INSTRUCTION MANUAL

ISI-201SW

Wireless MPEG4 IP Camera

About this manual

Before installing and using this unit, please read this Manual carefully.
Be sure to keep it handy for later reference.

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1. Precautions

ATTENTION: This exclamation point icon tells the user to take precaution when operating or repairing the product.

WARNING: This lighting icon tells the user of possible danger of electric shock.

When you see the above signs, take precaution against possible dangers during installation.

Regularly inspect and replace the hard disk to ensure normal recording function of the DVR.

- Do not unplug the main power cord while the system is still in operation in order not to damage the system.
- Do not place the system in a place with high humidity. This could affect the image quality or cause the system to malfunction.
- Protect the product against shock and vibration.

Do not place the system directly against sunlight.

- Do not drip any liquid on the system. Wipe up any spills.
- Carry out the installation process in temperatures between -10ºC and +50ºC.

To avoid fire or electrocution, do not open the case while in a wet area or use outdoors when it is raining.

2. Introduction

2.1 Product Description

The digital video surveillance technology not only creates safety in the work environment, but more so in private homes. It is suitable to be used in all public areas, such as video surveillance in business establishments, schools and universities. Installations can be easily done. Thus, maintaining public safety is no longer a problem.

The IP Camera with Wireless IEEE 802.11 and an RJ-45 network connector to allow remote monitoring via the Internet.

1. When connected to a camera, it can remotely record or capture images. Motion detection and alarm functions can be setup to allow contact with the user via Email for the user to receive messages instantly.
2. When connected to IP camera, remote monitoring is possible with the following network protocols: local area network, IEEE 802.11, PPPOE and DDNS.

2.2 Applications

Security: ATMs, banks, gas stations, stores, parking lots and gates.

Factory/Office: Monitoring factory equipment, warehouses, video conferencing, indoor parking areas and product showcase.

Academic/Military/Government: Military equipment; military drills, mass rapid transit, railways, airports and seaports.

Entertainment/Daily Life: Big gatherings, news broadcasting, voting/elections and traffic situation.

Residential: Elevators, front gates, community and restaurants.

Hospitals/Kindergarten: Hospitals, hospital rooms, home for the aged, kindergarten and baby-sitting centers.

3. Product Features and Specification

3.1 Product Features

- Video input format is automatically detected. Both NTSC and PAL signals are supported.
- Supports high quality video. Utilizes MPEG4 compression technology (high compression, low bit rate and motion). Max transfer rates are 30FPS for NTSC and 25FPS for PAL signals.
- Supports different networking protocols including LAN, PPPOE and DDNS for remote monitoring.
- Supports Motion Detection and Alarm Trigger – An email is instantly sent out as Motion Detection initializes them. Alarm Trigger recording will send images to designated e-mail address.
- Supports multiple channel display – Allows user to directly monitor a group of video sources in a single display.
- Built in automatic relay on/off – When the sensor is on/off, relay (NO or NC) will be close (NO) or open (NC).
- Supports firmware upgrade – for firm online modification and expandability.
- Supports one audio input – Allows real time audio reception and recording.
- Supports Wireless IEEE 802.11g and WEP encryption technology

3.2 Product Specification

pecification：

Model No.		ISI-201W
Camera	Image Sensor	1/3” Sony Super HAD CCD
	Picture Elements	NTSC: 512*492, PAL: 500*582 (H*V)
	Resolution	380 TVL 1: 2 Interlace
	Mini Illumination	0.5 Lux@F1.2
	Auto Electronic Shutter	AES: 1/60s~1/100, 000s
	Lens Mount	C OR CS mount adjustable
	Backlight Compensation	ON/OFF switch able
	Auto Iris Control	Video/DC
Video	Video Output	1 Vp-p Composite/75Ω
	Compression	Mpeg4 FORMAT
	Resolution	720×480, 360×240, (NTSC)/ 720×576, 360×288(PAL)
	Frame Rate	NTSC: Max. 30FPS PAL: Max 25FPS
	Quality	Best/Super/High/Normal/Middle/Basic
Alarm	Triggered Mode	Motion Detection, Sensor Input
	Action	Relay Output, Sent-mail
	Input/Output	1/1 (NC&NO)
Network	Ethernet	10/100 Base-T, RJ-45
	Protocol Supported	TCP/IP, HTTP, PPPoE, DDNS, DHCP, SMTP, Telnet, IEEE 802.11g
Audio Input		Built-in Microphone
Motion Detection		Yes
Security		Password Protection
WEP encryption		Yes
Power Supply		DC 12V/1.25A AC100~240V_{AC}
Power Consumption		About 9W
Weight		About 950g
Dimensions		60×53×145 mm(W×H×D)
Operating Temperature		-5°C ~ 50°C
Storage Temperature		-10°C ~ 60°C
Humidity		30％ ~ 80％ RH

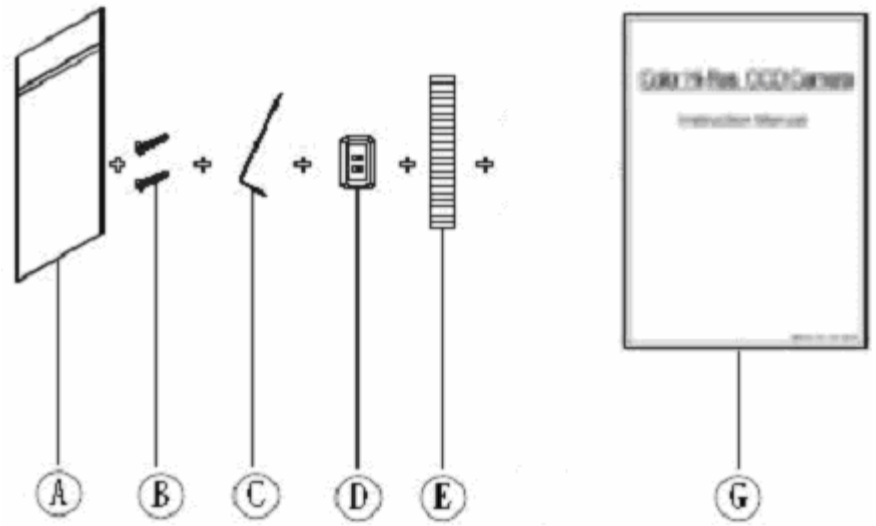
4. Accessories

Please inspect the accessories that come with the package. If anything is found missing, please contact the store where the product was purchased.

➀MPEG4 IP Camera

➁12V/1A Power Adaptor

➂Manual

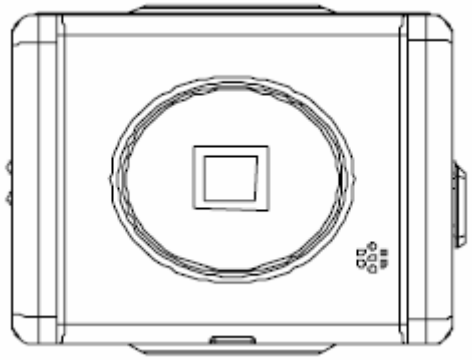


No	Parts	Quantity
A	Accessories	1
B	screw	2
C	L-type hexagon screw	1
D	Auto Iris Lens Connector	1
E	C/CS Ring	1
G	manual	1

This product does not include lenses.

5. Front and Rear Panel

5.1 Front Panel

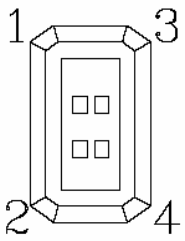


As the figure above,

1. C/CS Mount Lens + Cap: Remove the lens cover; select the C or CS ring and be careful to setup the lens.
2. Microphone: For good voice quality, care must be taken not to block the microphone.

5.2 Side panel

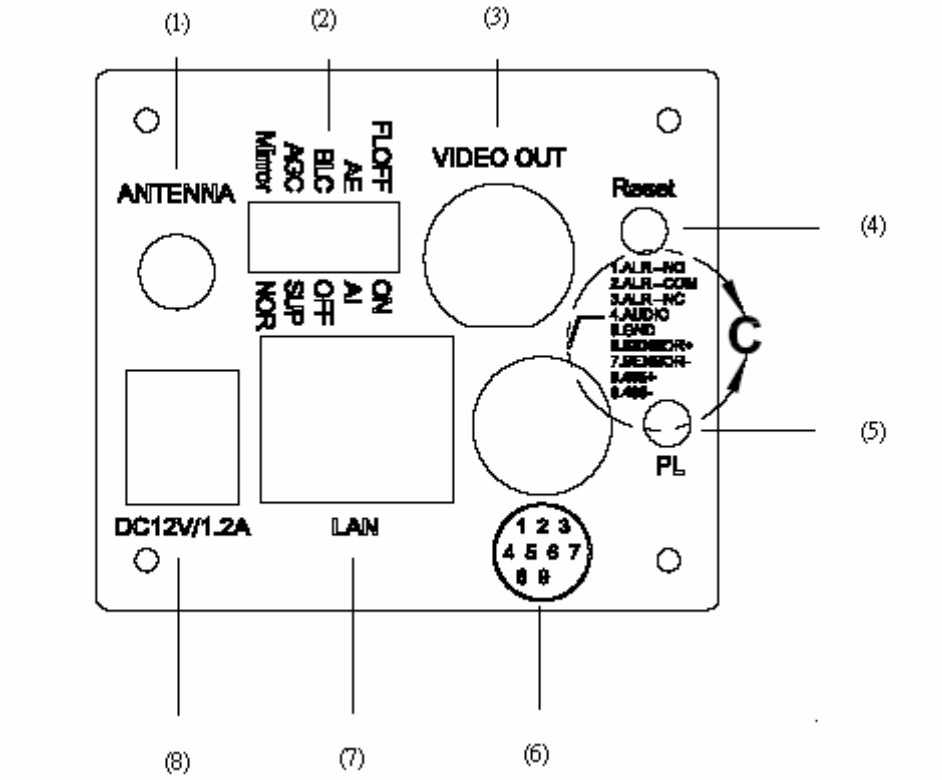
1. Auto-Iris Lens Connector



Pin	Video Driver	DC Driver (Direct Drive)
1	VDC OUT	DAMP-
2	IRIS OUT	DAMP+
3	N.C.	DRIVE+
4	GND	DRIVE-

To use the auto-iris function, please set to AI/MI mode; connect the lens (that has auto-iris feature) to the auto-iris connector.
Set the DC DRIVE or VIDEO DRIVE mode. If your lens is DC drive lens, please set the DC DRIVE mode, or VIDEO DRIVE if it is so.

5.3 Rear Panel



As figure above:

① ANTENNA input .

② DIP Switch: Described in the following table.

③ VIDEO OUT: BNC connector with 75-ohm video out.

④ RESET: Push this to restore the factory default including IP address and the IP camera will restart.

⑤ POWER indicator: red light for power.

⑥ MINI DIN-9: 1.NO (NORMAL OPEN) 2.COM: NC and NO common point 3. NC (NORMAL CLOSE) 4. Audio out 5. GND 6.SENSOR- 7.SENSOR+ 8.485+ 9.485-

⑦ Network connector (RJ-45): In normal connection, LINK would light and ACT would be blinking.

⑧ Power Terminal (DC 12V): DC power 12V/1.2A input.

1	FL OFF/ON	Flickerless Function
2	AE/AI	AE/AI option
3	BLC/OFF	BLC function.
4	AGC/SUP AGC	AGC Mode, AGC=28dB, SUP=34dB
5	Mirror/NOR	Mirror function.

RESET: Restore factory default. Do not push if not necessary.

Use the correct 12V/1A power.

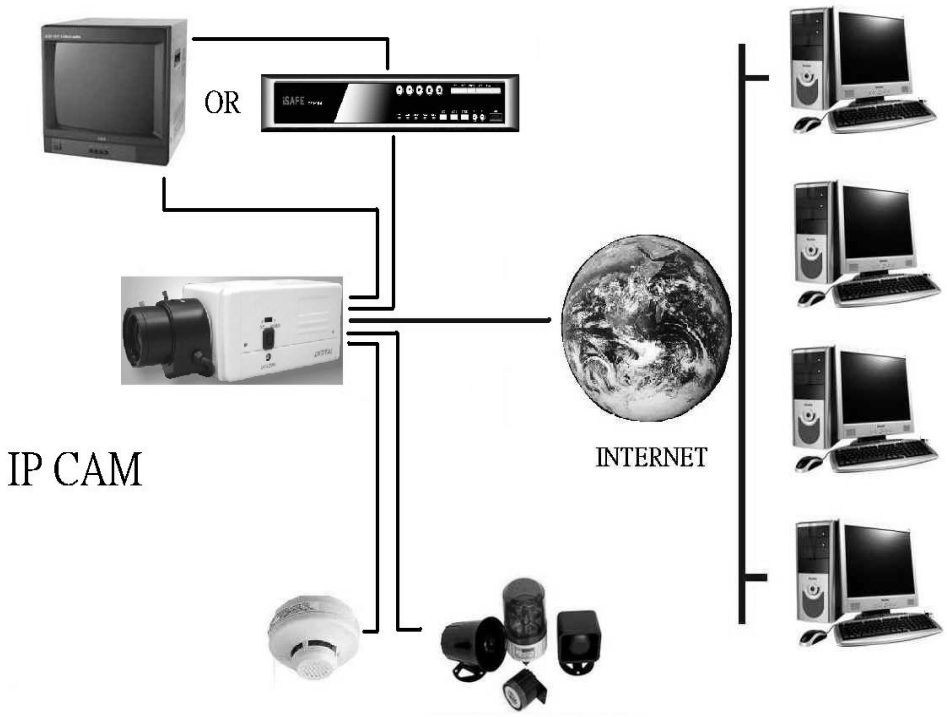
Before setting up the IP Camera, read the manual carefully.

6. Installation

6.1 Hardware Setup

Refer to the figure below to setup the system. Connect the IP camera and the network cable. Plug in the 12V/1A power adaptor.

6.2 System Structure



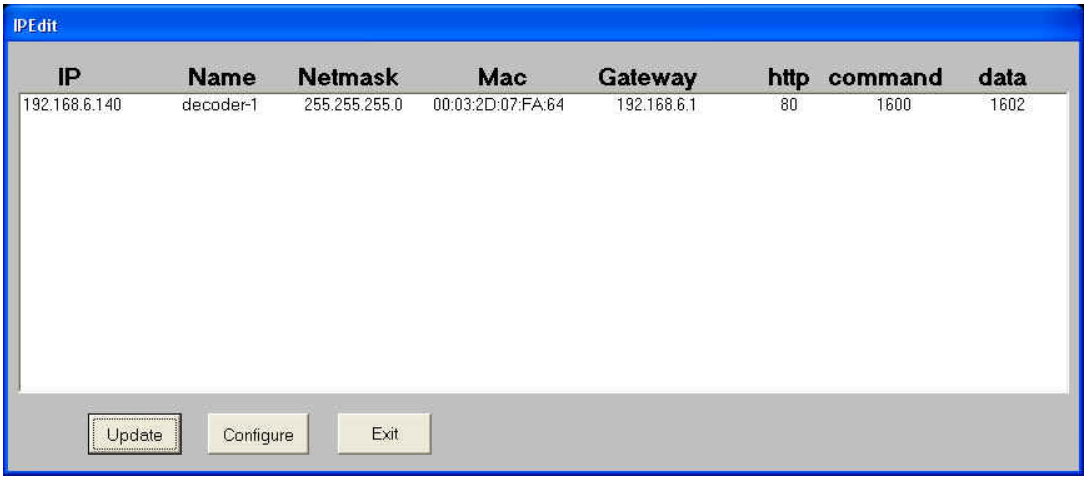
7. IP Camera Setup

When using the video server for the first time, connection can be made using peer to peer, hub or switch. Then use IPEdit.exe (in the CD provided) to check the video servers that are connected in the system.

Note: Before using PPPoE or DDNS, use the program IPEdit to set a working IP first.

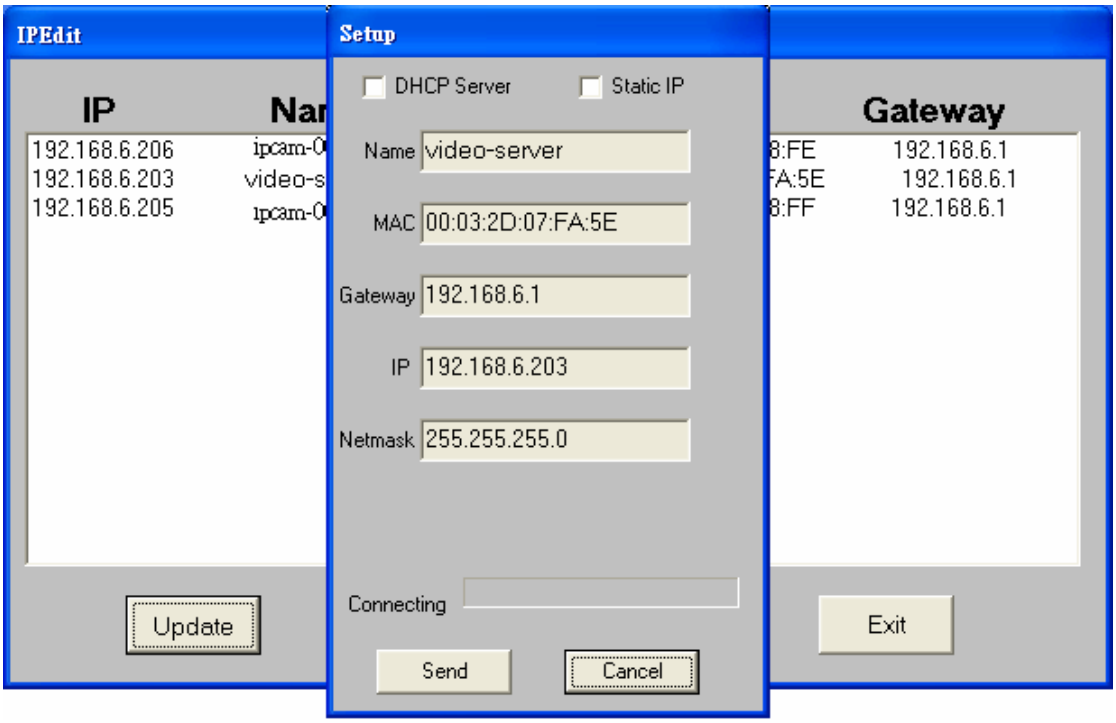
7.1 Using IPEdit in a DHCP Network

In a DHCP network, IP will be automatically obtained for the IP cameras. If not, please enter the correct Gateway, IP and Netmask.



7.2 Using IPEdit in a Non-DHCP network

1. Use IPEdit.exe to find the already installed video servers.
2. In a non-DHCP network, use the preset address” 192.168.0.202 ”.
3. In the IPEdit window, choose the video server to be connected to. Click Configure and the following screen would appear.



4. First select a dynamic IP (DHCP) or a static IP. The fields with white background can be modified. After entering the values, click Send. The system will reboot. It will take about 40 seconds for IPEdit to find the video server.
5. To set the Gateway, IP and Netmask, refer to the system's network configuration. You may run the IPCONFIG command under DOS mode to find the settings.

7.3. Connecting to the IP Camera

There are 3 ways to connect to the video server.

1. LAN or static IP
2. PPPOE
3. DDNS

7.3.1 Using LAN or Static IP Connection

The setting method is the same with the one for the network video server.

7.3.2 Using ADSL (PPPoE) Connection

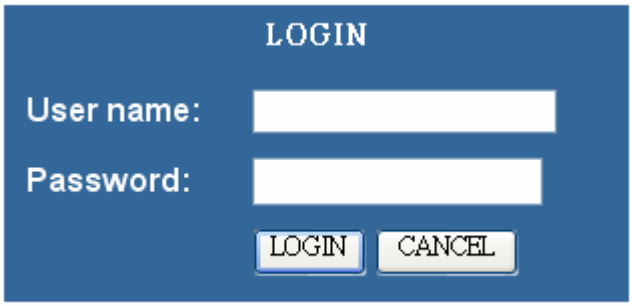
For the setup method, refer to section 8-2 network setting method.

7.3.3 Using DDNS Connection

Dynamic DNS is mainly used for 'dial up' users using dynamic IP address.
To use this method, visit http: //www.dyndns.org to apply for a domain name. This website offers free domain name services. However, for long-term use, users must pay a fee. For more details on the setup method, refer to 8-4-5 about DDNS servers.

7.4 Connection

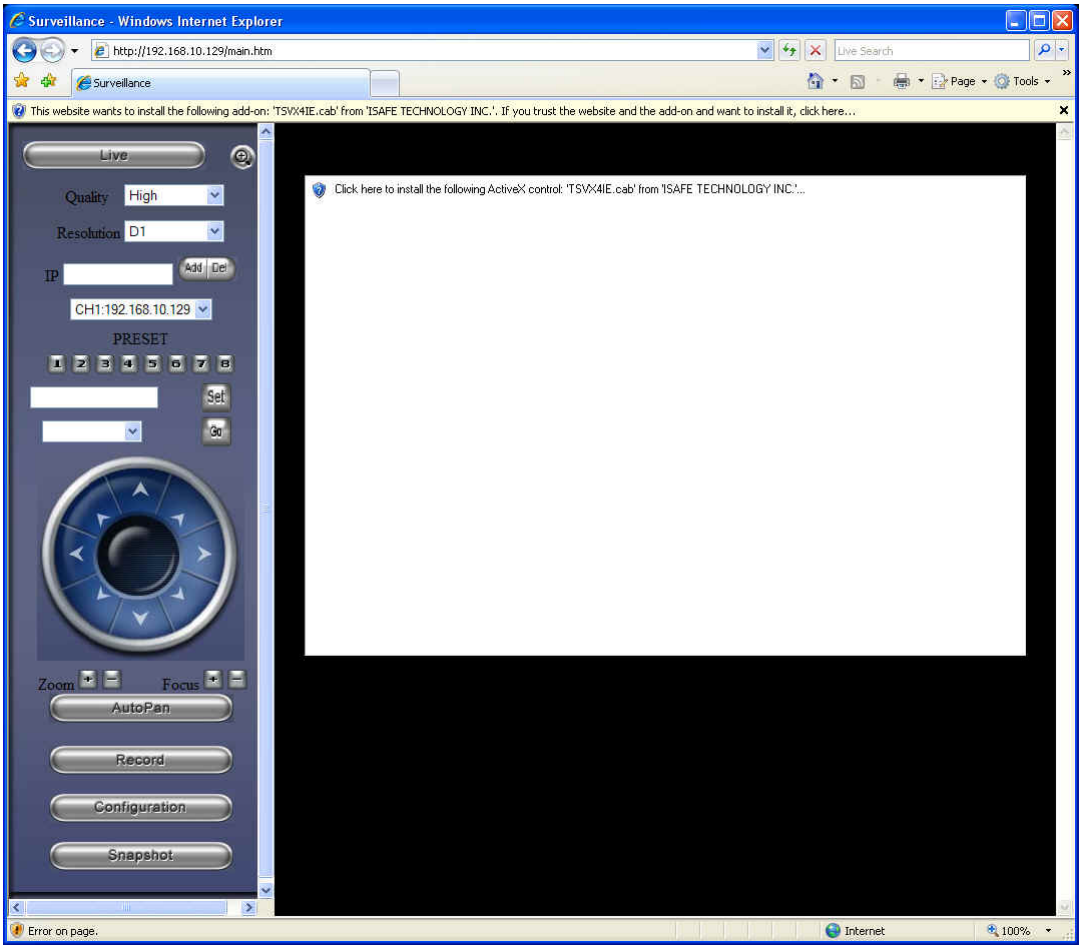
Start the explorer and enter the network address of the camera, for example 192.168.6.100. Or under IPEdit, double click the address to login. Now enter the User name and Password. The preset User name is admin. The preset Password is admin.



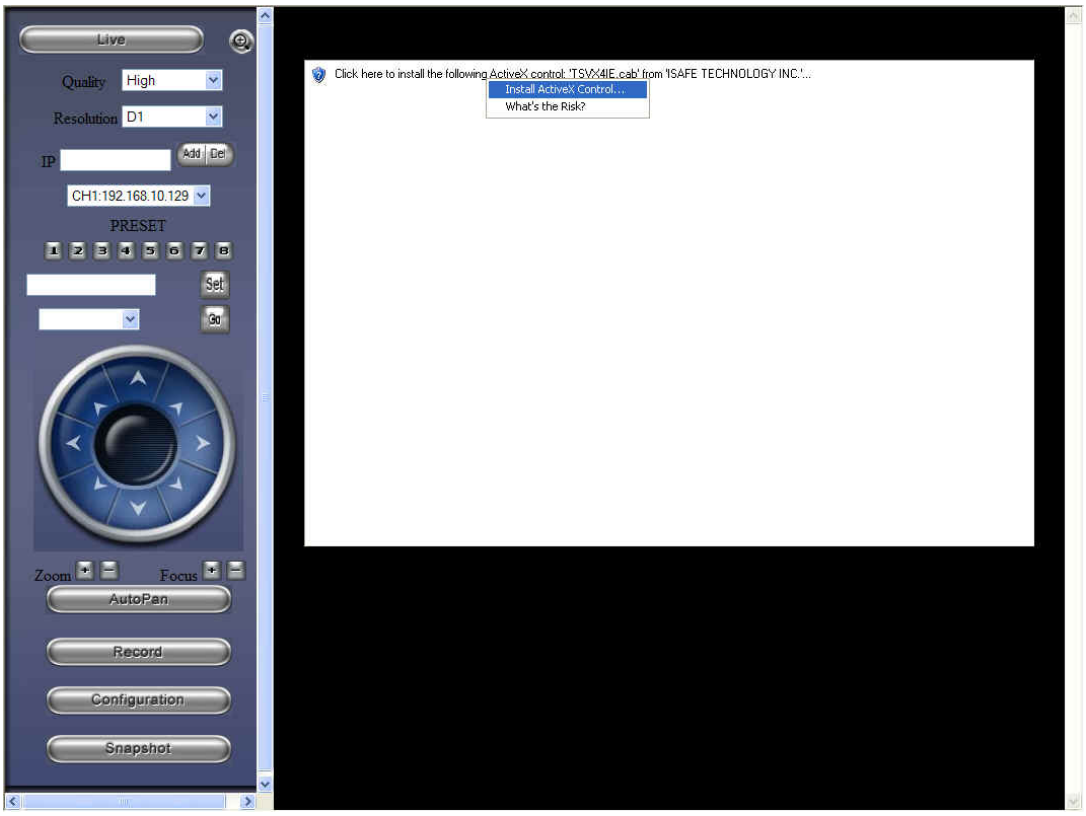
7.4.1 Installing ActiveX

Before using explorer, you must set up ActiveX. The procedures are as follows:

a.



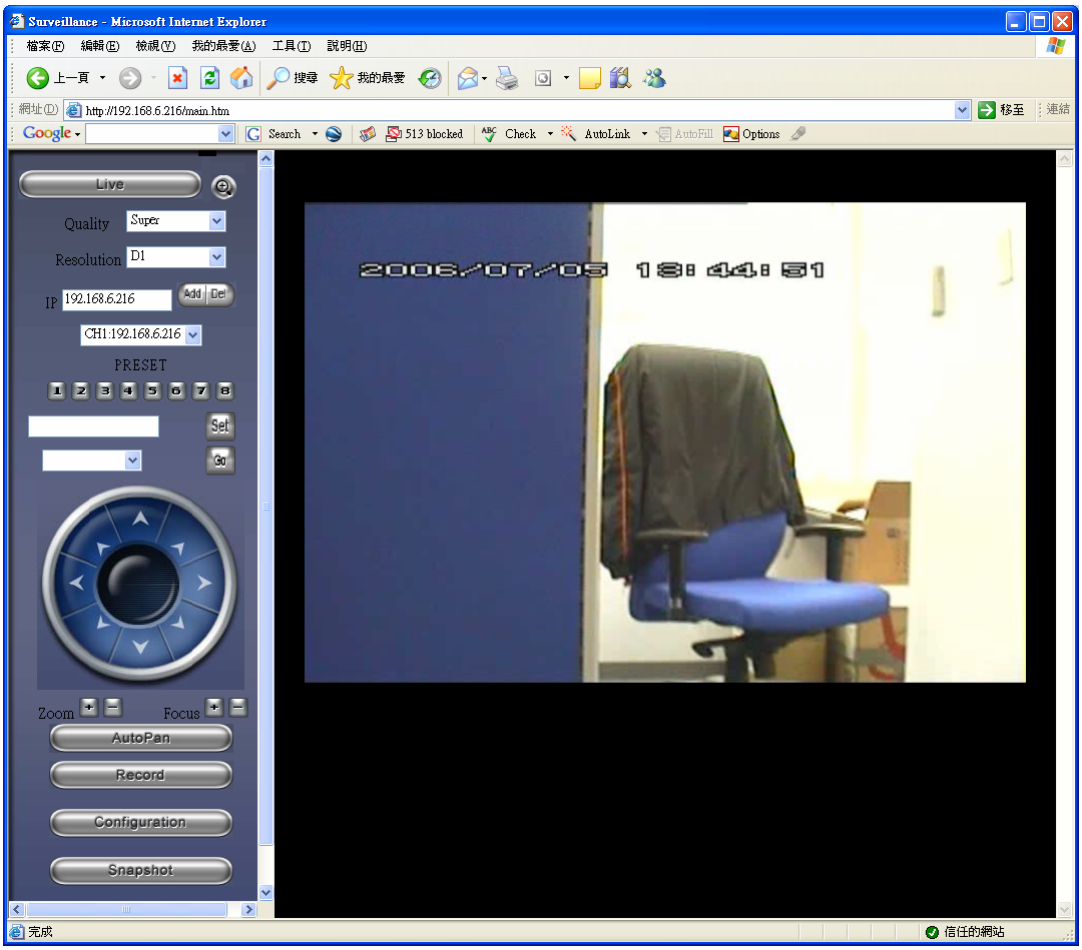
b. Click “Install ActiveX Control…” to install



c. Click “Install”

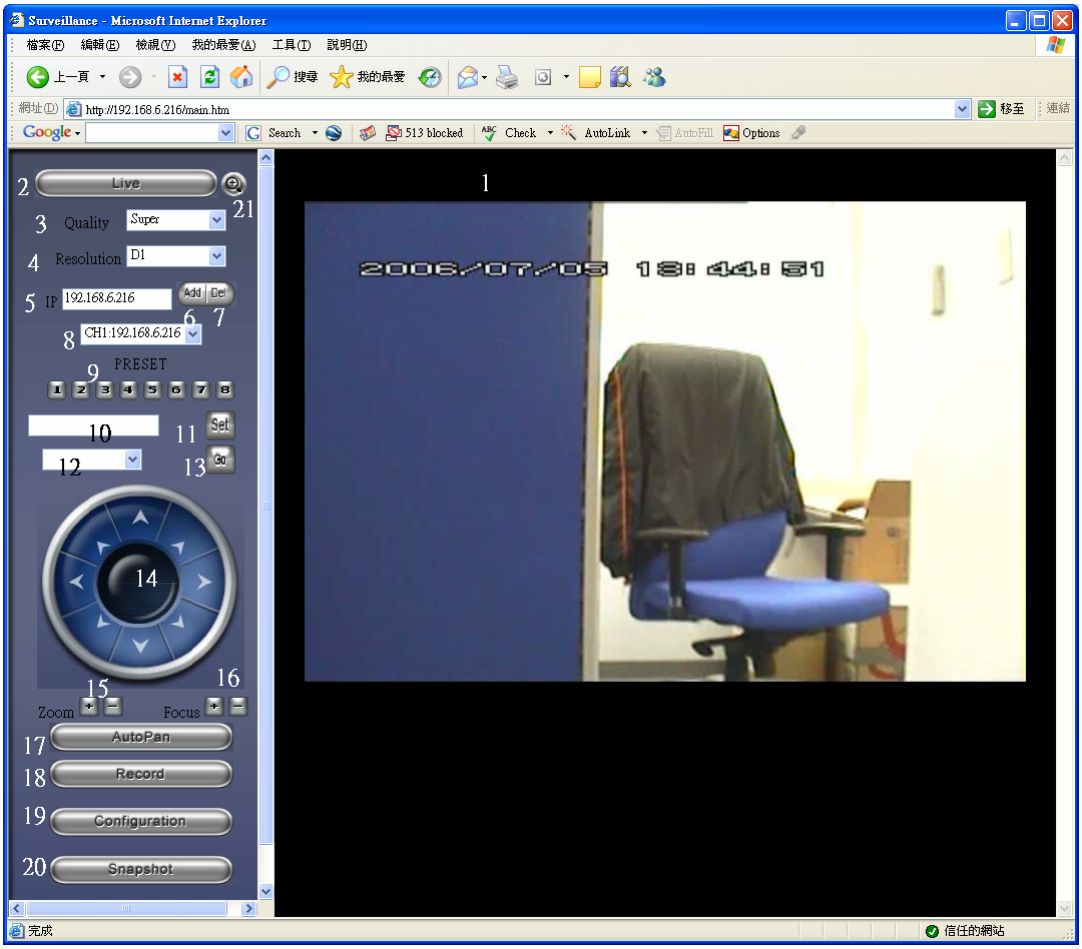
When running ActiveX Mode for the first time, a Security Warning will appear. Click Yes to proceed to install and run related components.

After the installation of ActiveX components, the image similar to the one below will appear.


Surveillance - Microsoft Internet Explorer
檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)
上一頁 搜尋 我的最愛
網址(D) http://192.168.6.216/main.htm
移至 連結
Google Search 513 blocked Check AutoLink AutoFill Options
Live
Quality Super
Resolution D1
IP 192.168.6.216
Add Del
CH1:192.168.6.216
PRESET
1 2 3 4 5 6 7 8
Set
Go
Zoom
Focus
AutoPan
Record
Configuration
Snapshot
2006/07/05 18:44:51
完成
信任的網站

8. Function Setup

8.1 Main



1. The screen shows the ‘Live’ channels. Up to 16 channels is supported. The recommended resolution is 1024 by 768.

Note: Since the ‘Live’ shots uses software compression, it is recommended that the system should have 3.2GHz processor and 512MB memory. This can show at least 4 channels in D1 resolution and ‘super’ picture quality. To show more channels, adjust (lower) the resolution and picture quality.

2. Live: When the ‘Live’ button is pressed, the screen will show channel 1.
3. Quality: There are 6 options - Basic, Middle, Normal, High, Super and Best.
4. Resolution: There are 3 options - D1, CIF and QCIF. When set to D1, Quality can be set to High, Super and Best. When set to CIF, Quality cannot

be set to Basic.

5. IP: This is the blank to enter the IP to add for monitoring. After entering the IP, click “Add” button and another channel will be added. And the next line (8), when dragged, will show the channel and the IP.
6. Add: This is to add the channel.
7. Del: This is to delete a channel. Each time this is clicked, the last of the channels will be closed.
8. ⑧This “drop down menu” will show the different channel and IP.
9. PRESET: Up to 8 monitoring points can be set.
10. and 11. SET: Names can be set for the monitoring points. Up to 9 English characters or 4 Chinese characters can be used. After entering the name, click SET. It will be saved and will appear in the “drop down menu” right on the next row below (12). 13. GO: After choosing the monitoring point on the left side, click GO to shift to this point.
14. This is to set the PTZ direction.
15. Zoom: This controls the zoom movement of PTZ.
16. Focus: This is to adjust the Focus. To use this function, turn off the Auto Focus function.
17. AutoPan: This is autopan for the 3 previous set points.
18. Record: The preset path for recording is c: \ipc_save. To play the saved file, download and install the free codec in the divx website at http://www.divx.com/divx/play/. Note: To set the record path, refer to section 8-2.
19. Configuration: This is to set the first channel. For details, refer to section 8-2.

⑨~⑰ PTZ Control (Video Server Only): The manufacturer provides PELCO PTZ control. Use “Configuration” to do the PTZ setup.

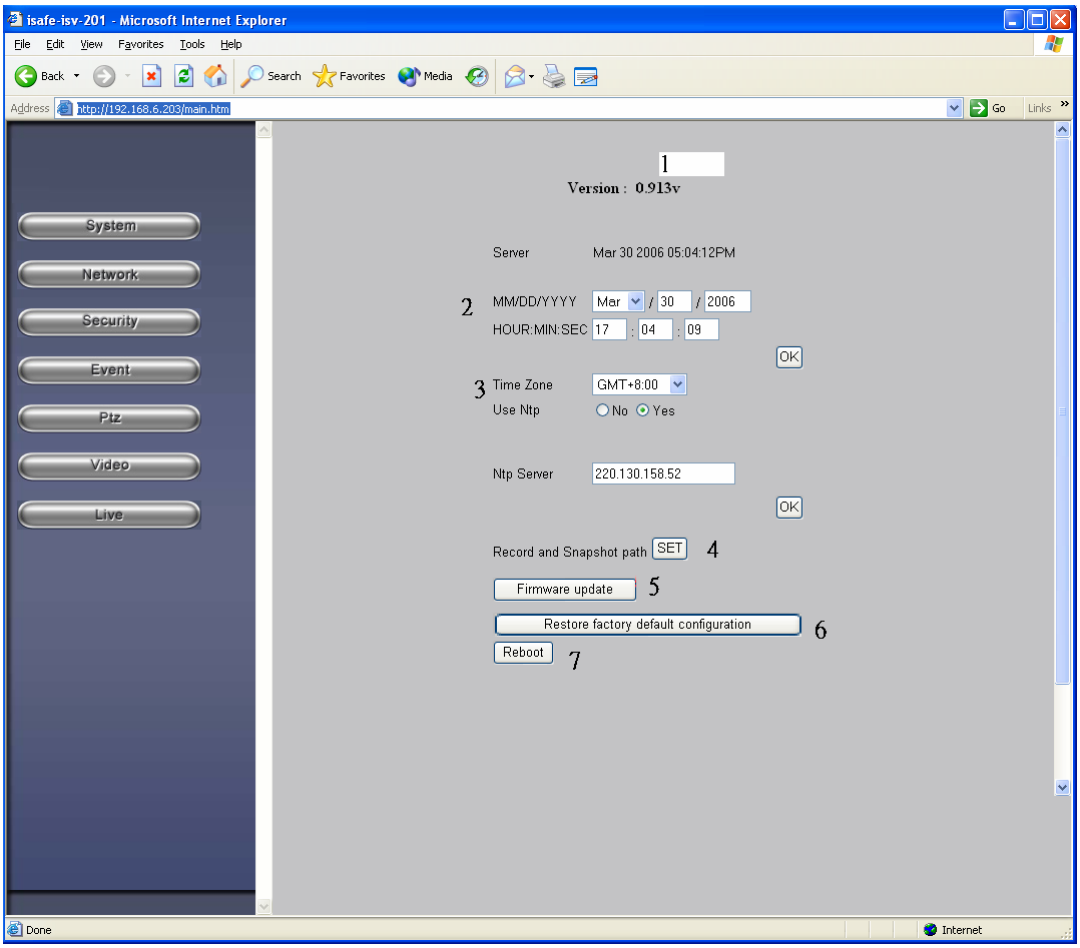
Note: The PELCO Baud Settings is 9600; PELCO D ID = 1; PELCO P ID = 2.

20 Snapshot: The preset path for saving snapshots is c: \ipc_save.

21. Adjust the display scope of live image (720*480 / 320*240 / 160*120).

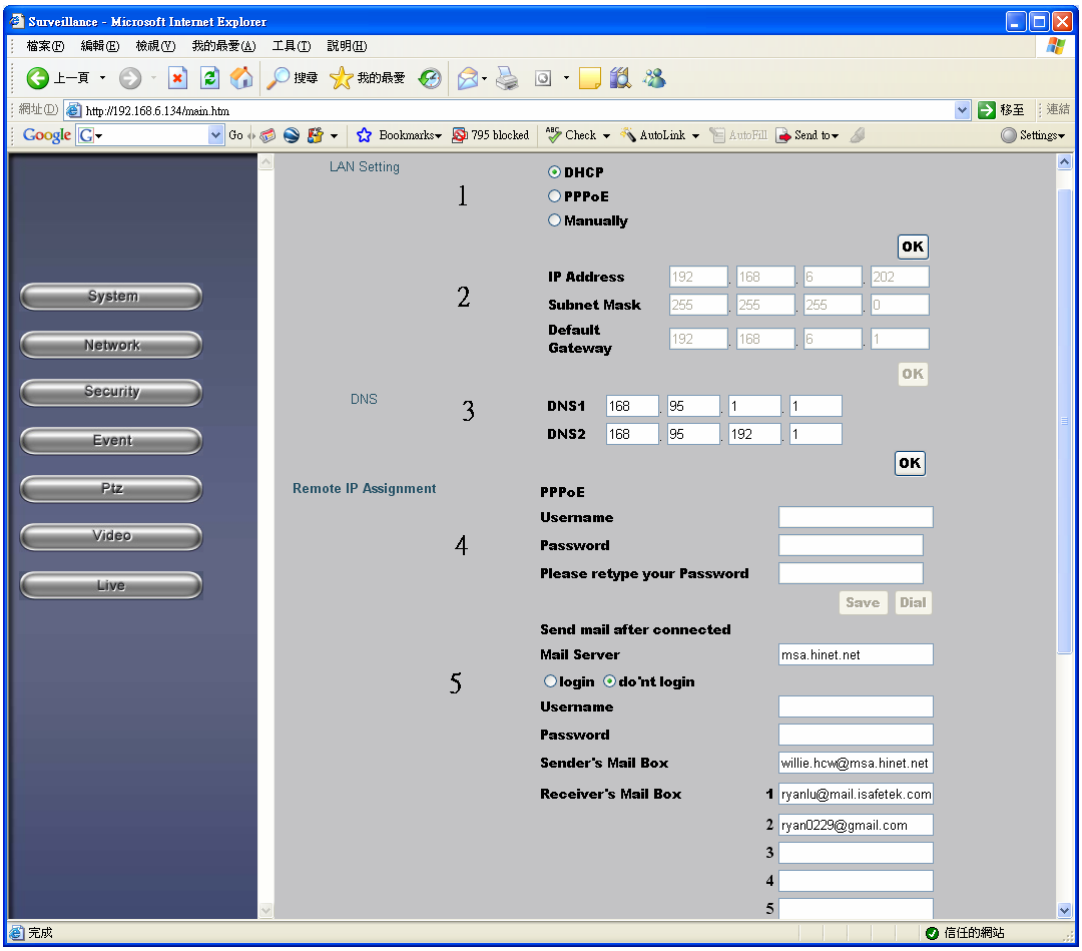
8.2 System Setup

8.2.1 System Setup



1. Version Number shown.
2. Set the time and date.
3. Set the NTP (NTP is 220.130.158.52 for the Taiwan region).
4. Set the Record and Snapshot path. Default path is c: \ipc_save.
5. Firmware update. The file must be the firmware update file from the manufacturer - vmlinuz.dat. To update the firmware, press the “Firmware update” button. A prompt asking if update is to be done will appear. After confirmation, there will be a warning message. Proceed and enter the path of the file. After update is complete, a confirmation will appear. The whole process should take about 4 minutes. Close the explorer and execute the file in the CD – (xp_ieclean.bat for Windows XP and nt2000_ieclean.bat for Windows NT or Windows 2000) to erase the old OCX program. Open the explorer and install the new OCX program to finish the update process.
6. Restore the factory default configuration.
7. Reboot.

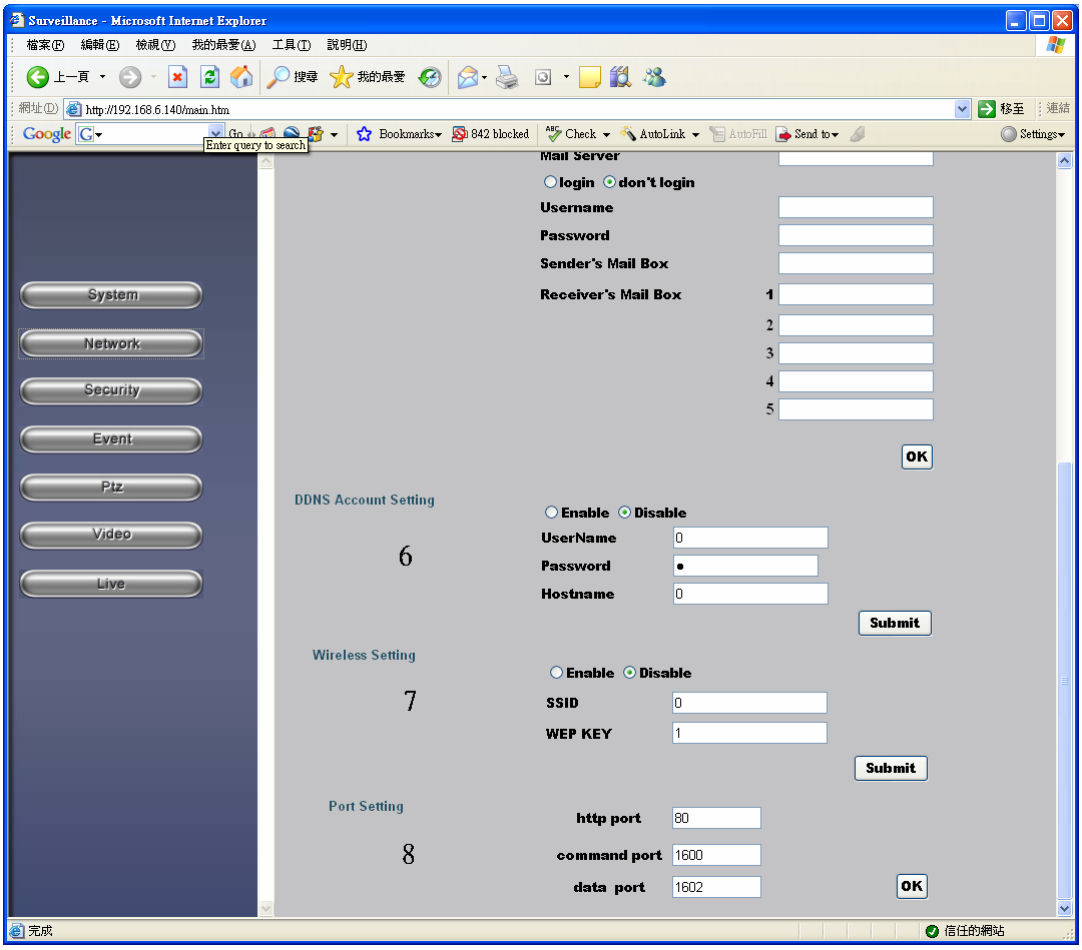
8.2.2 Network Setup



Setting up the Network connection. If the LAN is using DHCP, select DHCP to automatically get an IP. When PPoE is to be selected, set up first the Remote IP Assignment (④, ⑤). Enter the ADSL Username, Password and Mail Box. Then, click SAVE. Restart the system.

When “Manually” is selected, then enter the IP Address, Subnet Mask and Default Gateway values, and click OK.

DNS: This is to set up static IP. Please contact your ISP provider.



DDNS Account Setting: Visit the http: //www.dyndns.org to register a dynamic DNS. The steps for using DDNS are as follows:

1. Register with http: //www.dyndns.org
2. Apply the Domain.
3. When using ADSL, just select Enable and enter the Username, Password and Hostname.

Network Information: This portion shows the network information (Local IP, Net mask, Gateway, DNS1, DNS2 and Connect type).

Wireless Setting:

1. Select “Manually”, then enter the IP Address, Subnet Mask and Default Gateway values, and click OK.
2. Select Enable and enter SSID and WEP KEY.

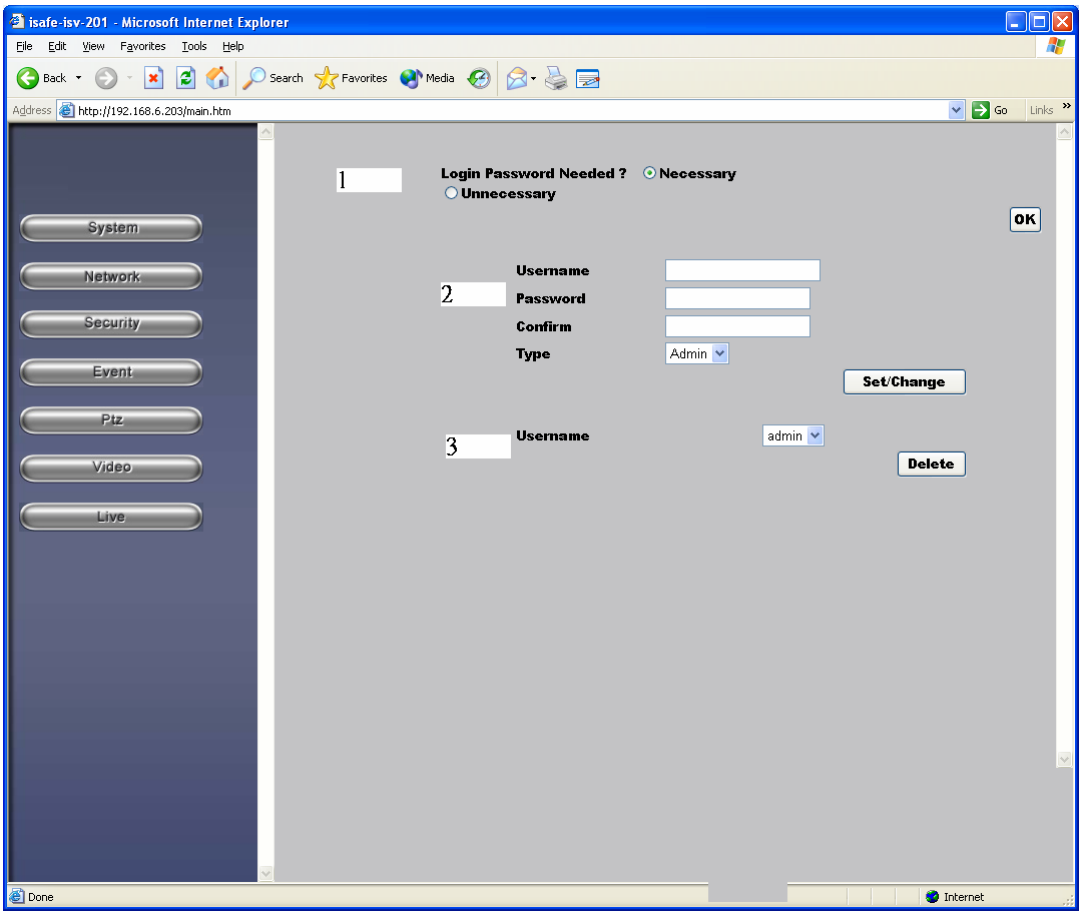
Note: When using wireless, you can only use fix IP address.

Port Setting:

1. Set http port and system will reboot automatically (default value is 80).
2. Set command port and system will reboot automatically (default value is 1600).

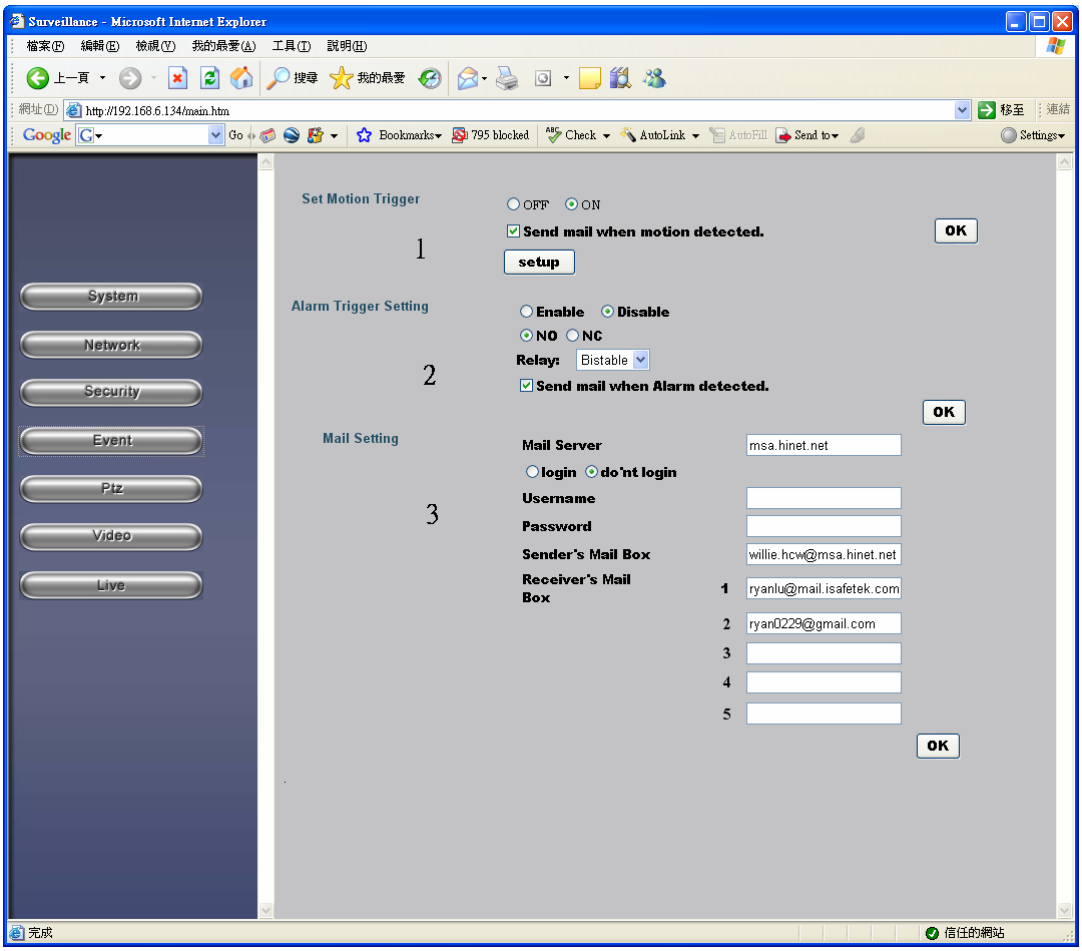
3. Set data port and system will reboot automatically (default value is 1602).

8.2.3 Security Setup

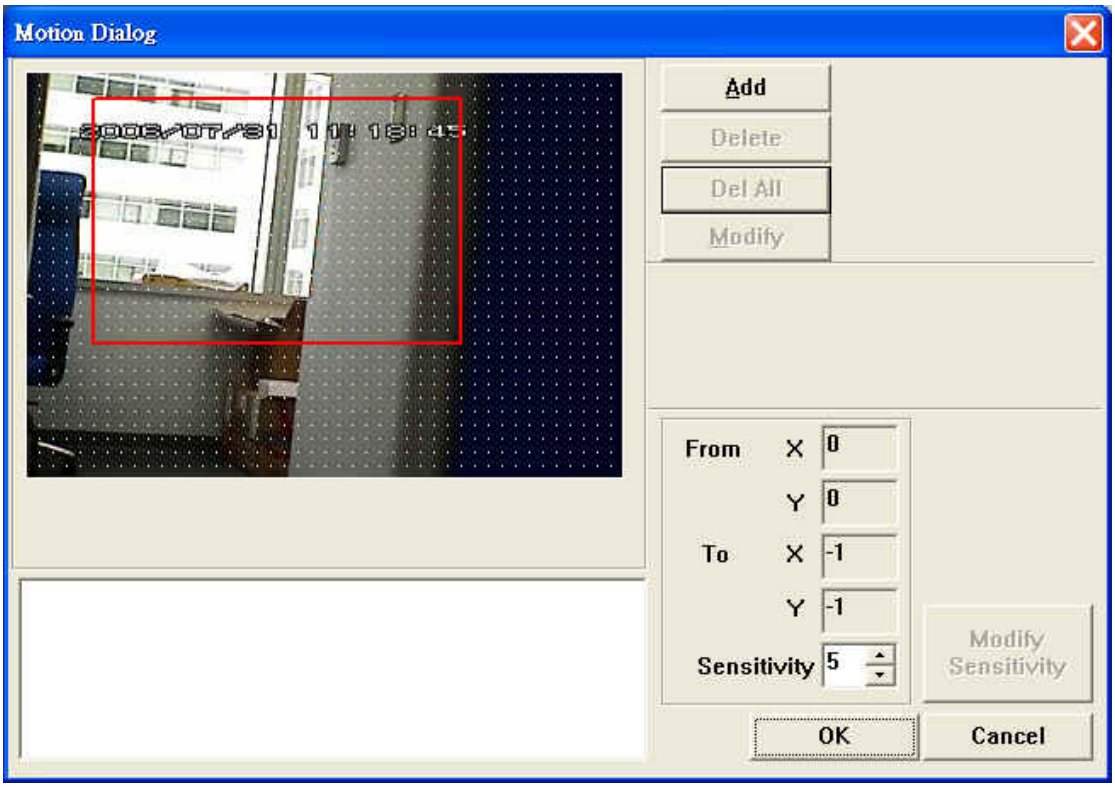


1. The Security Setup allows the setting of the Login Password
2. To add or modify the user settings, select Type as admin or user. When admin is selected, various settings can be configured. But ‘user’ can only view the live images.
3. This set up also allows the deletion of the selected user.

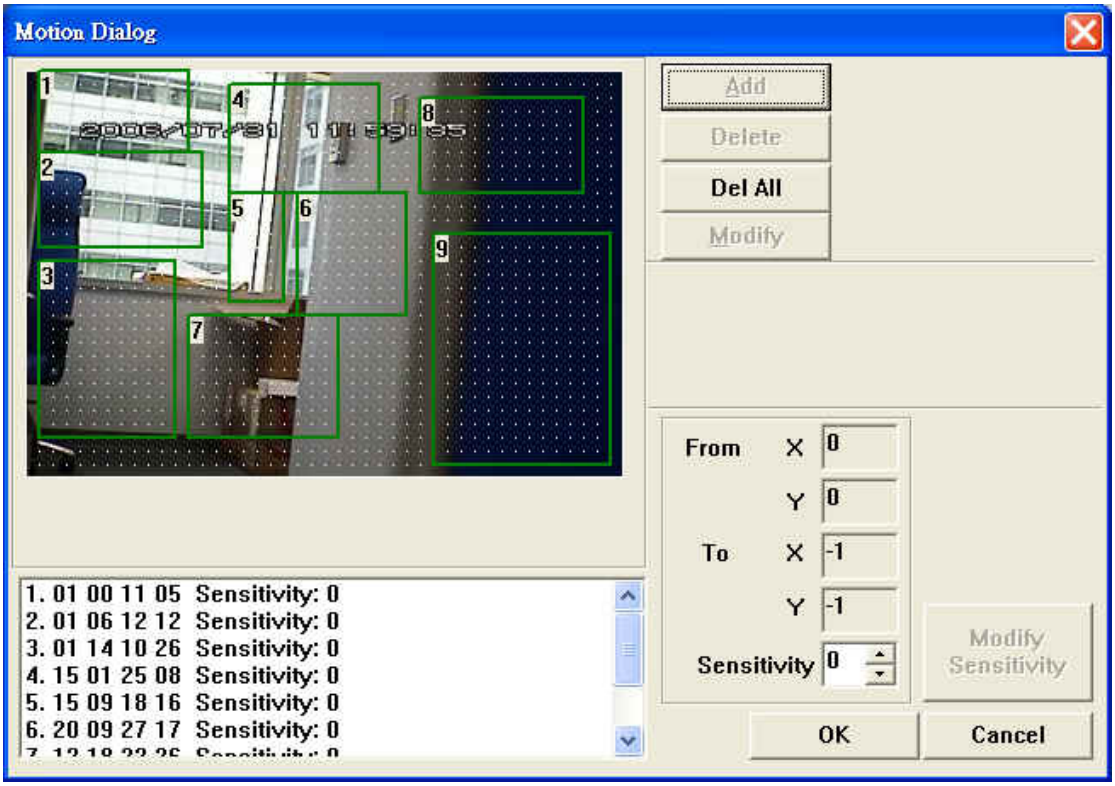
8.2.4 Event Trigger Setup



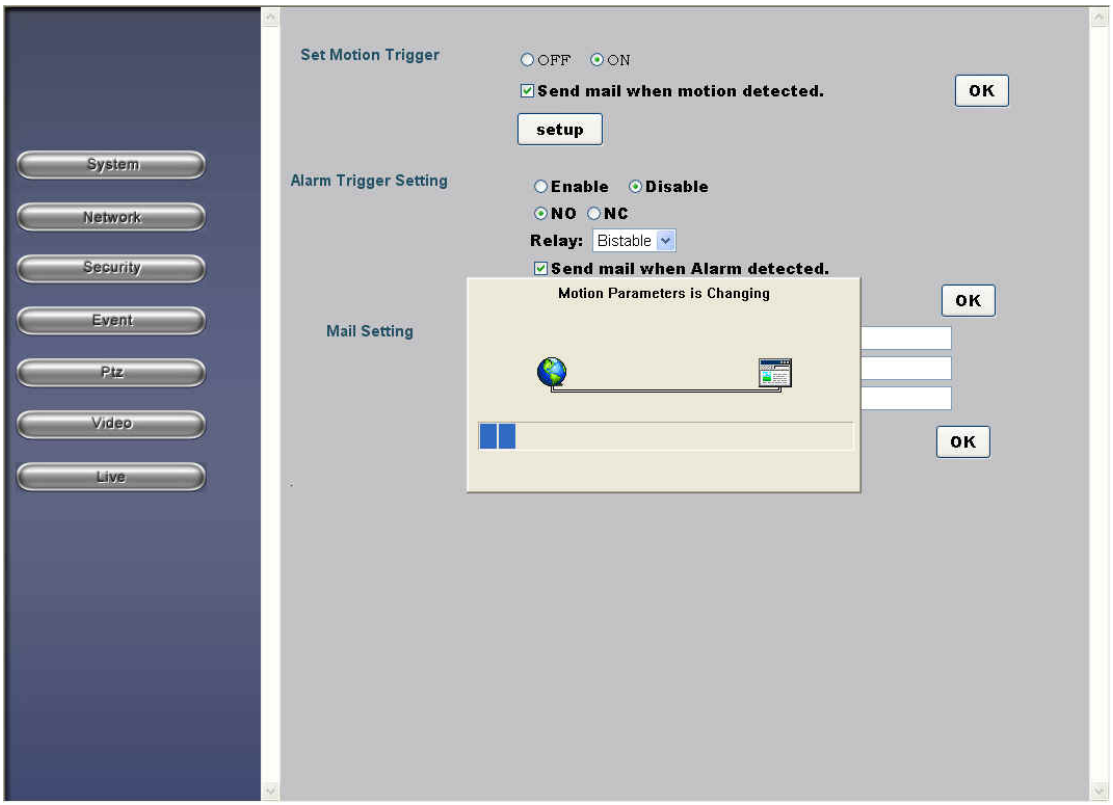
1. Set Motion Trigger: This function can be turned ON or OFF. Set whether or not to send mail when motion detected. Set the Motion Detection Area and the Sensitivity level by pressing the “setup” button to get into the Motion Dialog.



To set Motion Detection Area, press the right button of your mouse and draw a RED frame square that you want to set on the image. Then, select Sensitivity level that you need and press “Add” to save the settings. Now the frame turns to GREEN and all the settings are saved.



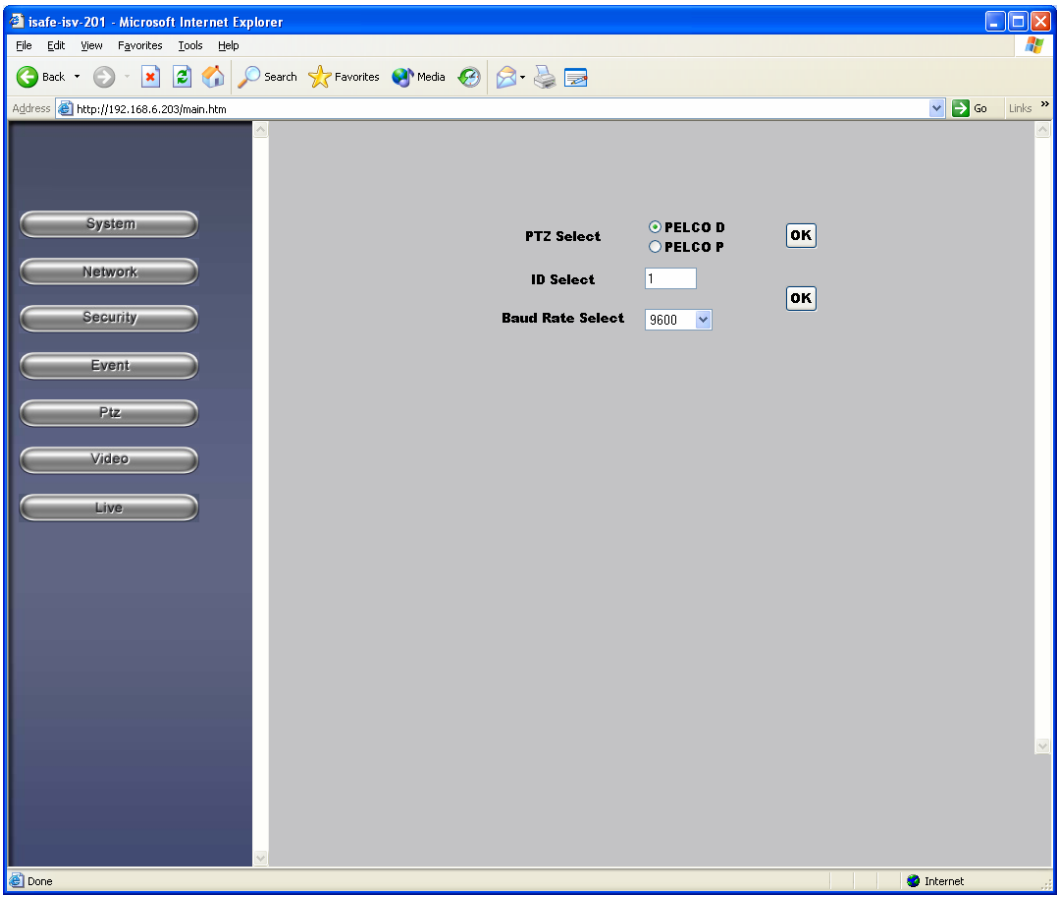
You can set up to 9 different motion detection areas.



Press “OK” to update the new settings on the system.

2. Alarm Trigger Setting: You can enable or disable this setting, activating the input/output of the alarm trigger function. To select NO or NC, select Disable the Alarm Trigger first. The Relay interval uses Bistable\0.5S\1S\2S\5S\10S options.
3. Mail Setting: To send mail based on the Motion Trigger or Alarm Trigger setting, enter the Sender and Receiver email address.

8.2.5 PTZ Setup (Video Server Only)



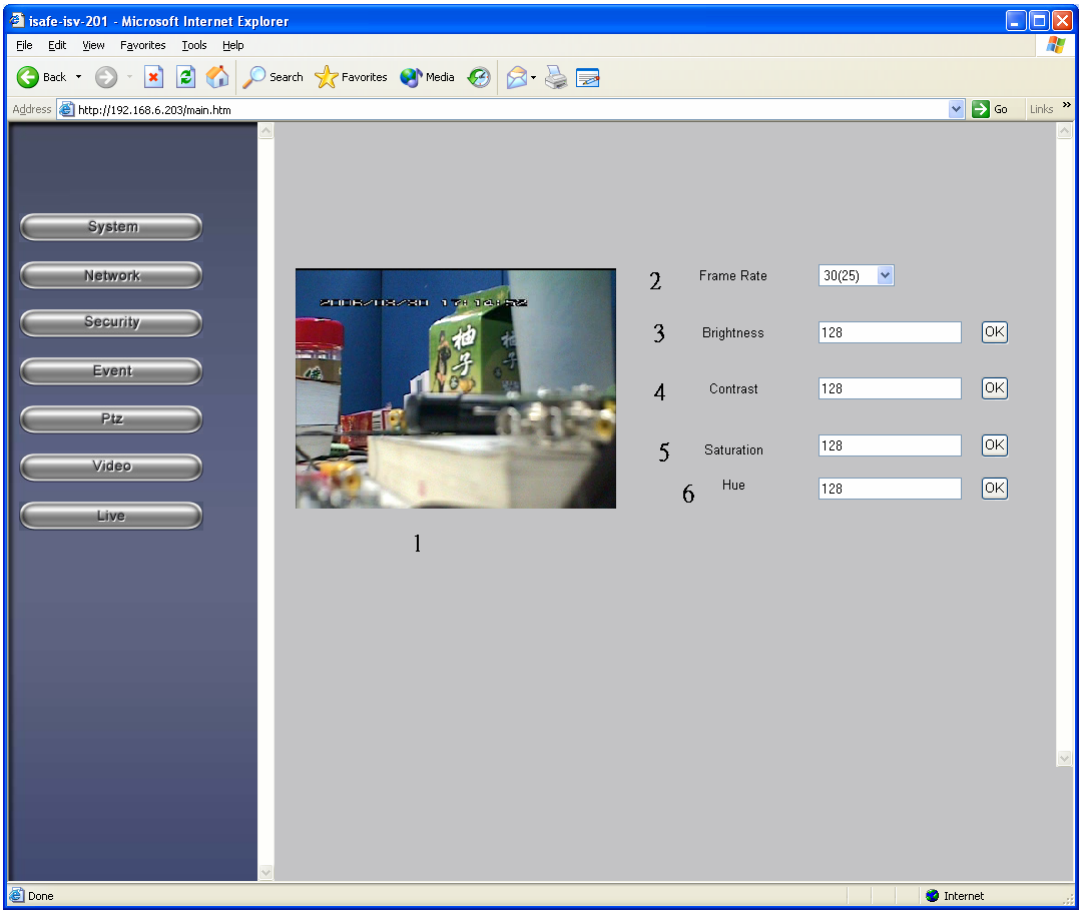
PELCO PTZ is supported. The default settings are as follows:

Baud Rate Settings - 9600.

PELCO D ID - 1.

PELCO P ID - 2.

8.2.6 Video Setup



1. Channel 1 live image.
2. Set the Frame Rate (1-30/25).
3. Set the Brightness (0-255).
4. Set the Contrast (0-255).
5. Set the Saturation (0-255).
6. Set the Hue (0-255).

8.2.7 Return to main page

Click live button to return to main page.

9. Troubleshooting

Question / Problem	Answer / Solution
Unable to detect the video server.	Make sure the network cable is connected. Restart the system.
Unable to have images and sound.	Make sure the video server is working normally. Disconnect it and install it again. Make sure the input cable is connected and restart the system.
What is the recommended system configuration?	10/100 Mbps, 2.8GHz processor, 512MB RAM, DirectX 9.0b and above
Cannot install ActiveX	Check if there is a firewall. Follow installation step 7.4.1.
IP address changes after 3 days while using pppoe	It is recommended to use ddns.
How long does it take to ‘renew’ the software?	After the ‘renewing’ of the software, it would take a while before there is image on screen. This is normal. Components are being reloaded and installed.

CE Statement

This device has been tested and found to comply with the requirements set up in the council directive on the approximation of the law of member states relating to R&TTE Directive 1999/5/EC.

FCC ID: VDVISAFE123

FCC Compliance and Advisory Statement

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 undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, according 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 instructions, may cause harmful interference to radio communications. 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 correct the interference by one or more of the following measures:

1.Reorient the receiving antenna.

2.Increase the separation between the equipment and receiver.

3.Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.

4.Consult the dealer or an experienced radio/TV technician for help.

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUSION: Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.