

# AVerMedia® AVerDiGi EB1704 Hybrid

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## User's Manual



<http://www.avermedia.com>  
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## 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.

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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 when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Changes and modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

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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**

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**CAUTION**

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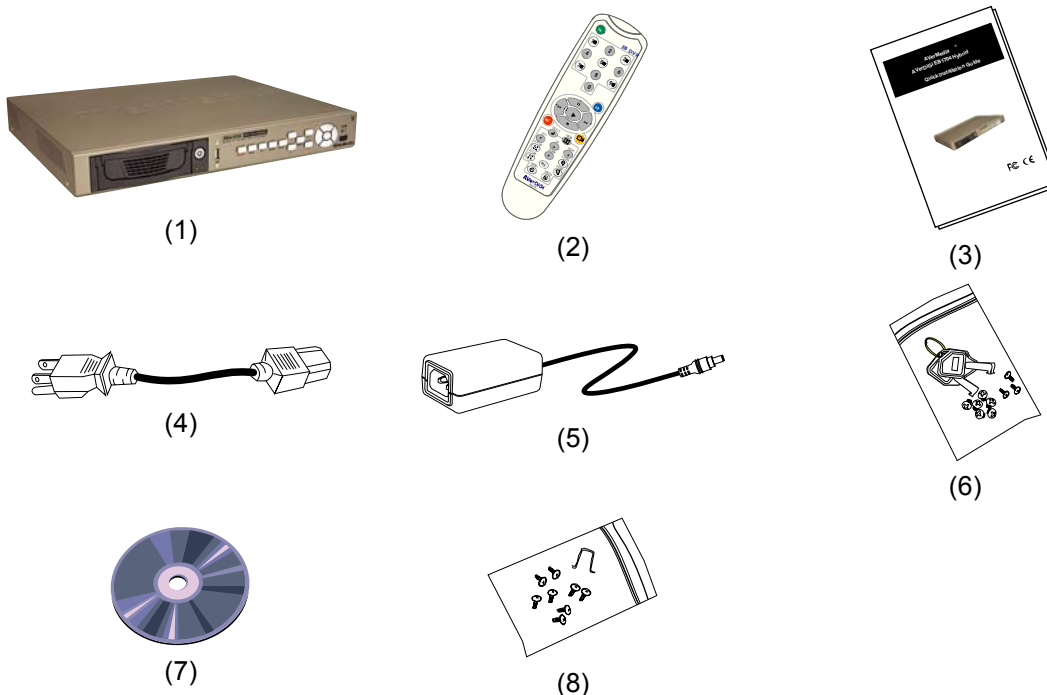
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# Chapter 1 Introduction

## 1.1 Package Content



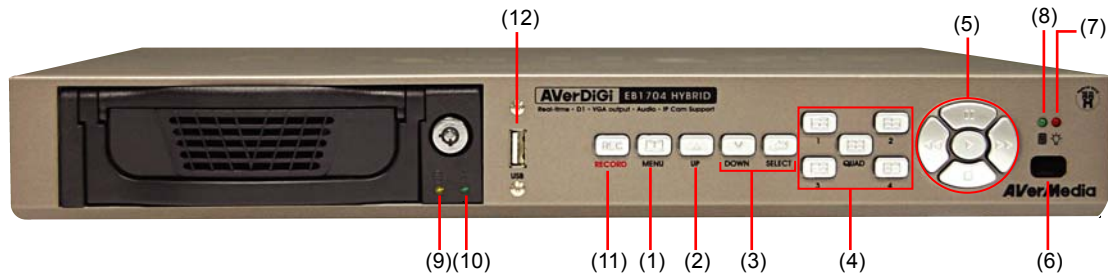
- (1) AVerDiGi EB1704 Hybrid unit
- (2) Remote Control (batteries included)
- (3) Quick Installation Guide
- (4) Power Cord
  - \* The power cord varies depending on the standard power outlet of the country where it is sold.
- (5) Power Adapter
- (6) Removable hard disk drawer accessories (with spare screws)
- (7) Software CD (User Manual included)
- (8) DVR accessories(including 8 screws and 1  $\Omega$  hook)



















## 1.2 Features and Specifications

- Non-PC hybrid network video recorder
- 4 composite video inputs and 1 composite output
- VGA output for LCD or CRT monitor display
- On Screen Display(OSD) control menu
- MPEG4 video compression
- Auto-detect NTSC or PAL video system
- Analog / IP camera/ PTZ camera support (extendable by customer's request)
- Support 4 channels Analog/IP cameras
- Audio support up to 4 channels
- Support network time synchronize function (Auto correction time delay & Day light saving)
- Support Web viewer on Internet Explorer

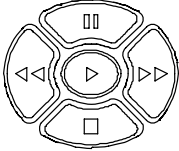





- Support Central Management System(CMS)
- Support remote console
- Support USB backup to pen drive and external hard disk
- Support network, playback, and recording simultaneously
- Supports 1 hard disk drive (not included)
- Full-screen resolution:  
Display: 720 x 480 (NTSC) / 720 x 576 (PAL)  
Recording: 720 x 480 (NTSC) / 720 x 576 (PAL)
- Recording frame rate:  
**D1 mode:** 60fps (NTSC) / 50fps (PAL)  
**CIF mode:** 120 fps (NTSC) / 100fps (PAL)
- Scheduled recording (00:00~23:00 set by hour )
- Search for recorded video files by date/time/event
- Support daylight saving and network time synchronize
- Input/Output: 4 sensor inputs and 1 relay output control
- Multiple language operation screens

### 1.3 Front Panel

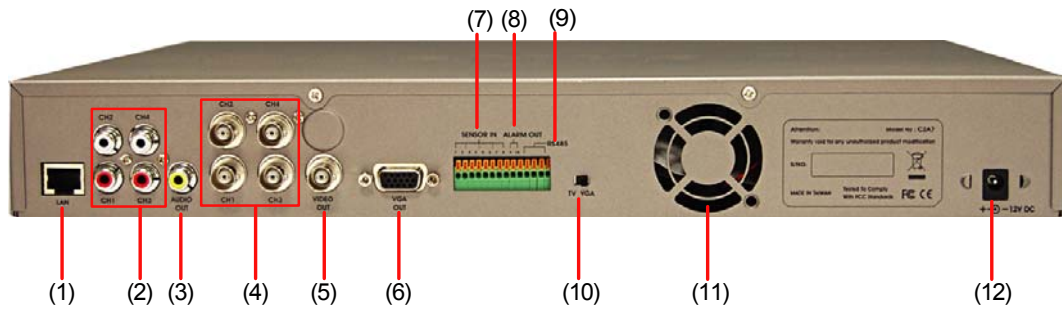


Name	Function
(1) Record 	: Start video recording. To stop recording, press 
(2) Menu 	: Call up and exit the OSD main and sub menu
(3) UP/DOWN/SELECT   	: Use the <b>UP</b> and <b>DOWN</b> buttons to change setting and move to the left and right, and <b>SELECT</b> to enter or make a selection
(4) 1/2/3/4/Quad      	: Use these buttons in playback mode to switch to display each channel in full screen or view all channels at the same time Use the buttons in setting password of OSD menu to:  : For "1"  : For "2"  : For "3"  : For "4"  : For "0"
 If in QUAD record mode, user would not be able to view single channel in full screen	
(5) Playback/OSD Menu Control Buttons	: Use the buttons in playback mode to: ▶ : Display the play list and play the recorded video ◀◀ : Wind back the video playback at the speed of 2x, 4x, 8x or 16x ▶▶ : Fast play the video playback at the speed of 2x, 4x, 8x or 16x



Name	Function
	<p>              : Temporarily freeze the video playback            ■ : Stop video playback            Use the buttons in navigating OSD menu to :            ◀▶ : Move to the left and right               ■ : Change the setting            ▶ : Make a selection         </p>
(6) IR Sensor	: Receive the signal from the remote control to operate the unit
(7) HDD LED 	: Indicate running state of the hard disk. Lights when the HDD is running
(8) DVR Power LED 	: Lights when the unit is on
(9) Removable HDD LED 	Indicate running state of the removable hard disk. Lights when the HDD is running
(10) Removable HDD Power LED 	Indicate power of the removable hard disk. Lights when the HDD power is connected
(11) USB 2.0 Port	: Connect to PC for video transfer or playback
(12) Removable HDD Keylock	: Lock/unlock the hard disk rack
	 Make sure to <b>TURN OFF</b> the unit <b>BEFORE</b> removing the hard disk

# 1.4 Back Panel



Name	Function
(1) LAN Port	: For Ethernet connection
(2) CH1/2/3/4	Input the video camera signal and display it on channel 1/2/3/4
(3) Audio Out	: Output the audio signal to a speaker
	<div style="display: flex; align-items: center;"> <p>The audio output device needs to be powered by external power.</p> </div>
(4) Audio In	: Input the audio signal from a mic or audio output device. The audio is embedded with channel 1/2/3/4
	<div style="display: flex; align-items: center;"> <p>The audio input device needs to be powered by external power.</p> </div>
(5) VGA Out	: Output the video signal to a CRT or LCD monitor
(6) Video Out (BNC)	: Output the video signal to a TV
	<div style="display: flex; align-items: center;"> <p>The DVR unit support 2 video output ports and you can only select to output the video either from the VGA OUT or VIDEO OUT</p> </div>
(7) Sensor In	: Support up to 4 sensor devices
(8) Alarm Out	: Support 1 relay device (Relay: 1A @ 125V AC/30V DC)
(9) RS485	: For PTZ camera connection (also see <a href="#">1.5.3.1</a> )
(10) TV-VGA	: Switch to select the video output. Make sure to set the video output before turning on the unit
(11) 12V DC	: Connect the power adapter into this port

# 1.5 Setting Up the DVR Unit

## 1.5.1 Installing the Hard Disk

The DVR unit allows user to install one hard disk. Before installing the hard disk, make sure to set the hard disk master jumper setting. Adjust the jumper setting according to the instructions on the hard disk label.



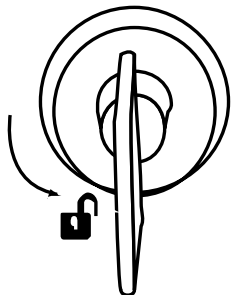
For hard disk spec, please referring to [http://www.avermedia.com/nvd/hardware-recom\\_eb.asp](http://www.avermedia.com/nvd/hardware-recom_eb.asp)



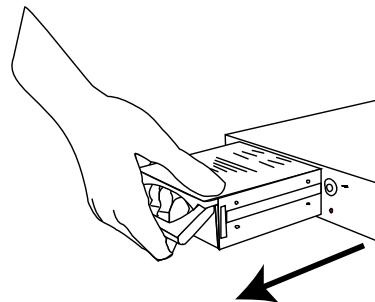
The “compatible hard disks” indicated in the above recommendation list only means that these commercially available hard disks were tested with AVerMedia® products and functioned well under normal operation conditions. AVerMedia® does not guarantee or provide warranties, explicitly, implied or statutory with respect to the reliability of the hard disk function or its compatibility. In no event AVerMedia® shall be liable for damages, with respect to any business interruption of clients, lost profits, loss of programs or other data on your information handling system or otherwise. This includes direct, indirect, incidental, special, or consequential damages, resulting from the incompatibility caused by the usage of these hard disks, even if AVerMedia® has expressly advised about the risk of such damages. The entire risk arising out of the use of any information attached here with is borne by the recipient.

Follow the illustrated instructions below to install the hard disk:

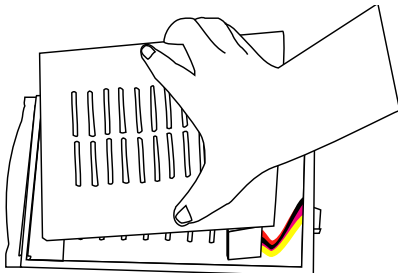
1. Unlock the removable hard disk drawer



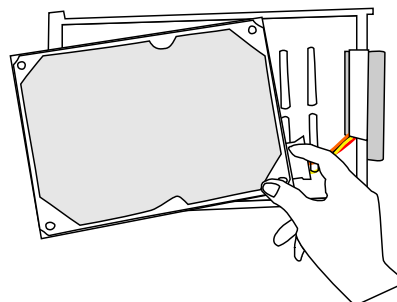
2. And then, pull out the removable hard disk drawer



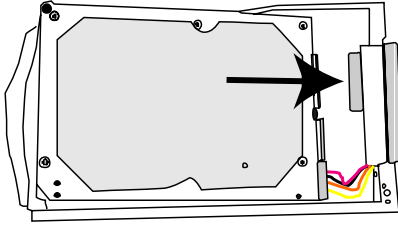
3. Remove the removable rack cover



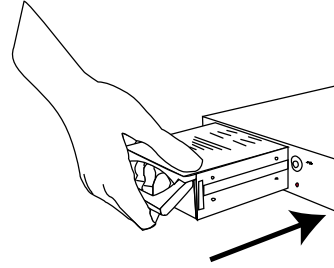
4. Connect the power connector to the hard disk



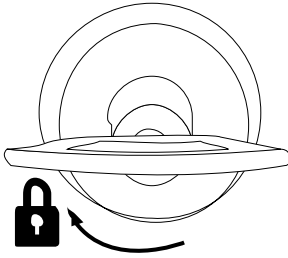
5. Carefully insert the hard disk in the removable rack then replace the removable rack cover




6. Slide the drawer back



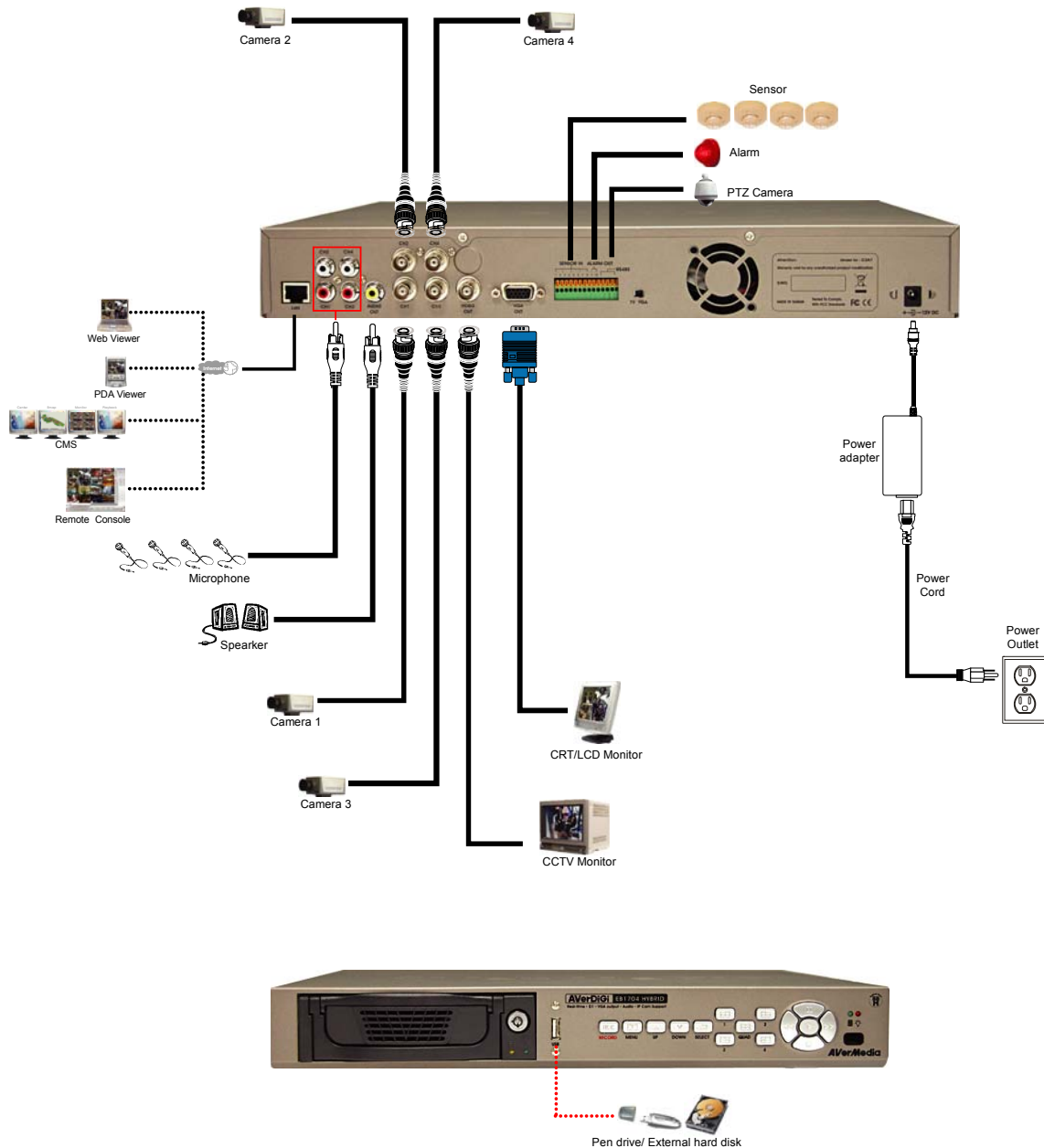
7. Lock the removable keylock



8. You may now connect all the cables. When the power is connected, the Power LED light  turns on

## 1.5.2 Connecting Devices

The back panel of the DVR unit, user can connect up to 4 video cameras, 4 sensor devices, 1 alarm device and output video to a TV or CRT/LCD monitor. Connecting the unit to a pen drive or external hard disk through USB connection for backup, then use the bundled software enables user to transfer, playback and segment the video. Follow the illustration below to make the connection:



Each time you change the video display output, the power must be turned **off** and **on** to reset the DVR unit.

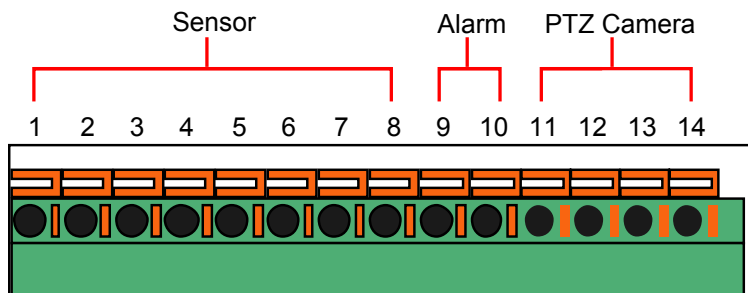


All connected devices need to be powered by external power.

## 1.5.3 Connecting the Sensor/Relay/PTZ Camera device

The Sensor, Alarm, and PTZ camera ports enable you to connect 4 sensor inputs, 1 relay outputs, and 1 PTZ camera. 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.



### 1.5.3.1 Sensor and Relay pinhole allocation:

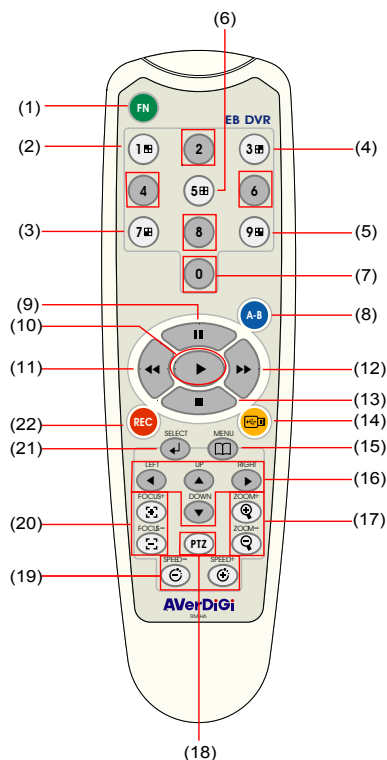
The signal from the sensor (i.e., infrared sensors, smoke detectors, proximity sensors, door sensors, etc.) is being transmitted to the unit and this triggers the system to respond and send signal to relay device (i.e., alarm, telephone etc).







Pin #	Definition
1	Sensor 1 Ground signal
2	Sensor 1 signal
3	Sensor 2 Ground signal
4	Sensor 2 signal
5	Sensor 3 Ground signal
6	Sensor 3 signal
7	Sensor 4 Ground signal
8	Sensor 4 signal
9	Relay signal
10	Relay signal
11	RS485 TX+ signal
12	RS485 TX- signal
13	RS485 RX+ signal
14	RS485 RX- signal



























# Chapter 2 Operating the EB1704 HYBRID

## 2.1 Familiarizing the Remote Control Buttons





Use the Remote control to operate the OSD menu on surveillance screen.



Button	Function
(1) 	A functional key for multiple DVR system remote control
(2) 	Switch to Channel 1
	As a number key for entering password
(3) 	Switch to Channel 2
	As a number key for entering password
(4) 	Switch to Channel 3
	As a number key for entering password
(5) 	Switch to Channel 4
	As a number key for entering password
(6) 	Switch to QUAD mode
	As a number key for entering password





Button	Function	
(7)	    	As a number key for entering password
(8)		Set a playing recorded video from A point to B point segment and repeat playing on surveillance screen(See <a href="#">2.1.1</a> )
(9)		Pause the playing
(10)		To play the video
(11)		Decrease the video playback at the speed of 2x, 4x 8x or 16x
(12)		Fast play the video playback at the speed of 2x, 4x 8x or 16x
(13)		Stop playing / Stop recording
(14)		USB backup(see <a href="#">2.1.2</a> )
(15)		To move the selection to the right
		To move the PTZ camera lens to the right
		To move the PTZ camera lens to the left
		To move the selection to the left
		To go up and select the items in the menu list or change the settings
		To move the PTZ camera lens to go up
(16)		To enter the OSD Main menu / Exit from the main menu or sub-menu display
(17)	 ZOOM+	To zoom out view of PTZ camera
	 ZOOM-	To zoom in view of PTZ camera
(18)		PTZ camera control button. Press  + camera channel button(     )can enter PTZ mode to control PTZ camera.(see <a href="#">2.1.3</a> )
(19)	 SPEED+	To speed up movement of PTZ camera lens
	 SPEED-	To speed down movement of PTZ camera lens



Button	Function
(20) 	To t focus in PTZ camera lens
	To focus out PTZ camera lens
(21) 	Make a selection Enter sub-menu
(22) 	Start video recording


## 2.1.1 Using AB Repeat Function




AB Repeat function allow user to set a video segment from A to B point and play on the surveillance screen until user stop. User also can backup AB Repeat file to pen drive or external hard disk (See [2.1.2](#)).

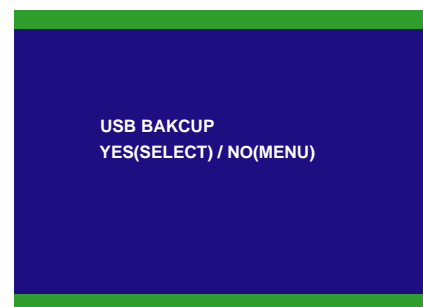
- Press  (play button) to call out the **SEARCH MODE** menu to find the recorded video that user wants to playback.
- Select **TIME SEARCH** or **EVENT LIST**.
  - **TIME SEARCH** (search by date and time): select the date and time from where you want to begin the video playback.
  - **EVENT LIST** (search by condition): select from the list.
- During the playback, press  to set the A point of video segment. And then, press  again to set the B point of video segment. On the surveillance screen will display “A-B” and repeat playing the AB point video segment which user has set. To cancel AB repeat, press  again.




## 2.1.2 Using USB Backup Button

User can press  button to backup the AB Repeat video file.

- Set the AB Repeat file (see [2.1.1](#)).
- Plug in pen drive or external hard disk to DVR system.
- During the AB Repeat playback, press  button.
- And then, press  (YES) to start backup file or press  (NO) to exit backup mode.



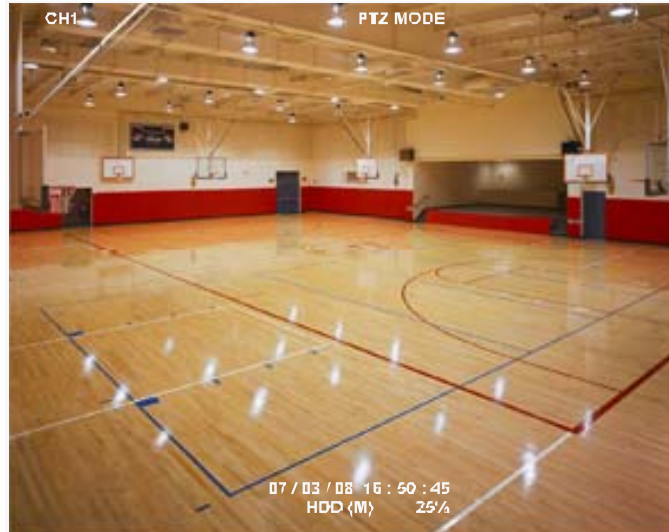
 The external hard disk needs to be powered by external power.

## 2.1.3 Controlling PTZ Camera

Using remote control, user can easily control PTZ camera at local site. Before starting, please go to OSD menu to enable PTZ control (see [3.1 Menu Function: PTZ Setup](#)).

### 2.1.3.1 To Enter the PTZ Mode

To control PTZ camera, user need to enter the PTZ mode first. Press **PTZ** button, and camera channel number button (**1** **2** **3** **4**). The surveillance monitor will switch to single screen and display **"PTZ mode"** on the screen.



To exit PTZ mode, press **PTZ** and **0** button. Also, when user doesn't have any action over 1 minute, the system will automatically exit PTZ mode.








### 2.1.3.2 To Set Preset Position




User can set 9 preset positions for PTZ camera. Using **1** to **9** button to set the preset position.

1. Press **PTZ** and camera channel number button (**1** **2** **3** **4**) to enter PTZ mode.
2. Using **▲**, **▼**, **◀** and **▶** to adjust the PTZ camera to the position that user wants.
3. Press any number button over 3 seconds and the position will be saved.
4. To move the PTZ camera to preset position, just press the number button.



### 2.1.3.3 To Control PTZ Camera

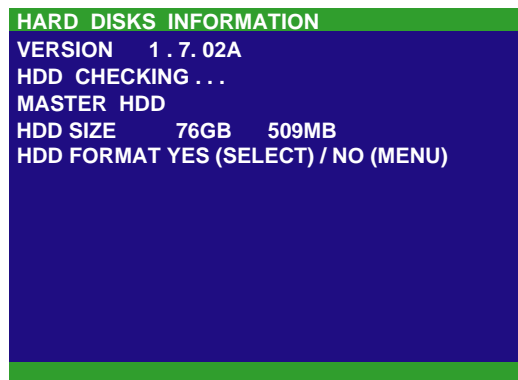
To move, adjust focus, and zoom in/out camera lens can be done by using some function buttons on the remote control.

-  To move the PTZ camera lens to the right
-  To move the PTZ camera lens to the left
-  To move the PTZ camera lens to go up
-  To move the PTZ camera lens to go down
-  To zoom out PTZ camera
-  To zoom in PTZ camera
-  To speed down movement of PTZ camera lens

-  To speed up movement of PTZ camera lens
-  To focus in PTZ camera lens
-  To focus out PTZ camera lens
























## 2.2 Using the DVR for the First Time

Upon connecting the power, the unit automatically detects the status of the hard disk. The hard disk must be formatted before user can use it with EB1704 HYBRID. If you are prompt to format the hard disk, press  (select) for **YES** to format the hard disk and  (menu) for **NO** to remain unchanged.





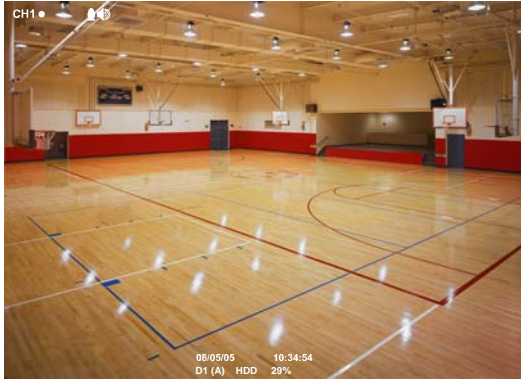
### 2.2.1 Set up the System Date and Time

Before starting record video, adjust the date and time first.

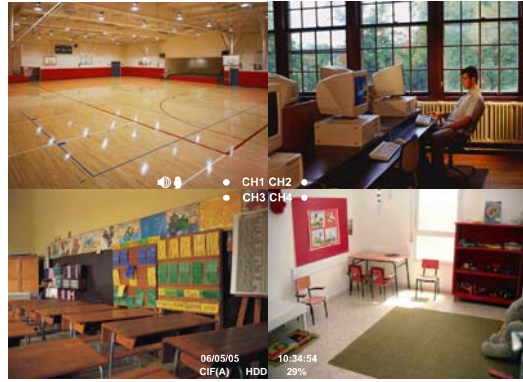
1. Press  to call up the OSD menu and then use  and  or  and  to go up and down and select **Submenu**. And then, press  or  to confirm the selection.
2. In Submenu, use  and  or  and  to go up and down and select the **Time Setup** and press  again to make a selection. And then, use  and  or  and  to select the Date and press  or  to confirm the selection.
3. To adjust the date, use  and  or  and  buttons to move the selection to the left and right.
4. To adjust Time, follow the above step 2 and 3.
5. Press  to go back to main menu after adjustment.

## 2.3 Surveillance Screen

To know if the channel is being recorded, the “●” record symbol would appear beside the channel number. The  (microphone) and  (speaker) indicate that the audio is available. The information below the screen shows the current date and time, recording mode (record schedule setting), and the percentage of the used hard disk space.



Full mode Screen Preview



QUAD model Preview

When you are in full screen preview, press the following buttons on the remote control to switch to different channel, or preview all 4 channels:



CH1: Camera1



CH2: Camera 2



CH3: Camera 3










CH4: Camera 4

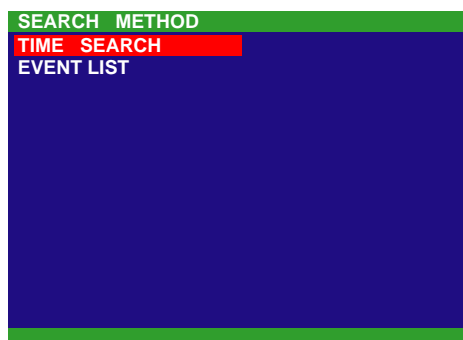


QUAD: 4-Channel







## 2.4 Playback the Video

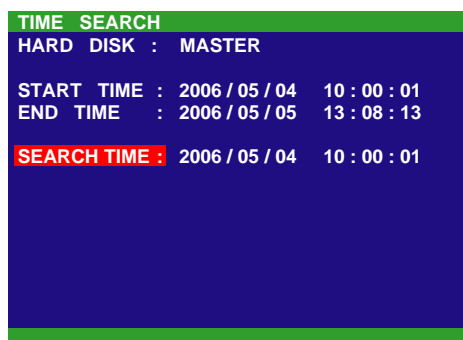
The DVR system can record and playback video simultaneously. Therefore, user doesn't need to stop recording while playback the video.











1. Press 
2. Use the  and  or  and  buttons to go up and down and select **TIME SEARCH** or **EVENT LIST**. Then, press  or  to make a selection.










### TIME SEARCH (search by date and time):









1. Use the  and  or  and  buttons and select **SEARCH TIME**. Then press  or  again to make the selection.
2. In the **SEARCH TIME**, user may now select the date and time from where you want to begin the video playback.



Use the  and  or  and  buttons to move the selection to the left and right. Use the  and  or  and  buttons to select the date and time. Then press  or  again to make the selection.

3. To start video playback, the time in second must be set. Use the  buttons to move the selection to the right most. Use the  and  or  and  buttons and select the time in second. Then press  or .

### EVENT LIST (search by event):

1. Use the  and  or  and  buttons to select from the list. Press  or  again to make the selection. User  and  to go next page or back to previous page.
2. Listed below are the following recording conditions:



**A** – Always Recording

It records non-stop and automatically continue recording when interrupted

**S** – Sensor Recording

It records when the sensor has been triggered

**M** – Motion Recording

It records when any movement has been detected

**B** – Button Recording

It records when the  record button is pressed


3. The “▶” play symbol would appear beside the channel number when you are previewing in playback mode.

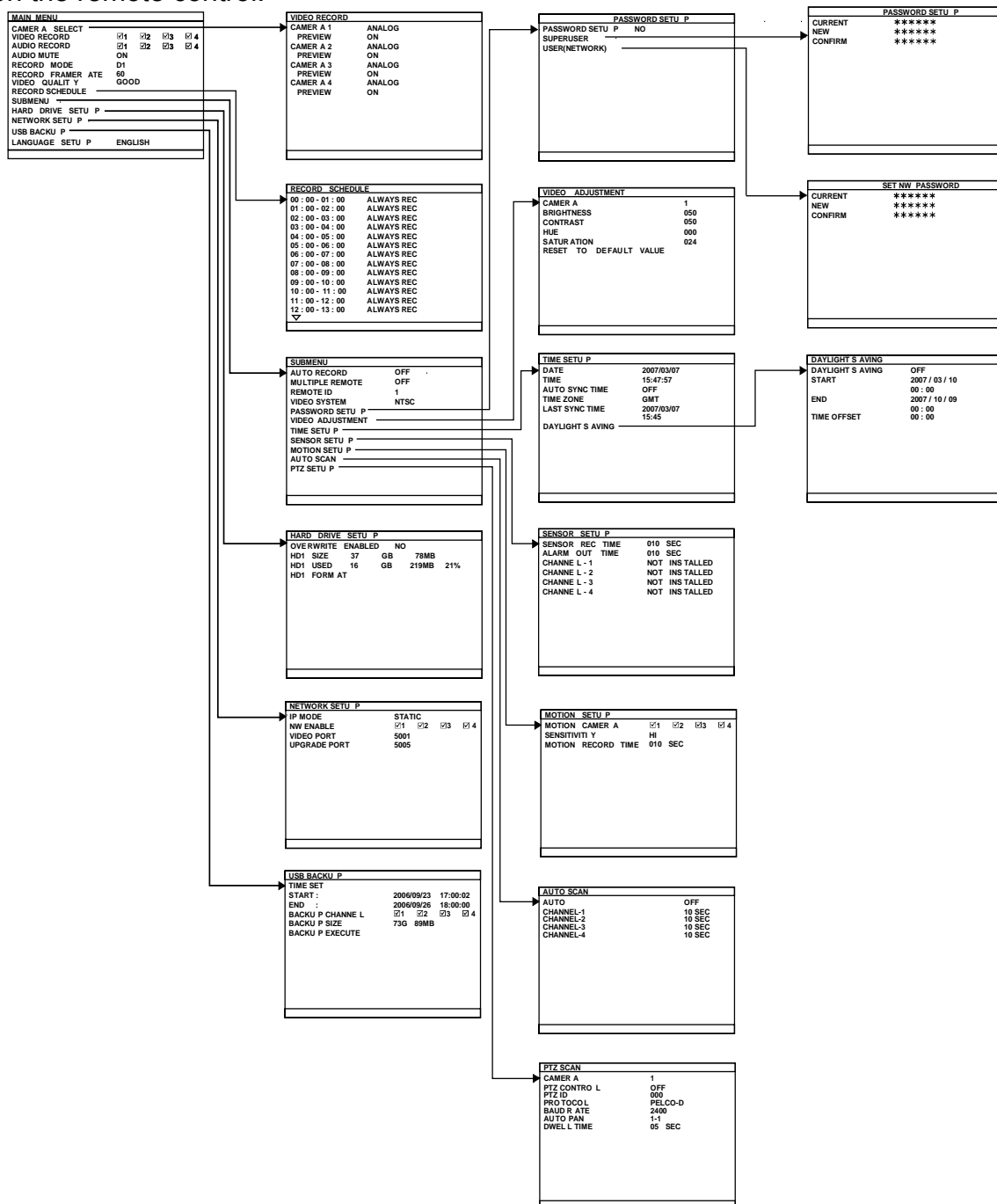


To playback the recording files during the daylight saving period; please select **Event List** to find the event that user wants to playback. On the first day and last day of daylight saving only has on record in **Time search**, so user can't find the specific playback file in time search.

---

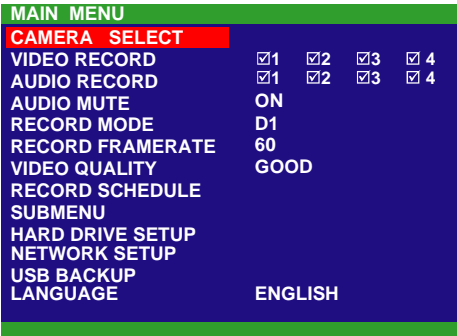
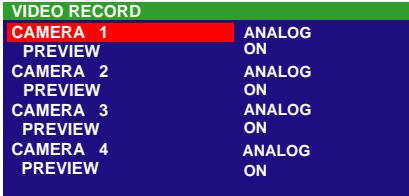


# Chapter 3 OSD Navigation Tree

The follow figure is an OSD menu tree map. To call out the OSD menu, press  on the remote control.




## 3.1 Menu Function

If the unit is currently recording the video, user may have to stop video recording to change the settings. Use remote control to navigate in the OSD menu. The red frame turns yellow when you are making a selection.


OSD MENU	Description
	<p><b>CAMERA SELECT :</b> Select the camera type(analog or IP camera) and enable/disable the channel number to display the video on the surveillance screen</p>
	<p><b>VIDEO RECORD :</b> Enable/disable the channel number to record video</p> <hr/> <p> The channels which could be recorded should be enabled in the <b>CAMERA SELECT</b> first.</p> <hr/> <p><b>AUDIO RECORD :</b> Enable/disable audio recording. To record sound, make sure the audio input device(ex: microphone) is connected to the unit</p> <p><b>AUDIO MUTE :</b> Enable/disable to hear audio sound. To hear sound, make sure the unit is connected to an audio output device (ex: speaker). If user recorded video in audio mute status, there is no sound when playback</p> <hr/> <p> The audio input and output device need to be powered by external power.</p> <hr/> <p><b>RECORD MODE :</b> Select D1/CIF recording mode Under D1 mode, the video recording is in full screen resolution and takes turns from one channel to the next one when Auto Scan enables. Each channel is recorded only at a maximum frame rate of 15fps. User can switch to view the video in full screen or QUAD screen Whereas in CIF mode, video recording is at a lower resolution, but each video is recorded in 30fps/25fps (NTSC/PAL). User can switch to view the video in full screen or QUAD screen</p>

**VIDEO RECORD :**  
Enable/disable the channel number to record video

 The channels which could be recorded should be enabled in the **CAMERA SELECT** first.

**AUDIO RECORD :**  
Enable/disable audio recording. To record sound, make sure the audio input device(ex: microphone) is connected to the unit

**AUDIO MUTE :**  
Enable/disable to hear audio sound. To hear sound, make sure the unit is connected to an audio output device (ex: speaker). If user recorded video in audio mute status, there is no sound when playback

 The audio input and output device need to be powered by external power.

**RECORD MODE :**  
Select D1/CIF recording mode  
Under D1 mode, the video recording is in full screen resolution and takes turns from one channel to the next one when Auto Scan enables. Each channel is recorded only at a maximum frame rate of 15fps. User can switch to view the video in full screen or QUAD screen  
Whereas in CIF mode, video recording is at a lower resolution, but each video is recorded in 30fps/25fps (NTSC/PAL). User can switch to view the video in full screen or QUAD screen



OSD MENU	Description
<b>MAIN MENU</b> <b>CAMERA SELECT</b> VIDEO RECORD <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 AUDIO RECORD <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 AUDIO MUTE            ON RECORD MODE        D1 RECORD FRAMERATE   60 VIDEO QUALITY        GOOD RECORD SCHEDULE SUBMENU HARD DRIVE SETUP NETWORK SETUP USB BACKUP LANGUAGE             ENGLISH	<b>RECORD FRAMERATE :</b> Set the number of frames per second to be recorded. Refer to the table below for the available record frame rate settings. The higher the frame rate is, it uses more hard disk space

Video Standard \ Record Mode	NTSC	PAL
D1	60, 20, 4	48, 20, 4
CIF	120, 60, 40, 20, 4	100, 48, 20, 4

**VIDEO QUALITY :**  
Select the video quality setting from BEST, HIGH, MEDIUM, GOOD, NORMAL or LOW.  
BEST – best record quality but less record hours  
LOW – longest record hour but quality is ordinary  
NORMAL – allows you to record more hours but the quality of the recorded video is moderate.

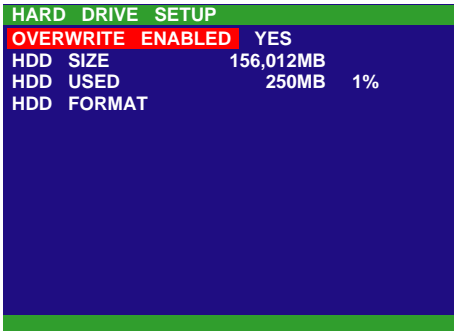
**LANGUAGE SETUP :**  
Select from the available languages

RECORD SCHEDULE	
00 : 00 - 01 : 00	ALWAYS REC
01 : 00 - 02 : 00	ALWAYS REC
02 : 00 - 03 : 00	ALWAYS REC
03 : 00 - 04 : 00	ALWAYS REC
04 : 00 - 05 : 00	ALWAYS REC
05 : 00 - 06 : 00	ALWAYS REC
06 : 00 - 07 : 00	ALWAYS REC
07 : 00 - 08 : 00	ALWAYS REC
08 : 00 - 09 : 00	ALWAYS REC
09 : 00 - 10 : 00	ALWAYS REC
10 : 00 - 11 : 00	ALWAYS REC
11 : 00 - 12 : 00	ALWAYS REC
12 : 00 - 13 : 00	ALWAYS REC

**RECORD SCHEDULE:**  
By default, in 24 hours, the recording schedule is set to always record every hour. Refer to the table below to customize the recording condition

Condition	Description
NO REC	Disable video recording
ALWAYS REC	Record non-stop
MOTION REC	Start recording when any movement is detected
SENSOR REC	Start recording when the sensor has triggered
BUTTON REC	Start recording when the record button is pressed

OSD MENU	Description
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\* HDD SIZE shows the total capacity of the hard disk.

\* HDD USED shows the amount of space that has been used.

**OVERWRITE ENABLED :**

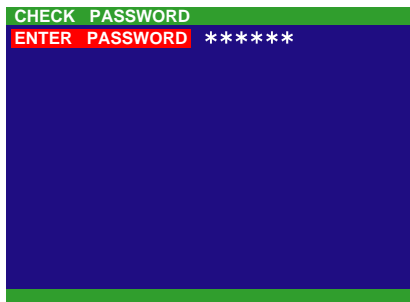
Enable/disable overwriting the earliest record when the hard disk space runs out. By default, the HDD overwrite setting is enabled

**HDD FORMAT :**

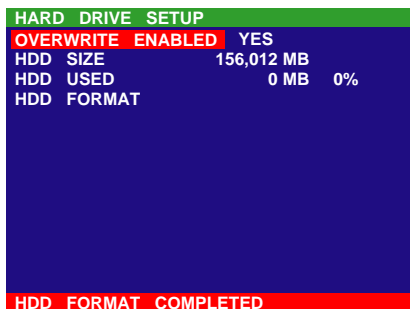
For security purpose, you may have to enter the password to format hard disk

To format hard disk:

1. Use the and buttons to go up and down and select **HDD FORMAT**. Then press or .
2. In the **CHECK PASSWORD** screen, press or . Then use the and buttons to select the security combination number. Repeat till you key in the last number. Also, user can use the number button on the remote control to enter the password. Press or button again to make the selection. To move the selection to the left and right, use and buttons



3. After entering the last number, the system will format the hard disk
4. It is done when the “**HDD FORMAT COMPLETED**” appears



Formatting the hard disk will permanently delete all the records and can no longer be retrieved

OSD MENU	Description
	<p><b>NETWORK SETUP:</b> Setup the network parameters for the internet or intranet remote monitor or playback.</p> <p><b>IP MODE:</b> The system provides 3 types of IP setup mode – Static, DHCP, and PPPOE.</p> <p>Use  and  buttons to go up and down and select <b>IP MODE</b>, and then press . Use  and  buttons to change the selections and press  or  to make a selection.</p>

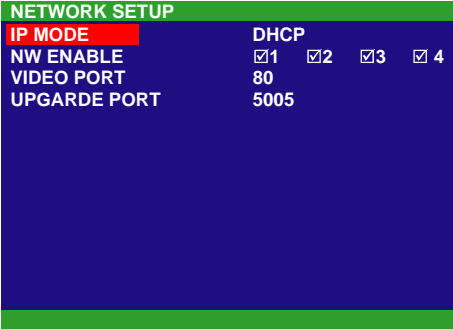





1. **STATIC:** Assigns a constant IP address for the DVR system. Use and buttons to go up and down and select items, and then press or to make selection. Use and to move left and right to select or enter the configuration value.
  - **IP ADDRESS:** Assign a constant IP address which a real IP addresses give from ISP to DVR system.

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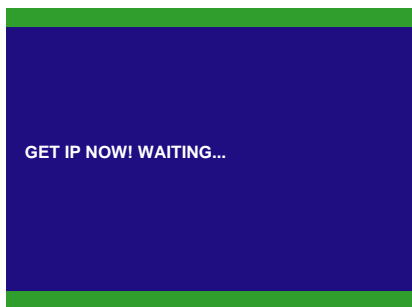
Do Not assign the DVR to 1.0.0.0 network segment. It will cause the DVR can not access to Internet due to the un-recognize to 1.0.0.0 IP segment.

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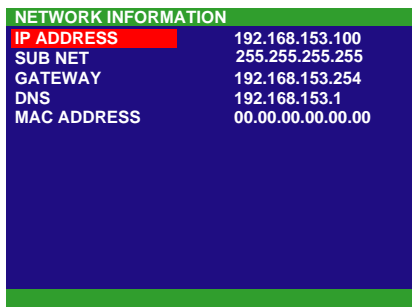
- **SUBNET:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to DVR system.
- **GATEWAY:** A network device act as a passageway to internet. Enter the network gateway IP address
- **DNS:** 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:** Only for user information. Don't need to enter the MAC address.
- When all parameters are set, select the **CHANGE** to confirm the configuration.

OSD MENU	Description
 <pre> NETWORK SETUP IP MODE NW ENABLE VIDEO PORT UPGARDE PORT DHCP [ ]1 [ ]2 [ ]3 [ ]4 80 5005 </pre>	<ul style="list-style-type: none"> <li> <b>DHCP:</b> Assign the IP address by local DHCP server to DVR system. Use  and  buttons to go up and down and select <b>DHCP</b>, and then press  or  to make selection. </li> </ul> <hr/> <p> The DHCP (Dynamic Host Configuration Protocol) is a set of rules used by a communications device (such as a computer, router or networking adaptor) to allow the device to request and get an Internet address from a server which has a list of addresses available for assignment</p> <hr/>

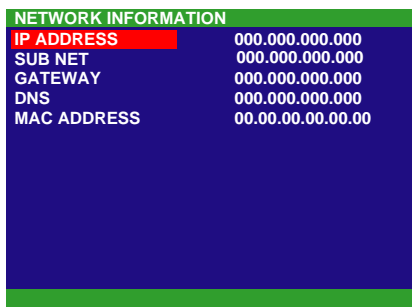
The DVR system will try to get an IP address from the DHCP server. A message window will show up as below:






When DVR system gets an IP address from DHCP server, the information will display as below:

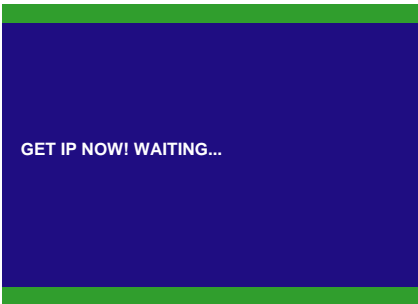


If system didn't get any network information, it means that get IP from DHCP server fail.

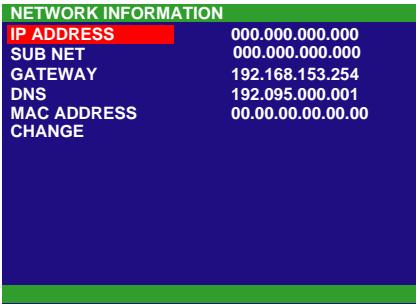


- PPPOE:** Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services. If your network is using ADSL service connecting to internet, and then, select PPPOE mode. Use  and  buttons to go up and down and select **PPPOE**, and then press  or to make selection. A message window will show up

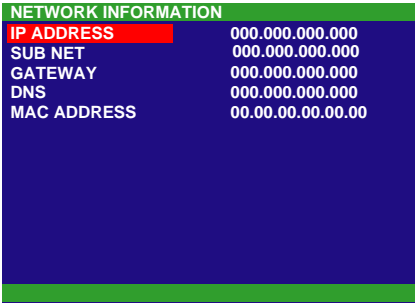
OSD MENU	Description
<p><b>NETWORK SETUP</b></p> <p><b>IP MODE</b>                    STATIC</p> <p>NW ENABLE                <input checked="" type="checkbox"/>1 <input checked="" type="checkbox"/>2 <input checked="" type="checkbox"/>3 <input checked="" type="checkbox"/>4</p> <p>VIDEO PORT                0080</p> <p>UPGARDE PORT            5005</p>	<p>as below:</p> 



When DVR system get an IP address, the information will display as below:



If system didn't get any network information, it means that get IP from PPPOE server fail.



**i** Please go to [8.1.1.5 Network Setup # PPPOE](#) to setup PPPOE account and password for connecting to PPPOE server.

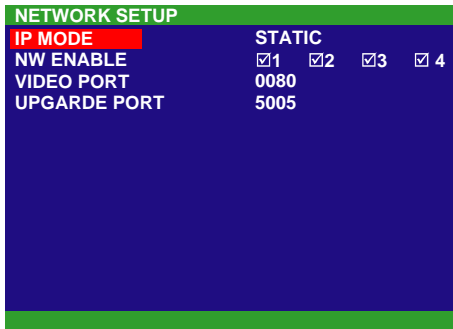
**NW ENABLE:**

Allow internet remote user to playback or monitor the channels. Without enabling the network function, the channels cannot be playback or monitor from remote site.

- i**  1 is Channel 1       2 is Channel 2  
 3 is Channel 3       4 is Channel 4

Use and buttons to go up and down and select **NW ENABLE** (network enable), and then press or and to move to the selection. Use and buttons to change the selections values and press or to confirm.

OSD MENU	Description
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**VIDEO PORT:**

A port for the remote connection. Any port can be assigned as a video port, except the ports already used by the network services. The default video port is 80.

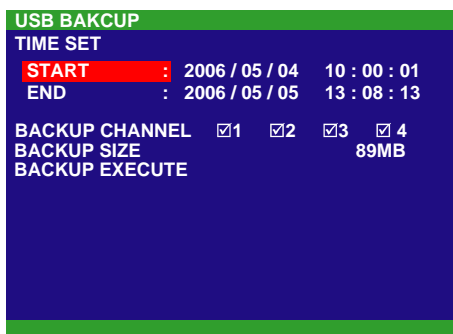
Use and buttons to go up and down and select **VIDEO PORT**, and then press or and to move to the selection. Use and buttons to change the selections values and press or to confirm.

**UPGRADE PORT:**

A port for the remote update DVR system firmware. Any port can be assigned as an upgrade port, except the ports are already used by the network services. The default upgrade port is 5005. **For Upgrading DVR firmware, please contact your local dealer.**

Please **DO NOT** cut off the power of the DVR system while the firmware is upgrading. Power failure will cause the permanent damage of the DVR system.

Use and buttons to go up and down and select **UPGRADE PORT**, and then press or and to move to the selection. Use and buttons to change the selections values and press or to confirm.

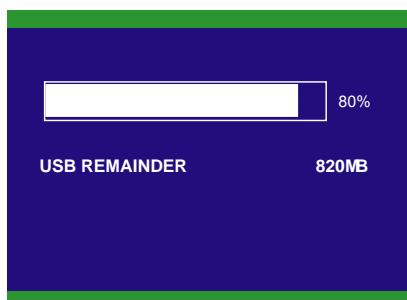


**USB BACKUP:**

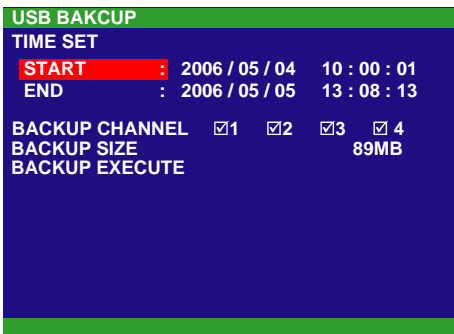
Using USB device (ex. Pen drive or External Hard disk) to backup partial recorded video and playback on PC.

Use and buttons to go up and down and select **USB BACKUP**, and then press or . Use and to move left and right. And, use and buttons to change the value and press or to confirm.

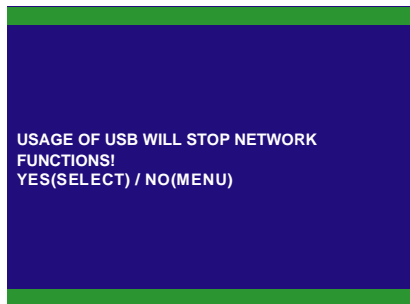
1. Select the **START TIME** and **END TIME**.
2. Select the channels which user wants to backup.
3. The DVR system will display the system hard disk space and backup file size.
4. And then, select **BACKUP EXECUTE** to start backup video to the USB device.



OSD MENU	Description
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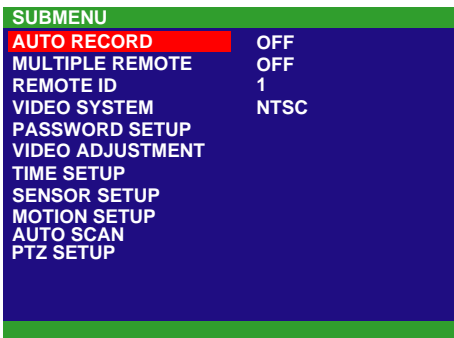
5. When backup is done, press any key to back to main menu.



6. To view the backup file, using USB Playback Application(see [4.3](#))



- Remember to plug in the USB device before starting to backup.
- The DVR system doesn't supply the power to external hard disk. Therefore, the external hard disk must be power supplied by self.




**AUTO RECORD :**

Enable/disable auto continue recording when interrupted (i.e., power breakdown, video playback or configuration setup). It continue recording after 10 second of idleness. This is applicable in Always Record mode.

**MUTLIPLE REMOTE:**

Enable/disable multiple DVR system remote control. When user has more than one DVR system, user can use **MULTIPLE REMOTE** function to control all DVR system by single remote control.

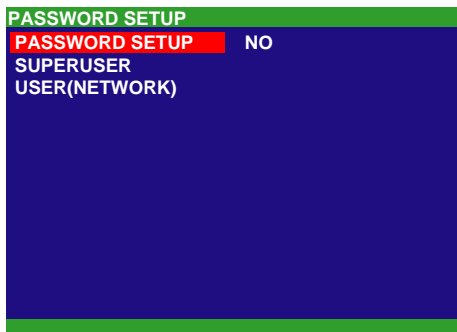
**REMOTE ID:**

Assign the ID number for multiple DVR system remote controls. When there are more than one DVR systems, user can enable MULTIPLE REMOTE function, and then assign REMOTE ID to each DVR system. Then, user can just use one remote control to control all DVR system by pressing REMOTE ID. To remote control multiple DVR systems, press  and number key (remote ID number) on the remote control.

**VIDEO SYSTEM:**

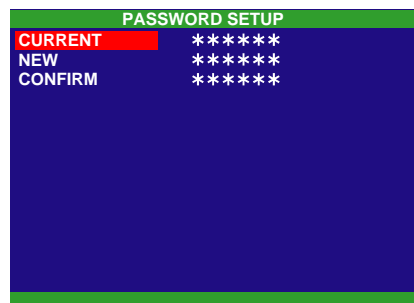
DVR system will auto detect the video system and display

OSD MENU	Description
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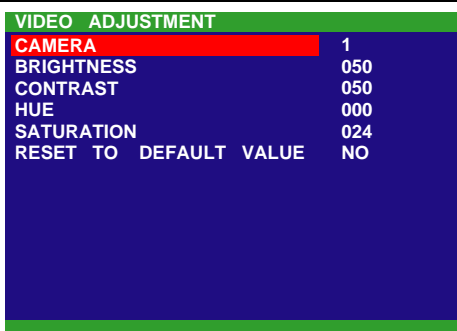
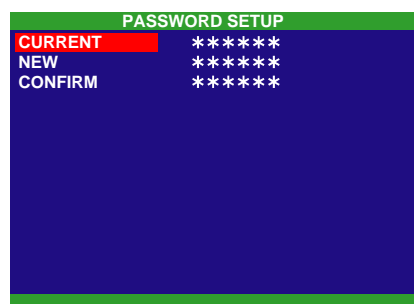


**PASSWORD SETUP :**  
 Enable/disable full system password protection. This would prevent unauthorized user to stop video recording, change system settings and formatting the hard disk.  
 Use the number button on the remote control to enter the password. Or use and or and button to select the security combination number. Press or button to confirm.

**SUPERUSER:**  
 Superuser has the authority of formatting hard disk, changing system settings, remote monitor the DVR system and changes the system settings. The factory default password is 111111.




**USER(NETWORK):**  
 The login account for remote connection through the internet. User account only can view and playback recorded video by Web viewer (ex: Internet Explorer), but no authority to change the DVR system's setting. The factory default password is 111111.

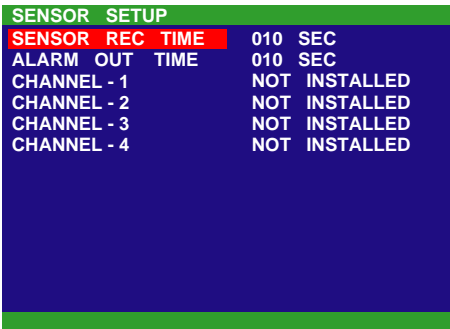


**VIDEO ADJUSTMENT :**  
 Select the camera number and set to adjust the video brightness, contrast, hue, and saturation value.



OSD MENU	Description														
<table border="1"> <thead> <tr> <th colspan="2">TIME SETUP</th> </tr> </thead> <tbody> <tr> <td>DATE</td> <td>2007 / 03 / 12</td> </tr> <tr> <td>TIME</td> <td>15 : 45 : 57</td> </tr> <tr> <td>AUTO SYNC TIME</td> <td>OFF</td> </tr> <tr> <td>TIME ZONE</td> <td>GMT</td> </tr> <tr> <td>LAST SYNC TIME</td> <td>2007 / 03 / 12 12 : 00 : 00</td> </tr> <tr> <td>DAYLIGHT SAVING</td> <td></td> </tr> </tbody> </table>	TIME SETUP		DATE	2007 / 03 / 12	TIME	15 : 45 : 57	AUTO SYNC TIME	OFF	TIME ZONE	GMT	LAST SYNC TIME	2007 / 03 / 12 12 : 00 : 00	DAYLIGHT SAVING		<p><b>TIME SETUP:</b> Setup system date, time, daylight saving, and enable auto synchronize time through network.</p> <p><b>DATE :</b> Set the current date</p> <p><b>TIME :</b> Set the current time</p> <p><b>AUTO SYNC TIME:</b> Enable/disable time synchronization automatically through network. The DVR system will auto synchronize time from NTP servers. The first time synchronize will be 6 hours later after system power up. When the daylight saving is enabling, the auto time synchronization will be stopped.</p> <hr/> <p> - User need to setup the NTP server's URL or IP address. Please go to <a href="#">8.1.1.1 System Setting #(3) NTP Setting</a> to setup the NTP server.</p> <p>- If the NTP server doesn't setup, the auto synchronize time function will not work correctly.</p> <hr/> <p><b>TIME ZONE:</b> Select the time synchronization time zone. The time zone will base on GMT (Greenwich Mean Time) time zone.</p> <p><b>LAST SYNC TIME:</b> Display the latest time synchronization date and time.</p>
TIME SETUP															
DATE	2007 / 03 / 12														
TIME	15 : 45 : 57														
AUTO SYNC TIME	OFF														
TIME ZONE	GMT														
LAST SYNC TIME	2007 / 03 / 12 12 : 00 : 00														
DAYLIGHT SAVING															
<table border="1"> <thead> <tr> <th colspan="2">DAYLIGHT SAVING</th> </tr> </thead> <tbody> <tr> <td>DAYLIGHT SAVING</td> <td>OFF</td> </tr> <tr> <td>START</td> <td>2007 / 03 /10 00 : 00</td> </tr> <tr> <td>END</td> <td>2007 / 10 /09 00 : 00</td> </tr> <tr> <td>TIME OFFSET</td> <td>00 : 00</td> </tr> </tbody> </table>	DAYLIGHT SAVING		DAYLIGHT SAVING	OFF	START	2007 / 03 /10 00 : 00	END	2007 / 10 /09 00 : 00	TIME OFFSET	00 : 00	<p><b>DAYLIGHT SAVING:</b> To enable/disable daylight saving function.</p> <p><b>START:</b> Setup daylight start up date and time.</p> <p><b>END:</b> Setup daylight stop date and time.</p> <p><b>TIME OFFSET:</b> 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.</p>				
DAYLIGHT SAVING															
DAYLIGHT SAVING	OFF														
START	2007 / 03 /10 00 : 00														
END	2007 / 10 /09 00 : 00														
TIME OFFSET	00 : 00														

OSD MENU	Description
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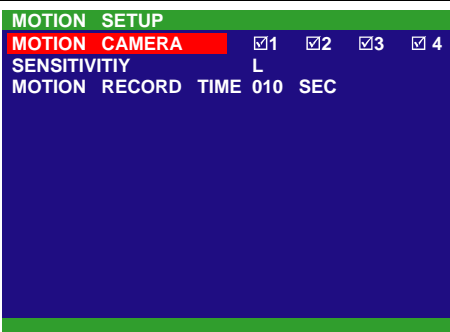


**SENSOR REC TIME :**  
Set the amount of time (in second) to start record when the sensor has triggered

**ALARM OUT TIME :**  
Set the amount of time (in second) to continue sending the alarm once triggered

**CHANNEL 1~4 :**  
Customize the initial state of the attached sensor. Refer to the table below to customize the sensor state

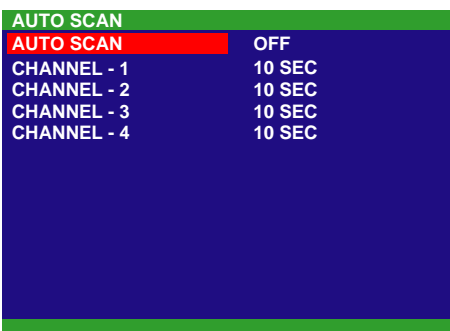
Condition	Description
NOT INSTALLED	Indicates that there is no sensor connected
NORMAL OPEN	Indicates that the initial state of the sensor is normal open. Video recording initiates when there is a changes in the sensor state
NORMAL CLOSE	Indicates that the initial state of the sensor is normal close. Video recording initiates when there is a changes in the sensor state



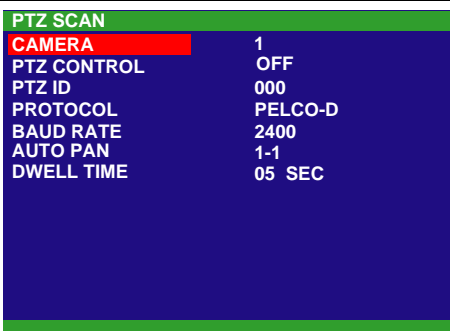
**MOTION CAMERA :**  
Enable/disable the channel number to detect motion.

**SENSITIVITY :**  
Set the sensitivity level. The sensitivity is from H (High), 9~ 2 and L (Low).

**MOTION RECORD TIME :**  
Set the amount of time (in second) to record when motion is detected.






**AUTO SCAN :**  
Enable/disable auto cycle switch to display the next channel when in full screen preview. User can set different switch time for each channel. The time range is from 5 ~30 seconds.



**PTZ SETUP:**  
To enable PTZ camera control by remote control and setup PTZ camera parameters.

1. Press and select **SUBMENU** → **PTZ SETUP**.
2. Use the and or and to go up and down to select the item and change the parameter value.
3. Use or button to enter the configure

OSD MENU	Description																
<table border="0"> <tr> <td colspan="2">PTZ SCAN</td> </tr> <tr> <td>CAMERA</td> <td>1</td> </tr> <tr> <td>PTZ CONTROL</td> <td>OFF</td> </tr> <tr> <td>PTZ ID</td> <td>000</td> </tr> <tr> <td>PROTOCOL</td> <td>PELCO-D</td> </tr> <tr> <td>BAUD RATE</td> <td>2400</td> </tr> <tr> <td>AUTO PAN</td> <td>1-1</td> </tr> <tr> <td>DWELL TIME</td> <td>05 SEC</td> </tr> </table>	PTZ SCAN		CAMERA	1	PTZ CONTROL	OFF	PTZ ID	000	PROTOCOL	PELCO-D	BAUD RATE	2400	AUTO PAN	1-1	DWELL TIME	05 SEC	<p>mode. Press  or  button to confirm the selection.</p> <p><b>CAMERA:</b> Select the channel of PTZ camera. If the PTZ camera is connecting on channel 1, then select the camera 1 for PTZ video to be display on channel 1.</p> <p><b>PTZ CONTROL:</b> To enable/disable PTZ camera can be controlled by remote control at local site.</p> <p><b>PTZ ID:</b> Assign an ID to PTZ camera. The ID range is from 001 to 255 but is limiting by protocol of PTZ camera. Please refer to your PTZ camera user's manual for more detail of PTZ ID assignment.</p> <hr/> <p> Every channel has a default ID value, channel 1 is 1, 2 is 2, 3 is 3, and 4 is 4. Therefore, we suggest assigning PTZ camera ID star from 5.</p> <hr/> <p><b>PROTOCOL:</b> Select the protocol of PTZ camera. The protocol will be differenced that depends on the brand of PTZ camera. The DVR system currently supports 2 protocols — PELCO-D and PELCO-P. Please refer to your PTZ camera user manual to make sure which protocol is using for.</p> <p><b>BAUD RATE:</b> To setup the baud rate of PTZ camera. For more detail, please refer to your PTZ camera's user manual.</p> <p><b>AUTO PAN:</b> Select the preset number to assign an auto move direction for the PTZ camera. For example: 1-3 means the PTZ camera will auto move from preset position 1, 2 and 3.</p> <p><b>DWELL TIME:</b> Set a time that how long the IP PTZ camera stays in that position before it moves to the next one.</p>
PTZ SCAN																	
CAMERA	1																
PTZ CONTROL	OFF																
PTZ ID	000																
PROTOCOL	PELCO-D																
BAUD RATE	2400																
AUTO PAN	1-1																
DWELL TIME	05 SEC																

# Chapter 4 Using the USB Playback Console

## 4.1 Recommended system requirements

- Pentium®4 2.4GHZ or above
- Windows®2000/ XP
- 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. You may plug in the pen drive or external hard disk now.

## 4.3 Running the USB Playback Console

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

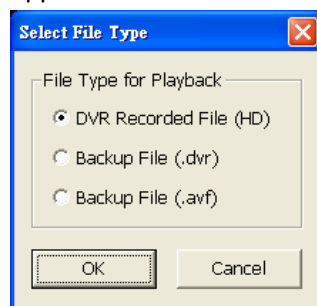


Name	Function
------	----------

(1) Video playback screen

To select the video file for playing. The playback application supports \*.dvr and \*.avf file.

(2) Open File

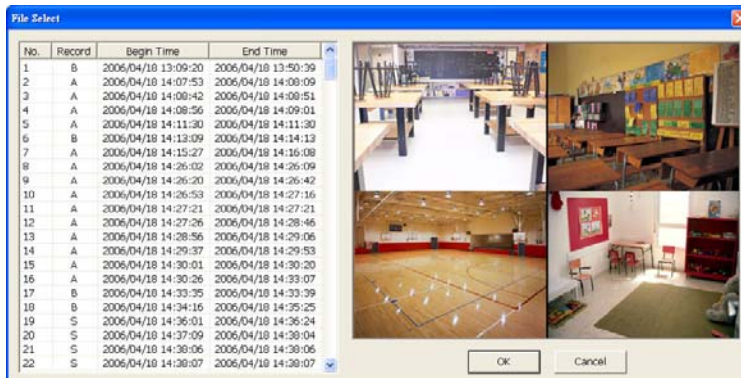


- **DVR Recorded File (HD):** To playback the recorded video from the hard disk which was recording video on the DVR system. (Also see [4.3.2](#))
- **Backup File(.dvr):** The file is backup and save in \*.dvr file format. (Also see 4.3.3)
- **Backup File(.avf):** The file is backup and save in \*.avf file format. The recorded video backup to pen drive is in \*.avf.

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

Select the event you want to playback. The event list only available when user select to playback in **DVR Recorded File(HD)**.

(3) Event List



(4) Full screen

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. 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.

(5) Segment

Keep a portion of the recorded video (see also [4.3.1](#))

(6) Output

Save the segmented file in \*.mpg or \*.avi format (see also [4.3.1](#)).

(7) Snapshot

Capture and save the image either in \*.jpg or \*.bmp format

(8) Print

Print the image

(9) HDD Backup

To call out HDD Backup application. (See [Chapter 5](#))

(10) iEnhance

To call out iEnhance application. ( See [Chapter 7](#))

(11) Watermark

To call out ImageVerification application. (See [Chapter 6](#))

(12) Status Bar

Display the recorded date, time and play speed.

(13) Progress Bar

Show the progress of the file being played. You may move the bar to seek at any location of the track.

(14) Playback Controller

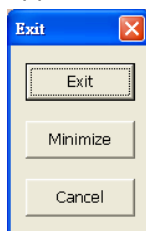
**Begin:** Move at the beginning of the recorded video file.  
**Previous:** Go back to the previous frame by frame.  
**Slower:** Play the recorded video file at the speed of 1/2X, 1/4X, or 1/8X.  
**Rewind:** Wind back the recorded video file.  
**Pause:** Briefly stop playing the recorded video file.  
**Play:** Play the recorded video file.  
**Faster:** Play the recorded video file at the speed of 2x, 4x, or 8x.  
**Next:** Go to the next frame by frame.  
**End:** Go to the end of the recorded video file.

(15) Split Screen Mode

Select from different screen view to playback the recorded video file of the entire camera or one camera on screen.

(16) Exit

Exit/ Minimize the application or chose Cancel to go back to the application



Name	Function
(17) Sound /Sound bar	Turn on and off the sound Increase and decrease the volume

### 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.



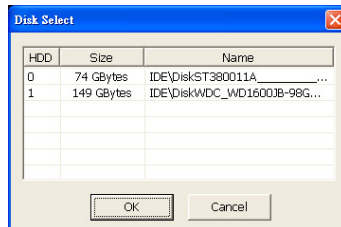
2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation, click **Segment** button again.



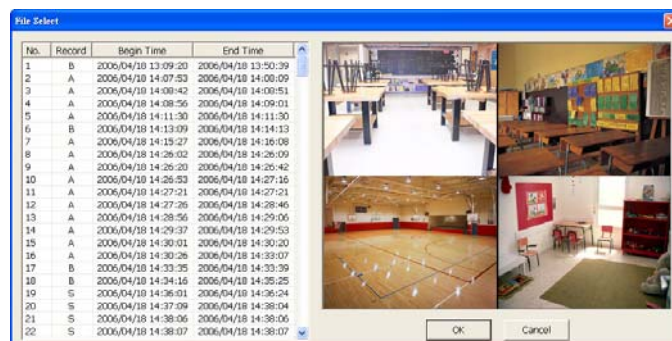
3. Click **Output** button to save the wanted portion.
4. In the **Save As** dialog box, locate on where user wants to save the file, type the filename, and select the video format.

### 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. And then, the **File Select** window appears. Select the event that user wants to play and click **OK**.



### 4.3.3 Playback Backup File(\*.dvr)

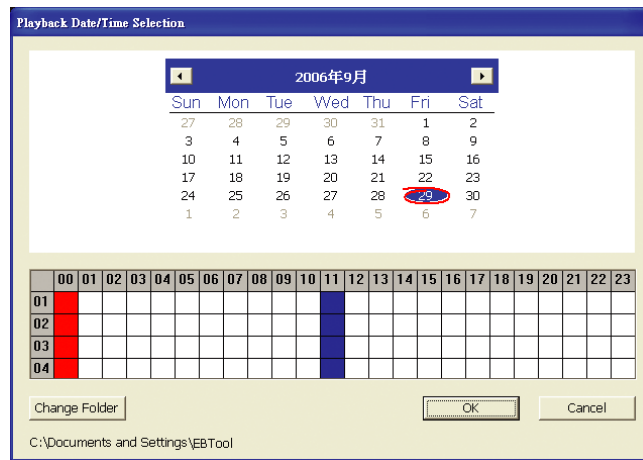
1. Click Open File button.
2. Select **Backup File(\*.dvr)** and click **OK**.
3. Locate the backup file folder and click **OK**.





When open the backup video file, just locate the where backup file folder is.

4. And then, **Playback Date/Time Selection** window appears. Select the date and time and click **OK**.



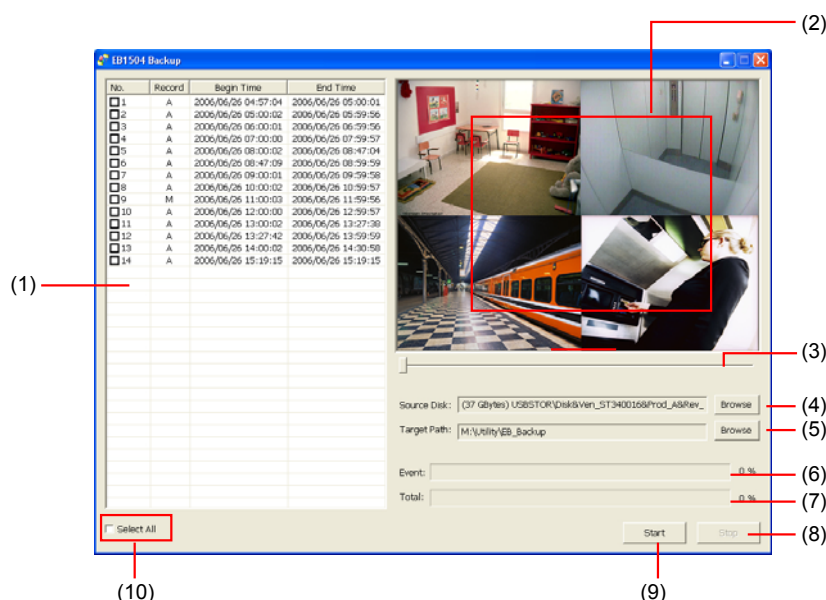


# Chapter 5 Backup Recorded Video File

## 5.1 Recommended system requirements

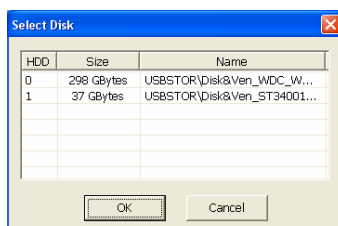
- Pentium®4 2.4GHZ or above
- Windows®2000/ XP
- DDR 256 MB
- Graphic function must support DirectDraw
- Audio card or built-in
- Speaker
- 1 available USB2.0 port

## 5.2 Familiarizing with HDD Backup Application



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

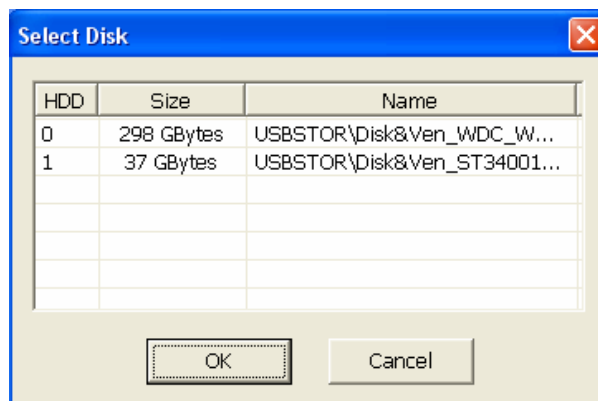
- |                                    |  |
|------------------------------------|--|
| (1) All recorded video events list | <b>No.:</b> the list order number<br><b>Record:</b> the record type(see also <a href="#">Chapter 2.3.1</a> )<br><b>Begin Time:</b> the beginning of record time<br><b>End Time:</b> the end of record time |
| (2)                                | Display first frame of each recorded channel video which user had selected.  |
| (3) Progress bar                   | Show the progress of the event being played. User may move the bar to seek at any location of the track  |
| (4) Source Disk                    | To select the hard disk drive  |



Name	Function
(5) Target Path	To locate on where user want to save the file
(6) Event (%)	Display the backup progress rate of event in percentage
(7) Total (%)	Display the total backup progress rate in percentage
(8) Stop	Stop backup progress
(9) Start	Start backup progress
(10) Select All	Select all listed recorded video events. Click the check box again to cancel for selecting all events.

### 5.3 To Backup Recorded Video File

1. Please have the hard disk which was recording video on the DVR system install on your PC or using external USB enclosure to connect to your PC.
2. To run the HDD Backup application, click the **HDD Backup** button on USB Playback Application main interface.
3. Click **Browse** in **Source Disk** to locate the recorded video file.
4. And then, the **Select Disk** windows will appear as below:



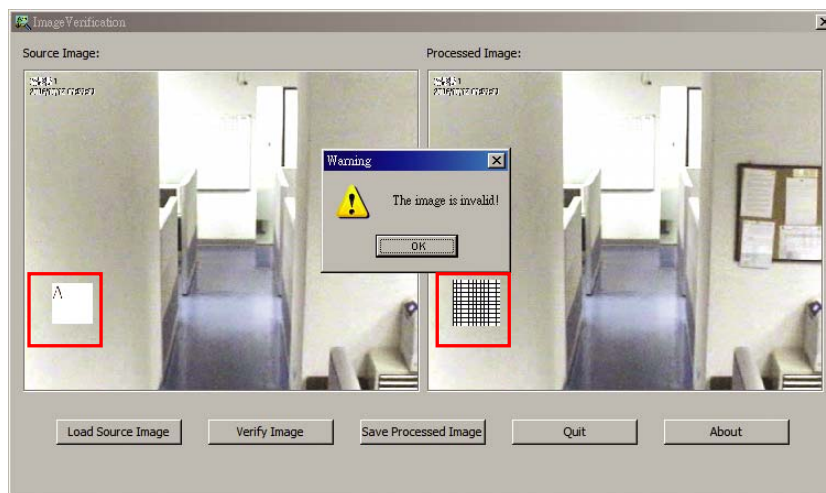
5. Select the hard disk drive from **Select Disk** windows. All available hard disk will list on the **Select Disk** windows with size and name
6. Select the hard disk drive and click **OK**
7. And then, all the recorded video files will list out.
8. Select the event which user wants to backup. Or mark the **Select All** to select all listed recorded video event
9. Locate on where user wants to save the backup file
10. Click **Start** to process backup
11. To stop the backup progress, click **Stop**
12. To play the backup file, see [4.3.3](#).

## Chapter 6 ImageVerification

Image Verification is a watermark-checking program to identify the authenticity of a saved image (e.g. by snapshot). This program can only verify uncompressed bmp image files.

### 6.1 To Run the ImageVerification

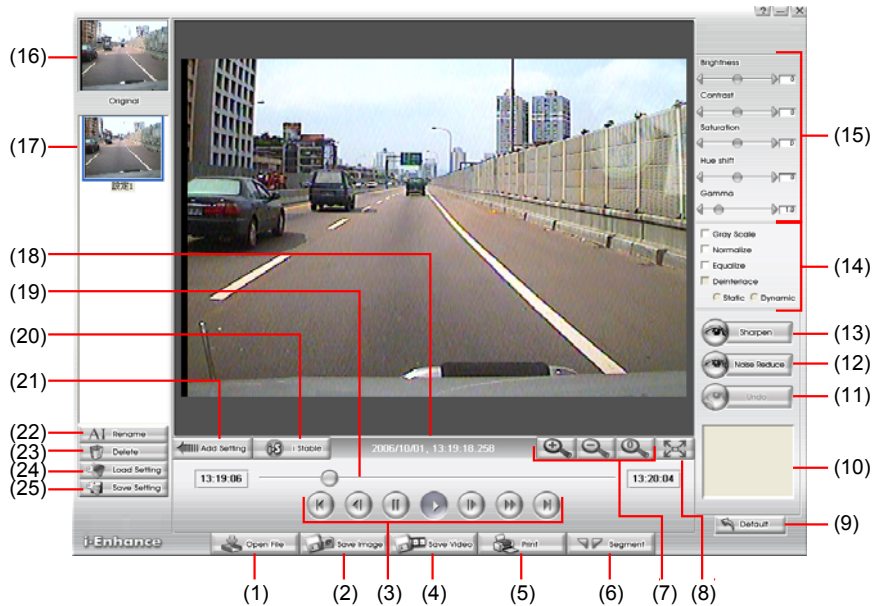
1. To run the ImageVerification application, click the **Watermark** button on USB Playback Console main interface.
2. In the ImageVerification screen, click **Load Source Image** and locate the image source.
3. Click **Verify Image** to begin the process.
4. Check the result in the **Processed Image** screen. If the picture is unmodified, the image in the **Source Image** and **Processed Image** screen would be exactly the same. If the picture is being modified, a warning dialog box would prompt and the modified area is highlighted.



# Chapter 7 iEnhance

The bundled iEnhance is a video editing tool and can only be used with \*.dvr 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.



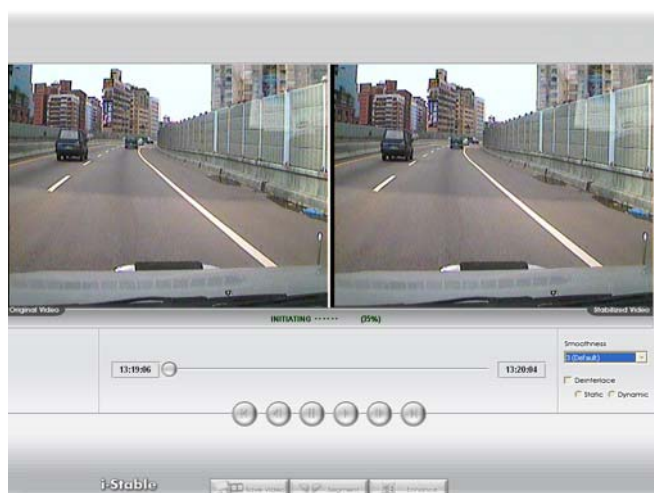
Name	Function
(1) Open File	Access *.dvr video file.
(2) Save Image	Capture and save the screen shot in *.bmp format.
(3) Playback Control Buttons	Begin: Move at the beginning of the video file. Previous: Go back to the previous frame. Rewind: Wind back the video file. Pause: Temporary stop playing the video file. Play: Play the video file. Faster: Play the video file at the speed of 2x, 4x, or 8x. 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.

Name	Function
(11) Undo	Delete the last action.
(12) Noise Reduce	Adjust the softness and repair the damaged colours.
(13) Sharpness	Improve the overall image by enhancing edges. This gives the image more depth.
(14) Effects	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. 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 <a href="#">Chapter 7.1</a> )
(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.

## 7.1 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.

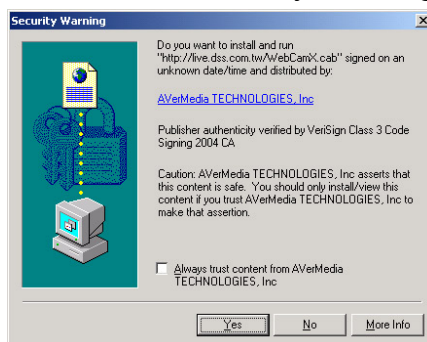


## Chapter 8 Using the Remote Programs

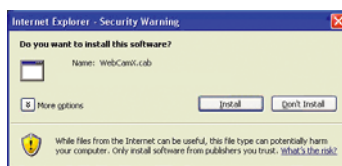
User can use Microsoft Internet Explorer to access DVR system by entering the IP address. To use this feature, make sure that you PC and EB1704 Hybrid both are connected to the internet and the Network feature is enabled.

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 2000, click **Yes** when the Security Warning dialog box appears.



For Windows XP, 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 User ID (Superuser or User) and password (default password is 111111) and select the type of network. Superuser has the authority to remote setup the DVR system configuration on Web Viewer.

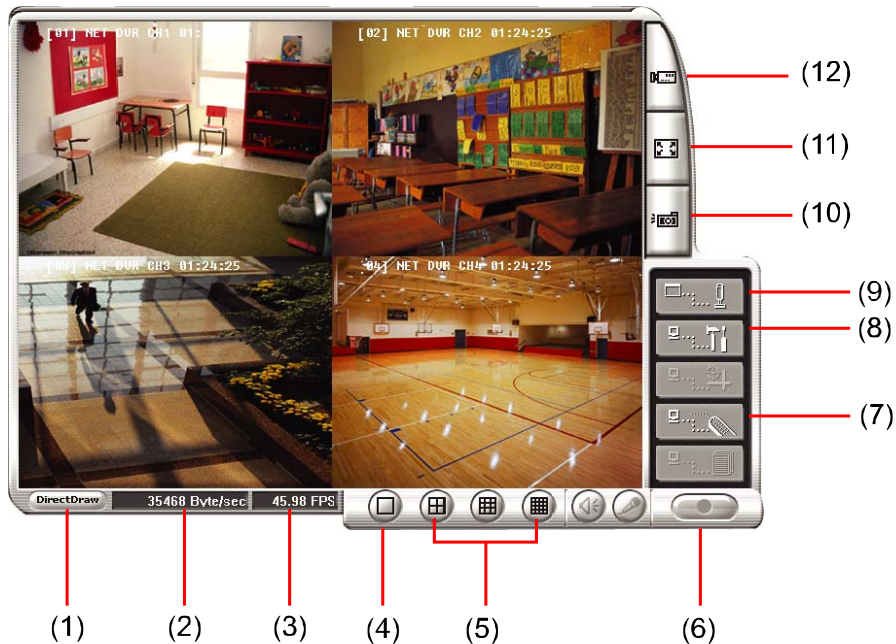
**i** Changing the Superuser and User default password is strongly recommended.





## 8.1 Familiarizing the Web Viewer Buttons

Right-clicking on the Web Viewer 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.
<p><b>i</b> Not all graphic cards can support this function. If you can not see the screen display correctly or screen is messed, please check with VGA card vendor.</p>	
(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) One screen view	To view single camera view on screen. User can right click on the screen to switch to different camera view.
(5) Split screen view	To view all cameras on screen simultaneously.
(6) 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 <b>Record</b> button.
(7) Remote Console	Initiate Remote Console. It allows you to control DVR server (see also <a href="#">Chapter 8.2</a> ).
(8) Remote setup	Change the DVR server settings (see also <a href="#">Chapter 8.1.1</a> ).



**i** Only Superuser has the authority to remote setup DVR system.

(9) PTZ Control	Initiate PTZ camera controller(see also <a href="#">Chapter 8.3</a> )
(10) Snapshot	Capture and save the screen shot in *.bmp format.

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

---

(11) 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.

---

(12) 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.

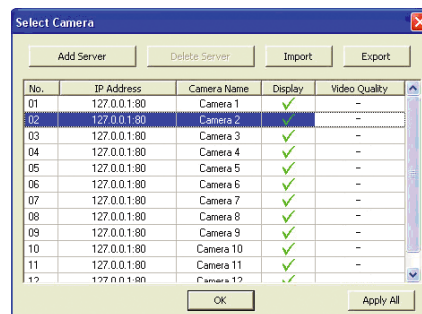
Click **Delete Server** to delete the selected item.

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.



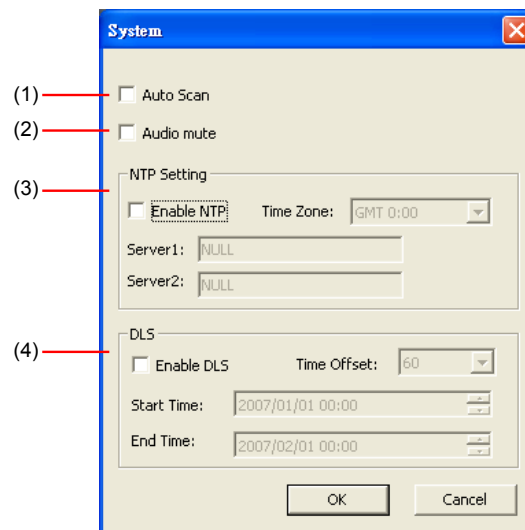


## 8.1.1 To Setup Remote System Setting

Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting. The setting here applies to Remote DVR system only.

- 
- i** - After changed the DVR system setting, refresh your web browser in order to apply the new setting to the DVR system.
  - Only the superuser has the authority to change remote DVR system settings.
- 

### 8.1.1.1 System Setup



#### (1) Auto Scan

Enable/disable auto cycle switch to display the next channel when in full screen preview. User can set different switch time for each channel. The time range is from 5 ~30 seconds.

#### (2) Audio mute

Enable/disable to hear audio sound of local DVR. To hear sound, make sure the unit is connected to an audio output device (ex: speaker). If user recorded video in audio mute status, there is no sound when playback

#### (3) NTP Setting

Setup the time auto synchronization.

##### - **Enable NTP**

Enable/disable time synchronization automatically through network. The DVR system will auto synchronize time from NTP servers which user has entered in following server 1 and server 2 column. The first time synchronize will be 6 hours later after system power up.

- 
- i** When the daylight saving is enabling, the auto time synchronization will be stopped.
- 

##### - **TIME ZONE:**

Select the time synchronization time zone. The time zone will base on GMT (Greenwich Mean Time) time zone.

- **Server 1/Server 2**

Fill in the network time server URL or IP address (clock.stdtime.gov.tw or time.stdtime.gov.tw)

**(4) DLS**

Setup daylight saving settings.

- **Enable DLS**

To enable/disable daylight saving function.

- **START**

Setup daylight start up date and time.

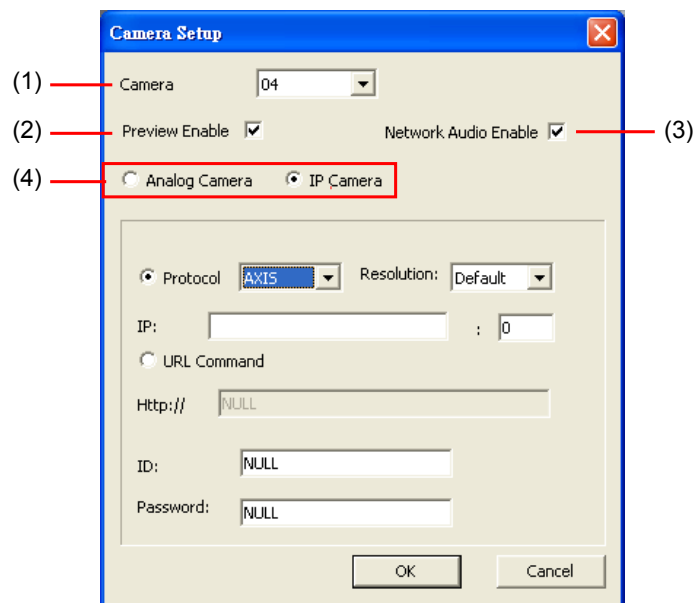
- **END**

Setup daylight stop date and time.

- **TIME OFFSET**

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.

**8.1.1.2 Camera Setup**



**(1) Camera**

Select the camera that user wants to set up.

**(2) Preview Enable**

Enable/disable the camera channel to display the video on the surveillance screen

**(3) Network Audio Enable**

Enable/disable the audio sound record when recording the video through network.

**(4) Select the Camera attribute**

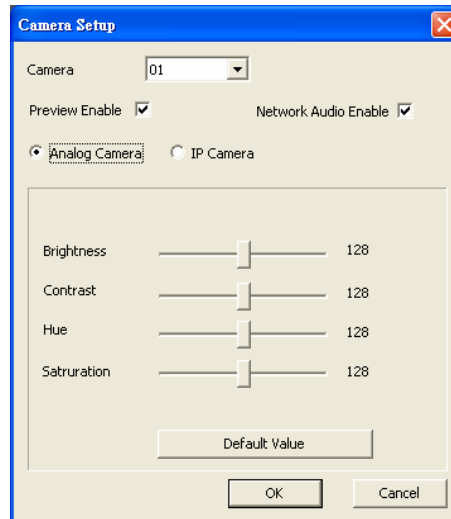
- **Analog Camera**

i. **Video Adjustment**

Select the camera and adjust the Brightness, Contrast, Hue and Saturation of the selected camera.

ii. **Default Value**

Set the video value back to default



- **IP Camera**

i. **Protocol / Resolution**

When the camera is an IP camera, select the protocol and resolution of IP camera.



The DVR system supports those brands of IP camera as below list: **AXIS 210, AXIS214, VIVOTEK 61x2, VIVOTEK 61x4, ACTI 1310N.**

ii. **IP**

Fill in the IP address and connection port of IP camera.

iii. **URL Command**

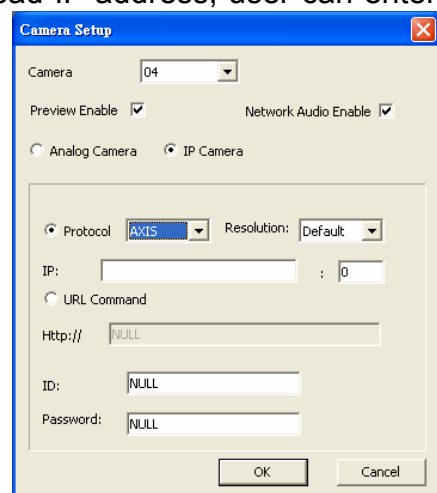
If the IP camera has a URL address instead IP address, user can enter the URL address for IP camera connection.

iv. **ID**

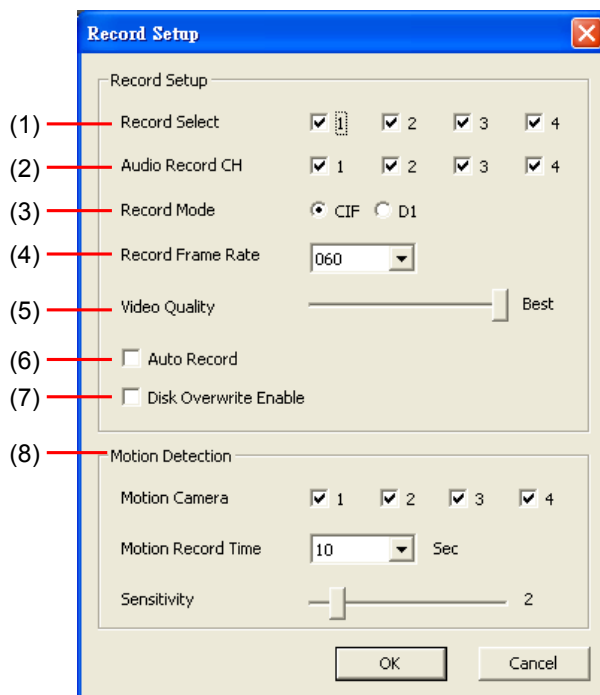
If the IP camera has setup the authority security for accessing, please fill the login ID account in here.

v. **Password**

Fill the password for accessing IP camera.



### 8.1.1.3 Record Setup



#### (1) Record Select

Enable/disable the channel number to record video



The channels which could be recorded should be enabled in the **CAMERA SELECT** first.

#### (2) Audio Record CH

Enable/disable channel number audio recording. To record sound, make sure the microphone is connected to the unit

#### (3) Record Mode

Select D1/CIF recording mode. Under D1 mode, the resolution of video recording is 720 x 480/720 x 576. Each channel is recorded at a maximum frame rate of 15fps. You can switch to view the video in single full screen or 4 split screen. Whereas in CIF mode, video recording is at resolution of 360 x 240/360 x 288, but each video is recorded in 30fps/25fps (NTSC/PAL).

#### (4) Record Frame Rate

Set the number of frames per second to be recorded. Refer to the table below for the available record frame rate settings. The higher the frame rate is, it uses more hard disk space

Video Standard Record Mode	NTSC	PAL
D1	60, 20, 4	48, 20, 4
CIF	120, 60, 40, 20, 4	100, 48, 20, 4

## (5) Video Quality

Select the video quality setting from BEST, HIGH, MEDIUM, GOOD, NORMAL or LOW.

## (6) Auto Record

Enable/disable continue auto recording when interrupted (i.e., power breakdown, video playback or configuration setup). It continue recording after 10 second of idleness. This is applicable in Always Record mode under schedule setting.

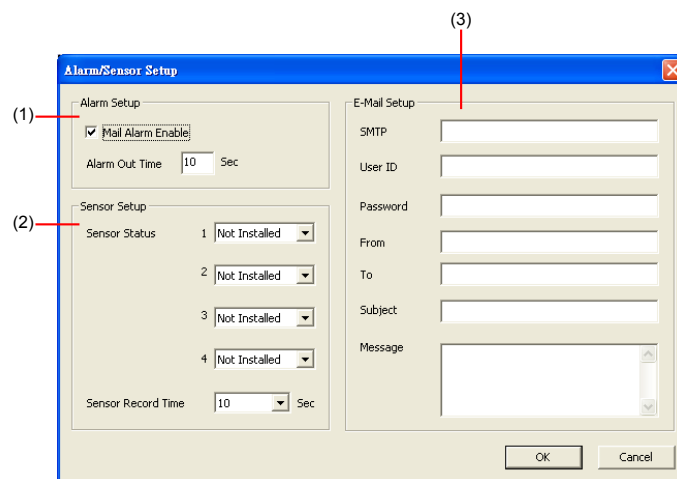
## (7) Disk Overwrite Enable

Enable/disable replacing the earliest record when the hard disk space runs out. By default, the HDD overwrite setting is enabled

## (8) Motion Detection

- **Motion Camera**  
Enable/disable the channel number to detect motion.
- **Motion Record Time**  
Set the amount of time (in second) to record when a motion has detected.
- **Sensitivity**  
Set the sensitivity level. The sensitivity is from high, 9~ 2 and low.

### 8.1.1.4 Alarm/Sensor Setup



#### (1) Alarm Setup

- **Mail Alarm Enable**  
Enable/disable alarm sending mail when alarm has triggered or motion has detected.



The Motion Detection must be enabled first, the alarm sending mail will send out the mail when detect motion.

- **Alarm Out Time**  
Set the amount of time (in second) to continue sending the alarm once activated

## (2) Sensor Setup

- **Sensor Status**

Customize the initial state of the attached sensor for every camera. Refer to the table below to customize the sensor state.

**Not installed:** Indicates that there is no sensor connected

**Normal open:** Indicates that the initial state of the sensor is normal open.  
Video recording initiate when there is a changes in the sensor state

**Normal close:** Indicates that the initial state of the sensor is normal close.  
Video recording initiate when there is a changes in the sensor state

- **Sensor Record Time**

Set the amount of time (in second) to record after the sensor has been triggered

## (3) E-Mail Setup

- **SMTP**

Enter the SMTP server IP

- **User ID & Password**

Enter User ID and Password for e-mail server user identification

- **From**

Enter the sender e-mail address

- **To**

The recipient e-mail address and separate it with a semicolon

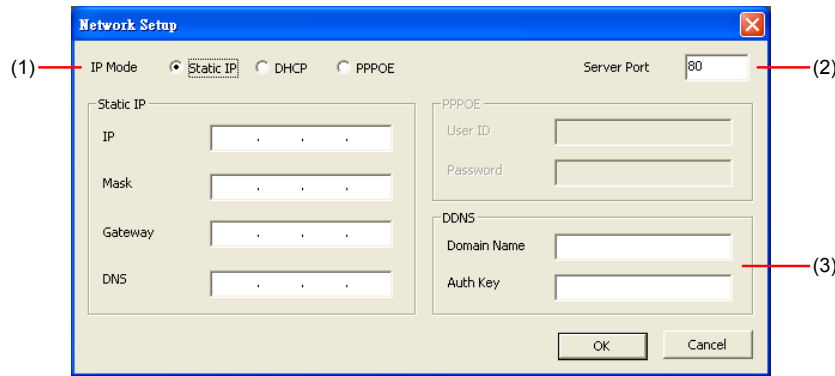
- **Subject**

Enter the message title

- **Message**

Type the message

## 8.1.1.5 Network Setup



### (1) IP Mode

#### - Static IP

Assign a fixed and global IP address for the DVR system

**IP:** Assign a constant IP address which real IP addresses from ISP.

**Mask:** Enter the subnet mask of the IP address which user has assigned to DVR system.

---



It is a bitmask used to tell how many bits in an octet(s) identify the subnetwork, and how many bits provide room for host addresses.

---

**Gateway:** Enter the network gateway IP address

**DNS:** Domain Name Server translates domain names (such as www.abb.com.tw) to IP addresses. It will translate the domain name into IP address when DVR system request.

#### - DHCP

Assign the IP address by local DHCP server to DVR system.

---



The Dynamic Host Configuration Protocol (DHCP) is a set of rules used by a communications device (such as a computer, router or networking adaptor) to allow the device to request and get an Internet address from a server which has a list of addresses available for assignment.

---

#### - 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.

**User ID & Password:** fill in the user account and password that user applied from your ISP for PPPOE connection.

### (2) Server Port

A port is using for the remote connection. Any port can be assigned as a server port, except the ports already used by the network services.

### (3) 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://www.ddns.avers.com.tw>. (See [Appendix A](#))

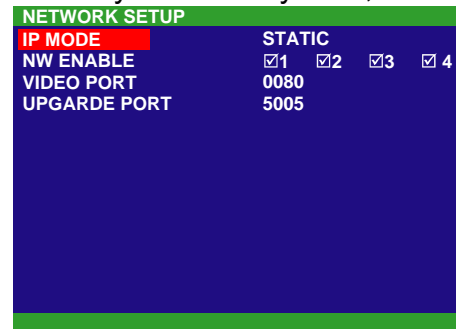
- **Domain Name**

Enter the domain name that user wanted.

- **Auth Key**

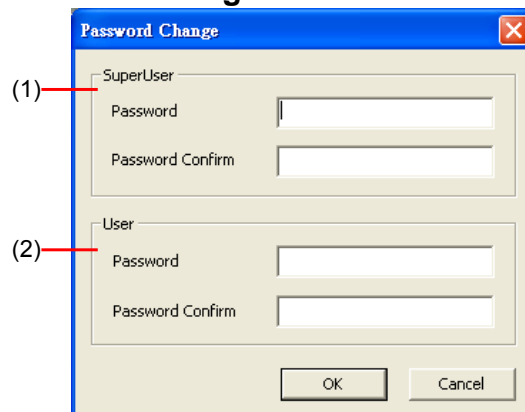
A password use to access DDNS to register the domain name. MAC address of the DVR system is the key for user to register the domain name on AVerMedia DDNS web site. To find MAC address of your DVR system, follow the steps below:

1. In OSD menu, select **NETWORK SETUP**
2. Select any one of IP mode
3. A **NETWORK INFORMATION** windows will show up
4. MAC address of DVR system is display as shown



### 8.1.1.6 Password Change

Click **Remote setup** button on Web Viewer main interface, and then, click **User** button to call out the **Password Change** interface.



**(1) Superuser**

Change the remote accessing password of super user. Superuser has the authority to remote setup the DVR system configuration on Web Viewer.

- **Password**  
Enter the new password
- **Password Confirm**  
Re-enter password to confirm

**(2) User**

Change the remote accessing password of user

- **Password**  
Enter the new password
- **Password Confirm**  
Re-enter password to confirm



## 8.2 Familiarizing the Remote Console Buttons



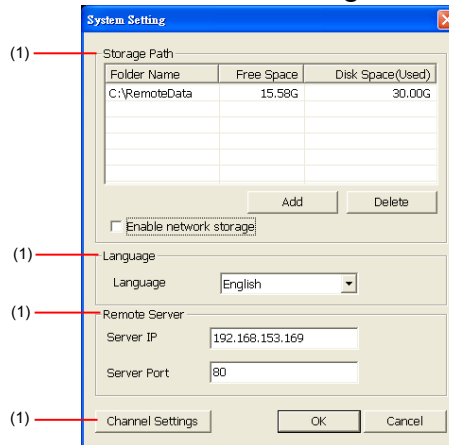
Name	Function
(1) Exit	Close the Remote Console.
(2) Audio button	Enable/disable the sound.
(3) Split Screen Mode	Select from six (6) different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.
<p><b>i</b> If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.</p>	
(4) Record	Start/stop video recording.
(5) Network	Enable/disable remote system access. This feature allows you to access EB DVR server from a remote location via internet connection.
(6) Setup	Configure the Remote Console setting. (see also <a href="#">Chapter 8.2.1</a> )
(7) Preview	Switch to Preview/Playback mode. This allows you to view live camera display.
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see <a href="#">Chapter 8.4</a> )
(9) Status Bar	Display the current date, time and hard disk free space.
(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) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(12) 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.
(13) DirectDraw	Enable/disable DirectDraw function

**i** Direct Draw function supports for certain VGA card. For more information, please contact your VGA card vendor.

### 8.2.1 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

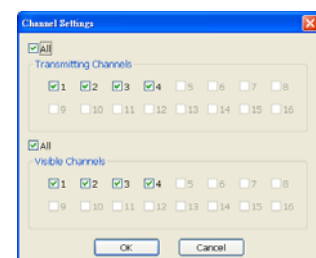
Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.

### (3) Remote Server

Enter the DVR Server IP and Server Port number.

### (4) Channel Settings

The numbers from 1 to 4 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.



## 8.3 Familiarizing the WebViewer PTZ Buttons



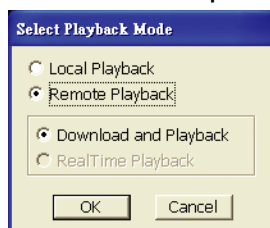
Name	Function
(1) Direction buttons	Adjust and position the focal point of the PTZ camera. Click the center to pan automatically.
(2) Zoom +/-	Zoom in and out the image.
(3) Select PTZ	Choose to enable/disable the PTZ camera. In the Select PTZ dialog box, Select column, click to enable/disable viewing and controlling the PTZ camera. Click <b>OK</b> to exit and save the setting and <b>Cancel</b> to exit without saving the setting.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Camera preset position number	Move the PTZ camera to the preset point. The reset point (1~9) is based on the user has setup by remote control at local site.

## 8.4 Using the Remote Playback

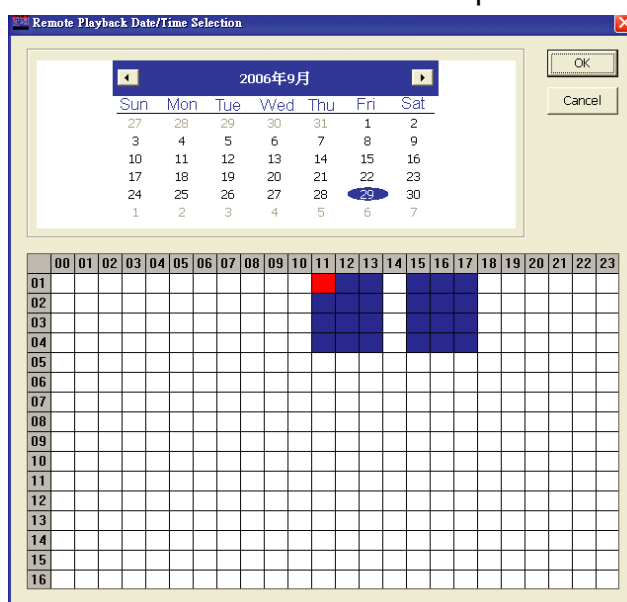
To use this feature, first you need to select the source of the file. Click the **Playback** button. And then, in the Select Playback Mode dialog box, choose **Local Playback** to open the file that is recorded in the Remote Console, and **Remote Playback** to open the file that is recorded in the DVR server. When you choose Remote Playback, select **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 16 represent the camera number.



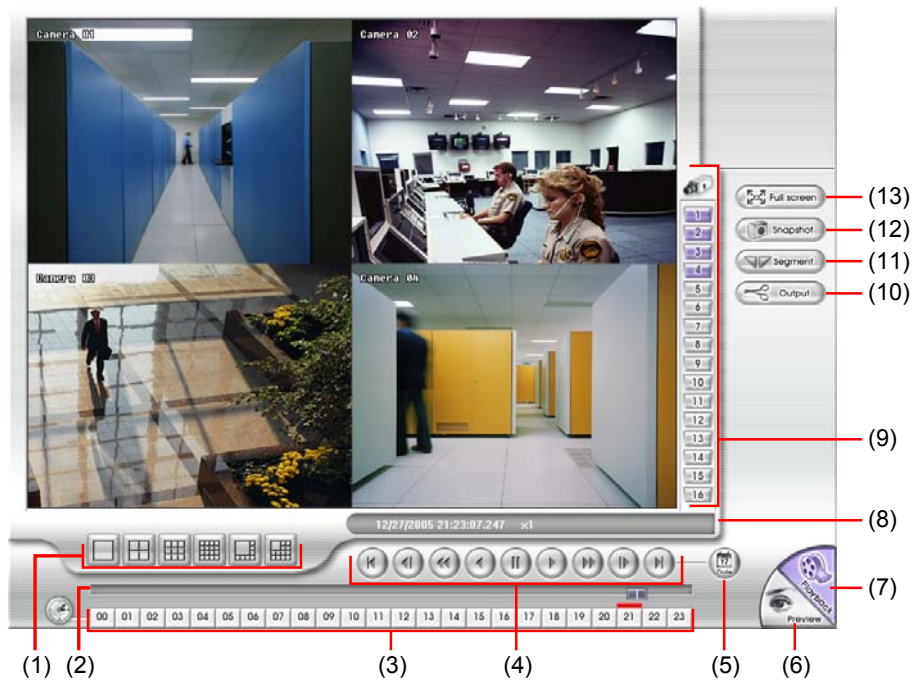
**To Make a Selection:**

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 8.3.2](#)).





## 8.4.1 Familiarizing the Local Playback Buttons



Name	Function
(1) Split Screen Mode	Select from six (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.
<b>i</b>	<ul style="list-style-type: none"> <li>- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.</li> <li>- 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.</li> </ul>
(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) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
<b>i</b>	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.
(4) Playback Control Buttons	<p><b>Begin:</b> Move at the beginning of the recorded video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.</p> <p><b>Rewind:</b> Wind back the video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p> <p><b>Faster:</b> Play the recorded video file at the speed of 2x, 4x, or 8x.</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the video file.</p>
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
<b>i</b>	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.
Name	Function

(6) Preview	Switch to Preview/Playback mode.
(7) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(8) Status bar	Display the record date, time, HDD capacity in preview mode and play speed in playback mode.
(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) Output	Save the segmented file in *.mpg, *.avi, or *.dvr format (see also <a href="#">Chapter 8.3.1.1</a> ).
(11) Segment	Keep a portion of the recorded video you want (see also <a href="#">Chapter 8.3.1.1</a> ).
(12) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(13) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard.

### 8.4.1.1 To Cut and Save the Wanted Portion of the Recorded Video

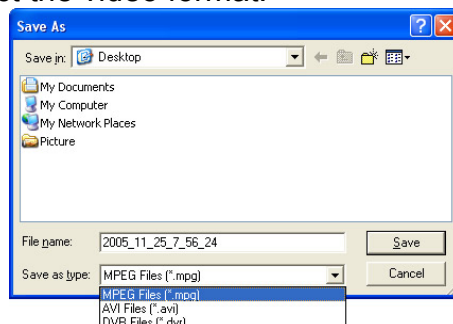
1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click Segment to set the begin mark.



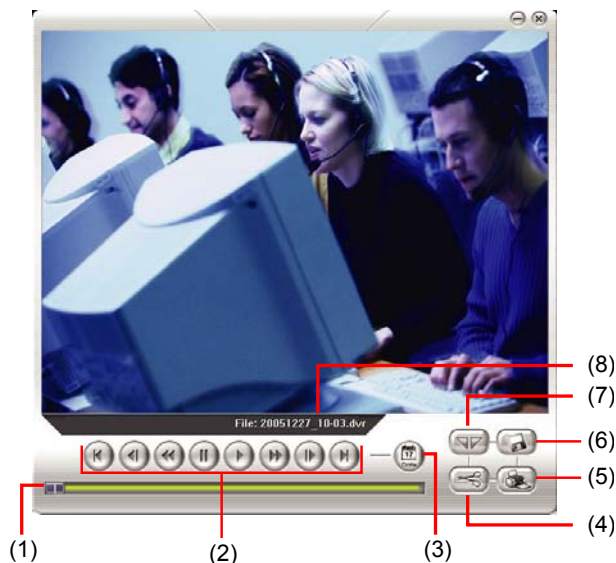
2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click Segment to set the end mark. To cancel segmentation or set the segment marks from the start, click Segment button again.



3. Click Output button to save the wanted clip.
4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.



## 8.4.2 Familiarizing the Download and Playback Buttons

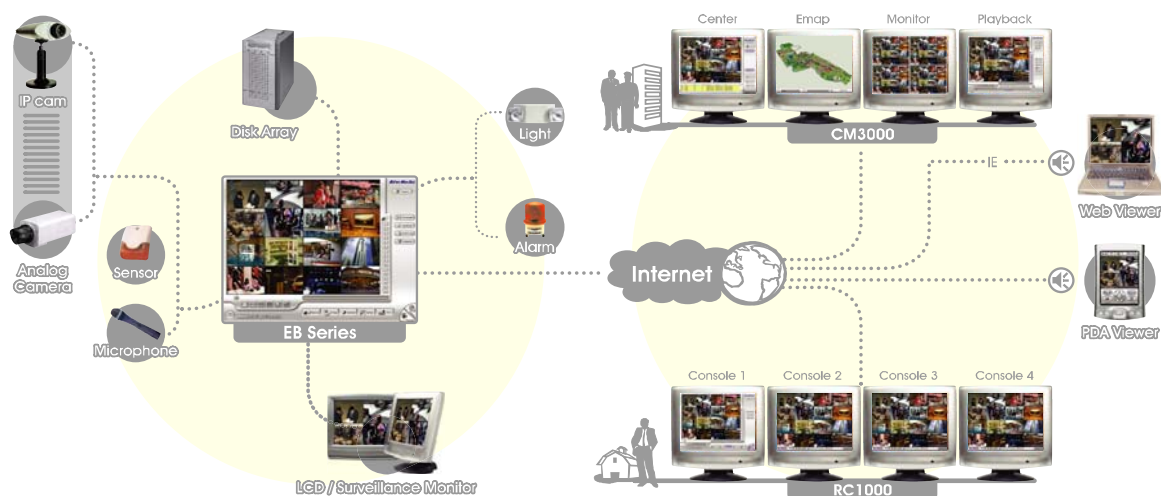


Name	Function
(1) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(2) Playback Control Buttons	<p><b>Begin:</b> Move at the beginning of the video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.</p> <p><b>Rewind:</b> Wind back the video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p> <p><b>Faster:</b> Play the recorded video file at the speed of 2x, 4x, or 8x.</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the video file.</p>
(3) Date	Open other file.
(4) Output	Save the segmented file in *.mpg or *.avi format.
(5) Print	Print the screen shot.
(6) Save	Save the screen shot either in *.jpg or *.bmp format and video in *.dvr format.
(7) Segment	Keep a portion of the recorded video you want. You may follow the instruction in <a href="#">Chapter 8.3.1.1</a> .

## Chapter 9 Using Central Management System

The AVerMedia® CM3000 is a central management system that enables user to monitor up to 1000 DVR servers (optional) through an internet connection. The CMS system also automatically records and displays video when an event has occurred on the remote side of the DVR server. You can also playback video files locally or download from a remote DVR server. The CMS system Supports Single, Dual, Triple, and four monitor displays. User can operate the CMS system application on different monitors. For dual monitor setup, please refer to Appendix B.

Application Diagram



### 9.1 Software Installation

This section describes how to install the CM3000 software.



Before installing the software, make sure the Windows OS patches are up to date and the video graphic card driver is up to date.



For Windows 2000, make sure the hyper-threading setting is DISABLED from the PC BIOS system.



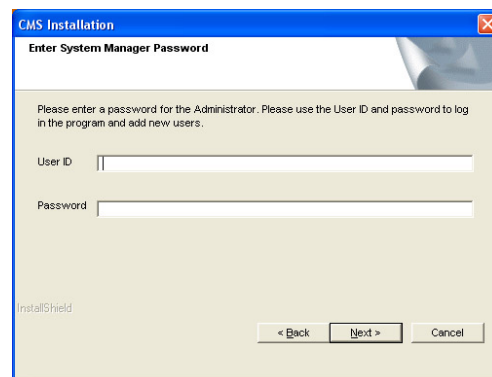
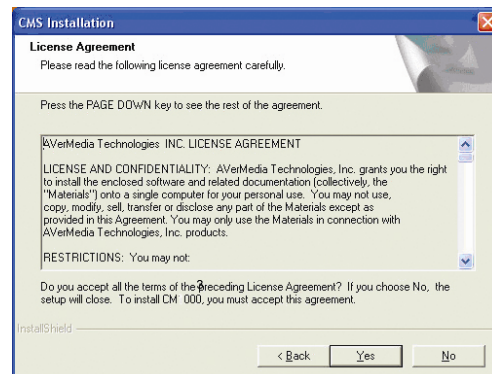
## 9.1.1 Minimum System Requirements

First, must verify if the computer meets the minimum system requirements.

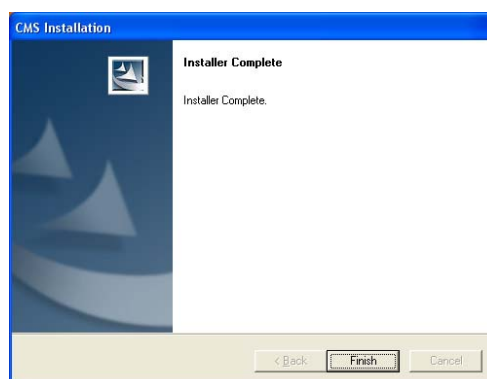
- CPU : Pentium® 4 3.0GHz or above recommended
- OS : Windows 2000 / XP Professional
- RAM : 512MB for dual display, 1GB for Quad display
- Hard disk : 120GB or higher
- Media : CD-ROM drive
- VGA : 32-bit high color SVGA graphics card with 128MB video memory and DirectDraw® / YUV Rendering Capability
- Audio : Sound card and speakers
- Internet capacity : 10/100/1000 Base-T Ethernet card or Gigabit Ethernet

## 9.2 Installing the CM3000 in Windows XP/2000

1. Place the installation CD into the CD-ROM drive then click **Utility**. And select the CM3000 folder and click **setup.exe**. And then, follow the on-screen instructions.
2. Please carefully read the license agreement. Click **Yes** to accept the agreement.
3. Enter the administrator ID and password for entering CMS system.



4. Click **Finish**.

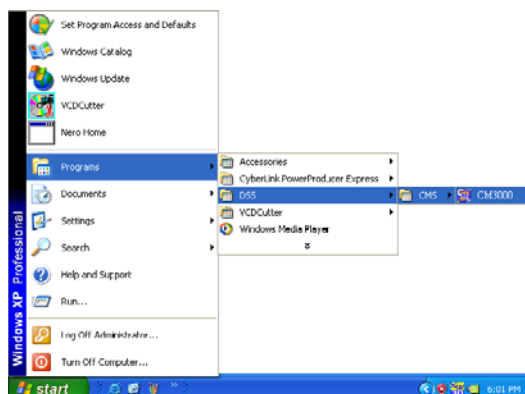


5. User may now run the CMS program. To run the application, click  on your PC desktop or click **Start>Programs >DSS>CMS > CMS3000**.

## 9.3 Using the CM3000

### 9.3.1 Running the CM3000 Software

To run the application, double-click  on your PC desktop or click **Start > Programs > DSS > CMS > CM3000**.



For security purposes, some of the features would require you to enter a User ID and Password before they can be accessed. When the Authorization dialog box appears, key in your User ID and Password. (If this is the first time to enter CMS system, enter the one you have registered when installing the software.)

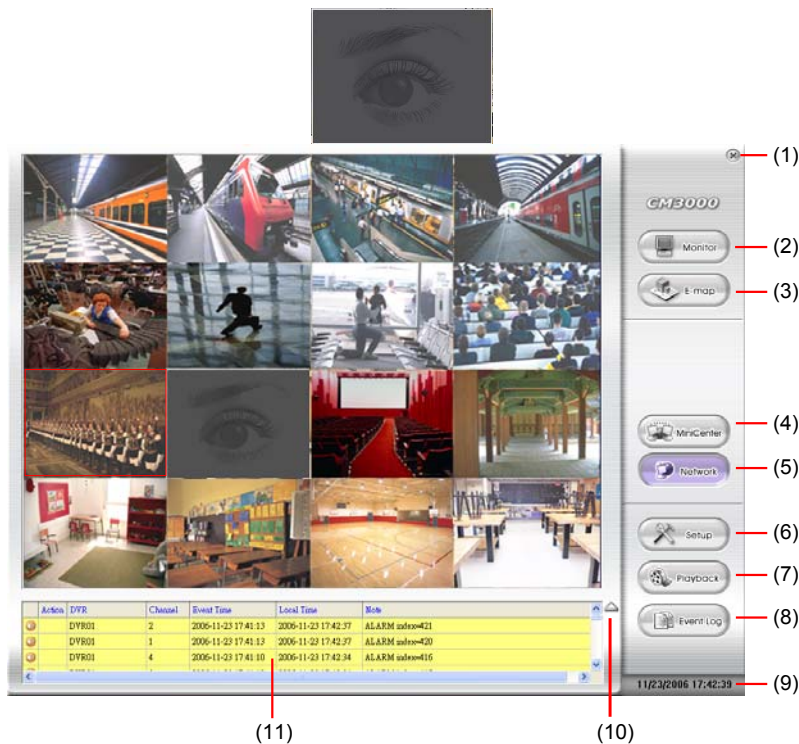


### 9.3.2 Using the CMS Application

When an alarm occurred on the DVR server, the video is transmitted to the CMS and played on the CM3000 main screen. The transmitted video is approximately 3 seconds long. You may download and playback the complete video directly from the DVR server. The video stream before the eye indicates the latest occurrence. Also, there is a red frame which indicates the latest occurrence.



For the best video play quality, we recommend that user set the record frame rate at 60fps in EB1704 HYBRID system(also see [Record Frame Rate in Chapter 3.1 Menu Function](#))

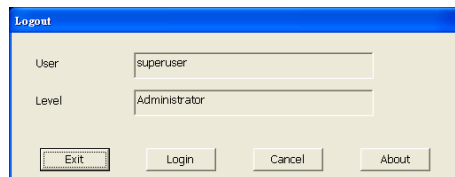


Name	Function
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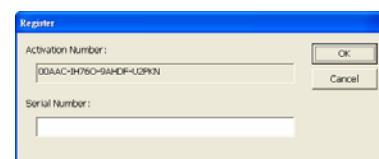
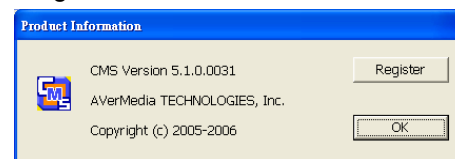
(1) Exit

Call up the Logout dialog box.

In the logout dialog box, you may do the following:



- Click **Exit** to close the CMS program. Only the administrator is authorized to access this command.
- Click **Login** to sign-in as a different user.
- Click **Cancel** to close the Logout dialog box.
- Click **About** to find out more about the software and register the CMS application. Click **Register** to call out the registration window. Enter the serial number in the **Serial number** column and click **OK** to complete the registration.



**i** To get the register serial number, please contact your local dealer and give activator key of product. And then, user will have the register serial number to complete product registration and also CMS system will be upgraded to 1000 DVR servers management.

(2) Monitor (F4)

Switch to display live video from the selected DVR servers group. If user is using a single monitor, press **ESC** to revert back to the CMS main application.

(3) E-map (F3)

Switch to display the map and show the location of the NV DVR server on the map. If you are using a single monitor, press **ESC** to revert back to the CMS main application.


Name	Function
(4) MiniCenter Viewer	To call out the MiniCenter viewer. Also, user can double click on screen or alarm event to call out the MiniCenter Viewer.(Also refer to <a href="#">9.3.3Using MiniCenter Viewer</a> )
(5) Network	Enable/disable the remote alarm data received. This is activated automatically when the CM software starts up. The network is using port 80 so please make sure you are not running any web server or application that locks port 80 on the PC with the CM3000 software.
(6) Setup	Configure the CMS system settings. Only the administrator is authorized to access this command. (see also <a href="#">Chapter 9.4.1</a> )
(7) Playback	Select to playback video from the local hard disk or remote DVR server.
(8) Event log	Show a record of activities that has taken place in the system (see also <a href="#">Chapter 9.5.4</a> ).
(9) Status	Display the current date, and time
(10) Log extender	Expand and reduce the log viewer
(11) Log viewer	List the entire info in event mode or text mode from all DVR servers.



There are a few Hot keys for quick switching between the different applications or display mode on a single monitor system.

- F1: displays current DVR server information on the CMS application main screen
- F3: Switches to E-Map mode
- F4: Switches to Monitor mode
- Esc: Switches back to the CMS application main screen

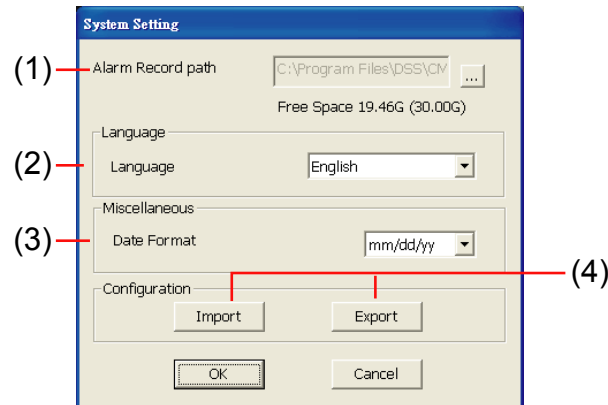
## 9.4 Customizing the CMS System

In the CMS application, click the  button to customize the CMS system. When the CMS configuration setup selection appears, select and click the buttons you want to change the setting.



### 9.4.1 System Setting

In the System Setting dialog box, click **OK** to accept and start to reload the new setting, and **Cancel** to exit without saving.



#### (1) Alarm Record Path

By default, the alarm folder is automatically generated to where the CMS application is installed and for saving the alarm clip videos and log files. The suggested hard disk capacity for storing the recorded video is 30GB (see also [9.4.1.1](#))

#### (2) Language

Customize the system to display the tool tips and dialogs based on the selected language. By default the set language is in English (see also [9.4.1.2](#))


#### (3) Miscellaneous

Date Format - Select from different date formats (see also [9.4.1.3](#))

#### (4) Configuration

Import / Export the CMS system configuration

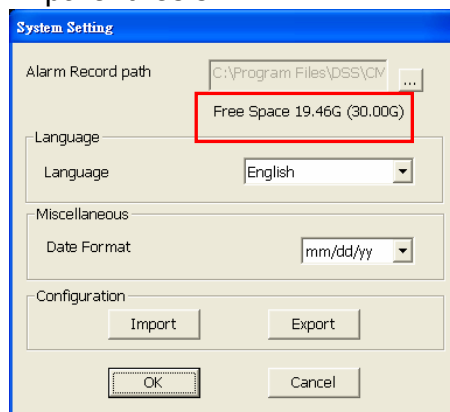
#### 9.4.1.1 To change the Alarm Record Storage Path

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **System** > . In the Browse For Folder dialog box, locate where you want to store the alarm video clip. Click **Make New Folder** to create

new folder, **OK** to accept and **Cancel** to exit.



4. The text below the Alarm Record path text box shows the hard disk free space and total space in parenthesis.



5. In the System Setting dialog box, click **OK** to start reloading the new setting and **Cancel** to exit without saving the new setting.

#### 9.4.1.2 To Set the System to a Different Language

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **System**.
4. In the Language drop down list, click and select the language.

#### 9.4.1.3 To Change the Status Date Format

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **System**.
4. In the Date Format drop down list, click and select the style.
5. In the System Setting dialog box, click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.

### 9.4.2 DVR Setup

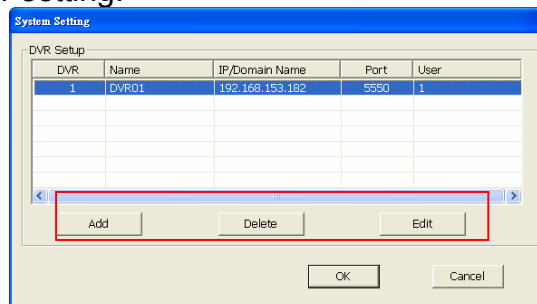
Display the list of all DVR servers. User may add up from 16 to 1000 DVR servers, delete and modify the DVR setting.



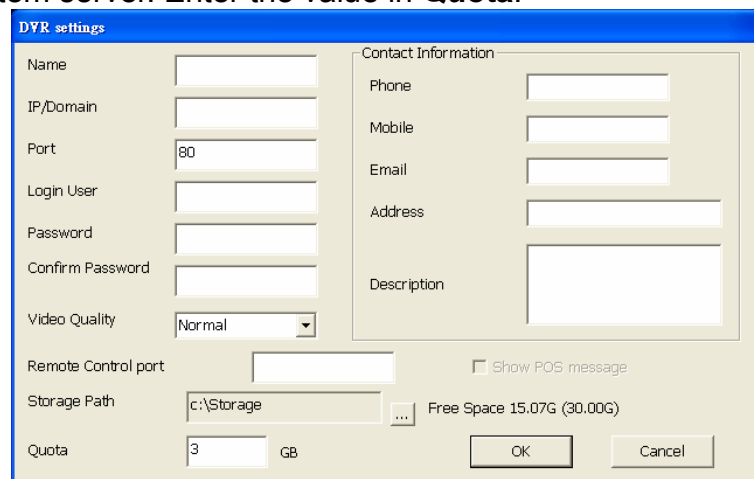
To monitor up to 1000 DVR servers may vary on CMS support. Please confirm with your local dealer for more information.

### 9.4.2.1 To Add and Remove DVR Server

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **DVR**.
4. In the DVR Setup section, click **Add** to insert, **Delete** to remove and **Edit** to modify DVR server setting.



5. To continue adding a DVR, in the text box, enter the name, IP/Domain, Login User, Password, Confirm Password of the remote DVR server.
6. If necessary, fill up the contact information to let the personnel in the CMS side know whom to get in touch with when an event has occurred.
7. Set the **Storage Path** for saving the recorded video data of the selected cameras on the Monitor screen.
8. Set the max video recorded storage capacity of this DVR server on the CMS system server. Enter the value in **Quota**.



9. In the **DVR Setting** dialog box, click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.

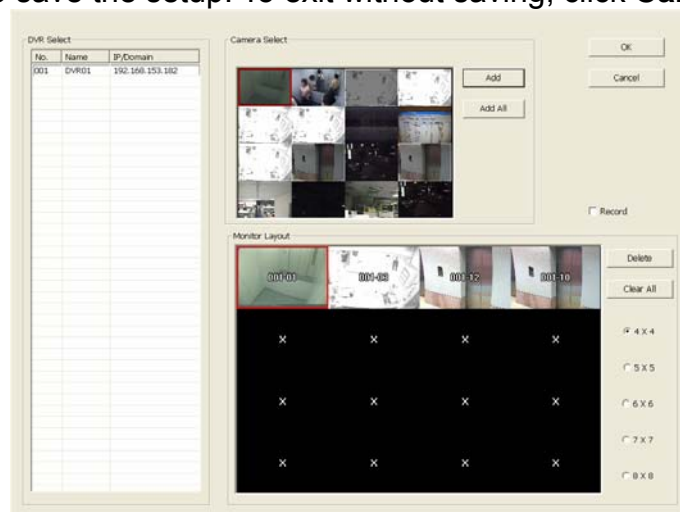
### 9.4.3 Camera Setup

Select the camera from different DVR servers in order to monitor on same screen. The selected cameras will be play on **Monitor** screen (see [Chapter 9.3.2 # 2](#)).

1. Click **Setup**.



2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **Camera**.
4. Select the DVR server. And then the cameras of the DVR server will display on the **Camera Select** window.
5. Select the camera that user wants to add, and then click **Add** button. The camera will be added to **Monitor Layout** window. User can add up to 64 cameras by select the camera display format from **4x4**, **5x5**, **6x6**, **7x7**, and **8x8** format. To remove the camera from the **Monitor Layout** window, select the camera and click **Delete** button. To delete all cameras, click **Clear All** button.
6. To record the cameras video, mark the **Record** box. Otherwise, the cameras video will not be saved on the CMS system hard disk. When playback the recorded camera video, user need to select the DVR server.
7. Click **OK** to save the setup. To exit without saving, click **Cancel**.



## 9.4.4 E-MAP Setup

Holds up to 64 maps in \*.bmp/\*.jpg format. The map is hierarchy in structure and users can add a map on another map. User also may add the DVR icons on the map.

### 9.4.4.1 To Set Up the E-Map


1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **E-Map**.
4. The E-Map interface will show up in second monitor if user is using multiple monitors for the CMS system. If user is using single monitor for the CMS application, the E-Map interface will show up in front of the CMS application interface. Press **Esc** to switch back to CMS application interface or press **F3** to switch to E-Map interface again.
5. On the E-Map interface:

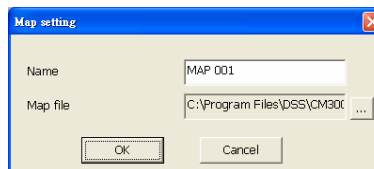



- (1) go back to previous layer of map
- (2) Show the current name and layer of map
- (3) Load a map to replace the current map
- (4) Add a new map. The new map is added on the current map as a next level.(See [Add a New Map](#))
- (5) Display the selected Map or DVR server information.
- (6) Add a DVR server icon on the map. (See [Add a DVR Server](#))
- (7) Click **OK** to save the setting and exit the E-Map interface.
- (8) Click **Cancel** without saving the setting and exit the E-Map interface.

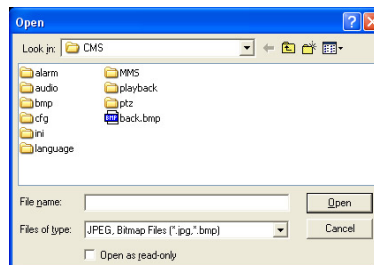


#### 9.4.4.1.1 Add a New Map

1. Click  button
2. In the Authorization dialog box, enter the administrator User ID and Password
3. Click **E-Map** button
4. Click **Add Map** button and the **Map setting** window will show up.




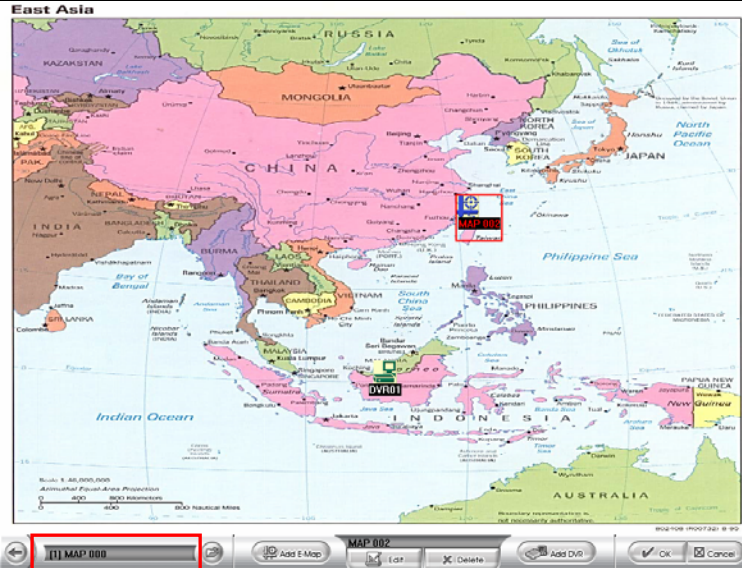
5. Give a name for the new map.
6. Click  to locate the map file. In the open dialog box, locate and select the map and click Open




7. User may now drag and move the Map icon to its place on the map.
8. User can double click the Map icon to view the map.
9. To edit and delete the map, click the map icon and **Edit** and **Delete** button will appear on the Map interface. Click **Edit** to modify the map (see [Add a New Map# 5~6](#)). To delete the map, click the map icon and click **Delete** button.

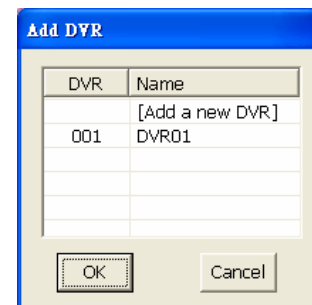
10. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.

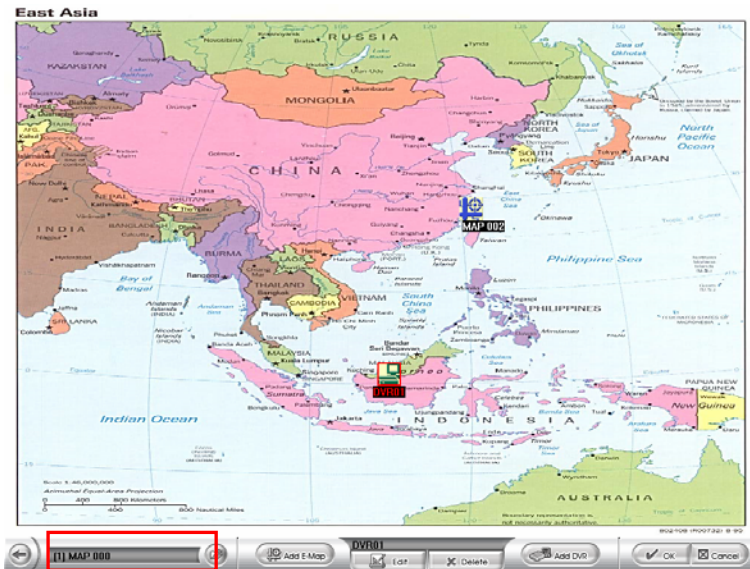
-  - User can add up to a total of 64 maps
- User also can right click the mouse button on the map, a function list window will show up. User can select the function to add and modify the map.



#### 9.4.4.1.2 Add a DVR Server

1. Click  button
2. In the Authorization dialog box, enter the administrator User ID and Password
3. Click E-Map button
4. Click Add DVR button and the Add DVR window will show up.
5. Select the DVR server from the Add DVR window and click OK.
6. User may now drag and move the DVR icon to its place on the map. Non-active white DVR icon cannot be placed on the map.
7. To edit and delete the DVR server on the map, click the DVR server icon and the **Edit** and **Delete** buttons will appear on the Map interface. Click **Edit** to modify the DVR server (see [9.4.2.1 # 5~10](#)). To delete the DVR server from the map, click the DVR server icon and click **Delete**.
8. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.



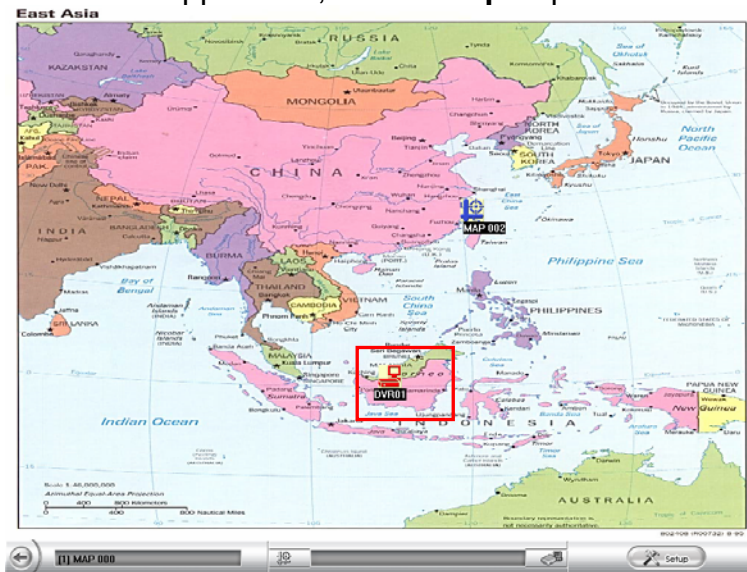



- i** User also can right click the mouse button on the map, a function list window will show up. User can select the function to add, delete, and edit the map.

#### 9.4.4.2 To Use the E-Map

When the alarm has been activated, the DVR icon blinks and turns red.

1. On the CMS main application, click **E-map** or press **F3**.



2. Click the DVR server icon and a **DVR watch** window will show up and connect the DVR server to play the live video.
3. To stop the DVR server icon from blinking, right click the mouse button and select **Reset Alarm** or **Reset Alarm (all)** and the remote DVR server alarm will reset and the DVR server icon will stop blinking.
4. To switch back to the main application, press **ESC**.
5. To setup the E-Map, click  button or right click the mouse button and select **E-Map setup** and the E-Map interface will switch to the E-Map setup mode. (see [9.4.4.1](#))

- i** When the setup mode is active in E-Map interface, the setup mode will not work in CMS main application.

---

To switch back the setup mode in CMS main application, click **OK** or **Cancel** to exit the setup mode in E-Map interface.

---

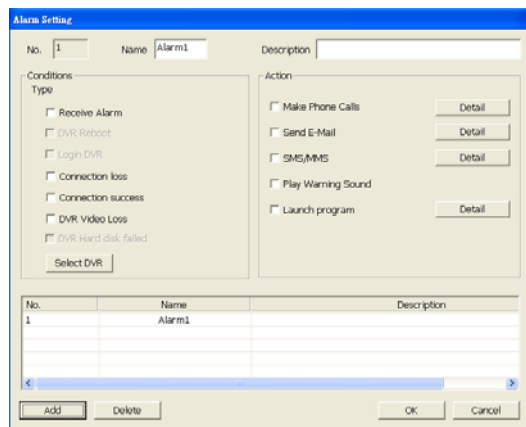
6. User can click the Map icon on the map to view the map. And the map can be added map on map and up to 64 maps. (see [Add a New Map](#)).

## 9.4.5 Alarm Setting

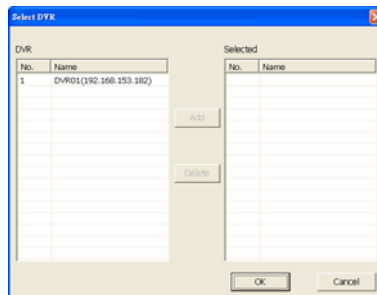
In the **Alarm Setting** dialog box, just select and enable the condition for the system to alarm and the action for the system to perform when an alarm is activated. User can setup a total of 16 different combinations of alarm settings. Each alarm setting can apply to several DVR servers. Click **OK** to accept new setting and **Cancel** to exit without saving.

### 9.4.5.1 To setup an alarm condition

1. Click the **Add** button to add a new alarm condition.
2. Give the name of this alarm condition.
3. Fill the simply description of this alarm condition in **Description** column.
4. Select the **Conditions**.
5. Select the **Action**. ( see also [9.4.5.1.1](#) & [9.4.5.1.2](#) & [9.4.5.1.3](#) )

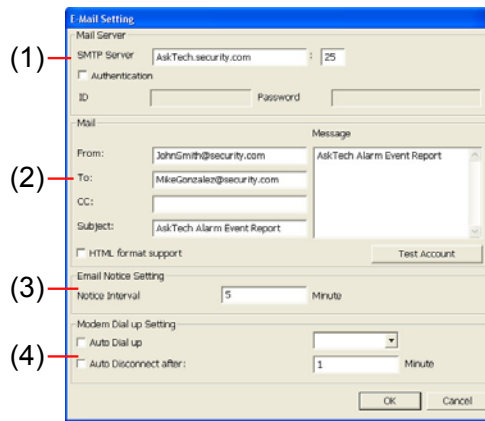


6. Apply to the DVR server, click **Select DVR**. In Select DVR window, select the DVR server and click **Add**. To exit and save the setup, click **OK**.



#### 9.4.5.1.1 To Setup the Send E-Mail Setting

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.



### (1) Mail Server

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

### (2) Mail

To check if it is working, click the Test Account button.

**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.

### (3) Email Notice Setting

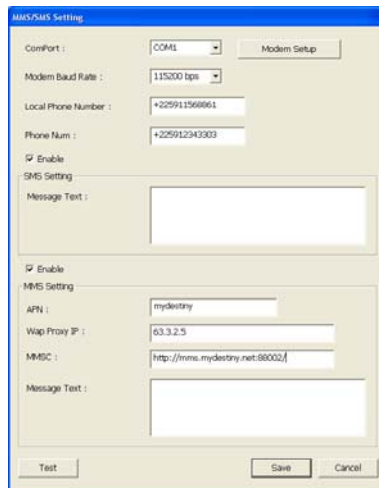
In the Notice Interval text box, set the period of time before it sends another e-mail notice.

### (4) Modem Dial up Setting

If you are using dial up modem, enable Auto Dial up check box and select the modem name. You may also set the time to disconnect automatically, just enable the Auto Disconnect after check box and set the time.

## 9.4.5.1.2 To Set the MMS/SMS Setting

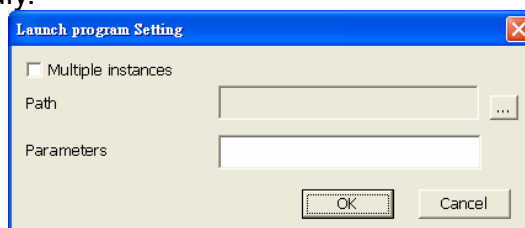
To use this feature, GSM/GPRS modem is required. Connect the GSM/GPRS modem to the serial COMM port of PC. Beside the SMS/MMS check box, click Detail.



1. Select the port number in **ComPort** drop down list from where the GSM/GPRS modem is connected.
2. Click **Modem Setup** button to automatically detect the Modem Baud Rate.
3. In **Local Phone Number** text box, enter the GSM SIM card phone number.
4. In **Phone Num** text box, enter the contact number.
5. You may now set to send thru SMS &/or MMS. If you enable SMS setting, just enter the message in the text box. If you enable MMS, enter the APN name, WAP IP, MMS address and the message. If you are not sure, please contact your mobile service provider.
6. Click **OK** to accept the new settings and **Cancel** to exit without saving.

#### 9.4.5.1.3 Launch the program

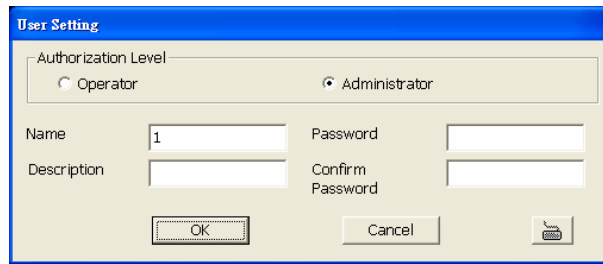
To call up the external program that is provided by a 3rd party. Click Detail and click **...** to locate the program path. Enable the **Multiple instance** check box if the external application has been programmed to execute repeatedly.



### 9.4.6 User Setting

CMS is limited to one operator and one administrator user account only. If there is an existing account, the old one will be replaced.






### 9.4.6.1 To Set the User Setting

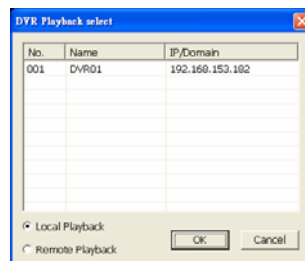
1. Select the type of user. Only the administrator is authorized to close and customize the CMS system.
2. In the text box, enter the name, description, password, and confirm password of the user.
3. Click **OK** to accept the new settings and **Cancel** to exit without saving.

## 9.5 Using the Playback Function

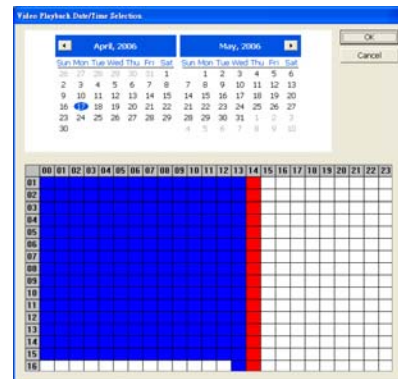
User can choose to playback video stored on the local hard disk or download the video from the remote side of the DVR server.

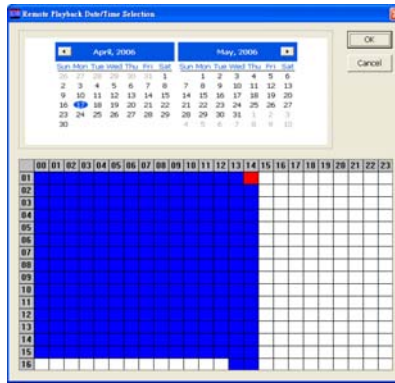
### 9.5.1 To Playback the video

1. Click 
2. In the **DVR Playback select** window, select DVR server and **Local Playback** to play video from the local hard disk or **Remote Playback** from the remote DVR server.

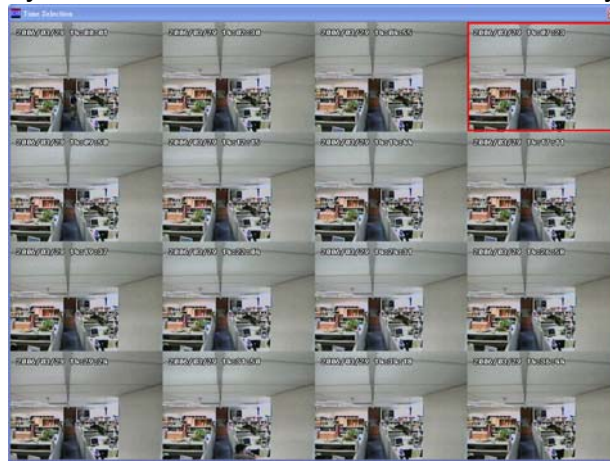


3. For Local Playback, user can select to preview 16 channels at a time. Only the cameras previously selected in **Monitor** and with the **Record** button enabled /recorded can be played back. In the Video Playback Date/Time Selection, the numbers from 00 to 23 represent the time in 24-hour. The numbers from 01 to 16 represent the camera number. The blue block indicates that there is a recorded video file in that period of time. While the red bar indicates the selected recorded video for viewing (see also [Chapter 9.5.2](#))
4. For Remote Playback, you can only select to preview one clip at a time. In the Remote Playback Date/Time Selection, the numbers from 00 to 23 represent the time in 24-hour. The numbers from 01 to 16 represent the camera number. The blue block indicates that there is a recorded video file on that period of time. While the red block indicates the selected recorded video for viewing (see also [Chapter 9.5.3](#)).





5. For Remote Playback, in Time Selection, click the frame you want to view.



## 9.5.2 Using the Local Playback Application




Name	Function
(1) Split Screen Mode	Select from six (6) different split screen types to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen.



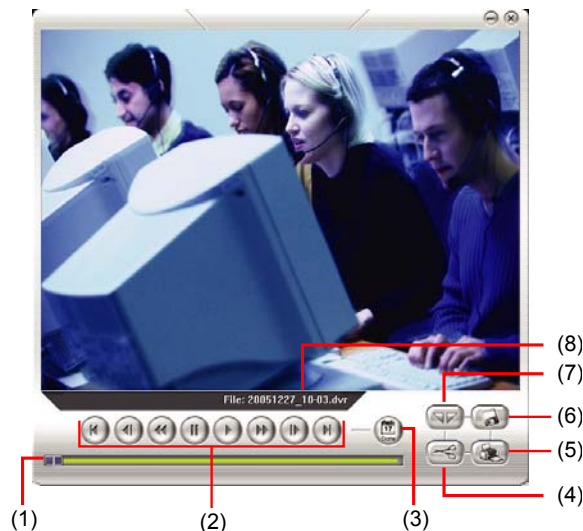
- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To zoom into an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.

Name	Function
(2) Exit	Close the Player.
(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.
(5) Playback Control Buttons	<p><b>Begin:</b> Move to the beginning of the recorded video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> Play the recorded video file at the speed of ½x, ¼x, or ⅓x.</p> <p><b>Rewind:</b> Wind back the recorded video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p> <p><b>Faster:</b> Play the recorded video file at the speed of 2x, 4x, or 8x.</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the recorded video file.</p>
(6) 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.
(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) Output	Save the segmented file in *.mpg, *.avi, or *.dvr format (see also <a href="#">4.3.1</a> ).
(10) Segment	Keep a portion of the recorded video you want (see also <a href="#">4.3.1</a> ).
(11) Print	Print the screen shot.
(12) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(13) Full screen	View in Playback-compact mode. To return, <b>Right</b> click the mouse or press <b>ESC</b> on the keyboard. When you switch to full screen in multiple-screen mode, <b>Left</b> click to toggle to only display one of the video in the multiple-screen mode or all.
(14) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second (See also <a href="#">9.5.3.2</a> ).
(15) 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 only.
(16) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS) (See also <a href="#">9.5.3.3</a> ).
(17) Intelligent Search	Search the changes in the motion detector frame (See also <a href="#">9.5.3.4</a> ).

### 9.5.3 Using the Remote Playback Application



Name	Function
(1) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(2) Playback Control Buttons	<p><b>Begin:</b> Move to the beginning of the recorded video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x.</p> <p><b>Rewind:</b> Wind back the recorded video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p> <p><b>Faster:</b> Play the recorded video file at the speed of 2x, 4x, or 8x.</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the recorded video file.</p>
(3) Date	Open other file.
(4) Output	Save the segmented file in *.mpg, or *.avi, format.
(5) Print	Print the screen shot.
(6) Save	Save the screen shot either in *.jpg or *.bmp format and video in *.dvr format.
(7) Segment	Keep a portion of the recorded video you want. You may follow the instruction in <a href="#">9.5.3.1</a> .

### 9.5.3.1 To Cut and Save the Wanted Portion of the Recorded Video

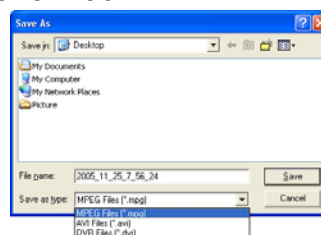
1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.



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.

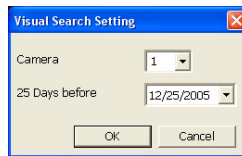


3. Click **Output** button to save the wanted clip.
4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.



### 9.5.3.2 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**.

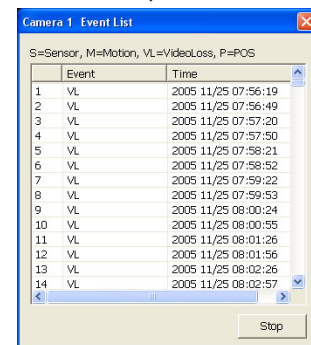


- When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minute of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click . To view from the selected frame and close event search,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



### 9.5.3.3 To Search Using the Event Search

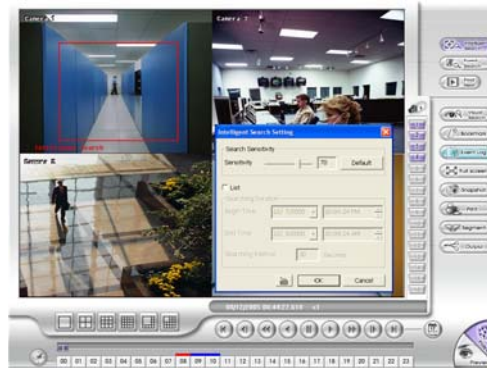
- Click on the video screen on where you want to search.
- Click **Event Search**. The Event Search text (red) would appear at the lower left corner of the screen.
- In the Event Search Setting dialog box, check the type of condition you want to search. If you select POS, in the Find Text box, type the word. 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 **Output Event List** box. In the Search Duration section, set the **Begin Time**, **End Time** and **Searching Interval**. Then, click **OK** to start searching.
- When the Event list appears, click and select the item you want to view.



### 9.5.3.4 To Search Using the Intelligent Search

- Click on the video screen on where you want to search.
- Click **Intelligent Search**. The Intelligent Search text (red) would appear at the lower left corner of the screen.
- 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**, **End Time** and **Searching Interval**. Then, click **OK** to start searching.



## 9.5.4 Using the Event Viewer

Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Alarm, Motion, DVR Reboot, HDD fail, Login DVR, Connection Success, Connection Loss or All Event. Click **Refresh** to update the list and **Save** to save the list in \*.txt format.

Time	Type	DVR	Camera	Note
2006/09/04 13:22:30	Alarm	DVR01	1	ALARM index=5092
2006/09/04 13:22:30	Alarm	DVR01	2	ALARM index=5092
2006/09/04 13:22:29	Connection Success	DVR01		CONNECT SUCCESS
2006/09/04 13:19:54	Alarm	DVR01	2	ALARM index=5167
2006/09/04 13:19:54	Alarm	DVR01	1	ALARM index=5167
2006/09/04 13:19:43	Alarm	DVR01	2	ALARM index=5157
2006/09/04 13:19:43	Alarm	DVR01	1	ALARM index=5157
2006/09/04 13:19:32	Alarm	DVR01	2	ALARM index=5146
2006/09/04 13:19:32	Alarm	DVR01	1	ALARM index=5146
2006/09/04 13:19:22	Alarm	DVR01	2	ALARM index=5136
2006/09/04 13:19:21	Alarm	DVR01	1	ALARM index=5136
2006/09/04 13:19:11	Alarm	DVR01	1	ALARM index=5125
2006/09/04 13:19:11	Alarm	DVR01	2	ALARM index=5125
2006/09/04 13:19:10	Connection Success	DVR01		CONNECT SUCCESS
2006/09/04 13:09:27	Alarm	DVR01	2	ALARM index=4545
2006/09/04 13:09:27	Alarm	DVR01	1	ALARM index=4545
2006/09/04 13:09:16	Alarm	DVR01	2	ALARM index=4534
2006/09/04 13:09:16	Alarm	DVR01	1	ALARM index=4534
2006/09/04 13:09:05	Alarm	DVR01	1	ALARM index=4523
2006/09/04 13:09:05	Alarm	DVR01	2	ALARM index=4523
2006/09/04 13:08:54	Connection Success	DVR01		CONNECT SUCCESS
2006/09/04 13:08:54	Alarm	DVR01	1	ALARM index=4513
2006/09/04 13:08:54	Alarm	DVR01	2	ALARM index=4513

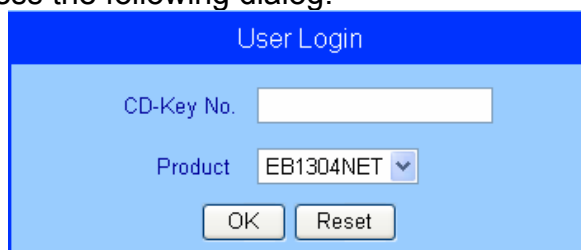
## Appendix A Registering Domain Names

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 <http://ddns.avers.com.tw>

### 1. User Login

Browse the website [ddns.avers.com.tw](http://ddns.avers.com.tw) with Microsoft IE or Netscape Navigator to access the following dialog.



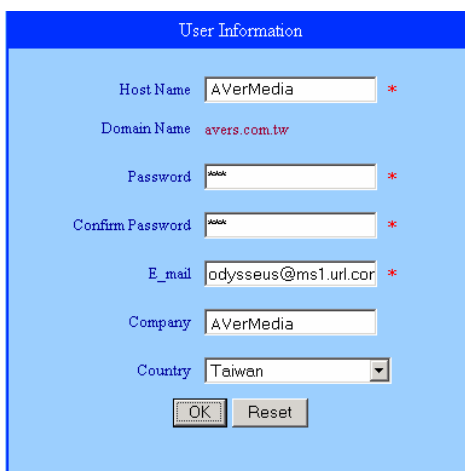
The 'User Login' dialog box has a blue title bar and a light blue background. It contains a text input field for 'CD-Key No.', a dropdown menu for 'Product' with 'EB1304NET' selected, and two buttons: 'OK' and 'Reset'.

First input the MAC address of your DVR system as CD-Key number and select the product name. The CD-Key of MAC address input format shall be 12 digits without colon (: ) or hyphen (-). To find MAC address of your DVR system, follow the steps below:

- In OSD menu, select **NETWORK SETUP**
- Select any one of IP mode
- A **NETWORK INFORMATION** windows will show up
- MAC address of DVR system is display as shown
- Then click **OK** to login or **Reset** to clear the previous input.

### 2. 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 title bar and a light blue background. It contains several fields: 'Host Name' (AVerMedia), 'Domain Name' (avers.com.tw), 'Password' (masked with asterisks), 'Confirm Password' (masked with asterisks), 'E\_mail' (odysseus@ms1.url.cor), 'Company' (AVerMedia), and 'Country' (Taiwan). There are 'OK' and 'Reset' buttons at the bottom.

## Appendix B Dual Monitors setting

Video configuration is different for each different VGA chipsets. Please follow the steps below to setup the dual monitors display.

### Graphic card with ATi chipset

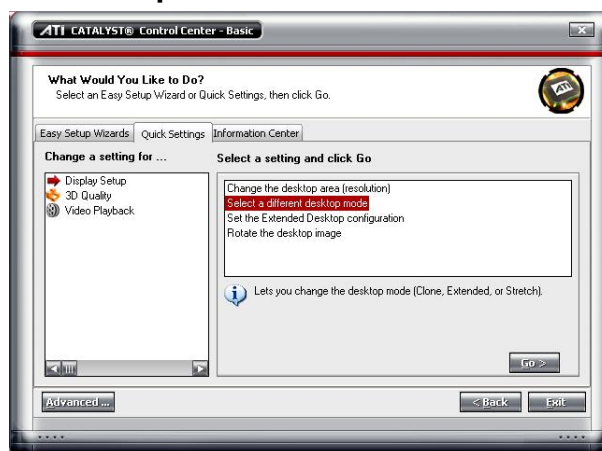
1. Enter the ATI Catalyst Control Center, user can click the short-cut or right click on the screen.



2. There are two modes to select — Basic and Advanced.

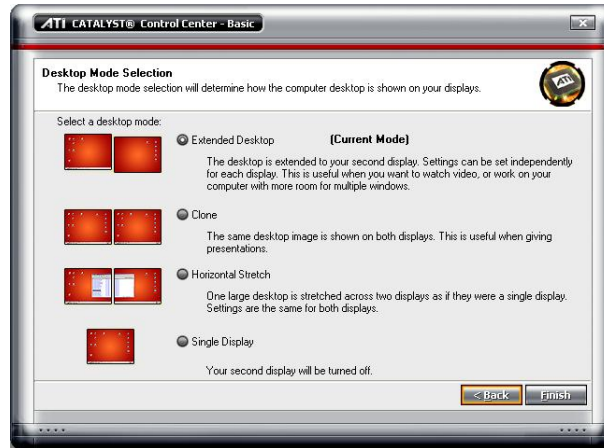


3. If user selected Basic mode, press the **Quick Settings** tab. Then select the **Select a different desktop mode** and click **Go**.





4. Select the **Extended Desktop** and then click **Finish**.



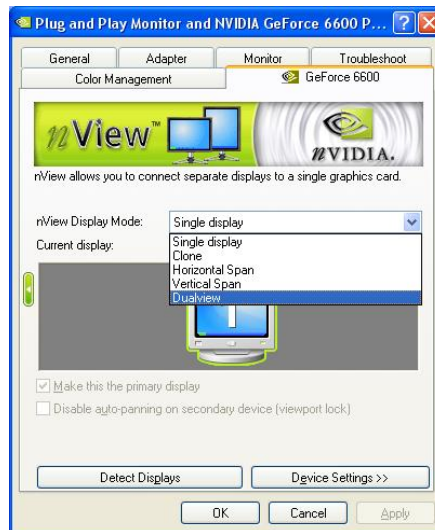
5. If user selected the Advanced mode, click the **View** button.
6. In **Display Manager**, right click on the second Display on the right side and select **Extend Main onto monitor**.



7. Adjust each monitor resolution to 1024x768.

## Graphic card with NVIDIA chipset

1. Click the NVIDIA nView, and select the **Dualview** mode.
2. Adjust each monitor resolution to 1024x768.



3. To review if the display mode is correct, you can check the task bar. The task bar will show on the first monitor only.



**Monitor 1**

**Monitor 2**



## Warranty Notice

### LIMITED WARRANTY

AVerMedia TECHNOLOGIES, Inc. warrants this product to be free of defects resulting from faulty manufacture or components under the following terms:

### WARRANTY LENGTH

Labor is warranted for (1) one year from the date of purchase

Parts are warranted for (1) one 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. AVerMedia does not warrant that this product will meet your requirements; it is your responsibility to determine the suitability of this product for your purpose

### WHAT WE WILL AND WILL NOT PAY FOR

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

### EXCLUSION OF DAMAGES

THE MANUFACTURER'S SOLE OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT AT OUR OPTION. THE MANUFACTURER SHALL NOT, IN ANY EVENT, BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE (INCLUDING, BUT NOT LIMITED TO, DAMAGES RESULTING FROM INTERRUPTION OF SERVICE AND LOSS OF BUSINESS) OR LIABILITY IN TORT RELATING TO THIS PRODUCT OR RESULTING FROM ITS USE OR POSSESSION.

### LIMITATIONS OF IMPLIED WARRANTIES

There are no other oral or written warranties, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. Any implied warranties are limited in duration to one year from the date of purchase

### STATE LAW AND YOUR WARRANTY

This warranty gives you specific legal rights, and you may also have other rights granted under state law. These rights vary from state to state

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