

**4/8/16 Channel**

**H.264 DVR**

**User Manual**

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

# Regulatory

## FCC Certification

This equipment has been tested and found to comply with the limits for a class A 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 their own expense.

## CE Mark

This product is marked with the CE symbol and indicates compliance with all applicable EEC directives.

## Warning

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

	<table border="1"><tr><td><b>CAUTION</b></td></tr><tr><td>RISK OF ELECTRIC SHOCK DO NOT OPEN</td></tr></table>	<b>CAUTION</b>	RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>CAUTION</b>				
RISK OF ELECTRIC SHOCK DO NOT OPEN				
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>				



This symbol alerts the user to the presence of non-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



This symbol alerts the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

# Contents

<b>CHAPTER 1 PACKING DETAIL.....</b>	<b>6</b>
<b>CHAPTER 2 PANEL LOCATION .....</b>	<b>6</b>
2-1 Front Panel Controls .....	7
2-2 Rear Panel Connectors .....	8
<b>CHAPTER 3 SPECIFICATIONS .....</b>	<b>9</b>
<b>CHAPTER 4 LIVE, PLAYBACK AND PTZ OPERATIONS .....</b>	<b>11</b>
4-1 Live Mode .....	11
4-1.1 Remote Controller .....	12
4-1.2 Main Screen OSD .....	13
4-2 Playback Mode .....	14
4-3 PTZ Mode .....	15
<b>CHAPTER 5 SETUP YOUR DVR.....</b>	<b>17</b>
5-1 Record Setup .....	20
5-1.1 Quality & Frame Rate Setup .....	21
5-2 Event Setup .....	22
5-2.1 Motion Setup .....	23
5-2.1.1 Motion Area Setup .....	24
5-2.2 Sensor Setup .....	25
5-3 Schedule Setup .....	26
5-3.1 Schedule Record Setup .....	27
5-3.2 Holiday Setup .....	27
5-4 Camera Setup .....	28
5-5 Account Setup .....	30
5-5.1 Permission Setup .....	31
5-6 Networking Setup .....	32
5-6.1 Networking Setup .....	33
5-6.1.1 DHCP .....	34
5-6.1.2 LAN .....	35
5-6.1.3 ADSL .....	35
5-6.2 HTTP Setup .....	36
5-6.3 DDNS Setup .....	36
5-6.4 Mail Setup .....	37
5-6.5 MSN Setup .....	38
5-7 PTZ & RS485 Setup .....	39
5-8 System Setup .....	40
5-8.1 Display Setup .....	40

5-8.2 Date/Time Setup .....	41
5-8.2.1 Change Date & Time .....	41
5-8.2.2 Time Zone Setup .....	42
5-8.2.3 Internet Time Setup .....	44
5-8.3 Buzzer & Relay Setup .....	45
5-8.4 SPOT Setup .....	46
5-9 Utility Setup .....	47
5-10 Diagnostic .....	49
<b>CHAPTER 6 BACKUP &amp; SEARCH .....</b>	<b>50</b>
6-1 Backup Setup .....	50
6-2 Search Setup .....	51
6-2.1 Event Search .....	52
6-2.1.1 Criteria Setup For Event Search .....	53
6-2.2 Time Search .....	54
<b>CHAPTER 7 NETWORK SURVEILLANCE .....</b>	<b>55</b>
7-1 IE Setup .....	55
7-2 Software Installation and Setup .....	57
<b>CHAPTER 8 MOBILE APPLICATION INSTALLATION AND USAGE....</b>	<b>61</b>
8-1 Mobile Application Installation and Operation for Symbian System.....	61
8-1.1 Mobile Application Installation .....	61
8-1.2 Mobile Application Operation .....	61
8-1.2.1 Add New Login DVR .....	61
8-1.2.2 Logging Onto the DVR .....	62
8-1.2.3 Modify the Login Information of DVR .....	63
8-1.2.4 Delete the Login Information of DVR .....	63
8-1.3 Live Monitoring Operation .....	63
8-1.3.1 Scroll the Image .....	63
8-1.3.2 Image Quality Setup .....	64
8-1.3.3 Channel Display.....	64
8-1.3.4 Size of Image .....	64
8-1.3.5 Rotate the Image .....	65
8-1.3.6 Alarm .....	65
8-2 Mobile Application Installation and Operation for Windows Mobile System.	66
8-2.1 Mobile Application Installation .....	66
8-2.2 Mobile Application Operation .....	67
8-2.3 Operation Under The Live Monitoring.....	68
8-2.3.1 Operation Under The LIVE Monitoring.....	68
8-3.2 Mobile Application Operation for Other Systems.....	69

<b>CHAPTER 9 CMS INSTALLATION AND USAGE GUIDE .....</b>	<b>70</b>
9-1 CMS Installation .....	70
9-2 CMS Login and Environment .....	73
9-3 Setup your own remote surveillance.....	74
9-3.1 User Setup .....	75
9-3.2 DVR Connection .....	76
9-3.3 Group Setup.....	77
9-3.4 eMap Setup.....	78
9-4 Remote Surveillance Management .....	79
9-4.1 View a DVR/Group List.....	79
9-4.2 View Event Logs.....	80
9-4.3 Main Display.....	80
9-4.4 Audio Control.....	81
9-4.5 eMap Display.....	81
9-4.3 PTZ Control.....	83
9-5 Local PC Video Record and Information.....	83
9-6 Playback Video .....	84
9-6.1 Remote Play .....	84
9-6.2 HDD Playback.....	85
9-6.3 File Playback .....	86
9-6.4 Event Playback.....	87
9-6.5 Snapshot Data .....	88
9-6.6 Recording Data.....	88
<b>APPENDIX I HARD DISK INSTALLATION .....</b>	<b>89</b>
<b>APPENDIX II DDNS SETUP .....</b>	<b>91</b>
<b>APPENDIX III TROUBLE SHOOTING .....</b>	<b>96</b>
<b>APPENDIX IV DVR CHECK LIST FOR 3G/GPRS SUPPORT .....</b>	<b>97</b>
<b>APPENDIX V THE AMOUNT OF TIME FOR STORAGE.....</b>	<b>98</b>

## CHAPTER 1 PACKING DETAIL

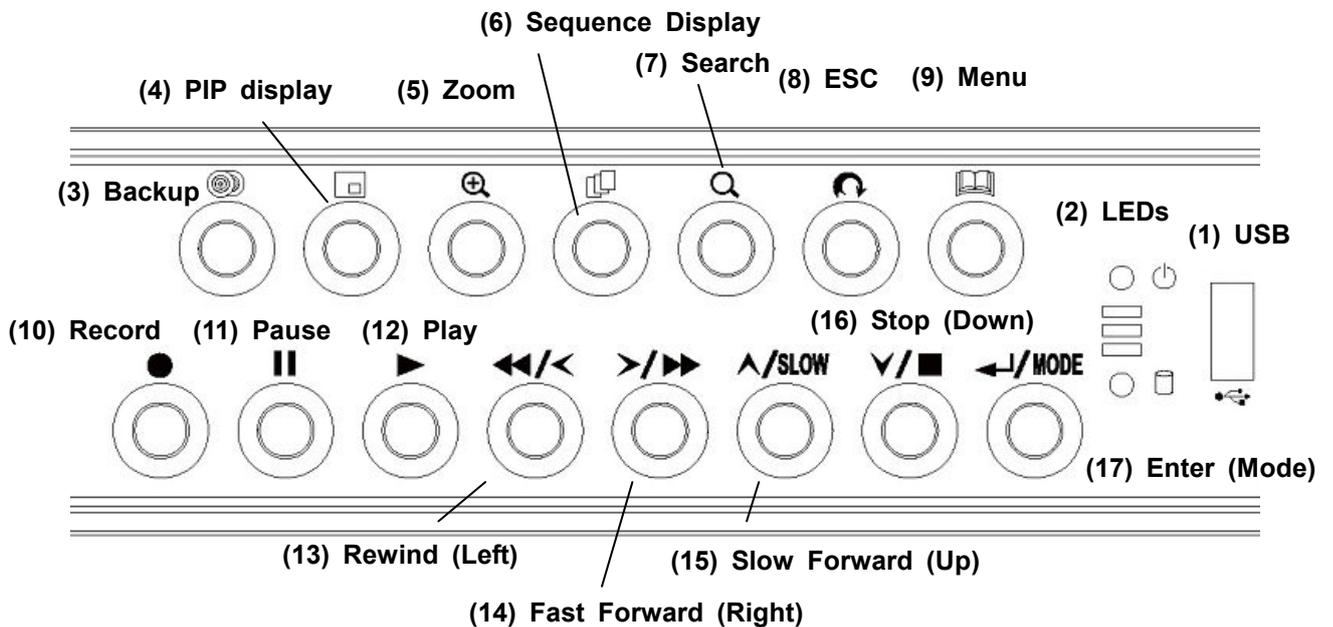
The content of the package include:

1. DVR
3. IR Remote Control
4. Batteries x 2
5. CD (User Manual, Software ...)
6. Power Adapter
7. Power Cord
8. HDD Screws
9. External Connector (for 16CH DVR only)
10. Camera x4 (for 4CH DIY kit only)
11. DIY cable x4 (for 4CH DIY kit only)

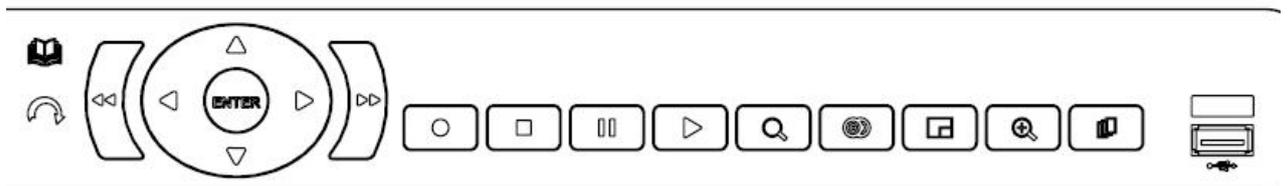
## CHAPTER 2 PANEL LOCATION

### 2-1 4/8/16 CH DVR FRONT PANEL CONTROL

- 4CH Front Panel



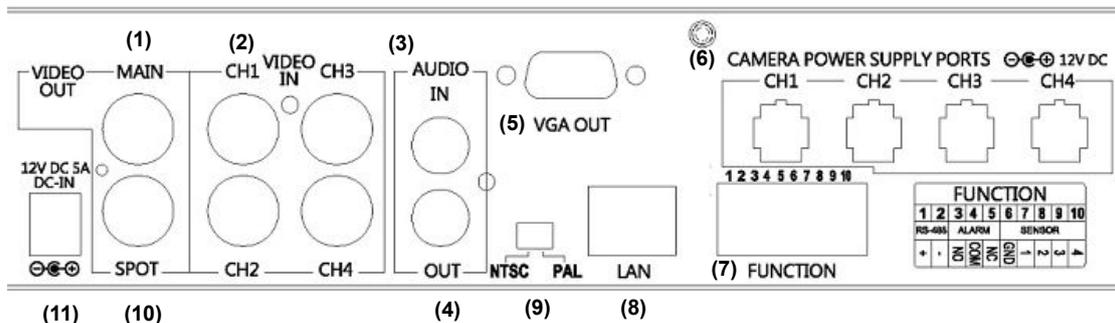
- 8/16CH FRONT PANEL



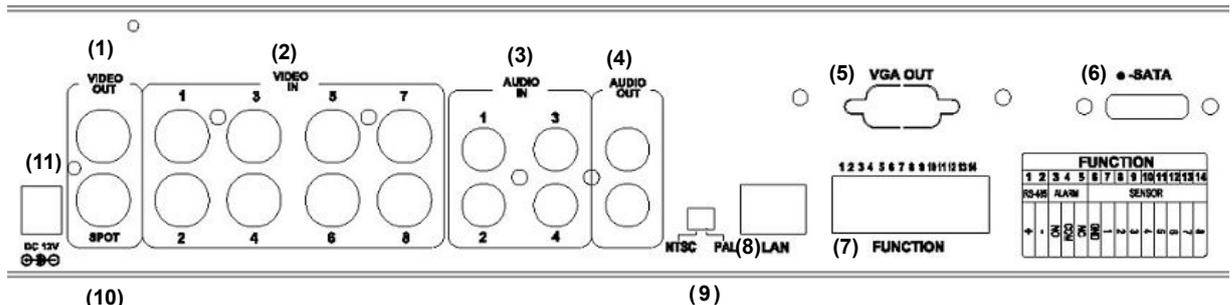
Control Keys	Description
(1) USB 2.0 Port	Port for USB external devices.
(2) LED Display	POWER : Power is on. HDD : Hard disk is in use.
(3)  BACKUP	In LIVE mode, press to display the BACKUP menu.
(4)  PIP	In LIVE mode, display with picture in picture format.
(5)  ZOOM	In LIVE or PLAYBACK mode, enlarge the display of a channel.
(6)  AUTO SEQ.	In LIVE mode, cycle through all channels in full screen.
(7)  SEARCH	Display the search menu.
(8)  ESC	In SETUP mode, press to return to previous page.
(9)  MENU	In LIVE mode, press to display menu.
(10)  REC	Start or stop recording.
(11)  PAUSE	In PLAYBACK mode, press to pause playback.
(12)  PLAY	Play back in normal speed.
(13)  /	<b>In SETUP mode, press to reduce value.</b> In PLAYBACK mode, press to play rewind.
(14)  /	<b>In SETUP mode, press to increase value.</b> In PLAYBACK mode press to play forwards.
(15)  / SLOW	<b>In SETUP mode, press to move cursor up.</b> In PLAYBACK mode, press to slow down.
(16)  DOWN/ STOP	<b>In SETUP mode, press to move cursor down.</b> In PLAYBACK mode, press to stop playing back.
(17) ENTER/MODE	In SETUP mode, press to enter values. In PLAYBACK mode, switch between different display in order.

## 2-2 4/8/16 CH DVR REAR PANEL CONNECTORS

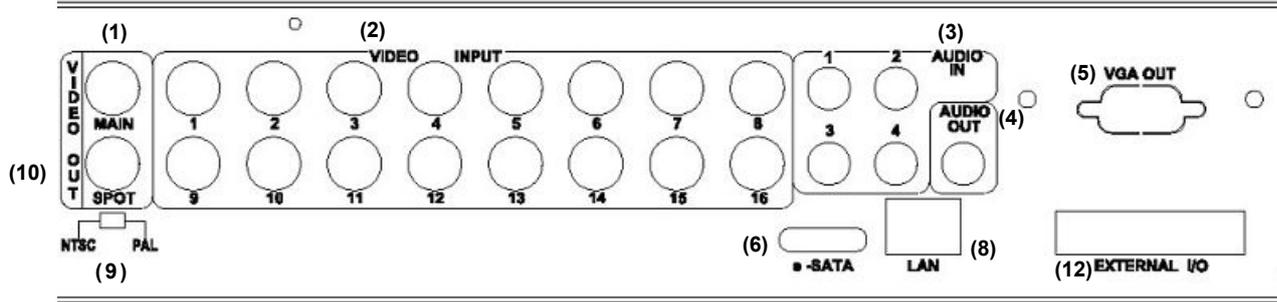
### ● 4CH DVR REAR PANEL



### ● 8CH DVR REAR PANEL



● **16CH DVR REAR PANEL**



(1) VIDEO OUT	BNC output port for the main monitor.																										
(2) VIDEO IN	BNC input ports for cameras, 4/8 in total.																										
(3) AUDIO IN	RCA input port for audio signal.																										
(4) AUDIO OUT	RCA output for audio signal.																										
(5) VGA	VGA port.																										
(6) Camera Power / ESATA	Power for cameras / external SATA interface for HDD																										
(7) FUNCTION (alarm in number differ for 4/8 DVR)	<table border="0"> <tr> <td>1 : RS-485 A</td> <td>8 : ALARM IN CH2</td> </tr> <tr> <td>2 : RS-485 B</td> <td>9 : ALARM IN CH3</td> </tr> <tr> <td>3 : RELAY NO</td> <td>10 : ALARM IN CH4</td> </tr> <tr> <td>4 : RELAY COM</td> <td>11 : ALARM IN CH5</td> </tr> <tr> <td>5 : RELAY NC</td> <td>12 : ALARM IN CH6</td> </tr> <tr> <td>6 : ALARM IN GND</td> <td>13 : ALARM IN CH7</td> </tr> <tr> <td>7 : ALARM IN CH1</td> <td>14 : ALARM IN CH8</td> </tr> </table>	1 : RS-485 A	8 : ALARM IN CH2	2 : RS-485 B	9 : ALARM IN CH3	3 : RELAY NO	10 : ALARM IN CH4	4 : RELAY COM	11 : ALARM IN CH5	5 : RELAY NC	12 : ALARM IN CH6	6 : ALARM IN GND	13 : ALARM IN CH7	7 : ALARM IN CH1	14 : ALARM IN CH8												
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7 : ALARM IN CH1	14 : ALARM IN CH8																										
(8) LAN	Network port.																										
(9)NTSC / PAL SWITCH	Switch between NTSC and PAL format.																										
(10) SPOT MONITOR	BNC port to display full screen image of all installed cameras in sequence.																										
(11) Power (DC12V)	Socket for a DC 12V input.																										
(12) EXTERNAL I/O (16CH DVR only)	<table border="0"> <tr> <td>1 : GND</td> <td>14 : ALARM IN CH4</td> </tr> <tr> <td>2 : GND</td> <td>15 : ALARM IN CH5</td> </tr> <tr> <td>3 : RS-485 B</td> <td>16 : ALARM IN CH6</td> </tr> <tr> <td>4 : RELAY NO</td> <td>17 : ALARM IN CH7</td> </tr> <tr> <td>5 : RS-485 A</td> <td>18 : ALARM IN CH8</td> </tr> <tr> <td>6 : RELAY COM</td> <td>19 : ALARM IN CH9</td> </tr> <tr> <td>7 : GND</td> <td>20 : ALARM IN CH10</td> </tr> <tr> <td>8 : RELAY NC</td> <td>21 : ALARM IN CH11</td> </tr> <tr> <td>9 : GND</td> <td>22 : ALARM IN CH12</td> </tr> <tr> <td>10 : GND</td> <td>23 : ALARM IN CH13</td> </tr> <tr> <td>11 : ALARM IN CH1</td> <td>24 : ALARM IN CH14</td> </tr> <tr> <td>12 : ALARM IN CH2</td> <td>25 : ALARM IN CH15</td> </tr> <tr> <td>13 : ALARM IN CH3</td> <td>26 : ALARM IN CH16</td> </tr> </table>	1 : GND	14 : ALARM IN CH4	2 : GND	15 : ALARM IN CH5	3 : RS-485 B	16 : ALARM IN CH6	4 : RELAY NO	17 : ALARM IN CH7	5 : RS-485 A	18 : ALARM IN CH8	6 : RELAY COM	19 : ALARM IN CH9	7 : GND	20 : ALARM IN CH10	8 : RELAY NC	21 : ALARM IN CH11	9 : GND	22 : ALARM IN CH12	10 : GND	23 : ALARM IN CH13	11 : ALARM IN CH1	24 : ALARM IN CH14	12 : ALARM IN CH2	25 : ALARM IN CH15	13 : ALARM IN CH3	26 : ALARM IN CH16
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13 : ALARM IN CH3	26 : ALARM IN CH16																										

## CHAPTER 3 SPECIFICATIONS

<b>1. VIDEO</b>		
Input Level		1.0 Vp-p±10% Composite, 75Ω Balanced
Display Speed	NTSC	480 fps (16CH), 240fps (8CH), 120fps (4CH)
	PAL	400 fps (16CH), 200fps (8CH) , 100fps (4CH)
Display Resolution	NTSC	720 (H) x 480 (V)
	PAL	720 (H) x 576 (V)
Monitor Output		2Vp-p Composite, 75Ω Balanced
<b>2. RECORDING</b>		
Compression Method		H.264
Recording Speed		Refer to table 3-1
Recording Resolution	NTSC	720 x 480, 720 x 240, 352 x 240
	PAL	720 x 576, 720 x 288, 352 x 288
Quality	Independent for each channel	Lowest/ Low/ 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	2HDD(8CH/16CH), 1 HDD (4CH)
	External Storage	E-SATA(8CH/16CH model only)
Type		SATA / SATA II compatible
<b>4. ALARM</b>		
Sensor Input		16 (16CH), 8 (8CH), 4 (4CH)
Alarm Out		1 Relay output
Motion Detection		Available per each camera/ Multi-detection level
<b>5. CONNECTIONS</b>		
Video Input		BNC 16 ports (16CH), 8 ports (8CH), 4 ports (4CH)
Video Output		BNC 2 port VGA 1 port (Option)
Audio Input		RCA x4 (8CH/16CH), RCA x1 (4CH)
Audio Output		RCA x1
USB 2.0		USB memory stick, USB Mouse, USB Touch Panel
Remote		Standard remote control
External I/O		1 RS-485, 16 (16CH) / 8 (8CH) / 4 (4CH) sensor input, 1 Relay Output
Ethernet		1 RJ45 connector, 10/100 Mbps
<b>6. ELECTRICAL</b>		
Power Source		DC 12V / 5A

7. ENVIRONMENTAL		
Operation Temperature		5°C ~ + 40°C
Humidity		Less than 90%
8. PHYSICAL		
Dimension		Varies with different models.
Weight		Varies with different models.
9. BACKUP		
BACKUP	USB Stick	Video Data, Audio
	DVD-RW	Video Data, Audio
	Network	Video Data, Audio
10. SEARCHING & PLAYBACK		
Searching Method		Event/ Time
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 viewing of DVR's HDD on PC
Numbers of event list		9999

**Table 3-1**

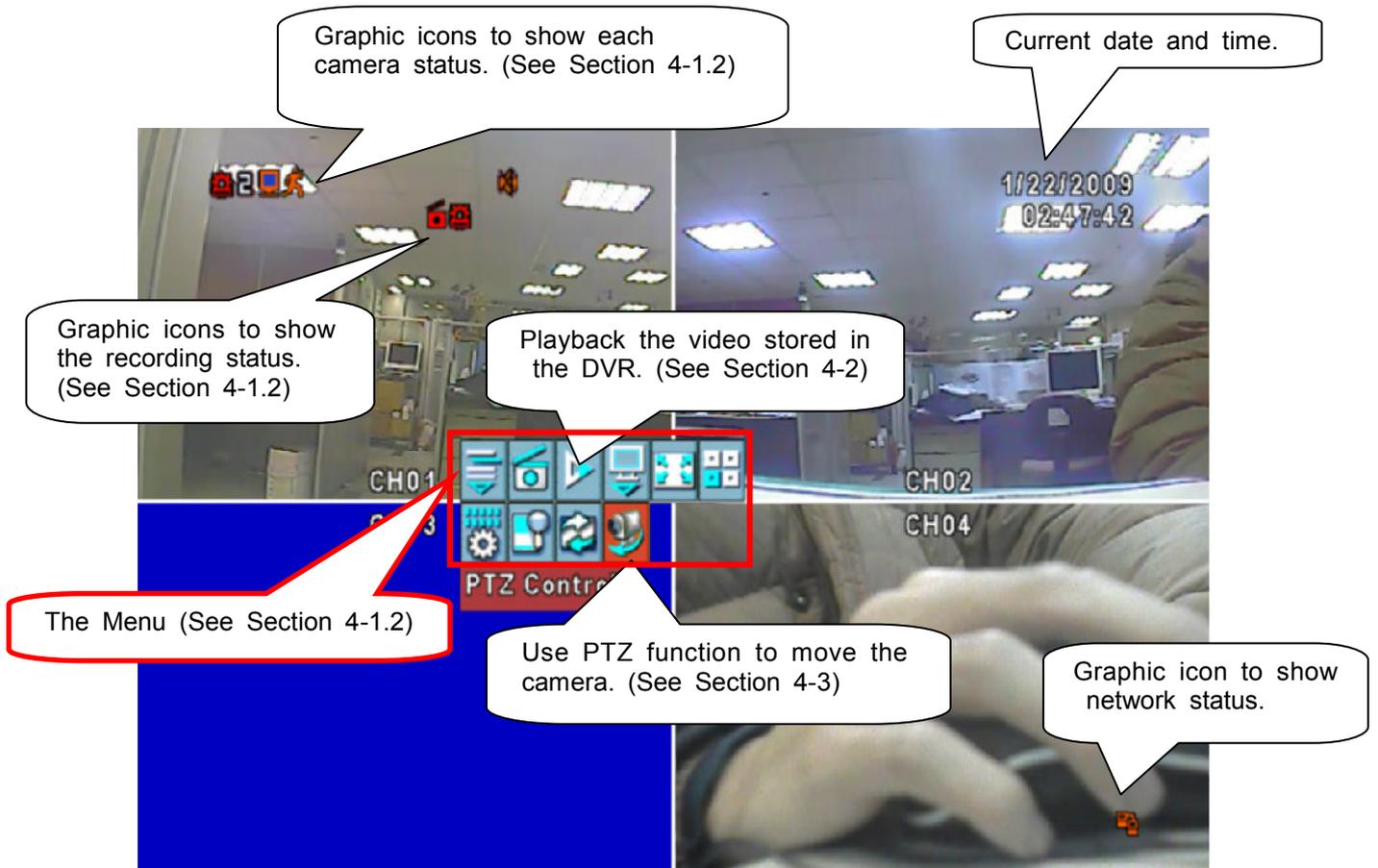
<b>RECORDING SPEED</b> (Independent setting for each channel)	NTSC	352 x 240	240fps / 16CH, 8CH 120fps / 4CH
		720 x 240	120fps / 16CH, 8CH 60fps / 4CH
		720 x 480	60fps / 16CH, 8CH 30fps / 4CH
	PAL	352 x 288	200fps / 16CH, 8CH 100fps / 4CH
		720 x 288	100fps / 16CH, 8CH 50fps / 4CH
		720 x 576	50fps / 16CH, 8CH 25fps / 4CH

## CHAPTER 4 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.

### 4-1 LIVE MODE

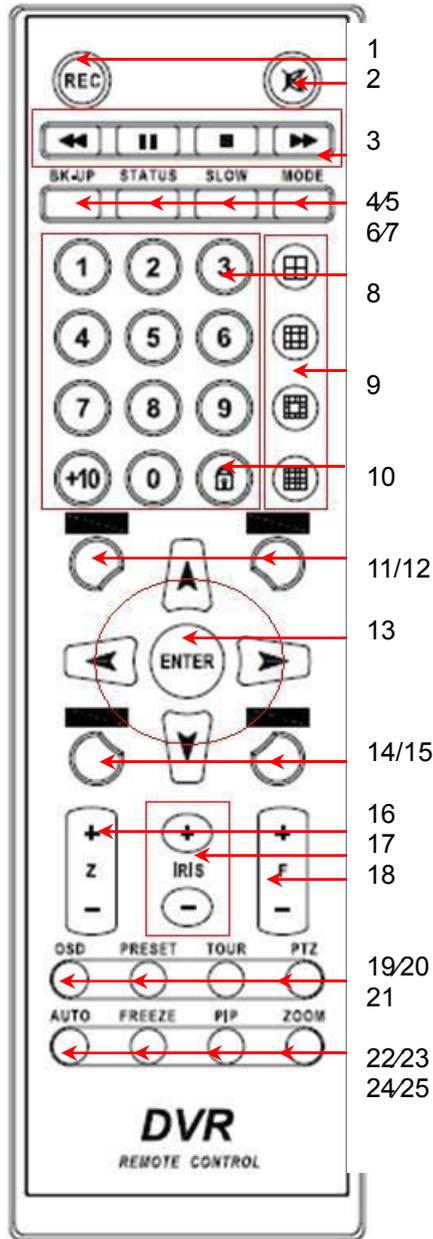
You can monitor all the channels, listen to audio signal and have some related operations under LIVE mode. This paragraph describes the IR remote control, mouse operation and on screen graphical icons under LIVE mode.



### 4-1.1 REMOTE CONTROLLER

The meaning for each button on the remote control is explained below:

**Table 4-1.1** Remote control functions under the LIVE mode



Button Name	Description	
1. REC	Start/Stop recording.	
2.	Audio	
3.	Fast forward ; Pause ; Stop ; Fast rewind	
4. BK-UP	Display backup menu.	
5. STATUS	Display status.	
6. SLOW	Press this button to slow-down playback speed	
7. MODE		
8.1,2...7,8,9, +10	Select the channel to monitor in full screen from 1 to 16	
9.	Switch to Quad/9/13/16 channel display	
10.  LOCK	Enable/Disable the keypad function on the front panel, the remote control and the mouse.	
11. PLAY	Start playing back the most recently recorded segment.	
12. T-SRH	Display search menu.	
13.	▲ : Up ▼ : Down ◀ : Left ▶ : Right ENTER	Direction and ENTER buttons.
14. MENU	Display setup menu.	
15. ESC	Return to the previous mode.	
16. Z+/Z-	PTZ zoom-in/out.	
17. IRIS +/-	PTZ iris-open/close.	
18. F +/-	PTZ focus-in/out.	
19. OSD	Turn on/off the screen display.	
20. PRESET	Preset	
21. PTZ	Start/Stop PTZ control.	
22. AUTO	In AUTO mode, all available channels will be cycled through in full screen.	
23. FREEZE	Turn on/off screen freeze function	
24. PIP	Turn on picture-in-picture format. Click on the channel name can switch to other channels.	
25. ZOOM	Enable/Disable double screen size display.	

#### 4-1.2 MAIN SCREEN OSD



**Table 4-1.2** Graphical icons appeared after right-click on the mouse under LIVE mode.

Icon	Description	Icon	Description
	Setup		Pause
	Main Menu		PIP, picture in picture
	Search Setup		ZOOM, double the screen size
	Backup		Auto-Sequence
	PTZ Control		LOCK, activate the key lock.
	Record On/Off		Full Screen
	Playback		Quad Display
	Display Setup		

**Table 4-1.3** Description for camera status in LIVE mode

Icon	Description	Icon	Description
	Motion detected on the channel		Video loss detected on the channel
	Sensor triggered on the channel	number	No event happening

**Table 4-1.4** Description of on screen graphical icons in LIVE mode

Icon	Description	Icon	Description
	Recording is on		Remote user currently logging into DVR
	Audio is on		Timer recording is on Red : Timer is set and recording has been started White : Timer is set but recording has not yet been started
	Audio is off		
	USB device detected		Auto-Seq is on
	DVD burner is detected	2X	2X zoom in is on
	Lock is on		Pause is on, screen is frozen
	PTZ control is on		

## 4-2 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 4-2.1** Remote control functions under the PLAYBACK mode

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

**Table 4-2.2** Mouse operation under the PLAYBACK mode.

Icon	Description	Icon	Description
	「◀◀ / ◀」 Fast rewind		「▼ / ■」, Stop playback
	「▶▶ / ▶」 Fast forward		Playback channel by channel with snap shot display
	Play / Pause		Full screen display
	「▲ / SLOW」, Slow playback		Quad display

### 4-3 PTZ MODE

Switch to the PTZ mode by pressing “PTZ” button under the LIVE mode. The PTZ icon  will appear on upper left of the screen but it can be re-located on any place of your screen by dragging the mouse.



**Table 4-3.1** Remote Control functions under the PTZ mode

Button	Description
▲ / SLOW	Move PTZ up.
▼ / ■	Move PTZ down.
◀◀ / ◀	Move PTZ to the left.
▶▶ / ▶	Move PTZ to the right.
ZOOM +	PTZ zoom-in.
ZOOM -	PTZ zoom-out.
FOCUS +	PTZ focus-in.
FOCUS -	PTZ focus-out.
IRIS +	PTZ iris-open.
IRIS -	PTZ iris-close.
PRESET+ NUMBER	Setup the Preset location; Press “PRESET” key first then two-digit number; DVR will set the current PTZ location at entered preset number.
PLAY+ NUMBER	Go to Preset location; Press “PLAY” key first then two-digit number, PTZ will go to the correspondent preset number location.



**Table 4-3.2** Mouse operation under the PTZ mode

Icon	Description
	Leave PTZ Mode, back to the LIVE mode.
	Pre-set number N. (1~64).
	Go to pre-set number N.
	Set current PTZ location at pre-set number N.
	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 details.	
	AUX 1, 「AUTO」 key + Number Key 「1」
	AUX 2, 「AUTO」 key + Number Key 「2」
	AUX 3, 「AUTO」 key + Number Key 「3」
	AUX 4, 「AUTO」 key + Number Key 「4」
	AUX 5, 「AUTO」 key + Number Key 「5」
	AUX 6, 「AUTO」 key + Number Key 「6」
	AUX 7, 「AUTO」 key + Number Key 「7」
	AUX 8, 「AUTO」 key + Number Key 「8」
	「Backup」, Customized function.

## CHAPTER 5 SETUP YOUR DVR

### Before you Start

Please install the hard disk. The detail of installation is introduced in Appendix I. To setup your DVR, Please follow the steps below:

- (1) Login to the DVR and enter the main menu. Please refer to the content below.
- (2) Setup the time and date. Please refer to section 5.8.
- (3) Format the hard disk. Please refer to section 5.9.
- (4) Setup the record schedule. Please refer to section 5.1 ~ 5.3.

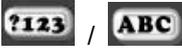
Please also refer to the CD for video tutorial, which will help you get on hand in shortest time.

### Login

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.

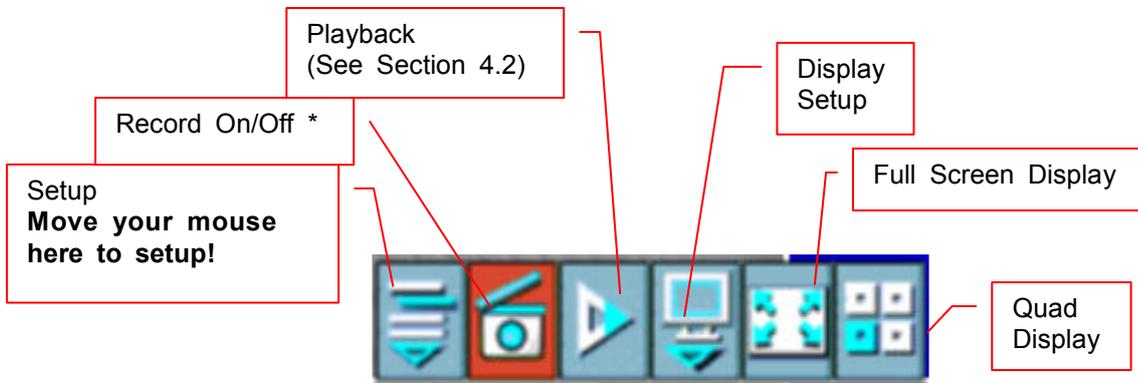


**Table 5-0.1** Definition of the virtual keyboard.

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 setup menu, if the password is verified.

## Quick Menu

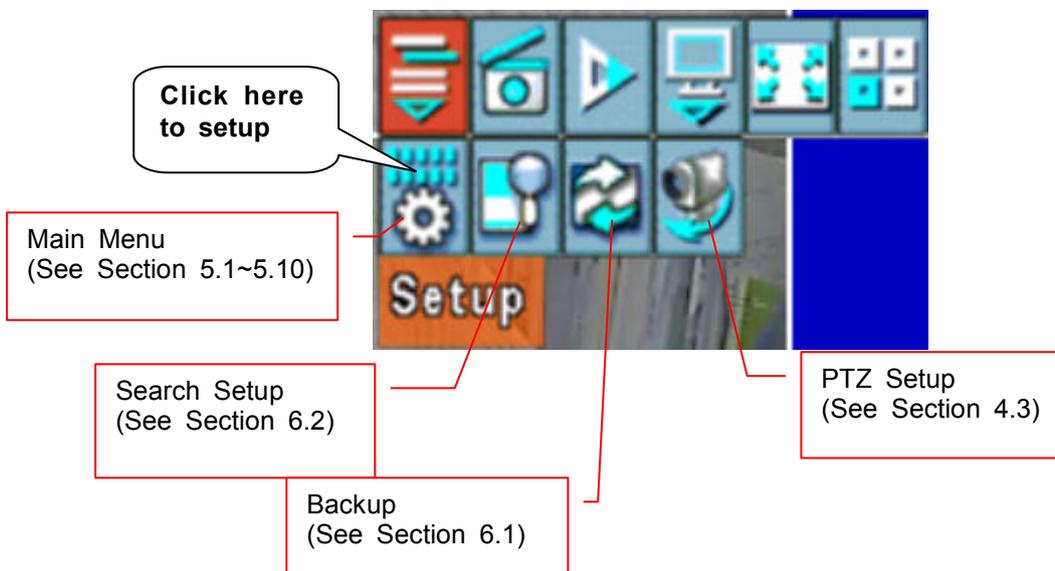
Right click with the mouse, or press the “menu” button on the front panel, and the quick menu will be shown on the display screen. Quick menu provides most common function for users, eg, playback, full screen display, quad display, etc.



\*Record On/Off: If record is set “On”, the record mode will be determined by Record Type in section 5.1.1. If the record is set “Off”, the record mode will be determined by the schedule setting.

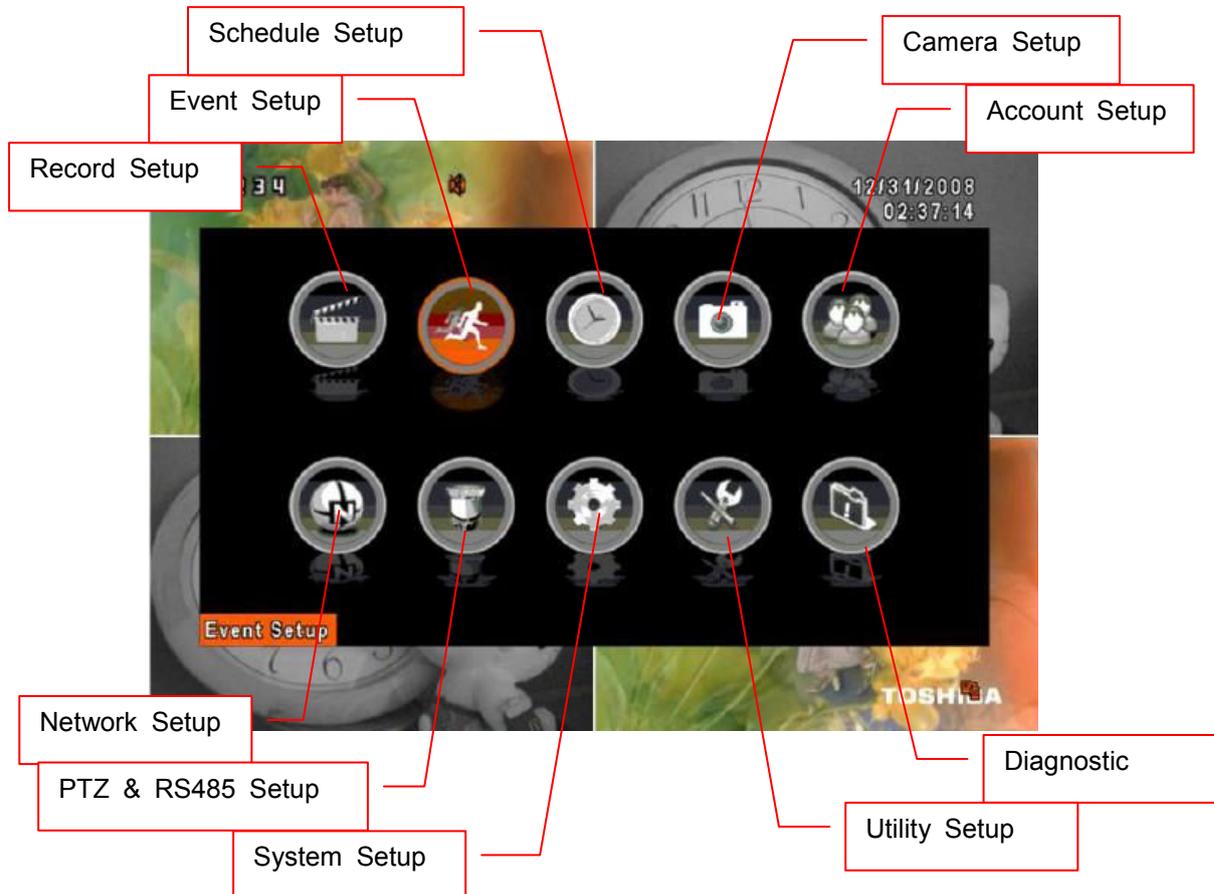
## Setup

This provides the setup menu for users. This includes the main menu, for configuration, search setup, backup setup and PTZ setup.



## Main Menu

The main menu provides 10 basic setting for DVR. The detail for each basic setup, will be described in the following sections. **Note that to start DVR recording, please (1) go to utility setup and format the HDD and (2) go over recording setup, event setup, as well as schedule setup.**



**Table 5-0.2** The operation of remote control under the setting menu

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

## 5-1 RECORD SETUP



Record setup enables the users to enable or disable the recording modes, as well as the recording quality and frame rate. Please click on the recording modes you wish to enable.

Note that, to enable motion detection or sensor detect in schedule, please enable (1) "Schedule – Motion" and "Schedule - Sensor", as well as (2) enable these function in the event setup. For detail, please refer to Section 5-2.1 on motion detection and Section 5-2.2 for sensor.



**Table 5-1.1** The options in record setup

Item	Description
HDD FULL	Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full 「STOP」: Stop recording when HDD is full. 「OVERWRITE」: Start to overwrite that begin from the oldest data of HDD, and continue to record.
RECORD NORMAL	Enable/disable normal recording

RECORD MOTION	Enable/disable recording while motion is detected
RECORD SENSOR	Enable/disable recording while sensor is triggered
PRE ALARM RECORD	Enable/disable pre-event recording while motion or sensor is triggered but not in the recording mode. The pre-recording time is approximate at 10 seconds (16 MB).
AUDIO RECORD	Enable/disable audio recording.
QUALITY & FRAME RATE SETUP	Setup the quality and frame rate for each channel under normal recording and event recording type.

### 5-1.1 QUALITY & FRAME RATE SETUP

User can adjust the resolution for the cameras. User can also adjust the quality, as well as the frame rate of each individual camera. FPS stands for Frames Per Second, and as the value increase, the video will be smoother.



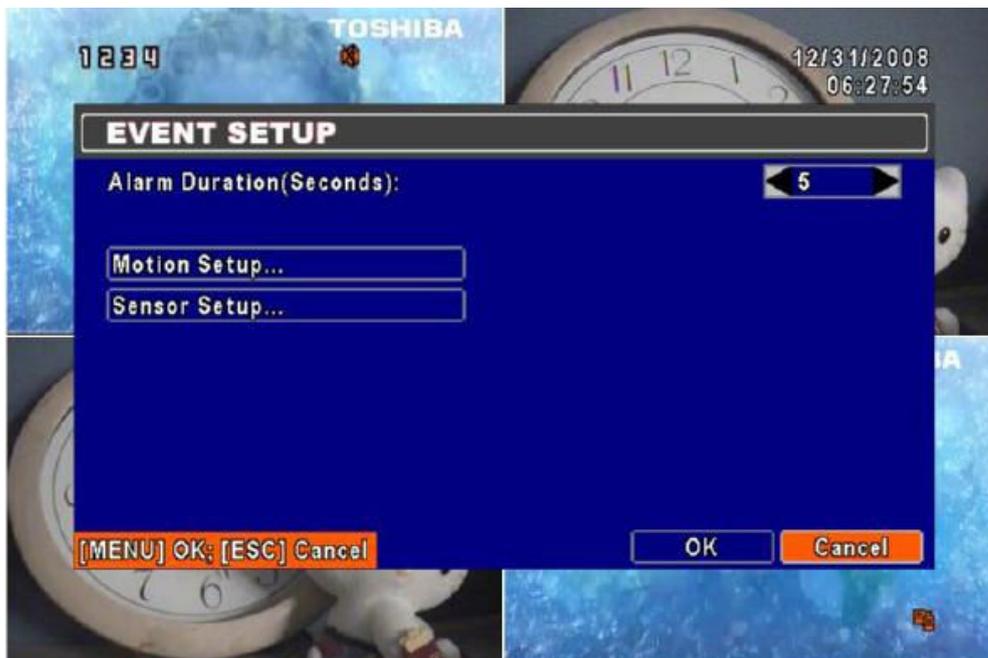
**Table 5-1.2** The options in quality & frame rate setup

Item	Description
RESOLUTION	Choose record resolution from : CIF/ Half D1 (2CIF)/ D1.
RECORD TYPE	You can choose from normal recording or event recording
NO.	Check/uncheck the box will enable/disable recording on the channel.
QUALITY	Choose from Lowest/Low/Normal/High/Highest.
FPS	Choose recording frame rate.

## 5-2 EVENT SETUP



There are two types of events. First is the motion event which detects the movement in each camera. Second is the alarm event which detects the alarm input from alarm sensors. Users can adjust the alarm duration (in other word the record time) for the detected event.



**Table 5-2.1** The options in event setup

Item	Description
ALARM DURATION (SECONDS)	Set up alarm duration in seconds. Drag the white bar or press ◀▶ to adjust value.
MOTION SETUP	Enter to set up motion detection.
SENSOR SETUP	Enter to set up sensor detection.

## 5-2.1 MOTION SETUP

Users can enable or disable the functions of motion detection and popup. The cameras can also be setup individually on sensitivity (this means at what level the camera is to determine the movement as a motion), and the region that requires detection.

**Note that to use motion detection by schedule, you must enable this function here, as well as enable this function in record setup. For detail, please refer to Section 5-1.**

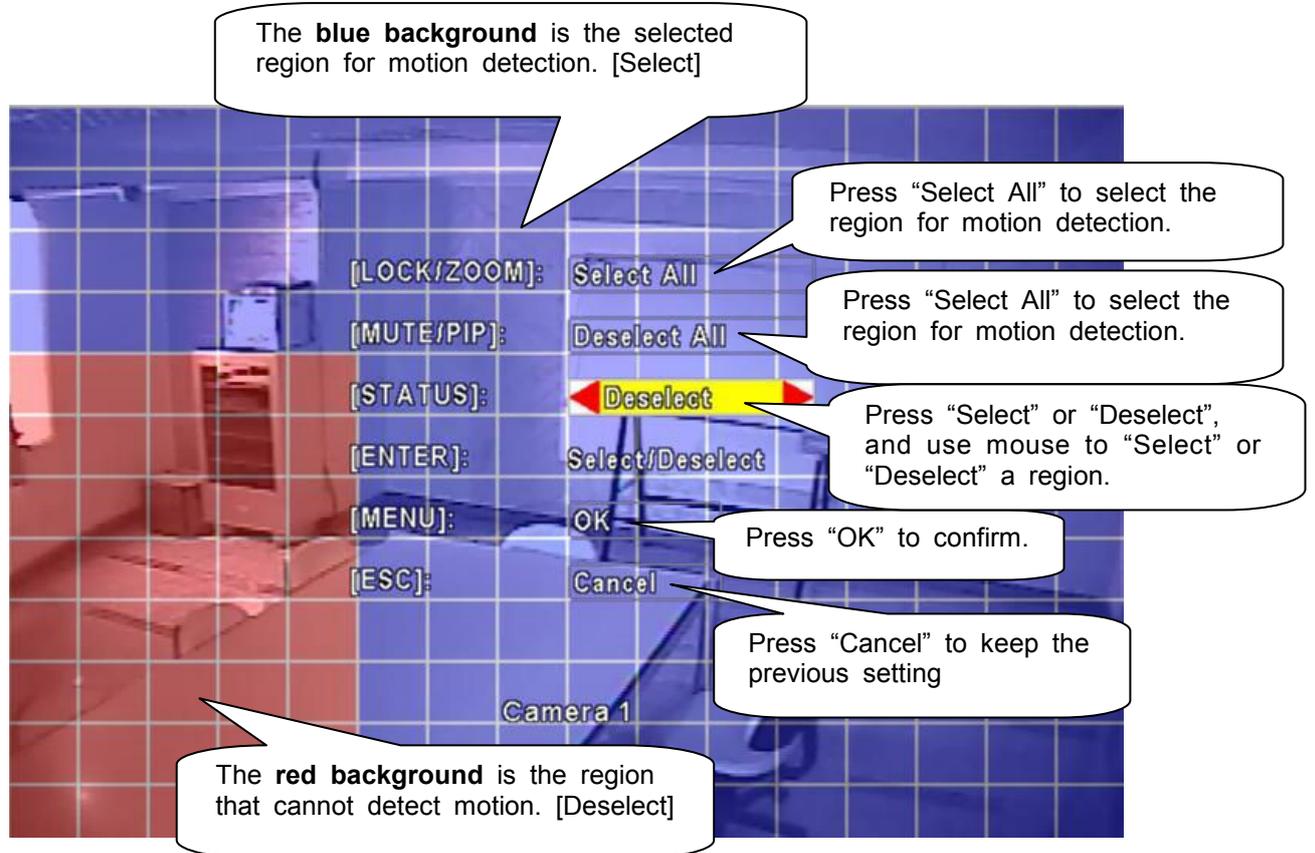


**Table 5-2.2** The options in motion setup

Item	Description
MOTION DETECTION	Check the box to enable/disable motion detection for all channels.
MOTION POPUP	Check the box to enable/disable popup screen function for all channels. When motion is detected in LIVE mode, the detected channel image will pop up in full screen display.
1~4	You can setup independently for each channel.
SELECTED CHANNEL TURN	Check the box to enable/disable motion detection for each channel.
OBJECT SIZE	Drag the white bar or press ◀ ▶ to set up Object Size from value 1 to 15 for each channel. The lower value you set the higher sensitivity it will be. Value set up as 1, the motion will be detected easiest.
SENSITIVITY	Drag the white bar or press ◀ ▶ to set up Sensitivity from value 1 to 15 for each channel. The lower value you set the higher sensitivity it will be
MOTION AREA SETUP	Enter to setup motion detection area

### 5-2.1.1 MOTION AREA SETUP

The motion area setup allows users to select multiple areas where camera should watch for motion detection. The default area is entire screen. **Click and drag the cursor without lifting to mark your selected motion detection area.**



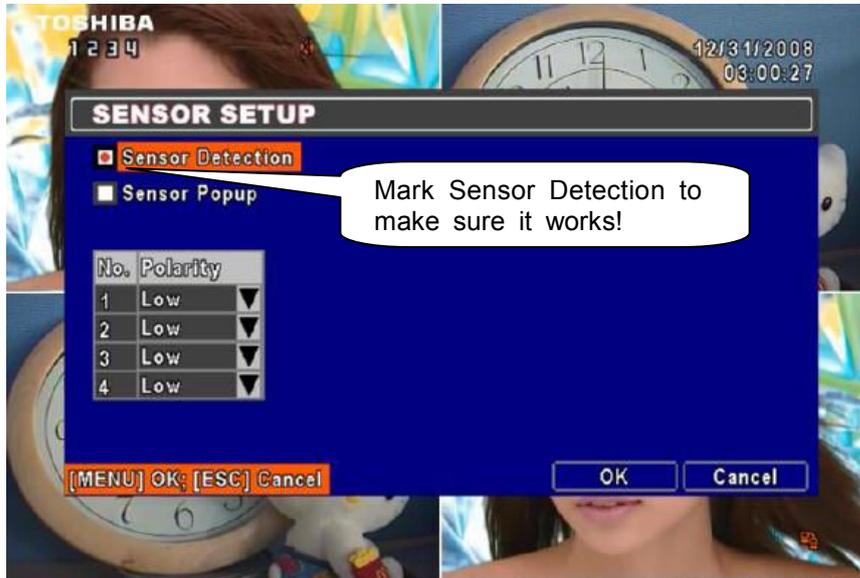
**Table 5-2.3** The options in motion setup

Item	Description
LOCK/ZOOM	Press LOCK/ZOOM to select entire screen as detection area.
MUTE/PIP	Press MUTE/PIP to deselect entire screen as detection area.
STATUS	Switch between "SELECT" and "DESELECT" for cursor-dragging function.
ENTER	Press to function on the selected area with assigned status.
MENU	Press to save the setup and leave.
ESC	Press to cancel the setup and leave.

## 5-2.2 SENSOR SETUP

This enables or disables the alarm sensor detection and popup. It also determines the polarity of each alarm sensor.

**Note that to use sensor in schedule, you must enable this function here, as well as enable this function in record setup. For detail, please refer to Section 5-1.**



**Table 5-2.4** The options in sensor setup

Item	Description
SENSOR DETECTION	Check the box to enable/disable sensor detection for all channels.
SENSOR POPUP	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.
SENSOR POLARITY	Click or press ▼ to select between HIGH, LOW voltage for triggering sensor detection or OFF to turn off the sensor for each channel <b>LOW</b> Polarity : Sensor has not been triggered. When connected, sensor will be turned on. <b>HIGH</b> Polarity : Sensor has been triggered. When connected, sensor status will be turned off. <b>OFF</b> : Sensor is deactivated, and will not be turned on/off.

### 5-3 SCHEDULE SETUP



Setup the schedule is required to command the DVR to record.

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

You can overlap normal recording, motion recording or alarm recording by setting up several schedules and enable each of the schedules.

**Yellow** is the selected schedule. The selection is done by mouse.

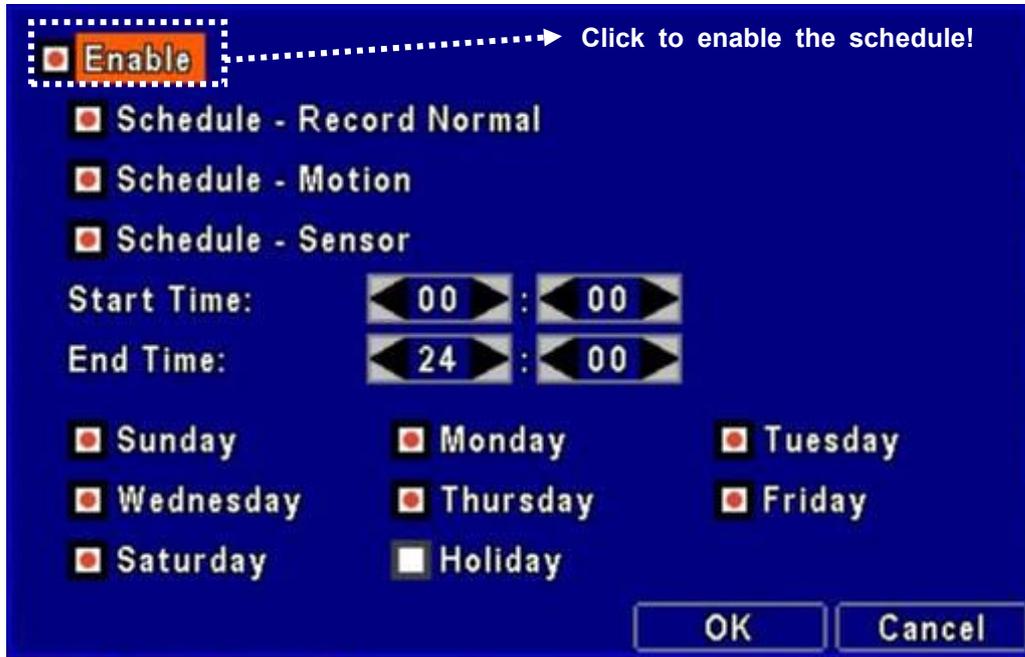
**Green:** The schedule is set. It is available in the selected schedule.  
**White:** The schedule is set. It is not set in the selected schedule.  
**Black:** The schedule is not set.

Table 5-3.1 The options in schedule setup

ITEM	DESCRIPTION
PAGE	Click or press ▼ to select Page. Each page provides 10 schedules for setup. 5 pages in total.
SCHEDULE	To enable each schedule, please mark on them. To adjust the content of each scheduling, please click on the option. (See 5-3.1)
HOLIDAY SETUP	Enter to setup holiday, up to 50 days, other than weekends. (See 5-3.2)
VIEW EVENT SETUP	View Normal/ Motion / Sensor Setup

### 5-3.1 SCHEDULE RECORD SETUP

Click on the time on the left side. The setup menu will be displayed. You can have detail setup by date, time and event. **Please remember to click “Enable” to activate the schedule.**



### 5-3.2 HOLIDAY SETUP

Since holidays are different by different country and region, you can setup the holiday of your location accordingly. The orange days are the selected holidays. The maximum number of days you can select are 50 days.



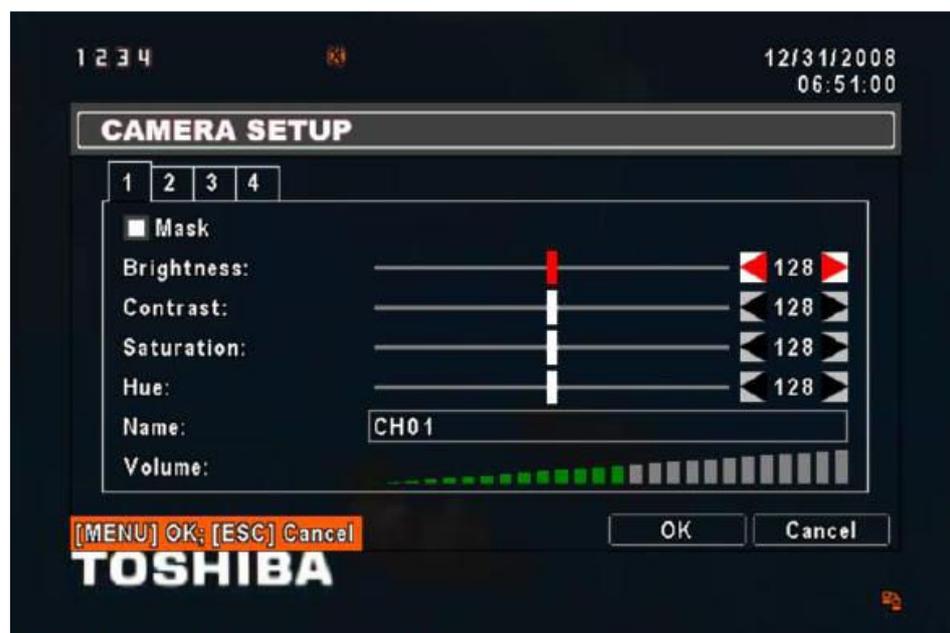
Click to choose different months

Click to select the day as holiday

## 5-4 CAMERA SETUP



The camera setup can adjust the display and volume for each individual camera.



**Table 5-4.1** The options in camera setup

Item	Description
1~4 (4 Channel) 1~8 (8 Channel) 1~16 (16 Channel)	You can setup independently for each channel.
MASK	Check the box to enable/disable mask function for LIVE mode
BRIGHTNESS	Drag the white bar or press ◀ ▶ to adjust the brightness of your camera from value 1 to 255. The default value is 128.
CONTRAST	Drag the white bar or press ◀ ▶ to adjust the contrast of your camera from value 1 to 255. The default value is 128.
SATURATION	Drag the white bar or press ◀ ▶ to adjust the saturation of your camera from value 1 to 255. The default value is 128.

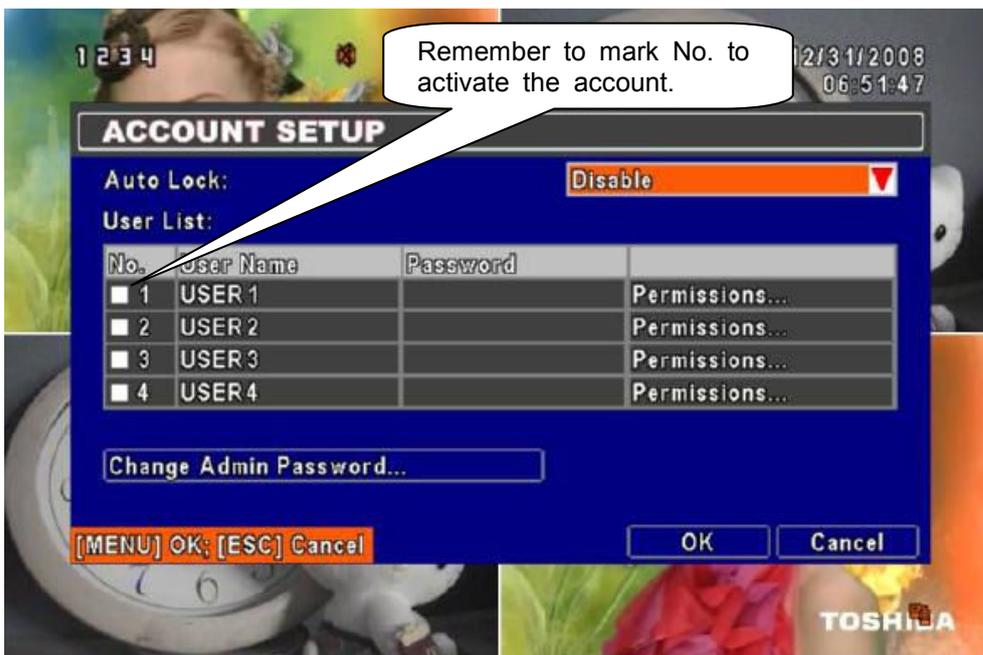
HUE	Drag the white bar or press ◀ ▶ to adjust Hue of your camera from value 1 to 255. The default value is 128. (This function is not supported at PAL system.)
NAME	Set up name of each channel. To ensure the name is read easily, it is suggested to use less than 30 characters.
VOLUME	Select to adjust the audio input volume in live mode for several channels under LIVE mode and recording mode. 4 Channel DVR: CH1 * 8/16 Channel DVR: CH1~CH4 *

\* Note: The audio recorded is tied with the camera. For example, Audio 1 is recorded with the video in Camera 1.

## 5-5 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 is 「admin」 and password is “123456”. You can register new accounts for users by setup user name, password, permission list, and **remember to click on the No.** to activate the account,



**Table 5-5.1** The options in account setup

Item	Description		
	Function	Auto Logout *	Key Lock **
AUTO LOCK	Setting		
	Key lock	○***	○
	Key unlock	○	X
	Disable	X	X
NO.	Check to activate the user's account.		
PASSWORD	Enter to set up password for each user. Password MUST be set up to 8 characters mixed by letters and numbers with case-sensitive.		

PERMISSIONS	Enter to set up Permissions for each user.
CHANGE ADMIN PASSWORD	Enter to change administrator's password. The number of characters is no restricted.

- \* In the status "logged out automatically", you will have to operate in limited authority. You can only use basic function such as operations like: freeze the screen, picture in picture, zoom in/out, switch between channels...etc. If you need to enter the setup menu, search menu, backup menu, record...etc, you will need to enter user account and password.
- \*\* In the status "key lock automatically", remote control and mouse can't function before entering the user account verified password.
- \*\*\* 「○」 : Enable the function, 「X」 : Disable the function

### 5-5.1 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 and mask on specific channels while playing back.



## 5-6 NETWORKING SETUP



In the networking setup, the user is required to determine the network type of the network used, and the configurations for it. Users can also setup the HTTP server for Internet Explorer connection, setup DDNS for the usage of DDNS, and setup mail server for email notification.

**Table 5-6.1** The options in networking setup

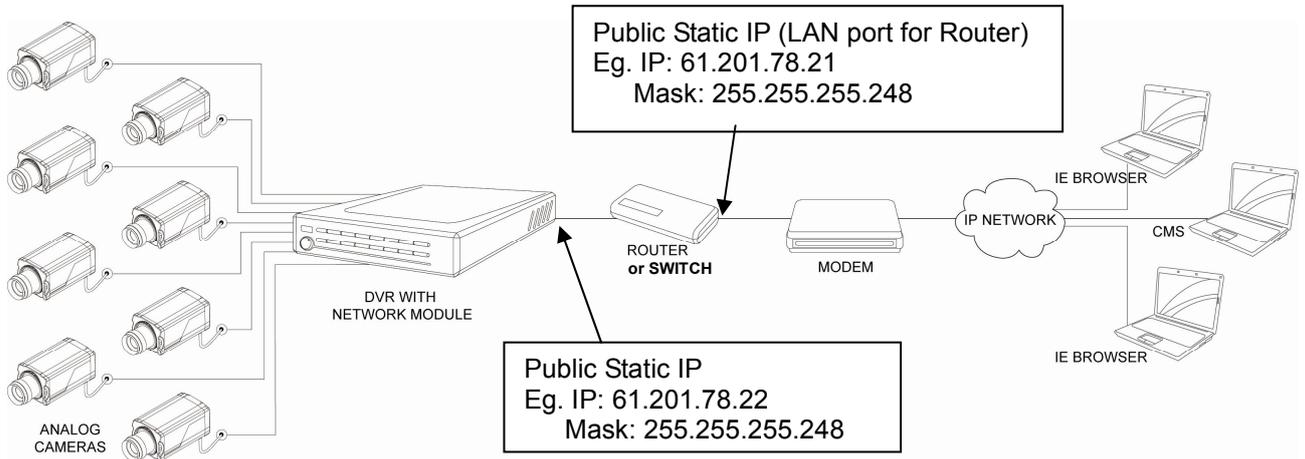
Item	Description
CONNECT TYPE	Setup mode for network connection : DHCP \ LAN \ ADSL.
HTTP SETUP	Enter to set up HTTP for remote access into DVR.
DDNS SETUP	Enter to enable/disable DDNS function and set up.
MAIL SETUP	Enter to enable/disable Email notification and setup. There are up to 10 email addresses can be notified with different event options.
MSN SETUP (8CH/16CH Model)	Enter to setup MSN notification, when an event is triggered.

## 5-6.1 NETWORKING SETUP

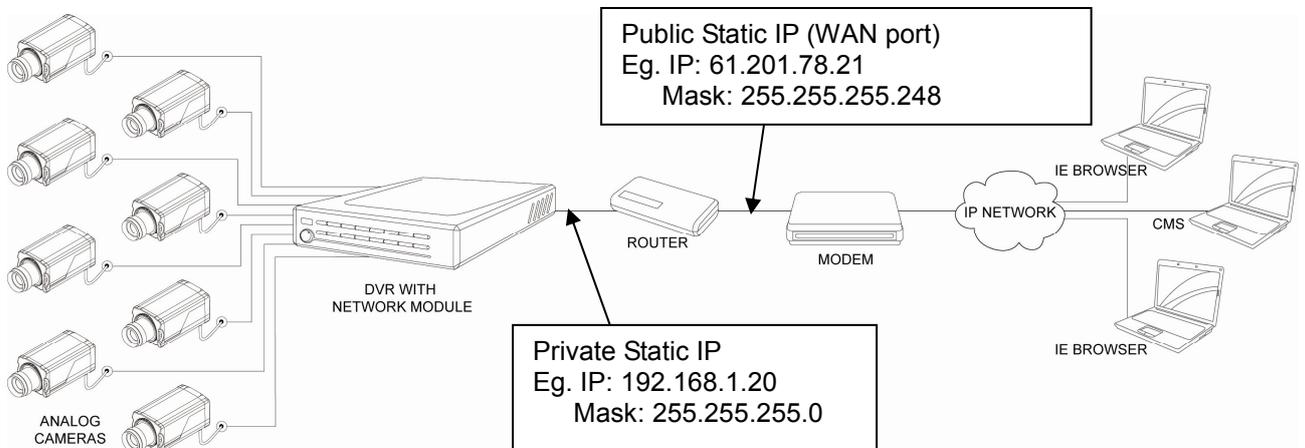
The DVR supports DHCP, LAN and ADSL accesses for network connection. If the settings are subsequently changed, pressing "PLAY" button to drive new settings for re-connection is required.

### LAN - STATIC IP

#### Public Static IP Connection



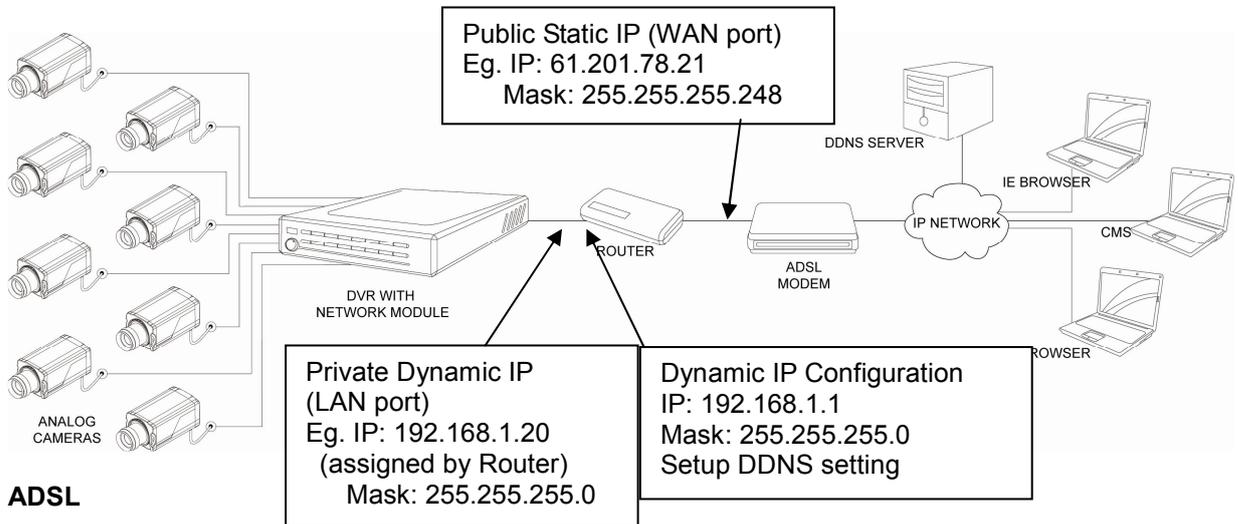
#### Private / Virtual IP Static IP Connection



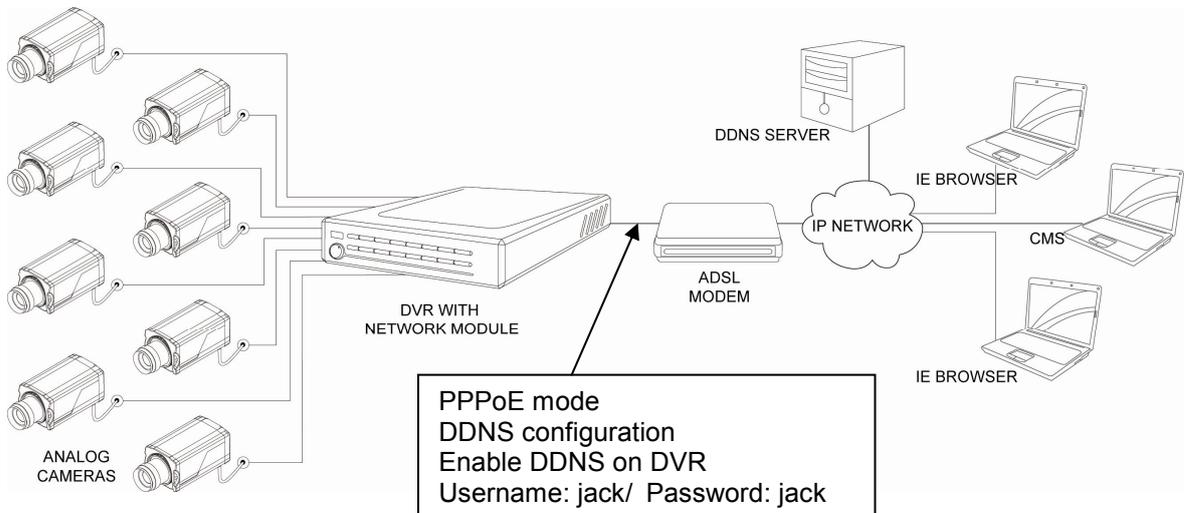
Static IP is considered as a fixed IP assigned by ISP (Public IP) or IP share device (Virtual IP). DVR connecting to static IP needs to be assigned IP address, Gateway, and Subnet mask.

## DHCP

The DHCP functions needs to be supported by a router or a cable modem network with DHCP services. It is preferable to use DDNS at DHCP connection. Note that port mapping is required if needed to connect the DVR outside the LAN.



The ADSL function needs to have one "username" and one "password" subscribed from one ISP supplier. Please set up username and password for ADSL connection.



### 5-6.1.1 DHCP

If the DHCP option is used for DVR network connection, an IP address is assigned by the DHCP server automatically.



### 5-6.1.2 LAN

To setup static IP address, please select “LAN” for network connection, and the following information, including IP address, Subnet Mask, Gateway and DNS, is required.



**Table 5-6.2** The options in LAN setup

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. (Note : The correct DNS address must be entered for DDNS function).

### 5-6.1.3 ADSL

Select ADSL for network connection, the following information, including user name and password, is required.

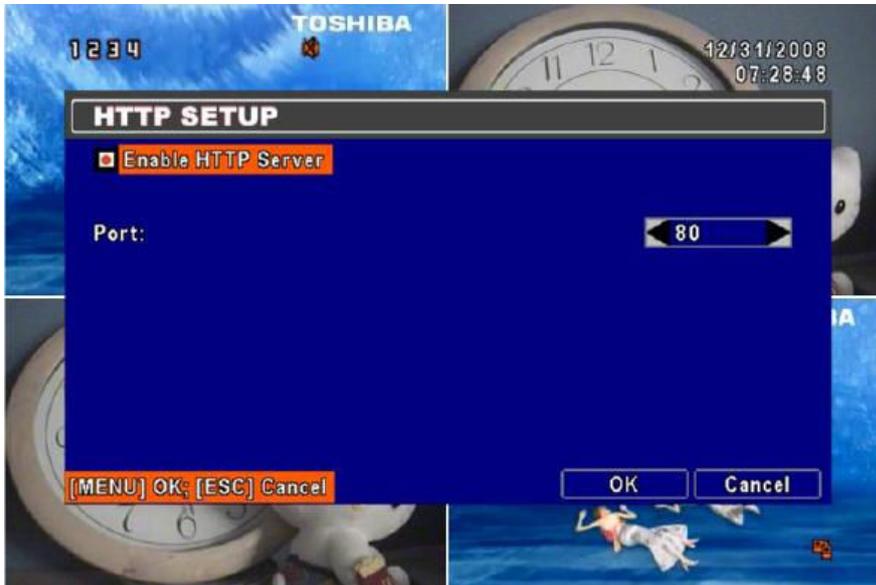


**Table 5-6.3** The options in ADSL setup

Item	Description
USER NAME	Enter user name provided by ISP
PASSWORD	Enter password provided by ISP

## 5-6.2 HTTP SETUP

To enable IE to connect to the DVR, user is required to enable HTTP server. The default port for IE is 80.



**Table 5-6.4** The options in HTTP setup

Item	Description
ENABLE HTTP SERVER	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
PORT	Enter a valid port value from 1 up to 65000. The default value is 80.

## 5-6.3 DDNS SETUP

To use DDNS, please enable the DDNS function, and choose the DDNS server that is used. To apply DDNS, please check appendix II for detail.



**Table 5-6.5** The options in DDNS setup

Item	Description
ENABLE DDNS	Check/uncheck to enable/disable DDNS function.
DDNS SERVER	Enter the registered SMTP server : DYNDNS.ORG 、 NO-IP.ORG 、 CUSTOM.COM
SMTP SERVER	Enter the registered SMTP server.
USER NAME	Enter user name.
PASSWORD	Enter password.

#### 5-6.4 MAIL SETUP

E-mail can be used as a form of notification when an event occurs (VLOSS, MOTION, SENSOR). Please enable e-mail notification to use this function, and fill in related information, including the SMTP server, user name, password and email of the sender, as well as the receiver's email.

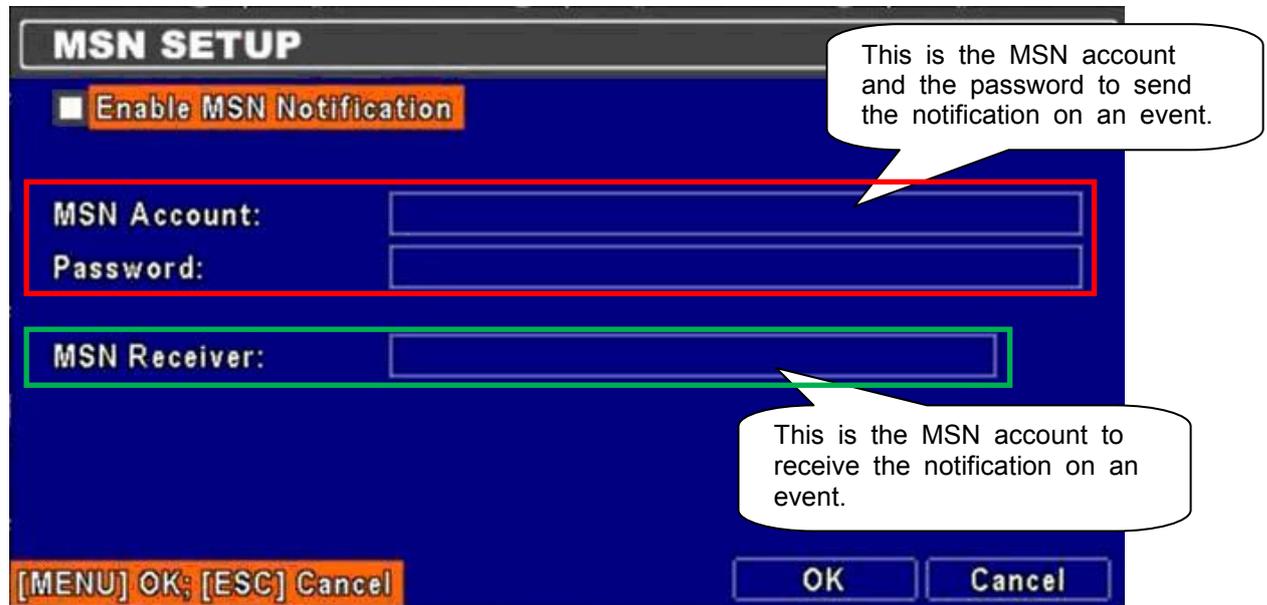


**Table 5-6.6** The options in mail setup

Item	Description
ENABLE E-MAIL NOTIFICATION	Check the box to enable/disable E-mail Notification function.
SMTP SERVER	Enter to set up SMTP server name.
USER NAME	Enter to set up user name.
PASSWORD	Enter to set up password.
SENDER E-MAIL	Enter to set up e-mail address of sender.
E-MAIL ADDRESS	Enter to set up e-mail addresses for up to 10 receivers individually.
TRIGGER EVENT	Enter to select events to send out e-mail notifications when below circumstances happen : Motion, Sensor and Vloss (Video Loss).

### 5-6.5 MSN SETUP (8CH/16CH Model Only)

MSN setup is used to provide MSN notification when an event is triggered, eg. motion event or alarm event.



Item	Description
ENABLE MSN NOTIFICATION	Check / Uncheck to enable / disable MSN notification.
MSN ACCOUNT	MSN account to be logged in.
PASSWORD	Account password to log into MSN.
MSN RECEIVER	MSN account to receive event notification messages.

## 5-7 PTZ & RS485 SETUP



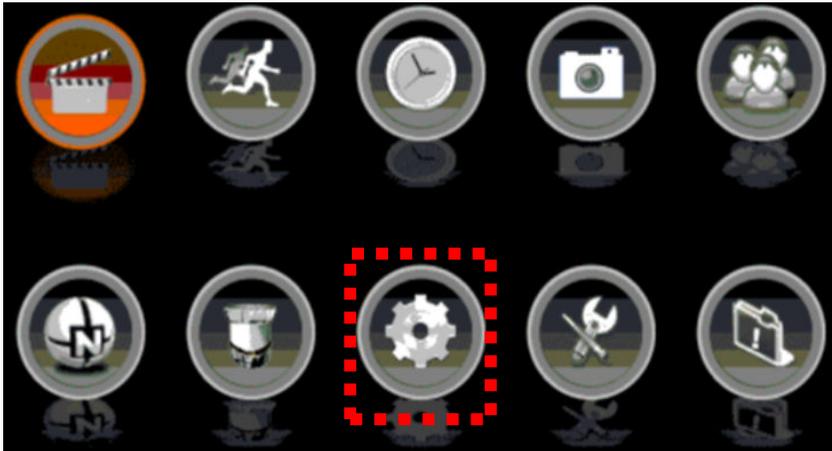
The DVR allows users to control PTZ function of your camera. To enable PTZ function, the 485 cable should be connected to the RS-485 port of DVR.



**Table 5-7.1** The options in PTZ and RS485 setup

Item	Description
ENABLE PTZ	Click the box to enable/disable PTZ function for each channel.
PROTOCOL	Set up the protocol of PTZ cam. The supported protocol are PELCO-P, PELCO-D, KND, LI-LIN.
PTZ ID	Click or press ◀ ▶ to set up PTZ ID. The valid ID value is from 1 to 64.
BAUD RATE	Select baud rate for PTZ from 2400 、 4800 、 9600

## 5-8 SYSTEM SETUP



The system setup provides basic settings, including (1) OSD display, (2) date and time, (3) buzzer, (4) language, and others.



**Table 5-8.1** The options in system setup

Item	Description
DVR NAME	The name of DVR will be shown when users login from remote access.
DVR LOCATION	The location of DVR will be shown when users login from remote access.
LANGUAGE	Click or press ▼ to select OSD language from English, Chinese, Greek, Italian, Japanese, Portuguese, Spanish, German, French, Russian or Polish.
AUTO-SEQ. INTERVAL ( SECONDS)	Click or press ◀ ▶ to setup duration time in seconds for the interval between channels under Auto-Seq. mode.

REMOTE ID	The default remote ID is 0, when DVR is controlled by standard remote controller.
DISPLAY SETUP	Enter to setup Display
DATE/TIME SETUP	Enter to setup Date/Time
BUZZER & RELAY SETUP	Enter to setup Buzzer & Relay
SPOT SETUP	Enter to setup Spot

### 5-8.1 DISPLAY SETUP



Item	Description
OSD	Turn on/off OSD display
DVR STATUS	Turn on/off DVR illustration and record status display
DATE/TIME	Turn on/off date and time display
MESSAGE	Turn on/off message display
CHANNEL NAME	Turn on/off channel name display
BORDER SET	Set up the color of border in LIVE1, PLAYBACK mode. (black · dark grey · light grey · white)

## 5-8.2 DATE/TIME SETUP

This provides retrieving the time from Internet, and adjustments for the time zone, date and time.



**Table 5-8.3** The options in date/time setup

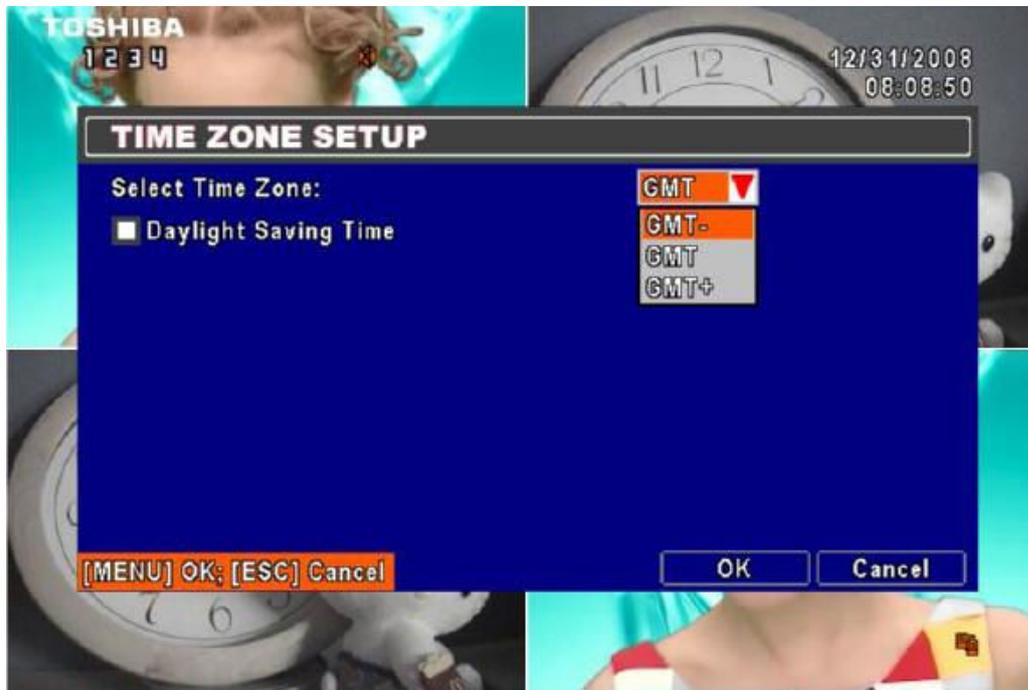
Item	Description
HOUR FORMAT	12HOURS/24HOURS
DATE FORMAT	MM-DD-YY/DD-MM-YY/YY-MM-DD
DATE/TIME POSITION	Choose the position of time and date display
CHANGE DATE & TIME	Setup time and date of DVR
TIME ZONE SETUP	Setup GMT and daylight saving time.
INTERNET TIME SETUP	Setup automatic synchronization with internet server

### 5-8.2.1 CHANGE DATE & TIME

Users are allowed to setup date and time of DVR manually according to your local time.

### 5-8.2.2 TIME ZONE SETUP

In time zone setup, users can change your time zone and activate daylight saving time function according to your DVR location.

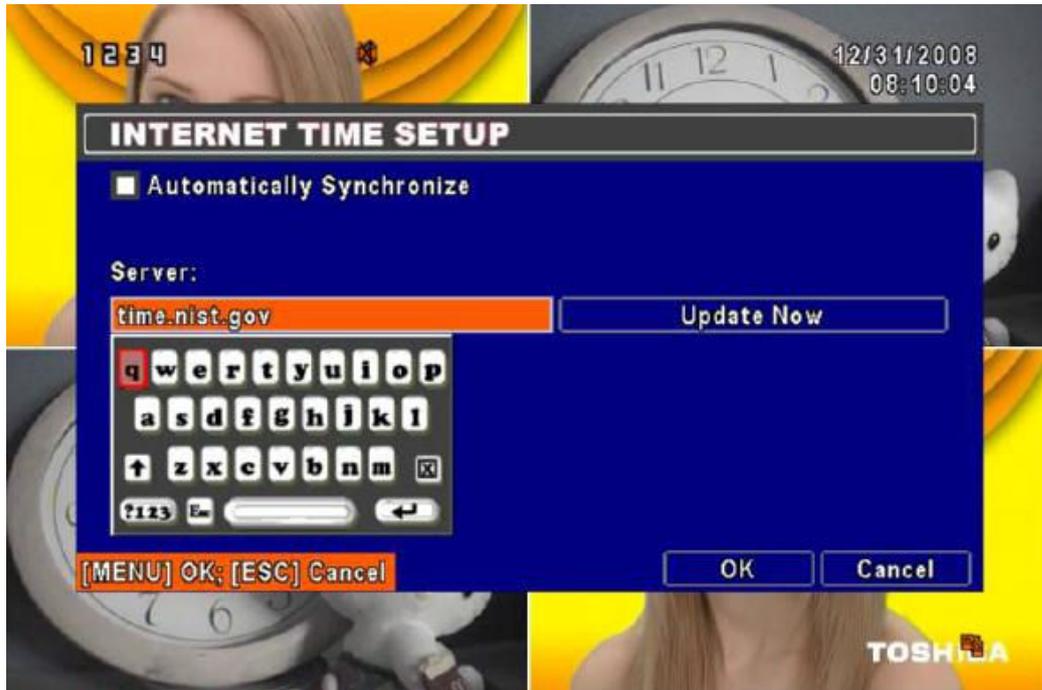


**Table 5-8.4** The options in time zone setup

Item	Description
SELECT TIME ZONE	Enter to modify GMT from GMT- 13 to GMT+ 13
DAYLIGHT SAVING TIME	Turn on/off daylight saving time

### 5-8.2.3 INTERNET TIME SETUP

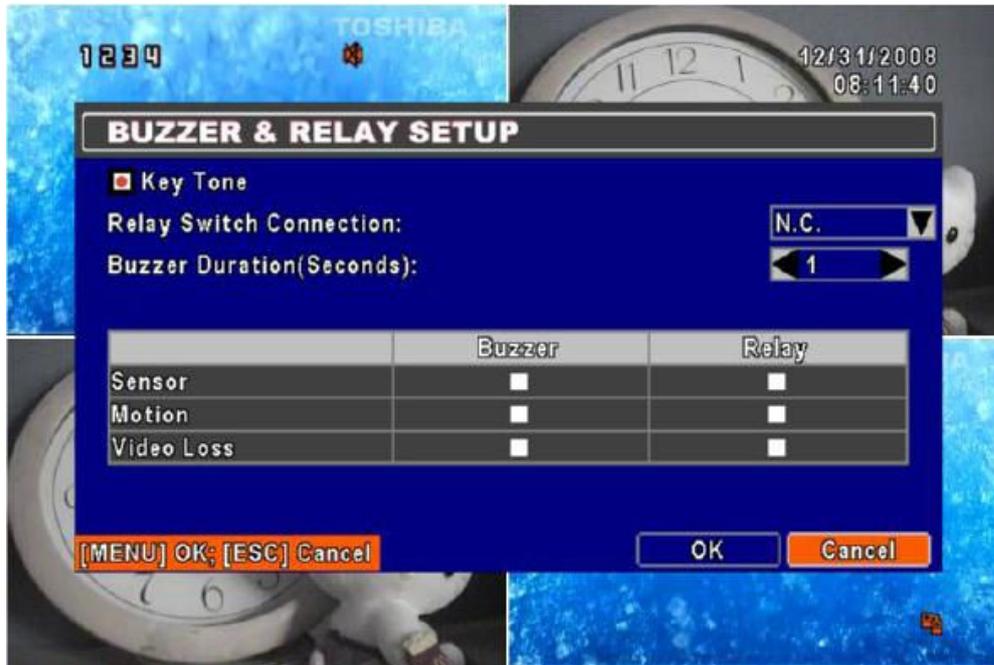
Synchronize your DVR time with internet time server.



**Table 5-8.5** The options in internet time setup

Item	Description
AUTOMATIC SYNCHRONIZATION	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.
UPDATE NOW	Date and time show on DVR will immediately correspond with those in internet server.

### 5-8.3 BUZZER & RELAY SETUP



**Table 5-8.6** The options in buzzer & relay setup

Item	Description
KEY TONE	Enable/disable keystrokes.
RELAY SWITCH CONNECTION	Set relay signal to be Normal Close (N.C.) or Normal Open (N.O.).
BUZZER DURATION	Set up the duration from 1~999 seconds.
ALARM BUZZER	Enable/disable buzzer operation when the alarm is triggered for sensor, motion and Vloss (Video Loss).
ALARM RELAY	Enable/disable the signal to be sent to the RELAY OUT blocks when the alarm is triggered for sensor, motion and Vloss.

## 5-8.4 SPOT SETUP



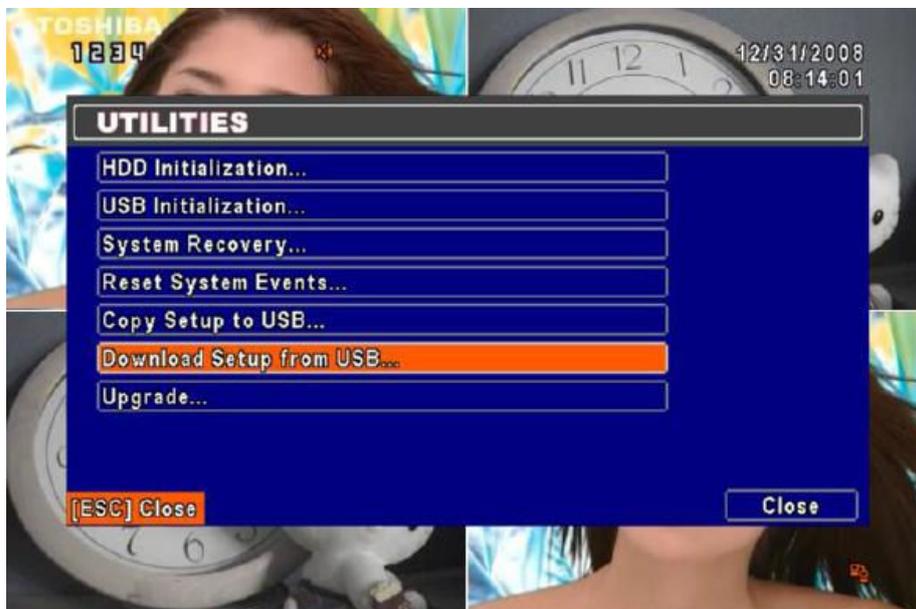
The DVR has two modes of video output; one is main video output, the other is spot video output. SPOT setup is for controlling the order of channels the system cycles through in SPOT mode. User can monitor every channel in the SPOT mode.

**Table 5-8.7** The options in buzzer & relay setup

Item	Description
SPOT MODE	Channels display in spot for three different modes : <b>MANUAL</b> : Select channels to display manually. <b>SEQUENCE</b> : Auto-sequence for all channels in order. <b>EVENT</b> : Display channels with event occurred.
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.

## 5-9 UTILITY SETUP

This is used to reset or upgrade the system, including the HDD, DVR, USB device.



**Table 5-9.1** The options in utility setup

Item	Description
HDD INITIALIZATION	Select to enter initialize hard disk menu. Please stop recording before entering this menu. Enter the menu, system will show all the data (model, volume) of HDD that installed in DVR. Check the HDD you would like to initialize then press "START". HDD initialization is succeeded when the status shows "SUCCEED".
USB INITIALIZATION	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".
SYSTEM RECOVERY	Restore system default values
RESET SYSTEM EVENTS	Reset all the recording events in DVR.
COPY SETUP TO USB	Copy configuration to a USB device. There will be a file named "sdvr.config" on your USB.

DOWNLOAD SETUP FROM USB	Download configuration from a USB device into DVR.
UPGRADE	Upgrade DVR through USB. Please stop recording and backup setup configuration before upgrading. The system will reboot automatically when the upgrade is completed.

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

## 5-10 DIAGNOSTIC



This shows the DVR, HDD and network information.



**Table 5-10.1** The options in diagnosis setup

Item	Description
VERSION	The current firmware version of DVR
IP ADDRESS	The connected IP address of DVR. If disconnected from network, the screen will display "NETWORK DISCONNECT".
MAC ADDRESS	MAC Address of DVR
HDD VOLUME	The capacity of HDD
HDD USED RATE	Percentage of space used on HDD.
HDD STATUS	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, otherwise it can be recognized as BAD by DVR.)
FORMAT TIME	The latest format time of HDD

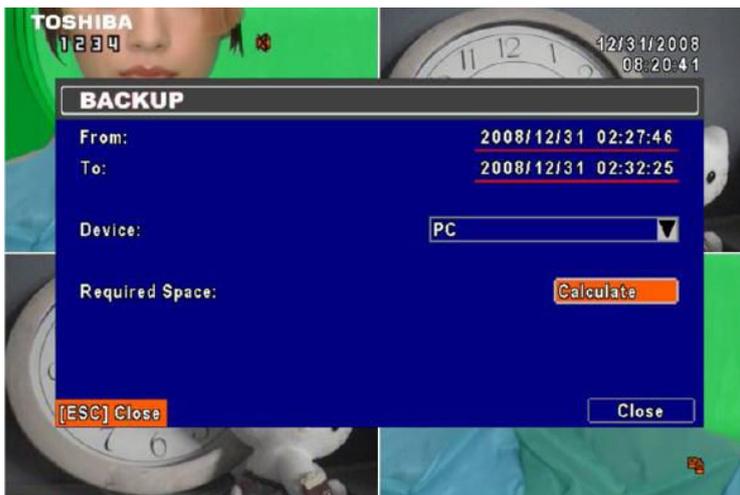
## CHAPTER 6 BACKUP & SEARCH

To enter the backup or search menu, please find “setup” from the quick menu, and press “backup” or “search”.



### 6-1 BACKUP SETUP

User can backup any segment of recorded data in a specified time frame. To do so, either a DVD-R/W or storage device, like USB, must be connected to the DVR. The format of backup file is in IRF format and the file can be played by “DVRemoteDesktop.exe” or “iCMS”.



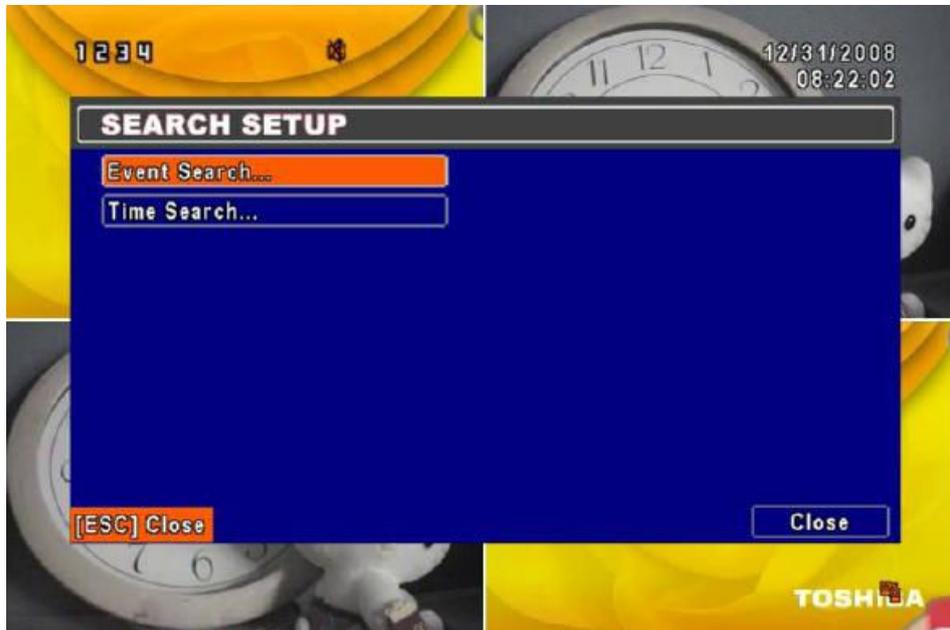
**Table 6-1.1** The options in backup setup

Item	Description
FROM	The start time of backup file
TO	The end time of backup file
DEVICE	Select USB etc. as the backup device
FREE SPACE	The available space in your backup device
REFRESH	Recalculate the available space of backup device
CALCULATE	Calculate the size of backup file
START	Start backup operation. Be sure to calculate the size of backup file BEFORE operating backup.

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

## 6-2 SEARCH SETUP

There are two types of search, event search and time search. In event search, every event will be shown as a list, and user can choose to playback a certain event. In time search, the user can specify a certain time range to playback.



**Table 6-2.1** The options in search setup

Item	Description
EVENT SEARCH	Press to enter event search menu
TIME SEARCH	Press to enter time search menu

## 6-2.1 EVENT SEARCH



The DVR automatically records events with type, time and channel information included. If there is recording data for an event, the recording 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.

Item	Description	
CRITERIA	Setup conditions of event search	
PAGE	Convert pages of events	
DATE/TIME	Date/time when event occurred.	
EVENT TYPE	Event type, defined as following	
	<b>VLOSS</b>	Video Loss
	<b>MOTION</b>	Motion Detected
	<b>SENSOR</b>	Sensor Detected
	<b>REMOTEIN</b>	user log-in over the network
	<b>REMOTEOUT</b>	user log-out over the network
	<b>POWER ON</b>	System Rebooting
	<b>KEY LOCK</b>	System key are locked
	<b>KEY UNLOCK</b>	System key are unlocked
<b>HDD FULL</b>	HDD is FULL	
CHANNEL	The channel where event occurred.	

### 6-2.1.1 CRITERIA SETUP FOR EVENT SEARCH

The amount of events can be a lot. Therefore, you can facilitate event sorting by setting up "CRITERIA". Setup "Start time", "End time" and "Event type" for event search, and the search result will be limited to this specific period of time. Only checked events and channels will be sorted in event search as well.

From: 2000/01/01 00:00:00  
 To: 2000/01/01 00:00:00

Motion  Sensor  
 Video Loss  Remote Login  
 Remote Logout  Power On  
 Key Lock  Key Unlock  
 System Errors

CH01  CH02  CH03  CH04

OK Cancel

## 6-2.2 TIME SEARCH

TIME SEARCH can search for the specific time of recording data to playback. To specify a date, use ◀ or ▶ to move the cursor up and down, use ▲▼ or roll the mouse to change dates. 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 "YES". DVR will playback the selected recording data.

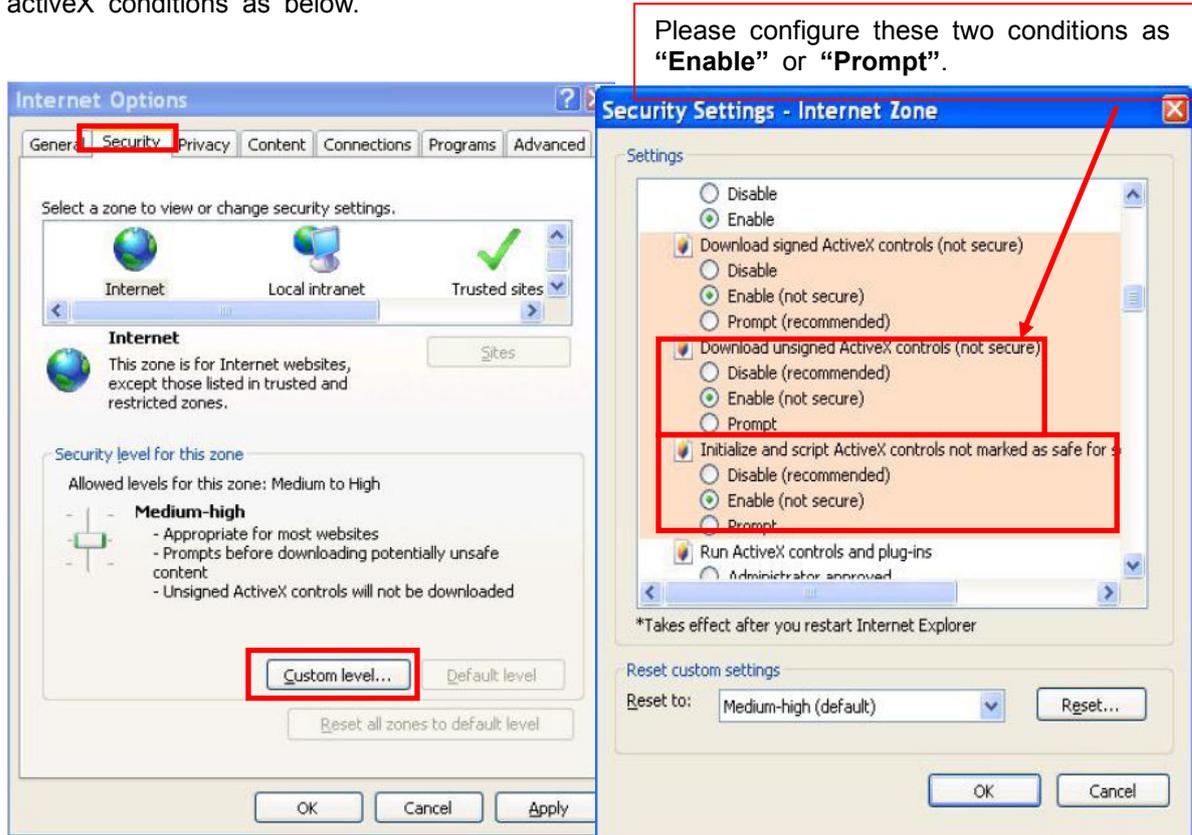


## CHAPTER 7 NETWORK SURVEILLANCE

### 7-1 IE SETUP

(1) **Pework:** Before you use, make sure you have **enabled the active X program** to download and run on your computer. Please note that some **anti-virus** program may block the connection. If this happens, we suggest you to use the AP (remote desktop) for surveillance. (See Section 7-2)

**Enable Active X:** In your IE, choose “Tools”, and go to “Internet Options”. The window below will appear. Choose “Security”, select Custom level, and configure the activeX conditions as below.



**Deactivate the Anti-Virus Program:** Please deactivate the web page protection in your antivirus program.

### (2) Login DVR with IE

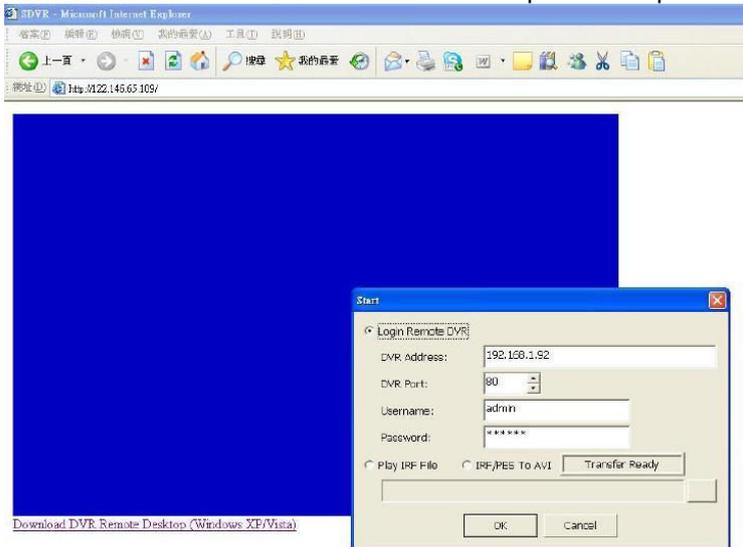
**Step One :** Enter the IP address of DVR in IE browser. Here you may choose to setup IE remote or download the AP software.



**Step Two** : Click OK when window prompts to install an ActiveX for IE remote desktop. After Installation, please enter the user name and password. Default user name is **admin** and password is **123456**. Other related setup about user account and password, please check “5-5 ACCOUNT SETUP”.



**Step Three** : Please enter information of login DVR: IP, port, user name and password, or choose “PLAY RECORDED FILE” to open backup files in your PC.



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



## 7-2 SOFTWARE INSTALLATION AND SETUP

The software, DVR Remote Desktop, can allow you to remotely access and control the DVR from PC. You can download from the Internet.

Note: Before you run the program, make sure you have installed **Direct X 9.0**. The software can be found inside the CD.

### (1) Download From The Internet

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



Note : This IP is only for reference. Please setup your local IP.

**Step Two** : Below windows will be shown up. Please enter the user name and password. Default user name is **admin** and password is **123456**. Other related setup about user account and password, please check "5-5 ACCOUNT SETUP".



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



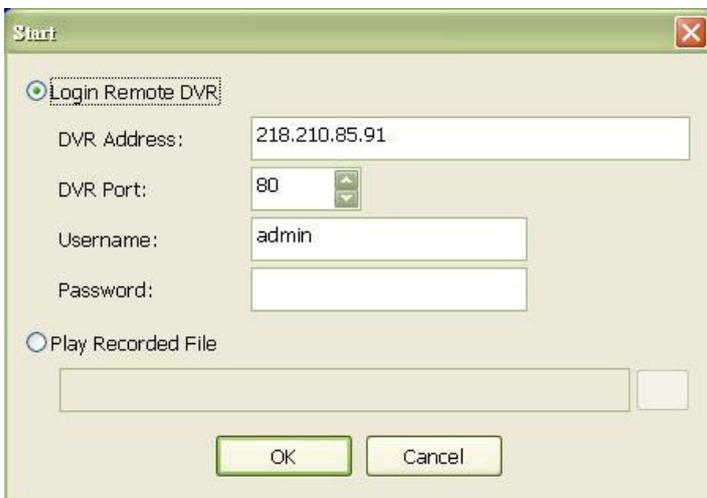
**Step Four** : Run or save our software.



## (2) Run the Program

If you have download the program from the Internet, click on the program "DVRemoteDesktop.exe" to run.

**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. The default username and password is "admin/ 123456".



**Step Six** : You've logged into the DVR. The operation of software remains the same as local DVR. The user can right-click on the DVR Remote Desktop and the main menu will be shown on the screen. The menu works exactly the same as the one in DVR. (Please refer to Chapter 5 for detail)



Furthermore, it provides some exclusive functions for remote users. Please check **Table 7-3.1** for detail information and **Table 7-3.2** for system requirements for software.

**Table 7-3.1** Toolbar of AP software

FILE - RECORD TO LOCAL	Record data to your PC, including <i>LIVE</i> and <i>Playback</i> .
FILE - PLAY RECORDED FILES	Play recorded files “.irf”
FILE – EXIT / ALT + F4	Close the AP software.
EDIT - CHANNEL NAME/F2	Edit the channel name of your DVR including font, size italic, and boldface of characters.
EDIT - RESET CHANNEL NAME	Reset channel name back to default.
VIEW - HIDE CAPTION & MENU/F9	Hide the caption and menu.
VIEW - DISABLE RESIZING/F10	Disable resizing the window.
VIEW - FULL SCREEN/F11	Switch it to full screen.
HELP – ABOUT	Show information about software and information.

**Table 7-3.2** System Requirements for AP software

CPU	Intel Pentium 4 above
OS	Microsoft Windows Vista, Windows XP SP2 above
RAM	512M above
OTHERS	DirectX 9.0 above

## 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 phone OS for Windows mobile 5.0 above, Symbian, OS X, RIM etc. To ensure your PDA or mobile phone can monitor your DVR, please refer to Appendix IV.

Please confirm network function of DVR has been activated before mobile connection :  
Main menu → Network Setup → HTTP Setup → Check the “ENABLE HTTP SERVER”  
(See Section 5-6.2)

### 8-1 MOBILE APPLICATION INSTALLATION & OPERATION FOR SYMBIAN SYSTEM

Mobile Device : Nokia, SonyEricsson...etc.

System requirement :

- 3G/GPRS must be provided from your telecom service.
- Mobile device should be support 3G/GPRS protocol and Java cldc1.0/midp 2.0 environment.

#### 8-1.1 MOBILE APPLICATION INSTALLATION

Please follow the steps cited below to perform the mobile device surveillance function.

**Step 1 :** Please download the files (**DVRH264.jar** and **DVRH264.jad**) in the CD that is packed with DVR, through Bluetooth or USB cable to your mobile phone. The files are in **/3G\_Software/Mobile/Symbian/**. You can also download files from the manufacturer's website to your mobile phone.

**Step 2 :** Install the application software in your mobile device. Please run the file **DVRH264.jar**. The program will be installed.

#### 8-1.2 MOBILE APPLICATION OPERATION

After the installation, enter the program files menu in your mobile device to run an application called “**H.264 MIDlet**”.

Select MENU at the left lower corner of your mobile Screen. The 4 commands, **Login, Add, Modify** and **Delete**, will show up.

##### 8-1.2.1 ADD NEW LOGIN DVR

To log into the DVR, you need to provide the remote DVR information. Find “ADD” under the “MENU”. Then enter the remote DVR's IP address, port number, account name and password. Press “ADD” to save this information after entering.



The screenshot shows a mobile application interface titled "Edit Data". It has a blue header bar with "ABC" on the right. Below the header, there are four input fields:

- IP:** A text box containing "218.210.85.91".
- PORT:** A text box containing "80".
- ACCOUNT:** A text box containing "admin".
- PASSWORD:** A text box containing "\*\*\*\*\*".

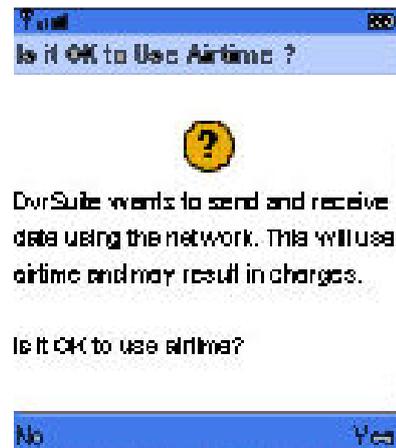
At the bottom of the screen, there is a blue bar with "Back" on the left, a downward arrow in the center, and "OK" on the right.

### 8-1.2.2 LOGIN TO THE DVR

1. Use the Login command to login to a DVR and monitor live images. If multiple DVRs have been added to the mobile application, they will be listed by name. You can select one to log in.



2. A confirmation message might show up for network charge before connection. The fee rate will depend on the telecom company and package fee you go with.



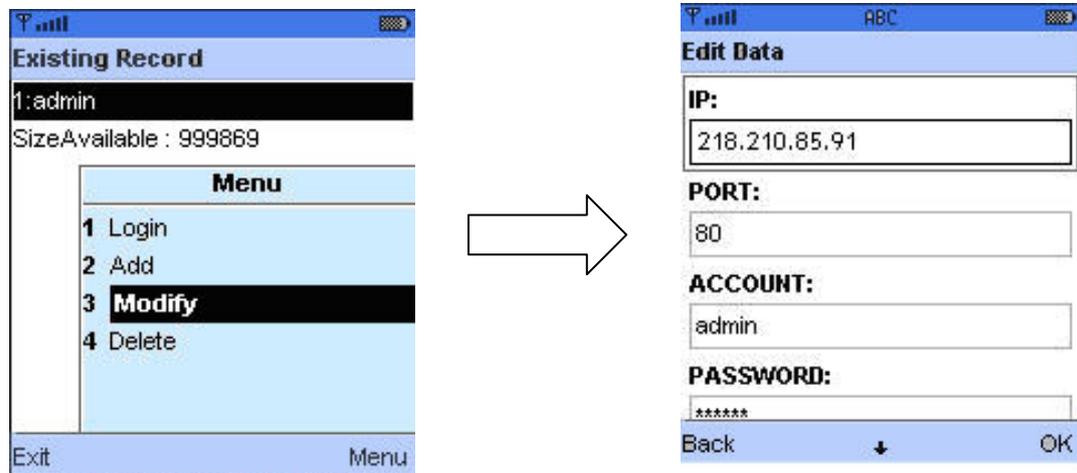
3. Network connectivity will take some time. It'll be affected by networking environment and bandwidth flow. Live image will show up after a successful connection.

PS. The *Live* cannot be displayed in your mobile when the recording is off in local DVR.



### 8-1.2.3 MODIFY THE LOGIN INFORMATION OF DVR

You can use the MODIFY command to change the login information of DVR. The dialogue is identical to that of the ADD command.



### 8-1.2.4 DELETE THE LOGIN INFORMATION OF DVR

DELETE command can be used to remove the DVR information if it is no longer useful. Select the DVR on the name list then choose DELETE



## 8-1.3 LIVE MONITORING OPERATION

This paragraph describes some operation under LIVE monitoring mode in your mobile device.

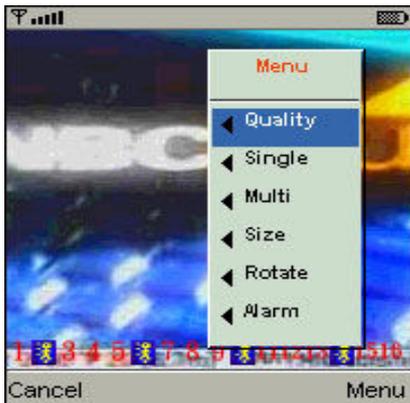
### 8-1.3.1 SCROLL THE IMAGE

You can use the keypad on your mobile device to scroll the image if it's oversized.

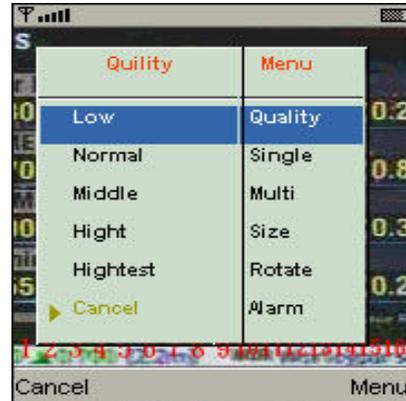
**Table 8-1.1 Keypad Action**

KEY	ACTION
2	Scroll Up
4	Scroll Left
6	Scroll Right
8	Scroll Down

### 8-1.3.2 IMAGE QUALITY SETUP



Select QUALITY under the MENU.



There will be 5 levels for you to choose: Low · Normal · Middle · High and Highest.

### 8-1.3.3 CHANNEL DISPLAY

You can choose single or quad channel display for live monitoring.



Select "SINGLE" under the "MENU", there will be all channels of your DVR in list for you to choose.

PS. The *Live* cannot be displayed in your mobile when the recording is off in local DVR.

### 8-1.3.4 SIZE OF IMAGE

The screen size of different mobile device can be really different. You can select SIZE under the MENU to choose from ORIGINAL or FIT SCREEN to resize the display image.

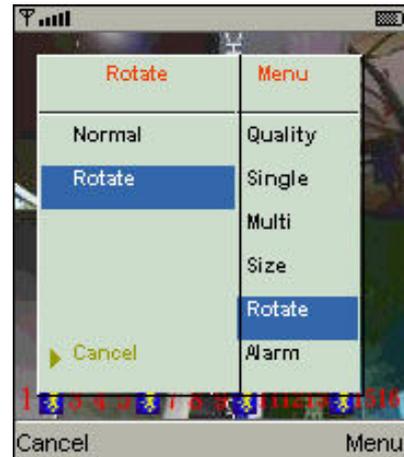


Table 8-1.2 Adjust Size of Image

Item	Description
ORIGINAL	The image will be shown in original size.
FIT SCREEN	The image will be shown to fit the screen.

### 8-1.3.5 ROTATE THE IMAGE

The Live image can be displayed in normal or rotate to 90 degrees. Select ROTATE under the MENU for this operation.



### 8-1.3.6 ALARM

This application not only allows you to remotely monitor through mobile device but receive the alarm that has been triggered by events such as motion detected, sensor triggered and Vloss.

Graphical icons below will be shown on the status :



: Motion detected



: Sensor triggered



: Video loss

Select the ALARM under the MENU to switch this function on or off.



## 8-2 MOBILE APPLICATION INSTALLATION & OPERATION FOR WINDOWS MOBILE SYSTEM

The applications for Window Mobile OS in H.264 compression can transfer both audio and video signal to your mobile device.

System Requirement :

Mobile device OS : Windows mobile system 5.0 above.

Mobile device need to support internet: GPRS / 3G / Wifi... etc.

### 8-2.1 MOBILE APPLICATION INSTALLATION

Please follow the steps cited below to perform the mobile device surveillance function on your mobile device (mobile phone, PDA...etc).

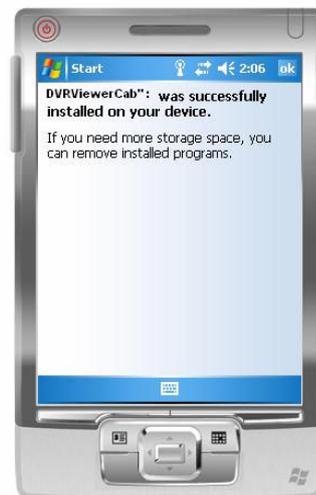
**Step 1 :** There are different software for PDA & mobile phone.

- **PDA phone:** Please download the “**H264Pocket.CAB**” in the CD in path **/3G\_Software/PDA**. You can also download files from the manufacturer’s website to your phone.
- **Mobile Phone:** Please download all the files in **/3G\_Software/Mobile/MS\_Mobile**.



**Step 2 :** Install the application software.

- **PDA phone:** Please run “**H264Pocket.CAB**” to install.
- **Mobile Phone:** Please run “**PocketDVR.exe**”, and the program will start.



## 8-2.2 MOBILE APPLICATION OPERATION

For PDA, after the installation, enter the program files menu in your mobile device to run files named “H264Pocket”(for PDA phone). For mobile phone, just run the program “PocketDVR.exe”.

This application allows you to remotely logon and monitor DVR. Press OK to bring up the operation menu; see below chart to further information.

**Table 8-2.1** Commands in the Application

Item	Function	Description
ADD	Add login DVR	Enter DVR’s name, IP address, port, account user, password. Then press OK.
LOGIN	Login DVR	Choose the DVR that you’d like to log in, and press OK. PS. The Live cannot be displayed in your mobile when the recoding is off. PS. Network connectivity will be affected by networking environment and bandwidth flow. The fee rate will depend on the telecom company and package fee you go with.
MODIFY	Modify login DVR	Choose DVR, press MODIFY, and press OK to save change.
DELETE	Delete login DVR	Choose DVR and press DELETE to delete the DVR info.

### The Operations of the Application – Add, Modify, Login and Delete



### 8-2.3 OPERATION UNDER THE LIVE MONITORING

After successful login the DVR, press “VIEW” to bring up operation menu. You can choose the channel, resize the image, choose the quality, and turn on/off the status bar, alarm, full screen display....etc.



**Table 8-2.2** The Operations Under Live Monitor

Item	Function	Description								
CHANNEL 1~4	Display for CH1~4	Choose from CH1~4 to display								
SCREEN	Size of image	Original : image size as original Stretch : stretch the size as full screen Fit : resize the image to fit the screen								
QUALITY	Quality	Change the quality of image. Please note the better quality, the slower data transfer rate.								
STATUS BAR	Status Bar	Graphical icons indicated below will be shown on the status bar if there is event such as motion detected, sensor triggered and video loss detected on any channel. You can also uncheck the “STATUS BAR” to deactivate this function. <div style="display: flex; justify-content: center; align-items: center; margin-top: 10px;"> <table border="1" style="border-collapse: collapse;"> <thead> <tr> <th style="width: 30px;">Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"></td> <td>Motion Detect</td> </tr> <tr> <td style="text-align: center;"></td> <td>Sensor Trigger</td> </tr> <tr> <td style="text-align: center;"></td> <td>V-Loss</td> </tr> </tbody> </table> </div>	Icon	Description		Motion Detect		Sensor Trigger		V-Loss
Icon	Description									
	Motion Detect									
	Sensor Trigger									
	V-Loss									
ALARM	Alarm	Alarm through your mobile device can be triggered if there is event to be detected. You can also uncheck the “ALARM” under the “VIEW” to inactivate this function.								

### **8-3 MOBILE APPLICATION OPERATION FOR OTHER SYSTEMS**

For other 3G mobile system, like (1) Apple System, including iPhone and iPod Touch, and (2) Blackberry System, etc, no installation is required. Please go to the website [http://\(DVR\\_IP\\_address\)/jpeg.html](http://(DVR_IP_address)/jpeg.html), and you will be able to run Live monitoring.

## CHAPTER 9 CMS INSTALLATION AND USAGE GUIDE

CMS stands for Central Management Software, which manage up to 5 DVRs through network. Please install the software to start. The following sections will guide you to prepare your CMS environment.

9.1 CMS installation – Teach you how to install the CMS into your PC.

9.2 CMS login and environment – Teach you how to login, and briefly introduce the software interface.

9.3 ~ 9.5 – Introduce the environment

### 9-1 CMS INSTALLATION

Please check if your PC reach the following requirements, to make sure it works properly.

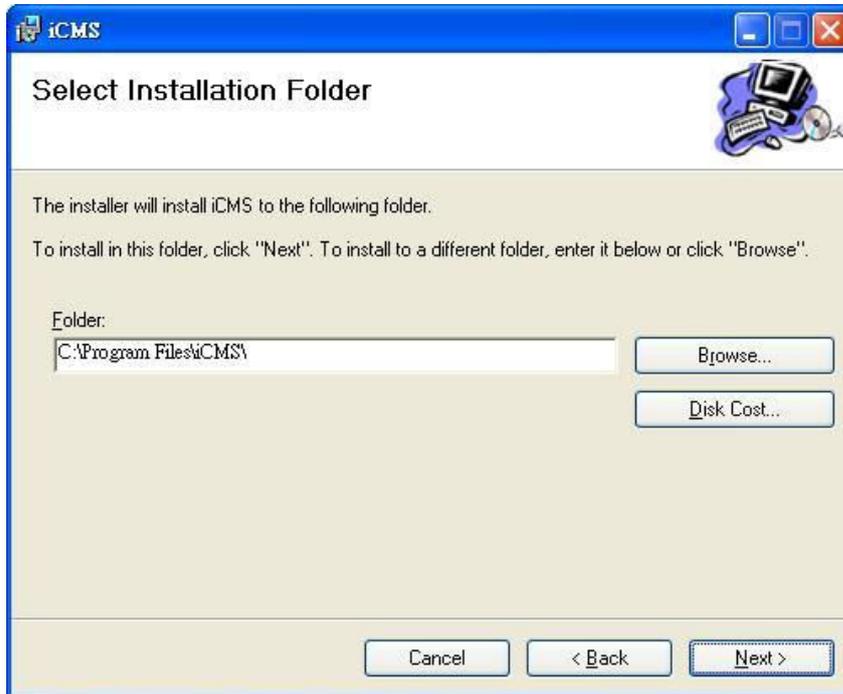
- Intel Pentium 4 processor or equivalent.
- Microsoft Windows Vista、Windows XP、Windows 2003 Server.
- 512MB memory above. (500M requested for group DVR connection and 180M for single DVR)
- 20MB HD space. Recording and image capturing require extra space for storage.

#### The Installation Instruction

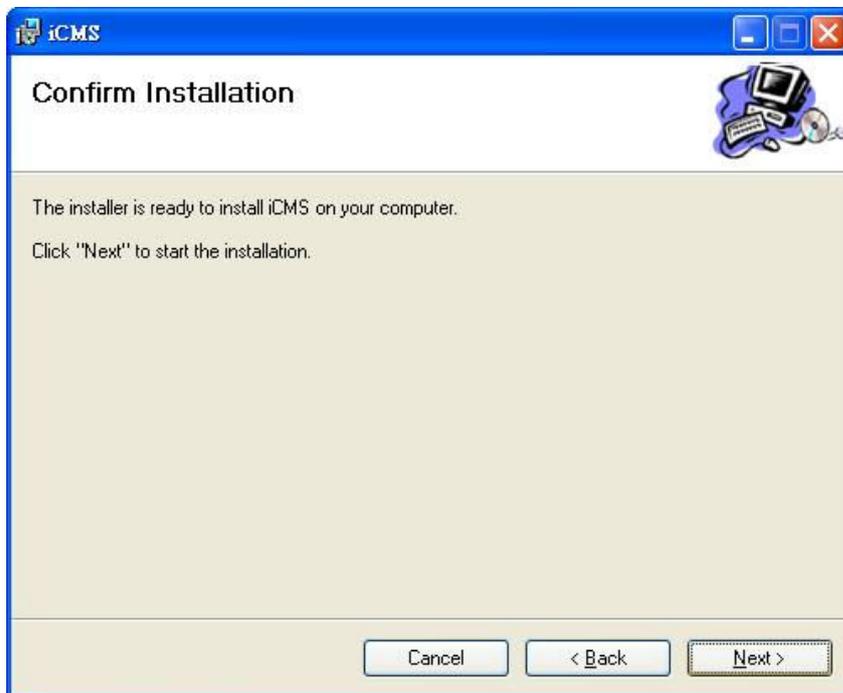
1. Open the CD provided in the package and execute “SETUP.EXE”. When the below window appear, select “NEXT”.

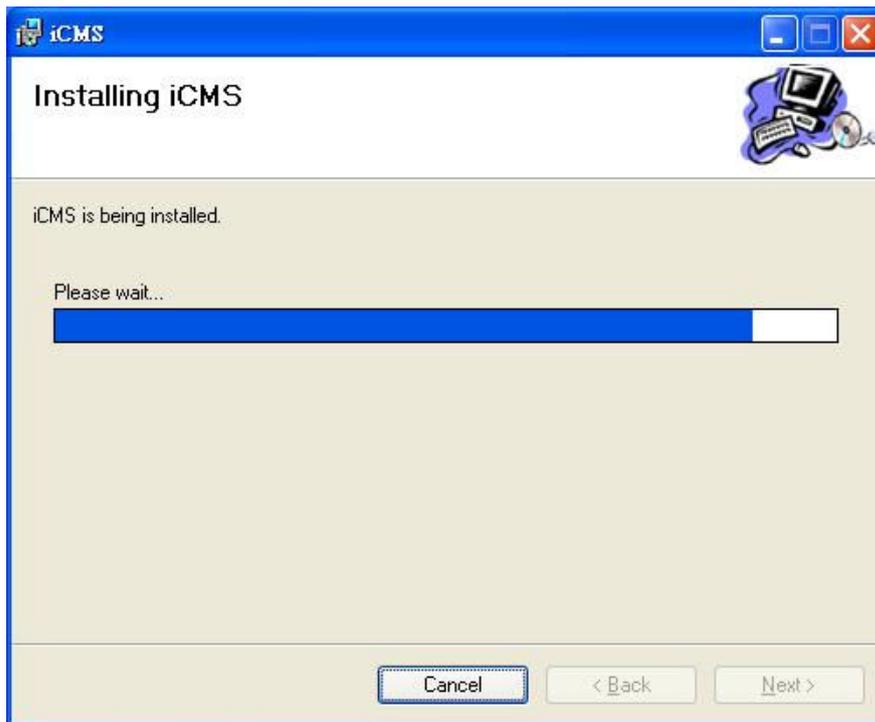


2. Select "BROWSE" to change installation path if needed. To check available space on hard disk, please select "DISK COST", then please select "NEXT" to go to the next step.

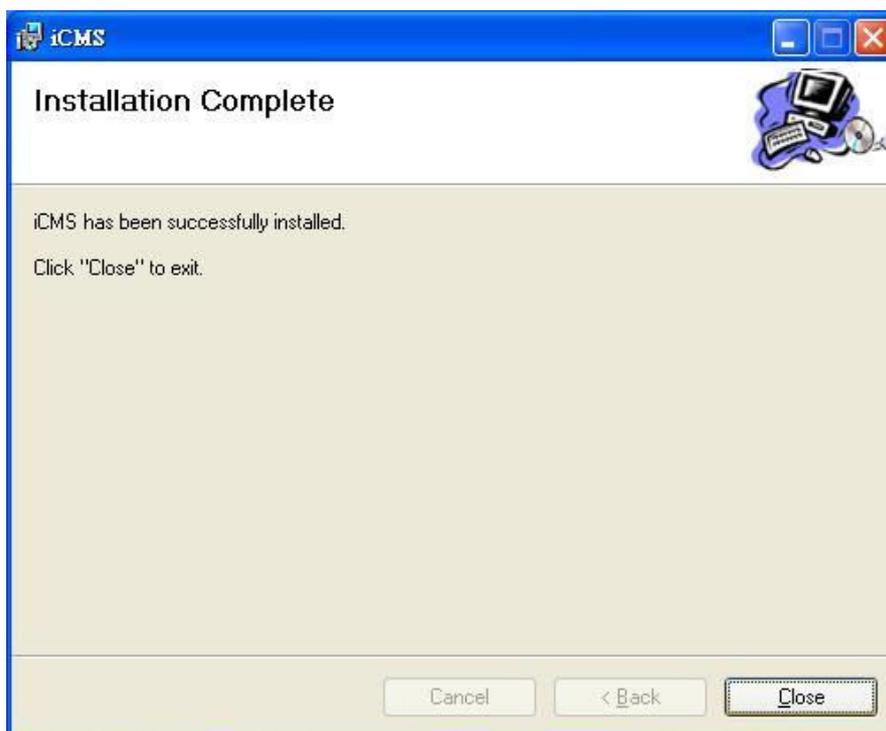


3. The "CONFIRM INSTALLATION" window shows up . Select "NEXT" and the installation starts.



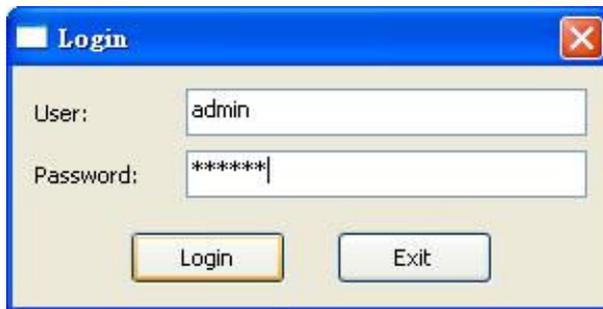


4. Select "CLOSE" to finish installation when the "INSTALLATION COMPLETE" window shows.

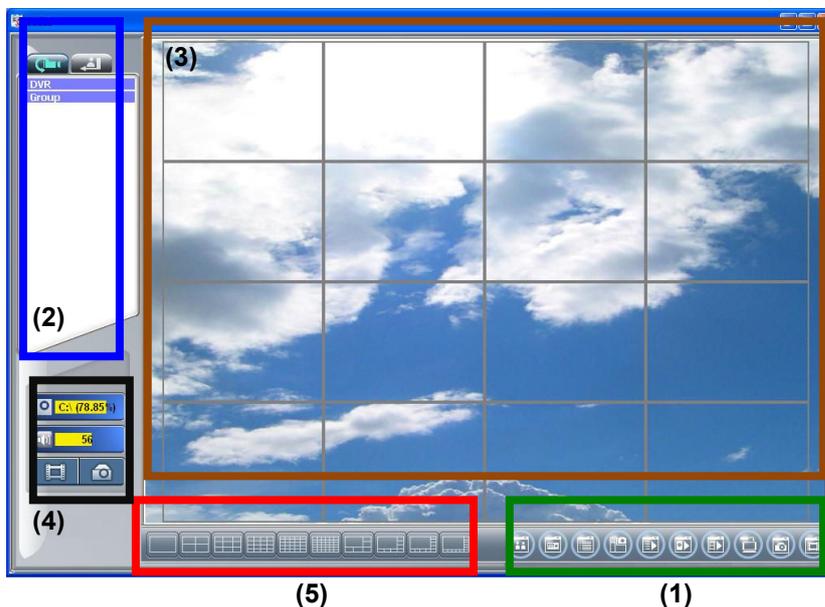


## 9-2 CMS LOGIN AND ENVIRONMENT

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



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



(1) OPERATION BAR	A set of 10 operations are provided by CMS. See "9-3 SETUP YOUR REMOTE SURVEILLANCE" and "9-7 PLAYBACK RECORDED VIDEO" for detail.
(2) DVRs, GROUPS & EVENTS	Information about DVRs, groups and events. See "9-4 REMOTE SURVEILLANCE MANAGEMENT" for detail.
(3) MAIN DISPLAY	Live image display area. See "9-4 REMOTE SURVEILLANCE MANAGEMENT" for detail.
(4) PC INFORMATION AND CONTROL	Information about local PC's hard disk, volume, recording...etc. See "9-5 LOCAL PC INFORMATION AND CONTROL" for more detail.
(5) DISPLAY MODES	Display modes supported by CMS. Note that group setup is required to use the display modes. See "9-3 SETUP YOUR REMOTE SURVEILLANCE" for detail.

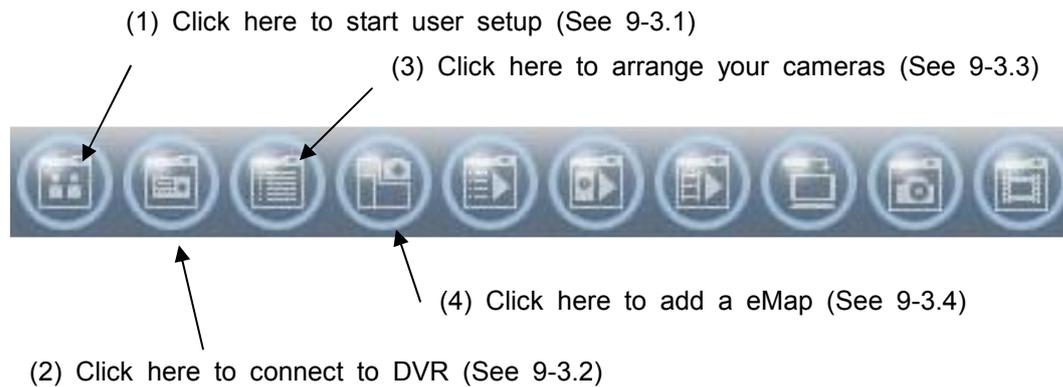
You need to setup the environment in able startup your remote surveillance. The setup flow is discussed in Section 9-3.

### 9-3 SETUP YOUR OWN REMOTE SURVEILLANCE

To setup your own remote surveillance, you have to do 4 things.

- (1) **Determine the user.**  
If you are the only user, you can use the administrator account. If there are other users, and they are not allowed certain actions, it is preferable to setup an account for each user. To setup a user, please refer to 9-3.1.
- (2) **Connect to your DVR.**  
You need to setup the network configuration for each DVR, so CMS can reach the DVR. Note that an individual setup is needed for each user for each DVR. To connect to DVR, please refer to 9-3.2.
- (3) **Group up your DVRs and arrange the cameras**  
Assume you have one or more DVRs connected. You can arrange your cameras on a specific channel on the screen, and save this arrangement as a group name. In this way, you can manage the cameras very easily. For detail, please refer to 9-3.3.
- (4) **Including additional information**  
If you want to include a map or some reference information, that is shown as a jpeg file, you can use the eMap function to help you reach this goal. For detail, please refer to 9-3.4.

The operations are listed below :

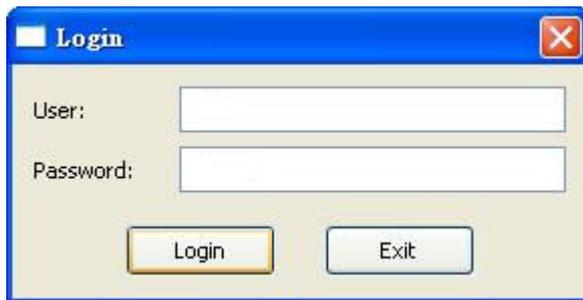


### 9-3.1 USER SETUP

Before the CMS can be used on a PC, a user account should be added with proper authority. Each user should 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.

After the account and password has been setup, the next time user opens the ICMS, when the login window appears, the user can type in the newly registered username and password to login ICMS.



Icon	Description
	Add a user account. The default authority is with none permission.
	Delete a user account.

Type in the user name and password for each user.

Click here to provide the user authority to certain actions.

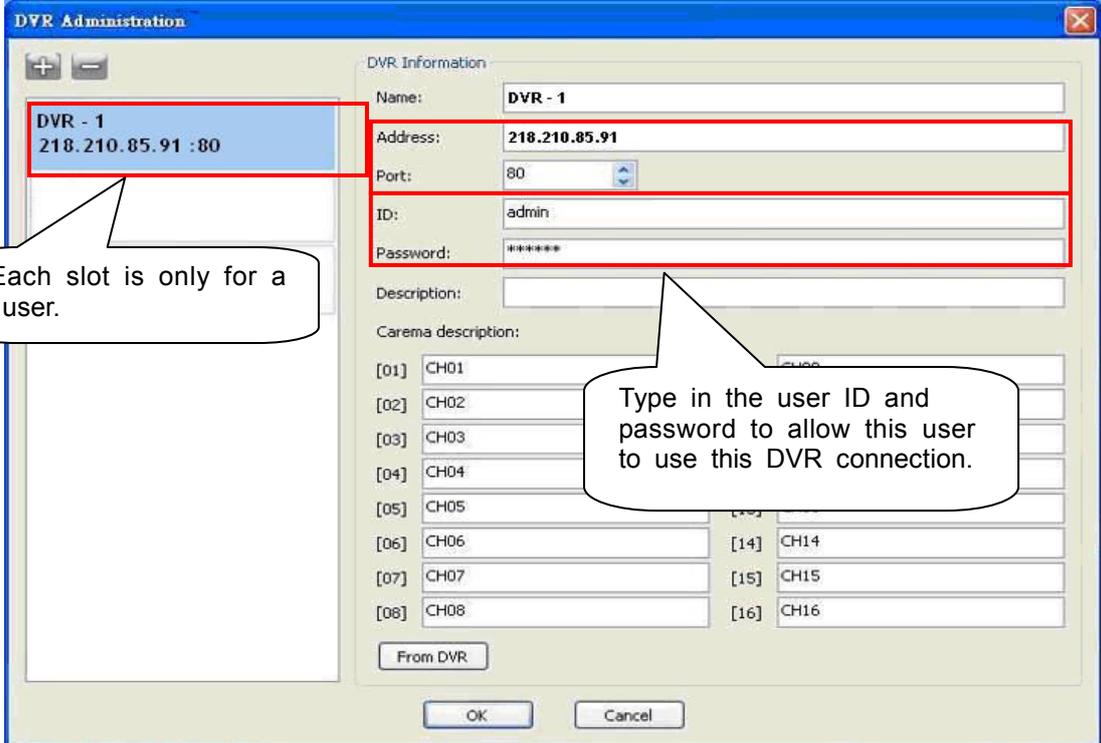
Click here to change the language for the CMS.

### 9-3.2 DVR CONNECTION

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

Note that, (1) **the user name and password refers to the account setup in the DVR.** To register a new account, please refer to Section 5.5. (2) Each DVR setup slot is only for an individual user. If you have more than one user connecting to the same DVR, please add a DVR setup slot for each user.

Icon	Description
	Add a DVR for a specific user.
	Delete a DVR for a specific user.



The screenshot shows the 'DVR Administration' window. On the left, a list contains one entry: 'DVR - 1' with IP address '218.210.85.91' and port '80'. The main configuration area is titled 'DVR Information' and includes the following fields:

- Name: DVR - 1
- Address: 218.210.85.91
- Port: 80
- ID: admin
- Password: \*\*\*\*\*
- Description: (empty)
- Carema description: (empty)

Below these fields is a 'From DVR' button and a list of channels from [01] to [16]. At the bottom are 'OK' and 'Cancel' buttons. Two callouts are present: one pointing to the list entry stating 'Each slot is only for a user.' and another pointing to the ID and Password fields stating 'Type in the user ID and password to allow this user to use this DVR connection.'

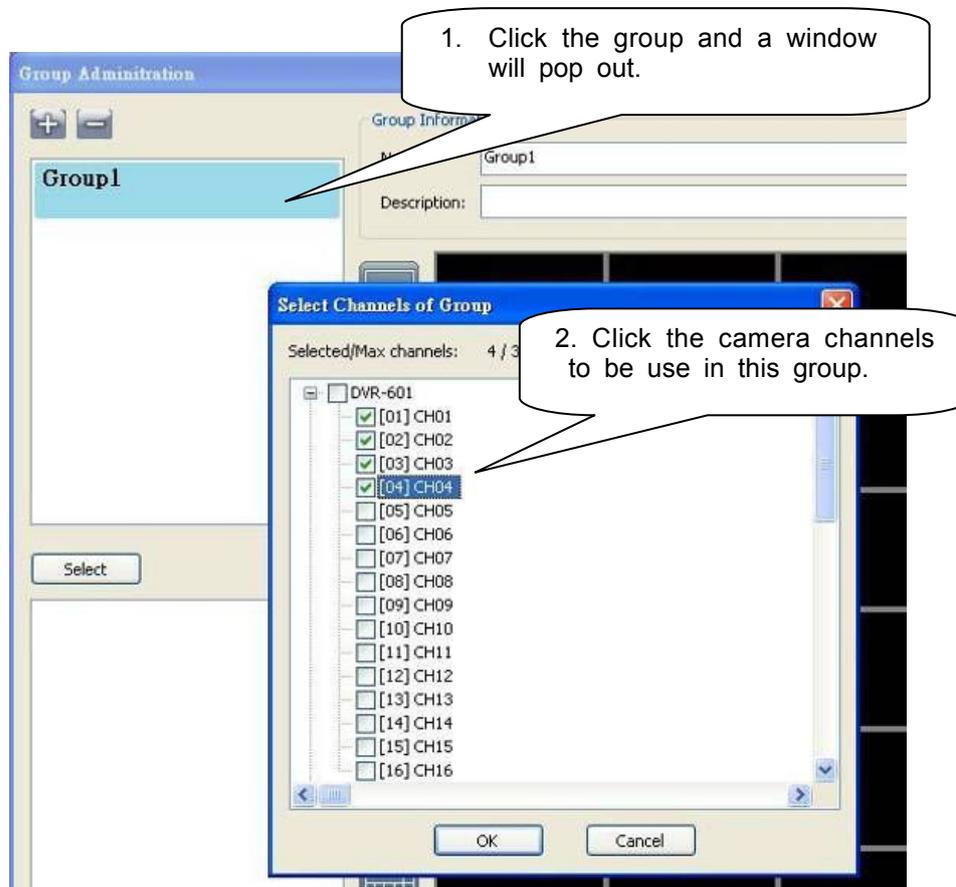
### 9-3.3 GROUP SETUP

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.

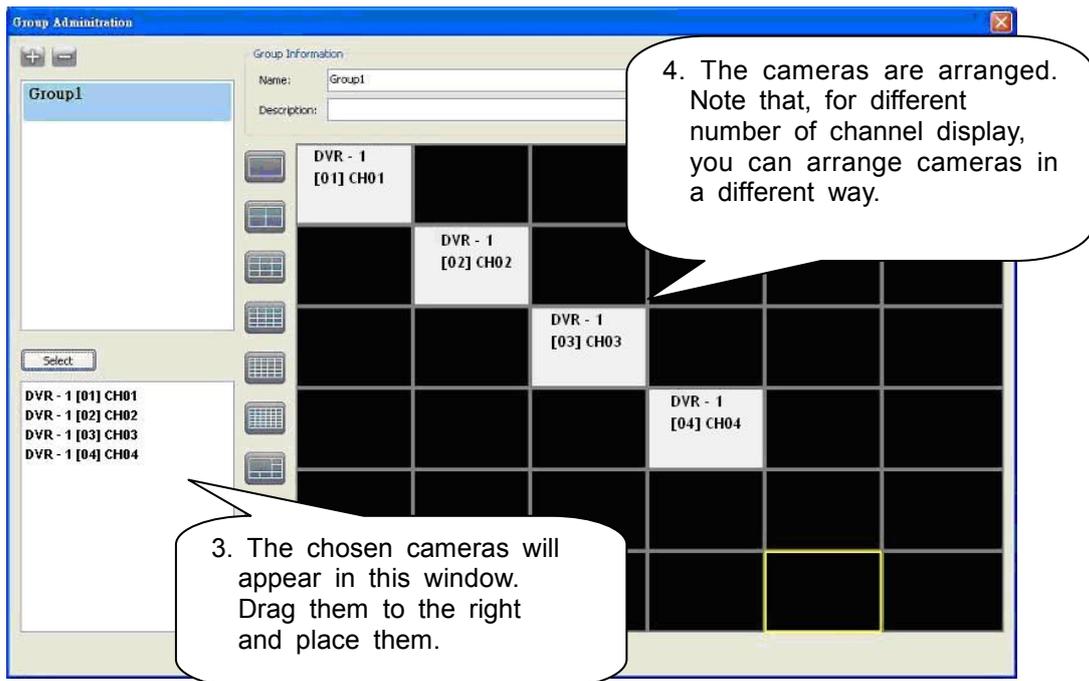
Steps :

- (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 would like to include in the group. To include all channels of a DVR, just check the DVR.

Icon	Description
	Add a group for a specific user.
	Delete a DVR for a specific user.



- (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.

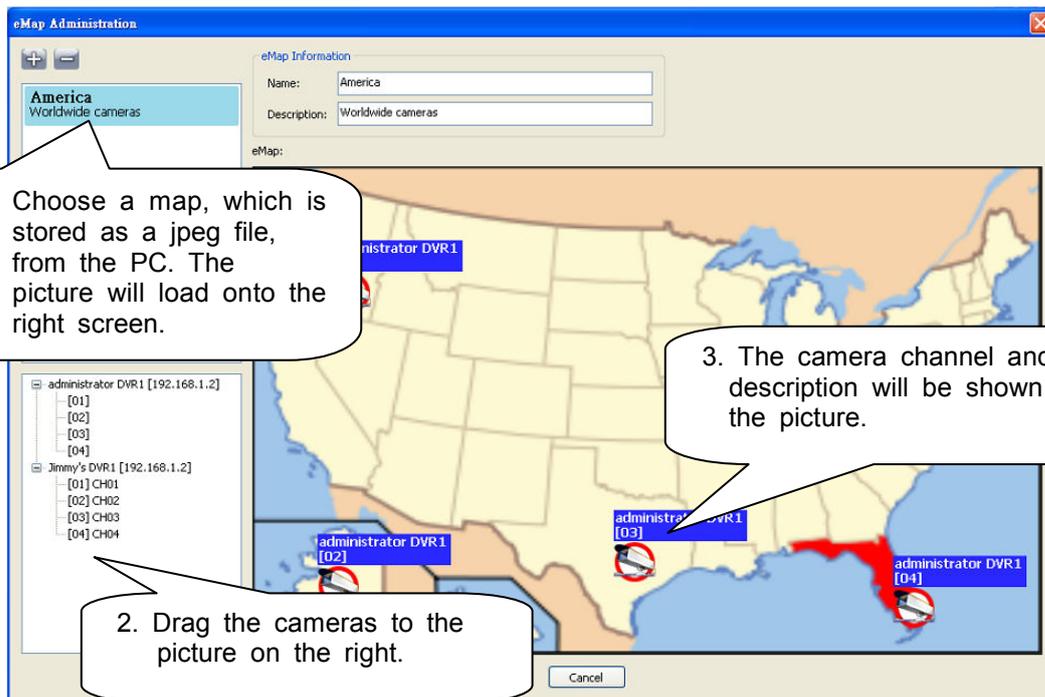


### 9-3.4 eMap SETUP

With eMap, the user can choose a map and place the camera channels on this map. **In this way, it is very easy to identify where the camera is located.** With eMap, the background map can be picked by the user and camera channels from multiple DVRs can be placed and dragged around onto 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.



## 9-4 REMOTE SURVEILLANCE MANAGEMENT

After setting up the users, DVR connection and groups, you are ready to start remote surveillance.

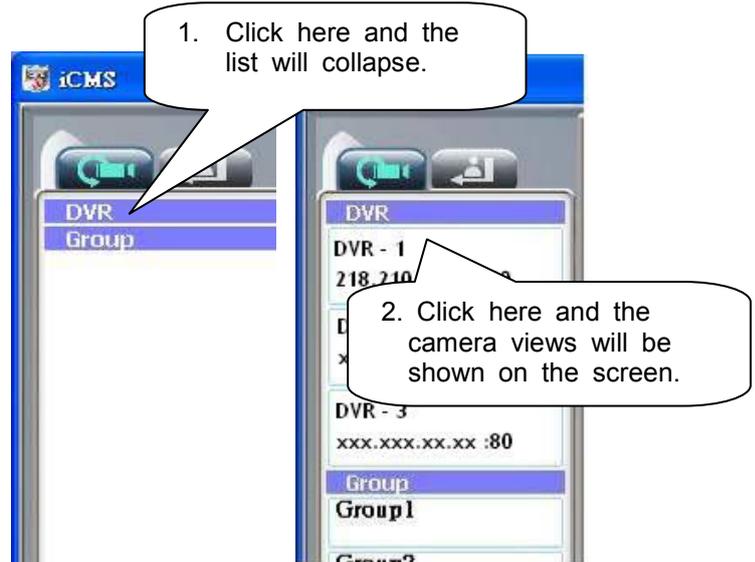
### 9-4.1 VIEW A DVR / GROUP LIST

Icon	Description
	View list of logged in DVR / Group.

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 on the main display.**

On the Group list, **double left click on a group will show live image from the channels of the group in the main display.**



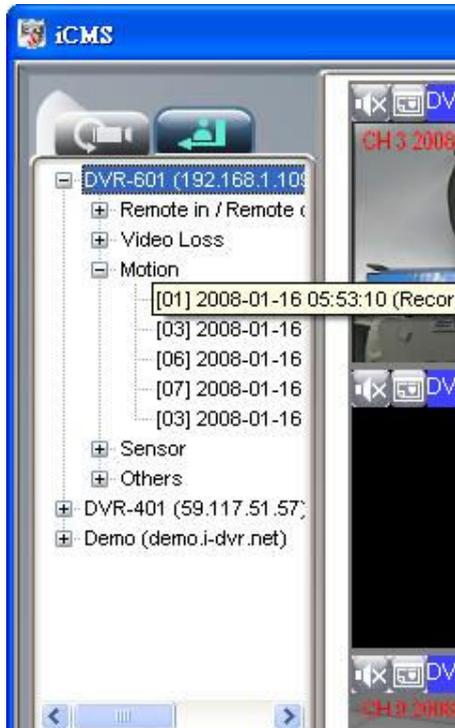
Left-clicking on a connected DVR will expand/collapse status of its all channels as below :

Icon	Description
	Video Loss
	Motion Detected
	Sensor Triggered



## 9-4.2 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).



## 9-4.3 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.



#### 9-4.4 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.

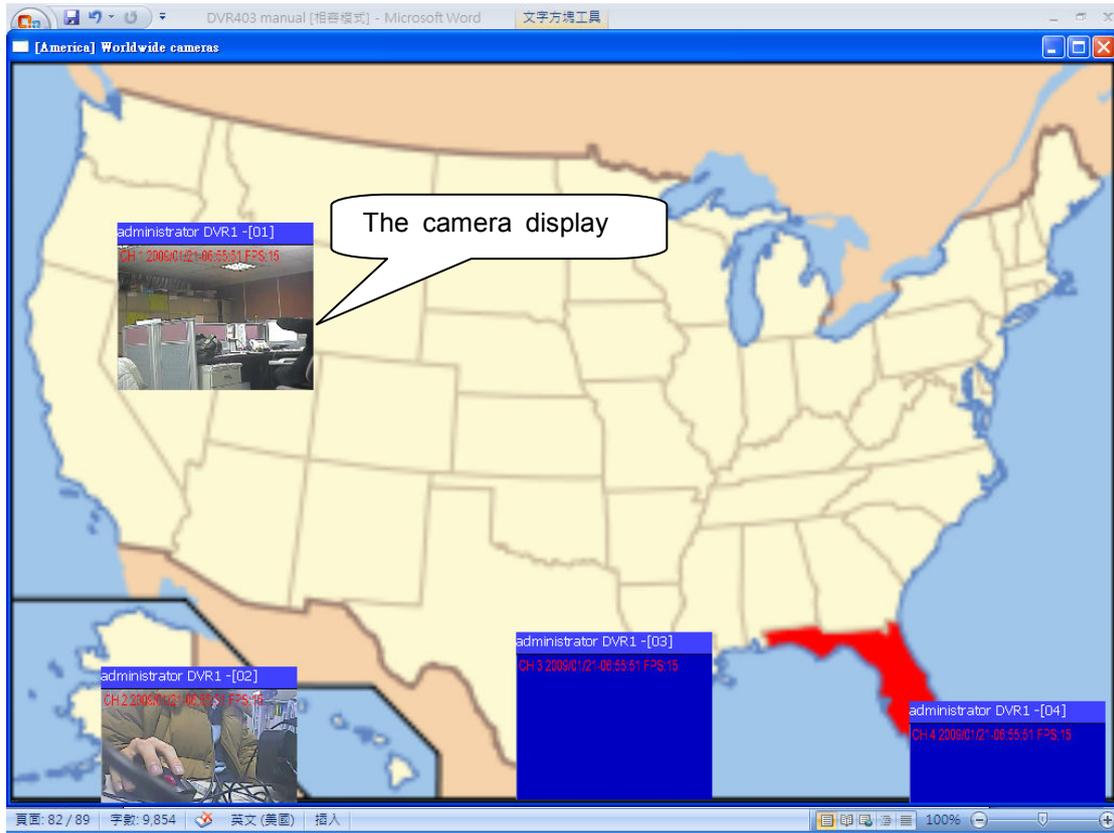


#### 9-4.5 eMAP DISPLAY

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 "9-3.4 eMAPSETUP" for setup information.



When you choose the eMap, the camera channel displays will be shown on the eMap.



## 9-4.6 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

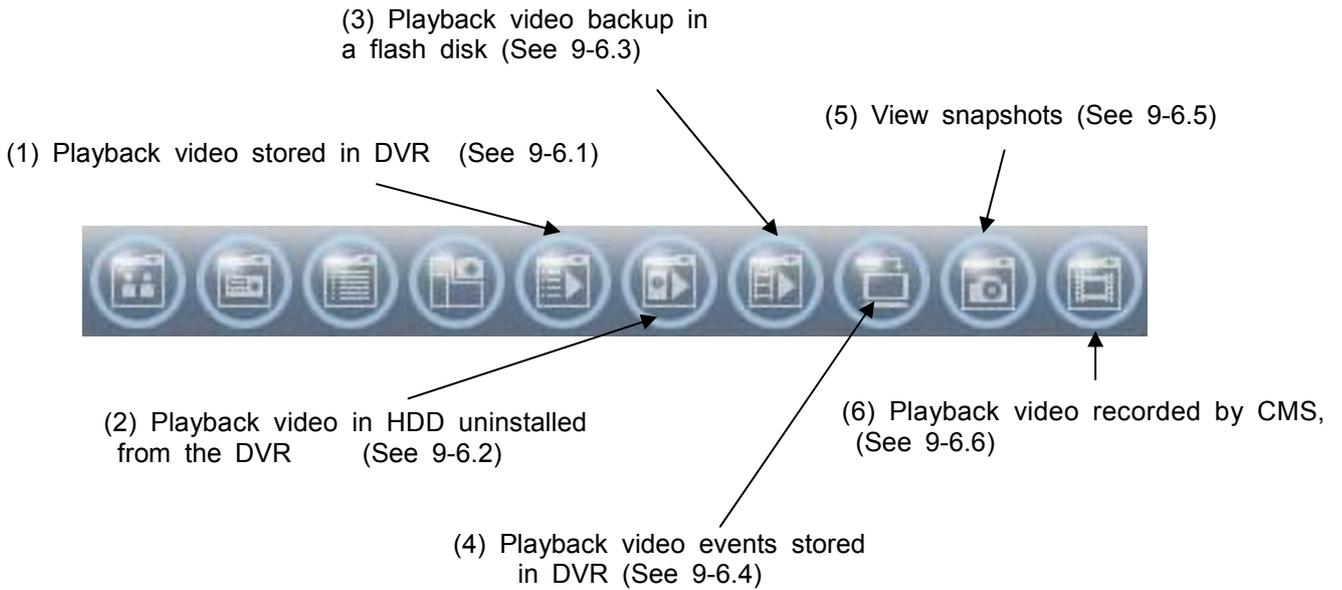


## 9-5 LOCAL PC VIDEO RECORD AND INFORMATION

The video record, snapshot control and information is located at the left lower corner of the screen. Please see the chart below :

Icon	Function	Description
	HDD INFO	Shows the ratio of available space/HDD size of the C:\ drive (where CMS is installed).
	VOLUME	PC volume or playback volume control bar.
	RECORDING	Record live image to local PC storage. To view locally stored data, use "RECORD" under the operation bar. Also see "9-6.6 HDD PLAYBACK" for detail.
	SNAPSHOT	Take snapshot to save in local PC storage. To view all the snapshot you've taken, please go to SNAPSHOT under the operation bar. See "9-6.5 REMOTE PLAY" for detail.

## 9-6 PLAYBACK VIDEO



### 9-6.1 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.

Choose a display mode

Choose a DVR to playback

Choose a time region to playback

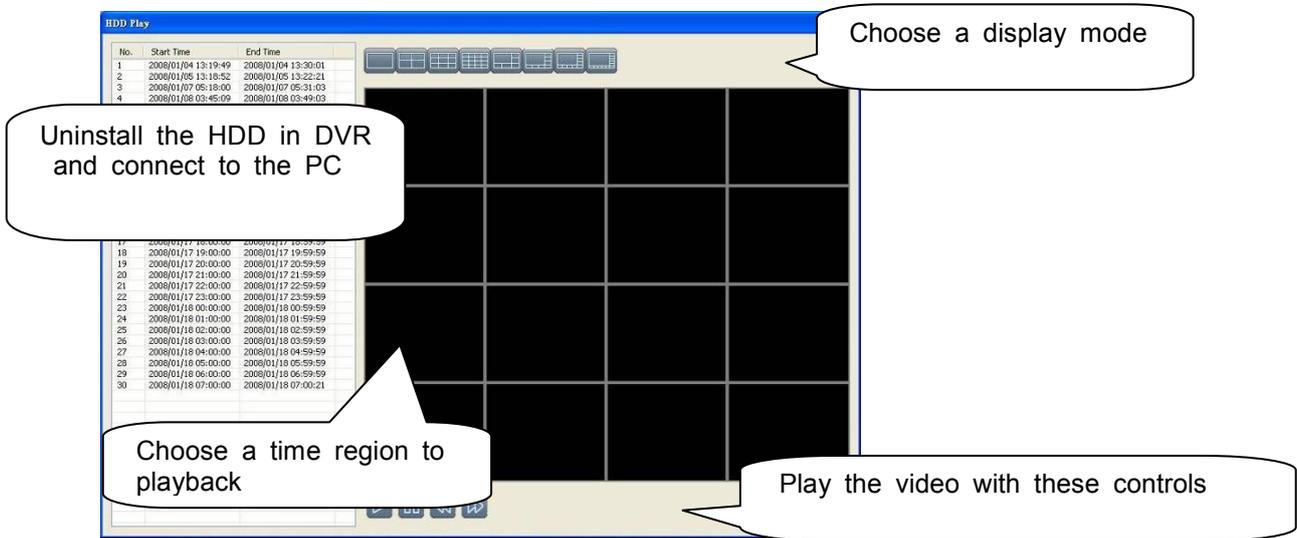
Play the video with these controls

No	Start Time	End Time
1	2008/01/14 17:00:00	2008/01/14 17:49:02
2	2008/01/14 16:00:00	2008/01/14 16:59:59
3	2008/01/14 15:00:00	2008/01/14 15:59:59
4	2008/01/14 14:00:00	2008/01/14 14:59:59
5	2008/01/14 13:00:00	2008/01/14 13:59:59
6	2008/01/14 12:00:00	2008/01/14 12:59:59
7	2008/01/14 11:00:00	2008/01/14 11:59:59
8	2008/01/14 10:00:00	2008/01/14 10:59:59
9	2008/01/14 09:00:00	2008/01/14 09:59:59
10	2008/01/14 08:00:01	2008/01/14 08:59:59
11	2008/01/14 07:00:00	2008/01/14 07:59:59
12	2008/01/14 06:00:00	2008/01/14 06:59:58
13	2008/01/14 05:00:00	2008/01/14 05:59:59
14	2008/01/14 04:00:00	2008/01/14 04:59:59
15	2008/01/14 03:00:00	2008/01/14 03:59:59
16	2008/01/14 02:00:00	2008/01/14 02:59:59
17	2008/01/14 01:00:00	2008/01/14 01:59:59
18	2008/01/14 00:00:00	2008/01/14 00:59:59
19	2008/01/13 23:00:00	2008/01/13 23:59:59
20	2008/01/13 22:00:00	2008/01/13 22:59:59
21	2008/01/13 21:00:00	2008/01/13 21:59:59
22	2008/01/13 20:00:00	2008/01/13 20:59:59
23	2008/01/13 19:00:00	2008/01/13 19:59:59
24	2008/01/13 18:00:00	2008/01/13 18:59:59
25	2008/01/13 17:00:00	2008/01/13 17:59:59
26	2008/01/13 16:00:00	2008/01/13 16:59:59
27	2008/01/13 15:00:00	2008/01/13 15:59:58
28	2008/01/13 14:00:01	2008/01/13 14:59:59
29	2008/01/13 13:00:00	2008/01/13 13:59:59
30	2008/01/13 12:00:00	2008/01/13 12:59:59
31	2008/01/13 11:00:00	2008/01/13 11:59:59
32	2008/01/13 10:00:00	2008/01/13 10:59:58
33	2008/01/13 09:00:00	2008/01/13 09:59:59
34	2008/01/13 08:00:00	2008/01/13 08:59:59
35	2008/01/13 07:00:00	2008/01/13 07:59:59
36	2008/01/13 06:00:00	2008/01/13 06:59:59
37	2008/01/13 05:00:00	2008/01/13 05:59:59
38	2008/01/13 04:00:00	2008/01/13 04:59:58
39	2008/01/13 03:00:00	2008/01/13 03:59:59

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

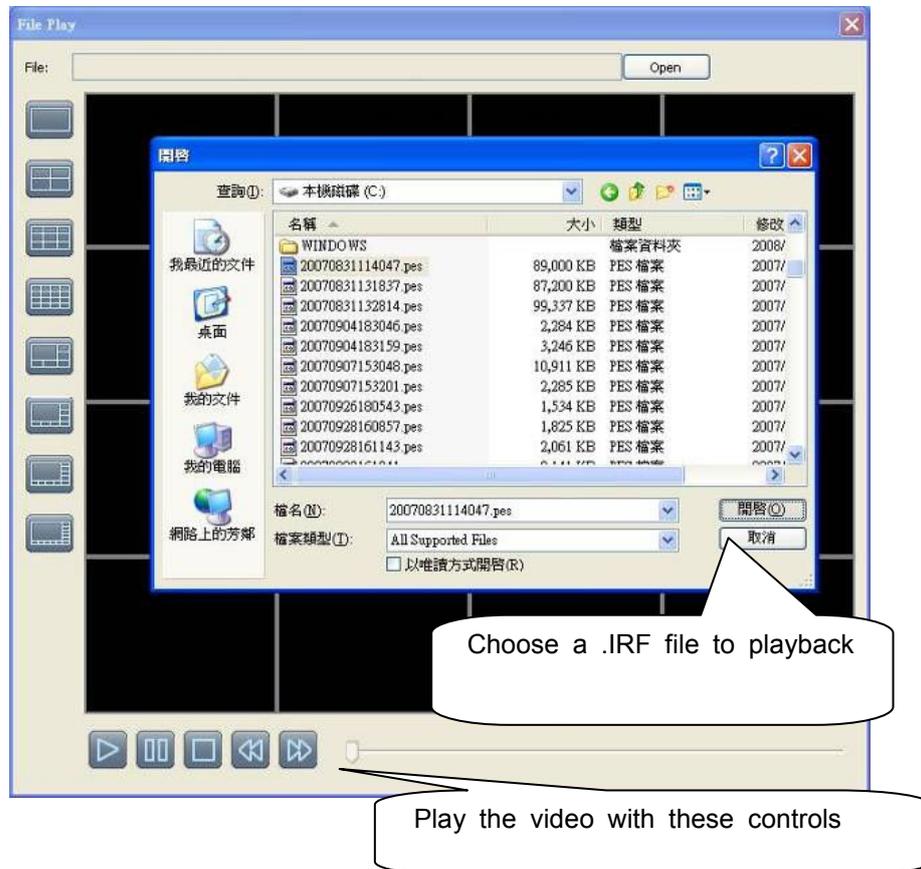
### 9-6.2 HDD PLAYBACK

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.



### 9-6.3 FILE PLAYBACK

The flash disk backup from the DVR is saved as .IRF files. 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 Playback.
	Pause.
	Stop playback.
	Fast forward.
	Fast rewind.

## 9-6.4 EVENT PLAYBACK

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

Steps to follow :

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

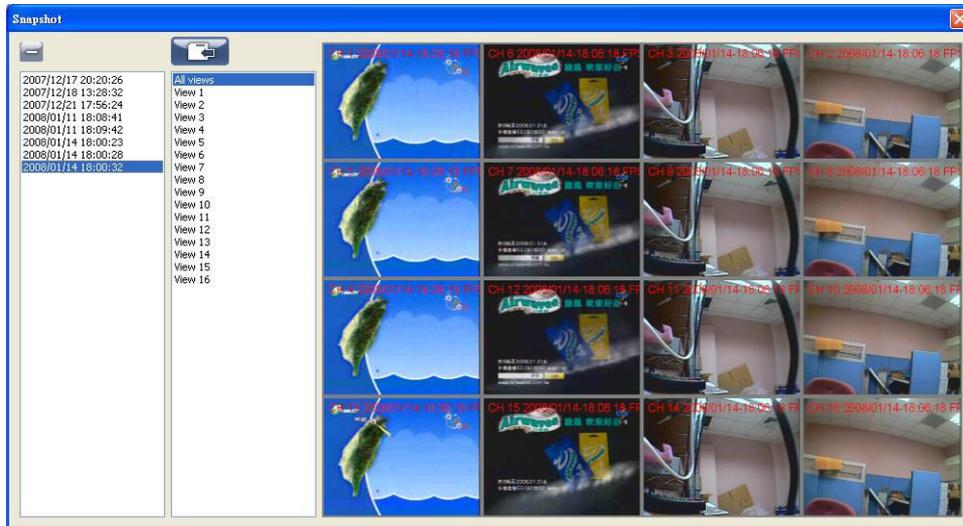
Use buttons at the bottom to control the playback.

The screenshot shows the 'Event Play' window. At the top, there's a dropdown for 'DVR: DVR - 1 (218.210.85.91)' and a grid of display mode icons. Below that is a calendar for January 2008 with the 10th and 11th highlighted. A list of events is shown on the left, with the 10th event selected. The main area displays 12 channels (CH01-CH12) in a grid, with CH11 showing a video feed. At the bottom, there are playback control buttons: play, pause, fast forward, and fast rewind.

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

### 9-6.5 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.

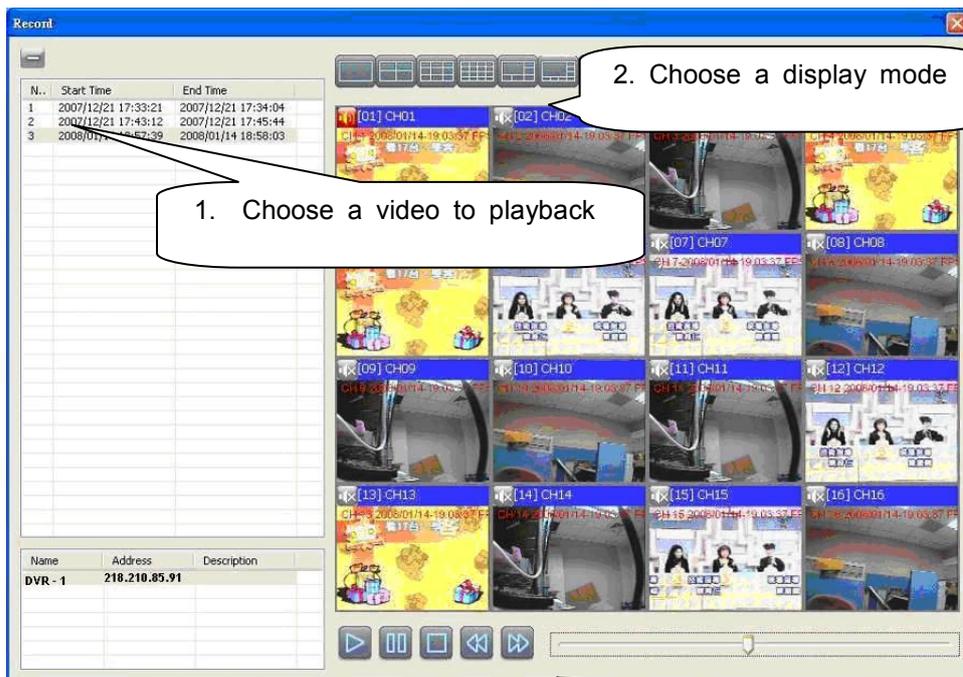


### 9-6.6 RECORDING DATA

It can play all the recording files you've recorded in line in RECORDING DATA. You can play or delete them here.

Steps :

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.



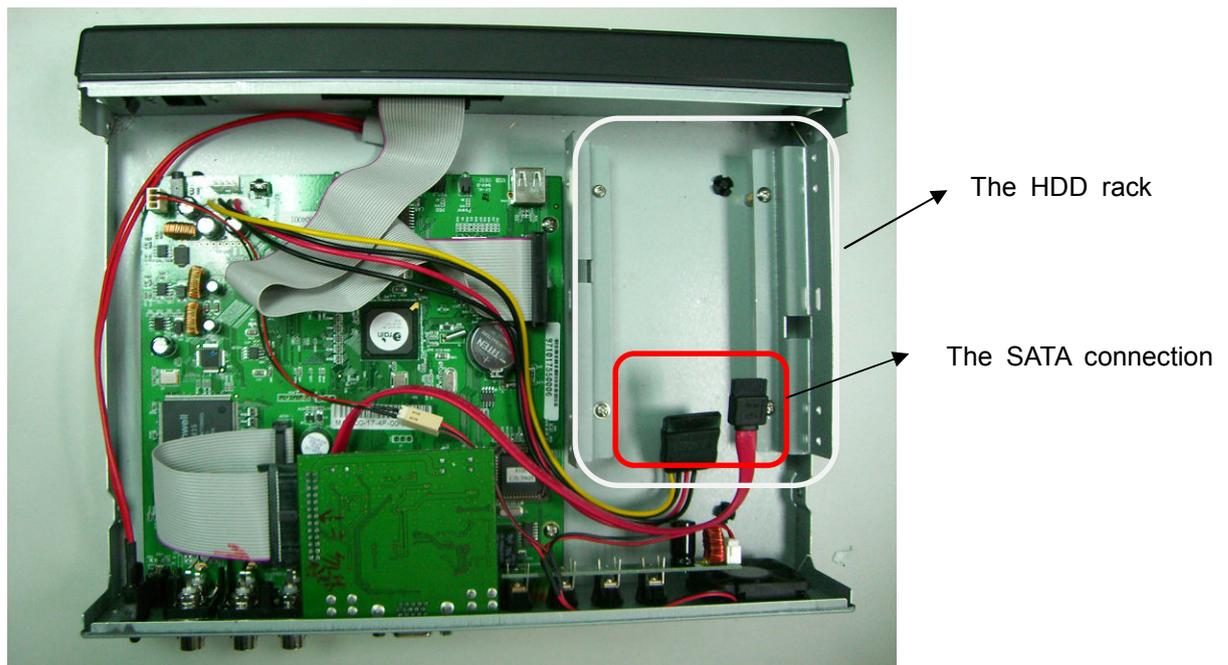
## APPENDIX I HARD DISK INSTALLATION

Note: the installation is for 4CH DVR only. However, 8CH and 16CH DVR are much the same, except that it has 2 HDD racks and different screw location.

1. **Unscrew the screws on the cover. There are 2 screws on each side, and 3 or 4 in the back, depends on the different models.**



2. **Take off the cover. Place the HDD on the HDD rack and plug SATA connection.**

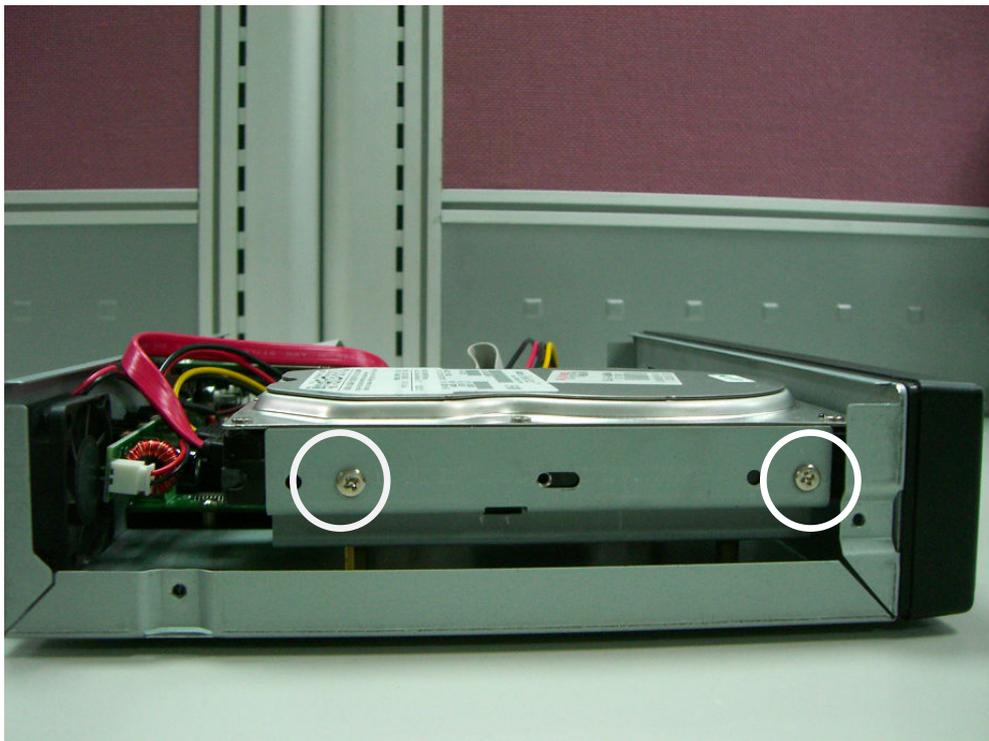


3. Screw up the HDD onto the HDD rack. Please screw up on both sides.



Plug the SATA connection

4. Put back the cover and screw the cover up. Now the installation is done.

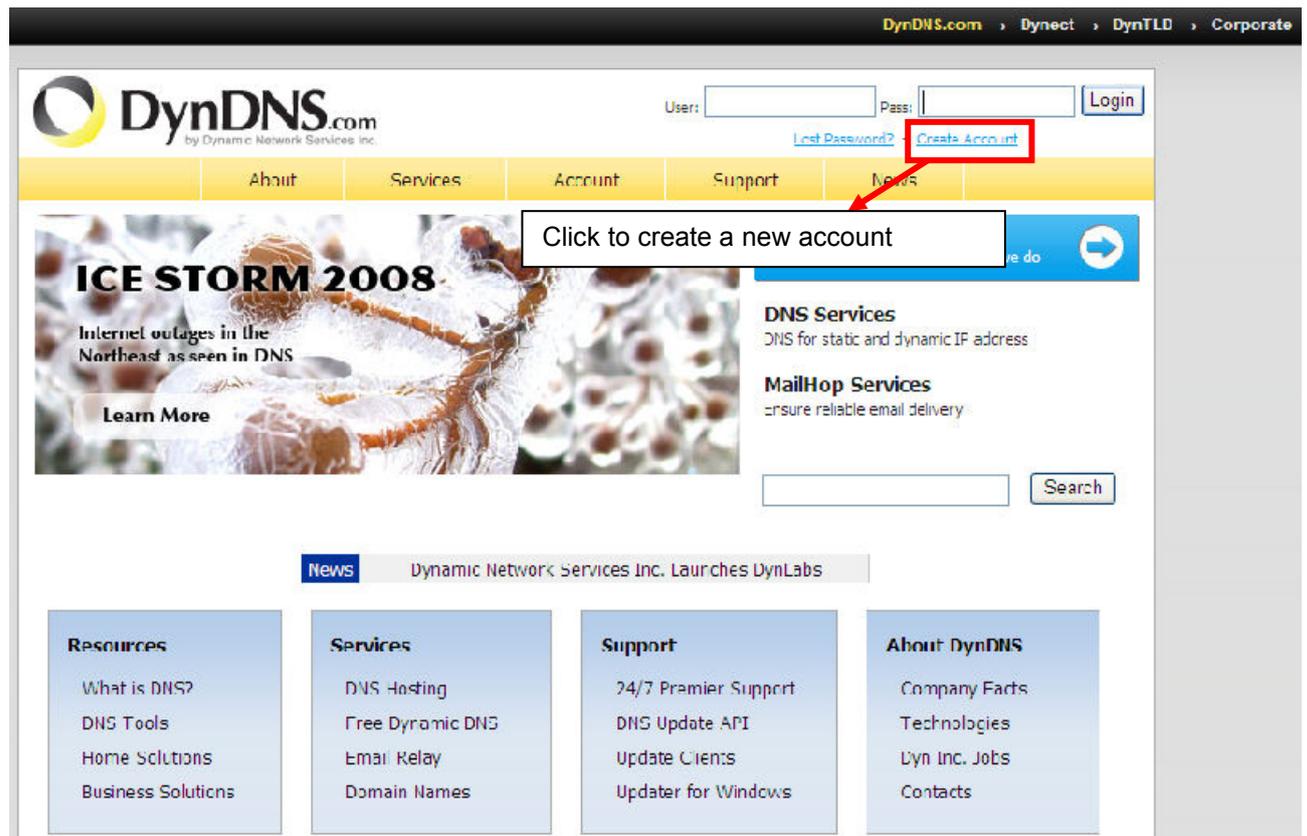


## Appendix II - DDNS SETUP

DDNS (Dynamic DNS) provides dynamic domain names for dynamic IP users. It translates domain names to dynamic IP address. Dynamic IP users can use DDNS to get access to their computers without memorizing the IP.

### 1. Apply for DDNS

This DVR supports DynDNS (<http://www.dyndns.com/>) DDNS service. To use DDNS service, we have to create an account first. Click "Create Account" under the "Login" button.



The screenshot shows the DynDNS.com website interface. At the top right, there is a navigation breadcrumb: [DynDNS.com](#) > [Dynect](#) > [DynTLD](#) > [Corporate](#). Below this is the DynDNS.com logo and a navigation menu with links for [About](#), [Services](#), [Account](#), [Support](#), and [News](#). A login form is present with fields for 'User:' and 'Pass:' and a 'Login' button. A red box highlights the 'Create Account' link next to the 'Login' button. A callout box with the text 'Click to create a new account' points to this link. Below the navigation menu, there is a banner for 'ICE STORM 2008' with the text 'Internet outages in the Northeast as seen in DNS' and a 'Learn More' link. To the right of the banner, there are sections for 'DNS Services' (DNS for static and dynamic IP address) and 'MailHop Services' (ensure reliable email delivery). A search bar is located below these services. At the bottom, there is a 'News' section with the headline 'Dynamic Network Services Inc. Launches DynLabs'. Below the news section are four columns of links: 'Resources' (What is DNS?, DNS Tools, Home Solutions, Business Solutions), 'Services' (DNS Hosting, Free Dynamic DNS, Email Relay, Domain Names), 'Support' (24/7 Premier Support, DNS Update API, Update Clients, Updater for Windows), and 'About DynDNS' (Company Facts, Technologies, Dyn Inc. Jobs, Contacts).

Complete the form and click “Create Account” button at the bottom to finish the process. DynDns will send an email to you. Click the link in the email and account creation process is complete.

**DynDNS** DynDNS.com > Dynect > TLDDNS > Corporate

User:  Pass:   [Lost Password?](#) - [Create Account](#)

About Services Account Support News

My Account  
 Create Account  
 Login  
 Lost Password?

**Create Your DynDNS Account**

Please complete the form to create your free DynDNS Account.

**– User Information**

Username:

E-mail Address:  Instructions to activate your account will be sent to the e-mail address provided.

Confirm E-mail Address:

Password:  Your password needs to be more than 5 characters and cannot be the same as your username. Do not choose a password that is a common word, or can otherwise be easily guessed.

Confirm Password:

**– About You (optional)**

Providing this information will help us to better understand our customers, and tailor future offerings more accurately to your needs. Thanks for your help!

How did you hear about us:

We do not sell your account information to anyone, including your e-mail address.

Done www.dyn dns.com

Login with your account/password and go to the account page.

DynDNS.com > Dynect > DynTLD > Corporate

**DynDNS.com** by Dynamic Network Services Inc.

User:  Pass:   [Lost Password?](#) - [Create Account](#)

About Services Account Support News

**1. Type in the user name and password you have applied.**

**2. Click here to login**

**ICE STORM**  
 Internet outages in the Northeast as seen in DNS  
[Learn More](#)

**Services**  
 DNS for static and dynamic IP address  
**MailHop Services**  
 Ensure reliable email delivery

**News** Dynamic Network Services Inc. Launches DynLabs

**Resources**  
 What is DNS?  
 DNS Tools  
 Home Solutions  
 Business Solutions

**Services**  
 DNS Hosting  
 Free Dynamic DNS  
 Email Relay  
 Domain Names

**Support**  
 24/7 Premier Support  
 DNS Update API  
 Update Clients  
 Updater for Windows

**About DynDNS**  
 Company Facts  
 Technologies  
 Dyn Inc. Jobs  
 Contacts

After login, you will enter your account. Click on "Service" to use DDNS service.

DynDNS.com » Dynect » DynTLD » Corporate

Logged In User: imagegospel  
[My Services](#) · [My Cart](#) · [Log Out](#)

About Services Account Support News

Increase your update abuse threshold with an [Account Upgrade](#).

My Account

My Services

Account Settings

Billing

My Cart  
0 Items

Search

Click here to use DDNS service

**My Services**  
View, modify, purchase, and delete your services.

[My Zones/Domains](#)  
[Add Zone/Domains Services](#)

[My Hosts](#)  
[Add Host Services](#)

[Spring Server VPS](#)

[Account Upgrades](#)

[MailHop Outbound](#)

[Network Monitoring](#)

[SSL Certificates](#)

**Billing**  
Update your billing information, complete a purchase, and view invoices.

[View Shopping Cart](#)

[Active Services](#)

[Order History](#)

[Billing Profile and Vouchers](#)

[Renew Services](#)

[Auto Renew Settings](#)

[Sync Expirations](#)

**Account Settings**  
Update your email address, set preferences, and delete your account.

[Change Email Address](#)

[Change Password](#)

[Change Username](#)

[Contact Manager](#)

[Mailing Lists](#)

[Move Services](#)

[Preferences](#)

[Close Account](#)

This page shows the services you can use. For free service, choose "Dynamic DNS".

DynDNS.com » Dynect » DynTLD » Corporate

Logged In User: imagegospel  
[My Services](#) · [My Cart](#) · [Log Out](#)

About Services Account Support News

Super dynamic TTL of 20 seconds with an [Account Upgrade](#).

Services

DNS Services

Domain Registration

SSL Certificates

MailHop Services

Network Monitoring

Spring Server VPS

URL Forwarding

Pricing

My Cart  
0 Items

NEED HELP?  
Visit the forum for

**Services**

We offer you superior domain name services (DNS), high quality domain management, world-class e-mail services, web redirection, and network monitoring. All of our services include **free technical support by e-mail or phone** where you speak to a highly trained engineer rather than a call center

[Why DynDNS.com](#) - why you should choose us  
[Technology Overview](#) - a peek behind the curtain

Click here to start DDNS service

**DNS Services**

**Dynamic DNS**  
A free DNS service for those with dynamic IP addresses.

**Custom DNS**  
Our dynamic and static DNS management tool for your

**Recursive DNS**  
Ensure DNS resolution for your DNS queries.

**Secondary DNS**  
Add reliability to your own nameservers.

In this page, it shows the description of Dynamic DNS. Click “Get Started” to set up a Host Name for your IP address.

**DynDNS** DynDNS.com > Dynect > TLDDNS > Corporate

Logged In User: **EugeneHuang**  
[My Services](#) - [My Cart](#) - [Log Out](#)

About Services Account Support News

### Dynamic DNS

Dynamic DNS (DDNS) allows you to create a hostname that points to your dynamic IP or static IP address or URL. We also provide an update mechanism which makes the hostname work with your dynamic IP address. **We continue to offer this service free** to the Internet community as we have done so for **nearly 10 years**.

**Capabilities and Features**

- Get five (5) hostnames in [88 available domains](#) for free.
- Create wildcard CNAME `*.yourhost.dyndns.org` for `yourhost.dyndns.org`.
- Forward web requests or mark host offline for maintenance or downtime.
- Configure MX records for flexible mail routing.
- Update host using [ddns update clients](#) for a wide variety of platforms.
- Modify DNS TTL values for fast propagation or reliable static IP caching.
- Deliver your DNS records to 5 DNS servers in 5 tier-1 datacenters around the globe.

Our **free industry-leading e-mail support** is ready to help you setup your dynamic or static DNS so you can host a website, remotely connect to your machine, and run a mail server. We also offer other premium features with our [Account Upgrade](#) service.

**Get Started**  
**Manage Hosts**

**Screenshot**

Click here to get started.

Type the hostname you like, and choose a domain name. Click Use auto detected IP address link, it fills your current IP automatically.

**DynDNS** Logged In User: EugeneHuang  
[My Services](#) - [My Cart](#) - [Log Out](#)

About Services Account Support News

### Add New Hostname

Note: You currently don't have Account Upgrades in your account. You cannot use some of our Host Service features. Please consider buying Account upgrade that make this form full-functional and will add several other features. [Learn More...](#)

Hostname:  .

Wildcard:  Yes, alias `*.hostname.domain` to same settings.

Service Type:  Host with IP address  
 WebHop Redirect  
 Offline Hostname

IP Address:   
[Use auto detected IP address 220.130.57.66](#)  
TTL value is 60 seconds. [Edit TTL](#).

Mail Routing:  Yes, let me configure Email routing.

**Create Host**

Click here to create this host name

Finally, press Create Host to finish the process.

**DynDNS** Logged In User: **EugeneHuang**  
[My Services](#) - [My Cart](#) - [Log Out](#)

About Services Account Support News

My Account

My Services

Account Upgrades  
SLA  
Premier Support  
Zone Services  
**Host Services**  
MailHop Outbound  
Recursive DNS  
Network Monitoring  
SSL Certificates  
Renew Services  
Auto Renew Settings  
Sync Expirations

Account Settings

Billing

My Cart  
0 items

### Host Services

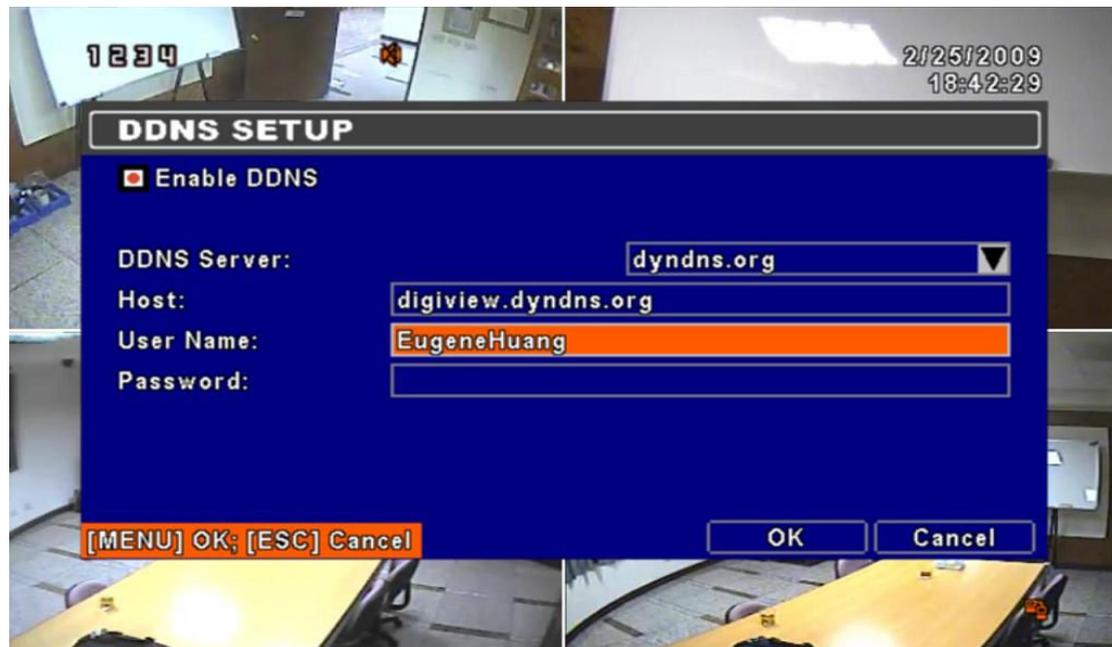
[Add New Hostname](#) - [Host Update Logs](#)

Hostname **digiview.dvrDNS.org** created.

Hostname	Service	Details	Last Updated
<a href="#">digiview.dvrDNS.org</a>	Host	220.130.57.66	Oct. 29, 2007 5:07 AM

## 2. Setup DVR

First, enable DDNS. Then choose the appropriate DDNS server, in the above case, dyndns.org. Type in the host that you have applied, as well as the user name and password that you have registered in the DDNS server. Finally, press OK. Now DDNS is ready.



## **APPENDIX III TROUBLE SHOOTING**

### DVR Related Problem

- Q. Why the DVR cannot record any video?
- A. Make sure you have correctly setup the recording. Please check if you have setup certain things in the main menu:
- (1) Go to utility -> HDD Initialization and format the HDD.
  - (2) Go to the record setup, and check "Schedule – Record Normal".
  - (3) Go to the schedule setup, and setup a schedule. Make sure you enable this schedule and check "Schedule – Record Normal".
- Q. I have setup the motion detection, but it still does not work.
- A. To make sure you have correctly setup the motion detection, please check if you have setup certain things in the main menu:
- (1) Go to the record setup, and check "Schedule - Motion".
  - (2) Go to the event setup, enter motion setup, and check "Motion Detection".
  - (3) Go to the schedule setup, and setup a schedule. Make sure you enable this schedule and check "Schedule - Motion".
- Q. I have setup the alarm detection, but it still does not work.
- A. To make sure you have correctly setup the motion detection, please check if you have setup certain things in the main menu:
- (1) Go to the record setup, and check the "Schedule - Sensor".
  - (2) Go to the event setup, enter sensor setup, and check "Sensor Detection".
  - (3) Go to the schedule setup, and setup a schedule. Make sure you enable this schedule and check the "Schedule - Sensor".

### iCMS Related Problem

- Q. When I setup a DVR through DVR administration, what should I type for the ID/Password? Is it the username/password setup in the CMS, or the username/password setup in DVR?
- A: The ID/Password is the username/password setup in DVR. Please identify the ID and Password that you use, is registered in the DVR, and has been enabled. To register this ID/Password, go to main menu -> account setup, and type in the user name/password. Please check on the number to activate it.

### Internet Explorer Related Problem

- Q. I cannot login to the DVR through Internet Explorer. After I type in the user name and password, the Internet Explorer stops. Why?
- A: Please check if:
- (1) you have allowed Active X to be download or run on your PC.
  - (2) your firewall is opened on your router, and blocked the port.
  - (3) your anti-virus program is open or not. Some anti-virus may block the connection.
- If closing the firewall or anti-virus program may be inconvenient, please use the AP (remote desktop) to connect to your DVR.

### Remote Desktop Related Problem

- Q. I cannot run the AP (remote desktop). What can I do.
- A: Make sure you have installed the Direct X 9.0, or it may not function normally.

### 3G Mobile Phone Related Problem

- Q. I cannot run the link on my mobile phone. Why.
- A: The link is only supported on certain mobile phone OS that support JPEG format. Please check this detail with your mobile phone supplier.

**APPENDIX IV DVR CHECK LIST FOR 3G/GPRS SUPPORT**

Model	System	CPU	Audio	Brand
Java	Symbian	N/A	X	Nokia, Sony Ericsson
Microsoft System	Microsoft Smart Phone Mobile 5.0, 6.0	400MHz above	V	For any phone that use this system
	PDA			
Apple	iPhone	N/A	X	http:// (DVR IP)/jpeg.html
	iPod Touch			
Blackberry	RIM	N/A	X	
Other				Please try: http:// (DVR IP)/jpeg.html

**APPENDIX V THE AMOUNT OF TIME FOR STORAGE**

DVR Type		8Ch/ 16 Ch			4 Ch		
Quality	Resolution	FPS	Size(MB/hour)	500GB HDD(Day)	FPS	Size(MB/hour)	500GB HDD(Day)
Highest	704x480	60	2,700	7.90	30	1,350	16
	704x240	120	2,700	7.90	60	1,350	16
	352x240	240	2,700	7.90	120	1,350	16
High	704x480	60	2,043	10.44	30	1,021	21
	704x240	120	2,043	10.44	60	1,021	21
	352x240	240	2,043	10.44	120	1,021	21
Normal	704x480	60	1,350	15.80	30	675	32
	704x240	120	1,350	15.80	60	675	32
	352x240	240	1,350	15.80	120	675	32
Low	704x480	60	675	31.60	30	338	63
	704x240	120	675	31.60	60	338	63
	352x240	240	675	31.60	120	338	63
Lowest	704x480	60	338	63.21	30	169	126
	704x240	120	338	63.21	60	169	126
	352x240	240	338	63.21	120	169	126