

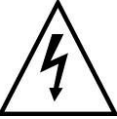



# — 4/8/16CH DVR —



This document contains preliminary information and subject to change without notice.

 <div style="text-align: center;"> <p><b>CAUTION</b></p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN</p> </div> 	<p><b>WARNING</b></p> <p>TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.</p>
<p><b>CAUTION :</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	
 <p>This symbol is intended to alert the user to the presence of unprotected "Dangerous voltage" within the product's enclosure that may be strong enough to cause a risk of electric shock.</p>	
 <p>This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>	<p><b>NOTE:</b> This equipment has been tested and found to comply with the limits for a class 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 instruction manual, 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.</p>



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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# CHAPTER 1 PACKING DETAIL AND INSTALLATION

## 1-1 PACKING



1. DVR



2. Quick Start



3. IR Remote Control  
**\* 16CH: Pressed "DVR1" Button before use**



4. Battery × 2 (16CH)



5. CD



6. Hard Disk Mount x2



7. Screws x20



8. Power Adaptor



9. Power Cord



10. DB25 Connector  
( 4CH / 8CH only)

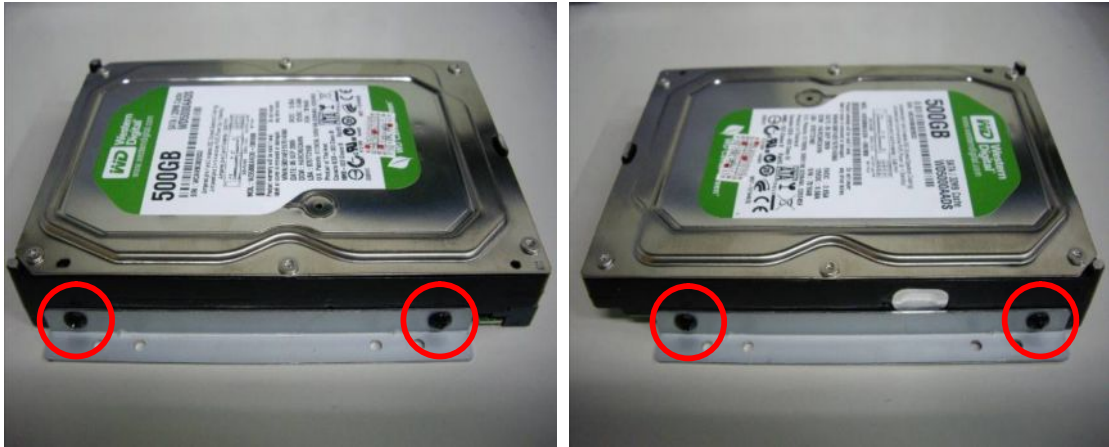


11. SATA cord × 3 (16CH)  
SATA cord × 2 (4CH/8CH)

**Note: Standard shipping products do not include HDD**

## 1-2 Hard Disk Installation

Step 1) Fix the HDD to rack mount with the screws as indicated.



Step 2) Place the HDD on the HDD plate and screw it as indicated.



Step 3) Connect the power and the SATA cables as indicated.



Note: After installation, please initialize Hard Disk before starting to record. For more detailed information, please check out User Manual 4-9 System Tools for reference.

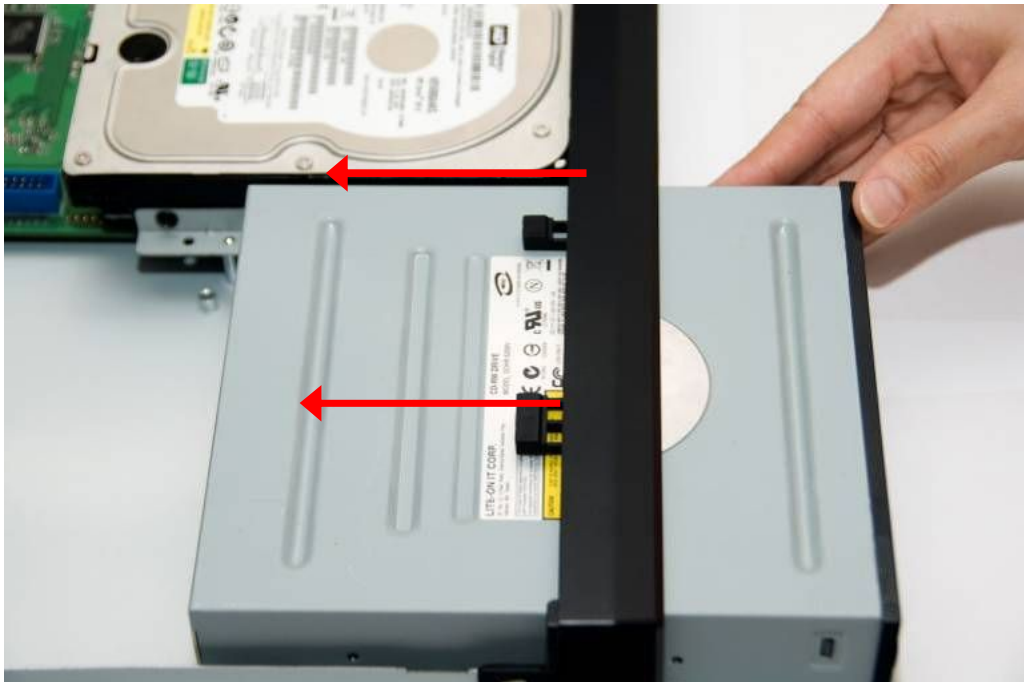


### 1-3 DVD-RW Installation(Only Support DVD/RW)

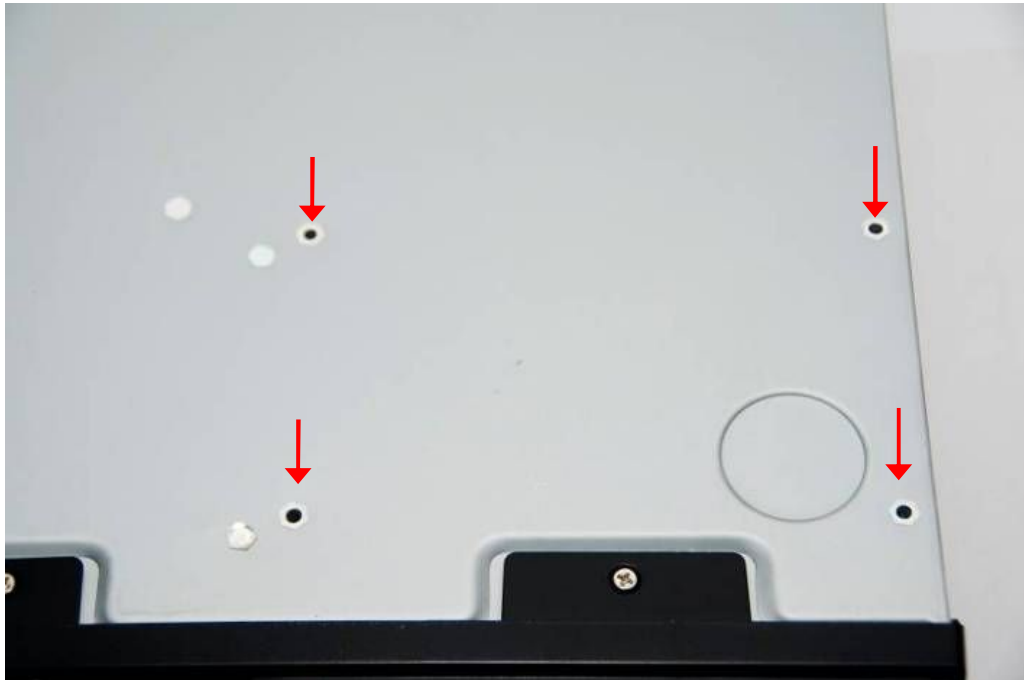
Step 1) Remove the front cover from DVR.



Step 2) Put the DVD-RW into the DVR as indicated by the arrow.



**Step 3) Screw the bottom of the DVR as indicated to fix the DVD-RW.**



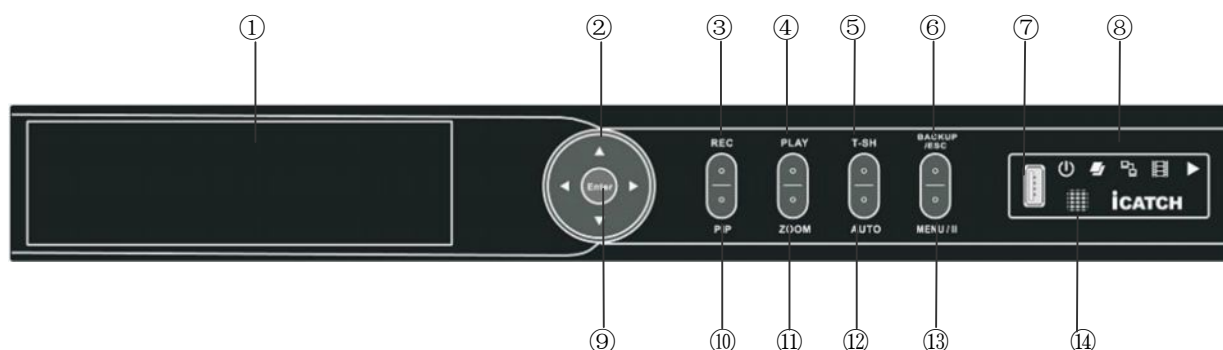
**Step 4) Connect the power and the SATA cables.**





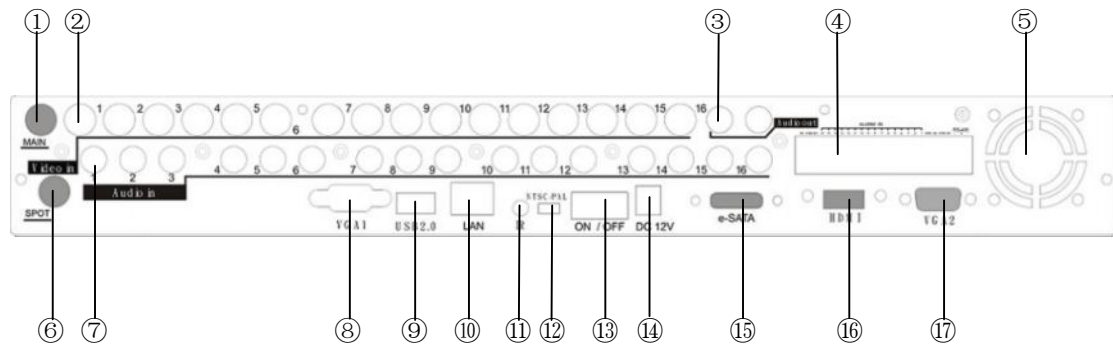
## CHAPTER 2 PANEL LOCATION

### 2-1 FRONT PANEL CONTROLS



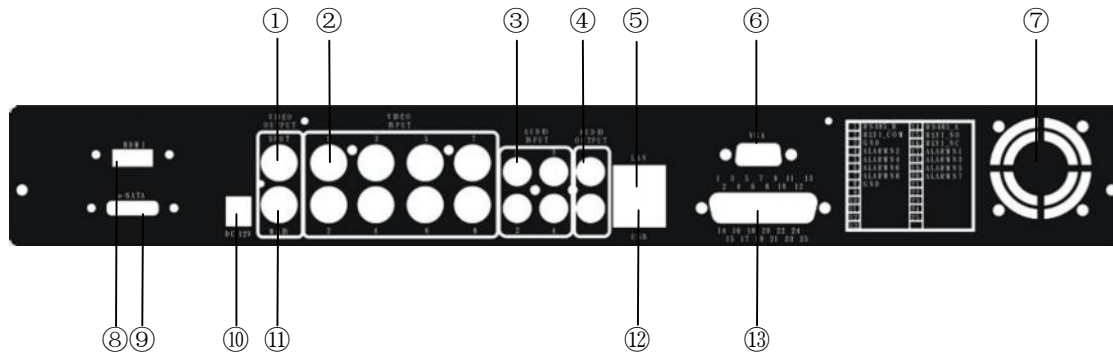
Control Keys	Description
① DVD Writer	Optional DVD-RW backup device.
② ▼ / ■	In SETUP mode, press to move cursor down. In PLAYBACK mode, press to stop playing back.
▲ / SLOW	In SETUP mode, press to move cursor up. In PLAYBACK mode, press to slow down.
▶ / ►►	In SETUP mode, press to increase value. In PLAYBACK mode press to play forwards.
◀ / ◀◀	In SETUP mode, press to reduce value. In PLAYBACK mode, press to play rewind.
③ REC	Start or stop recording.
④ PLAY	Play back in normal speed.
⑤ T-SRH	Display the search menu.
⑥ BACKUP/ESC	In LIVE mode, press to display the BACKUP menu. In SETUP mode, press to return to previous page.
⑦ USB 2.0 Port	Port for USB external devices (USB flash drive devices use, the mouse behind the back of the USB ports installed)..
⑧ LED Display (From left to right)	<b>Power:</b> Power is on. <b>HDD:</b> Hard disk is in use. <b>LAN:</b> Connected to the internet (in red): Remote user logged in. <b>REC:</b> Recording. <b>PLAY:</b> Playing back.
⑨ ENTER/MODE	In SETUP mode, press to enter values. In PLAYBACK mode, switch between full, quad, 9-channel, 16-channel display in order.
⑩ PIP	In LIVE mode, display with picture in picture format.
⑪ ZOOM	In LIVE or PLAYBACK mode, enlarge the display of a channel.
⑫ AUTO	Auto Sequence display.
⑬ MENU/II	In LIVE mode, press to display menu. In PLAYBACK mode, press to pause playback.
⑭ IR Sensor	Input sensor for the remote control.

## 2-2 16CH REAR PANEL CONNECTIONS



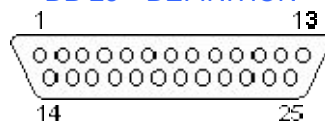
① MAIN monitor	BNC port for the main monitor.
② VIDEO IN	BNC input ports for cameras, 16 in total.
③ AUDIO OUT	RCA output port for audio signal.
④ EXTERNAL I/O	EXTERNAL I/O port.
⑤ Fan	DC 12V 40mm X 40mm fan.
⑥ SPOT monitor	BNC port to display full screen image of all installed cameras in sequence.
⑦ AUDIO IN	RCA input port for audio signal. 4 ports available for 4CH/8CH. 16 ports available for 16CH.
⑧ VGA1	VGA port.
⑨ USB 2.0 port	USB port(Device USB Mouse).
⑩ LAN	Network port.
⑪ IR JACK	IR extension cable jack.
⑫ NTSC/PAL	Switch NTSC/PAL Video.
⑬ ON/OFF	Power Switch.
⑭ DC 12V	Socket for a DC 12V input.
⑮ e-SATA	External SATA hard disks port for expanding recording space.
⑯ HDMI	HDMI port.
⑰ VGA2	VGA port.

## 2-3 8CH REAR PANEL CONNECTORS



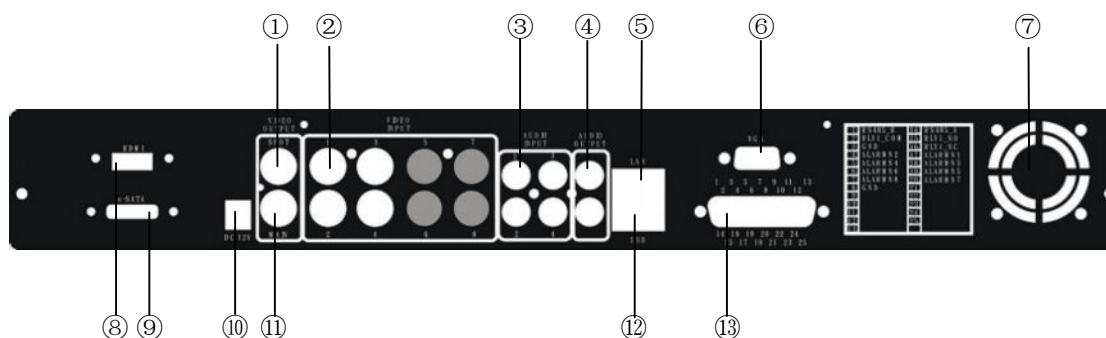
① SPOT monitor	BNC port to display full screen image of all installed cameras in sequence.
② VIDEO IN	BNC input ports for cameras, 8 in total.
③ AUDIO IN	RCA input port for audio signal. There are 4 ports available. (corresponding to channel 1 to 4)
④ AUDIO OUT	RCA output port for audio signal.
⑤ LAN	Network port
⑥ VGA	VGA port
⑦ Fan	DC 12V 40mm X 40mm fan
⑧ HDMI	HDMI port
⑨ e-SATA	External SATA hard disks port for expanding recording space
⑩ DC 12V	Socket for a DC 12V input.
⑪ MAIN monitor	BNC port for the main monitor.
⑫ USB	USB port(Device USB Mouse)
⑬ EXTERNAL I/O	EXTERNAL I/O port (see below for pin definition)

### DB 25 DEFINITION



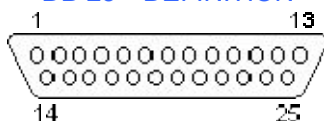
1.	RS485_B	14.	RS485_A
2.	RLY1_COM	15.	RLY1_NO
3.	GND	16.	RLY1_NC
4.	ALARMN2	17.	ALARMN1
5.	ALARMN4	18.	ALARMN3
6.	ALARMN6	19.	ALARMN5
7.	ALARMN8	20.	ALARMN7
8.	GND	21.	
9.		22.	
10.		23.	
11.		24.	
12.		25.	
13.			

## 2-4 4CH REAR PANEL CONNECTORS



① SPOT monitor	BNC port to display full screen image of all installed cameras in sequence.
② VIDEO IN	BNC input ports for cameras, 4 in total.
③ AUDIO IN	RCA input port for audio signal. There are 4 ports available. (corresponding to channel 1 to 4)
④ AUDIO OUT	RCA output port for audio signal.
⑤ LAN	Network port
⑥ VGA	VGA port
⑦ Fan	DC 12V 40mm X 40mm fan
⑧ HDMI	HDMI port
⑨ e-SATA	External SATA hard disks port for expanding recording space
⑩ DC 12V	Socket for a DC 12V input.
⑪ MAIN monitor	BNC port for the main monitor.
⑫ USB	USB port(Device USB Mouse)
⑬ EXTERNAL I/O	EXTERNAL I/O port (see below for pin definition)

### DB 25 DEFINITION



1.	RS485_B	14.	RS485_A
2.	RLY1_COM	15.	RLY1_NO
3.	GND	16.	RLY1_NC
4.	ALARMN2	17.	ALARMN1
5.	ALARMN4	18.	ALARMN3
6.	ALARMN6	19.	ALARMN5
7.	ALARMN8	20.	ALARMN7
8.	GND	21.	
9.		22.	
10.		23.	
11.		24.	
12.		25.	
13.			

## CHAPTER 3 LIVE, PLAYBACK AND PTZ OPERATIONS

The IR remote control and mouse operate differently under each mode; this chapter describes the functions of them under three different modes: LIVE, PLAYBACK and PTZ.

















### 3-1 LIVE Mode

You can monitor all the channels, listen to audio signal and have some related operations under *LIVE* mode. This paragraph describes the IR remote control, mouse operation and on screen graphical icons under LIVE mode.

**Table 3-1.1** Functions of remote control under LIVE mode















Button	Description
<b>REC</b>	Start/Stop recording.
<b>PLAY</b>	Start playing back the most recently recorded segment.
<b>ENTER/MODE</b>	Switch to full screen or multi split display.
<b>MENU/ II</b>	Enable/ Disable setup Menu.
<b>BK-UP</b>	Enable/ Disable backup menu.
<b>ESC</b>	Return last menu.






**Table 3-1.2** Graphical icons that will display after right-clicking your mouse under LIVE mode.

Icon	Description
	Resting the cursor on this icon will bring up the following four menu icons.
	Main menu.
	Search menu.
	Backup menu.
	PTZ mode.
	Turn on/off recording.
	Playback.
	Resting the cursor on this icon will bring up the following five display icons.
	FREEZE.
	ZOOM, double the screen size
	AUTO-sequence
	LOCK, activate the key lock.
	Full screen display.
	Quad display.
	9 display
	16-channel display




**Table 3-1.3** Description of on screen graphical icons in LIVE mode

Icon	Description
	Recording is on
	Schedule Recording is on
	Live Audio is on
	Live Audio is off
	Motion detected on the channel
	Video loss detected on the channel
	USB device detected
	Connected to the LAN cable.
	AUTO-seq is on
	Freeze is on, screen is frozen
	LOCK is on
	PTZ control is on
	Shows the current hard disk space has been used (99% mean used 99%, remain 1%)
	Lower right of each CH will show the current time

Icon	Description
	Image quality (High/Low)
	Full screen
	Record
	Record and snap shot file saving path setup
	Enable / Disable Shortcut Toolbar

### 3-2 PLAYBACK Mode

Switch to PLAYBACK mode by pressing “PLAY” under the LIVE mode, the graphical icon  will show up on the upper center of the screen and the operation panel ( see below picture) will show up at right lower corner of the screen. You can drag the panel by mouse to place it on any location of your screen.














**Table 3-2.1** Remote control functions under the PLAYBACK mode

Button	Description
<b>ENTER / MODE</b>	Switch to full screen or multi split display.
<b>MENU / ■■</b>	Turn on/off PAUSE.
<b>PLAY</b>	Play back at normal speed.
<b>▲ / SLOW</b>	Play back at slower speed. The speed will be slowed to 1/2, 1/4, 1/8, by each pressing of the button till the slowest limitation of the normal speed.
<b>◀◀ / ◀</b>	Fast rewind. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
<b>▶▶ / ▶</b>	Fast forward. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
<b>▼ / ■</b>	Stop playback.



**Table 3-2.2** The mouse operation under the PLAYBACK mode.

Icon	Description
	「 ◀◀ / ◀ 」 Fast rewind
	「 ▶▶ / ▶ 」 Fast forward
	Play/pause
	「 ▲ / SLOW 」, slow playback
	「 ▼ / ■ 」 stop playback
	Playback channel by channel with snap shot display
	Full screen display
	Quad display
	9 screen display
	16-channel display
	Zoom-in display

**If you want to monitor single channel, please choose a channel and click left button of mouse two times.**

### 3-3 PTZ Mode



Switch to the PTZ mode by pressing “PTZ” button under the LIVE mode. The PTZ icon will appear on upper left side of screen and the control panel will appear on the down right side of screen.



**Table 3-3.2** Mouse operation under the PTZ mode

Icon	Description
	Leave PTZ Mode , back to the LIVE mode
	Pre-set number N. (0~255)
	Go to pre-set number N.
	Set current PTZ location at pre-set number N.
	「TOUR」, press to activate pre-set tour *
	「PIP」, Set current PTZ location as the start of line-scan. *
	「FREEZE」, Activate line-scan. *
	「ZOOM」, Set current PTZ location as the end of line-scan. *
	To move PTZ in 360°
	PTZ zoom in; PTZ zoom out
	PTZ focus in; PTZ focus out.
	PTZ IRIS open, PTZ IRIS close.
Below functions need support from specific PTZ manufacturer. Please check user manual of your PTZ for more detail.	
	AUX 1~8, 「AUTO」 Key + Number key 「1~8」
	「Backup」, Customized function ◦







\* PTZ communication protocols from different brands aren't compatible 100% sometimes. Therefore, some of these functions may be unavailable.

## CHAPTER 4 MAIN MENU SETUP

To enter the main menu and set up DVR, log-in account and user password are required. The default password of the administrator is “123456”. Please check the “Account Setup” for related setup of other log-in users.



**Table 4-0.1** Some definition of virtual keyboard.

Item	Description
	Switch between capital and small letters.
	Switch between numbers and letters.
	Press to cancel the setup, and re-choose the login account.
	Delete the last character.
	Enter to identify the password. It will enter the set up menu, If the password is verified.
	Space key



**Table 4-0.2** The operation of remote control under the setting menu

Item	Description
◀ ▶	Switch to different options under one item
▲ ▼	Switch to different items
MENU	Save setup and back to LIVE mode
ESC	Back to Upper level of menu without saving
ENTER	Enter the menu, or display virtual keyboard

*PS. The initialization of new-installed HD is required before recording, please refer to “4-9 UTILITY SETUP” for detail.*

#### 4-1 RECORD SETUP



Item	Description
<b>HDD FULL</b>	Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full 「 <b>Stop</b> 」: Stop Recording 「 <b>Overwrite</b> 」: Start to overwrite that begin from the oldest data of HDD, and continue to record.
<b>OSD position X</b>	Setup OSD X axis
<b>OSD position Y</b>	Set up OSD y axis
<b>OSD position setup</b>	Set up OSD axis
<b>Video Preservation</b>	Setup the video preservation period. Recorded video will be deleted automatically after expiry of preservation period.
<b>Quality &amp; Frame Rate Setup</b>	Setup the quality and frame rate for each channel under normal recording and event recording type.

##### 4-1.1 Quality & Frame Rate Setup





Item	Description
<b>Normal setup/ event setup</b>	Select recording mode
<b>Resolution</b>	Select recording resolution: NTSC:352x240, 704x240, 704x480 PAL:352X288,704X288,704X576
<b>Record Type</b>	You can setup quality and FPS separately for record type.
<b>No.</b>	Check/uncheck the box enable/disable selected channel recording
<b>Quality</b>	Select quality: Below Basic/ Basic/ Normal/ High/ Highest
<b>FPS</b>	Select recording frame rate.
<b>Auto</b>	Assign each channel with its maximum accessible fps

#### 4-2 EVENT SETUP



Item	Description
<b>Motion Setup</b>	Enter to set up motion detection
<b>Motion Setup</b>	Enter to set up sensor detection

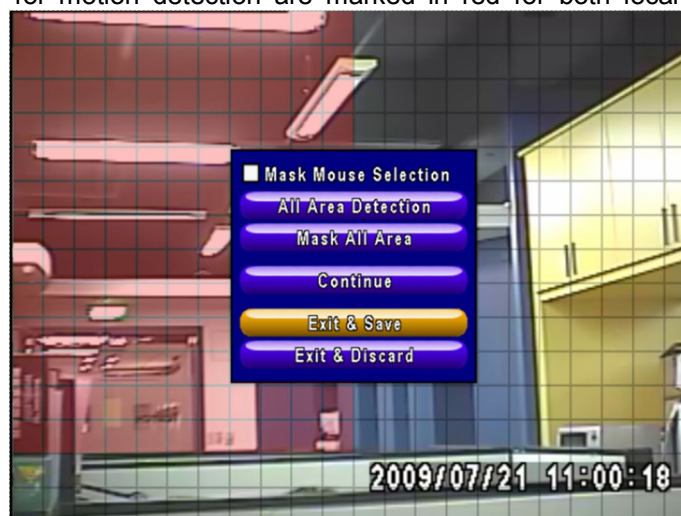
## 4-2.1 MOTION SETUP



Item	Description
<b>Alarm Duration(Seconds)</b>	When motion detect · the number of seconds continuous alarm
<b>1~16</b>	You can setup independently for each channel.
<b>Enable</b>	Check the box to Enable/Disable motion detection for each channel.
<b>Sensitivity</b>	Drag the white bar or press ◀ ▶ to set up Sensitivity from value 1 to 10 for each channel. The lower value you set the higher sensitivity it will be
<b>Motion Area Setup</b>	Enter to setup motion detection area

### 4-2.1.1 MOTION AREA SETUP

The motion detection has been divided into 16x12 grids. The default detection area is full screen as it marked in transparent for local DVR and purple for remote access. Areas deselected for motion detection are marked in red for both local and remote site.



Item	Description
<b>Mask Mouse Selection</b>	Switch between “select” and “deselect” for cursor-dragging function
<b>All Area Detection</b>	Select entire screen as detection area.
<b>Mask All Area</b>	Deselect entire detection area.
<b>Continue</b>	Continue setup
<b>Exit &amp; Save</b>	Save setup and leave
<b>Exit &amp; Discard</b>	Cancel setup and leave

#### 4-2.2 SENSOR SETUP



Item	Description
<b>Sensor Popup</b>	Check the box to Enable/Disable popup screen function for all channels. When Sensor is detected in LIVE mode, the detected channel image will pop up in full screen display.
<b>All Off</b>	Set all sensor off
<b>All Low</b>	Set all sensor polarity low
<b>All High</b>	Set all sensor polarity high
<b>Sensor Polarity</b>	<p>Click or press ▼ to select between HIGH, LOW voltage for triggering sensor detection or OFF to turn off polarity for each channel</p> <p><b>Low</b> Polarity : Sensor has not been triggered. When connected, sensor will be turned on..</p> <p><b>High</b> Polarity : Sensor has been triggered. When connected, sensor status will be turned off..</p> <p><b>Off</b> : Sensor is deactivated, and will not be turned on/off.</p>

**Note : 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.**

### 4-3 SCHEDULE SETUP

Except from starting recording manually, you can also setup the recording time by weeks and schedule including normal, motion detect, and recording type.



Item	Description
Page	Each page provides 10 schedules for setup. 5 pages in total.
Holiday Setup	Enter to setup holiday, up to 50 days, other than weekends,.
View Event/ Motion/ Sensor Setup	View Normal/ Motion/Sensor

#### 4-3.1 Schedule Record Setup

Click on the time on the left side. The setup menu will be displayed. You can have detail setup by dates, Time and event.



#### 4-3.2 Holiday Setup

Since holidays are different by different country and region, you can setup the holiday of your location accordingly.



#### 4-4 CAMERA SETUP



Item	Description
<b>1~16</b>	You can setup independently for each channel.
<b>Mask</b>	Check the box to Enable/Disable mask function for LIVE mode
<b>Sharpness</b>	Drag the bar or press ◀ ▶ to adjust Sharpness of your camera from value 0 to 15. The default value is 1.
<b>Brightness</b>	Drag the bar or press ◀ ▶ to adjust Brightness of your camera from value 1 to 255. The default value is 128.
<b>Contrast</b>	Drag the bar or press ◀ ▶ to adjust Contrast of your camera from value 1 to 255. The default value is 100.
<b>Chroma(U)/(V)</b>	Drag the bar or press ◀ ▶ to adjust Chroma of your camera from value 1 to 255. The default value is 128.
<b>Hue</b>	Drag the bar or press ◀ ▶ to adjust Hue of your camera from value 1 to 255. The default value is 128. ( <b>This function doesn't support at PAL system</b> )
<b>Name</b>	Set up name of each channel
<b>Volume</b>	Audio volume under LIVE mode and recording mode can be adjusted.



#### 4-5 ACCOUNT SETUP

The Account Setup menu is used to provide role-based permission independently setting for each user (maximum of 4 users) to access DVR over network. The default admin account and password is “admin” and “123456”

(The default password remains the same after firmware upgrade)



Item	Description
<b>No.</b>	Check to activate the user’s account.
<b>Username</b>	Set up username
<b>Password</b>	Set up password for each user. Password is 8-digits required and can be mixed by letters and numbers with case-sensitive. Letters can be mixed with capitals or lowercases.
<b>Permissions</b>	Set up Permissions for each user
<b>Change Admin Password</b>	Change administrator’s password
<b>Picture</b>	Change user’s picture

#### 4-5.1 Permission Setup

The Account Setup is set to provide individual user (maximum of 4 users) role-based permissions, including access to Setup menu, Network operation, PTZ function, Playback, Utility, Backup, Password expiry date and Mask on specific channels while playing back.





#### 4-5.2 User Picture Setup

User can select picture wished to be changed to from hard drive.



#### 4-6 NETWORKING SETUP



Item	Description
Connect type	Setup mode for network connection: (ADSL、DHCP、LAN、3G).
HTTP Setup	Enter to set up HTTP
DDNS Setup	Enter to set up DDNS
Mail Setup	Enter to set up mail
3G Setup	Enter to set up 3G network

## 4-6.1 NETWORKING SETUP

There are three ways to connect to the network as followed.

### 4-6.1.1 DHCP

When DHCP is selected, IP address will be assigned by DHCP server automatically.



### 4-6.1.2 LAN

Select LAN for network connection, the following information is required.



Item	Description
IP Address	Enter IP address provided by ISP
Subnet Mask	Enter IP address of Subnet Mask provided by ISP
Gateway	Enter IP address of Gate way provided by ISP
DNS	Enter DNS address provided by ISP. <b>(Note: The correct DNS address must be entered for DDNS function).</b>

### 4-6.1.3 ADSL

Select ADSL for network connection, the following information is required.



Item	Description
User Name	Enter user name provided by ISP
Password	Enter password provided by ISP

### 4-6.1.4 3G

Select 3G for network connection, the following information is required.



Item	Description
Dial-up Number	Dial-up Number · Determined as the ISP
PIN	Enter SIM card password
APN	Enter "internet"
Advance Setting	The advanced settings (Taiwan ISP outside)



Item	Description
<b>Enable</b>	Enable advance setting
<b>User Name</b>	Enter ISP username
<b>Password</b>	Enter ISP password
<b>IP Address</b>	Enter the ISP provides a fixed IP address ◦ (if the client uses the Internet only need to enter a fixed IP)

**PS : This feature currently only supports the Huawei 3G card**

#### 4-6.2 HTTP Setup



Item	Description
<b>Enable HTTP Server</b>	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
<b>Port</b>	Enter a valid port value from 1 up to 65000. The default value is 80.
<b>Auto</b>	Assign each channel with its maxima accessible fps
<b>No.</b>	Chanel number
<b>Quality</b>	Set up record quality. There are below basic, basic, normal, high, highest
<b>FPS</b>	Set up record FPS

### 4-6.3 DDNS Setup



Item	Description
Enable DDNS	Enable/disable DDNS function.
DDNS Server	Enter the registered SMTP Server: <b>ez-dns * \ I-DVR.NET * \ DYNDNS.ORG \ NO-IP.ORG \ 3322.ORG</b>
Host Name	Enter the completed registered SMTP Server. (Including username + Server) If the user name is h.264 and you choose i-dvr as your server, you should enter: <b>h.264.i-dvr.net</b>
User Name	Enter user name.
Password	Enter password.

**\*For more detailed I-DVR.NET operation instruction, please refer to appendix I \ II**

#### 4-6.4 Mail Setup

When event occurs (VLOSS, MOTION), email will be sent to the receiver account automatically.



Item	Description
<b>Enable E-mail Notification</b>	Check the box to enable/disable E-mail Notification function.
<b>SMTP Server</b>	Enter to set up SMTP Server name. (Varies according to the user)
<b>User Name</b>	Enter to set up User Name.
<b>Password</b>	Enter to set up Password.
<b>Sender E-mail</b>	Enter to set up e-mail address of receivers.
<b>Trigger Event</b>	Enter to select events to send out E-mail notifications when below circumstances happen: Motion, Sensor and Vloss (Video Loss).
<b>Receiver E-mail</b>	Enter to set up e-mail addresses for up to 10 receivers individually.



#### 4-7 PTZ & RS485 SETUP

The DVR allows users to control PTZ functions of your camera. To enable PTZ function, the 485 cable should be connected to the RS-485 port of DVR.



Item	Description
<b>Enable PTZ</b>	Click the box to Enable/Disable PTZ function for each channel.
<b>Protocol</b>	Set up the protocol of PTZ cam. The supported protocol are <b>PELCO-P, PELCO-D, KND, LI-LIN, SAMSUNG, LG, AVTECH.</b>
<b>PTZ ID</b>	Click or press ◀ ▶ to set up PTZ ID. The valid ID value is from 1 to 64.
<b>Baud Rate</b>	Select Baud Rate for PTZ from 2400, 4800, 9600,19200
<b>RS-485 ID</b>	Select RS-485 ID from 1 to 64
<b>RS-485 Baud Rate</b>	Select RS-485 Baud Rate from 2400. 4800, 9600,19200
<b>Keyboard</b>	Select Keyboard.

**Note : 4CH DVR will display 4 channels. 8CH DVR will display 8 channels.**

## 4-8 SYSTEM SETUP



Item	Description
<b>DVR Name</b>	The name of DVR will be shown when users login from remote access.
<b>DVR Location</b>	The location of DVR will be shown when users login from remote access
<b>Language</b>	Click or press ▼ to select OSD language.
<b>Remote ID</b>	Default ID is 0. DVR is controlled by standard remote control,
<b>Display Setup</b>	Enter to set up Display
<b>Date/Time Setup</b>	Enter to set up Date/Time
<b>Device Setup</b>	Enter to set up Buzzer & Relay
<b>Spot Setup</b>	Enter to set up Spot

### 4-8.1 DISPLAY SETUP



Item	Description
<b>Auto-Seq Interval</b>	Set up duration time in seconds for the interval between channels under Auto-Seq mode.
<b>Show OSD</b>	Turn On / Off OSD display
<b>Show DVR Status</b>	Turn On / Off DVR illustration and record status display
<b>Show Date/Time</b>	Turn On / Off date and time display
<b>Show Channel Name</b>	Turn On / Off channel name display
<b>Border Color</b>	Set up the color of border in LIVE , PLAYBACK mode. ( Red, Green, Blue )

#### 4-8.2 DATE/TIME SETUP



Item	Description
<b>Hour Format</b>	12HOURS/ 24HOURS
<b>Date Format</b>	MM-DD-YY/DD-MM-YY/YY-MM-DD
<b>Date/Time Position</b>	Choose the position of Time and Date display
<b>Change Date &amp; Time</b>	Setup time and date of DVR
<b>Time Zone Setup</b>	Set up GMT and Daylight Saving Time.
<b>Internet Time Setup</b>	Setup automatic synchronization with internet server

##### 4-8.2.1 CHANGE DATE & TIME

Setup date and time of DVR manually according to user's local time.



#### 4-8.2.2 TIME ZONE AND DAYLIGHT SAVING TIME SETUP

Set up time zone and activate Daylight Saving Time function according to user's DVR location.



Item	Description
Select Time Zone	Enter to modify GMT from GMT- 13 to GMT+ 13
Daylight Saving Time	Turn on/ off Daylight Saving Time

### 4-8.2.3 INTERNET TIME SETUP

Synchronize your DVR time with internet time server.



Item	Description
<b>Automatic Synchronization</b>	Check to enable DVR automatic synchronization function. Effective by this option selected, DVR will automatically synchronize the time upon rebooting or by every 24 hours after booting.
<b>Update Now</b>	Effectively, Date and Time show on DVR will immediately correspond with those in internet server.

### 4-8.3 BUZZER & RELAY SETUP



Item	Description
<b>Mouse Speed</b>	Move the mouse cursor speed, the more the faster to the right. (Only Local machine)
<b>Buzzer &amp; Relay Setup</b>	Into the buzzer & relay setup.



Item	Description
Key Tone	Enable/Disable keystrokes.
Buzzer	Enable/Disable buzzer operation when the alarm is triggered for sensor, motion and vloss (Video Loss).
Relay	Enable/Disable the signal to be sent to the RELAY OUT blocks when the alarm is triggered for sensor, motion and vloss.

#### 4-8.4 SPOT SETUP



**DVR's Main Monitor output signal, do the main screen output or switch SPOT mode output**

Item	Description
SPOT MODE	Channels display in spot for two different modes: Disable:The screen is same the main screen with VGA output, Enable: Spot Mode
Interval (Seconds)	The duration time in seconds for the interval between channels under SPOT mode.
Skip Video Loss Channel	Whether to skip channels without video signal.

## 4-9 UTILITY SETUP



Item	Description
<b>HDD Initialization</b>	Select to enter hard disk initialization menu. <b>Please stop recording before entering this menu.</b> Enter the menu, system will show all the data (model ,volume ) of HDD that installed in DVR. Check the HDD you'd like to initialize then press "Start". HDD initialization is successful when the status shows "Succeed"
<b>USB Initialization</b>	Clean up all data on USB. Enter USB initialization and press YES to clean up all data on your USB. The initialization is done when it's showed "Succeed".
<b>System Recovery</b>	Restore system default values
<b>Reset System Events</b>	Reset all the recording events in DVR.
<b>Copy Setup to USB</b>	Copy configuration to a USB device. There will be a file named 「sdvr_conf.dat」 on your USB.
<b>Download Setup from USB</b>	Download configuration from a USB device into DVR.
<b>Upgrade</b>	Upgrade DVR through USB. Please stop recording and backup setup configuration before upgrading. <b>System will reboot automatically when the upgrade is completed.</b>

**Notice! DO NOT TURN OFF POWER OR UNPLUG USB DEVICE DURING THE UPGRADE as it may cause incomplete firmware upgrade and damage to the DVR.**



## 4-10 DIAGNOSTIC



Item		Description
<b>Version</b>		The current firmware version of DVR
<b>IP</b>		The connected IP address of DVR. If disconnected from network, the screen will display" NETWORK DISCONNECT".
<b>MAC</b>		MAC Address of DVR
<b>HDD Status</b>	<b>No.</b>	HDD number
	<b>Volume</b>	HDD Capacity
	<b>Used Rate</b>	Percentage of space used on HDD.
	<b>Status</b>	Shows HDD status. <b>USING</b> means the HDD is being used for recording now <b>GOOD/BAD</b> means the HDD has a known/unknown format for the DVR. (Note: Please initialize your newly-installed HDD before using it.)
	<b>Format Time</b>	The latest format time of HDD

## CHAPTER 5 BACKUP & SEARCH

### 5-1 BACKUP SETUP

User can backup any segment of recorded data in a specified time frame. To do so, either a CD R/W or storage device, like USB, must be connected to the DVR. The format of backup file is *IRF* file that can be played by both "Ifileplay" and "CMS"

**\*:Use the USB flash backup, the system will automatically copy "Ifileplay" to the USB**



Item	Description
<b>From</b>	The start time of backup file
<b>To</b>	The end time of backup file
<b>Device</b>	Select USB or PC as the backup device
<b>Free Space</b>	The available space in your backup device. (not available for PC backup)
<b>Refresh</b>	Recalculate the available space of backup device. (not available for PC backup)
<b>Required Space</b>	Show the size of the backup file
<b>Calculate</b>	Calculate the size of backup file
<b>Start</b>	Start backup operation. <b>Be sure to calculate the size of backup file BEFORE operating backup.</b>

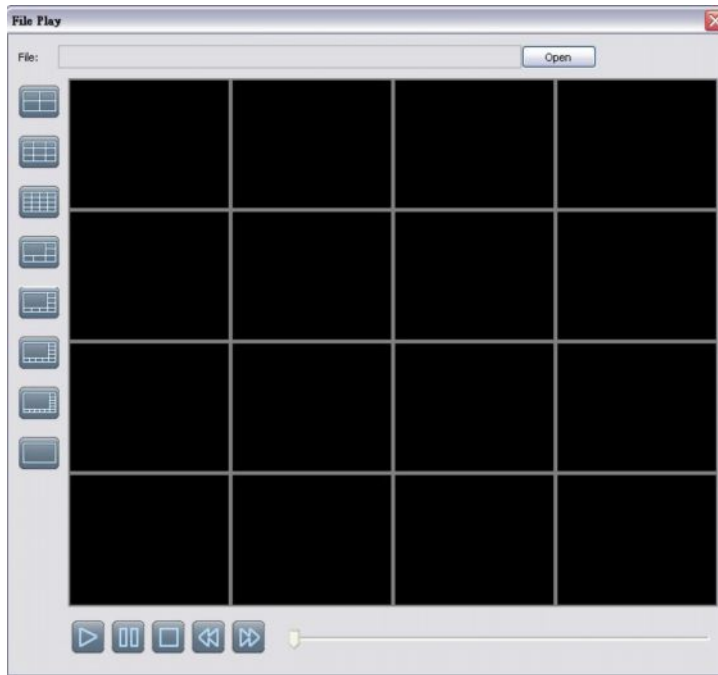
**Note! Do not unplug the USB device or turn off the DVR during the backup process to avoid unrecoverable error.**

## iFileplay Use Method

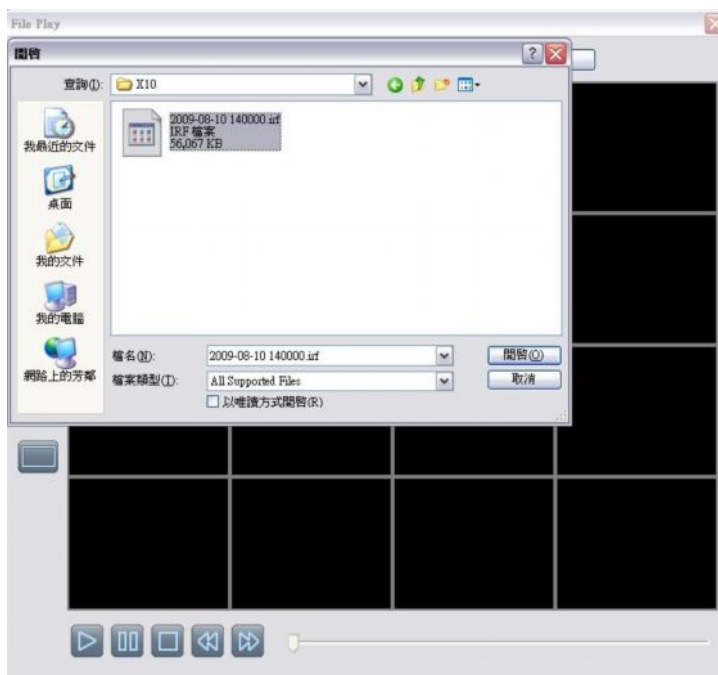
Step 1: install 「iFileplay」software to your PC. You can get「iFileplay」file from the CD with DVR Packing.

**PS: When you using USB to backup file, iFileplay.exe will copy to USB with the backup file automatically.**

Step 2 : Setup 「ifileplaypack.exe」。



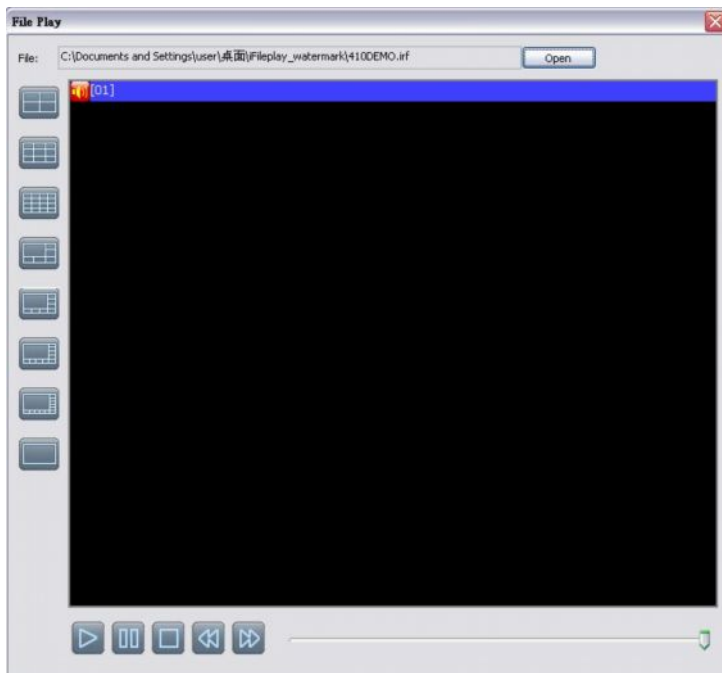
Step 3 : Click 「open」, choose and star a DVR backup file 。



Step 4 : Ifileplay software will play the backup file automatically.



Step 5 : If there is no display on the screen, The backup file is not our DVR recording format. Please check it.




## 5-2 SEARCH SETUP



Item	Description
Event Search	Event search menu
Time Search	Enter time search menu

### 5-2.1 EVENT SEARCH



The DVR automatically records events with type, time and channel information included. If there is recording data for an event, a yellow signal  will be shown on the left side of time information. Rest your cursor under the line and press “enter”, or left click your mouse to playback the recording data.

**P.S. Event Records will still be generated even when hard disk is not installed or the record function is not activated. However, the record can't be viewed after selecting it.**


Item	Description	
<b>Criteria</b>	Setup conditions of event search	
<b>Page</b>	Switch between pages of events	
<b>Date/Time</b>	Date/time when event occurred.	
<b>Event Type</b>	Event type, defined as following	
	<b>MOTION</b>	Motion Detected
	<b>Video Loss</b>	Video Loss
	<b>Remote Login</b>	user log-in over the network
	<b>Remote Logout</b>	user log-out over the network
	<b>Power On</b>	DVR Power on
	<b>HDD Full</b>	HDD Space FULL
	<b>HDD Error</b>	Detect HDD error
<b>Reboot</b>	DVR Reboot	
<b>Info</b>	The channel where event occurs or login user	

### 5-2.1.1 CRITERIA SETUP FOR EVENT SEARCH

The amount of events can be numerous. Therefore, you can facilitate event sorting by setting up "criteria". Setup "start time" and "end time" for event search, then the search result will be limited to this specific period of time. Only checked events and channels will be sorted in event search.



## 5-2.2 TIME SEARCH

TIME SEARCH can search for the specific time of recording data to playback. Press “Enter” or left click on the desired date to playback. Note that dates with recording data are marked with a red square “”. “System will start playing back according to the date you selected. Calendar will be shown by using mouse to click on “year” and “month”.



Click “date” to display recording time of that specific date with time bar. You can change time (hour/minute/second) or click on a specific time of time bar by mouse then press “ok”. DVR will playback the selected recording data.





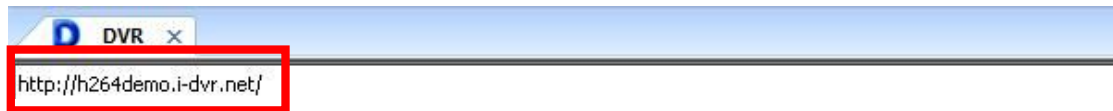
## CHAPTER 6 Remote Software Installation and Setup

### 6-1 AP Software Installation and instruction

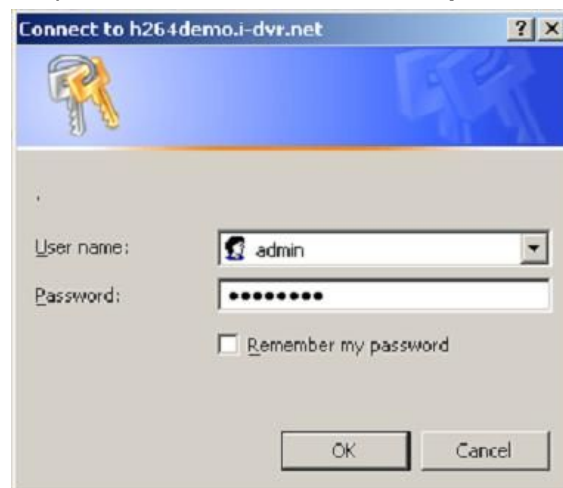
AP software: 「DVR Remote Desktop」 can allow you to remotely access and control the DVR from PC.

**p.s. Operation system currently supports Windows XP SP2 and above and Windows Vista, Windows 7**

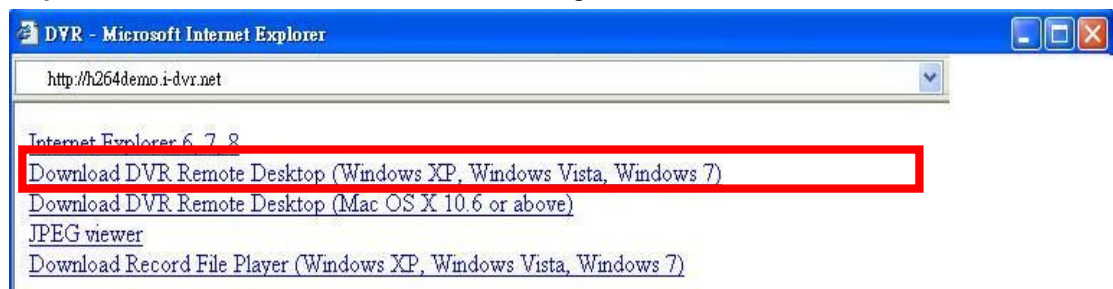
**Step One** : Enter the IP address of DVR in IE browser



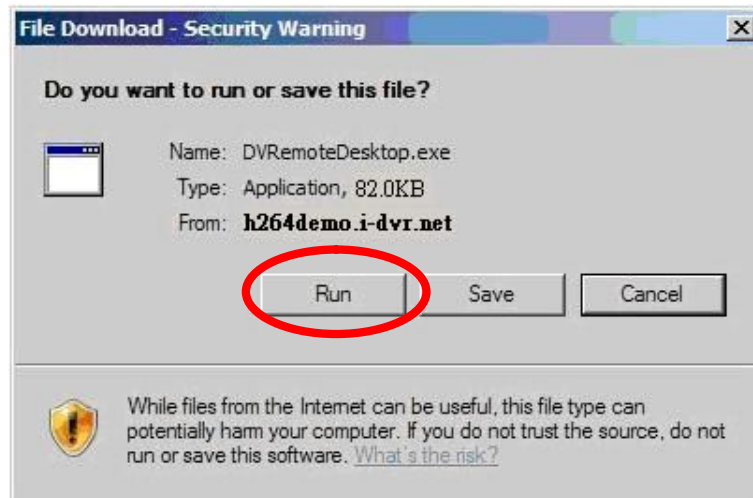
**Step Two**: Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check “**4-5 Account Setup**.”



**Step Three**: Click on the link to start downloading the AP software.



**Step Four:** Run or Save our AP software.



**Step Five:** If you choose to run the software, Start window will be shown up. Please enter information of login DVR: IP, Port, Username and Password, or choose "Play Recorded File" to open backup files in your PC.

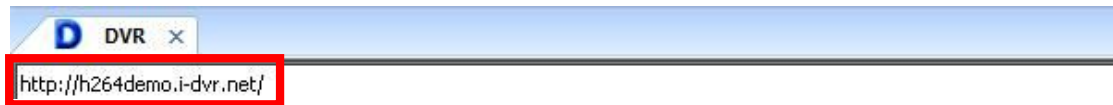


**Step Six:** You've logged into the DVR

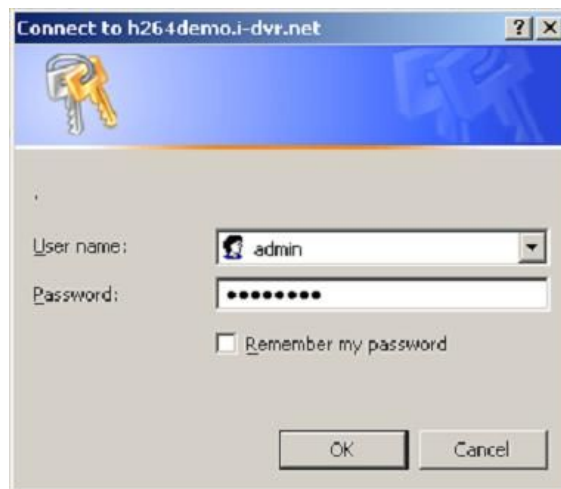


## 6-2 How to do remote monitoring through IE

**Step One :** Enter the IP address of DVR in IE browser. The address appeared in this image is only for demonstration. Actual address is depending on the setup of on-site DVR.



**Step Two:** Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check “**4-5 Account Setup**.” The user name and password appeared in this image is only for demonstration. Actual user name and password depend on the setup of on-site DVR.



**Step Three:** Click on “Internet Explorer 6, 7, and 8” to start downloading the AP software. ( The first option is for IE view, please refer to next chapter for more information)

**p.s. There will be IE connection security issue when clicking this link for the first time. Please refer to index II for Remote Monitoring IE ActiveX Control Installation Instruction.**

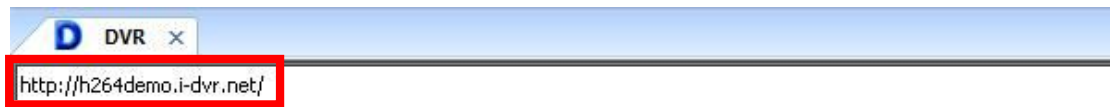


**Step Four:** DVR images appear.



### 6-3 How to do remote monitoring through JPEG VIEWER(Only Monitor Function)

**Step One :** Enter the IP address of DVR in IE browser. The address appeared in this image is only for demonstration. Actual address is depending on the setup of on-site DVR.



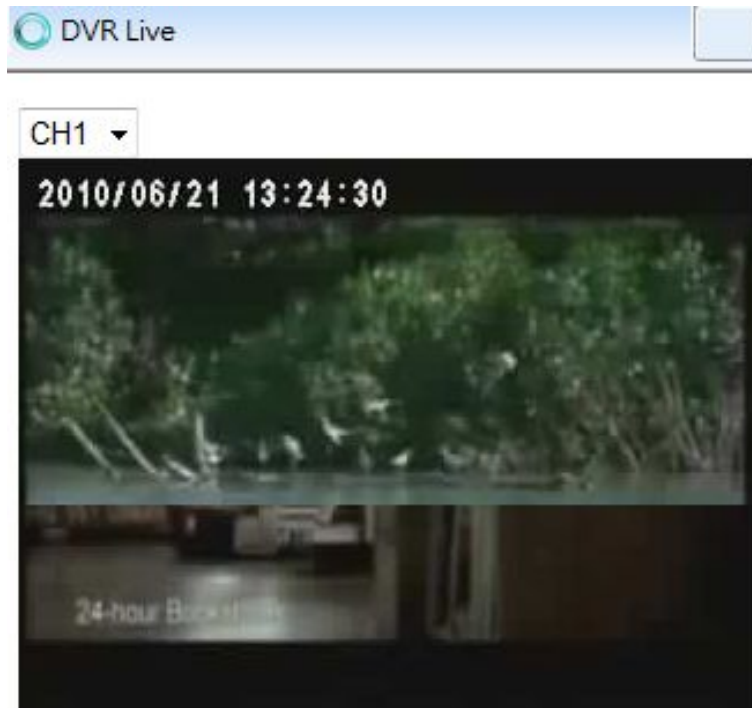
**Step Two:** Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check “4-5 Account Setup.” The user name and password appeared in this image is only for demonstration. Actual user name and password depend on the setup of on-site DVR.



**Step Three:** Click on “Jpeg Viewer”



**Step Four:** DVR images appear.



**PS :** Only for viewer, without any operation function.

## 6-4 AP Software Operation

Open the file “DVRemoteDesktop.exe”; enter the information of DVR “IP address”, “Port” “Username” and “Password” and click “OK”. You should be able to login DVR successfully and start to use the software. The default username and password is 「 admin/ 123456 」

“DVRemoteDesktop.exe” AP software provides some extra functions for remote users. Please check **Table 6-4.1** for minimum system requirements for “DVRemoteDesktop.exe” operation.

**Table 6-4.1** System Requirements for AP software

CPU	Intel Pentium 4 above
OS	Microsoft Windows 7 · Windows Vista · Windows XP SP2 above
RAM	512M above
VGA Card	Needed to support DirectX9.0 (Above) <b>Note 1</b>
Others	DirectX 9.0 above

**Note 1:**

Known VGA card that support DirectX9.0 currently:

**NVIDIA:** Geforce FXseries, Geforce 6series, Geforce 7series, Geforce 8series, Geforce 9series, Geforce 200series, etc.

Or

visit: [http://en.wikipedia.org/wiki/Comparison\\_of\\_Nvidia\\_graphics\\_processing\\_units](http://en.wikipedia.org/wiki/Comparison_of_Nvidia_graphics_processing_units)

**ATI:** Radeon R300series, Radeon R400series, Radeon R500series, Radeon R600series, Radeon R700series, Radeon HD 3xxx IGPseries, Mobility Radeonseries (9500 above), Mobility Radeon Xseries, Mobility Radeon HDseries, or FireGL Vseries etc.

Or visit: [http://en.wikipedia.org/wiki/Comparison\\_of\\_ATI\\_graphics\\_processing\\_units](http://en.wikipedia.org/wiki/Comparison_of_ATI_graphics_processing_units)

**SiS:** SiS 67Xseries, or SiS 77Xseries etc.

Or visit: [http://www.sis.com/support/support\\_compare.htm](http://www.sis.com/support/support_compare.htm)

**Intel:** 91Xseries, 94Xseries, 96Xseries, G3Xseries, or G4Xseries, etc.

Or visit: [http://en.wikipedia.org/wiki/Intel\\_GMA](http://en.wikipedia.org/wiki/Intel_GMA)

## CHAPTER 7 SPECIFICAITONS

<b>1. VIDEO</b>		
Input Level		1.0 Vp-p±10% Composite, 75Ω Balanced
Display Speed	NTSC	120fps
	PAL	100fps
Display Resolution	NTSC	704(H) X 480(V)
	PAL	704(H) X 576(V)
Monitor Output		2Vp-p Composite, 75Ω Balanced
<b>2. RECORDING</b>		
Compression Method		H.264
Recording Speed		Refer to table 7-1
Recording Resolution	NTSC	704 X 480, 704 X 240, 352 X 240
	PAL	704 X 576, 704 X 288, 352 X 288
Quality	Independent for each channel	Below Basic/ Basic/ Normal/ High/ Highest
Schedule		Setup by "minute" as unit
Mode		Manual / Event (Motion, Sensor) / Schedule
Method		By resolution, fps and quality Setup fps and quality separately for normal and event recording
<b>3. SATA DEVICE</b>		
Capacity	Internal Storage	Max: 2 Device (4CH/8CH), 4 Device(16CH)
	External Storage	Max: 1 Device(E-SATA)
Type		SATA / SATA II compatible
External Bay Interface		E-SATA
<b>4. ALARM</b>		
Motion Detection		Available per each camera/ Multi-detection level
<b>5. CONNECTIONS</b>		
Video Input		BNC 16 port (16CH), 8 port (8CH), 4 port (4CH)
Video Output		BNC : 1 port (To switch the main output or SPOT output) VGA : 1 port (Max Resolution:1280X1024) HDMI : 1 port Video output (Max Resolution:1280X1024) & Audio output
Audio Input		RCA 4 port (4CH/8CH), 16 port (16CH)
Audio Output		RCA 2 port
USB 2.0		USB memory stick, USB Touch Monitor
USB 1.1		USB Mouse
Remote		Remote control
External I/O		1 RS-485, 4 Sensor, 1 Relay Output(4CH), 1 RS-485, 8 Sensor, 1 Relay Output(8CH), 1 RS-485, 16 Sensor, 1 Relay Output(16CH)
Ethernet		1 RJ45 connector, 10/100 Mbps
<b>6. ELECTRICAL</b>		
Power Source		DC 12V / 5A (4CH/8CH), DV 12V / 6A (16CH)



7. ENVIRONMENTAL		
Operation Temperature		5°C ~ + 40°C
Humidity		Less than 90%
8. PHYSICAL		
Dimension		430(W) x 293(D) x 55(H) mm
Weight		1.85kg ( without HDD)
9. BACKUP		
BACKUP	USB Stick	Video Data, Audio
	Network	Video Data, Audio
10. SEARCHING & PLAYBACK		
Searching Type		Event/ Time
Playback speed		120 FPS
11. MULTI-REMOTE SURVEILLANCE		
Monitoring Environment		Web / Client Software(CMS)
Max. client		Supporting multi-client (5 clients accessible)
12. OTHERS		
OS		Embedded Linux
Multi Task	Pentaplex	Live · Record · Playback · Network · Backup
Control Device		Front Keys / Remote Control / Virtual Keyboard / Mouse / AP Software
PC Viewer		Direct monitoring of DVR's HDD on PC
Numbers of event list		10000

**Table 7-1**

Recording Speed (Independent setting for each channel)	NTSC	352 x 240	120 FPS(4CH), 240FPS(8CH) , 480FPS(16CH)
		704 x 240	120 FPS(4CH), 240FPS(8CH) , 240FPS(16CH)
		704 x 480	120 FPS(4CH), 120FPS(8CH) , 120FPS(16CH)
	PAL	352 x 288	100 FPS(4CH), 200FPS(8CH) , 400FPS(16CH)
		704 x 288	100 FPS(4CH), 200FPS(8CH) , 200FPS(16CH)
		704 x 576	100 FPS(4CH), 100FPS(8CH) , 100FPS(16CH)
Compression Method		H.264	

## **CHAPTER 8 MOBILE APPLICATION INSTALLATION AND USAGE**

You can remotely monitor all channels of DVR through your mobile device.

The required mobile application is from DVR manufacturer and it supports mobile OS for

1. Windows mobile 5.0 above.
2. Symbian.
3. Google Android
4. Blackberry
5. Apple Iphone

### ***8-1 Mobile Application Installation and Operation for Symbian***

Please refer to shipping the Mobile->Symbian directory CD

### ***8-2 Mobile Application Installation and Operation for Windows Mobile***

Please refer to shipping the Mobile->WindowsMobile directory CD

### ***8-3 Google Android Phone OS application and operation***

Please refer to shipping the Mobile->Gphone directory CD

### ***8-4 Blackberry Operation System Software Installation and Operation***

Please refer to shipping the Mobile->Blackberry directory CD

### ***8-5 iPhone Software installation and operation***

Please refer to shipping the Mobile->Iphone directory CD

## CHAPTER 9 CMS INSTALLATION AND USAGE GUIDE

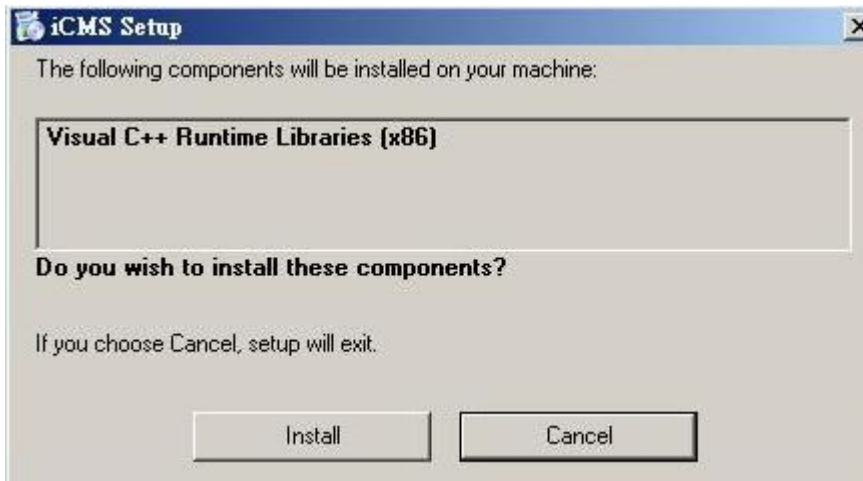
### 9-1 CMS Installation

#### System Requirement:

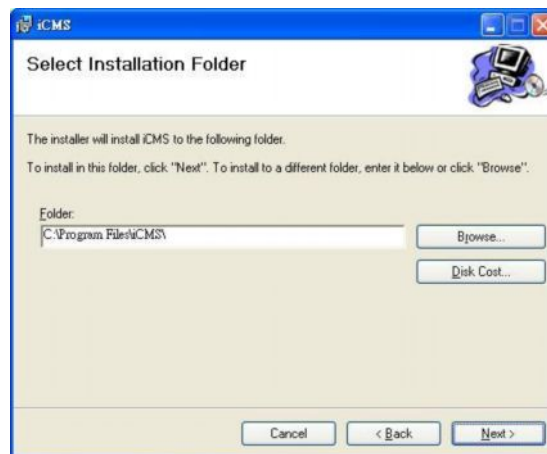
- \* Intel Pentium 4 processor or equivalent.
- \* Microsoft Windows Vista 、 Windows XP 、 Windows 2003 Server.
- \* Besides OS and other required APs, there will be 512MB remaining memory needed or above.
- \* 512MB memory above.(500M requested for group DVR connection and 180M for single DVR)
- \* 20MB HD space. Recording and image capturing require extra space for storage.
- \* VGA Card needs to support DirectX9 and function well while running it. Please refer to p48 Note 1.

#### Installation:

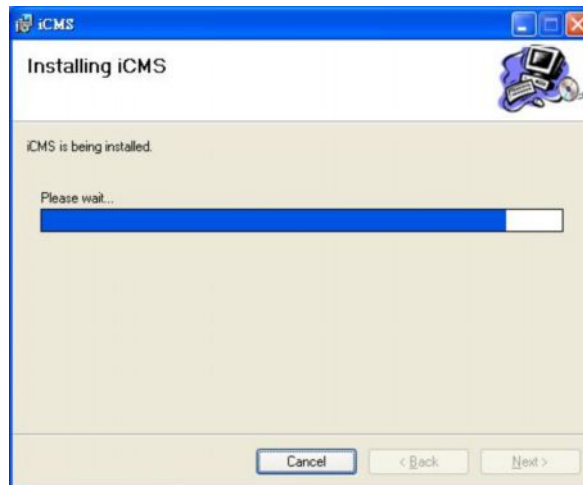
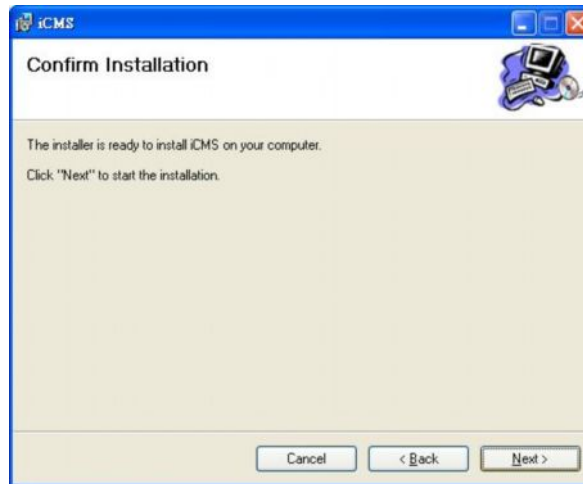
1. Connect to the manufacturer's website and download the CMS software.
2. Decompress and execute "**setup.exe**".
3. If "Visual C++ Runtime Libraries" has not been installed before in the operating PC, the following sign will suggest an installation automatically.



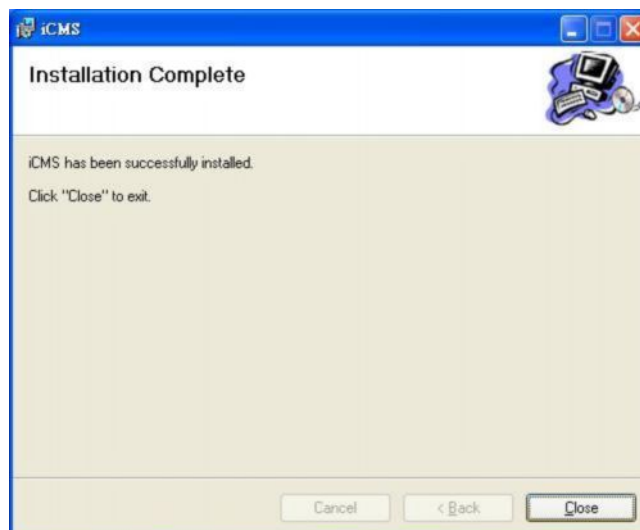
4. Select "**Next**", and then select "**Browse**" to change installation path if needed. To check available space on hard disk, please select "**Disk Cost**" then please select "**Next**" to the next step.



5. "Confirm Installation" window shows. Select 'Next' then the installation starts.

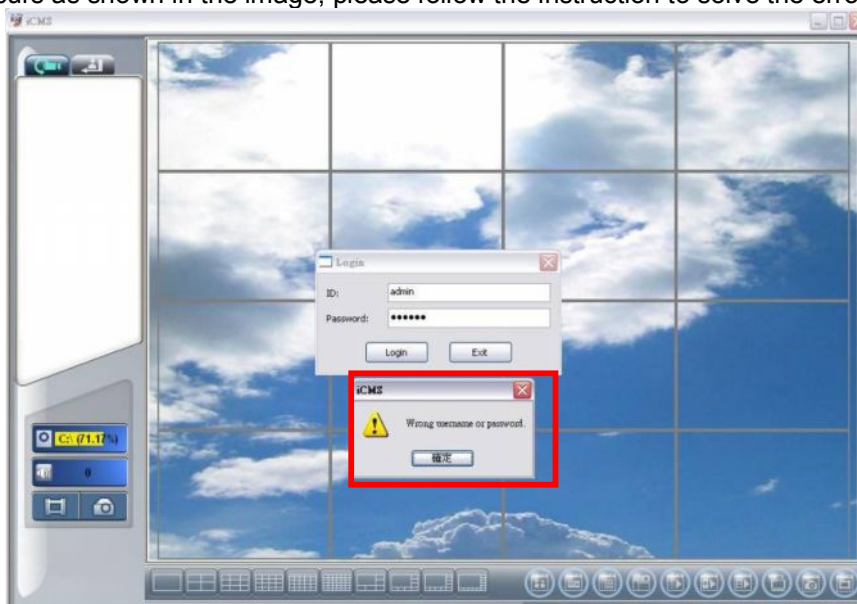


6. Select 'Close' to finish installation when the "Installation Complete" window shows.



## Instruction for Log-in Failure to CMS after Upgrade

Log in to CMS with the default account and password after CMS upgrade. If an error message occurs as shown in the image, please follow the instruction to solve the error.



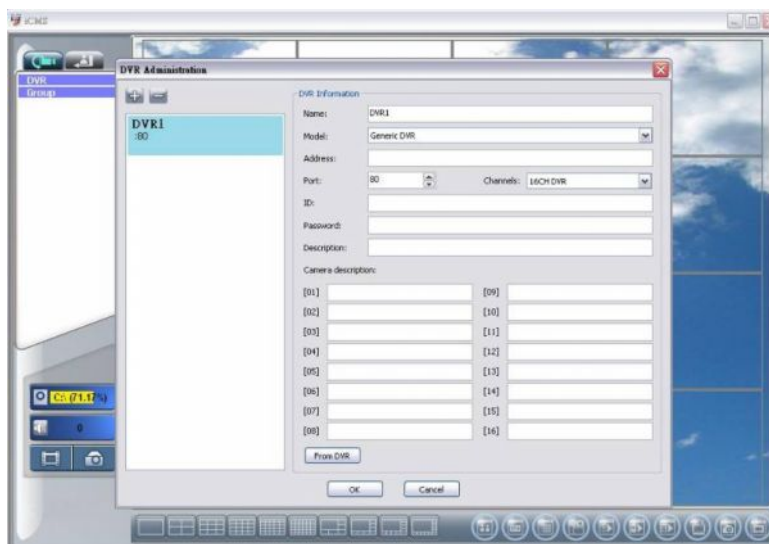
Step 1: Please enter file manager to enter folder, "Windows" and then folder "System32"  
(ex:C:\Windows\System32)



Step 2: Locate file, "iCMS.dat" and delete it.



Step 3: Restart CMS. Log-in successfully.

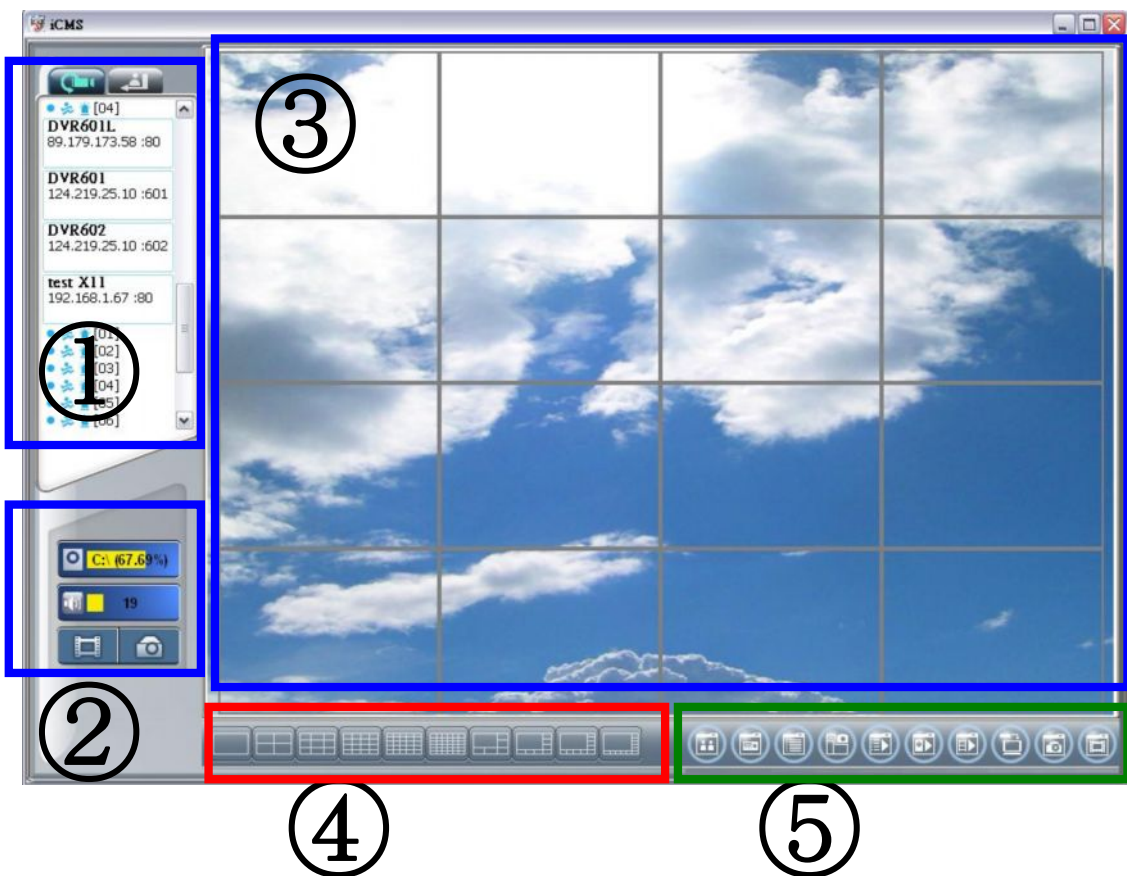


## 9-2 CMS LOGIN AND ENVIRONMENT

To enter CMS, the administrator's user name and password are required. The defaults are 'admin' and '123456'.





After successful login, the following image shows on your screen:



① <b>DVRs, Groups &amp; Events</b>	Information about DVRs, groups and events. See "9-3 Information List" for more detail.
② <b>PC information and control</b>	Information about local PC's hard disk, volume, recording...etc. See "9-4 PC Information and Control" for more detail.
③ <b>Main Display</b>	Live image display area. See "9-5 Main Display" for detail.
④ <b>Display Modes</b>	Several choices of display modes supported by CMS.
⑤ <b>Operation Bar</b>	A set of 10 operations are provided by CMS. See "9-6 Operation Bar" for detail.

### 9-3 DVRs, Groups & Events

Icon	Description
	View list of logged in DVR / Group.
	View Logs: list all the event information of DVR

### 9-3.1 View DVR / Group List




Single left click on 'DVR' or 'Group' will expand/collapse the entire DVRs and groups list.

On the DVR list, **double left click on a connected DVR will show its image in main display.** See "9-6.2 DVR Administration" for further information.

On the Group list, **double left click on a group will show live image from the channels of the group in the main display.** See "9-6.3 for Group Administration" for further information.



Left-clicking on a connected DVR will expand/collapse status of its all channels as below:

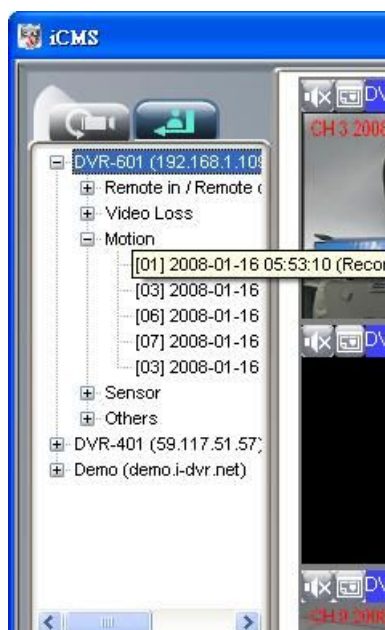
Icon	Description
	Video Loss
	Motion Detected
	Sensor Triggered



### 9-3.2 View Event Logs



Under this page, all the events of a DVR can be expanded/collapsed in the order of Remote in/Remote out, Video Loss, Motion, Sensor, Others (Power Reset, Key Lock, Key Unlock, HD Full).



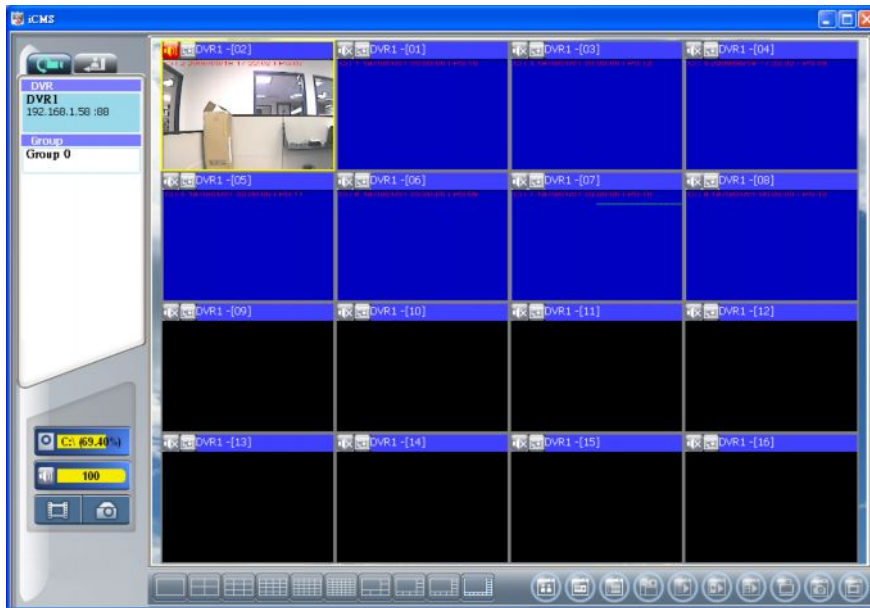
#### 9-4 Local PC Information and Control

Located at the left lower corner of the screen, please see the chart below:

Icon	Function	Description
	<b>HDD info</b>	Shows the ratio of available space / HDD capacity of C:\ drive (where CMS is installed).
	<b>Recording Directory</b>	Setting Recording Directory. (Default is C:\Program files\iCMS)
	<b>Recording Cycle</b>	Set the capacity size of the Recording space. (minimum is 10MB)
	<b>Volume</b>	PC volume or playback volume control bar.
	<b>Recording</b>	Record live image to local PC storage. To view locally stored data, use "Record" under the operation bar. Also see "9-6.6 recording data" for detail.
	<b>Snapshot</b>	Take snapshot to save in local PC storage. To view all the snapshots you've taken, please go to "Snapshot" under the operation bar. See "9-6.5 Snapshot data" for detail.



#### 9-5 Main Display

The main display area is where the live image of DVR is shown. You can drag to change the location of screen for each channel and turn on/off audio signal with mouse-click.

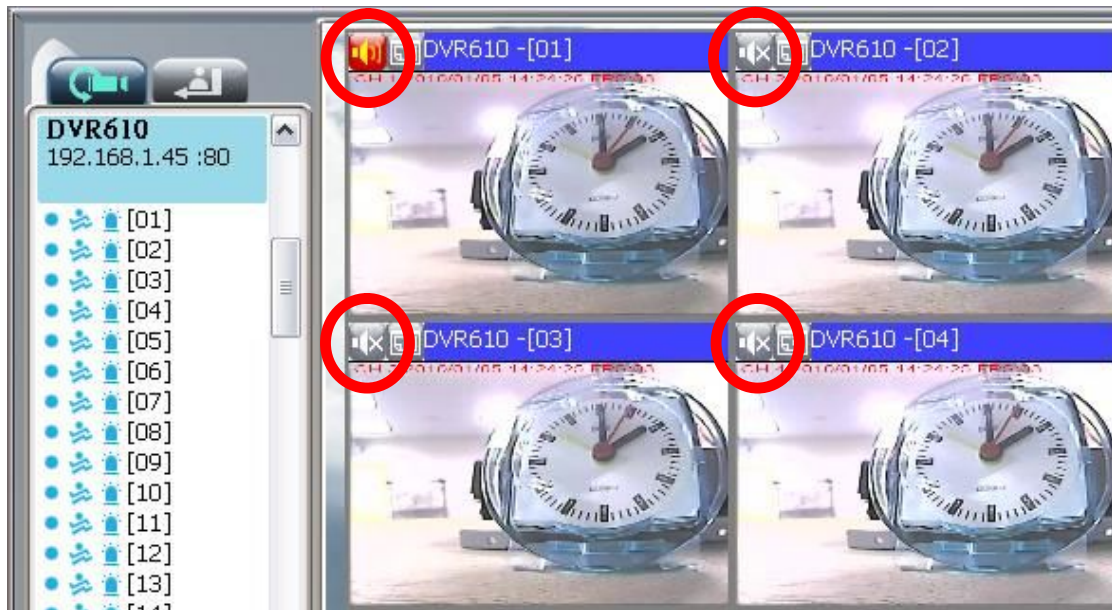


### 9-5.1 Audio Control


In live mode, you can turn on/off the audio signal of Ch1~Ch4:

- 「」 Audio signal is On
- 「」 Audio signal is Off

Turn on/off by clicking on the graphical icon, please note there can allow only one channel's audio signal to be on at one time.



### 9-5.2 eMAP Display

In Live mode, pressing  will bring the e-MAP drag-down menu. If the channel has been set up to use e-MAP, the menu will show all the e-MAP titles that have been entitled to this channel; otherwise, "No eMaps" will be shown. Please check "**9-6.4 eMAP administration**" for setup information.



### 9-5.3 PTZ Control

In the main display, right click on the channel will bring up PTZ control panel as below.



Icon	Description
8 direction key	Rotate the PTZ
	ZOOM+ : Zoom in
	ZOOM : Zoom out
	Setup the PTZ spot as pre-set N.
	FOCUS+ : Focus in
	FOCUS- : Focus out
	Move to pre-set N.
Set PTZ Preset	Setup 16 pre-set N.
Goto PTZ Preset	Move to specific pre-set N.
	Activate auto pre-set tour*
PTZ Sensitivity	Setup PTZ sensitivity*
	Setup the “start” and “end” of liner scan.*
	Activate the liner scan cruise.*
B	Adjust the Brightness (Down is +)
C	Adjust the Contrast (Down is +)
S	Adjust the Sharpness (Down is +)











\*PTZ communication protocols from different brands aren't compatible 100% sometimes. Therefore, some of these functions may be unavailable.

## 9-6 Operation Bar

10 Operations to be listed as below:





**Table 9-6.1** description of 10 operations:

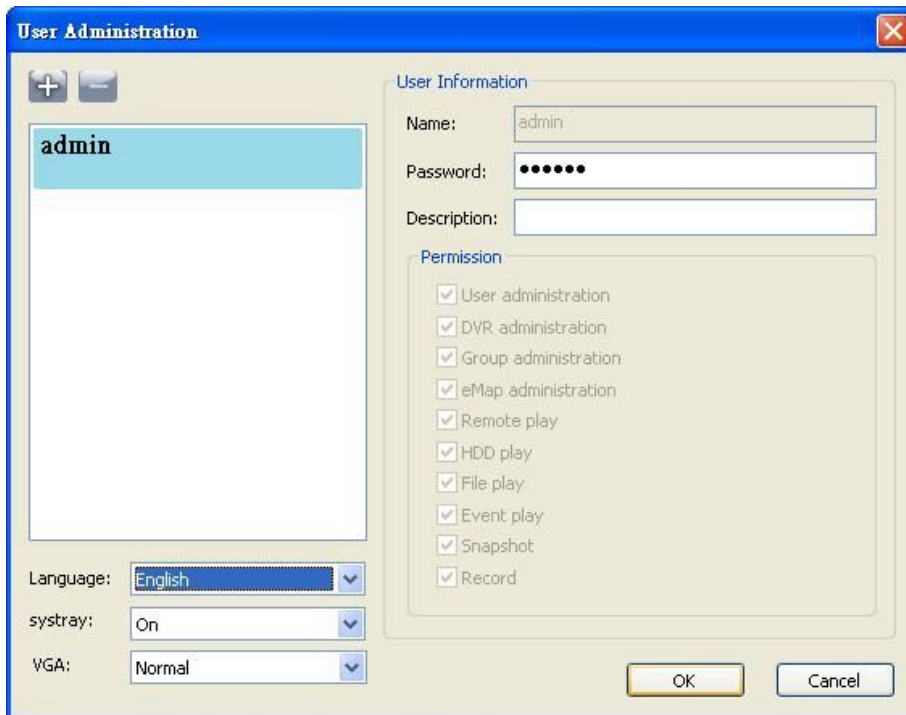
Icon	Description
	User Administration. Please see "9-6.1 User administration"
	DVR Administration. Please see "9-6.2 DVR Administration"
	Group Administration. Please see "9-6.3 Group Administration"
	eMap Administration. Please see "9-6.4 eMap Administration".
	Remote Playback. Please see "9-6.5 Remote Play".
	HDD Playback. Please see "9-6.6 HDD Play"
	File Playback. Please see "9-6.7 File Play"
	Event Playback. Please see "9-6.8 Event Play"
	Snapshot Data. Please see "9-6.9 Snapshot"
	Recording Data. Please see "9-6.10 Recording"

### 9-6.1 User administration

Before the CMS can be used on a PC, user accounts should be added with proper authority. Each user should also be assigned a password and optionally a description. If a user does not have certain authority assigned, he/she will not be able to operate the corresponding function on the Operation Bar. The default is none of the authority is assigned. The administrator should assign proper authority to each user. These user accounts can be deleted or edited later on.

Select "OK" to save the setup.

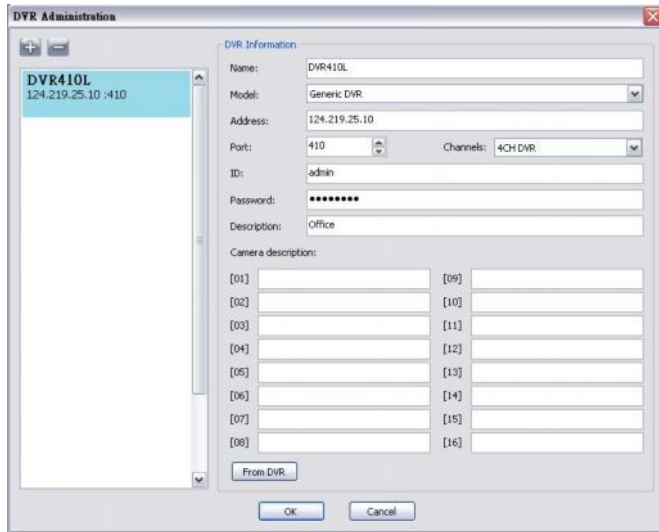
Icon	Description
	Add a user account. The default authority is with none permission.
	Delete a user account.
Language	Switch display language
systray	If the turn on this feature, when the program reduced, it will be based in the system tray icon. (This feature is switched on / off, the need to re-open the CMS until after the program in force)
VGA turbo	Increase the VGA efficiency





### 9-6.2 DVR Administration

DVR connections can be added to or deleted from the CMS and their information can be edited. DVR's channel names can be entered here or downloaded from the DVR by pressing 'From DVR'. Select "OK" to save the information.



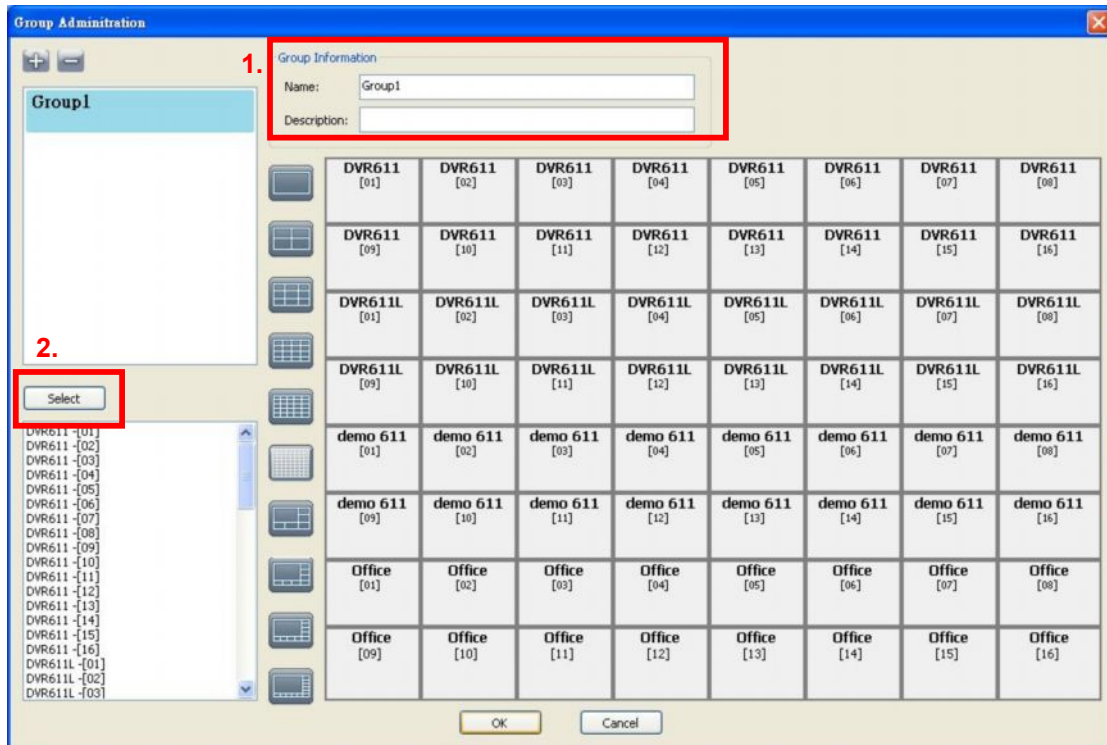
- Name:** DVR Name(Unrepeatable)
- Model:** DVR Model
- Generic:** For General Models
- Generic MainStream:** For DualStream Model
- DUAL SDVR:** For MPEG4 2U Models
- Address:** DVR IP Address
- Port:** DVR Network Port
- Channel:** DVR Camera Number
- ID:** DVR Login Account
- Password:** DVR Login Password
- Description:** Other Description
- Camera Description:** Carera Description
- From DVR:** Load Camera name from DVR

### 9-6.3 Group Administration

A 'Group' means a set of video channels from one or many DVRs, which means, user can organize channels from different DVRs to be set in a group. This function allows you to monitor and manager channels from multiple DVRs easily and flexible.

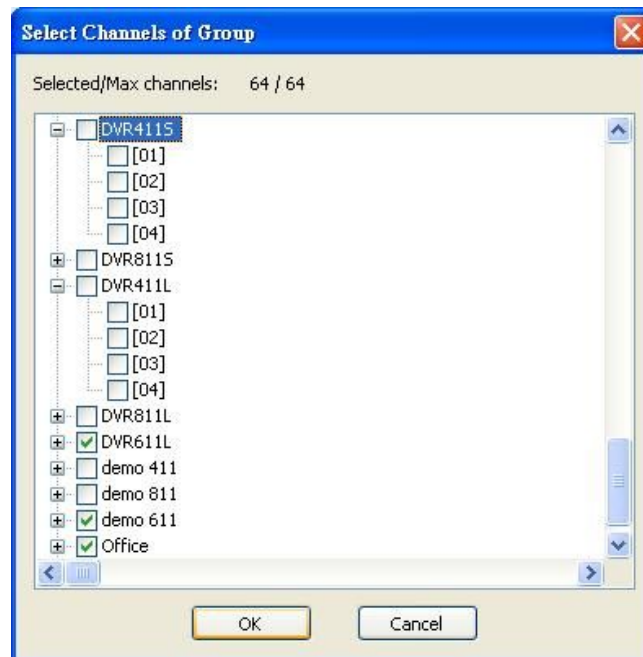
Steps:

1. Add a new group and set its name and description.
2. Click 'Select' which will bring up a new window.

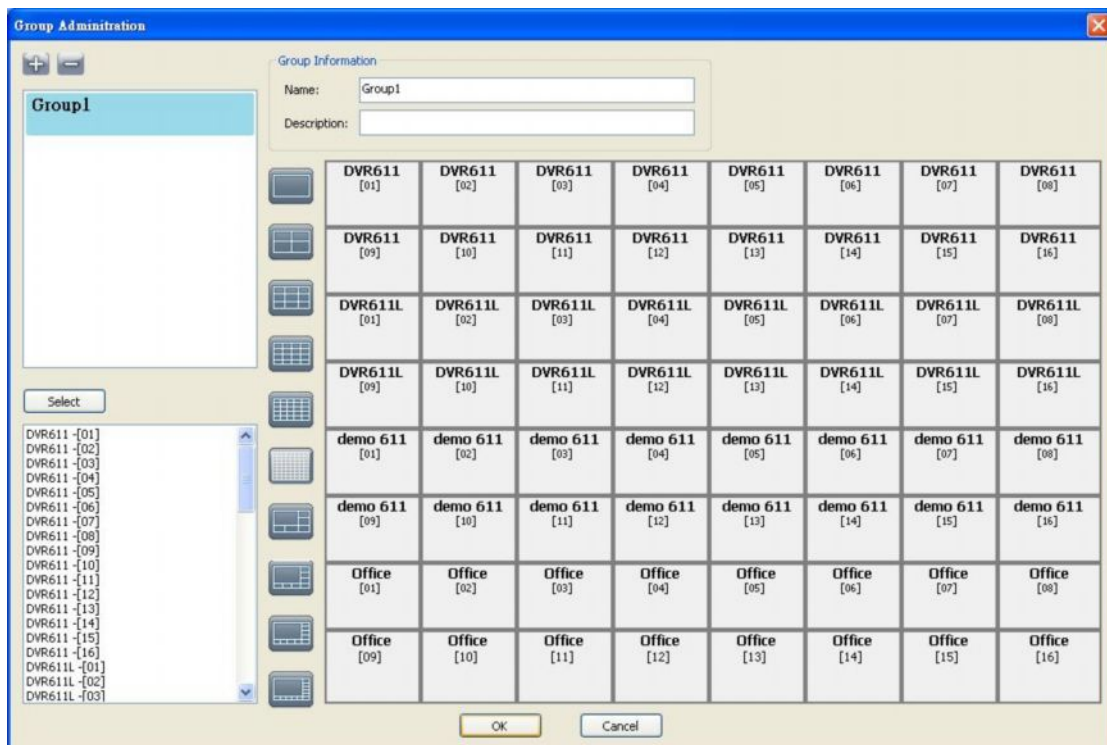




3. Check the specific channels that you'd like them to be included in the group. To include all channels of a DVR, just check the DVR.(1 Group up to select 64 camera)




4. Click "OK" to return to the previous window.
5. Select a display mode.
6. Drag a channel from the lower left panel into the main display to a preferred location. Or, change the channel location in the main display by mouse dragging.
7. You can 'Select' again to add other channels, but the un-saved channel locations will be lost.
8. Click "OK" to save the setup.

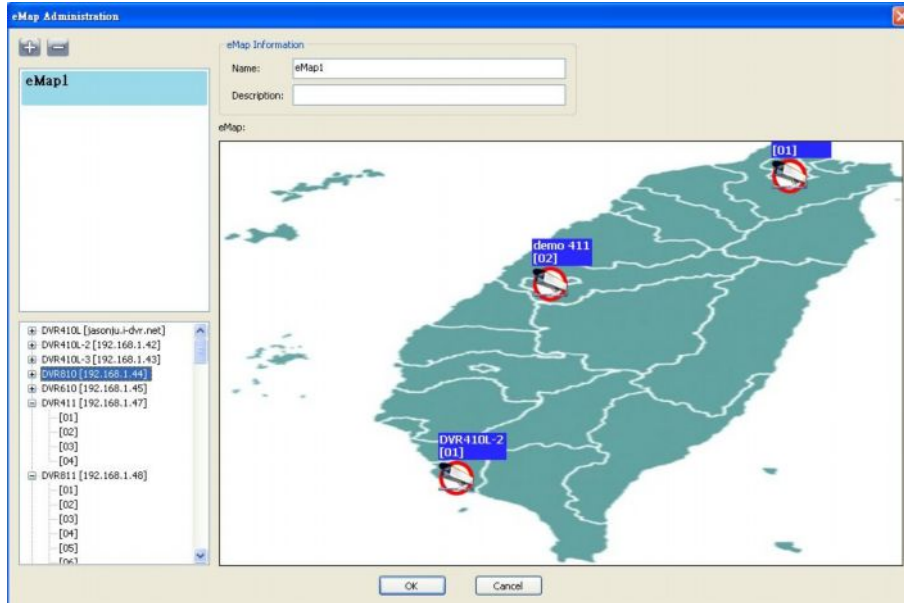


## 9-6.4 eMap Administration

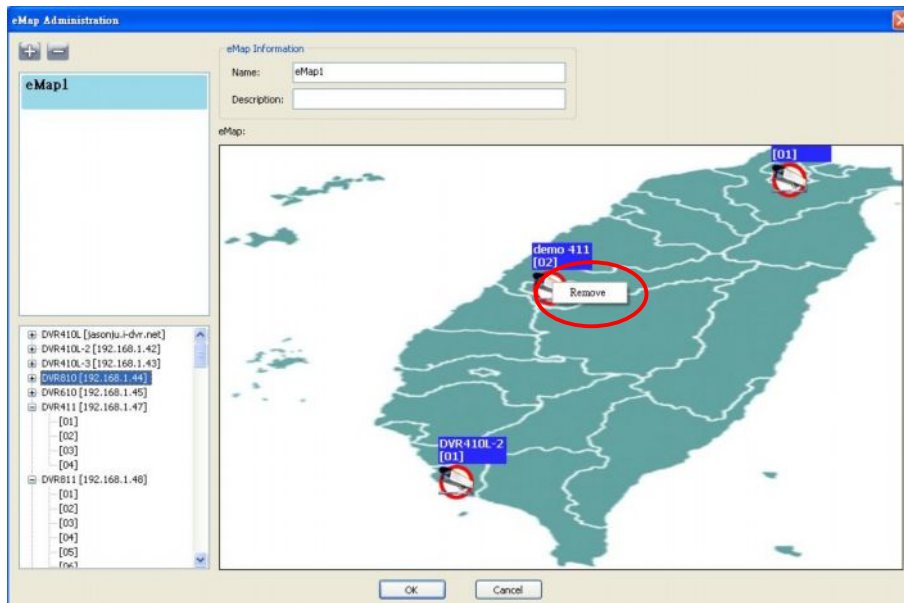
If geographical locations are relevant, or if it is desired to use a picture as the background, eMap can be used for the purpose. With eMap, the background picture can be picked by the user and channels from multiple DVRs can be placed and dragged around on the picture.

### Steps to follow:

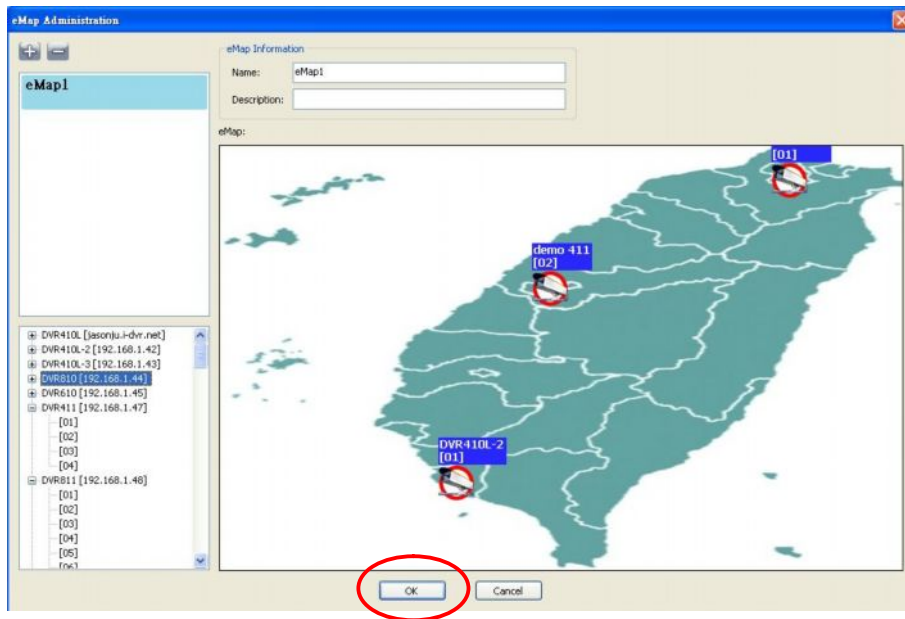
1. Click  and a path for the picture will be prompted.
2. Select a picture, click OK and the picture will show in the right panel.
3. Drag channels in the left lower corner onto the picture to any position.



4. To delete a channel already on the picture, right click the channel and click 'Remove'.

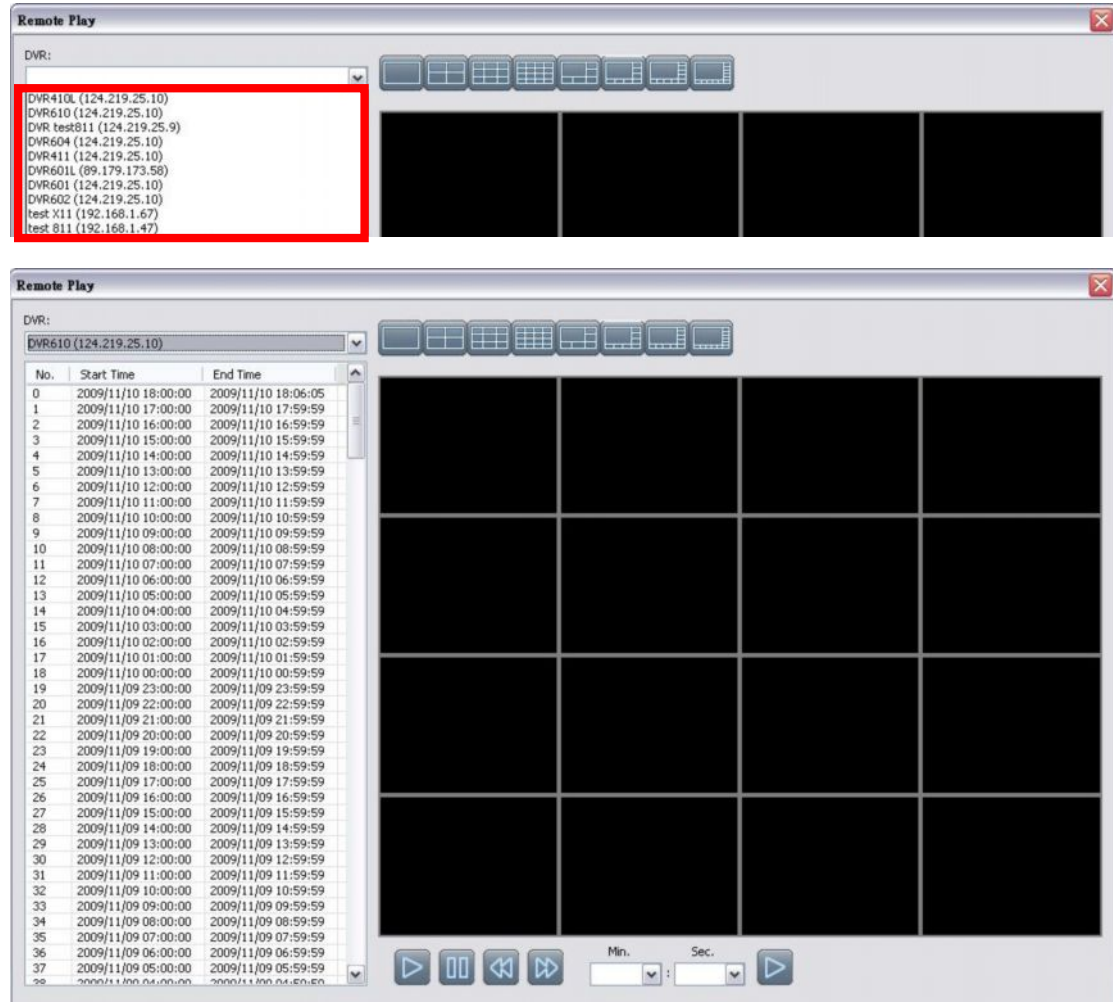








5. Click OK to save.



### 9-6.5 Remote Play

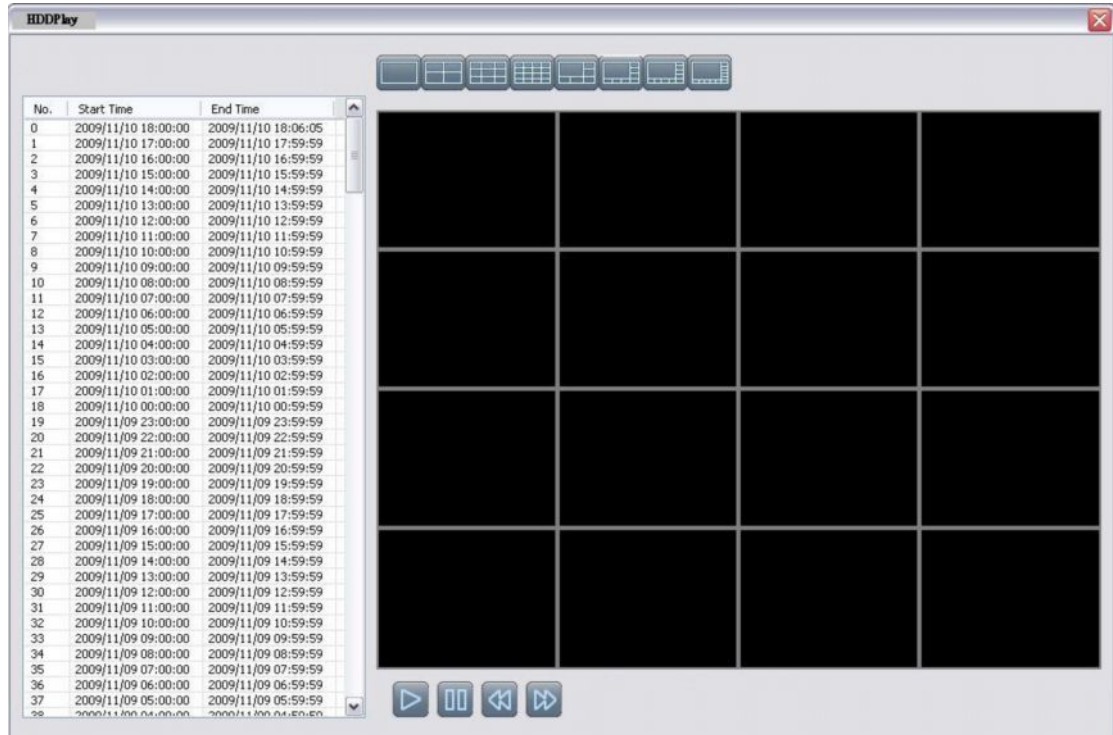
Video images recorded on a DVR can be displayed on a remote CMS. With Remote Play function, select a DVR and a display mode on top of the screen. After the recorded segments are listed below, double click on one to show its image on the right.







Icon	Description
	Start playing.
	Pause.
	Fast forward.
	Fast rewind.
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Min.</div> <input style="width: 40px; height: 20px;" type="text"/> <div style="margin: 0 5px;">:</div> <div style="margin-right: 10px;">Sec.</div> <input style="width: 40px; height: 20px;" type="text"/> <div style="margin-left: 10px;"></div> </div>	Select the clip you want to watch the number of minutes and seconds, Press the right button  is set to start playing

### 9-6.6 HDD Playback

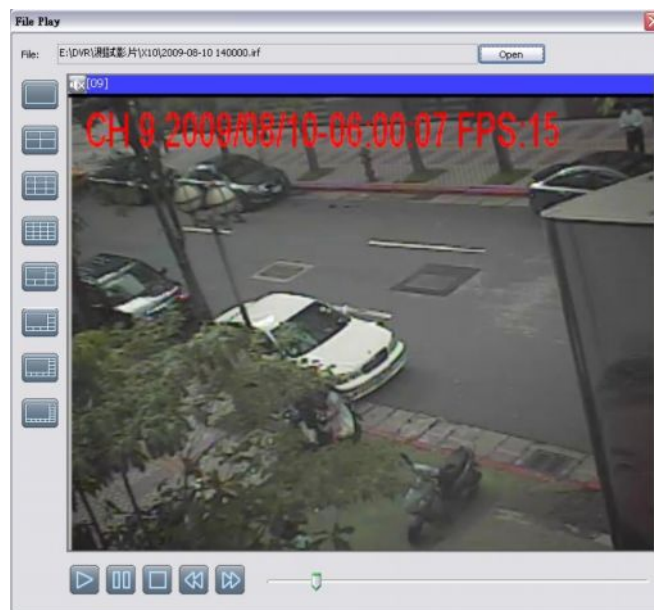
You can directly play the recording data in the HDD that's uninstalled from DVR by CMS. See the picture below, the left part of screen is recording data in list that's separated by hour and the right part is main display. You can change the display modes and play files fast forward or rewind.








Icon	Description
	Start playing.
	Pause.
	Fast forward.
	Fast rewind.

## 9-6.7 File Playback

You can play the recorded .irf files by “File Play” in CMS. It allows you to change the display mode, forward or rewind the file and drag the time bar.



Icon	Description
	Start playing.
	Pause.
	Stop playback.
	Fast forward.
	Fast rewind.



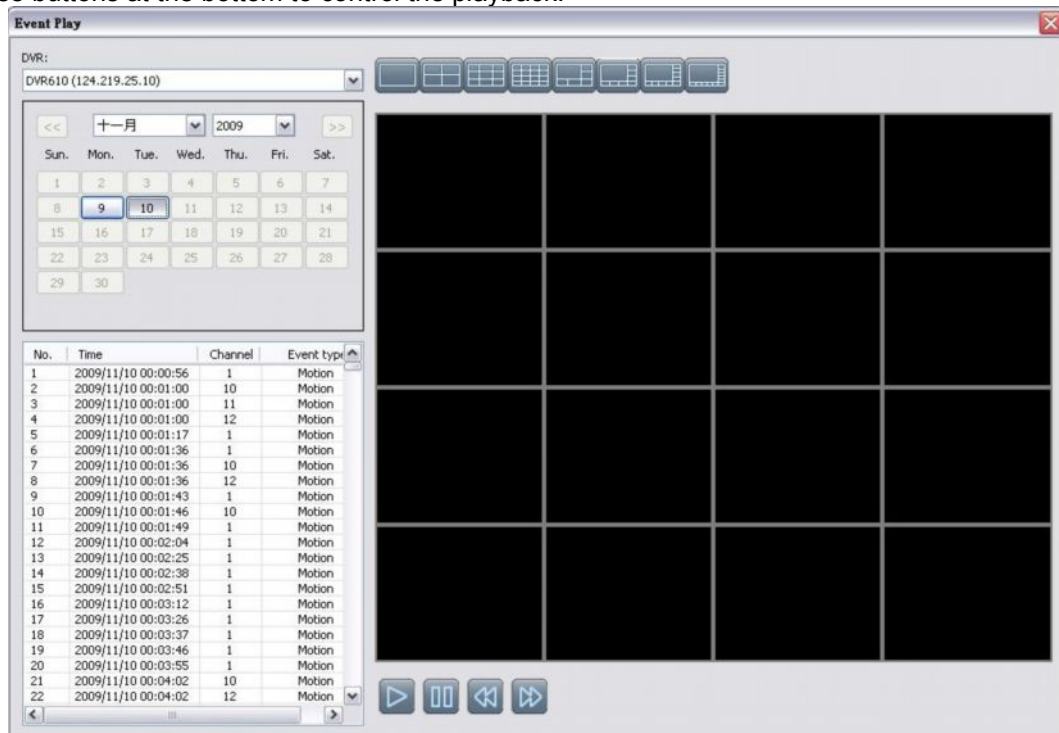
## 9-6.8 Event Playback

Event recordings on the DVR can be played back in CMS.

Steps to follow:

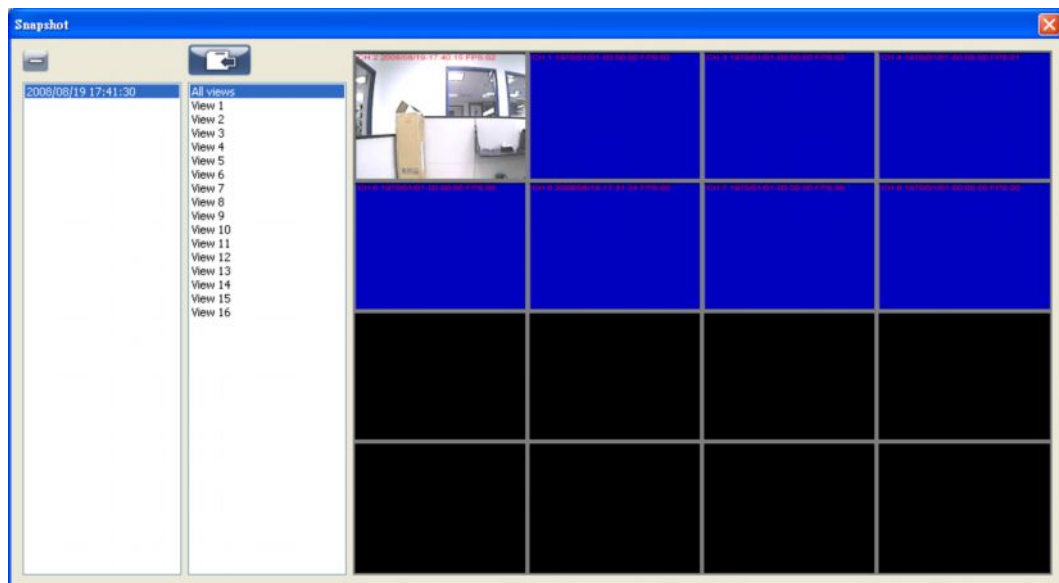
1. Select a DVR and a display mode.
2. Select a date.
3. Double click an event and play back the images on the right.

Use buttons at the bottom to control the playback.



## 9-6.9 Snapshot Data

It can display all the snapshots you've taken in line in "Snapshot Data". You can review, delete or save as other files here.



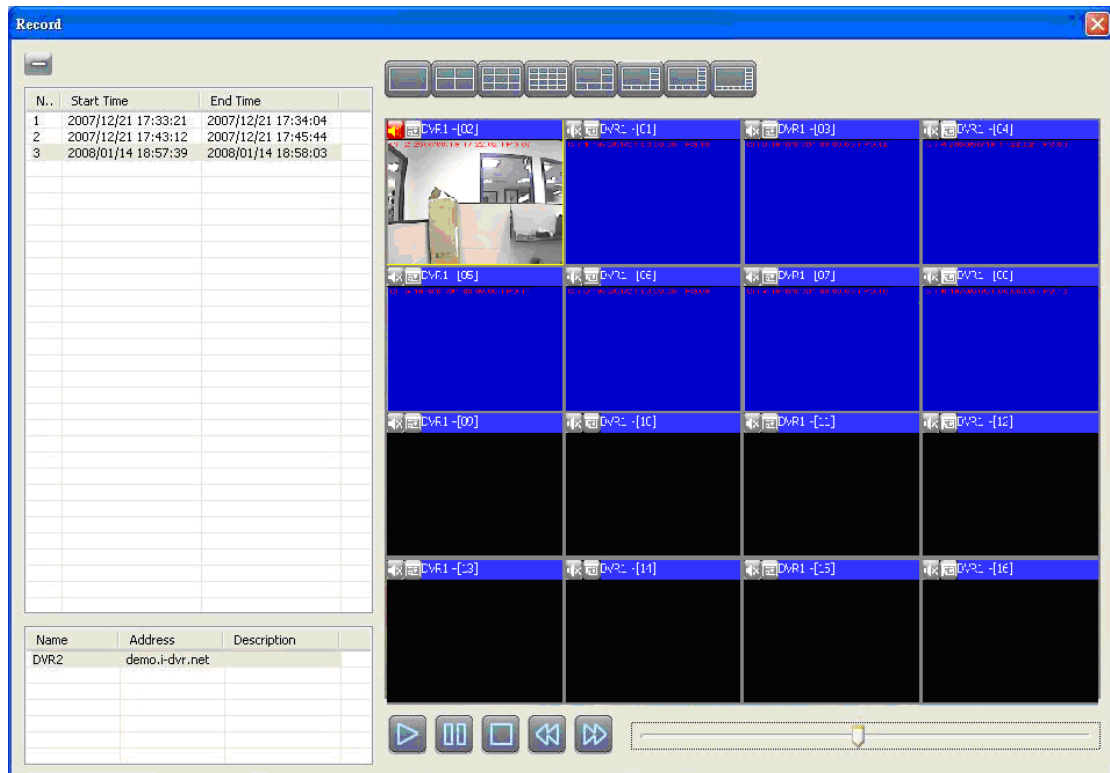
\*Capture images of the date and time will follow the PC-time display






### 9-6.10 Recording Data

It can play all the recording files you've recorded in line in "Recording Data". You can play or delete them here.

Steps to follow:

1. Choose the recording time at upper left corner, it will be played on the main display.
2. You can choose the display mode.
3. Time bar will be shown at right lower corner, please drag the time bar to specify the recording time you'd like to play.



Icon	Description
	Start playing.
	Pause.
	Stop playback.
	Fast forward.
	Fast rewind.



## APPENDIX I I-DVR.NET REGISTRATION

### DDNS Registration on I-DVR.NET

In the package of each DVR, you will find a sticker shows account information including username and password that allows users to login I-DVR.NET for registration.

To register DDNS on I-DVR.NET, please follow the steps as shown.

**Step 1.** Please open IE browser and then enter “ <http://i-DVR.NET/logon.asp> ” in IE browser bar. Next, “Control Panel Logo” dialog will appear. Enter the username and password provided by the sticker and then press, “Logon.”



**Step 2.** After login successfully, enter name at “host” in “Add New Record” dialog. For example, “idviewddns” is the host name, and then the address will be “idviewddns.idvr.net.” Select “Standard” type and enter an IP address of the DVR. Input known IP address if any, or press the “Add New” button if none.

Please enter any name by your choice at Column, “host.domain”  
For example, “hostname”  
Therefore, IE address will be “hostname.i-dvr.net”

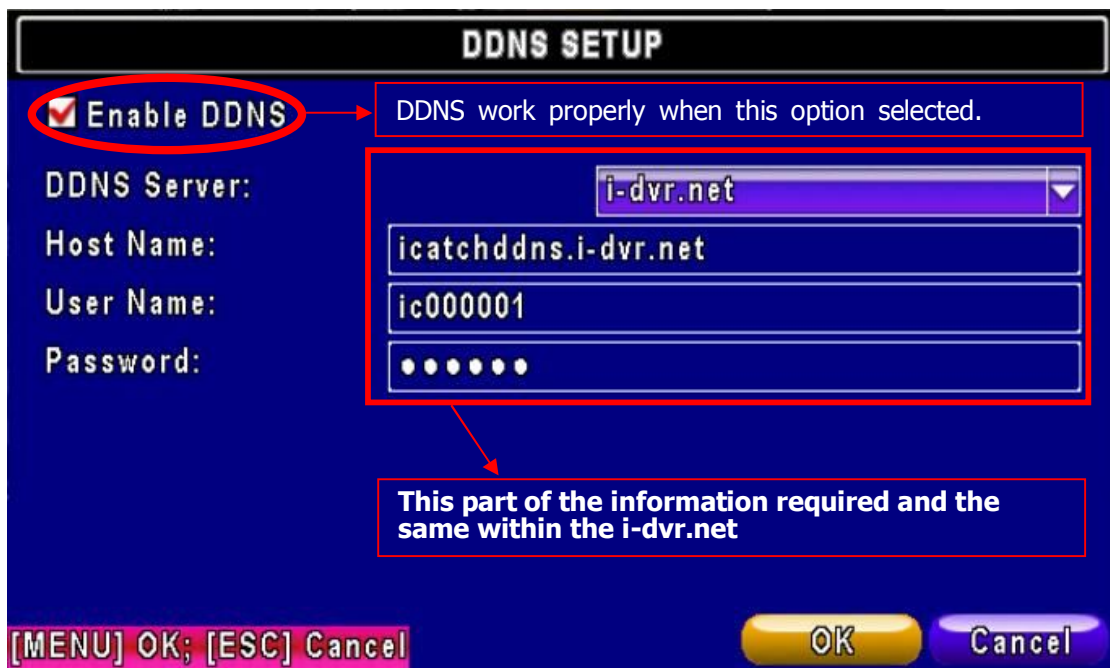
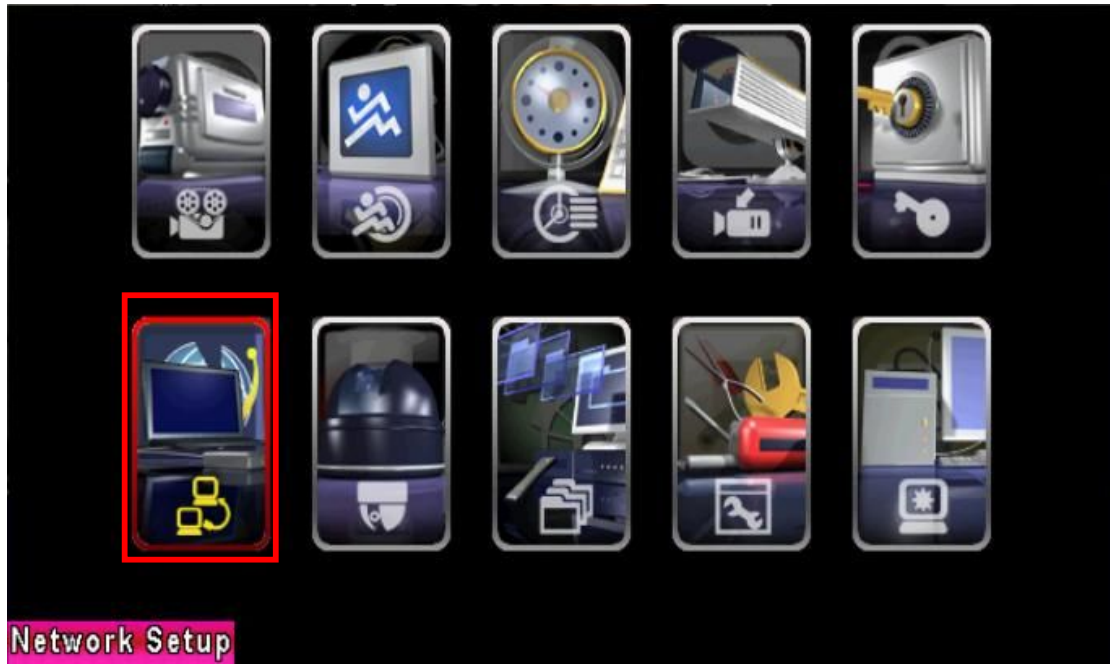
System will automatically show the current computer IP.  
If the DVR IP is known, you can type it in the column.  
If not, you can press “insert” button.

**Step 3.** The “Host Manager” dialog will show “insert succeed” when user setup successfully. The “host.domain” column will show up the setup just entered. Next, enter the DVR the same time setting the DDNS client machine information. If DDNS set up at DVR side successfully, the website will update the IP information in one minute. The IP column will be renewed to the corresponding IP address by pressing “F5: refresh” button.

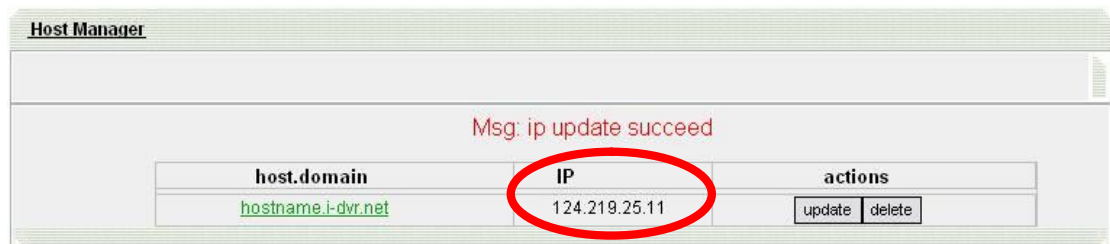
“host.domain” is named by your choice.  
“idviewddns.idvr.net” is what the main server generates

If DVR IP has any changes, there are updates Here at the same time. Press, “F5: Refresh”  
And then IP column will update automatically to it’s real IP Address.

**Step 4.** Enter DVR → Main Menu → Network Setup → DDNS. Activate DDNS functions and input related information.



**Step 5.** Back to the i-dvr.net, on this page by pressing "F5: Refresh", IP will be automatically updated into the DVR of the real IP location.

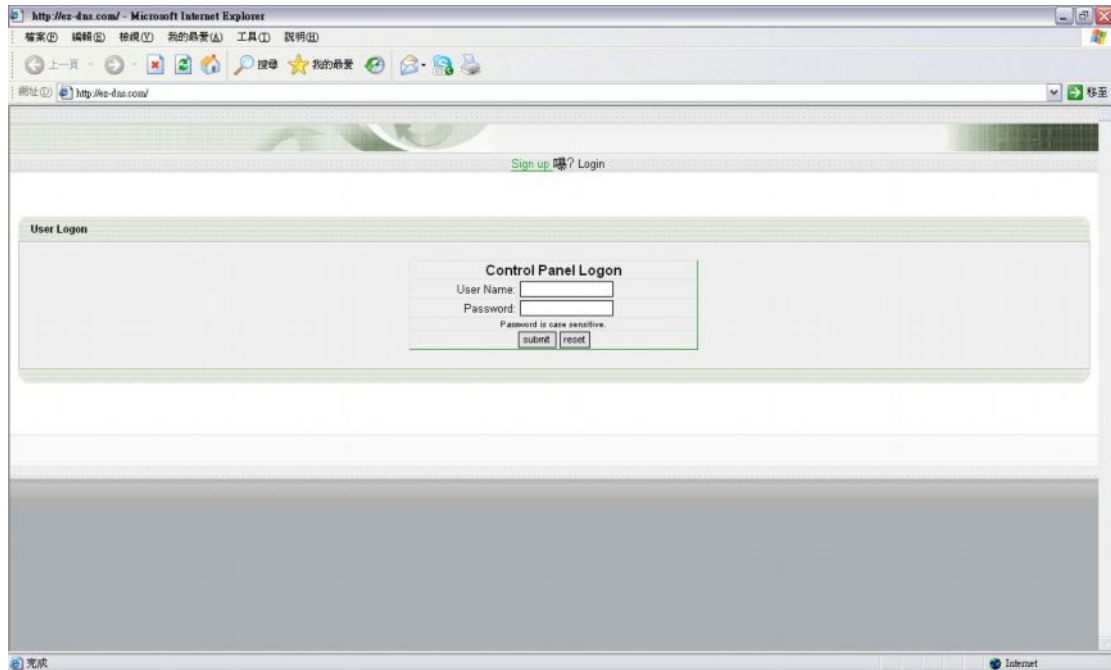


## APPENDIX II ez-dns REGISTRATION

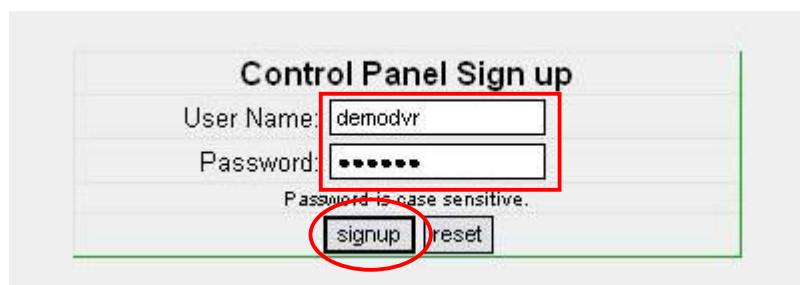
### DDNS Registration on ez-dns.com

In addition to I-DVR.NET the Company, the other has a ez-dns.com server may be used.. To register DDNS on ez-dns.com, please follow the steps as shown.

**Step 1.** Please open IE browser and then enter “ <http://ez-dns.com> ” in IE browser bar.  
First time, please click on the top of the screen of "Sing up" (red box )



**Step 2.** To input a user name and password, after clicking “singup”.  
Later, log in to use ez-dns.com that this group account password



**Step 3.** The “host.domain” column will show up the setup just entered.

Next, enter the DVR the same time setting the DDNS client machine information  
 If DDNS set up at DVR side successfully, the website will update the IP information in 10 minute. The IP column will be renewed to the corresponding IP address by pressing “F5: refresh” button.

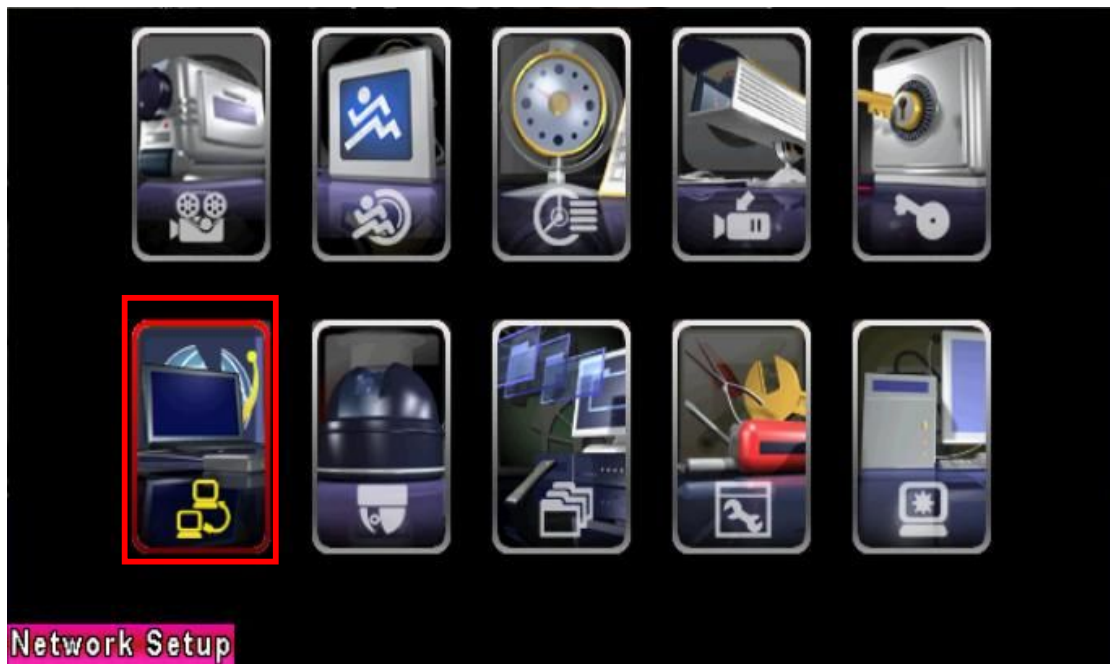
Sign up \* Host \* Logout

host.domain	IP	actions
demodvr.ez-dns.com	202.132.159.80 <input type="text" value="124.219.26.209"/> (now ip)	<input type="button" value="update"/>

“host.domain” is named by your choice.  
 “demodvr.ez-dns.com” is what the main server generates

The system will automatically display the current user's computer IP,  
 If the DVR's IP location is known can be input field and click update,  
 If DVR IP has any changes, there are updates Here at the same time. Press, “F5: Refresh”  
 And then IP column will update automatically to it's real IP Address.

**Step 4.** Enter DVR → Main Menu → Network Setup → DDNS. Activate DDNS functions and input related information.



### DDNS SETUP

**Enable DDNS** → DDNS work properly when this option selected.

DDNS Server: ez-dns

Host Name: demodvr.ez-dns.com

User Name: demodvr

Password: ●●●●●●

This part of the information required and the same within the ez-dns.com

[MENU] OK; [ESC] Cancel      **OK**      **Cancel**

**Step 5.** Back to the ez-dns.com, on this page by pressing "F5: Refresh", IP will be automatically updated into the DVR of the real IP location.

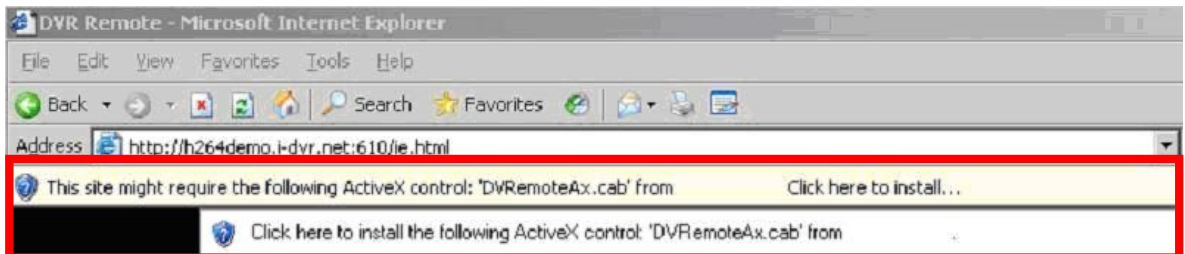
[Sign up](#) \* [Host](#) \* [Logout](#)

host.domain	IP	actions
demodvr.ez-dns.com	<div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">124.219.26.209</div> <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">124.219.26.209</div> (now ip)	<input type="button" value="update"/>

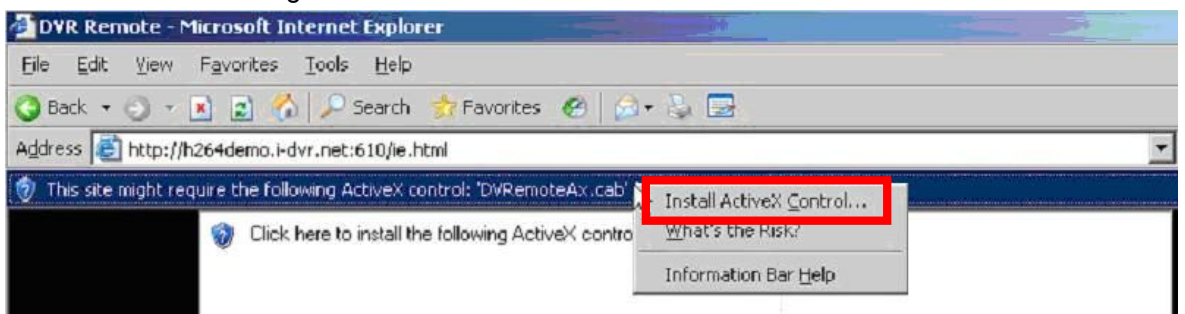
## APPENDIX III Remote Monitoring IE ActiveX Control Installation Instruction

When using IE for remote monitoring for the first time, IE ActiveX Control is needed to be downloaded.

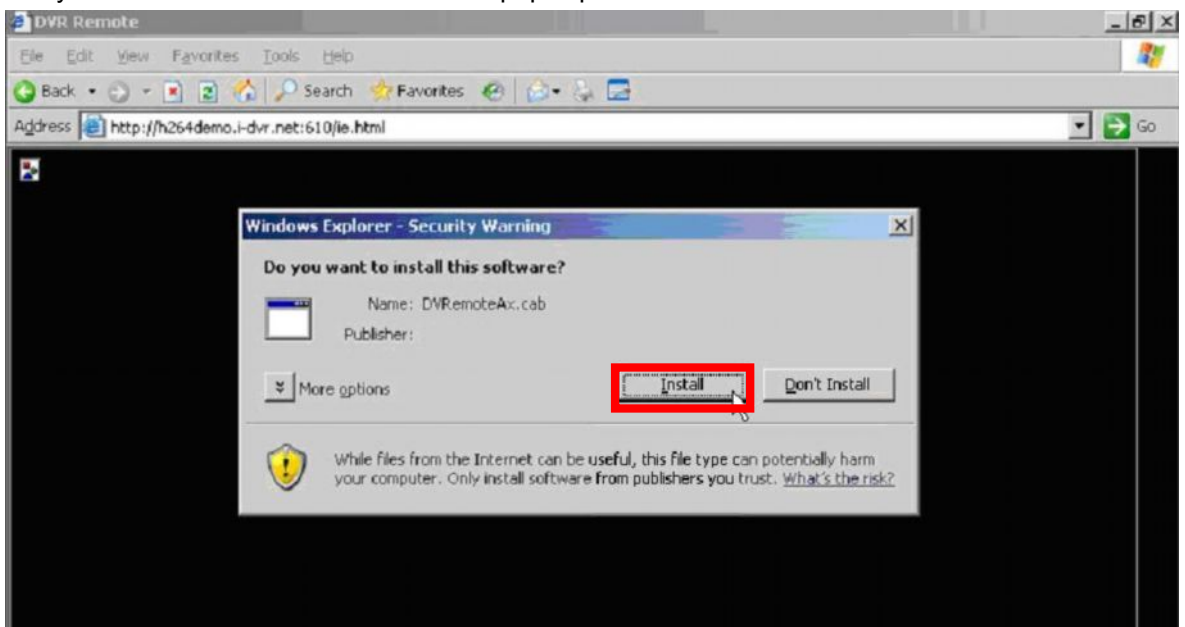
1. When remote monitoring on IE for the first time, an alert message occurs “Install ActiveX control” on the tool bar.



2. Click at this alert message and select “Install ActiveX Control”



3. “Do you want to install this software” alert pops up. Select “Install”

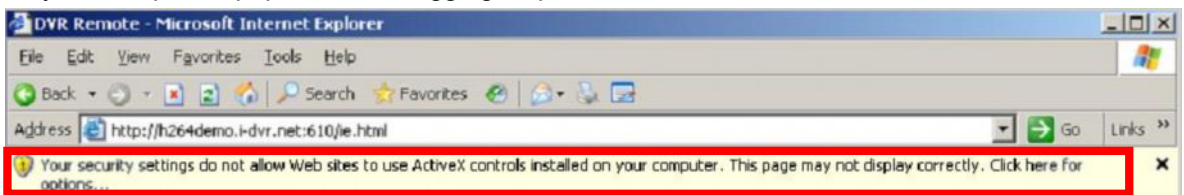




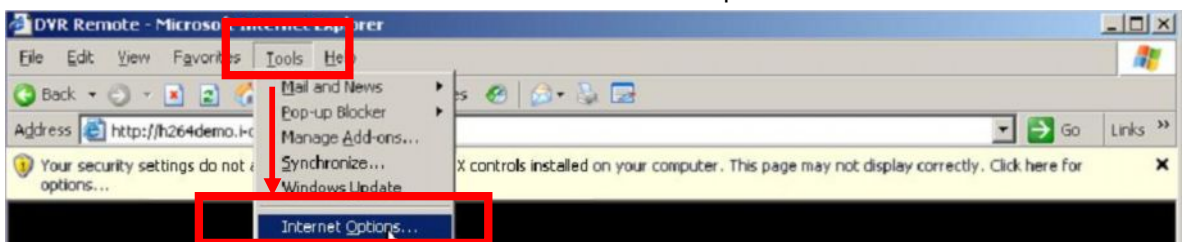
4. After installation, IE remote monitoring image appears.



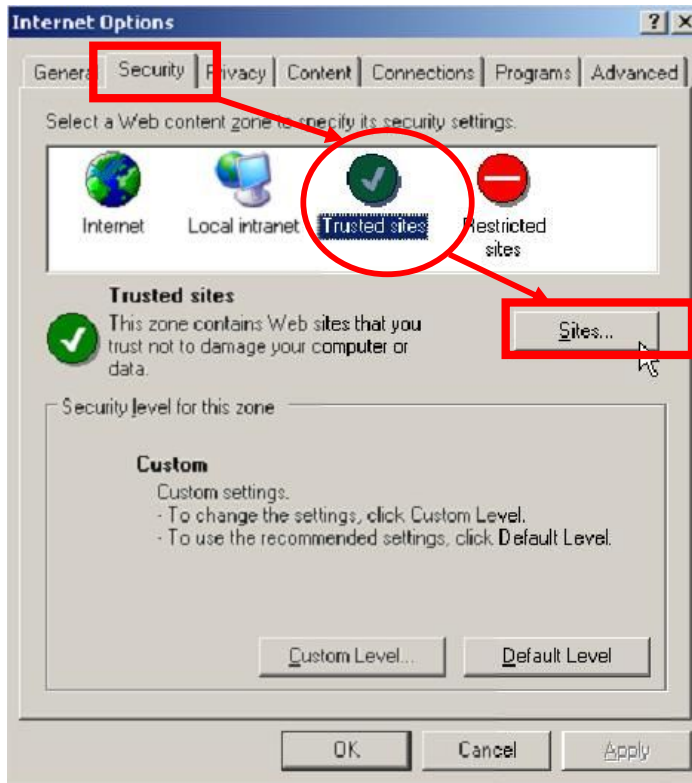
5. If message, "Your security Settings do not allow web sites to use ActiveX controls installed on your computer." pops on when logging in, please follow the next instruction.



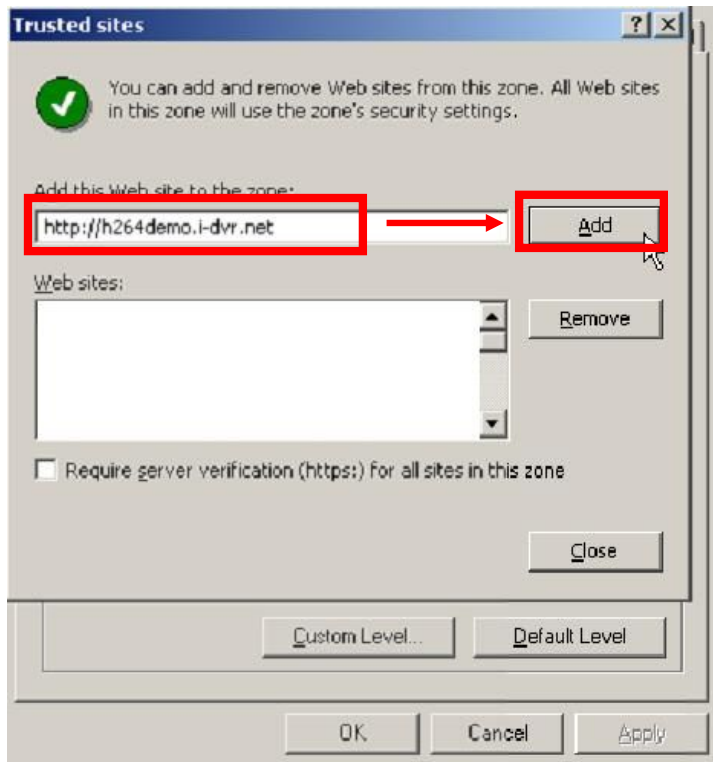
6. First select "Tools" on the tool bar and then select "Internet Options"



7. Select Security → Trusted Sites → Sites

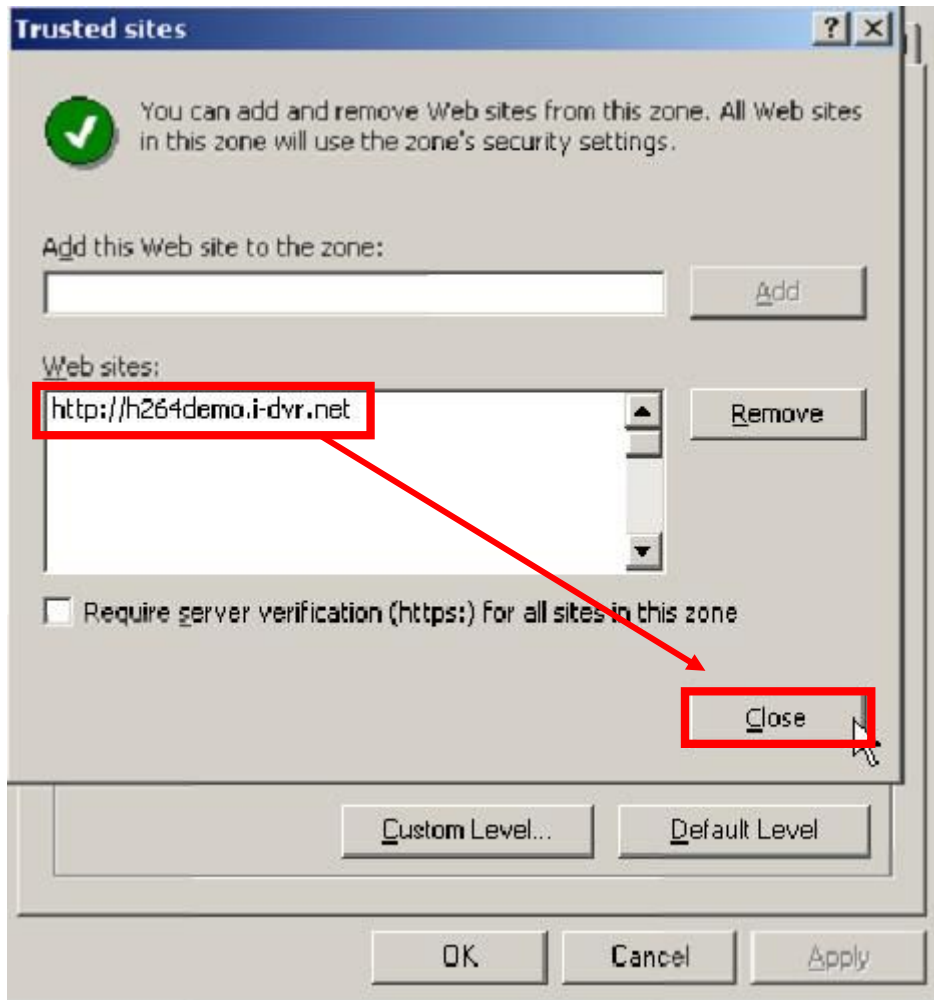


8. Enter DVR address (This address is only for demonstration. Please use the address depends on the setup of on-site DVR.) into the blanks shown in picture, and then press “add.”





9. Newly added website will appear at the trusted web sites list. Press close.



10. Go back to IE window, press refresh button or F5.

