4/8/16-Ch H.264 Digital Video Recorder

DVR-462/DVR-872/DVR-1672

User's Manual

Version 1.0

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FCC

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference

(2) This device must accept any interference received. Including interference that may cause undesired operation.

CE

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B

WEEE regulation

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Energy Saving Note of the Device

This power required device does not support Stand by mode operation.
For energy saving, please remove the DC-plug or push the hardware Power Switch to OFF position to disconnect the device from the power circuit.
Without remove the DC-plug or switch off the device, the device wills still consuming power from the power circuit. In the view of Saving the Energy and reduce the unnecessary power consuming, it is strongly suggested to switch off or remove the DC-plug for the device if this device is not intended to be active.

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Revision

User's Manual for PLANET 4/8/16-Ch H.264 Digital Video Recorder
Model: DVR-462/DVR-872/DVR-1672
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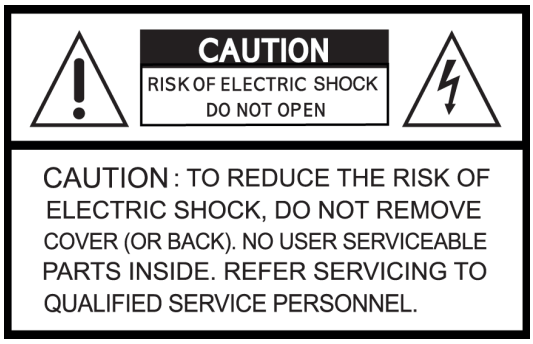
Part No. EM-DVRx72v1.0.doc



This symbol is intended to alert the user to the presence of unprotected "Dangerous voltage" within the product's enclosure that may be strong enough to cause a risk of electric shock.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING!!!

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

All the safety and operating instructions must be read before the unit is operated.

- Make sure to switch the power off before you install the DVR.
- There is the danger of an electric shock if the DVR is opened by an unqualified service engineer or installer.
- Avoid using the DVR outside of the reference temperature and humidity indicated in the specification.
- Avoid exposing the DVR to violent movement or vibration.
- Do not use or store the DVR in direct sunlight or near to any source of heat.
- Do not place any object into the holes used for air circulation.
- Always use the DVR in a well ventilated location to prevent overheating.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

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The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information herein.

Chapter 1 FEATURES

- Two USB ports (for mouse usage and backup).
- Dual streaming enhances the speed of network transmission
- Built-in VGA output up to 1024x768 resolution
- Individual setup of resolution, frame rate and video quality for each channel
- Still image snapshot
- AVI converter with time stamp
- H.264 compression ideal for saving HDD space
- Real time live display
- Live display, record, backup, playback and network access simultaneously
- Picture-in-picture monitoring and 2X to 8X digital zoom display
- Control Methods: front panel, USB mouse, IR remote controller, client viewer
- Intuitive GUI for easy configuration and menu driven operation
- Pan / Tilt / Zoom camera control
- Data backup: USB devices, network
- Event triggered with email notification: motion detection, alarm, video loss
- Supports Internet Explorer with same GUI as DVR site
- Multi-language OSD
- Central Management System (iCMS)
- 3G / GPRS mobile phone monitoring

Chapter 2 PACKING DETAIL

1. DVR

2. CD Disk

3. Quick Installation Guide

4. Remote Controller

5. Screw Kit x 1

6. Power Adapter

7. Battery x 2

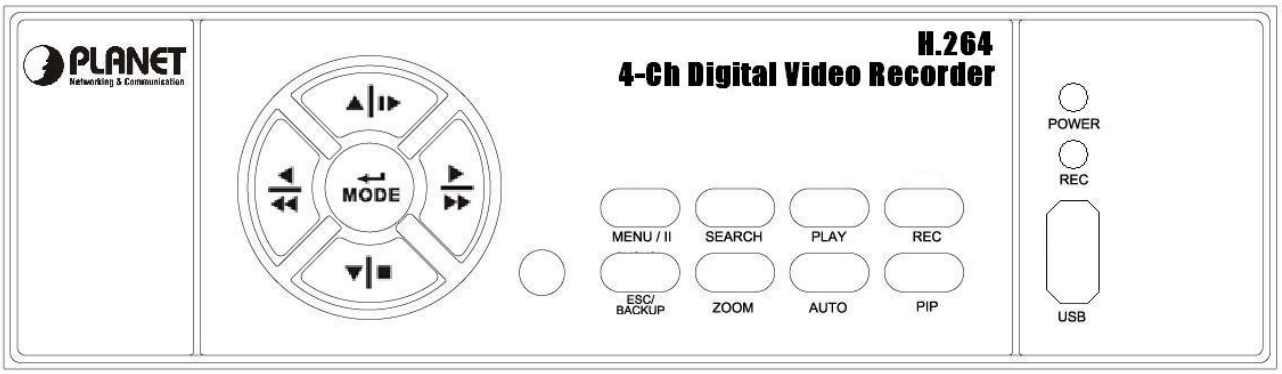
8. SATA Cord
(X2: DVR-872/DVR-1672)

9. HDD Rack x 6
(For DVR-872/DVR-1672)

Chapter 3 LOCATION AND CONTROL

3.1 Front Panel Controls

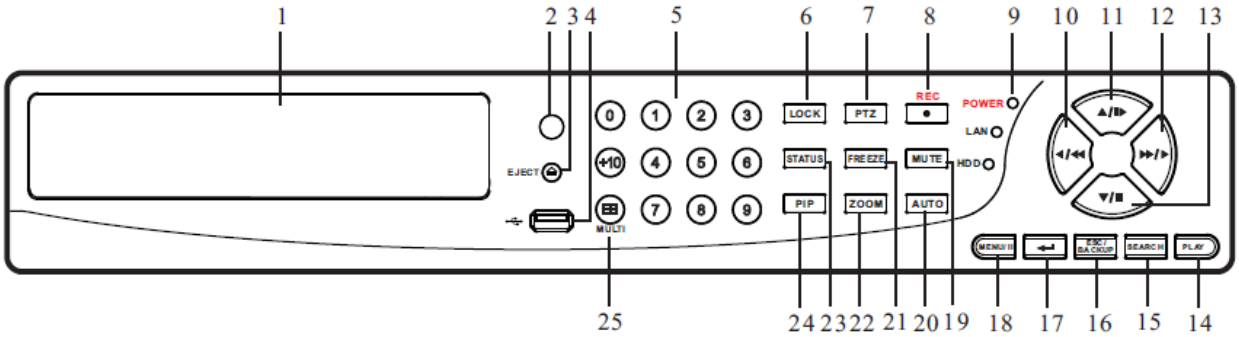
- **DVR-462**



Item		Description
1	**ESC/ BACKUP**	Exit various functions and menu screen Enter backup selection menu
2	**SEARCH**	Enter search menu screen, use Up/ Down button to navigate Press ENTER to access selected item
3	**PIP**	Turn on picture-in-picture format, use Up/ Down button to navigate Press ENTER to access selected item
4	**ZOOM**	Enable/ Disable double screen size display. Press ENTER to switch channels.
5	**AUTO**	Enable auto mode, to skip channels Press MENU to disable auto mode
6	**LED DISPLAY - REC**	DVR Recording.
7	**LED DISPLAY- POWER**	DVR Power is on.
8	**USB 2.0**	The USB 2.0 port can be used to connect USB, mouse and USB storage device.
9	**REC**	Start/ Stop recording.
10	**PLAY**	Start playing back.
11	**MENU/ PAUSE (MENU/II)**	Enter menu mode, use Up/ Down button to navigate menu screen. Press to pause playback
12	**IR SENSOR**	Input sensor for the remote control.
13	**RIGHT**	Right Directional Button.

	DIRECTIONAL BUTTON/ FAST (▶▶/▶)	Fast Forward Playback, Speed: 2x, 4x, 8x, 16x, 32x, 64x.
14	**UP DIRECTIONAL BUTTON/ SLOW (▲/▮▶)**	Up Directional Button. Slow Forward Playback, Speed: 1/2x, 1/4x, 1/8x, 1/16x.
15	**DOWN DIRECTIONAL BUTTON/ STOP (▼/■)**	Down Directional Button. Stop Playback.
16	**LEFT DIRECTIONAL BUTTON/ REWIND (◀/◀◀)**	Left Directional Button. Fast Forward Playback, Speed: 2x, 4x, 8x, 16x, 32x, 64x.
17	**ENTER/ MODE (MODE)**	Switch to full screen and quad screen.

- **DVR-872/DVR-1672**

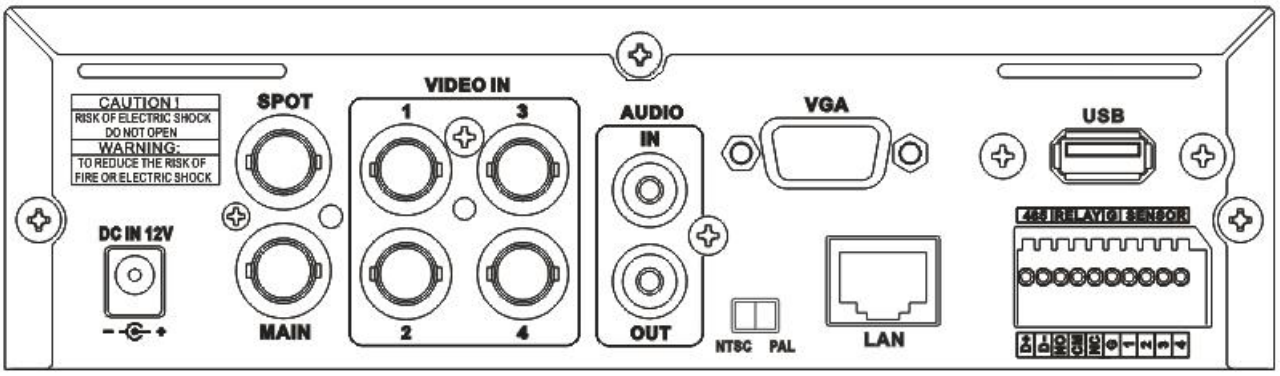


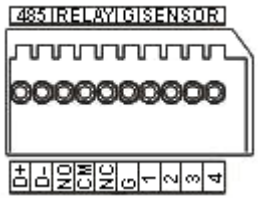
Item		Description
1	**DVD-RW Slot**	A DVD-RW drive can be installed in the front vancant drive bay.
2	**IR RECEIVER**	Input sensor for the remote control.
3	**EJECT**	Press EJECT button to open/close the DVD-RW drive.
4	**USB 2.0**	The USB 2.0 port can be used to connect to numerous USB 2.0 backup devices.
5	**NUMERIC BUTTON / CHANNEL SELECT**	Camera Select/Numeric Button. Press [+10] button to select channels.
6	**LOCK**	Enable Keypad Function.
7	**PTZ**	Start/Stop PTZ Control.
8	**REC**	Start/Stop recording.
9	**STATUS LED**	Displays the status of the DVR (standby), HDD read/write and network transmission.

10	**LEFT DIRECTIONAL BUTTON/ REWIND**	Left Directional Button. Fast Forward Playback, Speed: 2x, 4x, 8x, 16x, 32x and 64x.
11	**UP DIRECTIONAL BUTTON/ SLOW**	Up Directional Button. Slow Forward Playback, Speed: 1/2x, 1/4x, 1/8x and 1/16x.
12	**RIGHT DIRECTIONAL BUTTON/ FAST**	Right Directional Button. Fast Forward Playback, Speed: 2x, 4x, 8x, 16x, 32x and 64x.
13	**DOWN DIRECTIONAL BUTTON/ STOP**	Down Directional Button. Stop Playback.
14	**PLAY**	Start playing back.
15	**SEARCH**	Enter search menu screen, use Up/ Down button to navigate. Press ENTER to access selected item.
16	**ESC/ BACKUP**	Exit various functions and menu screen Video data storage backup.
17	**ENTER/ MODE( )**	Switch to full screen and quad screen.
18	**MENU/ PAUSE MENU/**	Enter menu mode, use Up/ Down button to navigate menu screen. Press to pause playback.
19	**MUTE**	Switch to 1-CH Audio Out/ Turn Off Live Audio.
20	**AUTO**	Enable auto mode, to skip channels. Press MENU to disable auto mode.
21	**FREEZE**	Turn On/ Off Live Display FREZZE Function. Turn On/ Off Screen FREEZE Function.
22	**ZOOM**	Enable/ Disable double screen size display. Press ENTER to switch channels.
23	**STATUS**	Display Status.
24	**PIP**	Turn on picture-in-picture format, use Up/ Down button to navigate. Press ENTER to access selected item
25	**MULTI**	This button is used to toggle between multiple display modes: 16, 13, 10, 9 and 4 channel split screen display modes.

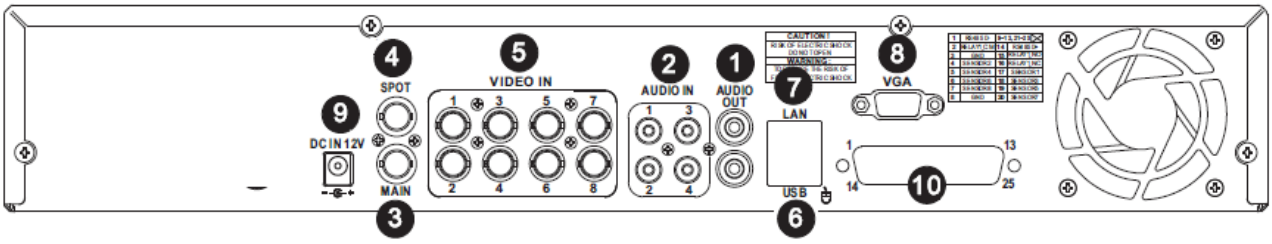
3.2 Real Panel Connectors

- **DVR-462**

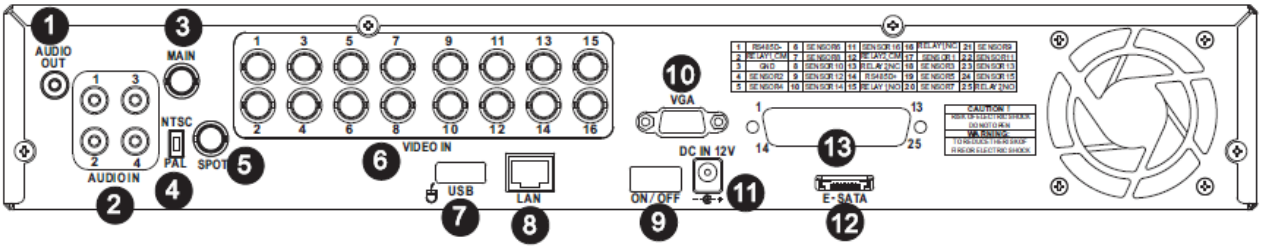


Item		Description
1	**MAIN**	BNC port for the main monitor.
2	**VIDEO IN**	BNC input ports for cameras, 4 in total.
3	**AUDIO IN**	RCA input port for an audio signal.
4	**NTSC／PAL SWITCH**	Switch between NTSC and PAL format. Please adjust this switch before power on.
5	**LAN**	Network port.
6	**EXTERNAL I/O**	EXTERNAL I/O port (*see below for pin definition*) 
7	**AUDIO OUT**	RCA output port for an audio signal.
8	**SPOT**	BNC port to display full screen image of all installed cameras in sequence.
9	**DC 12V**	Socket for a DC 12V input. Please use the bundled power adapter to prevent the DVR damage.

- **DVR-872**

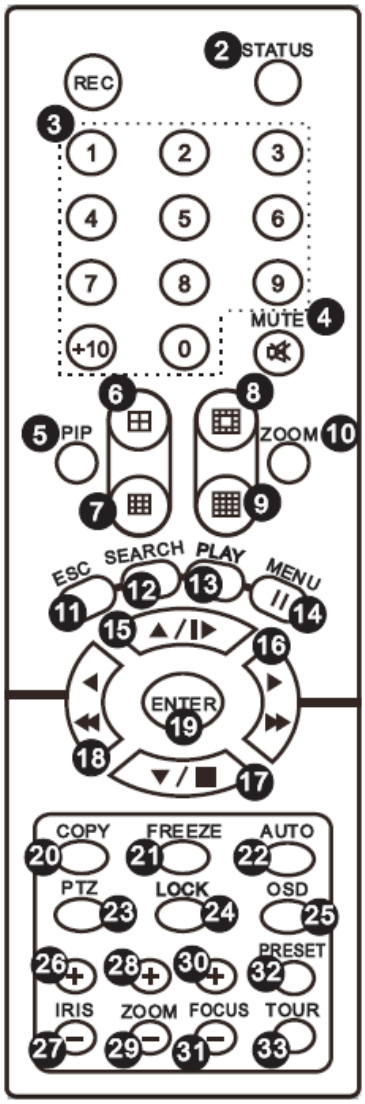


- **DVR-1672**



	Item	Description
1	**AUDIO OUT**	RCA output port for an audio signal.
2	**AUDIO IN**	RCA input port for an audio signal.
3	**MAIN MONITOR**	BNC port for the main monitor.
4	**NTSC/PAL SWITCH**	Switch between NTSC and PAL format. (available only for 16CH model)
5	**SPOT MONITOR**	BNC port to display full screen image of all installed cameras in sequence.
6	**VIDEO IN**	BNC input ports for cameras, 8/16 vary on model.
7	**USB**	For mouse connection.
8	**LAN**	Network port.
9	**ON/OFF**	Power switch (available only for 16CH model)
10	**VGA**	Output port for the VGA monitor.
11	**DC 12V**	Socket for a DC 12V input.
12	**E-SATA**	External SATA interface (available only to 16CH).
13	**EXTERNAL I/O**	EXTERNAL I/O port. For more information, please refer to the user manual.

3.3 Remote Control

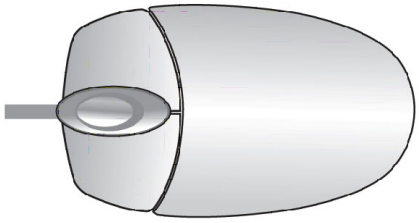


Item		Description
1	**REC**	Start/ Stop Recording.
2	**STATUS**	Display Status.
3	**CAMERA BUTTONS**	Camera Select / Numeric Button. Press [+10] button to select channels.
4	**MUTE**	Switch to 1-CH Audio Out/ Turn Off Live Audio.
5	**PIP**	Enable/ Disable On Picture-In-Picture Format. Use Directional button to navigate the menu item, and press Enter button to enter the menu item.
6	⊞	Switch to Quad Display
7	▦	Switch to 9-Channel Display. 4-CH doesn't support this function.

8		Switch to 13-Channel Display. 4-CH doesn't support this function.
9		Switch to 16-Channel Display. 4/8-CH doesn't support this function.
10	**Zoom**	Enable/ Disable double screen size display. Use Directional button to navigate the screen display, and press Enter button to switch channels.
11	**ESC**	Exit Button.
12	**SEARCH**	Use Up/ Down Directional Button to navigate the menu item, press Enter button to enter menu item.
13	**PLAY**	Start Playing Back.
14	**MENU/**	Enable/ Disable Menu. Pause Playback
15		Up Directional Button. Slow Forward Playback, Speed: 1/2x, 1/4x, 1/8x and 1/16x.
16		Right Directional Button. Fast Forward Playback, Speed: 2x, 4x, 8x, 16x, 32x and 64x.
17		Down Directional Button. Stop Playback.
18		Left Directional Button. Fast Rewind Playback, Speed: 2x, 4x, 8x, 16x, 32x and 64x.
19	**ENTER**	Enter/ Confirm selection.
20	**COPY**	Enter the COPY menu.
21	**FREEZE**	Turn On/ Off Live Display FREZZE Function. Turn On/ Off Screen FREEZE Function.
22	**AUTO**	Enable/ Disable auto sequence mode.
23	**PTZ**	Start/ Stop PTZ Control.
24	**LOCK**	Enable Keypad Function.
25	**OSD**	Turn On/ Off the Screen Display.
26	**IRIS +**	PTZ Iris-Open.
27	**IRIS -**	PTZ Iris-Close.
28	**ZOOM +**	PTZ Zoom-In.
29	**ZOOM -**	PTZ Zoom-Out.
30	**FOCUS +**	PTZ Focus-In.
31	**FOCUS -**	PTZ Focus-Out.
32	**PRESET**	Press PRESET button+ 2 numeric numbers to save current lens location.

		PLAY+ Numeric Number to move lens to preset point.
33	**TOUR**	Activate PTZ Preset Tour.

3.4 Mouse Control

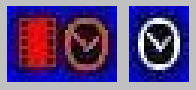


Live Mode	
Single Channel Display	Move the cursor to the desired channel and double left click.
Change from Single-Channel to Multi-Channel Display	Double left click.

Mouse – Menu Mode	
Enter Menu setup	Right click.
Select/ Enter	Left click.
Return to Previous Page	Right click.

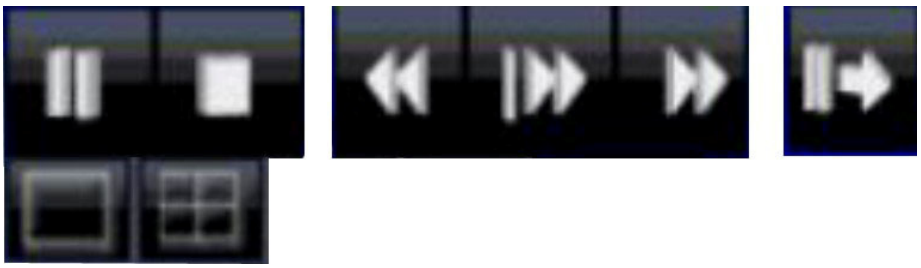
Mouse – Graphic Icons	
	Resting the cursor on this icon will bring up the four (Main Menu/ Search/ Backup/ PTZ) menu icons. MAIN MENU. SEARCH SETUP. BACKUP. PTZ CONTROL.
	Turn On/Off recording.
	PLAYBACK.

	Resting the cursor on this icon will bring up five (PAUSE/ PIP/ ZOOM/ AUTO SEQ/ LOCK) display icons. PAUSE, to pause LIVE image. PIP, picture in picture. ZOOM, double the screen size. AUTO-sequence. LOCK, activate the key lock.
	Full screen display, multiple clicking to switch channels
	Quad display.

Mouse – GUI Hints and Tips	
	Recording is on.
	Live Audio is on.
	Live Audio is off.
	Motion detected on the channel.
	Sensor triggered on the channel.
	Video loss detected on the channel.
	USB device detected.
	DVR has been connected onto the Internet.
	Timer recording is on Red : Timer is set and recording has been started White : Timer is set but recording has not yet been started.
	AUTO-SEQ is on.
2X	2X zoom in are on.
	FREZZE is on, screen is frozen.

	LOCK is on.
	PTZ control is on.

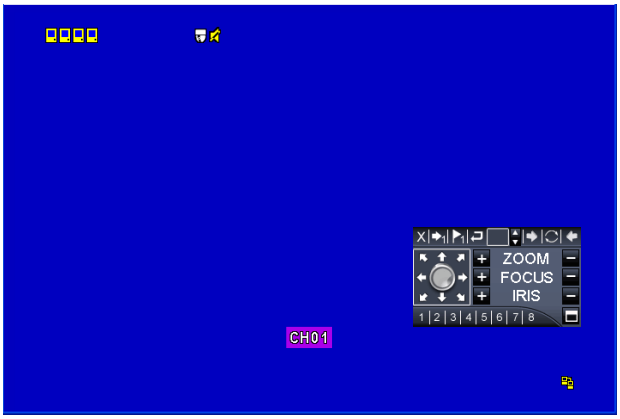
3.5 Playback Mode



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.

Playback – Quick Function Icon	
	Press「◀◀ /◀ 」button to Fast Rewind Speed: 2x, 4x, 8x, 16x, 32x, 64x.
	Press「 ▶▶ / ▶ 」button to Fast Forward Speed: 2x, 4x, 8x, 16x, 32x, 64x.
	Press「**PLAY**」/ 「▮▮」button to Play/ Pause Playback.
	「 ▲ / ▮▶ 」slow playback Speed: 1/2x, 1/4x, 1/8x, 1/16x.
	「 ▼/■ 」stop playback Speed: 1/2x, 1/4x, 1/8x, 1/16x.
	Playback channel by channel with snap shot display.
	Full screen display.
	Quad display.

3.6 PTZ Mode



Under LIVE mode, PTZ icon [will appear on the upper left of the screen or be re-located on any place of your screen by dragging the mouse.

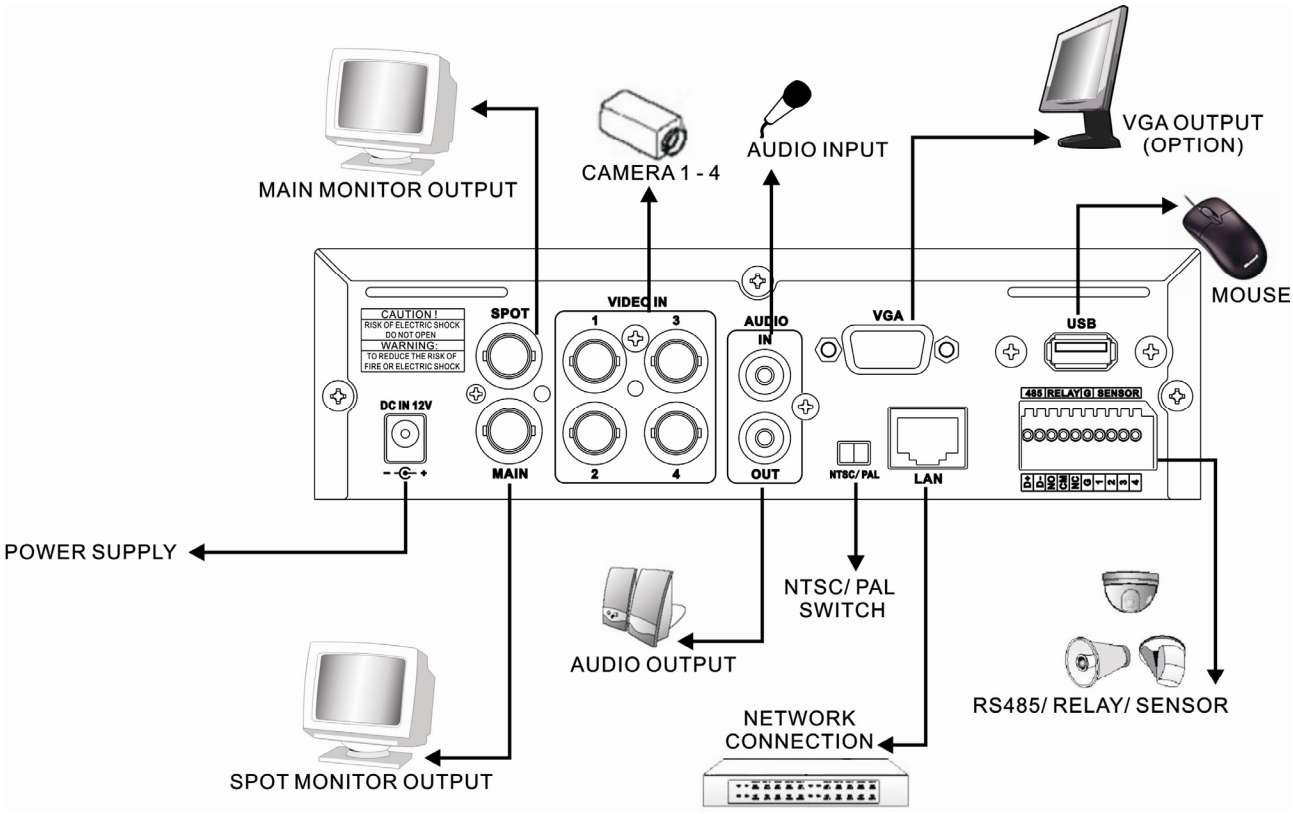
PTZ – Remote Controller Control	
▲ / SLOW	Move PTZ up.
▼	Move PTZ down.
◀◀	Move PTZ to the left.
▶▶	Move PTZ to the right.
ZOOM +	PTZ zoom-in.
ZOOM -	PTZ zoom-out.
FOCUS +	PTZ focus-in.
FOCUS -	PTZ focus-out.
IRIS +	PTZ iris-open.
IRIS -	PTZ iris-close.
TOUR	Activate PTZ pre-set tour.
PRESET + NUMBER	To save a preset location Press PRESET and a number key. DVR will save the current location.
PLAY + NUMBER	To go to a preset location Press PLAY and a number key. DVR will move to the preset location.
ZOOM	Set current PTZ location as the start of the line-scan.
PIP	Set current PTZ location as the start of the line-scan.
FREEZE	Activate line-scan.

PTZ – Quick Function Icon	
X	Exit PTZ Mode and back to the LIVE mode.
1	Preset number N. (1~64)
	Go to preset number N.
	Set current PTZ location at preset number N.
	[TOUR] icon, click to activate preset tour.
	Same as [PIP]. Set current PTZ location as the starting point of the line-scan.
	Same as [FREEZE]. Activate line-scan.
	Same as [ZOOM]. Set current PTZ location as the ending point of the line-scan.
	To move PTZ in 360°.
+ ZOOM −	PTZ zoom in or PTZ zoom out.
+ FOCUS −	PTZ focus in or PTZ focus out.
+ IRIS −	PTZ IRIS open or PTZ IRIS closes.
Below functions needs support from specific PTZ. Please check the user manual of your PTZ manufacturer for detail.	
1	AUX 1. [AUTO] + 「1」
2	AUX 2. [AUTO] + 「2」
3	AUX 3. [AUTO] + 「3」
4	AUX 4. [AUTO] + 「4」
5	AUX 5. [AUTO] + 「5」
6	AUX 6. [AUTO] + 「6」
7	AUX 7. [AUTO] + 「7」
8	AUX 8. [AUTO] + 「1」
	[Backup] icon, click to customized function.

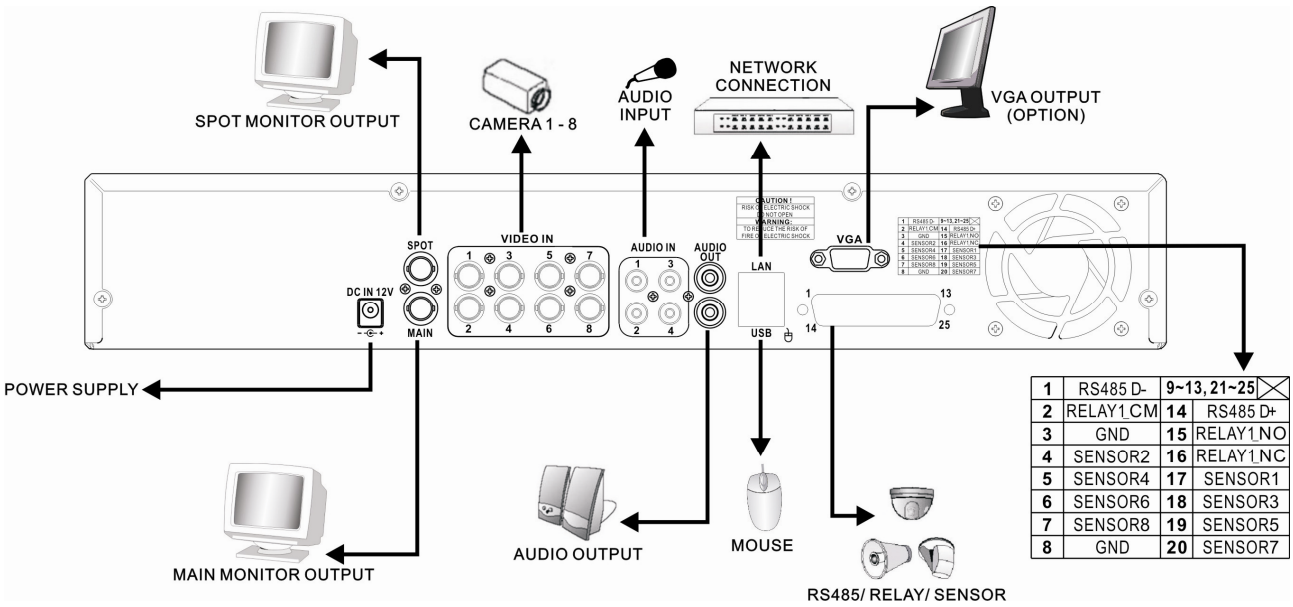
Chapter 4 INSTALLATION

4.1 System Configuration

- **DVR-462**

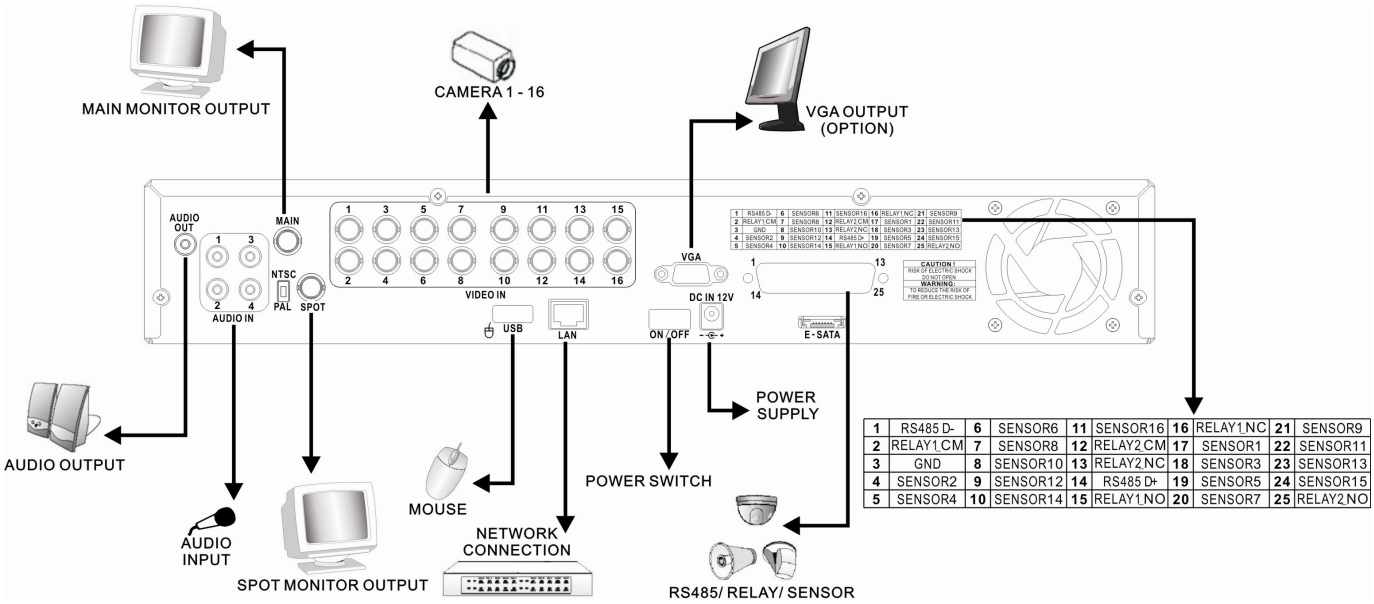


- **DVR-872**



1	RS485 D-	9~13, 21~25	
2	RELAY1.CM	14	RS485 D+
3	GND	15	RELAY1.NO
4	SENSOR2	16	RELAY1.NC
5	SENSOR4	17	SENSOR1
6	SENSOR6	18	SENSOR3
7	SENSOR8	19	SENSOR5
8	GND	20	SENSOR7

- **DVR-1672**



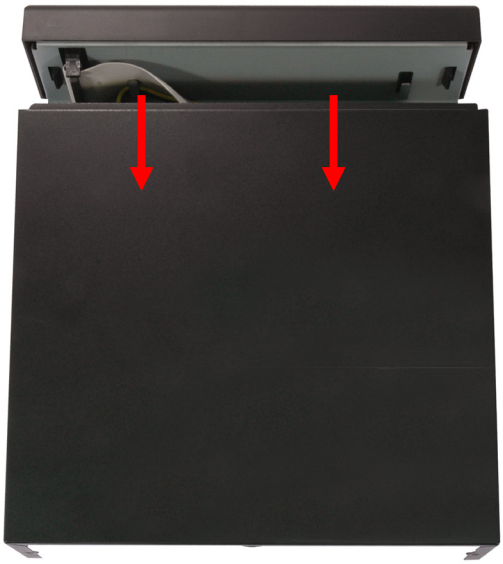
1	RS485 D-	6	SENSOR6	11	SENSOR16	16	RELAY1.NC	21	SENSOR9
2	RELAY1.CM	7	SENSOR8	12	RELAY2.CM	17	SENSOR1	22	SENSOR11
3	GND	8	SENSOR10	13	RELAY2.NC	18	SENSOR3	23	SENSOR13
4	SENSOR2	9	SENSOR12	14	RS485 D+	19	SENSOR5	24	SENSOR15
5	SENSOR4	10	SENSOR14	15	RELAY1.NO	20	SENSOR7	25	RELAY2.NO

4.2 Hard Disk Installation

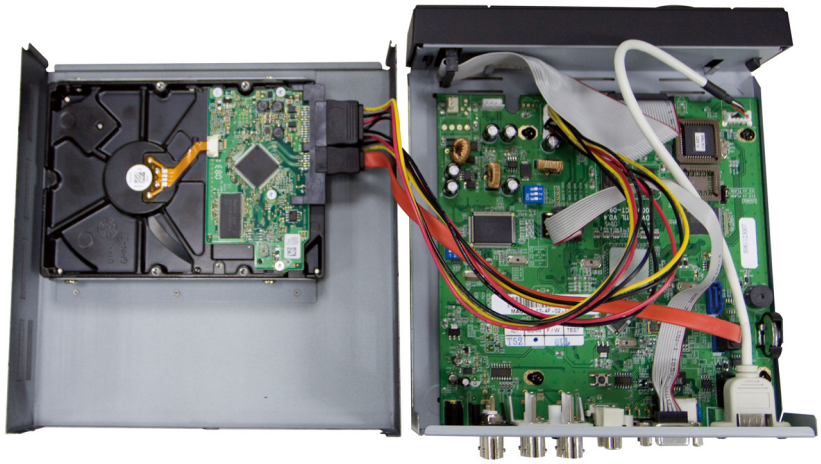
- **For DVR-462**

Step 1: Remove the 3 screws from DVR as cycled below.

Step 2: Follow the direction to remove the upper case.



Step 3: Place the HDD on the HDD plate of the removed case and connect the power and the SATA cable.



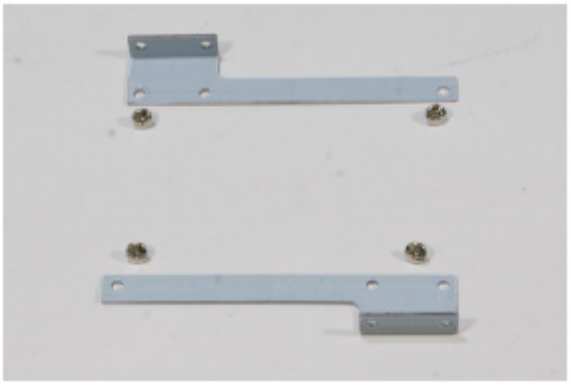
Step 4: Put back the upper case and tight the three screws.

- **For DVR-872/DVR-1672**

Step 1: Remove the upper case.

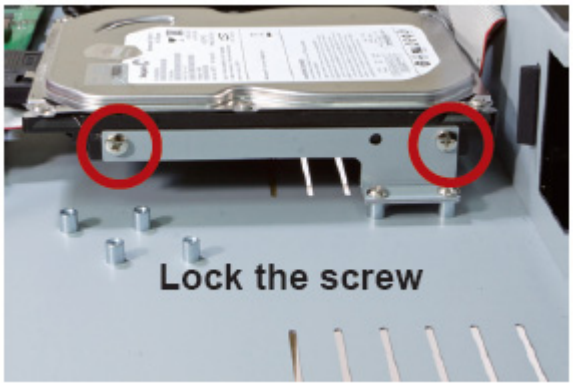
Step 2: Lock the HDD holder symmetrically onto both sides of the HDD.

2-1



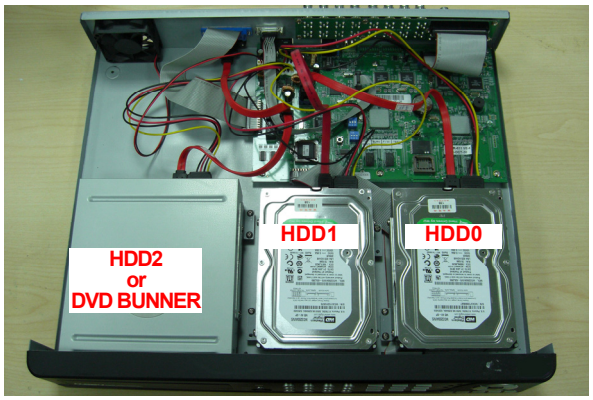
2-2

2-3



Step 3: Insert the SATA and power cable onto the SATA HDD or DVD-RW.

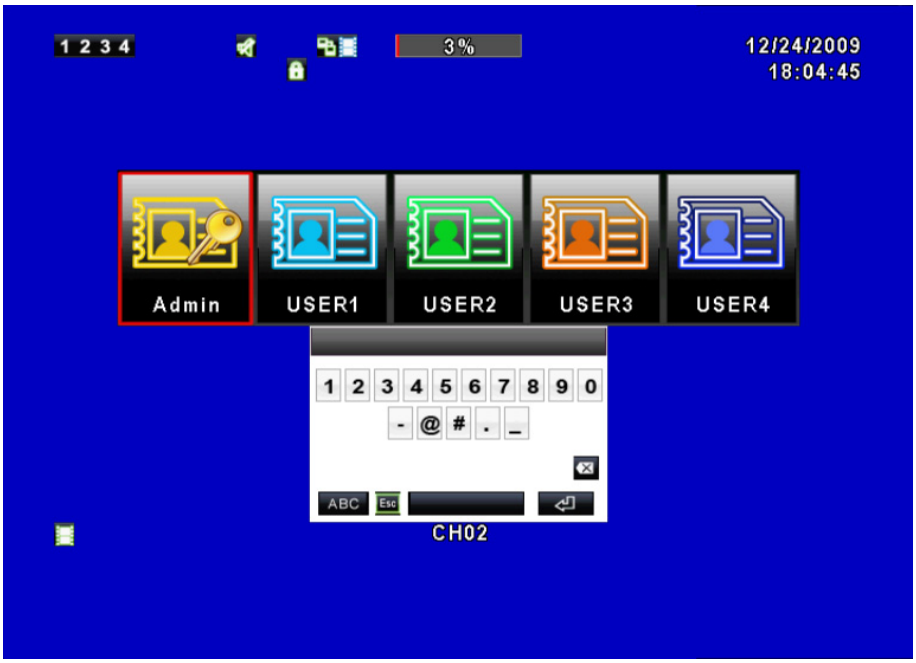
Step 4: Place the HDD onto HDD plate or place the DVD-RW onto DVD-RW plate



Step 5: The installation has completed.

Chapter 5 BASIC OPERATION and MENU SETUP

5.1 Main Menu Setup

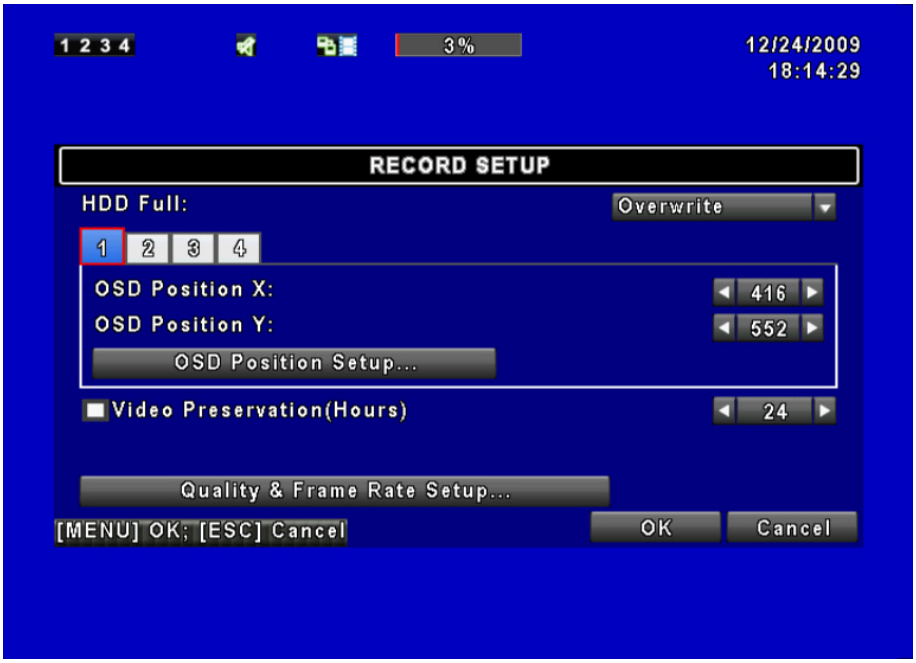


To enter the main menu and setup the DVR, please log-in account and enter user password. The default password of the administrator is "**123456**". Please refer to "Account Setup" for related setup of other log-in users.

Main Menu – Mouse Control	
⇧	Switch between capital and small letters.
.?123 / ABC	Switch between numbers and letters.
Esc	Press to cancel the setup, and re-choose the login account.
X	Delete the last character.
Enter	Enter to identify the password. It will enter the setup menu if the password is verified.

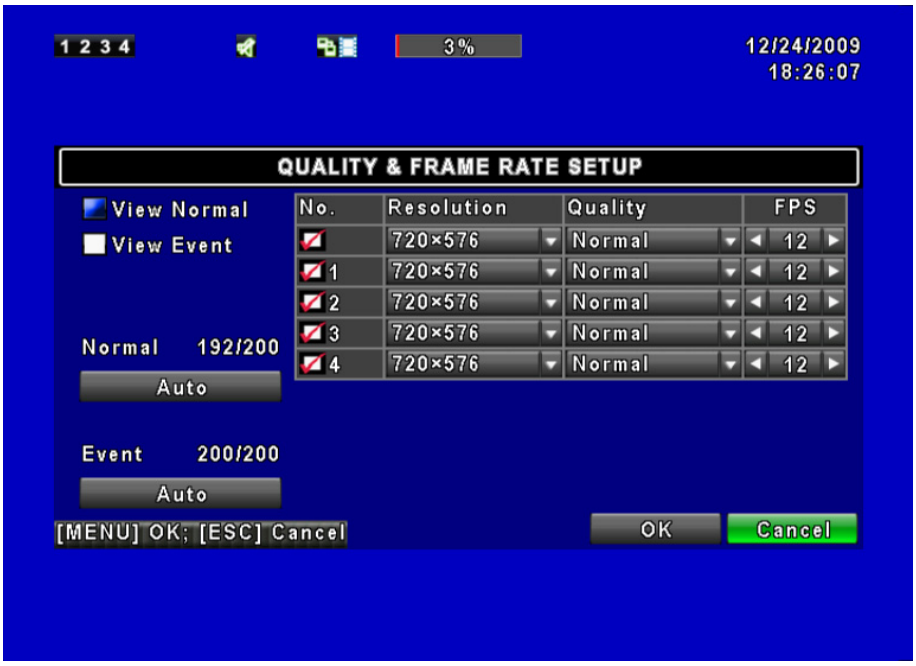
Main Menu – Remote Control and Front Panel Control	
◄ ►	Switch to different options less than one item.
▲ ▼	Switch to different items.
MENU	Save setup and back to LIVE mode.
ESC	Back to Upper level of the menu.
ENTER	Enter the menu, or display virtual keyboard.

5.2 Record Setup



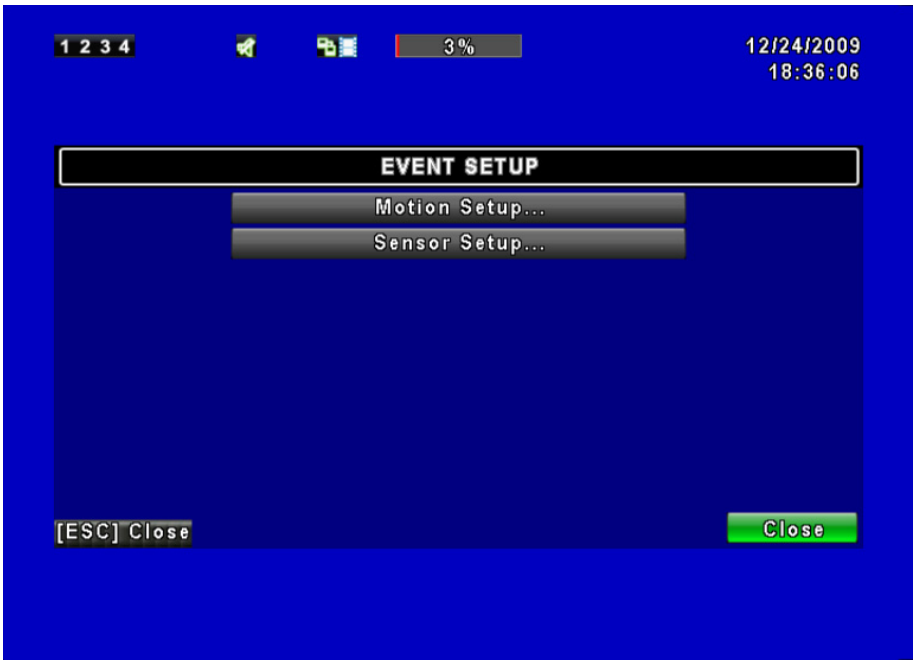
Item	Description
HDD FULL	Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full. **[Stop]**：Stop Recording **[Overwrite]**：Start to overwrite beginning from the oldest data of HDD, and continue to record.
Schedule - Record Normal	Enable/ Disable normal recording
Schedule – Record Motion	Enable/ Disable recording while Motion is detected
Schedule – 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. This option decides if save the pre-recording time 10 seconds data or not.
Audio Record	Enable/ Disable Audio recording.
Video Preservation	Information stored within the HDD is preserved for only a specified length of time.
Quality & Frame Rate Setup...	Setup the quality and frame rate for each channel under normal recording and event recording type.

5.2.1 Quality & Frame Rate Setup



Item	Description
Resolution	Choose record resolution, this value will be used by all channels.
Record Type	You can setup quality and FPS separately for record type.
No.	Check/ uncheck the box will enable/ disable recording of that channel.
Quality	Choose from Lowest/ Low/ Normal/ High/ Highest.
FPS	Choose recording frame rate.

5.3 Event Setup

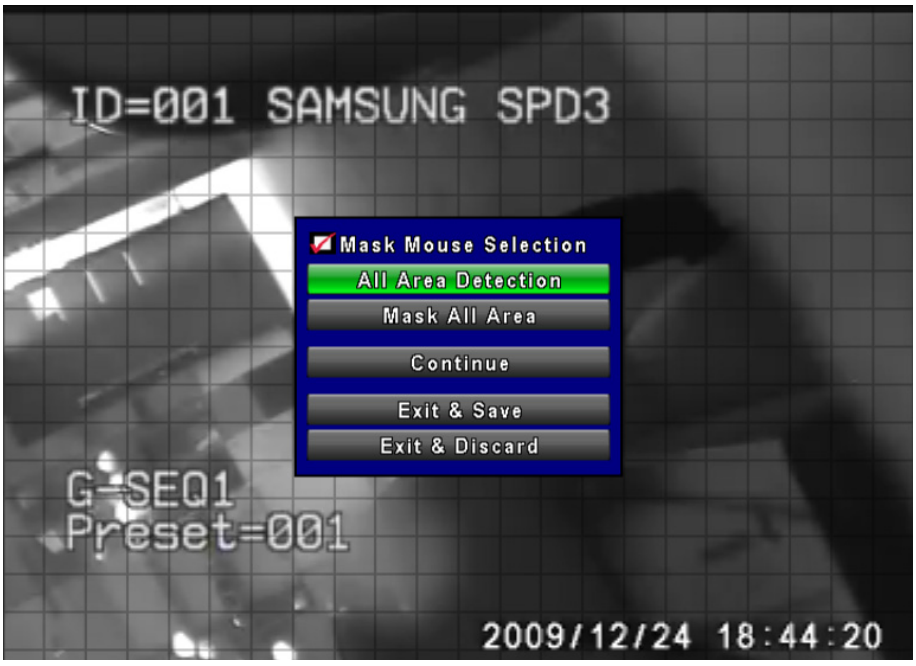


Item	Description
Alarm Duration (Seconds)	Set up alarm duration in seconds (can not be set to 0 seconds). Drag the white bar or press ☐ ☐ to adjust value.
Motion Setup	Enter to set up motion detection.
Sensor Setup	Enter to set up sensor detection.

5.3.1 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 popup in full screen display.
1 2 3 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.
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

5.3.1.1 Motion Area Setup



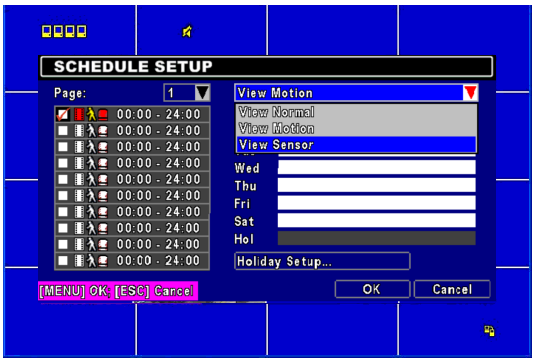
There are 16x12 partitions in motion detection area. Under initializing status, motion detection area is in the entire screen. Red colored area is detected; yet the undetected area is transparent. It is purple while network is connected.

Item	Description
Mask Mouse Selection	Select to mask the mouse selected area.
All Area Detection	Select all the images as motion detection area.
Mask All Area	Cancel all motion detection images on the screen.
Continue	Continue setup.
Exit & Save	Save setup and exit setup page.
Exit & Discard	Cancel setup and exit setup page.

5.3.2 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 polarity for each channel ● **Low** Polarity：Sensor has not been triggered. When connected, sensor will be turned on. ● **High** Polarity：Sensor has been triggered. When connected, sensor status will be turned off. ● **Off**：Sensor is deactivated, and will not be turned on/off.

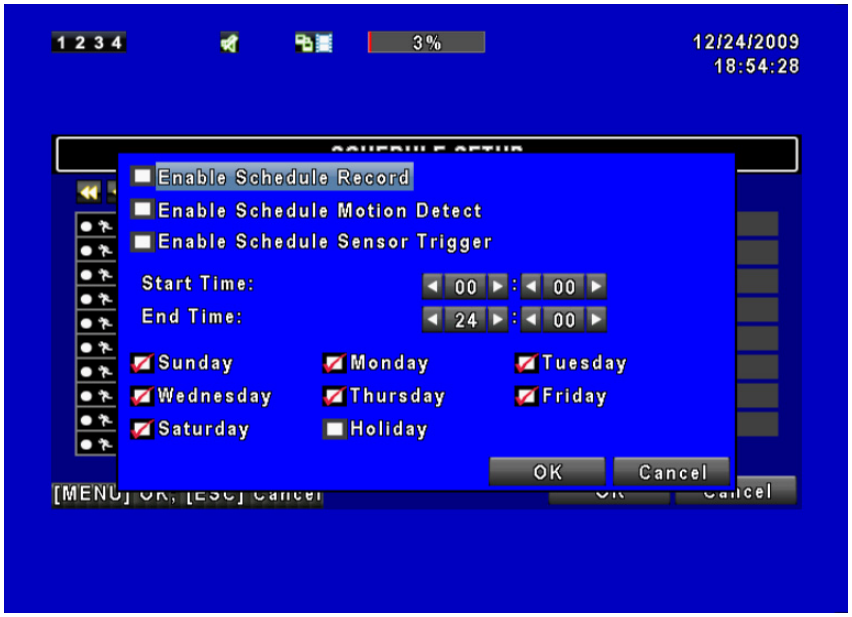
5.4 Schedule Setup



Apart from manual recording, you can also setup the recording time by weeks and schedule recordings include: normal, motion detection, and sensor detection.

Item	Description
Page	Click or press ▼ to select Page. Each page provides 10 schedules for setup. 5 pages in total.
Holiday Setup	Enter to setup holiday, maximum up to 50 days.
View Event Setup	View Normal/ Motion / Sensor Setup.

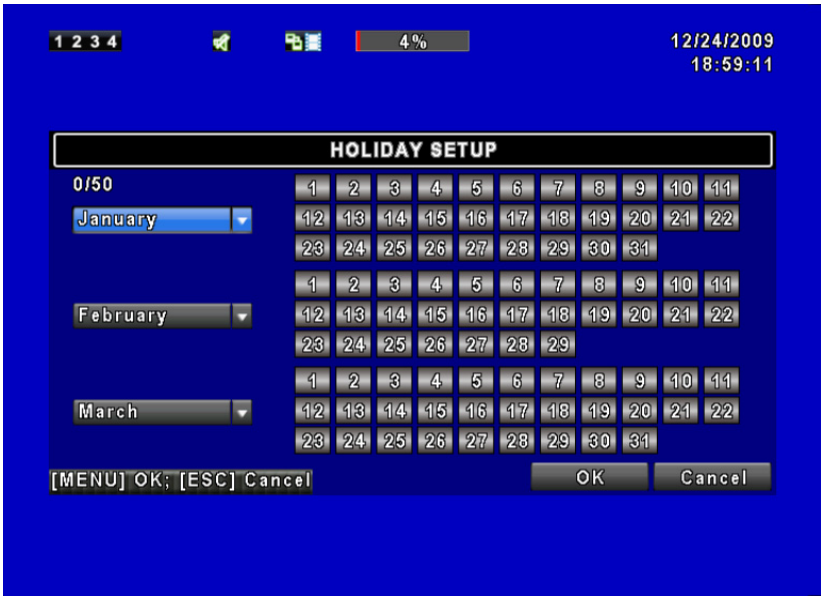
5.4.1 Schedule Record Setup



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

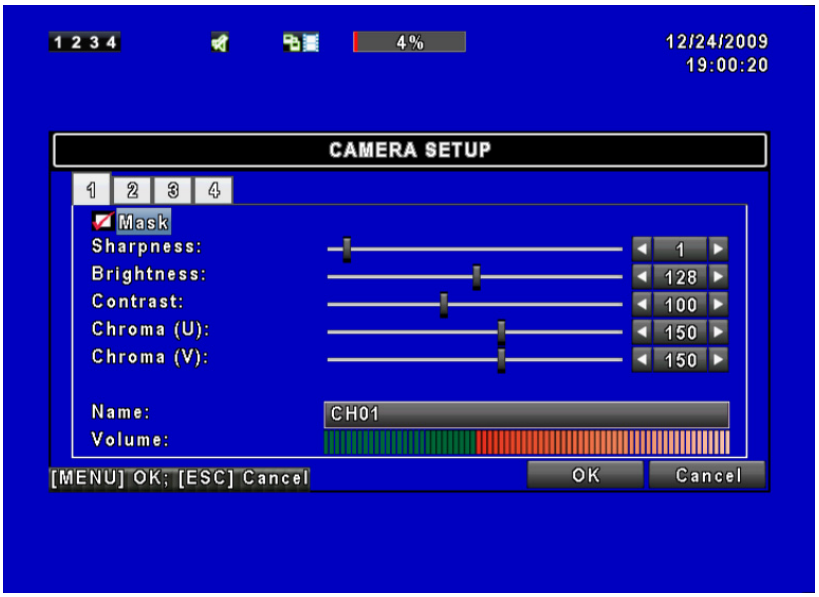
Item	Description
Enable Schedule Record	Enables schedule recording according to the time schedule (shown above).
Enable Schedule Motion Detect	Enables schedule motion detection recording according to the time schedule (shown above).
Enable Schedule Sensor Trigger	Enables schedule sensor trigger recording according to the time schedule (shown above).

5.4.2 Holiday Setup



Since holidays are different between countries and regions, you can setup the holiday of your location accordingly (Maximum Setup: 50).

5.5 Camera Setup



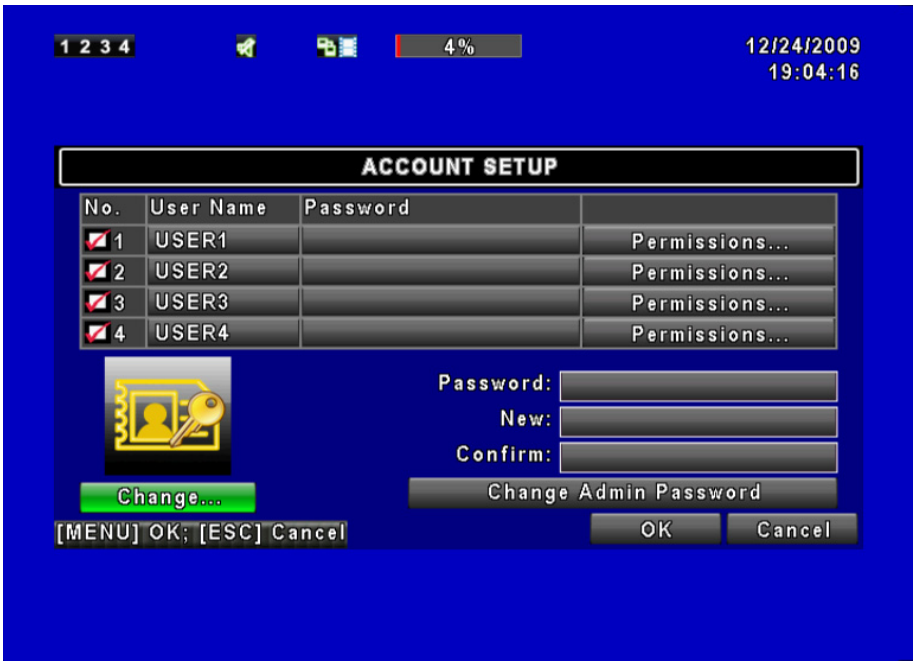
Item	Description
1 2 3 4	You can setup independently for each channel.
Mask	Check the box to Enable/ Disable mask function for LIVE mode
Brightness	Drag the white bar or press ☐ ☐ to adjust Brightness of your camera from value 1 to 255. The default value is 128.
Contrast	Drag the white bar or press ☐ ☐ to adjust Contrast of

	your camera from value 1 to 255. The default value is 128.
Saturation	Drag the white bar or press ☐ ☐ to adjust 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 ineffective in PAL system**).
Name	Set up name of each channel.
Volume	Select to adjust audio volume for CH1 to CH4 under LIVE mode and recording mode.

Note

Network LIVE videos are unable to be switched off when applying Mask function. To avoid network LIVE videos, please use User permission mask playback features (Administrator has no such permissions).

5.6 Account Setup



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

Item	Description
No.	Check to activate the user's account.
User Name	Edit the user name.
Password	Enter to set up password for each user.
Permissions	Enter to setup Permissions for each user.

Change	Change the ICON with a selected BMP file.
Change Admin Password	Enter to change administrator's password.

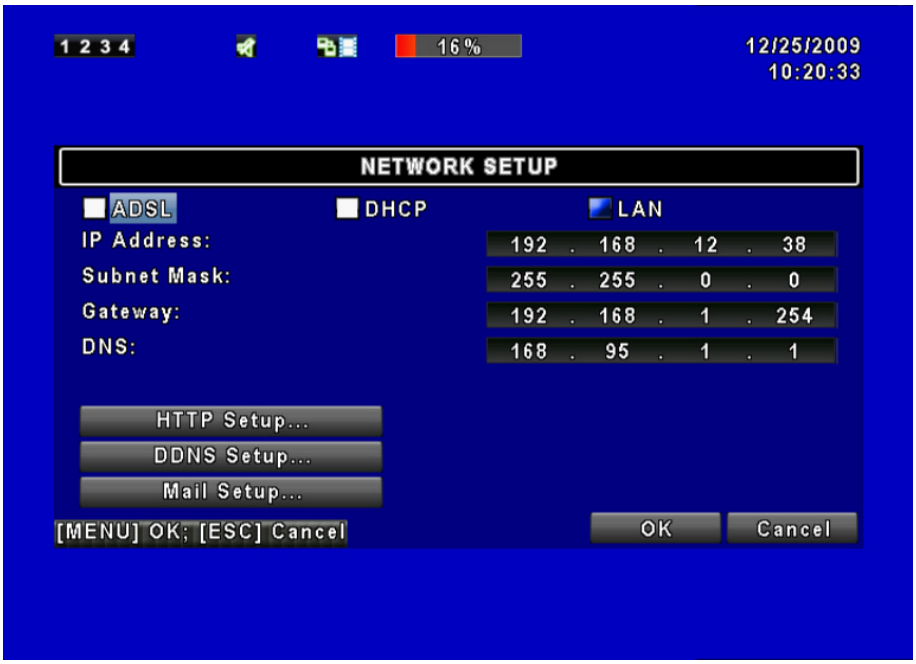
✍**Note**

1. When logged out automatically, you will have to operate in limited authority 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, user's account and password are required.
2. When the key lock is activated automatically, remote control and mouse may not function unless entering verified password, remote-site will not be able to operate all the features (including toolbar).
3. [○]: Enable the function, [×]: Disable the function.

5.6.1 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, and PTZ function, Playback, Utility, Backup and Mask on specific channels while playing back.

5.7 Network Setup

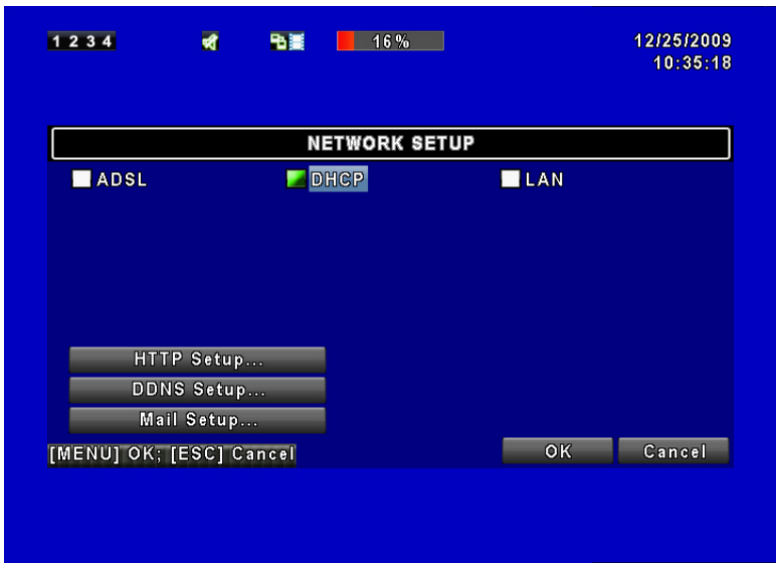


Item	Description
Connect type	Setup mode for network connection: **DHCP**、**LAN**、**ADSL**.
HTTP Setup	Enter to set up HTTP for remote access into DVR.
DDNS Setup	Enter to Enable/ Disable DDNS function and set up.
Mail Setup	Enter to Enable/ Disable Email notification and setup.

5.7.1 Networking Setup

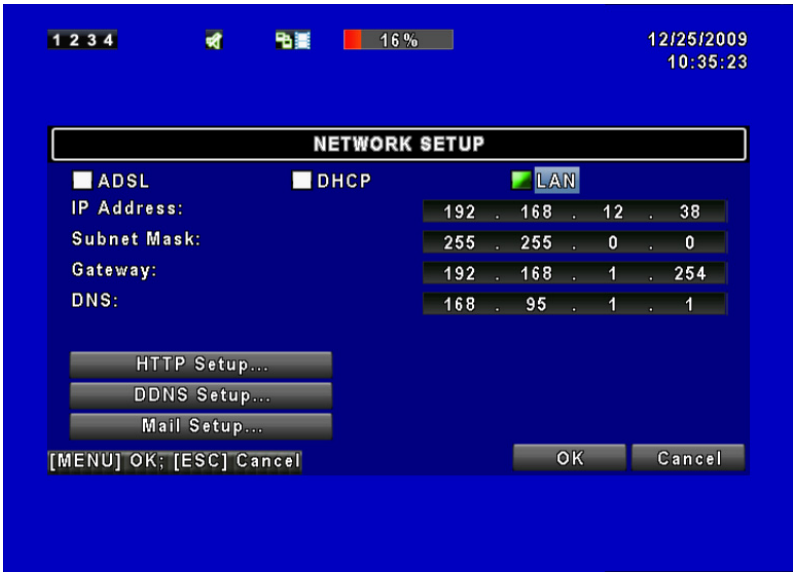
The DVR supports DHCP, LAN and ADSL access for network connection.

5.7.1.1 DHCP



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

5.7.1.2 LAN

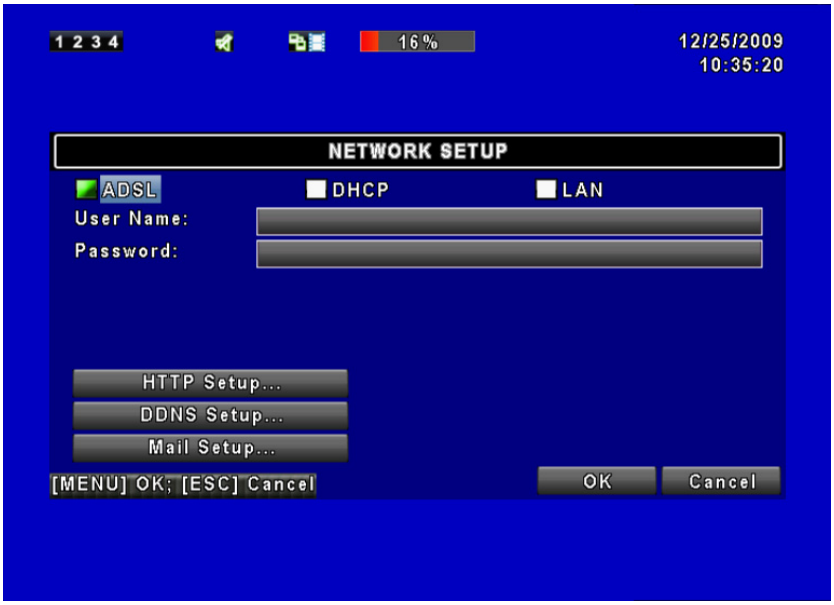


Select LAN for network connection, the following information is required.

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

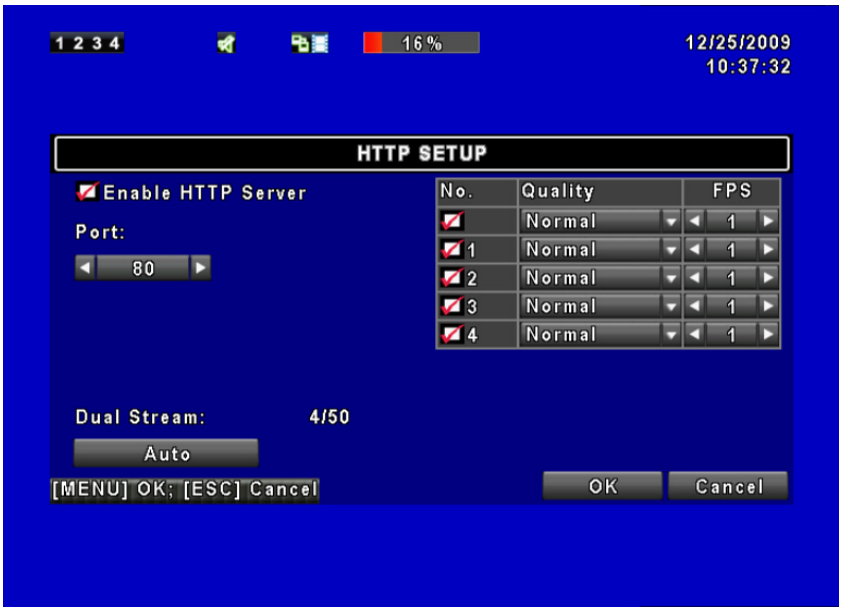
5.7.1.3 ADSL

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



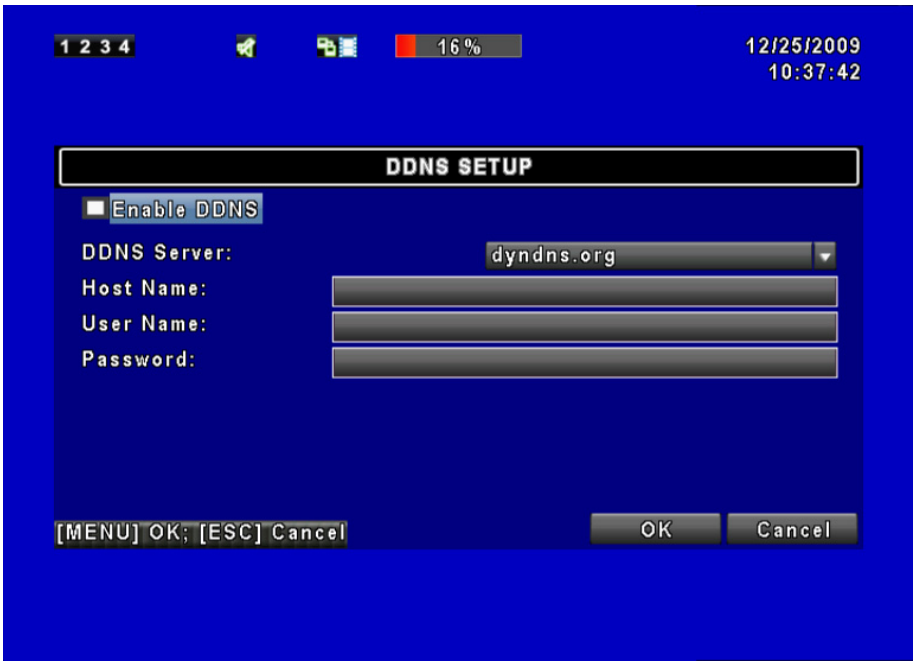
Item	Description
User Name	Enter user name provided by ISP.
Password	Enter password provided by ISP.

5.7.2 HTTP Setup



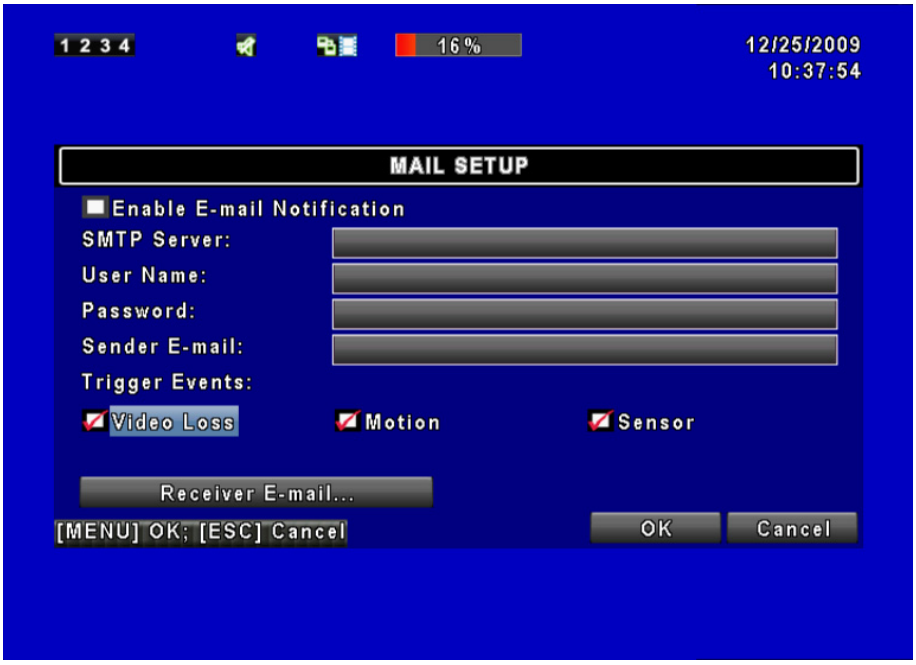
Item	Description
Enable HTTP Server	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
Port	Enter a valid port value from 1 up to 65535. The default value is 80.
Quality and Frame Rate Setup for Network Transmission	
No.	Check to activate the transmission of each camera.
Quality	Choose from Below Basic / Basic/ Normal/ High/ Highest.
FPS	Choose recording frame rate (1~30FPS).
Auto	The maximum recording frames available by the average distribution of each channel (totally 60FPS).
This video streaming is used for network transmission; setting is LQ (low quality). Under a low bandwidth capacity, this stream can send out small picture and keep a good video quality and smooth display rate. If the bandwidth is large enough, it can be adjusted to HQ (high quality). Thus, the network streaming will be switched to the condition which this DVR is recording. Therefore, a larger video image can be sent to remote site.	

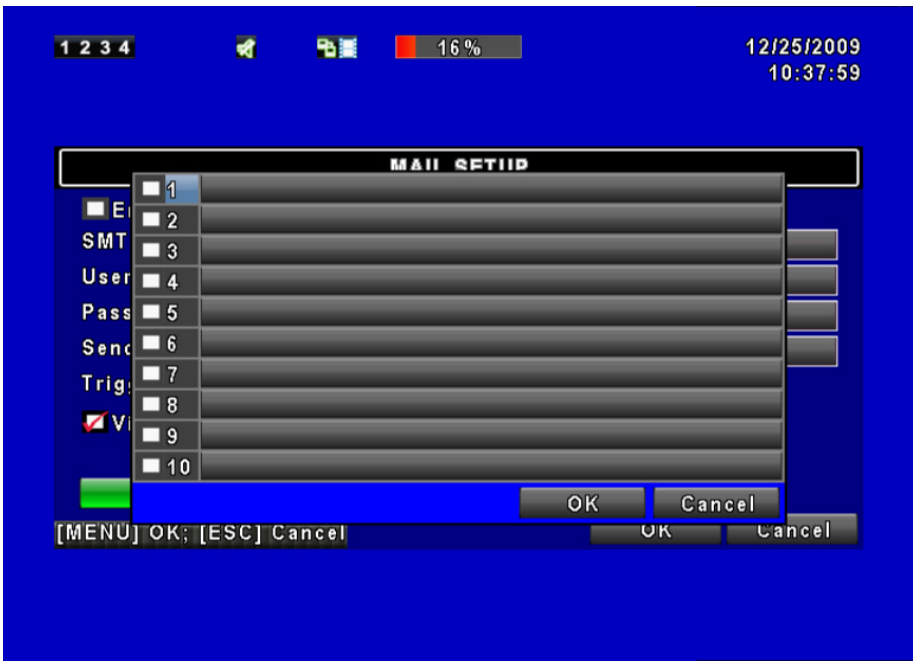
5.7.3 DDNS Setup



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**
Host Server	Enter the registered SMTP Server.
User Name	Enter user name.
Password	Enter password.

5.7.4 Mail Setup

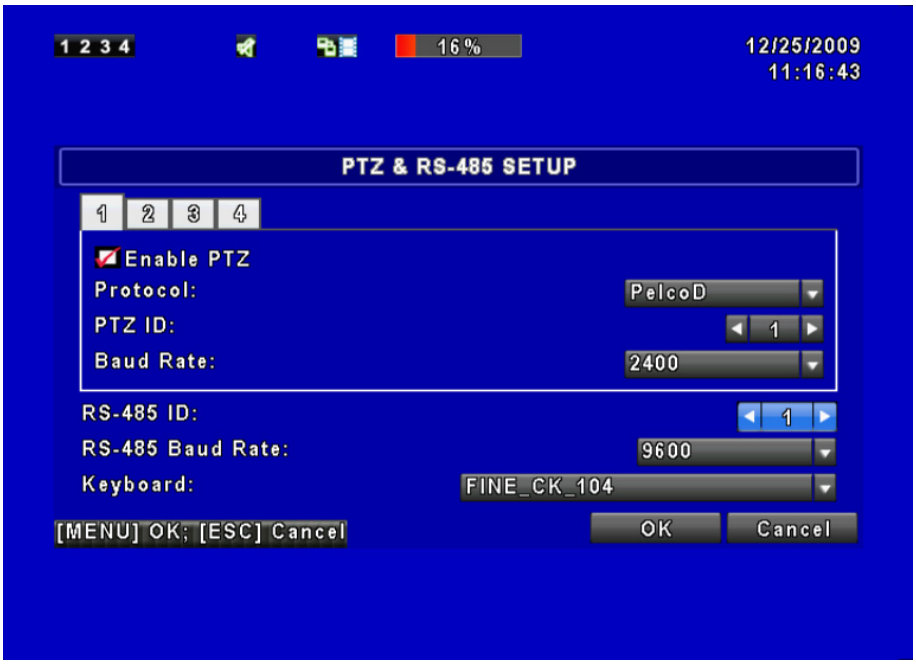




E-mail can be used as a form of notification when an event occurs (VLOSS, MOTION, and SENSOR).

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.
Trigger Event	Enter to select events to send out E-mail notifications when below circumstances happen: Motion, Sensor and Vloss (Video Loss).
Receiver E-mail	Enter to set up e-mail addresses for up to 10 receivers individually.

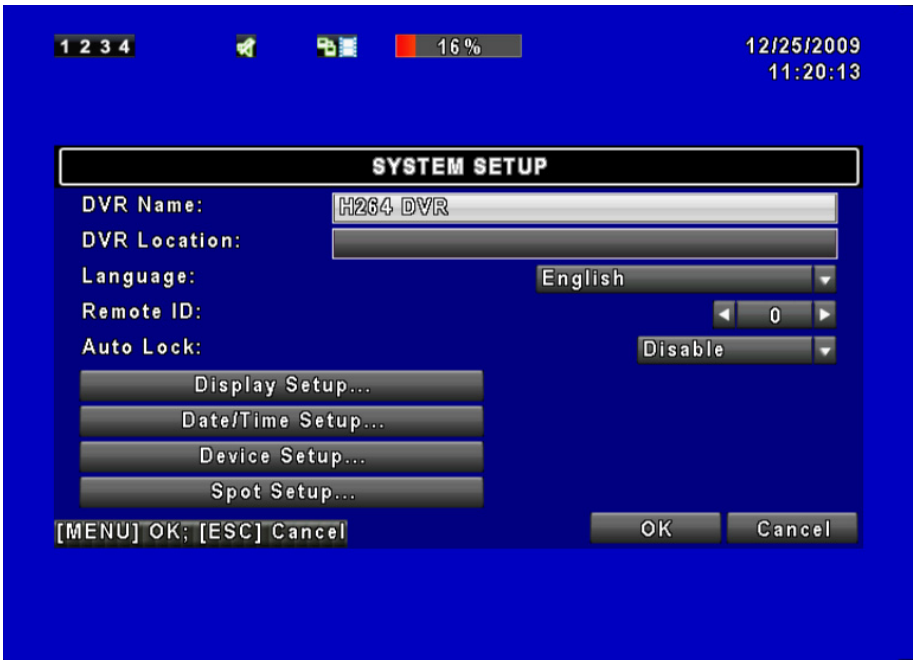
5.8 PTZ & RS-485 Setup



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

Item	Description
Enable PTZ	Click the box to Enable/Disable PTZ function for each channel.
Protocol	Set up the protocol of PTZ cam.
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 、19200
RS-485 ID	Reserved.
RS-485 Baud Rate	
Keyboard	

5.9 System Setup

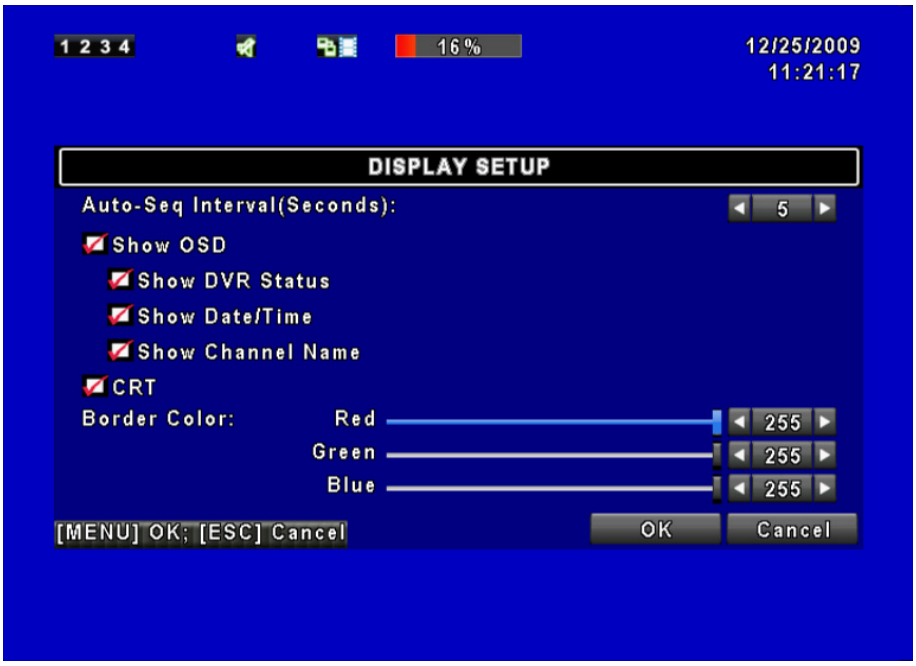


Item	Description
DVR Name	The name of DVR will be shown when users login from remote access.
DVR Location	The location of DVR will be shown when users login from remote access.
Language	Click or press ▼ to select OSD language.
Auto-Seq Interval (Seconds)	Click or press ☐ ☐ to set up duration time in seconds for the interval between channels under Auto-Seq mode.
Remote ID	Preserved Function.
Auto Lock	After one minute without any action, the DVR will switch to *LIVE* mode automatically. Auto lock can function differently according to the setting below. Button automatically Auto Lock: The front panel function keys are ineffective only until using the mouse and please re-enter the password again.

Function / Setting	**Auto Logout**	**Key Lock**
Key lock	○	○
Key unlock	○	×
Disable	×	×

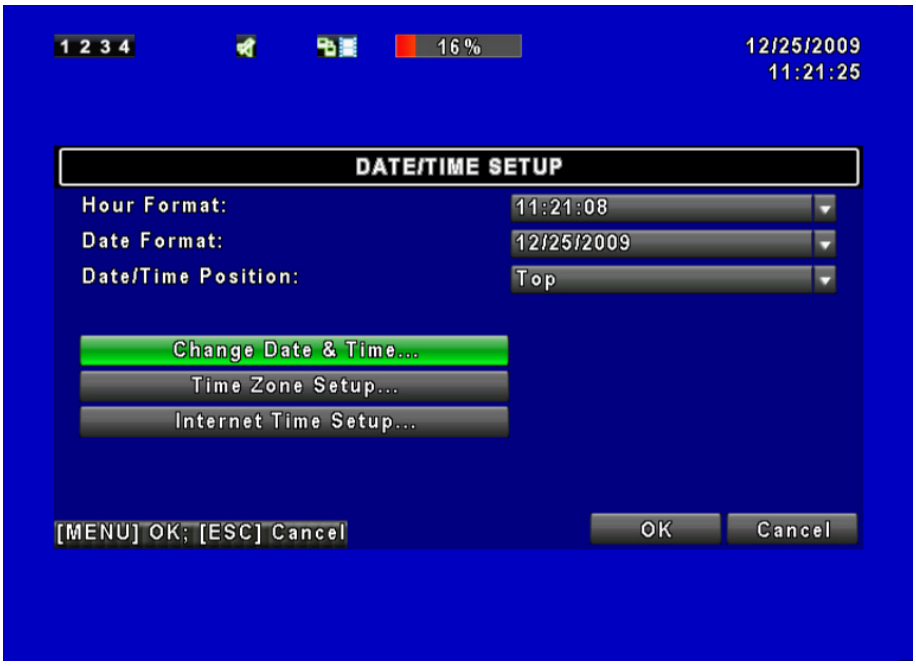
Display Setup	Enter to set up Display.
Date/Time Setup	Enter to set up Date/Time.
Buzzer & Relay Setup	Enter to set up Buzzer & Relay
Spot Setup	Enter to set up Spot.

5.9.1 Display Setup



Item	Description
Auto-Seq Interval (Seconds)	Click or press ☐ ☐ to set up duration time in seconds for the interval between channels under Auto-Seq mode (1~999 seconds).
Show OSD	Turn On / Off OSD display.
Show DVR Status	Turn On / Off DVR illustration and record status display.
Show Date/Time	Turn On / Off date and time display
Show Channel Name	Turn On / Off channel name display.
CRT	Make the display more suitable for CRT monitor.
Border Color	Set up the color of border in LIVE , PLAYBACK mode.（black, dark grey, light grey, and white）

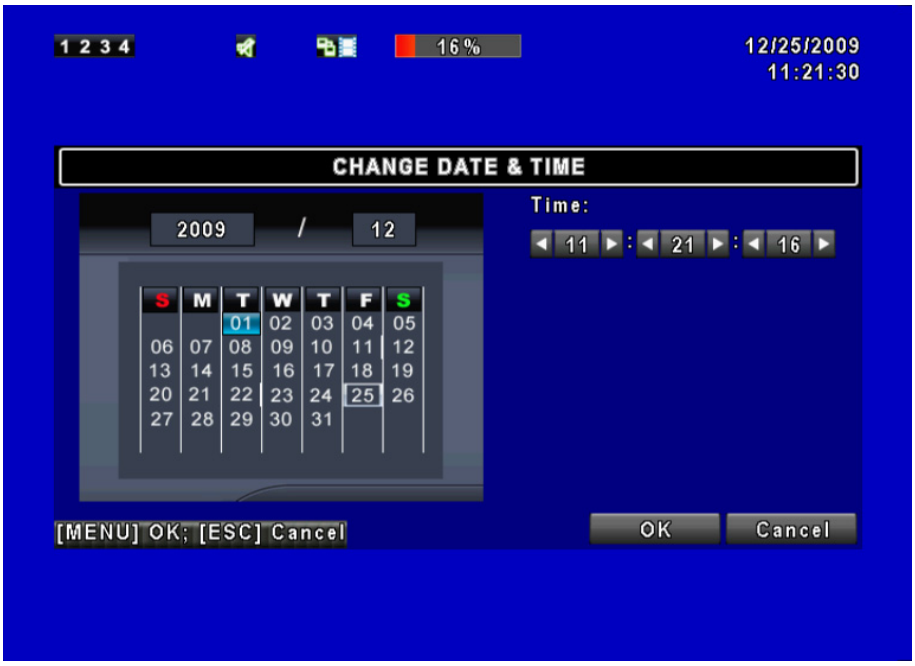
5.9.2 Date/ Time Setup



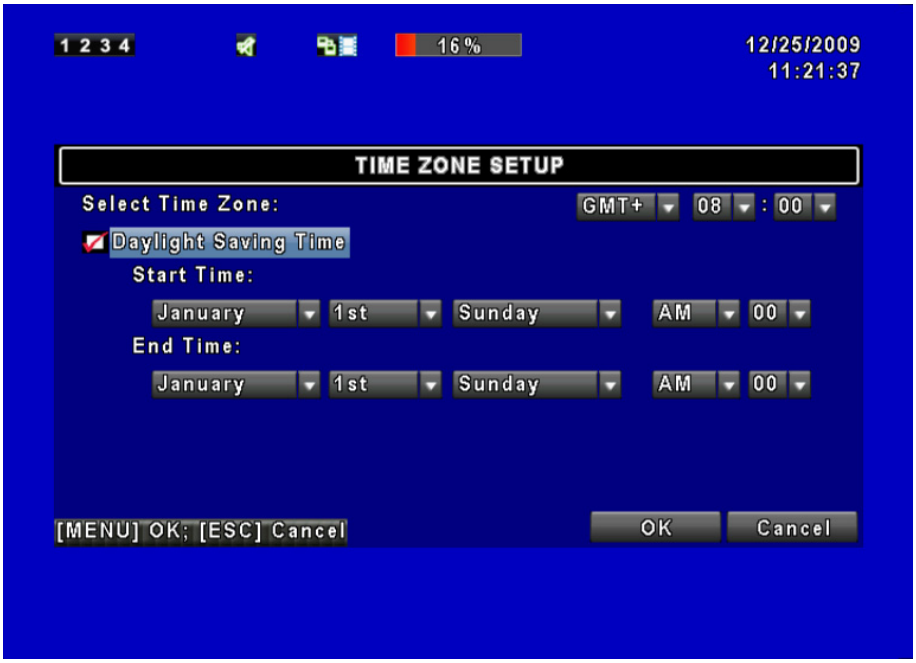
Item	Description
Hour Format	12HOURS/ 24HOURS.
Date Format	MM-DD-YY/DD-MM-YY/YY-MM-DD.
Date/Time Position	Choose the position of Time and Date display.
Change Date & Time	Setup time and date of DVR.
Time Zone Setup	Set up GMT and Daylight Saving Time.
Internet Time Setup	Setup automatic synchronization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

5.9.2.1 Change Date & Time

Users are allowed to setup date and time of the DVR.



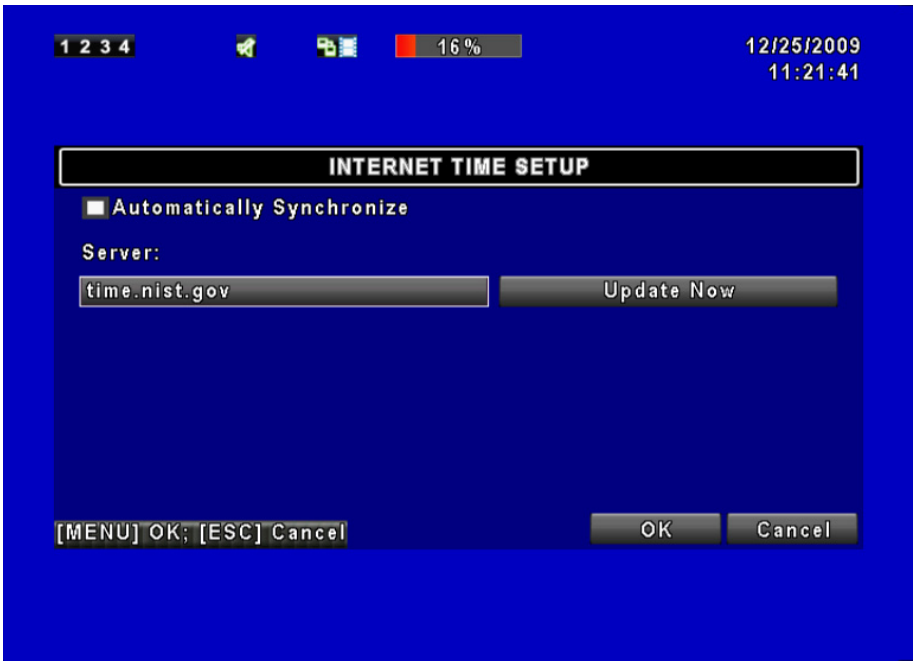
5.9.2.2 Time Zone Setup



In time zone setup, users can change the time zone and activate Daylight Saving Time function according to your DVR location.

Item	Description
Select Time Zone	Enter to modify GMT from GMT- 13 to GMT+ 13.
Daylight Saving Time	Turn On/ Off Daylight Saving Time.

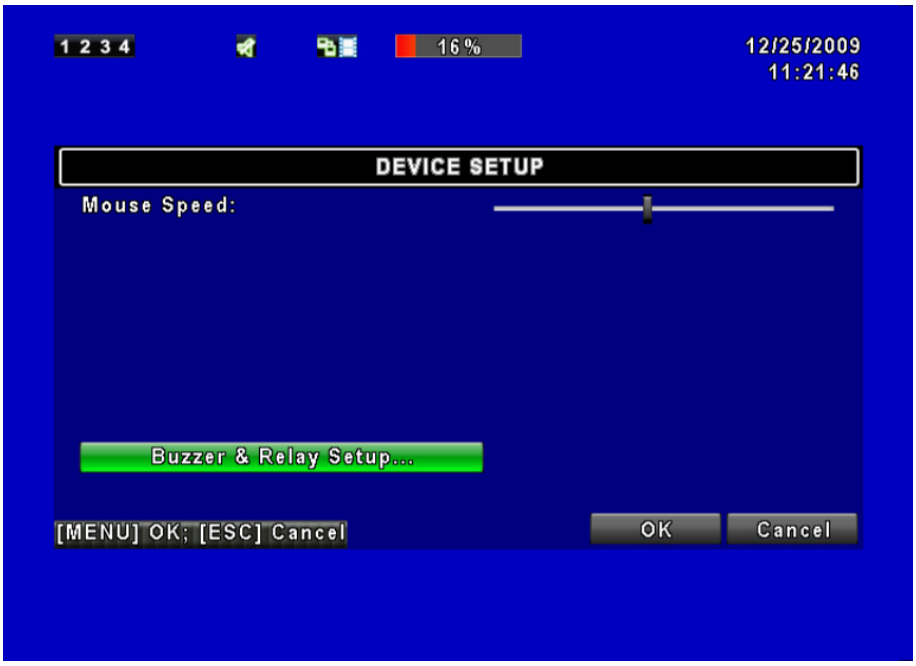
5.9.2.3 Internet Time Setup



Synchronize your DVR time with internet time server.

Item	Description
Automatic Synchronization	Check to enable DVR automatic synchronization function. Select this option to enable the function, 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.

5.9.3 Buzzer & Relay Setup



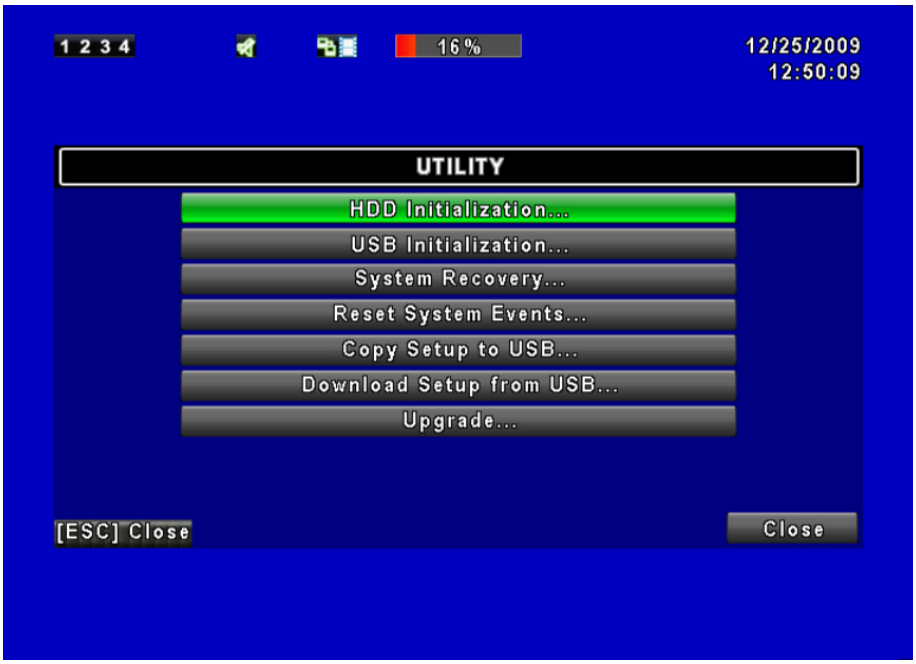
Item	Description
KEY TONE	Enable/ Disable keystrokes.
Relay Switch Connection	Set relay signal to be Normal Close (N.C.) or Normal Open (N.O.).
Buzzer Duration	Set up the duration from 1~999 seconds.
ALARM BUZZER	Enable/ Disable buzzer operation when the alarm is triggered for sensor, motion and vloss (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 (Video Loss).

5.9.4 Spot Setup

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

Item	Description
Auto-Seq. Interval (Seconds)	The duration interval time between channels is in seconds under SPOT mode (1~999 seconds).
Skip Video Loss Channel	Whether to skip channels without video signal.
Channels	Select which channels will be displayed in the sequence.

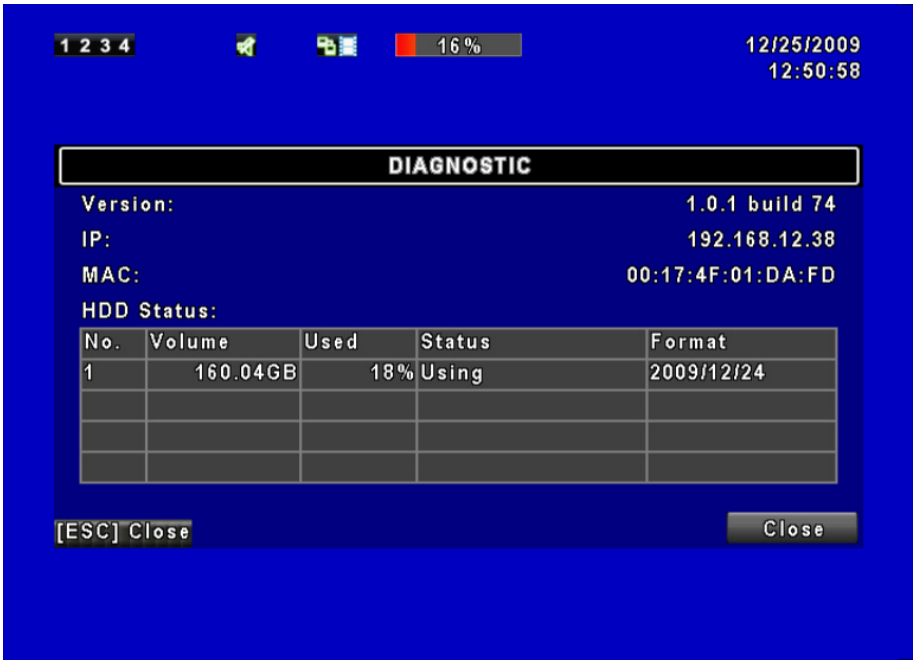
5.10 Utility Setup



Item	Description
HDD Initialization	Select to enter hard disk initialization menu. **Please stop recording before entering this menu.** Enter the menu, system will show all the data (model/ volume) of HDD that is installed in the DVR. Check the HDD you'd like to initialize, and then press "Start". HDD initialization is successful 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 shows "Succeed".
System Recovery	Restore system default values.
Reset System Events	Reset all the recording events in the 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. **System will reboot automatically when the upgrade is completed.**

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

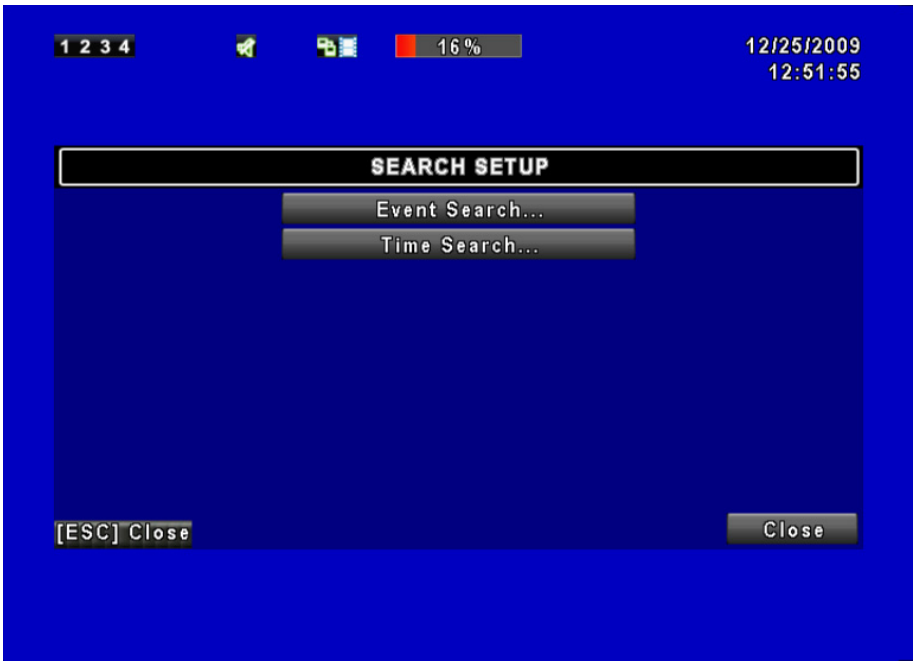
5.11 Diagnostic



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. **USING** means the HDD is now used for recording. **GOOD/ BAD** 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 the DVR).
Format Time	The latest format time of HDD.

Chapter 6 SEARCH & BACKUP

6.1 Search Setup



Item	Description
Event Search	Press to enter event search menu.
Time Search	Press to enter time search menu.

6.1.1 Event Search

The DVR automatically records events with type, time and channel information included. If there is recording data for an event, a yellow signal icon 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 the event search function.
Page	Convert pages of events.
Date/Time	Date/ time when the event occurred.
Event Type	Event type, defined as following: **VLOSS** Video Loss. **MOTION** Motion Detected. **SENSOR** Sensor Detected. **REMOTE IN** User log-in over the network. **REMOTE OUT** User log-out over the network. **POWER ON** System Rebooting. **KEY LOCK** System key is locked. **KEY UNLOCK** System key is unlocked.

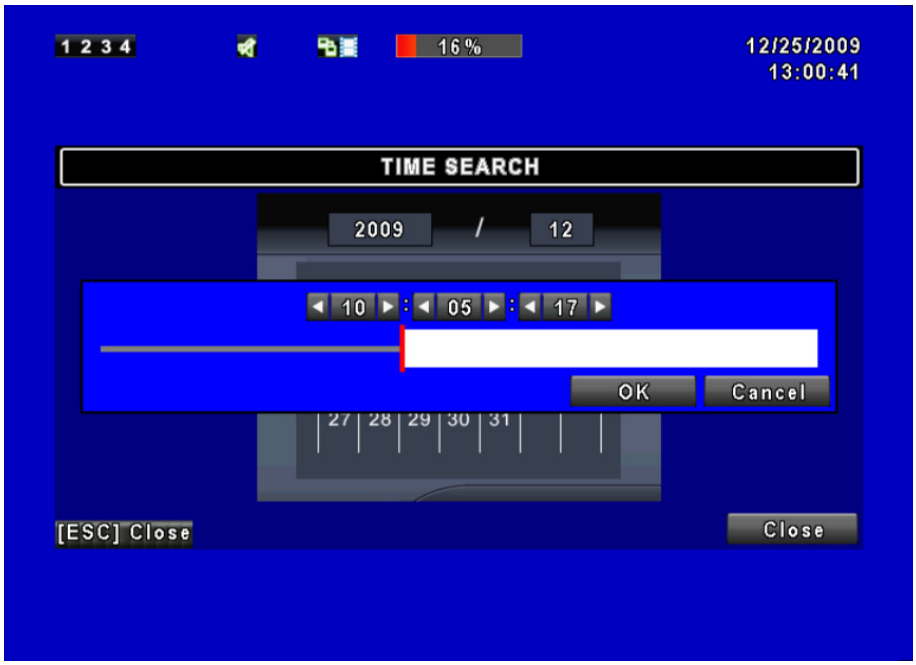
	HDD FULL	HDD is FULL.
Channel	The channel where the event occurred.	

6.1.1.1 Criteria Setup for Event Search

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

6.1.2 Time Search

TIME SEARCH, you can search for a specific time of the recording data to playback. Dates with recording are shown by data marked with a red square [□]. System will start playing back according to the date that you've 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.

6.2 Backup Setup

User can back-up any segment of recorded data in a specified time frame. To do so, connect a USB to the DVR. The format of backup file is *IRF* file and can be played by "DVRemoteDesktop.exe" or "iCMS".

Item	Description
From	Backup file starting time.
To	Backup file ending time.
Device	Select USB 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.**

✍Note

Do not unplug the USB device or turn off the DVR during the backup process to avoid unrecoverable error. When backup is completed, you need to re-plug in order to ensure proper function.

Chapter 7 iCMS Installation and Usage

DVR-462 has provided a simple use and powerful utility called – iCMS. When this utility installed to Windows platform, user can get more functions than on the web browser. When you want to fully control your DVR-462/872/1672, you may install the iCMS into your PC and refer to instructions below to know and manage these functions in the iCMS.

7.1 iCMS Installation

System Requirement:

- Intel Pentium 4 processor or equivalent.
- Microsoft Windows Vista、Windows XP、Windows 2003 Server.
- 512MB memory above.
- 20MB HD space. Recording and image capturing require extra space for storage.

Installation Guide:

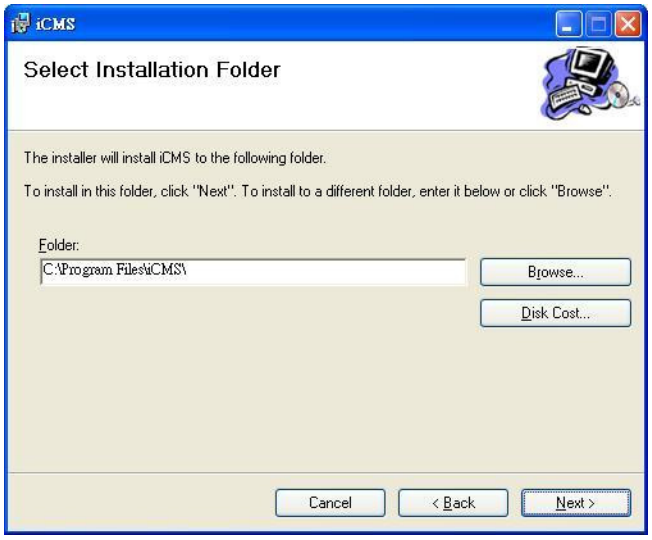
Step 1: Install the CD that is packed with the DVR and into your CD-ROM drive.

Step 2: You will see a welcome web page. Please click the iCMS utility hyper-link. If the welcome web page doesn't appear, you can find the program in E:\Utility\Setup.exe. Suppose "E" is your CD-ROM drive.

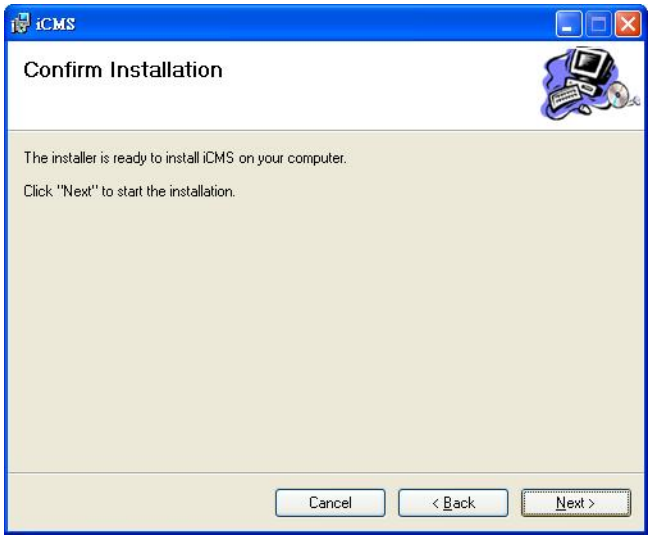
Step 3: If the PC doesn't install Visual C++ plug-in, you will see this screen below, please select "Install" to install this plug-in.

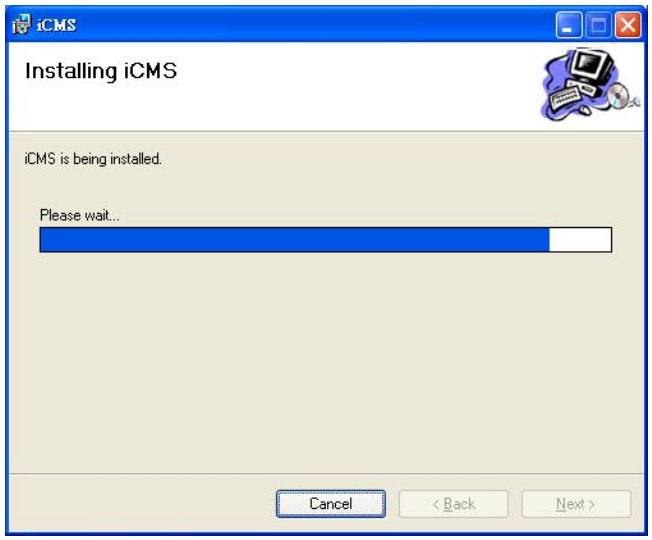
Step 4: Please click "Next".

Step 5: Select "**Browse"** to change installation path if needed. To check available space on hard disk, please select "**Disk Cost**" then please select "**Next**" to the next step.

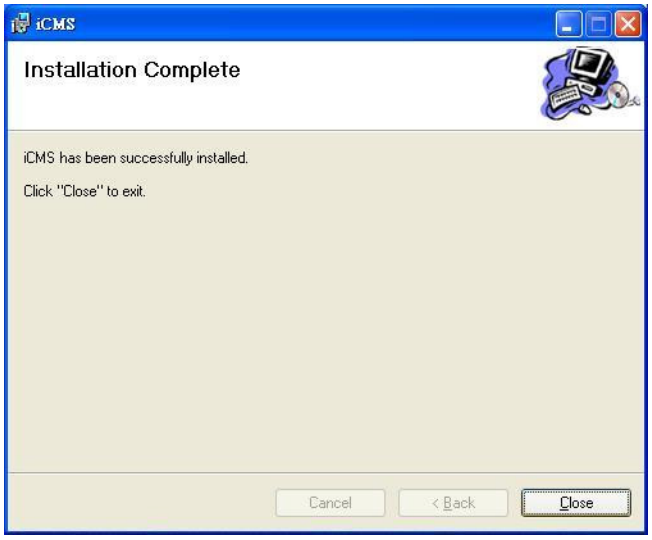


Step 6:"**Confirm Installation**" window shows. Select '**Next'** then the installation starts.



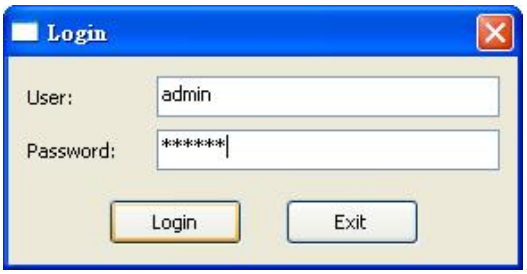


Step 7: Select '**Close'** to finish installation when the "**Installation Complete**" window shows.

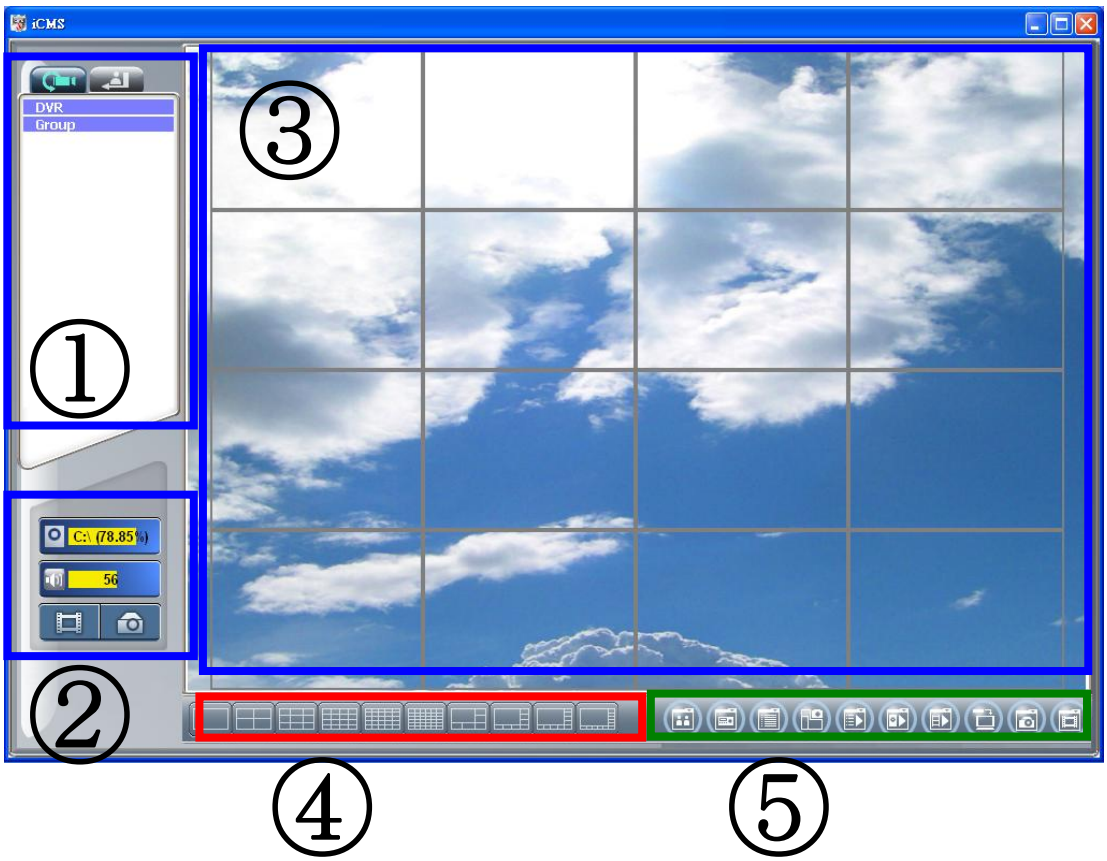


7.2 iCMS Login and Environment

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



After successful login, the following image is shown on your screen:



Item	Description
DVRs, Groups & Events	Information about DVRs, groups and events. See "7.3 Groups & Events" for more details.
PC information and control	Information about local PC's hard disk, volume, recording...etc. See "7.6 Local PC Information and Control" for more details.
Main Display	Live image display area. See "7.7 Main Display" for more details.
Display Modes	Several choices of display modes supported by iCMS.
Operation Bar	A set of 10 operations are provided by iCMS. See "7.11 Operation Bar" for more details.

7.3 Groups & Events

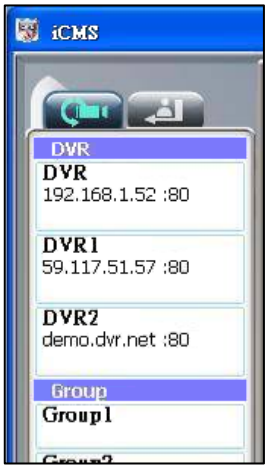
Icon	Description
	View list of logged in DVR／Group.
	View Logs： DVR event information list.

7.4 View DVR/ Group List

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

On the DVR list, double left click on a connected DVR will show its image in the main display. See "7.13 User Administration" for further information.

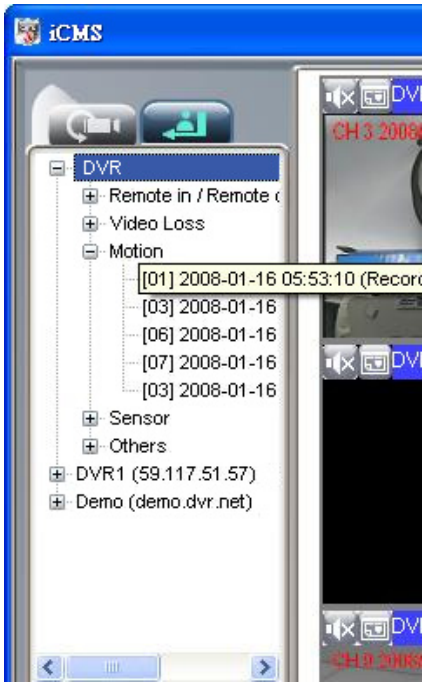
On the Group list, double left click on a group will show live image from the channels of the group in the main display. See "7.14 Group Administration" for further information.



Icon	Description
	Video Loss
	Motion
	Sensor

7.5 Event View

This window lists all the events recorded on the DVR. Each DVR has a list of different categories of events. According to Remote in/ Remote out, Video Loss, Motion, Sensor, and Other（Power Reset, Key lock, Key unlock, HD Full）.



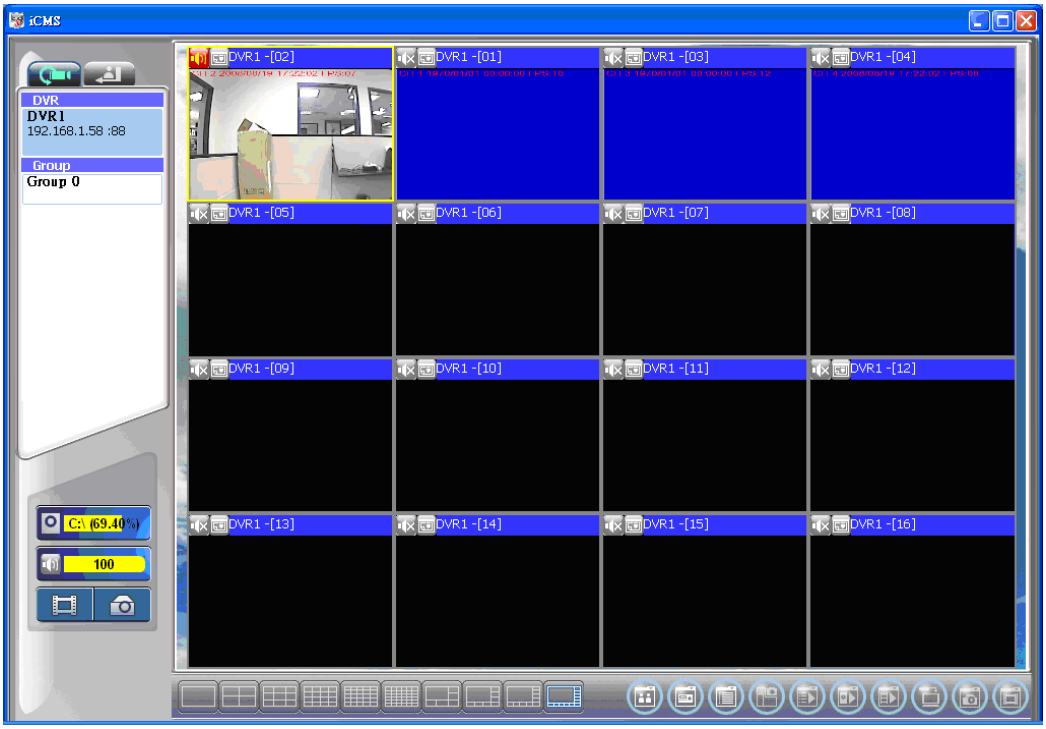
7.6 Local PC Information and Control

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

Icon	Function	Description
	HDD info	Shows the ratio of available space / HDD capacity of C:\ drive (where iCMS 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 “7.21Recording data” for detail.
	Snapshot	Take snapshot to save in local PC storage. To view all the snapshots you’ve taken; please go to “Snapshot” under the operation bar. See “7.20Snapshot data” for detail.

7.7 Main Display

The main display area is where the live image of DVR is shown. You can drag to change the location of the screen for each channel and turn On/Off audio signal by clicking the mouse.



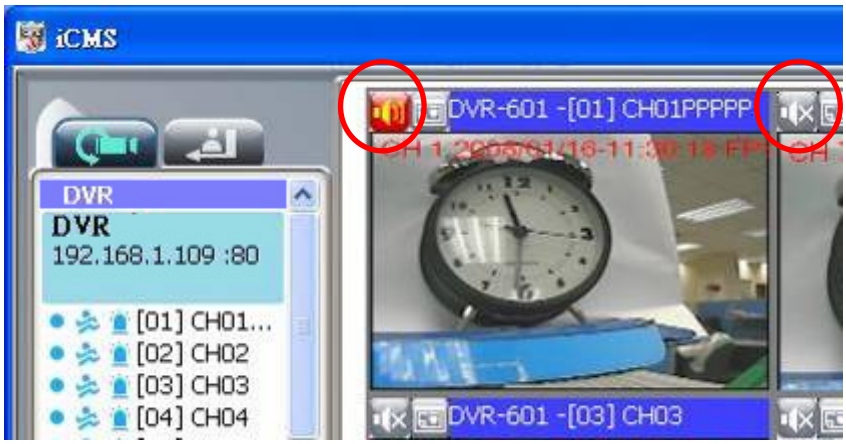
7.8 Audio Control

In live mode, you can turn On/ Off the audio signal of Ch1~Ch4 (4CH DVR supports only 1Channel audio recording):

「 」 Audio signal is On

「 」 Audio signal is Off

Turn On/Off by clicking on the graphical icon, please note that each time only one audio signal channel is allow turned on.



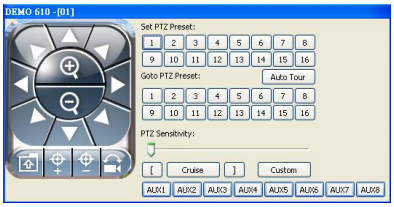
7.9 eMaps

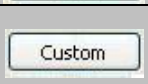
In LIVE view, press「 」to show eMap window. If a channel has e-Map settings added, a drop-down menu will appear showing the related e-Map names added in this channel. The channel that has not been added with any e-Map settings will have "No eMaps" shown on the screen.

For more information about e-Map setup, please refer to“7.15 eMap Setup”.

7.10 PTZ Control

Right mouse click on the screen, PTZ control icon will appear, as shown below:



Icon	Description
8 Directional Buttons	PTZ Movement.
	ZOOM+ : Zoom In.
	ZOOM- : Zoom Out.
	Preserved Function.
	FOCUS+ : Focus Near.
	FOCUS- : Focus Far.
	Preserved Function.
Set PTZ Preset	16 PTZ Preset Points.
Goto PTZ Preset	16 PTZ Goto Preset Points.
	Activate Auto Tour.
PTZ Sensitivity	PTZ Sensitivity Setup.
	Set the start and the end point of Cruise function.
	Activate Cruise Mode.
	Preserved Function.
AUX 1~8(Customize)	AUTO+1 - AUTO+8.

7.11 Operation Bar

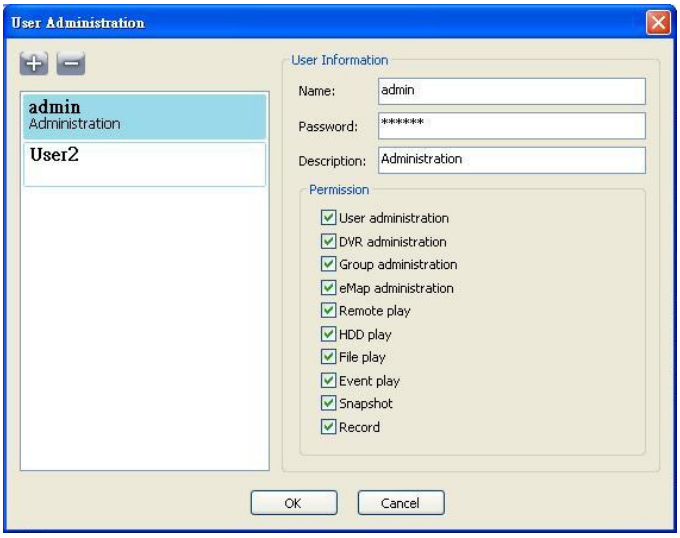
10 Operations listed as below:

Icon	Description
	User Administration. Please see「7.12 User administration」
	DVR Administration. Please see「7.13 DVR Administration」
	Group Administration. Please see「7.14 Group Administration」
	eMap Administration. Please see「7.15 eMap Setup」
	Remote Playback. Please see「7.16 Remote-Site Playback」
	HDD Playback. Please see「7.17 HDD Playback」
	File Playback. Please see「7.18 File Playback」
	Event Playback. Please see「7.19 Event Playback」
	Snapshot Data. Please see「7.20 Snapshot Data」
	Recording Data. Please see「7.21 Recording Data」

7.12 User administration

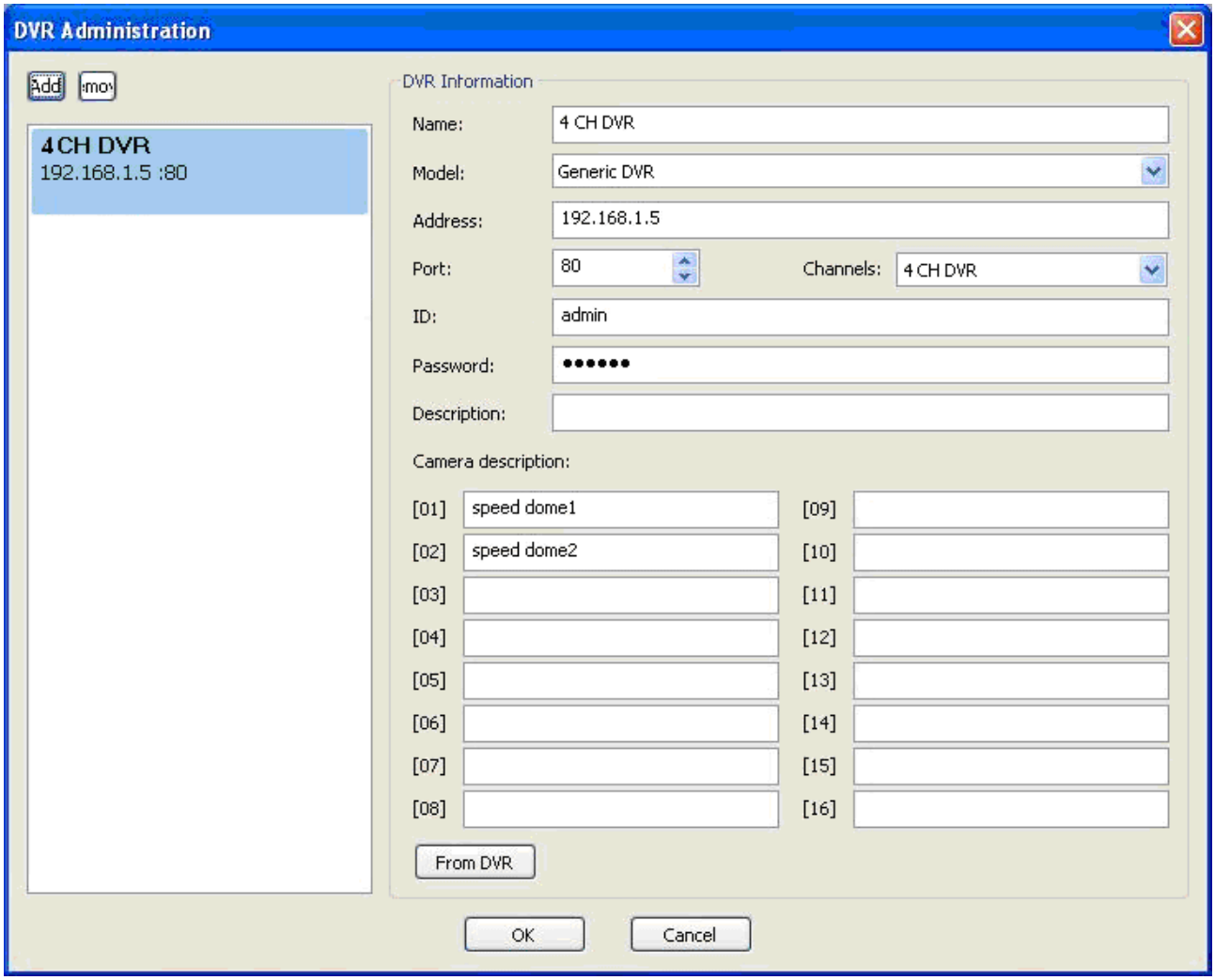
Before the iCMS can be used on a PC, user accounts should be added with proper authority. Each user should be assigned with a password and optionally a description. If a user does not have certain authority assigned, he/ she will not be able to operate the corresponding function on the Operation Bar.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

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



7.13 DVR Connection Information Setup

You can add or delete the DVR connection, information and description editing, also enter names of the channels (Please select Generic DVR for DVR Model). After setup, please click "OK" to store setup.



7.14 Group Administration

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

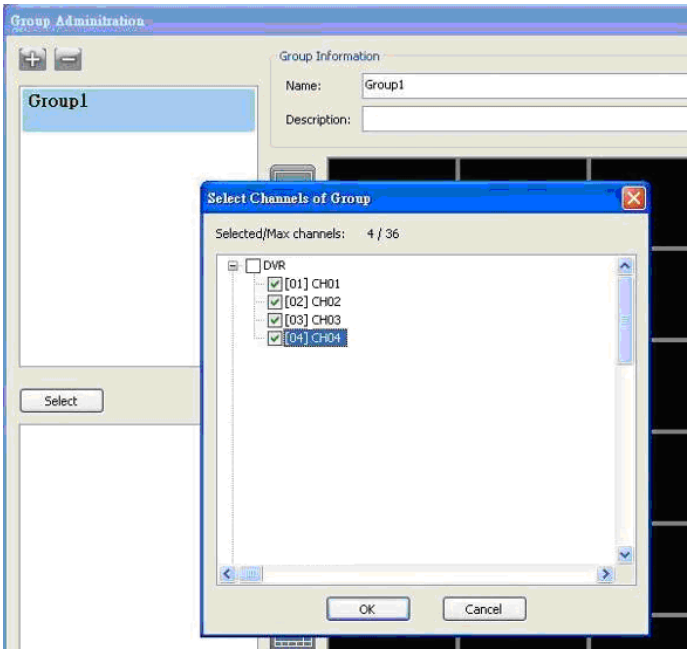
Steps:

Step 1: Add a new group and set its name and description.

Step 2: Click '**Select'** which will bring up a new window.

Step 3: Check the specific channels that you'd like them to be included in the

group. To include all channels of a DVR, just uses ☐ icon to check the DVR.



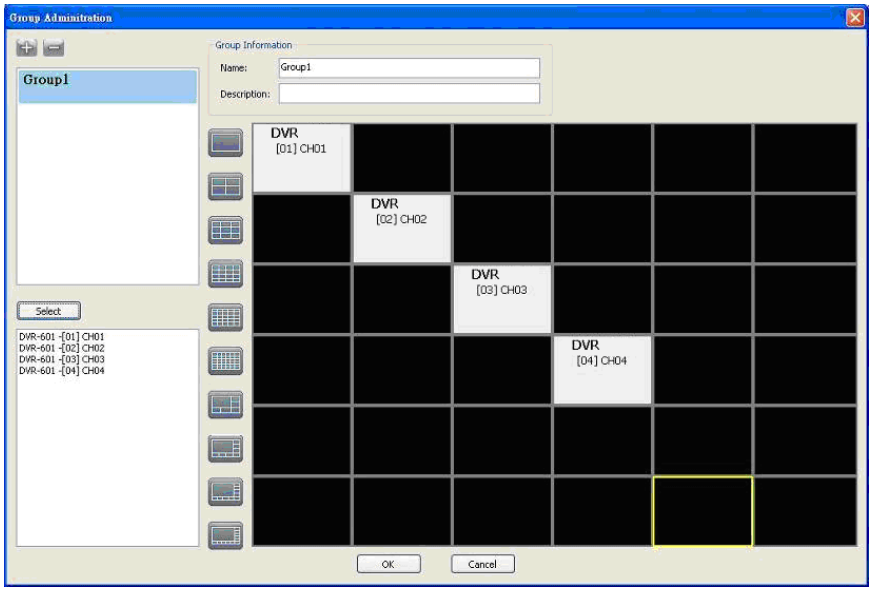
Step 4: Click "OK" to return to the previous window.

Step 5: Select a display mode, system will auto select.

Step 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.

Step 7: You can 'Select' again to add other channels, but the un-saved channel locations will be lost.

Step 8: Click "OK" to save the setup.

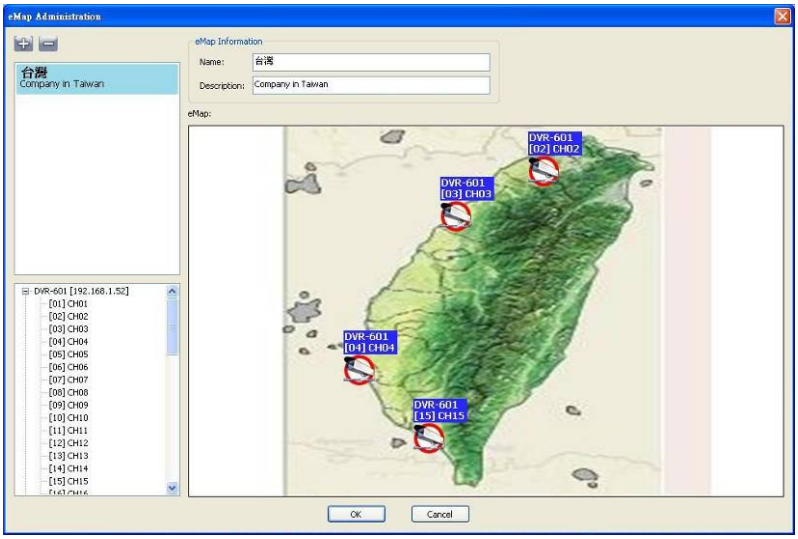


7.15 eMap Setup

If the DVR has the sub-region, or would like to have a picture on the background to monitor the channel, you can use the eMap.

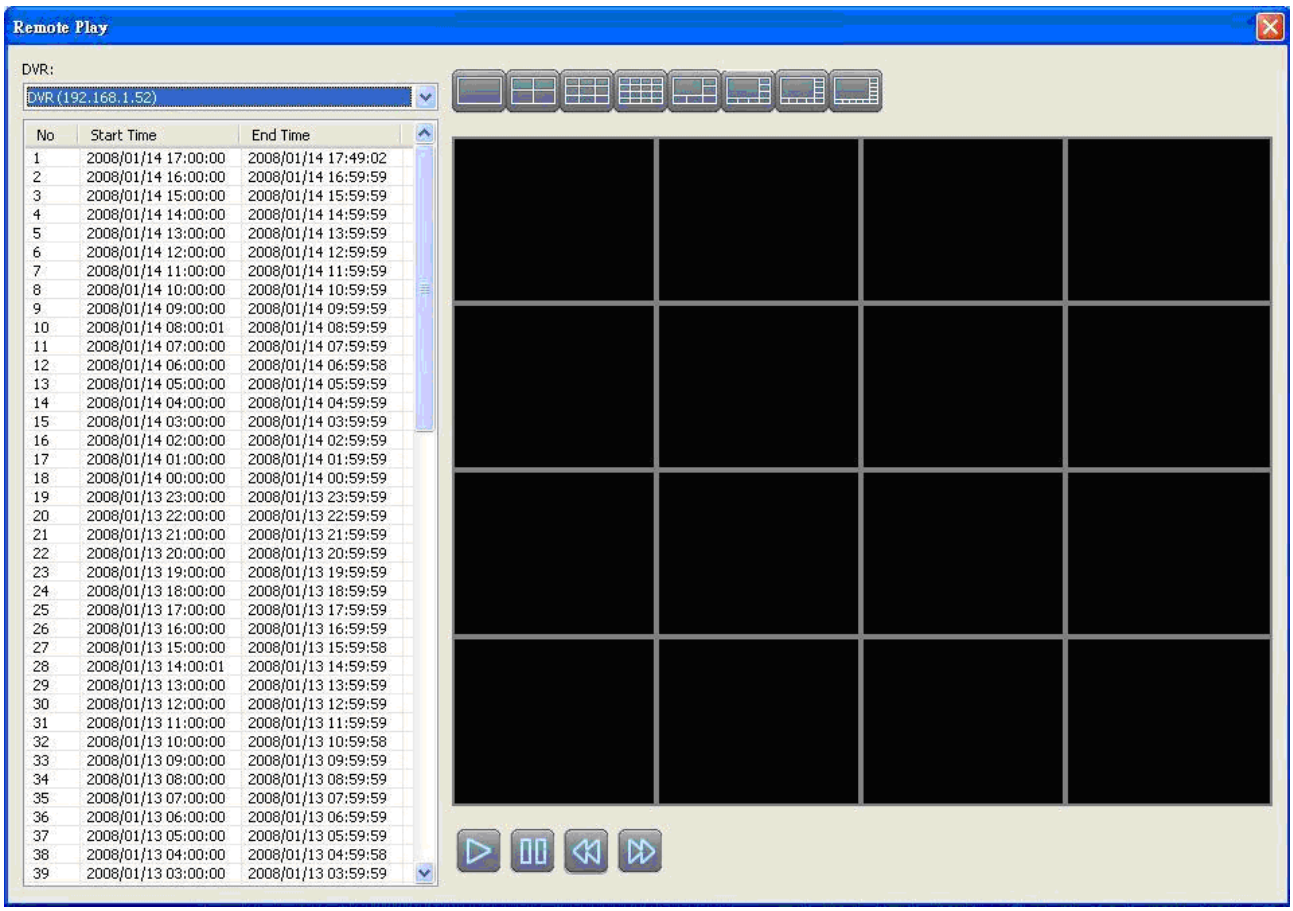
Steps:

1. Click [ ] icon to select a path of the window picture.
2. Click [OK] button after selecting a picture, a window will show on the right picture content.
3. Use left mouse button to drag to any location.
4. To delete a channel, please right-mouse click on the channel icon (CH1-CH4), and select item option "Remove".
5. Click [OK] button after setup has been completed to store setup.



7.16 Remote-Site Playback

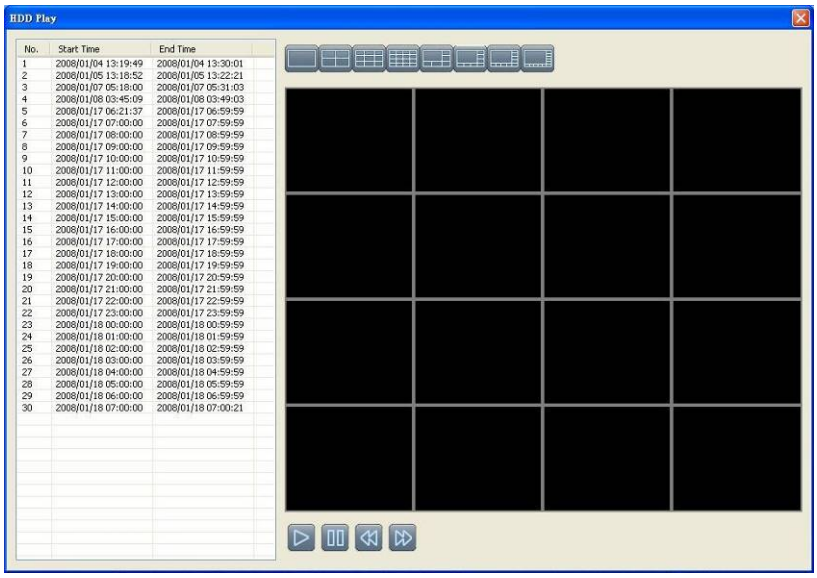
You can playback recorded images of the DVR on the remote-site. First select a DVR, DVR recording information list appears below, double-click to playback selected video time period, a video information screen will appear on the right. There are different split-screen options to select from, as shown below.



Icon	Description
	Start Playback
	Pause
	Stop playback
	Fast forward
	Fast rewind

7.17 HDD Playback

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



7.18 File Playback

You can play the recorded ***.irf** files by "File Play" in iCMS. 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

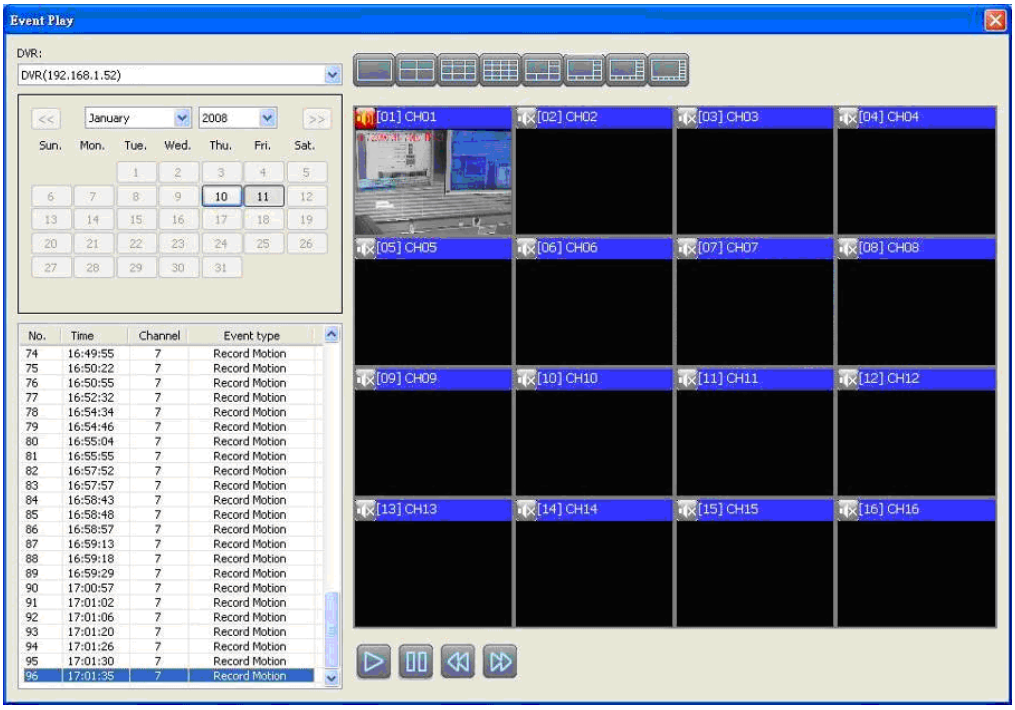
	Fast rewind

7.19 Event Playback

You can play the event recorded by the DVR.

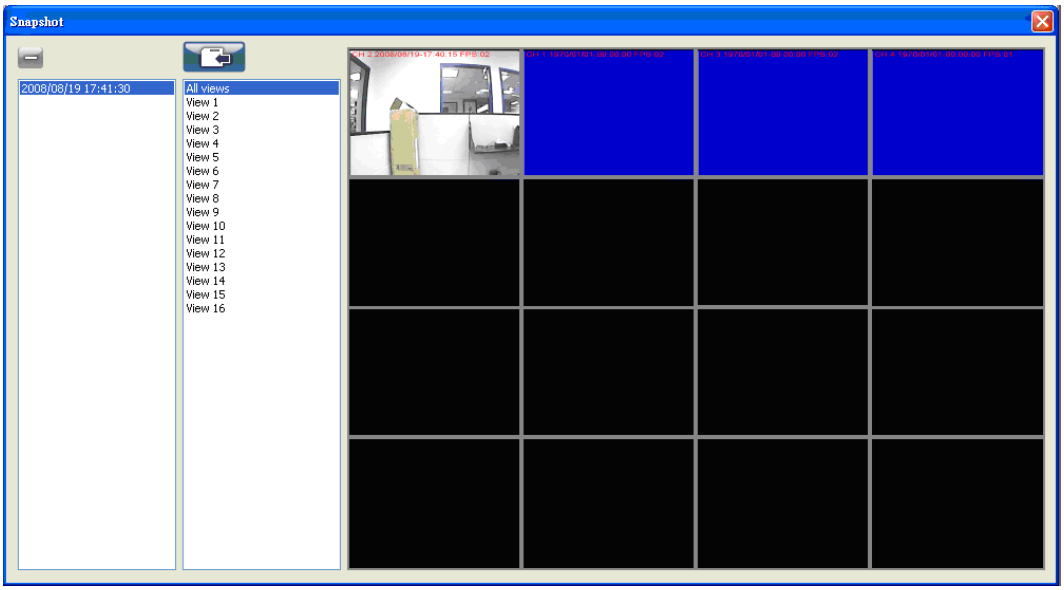
Steps:

1. Select DVR.
2. Select date.
3. Double-click on the selected "Event type" (table on the left hand side, bottom row), video will be shown on the right side of the screen.
4. Select split-screen.
5. Use the 4 icon functions on the bottom of the screen to operate video playback.



7.20 Snapshot Data

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



7.21 Recording Data

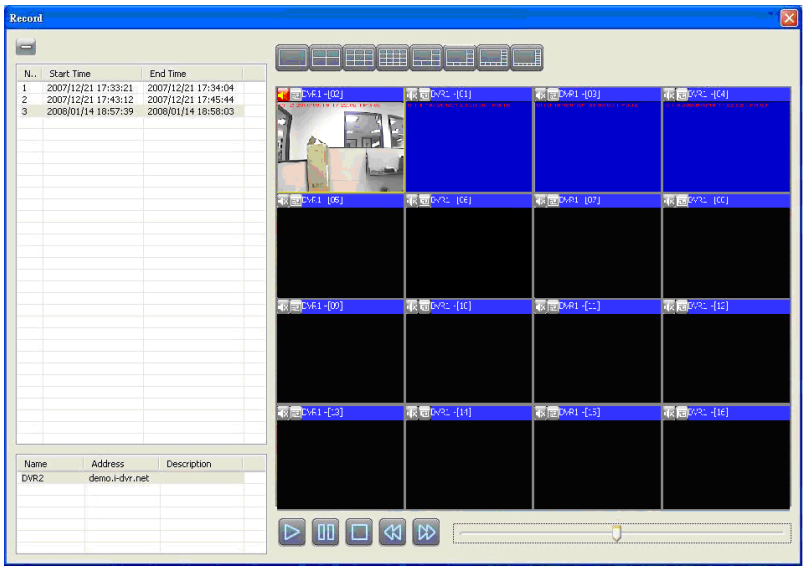
It can play all the recording files you've recorded, into "Recording Data". You can play or delete them.

Steps:

Step 1: Choose the recording time at upper left corner, it will be played on the main display.

Step 2: You can choose the display mode.

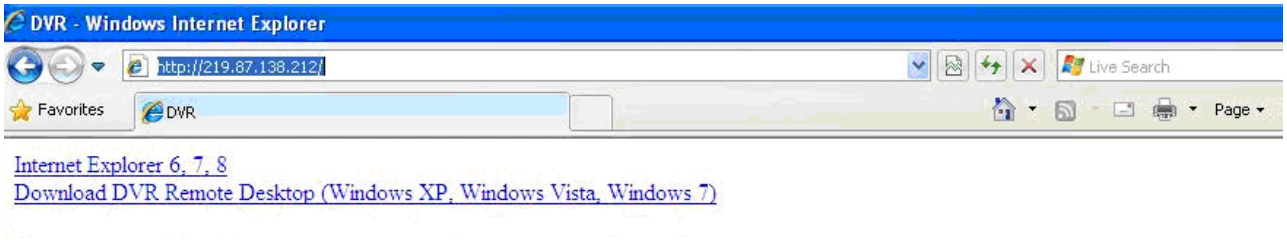
Step 3: Time bar will be shown on the right lower corner, please drag the time bar to specify the recording time you'd like to play.


Record
N..
Start Time
End Time
1
2007/12/21 17:33:21
2007/12/21 17:34:04
2
2007/12/21 17:43:12
2007/12/21 17:45:44
3
2008/01/14 18:57:39
2008/01/14 18:58:03
Name
Address
Description
DVR2
demo.i-dvr.net

Chapter 8 NETWORK SURVEILLANCE

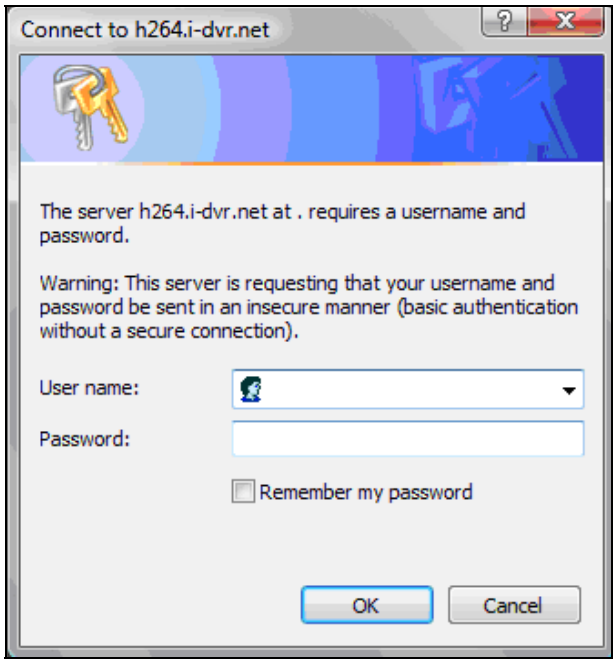
8.1 AP Software Installation and Setup

Step 1 : Enter the IP address of the DVR in the IE browser.

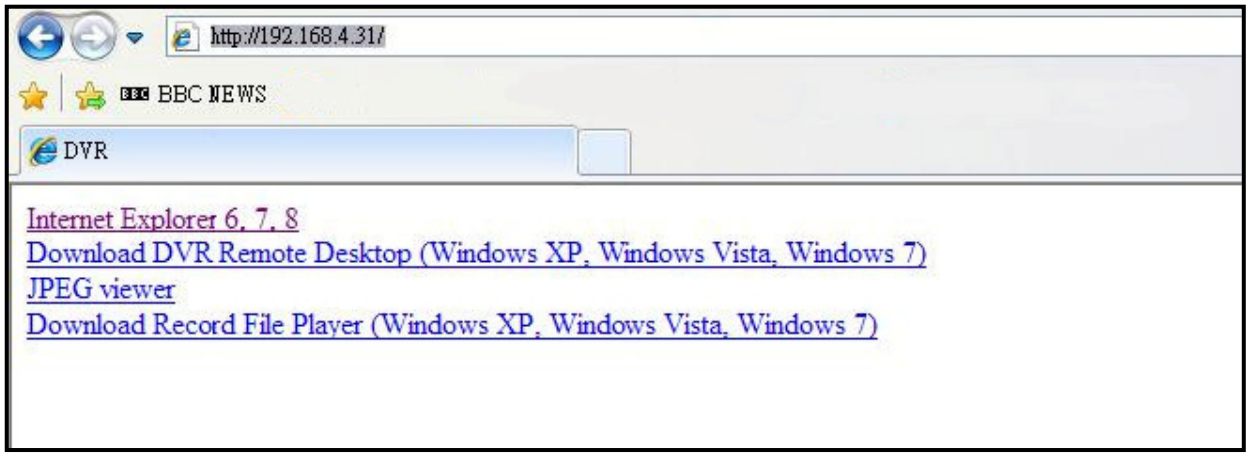


Provides two different ways of DVR connection, one is the use the Internet Explorer; the other to download and install the software to the PC.

Step 2: A window will pop-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 refer to section on **"Account Setup"**.



Step 3: Remote connection option appears.



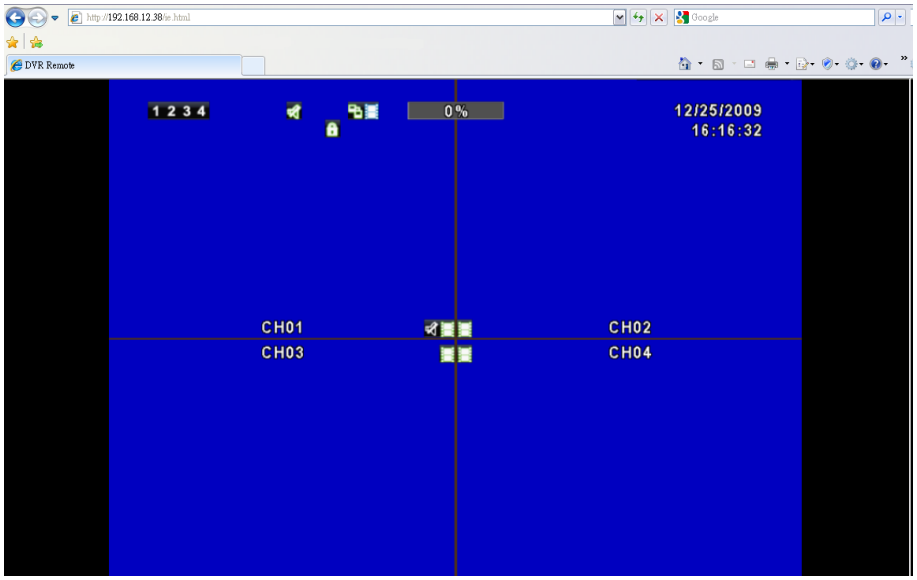
Internet Explorer 6, 7, 8:
Precede connection using Microsoft Internet Explorer.

Download DVR Remote Desktop (Windows XP, Windows Vista, Windows 7):
Continue connection operation by downloading the software and install it to the PC.

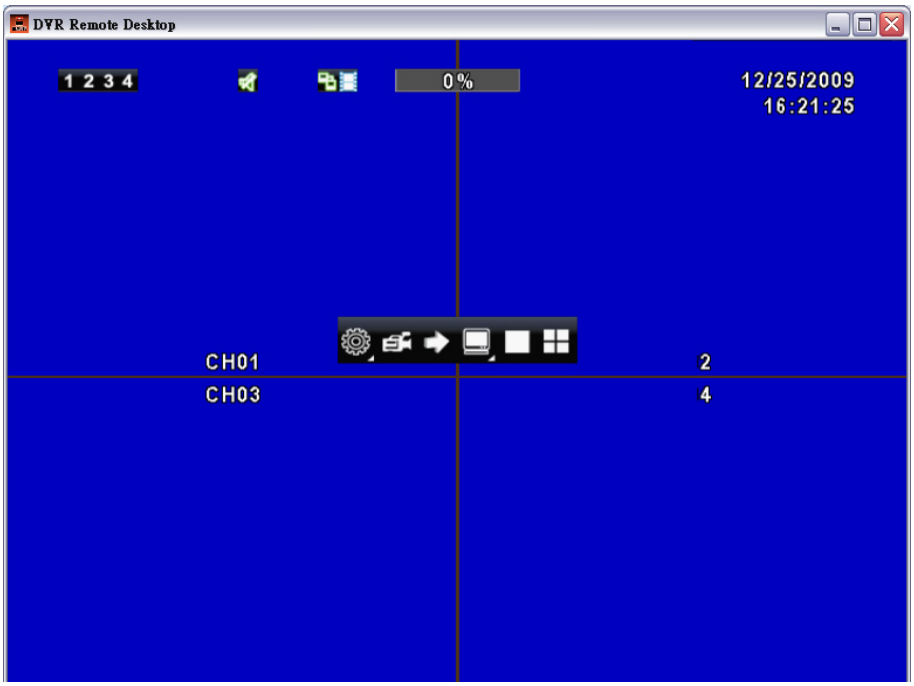
JPEG viewer: Applies only to LIVE connection monitoring.

Download Record File Player (Windows XP, Windows Vista, Windows 7):
Download software to backup playback files.

Step 4: You've logged into the DVR

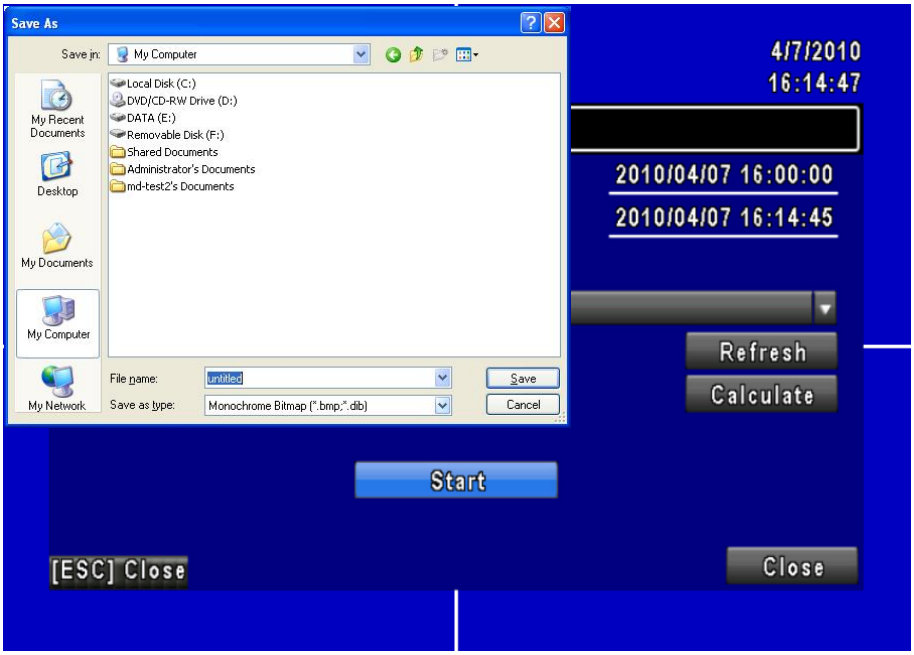


Internet Explorer



Software Application

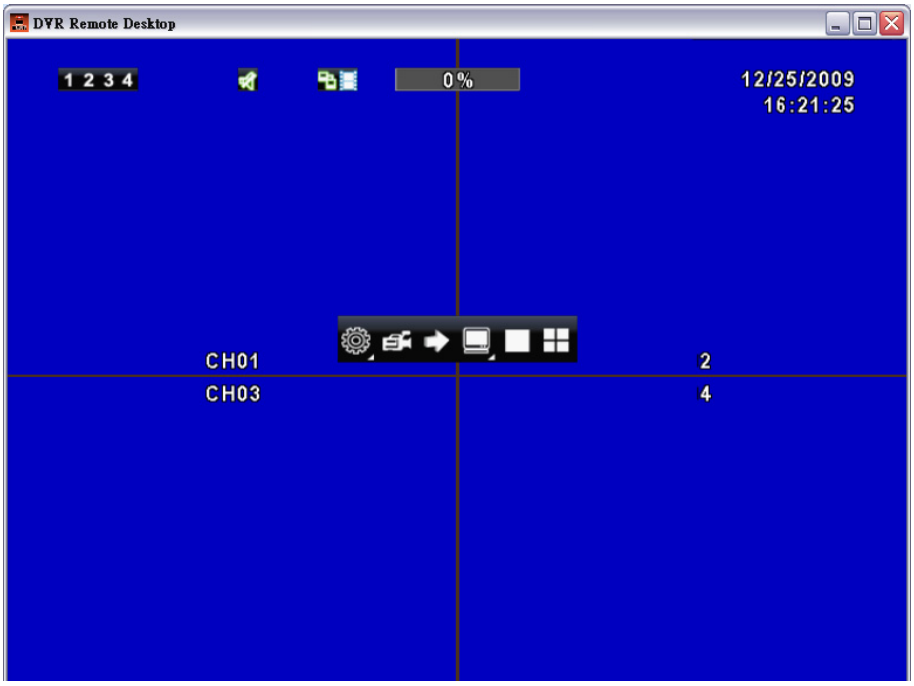
8.2 Remote Backup



You need to select a folder location on the PC for remote backup purposes.

8.3 AP Software Operation

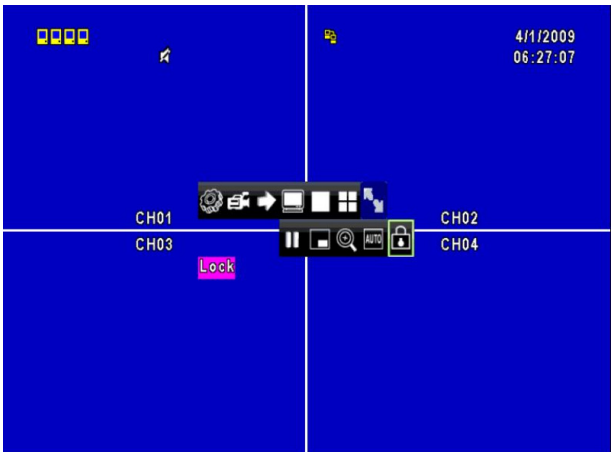
User-friendly operation, DVR remote interface provides the DVR with the same local client interface.


DVR Remote Desktop
1 2 3 4
0%
12/25/2009
16:21:25
CH01
2
CH03
4

8.3.1 Remote Record

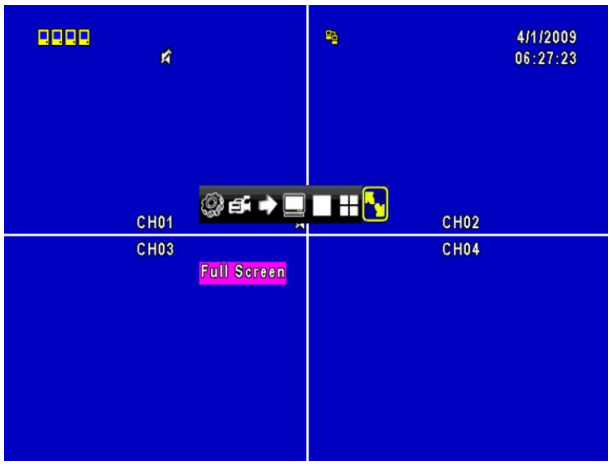
Click Record icon to select between 3 recording options (Record On/ Off, Record to Local…, Screen Snapshot [F2]). Record switch can activate DVR client to record, record to local client can be backed up onto the PC, may also use snapshot to capture video image onto the PC.

8.3.2 Lock



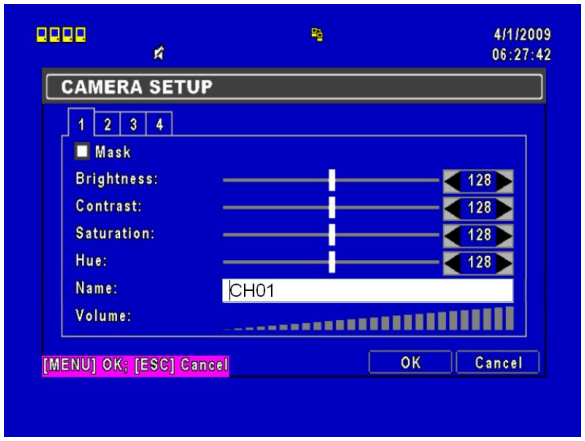
Click Lock icon to lock remote-site function and to unlock, account and password must be entered all over again.

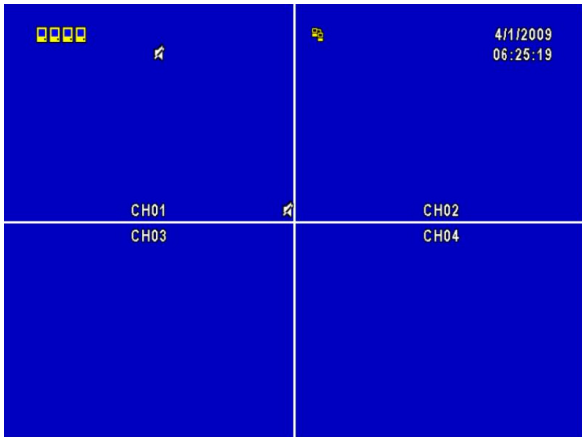
8.3.3 Full Screen



Click Full Screen icon to enlarge the screen to full screen display.

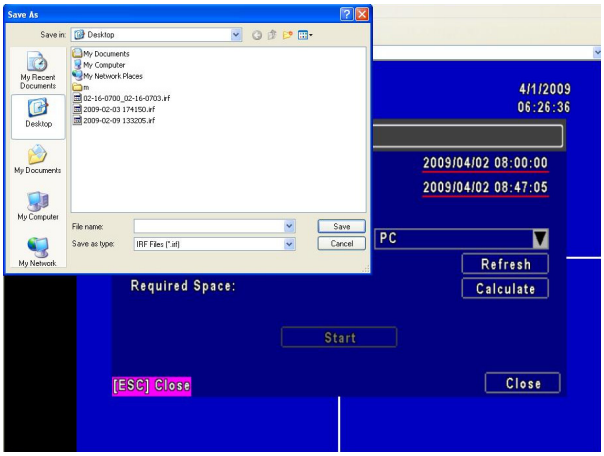
8.3.4 Camera Name





A variety of languages can be used to setup the PC client camera names; and simultaneously changes the display of the local client DVR.

8.3.5 Remote-Site Backup



Select backup function to backup the data to PC.

Chapter 9 Mobile Application

You can remotely monitor all channels of the DVR through your mobile device. The required mobile application is from the DVR manufacturer and it supports mobile OS for both Windows mobile 5.0 above and Symbian.

Please confirm that the network function of the DVR has been activated before mobile connection: Main menu → Network Setup → HTTP Setup → Check the "Enable HTTP Server".

9.1 For Symbian System

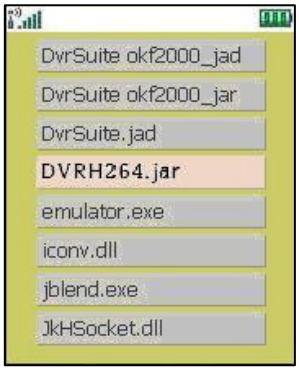
Mobile Device: Nokia, SonyEricsson…etc.

System requirement:
GPRS/ 3G must be provided from your telecom service.
Mobile device that supports GPRS/ 3G protocol and Java cldc1.0/midp 2.0 environment.

9.1.1 Mobile Application Installation

Please follow the steps shown below to perform the mobile device surveillance function.
Step 1: You need to install the mobile application called "**DVRH264.jar**" into your mobile device. The application can be downloaded from the CD that packed with DVR through Bluetooth or USB cable. You can find it in e:\utility\mobile\. For example, e is your CD-ROM drive.

Step 2: Install the application software "**DVRH264.jar**" in your mobile device. It might be installed automatically after downloading; otherwise, select it from the downloading file for installation.



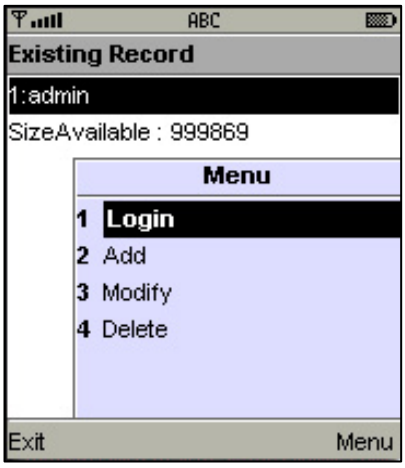
9.1.2 Mobile Application Operation

After the installation, enter Program Files menu in your mobile device to run a file called "**H264 MIDlet**".

Select "Menu" at the right lower corner of your mobile screen, 4 commands, **Login Add Modify** and **Delete**, will show up.

9.1.2.1 Add New Login DVR

To log into the DVR, you need to enter the logging-in DVR information. Find "**Add**" under the "Menu" then enter logging-in DVR's IP address, Port number, account name and password. Press "**Add**" to save this information after entering.

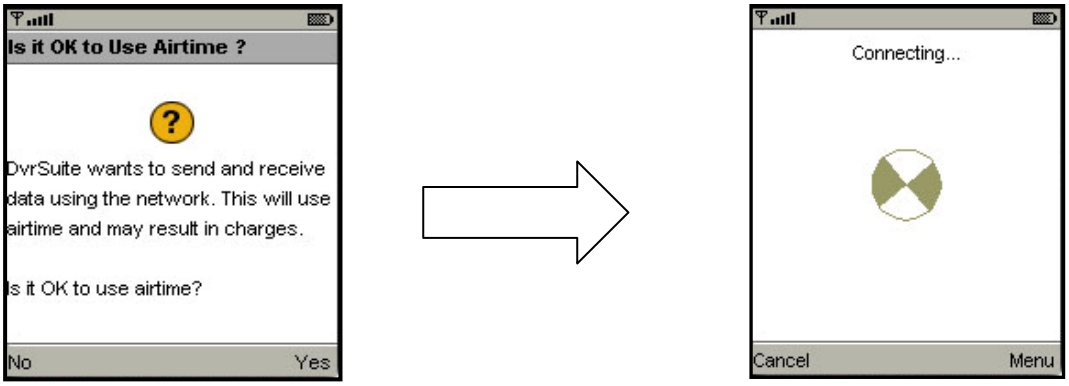


9.1.2.2 Logging onto the DVR

Use the Login command to log onto 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 onto.

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

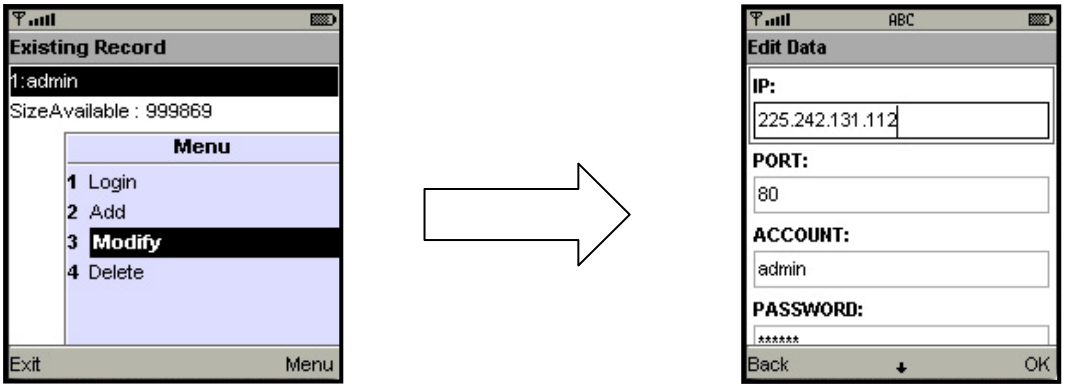
Network connectivity will take some time. It will be affected by networking environment and bandwidth flow. Live image will show up after a successful connection.



Note: *Live* images can not be displayed in your mobile when the recoding is set to off on local DVR.

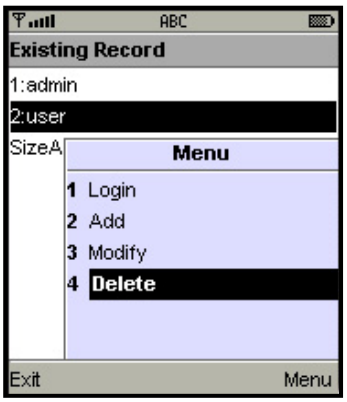
9.1.2.3 Modify the Login Information of the DVR

You can use "**Modify**" command to change the login information of the DVR. The dialogue is identical to that of "Add" command.



9.1.2.4 Delete the Login Information of the DVR

"**Delete**" command can be used to remove the DVR information when it is no longer useful. Select the DVR on the name list, then choose "**Delete**".



9.1.3 Live Monitoring Operation

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

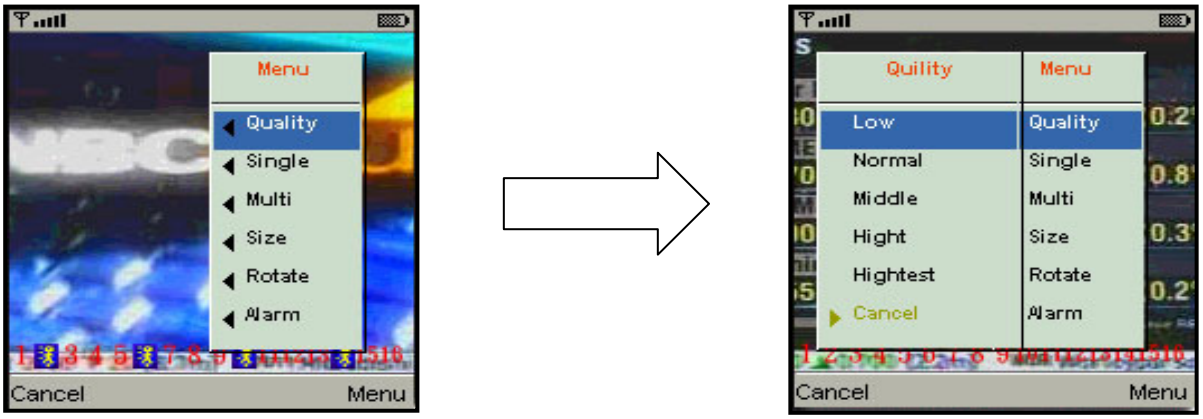
9.1.3.1 Scroll the Image

You can use the keypad on your mobile device to scroll the image when it is oversized.

Key	Action
2	Scroll Up
4	Scroll Left
6	Scroll Right
8	Scroll Down

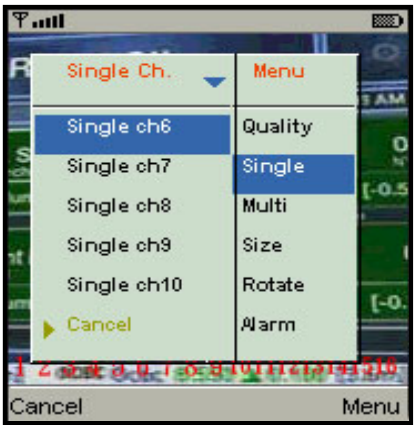
9.1.3.2 Image Quality Setup

Select "Quality" under the "Menu". There will be 5 levels for you to choose: Low, Normal, Middle, High and Highest.



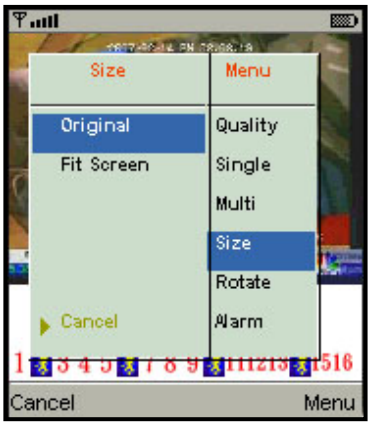
9.1.3.3 Channel Display

Select "**Single**" under the "Menu", all channels will be listed for you to choose from.



PS. *Live* images can not be displayed in your mobile when the recoding is set to off in local DVR.

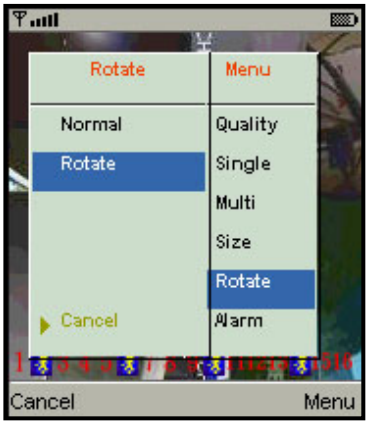
9.1.3.4 Size of Image



The screen size of different mobile device can be different. You can select "**Size**" under the "Menu" to choose from "**Original**" or "**Fit Screen"** to resize the display image.

Item	Description
Original	The image will be shown in original size.
Fit Screen	The image will be shown to fit the screen.

9.1.3.5 Rotate the image



Live image can be displayed by normal image or rotate to 90 degrees. Select "**Rotate**" under the "Menu" for this operation.

9.1.3.6 Alarm

This application will not only allow user to remotely monitor through mobile device but receive the alarm that has been triggered by events such as Motion Detected, Sensor Triggered and Vloss (Video Loss).

Select the "Alarm" under the "Menu" to switch this function on or off.

Item	Description
	Motion detected
	Sensor triggered
	Video loss

9.2 For Windows Mobile System

There are two kinds of applications for Window Mobile OS: JPEG compression and H.264 compression. The one for H.264 compression can transfer both audio and video signal to your mobile device.

System Requirement:

Mobile device OS：Windows mobile system 5.0 and above.

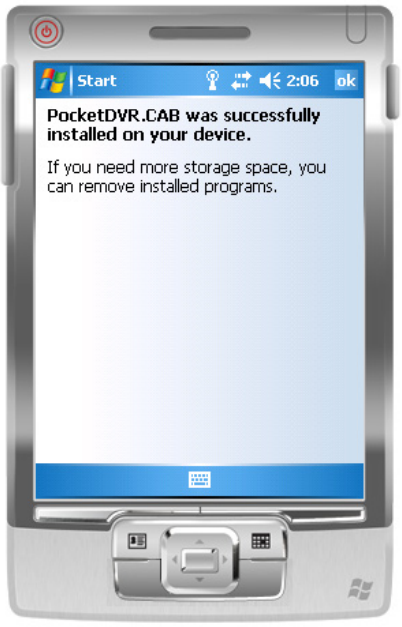
Mobile device need to support internet: GPRS／3G／Wifi… etc.

9.2.1 Mobile Application Installation

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

Step1: The mobile application called **"Jrviewer.CAB"** and "**H264Pocket.CAB**" need to be installed in your mobile device. The application can be downloaded directly from the manufacturer's website to your mobile or; alternatively, it can be transferred to your mobile device from the CD that is packed with DVR through Bluetooth or USB cable. You can find it in e:\utility\mobile\. For example, e is your CD-ROM drive

Step2: Install the application software **"Jrviewer.CAB"** and "**H264Pocket.CAB**" in your mobile device, two folders named "**Jrviewer**" and "**H264Pocket**" will be created. It might be installed automatically after downloading; otherwise, select it from the downloading file for installation.



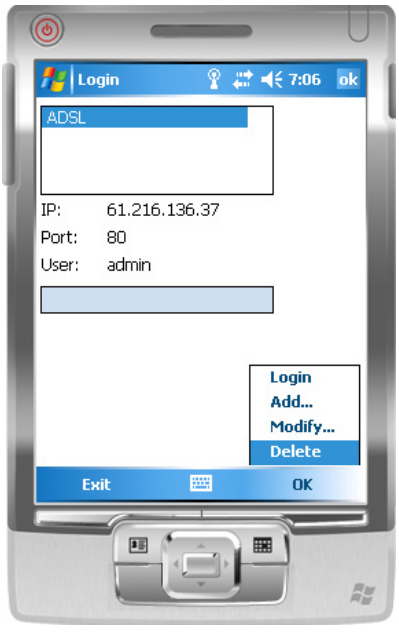
9.2.2 Mobile Application Operation

After the installation, enter the Program Files menu in your mobile device to run files named "**Jrviewer**" and "**H264Pocket**".

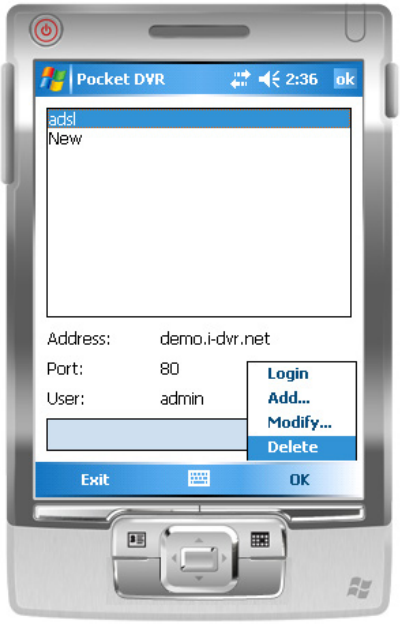
This application allows you to remotely logon and monitor the DVR. Press "**OK**" to bring up the operation menu; see chart the below for further information.

Item	Function	Description
Add	**Add login DVR**	Enter DVR's name, IP address, Port, Account user, Password then press "**OK**"
Login	**Logon DVR**	• Choose the DVR that you'd like to logon , then press "**OK**" • **PS. *Live* image can not 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 operation of **Jrviewer**



The operation of H264 Pocket



9.2.3 Operation under the LIVE monitoring

After successful logon to 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

9.2.3.1 jrviewer Operation under the LIVE monitoring

Item	Function	Description
Channel 1~16	**Display for CH 1~16**	Choose from CH1~16 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.

<table>
<tr><td>Status Bar</td><td>Status Bar</td><td>Graphical icons indicated below will be shown on the status bar if there is event such as motion detected, sensor triggered and video loss to be detected on any channel. You can also uncheck the “Status Bar” to inactivate this function.<table><tr><th>Icon</th><th>Description</th></tr><tr><td> </td><td>Motion Detect</td></tr><tr><td> </td><td>Sensor Trigger</td></tr><tr><td> </td><td>V-Loss</td></tr></table></td></tr>
<tr><td>Alarm</td><td>Alarm</td><td>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.</td></tr>
</table>

9.2.3.2 Operation under the LIVE monitoring for H264 Pocket

Item	Function	Description
Channel 1~16	**Display for CH 1~16**	Choose from CH1~16 to display. CH1 can receive audio signal.

<table>
<tr><td>Status Bar</td><td>Status Bar</td><td>Graphical icons indicated below will be shown on the status bar if there is event such as motion detected, sensor triggered and video loss to be detected on any channel. You can also ☐ uncheck the “Status Bar” to inactivate this function.
<table><tr><th>Icon</th><th>Description</th></tr><tr><td> </td><td>Motion Detect</td></tr><tr><td> </td><td>Sensor Trigger</td></tr><tr><td> </td><td>V-Loss</td></tr></table></td></tr>
<tr><td>Alarm</td><td>Alarm</td><td>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.</td></tr>
<tr><td>Full Screen</td><td>Full screen display</td><td>☑ Check this function to choose one channel to display in full screen.</td></tr>
</table>

Appendix A: Product Specification

Product	DVR-462	DVR-872	DVR-1672
General			
Video System	NTSC / PAL switch	Auto Detect	NTSC / PAL switch
Video Input	4CH BNC	8CH BNC	16CH BNC
Video Output	1CH BNC		
SPOT Output	1CH BNC		
VGA Output	1024x768		
Audio Input	1CH RCA	4CH RCA	
Audio Output	1CH RCA		
Audio Backup	YES		
Sensor	4 input / 1 output	8 input / 1 output	16 input / 1 output
RS-485	Pan / Tilt / Zoom camera		
USB Port	2 ports		
Mouse	USB mouse		
IR Remote Controller	Yes		
Storage			
HDD Support	SATA HDD x1 (Max. 1TB each)	SATA HDD x 3 (Max. 1TB each) or SATA HDD x2 + DVD writer x1	
DVD Writer	Optional		
OSD			
Display Division	1,4	1,4,9	1, 4, 9, 13, 16
Title	14 characters		
Recording			
Video Compression	H.264		
Audio Compression	ADPCM		
Resolution	720x480, 720x240, 360x240 (NTSC)		

	720x576, 720x288, 360x288 (PAL)		
Frame Rate	60, 120, 120 (NTSC) 50, 100, 100 (PAL)	60, 120, 240 (NTSC) 50, 100, 200 (PAL)	120, 240, 480 (NTSC) 100, 200, 400 (PAL)
Quality	Highest, High, Normal, Basic, Below Basic		
Record Mode	Manual, Schedule, Event (motion detection/sensor)		
Pre-Alarm Recording	16MB (around 10 sec)		
Post-Alarm Recording	1-999 sec		
Motion Detection	22X15 (sensitivity 0~10)		
Playback			
Search Mode	Time, Event		
Playback Speed	Fast forward/backward: 2X, 4X, 8X, 16X, 32X, 64X Slow forward/backward: 1/2X,1/4X,1/8X,1/16X Play / Pause		
Backup Mode	USB flash driver / Network / Optional DVD media		
Network			
Network Compression	H.264		
Network Software	Internet Explorer / iCMS / 3G Mobile Phone		
Network Users	5		
Remote Notification	E-mail message		
Service	TCP/IP, SMTP, DHCP, DDNS, PPPoE		
Other			
Daylight Saving	YES		
Password	5 users including 1 administrator user authority selectable		
Event List	10000		
Key Lock	YES		
Firmware	USB device		

Update		
Dimension	188mm (W) x 54mm (H) x 209mm (D)	430mm (W) x 70mm (H) x 360mm (D)
Power Source	DC12V	
Operating Environment	30 ~ 80% RH, 5℃ ~ 40℃ (41℉ ~ 104℉)	