

*** USER'S MANUAL ***

FCC ID : UTBHL C-81XW

The Federal Communication Commission Statement

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures: -

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced Radio/TV technician for help.

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that change or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

User Manual

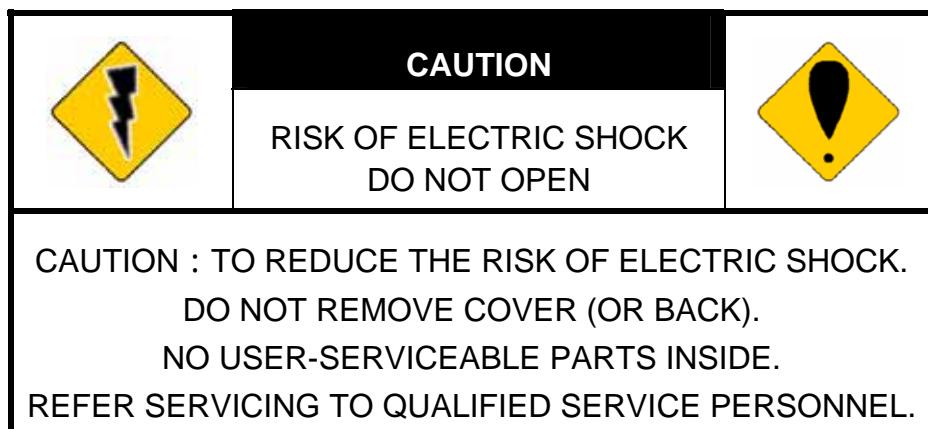
IP CAMERA



WARNINGS

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



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

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V1.7 2007/JUNE/21

I. Preface

This is a professional CCD IP camera with the web server built in. User can view real-time video via IE browser. It supports MPEG-4 & JPEG video compression which provides smooth and high video quality. The video can be stored in the SD card and playback remotely.

With user friendly interface, it is an easy-to-use IP camera which is designed for security application.

II. Product Specifications

- True Day/Night IR Cut Filter (Optional)
- MPEG4/JPEG compression
- Supports SD card for local recording
- Wireless network connection (Optional)
- 2-way audio
- Support Cell phone/PDA
- Online firmware upgrade
- Compatible with Microsoft Windows Media Player

Specifications

Hardware	
CPU	ARM 9 ,32 bit RISC
SDRAM	64MB
Flash	8MB
Image sensor	1/3" CCD
Lens Changeable	Yes, CS Mount
Support DC IRIS	Yes
I/O	2 in/ 2out
RS-485	Yes
Video Out	1
Microphone	Built-in
Audio Out	1

Power Consumption	LAN : DC 12V, 450mA; WLAN : DC 12V, 550mA	
Dimensions (WxHxD)	58 x 65 x 131.5 mm	
Network		
Ethernet	10/ 100 Base-T	
Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP	
Wireless (Optional)		
Wireless	802.11b/g	
	WEP	64/ 128 bit
System		
Video Resolution	NTSC : 720x480, 704x480, 352x240, 176x120	
	PAL : 720x576, 704x576, 352x288, 176x144	
Video adjust	Brightness, Contrast, Saturation, Hue	
CCD setting	AES, BLC, AGC, Day/ Night(Auto)	
Image snapshot	Yes	
Full screen monitoring	Yes	
Compression format	MPEG-4/ JPEG	
Video bitrate adjust	CBR, VBR	
Motion Detection	Yes, 3 different areas	
Triggered action	Mail, FTP, Save to SD card	
Pre/ Post alarm	Yes, configurable	
Security	Password protection	
Firmware upgrade	HTTP mode, can be upgraded remotely	
Simultaneous connection	Up to 10	
Audio	Yes, 2-way	
SD card management		
Recording trigger	Motion Detection, IP check, Network break down (wire only)	
Video format	AVI, JPEG	
Video playback	Yes	
Delete files	Yes	
Web browsing requirement		
OS	Windows 2000, XP, 2003, IE 6.0 or above	
Hardware	Suggested	Intel-C 2.0G, RAM : 512MB, Graphic card : 64MB
	Minimum	Intel-C 1.6G, RAM : 256MB, Graphic card : 32MB

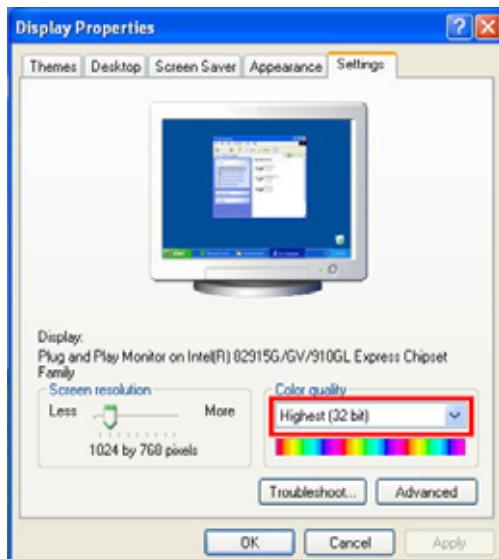
III. Product Installation

A. Monitor Setting

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



- ii. Change color quality to highest (32bit).



B. Hardware Installation

- i. Connect power adaptor



- ii. Connect IP Cam to PC or network with Ethernet cable



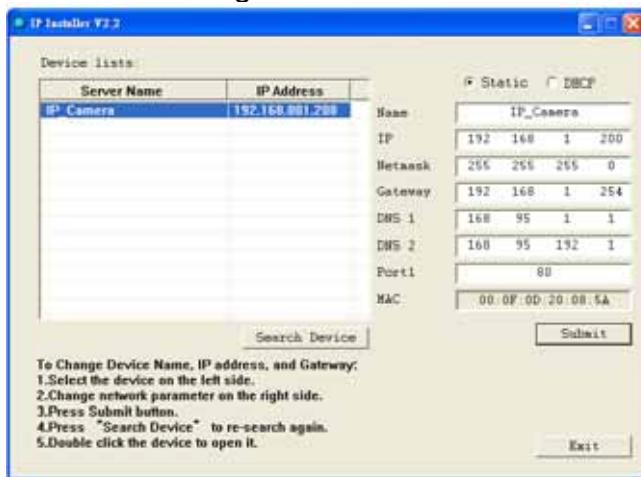
- iii. Set up the network configurations according to the network environment.
For further explanation, please refer to chapter VI, "Network Configuration for IP CAMERA".

C. IP Assignment

- i. Use the software, "IP Installer" to assign the IP address of IP CAMERA.
The software is in the attached software CD.
- ii. IP installer supports two languages
 - a. IPInstallerCht.exe : Chinese version
 - b. IPInstallerEng.exe : English version
- iii. There are 3 kinds of IP configuration.
 - a. Fixed IP (Public IP or Virtual IP)
 - b. DHCP (Dynamic IP)
 - c. Dial-up (PPPoE)
- iv. Execute IP Installer
- v. For Windows XP SP2 user, it may popup the following message box.
Please click "Unblock".



vi. IP Installer configuration:



vii. IP Installer will search all IP Cameras connected on Lan. The user can click "Search Device" to search again.

viii. 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 (eg: Office, warehouse). Change the parameter and click "Submit" then click "OK". It will apply the change and reboot the Device.



ix. 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

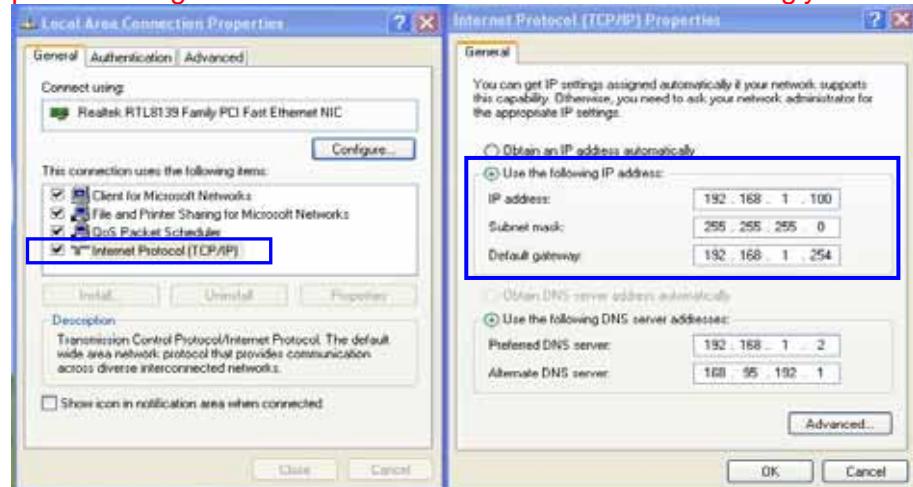


PC IP address: 192.168.1.100

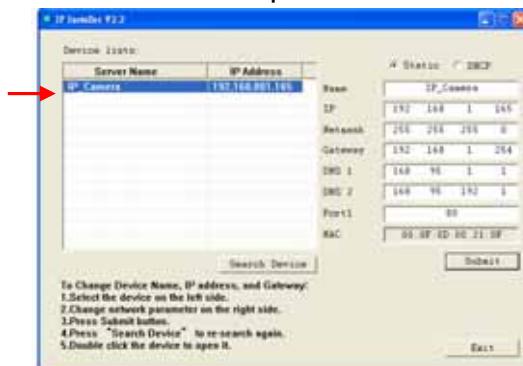
To Change PC IP address:

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.



x. 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.



xi. 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.



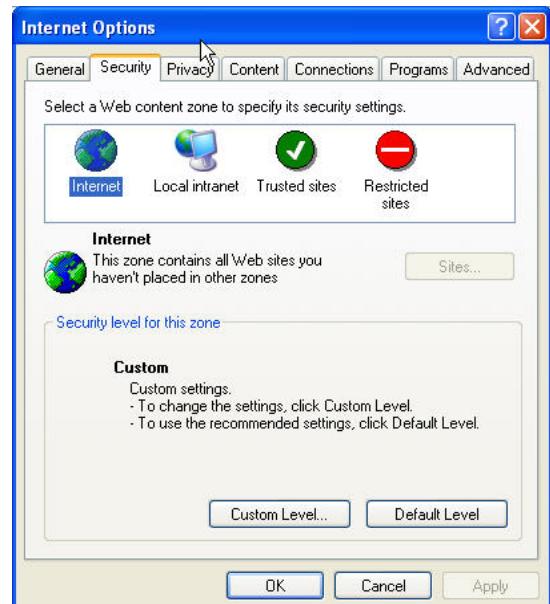
If the installation failed, please check the security setting for the IE browser.

- i. IE → Tools → Internet Options... → Security Tab → Custom Level... → Security Settings → Download unsigned ActiveX controls → Select "Enable" or Prompt.
- ii. IE → Tools → Internet Options... → Security Tab → Custom Level... → Initialize and script ActiveX controls not marked as safe → Select "Enable" or Prompt.

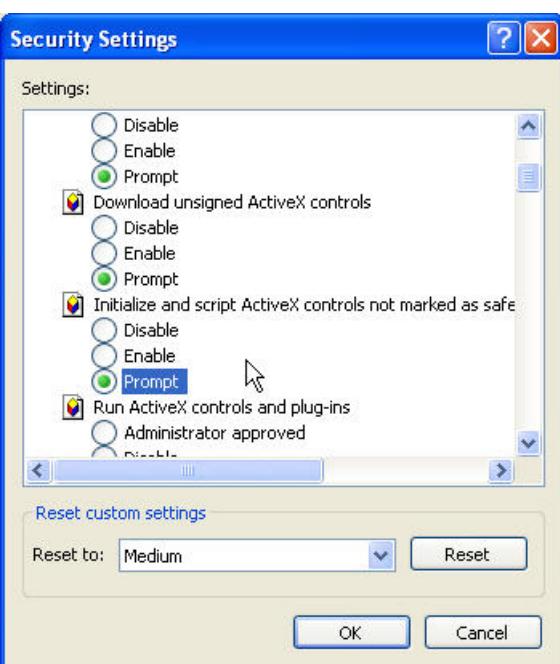
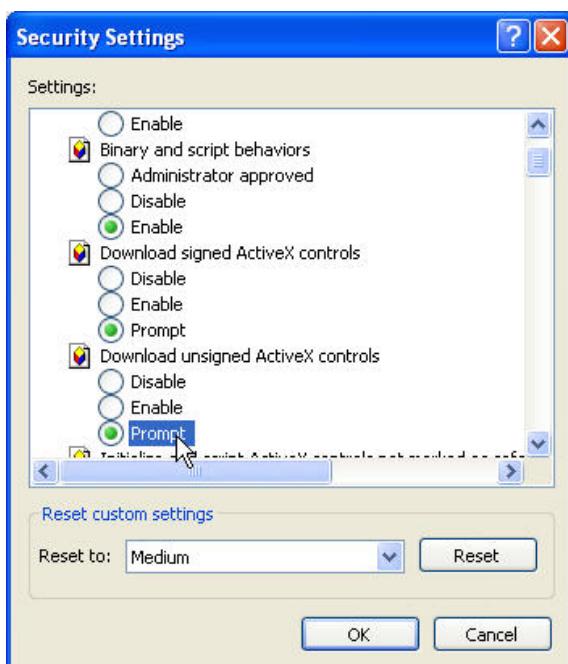
1



2

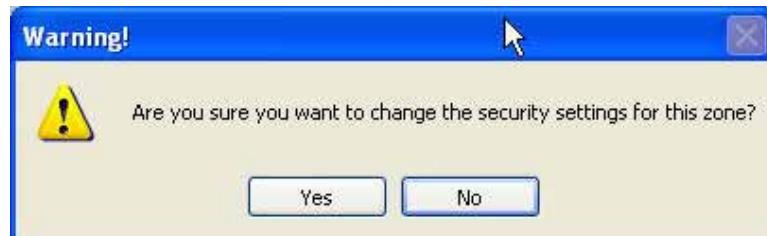


3



5

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



IV. Live Video

Start a 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 connect to the IP CAMERA. The following program interface shows.





1. : Get into the administration page



2. : Video Snapshot

3. Shows how many people connect to this IP camera
4. Show system time, video resolution, and video refreshing rate
5. IP CAMERA supports 2-way audio. Click the “Chatting” check box. Then you can use microphone which connect to the PC to talk to server side, which is IP CAMERA side.
6. Control the relay which is connected to this camera.

Double-click the video, it will change to full screen mode. Press “Esc” or double-click the video again, it will change 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 off the audio. Click again to turn on it.
4. Full Screen : Full-screen mode.

V. Configuration



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

A screenshot of the IP Camera configuration interface. The left sidebar shows a navigation menu with categories: System (System Information, User Management, System Update), Network (IP Setting, PPPoE, DNS, Wireless Setting), A/V Setting (Image Setting, Video Setting, Audio), Event Setting, I/O Setting, Mail & FTP, Log List, Event List, and SD Card. The main content area is titled 'System Information' and contains the 'Server Information' section. It shows the 'Server Name' as 'IP_Camera', 'MAC Address' as '00:0F:80:29:0C:30', and language settings for English, Traditional Chinese, and Simplified Chinese, with English selected. Under 'Overlay Setting', 'Enabled' is selected. Under 'Time Setting', the 'Server Time' is '2007/5/8 8:54:20' and the 'Time Zone' is 'GMT+08:00'. The 'Date Format' is set to 'yy/mm/dd'. There are three time zone options: 'NTP' (selected, with 'NTP Server' set to '192.123.10.112'), 'Synchronize with PC's time' (selected, with 'Date' set to '2007/5/8' and 'Time' set to '9:3:58'), and 'Manual' (selected, with 'Date' set to '2007/5/8' and 'Time' set to '9:3:47'). A checkbox 'The date and time remain the same' is checked. A 'Apply' button is located at the bottom right of the form.

A. System

i. System Information

a. Server Information: Set up the camera name, select language, and set up the camera time.

1. Server Name : This is the Camera name. This name will show on the IP Installer.
2. Select language : There are English, Traditional Chinese, and Simplified Chinese to select. When change, it will show the following dialogue box for the confirmation of changing language.



b. Overlay Setting: select a position where date & time showing on screen.

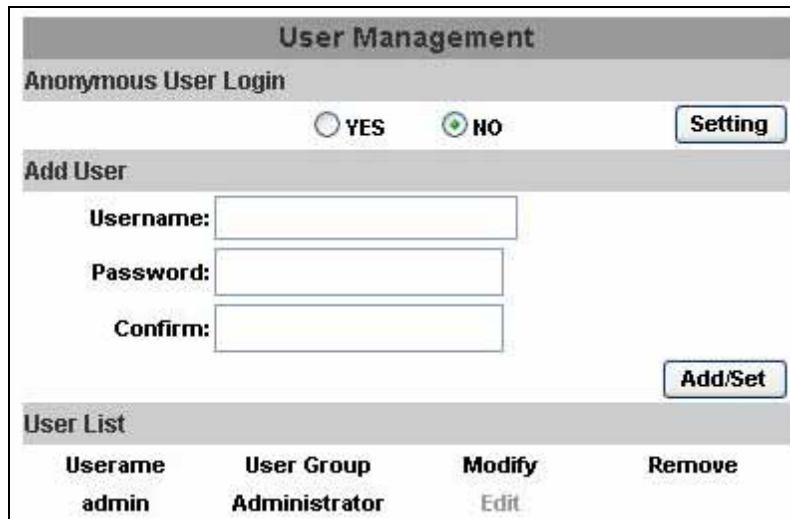
Overlay Setting	
<input checked="" type="radio"/> Enabled	<input type="radio"/> Disabled
Position: <input checked="" type="radio"/> Top-Left <input type="radio"/> Top-Right <input type="radio"/> Bottom-Left <input type="radio"/> Bottom-Right	

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:	2007/4/11 14:56:01 Time Zone: GMT+08:00
Date Format:	<input checked="" type="radio"/> yy/mm/dd <input type="radio"/> mm/dd/yy <input type="radio"/> dd/mm/yy
Time zone:	GMT+08:00
<input checked="" type="radio"/> NTP :	GMT-09:00 GMT-08:00 GMT-07:00 GMT-06:00 GMT-05:00 GMT-04:00 GMT-03:30 GMT-03:00 GMT-02:00 GMT-01:00 GMT-00:00 GMT+01:00 GMT+02:00 GMT+03:00 GMT+03:30 GMT+04:00 GMT+04:30 GMT+05:00
NTP Server :	
<input type="radio"/> Synchronize	
Date :	
Time :	
<input type="radio"/> Manual	
Date :	
Time :	
<input type="radio"/> The date and time remain the same	
<input type="button" value="Apply"/>	

ii. User Management

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



The screenshot shows the 'User Management' interface. At the top, there is a section for 'Anonymous User Login' with a radio button for 'YES' (unchecked) and 'NO' (checked). A 'Setting' button is to the right. Below this is an 'Add User' section with three input fields: 'Username', 'Password', and 'Confirm'. An 'Add/Set' button is located to the right of these fields. At the bottom is a 'User List' table with one row:

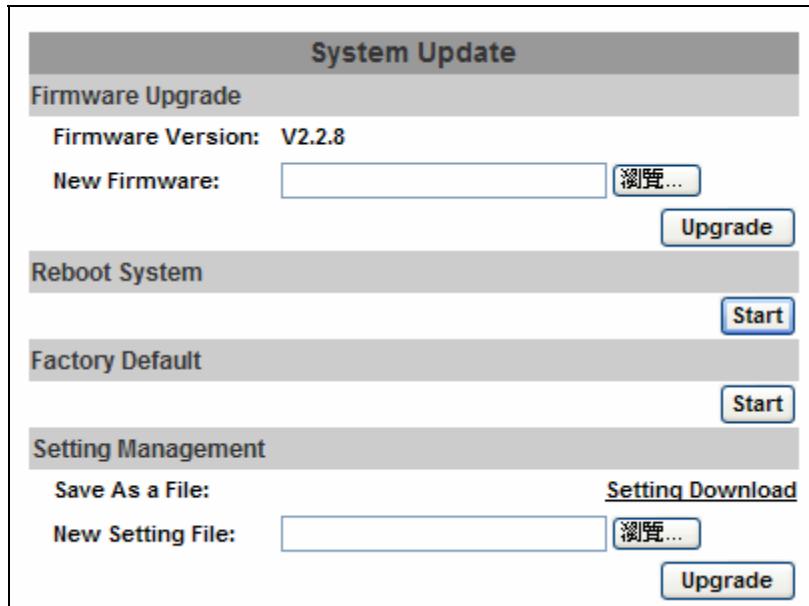
Username	User Group	Modify	Remove
admin	Administrator	Edit	

- 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" to modify the user.



The screenshot shows a 'User_Setting' dialog box in Microsoft Internet Explorer. The title bar says 'User_Setting - Microsoft Internet Explorer'. The dialog box has a 'User Setup' section with three input fields: 'Username' (admin), 'Password', and 'Confirm'. An 'OK' button is located to the right of the 'Confirm' field.

iii. System update :



- a. To update the firmware online, click “Browse...” to select the firmware. Then click “Upgrade” to proceed.
- b. Reboot system : re-start the IP camera
- c. Factory default : delete all the settings in this IP camera.
- d. Setting Management: User may download the current setting to PC, or upgrade from previous saved setting.
 1. 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
 2. Upgrade from previous setting
Browse → search previous setting → open → upgrade → Setting update confirm → click index.html. to return to main page

B.Network

i. IP Setting

IP Camera supports DHCP and static IP.

IP Setting	
IP Assignment	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IP Address:	192.168.1.217
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.254
DNS 0:	168.95.1.1
DNS 1:	168.95.192.1
Port Assignment	
Web Page Port:	80
Video Port :	7070
Audio In Port :	7071
Audio Out Port :	7072
<input type="button" value="Apply"/>	

- DHCP : Using DHCP, IP CAMERA will get all the network parameters automatically.
- Static IP : Please type in IP address, subnet mask, gateway, and DNS manually.
- Port Assignment: user may need to assign different port to avoid conflict when setting up IP assignment.

ii. PPPoE :

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

Select "Enabled" to use PPPoE.

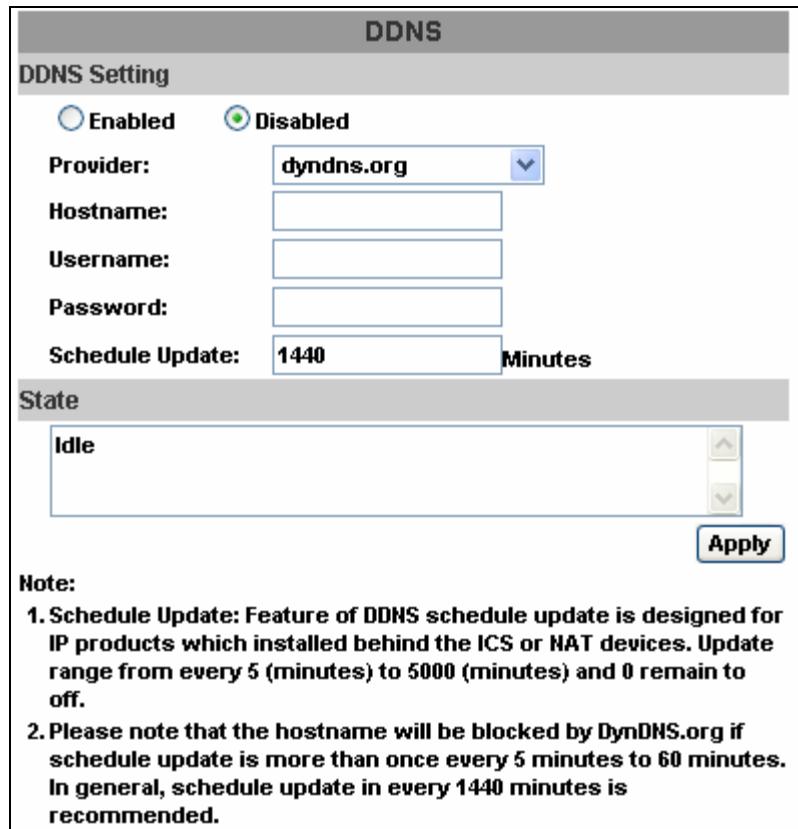
Key-in Username and password for the ADSL connection.

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.

iii. DDNS :

It supports DDNS (Dynamic DNS) service.

a. DynDNS :



The screenshot shows the 'DDNS Setting' configuration page. At the top, there is a radio button for 'Enabled' (unchecked) and one for 'Disabled' (checked). Below this, there is a dropdown menu for 'Provider' set to 'dyndns.org'. There are four input fields for 'Hostname', 'Username', and 'Password', all of which are empty. A 'Schedule Update' field contains the value '1440' followed by 'Minutes'. Below these fields is a 'State' section with a dropdown menu set to 'Idle'. At the bottom right of the page is a blue 'Apply' button. A note section at the bottom provides instructions for using the schedule update feature and notes about potential IP blocking.

DDNS Setting

Enabled Disabled

Provider: dyndns.org

Hostname:

Username:

Password:

Schedule Update: 1440 Minutes

State

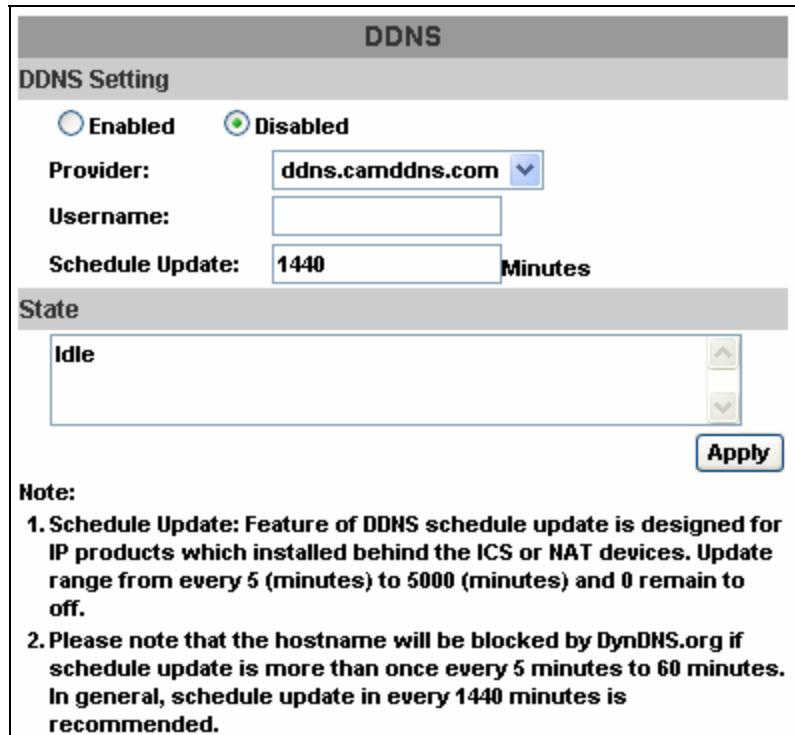
Idle

Note:

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 DynDNS server name, user name, and password.
3. Set up the IP Schedule update refreshing rate.
4. Click "Apply"
5. If setting up IP schedule update too frequently, the IP may be blocked. In general, schedule update every day (1440 minutes) is recommended.

b. Camddns service :



DDNS

DDNS Setting

Enabled Disabled

Provider: **ddns.camddns.com**

Username:

Schedule Update: **1440** Minutes

State

Idle

Note:

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.

Apply

1. Please enable this service
2. Key-in user name.
3. IP Schedule update is default at 5 minutes
4. Click “Apply”.

c. 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 provide : The server, user name, and password may be wrong.

iv. Wireless Setting (Wireless Network Optional)

Supports 802.11 b/g wireless connection.

Notice : Wireless network and Ethernet network use the same IP, the user has to unplug Ethernet cable, if Ethernet cable is not unplug, wireless setting can not be executed.

Wireless Setting				
Status of Wireless Networks				
SSID	Mode	Security	Signal strength	
allan	Infrastructure	WPA	79	
RHOSON	Infrastructure	WEP	16	
Link	Infrastructure	OFF	16	
SinoStar	Infrastructure	WEP	11	
7f-2	Infrastructure	WEP	12	
00160159A7FA	Infrastructure	WEP	56	
RDTEST	Infrastructure	WEP	48	
3Com	Infrastructure	OFF	43	
Default	Infrastructure	WPA	74	

Wireless Setting				
MAC Address:	00:16:16:16:DD:E1			
Mode:	Infrastructure <input type="button" value="▼"/>			
Operation Mode:	Auto <input type="button" value="▼"/>			
SSID:	allan			
Security:	None <input type="button" value="▼"/>			
<input type="button" value="Apply"/>				

a. Status of Wireless Networks :

scan all wireless services.

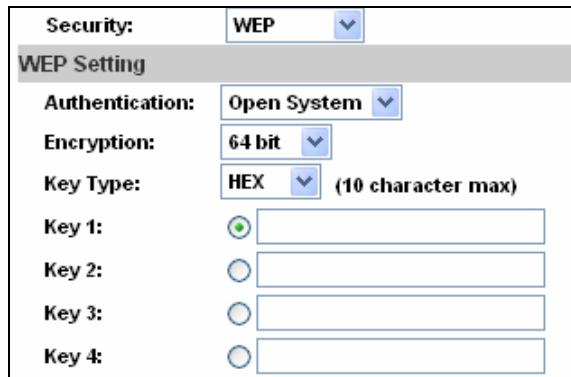
b. Wireless Setting :

1. **Mode** : There are Infrastructure and Ad-hoc. Infrastructure is for connecting with the router. Ad-hoc is for connecting with PC. There is “Channel” to select only when user uses Ad-hoc mode.

e.g. If one PC’s channel is 1, the other’s channel has to 1, too.

Wireless Setting	
MAC Address:	00:11:E2:03:37:48
Mode:	Ad-hoc <input type="button" value="▼"/>
Operation Mode:	Auto <input type="button" value="▼"/>
SSID:	Default
Channel:	6 <input type="button" value="▼"/>
Security:	None <input type="button" value="▼"/>

2. **SSID** : Based on AP setting.
3. **Channel** : This is only be used when the user selects Ad-hoc mode in order to avoid conflict.
4. **Security** : It supports “None”, “WEP”, “WPA-PSK” security encryption based on the setting of the Router.
5. **WEP** :



Security:	WEP
WEP Setting	
Authentication:	Open System
Encryption:	64 bit
Key Type:	HEX (10 character max)
Key 1:	<input type="radio"/>
Key 2:	<input type="radio"/>
Key 3:	<input type="radio"/>
Key 4:	<input type="radio"/>

- Authentication : There are Open System and Shared Keys, it is based on different encryptions. This has to be the same as the Router's setting.
- Encryption : There are 64 bits and 128 bits. This is based on Key Type based on the Router's setting.
- Key Type : There are HEX and ASCII. When selecting HEX, the user only can input 0~9 characters and use A, B, C, D, E, and F.
- When selecting ASCII, the user can input any character. **(Case sensitive)**
- Key 1~4 : Based on Key Type to input characters.

6. **WPA-PSK** :

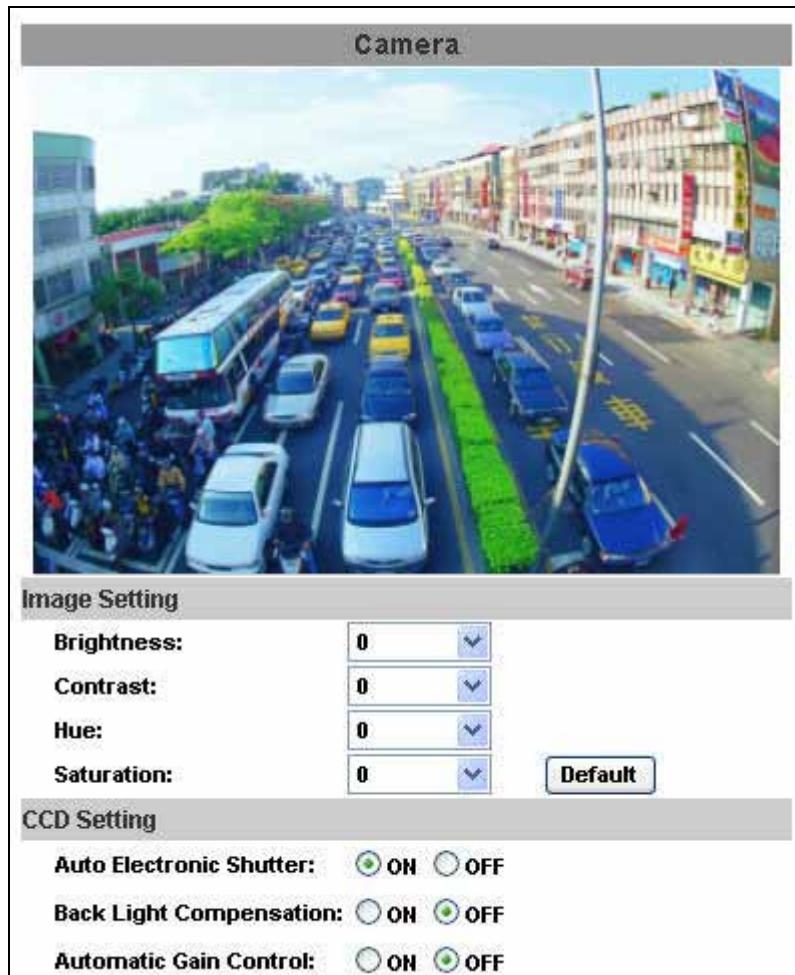


Security:	WPA-PSK
WPA-PSK Setting	
Encryption	TKIP
Pre-Shared Key:	(ASCII format, 8~63)

- Encryption : There are TKIP and AES.
- Pre-Shared Key : Allow any characters .**(Case sensitive)**

C.A/V Setting

i. Image Setting

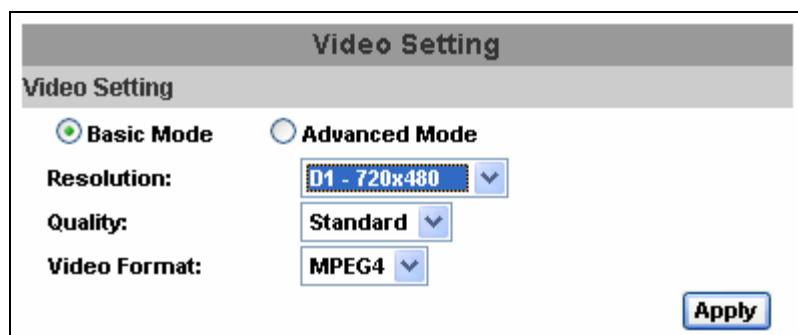


Adjust "Brightness", "Contrast", "Hue", "Saturation" to get clear video.

For CCD Setting, IP CAMERA supports "Auto Electronic Shutter", "Back Light Compensation", and "Automatic Gain Control".

ii. Video Setting

a. Basic Mode :



1. Resolution :

There are 4 resolutions to choose.

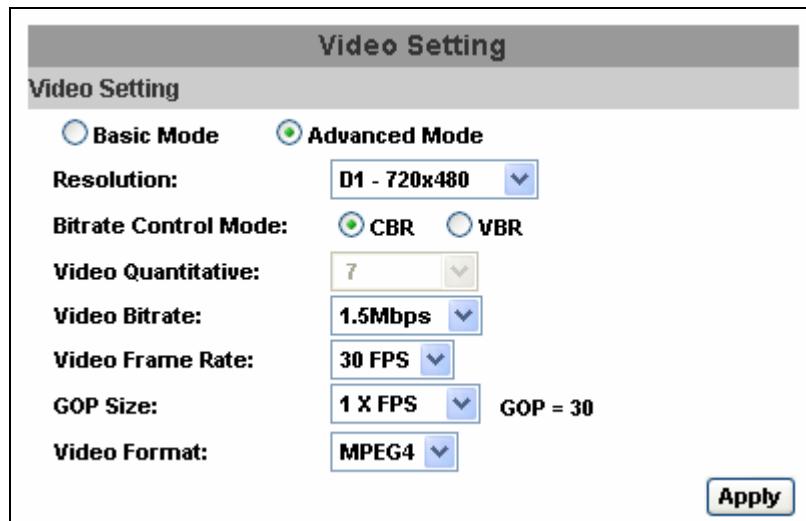
	NTSC	/	PAL
D1	–	720x480	/ 720x576
4CIF	–	704x480	/ 704x576
CIF	–	352x240	/ 352x288
QCIF	–	176x120	/ 176x144

2. Quality :

There are 5 levels to adjust, The higher the quality is, the bigger the file size is.

3. Video Format : MPEG4 or JPEG.

b. Advanced Mode :



The dialog box is titled "Video Setting" and has a tab labeled "Video Setting". It contains the following settings:

- Resolution:** D1 - 720x480 (selected)
- Bitrate Control Mode:** CBR (selected)
- Video Quantitative:** 7
- Video Bitrate:** 1.5Mbps
- Video Frame Rate:** 30 FPS
- GOP Size:** 1 X FPS (selected) | GOP = 30
- Video Format:** MPEG4

At the bottom right is a blue "Apply" button.

1. Resolution :

There are 4 resolutions to choose.

	NTSC	/	PAL
D1	–	720x480	/ 720x576
4CIF	–	704x480	/ 704x576
CIF	–	352x240	/ 352x288
QCIF	–	176x120	/ 176x144

2. Bitrate Control Mode

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

CBR : 64Kbps~4Mbps. (the higher the CBR is, the better the video quality is)

VBR : 1~10 (Compression Rate)

3. Video Frame Rate

The video refreshing rate per second.

4. GOP

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

5. Video Format :

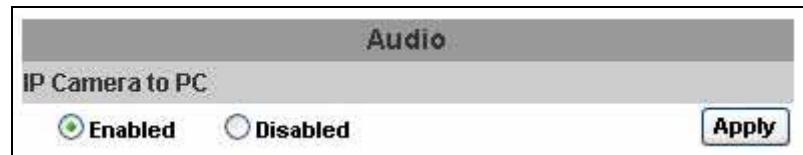
There are 2 Video Format to choose

MPEG4 or JPEG.

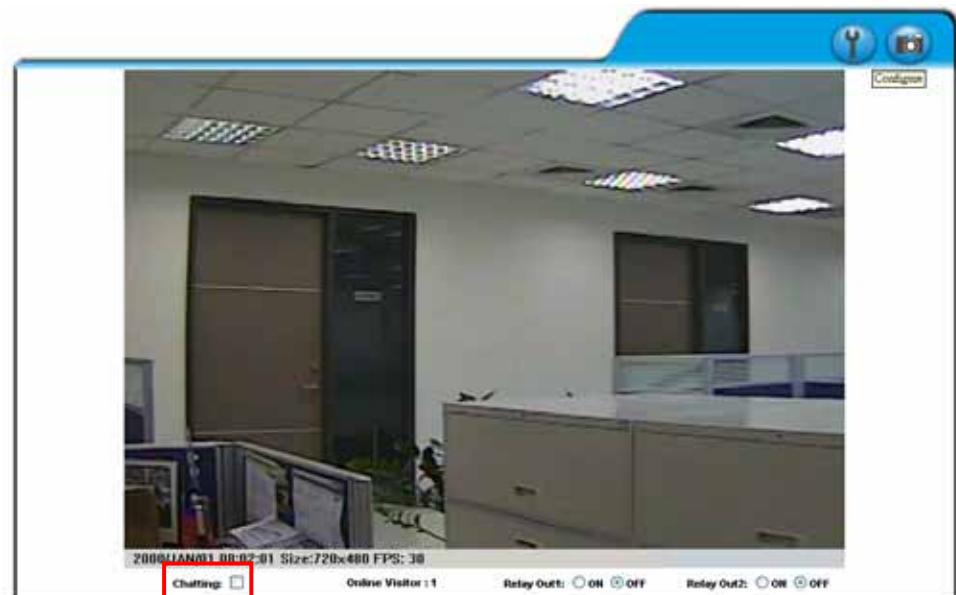
iii. Audio :

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 to IP Camera's external speaker.

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



b. Audio from local PC to IP Camera: Check "chatting" in the browsing page.



The Audio will not be smooth when enable SD card recording function simultaneously.

D. Event List

IP CAMERA provides multiple event settings.

i. Event Setting



a. Motion Detection :

IP CAMERA allows 3 areas motion detection. When motion is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local SD card. 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 Time Setting :

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

c. Network Dis-connected :

When the network is down, it will save the video to local SD card.

This function is only enabled in wire connection.

d. Network IP check

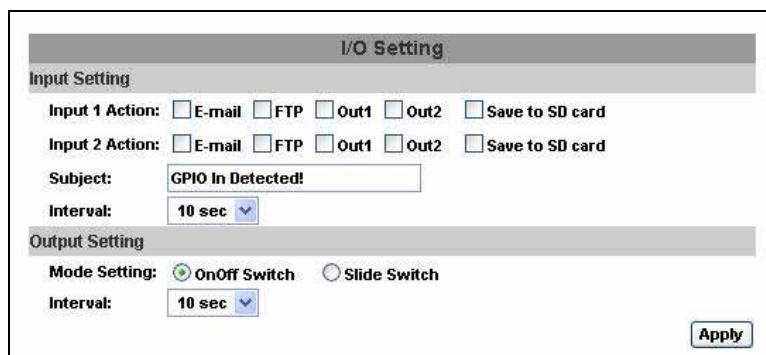
When the connection is down, it records the video to SD card. Make sure the video recording is continuous. To use this function, key in the IP address of the PC which has recording software installed.

Enable the function of “Save to SD card”, then click “Apply”.

The interval of two video files on SD card is fixed with 30 seconds.

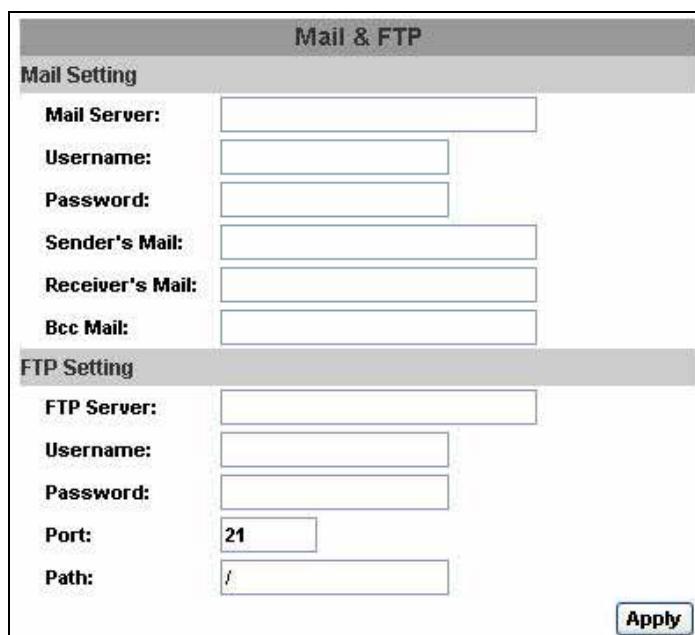
ii. I/O Setting

IP CAMERA supports 2 input/ 2 output. When input is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local SD card.



iii. Mail & FTP

To send out the video via mail or ftp, please set up the configuration first.



iv. 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.

v. SD card

Please Insert SD card before use it. Make sure pushing SD card into the slot completely.

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.



a. Playback:

Playback	
19700101	20060417
SD Card: << 878M / 982M >>	

b. It will show the capacity of the SD card. Click the date listed on this page. It will show the list of the video.

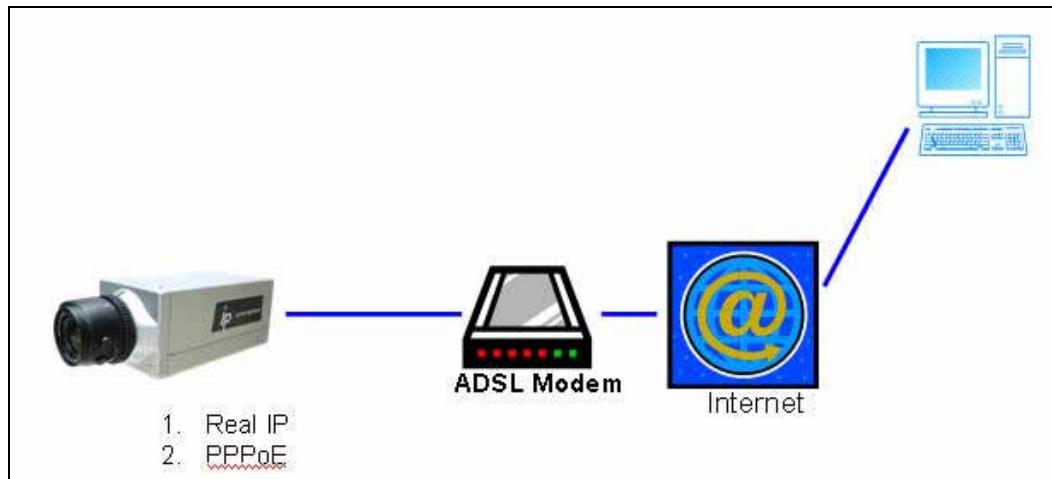
2006/04/17			Del
Time	Video	Event Type	<input type="checkbox"/>
09:05:22	090522f.avi	Network Dis-connected	<input type="checkbox"/>
09:05:52	090552f.avi	Network Dis-connected	<input type="checkbox"/>
09:06:22	090622f.avi	Network Dis-connected	<input type="checkbox"/>
09:06:52	090652f.avi	Network Dis-connected	<input type="checkbox"/>
09:07:22	090722f.avi	Network Dis-connected	<input type="checkbox"/>
09:07:52	090752f.avi	Network Dis-connected	<input type="checkbox"/>
09:08:22	090822f.avi	Network Dis-connected	<input type="checkbox"/>
09:08:51	090851f.avi	Network Dis-connected	<input type="checkbox"/>
09:09:21	090921f.avi	Network Dis-connected	<input type="checkbox"/>
09:09:51	090951f.avi	Network Dis-connected	<input type="checkbox"/>

1 2 3 4 5

1. The video format is AVI. Click the video to start Microsoft Media Player to play it.
2. To delete the video, check it, then click **Del**. When the SD card is full, it will remove the oldest video automatically.

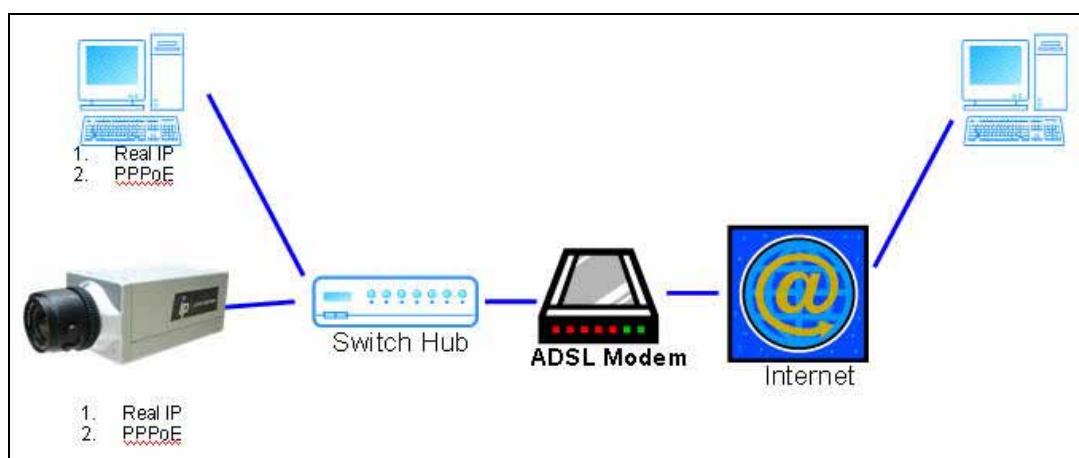
VI. Network Configuration

i. Configuration 1 :



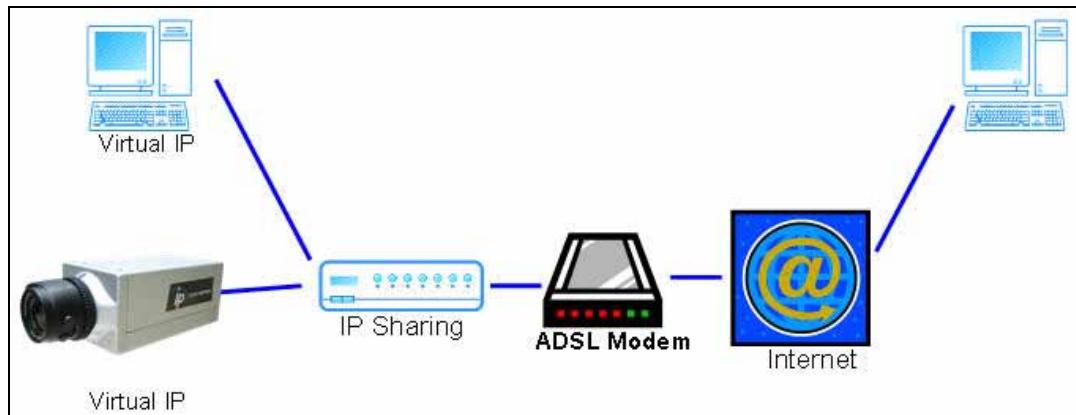
- a. Internet Access : ADSL or Cable Modem
- b. IP address : One real IP or one dynamic IP
- c. Only IP CAMERA connects to the internet
- d. For fixed real IP, set up the IP into IP CAMERA. For dynamic IP, start PPPoE.

ii. Configuration 2 :



- a. 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.

VII. Factory Default

- i. To recover the default IP address and password, please follow the following steps.
- ii. Remove power, and press and hold the button in the back of IP CAMERA.



- iii. Power on the camera. Don't release the button during the system booting.
- iv. It will take around 30 seconds to boot the camera.
- v. Release the button when camera finishes proceed.
- vi. Re-login the camera using the default IP (<http://192.168.1.200>), and user name (admin), password (admin).

VIII. Package contents

- i. IP CAMERA Network Camera
- ii. Adaptor
- iii. Ethernet Cable
- iv. CD title (User manual, IP installation Utility)

Appendix I

SD Card Recommended :

SanDisk 128M	Tracend 128M 80X
SanDisk 256M	Tracend 256M 80X
SanDisk 512M	Tracend 512M 80X
SanDisk 1G	Tracend 1G 80X
SanDisk 2G	Tracend 2G 80X
SanDisk 4G	Tracend 4G 80X