

EH6000H series

EH6108H⁺/EH6216H⁺

User's Manual



FCC NOTICE (Class B)



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.

Federal Communications Commission Statement

NOTE- 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 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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or 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/television technician for help.

European Community Compliance Statement (Class B)



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2004/108/EC.

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Battery Safety Information

- Store the batteries in a cool dry place.
- Do not dispose of used batteries in domestic waste. Dispose of batteries at special collection points or return to point of sale if applies.
- Remove the batteries during long periods of non-use. Always remove exhausted batteries from the remote control. Battery leakage and corrosion can damage this remote control, dispose of batteries safely.
- Do not mix old and new batteries.
- Do not mix different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
- Do not dispose of batteries in a fire. The batteries may explode or leak.
- Never short circuit the battery terminals.

**WARNING**

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

**CAUTION**

IF THERE IS ANY DAMAGE, SHORTAGE OR INAPPROPRIATE ITEM IN THE PACKAGE, PLEASE CONTACT WITH YOUR LOCAL DEALER. WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT MODIFICATION

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Chapter 1 Introduction

1.1 Package Content

1.1.1 EH6108H⁺



- (1) EH6108H⁺ DVR unit



EH6108H⁺ has 2 models; one is come with DVD-ROM and another one is come with HDD tray.

- (2) USB optical mouse
- (3) Quick User Guide
- (4) Software CD (User Manual included)
- (5) Screws for HDD installation
- (6) Power adaptor
- (7) Power Cord
- * The power cord varies depending on the standard power outlet of the country where it is sold.
- (8) SATA cables
- (9) Audio cable(Red cable: 8CH audio in/White cable: 1CH audio out/Black cable: 1CH MIC in)

1.1.2 EH6216H⁺



(1) EH6216H⁺ DVR unit

i EH6216H⁺ has 2 models; one is with DVD-ROM and another one is with HDD tray.

(2) USB optical mouse

(3) Quick User Guide

(4) Software CD (User Manual included)

(5) Screws for HDD installation

(6) Power adaptor

(7) Power Cord

* The power cord varies depending on the standard power outlet of the country where it is sold.

(8) SATA cables

(9) Audio cable (Red cable: 16CH audio in/White cable: 1CH audio out/Black cable: 1CH MIC in)

1.1.3 Optional Accessories



Remote controller



16CH Loop out cable



SATA cable for hard disk installation



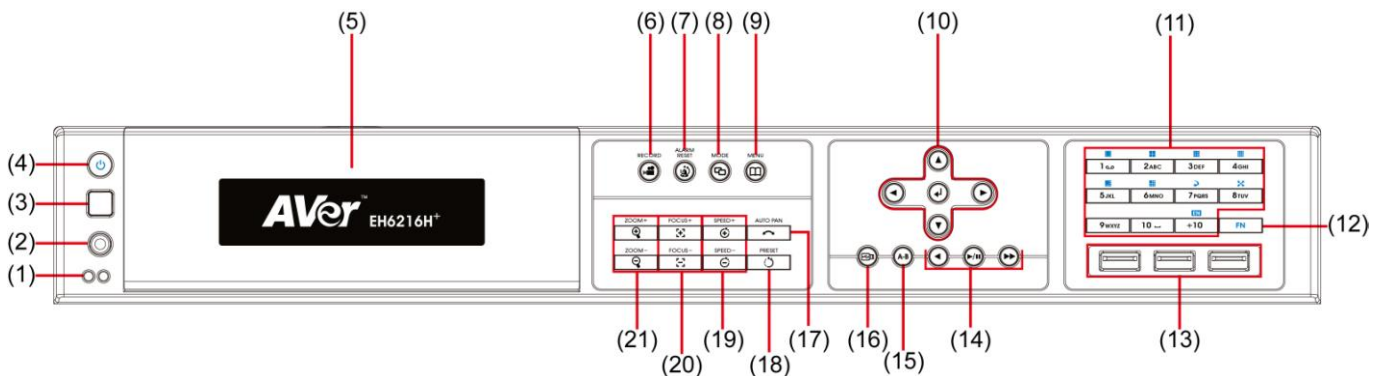
Rack ears













IR extended cable

1.2 Front Panel

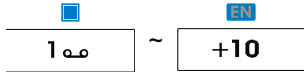
1.2.1 EH6108H⁺/EH6216H⁺



Name	Function
(1) System indicator	<ul style="list-style-type: none"> - Power indicator (left): System power status indicators. Lights when the system is running. - Record indicator (right): When DVR system is recording, the light will keep flashing.
(2) IR Sensor port	For extended IR sensor cable connection(optional)
(3) IR Sensor	Receive signal from the remote controller to operate the DVR unit
(4) Power	Power ON/OFF DVR unit
(5) DVD-ROM	To backup the recorded file to DVD±R/DVD±RW disk  CD-R/RW is not supported.
(6) 	To start recording video
(7) 	To reset alarm status
(8) 	Switch to playback mode or preview mode
(9) 	Call out system setup menu on preview mode
(10) Control Buttons	 Move to left direction on cursor control To move PTZ camera lens to left in PTZ mode
	 Move to right direction on cursor control To move PTZ camera lens to right in PTZ mode
	 Move to up direction on cursor control To move PTZ camera lens to up
	 Move to down direction on cursor control To move PTZ camera lens to down
	 Confirm or make a selection

Name	Function
------	----------

(11) Number buttons

















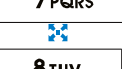


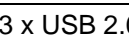
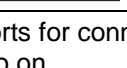
















- Channel camera selection number in playback and preview mode. For the channel over 10, press **+10**, then press **1** ~ **6MNO**
- Press **FN**, and then press **+10** can switch to character mode.
- Press **FN** button can switch to different screen display modes (**1** ~ **6MNO**).
- Press **PRESET** and number button, to set the preset position in the PTZ mode.

- Switch to character mode.
- Press **FN** to switch to FN mode (The word “**FN**” is displayed in the left bottom corner on screen). Then, press **+10** to enter EN mode (The word “**EN**” is displayed in the left bottom corner on screen). User can press the character button and press rapidly to find the character that wants to enter.



- 1** : backward/delete button
- 2ABC** : abcABC
- 3DEF** : edfDEF
- 4GHI** : ghiGHI
- 5JKL** : jklJKL
- 6MNO** : mnoMNO
- 7PQRS** : pqrPQRS
- 8TUV** : tuvTUV
- 9WXYZ** : wxyzWXYZ
- 10** : space button

Name	Function
(12) 	<p>A functional key for multiple system control. Press  to switch to FN mode (The word "FN" will show up in the left bottom corner on screen). Press  button again to exit FN mode (The "X" will show up in the left bottom corner on screen).</p> <p> +  : Switch to single screen display mode</p> <p> +  : Switch to QUAD display mode</p> <p> +  : Switch to 9 split screen display mode</p> <p> +  : Switch to 16 split screen display mode</p> <p> +  : Switch to one single and 8 split screen display mode</p> <p> +  : Switch to one single and 13 split screen display mode</p> <p> +  : Enable/disable auto scan</p> <p> +  : Switch to full screen mode</p> <p> +  : Switch to characters mode</p>
(13) USB 2.0 port	<p>3 x USB 2.0 ports for connecting USB device, ex: USB pen drive, external hard disk, mouse...and so on.</p> <hr/> <p> The USB backup device must be in FAT32 format.</p>
(14) Playback buttons	<p> To playback video at faster speed</p> <hr/> <p> To start playback To pause playback</p> <hr/> <p> To rewind the recorded video</p>
(15) 	Set a video segment to playback repeat (see Chapter 1.2.1.1).
(16) 	To backup recorded video file to USB storage device(pen drive or external hard disk) and DVD-ROM.
(17) Auto Pan	<p>AUTO PAN</p> <p> To enable auto pan function</p>
(18) Preset	<p>PRESET</p> <p>Adjust the PTZ lens to the position that user wants. And then, press  with number button to setup the PTZ camera preset position.</p>
(19) Speed + / Speed -	<p>SPEED+</p> <p> To speed up movement of PTZ camera lens</p> <p>SPEED-</p> <p> To speed down movement of PTZ camera lens</p>
(20) Focus + / Focus -	<p>FOCUS+</p> <p> To focus in PTZ camera lens</p> <p>FOCUS-</p> <p> To focus out PTZ camera lens</p>

Name	Function
(21) Zoom + / Zoom -	ZOOM+  To zoom in view of PTZ camera lens
	ZOOM-  To zoom out view of PTZ camera lens

1.2.1.1 To Cut and Save the Portion of the Recorded Video

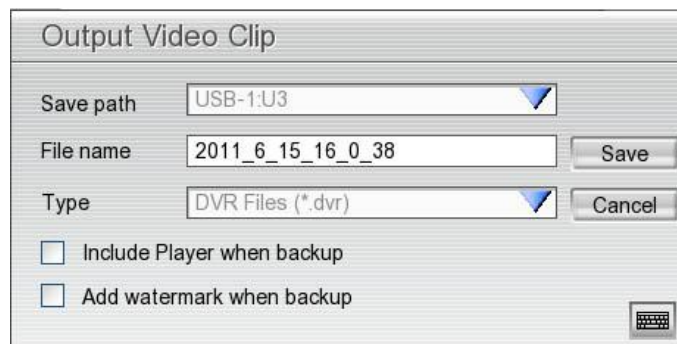
1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **A-B** to set the begin mark.



2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **A-B** to set the end mark. To cancel segmentation, click **A-B** button again.



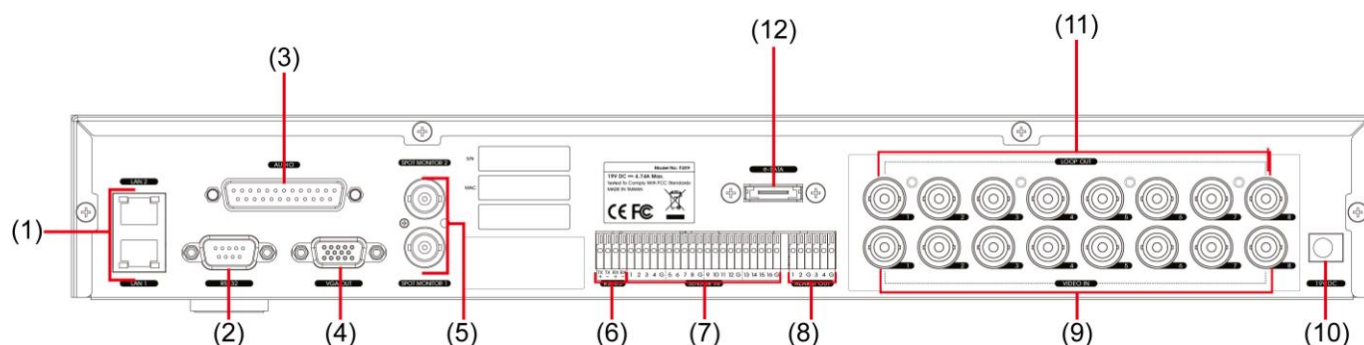
3. Click **Export** button and select **Output Video Clip** to save the wanted portion. User can rename the **File name**. Mark **“Include Player when backup”** option to include a Qplayer application in backup file for playback backup video clip later on. Mark **“Add watermark when backup”** option to have watermark protection on backup file and user can have watermark exam on Qplayer application.



4. Click **Save** to save the video clip. User should see a folder named **“backup”** on your USB storage device.
5. To playback the backup video clip, using Qplayer application that is included in backup folder.

1.3 Back Panel

1.3.1 EH6108H+

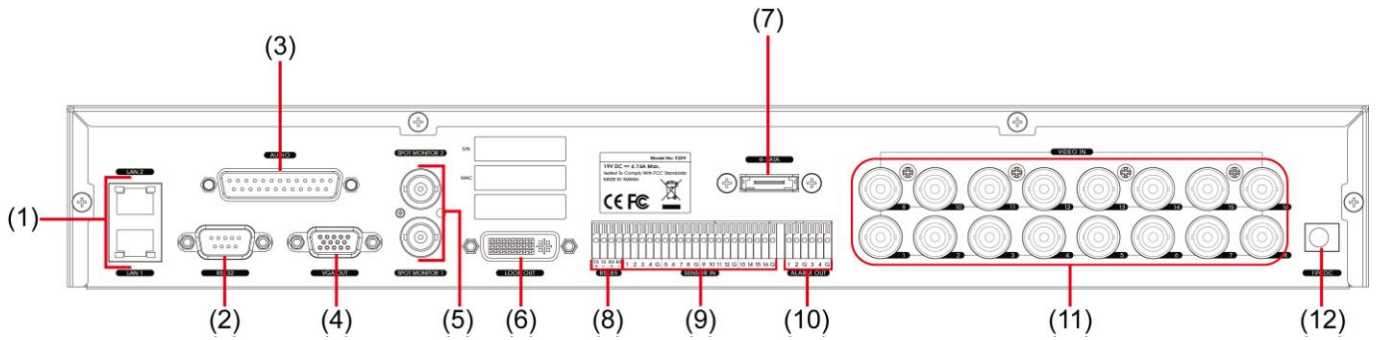


Name	Function
(1) LAN 1/LAN 2 port	For Gigabit Ethernet connection
(2) RS232 port	For POS device connection
(3) Audio port	Input/output audio signal to audio input/output device. - Audio input: 8 channels - Audio output: 1 channel - Microphone input: 1 channel
(4) VGA Out	Output the video signal to a CRT or LCD monitor
(5) SPOT Monitor 1/2	Output the analog video signal to SPOT monitor when receive the alarm events
(6) RS485	For analog PTZ camera connection (also see Chapter 1.4.3).
(7) Sensor In	Support up to 16 sensor devices
(8) Relay Out	Support 4 relay devices (Relay: 1A @ 125V AC/30V DC).
(9) CH1~ 08	Input the video camera signal and display it on channel 1~ 08.
(10) Video Loop Out	Output the analog video signal to a CCTV monitor.
(11) 19V DC connector	Connect the power adaptor into this port.
(12) eSATA port	For connecting with HDD or RAID.

i The audio input and output device has its own power supply is necessary.

i When connect eSATA device, please make sure the DVR has installed hard disk to reduce abnormal situation occurs.

1.3.2 EH6216H⁺



Name	Function
(1) LAN 1/LAN 2 port	For Gigabit Ethernet connection
(2) RS232 port	For POS device connection
(3) Audio port	Input/output audio signal to audio input/output device. - Audio input: 16 channels - Audio output: 1 channel - Microphone input: 1 channel
i The audio input and output device has its own power supply is necessary.	
(4) VGA Out	Output the video signal to a CRT or LCD monitor
(5) SPOT Monitor 1/2	Output the analog video signal to SPOT monitor when receive the alarm events
(6) Video Loop Out	Output the analog video signal to a CCTV monitor.
(7) eSATA port	For connecting with HDD or RAID.
i When connect eSATA device, please make sure the DVR has installed hard disk to reduce abnormal situation occurs.	
(8) RS485	For analog PTZ camera connection (also see Chapter 1.4.3).
(9) Sensor In	Support up to 16 sensor devices
(10) Relay Out	Support 4 relay devices (Relay: 1A @ 125V AC/30V DC).
(11) CH1~ 16	Input the video camera signal and display it on channel 1~ 16.
(12) 19V DC connector	Connect the power adaptor into this port.

1.4 Setting Up the DVR Unit

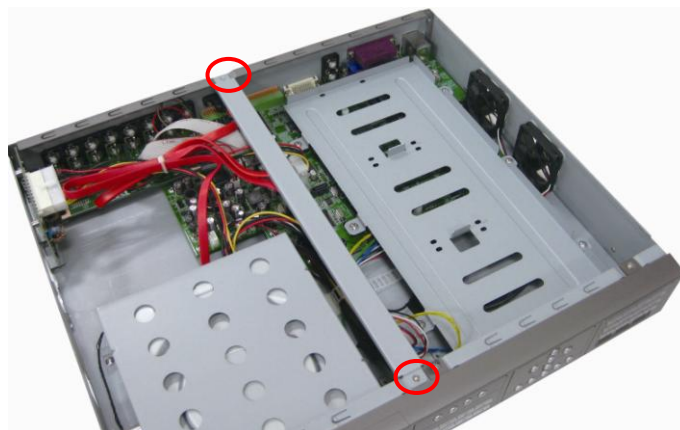
1.4.1 Installing the Hard Disks

i The external USB hard disk only supports on file backup. Please **do not** use the external USB hard disk for recording purpose.

User can install up to 3 SATA hard disks inside the DVR unit if it is necessary.

Follow the illustrated instructions below to install the hard disk:

1. Loosen all screws (2 side and back) and push the cover backward and lift.
2. Loosen the screws of holder in order to take out the hard disk rack.



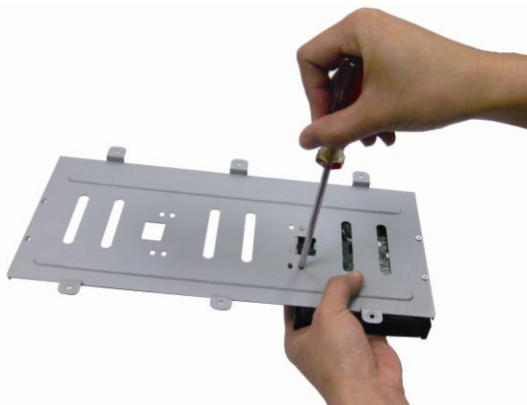
3. Loosen all the screws of hard disk plate.



4. The hard disk plate can be installed 3 hard disks. User can choose the position and place the hard disk on it.

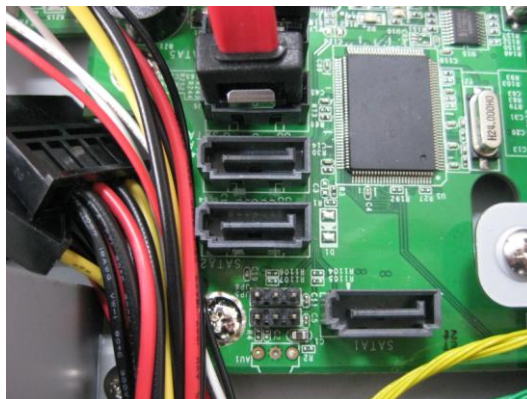


- Turn the plate and hard disk over carefully and screw the hard disk on the plate. If hard disk cannot match to the screw hole, then, you may adjust the hard disk position to match the screw hole.



[Note]

- SATA 5 is for DVD player.
- SATA 4 is for e-SATA interface
- 1st HDD is suggested to install on SATA 6.
- The number of SATA connector is displayed nearby SATA connector.



- Plug the power cable and SATA cable into hard disk. And then, screw the plate inside the DVR unit.

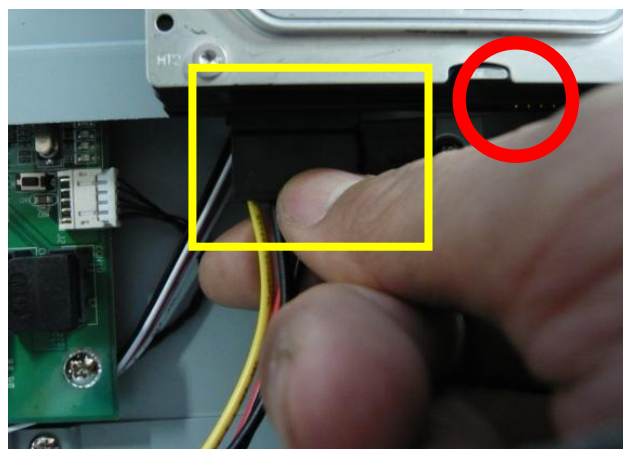
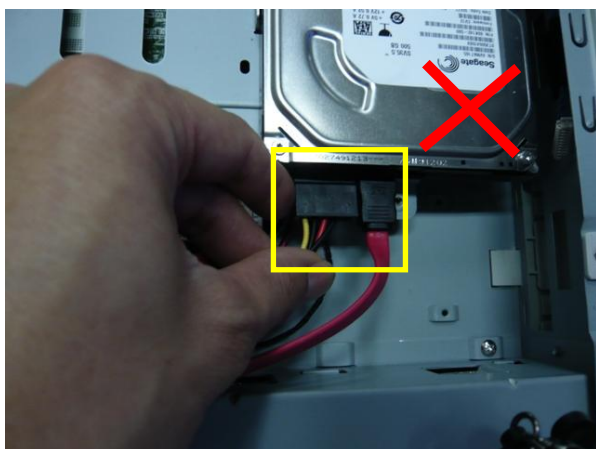


- Plug the SATA cable into the left side hard disk.



i User can leave un-plug the SATA cable of the left side HDD for screwing plate inside the DVR more easily later.

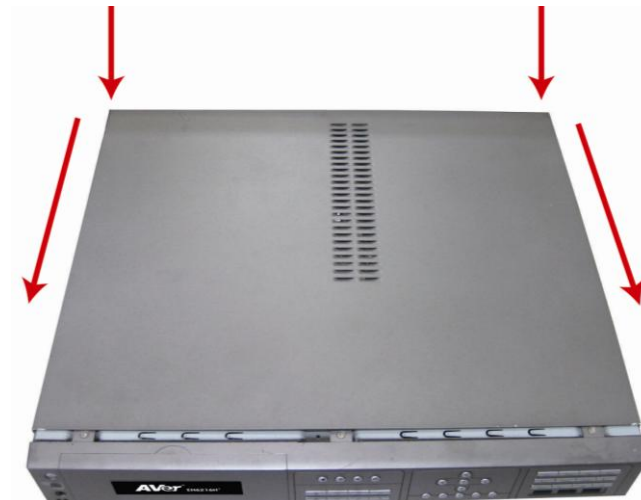
! When user remove power cable from hard disk, please **DO NOT** pull the power cable straight way. Please pull out the power cable by moving power connector to left and right side and slowly pull out the power cable from hard disk.



9. Screw the holder on the DVR unit.



10. Push the cover forward and secure the cover.



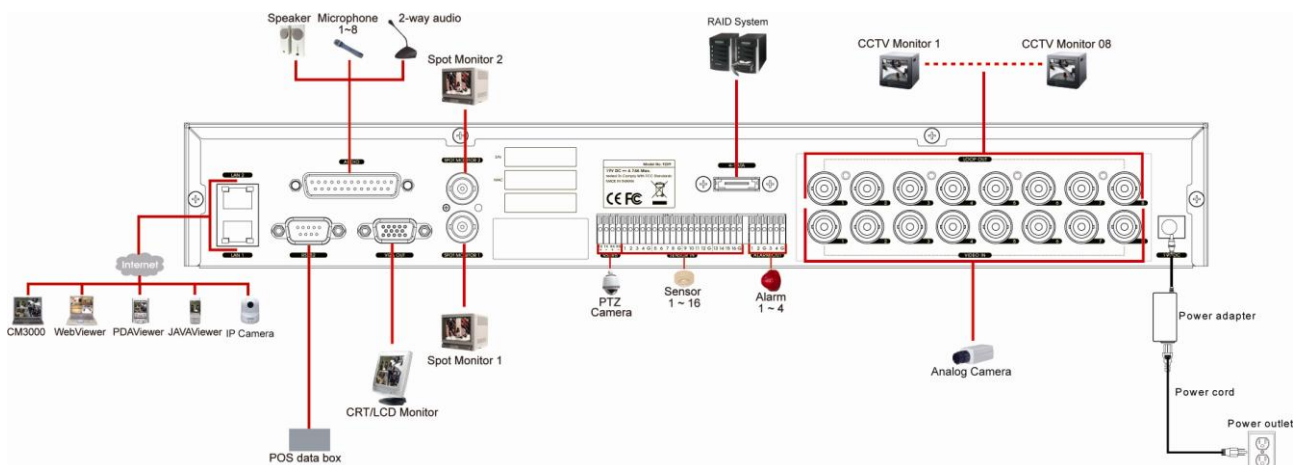
11. You may now connect all the cables and power on the DVR unit.

1.4.2 Connecting Devices

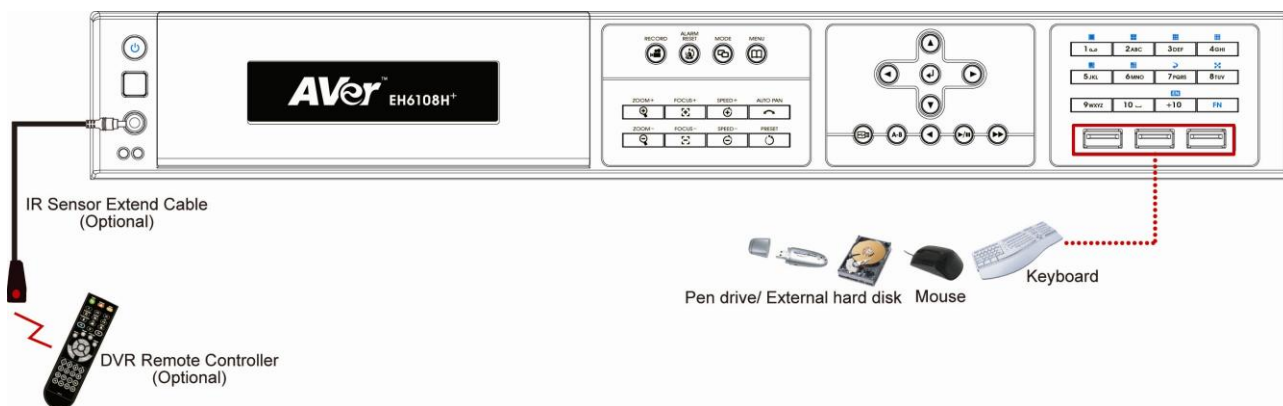
1.4.2.1 EH6108H⁺

The back panel of the DVR unit, user can connect up to 8 cameras in combination of analog and IP camera. The DVR unit also can connect 16 sensor devices, 4 alarm devices, and output video to a TV or CRT/LCD monitor.

Follow the illustration below to make the connection:



For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video. Follow the illustration below to make the connection:



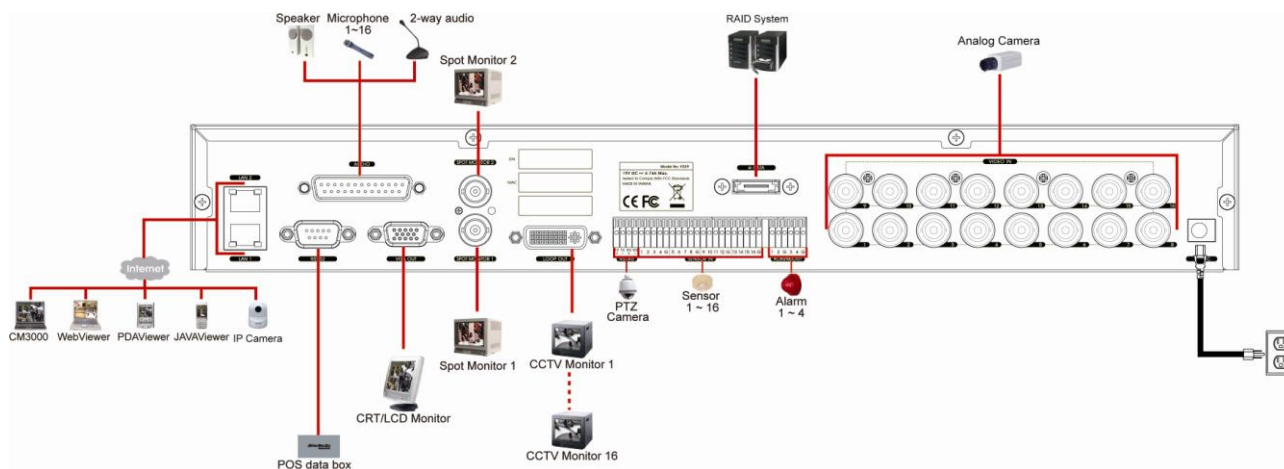
Pen drive and external hard disk must be FAT32 format.



- All connected devices have its own power supply is necessary.
- DVR unit can connect 16 cameras in analog and IP cameras combo.

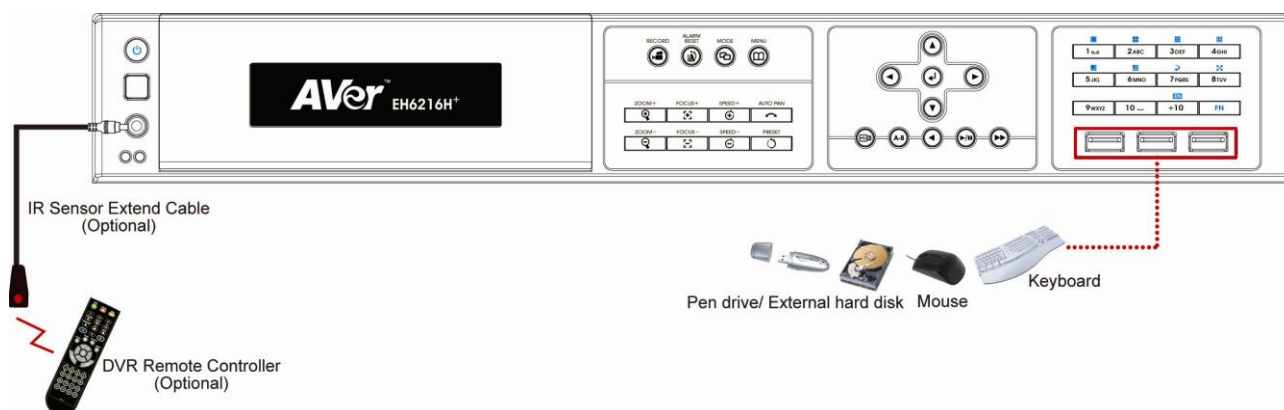
1.4.2.2 EH6216H+

The back panel of the DVR unit, user can connect up to 16 cameras in combination of analog and IP camera. The DVR unit also can connect 16 sensor devices, 4 alarm devices, and output video to a TV or CRT/LCD monitor. Follow the illustration below to make the connection:



For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video.

Follow the illustration below to make the connection:



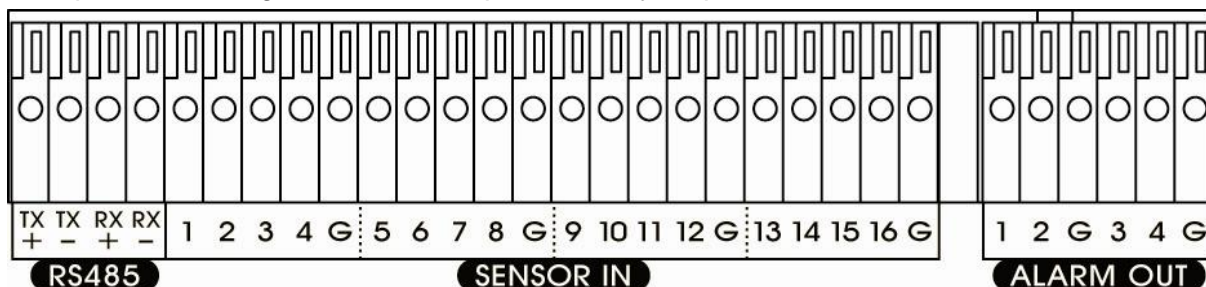
Pen drive and external hard disk must be FAT32 format.



- All connected devices have its own power supply is necessary.
- DVR unit can connect 16 cameras in analog and IP cameras combo.

1.4.3 Sensor, Relay and RS485 pinhole allocation

The Sensor and Alarm enable you to connect 16 sensor inputs, 4 relay outputs and PTZ cameras. Just connect the external sensor, relay, and PTZ camera pin directly to the pinhole. Check the table below and locate which pinhole is assigned to sensor input and relay output.



1.4.3.1 Sensor Pin Definition

Sensor Pin #	Definition	Sensor Pin #	Definition
1	Sensor 1 signal	9	Sensor 9 signal
2	Sensor 2 signal	10	Sensor 10 signal
3	Sensor 3 signal	11	Sensor 11 signal
4	Sensor 4 signal	12	Sensor 12 signal
G	Sensor ground	G	Sensor ground
5	Sensor 5 signal	13	Sensor 13 signal
6	Sensor 6 signal	14	Sensor 14 signal
7	Sensor 7 signal	15	Sensor 15 signal
8	Sensor 8 signal	16	Sensor 16 signal
G	Sensor ground	G	Sensor ground

1.4.3.2 Relay Pin Definition

Relay Pin #	Definition
1	Relay signal(N/O)
2	Relay signal(N/O)
G	Relay ground
3	Relay signal(N/O)
4	Relay signal(N/O)
G	Relay ground

1.4.3.3 RS485 Pin Definition

When connect PTZ camera through RS485 interface, please refer to the following pin definition to connect the DVR and PTZ.

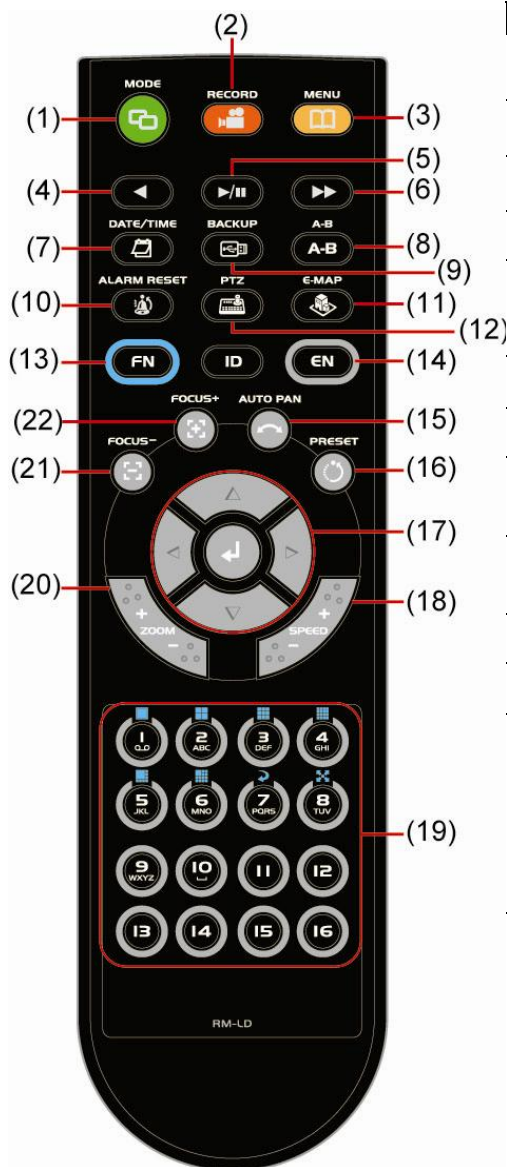
Pin #	DVR site	PTZ site
TX+	RS485 TX+ signal	RS485 RX+ signal
TX-	RS485 TX- signal	RS485 RX- signal
RX+	RS485 RX+ signal	RS485 TX+ signal
RX-	RS485 RX- signal	RS485 TX- signal



If user uses the 2 wires for the PTZ camera connection, please connect to the RS-485 TX+ and TX- of the DVR site.









































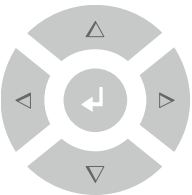


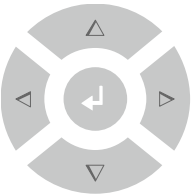




1.5 Familiarizing the Remote Controller Buttons

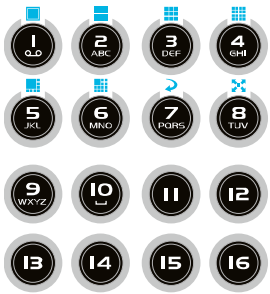





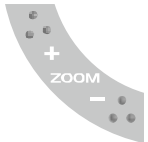



Use the Remote controller to operate the DVR unit.



Name	Function
(1)	Switch to playback mode
(2)	Start recording video
(3)	To call out system setup menu
(4)	To rewind the recorded video
(5)	To start playback To pause playback
(6)	To playback video at faster speed
(7)	To select the time and date of playback file
(8) A-B	Set a playing recorded video from A point to B point segment and repeat playing on surveillance screen
(9)	To backup recorded video file to USB storage device (pen drive or external hard disk) and DVD-ROM.
(10)	To reset alarm status
(11)	Switch to Emap mode
(12)	Switch to PTZ mode. Press + channel number (~) can switch to PTZ control mode if the selected camera is a PTZ camera and the PTZ function is enabled.

Name	Function
(13) FN	<p>A functional key for multiple system control</p> <ul style="list-style-type: none"> - Press FN to enable FN modes (The word "FN" will show up in the left bottom corner on screen). - To exit FN modes, press FN again (The "X" will show up in the left bottom corner on screen). <p>FN + : Switch to single screen display mode</p> <p>FN + : Switch to QUAD display mode</p> <p>FN + : Switch to 9 split screen display mode</p> <p>FN + : Switch to 16 split screen display mode</p>

Name	Function										
(13) FN	<p>FN +  : Switch to one single and 7 + 1 split screen display mode</p> <p>FN +  : Switch to one single and 12 + 1 split screen display mode</p> <p>FN +  : Enable/disable auto scan</p> <p>FN +  : Switch to full screen</p> <hr/> <p> FN +  ~  doesn't have any functions.</p> <hr/> <p>- Switch to character mode.</p> <p>- Press EN to enter EN mode (The word "EN" will show up in the left bottom corner on screen). User can press the character button and press rapidly to find the character that wants to enter. Press EN button again to exit EN mode (The "X" will show up in the left bottom corner on screen).</p>										
(14) EN	<table border="0"> <tr> <td> : backward/delete button</td> <td> : mnoMNO</td> </tr> <tr> <td> : abcABC</td> <td> : pqrsPQRS</td> </tr> <tr> <td> : defDEF</td> <td> : tuvTUV</td> </tr> <tr> <td> : ghiGHI</td> <td> : xyzWXYZ</td> </tr> <tr> <td> : jklJKL</td> <td> : space button</td> </tr> </table>	 : backward/delete button	 : mnoMNO	 : abcABC	 : pqrsPQRS	 : defDEF	 : tuvTUV	 : ghiGHI	 : xyzWXYZ	 : jklJKL	 : space button
 : backward/delete button	 : mnoMNO										
 : abcABC	 : pqrsPQRS										
 : defDEF	 : tuvTUV										
 : ghiGHI	 : xyzWXYZ										
 : jklJKL	 : space button										
(15) 	To enable auto pan function										
(16) 	To move the PTZ camera to the preset position. Press  + number button.										
(17) 	<p> To move PTZ camera to left</p> <p> To move PTZ camera to right</p>										
(17) 	<p> To move PTZ camera to up</p> <p> To move PTZ camera to down</p> <p> Confirm or make a selection</p>										
(18) 	<p>Speed + : To speed up movement of PTZ camera lens</p> <p>Speed - :To speed down movement of PTZ camera lens</p>										

Name	Function
(19) 	 ~  - As a number key for entering password in playback and preview mode - Channel camera selection number in playback and preview mode <hr/>  As a preset position with  at PTZ control mode <hr/>  With FN button can switch to different screen display modes and enable auto scan and full screen. (see also Chapter 1.7 #(16))
(20) 	Zoom + : To zoom in view of PTZ camera <hr/> Zoom - :To zoom out view of PTZ camera
(21) 	To focus out PTZ camera lens
(22) 	To focus in PTZ camera lens
 The ID button doesn't support at this version.	

Chapter 2 Using the DVR Software

2.1 The Way to Operate DVR

There are three ways can be managed the DVR unit:

1. Using mouse and keyboard

Connecting the mouse and keyboard through USB interface, user can manage the DVR unit easily. For the first time using DVR unit, mouse and keyboard is the best way to set up all DVR relevant configurations.

2. Using Remote Controller(Optional accessory)

After DVR unit has been setup, user can use remote controller to preview, playback, backup, reset alarm, output video and so on functions.

3. Using Front Panel button

It's an optional way to operate DVR unit. Front panel button function acts as same as remote control.



For the first time using DVR unit, using mouse and keyboard to setup all configurations.

2.1.1 First Time Using the DVR Unit

1. Connect the mouse and keyboard to DVR unit (through USB interface).
2. Power on the DVR unit.
3. For security purpose, the DVR system would require you to enter User ID and Password before it can be accessed. (If this is the first time, enter the default ID [**admin**] and password [**admin**]).



4. The hard disk must be formatted before user can use it with DVR unit. Following the below steps to format the hard disk.



- Before formatting hard disk, please stop all operations on DVR system.
- While formatting hard disk, the CPU usage will be near to 100% and might slow down the DVR system response.


- a. Click **Setup** and enter the password
- b. Click **System** → **Add**

- c. Select the hard disk from device list.
 - d. Click **Format** button to start formatting
 - e. When formatting is done, click **OK**.
5. Setup the date and time in order to have correct recording time and date. Following the below steps to setup date and time:
- a. Click **Setup** and enter the password
 - b. In **Date and Time Setting** section, click **Setting** button of **System Date and Time**.
 - c. Select the date and adjust the time, and then, click **OK**.
6. Following the below steps to connect the IP and analog camera.
- **To connect analog camera**
 - a. Plug the analog camera video cable into DVR video port.
 - b. Click **Setup** → **Camera**
 - c. Select camera type as **Analog Camera**.
 - d. And then, enable the camera.
 - e. Click **Edit** button to edit name of camera and enter short description.
 - f. Adjust the bright, contrast, hue, and saturation of camera.
 - g. Enable **Deinterlace** function if necessary.
 - h. Finally, click **OK**.
 - **To connect IP camera**
 - a. Click **Setup** → **Camera**
 - b. Select camera type as IP Camera.
 - c. And then, enable the camera.
 - d. Click **Add IPCam** button.
 - e. Select using **Protocol** or **URL** to connect the IP camera. If user chooses the Protocol, please select **mode**, **video format**, **resolution**, and **channel** of IP camera. If user chooses the URL, please enter the complete URL address of IP camera.
 - f. Enter **ID** and **password** if IP camera's access authority is required.
 - g. Finally, click **OK**.
 - h. To connect another IP camera, follow the above steps.



DVR unit doesn't supply the power to connected external devices.

2.1.2 Using the Virtual Keyboard

User can use the Virtual Keyboard when the keyboard is not available. Just click  or right-click screen to call out the virtual keyboard. For uppercase, click **Caps** button. To exit, click **Esc**.



2.2 Familiarizing the Buttons in Preview Mode



Name

Function

- (1) Exit
- **Reboot:** To restart the DVR system. It is required to enter the password
 - **Power OFF:** To shut down the DVR system. It is required to enter the password
 - **Login:** Using different ID to login to DVR system.
 - **Cancel:** To return to DVR application.

Logout

User

- (2) Split Screen Mode
- Select from 6 different split screen types to view all the camera, or one camera over the other or alongside on a single screen. It also allows you to switch and view different camera number.

- i**
- When you are in single screen mode, **Right click** and **Drag** a square on the area you want to enlarge. Right-click on screen again, the screen view will back to normal view.
 - When you are in full screen mode, partial enlarges does not support.

- (3) Record
- Start/stop video recording.
- (4) EMap
- Display the map in each area, and the location of camera/ sensor/ relay and the warning (see also [Chapter 2.2.1](#)).
- (5) Network
- Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection.
- (6) Setup
- Configure the system settings. (see also [Chapter 3](#))
- (7) PTZ
- Access PTZ control panel. (see also [Chapter 2.2.2](#))
- (8) Preview
- Switch to Preview mode. This allows you to view live camera display.

Name	Function
(9) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see also Chapter 2.3)
(10) Status bar	Display the recorded date, time, hard disk space and temperature of unit.
(11) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(12) Snapshot	Capture and save the screen shot in *.jpg format.



Please plug the USB pen drive to DVR server before press **Snapshot** button.

(13) Event log	Show the record of activities that take place in the system. (see also Chapter 2.2.3)
(14) AutoScan	Start/Stop video screen cycle switch.
(15) Full screen	View in full screen. To return, press the right button of the mouse or ESC on the keyboard or click the arrow icon.



Click it to exit from full screen mode.

When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.

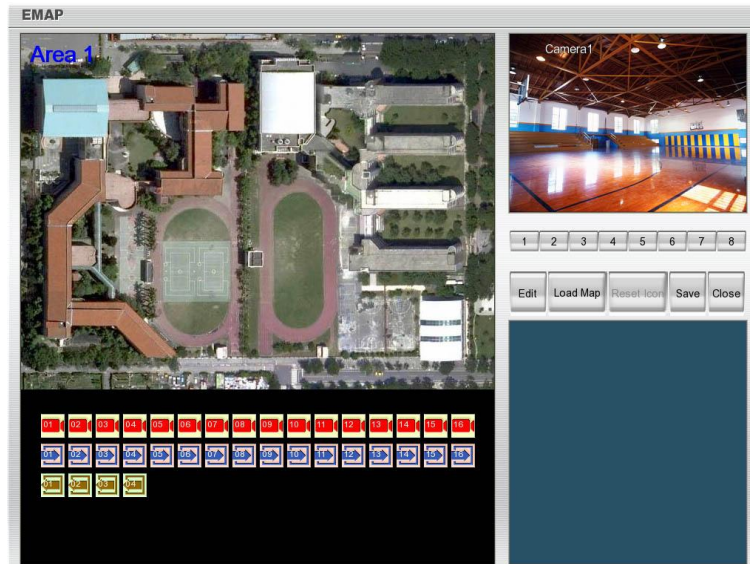
(16) Alarm	Alert and display warning info.
(17) Virtual Keyboard	Click to enable virtual keyboard.

2.2.1 Setting Up and Using the Emap

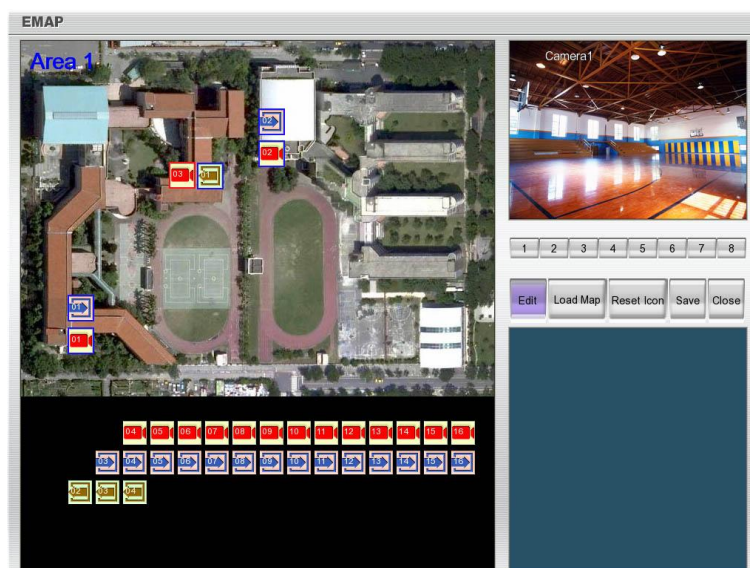
E-Map can hold up to 8 maps in *.jpg or *.bmp format. You may locate the camera, sensor and relay on the map.

To Set Up the Emap

1. Click **Emap**.
2. When the Emap screen appears, click the area number (1 to 8 buttons) on where you want to insert the map.



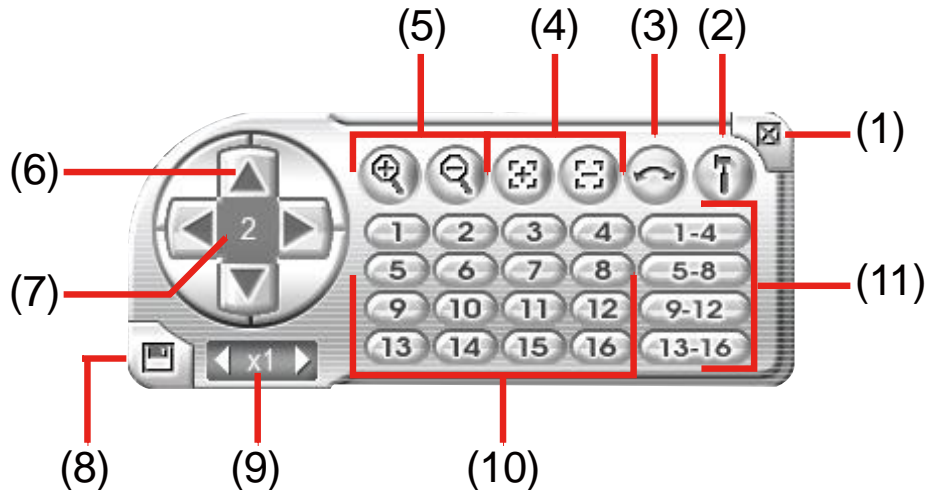
3. Click **Load Map** to insert the map. When the open dialog box appears, locate and select the map and click **Open**.
4. When the inserted map appears on the Emap screen, click **Edit**. You may now drag the camera, sensor, and relay icons to its place on the map. Icons on the map can be relocated anywhere. If you are going to locate the icon on the map to other area, you need to drag the icon to the black pane at the bottom of the Emap screen and then switch to the area on where you want to locate the icon. To bring all the icons back to the black pane at the bottom of the Emap screen, click **Reset Icon**.
5. When you are done, click **Save** button to save the new setting. To exit Emap screen, click **Close**.



To Use the Emap

1. Click **E-map**.
2. In the Emap screen, click the camera icon to switch on the area where the camera is located on the map and to display the video at the upper right corner of the Emap screen. At the lower right corner of the Emap screen, it lists all the warning message.
3. Click **Close** to exit Emap screen.

2.2.2 Familiarizing the Buttons in PTZ Camera Controller



Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Configure PTZ cameras.(see also Chapter 2.2.2.1 and Chapter 2.2.2.2)
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Save Camera preset position	Save the PTZ camera preset position number. Select the camera and click the preset position number and save it.
(9) Camera lens speed controller	Adjust the moving speed of the PTZ camera lens.
(10) Camera preset position number	Move the PTZ camera to the preset point.
(11) Group AutoPan	Select to automatically operate PTZ camera in group.

2.2.2.1 Setup the Analog PTZ Camera

1. Select the channel of analog PTZ camera on Preview UI.
2. Click **PTZ** button from preview UI.
3. In the PTZ control panel, click **Setup** (see also [Chapter 2.2.2](#)).
4. When the PTZ Setup dialog box appears, select the camera number and check the **Use PTZ** box.



5. In the Connection Settings section, fill in the following selections. Then, click **Save** to keep the settings.
 - **COMPort:** The port that the PTZ camera is connected
 - **ID:** PTZ camera ID number
 - **Baud Rate:** Please refer to the user's manual of the PTZ camera to make sure the baud rate.
 - **Protocol:** Please refer to the user's manual of the PTZ camera to make sure what protocol is using.
6. In the **Preset Setting** section, use the control panel to adjust the position of the PTZ camera and select the preset number to assign a number for the PTZ camera current position. Set the **DwellTime** (1-60 sec) for how long the PTZ camera stays in that position before it moves to the next one. After is done, click **Save** to keep the **Preset Setting** settings.
7. Repeat step 4 and 5, if you want to save another PTZ camera position.
8. **Restore AutoPan Time:** set a time period for restoring auto path function after the PTZ camera has been moved manually. Mark the check box and set the time period in second.
9. After finished all configurations, click **OK** to exit. Click **Cancel** will exit and without saving the settings.

2.2.2.2 Setup the IP PTZ Camera

When IP PTZ camera has successful connected with the DVR system, user can use the PTZ function directly without any configuration. To make connection of IP PTZ camera, please refer to [Chapter 3.2.1](#).

In PTZ camera panel, user can setup the preset position of the camera. The number of preset positions are depend on the IP PTZ camera that user has connected. For example: A brand of IP PTZ camera only supports 4 preset positions. Therefore, user only can setup 4 preset positions on the DVR system. User can refer to the user's manual of the IP PTZ camera to make sure the number of the preset positions has supported.

Please follow the below steps to configure the preset position.

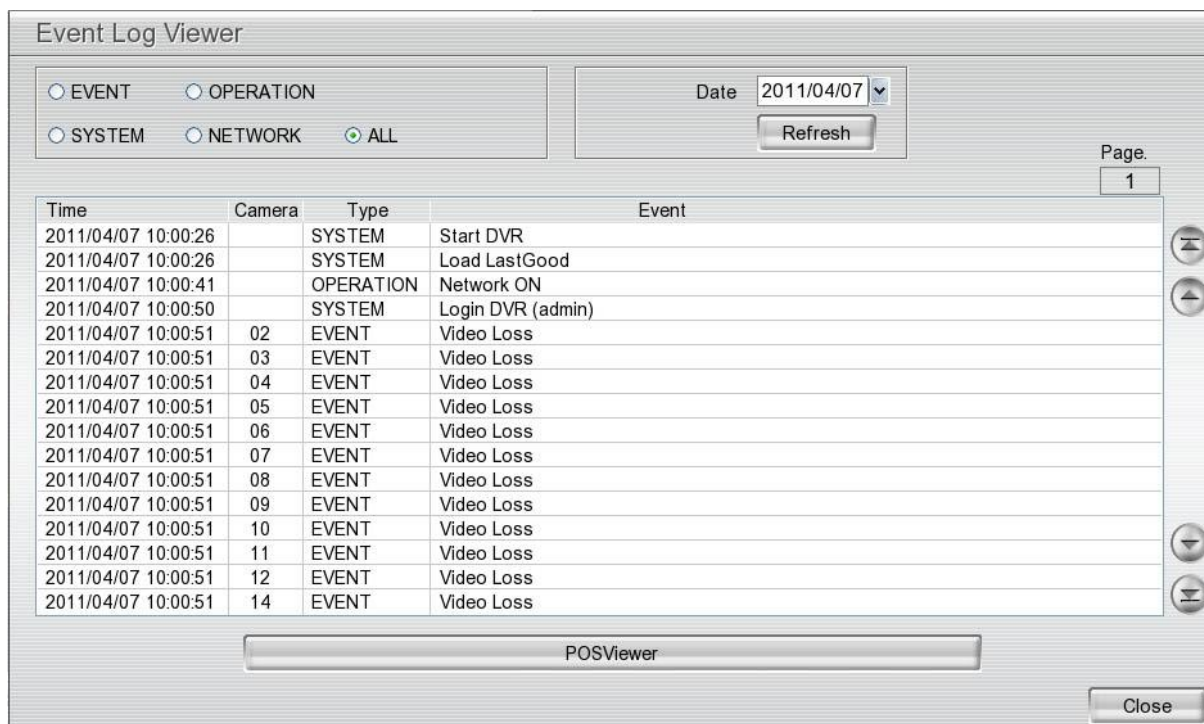
1. On Preview UI, select the channel that is an IP PTZ camera connection.
2. Click **PTZ** button from Preview UI and PTZ control panel will show up.
3. In the PTZ control panel, using the arrow button to adjust the position of IP PTZ camera.
4. And then, click **Setup** (see also [Chapter 2.2.2](#)). The Preset Settings window will show.







5. Select the **Preset Number** to assign a number for the PTZ camera current position. And then, click **Save** to save the setting.
6. Set the **DwellTime** for how long the PTZ camera stays in that position before it moves to the next one.
7. Repeat step 3 to 6, if you want to save another preset position.
8. **Restore AutoPan Time:** set a time period for restoring auto path function after the PTZ camera has been moved manually. Mark the check box and set the time period in second.
9. Click **OK** to complete the setting.

2.2.3 Using Event Log Viewer

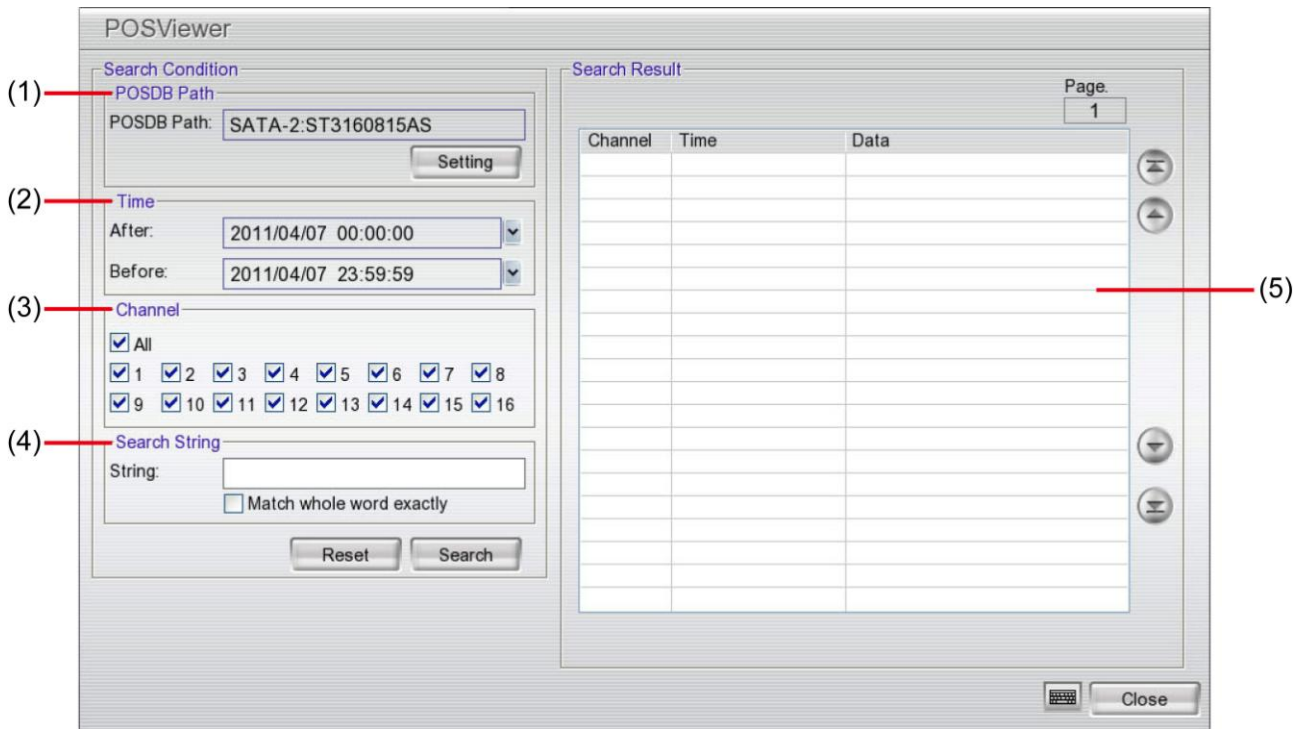
Show the record of activities that take place in the system. Click **Close** button to exit Event Log Viewer window.

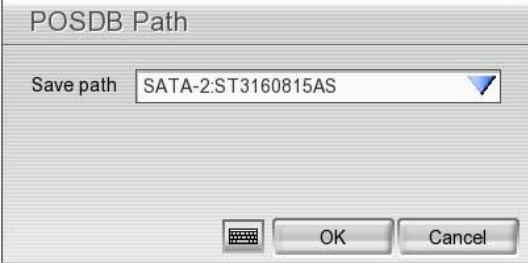






1. Click the **Event Log** button on DVR system main interface. The Event log viewer window will show up.
2. Select the **Date** to view.
3. To filter the records, select and click the select button to display **Event, System, Operation, Network** or **All**.
4. Click  button to go next page and click  button to go to the last page. To go to previous page, click  button. Click  button will back to the first page. In **Page** column, it displays the current page number.
5. To view POS event log, click POSViewer bar to call out the POSViewer window (see also [Chapter 2.2.3.1](#)).

2.2.3.1 Using POSViewer

To clear all setting, click **Reset** button. Click **Close** button will exit POWViewer window.





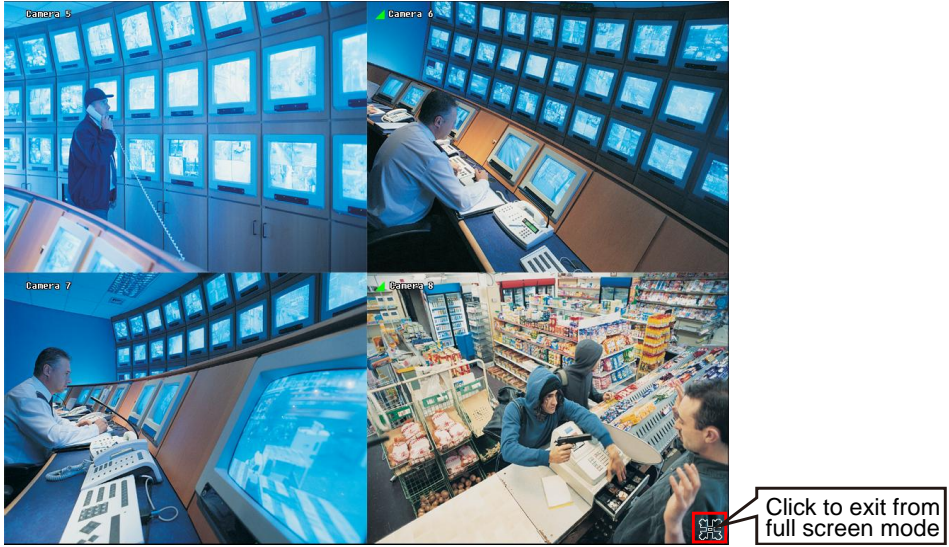
Name	Function
(1) POSDB Path	The storage path for POS event log. Click Setting to change the storage path. 
(2) Time Before/After	Set a time period before and after of POS event log.
(3) Channel	Select the POS event log of channel
(4) Search String	Enter specific key word or word string to search the POS event log. Mark the " Match whole word exactly " box if wants to find exactly key word or word string of POS event log. Click Search button to start searching.
(5) Search Result	Display the POS event log of search result. Click  button to go next page and click  button to go to the last page. To go to previous page, click  button. Click  button will back to the first page. In Page column, it displays the current page number.

2.3 Familiarizing the Buttons in Playback Mode

To switch in Playback mode, click **Playback** button at the lower right corner of Preview mode user interface.



Name	Function
(1) Split Screen Mode	Select from 6 different split screen type to playback the recorded video file of all the cameras or one camera over the other or alongside on a single screen.
i	<ul style="list-style-type: none"> When you are in single screen mode, Right click and Drag a square on the area you want to enlarge. Right-click on the screen again, the screen view will back to normal view. When you are in full screen mode, partial enlarges does not support.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track. When in single screen mode, the progress bar green color means motion recording file, blue color means general (always) recording file, and yellow color means video loss.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
i	The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.
(4) Playback Control Buttons	<p>Begin: Move at the beginning of the recorded video file.</p> <p>Previous: Go back to the previous frame.</p> <p>Slower: Play the recorded video file at the reduce speed from 64x, 32x, 16x, 8x, 4x, 2x, 1x, 1/2X, 1/4X.</p> <p>Rewind: Wind back the recorded video file.</p> <p>Pause: Briefly stop playing the recorded video file.</p> <p>Play: Play the recorded video file.</p> <p>Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x, or 64x.</p> <p>Next: Go to the next frame.</p> <p>End: Go to the end of the recorded video file.</p>

Name	Function
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.
(6) Preview	Switch to Preview mode.
(7) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(8) Status bar	Display the recorded date, time and play speed.
(9) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(10) Export	Export includes Snapshot, Output Video Clip, and Backup function. <ul style="list-style-type: none"> ■ Snapshot: Capture and save the screen shot either in *.jpg format. ■ Output Video Clip: Save the segmented file in *.dvr format to external USB storage device (see also Chapter 2.3.1). ■ Backup: Save the playback file to USB device or DVD-ROM disk(see also Chapter 3.6)
	Please plug the USB pen drive to DVR server before execute Export function (Snapshot, Output Video Clip, and Backup).
(11) Segment	Keep a portion of the recorded video (see also Chapter 2.3.1).
(12) Full screen	View in full screen. To return, press the right button of the mouse or ESC on the keyboard or click the arrow icon.
	
When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.	
(13) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or All.
(14) Bookmark	Mark a reference point when reviewing the recorded video file to which you may return for later reference (see also Chapter 2.3.2).
(15) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second(also see Chapter 2.3.3)
(16) Find Next	Search for the next event. You can use this when you are using Event Search function.
(17) Event Search	Search from the recorded activities that were recorded in event log (i.e., Sensor, Motion, Video Loss). (see also Chapter 2.3.4)
(18) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

2.3.1 To Cut and Save the Portion of the Recorded Video

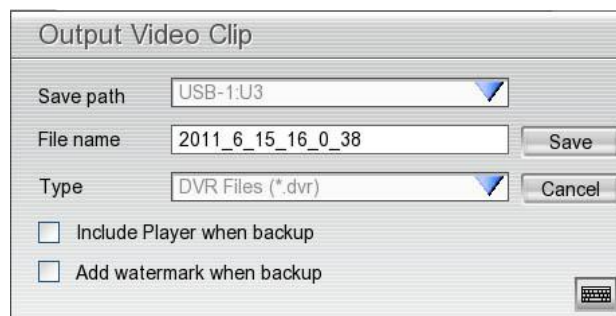
1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.



2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation, click **Segment** button again.



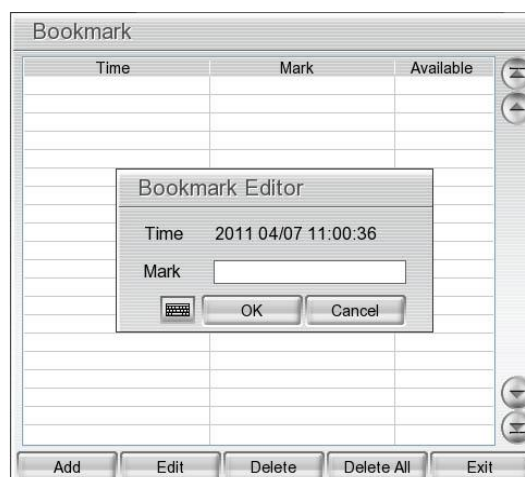
3. Click **Export** button and select **Output Video Clip** to save the wanted portion. User can rename the **File name**. Mark “**Include Player when backup**” option to include a Qplayer application in backup file for playback backup video clip later on. Mark “**Add watermark when backup**” option to have watermark protection on backup file and user can have watermark exam on Qplayer application.



4. In the **Save As** dialog box, locate on where user wants to save the file, type the filename, and select the video format.
5. To playback the backup video clip, using Qplayer application that is included in backup folder.

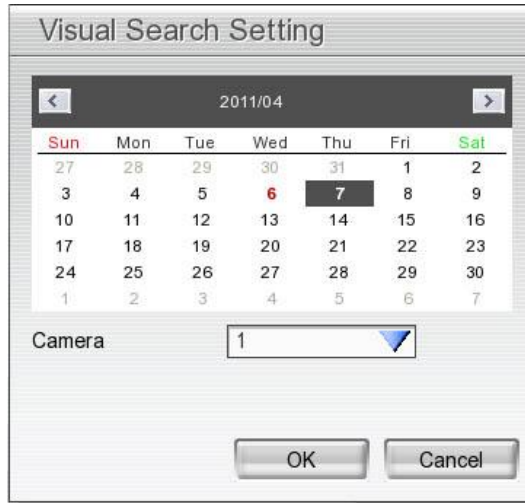
2.3.2 To Bookmark a Video Section

1. Click **Bookmark** button
2. In the Bookmark dialog box, you may do the following:
 - **Add** to create the new reference mark in the bookmark list.
 - **Edit** to change the mark description.
 - **Delete** to remove the selected reference mark in the list.
 - **Delete All** to remove all the reference marks in the list.
 - **Exit** to close Bookmark dialog box.
3. Select and click one in the bookmark list to review the file.

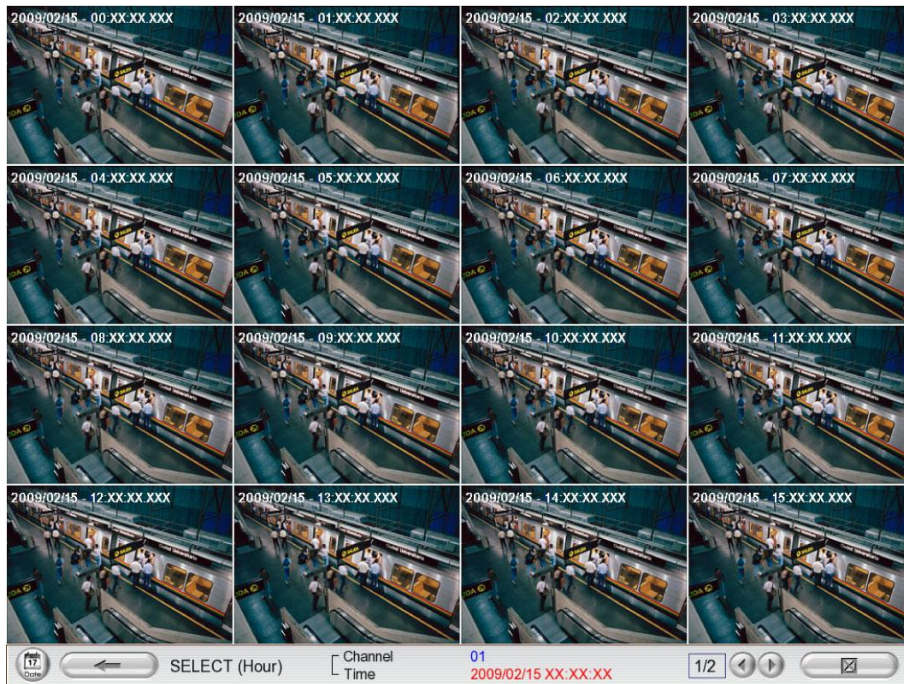


2.3.3 To Search Using Visual Search

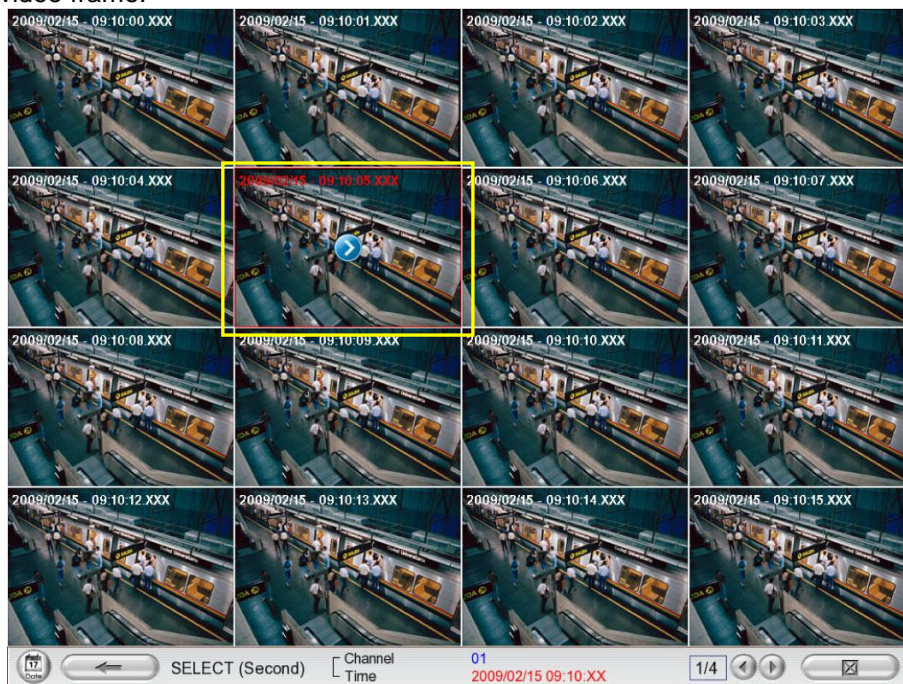
1. Click **Visual Search**.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.




3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minutes of that hour, and every Seconds of that minute. Using and to go previous and next page of page. To go back last time section (hour, minute, or second), click . To close event search, click . Click to select different date of video for visual search.



- On the time second screen, click the channel and playback button will appear. Click playback button to playback the selected channel video frame.



2.3.4 To Search Using the Event Search

- Click on the video screen on where you want to search.
- Click **Event Search**. The Event Search Setting dialog box would appear on the screen.
- In the Event Search Setting dialog box, check the type of condition you want to search. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click .
- You may also set to search and list all the result. In the **Search Duration** section, set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching.



The DVR system will automatically set the date of **End Time** at 3 days later of **Begin Time**. If event data are less than 3 days, the DVR system will set End Time at current date. Time of End Time is adjustable.

- When the Event list appear, click and select the item you want to view.

Event Search Setting

Searching Condition

Sensor Motion Video Loss

Searching Duration


Begin Time 2008/11/26 P.M.03:46:54

End Time 2008/11/26 P.M.03:46:54

Searching Interval 3 Seconds



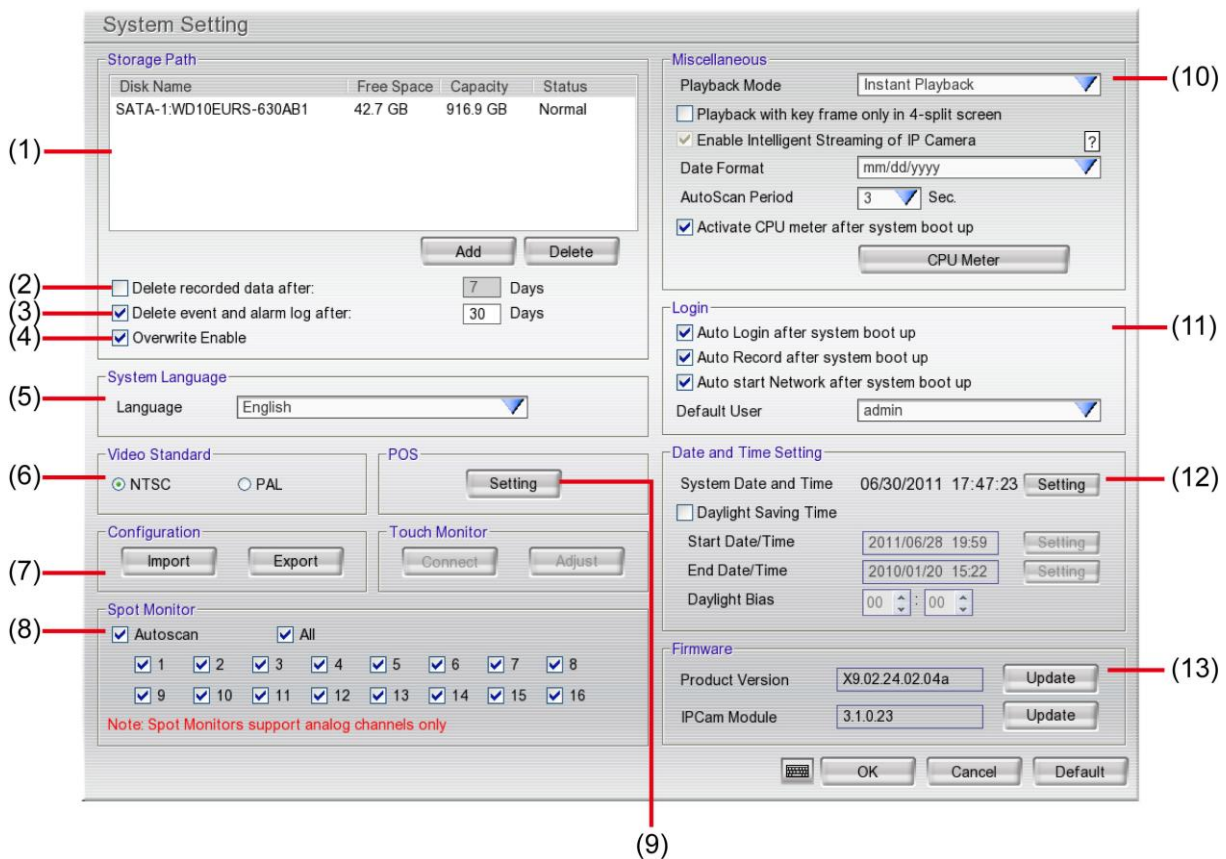

Chapter 3 Customizing the DVR System

In the Preview screen mode, click  button to customize your DVR. When the DVR configuration setup selection appears, select and click the buttons you want to change the setting.



3.1 System Setup

In the System Setting dialog box, click **OK** to accept the new settings, click **Cancel** to exit without saving.

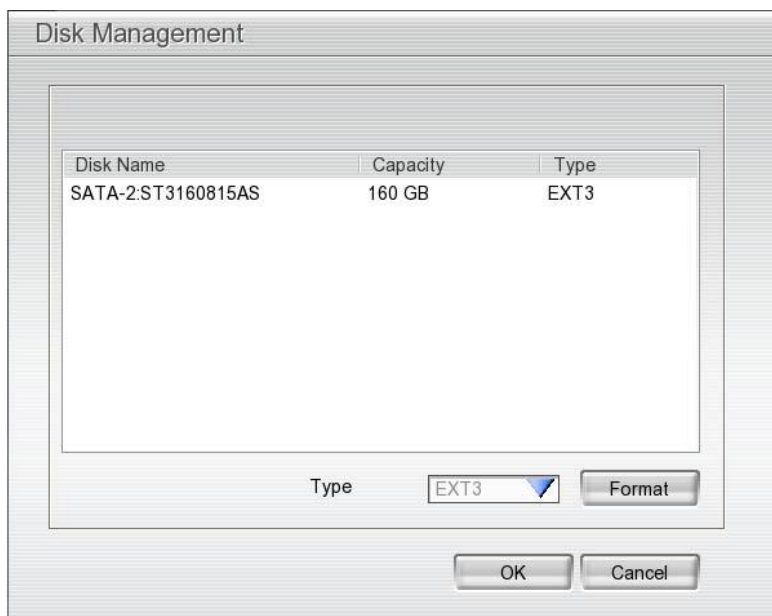


(1) Storage Path

Set the HDD on where to save the data. In case you have more than one storage device, the system automatically saves the data to the next storage device. To insert another storage device, click **Add** and select the storage path. To remove the selected path, click **Delete**. If the hard disk is the first time for DVR system, please format the hard disk before starting to use it. To format the hard disk, select the hard disk and click **Format** button.



- Before formatting hard disk, please stop all operations on DVR system.
- While formatting hard disk, the CPU usage will be near to 100% and might slow down the DVR system response.



(2) Delete recorded data after

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the number of days in **Days** text box.

(3) Delete event and alarm log after

If you want the system to automatically erase the event and alarm log after a certain days, enable the **Delete event and alarm log after** check box and enter the number of days in **Days** text box.

(4) Overwrite Enable

When there is not enough free space to record one hour data, the system automatically replaces the oldest data.

(5) Language

Customize the system to display the tool tips and dialogs based on the selected language. Default language is in English.

(6) Video Standard

Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.

(7) Configuration

Backup a copy of all the settings and allows you to regain the same settings back. To save the current settings, click **Export**. To replace the settings with the one you have saved, click **Import**.



Please plug the USB pen drive to DVR server before **Import** or **Export** the configuration from or to USB pen drive.

(8) Spot Monitor

Select the camera user wants to display on spot monitor or select **All** for all cameras. Mark **Autoscan** to enable display to take turns automatically.

(9) POS



- Please using Databox device to connect POS machine with DVR unit in order to use POS function.
- POS and Mask function cannot be enabled at the same time.

Set from which camera screen to display the data from the POS equipment. Click **Setting**, to set the POS Console Setting.

1. In the POS Console Setting dialog box, click **Add** to set a new POS setting, **Modify** to change the POS setting, and **Delete** to remove the selected POS setting. Click **OK** to save and close POS Console Setting.

The dialog box titled "iPOS Console Setting" contains a table with the following data:

Name	Port	Channel
POS 1	COM1	1,2,6

Buttons at the bottom: Add, Delete, Modify, OK, Cancel.

2. In the POS Mapping dialog box, click **OK** to accept the settings and **Cancel** to exit without saving the new setting.

The dialog box titled "iPOS Mapping" contains the following settings:

- (1) Name: POS 2
- (2) Protocol: General
- (3) Skip first: 0 line(s)
- (4) Font Color: [Color selection icons]
- (5) Port Setting: Local: COM2, Baud Rate: 9600 bps
- (6) Map to Channel: Max 4 Channels. Checkboxes for channels 1-16.
- (7) Text Filter: 8 input fields labeled 1. through 8.

Buttons at the bottom: OK, Cancel.

- (1) **Name:** Enter a name to identify the POS.
- (2) **Protocol:** Select the protocol.
- (3) **Skip first:** Set the number of lines you want to be removed.
- (4) **Font Color:** Select the text color of the POS data.
- (5) **Port Setting :** Select the **Local**(Com port) where it is connected and **Baud Rate**.
- (6) **Map to Channel:** Select to which camera number to display the transaction text.
- (7) **Text Filter:** Enter the word you want to be removed.

(11) Miscellaneous

- **Playback mode:** Select the mode of playback the video.
 - **Select date and time:** Select the date and time which user wants to playback.
 - **Play the last file:** Automatically playback the video from the last hour.
 - **Instant Playback:** Automatically playback the video which has just recorded.
- **Playback with key frame only in 4-split screen:** Enable to only playback key frame when in 4-split screen playback mode.
- **Enable Intelligent Streaming of IP camera:** The DVR now supports 3 streaming for preview, recording, and remote site in SF1311H IP camera series. User can setup 3 streaming in [Detail](#) of (5) [IP camera information](#) in [Chapter 3.2.1](#). Click ? mark will show up the intelligent streaming information dialog box.



DVR supports first 4 channels for IP camera within intelligent streaming is enabled.

- **Date Format:** Select the date format which wants to display in select date and time playback mode
- **Auto Scan Period:** Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.
- **Activate CPU meter after system boot up:** Mark to enable the CPU usage status display on the screen automatically when system boot up. User can manually to enable by clicking the **CPU Meter** button.

The screenshot shows the 'System Setting' window with the 'Miscellaneous' tab selected. In the 'Miscellaneous' section, the 'Activate CPU meter after system boot up' checkbox is checked, and the 'CPU Meter' button is visible. A red box highlights the 'CPU Meter' button, and a callout box points to it with the text: 'CPU usage status. Click X to close the display.'

(12) Login

Enable the conditions in Login section you want the system to automatically carry out.

- **Auto Login after system boot up**
Execute the DVR when the operating system is started.
- **Auto Record after system boot up**
Automatically start video recording when the DVR is executed.
- **Auto start Network after system boot up**
Automatically start network connection when the DVR is executed.
- **Default user**
Automatically log in to the selected default user when the DVR is executed.

(13) Date and Time Setting

Adjust the DVR system time and date. Click **Setting** to select the month, date, hour, and minute.

Mark **Daylight saving** check box to enable daylight saving function. And then, select the **Start** and **End Date/Time** by click **Setting**.

Daylight Bias: Assign a time that it is for daylight saving time offset in your time zone. For example: if the time zone is in U.S. Eastern, the time offset is 1 hour.

(14) Firmware

- **Product Version Update:** To update firmware, please contact your sales dealer.
- **IPCam Module Firmware Update:** To update firmware of IP camera, please contact your sales dealer.

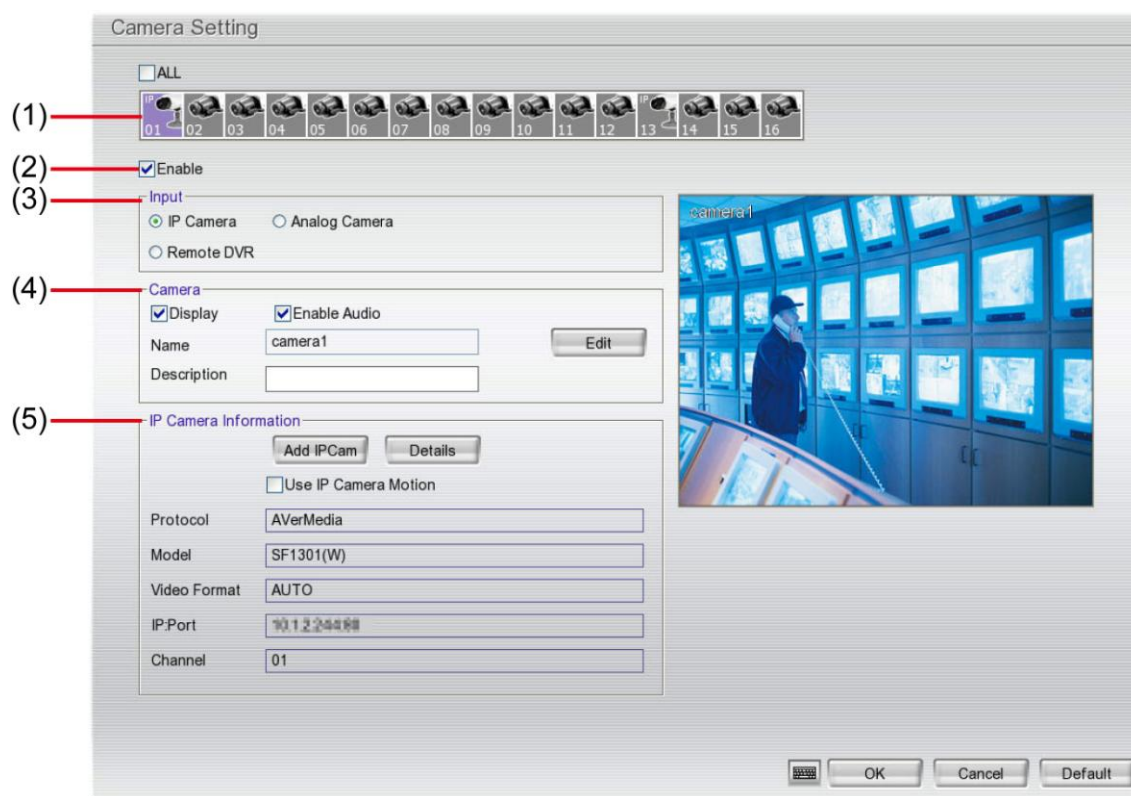
3.2 Camera Setup

The DVR system supports 8/16 cameras in combination of analog and IP cameras, only analog cameras, or only IP cameras.

3.2.1 To Setup IP Camera

Click **Default** will back to the factory default value.

i EH6108H+ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to view. To enable/disable all cameras, click **ALL** check box.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the camera type as **IP Camera**.

(4) Camera

- Display

Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.

- Enable Audio

Enable/disable audio of the camera if IP camera has supported.

- Name

Click **Edit** to change the camera name.

i DVR supports Chinese characters on remote site (remote setup).

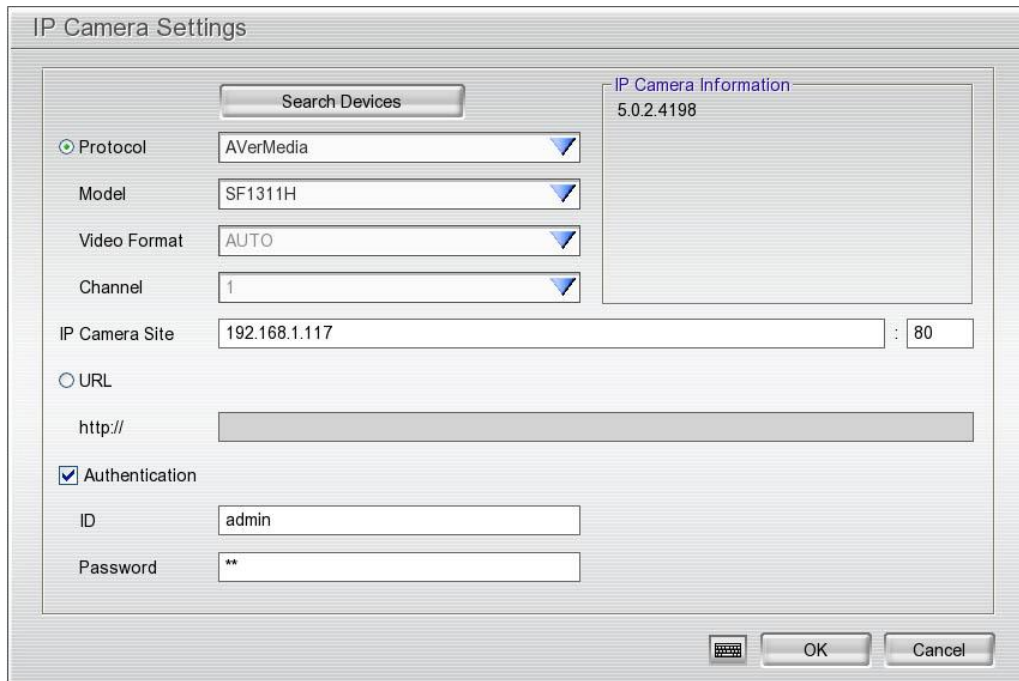
- **Description**

Add a short comment

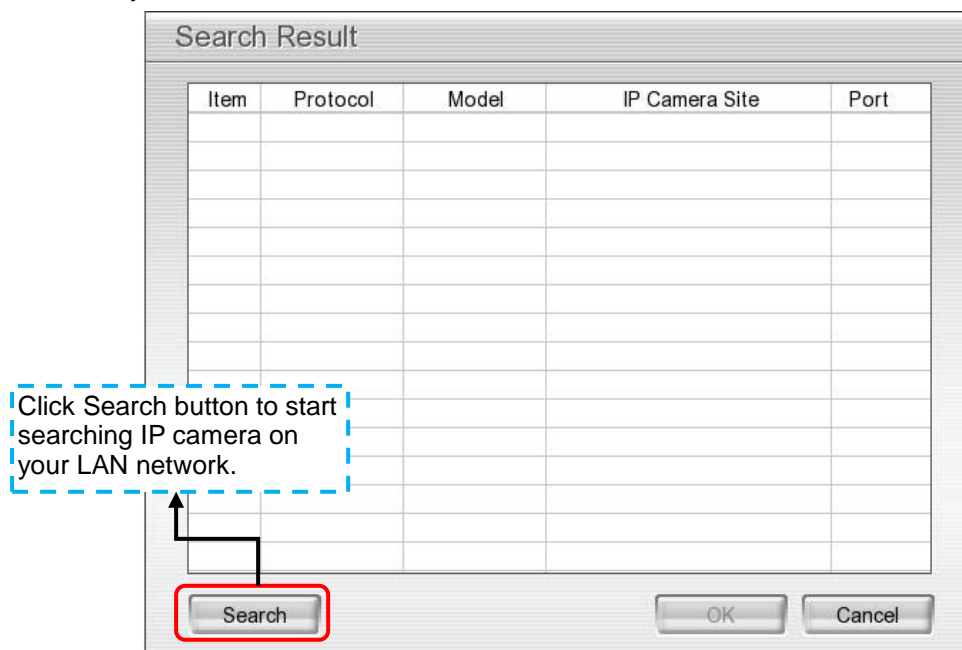
(5) IP Camera Information

To setup IP camera and display current IP camera information.

- **Using IP Camera Motion:** Enable to use the motion detection function of IP camera if the IP camera has support motion detection and the motion recording will based on IP camera's motion detection setting.
- **IP Setting:** Click **Add IPCam** to add the IP camera.



1. Click the radio button of **Protocol** to start setup IP camera. If use doesn't know any IP cam protocol, click **Search Device** button to find the IP cameras that can be detected on your LAN network; not all IP camera on your LAN network can be found.



For supported IP camera list, please refer to the IP camera support list on web site (<http://surveillance.aver.com/>).

2. Select the **Protocol**, **Model**, **Video Format**, and **Channel** of the IP camera.

3. Enter IP address and connecting port in **IP Camera Site** column.
 4. Or, user can choose to enter **URL** of IP camera to connect an IP camera.
 5. If the IP camera has authority request, please enable **Authentication** and enter **ID** and **Password**.
 6. Click **OK** to connect with the IP camera.
- **Detail:** The setting of advanced IP cameras are related to the **Intelligent Streaming** function in System setting. Click **Detail**. Click **Default** will back to the factory default value.

Stream Setting					
	Codec	Resolution	FPS	Bitrate Mode	Quality/Bitrate
<input checked="" type="checkbox"/> Stream 1	H264	SXGA	15	VBR	81
<input checked="" type="checkbox"/> Stream 2	MPEG4	VGA	10	VBR	85
<input checked="" type="checkbox"/> Stream 3	MPEG4	QVGA	5	VBR	80

Stream Selection

Record Stream: Stream 1

Preview Stream: Single-Channel (Stream 1), Multi-Channel (Stream 2)

Remote Stream: Mode 1 (High) (Stream 1), Mode 2 (Normal) (Stream 2), Mode 3 (Low) (Stream 3)

Video Adjustment

Brightness: 50

Contrast: 50

Hue: [Slider]

Saturation: [Slider]

Sharpness: [Slider]

I/O Control

Sensor [Button] Relay [Button]

OK [Button] Cancel [Button] Default [Button]

- ✓ **Stream Setting:** user can setup **Codec**, **Resolution**, **FPS**, **Bitrate Mode**, and **Quality Bitrate** of **Stream 2 and Stream 3** on the selected IP camera channel. The Stream 1 is steted in default.
- ✓ **Stream Selection:** user can setup which stream (**Stream 1 ~ Stream 3**) to use on **Record**, **Preview**(Quad and Single mode), and **Remote site**.
- ✓ **Video Adjustment:** user can adjust **Brightness** and **Contrast** of IP camera.



The stream setting only support for SF1311H IP camera.

- ✓ **I/O Control:** Setup the sensor and relay that is embedded on the IP camera.

- **Sensor Setting**

1. Click **Sensor** button.
2. Click the drop-down list and select the sensor ID number.
3. Enter sensor name in **Name** column
4. The system automatically detects the camera and input relates information. In the Content section, enter sensor **Description**.
5. In the test section, click **Test** to check the sensor status. **Red** is high and **Green** is low.
6. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

The screenshot shows the 'Sensor Setting' dialog box. At the top, there is a title bar 'Sensor Setting' and a dropdown menu currently showing 'Sensor 1'. Below this is a 'Name' text input field. A section titled 'Content' contains four fields: 'Camera' with the value '16', 'Protocol' with 'Panasonic', 'Model' with 'BB-HCM515', and an empty 'Description' field. Below the 'Content' section is a 'Test' section containing a red rectangular indicator with the word 'High' inside, and a 'Stop' button. At the bottom of the dialog are three buttons: a keyboard icon, 'OK', and 'Cancel'.

- **Relay Setting**

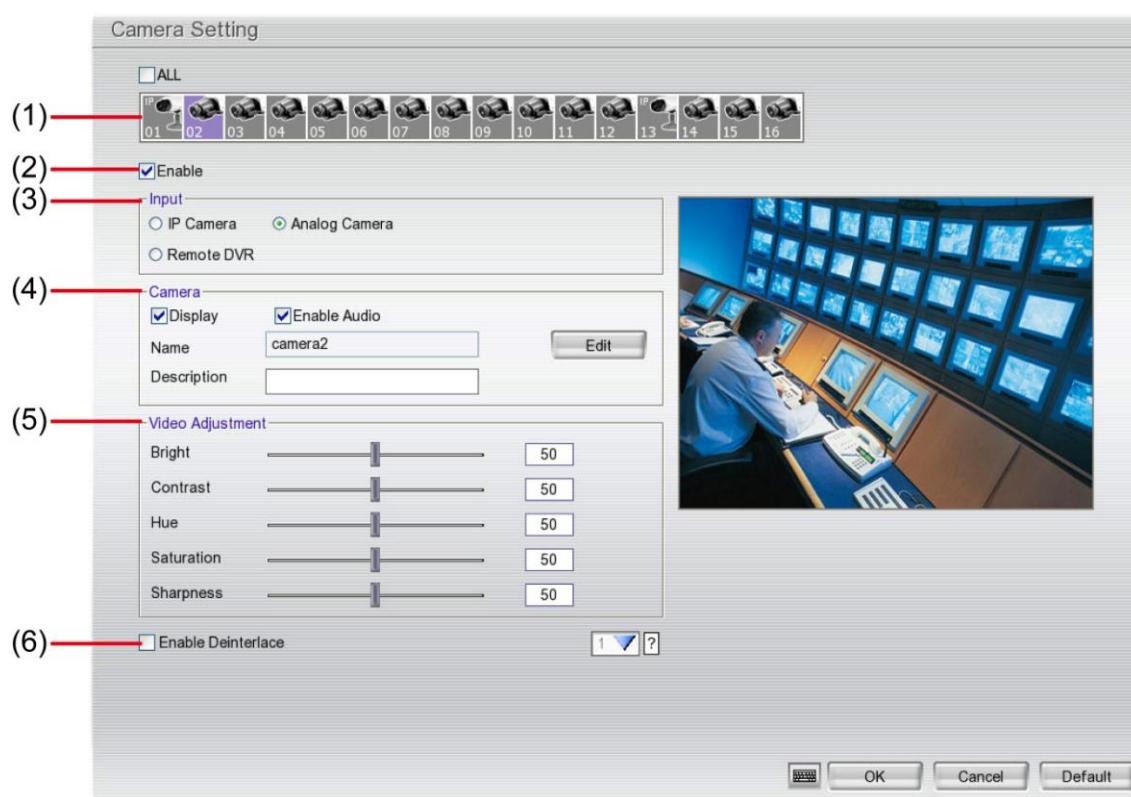
1. Click **Relay** button.
2. Click the drop-down list and select the relay ID number.
3. Enter relay name in **Name** column
4. The system automatically detects the camera and input relates information. In the Content section, enter relay **Description**.
5. In the test section, click **Test** to trigger the relay status. **Red** is high and **Green** is low.
6. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

The screenshot shows the 'Relay Setting' dialog box. At the top, there is a title bar 'Relay Setting' and a dropdown menu currently showing 'Relay 1'. Below this is a 'Name' text input field. A checkbox labeled 'Enable' is checked. A section titled 'Content' contains four fields: 'Camera' with the value '16', 'Protocol' with 'Panasonic', 'Model' with 'BB-HCM515', and an empty 'Description' field. Below the 'Content' section is a 'Test' section containing a red rectangular indicator with the word 'High' inside, and a 'Stop' button. At the bottom of the dialog are three buttons: a keyboard icon, 'OK', and 'Cancel'.

3.2.2 To Setup Analog Camera

Click **Default** will back to the factory default value.

i EH6108H⁺ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to view. To enable/disable all cameras, click **ALL** check box.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the camera type as **Analog Camera**.

(4) Camera

- Display

Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.

- Enable Audio

Enable/disable audio of the camera.

- Name

Click **Edit** to change the camera name.

i DVR supports Traditional Chinese characters on remote site (remote setup).

- Description

Add a short comment

(5) Video Adjustment

Adjust the Brightness, Contrast, Hue, Sharpness, and Saturation of the camera.

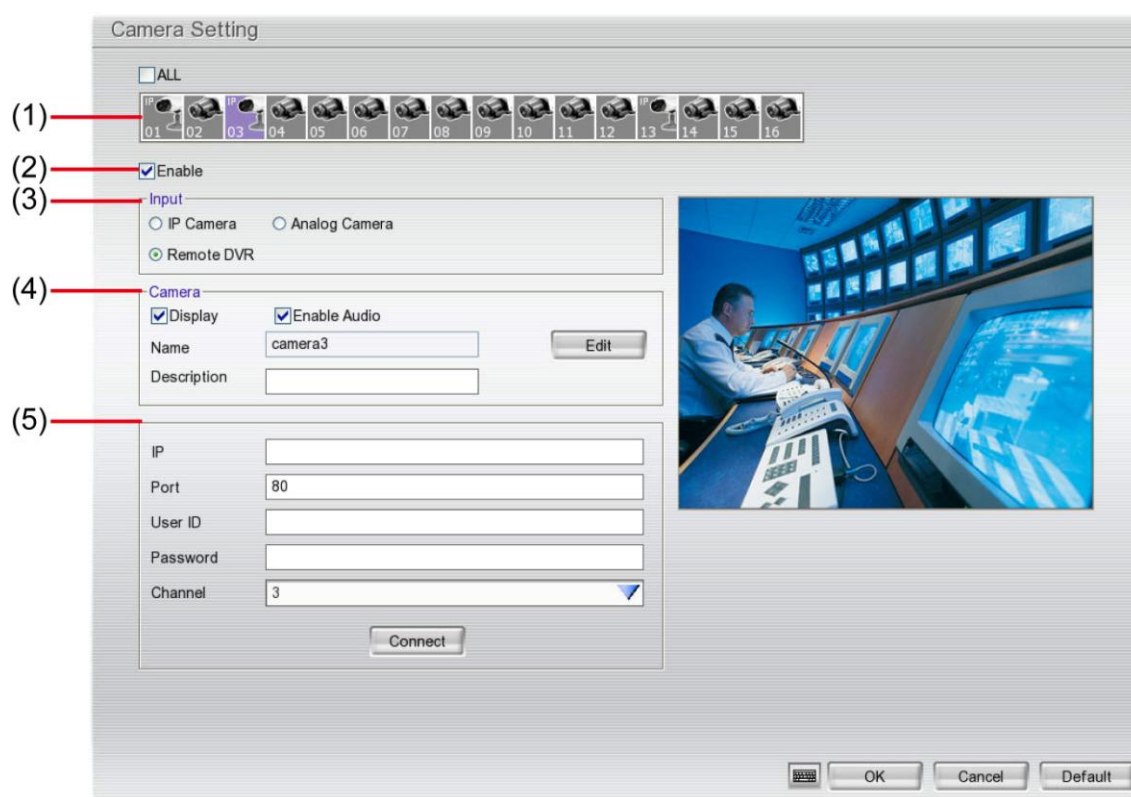
(6) Enable Deinterlace

Enhance the video quality. Set the **Enable Deinterlace** mode to #1, if you are capturing motionless picture and select #2, if it captures lots of movement.

3.2.3 To Setup Camera from the Remote DVR

User can add the camera from another DVR through the network.

i EH6108H⁺ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to view. To enable/disable all cameras, click **ALL** check box.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the camera type as **Remote DVR**.

(4) Camera

- **Display**
Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- **Enable Audio**
Enable/disable audio of the camera.
- **Name**
Click **Edit** to change the camera name.

i DVR supports Traditional Chinese characters on remote site (remote setup).

- **Description**
Add a short comment

(5) IP Camera Information

- **IP**
Enter the IP address of the camera
- **Port**
The port for connection
- **User ID**
Enter the user id that for connecting authority
- **Password**
Enter the password that is for connecting authority
- **Channel**
Select the channel of connected camera
- **Connect**
Click to connect the camera when all configurations are set.

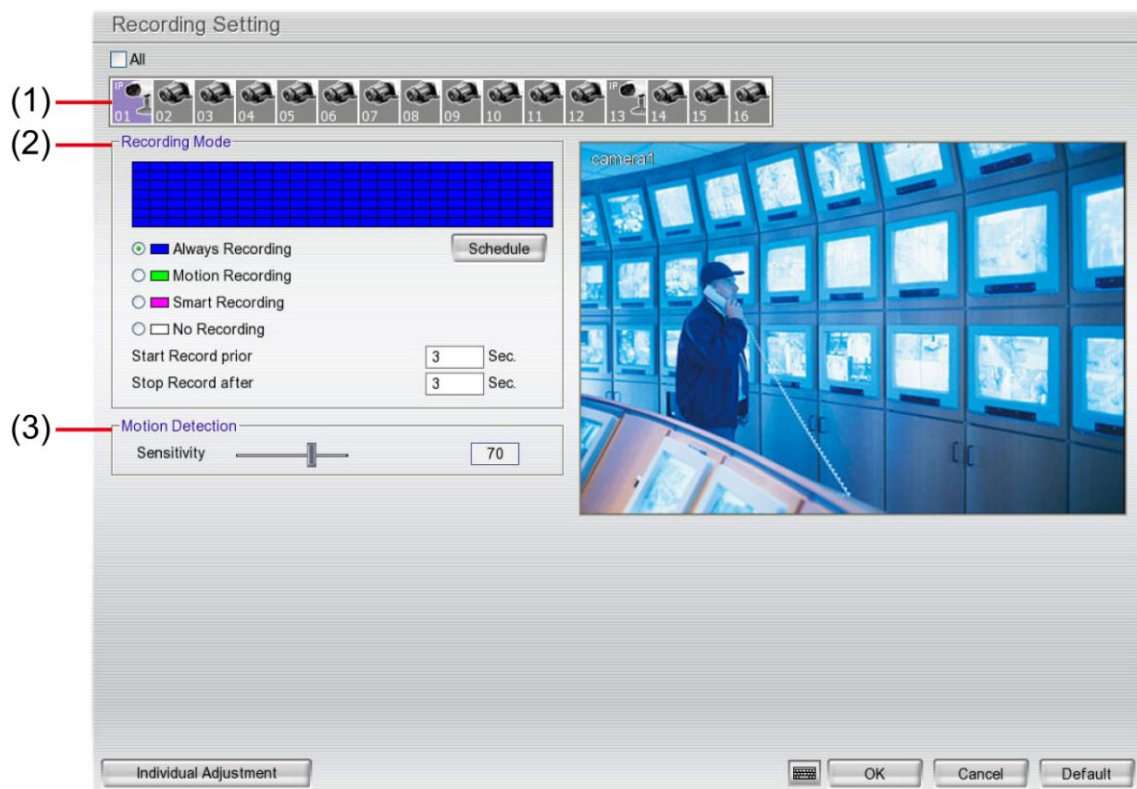
3.3 Recording Setup

3.3.1 Setup IP Camera Record Setting

Click **Default** will back to the factory default value.



EH6108H+ only support 8 channels.




(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns purple when it is selected.

(2) Recording Mode

The horizontal blocks from 00 to 23 represent the time in 24-hour clock and the vertical block 1 to 7 represent the day in the week block (Sunday to Saturday). To record in full 24 hours and 7 days a week, select the

recording mode and click the  button. If you want to only record at a particular time or day, click **Schedule** button and select the **Recording Mode**, and then click on the time or day blocks. When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- **Always Recording**
Record the video from the selected camera and save it to the designated storage device
- **Motion Recording**
Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.
- **Smart Recording**
Automatically switch to recorded at the maximum frame as DVR system can once a motion is detected and if there is no motion, it records at key frame.
- **No Recording**
The system won't do any recording.

(3) Motion Detection

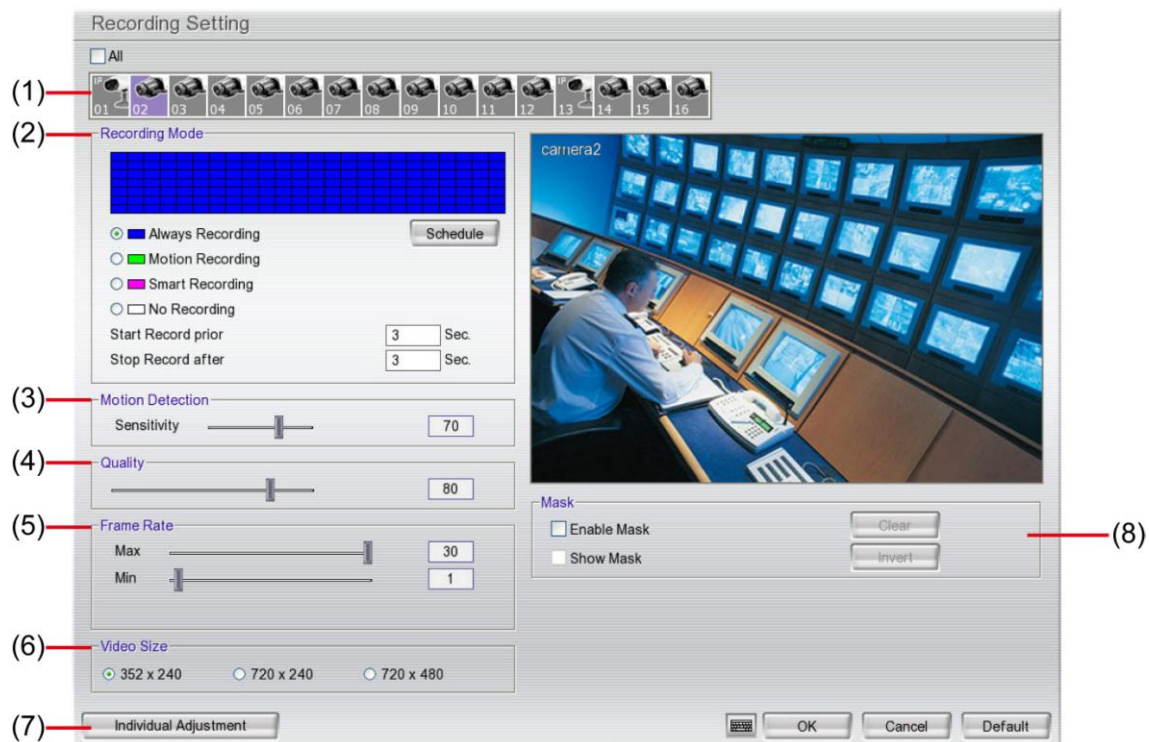
Adjust the sensitivity of the motion detection. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

3.3.2 Setup Analog Camera Record Setting

Click **Default** will back to the factory default value.




EH6108H⁺ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns purple when it is selected.

(2) Recording Mode

The horizontal blocks from 00 to 23 represent the time in 24-hour clock and the vertical block 1 to 7 represent the day in the week block (Sunday to Saturday). To record in full 24 hours and 7 days a week, select the recording mode and click the  button. If you want to only record at a particular time or day, click **Schedule** button and select the **Recording Mode**, and then click on the time or day blocks. When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- **Always Recording**

Record the video from the selected camera and save it to the designated storage device

- **Motion Recording**

Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.

- **Smart Recording**

Automatically switch to record at the maximum frame rate setting once a motion is detected and recording time will be based on **Stop Record After** setting; if there is no motion, it records at the minimum frame rate setting. Set the frame rate in **(5) Frame Rate**.

- **No Recording**

The system won't do any recording.

(3) Motion Detection

Adjust the sensitivity of the motion detection. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

(4) Quality

Adjust the video quality. The higher the value, the lower the compression level and uses more hard disk space.


(5) Frame Rate

Set the maximum and minimum number of frames to be recorded during motion and motionless state. The frame rate ranges from 01 to 30 for NTSC and 01 to 25 for PAL. The higher the frame rate, it uses more hard disk space.



Always recording frame rate is depending on value of max frame rate.

(6) Video Size

Select the size of the video and click the  button. The higher the size, the larger the file it creates.

(7) Individual Adjustment

Each camera can adjust video size and frame rate individually. Click **Default** will back to the factory default value. The frame rate usage is shown in **Used** and **Unused** columns by CIF mode.



Adjusting video size and frame rate by channel, only available on the analog camera.

Individual Adjustment Setting

CH01-CH08: CIF: 480 Used: 360 Unused: 120
 CH09-CH16: CIF: 480 Used: 390 Unused: 90

Camera	Video Size	Frame Rate	Current / Max
Camera 01 (IP)	<input checked="" type="radio"/> MJPEG (352x240)	<input type="range"/>	0 / *
Camera 02	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 03	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 04	<input type="radio"/> CIF <input checked="" type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 05	<input type="radio"/> CIF <input checked="" type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 06	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 07	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 08	<input type="radio"/> CIF <input type="radio"/> Half D1 <input checked="" type="radio"/> D1	<input type="range"/>	30 / 30
Camera 09	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 10	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 11	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 12	<input type="radio"/> CIF <input type="radio"/> Half D1 <input checked="" type="radio"/> D1	<input type="range"/>	30 / 30
Camera 13 (IP)	<input checked="" type="radio"/> MJPEG (352x240)	<input type="range"/>	0 / *
Camera 14	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 15	<input checked="" type="radio"/> CIF <input type="radio"/> Half D1 <input type="radio"/> D1	<input type="range"/>	30 / 30
Camera 16	<input type="radio"/> CIF <input type="radio"/> Half D1 <input checked="" type="radio"/> D1	<input type="range"/>	30 / 30

OK Cancel Default

(8) Mask

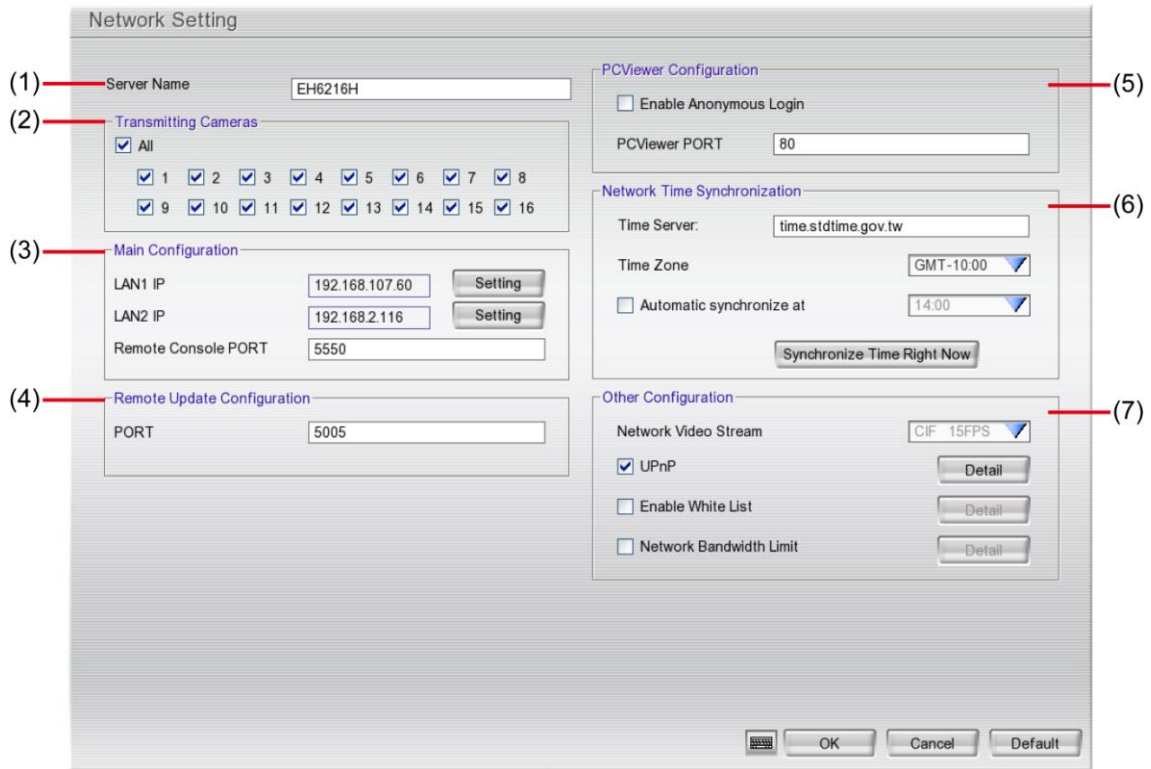


Mask and POS function cannot be enabled at the same time.

Mark an area on the screen to disregards the motion in the marked area and to only monitor outside the marked area. Enable the **Enable Mask** and click-and-drag an area on screen that user wants to mask. To clear all mask area, click **Clear** button. To inverse the mask area, click **Invert** button. The original selected area will exchanged with un-selected area. To show the mask area on preview screen, enable **Show Mask**. The mask is able to see on the screen only when preview screen is in single screen mode.

3.4 Network Setup

Click **Default** will back to the factory default value.



(1) Server Name

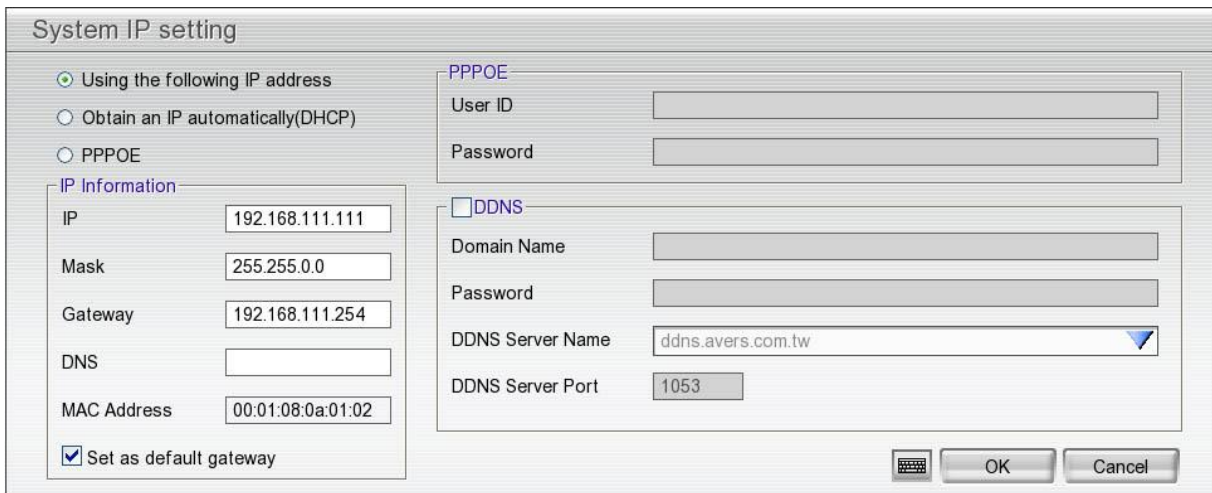
Assign a name for the DVR unit. Alphabet letters and numbers only.

(2) Transmitting Cameras

Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using PCViewer, Remote Console, PDA Viewer and JavaViewer (still image). To select all the cameras, enable the **ALL** check box.

(3) Main Configuration

Set the DVR IP address and **Remote Console Port**. You need this when accessing DVR server from the remote location via internet. The DVR system supports dual LAN, user can setup 2 IP address and only the one has marked **Set as default gateway** can configure **DDNS** function. Click **Setting** to setup IP setting.



■ **Using the following IP address:** Assigns an IP address for the DVR system. Fill in the IP related parameters in **IP information** section.

- **IP:** Assign a constant IP address which a real IP address gives from ISP to DVR system.

- **Mask:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to DVR system.
- **Gateway:** A network device acts as a passageway to internet. Enter the network gateway IP address
- **DNS:** Domain Name Server translates domain names (such as www.abb.com.tw) to IP addresses. Enter the IP address of DNS if it is available.
- **MAC Address:** An identifier hardware address of DVR unit that is assigned by the manufacturer for identification. User don't need to fill in, it will generated by system automatically.
- **Obtain an IP automatically (DHCP):** Assign the IP address by local DHCP server to DVR system.
- **PPPOE:** Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services. If your network is using ADSL service connecting to internet, and then, select PPPOE mode. Enter **User ID** and **Password** that is given by your ISP for PPPOE connecting authority.
- **DDNS:** DDNS(Dynamic Domain Name Service) is a data query service mainly used on the Internet for translating domain names into Internet addresses. Users can register their own domain name on <http://ddns.avers.com.tw> or <http://dyndns.org>(See [Appendix A](#)).
- **Domain Name**
Enter the domain name that user has registered.
- **Password**
A password use to access DDNS that user has setup when register the domain name
- **DDNS Server Name**
Select the DDNS server that user applied their domain name.
- **DDNS Server Port**
Fill in the port that connects to DDNS server. Default is 1053.

(4) Remote Upgrade Configuration

A port is using for the remote firmware upgrade through network.

(5) PCViewer Configuration

Activate **Enable Anonymous Login** to remotely access the DVR server without the need of password. Fill in the **PCViewer PORT** for remote accessing connection.

(6) Network Time Synchronization

Adjust the DVR system time same as network time server. Fill in the **Time Server** IP address or domain name and select the **Time Zone**. User can enable **Automatic Synchronize at** to set automatic synchronize time on a daily basis. Or, user can click **Synchronize Time Right Now** to adjust time right away.

(7) Other Configuration

- **Network Video Stream**
It displays the remote video stream value that is depended on the video quality user has selected on remote site.
- **UPnP**
Enable UPnP function to automatically map the port setting of PCViewer to the router on the local network. This function is available when the router has enabled the UPNP function.
Assign a port on DVR as an UPnP protocol port. The **PCViewer Port** is displayed the current PCViewer port number.

UPnP Setting	
PORT	1435
PCViewer PORT	80
<input type="button" value="Keyboard Icon"/> <input type="button" value="OK"/> <input type="button" value="Cancel"/>	

- **Enable White List**



Without any **IP/IP range** is assigned in White List table, none of IP address/IP range is allowed to access DVR when White List function is enabled.

An access permit list for the remote accessing of DVR server. Enter the IP address and click **Add**. Or, enter a range of IP address and click **Add**. To delete the IP from the list, select the IP and click **Delete** button. To reset the input, click **Clear** button.

The 'Network White List' dialog box features two radio buttons at the top: 'IP' (unselected) and 'IP Range' (selected). Below the 'IP' button is a text field containing '192.168.0.1'. Below the 'IP Range' button are two text fields: the first contains '192.168.0.1' and the second contains '192.168.0.255'. On the left side, there are three buttons: 'Add', 'Delete', and 'Clear All'. The main area is a list box containing ten entries, each reading '192.168.0.1 - 192.168.0.255'. At the bottom right, there are 'OK' and 'Cancel' buttons.

- **Network Bandwidth Limit**

By Channel: Set the network bandwidth by each channel.

All: Set the total network bandwidth consumption limit.

The 'Bandwidth Settings' dialog box has two radio buttons: 'By Channel' (unselected) and 'All' (selected). Under 'By Channel', there is a dropdown menu showing 'Camera 1' and a text field with '64' followed by 'KB/s'. Under 'All', there is a text field with '1024' followed by 'KB/s'. At the bottom, there are 'OK' and 'Cancel' buttons.

3.5 Schedule Setting

Schedule to record, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.

i EH6108H⁺ only supports 8 channels.

Schedule Setting

2011/04

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

Record

WEEKLY

ONE TIME

Remove

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
04/03																								
04/04																								
04/05																								
04/06																								
04/07																								
04/08																								
04/09																								

Save Clear All OK Cancel

To Set the Schedule Setting:

- Select the date in the calendar. Use and buttons to shift the calendar to the left or right.
- Select the condition you want to schedule in the drop down list.
 - **Record**
Activate all the cameras to start video recording at the set time based on the Recording setting
 - **Enable Network**
Activate DVR remote system to access at the set time. After the appointed time, the Network function will be disabled. If the Network function is already enabled, the Network function will not be disabled when the appointed time has ended.
 - **Reboot**
Restart the PC at the appointed time.
 - **Disable Alarm**
Deactivate the alarm at the set time temporarily.
- Set the schedule as weekly or one time. Click to make a selection.
- Click on the blocks to set the schedule or click **All** to select all. To un-select the specific schedule blocks, click the **Remove** and click blocks to un-select. To store the setting, click **Save**. To remove the settings, click **Clear**.

- To end Schedule Setting, click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

3.6 Backup Setup



- While backup, the CPU usage is near to 100% and might slow down the DVR system.
- EH6108H⁺ only supports 8 channels.

In the Backup Setting dialog box, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera number. When you back up the file, you may find Qplayer application included in the backup folder. User need to execute the Qplayer installation on PC for playback (see also [Chapter 3.6.1](#)).

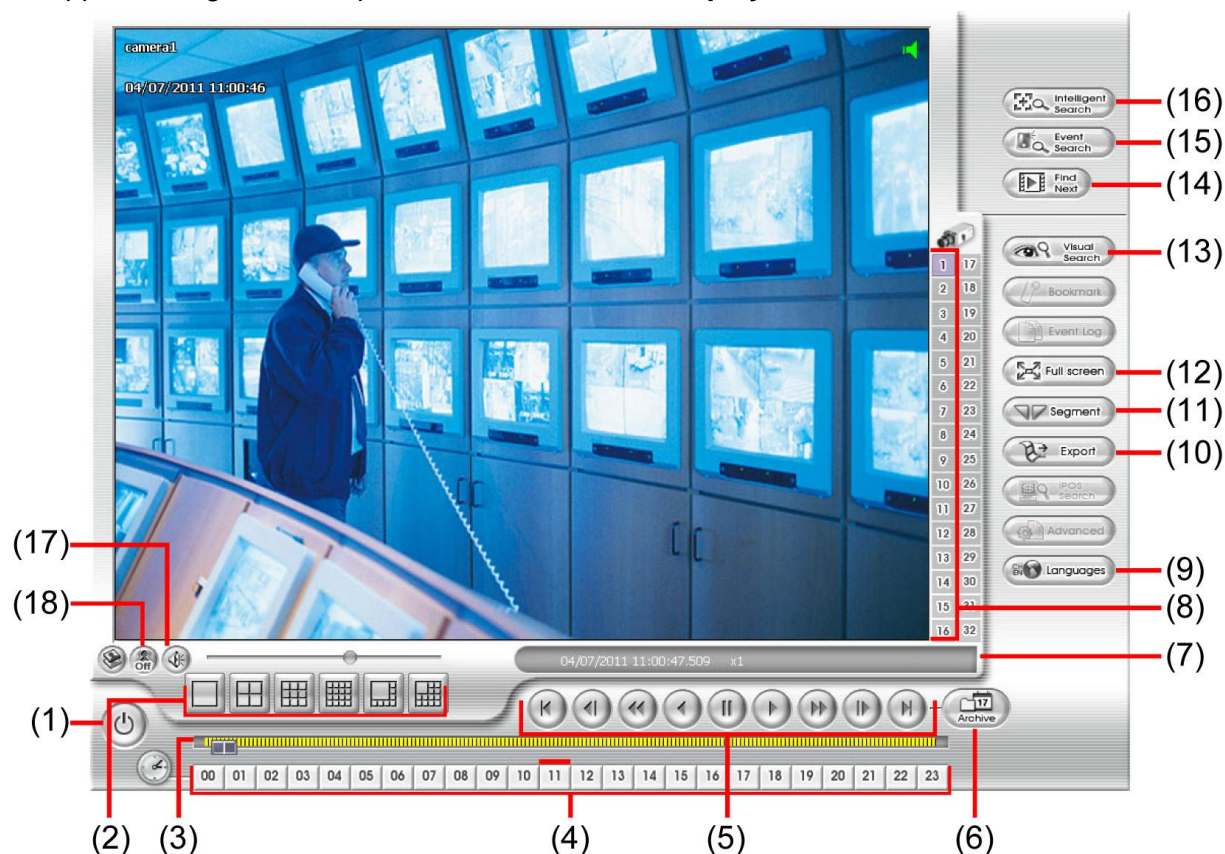
The screenshot shows the 'Backup Setting' dialog box. At the top, there is a calendar for April 2011. Below the calendar are two checkboxes: 'Include Player when backup' and 'Delete recorded files after Backup'. There is a 'Save path' dropdown menu set to 'USB-1:U3' and a 'Folder Name' text box containing 'Backup'. To the right, there are two text boxes: 'Require Space' showing '4.78 MB' and 'Free Space' showing '1506.62 MB'. Below these are 'Rescan Device' and 'Backup Now' buttons. At the bottom, there is a grid for selecting camera numbers (01-16) and times (00-23). The grid has columns for times (00-23) and rows for camera numbers (01-16). A vertical column of blue blocks is visible in the 10th time slot (10:00-10:59), and the 11th time slot (11:00-11:59) is highlighted in red. At the bottom of the grid are 'All' and 'Clear All' buttons, and an 'Exit' button is at the bottom right.

- Select the date of the recorded file in the calendar you want to backup. Use and buttons to shift the calendar to the left or right.
- In the table below, click on the blue block to select the recorded file or click camera (01~16) or time (00~23) to select the whole row or column. The blue block turns red when it is selected. The block that appears in white doesn't have data.
- Check the space need for backup beside the calendar. Click **Rescan Device** to calculate the space for backup.
 - **Require Space**: Show the total size of the backup file.
 - **Free Space**: Show the available storage space
- If user wants to include the Qplayer program in backup folder, mark the **Inculde Player when backup** check box. The Qplayer program will be in backup folder for playback using.
- If you do **NOT** want to keep the recorded file in the storage folder, enable **Delete files after Backup** check box.
- Select the backup device – USB disk or DVD-ROM device.
- DVR system will give **Folder Name** automatically.
- Click **Backup Now** button to start archiving the selected file.

3.6.1 Using QPlayer to Playback Backup Video

You can playback the backup files by using QPlayer applications on the PC. When you back up the recorded file, QPlayer applications are automatically included in the backup folder if user has enabled the selection of **Include player when backup** when backup recorded file. With QPlayer, it is the same as in Playback mode and supports different split screen types to view all the video at the same time. The only difference is that there are no Preview and Playback buttons.

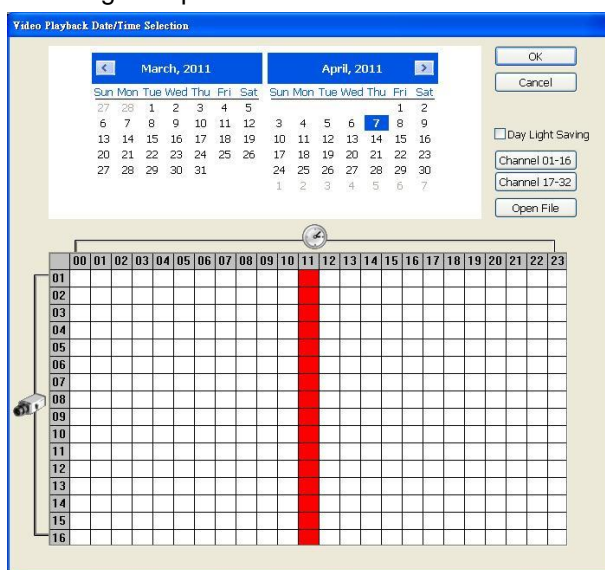
To run the application, go to backup folder and double-click **Qplayer.exe**.



Name	Function
(1) Exit	To close the application
(2) Split Screen Mode	Select from 6 different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.
i	To zoom in an area on the screen, Right click and Drag a square on the area you want to enlarge.
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
i	The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.


Name	Function
(5) Playback Control Buttons	<p>Begin: Move at the beginning of the recorded video file.</p> <p>Previous: Go back to the previous frame.</p> <p>Slower: Play the recorded video file at the speed of 1/2X, 1/4X, 1/8X, 1/16X, or 1/32X.</p> <p>Rewind: Wind back the recorded video file.</p> <p>Pause: Briefly stop playing the recorded video file.</p> <p>Play: Play the recorded video file.</p> <p>Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x, or 32x.</p> <p>Next: Go to the next frame.</p> <p>End: Go to the end of the recorded video file.</p>

- (6) Archive
- Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
- **OPEN FILE:** user can open the recorded file from HDD
 - **Channel 01~ 16&Channel 17 ~ 32:** If the channels are over 16, click button to switch to different channel group of playback calendar.
 - **Day Light Saving:** the playback calendar only display the video records during day light saving time period.



i The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.

(7) Status bar	Display the recorded date, time and play speed.
(8) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(9) Language	Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.
(10) Export	<p>Export includes Snapshot, Print, and Output Video Clip function.</p> <ul style="list-style-type: none"> ■ Snapshot: Capture and save the screen shot either in *.jpg format. ■ Print: Print the screen shot. ■ Output Video Clip: Save the segmented file in *.dvr format.
(11) Segment	Keep a portion of the recorded video (see also Chapter 3.6.2).

Name	Function
(12) Full screen	View in full screen mode. To return, press the right button of the mouse or ESC on the keyboard or click the arrow icon. 
(13) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second(see also Chapter 3.6.3)
(14) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(15) Event Search	Search from the recorded activities that were recorded in event log (i.e., Sensor, Motion, Video Loss). (See also Chapter 3.6.4)
(16) Intelligent Search	Search the changes in the motion detector frame (See also Chapter 3.6.5).
(17) Audio	Enable/disable volume
(18) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and select #2, if it captures lots of movement.

3.6.2 To Cut and Save the Portion of the Recorded Video

- Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.



- Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation, click **Segment** button again.



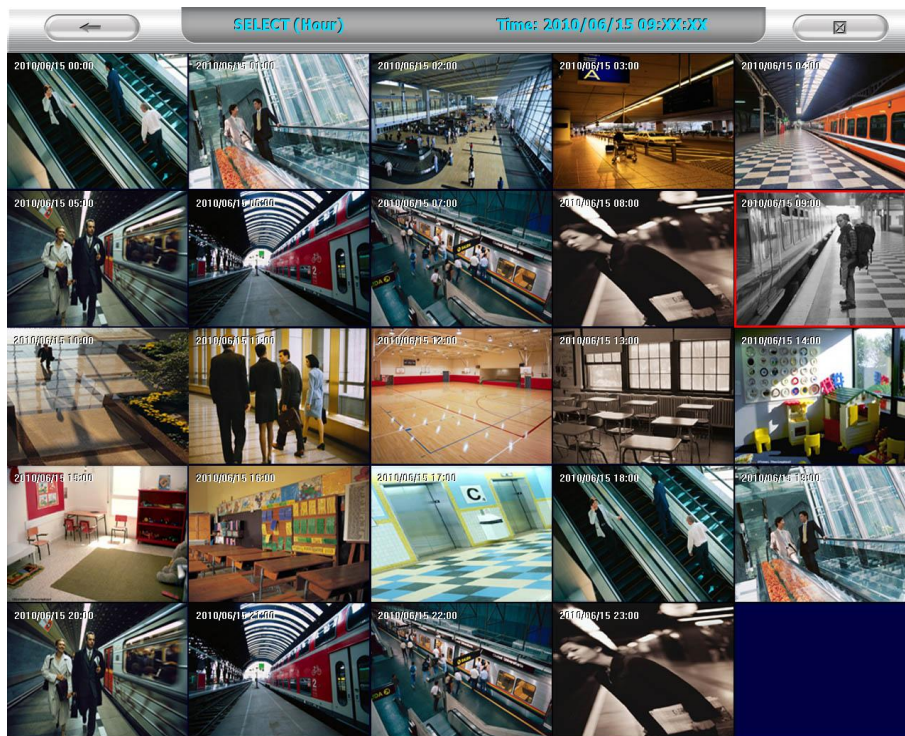
- Click **Export > Output Video Clip** button to save the wanted portion.
- In the **Save As** dialog box, locate on where user wants to save the file, type the filename, and select the video format.

3.6.3 To Search Using the Visual Search


1. Click **Visual Search**.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.




3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every 3Minutes of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click . To view from the selected frame and close event search, click .



3.6.4 To Search Using the Event Search

1. Click on the video screen on where you want to search.
2. Click **Event Search**. The Event Search text (red) would appear at the lower left corner of the screen.
3. In the Event Search Setting dialog box, check the type of condition you want to search. The video search would stop at the frame that matches the condition. To keep on searching click **Find Next** () button.
4. You may also set to search and list all the result. In the **Search Duration** section, set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching.
5. When the Event list appear, click and select the item you want to view.

3.6.5 To Search Using the Intelligent Search

1. Click on the video screen on where you want to search.
2. Click **Intelligent Search**. The Intelligent Search text (red) would appear at the lower left corner of the screen.
3. When the Intelligent Search Setting dialog box and motion detector frame appear, you may adjust the sensitivity bar and the motion detector frame size and location. To set motion detector frame size and location, left click and drag on the screen. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click . You may also set to search and list all the result. Just check the **List** box. In the **Search Duration** section set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching.



3.7 Sensor Setting

The I/O device must be installed to use this function.

1. Click the drop-down list and select the sensor ID number.
2. Enter sensor name in **Name** column.
3. The system automatically detects the card and input number. In the **Content** section, enter **Description** of sensor.
4. In the test section, click **Test** to check the sensor status. **Red** is high and **Green** is low.
5. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

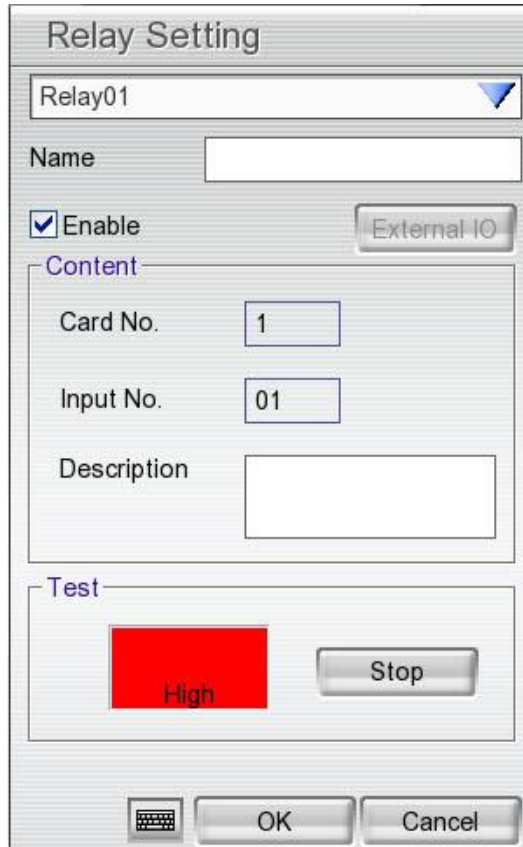
The image shows a 'Sensor Setting' dialog box with the following elements:

- Title:** Sensor Setting
- Sensor ID:** A dropdown menu currently showing 'Sensor01'.
- Name:** An empty text input field.
- External IO:** A button located to the right of the Name field.
- Content Section:**
 - Card No.:** A text input field containing the number '1'.
 - Input No.:** A text input field containing the number '01'.
 - Description:** An empty text input field.
- Test Section:**
 - A green rectangular indicator labeled 'Low'.
 - A 'Stop' button.
- Bottom Buttons:** A keyboard icon, an 'OK' button, and a 'Cancel' button.

3.8 Relay Setting

The I/O device must be installed to use this function.

1. Click the drop-down list and select the relay ID number.
2. Enter relay name in **Name** column.
3. The system automatically detects the card and input number. In the Content section, enter **Description** of relay.
4. In the test section, click **Test** to trigger relay. **Red** is high and **Green** is low.
5. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

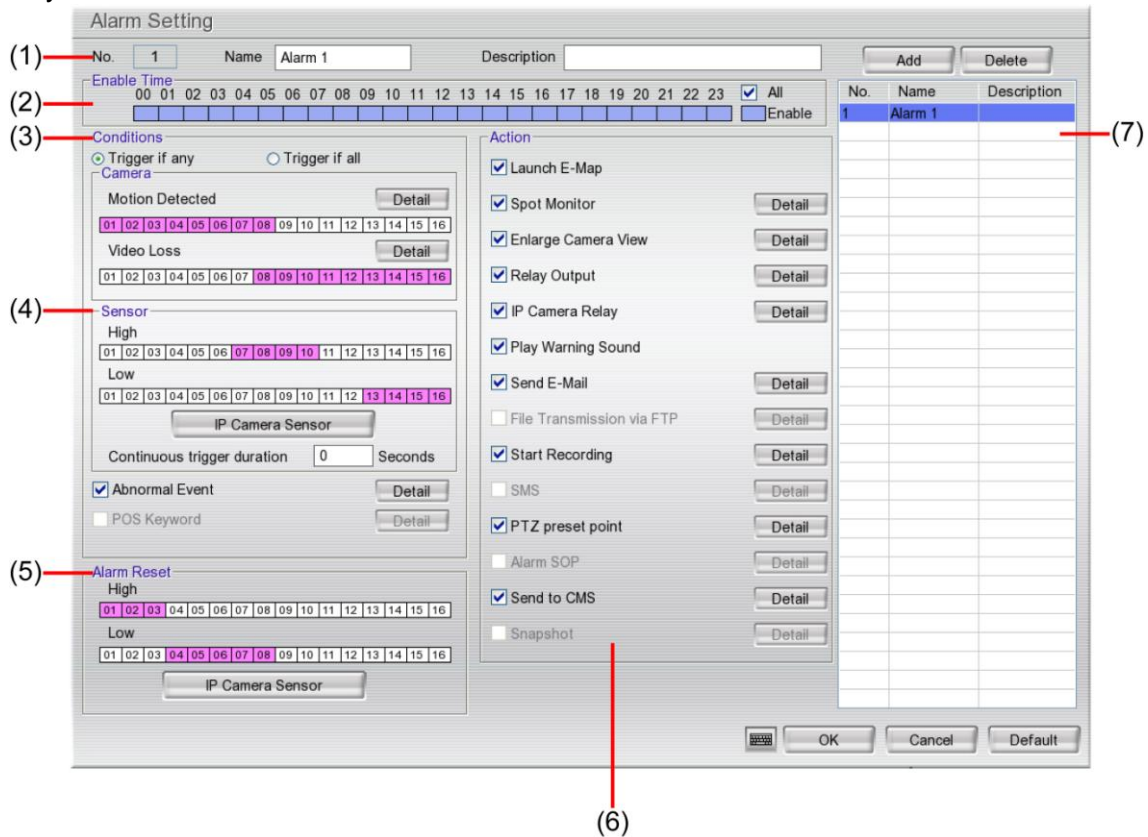


The image shows a 'Relay Setting' dialog box with the following fields and controls:

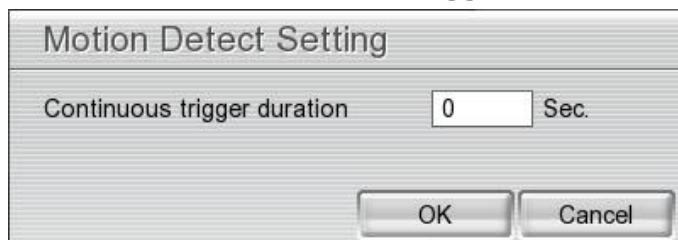
- Relay ID:** A drop-down menu currently showing 'Relay01'.
- Name:** An empty text input field.
- Enable:** A checked checkbox.
- External IO:** A button.
- Content Section:**
 - Card No.:** A text input field containing '1'.
 - Input No.:** A text input field containing '01'.
 - Description:** An empty text input field.
- Test Section:**
 - A red rectangular indicator with the word 'High' written on it.
 - A 'Stop' button.
- Bottom Controls:** A keyboard icon, an 'OK' button, and a 'Cancel' button.

3.9 Alarm Setting

In the Alarm Setting dialog box, click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **OK** to exit and save the setting, **Cancel** to exit without saving. Click **Default** will back to factory default value.



1. Click **Add** to insert and set a new alarm setting. Click the items in the **(7) Alarm Setting List** if you want to modify the alarm setting.
2. In **(1) No./Name/Description** enter alarm name and description. Alarm **No.** will be created by DVR system.
3. In **(2) Enable Time**, the number from 00 to 23 represent the time in 24-hour clock. Select the time and click the block you want to activate or deactivate the alarm function. When it is deactivated the color of the block turns white.
4. In **(3) Conditions**, you can set **“Trigger if any”** to activate if it falls to one of the conditions or **“Trigger if all”** to activate if it falls to all conditions.
5. In **Camera** section, select and click on the camera number (01 to 16) in **Motion Detected** and **Video Loss** to set the condition for the system to alarm.
 - **Motion Detected:** select and click on the camera number (01 to 16) to set the condition for the system to alarm. Click the **Detail** button to setup the system to send out the alarm when motion is detected and last the time that user has entered in **Continuous trigger duration**.



- Send E-mail

Send an electronic text message. Beside the Send Email check box, click **Detail**.

In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.

The screenshot shows the 'E-Mail Setting' dialog box with three main sections. Section (1) 'Mail Server' has an 'SMTP Server' field, a 'Port' field set to 25, a checked 'Authentication' checkbox, and 'ID' and 'Password' fields. Section (2) 'Mail' has 'From:', 'To:', 'CC:', and 'Subject:' fields, a 'Message' text area, a 'Notice Interval' of 1 minute, and a 'Test Account' button. Section (3) 'Snapshot' has a checked 'Enable' checkbox, a 'Select Camera' dropdown menu (set to 'Camera01'), and a 'Video Size' dropdown menu (set to 'Auto'). At the bottom right are 'OK' and 'Cancel' buttons.

(1) Mail Server

Enter the **SMTP Server** and **port**. If your e-mail system requires user identification, enable **Authentication** check box and enter **ID** and **Password**.

(2) Mail

Fill the mailing information. Click **Test Account** button can exam the mail is workable or not.

- ✓ **From:** Enter the sender e-mail address.
- ✓ **To and CC:** Enter the recipient email address and separate it with comma or a semicolon (;).
- ✓ **Subject:** Enter the message title.
- ✓ **Message:** Type the message.
- ✓ **Notice Interval:** Set a time gap for mail re-sending when mail has failed to send.

(3) Snapshot

When send out the email, the DVR system will snapshot image of the selected camera channel.

- ✓ **Select Camera:** Select the channel that will be snapshot when alarm email is sending out.
- ✓ **Video Size:** Select the size of vide that will be taken when snapshot. Auto means default size that chosen by DVR system.

- Start Recording

Record the video from the selected camera.

1. Beside the Start Recording check box, click **Detail**.
2. In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable **All** to select all cameras.
3. In the Frame Rate selection, select **As Setting** to record the number of frames based on the Recording Setting.
4. In the **Start Record prior** text box, mark and set the number in second for the program to begin recording before the alarm has been trigger. The time range is 1~10 seconds.
5. In the **Stop Record after** text box, mark and set the number in second for the program to continue recording after the alarm has ended. The time range is 1~999 seconds. If user doesn't mark and set the time, the alarm recording will continue recording until alarm is reset.
6. Click **OK** to accept the new settings and **Cancel** to exit without saving.

- PTZ preset point

Position the PTZ camera based on the preset point setting.

Beside the PTZ preset point check box, click **Detail**. In the Trigger PTZ Preset Setting dialog box, select the PTZ camera number then select the **Enable** check box. Select the position of the PTZ camera when the alarm is activated and ended. For the PTZ camera end point, user can also select on preset position or **Auto Pan** between preset position groups.

- Send to CMS (Central Management System)

Enable/disable the selected camera to send video to CMS when the alarm is activated.

Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.

(1) Authorization level

Select the status of the user. Administrator has full authority of control rights.

(2) Control Right

Enable the items that would allow the user to access.

(3) PCViewer

Enable/disable Web Viewer control right that allow the user to operate from a remote location using internet explorer.

- Remote Console

Allow the user to remote modify DVR system setting.

- Remote LogViewer

Allow the user to view the event log from remote site.

- Remote Record

Allow the user to record from remote site.

- IP Camera

Enable/disable user to add new IP camera when using the PCViewer.

- Remote Access Time

Enable **Infinite** check box to access DVR without time limit. If you want to set time limit, un-mark and enter the number of minutes in **Minute** text box.

(4) Visible Camera

Select the camera number that would allow the user to access or view. To select all the cameras, enable the **ALL** check box.

(5) Time Span

Set the user account a specific time period that user only can use given account to login DVR program in that specific period. Mark **Enable** check box and select the **Activation Date** and **Expiry Date**.

(6) Name

Enter the user name.

Description

Enter the user description.

Password

Enter the user password.

Confirm Password

Enter the same user password for confirmation.

Chapter 4 Using the UPC to Playback Backup File

4.1 Recommended System Requirements

- Pentium®4 2.4GHZ or above
- Windows®2000/ XP/Vista/7(32 bit/64 bit)
- DDR 256 MB
- Graphic function must support DirectDraw
- Audio card or built-in
- Speaker
- 1 available USB2.0 port

4.2 Installing the USB Playback Console

To install the USB Playback Console:

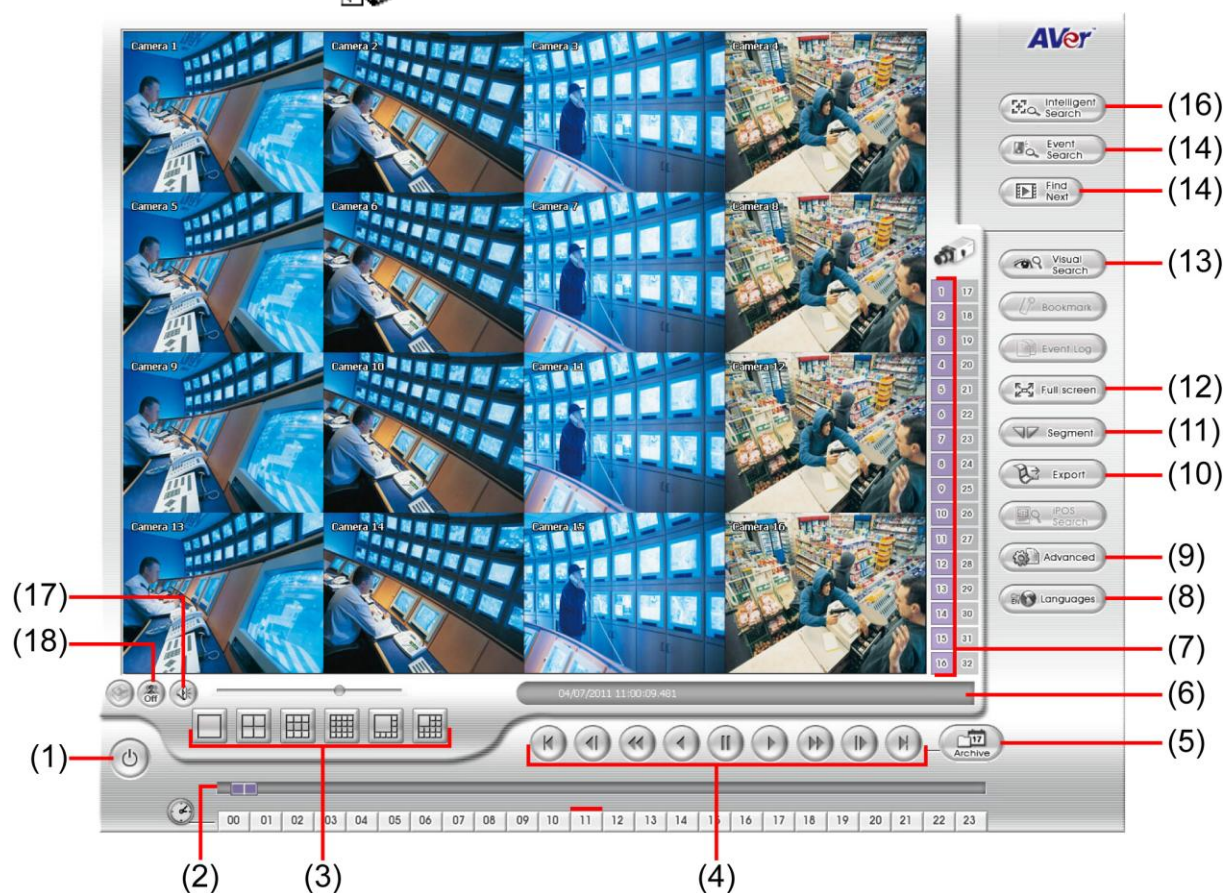
1. Place Installation CD into the CD-ROM drive. When the installation main screen appears, click **Install USB Playback Console** and then follow the on screen instructions
2. Select the language you prefer













3. Click **OK** to install the application.
4. Click **Exit** to close the installation main screen.
5. You may now connect the external USB storage device that has saved recorded files to PC.

4.3 Familiarizing the Buttons in USB Playback Console

To run the application, click the  icon on the PC desktop



Name	Function
(1) Exit	Exit the application.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Split Screen Mode	Select from different screen view to playback the recorded video file of the entire camera or one camera on screen. If there are only 8 cameras, you won't be able to switch to 13 and 16 split screen mode.
(4) Playback Control Buttons	<ul style="list-style-type: none">  Begin: Move at the beginning of the recorded video file.  Previous: Go back to the previous frame by frame.  Slower: Play the recorded video file at the speed of 1/2x, 1/4x, 1/8x, 1/16x, or 1/32x.  Rewind: Wind back the recorded video file.  Pause: Briefly stop playing the recorded video file.  Play: Play the recorded video file.  Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x, or 32x.  Next: Go to the next frame by frame.  End: Go to the end of the recorded video file.

Name	Function
(5) Archive	To select the video file source for playing.
	
	<ul style="list-style-type: none"> - DVR Recorded File (HD): To playback the recorded video from the hard disk which was recording video on the DVR system. (see also Chapter 4.3.2) - Backup File(.dvr): The file is backup and save in *.dvr file format. (see also Chapter 4.3.3) - Backup File(.avf): The file is backup and save in *.avf file format. (EH6000H series doesn't support *.avf file format when backup). - HD Eraser: HD Eraser function doesn't support for EH6000H series DVR.
(6) Status bar	Display the recorded date, time and play speed.
(7) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(8) Language	To switch DVR application UI language.
(9) Adv. Function	<p>Advanced function is including :</p> <ul style="list-style-type: none"> ■ HDD Backup: to call out HDD Backup application. (see also Chapter 4.3.4) ■ iEnhance: to call out iEnhance application. (see also Chapter 6) ■ AVF to AVI: Convert the *.avf file to *.avi file(EH6216H series doesn't support this function)
(10) Export	<p>Export includes Snapshot, Print, and Output Video Clip function.</p> <ul style="list-style-type: none"> ■ Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format. ■ Print: Print the screen shot. ■ Output Video Clip: Save the segmented file in *.avi, *.mpeg, or *.dvr format
(11) Segment	Keep a portion of the recorded video (see also Chapter 4.3.1)
(12) Full screen	<p>Use the entire area of the screen to only display the video. To return, press the right button of the mouse or ESC on the keyboard.</p> <p>When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.</p>
(13) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second(see also Chapter 4.3.5).
(14) Find Next	Search for the next event. You can use this when you are using Event Search function.
(15) Event Search	Search from the recorded activities that were recorded in event log (i.e., Sensor, Motion, Video Loss). (see also Chapter 4.3.6)
(16) Intelligent Search	Search the changes in the motion detector frame (see also Chapter 4.3.7).
(17) Sound /Sound bar	<p>Turn on and off the sound</p> <p>Adjust the volume</p>
(18) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and select #2, if it captures lots of movement.

4.3.1 To Cut and Save the Portion of the Recorded Video

1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.



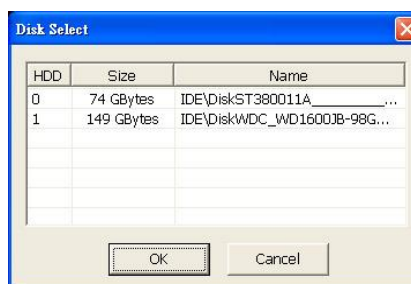
2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation, click **Segment** button again.



3. Click **Export > Output to AVI** button to save the wanted portion.
4. In the **Save As** dialog box, locate on where user wants to save the file, type the filename, and select the video format.

4.3.2 Playback DVR Recorded File from Hard Disk

1. Please have the hard disk which containing of recorded video data install on your PC or using external USB enclosure to connect to your PC.
2. Click **Open File** button
3. Select **DVR Recorded File(HD)** and click **OK**.
4. Select the hard disk drive from **Select Disk** window and click **OK**.



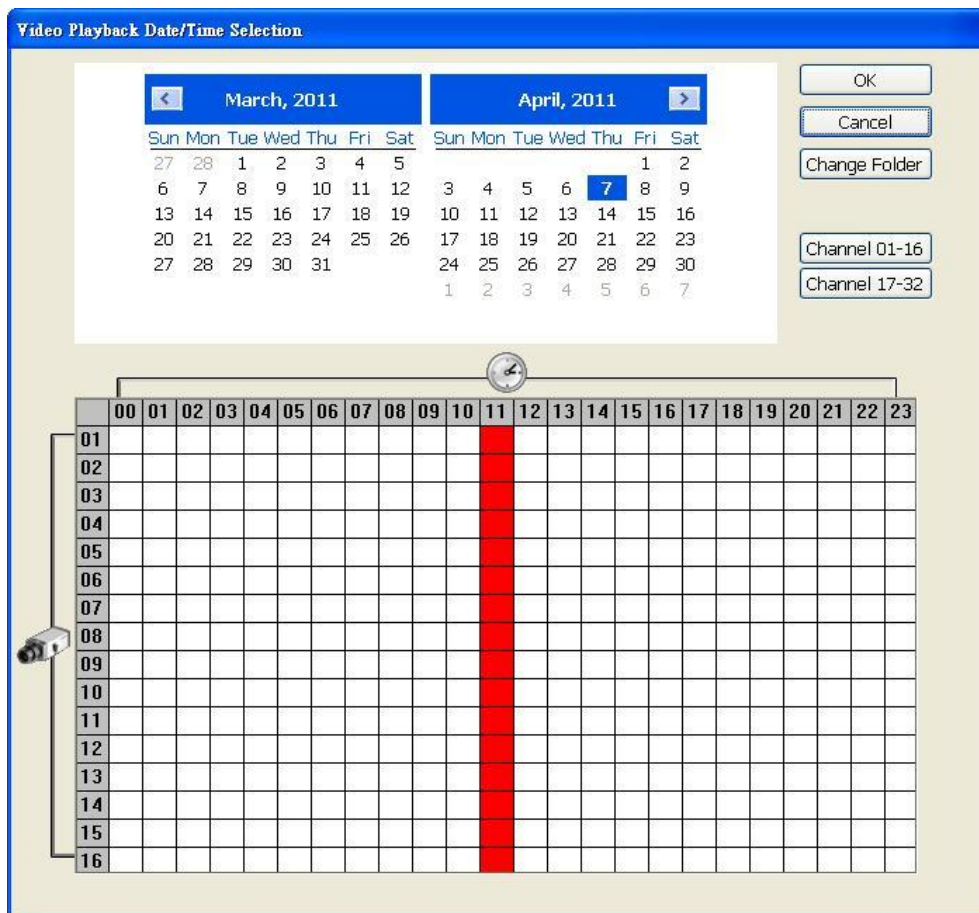
5. Then, Playback Date/Time Selection window appears. Select the date and time and click **OK**.

4.3.3 Playback Backup File(*.dvr)

1. Click Open File button.
2. Select **Backup File(*.dvr)** and click **OK**.
3. Select to open by date or by file.



4. Open by date, located the backup file and select the date folder.
5. And then, Playback Date/Time Selection window appears. Select the date and time and click **OK**.



6. Open by file, located the backup file folder and click **OK**.

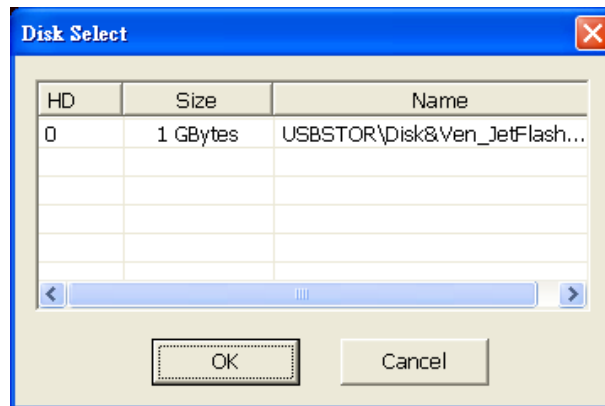


- When open by date, just locate the backup file folder.
- When open by file, locate the backup file.

4.3.4 To Backup Recorded File

HDD backup function allows user to backup recorded file from hard disk.

1. Click **Advanced** → **HDD Backup** on USB Playback Console UI.
2. Select the source hard disk.



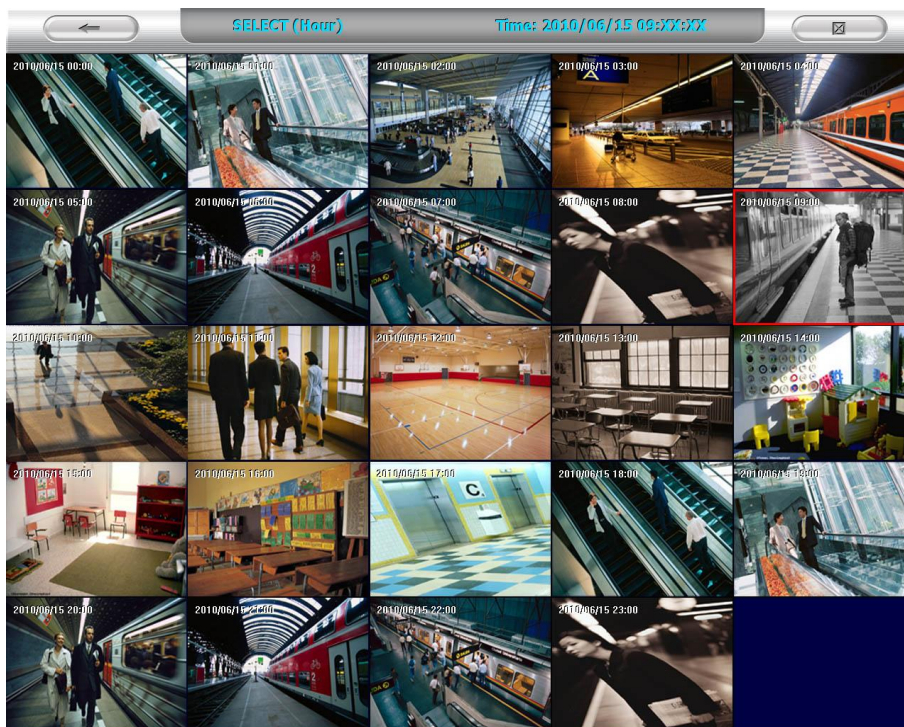
3. In Backup date/time selection windows, select the date and time. 00-24 represents hours and 01-16 represents channels. Blue block means there has recorded file. Red block means the block has been selected. Click-and-drag can select multiple blocks at once.
4. Click **Backup** to start backup file.
5. When backup complete, the complete information windows will display.

4.3.5 To Search Using the Visual Search


1. Click **Visual Search**.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.

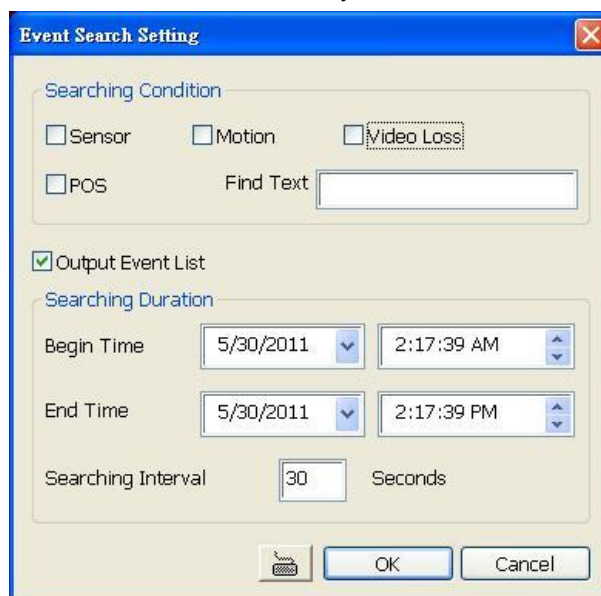


3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every 3Minutes of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click . To view from the selected frame and close event search, click




4.3.6 To Search Using the Event Search

1. Click on the video channel on where you want to search.
2. Click **Event Search**. The Event Search text (red) would appear at the lower left corner of the screen.
3. In the Event Search Setting dialog box, check the type of condition you want to search. The video search would stop at the frame that matches the condition. To keep on searching click **Find Next** () button.
4. You may also set to search and list all the result. In the **Search Duration** section, set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching.
5. When the Event list appear, click and select the item you want to view.



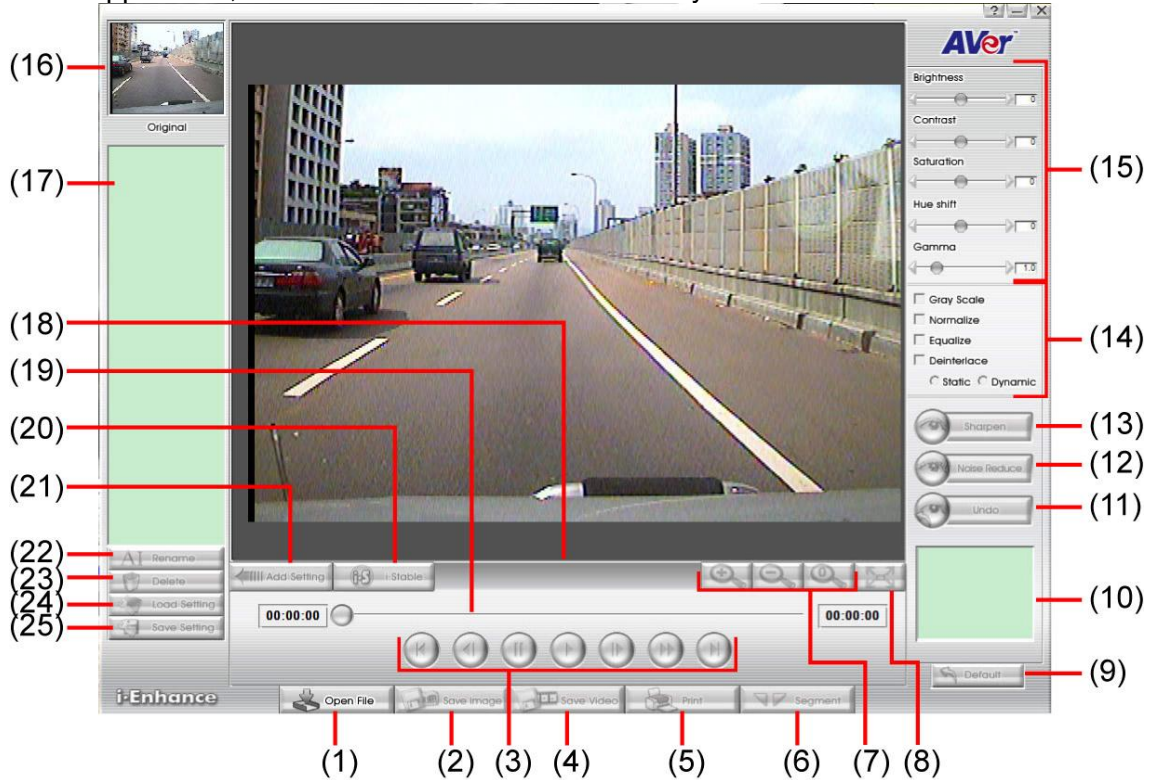
4.3.7 To Search Using the Intelligent Search

1. Click on the video screen on where you want to search.
2. Click **Intelligent Search**. The Intelligent Search text (red) would appear at the lower left corner of the screen.
3. When the Intelligent Search Setting dialog box and motion detector frame appear, you may adjust the sensitivity bar and the motion detector frame size and location. To set motion detector frame size and location, left click and drag on the screen. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click **Find Next** (). You may also set to search and list all the result. Just check the **List** box. In the **Search Duration** section set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching.

Chapter 5 iEnhance

The bundled iEnhance is a video editing tool and can only be used with *.dvr and *.avf video file. It allows you to adjust the video picture quality, segment and save the selected portion of the video, zoom in and out the image, and print or save the screen shot. You can also save the setting and apply it on other files.

To run iEnhance application, click **iEnhance** button on USB Playback Console interface.



Name	Function
(1) Open File	Access *.dvr and *.avf video file.
(2) Save Image	Capture and save the screen shot in *.bmp format.
(3) Playback Control Buttons	Begin: Move at the beginning of the video file. Previous: Go back to previous frame. Pause: Briefly stop playing the video file. Play: Play the video file. Faster: Play the video file at the faster speed. Next: Go to the next frame. End: Go to the end of the video file.
(4) Save Video	Save the edited or segmented video in *.avi format.
(5) Print	Print the screen shot.
(6) Segment	Mark the beginning and the end of the selected portion of the video. Two triangle marks will appear on the slider. To cancel video segmentation, click this button again.
(7) Zoom Buttons	Enlarge, reduce, and set the image back to normal size.
(8) Full Screen	Use the entire screen to only display the video.
(9) Default	Set the video back to original state and delete all the changes in the history box.
(10) History Box	List all the actions.
(11) Undo	Delete the last action.
(12) Noise Reduce	Adjust the softness and repair the damaged colors.

Name	Function
(13) Sharpness	Improve the overall image by enhancing edges. This gives the image more depth.
(14) Effects	<ul style="list-style-type: none"> ■ Gray Scale: convert the image into black and white (monochrome). ■ Normalize: adjust the brightness intensity. ■ Equalize: automatically adjust the images that are too dark. ■ De-interlace: smooth out the overlying frames. <ul style="list-style-type: none"> - Static: de-interlace for motionless scene. - Dynamic: de-interlace for moving scene.
(15) Picture Adjustment	Adjust the Brightness, Contrast, Saturation, Hue and Gamma.
(16) Original Screen	Display the original state of the image.
(17) Temporary Setting Block	Display the sample settings. Click the sample to apply the setting on the current video.
(18) Status Bar	Display the date, and time of the video.
(19) Progress Bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(20) iStable	To reduce the jolt in the recorded video.(also see Chapter 5.1)
(21) Add Setting	Include the new setting to the temporary setting block.
(22) Rename	Change the name of the selected setting in the temporary setting block.
(23) Delete	Permanently remove the selected setting in the temporary setting block.
(24) Load Setting	Call the saved settings.
(25) Save Setting	Store the settings in the temporary setting block.

5.1 To Use iStable

The iStable function can reduce the jolt in the recorded video.

1. Click **Open File** button and select the recorded video.
2. And then, click **iStable** button.
3. iStable windows will show up.
4. Select the **smoothness** level – 1(Low), 2, 3, 4, and 5(High). The default value is 3.
5. Click Play button, and then iStable function will start to initial the recorded video.
6. When the initialize is done, user will see the original and stabilized recorded video play in two windows. The original video on the right side of window and the stabilized video on the left side of window.



Chapter 6 Using the Remote Programs

User can use Microsoft Internet Explorer to access DVR system by entering the IP address. To use this feature, make sure that your PC and DVR server both are connected to the internet and the Network feature is enabled.

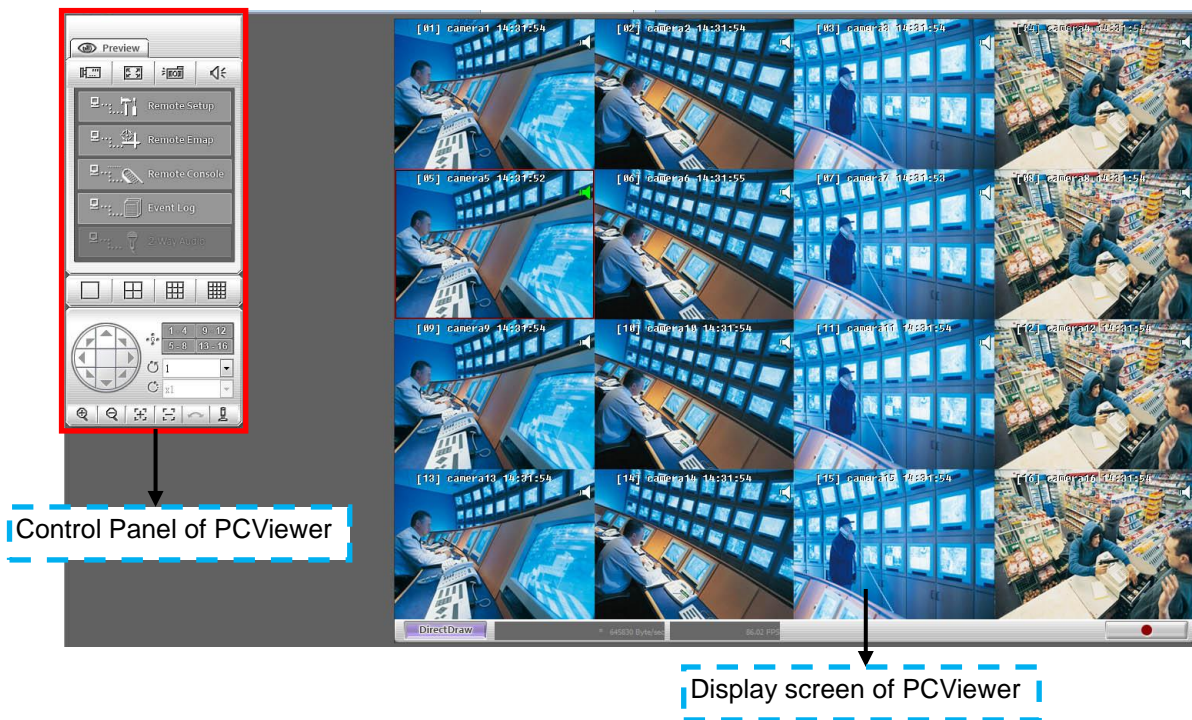
Accessing this feature for the first time you will be prompted by your browser to install WebCamX.cab, allow the installation and you should be able to connect and login afterwards.

For Windows XP/Vista/7, click Install when the Internet Explorer - Security Warning dialog box appears.

After installing the WebCamX.cab and when connecting to the DVR system, you are required to enter account ID and password; then, select the type of network. **Admin** account has the authority to remote setup the DVR system configuration on PCViewer. User account only can preview the video on PCViewer and Remote Console.

- i** - To have smooth remote frame rate, it's suggested to connect DVR by selecting **WAN (512K/64K)** as the Network Type on PCViewer.
- To operate full remote function, please use "Administrator" account to execute IE browser.

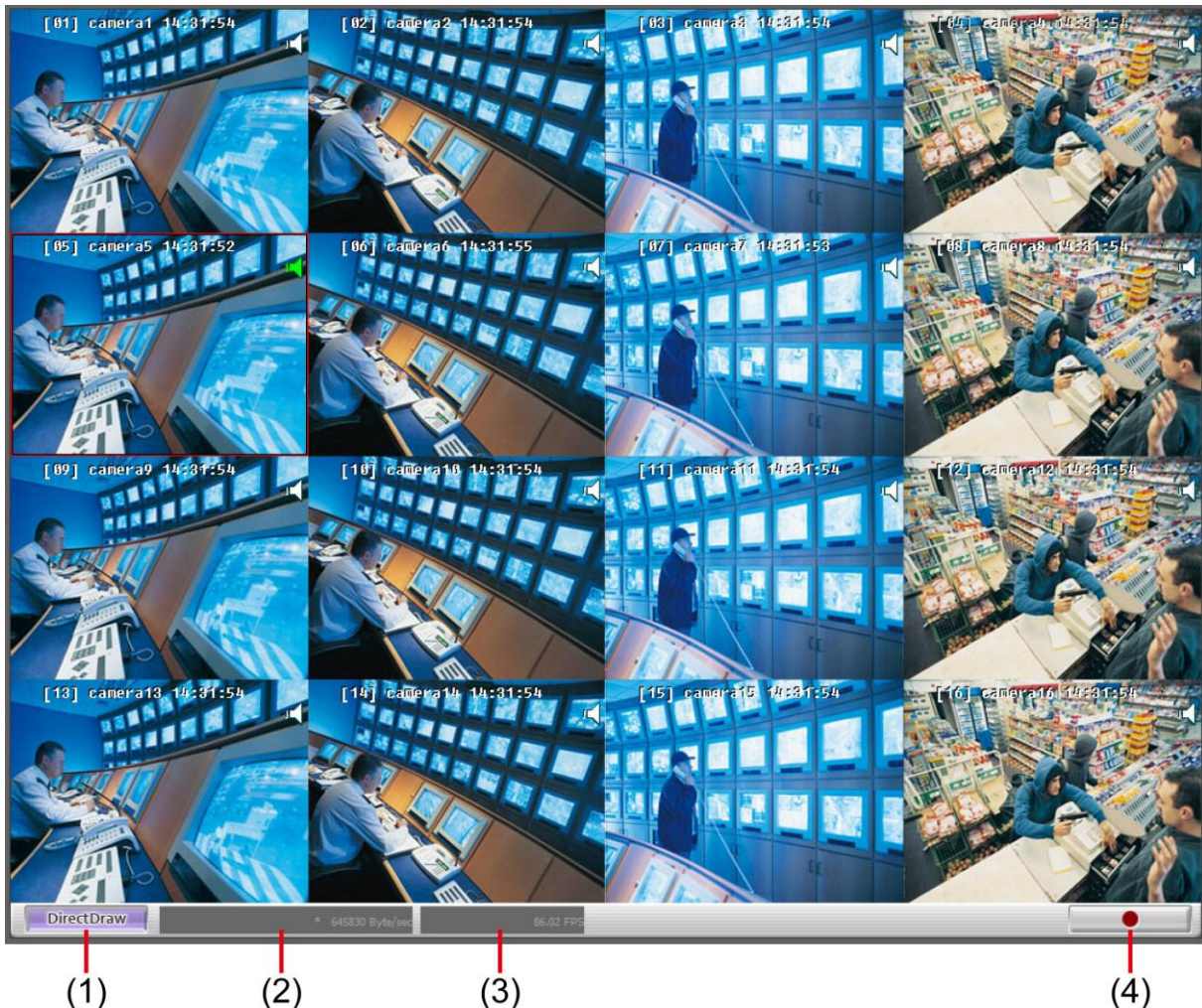
After login, the PCViewer interface is displayed.




6.1 Familiarizing the Buttons in PCViewer

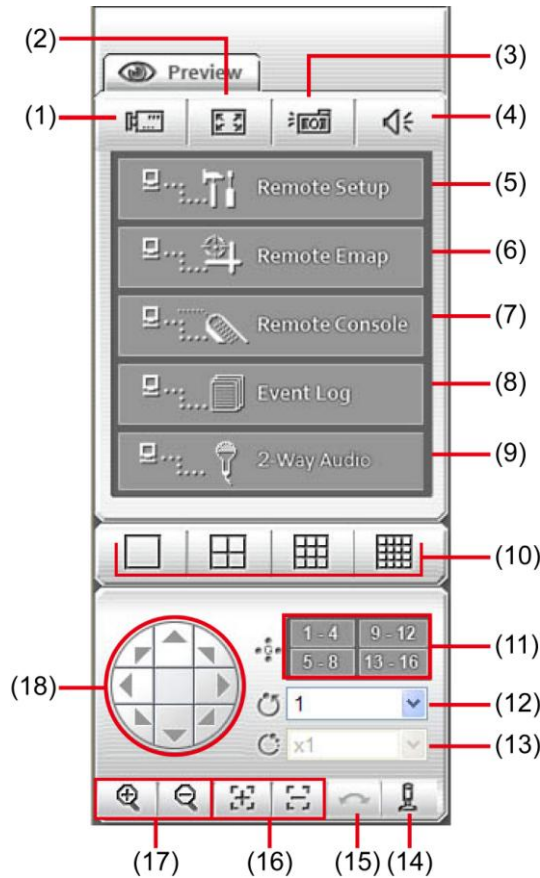
6.1.1 PCViewer Screen

Right-clicking on the PCViewer video screen, enables you to start video recording, change video quality, switch camera and enable/disable DirectDraw.



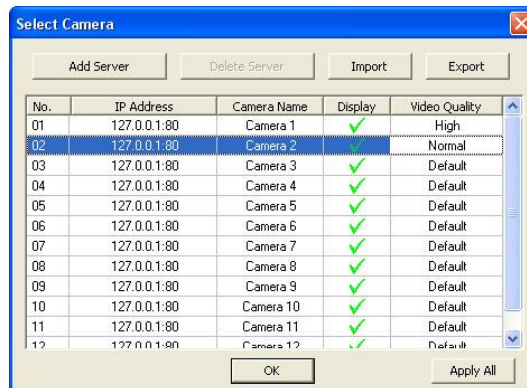
Name	Function
(1) DirectDraw	Enhance the video quality.
 Not all graphic cards can support this function. If you cannot see the screen display correctly or screen is messed, please check with VGA card vendor.	
(2) Received file size	Indicate the size of the data being sent per second.
(3) Camera frames	Indicate the number of frames per second.
(4) Record	Start to record the video of the selected camera in AVI format. Directly click screen to select the channel that user wants to record and press Record button.

6.1.2 PCViewer Control Panel



Name	Function
------	----------

- (1) Select cameras to view
- Select to the view camera from different server. In Select Camera dialog box, Display column, click to enable/disable viewing the camera.
 Click **Add Server** and select the server type between DVR and IP Cam to add.
 Click **Delete Server** to delete the selected item.
 Click **Import** to load the previous saved list.
 Click **Export** to save the list.
 Click **Apply All** to change all the camera video quality based on the selected setting.
 Click **OK** to exit.



- (2) Full screen Use the entire area of the screen to only display the video.
 To return, Right click the mouse or press ESC on the keyboard.
- (3) Snapshot Capture and save the screen shot in *.bmp format.
- (4) Audio Enable/disable remote sound.

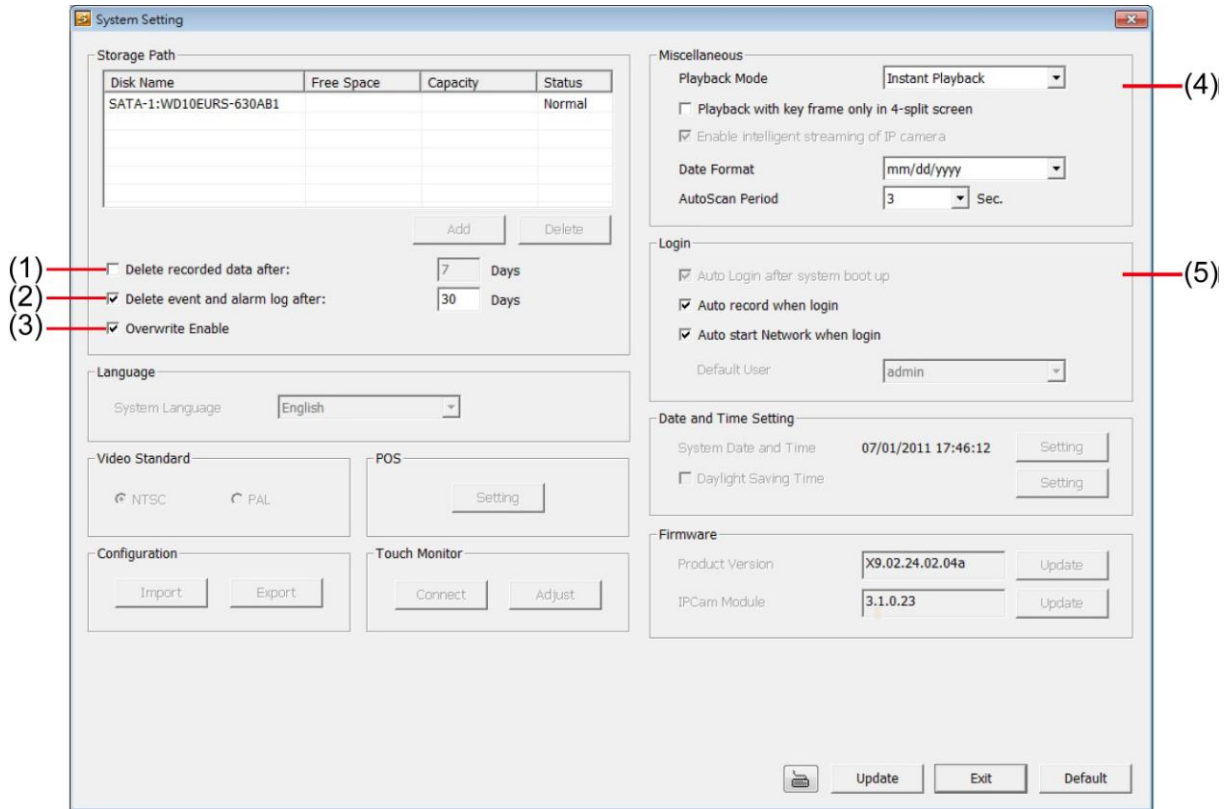
Name	Function
(5) Remote setup	Change the DVR server settings (see also Chapter 6.1.3)
(6) Remote Emap	To call out the Emap of remote DVR server to view.
(7) Remote Console	Initiate Remote Console. It allows you to control DVR server (see also Chapter 6.2).
(8) Event Log Viewer	Display the Event logs, Operation logs, System logs, and Network logs.
(9) 2-Way Audio	<p>Enable/disable 2-way audio function. This function allows the client and server to talk via internet using MIC.</p> <p>Make sure your microphone and speakers work before using this function. If the DVR server Talk to web-client setting is disabled, you won't be able to hear from the other side.</p>
(10) Split screen view	Select from four different split screen types to view all the cameras.
(11) Auto Pan Group	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(12) Camera preset position number	Move the PTZ camera to the preset point.
(13) Direction buttons' moving speed	Adjust the moving speed of the PTZ camera lens. This speed will apply to the (18) Direction buttons' moving speed only.
(14) Select PTZ	<p>Choose to enable/disable the PTZ camera. In the Select PTZ dialog box, Select column, click to enable/disable viewing and controlling the PTZ camera.</p> <p>Click OK to exit and save the setting and Cancel to exit without saving the setting.</p>
(15) Atuo Pan	Enable the PTZ cameras automatically based on the selected camera group preset position number.
(16) Zoom +/-	Zoom the image in or out.
(17) Focus +/-	Adjust the focus manually to produce clear image.
(18) Direction Buttons	Adjust and position the focal point of the PTZ camera. The supported direction buttons are depended on the PTZ camera has supported.

6.1.3 To Setup Remote System Setting

The setting here applies to Remote DVR only.

6.1.3.1 System Setting

In the System Setting windows, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Delete recorded data after

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box.

(2) Delete event and alarm log after

If you want the system to automatically erase the event and alarm log files after a certain days, enable the **Delete event and alarm log after** check box and enter the numbers of days in **Days** text box.

(3) Overwrite Enable

When there is not enough free space to record one hour data, the system automatically replaces the oldest data.

(4) Miscellaneous

Enable the conditions in **Miscellaneous** section you want the system to perform.

- Playback Mode

Select the mode of playback the video.

- **Select date and time:** Select the date and time which user wants to playback.
- **Play the last file:** Automatically playback the video from the last hour
- **Instant Playback:** Automatically playback the video which has just recorded

- Date Format

Select the date format which wants to display in **Select date and time** playback mode

- **Auto Scan Period**

Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.

(5) Login

Enable the conditions in Login section you want the system to automatically carry out.

- **Auto record when login**

Automatically start video recording when the DVR is executed.

- **Auto start Network when login**

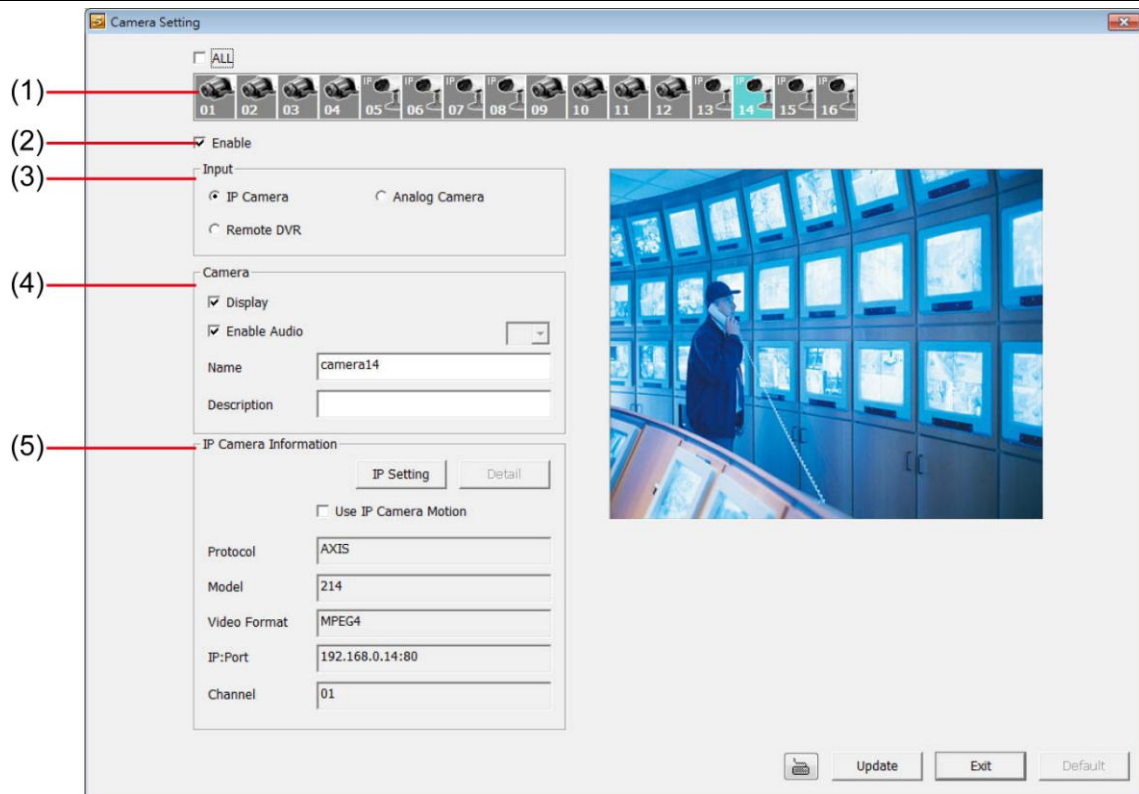
Automatically connect to network when the DVR is executed.

6.1.1.2 Camera Setting

Select the camera from remote DVR servers to modify settings. In the Camera Setting windows, click **Update** to save and apply the new settings, click **Exit** to exit without saving.

IP Camera Setting

i EH6108H+ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to adjust the video setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, Right click on the camera icon. To select one camera only, Left click on the camera icon. The camera icon turns red when it is selected.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the type of camera as IP camera. For General camera setting, see [Analog Camera Setting](#). To modify camera of remote DVR, see [Remote DVR Camera Setting](#).

(4) Camera

- **Display:** Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- **Enable Audio:** Audio function doesn't support on IP camera.
- **Name:** Change the camera name

i DVR supports Chinese characters but only can be entered in remote site (remote setup).

- **Description:** Add a short comment

(5) IP Camera Information

To setup IP camera and display current IP camera information.

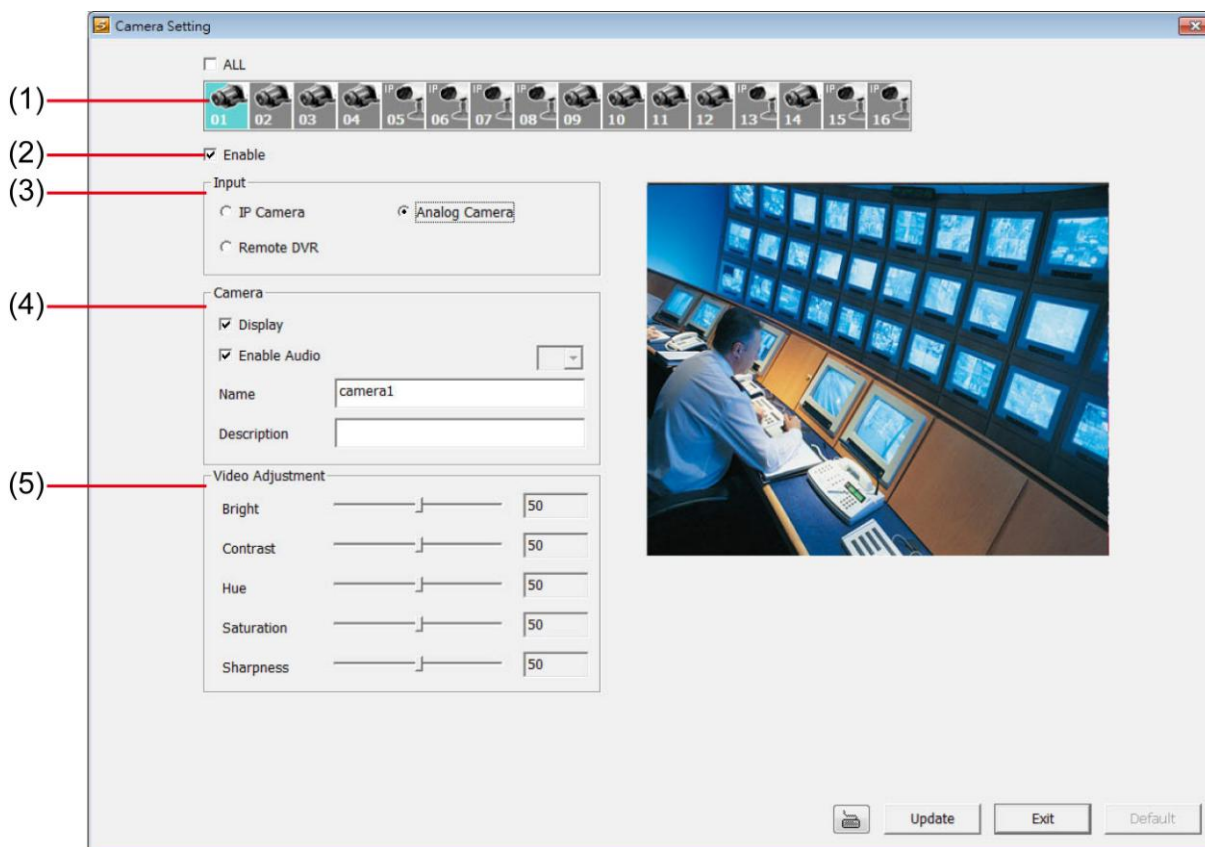
- **IP Setting:** Click **IP setting** to add the IP camera.

1. Click the radio button of **Protocol** to start setup IP camera.
2. Select the **Protocol**, **Model**, **Video Format**, and **Channel** of the IP camera.
3. Enter IP address and connecting port in **IP Camera Site** column.
4. Also, user can enter URL of IP camera instead of IP address.
5. If the IP camera has authority request, please enable **Authentication** and enter **ID** and **Password**.
6. Click **OK** to connect with the IP camera.

Analog Camera Setting

Select the camera from remote DVR servers to modify settings. In the Camera Setting windows, click **Update** to save and apply the new settings, click **Exit** to exit without saving.

i EH6108H+ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to view. To enable/disable all cameras, click **ALL** check box.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the camera type as **General Camera**. For IP camera setting, see [IP Camera Setting](#). To modify camera of remote DVR, see [Remote DVR Camera Setting](#).

(4) Camera

- Display

Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.

- Enable Audio

Enable/disable audio function.

- Name

Change the camera name

i DVR supports Chinese characters but only can be entered in remote site (remote setup).

- Description

Add a short comment

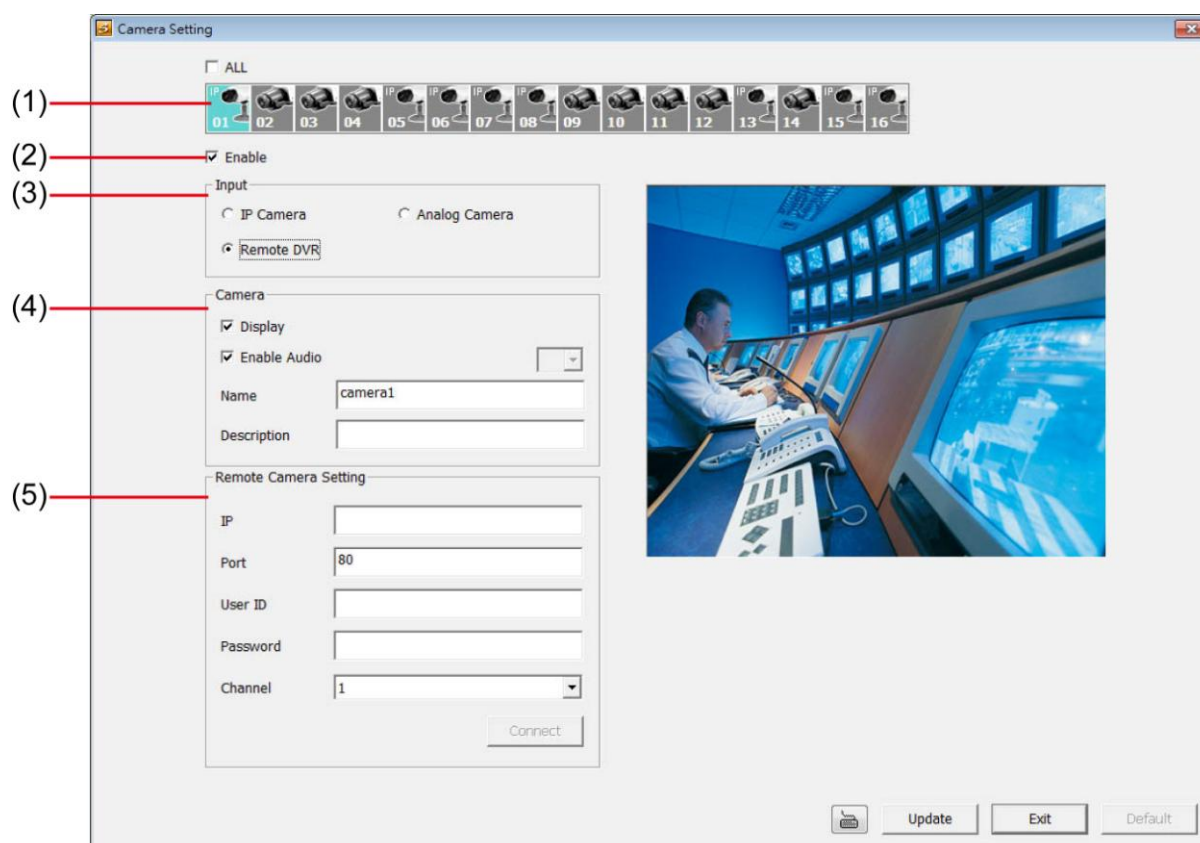
(5) Video Adjustment

Adjust the Brightness, Contrast, Hue and Saturation of the camera.

Remote DVR Camera Setting

Select the camera to modify settings. In the Camera Setting windows, click **Update** to save and apply the new settings, click **Exit** to exit without saving.

i EH6108H⁺ only supports 8 channels.



(1) Camera Icons

Select the camera number you want to view. To enable/disable all cameras, click **ALL** check box.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Input

Select the camera type as **Remote DVR**. For IP camera setting, see [IP Camera Setting](#). To modify analog camera setting, see [Analog Camera Setting](#).

(4) Camera

- **Display**
Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- **Enable Audio**
The audio function doesn't support for remote DVR.
- **Name**
Change the camera name

i DVR supports Chinese characters but only can be entered in remote site (remote setup).

(4) Remote Camera Setting

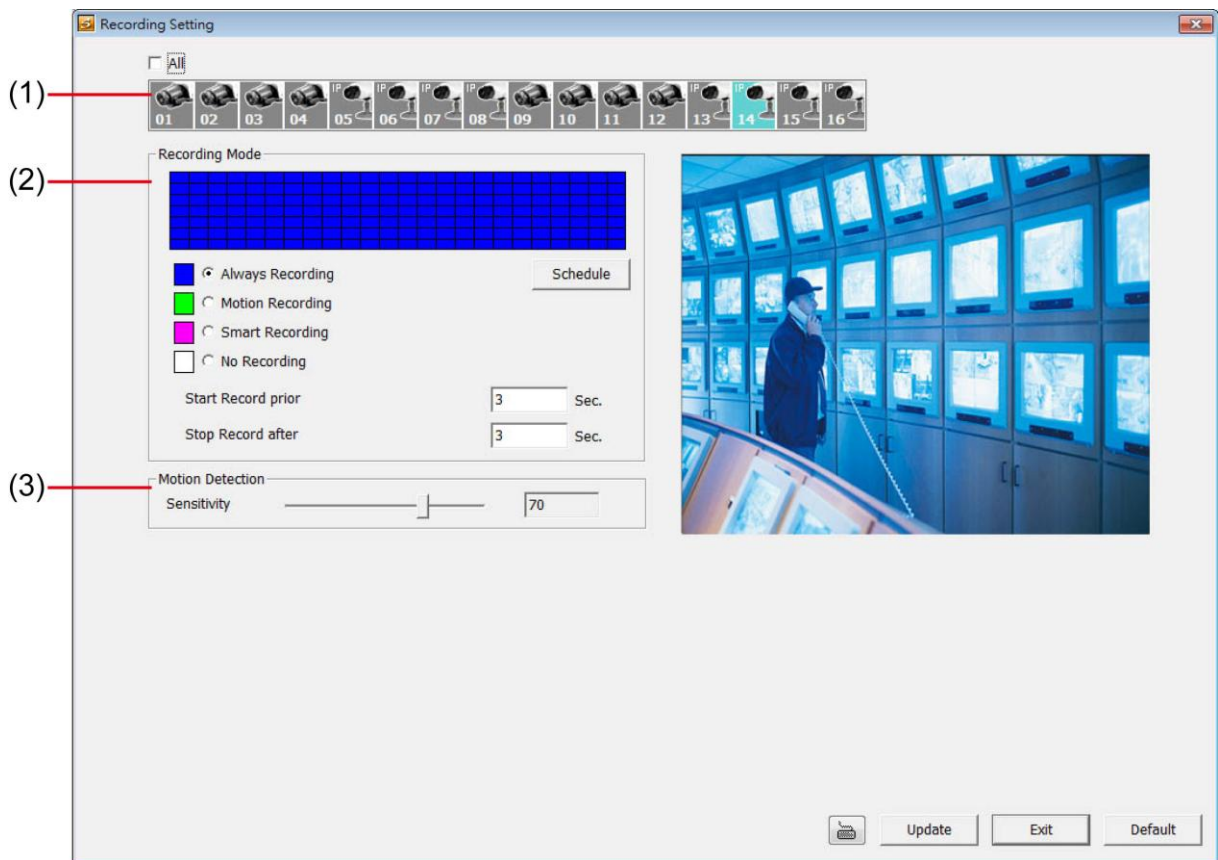
- **Description**
Add a short comment
- **IP**
Enter the IP address of the camera
- **Port**
The port for connection
- **User ID**
Enter the user id that for connecting authority
- **Password**
Enter the password that is for connecting authority
- **Channel**
Select the channel of connected camera

6.1.1.3 Record Setting

In the Recording setup windows, click **OK** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.

Record Setting of IP Camera


i EH6108H⁺ only supports 8 channels.

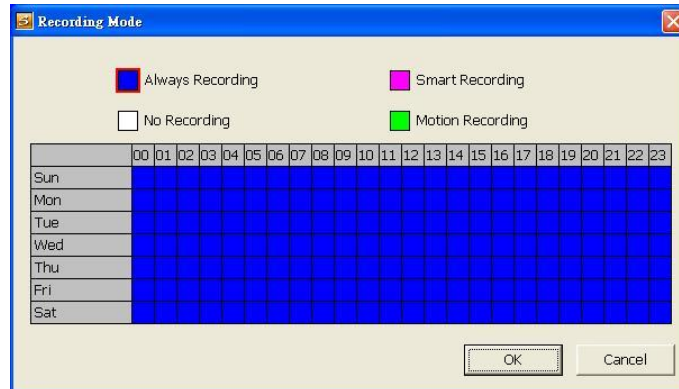


(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Recording Mode

The horizontal blocks from 00 to 23 represent the time in 24-hour clock and the vertical block represent the day in the week block (Sunday to Saturday). To record in full 24 hours and 7 days a week, select the recording mode and click the  button. If you want to only record at a particular time or day, click **Schedule** button and select the **Recording Mode**, and then click on the time or day blocks. When the system starts recording a red triangle mark would appear at the upper left corner of the screen.



The recording modes are listed below:

- **Always Recording**
Record the video from the selected camera and save it to the designated storage path
- **Motion Recording**
Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.
- **Smart Recording**
Automatically switch to recorded at the maximum frame rate once a motion is detected and if there is no motion, it records key frame only.
- **No Recording**
The system won't do any recording.

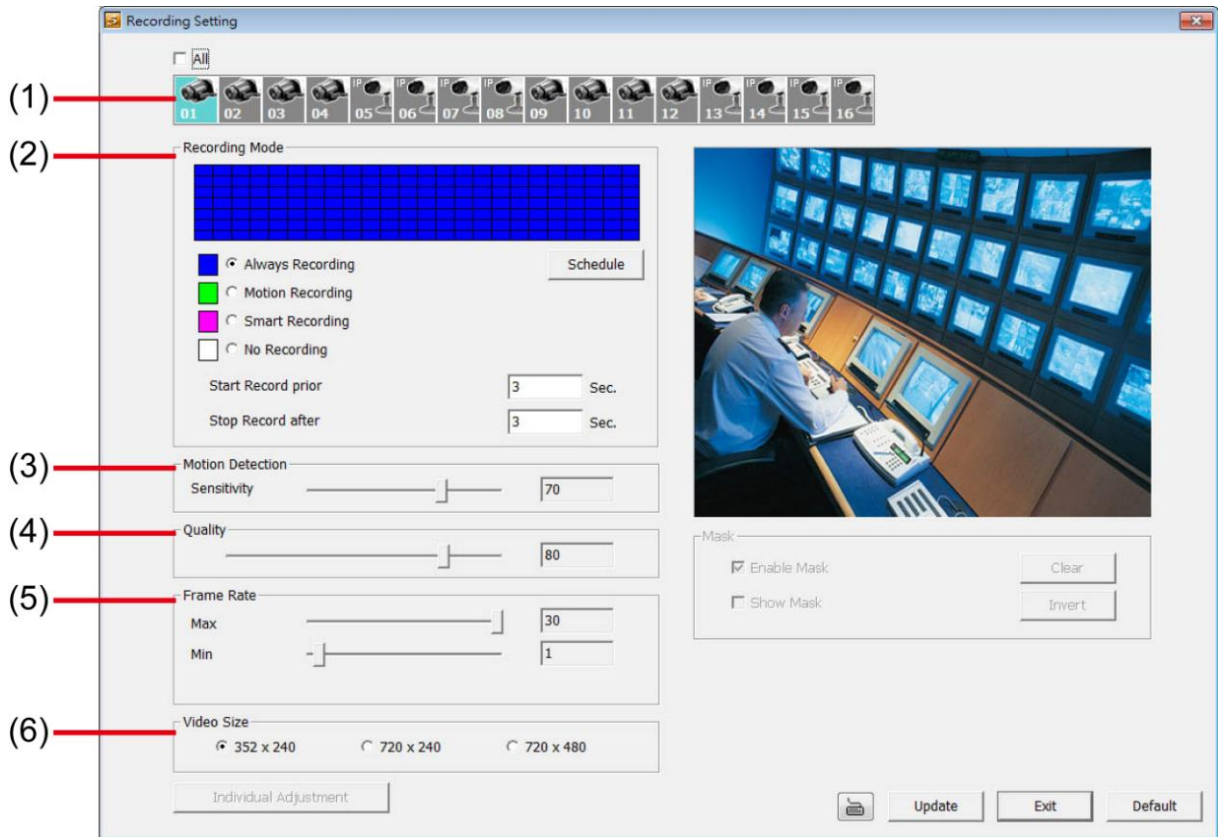
(3) Motion Detection

Adjust the sensitivity of the motion detection. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

Record Setting of Analog Camera



EH6108H⁺ only supports 8 channels.

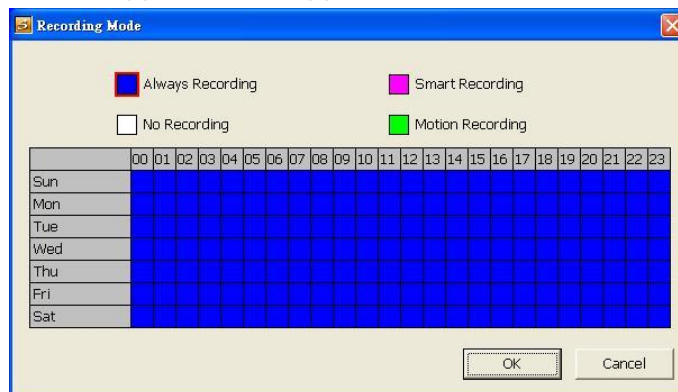


(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns purple when it is selected.

(2) Recording Mode

The horizontal blocks from 00 to 23 represent the time in 24-hour clock and the vertical block 1 to 7 represent the day in the week block (Sunday to Saturday). To record in full 24 hours and 7 days a week, select the recording mode and click the **☉** button. If you want to only record at a particular time or day, click **Schedule** button and select the **Recording Mode**, and then click on the time or day blocks. When the system starts recording a red triangle mark would appear at the upper left corner of the screen.



The recording modes are listed below:

- Always Recording

Record the video from the selected camera and save it to the designated storage path

- **Motion Recording**

Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.

- **Smart Recording**

Automatically switch to recorded at the maximum frame rate setting once a motion is detected and if there is no motion, it records at the minimum frame rate setting.

- **No Recording**

The system won't do any recording.

(3) Motion Detection

Adjust the sensitivity of the motion detection. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

(4) Quality

Adjust the video quality. The higher the value, the lower the compression level and uses more hard disk space.

(5) Frame Rate

Set the maximum and minimum number of frames to be recorded during motion and motionless state. The frame rate ranges from 01 to 30 for NTSC and 01 to 25 for PAL. The higher the frame rate, it uses more hard disk space.



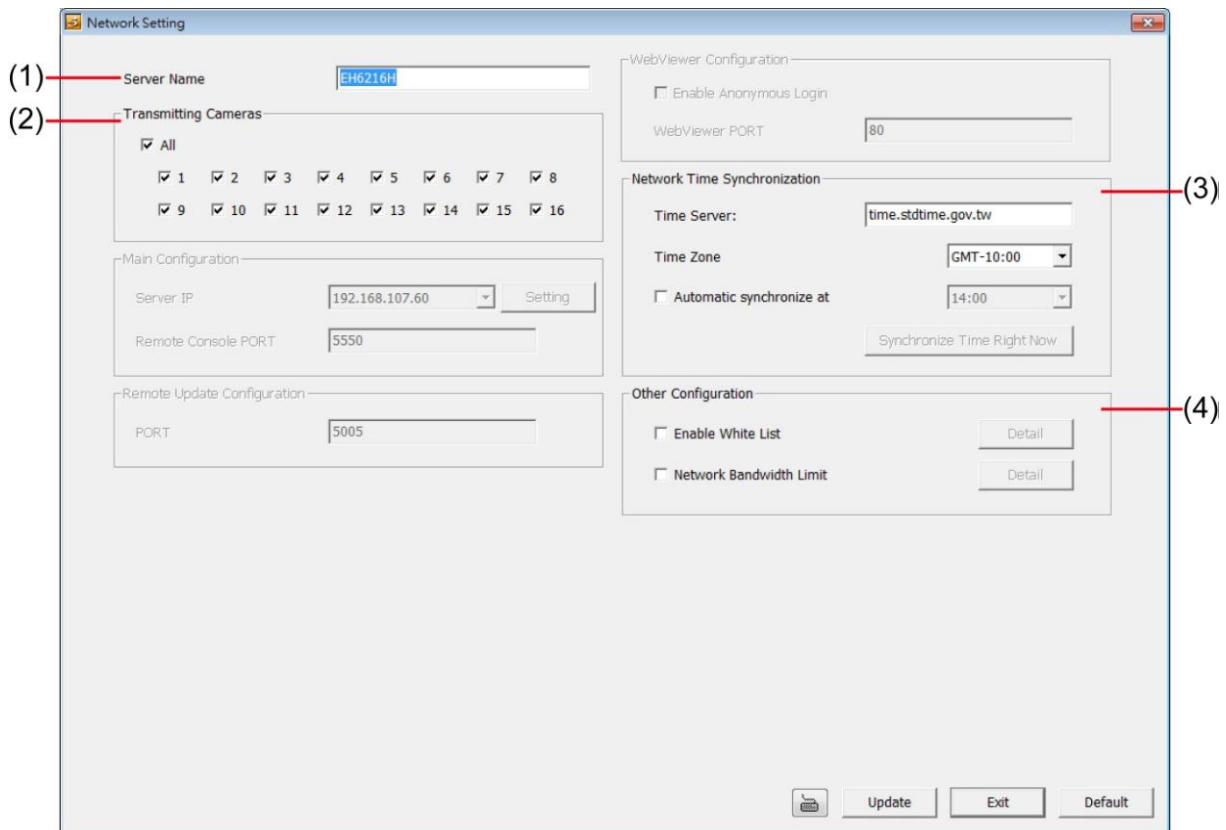
Always recording frame rate is depending on max frame rate value.

(6) Video Size

Select the size of the video and click the  button. The higher the size, the larger the file it create.

6.1.3.2 Network Setting

In the Network Setting dialog box, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting. For the network service ports that use by DVR server, please see [Appendix A](#).



(1) Server Name

Assign a name for the DVR unit. Alphabet letters and numbers only.

(2) Transmitting Cameras

Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using PCViewer, Remote Console, PDA Viewer and JavaViewer (still image). To select all the cameras, enable the **ALL** check box.

(3) Network Time Synchronization

Adjust the DVR system time same as network time server. Fill in the **Time Server** IP address or domain name. Select the **Time Zone** that DVR is located. And then, mark the **Automatic Synchronize** time to set automatic synchronize time on a daily basis.

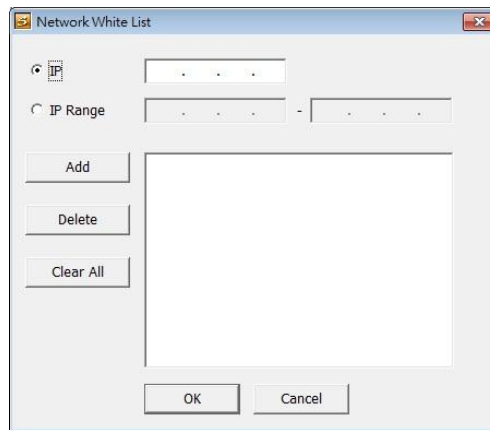
(4) Other Configuration

- Enable White List



Without any **IP/IP range** is assigned in White List table, none of IP address/IP range is allowed to access DVR when White List function is enabled.

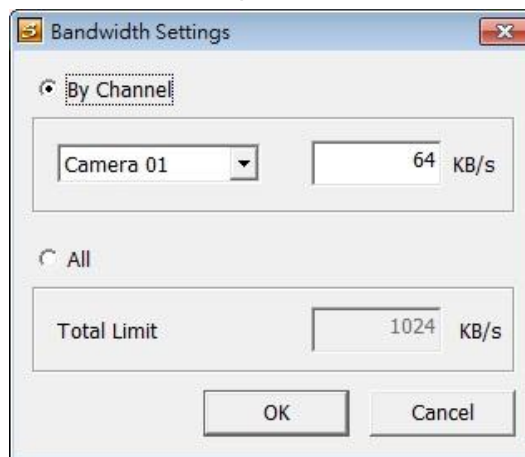
An access permit list for the remote accessing of DVR server. Enter the IP address and click **Add**. Or, enter a range of IP address and click **Add**. To delete the IP from the list, select the IP and click **Delete** button. To reset the input, click **Clear** button.



- **Network Bandwidth Limit**

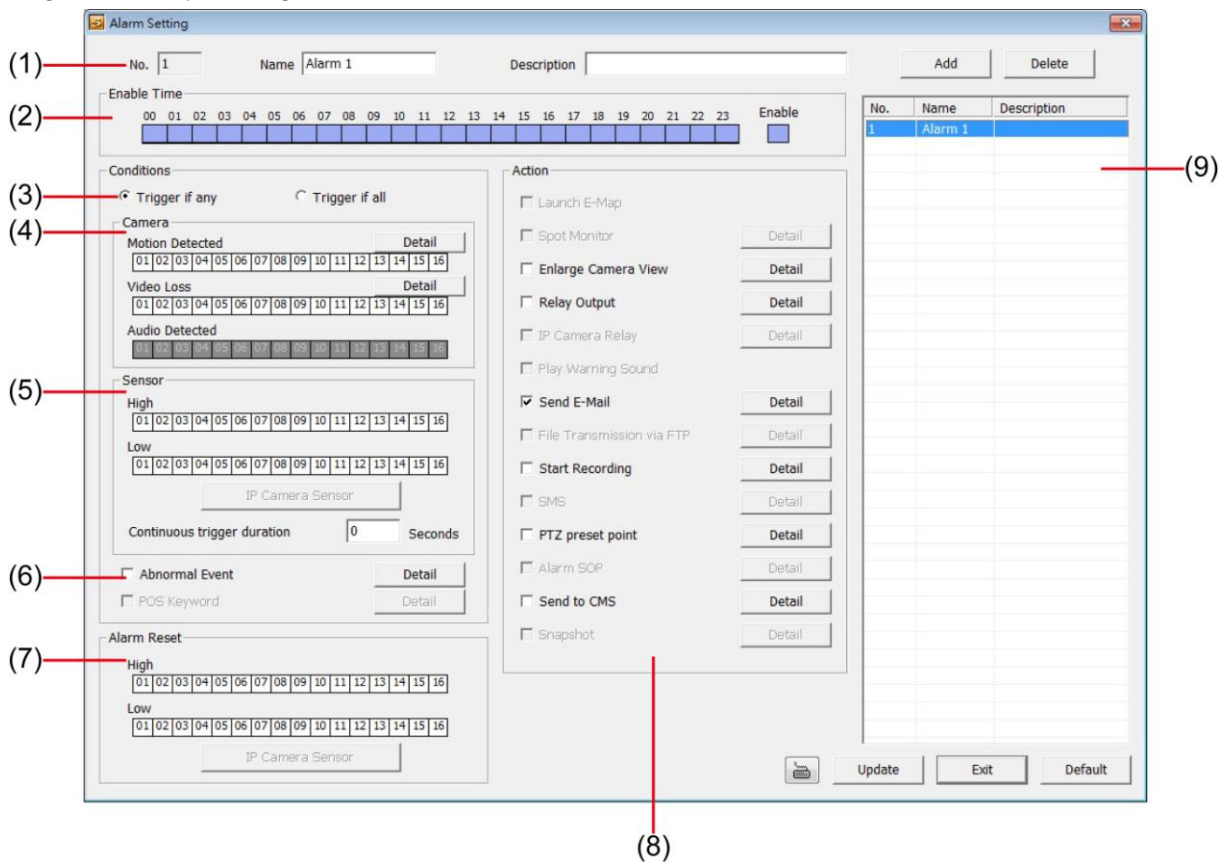
By Channel: Set the network bandwidth by each channel.

All: Set the total network bandwidth consumption limit.

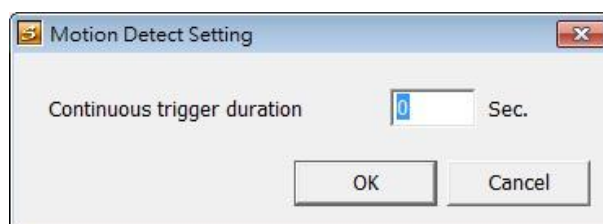


6.1.3.3 Alarm Setting

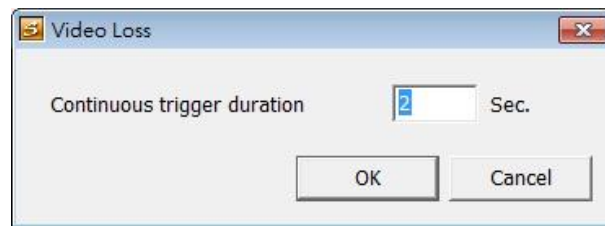
In the Alarm Setting dialog box, click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **Update** to save the setting, **Exit** to exit without saving, and **Default** to revert back to original factory setting.



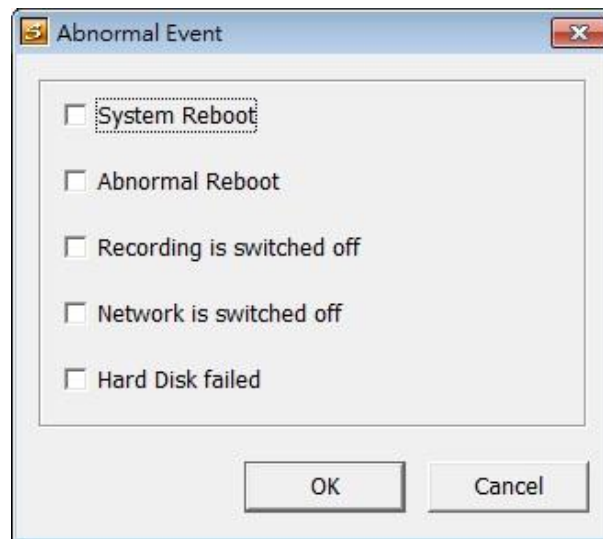
1. Click **Add** to insert and set a new alarm setting. Click the items in the **(9) Alarm Setting List** if you want to modify the alarm setting.
2. In **(1) No./Name/Description** enter alarm name and description. Alarm **No.** will be created by DVR system.
3. In **(2) Enable Time**, the number from 00 to 23 represent the time in 24-hour clock. Select the time and click the block you want to activate or deactivate the alarm function. When it is deactivated the color of the block turns white.
4. In **(3) Conditions**, you can set “**Trigger if any**” to activate if it falls to one of the conditions or “**Trigger if all**” to activate if it falls to all conditions.
5. In **(4) Camera** section, select and click on the camera number (01 to 16) in **Motion Detected** and **Video Loss** to set the condition for the system to alarm.
 - **Continue trigger duration:** Set a time period that when sensor has been trigger and stay in the same status for that period, then the alarm will be sent out.
 - **Motion Detected:** Click on the camera number to the motion condition for the system to alarm. Click **Detail** to setup the system to send out the alarm when motion has been detected to last the time that user has entered in **Continuous trigger duration**.



- **Video Loss:** Click the camera number to set the alarm condition when video is lost. Click the **Detail** to setup the system to send out the alarm when video has been lost to last the time that user has entered in **Continuous trigger duration**.



6. In **(5) Sensor**, select and click on the sensor number to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low.
7. In **(6) Abnormal Event**, mark check box to enable and set the condition of the event for system to alarm.

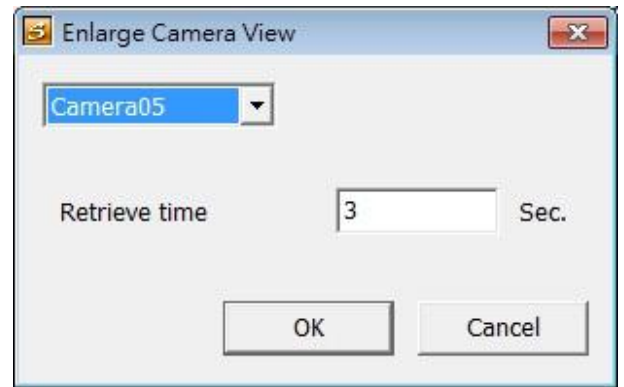


- **Reboot:** when the DVR system reboot without abnormal condition, the system will send out the alarm message.
 - **Abnormal Reboot:** when the DVR system reboot in irregular condition, the system will send out the alarm message.
 - **Recording is switched off:** when the recording has been stopped, the system will send out the alarm message.
 - **Network is switched off:** when the network connection of DVR system is lost, the system will send out the alarm message.
 - **Hard Disk failed:** when the hard disk doesn't work normally, the system will send out the alarm message.
8. In **(7) Alarm Reset**, click the camera number to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the alarm reset condition to low.
 9. In **(8) Action**, you may now set the alarm action for the system to perform when the alarm condition is activated.

- **Enlarge Camera View**

Switch to only display video in Preview mode from where the alarm is activated.

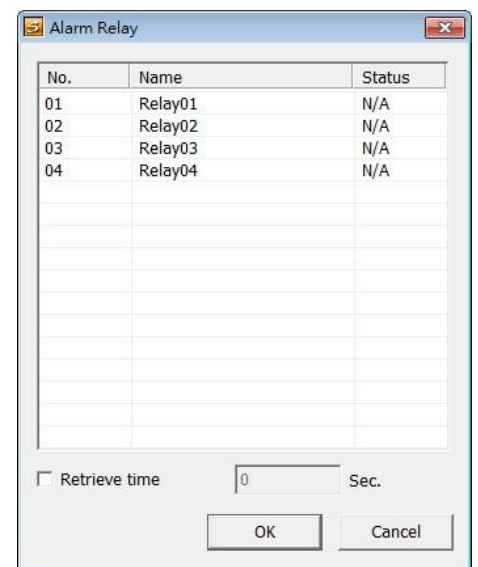
- a. Select the camera from drop down list to specify which camera video to be enlarged on screen when the alarm is triggered.
- b. **Retrieve time:** set the waiting duration before system switching back to original Preview mode. If the retrieve time is un-mark, the alarm video will keep enlarging until user switch back to Preview mode manually. The retrieve time range is 0~ 600 seconds.



- **Relay Output**

Set to enable/disable the relay operation when the alarm is activated and to extend additional time in second before it stops the relay operation.

1. Beside the Relay Output check box, click **Detail**.
2. In the Alarm Relay dialog box, select from the available relay list and in the ON column, set to enable/disable the relay operation when the alarm is activated.
3. In the Retrieve time check box, you may enable/disable to extend the relay operation time and set the duration in second.
4. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



- **Send E-mail**

Send an electronic text message. Beside the Send Email check box, click **Detail**.

In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.

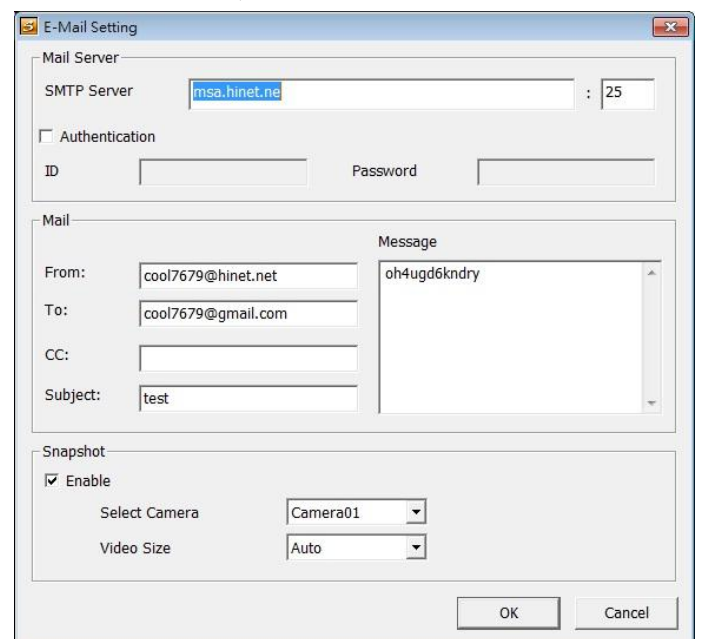
➤ **Mail Server**

Enter the **SMTP Server** and **port**. If your e-mail system requires user identification, enable **Authentication** check box and enter **ID** and **Password**.

➤ **Mail**

Fill the mailing information.

- ✓ **From:** Enter the sender e-mail address.
- ✓ **To and CC:** Enter the recipient email address and separate it with comma or a semicolon (;).
- ✓ **Subject:** Enter the message title.
- ✓ **Message:** Type the message.



- Start Recording

Record the video from the selected camera.

Beside the Start Recording check box, click **Detail**.

1. In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable **All** to select all cameras.
2. In the Frame Rate selection, select **As Setting** to record the number of frames based on the Recording Setting.
3. In the **Start Record prior** text box, mark and set the number in second for the program to begin recording after the alarm has been trigger. The time range is 1~10 seconds.
4. In the **Stop Record after** text box, mark and set the number in second for the program to continue recording after the alarm has ended. The time range is 1~999 seconds. If user doesn't mark and set the time, the alarm recording will continue recording until alarm is reset.
5. Click **OK** to accept the new settings and **Cancel** to exit without saving.

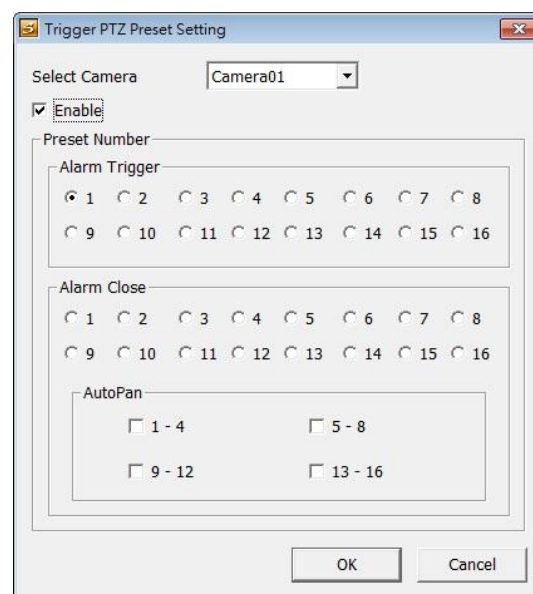


EH6108H⁺ only supports 8 channels.

- PTZ preset point

Position the PTZ camera based on the preset point setting.

Beside the PTZ preset point check box, click **Detail**. In the Trigger PTZ Preset Setting dialog box, select the PTZ camera number then select the **Enable** check box. Select the position of the PTZ camera when the alarm is activated and ended. For the PTZ camera end point, user can also select on preset position or **Auto Pan** between preset position groups.

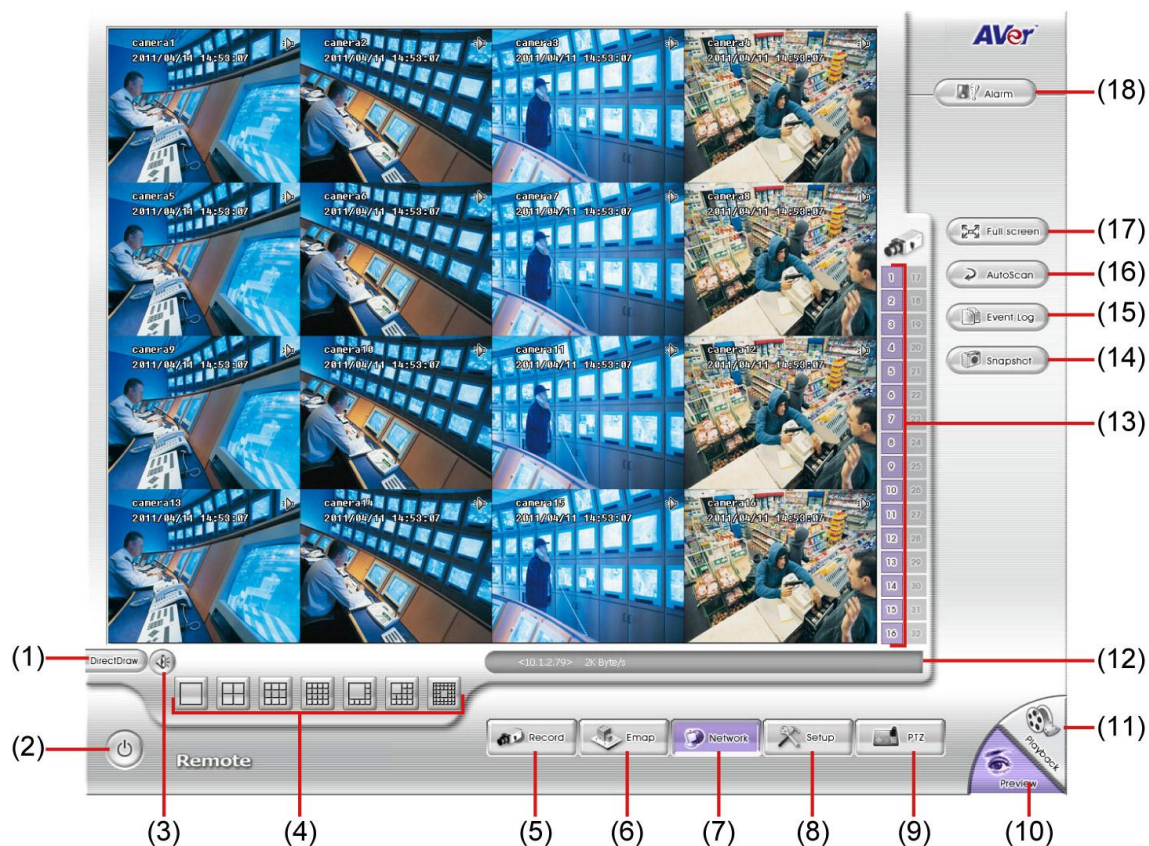



- **Send to CMS (Central Management System)**
Enable/disable the selected camera to send video to CMS when the alarm is activated. Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.



i EH6108H⁺ only supports 8 channels.

6.2 Familiarizing the Buttons in Remote Console

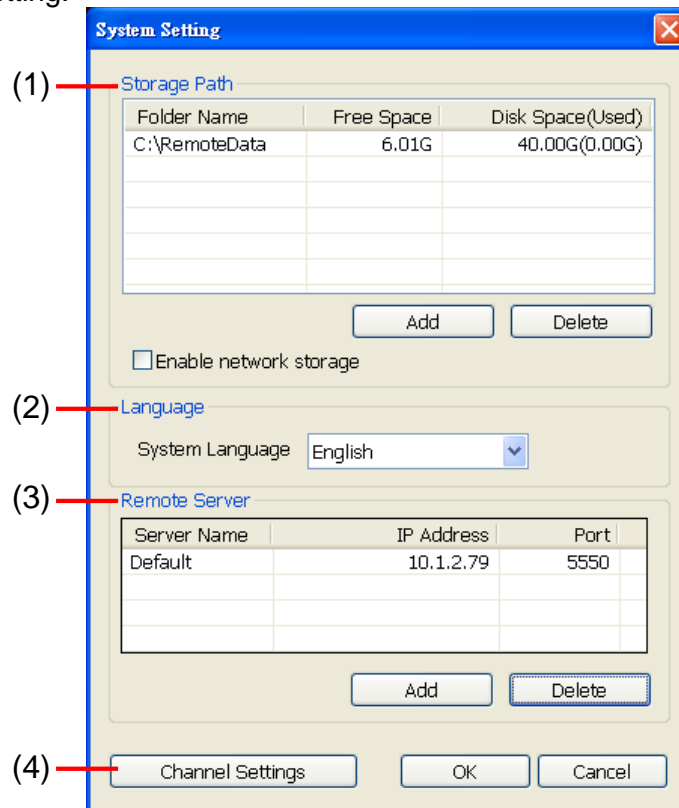


Name	Function
(1) DirectDraw	Enhance the video quality.
 Direct Draw	Direct Draw function supports for certain VGA card. For more information, please contact your VGA card vendor.
(2) Exit	Exit: Close the Remote Console. Minimize: Minimize the application on task bar. Cancel: To go back to the application.
(3) Audio button	Enable/disable the sound.
(4) Split Screen Mode	Select from 7 different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. If there are only 8 cameras, you won't be able to switch to 13, 16, and 32 split screen mode.
(5) Record	Start/stop video recording.
(6) Emap	To view the Emap of remote DVR.
(7) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection.
(8) Setup	Configure the Remote Console setting. (see also Chapter 6.2.1)
(9) PTZ	Access PTZ control panel. (see Chapter 6.2.2)
(10) Preview	Switch to Preview/Playback mode. This allows you to view live camera display.
(11) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see also Chapter 6.3)
(12) Status Bar	Display the current date, time and hard disk free space.
(13) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.

Name	Function
(14) Event Log	Display the Event logs, Operation logs, System logs, and Network logs.
(15) Auto Scan	Start/Stop video screen cycle switch.
(16) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(17) Full screen	Use the entire area of the screen to only display the video. To return, Right-click the mouse or press ESC on the keyboard.
(18) Alarm	Alert and display warning info. Admin and user account authority level both can reset the alarm. The password authentication is required.

6.2.1 To Setup Remote Console Setting

Click **Setup** button to call out the **System Setting** windows. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



(1) Storage Path

Set the directory on where to save the data. When there is not enough free space to record one hour data, the system automatically replaces the oldest data. In case you have more than one storage path, the system automatically saves the data to the next storage path. By default the data is stored in C:\RemoteData, to insert another storage path, click **Add**. To remove the selected path, click **Delete**.

- Enable network storage

Select the Enable network storage check box to send the recorded video in network-attached storage.



To add network storage, the Internet storage drive/folder must be mapped as Network Driver in DVR server. To know how to assign or connect to a network drive, please refer to your Windows help file and search "Map Network drive".

(2) Language

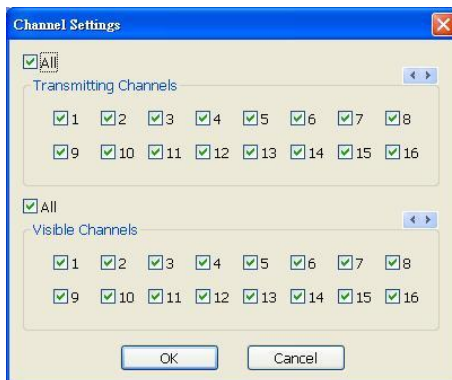
Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.

(3) Remote Server

Enter the DVR Server IP and Server Port number.

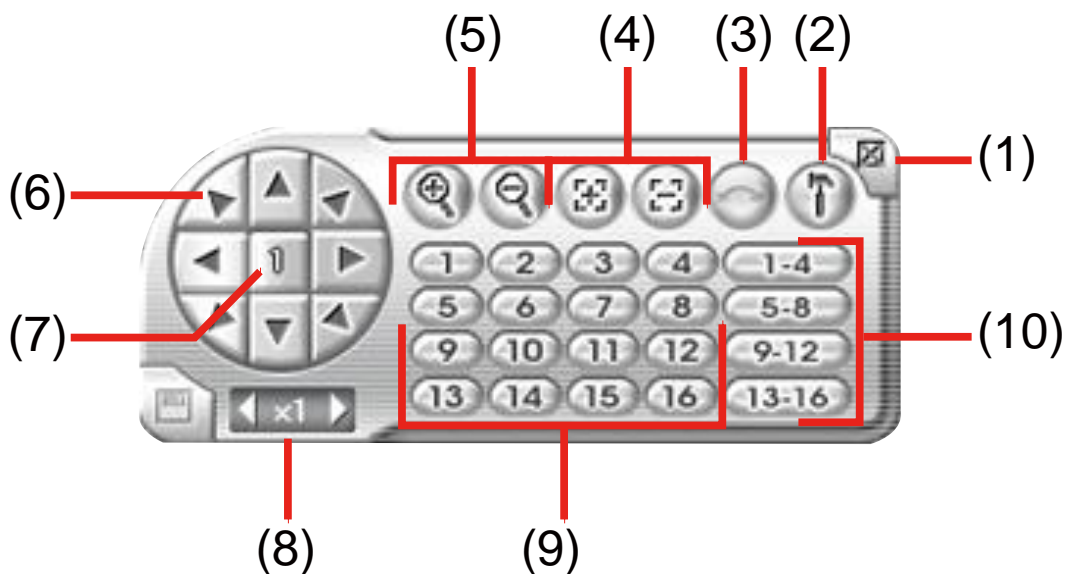
(4) Channel Settings

The numbers from 1 to 16 represent the camera ID. In Transmitting Channels section, enable the camera number to receive the camera signal from the server. In Visible Channels section, enable the camera number to view the camera signal on Remote Console screen. To select all the cameras, enable the **ALL** check box.



i EH6108H+ only supports 8 channels.

6.2.2 Familiarizing the Buttons in PTZ Camera Controller



Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Select the PTZ camera to operate.
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera. Only up, down, left and right direction buttons can be functional.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Camera lens speed controller	Adjust the moving speed of the PTZ camera lens.
(9) Camera preset position number	Move the PTZ camera to the preset point.
(10) Group AutoPan	Select to automatically operate PTZ camera in group.

6.3 Using the Remote Playback

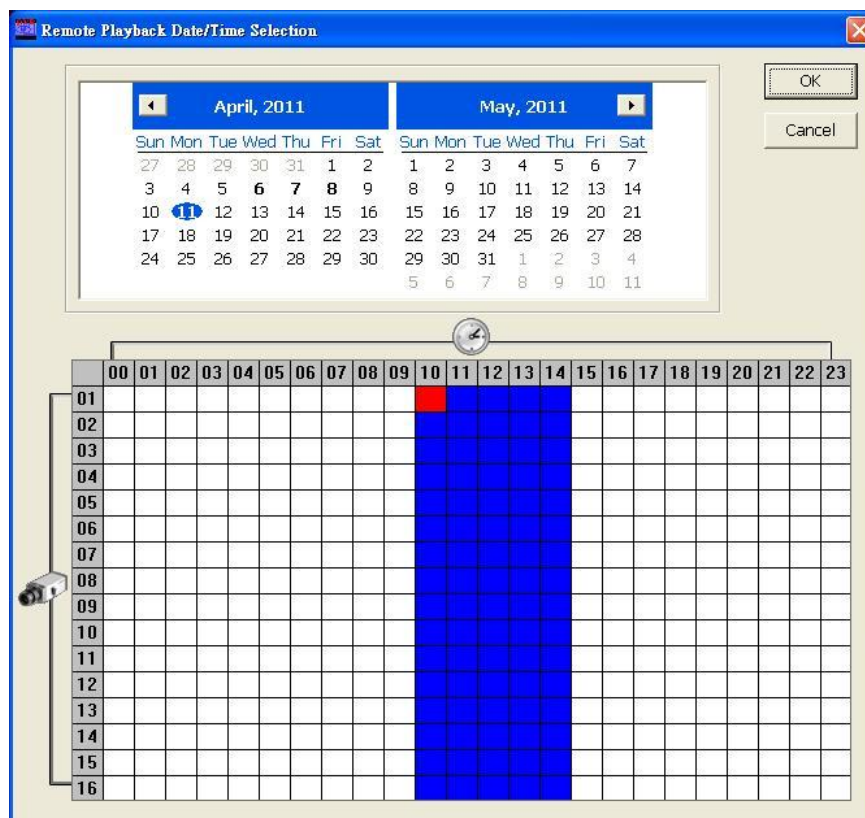
To use this feature, first you need to select the source of the file. In the Select Playback Mode dialog box, choose **Local Playback** to open the file that is recorded in the Remote Console, and **Remote Playback** to open the file that is recorded in the DVR server. When you choose Remote Playback, select **RealTime Playback** if your internet bandwidth is fast and big enough, otherwise choose **Download and Playback**.



Click **OK** to proceed and **Cancel** to void this operation.



In the Video Playback Date/Time Selection, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 8 represent the camera number.



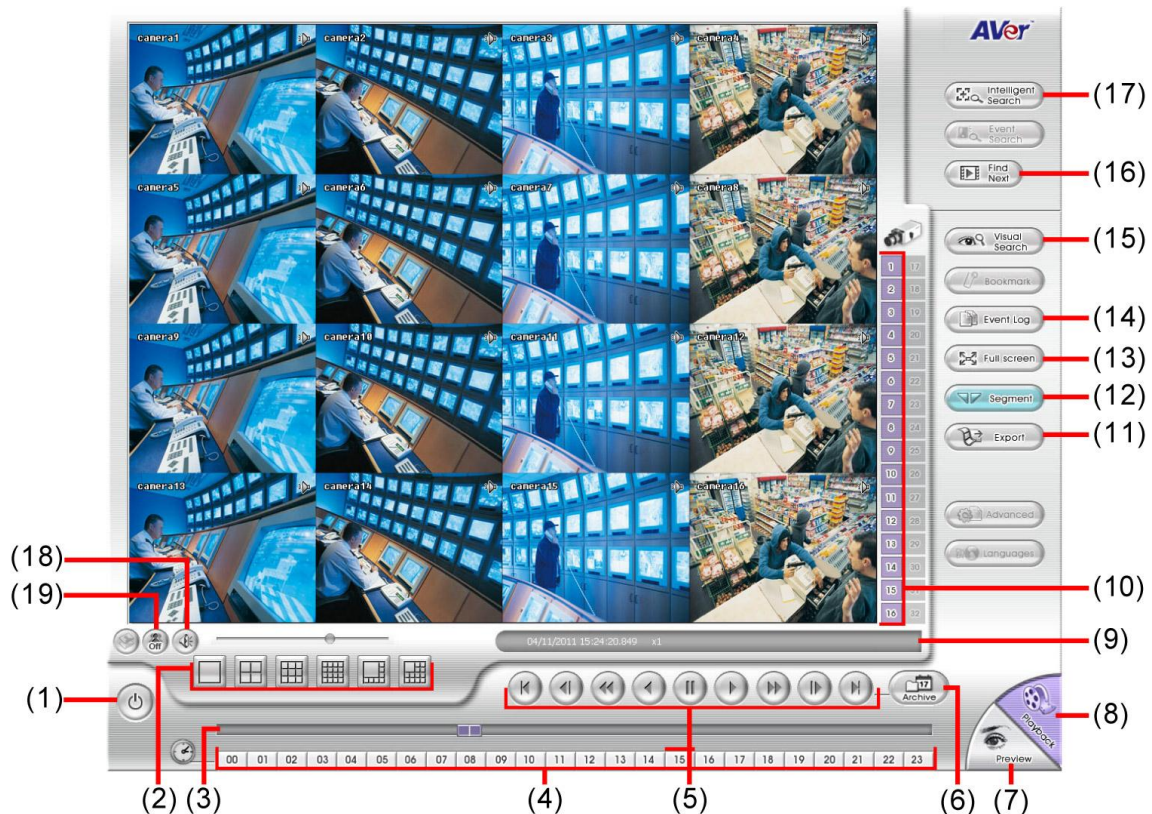
To Make a Selection:

1. Select the date in the calendar. Use ◀ and ▶ buttons to shift the calendar to the left or right.
2. In the table below, click on the blue block to select and open the recorded file. The blue block turns red when it is selected. The block that appears in white doesn't have data. You can only select one block when you choose Download and Playback.


3. Click **OK** to proceed and **Cancel** to void this operation.
4. If you select Download Playback and after making the selection, the system divides the selected hour into 16 video thumbnails. In the Time Selection screen, click on the video thumbnail you want to download (see also [Chapter 6.4.3](#)).



6.3.1 Familiarizing the Buttons in Local Playback



Name	Function
(1) Exit	To close the application
(2) Split Screen Mode	Select from 6 different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.
i	<ul style="list-style-type: none"> - If there are only 8 cameras, you won't be able to switch to 13 and 16 split screen mode. - To zoom in an area on the screen, Right click and Drag a square on the area you want to enlarge. To back to normal view, right click the channel screen again.
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
i	The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. If there is no recorded data within the hour, there will be no color bar on top of the hour button. While the red bar indicates that you are currently viewing the recorded video file.
(5) Playback Control Buttons	<p>Begin: Move at the beginning of the recorded video file.</p> <p>Previous: Go back to the previous frame.</p> <p>Slower: Play the recorded video file at the speed of 1/2x, 1/4x, 1/8x, 1/16x, or 1/32x.</p> <p>Rewind: Wind back the video file.</p> <p>Pause: Briefly stop playing the recorded video file.</p> <p>Play: Play the recorded video file.</p> <p>Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x.</p> <p>Next: Go to the next frame.</p> <p>End: Go to the end of the video file.</p>

Name	Function
(6) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. While the red colored column indicates on where to start playing the recorded video file. If there is no any video data, it will be no color bar on top of the date button.
(7) Preview	Switch to Preview mode.
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(9) Status bar	Display the record date, time, HDD capacity in preview mode and play speed in playback mode.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Export	Export includes Snapshot, Print, and Output Video Clip function. <ul style="list-style-type: none"> ■ Snapshot: Capture and save the screen shot either in *.jpg format. ■ Print: Print the screen shot. ■ Output Video Clip: Save the segmented file in *.dvr format (see also Chapter 6.3.1.1).
(12) Segment	Keep a portion of the recorded video you want (see also Chapter 6.3.1.1).
(13) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard.
(14) Event Log	Show the record of activities that take place in the system
(15) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second(also see Chapter 4.3.5).
(16) Find Next	Search for the next event. You can use this when you are using Event Search function.
(17) Intelligent Search	Search the changes in the motion detector frame (See also Chapter 4.3.7).
(18) Audio	Enable/disable volume
(19) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

6.3.1.1 To Cut and Save the Wanted Portion of the Recorded Video

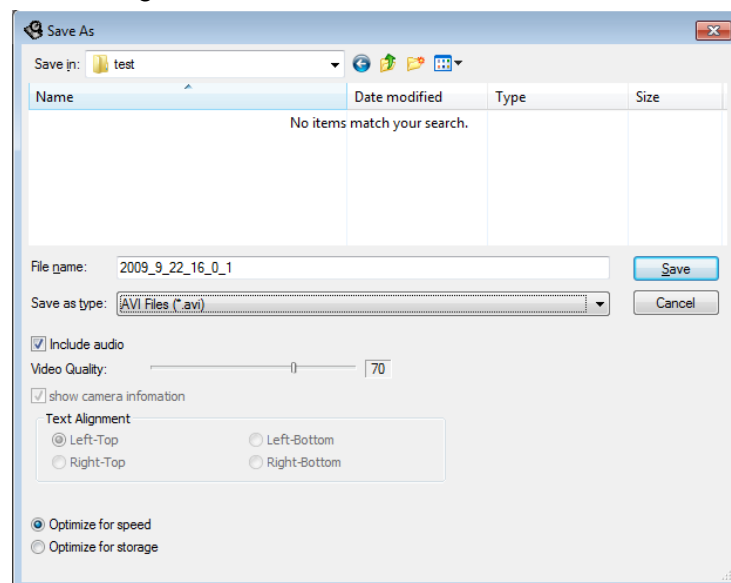
1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click Segment to set the begin mark.



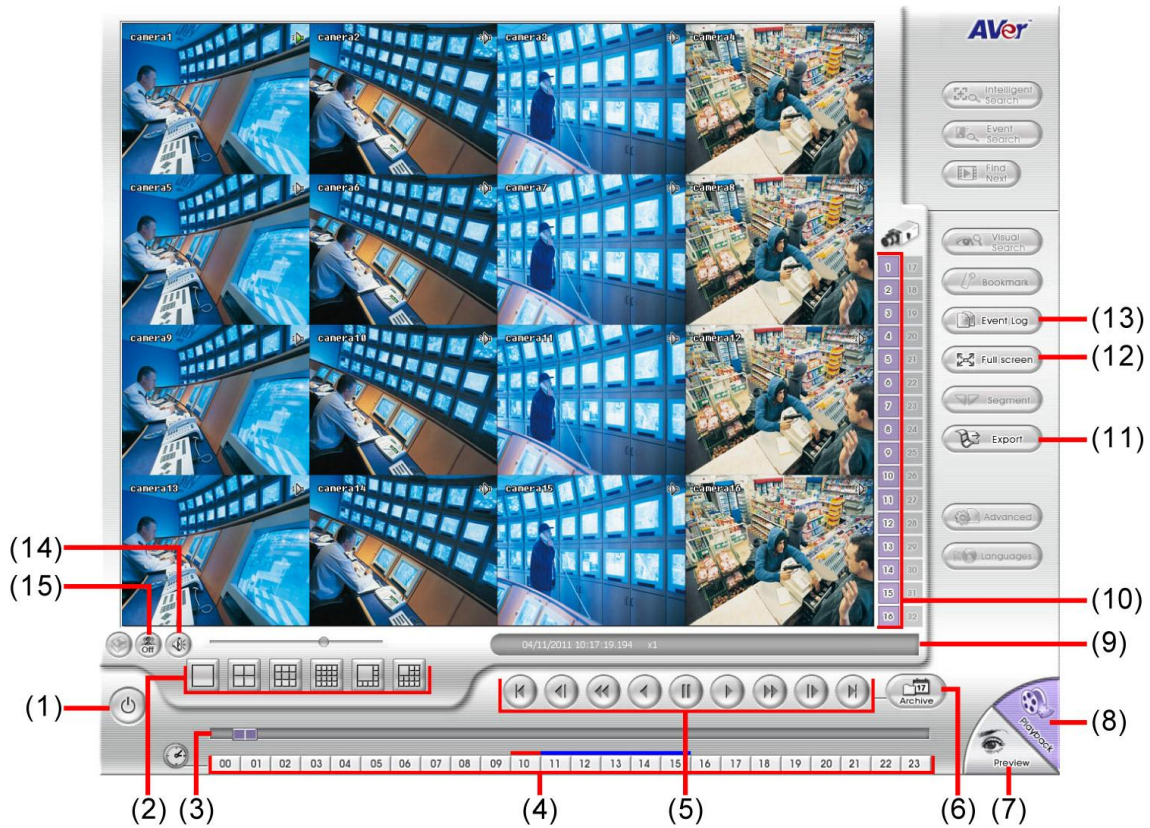
2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click Segment to set the end mark. To cancel segmentation or set the segment marks from the start, click Segment button again.



3. Click **Export > Output Video Clip** button to save the wanted clip.
4. In the Save As dialog box, locate on where you want to save the file.
5. Select the file type and select the camera information display position when playback. The camera information will be the information of server name that user has defined in Network Setting.
6. If the select the file type is *.avi, user can mark **included audio** to include audio in output video segment.
7. To adjust **Video Quality** if needed.
8. And, select the **Optimize for speed** (*.mpg /*.avi only) for faster file opened. For saving storage, select **Optimize for storage**.
9. Click **Save** to save the video segment.



6.3.2 Familiarizing the Buttons in RealTime Playback



Name	Function
(1) Exit	To close the application
(2) Split Screen Mode	Select from 6 different split screen type to playback the recorded video file of the entire camera, or one camera.
i	<ul style="list-style-type: none"> - If there are only 8 cameras, you won't be able to switch to 13 and 16 split screen mode. - To zoom in an area on the screen, Right click and Drag a square on the area you want to enlarge.
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
i	The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.
(5) Playback Control Buttons	<p>Begin: Move at the beginning of the recorded video file.</p> <p>Previous: Go back to the previous frame.</p> <p>Slower: Play the recorded video file at the speed of 1/2x, 1/4x, 1/8x, 1/16x, or 1/32x.</p> <p>Rewind: Wind back the recorded video file.</p> <p>Pause: Briefly stop playing the recorded video file.</p> <p>Play: Play the recorded video file.</p> <p>Faster: Play the recorded video file at the speed of 2x, 4x, or 8x, 16x or 32x.</p> <p>Next: Go to the next frame.</p> <p>End: Go to the end of the recorded video file.</p>
(6) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
i	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.
(7) Preview	Switch to Preview/Advanced mode.

Name	Function
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(9) Status bar	Display the recorded date, time and play speed.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Export	Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format.
(12) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.
(13) Event Log	Show the record of activities that take place in the system
(14) Audio	Enable/disable volume
(15) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and select #2, if it captures lots of movement.

6.3.3 Familiarizing the Buttons in Download and Playback



Name	Function
(1) Exit	To close the application.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Playback Control Buttons	<p>Begin: Move at the beginning of the recorded video file.</p> <p>Previous: Go back to the previous frame.</p> <p>Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.</p> <p>Rewind: Wind back the recorded video file.</p> <p>Pause: Briefly stop playing the recorded video file.</p> <p>Play: Play the recorded video file.</p> <p>Faster: Play the recorded video file at the speed of 2x, 4x, or 8x, 16x or 32x.</p> <p>Next: Go to the next frame.</p> <p>End: Go to the end of the recorded video file.</p>
(4) Status bar	Display the recorded date, time and play speed.
(5) Language	Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.
(6) Export	Export includes Snapshot, Print, and Output Video Clip function. <ul style="list-style-type: none"> ■ Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format. ■ Print: Print the screen shot. ■ Output Video Clip: Save the segmented file in *.mpg, *.avi, or *.dvr format (see also Chapter 6.3.1.1).
(7) Segment	Keep a portion of the recorded video you want (see also Chapter 6.3.1.1).
(8) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.
(9) Event Log	Show the record of activities that take place in the system

Name	Function
(10) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also Chapter 4.3.5).
(11) Audio	Enable/disable volume
(12) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and select #2, if it captures lots of movement.

Chapter 7 Using Mobile Device to Access DVR Server

7.1 Using PDAViewer to Access DVR Server

Users can also use a PDA to access the DVR through Internet. Make sure your PDA support IE browser and is connected to the internet. To use this feature, you need to install the PDA Viewer software either thru ActiveSync connection or download it from the internet. Please check if your PDA meets the 2 requirements below.

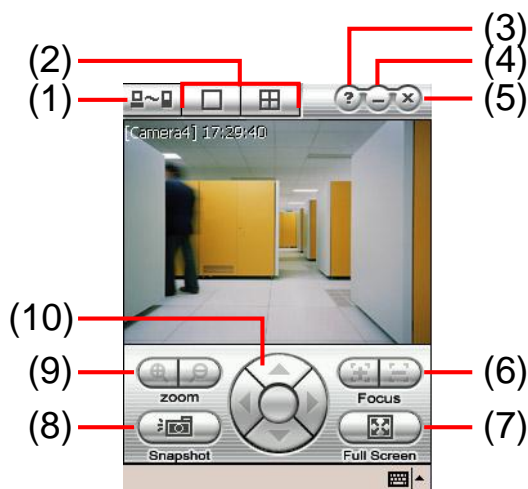
OS: MS Windows CE 4.0, PocketPC 2002/2003, Mobile 5 PDA version CPU: ARM architecture
--

7.1.1 To Install PDAViewer thru ActiveSync

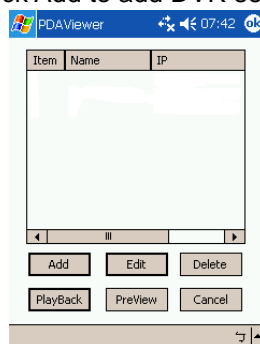
1. Connect your PDA to your PC and make sure PC and PDA are synchronized. Place the CD into the CD-ROM drive then click **Utilise** and select the **PDAViewer** fold and click **setup.exe** to install the PDAViewer program. And follow the on screen instructions.
2. Click **Next** to continue.
3. Read the license agreement and click **Yes** to accept all the terms. The system will then automatically install the application on PDA.

7.1.2 To Use the PDAViewer

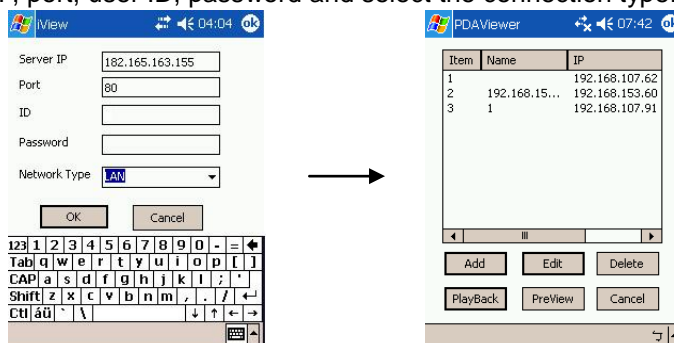
1. Run the **PDAViewer** on your PDA.
2. Familiarizing the PDAViewer buttons.



Name	Function
(1) Connect	Hook up to the DVR server. Make sure you are connected to internet. When the iView screen appears, click Add to add DVR server.



Enter the server IP, port, user ID, password and select the connection type. Then, click **OK**.



User can playback the recorded video from remote DVR server in PDAViewer.(see also [Chapter 7.1.3](#))

(2) Split Screen Mode	Select between 2 screen display types. It also allows you to switch and view different camera number or channels.
(3) About	Display the PDAViewer software version.
(4) Minimize	Reduce the size to taskbar.
(5) Exit	Close the PDAViewer.
(6) Focus	Adjust the focus of PTZ camera to produce clear image.
(7) Full Screen	Use the entire screen to only display the video.
(8) Snapshot	Capture and save the screen shot in *.bmp format.
(9) Zoom	Zoom in and out the PTZ camera image.

Name	Function
(10) Direction buttons	Adjust and position the focal point of the PTZ camera.

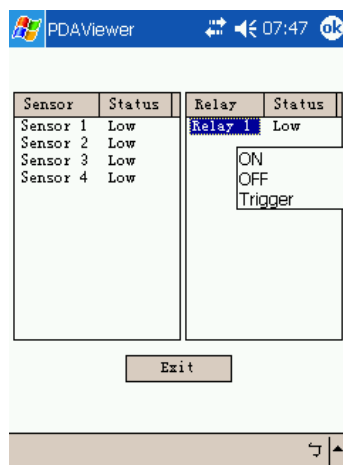
3. To change the video quality, enable/disable audio, and select to display different camera, tap on the video screen longer the pop-up menu will appear.



- 4. User also can view and change status of I/O devices.
- 5. On the preview screen, tap on video screen longer the pop up menu will appear.
- 6. Select the Remote IO.



7. The sensor and relay devices will list as below:



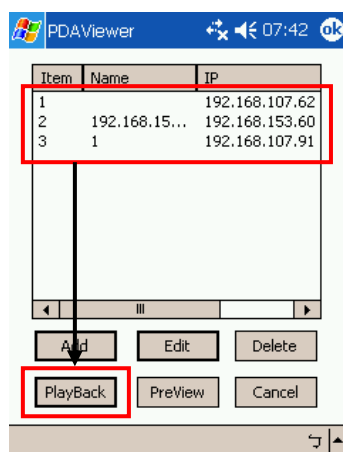
8. User can change the relay status. Select the relay and tap on video screen longer the popup menu will appear, and then, select the status (ON, OFF, Tigger)

7.1.3 To Playback in PDAViewer

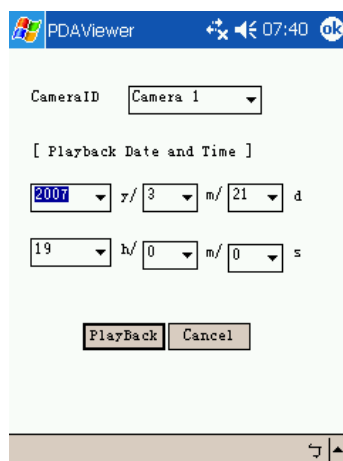
1. Run the **PDAViewer** in the Programs.
2. Hook up to the DVR server.
3. Click **Connect** icon and select the DVR server



4. Click **Playback** to enter playback option screen



5. Select the **camera, data, and time.**
6. Click **Playback** to start playing the recorded video.



7.2 Using JavaViewer to Access DVR Server

Using the mobile phone within Symbian Smart Phone OS to access the DVR through Internet. Make sure your mobile phone supports Symbian Smart Phone OS and can be connected to the internet. To use this feature, you need to install the JAVA Viewer program that it can be downloading it from the DVR server through the internet.

7.2.1 To install JavaViewer from the DVR Server

1. Open the web browser and enter the DVR server IP (http://DVR server IP: port/Java-Viewer.html). Then click **Connect**.
2. When the Download screen appears, select **Java-Viewer.jad** and download it to your mobile phone.
3. After the installation, the JavaViewer will be in your mobile phone system. To find the JavaViewer program where is located, please refer to your mobile phone user's manual.

7.2.2 To Use the JavaViewer

1. Run the JavaViewer program.
2. Enter the DVR IP address, port number, user ID, and password. Please refer to your DVR server setting for that information.
3. And then, select the Connect to connect to DVR server.
4. Click **Yes** to accept the data from DVR server.
5. When connection is success, you will see the camera video on the screen.



6. To switch to different camera view, select menu and select the channel.



7. The JavaViewer support PTZ control function. If the camera has enabled PTZ function, the camera name has a word "PTZ". Using button 2 to move PTZ camera up, 8 to move down, 4 to move to left, 6 to move to right, 7 to zoom in, 9 to zoom out, 1 to focus in, and 3 to focus out. User also can refer to **Help** file for detail function control key. Select **menu** and go the way down to select the **Help** file.



Chapter 8 Using the Web Tools

The bundled Web Tools includes Dispatch Server, Remote Backup, and Remote Setup program. To install Web Tools, place the CD into the CD-ROM drive then click **Install Web Tool**.

8.1 Dispatch Server

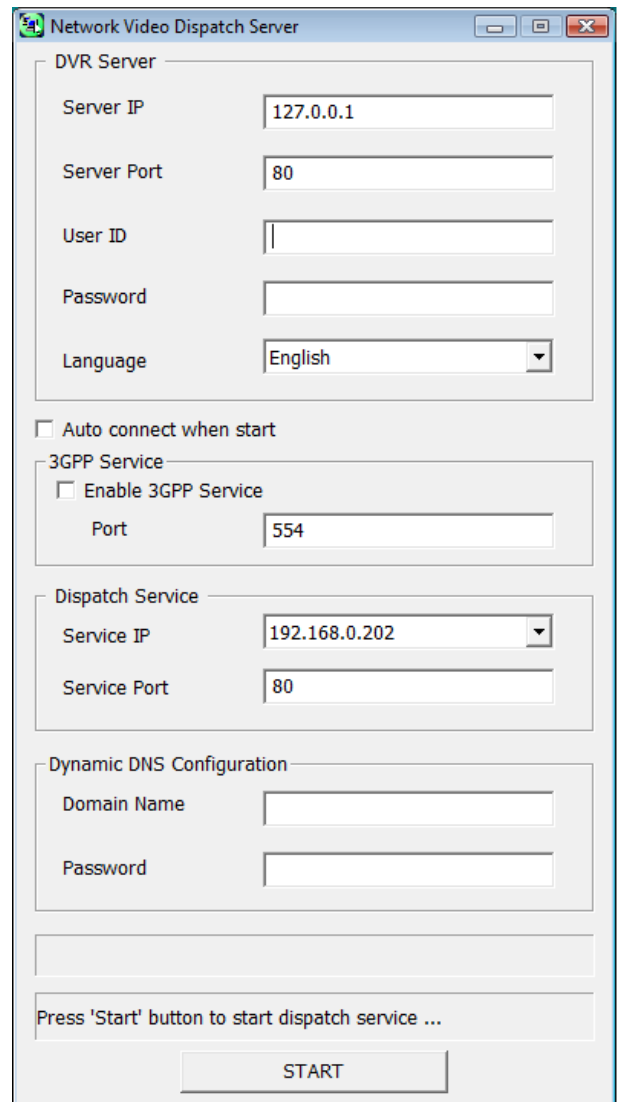
Dispatch is designed to reduce the network traffic of the DVR server. Instead of connecting directly to the DVR server, the client can connect to the computer that is connected to the DVR server using the Dispatch program.




To have better remote live and playback performance, it's suggested to connect DVR to Dispatch Server in LAN environment only.

8.1.1 To Run Dispatch program

1. Make sure you are connected to the internet.
2. Click **Start>Programs>DSS>Tool>Dispatch**.
3. In the DVR Server section, enter the NV DVR server IP, port, user ID and password. You can also select to display the language you prefer.
4. **Auto connect when start**
Enable to automatically connect the dispatch server when start up
5. **3GPP Service**
Enable to allow user using 3GPP service to receive video stream from Dispatch server. The **Service Port** must same as RTSP port of 3GPP on DVR server.
6. In the **Dispatch Service** section, if you have installed more than one network card, select the Service IP number.
7. In the **Dynamic DNS Configuration** section, enter the DNS server Name and Password. The DNS server can be the remote storage server for sharing the DVR system loading.
8. Click **START** to connect.

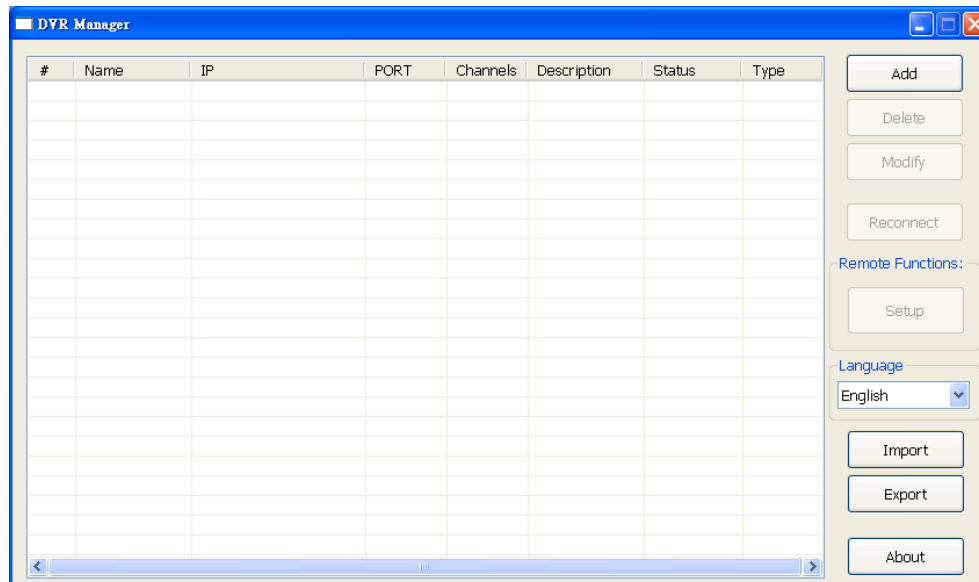


8.2 Remote Setup

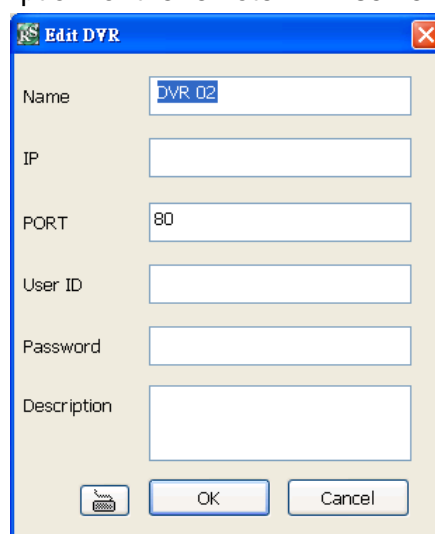
Remote Setup is a tool for configuring DVR server from remote site. To install Remote Setup application, insert the Installation CD into CD-ROM drive and click **Web Tools**. After installation, click  to start the Remote Setup application.

8.2.1 To Add DVR server

User need to add a DVR server and make connection in order to setup remote DVR server.



1. Click **Add**
2. In Edit DVR windows, fill in the following items:
 - **Name:** give a name for remote DVR server for easy managing
 - **IP:** fill in remote DVR server's IP address
 - **Port:** the port use to connect to remote DVR server. The port number is same the PCViewer port on the remote DVR server. The default is 80.
 - **User ID:** fill in the remote DVR server's login account
 - **Password:** fill in the remote DVR server's login password
 - **Description:** fill in a short description for the remote DVR server



3. Click **OK** to complete adding remote DVR server.
4. The added DVR server will be listed and auto connects to DVR server.

5. Once the connecting is success, user can start to configure DVR server by clicking **Setup** button.
6. When connection is lost, click **Reconnect** to connect again.
7. To modify or delete the added DVR server, select the DVR server from listing and click **Modify** to change the setting and click **Delete** to remove the DVR server.
8. User also can import the setting by clicking **Import** button. To save the setting to local hard disk, click **Export** button.

8.2.2 To Setup Remote System Setting

The setting here applies to Remote DVR only. Please refer to [Chapter 6.1.3](#).

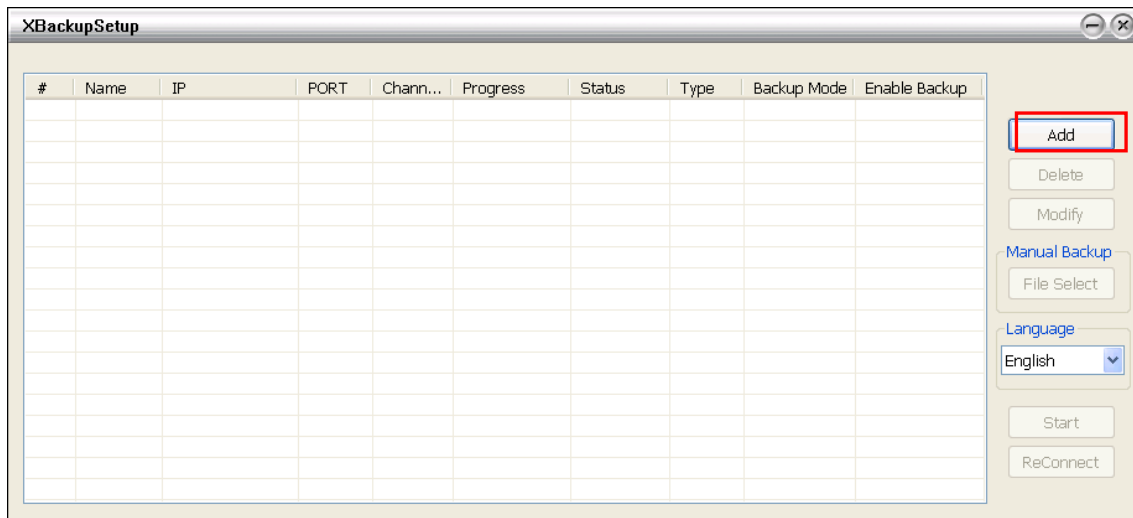
8.3 Remote Backup

Remote Backup is purely for backing up the *.dvr file from the DVR sever. You can select between Auto Backup and Manual Backup. Auto Backup continuously archives one hour of the recorded data at a time, starting from the specified date. As for Manual Backup, it only archives the recorded data of selected date.

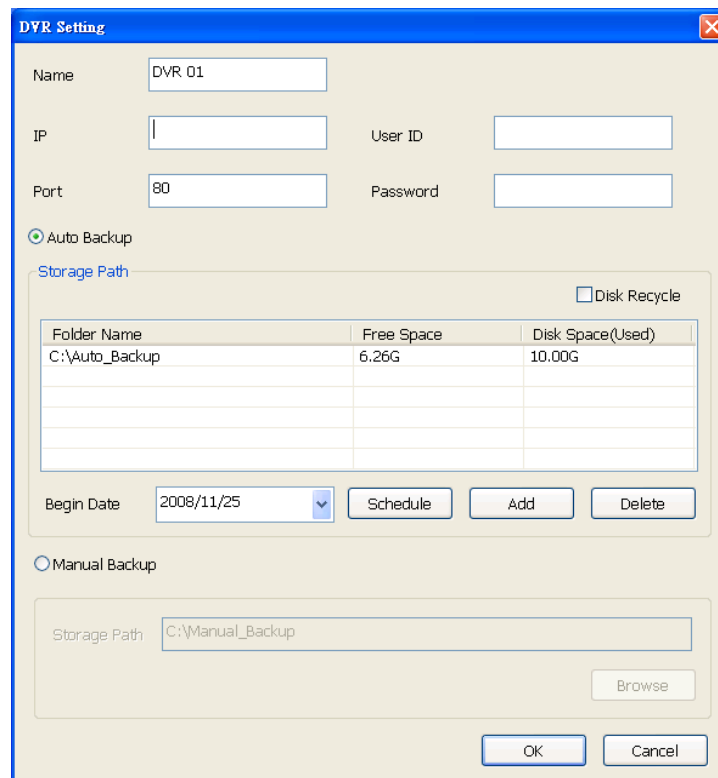
i To back up the data, you must have at least 2G hard disk space.

8.3.1 To back up the recoded data from the DVR server

1. Make sure you are connected to internet.
2. Click **Start >> Program >> DSS >> Tool >> Remote Backup**
3. To add the DVR server, click **Add**



4. In the Add New DVR windows, enter the Name, IP, user ID, and password.



5. Select the Backup mode:

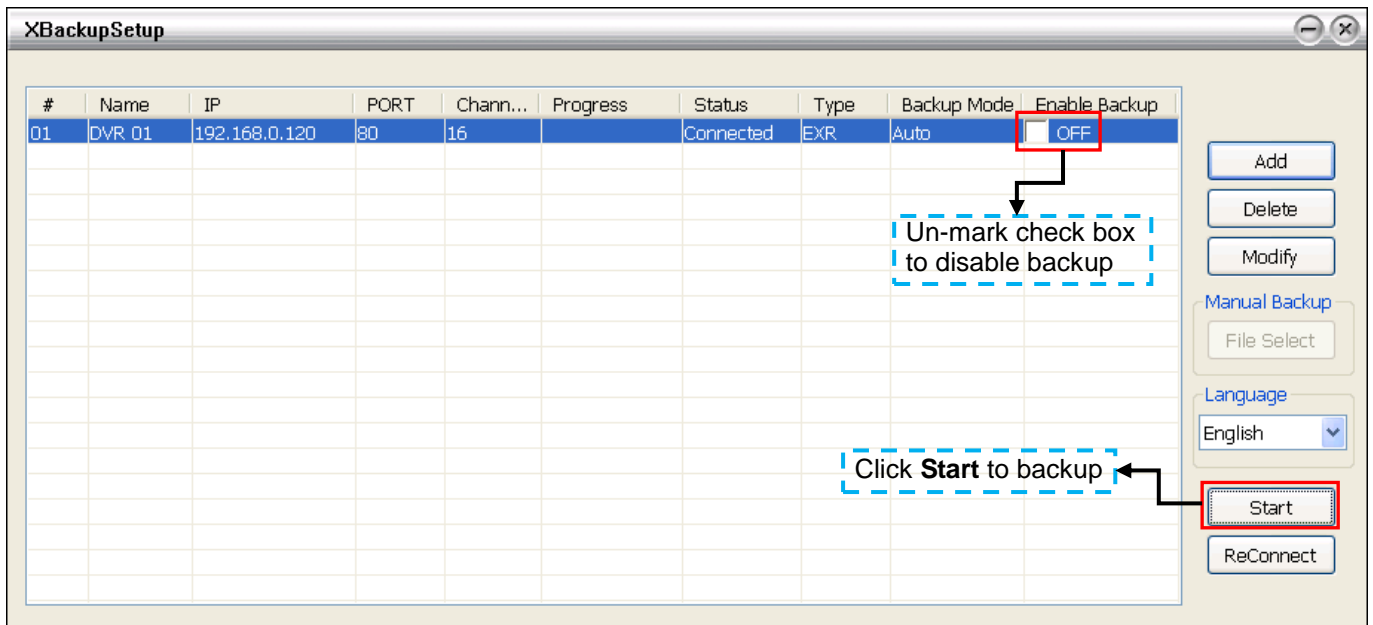
Auto Backup mode: the backup will automatically execute when the setup is completed

- In Begin Date drop down calendar, select the date from where to start
- Click **Add** to set the storage path.
- Click **Delete** to remove the selected storage path.
- Click **Schedule** to select/unselect the time you want to backup. The red block turns white when it is unselected.
- Enable/disable **Disk Recycle** check box, to automatically overwrite the oldest file when there is not enough free space to backup the file.

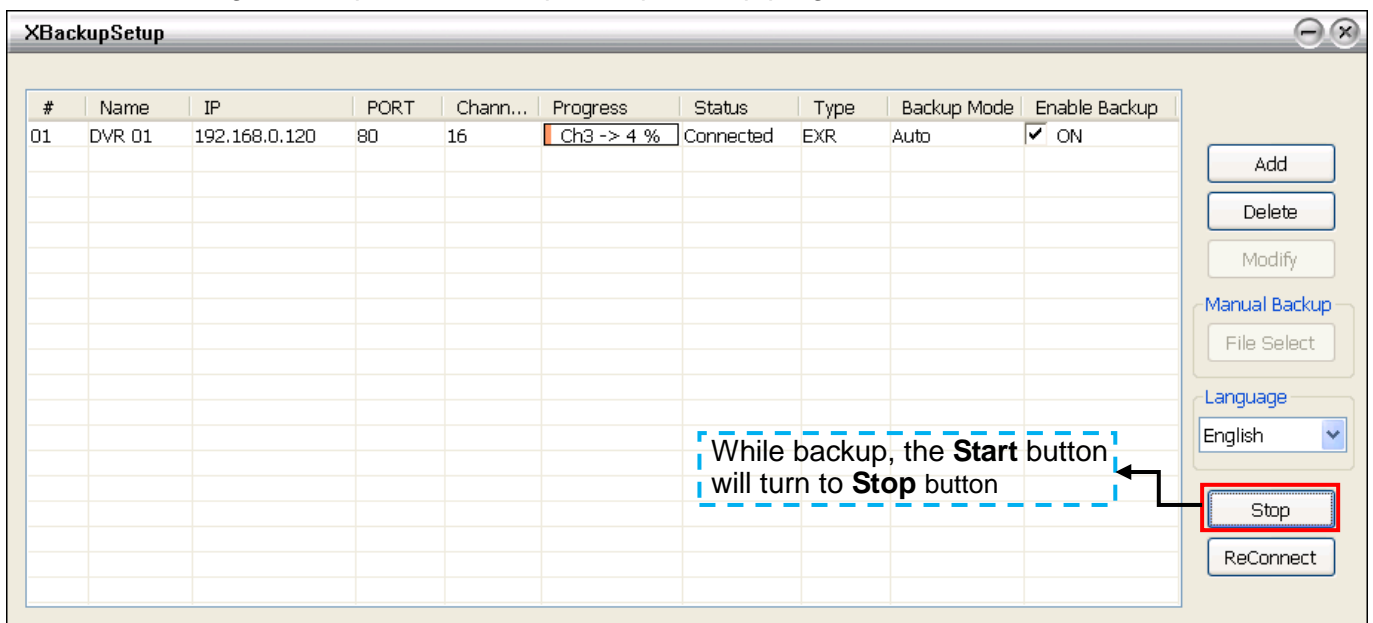
Manual Backup mode: the backup progress will start when user press the backup button

- Click **File Select** to choose the date, time and camera you want to back up.
- Click **Browse** to set the storage path.

6. Click **OK** to complete the adding DVR server. The added DVR server will display in Remote Backup main windows.



7. Click **Start** to begin backup and click Stop to stop backup progress.



Appendix A Registering Domain Name

DDNS (Dynamic Domain Name Service) is a data query service mainly used on the Internet for translating domain names into Internet addresses. It allows remote clients to intelligently search dynamic servers without any previous enquiring for servers' Internet addresses.

In order to take advantage of this intelligent service, first register your domain name on the following Web site.

I. Register the Domain Name on <http://ddns.avers.com.tw>

1. User Login

Browse the website **ddns.avers.com.tw** with Microsoft IE or Netscape Navigator to access the following dialog.



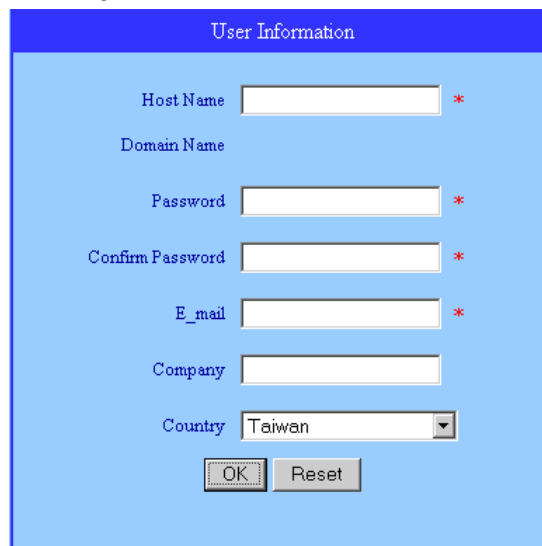
The 'User Login' dialog box has a blue header with the title 'User Login'. Below the header, there are two input fields: 'CD-Key No.' with a text box and 'Product' with a dropdown menu. At the bottom, there are two buttons: 'OK' and 'Reset'.

2. First input the **MAC Address** in **CD-Key No.** column and select the product name. Then click **OK** to login or **Reset** to clear the previous input.

i To find the MAC address of the DVR, click **Setup > Network** in preview mode UI. And then, click **Setting** of the Main Configuration and user should see the **MAC address** in IP Information section.

3. User Information

Please provide the following user information, **Host Name** (user can choose any name he/she likes except the one violence with other users), **Password**, **E-mail**, **Company**, and **Country**. And then, click **OK** to complete the domain name registration.



The 'User Information' dialog box has a blue header with the title 'User Information'. Below the header, there are several input fields: 'Host Name' (text box with a red asterisk), 'Domain Name' (text box), 'Password' (text box with a red asterisk), 'Confirm Password' (text box with a red asterisk), 'E_mail' (text box with a red asterisk), 'Company' (text box), and 'Country' (dropdown menu with 'Taiwan' selected). At the bottom, there are two buttons: 'OK' and 'Reset'.

-
- i**
- Note that Host Name and Domain Name (avers.com) are the replacement for Internet address while a remote client tends to search a dynamic server.
 - Host Name column supports alphabet letters and number only. The maximum character is 15.
 - The password maximum character is 12.
-

I. Register the Domain Name on <http://www.dyndns.com>

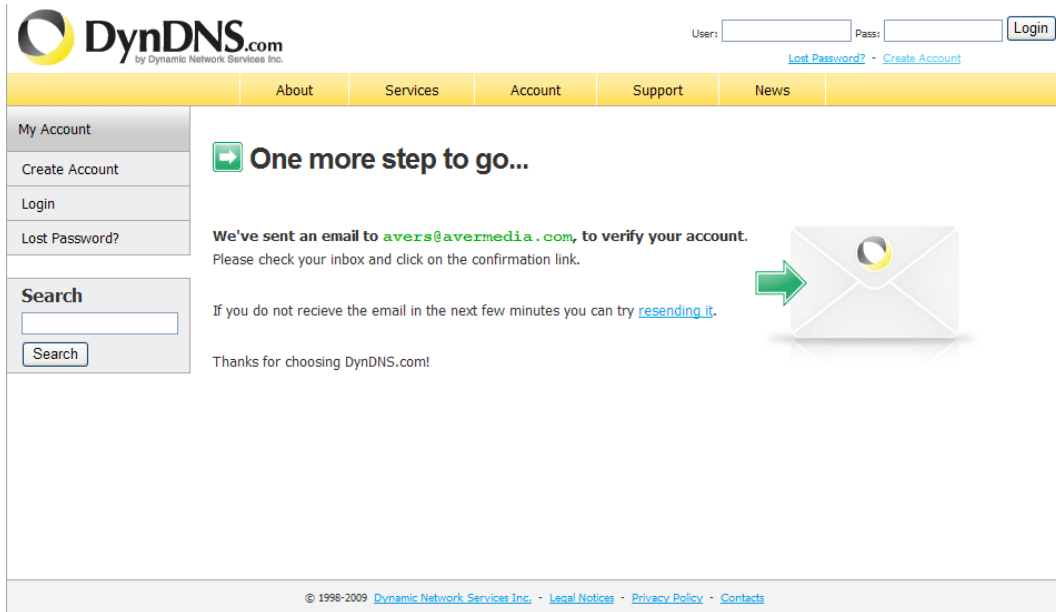
1. Open the browser on your PC and enter the URL <http://www.dyndns.com>
2. Select the **Create Account** from the main page.

The screenshot shows the DynDNS.com homepage. At the top right, there are fields for 'User:' and 'Pass:' with a 'Login' button. Below these are links for 'Lost Password?' and 'Create Account', with the latter highlighted by a red box. A yellow navigation bar contains links for 'About', 'Services', 'Account', 'Support', and 'News'. The main content area includes a banner for 'LIKE YIN AND YANG. Buy Custom DNS and get Domain Registration for just \$10.' with a 'Learn more about our Custom DNS service' button. To the right, there's a 'New to DynDNS.com?' section with a 'Take our new tour and see what we do' button. Below this are sections for 'DNS Services' and 'MailHop Services'. A search bar is located at the bottom right. A 'News' section highlights an article: 'Outage Causes Multiple Website Failures (DynDNS Customers Not Affected)'. At the bottom, there are four columns: 'Resources' (What is DNS?, DNS Tools, Home Solutions, Business Solutions), 'Services' (DNS Hosting, Free Dynamic DNS, Email Relay, Domain Names), 'Support' (DynStatus, Knowledge Base, 24/7 Premier Support, Update Clients), and 'Follow Us' (Our News, Twitter @dyninc, LinkedIn, DNS Ninjas | Facebook). The footer contains copyright information and links for 'Legal Notices', 'Privacy Policy', and 'Contacts'.

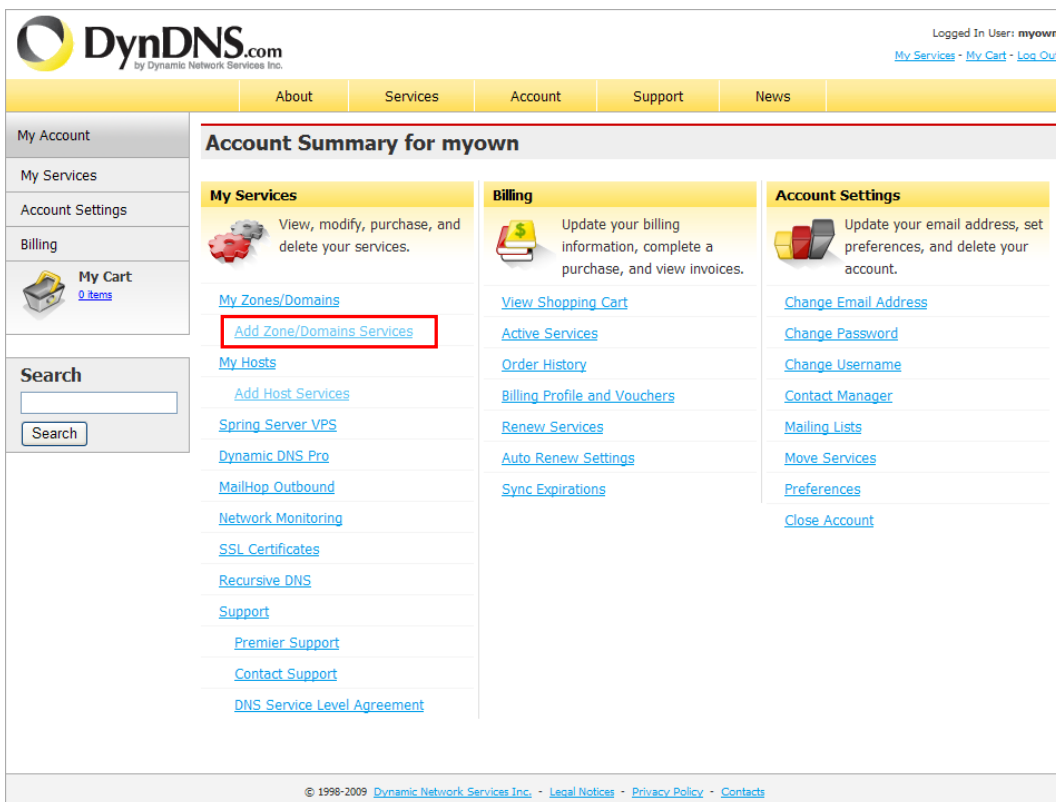
3. Enter the **Username, Email, Retype Email, Password, Retype Password**, and read the policy agreement.
4. Click **Create Account**.

The screenshot shows the 'Create your DynDNS.com account' page. At the top right, there are fields for 'User:' and 'Pass:' with a 'Login' button. Below these are links for 'Lost Password?' and 'Create Account'. A yellow navigation bar contains links for 'About', 'Services', 'Account', 'Support', and 'News'. On the left, there's a 'My Account' sidebar with links for 'Create Account', 'Login', and 'Lost Password?'. Below that is a 'Search' box with a 'Search' button. The main content area is titled 'Create your DynDNS.com account' and contains a 'User Information' section with fields for 'Username:', 'Email:', 'Retype Email:', 'Password:', and 'Retype Password:'. A note says 'Activation instructions will be sent here.' Below this is a 'Mailing Lists (optional)' section with checkboxes for 'Newsletters:' and 'Press-releases:', and radio buttons for 'Format: HTML' (selected) and 'Plain Text'. At the bottom, there's an 'Acceptable Use & Privacy Policy' section with a 'Privacy Policy:' link and a checkbox for 'I agree to the Acceptable Use Policy (AUP), and my mailing list subscriptions.' A 'Create Account' button is located at the bottom right.

5. User need to do the email verify in order to complete the account apply. Go to your mail account that user has used to register the account to find the confirm mail.



6. After account has been confirmed, user can login to your account.



7. Select **Add Zone/Domians Service** to register the domain name.

Appendix B Network Service Port

The following table shows the ports that DVR server uses for certain network service.

	Port#	Variable
Remote Console	5550	Y
PCViewer	80	Y
CM3000	80	Y
Firmware Update	5005	Y
DVR DDNS (Upload / Download)	53/1053	N

Appendix C Using Functional Keys

The DVR system provides shortcut keys. The table shows the function keys and descriptions.

Function Keys	Description
Q	Exit System
F1	Display system information
F2	Start recording
F3	Enable network function
F4	Access system settings
F5	Switch to playback mode
F6	Switch to Emap mode
F7	Access PTZ camera control panel
F8	Snapshot
F9	Switch to Full Screen
F11	Switch to AutoScan

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WARRANTY LENGTH

Labor is warranted for (3) three year from the date of purchase

Parts are warranted for (2) two year from the date of purchase

Replacement products will be warranted for the remainder of the one year warranty period or (30) thirty days, whichever is longer

WHO IS PROTECTED

This warranty is enforceable only by the first consumer purchaser

WHAT IS AND IS NOT COVERED

Except as specified below, this warranty covers all defects resulting from faulty manufacturing of this product. The following are not covered by the warranty.

1. Any product on which the serial number has been defaced, modified, or removed
2. Damage, deterioration, or malfunction resulting from:
 - Accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, commercial or industrial use, unauthorized product modification, or failure to follow instructions included with the product.
 - Misapplication of service by someone other than the manufacturer's representative
 - Any shipment damages (Claims must be made with carrier)
 - Any other cause which does not relate to a product defect
3. Cartons, cases, batteries, cabinets, tapes, or accessories used with product
4. AVer Information Inc. does not warrant that this product will meet your requirements; it is your responsibility to determine the suitability of this product for your purpose

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We will pay labor and material expenses for covered items. However, we will not pay for the following:

1. Removal or installation charges
2. Shipping charges
3. Any incidental charges

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