AVerMedia®
AVerDiGi
EB3004 NET
EB3004 NET$^+$

User Manual

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

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

⚠️ **NOTICE**
- INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.
- THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCT ONLY.

⚠️ **LIGHTNING WARNING**
- TO AVOID THE LIGHTNING STRIKE, STRONGLY SUGGEST INSTALLING THE LIGHTNING ROD AT LIGHTNING FREQUENTLY AREA.
- FOR ADDED PROTECTION, UNPLUG THE DVR UNIT DURING THE LIGHTNING STORM. THIS MAY PREVENT TO DAMAGE THE DVR UNIT DUE TO THE LIGHTNING.

Table of Contents

1.1 Package Content

a   b

(1)

(2)   (3)

(4)   (5)   (6)   (7)

☐ (1) DVR unit

    a. EB3004 NET unit   b. EB3004 NET$^+$

☐ (2) Remote Control (batteries included)

☐ (3) Quick User Guide

☐ (4) Software CD (User Manual included)

☐ (5) Power Cord

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

☐ (6) Power Adapter

☐ (7) Internal HDD holder (8 screws are included)

1.2 Front Panel

1.2.1 EB3004 NET
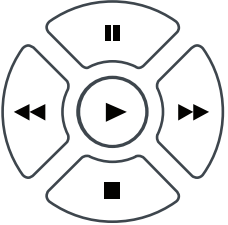
(1) (3) (4) (5) (6)
(2)

Name	Function
(1) DVR Power LED	Light when the unit is power on
(2) HDD LED	Indicate the hard disk running state. Light when the HDD is running (Read/Write)
(3) IR Sensor	Receive signal from the remote control to operate the unit
(4) IR Sensor Port	To connect extended IR sensor cable(optional)
(5) USB Mouse Port	For USB mouse connection.
(6) USB 2.0 Port	Connect to pen drive / external hard disk for backup
	ⓘ If the external hard disk is first time using, please format to FAT32 format.

1.2.2 EB3004 NET⁺

Name	Function
(1) DVR Power LED ☼	Light when the unit is power on
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(5) USB Mouse Port	For USB mouse connection.
(6) USB 2.0 Port	Connect to pen drive / external hard disk for backup
	ℹ️ If the external hard disk is first time using, please format to FAT32 format.
(6) 1/2/3/4/QUAD ⊟⊟⊟⊟⊞	Use these buttons in playback mode to switch to display each channel in full screen or view all channels at the same time ⊟ Channel 1 ⊟ Channel 2 ⊟ Channel 3 ⊟ Channel 4 ⊞ QUAD
(7) Record (REC)	Start video recording. To stop recording, press ▢
(8) Menu (📖)	Call up and exit the OSD main and sub menu
(9) UP/DOWN/SELECT ▲ ▼ ↵	Use the **UP** and **DOWN** buttons to change setting and move to the left and right, and **SELECT** to enter or make a selection
(10) Playback/OSD Menu Control Buttons	Use the buttons in playback mode to: ► Display the play list and play the recorded video ◄◄ Wind back the video playback at the speed of 2x, 4x, 8x or 16x ►► Fast play the video playback at the speed of 2x, 4x, 8x or 16x ❚❚ Temporarily freeze the video playback ▢ Stop video playback

1.3   Back Panel

Name	Function
(1) LAN port	For Ethernet connection.
(2) CH1/CH2/CH3/CH4	Input the video camera signal and display it on channel 1/2/3/4
(3) TV Out	Output the video signal to other video output device through BNC port
	⚠ When only connect one output device, please must set TV-VGA output order to **MAIN-MAIN** in *DISPLAY SETUP* (see also **VGA-TV SELECTION** in Chapter 3.1).
(4) VGA OUT	Output the video signal to a CRT or LCD monitor
	⚠ When only connect one output device, please must set TV-VGA output order to **MAIN-MAIN** in *DISPLAY SETUP* (see also **VGA-TV SELECTION** in Chapter 3.1).
(5) Audio In/Out	For 4 * audio input (microphone) and 1 * output(speaker) device connection.
	ⓘ The audio input and output device has its own power supply is required.
(6) Sensor In	Support 4 sensor devices
(7) Alarm Out	Support 1 relay device (Relay: 1A @ 125V AC/30V DC)
(8) RS-485	For PTZ camera connection.
(9) FAN speed Switch	Adjust fan speed(High/Low) according to the actual environment situation
	⚠ We do strong recommend that adjust the fan speed to **High** when the operating environment is over 40 ℃.
(10)12V DC	Power cable connection

1.4 Setting Up the DVR Unit

1.4.1 Installing the Hard Disk

(i) For hard disk spec, please referring to http://www.avermedia.com/AVerDiGi/Product/ → **Embedded Analog DVR** → **AVerDiGi EB3004 NET** or **AVerDiGi EB3004 NET⁺** → **Hardware Recommendations**

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

The DVR unit allows user to install one hard disk. Follow the illustrated instructions below to install the hard disk:

1. Loosen all screws

2. Push the cover backward and lift

3. Secure the brackets on the hard disk

4. Connect the the SATA cable and the power connector to the hard disk

5. Secure the hard disk inside the unit then place unit cover

6. Push the cover forward and secure the cover

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

1.4.2 Connecting Devices

The back panel of the DVR unit, user can connect up to 4 video cameras, 4 sensor devices, 1 alarm device and output video to a TV or CRT/LCD monitor. Also, the DVR unit supports 4 audio input devices and 1 audio output device. Using the bundled software enables user to playback and segment the video. Follow the illustration below to make the connection:
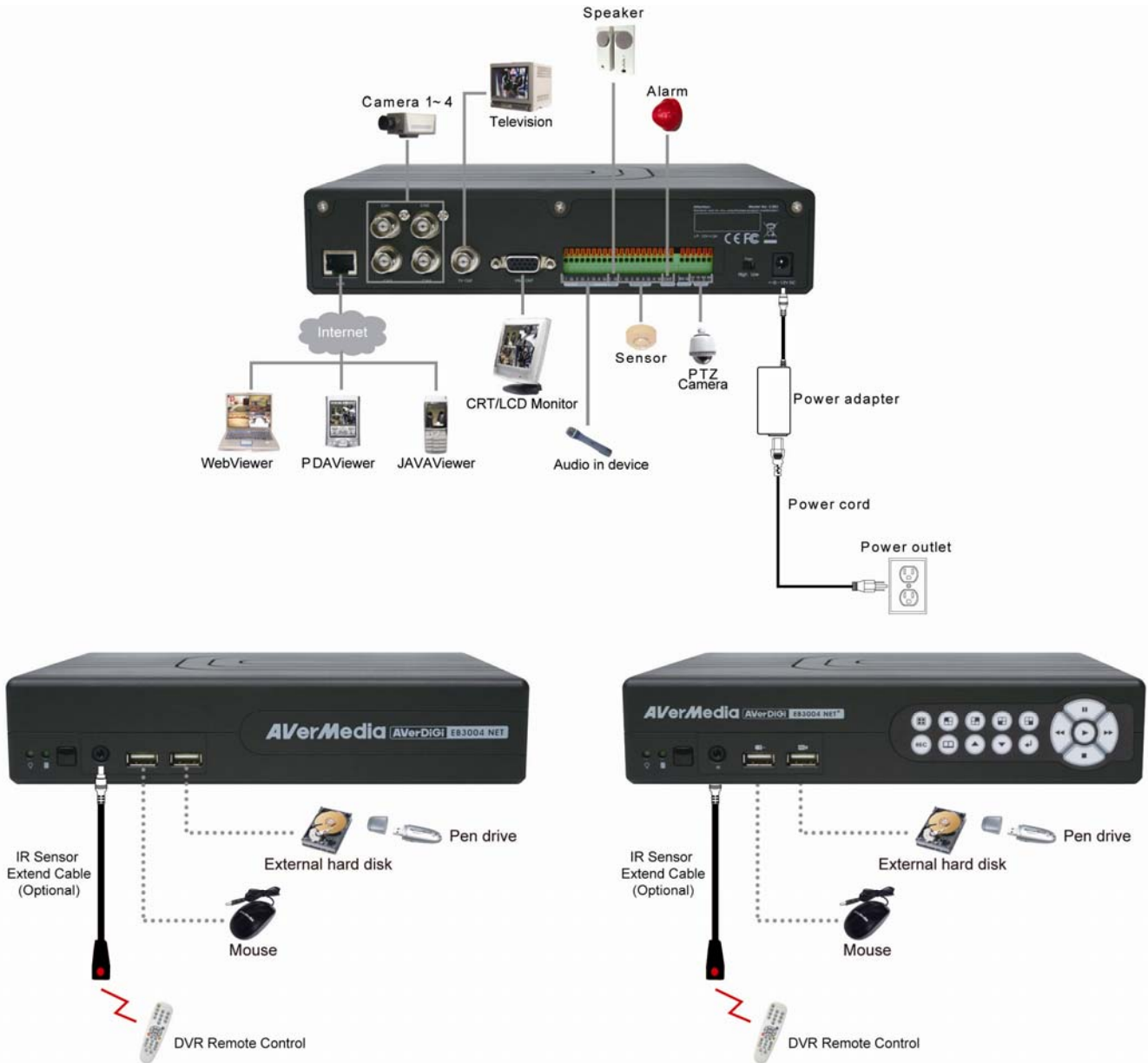
⚠ Each time you change the video display output or video system (NTSC/PAL), the power must be turned **off** and **on** to reset the DVR unit.

1.4.3 Connecting the Audio, Sensor and Relay device

The Sensor, Alarm, and audio port enable you to connect 4 sensor inputs, 1 relay outputs, 4 audio in devices and 1 audio out device. Just connect the external sensor, relay, and audio in/out device pin directly to the pinhole. The RS485 port can be used for PTZ camera connection.

Check the table below and locate which pinhole is assigned to audio in/out, sensor input, and relay output.

ⓘ The RS232 port is not supported at this version.
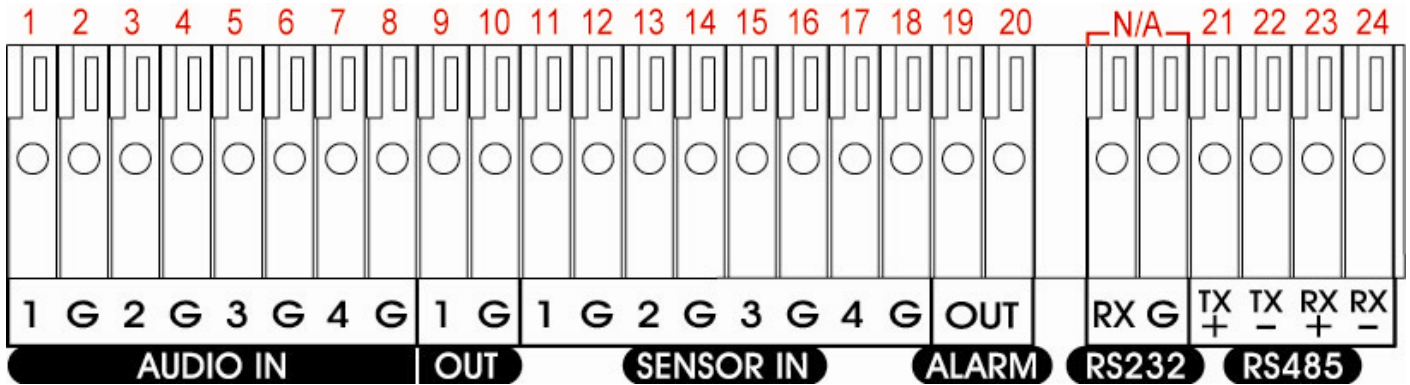
The signal from the sensor (i.e., infrared sensors, smoke detectors, proximity sensors, door sensors, etc.) is being transmitted to the unit and this triggers the system to respond and send signal to relay device (i.e., alarm, telephone etc).

Audio in and out pinhole:

Pin #	Definition
1	Audio input signal
2	Audio Ground signal
3	Audio input signal
4	Audio Ground signal
5	Audio input signal
6	Audio Ground signal
7	Audio input signal
8	Audio Ground signal
9	Audio output signal
10	Audio Ground signal

Sensor in and Alarm pinhole:

Pin #	Definition
11	Sensor 1 signal
12	Sensor 1 Ground signal
13	Sensor 2 signal
14	Sensor 2 Ground signal
15	Sensor 3 signal
16	Sensor 3 Ground signal
17	Sensor 4 signal
18	Sensor 4 Ground signal
19	Relay signal
20	Relay signal

RS-485 Pin Definition

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

	Pin #	DVR site	PTZ site
21	TX+	RS485 TX+ signal	RS485 RX+ signal
22	TX-	RS485 TX- signal	RS485 RX- signal
23	RX+	RS485 RX+ signal	RS485 TX+ signal
24	RX-	RS485 RX- signal	RS485 TX- signal

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

2.1   Familiarizing the Remote Control Buttons

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

Button		Function
(1)	FN	- Press FN + 0 , the DVR system will instantly playback the recorded file that is recorded 60 seconds before. - In multiple DVR mode, Press FN + number button(1 ~ 9) can switch to the selected DVR.
(2)	1	As a Channel 1 in preview and playback mode
		As a channel 1 and preset position in PTZ mode
(3)	3	As a Channel 2 in preview and playback mode
		As a channel 3 and preset position in PTZ mode
(4)	7	As a Channel 3 in preview and playback mode
		As a preset position in PTZ mode
(5)	9	As a Channel 4 in preview and playback mode
		As a preset position in PTZ mode
(6)	5	Switch to QUAD mode in preview and playback mode
		As a preset position in PTZ mode
(7)	2	As a channel 2 in PTZ mode
		As a preset position in PTZ mode
	4	A s a channel 4 in PTZ mode
		As a preset position in PTZ mode
	6	As a preset position in PTZ mode
	8	As a preset position in PTZ mode
(8)	📖	To enter the OSD Main menu
		Exit from the main menu or sub-menu display

Button		Function
(9)	▲	To move up the selection and select the items in the menu list or change the settings.
(10)	↵	Make a selection To play the video
		Enter sub-menu
(11)	◄	To move the selection to the left
(12)	►	To move the selection to the right
(13)	▼	To move down the selection and select the items in the menu list or change the settings.
(14)	REC	Start video recording
(15)	⬅🔲	To backup the vido segment to external flash memory (See 2.1.2).

Button		Function
(16)	A-B	Set a playing recorded video from A point to B point segment and repeat playing on surveillance screen(See 2.1.1)
(17)	▶▶	Fast play the video playback at the speed of 2x, 4x, 8x ,16x, 32x, or 64x
		When ❚❚ button has pressed, and press ▶▶ can go to next frame
	▶	To start play recorded file / To enter playback menu
	◀◀	Rewide the video playback at the speed of 2x, 4x, 8x ,16x, 32x, or 64x
		When ❚❚ button has pressed, and press ◀◀ can go back to last frame
	❚❚	Pause the playing
(18)	ZOOM+ ⊕	To zoom in view of PTZ camera
	ZOOM− ⊖	To zoom out view of PTZ camera
(19)	PTZ	PTZ camera control button. Press PTZ + camera channel button(1⊞ 2 3⊞ 4)can enter PTZ mode to control PTZ camera.(see Chapter 2.1.3)
(20)	SPEED+ ⊕	To speed up movement of PTZ camera lens
	SPEED− ⊖	To speed down movement of PTZ camera lens
(21)	FOCUS+ ⊡	To focus in PTZ camera lens
	FOCUS− ⊡	To focus out PTZ camera lens
(22)	■	Stop playing / Stop recording

2.1.1 Using AB Repeat Function

AB Repeat function allow user to set a video segment from A to B point and play on the surveillance screen until user stop.

1. Press (▶) to call out the **SEARCH MODE** menu to find the recorded video that user wants to playback.
2. Select **TIME SEARCH, FILE LIST**, or **MOTION SEARCH**.
   - **TIME SEARCH** (search by date and time): select the date and time from where you want to begin the video playback.
   - **FILE LIST**: select from the file list.
   - **MOTION SEARCH** (search by motion area): select an area to do the motion search.
3. During the playback, press (A-B) to set the A point of video segment. And then, press (A-B) again to set the B point of video segment. On the surveillance screen will display "**A-B**" and repeat playing the AB point video segment which user has set. To cancel AB repeat, press (A-B) again.
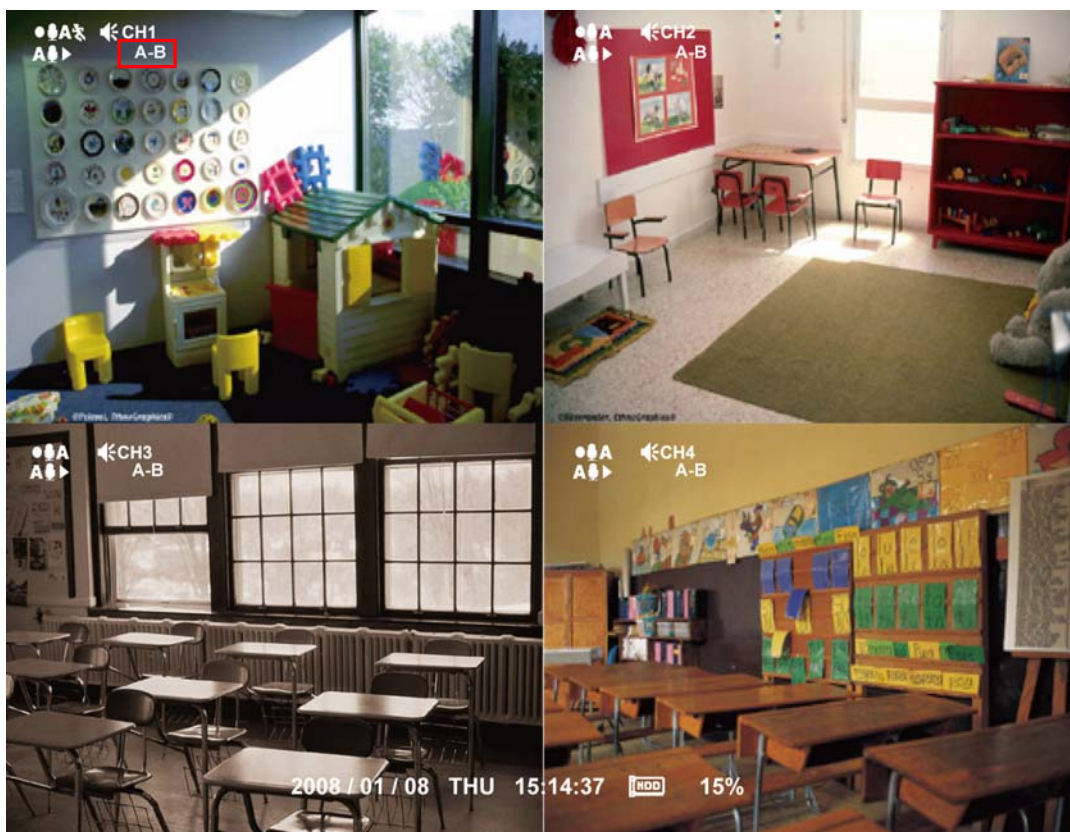
2.1.2 Using USB Backup Button

User can press [icon] button to backup the AB segment video file.

```
              VIDEO  BACKUP  SETUP
START                        2009 / 11 / 03   14 : 50 : 10
END                          2009 / 11 / 03   14 : 52 : 10
BACKUP  CH                   ☑1 ☑2  ☑3  ☑4
BACKUP  SIZE                 ~4  MB
BACKUP
```

1. Plug in pen drive or external hard disk to DVR system.

2. Set the AB segment video (see).

3. During the AB segment video playback, press [icon] button.

4. Select the **START** time of backup time by pressing the (↵) button, using (▲) and (▼) to setup the date and time. To confirm the value or selection, press (↵).

5. Select the **END** to set the end of backup time. Press (↵) and use (▲) and (▼) to setup the date and time. To confirm the value or selection, press (↵).

6. Select the **BACKUP CH** to setup the channel that user wants to backup. Press (↵) and use (▲) and (▼) to select the channel.

7. Select the **BACKUP SIZE** to calculate the total size of backup file.

8. Select the **BACKUP** and press (↵) to start backup.

9. When backup confirm message appear, press (↵) (YES) to start backup file or press [icon] (NO) to exit backup mode.

> ℹ If the external hard disk is first time using, please format to FAT32 format.

2.1.2.1 To Playback the AVF Format File

After recorder file back to external flash memory, user can playback the backup file by AVF Player that contains in backup folder when backup.

1. Double click the **AVF Player.exe**([icon]) to run the application.
2. Click **Open File** button from AVF Player UI.
3. Click **Select File** to locate the backup file and select the file to playback. Click **OK** to start playback.

```
Select Floder                              ✕
  ┌─────────────┐
  │ Select Floder │
  └─────────────┘
  ┌──────────────────────────────┐
  │ 2009_11_03_11_00_23          │
  │ 2009_11_03_11_00_06          │
  │                              │
  │                              │
  │                              │
  │                              │
  │                              │
  │                              │
  │                              │
  │                              │
  └──────────────────────────────┘
        ┌──────┐      ┌────────┐
        │  OK  │      │ Cancel │
        └──────┘      └────────┘
```
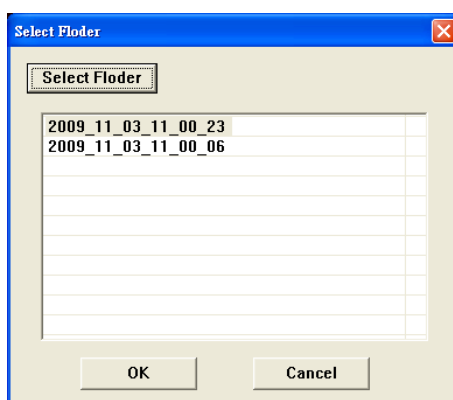
4. The selected file will be playback on AVF Player UI.

2.1.3 Controlling PTZ Camera

Using remote control, user can easily control PTZ camera at local site. Before starting, make sure the PTZ camera is connected with the DVR unit and PTZ function is enabled(see also PTZ Setup of Chapter 3.1).

2.1.3.1 To Enter the PTZ Mode

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

Speed for PTZ Camera movement.
Using (SPEED−) and (SPEED+) button to adjust the speed.

To exit PTZ mode, press 📖 button. Also, when the DVR system is idle over 1 minute, the DVR system will automatically exit PTZ mode.

2.1.3.2 To Set Preset Position

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

1. Press (PTZ) and camera channel number button (1 2 3 4) to enter PTZ mode.

2. Using ▲ , ▼ , ◄ and ► to adjust the lens of the PTZ camera to the position that user wants.

3. Press any number button over 3 seconds and the position will be saved.
4. To move the PTZ camera to preset position, just press the number button.

2.1.3.3 Controlling the PTZ Camera

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

Button	Description
▶	To move the PTZ camera lens to the right
◀	To move the PTZ camera lens to the left
▲	To move the PTZ camera lens to go up
▼	To move the PTZ camera lens to go down
ZOOM+	To zoom in PTZ camera
ZOOM−	To zoom out PTZ camera
SPEED−	To speed down movement of PTZ camera lens
SPEED+	To speed up movement of PTZ camera lens
FOCUS+	To focus in PTZ camera lens
FOCUS−	To focus out PTZ camera lens

2.2   Using the DVR for the First Time

1. Make sure all devices and power cables are well connected.
2. Turn on the DVR unit by connecting the power cable into the power plug.
3. User should see the **SYSTEM INITIALIZE** window appear on the surveillance screen. The system will do hard disk detection automatically.
4. For the first time use hard disk, please format the hard disk. Select **HDD FORMAT** and press ↵ (**YES)** to format hard disk. If hard disk doesn't need to format, press 📖 (**NO**).
5. When is done, **HDD FORMAT** will show **COMPLETE**.

SYSTEM INITIALIZE	
FW VERSION	B3. 01. 01. 00. 01
HDD STATUS	WAIT . . . .
HDD SIZE	476 . 918MB
HDD FORMAT	YES(SELECT)/NO(MENU)

SYSTEM INITIALIZE	
FW VERSION	B3. 01. 01. 00. 01
HDD STATUS	WAIT . . . .
HDD SIZE	476 . 918MB
HDD FORMAT	COMPLETE

6. When hard disk format is done, please adjust the system date and time in order to have the correct recording date and time.
7. Press 📖 to call up the OSD menu, and then, use ▲ and ▼ to select **SYSTEM** → **DATE/TIME** and press ↵ to make a selection.
8. Press ↵ and use ▲ and ▼ to select the **DATE FORMAT**.
9. And then, adjust the **DATE** and **TIME** by using ↵ to make a selection and using ▲ and ▼ to adjust the date and time.

DATE / TIME SETUP	
DATE FORMAT	YYYY/MM/DD
DATE	2009 / 11 / 03
TIME	15 : 19 : 09
TIME SYNC	☐
FORCE SYNC	○
TIME ZONE	GMT +08 : 00
LAST SYNC TIME	2009 / 01 / 01 00 : 00 : 00
DAYLIGHT SAVING	☐
START	2009 / 01 / 01 00 : 00 : 00
END	2009 / 01 / 01 00 : 00 : 00
OFFSET	00 : 00

10. When is done, the DVR system is ready to record.

2.3   Surveillance Screen Introduction

This chapter will describe the symbols on the surveillance screen and screen display mode. While DVR is playback, the record action will keep working and the surveillance screen is playback the recorded video.
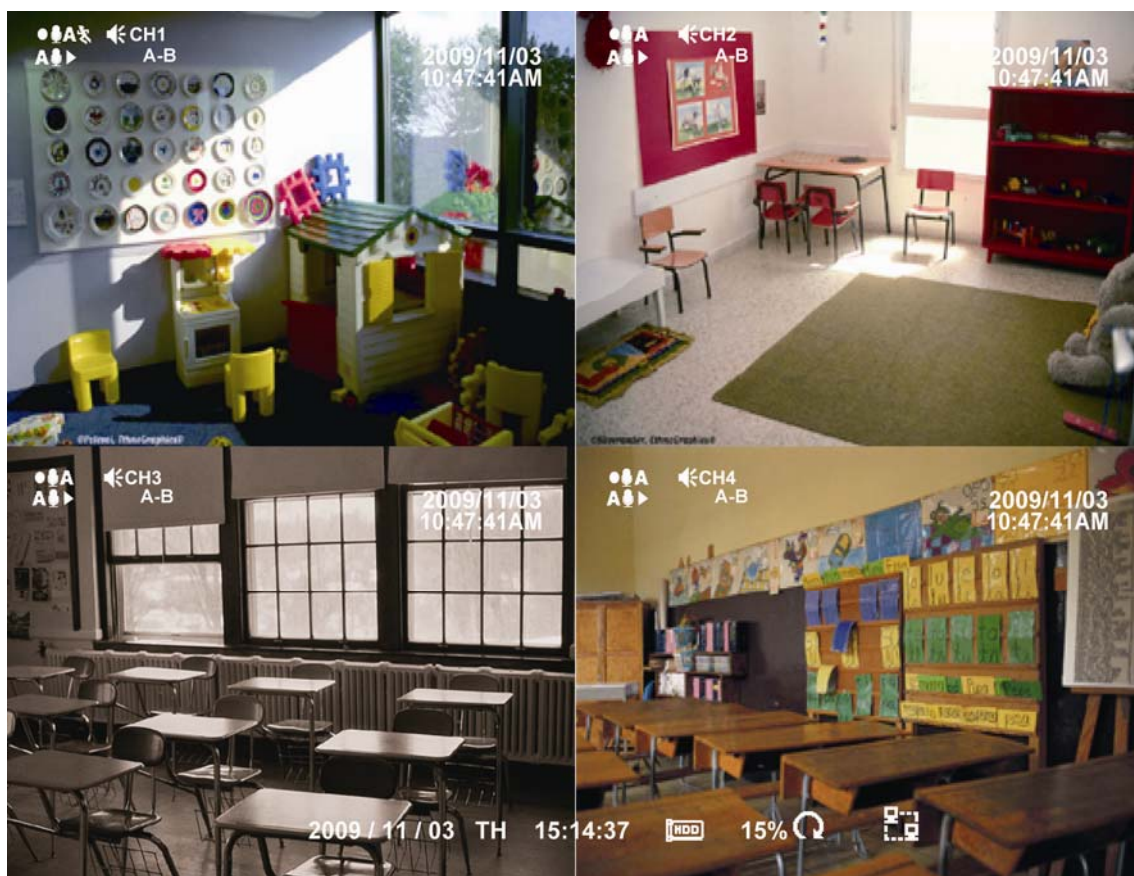
Surveillance Screen

■   **Preview Mode**

Symbol	Description
●	DVR is recording
🎙	Audio is enabled
🔊	Speaker is available
🏃	Motion Detection
[HDD] 5%	Hard disk capacity
↻	Hard disk overwrite is enabled
⌗	Network is connected

■ Playback Mode

Symbol	Description
▶	Playback the recorded video
▲	Go back to the last frame button is pressed
▼	Go to next frame button is pressed
‖	The pause the playing button is pressed
🎤	Audio is enabled
A-B	AB segment is set and playing
≪	Recorded video is playback at backward speed(2x, 4x, 8x, 16x, 32x, or 64x)
≫	Recorded video is playback at faster forward speed(2x, 4x, 8x, 16x, 32x, or 64x)
A	Always Recording
B	Button Recording
L	Alarm Recording

■ Screen Display Mode

User can switch to display each channel in full screen or 4 channels in **D1**, **D1 ENHANCE**, or **CIF** record mode.
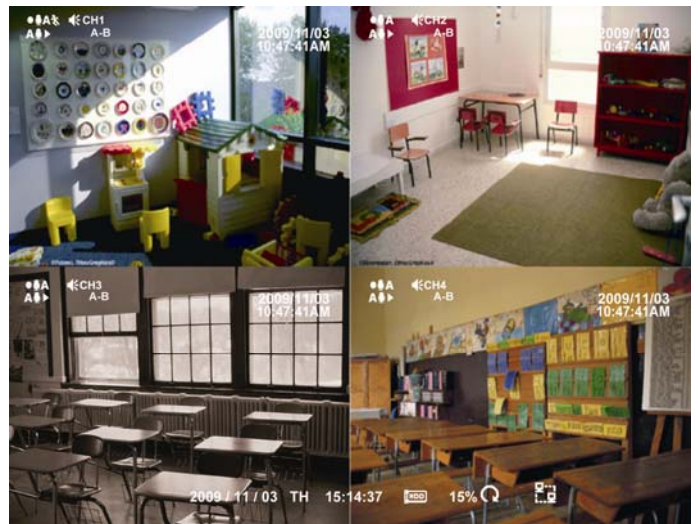
Full Screen Mode   QUAD Screen Mode

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

① 1⊞	③ 3⊞	⑦ 7⊞	⑨ 9⊞	⑤ 5⊞
CH1: Camera 1	CH2: Camera 2	CH3: Camera 3	CH4: Camera 4	QUAD:4-Channel

2.3.1 Setup the Time Stamp

By enabling **TIME STAMP** function, current date and time will be displayed on each channel screen to verify the recording date and time. Please follow the below steps to enable **TIME STAMP**.

1. Press 📖 to call out OSD menu.

2. Using ▲ and ▼ to move the highlight to **CAMERA/RECORD** and press ⏎ to make a selection.

3. Select **GENERAL** and press ⏎ to make a selection.

4. And then, select **TIME STAMP** by pressing ⏎ button.

5. Using ▲ and ▼ to select the disable/enable of TIME STAMP and press ⏎ or 📖 to confirm.

```
              GENERAL  SETUP
   RECORD MODE          CIF
   DVR  NAME            COMPANY
   TIME STAMP           ☑
   WATERMARK            ☐
   AUTO RECORD          ☑
   PRE  RECORD          00  SEC
```

6. Press 📖 to exit from OSD menu.

7. The current date and time will display on upper right corner of each channel screen and will be recorded.

19
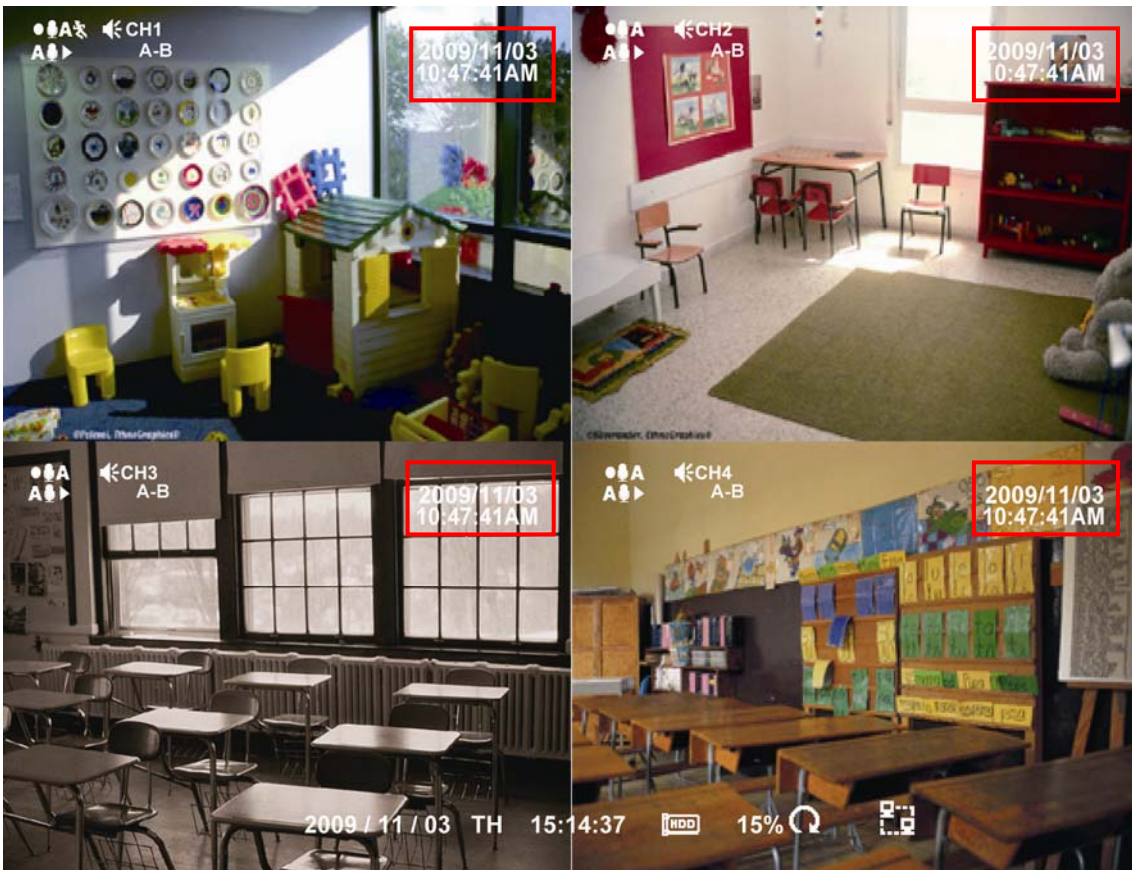
2.3.2   Playback the Video

If the unit is recording the video, user don't have to stop video recording.

1. Press ▶ (play).

2. Use the ▲ and ▼ buttons to go up and down and select **TIME SEARCH**, **FILE LIST**, or **SMART MOTION SEARCH**. And then, press ↵ to make a selection.

```
              SEARCH METHOD
TIME  SEARCH
FILE  LIST
SMART  MOTION  SEARCH
```

TIME SEARCH (search by date and time):

1. In TIME SEARCH window, the **START TIME** and **END TIME** show the date and time from when the recording begins and ends.

2. Press ↵ and use the ▲ and ▼ buttons to set the **SEARCH TIME**.

3. After **SEARCH TIME** has set, select **SEARCH EXECUTIION** and press ↵ to start searching.

```
               TIME  SEARCH
START              TIME:  2009 / 01 / 09  11:36:21
END                TIME:  2009 / 01 / 09  11:36:21
SEARCH  TIME           :    2009 / 01 / 09  11:36:21
SEARCH  EXECUTION
```

4. When the playback file is found, the DVR system will start playback automatically.

FILE LIST (search by condition):

1. In FILE LIST window, press ↵ and use ▲ and ▼ buttons to set the date and time for searching. And then, select the **EXECUTION** to start searching.

2. The searching result will be list out. Using ▲ and ▼ buttons to go up and down and press ↵ to make a selection.

```
                 FILE  LIST
MULTITIME  SEARCH :  2009/01/09 11:36:21 EXECUTION

2009/05/09   10:10:00 - 10:37:06
2009/05/09   10:09:10 - 10:09:45
2009/05/09   10:08:21 - 10:08:27
2009/05/09   10:07:26 - 10:08:03
2009/05/09   09:50:30 - 09:59:59
2009/05/09   09:45:07 - 10:45:49
2009/05/09   09:00:00 - 09:43:48
2009/05/09   09:00:00 - 08:37:06
2009/05/09   08:00:00 - 08:59:59
2009/05/09   07:30:31 - 07:59:59
                 ▼                        1/7
```

3. After make a selection, the **FILE LIST** of each channel will list out. Use ▲ and ▼ buttons to the selection and press ↵ to make a selection.

4. The selected event will start to playback.
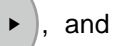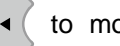
```
                EVENT  LIST
CH1   NORMAL   14:23:25 - 14:23:33
CH2   NORMAL   14:23:25 - 14:23:33
CH3   NORMAL   14:23:25 - 14:23:33
CH4   NORMAL   14:23:25 - 14:23:33




                                        1/1
                                  2009/11/02
```

SMART MOTION SEARCH (search by motion event):

1. In SMART MOTION SEARCH window, the **START TIME** and **END TIME** show the date and time from when the recording begins and ends.

2. Use ▲ and ▼ press ↵ to set **SEARCH START TIME** and **SEARCH END TIME** for searching period.

3. Then, Select the **CHANNEL** that wants to search.

```
            SMART  MOTION  SEARCH
START              TIME:  2009 / 11 / 01  11:36:21
END                TIME:  2009 / 11 / 02  11:36:21

SEARCH  START  TIME    :  2009 / 11 / 01  11:36:21
SEARCH  END    TIME    :  2009 / 11 / 02  11:36:21
CHANNEL                :  01
SEARCH  AREA
SEARCH  EXECUTION
```

4. And then, select **SEARCH AREA** to mark an area to search. Use the ▲ , ▼ , ▶ , and ◀ to move the block and press ↵ or A-B to confirm. To exit, press 📖 .

5. To start searching, select the **SEARCH EXECUTION**.

6. After make a selection, the DVR system will start playback automatically.
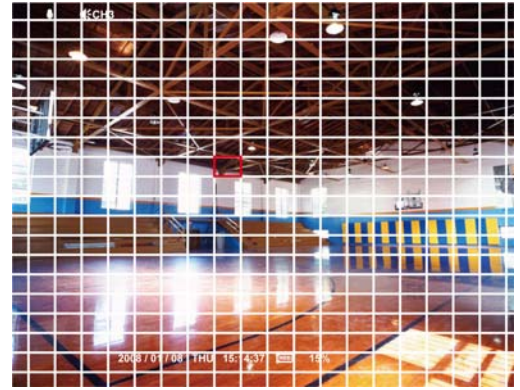
SEARCH AREA SETUP SCREEN

Listed below are the symbols of recording condition that will display on surveillance screen while playback mode and record mode:

A – Always Recording

It records non-stop and automatically continue recording when interrupted.

L – Alarm Recording

It records when the alarm has activated.

B – Button Recording

It records when the REC record button is pressed.

The "▶" play symbol would appear beside the channel number when you are in playback mode.

21

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

GENERAL SETUP

RECPRD MODE	CIF
DVR NAME	COMPANY
TIME STAMP	☑
WATERMARK	☐
AUTO RECORD	☑
PRE RECORD	00 SEC

CHANNEL SETTING SETUP

	CH1	CH2	CH3	CH4
ENABLE	☑	☑	☑	☑
RECORD	☑	☑	☑	☑
AUDIO RECORD	☑	☑	☑	☑
PREVIEW	☑	☑	☑	☑
ENCRYPTION	☐	☐	☐	☐
MAX. FPS	30	30	30	30
FPS	30	30	30	30
QUALITY	BEST	BEST	BEST	BEST
FPS(ALARM)	30	30	30	30
QUALITY(ALARM)	BEST	BEST	BEST	BEST

120 / 120 FPS

CAMERA / RECORD SETUP

GENERAL
CHANNEL SETTING
CHANNEL NAME
PTZ

CAMERA NAME SETUP

CH1	CAMERA1
CH2	CAMERA2
CH3	CAMERA3
CH4	CAMERA4

MAIN MENU

CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

DISPLAY SETUP

COLOR ADJUSTMENT	
VIDEO OUT SETTING	
VIDEO SHIELD	CH1
VGA - TV SELECTION	MAIN - MAIN
SPOT MONITOR	QUAD
EVENT DURATION	ADJUSTABLE
SET DURATION	010 SEC
AUTO SCAN	☐

PTZ SETUP

	CH1	CH2	CH3	CH4
ENABLE	☐	☐	☐	☐
ID	001	002	003	004
PROTOCOL	CANON VC - 4CR			
BAUD RATE	9600			
AUTO PAN	OFF	OFF	OFF	OFF
DWELL TIME	010S	010S	010S	010S

COLOR ADJUSTMENT SETUP

	CH1	CH2	CH3	CH4
BRIGHTNESS	124	124	124	124
CONTRAST	121	121	121	121
HUE	001	001	001	001
SATURATION	054	054	054	054
RESET TO DEFAULT	○	○	○	○

VIDEO OUT SETUP

	VGA	TV
SHARPNESS	00	00
COLOR ENHANCEMENT	00	00
VGA MODE	MODE1	-
RESOULTION	SVGA	-

RECORD SCHEDULE

CAMERA   ALL
SET TO ALL   ALWAYS

```
        00  02  04  06  08  10  12  14  16  18  20  22  24
SUN
MON
TUE
WED
THU
FRI
SAT
```

☐ : ALWAYS RECORDING   ☐ : ALARM RECORD
☐ : SMART RECORDING   ☐ : VARIED RECORD
☐ : NO RECORDING

ALARM SETUP

ALARM TYPE	REC
ALARM CONTINUOUSLY	☐
ALARM PERIOD	05SEC
SELECT / DESELECT ALL	○
SENSOR	☐
MOTION DETECTION	☐
VIDEO LOSS	☐1 ☐2 ☐3 ☐4
REMOTE TRIGGER	☐
HDD FAIL	☐

EVENT SETUP

ALARM SETTING
SENSOR SETTING
MOTION DETECTION

SENSOR SETUP

	SENSOR1	SENSOR2	SENSOR3	SENSOR4
ENABLE	☐	☐	☐	☐
TYPE	NO	NO	NO	NO

MAIN MENU

CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

STORAGE SETUP

HDD OVERWRITE	☑
HDD SIZE	953 , 849MB
HDD USED	279MB 0%
HDD FORMAT	
VIDEO BACKUP	

MOTION DETECTION SETUP

	CH1	CH2	CH3	CH4
ENABLE	☐	☐	☐	☐
SENSTIVITY	5	5	5	5
MASK SETUP	○	○	○	○

NETWORK SETUP

IP MODE	STATIC
VIDEO PORT	0080
UPGRADE PORT	5005
STREAM SETUP	

VIDEO BACKUP SETUP

START	2009 / 11 / 03 14 : 50 : 10
END	2009 / 11 / 03 14 : 52 : 10
BACKUP CH	☑1 ☑2 ☑3 ☑4
BACKUP SIZE	~4 MB
BACKUP	

STREAM SETUP

	CH1	CH2	CH3	CH4
ENABLE	☐	☐	☐	☐
NETWORK STREAM				
FPS	15	15	15	15
QUALITY	BEST	BEST	BEST	BEST

```
                                                    SYSTEM INFO
                                        FW VERSION              B3.01.01.00.02
                                        VIDEO FORMAT            NTSC
                                        MAC ADDRESS(LAN)        00:18:1A:09:00:02




                                                  CONFIGURATION SETUP
                                        LOAD SYSTEM DEFAULT
                                        EXPORT CONFIGURATION
                                        IMPORT CONFIGURATION




                                                      LOG LIST
                                        SEARCH TIME         : 2009 / 11 / 03  10 : 00 : 00
                                        SEARCH EXECUTION

                                        2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS      - 4
                                        2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS      - 3
                                        2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS      - 2
                                        2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS      - 1
                                        2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS      - 4
                                        2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS      - 3
                                        2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS      - 2
                                        2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS      - 1
                                        2009 / 01 / 07  10 : 40 : 02   VIDEO  LOSS      - 4
                                        2009 / 01 / 07  10 : 40 : 02   VIDEO  LOSS      - 3
                                                            ▼                          1-5

        MAIN MENU                     SYSTEM SETUP
CAMERA/REC                   SYSTEM INFO
DISPLAY                      CONFIGURATION                      DATE / TIME SETUP
SCHEDULE                     LOG                     DATE FORMAT         YYYY/MM/DD
EVENT SETUP                  DATE / TIME             DATE                2009 / 01 / 06
STORAGE                      PASSWORD CHANGE         TIME                15 : 19 : 09
NETWORK                      AUDIO SETUP             TIME SYNC           □
SYSTEM                       MULTIPLE DVR      □     FORCE SYNC          ○
                             DVR ID            1     TIME ZONE           GMT +08 : 00
                             INSTANT PLAYBACK  060 SEC  LAST SYNC TIME   2009 / 11 / 01  00 : 00 : 00
                             LANGUAGE          ENGLISH  DAYLIGHT SAVING  □
                                                       START               2009 / 01 / 01  00 : 00 : 00
                                                       END                 2009 / 07 / 01  00 : 00 : 00
                                                       OFFSET              00 : 00




                                                  PASSWORD CHANGE SETUP
                                        PASSWORD SETUP          □
                                        ADMINISTRATOR
                                        OPERATOR
                                        USER




                                                    AUDIO  SETUP
                                        AUDIO MUTE              □1   □2   □3   □4
                                        AUDIO OUT @ QUAD        CH1
                                        VOLUME ADJUSTMENT       15
                                        RESET TO DEFAULT        ○
```

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3.1   Menu Function

Use remote control to navigate in the OSD menu. The red frame turns yellow when you are making a selection.

⚠️ Each time you change the video display output or video system (NTSC/PAL), the power must be turned **off** and **on** to reset the DVR unit.

OSD MENU	Description

MAIN MENU

- CAMERA/RECORD
- DISPLAY
- SCHEDULE
- EVENT SETUP
- STORAGE
- NETWORK
- SYSTEM

CAMERA/RECORD SETUP

Configure camera parameters, name and PTZ camera.

CAMERA / RECORD SETUP

- GENERAL
- CHANNEL SETTING
- CHANNEL NAME
- PTZ

GENERAL SETUP

GENERAL SETUP

RECORD MODE	CIF
DVR NAME	COMPANY
TIME STAMP	☑
WATERMARK	☐
AUTO RECORD	☑

RECORD MODE

Three type of recording mode -- **D1**/**CIF/D1 Enhance**.

Under **D1** mode, the total recording frame rate is **60/50fps** (NTSC/PAL). The video recording is in full screen resolution and takes turns from one channel to the next one when **Auto Scan** enables. Each channel is recorded only at a maximum frame rate of 30/25 fps (NTSC/PAL). User can switch to view the video in single full screen or QUAD screen.

In **D1 ENHANCE** mode, the total recording frame rate is **30/25fps** (NTSC/PAL). Each channel can be recorded at a maximum frame rate of 30/25 fps (NTSC/PAL).

Whereas in **CIF** mode, the total recording frame rate is **120/100fps** (NTSC/PAL). The video recording is at a lower resolution, but all channels can be recorded at a maximum frame rate of 30/25 fps (NTSC/PAL). User can switch to view the video in single full screen or QUAD screen.

DVR NAME

Assign a name for the DVR unit. Maximum is 10 characters that may contain A~Z, 0~9, !, ", #, $, %, &, ', (,), *, +, -, /, :, ;, <. >, ?, @, and space.

TIME STAMP

Enable/disable the time and date display on the each channel.

AUTO RECORD

Enable/disable auto continue recording when interrupted (i.e., power breakdown, video playback or configuration setup). It starts to record after 5 seconds of idleness. This is applicable in Always Record mode.

OSD MENU	Description

CHANNEL SETTING SETUP

	CH1	CH2	CH3	CH4
ENABLE	☑	☑	☑	☑
RECORD	☑	☑	☑	☑
AUDIO RECORD	☑	☑	☑	☑
PREVIEW	☑	☑	☑	☑
ENCRYPTION	☐	☐	☐	☐
MAX. FPS	30	30	30	30
FPS	30	30	30	30
QUALITY	BEST	BEST	BEST	BEST
FPS(ALARM)	30	30	30	30
QUALITY(ALARM)	BEST	BEST	BEST	BEST

120 / 120 FPS

Current total fps value that user has set

Total fps value that user can set

CHANNEL SETTING

Configure the parameters of each channel.

ENABLE

Enable/disable the channel to display the video on the surveillance screen. If the channel is disabled, there won't be any video display and recording.

RECORD

Enable/disable the channel number to record video.

ⓘ The channels are enabled in the **ENABLE** can be set for video recording.

AUDIO RECORD

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

PREVIEW

Enable/disable the video preview on the surveillance screen.

MAX. FPS

Display the maximum frame rate of recording that user has set. Maximum fps total value depends on the RESOLUTION that user has chosen.

FPS

Set the number of frames per second to be recorded. The higher the frame rate, it uses more hard disk space.

QUALITY

Select the video quality setting from BEST, HIGH, GOOD, MEDIUM, NORMAL or LOW. Choosing higher quality allows user to record less hours but the quality of the recorded video is better.

FPS(ALARM)

Set the number of frames per second to be recorded when alarm has occurred. The higher the frame rate, it uses more hard disk space.

QUALITY(ALARM)

Select the video quality (BEST, HIGH, GOOD, MEDIUM, NORMAL or LOW) of alarm recording. Choosing higher quality allows user to record less hours but the quality of the recorded video is better.

CAMERA NAME SETUP

CH1	CAMERA1
CH2	CAMERA2
CH3	CAMERA3
CH4	CAMERA4

CHANNEL NAME

Give a name of the channel 1 ~ 4. Maximum is 12 characters and may contain A~Z, 0~9, !, ", #, $, %, &, ', (,), *, +, -, /, :, ;, <. >, ?, @, and space.

```
              PTZ  SETUP

              CH1    CH2    CH3    CH4
ENABLE         □      □      □      □
ID            001    002    003    004
PROTOCOL            PELCO-D
BAUD RATE            9600
AUTO PAN      OFF    OFF    OFF    OFF
DWELL TIME   010S   010S   010S   010S
```

PTZ SETUP

To enable PTZ camera control by remote control and setup PTZ camera parameters.

ENABLE

Select the channel of PTZ camera. If the PTZ camera is connecting on channel 1, then select the camera 1 for PTZ video to be display on channel 1.

ID

Assign an ID to PTZ camera. The ID range is from 000 to 255 but is limiting by protocol of PTZ camera. Please refer to your PTZ camera user's manual for more detail of PTZ ID assignment.

> **i** We suggest assigning PTZ camera ID starting from 5 to avoid conflict with ID of camera channels.

PROTOCOL

Select the protocol of PTZ camera. The protocol will be different that depends on the brand of PTZ camera. The DVR system currently supports 3 protocols — PELCO-D, PELCO-P, and CANON VC-C4R. Please refer to your PTZ camera user manual to make sure which protocol is using for.

BAUD RATE

To setup the baud rate of PTZ camera. For more detail, please refer to your PTZ camera's user manual.

AUTO PAN

Select the preset number to assign an auto move direction for the PTZ camera. For example: 1-4 means the PTZ camera will auto move from preset position 1, 2, 3 to 4 repeatly.

DWELL TIME

Set a time that how long the PTZ camera stays in that position before it moves to the next one.

```
              MAIN  MENU
CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM
```

DISPLAY

Configure the parameters of video and setting of spot monitor.

```
              DISPLAY SETUP
COLOR ADJUSTMENT
VIDEO OUT SETTING
VIDEO SHIELD            CH1
VGA - TV SELECTION      MAIN - MAIN
SPOT MONITOR            QUAD
 EVENT DURATION         ADJUSTABLE
 SET DURATION            010 SEC
 AUTO SCAN                □
```

COLOR ADJUSTMENT

To adjust the brightness, contrast, hue, and saturation value of channel video. To reset the setting, select **RESET TO DEFAULT VALUE**.

```
           COLOR ADJUSTMENT SETUP

                 CH1    CH2    CH3    CH4
BRIGHTNESS       124    124    124    124
CONTRAST         121    121    121    121
HUE              001    001    001    001
SATURATION       054    054    054    054
RESET TO DEFAULT  ○      ○      ○      ○
```

OSD MENU	Description

```
              DISPLAY  SETUP
COLOR  ADJUSTMENT
VIDEO  OUT  SETTING
VIDEO  SHIELD            CH1
VGA - TV  SELECTION      MAIN - MAIN
SPOT  MONITOR           QUAD
 EVENT  DURATION        ADJUSTABLE
 SET  DURATION           010  SEC
 AUTO  SCAN              □
```

VIDEO OUT SETTING

To select the sharpness, color enhancement, VGA mode, resolution of VGA and TV out setting.

```
            VIDEO  OUT  SETUP

                        VGA       TV
SHARPNESS               00        00
COLOR  ENHANCEMENT      00        00
VGA  MODE               MODE1     -
RESOULTION              SVGA      -
```

SHARPNESS

Adjust the sharpness of VGA and TV video output.

COLOR ENHANCEMENT

Adjust the color enhancement of VGA and TV video output.

VGA MODE

Select the de-interlace mode for VGA output.
- **Mode 1:** Optimized for dynamic scene
- **Mode 2:** No de-interlace
- **Mode 3:** Optimized for static scene

RESOLUTION

Select the resolution of VGA video output.

- **SVGA:** 800 x 600
- **XGA:** 1024 x 768
- **SXGA:** 1280 x 1024

VIDEO SHIELD

Select the channel and set an area that will be blocking for particular security issue when DVR unit is recording such as enter password for entrance guard.
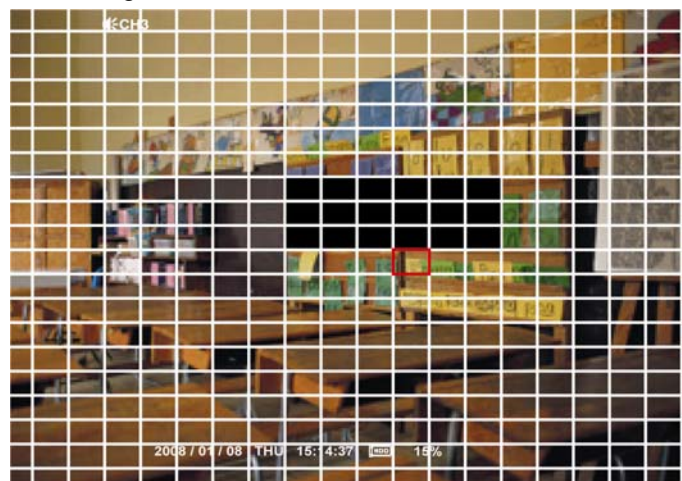
OSD MENU	Description

```
        DISPLAY  SETUP
COLOR  ADJUSTMENT
VIDEO  OUT SETTING
VIDEO  SHIELD          CH1
VGA - TV  SELECTION    MAIN - MAIN
SPOT  MONITOR          QUAD
 EVENT  DURATION       ADJUSTABLE
 SET  DURATION          010  SEC
 AUTO  SCAN            □
```

VGA - TV SELECTION

Select the VGA and TV output order.

- **MAIN - MAIN:** Both VGA and TV output surveillance video on screen.
- **MAIN – SPOT:** VGA output surveillance video and TV output the alarm event video.
- **SPOT – MAIN:** VGA output alarm event video and TV output the surveillance video.

ⓘ　When there is only one output source (TV or VGA), please select the output mode as **MAIN – MAIN**.

SPOT MONITOR

Enable/disable to display channel alarm event in QUAD screen mode or the selected channel (1, 2, 3, or 4) when the sensor is activated or motion is detected. When there is multiple alarm events, DVR system will display in QUAD screen mode.

EVENT DURATION

Select the way of the event video to be display.

- **STEADY:** When event has occurred, the event video will display on the screen. After event has been reset, the screen display will return to the normal display screen in few seconds later.
- **ADJUSTABLE:** the event video will be display according to the time that user has setup in **SET DURATION**. And then, after duration time, screen will return to the normal display screen.

SET DURATION

Set a period time (10 ~ 999 sec) for alarm event to display on screen.

AUTO SCAN

Enable/disable auto cycle switch to display the next channel when in full screen mode.

OSD MENU	Description

MAIN MENU

CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

RECORD SCHEDULE

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

Condition	Description
NO RECORD	Not recording at all.
ALWAYS	Record non-stop.
SMART	Automatically switch to recorded at the frame rate of **FPS (alarm)** that is setup in **CAMERA CHANNEL SETTING** once an alarm is detected and if there is no motion, it records at the frame rate of **FPS** that is setup in **CAMERA CHANNEL SETTING**.
ALARM	Start recording when the alarm is activated.
VARIED	When each channel has different recording schedule, the schedule table will display as **Green** color (**VARIED RECORD**).

CAMERA

Select a channel (1, 2, 3, or 4) or **ALL** for record schedule setup.

SET TO ALL

Select a recording condition – **NO RECORD**, **ALAWAYS**, **SMART** or **ALARM**. Please refer to the above table for record condition description.

RECORD SCHEDULE

CAMERA   ALL
SET TO ALL   ALWAYS

                00 02 04 06 08 10 12 14 16 18 20 22 24
SUN
MON
TUE
WED
THU
FRI
SAT

: ALWAYS RECORD   : ALARM RECORD
: SMART RECORD   : VARIED RECORD
: NO RECORDING

MAIN MENU

CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

EVENT SETUP

Configure alarm, sensor, and motion.

EVENT SETUP

ALARM SETTING
SENSOR SETTING
MOTION DETECTION

OSD MENU	Description

EVENT SETUP

ALARM SETTING
SENSOR SETTING
MOTION DETECTION

ALARM SETTING

Configure parameters of alarm.

ALARM SETUP

ALARM TYPE	RECORD
ALARM CONTINUOUSLY	☐
ALARM PERIOD	005 SEC
SELECT / DESELECT ALL	○
SENSOR	☐
MOTION DETECTION	☐
VIDEO LOSS	☐1 ☐2 ☐3 ☐4
REMOTE TRIGGER	☐
HDD FAIL	☐

ALARM TYPE

Select the way of alarming – **RECORD**, **EMAIL**, or **RELAY**.

ALARM PERIOD

Set the amount of time (in seconds; 0~ 999) for stop alarm action after alarm has been reset.

ALARM CONTINUOUSLY

Enable/disable to execute the alarm action (**ALARM TYPE**) continuously when alarm has been trigger. The alarm action is according to the setting of **ALARM TYPE** that user has setup.

> ℹ️ - When **ALARM CONTINUOUSLY** has been started, it won't be stop until the recording has been stop manually.
> - If **ALARM CONTINUOUSLY** has been enabled, the **ALARM PERIOD** won't be able to configure.

SELECT/DESECLECT ALL

To enable/disable all below selections.

SENSOR

Enable/disable to send out the alarm when sensor has been triggered.

MOTION DETECTION

Enable/disable to send out the alarm when motion has been detected.

> ℹ️ To activate the motion recording, please enable the **Motion Detection** feature here and setup record mode as **ALARM RECORD** in RECORD SCHEDULE.

VIDEO LOSS

Select the channel that will send out the alarm when video is lost.

REMOTE TIRGGER

Allow user to trigger alarm from remote site.

HDD FAIL

Enable/disable to send out alarm when hard disk is failed.

OSD MENU	Description

SENSOR SETUP

SENSOR1 SENSOR2 SENSOR3 SENSOR4
ENABLE ☐ ☐ ☐ ☐
TYPE NO NO NO NO

SENSOR

Customize the initial state of the attached sensor.

ENABLE

Active/deactivate the sensor.

TYPE

Select the state of the sensor.
- **NO:** Indicates that the initial state of the sensor is normal open. Video recording initiates when there is a changes in the sensor state
- **NC:** Indicates that the initial state of the sensor is normal close. Video recording initiates when there is a changes in the sensor state

MOTION DETECTION SETUP

CH1 CH2 CH3 CH4
ENABLE ☐ ☐ ☐ ☐
SENSTIVITY 5 5 5 5
MASK SETUP ○ ○ ○ ○

MOTION DETECTION

Setup motion detection. The motion detection setup will relate to the **MOTION DETECTION** in *ALARM SETTING*.

ENABLE

Enable/disable the channel to detect motion.

SENSITIVITY

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

MASK SETUP

Select a specific area for motion recording. The DVR system will start recording when the selected area has been detected motion.
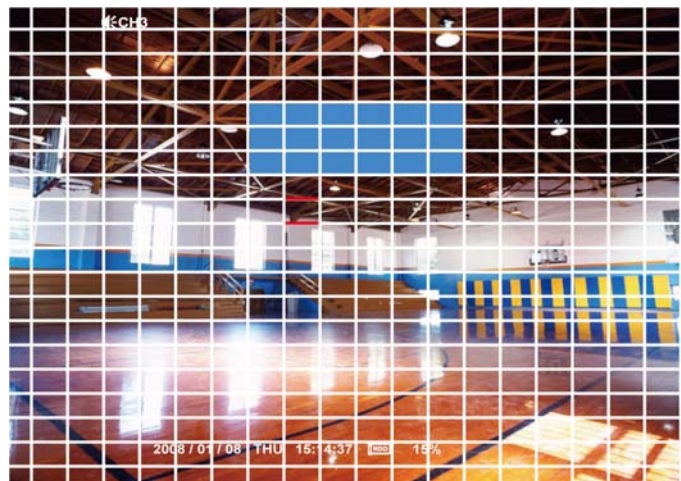
MAIN MENU

CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

STORAGE SETUP

To format hard disk and enable/disable hard disk spaces recycle.

STORAGE SETUP

HDD OVERWRITE ☑
HDD SIZE 953 , 849MB
HDD USED 279MB 0%
HDD FORMAT
VIDEO BACKUP

OSD MENU	Description

STORAGE SETUP

HDD OVERWRITE ☑
HDD SIZE 953 , 849MB
HDD USED 279MB 0%
HDD FORMAT
VIDEO BACKUP

HDD OVERWRITE

Enable/disable replacing the earliest recorded file when the hard disk space runs out. By default, the HDD overwrite setting is enabled. If user has enable the **PASSWORD SETUP** in **SYSTEM SETUP**, and then, a password entered is required when change the **HDD OVERWIRTE** status. The default password is **111111**.

HDD SIZE

Display the total capacity of the hard disk.

HDD USED

Display the amount of space that has been used.

HDD FORMAT

For security purpose, you may have to enter the password to format hard disk (The default password is **111111**).

To format hard disk:

1. Use the ▲ and ▼ buttons to go up and down and select **HDD FORMAT**. Then press ↵.

2. In the **CHECK PASSWORD** screen, press ↵. Then use ▲ and ▼ buttons to select the security combination number. Press button again to make the selection.

3. To move the selection to the left and right, use ►, and ◄ buttons.

CHECK PASSWORD

ENTER PASSWORD ✶✶✶✶✶✶
EXECUTE

4. After entering the last number, the "**PASSWORD CORRECT**" appears, you are now authorized to format the hard disk.
5. It is done when the "**FORMAT DISK SUCCESS**" appears.

⚠ Formatting the hard disk will permanently delete all the recorded files. The recorded files will be no longer for retrieving.

STORAGE SETUP

HDD OVERWRITE	☑
HDD SIZE	953 , 849MB
HDD USED	279MB 0%
HDD FORMAT	
VIDEO BACKUP	

VIDEO BACKUP

To backup the recorded video by selected period.

VIDEO BACKUP SETUP

START	2009 / 11 / 03 14 : 50 : 10
END	2009 / 11 / 03 14 : 52 : 10
BACKUP CH	☑1 ☑2 ☑3 ☑4
BACKUP SIZE	~4 MB
BACKUP	

ⓘ   Please plug the pen drive or external hard disk into DVR system before starting backup process.

1. Select the **START TIME** and **END TIME** of backup.
2. Select the channels which user wants to backup in **BACKUP CH**.
3. Select the **BACKUP SIZE** to calculate the size of selected backup file.
4. And then, select **BACKUP** and press **YES (ENTER)** to start backup video

BACKUP IN PROCESS

048%
1, 646MB
AVAILABLE SIZE

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

USB BACKUP IS SUCCESSFUL

PRESS ANY KEY TO EXIT

STORAGE SETUP

HDD OVERWRITE	☑
HDD SIZE	953 , 849MB
HDD USED	279MB 0%
HDD FORMAT	
VIDEO BACKUP	

VIDEO BACKUP SETUP

START	2009 / 11 / 03 14 : 50 : 10
END	2009 / 11 / 03 14 : 52 : 10
BACKUP CH	☑1 ☑2 ☑3 ☑4
BACKUP SIZE	~4 MB
BACKUP	

OSD MENU	Description

MAIN MENU
CAMERA/RECORD
DISPLAY
SCHEDULE
EVENT SETUP
STORAGE
NETWORK
SYSTEM

NETWORK SETUP

Setup the network parameters for the internet or intranet remote monitor or playback.

NETWORK SETUP

IP MODE	STATIC
VIDEO PORT	0080
UPGRADE PORT	5005
STREAM SETUP	

IP MODE

The system provides 3 types of IP setup mode – STATIC, DHCP, and PPPOE.

- **STATIC:** Assigns a constant IP address for the DVR system.

    ➢ **IP ADDRESS:** Assign a constant IP address which a real IP addresses give from ISP to DVR system.

    ➢ **SUBNET:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to DVR system.

    ➢ **GATEWAY:** A network device act as a passageway to internet. Enter the network gateway IP address

    ➢ **DNS:** Domain Name Server translates domain names (such as www.abb.com.tw) to IP addresses. Enter the IP address of DNS if it is available.

    ➢ **MAC ADDRESS:** The hardware address of the DVR system. Only for information. Doesn't need to enter the MAC address.

    ➢ When all parameters are set, select the **CHANGE** to confirm the configuration.

NETWORK INFORMATION

IP ADDRESS	192.168.1.3
SUBNET	255.255.255.0
GETWAY	192.168.1.254
MAC ADDRESS	00.00.00.00.00.00
CHAGNE	

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

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

- **PPPOE:** Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services. If your network is using ADSL service connecting to internet, and then, select PPPOE mode.

VIDEO PORT

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

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OSD MENU	Description

NETWORK SETUP

IP MODE	STATIC
VIDEO PORT	0080
UPGRADE PORT	5005
STREAM SETUP	

UPGRADE PORT:

A port for the remote update DVR system firmware. Any port can be assigned as an upgrade port, except the ports are already used by the network services. The default upgrade port is 5005.

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

NETWORK SETUP

IP MODE	STATIC
VIDEO PORT	0080
UPGRADE PORT	5005
STREAM SETUP	

STREAM SETUP

Configure the network stream of channel.

ENABLE

Enable/disable the stream setup of channel.

FPS

Set the frame rate of stream.

QUALITY

Select the quality for stream recording.

STREAM SETUP

	CH1	CH2	CH3	CH4
ENABLE	☐	☐	☐	☐
NETWORK STREAM				
FPS	15	15	15	15
QUALITY	BEST	BEST	BEST	BEST

MAIN MENU

- CAMERA/RECORD
- DISPLAY
- SCHEDULE
- EVENT SETUP
- STORAGE
- NETWORK
- SYSTEM

SYSTEM SETUP

To configure the parameters that relate with DVR system.

SYSTEM SETUP

SYSTEM INFO	
CONFIGURATION	
LOG	
DATE / TIME	
PASSWORD CHANGE	
AUDIO SETUP	
MULTIPLE DVR	☐
DVR ID	1
INSTANT PLAYBACK	060 SEC
LANGUAGE	ENGLISH

SYSTEM INFO

Display system software version, video system type, and MAC address of DVR device.

SYSTEM INFO

FW VERSION	B3 . 01 . 01 . 00 . 02
VIDEO FORMAT	NTSC
MAC ADDRESS(LAN)	00 : 18 : 1A : 09 : 00 : 02

OSD MENU	Description

```
              SYSTEM  SETUP
 SYSTEM  INFO
 CONFIGURATION
 LOG
 DATE / TIME
 PASSWORD  CHANGE
 AUDIO  SETUP
 MULTIPLE  DVR           □
 DVR  ID                 1
 INSTANT  PLAYBACK    060  SEC
 LANGUAGE             ENGLISH
```

CONFIGURATION

Backup and restore the DVR system setting.

```
          CONFIGURATION  SETUP
 LOAD SYSTEM DEFAULT
 EXPORT  CONFIGURATION
 IMPORT  CONFIGURATION
```

LOAD SYSTEM DEFAULT

Set whole system back to factory default. Please restart DVR after default value has loaded.

EXPORT CONFIGURATION:

Backup the current DVR system setting to USB storage device such as pen drive or external hard disk. Plug in the USB storage device before starting to save the configuration.

IMPORT CONFIGURATION:

To restore the previous saved DVR system setting from USB storage device such pen drive or external hard disk. Please restart DVR after default value has loaded.

LOG SETUP

To search event log. Select the **SEARCH TIME** and select **SEARCH EXECUTION** to start searching. The search result will be list out. User can select the log to view.

```
                     LOG  LIST
 SEARCH  TIME        : 2009 / 01 / 07   10 : 00 : 00
 SEARCH  EXECUTION

 2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS - 4
 2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS - 3
 2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS - 2
 2009 / 01 / 07  10 : 41 : 02   VIDEO  LOSS - 1
 2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS - 4
 2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS - 3
 2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS - 2
 2009 / 01 / 07  10 : 40 : 32   VIDEO  LOSS - 1
 2009 / 01 / 07  10 : 40 : 02   VIDEO  LOSS - 4
 2009 / 01 / 07  10 : 40 : 02   VIDEO  LOSS - 3
                       ▼                        1-5
```

```
              SYSTEM  SETUP
 SYSTEM  INFO
 CONFIGURATION
 LOG
 DATE / TIME
 PASSWORD  CHANGE
 AUDIO  SETUP
 MULTIPLE  DVR           □
 DVR  ID                 1
 INSTANT  PLAYBACK    060  SEC
 LANGUAGE             ENGLISH
```

```
          CONFIGURATION  SETUP
 LOAD SYSTEM DEFAULT
 EXPORT  CONFIGURATION
 IMPORT  CONFIGURATION
```

OSD MENU	Description

SYSTEM SETUP

SYSTEM INFO
CONFIGURATION
LOG
DATE / TIME
PASSWORD CHANGE
AUDIO SETUP
MULTIPLE DVR   ☐
DVR ID   1
INSTANT PLAYBACK   060 SEC
LANGUAGE   ENGLISH

DATE FORMAT

Select the display format of the date -- YYYY/MM/DD, MM/DD/YYYY, or DD/MM/YYYY

DATE / TIME SETUP

DATE FORMAT	YYYY/MM/DD
DATE	2009 / 11 / 03
TIME	15 : 19 : 09
TIME SYNC	☐
FORCE SYNC	◯
TIME ZONE	GMT +08 : 00
LAST SYNC TIME	2009 / 01 / 01 00 : 00 : 00
DAYLIGHT SAVING	☐
START	2009 / 01 / 01 00 : 00 : 00
END	2009 / 01 / 01 00 : 00 : 00
OFFSET	00 : 00

DATE

Set the current date

TIME

Set the current time Display the latest time synchronization date and time.

TIME SYNC

Enable/disable time synchronization automatically through network. The DVR system will auto synchronize time from NTP servers.

FORCE SYNC

To synchronization system time through the network time server manually.

TIME ZONE

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

DAYLIGHT SAVING

To enable/disable daylight saving function.

START

Setup daylight startup date and time.

END

Setup daylight stop date and time.

OFFSET

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

OSD MENU	Description

```
           SYSTEM SETUP
SYSTEM INFO
CONFIGURATION
LOG
DATE / TIME
PASSWORD  CHANGE
AUDIO SETUP
MULTIPLE DVR          □
DVR ID                1
INSTANT PLAYBACK    060 SEC
LANGUAGE           ENGLISH
```

PASSWORD   CHANGE

```
        PASSWORD CHANGE SETUP
PASSWORD SETUP           □
ADMINISTRATOR
OPERATOR
USER
```

PASSWORD SETUP

Enable/disable full system password protection. This would prevent unauthorized user to stop video recording, change system settings and formatting the hard disk.

If user wants to disabled the password function, user needs to enter password. The factory default password is **111111**.

```
          CHECK PASSWORD
ENTER PASSWORD     ******
EXECUTE
```

ADMINISTRATOR

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

	Default Password	Authority
ADMIN	111111	All
OPERATOR	111111	Preview/Playback/Remote access(preview/playback)
USER	111111	Preview/Remote access(preview only)

OPERATOR

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

USER

The login account for general user. No administrator authority and only can preview live video. The factory default password is **111111**.

```
          PASSWORD SETUP
CURRENT            ******
NEW                ******
CONFIRM            ******
EXECUTE
```

OSD MENU	Description

```
          SYSTEM  SETUP
SYSTEM  INFO
CONFIGURATION
LOG
DATE / TIME
PASSWORD  CHANGE
AUDIO  SETUP
MULTIPLE  DVR          □
DVR  ID                1
INSTANT  PLAYBACK      060  SEC
LANGUAGE                ENGLISH
```

AUDIO SETUP

```
              AUDIO   SETUP
MUTE                   □CH1 □CH2  □CH3 □CH4
AUDIO OUT @ QUAD       CH1
VOLUME ADJUSTMENT      15
RESET TO DEFAULT        ○
```

MUTE

Enable/disable to hear audio sound while preview or playback. To hear sound, make sure the unit is connected to a speaker.

> ℹ If you want to hear the voice when you playback the recorded file on this DVR, please make sure that you have selected Audio Mute Off.

AUDIO OUT@ QUAD

Select the channel to output the audio signal While QUAD mode. Please make sure the audio output device (such as a speaker) is connected to DVR unit.

> ℹ Audio output device has its own power supply is necessary.

VOLUME ADJUSTMENT

To adjust audio output volume.

RESET TO DEFAULT

Set all configurations back to factory default.

```
          SYSTEM  SETUP
SYSTEM  INFO
CONFIGURATION
LOG
DATE / TIME
PASSWORD  CHANGE
AUDIO  SETUP
MULTIPLE  DVR          □
DVR  ID                1
INSTANT  PLAYBACK      060  SEC
LANGUAGE                ENGLISH
```

MUTLIPLE   DVR

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

> ℹ - Using remote control to enter the DVR ID and switch to the selected DVR. To enter the DVR ID, please press **FN** + number button(1⊞ ~ 9⊞) can switch to the selected DVR.
>   - When idle time is over 1 minutes, user need to re-enter the DVR ID in order to controll the selected DVR.

DVR ID

Assign an ID of the DVR system for multiple DVR controlling. When multiple controlling, use remote control to press the DVR ID (**FN** + number button(1⊞ ~ 9⊞) can switch to operate the DVR system.

INSTANT PLAYBACK

To set the time in seconds for automatically playback the video that has just recorded.

LANGUAGE

Select the language of the system

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4.1 Recommended System Requirements

☐ Pentium®4 2.4GHZ or above

☐ Windows®2000/ Windows XP/Windows Vista/Windows 7

☐ DDR 256 MB

☐ Graphic function must support DirectDraw

☐ Audio card or built-in

☐ Speaker

☐ 1 available USB2.0 port

4.2 Installing the USB Playback Console

To install the USB Playback Console:

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

2. Select the language you prefer

3. Click **OK** to install the application
4. Click **Exit** to close the installation main screen.
5. You may now connect the external USB enclosure that contains recorded file hard disk to the PC.

4.3 Running the USB Playback Console

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

Name	Function
(1) Exit	To close the application.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Playback Controller	**Begin:** Move at the beginning of the recorded video file.
	Previous: Go back to the previous frame by frame.
	Slower - Play the backup recorded video file (***.dvr)** at the speed of 1/2x, 1/4x, 1/8x, 1/16x, or 1/32x. - Play the record video file (***.avf**) at speed of 1/2x, 1/4x, 1/8x, or 1/16x. - Play the record video file from hard disk directly at speed of 1/2x, 1/4x, or 1/8x.
	Rewind: Wind back the recorded video file.
	Pause: Briefly stop playing the recorded video file.
	Play: Play the recorded video file.
	Faster - Play the recorded video file (***.dvr** and ***.avf**) at the speed of 2x, 4x, 8x, 16x, or 32x. - Play the recorded video file from hard disk directly at speed of 2x, 4x, 8x, or 16x.
	Next: Go to the next frame by frame.
	End: Go to the end of the recorded video file.

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Name	Function
(4) Open File	To select the video file source for playing.
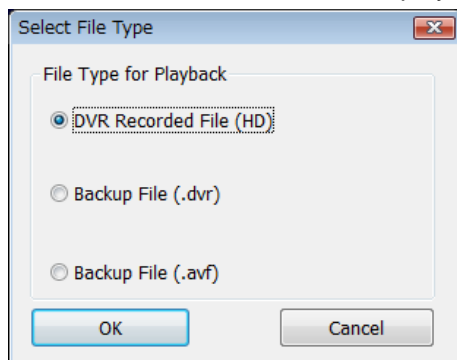
- **DVR Recorded File (HD):** To playback the recorded video from the hard disk which was recording video on the DVR system. (see aslo Chapter 4.3.2)
- **Backup File(.dvr):** The file is backup and save in *.dvr file format. (see also Chapter 4.3.3)
- **Backup File (.avf):** The file is backup and save to external USB storage device in *.avf format. To playback avf format file, see Chapter 2.1.2.1.

Name	Function
(5) Status bar	Display the recorded date, time and play speed.
(6) Language	To switch language of function tips.
(7) Advanced	Advanced function is including : ■ **HDD Backup:** to call out HDD Backup application. (see also Chapter 5) ■ **iEnhance:** to call out iEnhance application. (see also Chapter 6) ■ **AVF to AVI:** save *.avf file format into *.avi file format.
(8) Export	Export includes Snapshot, Print, Output Video Clip, and Export KML function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output to AVI:** Save the segmented file in *.avi format
(9) Segment	Keep a portion of the recorded video (see also Chapter 4.3.1)
(10) Full screen	Use the entire area of the screen to only display the video. To return, press the right button of the mouse or **ESC** on the keyboard. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.
(11) Event List	Select the event you want to playback. The event list only available when user select to playback in **DVR Recorded File(HD)**.
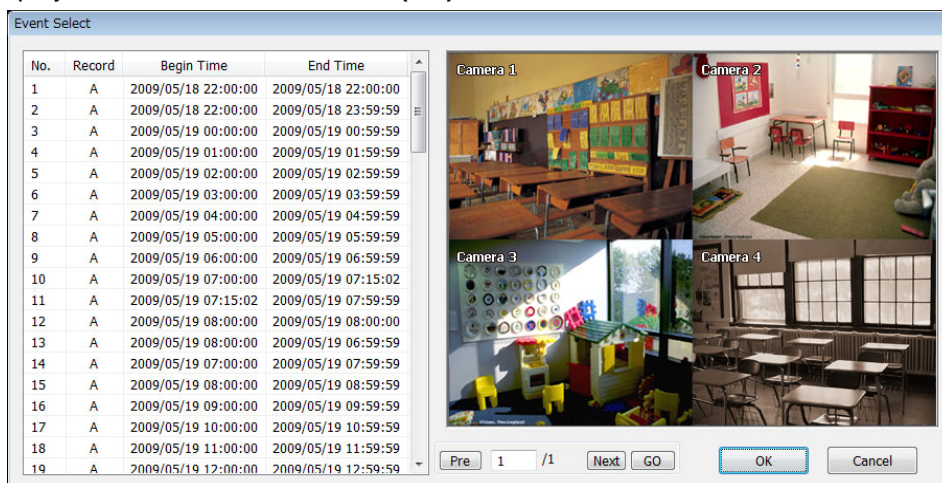
Name	Function
(12) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(13) Sound /Sound bar	- Turn on and off the sound - Increase and decrease the volume
(14) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

Name	Function
(15) Watermark	When playback file from **hard disk** and ***.avf** file, click watermark to call out ImageVerification application (see also Chapter 7).
(16) Split Screen Mode	Select from different screen view to playback the recorded video file of the entire camera or one camera on screen.

4.3.1 To Cut and Save the Portion of the Recorded Video

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

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

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

4.3.2 Playback DVR Recorded File from Hard Disk

1. Please have the hard disk which containing of recorded video data install on your PC or using external USB enclosure to connect to your PC.
2. Click **Open File** button
3. Select **DVR Recorded File(HD)** and click **OK**.
4. Select the hard disk drive from **Select Disk** window and click **OK**.
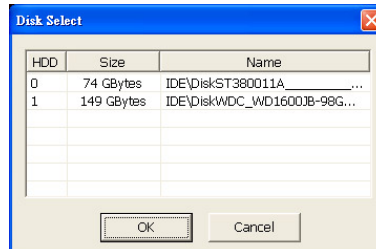
5. And then, the **Event List** window appears. Select the event that user wants to play and click **OK**.
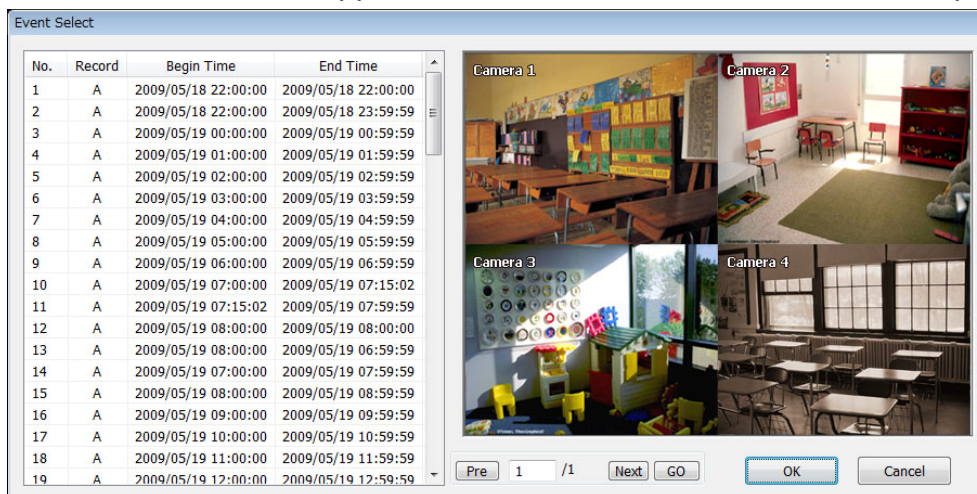
4.3.3 Playback Backup File(*.dvr)

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

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

4. And then, Playback Date/Time Selection window appears. Select the date and time and click **OK**.
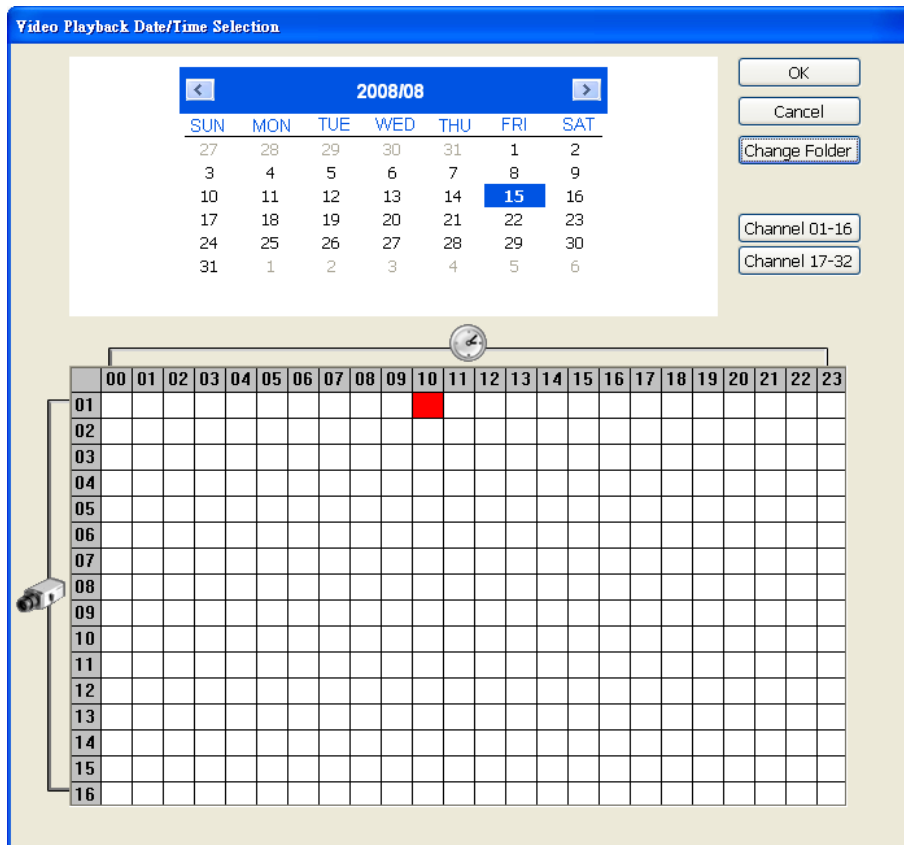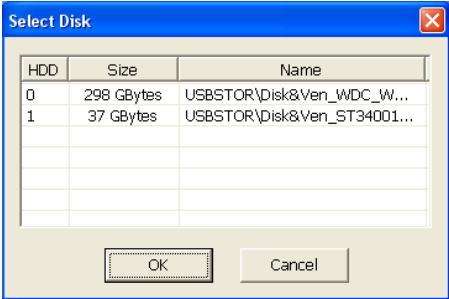
HDD Backup application provides user an interface to view recorded video from hard disk and backup it.

5.1 Familiarizing with HDD Backup Application

Name		Function
(1)	Date	Select the date for events

(2)	Hour and Channel	User can select the hour and channel for events.
		  : All events in this hour and channel have been selected.
		  : In this hour and channel has events
		  : Partial of events in this hour and channel has been selected.

(3)	Event list	All recorded video events list - **No.**: the list order number - **Record:** the record type(**A:** Always Record/**B:** Button Record/**L:**Alarm Record) - **Begin Time:** the beginning of record time - **End Time:** the end of record time
(4)	Set Marked File	Use **Ctrl** and mouse to select the multiple events from event list, and then click **Set Marked File** to mark multiple events. When click **Set Marked File** button, the marked event will turn to un-mark and un-mark event will turn to marked.
(5)	Page Switch	- **Pre:** go back last page - **Next:** go to next page - **Page column:** enter the page number and click **Go** button to go to the page
(6)	Select All	Select all listed recorded video events. Click the check box again to cancel for selecting all events.
(7)	Video display	Display first frame of each recorded video channel from 4 selected.
(8)	Progress bar	Show the progress of the event being played. User may move the bar to seek at any location of the track

Name	Function
(9) Source Disk	To select the hard disk drive

Name	Function
(10) Target Path	To locate on where user wants to save the file
(11) Event (%)	Display the backup progress rate of event in percentage
(12) Total (%)	Display the total backup progress rate in percentage
(13) Stop	Stop backup progress
(14) Start	Start backup progress

5.2　　To Backup Recorded Video File

1. Please have the hard disk which was recording video on the DVR system install on your PC or using external USB enclosure to connect to your PC.
2. To run the HDD Backup application, click the **HDD Backup** button on USB Playback Application main interface.
3. Click **Browse** in **Source Disk** to locate the recorded video file.
4. And then, the **Select Disk** windows will appear as below:
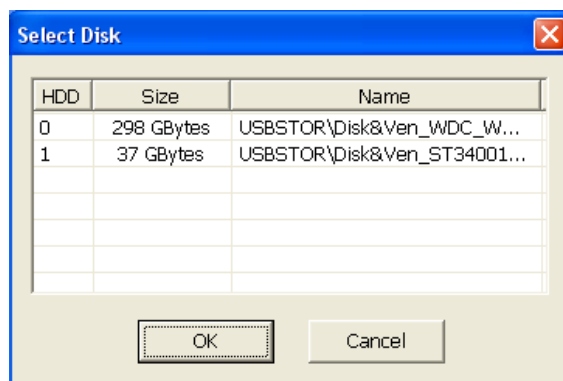
5. Select the hard disk drive from **Select Disk** windows. All available hard disk will list on the **Select Disk** windows with size and name
6. Select the hard disk drive and click **OK**
7. And then, all the recorded video files will list out.
8. Select the event which user wants to backup. Or mark the **Select All** to select all listed recorded video event
9. Locate on where user wants to save the backup file
10. Click **Start** to process backup
11. To stop the backup progress, click **Stop**
12. To play the backup file, see .

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

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

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

Name	Function
(11) Undo	Delete the last action.
(12) Noise Reduce	Adjust the softness and repair the damaged colours.
(13) Sharpness	Improve the overall image by enhancing edges. This gives the image more depth.
(14) Effects	**Gray Scale:** convert the image into black and white (monochrome). **Normalize:** adjust the brightness intensity. **Equalize:** automatically adjust the images that are too dark. **De-interlace:** smooth out the overlying frames. ■ **Static:** de-interlace for motionless scene. ■ **Dynamic:** de-interlace for moving scene.
(15) Picture Adjustment	Adjust the Brightness, Contrast, Saturation, Hue and Gamma.
(16) Original Screen	Display the original state of the image.
(17) Temporary Setting Block	Display the sample settings. Click the sample to apply the setting on the current video.
(18) Status Bar	Display the date, and time of the video.
(19) Progress Bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(20) iStable	To reduce the jolt in the recorded video.(also see Chapter 6.1)
(21) Add Setting	Include the new setting to the temporary setting block.
(22) Rename	Change the name of the selected setting in the temporary setting block.
(23) Delete	Permanently remove the selected setting in the temporary setting block.
(24) Load Setting	Call the saved settings.
(25) Save Setting	Store the settings in the temporary setting block.

6.1　To Use iStable

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

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

IMAGEVERIFICATION

CHAPTER 7

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

7.1   To Run the ImageVerification

1. To run the ImageVerification application, click the **Watermark** button on USB Playback Application main interface.
2. In the ImageVerification screen, click **Load Source Image** and locate the image source.
3. Click **Verify Image** to begin the process.
4. Check the result in the **Processed Image** screen. If the picture is unmodified, the image in the **Source Image** and **Processed Image** screen would be exactly the same. If the picture is being modified, a warning dialog box would prompt and the modified area is highlighted.
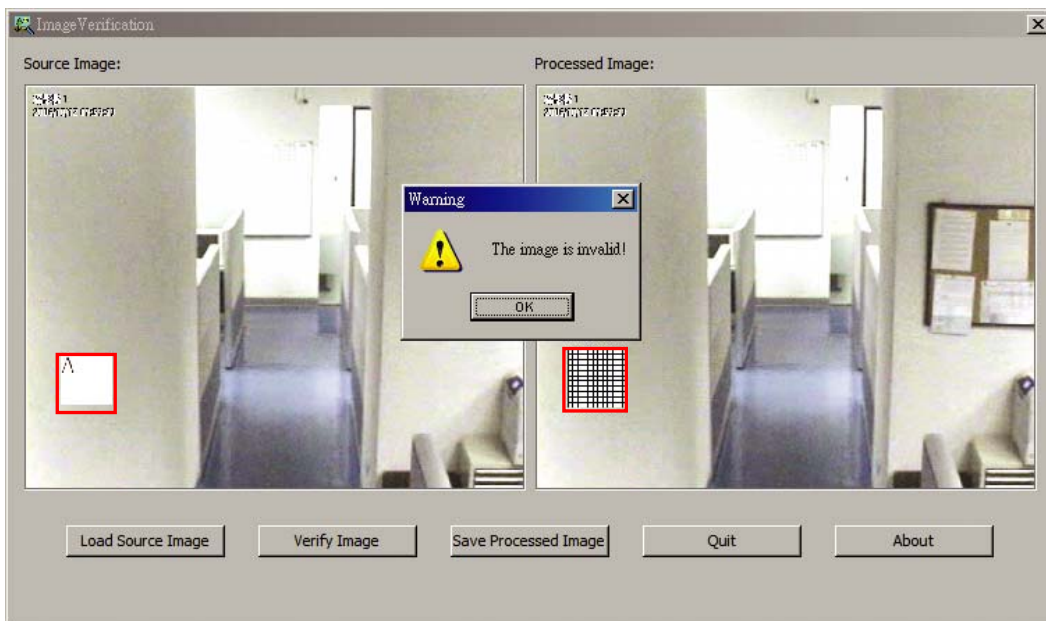
User can use Microsoft Internet Explorer to access DVR system by entering the IP address. To use this feature, make sure that your PC and DVR server both are connected to the internet and the Network feature is enabled.

Accessing this feature for the first time you will be prompted by your browser to install WebCamX.cab, allow the installation and you should be able to connect and login afterwards.
Click to install ActiveX if your PC required to be installed.
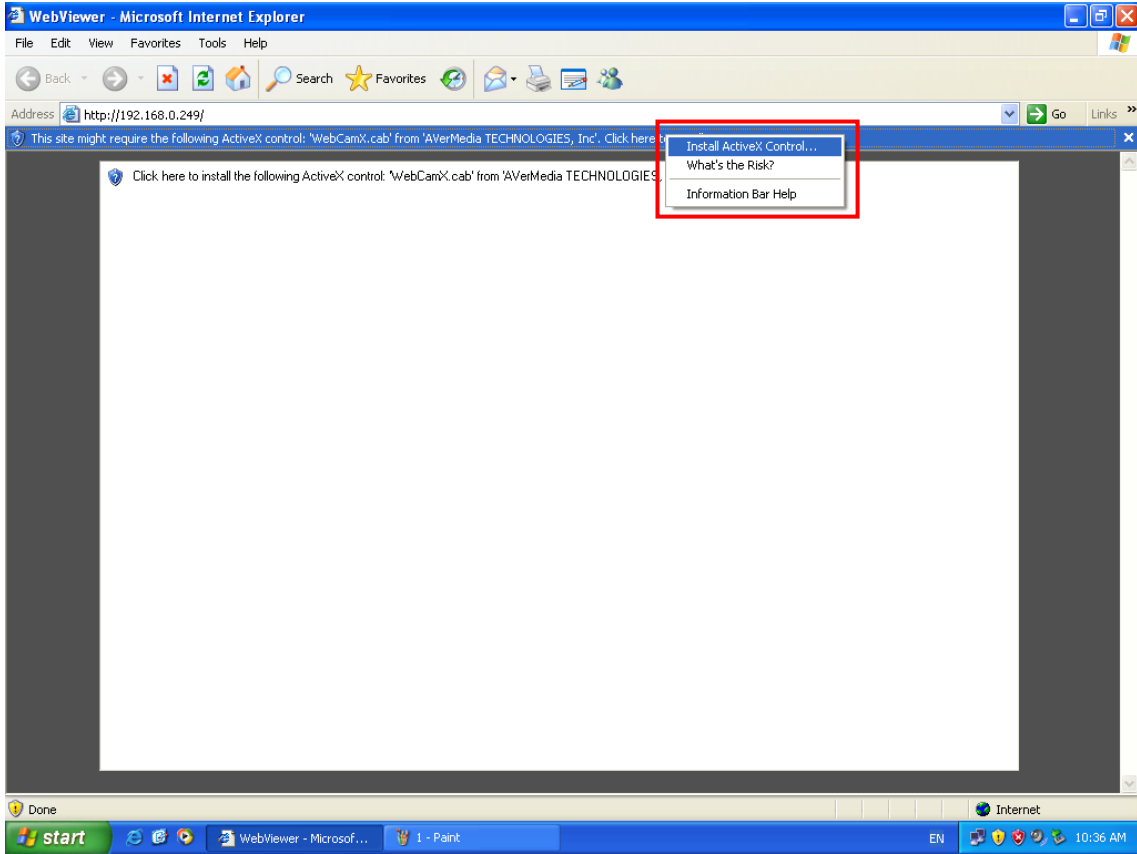
And then, Click **Install** when the Internet Explorer - Security Warning dialog box appears.
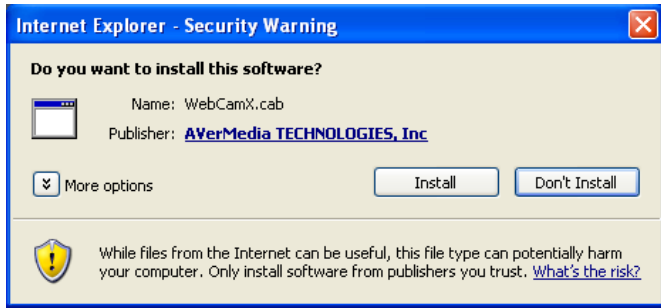
After installing the WebCamX.cab and when connecting to the DVR system, you are required to enter default account ID (default is **ADMIN**) and password (default is **111111**) and select the type of network.

ⓘ   Changing account password is strongly recommended.
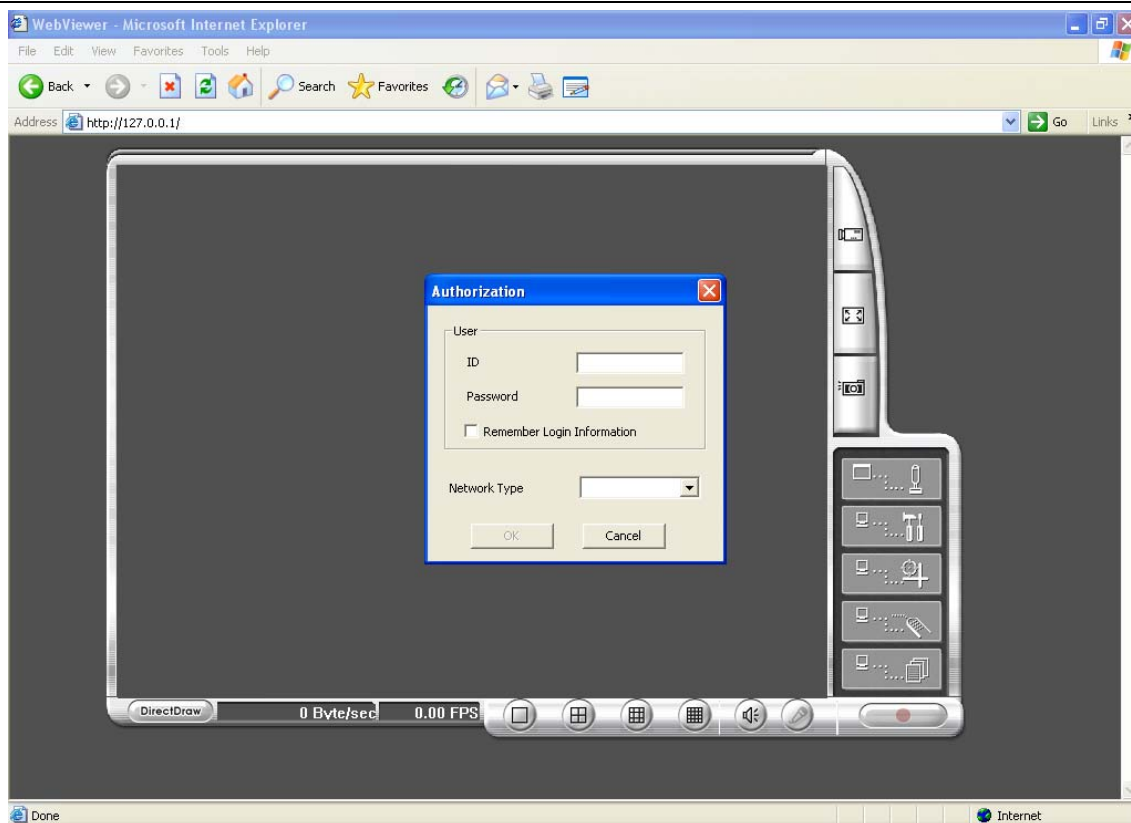
8.1 Familiarizing the WebViewer Buttons

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

Name	Function
(1) DirectDraw	Enhance the video quality.
ⓘ	Not all graphic cards can support this function. If you cannot see the screen display correctly or screen is messed, please check with VGA card vendor.
(2) Received file size	Indicate the size of the data being sent per second.
(3) Camera frames	Indicate the number of frames per second.
(4) Split screen view	Click to view one camera or all cameras on screen simultaneously.
(5) Audio	Enable/disable remote sound.
(6) Record	Start to record the video of the selected camera in AVI format. Directly click screen to select the channel that user wants to record and press **Record** button.
(7) Remote Console	Initiate Remote Console. It allows you to control DVR server (see also Chapter 8.3).
(8) Remote setup	Change the DVR server settings (see also Chapter 8.1.1).
(9) PTZ Control	Initiate PTZ camera controller(see also Chapter 8.2)
(10) Snapshot	Capture and save the screen shot in *.bmp format.
(11) Full screen	Use the entire area of the screen to only display the video. To return, Right-click or press **ESC** on the keyboard.

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

Select Camera

Add Server	Delete Server	Import	Export

No.	IP Address	Camera Name	Display	Video Quality
01	10.1.2.23:80	CAMERA1	✓	-
02	10.1.2.23:80	CAMERA2	✓	-
03	10.1.2.23:80	CAMERA3	✓	-
04	10.1.2.23:80	CAMERA4	✓	-

OK   Apply All
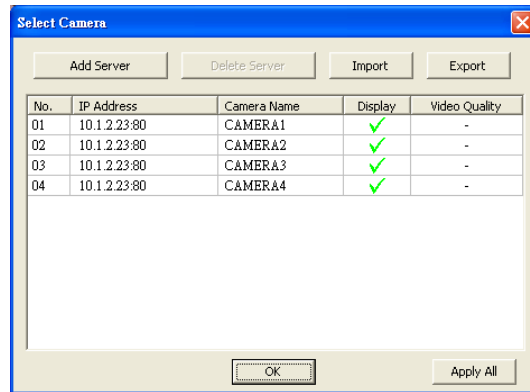
8.1.1　To Setup Remote System Setting

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

> ⓘ　After changed the DVR system setting, refresh your web browser in order to apply the new setting to the DVR system.

8.1.1.1　System Setup

(1) Video Out Setting
- **Video Output:** Select the **Video output** source (**VGA** or **TV**) to configure the value of **Resolution**, **Sharpness** and **Color Enhance**.
- **Resolution:** Select the video display resolution.
  - ➢ **SVGA:** 800 x 600
  - ➢ **XGA:** 1024 x 768
  - ➢ **SXGA:** 1280 x 1024
- **Sharpness:** Adjust the sharpness of display video.
- **Color Enhance:** Adjust the color enhancement of display video.

(2) DLS Setting

Mark **Enable DLS** check box to enable daylight saving. And then, select the **Start** and **End Time** by click **setting**.
- **Time Offset:** Assign a time that it is for daylight saving time offset in your time zone. For example: if the time zone is in U.S. Eastern, the time offset is 1 hour.

(3) MISC
- **Time Sync.:** Enable/disable Network Time Protocol to adjust the time of system from the network time server.
- **Time Zone:** Select the time zone of DVR located.
- **Sync Type:** Select the ways of the network time synchronize.
- **NTP Server:** Enter the URL of the network time server.

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- **Time Format:** Select the format of time and date for the DVR system.
- **Disk Overwrite:** Enable/disable replacing the earliest record when the hard disk space runs out. By default, the HDD overwrite setting is enabled

(4) Display
- **VGA-TV Selection:** Select the VGA and TV output order.
  - ✓ **MAIN - MAIN:** Both VGA and TV output surveillance video on screen.
  - ✓ **MAIN – SPOT:** VGA output surveillance video and TV output the alarm event video.
  - ✓ **SPOT – MAIN:** VGA output alarm event video and TV output the surveillance video.
- **SPOT Mode:** To select the display mode (**QUAD** or **Channel** (1, 2, 3, or 4)) on spot monitor when there is no alarm event.
- **Auto scan:** Enable/disable auto cycle switch to display the next channel when in full screen mode.
- **Event Duration:** Select the type of event duration.
- **Set Duration:** Set a time gap (10 ~ 999 seconds) before switch back to preview screen mode after display the alarm event.

8.1.1.2   Camera Setup
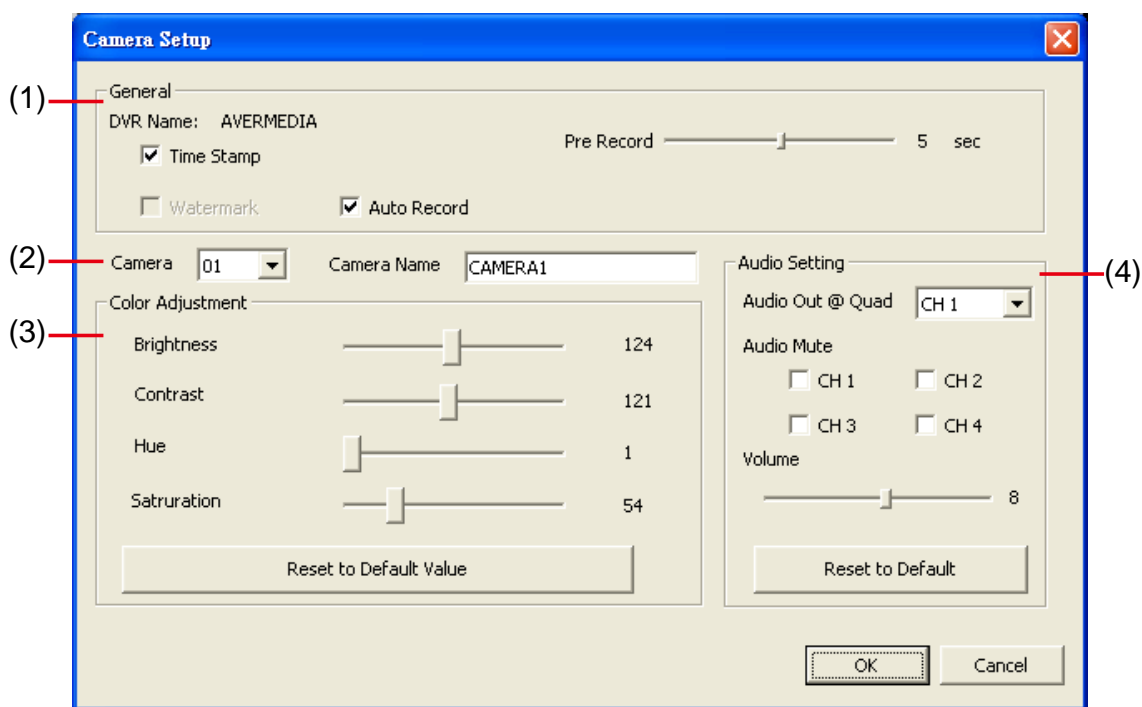
(1) General
- **Time Stamp**

  Enable/disable the time and date display on the each channel.
- **Auto Record**

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

  Set the pre-recording time in seconds when alarm has occurred.

(2) Camera
Select the camera and enter a name for the camera.

(3) Color Adjustment
Select the camera and adjust the **Brightness**, **Contrast**, **Hue** and **Saturation** of the selected camera.
Click **Reset to Default Value** to set all video setting back to the default.

(4) Audio Setting

Click **Reset to Default Value** to set all video setting back to the default.

- **Audio Out @ Quad**

    Select the channel to output the audio signal While QUAD mode. Please make sure the audio output device (such as a speaker) is connected to DVR unit.

- **Audio Mute**

    Enable/disable to hear audio sound while playback. To hear sound, make sure the unit is connected to a speaker.

> **i** If you want to hear the voice when you playback the recorded file on this DVR, please make sure that you have disabled **Audio Mute**.

- **Volume**

    To adjust audio output volume.

8.1.1.3 Record Setup

(1) → Record Mode
(2) → Channel Setting
(3) → Record Schedule
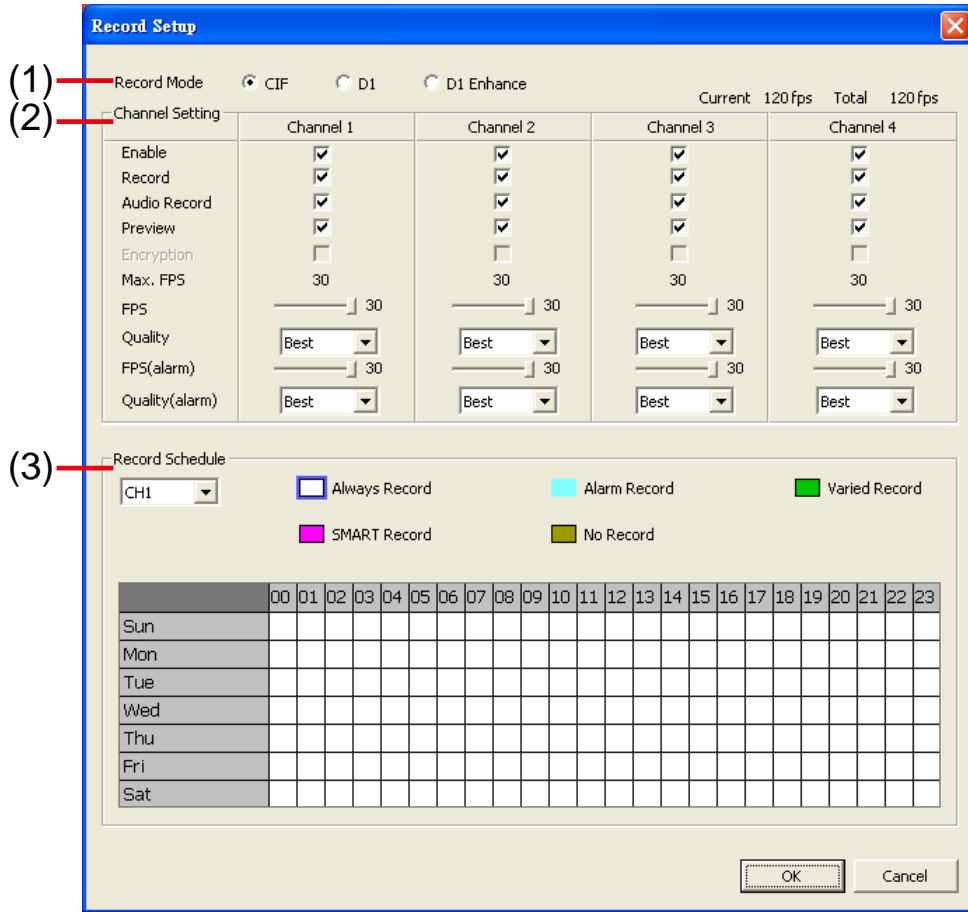
(1) Record Mode

Select **D1**/**CIF**/**D1 Enhance** recording mode.

Under **D1** mode, the total recording frame rate is **60/50fps** (NTSC/PAL). The video recording is in full screen resolution and takes turns from one channel to the next one when **Auto Scan** enables. Each channel is recorded only at a maximum frame rate of 30/25 fps (NTSC/PAL). User can switch to view the video in single full screen or QUAD screen.

In **D1 ENHANCE** mode, the total recording frame rate is **30/25fps** (NTSC/PAL). Each channel can be recorded at a maximum frame rate of 30/25 fps (NTSC/PAL).

Whereas in **CIF** mode, the total recording frame rate is **120/100fps** (NTSC/PAL). The video recording is at a lower resolution, but all channels can be recorded at a maximum frame rate of 30/25 fps (NTSC/PAL). User can switch to view the video in single full screen or QUAD screen.

(2) Channel Setting

Setup parameters of each channel.

- **Enable**

  Enable/disable the channel to display the video on the surveillance screen. If the channel is disabling, there won't be any video display and recording.

- **Record**

  Enable/disable the channel number to record video.

ⓘ   The channels are enabled can be set for video recording.

- **Audio Record**

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

- **Preview**

  Enable/disable the video preview on the surveillance screen.

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- **Max. FPS**

  Display the maximum frame rate of recording that user has set. Maximum fps total value depends on the **RESOLUTION** that user has chosen.

- **FPS**

  Set the number of frames per second to be recorded. The higher the frame rate, it uses more hard disk space.

- **Quality**

  Select the video quality setting from **BEST**, **HIGH**, **GOOD**, **MEDIUM**, **NORMAL** or **LOW**. Choosing higher quality allows user to record less hours but the quality of the recorded video is better.

- **FPS(alarm)**

  Set the number of frames per second to be recorded when alarm has occurred. The higher the frame rate, it uses more hard disk space.

- **QUALITY(alarm)**

  Select the video quality (**BEST**, **HIGH**, **GOOD**, **MEDIUM**, **NORMAL** or **LOW**) of alarm recording. Choosing higher quality allows user to record less hours but the quality of the recorded video is better.

(3) Record Schedule

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

Condition	Description
NO RECORD	Not recording at all
ALWAYS RECORD	Non-stop recording
ALARM RECORD	Start recording when the alarm is activated. The alarm activates status according to the setting in **ALARM SETTING**.
SMART RECORD	Automatically switch to recorded at the frame rate of **FPS (alarm)** that is setup in **CAMERA CHANNEL SETTING** once an alarm is detected and if there is no motion, it records at the frame rate of **FPS** that is setup in **CAMERA CHANNEL SETTING**.
VARIED RECORD	When each channel has different record schedule, the record schedule table will display in **Green** color that is indicated as **VARIED RECORD**.

Select the channel to setup record schedule. Click the type of schedule and select hour (00~23) and day (Mon ~ Sun), and then, click **OK** to complete the schedule setting.

8.1.1.4　Alarm Setup
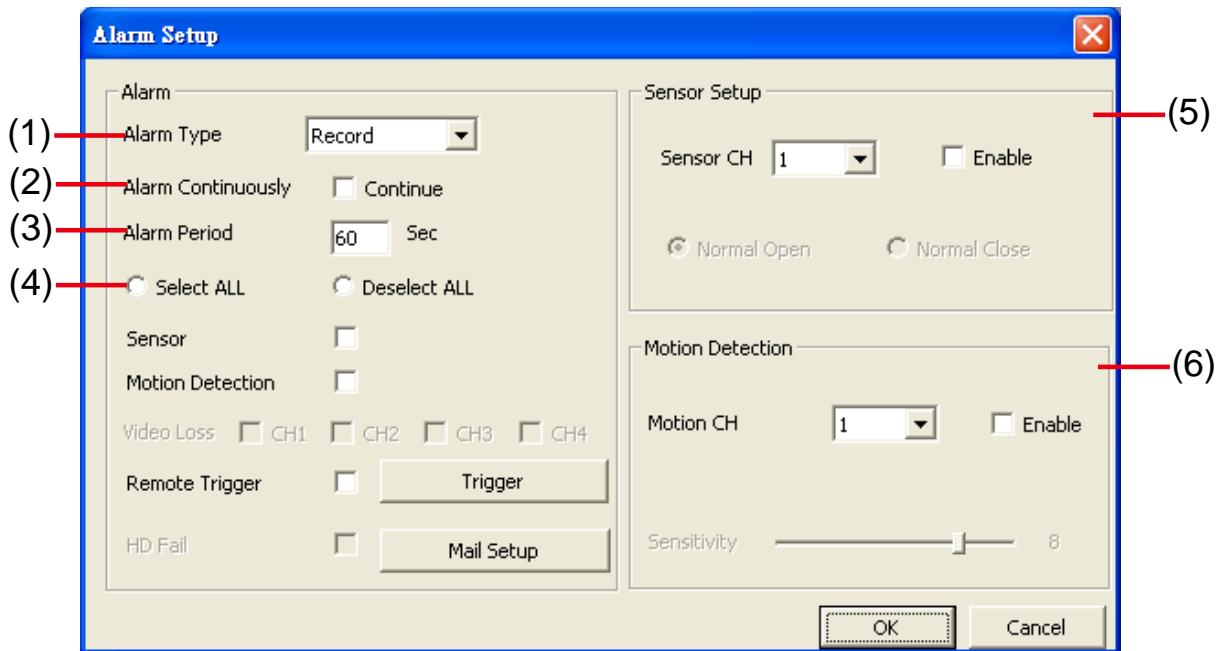
(1) Alarm Type

Select the way of alarming – **Record**, **EMAIL**, or **RELAY**.

(2) Alarm Continuously

Enable/disable to execute the alarm action (**ALARM TYPE**) continuously when alarm has been trigger. The alarm action is according to the setting of **ALARM TYPE** that user has setup.

> **ⓘ** When **ALARM CONTINUOUSLY** has been started, it won't be stop until the recording has been stop manually.
> If **ALARM CONTINUOUSLY** has been enabled, the **ALARM PERIOD** won't be able to configure.

(3) Alarm Period

Set the amount of time (in seconds; 0~ 999) for stop alarm action after alarm has been reset.

> **ⓘ** If **ALARM CONTINUOUSLY** has been enabled, the **ALARM PERIOD** won't be able to configure.

(4) Select/Deselect ALL

To enable/disable all below selection.

> **ⓘ** **Video Loss** and **HD Fail** only available when the Alarm Type is **Email** or **Relay**.

- **Sensor**
  Enable/disable to send out the alarm if sensor has been triggered according to the setting of **SENSOR SETTING**.
- **Motion Detection**
  Enable/disable to send out the alarm if motion has been detected.

> **ⓘ** To activate the motion recording, please enable the **Motion Detection** in this section or Alarm Setting of Chapter 3.1 and configure the record mode as **ALARM RECORD** in Chapter 7.1.1.3 or RECORD SCHEDULE of Chapter 3.1.

- **Video Loss**
  Issue an alarm when t selected channel's video is lost.
- **Remote Trigger**
  Allow user to trigger alarm from remote site. Click **Trigger** button to trigger.
- **HD Fail**
  Issue an alarm when hard disk of DVR system is failed.
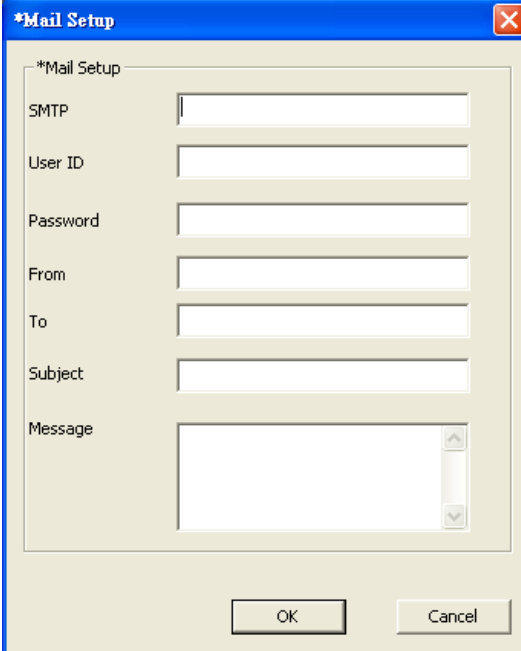
- **Mall Setup**
  - ✓ **SMTP:** Enter the SMTP server
  - ✓ **User ID & Password:** Enter User ID and Password for e-mail server user identification
  - ✓ **From:** Enter the sender e-mail address
  - ✓ **To:** The recipient e-mail address and separate it with a semicolon
  - ✓ **Subject:** Enter the message title
  - ✓ **Message:** Type the message

(5) Sensor
Enable/disable initial state of the attached sensor of the channel.

(6) Motion Detection
Enable/disable the channel to detect motion.

8.1.1.5   Network Setup

(1) IP Mode

The system provides 3 types of IP setup mode – STATIC, DHCP, and PPPOE.

- **STATIC:** Assigns a constant IP address for the DVR system.
- **DHCP:** Assign the IP address by local DHCP server to DVR system.

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

- **PPPOE:** Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services. If your network is using ADSL service connecting to internet, and then, select PPPOE mode.

(2) Remote audio record

Enable/disable the audio recording at remote site.

(3) DDNS

Dynamic Domain Name Service is a data query service mainly used on the Internet for translating domain names into Internet addresses.

- **Domain Name:** Enter the domain name that user has registered.
- **Password:** Enter the password that user has setup when registered the domain name.

(4) Stream Setup

Click it to setup each channel stream and quality for the remote site viewing.
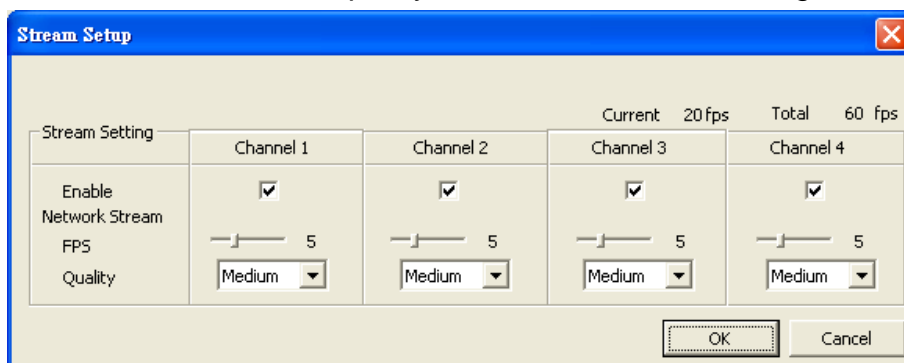
- **Enable**

    Enable/disable the channel. If channel is disabled, the video stream will not been seen in remote site and transmitting to remote site.

- **Network Stream FPS**
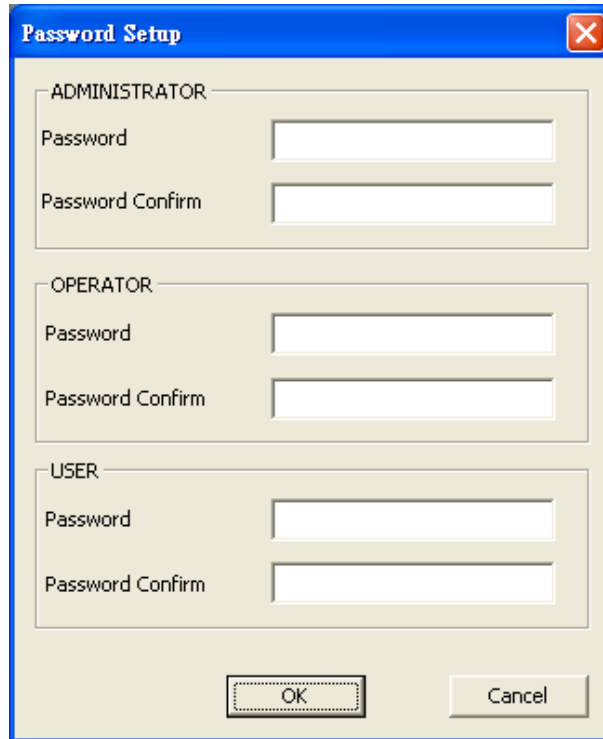
Set the stream FPS of channel. Scroll the bar to adjust the fps.
- **Quality**
  Select the quality of the channel.

8.1.1.6 User Setup

To change Admin, operator, and user account's password. Enter the new password in **Password** and re-enter again in **Password Confirm**. Click **OK** to complete the change.

8.2 Familiarizing the WebViewer PTZ Buttons

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

8.3   Familiarizing the Remote Console Buttons
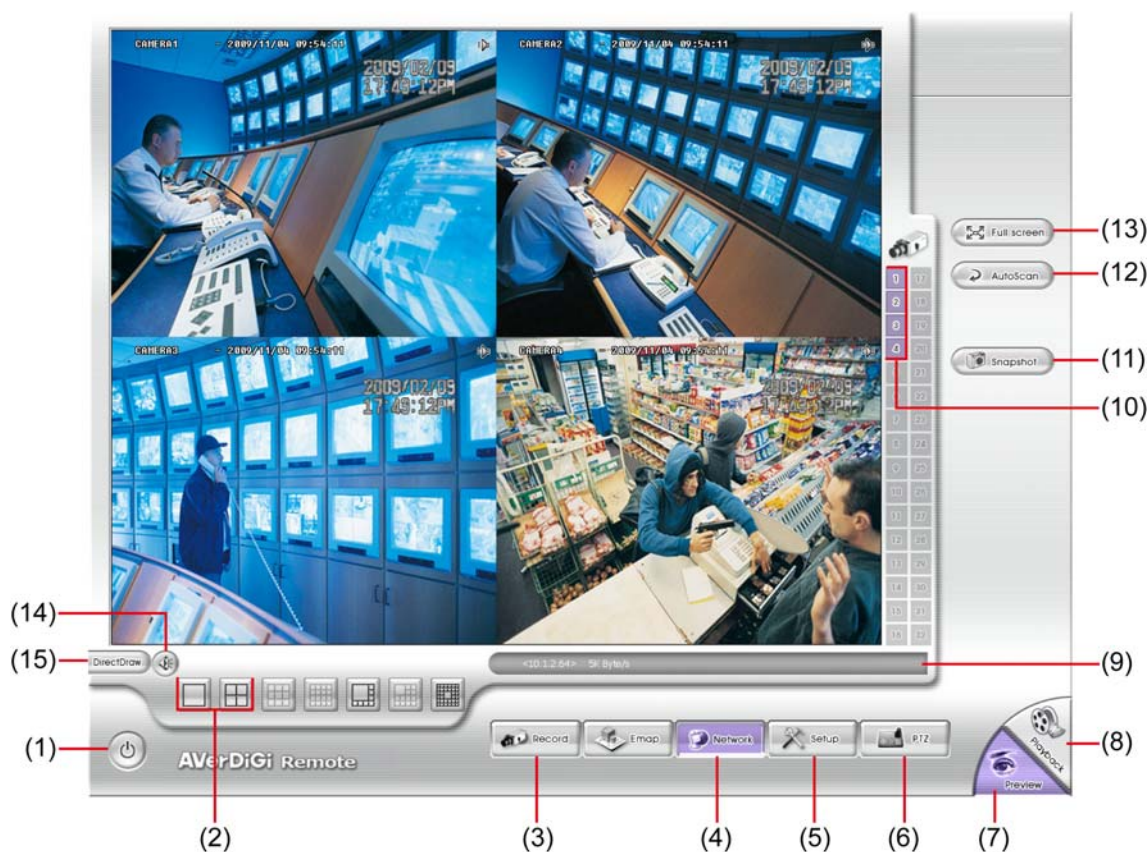
Name	Function
(1) Exit	Close/minimize remote console application
(2) Split Screen Mode	Select from 2 different split screen type to playback the recorded video file of all the cameras or one camera on the screen.
(3) Record	Start/stop video recording.
(4) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection.
(5) Setup	Configure the Remote Console setting. (see also Chapter 7.3.1)
(6) PTZ	To call out PTZ control panel for controlling PTZ camera.
(7) Preview	Switch to Preview/Playback mode. This allows you to view live camera display.
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see also Chapter 7.4)
(9) Status Bar	Display the current date, time and hard disk free space.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(12) Auto Scan	Enable/disable channel auto cycle switch.
(13) Full screen	Use the entire area of the screen to only display the video. To return, Right click the mouse or press **ESC** on the keyboard.
(14) Audio	Enable/disable the sound display
(15) DirectDraw	Enhance the video quality.

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

8.3.1 To Setup Remote Console Setting

Click **Setup** button to call out the **System Setting** windows. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.
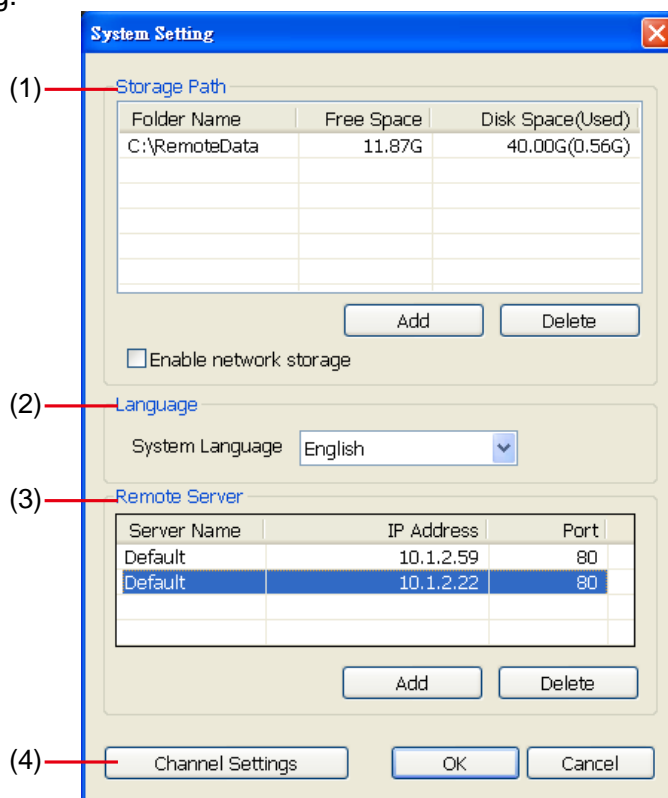
(1) Storage Path
Set the directory on where to save the data. When there is not enough free space to record one hour data, the system automatically replaces the oldest data. In case you have more than one storage path, the system automatically saves the data to the next storage path. By default the data is stored in C:\RemoteData, to insert another storage path, click **Add**. To remove the selected path, click **Delete**.

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

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

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

(3) Remote Server
Enter the DVR **Server IP** and **Server Port** number that user wants to remote connect it.

(4) Channel Settings
The numbers from 01 to 04 represent the camera ID. In **Transmitting Channels** section, enable the camera number to receive the camera signal from the server. In **Visible Channels** section, enable the camera number to view the camera signal on Remote Console screen. To select all the cameras, enable the **ALL** check box.
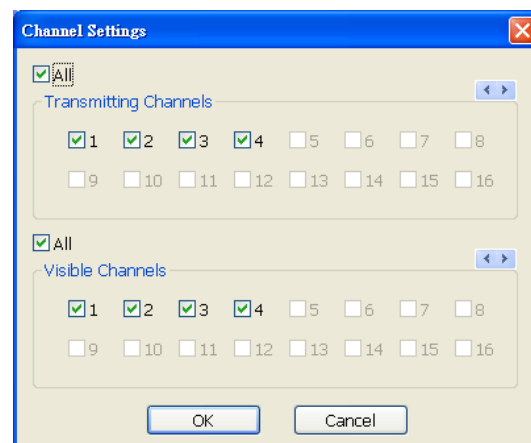
8.4 Using the Remote Playback

To use this feature, first switch to playback mode by clicking the **Playback** icon, and then, select the source of the file. In the **Select Playback Mode** dialog box, choose **Local Playback** to open the file that is recorded in the Remote Console, and **Remote Playback** to open the file that is recorded on the DVR server.

Click **OK** to proceed and **Cancel** to void this operation.
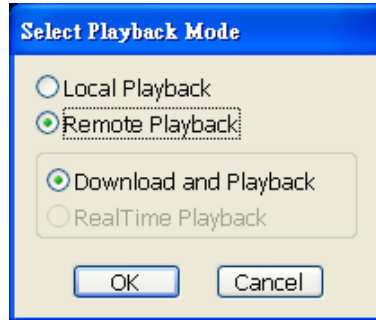
In the Remote Playback Date/Time Selection, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 04 represent the camera number.
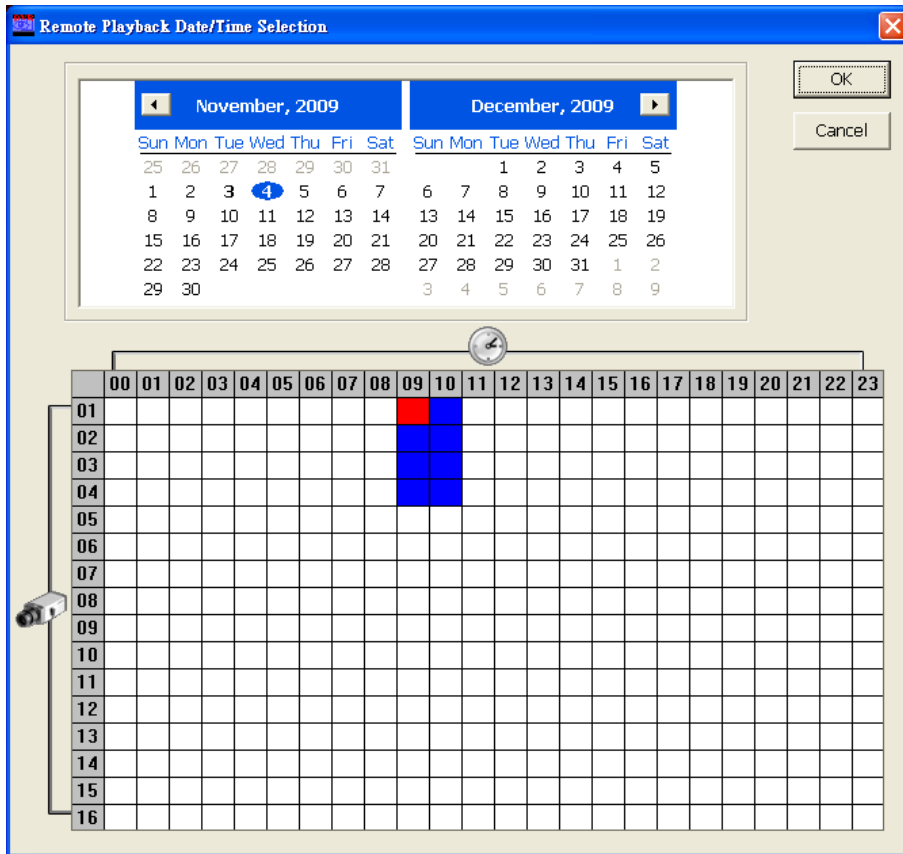
To Make a Selection:
1. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
2. In the table below, click on the blue block to select and open the recorded file. The blue block turns red when it is selected. The block that appears in white doesn't have data. You can only select one block when you choose Download and Playback.
3. Click **OK** to proceed and **Cancel** to void this operation.
4. The system divides the selected hour into 16 video thumbnails. In the Time Selection screen, click on the video thumbnail you want to download (see also Chapter 7.4.3).

8.4.1 Familiarizing the Local Playback Buttons

Name	Function
(1) Exit	Click to exit or minimize the application. The password is required for exit or minimize.

Name	Function
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Split Screen Mode	Select from 2 different split screen type to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen.

- If there are only 4 cameras, you won't be able to switch to 8, 13, and 16 split screen mode.
- To zoom in an area on the screen, Right click and Drag a square on the area you want to enlarge. To back to normal view, right click the channel screen again.

Name	Function
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. If there is no recorded data within the hour, there will be no color bar on top of the hour button. While the red bar indicates that you are currently viewing the recorded video file.

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

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Name	Function
(6) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
	- Also, user can open the recorded file from certain location by click **OPEN FILE** button
	- **Channel 01~ 16** and **Channel 17 ~ 32:** Click the button to switch to different channel group of playback calendar if the DVR has more than 16 channels.
	- Mark **Day Light Saving**, the playback calendar will show the available playback records during day light saving period.
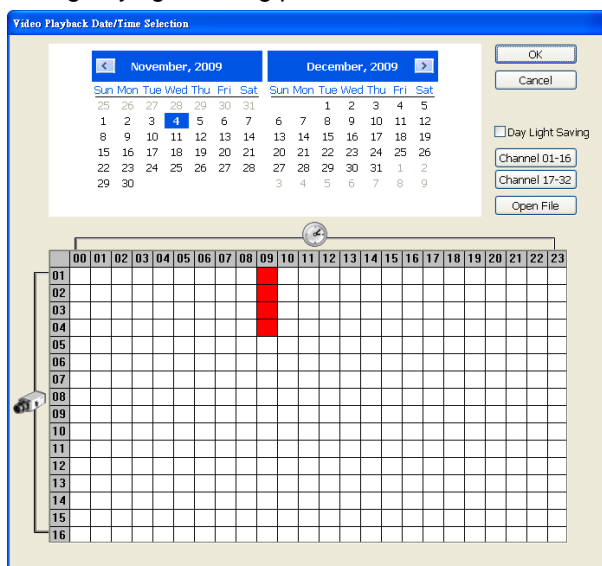
ⓘ	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 04 represent the camera ID. While the red colored column indicates on where to start playing the recorded video file. If there is no any video data, it will be no color bar on top of the date button.

(7) Preview	Switch to Preview mode.
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(9) Status bar	Display the record date, time, HDD capacity in preview mode and play speed in playback mode.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Export	Export includes Snapshot, Print, and Output function.
	■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format.
	■ **Print:** Print the screen shot.
	■ **Output:** Save the segmented file in *.avi format (see also Chapter 8.4.1.1)
(12) Segment	Keep a portion of the recorded video you want (see also Chapter 8.4.1.1).
(13) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard.
(14) Event Log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(15) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also Chapter 8.4.1.2)
(16) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(17) Intelligent Search	Search the changes in the motion detector frame (See also Chapter 8.4.1.3).
(18) Audio	Enable/disable audio play
(19) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

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

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

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

3. Click **Export → Output** button to save the wanted clip.
4. In the Save As dialog box, locate on where you want to save the file.
5. Mark the **show camera information** and select the **Text Alignment** to display camera name when playback. The camera information will be the information of server name that user has defined in **Network Setting**.
6. Select the file type (*.dvr, *.mgp, or *.avi) to save. If the select the file type is *.avi, user can mark **included audio** to include audio in output video segment.
7. To adjust **Video Quality** if needed.
8. Click **Save** to save the video segment.

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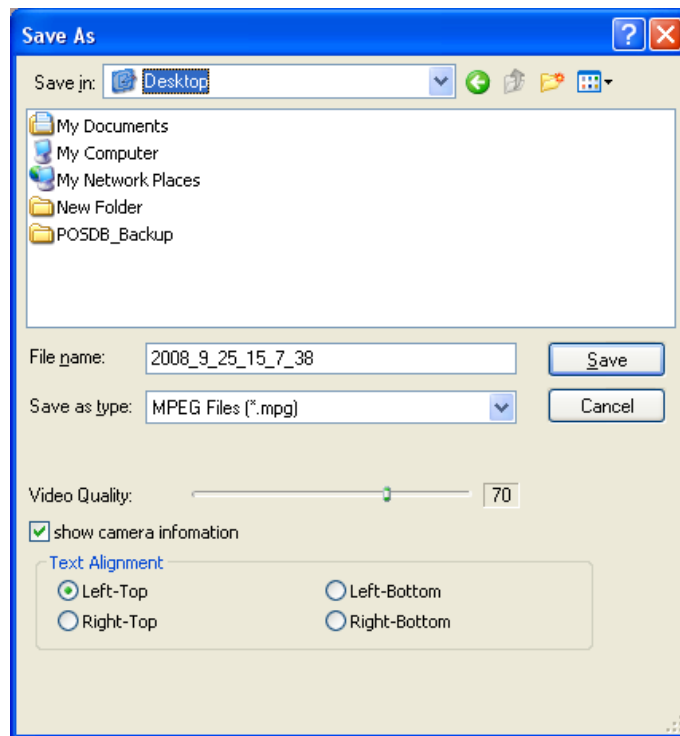
8.4.1.2   To Search Using the Visual Search

1. Click **Visual Search**.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.
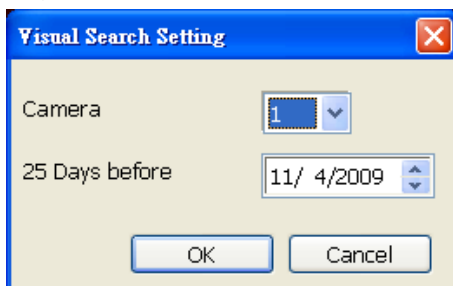
3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minutes of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click ⬅. To view from the selected frame and close event search, click ⊠.

8.4.1.3   To Search Using the Intelligent Search

1. Click on the video screen on where you want to search.
2. Click **Intelligent Search**. The Intelligent Search text (red) would appear at the lower left corner of the screen.

3. When the Intelligent Search Setting dialog box and motion detector frame appear, you may adjust the sensitivity bar and the motion detector frame size and location. To set motion detector frame size and location, left click and drag on the screen. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click .
4. You may also set to search and list all the result. Just check the **List** box. In the **Search Duration** section, set the **Begin Time** and **End Time**. Set the **Searching Interval** time that system won't list out the same events in a period of time that user has setup. Then, click **OK** to start searching. The search result will show as below figure:
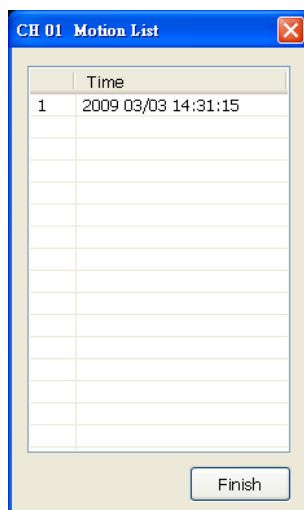
8.4.2   Familiarizing the Download and Playback Buttons

Name	Function
(1) Exit	Click to close the application.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of 1/2x, 1/4x, 1/8x, 1/16x, or 1/32x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, or 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.
(4) Status bar	Display the recorded date, time and play speed.
(5) Language	Switch the language of function/button tips
(6) Export	Export includes Snapshot, Print, and Output function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also Chapter 8.4.1.1).
(7) Segment	Keep a portion of the recorded video (see also Chapter 8.4.1.1).
(8) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(9) Event Log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(10) Audio	Enable/disable volume
(11) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

Name	Function
(12) Watermark	When playback file from **hard disk** and ***.avf** file, click watermark to call out ImageVerification application(see also Chapter 7)

> Watermark verification doesn't support on hardware compression products, EB series DVR, and video that is recorded from IP camera.

USING HANDYVIEWER AND JAVAVIEWER

Users can use a mobile phone to access the DVR through Internet. Make sure your mobile phone support IE browser and is connected to the internet. To access the DVR server, open IE browser and enter **http://DVR IP/mobile**. You can see the latest screen shot. Click **<< >>** to change the channel or camera and **Refresh** to reload new screen shot.

9.1 Using PDAViewer to Access DVR Server

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

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

9.1.1   To install PDAViewer thru ActiveSync

1. Connect your PDA to your PC. Place the CD into the CD-ROM drive then click **Utilities** > **PDAViewer** > **Setup.exe**. And follow the on screen instructions.

2. Click **Next** to continue.
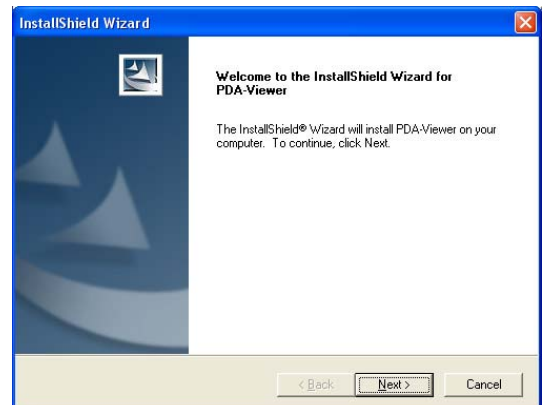
3. Read the license agreement and click **Yes** to accept all the terms. The system will then automatically install the application.
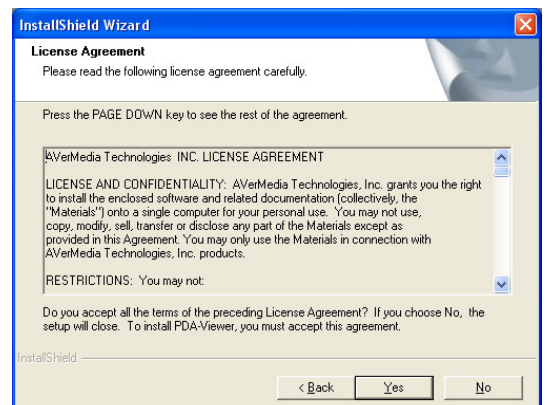
9.1.2　To install PDAViewer from the Internet

1. Make sure you are connected to the internet.
2. Open the web browser and enter the server IP. Then click the hyperlink **Download PDAViewer**.
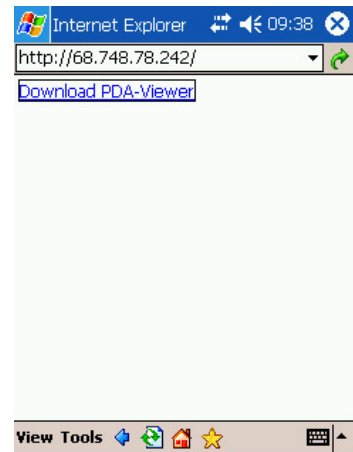
3. When the Download dialog box appears, enable **Open file after download** and click **Yes**.

4. After the installation, the PDAViewer icon will appear in the Programs list.

9.1.3   To Use the PDAViewer

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

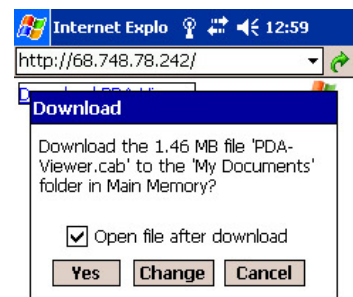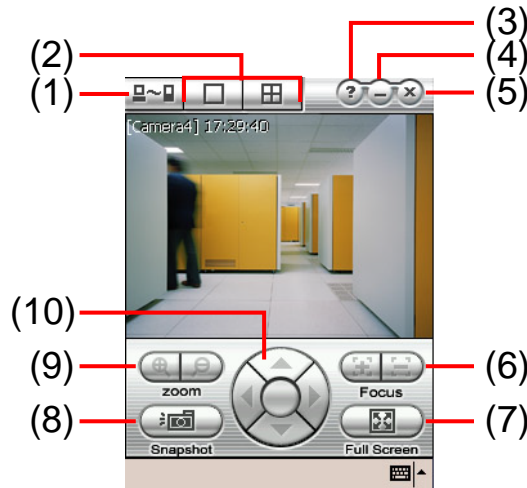| Name	Function
(1) Connect	Hook up to the DVR server. Make sure you are connected to internet. When the iView screen appears, click Add to add DVR server. Enter the server IP, port, user ID, password and select the connection type. Then, click **OK**. User can playback the recorded video from remote DVR server in PDAViewer.(see Chapter 8.1.4)
(2) Split Screen Mode	Select between 2 screen display types. It also allows you to switch and view different camera number or channels.
(3) About	Display the PDAViewer software version.
(4) Minimize	Reduce the size to taskbar.
(5) Exit	Close the PDAViewer.
(6) Focus	Adjust the focus of PTZ camera to produce clear image.
(7) Full Screen	Use the entire screen to only display the video.
(8) Snapshot	Capture and save the screen shot in *.bmp format.
(9) Zoom	Zoom in and out the PTZ camera image.
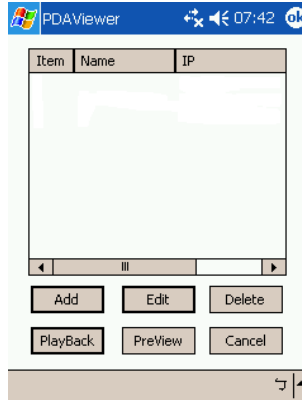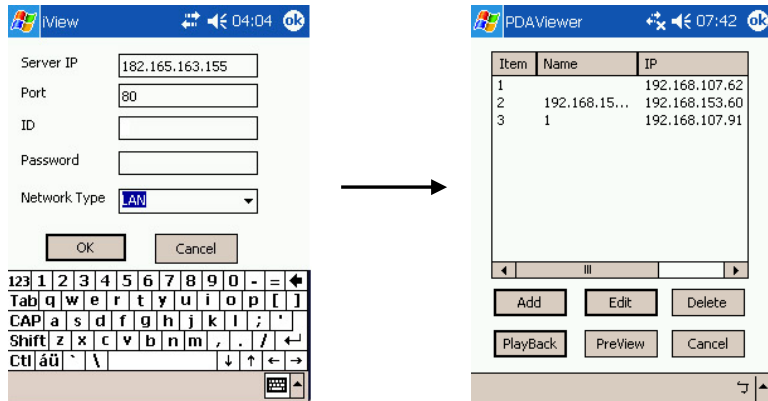
Name	Function
(10) Direction buttons	Adjust and position the focal point of the PTZ camera.

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

9.1.4   To Playback in PDAViewer

1. Run the **PDAViewer** in the Programs.
2. Hook up to the DVR server.
3. Click **Connect** icon and select the DVR server
4. Click **Playback** to enter playback option screen
5. Select the **camera**, **data**, and **time**
6. Click **Playback** to start playing the recorded video
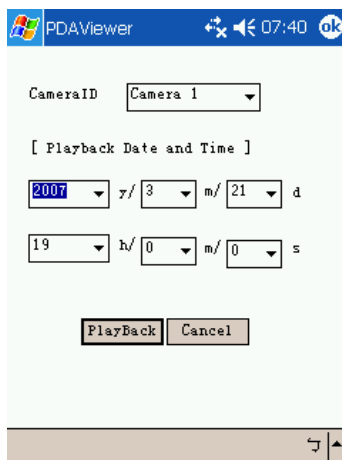
7. While playback, user can view and change status of I/O devices
8. On the playback screen, tap on video screen longer the popup menu will appear
9. Select the **Remote IO**
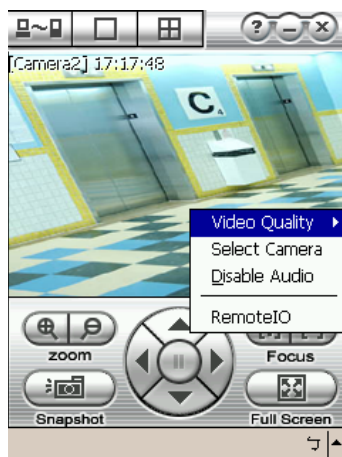
10. The sensor and relay devices will list as below:
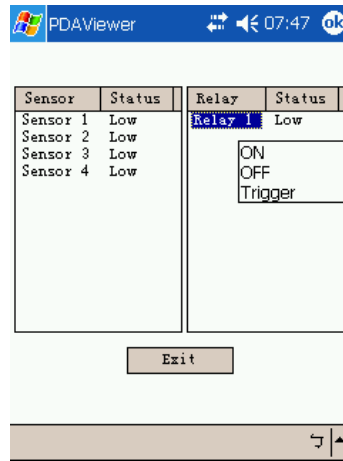
11. User can change the relay status. Select the relay and tap on video screen longer the popup menu will appear, and then, select the status (ON, OFF, Tigger)

9.2 Using JavaViewer to Access DVR Server

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

9.2.1 To install JAVAViewer from the DVR Server

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

9.2.2 To Use the JAVAViewer

1. Run the JAVAViewer program.

2. Enter the DVR IP address, port number, user ID, and password. Please refer to your DVR server setting for that information.

3. And then, select the Connect to connect to DVR server.

4. Click **Yes** to accept the data from DVR server.

5. When connection is success, you will see the camera video on the screen.

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

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7. The JAVAViewer support PTZ control function, you can refer to **Help** file for detail function control key. Select **menu** and go the way down to select the **Help** file.

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

WARRANTY LENGTH

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

Parts are warranted for (1) one year from the date of purchase

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

WHO IS PROTECTED

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WHAT IS AND IS NOT COVERED

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1. Any product on which the serial number has been defaced, modified, or removed

2. Damage, deterioration, or malfunction resulting from:

   Accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, commercial or industrial use, unauthorized product modification, or failure to follow instructions included with the product.

   Misapplication of service by someone other than the manufacturer's representative

   Any shipment damages (Claims must be made with carrier)

   Any other cause which does not relate to a product defect

3. Cartons, cases, batteries, cabinets, tapes, or accessories used with product

4. AVerMedia does not warrant that this product will meet your requirements; it is your responsibility to determine the suitability of this product for your purpose

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1. Removal or installation charges

2. Shipping charges

3. Any incidental charges

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CONTACT INFORMATION

Taiwan & International
No. 135, Jian Yi Rd., Chung Ho City, Taipei, Taiwan
TEL: 886-2-2226-3630
FAX: 886-2-2226-7241
Web Site: www.avermedia.com / http://www.averdigi.com