

# Performance Series HQA Digital Video Recorder

## DVR Models

HRHT4040	HRHT4080	HRHT4160
HRHT4041	HRHT4082	HRHT4162
HRHT4042	HRHT4084	HRHT4164
		HRHT4166
		HRHT41612

## Local User Guide

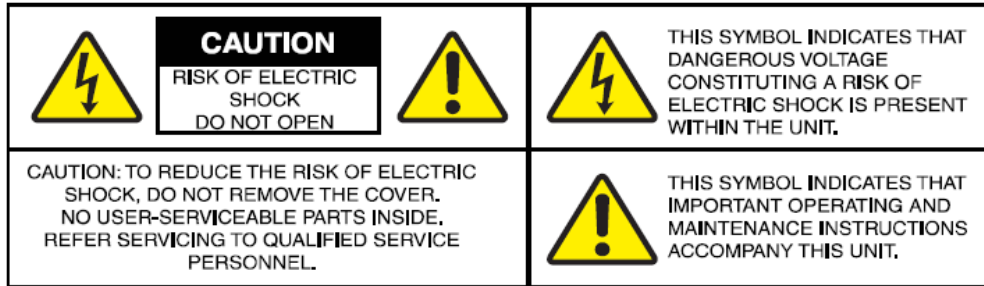
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Issue	Date	Revisions
A	04/2018	New document


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## Cautions and Warnings



 **WARNING** Use only with the supplied power adapter. The Ethernet connection is not intended to be connected to an exposed (outside plant) network.

 **CAUTION** There is a risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries in accordance with local laws.

 **CAUTION** Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.

## Regulatory Statements

### FCC Compliance Statement

**Information to the User:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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**Note**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

## Manufacturer's Declaration of Conformance

### North America

The equipment supplied with this guide conforms to UL 60950-1 and CSA C22.2 No. 60950-1.

### Europe

The manufacturer declares that the equipment supplied is compliant with the European Parliament and Council Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (2011/65/EU), the Low Voltage Directive (2014/35/EU), and the essential requirements of the EMC directive (2014/30/EU), conforming to the requirements of standards EN 55032 for emissions, EN 50130-4 for immunity, and EN 60950-1 for electrical equipment safety.

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

## Waste Electrical and Electronic Equipment (WEEE)



**Correct Disposal of this Product** (applicable in the European Union and other European countries with separate collection systems).

This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures.

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## Safety Instructions

**Before operating or installing the unit, read and follow all instructions. After installation, retain the safety and operating instructions for future reference**

1. **HEED WARNINGS** - Adhere to all warnings on the unit and in the operating instructions.
2. **INSTALLATION**
  - Install in accordance with the manufacturer's instructions.



- Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.
  - Do not install the unit in an extremely hot or humid location, or in a place subject to dust or mechanical vibration. The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.
  - Any wall or ceiling mounting of the product should follow the manufacturer's instructions and use a mounting kit approved or recommended by the manufacturer.
3. **POWER SOURCES** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your facility, consult your product dealer or local power company.
  4. **HEAT** - Situate away from items that produce heat or are heat sources such as radiators, heat registers, stoves, or other products (including amplifiers).
  5. **WATER AND MOISTURE** - Do not use this unit near water or in an unprotected outdoor installation, or any area classified as a wet location.
  6. **MOUNTING SYSTEM** - Use only with a mounting system recommended by the manufacturer, or sold with the product.
  7. **ATTACHMENTS** - Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
  8. **ACCESSORIES** - Only use accessories specified by the manufacturer.
  9. **CLEANING** - Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
  10. **SERVICING** - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
  11. **REPLACEMENT PARTS** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

## Warranty and Service

Subject to the terms and conditions listed on the Product warranty, during the warranty period Honeywell will repair or replace, at its sole option, free of charge, any defective products returned prepaid.

In the event you have a problem with any Honeywell product, please call Customer Service at 1.800.323.4576 for assistance or to request a **Return Merchandise Authorization (RMA)** number.

Be sure to have the model number, serial number, and the nature of the problem available for the technical service representative.

Prior authorization must be obtained for all returns, exchanges, or credits. **Items shipped to Honeywell without a clearly identified Return Merchandise Authorization (RMA) number may be refused.**



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## About This Document

This document introduces the Honeywell Performance Series HQA 4 MP Digital Video Recorder (DVR) and provides instructions for installing and operating the DVR.

These instructions apply to the following Performance Series HQA models:

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<b>4-channel DVRs</b>	
<b>HRHT4041</b>	4 MP, 4-channel, 1-HDD Bay, 1 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT4042</b>	4 MP, 4-channel, 1-HDD Bay, 2 TB, HQA/CVBS/IP Hybrid DVR

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<b>8-channel DVRs</b>	
<b>HRHT4082</b>	4 MP, 8-channel, 2-HDD Bay, 2 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT4084</b>	4 MP, 8-channel, 2-HDD Bay, 4 TB, HQA/CVBS/IP Hybrid DVR

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<b>8-channel DVRs</b>	
<b>HRHT4082</b>	4 MP, 8-channel, 2-HDD Bay, 2 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT4084</b>	4 MP, 8-channel, 2-HDD Bay, 4 TB, HQA/CVBS/IP Hybrid DVR

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<b>16-channel DVRs</b>	
<b>HRHT4162</b>	4 MP, 16-channel, 2-HDD Bay, 2 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT4164</b>	4 MP, 16-channel, 2-HDD Bay, 4 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT4166</b>	4 MP, 16-channel, 2-HDD Bay, 6 TB, HQA/CVBS/IP Hybrid DVR
<b>HRHT41612</b>	4 MP, 16-channel, 2-HDD Bay, 12 TB, HQA/CVBS/IP Hybrid DVR

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# Overview of Contents

This document contains the following chapters and appendixes:

- [Chapter 1, Introduction](#), describes the front and rear panel layout of the DVR, and mouse and remote control functions.
- [Chapter 2, Getting Started](#), describes how to connect the DVR and log on to its user interface.
- [Chapter 3, Viewing Live Video](#), describes the DVR's real-time monitoring mode and associated DVR operations, including controlling a PTZ camera (if connected).
- [Chapter 4, Recording Video](#), describes how to record a video clip manually and how to set up automatic recording.
- [Chapter 5, Playing Back Video](#), describes how to search for and play back recorded video and snapshots, and how to save recorded files to an external storage device.
- [Chapter 6, Configuring Face Search](#), describes how to configure Face Search function.
- [Chapter 7, Configuring Backup Settings](#), describes how to configure the Backup function.
- [Chapter 8, Configuring Camera Settings](#), describes how to configure camera image settings, encoder settings, snapshot settings, privacy mask settings, camera name settings, and channel type settings.
- [Chapter 9, Configuring Network Settings](#), describes how to configure the DVR's network settings, including connection settings, email settings, FTP settings, registration settings, and alarm center settings.
- [Chapter 10, Configuring Event Settings](#), describes how to configure the DVR's alarm settings, including settings for motion detection, video loss, camera tampering, and system events.
- [Chapter 11, Configuring Storage Settings](#), describes how to configure the DVR's storage settings, including recording settings and HDD management settings.
- [Chapter 12, Configuring System Settings](#), describes how to configure DVR system settings, display settings, and user accounts; export and import configuration settings to and from other DVRs; restore default settings; and upgrade the system firmware.
- [Chapter 13, Viewing Information](#), describes how to view system, event, network, and log information.
- [Chapter 14, Troubleshooting](#), lists troubleshooting steps for resolving errors that you may encounter when operating the DVR.
- [Appendix A, Installing Hard Drives](#), lists the manufacturers and models of compatible HDDs, including SATA HDDs and portable HDDs, and provides instructions for installing an additional HDD.
- [Appendix B, MAXPRO® Cloud](#), describes how to configure the MAXPRO® Cloud.

## Related Documents

The following related documents are supplied with the DVR:

- Performance Series HQA DVRs Remote User Guide
- Performance Series HQA DVRs Quick Installation Guide
- Performance Series HQA DVRs Quick Networking Guide

To access a PDF version of these documents, visit the Performance Series HQA DVR product page at [www.honeywellvideo.com/products/video-systems/recording-devices/index.html](http://www.honeywellvideo.com/products/video-systems/recording-devices/index.html).



# 1. Introduction

This chapter includes the following sections:

- [Front and Rear Panel Layouts on page 1](#)
- [8-/16-channel DVR Rear Panel on page 5](#)
- [Remote Control Operation on page 8](#)

## Front and Rear Panel Layouts

### 4-channel DVR Front Panel

Figure 1-1



Table 1-1

	Name	Function
1	HDD Indicator	Lights red when an HDD error occurs or when the HDD capacity is below the configured threshold.
2	NET Indicator	Lights red when a network error occurs or when there is no network connection.
3	POWER Indicator	Lights blue when the DVR receives power.
4	USB 2.0 Port	Connects USB devices (USB flash drive, mouse).

## 4-channel DVR Back Panel

Figure 1-2

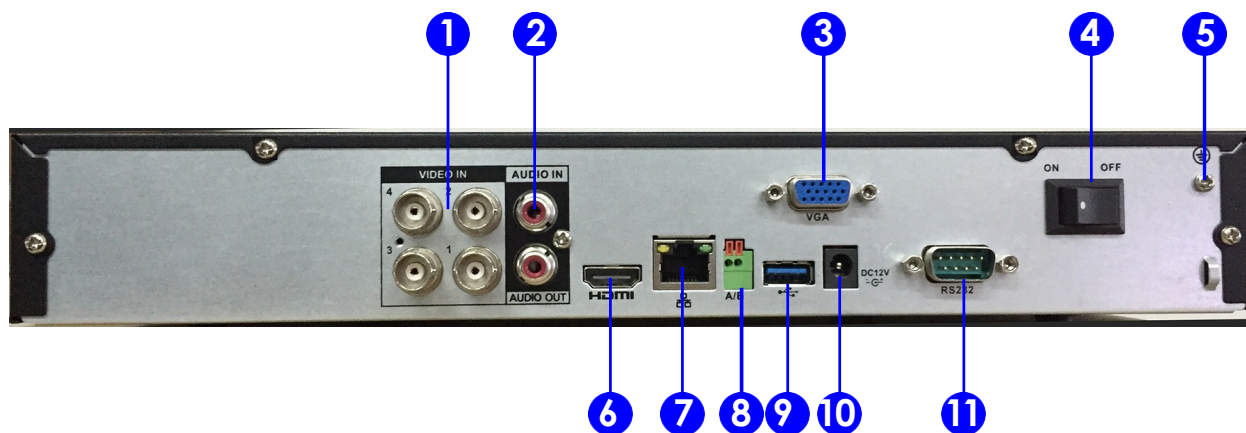


Table 1-2

	Name	Function
1	Video In	BNC connectors for HD-over-coax/CVBS video input.
2	Audio in/out ports	RCA connectors for audio input (microphone) and audio output (speaker, header).
3	VGA port	VGA connector for analog video output.
4	Power switch	Switch for turning DVR On/Off.
5	Ground	Ground terminal.
6	HDMI port	HDMI interface for transmitting high definition audio and video output.
7	Network port	RJ45 100M Ethernet interface for connecting to local area network (LAN).
8	RS485 port	RS485 interface for connecting RS485 devices (PTZ cameras).
9	USB 2.0 port	USB 2.0 interface for connecting to USB device (mouse, USB flash drive, portable HDD).
10	Power input	12 V DC power input.
11	RS232 port	RS232 interface for configuring IP addresses or transferring transparent COM data.

## 8-/16-channel DVR Front Panel

Figure 1-3

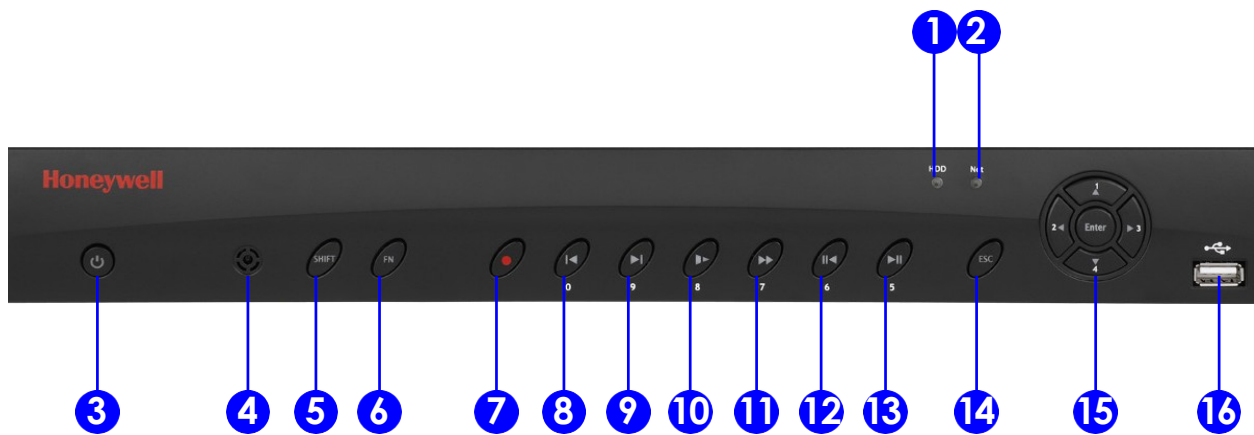



Table 1-3

Name	Function
1 HDD indicator	Lights red when an HDD error occurs or when the HDD capacity is below the configured threshold.
2 NET indicator	Lights red when a network error occurs or when there is no network connection.
3 Power button	Turns DVR On/Off.
4 IR receiver	Receives the IR signal from the remote control.
5 SHIFT	<b>Text mode:</b> Switches between uppercase and lowercase letters.
6 FN	Switches between function input mode and number/letter input mode. <b>Single-window live view mode:</b> Displays the Assistant function or configures the image color. <b>Text mode:</b> Deletes the last entered character when pressed and held for 1.5 seconds. <b>HDD management:</b> Switches HDD recording information.
7 Record button	<b>Live view mode:</b> Starts/stops recording.
8 Play Previous button / 0	<b>Playback mode:</b> Plays the previous video. <b>Text mode:</b> Enters the number 0.
9 Play Next button / 9	<b>Playback mode:</b> Plays the next video. <b>Text mode:</b> Enters the number 9.
10 Slow Play button / 8	<b>Playback mode:</b> Plays back video at various speeds. <b>Text mode:</b> Enters the number 8 or the letters T, U, or V.
11 Fast Forward button / 7	<b>Playback mode:</b> Plays back video at various speed. <b>Text mode:</b> Enters the number 7 or the letters P, Q, R, or S.

12	Reverse / Pause button / 6	<b>Playback mode:</b> Plays back video in reverse, pauses playback.
13	Play / Pause button / 5	<b>Playback mode:</b> Plays back video, pauses playback. <b>Text mode:</b> Enter the number 5 or the letter J, K, or L.
14	ESC	Live view mode: Returns to the previous menu or cancels the current operation. Playback mode: Returns to Live View mode.
15	Directions keys  / 1, 2, 3, 4	<b>Menu setup:</b> Navigate up and down, increase or decrease numbers. <b>PTZ mode:</b> Call up the assistant function for the PTZ menu. <b>Text mode:</b> Enter the numbers 1, 2, 3, or 4, or the letters A, B, C, D, E, F, G, H, and I.
16	Enter	<b>Menu setup:</b> Confirms Selection. Go to Default. Go to Menu.

## 8-/16-channel DVR Rear Panel

Figure 1-4

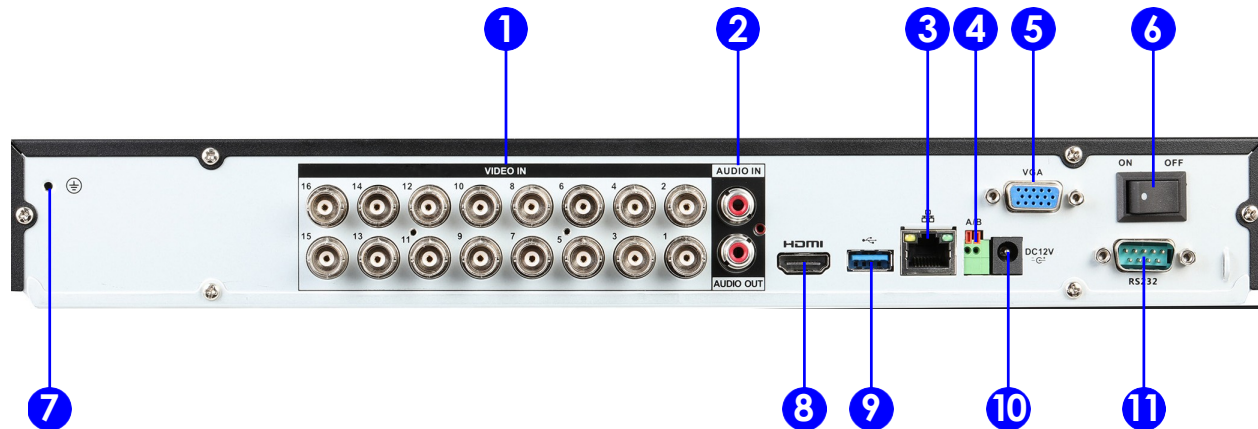


Table 1-4

	Name	Function
1	Video in	BNC connectors for HD-over-coax/CVBS video input.
2	Audio in/outputs	RCA connectors for audio input (microphone) and audio output (speaker, header).
3	Network port	RJ45 100M Ethernet interface for connecting to local area network (LAN).
4	RS485	RS485 interface for connecting RS485 devices (PTZ cameras).
5	VGA port	VGA connector for analog video output.
6	Power switch	Switch for turning DVR On/Off.
7	Ground	Ground terminal.
8	HDMI port	HDMI interface for transmitting high definition audio and video output.
9	USB 2.0 port	USB 2.0 interface for connecting to USB device (mouse, USB flash drive, portable HDD).
10	Power input	12 V DC power input.
11	RS232 port	RS232 interface for configuring IP addresses or transferring transparent COM data.

## Mouse Operation

Your Performance Series HQA DVR is optimized for mouse navigation. Use the supplied mouse to set up the DVR.

Figure 1-5



Table 1-5


Button	Action
1.Left	<ul style="list-style-type: none"> <li>Click to select a menu option.</li> <li>Click in text field to display on-screen keyboard.</li> <li>Click on-screen keyboard to input letters/numbers.</li> <li>In multi-screen view, double-click to view the channel full screen. Double-click again to exit full screen mode.</li> <li>Double-click video filename to play video.</li> </ul>
2.Right	<ul style="list-style-type: none"> <li>Click to close menu window without saving changes.</li> <li>Click to exit main menu to return to live view screen.</li> <li>Click to open shortcut menu from live view screen.</li> </ul>
3.Wheel	<ul style="list-style-type: none"> <li>Scroll up/down.</li> </ul>

## Using the On-screen Keyboard

- To display the on-screen keyboard, click in a text box. The keyboard appears directly below the text box.





2. Click the key corresponding to the letter/number/special character that you want to input in the text box.
  - To switch between the lowercase and uppercase letters, click Shift.
  - To delete the previous character, click the ← key.
  - To insert a space, click the  key.
3. Click **Enter** to close the on-screen keyboard.

## Remote Control Operation

It is strongly recommended to use a mouse to operate the DVR. However, you can also use the supplied IR remote control. The following table describes basic remote control operations:

Figure 1-6

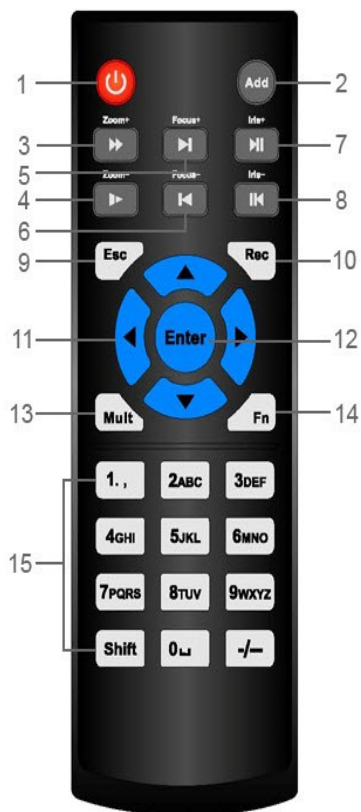


Table 1-6

	Button	Action
1	Power	Turn DVR on/off.
2	Add (Address)	Enter number of device that you want to control.
3	Forward	Increase forward playback speed.
4	Slow Play	Decrease forward playback speed.
5	Next Record	Select next video for playback.
6	Previous Record	Select previous video for playback.
7	Play/Pause	Pause/resume forward playback. In live view mode, enter video search mode.
8	Reverse/Pause	Pause/resume reverse playback.
9	Esc	Return to previous menu or cancel current operation.
10	Rec	Manually start/stop recording. While in recording interface, use direction buttons to select recording channel. Press and hold record button to enter manual recording interface.
11	Direction Keys	Use left/right keys to switch currently activated control. While in playback mode, use up/down buttons to change playback channel.
12	Enter	Go to default. Go to menu.
13	Mult	Switch between multi-channel view and single-channel view.
14	Fn	In single-monitor mode, using popup assistant function, control PTZ cameras or adjust video color. In PTZ control mode, switch the PTZ control menu. In text mode, press and hold button to delete last character.
15	Alphanumeric Keys	Enter passwords or switch channels. Press <b>Shift</b> to switch input method.



# 2. Getting Started

This chapter includes the following sections:

- [Unpacking the DVR, page 9](#)
- [Connecting External Devices, page 9](#)
- [Starting and Shutting Down the DVR, page 12](#)
- [Setting Up the DVR with the Startup Wizard, page 20](#)

## Unpacking the DVR

Before you set up the DVR, make sure that you have received the following items:

- Quick Installation Guide
- Quick Networking Guide
- Software CD
- Power adapter and cable
- Mouse
- Serial ATA (SATA) cable(s) (×1 for 4-channel; ×2 for 8-/16-channel)
- Remote control (8- and 16-channel DVRs only)
- CAT5e network cable
- Terminal block connectors (×2)
- Screws (×4 for 4-channel; ×10 for 8-/16-channel)
- Power cable(s)

If any of the items listed above are missing or damaged, contact your Honeywell dealer immediately.

## Connecting External Devices

### Step 1: Connect the cameras

Connect the coaxial cables from the cameras to the VIDEO IN connectors (1 Vp-p, 75 ohm).

### Step 2: Connect the monitor

Connect a VGA cable (not supplied) to the VGA interface and/or an HDMI cable (not supplied) to the HDMI interface. Connect the other end to a monitor (do not use a TV). Simultaneous VGA and HDMI output is supported.

### Step 3: Connect the mouse

Connect the supplied USB mouse to the USB 2.0 interface.

### Step 4: Connect the Ethernet cable

Connect the supplied CAT5e Ethernet cable to the network port. Connect the other end to a router on your network.

**Step 5: Connect audio devices (if applicable)**

To record audio, connect the audio sources to the AUDIO IN connectors. To play audio, connect an audio output device (low-impedance headphones, speaker, or amplifier) to the AUDIO OUT connector (200 mV / 1 kilohm).

**Step 6: Connect a PTZ camera (if applicable)**

To communicate with a PTZ camera, connect it to the RS485 A and B input. It is recommended to use shielded twisted pair cable with the shielded layer used to connect to the ground. The ground should be the same as for the DVR and the voltage between the A and B lines should be less than 5 V.

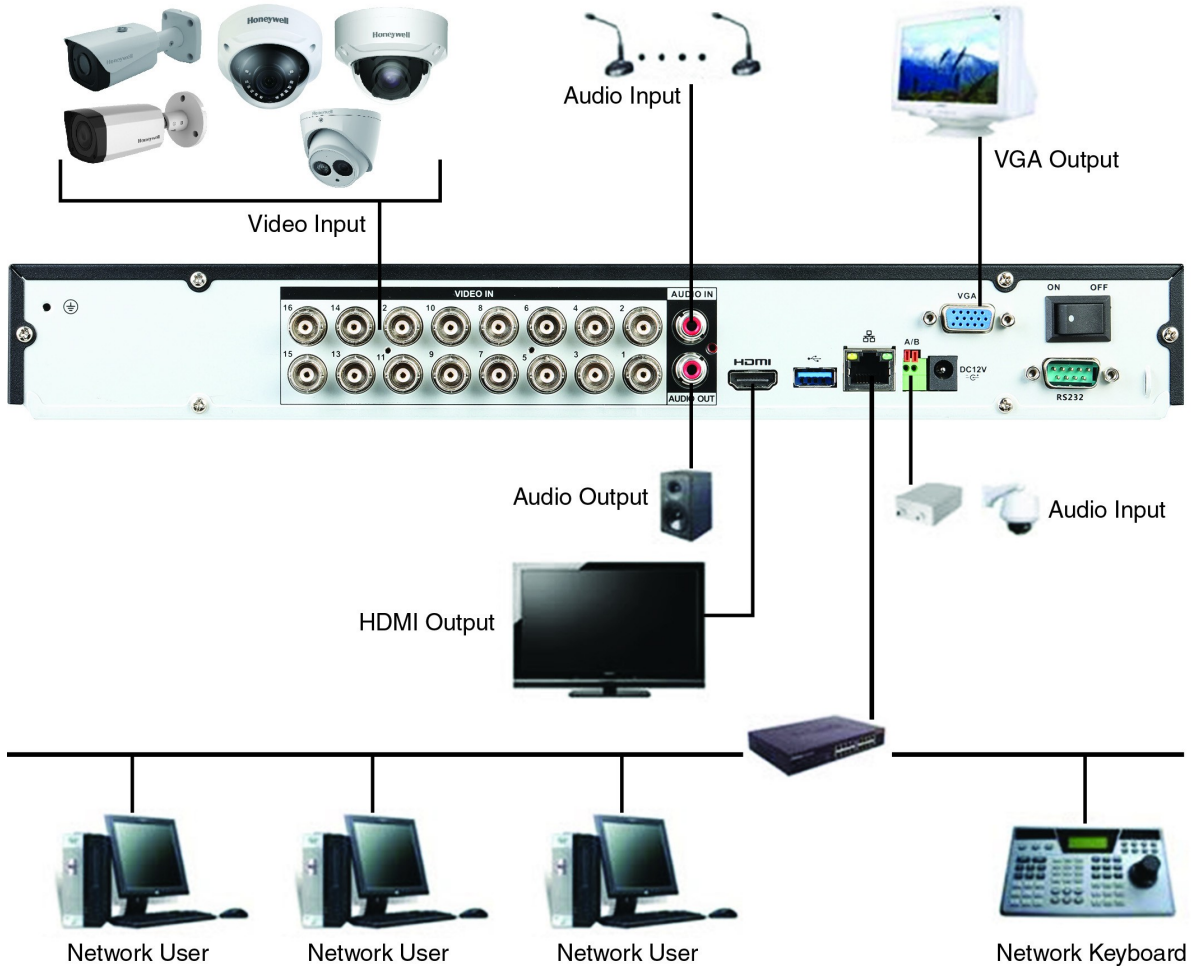
**Step 7: Connect the power cable**

Connect the supplied 12 V DC power adapter to the power input. Use of an uninterruptible power supply (UPS) is strongly recommended.

## Typical DVR Installation

The following diagram shows a typical DVR installation:

Figure 2-1



## Starting and Shutting Down the DVR

### Starting the DVR

1. Verify that the DVR is connected to an appropriate power source.
2. Turn on the power switch on the rear panel to start the DVR.

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**Note** The beep at startup is normal.

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### Shutting Down the DVR

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**Note** To shut down the DVR, you must be logged in as the admin user or have shutdown privileges assigned to you. See [Configuring Account Settings](#) on page 129.

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To prevent damage to the hard drive, follow these steps to shut down the DVR:

1. In live view mode, click anywhere on the screen to display the shortcut menu, and then click Main Menu.
2. In the Main Menu window, click **Shutdown**.
3. In the Shutdown window, click **Shutdown** or **Reboot**.
4. Enter the admin password (the default password is 1234), and then click **OK**.

### Booting Up the DVR

#### **WARNING**

The rated input voltage matches the device power on-off button. Please make sure the power wire connection is OK. Then click the power on-off button.

To protect device, please connect device to the power adapter first and then connect the power cable.

Always use the stable current, if necessary UPS is a best alternative measure.

Please follow the steps listed below to boot up the device.

1. Connect the device to the monitor and then connect a mouse.
2. Connect power cable.
3. Click the power button at the front or rear panel and then boot up the device. After device booted up, the device is in multiple-channel display mode by default. If the boot up time is in the record period, the device automatically goes to auto record mode, the corresponding channel indicator light is on, and device is working properly.

## Device Initialization

If it is your first time to use the device, please set a login password of admin (system default user).

**Note** For your device safety, please keep your login password of admin well after the initialization steps, and change the password regularly.

Steps:

1. Boot up device. The device displays device initialization interface. See [Figure 2-2](#).


**Figure 2-2**

The screenshot shows the 'Device Initialization' screen with the 'Honeywell' logo in the top right. A progress bar at the top indicates three steps: 1. Enter Password (highlighted), 2. Unlock Pattern, and 3. Password Protection. The 'Enter Password' section includes a 'User' field with 'admin' entered, a 'Password' field, and a 'Confirm Password' field. Below the password field, there are five requirements: '8~12 characters allowed', 'At least one upper case letter', 'At least one lower case letter', 'At least one number', and 'At least one special character'. There is also a 'Prompt Question' field. A 'Next' button is located at the bottom right of the screen.

2. Set login password of admin.

**User name:** The default user name is **admin**.

**Password/confirm password:** The password ranges from 8 to 32 digitals. It can contain letters, numbers and special characters (excluding “”, “”, “;”, “:”, “&”). The password shall contain at least two categories. Usually we recommend the strong password.

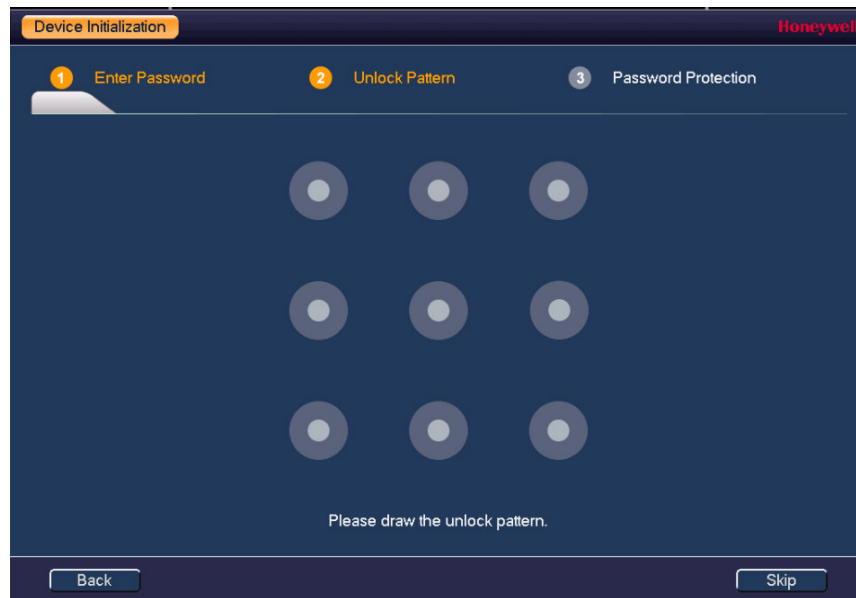
**Prompt question:** If you set the prompt question here. On the login interface, click , device can display the corresponding prompt question for you to remind the password.

### WARNING

**STRONG PASSWORD RECOMMENDED**—For your device own safety, please create a strong password of your own choosing. We also recommend you change your password periodically especially in the high security system.

3. Click **Next**. The device goes to unlock pattern interface. See [Figure 2-3](#).

Figure 2-3

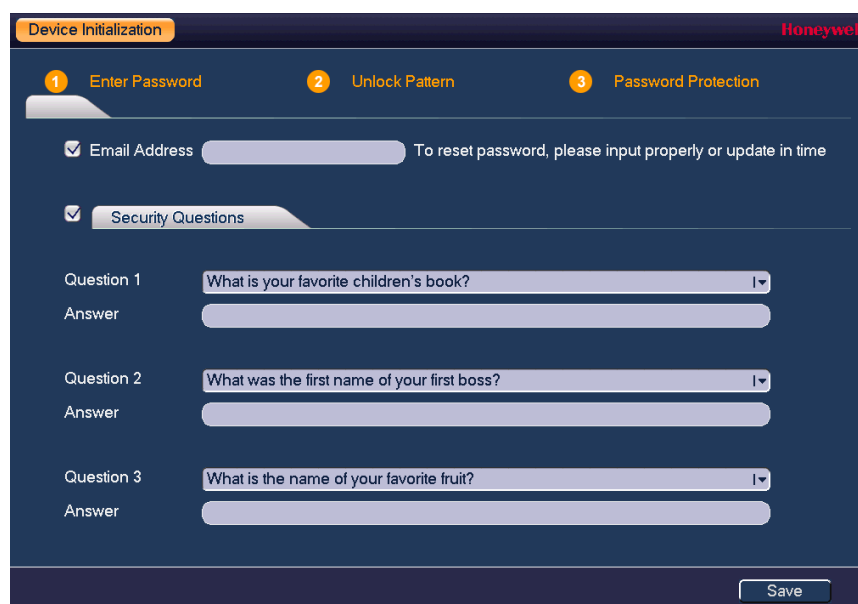


4. Set unlock pattern. After set unlock pattern, device goes to password protection interface. See [Figure 2-4](#).

**Note**

- The unlock pattern shall at least contain 4 grids.
- Device adopts unlock pattern to login by default if you have set pattern here. If there is no unlock pattern, please input the password to login.
- Click **Skip** if there is no need to set unlock pattern.

Figure 2-4



5. Input Email Address.  
Email: Input an email address for reset password purpose. In case you forgot password in

the future, input the security code you got on the assigned email to reset the password of admin. If you have not input email here or you need to update the email information, go to the **Main Menu->Setting->System->Account** to set.

You can use the email you input here or answer the security questions to reset admin password. Refer to [Reset Password](#) on page 15 for detailed information.

Deselect the email box and then click **Next** button to skip this step.

6. Set security questions.

**Security question:** Set security questions and corresponding answers. Properly answer the questions to reset admin password. In case you have not input security question here or you need to update the security question information, go to the **Main menu->Setting->System->Account** to set.

Deselect the security questions box and then click **Next** button to skip this step.

7. Click **Save** to complete the device initialization setup.

## Reset Password

If you forgot admin login password, there are two ways for you to reset password.

- When password reset function is enabled, scan the QR code on the user interface and use the email to reset password.
- When the password reset function is disabled, answer the security questions to reset password. If you have not set security questions, system pops up “Password reset function has been disabled” dialogue box, please use the reset button on the mainboard to restore factory default settings.

Steps:

1. Go to the device login interface. See [Figure 2-5](#) or [Figure 2-6](#). .
  - If you have set unlock pattern, device displays unlock pattern login interface. See [Figure 2-5](#). Click “Forgot unlock pattern”, device goes to [Figure 2-6](#).
  - If you have not set unlock pattern, device displays password interface. See [Figure 2-6](#).

---

**Note** Click **Switch User** button in [Figure 2-5](#) or click the user name in [Figure 2-6](#) and then then select a user from the dropdown list, you can login via other account.

---

Figure 2-5

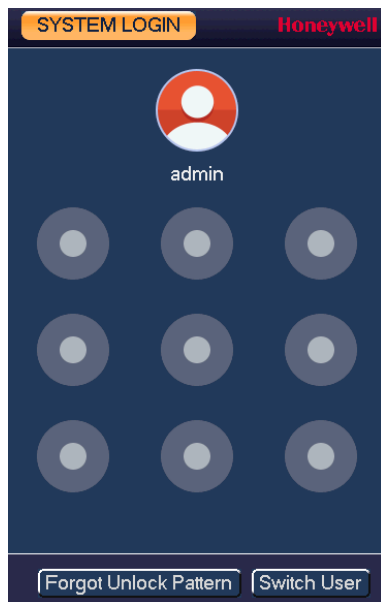
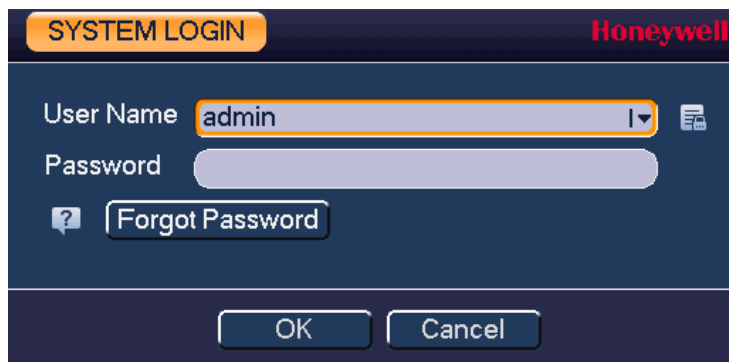



Figure 2-6



2. Click .

  - If you have not input email address information when you are initializing the device, the interface is shown as in [Figure 2-7](#). Please input an email address and then click **Next**, device goes to [Figure 2-8](#).
  - If you have input email when you are initializing the device, device goes to [Figure 2-8](#).



Figure 2-7

Reset the password Honeywell

Reset Type QR Code |

Email Address

To reset password, please input property or update in time

Cancel Next

Figure 2-8

Reset the password Honeywell

Reset Type QR Code |

SN: A059500544

Scan the QR code on the actual interface

Note(For admin only):  
Please use an APP to scan the left QR code to get special strings. And then send the strings to support\_gpwd@htmicrochip.com.

The security code will be delivered to 1\*\*\*@ABC.COM.

Security code

Cancel Next

### 3. Reset login password.

There are two ways to reset the password: Scan QR code and reset by email/security questions (local menu only).

- Email : In [Figure 2-8](#), follow the prompts on the interface to scan the QR code, and then input the security code you get via the assigned email.

**WARNING:** For the same QR code, max scan twice to get two security codes. Refresh the QR code if you want to get security code again.

The security code on your email is only valid for 24 hours.

- **Security questions:** In [Figure 2-7](#), select security question from the drop down list. Device displays security question interface. See [Figure 2-9](#). Please input the correct answers here.

---

**Note** There is no security question item from the dropdown list if you have not set the security question and corresponding answers when initializing the device.

---

**Figure 2-9**



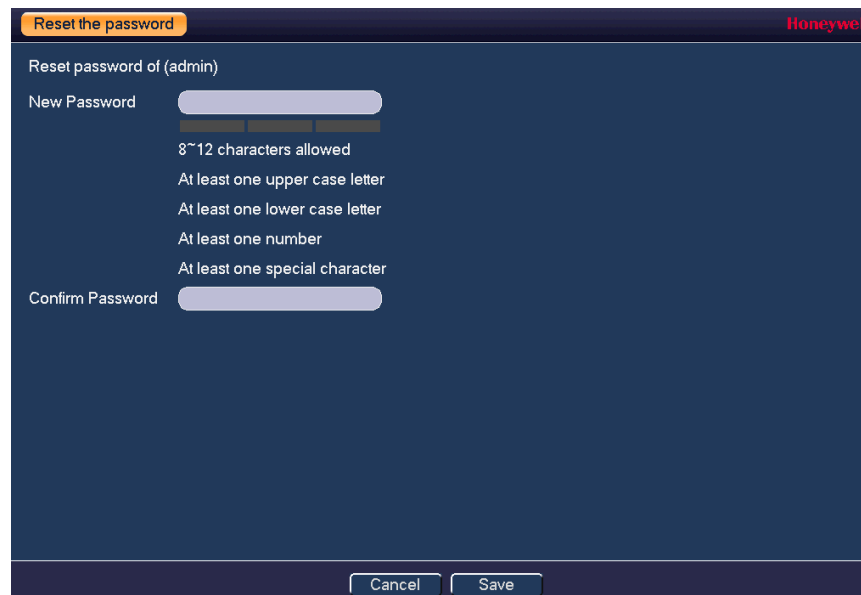
The screenshot shows a dark-themed interface titled "Reset the password" with the Honeywell logo in the top right. A "Reset Type" dropdown menu is set to "Security Questions". Below this, there are three question-answer pairs:

- Question 1: "What is your favorite children's book?" with an answer input field.
- Question 2: "What was the first name of your first boss?" with an answer input field.
- Question 3: "What is the name of your favorite fruit?" with an answer input field.

At the bottom of the screen, there are "Cancel" and "Next" buttons.

4. Click **Next**. Device displays reset password interface. See [Figure 2-10](#).

**Figure 2-10**



The screenshot shows the "Reset the password" interface for the "admin" user. It features two password input fields: "New Password" and "Confirm Password". Below the "New Password" field, the following requirements are listed:

- 8~12 characters allowed
- At least one upper case letter
- At least one lower case letter
- At least one number
- At least one special character

At the bottom of the screen, there are "Cancel" and "Save" buttons.

5. Input new password and then confirm.



## Setting Up the DVR with the Startup Wizard

Figure 2-13



The Startup Wizard opens by default when you turn on the DVR.

Using the wizard, you can:

- Configure general settings (device name, number, language, video standard)
- Set the date and time
- Configure network settings
- Link your Honeywell smartphone app to the DVR
- Configure video encoding settings
- Set up a recording schedule
- Configure recording settings

---

**Note**

If you want to bypass the wizard and go directly to live view, click **Cancel**. To prevent Startup Wizard from opening the next time you start the DVR, de-select the **Startup** check box.

---

## Using the Startup Wizard

1. Click **Next** to go to the System Login window.

Figure 2-14



2. Draw the password pattern or click **Forgot Unlock Pattern** to input the password to go to the General window.

Figure 2-15



For more information about configuring settings in the General window, see [Configuring System Settings](#) on page 115.

3. Click **Next** to go to the Network window.

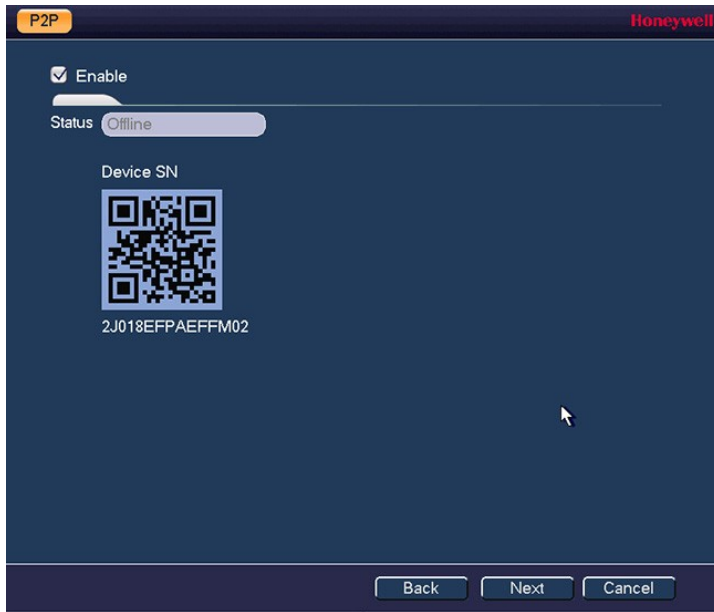
Figure 2-16



For more information about configuring settings in the **Network** window, see [Configuring TCP/IP and Port Settings](#) on page 71.

- Click **Next** to go to the P2P window.

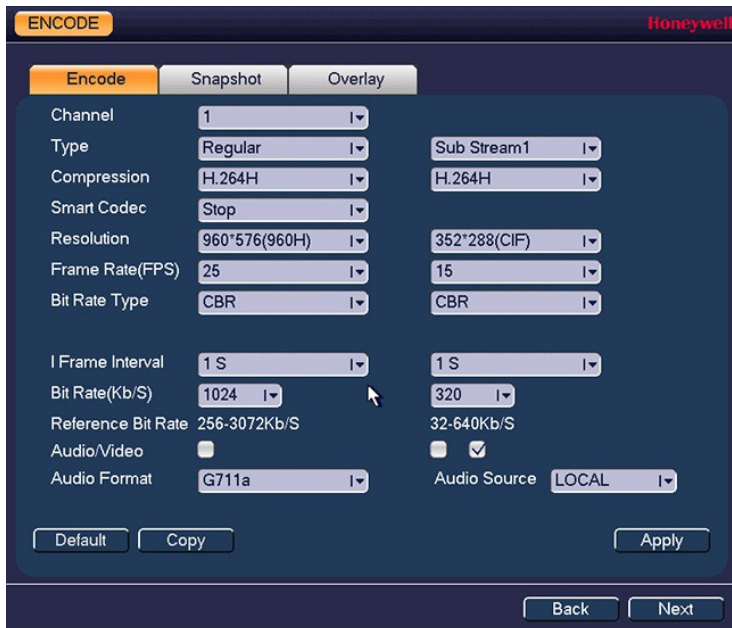
**Figure 2-17**



For more information about P2P, see [Configuring P2P Settings](#) on page 83.

- Click **Next** to go to the Encode window.

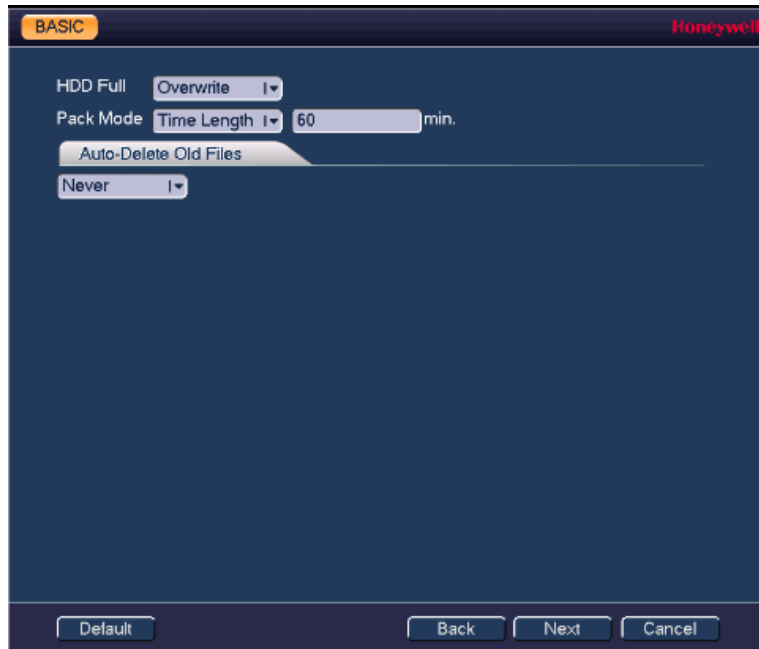
**Figure 2-18**



For more information about configuring settings in the Encode window, see [Configuring Encoding Settings](#) on page 62.

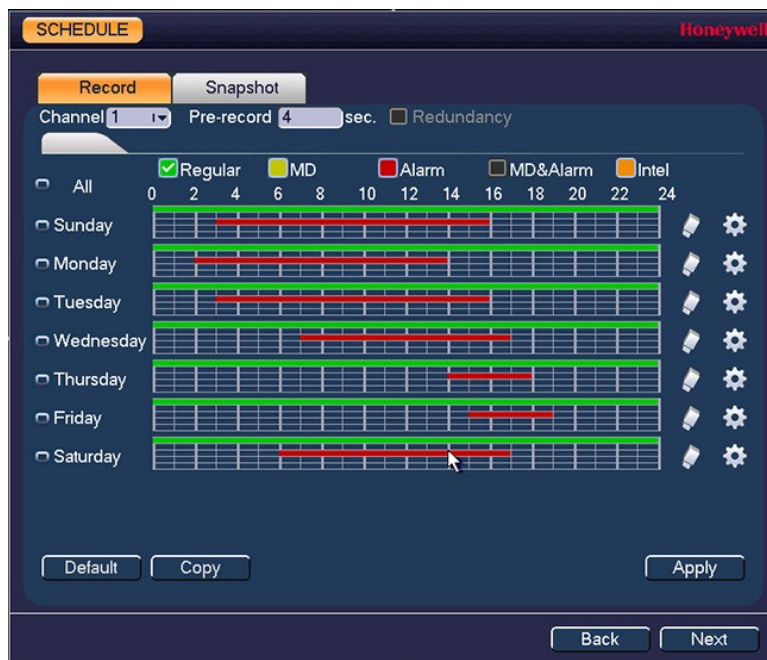
- Click **Next** to go to the BASIC window.

Figure 2-19



7. Click **Next** to go to the Schedule window.

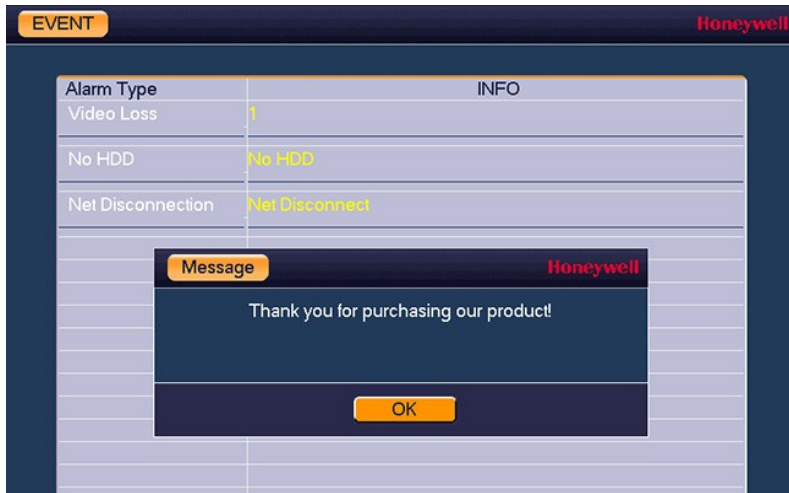
Figure 2-20



For more information about configuring settings in the **Schedule** window, see [Configuring the Video Recording Schedule](#) on page 39.

8. Click **Next**. The "Thank You" message appears:

Figure 2-21



9. Click **OK** to close the wizard.



# 3. Viewing Live Video

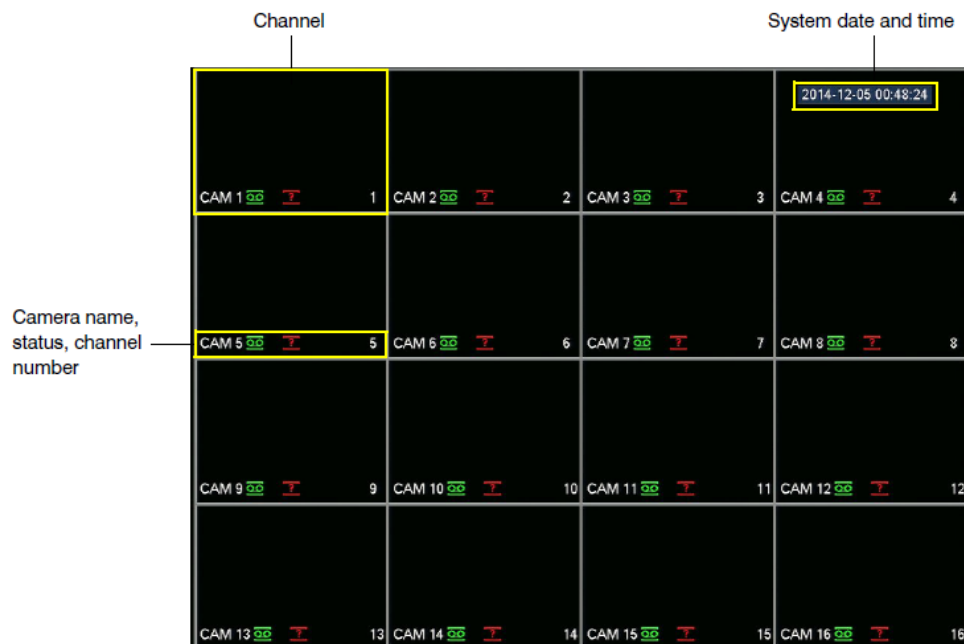
This chapter includes the following sections:

- [About Live View, page 25](#)
- [Configuring Live View, page 29](#)
- [Controlling PTZ Cameras, page 30](#)

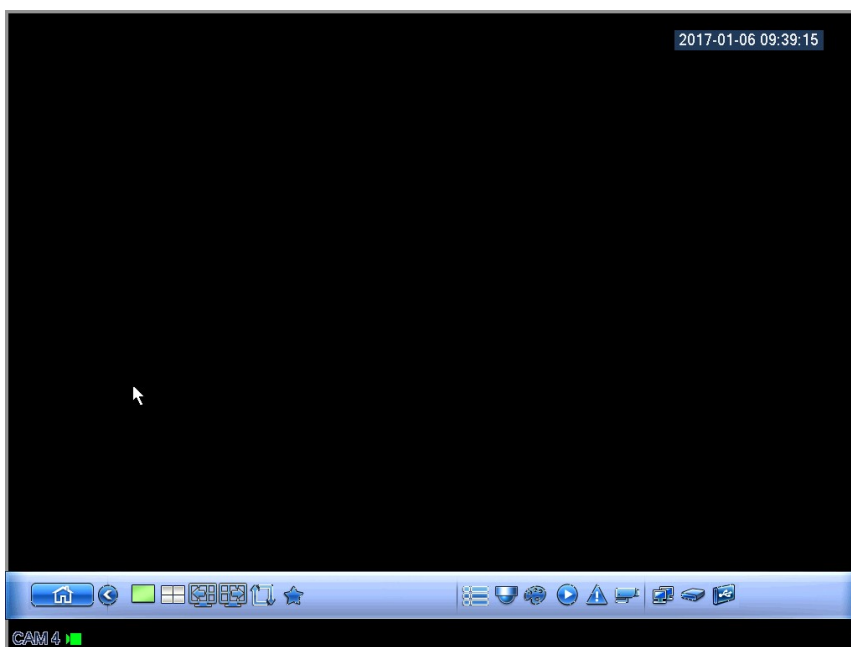
## About Live View

Live view is the DVR's default mode. When you start the DVR, live video from the connected cameras is displayed on the screen in a multi-channel layout (the number of channels displayed depends on whether you are using a 4-channel, 8-channel, or 16-channel DVR).

Figure 3-1







**Figure 3-2 Live View Window (Single Channel)**



## Camera Status

Camera status icons appear at the bottom of the channel window.

	Video is being recorded		No video signal
	Motion detected in scene		Camera locked


## Camera Toolbar





A camera toolbar is located at the top of each channel window. To display the toolbar, move the mouse pointer to the top of the channel window.

**Figure 3-3**



**Table 3-1**

	<b>INSTANT PLAY</b>	Play back the previous 5 to 60 minutes of recorded video.
		<b>Note:</b> The playback time is set to 5 minutes by default. You can change this setting in <b>Main Menu &gt; Setting &gt; System &gt; General &gt; General &gt; Instant Play</b> .

	<b>ZOOM</b>	Enlarge a specific area of the image. Click the button to enable digital zoom and then drag the mouse in the channel window to select the area that you want to enlarge.
	<b>REALTIME BACKUP</b>	Save a clip to a USB storage device. Click the button to start recording. Click again to stop recording. The clip is automatically saved to the connected USB storage device.
	<b>MANUAL SNAP</b>	Save a screen capture to the hard drive or to a connected USB storage device. To view the captured image, go to <b>Main Menu &gt; Operate &gt; Search</b> and click the <b>File List</b> button.
	<b>MUTE</b>	Mute the video sound (if applicable). Click the button to mute sound. Click again to enable sound. <b>Note:</b> Mute only works in single-channel view.

## Live View Toolbar



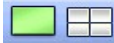


Figure 3-4














If enabled, the live view toolbar appears along the bottom of the live view screen.

The toolbar is disabled by default. To enable it, right-click and go to **Main Menu > Setting > System > General > General** and select the **Navigation** check box and then click **Apply**. Right-click twice to return to the live view screen. Click anywhere on the screen to display the toolbar.

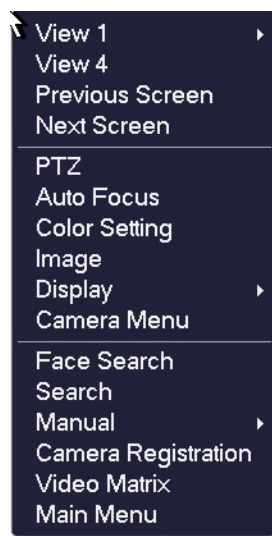
Table 3-2

	<b>Main Menu</b>	Open the main menu.
	<b>Expand/ Condense Toolbar</b>	Expand or condense the toolbar
	<b>Screen Layout</b>	Select screen layout format.
	<b>Previous/Next Screen</b>	Navigate to the previous or next screen/channel.
	<b>Tour Switch</b>	Enables tour (automatically cycles through channel views). See <a href="#">Configuring Tour Settings</a> on page 121.

	<b>Favorites</b>	Add/edit favorites. You can configure and save your favorite screen layout(s) so you can access them quickly.
	<b>Channel</b>	Click to select a channel.
	<b>Pan/Tilt/Zoom</b>	Open the PTZ control panel. See <a href="#">Controlling PTZ Cameras</a> on page 30.
	<b>Color Setting</b>	Open the <b>Color Setting</b> window. See <a href="#">Setting the Monitor Picture</a> on page 29.
	<b>Search</b>	Open the playback interface. See <a href="#">Playing Back Video</a> on page 44.
	<b>Event</b>	Open the <b>Event</b> information window.
	<b>Channel Info</b>	Open the <b>Channel Info</b> window.
	<b>Camera Registration</b>	Click to register or add an IP camera. See <a href="#">Registering/Finding an IP Camera</a> on page 59.
	<b>Network</b>	Open the <b>Network</b> window. See <a href="#">Configuring TCP/IP and Port Settings</a> on page 71.
	<b>HDD Manager</b>	Open the <b>HDD Manage</b> window. See <a href="#">Configuring HDD Settings</a> on page 110.
	<b>USB Manager</b>	Open the <b>USB Manage</b> window.

## Shortcut Menu

Figure 3-5



The shortcut menu is displayed by right-clicking anywhere on the screen in live view mode.

# Configuring Live View

## Setting the Screen Layout

The live view interface is configurable as a single-channel or multi-channel display.

### To change the screen display format using the shortcut menu

1. Right-click anywhere on the screen to display the shortcut menu.
2. Point to the View you want (View 1 is a single-channel layout, the others are multi-channel layouts), and then click the channel(s) that you want to display.

### To change the screen display format using the live view toolbar

- Click a screen layout button on the live view toolbar.

### To change the screen display format using the mouse

- Rotate the mouse wheel button.

### To move a channel to a different location in the multi-channel grid

- Drag the channel to a new location in the multi-channel grid.

For example, to move channel 2 to the top left position occupied by channel 1, click channel 2, drag it to channel 1's position, then release the mouse button.

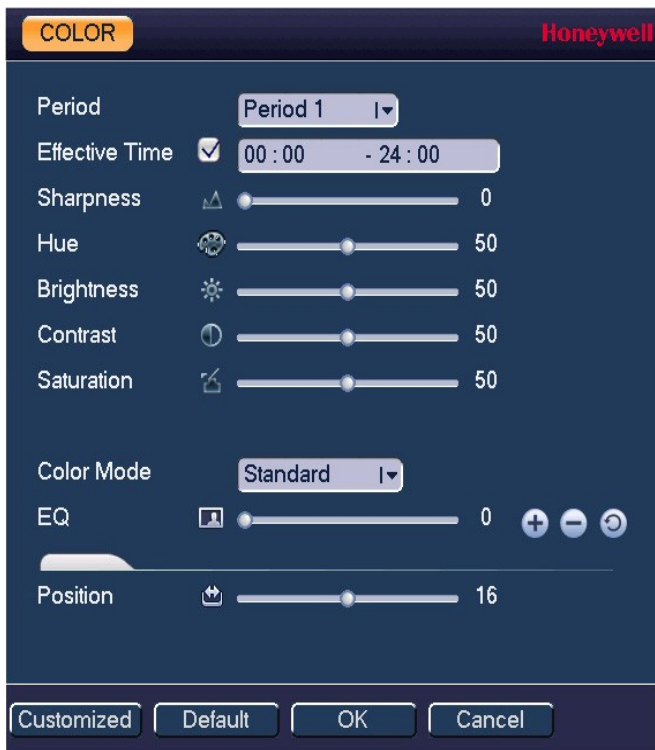
## Setting the Monitor Picture

You can configure different monitor picture settings for up to two time periods per day to accommodate changing lighting conditions.

### To configure monitor picture settings

1. Right-click anywhere on the screen to display the shortcut menu.
2. Click **Color Setting**. The Color Setting window opens.

Figure 3-6



3. In the Effective Time box, input the time range during which the settings will apply (for example, during daylight conditions from 07:00 - 19:00).
4. In the Color Mode box, select one of the preconfigured modes (Standard, Soft, Bright, Colorful, Bank, or Customized 1-4) or customize your own settings.

To customize your own settings, click **Customized** and define the following settings:

- Sharpness (0–15)
  - Hue (0–100)
  - Brightness (0– 100)
  - Contrast (0–100)
  - Saturation (0–100)
5. To configure settings for the remaining time, in the Period box, select Time Period 2, input the Effective Time, and select a Color Mode or adjust the settings manually.
  6. Click **OK** to save your settings.

## Controlling PTZ Cameras

This section describes how to configure PTZ connection settings, how to access the PTZ control panel, and how to configure and call PTZ presets, tours, and patterns.

To control PTZ cameras through the PTZ Control Panel, you will first have to configure the PTZ connection settings.

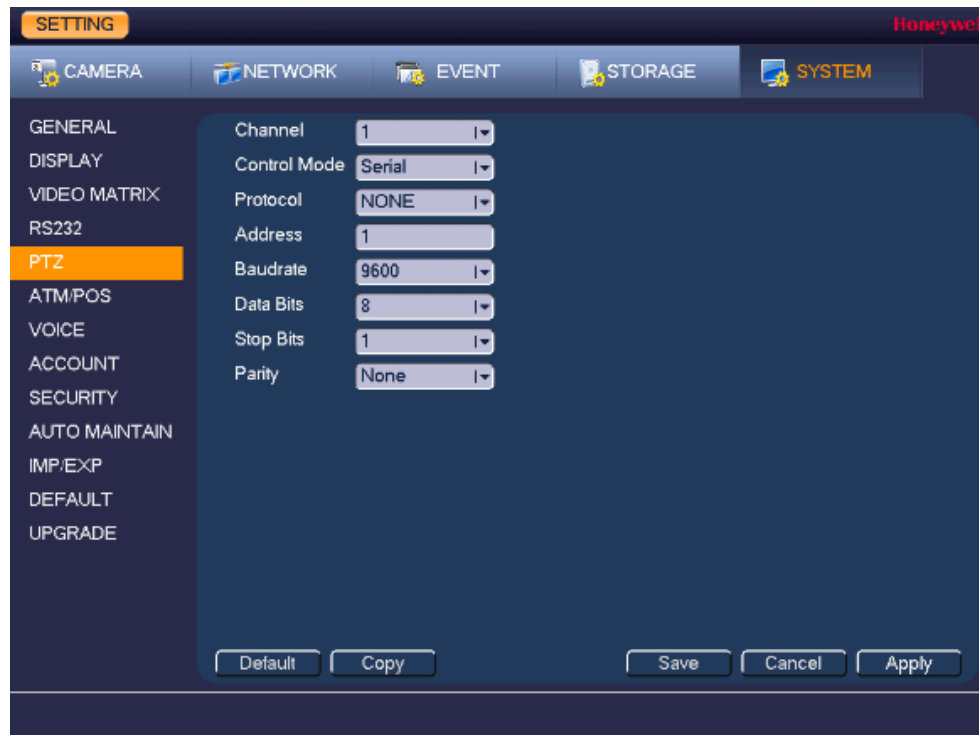
## Configuring PTZ Connection Settings

Before you can control a PTZ camera with the DVR, you must configure the PTZ connection settings.

### To configure the PTZ connection settings

1. Go to **Main Menu** → **Setting** → **System**.
2. In the left navigation pane, click **PTZ**.

Figure 3-7



3. Configure the following settings:
  - **Channel** Select the channel (camera) that you want to configure PTZ settings for.
  - **Control Mode** Select HQA.
  - **Protocol** Select the camera's PTZ control protocol from the list.
  - **Address** Enter the camera's address (ID).
  - **Baudrate** Select a value between 1200 and 115200. The default setting is 9600.
  - **Data Bits** Select a value between 5 and 8. The default setting is 8.
  - **Stop Bits** Select 1, 1.5, or 2. The default setting is 1.
  - **Parity** Select **None**, **Odd**, **Even**, **Mark**, or **Space**.
4. Click **Apply**, and then click **Save** to save your settings and exit.

## Working with the PTZ Control Panel

You can control a PTZ camera connected to the DVR's RS485 serial port using the on-screen PTZ control panel.

### Basic PTZ Control Panel

Right-click anywhere on the live screen and click **PTZ** to pen the PTZ Control Panel.

Figure 3-8

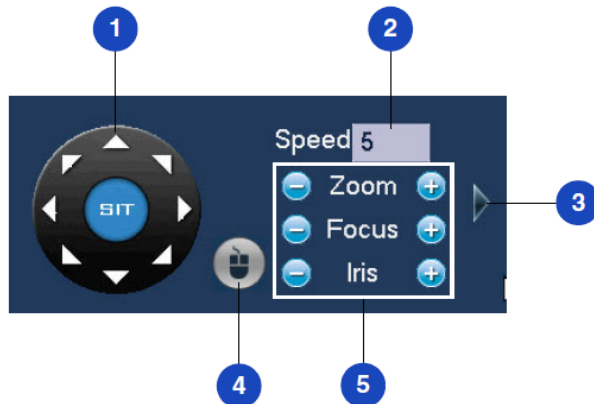


Table 3-3

#	Name	Function
1	Direction keys	Direct camera movement.
2	Speed	Adjust the camera speed. Select a value between 1 and 8.
3	Expand Arrow	Expand the control panel to display additional options.
4	PTZ Trace	Direct camera movement by dragging the mouse. Zoom in and out by rotating the wheel button.
5	Zoom, Focus, Iris	Adjust the camera's zoom, focus, and iris settings: Decrease zoom (-), increase zoom(+) Focus near (-), focus far(+) Iris close (-), iris open(+)



### Expanded PTZ Control Panel

Figure 3-9

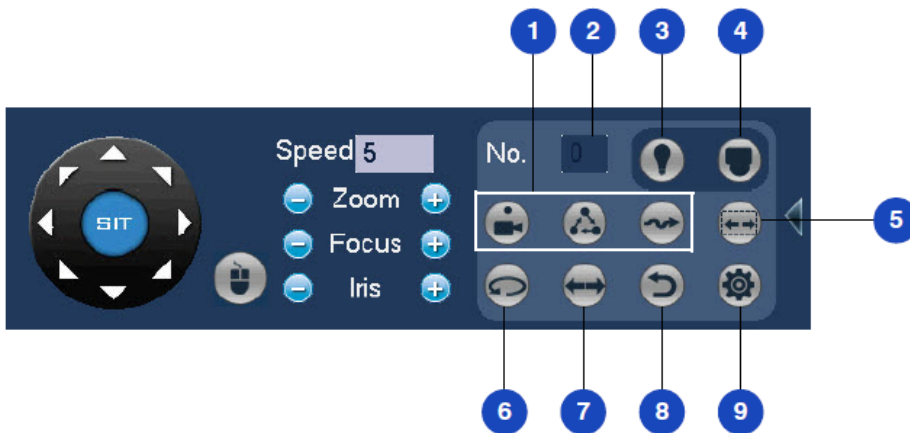


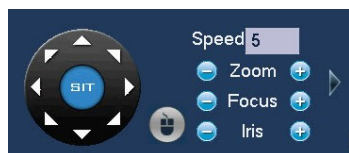
Table 3-4

#	Name	Function
1	Preset, Tour,	Configure/call PTZ functions.
2	No.	Enter number of PTZ function to call.
3	Aux	Call auxiliary functions.
4	Enter Menu	Enable up-the-coax OSD menu configuration for non-PTZ
5	AutoScan	Cause camera to continually pan between two points that you have defined.
6	AutoPan	Cause camera to continually rotate 360 degrees.
7	Flip	Cause camera to rotate 180 degrees.
8	Reset	Restore default settings.
9	Aux Config	Configure auxiliary functions.

#### To display the PTZ control panel

1. Right-click anywhere on the screen to display the shortcut menu.
2. Click **Pan/Tilt/Zoom**. The PTZ control panel opens.

Figure 3-10



3. To expand the PTZ control panel, click the arrow at the right side of the panel.



## Configuring PTZ Functions

You can configure presets, tours, patterns, and borders using the PTZ control panel.

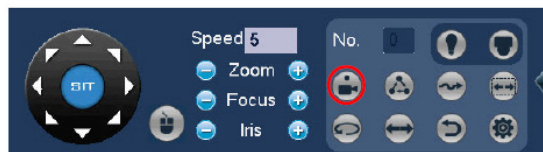
### Configuring PTZ Preset

You can program preset positions for the PTZ camera. For example, you can point the camera at a specific location, such as a doorway, when an alarm event occurs.

#### To program a preset

1. On the expanded PTZ control panel, click the **Preset** button.

Figure 3-11



2. Use the direction arrows to point the camera where you want to set as the preset, and then click **Set**.

Figure 3-12



3. In the Preset box, enter a number for the preset, and then click **Set** to save your settings.
  - To program additional presets, repeat steps 1 through 3.
  - To delete a preset, enter the number of the preset that you want to delete in the **Preset** box, and then click **Del Preset**.

---

**Note** Some protocols do not support the **Del Preset** function.

---

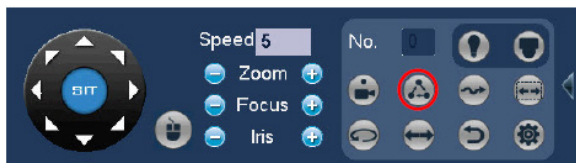
### Configuring PTZ Tours

You can set up the PTZ camera to go from preset to preset in a specific order.

#### To program a tour

1. On the expanded PTZ control panel, click the **Tour** button.

Figure 3-13



2. In the Preset box, enter the number of the first preset that you want to add to the tour.

Figure 3-14



3. In the Patrol No. box, enter a number for the tour.
4. Click **Add Preset** to add the preset to the tour.
5. Repeat steps 1 through 5 to add additional presets to the tour.
6. To delete a preset, enter the number of the preset that you want to delete in the Preset box, and then click **Del Preset**.

To delete a tour, enter the number of the tour that you want to delete in the Patrol No. box, and then click **Del Tour**.

---

**Note** Some protocols do not support the **Del Preset** function.

---

## Configuring PTZ Patterns

You can record a series of PTZ movements as a pattern. When you call the pattern in live view mode, the PTZ camera automatically moves along the path you have defined.

### To program a pattern

1. On the expanded PTZ control panel, click the Pattern button.

Figure 3-15



2. In the Pattern field, enter a number for the pattern.

Figure 3-16



3. Click **Begin**, and then use the direction arrows to direct the camera.
4. When you have finished directing the camera, click **End**.

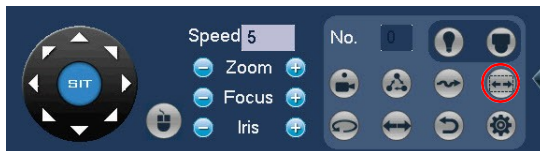
### Configuring PTZ Borders

You can define the left and right borders of the PTZ camera's pan movement.

#### To program a scan

1. On the expanded PTZ control panel, click the **AutoScan** button.

Figure 3-17



2. Use the direction arrows to set the camera's leftmost limit, then click **Left**.

Figure 3-18



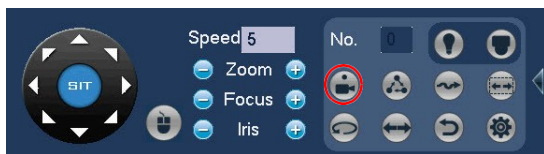
3. Use the direction arrows to set the camera rightmost limit, then click **Right**.

### Calling Presets, Tours, and Patterns

#### To call a preset

1. On the expanded PTZ control panel, in the No. box, enter the number of the preset that you want to call, and then click the **Preset** button.

Figure 3-19

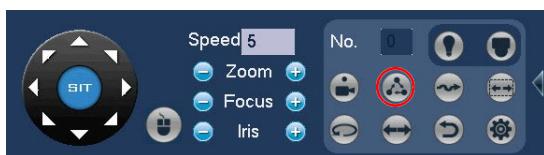


2. Click the **Preset** button again to stop calling the preset.

#### To call a tour

1. On the expanded PTZ control panel, in the No. box, enter the number of the tour that you want to call, and then click the **Tour** button.

Figure 3-20



2. Click the **Tour** button again to stop calling the tour.

#### To call a pattern

1. On the expanded PTZ control panel, in the No. box, enter the number of the pattern that you want to call, and then click the **Pattern** button.

Figure 3-21



2. Click the **Pattern** button again to stop calling the pattern.

## Configuring Auxiliary Settings

Refer to the user guide of your PTZ camera for details on configuring auxiliary settings.

# 4. Recording Video


This chapter contains the following sections:

- [Manual Record Settings, page 38](#)
- [Automatic Record Settings, page 38](#)

## Manual Record Settings

In live view mode, you can manually record a clip directly to a connected USB storage device.

### To record a video clip in live view mode

1. Connect a USB storage device (such as a USB flash drive) to one of the USB ports on the DVR.
2. The **Find USB device** dialog box opens automatically. Right-click to close the window.
3. In live view mode, move the mouse pointer to the top of the channel window to display the camera toolbar (see [Camera Toolbar](#) on page 26).
4. On the camera toolbar, click the **Realtime Backup** button  to start recording. The button changes to green while the DVR is recording.
5. Click the **Realtime Backup** button again to stop recording.

The video clip is saved automatically to the connected USB storage device. The file name uses the following format: [DVR name]\_[channel]\_[video stream]\_[recording start time]\_[recording end time]).dav.

## Automatic Record Settings

The DVR supports independent real-time recording of each channel, even while searching and playing recorded video.

To set up automatic recording, you have to do the following:

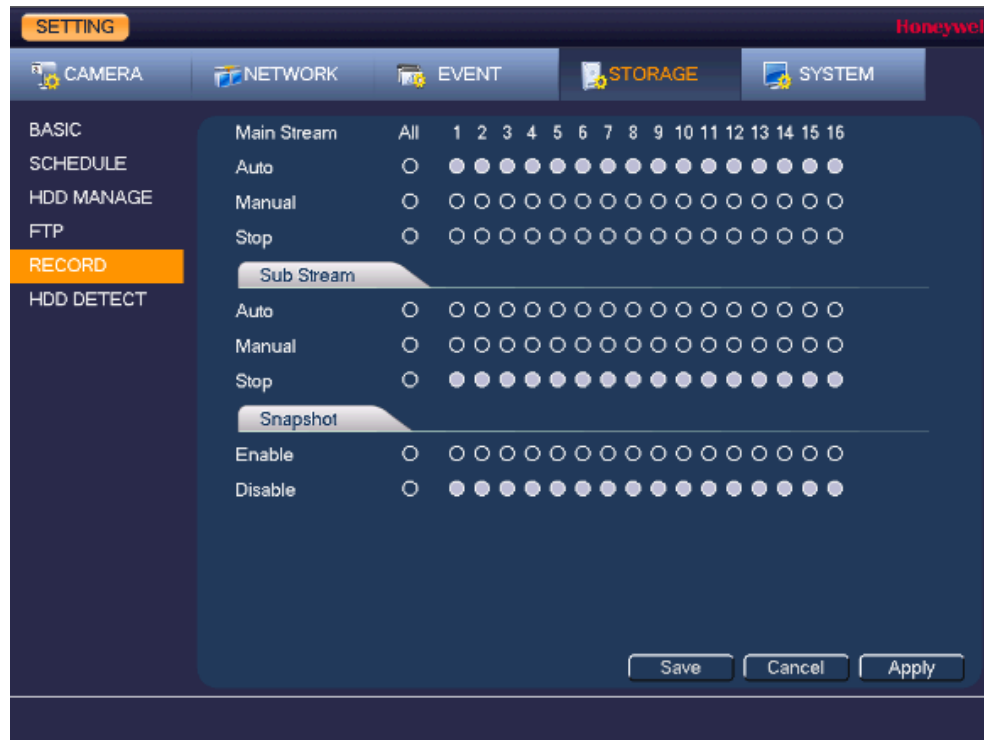
1. Select the recording type. (See [Configuring General Record Settings](#) on page 39.)
2. Configure the recording schedule. (See [Configuring the Video Recording Schedule](#) on page 39.)
3. Configure the snapshot recording schedule. (See [Configuring the Snapshot Recording Schedule](#) on page 41.)
4. Configure the snapshot recording settings. (See [To configure snapshot recording settings](#) on page 41.)

## Configuring General Record Settings

To configure general record settings

1. Go to Main Menu → Setting → Storage → Record.

Figure 4-1



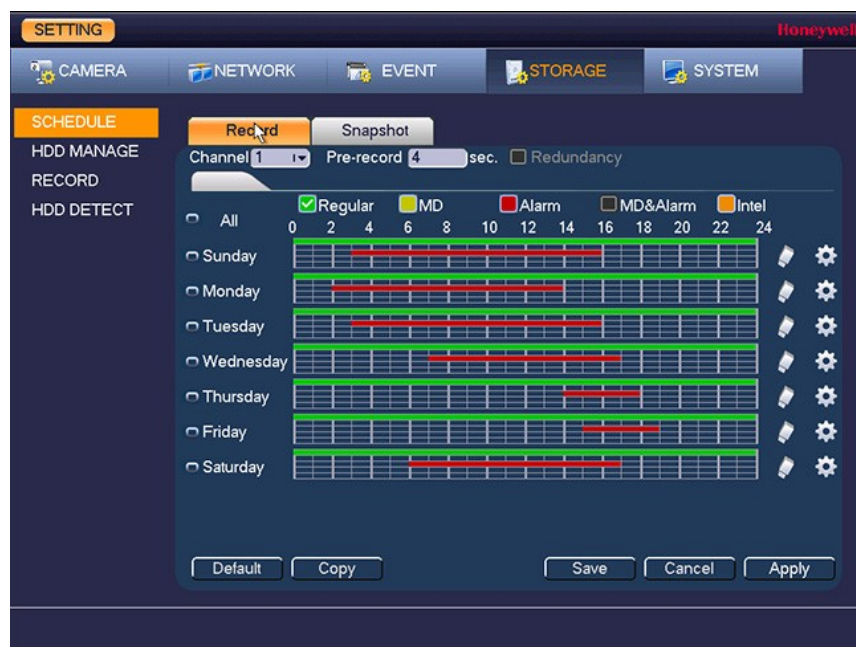
2. On the **Record** page, select the record types (Auto, Manual, Stop) that you want to enable on each channel for both the main stream and sub stream.
3. Under **Snapshot**, enable snapshot recording on the desired channels.
4. Click **Apply**, and then click **OK**.

## Configuring the Video Recording Schedule

To configure the video recording schedule

1. Go to Main Menu → Setting → Storage → Schedule → Record.

Figure 4-2



2. On the Record tab, in the Channel box, select the channel (camera) that you want to configure a recording schedule for.
3. In the PreRecord box, enter a time between 0 and 30 seconds. The default setting is 4 seconds. The pre-record time sets how long the DVR records before the scheduled recording start time.
4. If the DVR has two HDDs, select the Redundancy check box to enable redundant recording on the second HDD. This HDD must first be configured on the HDD Manage page (see [Configuring HDD Settings](#) on page 110).
5. At the top of the scheduling table, select the check box(es) of the recording type(s) that you want to schedule:
  - **Regular**            The regular recording schedule is indicated by a green bar.
  - **MD**                    The motion detection recording schedule is indicated by a yellow bar.
  - **Alarm**                The alarm recording schedule is indicated by a red bar.
  - **MD&Alarm**        The motion detection and alarm schedule is indicated by a blue bar.
  - **Intel**                 Intelligent identification recording, or Face Detection recording, is indicated by an orange bar.
6. At the left of the scheduling table, select the day(s) of the week that you want to configure a recording schedule for. To configure the same recording schedule for all of the days at the same time, select **All**.
7. Click or drag the mouse in the scheduling table to set the recording period. To erase a recording period, click the eraser icon at the right of the table. Alternatively, for the day of the week that you want to configure, click the gear icon at the right of the table. In the Period window, set up to six recording periods. To copy the settings to additional days, select the appropriate check box (es) under Copy, and then click **Save**.
8. Click **Apply** to save your settings.



- To copy the record schedule settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

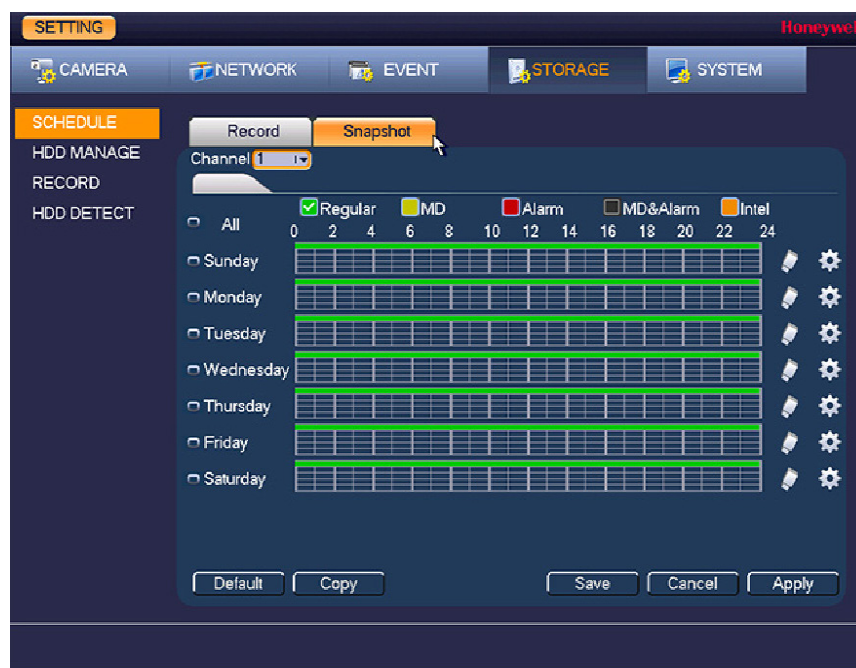
## Configuring the Snapshot Recording Schedule

Follow these steps to configure the snapshot recording function. When enabled, the DVR can take snapshots when a motion detection, video loss, video tampering, or alarm event occurs. See [Chapter 8, Configuring Event Settings](#) for detailed instructions.

### To configure the snapshot recording schedule

- Go to **Main Menu** → **Setting** → **Storage** → **Schedule** → **Snapshot**.

Figure 4-3



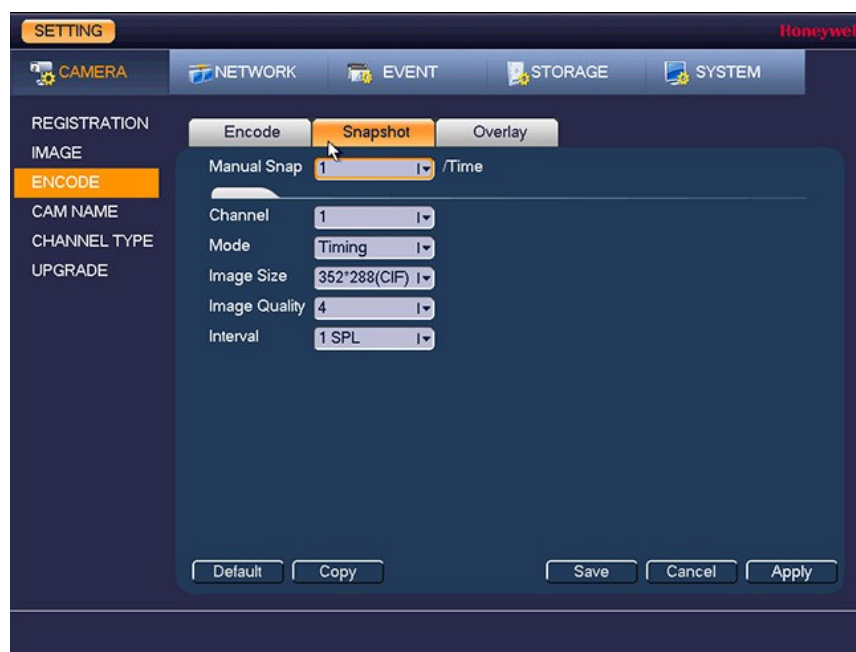
- On the Snapshot tab, in the Channel box, select the channel (camera) that you want to configure a snapshot schedule for.
- At the top of the scheduling table, select the check box(es) of the recording type(s) that you want to schedule:
  - Regular** The regular recording schedule is indicated by a green bar.
  - MD** The motion detection recording schedule is indicated by a yellow bar.
  - Alarm** The alarm recording schedule is indicated by a red bar.
  - MD&Alarm** The motion detection and alarm schedule is indicated by a blue bar.
  - Intel** Intelligent identification recording, or Face Detection recording, is indicated by an orange bar.
- At the left of the scheduling table, select the day(s) of the week that you want to configure a recording schedule for. To configure the same recording schedule for all of the days at the same time, select **All**.

- Click or drag the mouse in the scheduling table to set the recording period. To erase a recording period, click the eraser icon at the right of the table. Alternatively, for the day of the week that you want to configure, click the gear icon at the right of the table. In the Period window, set up to six recording periods. To copy the settings to additional days, select the appropriate check box(es) under Copy, and then click **Save**.
- Click **Apply** to save your settings.
- To copy the record schedule settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

### To configure snapshot recording settings

- Go to **Main Menu → Setting → Camera → Encode → Snapshot**.

Figure 4-4



- On the Snapshot tab, configure the following settings:
  - Manual Snap** Select the number of snapshots to take at a time.
  - Channel** Select the channel that you want to configure the settings for.
  - Mode** Select **Timing** to take snapshots according to a schedule. Select **Trigger** to take snapshots when a motion detection, video loss, video tampering, or alarm event occurs.
  - Image Size** Select a file size (**D1, HD1, 2CIF, CIF**).
  - Image Quality** Select a value between **1** and **6**, with **6** being the highest quality.
  - Interval** Select a value between **1 SPL** (second per picture) and **7 SPL** or click **Customized** to enter your own setting.
- Click **Apply** to save your settings.
- To copy the settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

---

**Note**

The DVR assigns event-activated snapshots a higher priority than schedule-activated snapshots. If you have enabled both of these types of snapshots, then the system activates an activation snapshot when an alarm occurs. If there is no alarm, then the DVR takes snapshots according to the schedule setup.

---

# 5. Playing Back Video

This chapter includes the following sections:

- [Playing Back Video, page 44](#)
- [Playing Back Snapshots, page 50](#)
- [Backing Up Video and Snapshots, page 50](#)

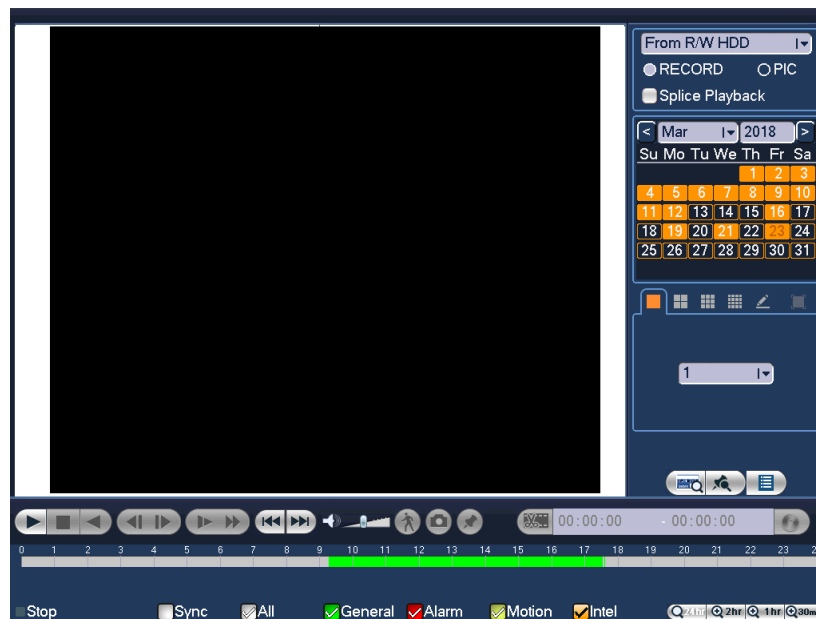
## Playing Back Video

### Searching For and Playing Back Video

To search for and play back recorded video by date

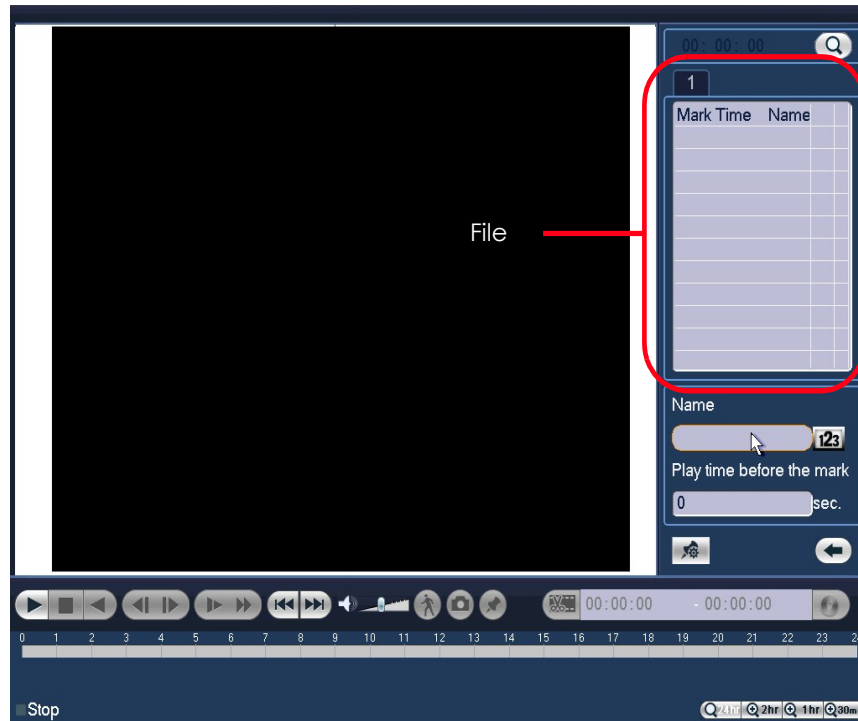
1. Go to **Main Menu** → **Operation** → **Search**. The playback interface opens.

Figure 5-1



2. On the right panel of the playback interface, in the calendar area, click the date(s) that you want to search. Dates with recorded video are solid orange.
3. Below the calendar, select the screen layout that you want to use, and then select the channel(s) that you want to search.
4. At the bottom of the screen, select the recording type(s) that you want to search (General, Alarm, Motion) or select All Record to search all recording types.
5. Click the **File List** button to display the list of search results.

Figure 5-2



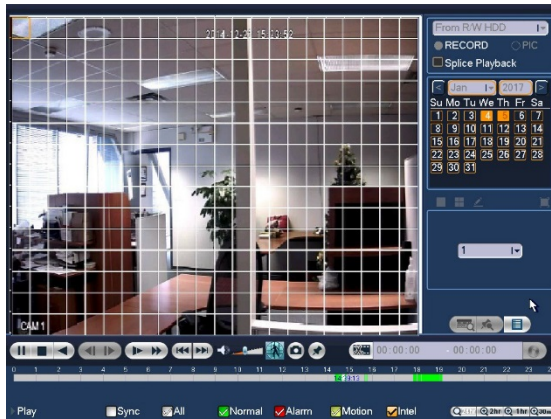
6. From the list of search results, double-click the recorded video file that you want to play back. The video begins playing in the playback window.
7. Use the playback controls at the bottom of the screen to control playback. Playback modes include slow play, fast play, reverse play, and frame-by-frame playback.
8. To jump forward or backward in the video, click the time bar at the desired time. To zoom in or out on the time bar, click one of the options in the lower right corner of the screen: 24 h, 12 h, 1 h, or 30 min.

## Smart Search

### To quickly locate activity using Smart Search

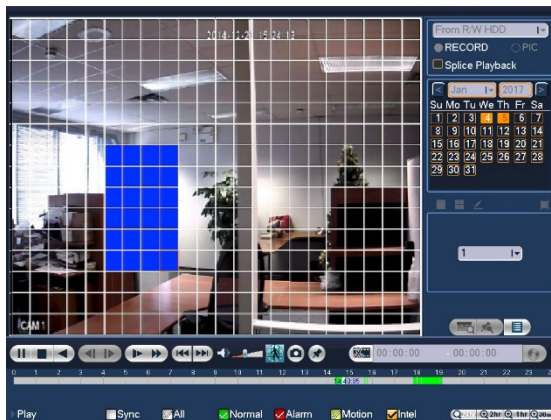
1. During video playback, click the Smart Search button. A grid is superimposed over the playback window.

Figure 5-3



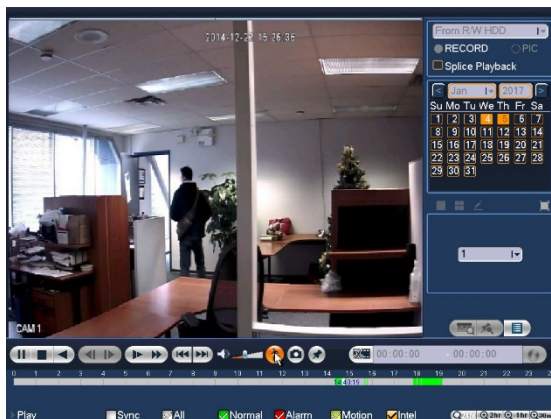
2. Drag the mouse over the area that you want to search for activity.

Figure 5-4



3. Click the **Smart Search** button again. Playback jumps to all the parts of the video where there is activity in that area.

Figure 5-5



4. To exit Smart Search, click the **Smart Search** button again. The message "Are you sure to exit smart search now?" appears. Click **OK**.

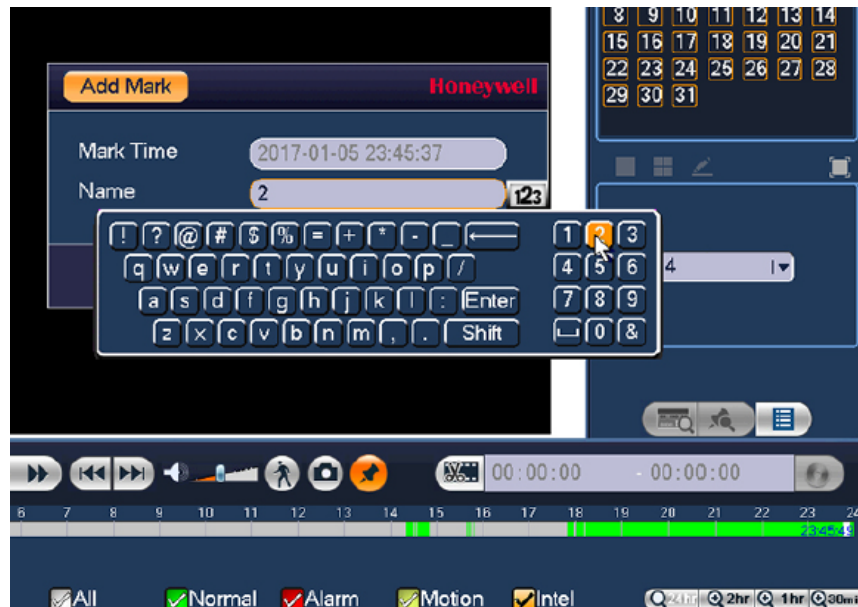
## Marking and Playing Back Video

When you are viewing recorded video, you can mark the recording where something important happens. You can then easily find this important moment by searching for the time or key words.

### Marking Video

1. Click the **Mark** button  while in playback2 mode. The Add Mark window appears.


Figure 5-6



2. Enter a Name, then click **OK**.

**Note:** Marked video playback must be done in 1-window mode.

### Playing Back Marked Video

1. Click the **Mark File List** button  while in Playback mode. The Mark File list appears.
2. Double-click a marked file to begin playback.

---

**Note** If the marked file you want to play is missing, the DVR begins playback from the first file in the list.

---

### Playing Back Before Marked Time

In the **Play back time before the mark** field in the **Playback** interface, you set the DVR to play N seconds of recorded video before the marked time.

---

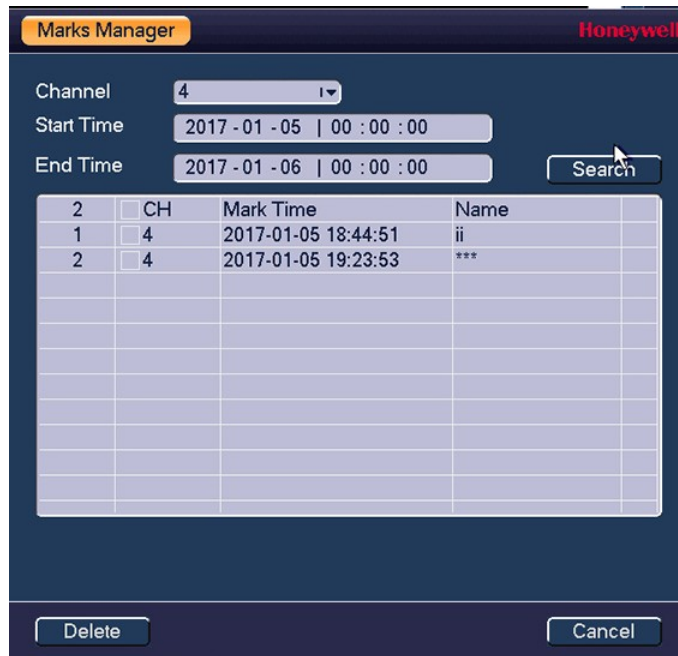
**Note** The DVR can only play N seconds of recorded video before the marked time if there is N seconds of recorded video before the mark. If there isn't, it will play as much pre-mark video as there is.

---

## Managing Marked Video

Click the **Mark File List** button  in the **Search** interface. The **Marks Manager** interface appears.

Figure 5-7



In this interface, you can view all the mark information for the currently selected channel.

**Note** After opening the **Marks Manager** interface, the DVR pauses current playback. The DVR continues playback after you exit the **Marks Manager** interface.

## Modifying Marked Video

**Note** The only thing you can change about marked video is the name.

1. Double-click a marked time in the Marks Manager window. A dialog box appears.
2. Change the name of the marked time.
3. Click **OK**.

## Deleting Marked Video

1. Click to select a marked time in the Marks Manager window.
2. Click **Delete**.



## Splice Playback

Use **Splice Playback** to play several sections of the same file at the same time.

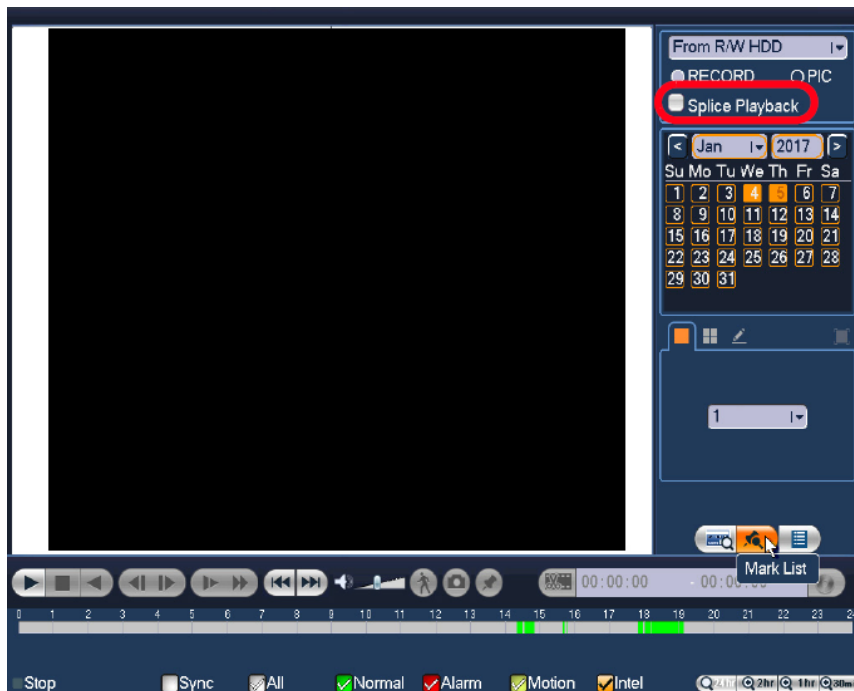
**Note** **Splice Playback** is for the single-window playback mode only.

**Note** The DVR system supports 1/4/8/16-split mode. However, slight differences might occur.

### To simultaneously view multiple sections of a file

1. Click to enable Splice Playback in the Search window.

Figure 5-8



2. Select the Channel, Date, and the playback window layout (the split mode). The Splice Playback time bar uses a triangle to mark each section of the file.

Figure 5-9



3. Play back the recorded file.
  - Click **Playback** to play from the beginning of the current day, by default.
  - Click on the **Time Bar** to play a specific time.

- Click  to select a file.

---

**Note**

The minimum period for each section is 5 minutes. If a recording is less than 20 minutes, select 4-split mode (or more) and the system automatically adjusts to that each section is 5 minutes. In this situation, some channels might not display any video.

---

## Playing Back Snapshots

### To search for and play back snapshot images by date

1. Go to **Main Menu > Operate > Search**. The playback interface opens.
2. On the right panel, below the search type box at the top of the panel, select **PIC**.
3. In the Interval box, enter the playback interval in seconds. Enter a time between 1 and 60 seconds. The default setting is 1 second.
4. In the calendar area, click the date(s) that you want to search. Dates with saved snapshots are solid orange.
5. Below the calendar, select the screen layout that you want to use, and then select the channel(s) that you want to search.
6. Click the File List button to display the list of search results.
7. In the list of search results, double-click the snapshot file that you want to play back. The snapshot appears in the playback window.
8. Playback cycles through all of the snapshot files in the file list at the interval you specified in the Interval box. To pause playback, click the Pause button in the control panel below the playback window. To go to the next snapshot, click the Next Frame button. To go to the previous snapshot, click the Prev Frame button.

---

**Note**

The green time bar in the snapshot playback interface only shows approximately when snapshots were taken. Click **File List** to do an accurate search.

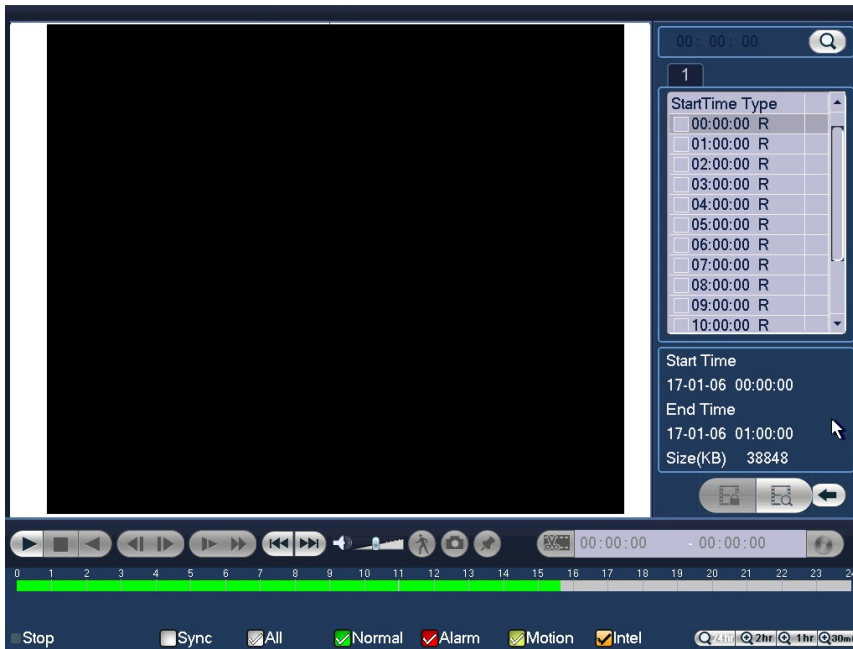
---

## Backing Up Video and Snapshots

### To back up from inside the playback interface

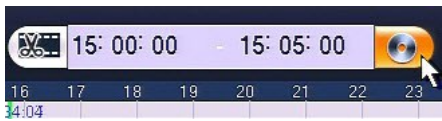
1. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR.  
  
Search for the recorded video or snapshot file(s) that you want to back up (see [Playing Back Video](#) on page 44 and [Playing Back Snapshots](#) on page 50).
2. Click the **File List** button to display the list of search results.
3. In the list of search results, select the check box (es) of the file(s) that you want to back up.

Figure 5-10



Alternatively, during video playback, in the video clip time field, enter the desired start time and end time, and then click the **Backup** button.

Figure 5-11



4. The Backup window opens, displaying the selected video file/clip.
5. In the Backup window, click **Backup**.

**Figure 5-12**



The **Browse** window of the USB storage device opens.

**Figure 5-13**



6. Click **Start** to back up the file(s). If the backup is successful, the message "Backup finished" appears.

**To back up from outside of the playback interface**

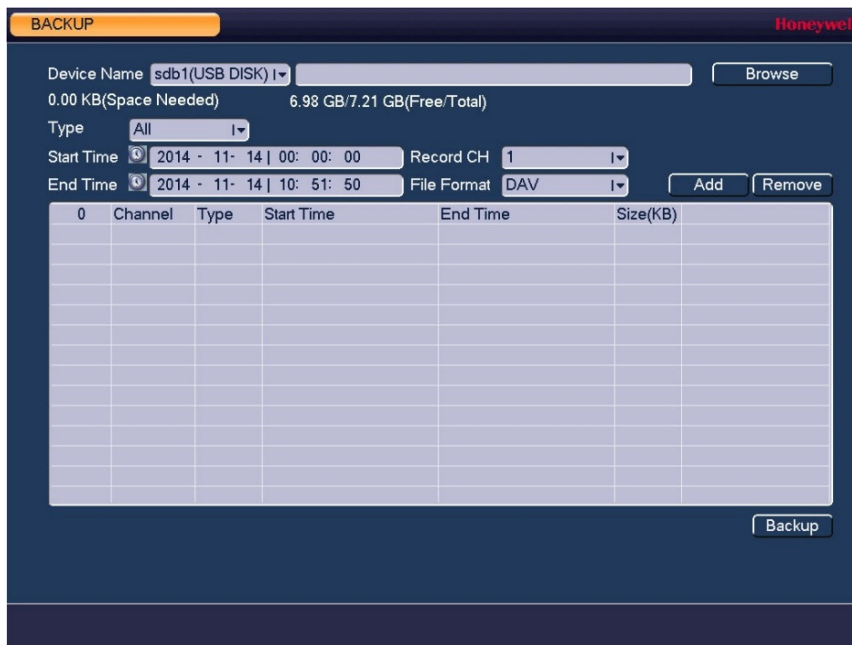
1. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR. The Find USB device dialog box opens.

Figure 5-14



- In the Find USB device dialog box, click **File Backup**.

Figure 5-15



- In the Backup window, configure the following settings:
  - Type** Select the file type that you want to search for.  
**Note:** To search for snapshots, select **PIC**, as **All** means all video files (excluding snapshots).
  - Start Time** Enter the start time of the search.
  - End Time** Enter the end time of the search.
  - Record CH** Select a specific channel to search or select **All** to search all channels.
  - File Format** Select **DAV** or **ASF** as the video file format.
- Click **Add** to display the search results in the file list.

**Note**

If there are too many files in the selected time, only the first 1024 files in the search period will be displayed. Refine the **Start Time** and **End Time** to find the desired files for backup.

5. Select the check box (es) of the file(s) that you want to back up, and then click **Backup**. The **Browse** window of the USB storage device opens.
6. Click **OK** to back up the file(s).

# 6. Configuring Face Search

To configure the Face search:

Go to Main Menu → Operate → Face Search.

Figure 6-1

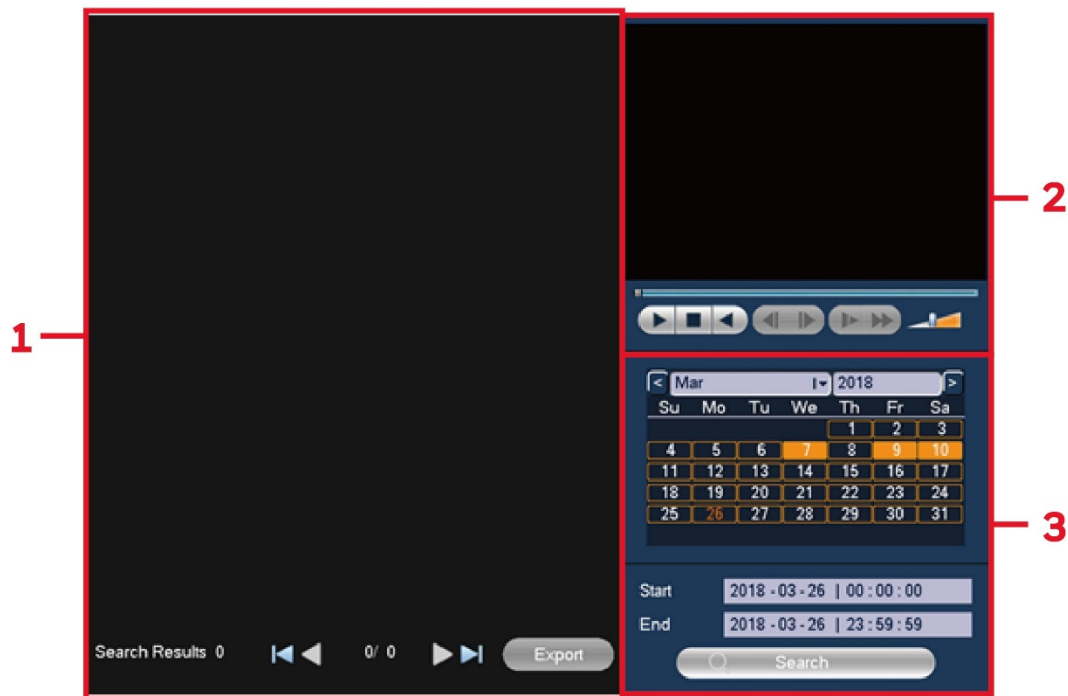


Table 6-1

Number	Name	Function
1	Display pane	Displays human face detection file list. The latest file is at the top. Click <b>Export</b> , you can export the selected file to the USB device. There are two types: image/record. <b>Image</b> : Export the recognized human face image. <b>Record</b> : Export the record file before and after 10 seconds when the DVR recognizes the human face.
2	Playback pane	Play the searched record file or image. Double click to playback in full screen.
3	Search pane	Set date, start time and end time, click <b>Search</b> button, you can view the corresponding file list.

# 7. Configuring Backup Settings

## To configure Backup settings

1. Go to **Main Menu → Operate → Backup**. You can view backup device name and its total space and free space. The device includes CD-RW, DVD burner, USB device, flash disk, eSATA backup.

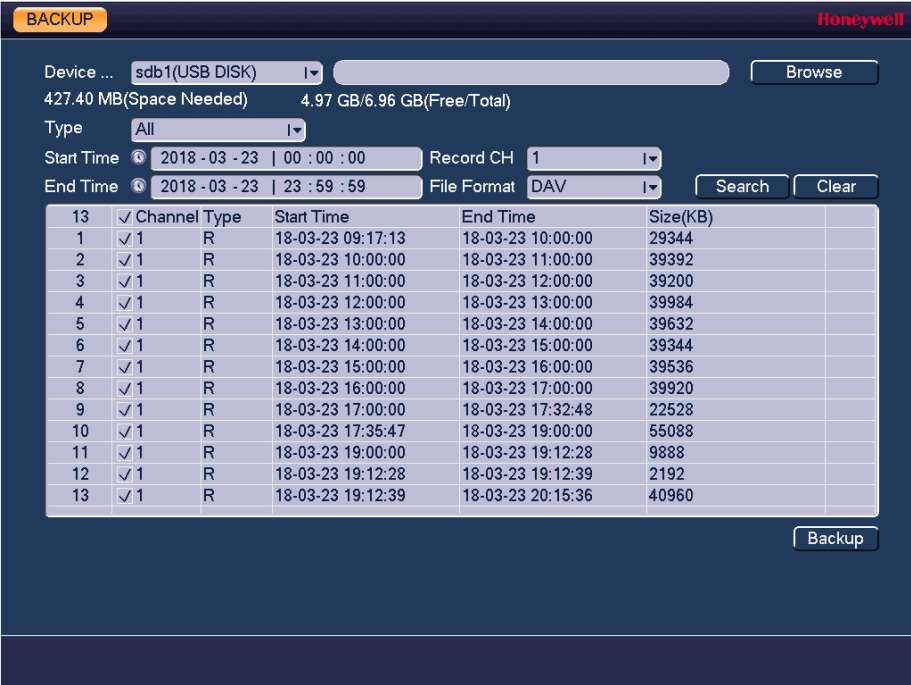
Figure 7-1

The screenshot shows the 'BACKUP' configuration screen. At the top left is a 'BACKUP' tab and at the top right is the 'Honeywell' logo. The main area contains several configuration fields: 'Device ...' with a dropdown menu showing 'sdb1(USB DISK)' and a 'Browse' button; '0.00 KB(Space Needed)' and '4.97 GB/6.96 GB(Free/Total)'; 'Type' with a dropdown menu showing 'All'; 'Start Time' with a calendar icon and a time field set to '2018 - 03 - 26 | 00 : 00 : 00'; 'Record CH' with a dropdown menu showing '1'; 'End Time' with a calendar icon and a time field set to '2018 - 03 - 26 | 09 : 50 : 40'; and 'File Format' with a dropdown menu showing 'DAV'. There are 'Search' and 'Clear' buttons to the right of the 'End Time' field. Below these fields is a table with the following columns: '0', 'Channel', 'Type', 'Start Time', 'End Time', and 'Size(KB)'. The table is currently empty. At the bottom right of the interface is a 'Backup' button.

2. Select backup device and then set channel, file format, file start time and end time.
3. Click **Search**, the system begins to search. All matched files will be listed as below. The system automatically calculates the capacity needed and remained.



Figure 7-2



**Note:** System only backup files with a √ before channel name. You can use Fn or cancel button to delete √ after file serial number.

- 4. Click **Backup**, system begins to copy the information. At the same time, the backup button becomes **Stop** button. You can view the remaining time and process bar at the left bottom.

Figure 7-3



**Note:**

- The file name format usually is: Channel number+Record type+Time. In the file name, the YDM format is Y+M+D+H+M+S. File extension name is .dav.
- During backup process, you can click **ESC** to exit current interface for other operation. The system will not terminate backup process.
- When you click stop button during the burning process, the stop function becomes activated immediately. For example, if there are ten files, when you click stop system just backup five files, system only save the previous 5 files in the device (But you can view ten file names).

# 8. Configuring Camera Settings

This chapter contains the following sections:

- [Registering/Finding an IP Camera, page 59](#)
- [Configuring Image Settings, page 61](#)
- [Configuring Encoding Settings, page 62](#)
- [Configuring Snapshot Settings, page 63](#)
- [Configuring Privacy Mask Settings, page 64](#)
- [Configuring the Text Overlay, page 65](#)
- [Changing a Camera Name, page 66](#)
- [Changing a Channel Type, page 66](#)
- [Upgrading Device, page 70](#)

## Registering/Finding an IP Camera

---

**Note**

You must first designate channels as IP (rather than BNC or UTP), apply that IP designation, and reboot the DVR before you can see the REGISTRATION tab. See [Adding IP Channels](#) on page 67.

---

**To register an IP camera**

1. Go to **Main Menu** → **Setting** → **Camera** → **Registration**.

Figure 8-1



2. Either click **IP Search** to automatically find IP cameras.
  - a. Click to select a found IP camera.
  - b. Click **Add** to add the found IP camera to the Added Device list.

---

**Note** If the DVR fails to display the model name of a found IP camera, click **IP Search** to rediscover the online IP cameras. The model name should appear in the **Added Device** list.

---

OR

Click **Manual Add** to manually add an IP camera.

- a. Manually configure the following settings:
  - **Decode Buffer** Select a decode buffer, from Default, Real Time, or Fluent.
  - **Channel** Select from a drop-down menu of options.
  - **Manufacturer** Select Private, Panasonic, Sony, Dynacolor, Samsung, AXIS, Arecont, ONVIF, PSIA, or General.
  - **IP Address** Enter the IP address for the camera.
  - **TCP Port** Enter the TCP port for the camera. (Optional)
  - **Username** Enter a username.
  - **Password** Enter a password.
  - **Channel** Select from a drop-down menu of options.
  - **Remote Channel** Select a video stream, or multiple video streams, from a device.

- b. Click **Save**. The newly added camera appears in the **Added Device** list.
- c. Click **Apply** to save your settings.
- d. If you want to save your settings and exit the **Settings** menu, click **OK**.

## Configuring Image Settings

You can configure the image settings (saturation, brightness, contrast, sharpness) for each connected camera.

To configure a camera's image settings

1. Go to **Main Menu** → **Setting** → **Camera** → **Image**.

Figure 8-2



2. In the Channel box, select the camera that you want to configure.
3. In the Period, box, select a time period for the image settings. These image settings will be used only during this period.
4. In the Effective Time box, click to enter the start and end times for the Period you selected.
5. Configure the image saturation, brightness, contrast, and sharpness by moving the slider to the desired value.
  - **Saturation**            Select a value between **0** and **100**. The default setting is **50**.
  - **Brightness**            Select a value between **0** and **100**. The default setting is **50**.
  - **Contrast**                Select a value between **0** and **100**. The default setting is **50**.
  - **Hue**                      Select a value between **0** and **100**. The default setting is **50**.
  - **Sharpness**              Select a value between **0** and **15**. The default setting is **1**.
  - **Image Enhance**        Select a value between **0** and **100**. The default setting is **30**.

- **NR** Select a value between **0** and **100**. The default setting is **50**.
6. Click **Apply** to save your settings.

## Configuring Encoding Settings

To configure a camera's video and audio encoding settings

1. Go to **Main Menu** → **Setting** → **Camera** → **Encode**.

Figure 8-3



2. On the Encode tab, in the Channel box, select the camera that you want to configure.
3. Configure the following settings for the primary stream and secondary stream:
  - **Type** Set the primary stream type as Regular, MD (Motion Detection), or Alarm. The secondary stream type is not configurable.
  - **Compression** *This setting is not configurable.*
  - **Smart Codec** Select Start from the drop-down menu to enable the Smart Codec function, which reduces the video bit stream for non-important recorded video to maximize storage space.
  - **Resolution** Set the primary stream to one of the following resolutions: 2560 x 1440, 1080P, 720P, 960H, D1, HD1, 2CIF, or CIF. Set the secondary stream to one of the following resolutions: D1, CIF, or QCIF.
  - **Frame Rate** Select a value between 1 and 30 (NTSC) or 1 and 25 (PAL) for the Main Stream. Select a value between 1 and 15 (NTSC) or 1 and ? (PAL) for the Main Stream.
  - **Bit Rate Type** Set to CBR (constant bit rate) or VBR (variable bit rate).

- **Quality** If the bit rate type is set to VBR, select a value between 1 and 6.
  - **I Frame Interval** Set to 1 S or 2 S.
  - **Bit Rate** Set to a value within the Reference Bit Rate range (640-6144). To enter a bit rate that does not appear on the list, click **Customized**.
  - **Audio/Video** Select or clear the check boxes to enable or disable audio and/or video.
  - **Audio Format** Set to G711a, PCM, or G711u (=G711 $\mu$ )
  - **Audio Source** Set to Local.
4. Click **Apply**.
  5. To copy the settings to one or more additional cameras, follow these steps:
    - a. Click **Copy**.
    - b. Click the specific camera(s) that you want to copy the settings to, or click **All** to select all the cameras, and then click **OK**.
  6. Click **Save** to save your settings.

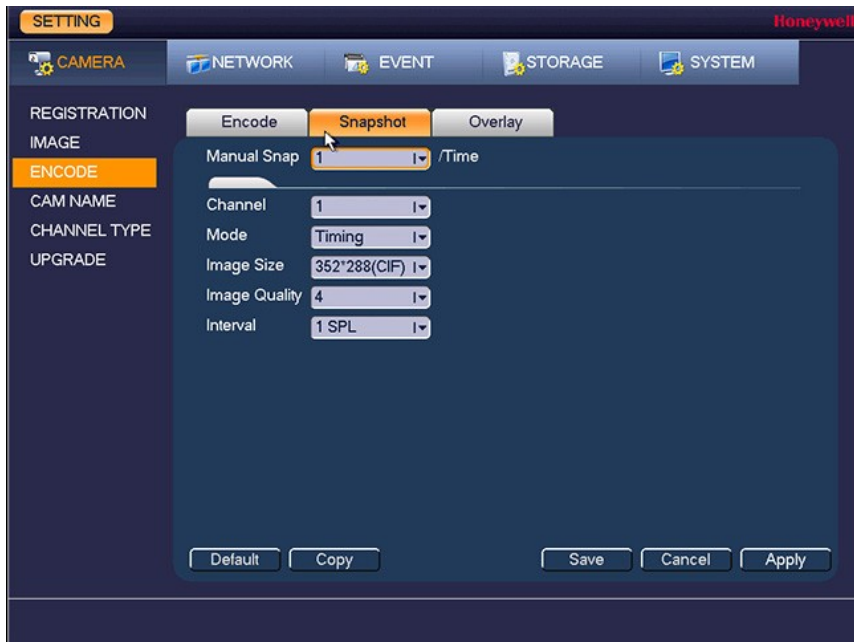
**Note:** After you added IP camera to the DVR, click **Refresh** after configuring Encode settings to ensure the Encode configuration is applied. Do not input parameters that is beyond the maximum performance of your IP camera.

## Configuring Snapshot Settings

To configure a camera's snapshot settings

1. Go to **Main Menu** → **Setting** → **Camera** → **Encode** → **Snapshot**.

Figure 8-4



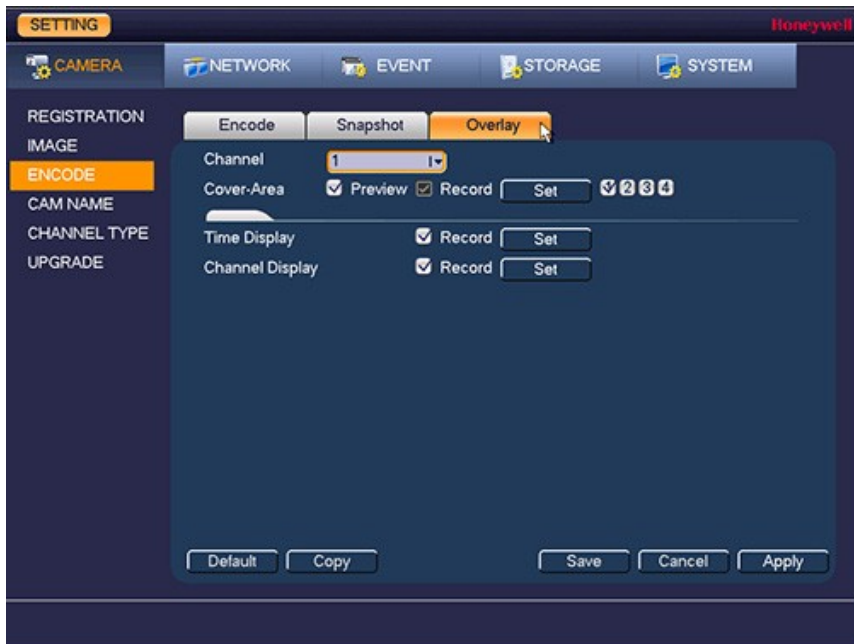
2. In the Channel box, select the camera that you want to configure.

## Configuring Privacy Mask Settings

To configure a privacy mask

1. Go to Main Menu → Setting → Camera → Encode → Overlay.

Figure 8-5





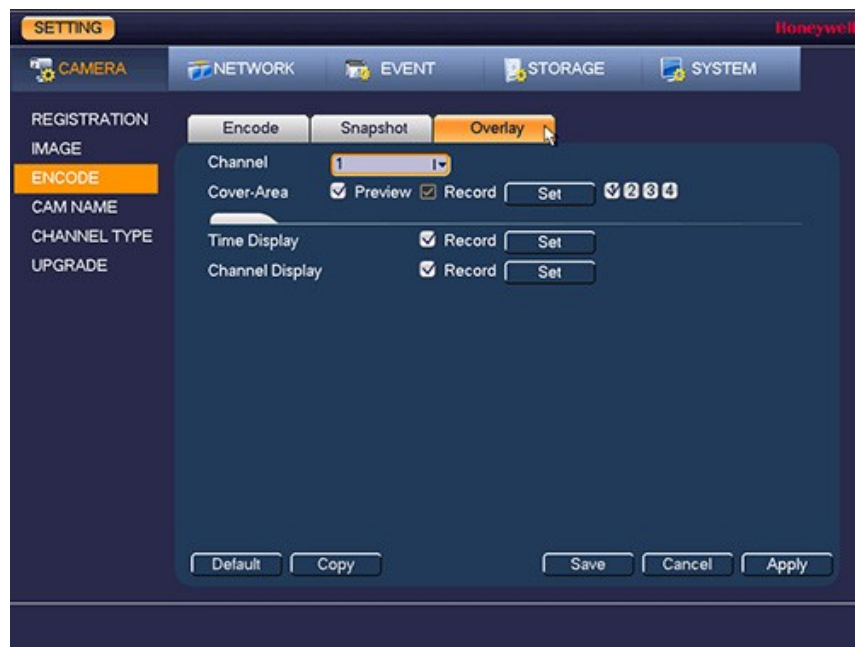
2. In the **Channel** box, select the camera that you want to configure.
3. Next to **Cover-Area**, select one of the following options:
  - **Preview**                      Blocks an area when the DVR is in live view mode.
  - **Record**                         Blocks an area when the DVR is in record mode.
4. Click **Set**.

## Configuring the Text Overlay

To configure a camera's text overlay settings

1. Go to **Main Menu → Setting → Camera → Encode → Overlay**.

Figure 8-6



2. In the **Channel** box, select the camera that you want to configure.
3. To set the time display, next to **Time Display**, select the **Record** check box, and then click **Set**. Drag the time display to the desired position on the screen.
4. To set the channel display, next to **Channel Display**, select the **Record** check box, and then click **Set**. Drag the channel display to the desired position on the screen.
5. To copy the settings to one or more additional cameras, follow these steps:
  - a. Click **Copy**.
  - b. Click the specific camera(s) that you want to copy the settings to, or click **All** to select all the cameras, and then click **OK**.

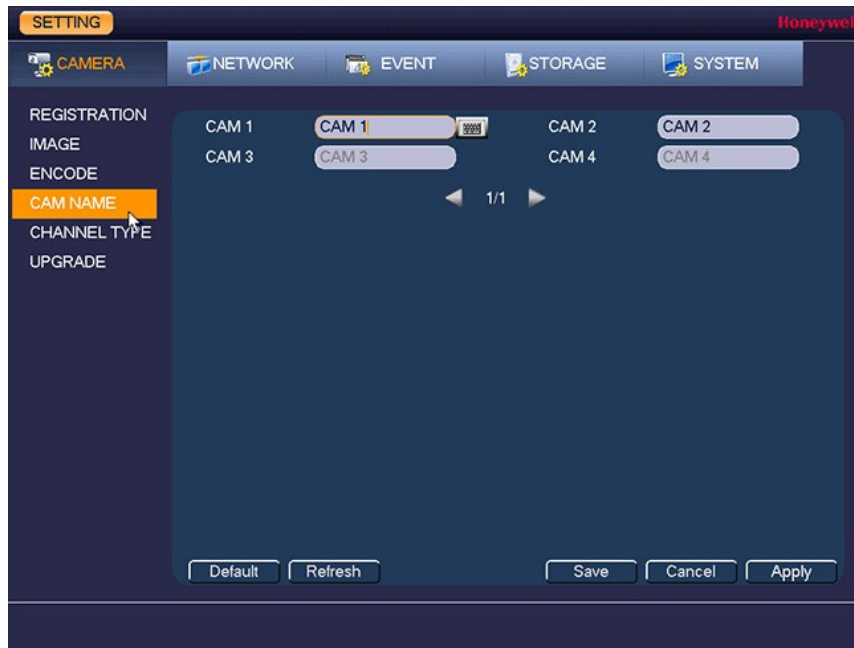
## Changing a Camera Name

By default, the cameras are named "CAM 1," "CAM 2," "CAM 3," and so on. You can assign each camera a descriptive name specific to your application (for example, "Front Entrance").

### To rename a camera

1. Go to **Main Menu** → **Setting** → **Camera** → **CAM Name**.

Figure 8-7



2. Click the text box of the camera that you want to rename and enter the new camera name.
3. Click **Apply** to save your settings.

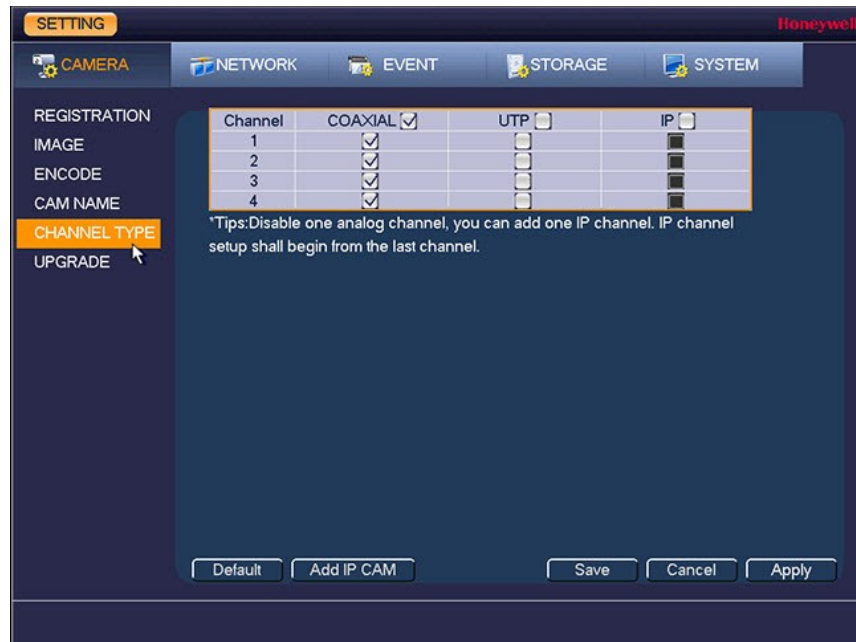
## Changing a Channel Type

By default, the analog channel type is set to **Coax**. You can change the channel type to **UTP** if unshielded twisted pair (UTP) cabling is used.

### To change an analog channel to UTP

1. Go to **Main Menu** → **Setting** → **Camera** → **Channel Type**.

Figure 8-8



2. Select the UTP check box of the channel(s) that you want to change to UTP.
3. Click **Apply**, and then click **Save** to save your settings.

## Adding IP Channels

### To add IP channels automatically

1. Go to **Main Menu → Setting → Camera → Channel Type**.
2. Click **Add IP CAM**. A message appears asking you to reboot the DVR.
3. Reboot the DVR.

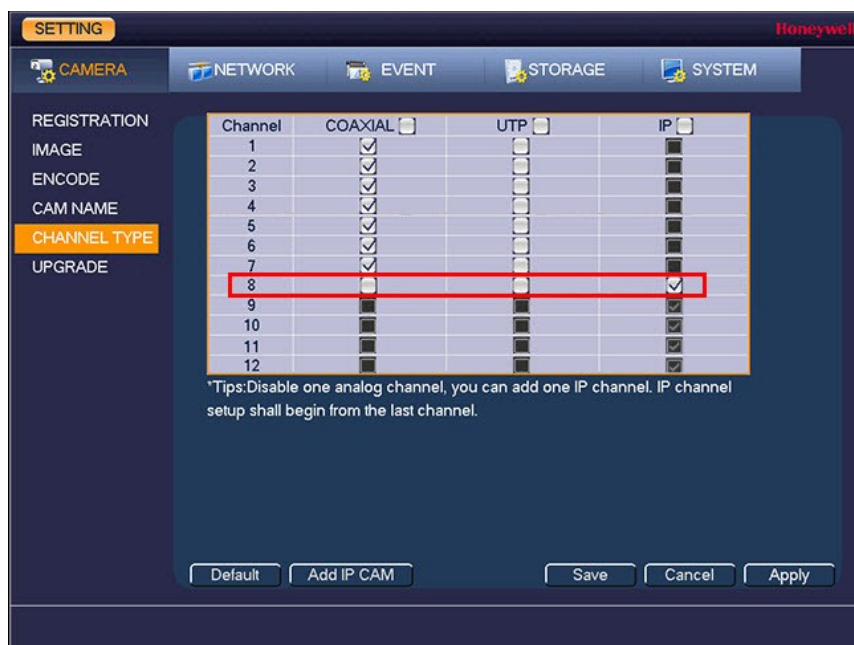
When the DVR reboots, new IP channels are added to the list of channels. On a 4-channel DVR, channels 5 and 6 are the default IP channels. On an 8-channel DVR, channels 9–12 are the default IP channels. On a 16-channel DVR, channels 17–24 are the default IP channels. See [Registering/Finding an IP Camera](#) on page 59 for instructions on assigning IP cameras to IP channels.

If you want to add more IP channels than the default amount (2, 4, or 8, depending on your DVR model), you can manually designate analog channels as IP channels.

### To add IP channels manually

1. Go to **Main Menu → Setting → Camera → Channel Type**.
2. On the channel that you want to configure, clear the check box in the analog column (**Coaxial** or **UTP**), and then select the corresponding check box in the **IP** column.

Figure 8-9



3. Click **Apply**, and then, at the prompt, reboot to DVR to apply the new settings. The different possible HQA and IP camera combinations are listed in the table below.

Table 8-1

	HQA Analog Camera		IP Camera	
	Qty	Channel Number	Qty	Channel Number
4ch HQA DVR	4	1,2,3,4	2	6,5
	3	1,2,3	3	6,5,4
	2	1,2	4	6,5,4,3
	1	1	5	6,5,4,3,2
	0	-	6	6,5,4,3,2,1
8ch HQA DVR	8	1,2,3,4,5,6,7,8	4	12,11,10,9
	7	1,2,3,4,5,6,7	5	12,11,10,9,8
	6	1,2,3,4,5,6	6	12,11,10,9,8,7
	5	1,2,3,4,5	7	12,11,10,9,8,7,6
	4	1,2,3,4	8	12,11,10,9,8,7,6,5
	3	1,2,3	9	12,11,10,9,8,7,6,5,4
	2	1,2	10	12,11,10,9,8,7,6,5,4,3
	1	1	11	12,11,10,9,8,7,6,5,4,3,2
	0	-	12	12,11,10,9,8,7,6,5,4,3,2,1
16ch HQA DVR	16	1,2,3,4,5,6,7,8,9,10,11,12,13,14	8	24,23,22,21,20,19,18,17
	15	1,2,3,4,5,6,7,8,9,10,11,12,13,14,	9	24,23,22,21,20,19,18,17,16
	14	1,2,3,4,5,6,7,8,9,10,11,12,13,14	10	24,23,22,21,20,19,18,17,16,15

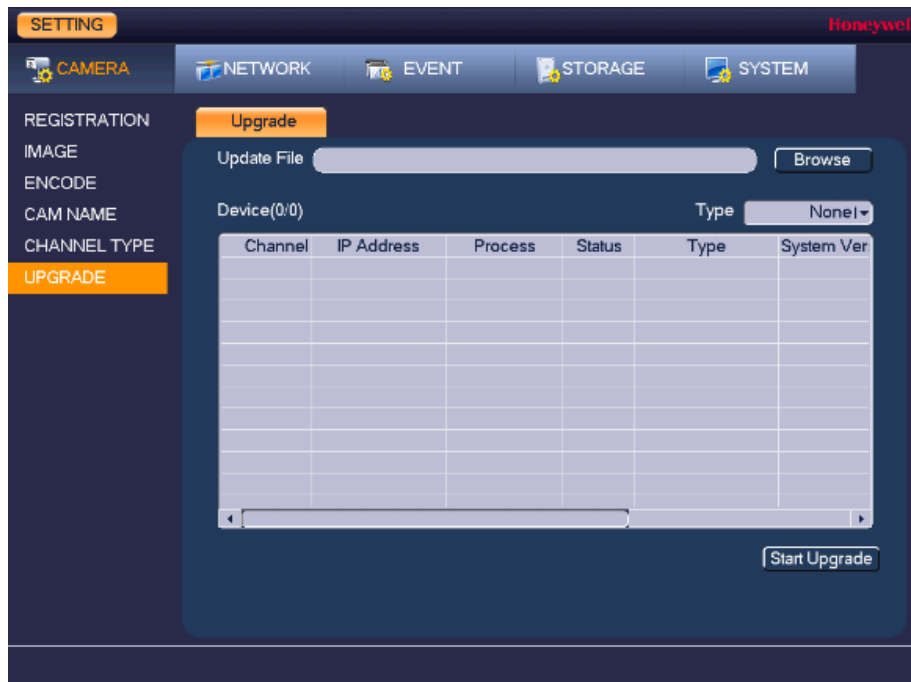
13	1,2,3,4,5,6,7,8,9,10,11,12,13	11	24,23,22,21,20,19,18,17,16,15,14
12	1,2,3,4,5,6,7,8,9,10,11,12	12	24,23,22,21,20,19,18,17,16,15,14,13
11	1,2,3,4,5,6,7,8,9,10,11	13	24,23,22,21,20,19,18,17,16,15,14,13,12
10	1,2,3,4,5,6,7,8,9,10	14	24,23,22,21,20,19,18,17,16,15,14,13,12,11
9	1,2,3,4,5,6,7,8,9	15	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10
8	1,2,3,4,5,6,7,8	16	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9
7	1,2,3,4,5,6,7	17	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8
6	1,2,3,4,5,6	18	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7
5	1,2,3,4,5	19	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6
4	1,2,3,4	20	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5
3	1,2,3	21	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5,4
2	1,2	22	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5,4,3
1	1	23	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5,4,3,2
0	-	24	24,23,22,21,20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5,4,3,2,1

## Upgrading Device

You can upgrade the camera firmware locally at the DVR.

Go to **Main Menu** → **SETTING** → **Camera** → **UPGRADE**.

Figure 8-10



**Note:** you can distinguish the devices by **Type**.

### Supported Camera Models (Type: COAXIAL):

- HD30HD2
- HB74HD2
- HD274HD2
- HD231HD2
- HD31HD2
- HB276HD2
- HD74HD2
- HB76HD2
- HD274HD4
- HB276HD4
- HB74HD4
- HD72HD4
- HD30HD4
- HD30XD2
- HE30XD2
- HE30XD2G
- HB30XD2
- HD41XD2
- HB41XD2
- HE41XD2
- HC2HD2
- H4D42HD8
- HBD42HD8
- HFD40HD4
- HB30PHD2
- HB30THD2

# 9. Configuring Network Settings

This chapter contains the following sections:

- [Configuring TCP/IP and Port Settings, page 71](#)
- [Configuring Wireless Connection Settings, page 73](#)
- [Configuring Advanced Network Settings, page 75](#)
- [Configuring PPPoE Settings, page 76](#)
- [Configuring DDNS Settings, page 76](#)
- [Configuring Sync Time, page 78](#)
- [Configuring Email Settings, page 78](#)
- [Configuring UPnP Settings, page 80](#)
- [Configuring SNMP Settings, page 81](#)
- [Configuring Multicast Settings, page 82](#)
- [Configuring P2P Settings, page 83](#)
- [Configuring Email Settings, page 78](#)
- [Configuring P2P Settings, page 83](#)

## Configuring TCP/IP and Port Settings

To configure TCP/IP settings

1. Go to **Main Menu** → **Setting** → **Network** → **TCP/IP**.

Figure 9-1



2. On the **TCP/IP** page, in the **IP Version** box, select **IPv4** or **IPv6**, depending on the Internet protocol that you want to use.
3. Set the Mode to Static or DHCP. Click **Static** to assign the DVR a static IP address or click **DHCP** to assign it a dynamic IP address.
4. If Mode is set to Static, manually enter the IP Address, Subnet Mask, and Gateway information. (The IP address, subnet mask, and gateway are not configurable when Mode is set to DHCP).
5. If Mode is set to Static and you have manually entered the IP Address, Subnet Mask, and Gateway, then click **Test** to test the connection.
6. If you want, enter Preferred DNS and Alternate DNS addresses.
7. Click **Apply** to save your settings.
8. If you want to exit the Setting menu, click **Save**.

#### To configure port settings

1. Go to **Main Menu** → **Setting** → **Network** → **Connection**.



Figure 9-2



2. On the Connection page, you can configure the following settings:
  - **Max Connection** Select a value between 0 and 20. The default setting is 20.
  - **TCP Port** Select a value between 1025 and 65535. The default setting is 37777.
  - **UDP Port** Select a value between 1025 and 65535. The default setting is 37778.
  - **HTTP Port** Select a value between 0 and 65535. The default setting is 80.
  - **HTTPS Port** Select a value between 0 and 65535. The default setting is 443.
  - **RTSP Port** Select a value between 0 and 65535. The default setting is 554.
3. Click **Apply** to save your settings.
4. If you want to exit the Setting menu, click **Save**.

---

**Note**

You must restart the DVR to apply any changes to the DVR's port settings.  
Ensure that the port settings do not conflict with each other.

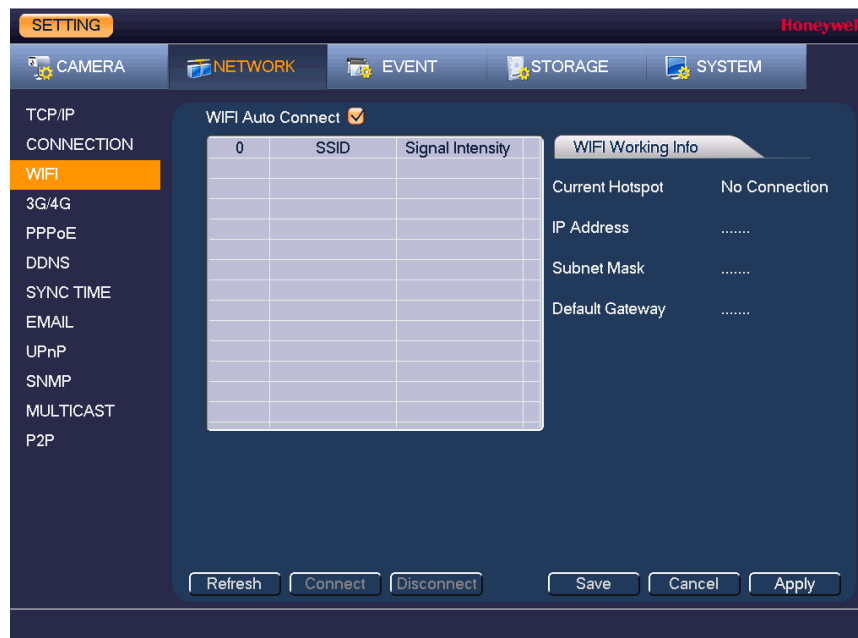
---

## Configuring Wireless Connection Settings

To manage Wi-Fi connections

1. Go to Main Menu → Setting → Network → WIFI Setting.

Figure 9-3



2. On the WIFI Setting page, you can do one or more of the following:
  - To enable automatic connections to Wi-Fi hotspots, select the **Auto Connect WIFI** check box.
  - To disable automatic connections to Wi-Fi hotspots, clear the **Auto Connect WIFI** check box.
  - To search for Wi-Fi hotspots, click **Refresh**.
  - To manually connect to a Wi-Fi hotspot, click **Connection**.
  - To disconnect from a Wi-Fi hotspot, click **DisConnect**.  
If a Wi-Fi connection is successfully established, the Wi-Fi hotspot name and connection details are displayed in the **WIFI Working Information** area.
3. Click **Apply** to save your settings.
4. If you want to exit the Setting menu, click **OK**.

---

**Note** The system does not support WPA and WPA 2 verification types.

---

#### To configure 3G/4G wireless connections

1. Go to **Main Menu** → **Setting** → **Network** → **3G/4G** Setting.

Figure 9-4



2. On the 3G/4G Setting page, you can configure the following settings:
  - **Ethernet Card** Select the wireless network adapter name.
  - **Enable** Select or clear the check box to enable or disable 3G/4G wireless connection using the selected wireless network adapter.
  - **Network Type** Select the network type that meets your requirements.
  - **APN** Select the wireless connection server that you want to use to access the wireless network.
  - **AUTH** Select the authentication mode that you want to use to access the wireless network: PAP or CHAP.
  - **Dial Number** Enter the 3G/4G network dial-up number that you received from your Internet service provider.
  - **User Name** Enter a user name for logging on to the 3G/4G network.
  - **Password** Enter a password for logging on to the 3G/4G network.
  - **Dial** Click **Dial** to manually enable or disable the 3G/4G network connection.
3. Click **Apply** to save your settings.
4. If you want to exit the Setting menu, click **OK**.

## Configuring Advanced Network Settings

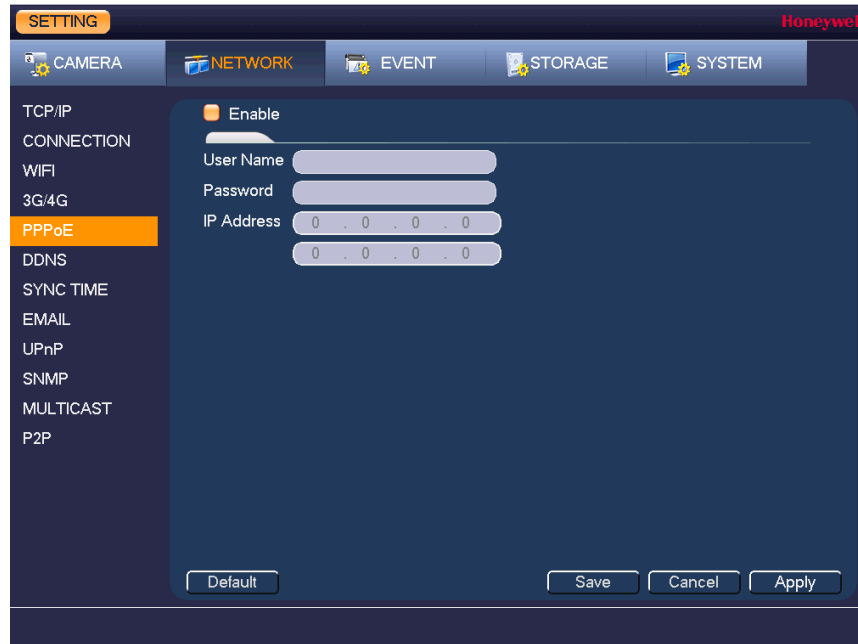
This section describes how to configure PPPoE, DDNS, SYNC TIME, EMAIL, UPnP, SNMP, MULTICAST and P2P settings.

## Configuring PPPoE Settings

To enable a Point-to-Point Protocol over Ethernet (PPPoE) network connection

1. Go to **Main Menu** → **Setting** → **Network** → **PPPOE**.

Figure 9-5



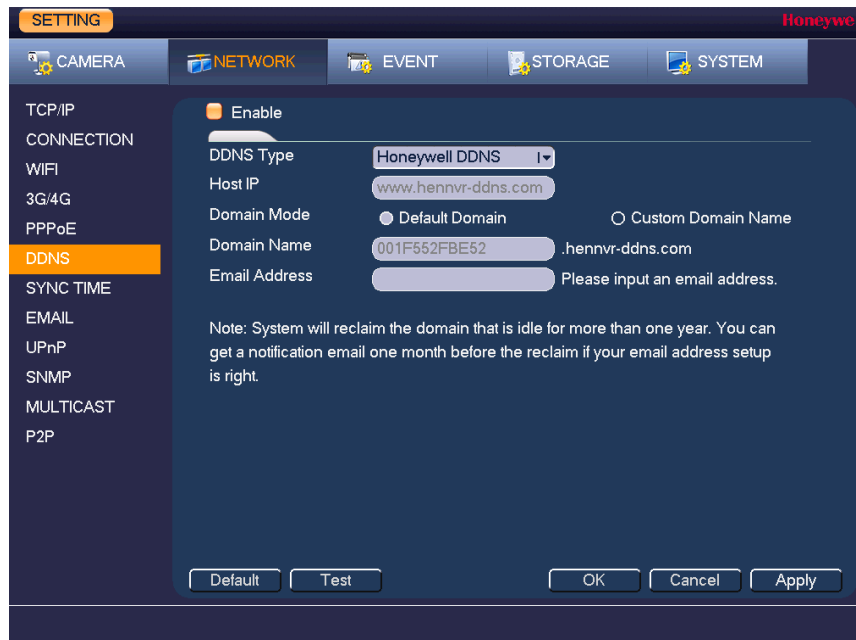
2. On the PPPOE page, select the **Enable** check box to enable a PPPoE network connection.
3. In the User Name and Password boxes, enter the user name and password provided by your Internet service provider for PPPoE access.
4. Click **Apply**, and then click **OK**.
5. Restart the DVR for the new network connection settings to take effect. The DVR's new IP address appears on the PPPOE page. Use this address when accessing the DVR remotely.

## Configuring DDNS Settings

To enable a Dynamic DNS (DDNS) network connection

1. Go to **Main Menu** → **Setting** → **Network** → **DDNS**.

Figure 9-6



2. On the DDNS page, select the Enable check box to enable a DDNS network connection.
3. In the DDNS Type box, select the DDNS service that you want to use.
4. Depending on the DDNS Type you select, you may need to enter the following details:
  - **Host** The address appears automatically unless DDNS Type is set to Private DDNS. In that case, enter the server IP address of your DDNS service provider.
  - **Domain Mode** If DDNS Type is set to Honeywell DDNS, click **Default Domain** to use the default domain name or click **Custom Domain Name** to create your own domain name.
  - **Domain Name** Enter a domain name (if you are not using a default domain name). You can obtain this from your DDNS service provider.
  - **User Name** If applicable, enter a user name to access your DDNS service.
  - **Password** If applicable, enter a password to access your DDNS service.
  - **Email Address** Unused Honeywell DDNS domain names will expire after a year. Enter your email address if you want to receive a notification before an unused domain name is reclaimed.
5. Click **Apply**, and then click **OK**.
6. Restart the DVR for the new network connection settings to take effect.
7. To test the settings, on the DDNS page, click **Test**.

## Configuring Sync Time

This function allows specified IP host to change device time in case several hosts are syncing time with the device.

1. Go to **Main menu**->**Setting**->**Network**->**Sync time**.
2. Enter Sync time interface. See [Figure 9-7](#).
3. Check the **Enable** box to enable Sync time function.

Figure 9-7

Start Address	End Address	Edit	Delete

4. Click **Apply** or **Save** to complete setup.

---

**Note** If the DVR has enabled NTP service, the device will sync time with the NTP server regularly. The sync or change time operation of the IP address in the whitelist will be invalid, unless the NTP server and the IP address in the whitelist is the same.

---

## Configuring Email Settings

To configure email notifications

1. Go to **Main Menu** → **Setting** → **Network** → **Email**.

Figure 9-8



2. On the Email page, select the Enable check box to enable email notifications for alarm events.
3. Configure the following settings:
  - **SMTP Server** Enter the SMTP server address of the sender's email account.
  - **Port** The default TCP/IP port used for SMTP is 25.
  - **Anonymous** Select check box to hide the sender's address in sent email.
  - **User Name** Enter the user name of the sender's email account.
  - **Password** Enter the password of the sender's email account.
  - **Receiver** Enter the email address where you want to send the notification. You can enter up to three email addresses.
  - **Sender** Enter the sender's email address.
  - **Subject** Enter the email subject.
  - **Attachment** Select check box to enable sending an attachment with the email.
  - **Encrypt Type** Select an encryption type: None, SSL, or TLS.
  - **Interval** This is the interval for sending emails. Enter a time between **0** and **3600** seconds. **0** means that there is no interval.
  - **Health Enable** Select check box to enable a health check. The system sends a test email to check the connection.
  - **Interval** This is the interval the DVR waits before sending out email notifications after an event is detected. Enter a time between **0** and **1440** minutes. **0** means that there is no interval.

## Configuring UPnP Settings

The Universal Plug and Play (UPnP) protocol is used to map the relationship between the LAN and the WAN.

### To configure UPnP settings

1. Go to **Main Menu** → **Setting** → **Network** → **UPnP**.

Figure 9-9



2. On the UPnP page, configure the following settings:
  - **PAT** Click to **Enable** or **Disable UPnP**.
  - **UPnP VAV Report** Enable/disable **UPnP** to work with I View Now.
  - **LAN IP** Enter the DVR's IP address from the **TCP/IP** page.
  - **WAN IP** Enter the router IP address.
3. Click **Apply** to save your settings.

### Editing a Mapping Relationship

If you want, you can edit a mapping relationship from the **PAT Table** list:

1. Click the mapping relationship that you want to edit.
2. Edit the Ext.Port details in the Port Info dialog box.
3. Click **OK**.



## Configuring SNMP Settings

You can use Simple Network Management Protocol (SNMP) to receive information from the DVR remotely. You will need to install SNMP software on a PC to receive information from the DVR via SNMP.

### To configure SNMP settings

1. Go to **Main Menu → Setting → Network → SNMP**.

Figure 9-10

The screenshot shows the 'SNMP' configuration page in the Honeywell DVR's web interface. The 'Enable' checkbox is checked. Under 'CONNECTION', V1, V2, and V3 are listed with checkboxes; V3 is selected. The 'SNMP Port' is set to 161. 'Read-Community' is 'public' and 'Write-Community' is 'private'. 'Trap Address' is empty, and 'Trap Port' is 162. 'Read/Write User' is 'private'. 'Authorize Type' is 'MD5' for both Read/Write and Read/Write users. 'Encryption Type' is 'CBC-DES' for both. Buttons for 'Default', 'Save', 'Cancel', and 'Apply' are at the bottom.

2. On the SNMP page, select the Enable check box to enable SNMP.
3. Configure the following settings:
  - **Version** Select the check boxes of the SNMP version(s) that you are using.
  - **SNMP Port** The default setting is **161**.
  - **Read Community** The default setting is **public**.
  - **Write Community** The default setting is **private**.
  - **Trap Address** Enter the IP address of the computer running SNMP software.
  - **Trap Port** The default setting is **162**.
4. If SNMP Version **V3** is selected, the following settings are also configurable:
  - ReadOnly User:** The default setting is **public**.
  - Read/Write User:** The default setting is **private**.
  - Authorize Type:** Select the authorization type, **MD5** or **SHA**, for both the ReadOnly and Read/Write users. The default setting is **MD5**.

**Password:** Enter the authorization passwords for both the ReadOnly and Read/Write users.

**Encryption Type:** Select the encryption type for both the ReadOnly and Read/Write users. The default setting is **CBC-DES** and is currently the only encryption option.

**Password:** Enter the encryption passwords for both the ReadOnly and Read/Write users.

5. Click **Apply** to save your settings.
6. If you want to exit the Setting menu, click **Save**.

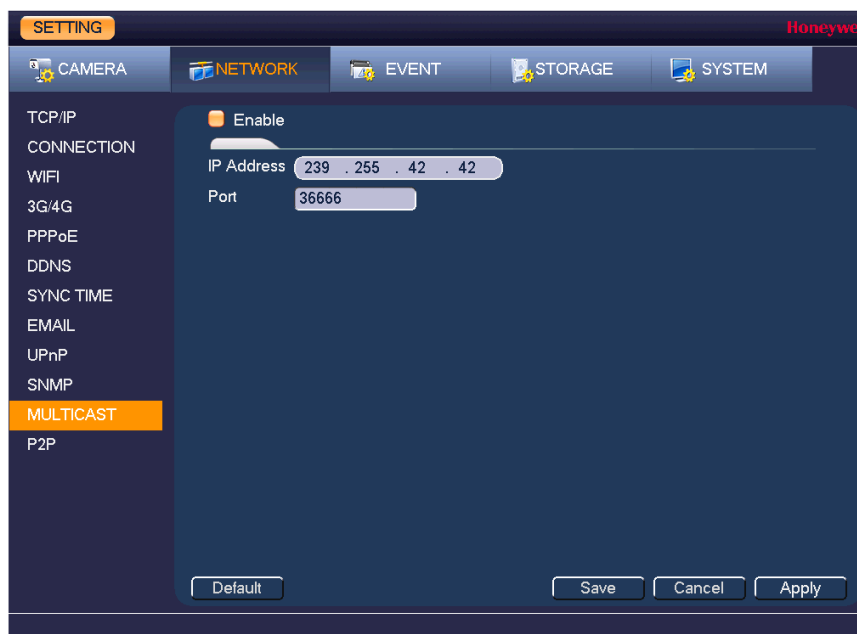
## Configuring Multicast Settings

Multicast allows for simultaneous real-time monitoring of live video from the DVR at multiple remote locations over the network.

**To configure multicast settings**

1. Go to **Main Menu → Setting → Network → Multicast**.

Figure 9-11



2. On the Multicast page, select the Enable check box to enable multicast.
3. In the IP Address box, enter a multicast IP address. The address must be valid for multicasting and should be in the range 224.0.0.0 to 239.255.255.255 for IPv4 or have the prefix ff00::/8. An address in the range 239.252.0.0 to 239.255.255.255 is recommended.
4. In the Port box, enter a multicast port number or use the default setting (36666).
5. Click **Apply** to save your settings.
6. If you want to exit the Setting menu, click **OK**.

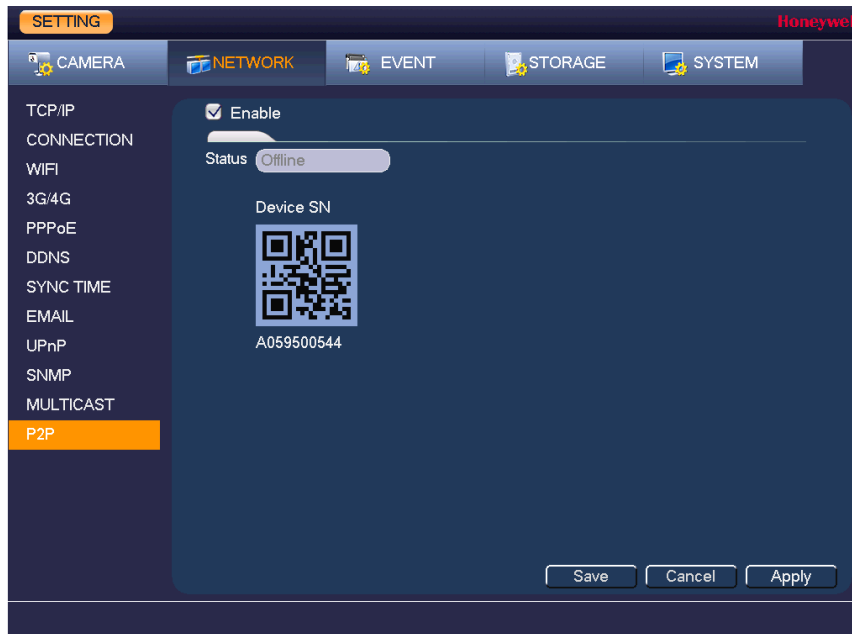
## Configuring P2P Settings

You can use a QR code and the scan function in the Hon View Touch app on your SmartPhone to add your DVR to your Honeywell devices in Hon View Touch. You can then access your DVR through the WAN.

### To add a DVR to the Hon View Touch app

1. Go to **Main Menu** → **Setting** → **Network** → **P2P**.

Figure 9-12






2. Open the app in your smartphone.

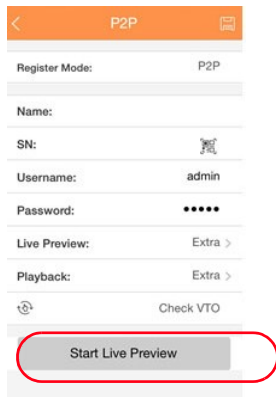
---

**Note** You can find the app in both the iOS App store and the Android Google Play store.

---

3. Tap  to go to Live Preview.
4. Tap  to open the Main Menu.
5. Tap the Device Manager button , then select P2P to add the device.
6. Tap Start Live Preview to view video from the connected device.

**Figure 9-13**



# 10. Configuring Event Settings

This chapter contains the following sections:

- [Configuring Motion Detection Settings, page 85](#)
- [Configuring Video Loss Settings, page 89](#)
- [Configuring Tampering Settings, page 90](#)
- [Configuring Diagnosis Settings, page 91](#)
- [Configuring Face Detection Settings, page 93](#)
- [Configuring Alarms, page 95](#)
- [Configuring Abnormality Settings, page 97](#)
- [Configuring Temperature and Humidity Camera \( IOT \), page 101](#)

## Configuring Motion Detection Settings

To set up motion detection regions

1. Go to **Main Menu** → **Setting** → **Event** → **Video Detect** → **Motion Detect**.

Figure 10-1



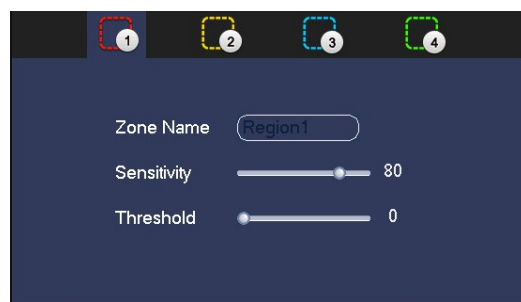
2. On the Motion Detect tab, in the Channel box, select the channel (camera) that you want to configure motion detection settings for.
3. Select the Enable check box to enable motion detection for the selected channel.

## 4. Enable PIR.

PIR function help enhance the motion detect accuracy and validity. It is to filter the false alarm triggered by leaves, small fly and insects. The PIR detection zone is smaller than the camera angle of view. The PIR function is enabled by default if the connected remote device supports the PIR function. When the PIR function is on, motion detection function is on by default. The motion detect event occurs when these two function are enabled at the same time. If the PIR function is disabled, check the enable box to enable the general motion detect function.

**Note**

- The channel type shall be HQA if you want to enable PIR function.
- If the remote device does not support PIR function, the PIR item on the interface is grey or is hiding. That is to say, the PIR function is null.
- The interface does not display PIR enable state if current DVR does not support PIR function.

5. Next to Region, click **Set** to define the motion detection region. A grid appears over the live view screen and the following dialog box appears:**Figure 10-2**

## 6. Set the Sensitivity level (0–100) and Threshold level (0–100) for Region1.

Sensitivity refers to the amount of change (as a percentage) in the image pixels between frames. Moving the **Sensitivity** slider to the left decreases the sensitivity of the motion detection and therefore more movement is required to trigger an event notification.

Threshold is the amount of motion required to trigger an event notification.

**Note**

The best way to configure motion detection is to experiment with the sensitivity and threshold settings while someone is walking in front of the camera.

## 7. By default, motion detection Region1 covers the whole screen.

- To disable motion detection in part of the image, drag the mouse over the area of the image that you want to exclude. The areas *not* covered by red boxes are *not* sensitive to motion.
- To change the threshold level in part of the image, select a different motion detection region (**Region2**, **Region3**, or **Region4**), set the **Threshold** level for that region, and then drag the mouse to define the region.

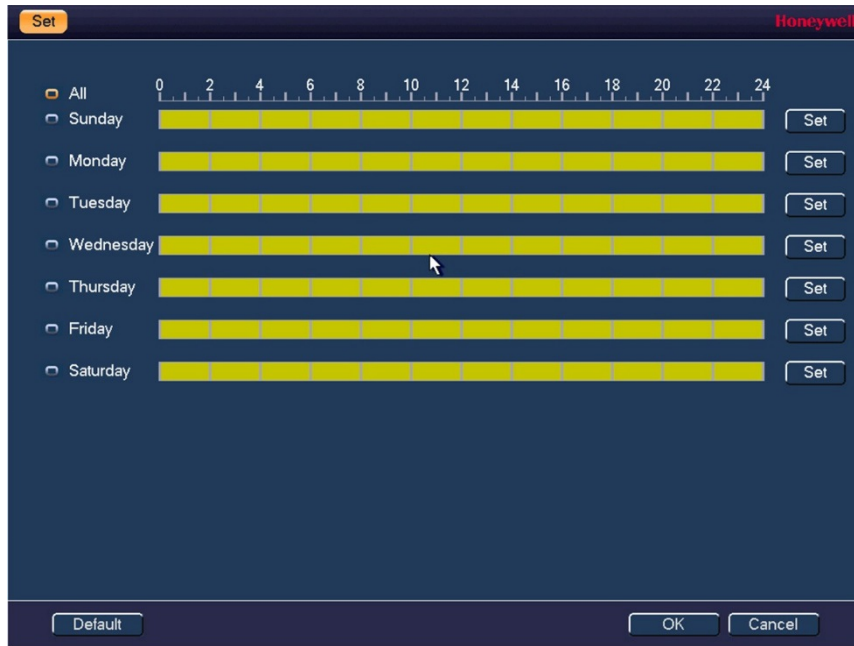
## 8. Right-click to return to the Setting menu.

9. Click **Apply** to save your settings.

**To set up motion detection periods**

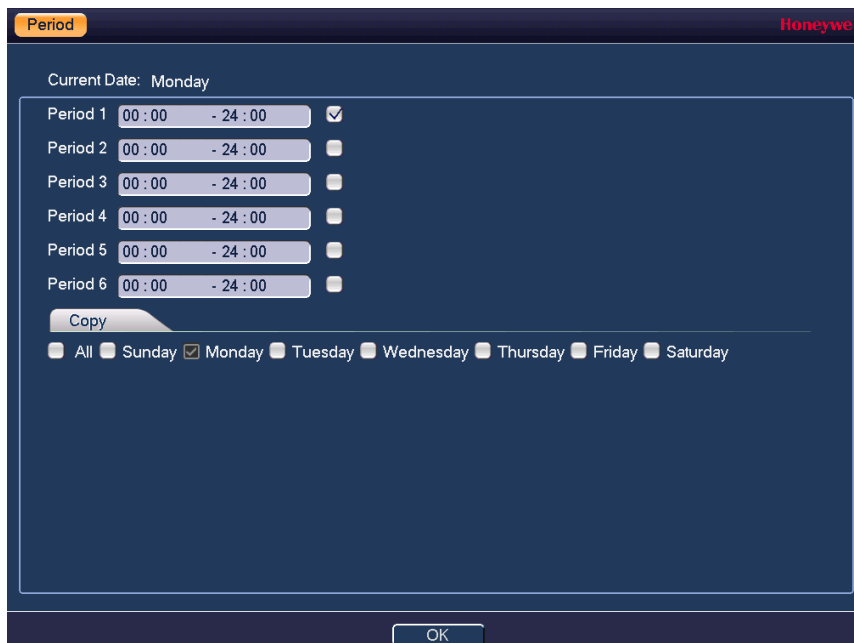
1. On the Motion Detect tab, next to Period, click **Set**. The Set window opens.

**Figure 10-3**



2. By default, when motion detection is enabled, it is active all the time. To modify the periods when motion detection for the selected channel is active, on each day's timeline, click the half-hour blocks when you want motion detection to be disabled.
3. Alternatively, for the day of the week that you want to configure, click **Set**. The Period window opens.

**Figure 10-4**



- a. Set up to six periods in the day when you want the motion detection settings for the selected channel to be active.
  - b. Select the check box next to each configured period to enable it.
  - c. To copy the settings to additional days, select the appropriate check box(es) under **Copy**.
  - d. Click **Save** to return to the previous window.
4. After you have finished setting up the motion detection periods, click **OK**.

#### To set up motion detection event actions

1. Go to **Main Menu → Setting → Event → Video Detect → Motion Detect**.

Figure 10-5



2. On the Motion Detect tab, select the actions that you want the system to initiate when a motion detection event occurs:

- **Anti Dither**

Configure the event detection lasting time (anti dither). During this time, if another event is detected, the DVR resets the recording time, but does not reactivate the buzzer/tour/PTZ activation/snapshot/email. Choose from 5 to 600 seconds.

**Note** This anti-dither time does not include the Latch (delay) time.
- **Show Message**

Select the check box to enable a pop-up message on your local host PC.
- **Alarm Upload**

Select the check box to enable the system to upload an alarm signal to the network (including to an alarm center and/or web



client).

- **Send Email** Select the check box to enable the system to send an email notification. If the Snapshot function is enabled, an image can be attached to the email.
- **Record Channel** Select the channel(s) that you want to record. In the **Delay** box, specify the amount of time (1–300 s) to delay recording after a motion detection event is triggered.

**Note** You also need to set the motion detection recording period. Go to **Storage > Schedule** to configure the current channel for scheduled recording. See [Configuring the Video Recording Schedule](#) on page 39.

- **PTZ Activation** Select the check box to activate PTZ functions, and then click **Select**. In the PTZ Activation window, for each PTZ camera, select the preset, tour, or pattern that you want to be called when a motion detection event occurs, and then click **OK**.
  - **Delay (Latch)** Set a length of time for the DVR to delay turning off events and activated input after an external alarm is cancelled.
  - **Tour** Select the check box to enable a tour of the selected channels.
  - **Snapshot** Select the check box to take a snapshot of selected channels.
  - **Video Matrix** Click to enable. When an event occurs, the SPOT OUT port video (a 1-window tour) from the event activation channel selected in the Record Channel.
  - **Buzzer** Select the check box to activate a buzzer noise at the DVR.
  - **Log** Click to enable the DVR to record a local event log.
  - **Voice Prompts** Select to enable audio broadcast/voice prompts in response to a motion detection event.
  - **File Name** Select a file for the voice prompt.
3. Click **Apply** to save your settings.
  4. To test your settings, click **Test**.
  5. To copy the motion detection settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

## Configuring Video Loss Settings

To configure video loss settings

1. Go to **Main Menu → Setting → Event → Video Detect → Video Loss.**

Figure 10-6



2. On the Video Loss tab, in the Channel box, select the channel (camera) that you want to configure video loss detection settings for.
3. Select the **Enable** check box to enable video loss detection for the selected channel.
4. To set the periods when video loss detection is active, next to Period, click **Set**, and then follow the steps listed in [To set up motion detection periods](#) on page 86.
5. To set the actions that you want the system to initiate when a video loss event occurs, follow the steps listed in [To set up motion detection event actions](#) on page 88.
6. Click **Apply** to save your settings.
7. To copy the settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

## Configuring Tampering Settings

To configure video tampering settings

1. Go to **Main Menu → Setting → Event → Video Detect → Tampering.**

Figure 10-7



2. On the **Tampering** tab, in the **Channel** box, select the channel (camera) that you want to configure video tampering detection settings for.
3. Select the **Enable** check box to enable video tampering detection for the selected channel.
4. In the **Sensitivity** box, set the sensitivity level. Select a value between 1 and 6, with 6 being the highest sensitivity. The default setting is **3**.
5. To set the periods when video tampering detection is active, next to Period, click **Set**, and then follow the steps listed in [To set up motion detection periods](#) on page 86.
6. To set the actions that you want the system to initiate when a video tampering event occurs, follow the steps listed in [To set up motion detection event actions](#) on page 88.
7. Click **Apply** to save your settings.
8. To copy the settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

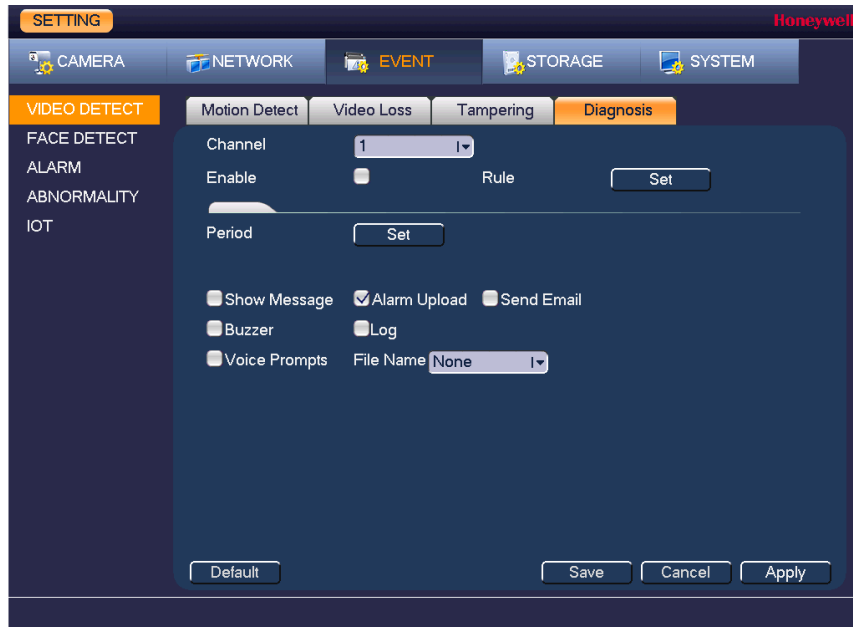
## Configuring Diagnosis Settings

You can configure the Diagnosis settings to alert you when the video is blurry, overexposed, or the color changes.

### To configure diagnosis settings

1. Go to **Main Menu** → **Setting** → **Event** → **Video Detect** → **Diagnosis**.

Figure 10-8



2. Click **Set**. The Diagnosis window appears.

Figure 10-9



3. Select the channel (camera) for which you want to configure diagnosis settings.
4. Select the Enable check box to enable diagnosis for the selected channel.
5. Click to configure the settings for the following parameters:
  - **Stripe** A vertical, horizontal, or diagonal stripe might occur due to electronic interference or age of the device. Click to set the sensitivity.

- **Noise** Click to set the sensitivity of the DVR's response to video noise, including blurry video and optical distortion.
  - **Color Cast** Click to set the sensitivity of the DVR's response to variances in normal RGB appearance.
  - **Out of Focus** Click to set the sensitivity of the DVR's response to focus/distortion issues, including blurry video and optical distortion.
  - **Over Exposure** The color brightness of the video is affected by the image pixel intensity. Select from 0 (the darkest black) to 255 (the brightest white). If the brightness of the entire image exceeds the threshold, then the image is over exposed.
6. Click **Apply** to return to the Diagnosis tab.
  7. To set the periods when diagnosis is active, next to Period, click **Set**, and then follow the steps listed in [To set up motion detection periods](#) on page 88.
  8. Select the actions that you want the system to initiate when a diagnosis event occurs:
    - **Show Message** Select the check box to enable a pop-up message on your local host PC.
    - **Alarm Upload** Select the check box to enable the system to upload an alarm signal to the network (including to an alarm center and/or web client).
    - **Send Email** Select the check box to enable the system to send an email notification. If the **Snapshot** function is enabled, an image can be attached to the email.
    - **Buzzer** Select the check box to activate a buzzer noise at the DVR.
    - **Log** Click to enable the DVR to record a local alarm log.
    - **Voice Prompts** Select to enable audio broadcast/voice prompts in response to a motion detection event.
    - **File Name** Select a file for the voice prompt.
  9. Click **Apply** to save your settings.

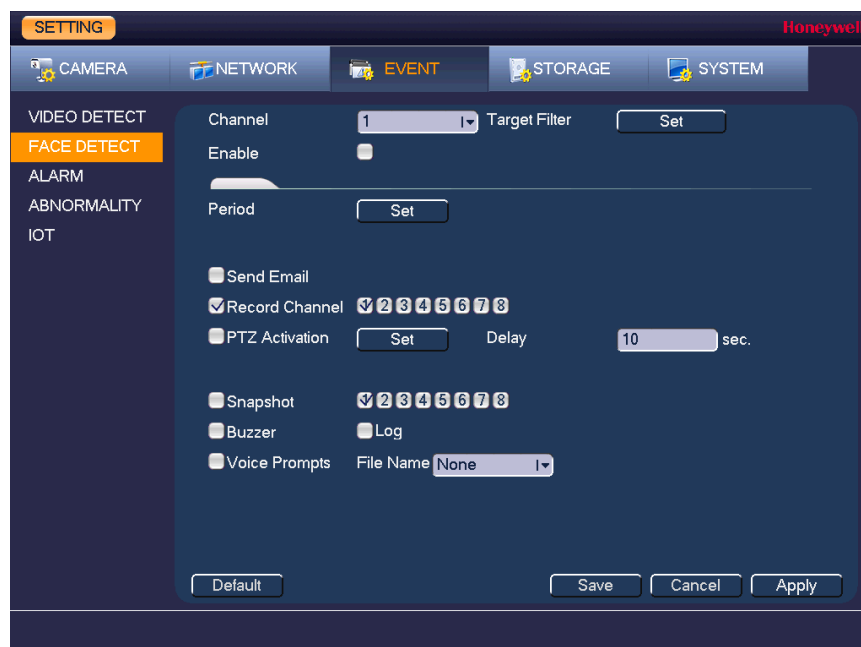
## Configuring Face Detection Settings

The DVR can recognize human faces, draw a rectangle around the face, and then trigger recording, snapshots, and alarms, for example.

### To configure face detection settings

1. Go to **Main Menu → Setting → Event → Video Detect → Face Detect**.

Figure 10-10



2. Select the channel (camera) for which you want to configure face detection settings.
3. Click **Set** to configure the Target Filter area.
4. Select the Enable check box to enable face detection for the selected channel.
5. Select the actions that you want the system to initiate when a face detection event occurs:
  - **Send Email** Select the check box to enable the system to send an email notification. If the Snapshot function is enabled, an image can be attached to the email.
  - **Record Channel** Select the channel(s) that you want to record. In the Delay box, specify the amount of time (1–300 s) to delay recording after a motion detection event is triggered.
 

**Note:** You also need to set the motion detection recording period. Go to Storage > Schedule to configure the current channel for scheduled recording. See [Configuring the Video Recording Schedule](#) on page 39.
  - **PTZ Activation** Select the check box to activate PTZ functions, and then click **Select**. In the PTZ Activation window, for each PTZ camera, select the preset, tour, or pattern that you want to be called when a motion detection event occurs, and then click **OK**.
  - **Delay (Latch)** Set a length of time for the DVR to delay turning off alarms and activated input after an external alarm is cancelled.
  - **Snapshot** Select the check box to take a snapshot of selected channels.

- **Buzzer** Select the check box to activate a buzzer noise at the DVR.
  - **Log** Click to enable the DVR to record a local alarm log.
  - **Voice Prompts** Select to enable audio broadcast/voice prompts in response to a motion detection event.
  - **File Name** Select a file for the voice prompt.
6. Click **Apply** to save your settings.

## Configuring Alarms

If your IP camera has alarm ports and alarm/event functions, then the DVR can receive the alarm message from the camera, and react by recording video, taking a snapshot, and/or sending an email.

## Configuring Remote Alarms

Configure the DVR to record video, take a snapshot, activate a PTZ camera preset,/tour/pattern, and/or send an email if the DVR detects an issue with the I-View Now software.

Click **Remote Alarm** in the **Alarm** configuration interface to open the **Remote Alarm** configuration interface.

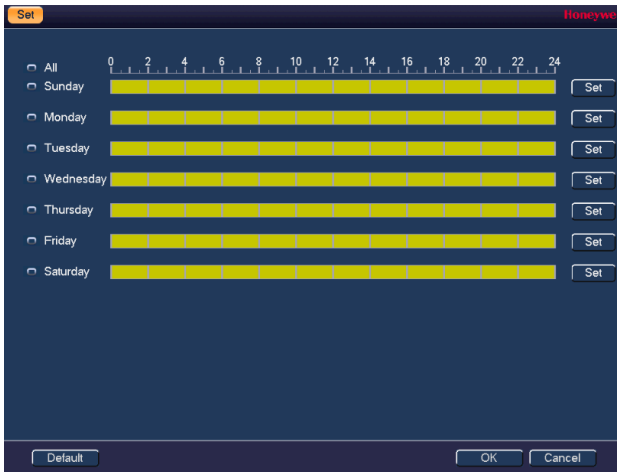
Figure 10-11 Remote Alarm Configuration Interface

The screenshot shows the 'Remote Alarm' configuration interface within the 'EVENT' settings of a Honeywell DVR. The interface is dark-themed with a sidebar on the left containing menu items: VIDEO DETECT, FACE DETECT, ALARM (highlighted), ABNORMALITY, and IOT. The main area is titled 'Remote Alarm' and contains the following settings:

- Alarm In:** A dropdown menu set to '1'.
- Alarm Name:** A text field containing 'Alarm In1'.
- Enable:** A checked checkbox.
- Period:** A 'Set' button.
- Show Message:** An unchecked checkbox.
- Send Email:** An unchecked checkbox.
- Record Channel:** A dropdown menu with options 2, 3, 4, 5, 6, 7, 8.
- PTZ Activation:** A 'Set' button.
- Delay:** A text field set to '10' with 'sec.' next to it.
- Tour:** A dropdown menu with options 2, 3, 4, 5, 6, 7, 8.
- Snapshot:** A dropdown menu with options 2, 3, 4, 5, 6, 7, 8.
- Video Matrix:** An unchecked checkbox.
- Buzzer:** An unchecked checkbox.
- Log:** A checked checkbox.
- Voice Prompts:** A checked checkbox.
- File Name:** A dropdown menu set to 'None'.

At the bottom of the interface are buttons for 'Default', 'Copy', 'Save', 'Cancel', and 'Apply'.

Table 8-1

Configuration	Description
<b>Enable</b>	Click to enable alarms. Select a channel from the drop-down list.
<b>Alarm Name</b>	Enter an alarm name.
<b>Period</b>	<p>Define a period during which motion detection is active.</p> <ol style="list-style-type: none"> <li>Click <b>Set</b>. The <b>Set</b> configuration interface appears.</li> </ol>  <ol style="list-style-type: none"> <li>Click <b>Set</b> after a day of the week to set time periods for that day.</li> <li>Enter a time range (Period) for when the event detection area is active, then click the check box to activate that Period.</li> </ol> <p><b>Note</b> You can configure up to 6 periods within one day..</p> <ol style="list-style-type: none"> <li>Click <b>Save</b>.</li> </ol> <p><b>To Copy Time Periods to Other Days</b></p> <ol style="list-style-type: none"> <li>Click <b>Set</b> to select a day with configured time periods.</li> <li>Click the boxes besides the days to select the days to which to copy the periods.</li> <li>Click <b>Save</b>.</li> </ol>
<b>Show Message</b>	Click to enable a pop-up message on your local host PC screen to let you know an alarm has occurred.
<b>Send Email</b>	The system can send an email when an alarm is detected. When you have enabled the Snapshot function, the system can also send an image attached to the email. Go to <b>Main Menu</b> → <b>Setting</b> → <b>Network</b> → <b>Email</b> to configure the email settings. See <a href="#">Configuring Email Settings</a> on page 78.
<b>Record Channel</b>	The system automatically starts recording selected channels when a motion detection alarm occurs. <b>Note</b> You need to set the alarm recording period. Go to <b>Storage</b> → <b>Schedule</b> to configure the current channel for scheduled recording. See <a href="#">Configuring Record Settings</a> on page 111.
<b>PTZ Activation</b>	When PTZ activation is configured, the system can activate. <ol style="list-style-type: none"> <li>Click <b>Set</b> to open the <b>PTZ Activation</b> configuration interface.</li> </ol>





2. Select a preset, tour, or pattern from the drop-down menu.  
Click **Save**.

<b>Delay</b>	The system can delay recording for a specified amount of time after an alarm has ended. Select from <b>10s</b> to <b>300s</b> .
<b>Tour</b>	Click to enable a tour to be triggered by an alarm. The system supports 1/8-window tour. See <a href="#">Configuring Display Settings</a> on page 119 for tour interval setup. On the <b>Display Settings</b> tab, when there are two tours enabled by default, you can configure the system so an alarm triggers the system to enable the alarm tours you configured here. If there is no alarm, then the system uses the tour setup that was configured in the <b>Display</b> interface.
<b>Snapshot</b>	Click to enable the <b>Snapshot</b> function. Channel snapshots are taken according to the schedule you configure. Alarm snapshots are taken when an alarm occurs.
<b>Video Matrix</b>	Click to enable. When an alarm occurs, the SPOT OUT port video (a 1-window tour) from the alarm activation channel selected in the Record Channel.
<b>Buzzer</b>	Click to enable the <b>Buzzer</b> function. When an alarm occurs, the buzzer beeps.
<b>Log</b>	Click to enable the DVR to record a local alarm log.
<b>Voice Prompts</b>	Select to enable audio broadcast/voice prompts in response to a motion detection event.
<b>File Name</b>	Select a file for the voice prompt.

## Configuring Abnormality Settings

There are three types of system events that can be configured in the **Abnormality** tab:

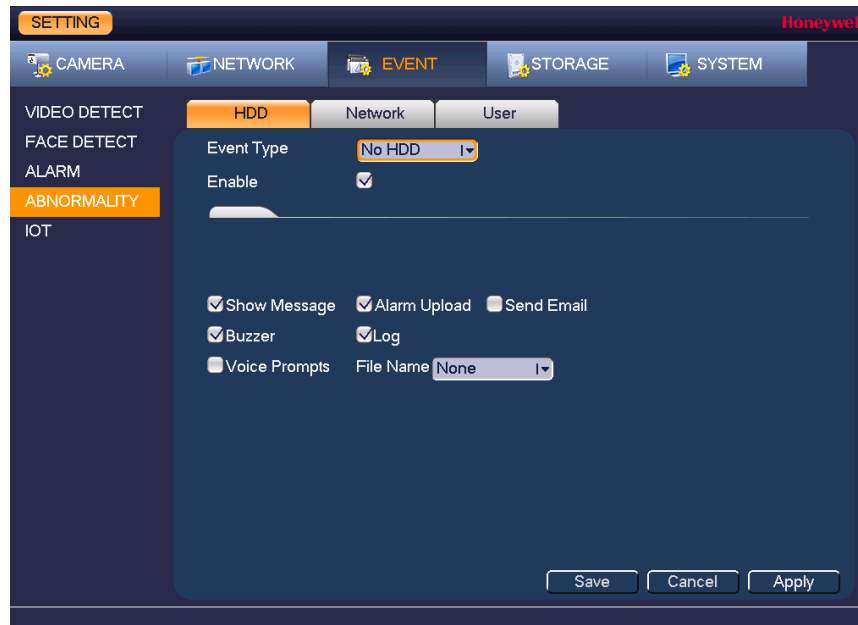
- HDD errors (no disk, disk error, nospace)
- Network errors (no connection, IP conflict, MAC conflict)
- User errors (illegal logins)

## Configuring HDD Event Settings

To configure HDD event settings

1. Go to **Main Menu** → **Setting** → **Event** → **Abnormality** → **HDD**.

Figure 10-12



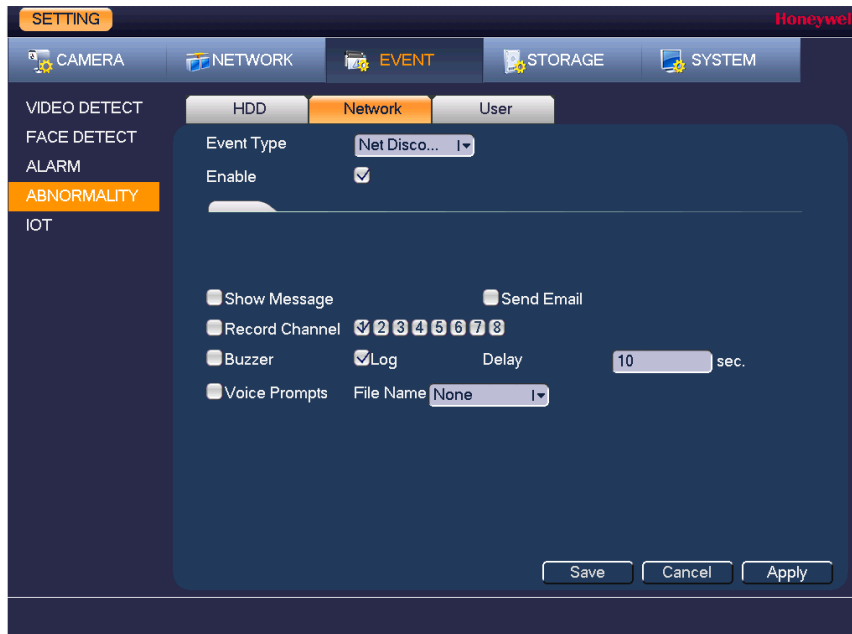
2. On the HDD tab, in the Event Type box, select the event type that you want to configure settings for: No HDD, HDD Error, HDD No Space.
3. Select the Enable check box to enable HDD error detection.
4. Select the actions that you want the system to initiate when the selected event occurs:
  - **Show Message** Select the check box to enable a pop-up message on your local host PC.
  - **Alarm Upload** Select the check box to enable the system to upload an alarm signal to the network (including to an alarm center and/or web client).
  - **Send Email** Select the check box to enable the system to send an email notification.
  - **Buzzer** Select the check box to activate a buzzer noise at the DVR.
  - **Log** Click to enable the DVR to record a local alarm log.
  - **Voice Prompts** Select to enable audio broadcast/voice prompts in response to a motion detection event.
  - **File Name** Select a file for the voice prompt.
5. Click **Apply** to save your settings.

## Configuring Network Errors

To configure network event settings

1. Go to **Main Menu → Setting → Event → Abnormality → Network**.

Figure 10-13



2. On the Network tab, in the Event Type box, select the event type that you want to configure settings for: Net Disconnection, IP Conflicted, MAC Conflicted.
3. Select the Enable check box to enable HDD error detection.
4. Select the actions that you want the system to initiate when the selected event occurs:
  - **Show Message** Select the check box to enable a pop-up message on your local host PC.
  - **Send Email** Select the check box to enable the system to send an email notification.
  - **Record Channel** Select the channel(s) that you want to record. In the Delay box, specify the amount of time (1–300 s) to delay recording after a motion detection event is triggered.
 

**Note** You also need to set the motion detection recording period. **Go to Storage → Schedule** to configure the current channel for scheduled recording. See [Configuring the Video Recording Schedule](#) on page 39.
  - **Buzzer** Select the check box to activate a buzzer noise at the DVR.
  - **Log** Click to enable the DVR to record a local alarm log.
  - **Delay (Latch)** Set a length of time for the DVR to delay turning off alarms and activated input after an external alarm

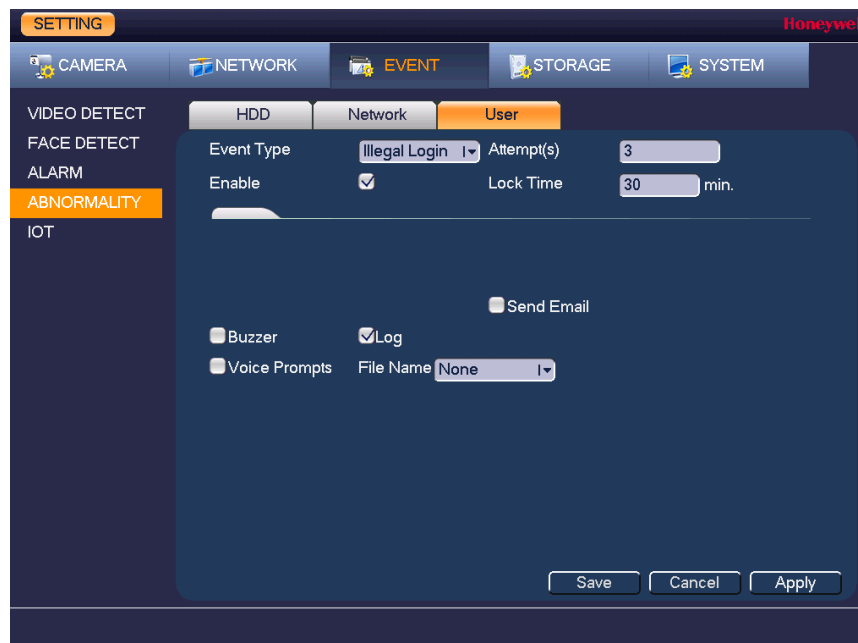
- **Voice Prompts** is cancelled.
  - **File Name** Select to enable audio broadcast/voice prompts in response to a motion detection event.
5. Click **Apply** to save your settings.

## Configuring for User Errors

To configure user event settings

1. Go to **Main Menu → Setting → Event → Abnormality → User**.

Figure 10-14



2. On the User tab, in the Event Type box, select the event type that you want to configure settings for: Illegal Login.
3. Select the Enable check box to enable user error detection.
4. Select the number of allowable Attempts before the action is taken, from 0 to 255.
5. Select how long the action (lockout) lasts, from 0 to 60 minutes.
6. Select the actions that you want the system to initiate when the selected event occurs:
  - **Send Email** Select the check box to enable the system to send an email notification.
  - **Buzzer** Select the check box to activate a buzzer noise at the DVR.
  - **Log** Click to enable the DVR to record a local alarm log.
  - **Voice Prompts** Select to enable audio broadcast/voice prompts in response to a motion detection event.

- **File Name** Select a file for the voice prompt.
7. Click **Apply** to save your settings.

## Configuring Temperature and Humidity Camera ( IOT )

You can configure the temperature and humidity data of camera with such sensors and configure the alarm event settings.

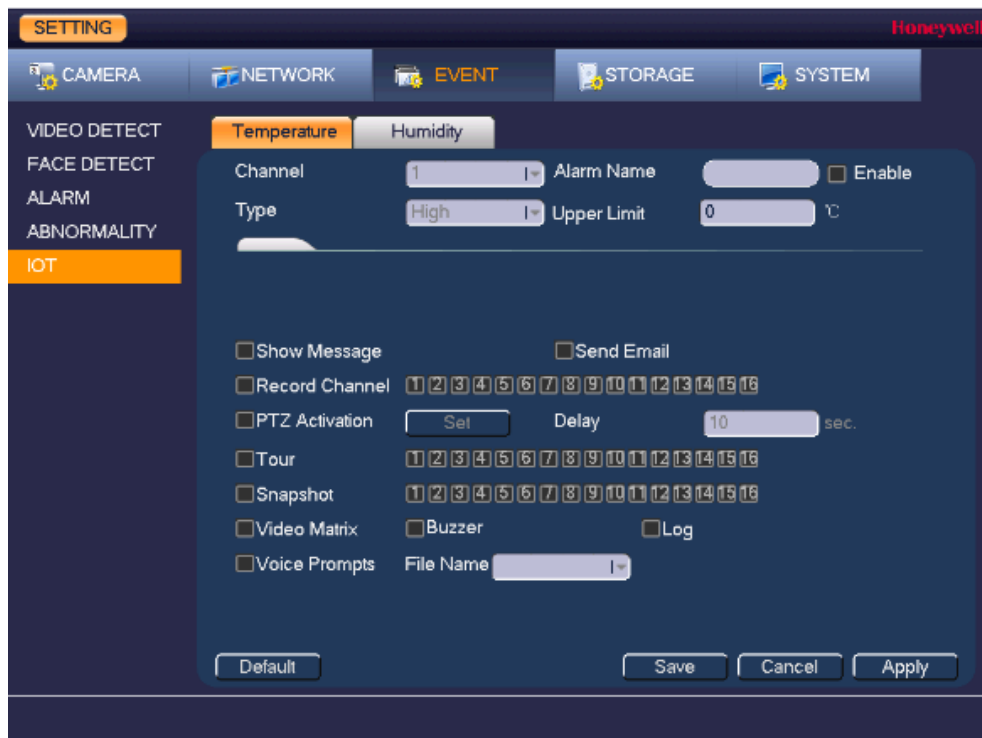
To use this function, please make sure there is at least one camera with temperature and humidity sensor has been connected to the Device.

### Configuring Temperature

To configure the temperature:


1. Go to **Main Menu → Setting → Event → IOT → Temperature**.

Figure 10-15



2. On the Temperature tab, select the Channel you want to configure and input the Alarm Name.
3. Select the Enable check box to enable Temperature configuration.
4. Select the actions that you want the system to initiate when the selected event occurs:

Table 10-2

Configuration	Description
Type	Select event type as High or Low, and set the upper and low temperature limit respectively. For example, select event type as High and set upper limit as 28, the alarm occurs when the temperature reaches 28°C.
Upper Limit	Select event type as High or Low, and set the upper and low temperature limit respectively. For example, select event type as High and set upper limit as 28, the alarm occurs when the temperature reaches 28°C.
Show Message	Click to enable a pop-up message on your local host PC screen to let you know an alarm has occurred.
Send Email	The system can send an email when an alarm is detected. When you have enabled the <b>Snapshot</b> function, the system can also send an image attached to the email. Go to <b>Main Menu →Setting →Network→Email</b> to configure the email settings. See <a href="#">Configuring Email Settings</a> on page 78.
Record Channel	The system automatically starts recording selected channels when a motion detection alarm occurs. <b>Note</b> You need to set the alarm recording period. Go to <b>Storage→Schedule</b> to configure the current channel for scheduled recording. See <a href="#">Configuring Record Settings</a> on page 111.
PTZ Activation	When PTZ activation is configured, the system can activate. 1. Click <b>Set</b> to open the <b>PTZ Activation</b> configuration interface.  2. Select a preset, tour, or pattern from the drop-down menu. Click <b>Save</b> .
Delay	The system can delay recording for a specified amount of time after an alarm has ended. Select from <b>10s</b> to <b>300s</b> .
Tour	Click to enable a tour to be triggered by an alarm. The system supports 1/8-window tour. See <a href="#">Configuring Display Settings</a> on page 119 for tour interval setup. On the <b>Display Settings</b> tab, when there are two tours enabled by default, you can configure the system so an alarm triggers the system to enable the alarm tours you configured here. If there is no alarm, then the system uses the tour setup that was configured in the <b>Display</b> interface.
Snapshot	Click to enable the <b>Snapshot</b> function. Channel snapshots are taken according to the schedule you configure. Alarm snapshots are taken when an alarm occurs.

<b>Video Matrix</b>	Click to enable. When an alarm occurs, the SPOT OUT port video (a 1-window tour) from the alarm activation channel selected in the Record Channel.
<b>Buzzer</b>	Click to enable the <b>Buzzer</b> function. When an alarm occurs, the buzzer beeps.
<b>Log</b>	Click to enable the DVR to record a local alarm log.
<b>Voice Prompts</b>	Select to enable audio broadcast/voice prompts in response to a motion detection event.
<b>File Name</b>	Select a file for the voice prompt.

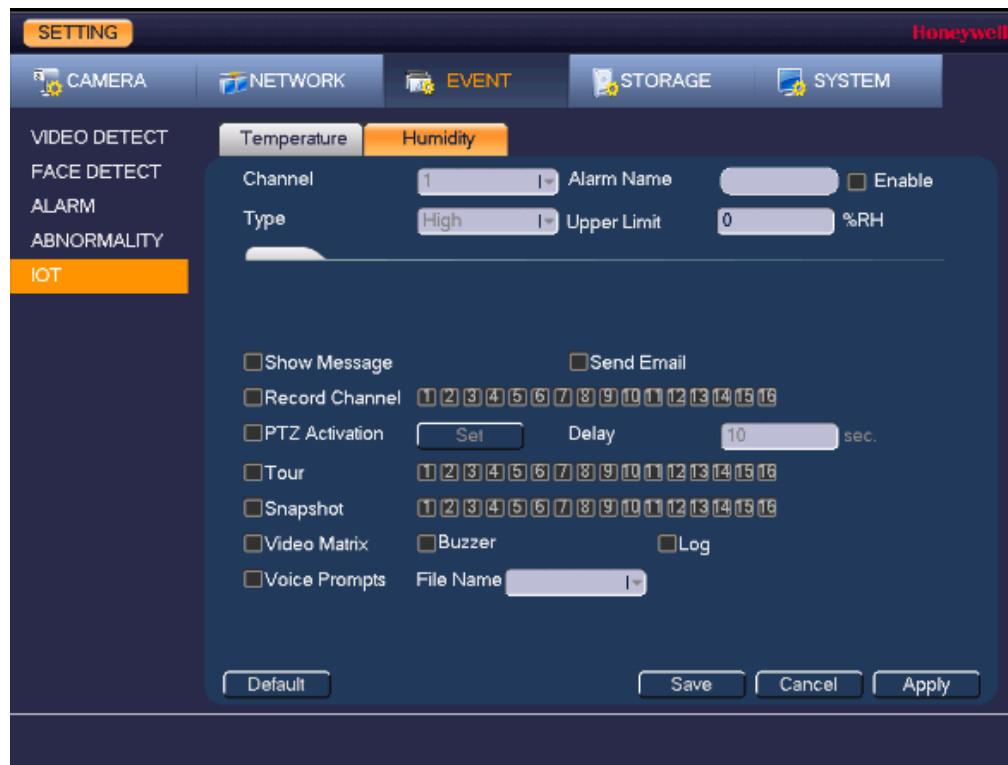
5. Click **Apply** to save your settings.

## Configuring Humidity

To configure the Humidity:


1. Go to **Main Menu** → **Setting** → **Event** → **IOT** → **Humidity**.

Figure 10-16



2. On the Humidity tab, select the Channel you want to configure and input the Alarm Name.
3. Select the Enable check box to enable Humidity configuration.
4. Select the actions that you want the system to initiate when the selected event occurs:

Table 8-3

Configuration	Description
Type	Select event type as High or Low, and set the upper and low humidity limit respectively. For example, select event type as High and set upper limit as 28, the alarm occurs when the temperature reaches 28.
Upper Limit	Select event type as High or Low, and set the upper and low humidity limit respectively. For example, select event type as High and set upper limit as 28, the alarm occurs when the temperature reaches 28.
Show Message	Click to enable a pop-up message on your local host PC screen to let you know an alarm has occurred.
Send Email	The system can send an email when an alarm is detected. When you have enabled the <b>Snapshot</b> function, the system can also send an image attached to the email. Go to <b>Main Menu</b> → <b>Setting</b> → <b>Network</b> → <b>Email</b> to configure the email settings. See <a href="#">Configuring Email Settings</a> on page 78.
Record Channel	The system automatically starts recording selected channels when a motion detection alarm occurs. <b>Note</b> You need to set the alarm recording period. Go to <b>Storage</b> → <b>Schedule</b> to configure the current channel for scheduled recording. See <a href="#">Configuring Record Settings</a> on page 111.
PTZ Activation	When PTZ activation is configured, the system can activate. 1. Click <b>Set</b> to open the <b>PTZ Activation</b> configuration interface.  2. Select a preset, tour, or pattern from the drop-down menu. Click <b>Save</b> .
Delay	The system can delay recording for a specified amount of time after an alarm has ended. Select from <b>10s</b> to <b>300s</b> .
Tour	Click to enable a tour to be triggered by an alarm. The system supports 1/8-window tour. See <a href="#">Configuring Display Settings</a> on page 119 for tour interval setup. On the <b>Display Settings</b> tab, when there are two tours enabled by default, you can configure the system so an alarm triggers the system to enable the alarm tours you configured here. If there is no alarm, then the system uses the tour setup that was configured in the <b>Display</b> interface.
Snapshot	Click to enable the <b>Snapshot</b> function. Channel snapshots are taken according to the schedule you configure. Alarm snapshots are taken when an alarm occurs.
Video Matrix	Click to enable. When an alarm occurs, the SPOT OUT port video (a 1-



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	window tour) from the alarm activation channel selected in the Record Channel.
<b>Buzzer</b>	Click to enable the <b>Buzzer</b> function. When an alarm occurs, the buzzer beeps.
<b>Log</b>	Click to enable the DVR to record a local alarm log.
<b>Voice Prompts</b>	Select to enable audio broadcast/voice prompts in response to a motion detection event.
<b>File Name</b>	Select a file for the voice prompt.

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5. Click **Apply** to save your settings.

# 11. Configuring Storage Settings

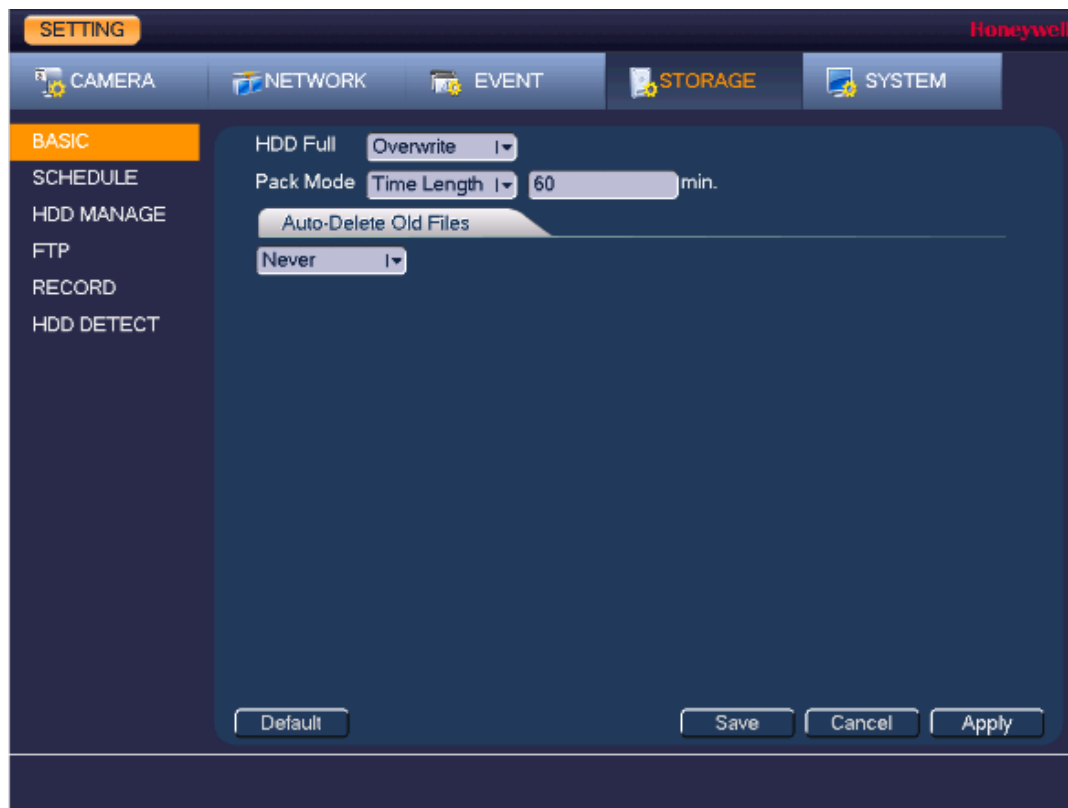
This chapter contains the following sections:

- [Configuring the Configuring the Basic Settings, page 106](#)
- [Configuring the Video Recording Schedule, page 107](#)
- [Configuring HDD Settings, page 110](#)
- [Configuring FTP, page 111](#)
- [Configuring Record Settings, page 111](#)
- [Configuring HDD Diagnostic Settings, page 112](#)

## Configuring the Basic Settings

Go to Main Menu → SETTING → STORAGE → BASIC.

Figure 11-1



**HDD Full:** Set to Overwrite to continue recording over old data when the HDD is full. Set to Stop Record to stop recording when the HDD is full. The default setting is **Overwrite**.

**Pack Mode:** Set time length or file length. Specify a time between 1 and 60 minutes. The default setting is 60 min; specify file length between 0 and 1025M.

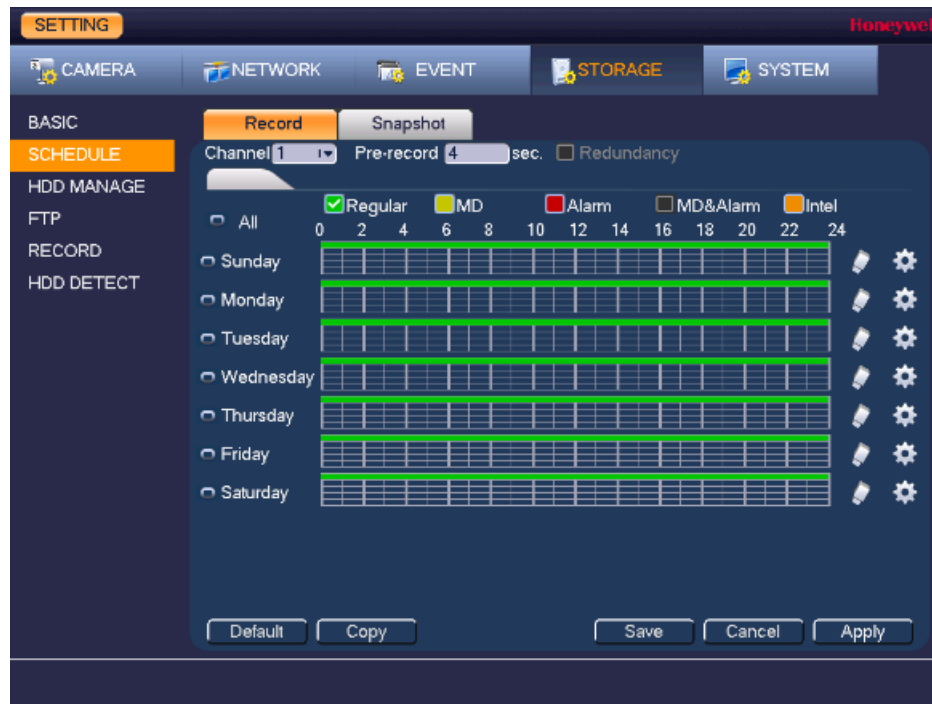
**Auto Delete Old Files:** Select **Never** or **Customized**. If **Customized** is selected, in the **Days Ago** box, enter the amount of time to elapse before the files are automatically deleted.

## Configuring the Video Recording Schedule

### Configuring the video recording schedule

1. Go to **Main Menu** → **Setting** → **Storage** → **Schedule** → **Record**.

Figure 11-2



2. On the **Record** tab, in the **Channel** box, select the channel (camera) that you want to configure a recording schedule for.
3. In the **Pre-Record** box, enter a time between 0 and 30 seconds. The default setting is 4 seconds. The pre-record time sets how long the DVR records before the scheduled recording start time. For example, if the DVR is scheduled to start recording at 12:00 and the pre-record time is set to 4 seconds, the DVR will start recording at 11:59:56.
4. If the DVR has two HDDs, select the Redundancy check box to enable redundant recording on the second HDD. This HDD must first be configured as redundant on the HDD Manage page (see [Configuring HDD Settings](#) on page 110).
5. At the top of the scheduling table, select the check box(es) of the recording type(s) that you want to schedule:
  - **Regular** The regular recording schedule is indicated by a

- **MD** green bar.  
The motion detection recording schedule is indicated by a yellow bar.
  - **Alarm** The alarm recording schedule is indicated by a red bar.
  - **MD&Alarm** The motion detection and alarm schedule is indicated by a blue bar.
  - **Intel** Intelligent identification recording, or Face Detection recording, is indicated by an orange bar.
6. At the left of the scheduling table, select the day(s) of the week that you want to configure a recording schedule for. To configure the same recording schedule for all of the days at the same time, select **All**.
  7. Click or drag the mouse in the scheduling table to set the recording period. To erase a recording period, click the eraser icon at the right of the table. Alternatively, for the day of the week that you want to configure, click the gear icon at the right of the table. In the **Period** window, set up to six recording periods. To copy the settings to additional days, select the appropriate check box(es) under **Copy**, and then click **Save**.
  8. Click **Apply** to save your settings.
  9. To copy the settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

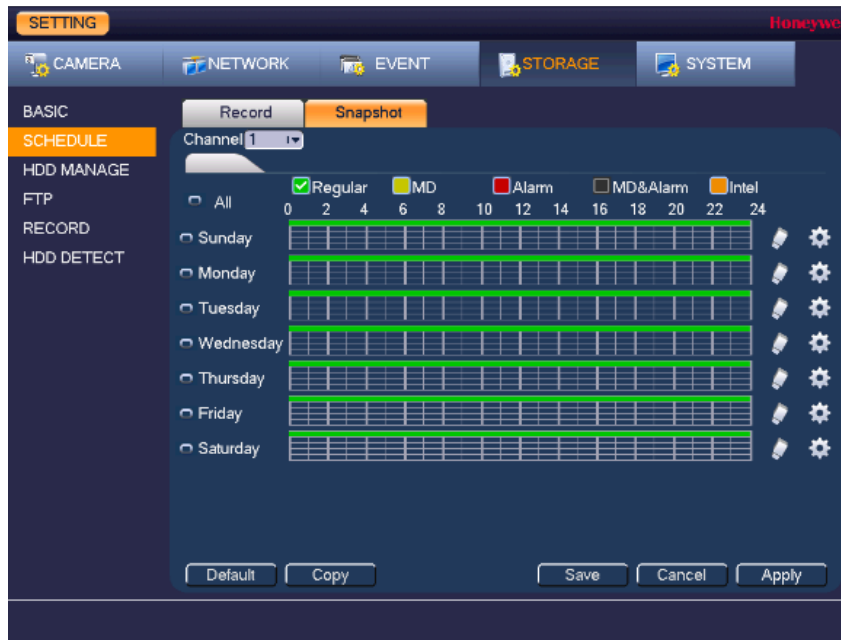
## Configuring the Snapshot Recording Schedule

Follow these steps to configure the snapshot recording function. When enabled, the DVR can take snapshots when a motion detection, video loss, video tampering, or alarm event occurs. See [Chapter 10, Configuring Event Settings](#) for detailed instructions.

### To configure the snapshot recording schedule

1. Go to **Main Menu → Setting → Storage → Schedule → Snapshot**.

Figure 11-3



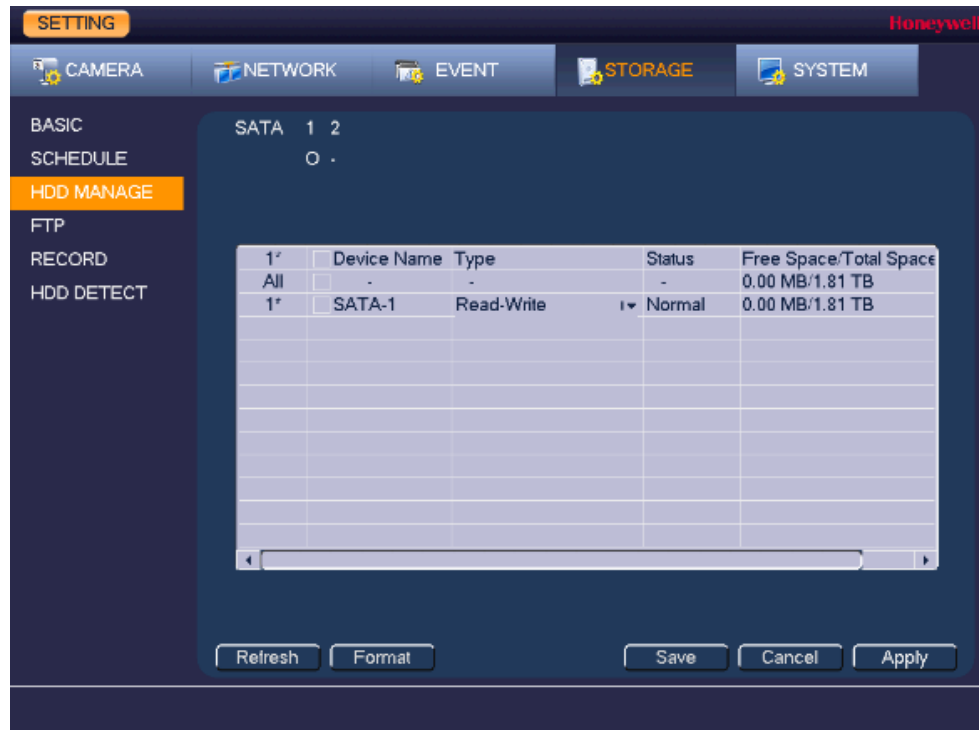
2. On the Snapshot tab, in the Channel box, select the channel (camera) that you want to configure a recording schedule for.
3. At the top of the scheduling table, select the check box(es) of the recording type(s) that you want to schedule:
  - **Regular**                      The regular recording schedule is indicated by a green bar.
  - **MD**                              The motion detection recording schedule is indicated by a yellow bar.
  - **Alarm**                            The alarm recording schedule is indicated by a red bar.
  - **MD&Alarm**                    The motion detection and alarm schedule is indicated by a blue bar.
  - **Intel**                             Intelligent identification recording, or Face Detection recording, is indicated by an orange bar.
4. At the left of the scheduling table, select the day(s) of the week that you want to configure a recording schedule for. To configure the same recording schedule for all of the days at the same time, select **All**.
5. Click or drag the mouse in the scheduling table to set the recording period. To erase a recording period, click the eraser icon at the right of the table. Alternatively, for the day of the week that you want to configure, click the gear icon at the right of the table. In the **Period** window, set up to six recording periods. To copy the settings to additional days, select the appropriate check box(es) under **Copy**, and then click **Save**.
6. Click **Apply** to save your settings.
7. To copy the settings to additional channels, click **Copy**, select the channels that you want to copy the settings to, and then click **OK**.

## Configuring HDD Settings

To configure HDD settings

1. Go to **Main Menu** → **Setting** → **Storage** → **HDD Manage**.

Figure 11-4



o indicates the current HDD is normal.

x indicates there is an error.

- indicates that there is no HDD.

? indicates that a HDD is damaged.

### SATA

**Device Name** The HDD name.

**Type** The HDD type (read-write or read-only)

**Status** The current operating status of the HDD.

**Free Space/** The amount of free space remaining on the HDD/

**Total Space** The total capacity of the HDD.

2. The HDD is configured as read-write by default. To change the HDD type to read-only, in the **Type** column, select **Read-only HDD**. The DVR restarts to apply the new setting.
3. To erase all the data from the HDD, click **Format**. The message "Confirm format on the selected device?" Click **OK** to continue.

## Configuring FTP

To configure FTP settings

1. Go to **Main Menu** → **Setting** → **Storage** → **FTP**.

Figure 11-5

2. On the **FTP** page, click the **Enable** check box to enable uploading images to an FTP server.
3. Configure the following settings:

**Host IP:** Enter the address of the FTP server.

**Port:** Enter the port of the FTP server.

**Username:** Enter the user name for logging on to the FTP server.

**Password:** Enter the password for logging on to the FTP server.

**Anonymous:** Select the check box to hide user name when logged on to the FTP server.

**Remote Directory:** Enter a name for the remote directory. If this is left blank, the NVR will automatically create folder names.

**File Length:** This is the maximum size for image files being uploaded to the FTP server. Enter a value between **0** and **65535** MB.

**Image Upload Interval:** This is the interval for uploading images to the FTP server. Enter a time between 1 and 600 seconds.

**Channel:** Select a channel to upload images from, or select **All** to select all channels.

**Weekday:** Select a day of the week to upload images on, or select **All** to upload images every day.

**Time Periods:** You can configure up to two time periods for uploading images. For each period, select either **Alarm&Analytics**, **Motion**, or **Regular** images.

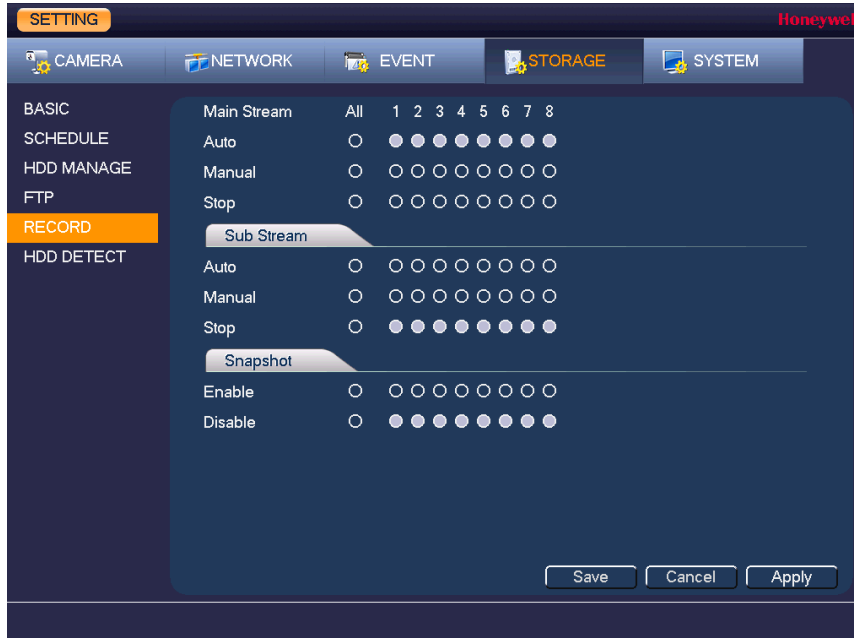
4. Click **Apply** to save your settings. To test the FTP connection, click **Test**.

## Configuring Record Settings

To configure record settings

1. Go to **Main Menu** → **Setting** → **Storage** → **Record**.

Figure 11-6



2. On the **Record** page, select the record types (Schedule, Manual, Stop) that you want to enable on each channel for both the main stream and secondary stream.
3. Under **Snapshot**, enable or disable snapshot recording on each channel.
4. Click **Apply** to save your settings.

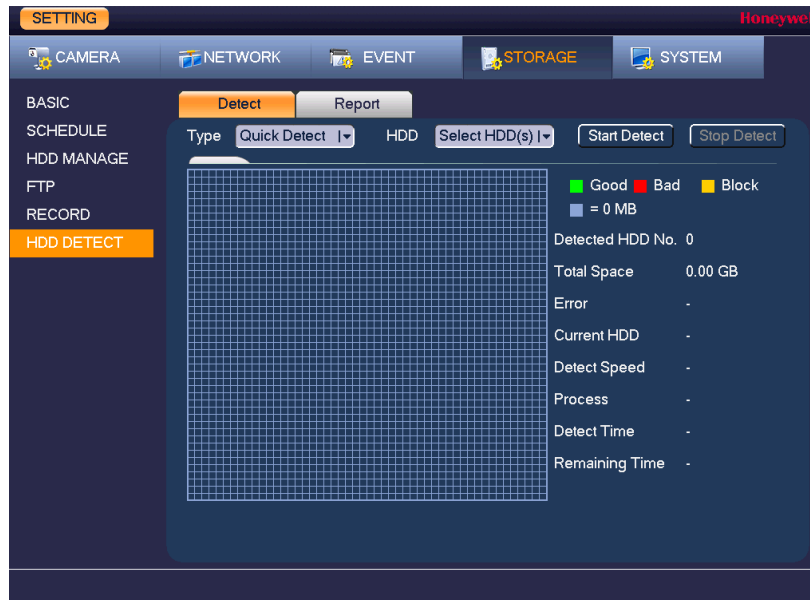
## Configuring HDD Diagnostic Settings

To run a diagnostic test on the HDD

1. Go to **Main Menu** → **Setting** → **Storage** → **HDD Detect** → **Detect**.



Figure 11-7



2. **On the Detect tab, in the Type box, select the diagnostic test that you want to run: Quick Detect or Global Detect.**
3. In the **HDD** box, select the check box of the HDD that you want to test.
4. Click **Start Detect** to start the diagnostic test.

**To view and/or back up the diagnostic test results**

1. Click the **Report** tab, double click the report that you want to view. The Details window opens.

Figure 11-8



5. In the **Details** window, on the **Detect Results** tab, you can view a graphical depiction of the HDD's overall health. Any bad sectors are marked red.
6. To back up the test results to an external USB storage device, ensure that a USB storage device (such as a USB flash drive) is connected to one of the USB ports on the DVR, and then click **Backup to USB Devices**. If the backup is successful, the message "BackupSucceed" appears.
7. To view S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) details, click the S.M.A.R.T tab.

**Figure 11-9**

The screenshot shows the 'Details' window in the Honeywell DVR interface. The 'S.M.A.R.T.' tab is selected, displaying the following information:

Port 1  
 Model ST2000VM003-1ET164  
 No. Z520V8Z6  
 Status OK  
 Describe:

Smart ID	Attribute	Threshold	Value	Worst Value
1	Read Error Rate	6	118	99
3	Spin Up Time	0	98	96
4	Start/Stop Count	20	100	100
5	Reallocated Sector Count	10	100	100
7	Seek Error Rate	30	62	60
9	Power On Hours Count	0	100	100
10	Spin-up Retry Count	97	100	100
12	Power On/Off Count	20	100	100
184	End-to-End Error	99	100	100

# 12. Configuring System Settings

This chapter contains the following sections:

- [Configuring General System Settings, page 115](#)
- [Configuring Display Settings, page 119](#)
- [Configuring Video Matrix Settings, page 123](#)
- [Configuring RS232 Settings, page 124](#)
- [Configuring Pan/Tilt/Zoom Settings, page 124](#)
- [Configuring ATM/POS \(Card Overlay\) Settings, page 125](#)
- [Configuring Voice Settings, page 127](#)
- [Configuring Account Settings, page 129](#)
- [Configuring Security, page 133](#)
- [Configuring Automatic Maintenance Settings, page 134](#)
- [Exporting and Importing System Configurations, page 135](#)
- [Restoring Default Settings, page 137](#)
- [Upgrading the DVR, page 137](#)

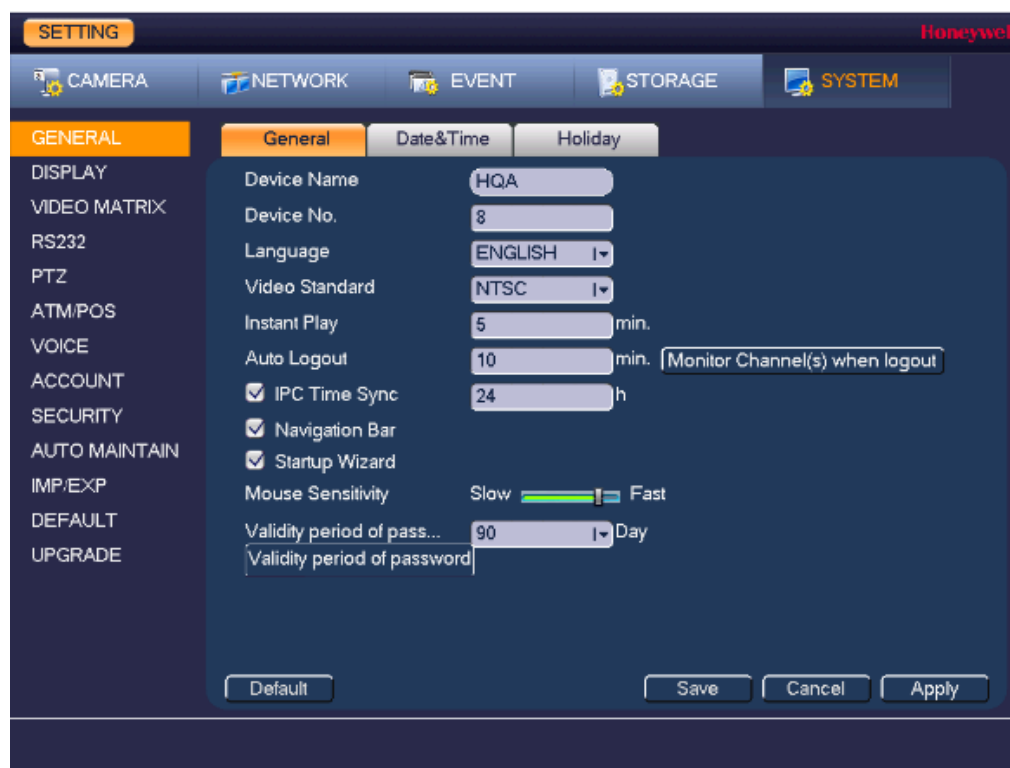
## Configuring General System Settings

### Configuring Device Settings

To configure general settings

1. Go to **Main Menu** → **Setting** → **System** → **General** → **General**.

Figure 12-1



2. On the General tab, configure the following settings:
  - **Device Name** Enter a device name for the DVR.
  - **Device No.** Enter a device number for the DVR.
  - **Language** Set the language of the user interface.
  - **Video Standard** Set the video standard to **NTSC** or **PAL**.
  - **Instant Play** Play back the previous 5 to 60 minutes of recorded video.  
**Note:** The playback time is set to 5 minutes by default.
  - **Auto Logout** Set the length of time the DVR waits before logging out an inactive user. Specify a time between **0** and **60** minutes. The default setting is **10 min.**
  - **Navigation Bar** Select the check box to display the live view toolbar on the live view screen. Clear the check box to hide the live view toolbar.
  - **IPC Time Sync** input an interval here to synchronize the DVR time with the IPC time.
  - **Startup Wizard** Select the check box to display the Startup Wizard at startup. Clear the check box to bypass the Startup Wizard at startup.
  - **Mouse Sensitivity** Set the desired mouse speed using the slider.
  - **Validity Period of pass...** Enter the Validity Period of password.

3. Click **Apply** to save your settings.

## Configuring Date and Time Settings

To configure the system time setting

1. Go to **Main Menu → Setting → System → General → Date&Time.**

Figure 12-2



2. On the Date&Time tab, configure the following settings:
  - **Date Format** Select the date format that you want to use for the system time: **YYYY MM DD, MM DD YYYY, or DD MM YYYY.**
  - **Time Format** Select the time format that you want to use for the system time: **24-Hour or 12-Hour.**
  - **Date Separator** Select the separator that you want to use for the system time: period (.), hyphen (-), or forward slash (/).
  - **System Time** Enter the system time and time zone, and then click **Save.**
3. Click **Apply** to save your settings.

To configure the Daylight Saving Time (DST) setting

1. Go to **Main Menu → Setting → System → General → Date&Time.**
2. On the **Date&Time** tab, select the DST check box.
3. Specify when Daylight Saving Time begins and ends.
  - a. Since the specific dates change every year, select **Day of Week** as the **DST Type.**

- b. Set the **Start Time** as **Mar 2nd Su 02:00** (the second Sunday in March at 2:00 a.m.).
  - c. Set the **End Time** as **Nov 1st Su 02:00** (the first Sunday in November at 2:00 a.m.).
4. Click **Apply** to save your settings.

**To synchronize the system time with the Network Time Protocol (NTP)**

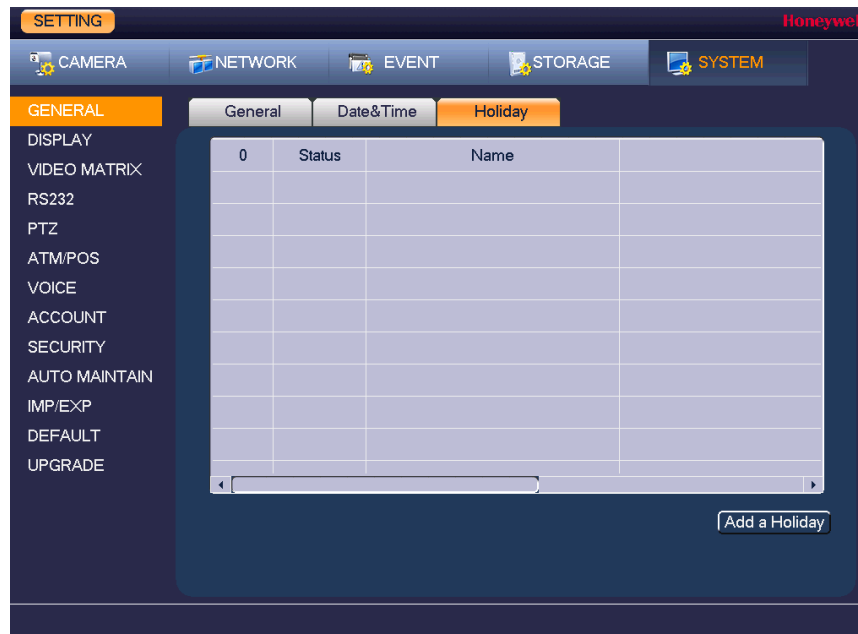
1. Ensure that the DVR is connected to the Internet.
2. Go to **Main Menu → Setting → System → General → Date&Time**.
3. On the Date&Time tab, select the NTP check box.
4. In the Server IP box, enter the IP address of the NTP server that you want to use (for example, time.nist.gov).
5. Ensure that Port is set to 123.
6. To change the frequency with which the system time synchronizes with the NTP server, enter a new time in the Update Period box. The default setting is 60 min.
7. Click **Manual Update** to manually synchronize your system time with the NTP server.
8. Click **Apply** to save your settings.

## Configuring Holiday Settings

**To configure holiday settings**

1. Go to **Main Menu → Setting → System → General → Holiday**.

**Figure 12-3**



2. On the Holiday tab, click **Add a Holiday**. The Add a Holiday window appears.

Figure 12-4

3. In the Holiday Name box, enter the name of the holiday that you want to add.
4. Set Repeat Mode to Once or Always.

---

**Note** If you want the DVR to recognize a particular day of the week as a holiday year-round (for example, every Friday), set **Repeat Mode** to **Always**.

5. Set Holiday Range to Date or Week depending on whether you want to designate a single day or one or more weeks as a holiday.
  - If **Date** is selected, enter the year, month, and day in the **Start Time** and **End Time** boxes.
  - If **Week** is selected, enter the year, month, week of the month (1st, 2nd, 3rd, 4th, Last), and day.
6. If you want to add more holidays, select the Add More check box.
7. Click **Add** to add the holiday.
8. After you have added the new holidays, on the Holiday Setup tab, set the Status of each holiday. Select Enable to enable the holiday or select Disable to disable it.

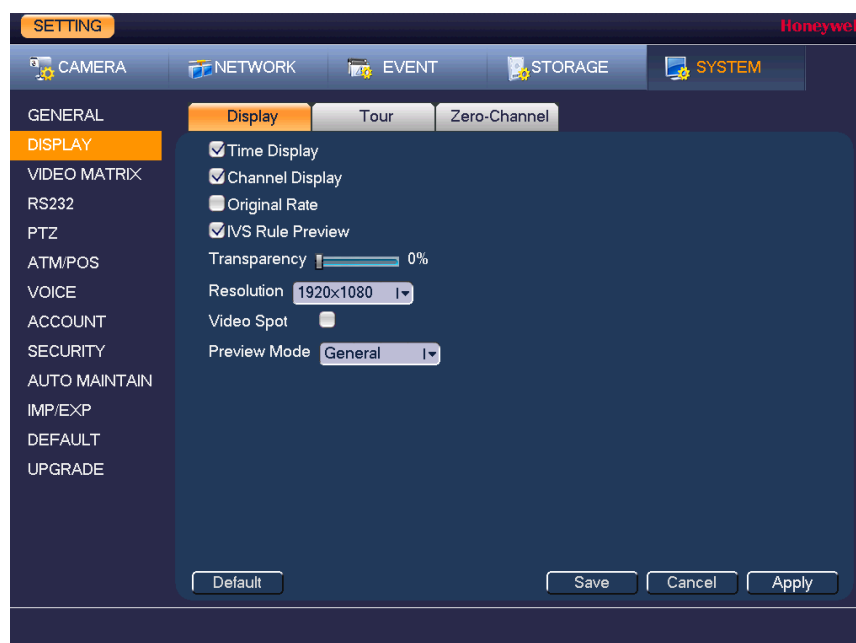
## Configuring Display Settings

### Configuring Display Settings

To configure the display settings

1. Go to **Main Menu** → **Setting** → **System** → **Display** → **Display**.

Figure 12-5



2. On the **Display** tab, configure the following settings:
  - **Time Display** To display the current time in each channel window in live view mode, select the check box. To hide the time, clear the check box.
  - **Channel Display** To display the camera name, status, and channel number in each channel window, select the check box. To hide the camera name, status, and channel number, clear the check box.
  - **Original Rate** Check to display the image in its actual size/proportion.
  - **Preview Enhancement** To enhance the display image, select the check box. To keep the default settings, clear the check box.
  - **Transparency** Set the transparency of the graphical user interface (GUI) to a value between **0** and **100**, with **0** being totally opaque and **100** being totally transparent.
  - **Resolution** Set the resolution of your display.  
**Note** You must restart the DVR for new display resolution settings to take effect.
  - **Video Spot** Click to enable Video Spot on a secondary monitor, on which you can view video from selected cameras or inputs.
  - **Preview Mode** Select **Show Face List** to see, on the right side of the **Live View** image, all of the snapshots taken as a result of face detection.
3. Click **Apply** to save your settings.



## Configuring Tour Settings

In a tour, the DVR cycles through different channel views. You can specify which views and cameras you want to appear in the tour.

### To configure a tour

1. Go to **Main Menu → Setting → System → Display → Tour**.

Figure 12-6



2. On the Tour tab, select the **Enable** check box to enable the tour function or clear the check box to disable the tour function.
3. In the **Interval** box, enter the amount of time in seconds that you want each view to appear on the screen. The default setting is 5 seconds.
4. Do one of the following:
  - To cycle through all of the cameras in all of the available views, keep the default settings.
  - To create a custom tour, for each view in the **Window Split** list (**View 1**, **View 4**, ...), clear the check box on the top row of the **Channel Group** list to deselect all of the cameras for that view, then select the cameras for each view that you want to appear in the tour.  
For example, to create a tour showing only cameras 2, 3, and 5 in single-channel view, set **Window Split** to **View 1** and then select cameras **2**, **3**, and **5**. There should be no other cameras selected in View 1 or in any of the other views.
5. If you want, you can add or delete cameras from the Channel Group list. You can only add cameras that do not already appear in the list. On some DVR models you can change the Motion Tour Type and Alarm Tour Type from View 1 (single-channel view) to View 4 (four-channel view).
6. Click **Apply** to save your settings.

## Configuring Zero-Channel Settings

The zero channel function lets you view several video sources on one channel in a web browser, saving bandwidth and improving upload speeds.

### To configure zero channel encoding

1. Go to **Main Menu → Setting → System → Display → Zero-Channel**.

Figure 12-7



2. On the Zero-Ch Encode tab, configure the following settings:
  - **Enable** Select the check box to enable the zero-channel function or clear the check box to disable it.
  - **Compression** Select the desired video compression standard from the list. The default setting is H.264.
  - **Resolution** Select the desired video resolution from the list. The default setting is **D1**.
  - **Frame Rate (FPS)** Select a value between **1** and **30** (NTSC) or between **1** and **25** (PAL).
  - **Bit Rate (Kb/S)** Select a value between **896** and **4096**. The default setting is **1024**.
3. Click **Apply** to save your settings.
4. Open a web browser, enter the DVR's remote access IP address in the browser's address field, and then log in.
5. Select Multi-Preview in the remote web client interface to display all of the DVR's video sources in one channel.

## Configuring Video Matrix Settings

You can configure the matrix output channel, including the resolution and window split, and its interval.

To configure Video Matrix settings

1. Go to **Main Menu** → **Setting** → **System** → **Video Matrix**.

Figure 12-8



2. On the Video Matrix tab, configure the following settings:
  - **Enable** Select the check box to enable the zero-channel function or clear the check box to disable it.
  - **Interval** This is the interval the DVR waits before sending out email notifications after an event is detected. Enter a time between **0** and **1440** minutes. 0 means that there is no interval.
  - **Resolution** Select the desired video resolution from the list. The default setting is **D1**.
  - **Window Split** Select from the drop-down list. BNC supports only 1-split mode. HDMI supports 1/4/9/16-split mode.
3. Click **Add** to add a channel group.
4. Click **Apply** to save your settings.

### Other Functions/Buttons

**Modify** - Double-click a channel or select a channel, then click **Modify** to change the current channel setup.

**Delete** - Click to remove a selected channel group.

**Move Up** - Click to move the current selected channel group up the list.

**Move Down** - Click to move the current selected channel group down the list.

## Configuring RS232 Settings

To configure RS232 settings

1. Go to **Main Menu** → **Setting** → **System** → **RS232**.

Figure 12-9



2. Configure the following settings:
  - **Function** Select **Console**, **Adapter**, or **NetKeyboard**, depending on the type of RS232 device that you have connected to the DVR.
  - **Baudrate** Select a value between **1200** and **115200**. The default setting is **115200**.
  - **Data Bits** Select a value between **5** and **8**. The default setting is **8**.
  - **Stop Bits** Select **1**, **1.5**, or **2**. The default setting is **1**.
  - **Parity** Select **None**, **Odd**, **Even**, **Mark**, or **Null**. The default setting is **None**.
3. Click **Apply** to save your settings.

## Configuring Pan/Tilt/Zoom Settings

See [Configuring PTZ Functions](#) on page 34.

## Configuring ATM/POS (Card Overlay) Settings

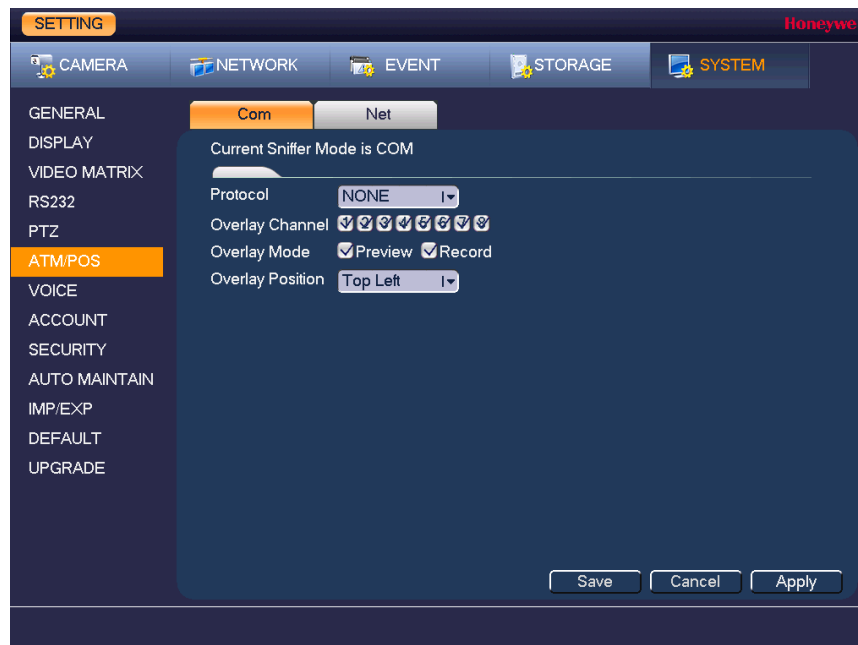
The ATM/POS (card overlay) settings allow the DVR to communicate with automated teller machines (ATMs) and point of sale (POS) machines in a retail environment.

## Configuring COM Settings

To configure the COM settings

1. Go to **Main Menu** → **Setting** → **System** → **ATM/POS** → **Com**.

Figure 12-10



2. On the Com tab, configure the following settings:
  - **Protocol** Select **None** or **POS**.
  - **Overlay Channel** Select a camera.
  - **Overlay Mode** The **Preview** and **Record** overlay modes are enabled by default. Clear the check boxes if you want to disable them.
  - **Overlay Position** Select **Top Left**, **Bottom Left**, **Top Right**, or **Bottom Right**.
3. Click **Apply**, and then click **Save** to save the settings.

## Configuring Net Settings

You can configure the network settings with or without the ATM/POS protocol.

To configure the network settings with the ATM/POS protocol

1. Go to **Main Menu → Setting → System → Card Overlay → Net**.

Figure 12-11



2. On the Net tab, configure the following settings:
  - **Protocol** Select **ATM/POS**.
  - **Overlay Mode** The **Preview** and **Encode** overlay modes are enabled by default. Clear the check boxes if you want to disable them.
  - **Preview** When enabled, text overlay will be visible in the preview mode.
  - **Record** When enabled, text overlay will be visible in the recording.
  - **Overlay Position** Select **Top Left**, **Bottom Left**, **Top Right**, or **Bottom Right**.
  - **Source IP/Port** Enter the source IP and port. The source IP refers to the host IP address that sends out the information.
  - **Destination/Port** Enter the destination IP and port. The destination IP refers to the IP address of the device that receives the information.
  - **Record Channel** Select a camera.
  - **Frame ID** Configure up to 6 Frame IDs to ensure valid and legal information.  
Enter the **StartPosition**, **Length**, and **Key**. Click **Data** to enter **Start Position**, **Length**, and **Title** information for up to four fields, and then click **Save**.
3. Click **Apply**, and then click **Save** to save the settings.

To configure the network settings without the ATM/POS protocol

1. Go to **Main Menu → Setting → System → Card Overlay → Net.**

**Figure 12-12**



2. On the **Net** tab, configure the following settings:

- **Protocol** Select **POS**.
- **Overlay Channel** Select a camera.
- **Overlay Mode** The **Preview** and **Encode** overlay modes are enabled by default. Clear the check boxes if you want to disable them.
- **Overlay Position** Select **Top Left**, **Bottom Left**, **Top Right**, or **Bottom Right**.
- **Source IP/Port** Enter the source IP and port. The source IP refers to the host IP address that sends out the information.
- **Destination/Port** Enter the destination IP and port. The destination IP refers to the IP address of the device that receives the information.

3. Click **Apply**, and then click **Save** to save the settings.

## Configuring Voice Settings

You can upload audio files that play when triggered by an event.

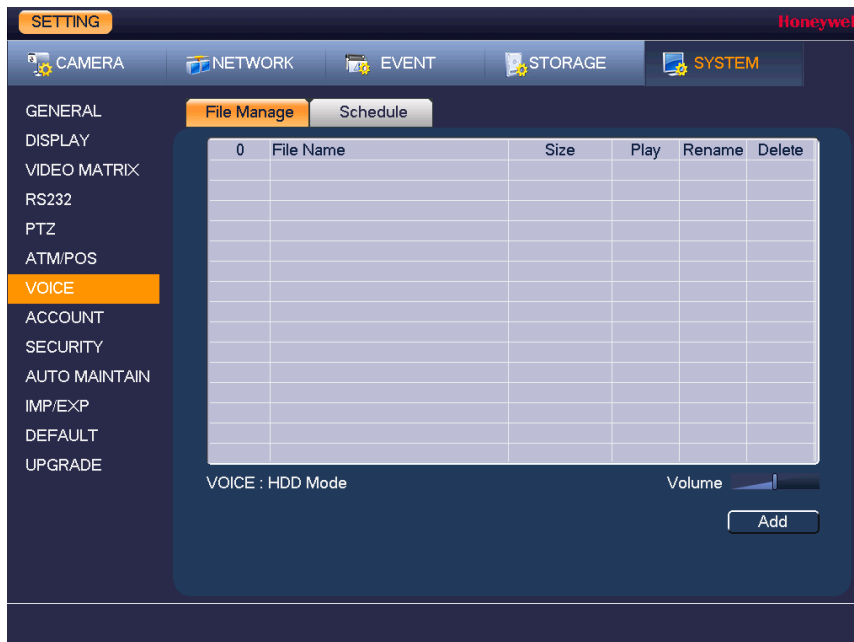
## Configuring the Voice Files

In the **File Manage** tab, you can add audio files, listen to audio files, rename/delete audio files, and configure the audio volume.

### To configure voice files

1. Go to **Main Menu → Setting → System → Voice → File Manage**.

Figure 12-13



2. Click **Add** to import an audio file from a USB device.

### Note

The audio file can either be saved to the HDD drive, or remain on the USB device. However, the USB will have to remain connected to the DVR. If the audio file is saved to the HDD, then it is not necessary to have the USB device connected at all times.

3. Click **Apply**, and then click **Save** to save the settings.

## Configuring the Voice Schedule

### To configure the voice schedule

1. Go to **Main Menu → Setting → System → Voice → Schedule**.



Figure 12-14



2. Select an audio file to the time period.
3. Configure the **Interval**, which is how long the audio file lasts.
4. Configure the **Repeat**, which is how many times the audio file repeats.
5. Click **Apply**, and then click **Save** to save the settings.

## Configuring Account Settings

You can add, edit, or delete user accounts. By default, the DVR has an admin user account and a default user account. The admin user account has permission to perform all the operation and configuration functions of the DVR. The default user account only has permission to monitor live video.

## Configuring Users

To add a user account

1. Go to **Main Menu** → **Setting** → **System** → **Account** → **User**.

**Figure 12-15**



2. On the **User** tab, click **Add User**. The Add User page opens.

**Figure 12-16**



3. On the **Add User** page, configure the following settings:
  - **User Name** Enter a user name for the account.
  - **Password** Enter a password for the account.
  - **Confirm Password** Re-enter the password.

- **Memo**                      Optionally, enter a brief description of the account.
- **User MAC**                Optionally, record the user's MAC address so that user can only log in on a specific device on the network. If this field is left blank, the user can log in on any connected device on the network.
- **Group**                     Assign the user to a group (**admin**, **user**, or another group that you have defined).
- **Authority**                Assign privileges by selecting or clearing check boxes on the **System**, **Playback**, and **Monitor** tabs.  
  
**Note** By default, the user group is set up to allow a new user to monitor live video from all cameras, play back recorded video from all cameras, control PTZ cameras, view information, manually control the DVR, back up files, and adjust color settings. To assign additional privileges, change the user settings on the Group tab.

4. Click **Save** to save your settings.

#### To edit a user account

1. Go to **Main Menu → Setting → System → Account → User**.
2. On the User tab, click the **Modify** icon of the user account that you want to edit. The Modify User page opens.
3. On the Modify User page, you can change any of the following settings:
  - Password
  - User Name
  - User Group
  - User MAC
  - Memo
  - Authority (System, Playback, Monitor)
4. When you have finished making changes, click **Save** to save your settings.

#### To delete a user account

1. Go to **Main Menu → Setting → System → Account → User**.
2. On the User tab, click the **Delete** icon of the user account that you want to delete.
3. The message "Are you sure that you want to remove this?" appears. Click **OK** to delete the account.

---

**Note**                      You can only delete an account that you have created. You cannot delete the admin and default user accounts.

---

## Configuring Groups

### To add a user group

1. Go to **Main Menu → Setting → System → Account → Group**.

Figure 12-17



2. On the Group tab, click **Add Group**.
3. On the Add Group page, enter a name for the group in the Group Name box, enter a description of the group in the Memo box, and then assign user permissions on the System, Playback, and Monitor tabs.
4. Click **Save** to save your settings.

#### To edit a user group

1. Go to **Main Menu → Setting → System → Account → Group**.
2. On the Group tab, click the **Modify** icon of the user group that you want to edit. The Modify Group page opens.
3. On the Modify Group page, you can change any of the following settings:
  - Group
  - Group Name
  - Memo
  - Authority (System, Playback, Monitor)
4. When you have finished making changes, click **Save** to save your settings.

#### To delete a user group

1. Go to **Main Menu → Setting → System → Account → Group**.
2. On the Group tab, click the **Delete** icon of the user group that you want to delete.
3. The message "Are you sure that you want to remove this?" appears. Click **OK** to delete the group.

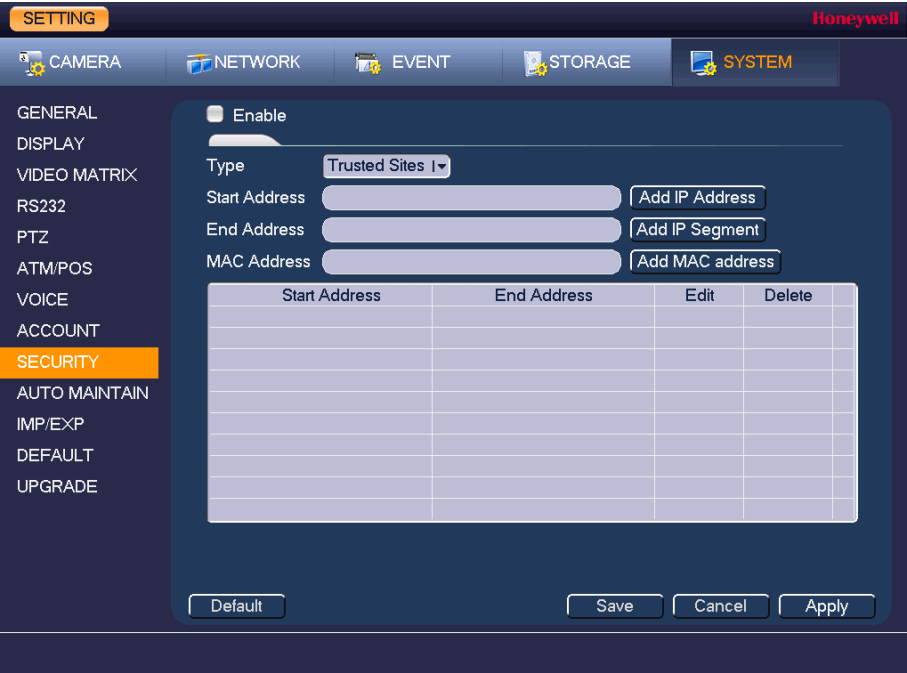
# Configuring Security

To enhance device network security and protect device data, please set the access right of the IP host (IP host here refers to the IP PC or the server). After you enabled trusted sites function, only the IP listed below can access current DVR.

If you enable blocked sites function, the following listed IP addresses cannot access current DVR.

1. Go to **Main menu->Setting->System->Security**.
2. Enter security interface. See the picture below.

Figure 12-18



3. Check the Enable box.
4. Select the trusted sites/block sites.
  - Enable trusted site function and then add the whitelist.
  - Enable blocked site function and then add the blacklist.
5. Set parameters.
  - Start address/end address: Select one type from the dropdown list, you can input IP address in the start address and end address. Now you can click **Add IP address** or Add IP section to add. System supports max 64 IP addresses.
    - a. For the newly added IP address, it is in enable status by default. Remove the ✓ before the item, and then current item is not in the list.
    - b. System max supports 64 items.
    - c. Address column supports IPv4 or IPv6 format. If it is IPv6 address, system can optimize it. For example, system can optimize aa:0000: 00: 00aa: 00aa: 00aa: 00aa as aa:: aa: aa: aa: aa: aa: aa.

- d. System automatically removes space if there is any space before or after the newly added IP address.
- e. System only checks start address if you add IP address. System check start address and end address if you add IP section and the end address shall be larger than the start address.
- f. System may check newly added IP address exists or not. System does not add if input IP address does not exist.
  - Delete: Click it to remove specified item.
  - Edit: Click it to edit start address and end address. See [Figure 12-19](#). System can check the IP address validity after the edit operation and implement IPv6 optimization.
  - Default: Click it to restore default setup. In this case, the trusted sites and blocked sites are both null.

**Figure 12-19**



- 6. Click **Apply** or **Save** to complete setup.
  - If you enabled trusted sites, only the IP in the trusted sites list can access the device.
  - If you enabled blocked sites, the IP in the blocked sites cannot access the device.

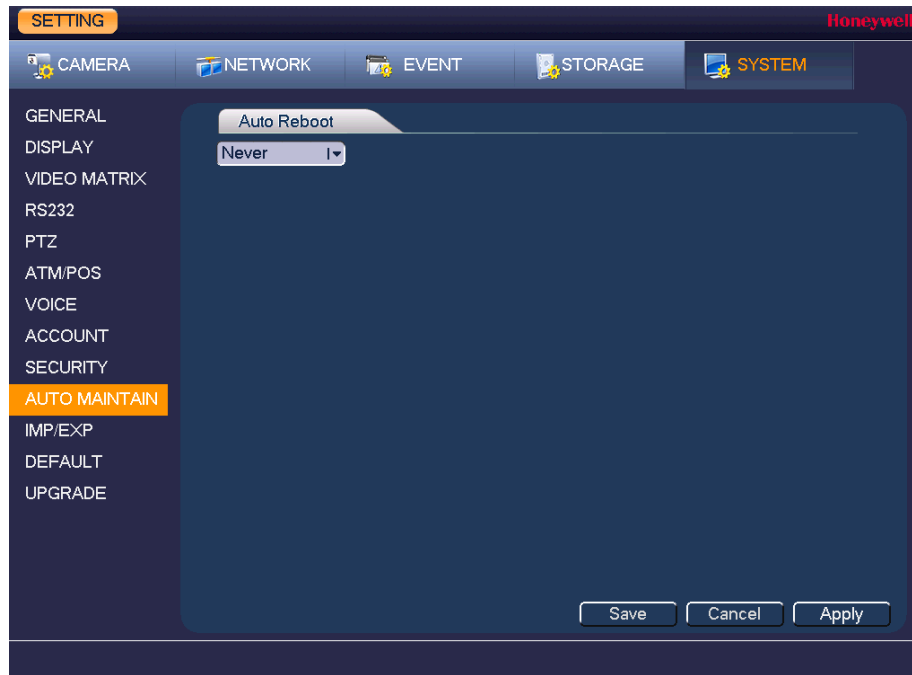
## Configuring Automatic Maintenance Settings

You can set up the DVR to automatically restart and/or to automatically delete old files.

### To configure the auto-reboot function

1. Go to **Main Menu** → **Setting** → **System** → **Auto Maintain**.

Figure 12-20



2. Under Auto-Reboot System, select one of the following options: Never, Everyday, Every Sunday, Every Monday, Every Tuesday, Every Wednesday, Every Thursday, Every Friday, or Every Saturday.
3. Click **Apply** to save your settings.

## Exporting and Importing System Configurations

You can export and/or import DVR system configurations if you are installing several DVRs requiring the same setup.

### To export a system configuration

1. Go to **Main Menu → Setting → System → IMP/EXP**.
2. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR. The Find USB device dialog box opens.

Figure 12-21



3. In the Find USB device dialog box, click **Config Backup**.

4. On the Config Backup page, click **Refresh**. The page populates with the details of the storage device.

Figure 12-22



5. Click **Export**. A message appears confirming that the export was successful and the system configuration file (named Config\_[YYYYMMDDhhmmss]) is added to the file list.

#### To import a system configuration

1. Insert a USB storage device containing a system configuration file (exported from another DVR) into one of the USB ports on the DVR. The Find USB device dialog box opens.
2. In the Find USB device dialog box, click **Config Backup**.
3. On the Config Backup page, click the configuration file that you want to import (named Config\_[YYYYMMDDhhmmss]), and then click **Import**.
4. Restart the DVR to apply the new settings.

#### To format an external USB storage device

1. Go to **Main Menu → Setting → System → Config Backup**.
2. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR. The Find USB device dialog box opens.
3. In the Find USB device dialog box, click **Config Backup**.
4. On the Config Backup page, click **Refresh**. The page populates with the details of the storage device.
5. Click **Format**.
6. The message "Confirm format on the selected device?" appears. Click **OK** to format the storage device.



## Restoring Default Settings

You can restore camera, network, event, storage, and system default settings.

---

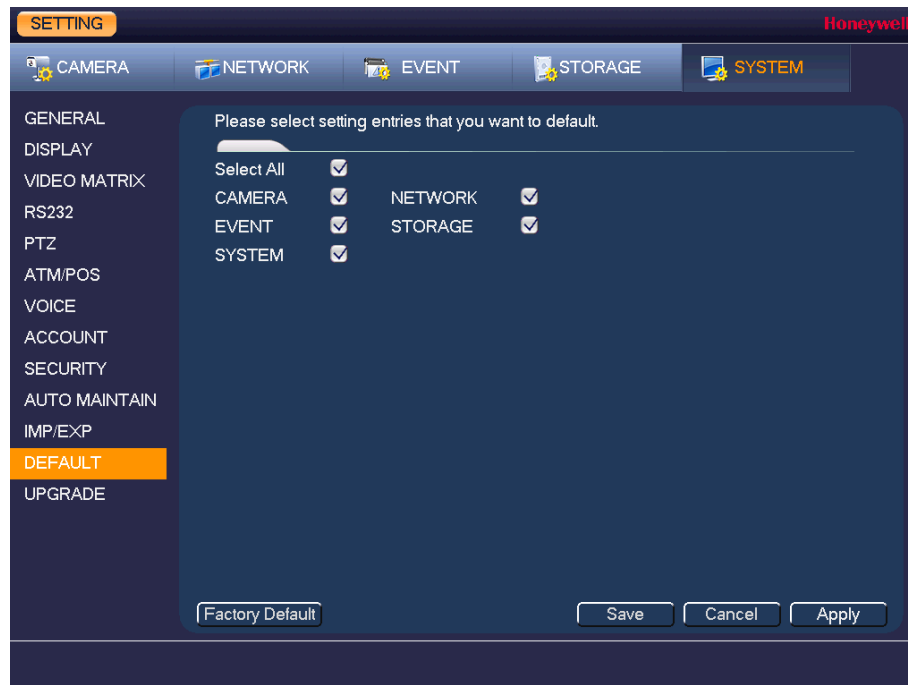
**Note** Restoring the default settings will cause all changes to the system menu color, language, time display mode, video format, IP address, and user accounts to be lost.

---

### To restore default settings

1. Go to **Main Menu → Setting → System → Default**.

Figure 12-23



2. Select the check boxes of the items that you want to restore to their default settings, or select **All** to restore all of them to their default settings.
3. Click **Apply** to save your settings.

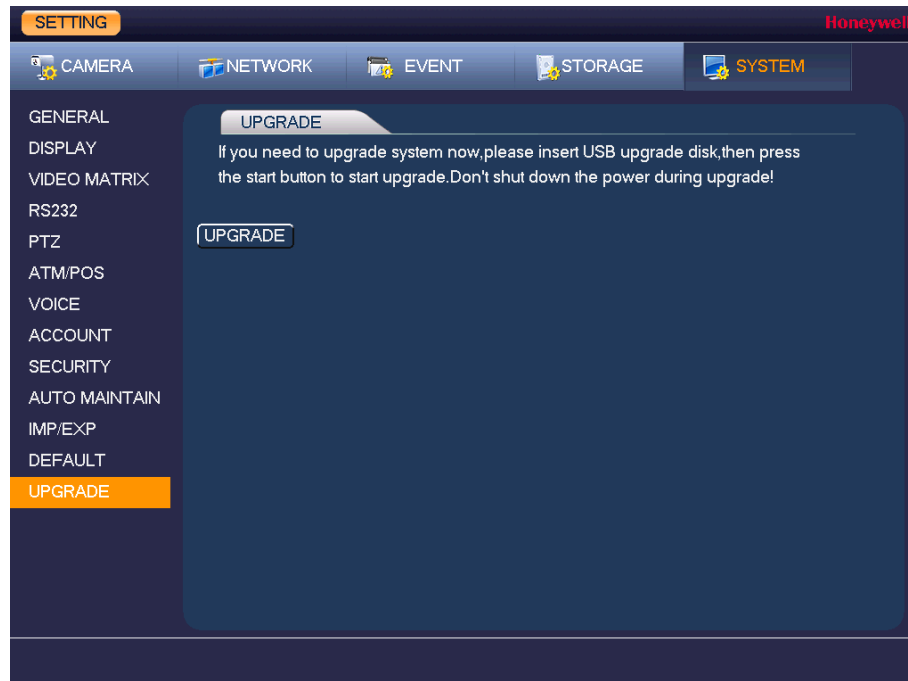
## Upgrading the DVR

You can upgrade the system firmware locally at the DVR.

### To upgrade the firmware

1. Go to **Main Menu → Setting → System → Upgrade**.

Figure 12-24



2. Insert a USB storage device (such as a USB flash drive) containing the new firmware into one of the USB ports on the DVR. The Find USB device dialog box opens.

Figure 12-25



3. In the Find USB device dialog box, click **System Upgrade**.
4. On the Upgrade page, click **Start**. The System Upgrade window opens.
5. Select the firmware file from the file list, and then click **Start**.

# 13. Viewing Information

This chapter contains the following sections:

- [Viewing System Information, page 139](#)
- [Viewing Event Information, page 145](#)
- [Viewing Network Information, page 146](#)
- [Viewing Log Information, page 149](#)

## Viewing System Information

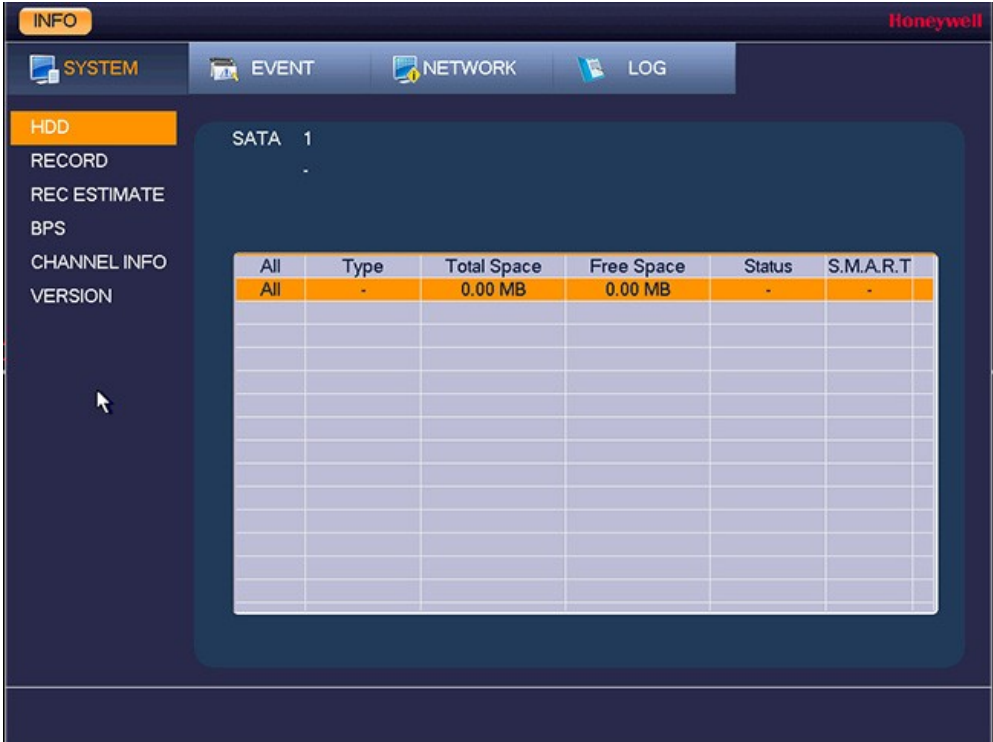
In the system information interface you can view HDD information, record information, bit stream statistics, and version details.

## Viewing HDD Information

To view HDD information

1. Go to **Main Menu** → **Info** → **System** → **HDD Info**.

Figure 13-1



2. Refer to the following table to interpret the HDD information:

<b>SATA</b>	<ul style="list-style-type: none"> <li>o indicates the current HDD is normal.</li> <li>x indicates there is an error.</li> <li>- indicates that there is no HDD.</li> <li>? indicates that a HDD is damaged.</li> </ul>
<b>Type</b>	Indicates the HDD type (for example, <b>Read/Write</b> ).
<b>Total Space</b>	Indicates the total capacity of the HDD.
<b>Free Space</b>	Indicates the amount of free space remaining on the HDD.
<b>Status</b>	Indicates the operating status of the HDD.
<b>S.M.A.R.T.</b>	Indicates S.M.A.R.T (Self-Monitoring, Analysis, and Reporting Technology) status.

3. In the list of HDDs, double-click an HDD to view more details.

**Figure 13-2**

Smart Info Honeywell

Port 1  
 Module WDCWD10EURX-73FH1Y0  
 Serial No. WD-WMC1U8912682  
 Status OK  
 Describe:

Smart ID	Attribute	Threshold	Value	Worst	Status
1	Read Error Rate	51	200	200	OK
3	Spin Up Time	21	149	135	OK
4	Start/Stop Count	0	100	100	OK
5	Reallocated Sector Count	140	200	200	OK
7	Seek Error Rate	0	200	200	OK
9	Power On Hours Count	0	94	94	OK
10	Spin-up Retry Count	0	100	253	OK
11	Calibrate Retry Count	0	100	253	OK
12	Power On/Off Count	0	100	100	OK
192	Power-Off Retract Cycle	0	200	200	OK
193	Load/Unload Cycle Count	0	200	200	OK
194	Temperature	0	107	95	OK
196	Reallocated Event Count	0	200	200	OK
197	Current Pending Sector Count	0	200	200	OK
198	Off-line Scan Uncorrectable Count	0	100	253	OK

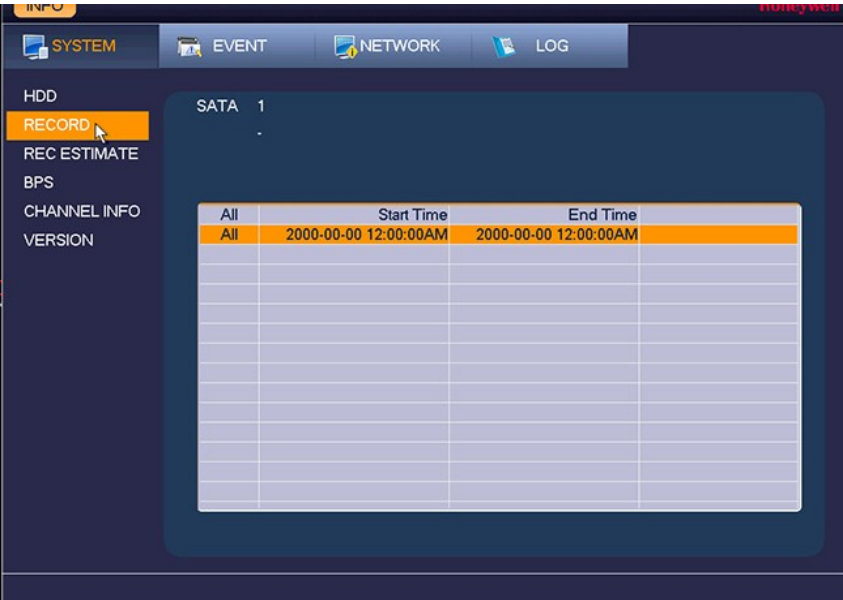
4. Right-click to return to the previous screen.

## Viewing Recording Information

To view recording information

Go to **Main Menu** → **Info** → **System** → **Record Info**.

Figure 13-3



On the **Record Info** page, you can view the start and end times for recorded video.

### Estimating Recording Time and Space

You can calculate the recording time based on the available HDD space, or you can calculate the HDD space you need for your recording time.

#### To estimate recording time

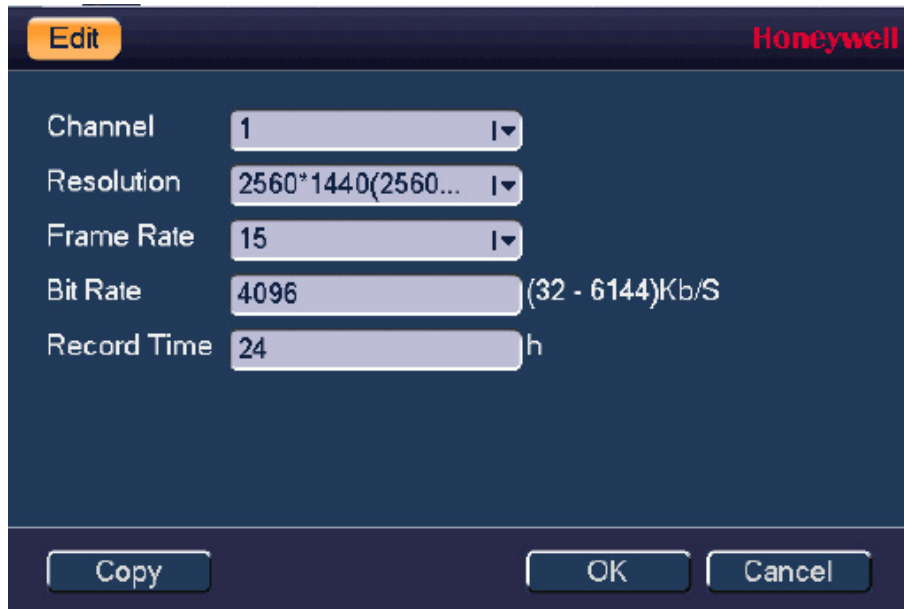
1. Go to **Main Menu → Info → System → REC ESTIMATE**.

Figure 13-4



- Click  in the Edit column. The Edit window appears.

Figure 13-5



- Enter the Resolution, Frame Rate, Bit Stream, and Recording Time of the channel.
- Click **OK**.
- Click **Select** under Known Space tab to select a HDD. See the picture below:

Figure 13-6

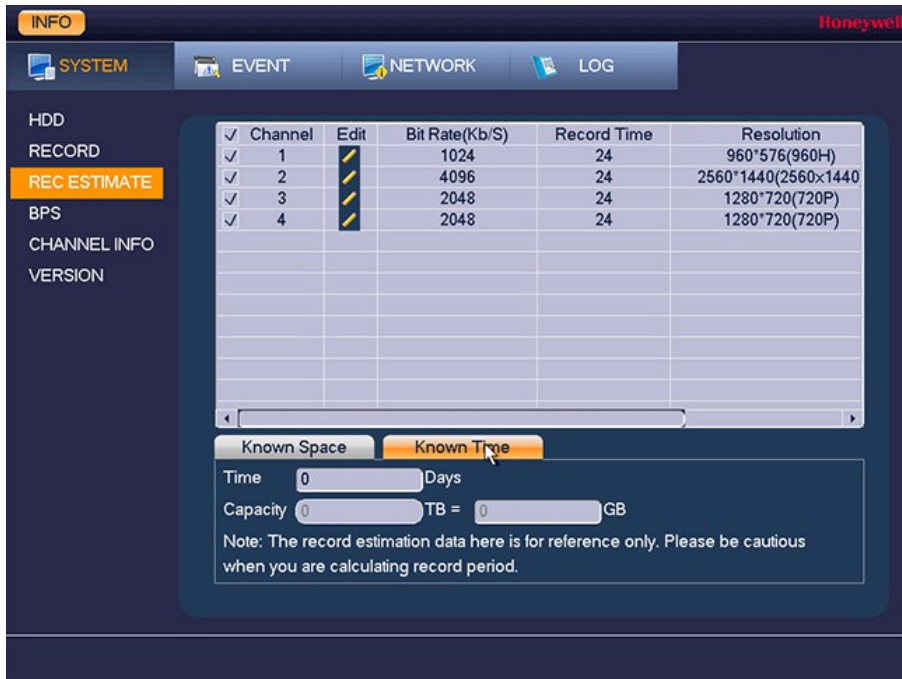


The DVR calculates the recording time based on the channel setup and the HDD space.

### To estimate recording space

1. On the Rec Estimate tab, click to select Known Time.

Figure 13-7



Channel	Edit	Bit Rate(Kb/S)	Record Time	Resolution
✓ 1	✎	1024	24	960*576(960H)
✓ 2	✎	4096	24	2560*1440(2560x1440)
✓ 3	✎	2048	24	1280*720(720P)
✓ 4	✎	2048	24	1280*720(720P)

Known Space    **Known Time**

Time  Days

Capacity  TB =  GB

Note: The record estimation data here is for reference only. Please be cautious when you are calculating record period.

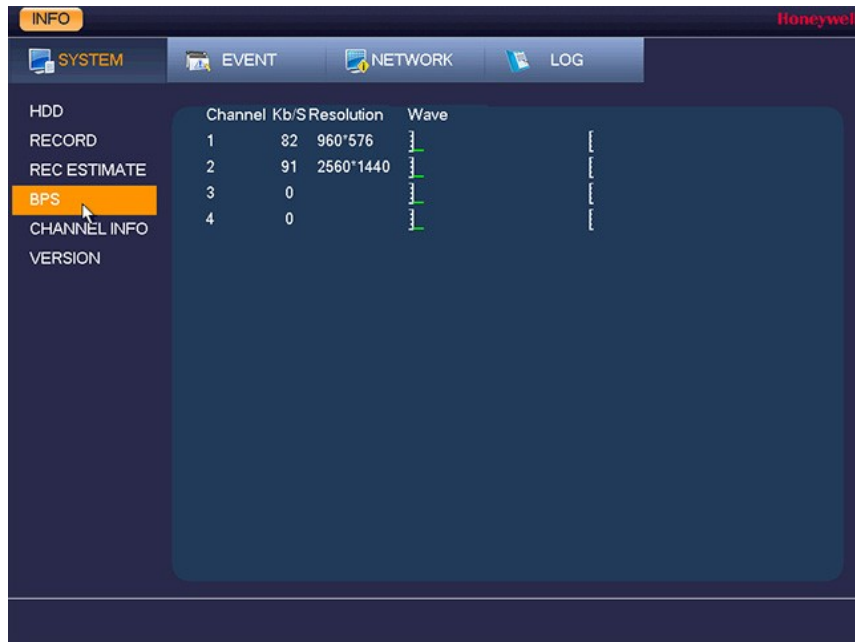
2. Enter how many days you want to record, and the DVR estimates how much HDD is needed.

## Viewing Data Stream Information

To view data stream information

Go to Main Menu → Info → System → BPS.

Figure 13-8



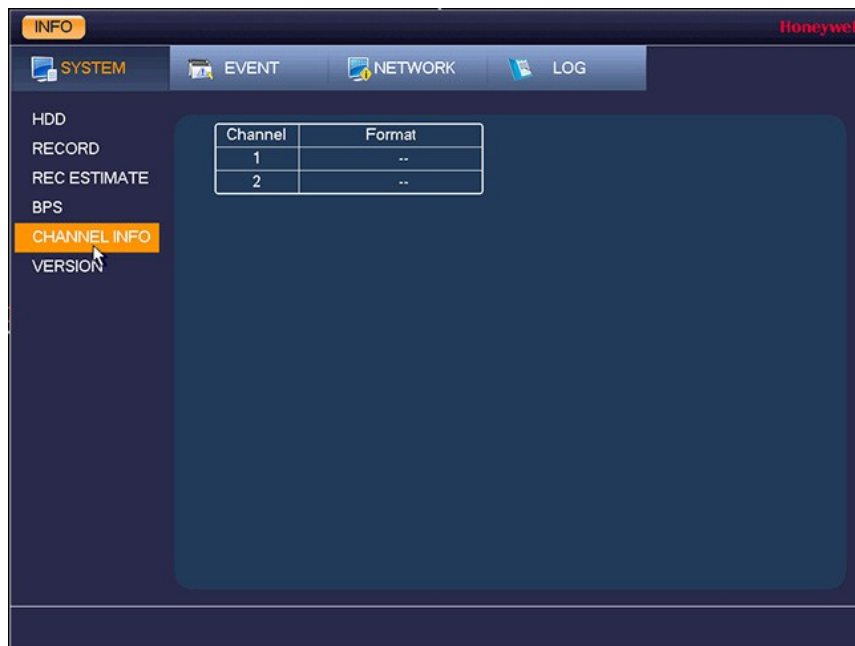
On the **BPS** page, you can view the current video data stream rates and resolutions for each channel.

## Viewing Channel Information

To view channel information

Go to **Main Menu** → **Info** → **System** → **Channel Info**.

Figure 13-9





On the Channel Info page, for each channel you can view the resolution and if the camera is working properly.

## Viewing Version Information

To view version information

Go to **Main Menu** → **Info** → **System** → **Version**.

Figure 13-10



On the **Version** page, you can view the DVR model type, record channel, current hardware version, system version, build date, web, serial number and Onvif server version.

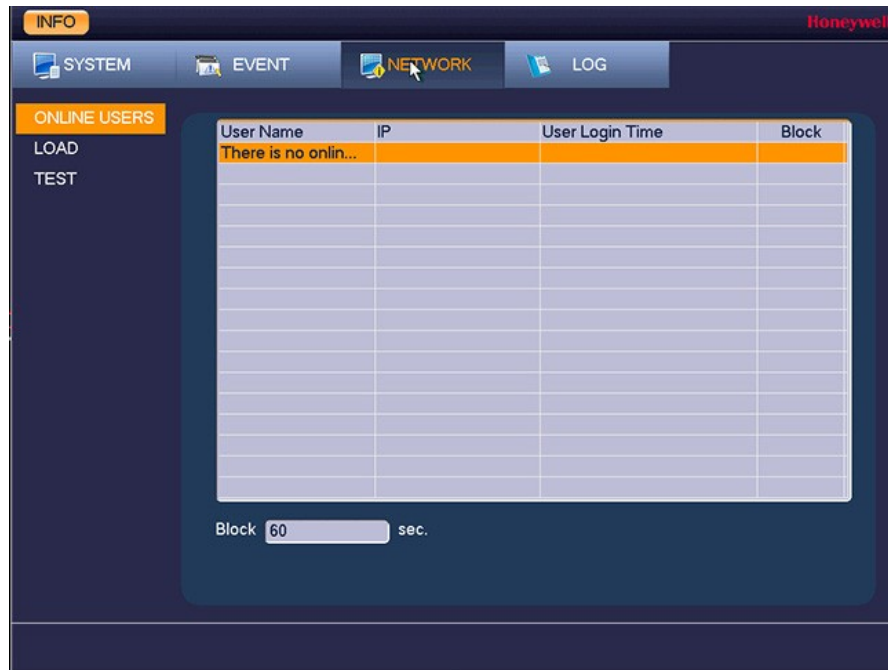
## Viewing Event Information

To view event information

Go to **Main Menu** → **Info** → **Event**.



Figure 13-12



**Note** Every five seconds, the DVR system detects newly added or dropped users, and updates the list of online users.

#### To block an online user

1. Go to **Main Menu** → **Info** → **Network** → **Online Users**.

Figure 13-13



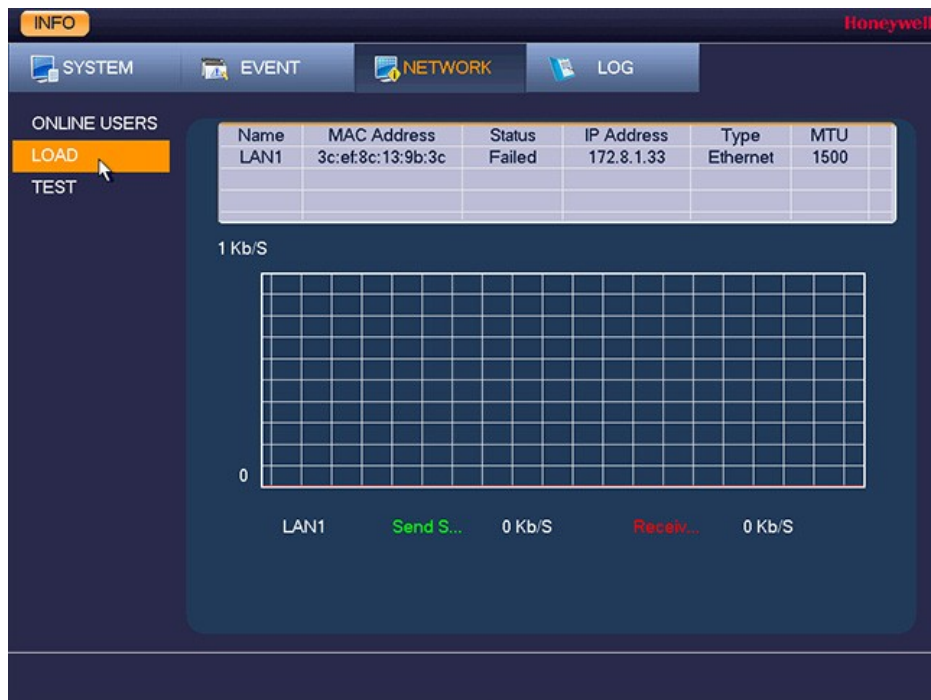
2. Click the **Block for** icon in the user list, and then, in the **Block for** box at the bottom of the screen, enter the time in seconds that you want to block the user for. You can enter up to 65535 seconds (18.2 hours).

## Viewing Network Load Information

To view network load information

Go to **Main Menu** → **Info** → **Network** → **Load**.

Figure 13-14



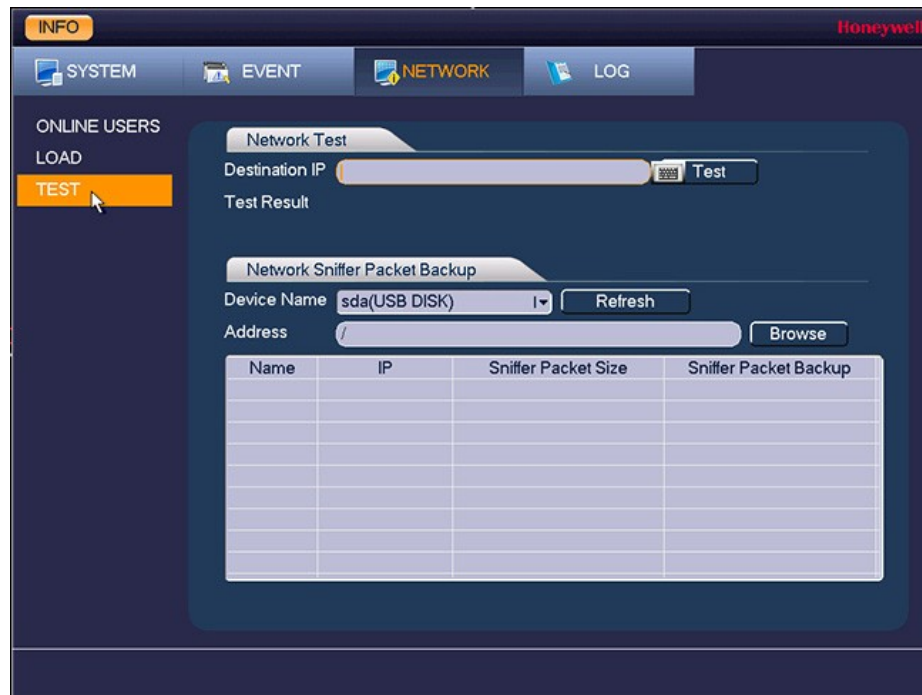
On the **Load** page, you can view the network adapter name, MAC address, status (**Succeed** or **Failed**), device IP address, network type, the maximum transmission unit (MTU), send speed, and receive speed.

## Viewing Network Test Information

To test the network

1. Go to **Main Menu** → **Info** → **Network** → **Test**.

Figure 13-15



2. On the Test page, under Network Test, enter a valid IPv4 address or domain name in the Destination Address box, and then click **Test**.

The test result displays the average delay and packet loss rate. It also indicates if the network status is **OK**, **Bad**, or **No Connection**.

#### To back up network packet data to an external USB storage device

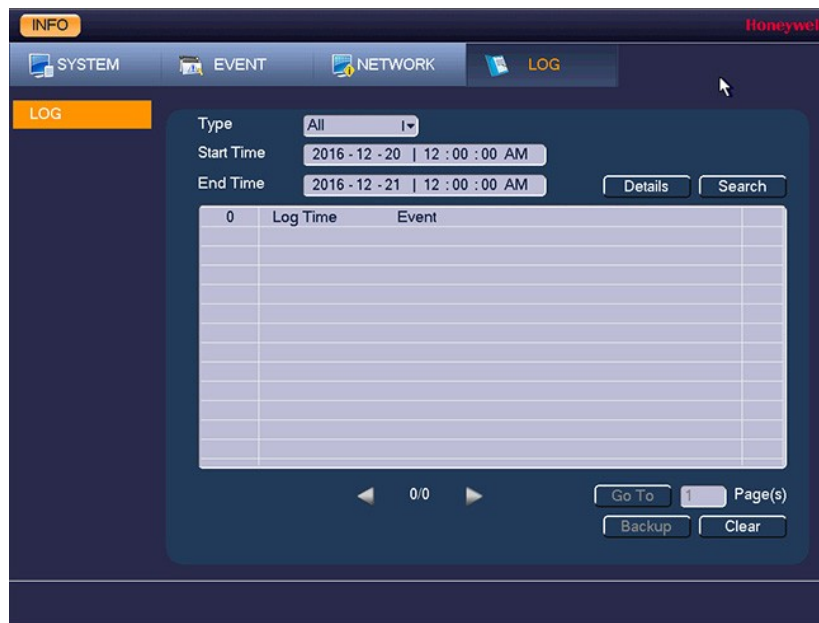
1. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR.
2. On the **Test** page, under **Network Sniffer Packet Backup**, click **Refresh**. The connected USB storage device should appear in the **Device Name** box.
3. If you want, click **Browse** to set the saving path.
4. In the network devices list, in the **Sniffer Packet Backup** column, click the green arrow button to start capturing the data. Click the button again to stop capturing the data.

## Viewing Log Information

To view log information

1. Go to Main Menu → Info → Log.

Figure 13-16



2. In the **Type** box, select a specific log type to view (**System, Config, Storage, Alarm, Record, Account, Clear, Playback**) or select All to view all logs.
3. In the **Start Time** and **End Time** boxes, enter the time period to search, and then click **Search**.

The search results are displayed in an ordered list. The DVR can save up to **1024** log files.

4. To view more details about a log entry, click **Details**.

#### To back up log information to an external USB storage device

1. Insert a USB storage device (such as a USB flash drive) into one of the USB ports on the DVR. The Find USB device dialog box opens.

Figure 13-17



2. In the **Find USB device** dialog box, click **Log Backup**.
3. On the **Log** page, click **Backup**. The log file (FileLog.txt) is located in a folder named Log\_[YYYYMMDDhhmmss] on your storage device.

# 14. Troubleshooting

The following section describes possible problems and solutions. Refer to these troubleshooting steps before calling Technical Support. If you still require assistance, call Honeywell Technical Support at 1-800-323-4576 (North America only) or send an e-mail to <https://www.honeywellsystems.com/ss/techsupp/index.html>. International contact information is listed on the back cover.

## **Problem: The DVR does not turn on.**

- Check that the input voltage is correct.
- Check that the power cable is connected correctly to the DVR.
- Check that the power switch is in the ON position.
- Check that there is power at the outlet. Try connecting the DVR to another outlet or test the outlet with another device.
- Remove the housing and check that the hard drive cables are firmly connected.

## **Problem: The DVR automatically shuts down or stops running.**

- Check that the DVR is receiving power and that the input voltage is correct and stable.
- Make sure that the working environment is within the specified temperature range and is free of dust.
- Remove the housing and check that the hard drive cables are firmly connected.

## **Problem: The DVR cannot detect the hard drive.**

- Remove the housing and check that the hard drive cables are firmly connected.
- Inspect the hard drive and ribbon for damage. Replace if damaged.
- Inspect the main board SATA port for damage. Replace if damaged.

## **Problem: There is no picture on the monitor.**

- Check that the correct input (VGA) is selected on the monitor.
- Turn off the monitor and DVR. Turn on the monitor, and then turn on the DVR.
- Check that the video cable is connected correctly to the DVR.
- Make sure that the camera's brightness setting is configured correctly. See [Configuring Camera Settings](#) on page 55.
- Make sure that a privacy mask is not blocking the video. See [Configuring Privacy Mask Settings](#) on page 64.

## **Problem: Color of live video is distorted.**

- Make sure that the camera image settings are configured correctly. See [Configuring Camera Settings](#) on page 55.

- Make sure that the DVR is configured to use the correct video standard (NTSC or PAL). See [Configuring General System Settings](#) on page 115.

**Problem: Cannot search local records.**

- Check that recording is enabled. See [Configuring General Record Settings](#) on page 39.

**Problem: There is no audio when viewing live video.**

- Check the audio input and output connections on the DVR.
- Increase the volume on the headphones/speakers.

**Problem: There is no audio when playing back video.**

- Make sure that the audio is enabled in the playback interface and the volume is turned up.

**Problem: The time display is incorrect.**

- Make sure that the date and time settings are configured correctly. See [Configuring Date and Time Settings](#) on page 117.
- Replace the battery on the main board.

**Problem: The DVR cannot control PTZ functions.**

- Check that the PTZ camera is connected correctly to the video input and RS485 port of the DVR.
- Make sure that the DVR is configured correctly for PTZ operation. The protocol and address settings of the DVR must match the protocol and address settings of the PTZ camera. See [Configuring PTZ Functions](#) on page 34.

**Problem: Motion detection does not work.**

- Increase the motion detection sensitivity. It may be set too low. See [Configuring Motion Detection Settings](#) on page 85.
- Make sure that the motion detection schedule is configured correctly. See [Configuring Motion Detection Settings](#) on page 85.
- Make sure that the motion detection zone setup is configured correctly. See [Configuring Motion Detection Settings](#) on page 85.

**Problem: The network connection is unstable.**

- Check that there is no IP address or MAC address conflict.

**Problem: There is a USB backup error.**

- Check that the USB storage device has sufficient space available.

**Problem: Alarm signal cannot be disarmed.**

- Make sure that the alarm settings are correctly configured.
- Check the alarm cable connections.



- Make sure that the DVR is running the latest firmware.

**Problem: Alarm function is null.**

- Make sure that the alarm settings are correctly configured.
- Check the alarm cable connections.
- Check that you have not connected two loops to one alarm device.

**Problem: Cannot play a downloaded file.**

- Use the player included on the software CD.
- Make sure that you have DirectX8.1 or greater installed on your computer.
- If you are using Windows XP, download the plug-ins DivX503Bundle.exe and ffdshow-20041012.exe.

# A Installing Hard Drives

The appendix contains the following sections:

- [Installing a Hard Drive, page 154](#)
- [List of Compatible SATA HDDs, page 155](#)
- [List of Compatible Portable HDDs, page 158](#)

## Installing a Hard Drive

On some HRHH DVR models, you can install an additional hard disk drive (HDD). For a list of compatible HDDs, see the [List of Compatible SATA HDDs](#) on page 155. A 7200 rpm or higher HDD is recommended.

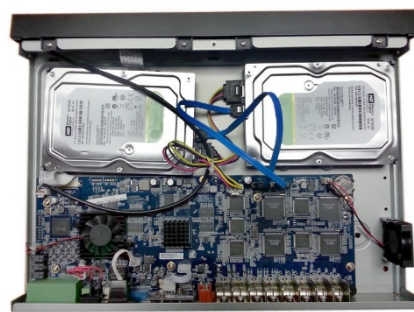
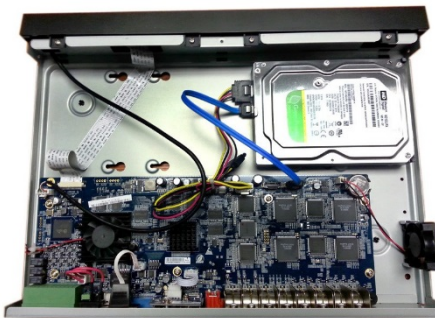
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**CAUTION** Risk of electric shock. Disconnect power before removing cover.

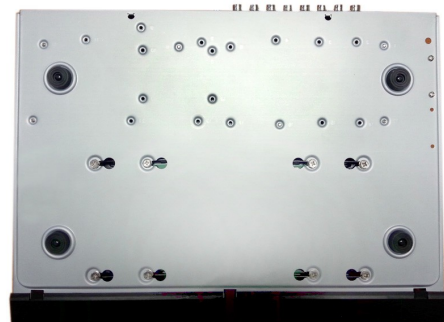
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### To install an additional HDD

1. If the DVR is connected to a power source, disconnect it before continuing.
2. Remove the top cover from the DVR housing by removing the four screws securing it to the housing and then sliding the cover backwards.
3. Connect the SATA and power cables to the new HDD.
4. Position the new HDD over the four open screw holes in the base of the housing, adjacent to the existing HDD.



5. Turn over the DVR housing and secure the new HDD to the housing using the four supplied HDD mounting screws.
6. Attach the HDD to housing with the four screws removed in step 4.
7. Replace the DVR top cover on the DVR housing



and secure it with the four screws removed in step 2.

## List of Compatible SATA HDDs

---

**Note** Upgrade the DVR firmware to the latest version to ensure the accuracy of the table below.

---

Manufacturer	Series	Model	Capacity
Seagate	Seagate SV35.1	ST3250824SV	250 GB
Seagate	Seagate SV35.1	ST3500641SV	500 GB
Seagate	Seagate SV35.2	ST3250820SV	250 GB
Seagate	Seagate SV35.2	ST3320620SV	320 GB
Seagate	Seagate SV35.2	ST3500630SV	500 GB
Seagate	Seagate SV35.2	ST3750640SV	750 GB
Seagate	Seagate SV35.3	ST3250310SV	250 GB
Seagate	Seagate SV35.3	ST3500320SV	500 GB
Seagate	Seagate SV35.3	ST3750330SV	750 GB
Seagate	Seagate SV35.3	ST31000340SV	1 TB
Seagate	Seagate SV35.4	ST3320410SV	320 GB
Seagate	Seagate SV35.4	ST3250311SV	250 GB
Seagate	Seagate SV35.5	ST3500410SV	500 GB
Seagate	Seagate SV35.5	ST3500411SV	500 GB
Seagate	Seagate SV35.5	ST31000525SV	1 TB
Seagate	Seagate SV35.5	ST31000526SV	1 TB
Seagate	Seagate SV35.5	ST1000VX003	1 TB
Seagate	Seagate SV35.5	ST2000VX003	2 TB
Seagate	Seagate SV35.5	ST2000VX002	2 TB

Seagate	Seagate SV35.5	ST2000VX000	2 TB
Seagate	Seagate SV35.5	ST3000VX000	3 TB
Seagate	Seagate Pipeline HD	ST3320410CS	320 GB
Seagate	Seagate Pipeline HD	ST3320310CS	320 GB
Seagate	Seagate Pipeline HD	ST3500422CS	500 GB
Seagate	Seagate Pipeline HD	ST3500321CS	500 GB
Seagate	Seagate Pipeline HD2	ST3250412CS	250 GB
Seagate	Seagate Pipeline HD2	ST3320311CS	250 GB
Seagate	Seagate Pipeline HD2	ST3500414CS	500 GB
Seagate	Seagate Pipeline HD2	ST3500312CS	500 GB
Seagate	Seagate Pipeline HD2	ST31000424CS	1 TB
Seagate	Seagate Pipeline HD2	ST31000322CS	1 TB
Seagate	Seagate Pipeline HD2	ST1000VM002	1 TB
Seagate	Seagate Pipeline HD2	ST1500VM002	1 TB
Seagate	Seagate Pipeline HD2	ST2000VM002	2 TB
Seagate	Seagate Pipeline HD2	ST2000VM003	2 TB
Seagate	Seagate Constellation ES	ST3500514NS	500 GB
Seagate	Seagate Constellation ES	ST31000524NS	1 TB
Seagate	Seagate Constellation ES	ST32000644NS	2 TB
Seagate	Seagate Constellation ES	ST2000NM0011	2 TB
Seagate	Seagate Constellation ES	ST1000MN0011	1 TB
Seagate	Seagate Constellation ES	ST500NM0011	500 GB
Seagate	Seagate Constellation ES	ST2000NM0031	2 TB
Seagate	Seagate Constellation ES	ST1000NM0031	1 TB
Seagate	Seagate Constellation ES	ST500NM0031	500 GB
Seagate	Seagate Constellation ES	ST2000NM0051	2 TB
Seagate	Seagate Constellation ES	ST1000NM0051	1 TB
Seagate	Seagate Constellation ES	ST500NM0051	500 GB
Seagate	Seagate Constellation ES2	ST33000650NS	3 TB
Seagate	Seagate Constellation ES2	ST32000645NS	2 TB

Seagate	Seagate Constellation ES2	ST33000651NS	3 TB
Seagate	Seagate Constellation ES2	ST32000646NS	2 TB
Seagate	Seagate Constellation ES2	ST33000652NS	3 TB
Seagate	Seagate Constellation ES2	ST32000647NS	2 TB
Western Digital	Cariar SE	WD3200JD	320 GB
Western Digital	Cariar SE	WD3000JD	300 GB
Western Digital	Cariar SE	WD2500JD	250 GB
Western Digital	Cariar SE16	WD7500KS	750 GB
Western Digital	Cariar SE16	WD5000KS	500 GB
Western Digital	Cariar SE16	WD4000KS	400 GB
Western Digital	Cariar SE16	WD3200KS	320 GB
Western Digital	Cariar SE16	WD2500KS	250 GB
Western Digital	WD Caviar SE16	WD2500YS-01SHB0	250 GB
Western Digital	WD Caviar RE16	WD3200YS-01PGB0	320 GB
Western Digital	WD Caviar RE2	WD5000YS-01MPB0	500 GB
Western Digital	WD AV-AVJS	WD2500AVJS-63WDA0	250 GB
Western Digital	WD AV-AVJS	WD3200AVJS-63WDA0	320 GB
Western Digital	WD AV-AVJS	WD5000AVJS-63YJA0	500 GB
Western Digital	WDAV-GP-AVCS	WD5000AVCS-63H1B1	500 GB
Western Digital	WDAV-GP-AVCS	WD7500AVCS-63ZLB0	750 GB
Western Digital	WDAV-GP-AVCS	WD3200AVCS	320 GB
Western Digital	WDAV-GP-AVCS	WD2500AVCS	250 GB
Western Digital	WDAV-GP-EVCS	WD10EVCS-63ZLB0	1 TB
Western Digital	WDAV-GP-EVCS	WD20EVCS-63ZLB0	2 TB
Western Digital	WDAV-GP-AVVS	WD3200AVVS-63L2B0	320 GB
Western Digital	WDAV-GP-AVVS	WD5000AVVS-63ZWBO	500 GB
Western Digital	WDAV-GP-AVVS	WD7500AVVS-63E1B1	750 GB
Western Digital	WDAV-GP-EVVS	WD10EVVS-63E1B1	1 TB
Western Digital	WDAV-GP-EVDS	WD10EVDS-63N5B1	1 TB
Western Digital	WDAV-GP-EVDS	WD15EVDS-63V9B0	1.5 TB
Western Digital	WDAV-GP-EVDS	WD20EVDS-63T3B0	2 TB
Western Digital	WDAV-GP-AVDS	WD5000AVDS-63U7B0	500 GB
Western Digital	WD AV-GP	WD30EURS	3 TB
Western Digital	WD AV-GP	WD25EURS	2.5 TB
Western Digital	WD AV-GP	WD20EURS	2 TB
Western Digital	WD AV-GP	WD15EURS	1.5 TB
Western Digital	WD AV-GP	WD10EURS	1 TB

Western Digital	WD AV-GP	WD10EURX	1 TB
Western Digital	WD AV-GP	WD7500AURS	750 GB
Western Digital	WD AV-GP	WD7500AVDS	500 GB
Western Digital	WD AV-GP	WD500AVDS	500 GB
Western Digital	WD AV-GP	WD10EUCX	1 TB
Samsung	Samsung-HA	HA500LJ/CE	500 GB
Samsung	Samsung-HA	HA751LJ	750 GB
Samsung	Samsung-HA	HA101UJ/CE	1 TB
Samsung	Samsung-HD	HD502HI/CEC	500 GB
Samsung	Samsung-HD	HD103SI/CEC	1 TB
Samsung	Samsung-HD	HD154UI/CE	1.5 TB
Hitachi	HitachiCinemaStar™ 5K500	HCP725050GLA380	500 GB
Hitachi	HitachiCinemaStar™ 7K1000.BHCT721050SLA360		500 GB
Hitachi	HitachiCinemaStar™ 7K1000.BHCT721075SLA360		750 GB
Hitachi	HitachiCinemaStar™ 7K1000.BHCT721010SLA360		1 TB
Maxtor	DiamondMax 20	STM3320820AS	320 GB
Maxtor	DiamondMax 20	STM3250820AS	250 GB

## List of Compatible Portable HDDs

<b>Manufacturer</b>	<b>Model</b>	<b>Capacity</b>
YDStar	YDStar HDD box	40 GB
Netac	Netac	80 GB
lomega	lomega RPHD-CG" RNAJ50U287	250 GB
WD Elements	WCAVY1205901	1.5 TB
Newsmy	Liangjian	320 GB
WD Elements	WDBAAR5000ABK-00	500 GB
WD Elements	WDBAAU0015HBK-00	1.5 TB
Seagate	FreeAgent Go (ST905003F)	500 GB
Aigo	H8169	500 GB

# B MAXPRO® Cloud

This appendix contains the following section:

- [Configuring for MAXPRO Cloud Mode on page 159](#)

## Configuring for MAXPRO Cloud Mode

These cloud-ready devices can be standalone devices or can easily be connected to Honeywell's MAXPRO Cloud platform to create a fully integrated managed cloud solution. When used in MAXPRO Cloud mode, this device becomes a MAXPRO Cloud appliance that creates a secure connection to the cloud, and has the ability to stream high quality video while managing bandwidth. Critical events can be captured locally at higher resolution and frame rates, and then also stored in the cloud for safe and secure backup.

The MAXPRO Cloud solution provides the following additional added value for customers and dealers:

- Access on the go. View live or recorded video anytime anywhere on your PC, MAC, laptop, or mobile device.
- Ease of remote management, configuration and changes, f/w updates, and increase managed services from a single login.
- Real-time informative notifications with clip links and alerts for health, status, and critical events.
- Verification of site alarms, and reduction of false alarm costs and call outs.
- Adding cloud storage on the go.

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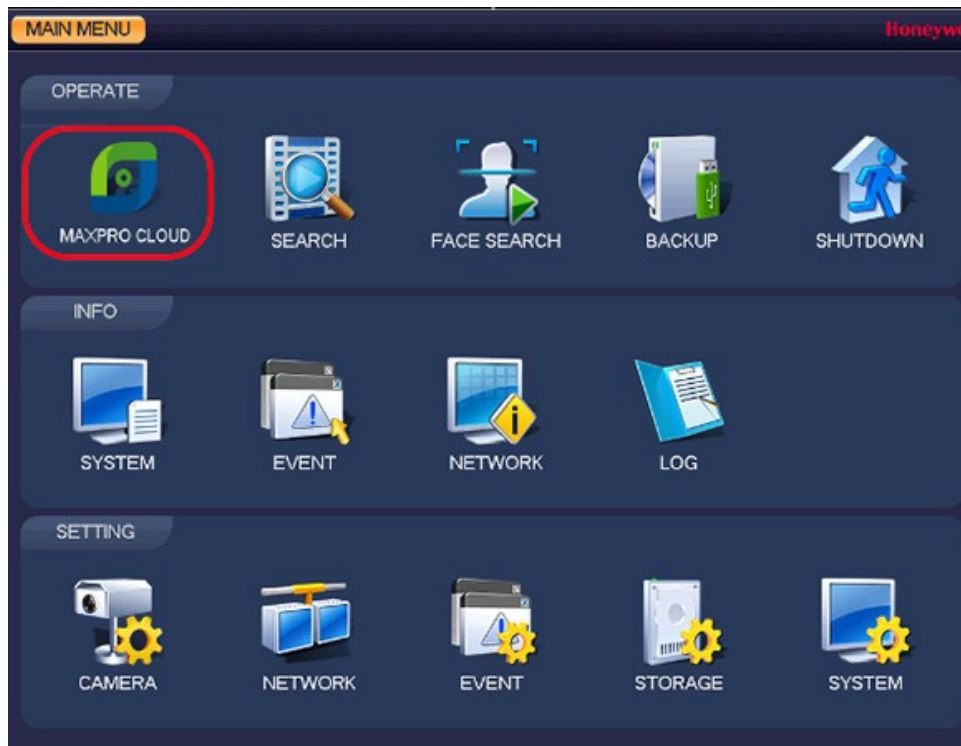
**Note** A MAXPRO Cloud service subscription is required. Please contact Honeywell Customer Service for details. See the back cover for contact information.

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To switch to MAXPRO Cloud mode:

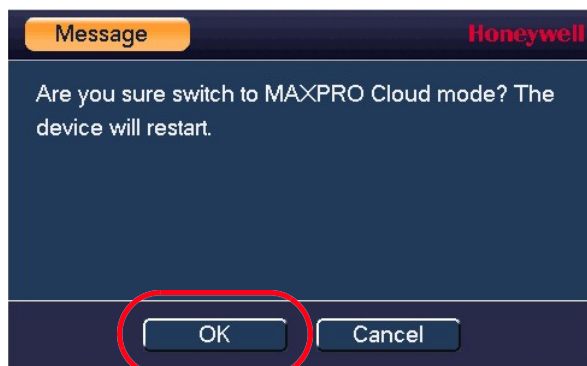
1. Go to **Main Menu > Operate**, then click **MAXPROCLOUD**.

Figure B-1 Selecting MAXPRO CLOUD



A confirmation message appears.

Figure B-2 MAXPRO Cloud Configuration Confirmation Message



2. Click **OK** to confirm that you want to switch to MAXPRO Cloud mode. The NVR restarts and opens in MAXPRO Cloud mode.

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**Note** For information about operating in MAXPRO Cloud mode, please Contact Honeywell CustomerService.

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