
User Manual

WEATHERPROOF IR

IP CAMERA

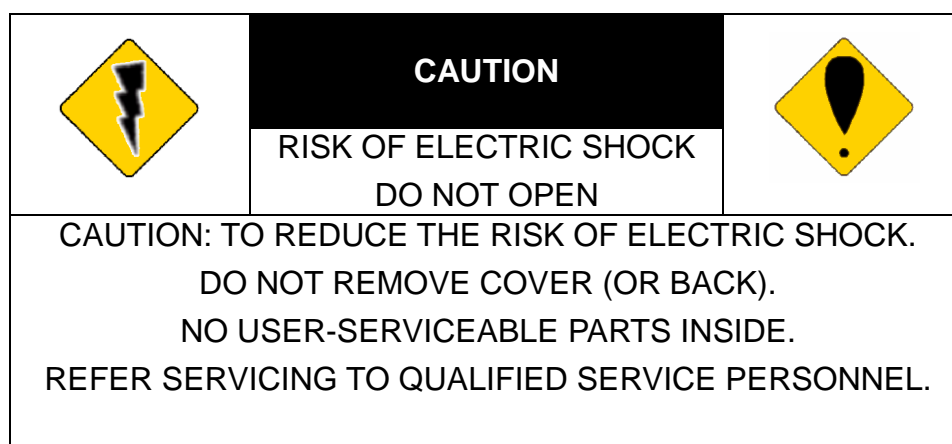


WARNINGS

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

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION



COPYRIGHT

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

CONTENT

I	Preface	4
II	Product Specifications	4
III	Product Installation	6
	A. Monitor Setting	6
	B. Hardware Installation	7
	C. IP Assignment	9
	D. Install ActiveX control	11
IV	Live Video	13
V	IP Camera Configuration	15
	A. System	16
	B. Network	20
	C. A/V Setting	30
	D. Event List	34
VI	Network Configuration	37
VII	I/O Configuration	38
VIII	Factory Default	40
IX	Package contents	40
X	Appendix I	41
XI	Appendix II	42

I Preface

This IP Camera is a Full HD 1080P waterproof IR IP camera. It has the web server built in. User can view real-time video via IE browser. IP Camera supports simultaneously H.264, Motion JPEG & MPEG4 video compression and dual streaming which provides smooth and high video quality. IP66 waterproof housing can adapt to outdoor environment. With user friendly interface, it is an easy-to-use IP camera which is designed for security application.

II Product Specifications

Main Features:

- Full HD 1080P@30fps Real Time
- 2M Mega-Pixel CMOS Sensor
- Digital Wide Dynamic Range
- Shutter Speed adjustable
- Sense Up adjustable
- Day & Night Switch time control manual
- Power over Ethernet
- IP66
- Bracket Management
- H.264/ M-JPEG/ MPEG4 compression
- Micro SD card back-up (Option)
- Support iPhone/Android/Mac
- SDK for Software Integration
- Free Bundle 36ch recording software (IP Camera Recorder)

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	256MB
Flash	16MB
Image sensor	1 / 2.7" Megapixel CMOS sensor
Sensitivity	0.1 Lux @30fps (IR Off) 0.05 Lux @30fps (IR On)
Shutter Time	1 / 5 ~ 1 / 10,000 sec
Lens Type	3.6~16mm@F1.2
I/O	DI/DO

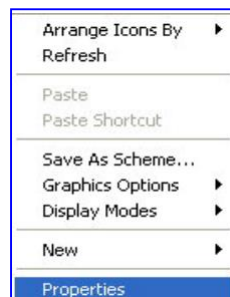
Power over Ethernet	Yes
Operating Temperature	-10°C ~ 45°C
Dimensions	φ83mm * H180mm
Weight	1000g
IR LEDs (Optional)	
LEDs	35 units
IR distance (meter)	25m
Network	
Ethernet	10/ 100 Base-T
Network Protocol	HTTP, HTTPS, SNMP, QoS/DSCP, Access list, IEEE 802.1X, RTSP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA, Bonjour
System	
Video Resolution	1920x1080@30fps, 1280x720@30fps, ,640x480@30fps, 320x240@30fps, 176x144@30fps
Video Adjust	Brightness, Contrast, Hue, Saturation, Sharpness, AGC, Shutter Speed adjustable, Sense-Up, D-WDR, Flip, Mirror, Noise reduction, Exposure, Day & Night adjustable
Triple Streaming	Yes
Image Snapshot	Yes
Full Screen Monitoring	Yes
Privacy Mask	Yes, 3 different areas
Compression Format	H.264/ M-JPEG/ MPEG4
Video Bitrates Adjust	CBR, VBR
Motion Detection	Yes, 3 different areas
Triggered Action	Mail, FTP, DO, SAMBA
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
Micro SD card management (Option)	
Recording Trigger	Motion Detection, IP check, Network break down (wire only),Schedule, DI
Video Format	AVI, JPEG
Video Playback	Yes
Delete Files	Yes
Web browsing requirement	

OS	Windows 7, 2000, XP, 2003, Microsoft IE 6.0 or above, Chrome, Safari, Firefox
Mobile Support	iOS 4.3 or above, Android 1.6 or above.
Hardware Suggested	Intel Dual Core 2.53G, RAM: 1024MB, Graphic card: 128MB

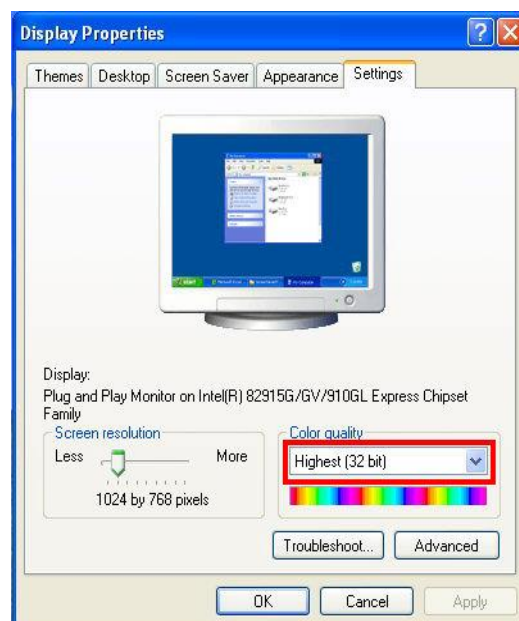
III Product Installation

A. Monitor Setting

1. Right-Click on the desktop. Select “Properties”



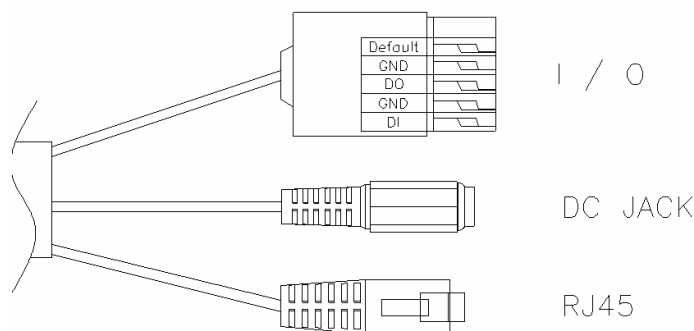
2. Change color quality to highest (32bit).



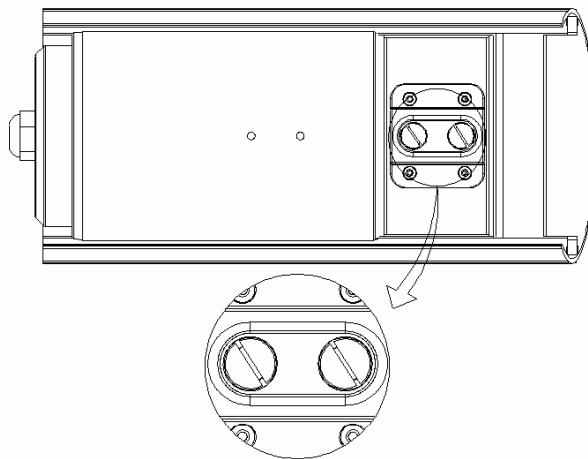
B. Hardware Installation

1. Connect power adaptor first.
2. Connect IP Camera to PC or network
3. Set up the network configurations according to the network environment. For further explanation, please refer to chapter VI: "Network Configuration for IP Camera".
4. IP Camera Instruction

The Cable and connector is as below. About I/O setting, please refer to chapter V in User Manual: "I/O Configuration" for detail.



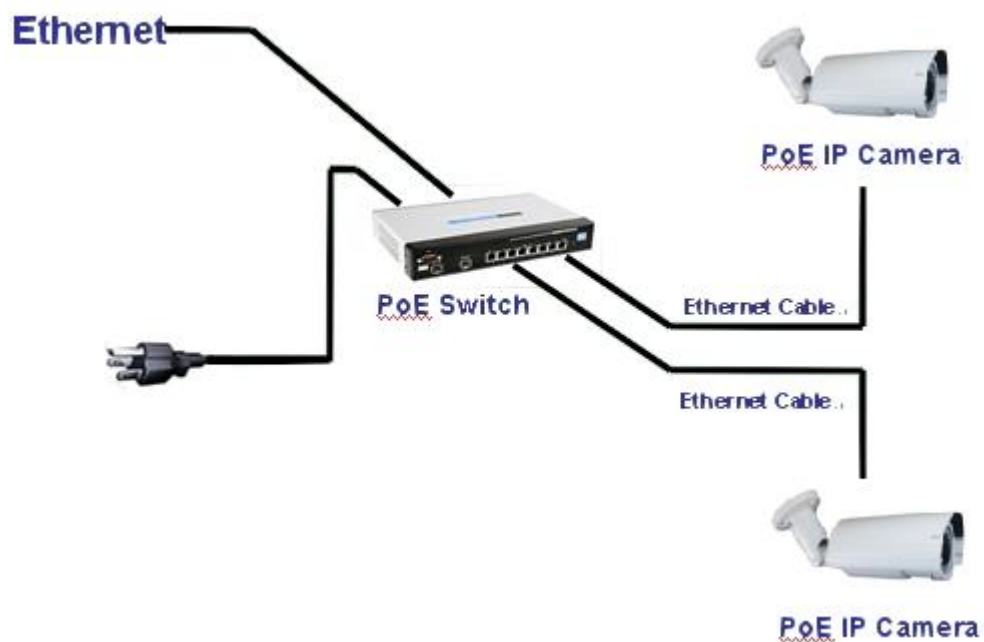
5. This IP camera belongs to external vari-focal lens adjustment camera. Please adjust "ZOOM" first and "FOCUS" as following picture to complete the adjustment.



6. PoE (Power over Ethernet) **802.3at, 30.0W PoE Switch is recommended**

Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It enables power to be provided to the network device, such as an IP phone or a network camera, using the same cable as that used for network connection. It eliminates the need for power outlets at

the camera locations and enables easier application of uninterruptible power supplies (UPS) to ensure 24 hours a day, 7 days a week operation.

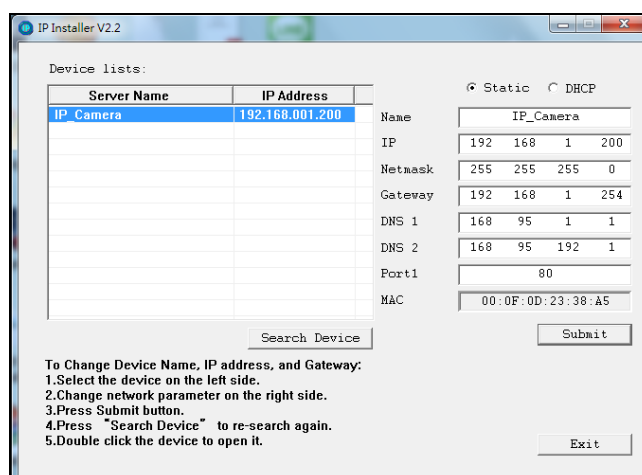


C. IP Assignment

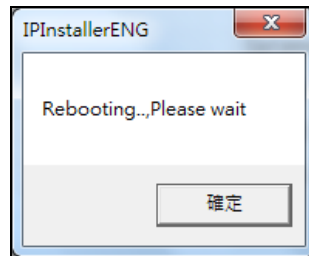
1. Use the software, “IP Installer” to assign the IP address of IP Camera. The software is in the attached CD.
2. There are two languages for the IP installer
 - a. IPInstallerCht.exe: Chinese version
 - b. IPInstallerEng.exe: English version
3. There are 3 kinds of IP configuration.
 - a. Fixed IP (Public IP or Virtual IP)
 - b. DHCP (Dynamic IP)
 - c. Dial-up (PPPoE)
4. Execute IP Installer
5. For Windows XP SP2 user, it may popup the following message box. Please click “Unblock”.



6. IP Installer configuration:



7. IP Installer will search all IP Cameras connected on LAN. The user can click “Search Device” to search again.
8. Click one of the IP Camera listed on the left side. The network configuration of this IP camera will show on the right side. You may change the “name” of the IP Camera to your preference (ex: Office, warehouse). Change the parameter and click “Submit” then click “OK”. It will apply the change and reboot the Device.



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

The same Subnet:

IP CAM IP address: 192.168.1.200

PC IP address: 192.168.1.100

Different Subnets:

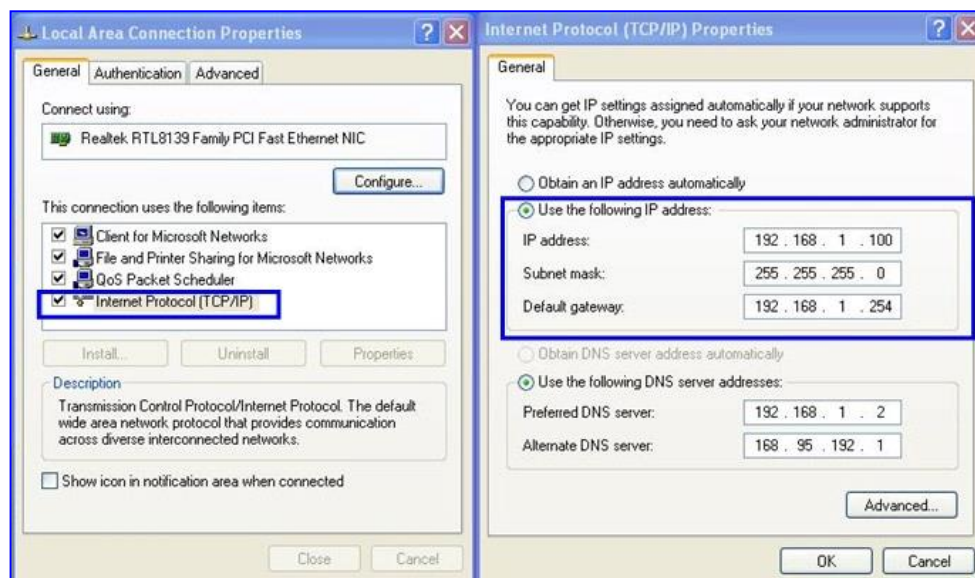
IP CAM IP address: 192.168.2.200

PC IP address: 192.168.1.100

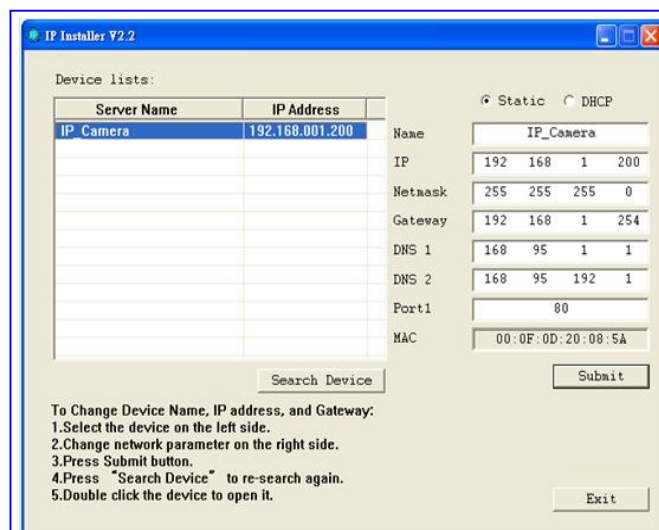
To Change PC IP address:

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

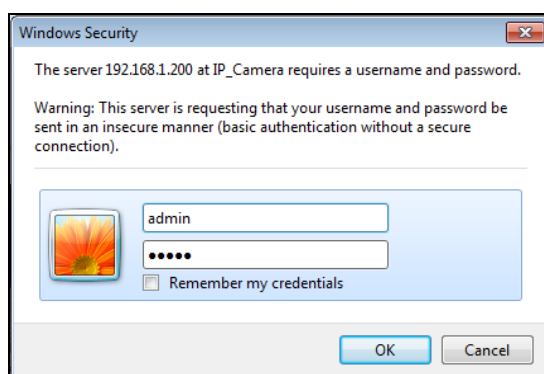
Please make sure your IP Camera and PC have the same Subnet. If not,
please change IP Camera subnet or PC IP subnet accordingly.



10. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP Camera listed on “Device list” of IP Installer. An IE browser will be opened.



11. Then, please key in the default “user name: admin” and “password: admin”.



D. Install ActiveX control

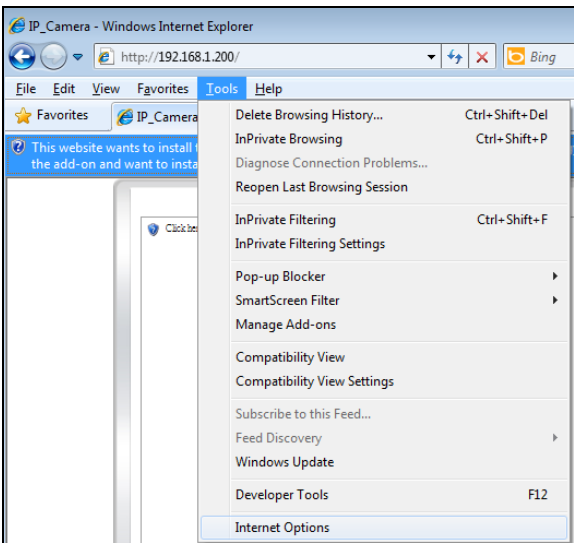
For the first time to view the camera video via IE, it will ask you to install the ActiveX component.

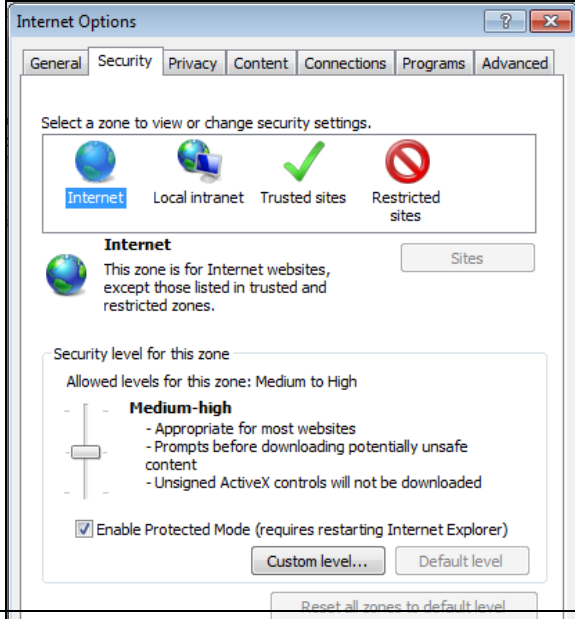
If the installation failed, please check the security setting for the IE browser.

1. IE → Tools → Internet Options... → Security Tab → Custom Level... → Security Settings → Download unsigned ActiveX controls → Select “Enable” or Prompt.
2. IE → Tools → Internet Options... → Security Tab → Custom Level... → Initialize and script ActiveX controls not marked as safe → Select “Enable” or Prompt.

1

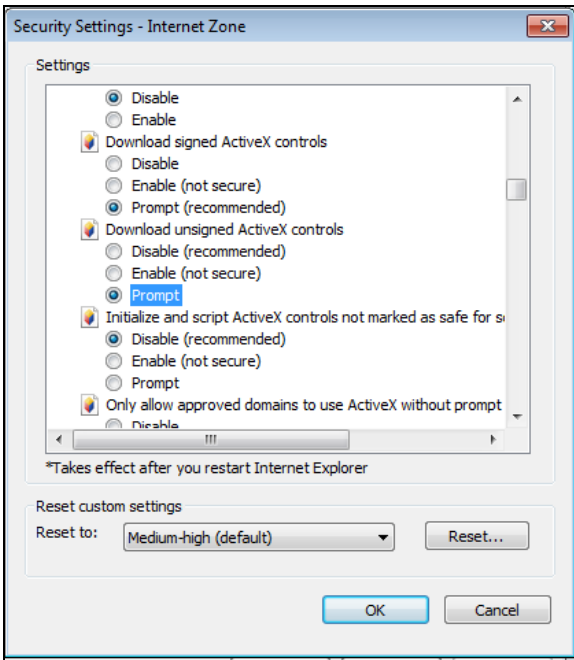
2

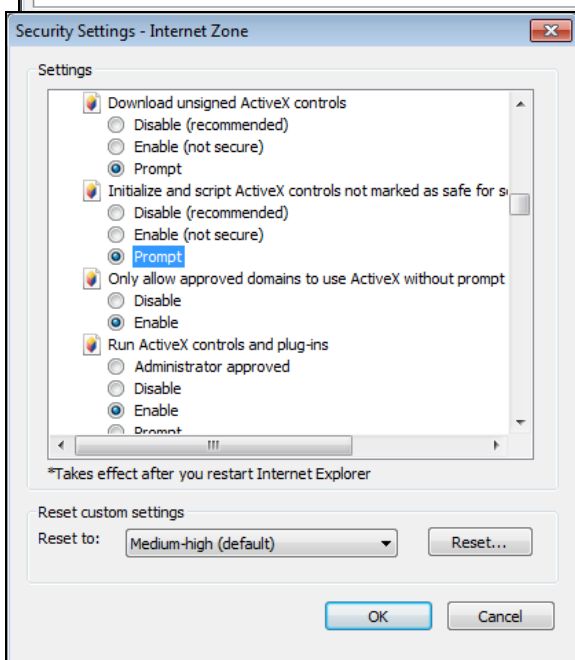




3

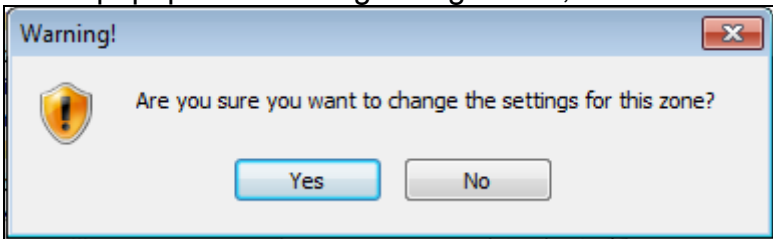
4





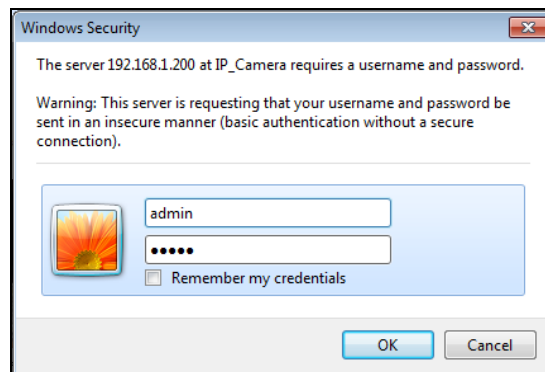
5

When popup the following dialogue box, click “Yes”.




IV 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 and password. The default user name and password are “admin” and “admin”.



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

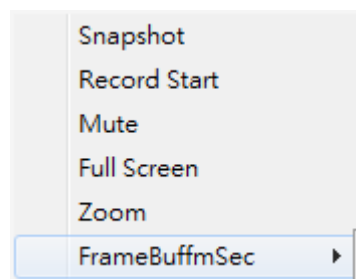


1.  Get into the administration page

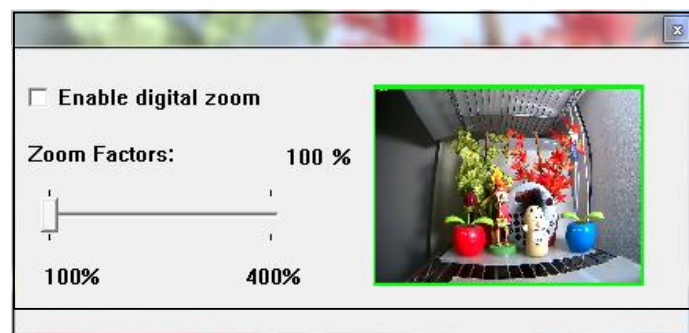
-
2. : Video Snapshot
 3. Show system time, video resolution, and video refreshing rate
 4. Adjust image, 1/2x, 1x, 2x
 5. Select video streaming source (If "Video Setting" the streaming 2 setting is closed, this option will not appear here.)
 6. Show how many people connect to this IP camera.
 7. Tick the Relay out "ON" box to enable the relay output.

Double-click the video to switch to full screen view. Press "Esc" or double-click the video again back to normal mode.

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



1. Snapshot: Save a JPEG picture
2. Record Start: Record the video in the local PC. It will ask you where to save the video. To stop recording, right-click the mouse again, select "Record Stop". The video format is AVI. Use Microsoft Media Player to play the recorded file.
3. Mute: Turn of the audio. Click again to turn on it.
4. Full Screen: Full-screen mode.
5. ZOOM: Enable zoom-in and zoom-out functions. Select "Enable digital zoom" option first within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.



V. IP Camera Configuration



Click to get into the administration page as below.



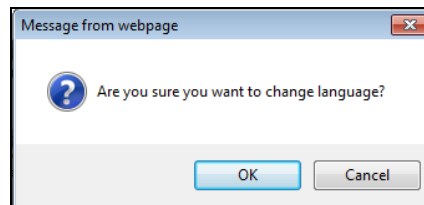
Click to back to the live video



A. System

1. System Information

- a. Server Information: Set up the camera name, select language, and set up the camera time.
 - (i) Server Name: This is the Camera name. This name will show on the IP Installer.
 - (ii) LED Indicator: The LED in the front of camera flickers when processing data. Turn off the function if you prefer no LED light.
 - (iii) Select language: There are English, Traditional Chinese, and Simplified Chinese to select. After changed, it will show the following dialogue box for the confirmation of changing language.



- b. OSD Setting: Select a position where date & time stamp / text showing on screen.

OSD Setting

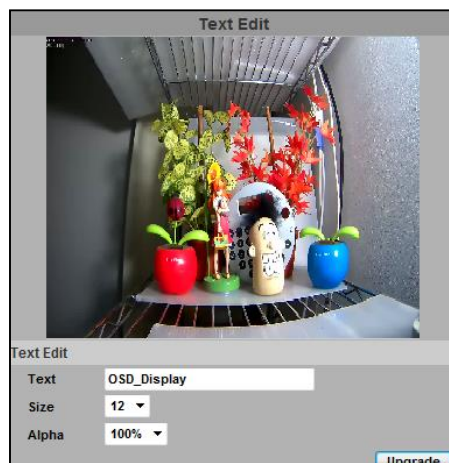
Time Stamp: ☒ Enabled ☐ Disabled

Position: ☒ Top-Left ☐ Top-Right ☐ Bottom-Left ☐ Bottom-Right

Text: ☒ Enabled ☐ Disabled

OSD_Display **Text Edit**

Moreover, click Text Edit can entry to adjust the OSD contents which is alpha of text. Finally, click Upgrade button to reserve the setting.



- c. Server time setting: Select options to set up time - “NTP”, “Synchronize with PC’s time”, “Manual”, “The date and time remain the same”

Time Setting

Server Time: 2012/11/11 21:17:27 Time Zone: GMT+08:00

Date Format: ☒ yy/mm/dd ☐ mm/dd/yy ☐ dd/mm/yy

Time Zone:

☐ Enable Daylight Saving:

☐ 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

2. User Management

IP CAMERA supports three different users, administrator, general user, and anonymous user.

User Management

Anonymous User Login

☐ YES ☒ NO

Add User

Username:

Password:

Confirm:

User List

Username	User Group	Modify	Remove
admin	Administrator	Edit	

a. Anonymous User Login:

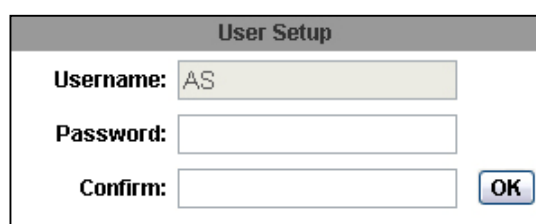
Yes: Allow anonymous login

No: Need user name & password to access this IP camera

b. Add user:

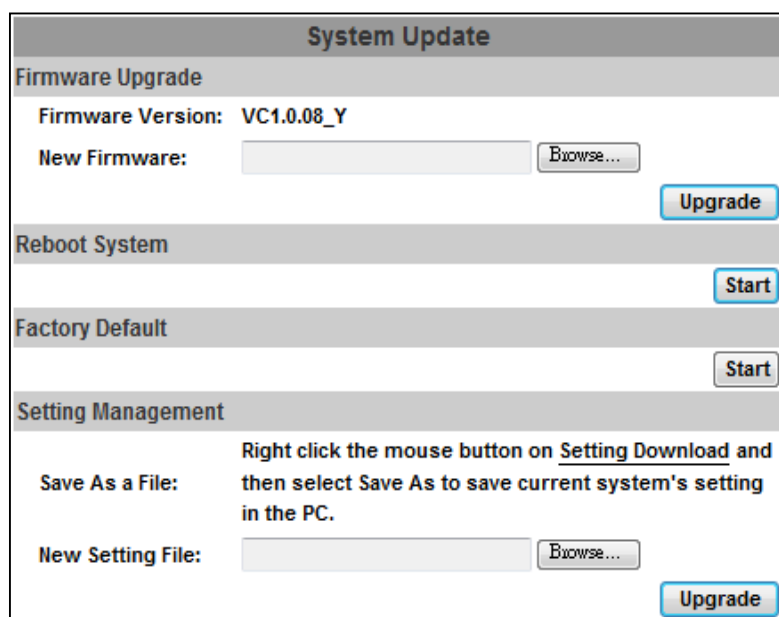
Type the user name and password, then click “Add/Set”.

c. Click “edit” or “delete” 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.



The 'User Setup' dialog box contains three input fields: 'Username' with the text 'AS', 'Password', and 'Confirm'. An 'OK' button is located to the right of the 'Confirm' field.

3. System update:



The 'System Update' interface is divided into four sections: 'Firmware Upgrade' with fields for 'Firmware Version' (VC1.0.08_Y) and 'New Firmware' (with a 'Browse...' button) and an 'Upgrade' button; 'Reboot System' with a 'Start' button; 'Factory Default' with a 'Start' button; and 'Setting Management' with a 'Save As a File' section (containing a 'New Setting File' field and a 'Browse...' button) and an 'Upgrade' button. A note in the 'Setting Management' section states: 'Right click the mouse button on Setting Download and then select Save As to save current system's setting in the PC.'

-
-
- a. To update the firmware online, click “Browse...” to select the firmware.
Then click “Upgrade” to proceed.
 - b. Reboot system: re-start the IP camera
 - c. Factory default: delete all the settings in this IP camera.
 - d. Setting Management: User may download the current setting to PC,
or upgrade from previous saved setting.
 - (i) Setting download:
Right-click the mouse button on Setting Download → Select “Save
AS...” to save current IP CAM setting in PC → Select saving directory
→ Save
 - (ii) Upgrade from previous setting:
Browse → search previous setting → open → upgrade → Setting
update confirm → click [index.html](#). to return to main page

B. Network

1. IP Setting

IP Camera supports DHCP and static IP.

IP Assignment

☐ DHCP

☒ Static

IP Address: 192.168.1.201

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.1

DNS 0: 168.95.1.1

DNS 1: 168.95.192.1

IPv6 Assignment

☐ IPv6 Enabled:

Port Assignment

Web Page Port: 66

HTTPS Port: 443 [HTTPS Setting](#)

UPnP

UPnP: ☒ Enabled ☐ Disabled

UPnP Port Forwarding: ☒ Enabled ☐ Disabled

External Web Port: 66 < The route doesn't support UPnP Port Forwarding. >

External HTTPS Port: 443

External RTSP Port: 554 < The route doesn't support UPnP Port Forwarding. >

a. IP Assignment

- (i) DHCP: Using DHCP, IP CAMERA will get all the network parameters automatically.
- (ii) Static IP: Please type in IP address, subnet mask, gateway, and DNS manually.

b. IPv6 Assignment: IPv6 is a newer numbering system that provides a much larger address pool than IPv4, which accounts for most of today's Internet traffic. You can set up IPv6 manually by key in Address, Gateway, and DNS, or enable DHCP to assign the IP automatically.

c. Port assignment:

- (i) Web Page Port: setup web page connecting port and video transmitting port (Default: 80)
- (ii) HTTP Port: setup HTTPS connecting port (Default:443)

d. UPnP (Universal Plug and play):

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.”

(i) UPnP Port Forwarding:

Enable UPnP Port Forwarding can access the Network Camera from the Internet, select this option to allow the Network Camera to open ports on the router automatically so that video streams can be sent out from a LAN. There are three External port can be set, Web Port, Http Port and RTSP port. To utilize of this feature, make sure that your router supports UPnP TM and it is activated.

(ii) Note: UPnP must be enabled on your computer. Please follow the procedure to activate UPnP.

- open the Control Panel from the Start Menu
- Select Add/Remove Programs
- Select Add/Remove Windows Components and open Networking Services section
- Click Details and select UPnP to setup the service
- The IP device icon will be added to “MY Network Places”
- User may double click the IP device icon to access IE browser

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]
Multicast Setting (Based on the RTSP Server)		
Streaming 1:		
IP Address:	234.5.6.78	[224.3.1.0 ~ 239.255.255.255]
Port:	6000	[1 ~ 65535]
TTL:	15	[1 ~ 255]
Streaming 2:		
IP Address:	234.5.6.79	[224.3.1.0 ~ 239.255.255.255]
Port:	6001	[1 ~ 65535]
TTL:	15	[1 ~ 255]
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
Bonjour		
Bonjour:	<input checked="" type="radio"/> Enabled	<input type="radio"/> Disabled
Bonjour Name:	IP_Camera @00:0F:0D:24:04:A2	
LLTD (Link Layer Topology Discovery)		
LLTD:	<input type="radio"/> Enabled	<input checked="" type="radio"/> Disabled
Apply		

e. RTSP setting

- (i) RTSP Server: enable or disable
- (ii) RTSP Port: setup port for RTSP transmitting (Default: 554)
- (iii) RTSP Start and End Port: in RTSP mode, you may use TCP and UDP for connecting. TCP connection uses RTSP Port (554). UDP connection uses RTSP Start and End Port.

f. Multicast Setting (Based on the RTSP Server)

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

To use Multicast, be sure to enable the function "Receive Multicast" in your media player.

g. ONVIF

Choose your ONVIF version and settings.

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

h. Bonjour

This function enables MAC systems to link to this IP camera. Key in the name here.

Bonjour
Bonjour: ☐ Enabled ☒ Disabled
Bonjour Name: @00:0F:0D:24:04:A2

i. LLTD

If your PC supports LLTD, enable this function then you can check the connection status, properties, and device position (like IP address) of this IP Camera in the network map.

LLTD (Link Layer Topology Discovery)
LLTD: ☐ Enabled ☒ Disabled

2. Advanced

- a. Https (Hypertext Transfer Protocol Secure): Https can help protect streaming data transmission over the internal on the higher security level.

The screenshot shows the 'Https Setting' window. It has two main sections: 'Created Request' and 'Installed Certificate'. Both sections have a 'Subject' field with the value 'C=TW, ST=, L=, O=, OU=, CN=' and a 'Date' field. The 'Created Request' date is '2011/Sep/22 08:26:18' and the 'Installed Certificate' date is 'Apr 23 09:05:24 2011 GMT'. Each section has 'Content' and 'Remove' buttons. At the bottom, there is a 'Connection Types' section with a dropdown menu currently set to 'Http&Https'.

Https setting: Before setting new request, please remove old secure identification at Http connection type.

This screenshot is similar to the previous one, but the 'Remove' buttons for both the 'Created Request' and 'Installed Certificate' sections are highlighted with red rectangles. The 'Connection Types' dropdown menu is now set to 'Http'.

- (i) Created Request: To remove secure identification in created request mode. There is a warning message showing. Please set "Yes" to remove secure identification.
- (ii) Setting the secure identification and apply it.

The screenshot shows the 'Create Request' form within the 'Https Setting' window. It contains several input fields for personal and organizational information: 'Country', 'State or province', 'Locality', 'Organization', 'Organizational Unit', and 'Common Name'. An 'Apply' button is located at the bottom right of the form.

- (iii) Installed Certificate: remove Certificate in .Installed Certificate mode.
There will be a warning message to check again.
- (iv) There are two ways to set Certificate- Install Signed Certificate and Create Self-Signed Certificate.

b. SNMP(Simple Network Management Protocol)

- (i) Enable SNMPv1 or SNMPv2 and write the name of Write Community and Read Community.
- (ii) Enable SNMPv3, please set Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of write mode and read mode.
- (iii) Enable SNMPv1/SNMPv2 Trap can detect the Trap server.

Please set what event need to detect.

- c. Access List: "Enable IP address filter" can set IP address which can allow or deny to this camera. There are two options, single and range, for user to set the IP address.

No.	IP Address	Filter	Action
1			remove
2			remove
3			remove
4			remove
5			remove
6			remove
7			remove
8			remove
9			remove
10			remove

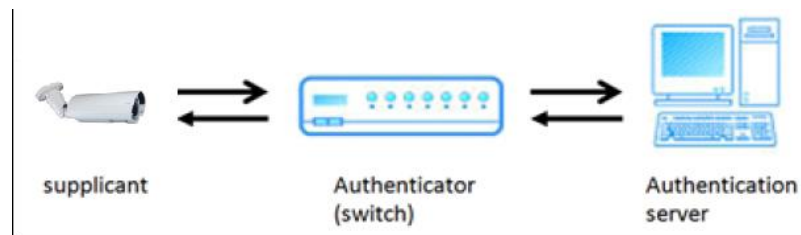
- d. QoS (Quality of Server / DSCP (Differentiated Services Code Point) :
DSCP specifies a simple mechanism for classifying and managing network traffic and provide QoS on IP networks. DSCP is a 6-bit in the IP header for packet classification purpose. Please define the reserve for Live Stream, Event / Alarm and Management.

Live Stream:	0	(0~63)
Event / Alarm:	0	(0~63)
Management:	0	(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 device wishing to attach to 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 support. This camera supports EAP-TLS method. Please enter ID, password issued by the CA, then upload related certificates.

IEEE 802.1x/EAP-TLS	
IEEE 802.1x Setting	
<input type="checkbox"/> Enable IEEE 802.1x	
Eapol version:	<input checked="" type="radio"/> v1 <input type="radio"/> v2
Identity:	<input type="text"/>
Private key password:	<input type="password"/>
	<input type="button" value="Apply"/>
CA certificate:	<input type="text"/> <input type="button" value="Upload"/> <input type="button" value="浏览..."/>
Status:	<input type="text"/> <input type="button" value="Remove"/>
Client certificate:	<input type="text"/> <input type="button" value="Upload"/> <input type="button" value="浏览..."/>
Status:	<input type="text"/> <input type="button" value="Remove"/>
Client private key:	<input type="text"/> <input type="button" value="Upload"/> <input type="button" value="浏览..."/>
Status:	<input type="text"/> <input type="button" value="Remove"/>

3. PPPoE & DDNS

- a. PPPoE: Select “Enabled” to use PPPoE. Key-in Username and password for the ADSL connection. Send mail after dialed: When connect to the internet, it will send a mail to a specific mail account. For the mail setting, please refer to “Mail and FTP” settings.

PPPoE	
PPPoE Setting	
<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	
Username:	<input type="text"/>
Password:	<input type="password"/>
Send mail after dialed	
<input type="checkbox"/> Enabled	
Subject:	<input type="text" value="PPPoE From IPcam"/> <input type="button" value="Apply"/>

b. DDNS:

DDNS Setting

☒ Enabled ☐ Disabled

Provider: ddns.camddns.com(TW) ▼

Username: Hi26RP

Schedule Update: 30 Minutes

State

http://Hi26RP.ddns.camddns.com

Note:

1. Schedule Update: Depends on the input time of Schedule Update, it will update DDNS's web site automatically. The time range is from 5 to 5000 minutes.
*0: It will not update.

2. dyndns.org & 3322.org: Update once per day is recommended (1440 minutes per day). If updated too frequently, it will be blocked.

Apply

It supports DDNS (Dynamic DNS) service.

- (i) Enable this service
- (ii) Key-in the DDNS server name, user name, and password.
- (iii) Set up the IP Schedule update refreshing rate.
- (iv) Click “Apply”
- (v) If setting up IP schedule update too frequently, the IP may be blocked.
In general, schedule update every day (1440 minutes) is recommended

(vi) DDNS Status

- Updating: Information update
- Idle: Stop service
- DDNS registration successful, can now log by <http://<username>.ddns.camddns.com>: Register successfully.
- Update Failed, the name is already registered: The user name has already been used. Please change it.
- Update Failed, please check your internet connection: Network connection failed.
- Update Failed, please check the account information you provide: The server, user name, and password may be wrong.

4. Server setting

There are three choices of server types available: Email, FTP and SAMBA. Select the item to display the detailed configuration options. You can configure either one or all of them.

- a. Mail Setting: To send out the video via mail of ftp, please set up the

configuration first.

Server Settings

Mail Setting

Login Method: Account ▼

Mail Server:

Username:

Password:

Sender's Mail:

Receiver's Mail:

Bcc Mail:

Mail Port: 25 (Default 25)

☐ Secure Connect: ☒ TLS ☐ SSL

Test

FTP Setting

Samba (Network storage)

Apply

- b. FTP: To send out the video via mail of ftp, please set up the configuration first.

FTP Setting

FTP Server:

Username:

Password:

Port: 21

Path: /

Mode: PORT ▼

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

Test

- c. Samba: Select this option to send the media files via a network neighborhood 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)

Test

C. A/V Setting

1. Image Setting



For the security purpose, there are three areas can be setup for privacy mask. Click Area button first and pull an area on the above image. Finally, click save button to reserve the setting.

Please refer to the details below for Image setting:

- Brightness, Contrast, Hue, Saturation, Sharpness can be adjusted here.
- AGC: The sensitivity of camera can adjusts with the environmental light in order to avoid the images too light or too dark.
- Shutter Time: You can use "Outdoor" or "Indoor" option, or fix it from 1/30 to 1/1000.
- Sense-Up: increase the sensitivity of camera to get brighter image at night.
- WDR: Enable the function to reduce the contrast of background with fore-ground(ex. people).
- Video Orientation: Flip, mirror, or rotate the image as your requirement.
- Day & Night: The camera can detect the light level of environment. If you

choose "Light Sensor Mode", the image will be turned to black and white at night in order to keep clear. To set light sensor mode, appoint a lux standard of switching D/N here. Current lux value is provided for reference. Under "Times Mode" according to given time. You can also control it by choosing "Color" or "B/W".

h. DNR: Adjust this option to reduce the noise.

2. Video Setting

User may select 2 streaming output simultaneously:

Streaming 1 Setting: Basic mode and Advanced mode

Streaming 2 Setting: Basic mode, Advanced mode, and 3GPP mode

a. Basic Mode of Streaming 1 and Streaming 2:

The screenshot displays the 'Video Setting' window. At the top, 'Video System' is set to 'NTSC'. Below this, the 'Streaming 1 Setting' section is active, showing 'Basic Mode' selected. Its settings are: Resolution: 1920x1080, Quality: Best, Video Frame Rate: 25 FPS, Video Format: H.264, and RTSP Path: (empty). To the right of the RTSP path is the text 'ex:rtsp://IP_Address/ Audio:G.711'. The 'Streaming 2 Setting' section is also visible, showing 'Basic Mode' selected. Its settings are: Resolution: 640x480, Quality: Standard, Video Frame Rate: 15 FPS, Video Format: JPEG, and RTSP Path: v2. To the right of the RTSP path is the text 'ex:rtsp://IP_Address/v2 Audio:G.711'.

(i) Resolution:

There are 5 resolutions can be chosen:

1920x1080, 1280x720, 640x480, 320x240, 176x144

(ii) Quality:

There are 5 levels to choose:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is. It might affect internet transmitting speed if the file gets too large.

(iii) Video Frame Rate: The video refreshing rate per second. The max value will affect by the resolution you choose.

(iv) Video Format: H.264, MPEG4, or M-JPEG

(v) RTSP Path: Set the RTSP output connecting route

b. Advanced Mode of Streaming 1 and Streaming 2:

The image shows two windows for configuring streaming settings. The top window is titled 'Streaming 1 Setting' and the bottom is 'Streaming 2 Setting'. Both have radio buttons for 'Basic Mode' and 'Advanced Mode'. In the 'Advanced Mode' section, various parameters are set via dropdown menus and text boxes. For Streaming 1, Resolution is 1920x1080, Profile is Baseline, Bitrate Control Mode is CBR, Video Quantitative is 6, Video Bitrate is 4Mbps, Video Frame Rate is 30 FPS, GOP Size is 1/2 X FPS (with a note GOP = 15), Video Format is H.264, and RTSP Path is v1. For Streaming 2, Resolution is 640x480, Profile is Baseline, Bitrate Control Mode is CBR, Video Quantitative is 9, Video Bitrate is 512Kbps, Video Frame Rate is 15 FPS, GOP Size is 1 X FPS (with a note GOP = 15), Video Format is H.264, and RTSP Path is v2. Both windows show an example RTSP path: ex:rtsp://IP_Address/v1 and Audio:G.711.

Setting	Streaming 1	Streaming 2
Mode	Advanced	Advanced
Resolution	1920x1080	640x480
Profile	Baseline	Baseline
Bitrate Control Mode	CBR	CBR
Video Quantitative	6	9
Video Bitrate	4Mbps	512Kbps
Video Frame Rate	30 FPS	15 FPS
GOP Size	1/2 X FPS (GOP = 15)	1 X FPS (GOP = 15)
Video Format	H.264	H.264
RTSP Path	v1	v2

(i) Resolution

There are 5 resolutions can be chosen:

1920x1080, 1280x720, ,640x480, 320x240, 176x144

(ii) Bitrate Control Mode

There are CBR (Constant Bit Rate) and VBR (Variable Bit Rate) to be chosen.

(iii) Video Quantitative

The quality adjustment of VBR, you can choose 1~10 compression rate

(iv) Video Bitrate

The quality adjustment of CBR, you can choose 32kbps~8Mkbps. The higher the value is, the higher the image quality is.

(v) Video Frame Rate

The video refreshing rate per second, the max value will affect by the resolution you choose.

(vi) GOP Size

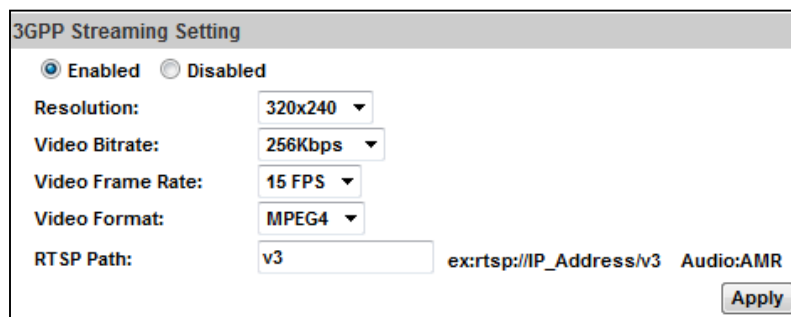
It means "Group of Pictures". The higher the GOP is, the better the quality is.

(vii) Video Format: H.264, MPEG4, or M-JPEG

(viii) RTSP Path: RTSP output connecting route

In Streaming 2, the option under Advanced Mode has no difference with under Basic Mode.

c. 3GPP Streaming mode:



The '3GPP Streaming Setting' dialog box contains the following controls:

- Enabled** (selected) / Disabled radio buttons.
- Resolution:** 320x240 (dropdown menu).
- Video Bitrate:** 256Kbps (dropdown menu).
- Video Frame Rate:** 15 FPS (dropdown menu).
- Video Format:** MPEG4 (dropdown menu).
- RTSP Path:** v3 (text input field).
- ex:** rtsp://IP_Address/v3 (example text).
- Audio:** AMR (text input field).
- Apply** button.

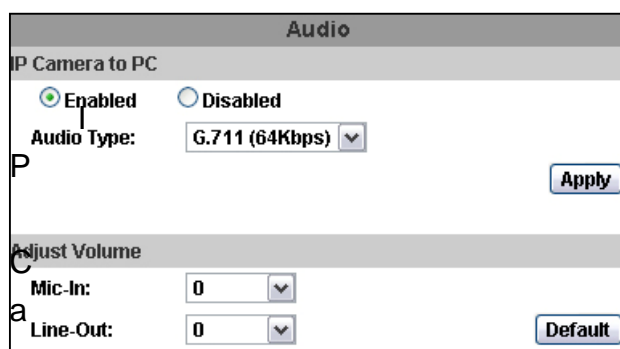
3GPP mode has 640x480, 320x240, 176x144 resolutions, 3~15FPS frame rate levels, H.264 / MPEG4 format

(i) Enable or Disable 3GPP Streaming

(ii) 3GPP Path: 3GPP output connecting route

3. Audio:

IP Camera supports 2-way audio. User can send audio from IP Camera Built-in mic to remote PC; User can also send audio from remote PC mic to IP Camera's external speaker



The 'Audio' settings dialog box contains the following controls:

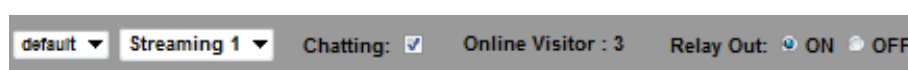
- IP Camera to PC:**
 - Enabled** (selected) / Disabled radio buttons.
 - Audio Type:** G.711 (64Kbps) (dropdown menu).
 - Apply** button.
- Adjust Volume:**
 - Mic-In:** 0 (dropdown menu).
 - Line-Out:** 0 (dropdown menu).
 - Default** button.

Note: The Audio may not be smooth if the SD card recording is functioned simultaneously.

a. Audio from IP camera built-in mic to local PC: select "Enable" to start this function.

b. Adjust Volume of audio.

c. Check "chatting" in the browsing page, then your voice can be propagated from PC to camera.



The streaming control bar includes the following elements:

- default** (dropdown menu)
- Streaming 1** (dropdown menu)
- Chatting:** ☒
- Online Visitor :** 3
- Relay Out:** ☒ ON ☐ OFF

D. Event List

IP Camera provides multiple event settings.

1. Event Setting

Area Setting:

Sensitivity:

Area 1: ☐ E-mail ☐ FTP ☐ Out1 ☐ Save to SD card ☐ Samba

Area 2: ☐ E-mail ☐ FTP ☐ Out1 ☐ Save to SD card ☐ Samba

Area 3: ☐ E-mail ☐ FTP ☐ Out1 ☐ Save to SD card ☐ Samba

Subject: IP Camera Warning!

Interval: 10 sec a period of time between every two motions detected.

☐ Based on the schedule

Record File

File Format: AVI File(with Record Time Setting)

Record Time Setting

Pre Alarm: 5 sec Post Alarm: 5 sec

Network Dis-connected

Dis-connected: ☐ Save to SD card

Network IP Check

IP Check: ☐ Enabled ☒ Disabled

IP Address: www.google.com

Interval: 30 sec

IP Check: ☐ Save to SD card

Apply

a. Motion Detection

IP CAMERA allows 3 areas motion detection. When motion is triggered, it can send video to some specific email address, transmit the video to remote ftp server or Samba. To set up the motion area, click "Area Setting". Using mouse to drag and draw the area. The same operation for area 2 and 3.

b. Record File: Choose AVI or JPEG file

c. Record Time Setting

Pre Alarm and Post Alarm setups for video start and end time when motion detected, I/O, or other devices got triggered

2. Schedule

The screenshot shows a configuration window titled "Schedule". It features a calendar grid with days of the week (Mon. to Sun.) and hours (0 to 23). A green square is placed in the grid at the intersection of Saturday and hour 10. Below the grid, there is a green square followed by the text "With schedule setup." and a section titled "Snapshot". In the "Snapshot" section, the "Enabled" radio button is selected. There are checkboxes for "E-mail", "FTP", and "Samba", all of which are currently unchecked. The "Interval" is set to "10" with the unit "Second(s) [1..50000]". The "File Name" is set to "Snapshot". An "Apply" button is located at the bottom right of the window.

- Schedule: After complete the schedule setup, the camera data will be recorded according to the schedule setup.
- Snapshot: After enabling the snapshot function, user can select the storage position of snapshot file, the interval time of snapshot and the reserved file name of snapshot.
- Interval: The interval between two snapshots.

3. I/O Setting

The screenshot shows a configuration window titled "I/O Setting". It is divided into two sections: "Input Setting" and "Output Setting". In the "Input Setting" section, "Input 1 Sensor" is set to "N.O" (Normally Open). "Input 1 Action" has checkboxes for "E-mail", "FTP", "Out1", and "Samba", all of which are unchecked. The "Subject" is set to "GPIO In Detected!". The "Interval" is set to "10 sec". There is an unchecked checkbox labeled "Based on the schedule". In the "Output Setting" section, "Mode Setting" has two radio buttons: "OnOff Switch" (selected) and "Time Switch". The "Interval" is set to "10 sec". An "Apply" button is located at the bottom right of the window.

- Input Setting:
IP Camera supports input and output. When the input condition is triggered, it can send the video to some specific mail addresses, transmit the video to remote FTP server, trigger the relay, or save video to SAMBA.
- Output Setting:
"On/Off Switch" means the camera executes the action when triggered.
"Time Switch" means the camera executes the action according to the interval you choose after triggered.

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

5. Micro SD card

Choose "The 1st day" means the recording file will be kept one day.

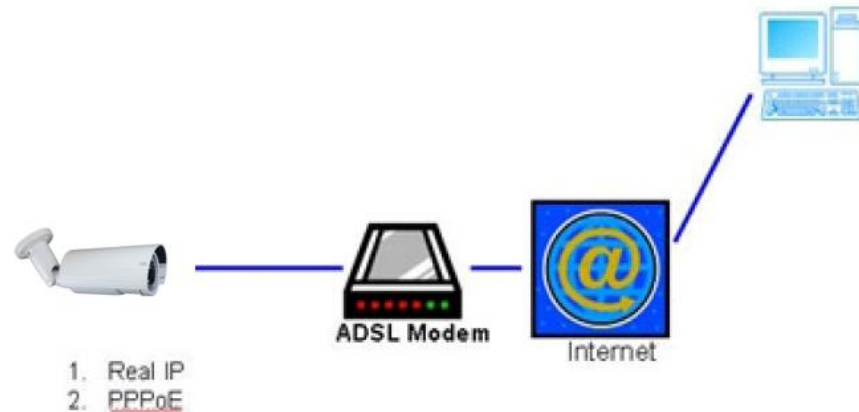
Example: It is five o'clock now. Choose "The 1st day". The files will be kept from five o'clock yesterday to five o'clock today.

Playback	
No SD card	
SD Management	
Auto Deletion:	<div>Off (Keep 1/ 2/ 3/ 4...days)</div> <div>Off</div> <div>The 1st day</div> <div>The 2nd day</div> <div>The 3rd day</div> <div>The 4th day</div> <div>The 5th day</div> <div>The 6th day</div> <div>The 7th day</div> <div>The 8th day</div> <div>The 9th day</div> <div>The 10th day</div> <div>The 15th day</div> <div>The 20th day</div> <div>The 25th day</div> <div>The 30th day</div>
<div>Apply</div>	

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

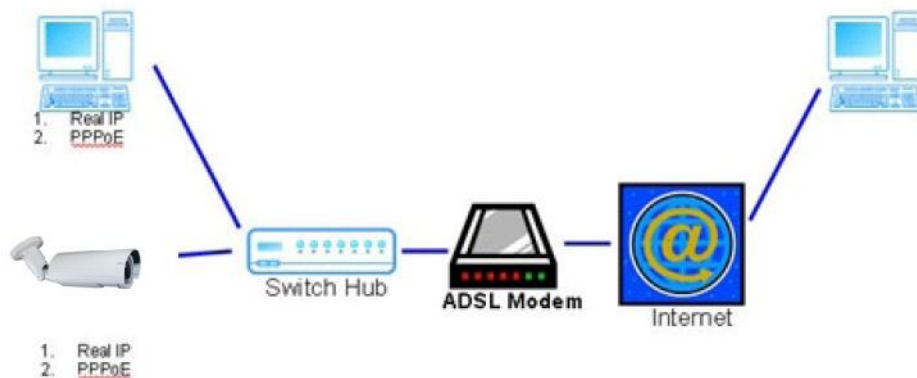
VI Network Configuration

- Configuration 1:



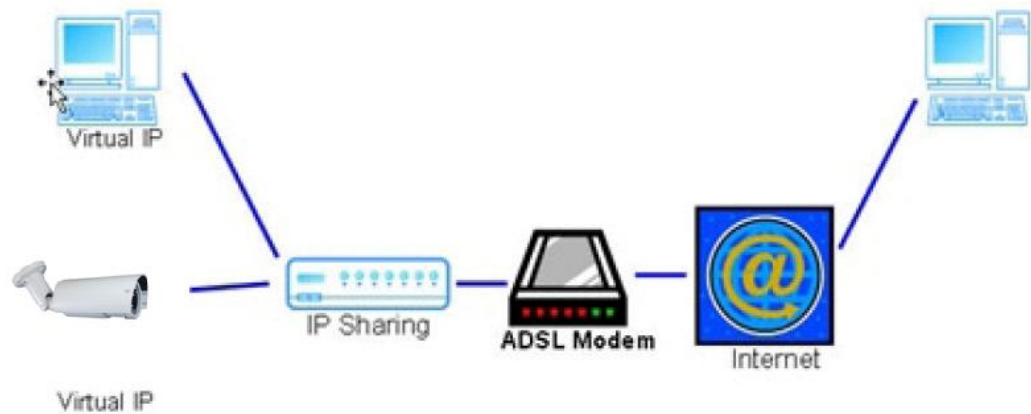
- a. Internet Access: ADSL or Cable Modem
- b. IP address: One real IP or one dynamic IP
- c. Only IP Camera connects to the internet
- d. For fixed real IP, set up the IP into IP Camera. For dynamic IP, start PPPoE.

- Configuration 2:



- a. Internet AccessL: 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.

- Configuration 3:

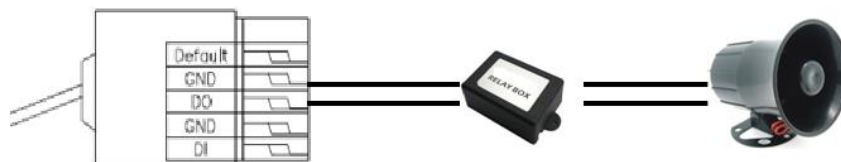


- a. Internet Access: ADSL or Cable Modem
- b. IP address: one real IP or one dynamic IP
- c. IP Camera and PC connect to the internet
- d. Device needed: IP sharing
- e. Use virtual IP, set up port forwarding in IP sharing.

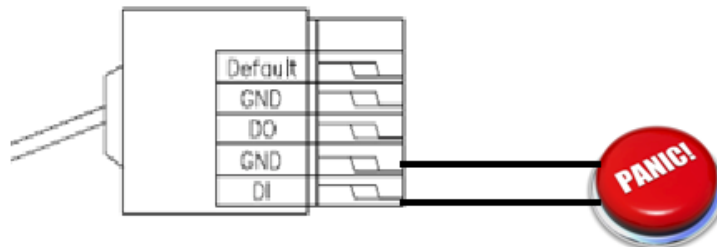
VII I/O Configuration

1. I/O Connection

- a. Please connect the GND & DO pin to the external relay (buzzer) device.



- b. Please connect the GND & DI pin to the external trigger device.

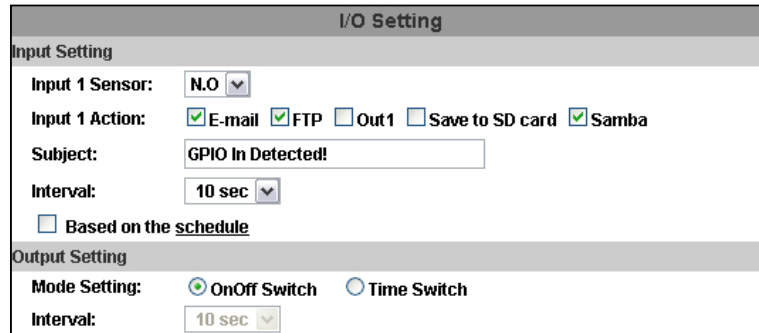


c. I/O PIN definition

- Default
- GND (Ground): Initial state is LOW
- DO (Digital Output): DC 5V
- GND (Ground): Initial state is LOW
- DI (Digital Input): Max. 50mA, DC 5V

2. I/O Setup

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



The screenshot shows the "I/O Setting" web interface. It is divided into two main sections: "Input Setting" and "Output Setting".

Input Setting:

- Input 1 Sensor:** A dropdown menu set to "N.O".
- Input 1 Action:** A row of checkboxes: ☒ E-mail, ☒ FTP, ☐ Out1, ☐ Save to SD card, and ☒ Samba.
- Subject:** A text input field containing "GPIO In Detected!".
- Interval:** A dropdown menu set to "10 sec".
- ☐ Based on the schedule

Output Setting:

- Mode Setting:** Two radio buttons: ☒ OnOff Switch and ☐ Time Switch.
- Interval:** A dropdown menu set to "10 sec".

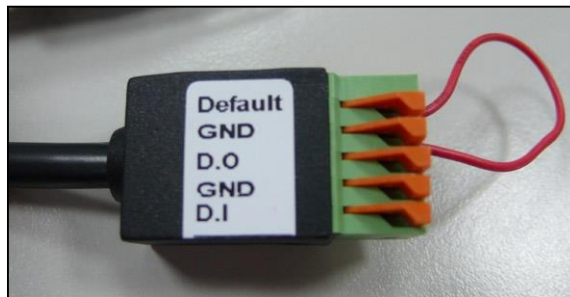
- b. Click ON/OFF from the setup main page via IE to control relay out signal.



VIII Factory Default

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

- Remove the power and Ethernet cable from your camera
- Put one side of electric wire in to “Default”, and the other side of electric wire in to “GND”, as the picture below.
- Connect the power to the camera. It will take around 30 seconds to boot.
- After the camera complete booting, remove the electric wire and plug in the Ethernet cable.
- Re-login the camera using the default IP (<http://192.168.1.200>), and user name (admin), password (admin).



XI. Package contents

- IP Camera Network Camera
- Adaptor
- CD (Including User manual and IP installation tool)

IX. Appendix I

(I) The following is the Micro SD Card recommended:

Transcend	SDHC class4 16GB
	SDHC class4 32GB
	SDHC class4 16GB
	SDHC class4 32GB
	SDHC class6 4GB
	SDHC class6 8GB
	SDHC class6 16GB
	SDHC class6 4GB
	SDHC class6 8GB
	SDHC class6 16GB
	SDHC class10 4GB
	SDHC class10 8GB
	SDHC class10 16GB
SanDisk	SDHC class4 4GB
	SDHC class4 8GB
	SDHC class4 16GB
	SDHC class4 32GB

X. Appendix II

(II) 2M 1080P IP Cameras – Video Setting – Streaming 1 & Streaming 2 setting table, NVR@ Normal Mode

Co-working with NVR, the listed video setting in Streaming 1 & 2 appendix table:

ITEM	Streaming 1 Setting	Streaming 2 Setting	Test Result
Resolution	1024x1080	1920x1080	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	5	
Video Bit rate	10Mbps	1Mbps	
Resolution	1280x720	1920x1080	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	5	
Video Bit rate	10Mbps	1Mbps	
Resolution	640x480	1920x1080	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	15	30	
Video Bit rate	10Mbps	1Mbps	
Resolution	320x240	1920x1080	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	30	
Video Bit rate	10Mbps	1Mbps	
Resolution	176x144	1920x1080	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	30	
Video Bit rate	10Mbps	1Mbps	
Resolution	1920x1080	1080x720	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	5	
Video Bit rate	10Mbps	1Mbps	
Resolution	1920x1080	640x480	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	

Video Frame Rate(fps)	30	15	
Video Bit rate	10Mbps	1Mbps	
Resolution	1920x1080	320x240	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	30	
Video Bit rate	10Mbps	1Mbps	
Resolution	1920x1080	176x144	Pass
Profile	Baseline	Baseline	
Bit rate Control Mode	CBR	CBR	
Video Frame Rate(fps)	30	30	
Video Bit rate	10Mbps	1Mbps	