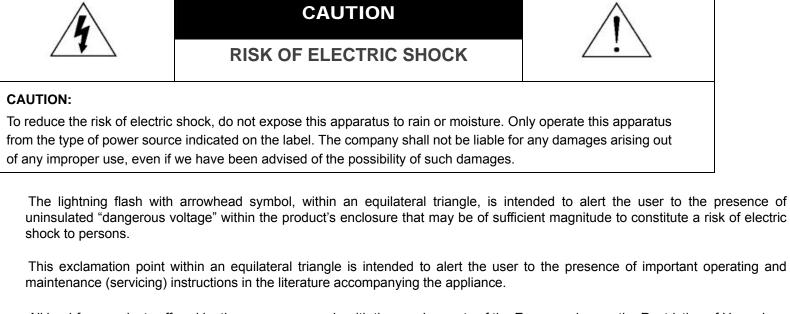
# FULL D1 DVR

# **User Manual**

- Intelligent Video Surveillance
- GUI Display with USB Mouse Control

Please read instructions thoroughly before operation and retain it for future reference. For the actual display & operation, please refer to your DVR in hand.

### **IMPORTANT SAFEGUARD**





All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.



The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.



This apparatus is manufactured to comply with the radio interference requirements.

### Federal Communications Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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### Grounding

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We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

http://download.dvrtw.com.tw/GPL/076D\_Series/arm-linux-2.6.tar.gz

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### **1. HARDWARE OVERVIEW**

Note: The functions on the front panel and rear panel may vary, depending on the model you have.

### **1.1 Package Content**

Standard Package	
	□ HDD screws
□ Adapter & power cord	□ USB Mouse
□ IR remote controller	Manual for IR remote controller
> Optional Accessories	

 $\hfill\square$  IR Receiver extension cable

🗆 CD manual

### 1.2 Front Panel

### 1) LED Indicators

- **U** DVR is powered on.
- The hard disk is reading or recording.
- An alarm is triggered.
- Timer recording is on.
- Under playback status.

### 2) <u>CH1 ~ 16</u>

Press the channel number buttons to select the channel to display.

Ш 3)

Press to show the 4 channel display mode.

4) <u>SEQ</u>

Press to display each channel in full screen one by one starting from CH1. When the last channel is displayed, it will repeat from CH1 again. To exit this mode, press "SEQ" again.

5) <u>SLOW</u>

In the playback mode, press to show slow playback.

6) <u>ZOOM</u>

Press to enlarge the picture of selected channel in the FRAME or FIELD recording mode.

7) <u>PLAY</u>

Press to playback the latest recorded data.

8) LIST (Event List Search)

Press to quickly search the recorded files by event types, or select FULL to show all the event logs. To quickly search the time you want, select "QUICK SEARCH". For details, please refer to "5.4.1 QUICK SEARCH" in the user manual.

9) <u>MENU</u>

Press "MENU" to enter the main menu.

10) <u>ENTER</u>

Press "ENTER" to confirm the setting.

11)	$   (\blacktriangle) / \blacksquare (\triangledown) / \nleftrightarrow (\blacktriangleleft) / \Rightarrow (\blacktriangleright)$	
	Press ▲ / ▼ / ◀ / ► to move up / down / left	/ right.
	In the playback mode:	
	Press " II " to pause playback.	
	Press "■" to stop playback.	
	Press "▶" to fast forward.	
	Press "◀ " to fast rewind.	
12)	AUDIO (SLOW + ZOOM)	
	Press "SLOW" + "ZOOM" to select live or play	back audio from audio channel 1~4.
	L' 50 L' 50	Playback audio from audio channel 1~4 indicated in yellow).
	Audio channel unselected	
13)	<u>P.T.Z. ( 🗄 + SEQ)</u>	

Press "
"
" + "SEQ" at the same time to enter / exit the PTZ control mode.

14) USB port

There are two USB ports on the front panel, one for connecting your USB mouse for mouse control, and the other one for connecting your USB flash drive for video backup.

Note: It's not allowed to have two USB mice or two USB flash drives connected on the front panel.

**Note:** For the compatible USB flash drive list, please refer to "APPENDIX 6 COMPATIBLE USB FLASH DRIVE LIST" at page 72.

15) ▲ (For selected models only)
 Press "▲" to eject the disk tray of the DVD writer.

### 1.3 Rear Panel

- 1) <u>75 $\Omega$  / HI-IMPEDANCE (For selected models only</u>) When using VIDEO LOOP, switch to HI-IMPEDANCE. If not, switch to 75 $\Omega$ .
- 2) <u>VIDEO IN:</u> Connect to the video connector of a camera. <u>VIDEO LOOP (For selected models only)</u>: Video output connector.
- **Note:** The DVR will automatically detect the video system of the camera, please make sure that the cameras are properly connected to the DVR and power-supplied before the DVR is turned on.

<u>AUDIO IN (1~4)</u>
 Connect to the audio connector of a camera if the camera supports audio recording.

- Note: To make a video backup with audio, make sure the camera which supports the audio function is connected to the video-in channel and audio-in channel. For example, the audio data from audio CH1 will be recorded with the video data from video CH1. For 16CH models, the audio CH1 ~ CH4 are corresponding to video CH1 ~ CH4 respectively.
- AUDIO OUT (1~2)
   Connect to a speaker with 1 mono audio output.
- 5) <u>CALL (For selected models only)</u> Connect to a monitor specific for sequence display.
- 6) <u>HDMI</u>

Connect to the HDMI port of the monitor which supports HDMI video output.

Note: Dual video outputs via both VGA and HDMI ports are supported.

7) <u>VGA</u>

Connect to the VGA port of the monitor which supports VGA video output.

#### Note: Dual video outputs via both VGA and HDMI ports are supported.

#### 8) <u>IR</u>

Connect the IR receiver extension line for remote control.

9) <u>eSATA</u>

This port is used to connect a storage device supporting eSATA interface; for instance, an external hard disk or a disk array.

Note: Please purchase a disk array supporting Linux system to ensure your DVR to work properly.

10) Push Video Alarm In (For selected models only)

Connect up to four external alarm devices for active event notifications to your smart phone (Push Video). The four alarm inputs,  $1 \sim 4$ , are corresponding to the four video inputs, CH1 ~ 4.

11) EXTERNAL I/O

This port is used to connect external devices (such as speed dome cameras or external alarm, etc).

12) <u>LAN</u>

Connect to Internet by LAN cable.

13) <u>DC 19V IN</u>

Connect to the supplied adapter.

14) <u>- · Power Switch</u>

Switch to "—• To turn on the power, and "O" to turn off the power.

### 2. CONNECTION AND SETUP

Before the DVR is powered on, make sure you have installed a hard disk, connected at least one camera and a HDMI monitor. For details, please refer to the following sections.

**Note:** The DVR is designed to automatically detect the video system of the connected cameras (NTSC or PAL). To make sure the system detection is correct, please check if the cameras are connected to the DVR and power-supplied before the DVR is powered on.

### 2.1 SATA Hard Disk Installation

A SATA hard disk must be installed before the DVR is powered on.

- **Note:** It's not recommended to use a green hard disk in this device. Please check our hard disk compatible list at page 73.
- **Note:** It's recommended to clear all data in the hard disk when the DVR is powered on and the date & time are set correctly to ensure the recorded data are not mixed with other data previously saved in the same hard disk. For details, please refer to "2.6 Clear Hard Disk" at page 8.

Step1: Loose the screws on the upper cover and open the upper cover of the DVR.

Note: The DVR cover is made of metal. Please be careful with its edge when you remove the cover.

Step2: There are two hard disk brackets for this DVR as indicated in the right picture.

2-1 To install on the first bracket

Remove the bracket, and align the screw holes of the bracket with the hard disk's screw holes. Make sure the PCB side of the hard disk is facing up.

Fasten the hard disk to the bracket, and connect the power connector and data bus connector to the hard disk. Then, replace the bracket to DVR.

2-2 To install on the second bracket

Connect the power connector and data bus connector to the hard disk.

Align the screw holes of the bracket with the hard disk's screw holes. Make sure the PCB side of the hard disk is facing up. Then, fasten the hard disk to the bracket.





Step3: Close the upper cover of the DVR, and fasten all the screws you loosened in Step1.

### 2.2 Camera Connection

Install the camera on the wall or ceiling based on your installation environment and camera type. For installation details, please refer to the user manual of your camera.

### 2.2.1 Normal / DCCS Camera

### 1) Connecting to DVR video input

Connect the camera video output to the DVR video input port with a coaxial cable or RCA line with a BNC connector.

**Note:** For connecting a DCCS-type camera, make sure your DVR model supports DCCS, the camera is connected to the 1<sup>st</sup> video channel (CH1), and the distance between the camera and DVR needs to be within 200 meters by using a 3C2V coaxial cable (112 braids) for DCCS control to take effects. For more details, please refer to "2.8 Examining DCCS Signal Transmission" at page 9.

### 2) Connecting to DVR audio input (Optional)

Connect the camera audio output to the DVR audio input port with a coaxial cable or RCA cable with BNC connectors.

### 3) Connecting to power

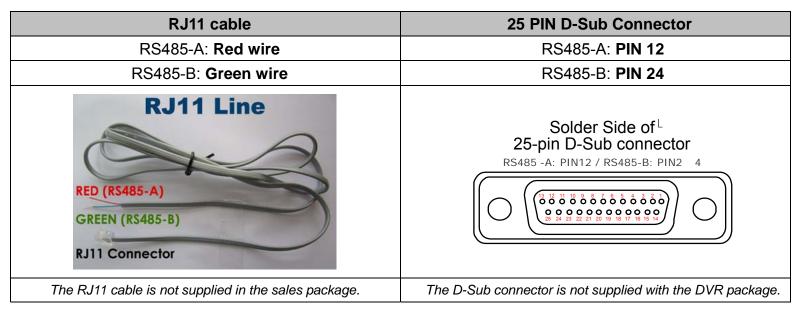
Connect the camera with indicated power supply and make sure it's power-supplied.

### 2.2.2 PTZ Camera

The following description is taking our brand's PTZ camera as an example.

**Note:** The RS485 wiring is not needed when your DVR and PTZ camera both support DCCS, and the video channel your PTZ camera connects is CH1. If yes, please go to **STEP 5** directly for PTZ camera setting.

For detailed PIN / port connection, please refer to "APPENDIX 2 PIN CONFIGURATION" at page 64. For detailed PTZ camera control and operation, please refer to its own user manual.



### STEP 1: Get a RJ11 cable with the proper length to your connection.

Different RJ11 connector may have different wire layout, so the connection might be different. If you cannot control the DVR after connection, please reverse the RJ11 cable connection with the DVR.

### STEP 2: Remove one end of the insulating coating of the RJ11 cable.

Remove one end of the insulating coating of the RJ11 cable to find the RS485-A and the RS485-B wires, and remove the insulating coating to reveal the naked wires for further connection.

#### STEP 3: Twist the RS485-A and RS485-B wires of the RJ11 cable and the speed dome camera together.

Twist the RS485-A (red) and RS485-B (green) wires of the RJ11 cable to the RS485-A (brown) and RS485-B (orange) wires of the speed dome camera. To protect the naked wires, use the insulation tape to cover on the twisted wires.

#### STEP 4: Connect the other end of the RJ11 cable to DVR.

Solder the RS485-A (red) and RS485-B (green) wires of the RJ11 cable to the corresponding pins on the solder side of the 9 or 25 PIN D-Sub connector (as shown above).

#### STEP 5: Set the camera at the DVR side.

Right click to show the main menu in the live view, and go to "Q" (ADVANCED CONFIG)  $\rightarrow$  "DEVICES" to set the camera.

- a) Select the device to "PTZ".
- b) Set the ID to the value the same as the one set in the camera. The default ID of the camera is 000.
- c) Select the protocol to "NORMAL".
- d) Set the baud rate to the value the same as the one set in the camera. The default baud rate of the camera is 2400.

ADVANCED CONFIG						
CAMERA	CH1 CH2 CH3 CH4 CH5 CH6 CH	7   CH8   CH9   CH10   CH11   <				
DETECTION	DEVICE	PTZ 🔻				
ALERT	ID	000				
NETWORK	PROTOCOL	NORMAL 🔻				
DISPLAY	RATE	2400 🔻				
RECORD						
DEVICES						
DCCS						
IVS						
NOTIFY						
EXIT						

### **2.3 External Device Connection**

This device supports external device connection with RS485 and alarm I/O ports, allowing users to connect control devices such as a PTZ camera or keyboard controller, or connect alarm devices such as a magnetic contact or buzzer.

Check the user manual of your external device to know which pin(s) should be used, and connect it to the corresponding pins on the DVR rear panel.

```
Note: For more details about alarm I/O pin configurations, please refer to "APPENDIX 2 PIN CONFIGURATION" at page 64.
```

Certain alarm-in pins also support sending instant event notifications to your mobile devices, such as iPhone, iPad and Android mobile devices, for an alarm event (Push Video). For details, please refer to "APPENDIX 3 PUSH VIDEO CONFIGURATION" at page 65.

### 2.4 DVR Power On

This device should be operated only with the type of power source indicated on the manufacturer's label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet. Then turn the power switch on the rear panel to "—". The power LED will be on.

**Note:** Before the DVR is powered on, make sure (1) the cameras are connected and power-supplied for the detection of the camera video system to be correct, and (2) a HDMI monitor is connected to the DVR for correct video output detection.

**Note:** To ensure that your DVR works constantly and properly, it's recommended to use an UPS, Uninterruptible Power Supply (Optional), for continuously operation.

### 2.5 Date and Time Setting

Before operating your DVR, please set the date and time on your DVR FIRST.

**Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it's recommended to clear all HDD data, and start recording again.

**Note:** For the first time to use the DVR, please power it on for at least 48 hours continuously after the date & time is set correctly. It helps to prevent DVR time from resetting after the disconnecting of DVR power. If the DVR time resets after the disconnecting of DVR power, for example, caused by a power outage, the battery might run out and please replace the battery as described in "APPENDIX 9 DVR BATTERY REPLACEMENT" at page 76.

Right-click to enter the DVR password with the password keypad. The default administrator password is 0000. The status will be changed from (key lock) to (unlock). Then, right-click to show the main menu, and select  $(QUICK START) \rightarrow (TIME SETUP)$  to set the date & time.

QUICK START				
GENERAL	DATE	2009 / NOV / 17		
TIME SETUP	TIME	15 : 35 : 53		
DAYLIGHT				
EXIT				

### 2.6 Clear Hard Disk

It's recommended to clear all data in the hard disk for the first time to user this DVR to ensure the recorded data are not mixed with other data previously saved in the same hard disk.

Right-click to show the main menu, and select  $\checkmark$  (SYSTEM)  $\rightarrow$  "SYSTEM INFO"  $\rightarrow$  "CLEAR HDD". The DVR will reboot when hard disk data are cleared.

SYSTEM	
BAUD RATE	2400 🔻
HOST ID	000
R.E.T.R	5 🔻
AUTO KEY LOCK(S)	NEVER 🔻
CLEAR HDD	HDD-0 🔻
RESET DEFAULT	SUBMIT
REMOTE CONTROL ID	000
SERIAL TYPE	RS485
VIDEO FORMAT	NTSC
VERSION	1019-1008-1010-1010
	BAUD RATE HOST ID R.E.T.R AUTO KEY LOCK(S) CLEAR HDD RESET DEFAULT REMOTE CONTROL ID SERIAL TYPE VIDEO FORMAT

### 2.7 Password Setting

Right-click to show the main menu, and select  $\boxed{2}$  (SYSTEM)  $\rightarrow$  "ACCOUNT" to change the default password of SUPERVISOR.

There are four user levels for different access privileges: SUPERVISOR, POWER USER, NORMAL & GUEST. For details, please refer to "4.2 User Level Creation" at page 13.

	SYSTEM		
ACCOUNT TOOLS SYSTEM INFO BACKUP DATA BACKUP LOG	USER LIST USER NAME admin power normal guest	SUPE	RVISOR ER USER IAL
EXIT	ADD	EDIT	DEL

### 2.8 Examining DCCS Signal Transmission

Note: Needed only when the camera connected to CH1 supports DCCS.

Check the channel status bar of CH1, and see if the status icon of DCCS connection is "<>".

- If yes, the connection is ok.
- If you see " make sure:

- The distance between this DVR and the DCCS camera should not exceed 200 meters with a 3C2V coaxial cable (112 braids).

**Note:** However, different materials used in 3C2V coaxial cables with different connection distance may cause some effects for the availability and fluency of signal transmission.

- It's not allowed to use a signal booster or modem to amplify signals and extend the connection distance.

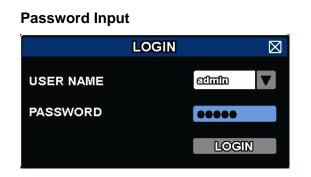
### **3. USER INTERFACE**

### 3.1 DVR Access

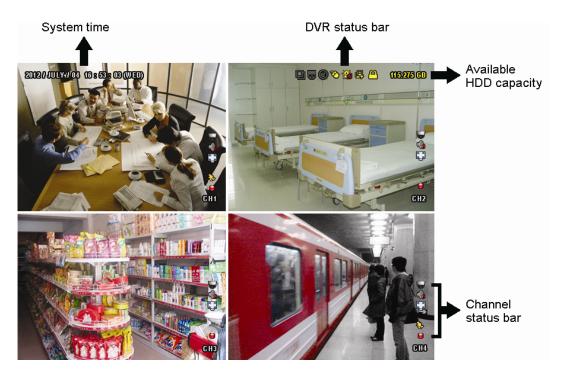
Connect your USB mouse to one of the USB ports on the DVR front panel, and check if there's a mouse icon (<sup>®</sup>) on the screen, indicating the USB mouse is detected properly.

Move your mouse to enter the DVR password with the password keypad. The default user name and password are both "**admin**". The status will be changed from (key lock) to (unlock).

Note: You may configure four different user levels to have different access privileges in "SYSTEM" → "ACCOUNT". For details, please refer to "4.2 User Level Creation" at page 13.



### 3.2 Live Page



### 3.1.1 DVR Status



<u> </u>	Key lock	2	Key unlock
	Overwrite on	$\mathbf{Q}$	Overwrite off
e,	Internet disconnected	囹	Internet connected
<b>₽</b>	Local connection	8	USB mouse connected
÷	USB flash drive / device connected	Ś	No USB device connected
**	IVS on		
۲	Timer record on	C	Timer record off
6	PTZ mode on	9	PTZ mode off
Ð	Sequence mode on	Ð	Sequence mode off

### 3.1.2 Channel Status.

1:1	Original size		Fit to screen	$\diamond$	DCCS connection OK	DCCS connection failed
Ø	Live audio on		Audio off	4	Audio playback on	Audio playback off
9	Recording	ŝ	Human detection event	₹ <mark>?</mark> }	Motion event	Alarm event
5 A 6 N	Record mode: Frame	+ +	Record mode: Field		Record mode: CIF	
<b>V</b> P	Virtual fence event	9	One way pass event	<>>	Scene Change event	

#### Note: Certain icons are for selected models only.

### 3.1.3 Record-related lcons

1) Manual Recording

By defaults, manual recording is on () when the DVR is powered on and a hard disk is installed.

2) Event Recording

The event icons, 🇞 / 🚧 / 💖 / 🧐 / 😼 / 🐯, show on the channel status bar when their respective

events occur and the related record function is on.

3) Timer Recording

When timer recording is on, you will see "" on the screen.

4) HDD Overwritten

Be defaults, the HDD overwritten function is set to ON, and "

**Note:** To disable this function, right click to display the main menu in the live view, and go to "Q" (ADVANCED CONFIG.)  $\rightarrow$  "RECORD"  $\rightarrow$  "OVERWRITE".

### 3.3 Quick Menu Bar

Move to the arrow mark to extend the quick menu bar and show the five functions as follows:

Quick Menu: Open





Click to show the power off panel to either halt or reboot the system.

### 3.4 Main Menu

Right-click anywhere on the screen to show the main menu as follows, and right-click again to exit.

#### Main Menu

0	QUICK START	Click to set the status display, image settings, and date & time.
	SYSTEM	Click to set the system configurations.
R	EVENT INFORMATION	Click to enter the event search menu.
	ADVANCED CONFIG	Click to set CAMERA, DETECTION, ALERT, NETWORK, DISPLAY, RECORD, DEVICES, DCCS*, IVS* & NOTIFY*.
	SCHEDULE SETTING	Click to set record timer, detection timer & alarm timer.

\* For selected models only

### 4. FREQUENTLY-USED FUNCTIONS

### 4.1 Key Lock / Unlock

To lock or unlock NVR local operation, click 2 (unlock) or 2 (lock) on the DVR status bar to change the status to 2 (lock) or 2 (unlock).

To unlock NVR local operation, you'll be prompted to enter the user name and password to access.

Note: The default user name and password are both "admin", which is the highest user level.

**Note:** Different user level has different access privilege for certain DVR functions. Please refer to "4.2 User Level Creation" at page 13.

### 4.2 User Level Creation

```
Note: This function is available only for "SUPERVISOR".
```

To create different user account for different access privilege, click 🐖 (SYSTEM)), and select "ACCOUNT" to enter "USER LIST".

SYSTEM						
ACCOUNT TOOLS SYSTEM INFO BACKUP DATA BACKUP LOG	USER LIST USER NAME admin power normal guest	00.2	RVISOR ER USER IAL			
EXIT	ADD	EDIT	DEL			

Different user level has different access privilege for certain functions as described below:

	Function		User I	Level	
		SUPERVISOR	POWER	NORMAL	GUEST
■ DVR status				-	
<b>( )</b>	Key lock / unlock	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
■ Channel status					
<b>(</b> ), <b>(</b>	Live audio on / off	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
🥠 / ሌ	Playback audio on / off	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
1:1 / 🌅	Original size / Fit to screen	~			
	PTZ Control	$\checkmark$	$\checkmark$		
Quick menu ba	r				
Set.	Channel Selection	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Playback	~	$\checkmark$	$\checkmark$	
ę	Digital Zoom	~	$\checkmark$	$\checkmark$	$\checkmark$
٢	Power	~			

	Function		User	Level	
		SUPERVISOR	POWER	NORMAL	GUEST
Main menu					
0	Quick Start	$\checkmark$			
	System	$\checkmark$			
I.	Event Information	$\checkmark$			
<b>O</b>	Advanced Config.	$\checkmark$			
	Schedule Setting	$\checkmark$			
Playback con	trol				
**	Fast Forward	✓	$\checkmark$	$\checkmark$	
	Fast Rewind	✓	$\checkmark$	$\checkmark$	
<b>&gt;</b> / <b>11</b>	Play / Pause	✓	$\checkmark$	$\checkmark$	
	Stop	✓	$\checkmark$	$\checkmark$	
<b>&gt;&gt;&gt;</b>	Slow Playback	✓	$\checkmark$	$\checkmark$	
<b>i</b> ∢ / ►i	Previous / Next Hour	$\checkmark$	$\checkmark$	$\checkmark$	
	Quick Search	✓	$\checkmark$	✓	

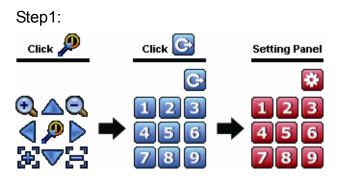
### 4.3 PTZ Control 🛡

**Note:** This function is available only for "SUPERVISOR" and "POWER USER". To know more details, please refer to "4.2 User Level Creation" at page 13.

Click **v** on the channel status bar to display the panel as follows:

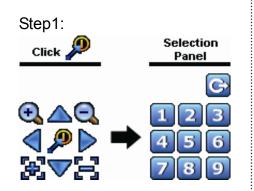
	🛆 / 🛡 / 🗨 / Þ	Up / Down / Left / Right	Click to move your selection up / down / left / right, or change settings.
	🔁 / 🗨	Digital zoom in / out	Click to zoom in / out the camera image digitally.
	8./E	Focus near / far	Click to adjust the focus of the image.
°° ∨ 6°	9	Preset point	Click to display the preset point panel for preset point viewing or setting. For details, please refer to the section below.

### How to set a preset point:



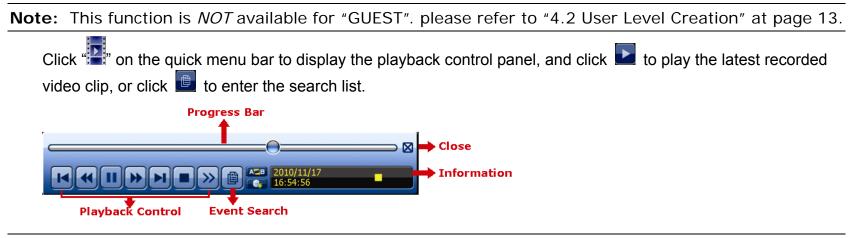
- Step3: Click the numbering you want to configure for this point, and wait till you see < (command sending) appearing and disappearing on the DVR status bar.
- Step4: Repeat from Step1 again to set other points if needed, or click it to return to the preset point selection panel.

#### How to go to a preset point:



Step2: Select the numbering within which saves the camera view you want to see, and wait till you see < (command sending) appearing and disappearing on the DVR status bar.

### 4.4 Playback



**Note:** There must be at least 8192 images of recorded data for playback to work properly. If not, the device will stop playback. For example, if the IPS is set to 30, the recording time should be at least 273 seconds (8192 images / 30 IPS) for the playback to work properly.

		Increase the speed for fast forward. Click once to get 4X speed forward and click
*	Fast Forward	twice to get 8X speed, etc., and the maximum speed is 32X.
¥	Fast Rewind	Increase the speed for fast rewind. Click once to get 4X speed rewind and click
	T dot i teminu	twice to get 8X speed, etc., and the maximum speed is 32X.
		Click to play the latest recorded video clip immediately, and click again to pause.
<b>&gt;</b> / <b>•</b>	Play / Pause	In the pause mode, click 🔛 once to get one frame forward, and click 述 to get one frame rewind.
	Stop	Click to stop the video playback.
	Slow Playback	Click once to get 1/4X speed playback, and click twice to get 1/8X speed
<b>&gt;&gt;</b>	SIUW Flayback	playback.
	Previous /	Click to jump to the next / previous time interval in an hour, for example, 11:00 $\sim$
I / <b>&gt;</b>	Next Hour	12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded
	Nextriour	during this whole hour.
AB	Repeat	Click to set point A and point B in a video clip, and the system will play only the
A	περεαι	specified range in that clip.
	Backup	Click to open the backup menu for video backup.

### 4.4.1 Playback Control

**Note:** During playback, the image size of the recording (FRAME , FIELD or CIF ) will be shown on the screen.

### 4.4.2 Event Search

Click to quickly search the recorded files by event types, or select FULL to show all the event logs. To quickly search the time you want, select "QUICK SEARCH".

### 4.4.3 Audio Playback

In the playback mode, click 🧐 or 🈘 on the channel status bar to play or mute audio recording.

Note: To make a video backup with audio, or play a recording with audio, make sure the camera which supports the audio function is connected to the video-in channel and audio-in channel. For example, the audio data from audio CH1 will be recorded with the video data from video CH1. For 16CH models, the audio CH1 ~ CH4 are corresponding to video CH1 ~ CH4 respectively.

### 4.5 Video Backup

- **Note:** This function is available for "SUPERVISOR". For details, please refer to "4.2 User Level Creation" at page 13.
- **Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to "APPENDIX 6 COMPATIBLE USB FLASH DRIVE LIST at page 72.
- **Note:** Video backup could be made via the built-in DVD writer (optional), a USB flash drive, or the Internet. It's **NOT** allowed to connect the hard disk to your PC directly for it may impair the recorded data saved in the hard disk.

To copy recorded data for video backup, click 💆 (SYSTEM), and select "BACKUP DATA (USB)" or "BACKUP DATA (DVD)".

	SYSTEM	
ACCOUNT	START DATE	2009/NOV/19
TOOLS	START TIME	08:30:21
SYSTEM INFO	END DATE	2009/NOV/19
BACKUP DATA	END TIME	17:59:29
BACKUP LOG	CHANNEL	3 SELECTED
		🗆 ALL
		☑ CH1 ▲
		☑ CH2
		☑ CH3
		🗆 CH4
		□ CH5 ▼
	HARD DISK	ALL HDD
	OUTPUT FILE FORMAT	AVI
	TARGET DEVICE	USB DEVICE
	BACKUP	SUBMIT
	REQUIRE SIZE: 554MB	SUBMIT
EXIT	AVAILABLE SIZE: 3788.0MB	

Step1: Select the time within which includes the video data you want to backup.

Step2: Select the channel(s) within which includes the video data you want to backup.

Step3: In "OUTPUT FILE FORMAT", select the output video format: DEFAULT / AVI.

When "DEFAULT" is selected, the copied video is saved to ".dv5", and you can only open it with our own video player on PC. For details, please check "4.6 Video Playback on PC".

**Note:** It's recommended to save the file to the default format for security reasons. Only specific video player supports the default format and not everyone can see the video footage.

- When "AVI" is selected, the copied video will be converted to "avi", and you can open it with any media player which supports the "avi" format on PC.
- Step4: In "TRAGET DEVICE", select "USB DEVICE" or "DVD DEVICE" based on the device you want to use for video backup.

Note: "DVD DEVICE" is available for selected models only.

Step5: In "REQUIRE SIZE", select "SUBMIT" to know the file size of the selected data.

Step6: In "BACKUP", select "SUBMIT" to start backup to your USB flash drive, and wait till the backup successful message appears.

### 4.6 Video Playback on PC (.dv5)

For video backup with the format ".dv5", you can only use our own player to play.

**Note:** It's **NOT** allowed to remove the hard disk installed in the DVR and connect it directly to your PC to check recorded video clips. It might impair the files saved in the hark disk, causing the loss of those files even when the disk is replaced back to the DVR.

#### To play ".dv5" video on your PC:

Step1: Insert the USB flash drive or CD / DVD with recorded data into your PC.

Note: The supported PC operating systems are Windows 7, Vista & XP.

Step2: Find the program "PLAYER.EXE" in the USB flash drive, and double-click it to install.

Note: "PLAYER.EXE" can also be downloaded from www.surveillance-download.com/user/c700.swf.

Step3: Run the program, *VideoPlayer*, and browse to where you save the recorded data.

Step4: Select the file you want to start video playback

### 4.6.1 Convert the file format to AVI

To convert the video file format to AVI, click "AVI" from the playback panel to start file conversion.

Note: The recorded audio (if any) will be removed when the file format is converted to AVI.

**Note:** If the backup video includes data for multiple channels, click to a specific channel for this function to work properly.



### 4.7 Digital Zoom

Switch to the channel you want to zoom in, and move to the left side of the screen to show the quick start bar. Click <</td>Click <</td>to enter the zoom-in mode. In this mode, click and drag the red frame on the bottom left of the screen to move to the place you want to see.



To exit this mode, right-click anywhere on the screen.

**Note:** You need to exit the zoom mode first to use other DVR functions.

### 5. MAIN MENU

### **5.1 QUICK START**

### 5.1.1 GENERAL

QUICK START					
GENERAL TIME SETUP DAYLIGHT	CHANNEL TITLE EVENT STATUS DATE DISPLAY BUTTON CONTROL DISPLAY MOUSE SENSITIVITY RECORD CONFIG	ON ON ON - 1111 IIII + SETUP			
EXIT					

1) CHANNEL TITLE

Select to display the channel title or not (ON / OFF).

2) <u>EVENT STATUS</u>

Select to display the event icons or not (ON / OFF).

Note: For details about each event icon, please refer to "3.2 Live Page" at page 10.

3) DATE DISPLAY

Select to display the date or not (ON / OFF).

4) BUTTON CONTROL DISPLAY

Select to display the control icons on each single channel or not (ON / OFF).

5) MOUSE SENSITIVITY

Select the mouse sensitivity by 9 levels.

6) <u>RECORD CONFIG</u>

Click "SETUP" to enter the setting page individually for manual record, event record and timer record.

- a) Select the record type you want to set.
- b) In "CHANNEL", select "ALL" to apply the changes here to all channels.

Note: The I.P.S. section is based on NTSC system.

QUICK START					
MANUAL	EVENT	TIMER			
CHANNE	L	IMAGE SIZE	I.P.S.		QUALITY
ALL		FRAME	480		SUPER BEST
					EXIT

Or, select "BY CHANNEL" to set the image size, image per second & image quality individually for each channel.

Note: The I.P.S. section is based on NTSC system.

			QUICK	START		
MANUAL	EVENT	TIMER				
CHANNE	L	IMAGE SIZ	ZE	I.P.S.		QUALITY
CH1		960H		40		SUPER BEST
CH2		CIF		30		SUPER BEST
CH3		CIF		30		HIGH
CH4		FIELD		15	SUPER BEST	
CH5		FRAME		15		SUPER BEST
CH6		CIF		30	SUPER BEST	
CH7		CIF		30	HIGH	
CH8		FIELD		7.5		SUPER BEST
						NEXT
AVAILAB	LE IPS: C	IF 705 / FI	ELD 352	.5 / FRAME	176.25	
					APPLY	EXIT

Note: The image size of 960H is available for selected models only.

### 5.1.2 TIME SETUP

QUICK START					
GENERAL TIME SETUP DAYLIGHT	DATE TIME NTP SERVER FORMAT SYNC PERIOD GMT	2009 / NOV / 17 15 : 35 : 53 tock.stdtime.gov.tw Y/M/D DAILY (GMT+08:00)TAIPEI			
EXIT					

### 7) <u>DATE</u>

Set the current date. The default display format is YEAR – MONTH – DATE (Y-M-D).

### 8) <u>TIME</u>

Set the current time in HOUR : MIN : SEC.

### 9) <u>NTP SERVER</u>

Click to change the default NTP server to another server they're familiar with, or keep the default NTP server.

### 10) <u>FORMAT</u>

Select one date format from the following three options: Y/M/D, M/D/Y or D/M/Y.

11) SYNC PERIOD

Select to synchronize the NVR time everyday (DAILY), or turn this function off (OFF).

12) <u>GMT</u>

Select your time zone.

### 5.1.3 DAYLIGHT

	QUICK START					
GENERAL TIME SETUP	DAYLIGH	IT SAVING	ON			
DAYLIGHT	START T 1ST END TIM	MON	AUG	06:00		
	LAST	MON	OCT	10:00		
	ADJUST		01:00			
EXIT						

Depending on the time zone you're in:

1) DAYLIGHT SAVING

Select to enable (ON) or disable (OFF) this function.

- 2) <u>START TIME / END TIME</u> Set the start time and end time.
- 3) <u>ADJUST</u> Set the time in HOUR : MIN.

### **5.2 SYSTEM**

### 5.2.1 ACCOUNT

This function is used to create a new user account, or modify or delete an existing account for different access privilege.

**Note:** For details about available local operations of each user level, please refer to "4.2 User Level Creation" at page 13.

ADVANCED CONFIG						
ACCOUNT TOOLS SYSTEM INFO BACKUP DATA (USB) BACKUP LOG (USB)	USER LIST USER NAME admin power normal guest		RVISOR RUSER AL			
EXIT	ADD	EDIT	DEL			

### 5.2.2 TOOLS

SYSTEM				
ACCOUNT TOOLS SYSTEM INFO BACKUP DATA BACKUP LOG	LANGUAGE UPGRADE NETWORK UPGRADE BACKUP CONFIG RESTORE CONFIG	ENGLISH ▼ SUBMIT SUBMIT SUBMIT SUBMIT		
EXIT				

### 1) LANGUAGE

Select the language of the OSD.

2) <u>UPGRADE</u>

Save the upgrade files obtained from your installer or distributor in a compatible USB flash drive, and insert it into the USB port at the front panel. Then, click "SUBMIT" to start upgrading.

- **Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to "APPENDIX 6 COMPATIBLE USB FLASH DRIVE LIST" at page 72.
- **Note:** After upgrading firmware, it's recommended to clear all HDD data for the system to work more stably. Before clearing all HDD data, please remember to make video backup.
  - 3) NETWORK UPGRADE

Click "SUBMIT" for perform system upgrade via Internet.

- **Note:** This function requires Internet access. Please make sure your DVR is connected to Internet before using this function.
  - 4) BACKUP CONFIG / RESTORE CONFIG

To keep the current configurations after DVR upgrade, insert a compatible USB flash drive into the USB port, and select "SUBMIT" in "BACKUP CONFIG" to copy the current DVR configurations to a file "System.bin" and save to your USB flash drive.

To restore the DVR configurations, insert the USB flash drive including "System.bin" to the USB port, and select "SUBMIT" in "RESTORE CONFIG".

### 5.2.3 SYSTEM INFO

	SYSTEM	
ACCOUNT	BAUD RATE	2400 🔻
TOOLS	HOST ID	000
SYSTEM INFO	R.E.T.R	5 🗸
BACKUP DATA	AUTO KEY LOCK(S)	NEVER 🔻
BACKUP LOG	CLEAR HDD	HDD-0 🔻
	RESET DEFAULT	SUBMIT
	REMOTE CONTROL ID	000
	SERIAL TYPE	RS485
	VIDEO FORMAT	NTSC
	VERSION	1010-1005-1006-1007
EXIT		

### 1) BAUD RATE

Set the baud rate of the DVR (2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200).

#### 2) <u>HOST ID</u>

Set the ID of the DVR (000  $\sim$  254).

### 3) <u>R.E.T.R</u>

Select the timeout in minute after which the R.E.T.R. function will be activated (3 / 5 / 10 / 30).

#### 4) AUTO KEY LOCK(S)

Set the time-out in second after which the key lock function is activated (NEVER / 30 / 60 / 120).

#### 5) CLEAR HDD

Select the HDD you want to clear, and click "YES" to confirm or "NO" to cancel.

It's recommended to clear all data in the hard disk when:

- It's the first time to use this DVR to ensure the recorded data are not mixed with other data previously saved in the same hard disk.
- The DVR firmware is upgraded for the system to work more stably. Before clearing all HDD data, please remember to make video backup.
- DVR date and time are changed accidentally when the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search.

#### 6) <u>RESET DEFAULT</u>

Click "SUBMIT" to reset all settings as default, and select "YES" to confirm or "NO" to cancel. The DVR will reboot after reset.

#### 7) <u>REMOTE CONTROL ID</u>

This function is available when users need to control two or more DVRs with one IR remote controller. The ID set here is used to identify the DVR the remote controller is going to control. Please also read the user manual of the IR remote controller for details.

#### 8) <u>SERIAL TYPE</u>

Here shows the serial type of the DVR (RS-485).

#### 9) VIDEO FORMAT

Here shows the information of the DVR video format (NTSC / PAL).

#### 10) VERSION

Here shows the firmware version information.

### 5.2.4 BACKUP DATA

**Note:** It's **NOT** allowed to remove the hard disk installed in the DVR and connect it directly to your PC to check recorded video clips. It might impair the files saved in the hard disk, causing the loss of those files even when the disk is replaced back to the DVR.

Insert a compatible USB flash drive to the USB port at the front panel, or press ▲ to eject the DVD writer and place a DVD-R or CD-R to it.

Note: Copying video footage to CD / DVD is available only for selected models.

**Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to "APPENDIX 6 COMPATIBLE USB FLASH DRIVE LIST" at page 72.

	SYSTEM		
ACCOUNT	START DATE	2009/NOV/19	)
TOOLS	START TIME	08:30:21	
SYSTEM INFO	END DATE	2009/NOV/19	)
BACKUP DATA	END TIME	17:59:29	
BACKUP LOG	CHANNEL	ALL	
	HARD DISK	ALL HDD	
	OUTPUT FILE FORMAT	DEFAULT	
	TARGET DEVICE	USB DEVICE	
	BACKUP	SUBMIT	
	REQUIRE SIZE: 554MB	SUBMIT	
EXIT	AVAILABLE SIZE: 3788.0MB		

1) <u>START DATE / START TIME</u>

Select the start date & time.

2) END DATE / TIME

Select the end date & time.

3) <u>CHANNEL</u>

Click to select the channel(s).

4) <u>HARD DISK</u>

Select the hard disk containing the video data you need or "ALL HDD".

5) OUTPUT FILE FORMAT

Select the file format for backup video: "DEFAULT" or "AVI".

When "DEFAULT" is selected, the copied video is saved to ".dv5", and you can only open it with our own video player on PC. For details, please check the next section, "Video Playback on PC".

**Note:** It's recommended to save the file to the default format for security reasons. Only specific video player supports the default format and not everyone can see the video footage.

- When "AVI" is selected, the copied video will be converted to "avi", and you can open it with any media player which supports the "avi" format on PC.
- 6) TARGET DEVICE

Select the device you want to use for video backup: "USB DEVICE" or "DVD DEVICE".

Note: "DVD DEVICE" is available for selected models only.

### 7) <u>BACKUP</u>

Click "SUBMIT" to start backup.

8) <u>REQUIRE SIZE</u>

To know the size of the expected backup video before backup, click "SUBMIT" to start calculating.

### Video Playback on PC (.dv5)

For video backup with the format ".dv5", you can only use our own player to play.

**Note:** It's **NOT** allowed to remove the hard disk installed in the DVR and connect it directly to your PC to check recorded video clips. It might impair the files saved in the hark disk, causing the loss of those files even when the disk is replaced back to the DVR.

### To play ".dv5" video on your PC:

Step1: Insert the USB flash drive or CD / DVD with recorded data into your PC.

Note: The supported PC operating systems are Windows 7, Vista & XP.

Step2: Find the program "PLAYER.EXE" in the USB flash drive, and double-click it to install.

Note: "PLAYER.EXE" can also be downloaded from <u>www.surveillance-download.com/user/c700.swf</u>.

Step3: Run the program, *VideoPlayer*, and browse to where you save the recorded data. Step4: Select the file you want to start video playback.

### Convert the file format to AVI:

To convert the video file format to AVI, click "AVI" from the playback panel to start file conversion.

Note: The recorded audio (if any) will be removed when the file format is converted to AVI.

**Note:** If the backup video includes data for multiple channels, click to a specific channel for this function to work properly.

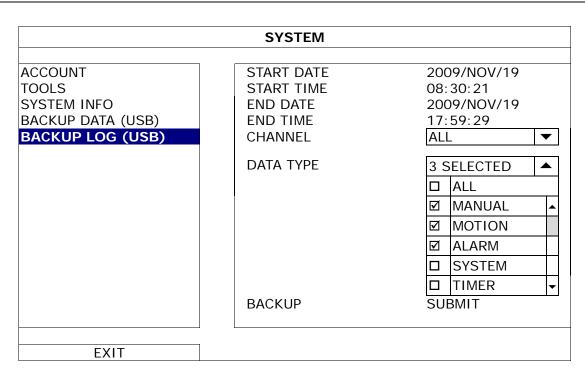


### 5.2.5 BACKUP LOG

This function is used to backup the event log.

Insert a compatible USB flash drive to the USB port at the front panel.

**Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to "APPENDIX 6 COMPATIBLE USB FLASH DRIVE LIST" at page 72.



1) START DATE / START TIME

Select the start date & time.

2) <u>END DATE / TIME</u>

Select the end date & time.

3) <u>CHANNEL</u>

Click to select the channel(s).

4) <u>DATA TYPE</u>

Click "SETUP" to select the event type you want: MANUAL / MOTION / ALARM / SYSTEM / TIMER / HUMAN DETECTION / INFLOW / OUTFLOW / VIRTUAL FENCE / ONEWAY / SENCE CHANGE, or select "ALL" to choose all event types.

Note: Some events are available only for selected models.

5) <u>BACKUP</u>

Click "SUBMIT" to start backup. You'll see a log file (.csv) in the flash drive. You may open it with any txt editor, such as NotePad.

### **5.3 EVENT INFORMATION**

### 5.3.1 QUICK SEARCH

		EV	ENT INFO	RMATION			
QUICK SEARCH	HARD D	ISK				ALL HDI	
EVENT SEARCH	CHANNE	IL.				2 SELEC	TED 🔻
HDD INFO							
EVENT LOG						101/	
		2009			ſ	VOV	
	SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	_				
	00	06		12		18	24
EXIT				15 : 20			SUBMIT

Step1: Select the hard disk and channel including the video data you want to search.

Step2: Select the year and month including the video data you want to search from the calendar, and the date with recorded data will be highlighted.

**Note:** To select the year and month, move your mouse to the display bar. Then, click and hold to drag up or down.

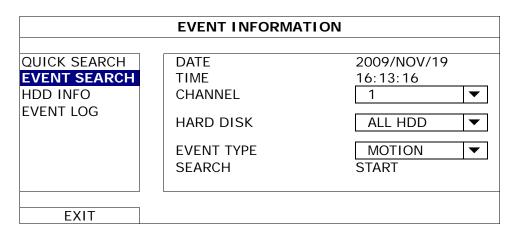
Step3: Select the date you want from the calendar, and the time with recorded data will be highlighted from the time scale bar.

Step4: To immediately play the video clip, click "SUBMIT".

To choose the start time for video playback, move your mouse cursor to the highlighted time, and click to confirm the time when the time display below is the time you want. The video playback is activated right away when you confirm the time.

Note: For video playback operations, please refer to "4.4 Playback" at page 15.

### 5.3.2 EVENT SEARCH



1) DATE / TIME

Select the specific time period that you want to search.

#### 2) <u>CHANNEL</u>

Select the video channel you want to search.

#### 3) HARD DISK

Select the hard disk including the video data you want to search, or select "ALL HDD".

### 4) <u>EVENT TYPE</u>

Select the event type you want to search, or select "ALL" to choose all events.

Note: Some events are available only for selected models.

#### 5) <u>SEARCH</u>

Click "START" to start search and play the video data immediately.

### **5.3.3 HDD INFO**

You can check the remaining capacity of the connected HDD in this device.

	EVENT INFORMATION							
		MODEL	TEMP	0175				
QUICK SEARCH	NUMBER	MODEL	TEMP.	SIZE	FREE	FORMAT TIME	SERIAL NUMBER	F.W.
EVENT SEARCH	HDD-0	ST31000526SV	46	890.562GB	864.832GB	2011/DEC/13 18:18:53	9V0DN5WS	ST31000526SV
HDD INFO								
EVENT LOG								
EXIT								
EXIT								

### 5.3.4 EVENT LOG

You can check all system events (SYSTEM) and backup logs (BACKUP), or clear all log records.

	EVENT INF	ORMATIC	ON	
QUICK SEARCH				
EVENT SEARCH HDD INFO	EVENT KEY UNLOCK		/19 15:49:07	COMMENT
EVENT LOG	VIDEO LOSS POWER ON		'19 15:32:05 '19 15:32:02	04
				-
EXIT		PREV	NEXT	CLEAN

### **5.4 ADVANCED CONFIG**

### 5.4.1 CAMERA

ADVANCED CONFIG					
CAMERA	CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 4				
DETECTION	BRIGHTNESS 128				
ALERT	CONTRAST 128				
NETWORK	SATURATION 128				
DISPLAY	HUE 128				
RECORD	COV. OFF				
DEVICES	REC ON				
DCCS	CHANNEL TITLE CH1				
IVS					
NOTIFY					
EXIT					

### 1) BRIGHTNESS / CONTRAST / SATURATION / HUE

Click the current value to manually adjust the brightness/contrast/saturation/hue of each channel here. .

2) <u>COV.</u>

Select if you want to mask the selected channel under recording (ON / OFF). When this function is activated, the wording "COV." will be shown on the channel screen.

# **Note:** To hide the wording "COV." When this function is on, go to "DISPLAY", and set "DISPLAY COVERT" to "OFF". For details, please refer to "5.4.5 DISPLAY" at page 34.

3) <u>REC</u>

Select if you want to enable recording for the selected channel (ON / OFF).

- **Note:** When this function is disabled, no manual, event or timer recording will be activated even if any of these three record functions is set to "ON".
  - 4) CHANNEL TITLE

Click the channel title column to change the channel title (up to 12 characters). The default title is the channel number.

### 5.4.2 DETECTION

ADVANCED CONFIG					
CAMERA	CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 ┥ 🕨				
DETECTION	LS 07				
ALERT	SS 03				
NETWORK	TS 02				
DISPLAY	MOTION OFF				
RECORD	ALARM OFF				
DEVICES	AREA EDIT				
DCCS					
IVS					
NOTIFY					
EXIT					

### 1) LS (Level of Sensitivity)

"LS" is to set the sensitivity of comparing two different images. The smaller the value is, the higher sensitivity for motion detection. The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default value is 07.

### 2) <u>SS (Spatial Sensitivity)</u>

"SS" is to set the sensitivity for detecting the size of one object (the number of the grids) on the screen. The smaller the value is, the higher sensitivity for motion detection.

The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default setting is 03.

**Note:** The default setting of SS is 03, which means once an object is detected more than 3 grids, the system will get triggered. So the value of SS must be less than the number of grids that you set up for the motion detection area.

### 3) <u>TS (Time of Sensitivity)</u>

"TS" is to set the sensitivity regarding how long one object stays in the detection area and triggers the recording. The smaller the value is, the higher sensitivity for motion detection. The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default setting is 02.

4) <u>MOTION</u>

Select if you want to activate the motion detection function for the selected channel (ON/OFF).

5) <u>ALARM</u>

Select N.C./ N.O depending on your installation need. The default alarm value is OFF.

6) <u>AREA</u>

Click "EDIT" to set the motion detection area.

There are  $16 \times 12$  grids per camera for all channels. Pink blocks represent the area that is not being detected while the transparent blocks are the area under detection.

### 5.4.3 ALERT

	ADVANCED CONFIG			
CAMERA DETECTION	EXT. ALERT INT. BUZZER	ON OFF		
ALERT NETWORK DISPLAY RECORD DEVICES	KEY BUZZER VLOSS BUZZER MOTION BUZZER ALARM BUZZER HDD BUZZER	ON ON ON ON ON		
DCCS IVS NOTIFY	ALARM DURATION (SEC) HDD NEARLY FULL (GB) HDD OVERHEAT ALERT (°C)	5 5 60	• •	
EXIT	L			

1) EXT. ALERT

Select to enable or disable the sound when any external alarm is triggered (ON / OFF).

2) <u>INT. BUZZER</u>

Select to enable or disable the sound (ON / OFF) for all internal buzzers: KEY BUZZER, VLOSS BUZZER, MOTION BUZZER, ALARM BUZZER, and HDD BUZZER.

Note: When this item is set to "OFF", item 3) to item 7) will be disabled even though they are set to ON.

3) <u>KEY BUZZER</u>

Select to enable or disable the sound when pressing the buttons on the front panel (ON / OFF).

4) <u>VLOSS BUZZERD</u>

Select to enable or disable the sound when video loss happened (ON / OFF).

5) MOTION BUZZER

Select to enable or disable the sound when any motion alarm is triggered (ON / OFF).

### 6) ALARM BUZZER

Select to enable or disable the sound when any internal alarm is triggered (ON / OFF).

7) HDD BUZZER

Select to enable or disable the sound (ON / OFF) when the HDD remaining capacity reaches to the value set in "HDD NEARLY FULL (GB)".

8) ALARM DURATION (SEC)

Select the duration time for alarm buzzer in second (5 / 10 / 20 / 40).

9) HDD NEARLY FULL (GB)

If HDD BUZZER is enabled, select the duration time for buzzer notifications when the hard disk available capacity is 5/10/15/20 GB left.

10) HDD OVERHEAT ALERT (°C)

Select the temperature alert for your hard disk to be aware of the possible overheat of your hard disk.

### 5.4.4 NETWORK

### **NETWORK**

### > **STATIC**

ADVANCED CONFIG					
CAMERA	WAN FTP E-MAIL DDNS				
DETECTION	NETWORK TYPE	STATIC 🔻			
ALERT	IP	192.168.001.010			
NETWORK	GATEWAY	192.168.001.254			
DISPLAY	NETMASK	255.255.255.000			
RECORD	PRIMARY DNS	168.095.001.001			
DEVICES	SECONDARY DNS	139.175.055.244			
DCCS	PORT	0080			
IVS		APPLY			
NOTIFY					
EXIT	MAC: 00:0E:53:EC:A7:B4				

#### 1) <u>NETWORK TYPE</u>

Select the network type as STATIC and set all the information needed in the DVR.

2) NETWORK INFORMATION (IP / GATEWAY / NETMASK)

Key in all the network information obtained from your ISP (Internet Service Provider).

3) DNS (PRIMARY DNS / SECONDARY DNS)

Key in the IP address of the domain name server obtained from your ISP (Internet Service Provider).

4) <u>PORT</u>

The valid number ranges from 1 to 9999. The default value is 80. Typically, the TCP port used by HTTP is 80. However in some cases, it is better to change this port number for added flexibility or security.

#### > PPPOE

ADVANCED CONFIG							
		6	1				
CAMERA	WAN	FTP	E-MAIL	DDNS			
DETECTION	NETWC	ork typ	ΡE		PPPOE	$\bullet$	
ALERT	IP				192.168	.001	1.010
NETWORK	GATEW	ΆY			192.168	.001	1.254
DISPLAY	NETMA	SK			255.255	.255	5.000
RECORD	PRIMAR	ry DNS			168.095	.001	1.001
DEVICES	SECONDARY DNS			139.175	.055	5.244	
DCCS	PORT				0080		
IVS	USER N	IAME			OFFICE		
NOTIFY	PASSW	ORD					
EXIT	MAC: 0	0:0E:5	3: EC: A7: B	4			

#### 1) NETWORK TYPE

Select the network type as PPPOE and set all the information needed in the DVR.

#### 2) DNS (PRIMARY DNS / SECONDARY DNS)

Key in the IP address of the domain name server obtained from your ISP (Internet Service Provider).

3) <u>PORT</u>

The valid number ranges from 1 to 9999. The default value is 80. Typically, the TCP port used by HTTP is 80. However in some cases, it is better to change this port number for added flexibility or security.

4) USER NAME / PASSWORD

Set "username" and "password" subscribed from your ISP supplier

## > DHCP

**Note:** When DHCP configuration is completed, please move to "DDNS" to configure the DDNS service.

ADVANCED CONFIG				
CAMERA DETECTION ALERT	WAN FTP E-MAIL DDNS NETWORK TYPE IP	DHCP ▼ 192.168.001.010		
NETWORK DISPLAY RECORD DEVICES DCCS IVS NOTIFY	GATEWAY NETMASK PRIMARY DNS SECONDARY DNS PORT	192.168.001.254 255.255.255.000 168.095.001.001 139.175.055.244 0080		
EXIT	MAC: 00:0E:53:EC:A7:B4			

1) NETWORK TYPE

Select the network type as DHCP.

2) DNS (PRIMARY DNS / SECONDARY DNS)

Key in the IP address of the domain name server obtained from your ISP (Internet Service Provider).

3) <u>PORT</u>

The valid number ranges from 1 to 9999. The default value is 80. Typically, the TCP port used by HTTP is 80. However in some cases, it is better to change this port number for added flexibility or security.

## <u>FTP</u>

When this function is enabled and an event occurs, a html file including a link will be sent to the specified FTP site. Click the link to access to this DVR and check the event recording.

ADVANCED CONFIG				
CAMERA DETECTION ALERT	WAN FTP FTP ALERT USER NAME	E-MAIL	DDNS ON MANAGER	
NETWORK DISPLAY RECORD	PASSWORD SERVER PORT		●●●●●● 192.168.2.32 0021	2
DEVICES DCCS IVS NOTIFY	DIRECTORY		UPLOAD	
EXIT	L			

## E-MAIL

When this function is enabled and an event occurs, a html file including a link will be sent to the specified E-mail address. Click the link to access to this DVR and check the event recording.

ADVANCED CONFIG				
CAMERA DETECTION	WAN FTP E-MAIL E-MAIL ALERT	DDNS		
ALERT	SMTP SERVER	SMTP.GMAIL.COM		
NETWORK	PORT	465		
DISPLAY	MAIL FROM	MANAGER		
RECORD	SSL ENCRYPTION	ON		
DEVICES	VERIFY PASSWORD ON			
DCCS	USER NAME	MANAGER		
IVS	PASSWORD	•••••		
NOTIFY	RECEIVER	SETUP		
EXIT				

#### 1) <u>E-MAIL ALERT</u>

Select "ON" to enable this function, or "OFF" to disable this function.

## 2) <u>SMTP SERVER</u>

Enter the SMTP server address provided from your e-mail system supplier.

3) <u>PORT</u>

Enter the port number provided from your e-mail system supplier. If this column is left blank, the e-mail server will use port 25 to send e-mails.

4) MAIL FROM

Enter the sender's name.

5) <u>SSL ENCRYPTION</u>

Select "ON" if your e-mail server is using SSL encryption to protect your e-mail content from unauthorized access.

6) <u>VERIFY PASSWORD</u>

Some mail servers are required to verify the password. Please enter the "user name" and "password".

## 7) USER NAME / PASSWORD

Enter the "user name" and "password" when "VERIFY PASSWORD" is set to "ON".

8) <u>RECEIVER</u>

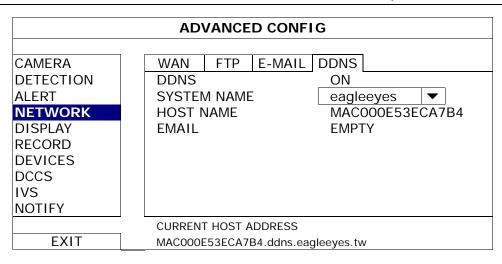
Select "SETUP" to add up to 15 e-mail addresses of the assigned recipients.

## **DDNS**

You need to additionally set DDNS when your network type is PPPOE or DHCP.

We have our own DDNS server for quick DDNS service configuration. You don't need to additionally apply a DDNS service.

- To use our own DDNS server, select "eagleeyes" in "SYSTEM NAME".
- The default host name is the MAC address of the DVR.
   Then, note down the whole address under "CURRENT HOST ADDRESS", such as MAC000E53ECA7B4.ddns.eagleeyes.tw. This is the default IP address used to access your DVR remotely.
- **Note:** Please at least use the default address to access your DVR remotely once. This is to ensure our DDNS server has your DVR registered. Then, you may change the host name to a more meaningful name to memorize later here.
  - (Optional) Enter your email address to receive our DDNS server notification if any.
- **Note:** If you want to additionally apply a DDNS service instead of using ours, please refer to <u>www.surveillance-download.com/user/CMS.pdf</u> and check "Appendix 2" for details.



## 5.4.5 DISPLAY

ADVANCED CONFIG				
CAMERA DETECTION ALERT NETWORK	FULL SCREEN DURATION QUAD SCREEN DURATION CALL SCREEN DURATION (For selected models only) DISPLAY COVERT	03 ▼ 03 ▼ 03 ▼ ON		
DISPLAY RECORD DEVICES DCCS IVS NOTIFY	HDD DISPLAY MODE DISPLAY OUTPUT	REMAINING SIZE AUTO	▼ ▼	
EXIT				

#### 1) FULL SCREEN DURATION

Select the full screen dwell duration time in second (03 / 05 / 10 / 15).

2) QUAD SCREEN DURATION

Select the quad screen dwell duration time in second (03 / 05 / 10 / 15).

3) CALL SCREEN DURATION (For selected models only)

Select the duration time in second for the CALL monitor function (03 / 05 / 10 / 15).

4) <u>DISPLAY COVERT</u>

Select "ON" or "OFF" to display or hide the wording "COV." When covert recording is activated in "CAMERA".

#### 5) HDD DISPLAY MODE

Select "REMAINING SIZE" to show the remaining HDD capacity for recording in GB, "REMAINING TIME" to show the remaining recording time, or "DAYS KEPT" to show how many recording data are saved in day.

#### 6) <u>DISPLAY OUTPUT</u>

Select the display resolution you want. There are four options as follows:

AUTO (default) > 1920 x 1080 > 1024

➤ 1024 x 768
➤ 1366 x 768

**Note:** To have the best image quality on your monitor, make sure (1) the selected DVR output resolution is supported by your monitor, and (2) the output settings on both the LCD monitor and DVR are consistent.

If the image is not positioned or scaled properly, please go to your monitor's menu for adjustment. For details, please refer to the user manual of your monitor.

## 5.4.6 RECORD

**Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it's recommended to clear all HDD data, and start recording again.

	ADVANCED CONFIG		
CAMERA DETECTION ALERT NETWORK DISPLAY	MANUAL RECORD EVENT RECORD TIMER RECORD PRE-ALARM RECORD OVERWRITE	ON ON ON ON ON	
RECORD DEVICES DCCS IVS NOTIFY	KEEP DATA LIMIT (DAYS) RECORD CONFIG	OFF ▼ SETUP	
EXIT			

1) MANUAL RECORD

Set the manual recording function on / off.

2) EVENT RECORD

Set the event recording function on / off.

3) <u>TIMER RECORD</u>

Set the timer recording function on / off.

#### 4) <u>PRE-ALARM RECORD</u>

Select to enable or disable the pre-alarm function (ON / OFF). When pre-alarm and event recording functions are both activated, the DVR will record 8MB data before an alarm / motion event is triggered.

5) <u>OVERWRITE</u>

Select "ON" to overwrite previous recorded data in your hard disk when the hard disk is full. When this function is on and the hard disk is full, the DVR will clear 8GB data from the oldest for continuous recording without notice.

## 6) KEEP DATA LIMITS (DAYS)

Assign the maximum recording days from 01 to 31 after which all the recorded data will be removed, or select "OFF" to disable this function.

#### 7) <u>RECORD CONFIG</u>

Click "SETUP" to enter the setting page individually for manual record, event record and timer record. For details, please refer to "5.1.1 GENERAL" at page 19.

## 5.4.7 DEVICES

ADVANCED CONFIG				
CAMERA DETECTION ALERT NETWORK DISPLAY RECORD	CH1 CH2 CH3 CH4 CH5 CH6 DEVICE ID PROTOCOL RATE	CH7       CH8       CH9       CH10       CH11       ▲         PTZ       ▼       00         NORMAL       ▼       2400       ▼		
DEVICES DCCS IVS NOTIFY				
EXIT				

## 1) <u>DEVICE</u>

For the PTZ camera, select "PTZ".

For a zoom lens control camera:

The DVR will detect it automatically and display its model number here.

To configure the parameters for a zoom lens control camera, please refer to "5.4.8 DCCS" at page 37. Different zoom lens control cameras might have different parameter settings. For details, please refer to their own user manuals.

#### 2) <u>ID</u>

Click the current value to set the ID number ( $0 \sim 255$ ) for the connected PTZ camera if necessary.

Make sure the ID setting of the camera is the same as the setting here, or the DVR will not be able to control the device.

Note: To know the default ID of the PTZ camera, please refer to its user manual.

3) PROTOCOL

Select NORMAL (our protocol), P-D (PELCO-D) or P-P (PELCO-P) protocol.

4) <u>RATE</u>

Select the baud rate for the connected PTZ camera (2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200). Make sure the baud rate setting of the camera is the same as the setting here, or the DVR will not be able to control the device.

Note: To know the default baud rate of the PTZ camera, please refer to its user manual.

#### Note: This function is for selected models only.

**Note:** DCCS is supported only for CH1. Make sure you've connected a DCCS-enabled camera to the video channel of CH1, and you see "<>" in the channel status bar.

ADVANCED CONFIG				
CAMERA	CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 4			
DETECTION	DIAGNOSTIC START			
ALERT	MENU SETUP			
NETWORK				
DISPLAY				
RECORD				
DEVICES	DEVICE AVK523			
DCCS	CONNECTION OK			
IVS				
NOTIFY				
	·			
EXIT				

#### 1) **DIAGNOSTIC**

Click "START" to start examining the DCCS signal transmission between the DVR and the camera. The result will display in "CONNECTION".

#### 2) <u>MENU</u>

Click "SETUP" to configure the connected zoom lens control camera.

Different zoom lens control cameras might have different parameter settings. For details, please refer to their own user manuals.

**Note:** While configuring the camera parameters, the DVR will switch to the corresponding channel, and you can simultaneously preview the effects for the settings.

#### 3) <u>DEVICE</u>

Here shows the model number of the camera.

#### 4) <u>CONNECTION</u>

Here shows the examining result for DCCS signal transmission between the DVR and camera. The message is as follows:

MESSAGE SHOWN	MEANING	
CHECKING	The DVR is checking the DCCS signal transmission between the DVR and camera.	
OK	The signal transmission is fine and the DCCS function works properly.	
FAIL	The signal transmission is too weak or not available for the DCCS function to work properly.	

Note: This function is for selected models only.

Note: Before using the IVS function, make sure the event record function is enabled on your DVR.

IVS, Intelligent Video Surveillance, is the advanced application for motion detection, but more precise and smarter. It can be applied to different situations with one of the following three modes: FLOW COUNTING, VIRTUAL FENCE, and ONE WAY.

When anyone crosses the detection line (virtual fence), the recording will be on.

#### **Note:** Four camera channels are supported for this function.

ADVANCED CONFIG				
CAMERA	IVS1 IVS2 IVS3 IVS4			
DETECTION	CAMERA	CH3	•	
ALERT	IVS MODE	FLOW COUNTING	•	
NETWORK	DISPLAY LINE	OFF	•	
DISPLAY	SENSITIVITY	07		
RECORD	RESET COUNT	SUBMIT		
DEVICES	VIRTUAL FENCE AREA	SETUP		
DCCS	SCENE CHANGE	OFF	$\bullet$	
IVS	SCENE CHANGE LEVEL	MIDDLE	•	
NOTIFY				
	· · · · · · · · · · · · · · · · · · ·			
EXIT				

#### 1) <u>CAMERA</u>

Select the camera channel that you want to use the IVS function.

#### 2) IVS MODE

Select one of the following three modes depending on your environment:

MODE	DESCRIPTION
FLOW COUNTING	A virtual detection line is set to detect the moving direction of pedestrians for flow counting.
VIRTUAL FENCE	A virtual detection line is set to detect intruders crossing the detection line, and an alarm will be triggered.
ONE WAY	A virtual detection line is set to detect intruders from the specified direction, and an alarm will be triggered.

#### 3) DISPLAY LINE

Select to display the detection line for IVS on the screen or not.

#### 4) <u>SENSITIVITY</u>

Set the sensitivity for IVS from 00 ~ 15. The larger the value, the more sensitive the IVS will be.

5) RESET COUNT

Click "SUBMIT" to reset the flow counting number to 0 when the IVS mode is set to "FLOW COUNTING" and activated.

#### 6) <u>VIRTUAL FENCE AREA</u>

Click "SETUP" to draw the detection line for IVS, and set the detection direction from left to right, or right to left. This area setting is the detection base for IVS MODE.

**Note:** There are some tips to draw the detection line. For details, please check <u>www.surveillance-download.com/user/IVS\_setup.pdf</u>.

#### 7) SCENE CHANGE

Select "ON" to trigger a motion event when the camera is sensed to be moved and the camera scene is changed. At the same time, the icon " $\Im$ " will be also shown on the screen in addition to the motion icon " $\Im$ "

#### 8) <u>SCENE CHANGE LEVEL</u>

Set the detection sensitivity for "SCENE CHANGE" to "HIGH", "MIDDLE" or "LOW".

## **IVS APPLICATION**

## FLOW COUNTING

Step1: Go to "VIRTUAL FENCE AREA" to draw a detection line with your mouse, and decide the detection direction by selecting "REVERSE".



Step2: Finish the IVS setting and return to the live view. The IVS icon """ will be shown on the status bar. Click it to show the flow counting panel as follows.

When anyone walks across the detection line, the system will determine his movement is in or out, and add one count to the corresponding channel on the flow counting panel.

IN	People coming from the opposite direction to the arrow mark.
OUT	People coming from the same direction as the arrow mark.



# VIRTUAL FENCE and ONE WAY

Step1: Go to "VIRTUAL FENCE AREA" to draw a detection line with your mouse, and decide the detection direction by selecting "REVERSE".



Step2: Finish the IVS setting and return to the live view.

When anyone walks across the detection line, the system will determine his movement is in or out, and:

VIRTUAL FENCE	An event happens for anyone walking across the detection line, and "***" will be shown on the screen.
ONE WAY	An event happens for anyone walking from the opposite direction to the arrow mark, and "" will be shown on the screen.



#### **IVS STATISTICS**

Press "LIST" on the DVR front panel, or click " $\square$ "  $\rightarrow$  " $\square$ " to enter the event search menu. Then, select

## "STATISTIC"

LIST									
QUICK SEARCH	CHANNEL	3 SELECTED 🔺							
RECORD		🗆 ALL							
MOTION		☑ CH1 ▲							
ALARM		☑ CH2							
TIME		🗹 СНЗ							
HUMAN DETECTION		□ CH4							
IVS		🗖 СН5 👻							
FULL									
STATISTIC	EVENT TYPE	3 SELECTED 🔺							
		🗆 ALL							
		☑ INFLOW ▲							
		☑ OUTFLOW							
		☑ VIRTUAL FENCE							
		□ ONEWAY							
		□ MOTION ▼							
	TIME	2010/MAY/17							
	STATISTIC	SUBMIT							
EXIT									

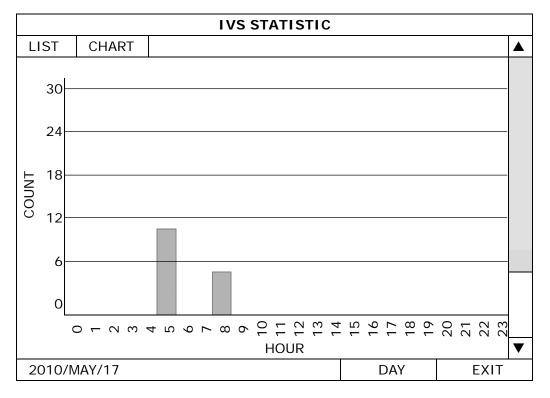
Set all the criteria you want to search, and click "SUBMIT" in "STATISTIC" to show the event statistics by DAY in LIST (default) or CHART.

- > To check the statistics in the bar chart, click "CHART".
- > To switch to the MONTH or HOUR view, click "DAY" at the bottom.

#### List View

		IVS STAT	ISTIC			
LIST	CHART					
HOUR		COUNT				
00:00 -	- 00:59	0				
01:00 -	- 01:59	0				
02:00 -	- 02:59	0				
03:00 -	- 03:59	0				
04:00 -	- 04:59	0				
05:00 -	- 05:59	10				
06:00 -	- 06:59	0				
07:00 -	- 07:59	0				
08:00 -	- 08:59	5				
09:00 -	- 09:59	0				▼
2010/N	IAY/17			DAY	EXIT	

#### Chart View



## 5.4.10 NOTIFY

You can configure this DVR to send notifications for certain events to mobile devices with our mobile app, EagleEyes, installed, or to the specified E-mail address(es).

## PUSH VIDEO

Note: This function is for selected models only.

Before using this function, make sure:

- An external alarm is connected to PUSH VIDEO Alarm in terminal on the rear panel.
- You have a iPhone, iPad, or Android mobile phone or tablet.
- You have subscribed the mobile network service from your mobile service provider.
- The mobile app, EagleEyes, is installed in your mobile device. For details, please refer to "APPENDIX 4 MOBILE SURVEILLANCE VIA EAGLEEYES" at page 68.
- You have configured EagleEyes to access this DVR, and Push Video is enabled. For details, please refer to "APPENDIX 5 SET PUSH VIDEO" at page 70.

You'll get an active event notification with video telling you the occurrence of alarm event(s).

		ADVANCED CO	ONFIG										
CANERA	PUSH VIDEO	PUSH MESSAGE	MESSAGE MAIL	VIDEO M	AIL								
DETECTION	GUARD			(	ON								
ALERT	CH01	ALARM OFF / IN	ALARM OFF / INTERNAL ALARM 🔻 CH1										
NETWORK	CH02	ALARM OFF	ALARM OFF CH2										
DISPLAY	CH03	ALARM N.O.		<b>▼</b> (	office								
RECORD	CH04	ALARM OFF		▼ (	CH4								
DEVICES				<u> </u>									
DCCS													
IVS													
ΝΟΤΙΕΥ													
EXIT													

1) <u>GUARD</u>

Select to enable or disable Push Video function (ON / OFF).

Select to activate the Push Video function (ON / OFF). Or it could also be activated later from your iPhone, iPad or Android mobile device.

**Note:** For details about DVR operations from your mobile device, please visit <u>http://www.eagleeyescctv.com</u>.

2) ALARM TYPE

Select the external alarm type to "ALARM NO." or "ALARM N.C." For CH01, there's one more option of "INTERNAL ALARM". This option should be selected only when the camera connected to CH1 is a human detection camera.

3) <u>CH1 ~ 4</u>

Enter the text you want to see when your iPhone, iPad or Android mobile device receives Push Video. The default text is the channel number.

## PUSH MESSAGE

Note: This function is for selected models only.	
--	--

Before using this function, make sure:

- You have iPhone, iPad, or Android mobile phone or tablet.
- You have subscribed the mobile network service from your mobile service provider.
- The mobile app, EagleEyes, is installed in your mobile device. For details, please refer to "APPENDIX 4 MOBILE SURVEILLANCE VIA EAGLEEYES" at page 68.
- You have configured EagleEyes to access this DVR, and Push Video is enabled. For details, please refer to "APPENDIX 5 SET PUSH VIDEO" at page 70.

You'll get a text message telling you the occurrence of selected system event(s).

		ADVANCE	D CONFIG		
CANERA	PUSH VIDEO	PUSH MESSAGE	MESSAGE MAIL	VIDEO MAIL	
DETECTION	ACTION	] OI	N		
ALERT	EVENT		ALL		
NETWORK			VIDEO LOSS		
DISPLAY			HDD FULL		
RECORD			POWER ON		
DEVICES		Ø	CLEAR HDD		
DCCS			NET LOGIN		
IVS		Ø	KEY UNLOCK		
NOTIFY			NETWORK		
			UPS		
			SYSTEM ABNOR	MAL	
	<u>.</u>				
EXIT					

Step1: Switch "ACTION" to "ON".

Step2: Select the system event(s) you want to get notified via your mobile device.

Step3: Enable "Push Message" in EagleEyes on your mobile device, and try to trigger an alarm event to see if you'll get Push Message.

#### **MESSAGE MAIL**

# Note: For E-mail notifications, make sure you have configured an E-mail account in "NETWORK" → "E-MAIL" to send the notifications.

Enable this function in "ACTION", select the event type(s) you want to send notifications in "EVENT", and add the E-mail address(es) to which you want to send notifications in "RECEIVER".

ADVANCED CONFIG CANERA PUSH MESSAGE MESSAGE MAIL VIDEO MAIL PUSH VIDEO DETECTION ACTION ON ALERT EVENT NETWORK ☑ VIDEO LOSS DISPLAY □ HDD FULL RECORD □ POWER ON DEVICES ☑ CLEAR HDD DCCS □ NET LOGIN IVS ☑ KEY UNLOCK NOTIFY □ NETWORK □ UPS □ SYSTEM ABNORMAL RECEIVER SETUP EXIT

You'll get an E-mail telling you the occurrence of your selected event(s).

#### VIDEO MAIL

**Note:** For E-mail notifications, make sure you have configured an E-mail account in "NETWORK"  $\rightarrow$  "E-MAIL" to send the notifications.

Enable this function in "E-MAIL ALERT", and add the E-mail address(es) to which you want to send notifications in "RECEIVER".

You'll get an E-mail telling you the occurrence of motion events attached with a html file.

		ADVANCE	DCONFIG	
		1		I
CANERA	PUSH VIDEO	PUSH MESSAGE	MESSAGE MAIL	VIDEO MAIL
DETECTION	E-MAIL ALERT	-		ON
ALERT	RECEIVER			SETUP
NETWORK				
DISPLAY				
RECORD				
DEVICES				
DCCS				
IVS				
NOTIFY				
EXIT				

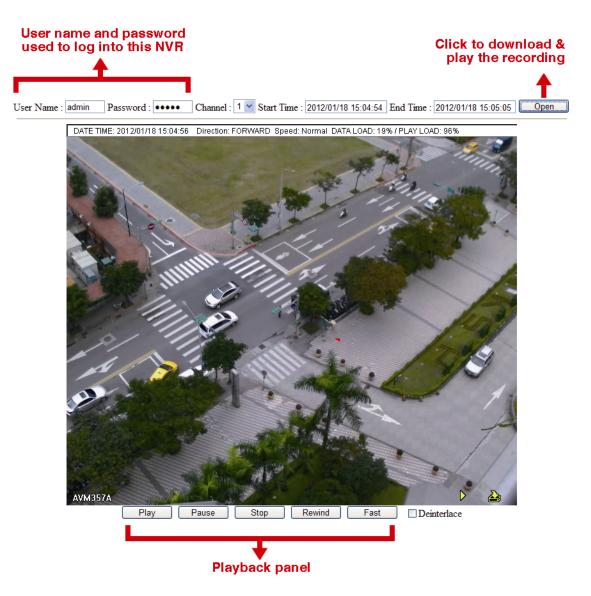
#### How to check video recording

Step1: Open the html file attached.

#### Note: Please accept to install ActiveX control on your computer.

Step2: Enter the user name and password to log into this NVR, and select the channel you want.

Step3: Click "Open" to download the motion recording to your computer and start playing.



# **5.5 SCHEDULE SETTING**

## 5.5.1 RECORD

			SCH	EDUL	E SE	ΓΤΙΝΟ	à						
RECORD DETECTION	RECORD	TIMEF 2	R 4	6	8	10	12	C 14	DN 16	18	20	22	24
ALARM	SUN MON TUE WED THU FRI SAT												
EXIT													

Select "ON" to enable record timer, and select the day and time for this function.

X axis0 ~ 24 hours. Each time bar is 30 minutes.Y axisMonday ~ Sunday.

## **5.5.2 DETECTION**

Select "ON" to enable detection timer, and select the day and time for this function.

RECORD	DETECTION TIMER						ON															
DETECTION		0 0	2		ск 4	6	6	8		10		12		14	U	16		18	20		22	2
ALARM	SUN																					
	MON																					
	TUE																					
	WED																					
	THU						П															
	FRI						П															
	SAT						П															
	· ·												1		1 1							
EXIT																						

X axis0 ~ 24 hours. Each time bar is 30 minutes.Y axisMonday ~ Sunday.

## 5.5.3 ALARM

RECORD	ALARM T							0	N						
DETECTION	0 2 4 6					8	10	12	1	4	16	18	20	22	24
ALARM	SUN														
	MON														$\square$
	TUE														$\square$
	WED														$\square$
	ТНИ														$\square$
	FRI														$\square$
	SAT														
EXIT	]														

Select "ON" to enable alarm timer, and select the day and time for this function.

**X axis** 0 ~ 24 hours. Each time bar is 30 minutes.

Y axis Monday ~ Sunday.

## 6. REMOTE OPERATION

You can also control the DVR remotely via the supplied licensed software "Video Viewer", web browser, and your smart phones.

**Note:** For more details about mobile surveillance via your smart phones, please visit our official website <u>www.eagleeyescctv.com</u>, or download the instructions of EagleEyes installation and configuration from <u>www.surveillance-download.com/user/eagleeyes\_guick.pdf</u>.

## 6.1 Supplied Licensed Software

The sections below describe frequently-used functions of the Video Viewer. For details about this software and network settings, please download its extended user manual from the following link: <a href="http://www.surveillance-download.com/user/CMS.pdf">http://www.surveillance-download.com/user/CMS.pdf</a>

#### 6.1.1 Installation & Network Connection

1) Install the software

Step1: Place the supplied CD into your CD-ROM or DVD-ROM drive. The program will be automatically run. Step2: Click "Video Viewer" to install the program, or click "Download the latest manuals and programs" to download the latest version of Video Viewer from the Internet.

Step3: Follow the on-screen instructions to finish the installation. When the installation is completed, a shortcut icon "" will be placed on your PC desktop.

#### 2) <u>Network Connection</u>

Local Connection (via LAN)

LAN is used when it's the first time to remotely access the DVR and you need to configure the network setting of your DVR based on your network type in advance.

a) Connect the DVR to your PC via a RJ45 network cable. The default DVR values are as follows:

Default Value
192.168.1.10
admin
admin
80

- b) Set the PC's IP address as "192.168.1.XXX" (1~255, except 10) in order to make the PC and DVR under the same domain.
- c) Double-click "See" on your PC desktop to enter the control panel. By defaults, the "Address Book" panel will be displayed on the right side of the control panel.
- d) Click "↓" → " 11 to key in the default IP address, user name, password, and port number of the DVR you intend to connect.

OR

Click " $\bigcirc$ "  $\rightarrow$  " $\bigcirc$ " to search the available IP address(es) of other DVR(s) under the same domain as your PC's IP address. The found address(es) will be listed, and can be added into the address book by clicking " $\bigcirc$ ".

e) Double-click the IP address you just added into the address book to log in.

#### Remote Connection (via Internet)

When the network configuration of your DVR is completed, you can access your DVR remotely via Internet.

- a) Double-click "P?" on your PC desktop to enter the control panel. By defaults, the "Address Book" panel will be displayed on the right side of the control panel.
- b) Click " <sup>1</sup>/<sub>1</sub>" → " <sup>1</sup>/<sub>1</sub>" → " <sup>1</sup>/<sub>1</sub>" to key in the IP address, user name, password, and port number of the DVR you intend to connect.

OR

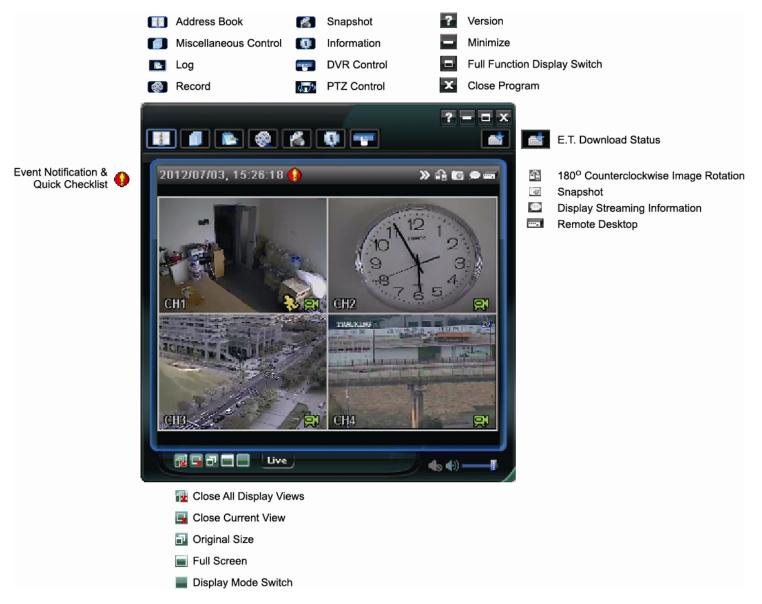
Click "  $\square$ "  $\rightarrow$  "  $\blacksquare$ " to search the available IP address(es) of other DVR(s) under the same domain as your PC's IP address. The found address(es) will be listed, and can be added into the address book by clicking "  $\blacksquare$ ".

c) Double-click the IP address you just added into the address book to log in.

#### 6.1.2 Control Panel Overview

Two control panels are available and can be switched depending on your use habit.

#### Simplified Version (Default)



# Full Function Version



## Main Button Overview

But	tton	Francisco	Description			
Simplified	Full Function	Function				
- MARK		Address Book		Click to show the predefined IP address(es). You can add, search the IP address to log in the DVR remotely.		
				Remote Config	Click to go into the detailed DVR setting.	
		Miscellaneous Control	(ع	Record Setting	Click to go to the detailed record setting.	
				Custom Setting	Click to choose the language of this program. The language change will take effect when this program is closed and executed again.	
		Log			ent and recording logs, search the desired log(s) by the recording of the selected log.	
🔞 / 🔇	<b>&amp;</b> , <b>&amp;</b>	Record / Record Stop	Click	to start / stop	the manual recording.	
K	O	Snapshot	Click to take a snapshot of the current view. The snapshot will the in the path you specified in "Record Setting".		•	
		Information	Click	Click to show the current network connection details.		
		DVR Control	Click	to go to the [	OVR control panel to operate the DVR remotely.	

## 6.1.3. General Operation

### **Record**

To record remotely at the same time for any event or alarm at the DVR side, click "fillered fillered fillered for any event or alarm at the DVR side, click "<math>fillered fillered fillered fillered for any event or alarm at the DVR side, click "<math>fillered fillered fi

Second second second	Off Timer	Motio	n 🗆 Alarm	Prev/Post Event Recon	rd		
7 Overwi	ite Hard Disk	Ì					
	ime Range-						
Weekly	•		Timer	Alarm	Motion		
	oustonn						
+ -	Sun	0 1 2 3 .	4 5 6 7 8	9 10 11 12 13 14 15 16	17 18 19 20 21 22 23		
3	Sun						
1	Mon			ala dala dala dala dala dala dala dala			
1	Tue						
	Wed						
	Thu						
	Fri						
	Sat						
	Sat						
Record P	ath						
Drive	Total(MB)	Free(MB)	Reserve (MB)	Video Path	Picture Path		
	29996	10867	2048	C:\tempvideo\	C:\temppicture\		
	78528	22242	2048	D:\	D:\		
D:	76316	23637	2048	E:V	E:N		
D: E:	76316			F:\tempvideo\	F:\temppicture\		

In the "Record Setting" page, you can set the following items:

- Record type
- Hard disk overwriting
- Pre- / post-alarm record time
- Record time setting
- Record path

If "Manual" is checked, click " or " on the main control panel to start the manual recording immediately, and the recordings will be saved in the specified location.

If "Motion" and / or "Alarm" are checked, the recording function will also be enabled at the remote side when any event is triggered at the DVR side, and the recordings will be saved in the specified location.

#### **Playback**

To play a recording, click "**W**", and select the "Record" tab or "Backup" tab. A list of all the recordings will be shown by defaults, and you can also sort out the logs you want to speed up the search time.

lime Ra		_		Prev. Ne	4	Record Type		
Range Unit On Start Time:			e Week 🝷 🔜	✓ User	🔽 Alarm			
			2010/11/21	<b>⇒</b>   <b>▼</b>		Motion	RETR	
	End Time	:	2010/11/27	+ + +				
Record	Backup	Event	Event Trigger				Qu	ery
Event	I	P	Start Time	End Time		File Path	Reserve	Error
User	yes-AVC7	no A dama	11 00 00 15 10 05					
		90A.U.YIL	11/22/10 15:13:27	11/22/10 15:30:00	F:\tempvideo\2	0101122151327_Livi	Г	
		964.0уш	11/22/10 15:13:27	11/22/10 15-30:00	F:\tempvideo\2	0101122151327_Liv	F	F

To immediately play a recording, select a log from the list, and click "Play", or double-click the selected log.

## Network Backup

Click " $\bigcirc$ ", or click " $\bigcirc$ " to go into the "Backup" page as follows, and you can select a specific time range or event to make a video backup remotely.

The file(s) you backup will be from the currently selected IP address.

HDD Number:	MASTER		,		
st Calendar		Г	СН9 🗆 С	H10 T CH11 T CH1	2 T CH13 T CH14 T CH15 T CH16
	NO.	Event	CH	Time	1
	1	MOTION	4	2010/11/24 17:56:41	-
Reload	2	MOTION	3	2010/11/24 17:56:38	Event Filter:
Ticibau	3	MOTION	4	2010/11/24 17:54:01	Liontinon
	4	MOTION	4	2010/11/24 17:51:42	
	, 5	MOTION	3	2010/11/24 17:51:40	System, Manual, Timer, Alarm 🔻
Prev. Page	6	MOTION	4	2010/11/24 17:46:42	
3	7	MOTION	4	2010/11/24 17:43:57	
	8	MOTION	3	2010/11/24 17:43:50	
	1 9	MOTION	3	2010/11/24 17:43:26	
Next Page	10	MOTION	4	2010/11/24 17:43:23	
	11	MOTION	4	2010/11/24 17:42:32	
	12	MOTION	4	2010/11/24 17:41:34	
	13	MOTION	3	2010/11/24 17:40:55	
	14	MOTION	4	2010/11/24 17:40:26	
	15	MOTION	4	2010/11/24 17:40:15	
	16	MOTION	4	2010/11/24 17:39:17	
	17	MOTION	4	2010/11/24 17:38:22	
	18	MOTION	4	2010/11/24 17:37:24	
	19	MOTION	4	2010/11/24 17:36:23	
	20	MOTION	3	2010/11/24 17:36:21	
Start Time:	2010/11/2	2 15:14:47	<u>↓</u> ▼	End Time:	2010/11/22 16:14:47
File Path:	E:\downl	oad			File Size: 200MB

Function	Description
HDD Number / Channel	Specify the hard disk (HDD Number) and channel number (Channel) within which have the video data you need.
Download by Time	Specify the time range within which has the video data you want in the "Start Time" and "End Time" columns.
Download by Event	<ul> <li>Select an event log from the event list. This list shows all logs in the specified DVR from the latest to the earliest.</li> <li>To quickly find the events you need, check or uncheck the event type "System" / "Manual" / "Alarm" / "Motion", and select the log you want.</li> <li>To view the earlier or later logs that are not shown in the current page, click "Prev. Page" or "Next Page".</li> <li>To refresh the event list, click "Reload".</li> </ul>
File Path	Assign the location where the backup files are saved.

Function	Description
Simultaneous Playback	To view the backup images simultaneously when the download process is in progress, select the checkbox "Simultaneous Playback". You will see the backup images while the images are being downloaded to the PC or notebook.
	To simply backup images without previewing, deselect the checkbox "Simultaneous Playback". You will only see a message box indicating the total time needed, the current status and the saving location.
Download / Cancel	Click "Download" to start or "Cancel" to discard the video backup.

#### Firmware Upgrade

This function is used to grade your DVR for function scalability.

**Note:** Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Step1: Click ", and select the IP address of your device in the address book.

Step2: Click " ```` to show the upgrade page, "Update Server". 1. Address Book . Select an address Address
Port Comment REC 192108110 80 . Step2: Click ' . Address Book . Select an address . Select an ad

Step3: Click "Add" to browse to the upgrade files.

Update Server(IVS-4CH.dyndns.org)
Current version: 1008-1003-1004-1002
Firmware Language Logo
Add Remove
C:\1008-1003-1004-1002\4ppImg_4.bin C:\1008-1003-1004-1002\fboot_4.bin C:\1008-1003-1004-1002\kernel_4.bin C:\1008-1003-1004-1002\xml_4.bin
Upgrade Firmware
Config. File
System Backup: Backup

Step4: Click "Upgrade Firmware" to start firmware upgrade.

**Note:** It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The device will reboot after the upgrade.

Step5: Select the IP address of the device and click " salar again to check if the firmware is upgraded.

#### 6.1.4. E-Map

Video Viewer is also a Central Management System (CMS) software, which allows network device control & management for up to 16 devices simultaneously.

**Note:** Before using this function, make sure Video Viewer is connected to all the devices (up to 16) you want to monitor.

E-Map is **ONLY** available when the control panel is switch to the full function version.

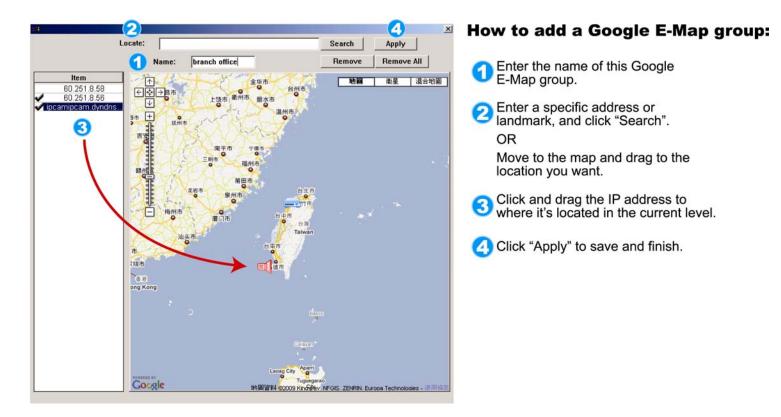
How to Add an E-Map Group

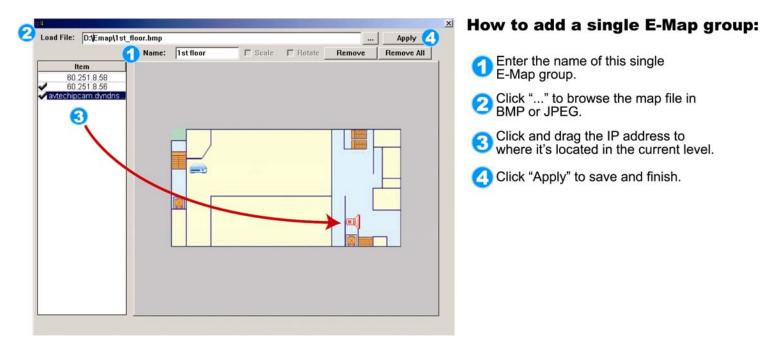
STEP1: In the simplified version, click "<sup>1</sup> to switch the control panel to the full function version, and click "<sup>1</sup> to enter the E-Map page as follows.

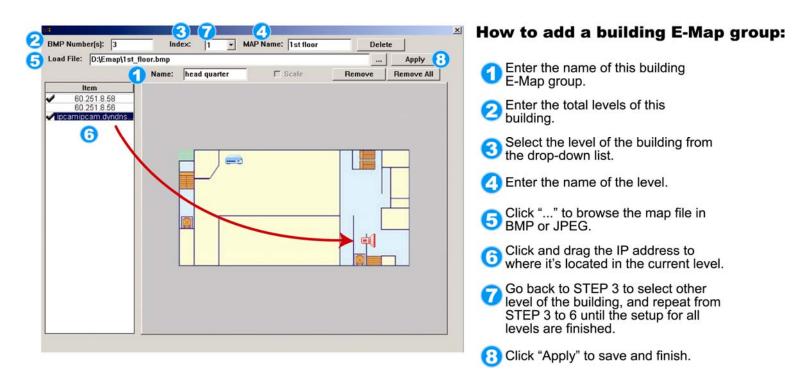
**Note:** To know where the buttons are, please refer to "Simplified Version (Default) at page 48, and "Full Function Version" at page 49.



STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add. There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.







STEP3: When the E-Map group is created, you will see the tree on the top-left panel, showing all the devices you've added to this group.



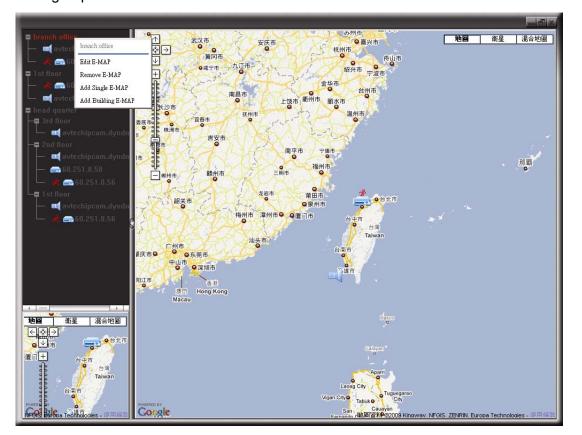
lcon	Description
	The connected device is camera. When it's selected, it will become red.
	The connected device is DVR. When it's selected, it will become red.
Å	For any motion or alarm event, it will appear on the screen to catch your attention. To know what's happening quickly, double-click the device icon on the E-Map to show the live view.

# How to Edit / Remove an Existing E-Map Group

For Google E-Map Group

Right-click on the group name to show the shortcut menu list, and select "Edit E-MAP" or "Remove E-MAP" as needed.

You can also add a single E-Map group (Add Single E-MAP) or Building E-Map group (Add Building E-MAP) into the existing Google E-Map group.



# ➢ For Single E-Map Group

Right-click on the group name to show the shortcut menu list, and select "Edit E-MAP" or "Remove E-MAP" as needed.



#### For Building E-Map Group

Right-click on the group name to show the shortcut menu list, and select "Edit Building E-MAP" or "Remove E-MAP" as needed.

			_ dix
■ branch office → ■ avtechipcam.dyndns.r → → ⊕ 60.251.8.56			
📮 1 st floor			· ·
head quarter     Jead quarter     head quarter			
Edit Building E-MAP			
│			
└──			
🗕 🛋 avtechipcam.dyndn 🦛 🌮 60.251.8.56 💡			
			-
	X		
Const Const Const	1821		
		1957	

To edit or remove a certain level of the building E-Map group, right click on the level name, and select "Edit E-MAP" or "Remove E-MAP" as needed.

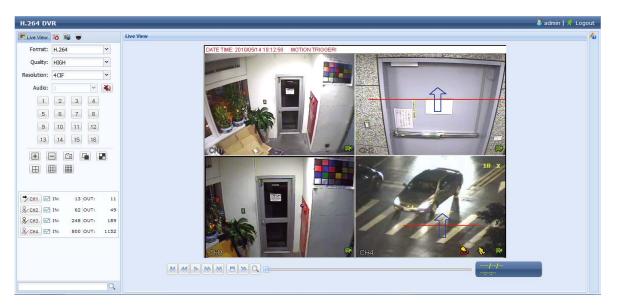


## 6.2 Web Browser

You can view the images or operate your DVR with a web browser, for example, Microsoft Internet Explorer.

**Note:** The supported PC operation systems are Windows 7, Vista & XP.

- **Note:** To use Mozilla Firefox or Google Chrome for remote access, please go to Apple's official website (http://www.apple.com) to download and install QuickTime first.
- **Note:** The illustration below is just for your reference and may be different from what you actually see. Some functions and buttons are for selected models or certain user levels only.
- Step 1: Key in the IP address used by your DVR in the URL address box, such as 60.121.46.236, and press Enter. You will be prompted to enter the user name and password to access the DVR.
  If the port number your DVR used is NOT 80, you need to key in the port number additionally. The format is *ipaddress:portnum*. For example, for IP address 60.121.46.236 and port No. 888, please key in "http://60.121.46.236:888" into the URL address box, and press "Enter".
- Step 2: Enter the user name and password, the same as the ones used at AP login, and click "OK". You will see a similar screen as the following when the login information is correct.

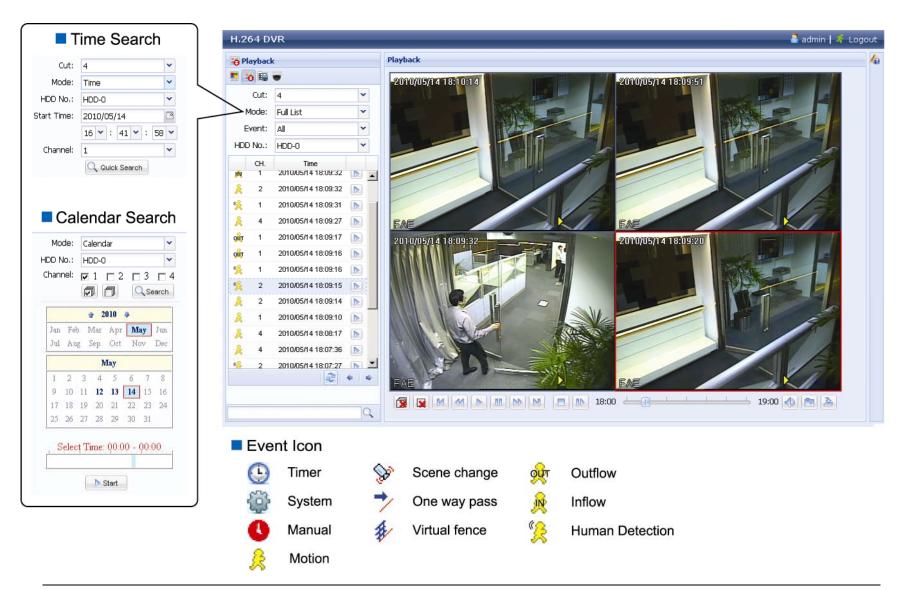


lcon	Description
<b>.</b>	Click to go to the live view of the DVR.
	Click to enter the playback panel where you can search or select the event you want to play and download to your PC simultaneously. For details, please refer to "6.2.1 Event Playback & Download" at page 59.
	Click to go to the detailed DVR setting.
	Click to enter the PTZ mode.
Video / Audio Control	
Format	H.264 / QuickTime
	QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in you operation system first. When "QuickTime" is selected, you will be promoted to enter the user name and password to access the server of the DVR.
Quality	BEST / HIGH / NORMAL / BASIC
	Select the image quality.
Resolution	4 CIF / CIF
	Select the image resolution (4CIF: 704*480 / CIF: 352*240)
Audio	Select the audio channel you want for listening to the live audio.
	Note: Your camera must support audio recording, and connect to the video channel which supports audio recording and the audio input of the DVR. For details, please refer to "     (For selected models only)
	Press "▲" to eject the disk tray of the DVD writer.
	1.3 Rear Panel <sup>#</sup> at page 2.

lcon	Description
	means mute.
	To disable the mute status, click this icon again and select the audio channel you want.
Channel Control	
Channel Selection (1~16)	Click one of the number to switch to the channel you want to see in full screen.
<b>+</b> , <b>=</b>	Click to go to the previous / next channel, or change setting.
	Click to take a snapshot of the current view, and save it to the specified path in your PC set in " $\blacksquare$ " $\rightarrow$ "General".
· .	Click to display four channels at a time.
	Click to display each channel one by one, starting from CH1. When the last channel is displayed, it will start from CH1 again.
	: To exit from this display mode, press any other channel display button.
⊞,⊞,Ш	Click to show 4-cut / 9-cut / 16-cut display.
Playback Control	
	Increase the speed for fast rewind. Click once to get 4X speed rewind and click twice to get 8X speed, etc., and the maximum speed is 32X.
	Increase the speed for fast forward. Click once to get 4X speed forward and click twice to get 8X speed, etc., and the maximum speed is 32X.
	Click to play the current video clip.
00	Click to pause the video playback.
	Click to stop the video playback.
	Click to play the video clip slowly, once to get 4X slower, twice get 8X slower.
IVS Panel*	
<u></u> €сн1	This button is enabled only when the IVS mode is "Flow Counting". Click to show the detection line.
	Click to enter the IVS statistics page. For details, please refer to "6.2.2 IVS Statistics" at page 61.

\* For selected models only

## 6.2.1 Event Playback & Download



#### Note: Certain icons are for selected models only.

i 🕱 / 🔀	Close all / Close	Click is to close the current playback video clip (in the red frame), or is to close all playback video clips.
M / M	Previous / Next Hour	Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour.
	Fast Forward	Increase the speed for fast forward. Click once to get 4X speed rewind and click twice to get 8X speed, etc., and the maximum speed is 32X.
	Fast Rewind	Increase the speed for fast rewind. Click once to get 4X speed forward and click twice to get 8X speed, etc., and the maximum speed is 32X.
	Play	Click to play the current video clip.
88	Pause	Click to pause the video playback.
	Stop	Click to stop the video playback.
	Step	In the pause mode, click to get one frame forward.
	Audio	Click to mute the playback if necessary, and click again to restore.
		Note: Audio is available when your camera supports audio recording, and connects to the video channel which supports audio recording and the audio input of the DVR. For details, please refer to "▲ (For selected models only)
		Press "▲" to eject the disk tray of the DVD writer.
		1.3 Rear Panel <sup>®</sup> at page 2.
	Snapshot	Click to take a snapshot of the current view, and save it to the specified path in your PC set in " $\blacksquare$ " $\rightarrow$ "General".
2	Download	Click to download the current video clip to the specified path in your PC.

# 6.2.2 IVS Statistics



TLive Vew 👸 🖳 🐨	Live View	
Format: H.264	DATE T ME: 2010/00/04	1418:12:58 MOTION TRIGGERI
Qualty: HIGH		
Audo: 1 🖌 🖌		
1 2 3 4		
5 6 7 8		
0 10 11 12		
13 14 15 IE		
	CHL	
		18 x
V CH1         W         1.3 (001)           &         CH2         W         IN:         52 (001)         41		
Srciii M^ IN: 240 OUT: 10:		
& CH1 N: 80C OUT: 115:		
and the second s		
	CHB	📃 🔲 🛤 (1H4
	M M N N B N Q	
Q		
IVS Statistic	s	
IVS Statistics:	s Event Search Panel	×
IVS Statistics:	Event Search Panel	× 
IVS Statistics: IVS Statistics Channel:   1  1  1  1  1  1  1  1  1  1  1  1  1	Event Search Panel	
IVS Statistics: IVS Statistics: Channel: F 1 F U	Event Search Panel           2         C 3         C 4         C 5         C 6         C 7	□ 16
IVS Statistics: IVS Statistics Channel:   1  1  1  1  1  1  1  1  1  1  1  1  1	Event Search Panel           2         13         14         15         16         7           1         12         12         13         14         15           IZ Mation         15         16         16         15	□ 16
IVS Statistics: VS Statistics (hennel: 7 1 9 Event: Aler- ViL.aler-	Event Search Panel           2         5         6         7           1         12         13         24         15           IZ         M*ticn         Indiaw         Outffee           IV         M*ticn         Indiaw         Outffee           IV         Hair an Detection         Indiaw         Indiaw	
IVS Statistics: IVS Statistics: Channel: F 1 U Evont: Aler-	Event Search Panel           2         5         6         7           1         12         13         24         15           IZ         M*ticn         Indiaw         Outffee           IV         M*ticn         Indiaw         Outffee           IV         Hair an Detection         Indiaw         Indiaw	□ 16
IVS Statistics: VS Statistics Chennel: [7] 1 Event: Alerr Vitual Pent HDD No.: HDD-0	Event Search Panel	E 8 E 16 www. serch
IVS Statistics: VS Statistics (hennel: 7 1 9 Event: Aler- ViL.aler-	Event Search Panel	IVS Statistics: Chart
IVS Statistics: V's Statistics: (hannel: 1 1 1 V 1 Evont: Alar- VrL.d Fant HDD.No.: HDD-0 IVS Statistics:	Event Search Panel	IVS Statistics: Chart
IVS Statistics: V5 Statistics Chennel: [7] Evont: Aler VFL.al Part HDD No: HDD-0 IVS Statistics: Hur	Event Search Panel	IVS Statistics: Chart
IVS Statistics: VS Statistic Channel: [7 1 ] Event: Aler VitLalent HDD No.: HDD-0 IVS Statistics: Hur 2707/05/14 _F10000	Event Search Panel	IVS Statistics: Chart
IVS Statistics: V5 Statistics Chennel: [7] Evont: Aler VFL.al Part HDD No: HDD-0 IVS Statistics: Hur	Event Search Panel	IVS Statistics: Chart
IVS Statistics: IVS Statistics: IVS Statistics: IVS Statistics: IVS Statistics: IVS Statistics: IVS Statistics:	Event Search Panel           2         5         6         7           1         12         13         24         15           I         12         13         24         15           I         12         13         24         15           I         14         13         24         15           I         14         13         24         15           I         13         24         15         0.00000000000000000000000000000000000	IVS Statistics: Chart
IVS Statistics: IVS Statistics: IVS Statistics: UV U Event: Alert VIL.alert VIL.alert HDD No: HCD-0 IVS Statistics: Hur 2707/05/14 _51:0,-000 2707/05/14 _51:0,-000 2707/05/14 _51:0,-000	Event Search Panel	IVS Statistics: Chart
IVS Statistics:           IVS Statistics:           IVS Statistics:           IVS Statistics:           IV           Event:         Alert           VitL al Part           HDD No:         HDD-0           IVS Statistics:           Hor           2200705/14         2500-000           2200705/14         2502-000           2200705/14         2502-000           2200705/14         2502-000           2200705/14         2502-000           2200705/14         2502-000           2200705/14         2502-000           2700705/14         2502-000           2700705/14         2502-000	Event Search Panel	IVS Statistics: Chart
IVS Statistics: V5 Statistic U U Event: 1 1 U U Event: Alert Vit. al Pert HDD No: HDD-0 IVS Statistics: Hur 2700 /05 (14 30:00 - 000 2700 /00 - 000 27	Event Search Panel	IVS Statistics: Chart
IVS Statistics: IVS Statistics Channel: [7] 1 [ U ] Event: Alerr VitLal Peri HDD No.: HDD-0 IVS Statistics: Hur 2707/05/14 (2000-010) 2707/05/14 (2000-010)	Event Search Panel	IVS Statistics: Chart
IVS Statistics: V5 Statistic U U Event: 1 1 U U Event: Alert Vit. al Pert HDD No: HDD-0 IVS Statistics: Hur 2700 /05 (14 30:00 - 000 2700 /00 - 000 27	Event Search Panel	Search IVS Statistics: Chart US Statistics: Chart US Statistics: Chart US Statistics: Chart US Statistics: Chart
IVS Statistics: IVS Statistics: IVS Statistics IVS Statistics ViLal Period HDD No.: HCD-0 IVS Statistics: Hur 2707/05/14 (2000-000 2707/05/14 (2000-000)	Event Search Panel	IVS Statistics: Chart
IVS Statistics: IVS Statistics: IVS Statistics IVS Statistics ViLal Period HDD No.: HCD-0 IVS Statistics: Hur 2707/05/14 (2000-000 2707/05/14 (2000-000)	Event Search Panel	Image: Signed bit is the set of the

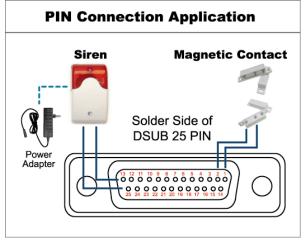
# **APPENDIX 1 SPECIFICATIONS**

			Model 1	Model 2	Model 3	Model 4	Model 5		
▼ Video									
Video System			NTSC / PAL (auto detection)						
Video Compression Fo	rmat				H.264				
Video Input				16 channels (Co	omposite video signal 1	Vp-p 75Ω BNC)			
Video Loop Output				16 channels     NO       (Composite video signal 1 Vp-p 75Ω BNC)     NO					
Video Output	Video Output BNC			ES sequence display)		NO			
	VGA			I	YES (Full HD display)				
-	HDN	11		`	YES (Full HD display)				
Dual Video Output					YES				
▼ Record & Backup									
Maximum Recording Ra	ate	960H		960 x 480 pixels with 360 IPS <ntsc> / 960 x 576 pixels with 360 IPS <pal></pal></ntsc>	-	-	960 x 480 pixels with 360 IPS <ntsc> / 960 x 576 pixels with 360 IPS <pal></pal></ntsc>		
		Frame	704×480	pixels with 480 IPS	<ntsc> / 704×57</ntsc>	6 pixels with 400 I	PS <pal></pal>		
		Field	704x240	pixels with 480 IPS	<ntsc> / 704×28</ntsc>	8 pixels with 400 I	PS <pal></pal>		
		CIF	352×240	pixels with 480 IPS	<ntsc> / 352×28</ntsc>	8 pixels with 400 I	PS <pal></pal>		
Image Resolution			Frame / Field / CIF	960H / Frame / Field / CIF	Frame / F	ield / CIF	960H / Frame / Field / CIF		
Recording Mode				Manual / Timer / Motion / Alarm / Remote					
Pre-alarm Recording			YES						
Quick Search			Time / Motion / Alarm search mode						
Backup Device			USB 2.0 flash drive / Network	DVD Writer (Optional) / USB 2.0 flash drive / Network	USB 2.0 flash drive / Network				
▼ Audio									
Audio Input				4 audio inputs					
Audio Output			2 audio outputs (Mono)						
▼ General									
Hard Disk Storage				Accommodates 2	SATA HDDs (1 HDD	D capacity up to 3TB)			
SATA Interface			YES						
eSATA Interface			YES (For external disk array connection)						
Image Quality Setting			SUPER BEST / BEST / HIGH / NORMAL						
USB Mouse Control			YES						
Motion Detection Area			16 × 12 grids per channel						
Motion Detection Sensi	itivity		3 adjustable parameters for accurate detection						
Event Notification		Push Video / FTP / E-Mail							
Picture Zoom		2X digital zoom							
PTZ Control		YES							
Alarm I/O		16 inputs (4 inputs for Push Video), 1 output							
IR Remote Control			YES (IR receiver built-in)						
Key Lock (Password Pr	rotecti	on)	YES						
User Level			4 user levels for different access privilege						
			YES						
Video Loss Detection					YES				

	Model 1	Model 2	Model 3	Model 4	Model 5		
▼ General							
Video Adjustable		Hue / Saturation / Contrast / Brightness					
Date Display Format		YY/MM/D	D, DD/MM/YY & M	M/DD/YY			
▼ General	•						
Daylight Saving			YES				
Power Source (±10%)			DC 19V				
Power Consumption (±10%)			< 64 W				
Operating Temperature		<b>10</b> °C	C ~40°C (50°F~10	<b>4</b> °F)			
Dimensions (mm)**		432	2(W) × 90(H) × 326	(D)			
▼ Network							
Ethernet	10/10	0 Base-T. Support	s remote control ar	nd live view via Ethe	ernet		
Network Protocol		TCP/IP,	PPPOE, DHCP and	d DDNS			
▼ Remote Surveillance from PC							
Compatible Operating System			Windows & MAC				
Compatible Program	Web Browser: Internet Explorer, Mozilla Firefox, Google Chrome, Safari & Opera						
	Video Viewer: For both Windows and MAC operating systems						
	QuickTime: For	both Windows and	MAC operating sy	stems			
Max. online users			10				
Web Transmitting Compression Format			H.264				
Network Live Audio			YES				
Remote Independent Operation			YES				
Remote Event Download & Playback			YES				
R.E.T.R. (Remote Event Trigger Recording)			YES				
▼ Mobile Surveillance	•						
Арр	EagleEyes						
Compatible Devices	iPad, iPhone, BlackBerry, Symbian, Windows Mobile & Android mobile devices						
Push Video							
(With EagleEyes for iPhone, iPad and Android versions)	YE	S	NO	YI	ΞS		
▼ Others	▼ Others						
DCCS Support	YES (1 channel) NO						
IVA Support	YES (4 ch	annels)		NO			
AVTECH Free DDNS service			YES				
Multiplex Operation	Liv	e display / record	/ playback / backup	/ network operation	าร		
System Recovery	System auto recovery after power failure						
Optional Peripherals	Keyboard Controller						

\* The specifications are subject to change without notice. \*\* Dimensional Tolerance: ±5mm

# **APPENDIX 2 PIN CONFIGURATION**



#### Siren:

When the DVR is triggered by alarm or motion, the COM connects with NO and the siren with strobe starts wailing and flashing.

## Magnetic Contact:

When the magnetic contact is opened, the alarm will be triggered and the recording is on.

\* The D-Sub connector shown above is optional.

PIN	FUNCTION	DESCRIPTION				
1	GND	GROUND				
		Connect ALARM INPUT (PIN 2 9) and GND (PIN 1) connector with wires. Once an alarn is triggered, the DVR will start recording and the buzzer will be on.				
		PIN	Alarm	Corresponding video channel		
		PIN 2	1	CH1		
		PIN 3	3	CH3		
2~9	ALARM INPUT	PIN 4	5	CH5		
	-	PIN 5	7	CH7		
		PIN 6	9	CH9		
		PIN 7	11	CH11		
		PIN 8	13	CH13		
		PIN 9	15	CH15		
10~11	PIN OFF	NA				
12	RS485-A					
13	EXTERNAL ALARM NO	Under the normal operation, COM disconnects with NO. But when any alarm is triggered, COM connects with NO. Attention: The voltage restriction is under DC24V 1A.				
14	PIN OFF	NA				
		Connect ALARM INPUT (PIN 15 – 22) and GND (PIN 1) connector with wires. Once an alarm is triggered, the DVR will start recording and the buzzer will be on.				
		PIN	Alarm	Corresponding video channel	-	
		PIN 15	2	CH2	-	
		PIN 16	4	CH4	-	
15~22	ALARM INPUT	PIN 17	6	CH6	-	
		PIN 18	8	CH8		
		PIN 19	10	CH10		
		PIN 20	12	CH12	_	
		PIN 21	14	CH14	_	
		PIN 22	16	CH16	_	
23~23	PIN OFF	NA				
24	RS485-B					
25	EXTERNAL ALARM COM	Under the normal operation, COM disconnects with NO. But when any alarm is triggered, COM connects with NO. Attention: The voltage restriction is under DC24V 1A.				

# **APPENDIX 3 PUSH VIDEO CONFIGURATION**

**Note:** Available only when your DVR supports Push Video.

# **A3.1 PIN Connection**

This DVR supports sending instant event notifications to your mobile devices, such as iPhone, iPad and Android mobile devices, for an alarm event (Push Video). However, only certain alarm-in pins support this function.

There are two methods to connect alarm sensors for Push Video to take efforts: via PUSH VIDEO alarm-in terminal and via external I/O port.

#### **PUSH VIDEO alarm-in terminal**

A PUSH VIDEO alarm-in terminal is provided on the DVR rear panel, as shown in the right picture, to help you quickly find and connect to the pins which support Push Video.

PUSH VIDEO Alarm In						
	4 L	3	2	1	G	
	Al	arm	1~	4	G	SND

Alarm	Corresponding video channel	
Alarm 1	CH1	
Alarm 2	CH2	
Alarm 3	CH3	
Alarm 4	CH4	

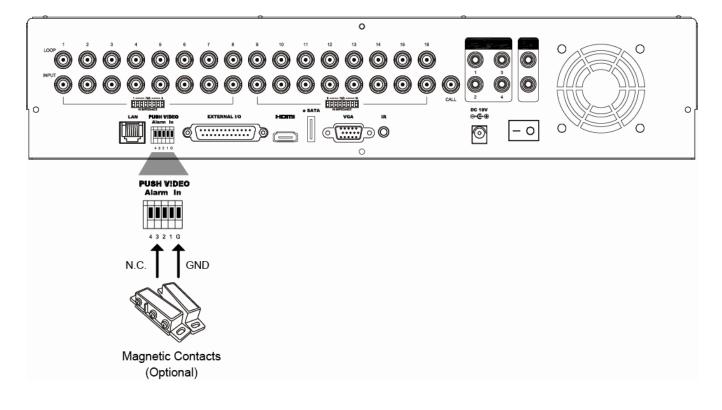
## External I/O port

Check the table below to know which pin for alarm devices supports Push Video and its corresponding video channel.

PIN	Corresponding video channel	
PIN2	CH1	
PIN15	CH2	
PIN3	CH3	
PIN16	CH4	

#### Alarm sensor connection

Connect the alarm sensor, such as magnetic contacts, to the PUSH VIDEO alarm-in terminal or I/O pin which supports Push Video on the DVR rear panel.



# A3.2 Configuration

Before configuring Push Video, make sure:

- 1. The DVR system is set up as described in "2. CONNECTION AND SETUP" at page 4.
- 2. The DVR is connected to Internet.
- 3. You've installed the app, EagleEyes, on your iPhone, iPad or Android mobile devices.

For details, please refer to "APPENDIX 4 MOBILE SURVEILLANCE VIA EAGLEEYES" at page 68.

Step1: Right click to show the main menu.

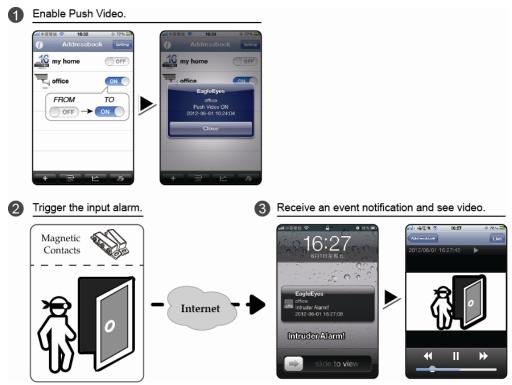
Go to  $\bigcirc$  (ADVANCED CONFIG.)  $\rightarrow$  "NOTIFY" to enable "GUARD" to "ON", and configure your alarm sensor type (N.C. or N.O.).

ADVANCED CONFIG							
			-				
CANERA	PUSH VIDEO	PUSH MESSAGE MESSAGE MAIL VIDEO MAIL					
DETECTION	GUARD	GUARD ON					
ALERT	CH01	ALARM OFF / IN	ITERNAL ALARM	•	CH1		
NETWORK	CH02	ALARM OFF		•	CH2		
DISPLAY	CH03	ALARM N.O.		•	office		
RECORD	CH04	ALARM OFF		•	CH4		
DEVICES							
DCCS							
IVS							
NOTIFY							
	<u>.</u>						
EXIT							

Step2: Open EagleEyes, and add this DVR to the EagleEyes address book.

Note: For more details about EagleEyes operation, please visit www.eagleeyescctv.com.

Step3: Enable Push Video as described below, and try to trigger your sensor to see if you can receive Push Video successfully.



# APPENDIX 4 MOBILE SURVEILLANCE VIA EAGLEEYES

*EagleEyes* is a mobile phone program used with our surveillance system for remote surveillance. It has several advantages:

- It's free (Except EagleEyes Plus for iPhone, EagleEyes Plus+ for Android, and EagleEyesHD Plus for iPad).
- It's compatible with several popular mobile platforms, such as iPhone, iPad, BlackBerry and Android.

It's easy to download, install and configure. For more details about configuring and operating this program, please visit our official website <u>www.eagleeyescctv.com</u>.

## **A4.1 Prerequisites**

Before installing EagleEyes to your mobile phone for remote surveillance, make sure you have checked the following:

- ✓ Your mobile platform is iPhone, iPad, BlackBerry and Android.
- ✓ Mobile Internet services are subscribed and available to use for your mobile phone.
- **Note:** You might be charged for Internet access via wireless or 3G networks. For the Internet access rate details, please check with your local network operator or service provider.
  - ✓ You have noted down the IP address, port number, user name and password used to access your network camera from Internet.

## A4.2 Where to download

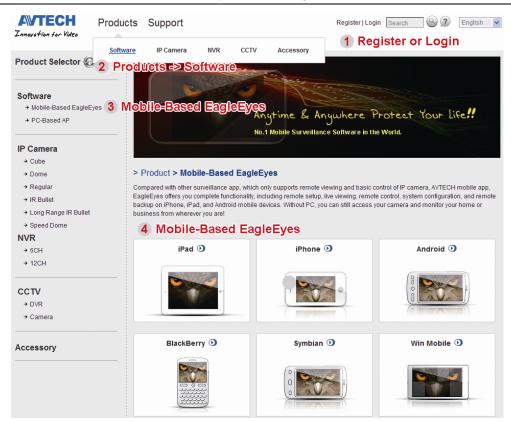
Visit <u>www.eagleeyescctv.com</u> from your mobile device.

#### Note: Please DO NOT download EagleEyes from your computer.

Select "Products"  $\rightarrow$  "Software" to enter EagleEyes introduction page.

Then, select the mobile platform type you're using in "Software", and download the program you need.

Note: This DVR series is compatible only with iPhone, iPad, BlackBerry & Android mobile devices.



Follow the onscreen instructions to start downloading. When the download is completed, *EagleEyes* will be installed automatically to the location where all applications are saved in your phone by default, or where you specify.

**Note:** For more details about configuring this program, scroll down the download page to see related instructions.

# **APPENDIX 5 SET PUSH VIDEO**

Note: Available only when your DVR supports Push Video.

This DVR series supports instant event notifications to your iPhone / iPad / Android mobile device with our self-developed program, "EagleEyes", installed. When a man is detected by a human detection camera or the external alarm device, the DVR will immediately receive alarm signals and send to your iPhone / iPad / Android mobile device.

**Note:** iPhone, iPad and Android are the trademarks or registered trademarks of their respective holders.

## A5.1 Prerequisite

Before setting this function, make sure you have checked the following:

- ✓ You have an iPhone / iPad / Android mobile device with our self-developed program, "EagleEyes", installed. For details, please refer to the previous chapter.
- A human detection camera is connected to CH1 (for models which support DCCS), or an external alarm device is connected to "PUSH VIDEO Alarm In" on the rear panel. Make sure a camera is also connected to record for alarm occurrences. To know which video channel corresponds to which alarm pin, please refer to "APPENDIX 3 PUSH VIDEO CONFIGURATION" at page 65.
- ✓ The event record function of your DVR is not disabled.
- ✓ The motion detection function of your DVR is not disabled.
- ✓ Your DVR is connected to Internet. For details, please refer to <u>http://www.surveillance-download.com/user/CMS.pdf</u>.

## A5.2 Enable Push Video

## A5.2.1 From iPhone / iPad

Step1: In the iPhone / iPad main menu, select "Settings" → "Notifications". Select "EagleEyes", and make sure "Notification Center" is set to "ON".

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Settings	Notifications Done	Notifications EagleEyes
Airplane Mode OFF	Swipe down from the top of the screen to view Notification Center.	Notification Center ON
WI-Fi WLAN06 >	Sort Apps:	Show 5 Recent Items >
Personal Hotspot Off >	Manually 🗸	Alert Style
Notifications	By Time	
Location Services Off >	In Notification Center	
Carrier Chunghwa Telecom >	EagleEyes Badges, Sounds, Alerts	None Banners Alerts
Sounds >	Seather Widget	Alerts require an action before proceeding.
Brightness >	Badges, Alerts	Banners appear at the top of the screen and go away automatically.
🔛 Wallpaper >	Messages	Badge App Icon ON

- Step2: Open "EagleEyes", and switch the Push Video button to "ON". You'll receive the message indicating that Push Video is on.
- Step3: Return to the main menu of your iPhone / iPad. You'll receive event notifications when there's a human detection or an alarm event. Select "Launch" to immediately play the recorded clip.



## A5.2.2 From Android Mobile Device

In the address book, switch "Guard" from "OFF" to "ON".

