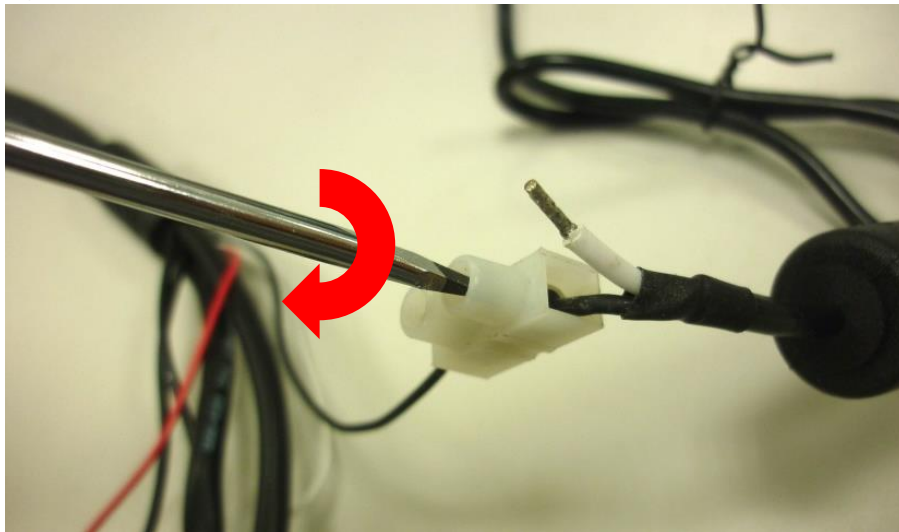
Do the same for the other cable wire. Finish connecting both power cable wires to DC cables. Be sure that the black cable wire aims at the black DC cable outlet, and the white cable wire aims at the red DC cable outlet.
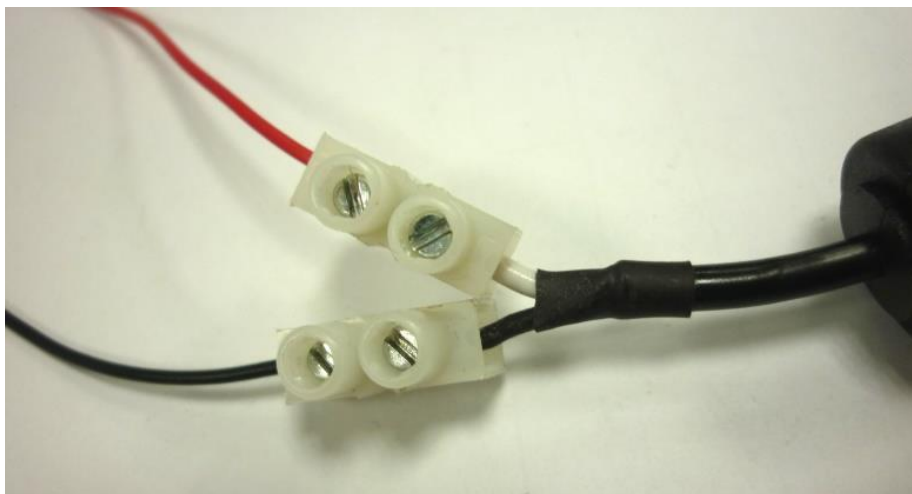
7. PoE (Power Over Ethernet) (Optional) 60W PoE single port recommended

Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It provides power for a network device, such as a network camera using the same cable for network connection. It eliminates the need for power outlets at the camera locations and enables easier application of uninterruptible power supplies (UPS) to ensure 24 hours a day, 7 days a week operation.
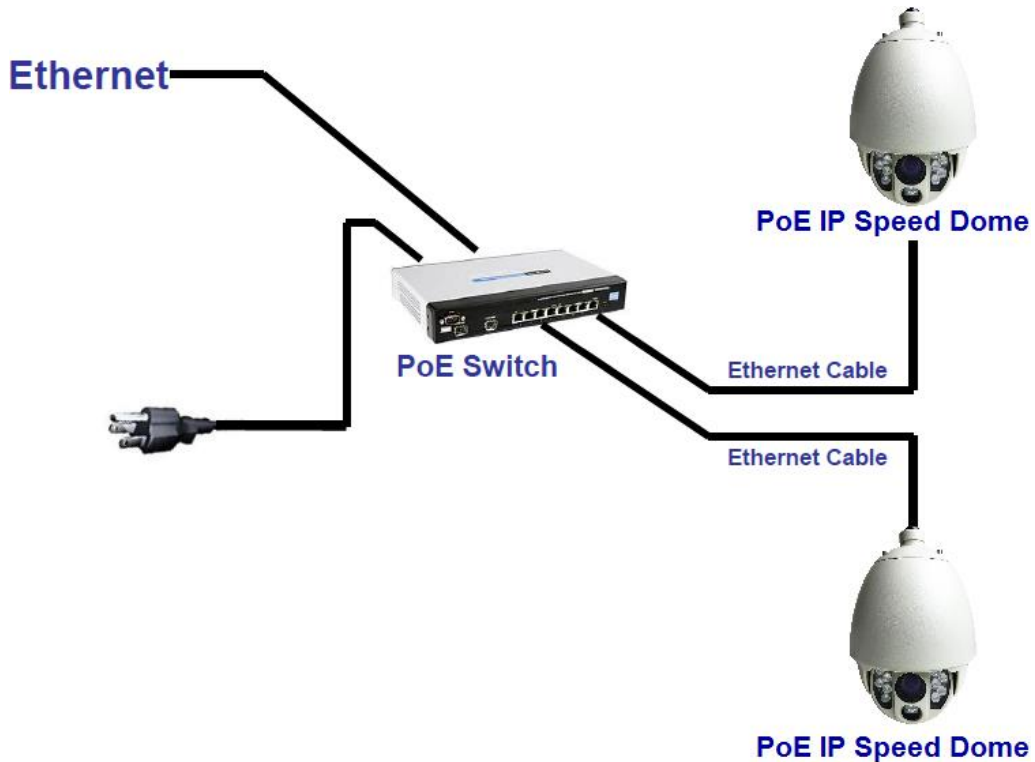
8. PoE Injector Connection Setup

Connect the IP camera with the PoE injector for supplying power to the camera.

a. Connect the DC 56V with the power adaptor and connect the DATA IN with the RJ45 cable from the network host.
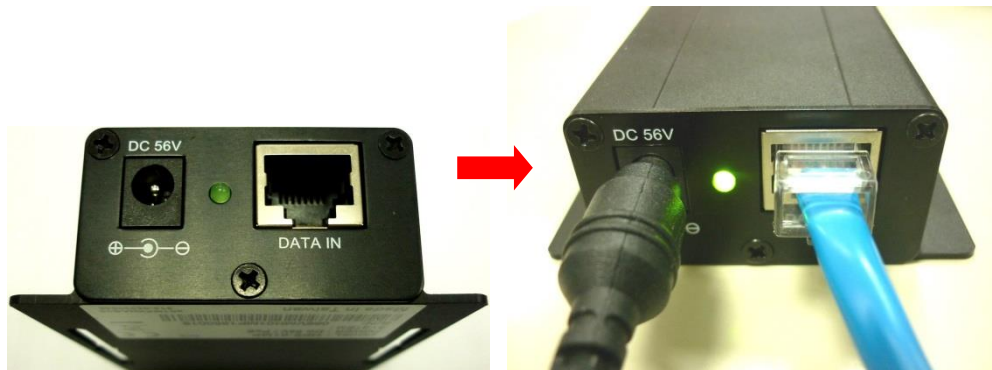
b. Connect the PWR+DATA OUT with the RJ45 cable from the camera.
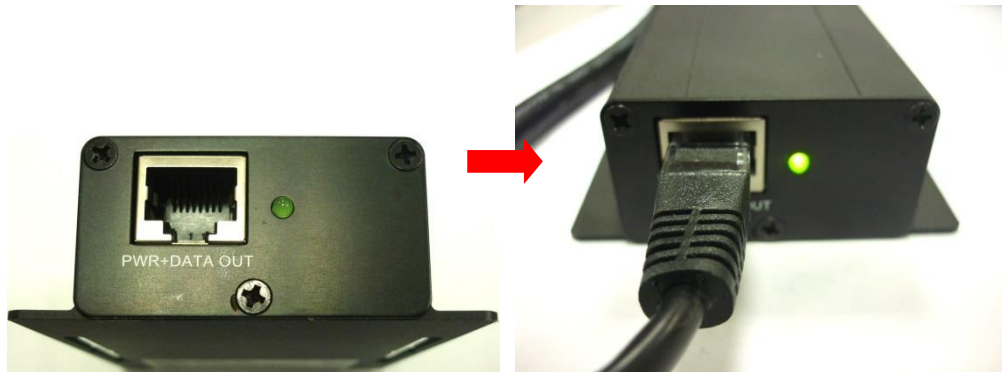
c. If the power goes through successfully, the green signal lights of both ends should light up and the camera will start up.

*IP assignment

1. Open the software **IP Scanner** to assign the IP address of the IP Camera. Find this software in the **Applications** folder in the software CD attached to the product's package.

2. **IP Scanner** supports two languages: This manual is for English version.

3. There are 3 kinds of IP configuration.
    a. Fixed IP (Public IP or Virtual IP)
    b. DHCP (Dynamic IP)
    c. Dial-up (PPPoE)

4. Execute **IP Scanner**

5. For Windows XP SP2 or above, a Windows Security Alert may pop up. Choose the network type based on your surveillance environment, and click on **Unblock**.

6. **IP Scanner** configuration:
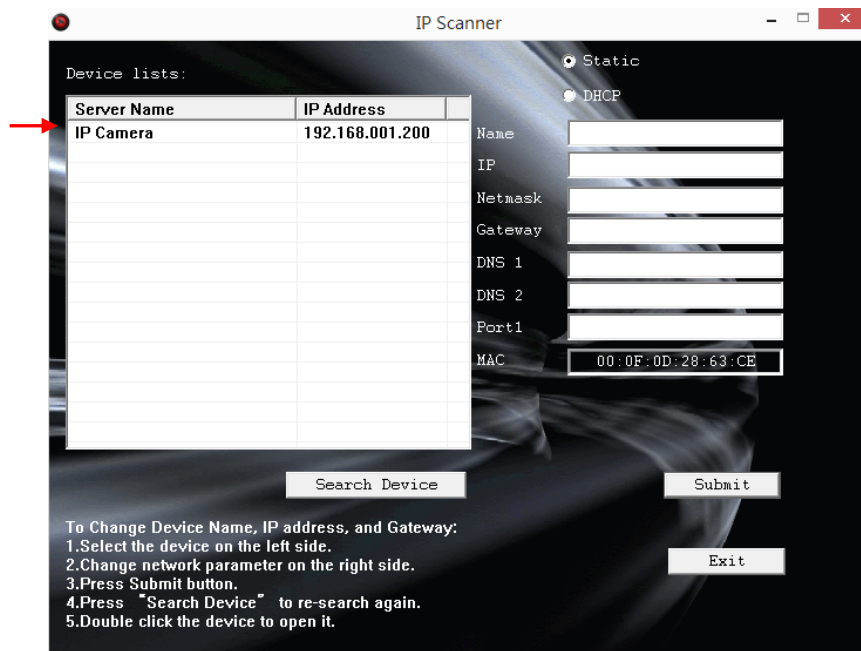
7. **IP Scanner** will search for all the IP Cameras connected on the LAN. The user can click **Search Device** to search again.

8. Click one of the IP Cameras listed on the left side. The network configuration of this IP camera will be shown on the right side once you highlight the device with your mouse. You can change the **name** of the IP Camera to your preference (e.g.: Office, warehouse). Change the parameters and click **Submit**, then click **OK**, it will apply the changes and reboot the device.

9. Please make sure the subnet of the PC IP address and the IP Camera IP address are the same.

The same Subnet:
IP Camera IP address: <u>192.168.1</u>.200
PC IP address: <u>192.168.1</u>.100

Different Subnets:
IP Camera IP address: <u>192.168.2</u>.200
PC IP address: <u>192.168.1</u>.100

To Change the PC IP address:
Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Make sure your IP Camera and PC are in the same Subnet. If not, change the IP Camera subnet or the PC IP subnet accordingly below.
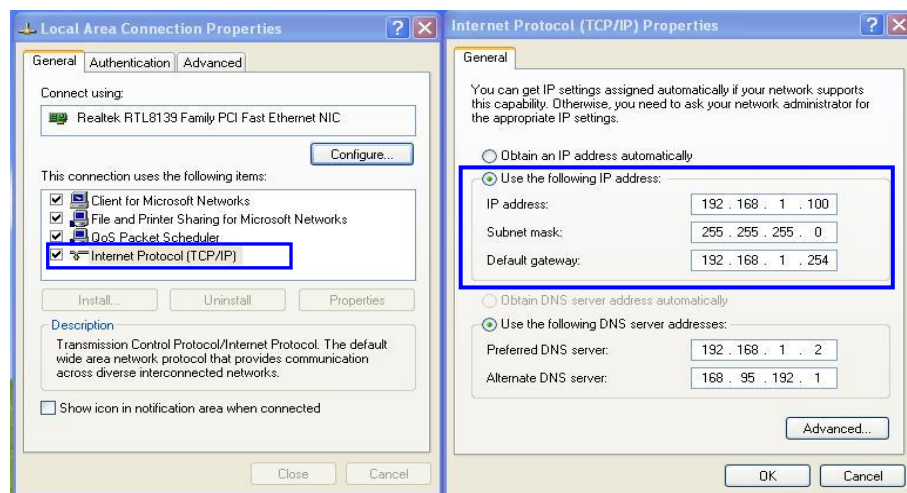
10. To quickly access remote monitoring, left-click the mouse twice on the selected IP Camera listed under **Device list** of **IP Scanner**. A default network browser of the camera control interface will open.
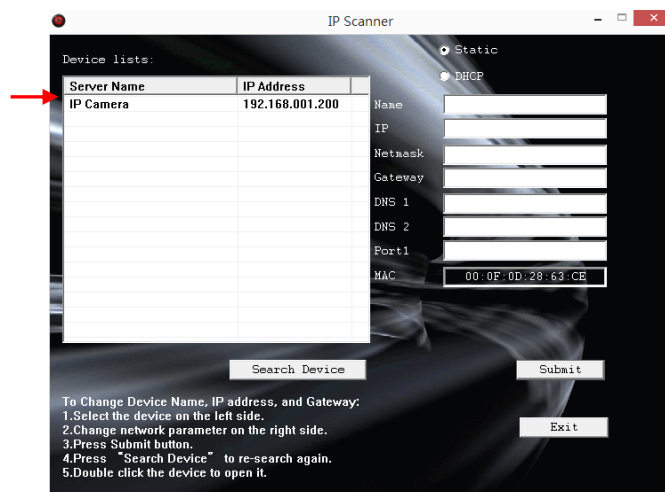
11. Enter **admin** for both Username and Password to gain access.

*Install ActiveX control

1. For users of IE 6.0 or above:

When viewing the camera video for the first time via IE, the browser will ask you to install the **ActiveX** component.

Choose 'Allow',

This web page wants to run the following add-on: 'WATCH_16R ActiveX Control Module' from ' VIDEO SURVEILLANCE '. What's the risk?   Allow ▼ ×

Then choose 'Install'.
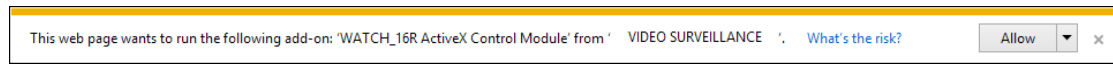
This website wants to install the following add-on: 'WATCH_16R.cab' from 'VIDEO SURVEILLANCE SYSTEM COMPANY'.   What's the risk?   Install ×
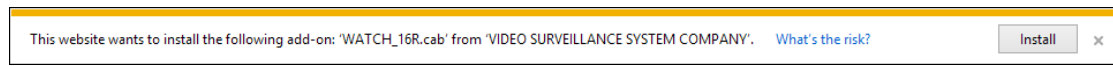
Start installing the   ActiveX component.
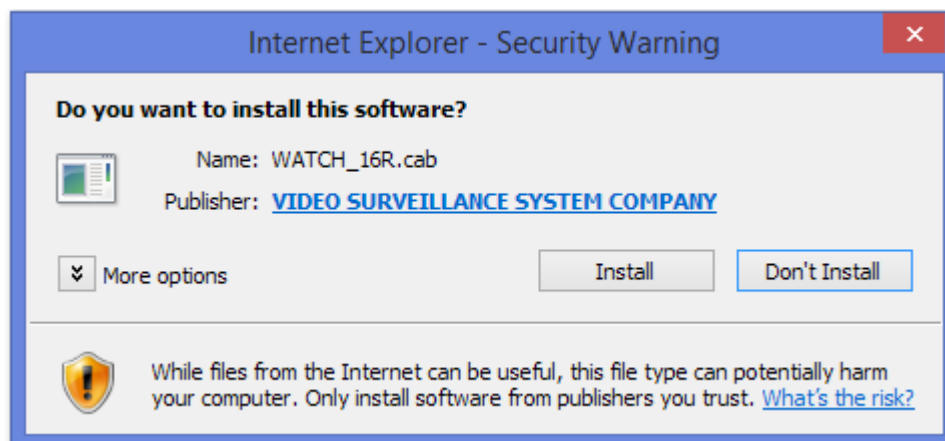
If the installation fails, please check the security settings in the IE browser.

Go to **Start-Up Menu** on the lower left corner of the **Window**s,

select **Control Panel** then Double-click on
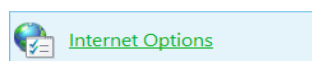
 Internet Options   to access to **Internet Properties** settings.

Starting from **Internet Properties**, proceeding step **A** and **B:**

A. Security → Custom Level → Security Settings → Download unsigned ActiveX controls → Enable or Prompt (recommended).

B. Security → Custom Level → Security Settings → Initialize and script ActiveX controls not marked as safe → Enable or Prompt (recommended).

1

2

3
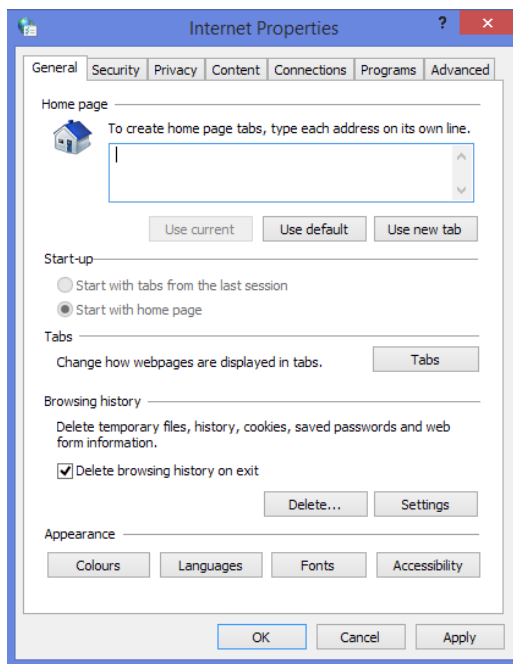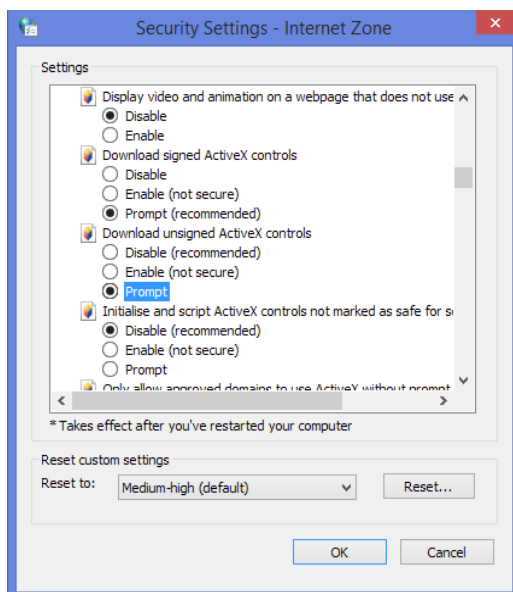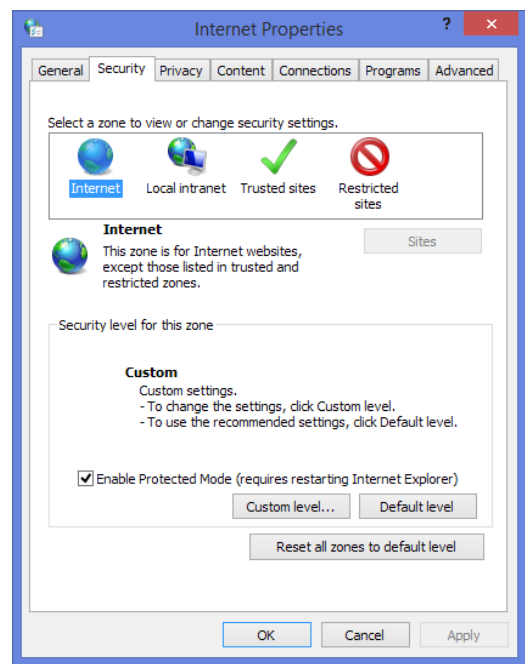
4
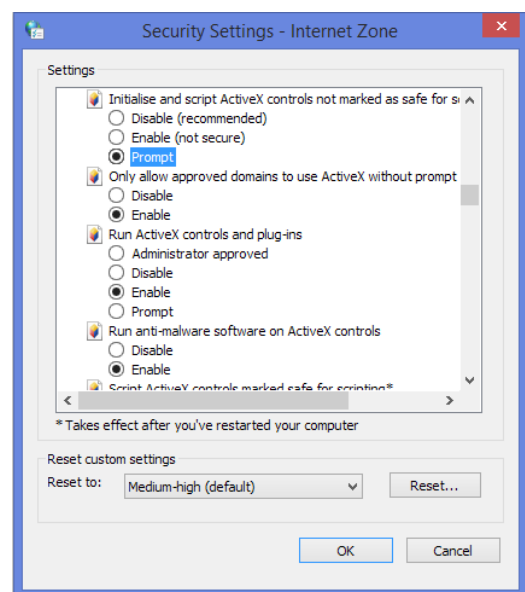
5

When popup the following dialogue box, click **Yes**.
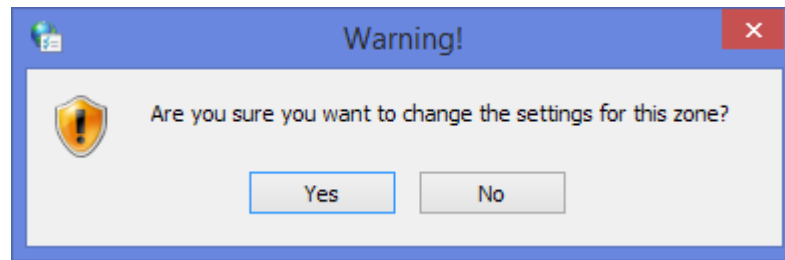
2. You can choose another way:

Go to: IE→Tools → Internet Options… → Security Tab → Trusted sites → Add the IP address and click **OK**.

In the site list you can key one single IP address or a LAN address. For example, if you add **192.168.21.***, all the IP address under **21.*** on the LAN will be regarded as trusted sites.
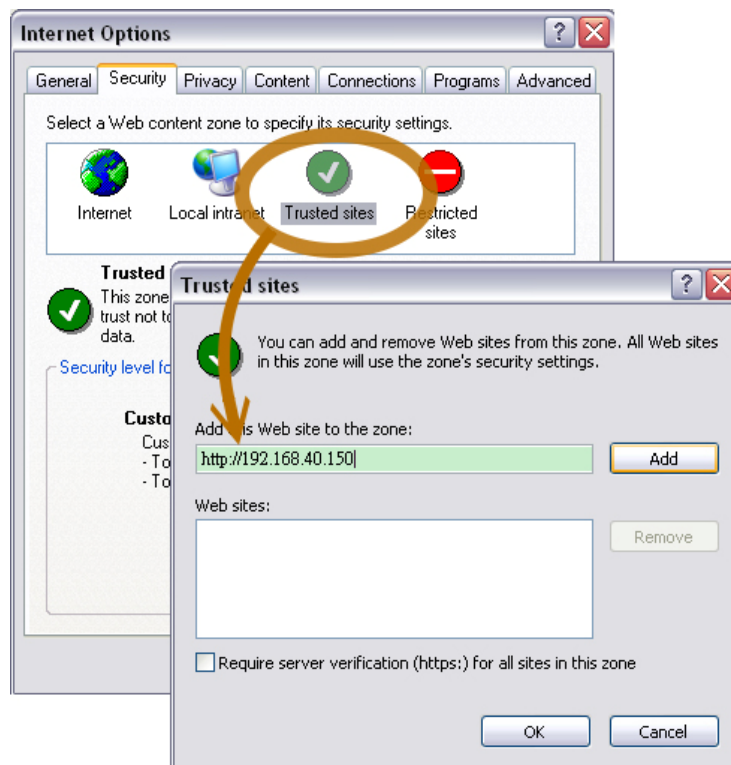
2. To Non-IE Web Browser Users

If you use Firefox or Google chrome to access the IP camera but fails to watch the live video, please follow the steps to install necessary tools:

(The following pictures are based on chrome.)

a. You may see the prompt message as the picture below. Click the link:

Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86).
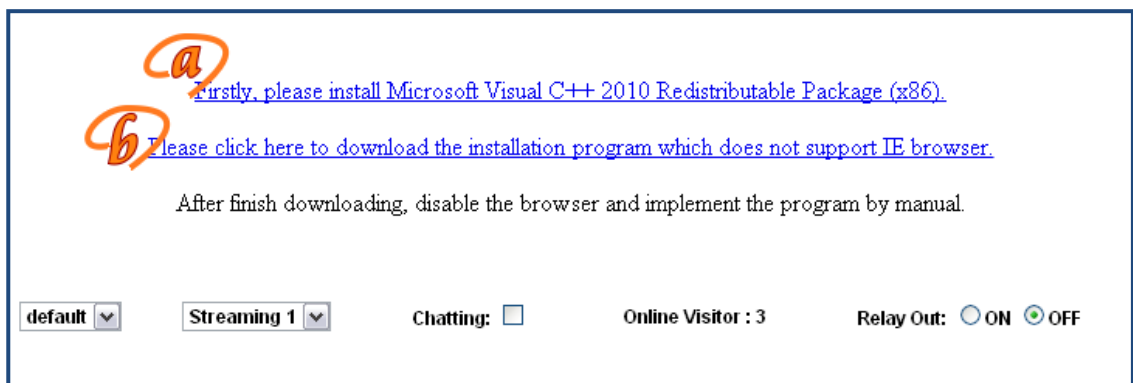
The link will conduct you to the Microsoft official site where you can download the tools. Please select the language and click **download**.
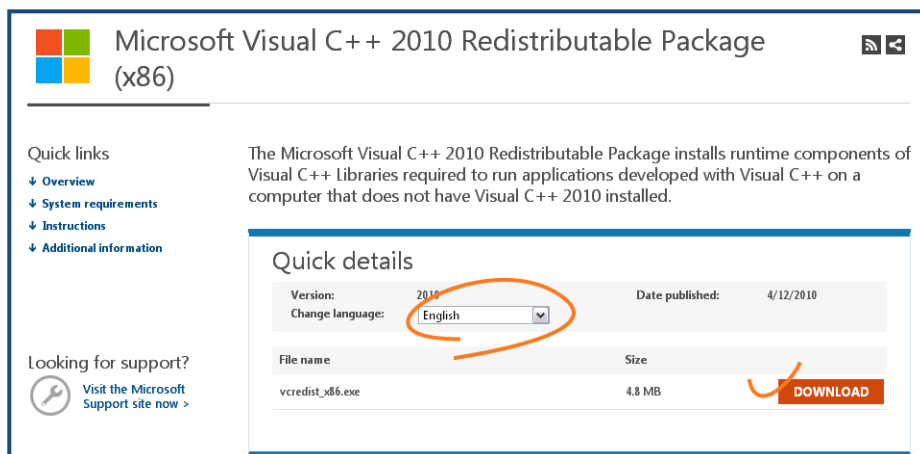
In the pop-up window, please tick the first and the third file as the picture below. Click **Next** to download both **Microsoft .NET Framework 4 Client Profile (Web Installer)** and **Microsoft Visual C++ 2010 Redistributable Package (x64)**.
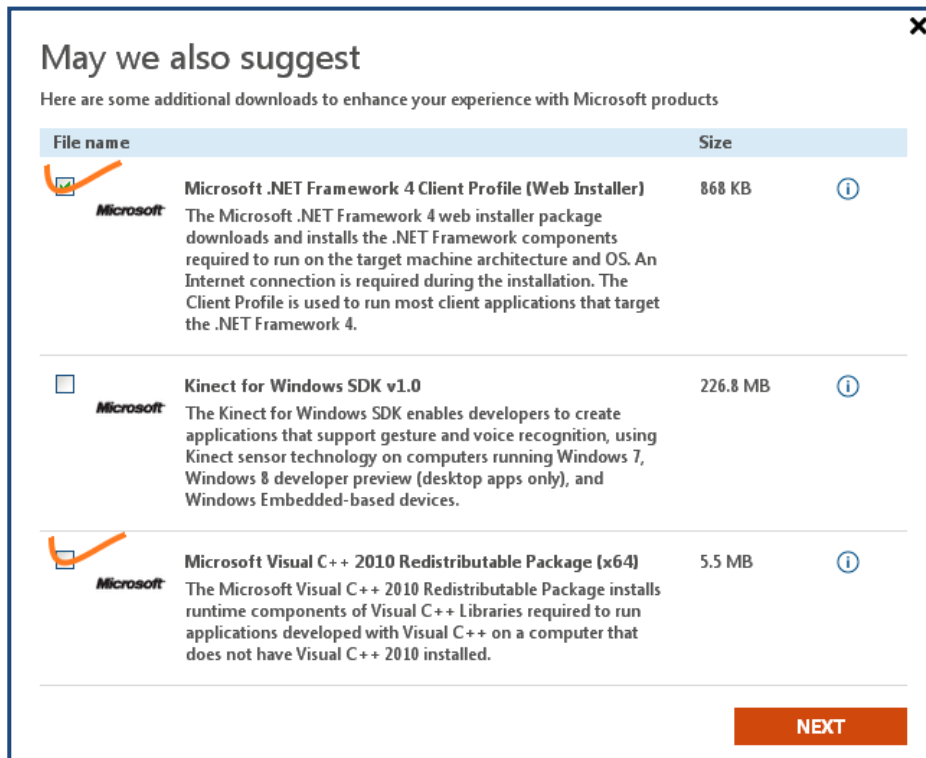
After finishing downloading, execute the two files respectively to install them. The windows may ask you to reboot the PC when the installation is finished.

b. Then, click the second link **Please click here to download the installation program which does not support IE browser** to download Setup ActiveX.

After finishing downloading, execute the files to install **ActiveX**. Then restart the browser.
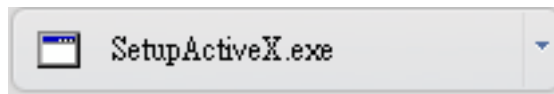
c. If you execute the steps above but still cannot see live video normally, please try the following solution:

Search for the file **np_hoem_x.dll** in your system disk. For Windows XP users, please go to **Start → Search → Search for All files and folders** and key-in **np_hoem_x.dll**. For Windows 7 users, please use the search bar on the top-right of the Windows Explorer.
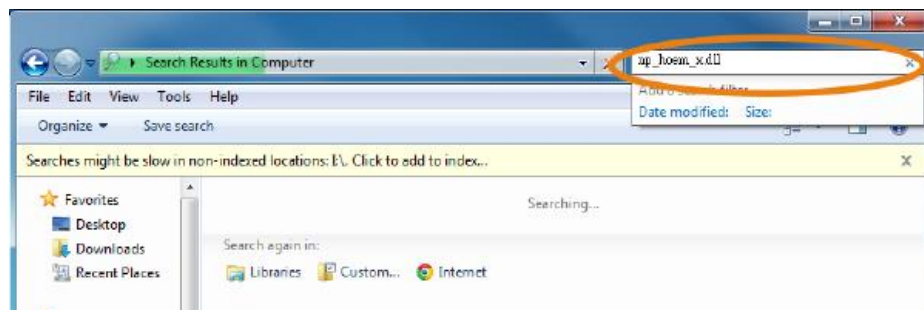
Delete all the files named **np_hoem_x.dll**. They're the **ActiveX** control tools installed in your computer, but the old version of **ActiveX** might not be compatible with the new version of the browser. Therefore, they need to be deleted in order to install the latest **ActiveX** control.
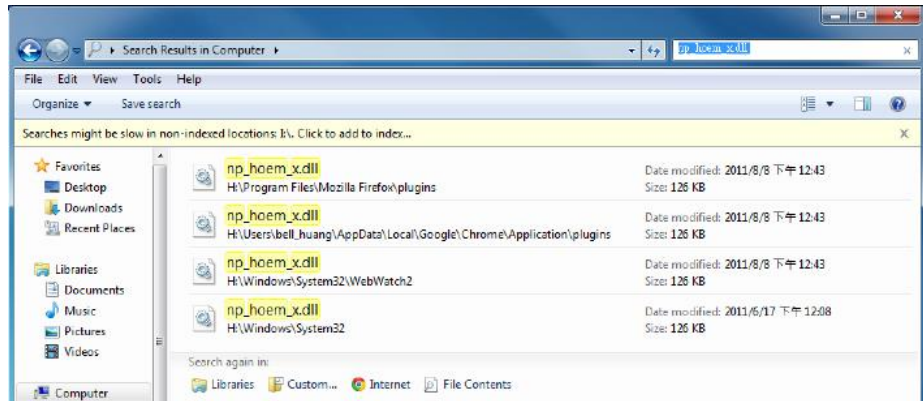
Start your web browser, and repeat the step 2-b: **Download the installation program which does not support IE browser** to download and install **ActiveX**.

Start an IE browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the user name: **admin** and password: **admin**.

A. Live Video

The following interface shows up when the IP Camera access is granted.

Note: Double-clicking on the live screen will change the direction of the view.

1. Get into the administration page.

2. Video Snapshot.

3. Show the system time, video resolution, and video refreshing rate.

4. Full Screen: Clicking on the button to change the view to full screen mode. Press **Esc** or double-click the view again for returning to normal view.

5. Adjust image: Select the video scale from default to 1/2x, 1x, 2x.

6. Select video streaming source (If the streaming 2&3 settings are both closed in 'Video Setting', this option will not appear here.)

7. Tick on **Chatting** for enabling two-way audio, then use microphone connected to the PC to talk to the Camera side

8. Shows how many people are connected to this IP camera.

   Right-Click the mouse on the video, a small menu will pop up.

Snapshot
Record Start
Mute
Full Screen
Zoom
FrameBufmSec ▶	✔ Auto
	Normal
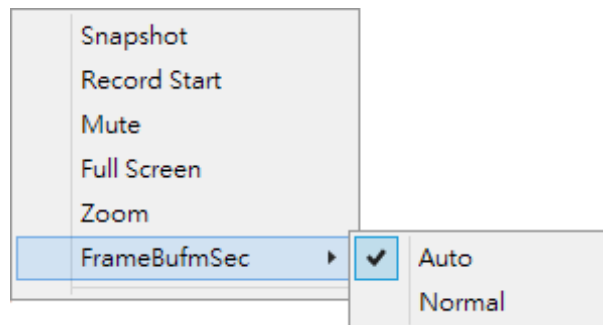
1. Snapshot: Save a JPEG picture.

2. Record Start: Record the video in the local PC. It will ask where to save the video. To stop recording, right-click again and Select **Record Stop**.
   The video format is AVI. Use Microsoft Media Player to play the recorded file.

3. Mute: Turn-off the audio. Click again to turn on it.

4. Full Screen: Full-screen mode.

5. Zoom: Enable the zoom-in and zoom-out functions. First, select **Enable digital zoom** option within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.
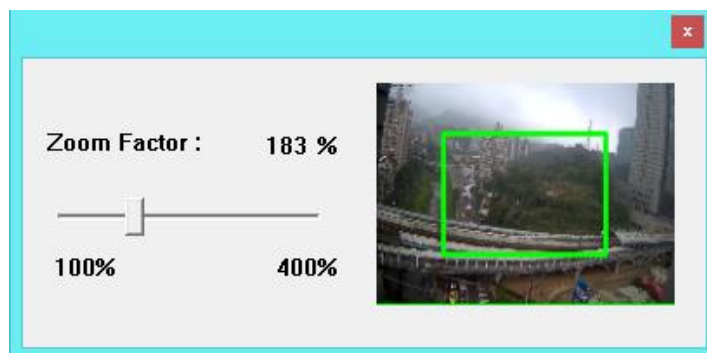
6. Frame Buffm Sec: This function aims to build a temporary buffer to accumulate several video frames in a LAN network environment. It can make video streaming smooth when the network speed is slow. Select **Auto** to allow this function automatically help fix the streaming performance whenever the video happens to be lagging. Select **Normal** to play the video data based on the current network streaming performance. (Note: the lagging of the video displayed will not be seen as a result of the actual video data)

B. Performing PTZ

1. Move the camera view with 8-direction arrows. The bigger value selected in the faster each click with the arrow traveling time will be.

2. If you click on the icon, the camera will go back to its initial position.

3. Use icons to zoom-in/out, and icons to adjust focus.

C. Setting a Preset Point
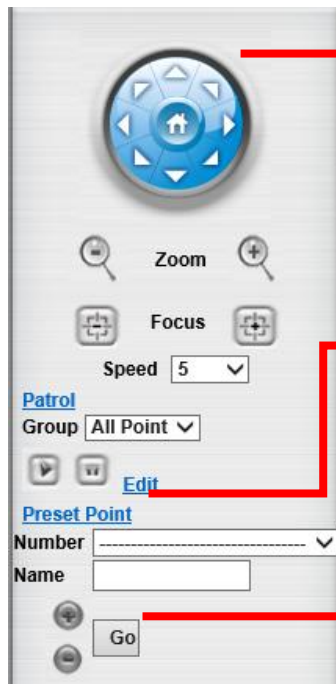
1. After clicking on "**Preset Point**", use the 8-direction arrows, **Zoom**, and **Focus** function to shift the camera view.

2. After you adjust the camera view to where you want to set the preset point, select a number from the "**Preset Point**" drop-down menu, key-in a name in the "**Name**" column, and click the ⊕ button. After this, the point name you set will be added to the point list.

3. When you select that point from the drop-down menu and click "**Go**", the camera view will move in a pattern of Preset Points you have set.

D. Setting a Patrol Group

1. Click on "**Patrol**". The Group menu will appear right below.

2. A window will pop up.
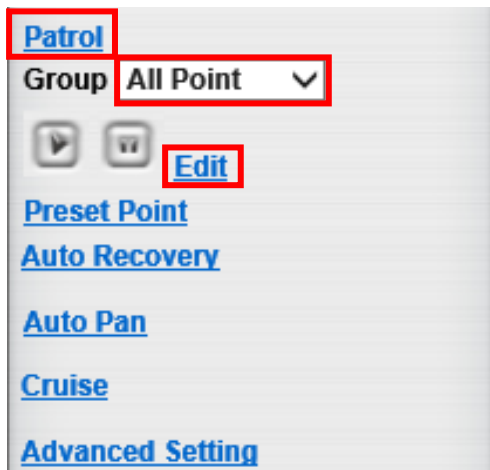
To build a new group, select a number under **Patrol** from the "**Group**" drop-down list, and click "**Edit**".

Key-in the **Group Name**, and select how long the patrol will last in **Run Period**.

3. If you select "**Always**" in **Run Period**, the camera will keep patrolling until it is stopped manually. The longest patrolling time lasts for 240 minutes.

For each number in the list, select a **Preset Point**, the interval of seconds for **Stop Time** on that point and the auto focus/manual focus adjustments.

5. For starting patrol, select one group from the list, and press . The camera will move according to the patrol route and dwell time set.

4. If you select manual focus in **Focus Mode**, remember to focus clearly toward the view point when setting up that preset point.

After completing the setting, click "**Save**" and close the patrol group settings page. The group name set will be added to the patrol list.

6. If you select "**All Point**" the camera will move to every preset point in sequence. To edit a patrol group, select it from the drop-down list and click "**Edit**".

You can customize up to 8 groups.

E. Auto Recovery

In case there are no settings for "**Pan**" and "**Patrol**", the settings made here recover the viewing angle of the IP camera automatically.

1. Pending Time: Varies from No Action, 10~50 seconds to 1~10 minutes.

2. Action: Different actions can be executed from other settings.

F. Setting Auto Pan

The **Auto Pan** function allows the camera to patrol between two preset points. After clicking on "**Auto Pan**", select the **Start Point** and **End Point** locations from the drop-down lists to set a preset position pattern for the camera to follow.

1. Select how long **Auto Pan** lasts. If you select "Always", the camera will keep performing the **Auto Pan** actions until someone stops it manually.

2. Set **Stop Time**, **Focus Mode**, **Direction**, and **Pan Speed**.

3. Press to start **Auto Pan**. Press to pause.

Note: If you select **Manual Focus** from **Focus Mode**, please adjust the focus clearly toward the view point when setting up that preset point. For **Auto Focus**, set the **Stop Time** longer, the camera might need some seconds to focus.

G. Cruise

A function for users to record movement patterns which can be played back right after.

33
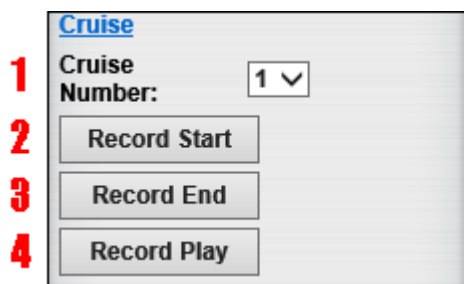
1. **Cruise Number:** Create up to 8 types of different movements assigned with 8 numbers. For example, when you click on Record Start under Cruise Number 1, the movement pattern you create will be assigned to number 1. Same method applies to other numbers.

2. **Record Start:** Click on [Record Start] button to begin. Press

   8-direction arrows to move camera view in a pattern of preset points, bear in mind that every movement made with your camera view will be recorded.

3. **Record End:** Once you have finished making your preset points in Record Start, click on [Record End] button to stop.

4. **Record Play:** Click on [Record Play] button to view the camera move in movements you have recorded. Choose different group of numbers from **Cruise Number** to perform at a time.

H. Advanced Setting

Other settings for the camera.

Advanced Setting
1 Home Position: 13:
2 PTZ Control: Continuous
3 DO: ● ON ○ OFF
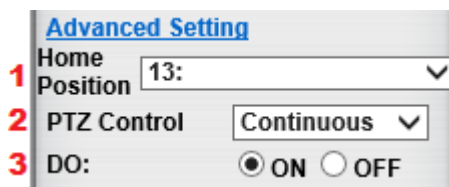
1. <u>**Home Position:**</u> For setting the home position of the IP Camera.

2. <u>**PTZ Control:**</u> In "**Continuous**" mode, when controlling the 8-direction arrows, press and hold the button to let the camera lens move smoothly. In "**Step by Step**" mode, when controlling the 8-direction arrows, click on button to let the camera lens move one step.

3. <u>**DO:**</u> Tick the "ON" box to trigger the digital output for testing. Tick "Off" to stop triggering.

v. Camera Configuration

* System

Click ⚙ to get into the administration page. Click 🎞 to go back to the live video page.

I. System Information

a. Server Information

Set up the camera name, language, and the camera time.

1. **Server Name:** This is the Camera name. This name will be shown on the IP Scanner.

2. **LED Indicator:** Turn on/off the LED indicator on the camera.

3. **Language:** English and other languages can be selected. When a language preference is selected, the following dialogue box will pop up to confirm the change.
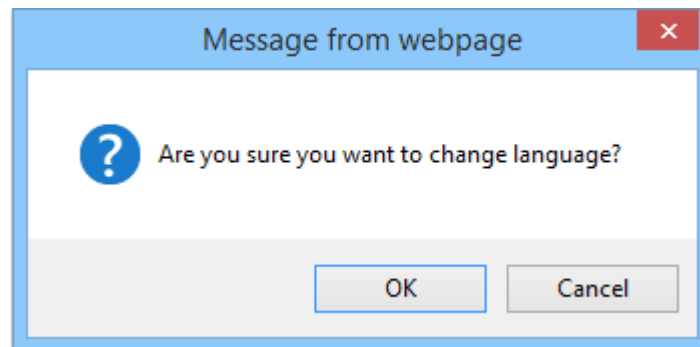
b. **OSD Setting**

Select a position where the date & time stamp / text are displayed on the screen.

Click **Text Edit** for editing the OSD content, including text size and transparency. Click the Upgrade button to apply the settings.

c. **Time Setting**

Select between **NTP**, **Synchronize with PC's time**, **Manual**, **The date and time remain the same** for setting the server time.

d. Askyviewer Pro P2P (Optional)

Install **Askyviewer Pro App** on your mobile phone to access **P2P** operations which allow users to watch IP Camera live view on their mobile phones. Once the installation is done, either enter the **P2P ID** from the IP camera web browser, or simply scan the **QR Code** to help you log in to your IP camera through **Askyviewer Pro App** and watch the live view

For more operating details of the **Askyviewer Pro for P2P**,please click on the icons below (**IOS Version** & **Android Version**) with your mouse to directly open the manual page.
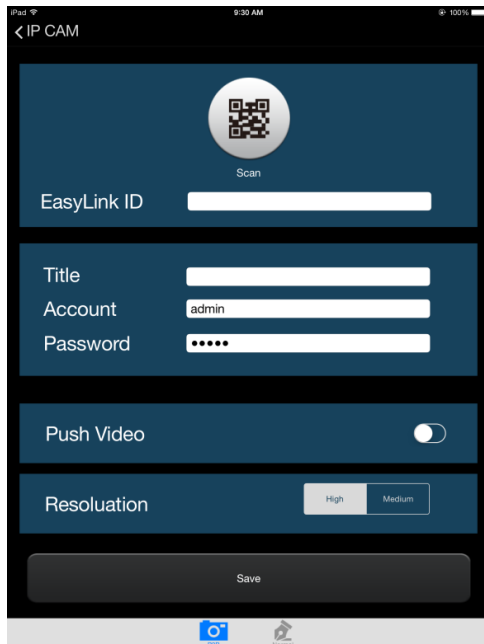
IOS Version   Android Version
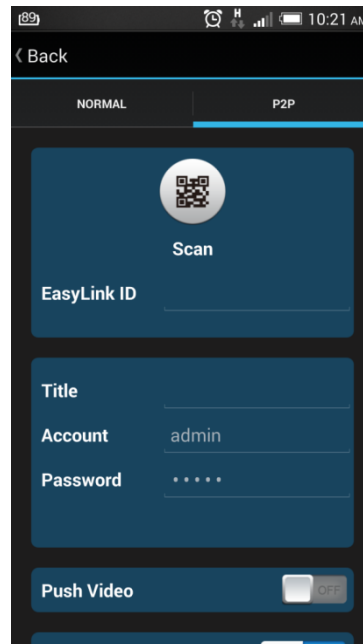
Note: Your smartphone must be equipped with a camera and featured with a QR code scanner application.

II. User Management

The IP Camera supports three different users: **administrator**, **general**, and **anonymous** user.

1. Anonymous User Login

Select **Yes** for allowing access to watch live video of the IP camera without having to enter username and password. Yet when entering the configuration page of the IP camera, the system will do otherwise. Select **No** for requiring a username and login to access the camera.

2. Universal Password

Select **Yes** for allowing login to this IP camera by universal password. Please refer to **Universal Password** chapter for more explanations. Select **No** for disabling universal password.

3. Add user

Type the user name and password, then click **Add/Set**. The guest user can only browse live video page and is not allowed to enter the configuration page.

Click "Edit" or "Remove" in the user list to modify them. The system will ask you to key-in the password in the pop-up window before you edit the user information.

III. System update

a. To update the firmware online, click **Browse…** to select the firmware. Then click **Upgrade** to proceed.

b. Reboot system: re-start the IP camera

c. Factory default: delete all the settings of this IP camera.

d. Setting Management: The user can download the current settings to PC, or upgrade from previous saved settings.

1. **Settings download**
   Right-click the mouse button on Setting Download → Select **Save AS…** to save current IP Camera settings in PC → Select saving directory → Save

2. **Upgrade from previous settings**
   Browse → search previous settings → open → upgrade → Settings update confirm → click **index.html**. for returning to the main page.

*Network

Click ![gear icon] to get into the administration page. Click ![reel icon] to go back to the live video page.

I. IP Settings

IP Assignment

The IP Camera supports DHCP and static IP.

a.   <u>DHCP:</u> The IP Camera will get all the network parameters automatically.

b.   <u>Static IP:</u> Type-in the IP address subnet mask, gateway, and DNS.

IPv6 Assignment

By enabling DHCPv6 you can configure the following IPv6 address settings:

- <u>Manually setup the IPv6 address:</u> Key-in the Address, Gateway, and DNS.

- <u>DHCPv6:</u> If you have a DHCPv6 server, enable it to assign the IPv6 automatically. The assigned IP address will be displayed beside the column.

- **Automatically generated IPv6 Address:** Indicates a virtual IPv6 address generated automatically by the IP camera. This virtual IPv6 address cannot be used on WAN.

  To use IPv6 address to access the IP camera, open the web browser, and key-in the **[IPv6 address]** in the address bar. The [ ] parentheses mark is necessary.
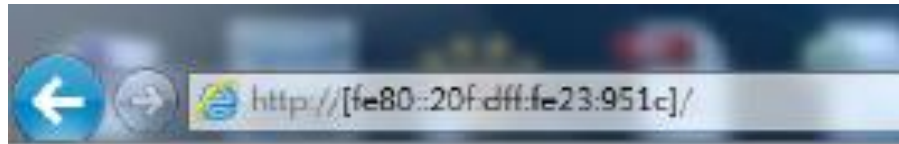
a. Port Assignment: The user might need to assign a different port to avoid conflicts when setting up the IP.

b. W
   eb Page Port: setup the web page connecting port and video transmitting port (Default: 80)

c. HTTPs Port: setup the https port(Default: 443)

UPnP

This IP camera supports UPnP, if this service is enabled on your computer, the camera will automatically be detected and a new icon will be added to **My Network Places**.

UPnP Port Forwarding : Enable UPnP Port Forwarding for accessing the IP Camera from the Internet; this option allows the IP Camera to open ports on the router automatically so that video streams can be sent out from a LAN.

There are three external ports for being set: **Web Port**, **Http Port** and **RTSP** port. To utilize of this feature, make sure that your router supports **UPnP** and is activated.

*Note: UPnP must be enabled on your computer.*
Please follow the procedure to activate UPnP:
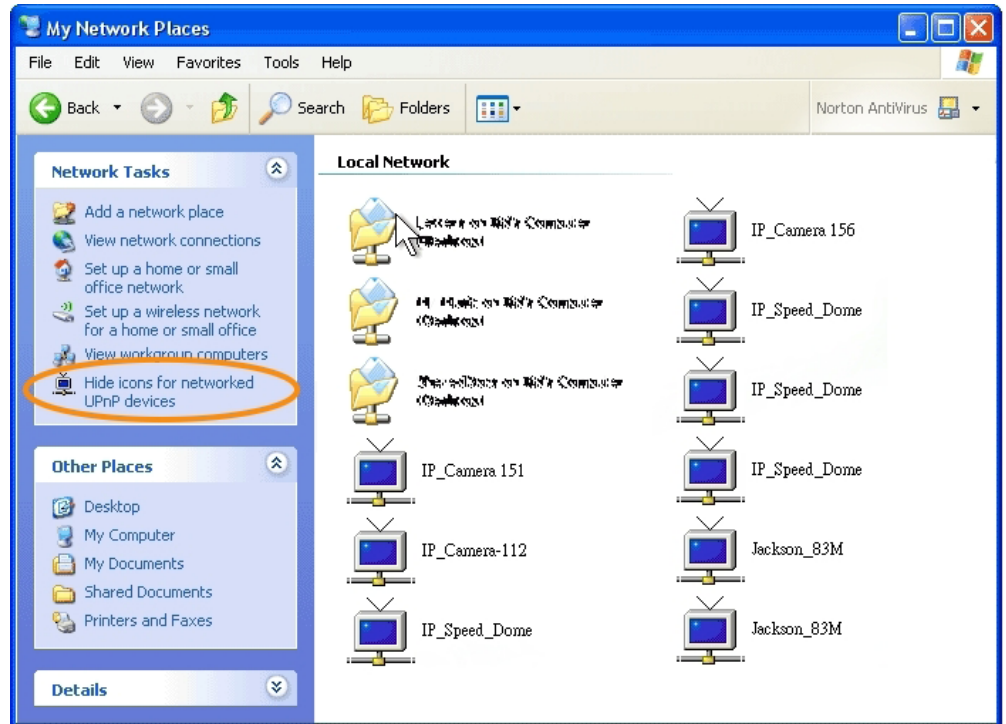
<Approach 1>

1.   open the **Control Panel** from the **Start Menu**
2.   Select **Add/Remove Programs**
3.   Select **Add/Remove Windows Components** and open **Networking Services** section
4.   Click **Details** and select **UPnP** to setup the service.
5.   The IP device icon will be added to **My Network Places.**
6.   The user may double click the IP device icon to access IE browser

<Approach 2>

1.   Open My **Network Space**
2.   Click **Show icons for networked UPnP devices** in the tasks column on the left of the page.
3.   Windows might ask your confirmation for enabling the components. Click **Yes**.
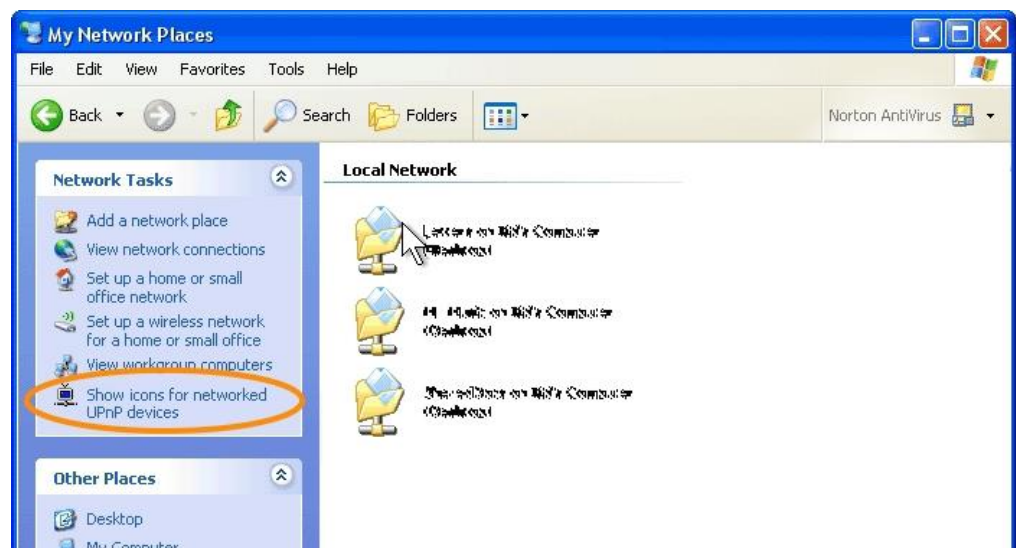
4. Now the IP device is displayed under the LAN. Double-click the icon to access the camera via web browser. To disable the UPnP, click **Hide icons for networked UPnP devices** in the tasks column.

RTSP setting

If you have a media player that supports RTSP protocol, you can use it to receive video streaming from the IP camera. The RTSP address can be set for two streamings respectively.

1. <u>RTSP Server</u>: enable or disable
   Disable means everyone who knows your camera IP Address can link to your camera via RTSP. No username and password are required.

Under **Basic** and **Digest** authentication mode, the camera asks for a username and password before allows access.

The password is transmitted as a clear text under basic mode, which provides a lower level of security than under **digest** mode.

Make sure your media player supports the authentication schemes.

2. RTSP Port: setup port for RTSP transmitting (Default: 554)

3. RTP Start and End Port: in RTSP mode, you can use TCP and UDP for connecting. TCP connection uses RTSP Port (554). UDP connection uses RTP Start and End Port.

Multicast Setting (Based on the RTSP Server)

Multicast Setting (Based on the RTSP Server)		
Streaming 1:		
IP Address:	234.5.6.78	[224.3.1.0 ~ 239.255.255.255]
Port:	6000	[1 ~ 65535]
TTL:	15	[1 ~ 255]
Streaming 2:		
IP Address:	234.5.6.79	[224.3.1.0 ~ 239.255.255.255]
Port:	6001	[1 ~ 65535]
TTL:	15	[1 ~ 255]
Streaming 3:		
IP Address:	234.5.6.80	[224.3.1.0 ~ 239.255.255.255]
Port:	6002	[1 ~ 65535]
TTL:	15	[1 ~ 255]

Multicast is a bandwidth conservation technology. This function allows several users to share the same packet sent from the IP camera.

For using Multicast, appoint here an IP Address and port. TTL means the life time of packet, the larger the value is, the more users can receive the packet.

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

ONVIF

1. Choose your ONVIF version and settings.
   Under ONVIF connection, the video will be transmitted by RTSP. Be sure to enable the RTSP server in IP setting, otherwise the IP Camera will not be able to receive the video via ONVIF.

2. Security
   By selecting **Disable**, the username and password are not required for accessing the camera via ONVIF. By selecting **Enable** the username and password are necessary.

3. RTSP Keepalive:
   When the function is enabled, the camera checks once in a while if the user who is connected to the camera via ONVIF is still connected. If the connection has been broken the camera will stop transmitting video to the user.

Bonjour

This function allows Apple systems to connect to this IP camera. On **Bonjour Name** key-in the name here.

The web browser **Safari** also has a Bonjour function. Tick **Include Bonjour** in the bookmark setting, for the IP camera to appear under the bonjour category. Click the icon to connect to the IP camera.

The Bonjour function on Safari browser doesn't support HTTPS protocol. If on the camera you select **https**, the camera will appear on Safari's bookmarks but it cannot be accessed.

Take as a reference the following image:
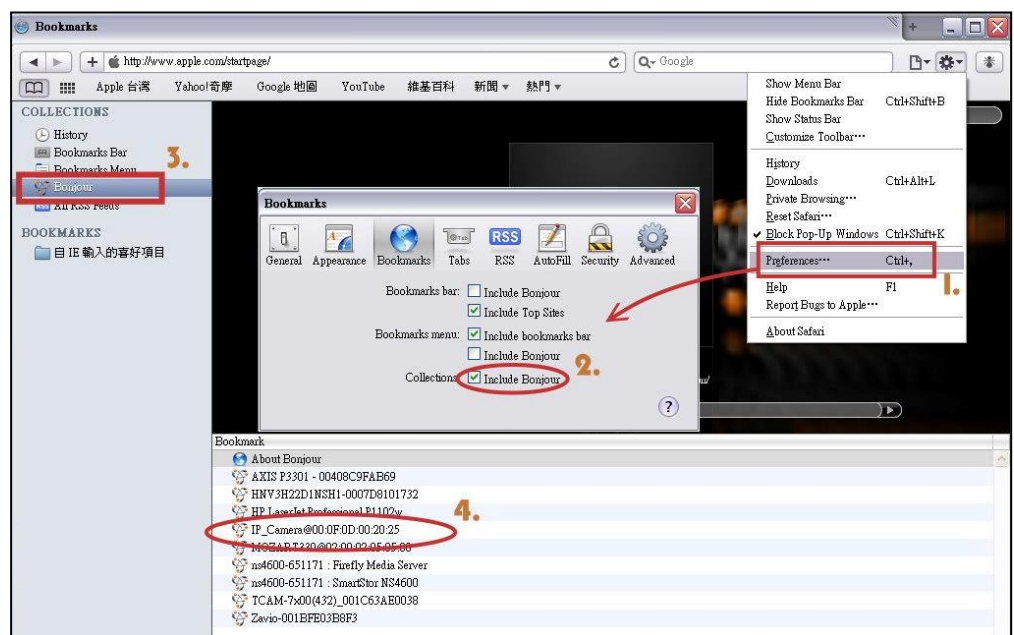
LLTD

If your PC supports LLTD, enable this function for allowing checking the connection status, properties, and device location (IP address) in the network map.

If the computer is running Windows Vista or Windows 7, you can find LLTD through the path:
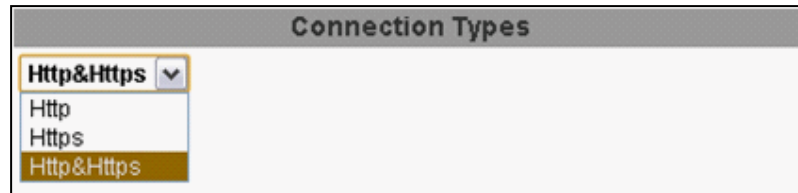
Control Panel → Network and Internet → Network and Sharing Center → Click **See full map**.
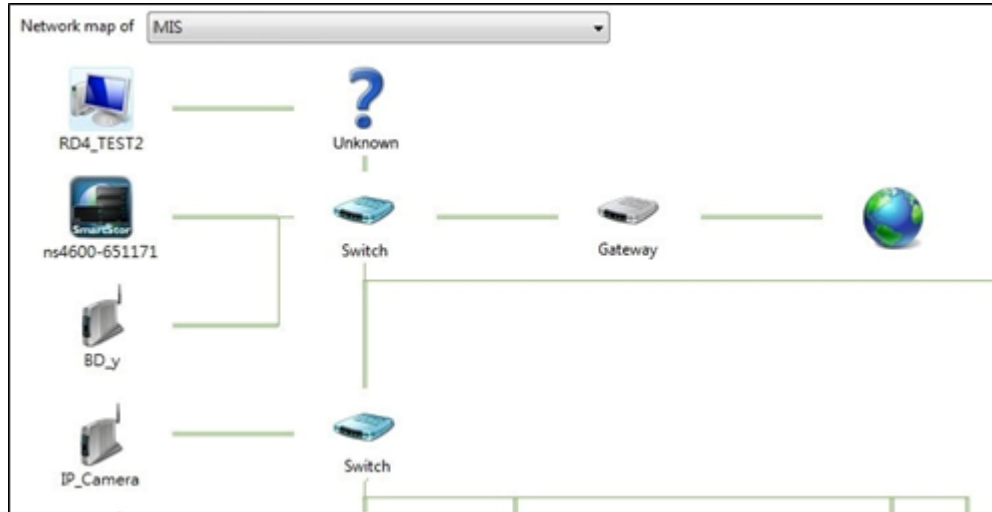
II. Advanced

a. Https (Hypertext Transfer Protocol Secure)

When the users access cameras via Https protocol, the transmitted information will be encrypted, increasing the security level.
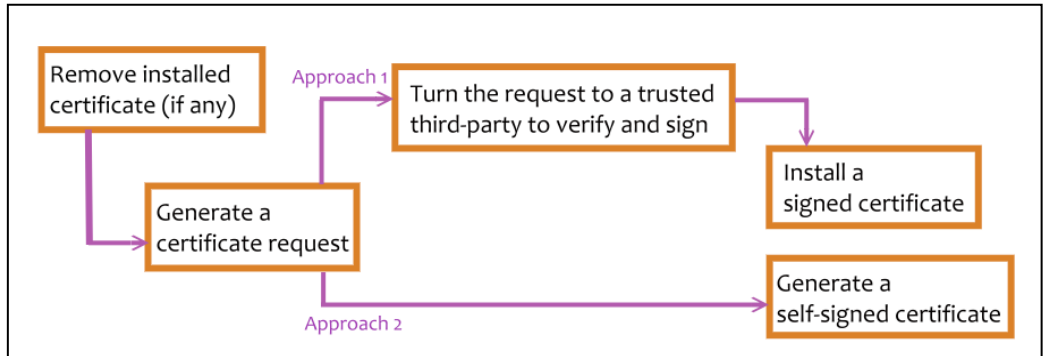

Select the connection type:

• Http: the user can access the camera via the Http path but cannot access it via the Https path.

• Https: the user can access the camera via the Https path but cannot access it via the Http path.

• Http & Https: Both the Http and Https path can be used to access the camera. When you change the connection type settings, it may cause connection error or disconnection error if you switch the protocol directly. Therefore, **Http & Https** mode is necessary. If you want to change from Http to Https, please switch to **Http & Https** mode first, and then switch to **Https** mode and vice versa.

The Https protocol has a verifying mechanism. When the user access a website via Https, the browser will check the certificate of that domain and verify its trustiness and security.

Certificate generation process:

• Remove the existing certificate: Before you generate a new certificate, please remove the installed one. Select the **Http** connection type and click **Remove**. If a dialog box pops up to ask you to confirm, click **Yes**.

• Created Request: Fill-in the following form and click **apply**.

• After generating a certificate request, if you choose to turn it and verified by a trusted third-party, click **Content** and copy all the request content.
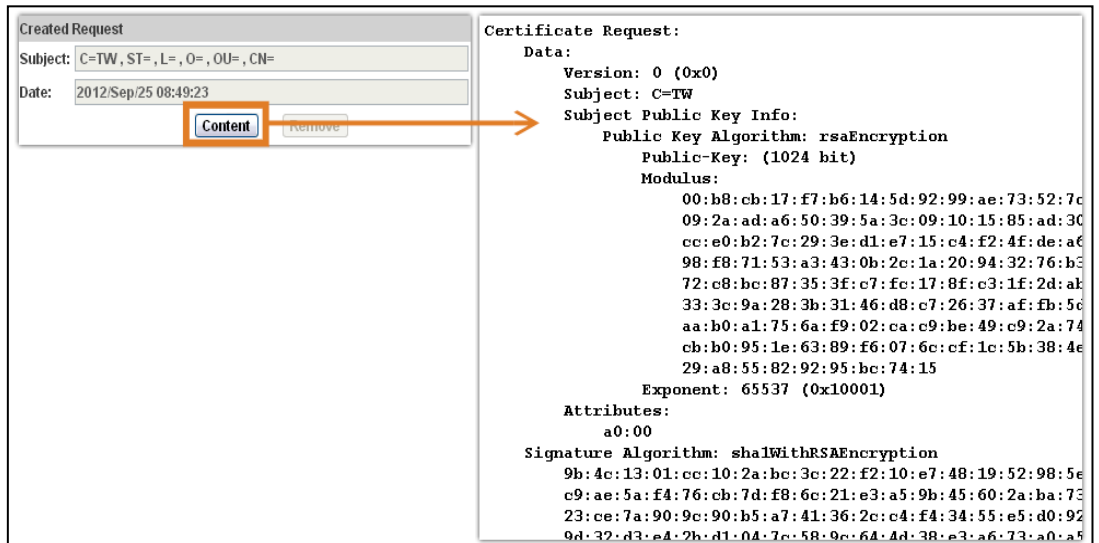
• According to the certificate source, there are two ways to install the certificate:

If you had sent the certificate request for signing and receiving a signed certificate, click **browse** and find the certificate file in your computer. Click **Apply** to install it.

If you choose to generate a self-signed certificate, fill-in the following forms and set the validity day, click **Apply** to finish installed it.

After finishing the installation, click on **Content** to call out and check the certificate content.


To use Https to access the camera, open your browser, and key-in **https:// (IP address)/** in the address bar. Now your data will be transmitted via encrypted communications. The browser will check your certificate status. It might show the following warning message:
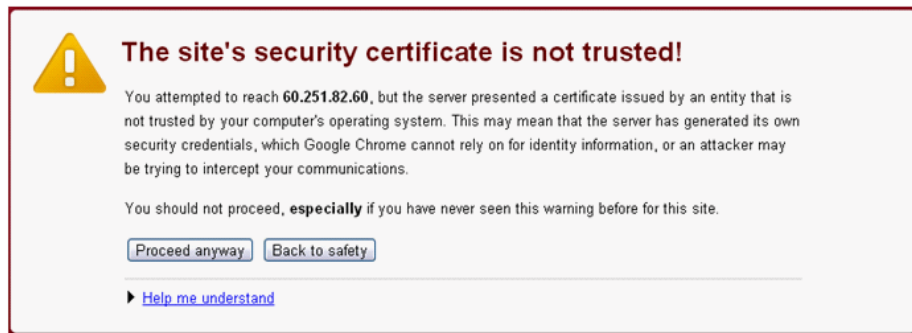
Meaning that certificate is self-signed or signed by a distrusted institution. Click **Proceed anyway** for continuing to the camera page.

b. SNMP (Simple Network Management Protocol)

1. **SNMPv1** or **SNMPv2**: write the name of both **Write Community** and **Read Community**.
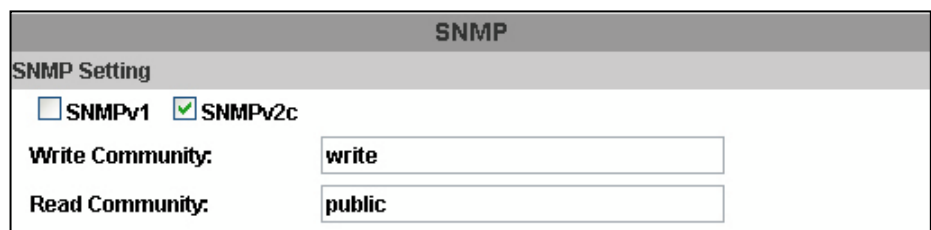
2. **SNMPv3**: Set the Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of Write mode and Read mode.

3. Enable SNMPv1/SNMPv2 Trap for detecting the Trap server. Please set what event needs to be detected.

- Cold Start: The camera starts up or reboots.

- Setting changed: The SNMP settings have been changed.

- Network Disconnected: The network connection was broken down (The camera will send trap messages after the network is connected again).

- V3 Authentication Failed: A SNMPv3 user account tries to get authentication but failed. (Due to incorrect password or community)

- SD Insert / Remove: A Micro SD card is inserted or removed.

c. Access list:

Enable IP address filter for setting the IP addresses which allows or denies this camera. There are two options: **single** and **range**.

d. QoS/DSCP(Quality of Server/Differentiated Services Code-point):

DSCP specifies a simple mechanism for classifying and managing network traffic; and provide QoS on IP networks. DSCP is a 6-bit in the IP header for packet classification purpose. Please define it for **Live Stream**, **Event / Alarm and Management**.

e. IEEE 802.1x:

IEEE 802.1x is an IEEE standard for port-based Network Access Control. It provides an authentication mechanism to a device on a LAN or WLAN.

The EAPOL protocol support service identification and optional point to point encryption over the local LAN segment.

supplicant   Authenticator   Authentication
               (switch)   server

Please check what version of the authenticator and authentication server is supported. This camera supports EAP-TLS method. Please enter the ID, password issued by the CA, then upload related certificates.

III. PPPoE & DDNS

a. PPPoE: Select **Enabled** to use PPPoE. Key-in the the Username and password for ADSL connection.

Send mail after dialed: When connected to the internet, the camera will send a mail to a specific mail account.

b. DDNS (camddns example):

1. Enable this service
2. Key-in the username.
3. IP schedule update. Default: 5 minutes
4. Click **Apply**.

DDNS Status

(1) **Updating:** Information update

(2) **Idle:** Stop service

(3) **DDNS registration successful, can now log by http://<username>.ddns.camddns.com:** Register successfully.

(4) **Update Failed, the name is already registered:** The user name has already been used. Please change it.

(5) **Update Failed; please check your internet connection:** Network connection failed.

(6) **Update Failed, please check the account information you provided:** The server, user name, and password may be wrong.

IV. **Server settings**

There are three server types available: **Email**, **FTP** and **SAMBA**. Select the item for display detailed configuration options. You can configure either one or all of them. To send out the video via mail of FTP, please set up the configuration first.

Server Settings		
Mail Setting		
Login Method:	Account ▾	
Mail Server:		
Username:		
Password:		
Sender's Mail:		
Receiver's Mail:		
Bcc Mail:		
Mail Port:	25	(Default 25)
☐ Secure Connect:	◉ TLS ○ SSL	
		Test
FTP Setting		
Samba (Network storage)		
		Apply

FTP

To send out the video via mail of FTP, please set up the configuration.

Samba

Select this option to send the media files via a neighbor network when an event is triggered.

Click **Apply** to save the setting, then use **Test** button to test the server connection. A message box will tell you **OK!** if it works, and a test document will be created in the location.

If the test failed, check the sharing setting of your location folder. The folder properties must be **shared** and the permissions must be **Full Control** as the picture.

Click to get into the administration page. Click to go back to the live video page.

1. Image Setting

Mouse Navigation Tool

There is a camera live mini screen on top of the page for users to preview any changes made in the setting before actually applying. Your mouse cursor will appear to become the Mouse Navigation Tool when you move your mouse cursor on the live mini screen.

Click anywhere on the mini screen to direct your camera angle.

A. Creating A Privacy Mask: You can make up to 6 masks.
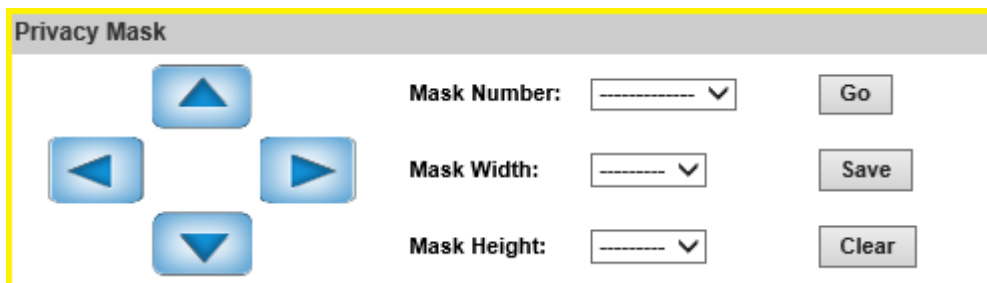
a. **Four Direction Arrow:** Clicking on icons to move the screen is essential for aiming a center point for the privacy mask before creating one, because the mask only starts from the center position of the screen. Making masks without moving its center point may result the masks to be on top of each other like the picture below.

b. **Mask Number:** Assign a number for the mask you are about to create.

c. **Mask Width:** Assign the width for the mask you are about to create.

d. Mask Height: Assign the height for the mask you are about to create.

e. Click [Save] to finish creating the new mask. A mask block will appear at the center of the camera preview and the **Mask Number** will also be marked with a tick sign like the picture below.
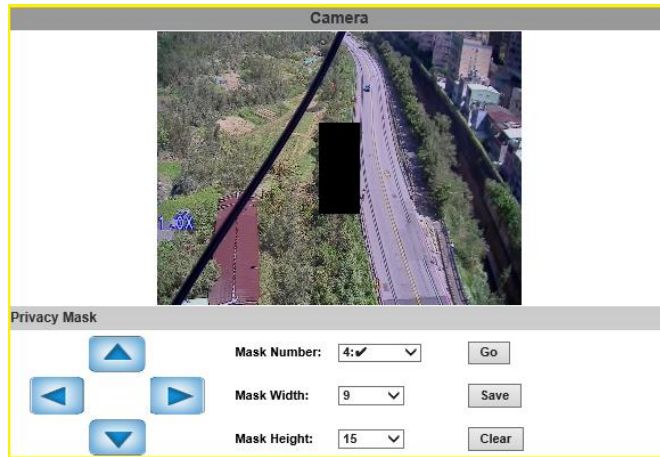
f. Select a **Mask Number** and click [Go] to go to adjust its **Mask Width** and **Mask Height** again. Click [Clear] to erase the current data.

B. Image Setting

a. Contrast, Saturation, Sharpness

Different values of them can be adjusted and applied here.

b. Auto Electronic Shutter

- **Auto:** Both the iris and shutter are adjusted by the camera automatically.

- **Flickerless:** This mode aims to balance the refresh rate to a human eye to avoid flicker effect of the video display when the camera display shifts between cycles.

  Other shutter speed values range from **1/30** to **1/50**, **1/60**, **1/100**, **1/120**, **1/250**, **1/500**, **1/1000**, **1/2500**, and **1/5000**. The shorter the shutter time you select, the darker the image becomes. The iris is adjusted by the camera automatically.

c. Day & Night Mode

The camera can detect the light level of the environment.

- **Auto:** The video image will be turned to black and white at night automatically in order to keep it clear.

  Day & Night Level: To assign a lux standard for Day &Night switching.

  Day & Night Delay: This is used for preventing disturbance in the light sensor from external factors.
  For example, a passing-by car's light directly shoots on the camera at night. If the D/N delay is not enabled, the Image Setting will be switched to color mode when the car light passes, and switched back to B/W immediately.

- **Color:** The video image will be displayed in colors, but it does not adjust itself automatically to compensate the image quality.

- **B/W:** The video image will be displayed in black and white only.

- **Time Mode:** Choose to Enable **Day & Night Time** where you may adjust the switch time between Color & BW modes according to the given time or simply choose Color or B/W.

  Click **Save** to keep the change.

d. DNR-2D (Digital Noise Reduction 2D)

This function is able to filter the noise and blur from the image and show a clearer view. Set the values through 2D filters.

e. DNR-3D (Digital Noise Reduction 3D)

This function is able to filter the noise and blur from the image and show a clearer view. Set the reduction level through 3D filters.

f. WDR (Wide Dynamic Range)

This function enables the camera to reduce the contrast in the view for avoiding dark zones resulted from over and under exposure.

g. Video Orientation

Choose to flip, mirror, or rotate the image.

h. White Balance

It helps reproducing actual image colors to display in balance. Select the mode according to its lighting condition.

- **Auto**: Continuously adjusts camera color balance according to any change of color temperatures and lightings.
- **Indoor**: Adjusts the image colors in an indoor environment.
- **Outdoor**: Adjusts the image colors in an outdoor environment.
- **Fine shade 7500K**
- **Cloudy weather 6000K**
- **Fluorescent lighting 4200K**
- **Halogen light 3200K**
- **Electric light bulb 2900K**

i. ExpComp (Exposure Compensation)

Assign levels of exposure to help lighten or darken the camera view. Assigning a bigger number creates a lighter image. On the contrast, a smaller number creates a darker image.

j. Defog

Choose different level of defogging the camera view.

k. OSD

Choose to switch on/off the On Screen Display.

l. IR LED

Choose **Auto** to enable the IR LED to help the camera observe a clearer view when the lighting condition of the monitored environment becomes low, however if the lighting condition is always at a satisfactory level to view,   you may set **off** to disable this option.

m. Speed dome Height

Apply different value in meters according to how high the camera is positioned.

n. LED Indicator

Chose to turn on the LED indicator automatically or turn it On/Off during its operation time.

o. Default

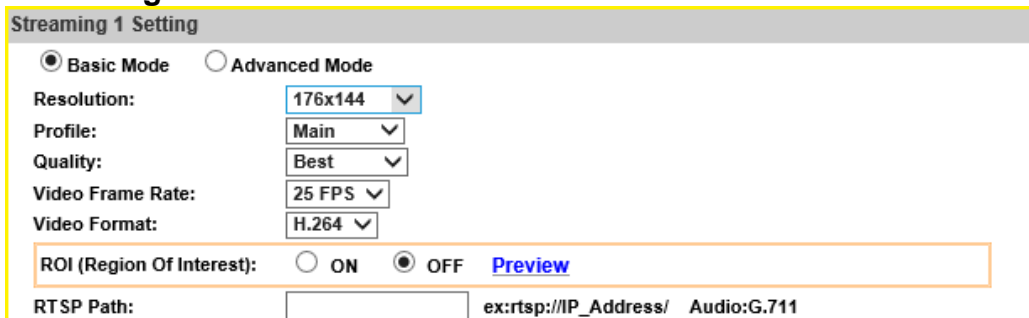Choose to go back to its original default settings on this page.

2. Video Setting

A. **Video System:** The user can select the camera system type: AUTO, PAL or NTSC. Choose the video system based on user's origin of location.

Video Setting	
Video System:	PAL ∨

B. **Streaming 1 & 2 & 3 Basic Mode:**

Streaming 1 Setting

◉ Basic Mode   ○ Advanced Mode

Resolution:	176x144 ∨
Profile:	Main ∨
Quality:	Best ∨
Video Frame Rate:	25 FPS ∨
Video Format:	H.264 ∨

ROI (Region Of Interest):	○ ON	◉ OFF	Preview

RTSP Path:	[ ]	ex:rtsp://IP_Address/ Audio:G.711

1. **Resolution:** 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps

2. **Profile:** Chose between Main or Baseline

64

3. **Quality:** 5 levels (Best/High/Standard/Medium/Low) to choose from. The higher the quality is, the bigger the file size is. Not good for Internet transmission.

4. **Video Frame Rate:** The video refreshing rate per second.

5. **Video Format: H.264+**, **H.264** or **JPEG**

6. **ROI (Region Of Interest):** Please refer to the description below in Advanced Mode.

7. **RTSP Path:** RTSP output name

C. Streaming 1 & 2 & 3 Advanced Mode:

1. **Resolution:** 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps

2. **Profile:** Chose between Main or Baseline

3. **Bitrate Control Mode:** There are CBR (Constant Bit Rate) and CVBR (Constrained Variable Bit Rate)

   CBR: 32Kbps~8Mbps (the higher the CBR the better the video quality is)

   CVBR: 1(Low) ~10(High) –Compression rate, the higher the compression rate, the lower the picture quality is; vise versa. Once it is enabled, the **Video Quantitative** becomes available.

   Video Quantitative: The quality parameter of CVBR. You can choose from 1~10 compression rate.

Video Bitrate Limit: The quality parameter of CBR. This function maintains a balance between visual information captured by the camera and network bandwidth.

By setting up a video bitrate limit, it helps the camera to prevent sudden increase of bitrate transmission which may affect the picture quality.

You can choose from **32Kbps~8Mkbps**. The higher the value, the better the image quality is.

4. **Video Frame Rate (5~30 FPS):** The video refreshing rate per second.

5. **GOP Size (1, 1/2, 2) X FPS:** "Group of Pictures". The higher the GOP is, the better the quality is.

6. **Video Format: H.264+**, **H.264** or **JPEG**

7. **ROI (Region of Interest):** This function helps refine any specific part of the monitoring area which can be dragged out with the mouse at a time, improving efficiency in image observation and management in video compression rate.

Click **ON** to enable the **ROI** function. Click on **Preview** to watch the surveilling area and edit different settings under the ROI mode.
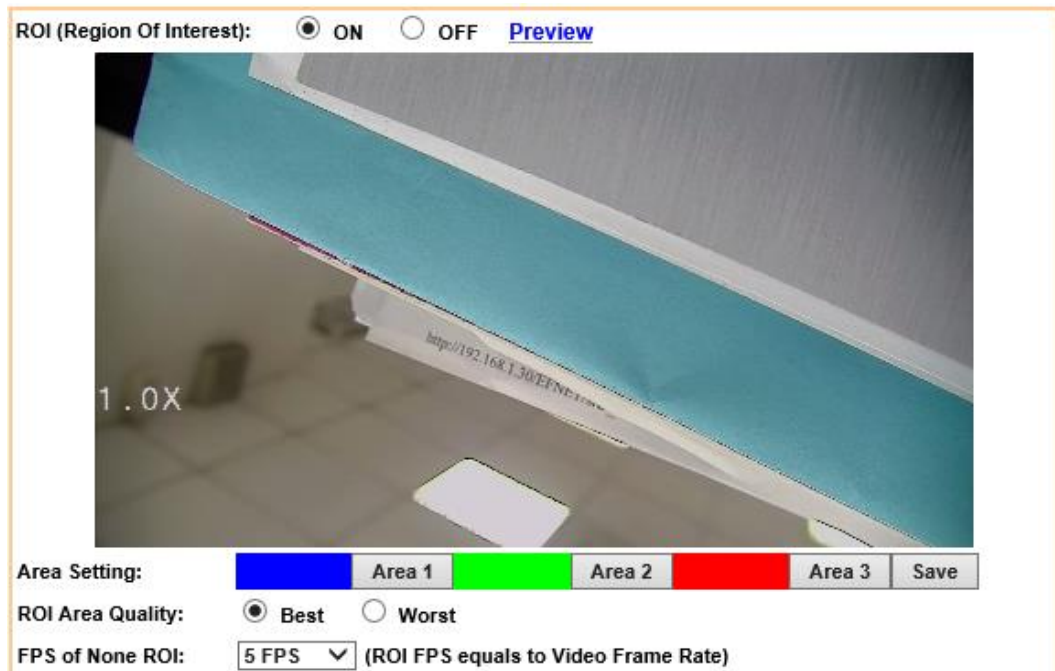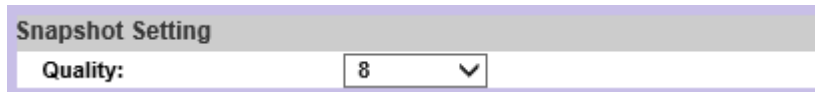

Click on any of the colours in **Area Setting** to draw an ROI square on the preview screen with mouse. You can set up to approximately 3 ROI squares. Adjust the **FPS of None ROI** values of each area from each drop down list.

8. **Video Format: H.264+**, **H.264** or **JPEG**

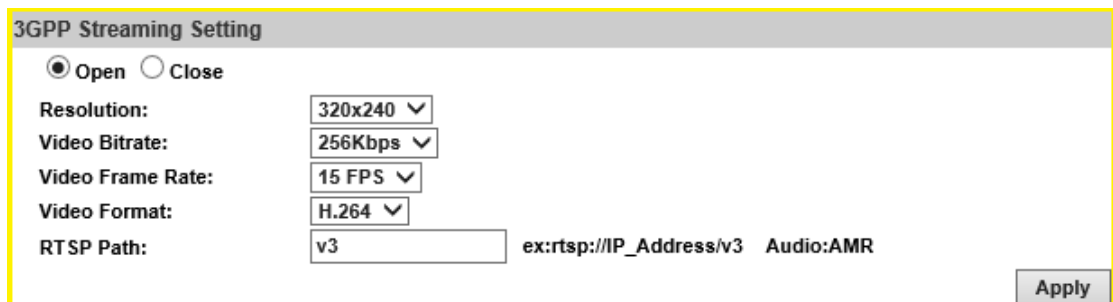9. **RTSP Path:** RTSP output connecting path

D. Snapshot Setting:

Snapshot Setting

Quality:	8 ⌄

Adjust the snapshot image quality from 1(Low) ~10(High).

E. 3GPP Streaming mode:

3GPP Streaming Setting

◉ Open ○ Close

Resolution:	320x240 ⌄
Video Bitrate:	256Kbps ⌄
Video Frame Rate:	15 FPS ⌄
Video Format:	H.264 ⌄
RTSP Path:	v3	ex:rtsp://IP_Address/v3 Audio:AMR

Apply
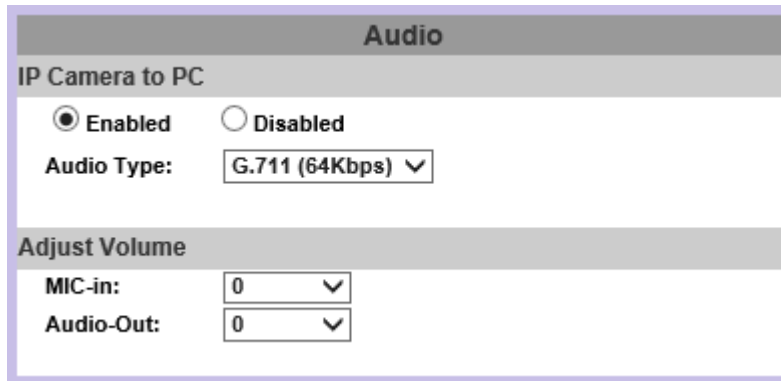
1. **Resolution:** 640x480@15fps, 640x360@15fps, 320x240@15fps, 176x144@15fps

2. **Video Bitrate Limit: 32Kbps~1Mbps** (the higher Video Bitrate is, the better the video quality is)

3. **Video Frame Rate:** The video refreshing rate for each second.

4. **Video Format: H.264+** or **H.264**

5. **RTSP Path:** 3GPP output connecting path. If the IP address of your camera is 192.168.40.150, and when you key-in "3g" in the column, the 3GPP path will be rtsp://192.168.40.150/3g.

   ◎**Remember to click on** **Apply** **for keeping all the changes.**

3. Audio

The IP CAMERA supports 2-way audio. The user can send audio from the IP Camera built-in microphone to the remote PC; the user can also send audio from remote PC to IP Camera's external speaker.

A. **IP Camera to PC:** Select "Enable" to start this function and also can select the audio type.
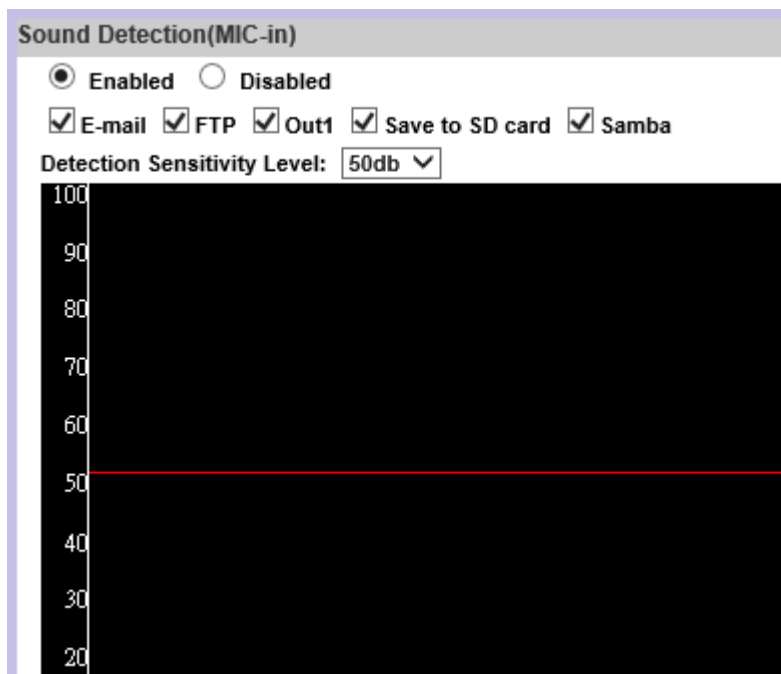

Go back to live view page [Chatting: ☐   Online Visitor : 1] and tick on **chatting** box   to enable **PC to IP Camera** audio function.
Note: The Audio may not be smooth when the SD card is recording.

B. **Adjust Volume:** Select the volume of both Mic-in and Audio-out.

C. **Sound Detection:** Test the audio volume and sound quality first by selecting **Enabled**. Tick the output destination of the audio file recorded. Adjust the **Detection Sensitivity Level** from 40~90db to display the audio frequency level in the analytical graph below.

Click on the [Apply] button to save all the settings.

Click ![gear icon] to get into the administration page. Click ![film reel icon] to go back to the live video page.

1. Event Setting

A. Motion Detection

Tick "**Motion Area**" to enable motion detection. When motion is detected, the word "**Motion!**" will be displayed on the live screen.

Motion Detection

Sensitivity: | 5 ✔
Motion Area: ☐ E-mail ☐ FTP ☐ Out1 ☐ Samba ☐ Google Drive ☐ Dropbox
Subject: IP Camera Warning!
Interval: 10 sec ✔ a period of time between every two motions detected.
☐ Based on the schedule

You can adjust the **Sensitivity** level for the camera to detect motions. The lower the number, the less sensitive the camera will react.

The camera will then send snapshots to assigned mail addresses, save snapshots to E-mail/ FTP/ Samba/Google Drive/Dropbox, or trigger the output device. Snapshots titled as "**IP Camera Warning!**" can be edited in the **Subject** column.

By ticking "E-mail/ FTP/ Samba/Google Drive/Dropbox" on the "Log" option, the motion detection log will be sent to "E-mail/ FTP/ Samba" simultaneously.

Interval: For example, selecting "10 sec". Once the motion is detected and action is triggered, it cannot be triggered again within 10 seconds.

Based on the schedule: When the option box is ticked, only during the selected schedule time the motion detection is enabled.

B. Record File

Record File	
File Format:	AVI File(with Record Time Setting)

When an event occurs, IP camera will record a video clip or take snapshot, and send to mail/FTP/Samba. Select the file saving format.

- <u>AVI File (with Record Time Setting):</u> Save AVI video file. The video length is according to the value set in Record Time Setting.

- <u>JPEG Files (with Record Time Setting):</u> Only when selecting "JPEG" in streaming 1 video format of Video Setting, this option can be enabled. Select this option to save several JPEG picture files. The successive picture files cover a period of time according to the value set in Record Time Setting.

- <u>JPEG File (Single File with Interval Setting):</u> Save single JPEG picture file when the event occurs.

C. Record Time Setting

Record Time Setting			
Pre Alarm:	5 sec	Post Alarm:	5 sec

When an event occurs, the IP camera can record a video clip or take a snapshot, and then send it via mail/ FTP/ Samba. Select the video recording length before and after the event is detected.

D. Network IP Check:

Network IP Check	
IP Check:	⚪ Enabled ⦿ Disabled
IP Address:	www.google.com
Interval:	30 sec
Check failed:	☐ Connection failed four times. Reboot IP Camera. ☐ Save to SD card

After IP Check is **Enabled**, the IP camera can check if the network server is connecting. Tick the actions to follow if the IP checking fails.

2. Schedule

A. **Schedule:** Tick the grids on the calendar to manage the time of your schedule.

B. **Snapshot**

Snapshot: After enabling the snapshot function; the user can select the storage position of the snapshot file, the interval time of the snapshot and the reserved file name of the snapshot.

Interval: Users can set the interval between two snapshots.
File Name: Enter the file name of your snapshot file.

Restart IP Camera Automatically: Set up the time for IP camera to restart automatically after ticking **Restart** to enable access.

Click [Apply] to keep all the changes.

3. I/O Setting

I/O Setting
Input Setting

Input 1 Sensor: `N.O ▾`
Input 1 Action: ☐ E-mail ☐ FTP ☐ Out1 ☐ Samba
Input 1 PTZ Action: ☐ Enable `---------------------------- ▾`
Input 2 Sensor: `N.O ▾`
Input 2 Action: ☐ E-mail ☐ FTP ☐ Out1 ☐ Samba
Input 2 PTZ Action: ☐ Enable `---------------------------- ▾`
Input 3 Sensor: `N.O ▾`
Input 3 Action: ☐ E-mail ☐ FTP ☐ Out1 ☐ Samba
Input 3 PTZ Action: ☐ Enable `---------------------------- ▾`
Input 4 Sensor: `N.O ▾`
Input 4 Action: ☐ E-mail ☐ FTP ☐ Out1 ☐ Samba
Input 4 PTZ Action: ☐ Enable `---------------------------- ▾`
Subject: `GPIO In Detected!`
Interval: `10 sec ▾`
☐ Based on the schedule

A. Input Setting:

The IP Cam supports input and output. When the input condition is triggered, a video will be sent to user mail addresses/FTP server/SAMBA. With the **PTZ Action**, select preset points from the drop-down list which have been assigned in Live Viewing Mode, and click **Enable** to perform.

•**Subject:** Edit the message content in the column.

•**Interval:** For example, if you select "10 sec" here, once the motion is detected and action is triggered, it cannot be triggered again within 10 seconds.

•**Based on the schedule:** When the option box is ticked, only during the selected schedule time the I/O is enabled. That is, for example, the 11th hour of Monday has not been colored in the schedule table, then no action will be triggered even if the camera detects input signal during 11:00~12:00 on Monday.
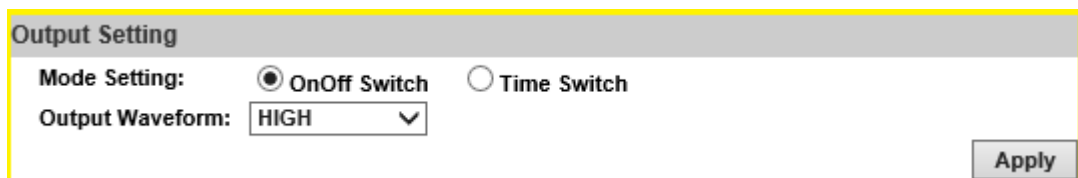
B. <u>Output Setting</u>: It affects the **DO** or **relay out** duration.

Step 1: Adjust the **Output Settings** from **I/O Setting**.

Step 2: Turn on/off the **DO** or **relay out** control from "**Advanced Setting**" on the **left panel** of the live view page.
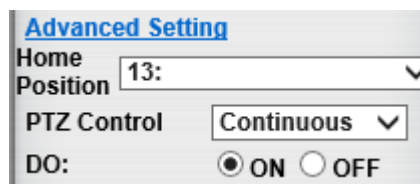

<u>On & Off Switch</u>: The camera triggers the digital output device which lasts for 10 seconds.

While in Output Setting, enable the **OnOff Switch** by clicking beside the title, and then adjust the **Output Waveform** at your desired level.

Output Setting

Mode Setting:	● OnOff Switch	○ Time Switch
Output Waveform:	HIGH ▼	

Apply
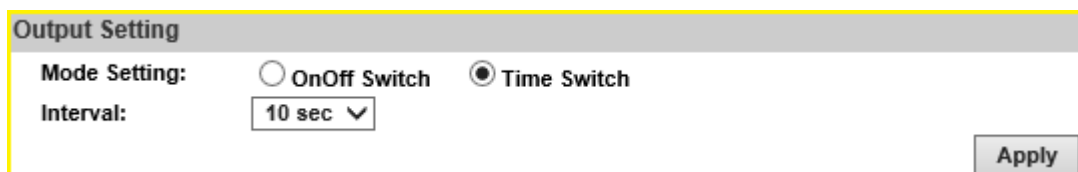
Go back to live view page. Click to turn **ON/OFF** the **DO/relay out**.

Advanced Setting

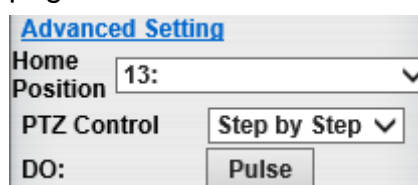|	
Home Position	13: ▼
PTZ Control	Continuous ▼
DO:	● ON ○ OFF

<u>Time Switch</u>: The camera triggers the digital output device which lasts for certain time according to the internal setting, and the user is not allowed to break off the alarm manually.

While in Output Setting, enable the **Time Switch** by clicking beside the title, and then adjust the **Interval** to your desired level.

Output Setting

Mode Setting:	○ OnOff Switch	● Time Switch
Interval:	10 sec ▼	

Apply

Go back to live view page. Click **Pulse** to test the **DO/relay out**.

Advanced Setting

Home Position	13: ▼
PTZ Control	Step by Step ▼
DO:	Pulse

4. Log List

Sort by System Logs, Motion Detection Logs and I/O Logs.

Log List	
System Logs	
	Logs
Motion Detection Logs	
	Logs
I/O Logs	
	Logs
All Logs	
	Logs

System Logs and I/O Logs won't lose data due to power failure.

All Log	
<System>	[2014/11/25 17:56:16] 192.168.23.65 login by admin.
<System>	[2014/11/25 17:42:31] 192.168.23.65 login by admin.
<Motion Detection>	[2014/11/25 17:32:28] Area 3 Motion Detection.
<Motion Detection>	[2014/11/25 17:32:28] Area 2 Motion Detection.
<Motion Detection>	[2014/11/25 17:32:28] Area 1 Motion Detection.
<Motion Detection>	[2014/11/25 17:18:49] Area 3 Motion Detection.
<Motion Detection>	[2014/11/25 17:18:49] Area 2 Motion Detection.
<Motion Detection>	[2014/11/25 17:13:41] Area 3 Motion Detection.

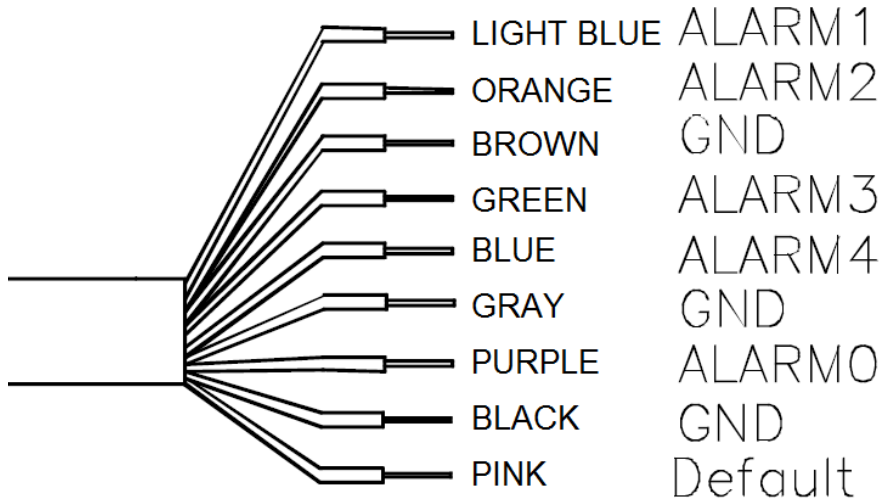# vi. Network Configuration

    I.   **Configuration 1:**
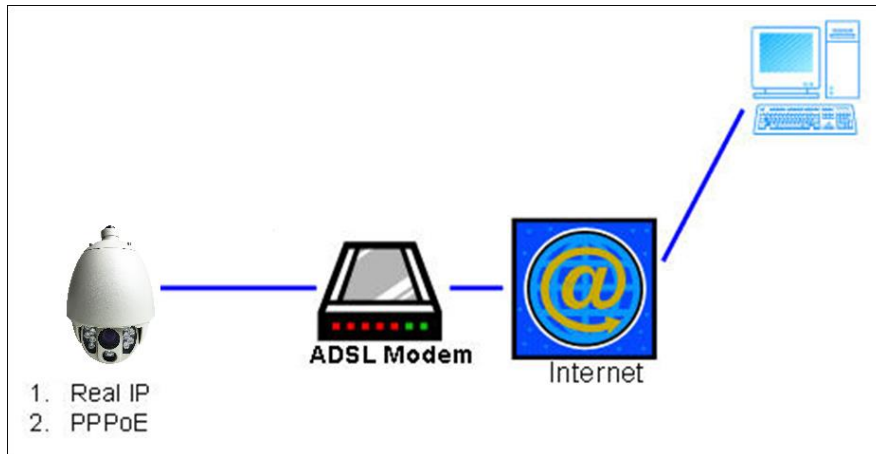
      a. Internet Access: ADSL or Cable Modem

      b. IP address: One real IP or one dynamic IP

      c. Only the IP Camera is connected to the internet

      d. For fixed real IP, set up the IP into IP Camera. For dynamic IP, start PPPoE.

    II.   **Configuration 2:**
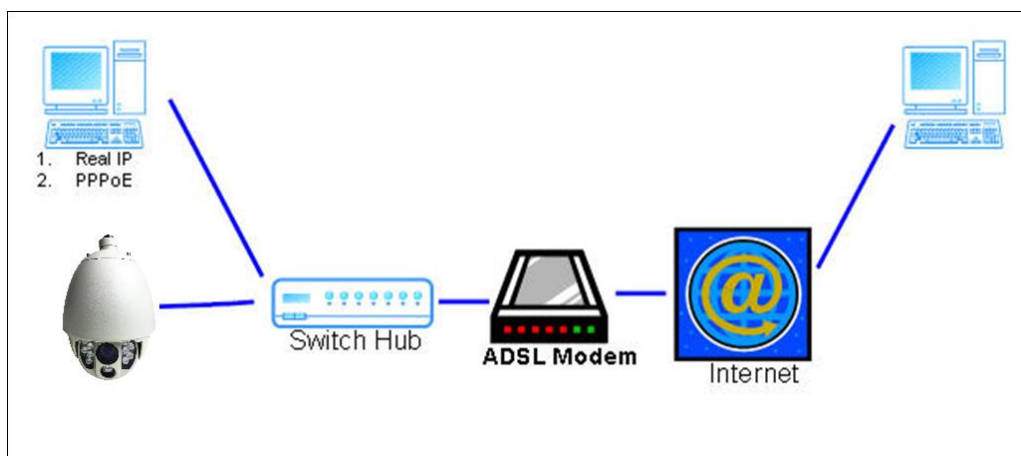
a. <u>Internet Access:</u> ADSL or Cable Modem

b. <u>IP address:</u> More than one real IP or one dynamic IP

c. IP Camera and PC connect to the internet

d. <u>Device needed:</u> Switch Hub.

e. For fixed real IP, set up the IP into IP Camera and PC. For dynamic IP, start PPPoE.

III. **Configuration 3:**
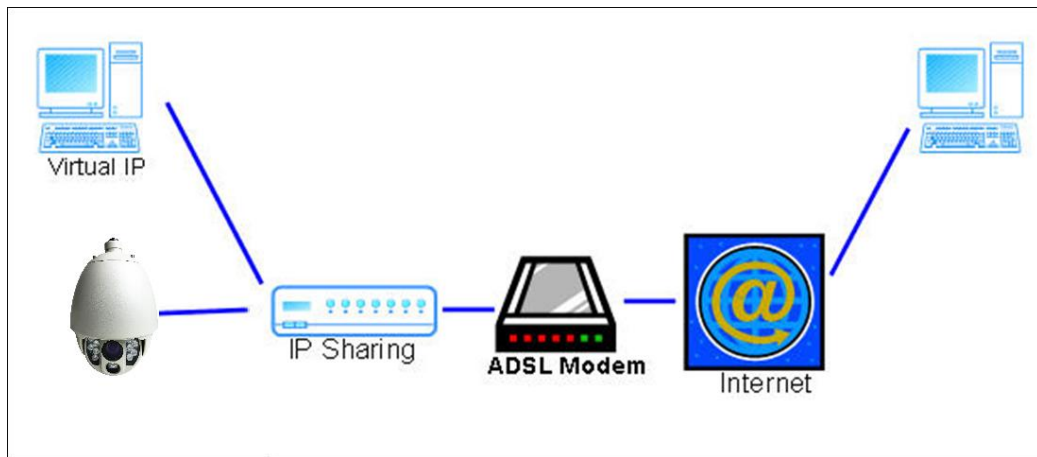
a. Internet Access: ADSL or Cable Modem

b. IP address: one real IP or one dynamic IP

c. IP Camera and PC connect to the internet

d. Device needed: IP sharing

e. Use virtual IP, set up port forwarding in IP sharing.

1. I/O Connection

LIGHT BLUE	ALARM1
ORANGE	ALARM2
BROWN	GND
GREEN	ALARM3
BLUE	ALARM4
GRAY	GND
PURPLE	ALARM0
BLACK	GND
PINK	Default

a. Connect GND & ALARM0 (**DO**) pin to external relay device or buzzer.

b. Connect GND & ALARM_N (**DI**) pin to external trigger device.

When no event occurs, the DO output is 5V (DO and GND are disconnected). When the camera detects events it will trigger and external alarm, DO output is 0V (DO and GND are connected).
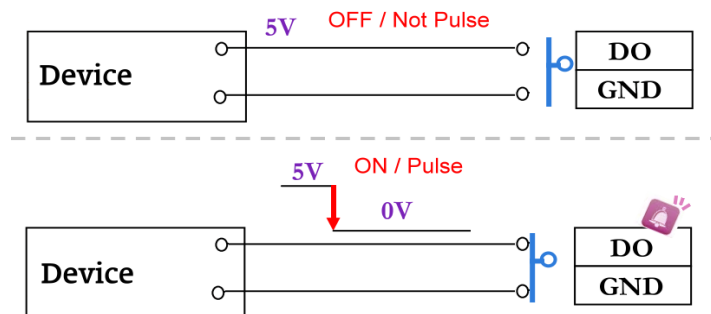
If you select "N.O" on "Input sensor setting", when the switch contacts are opened, the camera input alarm will be triggered and will execute the action user has set, for example, send a snapshot to E-mail address.If you select "N.C" in "Input sensor setting", when the switch contacts are closed, the camera input alarm will be triggered and will execute the action which the user has set, for example, sending a snapshot to assigned E-mail address.

c. I/O PIN definition

   • GND (Ground)

   • ALARM_0 (Digital Output, **DO**): DC 5V

   • ALARM_N (Digital Input, **DI-N**): Max. DC 5V

   • AUDIO_OUT (Audio Output)

   • MIC_IN (Microphone Input)

2. I/O Setup

a. Input Setting

Click I/O Setting from the system setup page via the internet browser, and mark "Out1" to enable I/O signal.

b. Output Setting

After the external input and output hardware are installed, you can enable the "Relay Out" function on the live video page to test if DO / Relay Out works.

i). On Off Switch mode:

Clicking **ON** will trigger the external output device for 10 seconds. For example, your alarm buzzer will continuously ring for 10 seconds. After 10 seconds the buzzer stops ringing, or you can manually break off the output signal by clicking **OFF**.
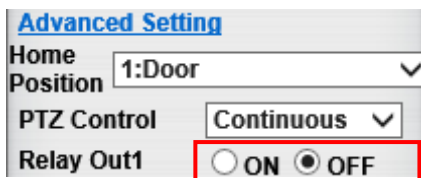
Select **HIGH** or **GROUNDED** To adjust the **Output Waveform**.
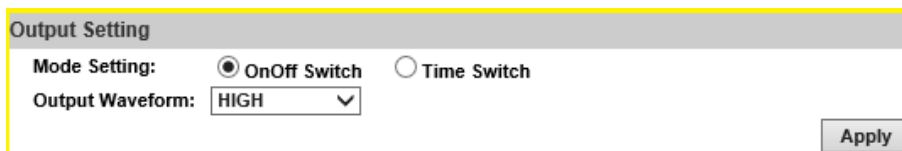
ii). Time Switch mode:

Click **Pulse**, the camera will trigger the external output device for several seconds.
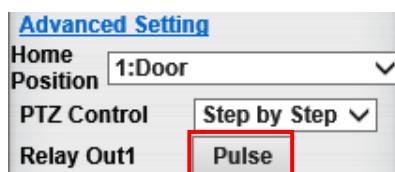
The duration length is based on the values set from **Interval**.
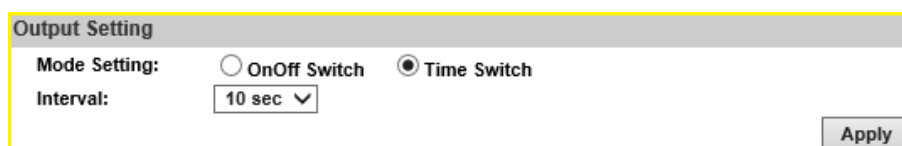
viii. Factory Default

If you forget your password, please follow the steps to revert back to default value.

- Remove power and Ethernet cables from the camera.

- Join the Black (**GND**) and Pink (**Default**) cables.
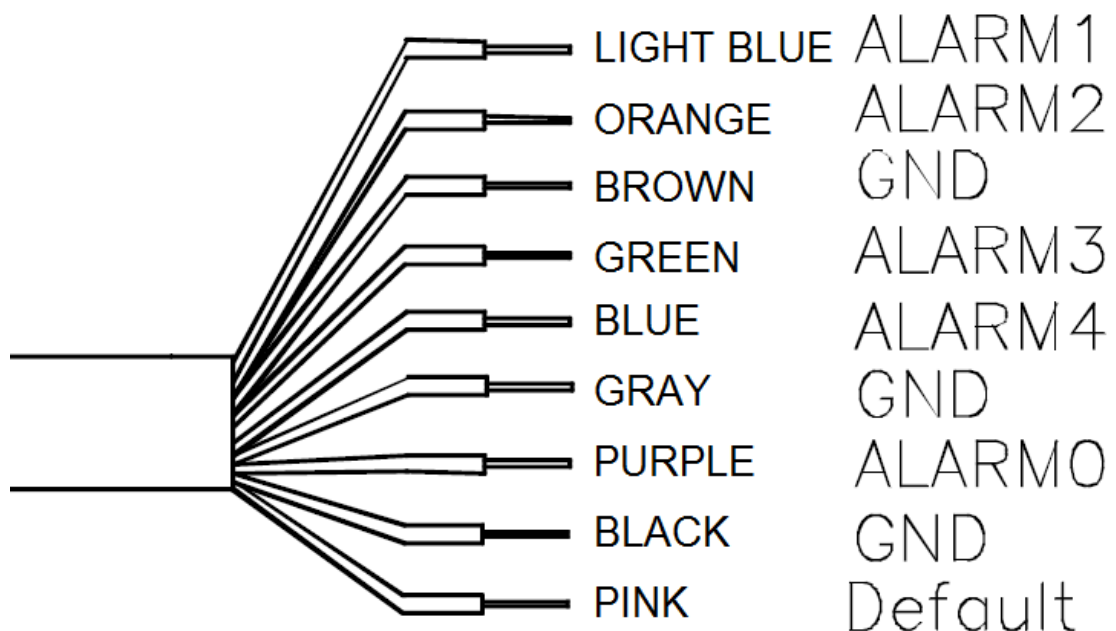
- Connect the power to the camera again. Keep the two wires connected during the booting. It will take around 30 seconds.

- Separate the Black (GND) and Pink (Default) cables when camera finishes booting.

- Plug-in the Ethernet cable. Re-login the camera using the default IP (**http://192.168.1.200**), and user name: **admin**, password: **admin**.

ix. Universal Password

If you forgot the password of your IP camera, you can reset the camera to factory default, or follow the procedure below to generate a universal password.

Note: Universal password will be valid only when you enable the function in **User Management.**

1. First, you need to know the IP address and MAC address of your IP camera. You can use **IP Scanner** to scan the LAN, and see the IP address and MAC address on the side column.
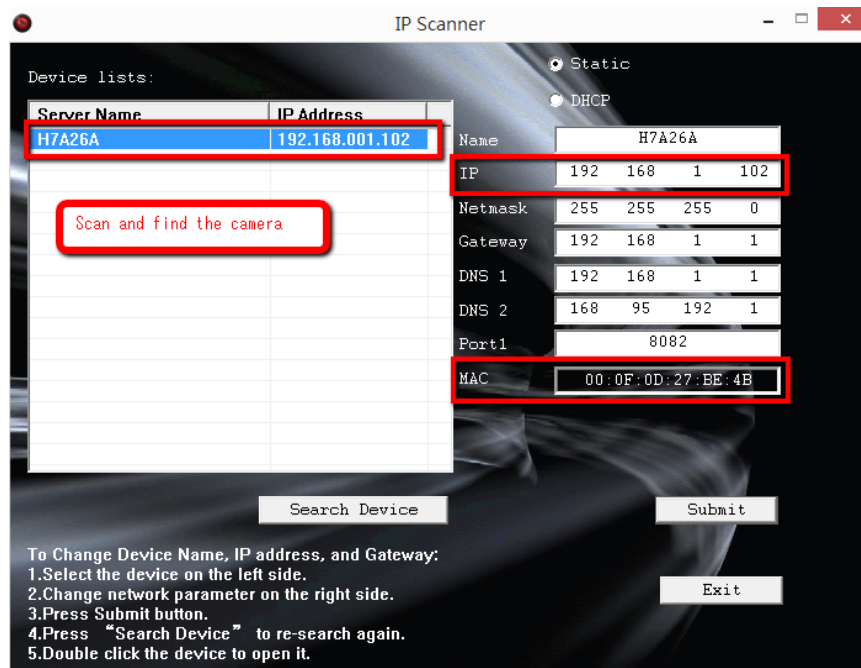
Or, if you already know the IP address of camera: Open the web browser, key in **http:// (IP address) /GetIPMAC.cgi** and press enter. The IP address and MAC address will be displayed on browser.
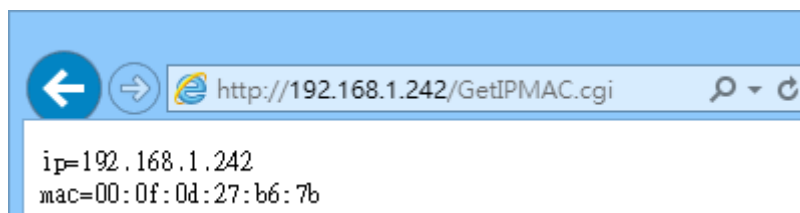
2. Find the .html file named **Universal Password** in CD-ROM. Click to open it.

Universal Password_V1.1
Chrome HTML Document
10 KB

3. Key in the camera IP address **IP Address** column and MAC address in **MAC** column, and then click **encoder**, a set of username and password will appear, as shown in the picture below:

IP address: 192.168.1.200
MAC: 00:0f:0d:11:22:33
Username

Password

encoder

The universal username and password are generated from the IP address and MAC address you key-in, so if you change the camera IP address the universal password changes, too.
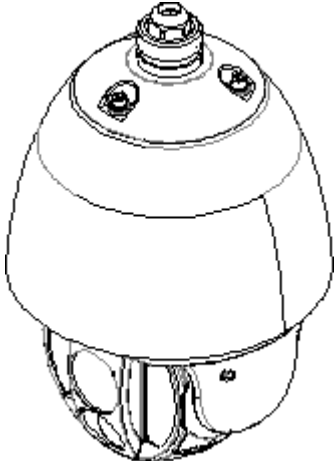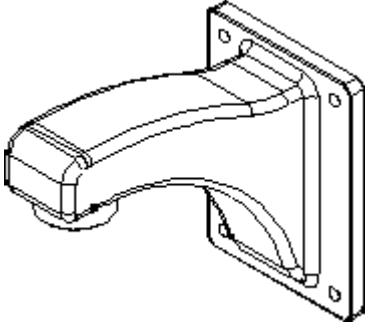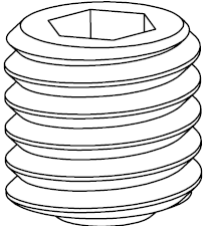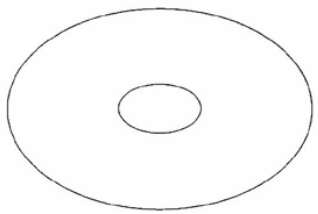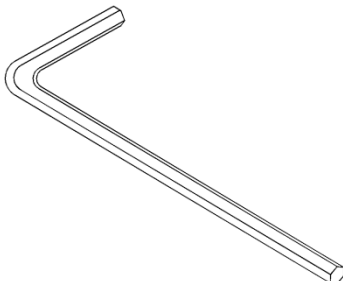
4. Take the generated username and password. Use them to log into the camera.

Windows Security

iexplore
The server 192.168.1. 200 is asking for your username and password. The server reports that it is from IP_Camera.

Warning: Your username and password will be sent using basic authentication on a connection that isn't secure.

B923FB

●●●●●●●●●●

☐ Remember my credentials

OK   Cancel

5. Now you can login as administrator. Turn to **User Management** page. The use of universal password does not affect the previous user setting, so the administrator account password does not change until you edit it. Please click **Edit** to give a new administrator password.
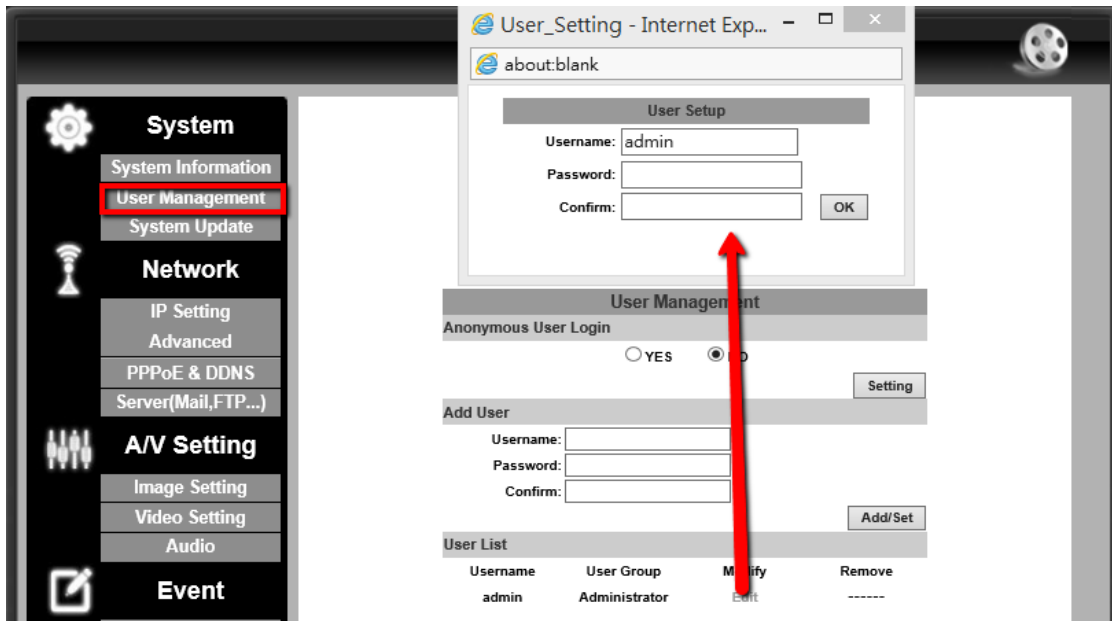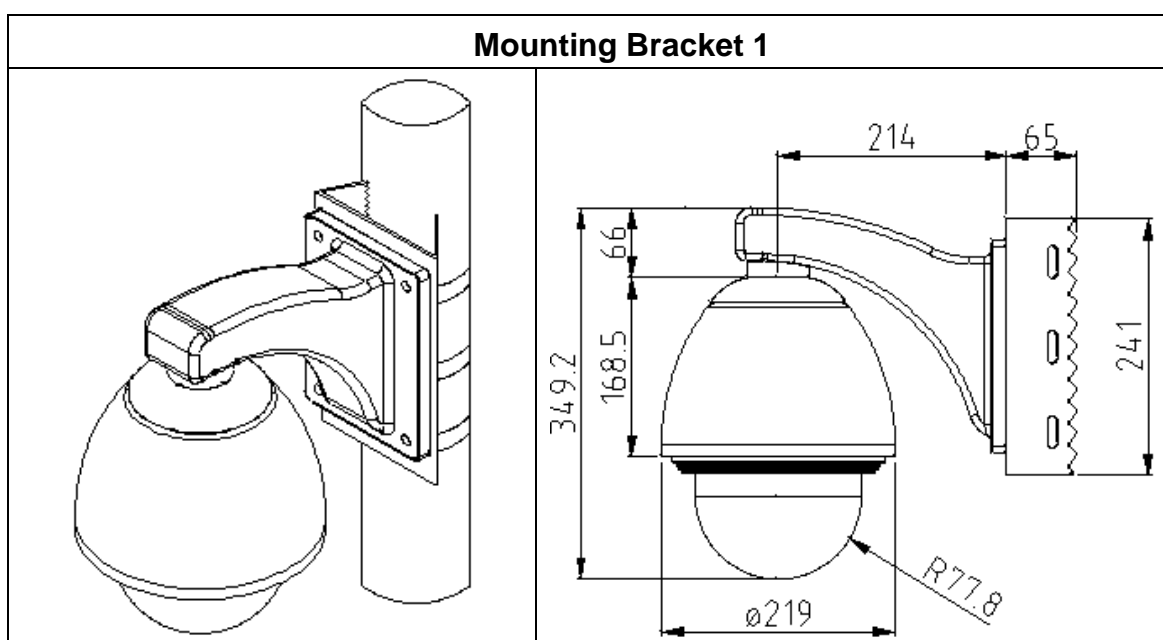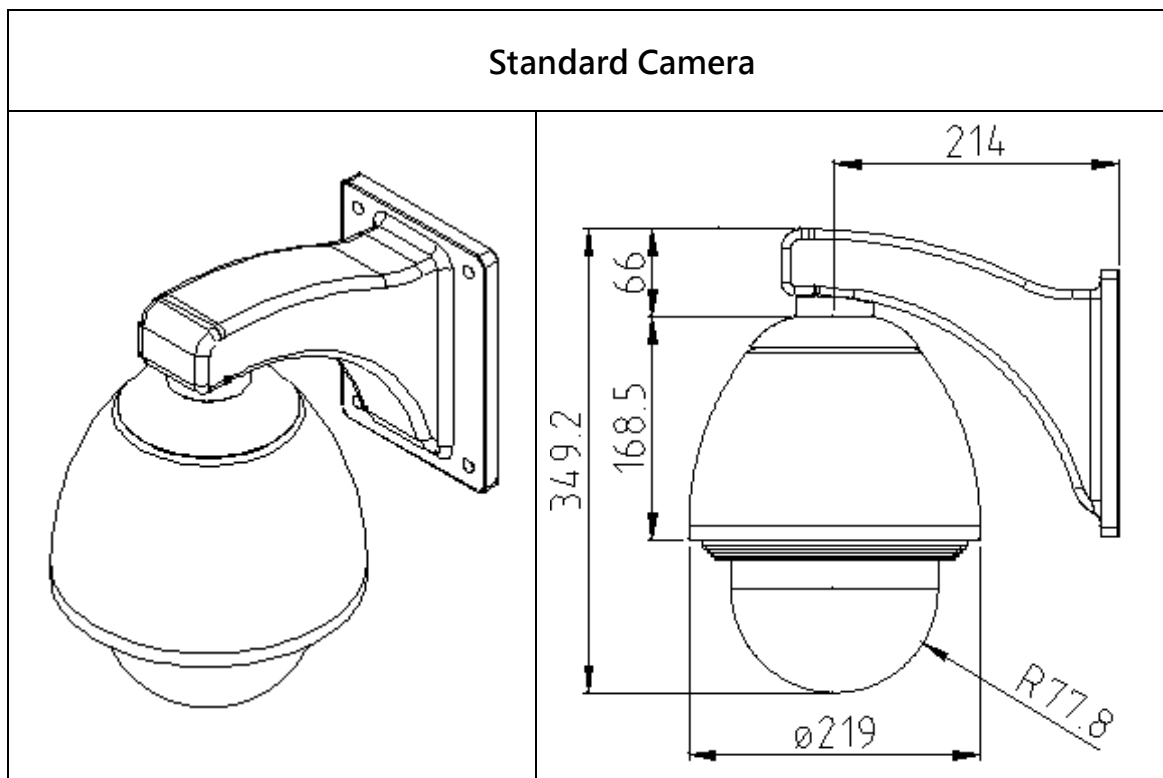
x. Package Contents

IP Speed Dome	Wall Mount	HEX SOCKET CAP SCREWS
Quick Installation Guide	**CD**	**Hex Wrench**

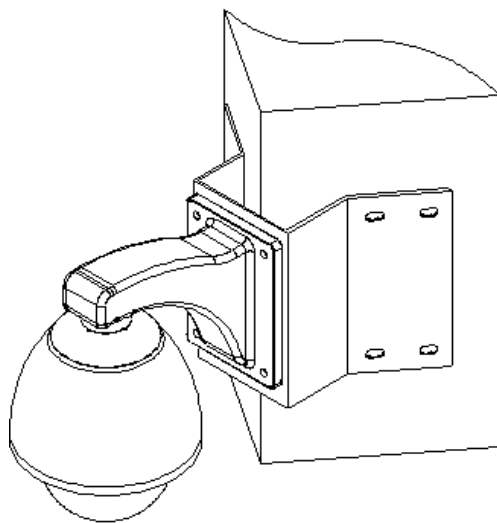• The CD includes user manual and software tools

xi. Accessories (Optional)
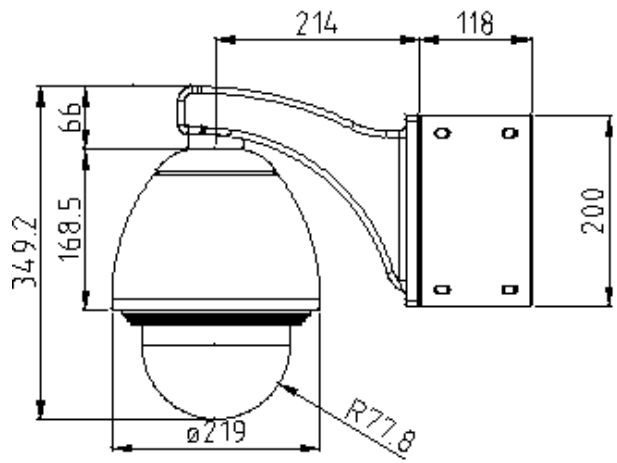
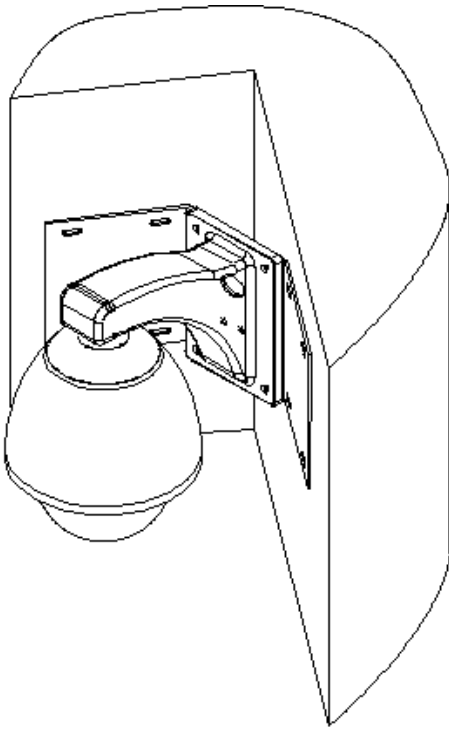You can choose different accessories for your camera:

Standard Camera

Mounting Bracket 1

Mounting Bracket 2
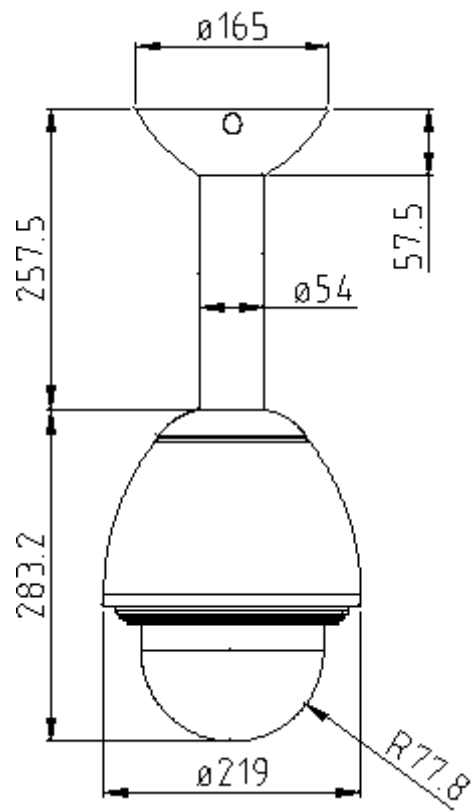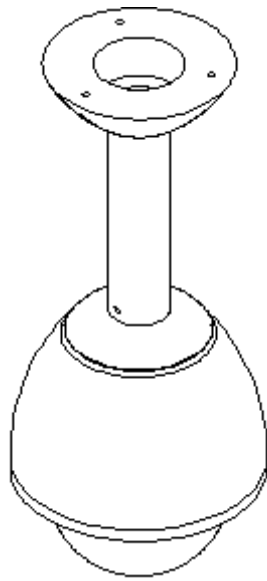
Mounting Bracket 3
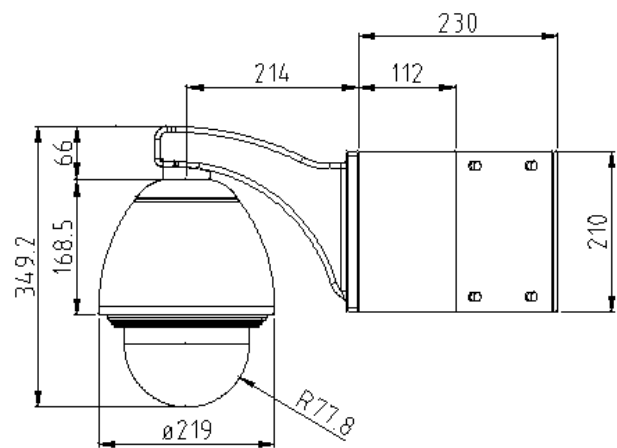
Mounting Bracket 4

Mounting Bracket 5
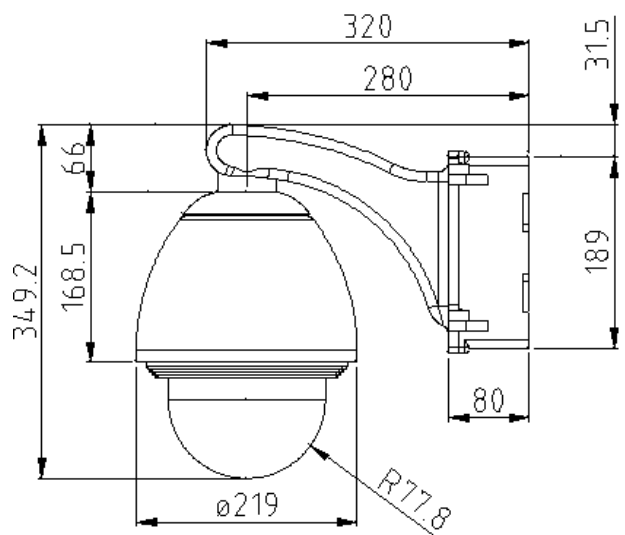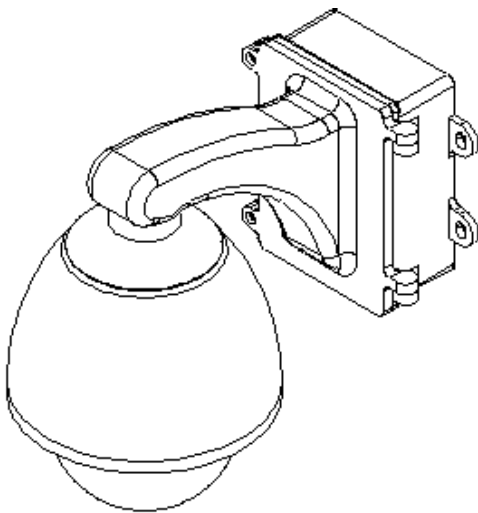
Mounting Bracket 6

Mounting Bracket 7