



User Manual

STAINLESS STEEL IP CAMERA

V1.0_20180912



STAINLESS STEEL IP CAMERA

This is a **1 / 2.8" Megapixel CMOS Sensor** stainless steel 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 **M-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.

Topics

Inside the folder '**Topics**' you will find the documentation related with this IP Camera. You can click on '**Read More**' for directly opening the file regarding the topic you would like to read.

[Adobe Acrobat is recommended.](#)

I. **Warnings, Cautions and Copyright**

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Product features, spec table and pictures.

STAINLESS STEEL IP CAMERA

III. Product Installation

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B. Hardware Installation

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STAINLESS STEEL IP CAMERA

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C. A / V Settings

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STAINLESS STEEL IP CAMERA

VI. Network Configuration

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Steps for using universal password.

X. Package Contents

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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.

Intended Use of the Camera

Certification	Mark
ATEX	 II 2G Ex db IIC T6 Gb
ATEX	 II 2D Ex tb IIIC T85°C Db
IECEX	Ex db IIC T6 Gb
IECEX	Ex tb IIIC T85°C Db

Hazardous Area Classification: Zone 1, Zone 2, Zone 21, Zone 22.

IP Degree: IP68, IP69

Ex Standards: IEC 60079-0: 2011 EN 60079-0: 2012
 IEC 60079-1: 2014 EN 60079-1: 2014
 IEC 60079-31: 2013 EN 60079-31: 2014

Nameplate:

Model: **HLZ-62KDS+** IECEx BAS 18.0059X
 Ingress Protection: **IP68 IP69** 
 Input Voltage: **DC12V**
 Tamb: **-40°C to 70°C**  **II 2GD**
 Ex db IIC T6 Gb Baseefa18ATEX0086X
 Ex tb IIIC T85°C Db 
 S/N.:

Warning:

Do Not Open When an Explosive Atmosphere is Present.

 **Hunt Electronic Co., LTD.**
 9F, No.171, Sec. 2, Datong Rd., Xizhi Dist,
 New Taipei City, Taiwan



Special Conditions for Safe Use:

- Ambient Temperature: -40°C to +70°C.
- DO NOT OPEN WHEN ENERGIZED.
- POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.
- When assembly, operation and maintenance, the operator must follow the requirements of the IEC 60079-14: latest version Explosive atmosphere- Part 14: Electrical installation design, selection and erection, beside of the manufacturer's operation instruction or its National equivalent.
- Repair and overhaul shall comply with IEC 60079-19: latest version or its National equivalent.
- HLZ-62KDS+ enclosure cover is provided with 6 off M6x1x12mm A2-70 socket head screws.
- External surfaces are to be routinely cleaned to prevent the accumulation of dust layers.

Product Specifications

Main Features:

- Certification for use in Zones 1 and 2 IIC T6 Group(Gas) and Zones 21 and 22 IIIC T85°C Group (Dust)
- 1080P@30FPS
- 30x Bulid-in Zoom Lens
- H.264+/ H.264/ M-JPEG Video Compression
- Smart Focus System for Remote Focus Adjustment
- Power over Ethernet
- IR Cut Filter Mechanism
- Day & Night Manual Switch Time Control
- Smart Stream
- ROI Function
- IP68, IP69
- Support iPhone/Android/Mac
- SDK for Software Integration
- Free Bundle 36 Ch Recording Software

Certification	Mark
ATEX	 II 2G Ex db IIC T6 Gb
ATEX	 II 2D Ex tb IIIC T85°C Db
IECEX	Ex db IIC T6 Gb
IECEX	Ex tb IIIC T85°C Db
Explosion Proof	
Housing Material	AISI 316L Stainless Steel
Hardware	
CPU	Multimedia SoC
RAM	512MB
Flash	32MB
Image Sensor	1 / 2.8" Megapixel CMOS Sensor



Sensitivity	Color : 0.005 Lux (AGC ON) B / W : 0.001 Lux (AGC ON)
Lens Type	4.5-135mm 30X Bulid-in Zoom Lens @ F1.6
View Angle	2.7~45°(H), 1.9~34.2°(V)
Power over Ethernet	Yes
Power Consumption	PoE Max: 2.88 W DC 12V Max : 2.28W
ICR	IR cut Filter Mechanism
Operating Temperature	-40°C ~ 70°C
Dimensions	142.25mm (∅) x 224mm(H)
Enclosure Certificate	IP68, IP69, IK10
Alarm In/Out	1DI / 1DO
Sunshield	Yes
Wide Dynamic Range	120dB
Audio	G.711(64K) and G.726(32K,24K) audio compression Input : 3.5mm phone jack Output: 3.5mm phone jack Support 2-way.
RS485	1
Cable Length	4M
Weight	6.8kg
Micro SD Card Management	
Local Storage	Industrial 64 GB Micro SD card built in (optional)
Recording Trigger	Motion Detection, IP check, Network break down (wire only),Schedule, DI
Video Format	AVI , JPEG
Video Playback	Yes
Delete Files	Yes
Network	
Ethernet	10/ 100 Base-T
Network Protocol	IPv6, IPv4, HTTP, HTTPS, SNMP, SSL, TLS , DNS , ICMP, IGMP, ARP, SNTP, QoS/DSCP, Access list, IEEE 802.1X, RTSP/RTP/RTCP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA, Bonjour
System	
Video Resolution[16:9]	1920x1080@30fps, 1280x720@30fps, 640x360@30fps
Video Adjust	Brightness, Contrast, Hue, Saturation, Sharpness, AGC, Night Mode, T-WDR, Flip, Mirror, Noise Reduction, Day&Night Adjustable



Features	ROI, Smart Stream, Motion Detection, Privacy Mask, Anti Fog, BNC, Tampering Detection, Corridor Mode, 3-Axis Cable Management, IP66, Push Video
Quadruple Streaming	Yes
Image Snapshot	Yes
Full Screen Monitoring	Yes
Privacy Mask	Yes, 3 different areas
Compression Format	H.264+/ H.264/ M-JPEG
Video Bitrates Adjust	CBR, VBR
Motion Detection	Yes, 10 different areas
Triggered Action	Mail , FTP , SAMBA , Dropbox , Google Drive
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
Simultaneous Connection	Up to 10
Focus Mode	Auto, Manual
Web Browsing Requirement	
OS	Windows 7, 8 , 10 ,XP, Microsoft IE 6.0 or above
Mobile Support	iOS 8 or above, Android 4.0.4 or above.
Hardware Suggested	Intel Dual Core 2.8G, RAM, 4GB, Graphic card: 128MB

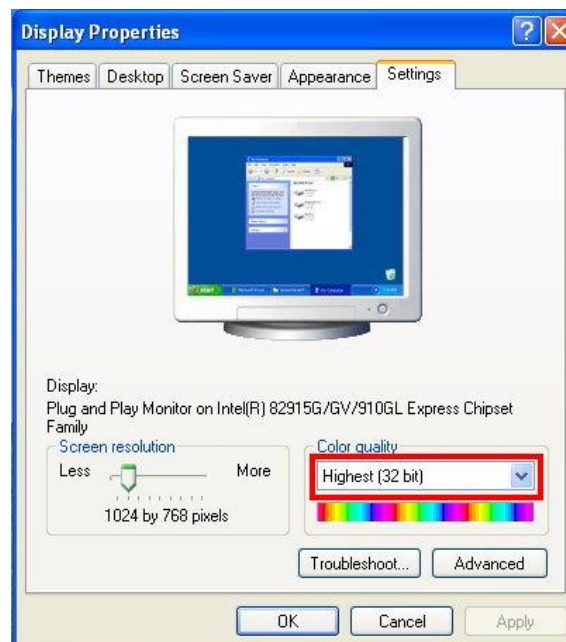
*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION.

Monitor Settings

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

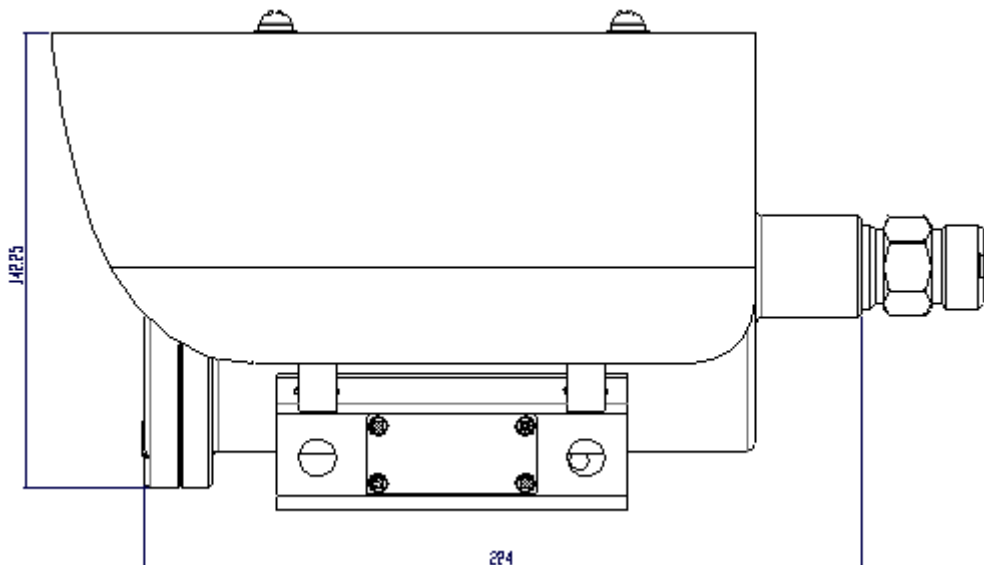
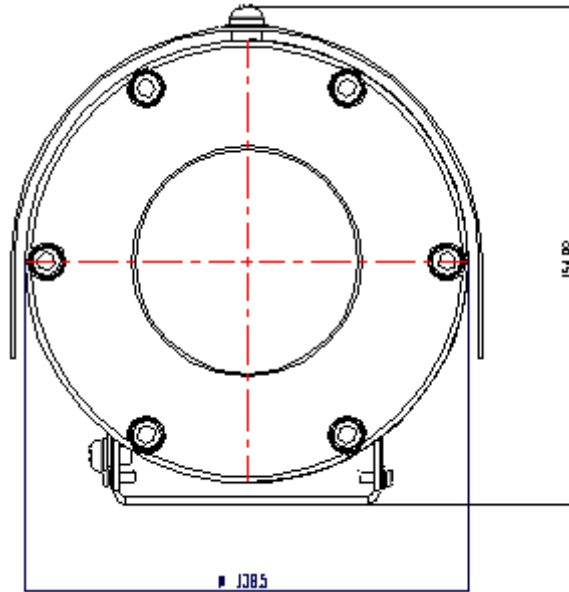


2. Change color quality to highest (**32bit**).



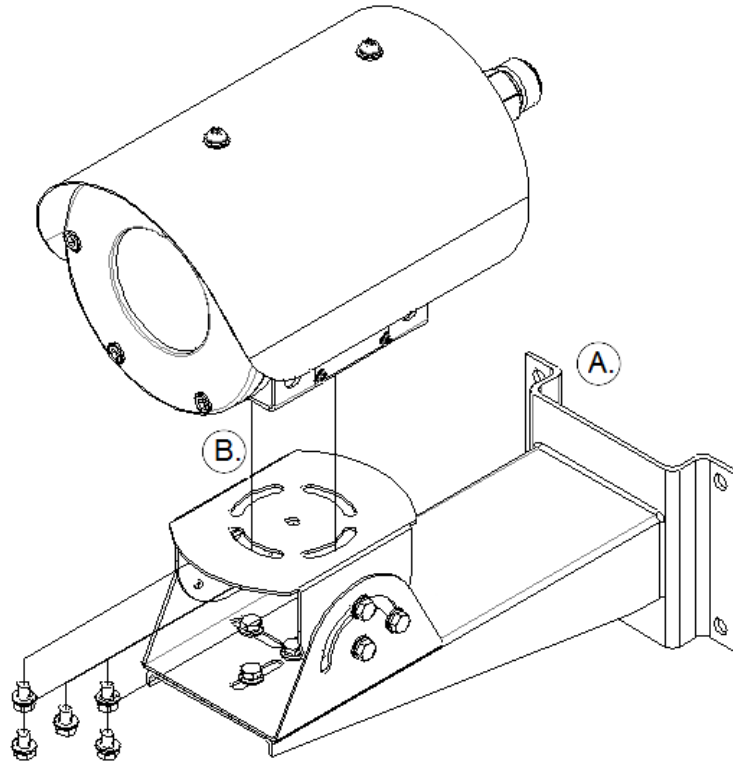
Hardware Installation

Camera Without Bracket

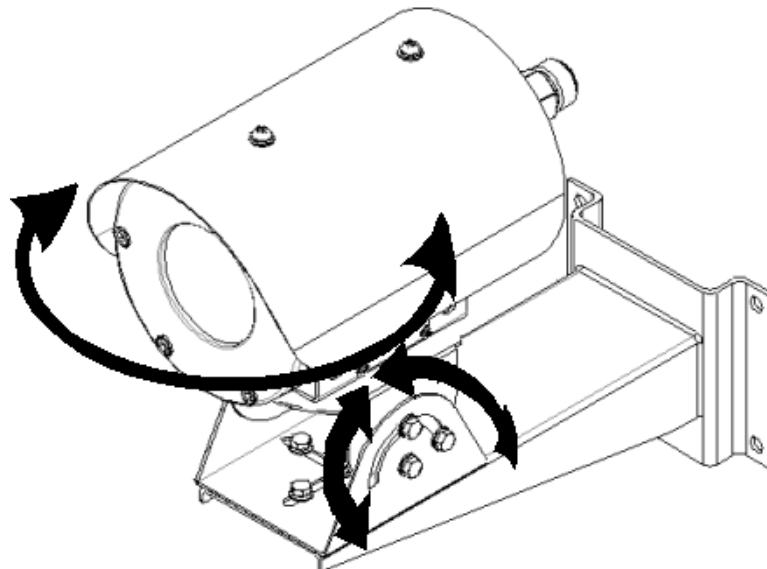


1. Camera With Bracket: Installation Steps

- A. Mount the wall bracket before you begin the installation. Please consider its position in relation of the environment for aiming to achieve proper observation for surveillance purposes.
- B. Install the mounting base of the camera onto the pedestal bracket with washers and screws.

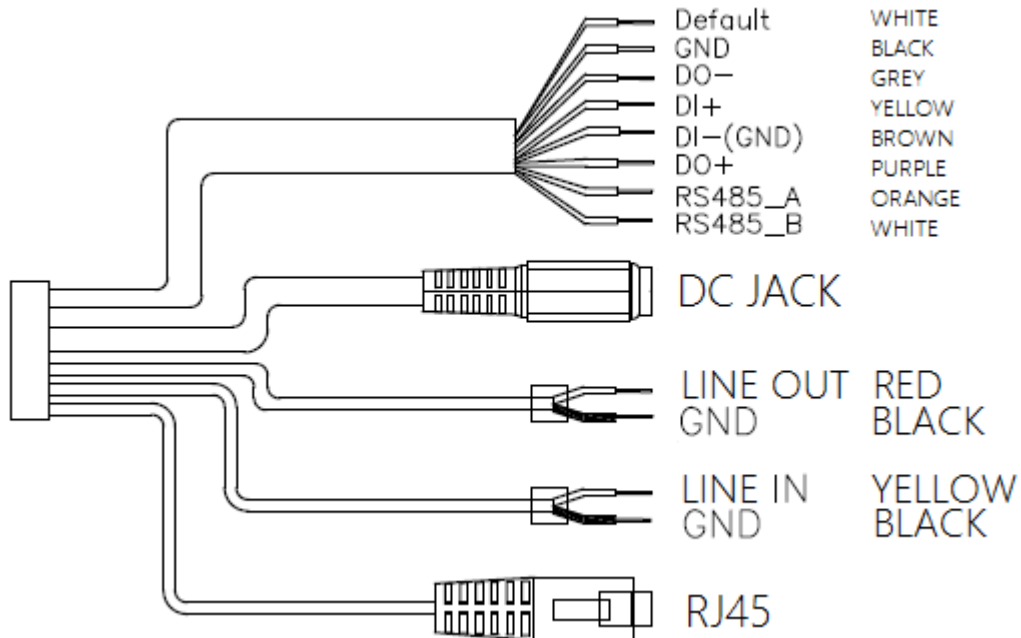


- C. Adjust the tilting position and the panning position for the pedestal bracket and the camera base.



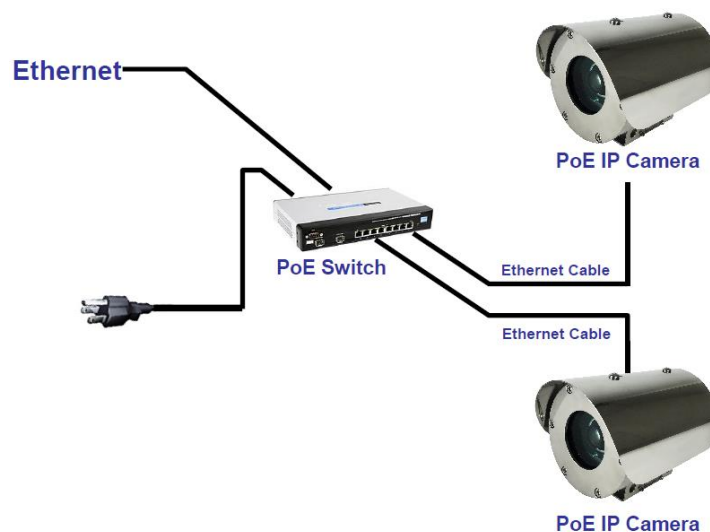
2. Connector Instruction

Connect power adaptor first then the IP Camera to PC or network, and set up the network configurations according to the network environment. Please refer to User Manual: [I/O Configuration](#) chapter for more descriptions.



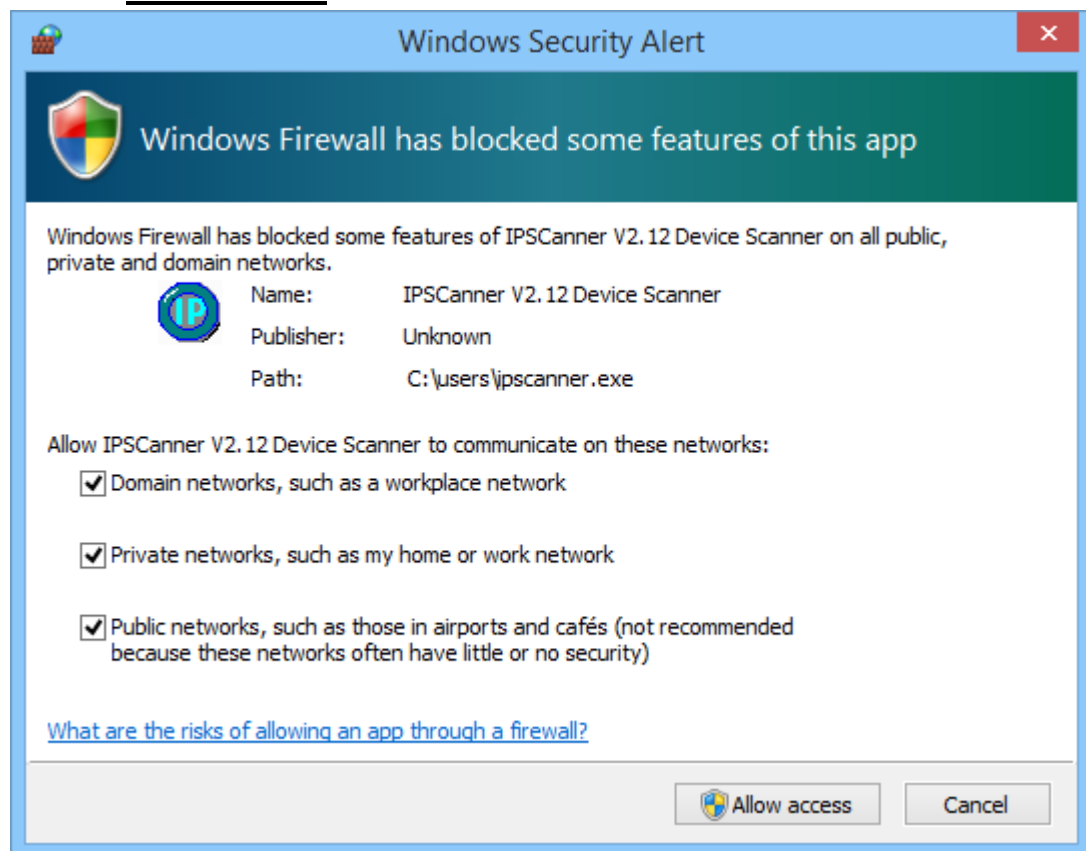
3. PoE (Power Over Ethernet) (Optional) 60W PoE single port recommended

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 which 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.

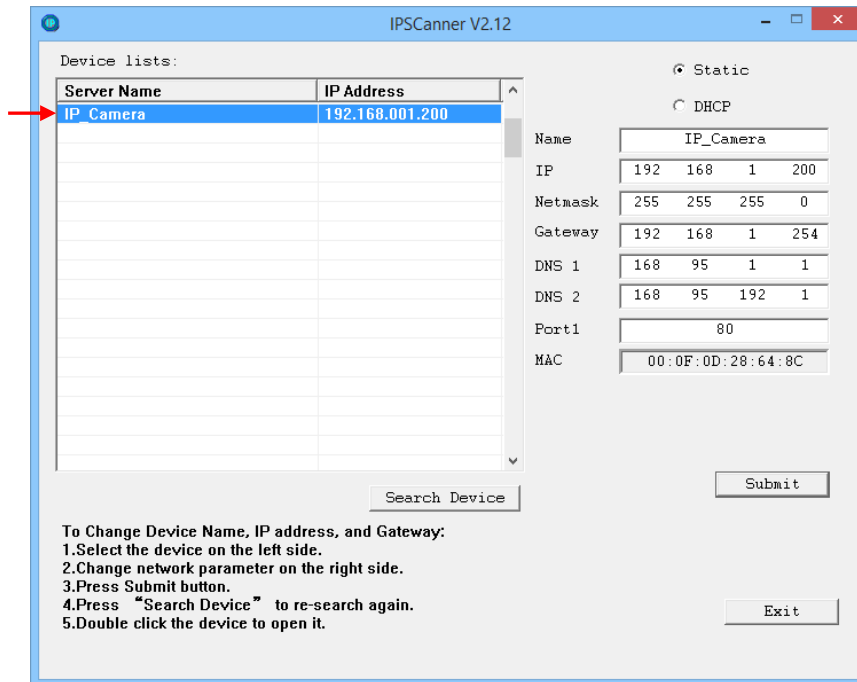


IP Assignment

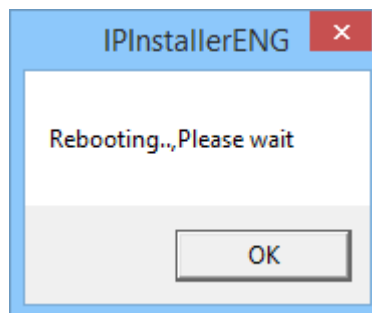
1. Open the software **IP Scanner** to assign the IP address of the IP Camera. Find this software in the **Applications** folder in the software CD attached to the product's package.
2. **IP Scanner** supports two languages: This manual is for English version.
3. There are 3 kinds of IP configuration.
 - a. Fixed IP (Public IP or Virtual IP)
 - b. DHCP (Dynamic IP)
 - c. Dial-up (PPPoE)
4. Execute the English version of **IP Scanner: IPScannerENG**
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 **Allow access**.



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: 192.168.1.200

PC IP address: 192.168.1.100

Different Subnets:

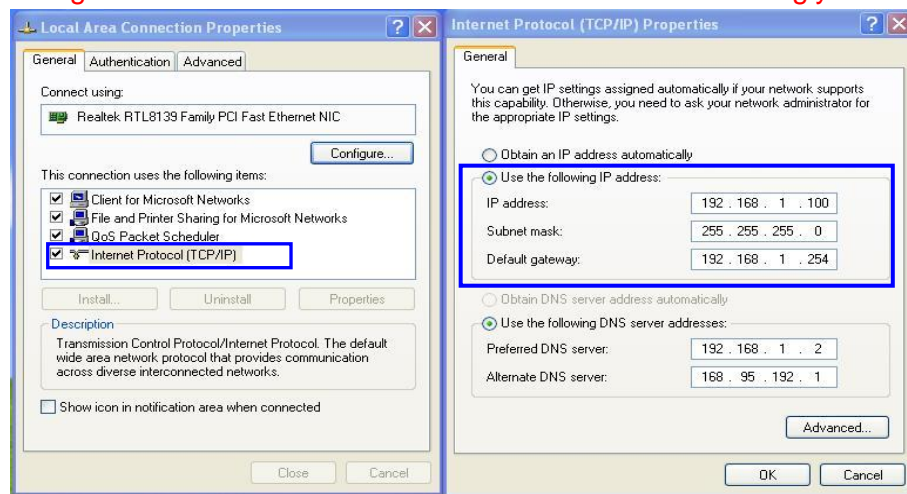
IP Camera IP address: 192.168.2.200

PC IP address: 192.168.1.100

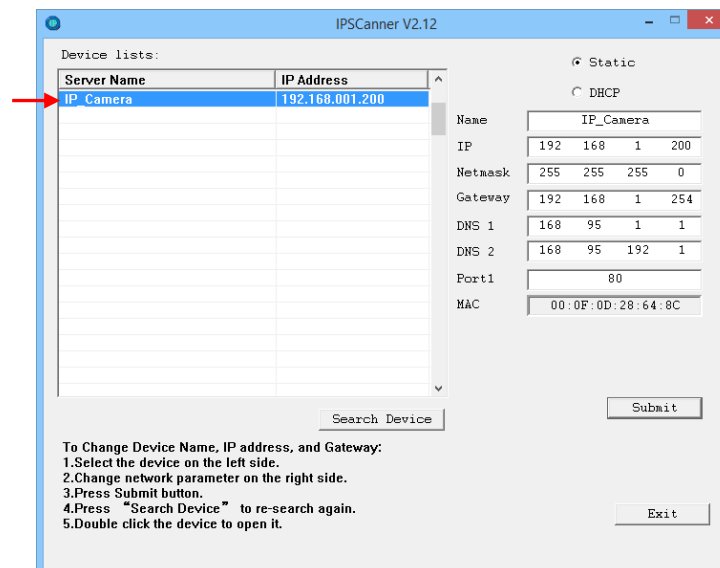
To Change the PC IP address:

Control Panel → Network Connections → Local Area Connection Properties → Internet Protocol (TCP/IP) → Properties

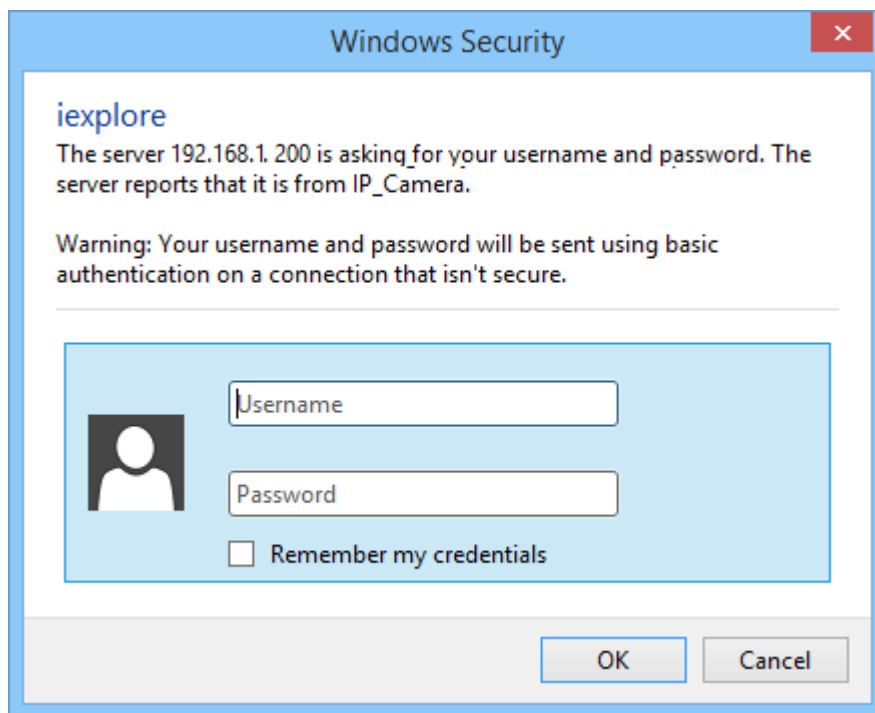
Make sure your IP Camera and PC are in the same Subnet. If not, change the IP Camera subnet or the PC IP subnet accordingly below.



- 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.



- Enter **admin** for both Username and Password to gain access.

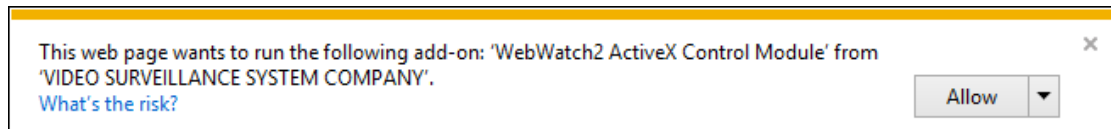


Install ActiveX control

1. For users using 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**'



The ActiveX component should then be completed and user will be able to view the live video screen.

If the installation fails, please check the security settings in the IE browser.

Follow the steps below:

1) Go to **Start-Up Menu**  on the lower left corner of the **Windows**

2) Select **Control Panel** 

3) Double-click on  **Internet Options**.

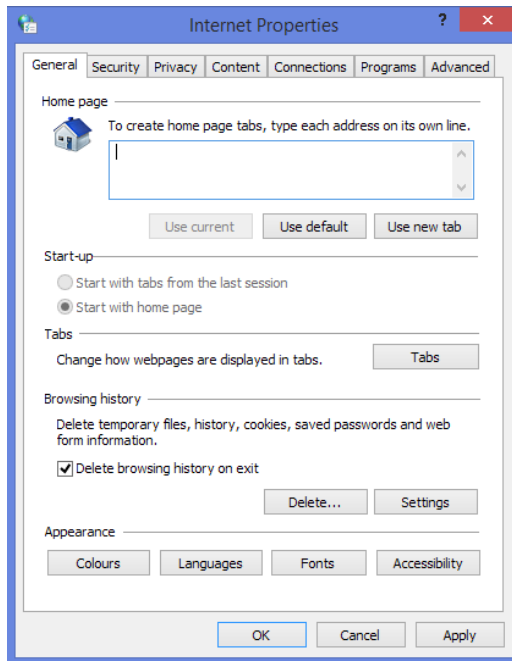
4) You will then enter the page of **Internet Properties** settings.

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

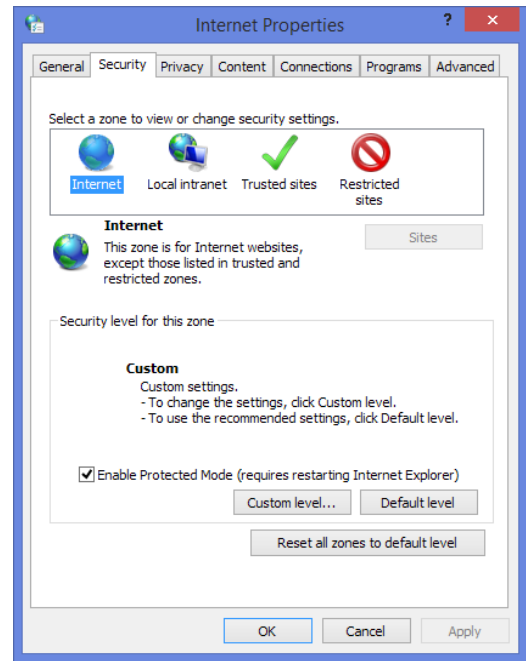
A. Security → Custom Level → Security Settings → Download unsigned ActiveX controls → Enable or Prompt (recommended).

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

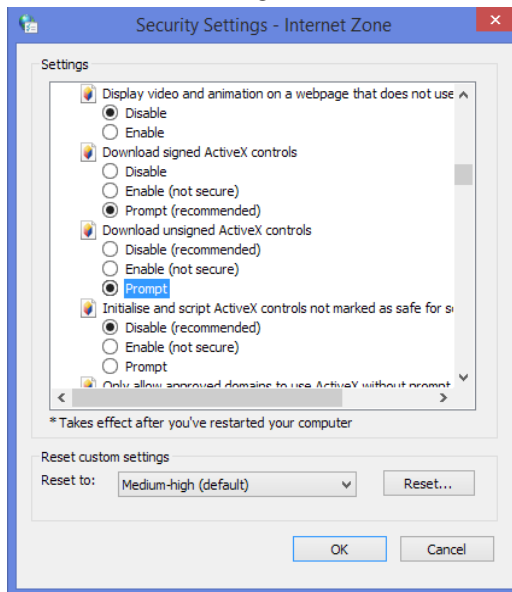
1



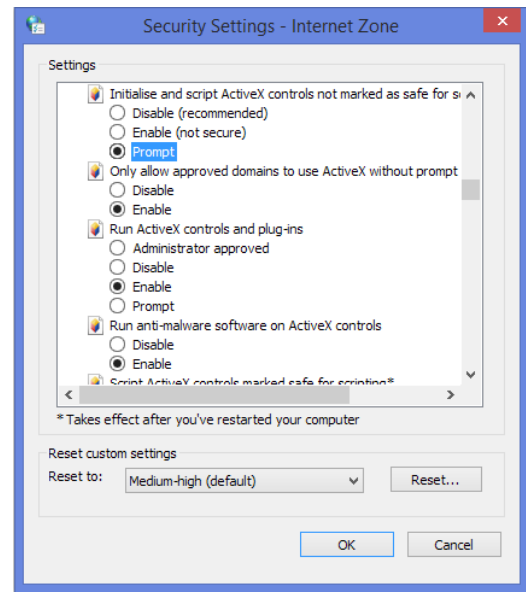
2



3

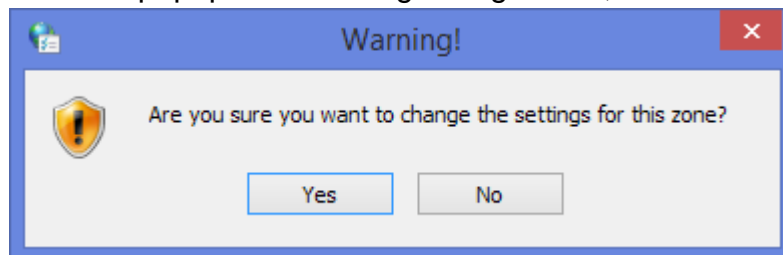


4



5

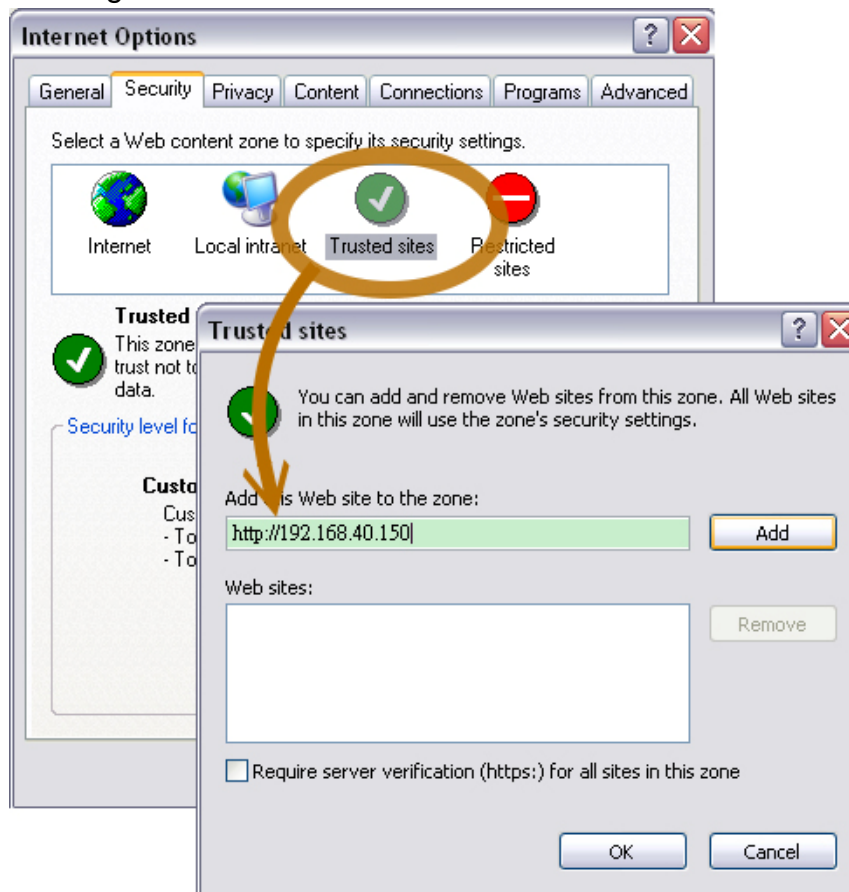
When popup the following dialogue box, click **Yes**.



2. You can choose another method:

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

In the site list you can key in 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.

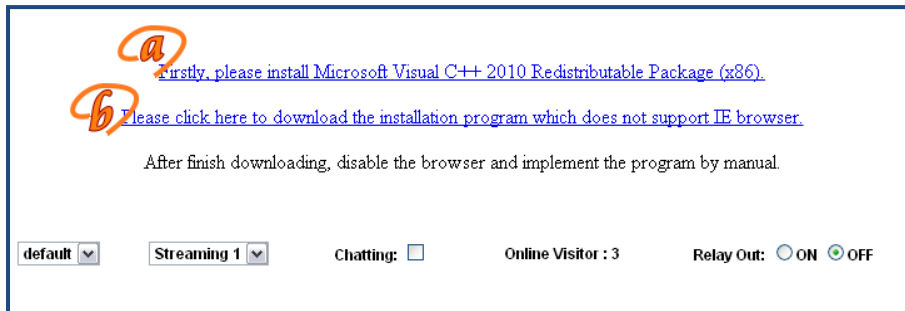


3. For Non-IE Web Browser Users

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 **a** link:

Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86).



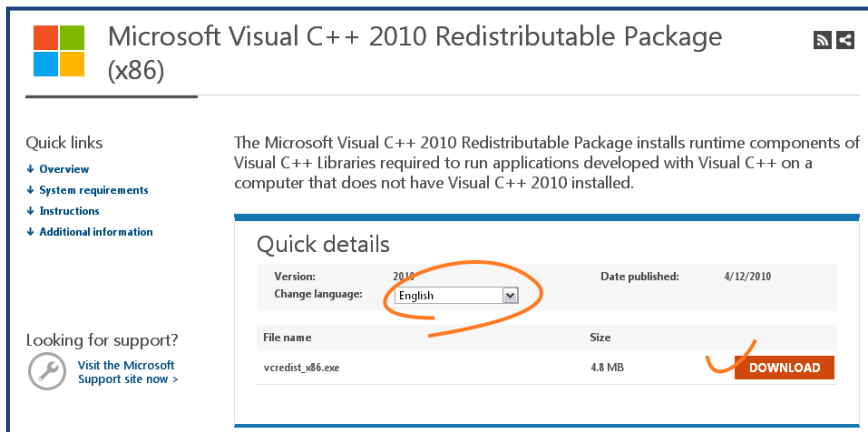
a Firstly, please install [Microsoft Visual C++ 2010 Redistributable Package \(x86\)](#).

b Please click [here](#) to download the installation program which does not support IE browser.

After finish downloading, disable the browser and implement the program by manual.

default | Streaming 1 | Chatting: | Online Visitor : 3 | Relay Out: ON OFF

The link will conduct you to the Microsoft official site where you can download the tools. Please select the language and click **download**.



Microsoft Visual C++ 2010 Redistributable Package (x86)

Quick links: Overview, System requirements, Instructions, Additional information

The Microsoft Visual C++ 2010 Redistributable Package installs runtime components of Visual C++ Libraries required to run applications developed with Visual C++ on a computer that does not have Visual C++ 2010 installed.

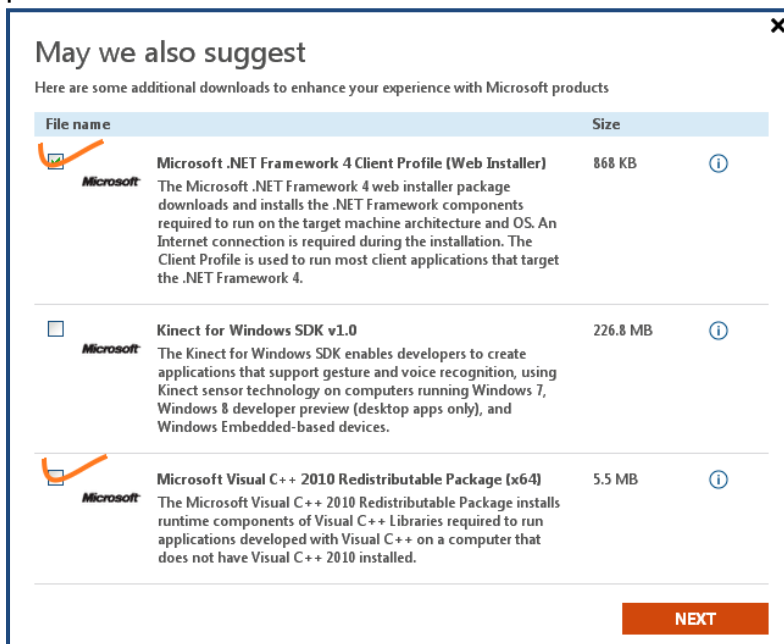
Quick details

Version:	2010	Date published:	4/12/2010
Change language:	English		

File name	Size	
vcredist_x86.exe	4.8 MB	<input checked="" type="checkbox"/> DOWNLOAD

Looking for support? Visit the Microsoft Support site now >

In the pop-up window, please tick the first and the third file as the picture below.



May we also suggest

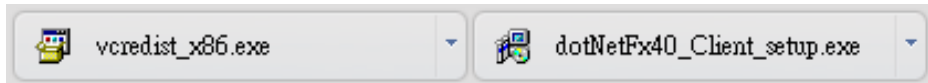
Here are some additional downloads to enhance your experience with Microsoft products

File name	Size	
<input checked="" type="checkbox"/> Microsoft .NET Framework 4 Client Profile (Web Installer) The Microsoft .NET Framework 4 web installer package downloads and installs the .NET Framework components required to run on the target machine architecture and OS. An Internet connection is required during the installation. The Client Profile is used to run most client applications that target the .NET Framework 4.	868 KB	<input checked="" type="checkbox"/> (i)
<input type="checkbox"/> Microsoft Kinect for Windows SDK v1.0 The Kinect for Windows SDK enables developers to create applications that support gesture and voice recognition, using Kinect sensor technology on computers running Windows 7, Windows 8 developer preview (desktop apps only), and Windows Embedded-based devices.	226.8 MB	<input type="checkbox"/> (i)
<input checked="" type="checkbox"/> Microsoft Visual C++ 2010 Redistributable Package (x64) The Microsoft Visual C++ 2010 Redistributable Package installs runtime components of Visual C++ Libraries required to run applications developed with Visual C++ on a computer that does not have Visual C++ 2010 installed.	5.5 MB	<input checked="" type="checkbox"/> (i)

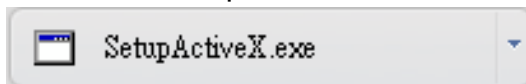
NEXT

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.



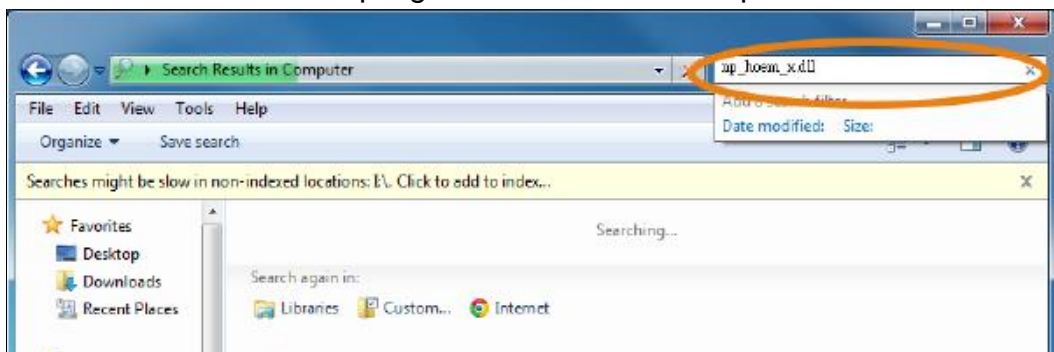
B. Then, click the second link **Please click here to download the installation program which does not support IE browser to download Setup ActiveX**.



After finishing downloading, execute the files to install **ActiveX**. Then restart the browser.

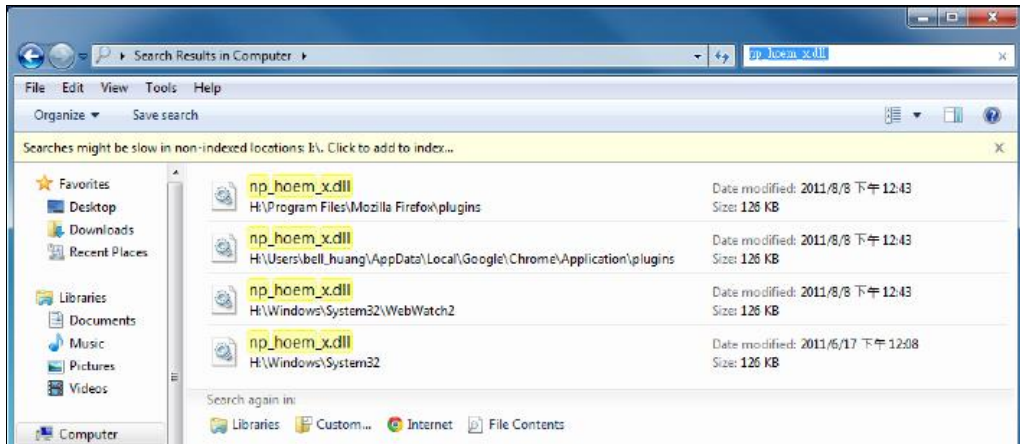
C. If you execute the steps above but still cannot see live video normally, please try the following solution:

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 A: Download the installation program which does not support IE browser** to download and install **ActiveX**.

a [Firstly, please install Microsoft Visual C++ 2010 Redistributable Package \(x86\).](#)

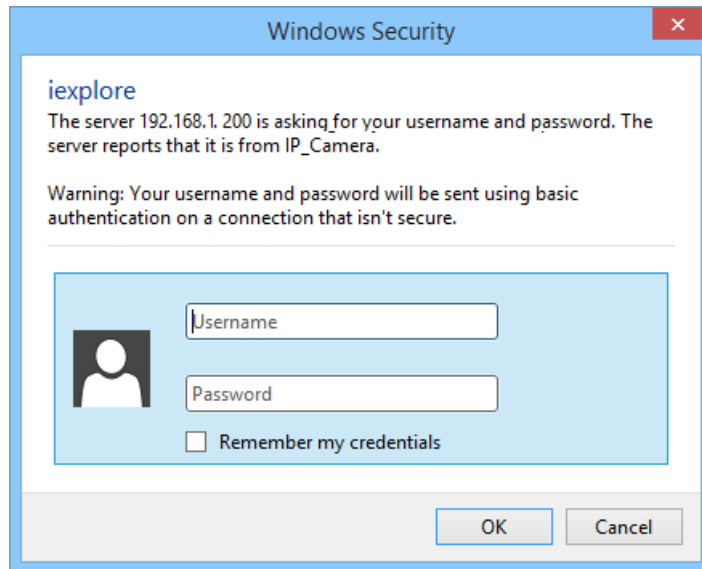
b [Please click here to download the installation program which does not support IE browser.](#)

After finish downloading, disable the browser and implement the program by manual.

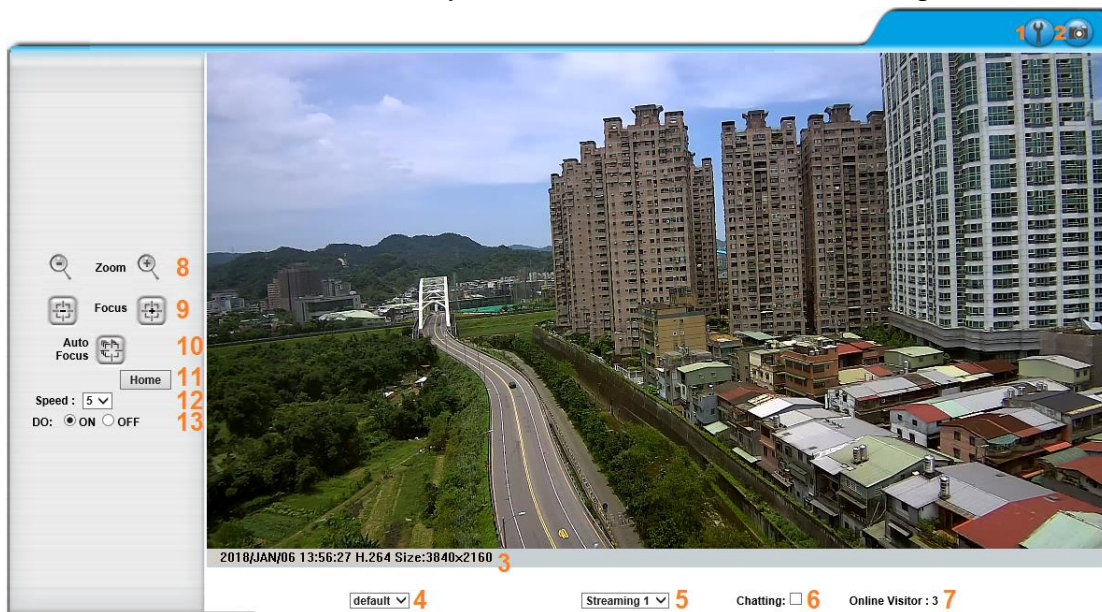
default | Streaming 1 | Chatting: | Online Visitor : 3 | Relay Out: ON OFF

Live Video






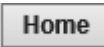
Start an IE browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the user name: **admin** and password: **admin**.



When IP Camera is successfully connected it shows the following interface.

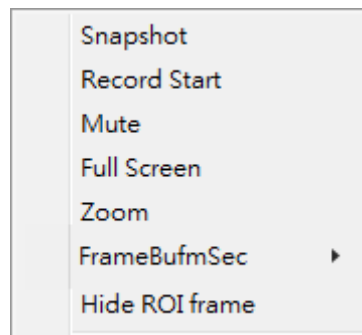


Please change default password is a sign which flickers on the live view screen as a reminder, to suggest the user to change the default password. You may configure the login settings in [System](#) to secure your account privacy.

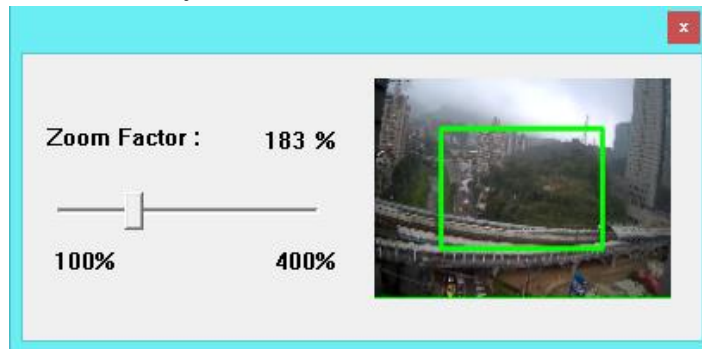
1. Get into the administration page.
2. Video Snapshot.
3. Show the system time, video resolution, and video refreshing rate.
4. Adjust image: 1/2x, 1x, 2x.
5. Selects the video streaming source: If the streaming 2 is closed, this function will not be displayed.
6. Tick on “Chatting” for enabling two-way audio.
7. Shows how many people are connected to this IP camera.
8. Click on   icons to adjust Zoom In / Zoom Out.
9. Focus: Click on   icons to adjust focus.
10. Auto Focus: Click on  icon to automatically adjust focus.
11. Home: Click on  to restart the view with no Focus / Zoom adjustments.
12. Speed: Set the zoom speed.
13. Control the external output device or DO (digital output) connected to this camera.

Double-clicking on the video screen will enter the full screen mode. Press “Esc” on your computer keyboard or double-click the video screen again for returning to normal screen mode.

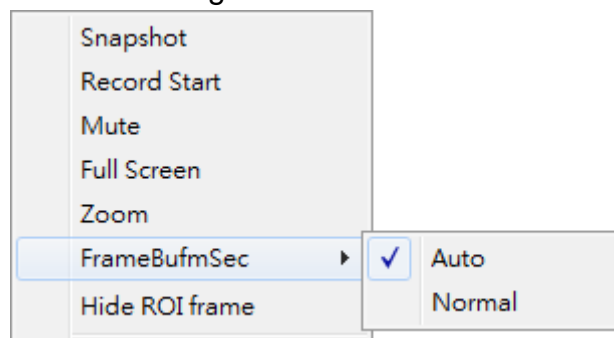
Right-Click the mouse on the live video screen, a pop-up menu will then appear as below.



1. **Snapshot**: Save a JPEG picture
2. **Record Start**: Record the video to the local PC. The video format is AVI and you will be asked to set up the directory for the video file. To stop recording, right-click again. Select “Record Stop”. Play the recorded file with Microsoft Media Player.
3. **Mute**: Click to turn off the audio. Click again to turn it on.
4. **Full Screen**: Full-screen mode.
5. **Zoom**: Select “zoom” within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.



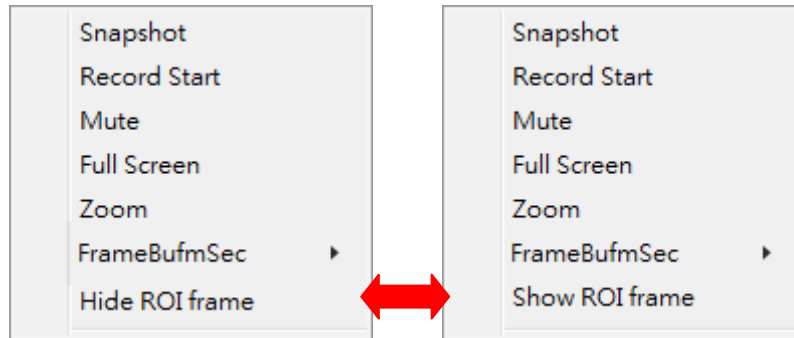
6. **Frame Buffm Sec**: This function aims to build a temporary buffer to accumulate several video frames in a LAN network environment. It can make video streaming smooth when the network speed is slow.



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)

7. **Hide / Show ROI frame:** Once the ROI frame has been set up from [AV Settings](#), there will be frames in colors appearing on the live view. Choose to hide to make the frames invisible, or choose show to keep the frames.



System

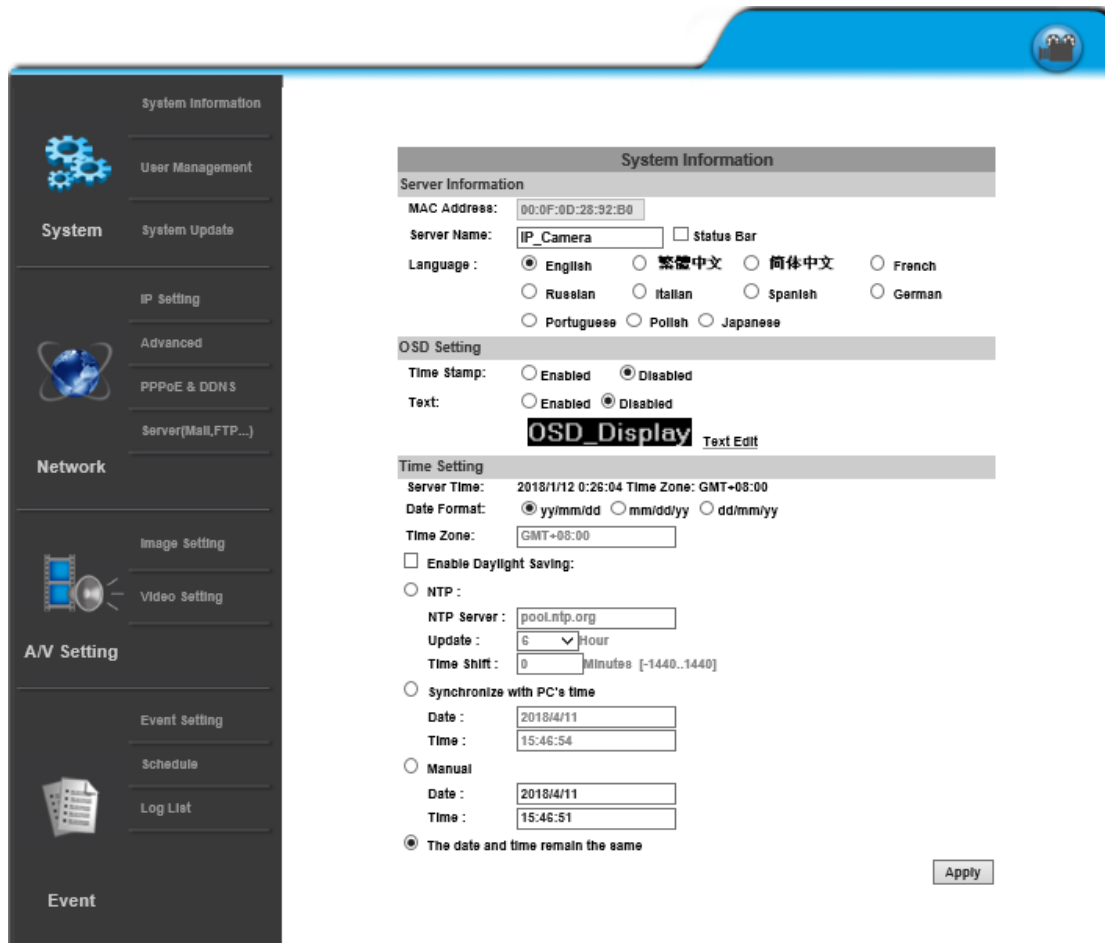


Click



to go back to the

live video page.



The screenshot shows the 'System Information' configuration page. On the left is a dark sidebar with a menu containing: System Information, User Management, System, System Update, IP Setting, Advanced, PPPoE & DDNS, Server(Mail,FTP...), Network, Image Setting, Video Setting, A/V Setting, Event Setting, Schedule, Log List, and Event. The main content area is titled 'System Information' and contains several sections: 'Server Information' with fields for MAC Address (00:0F:0D:28:92:B0), Server Name (IP_Camera), and Language (English selected); 'OSD Setting' with 'Time Stamp' and 'Text' both set to 'Disabled'; 'Time Setting' with 'Server Time' (2018/1/12 0:26:04), 'Date Format' (yy/mm/dd selected), and 'Time Zone' (GMT+08:00); 'NTP' settings with 'NTP Server' (pool.ntp.org) and 'Update' (6 hours); 'Synchronize with PC's time' with 'Date' (2018/4/11) and 'Time' (15:46:54); and 'Manual' settings with 'Date' (2018/4/11) and 'Time' (15:46:51). An 'Apply' button is at the bottom right.

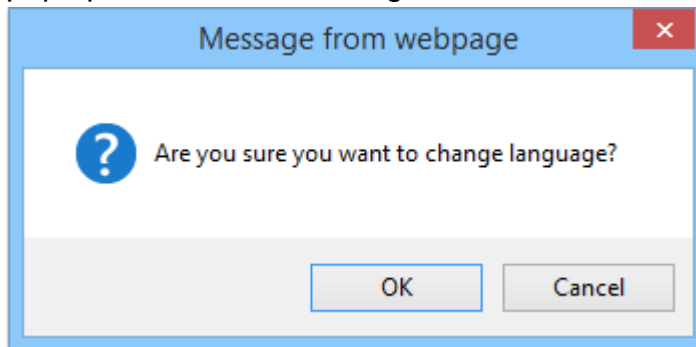
I. System Information

A. Server Information

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

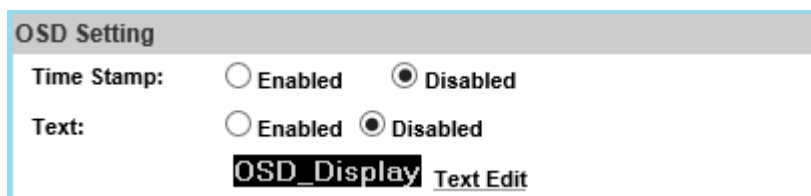


- a. **Server Name:** This is the Camera name. This name will be shown on the IP Scanner.
- b. **Language:** English and other languages can be selected. When a language preference is selected, the following dialogue box will pop up to confirm the change.



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.

Text Edit



Text Edit

Text

Size

Transparency

C. Time Setting

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

Time Setting

Server Time: 2015/7/28 12:43:57 Time Zone: GMT+08:00

Date Format: yy/mm/dd mm/dd/yy dd/mm/yy

Time Zone:

Enable Daylight Saving:

	Month	Day of Week	Time
DST Start:	<input type="text" value="Mar"/>	<input type="text" value="2nd"/>	<input type="text" value="12 am"/>
DST End:	<input type="text" value="Nov"/>	<input type="text" value="1st"/>	<input type="text" value="12 am"/>

NTP :

NTP Server :

Update : Hour

Time Shift : Minutes [-1440..1440]

Synchronize with PC's time

Date :

Time :

Manual

Date :

Time :

The date and time remain the same

II. User Management

User Management

Anonymous User Login

YES NO

Universal Password (differs by IP Address)

YES NO

Add User

Username:

Password:

Confirm:

User List

Username	User Group	Modify	Remove
admin	Administrator	Edit	-----
guest	Guest	Edit	Remove

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

A. 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.

B. Universal Password

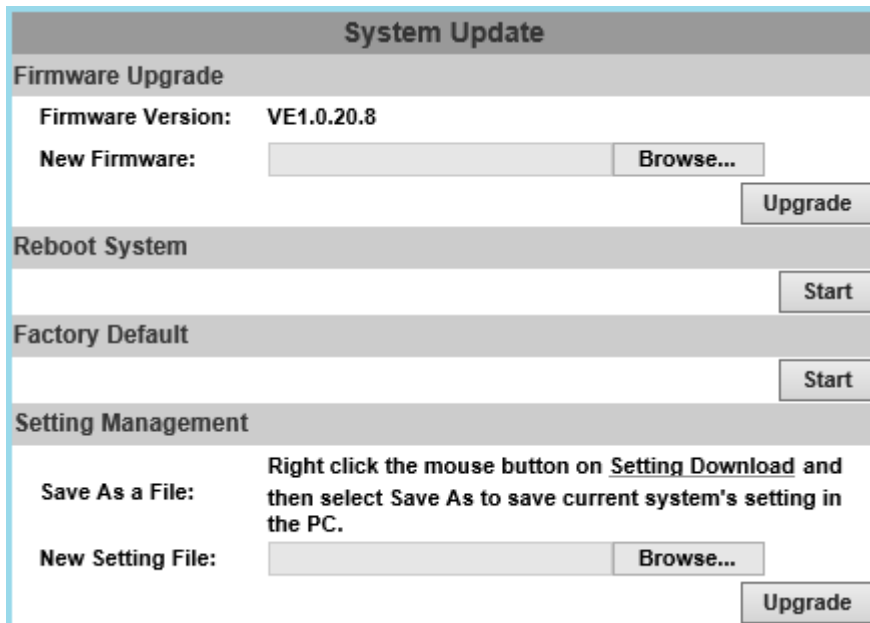
Select **Yes** for allowing login to this IP camera by universal password. Please refer to **Universal Password** chapter for more explanations. Select **No** for disabling universal password.

C. 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



The screenshot shows a web interface titled "System Update". It is divided into four main sections:

- Firmware Upgrade:** Shows the current "Firmware Version: VE1.0.20.8". Below it is a "New Firmware:" field with a "Browse..." button and an "Upgrade" button.
- Reboot System:** A section with a "Start" button.
- Factory Default:** A section with a "Start" button.
- Setting Management:** Contains a "Save As a File:" label and a text instruction: "Right click the mouse button on **Setting Download** and then select Save As to save current system's setting in the PC." Below this is a "New Setting File:" field with a "Browse..." button and an "Upgrade" button.

- A. **Firmware Upgrade:** 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.

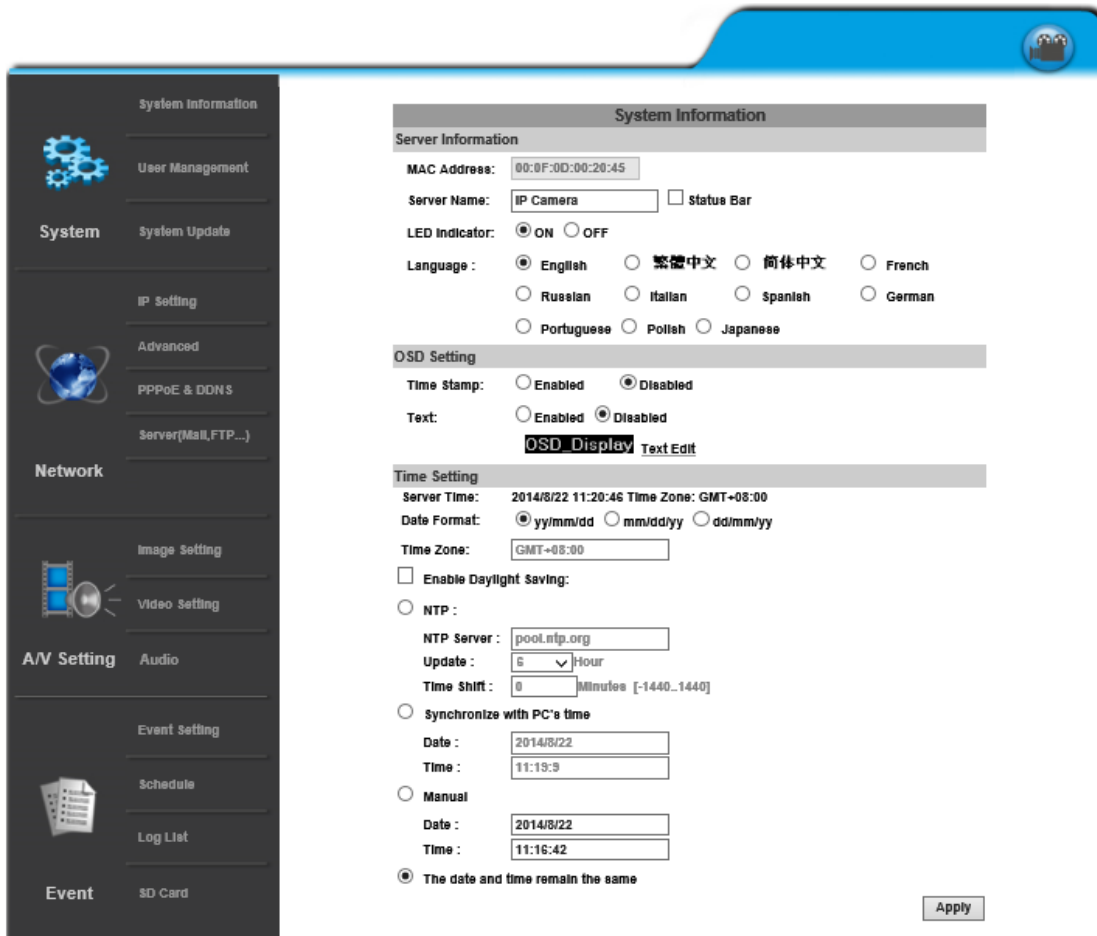
 - D. **Setting Management:** The user can download the current settings to PC, or upgrade from previous saved settings.
 - a. **Settings download**
Right-click the mouse button on Setting Download → Select **Save AS...** to save current IP Camera settings in PC → Select saving directory → Save

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

Network



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



The screenshot displays the 'System Information' configuration page. The left sidebar lists various settings categories: System Information, User Management, System Update, IP Setting, Advanced, PPPoE & DDNS, Server(Mail,FTP...), Network, Image Setting, Video Setting, AV Setting, Audio, Event Setting, Schedule, Log List, and Event. The main content area is titled 'System Information' and includes the following sections:

- Server Information:** MAC Address (00:0F:0D:00:20:45), Server Name (IP Camera), Status Bar (checkbox), LED Indicator (ON/OFF), Language (English, 繁體中文, 简体中文, French, Russian, Italian, Spanish, German, Portuguese, Polish, Japanese).
- OSD Setting:** Time Stamp (Enabled/Disabled), Text (Enabled/Disabled), OSD Display (checkbox), Text Edit (checkbox).
- Time Setting:** Server Time (2014/8/22 11:20:46), Time Zone (GMT+08:00), Date Format (yy/mm/dd, mm/dd/yy, dd/mm/yy), Time Zone (GMT+08:00), Enable Daylight Saving (checkbox), NTP (pool.ntp.org), Update (5 Hour), Time Shift (0 Minutes), Synchronize with PC's time (Date: 2014/8/22, Time: 11:19:9), Manual (Date: 2014/8/22, Time: 11:16:42), and a radio button for 'The date and time remain the same'.

An 'Apply' button is located at the bottom right of the configuration area.

I. IP Settings

IP Assignment

The IP Camera supports DHCP and static IP.

IP Setting	
IP Assignment	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IP Address:	<input type="text" value="192.168.1.200"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="192.168.1.254"/>
DNS 0:	<input type="text" value="168.95.1.1"/>
DNS 1:	<input type="text" value="168.95.192.1"/>

- DHCP: The IP Camera will get all the network parameters automatically.
- Static IP: Type-in the IP address subnet mask, gateway, and DNS.

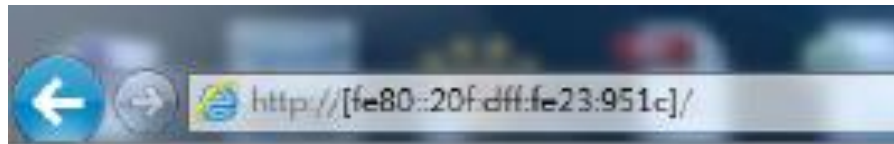
IPv6 Assignment

IPv6 Assignment	
<input checked="" type="checkbox"/> IPv6 Enabled:	
<input checked="" type="checkbox"/> Manually setup the IPv6 address:	
IPv6 Address/Prefix:	<input type="text" value="::"/> / <input type="text" value="64"/>
IPv6 Gateway:	<input type="text" value="::"/>
IPv6 DNS:	<input type="text" value="::"/>
DHCPv6:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
IPv6 Address:	fe80::20f:dff:fe00:284d

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

- Manually setup the IPv6 address: Key-in the Address, Gateway, and DNS.
- DHCPv6: 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.

Port Assignment	
Web Page Port:	<input type="text" value="80"/>
HTTPS Port:	<input type="text" value="443"/> HTTPS Setting

- b. Web Page Port: setup the web page connecting port and video transmitting port (Default: 80)
 - c. HTTPs Port: setup the https port(Default: 443)
-

UPnP

UPnP	
UPnP:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
UPnP Port Forwarding:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
External Web Port:	<input type="text" value="80"/>
External HTTPS Port:	<input type="text" value="443"/>
External RTSP Port:	<input type="text" value="554"/>

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:

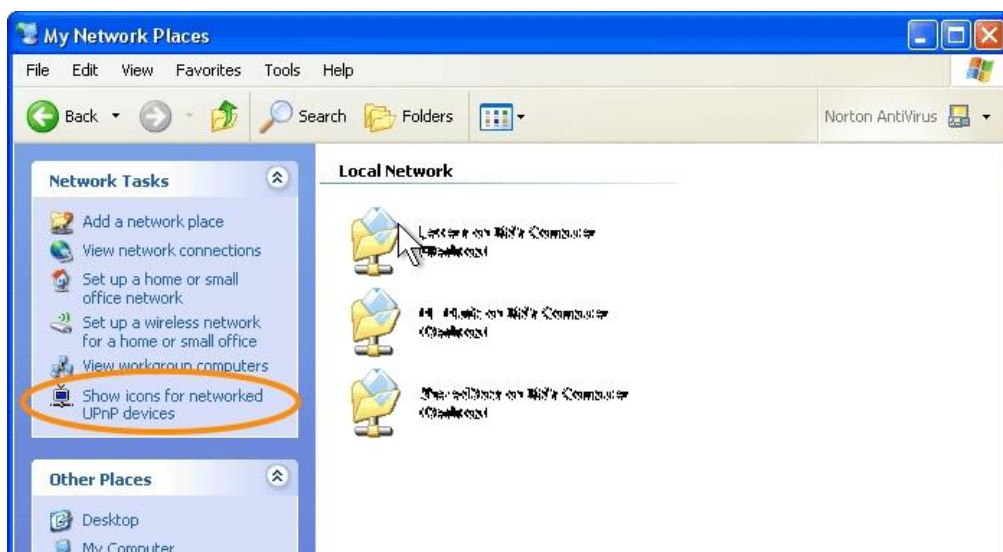
<Approach 1>

1. open the **Control Panel** from the **Start Menu**
 2. Select **Add/Remove Programs**
-

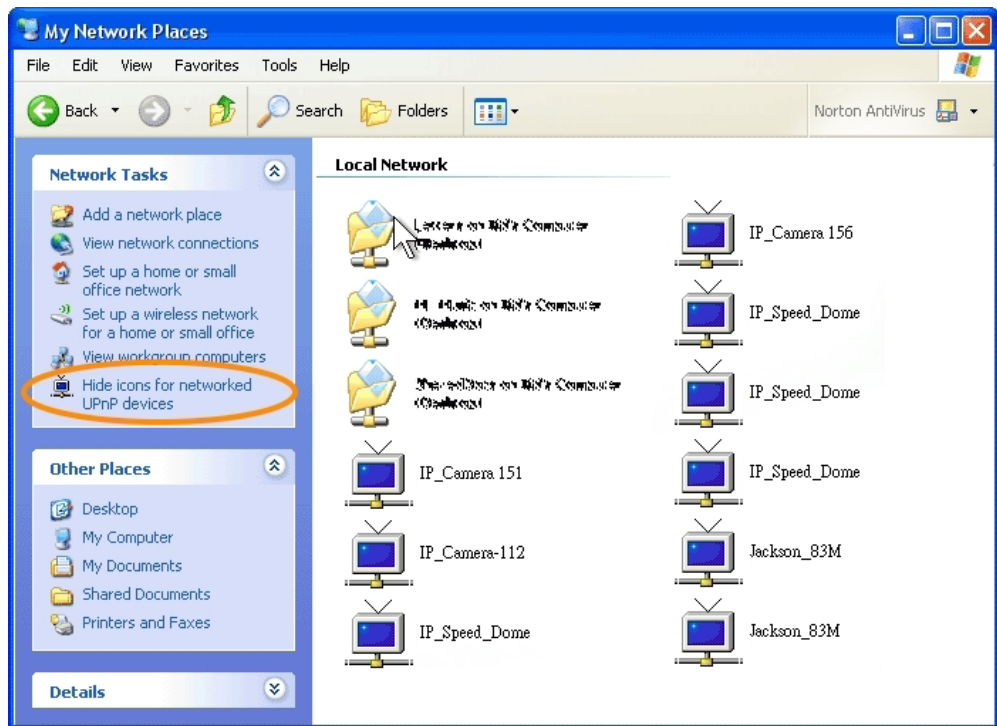
3. Select **Add/Remove Windows Components** and open **Networking Services** section
4. Click **Details** and select **UPnP** to setup the service.
5. The IP device icon will be added to **My Network Places**.
6. The user may double click the IP device icon to access IE browser

<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**.



- 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

RTSP Setting		
RTSP Server:	<input checked="" type="radio"/> Enabled	<input type="radio"/> Disabled
RTSP Authentication:	Disable ▼	
RTSP Port :	554	
RTP Start Port:	5000	[1024..9997]
RTP End port:	9000	[1027..10000]

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. RTSP Server: 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:	<input type="text" value="234.5.6.78"/>	[224.3.1.0 ~ 239.255.255.255]
Port:	<input type="text" value="6000"/>	[1 ~ 65535]
TTL:	<input type="text" value="15"/>	[1 ~ 255]
Streaming 2:		
IP Address:	<input type="text" value="234.5.6.79"/>	[224.3.1.0 ~ 239.255.255.255]
Port:	<input type="text" value="6001"/>	[1 ~ 65535]
TTL:	<input type="text" value="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

ONVIF		
ONVIF:	<input checked="" type="radio"/> v2.10/v1.02	<input type="radio"/> v1.01 <input type="radio"/> Disabled
Security:	<input type="radio"/> Enabled	<input checked="" type="radio"/> Disabled
RTSP Keepalive:	<input checked="" type="radio"/> Enabled	<input type="radio"/> Disabled

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

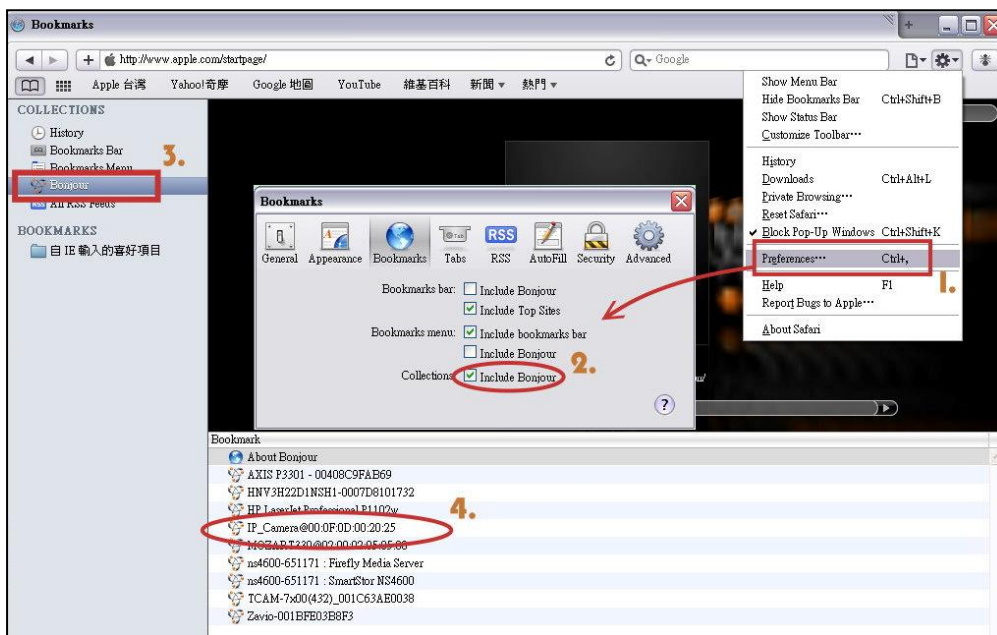
Bonjour	
Bonjour:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
Bonjour Name:	<input type="text" value="IP_Camera"/> @00:0F:0D:00:28:4D

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

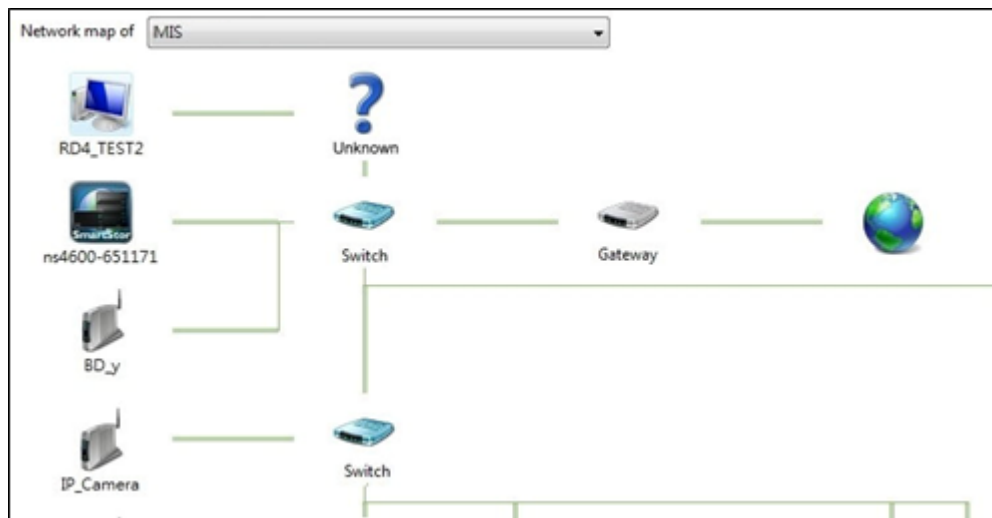
LLTD (Link Layer Topology Discovery)

LLTD: Enabled Disabled

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:

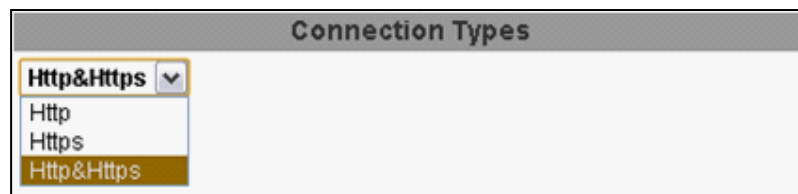
Control Panel → Network and Internet → Network and Sharing Center → Click **See full map**.



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.



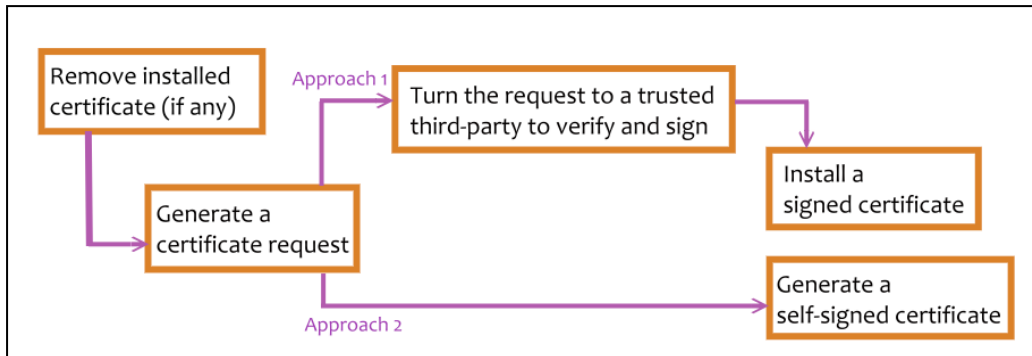
Select the connection type:

- 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.

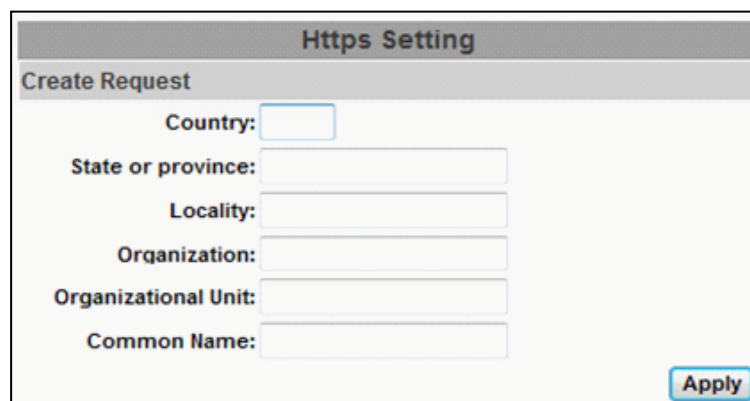
Certificate generation process:



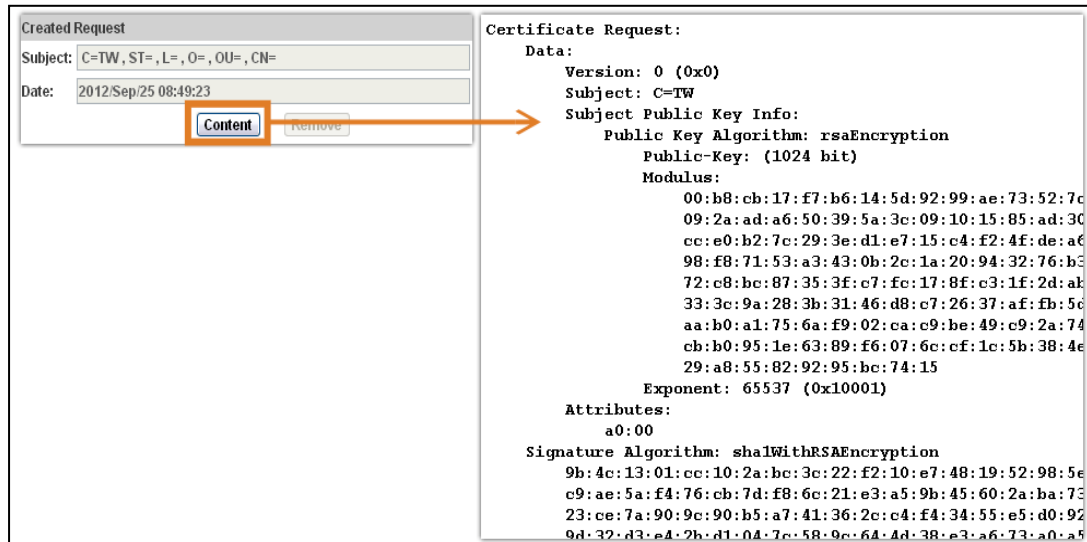
- Remove the existing certificate: Before you generate a new certificate, please remove the installed one. Select the **Http** connection type and click **Remove**. If a dialog box pops up to ask you to confirm, click **Yes**.



- 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.

Install Signed Certificate

Signed Certificate:

Create Self-Signed Certificate

Country:

State or province:

Locality:

Organization:

Organizational Unit:

Common Name:

Validity: Days


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

Installed Certificate

Subject: C=AC , ST= , L= , O= , OU= , CN=name

Date: Oct 4 08:35:29 2012 GMT

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:



The site's security certificate is not trusted!

You attempted to reach **60.251.82.60**, but the server presented a certificate issued by an entity that is not trusted by your computer's operating system. This may mean that the server has generated its own security credentials, which Google Chrome cannot rely on for identity information, or an attacker may be trying to intercept your communications.

You should not proceed, **especially** if you have never seen this warning before for this site.

▶ [Help me understand](#)

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**.

SNMP	
SNMP Setting	
<input type="checkbox"/> SNMPv1	<input checked="" type="checkbox"/> SNMPv2c
Write Community:	<input type="text" value="write"/>
Read Community:	<input type="text" value="public"/>

2. **SNMPv3**: Set the Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of Write mode and Read mode.

<input checked="" type="checkbox"/> SNMPv3	
Write Security Name:	<input type="text" value="write"/>
Authentication Type:	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA
Authentication Password:	<input type="text" value="....."/>
Encryption Type:	<input checked="" type="radio"/> DES <input type="radio"/> AES
Encryption Password:	<input type="text" value="....."/>
Read Security Name:	<input type="text" value="public"/>
Authentication Type:	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA
Authentication Password:	<input type="text" value="....."/>
Encryption Type:	<input checked="" type="radio"/> DES <input type="radio"/> AES
Encryption Password:	<input type="text" value="....."/>

3. Enable SNMPv1/SNMPv2 Trap for detecting the Trap server.

Please set what event needs to be detected.

<input type="checkbox"/> SNMPv1/v2c Trap	
Trap Address:	<input type="text"/>
Trap Community:	<input type="text" value="public"/>
Trap Event:	<input type="checkbox"/> Cold Start <input type="checkbox"/> Warm Start <input type="checkbox"/> Link Up <input type="checkbox"/> Authentication Failed <input type="checkbox"/> SD Detect

- 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**.

IP FILTER

IP ADDRESS FILTER Setting

Enable ip address filter

IPv4 Setting:

allow deny

address:

IPv4 List:

No.	IP Address	Filter	Action
1			<input type="button" value="remove"/>
2			<input type="button" value="remove"/>
3			<input type="button" value="remove"/>
4			<input type="button" value="remove"/>
5			<input type="button" value="remove"/>
6			<input type="button" value="remove"/>
7			<input type="button" value="remove"/>
8			<input type="button" value="remove"/>
9			<input type="button" value="remove"/>
10			<input type="button" value="remove"/>

Allow admin ip address always access this device

Admin ip address:

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**.

QoS/DSCP

QoS/DSCP Setting

Enable QoS/DSCP

Live Stream: (0~63)

Event / Alarm: (0~63)

Management: (0~63)

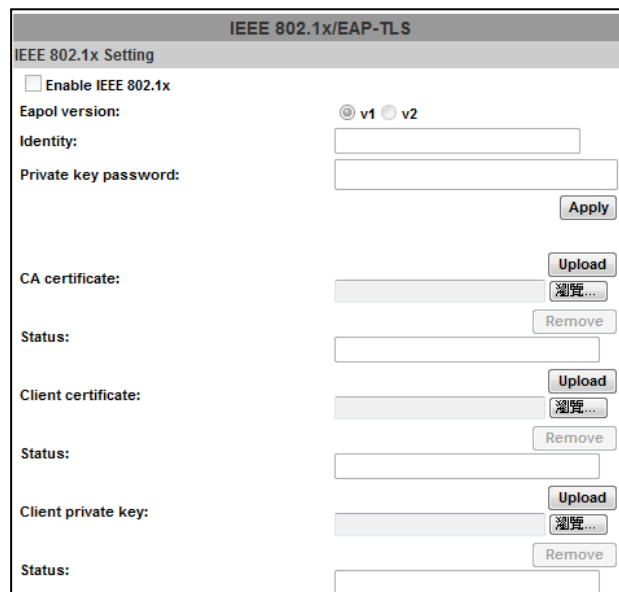
e. IEEE 802.1x:

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.

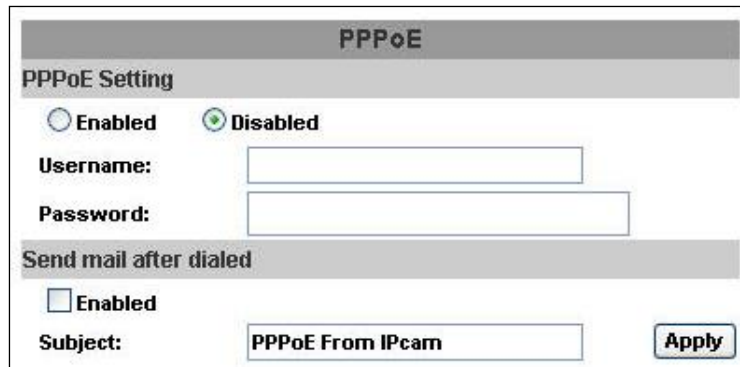


Please check what version of the authenticator and authentication server is supported. This camera supports EAP-TLS method. Please enter the ID, password issued by the CA, then upload related certificates.



The screenshot shows the 'IEEE 802.1x/EAP-TLS' configuration page. The page title is 'IEEE 802.1x Setting'. There is a checkbox for 'Enable IEEE 802.1x'. Below it, the 'Eapol version:' is set to 'v1'. The 'Identity:' field is empty. The 'Private key password:' field is empty. There is an 'Apply' button. The 'CA certificate:' section has an 'Upload' button and a '浏览...' button. Below it is a 'Status:' field and a 'Remove' button. The 'Client certificate:' section has an 'Upload' button and a '浏览...' button. Below it is a 'Status:' field and a 'Remove' button. The 'Client private key:' section has an 'Upload' button and a '浏览...' button. Below it is a 'Status:' field and a 'Remove' button.

III. PPPoE & DDNS

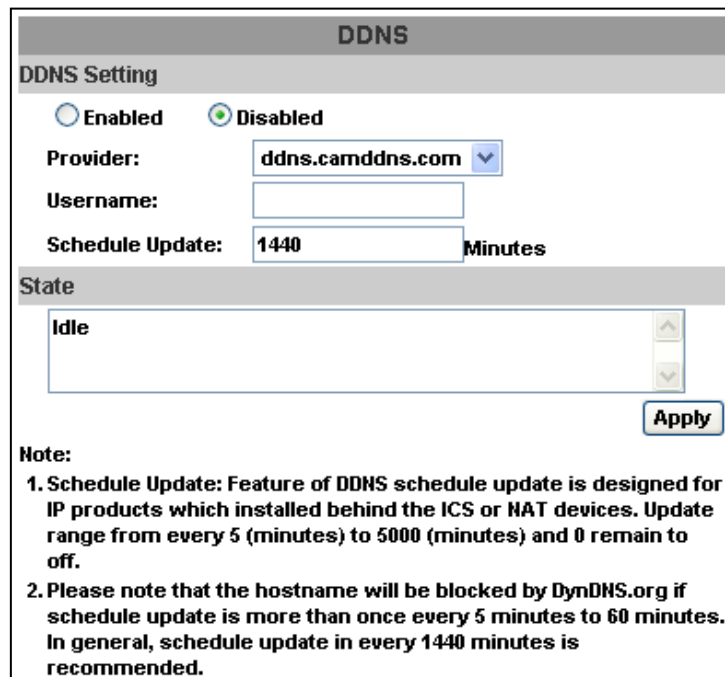


The screenshot shows the 'PPPoE' configuration page. It has a title bar 'PPPoE' and a sub-section 'PPPoE Setting'. Under 'PPPoE Setting', there are two radio buttons: 'Enabled' (unselected) and 'Disabled' (selected). Below these are two text input fields labeled 'Username:' and 'Password:'. A second sub-section 'Send mail after dialed' contains a checkbox for 'Enabled' (unselected) and a 'Subject:' field with the text 'PPPoE From IPcam'. An 'Apply' button is located at the bottom right of the form.

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):**



The screenshot shows the 'DDNS' configuration page. It has a title bar 'DDNS' and a sub-section 'DDNS Setting'. Under 'DDNS Setting', there are two radio buttons: 'Enabled' (unselected) and 'Disabled' (selected). Below these are three fields: 'Provider:' with a dropdown menu showing 'ddns.camddns.com', 'Username:' with an empty text input, and 'Schedule Update:' with a text input '1440' and the label 'Minutes'. A second sub-section 'State' contains a dropdown menu with 'Idle' selected. An 'Apply' button is at the bottom right. Below the form is a 'Note:' section with two numbered points: 1. 'Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.' 2. 'Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.'

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:	<input type="text"/>	
Username:	<input type="text"/>	
Password:	<input type="password"/>	
Sender's Mail:	<input type="text"/>	
Receiver's Mail:	<input type="text"/>	
Bcc Mail:	<input type="text"/>	
Mail Port:	25	(Default 25)
Secure Connect:	<input type="checkbox"/> <input checked="" type="radio"/> TLS <input type="radio"/> SSL	

FTP Setting

Samba (Network storage)

FTP

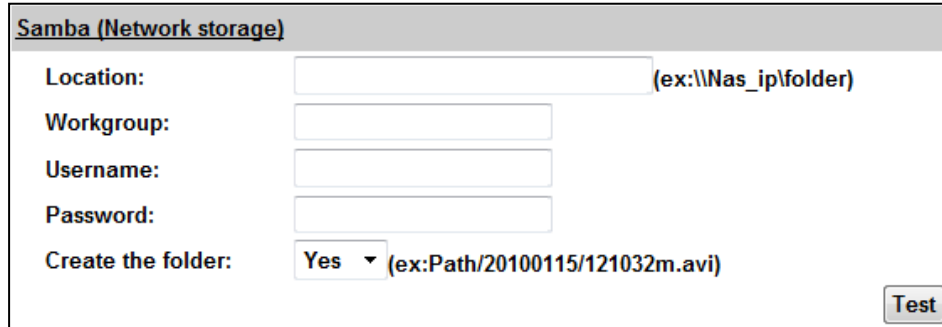
To send out the video via mail of FTP, please set up the configuration.

FTP Setting

FTP Server:	<input type="text"/>	
Username:	<input type="text"/>	
Password:	<input type="password"/>	
Port:	21	
Path:	/	
Mode:	PORT ▾	
Create the folder:	Yes ▾	(ex:Path/20100115/121032m.avi)

Samba

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



Samba (Network storage)

Location: (ex:\\Nas_ip\folder)

Workgroup:

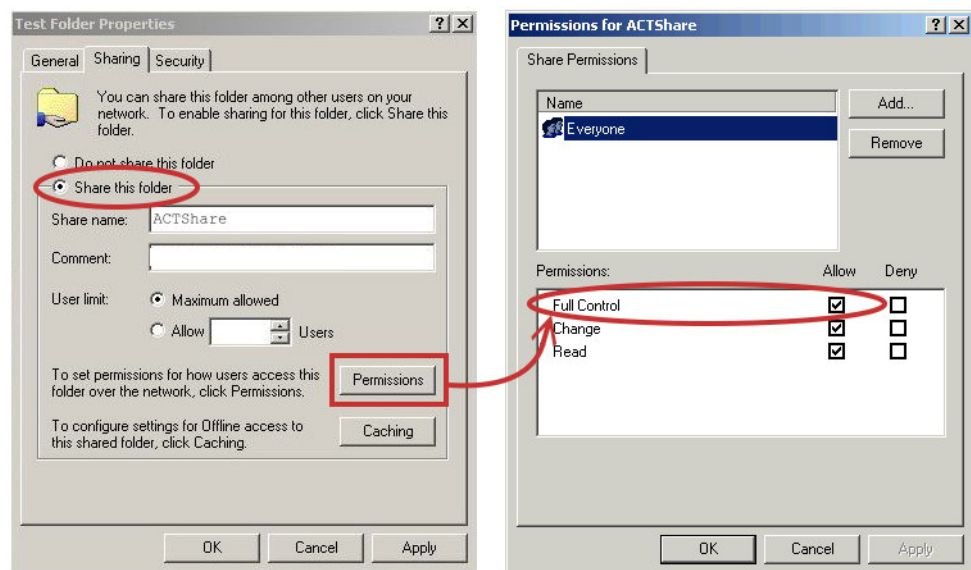
Username:

Password:

Create the folder: Yes (ex:Path/20100115/121032m.avi)

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.



A / V Settings

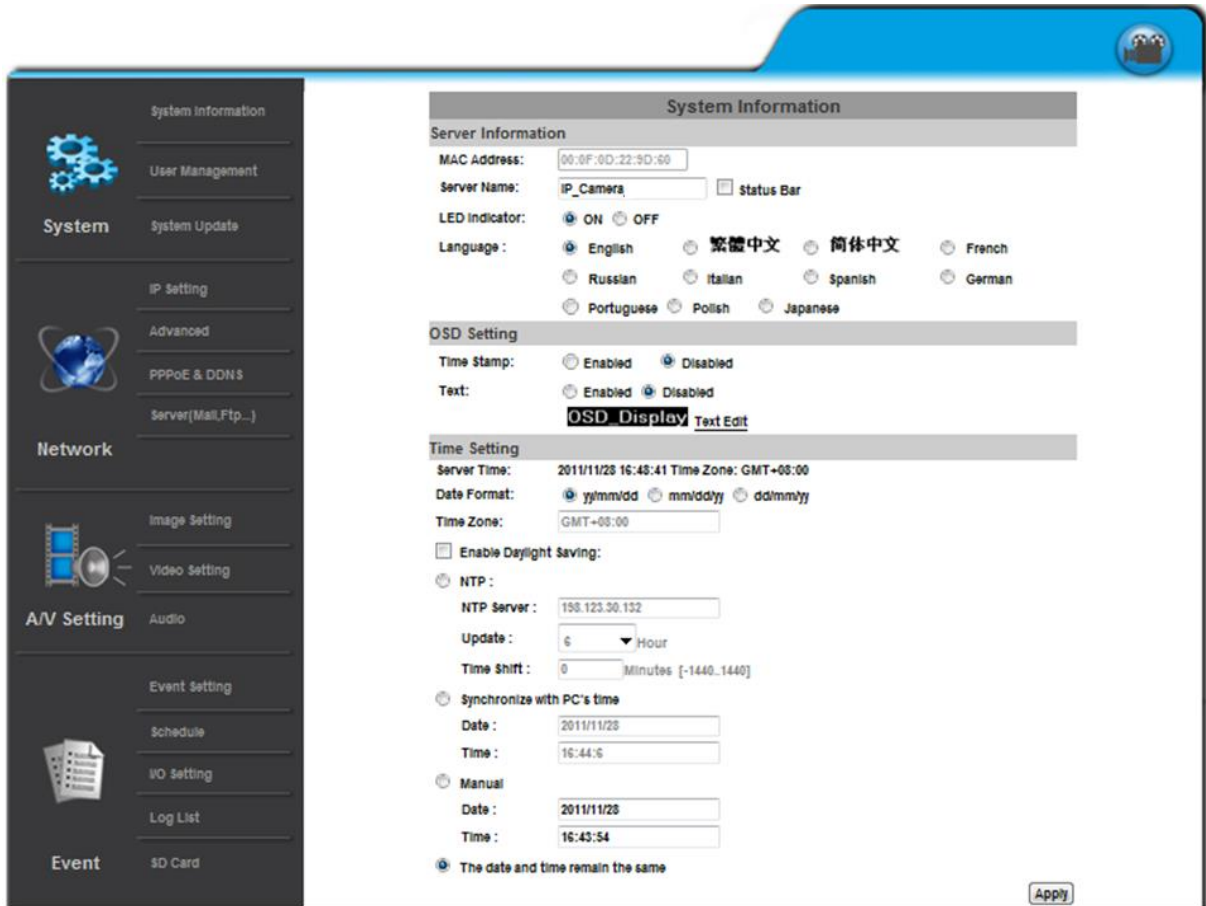


Click



to go back to the

live video page.

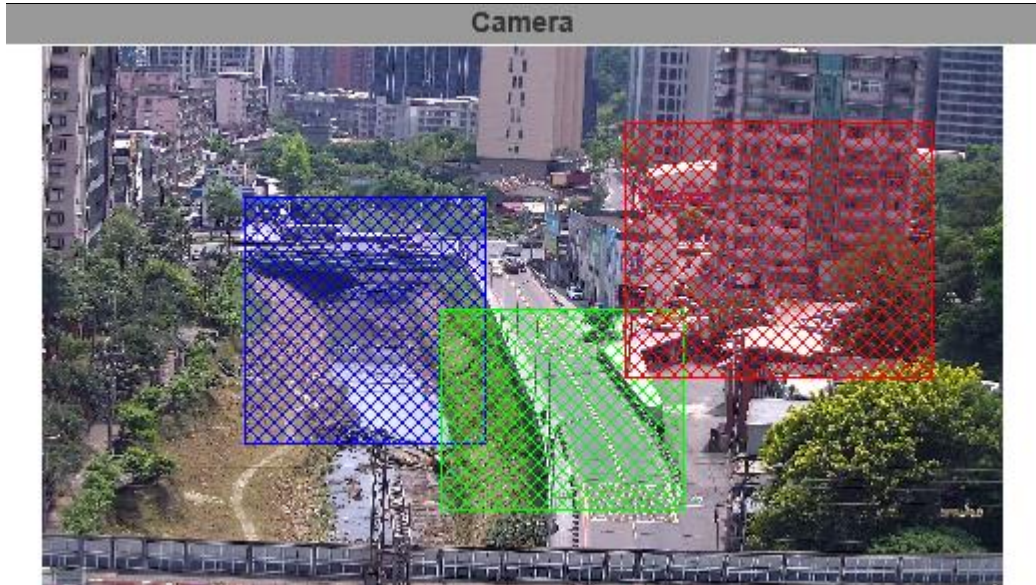


The screenshot displays the web interface for an IP camera's settings. On the left is a dark sidebar with a navigation menu. The main area is titled 'System Information' and contains several configuration sections:

- System Information:** Includes fields for MAC Address (00:0F:0D:22:9D:50), Server Name (IP_Camera), LED Indicator (ON/OFF), and Language (English, 繁體中文, 简体中文, French, Russian, Italian, Spanish, German, Portuguese, Polish, Japanese).
- OSD Setting:** Includes Time Stamp (Enabled/Disabled) and Text (Enabled/Disabled) options, with a text input field containing 'OSD_Display'.
- Time Setting:** Includes Server Time (2011/11/28 16:43:41), Date Format (yy/mm/dd), Time Zone (GMT+08:00), and NTP settings (Server: 198.123.30.132, Update: 6 Hour, Time Shift: 0 Minutes).

Buttons for 'Apply' and 'Text Edit' are visible at the bottom right of the settings area.

1. Image Setting



Please refer to the details below for image settings:

A. Privacy Mask:



An area on the monitoring screen can be masked for security and privacy purposes. Click any **Area 1/2/3** button first, and then drag an area on the preview image screen. Please remember to click **Save** to confirm your settings. The masked area will not be shown on both live view and recording image as a monitoring result. Click the **Area 1/2/3** button, and click on **Save** to cancel the masked area you have just set.

B. Image Setting:

Image Setting	Day Profile	Night Profile
a. Brightness:	0 ▾	0 ▾
Contrast:	0 ▾	0 ▾
Hue:	0 ▾	0 ▾
Sharpness:	0 ▾	0 ▾
b. D-WDR:	1 (Low) ▾	1 (Low) ▾
c. Denoise 3D:	2 ▾	2 ▾
Denoise 2D:	1 ▾	1 ▾
d. AGC:	64x ▾	64x ▾
e. Shutter Time:	Outdoor ▾	Outdoor ▾

Settings can be adjusted from **a ~ e** under **Day Profile & Night Profile** drop-down lists. Activate these profile settings by enabling **Times Mode** from **Day & Night**, the configurations from **a ~ e** will be automatically adjusted between daytime and nighttime.

- a. **Brightness / Contrast / Hue / Sharpness**: Different values can be adjusted here.
- b. **D-WDR**: It enables the camera to reduce the contrast in the view to avoid dark zones as a result of over & under exposure.
- c. **Denoise 3D & 2D**: Filter the noise and blur from the image and show a clearer view. You can set the values for **3D & 2D** filters.
- d. **AGC**: The sensitivity of the camera can be adjusted according to its environmental lighting. Enable this function to get brighter images on low light, but the level of noise may also increase.
- e. **Shutter Time**: Choose the location of your camera or a fixed shutter time. The shorter the shutter time is the less light the camera receives and the image becomes darker.

Note: When you select a number in **Shutter Time**, the shutter time will vary in a range and be controlled by camera automatically. The following table shows the shutter time options and corresponding range.

f.	Sense-Up:	1/15 ▾
g.	Saturation:	0 ▾
h.	Low Lux Auto-adjust:	<input checked="" type="checkbox"/>
i.	Anti Fog:	<input type="checkbox"/> Enable
j.	Video Orientation:	<input type="checkbox"/> Flip <input type="checkbox"/> Mirror

- f. **Sense-Up**: This function increases the sensitivity of camera to get brighter image at night. The smaller value you select, the slower shutter speed becomes. So that the image will get brighter, and moving subjects might be blurred.
- g. **Saturation**: Adjust the saturation values here.
- h. **Low Lux Auto-adjust**: Click to enable the camera to adjust its low lux level automatically in different lighting environments.
- i. **Anti Fog**: Improve the image clarity on environments presenting high levels of fog or smoke.

- j. **Video Orientation**: Flip or mirror the image.
- k. **Day & Night**: Adjust the camera to detect the light level for different environments. Settings vary when modes are shifted. An extra sub-function may appear to be available after a setting is adjusted.

Light Sensor Mode: Automatically adjust itself depending on the light of the monitoring scene.

k. **Day & Night:** Light Sensor Mode ▼

Night to Day Interval: 6 ▼ (second)	Day to Night Interval: 6 ▼ (second)
Night to Day Lux: 7 lux ▼ (about)	Day to Night Lux: 3 lux ▼ (about)
Current Lux: over 55 lux (about)	
IR Intensity: Far ▼	
White Balance: Auto ▼	
Red Gain: 0 ▼	Blue Gain: 0 ▼
Outdoor Threshold: 0 ▼	Indoor
Default	

- ◆ **Night to Day Interval & Day to Night Interval**: Set up the duration of how long before the Day time shifts to Night time (or the other way around).
- ◆ **Day to Night Lux & Night to Day Lux**: Appoint desired lux values as a standard for switching Night to Day Interval & Day to Night Interval.
- ◆ **Current Lux**: Provided as a reference to adjust the Day to Night Lux & Night to Day Lux.
- ◆ **IR Intensity**: Adjust the IR intensity level from Far, Middle or Near.
- ◆ **White Balance**: Apart from AUTO, which continuously adjusts image color balance according to any change of lightings in various scenes, the other 5 modes are designed for specific lighting conditions such as Tungsten Lamp, Fluorescent Lamp, Sunlight, Cloudy, and Cloudy Days.
- ◆ **Red & Blue gain**: Adjust levels in red & blue contrasts in the image. Be aware that when these levels are increased, the image quality will become sharper to a point that noise of the image will also be increased.
- ◆ **Outdoor Threshold**: Values applied for this feature will define how sensitive the motion detection is triggered for outdoor scenes. The lower the number, the less motion will be conditioned for triggering.
- ◆ **Indoor**: Click to enable operation for any indoor motion detections.
- ◆ **Default**: Click on Default button to restore the default settings.

Color Mode (Day): Recommended to use for daytime.

k. Day & Night:

White Balance:

Red Gain: Blue Gain:

Outdoor Threshold:

- ◆ **White Balance:** Please refer to the content above.
- ◆ **Red & Blue gain:** Please refer to the content above.
- ◆ **Outdoor Threshold:** Please refer to the content above.
- ◆ **Indoor:** Please refer to the content above.
- ◆ **Default:** Please refer to the content above.

B/W Mode (Night): Recommended to use for nighttime.

k. Day & Night:

IR Intensity:

White Balance:

Red Gain: Blue Gain:

Outdoor Threshold:

- ◆ **IR Intensity:** Please refer to the content above.
- ◆ **White Balance:** Please refer to the content above.
- ◆ **Red & Blue gain:** Please refer to the content above.
- ◆ **Outdoor Threshold:** Please refer to the content above.
- ◆ **Indoor:** Please refer to the content above.
- ◆ **Default:** Please refer to the content above.

Times Mode: The values set in **Brightness, Contrast, Sharpness, & Denoise(3D&2D)** from **Day Profile & Night Profile** will be performed according to the **Time** arranged from **Day to Night**.

k. Day & Night:

Time: Day: Night: (HH:MM)

IR Intensity:

White Balance:

Red Gain: Blue Gain:

Outdoor Threshold:

- ◆ **Time:** The user can define when the daytime (**Day**) starts by filling in the digits such as 05:00 or 12:35. (Hours range: 0~23, minutes range: 0~59)

The example is as below:

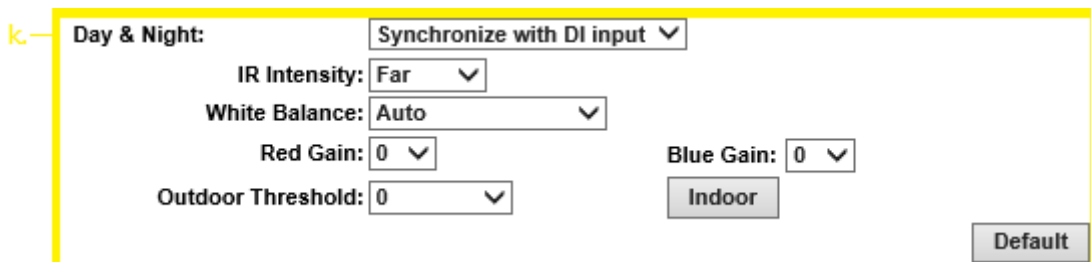
Time: Day: Night: (HH:MM)

If the time range is inaccurate, a window will pop up to remind you. Same way applies to filling the nighttime (**Night**).

Click when settings are completed.

- ◆ **IR Intensity:** Please refer to the content above.
- ◆ **White Balance:** Please refer to the content above.
- ◆ **Red & Blue gain:** Please refer to the content above.
- ◆ **Outdoor Threshold:** Please refer to the content above.
- ◆ **Indoor:** Please refer to the content above.
- ◆ **Default:** Please refer to the content above.

Synchronize with DI input: Settings are adjusted according to the DI input functions.



Day & Night: ▼

IR Intensity: ▼

White Balance: ▼

Red Gain: ▼

Blue Gain: ▼

Outdoor Threshold: ▼

- ◆ **IR Intensity:** Please refer to the content above.
- ◆ **White Balance:** Please refer to the content above.
- ◆ **Red & Blue gain:** Please refer to the content above.
- ◆ **Outdoor Threshold:** Please refer to the content above.
- ◆ **Indoor:** Please refer to the content above.
- ◆ **Default:** Please refer to the content above.

2. Video Setting


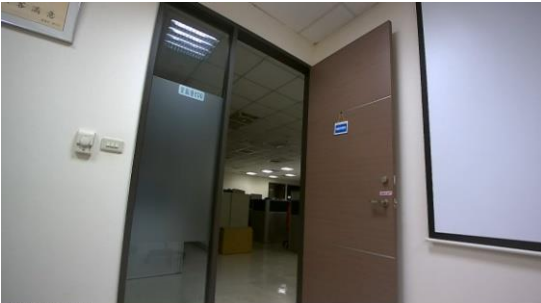




A. Video System

Video Setting	
Input Resolution:	1920x1080 @ 30fps ▾
Video System:	PAL ▾
TV Output:	Auto ▾ (Auto : Based on the Video System)
Corridor Mode:	none ▾

- Input resolution: 1920x1080@30fps or 1920x1080_WDR@30fps
- Video System: NTSC or PAL
- TV Output: Choose Auto or select between NTSC and PAL signal.
- Corridor Mode: 90 degrees, 270 degrees or none.

If **Corridor Mode** is set as **none** the relation of the image and the camera would be as the following:

Corridor mode: None (Pictures based on another type of camera model)

Degrees	Position	Image
0 degrees		
90 degrees		
270 degrees		

If **Corridor Mode** is set as **90 degrees** or **270 degrees** the relation of the image and the camera would be as the following:

Corridor Mode: 90 or 270 degrees
 (Pictures based on another type of camera model)

Degrees	Position	Image
90 degrees		
270 degrees		
0 degrees		

B. Streaming 1 Setting & Streaming 2 Setting

a. **Basic Mode:** Resolution range varies depending on different modes.

Streaming 1 Setting

Basic Mode **Advanced Mode**

Resolution:

Profile:

Quality:

Video Frame Rate:

Video Format:

Stream Feature: **ROI** **Close**

ROI (Region Of Interest): [Preview](#)

ROI Satatus: **Not Setting**

RTSP Path: **ex:rtsp://IP_Address/** **Audio:G.711**

- **Resolution:** 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps
- **Profile:** Chose from Main or Baseline.
- **Quality:** There are 5 levels. Best/ High/ Standard/ Medium/ Low The higher the quality is, the bigger the file size is. Not good for internet transmission.
- **Video Frame Rate:** Adjust the video refreshing rate for each second.
- **Video Format:** **H.264+**, **H.264** or **JPEG**
- **Stream Feature**

You MUST click at the bottom to execute the feature FIRST to enable the Stream Feature after either ROI or Smart Stream is selected.

Stream Feature: **ROI** **Smart Stream** **Close**

ROI (Region Of Interest): [Preview](#)

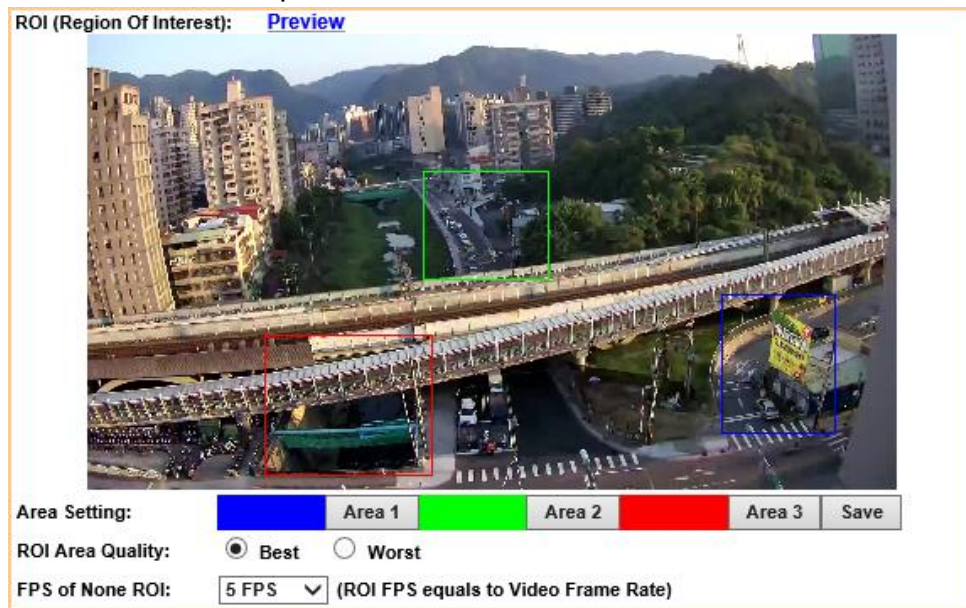
ROI Satatus: **Not Setting**

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 [Preview](#) to enable ROI the function. Click on any of the colors in **Area Setting** to draw an ROI area on the preview screen by dragging your mouse. You can set up to approximately 3 ROI areas.

Adjust the **ROI Area Quality** and **FPS of None ROI** values of each area from each drop down list.

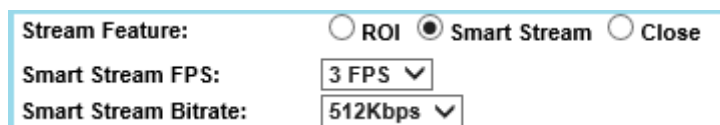


After the **ROI** is set in the **Stream Feature**, you can see the **ROI Status** once **ROI** is activated.

Stream Feature: ROI Smart Stream Close

ROI (Region Of Interest): [Preview](#)
 ROI Status: Area1_ON,Area2_ON,Area3_ON,FPS of None ROI=5,ROI Area Quality=Best

Smart Stream



Enable this mode, set the range of FPS and Bitrate to limit its stream capacity, in order to preserve a better performance of image quality and save more bandwidth.

- **RTSP Path:** Offers the RTSP output connecting path.

a. Advanced Mode:

Streaming 1 Setting

Basic Mode **Advanced Mode**

Resolution:

Profile:

Bitrate Control Mode: CBR **CVBR**

Video Quantitative:

Video Bitrate Limit:

Video Frame Rate:

GOP Size: GOP = 30

Video Format:

Stream Feature: **ROI** Close

ROI (Region Of Interest): [Preview](#)

ROI Satatus: **Not Setting**

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

- **Resolution:** 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps
- **Profile:** Chose from High, Main or Baseline.
- **Bitrate Control Mode:** There are **CBR**(Constant Bit Rate) and **CVBR**(Constrained Variable Bit Rate) modes.

CBR: Video Bitrate Limit: (32Kbps~8Mbps)

The higher the CBR is, the better the video quality is.

CVBR: Video Quantitative: 1(Low) ~10(High)

The higher the compression rate, the lower the picture quality is; vice versa. Avoid image breaking up or lagging by setting the bandwidth limit for CVBR streaming.

- **Video Frame Rate:** The video refreshing rate per second.
- **GOP Size:** It means "Group of Pictures". The higher the GOP is, the better the quality is.
- **Video Format:** H.264+, H.264 or JPEG
- **Stream Feature**

You MUST click at the bottom to execute the feature FIRST to enable the Stream Feature after either ROI or Smart Stream is selected.

Stream Feature:	<input checked="" type="radio"/> ROI <input type="radio"/> Smart Stream <input type="radio"/> Close
ROI (Region Of Interest):	Preview
ROI Satatus:	Not Setting

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 [Preview](#) to enable ROI the function. Click on any of the colors in **Area Setting** to draw an ROI area on the preview screen by dragging your mouse. You can set up to approximately 3 ROI areas.

Adjust the **ROI Area Quality** and **FPS of None ROI** values of each area from each drop down list.

ROI (Region Of Interest):	Preview
	
Area Setting:	<input checked="" type="radio"/> Area 1 <input type="radio"/> Area 2 <input type="radio"/> Area 3 <input type="button" value="Save"/>
ROI Area Quality:	<input checked="" type="radio"/> Best <input type="radio"/> Worst
FPS of None ROI:	5 FPS (ROI FPS equals to Video Frame Rate)

After the ROI is set in the **Stream Feature**, you can see the **ROI Status** once ROI is activated.

Stream Feature:	<input checked="" type="radio"/> ROI <input type="radio"/> Smart Stream <input type="radio"/> Close
ROI (Region Of Interest):	Preview
ROI Satatus:	Area1_ON,Area2_ON,Area3_ON,FPS of None ROI=5,ROI Area Quality=Best

Smart Stream

Stream Feature:	<input type="radio"/> ROI <input checked="" type="radio"/> Smart Stream <input type="radio"/> Close
Smart Stream FPS:	3 FPS
Smart Stream Bitrate:	512Kbps

Enable this mode, set the range of FPS and Bitrate to limit its stream capacity, in order to preserve a better performance of image quality and save more bandwidth.

- **RTSP Path:** Offers the RTSP output connecting path.

b. 3GPP Streaming mode: TV output will be shut down during this mode.

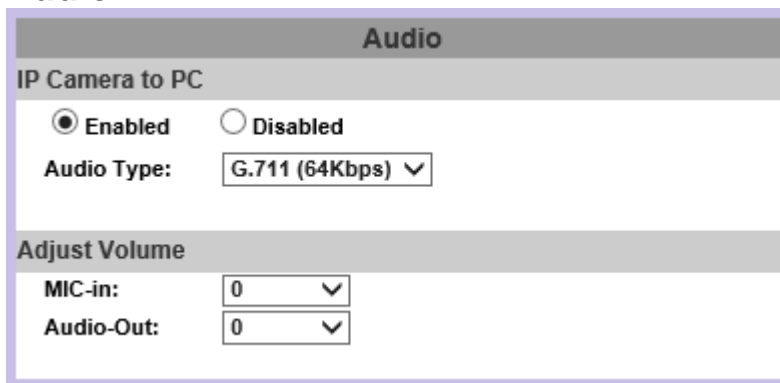


The screenshot shows the '3GPP Streaming Setting' interface. It includes a title bar, a 'Format=H.264' label, and radio buttons for 'Open' (selected) and 'Close'. Below are four rows of settings: 'Resolution' (320x240), 'Video Bitrate' (256Kbps), 'Video Frame Rate' (15 FPS), and 'RTSP Path' (v3). To the right of the RTSP Path field, there is an example 'ex:rtsp://IP/v3' and 'Audio:AMR'.

- ◆ **Resolution:** 640x480@15fps, 320x240@15fps
- ◆ **Video Bitrate:** The higher Video Bitrate, the better the video quality is.
- ◆ **Video Frame Rate:** The video refreshing rate per second.
- ◆ **RTSP Path:** RTSP output name

Please click on the button to keep the changes when all the settings are completed and confirmed.

3. Audio



The screenshot shows the 'Audio' settings interface. It has a title bar and two main sections. The first section, 'IP Camera to PC', has radio buttons for 'Enabled' (selected) and 'Disabled', and a dropdown for 'Audio Type' set to 'G.711 (64Kbps)'. The second section, 'Adjust Volume', has two dropdowns: 'MIC-in' and 'Audio-Out', both set to '0'.

The user can send audio from the IP Camera built-in microphone to the remote PC and audio from remote PC to IP Camera's external speaker.

- A. IP Camera to PC:** Select **Enabled** to start and select the audio type. Tick **chatting** in the live browser to enable **PC to IP Camera** audio function. **The Audio may not be smooth when the SD card is recording.**

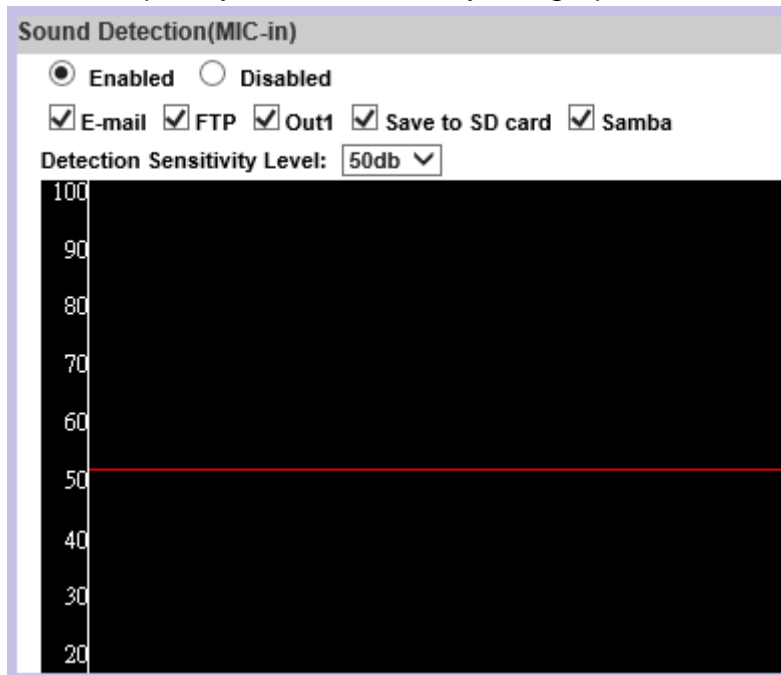
Chatting:

Online Visitor : 1



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

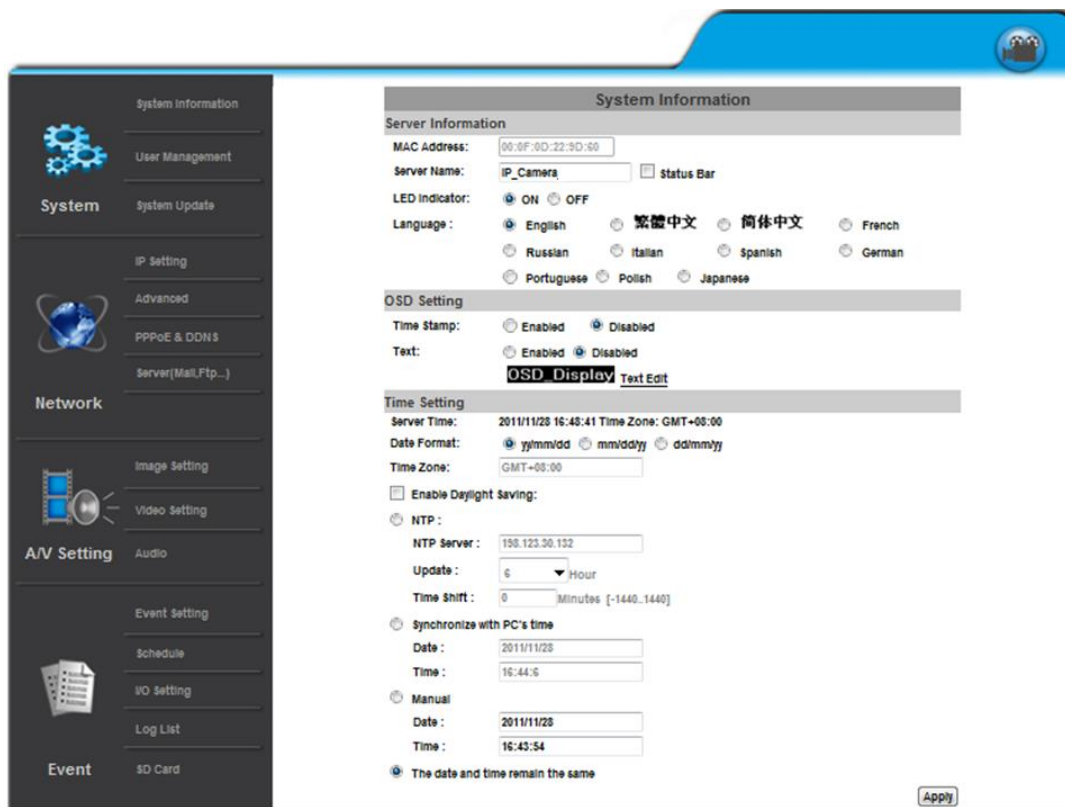
Click on the button to keep all the changes.

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.



Event List

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



The IP Camera provides multiple event settings.


1. Event Setting

A. Motion Detection

Please change default password is a sign which appears on the live view screen as a reminder, to suggest the user to change the default password.

Event Setting

Motion Detection



Area Setting:	<input type="checkbox"/> Area 1	<input type="checkbox"/> Area 2	<input type="checkbox"/> Area 3
Sensitivity:	<input type="text" value="5"/>	<input type="text" value="5"/>	<input type="text" value="5"/>
Activate motion time:	<input type="text" value="1 sec"/>		

<input checked="" type="checkbox"/> Area 1:	<input checked="" type="checkbox"/> E-mail	<input checked="" type="checkbox"/> FTP	<input checked="" type="checkbox"/> Out1	<input checked="" type="checkbox"/> Save to SD card	<input checked="" type="checkbox"/> Samba	<input checked="" type="checkbox"/> Google Drive	<input checked="" type="checkbox"/> Dropbox
<input type="checkbox"/> Area 2:	<input type="checkbox"/> E-mail	<input type="checkbox"/> FTP	<input type="checkbox"/> Out1	<input type="checkbox"/> Save to SD card	<input type="checkbox"/> Samba	<input type="checkbox"/> Google Drive	<input type="checkbox"/> Dropbox
<input type="checkbox"/> Area 3:	<input type="checkbox"/> E-mail	<input type="checkbox"/> FTP	<input type="checkbox"/> Out1	<input type="checkbox"/> Save to SD card	<input type="checkbox"/> Samba	<input type="checkbox"/> Google Drive	<input type="checkbox"/> Dropbox

Log : E-mail FTP Samba

Subject:

Interval: a period of time between every two motions detected.

Based on the schedule

- **Area Setting:** To start a motion detection operation, tick **Area 1/2/3**, click **Area 1/2/3** in **Area Setting**, and draw an area on the preview screen.

When motion is detected in the area, the word **Motion!** will be displayed on the live screen. The camera will send video or snapshot to specific **E-mail** addresses, trigger the output device, or save recorded data to **FTP/ Micro SD card/ Samba / Google Drive / Dropbox**. You can set up those network paths from [Network](#) operations.

- **Sensitivity:** Adjust the level of the responsiveness defined as motion detection.

- **Activate motion time:** Adjust the duration of the time defined as motion detection.
- **Area 1/2/3:** By marking the **Save to SD card** checkbox, the video or snapshot will be saved to the **Micro SD card**.
- **Log:** Popped up after **Save to SD card** checkbox is ticked by your mouse. Check **E-mail/ FTP/ Samba** checkboxes on the **Log** option to send the motion detection log to **E-mail/ FTP/ Samba** simultaneously. Please see [IO Configuraiton](#) for details.
- **Subject:** Type in the message you would receive when motion is detected. The default message is **"IP Camera Warning!"**.
- **Interval:** For example, when selecting **10 sec**, once the motion is detected and the 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. Tampering Detection

Tampering Detection	
Tampering:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
	<input type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Out1 <input type="checkbox"/> Save to SD card <input type="checkbox"/> Samba
Interval:	<input type="text" value="30 sec"/> ▼

When the camera view is covered, moved, hit by strong light, or out of focus, the tampering detection will be triggered, and send snapshot to mail/FTP/Samba/SD card, or trigger the external alarm. For example:

Before Tampering Detection



Tampering Triggered (Defocused)



Before Tampering Detection



Tampering Triggered (Lens Covered)



Before Tampering Detection



Tampering Triggered (Glare)



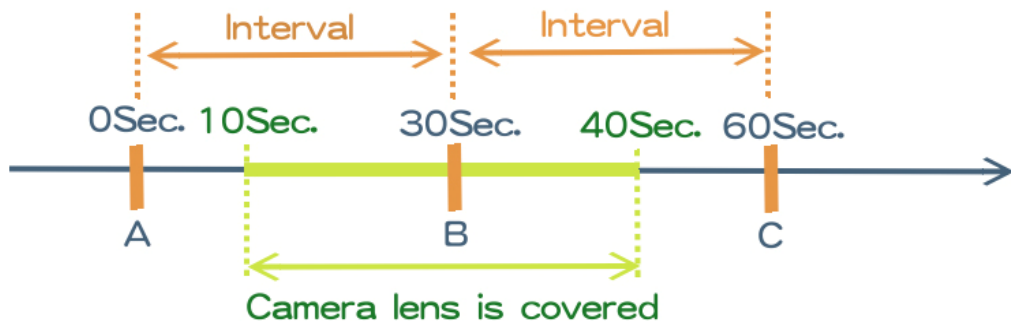
Before Tampering Detection



Tampering Triggered (Camera Moved)



- Interval:** The tampering detecting interval. Take the diagram below as example. The interval is set for 30 second; the camera lens is covered during 10 - 40 sec. At time point B, the camera compares the view with time point A, and sends an alarm when it finds that the lens is covered. At time point C, the camera compares the view with time point B, and sends an alarm when it finds that the lens is uncovered.



C. Record File

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

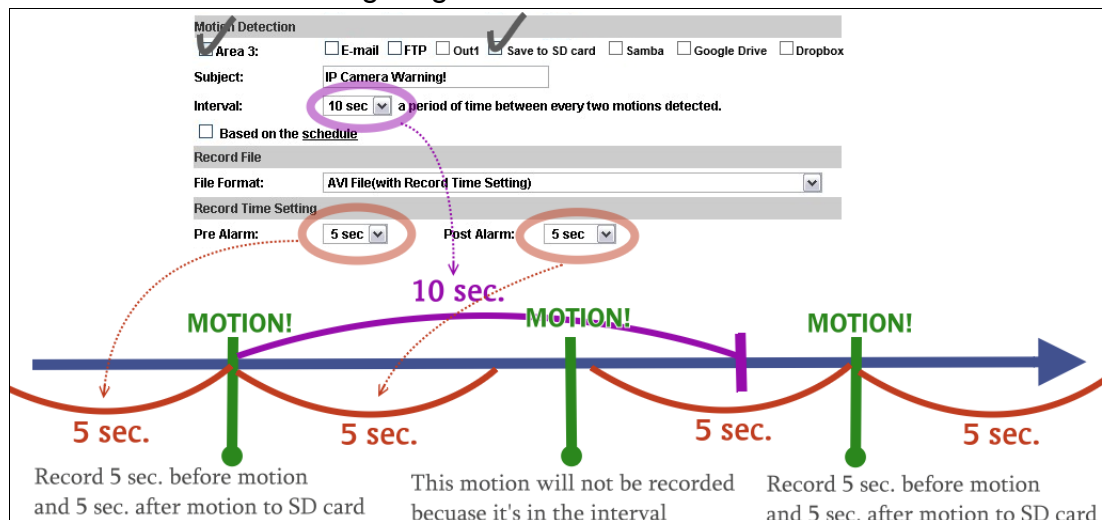
When an event occurs, the IP camera will record a video clip or take snapshot, and then send to mail/ FTP/ Samba. Select the file format to be saved.

- **AVI File (with Record Time Setting)**: Save AVI video file. The video length is according to the value set in Record Time Setting.
- **JPEG Files (with Record Time Setting)*Only Streaming 1 with JPEG file format.**: 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.
- **JPEG File (Single File with Interval Setting)**: Save single JPEG picture file when the event occurs.

D. 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** and other platforms. Select the video recording length before and after the event is detected.



E. Network Dis-connected

Network Dis-connected

Dis-connected: Save to SD card

The image will be recorded to the SD card after the IP Camera detects network dis-connected, if set “Save to SD card”.

F. Network IP Check: The IP camera can check if the network server is connecting after the function is enabled.

Network IP Check

IP Check: Enabled Disabled

IP Address:

Interval: ▼

Check failed: Connection failed four times. Reboot IP Camera.
 Save to SD card

(When Schedule Record Enable, it'll stop saving to SD card)
 (When IP check failed, first step will save to SD card, continuing other saving storage)

If the IP camera checking fails for 4 times, the camera will reboot.

Click to update all the settings adjusted.

2. Schedule

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

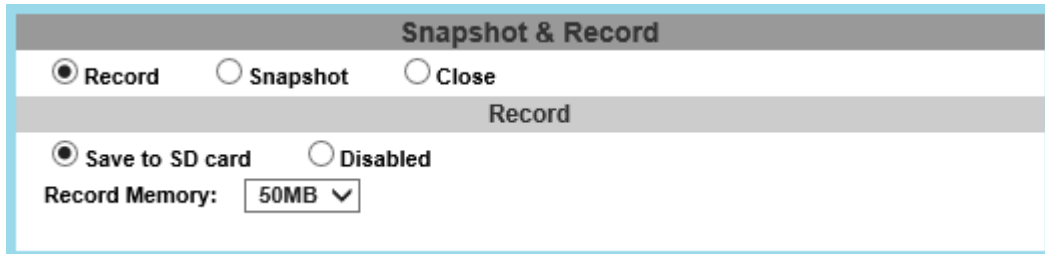
Schedule

All	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon.																								
Tue.																								
Wed.																								
Thu.																								
Fri.																								
Sat.																								
Sun.																								

With schedule setup.

B. Snapshot & Record

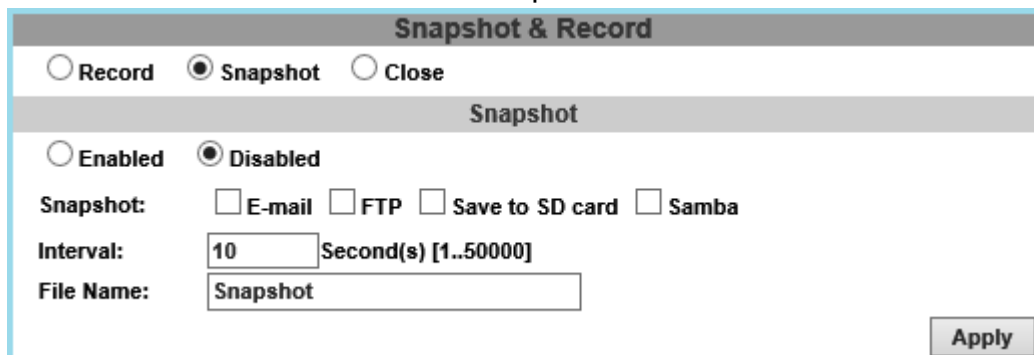
- **Record:** After completing the **Schedule**, the camera data will be recorded according to the schedule made from the calendar.



The screenshot shows the 'Snapshot & Record' configuration page. At the top, there are three radio buttons: 'Record' (selected), 'Snapshot', and 'Close'. Below this, there is a sub-section titled 'Record' containing two radio buttons: 'Save to SD card' (selected) and 'Disabled'. At the bottom, there is a 'Record Memory' field with a dropdown menu set to '50MB'.

Beware that SD cards may fail in time for being recorded for a long period of time. You may set up how much SD card memory to be used in order to estimate the right time to swap a new one.

- **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.

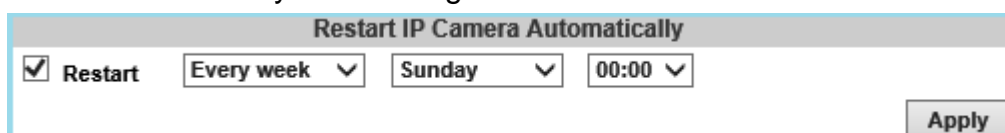


The screenshot shows the 'Snapshot & Record' configuration page with the 'Snapshot' tab selected. At the top, there are three radio buttons: 'Record', 'Snapshot' (selected), and 'Close'. Below this, there is a sub-section titled 'Snapshot' containing two radio buttons: 'Enabled' and 'Disabled' (selected). Underneath, there are four checkboxes: 'E-mail', 'FTP', 'Save to SD card', and 'Samba'. The 'Interval' field is set to '10' with the unit 'Second(s) [1..50000]'. The 'File Name' field contains the text 'Snapshot'. An 'Apply' button is located at the bottom right.

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.



The screenshot shows the 'Restart IP Camera Automatically' configuration page. It features a checked checkbox for 'Restart'. To its right are three dropdown menus: 'Every week', 'Sunday', and '00:00'. An 'Apply' button is located at the bottom right.

3. I/O Setting

I/O Setting

Input Setting

Input 1 Sensor:

Input 1 Action: E-mail FTP Out1 Save to SD card Samba

Log: E-mail FTP Samba

Subject:

Interval:

Based on the schedule

Output Setting

Mode Setting: OnOff Switch Time Switch

Output Waveform:

A. Input Setting: The IP Cam supports input and output. When the input condition is triggered, it can trigger the relay; send the video to mail addresses/FTP server/SAMBA.

- 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. 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. Output Setting: The output mode affects the DO or relay out duration.



- Mode Setting
 - (i) ON/Off Switch: The camera triggers the external device and lasts for 10 seconds. You can turn off the alarm manually by clicking “off” at the right bottom of the live video page.
 - (ii) Time Switch: The camera triggers the external device and lasts for certain time according to the internal setting, and the user is not allowed to break off the alarm manually.

Click on the button to keep all the changes.
- Output Waveform
Select either HIGH or GROUNDED for the output waveform.

4. Log List

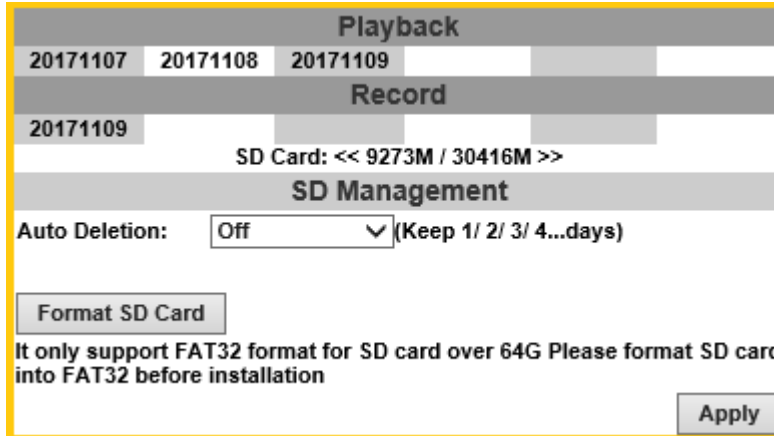
Log List	
System Logs	Logs
Motion Detection Logs	Logs
I/O Logs	Logs
All Logs	Logs

Sort by System Logs, Motion Detection Logs and I/O Logs. In addition, System Logs and I/O Logs won't lose data due to power failure. Choose All Logs to list out all the events from Motion Detection Logs to I/O Logs.

All Log	
<System>	[2017/11/23 15:17:39] Language changed to Trad. Chinese.
<System>	[2017/11/23 15:17:21] 220.135.138.67 login by admin.
<System>	[2017/11/23 15:12:20] 220.135.138.67 login by admin.
<System>	[2017/11/23 15:12:15] 220.135.138.67 login by Anonymous.
<System>	[2017/11/23 15:12:15] 220.135.138.67 login by Anonymous.

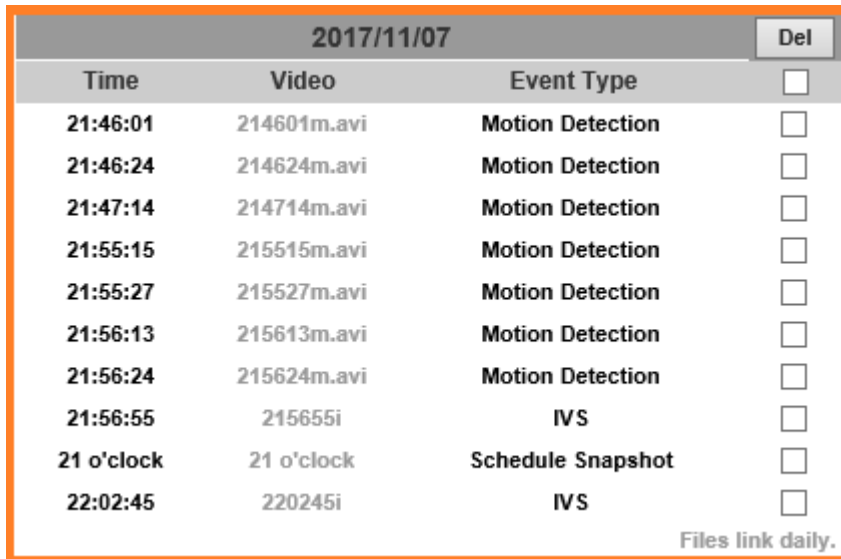
5. SD card

- A. **Playback:** Please Insert the Micro SD card before use it. Make sure to push the Micro SD card into the slot completely.



The screenshot shows the SD Management interface. At the top, there are sections for **Playback** and **Record**, each with a date selector (20171107, 20171108, 20171109). Below these is the **SD Card** status: << 9273M / 30416M >>. The **SD Management** section includes an **Auto Deletion** dropdown menu set to **Off** with options (Keep 1/ 2/ 3/ 4...days). There is a **Format SD Card** button and a note: "It only support FAT32 format for SD card over 64G Please format SD card into FAT32 before installation". An **Apply** button is at the bottom right.

Click the date under the **Playback** title and a list of files will pop up. For example, if the date **2017/11/07** is clicked, all the events happened within that time frame will then appear in a list like the one below.



2017/11/07			Del
Time	Video	Event Type	
21:46:01	214601m.avi	Motion Detection	<input type="checkbox"/>
21:46:24	214624m.avi	Motion Detection	<input type="checkbox"/>
21:47:14	214714m.avi	Motion Detection	<input type="checkbox"/>
21:55:15	215515m.avi	Motion Detection	<input type="checkbox"/>
21:55:27	215527m.avi	Motion Detection	<input type="checkbox"/>
21:56:13	215613m.avi	Motion Detection	<input type="checkbox"/>
21:56:24	215624m.avi	Motion Detection	<input type="checkbox"/>
21:56:55	215655i	IVS	<input type="checkbox"/>
21 o'clock	21 o'clock	Schedule Snapshot	<input type="checkbox"/>
22:02:45	220245i	IVS	<input type="checkbox"/>

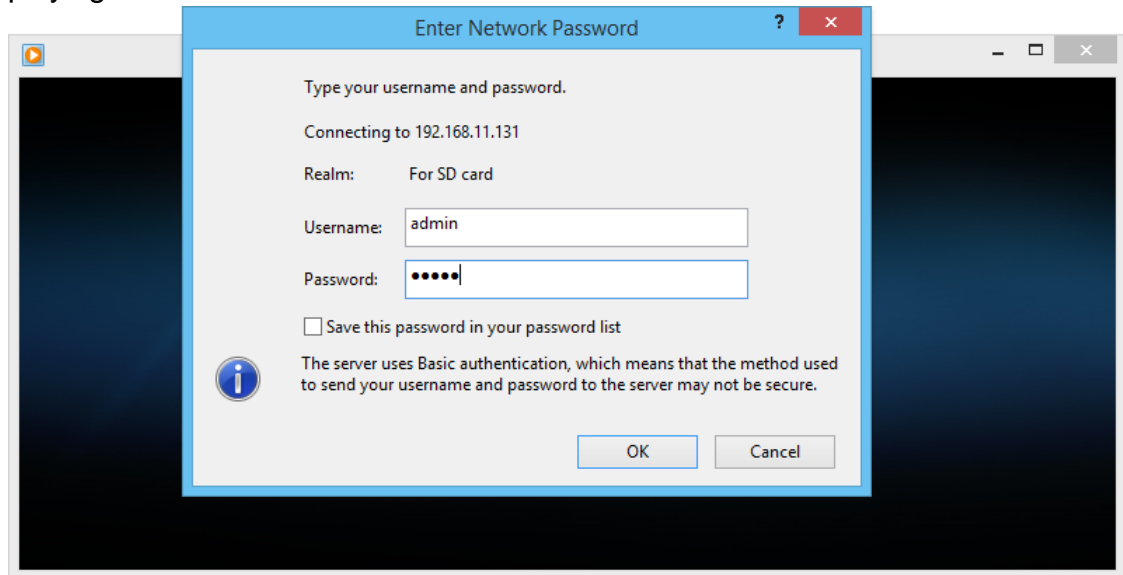
Files link daily.

The enlisted files under **Video** category are files representing an event. There are 3 types of file formats, and each is different for its own **Event Type**. Notice how the file name formations under the **Video** category represent the time when a file is created.

For instance, the file name "**214601m.avi**" means the video is recorded at **21:46:01** today, **m** means **Motion Detection**, and **avi** represents the file format.

Click on the file name to open the file.

For **avi** files, you need Microsoft Media Player which is supposedly built-in in your PC. The default Username & Password for playing the video file are both **admin**.



Clicking on an **IVS** file (such as **215655i**) will bring out a pop-up window suggesting an **IVS** event captured as snapshots as the one below:



Clicking on any title that is labeled with “**time unit**” (such as **21 o'clock**) at the end will bring out a pop-up window indicating the snapshot taken as scheduled in **Schedule** mode and enabled in **Snapshot** mode.



Click the icon to delete any file by marking on the checkbox under the **Del** category with a mouse click.

- B. Record:** The recording mode is enabled after **Record** is set in **Schedule** mode. Take the schedule calendar below for example, the grids coloured in green between 3~12 are scheduled to start recording from 3 o'clock to 12 o'clock from Monday to Thursday.

Schedule																								
All	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon.																								
Tue.																								
Wed.																								
Thu.																								
Fri.																								
Sat.																								
Sun.																								

With schedule setup.

Once the recording mode is on, the video data recorded will be found and labelled as **2017/11/09**.



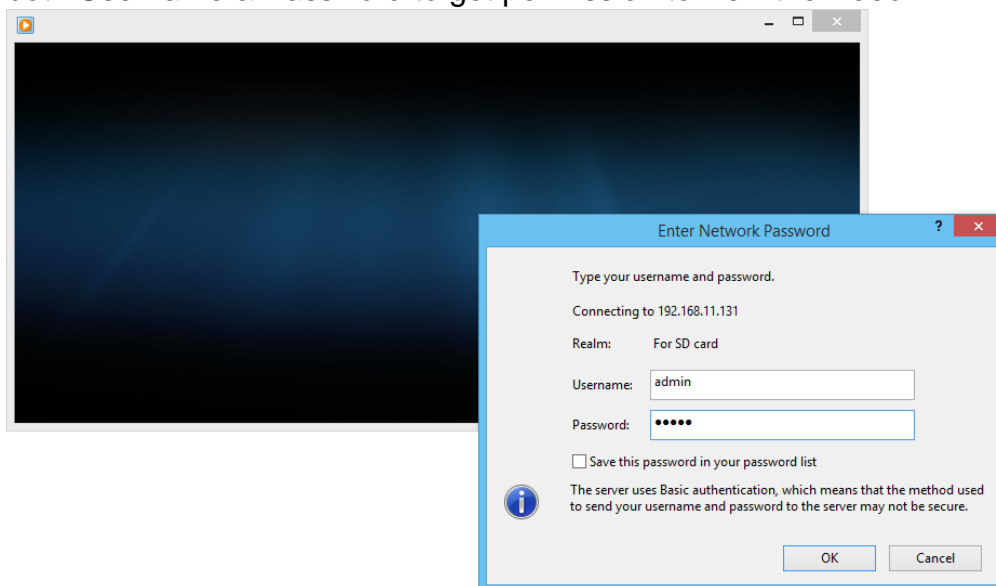
Click on **2017/11/09** to enter the next page where all files recorded on that date are enlisted.

2017/11/09			Del
Time	Video	Event Type	<input type="checkbox"/>
03:00:00	030000r	Record	<input type="checkbox"/>
04:00:00	040000r	Record	<input type="checkbox"/>
05:00:00	050000r	Record	<input type="checkbox"/>
06:00:00	060000r	Record	<input type="checkbox"/>
07:00:00	070000r	Record	<input type="checkbox"/>
08:00:00	080000r	Record	<input type="checkbox"/>
09:00:00	090000r	Record	<input type="checkbox"/>
10:00:00	100000r	Record	<input type="checkbox"/>
11:00:00	110000r	Record	<input type="checkbox"/>
12:00:00	120000r	Record	<input type="checkbox"/>

1 2

Files link daily.

Click on any video title to open Microsoft Media Player (supposedly already built-in in your PC) and play the video file. Key-in **admin** for both Username & Password to get permission to view the video.




The number at the bottom indicates the distributive law of the current SD Card memory which is divided and assigned to different types of recording purposes. The left side shows how much memory is still available, and the right side shows how much the total memory is.

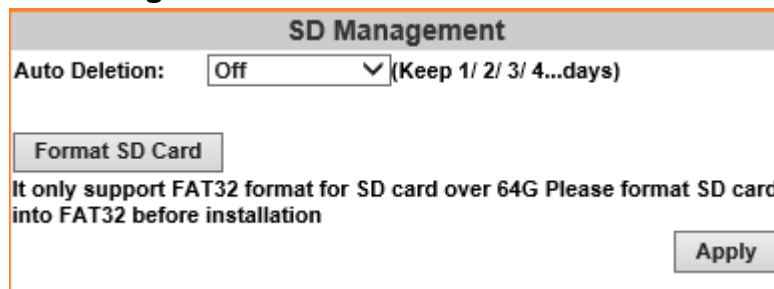
Record	
20171109	SD Card: << 9273M / 30416M >>

If the memory of the SD card is **over 128G**, **70%** of the memory will be used for scheduled recording, and **30%** will be used for event recording.

If the memory of the SD card is **below 128G**, **50%** of the memory will be used for scheduled recording, and **50%** will be used for event recording.

Click the  icon to delete any file by marking on the checkbox under the Del category with a mouse click.

C. SD Management

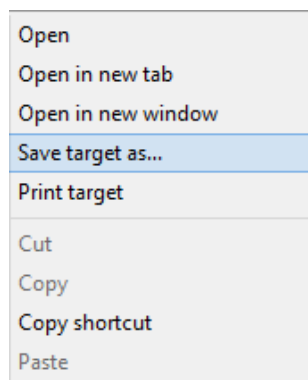


- a. **Auto Deletion:** Choosing “The 1st day” means the recording file will be kept for one day. Example: It is five o’clock now. Choose “The 1st day”. The files will be kept from five o’clock yesterday to five o’clock today. The oldest file will be deleted if the Micro SD card is full.

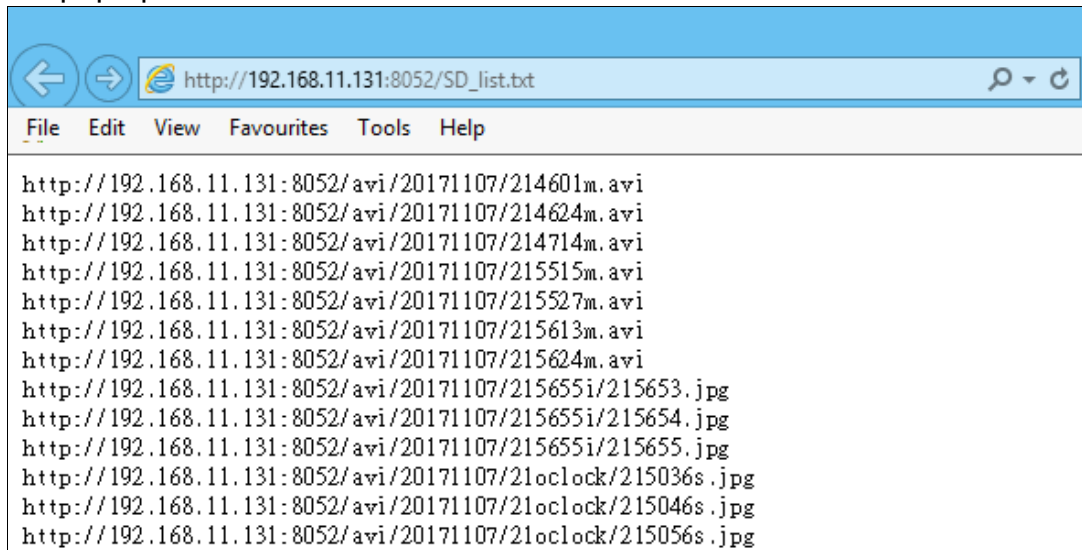
Note : The use of the SD card will slightly affect the operation of the IP Camera, such as affecting the frame rate of the video.

- b. **Format SD Card:** Click the icon to process the SD Card formatting into FAT32 format. Be cautious that since it only supports FAT format for SD Card over 64G, please format SD Card into FAT32 before installation.

D. SD Card Files



- a. **Downloading the Files:** For both **Playback** and **Record** mode, after entering a date data to see the **Video** and **Event Type**, right-click on a title under the **Video** list, and choose “**Save Target As...**” from its pop-up window to start downloading the file.
- b. **Linking the Files:** For both **Playback** and **Record** mode, find the **Files link daily.** link at the right corner of the bottom after entering a date data to see the **Video** and **Event Type**. Click on the link, a window will pop up.



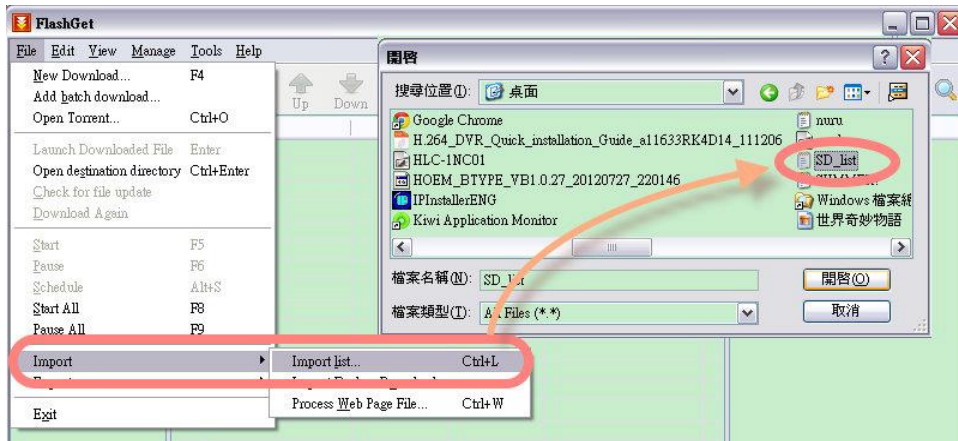
You may copy any of the protocol provided in the window and paste it on a web browser as a URL address to look at each file.

- c. **Copy to PC:** You can insert the Micro SD card to the PC and read the files directly, or use FlashGet instead to download the files from the IP camera. (In this way you do not need to pull out the Micro SD card from the camera.) To use FlashGet for downloading image and video data from the Micro SD card, please follow the steps:

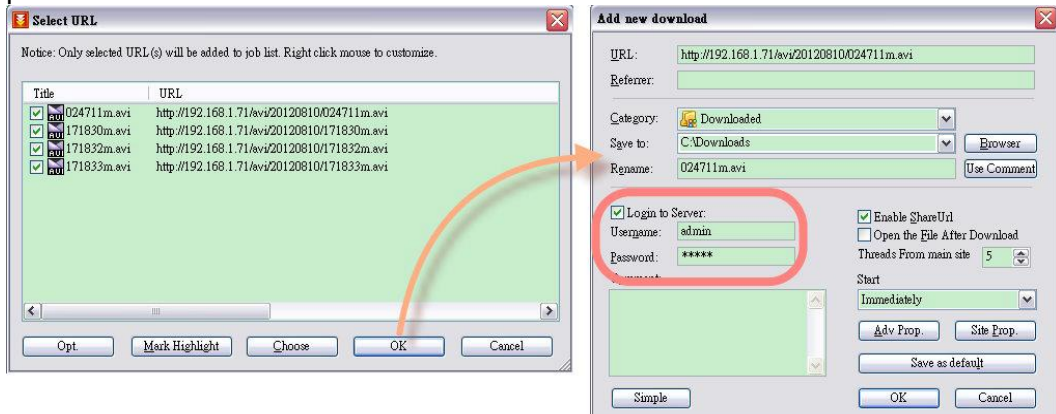
- i. Enter data list and right-click “**Files link daily.**”, select “save target as...” then save the link list to PC.



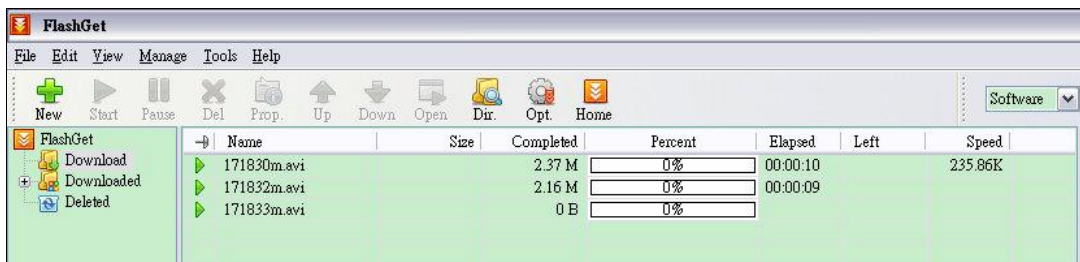
- ii. Open FlashGet, select "File"→ "Import" → "Import list", and find the link list file you just saved. The file name may be called “SD_list”.



- iii. FlashGet will show you the link list, and you can tick the files you want to copy to your PC. Give the directory path in the new download window, and remember to enable "Login to Server": key in the IP Camera username and password.



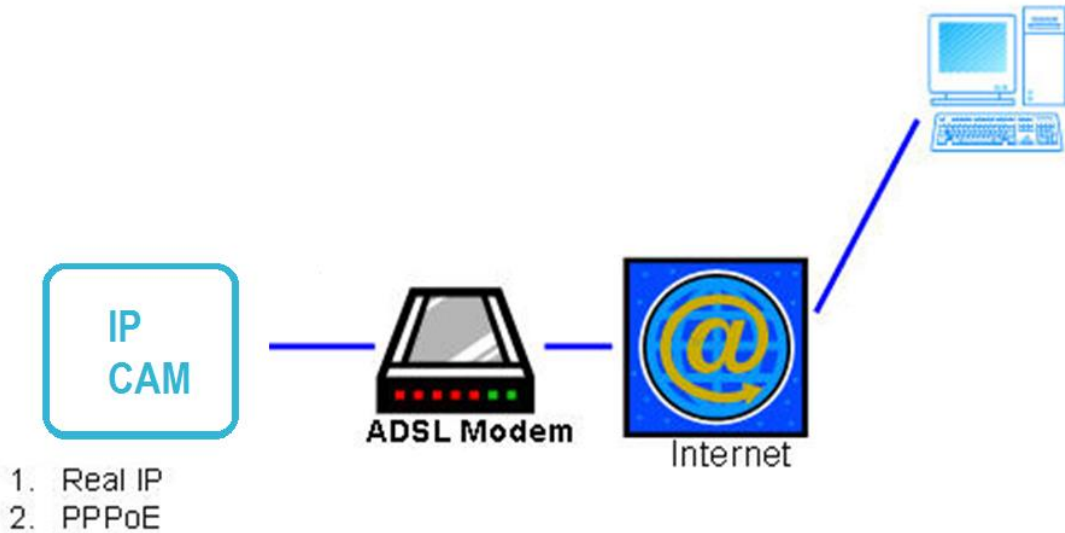
- iv. Click OK to start download.



- FlashGet is free software that can be downloaded from FlashGet official website. The example above is based on FlashGet ver.1.9.6.

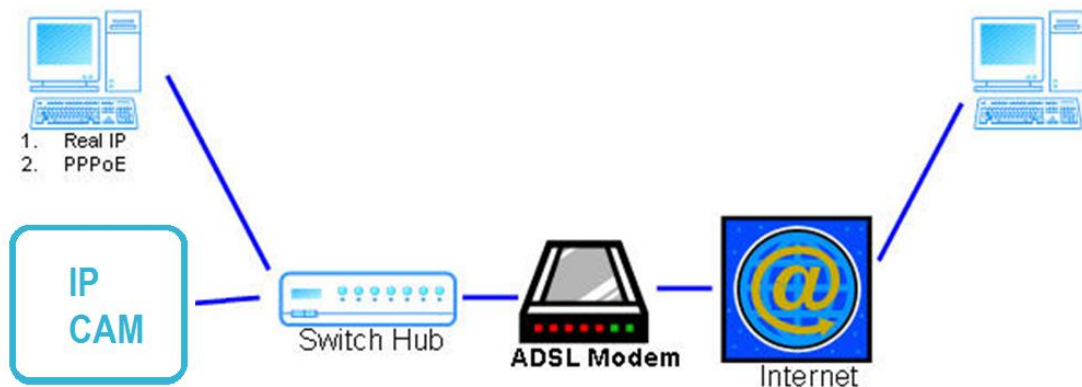
Network Configuration

I. Configuration 1:



- Internet Access: ADSL or Cable Modem
- IP address: One real IP or one dynamic IP
- Only the IP Camera is connected to the internet
- For fixed real IP, set up the IP into IP Camera. For dynamic IP, start PPPoE.

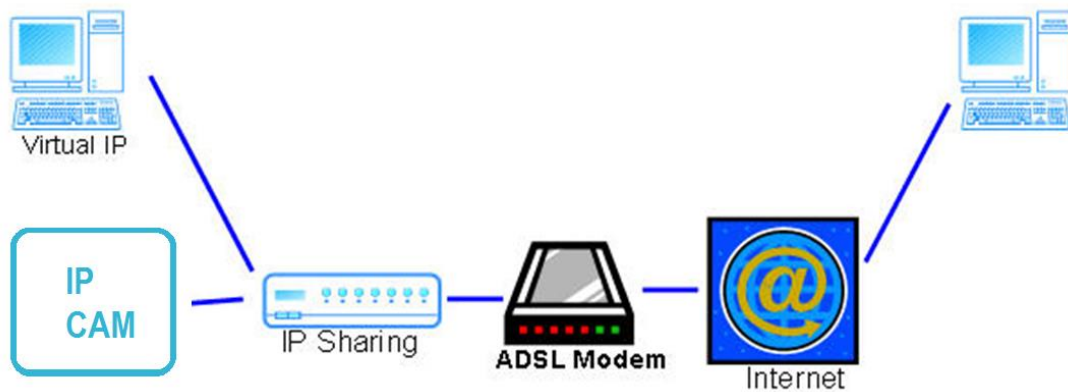
II. Configuration 2:



- Internet Access: ADSL or Cable Modem

- b. IP address: More than one real IP or one dynamic IP
- c. IP Camera and PC connect to the internet
- d. Device needed: Switch Hub.
- e. For fixed real IP, set up the IP into IP Camera and PC. For dynamic IP, start PPPoE.

III. Configuration 3:

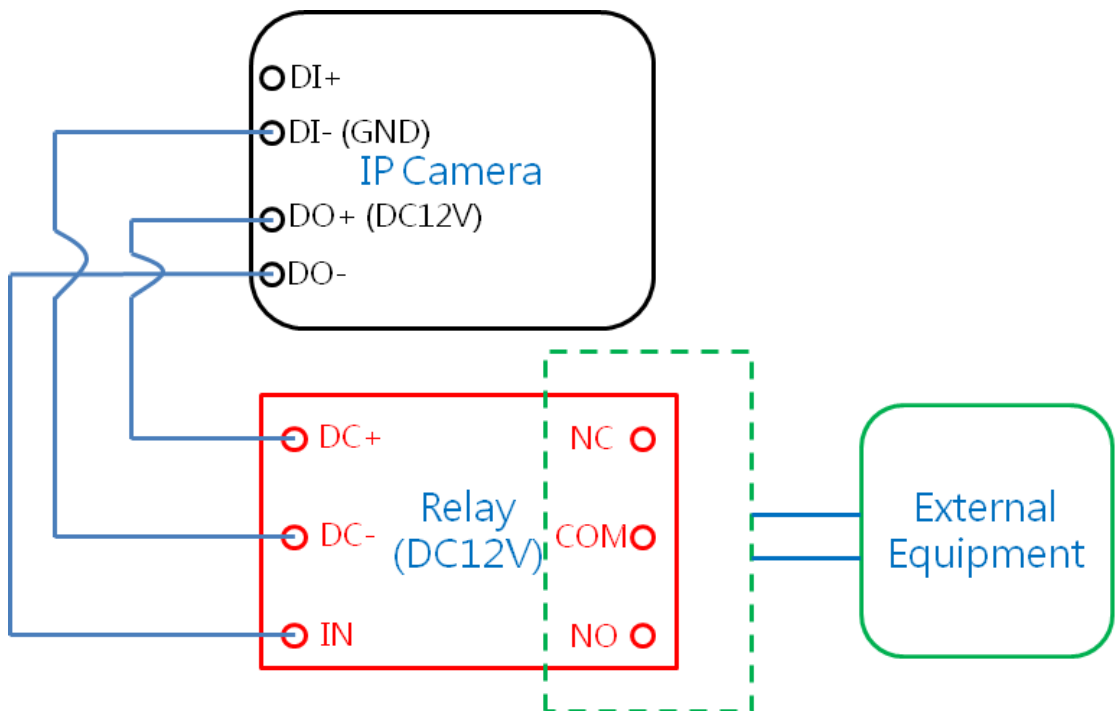


- a. Internet Access: ADSL or Cable Modem
- b. IP address: one real IP or one dynamic IP
- c. IP Camera and PC connect to the internet
- d. Device needed: IP sharing
- e. Use virtual IP, set up port forwarding in IP sharing.

I / O Configuration

1. I/O Connection

- A. Connect the GND & DO pin to the external relay (buzzer) device.
- B. Connect the GND & DI pin to the external trigger device.



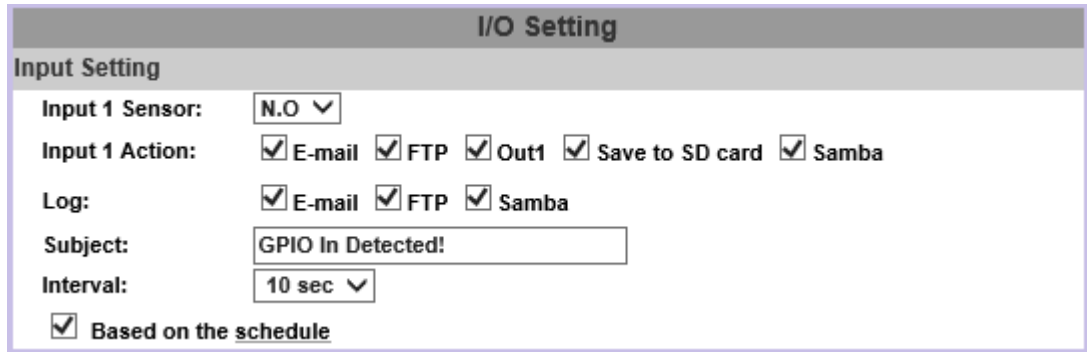
C. I/O PIN definition

- GND (Ground): Initial state is LOW
- DO (Digital Output): Max. 50mA ,.DC 12V
- DI (Digital Input): Max. DC 6V

2. I/O Setup

Click I/O Setting from the system setup page via IE, and check “Out1” to enable I/O signal.

A. Input Setting: The IP Cam supports input and output. When the input condition is triggered, the relay will be also triggered & a notification will be sent depending what checkboxes are ticked.



I/O Setting

Input Setting

Input 1 Sensor:

Input 1 Action: E-mail FTP Out1 Save to SD card Samba

Log: E-mail FTP Samba

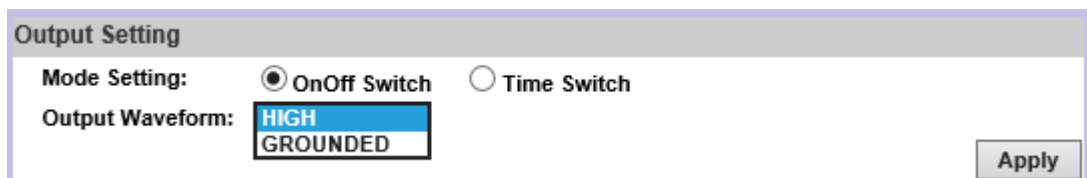
Subject:

Interval:

Based on the schedule

- **Log:** Tick the **Save to SD card** checkbox to enable the **Log** which you would like to save data with.
- **Subject:** Input or edit the message you would like to receive for triggered alarm.
- **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. Output Setting



Output Setting

Mode Setting: OnOff Switch Time Switch

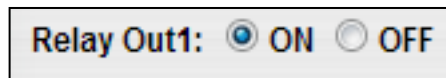
Output Waveform:

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.

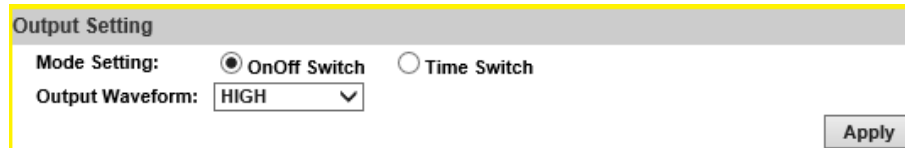


● **Mode Setting**

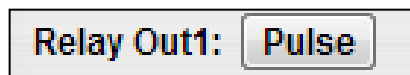
- (i) On Off Switch mode: Clicking "ON" will trigger the external output device for 10 seconds. For example, your alarm buzzer will continuously ring for 10 seconds. After 10 seconds the buzzer stops ringing, or you can manually break off the output signal by clicking "OFF".



Select **HIGH** or **GROUND** To adjust the **Output Waveform**.



- (ii) Time Switch mode: The camera triggers the external device and lasts for certain time according to the internal setting, and the user is not allowed to break off the alarm manually.



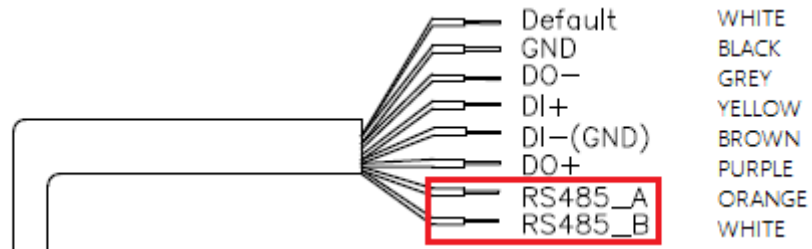
Click "Pulse", the camera will trigger the external output device for several seconds; the duration length is according to the "interval" setting in Output Setting.



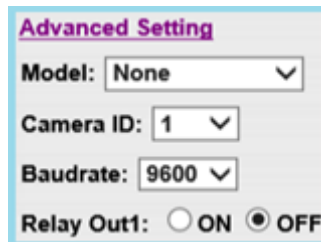
Click on the **Apply** button to keep all the changes.

3. RS-485

You can link the camera to NVR, DVR, cradle head, or joystick controller by RS-485. Please use cable to connect D+ with D+ of two devices, and connect D- with D-.



After the RS-485 Setting in I/O Setting is enabled, you can turn to the [live video](#) page and check the related options.



Advanced Setting

Model:

Camera ID:

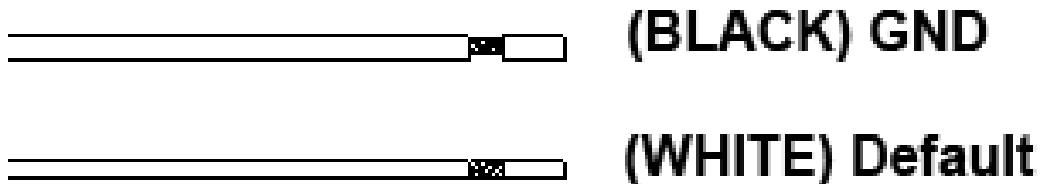
Baudrate:

Relay Out1: ON OFF

Factory Default

If you forget your password, please follow the steps to set back the IP Camera to its default value.

- Remove the power and Ethernet cable.
- Join the Black (GND) and White (Default) cables



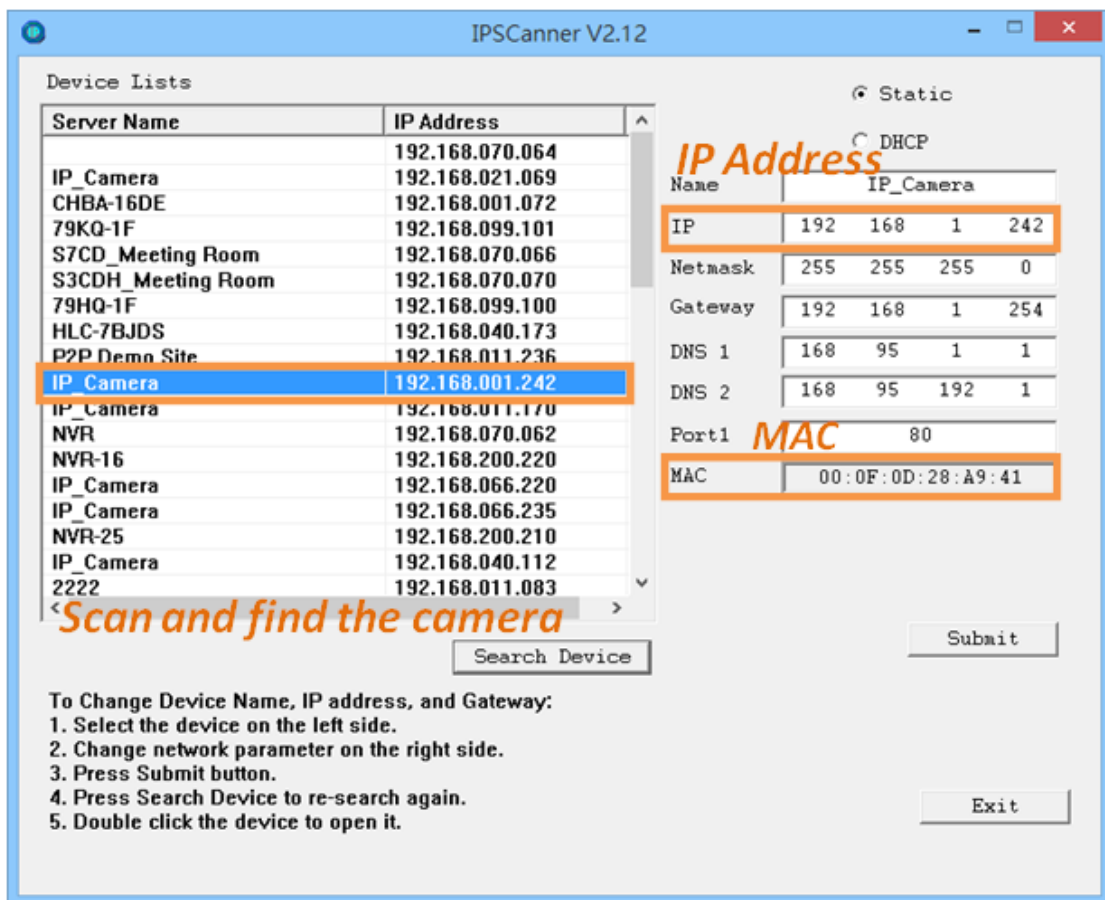
- Connect the power back to the camera. It will take around 30 seconds to boot the camera.
- Separate the Black(GND) and White (Default) cables
- Re-log in the camera using the default IP (<http://192.168.1.200>), and user name: **admin**, password: **admin**.

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.



The screenshot shows the IPScanner V2.12 interface. On the left, a table lists discovered devices. The 'IP_Camera' device with IP 192.168.001.242 is selected. On the right, network configuration options are shown for 'IP_Camera', including IP address (192.168.1.242), Netmask (255.255.255.0), Gateway (192.168.1.254), DNS 1 (168.95.1.1), DNS 2 (168.95.192.1), Port1 (80), and MAC (00:0F:0D:28:A9:41). A 'Submit' button is visible below the configuration fields.

Server Name	IP Address
IP_Camera	192.168.070.064
CHBA-16DE	192.168.021.069
79KQ-1F	192.168.001.072
S7CD_Meeting Room	192.168.099.101
S3CDH_Meeting Room	192.168.070.066
79HQ-1F	192.168.070.070
HLC-7BJDS	192.168.099.100
P2P Demo Site	192.168.040.173
IP_Camera	192.168.011.236
IP_Camera	192.168.001.242
NVR	192.168.011.170
NVR-16	192.168.070.062
IP_Camera	192.168.200.220
IP_Camera	192.168.066.220
NVR-25	192.168.066.235
IP_Camera	192.168.200.210
2222	192.168.040.112
	192.168.011.083

IP Address

Name	IP_Camera
IP	192 168 1 242
Netmask	255 255 255 0
Gateway	192 168 1 254
DNS 1	168 95 1 1
DNS 2	168 95 192 1
Port1	MAC 80
MAC	00:0F:0D:28:A9:41

MAC

Submit

Exit

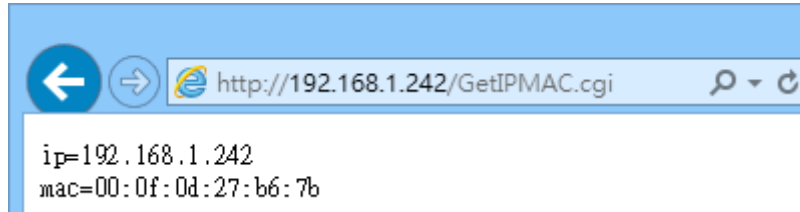
Scan and find the camera

Search Device

To Change Device Name, IP address, and Gateway:

1. Select the device on the left side.
2. Change network parameter on the right side.
3. Press Submit button.
4. Press Search Device to re-search again.
5. Double click the device to open it.

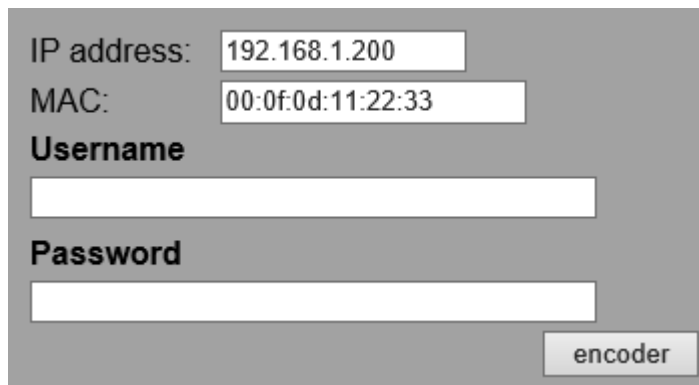
Or, if you already know the IP address of camera: Open the web browser, key in **http:// (IP address) /GetIPMAC.cgi** and press enter. The IP address and MAC address will be displayed on browser.



2. Locate the .html file named **Universal Password_V1.1** in the Universal Password from the Applications folders in CD-ROM. Open it with a web browser.



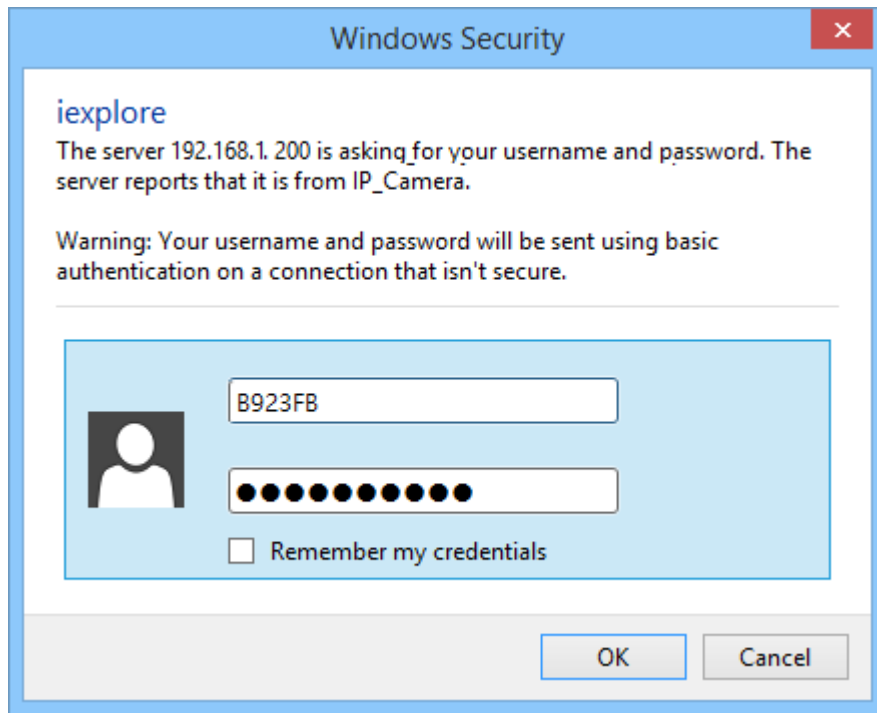
3. The camera IP address and MAC address will be displayed automatically in both **IP Address** and **MAC** columns.



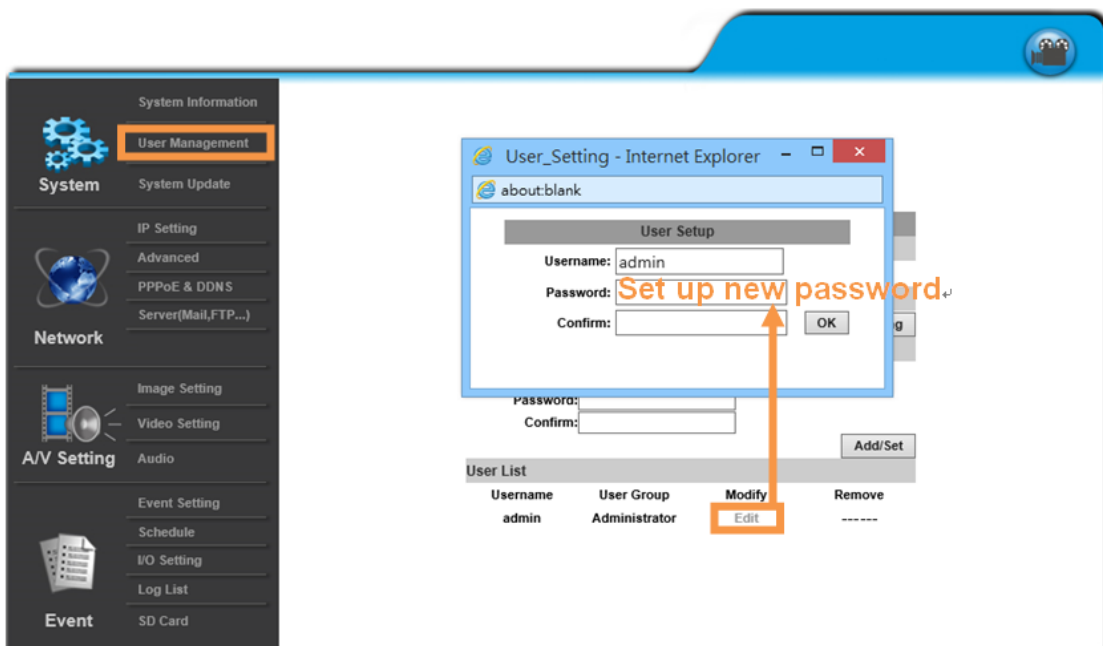
After clicking on **encoder**, a set of username and password will appear.

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.

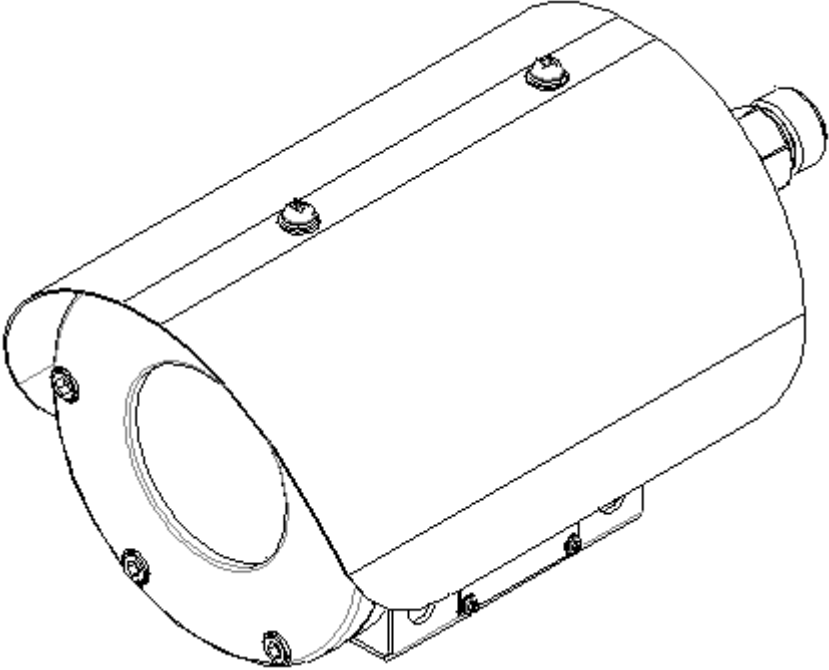
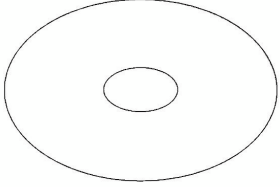
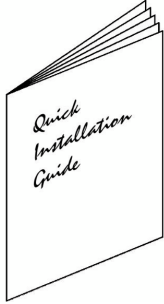
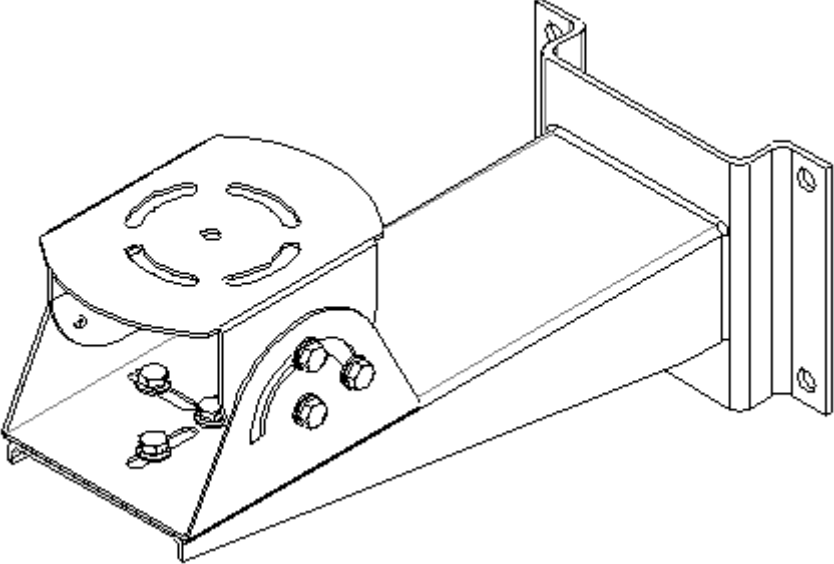
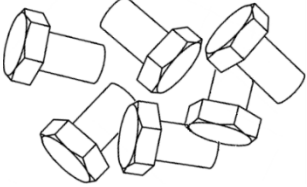
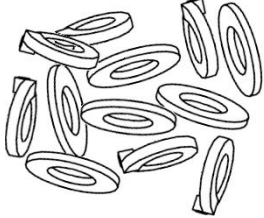
4. Take the generated username and password. Use them to log into the camera.
-



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.



Package Contents

IP Camera	CD
	
	Quick Installation Guide
	
Bracket	Screws Pack
	
	Washers
	

- The CD includes user manual and software tools