AVerMedia®
AVerDiGi
EB1304NET SATA
EB1304NET SATA$^+$

User Manual

FCC NOTICE (Class A)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

.Federal Communications Commission Statement

NOTE- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:
Warning --This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Community Compliance Statement (Class A)

This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2004/108/EEC.

Warning - This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to correct this interference.

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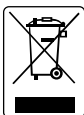
The mark of Crossed-out wheeled bin indicates that this product must not be disposed of with your other household waste. Instead, you need to dispose of the waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information about where to drop off your waste equipment for recycling, please contact your household waste disposal service or the shop where you purchased the product.

Battery Safety Information

- Store the batteries in a cool dry place.
- Do not dispose of used batteries in domestic waste. Dispose of batteries at special collection points or return to point of sale if applies.
- Remove the batteries during long periods of non-use. Always remove exhausted batteries from the remote control. Battery leakage and corrosion can damage this remote control, dispose of batteries safely.
- Do not mix old and new batteries.
- Do not mix different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
- Do not dispose of batteries in a fire. The batteries may explode or leak.
- Never short circuit the battery terminals.

WARNING
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

Chapter 1   Introduction

1.1   Package Content

A   B

(1)

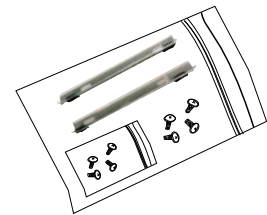(2)   (3)

(4)   (5)

(6)
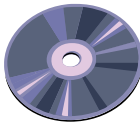
(7)

(1) DVR Unit
☐
- **A:**   AVerDiGi EB1304NET SATA unit
- **B:**   AVerDiGi EB1304NET SATA$^+$ unit

ℹ️   The model of DVR unit is depending on your purchase.

☐   (2) Remote Control (batteries included)
☐   (3) Quick Installation Guide
☐   (4) Power Cord
   * The power cord varies depending on the standard power outlet of the country where it is sold.
☐   (5) Power Adapter
☐   (6) Internal HDD holder (8 screws are inculded)
☐   (7) Software CD (User Manual included)

1.2   Features and Specifications

- Fire resistance material
- Non-PC stand-alone network digital video recorder
- 4 composite video inputs and 1 composite output
- VGA output for LCD or CRT monitor display
- On Screen Display(OSD) control menu
- MPEG4 video compression
- Auto-detect NTSC or PAL video system
- Support Web viewer on Internet Explorer
- Support Central Management System(CMS)

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

1.3　Front Panel

1.3.1　EB1304NET SATA
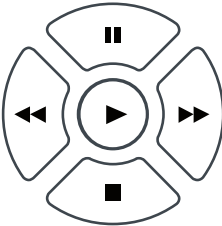
Name	Function
(1) DVR Power LED 💡	Light when the unit is power on
(2) HDD LED ▤	Indicate the hard disk running state. Light when the HDD is running (Read/Write)
(3) IR Sensor	Receive signal from the remote control to operate the unit
(4) IR Sensor Port	To connect extended IR sensor cable
(5) USB 2.0 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. - The DVR system supports external hard disk capacity up to 32GB.

1.3.2 EB1304NET SATA⁺

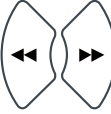| Name	Function
(1) DVR Power LED 💡	Light when the unit is power on
(2) HDD LED 🗄	Indicate the hard disk running state. Light when the HDD is running (Read/Write)
(3) IR Sensor	Receive signal from the remote control to operate the unit
(4) IR Sensor Port	To connect extended IR sensor cable
(5) USB 2.0 Port	Connect to pen drive / external hard disk for backup
	ⓘ - If the external hard disk is first time using, please format to FAT32 format. - The DVR system supports external hard disk capacity up to 32GB.
(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 Use the buttons in setting password of OSD menu to: For "1" For "2" For "3" For "4" For "0"
(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

3

Name	Function
(10) Playback/OSD Menu Control Buttons	Stop video playback
	Use the buttons in navigating OSD menu to :
	Move to the left and right
	Change the setting
	Make a selection

1.4 Back Panel

Name			Function
(1)	RJ-45 port	:	Ethernet connection port
(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
			⚠ The DVR unit support 2 video output ports and you can only select to output the video either from the VGA OUT or VIDEO OUT
(4)	VGA OUT	:	Output the video signal to a CRT or LCD monitor
(5)	Audio Out/In	:	- Input the audio signal from audio output device which it has a power supply by itself. The audio is embedded with channel 1 - Output the audio signal to a audio out device which it has a power supply by itself
			ℹ The audio input/output device needs to be powered by external power.
(6)	Sensor In & Alarm Out	:	Support up to 4 sensor device and 1 relay device (Relay: 1A @ 125V AC/30V DC)
(7)	RS485		For PTZ camera connection
(8)	TV-VGA Switch	:	Switch to select the video output. Make sure to set the video output before turning on the unit
(9)	12V DC	:	Connect the power adapter into this port

1.5 Setting Up the DVR Unit

1.5.1 Installing the Hard Disk

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

For hard disk spec, please referring to
http://www.avermedia.com/nvd/hardware-recom_eb_c.asp

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

Follow the illustrated instructions below to install the hard disk:

1. 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 replace 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

1.5.2 Adjust Fan Speed

The DVR provides 3 speed of fan for user to adjust by actual condition.

1. Loosen all screws

2. Push the cover backward and lift

3. Move the pin cover to the pin. 3x is maximum, 2x is medium and 1x is low.

4. Push the cover forward and secure the cover after adjust the fan speed.
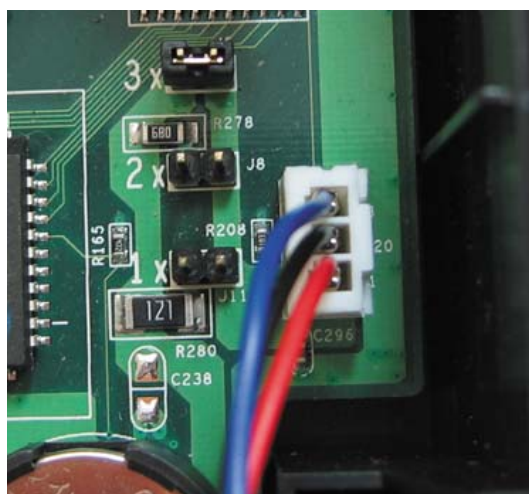
1.5.3 Connecting Devices

The back panel of the DVR unit, user can connect up to 4 video cameras, 4 sensor devices, 1 alarm device and output video to a TV or CRT/LCD monitor. Connecting the unit to a pen drive or external hard disk through USB interface for backup, then use the bundled software enables user to transfer, playback and segment the video. Follow the illustration below to make the connection:
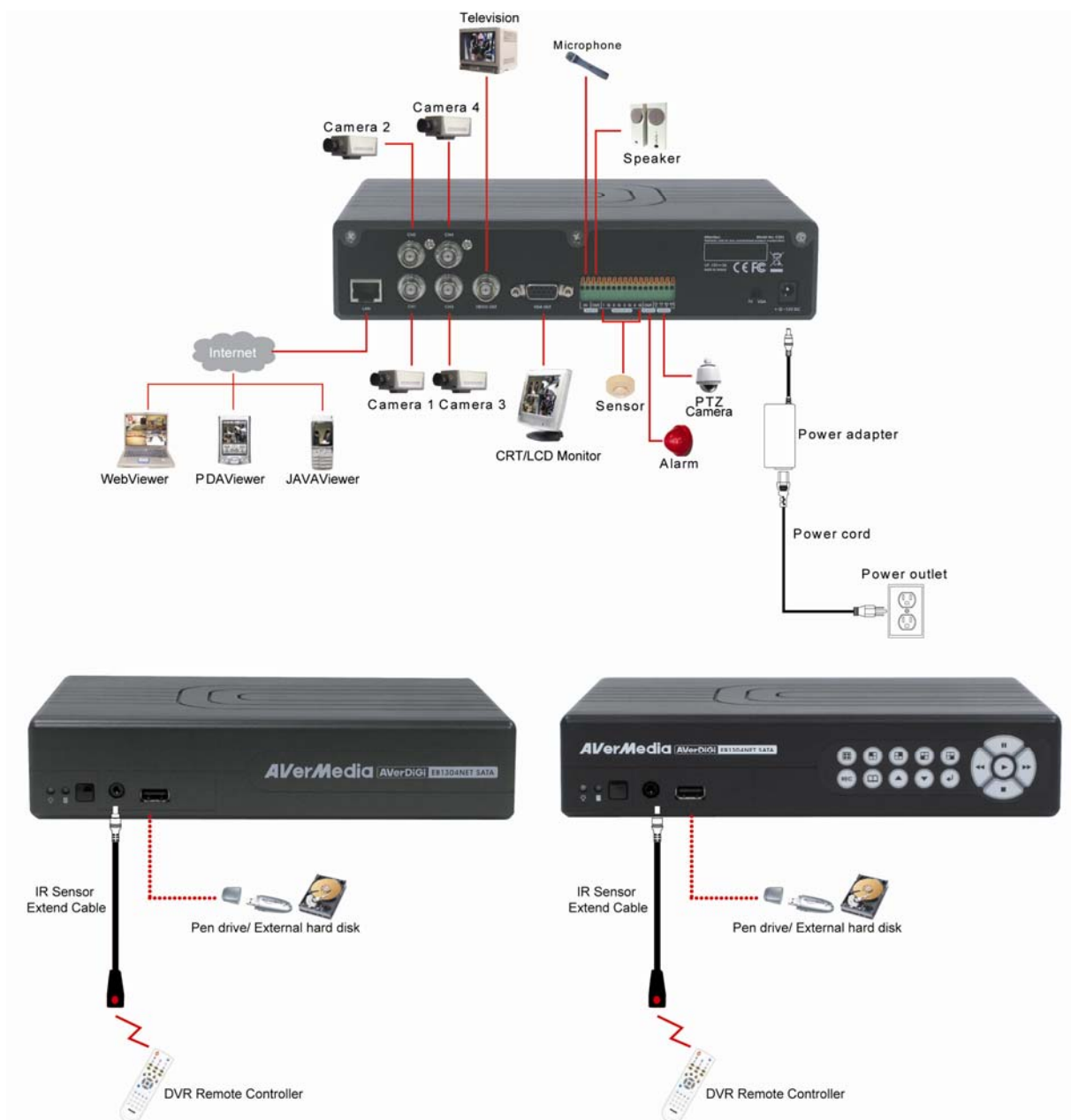
⚠️ Each time you change the video display output or video system(NTSC/PAL), the power must be turned **off** and **on** to reset the DVR unit.

1.5.4 Connecting the Sensor device/Relay device /PTZ Camera

The Sensor, Alarm, and RS485 port enable you to connect 4 sensor inputs, 1 relay outputs, and PTZ camera. Just connect the external sensor, relay, and PTZ camera pin directly to the pinhole. Check the table below and locate which pinhole is assigned to sensor input and relay output.
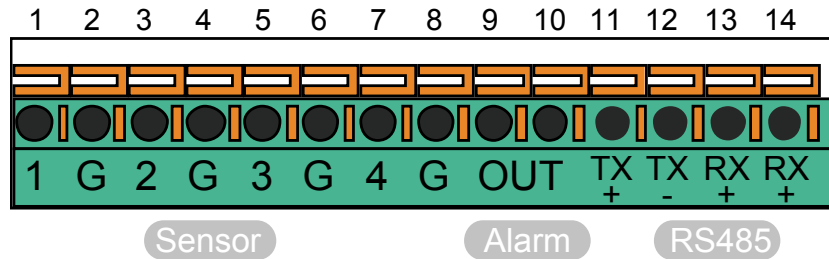
The signal from the sensor (i.e., infrared sensors, smoke detectors, proximity sensors, door sensors, etc.) is being transmitted to the unit and this triggers the system to respond and send signal to relay device (i.e., alarm, telephone etc).

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

Chapter 2   Operating the DVR unit

2.1   Familiarizing the Remote Control Buttons

Use the Remote control to operate the OSD menu on surveillance screen.
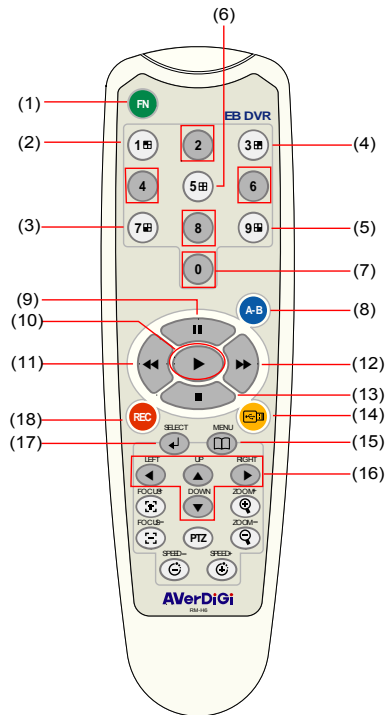
Button		Function
(1)	FN	A functional key for multiple DVR system remote control
(2)	1▦	Switch to Channel 1
		As a number key for entering password
(3)	3▦	Switch to Channel 2
		As a number key for entering password
(4)	7▦	Switch to Channel 3
		As a number key for entering password
(5)	9▦	Switch to Channel 4
		As a number key for entering password
(6)	5▦	Switch to CIF mode
		As a number key for entering password

Button		Function
(7)	2 4 6 8 0	As a number key for entering password
(8)	A-B	Set a playing recorded video from A point to B point segment and repeat playing on surveillance screen(See 2.1.1)
(9)	❚❚	Pause the playing
(10)	▶	To play the video
(11)	◀◀	Decrease the video playback at the speed of 2x, 4x 8x or 16x
(12)	▶▶	Fast play the video playback at the speed of 2x, 4x 8x or 16x
(13)	■	Stop playing / Stop recording
(14)	⬅▤	USB backup(see 2.1.2)

9

Button		Function
(15)	▶	To move the selection to the left and right
	◀	
	▲	To go up and down and select the items in the menu list or change the settings
	▼	
(16)	📖	To enter the OSD Main menu / Exit from the main menu or sub-menu display
(17)	↵	Make a selection
		Enter sub-menu
(18)	REC	Start video recording

ℹ️ The buttons which list below are not functional for the EB1304NET SATA

FOCUS +   FOCUS -   ZOOM-   ZOOM+   SPEED-   SPEED+
🔳   🔳   🔍   🔍   ⊙   ⊙   PTZ

2.1.1   Using AB Repeat Function

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

1. Press ▶ (play button) to call out the **SEARCH MODE** menu to find the recorded video that user wants to playback.

2. Select **TIME SEARCH** or **EVENT LIST**.
   - **TIME SEARCH** (search by date and time): select the date and time from where you want to begin the video playback.
   - **EVENT LIST** (search by condition): select from the list.

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 Repeat video file.

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

```
USB BAKCUP
YES(SELECT) / NO(MENU)
```
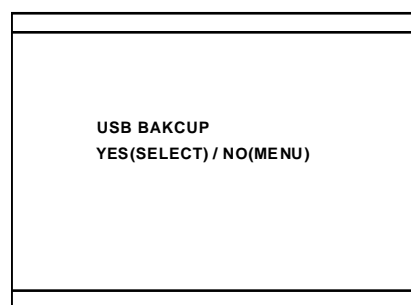
ⓘ - If the external hard disk is first time using, please format to FAT32 format.
    - The external hard disk needs to be powered by external power.
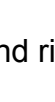
2.2 Using the DVR for the First Time

Upon connecting the power, the unit automatically detects the status of the hard disk. The hard disk must be formatted before user can use it with EB1304NET SATA. If you are prompt to format the hard disk, press ↵ (select) for **YES** to format the hard disk and [icon] (menu) for **NO** to remain unchanged.

```
HARD  DISKS  INFORMATION
VERSION     S3 . 01. 01. 00. 03
HDD  CHECKING . . .
MASTER  HDD
     SIZE     76GB    509MB
HDD FORMAT YES (SELECT) / NO (MENU)
```
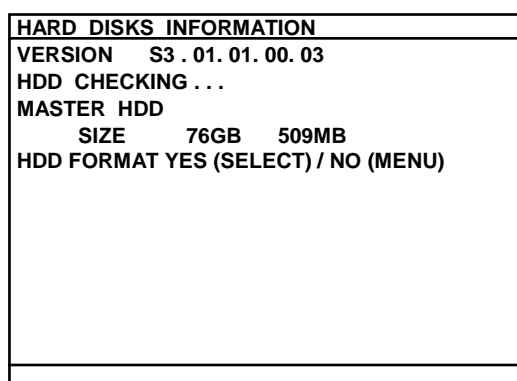
2.2.1 Set up the System Date and Time

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

1. Press [icon] to call up the OSD menu and then use ▲ and ▼ to go up and down and select **Submenu**. And then, press ↵ or ▶ to confirm the selection.

2. In Submenu, use ▲ and ▼ to go up and down and select the **Time Setup** and press ↵ again to make a selection. And then, use ▲ and ▼ to select the Date and press ↵ or ▶ to confirm the selection.

3. To adjust the date, use ◀ and ▶ or ◀◀ and ▶▶ buttons to move the selection to the left and right.

4. To adjust Time, follow the above step 2 and 3.

```
TIME SETUP
DATE                      2007 / 03 / 12
TIME                      15 : 45 : 57
AUTO SYNC TIME            OFF
TIME ZONE                 GMT
LAST SYNC TIME            2007 / 03 / 12
                          12 : 00 : 00
DAYLIGHT  SAVING
DELETE   RECORDED  FILES  OLDER  THAN
                              10 DAYS
```
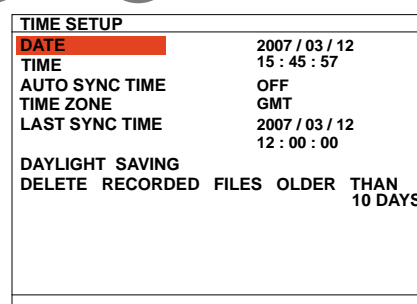
5. Press 📖 to go back to main menu after adjustment.

2.3 Surveillance Screen

To know if the channel is being recorded, the "●" record symbol would appear beside the channel number. The 🎤 (microphone) and 🔊 (speaker) indicate that the audio is available. The information below the screen shows the current date and time, recording mode (record schedule setting), and the percentage of the used hard disk space.
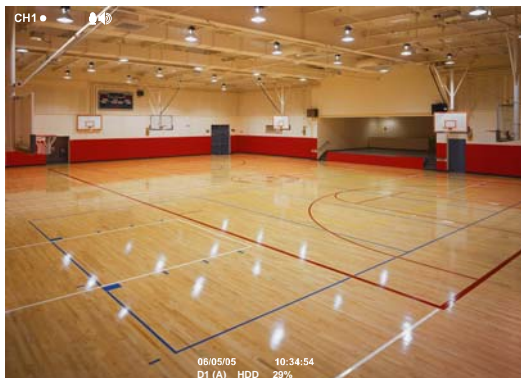
D1 mode Screen Preview
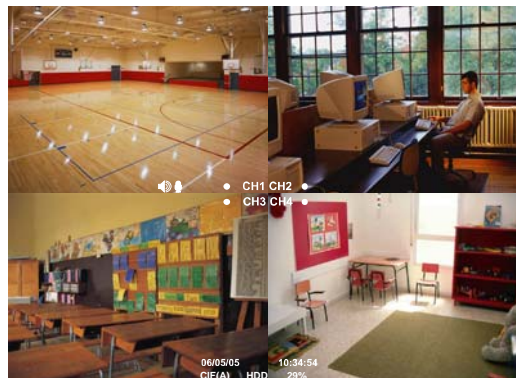
CIF mode Preview

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

1⊞	3⊞	7⊞	9⊞	5⊞
CH1: Camera1	CH2: Camera 2	CH3: Camera 3	CH4: Camera 4	QUAD: 4-Channel

2.4 Playback the Video

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

1. Press ▶

2. Use the ▲ and ▼ buttons to go up and down and select TIME SEARCH or EVENT LIST. Then, press ↵ or ▶ to make a selection.

```
SEARCH  METHOD
TIME  SEARCH
EVENT LIST
```

TIME SEARCH (search by date and time):

1. Use the ▲ and ▼ buttons and select **SEARCH TIME**. Then press ↵ or ▶ again to make the selection.

2. In the **SEARCH TIME**, user may now select the date and time from where you want to begin the video playback.

```
TIME  SEARCH
HARD  DISK  :  MASTER

START  TIME  :  2006 / 05 / 04    10 : 00 : 01
END  TIME    :  2006 / 05 / 05    13 : 08 : 13

SEARCH TIME :  2006 / 05 / 04    10 : 00 : 01
```

Use the ◀ and ▶ buttons to move the selection to the left and right. Use the ▲ and ▼ buttons to select the date and time. Then press ↵ or ▶ again to make the selection.

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

EVENT LIST (search by event):

1. Use the ▲ and ▼ buttons to select from the list. Press ↵ or ▶ again to make the selection. User ⏸ and ⏹ to go next page or back to previous page.

2. Listed below are the following recording conditions:

EVENT LIST			
HARD DISK :	MASTER		
S	2006 / 05 / 03	13 : 26 : 34	13 : 26 : 50
A	2006 / 05 / 03	13 : 00 : 01	13 : 16 : 46
A	2006 / 05 / 03	12 : 00 : 01	13 : 00 : 01
B	2006 / 05 / 03	11 : 48 : 37	12 : 00 : 00
A	2006 / 05 / 03	11 : 30 : 23	11 : 31 : 18
A	2006 / 05 / 03	11 : 29 : 47	11 : 30 : 13
S	2006 / 05 / 03	11 : 28 : 55	11 : 28 : 58
B	2006 / 05 / 03	11 : 28 : 33	11 : 28 : 55
A	2006 / 05 / 03	11 : 25 : 41	11 : 28 : 32
A	2006 / 05 / 03	11 : 23 : 26	11 : 23 : 30
▼			

A – Always Recording

It records non-stop and automatically continue recording when interrupted

S – Sensor Recording

It records when the sensor has triggered

M – Motion Recording

It records when any movement has detected

B – Button Recording

It records when the REC record button is pressed

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

Chapter 3   OSD Navigation Tree

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

```
MAIN MENU
CAMERA SELECT      ☑1  ☑2  ☑3  ☑4
RECORD SELECT      ☑1  ☑2  ☑3  ☑4
RECORD MODE        D1
VIDEO FORMAT       MPEG4
RECORD FRAMERATE   60
VIDEO QUALITY      GOOD
RECORD SCHEDULE
SUBMENU
HARD DRIVE SETUP
SENSOR SETUP
MOTION SETUP
NETWORK SETUP
USB BACKUP
LANGUAGE SETUP     ENGLISH
```

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

```
RECORD SCHEDULE
△
13:00-14:00    ALWAYS REC
14:00-15:00    ALWAYS REC
15:00-16:00    ALWAYS REC
16:00-17:00    ALWAYS REC
17:00-18:00    ALWAYS REC
18:00-19:00    ALWAYS REC
19:00-20:00    ALWAYS REC
20:00-21:00    ALWAYS REC
21:00-22:00    ALWAYS REC
22:00-23:00    ALWAYS REC
23:00-00:00    ALWAYS REC
```

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

```
SUBMENU
PASSWORD CHANGE
VIDEO ADJUSTMENT
TIME SETUP
AUTO RECORD        ON
AUTO SCAN
PASSWORD SETUP     NO
AUDIO RECORD       ON
AUDIO MUTE         OFF
VIDEO SYSTEM       NTSC
MULTIPLE REMOTE    OFF
REMOTE ID          1
PTZ SETUP
CHANNEL NAME SETTING
                   S3.01.01.00.03
```

```
PASSWORD SETUP
SUPERUSER
USER(NETWORK)
```

```
SET NW PASSWORD
CURRENT      ******
NEW          ******
CONFIRM      ******
```

```
HARD DRIVE SETUP
OVERWRITE ENABLED    NO
HD1 SIZE    37  GB    78MB
HD1 USED    16  GB    219MB  21%
HD1 FORMAT
```

```
VIDEO ADJUSTMENT
CAMERA                  1
BRIGHTNESS              050
CONTRAST               050
HUE                    000
SATURATION             024
RESET TO DEFAULT VALUE
```

```
SENSOR SETUP
SENSOR REC TIME    010 SEC
ALARM OUT TIME     010 SEC
CHANNEL-1          NOT INSTALLED
CHANNEL-2          NOT INSTALLED
CHANNEL-3          NOT INSTALLED
CHANNEL-4          NOT INSTALLED
VIDEO LOSS ALARM   ☑1  ☑2  ☑3  ☑4
```

```
AUTO SCAN
AUTO          OFF
CHANNEL-1     10 SEC
CHANNEL-2     10 SEC
CHANNEL-3     10 SEC
CHANNEL-4     10 SEC
```

```
MOTION SETUP
MOTION CAMERA       ☑1  ☑2  ☑3  ☑4
SENSITIVITY         HI
MOTION RECORD TIME  010 SEC
```

```
PTZ SETUP
CAMERA         1
PTZ CONTROL    OFF
PTZ ID         000
PROTOCOL       PELCO-D
BAUD RATE      2400
AUTO PAN       1-1
DWELL TIME     05 SEC
```

```
NETWORK SETUP
IP MODE         STATIC
NW ENABLE       ☑1  ☑2  ☑3  ☑4
VIDEO PORT      5001
UPGRADE PORT    5005
USER            1
SET NW PASSWORD
```

```
CHANNEL NAME SETTING
CHANNEL 1 NAME    CH01
CHANNEL 2 NAME    CH02
CHANNEL 3 NAME    CH03
CHANNEL 4 NAME    CH04
```

```
USB BACKUP
TIME SET
START :          2006/09/23  17:00:02
END   :          2006/09/26  18:00:00
BACKUP CHANNEL   ☑1  ☑2  ☑3  ☑4
BACKUP SIZE      73G 89MB
BACKUP EXECUTE
```

3.1   Menu Function

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

OSD MENU	Description
<pre>MAIN MENU
CAMERA SELECT   ☑1 ☑2 ☑3 ☑ 4
RECORD SELECT   ☑1 ☑2 ☑3 ☑ 4
RECORD MODE   D1
VIDEO FORMAT   MPEG4
RECORD FRAMERATE   60
VIDEO QUALITY   GOOD
RECORD SCHEDULE
SUBMENU
HARD DRIVE SETUP
SENSOR SETUP
MOTION SETUP
NETWORK SETUP
USB BACKUP
LANGUAGE SETUP ENGLISH</pre>	**CAMERA SELECT** Enable/disable the channel number to display the video on the surveillance screen **RECORD SELECT** Enable/disable the channel number to record video ⓘ The channels which could be recorded should be enabled in the **CAMERA SELECT** first.

RECORD MODE

Select D1/CIF recording mode

Under D1 mode, the video recording is in full screen resolution and takes turns from one channel to the next one when Auto Scan enables. Each channel is recorded only at a maximum frame rate of 15fps. User can switch to view the video in single full screen or QUAD screen

Whereas in CIF mode, video recording is at a lower resolution, but each video is recorded in 30fps/25fps (NTSC/PAL). User can switch to view the video in single full screen or QUAD screen

VIDEO FORMAT

The recorded video is in MPEG4 format

RECORD FRAME RATE

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

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

VIDEO QUALITY

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

BEST – best record quality but less record hours

LOW – longest record hour but quality is ordinary

NORMAL – allows you to record more hours but the quality of the recorded video is moderate.

LANGUAGE SETUP

Select from the available languages

OSD MENU	Description

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

RECORD SCHEDULE

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

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

```
SUBMENU
PASSWORD CHANGE
VIDEO ADJUSTMENT
TIME SETUP
AUTO RECORD         ON
AUTO SCAN
PASSWORD SETUP      NO
AUDIO RECORD        ON
AUDIO MUTE          OFF
VIDEO SYSTEM        NTSC
MUTIPLE REMOTE      OFF
REMOTE ID           1
PTZ SETUP
CHANNEL NAME SETTING
                    S3. 01. 01. 00. 03
```

PASSWORD CHANGE

Set a security combination number. There are two type of user password – SUPERUSER and USER.

```
PASSWORD SETUP
SUPERUSER
 USER(NETWORK)
```

Use the number button on the remote control to enter the password. Or use (▲) and (▼) button to the select the security combination number. Press (↵) or (▶) button to confirm.

SUPERUSER

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

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

OSD MENU	Description

```
SUBMENU
PASSWORD CHANGE
VIDEO ADJUSTMENT
TIME SETUP
AUTO RECORD        ON
AUTO SCAN
PASSWORD SETUP     NO
AUDIO RECORD       ON
AUDIO MUTE         OFF
VIDEO SYSTEM       NTSC
MUTIPLE REMOTE     OFF
REMOTE ID          1
PTZ SETUP
CHANNEL NAME SETTING
                   S3. 01. 01. 00. 03
```

USER(NETWORK)

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

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

VIDEO   ADJUSTMENT

Select the camera number and set to adjust the video brightness, contrast, hue, and saturation value

```
VIDEO  ADJUSTMENT
CAMERA                  1
BRIGHTNESS              083
CONTRAST               142
HUE                    130
SATURATION             130
RESET  TO  DEFAULT  VALUE   NO
```

```
TIME SETUP
DATE                   2007 / 03 / 12
TIME                   15 : 45 : 57
AUTO SYNC TIME         OFF
TIME ZONE              GMT
LAST SYNC TIME         2007 / 03 / 12
                       12 : 00 : 00

DAYLIGHT  SAVING
DELETE  RECORDED  FILES  OLDER  THAN
                              10 DAYS
```

TIME   SETUP

Setup system date, time, daylight saving, and enable auto synchronize time through network.

DATE

Set the current date

TIME

Set the current time

AUTO   SYNC TIME

Enable/disable time synchronization automatically through network. The DVR system will auto synchronize time from NTP servers. The first time synchronize will be 6 hours later after system power up. When the daylight saving is enabling, the auto time synchronization will be stopped.

> ℹ️ - User need to setup the NTP server's URL or IP address. Please go to 8.1.1.1 System Setting #(3) NTP Setting to setup the NTP server.
> - If the NTP server doesn't setup, the auto synchronize time function will not work correctly.

TIME   ZONE

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

LAST   SYNC   TIME

Display the latest time synchronization date and time.

TIME SETUP

DATE	2007 / 03 / 12
TIME	15 : 45 : 57
AUTO SYNC TIME	OFF
TIME ZONE	GMT
LAST SYNC TIME	2007 / 03 / 12
	12 : 00 : 00
DAYLIGHT SAVING	
DELETE RECORDED FILES OLDER THAN	
	10 DAYS

DELETE RECORDED FILES OLDER THAN 0 DAYS

Set a period of time to delete recorded files that save on hard disk.

DAYLIGHT SAVING

DAYLIGHT SAVING	OFF
START	2008 / 01 /01
	00 : 00
END	2008 / 06 /30
	00 : 00
TIME OFFSET	00 : 00

DAYLIGHT SAVING

To enable/disable daylight saving function.

START

Setup daylight start up date and time.

END

Setup daylight stop date and time.

TIME OFFSET

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

SUBMENU

PASSWORD CHANGE	
VIDEO ADJUSTMENT	
TIME SETUP	
AUTO RECORD	ON
AUTO SCAN	
PASSWORD SETUP	NO
AUDIO RECORD	ON
AUDIO MUTE	OFF
VIDEO SYSTEM	NTSC
MUTIPLE REMOTE	OFF
REMOTE ID	1
PTZ SETUP	
CHANNEL NAME SETTING	
	S3. 01. 01. 00. 03

AUTO RECORD

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

AUTO SCAN

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

AUTO SCAN

AUTO SCAN	OFF
CHANNEL - 1	10 SEC
CHANNEL - 2	10 SEC
CHANNEL - 3	10 SEC
CHANNEL - 4	10 SEC

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

AUDIO RECORD

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

OSD MENU	Description

```
SUBMENU
PASSWORD CHANGE
VIDEO ADJUSTMENT
TIME SETUP
AUTO RECORD        ON
AUTO SCAN
PASSWORD SETUP     NO
AUDIO RECORD       ON
AUDIO MUTE         OFF
VIDEO SYSTEM       NTSC
MUTIPLE REMOTE     OFF
REMOTE ID          1
PTZ SETUP
CHANNEL NAME SETTING
                   S3. 01. 01. 00. 03
```

AUDIO MUTE

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

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

VIDEO SYSTEM

DVR system will auto detect the video system and display

MUTLIPLE REMOTE

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

REMOTE ID

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

```
PTZ SETUP
CAMERA          1
PTZ CONTROL     OFF
PTZ ID          000
PROTOCOL        PELCO-D
BAUD RATE       2400
AUTO PAN        1-1
DWELL TIME      05 SEC
```

PTZ SETUP

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

1. Press 📖 and select **SUBMENU → PTZ SETUP**.

2. Use the ▲ and ▼ to go up and down to select the item and change the parameter value.

3. Use ▶ or ⏩ button to enter the configure mode.

    Press ↵ or ▶ button to confirm the selection.

CAMERA

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.

PTZ CONTROL

To enable/disable PTZ camera can be controlled by remote control at local site.

PTZ ID

Assign an ID to PTZ camera. The ID range is from 001 to 255 but is limiting by protocol of PTZ camera. Please refer to your PTZ camera user's manual for more detail of PTZ ID assignment.

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

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```
PTZ_SETUP
CAMERA              1
PTZ CONTROL         OFF
PTZ ID              000
PROTOCOL            PELCO-D
BAUD RATE           2400
AUTO PAN            1-1
DWELL TIME          05  SEC
```

PROTOCOL

Select the protocol of PTZ camera. The protocol will be differenced that depends on the brand of PTZ camera. The DVR system currently supports 2 protocols — PELCO-D and PELCO-P. Please refer to your PTZ camera user manual to make sure which protocol is using for.

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: 1-3 means the PTZ camera will auto move from preset position 1, 2 and 3.

DWELL TIME

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

```
CHANNEL  NAME  SETTING
CHANNEL 1 NAME       CH01
CHANNEL 2 NAME       CH02
CHANNEL 3 NAME       CH03
CHANNEL 4 NAME       CH04
```

CHANNEL   NAME   SETTING

User can define name of each channel. Channel name can be 7 digit long that include A~Z, 0~9, space, and dash (-).

OSD MENU	Description

```
HARD   DRIVE   SETUP
OVERWRITE   ENABLED        YES
HDD   SIZE                1560,12MB
HDD   USED                   250MB    1%
HDD   FORMAT
```

* HDD SIZE shows the total capacity of the hard disk.

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

OVERWRITE   ENABLED

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

HDD   FORMAT

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

To format hard disk:

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

2. In the **CHECK PASSWORD** screen, press ↵ or ▶. Then use the ▲ and ▼ buttons to select the security combination number. Repeat till you key in the last number. Also, user can use the number button on the remote control to enter the password. Press ↵ or ▶ button again to make the selection. To move the selection to the left and right, use ▲ and ▼ buttons

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

3. After entering the last number, the system will format the hard disk

4. It is done when the "**HDD FORMAT COMPLETED**" appears

```
HARD   DRIVE   SETUP
OVERWRITE   ENABLED        YES
HDD   SIZE                156,012MB
HDD   USED                   0MB    0%
HDD   FORMAT



HDD   FORMAT   COMPLETED
```

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

```
SENSOR   SETUP
SENSOR  REC  TIME      010  SEC
ALARM  OUT   TIME      010  SEC
CHANNEL - 1            NOT  INSTALLED
CHANNEL - 2            NOT  INSTALLED
CHANNEL - 3            NOT  INSTALLED
CHANNEL - 4            NOT  INSTALLED
VIDEO LOSS ALARM       ☑1  ☑2  ☑3  ☑4
```

SENSOR   REC   TIME

Set the amount of time (in second) to start record when the sensor has triggered

ALARM   OUT   TIME

Set the amount of time (in second) to continue sending the alarm once triggered

CHANNEL 1~4

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

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

VIDEO   LOSS   ALARM

Select the channel when the video loss that the DVR system will send out a alarm

```
MOTION   SETUP
MOTION  CAMERA        ☑1   ☑2   ☑3   ☑4
SENSITIVITIY          MEDIUM
MOTION  RECORD  TIME  010  SEC
```

MOTION   CAMERA

Enable/disable the channel number to detect motion.

SENSITIVITY

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

MOTION   RECORD   TIME

Set the amount of time (in second) to record when motion is detected.

```
NETWORK SETUP
IP MODE               STATIC
NW ENABLE             ☑1   ☑2   ☑3   ☑4
VIDEO PORT            0080
UPGARDE PORT          5005
```

NETWORK SETUP

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

IP MODE

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

Use ▲ and ▼ buttons to go up and down and select **IP MODE**, and then press ↵. Use ▲ and ▼ buttons to change the selections and press ↵ or ▶ to make a selection.

■ **STATIC:** Assigns a constant IP address for the DVR system. Use ▲ and ▼ buttons to go up and down and select items, and then press ↵ or ▶ to make selection. Use ◄ and ▶ to move left and right to select or enter the configuration value.

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

OSD MENU	Description

NETWORK SETUP

IP MODE	DHCP
NW ENABLE	☑1　☑2　☑3　☑ 4
VIDEO PORT	0080
UPGARDE PORT	5005

- **SUBNET:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to DVR system.
- **GATEWAY:** A network device act as a passageway to internet. Enter the network gateway IP address
- **DNS:** Domain Name Server translates domain names (such as www.abb.com.tw) to IP addresses. Enter the IP address of DNS if it is available.
- **MAC ADDRESS:** Only for user information. Don't need to enter the MAC address.
- When all parameters are set, select the **CHANGE** to confirm the configuration.

NETWORK INFORMATION

IP ADDRESS	192.168.153.100
SUB NET	255.255.255.255
GATEWAY	192.168.153.254
DNS	192.168.153.1
MAC ADDRESS	00.00.00.00.00.00
CHANGE	

■ **DHCP:** Assign the IP address by local DHCP server to DVR system. Use ▲ and ▼ buttons to go up and down and select **DHCP**, and then press ↵ or ▶ to make selection.

ⓘ 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

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

GET IP NOW! WAITING…

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

NETWORK INFORMATION

IP ADDRESS	192.168.153.100
SUB NET	255.255.255.255
GATEWAY	192.168.153.254
DNS	192.168.153.1
MAC ADDRESS	00.00.00.00.00.00

OSD MENU	Description

NETWORK SETUP
IP MODE	PPPOE
NW ENABLE	☑1 ☑2 ☑3 ☑4
VIDEO PORT	0080
UPGARDE PORT	5005

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

GET IP NOW! WAITING...
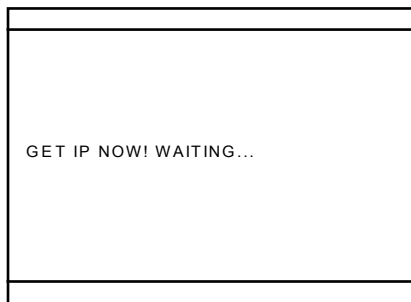
When DVR system get an IP address, the information will display as below:

NETWORK INFORMATION
IP ADDRESS	192.168.153.100
SUB NET	255.255.255.255
GATEWAY	192.168.153.254
DNS	192.168.153.1
MAC ADDRESS	00.00.00.00.00.00
CHANGE	

NW ENABLE

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

ⓘ ☐ 1 is Channel 1   ☐ 2 is Channel 2
    ☐ 3 is Channel 3   ☐ 4 is Channel 4

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

VIDEO PORT

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

Use (▲) and (▼) buttons to go up and down and select **VIDEO PORT**, and then press (↵) or (◀) and (▶) to move to the selection. Use (▲) and (▼) buttons to change the selections values and press (↵) or (▶) to confirm.

NETWORK SETUP	
IP MODE	STATIC
NW ENABLE	☑1 ☑2 ☑3 ☑ 4
VIDEO PORT	0080
UPGARDE PORT	5005

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. <u>For Upgrading DVR firmware, please contact your local dealer.</u>

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

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

USB BAKCUP		
TIME SET		
START	:	2006 / 05 / 04 10 : 00 : 01
END	:	2006 / 05 / 05 13 : 08 : 13
BACKUP CHANNEL	☑1 ☑2	☑3 ☑ 4
BACKUP SIZE		89MB
BACKUP EXECUTE		

USB BACKUP

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

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

ⓘ
- Remember to plug in the USB device before starting to backup.
- If the external hard disk is first time using, please format to FAT32 format.
- The DVR system supports external hard disk capacity up to 32GB.
- The external hard disk needs to be power by external power.

1. Select the **START TIME** and **END TIME**.
2. Select the channels which user wants to backup.
3. The DVR system will display the system hard disk space and backup file size.
4. And then, select **BACKUP EXECUTE** to start backup video to the USB device.
5. When backup is done, press any key to back to main menu.

USB BACKUP !
USAGE OF USB WIL L STOP NETWORK FUNCTIONS!
YES(SELECT) / NO(MENU)

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

Chapter 4   Using the USB Playback Console

4.1   Recommended system requirements

☐ Pentium®4 2.4GHZ or above

☐ Windows®2000/ XP

☐ DDR 256 MB

☐ Graphic function must support DirectDraw

☐ Audio card or built-in

☐ Speaker

☐ 1 available USB2.0 port

4.2   Installing the USB Playback Console

To install the USB Playback Console:

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

2. Select the language you prefer

3. Click **OK** to install the application

4. Click **Exit** to close the installation main screen. You may plug in the pen drive or external hard disk now.
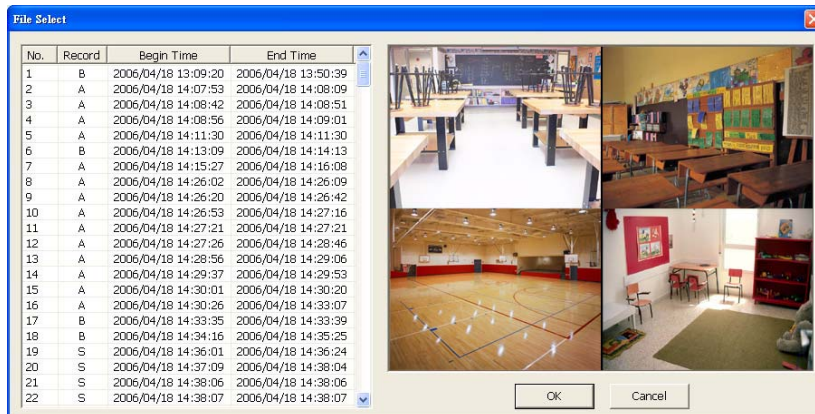
4.3 Running the USB Playback Console

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

Name	Function
(1) Exit	Exit/ Minimize the application or chose Cancel to go back to the application. **About:** shows DVR application version information.
(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 different screen view to playback the recorded video file of the entire camera or one camera on screen.
(4) Playback Controller	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame by frame. **Slower:** Play the recorded video file at the speed of 2x, 4x, or 8x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 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
(5) Open File	To select the video file for playing. The playback application supports *.dvr and *.avf file type. - **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 in *.avf file format. The recorded video backup to pen drive is in *.avf (see also 4.3.4)
(6) Status bar	Display the recorded date, time and play speed.
(7) 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.
(8) Language	To switch DVR application UI language.
(9) Adv. Function	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)
(10) Export	Export includes Snapshot, Print, Output Video Clip, and Backup 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 *.mpg or *.avi format
(11) Segment	Keep a portion of the recorded video (see also Chapter 4.3.1)
(12) 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.
(13) Event List	Select the event you want to playback. The event list only available when user select to playback in **DVR Recorded File(HD)**.
(14) Sound /Sound bar	Turn on and off the sound Increase and decrease the volume

Name	Function
(15) Watermark	To call out Image Verification application. (see also Chapter 7)

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**.
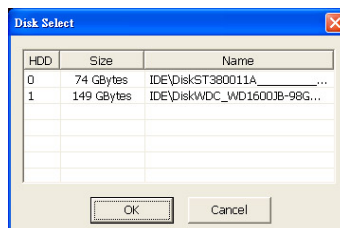
5. And then, the **Event List** window appears. Select the event that user wants to play and click **OK**.
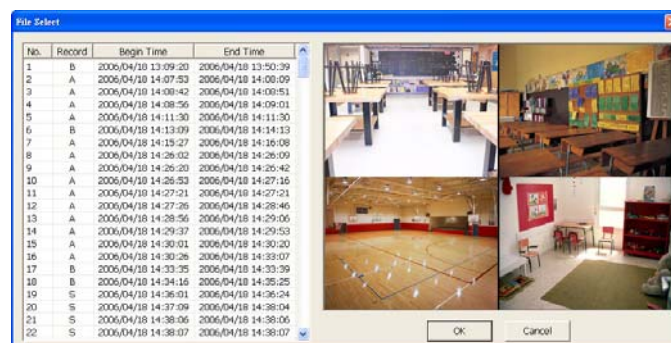
4.3.3 Playback Backup File(*.dvr)

1. Click Open File button.

2. Select **Backup File(*.dvr)** and click **OK**.

3. Locate the backup file folder and click **OK**.

> **i** 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**.
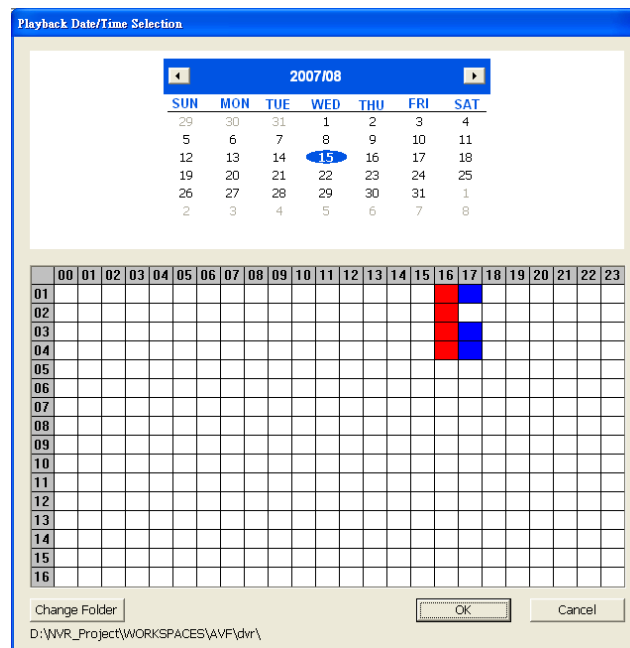
4.3.4 Playback Backup File (*.avf)

To playback backup file in *.avf format, user can use the AVFPlayback application that included in backup folder when backup into USB storage device. Also, user can use USB Playback Console to playback backup file (see also Chapter 4.3).

1. Plug the USB storage device into PC USB port.
2. Run **AVFPlayback** from USB storage device
3. Click **Open** in AVFPlayback UI
4. Click **Select Folder** to locate the backup files
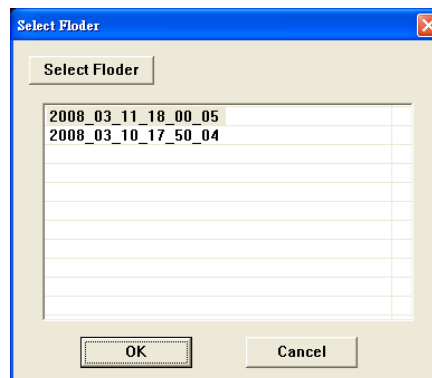
5. And then, select the backup file and click **OK**
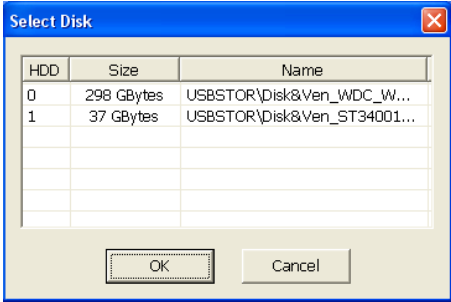
Chapter 5   Backup Recorded Video File

HDD Backup application provides user a interface to view recorded video from hard disk.

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(see also Chapter 2.4) **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.

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Name	Function
(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
(9) Source Disk	To select the hard disk drive
(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
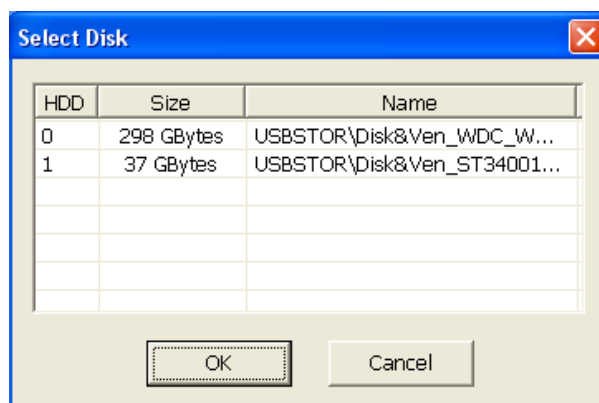
10. Click **Start** to process backup
11. To stop the backup progress, click **Stop**
12. To play the backup file, see 4.3.3.

Chapter 6   ImageVerification

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

6.1   To Run the ImageVerification

1. To run the ImageVerification application, click the **Watermark** button on USB Playback 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.
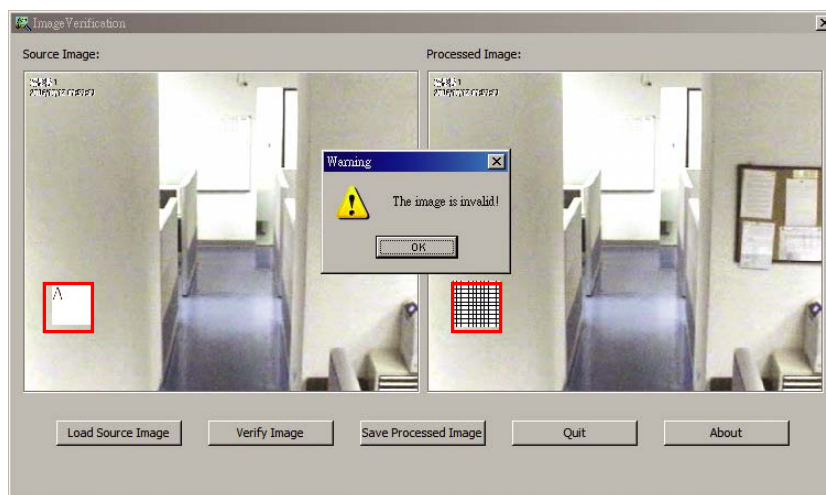
Chapter 7   iEnhance

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

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

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

Name	Function
(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 7.1)
(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.

7.1 To Use iStable

The iStable function can reduce the jolt in the recorded video.
1. Click **Open File** button and select the recorded video.
2. And then, click **iStable** button.
3. iStable windows will show up.
4. Select the **smoothness** level – 1(Low), 2, 3, 4, and 5(High). The default value is 3.
5. Click Play button, and then iStable function will start to initial the recorded video.
6. When the initialize is done, user will see the original and stabilized recorded video play in two windows.
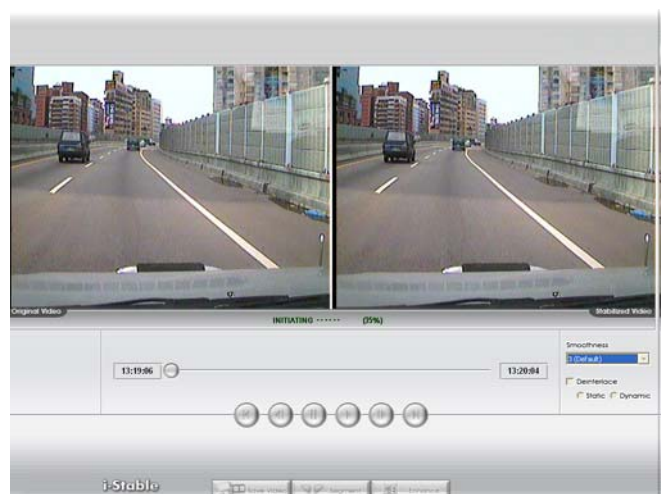
Chapter 8   Using the Remote Programs

User can use Microsoft Internet Explorer to access DVR system by entering the IP address. To use this feature, make sure that you PC and EB 1304 NET both are connected to the internet and the Network feature is enabled.

Accessing this feature for the first time you will be prompted by your browser to install WebCamX.cab, allow the installation and you should be able to connect and login afterwards. For Windows 2000, click **Yes** when the Security Warning dialog box appears.
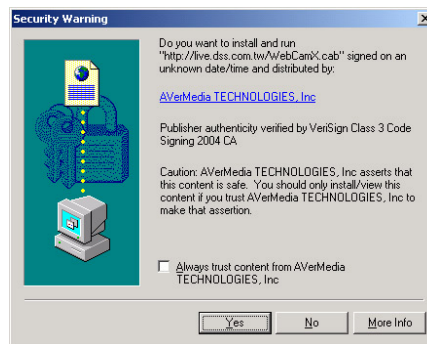
For Windows XP, click Install when the Internet Explorer - Security Warning dialog box appears.
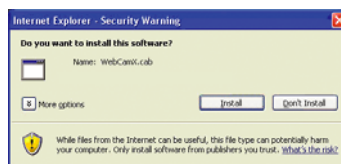
After installing the WebCamX.cab and when connecting to the DVR system, you are required to enter User ID (Superuser or User) and password (default password is 111111) and select the type of network. Superuser has the authority to remote setup the DVR system configuration on Web Viewer.

i   - If user can not connect to DVR server, it might be the IP address of DVR server is conflict with IP address of any PC at network. Please contact the manager of DVR server to reconfigure IP address of DVR server. Please reconnect with DVR server again when the IP address conflict is solved

- Changing the Superuser and User default password is strongly recommended.
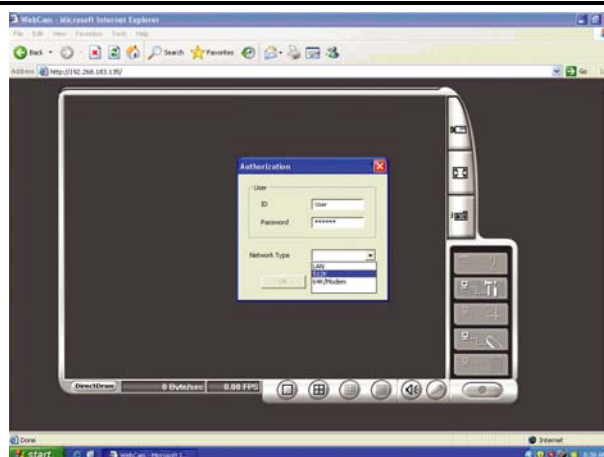
8.1 Familiarizing the Web Viewer Buttons

Right-clicking on the Web Viewer video screen, enables you to start video recording, change video quality, switch camera and enable/disable DirectDraw.
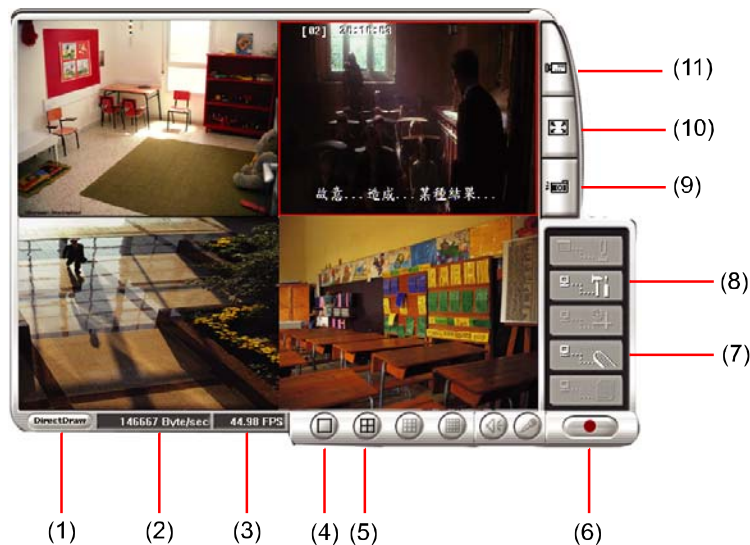
Name	Function
(1) DirectDraw	Enhance the video quality.
ℹ	Not all graphic cards can support this function. If you can not see the screen display correctly or screen is messed, please check with VGA card vendor.
(2) Received file size	Indicate the size of the data being sent per second.
(3) Camera frames	Indicate the number of frames per second.
(4) One screen view	To view single camera view on screen. User can right click on the screen to switch to different camera view.
(5) Split screen view	To view 4 camera on screen simultaneously.
(6) Record	Start to record the video of the selected camera in AVI format. Directly click screen to select the channel that user wants to record and press **Record** button.
(7) Remote Console	Initiate Remote Console. It allows you to control DVR server (see also Chapter 8.2).
(8) Remote setup	Change the DVR server settings (see also Chapter 8.1.1).
ℹ	Only Superuser has the authority to remote setup DVR system.
(9) Snapshot	Capture and save the screen shot in *.bmp format.
(10) 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.

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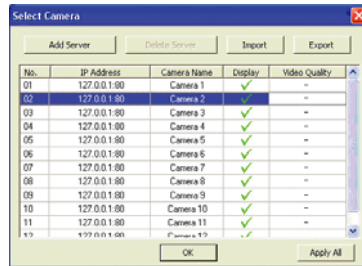
8.1.1 To Setup Remote System Setting

Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting. The setting here applies to Remote DVR 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 Camera Setup
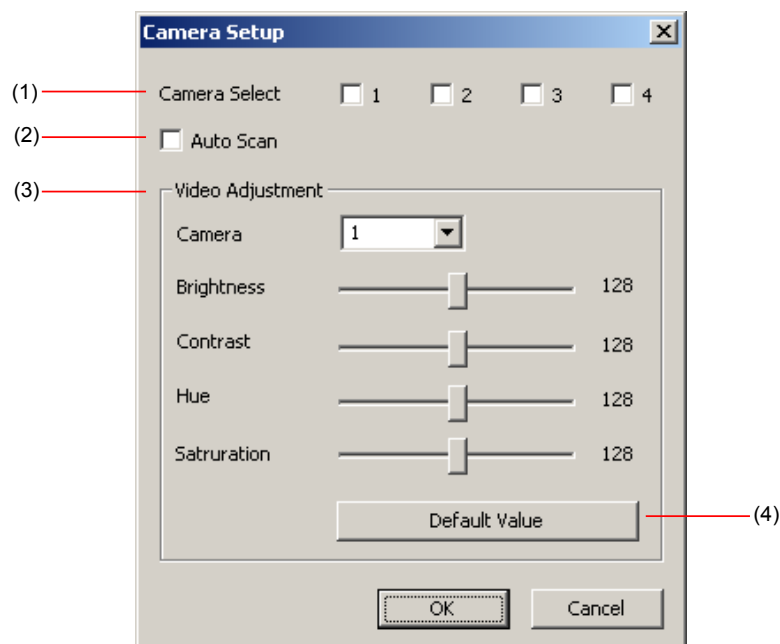
(1) Camera Select:

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

(2) Auto Scan

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

(3) Video Adjustment

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

(4) Default Value

Set the video value back to default

8.1.1.2 Record Setup
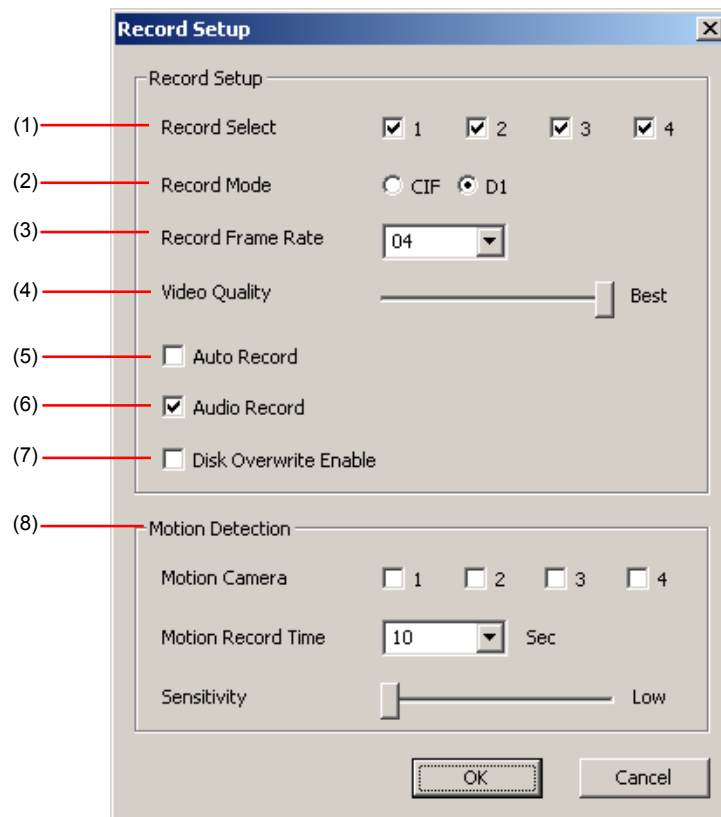
(1) Record Select

Enable/disable the channel number to record video

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

(2) Record Mode

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

(3) Record Frame Rate

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

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

(4) Video Quality

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

(5) Auto Record

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

(6) Audio Record

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

(7) Disk Overwrite Enable

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

(8) Motion Detection

- **Motion Camera**

Enable/disable the channel number to detect motion.

- **Motion Record Time**

Set the amount of time (in second) to record when a motion has detected.

- **Sensitivity**

Set the sensitivity level. The sensitivity is from high, 9~ 2 and low.

8.1.1.3 Alarm/Sensor Setup

(3)

(1) Alarm Setup

- **Mail Alarm Enable**

  Enable/disable alarm sending mail when alarm has triggered or motion has detected.

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

- **Alarm Out Time**

  Set the amount of time (in second) to continue sending the alarm once activated

(2) Sensor Setup

- **Sensor Status**

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

  Not installed: Indicates that there is no sensor connected

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

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

- **Sensor Record Time**

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

(3) E-Mail Setup

- **SMTP**

  Enter the SMTP server

- **User ID & Password**

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

- **From**

  Enter the sender e-mail address

- **To**

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

Enter the message title
- **Message**

Type the message

8.1.1.4 Network Setup
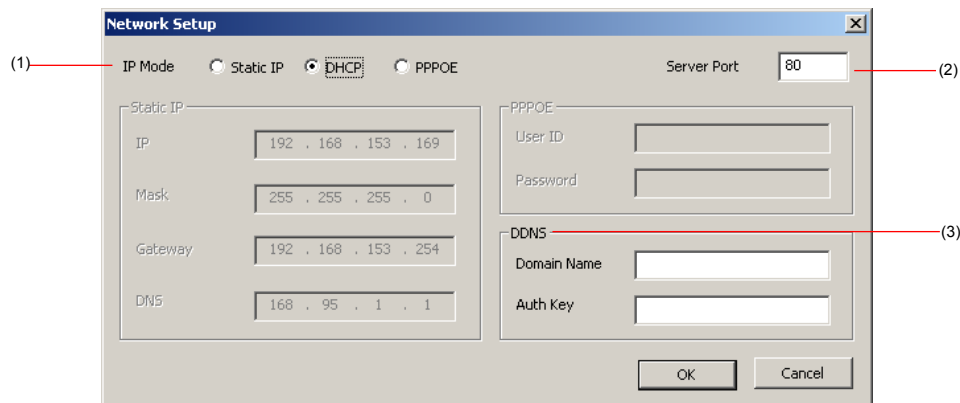
(1) IP Mode
- **Static IP**

Assign a fixed and global IP address for the DVR system

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

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

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

Gateway: Enter the network gateway IP address

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

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

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

- **PPPOE**

Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services.

(2) Server Port

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

(3) DDNS

DDNS (Dynamic Domain Name Service) is a data query service mainly used on the Internet for translating domain names into Internet addresses. Users can register their own domain name on **http://ddns.avers.com.tw**. (See Appendix A)

- **Domain Name**

Enter the domain name that user has registered.

- **Auth Key**

A password use to access DDNS that user has setup when register the domain name.

> - To register a domain name, please refer to Appendix A.
> - Please restart DVR system in order to active DDNS service.

8.1.1.5 Password Change

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

(1) Superuser

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

- **Password**

  Enter the new password

- **Password** Confirm

  Re-enter password to confirm

(2) User

Change the remote accessing password of user

- **Password**

  Enter the new password

- **Password** Confirm

  Re-enter password to confirm

8.2   Familiarizing the Remote Console Buttons

Name	Function
(1) Exit	Close the Remote Console.
(2) Audio button	Enable/disable the sound.
(3) Split Screen Mode	Select from six (6) different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.

ⓘ   - If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To change the video quality, right-click on the screen and select between High, Normal or Low.

Name	Function
(4) Record	Start/stop video recording.
(5) Network	Enable/disable remote system access. This feature allows you to access EB DVR server from a remote location via internet connection.
(6) Setup	Configure the Remote Console setting. (see also Chapter 8.2.1)
(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 Chapter 8.3)
(9) Status Bar	Display the current date, time and hard disk free space.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(12) Full screen	Use the entire area of the screen to only display the video. To return, Right click the mouse or press ESC on the keyboard.
(13) DirectDraw	Enable/disable DirectDraw function

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

To Setup Remote Console Setting

Click **Setup** button to call out the **System Setting** windows. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.
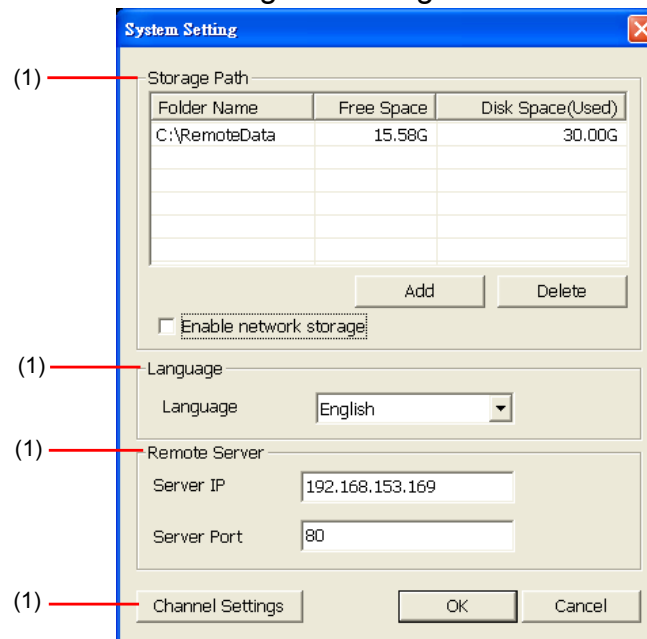
(1) Storage Path

Set the directory on where to save the data. When there is not enough free space to record one hour data, the system automatically replaces the oldest data. In case you have more than one storage path, the system automatically saves the data to the next storage path. By default the data is stored in C:\RemoteData, to insert another storage path, click **Add**. To remove the selected path, click **Delete**.

- **Enable** network storage

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

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

(2) Language

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

(3) Remote Server

Enter the DVR Server IP and Server Port number.

(4) Channel Settings

The numbers from 1 to 4 represent the camera ID. In Transmitting Channels section, enable the camera number to receive the camera signal from the server. In Visible
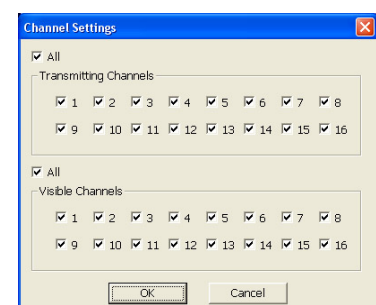
Channels section, enable the camera number to view the camera signal on Remote Console screen. To select all the cameras, enable the **ALL** check box.

8.3 Using the Remote Playback

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

Click **OK** to proceed and **Cancel** to void this operation.
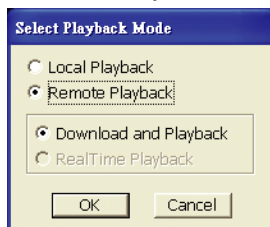
In the Video Playback Date/Time Selection, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera number.
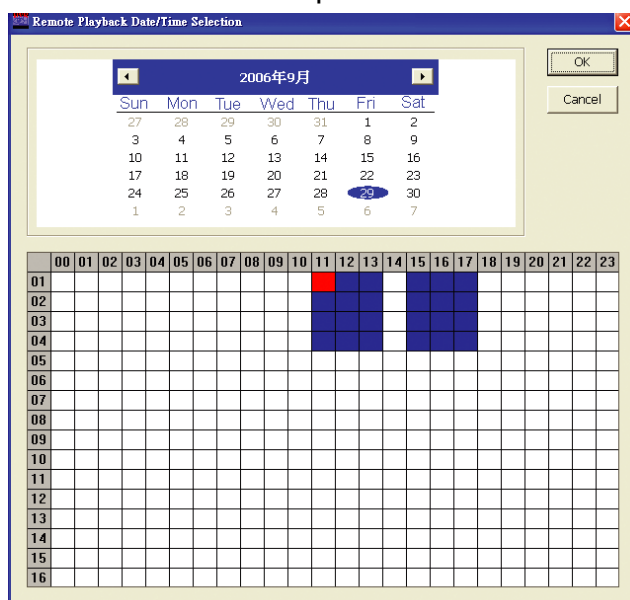
To Make a Selection:

1. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
2. In the table below, click on the blue block to select and open the recorded file. The blue block turns red when it is selected. The block that appears in white doesn't have data.

You can only select one block when you choose Download and Playback.

3. Click **OK** to proceed and **Cancel** to void this operation.

4. If you select Download Playback and after making the selection, the system divides the selected hour into 16 video thumbnails. In the Time Selection screen, click on the video thumbnail you want to download (see also [Chapter 8.3.2](#)).
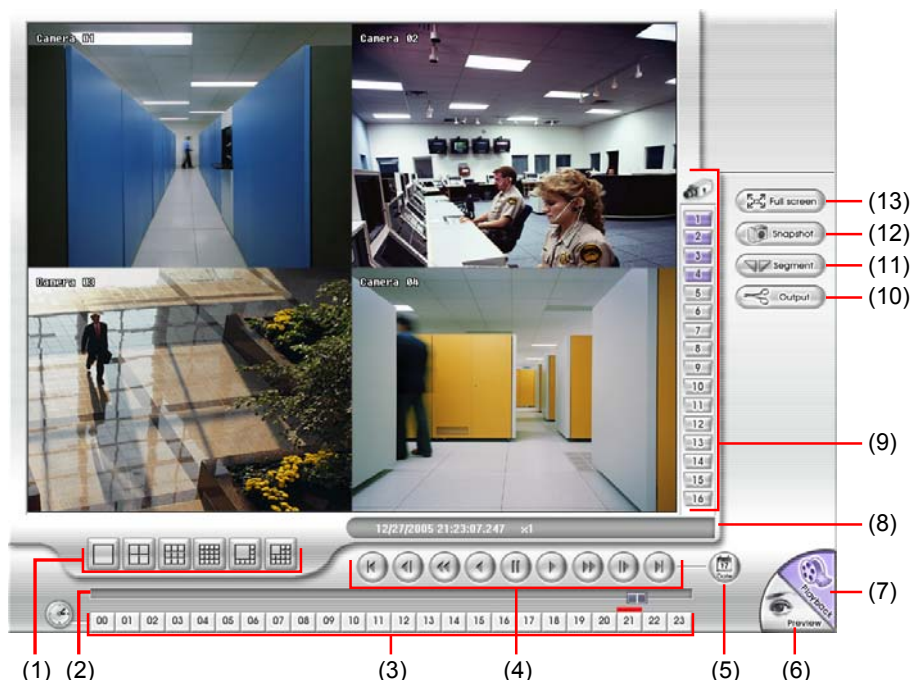
8.3.1 Familiarizing the Local Playback Buttons

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

ℹ️ - If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 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
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

ℹ️ 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.

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Name	Function
(4) 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 ½x, ¼x, or ⅛x. **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, or 8x. **Next:** Go to the next frame. **End:** Go to the end of the video file.
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.

> The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. While the red colored column indicates on where to start playing the recorded video file. If there is no any video data, it will be no color bar on top of the date button.

Name	Function
(6) Preview	Switch to Preview/Playback mode.
(7) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(8) Status bar	Display the record date, time, HDD capacity in preview mode and play speed in playback mode.
(9) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(10) Output	Save the segmented file in *.mpg, *.avi, or *.dvr format (see also Chapter 8.3.1.1).
(11) Segment	Keep a portion of the recorded video you want (see also Chapter 8.3.1.1).
(12) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(13) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard.

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

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

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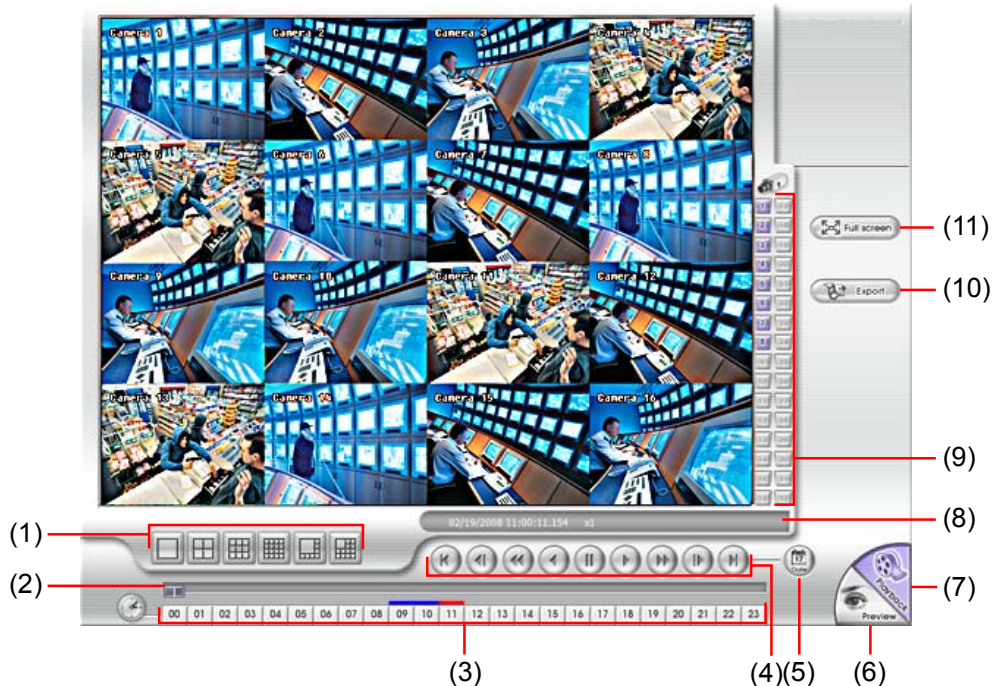

3. Click Output button to save the wanted clip.

4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.
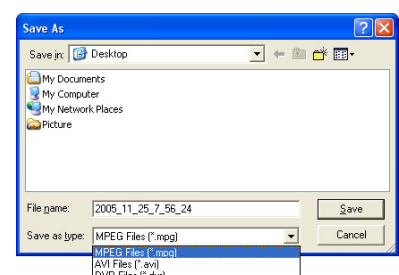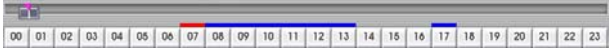
8.3.2 Familiarizing the Download and Playback Buttons

Name	Function
(1) Split Screen Mode	Select from six (6) different split screen types to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.
ⓘ	- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode. - To zoom in an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
ⓘ	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. While the red bar indicates that you are currently viewing the recorded video file.
(4) 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, or 1/8x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, or 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
ⓘ	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.
(6) Preview	Switch to Preview/Advanced mode.
(7) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(8) Status bar	Display the recorded date, time and play speed.
(9) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.

Name	Function
(10) Export	Export includes Snapshot, Print, Output Video Clip, and Backup function.
	■ Snapshot: Capture and save the screen shot either in *.jpg or *.bmp format.
	■ Print: Print the screen shot.
	■ Output Video Clip: Save the segmented file in *.mpg, *.avi, or *.dvr format. Follow the below steps to output a video clip:
	1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.
	2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation or set the segment marks from the start, click **Segment** button again.
	3. Click **Output** button to save the wanted clip.
	4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.
(11) 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.

Chapter 9 Using HandyViewer to Access DVR server

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://enter server IP or domain name here/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 PDA Viewer 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 PDAViewer 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

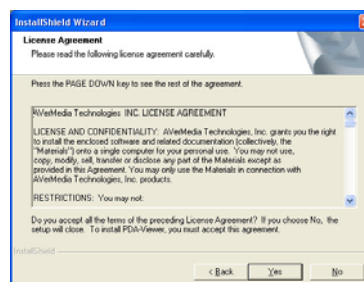1. Connect your PDA to your PC. Place the CD into the CD-ROM drive then click Install PDAViewer. And follow the on screen instructions.
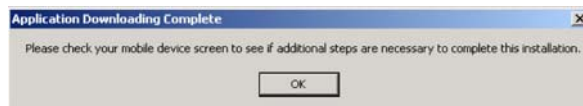

2. Click **Next** to continue.

3. Read the license agreement and click **Yes** to accept all the terms. The system will then automatically install the application.

4. When you are prompted, click **Yes** to install the application using the default directory.

5. When done, click **OK**.

| Application Downloading Complete | ✕ |
| --- |
| Please check your mobile device screen to see if additional steps are necessary to complete this installation. |
| OK |

9.1.2 To install PDAViewer from the Internet

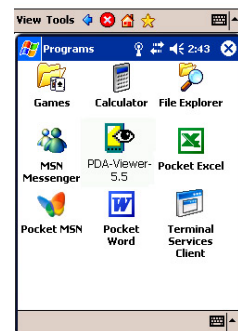Make sure you are connected to the internet.
1. Open the web browser and enter the server IP. Then click the hyperlink **Download PDA-Viewer**.

2. When the Download dialog box appears, enable **Open file after download** and click **Yes**.
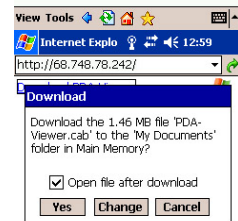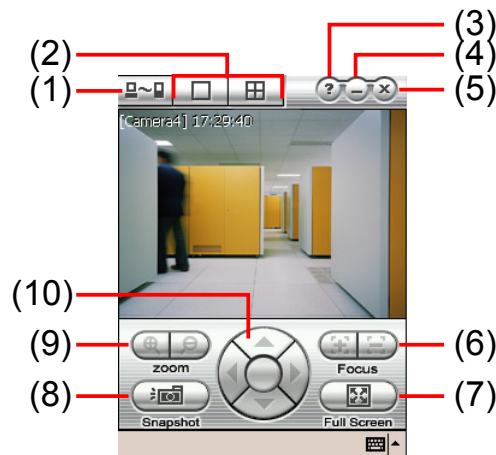
After the installation, the PDAViewer icon will appear in the Programs list.
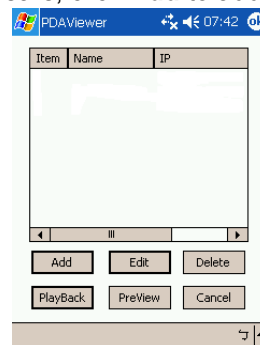
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9.1.3 To Use the PDAViewer

1. Run the **PDAViewer** in the Programs.

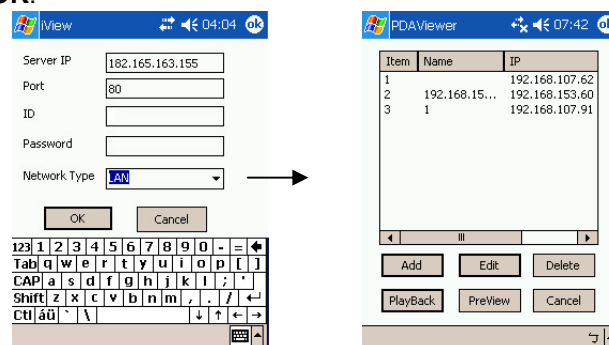2. Familiarizing the PDAViewer buttons.

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 9.1.4)
(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 PDA-Viewer software version.
(4) Minimize	Reduce the size to taskbar.
(5) Exit	Close the PDA-Viewer.
(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.
(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 pop up menu will appear.

9.1.4 To Playback in PDA Viewer

1. Run the **PDA-Viewer** 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
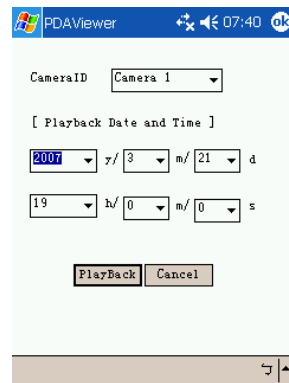
7. While playback, user can view and change status of I/O devices
8. On the playback screen, tap on video screen longer the pop up menu will appear
9. Select the **Remote IO**
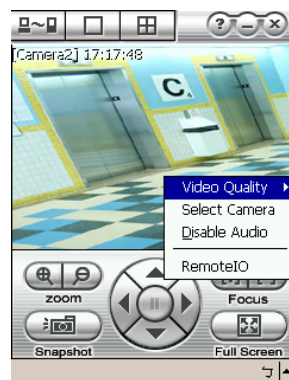
10. The sensor and relay devices will list as below:
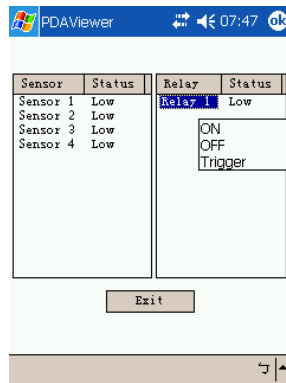
11. User can change the relay status. Select the relay and tap on video screen longer the pop up menu will appear, and then, select the status (ON, OFF, Trigger)

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 JAVAViewer program that it can be downloading it from the DVR server through the internet.

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.

⚠	- DVR server only provides one channel video at time and transmits one frame per second to JAVAViewer.
	- When there is a multiple JAVAViewer connection, DVR server will transmit the last JAVAViewer' request to all JAVAViewers.
	- Please assign the port that besides port 80 as JAVAViewer video port.

9.2.1 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.

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.
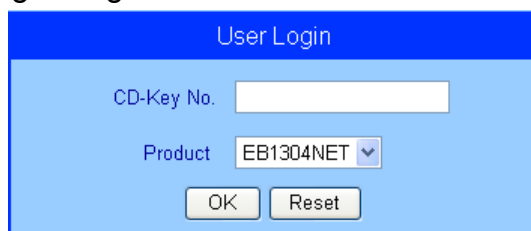
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Appendix A   Registering Domain Name

DDNS (Dynamic Domain Name Service) is a data query service mainly used on the Internet for translating domain names into Internet addresses. It allows remote clients to intelligently search dynamic servers without any previous enquiring for servers' Internet addresses.

In order to take advantage of this intelligent service, first register your domain name on the following Web site **http://ddns.avers.com.tw**

1. **User Login**
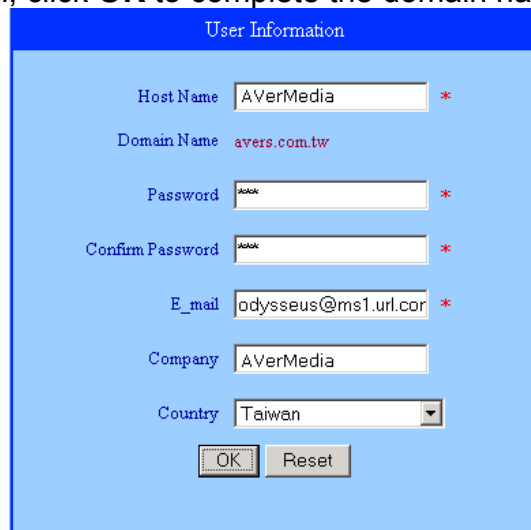   - Browse the website **ddns.avers.com.tw** with Microsoft IE or Netscape Navigator to access the following dialog.

   - First input the MAC address of your DVR system as CD-Key number and select the product name. The CD-Key of MAC address input format shall be 12 digits without colon (:) or hyphen (-).To find MAC address of your DVR system, follow the steps below:
     - In OSD menu, select **NETWORK SETUP**
     - Select any one of IP mode
     - A **NETWORK INFORMATION** windows will show up
     - MAC address of DVR system is display as shown
   - Then click **OK** to login or **Reset** to clear the previous input.

2. **User Information**

   Please provide the following user information, **Host Name** (user can choose any name he/she likes except the one violence with other users), **Password**, **E-mail**, **Company**, and **Country**. And then, click **OK** to complete the domain name registration.

Appendix B   Network Service Port

The following table shows the ports that DVR server uses for certain network service.

	Port #	Variable
Remote Console (CM 3000)	5550	Y
WebCam	80	Y
2-way audio	9999	Y
Remote Control (CM3000/RC1000)	5555	Y
DVR POS	5150	Y
DVR DDNS (Upload / Download)	53 / 1053	N

Warranty Notice

LIMITED WARRANTY

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

WARRANTY LENGTH

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

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

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

WHO IS PROTECTED

This warranty is enforceable only by the first consumer purchaser

WHAT IS AND IS NOT COVERED

Except as specified below, this warranty covers all defects resulting from faulty manufacturing of this product. The following are not covered by the warranty.

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

2. Damage, deterioration, or malfunction resulting from:

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

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

   Any shipment damages (Claims must be made with carrier)

   Any other cause which does not relate to a product defect

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

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

WHAT WE WILL AND WILL NOT PAY FOR

We will pay labor and material expenses for covered items. However, we will not pay for the following:

1. Removal or installation charges

2. Shipping charges

3. Any incidental charges

EXCLUSION OF DAMAGES

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

LIMITATIONS OF IMPLIED WARRANTIES

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

STATE LAW AND YOUR WARRANTY

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

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