*** USER'S MANUAL ***

FCC ID : UTBHVT01HTW

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.**

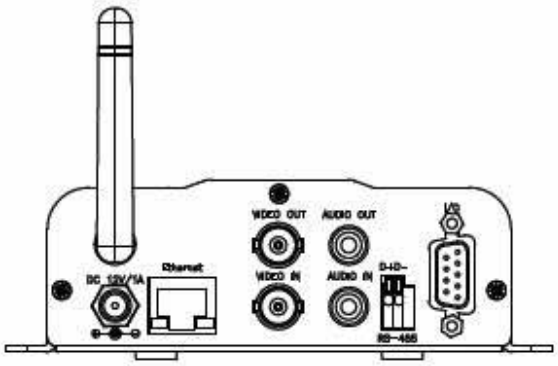
Use only shielded cables to connect I/O devices to this equipment. You are cautioned that change or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

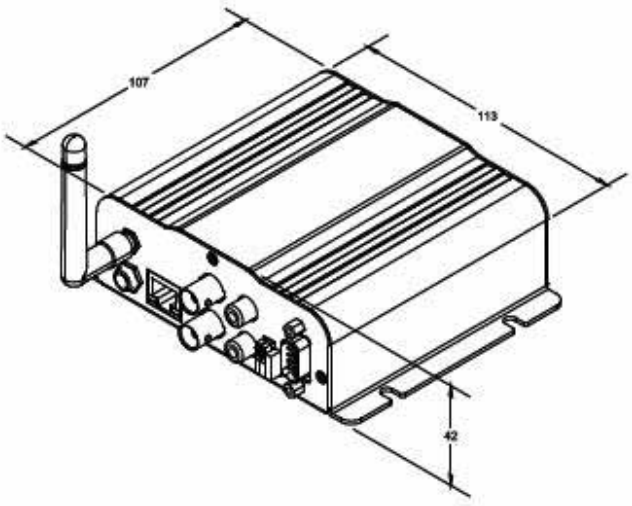
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERECE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

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 v.0.1

HVT-01HTW





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PREFACE

HVT-01HT is a transceiver which is a combination of Video Server and Video Receiver with IE built-in.

It encodes analogue signals of traditional cameras to digital signals; the user can monitor real-time video via IE browser. MPEG4 compression format supports smooth video quality. In addition, it also supports JPEG. HVT-01HTW supports SD card backup to save video files and playback on any PC. In addition, the user can control this HVT-01HTW with an easy-control user interface via IE browser to build a home surveillance.

The user can use HVT-01HTW to connect any IP camera via IE browser within Internet or Intranet. It can decode MPEG4 or JPEG compression format and transfer analogue signals to TVs, CRT monitors or DVR systems.

I. Product Specifications

- Support MPEG4 and JPEG compression format.
- SD card backup.
- Wireless network connection (802.11 b/g).
- Online firmware upgrade.
- Support dynamic IP and PPPoE through free DDNS.
- Support AVI video backup via IE browser.
- Compatible with Microsoft Windows Media Player.
- Support to connect with 10 IP Cameras.
- OSD output support

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	64MB
ROM	8MB
Image sensor	
Network	
Ethernet	10/ 100 Base-T
Wireless	802.11b/g
WEP	64/ 128 bit
Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP
System	
Video Resolution (NTSC/PAL)	720x480/576, 352x240/288, 176x120/144
Video adjust	Brightness, Contrast, Saturation, Hue
Image snapshot	Yes
Full screen monitoring	Yes
Compression format	MPEG-4
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
SD card management	
Recording trigger	Motion Detection, Network break down
Video format	AVI
Video playback	Yes
Delete files	Yes
Web browsing requirement	
OS	Windows 2000, 2003, XP
Browser	IE 6.0 or above

II. Product Installation

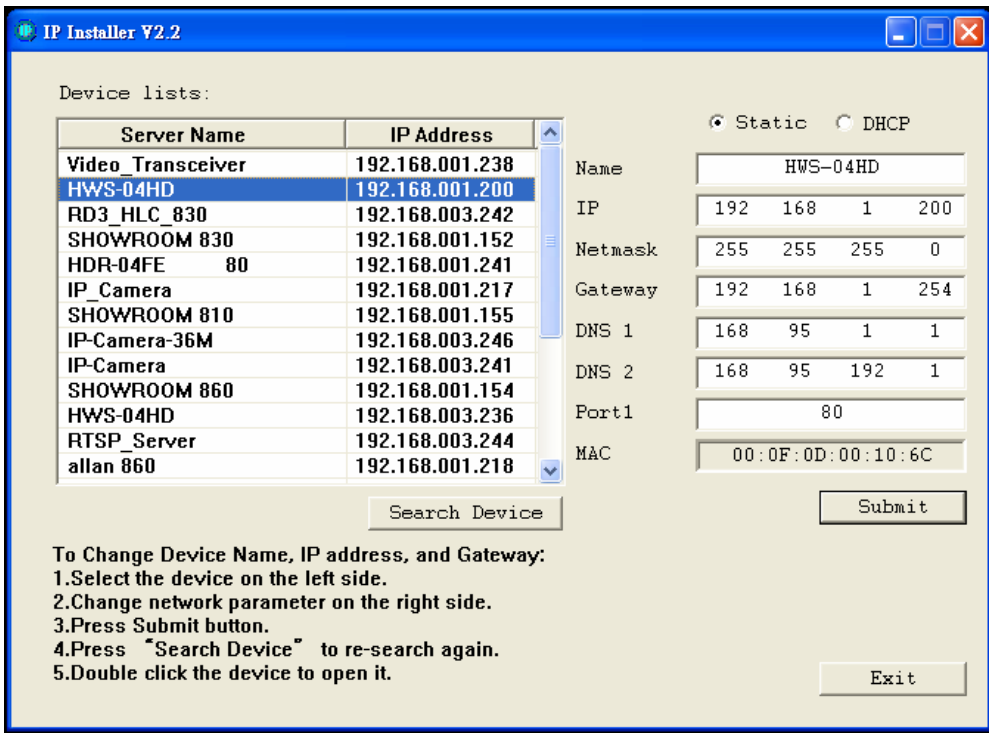
A. Hardware Installation

i. Connect the power adapter and Ethernet cable.
ii. Set up the network configuration based on different environments. For further information, please refer to chapter IV Network Configuration.

B. IP Assignment

i. Use “IP Installer”, comes with CD, to assign the IP address of HVT-01HTW.
ii. 2 languages supported for IP Installer：
    i. IPInstallerCht.exe: Chinese version
    ii. IPInstallerEng.exe: English version
iii. 3 different IP configurations based on different environments.
    i. Fixed IP (Public IP or Virtual IP)
    ii. DHCP (Dynamic IP)
    iii. Dial-up (PPPoE)
iv. Execute IP Installer
v. Use Windows XP SP2 or newer version. If the following message popup, please click “Unblock.”

vi. The GUI of IP Installer：



vii. IP Installer searches all IP deceives which connect with the internet and it lists all of them on the left side or the user can click “Search Device” to search again.

viii. When the user clicks on each IP device listed on the left side of IP Installer, the network configuration of the IP device will show on the right side. The user can change the parameter and click on “Submit”. And, then, the following message will popup. Click on “OK” to reboot HVT-01HTW.

ix. After HWS-04HD reboot, click “Search Device” to research HVT-01HT. And, use IE Browser for live viewing.

C. Install ActiveX control (setup once only):

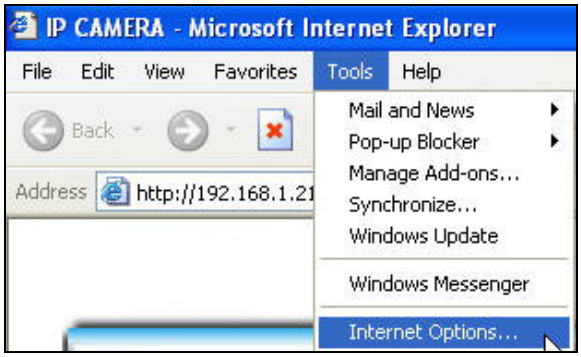
For the first time to view HWS-04HD via IE browser, it will request the user to install ActiveX.

Also, check the security setting as follows.

i. IE → Tools → Internet Options… → Security Tap → Custom Level → Security Settings →Download unsigned ActiveX controls → Select “Enable” or “Prompt (Recommend).

ii. IE → Tools → Internet Options → Security Tap → Custom Level… → Security Settings → Initialize and script ActiveX controls not marked as safe → Select “Enable” or “Prompt” (Recommend).

1



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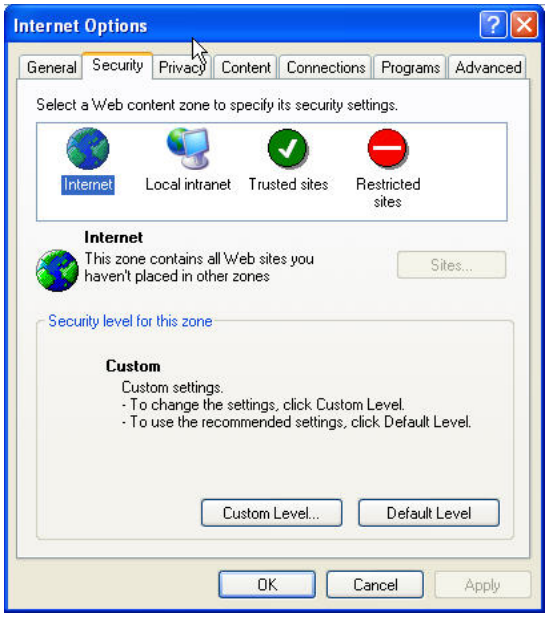

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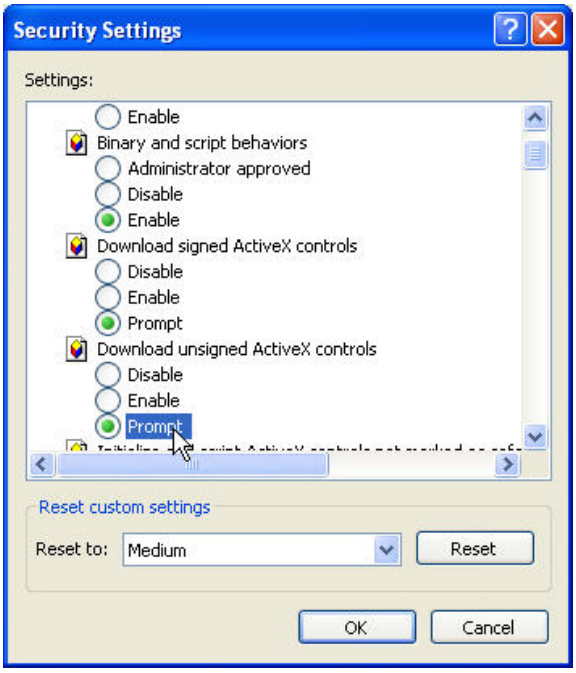
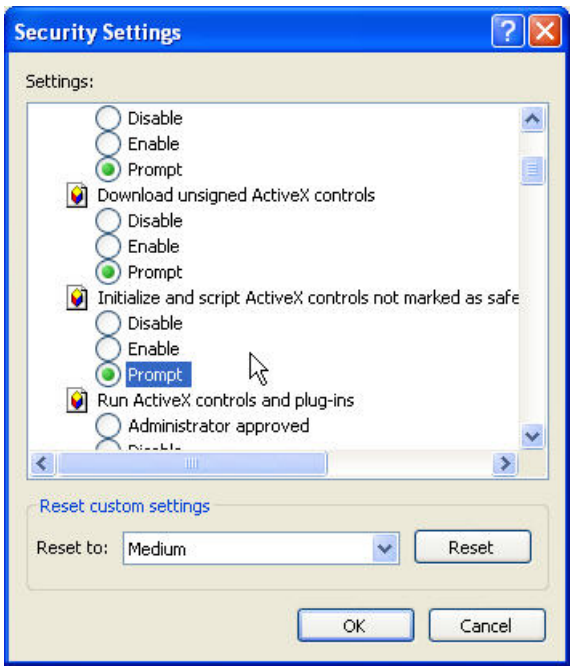


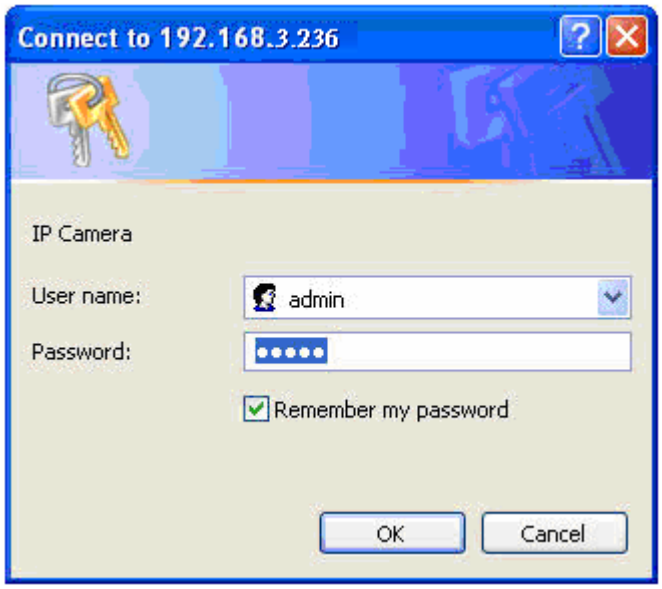


5

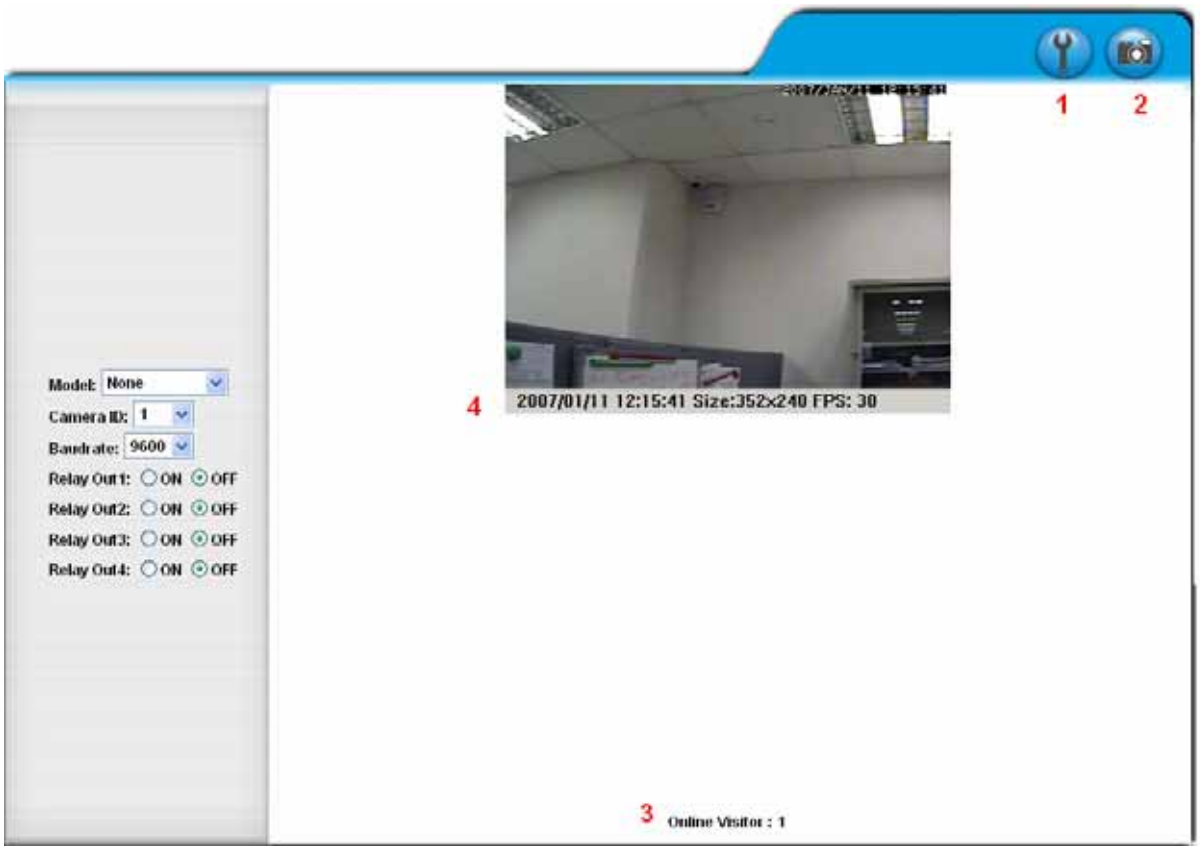
When popup the following dialogue box, click “Yes”.

III. Live Video

After executing IE browser and typing the IP address of HVT-01HTW, the following message will popup and request the user to input the user name and password. The default user name and password are “admin” and “admin.”



When the user name and the password are correct, it will connect toHWS-04HD via IE Browser. The GUI will display as follows.



1. ：Get into the administration page.

2. ：Video Snapshot.

3. Show how many users connect to this HVT-01HT.
4. Display “date and time”, “resolution”, and “refreshing rate”.

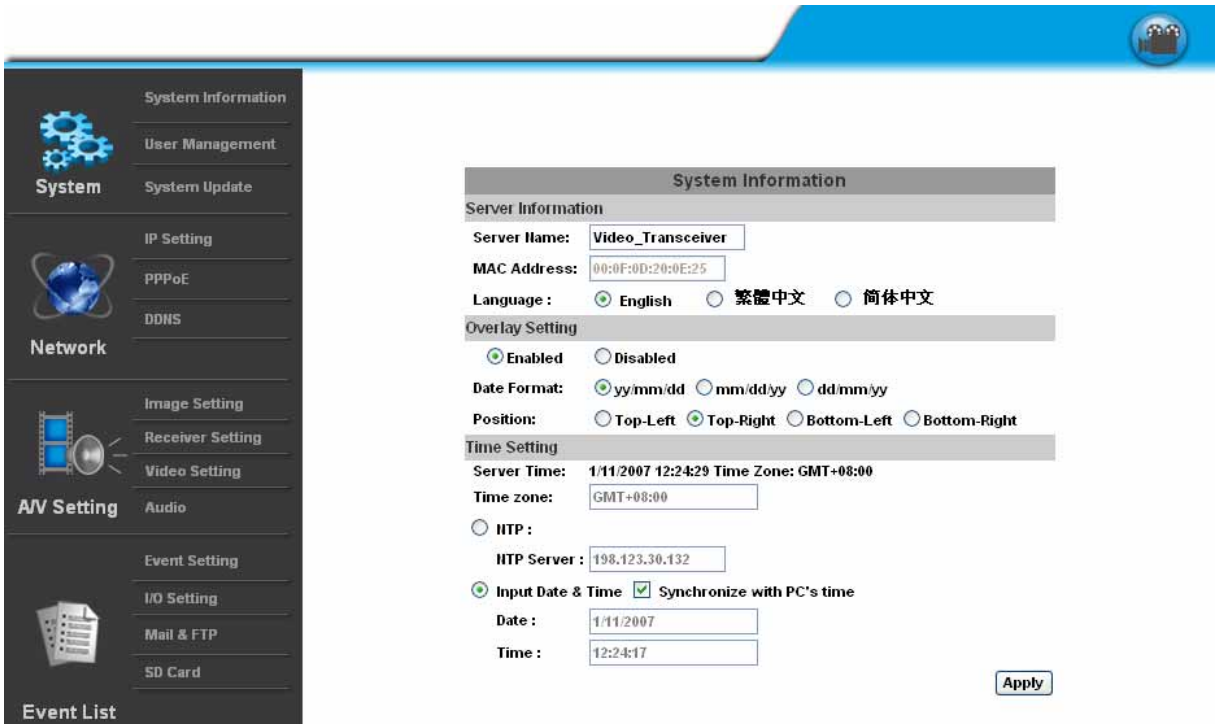
On each chancel, the user can left click twice on the mouse to for live viewing with full screen. And, the user can press Esc on keyboard on left click twice on the mouse to return to a normal mode.

On each channel, the user can right click on the mouse and a function list will display as follows.

1. Snapshot：Save as JPE files.
2. Record Start：The user can choose the path to save videos. When the user start to record. “Record Start” will change its name to “Record Stop” and the user just click on “Record Stop” to stop recording. The video will be saved as AVI format.
3. Mute：Click on Mute to enable or disable sound.
4. Full Screen：View the video with full screen.

IV. HVT-O1HT Configuration

Click to get into the administration and click on to return to the live viewing as follows.



A.System Information

i、 Server Information

a. Sever name：This is the video server name for the user to search on IP Installer.

b. Select language：There are English, Traditional Chinese, and simplified Chinese. When a certain language is selected, the following message will popup and ask the user to confirm language changed.

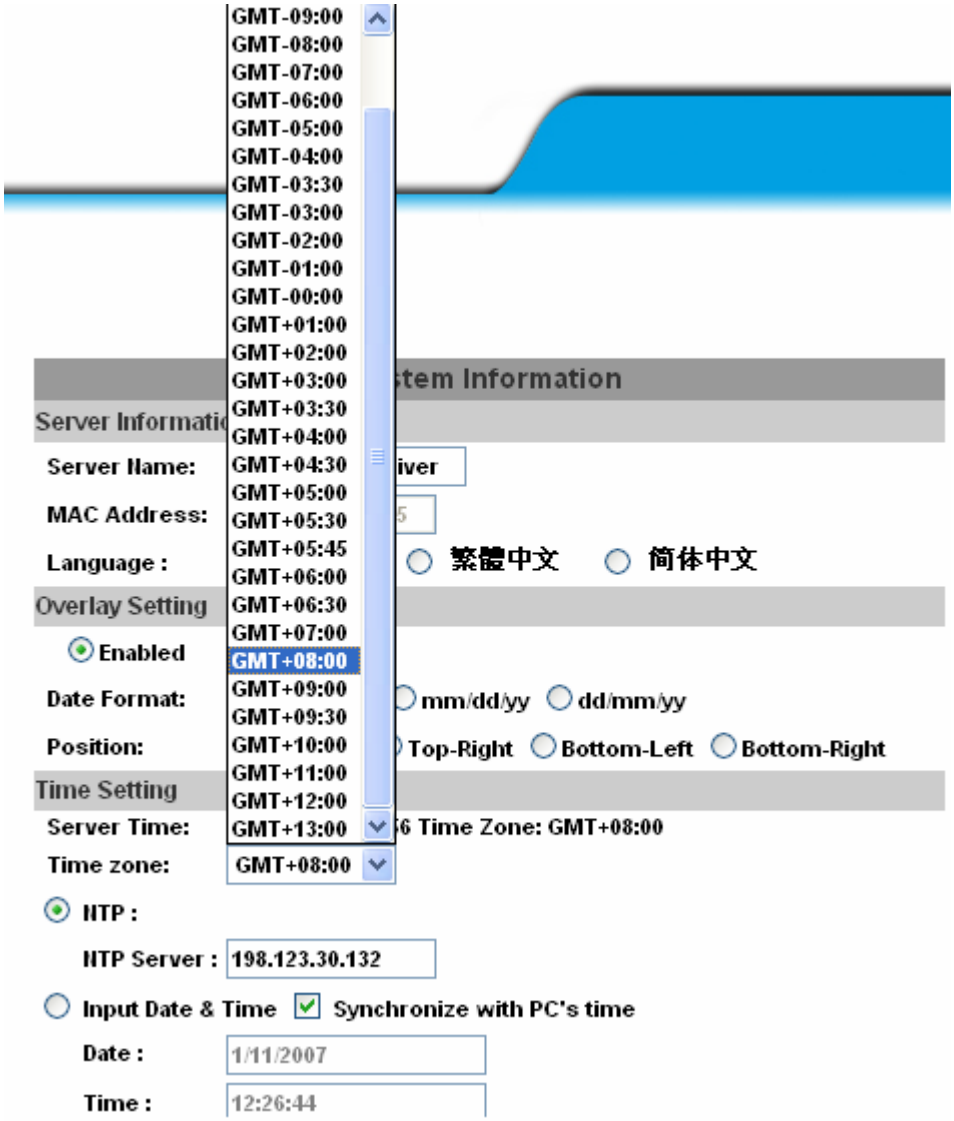
c. Overlay Setting：Enable or disable Overlay Setting.

i. Date Format：yy/mm/dd, mm/dd/yy, or dd/mm/yy.

ii. Position：Top-Left, Top-Right, Bottom-Left, or Bottom-Right.

d. Time Setting：Use NTP or Input Date & Time.

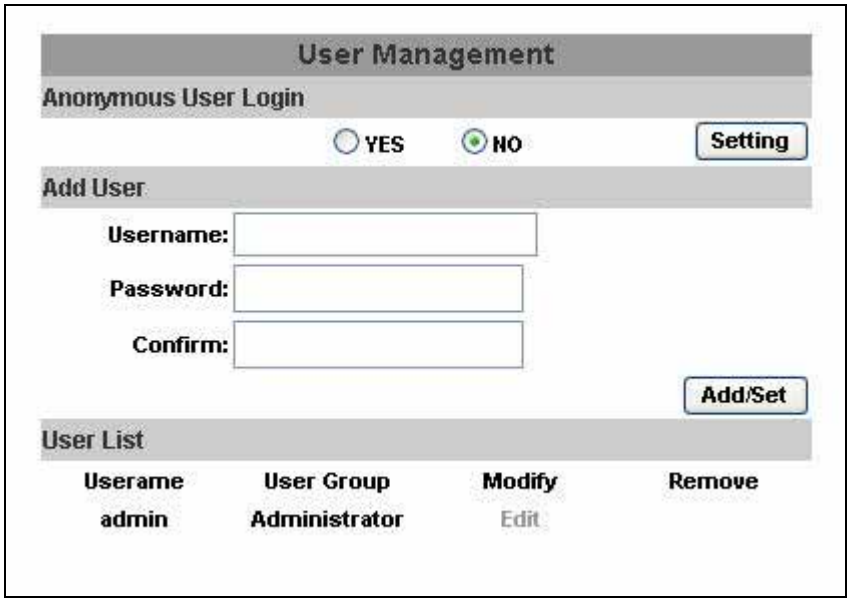
e. Click on “Apply” to save.


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
GMT+05:30
GMT+05:45
GMT+06:00
GMT+06:30
GMT+07:00
GMT+08:00
GMT+09:00
GMT+09:30
GMT+10:00
GMT+11:00
GMT+12:00
GMT+13:00
stem Information
Server Informati
Server Name:
iver
MAC Address:
Language :
繁體中文
简体中文
Overlay Setting
Enabled
Date Format:
mm/dd/yy
dd/mm/yy
Position:
Top-Right
Bottom-Left
Bottom-Right
Time Setting
Server Time:
Time Zone: GMT+08:00
Time zone:
GMT+08:00
NTP :
NTP Server :
198.123.30.132
Input Date & Time
Synchronize with PC's time
Date :
1/11/2007
Time :
12:26:44

ii、 User Management

Support three authorities: administrator (the highest), user, and anonymous user.

Default Username and Password: admin/ admin



a. Anonymous User Login：

Yes：Allow anonymous login.

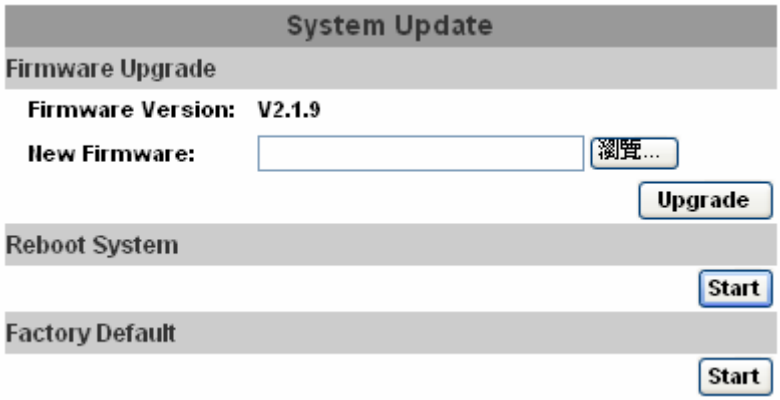
No：Require user name and password to login.

b. Add user：

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

c. Click on “Edit” or “Delete” to modify the user.

iii、 System update



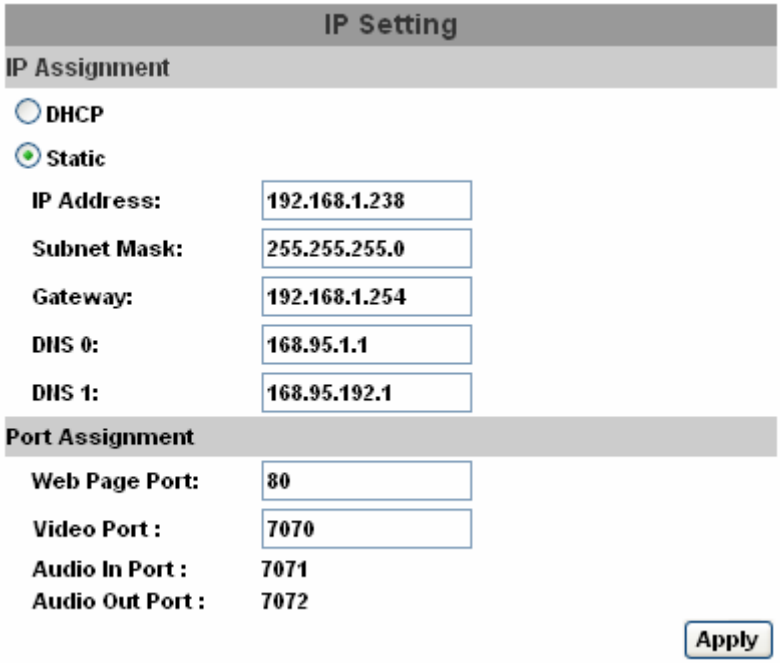
Update the firmware online. Click on “Browse…” to select the firmware. And then, click on “Upgrade.”

Other settings：
Reboot system：Reboot the video server.
Factory default：Recover all settings.

B.Network

i、 IP Setting

HVT-01HTW supports static IP and DHCP.



a. DHCP：Use Dynamic Host Configuration Protocol to get all network parameters automatically.

b. Static IP：Type IP address, subnet mask, gateway, and DNS.

c. DNS：

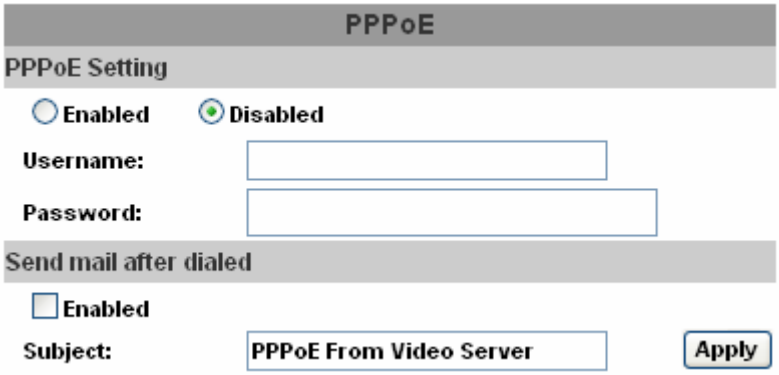
With DHCP, DNS will be assigned automatically.

Static IP: Based on the network environment.

d. Port：If the user uses the router, some ports have to be adjusted in case of conflict.

e. Click on “Apply” to save.

ii、 PPPoE

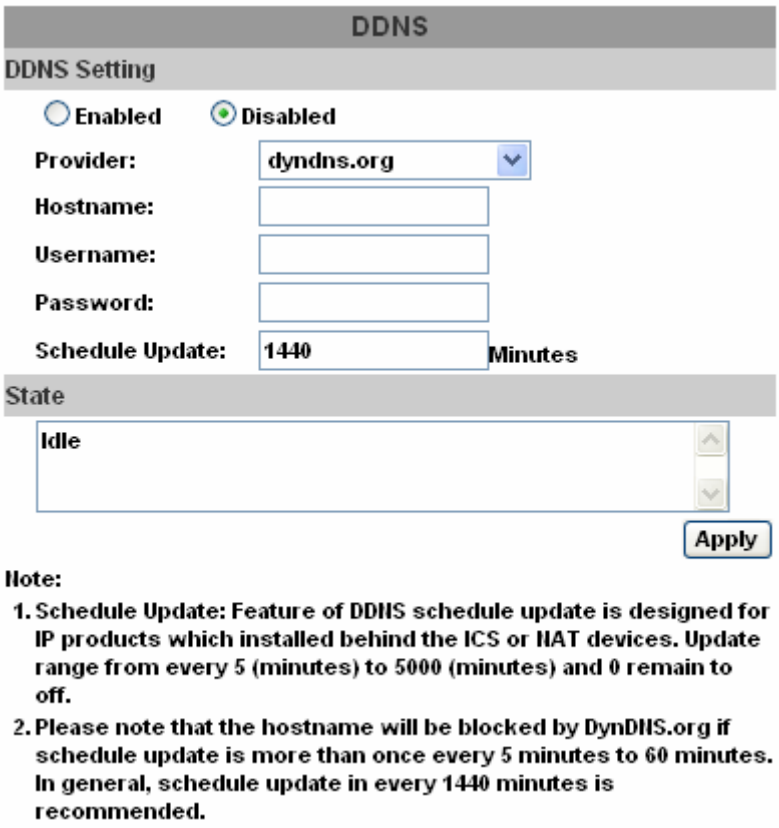


If the user wants to use ADSL, please select “Enabled”.
Username: username for ADSL connection.
Password: password for ADSL connection.
Send mail after dialed：After this function is enabled, it will send an email to a specific mail account. Default subject is “PPPoE from Video Server”. For the mail setting, please refer to IV. “Mail and FTP” settings. And, click on “Apply” to save.

iii、 DDNS

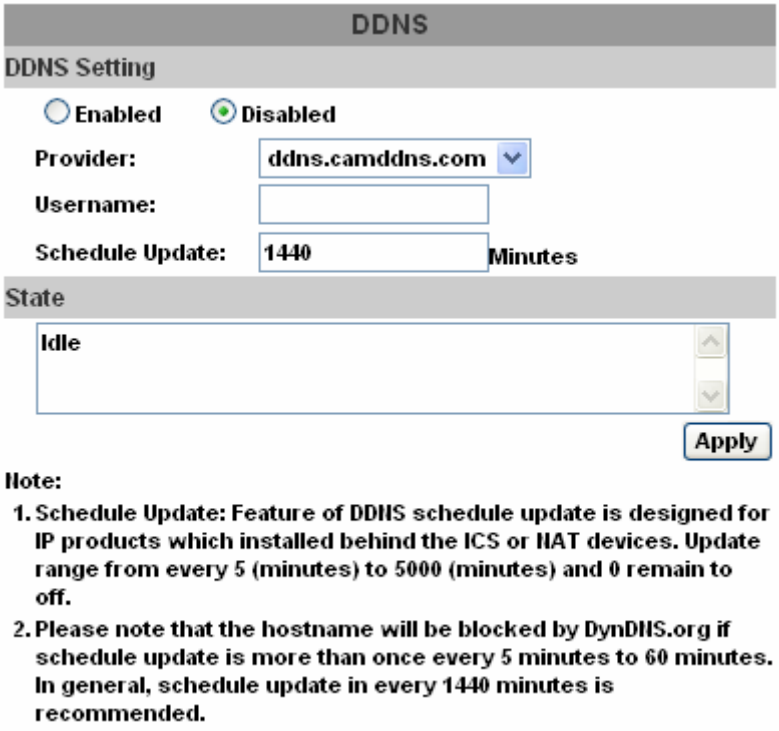
HVT-01HTW supports DDNS. It uses dynamic IP to redirect IP and connect with the video sever.
HVT-01HTW supports 3 kinds of DDNS severs, including dyndns.org, ddns.camddns.com, and ddns2.ydsdvr.com.

a. DynDNS；



1. DDNS Setting: Enable or Disable DDNS setting.
2. Input the DynDNS's host name, user name, and password.
3. Schedule Update: Default 1440 minutes.
   * dyndns.org: If the user's schedule update is too often, it will be blocked. Recommend the user to update once per day (1440 minutes per day).
4. Click on "Apply" to save.

b. Camddns：



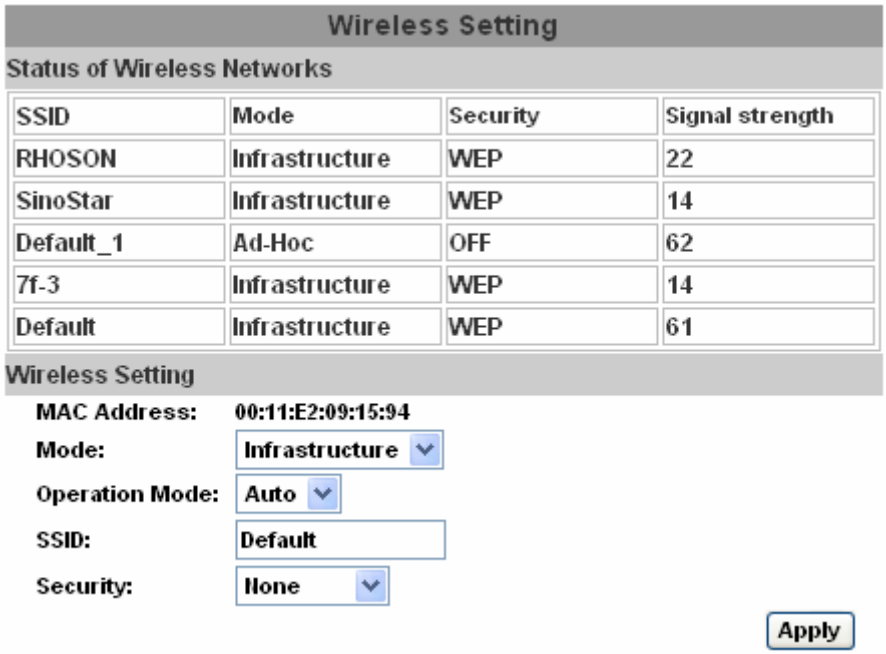
1. Input user name.
2. Schedule Update: Default 1440 minutes.
3. Click on “Apply” on save.

c. DDNS State：

1. Updating: Information updating.
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 another one.
5. Update Failed, please check your internet connection: Network connection failed.

iv、 Wireless Setting

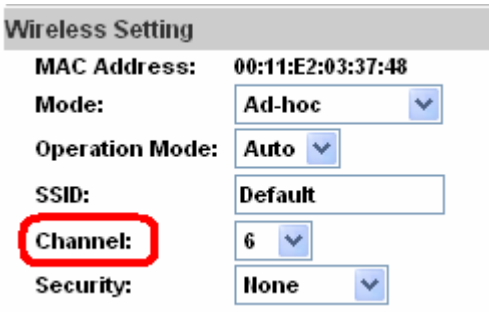
HVT-01HTW supports 802.11b/g wireless connection. **(Notice: While using wireless setting, the user has to unplug Ethernet cable because both use the same IP. If the user doesn't unplug Ethernet cable, wireless setting can not be executed).**



a. Status of Wireless Networks；
It can 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. When the user uses Ad-hoc mode, there is "Channel" to select. e.g. If one PC's channel is 1, the other's channel has to 1, too.

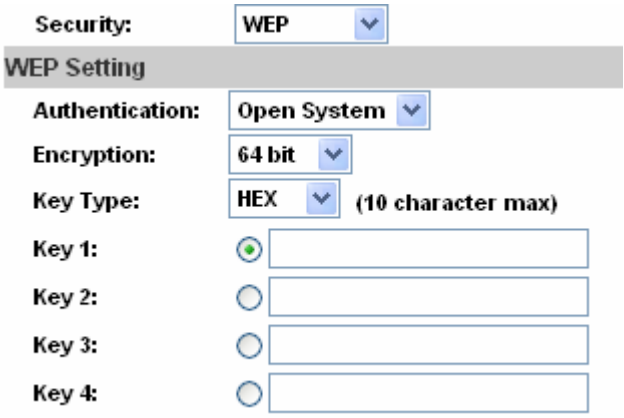


2. **SSID**：Based on AP setting.
3. **Channel**：This is only be used when the user selects Ad-hoc mode in order to avoid conflict.

4. **Security**：It supports “None”, “WEP”, “WPA-PSK” security encryption based on the setting of the Router.

『WEP』

- 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. And, when selecting ASCII, the user can input any character. (case [upper cases/ lower cases] sensitive).
- Key 1~4：Based on Key Type to input characters.



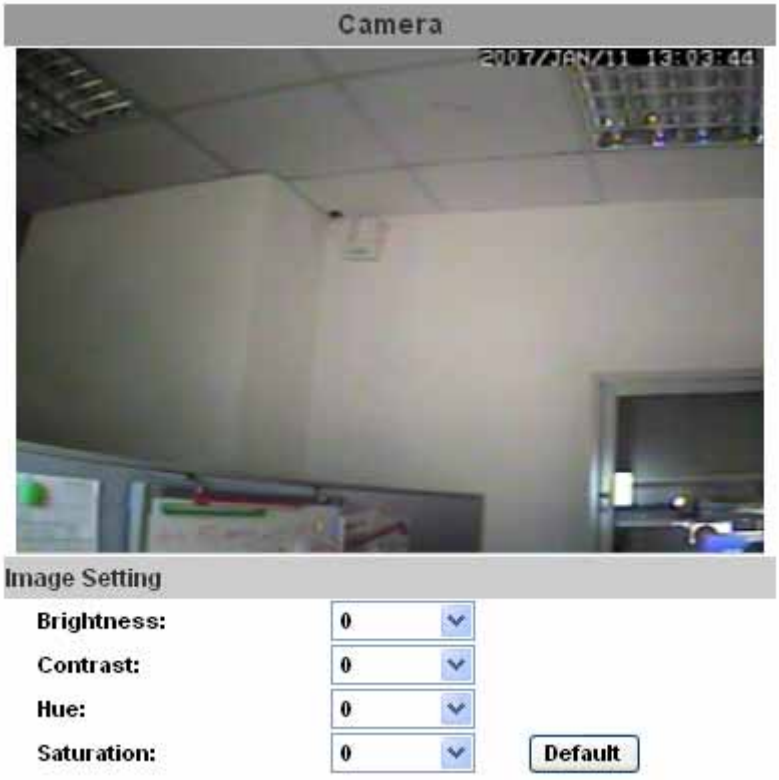
『WPA-PSK』：

- Encryption：There are TKIP and AES.

Pre-Shared Key：Allow any characters (case [upper cases/ lower cases] sensitive).

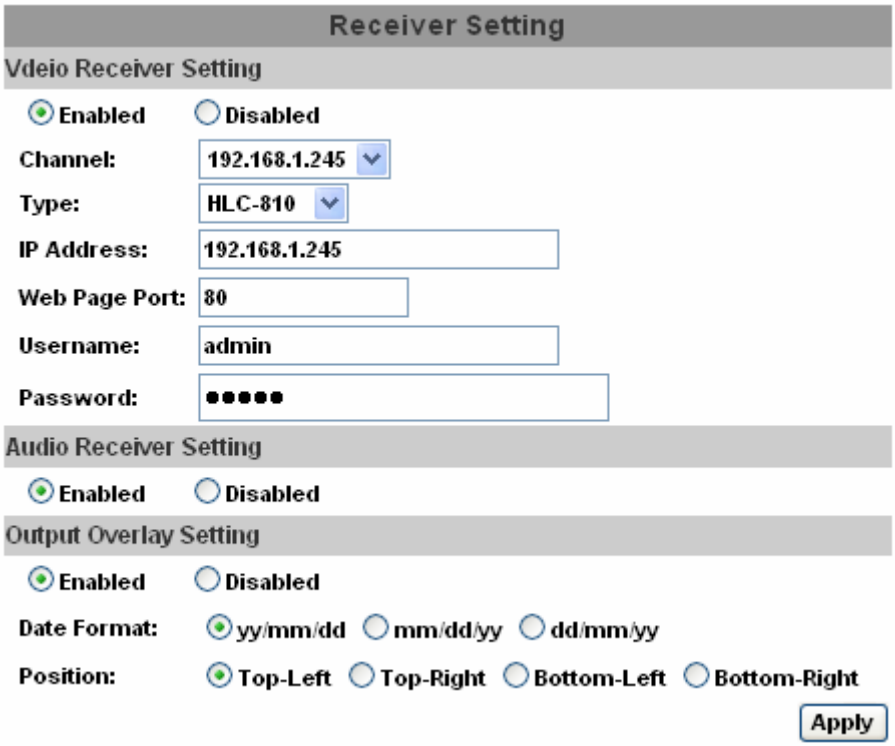
C.Multimedia

i、 Image Setting



The user can adjust “Brightness”, “Contrast”, “Hue”, and “Saturation”.

ii、 Receiver Setting



a. Video Receiver Setting：Enable or disable Video Receiver Setting.
   1. Channel：10 IP addresses of IP cameras.
   2. Type：10 IP camera names.
   3. IP Address：Add new IP address.
   4. Web Page Port：Default 80.
   5. Username：Default admin
   6. Password：default admin

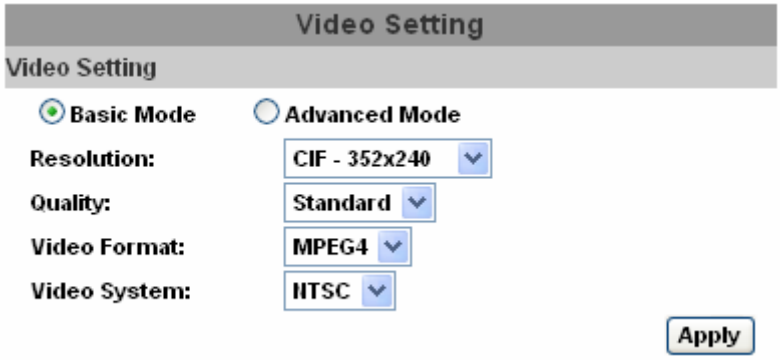
b. Audio Receiver Setting：Enable or disable Audio Receiver Setting.

c. Output Overlay Setting：Enable or disable Output Overlay Setting.
   1. Date Format：yy/mm/dd, mm/dd/yy, or dd/mm/yy.
   2. Position：Top-Left, Top-Right, Bottom-Left, or Bottom-Right.

d. Click on “Apply” to save.

iii、 Video Setting

a. Basic mode：



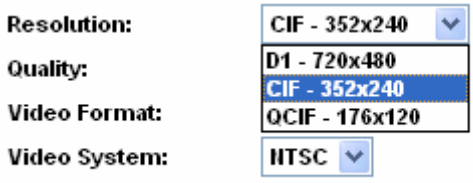
1. Resolution：

   There are 3 resolutions to be adjusted.

   D1 – 720X480

   CIF – 352X240

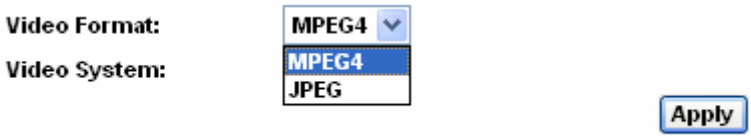
   QCIF – 176X120



2. Quality：

   There are 5 qualities to be adjusted, including Best, High, Standard, Medium, and Low. The higher the quality is, the bigger the files size is.

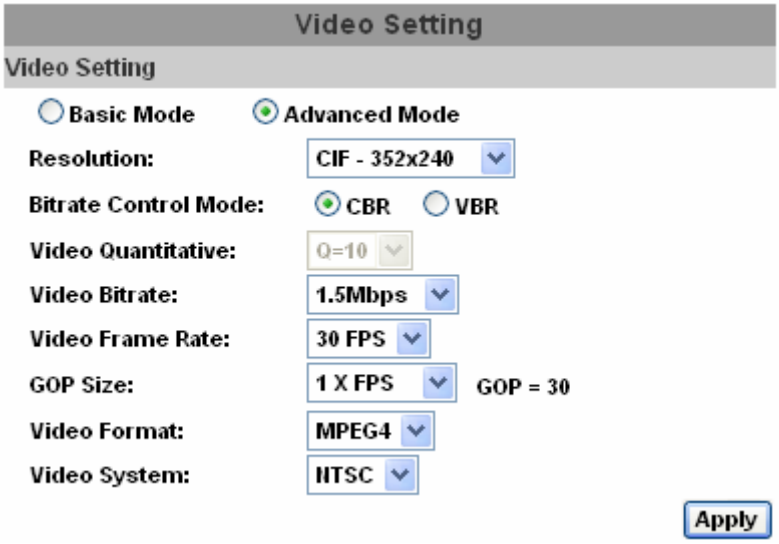
3. Video Format：MPEG4 or JPEG.



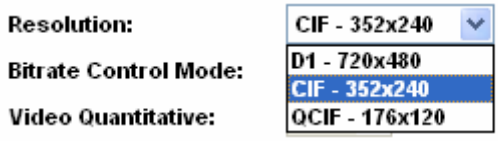
4. Video System：
   It supports NTSC and PAL.

5. Click on “Apply” to save.

b. Advanced Mode：



1. Resolution：
   There are 3 resolutions to be adjusted.
   D1 – 720X480
   CIF – 352X240
   QCIF – 176X120

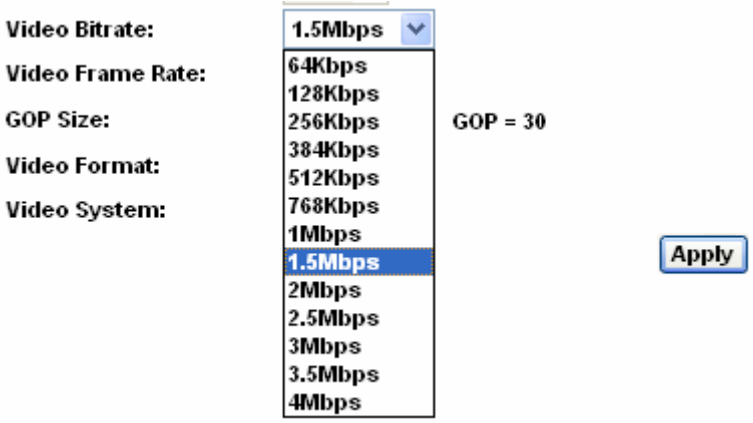


2. Bitrate Control Mode：
   There are CBR〔Constant Bit Rate〕and VBR〔Variable Bit Rate〕.
   CBR；64Kbps~4Mbps。

VBR：Q=4~30。

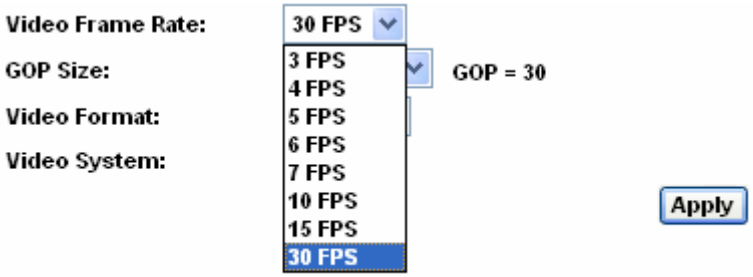
If the bandwidth is smaller than CBR or VBR setup, it will cause legging and incomplete images.

3. Video Bitrate：There are 13 Video Bitrates to select.



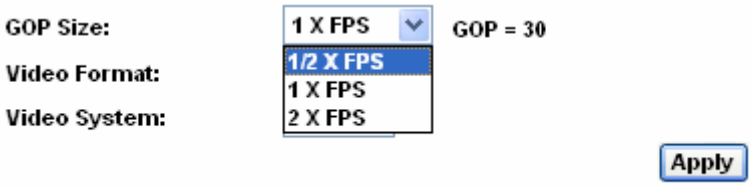
4. Video Frame Rate：

The video refreshing rate per second. The highest Frame Rate is 30/ FPS.

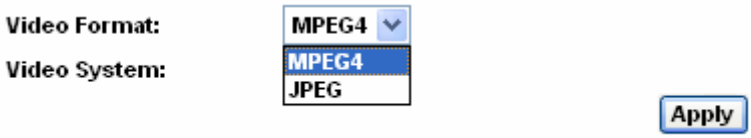


5. GOP：

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



6. Video Format：MPEG4 or JPEG.



7. Video System：It supports NTSC and PAL.

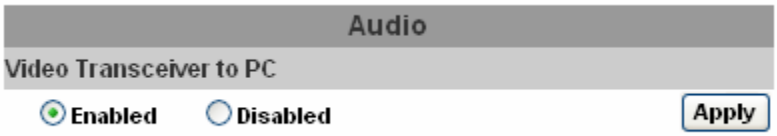
8. Click on “Apply” to save.

vi. Audio：

a. After HVT-01HT receiving the audio data from IP CAM’s microphone built-in via Internet or HVT-01HT’s microphone built-in, it can play the audio data by HVT-01HT’s Audio Out.

b. After HVT-01HT’s microphone built-in receiving the audio data, it can play the audio data by PC’s Audio Out via Internet.

To transfer the audio data from HVT-01HTW to local PC, please select “Enabled” to enable this function.

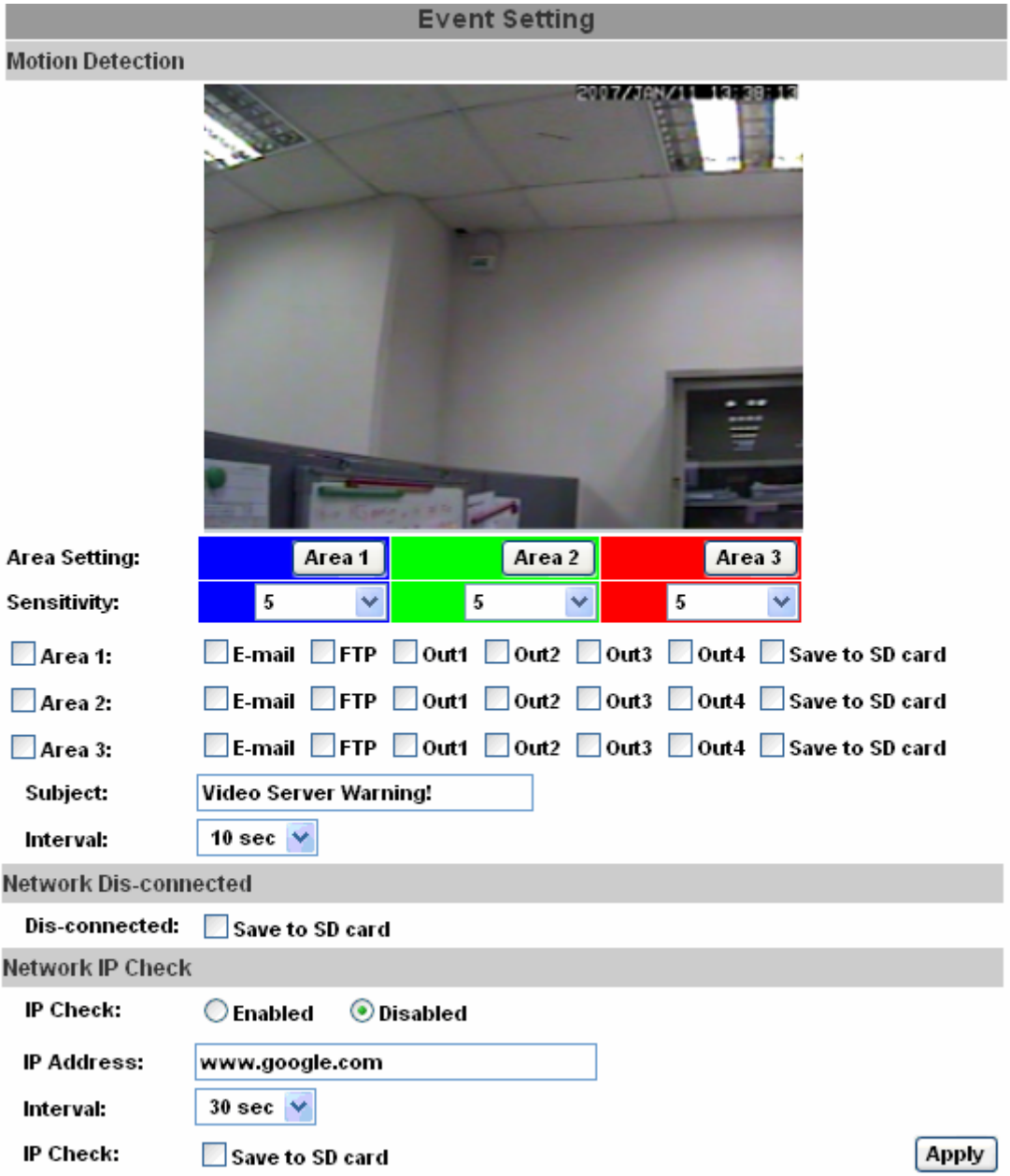


NOTE: HVT-01HTW can’t receive the audio data from PC.

D.Event

HVT-01HTW provides multiple event settings.

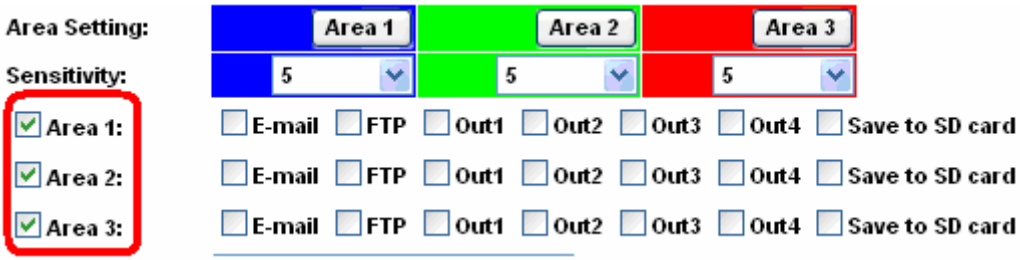
i、 Event Setting



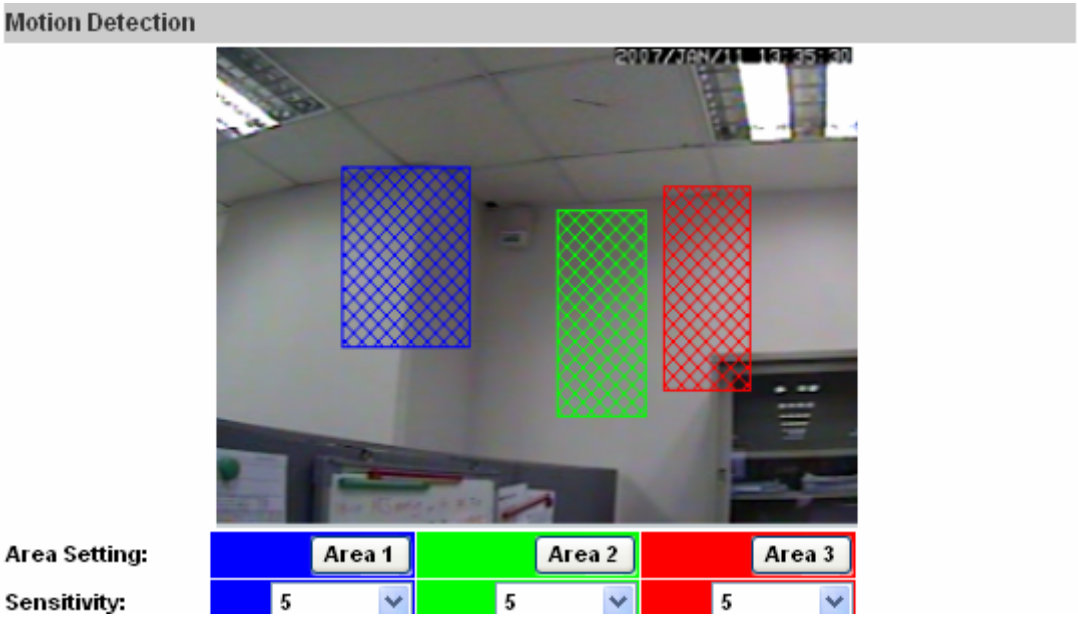
HVT-01HTW supports 3 motion detection areas. When the motion is triggered, it can send out the video to a certain email address or upload the video to FTP. If the user has a SD card, they can do SD card backup.

a. Motion Detection：

1. Put the check mark on each motion detection area to enable motion detection function.



2. Click on Area Setting's Area 1/ Area 2/ Area 3 and use the mouse to drag the area for motion detection areas. If the user wants to reset motion detection area, just click Area 1/ Area 2/ Area 3 and make new motion detection areas again.



3. Click on "Apply" to save.

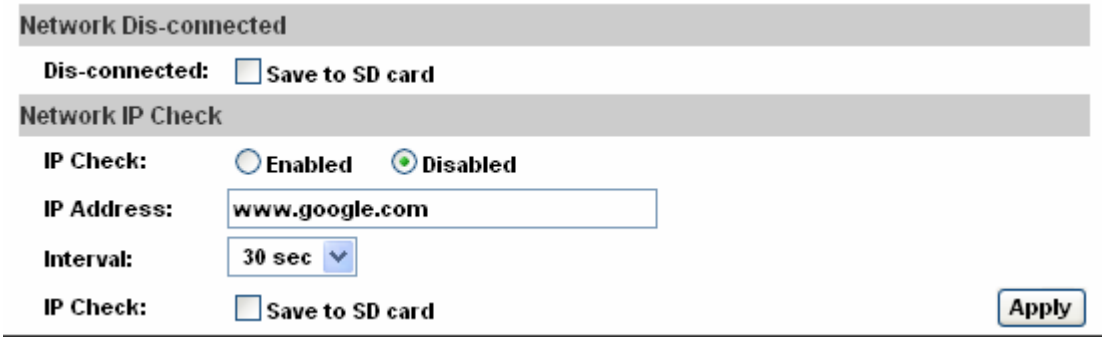
b. Network Dis-connected：Enable or disable to save the video files to SD card. When the network is down, it will save the video to local SD card. This function is only enabled in wire connection. Click on "Apply" to save.

c. Network IP Check：

1. IP Check： Enable or disable IP Check.
2. IP Address：default www.google.com

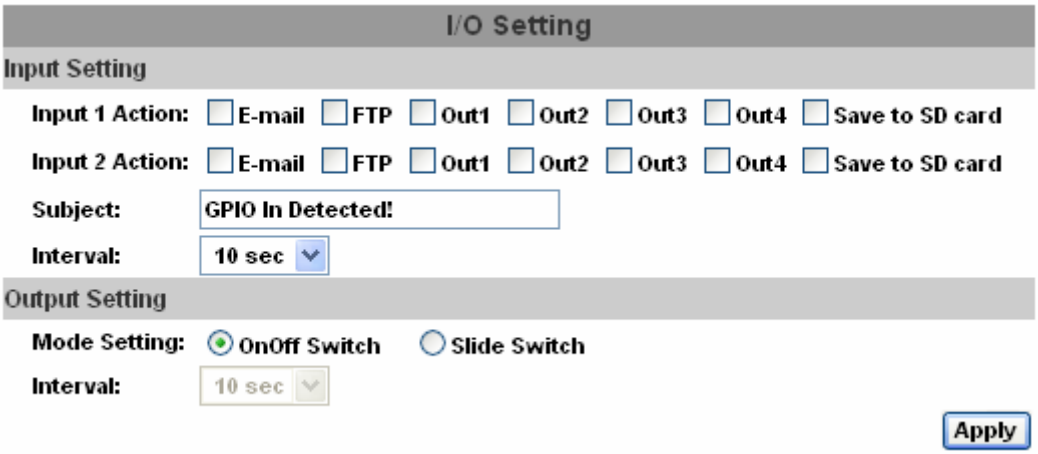
3. Interval：Default 30 sec.

4. IP Check：Enable or disable to save to SD card.



5. Click on “Apply” to save.

ii、 I/O Setting：



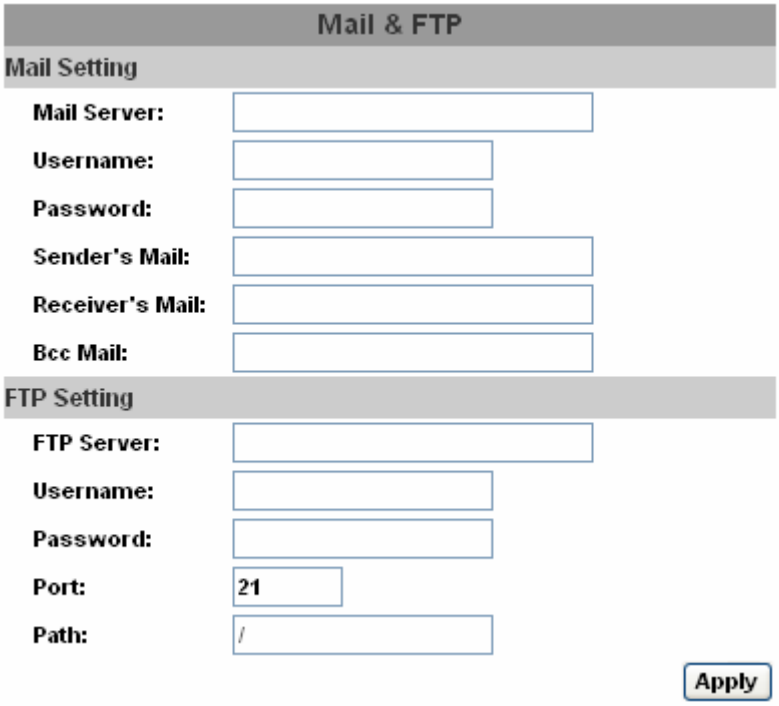
a. Input Setting：

1. Input 1 Action：E-mail/ FTP/ Out1/ Out2/ Out3/ Out4/ Save to SD card.
2. Input 2 Action：The same as Input 1.
3. Subject：Default GPIO In Detected!
4. Interval：Default 10 sec.
5. Click on “Apply” to save.

b. Output Setting：Mode Setting：OnOff Switch or Slide Switch. Click

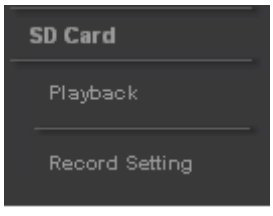
on “Apply” to save.

iii、 Mail and FTP



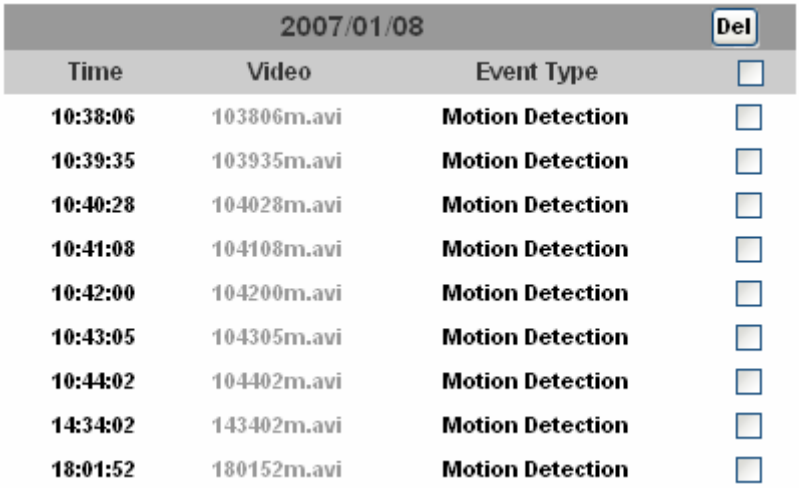
To send out the video via mail or FTP, please set up the configuration first.

iv、 SD card：Support Playback and Record Setting.



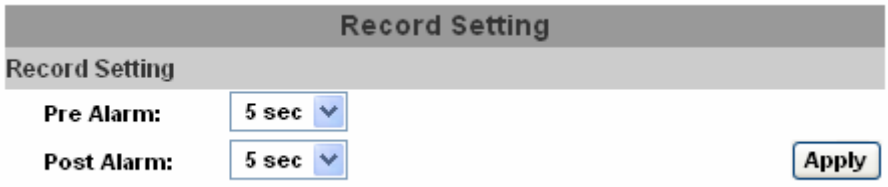
a. Playback：

1. It will show the capacity of SD card and the date of the video file. The user can choose a certain date to play back.



2. The video file is with AVI format. On the video, it will display the date of the video file and the event. The user can click on the video file to play back on Microsoft Media Player.
3. To delete the video, check the video file and click on Del . When the SD card is full, it will remove the oldest video automatically.

b. Record Setting：



The Pre/ Post Alarm are adjustable.

V. Package contents

1. Hunt HVT-01HTW Video Server + Receiver
2. Adaptor
3. Ethernet Cable
4. CD (user manual, IP installation utility).