Storage Options

IP Camera Pro
Instruction Manual

IMPORTANT SAFEGUARD

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.

DISCLAIMER

We reserve the right to revise or remove any content in this manual at any time. We do not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of this manual. The content of this manual is subject to change without notice.

GROUNDING

This is a Safety Class 1 Product (provided with a protective earthing ground incorporated in the power cord). The mains plug shall only be inserted in a socket outlet provided with a protective earth contact. Any interruption of the protective conductor inside or outside of the instrument is likely to make the instrument dangerous. Intentional interruption is prohibited.

WATER & MOISTURE

Do not expose this product to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the product.

TRADEMARK ACKNOWLEDGEMENTS

Internet Explorer, Microsoft, Windows, Mozilla & QuickTime are registered trademarks of the respective holders.

MPEG4 LICENCING

THIS PRODUCT IS LICENSED UNDER THE MPEG4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG4 VISUAL STANDARD ("MPEG-4 VIDEO") AND/OR (ii) DECODING MPEG4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP://WWW.MPEGLA.COM.

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This product contains codes which are developed by Third-Party-Companies and which are subject to the GNU General Public License ("GPL") or the GNU Lesser Public License ("LGPL").
The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.
Further source codes which are subject to the GPL-licenses are available upon request. We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:
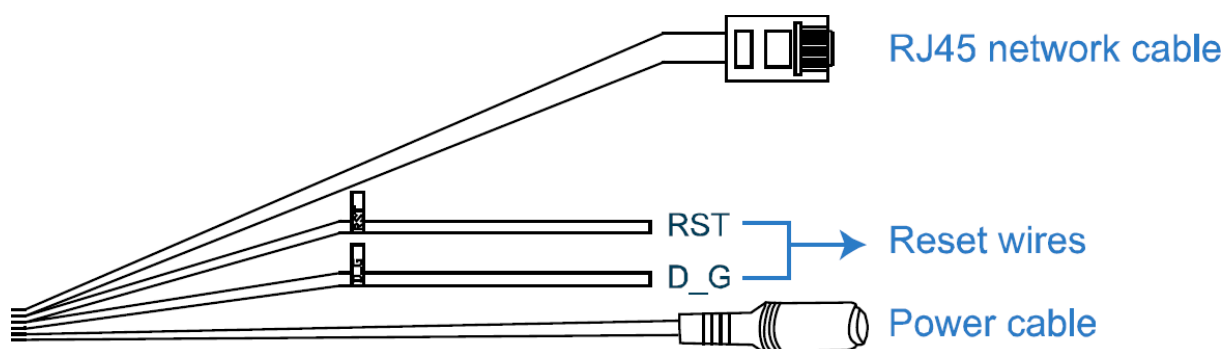ftp://ftp.dvrtw.com.tw/GPL/AV074/

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OVERVIEW

1.1 – Product Features

- True Day & Night surveillance & large aperture lens (F1.4)
- The best cost / performance outdoor solution with IP65
- IR effective distance up to 30 metres with 56 IR LEDs
- Smart Light Control to avoid overexposure
- Excellent outdoor ID design with cable management
- Low-latency video streaming with H.264 compression format
- Free CMS software with E-Map for multiple devices control & surveillance
- Powerful mobile surveillance supporting iPhone, BlackBerry, WinCE & J2ME
- Motion detection and alarm notification functions

1.2 – Package Contents

☐ Network Camera   ☐ Installation Sticker

☐ Installation Guide   ☐ RJ45 Cable Extender Adapter

☐ Mains Adapter   ☐ RJ45 Network Cable

☐ CD-ROM Disc (including user manuals "Video Viewer" software)

1.3 – Cable Overview

| CABLE	DESCRIPTION
RJ45 Network Cable	Connect it to the supplied RJ45 cable extender adapter for cable extension, and prepare another RJ45 network cable with suitable length for your connection.
Reset Wires	Remove the insulating coating of these two wires, and twist them together to reset to default. This will reset all parameters, including the IP address to factory default settings. **Note:** Disconnect power before twisting these two wires together, and connect to power again to reset default. When fitting, you may wish to provide internal cabling access to these wires
Power Cable	Connect to DC 12V power supply.

INSTALLATION AND CONNECTION

2.1 – Install The Camera
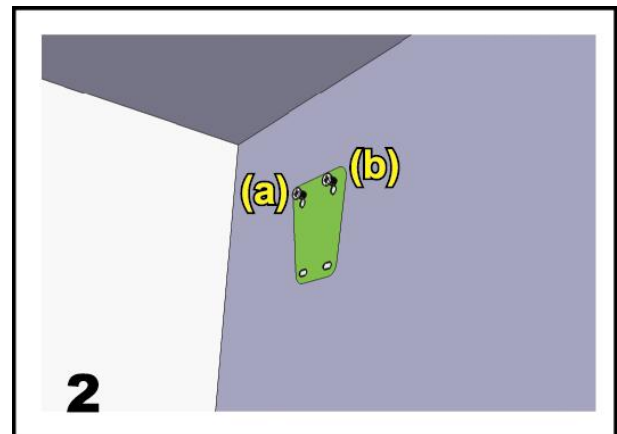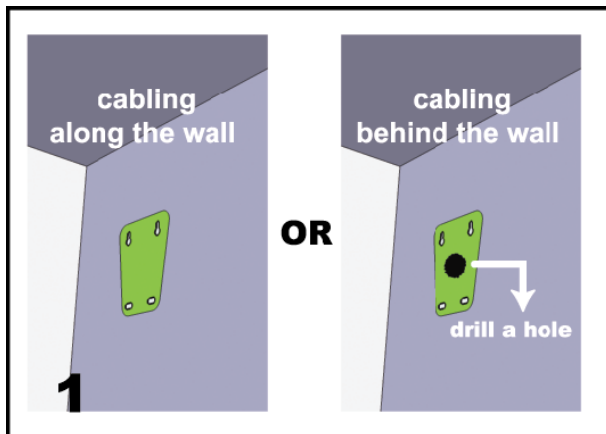
Paste the supplied installation sticker to the location where your camera will be installed.

Based on your installation environment, drill a hole in the middle of the sticker for the power and data cable to put through later if necessary.

Slightly fasten the screws to (a) and (b) as indicated, and make sure the screws are not fully tightened.
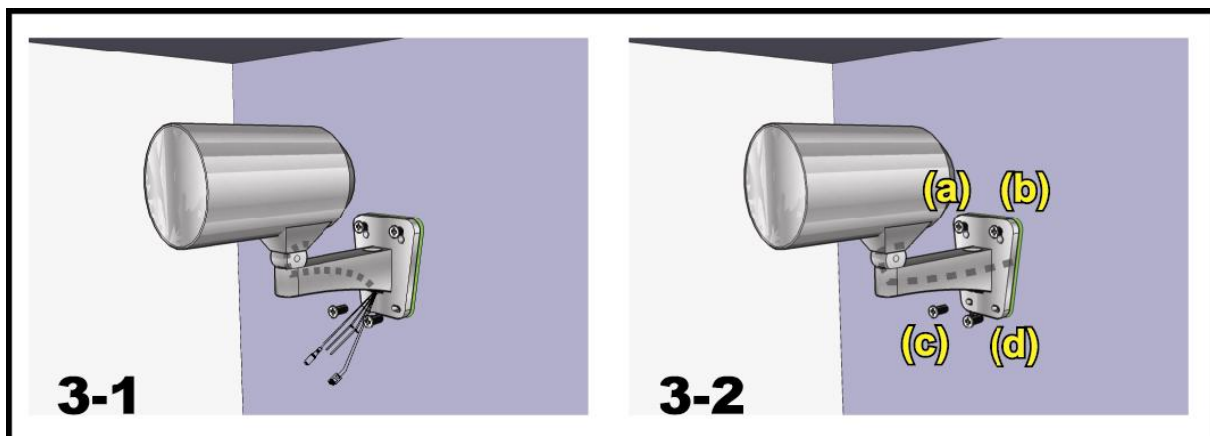
1) Based on your installation environment, put the power and data cable through the bracket, and determine the cabling of your camera:

   3-1: The cable walks along the wall
   3-2: The cable is hidden on the other side of the wall

2) Hook the bracket with the camera to the screws fastened in step 2, and push it down to fix the bracket.

3) Secure the screws on (a) and (b), and fasten the other two screws to (c) and (d) to fix the bracket.

Adjust the angles of the camera:
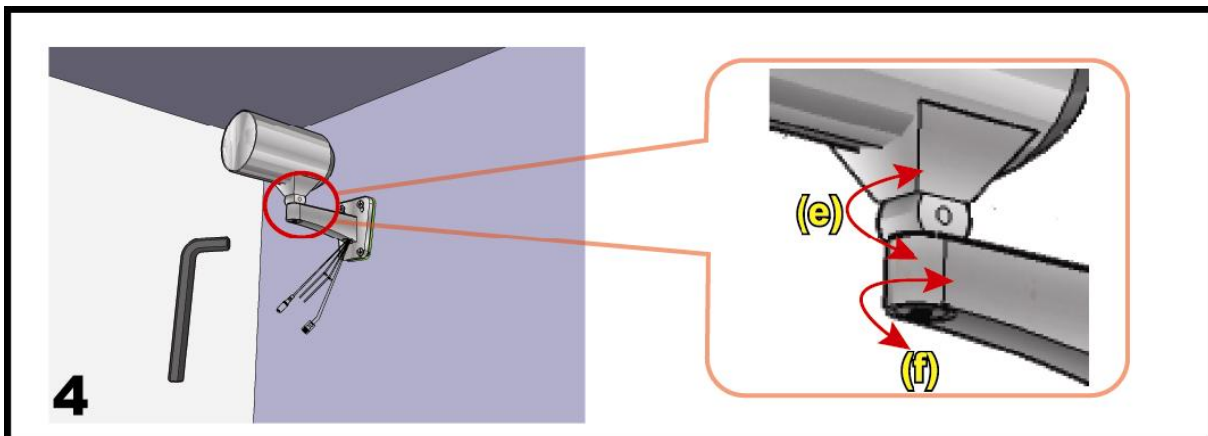
(e) Adjust the vertical angle of the camera, and fix it with the screw and wrench supplied with the socket.

(f) Loosen the screw a little on the camera joint with the supplied wrench to adjust the horizontal angle of the camera, then re-tighten to fix it in place.

2.2 – Connect To Power

Connect the power adapter to the camera's power connector and power outlet.
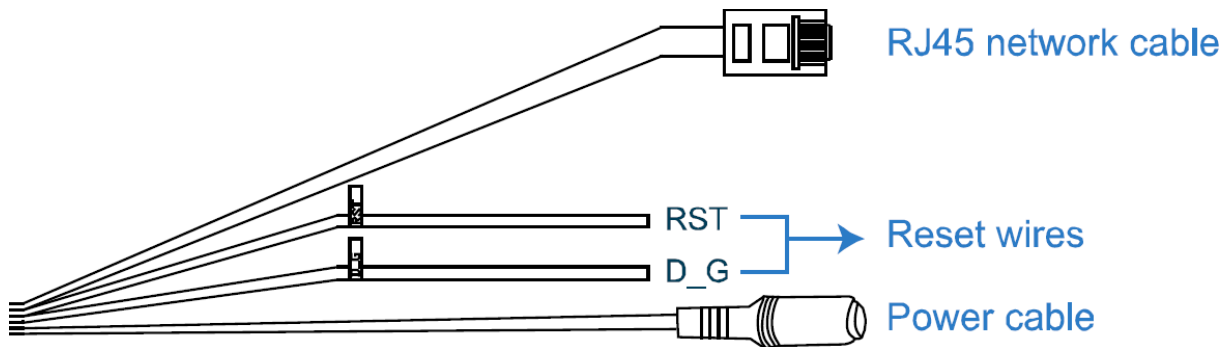
## BEFORE USING YOUR NETWORK CAMERA

Before using the network camera, make sure:

1) You have installed the supplied CMS software, "Video Viewer".
2) You have configured the network settings, and the network connection is fine.

If not, please refer to the Quick Start Guide for instructions on how to do this.

The camera can be accessed via supplied CMS software "Video Viewer", or via Web browser such as "Microsoft Internet Explorer" or "Mozilla Firefox", depending on different using situations.

To check or configure up to 16 surveillance devices simultaneously with the record function, please use "Video Viewer".

For details about using Video Viewer, please refer to "ACCESSING THE CAMERA VIA VIDEO VIEWER" on page 8, and "SYSTEM CONFIGURATION" on page 13.
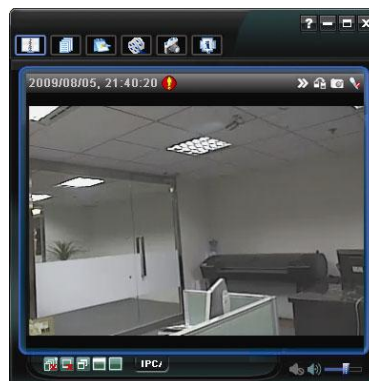
To view or configure this network camera only, it's recommended to use a web browser such as "Microsoft Internet Explorer" or "Mozilla Firefox".

For details about using the web browser, please refer to "ACCESSING THE CAMERA VIA YOUR WEB BROWSER" on page 20.
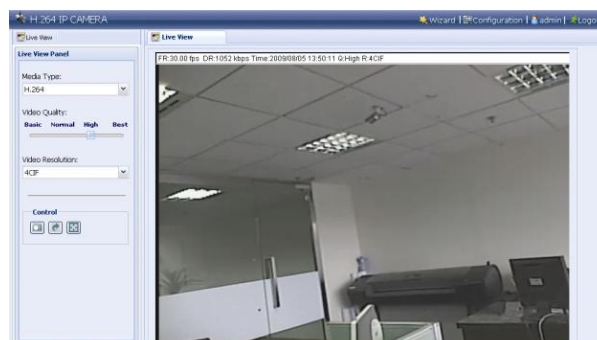
ACCESSING THE CAMERA VIA VIDEO VIEWER

4.1 – Accessing The Camera

Step 1: Double-click on your PC desktop to open Video Viewer. By default, the "Address Book" panel will be displayed on the right side of the control panel.

Step 2: Click "" to select the IP address of the camera you intend to connect, and double-click it.

Step 3: The live view is displayed in the Video Viewer

4.2 – Control Panel Overview

Two control panels are available and can be switched depending on your using habit.

Simple Version:

Full Function Version:

Main Button Overview:

Button		Function	Description
Simplified	**Full Function**		
		Address book	Click to show the predefined IP address(es). You can add, remove or search the IP address to log in the DVR remotely.

		Miscellaneous control	Remote config — Click to go to the detailed system configuration.
			   Record setting — Click to go to the detailed record setting.
			  Custom setting — Click to choose the language of this program, or set the password when activating this program.

		Log	Click to view all event and recording logs, search the desired log(s) by date, or playback the recording of the selected log.
		Record / Stop	Click to start / stop the manual recording. The record button will be disabled when the reserved disk capacity set in "Record Setting" is larger than the current disk capacity.
		Snapshot	Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in "Record Setting".
		Information	Click to show the current network connection details.

4.3 – Frequently Used Functions

Record:
To record, click " [icon] " or " [icon] " → " [icon] " to go to the "Record Setting" page.
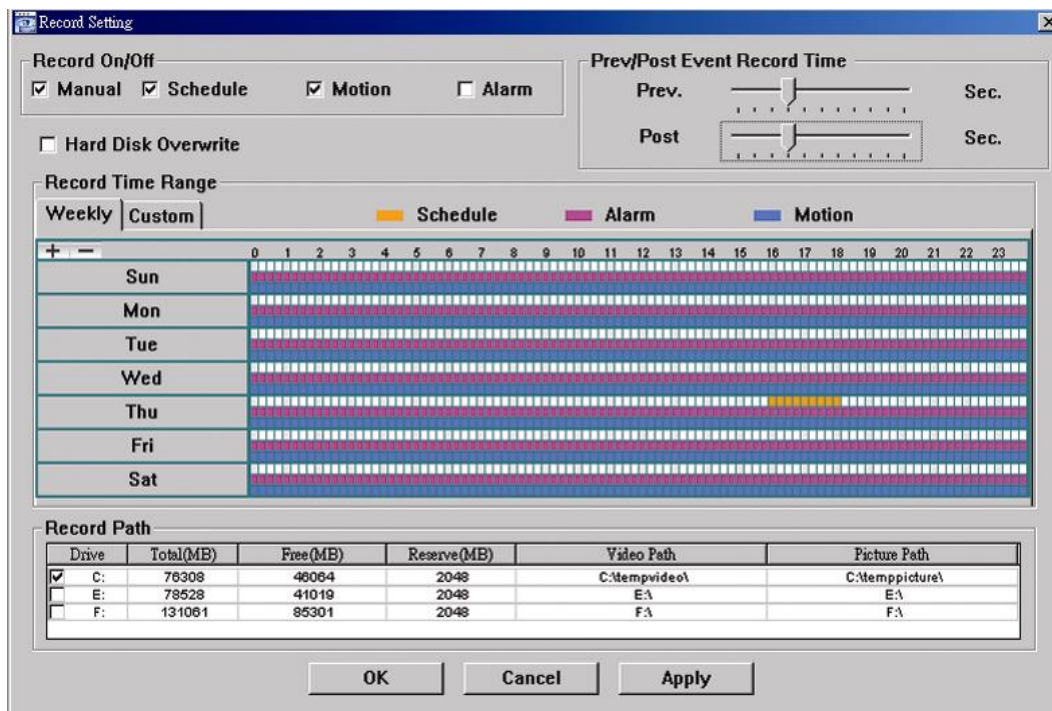
In the "Record Setting" page, you can set the following items:
- Record type
- Pre / post-event record time (0~10 seconds)
- Record time setting
- Record path

Note: The record function will be disabled when the reserved disk capacity in "Reserved(MB)" is larger than the current disk capacity in "Free(MB)".

When "Manual" is checked, click " [icon] " or " [icon] " on the main control panel to start the manual recording immediately, and the recordings will be saved in the location specified in "Record Path". When "Motion" and / or "Alarm" are checked, the recording function will be enabled for any motion or alarm event, and the recordings will be saved in the location specified in "Record Path".

You can also set a recording schedule from the "Record Setting" page, by setting colour coded blocks of time.

Schedule:	**Alarm:**	**Motion:**
[orange block]	[purple block]	[blue block]

Playback:

To play a recording, click " " or " ", and select the "Record" tab. A list of all the recordings will be shown by default, and you can also sort the logs by date, start time, end time, etc, by simply clicking the column header.

Firmware Upgrade:

This function allows the user to upgrade to the latest version of the camera's firmware.

Note: Before using this function, make sure you have the correct upgrade files from www.storageoptions.com.

Step 1: Click " " and select the IP address of your network camera in the address book.

Step 2: Click " " to show the upgrade page, "Update Server".
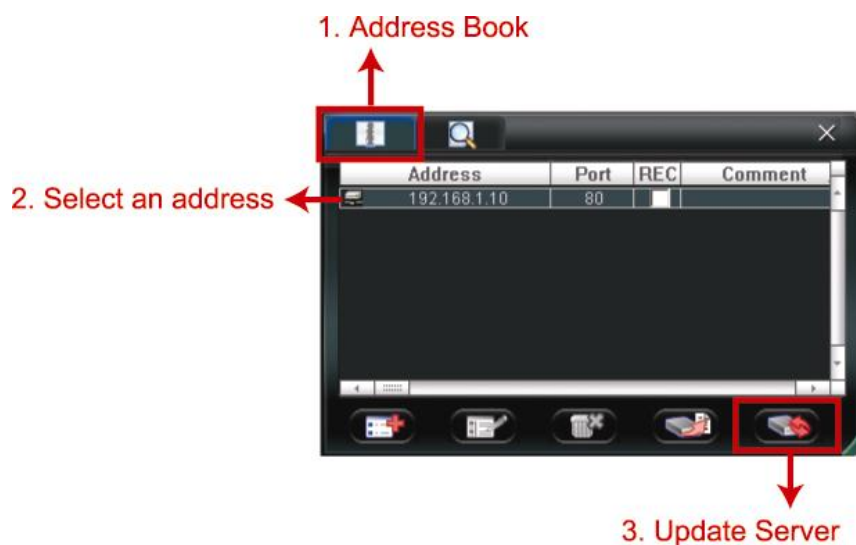
Step 3: Click "Add" to browse to the upgrade files.
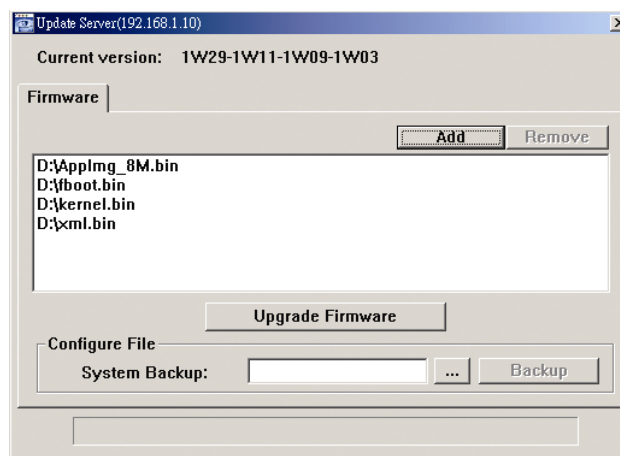
Step 4: Click "Upgrade Firmware" to start firmware upgrade.

Note: The firmware upgrade process should take a few minutes. Do not disconnect the power during this time, or the upgrade may fail. The camera will reboot after the upgrade.

SYSTEM CONFIGURATION

Before using the network camera, make sure you have installed the supplied "Video Viewer" software, and configure the camera's network settings. If not, please refer to your installer.

Note: You need to use the administrator account to enter the system configuration page. If you are logged in as a user, please sign out and re-log into the camera using an admin account.

Click " ▤ " and select " ◬ " to enter the system configuration page. All the system configurations are listed as a tree structure on the left panel as follows.

Main Menu	Sub Menu	Functionality
General		1. Check the firmware version and MAC address of the camera. 2. Change the camera title.
	Log	Check the system event logs.
	Account	1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Online User	Check the current online user(s).
	Trigger	1. Enable / disable the motion detection. 2. Set the motion detection area. 3. Select the event notification method.
Network		Configure network settings.
	QoS	Limit the data flow for live streaming.
	DDNS	Enter DDNS information when the network type is PPPOE or DHCP.
	SNTP	Synchronize your camera time with the networked computer systems.
	FTP	Enter the FTP information for event notifications when "FTP" is chosen in "General" → "Trigger".
	Mail	Enter Email information for event notifications when "Email" is chosen in "General" → "Trigger".
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UPnP	Allow this camera to be detected among devices within the same network area for easy and quick usage.
Video		Set the image resolution, quality and frame rate.
Camera		Adjust the camera parameters if necessary.
	Colour	Adjust the color performance.
	Time	Set daylight saving time and the current time.

5.1 – General

In "General", you can check the general information for your IP camera, such as the firmware version and MAC address, and also modify the identification name of your camera (up to 15 alphanumeric characters).

Log:

To quickly search the system log by event type, click the drop-down list to select the system log type you want to check, and click "Reload" to refresh the list.
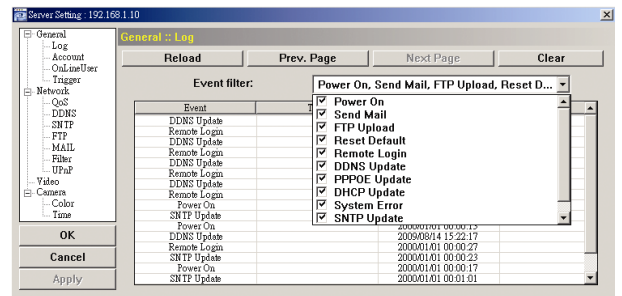
To clear all system event logs, click "Clear".

Account:

You can create a new account with different user access privilege, or delete / modify an existing account setting.

DO NOT ATTEMPT TO DELETE THE ADMIN ACCOUNT.

Step 1: Click "New", and fill in the following information.

Option	Desciption
User Name:	Set a user name that will be used for camera access. The user name can be up to 16 alphanumeric characters.
Password:	Set the password that will be used for remote login. The password can be up to 16 alphanumeric characters.
User Level:	Set the permission level of an account to give access to control different functions. There are four user levels: Supervisor, Power, Normal and Guest.
Life Time:	Select how long this account is allowed to stay online. (1 / 5 / 10 / 60 mins / 1 day / infinite)

Step 2: Click "Apply" to save your settings and create the new account.
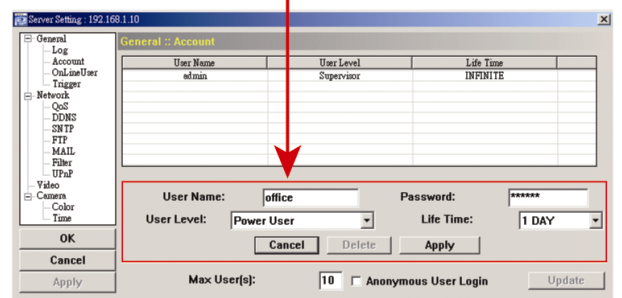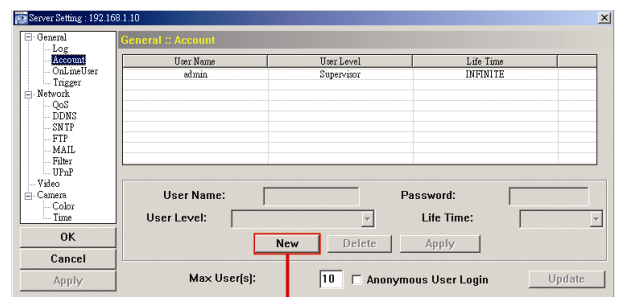
Online User:

Here you can check which users are currently logged into the camera.

To refresh the list, click "Refresh".
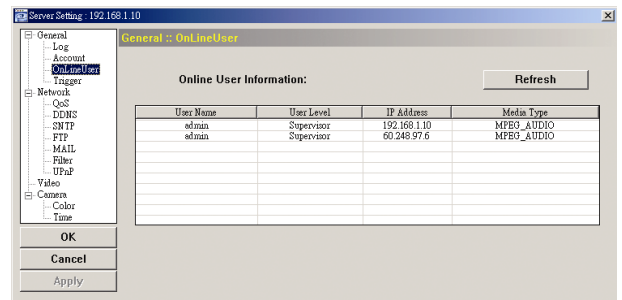
Trigger:

You can set the motion or alarm detection and select the notification function.
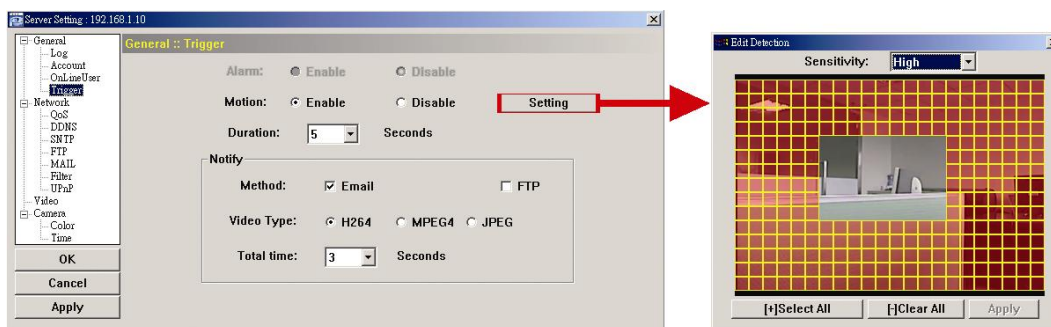
Trigger Setting:

In this section, you can select to enable or disable the alarm or motion detection.

Item	Description
Motion:	Select to enable or disable the motion detection function. When "Enable" is selected, click "Setting" to enter the motion detection area setting page as follows:
	Sensitivity: Set the detection sensitivity (High / Normal / Low). **Area Setting:** Set the motion detection area by selecting the area grids with your mouse. Pink grids represent the area that is not being detected while the transparent grids are the area under detection. You can set multiple areas under detection. Click "－" (Clear All) to set the whole area undetected. Click "＋" (Select All) to set the whole area under detection.
Duration:	Set the duration time for trigger recording (5 / 10 / 20 / 40 seconds).

5.2 – Network

You can set the network configuration of the IP camera depending on your network type.

For more details, please refer to the Quick Start Guide.
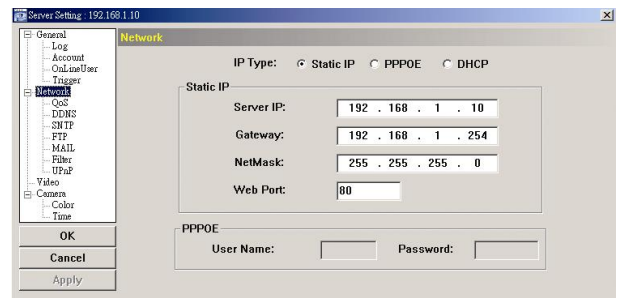
QoS:

Quality of Service is the ability to control the data flow for real-time streaming. This function is important if your network bandwidth is insufficient and you have other devices that share bandwidth.

To use QoS, check "QoS Enable" and set the maximum upload rate from 256 to 10240 kbps.
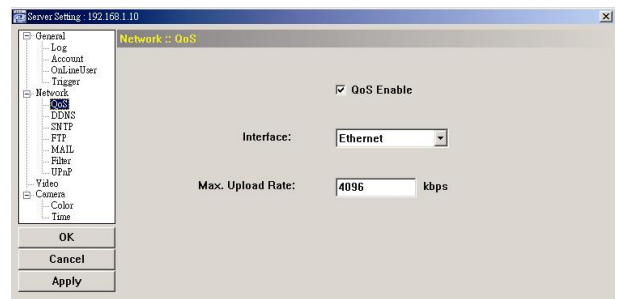
DDNS:

Select "On" when the selected network type in "Network" is "PPPOE" or "DHCP". For details, please refer to "CREATING AN ACCOUNT FOR DDNS SERVICE" on page 25.
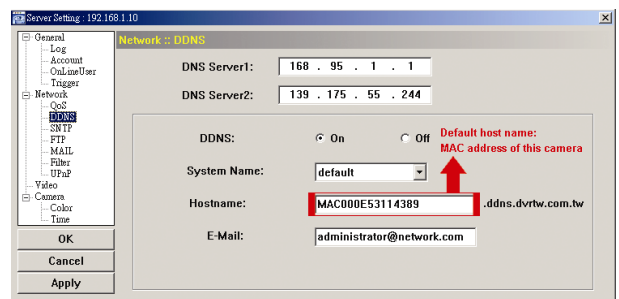
SNTP:

Simple Network Time Protocol is used to synchronize your camera time with the networked computer systems.

Function	Description
GMT:	Once users choose the time zone, the network camera will adjust the local area time of the system automatically.
Server Name:	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync Period:	Select "Daily" to synchronize the camera time with the network time every day or "None" to turn off this function.
Sync Server Time:	Click and the network camera will synchronize the time with the network time.

Mail:

Enter the details of an e-mail account you wish to use for notifications and click "Apply" to confirm. The information you set here will be applied when "Email" is selected in "General" → "Trigger".
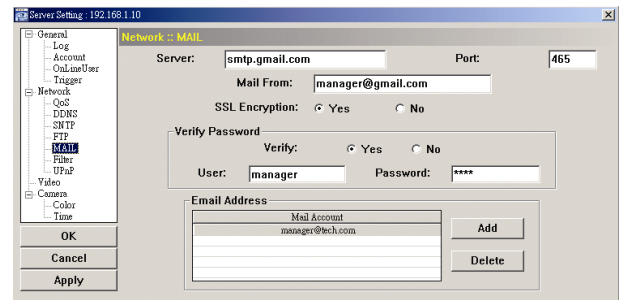
Function	Description
Server:	Enter the SMTP server address provided from your e-mail system supplier.
Port:	Enter the port number provided from your e-mail system supplier. If this is left blank, the e-mail server will default to port 25.
Mail From:	Enter the entire mail address to ensure e-mails will not be blocked by SMTP.
SSL Encryption:	Select "Yes" if your e-mail server is using SSL encryption to protect your e-mail content from unauthorized access.
Verify Password:	Some mail servers are required to verify the password. Please enter the "user name" and "password".
E-Mail Address:	Add the e-mail address(s) of the assigned recipient(s).

Filter:

Choose to permit or block the IP address(es) which can access this camera.

Function	Description
Error Login Count:	Set the maximum count for login failure. When the maximum count is reached, the IP address trying to access the network camera will be locked.
Error Lock Time:	Set the lock time in minutes when the maximum count of error login for an IP address is reached.
Echo Request:	Select "Non-Block" to allow other users to use the ping command to detect the IP address of your network camera, or "Block" to deny the ping command request.
Filter:	Choose to enable (YES) or disable (NO) the filter function.
	If "YES" is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.
	- To add an item to the IP address list, key in the IP address in "IP Address", and click "Add". - To remove an existing item in the IP address list, click the item you want to remove, and click "Delete".
Apply:	Click "Apply" on the bottom right corner when any change is made in this menu, or the change will not be recorded in the system.

UPnP:

Universal Plug and Play allows devices to connect seamlessly in the home and corporate environments and simplify installation of computer components.

Check "Enable UPnP" to allow the network camera to be detected among devices within the same network area, and set the identification name of the camera in "Friendly name".
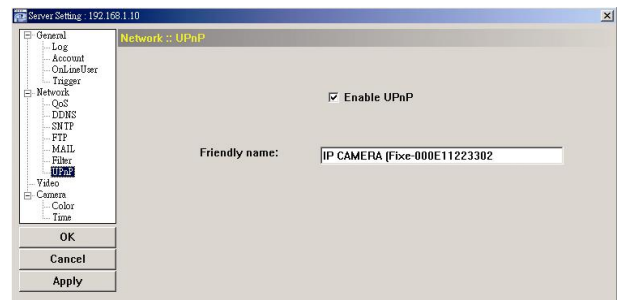
5.3 – Video

Set the image resolution, quality and frame rate.

Item	Description
JPEG / MPEG / H.264:	Select the image resolution and quality. Image Resolution: CIF / 4CIF Image Quality: BEST / HIGH / NORMAL / LOW
Frame Rate:	The frame rate allowed to each viewer can be adjusted to adapt to the bandwidth on the network. Set the desired image frequency to the maximum (FULL) or to a specified frame rate: (1/2; 1/3; 1/4; 1/5; 1/10; 1/15; 1/20; 1/25; 1/30). The actual frame rate depends on the actual network connection, and may be lower than the specified one.

5.4 – Camera

Adjust the camera parameters if necessary.

Note: To preview changes, click "Apply".
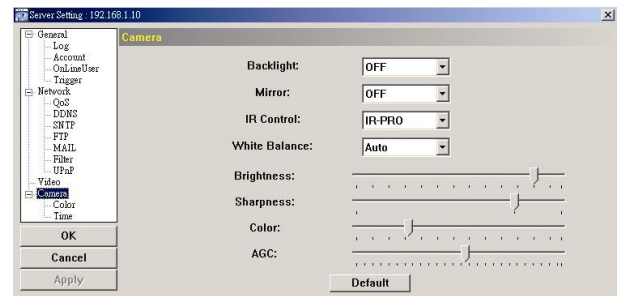
| Item	Description
Backlight:	The backlight is adjustable to compensate for an area that is overpowered by brightness because of excessive light. The image will be properly exposed for clearness. Select to activate (ON) or disable (OFF) this function. **Note:** This function is only available in day mode.
Mirror:	Mirror is used when you want to flip the images horizontally based on your installation situation. The options are: ON / OFF.
IR Control:	Select "IR PRO" to smartly activate the IR LEDs when needed, "Always On" to always activate the IR LEDs, or "Always Off" to deactivate the IR LEDs.
White Balance:	The white balance function processes the current image to retain colour balance over a colour temperature range. According to different colour temperatures and installation situations, set the white balance function to a suitable mode. The options are: Auto / AWB1 / AWB2 / AWB3.
Brightness:	Brightness helps to adjust the image based on different lighting conditions. Click and drag the slider to adjust the brightness. Applicable values are from 0~127. The larger the value, the brighter the image.
Sharpness:	Sharpness enhances the clarity of image detail by adjusting the aperture and sharpening the edges in the pictures. Click and drag the slider to adjust the sharpness. Applicable values are from 2~15. The larger the value, the sharper the image.
Colour:	Colour helps to adjust the image saturation through the camera. Click and drag the slider to adjust the colour level. Applicable values are from 0~127. The larger the value, the thicker the image.
AGC:	Adjusts the amplitude of the signal input according to different light conditions. Click and drag the slider to adjust the amplitude of the signal input. Applicable values are from 0~255. The larger the value is, the more the signal noise there will be.
Default:	Click to restore all changes to default values.

Colour:

Adjust the colour performance of the camera, including Brightness, Contrast, Hue and Saturation. Click and drag the slider to preview the colour change on the live view panel and adjust the image colour. Click "Apply" to confirm the change.

To restore the default values, click "Default", and click "Apply" to confirm the change.
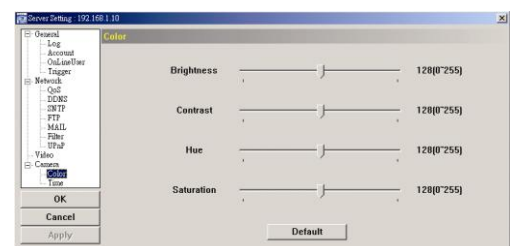
Time:

Set daylight saving time and the current time.
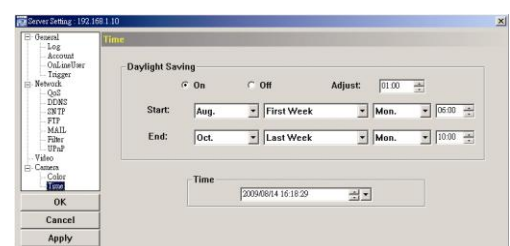
ACCESSING THE CAMERA VIA YOUR WEB BROWSER

It is also possible to access the IP camera via a web browser, such as Microsoft Internet Explorer or Mozilla Firefox.

However, you can only access one camera at a time through a Web browser. If you wish to view multiple cameras, please use the included "Video Viewer" software. Alternatively, you can open separate tabs / windows for each camera in your Web browser.

Before using the network camera, make sure you have configured the network settings and have the camera's IP address, user name and password to hand. If not, please refer to the installation guide.

6.1 – Accessing The Camera

Step 1: Open your web browser, and key in http://ipaddress:portnum in the URL address box.

For example, for IP address 192.168.1.10 and port number 81, please key in "http://192.168.1.10:81" into the URL address box, and press "Enter".

Step 2: In the login page, key in the user name and password, and enter the security code from the image below. Click "LOGIN" to access camera controls.

Step 3: The wizard will analyze your network environment.

- To continue setting the password, date & time, and network, click "Next" and follow the step-by-step instructions.
- To skip the wizard and directly access the camera live view, click "Close".
- To directly access the camera live view without starting the wizard for the next login, check "Do not start wizard at login".
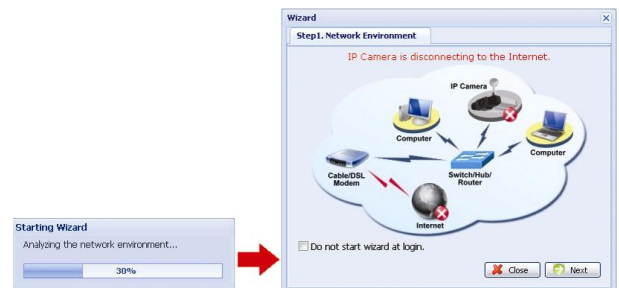
Step 4: When you have logged in successfully, the camera's live view is shown.
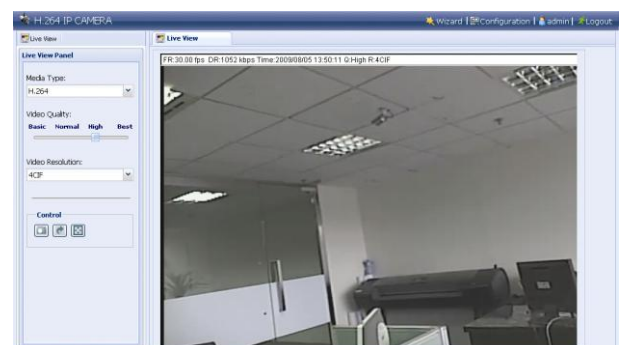
6.2 – Control Panel Overview

Live View Panel:

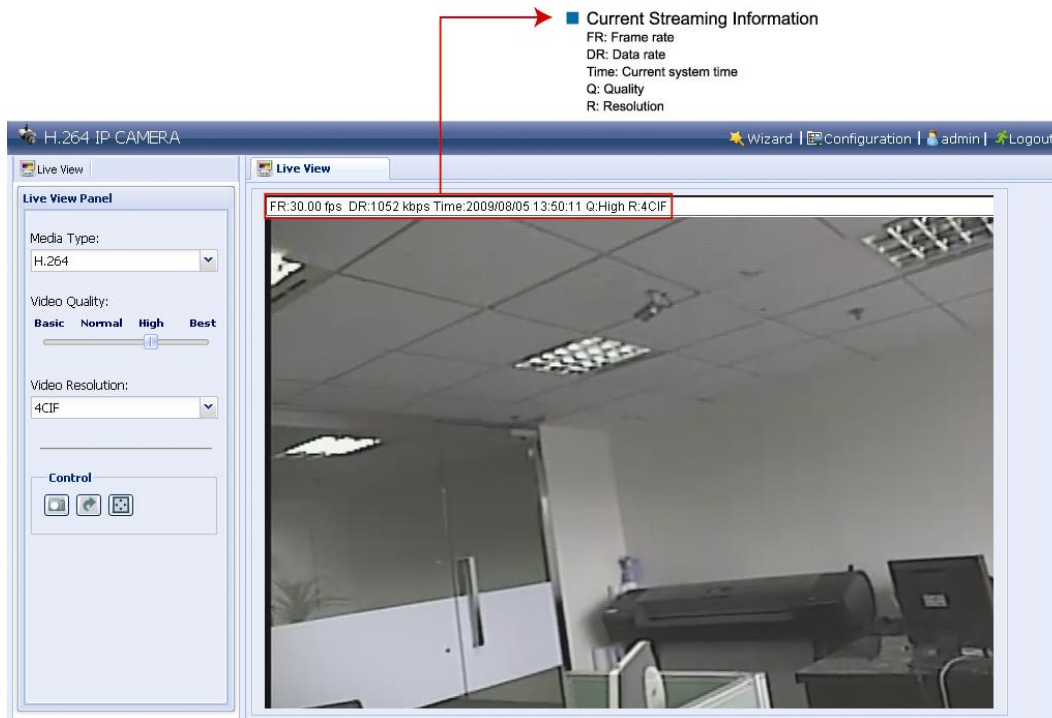| Function	Icon	User Level	Description
Media Type		Supervisor Power / Normal User Guest	Select the web transmission format from the drop-down list: H.264 / MPEG-4 / Motion JPEG / QuickTime For users using Mozilla Firefox, only "QuickTime" is selectable. QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed on your operating system before selecting "QuickTime". When it is selected, you will be promoted to enter the user name and password to access the camera.
Video Quality		Supervisor Power / Normal User	Click & drag the slider to select the video quality: Basic / Normal / High / Best
Video Resolution		Supervisor Power / Normal User	Select the video resolution from the drop list: 4CIF / CIF.
Snapshot		Supervisor Power / Normal User	Click to take a snapshot for the current view, and a new browser window will be opened to display the captured image.
Flip		Supervisor Power / Normal User	Click to flip the image 180^0 anti-clockwise when necessary.
Full Screen		Supervisor Power / Normal User	Click to display the image in full screen.

System Configuration Panel:

Click "Configuration" to enter the configuration page.

Note: You need to be the supervisor to enter the system configuration page. If not, please re-log into the camera with an admin account.

The functions are categorized into three menus: Network, Camera and General.

For details about "General", please refer to "5.1 – General" on page 14, and "5.3 – Video" on page 18.
For details about "Network", please refer to "5.2 – Network" on page 16.
For details about "Camera", please refer to "5.4 – Camera" on page 19.

Main Menu	Sub Menu	Reference
Network	Network	→ Remote Config → Network
	QoS	→ Remote Config → Network → QoS
	DDNS	→ Remote Config → Network →DDNS
	SNTP	→ Remote Config → Network →SNTP
	FTP	→ Remote Config → Network →FTP
	Mail	→ Remote Config → Network →MAIL
	Filter	→ Remote Config → Network →Filter
	UPnP	→ Remote Config → Network →UPnP
Camera	Colour	→ Remote Config → Colour
	Time	→ Remote Config → Time
	Advance	→ Remote Config → Camera
General	General	→ Remote Config → Custom Setting
	Server Log	→ Remote Config → General → Log
	Login	→ Remote Config → General → Account
	Account	→ Remote Config → General → Account
	Trigger	→ Remote Config → General → Trigger
	Video	→ Remote Config → Video
	Upgrade	→ For details, please refer to "Firmware Upgrade" on page 6.

ACCESSING THE CAMERA VIA YOUR MOBILE PHONE

7.1 – Checklist Before Using

Make sure your PDA or mobile phone conform to the following requirements:

Device	Make Sure...
WinCE-Based PDA	The operating system is Windows Mobile 5.0 Packet PC / 6.0 Professional*. Windows Mobile 5.0 Smartphone / 6.0 Standard is NOT supported.
	J2ME MIDP2.0 is supported.
	Internet services via Wireless or GPRS / 3G networks are subscribed and available to use. For details, please check with your local network operator or service provider.
J2ME-Based Mobile Phone	J2ME is supported.
	Internet services via GPRS / 3G networks are subscribed and available to use. For details, please check with your local network operator or service provider.
	The port number of the connected device is NOT 80. The suggested port number is 88.
iPhone	Internet services via 3G networks are subscribed and available to use. For details, please check with your local network operator or service provider.
	Your mobile phone is available to access "App Store".

* We do not guarantee the compatibility of the mobile surveillance software in every touch panel PDA brand with the operating system of Windows Mobile 5 Packet PC / 6.0 Professional. Please check with your distributor for details.

7.2 – Program Download / Installation

For iPhone:

Step 1: Go to "App Store" via your iPhone, and search our program with one of the following keywords:

- EagleEyes
- PTZ
- IPCAM
- Surveillance

Note: You might be charged for Internet access via wireless or 3G networks. For the Internet access rate details, please check with your local network operator or service provider.

Step 2: Follow the on-screen instructions to download and install the program. " " will be shown on the iPhone desktop for quick access when the program is installed successfully.

For WinCE & J2ME Based Mobile Phone:

Step 1: To download the program for mobile surveillance, please visit the following website address from your PDA or mobile phone: http://www.storageoptions.com/mobile

Note: The Internet access setting via wireless or GPRS / 3G networks varies depending on different PDA or mobile phone brand. For details, please refer to its individual user manual, or check with your local network operator or service provider.

Note: You may be charged for Internet access via wireless or GPRS / 3G networks. For the Internet access rate details, please check with your local network operator or service provider.

You will see the following four programs are available:

GPRS_3G_Software:	J2ME AP for Network MJPEG format DVR
EagleEyes (J2ME_NewVersion):	J2ME AP for Network MPEG/H.264 format DVR & IP camera
EagleEyes (for WinCE):	WinCE AP for Network MJPEG format DVR
EagleEyes (for WinCE NewVersion):	WinCE AP for Network MPEG4/H.264 format DVR & IP camera)

Step 2: Download the program as instructed:

- Select "EagleEyes (J2ME New version)" if you're using the J2ME-based mobile phone.
- Select "EagleEyes (For WinCE New Version)" if you're using the WinCE-Based PDA phone.

Step 3: Follow the on-screen instructions after downloading.

- For mobile phones, the program will be saved to the location you specified.

For WinCE-Based PDA, the program will be saved in "Programs".

7.3 – Program Setup

Step 1: Get the necessary information for accessing your network camera, such as the IP address, user name, password, port number, etc.

Step 2: Activate the program, and go to its setting page to fill in the information needed.

Step 3: Try to access your network camera to see if the connection works.

CREATING AN ACCOUNT FOR DDNS SERVICE

For PPPOE or DHCP, you should enter the host name which points to the IP address of your network camera for login first. Besides using the default DDNS service, you can also apply for new DDNS services.

There are many websites that offer free DDNS service application. Below is an example of DDNS account application from the website http://www.dyndns.com.

1)   Go to http://www.dyndns.com, and click "Create Account" to sign up a DDNS account.
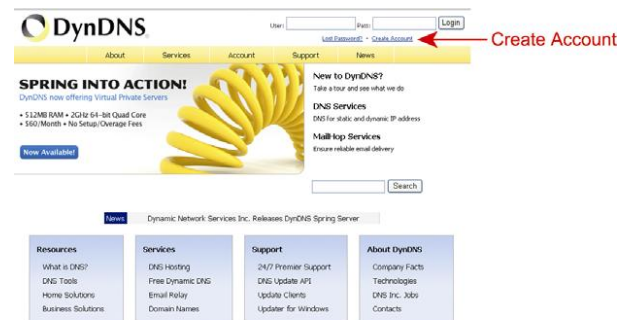
2)   Enter all the information necessary for signing up an account according to the website instructions.

- Key in a user name for login, for example, headoffice523.
- Set the password and input it again to confirm.
- Key in your E-mail address and input it again to confirm.

Then, click "Create Account".
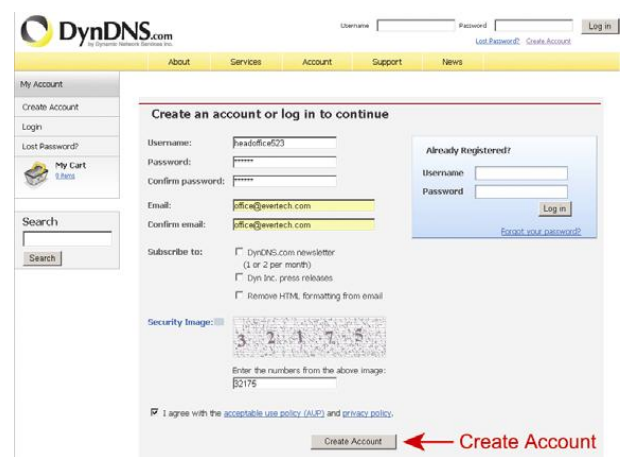
3)   The system will automatically send a confirmation email to your email account.

Please read this email within 48 hours and complete the procedure to activate your account according to the instructions in the email.
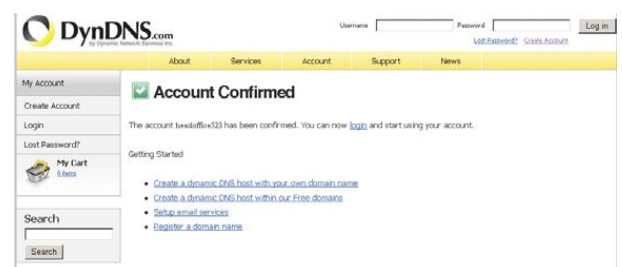
4)   Click "login", and enter the user name and password.

5) Click "Add Host Services".

- Input a meaningful host name.
- Choose a host system name.
- Enter the IP address you want to redirect.

Note down the whole host name, for example, headoffice523.dyndns.org.

Then, click "Add To Cart" for billing.

Note: This service is free. Just finish the billing process, and NO payment information is required.

6) Click "Activate Services" after checkout, and your to use DDNS services will be ready to use.
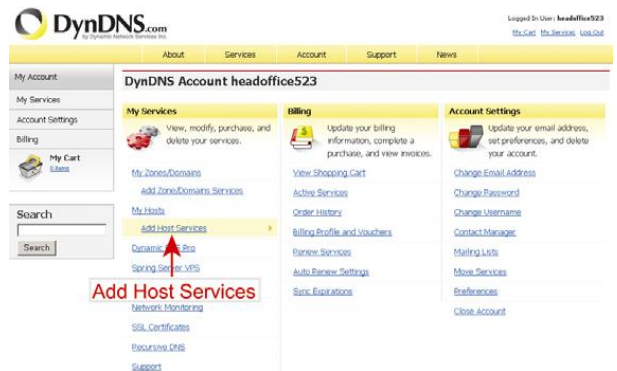
7) Return to Video Viewer, and go to "Network" → "DDNS".

- Select "On" for DDNS.
- Select the system name you set when subscribing the DDNS service from the drop-down list, for example, "dyndns".
- Enter the user name and password you used to log into the DDNS service.
- Enter the host name you set when subscribing to the DDNS service, for example, headoffice523.
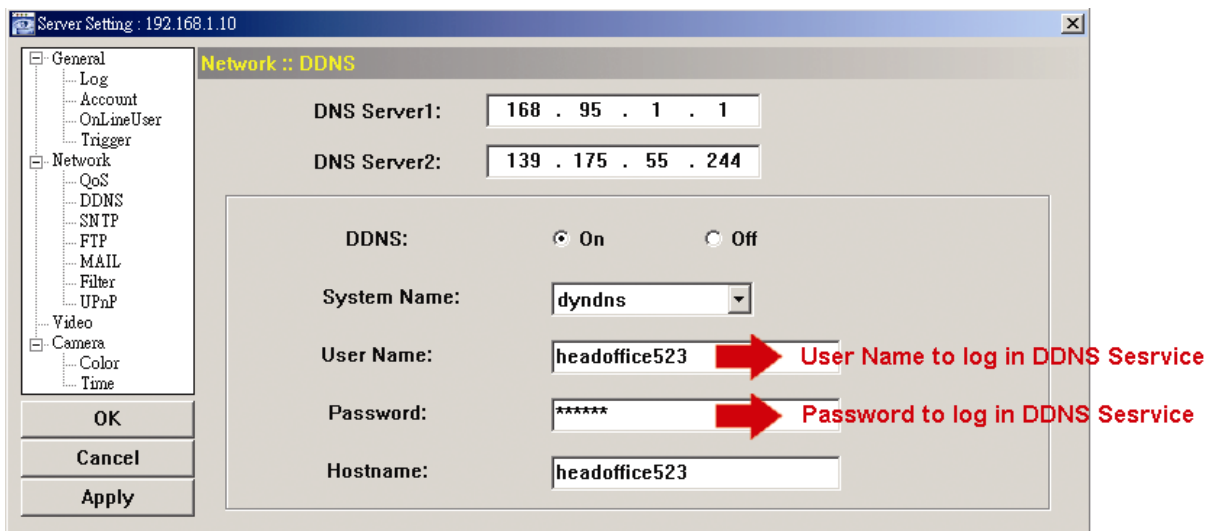
APPENDIX - PRODUCT SPECIFICATIONS

Network	
Network Compression	H.264, QuickTime, MPEG4, M-JPEG
LAN Port	Yes
LAN Speed	10/100Mbps Ethernet
Supported Protocols	DDNS, PPPoE, DHCP, NTP, SNTP, TCP/IP, ICMP, SMTP, FTP, HTTP, RTP, RTSP
Frame Rate	NTSC: 30 PAL: 25
Number Of Online Users	10
Security	Multiple user access levels with password
Web Management	(1) Web browsers, such as Internet Explorer, Mozilla FireFox, or Google Chrome for single device access (2) Free CMS software, Video Viewer, for up to 16 network cameras control simultaneously
Camera	
Image Sensor	1/3" HR colour CCD image sensor
Pixels	768(H) x 494(V) <NTSC> / 752(H) x 582(V)) <PAL>
Minimum Illumination	0.05 Lux / F1.4, 0 Lux (IR ON)
Shutter Speed	1 / 60 (1/50) to 1 / 100,000 sec.
S/N Ratio	More than 48dB (AGC off)
Lens	f6.0mm
Viewing Angle	48^0
IR LED	56 units
IR Effective Range	Up to 40 metres
Smart Light Control	Yes
White Balance	ATW
AGC	Auto
IRIS Mode	AES
IP Rating	IP65
Power Source (±10%)	DC 12V / 1.5A
Others	
Mobile Surveillance	iPhone, BlackBerry, J2ME & WinCE
Motion Detection	Yes
Alarm & Event Notification	FTP and E-Mail
Minimum Requirements	Pentium 4 CPU 1.3 GHz or higher, or equivalent AMD 256 MB RAM AGP graphics card, Direct Draw, 32MB RAM Windows Vista, XP, Windows 2000 Server, ME, 98, DirectX 9.0 or later Internet Explorer 6.x or later

Storage Options - IP Camera Pro
Part No: 52109   SON-IPC2
Made in Taiwan