

HRGX Performance Series

4/8/16-Channel Embedded DVR

HRGX45	HRGX85	HRGX161
HRGX45X	HRGX85X	HRGX161X
HRGX41	HRGX81	HRGX162
HRGX41X	HRGX81X	HRGX162X
	HRGX82	HRGX164
	HRGX82X	HRGX164X

Getting Started Guide

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Cautions and Warnings

 **WARNING** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries in accordance with local laws.

 **CAUTION** Use only with supplied power adapter.

	<p style="text-align: center;">CAUTION</p> <p style="text-align: center;">RISK OF ELECTRIC SHOCK DO NOT OPEN</p>		<p>THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THE UNIT.</p>
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>			<p>THIS SYMBOL INDICATES THAT IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS ACCOMPANY THIS UNIT.</p>

Regulatory Statements

FCC Compliance Statement

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

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

Canadian Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la Classe A 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 essential protection requirements of the EMC directive 2004/108/EC and the Low Voltage Directive (LVD) 2006/95/EC, conforming to the requirements of standards EN 55022 for emissions, EN 50130-4 for immunity, and EN 60950 for electrical equipment safety.

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.

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.
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** - This unit is intended for indoor use only. Do not use this unit outdoors or in wet locations.
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. **CLEANING** - Unplug the unit from the wall outlet before cleaning it. Do not use liquid aerosol cleaners. Use a damp soft cloth for cleaning.
9. **SERVICING** - Do not attempt to service this unit yourself. Refer all servicing to qualified service personnel.
10. **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.

Introducing the HRGX DVR

This chapter contains the following sections:

- *About This Manual, page 7*
- *Front Panel Layout, page 8*
- *Rear Panel Layout, page 10*
- *Mouse Operation, page 13*
- *Remote Control Operation, page 14*

About This Manual

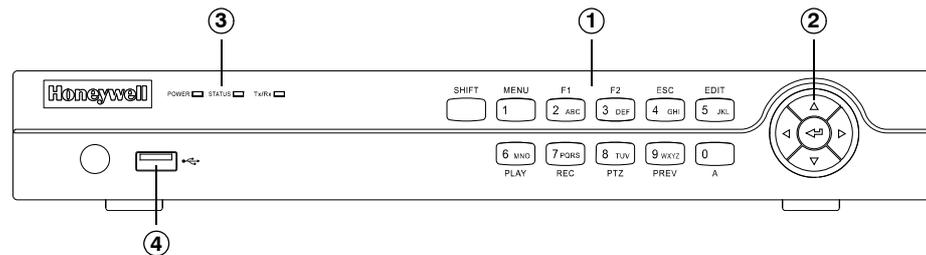
This manual introduces the Honeywell HRGX Performance Series DVR and describes basic installation and setup procedures. It is primarily intended for system integrators and installers.

For information about configuring and operating the DVR, and to learn about accessing the DVR remotely, visit the product webpage. See the back cover for contact details for your region.

Front Panel Layout

The following illustration shows the front panel of the 4-channel HRGX DVR.

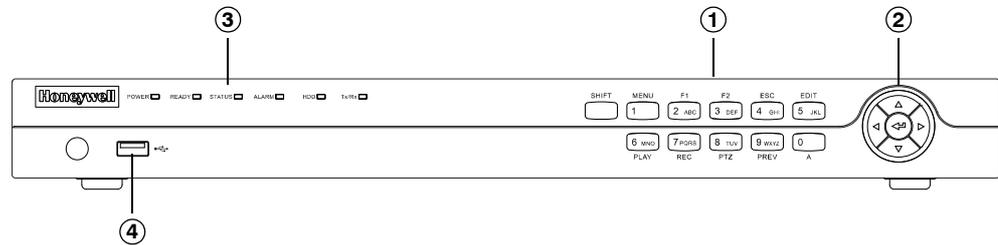
Figure 1-1 HRGX4 Front Panel



No.	Name	Function
1	Alphanumeric Buttons	<p>SHIFT: Switches between number/letter input and function input.</p> <p>MENU/1: Enters 1; MENU accesses the main menu interface.</p> <p>2ABC/F1: Enters 2/A/B/C; F1 selects all items in a list. In live view or playback mode, F1 switches between main and spot video output. In PTZ mode, F1 zooms out PTZ camera.</p> <p>3DEF/F2: Enters 3/D/E/F; F2 cycles through tabbed pages. In PTZ mode, F2 zooms in PTZ camera.</p> <p>4GHI/ESC: Enters 4/G/H/I; ESC returns to previous menu.</p> <p>5JKL/EDIT: Enters 5/J/K/L; EDIT deletes characters before cursor, selects check boxes and on/off switches. In playback mode, EDIT starts/stops playback.</p> <p>6MNO/PLAY: Enters 6/M/N/O. In playback mode, PLAY accesses the playback interface.</p> <p>7PQRS/REC: Enters 7/P/Q/R/S; REC accesses the manual recording interface, manually starts/stops recording.</p> <p>8TUV/PTZ: Enters 8/T/U/V; PTZ accesses the PTZ control interface.</p> <p>9WXYZ/PREV: Enters 9/W/X/Y/Z. In live view mode, PREV enables multi-camera display. In playback mode, PREV deletes selected tag.</p> <p>0/A: Enters 0; A switches between uppercase and lowercase letters, symbols, numeric input). In playback mode, A adds default tag.</p>
2	Direction/Enter Buttons	<p>Direction buttons move the cursor up/down/left/right (▲▼◀▶). In live view mode, the direction buttons cycle through channels. In playback mode, up/down buttons speed up/slow down playback. In PTZ mode, the direction buttons control PTZ camera movement.</p> <p>The Enter button (↵) selects a menu item or executes a selection.</p>
3	LED Indicators	<p>POWER: Lights green when DVR is receiving power.</p> <p>STATUS: Lights red when DVR hard drive is reading/writing.</p> <p>Tx/Rx: Flashes green when network connection is active.</p>
4	USB Port	Connects USB device (such as a flash drive for saving video clips).

The following illustration shows the front panel of the 8/16-channel HRGX DVR.

Figure 1-2 HRGX8/HRGX16 Front Panel

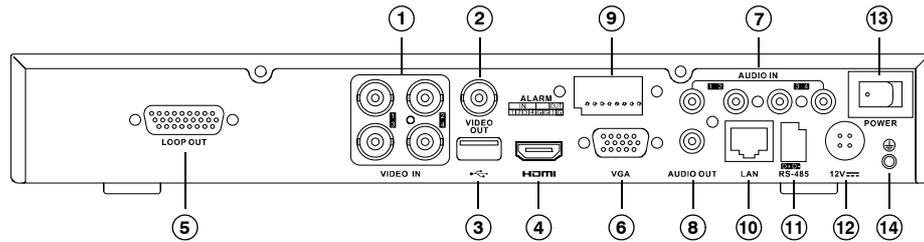


No.	Name	Function
1	Alphanumeric Buttons	<p>SHIFT: Switches between number/letter input and function input.</p> <p>MENU/1: Enters 1; MENU accesses the main menu interface.</p> <p>2ABC/F1: Enters 2/A/B/C; F1 selects all items in a list. In live view or playback mode, F1 switches between main and spot video output. In PTZ mode, F1 zooms out PTZ camera.</p> <p>3DEF/F2: Enters 3/D/E/F; F2 cycles through tabbed pages. In PTZ mode, F2 zooms in PTZ camera.</p> <p>4GHI/ESC: Enters 4/G/H/I; ESC returns to previous menu.</p> <p>5JKL/EDIT: Enters 5/J/K/L; EDIT deletes characters before cursor, selects check boxes and on/off switches. In playback mode, EDIT starts/stops playback.</p> <p>6MNO/PLAY: Enters 6/M/N/O. In playback mode, PLAY accesses the playback interface.</p> <p>7PQRS/REC: Enters 7/P/Q/R/S; REC accesses the manual recording interface, manually starts/stops recording.</p> <p>8TUV/PTZ: Enters 8/T/U/V; PTZ accesses the PTZ control interface.</p> <p>9WXYZ/PREV: Enters 9/W/X/Y/Z. In live view mode, PREV enables multi-camera display. In playback mode, PREV deletes selected tag.</p> <p>0/A: Enters 0; A switches between uppercase and lowercase letters, symbols, numeric input). In playback mode, A adds default tag.</p>
2	Direction/Enter Buttons	<p>Direction buttons move the cursor up/down/left/right (▲▼◀▶). In live view mode, the direction buttons cycle through channels. In playback mode, up/down buttons speed up/slow down playback. In PTZ mode, the direction buttons control PTZ camera movement.</p> <p>The Enter button (↵) selects a menu item or executes a selection.</p>
3	LED Indicators	<p>POWER: Lights green when DVR is receiving power.</p> <p>READY: Lights blue when DVR is operating properly.</p> <p>STATUS: Lights blue when DVR is controlled by IR remote. Lights red when DVR is controlled by keyboard. Lights orange when DVR is being controlled by IR remote and keyboard at the same time.</p> <p>ALARM: Lights red when a sensor alarm is detected.</p> <p>HDD: Flashes red when DVR hard drive is reading/writing.</p> <p>Tx/Rx: Flashes green when network connection is active.</p>
4	USB Port	Connects USB device (such as a flash drive for saving video clips).

Rear Panel Layout

The following illustration shows the rear panel of the 4-channel HRGX DVR.

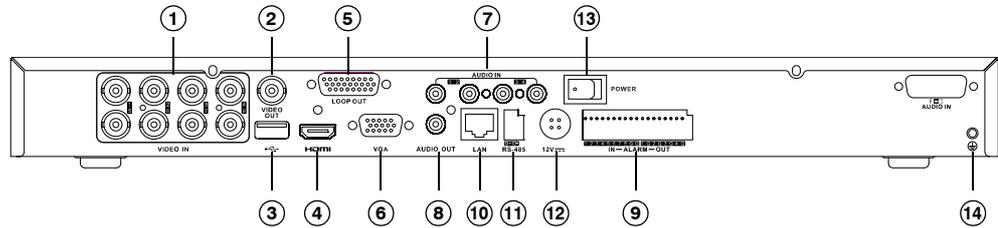
Figure 1-3 HRGX4 Rear Panel



No.	Name	Description
1	Video In	BNC connectors for analog video input
2	Video Out	BNC connectors for analog video output
3	USB Port	Connects USB device (such as a USB mouse)
4	HDMI	HDMI connector for high definition digital video output
5	Loop Out	DB26 socket for independent video output
6	VGA Port	DE15 socket for local video output
7	Audio In	RCA connectors for audio input
8	Audio Out	RCA connectors for audio output
9	Alarm In/Out	Connector for alarm input/output
10	LAN Port	RJ45 10M/100M Ethernet interface
11	RS-485	Connects RS-485 devices. Connect D+ and D- terminals to R+ and R- terminals of PTZ receiver.
12	12V	12 V DC power input
13	Power Switch	Switch for turning DVR on/off
14	GND	Ground terminal (needs to be connected before DVR is turned on)

The following illustration shows the rear panel of the 8-channel HRGX DVR.

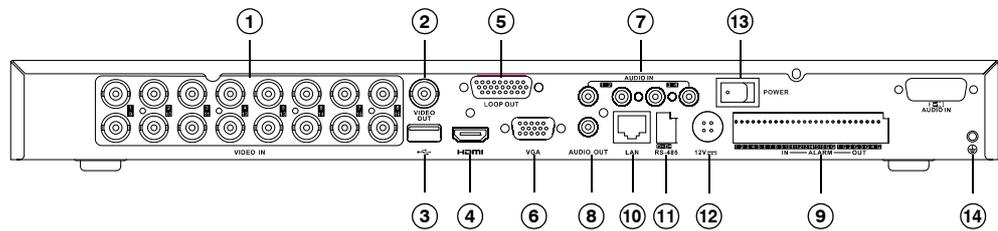
Figure 1-4 HRGX8 Rear Panel



No.	Name	Description
1	Video In	BNC connectors for analog video input
2	Video Out	BNC connectors for analog video output
3	USB Port	Connects USB device (such as a USB mouse)
4	HDMI	HDMI connector for high definition digital video output
5	Loop Out	DB26 socket for independent video output
6	VGA Port	DE15 socket for local video output
7	Audio In	RCA connectors for audio input
8	Audio Out	RCA connectors for audio output
9	Alarm In/Out	Connector for alarm input/output
10	LAN Port	RJ45 10M/100M Ethernet interface
11	RS-485	Connects RS-485 devices. Connect D+ and D- terminals to R+ and R- terminals of PTZ receiver.
12	12V	12 V DC power input
13	Power Switch	Switch for turning DVR on/off
14	GND	Ground terminal (needs to be connected before DVR is turned on)

The following illustration shows the rear panel of the 16-channel HRGX DVR.

Figure 1-5 HRGX16 Rear Panel



No.	Name	Description
1	Video In	BNC connectors for analog video input
2	Video Out	BNC connectors for analog video output
3	USB Port	Connects USB device (such as a USB mouse)
4	HDMI	HDMI connector for high definition digital video output
5	Loop Out	DB26 socket for independent video output
6	VGA Port	DE15 socket for local video output
7	Audio In	RCA connectors for audio input
8	Audio Out	RCA connectors for audio output
9	Alarm In/Out	Connector for alarm input/output
10	LAN Port	RJ45 10M/100M Ethernet interface
11	RS-485	Connects RS-485 devices. Connect D+ and D- terminals to R+ and R- terminals of PTZ receiver.
12	12V	12 V DC power input
13	Power Switch	Switch for turning DVR on/off
14	GND	Ground terminal (needs to be connected before DVR is turned on)

Mouse Operation

It is recommended that you use the supplied mouse to set up and operate your HRGX DVR. To use the mouse, connect the mouse cable to the USB port at the rear of the DVR. The mouse should be detected automatically.

Note If you prefer, you can use your own mouse instead of the supplied mouse. Ask your Honeywell dealer for a list of compatible mice.

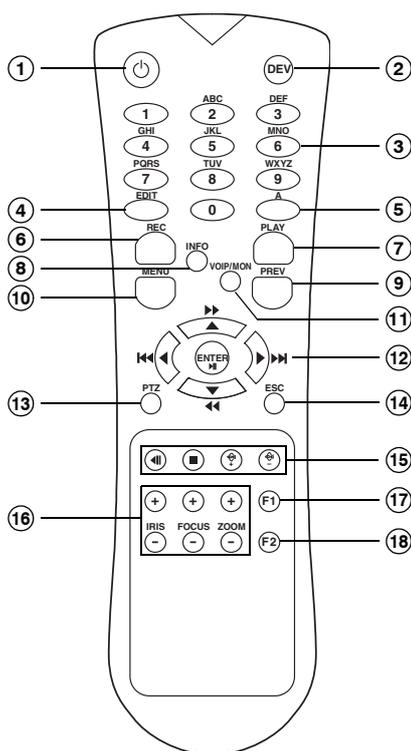
The following table describes basic mouse operations:

Name	Action	Description
Left Mouse Button	Click	Live view: Select channel and display quick set menu. Menu: Select and enter.
	Double-click	Live view: Switch between single-screen and multi-screen.
	Press and drag	Live view: Select time bar. PTZ control: Pan, tilt, and zoom. Privacy masking and motion detection: Select target area. Digital zoom: Select target area.
Right Mouse Button	Click	Live view: Show menu. Menu: Exit menu.
Scroll Wheel	Scroll up	Live view: Go to previous screen. Shortcut menu: Go to previous item.
	Scroll down	Live view: Go to next screen. Shortcut menu: Go to next item.

Remote Control Operation

Although it is recommended to use a mouse to set up and operate your HRGX DVR, you can also use the supplied IR remote control. Two AAA batteries (not included) must be installed before use.

The following illustration shows the layout of the remote control.

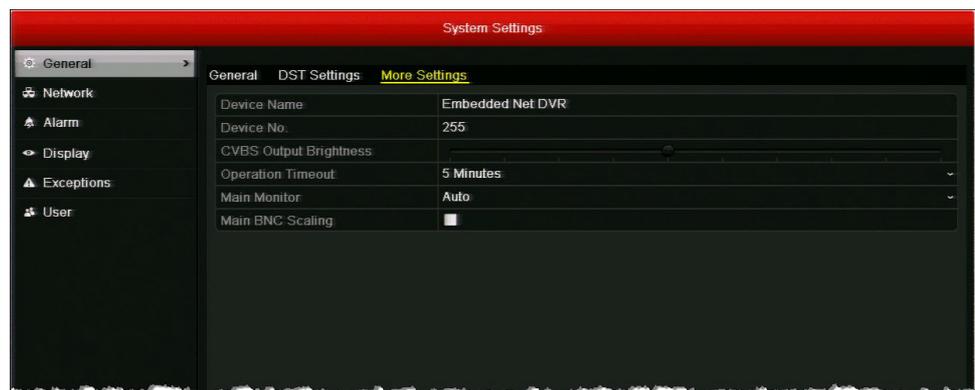


No.	Button	Function
1	Power	Turns DVR on/off.
2	DEV	Enables/disables remote control.
3	Alphanumeric	Inputs numbers/characters in edit mode. Selects channel to view in live view and playback mode.
4	EDIT	Deletes characters before cursor, selects check boxes in edit mode. Generates video clips for backup in playback mode.
5	A	Switches between uppercase and lowercase letters, symbols, numeric input.
6	REC	Accesses manual record menu. Calls preset in PTZ mode (press REC, then preset number).
7	PLAY	Accesses all-day playback menu.
8	INFO	Reserved
9	PREV	Switches between single screen and multi-screen layout in live view mode.
10	MENU	Accesses main menu.
11	VOIP/MON	Selects all items in a list.
12	Direction/ ENTER	Move cursor up/down/left/right in edit mode. Cycle through channels in live view mode. In playback mode, up/down buttons speed up/slow down playback, left/right buttons jump back/forward 30 s.
13	PTZ	Enters PTZ control mode.
14	ESC	Returns to previous menu.
15	RESERVED	Reserved
16	PTZ Controls	Control iris, focus, and zoom of PTZ camera.
17	F1	Selects all items in a list.
18	F2	Cycles through tabbed pages.

Pairing the Remote Control with the DVR

To pair the remote control with the DVR, follow these steps:

1. Turn on the DVR.
2. Using the mouse, log in to the DVR.
3. Right-click anywhere on the screen to display the shortcut menu, and then click **Menu**.
4. If prompted, enter your password.
5. In the main menu, click **Settings**.
6. In **System Settings**, on the **General** page, click the **More Settings** tab.



7. Make a note of the device number of the DVR. The default device number is **255**.
8. Press the **DEV** button on the remote control, input the device number, and then press the **ENTER** button.

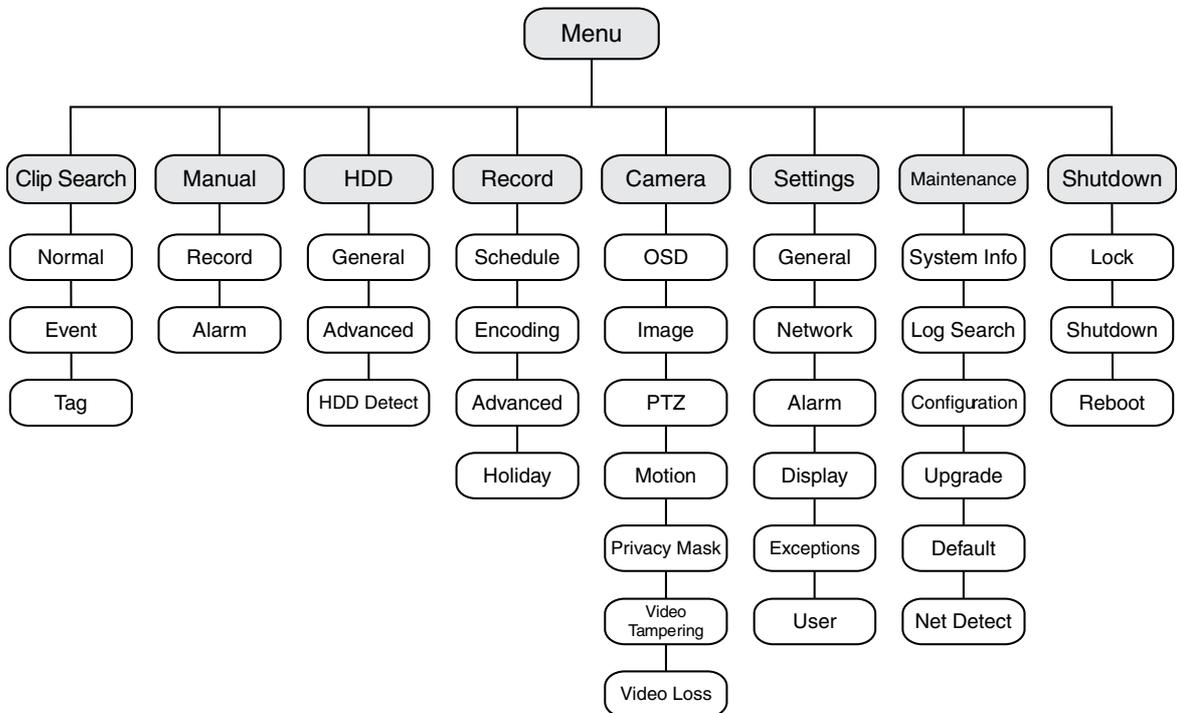
Troubleshooting the Remote Control

If there is no response when you try to use the remote control, follow these steps:

1. Check that the batteries are properly installed. Ensure that the polarities are not reversed.
2. Check that the IR receiver on the DVR front panel is not obstructed.
3. Aim the remote control at the IR receiver.

If the problem persists, contact your Honeywell dealer for a replacement.

Menu Structure



Installing the DVR

This chapter contains the following sections:

- *Installation Precautions, page 17*
- *Connecting External Devices, page 18*
- *Starting Up and Shutting Down the DVR, page 21*
- *Using the Setup Wizard, page 22*
- *Accessing the Main Menu, page 25*
- *Setting the System Date and Time, page 26*
- *Upgrading the Firmware, page 27*
- *HDD Storage Calculation, page 28*

Installation Precautions

Follow these precautions when installing the DVR:

- Use brackets for rack mounting.
- Ensure that there is at least 0.75 in. (2 cm) of space between rack-mounted devices.
- Ensure that there is ample room for the audio and video cables.
- When installing cables, ensure that the bend radius of the cable is at least five times the cable diameter.
- Ensure that the DVR is properly grounded.
- Ensure that the environmental temperature is between 14°F (–10°C) and 131°F (55°C).
- Ensure that the environmental humidity is between 10 percent and 90 percent.

Connecting External Devices

Video, audio, network, and other connections are made using the rear panel connectors (see *Rear Panel Layout, page 10*).

Connecting Cameras

Connect the coaxial cables from the cameras to the **Video In** BNC connectors.

Connecting Monitors

Connect your main video monitor to the **VGA** or **HDMI** output. Connect a spot monitor, if used, to the **Video Out** BNC connector.

Connecting Audio Devices

To record audio, connect your audio sources to the **Audio In** RCA connectors. To play audio, connect a speaker to the **Audio Out** RCA connector.

Connecting to a Local Area Network

Connect a Cat5 Ethernet cable to the **LAN** RJ45 jack.

Connecting a Mouse

Connect the supplied USB mouse to the rear panel USB port. This leaves the front panel USB port available for importing data from, or exporting data to, a USB flash drive.

Connecting a PTZ Camera or Other RS-485 Device

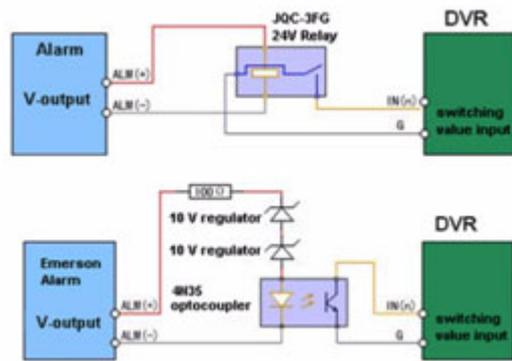
Connect the R+ and R- terminals of the PTZ receiver or other RS-485 device to the D+ and D- terminals of the **RS-485** interface. Press and hold the orange part of the terminal block, insert the wire, then release the orange part to lock the wire in place.

Connecting Alarm Devices

Connect alarm devices to the **Alarm In/Out** interface. Press and hold the orange part of the terminal block, insert the wire, then release the orange part to lock the wire in place.

Alarm Input

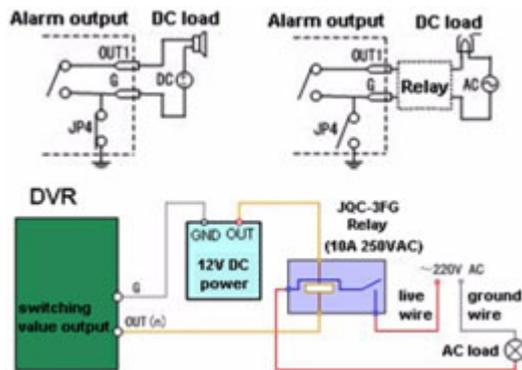
The alarm input should be an open/closed dry contact relay. If an open/closed relay is not used, connect the alarm input as follows:



Alarm Output

The alarm output relay supports connections to AC/DC loads. DC loads must be within the limit of 12 V DC / 1 A.

Refer to the following diagram when connecting to AC/DC loads:



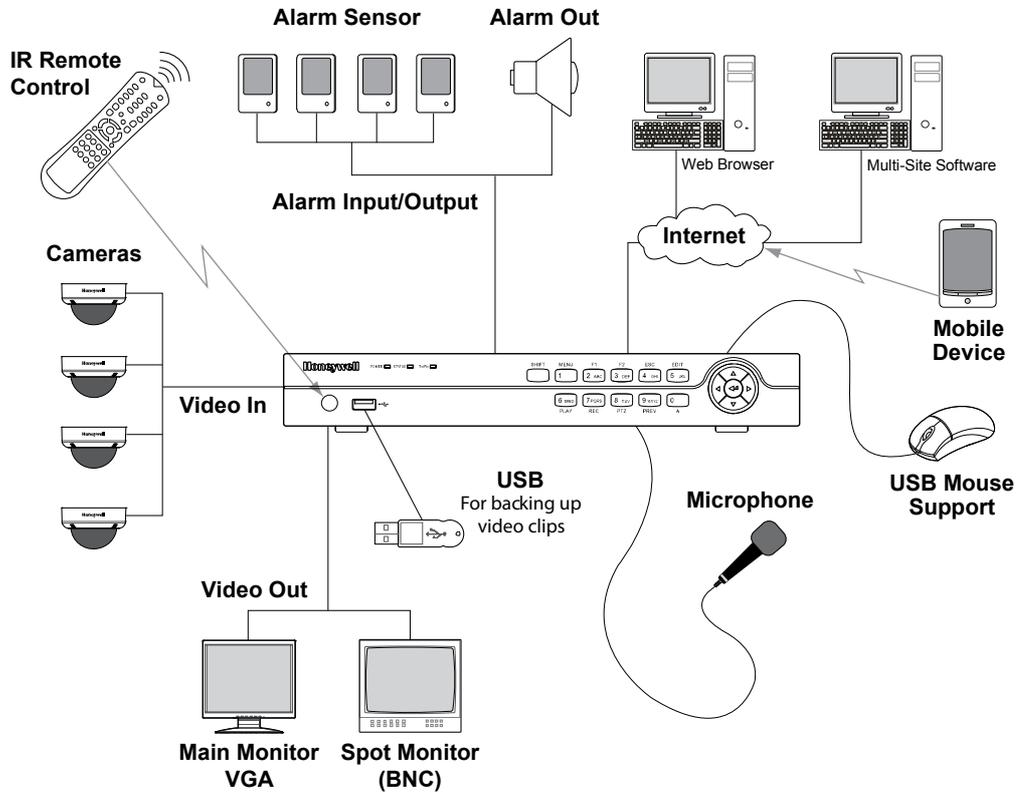
⚠ CAUTION Risk of electric shock. An external relay is necessary to prevent electric shock when connecting to an AC load.

Connecting Power

Connect the supplied power adapter to the 12 V DC power input. It is strongly recommended that you use an uninterruptible power supply when powering the DVR.

Typical Installation

The following diagram shows a typical HRGX DVR installation:



Starting Up and Shutting Down the DVR

Following correct startup and shutdown procedures will help to prolong the life of your DVR. Before you begin, ensure that all extension cords, surge protectors, and uninterruptible power supplies used with the device are rated to handle the device's electrical requirements, and that the device is properly grounded.

To turn on the DVR:

1. Ensure that the DVR is connected to a suitable power source.
2. Turn on the power switch on the rear panel of the DVR. The POWER LED on the front panel lights solid green when the DVR is receiving power.

Note The DVR takes approximately 45 seconds to initialize after it is turned on.

To turn off the DVR:

Note To shut down the device, you must be logged in as the admin user or else have shutdown privileges assigned to you.

1. In live view mode, right-click anywhere on the screen to display the shortcut menu, and then click **Menu**.
2. If prompted, enter your password.
3. In the main menu, click **Shutdown**.
4. In the **Shutdown** menu, click **Shutdown**.

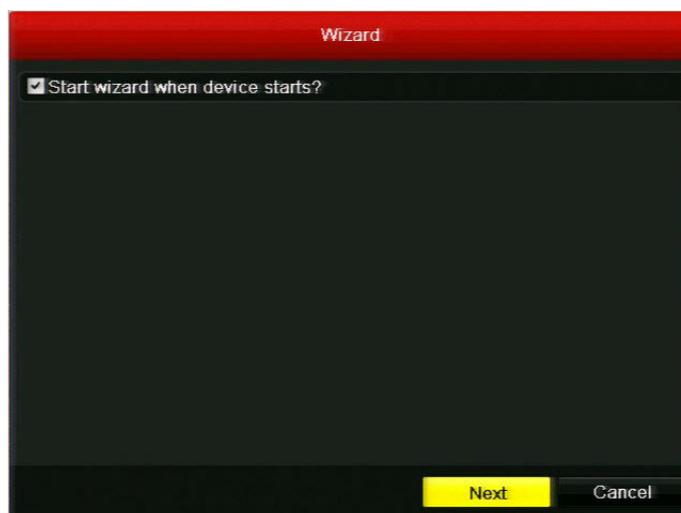


5. Click **Yes** to confirm that you want to shut down the system.
6. Turn off the power switch on the rear panel of the DVR.

Using the Setup Wizard

The setup wizard starts by default when you turn on the DVR. The wizard will guide you through the initial setup of the DVR.

Note It is strongly recommended that you use the supplied mouse to set up and operate the DVR. If you have not already done so, plug the mouse into the USB on the rear panel of the DVR.



1. The **Start wizard when device starts?** check box is enabled by default. If you want to stop the setup wizard from starting each time you turn on the DVR, clear the check box.
2. Click **Next** to continue to the next screen.
3. Click the **Admin Password** field to display the on-screen numerical keypad, enter your DVR's admin password (the default admin password is **12345**), and then click **Enter**.



4. If you want to create a new password, select the **New Admin Password** check box, enter a new password in the **New Password** field, and then re-enter the new password in the **Confirm** field.
5. Click **Next** to continue to the next screen.
6. Specify your DVR's network settings. If you want to configure the IP address, subnet mask, default gateway, and DNS addresses manually, clear the **Enable DHCP** check box.

Wizard	
NIC Type	10M/100M Self-adaptive
Enable DHCP	<input checked="" type="checkbox"/>
IPv4 Address	192 .0 .0 .64
IPv4 Subnet Mask	255 .255 .255 .0
IPv4 Default Gateway	
Preferred DNS Server	8.8.8.8
Alternate DNS Server	
<input type="button" value="Previous"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/>	

7. Click **Next** to continue to the next screen.
8. Select a camera, and then specify the desired recording resolution, frame rate, and recording time. You can use the DiskCalculator storage estimator tool included with your DVR to help you determine these settings. See also [HDD Storage Calculation, page 28](#).

Wizard	
Camera	Analog 1
Resolution	WD1
Frame Rate	Full Frame
Recording Time (day)	2
<input type="button" value="Copy"/>	
<input type="button" value="Previous"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/>	

- Specify the recording settings for each camera that is connected to your DVR. To copy the same settings to one or more additional cameras, click **Copy**, select the check boxes of the channel(s) that you want to copy the settings to (or select the **Analog** check box to select all the channels), and then click **OK**.



- Click **Next** to continue to the next screen.
- Motion detection is disabled for all channels by default. Click the channel(s) that you want to enable motion detection for, or click **Analog** to select all channels, and then click **OK**.

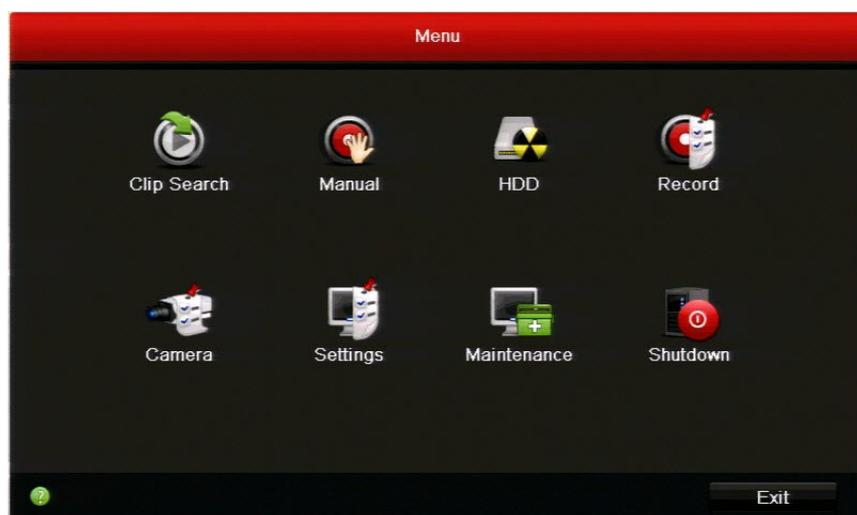


Accessing the Main Menu

Use the following procedure to access the main menu.

To access the main menu:

1. In live view mode, right-click anywhere on the main monitor screen to display the shortcut menu, and then click **Menu**.
2. If prompted, enter the DVR's admin password, and then click **OK**. The default admin password is **12345**.



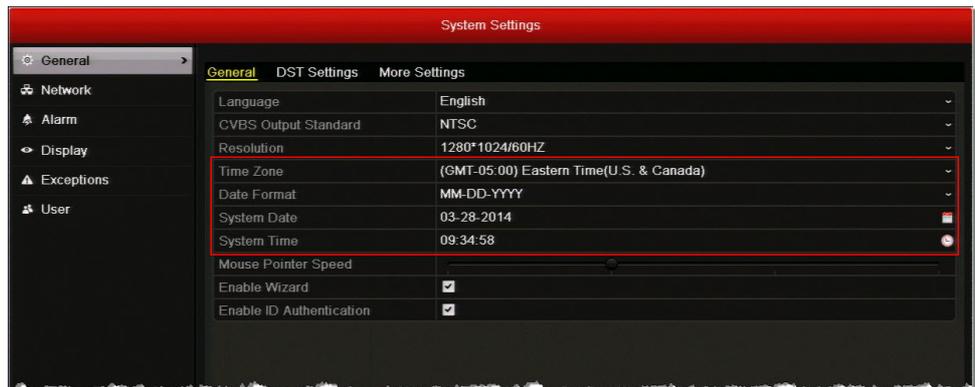
3. In **Menu**, click the submenu you want to open: **Clip Search**, **Manual**, **HDD**, **Record**, **Camera**, **Settings**, **Maintenance**, or **Shutdown**.

Setting the System Date and Time

Before you begin using the DVR, set the system date and time to ensure that recordings and events are time-stamped correctly.

To set the system date and time:

1. Go to **Menu > Settings**. The **System Settings** window opens.



2. On the **General** page, under **General**, configure the following settings:
 - **Time Zone** Select your time zone from the list.
 - **Date Format** Select **MM-DD-YYYY**, **YYYY-MM-DD**, or **DD-MM-YYYY**.
 - **System Date** Click the calendar icon to display the on-screen calendar, and then select the current date.
 - **System Time** Click the clock icon, and then enter the current time (hh:mm:ss).
3. Click **Apply** to save your settings.

Upgrading the Firmware

To obtain the latest firmware for your HRGX DVR, contact your Honeywell dealer. The firmware can be upgraded locally (by connecting a USB flash drive or other device containing the firmware file to the DVR) or remotely (via FTP server).

To upgrade the firmware locally:

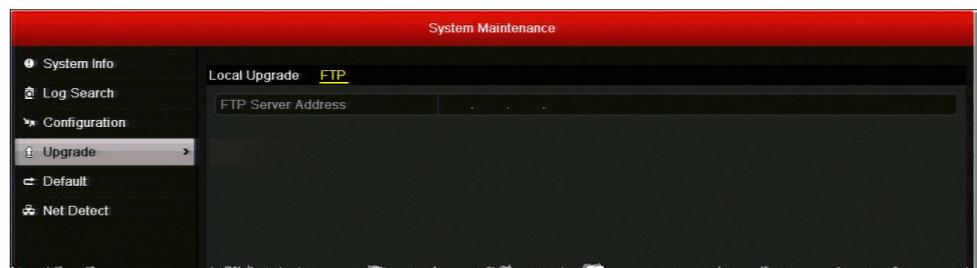
1. Insert a USB flash drive containing the `digicap.dav` file into the USB port on the front of the DVR. Ensure that no other USB flash drive or storage device is connected to the DVR.
2. Go to **Menu > Maintenance > Upgrade > Local Upgrade**. The `digicap.dav` file should appear in the file list under **Local Upgrade**.



3. Click **digicap.dav**, and then click **Upgrade**. The DVR restarts automatically after the upgrade is complete.

To upgrade the firmware remotely via FTP:

1. Ensure that your DVR and the PC running the FTP server are properly connected to the network and that the `digicap.dav` file is saved in the appropriate directory on the PC.
2. Go to **Menu > Maintenance > Upgrade > FTP**.



3. In the **FTP Server Address** field, type the address of the FTP server you want to access, and then click **Upgrade**.
4. After the firmware upgrade is complete, restart the DVR.

HDD Storage Calculation

The following table estimates storage space usage based on recording one channel for hour at a fixed bit rate. Actual usage will vary.

Bit Rate (Kbps)	Storage Used (MB)
96	42
128	56
160	70
192	84
224	98
256	112
320	140
384	168
448	196
512	225
640	281
768	337
896	393
1024	450
1280	562
1536	675
1792	787
2048	900
3072	1350

Operating the DVR

This chapters contains the following sections:

- [Using Live View, page 29](#)
- [Playing Back Video, page 31](#)
- [Exporting Video, page 33](#)

Using Live View

Live view mode is the DVR's default mode. When you start the DVR, live video from the connected cameras displays automatically on the monitor.

On-Screen Notifications

The following icons appear in the upper right corner of each channel's screen when the camera is recording and/or when an event alarm has been triggered:

-  Indicates video is being recorded. This may be a scheduled recording, a recording initiated manually by the DVR operator, or it may be initiated by motion or a relay alarm.
-  Indicates video loss/tampering, motion detection, or a relay alarm.

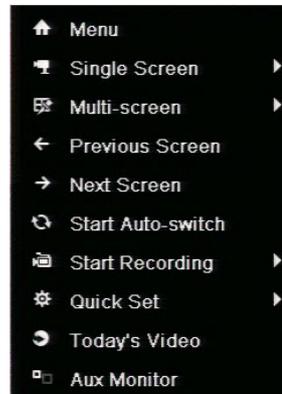
Quick Setting Toolbar

The following toolbar appears when you click on a channel in live view mode:



Shortcut Menu

The following menu appears when you right-click on the screen in live view mode:



Name	Description
Menu	Enter the main menu.
Single Screen	Switch to full screen view. Select channel from list.
Multi-screen	Switch to multi-screen view. Select option from list.
Previous Screen	Go to previous channel.
Next Screen	Go to next channel.
Start Auto-switch	Enable auto-switching between channels.
Start Recording	Start all-day normal recording or motion detection recording for all channels.
Quick Set	Set video output mode to Standard, Bright, Gentle, or Vivid.
Today's Video	Play back day's video of current channel.
Aux Monitor	Disable main output and switch to auxiliary output. Aux monitor must be connected.

Main/Aux Output Switching

When HDMI/VGA output is configured as the main output, you can switch to Main BNC output by double-clicking the mouse **wheel** anywhere on the screen. The message "Double-click the mouse again to switch the auxiliary and main output?" appears. Double-click the mouse wheel again to continue, or click **Cancel** to cancel the operation.

To switch back to the main HDMI/VGA output, right-click on the screen in live view mode to display the shortcut menu, and then click **Main Monitor**.

Playing Back Video

Use the following procedures to play back recorded video.

To play back the last five minutes of video:

1. Click a channel in live view mode to display the quick setting toolbar.
2. On the toolbar, click the **Instant Playback** button . The channel begins playing back video from the last five minutes.

You can use the on-screen playback controls to move backwards or forwards through the video or to pause playback.

3. To return to live view mode, click the **Exit** button.

To search and play back video from the current day or other dates:

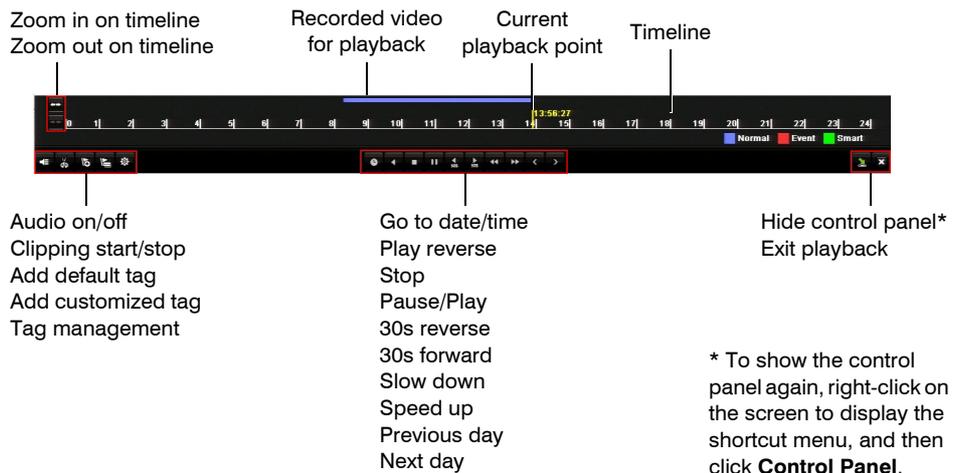
1. Right-click a channel in live view mode to display the shortcut menu, and then click **Today's Video**. The playback interface appears.



- To display the channel and date selection panel, move the mouse to the right edge of the playback interface.



- To switch playback to another channel or to play back video from multiple cameras simultaneously, select one or more additional cameras from the list.
 - To play back video from a different date, double-click the date in the calendar. The dates with recorded video are shown in blue or red. Blue indicates normal recording. Red indicates event recording.
- Control playback using the control panel at the bottom of the screen. Drag the yellow indicator to the desired playback point in the timeline.

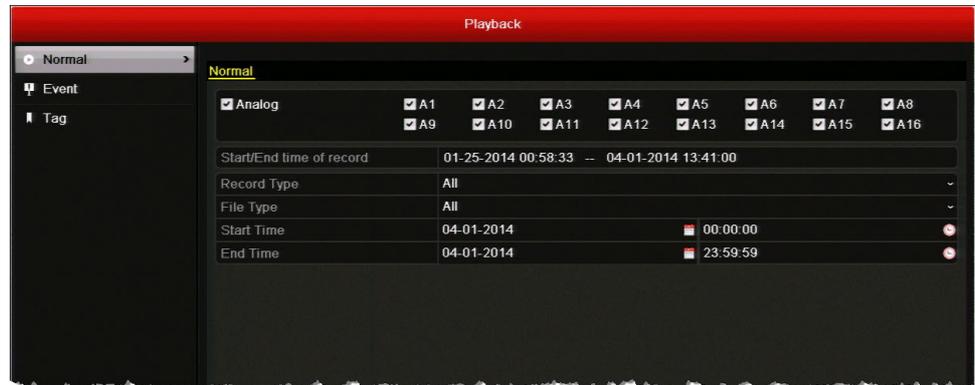


Exporting Video

Use the following procedures to export recorded video files and customized video clips.

To export recorded video files:

1. Insert a USB flash drive or other external storage device into the USB port on the front of the DVR.
2. Go to **Menu > Clip Search > Normal**.



3. On the **Normal** page, under **Normal**, select the channel(s) you want to search, or click **Analog** to select all the channels.
4. Configure the following search parameters:
 - **Record Type** Select one of the following recording types: **Normal, Motion, Alarm, Motion | Alarm, Motion & Alarm, Manual**, or **All**.
 - **File Type** Select one of the following file types: **Unlocked, Locked**, or **All**.
 - **Start Time** Select the date and time for the start point of the search.
 - **End Time** Select the date and time for the end point of the search.

Note The start and end search points must fall within the range listed next to **Start/End time of record**.

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