

DS-8100HFI-ST Series DVR USER MANUAL Version 2.0.2

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Hikvision® Network Digital Video Recorder User's Manual

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Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for 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.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC.



2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Description on Laser Specification

The optical disc drive such as DVD Super Multi (Double Layer) Drive 22X that is used in this computer is equipped with laser. The classification label with the following sentence is affixed to the surface of the drive.

CLASS 1 LASER PRODUCT TO IEC60825-1

LASER KLASSE 1

The drive with the above label is certified by the manufacturer that the drive complies with the requirement for laser product on the date of manufacturing pursuant to article 21 of Code of Federal Regulations by the United States of America, Department of Health & Human Services, Food and Drug Administration.

In other countries, the drive is certified to comply with the requirement pursuant to IEC 60825-1 and EN 60825-1 on class 1 laser product.

This computer is equipped with the optical disc drive in the following list according to the model.

Safety Warnings and Cautions

Please pay attention to the following warnings and cautions:



Hazardous Voltage may be present: Special measures and precautions must be taken when using this device. Some potentials (voltages) on the device may present a hazard to the user. This device should only be used by the Employees from our company

with knowledge and training in working with these types of devices that contain live circuits.



Caution The power supply in this product contains no user-serviceable parts. Refer servicing only to qualified personel.

Power Supply Hazardous Voltage: AC mains voltages are present within the power supply assembly. This device must be connected to a UL approved, completely enclosed power supply, of the proper rated voltage and current. **No user serviceable parts inside the power supply.**



System Grounding (Earthing): To avoid shock, ensure that all AC wiring is not exposed and that the

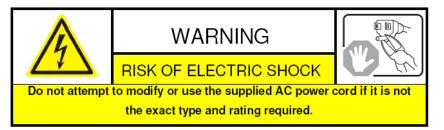
earth grounding is maintained. Ensure that any equipment to which this device will be attached is also connected to properly wired grounded receptacles and are approved medical devices.



Power Connect and Disconnect: The AC power supply cord is the main disconnect device to mains (AC power). The socket outlet shall be installed near the equipment and shall be readily accessible.

Installation and Maintenance: Do not connect/disconnect any cables to or perform

installation/maintenance on this device during an electrical storm.



Power Cord Requirements: The connector that plugs into the wall outlet must be a grounding-type male plug designed for use in your region. It must have certification marks showing certification by an agency in your region. The connector that plugs into the AC receptacle on the power supply must be an IEC 320, sheet C13, female connector. See the following website for more information http://kropla.com/electric2.htm.



Lithium Battery: This device contains a Lithium Battery. There is a risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the vendor's instructions and in accordance with local environmental regulations.

Perchlorate Material: Special handling may apply. See

www.dtsc.ca.gov/hazardouswaste/perchlorate. This notice is required by California Code of Regulations, Title 22, Division 4.5, Chapter 33: Best Management Practices for Perchlorate Materials. This device includes a battery which contains perchlorate material.

Taiwan battery recycling:



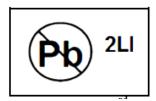
Please recycle batteries.



Thermal and Mechanical Injury: Some components such as heat sinks, power regulators, and processors may be hot; care should be taken to avoid contact with these components.

Electro Magnetic Interference: This equipment has not been tested for compliance with emissions limits of FCC and similar international regulations. This device is not, and may not be, offered for sale or lease, or sold, or leased until authorization from the United States FCC or its equivalent in other countries has been obtained. Use of this equipment in a residential location is prohibited. This equipment generates, uses and can radiate radio frequency energy which may result in harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is required to take measures to eliminate the interference or discontinue the use of this equipment.

Lead Content:



Please recycle this device in a responsible manner. Refer to local environmental regulations for proper recycling; do not dispose of device in unsorted municipal waste.

Preventive and Cautionary Tips

Before connecting and operating your DVR, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the DVR.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the DVR in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Product Key Features

Compression

- PAL/NTSC adaptive video inputs.
- H.264 video compression with high reliability and superior definition.
- Each channel supports dual-stream. Main stream supports up to 4CIF resolution and sub stream supports up to CIF resolution.
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc.
- The quality of the imported and exported record is configurable.
- Each channel supports two kinds of compression parameters, the normal continuous and event, which can be configured locally.
- Encoding for both audio/video composite stream and video stream; audio and video synchronization during composite stream encoding.
- Watermark technology.

Local Monitoring

- Simultaneous HDMI, VGA and CVBS outputs; simultaneous live view and playback via VGA and HDMI outputs.
- HDMI output and VGA output at up to 1920×1080P resolution.
- 1/4/6/8/9/16-division live view is supported, and the display sequence of screens is adjustable.
- Live view screen can be switched in group, and manual switch and automatic cycle review is also provided, the interval of automatic cycle can be adjusted.
- Quick setting menu is provided for live view.
- The selected live view channel can be shielded.
- Motion detection, tamper-proof, video exception alert and video loss alert functions.
- Privacy mask.
- Several PTZ protocols supported; PTZ preset, patrol and pattern.
- Zooming in by clicking the mouse and PTZ tracing by dragging mouse.

HDD Management

- Up to 8 SATA hard disks, 8 network disks (8 NAS disks, or 7 NAS disks+1 IP SAN disk) and 1 eSATA disk can be connected, each disk with a maximum of 4TB storage capacity.
- Support eSATA disk for recording or backup.
- HDD group management.
- Support HDD standby function.
- HDD property: redundancy, read-only, read/write (R/W).
- HDD quota management; different capacity can be assigned to different channel.

Recording, Capture and Playback

- Holiday recording schedule configuration.
- Cycle and non-cycle recording mode.
- Normal and event video encoding parameters.
- Multiple recording types: manual, normal, alarm, motion, motion | alarm, motion & alarm.
- 8 recording time periods with separated recording types.
- Pre-record and post-record for alarm, motion detection for recording, and pre-record time for schedule and manual recording.
- Searching record files and captured pictures by events (alarm input/motion detection).

- Customization of tags, searching and playing back by tags.
- Locking and unlocking record files.
- Local redundant recording and capture.
- Searching and playing back record files by channel number, recording type, start time, end time, etc.
- Motion analysis for the selected area in the video.
- Zooming in when playback.
- Playing reversely.
- Supports pause, rewind, play fast, play slow, skip forward, and skip backward when playback, locating by dragging the mouse.
- Up to 16-ch synchronous playback at 4CIF real time.
- Manual capture, continuous capture of video images and playback of captured pictures.

Backup

- Export video data by USB, SATA or eSATA disk.
- Export video clips when playback.
- Management and maintenance of backup devices.

Alarm and Exception

- Configurable arming time of alarm input/output.
- Alarm for video loss, motion detection, tampering, abnormal signal, video input/output standard mismatch, illegal login, network disconnected, IP confliction, abnormal record/capture, HDD error, and HDD full, etc.
- Alarm triggers full screen monitoring, audio alarm, notifying surveillance center, sending email and alarm output.
- Automatic restore when system is abnormal.

Other Local Functions

- Users can operate by front panel, mouse, remote control, and control keyboard.
- Three-level user management; admin user is allowed to create many operating accounts and define their operating permission, which includes the limit to access any channel.
- Operation, alarm, exceptions and log recording and searching.
- Manually triggering and clearing alarms.
- Import and export of device configuration information.

Network Functions

- 1 self-adaptive 10M/100M/1000M network interface.
- IPv6 is supported.
- TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, and iSCSI are supported.
- TCP, UDP and RTP for unicast.
- Remote search, playback, download, locking and unlocking the record files, and downloading files broken transfer resume.
- Remote parameters setup; remote import/export of device parameters.
- Remote viewing of the device status, system logs and alarm status.
- Remote keyboard operation.
- Remote locking and unlocking of control panel and mouse.
- Remote HDD formatting and program upgrading.
- Remote system restart and shutdown.

- RS-232, RS-485 transparent channel transmission.
- Alarm and exception information can be sent to the remote host
- Remotely start/stop recording.
- Remotely start/stop alarm output.
- Captured pictures can be sent to the FTP and the FTP can be upgraded remotely.
- Remote PTZ control.
- Remote JPEG capture.
- Two-way voice talk and voice broadcasting.
- Embedded WEB server.

Development Scalability:

- SDK for Windows and Linux system.
- Source code of application software for demo.
- Development support and training for application system.

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CHAPTER1

Introduction

1.1 Front Panel

The front panel of DS-8100HFI-ST is shown in Figure 1.1.



Figure 1.1 Front Panel

	Table	1.1 Description of Control Panel Buttons
No.	Name	Function Description
1	POWER ON/OFF	Power on/off switch.
2	USB	Universal Serial Bus (USB) ports for additional devices such as USB
		mouse and USB Hard Disk Drive (HDD).
3	DVD-ROM	Slot for DVD-ROM. (Optional)
		• Switching to the corresponding channel in Live view or PTZ Control
		mode.
		• Inputting numbers and characters in Edit mode.
4	Alphanumeric Buttons	• Switching between different channels in Playback mode.
		•The light of the button is green when the corresponding channel is
		recording; it is red when the channel is in network transmission status; it is
		pink when the channel is recording and transmitting.
		The DIRECTION buttons are used to navigate between different fields
		and items in menus. In Playback mode, the Up and Down button is used to
	DIRECTION/ENTER	speed up and slow down recorded video. The Left and Right button will
		select the next and previous day of recordings. In Preview mode, these
5		buttons can be used to cycle through channels.
		The ENTER button is used to confirm selection in any of the menu modes.
	ENTER	It can also be used to tick checkbox fields. In Playback mode, it can be
	ENTER	used to play or pause the video. In single-screen play mode, pressing the
		ENTER button will advance the video by a single frame.
	ESC	Back to the previous menu
	ESC	Pressing for arming/disarming the DVR in Live View mode.
		Entering the Manual Record setting menu. In PTZ control settings, press
	REC/SHOT	the REC/SHOT button and then you can call a PTZ preset by pressing
		Numeric button.
		The PLAY/AUTO button is used to enter the Playback menu. It is also
	PLAY/AUTO	used to turn audio on/off in the Playback menu and auto scan in the PTZ
		Control menu.
	ZOOM+	Zooming in the PTZ camera in the PTZ Control setting.
		Adjusting focus in the PTZ Control menu. It is also used to switch
	A/FOCUS+	between input methods (upper and lowercase alphabet, symbols and
		numeric input). It can also be used to clear entire masked areas, such as in

Table 1.1 Description of Control Panel Buttons

		the Motion Detection and Privacy Mask menus.
6	EDIT/IRIS+	The EDIT/IRIS+ button is used to edit text fields. When editing text fields, it will also function as a Backspace button to delete the character in front of the cursor. On checkbox fields, pressing the EDIT/IRIS+ button will <i>tick</i> the checkbox. In PTZ Control mode, the EDIT/IRIS+ button opens up the iris of the camera. In Playback mode, it can be used to generate video clips for backup.
	MAIN/SPOT/ZOOM-	The MAIN/SPOT/ZOOM- button is used to switch between main and spot output. In PTZ Control mode, it can be used to zoom out the image.
	F1/ LIGHT	The F1/LIGHT button when used in a list field will select all items on the list. In PTZ Control mode, it will turn on/off PTZ light.
	F2/AUX	The F2/AUX button is used to cycle through tab pages.
	MENU/WIPER	Pressing the MENU/WIPER button will return the user to the Main menu (after successful login). Pressing and holding the button for 5 seconds will turn off audible key beep. The MENU/WIPER button will also bring up Sensitivity Interface settings. In PTZ Control mode, the MENU/WIPER button will start wiper (if applicable).
	PREV/FOCUS-	The PREV/FOCUS- button is used to switch between single screen and multi-screen mode. In PTZ Control mode, it is used to adjust the focus in conjunction with the A/FOCUS+ button. It can also be used to select entire masked areas, such as in Motion Detection and Privacy Mask menus.
	PTZ I/IRIS	The PTZ/IRIS- button is used to enter the PTZ Control mode. When in the PTZ Control mode, it is used to close the iris of the PTZ camera.
7	IR Receiver	Receiver for IR remote
8	JOG SHUTTLE Control	The JOG SHUTTLE control can be used to move the active selection in a menu. It will move the selection up and down. In the Playback mode, the ring is used to jump 30s forward/backward in video files. In Live View mode, it can be used to cycle through different channels.
	ALARM	Alarm indicator turns red when a sensor alarm is detected.
	READY	Ready indicator is normally green, indicating that the DVR is functioning properly.
	STATUS	Status indicator turns green when DVR is controlled by an IR remote. Indicator turns red when controlled by a keyboard and purple when IR remote and keyboard is used at the same time.
	HDD	HDD indicator blinks red when data is being read from or written to HDD.
	MODEM	Reserved for future usage.
	TX/RX	TX/RX indictor blinks green when network connection is functioning properly.
9	GUARD	Guard indicator turns green when the device is in armed status; at this time, an alarm is enabled when an event is detected. The indicator turnsoff when the device is unarmed. The arm/disarm status can be changed by pressing and holding on the ESC button for more than 3 seconds in live view mode.

Note: If GUARD indicator is green (default), all alarm event and exception settings are valid. Otherwise, alarm

event and exception settings will be invalid, but normal recording will still be available.

Note: It is important to note that you must click the EDIT button on either the remote or front panel on a text field before you're able to edit its content. After you're done entering text, you must hit the ENTER button to be

able to move on to the next field.

1.2 IR Remote Control Operations

The DVR may also be controlled with the included IR remote control, shown in Figure 1.2. *Note:* Batteries (2×AAA) must be installed before operation.



Figure 1.2 Remote Control

The keys on the remote control closely resemble the ones found on the front panel. Referring to Figure 1.2, they include:

No.	Name	Description
1	POWER	Power on/off the device.
2	DEV	Enables/Disables Remote Control.
3	Alphanumeric Buttons:	Same as Alphanumeric buttons on front panel.
4	EDIT Button	Same as EDIT/IRIS+ button on front panel.
5	A Button	Same as A/FOCUS+ button on front panel.
6	REC Button	Same as REC/SHOT button on front panel.
7	PLAY Button	Same as the PLAY/AUTO button on front panel.
8	INFO Button	Same as the ZOOM+ button on front panel.
9	VOIP Button	Same as the MAIN/SPOT/ZOOM- button on front panel.

Table 1.2 Description of the IR Remote Control Buttons

10	MENU Button	Same as the MENU/WIPER button on front panel.
11	PREV Button	Same as the PREV/FOCUS- button on front panel.
12	DIRECTION/ENTER	Same as the DIRECTION/ENTER buttons on front panel.
	Buttons	
13	PTZ Button	Same as the PTZ/IRIS- button on front panel.
14	ESC Button	Same as the ESC button on front panel.
15	RESERVED	Reserved for future usage.
16	F1 Button	Same as the F1/LIGHT button on front panel.
17	PTZ Control Buttons	Buttons to adjust the iris, focus and zoom of a PTZ camera.
18	F2 Button	Same as the F2/AUX button on front panel.

Troubleshooting Remote Control:

Note: Make sure you have install batteries properly in the remote control. And you have to aim the remote control at the IR receiver in the front panel.

If there is no response after you press any button on the remote, follow the procedure below to troubleshoot. *Steps:*

- 1. Go into Menu > Settings > General > More Settings by operating the front control panel or the mouse.
- 2. Check and remember DVR ID#. The default ID# is 255. This ID# is valid for all IR remote controls.
- **3.** Press the DEV button on the remote control.
- 4. Enter the DVR ID# from step 2.
- **5.** Press the ENTER button on the remote.

If the Status indicator on the front panel turns green, the remote control is operating properly. If the Status indicator does not turn green and there is still no response from the remote, please check the following:

- 1. Batteries are installed correctly and the polarities of the batteries are not reversed.
- 2. Batteries are fresh and not out of charge.
- **3.** IR receiver is not obstructed.

If the remote still can't function properly, please change the remote and try again, or contact the device provider.

1.3 USB Mouse Operation

A regular 3-button (Left/Right/Scroll-wheel) USB mouse can also be used with this DVR. To use a USB mouse:

- 1. Plug USB mouse into one of the USB interfaces on the front panel of the DVR.
- 2. The mouse should automatically be detected. If in a rare case that the mouse is not detected, the possible reason may be that the two devices are not compatible, please refer to the recommended the device list from your provider.

The operation of the mouse:

Name	Action	Description				
	Single-Click	Live view: Select channel and show the quick set menu.				
		Menu: Select and enter.				
	Double-Click	Live view: Switch between single-screen and multi-screen.				
Left-Click	Click and Drag	PTZ control: Wheeling.				
		Tamper-proof, privacy mask and motion detection: Select target area.				
		Digital zoom-in: Drag and select target area.				
		Live view: Drag channel/time bar.				
Right-Click	Single-Click	Live view: Show menu.				
		Menu: Exit current menu to upper level menu.				
Scroll-Wheel	Scrolling up	Live view: Previous screen.				
		Menu: Previous item.				
	Scrolling down	Live view: Next screen.				
		Menu: Next item.				

Table 1.3 Description of the Mouse Control

1.4 Input Method Description

1	L		2		3	4	1	-	5	(5	7	7	-	8	1	9	0
ç	5	٧	٧	1	E	1	R	1	r	1	Y	ι	J		I	(2	Ρ
	A		S		C	>	F		G		H	1	J			(L	
	0	3	Z		>	(C		١	1	E	3	Ν	1	N	1	•	3
	a	1					1	-				0		En	ter		ES	c

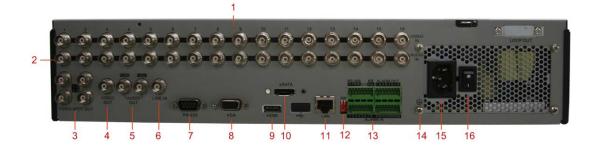
Figure 1.3 Soft Keyboard

Description of the buttons on the soft keyboard:

Table 1.4 Description of the Soft Keyboard Icons

Icons	Description	Icons	Description
En	English	Α	Capital English
123	Numbers	25	Symbols
a	Lowercase/Uppercase	×	Backspace
]	Space	Enter	Enter
ESC	Exit		

1.5 Rear Panel



No.	Item	Description						
1	VIDEO IN	BNC connector for analog video input.						
2	AUDIO IN	BNC connector for audio input.						
3	VIDEO SPOT OUT	BNC connector for video output.						
4	VIDEO OUT	BNC connector for video output.						
		1. When both HDMI and VGA are connected, it is used for live view only;						
		2. When either HDMI or VGA is connected, it is used as the spot video						
		output for live view, playback, recording and PTZ controls;						
		3. When neither HDMI nor VGA is connected, it is used as the main video						
		output for live view and menu operations.						
5	AUDIO OUT	BNC connector for audio output. This connector is synchronized with						
		VIDEO OUT.						
6	LINE IN	BNC connector for audio input.						
7	RS-232 Interface	Connector for RS-232 devices.						
8	VGA	DB9 connector for VGA output. Display local video output and menu.						
9	HDMI	HDMI video output connector.						
10	eSATA (Optional)	Connects external SATA HDD, CD/DVD-RM.						
11	LAN Interface	Connector for LAN (Local Area Network).						
12	Termination Switch	RS-485 termination switch. Up position is not terminated.						
		Down is terminated with 120Ω resistance.						
	RS-485 Interface	Connector for RS-485 devices. T+ and T- pins connect to R+ and R- pins of						
		PTZ receiver respectively.						
		D+, D- pin connects to Ta, Tb pin of controller. For cascading devices, the						
13	Controller Port	first DVR's D+, D- pin should be connected with the D+, D- pin of the next						
		DVR.						
	ALARM IN	Connector for alarm input.						
	ALARM OUT	Connector for alarm output.						
14	GROUND	Ground (needs to be connected when DVR starts up).						
15	AC 100V ~ 240V	AC 100V ~ 240V power supply.						
16	POWER	Switch for turning on/off the device.						

Table 1.5 Description of DS-8100HFI-ST Rear Panel

1.6 Starting Up and Shutting Down the DVR

Purpose:

Proper startup and shutdown procedures are crucial to expanding the life of the DVR.

Before you start:

Check that the voltage of the extra power supply is the same with the DVR's requirement, and the ground connection is working properly.

Starting up the DVR:

Steps:

- Check the power supply is plugged into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device. The Power indicator LED on the front panel should be red, indicating the device gets the power supply.
- 2. Press the POWER button on the front panel. The Power indicator LED should turn green indicating that the unit begins to start up.
- 3. After startup, the Power indicator LED remains green. A splash screen with the status of the DSP and HDD appears on the monitor. The first row of icons at the bottom of the screen shows the DSP status. If an 'X' is shown on the top of an icon, it means that the DSP initialization has failed. The second row of icons at the bottom of the screen will show the HDD status. If an 'X' is shown, it means that the HDD is not installed or cannot be detected.

Shutting down the DVR

Steps:

There are two proper ways to shut down the DVR. To shut down the DVR:

• **OPTION 1: Standard shutdown**

- **1.** Enter the Shutdown menu.
 - Menu > Shutdown



Figure 1.4 Shutdown Menu

- 2. Select the Shutdown button.
- 3. Click the Yes button.

• OPTION 2: By operating the front panel

- 1. Press and hold the POWER button on the front panel for 3 seconds.
- 2. Enter the administrator's username and password in the dialog box for authentication.
- **3.** Click the **Yes** button.

Note: Do not press the POWER button again when the system is shutting down.

Rebooting the DVR

While in the Shutdown menu (Figure 4), you can also reboot the DVR.

Steps:

- 1. Enter the **Shutdown** menu by clicking Menu > Shutdown.
- 2. Click the Lock button to lock the DVR or the **Reboot** button to reboot the DVR.

CHAPTER2

Getting Started

By default, the Setup Wizard will start once the DVR has loaded, as shown in Figure 2.1.

Wizard		_
Start wizard when device starts?)
		22 2
	Next	Cancel

Figure 2.1 Start Wizard Interface

Operating the Setup Wizard:

- The Setup Wizard can walk you through some important settings of the DVR. If you don't want to use the Setup Wizard at this time, click the **Cancel** button. You can also choose to use the Setup Wizard next time by leaving the "Start wizard when DVR starts?" checkbox in checked status.
- 2. Click Next button on the Wizard window to enter the Login window, as shown in Figure 2.2.

	Wizard	
Admin Password		
New Admin Password	Z	
New Password	*****	
Confirm	•••••	

Figure 2.2 Login Window

- **3.** Enter the admin password. By default, the password is 12345.
- To change the admin password, check the New Admin Password checkbox. Enter the new password and confirm the password in the given fields.
- 5. Click the Next button to enter the date and time settings window, as shown in Figure 2.3.

	Wizard	
Time Zone	(GMT+08:00) Beijing, Urumqi, Singapore	
Date Format	MM-DD-YYYY	
System Date	06-24-2011	-
System Time	16:18:12	0
	Previous Next	Cancel

Figure 2.3 Date and Time Settings

6. After the time settings, click **Next** button which will take you back to the Network Setup Wizard window, as shown in Figure 2.4.

		Wiza	ard		
Working Mode	Multi-add	ress			
Select NIC	LAN1				
NIC Type	100M Ful	l-dup			
DHCP					
IPv4 Address	172.9	.4	.65		
IPv4 Subnet Mask	255 .255	.255	.0		
IPv4 Default Gateway	172.9	.4	.1		
Preferred DNS Server					
Alternate DNS Server					
Default Route	LAN1				
		Previ	ous	Next	Cancel

Figure 2.4 Network Configuration

 Click Next button after you having configured the network parameters, which will take you to the HDD Management window, shown in Figure 2.5.

		w	izard		
Label	Capacity	Status	Property	Туре	Free Space
3	76,319MB	Normal	R/W	Local	50,176MB
					Init

Figure 2.5 HDD Management

- 8. To initialize the HDD, click the **Init** button. Initialization will remove all the data saved in the HDD.
- 9. Click Next button to enter the Record Settings window, as shown in Figure 2.6.

	Wizard		
Camera	Analog 1		
Start Recording			
 Normal 			
 Motion Detection 			
			Сору
	Previous	ок	Cancel

Figure 2.6 Record Settings

10. Click **Copy** to copy the settings to other channels, as shownin Figure 2.7.

Analog A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15 A16
OK Cancel

Figure 2.7 Copy Record Settings

11. Click **OK** to complete the startup Setup Wizard.

CHAPTER3

Live View

3.1 Introduction of Live View

Live view shows you the video image getting from each camera in real time. The DVR will automatically enter Live View mode when powered on. It is also at the very top of the menu hierarchy, thus hitting the ESC many times (depending on which menu you're on) will bring you to the Live View mode.

Live View Icons

In the live view mode, there are icons at the right top of the screen for each channel, showing the status of the record and alarm in the channel, so that you can find problems as soon as possible.

Icons	Description
	Alarm (video loss, tampering, motion detection or sensor alarm)
	Record (manual record, schedule record, motion detection or alarm triggered record)
	Alarm & Record

Table 3.1 Description of Live View Icons

3.2 Operations in Live View Mode

In live view mode, there are many functions provided. The functions are listed below.

- Single Screen: show only one screen on the monitor.
- Multi-screen: show multiple screens on the monitor simultaneously.
- Auto-switch: the screen is auto switched to the next one. And you must set the dwell time for each screen on the configuration menu before enabling the auto-switch. Menu>Configuration>Live View>Dwell Time.
- All-day Playback: play back the recorded videos for current day.
- Aux/Main output switch: the DVR will check the connection of the output interfaces to define the main and auxiliary output interfaces. The priority level for the main and aux output is HDMI>VGA>CVBS. This means if the HDMI is used the output of it will be the main output. If the HDMI is not used, the VGA output will be the main output. See the table below.

	HDMI	VGA	CVBS	Main output	Auxiliary
					output
1	\checkmark	\checkmark	\checkmark	HDMI	VGA
2	\checkmark	×	\checkmark	HDMI	CVBS
3	×	\checkmark	\checkmark	VGA	CVBS
4	×	×	\checkmark	CVBS	

m 11 0 0	D · · · ·	CT . C
Table 3.2	Priorities c	of Interfaces

• $\sqrt{\text{means the interface is in use}}$, \times means the interface is out of use or the connection is invalid. And the HDMI, VGA and CVBS can be used at the same time.

When the aux output is enabled, the main output can't do any operation, and you can do some basic operation on the live view for the Aux output.

3.2.1 Front Panel Operation

Functions	Front Panel Operation
Show single screen	Press the corresponding Alphanumeric button. E.g. Press 2 to display only the screen
	for channel 2.
Show multi-screen	Press the PREV/FOCUS- button.
Manually switch	Next screen: left direction button.
screens	Previous screen: right direction button.
Auto-switch	Press Enter button.
All-day playback	Press Play button.
Switch between main	Press Main/Aux button.
and aux output	

Table 3.3 Front Panel Operation in Live View

3.2.2 Using the Mouse in Live View

Name	Description
Menu	Enter the main menu of the system by right clicking the mouse.
Single Screen	Switch to the single full screen by choosing channel number from the dropdown list.
Multi-screen	Adjust the screen layout by choosing from the dropdown list.
Previous Screen	Switch to the previous screen.
Next Screen	Switch to the next screen.
Start/Stop Auto-switch	Enable/disable the auto-switch of the screens.
All-day Playback	Play back the video of the selected channel.
Aux Monitor	Switch to the auxiliary output mode and the operation for the main output is
	disabled.

Table 3.4 Mouse Operation in Live View

Note: The dwell time of the live view configuration must be set before using Start Auto-switch.

Note: If you enter Aux monitor mode and the Aux monitor is not connected, the mouse operation is disabled;

witch back to the Main output with the MAIN/AUX button on the front panel or remote.

Note: If the corresponding camera supports intelligent function, the Reboot Intelligence option will be included when right-clicking mouse on this camera.

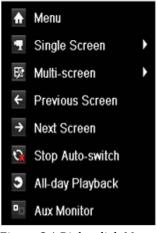


Figure 3.1 Right-click Menu

3.2.3 Using an Auxiliary Monitor

Certain features of the Live View are also available while in an Aux monitor. These features include:

- **Single Screen:** Switch to a full screen display of the selected camera. Camera can be selected from a dropdown list.
- Multi-screen: Switch between different display layout options. Layout options can be selected from a dropdown list.
- Next Screen: When displaying less than the maximum number of cameras in Live View, clicking this

feature will switch to the next set of displays.

- Playback: Enter into Playback mode.
- **PTZ:** Enter PTZ Control mode.
- Main Monitor: Enter Main operation mode.

Note: In the live view mode of the main output monitor, the menu operation is not available while in Aux output mode.

3.2.4 Quick Setting Toolbar in Live View Mode

On the screen of each channel, there is a quick setting toolbar which shows when you point the mouse to the bottom of the screen.



Figure 3.2 Quick Setting Toolbar

Table 3.5 Description of	Quick Setting Toolbar Icons
Table 3.5 Description of	Quick Setting Toolbal Icons

Icons	Description	Icons Description		Icons	Description	
\odot	Enable Manual Record	2 5	Instant Playback	>>	Mute/Audio on	
3	Capture		PTZ Control	P.	Digital Zoom	
	Image Settings	I	Close			

Instant Playback only shows the record in last five minutes. If no record is found, it means there is no

record during the last five minutes.

Digital Zoom can zoom in the selected area to the full screen. Left-click and drag the red box for target zooming in area, as shown in Figure 3.3.



Figure 3.3 Digital Zoom

Image Settings icon can be selected to enter the Image Settings menu. There are four preset modes for

selection according to the real situation.

Below is the explanation for each mode.

- ➢ Indoor: the image is relatively smoother.
- > Dim Light: the image is smoother than the other two modes.
- Outdoor: the image is relatively clearer and sharper. The degree of contrast and saturation is high.

Image Settings	×
Pre-set Mode	•
 Standard 	
 Indoor 	
Dim Light	
 Outdoor 	
Restore	

Figure 3.4 Image Settings- Preset

You can also choose the Customize mode to set the image parameters like brightness, contrast, saturation and hue.

Click the **Restore** button to restore the previous settings.

Image Settings	×
Customize	*
* Brightness	
• Contrast	
Saturation	
O Hue	
Restore	

Figure 3.5 Image Settings- Customize

3.3 Adjusting Live View Settings

Purpose:

Live View settings can be customized according to different needs. You can configure the output interface, dwell time for screen to be shown, mute or turning on the audio, the screen number for each channel, etc. *Steps:*

1. Enter the Live View Settings interface.

Menu> Configuration> Live View

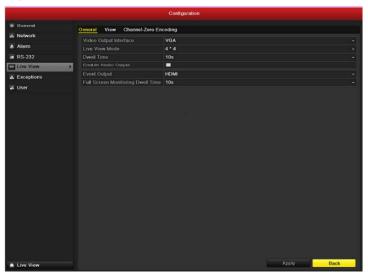


Figure 3.6 Live View-General

The settings available in this menu include:

- Video Output Interface: Designates the output to configure the settings for. Outputs include HDMI (depends on the model), VGA, Main CVBS and Spot Output.
- Live View Mode: Designates the display mode to be use for Live View.
- **Dwell Time:** The time in seconds to *dwell* between switching of channels when enabling auto-switch in Live View.
- Enable Audio Output: Enables/disables audio output for the selected video output.
- Event Output: Designates the output to show event video.
- Full Screen Monitoring Dwell Time: The time in seconds to show alarm event screen.
- 2. Setting Camera Order

				onfiguration				
General	General	View Ch	annel-Zero Encodii	19				
Network		utput Interfac	ce VG	٨				
Alarm				0 8	 			
RS-232	<u>.</u>							
Live View	2 1							
Exceptions				A2 0	A3 0		A4 0	
User 🖡		A5 0		A6 0			A8 0	
		A9 0		A10 0	A11 0		A12 0	
		A13 0	14	A14 C	A15 C	16	A16 0	
Live View						Apply		Back

Figure 3.7 Live View- Camera Order

To set the camera order:

- 1) Select View.
- Click the up and down button at each screen to select the channel you would like to display. Setting an 'X' means the channel will not be displayed.
- **3)** Click the **Apply** button.

3.4 Channel-zero Encoding

Purpose:

Sometimes you need to get a remote view of many channels in real time from web browser or CMS (Client Management System) software, in order to decrease the bandwidth requirement without affecting the image quality, channel-zero encoding is supported as an option for you.

Steps:

- 1. Enter the **Live View** Settings interface.
- 2. Select Channel-Zero Encoding tab.

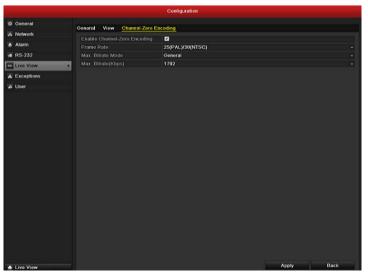


Figure 3.8 Live View- Channel-Zero Encoding

- 3. Check the checkbox after Enable Channel-Zero Encoding.
- 4. Configure the Frame Rate, Max. Bitrate Mode and Max. Bitrate.

3.5 Locking the System

Purpose:

After locking the system, the monitor turns to the live view mode and if you want to do some operation, you need to enter user name and password tog in again.

Steps:

1. Enter the Shutdown menu.

Menu>Shutdown

	Shutdown	
e Lock	0 Shutdown	es Reboot
		Cancel
	Figure 3.9 Shutdown	

2. Click Lock.

Note: After you have locked the system, any click on the screen is invalid. It is required a user name and password to unlock the system.

CHAPTER4

PTZ Controls

4.1 Configuring PTZ Settings

Purpose:

Follow the procedure to set the parameters for PTZ. The configuring of the PTZ parameters should be done

before you set the PTZ camera.

Before you start:

Check that the PTZ and the DVR are connected properly through RS-485 interface.

Steps:

1. Enter the PTZ Settings interface.

Menu >Camera> PTZ

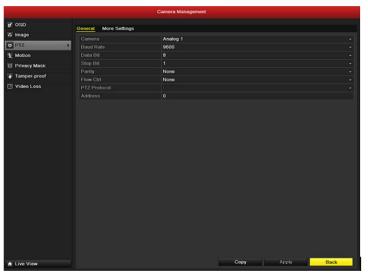


Figure 4.1 PTZ- General

- 2. Choose the camera for PTZ setting next to **Camera** label.
- 3. Enter the parameters of the PTZ camera.

Note: All the parameters should be exactly the same as the PTZ camera parameters.

- 4. Click **Copy** if you want to configure same settings to other PTZ cameras.
- 5. Click **Apply** button to save and exit menu.

4.2 Setting PTZ Presets, Patrols & Patterns

Before you start:

Please make sure that the presets, patrols and patterns should be supported by PTZ protocols.

4.2.1 Customizing Presets

Purpose:

Follow the steps to set the Preset location which you want the PTZ camera to point to when an event takes place.

Steps:

- **1.** Enter the PTZ Control interface.
 - Menu>Camera>PTZ>More Settings

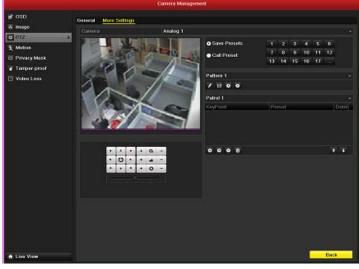


Figure 4.2 PTZ- More Settings

- 2. Use the directional button to wheel the camera to the location where you want to set preset.
- 3. Click the round icon before **Save Preset**.
- 4. Click the preset number to save the preset.

Repeat the steps2-4 to save more presets. If the number of the presets you want to save is more than 17, you can click [...] and choose the available numbers.

		Preset	
Devent	22		
Preset	23		0
		ок	Cancel
			Galicei

Figure 4.3 More Presets

4.2.2 Calling Presets

Purpose:

This feature enables the camera to point to a specified position such as a window when an event takes place.

Call preset in the PTZ setting interface:

Steps:

- Enter the PTZ Control interface. Menu>Camera>PTZ>More Settings
- 2. Check the round icon before Call Preset.

		Camera Management			
🕫 OSD	General More Settings				
🐼 Image	Camera	Analog 1			
o PTZ >	THE REAL PROPERTY AND	Samora I	Save Presets	1 2 3 4	5 6
X Motion	1. 此前成				5 6 11 12
🔟 Privacy Mask	1		 Call Preset 	13 14 15 16	
Tamper-proof	0010				
Video Loss	XIVI	A COLUMN TWO IS NOT	Pattern 1		
	211	and the second s	/ 11 0 0		
			Patrol 1		
			KeyPoint.	Preset	Delet
	• • • • Q	-	000		1.1
	· O · ·	-			
	* * * * 0	-			
★ Live View					Back

Figure 4.4 PTZ- Call Preset

3. Choose the preset number.

Call preset in live view mode:

Steps:

1. Press the PTZ button on the front panel or click the PTZ Control icon in the quick setting bar to enter the PTZ setting menu in live view mode.

* * * • • - * * * * * * * * * * * * * *						
↓ ↓			P	ΤZ		_ ×
	•		•	+	Q	-
Image: Camera Camera Preset Pi A1 A2 A3 A4	•	C	F	+	-	-
A1 A2 A3 A4		•		+	0	-
A1 A2 A3 A4						
A1 ^ A2 & A3 _ A4 &	·•			ম	<u>ل</u>	
A2 A3 A4	< <u>C</u> a	amer	a	Pre	set	P
A2 A3 A4	A1					^
A4	A 2					
	A3					
A5 🗸						
	Α5					~

Figure 4.5 PTZ Toolbar

- 2. Choose Camera in the list on the menu.
- 3. Choose preset in the **Preset** list.

4.2.3 Customizing Patrols

Purpose:

Patrols can be set to move the PTZ to different key points and have it stay there for a set duration before moving on to the next key point. The key points are corresponding to the presets. The presets can be set following the steps above in *Customizing Presets*.

Steps:

1. Enter the PTZ Control interface.

Menu>Camera>PTZ>More Settings

- 2. Select patrol number.
- 3. Select the **O** under Patrol option box to add key points for the patrol.

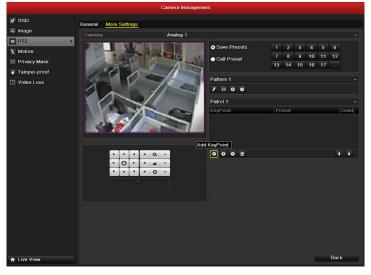


Figure 4.6 PTZ- Add Key Point

4. Configure key point parameters, such as the key point No., duration of staying for one key point and speed of patrol. The key point is corresponding to the preset. The Key Point No. determines the order at which the PTZ will follow while cycling through the patrol. The Duration refers to the time span to stay at the corresponding key point. The Speed defines the speed at which the PTZ will move from one key point to the next.

	KeyPoi	nt	
KeyPoint:1			
Preset	1	۵	
Duration	3	0	
Speed	1	0	
	OK	Cancel	

Figure 4.7 Key point Configuration

5. Click **OK** to save the key point to the patrol.

Repeat the above steps to add more key points.

You can also delete all the key points by clicking the trash icon

Save Presets	1	2	3	4	5	6	
	7	8	9		11	12	
Call Preset				10		12	
	13	14	15	16	17		
Pattern 1							
/ 8 0 0							
Patrol 1							
KeyPoint	Pre	eset					Delet
1	Pre	eset 1					İ
2	Pr€	eset 2	2				ά
3	Pr€	eset 3	}				İ
000 1						1	

Figure 4.8KeyPoints Deletion

4.2.4 Calling Patrols

Purpose:

Calling a patrol makes the PTZ to move according the predefined patrol path.

Calling patrol in the PTZ setting interface:

Steps:

1. In the PTZ setting interface.

Menu> Camera> PTZ> More Settings

- 2. Select the patrol number, and then click \bigcirc to call the patrol.
- 3. Click O to stop it.

-							
 Save Presets 	1	2	3	4	5	6	
Call Preset	7	8	9	10	11	12	
	13	14	15	16	17		
Pattern 1							~
/ 8 0 0							
Patrol 1							~
KeyPoint	Pre	eset					Delet
1	Pre	eset 1					ö
2	Pre	eset 2	2				İ
3	Pre	eset 3	;				İ
000 1						1	I I

Figure 4.9 Calling Patrol

Calling preset in live view mode:

Steps:

- 1. Press PTZ control on the front panel or on the remote, or click PTZ Control icon on the quick setting toolbar, to show the PTZ control toolbar.
- 2. Choose **Patrol** on the control bar.
- **3.** Click the patrol you want to call.



Figure 4.10 PTZ Toolbar- Patrol

4.2.5 Customizing Patterns

Purpose:

Patterns can be set by recording the movement of the PTZ. You can call the pattern to make the PTZ movement according to the predefined path.

Steps:

- 1. Enter the PTZ Control interface. Menu>Camera>PTZ>More Settings
- 2. Choose pattern number in the option box.

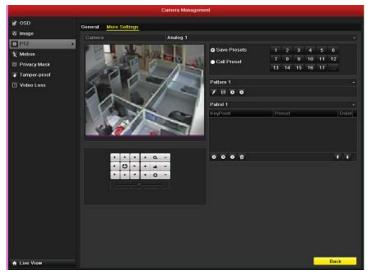


Figure 4.11 PTZ- Pattern

3. Click , and use your mouse to drag the image or click the eight directional buttons in the control box under the image to move the PTZ camera.

The movement of the PTZ is recorded as the pattern.

Click to save the pattern.
 Repeat the above steps to save more patterns.

4.2.6 Calling Patterns

Purpose:

Follow the procedure to move the PTZ camera according to the predefined patterns.

Calling pattern in the PTZ setting interface.

Steps:

- **1.** Enter the PTZ Control interface.
- 2. Select the pattern number.
- 3. Click , then the PTZ moves according to the pattern. Click ot to stop it.

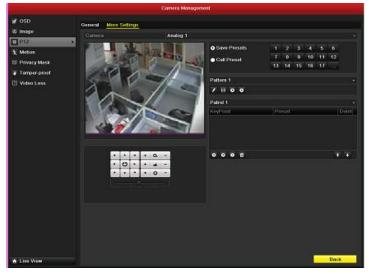


Figure 4.12 PTZ- Calling Pattern

Call pattern in live view mode.

Steps:

1. In the live view mode, press PTZ control on the front panel or on the remote control, or click PTZ

Control icon on the quick setting toolbar.

- 2. And then choose **Pattern** on the control bar.
- 3. Click the pattern number you want to call



Figure 4.13 PTZ Toolbar- Pattern

4.3 PTZ Control Toolbar

In the Live View mode, you can press the PTZ Control button on the front panel or on the remote control, or

choose the PTZ Control icon to enter the PTZ toolbar.

		P	ΤZ		_ ×			P	ΤZ		<u> </u>
•		•	+	٩	-	•		•	+	Q	-)
•	C	F	+	-	-		C	►	+	-	-
	•	•	+	0	-		•		+	0	-
Γ					-						
·•			ম	〕		·#	•	۶ E	ম	ÌЦ	
∢ <u>C</u> a	amer	а	Pre	set	P	∢ Pa	atrol	P	atter	n	►
A1					^	Pat	tern 1				
A 2					=						
A3											
A 4											
A 5					~						0 0

Figure 4.14 PTZ Toolbar

		_			
Icon	Description	Icon	Description	Icon	Description
	Direction button and the auto-cycle button	+	Zoom+, Focus+, Iris+	Ū	Zoom-, Focus-, Iris-
• •	The speed of the PTZ movement	÷.	Light on/off		Wiper on/off
Q	Zoom	Ţ	Middle	Preset	Preset
Patrol	Patrol	Pattern	Pattern		Menu
	Previous item		Next item	٩	Start pattern/patrol

Table 4.1 Description of the PTZ toolbar icons

O	Stop the patrol or	Minimize	×	Exit
	pattern movement	windows		LAR

C H A P T E R 5

Record and Capture Settings

5.1 Configuring Encoding Parameters

Before you start:

1. Make sure that the HDD has already been installed. If not, please install a HDD and initialize it. (Menu>HDD>General)

			HD					
General >	HDD Inform	ation						
S Advanced								
Ø SMART.	Label	Capacity	Status	Property	Туре	Free Space	Group Edit	
	3	76.319MB	Normal	RAW	Local	50,176MB	1 🖬	
	Total Cap	ncity	76,319M	3				
	Free Space		50,176M					
🔶 Live View					Add	Init	Bac	k

Figure 5.1 HDD- General

- 2. Click Advance to check the storage mode of the HDD.
 - 1) If the HDD mode is *Quota*, please set the maximum record capacity and maximum picture capacity. For detailed information, see *Chapter 10.5 Configuring Quota Mode*.
 - If the HDD mode is *Group*, you should set the HDD group. For detailed information, see Chapter 5.9 Configuring HDD Group for Recording and Capture.

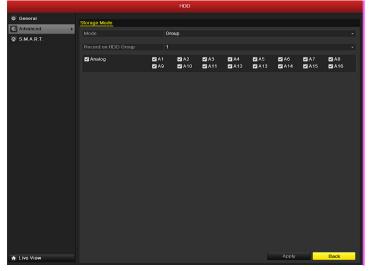


Figure 5.2 HDD- Advanced

Steps:

 Enter the Record settings interface to configure the encoding parameters: Menu>Record>Encoding

		Record	
Schedule	Record Capture		
Encoding	,		
Advanced	Camera	Analog 1	
		Main Stream(Normal)	
The Holiday		Video & Audio	
		4CIF	
	Bitrate Type	Constant	
		25(PAL)/30(NTSC)	
		General	
	Max. Bitrate(Kbps)	1792	
			More

Figure 5.3 Record Encoding

- **2.** Encoding Parameters for Recording
 - Select **Record** to configure. You can configure the stream type, the resolution, the video quality on demand.
 - 2) Click **More** to configure the pre-record, post-record time, expired time, redundant record/capture and whether you want to record audio.
 - Pre-record: The time you set to record before the scheduled time or event. For example, if you set the pre-record time as 5 seconds, the camera records it at 9:59:55.
 - Post-record: The time you set to record after the event or the scheduled time. For example, when an alarm triggered the recording ends at 11:00, if you set the post-record time as 5 seconds, it records till 11:00:05.
 - Expired Time: The expired time is the longest time for a record file to be kept in the HDD, if the deadline is reached, the file will be deleted. You can set the expired time to 0, and then the file will not be deleted. The actual keeping time for the file should be determined by the capacity of the HDD.
 - Redundant Record/ Capture: Enabling redundant record or capture means you save the record and captured picture in the redundant HDD. See Chapter 5.8 Configuring Redundant Record/ Capture.
 - Record Audio: Choose "yes" to record the sound, "no" to record the image without sound.

		More Settings		
Pre-record	5s			~
Post-record	5s			~
Expired Time (day)	0			
Redundant Record/	No			~
Record Audio	Yes			~
		Apply	ок	Cancel

Figure 5.4 Record Encoding- More

- 3) Click **Apply** to save the settings.
- 4) Click **OK** to back to the upper level menu.
- 5) You can copy the settings to other channels by clicking **Copy**, if the setting can also be used for other channels.



Figure 5.5 Copy Camera Settings

Note: The redundant record/capture is to decide whether you want the camera to save the record files or captured pictures in the redundant HDD. You must configure the redundant HDD in HDD settings. For detailed information, see *Chapter 10.4.2 Setting HDD Property*.

- 3. Encoding Parameters for Capture
 - 1) Select the **Capture**.

		Record	
Schedule	Record Capture		
Encoding >			
豪 Advanced		Analog 1	*
The second secon	Parameter Type Resolution	Normal 4CIF	*
g rionaly	Picture Quality	Holium	•
	Interval	35	•
	Interval	35	
★ Live View		Copy	Apply Back

Figure 5.6 Capture Encoding

- 2) Configure the parameters.
- 3) Click **Apply** to save the settings.
- 4) If the parameters can also be used to other channels, click **Copy** to copy the settings to other channels.

Note: The interval is the time period between two capturing actions. You can configure all the parameters on this menu on your demand.

5.2 Configuring Record/Capture Schedule

Purpose:

Set the record schedule, and then the camera will automatically start/stop recording according to the configured schedule.

Steps:

- **1.** Enter the Record Schedule interface.
 - Menu>Record/Capture>Schedule
- 2. Configure Record Schedule
 - 1) Select Record/Capture Schedule.



Figure 5.7 Record Schedule

- 2) Choose the camera you want to configure.
- 3) Select the check box after the **Enable Schedule** item.
- 4) Click **Edit**.
- 5) In the message box, you can choose the day to which you want to set schedule.
- 6) To schedule an all-day recording, check the checkbox after the **All Day** item.

		Edit		
Schedule		Mon		
All Day	~		Туре	Normal -
Start/End Time	03:55-21:0)2	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
Start/End Time	00:00-00:0	0	Туре	Normal
	Сору	Apply	ОК	Cancel

Figure 5.8 Edit Schedule

7) To arrange other schedule, leave the **All Day** checkbox blank and set the Start/End time.

Note: Up to 8 periods can be configured for each day. And the time periods can't be overlapped each other. Repeat the above steps5)-7) to schedule recording/capture for other days in the week. If the schedule can also be set to other days, click **Copy**.

		Сору W	/eek			
⊠ All	1 27	☑ 2 ☑ Holid	☑ 3 lay	₽4	₹5	₽6
				ОК		Cancel

Figure 5.9 Copy Schedule to Other Days

- 8) Click **OK** to save setting and back to upper level menu.
- 9) Click **Apply** in the Record Schedule interface to save the settings.

You can repeat steps 5)-8) to set schedule for other channels. If the settings can also be used to other channels,

click Copy, and then choose the channel to which you want to copy.



Figure 5.10 Copy Schedule to Other Channels

5.3 Configuring Motion Detection Record and Capture

Purpose:

Follow the steps to set the motion detection parameters. In the live view mode, once a motion detection event takes place, the video can analyze it and do many actions to handle it. Enabling motion detection function can trigger certain channels to start recording, or trigger full screen monitoring, audio warning, notify the surveillance center and so on.

Steps:

 Enter the Motion Detection interface. Menu>Camera>Motion



Figure 5.11 Motion Detection

- 2. Configure Motion Detection:
 - 1) Choose camera you want to configure.
 - 2) Check the checkbox after **Enable Motion Detection**.
 - Drag and draw the area for motion detection by mouse. If you want to set the motion detection for all the area shot by the camera, click Full Screen. To clear the motion detection area, click Clear.

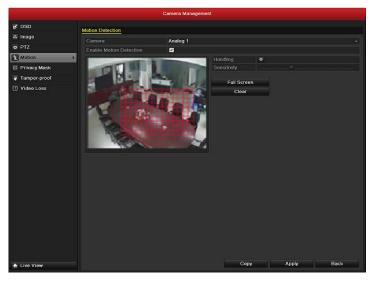


Figure 5.12 Motion Detection- Mask

4) Click **Handling**, and the message box for channel information will pop up.

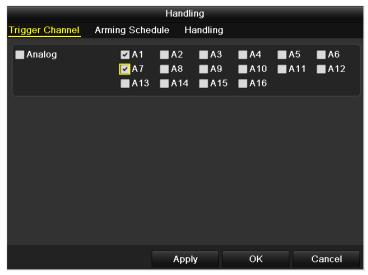


Figure 5.13 Motion Detection Handling

- 5) Select the channels which you want the motion detection event to trigger recording.
- 6) Click **Apply** to save the settings.
- 7) Click OK to back to the upper level menu.
- 8) Exit the Motion Detection menu.
- 3. Enter Schedule settings interface. Menu> Record> Schedule>Record/Capture Schedule



Figure 5.14 Record Schedule

- 1) Check the checkbox after the **Enable Schedule** item.
- 2) Click Edit.

	Edit		
Schedule	Mon		
All Day	✓	Туре	Motion ~
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
	Copy Apply	ОК	Cancel

Figure 5.15 Edit Schedule- Motion Detection

- 3) In the message box, you can choose the day to which you want to set schedule.
- 4) Set the **Type** as Motion.
- 5) To schedule an all-day recording, check the checkbox after the **All Day** item.

	Edit		
Schedule	Mon		
All Day	~	Туре	Normal -
Start/End Time	03:55-21:02	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
Start/End Time	00:00-00:00	Туре	Normal
	Copy Apply	ОК	Cancel

Figure 5.16 Edit Schedule- All Day

6) To arrange other schedule, leave the **All Day** checkbox blank and set the Start/End time.

Note: Up to 8 periods can be configured for each day. And the time periods can't be overlapped each other.

Repeat the above steps11)-13) to schedule motion detection triggered recording/capture for all the week. If the schedule can also be set to other days, click **Copy**.

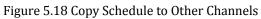


Figure 5.17 Copy Schedule to Other Days

7) Click **OK** to back to upper level menu.

You can repeat steps to set schedule for other channels, if the settings can also be used to other channels, click **Copy**, and then choose the channel to which you want to copy.





5.4 Configuring Alarm Triggered Record and Capture

Purpose:

Follow the procedure to configure alarm triggered recording or capture.

Steps:

1. Enter the Alarm setting interface.

Menu> Configuration> Alarm

		Configure	ation		
 General Network 	Alarm Status Al	iarm Input Alarm Output			
Alarm	No.	Alarm Name	IP Camera Address	Alarm Type	^
RS-232	A<-1	Marin Name	Local	N.O	
C Live View	A<-2		Local	N.O	
	A<-3		Local	N.O	
A Exceptions	A<-4		Local	N.O	-1
& User	A<-5		Local	N.O	
	A<-6		Local	N.0	
	A<-7		Local	N.0	~
	Alarm Output List				
	No.	Alarm Name	IP Camera Address	Dwell Time	
	A->1		Local		
	A->2		Local		
	A->3		Local	5s	
	A->4		Local	5 s	
♠ Live View				Bac	k 🔤

Figure 5.19 Alarm Settings

2. Click Alarm Input.

			Conf	guration			
🕸 General	Alarm Status	Alarm Input	Alarm Output				
🕉 Network	Alarm Input N		Alarin Oatpat				
\Lambda Alarm 🔹 🔹	Alarm Name		A⊂1 1				
🕫 RS-232			N.O				
S Live View			2				
A Exceptions	Handling		0				
at User							
A Live View					Сору	Apply	Back

Figure 5.20 Alarm Settings- Alarm Input

- 1) Select Alarm Input number and configure alarm parameters.
- 2) Choose N.O (normally open) or N.C (normally closed) for alarm type.
- 3) Check the checkbox for Setting \checkmark .
- 4) Click Handling.

Trigger Channel	Ha Arming Schedule	ndling Handling	PTZ Linking	
mgger Gnanner	Anning Schedule	rianuing	F IZ LIIKIIQ	ļ
Analog	☑ A1 A ☑ A7 A ■ A13 A		■ A10 ■	A5 ■A6 A11 ■A12
	4	Apply	ок	Cancel

Figure 5.21 Alarm Handling

- 5) Choose the alarm triggered recording channel.
- 6) Check the checkbox $\boxed{}$ to select channel.
- 7) Click **Apply** to save settings.
- 8) Click **OK to** back to the upper level menu.

Repeat the above steps to configure other alarm input parameters.

If the setting can also be applied to other alarm inputs, click Copy and choose the alarm input number.

	Copy Alarm Input		
Alarm Input No.	Alarm Name	IP Camera Addr	ress ^
A<-1		Local	
■ A<-2		Local	
✓ A<-3		Local	-
✓ A<-4		Local	-
■ A<-5		Local	-
■ A<-6		Local	
■ A<-7		Local	
■ A<-8		Local	
■ A<-9		Local	
A<-10		Local	
■ A<-11		Local	
■ A<_17		Incal	~
		OK C	Cancel

Figure 5.22 Copy Alarm Input

3. Enter Record/Capture Schedule setting interface.

Menu> Record> Schedule

- 1) Click Record/Capture Schedule
- 2) Check the checkbox after the **Enable Schedule**.



Figure 5.23 Record Schedule

- 3) Click **Edit**.
- 4) Set the **Type** to **Alarm**
- 5) In the message box, you can choose the day to which you want to set schedule.
- 6) To schedule an all-day recording, check the checkbox after the **All Day** item.
- To arrange other schedule, leave the All Day checkbox blank and set the Start/End time.
 Note: Up to 8 periods can be configured for each day. And the time periods can't be overlapped each other.

Repeat the above steps4)-7) to schedule alarm triggered recording/capture for all the week. If the schedule can also be set to other days, click **Copy**.

8) Click **OK** to back to the upper level menu.

5.5 Manual Record and Continuous Capture

Purpose:

Follow the steps to set parameters for the manual record and continuous capture. Using manual record and continuous capture, you don't need to set a schedule for recording or capture.

Steps:

1. Enter the Manual settings interface.

Menu> Manual

Or press the REC/SHOT button on the front panel.

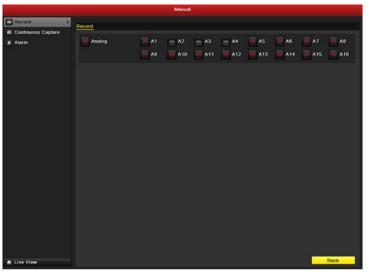


Figure 5.24 Manual Record

- 2. Enabling Manual Record
 - 1) Select **Record** on the left bar.
 - 2) Click the status button before camera number to change \square to \square .
- **3.** Disable manual record.

Click the status button to change $\boxed{}$ to $\boxed{}$

Note: After rebooting all the manual records enabled are canceled.

- 4. Enabling and disabling the continuous capture
 - 1) Select **Continuous Capture** on the left bar.

			Manual						
i Record	Continuous Capture								
Continuous Capture	· ·								
& Alarm	Analog	A1	A2	A3.	- A4	A5	- A6	► ∧ 7	AB
		A9	A10	- A11	A12	A13	A14	= A15	= A16
Live View									Back

Figure 5.25 Continuous Capture

- 2) Click the status button before camera number to change \square to \square .
- 3) Disable continuous capture.
- 4) Click the status button to change \bigcirc to \bigcirc .

Note: After rebooting, all the continuous capture will be canceled.

5.6 Configuring Holiday Record and Capture

Purpose:

Follow the steps to configure the record or capture schedule on holiday for that year. You may want to have different plan for recording and capture on holiday.

Steps:

1. Enter the Record setting interface.

Menu>Record

2. Choose Holiday on the left bar.

			Record				
Schedule		0.00 m					
Encoding	Holiday	The second second second second second second second second second second second second second second second s					
Advanced	No.	Holiday Name	Status	Start Date	End Date	Edit	^
	1	Holiday1	Enabled	06-23-2011	06-23-2011	2	
Holiday	> 2	Holiday2	Enabled	Sun.First.Jan	Sun First Jan	2	
		Holiday3	Disabled	1.Jan	1.Jan	1	
		Holiday4	Disabled	1.Jan	1 Jan	2	
		Holiday5	Disabled	1.Jan	1 Jan		
		Holiday6	Disabled	1.Jan	1.Jan	1	
		Holiday7	Disabled	1.Jan	1.Jan	<u> </u>	
		Holiday8	Disabled	1.Jan	1.Jan	2	
		Holiday9	Disabled	1.Jan	1 Jan	2	
	10	Holiday10	Disabled	1.Jan	1.Jan	2	
		Holiday11	Disabled	1.Jan	1.Jan	1	
	12	Holiday12	Disabled	1.Jan	1.Jan	2	
						Back	

Figure 5.26 Holiday Settings

- **3.** Enable Edit Holiday schedule.
 - 1) Click $\boxed{1}$ to enter the Edit interface.

		Edit		
Holiday Name	Holiday1			
Enable				
Mode	By Date			
Start Date	06-23-2011			<u> </u>
End Date	06-23-2011			<u> </u>
		Apply	ок	Cancel

Figure 5.27 Edit Holiday Settings

- 2) Check the checkbox after **Enable Holiday**.
- 3) Select Mode from the dropdown list.

There are three different modes for the date format to configure holiday schedule.

- 4) Set the start and end date.
- 5) Click **Apply** to save settings.
- 6) Click **OK** to exit the Edit interface.
- 4. Enter Record/Capture Schedule settings interface.

Menu> Record> Schedule

- 1) Select Record/Capture.
- 2) Check the checkbox after **Enable Schedule**.
- 3) Click Edit.
- 4) Select **Holiday** from the **Schedule** dropdown list.

Edit								
Schedule	Holiday		~					
All Day	✓	Туре	Motion -					
Start/End Time	00:02-24:00	Туре	Motion Alarr					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
Start/End Time	00:00-00:00	Туре	Normal					
	Copy Apply	ОК	Cancel					

Figure 5.28 Edit Schedule- Holiday

- 5) Select **Motion** from the **Type** dropdown list.
- 6) If you need all day recording, check the **All Day** checkbox. Otherwise leave it blank.
- 7) Set start/end time for holiday schedule.

Note: Up to 8 periods can be configured for each day. And the time periods can't be overlapped each other.

In the time table of the channel, both holiday schedule and normal day schedule are displayed.

Repeat the above steps4)-7) to set Holiday schedule for other channel. If the holiday schedule can also be used to other channels, click **Copy** and choose the channel you want to apply the settings.

5.7 Configuring Other Recording and Capture Types

Purpose:

Other recording and capture types refer to the Motion | Alarm (motion or alarm) and Motion & Alarm triggered recording and capture.

For motion detection and alarm recording and capture, please refer to *Chapter 5.3* and <u>*Chapter 5.4*</u>. In this chapter, the configuration for Motion | Alarm (motion or alarm) and Motion & Alarm triggered recording and capture will be described only.

Steps:

1. Enter the Record setting interface.

Menu> Record> Schedule

2. Select Record/ Capture.



Figure 5.29 Record Schedule

- 3. Schedule Motion | Alarm or Motion & Alarm triggered recording.
 - 1) Select the channel you want to set schedule.
 - 2) Check the check box after Enable Schedule .
 - 3) Click **Edit**.
 - 4) Select Motion | Alarm or Motion & Alarm in the **Type** dropdown list.

Edit								
Schedule		Mon						
All Day	v		Туре	Motion Alarr ~				
Start/End Time	03:55-21:0	2	Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
Start/End Time	00:00-00:0		Туре	Normal				
	Сору	Apply	ОК	Cancel				

5) To schedule an all-day recording, select the checkbox after the **All Day** item **I**.

6) To arrange other schedule, leave the **All Day** checkbox blank and set the Start/End time. *Note:* Up to 8 periods can be configured for each day. And the time periods can't be overlapped each other. Repeat the above steps to schedule for all the week. If the schedule can also be applied to other days, click **Copy**.

- 7) Click **Apply** to save settings.
- 8) Click **OK** to back to the upper level menu.

Repeat the above steps to schedule Motion | Alarm or Motion & Alarm triggered recording/capture to other channels. If the setting can also be applied to other channels, click **Copy** and then choose the channel number.

5.8 Configuring Redundant Recording and Capture

Purpose:

Enabling redundant recording and capture, which means saving the record files and captured pictures not only in the R/W HDD but also in the redundant HDD, will effectively enhance the data safety and reliability.

Steps:

1. Enter HDD Information interface.

Menu> HDD

			HC	D				
General >	HDD Inform	ation						
T Advanced		1.						
S.M.A.R.T.	Label	Capacity 76,319MB	Status Normal	Property R/W	Type Local	Free Space 50,176MB	Group Edit	- Delet
		11,310,000	(Office)			30,11080		
	Total Cap Free Spa		76,319M 50,176M					
🛧 Live View					Add	Init	Ba	ck

Figure 5.31 HDD General

- 2. Select the HDD and click $\boxed{2}$ to enter the Local HDD Settings interface.
 - 1) Set the HDD property to Redundant.

Local HDD Settings									
HDD No.		3							
HDD Property									
● R/W									
Read-only									
 Redundancy 									
Group	● 1 ● 9	● 2 ● 10							
HDD Capacity		76,319	MB						
			A	pply		OK		C	ancel

Figure 5.32 HDD General-Editing

- 2) Click **Apply** to save the settings.
- 3) Click **OK** to back to the upper level menu.

Note: You must set the Storage mode in the HDD advanced settings to Group before you set the HDD property to Redundant. For detailed information, please refer to *Chapter 10.4 Managing HDD Group*. There should be at least another HDD which is in Read/Write status.

3. Enter the Record setting interface.

Menu> Record> Encoding

1) Select Record.

		Record		
G Schedule	Record Capture			
Encoding 3		Analog 1		
😨 Advanced	Encoding Parameters	Main Stream(Normal)		
The Holiday	Stream Type	Video & Audio		
	Resolution	4CIF		
	Bitrate Type	Constant		
	Video Quality			
	Frame Rate	25(PAL)/30(NTSC)		
	Max. Bitrate Mode	General		
	Max. Bitrate(Kbps)	1792		
				More
♠ Live View			Сору Арр	ly Back

Figure 5.33 Encoding Record

2) Select Camera you want to configure.

	M	ore Settings			
Pre-record	5s				•
Post-record	5s				~
Expired Time (day)	0				
Redundant Record/	No				•
Record Audio	Yes				•
		Apply	ок	Cancel	
		мрріў	OK	Cancel	

3) Click More Settings.

Figure 5.34 Encoding Record- More

- 4) Set the **Redundant Record/Capture** to **Yes**.
- 5) Click **OK** to save settings and back to the upper level menu.

Repeat the above steps for configuring other channels.

5.9 Configuring HDD Group for Recording and Capture

Purpose:

You can group the HDDs and save the record files and captured pictures in certain HDD group.

Steps:

1. Enter HDD setting interface.

Menu>HDD

			н	DD			
General >	HDD Inform	ation					
🐺 Advanced							
Ø SMART.	Label	Capacity 76,319MB	Status Normal	Property R/W	Type Local	Free Space 50,176MB	Group Edit Delet
	Total Cap	acihi	76,319	AB .			
	Free Space		50,176				
★ Livo Viow					Add	Init	Back

Figure 5.35 HDD General

2. Select Advanced on the left bar.

Check whether the storage mode of the HDD is Group. If not, set it to Group. For detailed information, please refer to *Chapter 10.4 Managing HDD Group*.

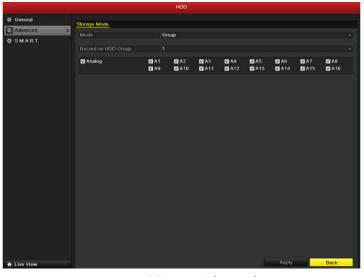
3. Select General in the left bar.

Click $\boxed{1}$ to enter editing interface.

- **4.** Configuring HDD group.
 - 1) Choose a group number for the HDD group.
 - 2) Click **Apply** and then in the pop-up message box, click **Yes** to save your settings.
 - 3) Click **OK** to back to the upper level menu.

Repeat the above steps to configure more HDD groups.

- 5. Choose the Channels which you want to save the record files and captured pictures in the HDD group.
 - 1) Select **Advanced** on the left bar.



- Figure 5.36 HDD Advanced
- 2) Choose Group number in the dropdown list of **Record on HDD Group**
- 3) Check the channels you want to save in this group.
- 4) Click **Apply** to save settings.

Note: After you having configured the HDD groups, you can configure the Recording and Capture settings following the procedure provided in *Chapter 5.2-5.7*.

5.10 Files Protection

Purpose:

You can lock the recorded files or set the HDD property to Read-only to protect the record files from being overwritten.

Protect file by locking the record files:

Steps:

1. Enter Playback setting interface.

Menu> Playback

Normal Event Tag	Pic	ture								
✓ Analog	✓ A1 ✓ A9		✓ A3 ✓ A11	✓ A4 ✓ A12	Z A Z A			☑ A7 ☑ A15	✓ A8 ✓ A16	
Record Type		All								
File Type		All								
Start Time		06-24-201	1		-	00:	00:00			•
End Time		06-24-201	1		*	23:	59:59			٩
				Playba	ack		Search	1 👘	Cancel	

Figure 5.37 Playback

- 2. Select the channels you want to investigate by checking the checkbox to \blacksquare .
- **3.** Configure the record type, file type start/end time.
- 4. Click **Search** to show the results.

		Search result			
Camera	Start/End Time	Size P	lay L	ock	06-24-2011 Fri 11:22:49
A1	06-24-2011 11:22:5513:27:03	128,916KB		n	
A1	06-24-2011 14:49:1214:53:11	4,243KB		î	
A1	06-24-2011 16:41:1118:25:10	107,871KB		٩.	NO VIDEO
A2	06-24-2011 09:45:1913:27:03	231,138KB		٩.	-
A2	06-24-2011 14:49:0614:53:05	4,170KB		٩	_ Canera 01
A2	06-24-2011 14:58:4015:21:22	23,758KB		î	
A2	06-24-2011 15:22:3915:57:58	36,912KB 🕷		î	
A2	06-24-2011 16:01:5717:01:27	62,073KB 🕷		î	
A2	06-24-2011 17:01:2718:25:26	87,341KB 🕷		î	
A3	06-24-2011 09:45:1913:27:03	224,618KB 🕷		P	HDD: 3
A3	06-24-2011 14:49:0614:53:05	4,050KB 🕷		î	Start time:
A3	06-24-2011 14:58:4015:21:22	23,082KB 🕷		P	06-24-2011 11:22:55
A3	06-24-2011 15:22:3915:57:58	35,853KB 🕷		n	
A3	06-24-2011 16:01:5718:25:56	145,529KB 🕷		P	End time: 06-24-2011 13:27:03
A4	06-24-2011 09:45:1913:27:04	230,144KB		٩,	
Total: 2	3 P: 1/1			1-2	

Figure 5.38 Playback- Search Result

5. Protect the record files.

Find the record files you want to protect, and then click the sicon which will turn to indicating that the file is locked.

Note: Only the record files with size bigger than 1GB can be locked, otherwise it can't be protected by locking it.

2) Click 📓 to change it to 📢 to unlock the file and the file is not protected.

Atter	ntion	
le may be o . Continue?		after
Yes	No	
 E 20 H J	3.4	

Figure 5.39 Unlocking Attention

Protect file by setting HDD property to Read-only

Steps:

1. Enter HDD setting interface.

Menu> HDD

			HD	D				
General >	HDD Inform	ation						
K Advanced	Label	Capacity		Property	Туре	Free Space	Group Edit	Delet
© S.M.A.R.T.	3	76,319MB	Normal	R/W	Local	50,176MB	1 🎽	-
	Total Cap Free Spa		76,319M 50,176M					
	Free Spa		50,176M					
					Add	Init	Ba	ck
★ Live View					Add	11. All 10.	Ba	

Figure 5.40 HDD General

2. Click \blacksquare to edit the HDD you want to protect.

		Lo	cal HD)D Sei	tings			
HDD No.		3						
HDD Property								
● R/W								
 Read-only 								
Redundancy								
Group	● 1 ● 9	● 2 ● 10						
HDD Capacity		76,319	MB					
			A	pply		OK	C	ancel

Figure 5.41 HDD General- Editing

Note: To edit HDD property, you need to set the storage mode of the HDD to Group. See *Chapter Managing* 10.4 HDD Group.

- **3.** Set the HDD to Read-only.
- 4. Click **OK** to save settings and back to the upper level menu.

Note: You can't save any files in a Read-only HDD. If you want to save files in the HDD, change the property to R/W.

Note: If there is only one HDD and is set to Read-only, the DVR can't record any files. Only live view mode is available.

If you set the HDD to Read-only when the DVR is saving files in it, then the file will be saved in next R/W HDD. If there is only one HDD, the recording will be stopped.

CHAPTER6

Playback

6.1 Playing Back Record Files

6.1.1 Playing Back by Channel

Purpose:

Play back the recorded video files of a specific channel in the live view mode. Channel switch is supported.

Instant playback by channel:

Steps:

Choose a channel in live view mode using the mouse and click the Line button in the quick setting

toolbar.

Note: Only record files recorded during the last five minutes on this channel will be played back.



Figure 6.1 Instant Playback Interface

All-day Playback by channel

1. Enter the All-day Playback interface.

Mouse: right click a channel in live view mode and select All-day Playback from the menu, as shown in Figure 6.2.



Figure 6.2 Right-click Menu under Live View

Front Panel: press **PLAY** button to play back record files of the channel under single-screen live view mode.

Under multi-screen live view mode, the recorded files of the top-left channel will be played back.

Note: Pressing numerical buttons will switch playback to the corresponding channels during playback process.Playback management.

The toolbar in the bottom part of Playback interface can be used to control playing progress, as shown in Figure 6.3.



Figure 6.3 All-day Playback Interface

The channel and time selection menu displays by moving the mouse to the right of the playback interface. Click the channel(s) if you want to switch playback to another channel or execute simultaneous playback of multiple channels, as shown in Figure 6.4.



Figure 6.4 All-day Playback Interface with Channel List

Dates marked in colors:

- 11 : No record files in this day.
- : There is record file(s) in this day (not current day).
- : Mouse cursor is located.

							113:34	9-15													
	[1]	2		_	 13	 	1	14		 	 15	I				16	 	 17	 	_	18
-12	ŏ	15	18.	瘀					4		Þ	44	••	۲.	>				Normal Event		×

Figure 6.5 Toolbar of All-day Playback

	Та	ble 6.1 Detailed E	xplanation of Al	l-day-playk	oack Toolbar		
Button	Operation	Button	Operation	Button	Operation	Button	Operation
4 / 💸	Audio on	do / 🐱	Start/Stop	▲ 305	30s forward	₹ 305	30s reverse
	/Mute	90 / <u>.</u> 99	clipping	305	50s forward	305	508 16 verse
61	Add default	L.	Add		Tag	¥	Speed
Θ	tag	H	customized tag	¥	management		down
	Pause reverse		Pause play/				
	play/						
Ⅲ/ ◀	Reverse play/	Ⅲ/ ►	Play/ Single-frame		Stop	••	Speed up
	Single-frame		Ũ				
	reverse play		play				
<	Previous day	>	Next day	1	Hide	×	Exit
<u>10, 11, 12,</u>	Process bar		Video type bar				

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.1.2 Playing Back by Time

Purpose:

Play back video files recorded in specified time duration. Multi-channel simultaneous playback and channel switch are supported.

Steps:

1. Enter playback interface.

Menu>Playback

2. Set search conditions and click the Playback button to enter Playback interface.

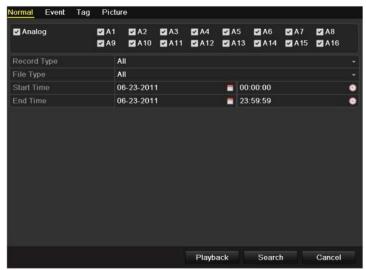


Figure 6.6 Video Search by Time

In the Playback interface:

The toolbar in the bottom part of Playback interface can be used to control playing process, as shown in Figure 6.7.



Figure 6.7 Interface of Playback by Time

ŧ	do.	15	1	尊	

Normal

00%

	Table 6.2 Detailed Explanation of Playback-by-time Toolbar									
Button	Operation	Button	Operation	Button	Operation	Button	Operation			
* / *	Audio on/Mute	¥0 / ₹~	Start/Stop clipping	▲ 305	30s forward	₹ 305	30s reverse			
Ø	Add default tag	<u>↓</u>	Add customized tag	\$	Tag management	¥	Speed down			
	Pause reverse play/Reverse play/ Single-frame reverse play	0/0	Pause playing/Play/Single-fr ame play		Stop	¥	Speed up			
	Video search	×	Exit	2	Hide	0	Progress bar			
	Video type bar									

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.1.3 Playing Back by Normal Video Search

Purpose:

Play back video files searched out by restricting recording type and recording time. The video files in the result list are played back sequentially and channel switch is supported. Recording types contain Normal, Motion, Alarm, Motion / Alarm, Motion & Alarm, Manual and All.

Steps:

1. Enter Record File Search interface.

Menu>Playback

Set search condition and press Search button to enter the Search Result interface.

🗹 Analog	☑ A1 ☑ A9		☑ A3 ☑ A11	✓ A4 ✓ A12			✓ A8 ✓ A16	
Record Type		All						
File Type		All						
Start Time		06-23-201	1		00	00:00		0
End Time		06-23-201	1		 23	59:59		•

Figure 6.9 Normal Video Search

2. Choose a record file you want to play back.

If there is only one channel in the search result, pressing in button takes you to Full-screen Playback interface of this channel.

If more than one channel is optional, pressing is button takes you to step 3 and step 4.

Camer Start/End Time Size Play Lock A1 06-23-2011 10:26:4311:32:09 67,954KB 1 A2 06-23-2011 00:00:00-03:21:29 210,770KB 1 1 A2 06-23-2011 03:21:2909:12:45 367,117KB 1 1 1 A2 06-23-2011 09:12:2909:12:45 367,117KB 1 <			Search result		
A2 06-23-2011 00:00:00-03:21:29 210,770KB Image: Constraint of the system of the	Came	era Start/End Time	Size Play	Lock	
A2 06-23-2011 03:21:2909:12:45 367,117/KB () 1 A2 06-23-2011 09:14:0309:18:18 4,550KB () 1 A2 06-23-2011 09:23:2311:32:08 134,301KB () 1 A2 06-23-2011 109:23:2311:32:08 134,301KB () 1 A2 06-23-2011 11:33:2513:24:58 116,188KB () 1 A2 06-23-2011 13:28:0013:45:59 18,866KB () 1 A3 06-23-2011 00:00:0004:29:32 273,751KB () 1 A3 06-23-2011 09:14:0309:18:18 4,423KB () 1 A3 06-23-2011 09:14:0309:18:18 4,423KB () 1 A3 06-23-2011 09:23:2311:32:08 130.605KB () 1 A3 06-23-2011 13:28:0013:45:59 18.367KB () 1 A3 06-23-2011 13:24:09 37,304KB () 1 0 A3 06-23-2011 13:47:4314:24:30 37,304KB () 1 0	A1	06-23-2011 10:26:4311:32:09	67,954KB 🙆	•	a the second second second second second second second second second second second second second second second
A2 06-23-2011 09:14:0309:18:18 4,550KB () 1 A2 06-23-2011 09:23:2311:32:08 134,301KB () 1 A2 06-23-2011 11:33:2513:24:58 116,188KB () 1 A2 06-23-2011 13:28:0013:45:59 18.866KB () 1 A2 06-23-2011 13:47:4314:24:30 38.347KB () 1 A3 06-23-2011 00:00:00-04:29:32 273,751KB () 1 A3 06-23-2011 09:14:03-09:18:18 4,423KB () 1 A3 06-23-2011 09:23:2311:32:08 130.605KB () 1 A3 06-23-2011 10:23:2311:32:08 130.605KB () 1 A3 06-23-2011 13:28:0013:45:59 18.367KB () 1 A3 06-23-2011 13:24:58 113.006KB () 1 A3 06-23-2011 13:24:59 18.367KB () 1 A3 06-23-2011 13:24:59 18.367KB () 1 0 A3 06-23-2011 13:24:43:0 37,304KB () 1 0 0	A2	06-23-2011 00:00:0003:21:29	210,770KB 🎯	•	
A2 06-23-2011 09:23:2311:32:08 134.301KB (a) Image: Constraint of the system o	A2	06-23-2011 03:21:2909:12:45	367,117KB 🔘	P	
A2 06-23-2011 11:33:2513:24:58 116,188KB A2 06-23-2011 13:28:0013:45:59 18:866KB A2 06-23-2011 13:47:4314:24:30 38:347KB A3 06-23-2011 00:00:0004:29:32 273,751KB A3 06-23-2011 00:00:0004:29:32 273,751KB A3 06-23-2011 00:14:0309:18:18 4.423KB A3 06-23-2011 09:14:0309:18:18 4.423KB A3 06-23-2011 09:23:2311:32:08 130.665KB A3 06-23-2011 10:2513:24:58 113,0066KB A3 06-23-2011 11:33:2513:24:58 113,0066KB A3 06-23-2011 13:28:0013:45:59 18:367KB A3 06-23-2011 13:47:4314:24:30 37,304KB A5 06-23-2011 11:32:09	A2	06-23-2011 09:14:0309:18:18	4,550KB 🔘	-	
A2 06-23-2011 13:28:0013:45:59 18,866KB (Institution of the second of the secon	A2	06-23-2011 09:23:2311:32:08	134,301KB 🔘	•	
A2 06-23-2011 13:47:4314:24:30 38;347KB Image: Constraint of the system of the	A2	06-23-2011 11:33:25-13:24:58	116,188KB 🔘	•	
A3 06-23-2011 00:00:-0-4:29:32 273,751KB () 1 A3 06-23-2011 04:29:3209:12:46 287,513KB () 1 A3 06-23-2011 09:14:0309:18:18 4,423KB () 1 A3 06-23-2011 09:14:0309:18:18 4,423KB () 1 A3 06-23-2011 09:23:2311:32:08 130.605KB () 1 A3 06-23-2011 11:33:2513:24:58 113.006KB () 1 A3 06-23-2011 13:28:0013:45:59 18.367KB () 1 A3 06-23-2011 13:47:4314:24:30 37,304KB () 1	A2	06-23-2011 13:28:0013:45:59	18,866KB 🔘	P	
A3 06-23-2011 04:29.3209:12:46 287,513KB P HDD: 3 A3 06-23-2011 09:14:0309:18:18 4,423KB P Start time: 06-23-2011 10:26:43 A3 06-23-2011 09:23:2311:32:08 130.605KB P 62-23-2011 10:26:43 A3 06-23-2011 11:33:2513:24:58 113.006KB P 62-23-2011 10:26:43 A3 06-23-2011 13:28:0013:45:59 18.367KB P 06-23-2011 11:32:09 A3 06-23-2011 13:47:4314:24:30 37.304KB P 06-23-2011 11:32:09	A2	06-23-2011 13 47 43-14 24 30	38,347KB 🔘	-	
A3 06-23-2011 09:14:0309:18:18 4,423KB (a) Image: Constraint of the constraint	A3	06-23-2011 00:00:0004:29:32	273,751KB 🔘	-	
A3 06-23-2011 09:23:2311:32:08 130.605KB (a) Image: Constraint of the constrai	A3	06-23-2011 04:29:3209:12:46	287,513KB 🔘	f	HDD: 3
A3 06-23-2011 09:23:2311:32:08 130.605KB (b) Image: Constraint of the constrai	A3	06-23-2011 09:14:0309:18:18	4,423KB 🔘	•	Start time:
A3 06-23-2011 13:28:0013:45:59 18:367KB	A3	06-23-2011 09:23:2311:32:08	130,605KB 🔘	•	
A3 06-23-2011 13:28:0013:45:59 18:367KB	A3	06-23-2011 11:33:2513:24:58	113,006KB 🔘	£	
A3 06-23-2011 13:47:4314:24:30 37,304KB (்) ₽ ✓	A3	06-23-2011 13:28:0013:45:59	18,367KB 🔘	£	
Total: 23 P: 1/1	A3	06-23-2011 13:47:4314:24:30	37,304KB 🔘	•	×
Total: 25 F. 171	Total	23 P: 1/1			
					Cancel

Figure 6.10 Result of Normal Video Search

3. Choose channels for simultaneous playback.

Note: Optional channels for simultaneous playback are the same as the channels chosen to search record files in step 1. And the channel with the recorded file selected in step 2 is the main channel during multi-channel playback and it is displayed at the upper left corner. 4-ch, 8-ch and 16-ch devices support 4-ch, 8-ch and 16-ch simultaneous playback respectively.



Figure 6.11 Select Channels for Synchronous Playback

- 4. Synchronous Playback interface.
 - The toolbar in the bottom part of Playback interface can be used to control playing process.



Figure 6.12 4-ch Synchronous Playback Interface

The hidden list of recorded files displays by moving the mouse to the right of the playback interface.



Figure 6.13 4-ch Synchronous Playback Interface with Video List

0	
de % 15 1 mm 4≥	Normal 📠 🗽 🗙

Figure 6.14 Toolbar of Normal Playback

Button	Operation	Button	Operation	Button	Operation	Button	Operation
*	Audio on/Mute	る/ る	Start/Stop clipping	▲ 305	30s forward	₹305	30s reverse
Q	Add default tag	<u>↓</u>	Add customized tag	\$	Tag management	¥	Speed down
	Pause reverse play/Reverse play/ Single-frame reverse play	0/0	Pause playing/Play/Single-fr ame play		Stop	¥	Speed up
<	Previous file	>	Next file		Video search	×	Exit
~1	Hide toolbar	0	Progress bar	-	Video type bar		

Table 6.3 Detailed Explanation of Normal-playback Toolbar

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.1.4 Playing Back by Event Search

Purpose:

Play back record files on one or several channels searched out by restricting event type (e.g. alarm input and motion detection). Channel switch is supported.

Steps:

1. Enter the playback interface.

Menu>Playback

- 2. Select Event tab to enter the Event Playback interface.
- **3.** Select **Alarm Input** as the event type.
- 4. Click **Search** button to enter the Search Result interface.

Event Type	Alarm Input			
Start Time	06-23-2011		00:00:00	0
End Time	06-23-2011	. 🖻	23:59:59	C
Alarm Input No.	Alarm Name	Name IP Ca		-
✓ A<-1			Local	
☑ A<-2			Local	
✓ A<-3			Local	
☑ A<-4			Local	-
✓ A<-5			Local	-
A<-6			Local	-
🗖 A<-7			Local	
A<-8			Local	
A<-9			Local	
📕 A<-10			Local	
🔳 A<-11			Local	
A<-12			Local	
A<-13			Local	

Figure 6.15 Video Search by Alarm Input

If you want to play back recorded files associated with motion detection, choose **Motion** as event type and click **Search** button to enter the Search Result interface.

lormal <mark>Event</mark> Tag	Pictu	e								
Event Type	M	lotion								
Start Time	0	6-23-201	1		-	00	:00:00			C
End Time	0	6-23-201	1		-	23	59:59			0
🗹 Analog	✓ A1 ✓ A9	☑ A2 ☑ A10	☑ A3 ☑ A11	☑ A4 ☑ A12	MA MA		☑ A6 ☑ A14	✓ A7 ✓ A15	✓ A8 ✓ A16	

Figure 6.16 Video Search by Motion

5. Click D button to enter the Playback interface.

If there is only one channel is triggered by an alarm input, pressing **o** button takes you to Full-screen Playback interface of this channel.

If several channels are triggered, pressing button takes you to step 7 and then step 8. *Note:* Pre-play and post-play can be configured.

			Alarm	Input		_
√ S	ource	Start Time		End Time		Play
v	A<-1	06-27-2011 08:5	59:39	06-27-2011 08:59:3	9	0
	A<-1	06-27-2011 13:5	57:53	06-27-2011 13:57:5	3	۲
	A<-1	06-27-2011 14:0	01:05	06-27-2011 14:01:0	5	۲
•	A<-1	06-27-2011 15:4	12:48	06-27-2011 15:42:4	8	۲
	A<-1	06-27-2011 15:5	53:26	06-27-2011 15:53:2	6	۲
	al: 5 P:	1/1			RADE	
	-play		30s			
Pos	t-play		30s			
					<mark>Details</mark> C	ancel

Figure 6.17 Result of Video Search by Alarm Input

6. Click **Details** button to view detailed information of the record file, e.g. start time, end time, file size, etc.

9			Event De	tails		
Source	Camer	Record Time		Size	Play	
A<-1	A1	06-27-2011 08:59:4	909:00:09	398KB		distantion for the
A<-1	A1	06-27-2011 13:58:0	313:58:23	398KB	۲	
A<-1	A1	06-27-2011 14:01:1	514:01:35	395KB	۲	
A<-1	A1	06-27-2011 15:42:5	815:43:18	396KB	۲	Vine Att
A<-1	A1	06-27-2011 15:53:3	6 15:53:56	396KB	۲	
A<-1	A2	06-27-2011 15:53:3	615:53:56	414KB	۲	
A<-1	A3	06-27-2011 15:53:3	615:53:56	382KB	۲	
A<-1	A4	06-27-2011 15:53:3	615:53:56	396KB		
Total: 1	8 P: 1/1			н	*	HDD: 3 Start time: 06-27-2011 15:53:36 End time: 06-27-2011 15:53:56
						Cancel

Figure 6.18 Event Details Interface

7. Playback interface.

The toolbar in the bottom part of Playback interface can be used to control playing process.



Figure 6.19 Interface of Playback by Event

The hidden list of events will be displayed by moving the mouse to the right of the playback interface.



Figure 6.20 Playback Interface with Alarm Input List



Figure 6.21 Toolbar of Playback by Event

Button	Operation	Button	Operation	Button	Operation	Button	Operation
* / %	Audio on/Mute	る/ む	Start/Stop clipping	► 305	30s forward	₹305	30s reverse
Ø	Add default tag	M	Add customized tag	햧	Tag management	¥	Speed down
	Pause reverse play/Reverse play/ Single-frame reverse play		Pause playing/Play/Single-fr ame play		Stop	ź	Speed up

Table 6.4 Detailed Explanation of Playback-by-event Toolbar

<	Previous event	>	Next event	Event search	×	Exit
	Hide		Drograss har	Video type		
	пие		Progress bar	bar		

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.1.5 Playing Back by Tag

Purpose:

Video tag allows you to record related information like people and location of a certain time point during playback. You are also allowed to use video tag(s) to search for record files and position time point.

Before playing back by tag:

1. Enter Playback interface.



Figure 6.22 Interface of Playback by Time

Press **button to add default tag.**

Press button to add customized tag and input tag name.

Note: Max. 64 tags can be added to a single video file.

2. Tag management.

Press button to check, edit and delete tag(s).

	Tag man	agement	
Camer	Tag Name	Time	Edit Delet
A2	TAG	06-23-2011 02:29:10	2
A2	TAG	06-23-2011 02:29:15	2 💼
A2	TAG	06-23-2011 02:29:16	1 💼
A2	TAG	06-23-2011 02:29:19	10 10
A2	TAG	06-23-2011 02:29:19	1 🕅
Total: 5	5 P: 1/1		7 4
			Cancel

Figure 6.23 Tag Management Interface

Steps:

1. Enter Playback interface.

Menu>Playback

Press Tag tab to enter Playback by Tag interface.

Choose channels, tag type and time, and press Search to enter Search Result interface.

Note: Two tag types are selectable: All and Tag Keyword. Input keyword if you choose Tag Keyword.

Analog	A1		A3	■ A4 ■ A12			A6	A7	A8	
Тад Туре						15				
Tag Keyword		A.II								
Start Time		06-23-201	1		-	00:0	00:00			C
End Time		06-23-201	1		-	23:5	59:59			¢

Figure 6.24 Video Search by Tag

Set playback conditions and tag management.
Choose the tag name of the recorded file you want to play back; it can be edited or deleted.
Pre-play and post-play time can be set according to actual needs. *Note:* Pre-play time and post-play time is added to the time point of the tag.



Figure 6.25 Result of Video Search by Tag

- **3.** Playback by tag.
 - Choose a tag and press button to play back the related record file.



Figure 6.26 Interface of Playback by Tag

The hidden list of tags will be displayed by moving the mouse to the right of the playback interface.



Figure 6.27 Interface of Playback by Tag with Video List



Figure 6.28 Toolbar of Playback by Tag

	Table 0.5 Detailed Explanation of Playback-by-tag Toolbai									
Button	Operation	Button	Operation	Button	Operation	Button	Operation			
₹	Audio on/Mute	₹o / ₹~	Start/Stop clipping	▲ 305	30s forward	₹305	30s reverse			
O	Add default tag	L	Add customized tag	\$	Tag management	**	Slow down			
	Pause reverse play/Reverse play/ Single-frame reverse play	0/0	Pause playing/Play/Single-fr ame play		Stop	\$	Speed up			
<	Previous tag	>	Next tag		Tag search	×	Exit			
2	Hide	0	Progress bar		Video type bar					

Table 6.5 Detailed Explanation of Playback-by-tag Toolbar

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.1.6 Playing Back by System Log

Purpose:

Play back record file(s) associated with channels after searching system logs. *Steps:*

1. Enter Log Search interface.

Menu>Maintenance>Log Search

Set search time and type and press Search button.

		System Mainten	anco		
System Info	Log Search				
Log Search	Start Time	06-23-2011		00 00 00	100
Import/Export	End Time	06-23-2011		23.59.59	•
1 Upgrade		All			
C Default	Minor Type	Ali			
🐱 Net Detect	No. Major Type	Time	Minor Type	Parameter Play	Details
	Totat 0 P-1/1				-
A Live View	_		Export	Search	Back

Figure 6.29 System Log Search Interface

2. Choose a log with record file and press D button to enter Playback interface.

Note: If there is no record file at the time point of the log, the message box "no related record file" will

alls
alls —
1

Figure 6.29 Result of System Log Search

3. Playback interface.

The toolbar in the bottom part of Playback interface can be used to control playing process.

pop up.



Figure 6.30 Interface of Playback by Log

6.2 Auxiliary Functions of Playback

6.2.1 Playing Back Frame by Frame

Purpose:

Play video files frame by frame, in order to check image details of the video when abnormal events happen. *Steps:*

• Using a Mouse:

Go to Playback interface and click button \blacksquare and \blacktriangleright until the speed changes to *Single* frame. One click on the playback screen represents playback or adverse playback of one frame. It is also feasible to use

- button 🛄 in toolbar.
- Using the Front Panel:
 Rotate the inner control on Jog Shuttle counterclockwise or press the ▼ button to set the speed to *Single* frame. One click on button represents playback or adverse playback of one frame.

6.2.2 Smart Search

Purpose:

In order to locate motion detection event easily and accurately in the playback progress bar, you are allowed to analyze a certain area (scene) dynamically, and to get all of the related motion detection events that occurred in this area.

Steps:

1. Go to Playback interface and play the video.



Figure 6.31 Interface of Playback by Time

2. Right-click mouse and select Smart Search to go to analysis area selection interface.

٩	Video Search
Ω	Digital Zoom
ß	Smart Search
1	Control Panel
筃	Exit

Figure 6.32 Right-click Menu under Playback

3. You can press button to set the full screen as target searching area. After drawing area(s), press button to execute smart search in this area.

Note: Multi-area and full-screen searching modes are supported.



Figure 6.33 Draw Area of Smart Search

Results of intelligent analysis:

Video type bar:

- Normal record file;
- Event record file;

Dynamic record file.

The hidden list of record files display when moving the mouse to the right of the playback interface.



Figure 6.34 Smart Search Result with Video List



Figure 6.35 Toolbar of Smart Search Playback

Button	Operation	Button	Operation	Button	Operation	Button	Operation
∢≣ / %	Audio on/Mute	¥8 ∀8	Start/Stop clipping	▲ 305	30s forward	₹ 305	30s reverse
õf	Add default tag	赳	Add customized tag	햧	Tag management	*	Slow down
0/1	Pause reverse play/Reverse play/ Single-frame reverse play	× H	Pause playing/Play/Single-fr ame play		Stop	≯	Speed up
۲	Previous smart search result	>	Next smart search result		Video search	×	Exit
2	Hide	0	Progress bar		Video type bar		Smart search bar

Table 6.6 Detailed Explanation of Smart-search-playback Toolbar

Note:

- 1. Playback progress bar: use the mouse to click any point of the progress bar or drag the progress bar to locate special frames.
- 2. About video type bar: represents normal recording (manual or schedule); represents event recording (motion, alarm, motion | alarm, motion & alarm).

6.2.3 Digital Zoom

Steps:

1. Right click the mouse on a channel under playback and choose Digital Zoom to enter Digital Zoom

interface.

2. Move the red rectangle and the image within it will be quadrupled.



Figure 6.36 Draw Area for Digital Zoom



Figure 6.37 Right-click Menu under Playback

The right-click menu:

Note: This menu differs slightly from one playback interface to another.

Table 6.7 Detailed Explanation of Right-click Menu under Playback

Button	Function
đ	Return to Search interface
¢	Enter Digital Zoom interface
3	Motion Analysis against a specified area
	Show & hide control interface
Ê	Return to Playback interface

6.3 Picture Playback

Purpose:

Search and view captured pictures stored in HDD.

Steps:

1. Enter Playback interface.

Menu>Playback

2. Choose Picture tab.

Set channel, picture type and time and press Search button to enter Search Result interface.

Note: Picture types include Normal, Motion, Alarm, Motion / Alarm, Motion & Alarm, Capture and

Continuous Capture.

Normal Event	Tag <mark>P</mark> i	cture						
🖬 Analog	2 / 2 /		A2 ☑A3 A10 ☑A11				✓ A8 ✓ A16	
Picture Type		All						•
Start Time		06-23	2011	1	00:00:00			•
End Time		06-23	2011	-	23:59:59			•
					Searc	:h	Cancel	

Figure 6.38 Picture Search

3. View pictures.

Choose a picture you want to view and press button

			Search result	
Camer	HDD I	N Time	Picture Size Play	
A13	3	06-23-2011 19:55:08	13KB 🕥	Contraction of the state
A13	3	06-23-2011 19:55:08	13KB 🔘	
A14	3	06-23-2011 19:55:10	13KB 🔘	
A14	3	06-23-2011 19:55:11	13KB 🔘	the first the
A14	3	06-23-2011 19:55:27	13KB 🔘	
A14	3	06-23-2011 19:55:28	13KB 🔘	
A15	3	06-23-2011 19:55:23	13KB 🔘	
A15	3	06-23-2011 19:55:23	13KB 🔘	
A16	3	06-23-2011 19:55:25	13KB 🔘	
A16	3	06-23-2011 19:55:25	13KB 🔘	
A16	3	06-23-2011 19:55:25	13KB 🔘	
Total: 1		1/1	R K S D	
				Cancel

Figure 6.39 Result of Picture Search

4. Picture Playback interface.



The toolbar in the bottom part of Playback interface can be used to control playing process.

Figure 6.40 Picture Playback Interface

The hidden list of captured pictures will be displayed by moving the mouse to the right of the playback interface.



Figure 6.41 Playback Interface with Picture List



Figure 6.42 Picture Playback Toolbar

Button	Function	Button	Function	Button	Function	Button	Function
•	Play reverse	٣	Play	<	Previous picture	>	Next picture
1	Picture search	×	Hide	×	Exit		

Table 6.8 Detailed Explanation of Picture-playback Toolbar

C H A P T E R 7

Backup

7.1 Backing up Record Files

7.1.1 Quick Export

Purpose:

Export record files to backup device(s) quickly.

Steps:

1. Enter Video Export interface.

Choose the channel(s) you want to back up and press **Quick Export** button.

Note:

- 1. The time duration of record files on a specified channel cannot exceed one day. Otherwise, the message box "Max. 24 hours are allowed for quick export." will pop up.
- 2. The number of channels for synchronous export cannot exceed 4. Otherwise, the message box "Max. 4 channels are allowed for synchronous quick export." will pop up.

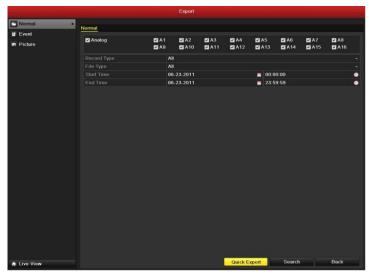


Figure 7.1 Quick Export Interface

2. Export.

Go to Export interface, choose backup device and press **Export** button to start exporting. *Note:* Here we use USB Flash Drive and please refer to the next section Normal Backup for more backup devices supported by the device.

		Бф	ort		
Device Name	USB1	4		Re	fresh
Name		Size Type	Edit Date	Dele	te Play
a 11		Folder	06-23-2011 20:07:22		-
Backup		Folder	06-23-2011 20:07:28	=	-
Export record file	is to r	0KB File	06-23-2011 20:07:58	1	۲
Welcome to use I	backi.	0KB File	06-23-2011 20:07:36	-	۲
-\$bandwidth esti	matic	0KB File	05-31-2011 11:32:46	-	0
Free Space		995MB			

Figure 7.2 Quick Export using USB1-1

Stay in the Exporting interface until all record files are exported.

Export	
Export finished.	
	ок

Figure 7.3 Export Finished

3. Check backup result.

Choose the record file in Export interface and press button in to check it. *Note:* The Player player.exe will be exported automatically during record file export.

		Eq	ort		
Device Name	USB	1-1		Re	fresh
Namo		Size Type	Edit Date	Delet	te Play
a 11		Folder	06-23-2011 20:07:22		-
Backup		Folder	06-23-2011 20:07:28	1	-
Export record file	es to r	0KB File	06-23-2011 20:07:58	1	۲
Welcome to use	backı.	0KB File	06-23-2011 20:07:36	1	۲
-\$bandwidth est	imatic	0KB File	05-31-2011 11:32:46		۲
Free Space		995MB			

Figure 7.4 Checkup of Quick Export Result Using USB1-1

7.1.2 Backing up by Normal Video Search

Purpose:

The record files can be backup to various devices, such as USB devices (USB flash drives, USB HDDs, USB writer), SATA writer and e-SATA HDD.

Backup using USB flash drives and USB HDDs

Steps:

1. Enter Export interface.

Menu>Export>Normal

2. Set search condition and press **Search** button to enter the search result interface.



Figure 7.5 Normal Video Search for Backup

3. Select record files you want to back up.

Press button it to play the record file if you want to check it.

Check the checkbox before the record files you want to back up.

Note: The size of the currently selected files is displayed in the lower-left corner of the window.

	Search result	
Cam Start/End Time	Size Play Lo	ck 🗠
A1 06-23-2011 10:26:4311:32:09	67,954KB 🔘 🔐	The standing of the second set of the
A2 06-23-2011 00:00:00-03:21:29	210,770KB 🔘 🔐	
A2 06-23-2011 03:21:2909:12:45	367,117KB 🔘 🔐	
A2 06-23-2011 09:14:0309:18:18	4,550KB 🔘 🔐	
A2 06-23-2011 09:23:2311:32:08	134,301KB 🔘 🔐	
A2 06-23-2011 11:33:25-13:24:58	116,188KB 🔘 🔐	
A2 06-23-2011 13:28:0013:45:59	18,866KB 🔘 🔐	
A2 06-23-2011 13:47:4314:24:30	38,347KB 🔘 📑	
A3 06-23-2011 00:00:0004:29:32	273,751KB 🔘 🔐	
A3 06-23-2011 04:29:3209:12:46	287,513KB 🔘 🔐	HDD: 3
A3 06-23-2011 09:14:0309:18:18	4,423KB 🔘 🔐	
A3 06-23-2011 09:23:2311:32:08	130,605KB 🔘 🔐	Start time: 06-23-2011 13:47:43
A3 06-23-2011 11:33:2513:24:58	113,006KB 🔘 🔐	
A3 06-23-2011 13:28:00-13:45:59	18,367KB 🔘 🔐	End time:
A3 06-23-2011 13:47:4314:24:30	37,304KB 🔘 🔐	06-23-2011 14:24:30
Total: 23 P: 1/1		
Total size: 1,828MB		Export Cancel

Figure 7.6 Result of Normal Video Search for Backup

4. Export.

Click Export button and start backup.

Note: If the inserted USB device is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

You can also format USB flash drives or USB HDDs via the device.

Export									
Device Name	USB1-1			Refr	esh				
Name	Size Type	Edit Date		Delete	Play				
📑 ch03_201106230000	C 267MBFile	06-23-2011 20:15:02		1	۲				
📄 ch03_201106230429	3 280MB File	06-23-2011 20:11:14		1	۲				
📄 ch03_201106230914	C 4,423KB File	06-23-2011 20:11:20		1	۲				
📄 ch03_201106230923	2 127MB File	06-23-2011 20:12:12		n	۲				
📄 ch03_201106231133	2 110MB File	06-23-2011 20:12:54		m	۲				
📄 ch03_201106231328	C 18,367KB File	06-23-2011 20:13:02		1	۲				
📑 ch03_201106231347	4 37,305KB File	06-23-2011 20:13:12		m	۲				
🗐 player.exe	608KB File	06-23-2011 20:09:40		Ť	۲				
Free Space	150MB								
	New Folder	Format Expor	1	Can	cel				

Figure 7.7 Export by Normal Video Search using USB Flash Drive

Stay in the Exporting interface until all record files are exported with pop-up message box"Export finished".

	Export	
Export finished.		
		ок

Figure 7.8 Export Finished

5. Check backup result.

Choose the record file in Export interface and press button it to check it. *Note:* The Player player.exe will be exported automatically during record file export.

	Ex	port			
Device Name	USB1-1			Refre	esh
Name	Size Type	Edit Date		Delet	te Pla
🧃 11	Folde	r 06-23-2011 20:07:2	22	1	- 14
🖬 Backup	Folde	r 06-23-2011 20:07:2	28	1	4 - 6
Export record files to	me OKB File	06-23-2011 20:07:	58	1	۲
Welcome to use back	kup OKB File	06-23-2011 20:07:3	36	1	۲
ch03_201106230000	00 267MB File	06-23-2011 20:15:0)2	1	۲
ch03_201106230429	32 280MB File	06-23-2011 20:11:1	4	1	۲
ch03_201106230914	03 4,423KB File	06-23-2011 20:11:2	20	1	۲
ch03_201106230923	23 127MB File	06-23-2011 20:12:1	12	1	۲
ch03_201106231133	25 110MB File	06-23-2011 20:12:	54	1	۲
ch03_201106231328	00 18,367KB File	06-23-2011 20:13:0)2	1	۲
ch03_201106231347	43 37,305KB File	06-23-2011 20:13:1	2	1	۲
🖬 player.exe	608KB File	06-23-2011 20:09:4	10	Ē	۲
📕 Ølsenekriidtle netimeti 🕻		05 94 0044 44-90 I	10	-	` `
Free Space	150MB				
	New Folder	Format Exp	ort	Can	cel

Figure 7.9 Checkup of Export Result using USB Flash Drive

Backup using USB writer and SATA writer

Steps:

1. Enter Export interface.

Menu>Export>Normal

2. Set search condition and press Search button to enter the search result interface.

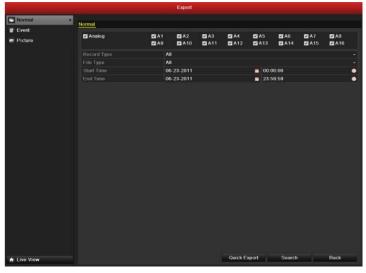


Figure 7.10 Normal Video Search for Backup

Select record files you want to back up.
 Press button is to play the record file if you want to check it.
 Check the checkbox before the record files you want to back up.
 Note: The size of the currently selected files is displayed in the lower-left corner of the window.

	Search result		
Cam Start/End Time	Size Play	Lock	
A1 06-23-2011 10:26:4311:32:09	67,954KB 🔘	1	The standing in the standard
A2 06-23-2011 00:00:0003:21:29	210,770KB 🔘	f	
A2 06-23-2011 03:21:2909:12:45	367,117KB 🔘	P	
A2 06-23-2011 09:14:0309:18:18	4,550KB 🔘	f	
A2 06-23-2011 09:23:2311:32:08	134,301KB 🔘	-	
A2 06-23-2011 11:33:25-13:24:58	116,188KB 🔘	-	
A2 06-23-2011 13:28:0013:45:59	18,866KB 🔘	£	
A2 06-23-2011 13:47:4314:24:30	38,347KB	•	
A3 06-23-2011 00:00:0004:29:32	273,751KB 🔘	-	
A3 06-23-2011 04:29:3209:12:46	287,513KB 🔘	P	HDD: 3
A3 06-23-2011 09:14:0309:18:18	4,423KB 🔘	P	
A3 06-23-2011 09:23:2311:32:08	130,605KB 🔘	P	Start time: 06-23-2011 13:47:43
A3 06-23-2011 11:33:25-13:24:58	113,006KB 🔘	ſ	00-23-2011 13.47.43
A3 06-23-2011 13:28:00-13:45:59	18,367KB 🔘	P	End time:
A3 06-23-2011 13:47:4314:24:30	37,304KB 🕥	_	06-23-2011 14:24:30
Total: 23 P: 1/1	RADE		
Fotal size: 1,828MB			Export Cancel

Figure 7.11 Result of Normal Video Search for Backup

4. Export.

Click Export button and start backup.

Note: If the inserted USB writer or SATA writer is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

Export				
Device Name	USB CD/DVD-RW			Refresh
Name	Size Type	Edit Date		Delete Play
Free Space	0KB			
		Erase	Export	Cancel
		Elase	Export	Cancel

Figure 7.12 Export by Normal Video Search using USB Writer

Stay in the Exporting interface until all record files are exported with pop-up message box "Export finished".



Figure 7.13 Export Finished

5. Check backup result.

Choose the record file in Export interface and press button it to check it. Note: The Player player.exe will be exported automatically during record file export.

	Ехро	rt	
Device Name US	SB CD/DVD-RW		 Refresh
Name	Size Type	Edit Date	Delete Pla
11	Folder	06-23-2011 20:07:22	10 - 10
Backup	Folder	06-23-2011 20:07:28	💼 –
Export record files to m	: 0KB File	06-23-2011 20:07:58	11 💿
Welcome to use backup	0KB File	06-23-2011 20:07:36	💼 💿 🗖
E ch03_2011062300000	267MB File	06-23-2011 20:15:02	💼 💿 -
Ch03_20110623042932	280MB File	06-23-2011 20:11:14	💼 💿 –
E ch03_20110623091403	4,423KB File	06-23-2011 20:11:20	(
ch03_20110623092323	127MB File	06-23-2011 20:12:12	
E ch03_20110623113325	110MB File	06-23-2011 20:12:54	💼 💿
E ch03_20110623132800	18,367KB File	06-23-2011 20:13:02	💼 💿
E ch03_20110623134743	37,305KB File	06-23-2011 20:13:12	💼 💿 –
📄 player.exe	608KB File	06-23-2011 20:09:40	💼 💿
#h and width and implies		DE 94 0044 44 99 46	<u> </u>
Free Space	150MB)
		Erase Export	Cancel

Figure 7.14 Checkup of Export Result using USB Writer

Backup using eSATA HDDs

Steps:

- 1. Enter Record>Advanced and set the working mode of eSATA HDD at "Export".
 - Menu>Record>Advanced

Choose eSATA and set its mode at Export. Click **Yes** when pop-up message box "System will reboot automatically if the usage of eSATA is changed. Continue?"

Note: The working modes of eSATA HDD contain Record/Capture and Export. And changes in working mode will take effective after rebooting the device.

2. Enter Export interface.

Menu>Export>Normal

Set search condition and press Search button to enter the search result interface.

			Export							
Normal >	Normal									
Event	and the second s					-				
Picture	Analog	2 A 1 2 A 9	A2	A3	A4	A5	A6	A7	■ A8 ■ A16	
		AI								
		AI								
		06	-23-2011			00:0	0:00			4
		06	-23-2011			23:5	9:59			
Live View					Quick E	xport	Search		Back	

Figure 7.15 Normal Video Search for Backup

3. Select record files you want to back up.

Press button it to play the record file if you want to check it.

Tick record files you want to back up.

Note: The size of the currently selected files is displayed in the lower-left corner of the window.

	Search result	
Cam Start/End Time A1 06-23-2011 10:26:4311:32:09	Size Play Lock 67,954KB 🔘 🚽	
 ✓ A2 06-23-2011 00:00:00-03:21:29 ✓ A2 06-23-2011 03:21:29-09:12:45 ✓ A2 06-23-2011 03:21:29-09:12:45 	210,770KB (©) 🔐 367,117KB (©) 🔐	
 A2 06-23-2011 09:14:0309:18:18 A2 06-23-2011 09:23:2311:32:08 A2 06-23-2011 11:33:2513:24:58 	4,550KB () 4,550KB ()	
 ▲ A2 06-23-2011 13:28:0013:45:59 ▲ A2 06-23-2011 13:47:4314:24:30 	18,866KB 💿 🔐 38,347KB 💿 🔐	
 A3 06-23-2011 00:00:0004:29:32 A3 06-23-2011 04:29:3209:12:46 A3 06-23-2011 09:14:0309:18:18 	273,751KB (©) 🔐 287,513KB (©) 🔐 4,423KB (©) 🔐	HDD: 3
A3 06-23-2011 09:23:2311:32:08 A3 06-23-2011 11:33:2513:24:58	130,605КВ 💿 🔒 113,006КВ 💿 🔒	Start time: 06-23-2011 13:47:43
A3 06-23-2011 13:28:00-13:45:59 A3 06-23-2011 13:47:43-14:24:30	18,367KB 💿 🚽 37,304KB 💿 🚽	End time: 06-23-2011 14:24:30
Total: 23 P: 1/1 Total size: 1,828MB		Export Cancel

Figure 7.16 Result of Normal Video Search for Backup

4. Export.

Press Export button and start backup.

Note: Please format the eSATA first when using it for the first time. If the inserted eSATA HDD is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

You can also format SATA HDD via the device.

	Exp	oort		
Device Name	ESATAO			Refresh
Name	Size Type	Edit Date		Delete Play
Free Space	0KB			
	New Folder	Format	Export	Cancel

Figure 7.17 Export by Normal Video Search Using eSATA HDD

Stay in the Exporting interface until all record files are exported with pop-up message "Export finished".

Export	
Export finished.	
	ок

Figure 7.18 Export Finished

5. Check backup result.

Choose the record file in Export interface and press button 🔘 to check it.

Note: The Player player.exe will be exported automatically during record file export.

		Export				
Device Name	ESA	TAO			Refres	sh
Name		Size Type	Edit Date		Delete	Pla
📹 11		Folder	06-23-2011 20:07:2	2	Ť	/-8
📹 Backup		Folder	06-23-2011 20:07:2	8	Ť	2 - 2
Export record files to	o m∈	0KB File	06-23-2011 20:07:5	8	1	۲
📑 Welcome to use bac	kup	0KB File	06-23-2011 20:07:3	6	1	
🔤 ch03_20110623000	000	267MB File	06-23-2011 20:15:0	2	1	0 -
ch03_20110623042	932	280MB File	06-23-2011 20:11:1	4	Ť	•
🔄 ch03_201106230914	403	4,423KB File	06-23-2011 20:11:2	0	1	۲
ch03_20110623092	323	127MB File	06-23-2011 20:12:1	2		۲
Ch03_20110623113	325	110MB File	06-23-2011 20:12:5	4	Ť	۲
ch03_20110623132	800	18,367KB File	06-23-2011 20:13:0	2	Ť	۲
ch03_20110623134	743	37,305KB File	06-23-2011 20:13:1	2	Ť.	۲
📔 player.exe		608KB File	06-23-2011 20:09:4	0	1	۲
🔲 🕂 the number of the section of	6.0m		05 94 0044 44-99-4	0		^`
Free Space		150MB				
		New Folder	Format Expo	ort	Cance	əl

Figure 7.19 Checkup of Export Result Using eSATA HDD

7.1.3 Backing up by Event Search

Purpose:

Back up event-related record files using USB devices (USB flash drives, USB HDDs, USB writer), SATA writer or e-SATA HDD. Quick Backup and Normal Backup are supported.

Steps:

1. Enter Export interface.

Menu>Export>Event

- 1) Select "Alarm Input" from the dropdown list of Event Type.
- 2) Select the alarm input No. and time.
- 3) Press **Search** button to enter the Search Result interface.

		Export		
Normal	Event			
Event	s Event			
Picture	Event Type	Alarm Input		
en Pricture		06-23-2011	00:00:00	•
		06-23-2011	23:59:59	•
	Alarm Input No			
	☑ A<-1		Local	
	☑ A<-2		Local	
	☑ A<-3		Local	
	🖬 A<-4		Local	
	☑ A<-5		Local	
	☑ A<-6		Local	
	🖬 A<-7		Local	
	🖬 A<-8		Local	ľ
	II A<-9		Local	
	🖬 A<-10		Local	
	🖬 A<-11		Local	
	🖬 A<-12		Local	
	🖬 A<-13		Local	
	🖬 A<-14		Local	
	☑ A<-15		Local	
Live View			Soarch	Back

Figure 7.20 Event Search for Backup

- 2. Select record files to export.
 - 1) Select an alarm input in the list and press **Quick Export** button to enter Export interface.
 - Pressing **Details** button will take you to the interface with detailed information of all channels triggered by the selected alarm input.

Note: Event types contain Alarm Input and Motion.

 Pressing Quick Export button will export record files of all channels triggered by the selected alarm input.

	Ala	arm Input		
Source	Start Time	End T	ime	
☑ A<-1	06-27-2011 08:59:39	06-27-	-2011 08:59:39)
🗹 A<-1	06-27-2011 13:57:53	06-27-	-2011 13:57:53	l .
🗹 A<-1	06-27-2011 14:01:05	06-27	2011 14:01:05	5
🗹 A<-1	06-27-2011 15:42:48	06-27-	2011 15:42:48	3
🗹 A<-1	06-27-2011 15:53:26	06-27	-2011 15:53:26	3
Total: 5 P: 1/1				
Pre-play	30s			
Post-play	30s			
		Quick Export	Details	Cancel

Figure 7.21 Result of Event Search

4) Click Details button to view detailed information of the record file, e.g. start time, end time, file size, etc.

Note: The size of the currently selected files is displayed in the lower-left corner of the

window.

	Eve	ent Details		
Sou Came	r Record Time	Size Play		
☑ A<-A1	06-27-2011 08:59:4909:00:0	9 398КВ 🔘	the state	in the local
🗹 A<-A1	06-27-2011 13:58:0313:58:2	3 398КВ 💿	The second second	
☑ A<-A1	06-27-2011 14:01:1514:01:3	5 395KB 🔘	11	
🗹 A<-A1	06-27-2011 15:42:5815:43:1	8 396KB 💿	Ver 18	
🗹 A<-A1	06-27-2011 15:53:3615:53:5	6 396KB 🕥	100	
🗹 A<-A2	06-27-2011 15:53:3615:53:5	6 414KB 🔘	-	
🗹 A<-A3	06-27-2011 15:53:3615:53:5	6 382KB 🕥		
✓ A<-A4	06-27-2011 15:53:3615:53:5	6 396КВ 💽		
Total: 8 P: 1/			HDD: 3 Start time: 06-27-2011 End time: 06-27-2011	
Total size: 3,	176KB	j.	Export	Cancel

Figure 7.22 Event Details Interface

3. Export.

Click the **Export** button and start backup.

Note: If the inserted USB device is not recognized:

- Click the Refresh button.
- Reconnect device.
- Check for compatibility from vendor.

You can also format USB flash drive or USB HDDs via the device.

		Бф	ort		
Device Name	USB	1-1		Re	fresh
Name		Size Type	Edit Date	Dele	te Play
a 11		Folder	06-23-2011 20:07:22	1	-
Backup		Folder	06-23-2011 20:07:28	=	-
Export record files	s to r	0KB File	06-23-2011 20:07:58	1	۲
Welcome to use b	ackı.	0KB File	06-23-2011 20:07:36	1	۲
-\$bandwidth estin	natic	0KB File	05-31-2011 11:32:46	-	0
Free Space		995MB			

Figure 7.23 Export by Event Using USB Flash Drive

Stay in the Exporting interface until all record files are exported with pop-up message "Export finished".

Export	
Export finished.	
	ок

Figure 7.24 Export Finished

4. Check backup result.

Note: The Player player.exe will be exported automatically during record file export.

	Export	
Device Name	USB1-1	 Refresh
Name	Size Type Edit Date	Delete Play
🔝	Folder 2011-06-27 19:06:	:35 — —
a01_md_ch01_11062	629KB File 2011-06-27 19:06:	:40 📋 💿
a01_md_ch01_11062	635KB File 2011-06-27 19:06	:48 💼 💿
a01_md_ch02_11062	672KB File 2011-06-27 19:06:	:40 💼 💿
a01_md_ch02_11062	2011-06-27 19:06:	:48 💼 💿
a01_md_ch03_11062	668KB File 2011-06-27 19:06:	:40 🧰 💿
a01_md_ch03_11062	655KB File 2011-06-27 19:06	:48 💼 💿
📑 a01_md_ch04_11062	672KBFile 2011-06-27 19:06	:40 💼 💿
📑 a01_md_ch04_11062	624KBFile 2011-06-27 19:06	:50 💼 💿
🔚 a01_md_ch05_11062	529KB File 2011-06-27 19:06	:40 📋 💿
a01_md_ch05_11062	481KB File 2011-06-27 19:06:	:50 📋 💿
a01_md_ch06_11062	527KB File 2011-06-27 19:06:	:40 💼 💿
a01_md_ch06_11062	484KBFile 2011-06-27 19:06:	:54 💼 💿
Free Space	1,063MB	
	New Folder Format E	Export Cancel

Figure 7.25 Checkup of Event Export Result Using USB Flash Drive

7.1.4 Backing up Video Clips

Purpose:

You may also select video clips to export directly during Playback, using USB devices (USB flash drives, USB HDDs, USB writer), SATA writer or e-SATA HDD.

Steps:

- Enter Playback interface.
 Please refer to *Chapter 6*.
- 2. During playback, use buttons **and** in the playback toolbar to start or stop clipping record file(s).
- Quit Playback interface after finishing clipping and you will then be prompted to save the clips.
 Note: A maximum of 30 clips can be selected for each channel.



Figure 7.26 Interface of Playback by Time

4. Click Yes to save video clips and enter Export interface, or click No to quit and do not save video clips.



Figure 7.27 Attention to Video Clip Saving

5. Export.

Press Export button and start backup.

Note: If the inserted USB device is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

You can also format USB flash drive or USB HDDs via the device.

		Бф	ort		
Device Name	USB1	-1		Re	fresh
Name		Size Type	Edit Date	Delet	e Play
11		Folder	06-23-2011 20:07:22	1	-
Backup		Folder	06-23-2011 20:07:28	-	-
Export record file	es to r	0KB File	06-23-2011 20:07:58	1	۲
Welcome to use	backı.	0KB File	06-23-2011 20:07:36	1	۲
-Sbandwidth est	imatic	0KB File	05-31-2011 11:32:46	-	0
		995MB			
Free Space		305mD			

Figure 7.28 Export Video Clips Using USB Flash Drive

Stay in the Exporting interface until all record files are exported with pop-up message "Export finished".

Export	
Export finished.	
	ок

Figure 7.29 Export Finished

6. Check backup result.

Note: The Player player.exe will be exported automatically during record file export.

	Exp	port	
Device Name	USB1-1		 Refresh
Name	Size Type	Edit Date	Delete Play
📄 ch01_201106271419	1 8,850KB File	06-27-2011 19:50:00	1
ch01_201106271429	1 14,165KB File	06-27-2011 19:50:06	<u> </u>
🔲 ch01_201106271448	2 13,309KB File	06-27-2011 19:50:12	💼 💿
🔲 player.exe	608KB File	06-27-2011 19:50:00	<u> </u>
Free Space	959MB		
	New Folder	Format Export	Cancel

Figure 7.30 Checkup of Video Clips Export Result Using USB Flash Drive

7.2 Backing up Pictures

Purpose:

Back up pictures using USB devices (USB flash drives, USB HDDs, USB writer), SATA writer or e-SATA HDD.

Steps:

1. Enter Export interface.

Menu>Export>Picture

Select channel(s), image type, start time and end time, and click **Search** button to enter the Search Result interface.



Figure 7.31 Picture Search for Backup

2. Select pictures you want to back up.

Check the checkbox before the pictures you want to back up and click Export button.

Note: Here we take USB flash drive as an example. For more backup devices, please refer to section Playing Back by Normal Video Search.

				Search result			
	Camer	a HDD	N Time	Picture	Size		
~	A13	3	06-23-2011 19:55:08		13KB	1000	1000
~	A13	3	06-23-2011 19:55:08		13KB		and the second second
~	A14	3	06-23-2011 19:55:10		13KB	Sec. 1	10.000
2	A14	3	06-23-2011 19:55:11		13KB	100000	ON DESCRIPTION
~	A14	3	06-23-2011 19:55:27		13KB	COLLEGE DE	
~	A14	3	06-23-2011 19:55:28		13KB		
2	A15	3	06-23-2011 19:55:23		13KB		
M	A15	3	06-23-2011 19:55:23		13KB		
M	A16	3	06-23-2011 19:55:25		13KB		
2	A16	3	06-23-2011 19:55:25		13KB		
~	A16	3	06-23-2011 19:55:25		13KB		
To		D- 4/4					
		P: 1/1		H K P PI			
То	tal size	: 143KE	3			Export	Cancel

Figure 7.32 Result of Picture Search

3. Export.

Press **Export** button and start backup.

		Бф	ort		
Device Name	USB1	1		Re	fresh
Name		Size Type	Edit Date	Dele	to Play
a 11		Folder	06-23-2011 20:07:22	-	-
Backup		Folder	06-23-2011 20:07:28	1	-
Export record files	to r	0KB File	06-23-2011 20:07:58	1	0
Welcome to use ba	icki.	0KB File	06-23-2011 20:07:36	1	۲
-\$bandwidth estim	atic	0KB File	05-31-2011 11:32:46		0
Free Space	1	995MB			

Figure 7.33 Export Pictures Using USB Flash Drive

Stay in the Exporting interface until all record files are exported with pop-up message "Export finished".

Export	
Export finished.	
	ок

Figure 7.34 Export Finished

4. Check backup result.

		Exp	ort		
Device Name	USB1-1			Re	fresh
Name		Size Type	Edit Date	Delet	e Play
a 11		Folder	06-23-2011 20:07:22	1	-
ch01_20110627090	01	12KB File	06-27-2011 19:43:29	1	۲
ch01_20110627090	02	12KB File	06-27-2011 19:43:29		0
ch01_20110627090	02	12KB File	06-27-2011 19:43:29	1	۲
ch01_20110627090	102	12KB File	06-27-2011 19:43:29	=	۲
Free Space	94	33MB			

Figure 7.35 Checkup of Picture Export Using USB Flash Drive

7.3 Managing Backup Devices

Management of USB flash drives, USB HDDs and eSATA HDDs.

- 1. Enter Search Result interface of record files.
 - Menu>Export>Normal

Set search condition and press Search button to enter Search Result interface.

Note: At least one channel shall be selected.

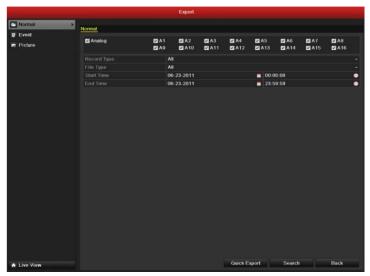


Figure 7.36 Normal Video Search for Backup

2. Select record files you want to back up.

Press Export button to enter Export interface.

Note: At least one record file shall be selected.

	Search result	
Cam Start/End Time	Size Play Lock	
A1 06-23-2011 10:26:4311:32:09	67,954KB 🔘 📲	The stanits Subpared and
A2 06-23-2011 00:00:0003:21:29	210,770KB 💿 🛛 🔒	
A2 06-23-2011 03:21:2909:12:45	367,117KB 🍥 🛛 🔐	
A2 06-23-2011 09:14:0309:18:18	4,550KB 🍥 🔐	
A2 06-23-2011 09:23:2311:32:08	134,301KB 🍥 🔐	
A2 06-23-2011 11:33:25-13:24:58	116,188KB 🔘 🔐	
A2 06-23-2011 13:28:0013:45:59	18,866KB 🌀 🔐	
A2 06-23-2011 13:47:4314:24:30	38,347KB 🕥 📑	
A3 06-23-2011 00:00:0004:29:32	273,751KB 🔘 🔐	
A3 06-23-2011 04:29:3209:12:46	287,513KB 💿 🔐	HDD: 3
A3 06-23-2011 09:14:0309:18:18	4,423KB 🔘 🔐	1.00.0
A3 06-23-2011 09:23:2311:32:08	130,605KB 🍥 🔐	Start time: 06-23-2011 13:47:43
A3 06-23-2011 11:33:25-13:24:58	113,006KB 🔘 🔐	00-23-2011 15.47.45
A3 06-23-2011 13:28:00-13:45:59	18,367KB 🔘 🔐	End time:
A3 06-23-2011 13:47:4314:24:30	37,304KB 💿 🔐	06-23-2011 14:24:30
Fotal: 23 P: 1/1	RAND	
Total size: 1,828MB		Export Cancel

Figure 7.37 Result of Normal Video Search for Backup

3. Backup device management.

Press **New Folder** button if you want to create a new folder in the backup device.

Select a record file or folder in the backup device and press button if you want to delete it.

Select a record file in the backup device and press button it. Press **Format** button to format the backup device.

Note: If the inserted USB device is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

	Expo	ort	
Device Name	USB1-1		Refresh
Name	Size Type	Edit Date	Delete Play
🗐 ch03_201106230000	C 267MBFile	06-23-2011 20:15:02	a b
🗐 ch03_201106230429	3 280MB File	06-23-2011 20:11:14	💼 💿
🖬 ch03_201106230914	C 4,423KB File	06-23-2011 20:11:20	💼 💿
🖬 ch03_201106230923	2 127MB File	06-23-2011 20:12:12	1
🖬 ch03_201106231133	2 110MB File	06-23-2011 20:12:54	<u> </u>
🖬 ch03_201106231328	C 18,367KBFile	06-23-2011 20:13:02	💼 💿
ch03_201106231347	4 37,305KB File	06-23-2011 20:13:12	<u> </u>
🖬 player.exe	608KB File	06-23-2011 20:09:40	<u> </u>
Free Space	150MB		
	New Folder	Format Expo	rt Cancel

Figure 7.38 USB Flash Drive Management

Management of USB writers and SATA writers

1. Enter Search Result interface of record files.

Menu>Export>Normal

Set search condition and press Search button to enter Search Result interface.

Note: At least one channel shall be selected.

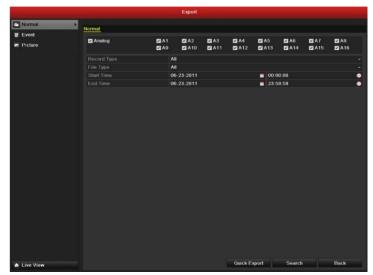


Figure 7.39 Normal Video Search for Backup

Select record files you want to back up.
 Press Export button to enter Export interface.
 Note: At least one record file shall be selected.

	Search result		
Cam Start/End Time	Size Play	Lock ^	
A1 06-23-2011 10:26:4311:32:09	67,954KB 🔘	•	The standing of the second second
A2 06-23-2011 00:00:00-03:21:29	210,770KB 🔘	•	
A2 06-23-2011 03:21:2909:12:45	367,117KB 🔘	-	
A2 06-23-2011 09:14:0309:18:18	4,550KB 🔘	•	
A2 06-23-2011 09 23 2311 32 08	134,301KB 🔘	•	
A2 06-23-2011 11:33:25-13:24:58	116,188KB 🔘	•	
A2 06-23-2011 13:28:0013:45:59	18,866KB 🔘	ſ	
A2 06-23-2011 13:47:4314:24:30	38,347KB	P	
A3 06-23-2011 00:00:0004:29:32	273,751KB 🔘	•	
A3 06-23-2011 04:29:3209:12:46	287,513KB 🔘	f	HDD: 3
A3 06-23-2011 09:14:0309:18:18	4,423KB 🔘	-	
A3 06-23-2011 09:23:2311:32:08	130,605KB 🔘	f	Start time: 06-23-2011 13:47:43
A3 06-23-2011 11:33:2513:24:58	113,006KB 🔘	P	00-25-2011 15.41.45
A3 06-23-2011 13:28:00-13:45:59	18,367KB 🔘	P	End time:
A3 06-23-2011 13:47:4314:24:30	37,304KB 🔘	•	06-23-2011 14:24:30
Fotal: 23 P: 1/1			
Fotal size: 1,828MB			Export Cancel

Figure 7. 40 Result of Normal Video Search for Backup

3. Backup device management.

Press **Erase** button if you want to erase the files from a re-writable CD/DVD. *Note:* There must be a re-writable CD/DVD when you make this operation. *Note:* If the inserted USB writer or SATA writer is not recognized:

- Click the **Refresh** button.
- Reconnect device.
- Check for compatibility from vendor.

Export						
Device Name	USB CD/DVD-RW v					
Name	Size Type	Edit Date		Delete Play		
Free Space	0KB					
		Erase	Export	Cancel		

Figure 7.41 USB Writer Management

CHAPTER8

Alarm Settings

8.1 Setting up Motion Detection

Steps:

1. Enter Motion Detection interface of Camera Management and choose a camera you want to set up motion detection.

Menu> Camera> Motion



Figure 8.1 Motion Detection Setup Interface

2. Set up detection area and sensitivity.

Tick "Enable Motion Detection", use the mouse to draw detection area(s) and drag the sensitivity bar to set sensitivity.

Press Handling button and set alarm response actions.

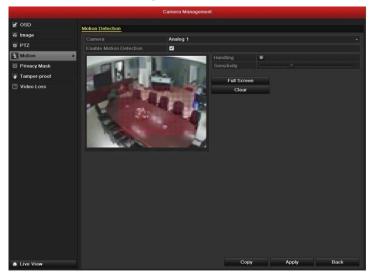


Figure 8.2 Set Detection Area and Sensitivity

3. Click **Trigger Channel** tab and select one or more channels which will start to record/capture or become full-screen monitoring when motion alarm is triggered.

		Handli	ng			
Trigger Channel	Arming Scheo	tule Ha	andling			
Analog	✓ A1 ● A7 ● A13	■ A2 ■ A8 ■ A14	A3 A9 A15	■ A4 ■ A10 ■ A16	■A5 ■A11	■ A6 ■ A12
		Appl	y	ок		Cancel

Figure 8.3 Set Trigger Camera of Motion Detection

4. Set up arming schedule of the channel.

Select Arming Schedule tab to set the channel's arming schedule.

Choose one day of a week and up to eight time periods can be set within each day.

Note: Time periods shall not be repeated or overlapped.

Handling						
Trigger Channel	Arming Schedule	Handling				
Week	Mon			•		
1	00:00-24:0	0		9		
2	00:00-00:0	0		0		
3	00:00-00:0	0		0		
4	00:00-00:0	0		0		
5	00:00-00:0	0		9		
6	00:00-00:0	0		0		
7	00:00-00:0	0		0		
8	00:00-00:0	0		0		
	Сору	Apply	ок	Cancel		

Figure 8.4 Set Arming Schedule of Motion Detection

 Click Handling tab to set up alarm response actions of motion alarm (please refer to *Chapter 8.6*). Repeat the above steps to set up arming schedule of other days of a week. You can also use Copy button to copy an arming schedule to other days.

Click the **OK** button to complete the motion detection settings of the channel.

6. If you want to set up motion detection for another channel, repeat the above steps or just copy the above settings to it.

Note: You are not allowed to copy the "Trigger Channel" action.

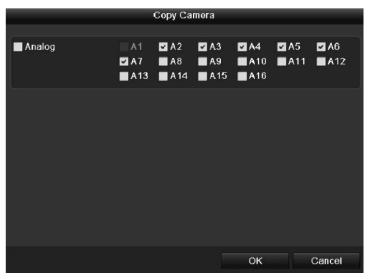


Figure 8.5 Copy Settings of Motion Detection

8.2 Setting up Sensor Alarms

Purpose:

Set up handling method of an external sensor alarm.

Steps:

1. Enter Alarm Settings of System Configuration and select an alarm input.

Menu> Configuration> Alarm

Select Alarm Input tab to enter Alarm Input Settings interface.

				Configur	alion		
•	General	Alarm Status	Alarm Input	Alarm Output			
	Network	Alarm Input Lis		Alarm Output			
	Alarm >	No		rm Name	IP Camera Address	Alarm Typ	
	RS-232	A<1	1.000		Local	N.O	
1000	Live View	A<2			Local	N.0	
		A<-3			Local	N.O	
	Exceptions	A<-4			Local	N.0	
35	User	A<-5			Local	N.O	
17		A<-6			Local	N.O.	
		A<-7			Local	N.O	
		Alarm Output L					~
		No	Ala	rm Name	IP Camera Address	Dwell Tim	0
		A->1			Local		
		A->2			Local		
		A->3			Local		
		A->4			Local		
							-
•	Live View						Back

Figure 8.6 Alarm Status Interface of System Configuration

2. Set up the handling method of the selected alarm input.

Check the Setting checkbox and click Handling button to set up its alarm response actions.

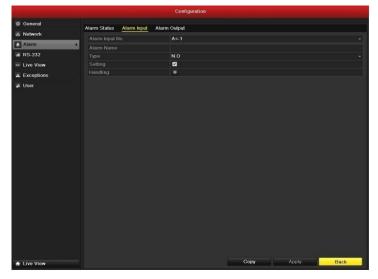


Figure 8.7 Alarm Input Setup Interface

- **3.** Select Trigger Channel tab and select one or more channels which will start to record/capture or become full-screen monitoring when an external alarm is input.
- Select Arming Schedule tab to set the channel's arming schedule. Choose one day of a week and Max. eight time periods can be set within each day.

Note: Time periods shall not be repeated or overlapped.

 Select Handling tab to set up alarm response actions of the alarm input (please refer to *Chapter 8.6*). Repeat the above steps to set up arming schedule of other days of a week. You can also use Copy button to copy an arming schedule to other days.

	ŀ	landling		
Trigger Channel	Arming Schedule	Handling	PTZ Linking	
Week	Mon			
	00:00-24:0	0		0
	00:00-00:0	0		C
	00:00-02:0	0		6
4	00:00-00:0	0		C
	00:00-00:0	0		C
	00:00-00:0	0		C
	00:00-00:0	0		C
	00:00-00:0	0		C
	Сору	Apply	ок	Cancel

Figure 8.8 Set Arming Schedule of Alarm Input

6. If necessary, select PTZ Linking tab and set PTZ linkage of the alarm input.

Set PTZ linking parameters and press OK to complete the settings of the alarm input.

Note: Please check whether the PTZ or speed dome supports PTZ linkage.

One alarm input can trigger presets, patrol or pattern of more than one channel. But presets, patrols and patterns are exclusive.

		Handling		
Trigger Channel	Arming Schedu	ule Handling	PTZ Linking	
PTZ Linking	Analog 1			~
Call Preset	•			
Preset				
Call Patrol	•			
Patrol				
Call Pattern	\bullet			
Pattern				
	Сору	Apply	ОК	Cancel

Figure 8.9 Set PTZ Linking of Alarm Input

7. If you want to set handling method of another alarm input, repeat the above steps or just copy the above settings to it.

	Copy Alarm In	put
Alarm Input No.	Alarm Name	IP Camera Address
A<-1		Local
☑ A<-2		Local
☑ A<-3		Local
 ✓ A<-4 		Local
A<-5		Local
■ A<-6		Local
📕 A<-7		Local
A<-8		Local
■ A<-9		Local
📕 A<-10		Local
📕 A<-11		Local
■ A<_1?		l ocal
		OK Cancel

Figure 8.10 Copy Settings of Alarm Input

8.3 Detecting Video Loss

Purpose:

Detect video loss of a channel and take alarm response action(s).

Steps:

- 1. Enter Video Loss interface of Camera Management and select a channel you want to detect.
 - Menu> Camera> Video Loss



Figure 8.11 Video Loss Setup Interface

2. Set up handling method of video loss.

Check the checkbox of "Enable Video Loss Alarm", and press Handling button to set up handling method of video loss.



Figure 8.12 Set Handling Method of Video Loss

Set up arming schedule of the channel.Select Arming Schedule tab to set the channel's arming schedule.Choose one day of a week and up to eight time periods can be set within each day.

		Handling				
Arming Schedul	<mark>e</mark> Handling					
Week	Mon			~		
	00:00-2	24:00		0		
	00:00-0	00:00		G		
	00:00-0	00:00		6		
4	00:00-0	00:00		G		
	00:00-0	00:00-00:00				
6	00:00-0	00:00		9		
	00:00-0	00:00		•		
8	00:00-0	00:00		•		
	Сору	Apply	ОК	Cancel		

Note: Time periods shall not be repeated or overlapped.

Figure 8.13 Set Arming Schedule of Video Loss

 Select Handling tab to set up alarm response action of video loss (please refer to *Chapter 8.6*). Repeat the above steps to set up arming schedule of other days of a week. You can also use Copy button to copy an arming schedule to other days.

Click the **OK** button to complete the video loss settings of the channel.

5. If you want to set up video loss handling method for another channel, repeat the above steps or just copy the above settings to it.

	3	Сору Са	mera			
Analog	A1 ✓ A7 ■ A13	✓ A2 ● A8 ● A14	A 9		✓ A5 ■ A11	✓ A6 ■ A12
				ок	Ĩ.	Cancel

Figure 8.14 Copy Settings of Video Loss

8.4 Detecting Video Tampering

Purpose:

Trigger alarm when the lens is covered and take alarm response action(s).

Steps:

1. Enter Video Tampering interface of Camera Management and select a channel you want to detect video

tampering.

Menu> Camera> Tamper-proof



Figure 8.15 Tamper-proof Setup Interface

 Set up the video tampering handling method of the channel. Check the checkbox of "Enable Video Tampering".

Drag the sensitivity bar and choose a proper sensitivity level. Use the mouse to draw an area you want to detect video tampering.



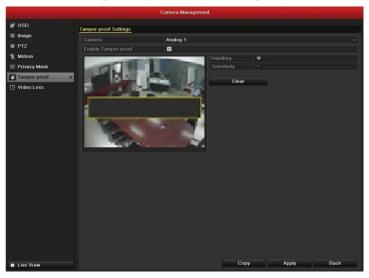


Figure 8.16 Set Detection Area and Sensitivity of Video Tampering

- 3. Set up arming schedule and alarm response action of the channel.
 - 1) Press Arming Schedule tab to set the channel's arming schedule.
 - 2) Choose one day of a week and Max. eight time periods can be set within each day.

Note: Time periods shall not be repeated or overlapped.

		Handling					
rming Schedul	e Handling						
Week	Mon						
	00:00-2	24:00					
	00:00-0	00:00-00:00					
3	00:00-0	00:00		(
4	00:00-0	00:00					
	00:00-0	00:00		(
	00:00-0	00:00		Ċ			
	00:00-0	00:00		(
	00:00-0	00:00					
	Сору	Apply	ОК	Cancel			

Figure 8.17 Set Arming Schedule of Video Tampering

4. Select **Handling** tab to set up alarm response action of video tampering alarm (please refer to *Chapter* 8.6).

Repeat the above steps to set up arming schedule of other days of a week. You can also use **Copy** button to copy an arming schedule to other days.

Click the **OK** button to complete the video tampering settings of the channel.

5. If you want to set up video loss handling method for another channel, repeat step two and three, or just copy the above settings to it.

		Сору Са	mera			
🔲 Analog	A1	🗹 A 2	🗹 A3	🗹 A4	🗹 A5	🗹 A6
	🗹 A 7	A 8			A11	A12
	A13	🗖 A 14	📕 A 15	A 16		
						5
				ок		Cancel

Figure 8.18 Copy Settings of Video Tampering

8.5 Handling Exceptions

Purpose:

Exception settings refer to the handling method of various exceptions, e.g.

- HDD Full: The HDD is full.
- HDD Error: Writing HDD error or unformatted HDD.
- Network Disconnected: Disconnected network cable.
- IP Conflicted: Duplicated IP address.
- Illegal Login: Incorrect user ID or password.
- Abnormal Video Signal: Unstable video signal.
- Input / Output Video Standard Mismatch: I/O video standards do not match.
- Abnormal Record/Capture: No space for saving recorded files or captured images.

Steps:

Enter Exception interface of System Configuration and handle various exceptions.

Menu> Configuration> Exceptions

Please refer to Chapter 8.6 for detailed alarm response actions.

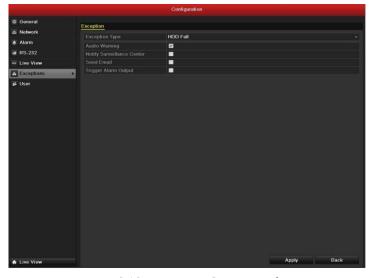


Figure 8.19 Exceptions Setup Interface

8.6 Setting Alarm Response Actions

Purpose:

Take alarm response actions will be activated when an alarm or exception occurs, including Full Screen Monitoring, Audible Warning (buzzer), Notify Surveillance Center, Upload Picture to FTP, Trigger Alarm Output and Send Email.

Full Screen Monitoring

When an alarm is triggered, the local monitor (VGA or BNC monitor) display in full screen the video image from the alarming channel configured for full screen monitoring.

If alarms are triggered simultaneously in several channels, their full-screen images will be switched at an interval of 10 seconds (default dwell time). A different dwell time can be set by going to Manu > Configuration >Live View> Alarm Picture Dwell Time.

Auto-switch will terminate once the alarm stops and you will be taken back to the Live View interface.

Note: You must select during "Trigger Channel" settings the channel(s) you want to make full screen monitoring.

Audible Warning

Trigger an audible beep when an alarm is detected.

Notify Surveillance Center

Sends an exception or alarm signal to remote alarm host when an event occurs. The alarm host refers to the PC installed with Remote Client.

Note: The alarm signal will be transmitted automatically at detection mode when remote alarm host is configured. Please refer to *Chapter 9.2.6* for details of alarm host configuration.

Upload Captured Pictures to FTP

Capture the image when an alarm is triggered and upload the picture to a FTP server. *Note:* Please set up FTP address and the remote FTP server first.

Email Linkage

Send an email with alarm information to a user or users when an alarm is detected. Please refer to *Chapter 9.2.10* for details of Email configuration.

Trigger Alarm Output

Trigger an alarm output when an alarm is triggered.

1. Enter Alarm Output interface.

Menu> Configuration> Alarm> Alarm Output

Select an alarm output and set alarm name and dwell time. Press **Schedule** button to set the arming schedule of alarm output.

Note: If "Manually Clear" is selected in the dropdown list of Dwell Time, you can clear it only by going to Menu> Manual> Alarm.

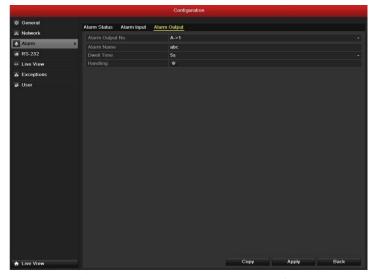


Figure 8.20 Alarm Output Setup Interface

2. Set up arming schedule of the alarm output.

Choose one day of a week and up to 8 time periods can be set within each day.

Note: Time periods shall not be repeated or overlapped.

	00:00-2	00:00-24:00					
2	00:00-0	00:00		(
3	00:00-0	00:00		1			
4	00:00-0	00:00		, j			
5	00:00-0	00:00					
6	00:00-0	00:00					
	00:00-0	00:00		I			
	00:00-0	00:00		1			

Figure 8.21 Set Arming Schedule of Alarm Output

3. Repeat the above steps to set up arming schedule of other days of a week. You can also use **Copy** button to copy an arming schedule to other days.

Click the **OK** button to complete the video tampering settings of the channel.

4. You can also copy the above settings to another alarm output No..

	Copy Alarm Ou	tput	
Alarm Output No.	Alarm Name	IP Camera Addre	SS
A->1		Local	
✓ A->2		Local	
A->3		Local	
A->4		Local	
		OK Ca	incel

Figure 8.22 Copy Settings of Alarm Output

8.7 Triggering or Clearing Alarm Output Manually

Purpose:

Sensor alarm can be triggered or cleared manually. If "Manually Clear" is selected in the dropdown list of dwell time of an alarm output, the alarm can be cleared only by pressing **Clear** button in the following interface.

Steps:

Select the alarm output you want to trigger or clear and make related operations.

Menu> Manual> Alarm

Press Trigger/Clear button if you want to trigger or clear an alarm output.

Press Trigger All button if you want to trigger all alarm outputs.

Press **Clear All** button if you want to clear all alarm output.

			Manual		
Record	Alarm				
Continuous Capture	No.	Alarm Name		IP Camera Address	Trigger
Alarm >	A->1	Ardrin ryame		Local	No
-	A->2			Local	No
	A->3			Local	No
	A->4			Local	No
				Locar	
Live View			Trigger	Trigger All Clea	r All Back
LING ALOW				Contra Contra	Duen

Figure 8.23 Clear or Trigger Alarm Output Manually

CHAPTER9

Network Settings

9.1 Configuring General Settings

Purpose:

Network settings must be properly configured before you operate DVR over network.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

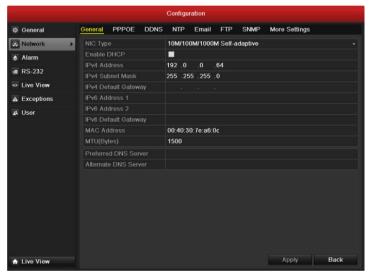


Figure 9.1 Network Settings Interface

- 2. Select the General tab.
- In the General Settings interface, you can configure the following settings: NIC Type, IPv4 Address, IPv4 Gateway, MTU and DNS Server.

If the DHCP server is available, you can click the checkbox of **DHCP** to automatically obtain an IP address and other network settings from that server.

Note: The valid value range of MTU is 500 ~ 9676.

4. After having configured the general settings, click the Apply button to save the settings.

9.2 Configuring Advanced Settings

9.2.1 Configuring PPPoE Settings

Purpose:

Your DVR also allows access by Point-to-Point Protocol over Ethernet (PPPoE).

Steps:

- Enter the Network Settings interface.
 Menu > Configuration > Network
- 2. Select the **PPPoE** tab to enter the PPPoE Settings interface, as shown in Figure 9.2.

				Configur	ration			
General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings
Retwork >	Enable	PPPOE						
\land Alarm								
🐗 RS-232								
👁 Live View								
A Exceptions								
द्धे User								
★ Live View								Apply Back

Figure 9.2 PPPoE Settings Interface

- 3. Check the **PPPoE** checkbox to enable this feature.
- 4. Enter User Name, Password, and Confirm Password for PPPoE access.

Note: The User Name and Password should be assigned by your ISP.

	Configuration									
¢	General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
ŵ	Network >	Enable	PPPOE		2					
٨	Alarm									
9	RS-232	Passwo			*****					
٩	Live View	Confirm								
	Exceptions									
	User									
-	0.501									
_									Applu	Back
•	Live View								Apply	Back

Figure 9.3 PPPoE Settings Interface

- 5. Click the Apply button to save and exit the interface.
- 6. After successful settings, the system asks you to reboot the device to enable the new settings, and the PPPoE dial-up is automatically connected after reboot.

You can go to Menu > Maintenance > System Info > Network interface to view the status of PPPoE connection. Please refer to *Chapter 12.1Viewing System Information* for PPPoE status.

9.2.2 Configuring DDNS

Purpose:

If your DVR is set to use PPPoE as its default network connection, you may set Dynamic DNS (DDNS) to be used for network access.

Prior registration with your ISP is required before configuring the system to use DDNS.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

2. Select the **DDNS** tab to enter the DDNS Settings interface, as shown in Figure 9.4.

	Configuration										
🕸 Ge	eneral	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings		
30 No	etwork >	Enable (DDNS								
🔈 Al	arm										
🕫 R\$	5-232	Server A	Address Domain Nai								
👁 Lin	ve View	User Na									
A Ex	ceptions										
as Us	ser										
🛧 Li	ve View								Apply	Back	

Figure 9.4 DDNS Settings Interface

- 3. Check the **DDNS** checkbox to enable this feature.
- Select DDNS Type. Four different DDNS types are selectable: IPServer, DynDNS, PeanutHull and NO-IP.
 - IPServer: Enter Server Address for IPServer.

Configuration											
🕸 General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings			
Network >	Enable	DDNS		2							
🔈 Alarm				IPServe					~		
🕫 RS-232	Server /	Address Domain Na		172 ,8 ,	2 ,1						
Live View	User Na										
A Exceptions											
♣ Live View								Αρρίγ	Back		

Figure 9.5 IPServer Settings Interface

- DynDNS:
 - 1) Enter Server Address for DynDNS (i.e. members.dyndns.org).
 - 2) In the DVR Domain Name text field, enter the domain obtained from the DynDNS website.
 - 3) Enter the **User Name** and **Password** registered in the DynDNS website.

	Configuration											
ø	General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings			
*	Network >	Enable	DDNS									
٨	Alarm	DDNS T			DynDNS							
-	RS-232	Server /	Address Domain Nai			s,dyndns	org					
۵	Live View	User Na		me	123,dyn 123	dns,com						
A	Exceptions	Passwo			*****							
	User				*****							
									Δορίγ	Rack		
٠	Live View								Apply	Back		

Figure 9.6 DynDNS Settings Interface

• PeanutHull: Enter User Name and Password obtained from the PeanutHull website.

				Configu	ration					
· General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings		
Network >	Enable			2						
\land Alarm	DDNS 1		PeanutHull v							
🕫 RS-232		Address Domain Na								
🔹 Live View	User Na			123,gic	p,net					
A Exceptions	Passwo									
避 User	Confirm			•••••						
								Annly	Bank	
✿ Live View								Apply	Back	

Figure 9.7 Peanut Hull Settings Interface

• NO-IP:

Enter the account information in the corresponding fields. Refer to the DynDNS settings.

- 1) Enter Server Address for NO-IP.
- 2) In the DVR Domain Name text field, enter the domain obtained from the NO-IP website (www.no-ip.com).
- 3) Enter the User Name and Password registered in the NO-IP website.

Configuration											
Ø General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings			
Notwork >	Enable										
& Alarm				NO-IP -							
🕡 RS-232				no-ip,or							
	Device Domain Name			123,no-	ip,org						
🖙 Live View				123							
A Exceptions	Passwo										
ai User											
♣ Live View								Apply	Back		

Figure 9.8 NO-IP Settings Interface

5. Click the Apply button to save and exit the interface.

9.2.3 Configuring NTP Server

Purpose:

A Network Time Protocol (NTP) Server can be configured on your DVR to ensure the accuracy of system date/time.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

2. Select the **NTP** tab to enter the NTP Settings interface, as shown in Figure 9.9.

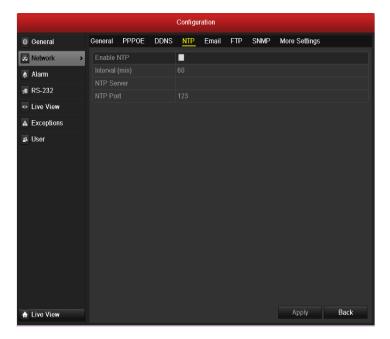


Figure 9.9 NTP Settings Interface

- 3. Check the **Enable NTP** checkbox to enable this feature.
- **4.** Configure the following NTP settings:

- **Interval:** Time interval between the two synchronizing actions with NTP server. The unit is minute.
- NTP Server: IP address of NTP server.
- NTP Port: Port of NTP server.
- 5. Click the **Apply** button to save and exit the interface.

Note: The time synchronization interval can be set from 1 to 10080min, and the default value is 60min. If the DVR is connected to a public network, you should use a NTP server that has a time synchronization function, such as the server at the National Time Center (IP Address: 210.72.145.44). If the DVR is setup in a more customized network, NTP software can be used to establish a NTP server used for time synchronization.

9.2.4 Configuring FTP Server

Purpose:

The FTP can be configured on your DVR to realize dual-directional transmission of control files over Internet. And the captured pictures of DVR can be uploaded to FTP server as well.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

2. Select the **FTP** tab to enter the FTP Settings interface, as shown in Figure 9.10.



Figure 9.10 FTP Settings Interface

- 3. Check the Enable FTP checkbox to enable this feature.
- 4. Configure the NTP settings, including FTP server, port, user name, password and the directory.

	Configuration										
🕸 General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings			
Network >	Enable I			Z							
🔈 Alarm				192,8,2	.21						
🕫 RS-232			21								
Live View	User Na Passwo			root						-	
A Exceptions	Director				condan/ D	irector	,			-	
User		y Directory		Use Secondary Directory Use Device Name v							
a Oser		ary Directo		Use Ca	mera Nam	ne				~	
▲ Live View								Apply	Back		

Figure 9.11 Configure FTP Settings

Directory: In the **Directory** field, you can select the Root Directory, Parent directory and secondary directory. When the Parent Directory is selected, you have the option to use the Device Name, Device No or Device IP for the name of the directory; and the when the Secondary Directory is selected, you can use the Camera Name or Camera No. as the name of the directory.

Click the Apply button to save and exit the interface.
 Note: Please make sure the remote FTP server has been started up before setting the FTP parameters.

9.2.5 Configuring SNMP

Purpose:

You can use SNMP protocol to get device status and parameters related information.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

2. Select the **SNMP** tab to enter the SNMP Settings interface, as shown in Figure 9.12.

	Configuration										
@ General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings			
🐱 Network 🔹 🔹	Enable	SNMP									
🛦 Alarm	SNMP V										
🕫 RS-232	SNMP F										
Live View		NMP Comm									
		NMP Comm									
Exceptions											
🔉 User											
♠ Live View								Apply	Back		

Figure 9.12 SNMP Settings Interface

- 3. Check the **SNMP** checkbox to enable this feature.
- **4.** Configure the SNMP settings.

					Configur	ration			
₿ G	eneral	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings
30 N	letwork >	Enable	SNMP		Z				
🔉 A	larm	SNMP V			V2				
a R	S-232	SNMP F			161				
	ive View		MP Comm		public				
	exceptions	Trap Ad	MP Comm	iunity	private				
AL AU		Trap Po			162				
									Anniv Back
↑ Li	ive View								Apply Back

Figure 9.13 Configure SNMP Settings

5. Click the Apply button to save and exit the interface.

Note: Before setting the SNMP, please download the SNMP software and manage to receive the device information via SNMP port. By setting the Trap Address, the DVR is allowed to send the alarm event and exception message to the surveillance center.

9.2.6 Configuring Remote Alarm Host

Purpose:

With a remote alarm host configured, the DVR will send the alarm event or exception message to the host when an alarm is triggered. The remote alarm host must have the Network Video Surveillance software installed. *Steps:*

- Enter the Network Settings interface.
 Menu > Configuration > Network
- 2. Select the More Settings tab to enter the More Settings interface, as shown in Figure 9.14.

				Configu	ration				
Ø General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
Network >	Alarm H	lost IP							
Alarm	Alarm H	lost Port		0					
🕫 RS-232	Server I			8000					
Live View				80					
	Multicas	t IP							
Exceptions		ervice Port		554					1
jā User									
▲ Live View								Apply	Back

Figure 9.14 More Settings Interface

3. Enter Alarm Host IP and Alarm Host Port in the text fields.

The **Alarm Host IP** refers to the IP address of the remote PC on which the Network Video Surveillance Software (e.g., iVMS-4000) is installed, and the **Alarm Host Port** must be the same as the alarm monitoring port configured in the software (default port is 0).

				Configu	ration				
& General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
😞 Network 🔷 🔸	Alarm H	lost IP		172,8,1	,25				
🞄 Alarm	Alarm H			7200					
≢ RS-232	Server F			8000					
➡ Live View	HTTP P Multicas			80					
▲ Exceptions		ervice Port		554					
a User A Live Viaw								Арріу	Back

Figure 9.15 Configure Alarm Host

4. Click the Apply button to save and exit the interface.

9.2.7 Configuring Multicast

Purpose:

The multicast can be configured to realize live view for more than 128 cameras through network.

A multicast address spans the Class-D IP range of 224.0.0.0 to 239.255.255.255. It is recommended to use the IP address ranging from 239.252.0.0 to 239.255.255.255.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

- 2. Select the More Settings tab to enter the More Settings interface, as shown in Figure 9.14.
- **3.** Set **Multicast IP**, as shown in Figure 9.19. When adding a device to the Network Video Surveillance Software, the multicast address must be the same as the DVR's multicast IP.

				Configu	ration			
🕸 General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings
🐼 Network 🔷 >	Alarm H	ost IP		172,8,1	,25			
\land Alarm	Alarm H	ost Port		7200				
🕫 RS-232	Server F			8000				
Live View	HTTP P Multicas			80 239,22	1.2.50			
A Exceptions		ervice Port		239,22 554	,2,90			
∎ User								
♠ Live View								Apply Back

Figure 9.16 Configure Multicast

4. Click the Apply button to save and exit the interface.

9.2.8 Configuring RTSP

Purpose:

The RTSP (Real Time Streaming Protocol) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers.

Steps:

- 1. Enter the Network Settings menu by clicking Menu > Configuration > Network.
- 2. Select the More Settings tab to enter the More Settings menu, as shown in Figure 9.14.

					Configu	ration				
ø	General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
ž	Network >	Alarm H	lost IP							
٨	Alarm	Alarm H	lost Port		0					
	RS-232	Server F			8000					
	Live View	HTTP P Multicas			80					
A	Exceptions		ervice Port		554					2
iš.	User									
A	Live View								Apply	Back

Figure 9.17 RTSP Settings Interface

- **3.** Enter the RTSP port in the text field of **RTSP Service Port**. The default RTSP port is 554, and you can change it according to different requirements.
- 4. Click the **Apply** button to save and exit the menu.

9.2.9 Configuring Server and HTTP Ports

Purpose:

You can change the server and HTTP ports in the Network Settings menu. The default server port is 8000 and the default HTTP port is 80.

Steps:

2.

- 1. Enter the Network Settings interface.
 - Menu > Configuration > Network
 - Select the More Settings tab to enter the More Settings interface, as shown in Figure 9.14.
- 3. Enter new Server Port and HTTP Port, as shown in Figure 9.18.

				Configu	ration				
& General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
💰 Network	> Alarm H	lost IP							
🔉 Alarm		lost Port		0					
🕫 RS-232		Server Port HTTP Port							
🗢 Live View									
A Exceptions		ervice Port		554					
a User									
▲ Live View								Apply	Back

Figure 9.18 Host/Others Settings Menu

- 4. Enter the Server Port and HTTP Port in the text fields. The default Server Port is 8000 and the HTTP Port is 80, and you can change them according to different requirements.
- 5. Click the **Apply** button to save and exit the interface.

Note: The Server Port should be set to the range of 2000-65535 and it is used for remote client software access. The HTTP port is used for remote IE access.

9.2.10 Configuring Email

Purpose:

The system can be configured to send an Email notification to all designated users if an alarm event is detected, etc., an alarm or motion event is detected or the administrator password is changed.

Before configuring the Email settings, the DVR must be connected to a local area network (LAN) that maintains an SMTP mail server. The network must also be connected to either an intranet or the Internet depending on the location of the e-mail accounts to which you want to send notification.

Steps:

1. Enter the Network Settings interface.

Menu > Configuration > Network

2. Set the IPv4 Address, IPv4 Subnet Mask, IPv4 Gateway and the Preferred DNS Server in the Network Settings menu, as shown in Figure 9.19.

					Configur	ation				
Ø	General	General	PPPOE	DDNS	NTP	Email	FTP	SNMP	More Settings	
÷	Network >	Working	Mode		Net Fau	t-tolerar	ice			
٨	Alarm									
58	RS-232	NIC Typ				DM/1000	M Auto-a	adaptive		
ø	Live View	Enable I IPv4 Ad			■ 172 .8		.21			
A	Exceptions	IPv4 Sul	onet Mask		255 .25	5 .255	.0			
-	User	IPv4 De	fault Gatew	ay	172.8					
		IPv6 Ad	dress 1		fe80::24	0:48ff:fe	4c:7ff7/	64		
		IPv6 Ad	dress 2							
		IPv6 De	fault Gatew							
		MAC Ac	ldress		00:40:48	3:4c:7f:f	7			
		MTU(By	tes)		1500					
		Preferre	d DNS Ser	ver	192,0,0	200				
		Alternat	e DNS Sen	ver						
		Main NI			LAN1					
Trease									- Analy	Back
•	Live View								Apply	Back

Figure 9.19 Network Settings Interface

- 3. Click the Apply button to save the settings.
- 4. Select the **Email** tab to enter the Email Settings interface.

			Configu	ration					
🕸 General	General PPPC	DE DDNS	NTP	Email	FTP	SNMP	More Settings		
🐱 Network 🔷 🔸	Enable Server	Authentica							
🛦 Alarm									
# RS-232									
The second second second second second second second second second second second second second second second s	SMTP Server		126,sm	tp.com					
 Live View 	SMTP Port		25						
Exceptions	Enable SSL								
👪 User	Sender		A08						
	Sender's Addre		A08@1	26.com					
	Select Receive	rs	Receive	ər 1					
	Receiver		test						
	Receiver's Add	ress	test@1	63.com					
	Enable Attache	d Picture	•						
	Interval		2s						
▲ Live View						Test	Apply	Back	ļ

Figure 9.20 Email Settings Interface

5. Configure the following Email settings:

Enable Server Authentication (optional): Check the checkbox to enable the server authentication feature.

User Name: The user account of sender's Email for SMTP server authentication.Password: The password of sender's Email for SMTP server authentication.SMTP Server: The SMTP Server IP address or host name (e.g., smtp.263xmail.com).SMTP Port No.: The SMTP port. The default TCP/IP port used for SMTP is 25.

Enable SSL(optional): Click the checkbox to enable SSL if required by the SMTP server.
Sender: The name of sender.
Sender's Address: The Email address of sender.
Select Receivers: Select the receiver. Up to 3 receivers can be configured.
Receiver: The name of user to be notified.
Receiver's Address: The Email address of user to be notified.
Enable Attached Pictures: Check the checkbox of Enable Attached Picture if you want to send email with attached alarm images. The interval is the time of two adjacent alarm images. You can also set SMTP port and enable SSL here.
Interval: The interval refers to the time between two actions of sending attached pictures.
E-mail Test: Sends a test message to verify that the SMTP server can be reached.

- 6. Click the **Apply** button to save the Email settings.
- 7. You can click the **Test** button to test whether your Email settings work. The corresponding Attention message box will pop up. Refer to Figure 9.21.



Figure 9.21 Email Testing Attention

9.3 Checking Network Traffic

Purpose:

You can check the network traffic to obtain real-time information of DVR such as linking status, MTU, sending/receiving rate, etc.

Steps:

1. Enter the Network Traffic interface.

Menu > Maintenance > Net Detect

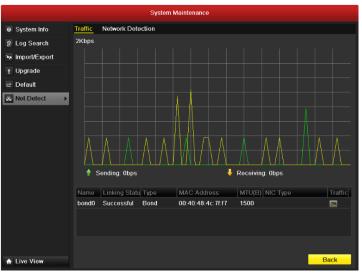


Figure 9.22 Network Traffic Interface

2. You can view the sending rate and receiving rate information on the interface. The traffic data is refreshed every 1 second.

9.4 Configuring Network Detection

Purpose:

You can obtain network connecting status of DVR through the network detection function, including network delay, packet loss, etc.

9.4.1 Testing Network Delay and Packet Loss

Steps:

- Enter the Network Traffic interface.
 Menu > Maintenance > Net Detect
- 2. Click the **Network Detection** tab to enter the Network Detection menu, as shown in Figure 9.23.

	System Maintenance
System Info	Traffic Network Detection
ē Log Search	Network Delay, Packet Loss Test
► Import/Export	Destination Address Test
1 Upgrade	Network Packet Export
⊂ Default	Device Name Refresh
🐱 Net Detect 🔷 🔸	bond0 172.8.2.250 0bps Export
▲ Live View	Status Network Back

Figure 9.23 Network Detection Interface

- 3. Enter the destination address in the text field of **Destination Address**.
- 4. Click the **Test** button to start testing network delay and packet loss. The testing result pops up on the window. If the testing is failed, the error message box will pop up as well. Refer to Figure 9.24.



Figure 9.24 Testing Result of Network Delay and Packet Loss

9.4.2 Exporting Network Packet

Purpose:

By connecting the DVR to network, the captured network data packet can be exported to USB-flash disk, SATA/eSTATA CD-RW and other local backup devices.

Steps:

1. Enter the Network Traffic interface.

Menu > Maintenance > Net Detect

- 2. Click the Network Detection tab to enter the Network Detection interface.
- 3. Select the backup device from the dropdown list of Device Name, as shown in Figure 9.25. *Note:* Click the **Refresh** button if the connected local backup device cannot be displayed. When it fails to detect the backup device, please check whether it is compatible with the DVR. You can format the backup device if the format is incorrect.

	System Maintenance
System Info	Traffic Network Detection
ē Log Search	Network Delay, Packet Loss Test
► Import/Export	Destination Address Test
1 Upgrade	Network Packet Export
⊂ Default	Device Name USB1-1 · Refresh
🐱 Net Detect 🔷 🔹	bond0 172.8.2.250 480bps Export
♠ Live View	Status Network Back

Figure 9.25 Export Network Packet

- 4. Click the **Export** button to start exporting.
- 5. After the exporting is complete, click **OK** to finish the packet export, as shown in Figure 9.26.



Figure 9.26 Packet Export Attention

Note: Up to 1M data can be exported each time.

CHAPTER10

HDD Management

10.1 Initializing HDDs

Purpose:

A newly installed hard disk drive (HDD) must be initialized before it can be used with your DVR. Steps:

1. Enter the HDD Information interface.

Menu > HDD>General.

			HDE					
General >	HDD Infor	mation						
S Advanced	Label	Capacity	Status	Property	Туре	Free Space	Grou	Edit D
S.M.A.R.T.	✓ 5	931GB	Uninitialized	RAW	Local	0KB	1	2 -
	6	931GB	Normal	RAW	Local	931GB		2 -
			1,863GE	5				
	Free Sp	ace	931GB					
Live View					Add	Init	-	Back

Figure 10.1 HDD Information Interface

- Select HDD to be initialized. 2.
- 3. Click the Init button.



Figure 10.2 Confirm Initialization

4. Select the **OK** button to start initialization.

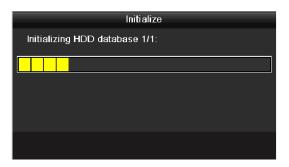


Figure 10. 3 Start Initialization

5. After the HDD has been initialized, the status of the HDD will change from *Uninitialized* to *Normal*.

				HDD							
🕸 General 🔷 🔹	HDD Inform	nation									
Advanced	Label	Capacity	Statu		Property		Туре	Free Space	Grou	Edit	Dele
S.M.A.R.T.	5	931GB	Norm	al	R/W		Local	931GB		2	-
	6	931GB	Norm	al	R/W		Local	931GB		2	-
	Total Ca	pacity		1,863GB							
	Free Spa	ice		1,862GB							
▲ Live View						/	\dd	Init		Bac	k

Figure 10.4 HDD Status Changes to Normal

Note: Initializing the HDD will erase all data on it.

10.2 Managing Network HDD

Purpose:

You can add the allocated NAS or disk of IP SAN to DVR, and use it as network HDD.

Steps:

1. Enter the HDD Information interface.

Menu > HDD>General.

				HDE	þ				
General >	1	HDD Info	mation						
S Advanced		Label	Capacity	Status	Property	Туре	Free Space	Grot E	dit Dele
Ø S.M.A.R.T.		✓ 5	931GB	Uninitialized	R/W	Local	0KB	1 📝	
10-10-10-10-10-10-10-10-10-10-10-10-10-1		6	931GB	Normal	RAW	Local	931GB	1 🧋	/ -
		Total Ca		1,863GE	3				
		Free Sp	ace	931GB					
🔒 Live View					ļ	Add	Init		lack

Figure 10.5 HDD Information Interface

2. Click the Add button to enter the Add NetHDD interface, as shown in Figure 10.6.

Add NetHDD								
NetHDD	NetHDD 1							
Туре	NAS							
NetHDD IP Address								
NetHDD Directory								
		21/						
		QK	Cancel					

Figure 10.6 HDD Information Interface

- **3.** Add the allocated NetHDD.
- 4. Select the type to NAS or IP SAN.
- 5. Configure the NAS or IP SAN settings.
 - Add NAS disk:

- 1) Enter the NetHDD IP address in the text field.
- 2) Enter the NetHDD Directory in the text field.
- 3) Click the **OK** button to add the configured NAS disk.

Note: Up to 8 NAS disks can be added.

Add NetHDD								
NetHDD	NetHDD 2							
Туре	NAS							
NetHDD IP Address	192.0.0.28							
NetHDD Directory	/dvr/9000							
		ОК	Cancel					

Figure 10.7 Add NAS Disk

• Add IP SAN:

- 1) Enter the NetHDD IP address in the text field.
- 2) Click the **Search** button to the available IP SAN disks.
- 3) Select the IP SAN disk from the list shown below.
- 4) Click the **OK** button to add the selected IP SAN disk.
- Note: Up to 1 IP SAN disk can be added.

		Add NetHDD	
NetH	DD	NetHDD 1	
Туре		IP SAN	
NetH	DD IP Address	172 .9 .2 .210	
NetH	DD Directory	iqn.2004-05.storos.t-8	
No.	Directory		T
1	iqn.2004-05.	storos t-8	
2	iqn.2004-05.	storos.t-41	
3	iqn.2004-05.	storos.t-1000	
		Search OK Cancel	

Figure 10.8 Add IP SAN Disk

6. After having successfully added the NAS or IP SAN disk, return to the HDD Information menu. The added NetHDD will be displayed in the list.

Note: If the added NetHDD is uninitialized, please select it and click the Init button for initialization.

			HDD					
General	HDD Info	mation						
5 Advanced	Label	Capacity	Status	Property	Туре	Free Space	Grot	Edit Dele
S.M.A.R.T.	5	931GB	Sleeping	R/W	Local	931GB		1 -
	6	931GB	Normal	R/W	Local	931GB		1 -
	17	40,000MB	Normal	R/W	IP SAN	22,528MB		📝 🏦
	Total Ca	pacity	1,902GE	3				
	Total Ca Free Sp		1,902GE 1,884GE					

Figure 10.9 Initialize Added NetHDD

10.3 Managing eSATA

Purpose:

When there is an external eSATA device connected to DVR, you can configure eSATA for the use of Record/Capture or Export, and you can manage the eSATA in the DVR.

Steps:

- Enter the Advanced Record Settings interface. Menu > Record>Advanced
- 2. Select the eSATA type to Export or Record/Capture from the dropdown list of eSATA.

Export: use the eSATA for backup. Refer to *Backup using eSATA HDDs* in *Chapter 7.1.2 Backing up by Normal Video Search* for operating instructions.

Record/Capture: use the eSATA for record/capture. Refer to the following steps for operating instructions.

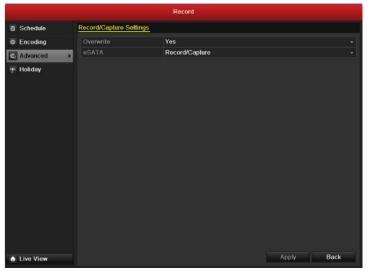


Figure 10.10 Set eSATA Mode

- 3. When the eSATA type is selected to Record/Capture, enter the HDD Information interface. Menu > HDD>General
- Edit the property of the selected eSATA, or initialize it is required.
 Note: Two storage modes can be configured for the eSATA when it is used for Record/Capture. Please refer to *Chapter 10.4* and *Chapter 10.5* for details.

			HDD					
🗘 General 🔷 🔸	HDD Infor	mation						
🕸 Advanced	Label	Capacity	Status	Property	Туре	Free Space	Grot E	Edit Dele
S.M.A.R.T.	5	931GB	Sleeping	R/W	Local	eSATA		2 -
	6	931GB	Normal	R/W	Local	931GB		<u>/</u> -
	17	40,000MB	Normal	R/W	IP SAN	22,528MB	1	1
	Total Ca	pacity	1,902GB					
	Total Ca Free Sp		1,902GB 1,884GB					

Figure 10.11 Initialize Added NetHDD

10.4 Managing HDD Group

10.4.1 Setting HDD Groups

Purpose:

Multiple HDDs can be managed in groups. Video from specified channels can be recorded onto a particular HDD group through HDD settings.

Steps:

- 1. Enter the Storage Mode interface. Menu > HDD > Advanced
- 2. Set the **Mode** to Group, as shown in Figure 10.12.

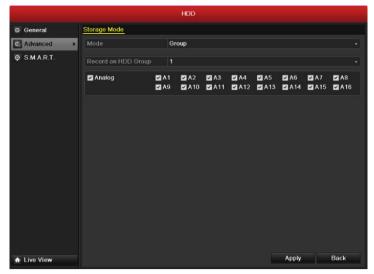


Figure 10.12 Storage Mode Interface

3. Click the Apply button and the following Attention box will pop up.

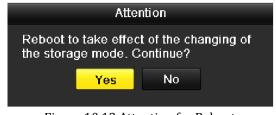


Figure 10.13 Attention for Reboot

- 4. Click the **Yes** button to reboot the device to activate the changes.
- After reboot of device, enter the HDD Information interface.
 Menu > HDD > General
- 6. Select HDD from the list and click the *icon* to enter the Local HDD Settings interface, as shown in Figure 10.14.

	Local HDD Settings
HDD No.	5
HDD Property	
• R/W	
Read-only	
Redundancy	
Group	●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 ●11 ●12 ●13 ●14 ●15 ●16
HDD Capacity	931GB
	Apply OK Cancel

Figure 10.14 Local HDD Settings Interface

7. Select the Group number for the current HDD.

Note: The default group No. for each HDD is 1.

8. Click the **OK** button to confirm the settings.



Figure 10. 15 Confirm HDD Group Settings

9. In the pop-up Attention box, click the Yes button to finish the settings.

10.4.2 Setting HDD Property

Purpose:

The HDD property can be set to redundancy, read-only or read/write (R/W). Before setting the HDD property,

please set the storage mode to Group (refer to step1-4 of Chapter 10.4.1 Setting HDD Groups).

A HDD can be set to read-only to prevent important recorded files from being overwritten when the HDD becomes full in overwrite recording mode.

When the HDD property is set to redundancy, the video can be recorded both onto the redundancy HDD and the R/W HDD simultaneously so as to ensure high security and reliability of video data.

Steps:

- **1.** Enter the HDD Information interface.
 - Menu > HDD > General
- 2. Select HDD from the list and click the *icon* to enter the Local HDD Settings interface, as shown in Figure 10.16.

	Lo	ocal HDD Set	tings	
HDD No.	5			
HDD Property				
• R/W				
Read-only				
Redundancy				
Group		●3 ●4 ●11 ●12		
HDD Capacity	931GE	3		
		Apply	ОК	Cancel

Figure 10.16 Set HDD Property

- 3. Set the HDD property to R/W, Read-only or Redundancy.
- 4. Click the **OK** button to save the settings and exit the interface.
- 5. In the HDD Information menu, the HDD property will be displayed in the list.

Note: At least 2 hard disks must be installed on your DVR when you want to set a HDD to Redundancy, and there is one HDD with R/W property.

10.5 Configuring Quota Mode

Purpose

Each camera can be configured with allocated quota for the storage of recorded files or captured pictures.

Steps

1. Enter the Storage Mode interface.

Menu > HDD > Advanced

2. Set the **Mode** to Quota, as shown in Figure 10.17.

Note: The DVR must be rebooted to enable the changes to take effect.

		HDD	
General	Storage Mode		
Advanced >	Mode	Quota	
SMART.	Camera Used Record Cpacity Used Picture Capacity HDD Capacity (GB) Max. Record Capacity (GB) Max. Picture Capacity (GB)		
♣ Live View		Copy Apply Back	

Figure 10.17 Storage Mode Settings Interface

- 3. Select a camera for which you want to configure quota.
- 4. Enter the storage capacity in the text fields of Max. Record Capacity (GB) and Max. Picture Capacity (GB), as shown in Figure 10.18.

		HDD
Ø General	Storage Mode	
Advanced	Mode	Quota •
Ø S.M.A.R.T.	Camera	Analog 1 -
	Used Record Cpacity	0KB
	Used Picture Capacity	0KB
	HDD Capacity (GB)	1902
	Max. Record Capacity (GB)	200
	Max. Picture Capacity (GB)	100
▲ Live View		Copy Apply Back

Figure 10.18 Configure Record/Picture Quota

5. You can copy the quota settings of the current camera to other cameras if required. Click the Copy button

1.7		-				
		Сору Са	mera			
Analog	A1	✓ A2	🕶 A3	🗹 A4	🕶 A5	⊿ A6
	🗹 A 7	🗹 A8	🗹 A 9	🗹 A10	🗹 A11	🗹 A12
	🗹 A13	🗹 A 14	■A15	■A16		
				OK		Cancel

to enter the Copy Camera menu, as shown in Figure 10.19.

Figure 10.19 Copy Settings to Other Camera(s)

- **6.** Select the camera (s) to be configured with the same quota settings. You can also click the checkbox of Analog to select all cameras.
- 7. Click the **OK** button to finish the Copy settings and back to the Storage Mode interface.
- **8.** Click the **Apply** button to apply the settings.

Note: If the quota capacity is set to 0, then all cameras will use the total capacity of HDD for record and picture capture.

10.6 Checking HDD Status

Purpose:

You may check the status of the installed HDDs on DVR so as to take immediate check and maintenance in case of HDD failure.

Checking HDD Status in HDD Information Interface

Steps:

- Enter the HDD Information interface. Menu > HDD>General
- 2. Check the status of each HDD which is displayed on the list, as shown in Figure 10.20.

			HD	D				
General >	HDD Infor	mation						
👼 Advanced	Label	Capacity	Status	Property	Туре	Free Space	Grot Edi	t Dele
Ø SMART	5	931GB	Sleeping	R/W	Local	931GB	1 📝	
	6	931GB	Normal	R/W	Local	931GB	1 📝	
	17	40,000MB	Normal	R/W	IP SAN	22,528MB	1 📝	1
	Total Ca	narihi	1,9020					
	Free Spa	ace	1,884G					
♠ Live View					Add	Init	Ba	ck

Figure 10.20 View HDD Status (1)

Note: If the status of HDD is *Normal* or *Sleeping*, it works normally. If the status is *Uninitialized* or *Abnormal*, please initialize the HDD before use. And if the HDD initialization is failed, please replace it with a new one. **Checking HDD Status in HDD Information Interface**

Steps:

1. Enter the System Information interface.

Menu > Maintenance > System Info

2. Click the HDD tab to view the status of each HDD displayed on the list, as shown in Figure 10.21.

					System	Maintena	nce			
System Info	>	Device Info	Came	era R	tecord	Alarm	Network	HDD		
ē Log Search		Label	Status	Capac	ity	Fre	e Space	Property	Туре	Group
va Import/Export				931GE		931		R/W	Local	
1 Upgrade			Sleeping Normal	931GE		931	GB 28MB	Redundancy R/W	Local IP SAN	1
⇒ Default		1/ 1	Normai	40,000	IMB	22,3	28MB	FGW	IP SAN	
Solution Net Detect										
Not Dottoet										
		Total Cap	acity		1.0	D2GB				
		Free Spa				326B 346B				



10.7 Checking S.M.A.R.T Information

Purpose:

The S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) is a monitoring system for HDD to detect and report on various indicators of reliability in the hopes of anticipating failures.

Steps:

- Enter the S.M.A.R.T Settings interface. Menu > HDD > S.M.A.R.T.
- 2. Check the checkbox of Enable S.M.A.R.T.
- 3. Select the HDD to view its S.M.A.R.T information list, as shown in Figure 10.22.

			HDD								
Ø General	S.M.A.F	T. Settings									
蓉 Advanced	Enable	4									
S.M.A.R.T.	HDD	5									
	S.M.A.F	R.T. Information									
	ID	Attribute Name	Status	Flags	Thresh	Value	Worst	Raw Value	^		
	0x1	Raw Read Error Rate	ок	2f	51	200	200				
	0x3	Spin Up Time	ок	27	21	142	107	5866			
	0x4	Start/Stop Count	ок	32		100	100	105	_		
	0x5	Reallocated Sector Co	un OK	33	140	200	200		_		
	0x7	Seek Error Rate	ок	2e		200	200				
	0x9	Power-on Hours Count	ок	32		100	100	244			
	0xa	Spin Up Retry Count	ок	32		100	100				
	0xb	Calibration Retry Coun	tок	32		100	253				
	0xc	Power Cycle Count	ок	32		100	100	94			
	0xc0	Power Off Retract Cou	nt OK	32		200	200	82			
	0xc1	Load/Unload Cycle Co	uniOK	32		200	200	1537			
	0xc2	Power temperature	ок	22	0	111	102	36			
	0xc4	Reallocation Event Cor	unt OK	32	0	200	200	0	~		
▲ Live View							Ap	ply B	ack		

Figure 10.22 S.M.A.R.T Settings Interface

10.8 Configuring HDD Error Alarms

Purpose:

You can configure the HDD error alarms when the HDD status is Uninitialized or Abnormal.

Steps:

1. Enter the Exception interface.

Menu > Configuration > Exceptions

- 2. Select the Exception Type to HDD Error from the dropdown list.
- 3. Click the checkbox(s) below to select the HDD error alarm type (s), as shown in Figure 10.23.

Note: The alarm type can be selected to: Audio Warning, Notify Surveillance Center, Send Email and Trigger Alarm Output. Please refer to *Chapter 8.6 Setting Alarm Response Actions*.

		Configuration					
@ General	Exception						
😞 Network	Exception Type	HDD Full					
🔉 Alarm	Audio Warning						
🕫 RS-232	Notify Surveillance Center						
🗢 Live View	Send Email Trigger Alarm Output	2 2					
Exceptions >		rm Name	IP Camera Address				
👪 User	✓ A->1		Local				
	A->2		Local				
	A->3		Local				
	📕 A->4		Local				
♠ Live View			Apply Back				

Figure 10.23 Configure HDD Error Alarm

- **4.** When the Trigger Alarm Output is selected, you can also select the alarm output to be triggered from the list below.
- 5. Click the **Apply** button to save the settings.

CHAPTER11

Camera Settings

11.1 Configuring OSD Settings

Purpose:

You can configure the OSD (On-screen Display) settings for the camera, including date /time, camera name, etc. *Steps:*

- Enter the OSD Configuration interface. Menu > Camera > OSD
- 2. Select the camera to configure OSD settings.
- **3.** Edit the Camera Name in the text field.
- 4. Configure the Display Name, Display Date and Display Week by clicking the checkbox.
- 5. Select the Date Format, Time Format and Display Mode.



Figure 11. 1 OSD Configuration Interface

- 6. You can use the mouse to click and drag the text frame on the preview window to adjust the OSD position.
- 7. Copy Camera Settings
 - 1) If you want to copy the OSD settings of the current camera to other cameras, click the **Copy** button to enter the Copy Camera interface, as shown in Figure 11.2.

		Сору Са	mera			
Analog	A1	🗹 A2	🗸 🖌	🗹 A4	🗹 A5	🗹 A6
	🖬 A 7	🗹 A8	🖌 🖌	🗹 A10	🗹 A11	🗹 A12
	🗹 A13	🗹 A 14	■A15	A16		
				ок		Cancel

Figure 11.2 Copy Settings to Other Cameras

- 2) Select the camera (s) to be configured with the same OSD settings. You can also click the checkbox of Analog to select all cameras.
- 3) Click the **OK** button to finish the Copy settings and back to the OSD Configuration interface.
- 8. Click the **Apply** button to apply the settings.

11.2 Configuring Privacy Mask

Purpose:

You are allowed to configure the four-sided privacy mask zones that cannot be viewed by the operator.

Steps:

1. Enter the Privacy Mask Settings interface.

Menu > Camera > Privacy Mask

- 2. Select the camera to set privacy mask.
- 3. Click the checkbox of Enable Privacy Mask to enable this feature.



Figure 11.3 Privacy Mask Settings Interface

4. Use the mouse to draw a zone on the window. The zones will be marked with different frame colors.

Note: Up to 4 privacy mask zones can be configured, and the size of each area can be adjusted.

 The configured privacy mask zones on the window can be cleared by clicking the corresponding Clear Zone1-4 icons on the right side of the window, or click Clear All to clear all zones.



Figure 11. 4 Set Privacy Mask Area

- 6. You can click the **Copy** button to copy the privacy mask settings of the current camera to other cameras. Please refer to step 7 of *Chapter 11.1 Configuring OSD Settings*.
- 7. Click the **Apply** button to save the settings.

11.3 Configuring Video Parameters

Steps:

1. Enter the Image Settings interface.

Menu > Camera > Image

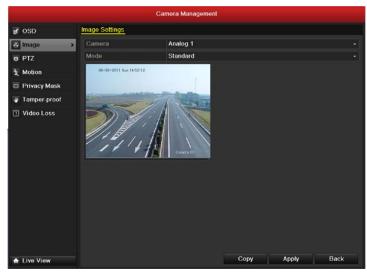


Figure 11.5 Image Settings Interface

- 2. Select the camera to set image parameters.
- **3.** Select the mode from the dropdown list of **Mode**. Five modes are selectable: Standard, Indoor, Dim Light, Outdoor and Customize.
- **4.** When the mode is selected to Customize, you can adjust the video parameters, including Brightness, Contrast, Saturation and Hue, as shown in Figure 11.6.



Figure 11.6 Configure Customized Image Settings

- 5. You can click the **Copy** button to copy the image settings of the current camera to other cameras. Please refer to step 7 of *Chapter 11.1 Configuring OSD Settings*.
- 6. Click the **Apply** button to save the settings.

CHAPTER12

DVR Management and Maintenace

12.1 Viewing System Information

12.1.1 Viewing Device Information

Steps:

- Enter the System Information interface. Menu > Maintenance > System Info
- 2. Click the **Device Info** tab to enter the Device Information menu to view the device name, model, serial No., firmware version and encode version, as shown in Figure 12.1.

	System Maintenance											
O System Info	Device Info	Camera	Record	Alarm	Network	HDD						
🖻 Log Search	Device Nar	ne	Emt	bedded N	et DVR							
> Import/Export	Model	Model			HF-ST/-AF-	DVR- II - A/16-16						
t Upgrade	Serial No.	Serial No.			BBRR00412	23452WCU						
		Firmware Version			110630							
☑ Default ☑ Net Detect	Encoding V	ersion	V1.	D, Build 1	10617							
▲ Live View							Back					

Figure 12.1 Device Information Interface

12.1.2 Viewing Camera Information

Steps:

- Enter the System Information interface.
 Menu > Maintenance > System Info
- 2. Click the **Camera** tab to enter the Camera Information menu to view the status of each camera, as shown in Figure 12.2.

System Maintenance											
System Info >	Device Info	Camera	Record Ala	rm Ne	twork	HDD					
Log Search	Camera C	amera Name		tatus	Motion (Detect Tamp	er-r Video Loss	s Video Ex			
₩ Import/Export	A1 C	amera 01		nabled	Not use	d Notu	sed Not used	Used			
	A2 C	amera 02		nabled	Not use	d Notu	sed Not used	Used			
± Upgrade	A3 C	amera 03	E	nabled	Not use	d Notu	sed Not used	Used			
d Default	A4 C	amera 04	E	nabled	Not use	d Notu	sed Not used	Used			
😞 Net Detect	A5 C	amera 05		nabled	Not use	d Notu	sed Not used	Used			
	A6 C	amera 06		nabled	Not use	d Notu	sed Not used	Used			
	A7 C	amera 07		nabled	Not use	d Notu	sed Not used	Used			
	A8 C	amera 08	E	nabled	Not use	d Notu	sed Not used	Used			
	A9 C	amera 09	E	nabled	Not use	d Notu	sed Not used	Used			
	A10 C	amera 10		nabled	Not use	d Notu	sed Not used	Used			
	A11 C	amera 11		nabled	Not use	d Notu	sed Not used	Used			
	A12 C	amera 12	E	nabled	Not use	d Notu	sed Not used	Used			
	A13 C	amera 13	E	nabled	Not use	d Notu	sed Not used	Used			
	A14 C	amera 14		nabled	Not use	d Notu	sed Not used	Used			
	A15 C	amera 15		nabled	Not use	d Notu	sed Not used	Used			
	A16 C	amera 16	E	nabled	Not use	d Notu	sed Not used	Used			
♠ Live View								Back			

12.1.3 Viewing Record Information

Steps:

- **1.** Enter the System Information interface.
 - Menu > Maintenance > System Info
- 2. Click the **Record** tab to enter the Record Information menu to view the recording status encoding parameters of each camera, as shown in Figure 12.3.

				System I	Maintena	nce				
System Info >	Device Info	o Came	era F	Record	Alarm	Netwo	rk HDD			
ē Log Search	Camera	Recordin	Strear	n T Fram	ie Rate	Bitrate(K	(bps) Resolutic	Record T Encoding	Redund	i: ^
► Import/Export	A1	Not used	Video	& 725(P	AL)/30(N	113/179:	2 4CIF	Normal	No	
1 Upgrade		Not used						Normal	No	
		Not used						Normal	No	
default		Not used						Normal	No	
😞 Net Detect	A5	Not used	Video	& 125(P	AL)/30(N	113/1792	2 4CIF	Normal	No	
	A6	Not used	Video	& 125(P	AL)/30(N	113/179:	2 4CIF	Normal	No	_
	A7	Not used	Video	& 125(P	AL)/30(N	111/1793	2 4CIF	Normal	No	
	A8	Not used	Video	& 125(P	AL)/30(N	111/1793	2 4CIF	Normal	No	-
	A9	Not used	Video	& 725(P	AL)/30(N	113/179:	2 4CIF	Normal	No	
	A10	Not used	Video	& 725(P	AL)/30(N	113/179:	2 4CIF	Normal	No	
	A11	Not used	Video	& 125(P	AL)/30(N	111/179:	2 4CIF	Normal	No	
	A12	Not used	Video	& 125(P	AL)/30(N	111/179:	2 4CIF	Normal	No	
	A13	Not used	Video	& 125(P	AL)/30(N	113/1793	2 4CIF	Normal	No	
	A14	Not used	Video	& 125(P	AL)/30(N	112/1793	2 4CIF	Normal	No	
	A15	Not used	Video	& 125(P	AL)/30(N	111/1793	2 4CIF	Normal	No	~
♠ Live View								_	Back	

Figure 12.3 Record Information Interface

12.1.4 Viewing Alarm Information

Steps:

1. Enter the System Information interface.

Menu > Maintenance > System Info

2. Click the Alarm tab to enter the Alarm Information menu to view the alarm information, as shown in Figure 12.4.

System Info	>	Device Info	Camera	Record	Alarm	Network	HDD	
ē Log Search	_	No.	Ala	rm Name	Alan	п Туре	Alarm Status	Triggered Camer
₩ Import/Export		A<-1			N.0		Not used	
t Upgrade		A<-2			N.O		Not used	
		A<-3			N.0		Not used	
default		A<-4			N.0		Not used	
😞 Net Detect		A<-5			N.O		Not used	
		A<-6			N.O		Not used	
		A<-7			N.O		Not used	
		A<-8			N.O		Not used	
		A<-9			N.O		Not used	
		A<-10			N.O		Not used	
		A<-11			N.0		Not used	
		A<-12			N.O		Not used	
		A<-13			N.0		Not used	
		A<-14			N.O		Not used	
		A<-15			N.O		Not used	

Figure 12.4 Alarm Information Interface

12.1.5 Viewing Network Information

Steps:

- Enter the System Information interface.
 Menu > Maintenance > System Info
- 2. Click the **Network** tab to enter the Network Information menu to view the network information, as shown in Figure 12.5.

			System I	Maintena	nce	
System Info >	Device Info	Camera	Record	Alarm	Network	HDD
ē Log Search	NIC				bond0	
>> Import/Export	IPv4 Addres	s			172.8.	2.250
	IPv4 Subnet	Mask			255.25	55.255.0
1 Upgrade	IPv4 Defaul	t Gateway			172.8.	2.1
⊂ Default	IPv6 Addres	ss 1			fe80::2	240:48ff:fe4c:7ff7/64
😞 Net Detect	IPv6 Addres	ss 2				
	IPv6 Defaul	t Gateway				
	Preferred D	NS Server			192.0.	0.200
	Alternate D	NS Server				
	Enable DH0	3P			Disabl	ed
	Enable PPF	POE			Disabl	ed
	PPPOE Ad	dress				
	PPPOE Sub	onet Mask				
	PPPOE Det	iault Gatewa	iy			
	Main NIC				LAN1	
▲ Live View						Back

Figure 12.5 Network Information Interface

12.1.6 Viewing HDD Information

Steps:

- 1. Enter the System Information interface.
 - Menu > Maintenance > System Info
- 2. Click the **HDD** tab to enter the HDD Information menu to view the HDD status, free space, property, etc., as shown in Figure 12.6.

System Maintenance												
System Info >	Device Inf	o Came	ara Red	ord A	larm	Network	HDD					
ල් Log Search	Label	Status	Capacity		Free	Space	Property	Туре				
► Import/Export		Normal	931GB		9310	€B	R/W	Local				
1 Upgrade	6	Normal	931GB		9310	€B	Redundancy	Local				
	17	Normal	40,000M	в	22,5	28MB	R/W	IP SAN				
➡ Default												
🚓 Net Detect												
	Total Ca	naciby		1,902G	•							
	Free Spa			1,902G								
	riee sp	aco		1,0040								
								_				
♠ Live View									Back			

Figure 12.6 HDD Information Interface

12.2 Searching & Export Log Files

Purpose:

The operation, alarm, exception and information of the DVR can be stored in log files, which can be viewed and exported at any time.

Steps:

1. Enter the Log Search interface.

Menu > Maintenance > Log Search

	٤	System Maintenance							
System Info	Log Search								
🗟 Log Search 🔹	Start Time	Start Time 2011-06-27 🖱 00:00:00							
>> Import/Export	End Time	2011-06-27	23:59:59 0						
1 Upgrade	Major Type	All							
⊂ Default	Minor Type	All							
🐱 Net Detect	No. Major Type	Time Minor Type	Parameter Play Details						
	Totat: 0 P: 1/1								
▲ Live View		Export	Search Back						

Figure 12.7 Log Search Interface

- 2. Set the log search conditions to refine your search, including the Start Time, End Time, Major Type and Minor Type.
- 3. Click the **Search** button to start search log files.
- 4. The matched log files will be displayed on the list shown below.

Note: Up to 2000 log files can be displayed each time.

				Syst	em Maintenance							
System Info	Log Se	arch										
Log Search	Start	Time			2011-06-26			00:0	00:00			•
Import/Export	End T	Time			2011-06-27		-	23:5	59:59			C
	Major	Туре			Operation							
Upgrade	Minor	Туре			All							
: Default	No.	Major	Type	Tim		Minor Ty	-		Parameter	Diau	Deta	ut et
Net Detect	1		eration		1-06-26 09 39 09	A REAL PROPERTY.		-	N/A	- lay		
	2		eration		1-06-26 09 39 15			on: L		_	0	
	3		eration		1-06-26 09:39:15						0	
	4		eration		1-06-26 10:32:39						0	
		T Of	eration	201	1-06-26 10:32:45	Local Op	erati	on: C	Hard Disk		0	
	6	T Op	eration	201	1-06-26 10:32:55	Local Op	oerati	on: C	Hard Disk		0	
		T Op	eration	201	1-06-26 10:33:04	Local Op	oerati	on: C	Hard Disk		0	
	8	T Op	peration	201	1-06-26 10:33:24	Local Op	oerati	on: C	Hard Disk		9	
	9	T Op	peration	201	1-06-26 10:33:41	Local Op	oorati	on: C	Hard Disk		0	
	10	👗 Ot	peration	201	1-06-26 10:38:41	Local Op	oerati	on: C	Hard Disk		9	
	11	1 Ot	peration	201	1-06-26 10:38:47	Local Op	perati	on: C	Hard Disk		9	
	12	1 Ot	peration	201	1-06-26 12:53:15	Abnorma	al Shu	tdow	N/A		0	
	Total	53 P: 1										
										_		
Live View						Exp	ort		Search		Back	

Figure 12.8 Log Search Results

5. You can click the 🗹 button of each log or double click it to view its detailed information, as shown in

Figure 9. And you can also click the D button to view the related video files if available.

		System Maintenance	
System	Jofe Log Soarch	Log Information	
👌 Log Se	Time	2011-06-26 10:33:04	0
∕א Import/		Operation-Local Operation: Configure Parameters	•
1 Upgrad	Local User	admin	
d Default	Host IP Address	N/A	
😞 Net De	Parameter Type		Details
	Camera No.	N/A	<u> </u>
	Description: HDD: 5		<u> </u>
	Read-only or not. No	Previous Next OK	
🛧 Live Vi	ew	Export Search B	lack

Figure 12.9 Log Details

6. If you want to export the log files, click the **Export** button to enter the Export menu, as shown in Figure 12.10.

		Ex	port			
Device Name	USB1-1				Refr	esh
Name	Size	Туре	Edit Date		Delete	Play
EOUND.000		Folder	2010-09-17 11:19:04	l	a	-
FOUND.001		Folder	2011-04-02 17:45:24	l	T	_
RECYCLER		Folder	2010-08-04 17:35:20)	T	-
📹 Work		Folder	2011-06-21 17:55:42	2	İ	-
Book1.xls	23KB	File	2011-05-26 18:32:14		T	۲
Compare Excel.exe	129KB	File	2011-04-20 09:51:42	2	1	۲
Recycled	4KB	File	2011-02-22 14:16:18	3	İ	۲
🖬 bond0_20110624172	(1,024KB	File	2011-06-24 17:20:48	3	1	۲
🖬 digicap.mav	19,790KB	File	2011-06-23 09:05:20)	T	۲
Free Space	180MB					
	New F	older	Format Exp	ort	Can	cel

Figure 12.10 Export Log Files

- 7. Select the backup device from the dropdown list of **Device Name**.
- 8. Click the Export to export the log files to the selected backup device.You can click the New Folder button to create new folder in the backup device, or click the Format button to format the backup device before log export.

Note:

- 1) Please connect the backup device to DVR before operating log export.
- 2) The log files exported to the backup device are named by exporting time, e.g.,
- 20110514124841logBack.txt.

12.3 Importing/Exporting Configuration Files

Purpose:

The configuration files of the DVR can be exported to local device for backup; and the configuration files of one DVR can be imported to multiple DVR devices if they are to be configured with the same parameters.

Steps:

1. Enter the Import/Export Configuration File interface.

		System Maintenance		
System Info	Import/Export Config File			
D Log Search	Device Name	USB1-1	•	Refresh
Import/Export	Name	Size Type	Edit Date	Delet Play
t Upgrade	E FOUND.000	Folder	09-17-2010 11:19:04	† –
	E FOUND.001	Folder	04-02-2011 17:45:24	💼 –
⊂ Default	C RECYCLER	Folder	08-04-2010 17:35:20	👕 —
🚓 Net Detect	G Work	Folder	06-21-2011 17:55:42	📋 —
	🧧 a	Folder	06-27-2011 14:56:13	👕 —
	📑 20110627103631log	15KB File	06-27-2011 10:36:30	† (6)
	Book1.xls	23KB File	05-26-2011 18:32:14	† (0)
	Compare Excel.exe	129KB File	04-20-2011 09:51:42	<u> </u>
	Recycled	4KB File	02-22-2011 14:16:18	<u> </u>
	bond0_2011062417	1,024KB File	06-24-2011 17:20:48	<u> </u>
	🔚 digicap.mav	19,790KB File	06-23-2011 09:05:20	† O
	Free Space	180MB		
▲ Live View		New Folder	Import Export	Back
T LIVE VIEW			Lapon	

Figure 12.11 Import/Export Config File

- 2. Click the **Export** button to export configuration files to the selected local backup device.
- **3.** To import a configuration file, select the file from the selected backup device and click the **Import** button. After the import process is completed, you must reboot the DVR.

Note: After having finished the import of configuration files, the device will reboot automatically.

12.4 Upgrading System

Purpose:

The firmware on your DVR can be upgraded by local backup device or remote FTP server.

12.4.1 Upgrading by Local Backup Device

Steps:

- 1. Connect your DVR with a local backup device where the update firmware file is located.
- 2. Enter the Upgrade interface.
 - Menu > Maintenance > Upgrade
- 3. Click the Local Upgrade tab to enter the local upgrade menu, as shown in Figure 12.12.

		System Maintenance			
System Info	Local Upgrado FT	P			
🗟 Log Search	Device Name	USB1-1		Refre	sh
Import/Export	Name	Size Type	Edit Date	Delet	Play
1 Upgrade	FOUND.000	Folder	09-17-2010 11:19:04		
	FOUND.001	Folder	04-02-2011 17:45:24	1	
≓ Default	RECYCLER	Folder	08-04-2010 17:35:20	1	
Net Detect	Work	Folder	06-21-2011 17:55:42	1	
	a 🔤	Folder	06-27-2011 14:56:12	1	
	2011062710363	1log 15KB File	06-27-2011 10:36:30	1	۲
	Book1.xls	23KB File	05-26-2011 18:32:14	1	۲
	Compare Excel.e	exe 129KB File	04-20-2011 09:51:42	1	۲
	Recycled	4KB File	02-22-2011 14:16:18	1	۲
	bond0_2011062	417: 1,024KB File	06-24-2011 17:20:48	1	۲
	digicap.mav	19,790KB File	06-23-2011 09:05:20		0
Live View			Upgrade	Ba	ck

Figure 12.12 Local Upgrade Interface

- 4. Select the update file from the backup device.
- 5. Click the **Upgrade** button to start upgrading.
- 6. After the upgrading is complete, reboot the DVR to activate the new firmware.

12.4.2 Upgrading by FTP

Before you start:

Configure PC (running FTP server) and DVR to the same Local Area Network. Run the 3rd-party TFTP software on the PC and copy the firmware into the root directory of TFTP.

Steps:

1. Enter the Upgrade interface.

Menu > Maintenance > Upgrade

2. Click the **FTP** tab to enter the local upgrade interface, as shown in Figure 12.13.

		System Maintenance	
System Info	Local Upgrade FTP		
ē Log Search	FTP Server Address	172 .8 .2 .36	
► Import/Export			
1 Upgrade >			
⊂ Default			
🚓 Net Detect			
♠ Live View			Upgrade Back

Figure 12.13 FTP Upgrade Interface

- **3.** Enter the FTP Server Address in the text field.
- 4. Click the **Upgrade** button to start upgrading.
- 5. After the upgrading is complete, reboot the DVR to activate the new firmware.

12.5 Restoring Default Settings

Steps:

1. Enter the Default interface.

Menu > Maintenance > Default

	System Maintenance
System Info	Default
ē Log Search	
► Import/Export	System will restore factory settings after reboot. Continue?
1 Upgrade	
C Default	
🚓 Net Detect	
▲ Live View	ОК Васк

Figure 12.14 Restore Factory Default

2. Click the **OK** button to restore the default settings.

Note: Except the network parameters (including IP address, subnet mask, gateway, MTU, default route and server port), all other parameters of the device will be restored to factory default settings.

CHAPTER13

Others

13.1 Configuring RS-232 Serial Port

Purpose:

The RS-232 port can be used in two ways:

• Parameters Configuration: Connect a PC to the DVR through the PC serial port. Device parameters can be configured by using software such as HyperTerminal. The serial port parameters must be the same as the DVR's when connecting with the PC serial port.

• Transparent Channel: Connect a serial device directly to the DVR. The serial device will be controlled remotely by the PC through the network and the protocol of the serial device.

Steps:

 Enter the RS-232 Settings interface. Menu > Configuration > RS-232

> Configuratio @ Genera RS-232 Settings So Network 115200 Alarm R R 5-232 None 👁 Live View None Consol A Exceptions 👪 User ♠ Live View Back

Figure 13.1 RS-232 Settings Interface

- 2. Configure RS-232 parameters, including baud rate, data bit, stop bit, parity, flow control and usage.
- 3. Click the **Apply** button to save the settings.

13.2 Configuring General Settings

Purpose:

You can configure the BNC output standard, VGA output resolution, mouse pointer speed through the Menu > Configuration > General interface.

Steps:

- Enter the General Settings interface.
 Menu > Configuration > General
- 2. Select the General tab.

		Configuration
General >	General DST Settings	More Settings
👼 Network	Language	English ·
🛦 Alarm	CVBS Output Standard	NTSC -
# RS-232	VGA Resolution	1024*768/60HZ ~
	HDMI Resolution	1920*1080/60HZ(1080P) ~
 Live View 	Time Zone	(GMT+08:00) Beijing, Urumqi, Singapore 🔹 👻
▲ Exceptions	Date Format	MM-DD-YYYY ~
👪 User	System Date	06-27-2011
	System Time	19:01:19 😋
	Mouse Pointer Speed	
	Enable Wizard	
	Enable ID Authentication	
▲ Live View		Apply Back

Figure 13.2 General Settings Interface

- **3.** Configure the following settings:
 - Language: The default language used is *English*.
 - **CVBS Output Standard:** Select the CVBS output standard to NTSC or PAL, which must be the same with the video input standard.
 - VGA Resolution: Select the VGA output resolution, which must be the same with the resolution of the monitor screen.
 - **HDMI Resolution:** Select the HDMI resolution, which must be the same with the resolution of the monitor screen.
 - Time Zone: Select the time zone.
 - Date Format: Select the date format.
 - System Date: Select the system date.
 - System Time: Select the system time.
 - Mouse Pointer Speed: Set the speed of mouse pointer; 4 levels are configurable.
 - Enable Wizard: Enable/disable the Wizard when the device starts up.
 - **Enable Password:** Enable/disable the use of the login password.
- 4. Click the **Apply** button to save the settings.

13.3 Configuring More Settings

Steps:

- Enter the General Settings interface.
 Menu > Configuration > General
- 2. Click the More Settings tab to enter the More Settings interface, as shown in Figure 13.3.

				Confi	guratio	n					
General >	General	DST Setti	ings	More S	ettings						
🐼 Network	Device	Name		Embe	dded	Net D\	/R				
🛦 Alarm	Device			255							
🗰 RS-232	Output N			Stan	lard						
🗢 Live View		Output Brigh on Timeout	Iness	Neve							
A Exceptions	Operation	on mileour		Novo							
Juser											
a Oser											
♠ Live View								A	oply	Back	

Figure 13.3 More Settings Interface

- **3.** Configure the following settings:
 - **Device Name:** Edit the name of DVR.
 - **Device No.:** Edit the serial number of DVR. The Device No. can be set in the range of 1~255, and the default No. is 255.
 - Output Mode: Select the output mode to: Standard, Bright, Gentle or Vivid.
 - CVBS Output Brightness: Adjust the video output brightness.
 - **Operation Timeout:** Set timeout time for menu inactivity. E.g., when the timeout time is set to 5 *Minutes*, then the system will exit from the current operation menu to live view screen after 5 minutes of menu inactivity.
- 4. Click the **Apply** button to save the settings.

13.4 Managing User Accounts

Purpose:

There is a default account in the DVR: *Administrator*. The *Administrator* user name is *admin* and the password is *12345*. The *Administrator* has the permission to add and delete user and configure user parameters.

13.4.1 Adding a User

Steps:

1. Enter the User Management interface. Menu > Configuration > User

			Configuration		
Ø General	User Ma	anagement Change F	assword		
💀 Network	No.	User Name	Level	User's MAC Address	Pern Edit Delet
🔉 Alarm	1	admin	Admin	00:00:00:00:00:00	
🕫 RS-232					
🗢 Live View					
▲ Exceptions					
👪 User 🔷 🔸					
★ Live View				Add	Back

Figure 13.4 User Management Interface

2. Click the Add button to enter the Add User interface.

Add User							
User Name	01						
Password	*****		, in the second s				
Confirm	•••••						
Level	Operator ~						
User's MAC Address	00:00:00:00:00:	: 00					
	Apply	OK	Cancel				

Figure 13.5 Add User Menu

- 3. Enter the information for new user, including User Name, Password, Level and User's MAC Address. Level: Set the user level to Operator or Guest. Different user levels have different operating permission.
 - **Operator:** The *Operator* user level has permission of Two-way Audio in Remote Configuration and all operating permission in Camera Configuration.
 - **Guest:** The Guest user has no permission of Two-way Audio in Remote Configuration and only has the local/remote playback in the Camera Configuration.
 - User's MAC Address: The MAC address of the remote PC which logs onto the DVR. If it is configured and enabled, it only allows the remote user with this MAC address to access the DVR.
- 4. Click the **OK** button to save the settings and go back to the User Management interface. The added new user will be displayed on the list, as shown in Figure 13.6.

Configuration									
@ General	User Ma	anagement	Change Pass	word					
😞 Network	No	User Nar	me	Level	User's MAC	Address	Perr	Edit	Delet
🔉 Alarm	1	admin		Admin	00:00:00:00:		-	-	
🕫 RS-232		01		Operator	00:00:00:00:	00:00	9	1	â
🗢 Live View									
A Exceptions									
👪 User 🔹 🔸									
A Live View						Add		Ba	ck

Figure 13.6 Added User Listed in User Management Interface

5. Select the user from the list and then click the *button* to enter the Permission settings interface, as

shown in Figure 13.7.

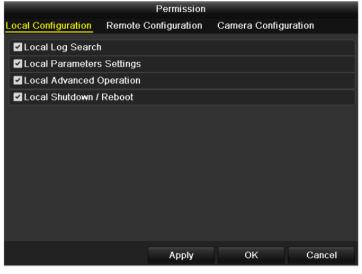


Figure 13.7 User Permission Settings Interface

6. Set the operating permission of Local Configuration, Remote Configuration and Camera Configuration for

the user.

Local Configuration

- Local Log Search: Searching and viewing logs and system information of DVR.
- Local Parameters Settings: Configuring parameters, restoring factory default parameters and importing/exporting configuration files.
- Local Advanced Operation: Operating HDD management (initializing HDD, setting HDD property), upgrading system firmware, clearing I/O alarm output.
- Local Shutdown Reboot: Shutting down or rebooting the DVR.

Remote Configuration

- Remote Log Search: Remotely viewing logs that are saved on the DVR.
- Remote Parameters Settings: Remotely configuring parameters, restoring factory default parameters and importing/exporting configuration files.
- Remote Serial Port Control: Configuring settings for RS-232 and RS-485 ports.
- Remote Video Output Control: Sending remote button control signal.
- Two-Way Audio: Realizing two-way radio between the remote client and the DVR.
- Remote Alarm Control: Remotely arming (notify alarm and exception message to the remote client) and controlling the alarm output.
- Remote Advanced Operation: Remotely operating HDD management (initializing HDD, setting HDD property), upgrading system firmware, clearing I/O alarm output.
- Remote Shutdown/Reboot: Remotely shutting down or rebooting the DVR.

Camera Configuration

- Remote Live View: Remotely viewing live video of the selected camera (s).
- Local Manual Operation: Locally starting/stopping manual recording, picture capturing and alarm output of the selected camera (s).
- Remote Manual Operation: Remotely starting/stopping manual recording, picture capturing and alarm output of the selected camera (s).
- Local Playback: Locally playing back recorded files of the selected camera (s).
- Remote Playback: Remotely playing back recorded files of the selected camera (s).
- Local PTZ Control: Locally controlling PTZ movement of the selected camera (s).
- Remote PTZ Control: Remotely controlling PTZ movement of the selected camera (s).
- Local Video Export: Locally exporting recorded files of the selected camera (s).
- 7. Click the **OK** button to save the settings and exit interface.

Note: Only the admin user account has the permission of restoring factory default parameters.

13.4.2 Deleting a User

Steps:

- Enter the User Management interface.
 Menu > Configuration > User
- 2. Select the user to be deleted from the list, as shown in Figure 13.8.

			Co	nfiguration			
General	User M	anagement	Change Pa	ssword			
a Network	No.	User Nar	ne	Level	User's MAC Address	Perrr Edi	t Delei
🗴 Alarm	1	admin		Admin	00:00:00:00:00:00		-
RS-232	2	01		Operator	00:00:00:00:00:00		
Live View							
Exceptions							
User	>						
Live Marrie					Add	B	ack
Live View					Add	D.	DOK

Figure 13.8 Delete a User

3. Click the icon to delete the selected user.

13.4.3 Editing a User

Steps:

- 1. Enter the User Management interface.
 - Menu > Configuration > User
- 2. Select the user to be edited from the list, as shown in Figure 13.9.



Figure 13.9 Edit a User

3. Click the *icon* to enter the Edit User interface, as shown in Figure 13.10.

Edit User								
User Name	01							
Password								
Confirm	•••••							
Level	Operator ~							
User's MAC Address	00 : 00 : 00 : 00 : 00 : 00							
	Apply Ok	Cancel						
	Apply Ok	: Cancel						

Figure 13.10 Edit User Interface

- 4. Edit the user information, including user name, password, level and MAC address.
- 5. Click the **OK** button to save the settings and exit the menu.

13.4.4 Changing Password of Admin

Purpose:

The password of the Admin user account can be changed in the User Management menu.

Steps:

1. Enter the User Management interface.

Menu > Configuration > User.

2. Click the Change Password tab to enter the Change Password menu, as shown in Figure 13.11.

		Conf	iguration			
@ General	User Management	Change Pass	word			
👼 Network	User Name	adm	in			1
🔉 Alarm	Old Password					
# RS-232	New Password					
👳 Live View	MAC Address	00 :	00:00:00:00	0:00		
A Exceptions						
👪 User 🔹 🔹						
★ Live View					Save	Back

Figure 13.11 Change Password

- **3.** Enter the old password, new password and confirm password on the menu.
- 4. Click the **Save** button to save the changes.

13.5 Locking/Shutting down/Rebooting Device

Steps:

1. Enter the Shutdown interface.

Menu > Shutdown



Figure 13.12 Shutdown Menu

 Click the Lock button to lock the device, or Click the Shutdown button to shut down the device, or Click the Reboot button to reboot the device.

Note: After locking the device, you need to log in again to operate the device.

C H A P T E R 1 4

Appendix

Glossary

- **Dual Stream:** Dual stream is a technology used to record high resolution video locally while transmitting a lower resolution stream over the network. The two streams are generated by the DVR, with the main stream having a maximum resolution of 4CIF and the sub-stream having a maximum resolution of CIF.
- **DVR:** Acronym for Digital Video Recorder. A DVR is device that is able to accept video signals from analog cameras, compress the signal and store it on its hard drives.
- **HDD:** Acronym for Hard Disk Drive. A storage medium which stores digitally encoded data on platters with magnetic surfaces.
- **DHCP:** Dynamic Host Configuration Protocol (DHCP) is a network application protocol used by devices (DHCP clients) to obtain configuration information for operation in an Internet Protocol network.
- **HTTP:** Acronym for Hypertext Transfer Protocol. A protocol to transfer hypertext request and information between servers and browsers over a network
- **PPPoE:** PPPoE, Point-to-Point Protocol over Ethernet, is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modem) over Ethernet and in plain Metro Ethernet networks.
- **DDNS:** Dynamic DNS is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a domain name server to change, in real time (ad-hoc) the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.
- Hybrid DVR: A hybrid DVR is a combination of a DVR and NVR.
- **NTP:** Acronym for Network Time Protocol. A protocol designed to synchronize the clocks of computers over a network.
- NTSC: Acronym for National Television System Committee. NTSC is an analog television standard used in such countries as the United States and Japan. Each frame of an NTSC signal contains 525 scan lines at 60Hz.
- NVR: Acronym for Network Video Recorder. An NVR can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other DVRs.
- **PAL:** Acronym for Phase Alternating Line. PAL is also another video standard used in broadcast televisions systems in large parts of the world. PAL signal contains 625 scan lines at 50Hz.
- **PTZ:** Acronym for Pan, Tilt, Zoom. PTZ cameras are motor driven systems that allow the camera to pan left and right, tilt up and down and zoom in and out.
- USB: Acronym for Universal Serial Bus. USB is a plug-and-play serial bus standard to interface devices to a host computer.

FAQ

• Why does my DVR make a beeping sound after booting?

The possible reasons for the warning beep on the DVR are as follows:

- a) There is no HDD installed in the DVR.
- b) The HDD is not initialized.
- c) HDD error

To cancel the beeping sound and use the DVR without HDD, enter the Exception Settings interface. For detailed information, see Chapter Handling Exception..

• Why does the DVR seem unresponsive when operating with the IR remote control?

Please read through the section *Using the IR Remote Control*, and check:

- a) The batteries are installed correctly in the remote, making sure that the polarities of the batteries are not reversed.
- b) The batteries are fresh and are not out of power.
- c) The remote has not been tampered with.
- d) there are no fluorescent lamps in use nearby.

• Why does the PTZ seem unresponsive?

If the PTZ seem unresponsive, please check:

- a) The RS-485 cable is properly connected.
- b) The dome decoder type is correct.
- c) The dome decoder speed configuration is correct.
- d) The dome decoder address bit configuration is correct.
- e) That the main board RS-485 interface is not broken.

• Why is there no video recorded after setting the motion detection?

If there are no recorded video after setting the motion detection, please check:

- a) The recording schedule is setup correctly by following the steps listed in *Configuring Record/Capture Schedule*.
- b) The motion detection area is configured correctly (See Configuring Motion Detection).
- c) The channels are being triggered for motion detection (See Configuring Motion Detection).

• Why doesn't the DVR detect my USB export device for exporting recorded files?

There's a chance that the DVR and your USB device is not compatible. Please refer to our company's website to view a list of compatible devices.

• My DVR is in Live View mode and the menu does not show up. It does not respond to the mouse, the front panel, the remote or keyboard.

Your DVR may be in auxiliary mode. This occurs when the F1 button is pressed on the front panel. To return to the previous mode of operation, press the F1 button again.