

Performance Series

1080p IP PTZ

HDZP252DI

User Guide

Recommended

Find the latest version of this and other Performance Series IP camera documents on the Honeywell Video website. Go to <http://www.honeywellvideo.com/products/cameras/ip/index.html> to find your camera and view/download the latest documentation.






Refer to the Honeywell Open Technology Alliance to learn more about our open and integrated solutions (go to: <http://www.security.honeywell.com/hota/>).



Revisions

Issue	Date	Revisions
A	02/2017	New document for 1080p IR PTZ IP cameras, based on 800-21358-A.

Cautions and Warnings

	<p>CAUTION 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 THE COVER. 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> 

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

⚠ WARNING To ensure compliance with electrical safety standards this product is intended for use with a Listed Power Adapter marked with “Limited Power Source”, “LPS”, on the unit, output rated 12 V DC, minimum 0.7 A, Tma=60°C or from Power over Ethernet (PoE) provided by Listed Information Technology Equipment meeting the IEEE 802.3af PoE standard.

The Ethernet connection is not intended to be connected to exposed (outside plant) networks. Do not connect two power sources to the camera at the same time.

⚠ WARNING To comply with EN50130-4 requirements, a UPS should be employed when powering the camera from 24 V AC.

CAUTION Invisible LED radiation (850 nm). Avoid exposure to beam.

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 instruction manual, 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.

Note 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 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

The equipment supplied with this guide meets the provisions of the following European Union council directives 2014/30/EU for EMC, 2001/95/EC for safety, and 2011/65/EU for RoHS compliance.

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 installing or operating 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.
 - 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. **MOUNTING SYSTEM** - Use only with a mounting system recommended by the manufacturer, or sold with the product.
5. **ATTACHMENTS/ACCESSORIES** - Do not use attachments/accessories not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
6. **CLEANING** - Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
7. **SERVICING** - Do not attempt to service this unit yourself. Refer all servicing to qualified service personnel.
8. **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. Using replacement parts or accessories other than the original manufacturers may invalidate the warranty.










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.**

List of Symbols

The following is a list of symbols that may appear on the camera:

Symbol	Explanation
	<p>The WEEE symbol.</p> <p>This symbol indicates that when the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling. By separating this product from other household-type waste, the volume of waste sent to incinerators or landfills will be reduced, and thus natural resources will be conserved.</p>
	<p>The UL compliance logo.</p> <p>This logo indicates that the product has been tested and is listed by UL (formerly Underwriters Laboratories).</p>
	<p>The FCC compliance logo.</p> <p>This logo indicates that the product conforms to Federal Communications Commission compliance standards.</p>
	<p>The direct current symbol.</p> <p>This symbol indicates that the power input/output for the product is direct current.</p>
	<p>The alternating current symbol.</p> <p>This symbol indicates that the power input/output for the product is alternating current.</p>
	<p>The RCM compliance logo.</p> <p>This logo indicates that the product conforms with Australian RCM guidelines.</p>
	<p>The CE compliance logo.</p> <p>This logo indicates that the product conforms to the relevant guidelines/standards for the European Union harmonization legislation.</p>
	<p>The caution symbol.</p> <p>This symbol indicates important information.</p>
	<p>The protective earth (ground) symbol.</p> <p>This symbol indicates that the marked terminal is intended for connection to the protective earth/grounding conductor.</p>

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About This Document

This document provides instructions for accessing, configuring, and operating the Performance Series 1080p IP PTZ. It is intended for system installers, administrators, and operators.

Overview of Contents

This document contains the following chapters and appendixes:

- [Chapter 1, Introduction](#), provides an overview of the main features of the Performance Series 1080p IP PTZ.
- [Chapter 2, Getting Started with the ConfigTool](#), describes how to install the Config Tool to access the camera remotely from a web browser. It also describes how to update your camera's firmware.
- [Chapter 3, Logging In and Viewing Live Video](#), describes how to log in to a camera and the Live View interface.
- [Chapter 4, Playing Back Video](#), describes how to search for recorded video and snapshots, and how to export them.
- [Chapter 5, Configuring Camera Settings](#), describes all camera configurations, including network and storage configurations.
- [Chapter 6, PTZ Functions](#), covers programming PTZ functions such as Presets, Tours, and Auto Scans.
- [Chapter 7, Configuring Events and Alarms](#), shows how to set up notifications for alarm inputs, motion detection, and network failure events.
- [Appendix A, Troubleshooting](#), lists common problems and solutions.
- [Appendix B, Camera Specifications](#), lists the specifications of the Performance Series 1080p IP PTZ.

Typographical Conventions

This document uses the following typographical conventions:

Font	What it represents	Example
Helvetica Narrow	Keys on the keyboard	Press Ctrl+C
Lucida	Values of editable fields that are mentioned in the body text of the document for reference purposes, but do not need to be entered as part of a procedure	The Time from field can be set to Hours:Minute:Seconds.
	Text strings displayed on the screen	The message <code>Valid</code> displays.
Swiss721 BT Bold	Words or characters that you must type. The word “enter” is used if you must type text and then press the Enter or Return key.	Enter the password .
	Menu titles and other items you select	Double-click Open from the File menu.
	Buttons you click to perform actions	Click Exit to close the program.
<i>Italic</i>	Placeholders: words that vary depending on the situation	Enter your <i>user name</i> .
	Cross-reference to external source Cross-reference within document	Refer to the System Administrator Guide . See Chapter 2, Installation .

1

Introduction

This chapter contains the following sections:

- [Overview, page 11](#)
- [Key Features, page 12](#)

Overview

Honeywell's Performance Series 1080p IR PTZ IP cameras integrate traditional camera and network video technology, combining video data collection and transmission. These flexible, fully featured PTZ cameras are the ideal choice for a wide range of indoor surveillance applications.

Plug-and-play compatible with Honeywell 8-/16-/32-/64-Channel Focus 4K Embedded NVRs, the cameras offer 1080p resolution at up to 30/25 (NTSC/PAL) frames per second and use H.264 video compression technology to save bandwidth and storage while ensuring maximum video quality. All of the cameras are True Day/Night with intelligent IR capability, providing up to 325 ft (100 m) of illumination in low-light and nighttime scenes.

Each camera comes with configurable motion detection and face detection video analytics.

In addition to a 12 V DC adapter, the 1080p PTZ cameras support Power over Ethernet (PoE), eliminating the need for a separate power supply and associated wiring. The cameras also support local video storage on microSDHC cards (up to 128 GB) to continue recording when network service is interrupted.

You can monitor Performance Series 1080p IR PTZ IP cameras from anywhere, at any time, using the free HonView Touch mobile app for both Apple and Android smartphones and tablets.

Key Features

Key features of the Performance Series 4K IP cameras include the following:

- | | |
|---------------------------|--|
| Camera | <ul style="list-style-type: none">• Day/Night mode auto-switch• Picture parameter setup, such as electronic shutter and gain• Motion detection• Backlight compensation• Video watermark function to prevent modification• Programmable PTZ tours, patterns and presets for easy monitoring of defined areas• IR night vision |
| Storage | <ul style="list-style-type: none">• Central server backup (configure in Alarm or Schedule settings)• Recording over Internet, files stored on client PC• Network storage (FTP)• Micro SDHC card storage (up to 128 GB) |
| Network Monitoring | <ul style="list-style-type: none">• One-channel video data transmission to a network terminal and decoding• Delay time less than 270 ms (network bandwidth support required)• Up to 20 connections• Compatible with the following network protocols: IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP, UPnP, ICMP, IGMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS |
| Network Management | <ul style="list-style-type: none">• Camera configuration and management via Ethernet• Device management via Internet or client PC |
| User Management | <ul style="list-style-type: none">• Each user belongs to specific group• Different user rights for each group• User rights cannot exceed group rights |
| System Management | <ul style="list-style-type: none">• Log function• System resource information and running real-time status display |

2

Getting Started with the ConfigTool

This chapter contains the following sections:

- *Installing the ConfigTool IP Utility, page 13*
- *Discovering Your Device on the Network, page 14*
- *Assigning a New IP Address to Your Device, page 14*
- *Upgrading the Device's Firmware, page 15*
- *Opening a Web Client, page 18*

Installing the ConfigTool IP Utility

Before you can start using your camera, you must install the ConfigTool IP utility on your PC.

1. Insert the software CD that came with your camera into your PC's disk drive.
2. Open the **Honeywell Config Tool** folder, and then double-click **Honeywell ConfigTool.exe**.
3. Click **Next** on the ConfigTool welcome screen.
4. Read the User License Agreement. If you agree, select **I agree**.
5. If you want, you can change the installation directory (by default, ConfigTool will be installed in C:\Program Files). To proceed with the installation, click **Install**.
6. If the installation is successful, the message **Installation is complete!** appears. Click **Enjoy Now** to open ConfigTool.

Discovering Your Device on the Network

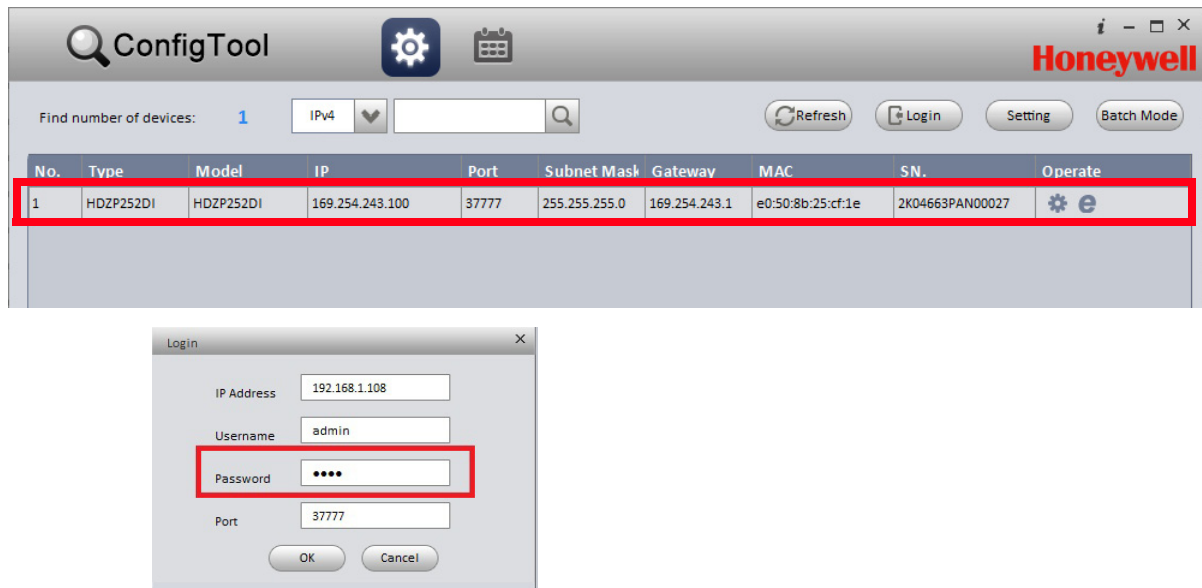
Use ConfigTool to discover your IP device(s) on the network. To discover your device(s), open ConfigTool. All of the connected IP devices on the network are listed. To refresh the list, click **Refresh**.

Assigning a New IP Address to Your Device

The current IP address of your device appears in the **IP** column of the ConfigTool main interface. If required, you can assign a new static IP address to the device.

1. From the list of devices in ConfigTool, select the device that you want to assign a new IP address to.
2. Click **Login**. Enter the login user name and password for the device (the default user name is **admin** and the default password is **1234**), and click **OK**.

Figure 2-1 Log In to a Device



3. Click the **Net** tab on the **Config** screen (see [Figure 2-2](#)). Enter the new IP settings in the **IP Address**, **Subnet Mask**, and **Gateway** fields, and click **Save**.

Figure 2-2 Network Settings

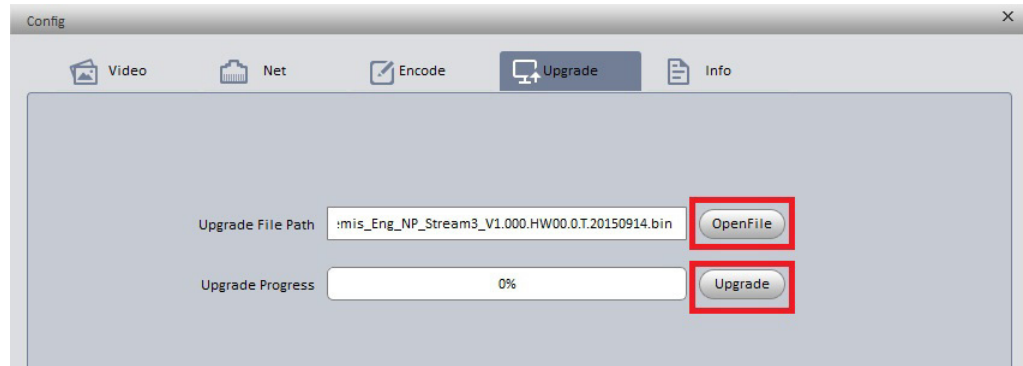
The screenshot shows the 'Config' window with the 'Net' tab selected. The 'Ethernet Card' is set to 'Wired' and 'IP Version' is set to 'IPv4'. The 'IP Address' field contains '169.254.243.100', 'Subnet Mask' is '255.255.255.0', and 'Gateway' is '169.254.243.1'. The 'MAC' address is 'e0:50:8b:25:cf:1e'. The 'TCP' port is '37777' (range 1025 - 65534), 'HTTP' is '80', 'UDP' is '37778', and 'RTSP' is '554'. The 'Save' button is highlighted with a red box.

Upgrading the Device's Firmware

Before using the camera, make sure that the latest firmware is installed. You can upgrade a single device or multiple devices at the same time.

To upgrade a single device:

1. Select the device to upgrade from the list of devices in ConfigTool.
2. Click **Login**. Enter the login user name and password for the device (the default user name is **admin** and the default password is **1234**), and click **OK**.
3. Click the **Upgrade** tab on the **Config** screen (see [Figure 2-3](#)).
4. Click **OpenFile**, navigate to the directory that contains the firmware file, and then click **Upgrade**.

Figure 2-3 Upgrade Screen

The device will reboot when the upgrade is complete. The message Device is offline: [device IP address] appears while the device is rebooting.

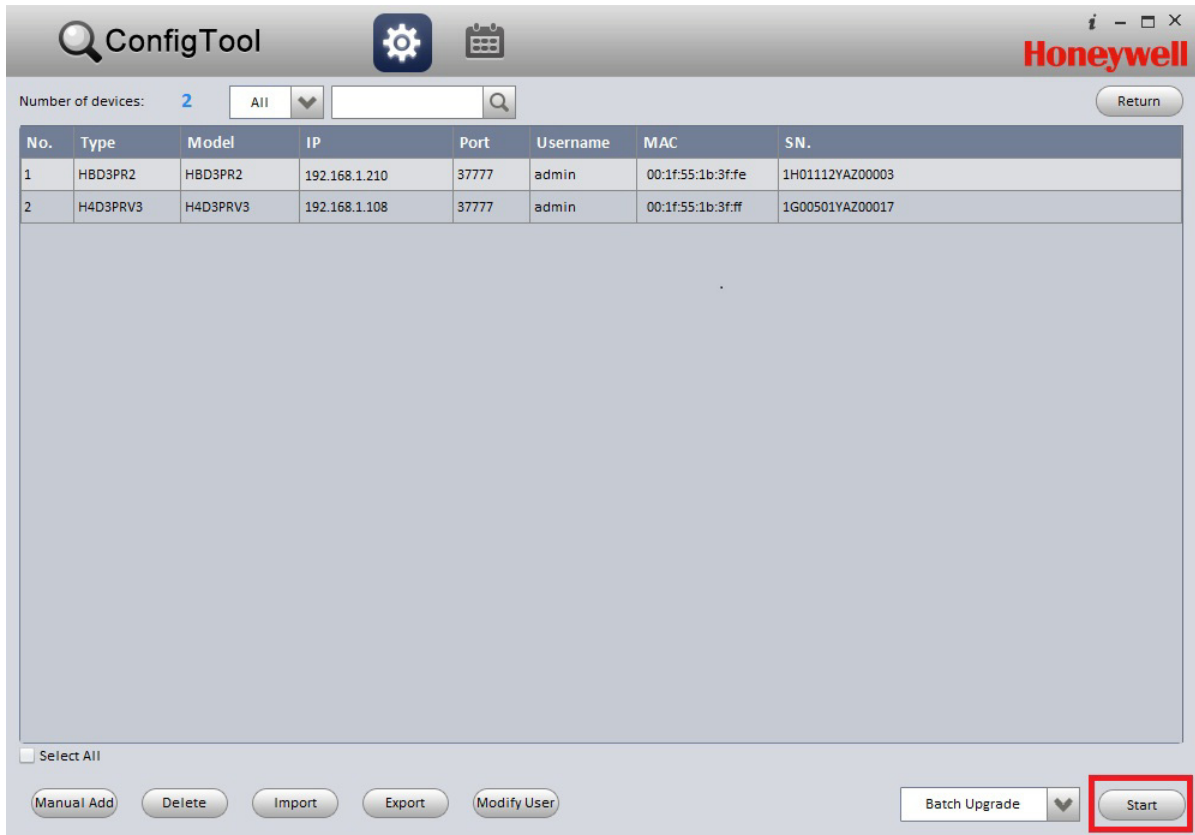
To upgrade multiple devices simultaneously:

1. Click **Batch Mode** in ConfigTool.

Figure 2-4 Select Batch Mode

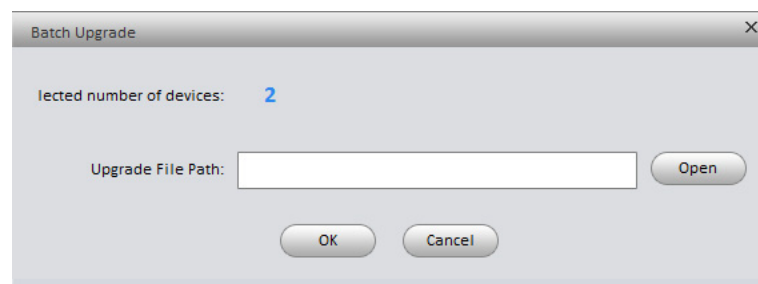
2. Click to select all of the devices that you want to upgrade from the list of devices, and then click **Start** (see [Figure 2-5](#)). Hold **Ctrl** while selecting to select multiple devices.

Figure 2-5 Batch Mode Screen



3. Click **Open** on the **Batch Upgrade** screen (see [Figure 2-6](#)). Navigate to the directory that contains the firmware file, and click **OK**.

Figure 2-6 Batch Upgrade Dialog Box



The devices will reboot when the upgrade is complete. The message Device is offline: [device IP address] appears while a device is rebooting.

Opening a Web Client

You can configure individual camera settings using the web client (see [Chapter 5, Configuring Camera Settings](#) for more information). To open the web client from ConfigTool, select the device to open a web client for, and then click the Microsoft Internet Explorer icon in the **Operate** column. The web client opens in your browser.

3

Logging In and Viewing Live Video

This chapter contains the following sections:

- *Logging In to the Camera via the Web Client, page 19*
- *Using the Live View Interface, page 21*

Logging In to the Camera via the Web Client

Using the web client, you can monitor live video, play back recorded video, and configure camera settings.

Before You Begin

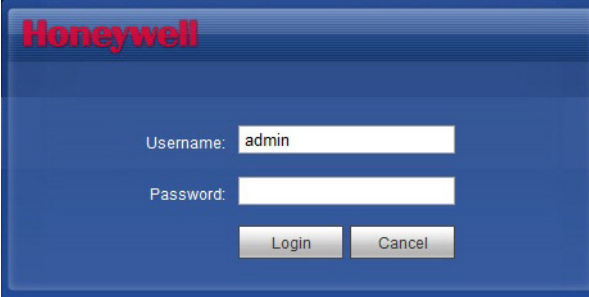
Before logging in to the web client, ensure that the following conditions are met:

- The camera is properly connected to the network.
- The camera's IP address and the PC's IP address are in the same network segment. If there is a router, set the corresponding gateway and subnet mask.
- A network connection has been established. To check this, ping the camera's IP address. (Enter "ping [IP address]").

Logging In to the Camera

1. Open **Internet Explorer**, enter the camera's IP address in the address bar, and then press **Enter**. For example, if your camera's IP address is **192.168.1.108**, you would type **http://192.168.1.108**.
2. On the login screen, enter the admin user name and password, and then click **Login**.
The default user name is **admin** (case-sensitive) and the default password is **1234**.

Figure 3-1 Login Window



The login window features the Honeywell logo at the top left. Below it, there are two input fields: 'Username:' with the text 'admin' and 'Password:'. At the bottom, there are two buttons: 'Login' and 'Cancel'.

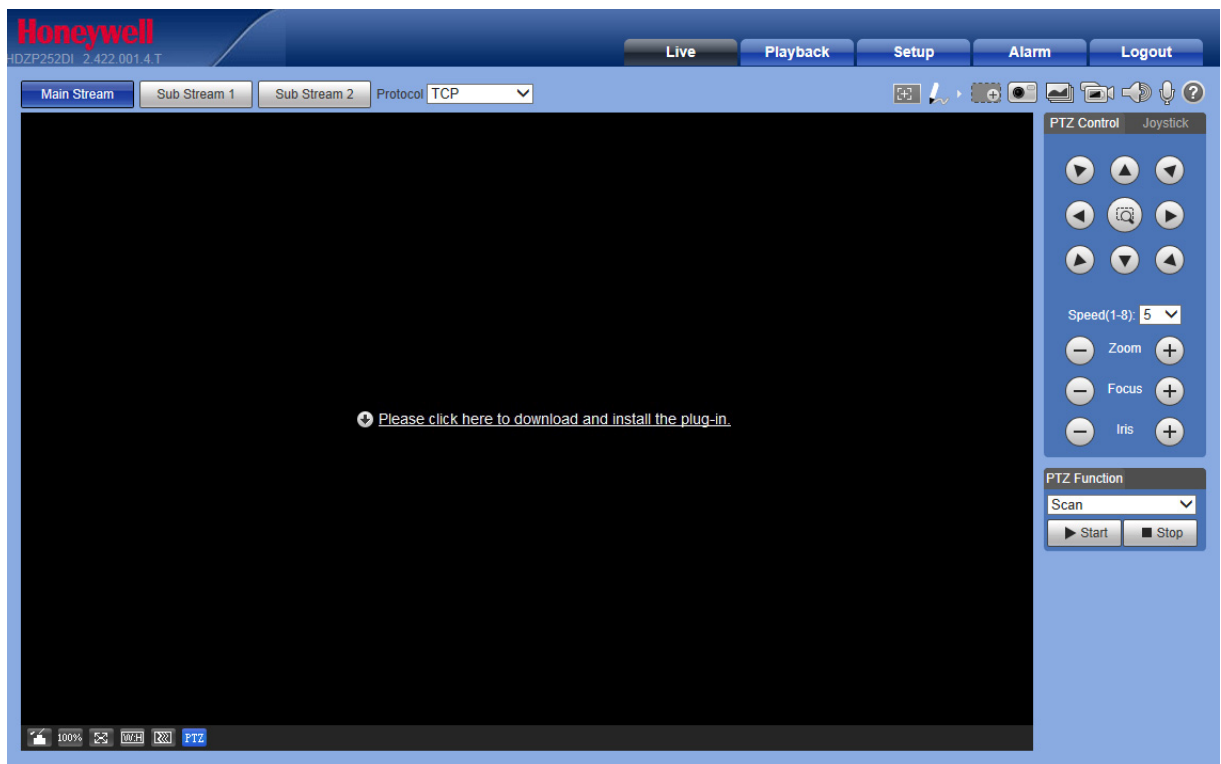
Installing the Browser Plug-In

If you are logging in for the first time, you will be prompted to download and install a browser plug-in (see [Figure 3-2](#)). Follow the on-screen instructions to install the plug-in. When the installation is complete, the web client automatically refreshes and the Live View interface opens ([Figure 3-5](#)).

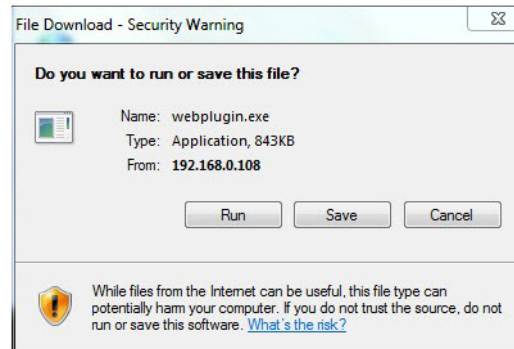
If this is your first time logging in, you will see the following message:

Please click here to download and install the plug-in.

Figure 3-2 First-time Login Message



1. Click **Please click here to download and install the plug-in**. A **File Download-Security Warning** popup message appears ([Figure 3-3](#)) that asks if you would like to run or save the file.

Figure 3-3 File Download Security Warning Message for the Plug-in

2. Click **Run**. An **Internet Explorer - Security Warning** appears.

Figure 3-4 Internet Explorer - Security Warning

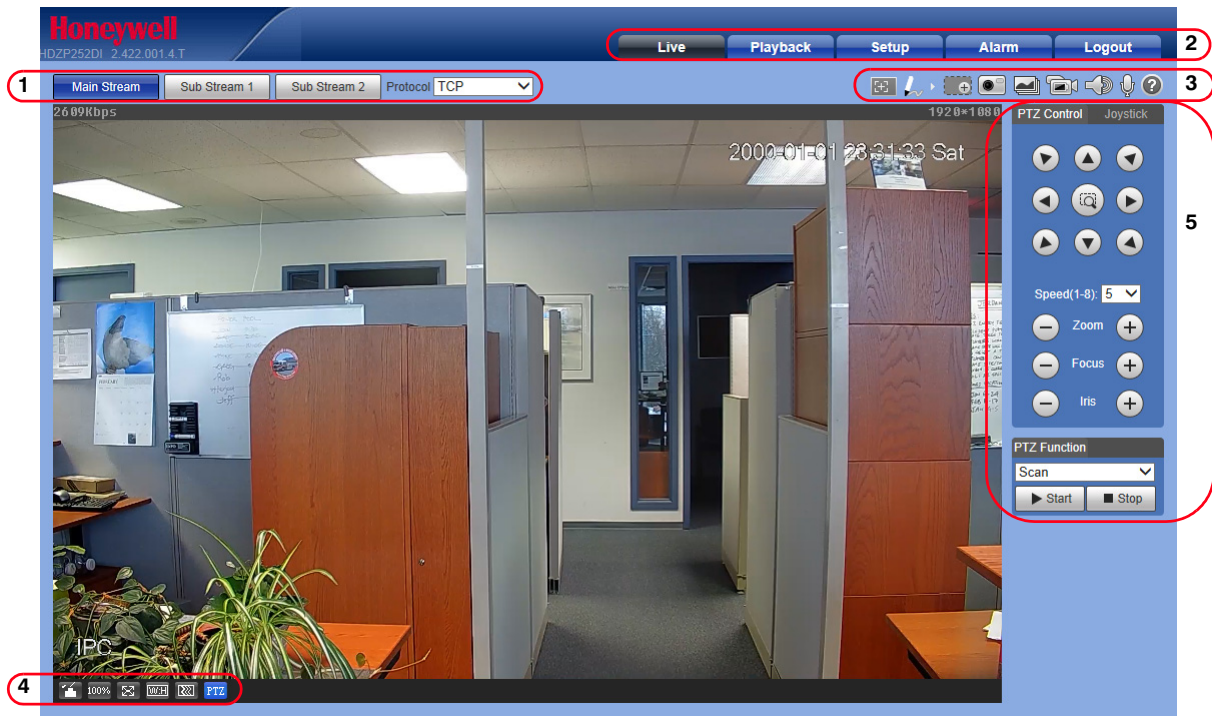
3. Click **Run** to start the installation. A **Ready to Install** window appears.
4. Click **Install**. A progress window appears.

When the plug-in installation is complete, the installation page will close. Then the web client automatically refreshes, and the Live View interface ([Figure 3-5](#)) opens.

Using the Live View Interface

The Live View interface has four sets of control areas (see [Figure 3-5](#)).

Figure 3-5 Live View Interface



- 1 Video encoder controls (see *Video Encoder Controls, page 22*)
- 2 System menus (see *System Menus, page 23*)
- 3 Live View controls toolbar (see *Live View Controls, page 23*)
- 4 Live View window settings toolbar (see *Live View Window Configuration, page 24*)
- 5 PTZ Controls panel (see *PTZ Controls, page 24*)

Video Encoder Controls

You can choose a stream and set the stream protocol with the video encoder controls.

Figure 3-6 Video Encoder Controls

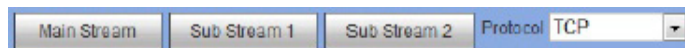


Table 3-1 Video Encoder Controls

Setting	Description
Main Stream	In a normal network bandwidth environment, the main stream can record audio/video files and support a network monitor. Set the main stream resolution if your camera supports it.
Sub Stream 1/ Sub Stream 2	If the network bandwidth is not sufficient, you can use the sub stream with lower resolution to support a network monitor.
Protocol	You can select the stream media protocol from the drop-down list. There are three options: TCP , UDP , or Multicast .

System Menus

Figure 3-7 System Menu



When you log in to the camera using the web client, the Live View interface opens by default. To access the Playback, Setup, and Alarm interfaces, or to log out, select the corresponding tab in the system menu.

Live View Controls

From the Live View controls toolbar, you can zoom in on a scene, take a snapshot, or manually record video. These controls are described with detail in [Table 3-2](#).

Figure 3-8 Live View Window Controls



Table 3-2 Live View Window Controls

Icon	Control	Description
	Regional Focus	You can force the camera to focus on a specific region in the scene by clicking Regional Focus and then drawing a box over the region to focus on by clicking and dragging the mouse on the video image. The camera will adjust the focus so the selected region becomes more clear.
	Draw on the Image	Use the Pencil icon to draw on the live view image. Use this option to circle items of interest so they can be easily seen when going over recorded video. Click the arrow beside the pencil to select from either red, blue or green pencil. Double-click the pencil icon to clear the image.
	Digital Zoom	While viewing live video, click and hold down the left mouse button to zoom in on a specific area. Right-click the mouse to return to the previous magnification.
	Snapshot	Click to take a snapshot, saved as a JPEG at the default location (picture download). To change the save path, see Path on page 51 . Or go to Setup > Camera > Video > Path .
	Triple Snap	Click to take three snapshots at 1 fps. All images are saved to the path as set in Setup > Camera > Video > Path .
	Record	Click to start manual recording. All video is saved to Setup > Camera > Video > Path .
	Audio Output	Click to enable/disable audio when monitoring a scene.
	Bidirectional Talk	Click to enable/disable bidirectional talk to communicate with someone within range of the camera.
	Help	Click to open Help .

Live View Window Configuration

From the Live View window configuration toolbar, you can adjust the screen brightness, contrast, hue, or saturation; change the screen size and/or aspect ratio; and adjust image fluency. These controls are described in more detail in [Table 3-3](#).

Figure 3-9 Live View Window Configuration Toolbar



Table 3-3 Live View Window Configuration Tools

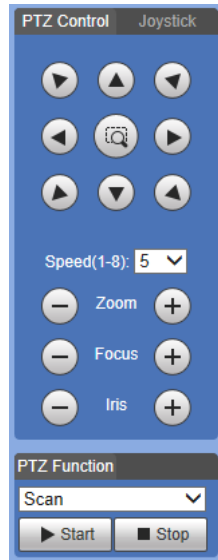
	Image Control	Click to open the Image Adjustment panel. Drag the sliders to set brightness, contrast, hue, and saturation, or click reset to return to the default settings.
		Alternatively, you can go to Setup > Camera > Conditions to adjust these settings.
Note		Image adjustments apply only to video displayed with the web client interface.
	Original Size	Click to return video display to its original size (the size will depend on the resolution setting of the bit stream).
	Full Screen	Click to enter full-screen mode. Press Esc or double-click the mouse to exit full screen.
	Width and Height Ratio	Click to return the video display to the original aspect ratio (or an aspect ratio suitable for the window).
	Adjust Fluency	Click to select a fluency level based on your network connection. The default setting is Normal . If your network connection is slow, you can select Fluent to make the video appear smoother (however, this may result in a decrease in image quality).
	PTZ Controls	Click to open the PTZ Controls panel. Use these controls to control the PTZ camera movement. See PTZ Controls on page 24 for more information.

PTZ Controls

From the Live View window PTZ controls panel, you can move the PTZ camera in any direction, zoom in on an object, recall a preset position or tour for the camera to move to, and set the PTZ to auto scan the scene. These controls are described in more detail in [Table 3-4](#).

Figure 3-10 Live View PTZ Controls Panel

PTZ Controls with Scan function



Joystick Controls with Preset function



Table 3-4 Live View PTZ Controls

	<p>PTZ Directional Controls</p>	<p>Click to the directional arrows to move the video image in the direction of the arrow.</p>
	<p>PTZ Joystick Controls</p>	<p>Click and drag the middle icon in the joystick control in the direction that you want the video image to move to.</p>
	<p>Position Button</p>	<p>Use the Position button to move the video image. Click the Position button and then click on the video image to re-center the PTZ camera on the point of the image that you clicked.</p>
	<p>Speed Setting</p>	<p>Use the Speed drop-down list to select the PTZ movement speed.</p>
	<p>Zoom/Focus/Iris</p>	<p>Use the Zoom, Focus and Iris controls to adjust the zoom, focus, and iris of the PTZ camera image. Click the + and – Zoom buttons to zoom in and out of the image. Click the + and – Focus buttons to focus the image near or far. Click the + and – Iris buttons to open and close the iris to let more or less light into the image.</p>
	<p>PTZ Function drop-down list</p>	<p>Use the PTZ Function drop-down list to select the type of PTZ function that you want to perform. You can select from Scan, Preset, Tour, Pattern, Assistant, Pan, and Go To. See the following sections for more information on performing each of these functions.</p>

PTZ Functions: Scan

To use a PTZ Scan, you must program the Scan settings on the **Setup > PTZ > Function > Scan** screen. Click **Start** to start the PTZ to repeatedly move in the programmed scan. Click **Stop** to stop the scan function.

PTZ Functions: Preset

To use a PTZ Preset, you must program at least one Preset on the **Setup > PTZ > Function > Preset** screen. Enter the number of the Preset to move to in the field provided and click **Go To** to move the PTZ camera to the position.

PTZ Functions: Tour

To use a PTZ Tour, you must program at least one Tour on the **Setup > PTZ > Function > Tour** screen. Enter the number of the Tour to run in the field provided and click **Start** to start the camera to move through the tour positions. Click **Stop** to stop the tour.

PTZ Functions: Pattern

To use a PTZ Pattern, you must program at least one Pattern on the **Setup > PTZ > Function > Pattern** screen. Enter the number of the Pattern to run in the field provided and click **Start** to start the camera to move through the pattern positions. Click **Stop** to stop the pattern.

PTZ Functions: Pan

When using the PTZ Pan function, you can adjust the Pan speed on the **Setup > PTZ > Function > Scan** screen. Click **Start** to start the PTZ to continuously pan from the current position. Click **Stop** to stop the panning movement.

PTZ Functions: Go To

To use the Go To function, enter Horizontal Angle, Vertical Angle, and Zoom values in the fields provided and click **Go To**. The camera will move to the position and zoom values specified.

4

Playing Back Video

This chapter contains the following sections:

- [Introduction, page 27](#)
- [Playing Back Recorded Video, page 28](#)
- [Using the Playback Assistant, page 31](#)
- [Creating a Video Clip, page 32](#)
- [Viewing Snapshots, page 32](#)

Introduction

This chapter describes how to play back recorded video and saved snapshots on 1080p PTZ IP cameras using the web client, how to take snapshots while playing back recorded video using the Playback Assistant, and how to create custom video clips.

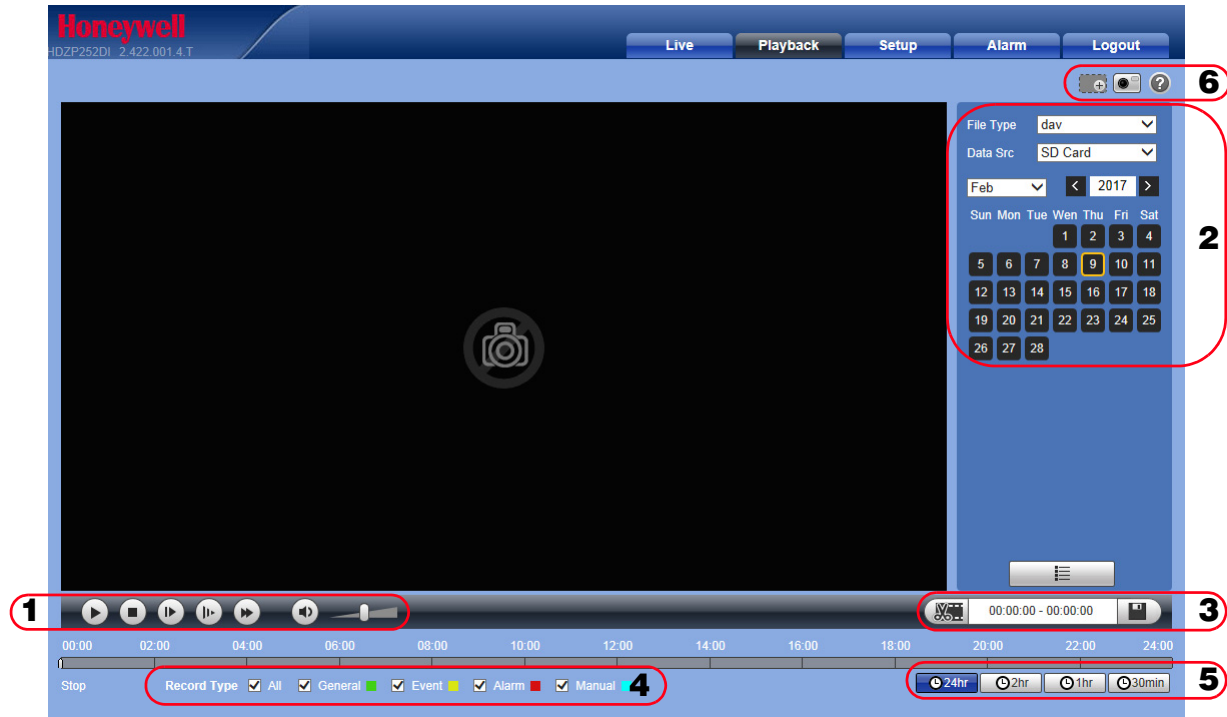
Note Before you can play back recorded video or saved snapshots, you must first configure storage settings in the **Setup** menu. See [Configuring Storage Settings on page 64](#) for more information.

Click the **Playback** tab to display the playback interface.

Overview of the Playback Interface

The Playback interface has six areas with controls and options for playback (see [Figure 4-1](#)).

Figure 4-1 Playback Interface



- 1 Playback controls (see [Playback Controls on page 28](#))
- 2 Calendar area (see [Playing a Recorded File from the Calendar on page 29](#))
- 3 Clip selection (see [Creating a Video Clip on page 32](#))
- 4 Record type (see [Searching for a File by Recording Type on page 31](#))
- 5 Timeline configuration (see [Timeline Configuration on page 31](#))
- 6 Playback Assistant (see [Using the Playback Assistant on page 31](#))







Playing Back Recorded Video

Playback Controls

Figure 4-2 Playback Controls



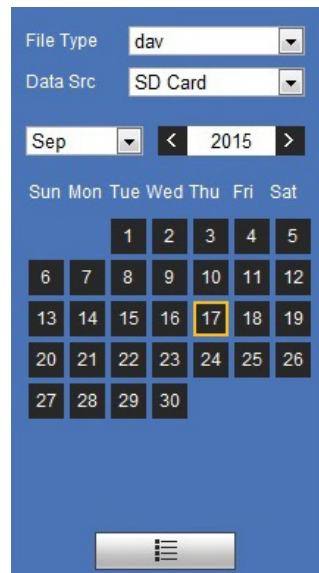
Table 4-1 Playback Controls

Control	Description
	Click to play video. While in Play mode, this button changes to the Pause button.
	Click to stop video playback.
	Click to go to the next frame.
	Note Video playback must be paused before you can use this function.
	Slow playback.
	Fast playback.

Playing a Recorded File from the Calendar

On the playback calendar, a day in **BLUE** indicates a day on which video was recorded.

Figure 4-3 Playback Calendar



For the **File Type**, select **dav** for video playback and **jpg** for snapshots.

The default **Data Source** is **SD Card**.

Playing a Recorded File

1. In the Playback interface, in the calendar area, use the options to find a recording:
 - a. Select **dav** in the **File Type** box.
 - b. Select **SD Card** in the **Data Src** box.

- c. Select the month and year that you want to search. Dates with recorded video are shown in blue.
- d. Click the date (in blue) that you want to view video from. The timeline ([Figure 4-4](#)) displays the recordings for that day as color-coded bars.
 - Green indicates normal recording.
 - Yellow indicates motion detection recording.
 - Red indicates alarm-triggered recording.
 - Blue indicates manual recording.

Figure 4-4 Recording Timeline









2. Click on the timeline to select a playback time.
3. Click  to open the list of recorded files.
4. Double-click a file in the file list to begin playback, and to see the file size, start time, and end time. Use the [Playback Controls, page 28](#), to review the video.


Figure 4-5 Playback File Details

00 : 00 : 00 - 23 : 59 : 59 

Download Format dav mp4

	Start Time	File Type	
1	11:12:28		
2	11:13:48		

Begin Time:
End Time:
File Size:



Enter a start and end time to search for recorded video.

Select a recording type. Select **dav**, as MP4 is not currently supported.

Click the download button to download the **dav** file to the local computer.

Click to return to the calendar interface.

Note You can download a file to your local computer from the playback interface.

Note Select **dav** for the recording type. **MP4** is not currently supported.

Searching for a File by Recording Type

By selecting a recording file type, you can filter by a particular recording type so that the timeline and file list display only those types of recorded files. You can also select the record type to display in the Playback window. The filter is at the bottom of the Playback window (see [Figure 4-1](#)).

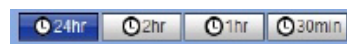
Figure 4-6 Recording Type Filter in Playback



Timeline Configuration

You can configure the playback timeline to show the last 24 hours, 2 hours, 1 hour, or 30 minutes of recorded video. Click to select.


Figure 4-7 Playback Timeline Configuration



Using the Playback Assistant


The Video Playback Assistant buttons allow you to zoom in and out on video, and to take snapshots.

Zooming In and Out

To zoom in, in the Playback Assistant area (see [Figure 4-1](#)), click the **Zoom In** button , and then use the scroll wheel on your mouse to zoom in on an area of the video.

Right-click the mouse to return the video to its original picture without zooming.

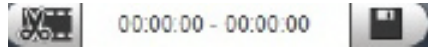
Taking a Snapshot

Click  while playing video to manually take a snapshot. The snapshot is saved to the file path on your local PC. To configure the file path, see [Path on page 65](#).




Creating a Video Clip

You can clip and save a section of recorded video during video playback using the clip function.

Figure 4-8 Clip Function Controls



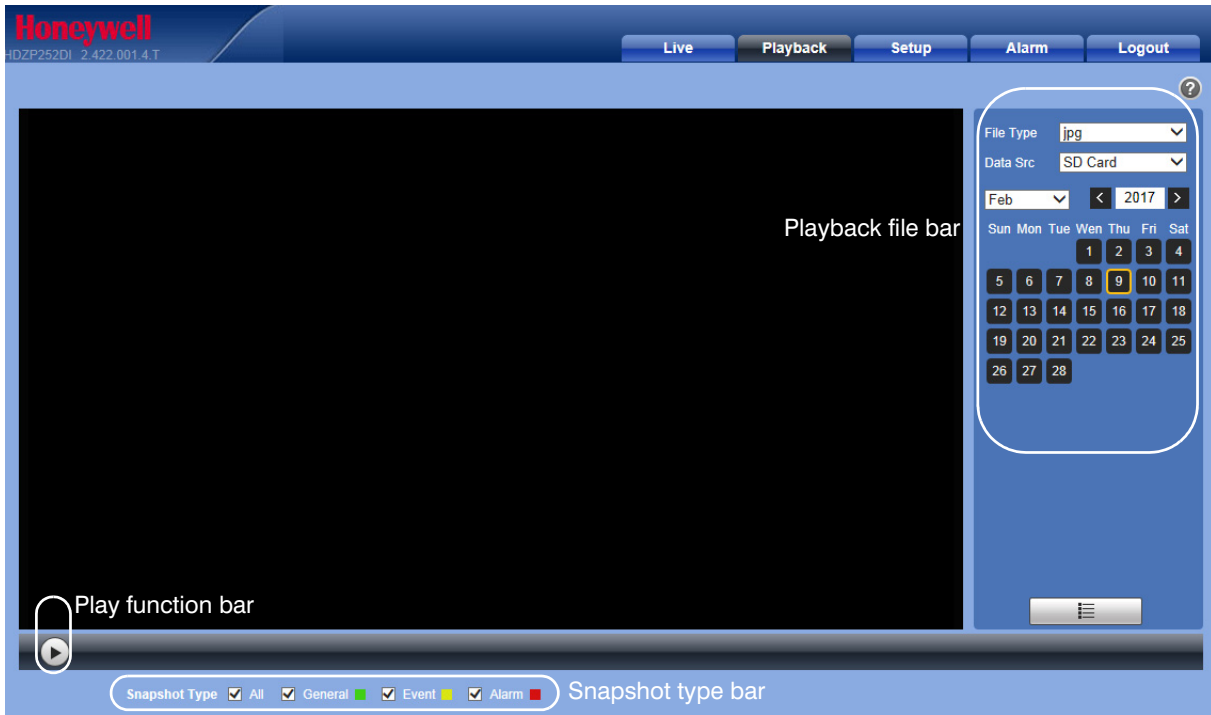
Note Playback of recorded video is automatically paused during clipping.

1. Find the recording that you want to create a clip from (see [Playing Back Recorded Video on page 28](#)).
2. On the timeline, click the recording at the time you want to start the clip, and then click . This designates the start time of the clip.
3. Next, click the recording at the time you want to end the clip, and click . This designates the end time of the clip.
4. Click  to save the clipped file to your local PC. To configure the saving path, see [Path on page 65](#).

Viewing Snapshots

1. In the Playback interface, in the calendar area, do the following:
 - a. Select **jpg** in the **File Type** box.
 - b. Select **SD Card** in the **Data Src** box.
 - c. Select the month and year that you want to search. Dates with snapshots are shown in blue.
 - d. Click the date (in blue) that you want to view snapshots for.

Figure 4-9 Snapshot Playback Control Interface




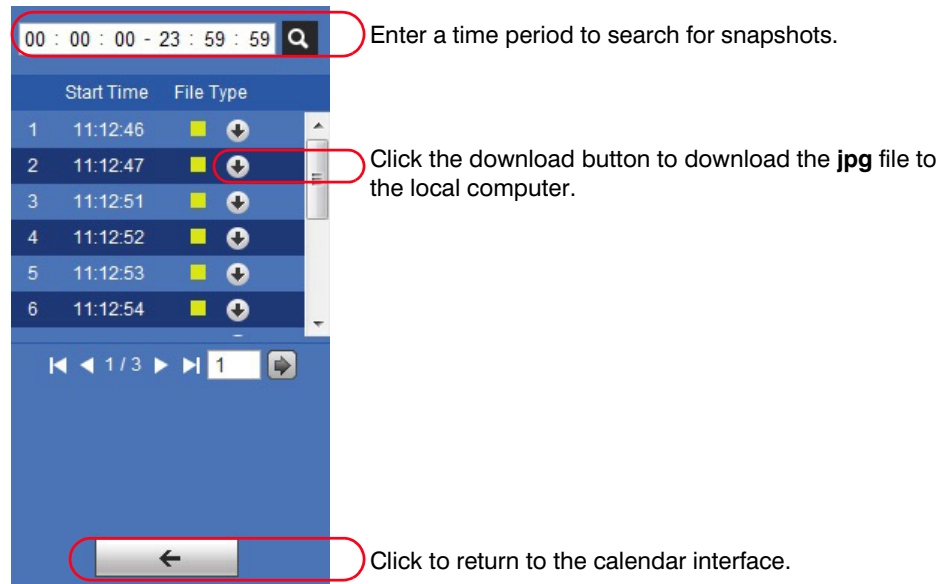
2. In the **Snapshot Type** area, you can refine your search results by selecting specific snapshot types to search for (**General**, **Motion**, or **Alarm**).
3. Click the file list button  below the calendar to display a list of snapshots for the selected date.

Figure 4-10 List of Snapshots



4. If you want, you can refine your search results further by entering a specific time range to search.

5. To view a snapshot, double-click the file name (start time). To download a snapshot to your local PC, click the download button next to the file name. To configure the saving path/location, see [Path on page 65](#).

5

Configuring Camera Settings

This chapter contains the following sections:

- [Configuring Camera Settings, page 35](#)
- [Configuring Network Settings, page 52](#)
- [Configuring Storage Settings, page 64](#)
- [Configuring System Settings, page 68](#)
- [Viewing System Information, page 75](#)

Configuring Camera Settings

Conditions

On the **Conditions** tab, you can view the camera settings. Configuration changes become valid immediately after they are saved.

Note The settings that are available on the **Conditions** tab may differ depending on the selections made in the **Profile Management** setup (see [Profile Management on page 47](#) for more information).

Picture Settings

Figure 5-1 Camera Setup - Picture Window

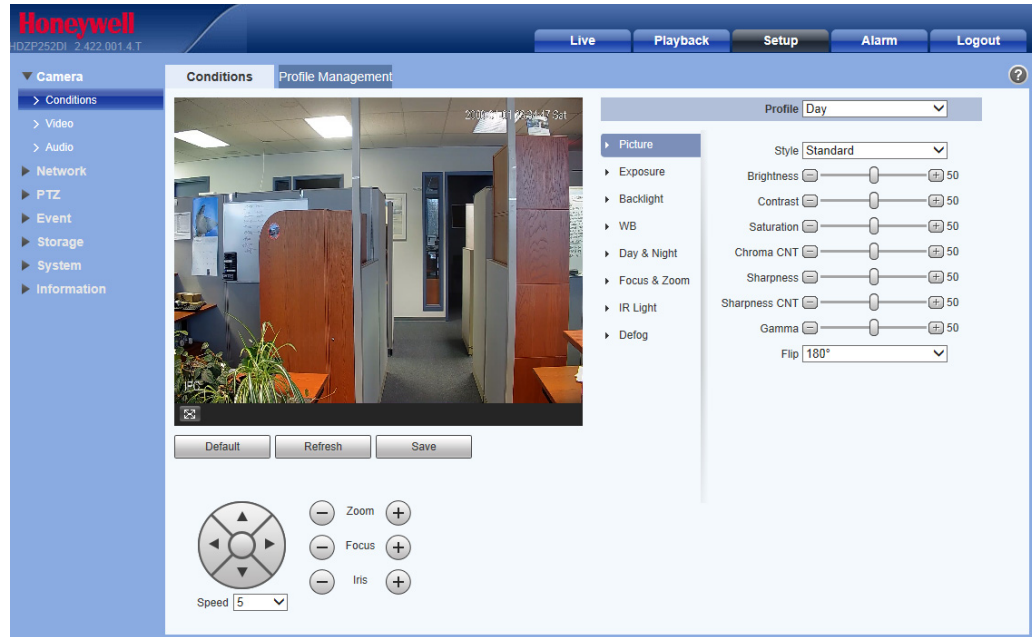



Table 5-1 Camera Picture Configurations

Parameter	Function
Profile	Select from Normal, Day, Night . Settings changed will only affect the selected profile.
Style	Select from Soft, Standard, and Vivid lighting and image styles.
Brightness	Adjusts video brightness. Choosing a higher value increases the video brightness. Adjustments to this value affects the brightness of the video. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 . Note The video can become hazy if this value is too high.
Contrast	Adjusts video contrast. Choosing a higher value increases the contrast. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 . Note The video can become hazy if this value is too low. If this value is too high, then the dark parts of the video could lose details, and the bright parts of the video could become overexposed.
Saturation	Adjusts video color saturation. Choosing a higher value increases the color saturation/strength. This value has no effect on the general brightness of the video. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 . Note You might see a distortion in grays if the white balance is turned off.
Chroma CNT	Adjusts video chroma color value. Choosing a value changes the color chroma/hue. This value has no effect on the general brightness of the video. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 .

Table 5-1 Camera Picture Configurations (cont'd)

Parameter	Function
Sharpness	Adjusts video sharpness. Choosing a higher value increases the sharpness of the video. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 . Note Choosing a higher value can introduce video noise to the image.
Sharpness CNT	Adjusts video sharpness. Choosing a higher value increases the sharpness of the video. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 .
Gamma	Adjusts dynamic range. Choosing a higher value increases the brightness of the image non-linearly. Select from 0 to 100 . The recommended range is between 40 and 60 . The default value is 50 .
Flip	0° : Video is not flipped. This is the default setting. 180° : Flips the video 180°.
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Exposure Settings


Figure 5-2 Camera Setup - Exposure Window



Table 5-2 Camera Exposure Configurations

Parameter	Function	
Profile	Select from Normal, Day, Night .	
Anti-flicker	<p>Outdoor: In Outdoor mode, you can select any exposure mode to avoid flicker.</p> <p>50Hz: When the current is 50Hz (power company's electrical frequency), the system can automatically adjust the exposure according to the environment's brightness to prevent stripes in the video.</p> <p>60Hz: When the current is 60Hz (power company's electrical frequency), the system can automatically adjust the exposure according to the environment's brightness to prevent stripes in the video.</p>	
Exposure	Auto	The image automatically compensates for changes in the scene's lighting.
	Gain Priority	<p>The image automatically compensates for changes in the scene's lighting. Adjusting the Gain can enhance the low light areas of the scene; however, noise will increase as the gain is increased.</p> <p>In the same environments, the noise with the Gain Priority mode enabled shall be less than the noise with Auto mode enabled.</p>
	Aperture Priority	The image automatically compensates for changes in the scene's lighting. Adjusting the Iris range (0~100) can adjust the range of lighting that will get through the iris; however, darkness will increase as the iris range is decreased.
	Shutter Priority	<p>Select this exposure option when the image scene includes lots of motion that needs to be captured clearly. Change the Shutter value to adjust the scene's exposure to the light level required.</p> <p>In the same environments, the distortion (motion blur) with the Shutter Priority mode enabled will be less than the distortion with the Auto mode enabled.</p>
	Manual	Shutter speed and gain settings can be manually adjusted to set the scene exposure.
Exposure Comp	Use the Exposure Comp setting to manual compensate for automatic exposure settings. This value ranges from 0 to 100 . The default is 50 . This setting is not available when Manual mode is selected.	
AE Recovery	Select the Auto Exposure Recovery timeline from this drop-down list from: OFF, 5Minute, 15Minute, 1Hour, and 2Hour . 15Minute is the default setting.	
2D Noise Reduction	2D noise reduction is enabled by default.	
2D NR Grade	This value ranges from 0 to 100 . The default is 50 when 2D NR is on.	
3D Noise Reduction	3D noise reduction is enabled by default.	
3D NR Grade	This value ranges from 0 to 100 . The default is 50 when 3D NR is on.	

Table 5-2 Camera Exposure Configurations (cont'd)

Parameter	Function
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Backlight Settings

Figure 5-3 Camera Setup - Backlight Window

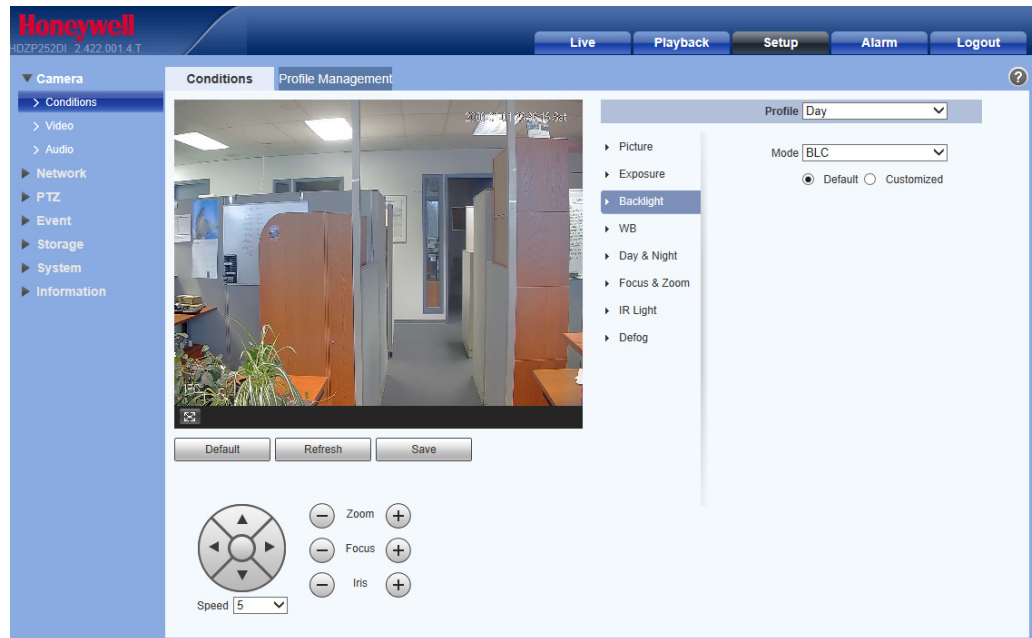



Table 5-3 Camera Backlight Configurations

Parameter	Function
Profile	Select from Normal, Day, Night .

Table 5-3 Camera Backlight Configurations (cont'd)

Parameter	Function	
BLC Mode (Backlight Compensation)	OFF	BLC is off. BLC is disabled by default.
	BLC (Default or Customized)	The camera automatically adjusts the exposure to suit the scene conditions, so that the darkest area of the video can be seen. Default applies BLC to the entire scene. The Customized option allows the user to apply BLC to a specified area of the scene.
	WDR	By lowering the brightness of the brightest area, and enhancing the brightness of the darkest area, WDR balances brightness and darkness in a scene so that both the darkest area and the lightest area can be seen clearly at the same time. This value ranges from 1 to 100 . Note When you switch the camera from non-WDR to WDR mode, there might be a few seconds lapse in video.
	HLC	When the HLC function is enabled, the camera can lower the brightness of the brightest section of video, according to the selected HLC control level. HLC can reduce the amount of halo and lower the brightness of the entire video image. This value ranges from 1 to 100 . The default value is 50 when HLC is turned on. HLC is only available when Anti-flicker is set to Outdoor , and the Exposure is set to Auto .
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.	
Default	Click to return the camera to the default setup.	
Refresh	Click to cancel the current operation and restore the previously saved operation.	
Save	Click to save the currently configured customized settings.	

White Balance Settings


Figure 5-4 Camera Setup - White Balance Window



Table 5-4 Camera White Balance Configurations

Parameter	Function
Profile	Select from Normal, Day, Night .
White Balance	<p>Sets the White Balance mode, which affects the general hue of the video. This function is on by default.</p> <p>You can select different scene modes such as Auto, Indoor, Outdoor, ATW, Sodium Lamp, Street Lamp, Manual, or Natural, to achieve the best quality video for the camera.</p> <p>Auto: Auto white balance is on. The system automatically adjusts the color temperature to ensure that the video color is correct.</p> <p>Natural: The white balance threshold is set to the best setting for sunny scenes.</p> <p>Street Lamp: The white balance threshold is set to the best setting for night scenes.</p> <p>Sodium Lamp: The white balance threshold is set to the best setting for night scenes lit by sodium-style yellowish lights.</p> <p>Manual: You can manually set the gain for the red/blue settings. The value ranges from 0 to 100.</p> <p>ATW: The auto tracing white balance automatically adjusts the color temperature to ensure that the video color is correct.</p> <p>Outdoor: The white balance threshold is set to the best setting for outdoor scenes.</p> <p>Indoor: The white balance threshold is set to the best setting for indoor scenes.</p>

Table 5-4 Camera White Balance Configurations (cont'd)

Parameter	Function
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Day & Night Settings


Figure 5-5 Camera Setup - Day & Night Window



Table 5-5 Camera Day & Night Configurations

Parameter	Function
Profile	Select from Normal , Day , Night . Sets the camera color and B/W mode switch. When the Configuration Profile is set to Normal or Night , then the default is Auto . When the Profile is set to Day , then the default is Color . See Profile Management on page 47 for more information about the configuration profiles.
Day & Night	Color: The camera outputs video in color. Auto: The camera switches from Color to Black & White according to the scene conditions, such as if the scene is generally bright, or if IR illumination is required. Black & White: The camera outputs black and white video.

Table 5-5 Camera Day & Night Configurations (cont'd)

Parameter	Function
Type	Select the Type of Day & Night switching from Electrical and ICR (IR cut filter removal). Electrical is a software day/night switching option and ICR is true day/night IR cut filter day/night switching.
Sensitivity	Adjusts the sensitivity threshold at which the camera switches from Color to Black & White mode. Set to Low , Middle (default), or High . Note Available only when Day & Night is set to Auto .
Delay	Adjusts the delay value of the switch from Color to Black & White mode. The value ranges from 2 to 10 seconds . The default value is 6 seconds. Note Available only when Day & Night is set to Auto .
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Focus and Zoom

Figure 5-6 Motorized Focus and Zoom

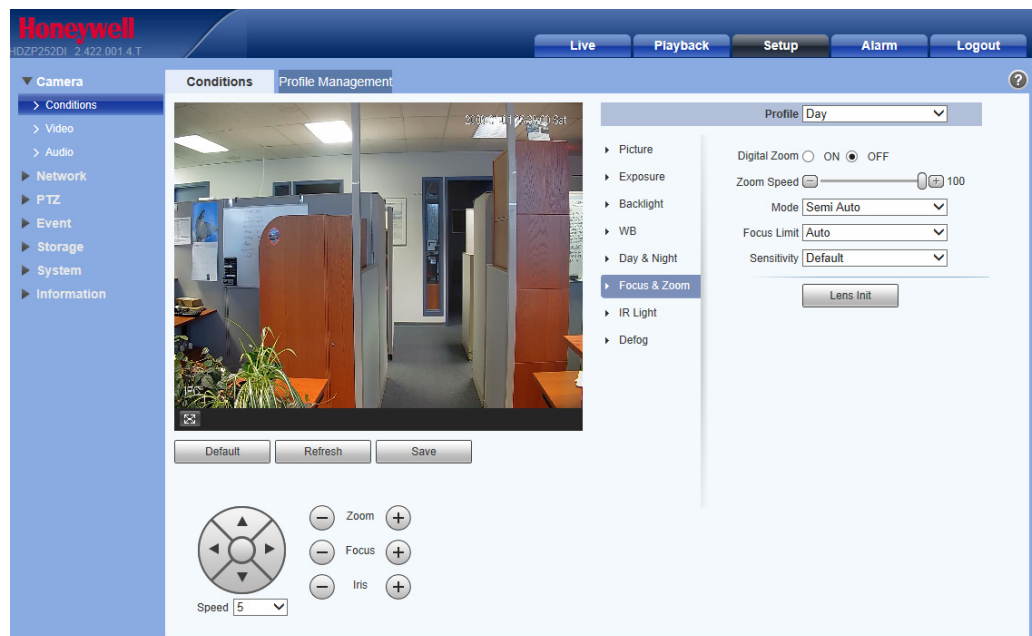



Table 5-6 Zoom and Focus

Parameter	Function
Digital Zoom	Enable or disable the digital zoom function by selecting ON or OFF . Digital zoom is off by default. The digital zoom setting will not affect optical zoom functions.
Zoom Speed	Set the speed of zoom actions with this setting. The speed ranges from 0 to 100 . The default setting is 100 .
Mode	Select the focus mode from the Mode drop-down list from Semi Auto , Auto and Manual . When Auto is selected, the camera will continuously automatically focus the image. When Semi Auto is selected, the camera will automatically focus the image when a pan, tilt or zoom function occurs. When Manual is selected, users must manually focus the camera as it is needed.
Focus Limit	Select the limit that focus will go to from the Focus Limit drop-down list. Select from Auto , 10cm , 1m , 2m , 3m , and 5m . Auto is the default setting. When Auto is selected, the camera will focus to any range, without limit. When 10cm is selected, the camera will only focus on objects that are further than 10cm away from the camera. Selecting any of the focus limit distances, such as 1 meter, is meant to prevent the camera from automatically focusing on a nearby objects and resulting in an out-of-focus background where an incident could be missed. Choose a focus limit that suits your PTZ environment. For example, if there are tree branches near to the PTZ camera, choose a focus limit that will prevent the camera from focusing on the branches.
Sensitivity	Select the auto focus Sensitivity setting from the drop-down list. Select from High , Low , or Default (middle). Selecting High sensitivity will have the camera automatically focus with any slight change in the scene. Selecting Low sensitivity will have the camera automatically focus only when there is a significant change in the scene. Default is a mid-range setting in between Low and High .
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

IR Light Settings

Figure 5-7 Camera Setup - IR Light Window

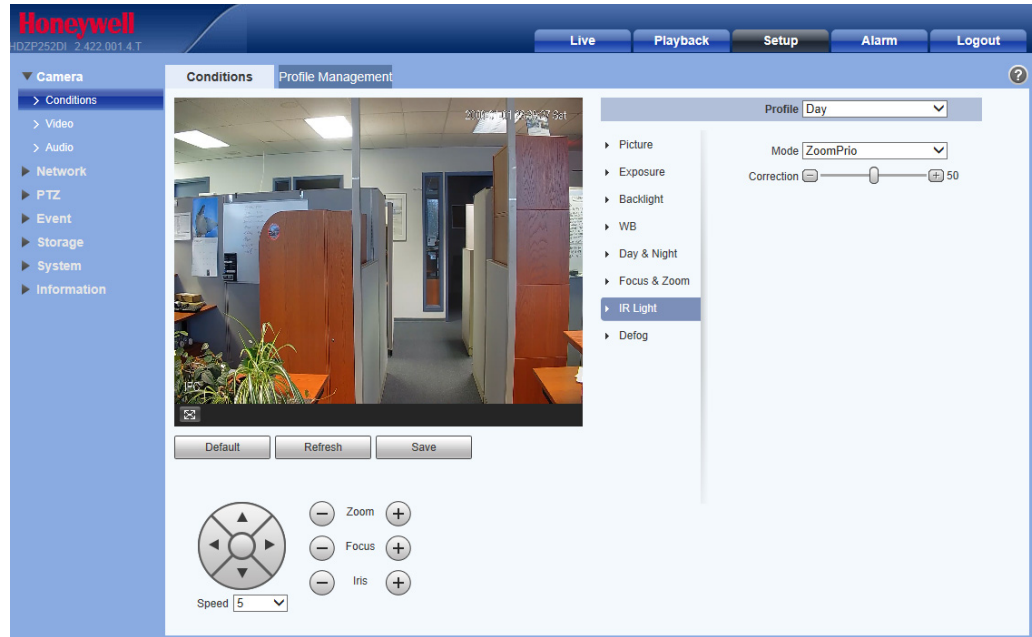



Table 5-7 Camera IR Light Configurations

Parameter	Function
Profile	Select from Normal, Day, Night .
IR Mode	<p>Set the intensity of the IR light with the Mode drop-down menu:</p> <p>ZoomPrio (default): IR Light is on and automatically adjusts according to the brightness of the actual scene and the zoom setting. Adjust the IR Correction setting from 0 to 100. 50 is the default setting.</p> <p>Manual: Manually adjust the intensity of the NearLight and FarLight IR lighting from 0 to 100.</p> <p>Off: IR Light is disabled.</p>
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Defog Settings

Figure 5-8 Camera Setup - Defog Window

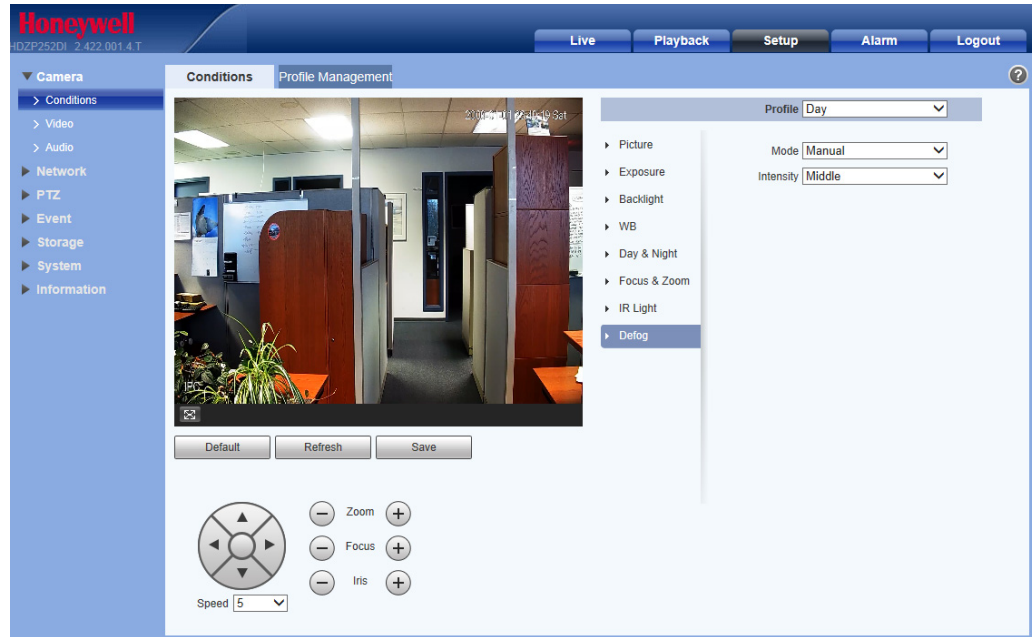

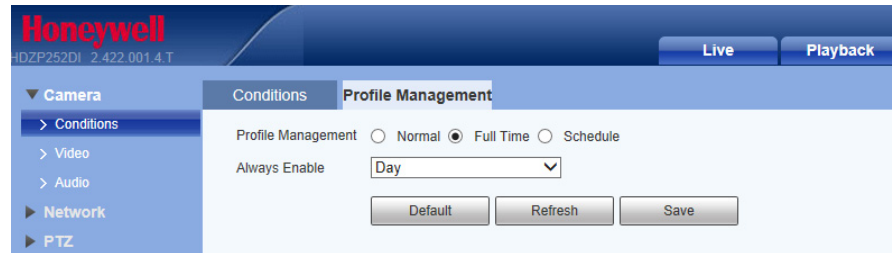


Table 5-8 Camera Defog Configurations

Parameter	Function
Profile	Select from Normal, Day, Night .
Defog Mode	<p>Set the defog mode with the Mode drop-down menu:</p> <p>Auto: Defog is on and automatically adjusts according to the fogginess of the actual scene.</p> <p>Manual: Manually adjust the defog Intensity setting from Low, Middle and High.</p> <p>Off (default): Defog is disabled.</p>
Full-screen Test	Click the  button on the bottom left of the video window to begin a full-screen test. Double-click to return to the normal screen.
Default	Click to return the camera to the default setup.
Refresh	Click to cancel the current operation and restore the previously saved operation.
Save	Click to save the currently configured customized settings.

Profile Management

Figure 5-9 Profile Management Tab



Profile management has three modes: **Normal**, **Full Time**, and **Schedule**.

- Select **Normal** to configure the video as normal.
- Select **Full Time**, and you must select either **Day** or **Night** for the video.
- Select **Schedule**, and you can configure a detained time interval.

Note When you make changes to the video configuration, you will immediately see the effects of those changes in the video. However, you must click **Save** to save and apply these settings.

Video Configuration

Video Stream

Figure 5-10 Video Stream Configuration Window

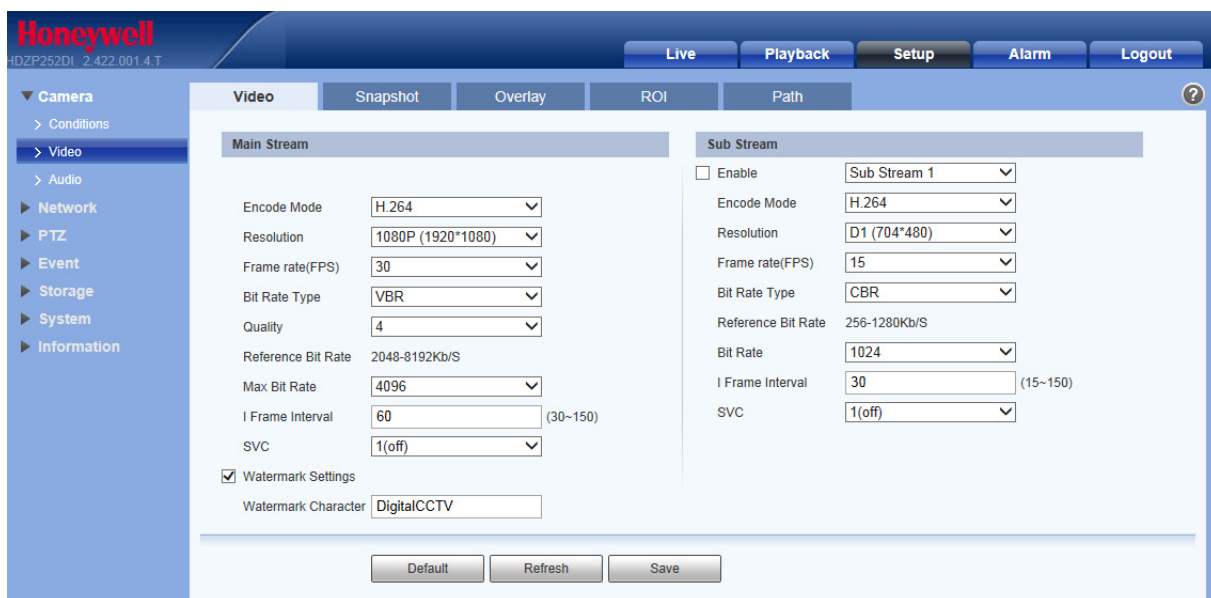


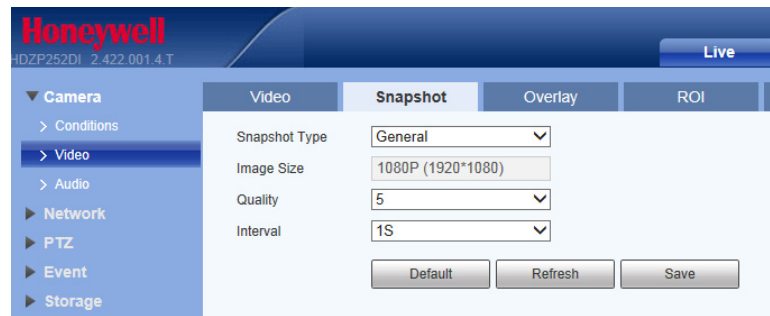
Table 5-9 Video Bit Stream Configurations

Parameter	Function
Main Stream	<p>Select from three options for Encode Mode:</p> <p>H.264: Main profile encoding mode.</p> <p>H.265: Advanced profile encoding mode.</p> <p>MJPEG: High quality profile encoding mode with no compression.</p>
	<p>You can select from multiple resolutions in the drop-down list. The recommended bit stream value is different for each resolution.</p>
	<p>PAL: 1~50 fps; NTSC: 1~60 fps.</p>
	<p>Select either VBR (variable bit rate) or CBR (constant bit rate).</p> <p>Note You can select the video quality in VBR mode. The value ranges from 1 to 6.</p>
	<p>Displays the Reference Bit Rate value according to the resolution and frame rate that you have selected.</p>
	<p>With Bit Rate Type: VBR, the Bit Rate here is the maximum value. In CBR, the bit rate is a fixed value.</p> <p>See the Reference Bit Stream for a recommended value.</p>
	<p>Set the number of P-frames between I-frames. The value ranges from 30 to 150. The default value is 50. This value is not available if MJPEG is the selected Encode Mode.</p> <p>The recommended value for I Frame Interval is <i>2 times</i> the frame rate setting.</p>
	<p>Select the scalable video encoding setting from the drop-down list. Select from 1(off), 2, or 3. 1(off) is the default setting.</p>
	<p>This function allows you to verify that the video has not been altered. Select to enable the watermark function, and then type the watermark text. The default watermark text is DigitalCCTV. The maximum length is 85 digits. Only numbers, letters, and the underscore character (<code>_</code>) can be used.</p>
	<p>Click the check box to enable the secondary stream. This function is enabled by default.</p> <p>Select Sub Stream 1 or Sub Stream 2 as the stream to be make the video setting changes to.</p>
Sub Stream	<p>Select from three options for Encode Mode:</p> <p>H.264: Main profile encoding mode.</p> <p>H.265: Advanced profile encoding mode.</p> <p>MJPEG: High quality profile encoding mode with no compression.</p>
	<p>You can select from multiple resolutions in the drop-down list. The recommended bit stream value is different for each resolution.</p>
	<p>PAL: 1~25 fps; NTSC: 1~30 fps.</p>

Table 5-9 Video Bit Stream Configurations (cont'd)

Parameter	Function
	Select either VBR (variable bit rate) or CBR (constant bit rate).
Bit Rate Type	Note You can select the video quality in VBR mode. The value ranges from 1 to 6 .
Reference Bit Rate	Recommended bit rate value according to the resolution and frame rate you have set.
Sub Stream	
Bit Rate	With Bit Rate Type: CBR , the bit rate here is the maximum value. In dynamic video, the system needs a lower frame rate or lower video quality to adapt to the current bandwidth.
I Frame Interval	Set the number of P-frames between I-frames. The value ranges from 25 to 150 . The default value is 50 . The recommended value for I Frame Interval is <i>2 times</i> the frame rate setting.
SVC	Select the scalable video encoding setting from the drop-down list. Select from 1(off) , 2 , or 3 . 1(off) is the default setting.

Snapshot

Figure 5-11 Snapshot Configuration Interface**Table 5-10 Snapshot Configurations**

Parameter	Function
Snapshot Type	Select from either General (scheduled) or Event (user activated).
Image Size	Same as the main stream resolution.
Quality	Select from six levels of image quality.
Interval	Set the snapshot frequency from 1S to 7S , or Customized . If you select Customized you can enter the required interval value in seconds from 1 to 50000 s.

Note See *Path on page 51* for information about configuring where snapshots are saved. Snapshots are saved as JPEGs.

Video Overlay

Figure 5-12 Video Overlay Configuration Interface

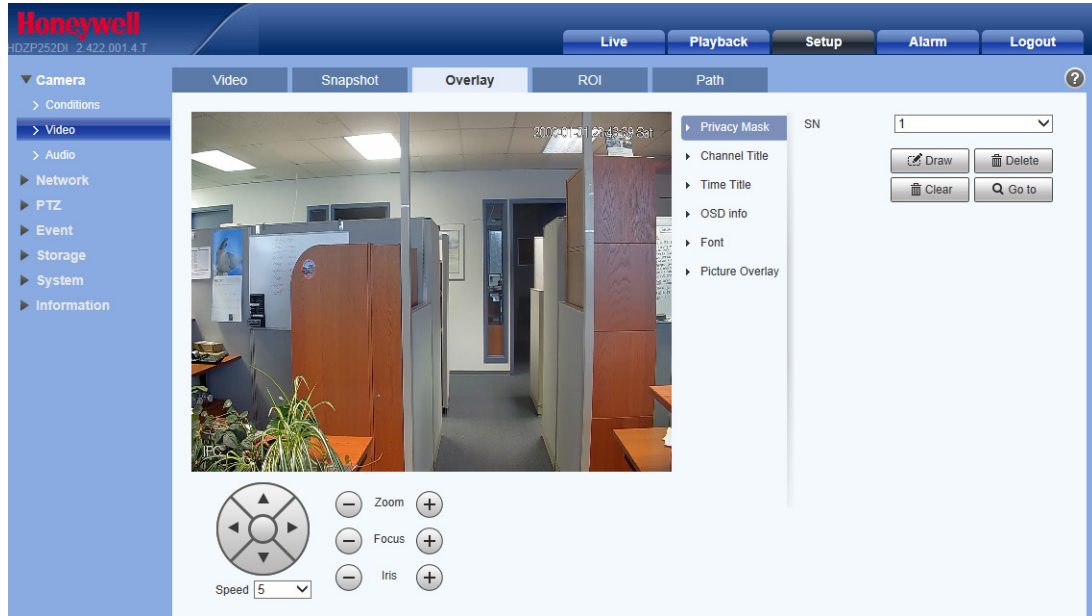


Table 5-11 Video Overlay Configurations

Parameter	Function
Privacy Mask	<p>Masks areas of the video for privacy. You can configure up to 24 privacy mask zones.</p> <p>Select the mask to configure with the SN drop-down list. Use the PTZ controls to move the camera to the area to be masked, then click Draw and click and drag a box in the image over the area to be covered.</p> <p>Click Delete to delete the selected privacy mask.</p> <p>Click Clear to delete all of the privacy masks.</p> <p>Click Go to to move the camera image to the selected mask.</p>
Channel Title	<p>Enable this function to overlay channel information in the video window. Use the mouse to drag the channel title to the desired position.</p>
Time Title	<p>Enable this function to overlay time information in the video window. Use the mouse to drag the time to the desired position.</p>
OSD info	<p>Enable this function to overlay OSD info and text in the video window. Enable the type of info to be overlaid from the options presented: Preset, Temperature, Coordinates, Zoom, and Text Overlay. If Text Overlay is enabled, enter any text to be overlaid in the Input Text field. Select Right or Left alignment from the Text Align drop-down menu.</p>
Font	<p>Select the font Size of any overlaid text here.</p>
Picture Overlay	<p>Enable this function to overlay a picture in the video window. Click Upload Picture to choose an image to be overlaid on the video.</p>

ROI

Figure 5-13 ROI Interface

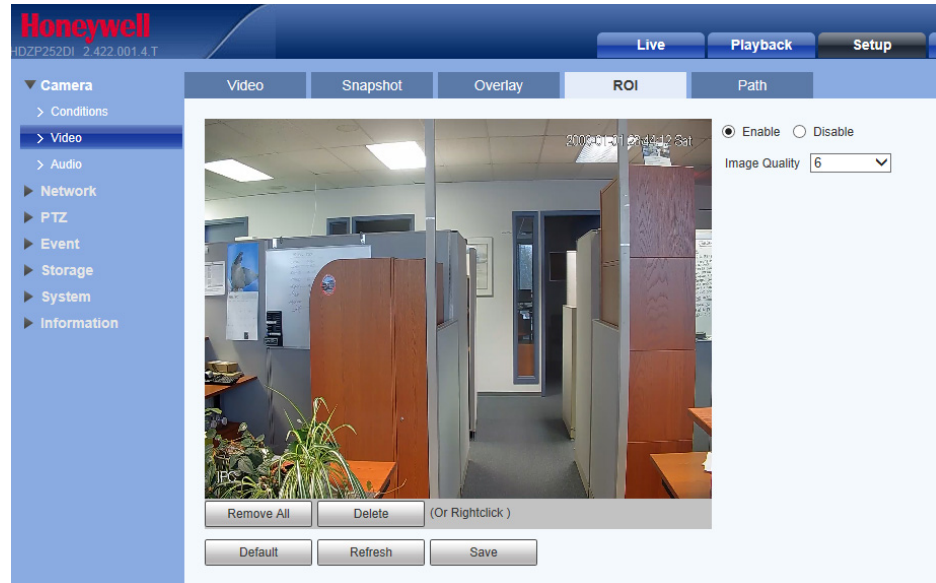
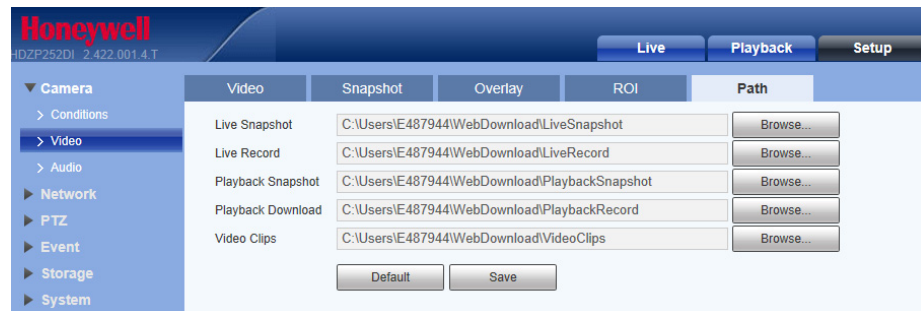




Table 5-12 ROI Configurations

Parameter	Function
Enable/Disable	Enable or disable the Region of Interest (ROI) feature. Click and drag a box over the region of interest in the video image.
Image Quality	Select the image quality required for the region of interest.

Path

Figure 5-14 Storage Path Interface



Set the storage path for Live Snapshots ( in the live interface) and for Live Recorded video ( in the live interface), Playback Snashots, Playback Dowloads, and Video Clips. The default path for snapshots is **C:\Honeywell Video Systems\LiveSnapshot**. The default path for recorded video is **C:\Honeywell Video Systems\LiveRecord**. Click **Browse** to select a new storage path, if required.

Click **Save** to save any changes to the storage paths.

Configuring Network Settings

TCP/IP

Figure 5-15 TCP/IP Interface

Table 5-13 TCI/IP Configuration

Parameter	Function
Host Name	Configure to set the current host camera's name. Maximum 32 characters.
Ethernet Card	Select an Ethernet port. The default is Wire . Note If you modify these settings, you will have to reboot your camera to activate the new setup.
Mode	Select Static or DHCP mode. If Static mode is selected, you must manually assign the IP Address , Subnet mask , and Default Gateway values. If DHCP mode is selected, the IP Address , Subnet mask , and Default Gateway are assigned automatically and the fields are grayed out. Note IP Address , Subnet mask , Default Gateway , and DHCP are read-only when PPPoE is enabled.
MAC Address	Displays the MAC address.
IP Version	Select the IP version you are using: IPv4 or IPv6 .

Table 5-13 TCI/IP Configuration (cont'd)

Parameter	Function
IP Address	If Static mode is selected, type values for the IP Address , Subnet mask , and Default Gateway .
Preferred DNS Server	Enter the preferred DNS server IP address.
Alternate DNS Server	Enter an alternate DNS server IP address.

Enabling ARP/Ping to set IP Address Service

If you know the camera's MAC address, then use the ARP/Ping command to modify or set the camera's IP address.

Before operating the camera, please ensure that the network camera and the PC are in the same LAN. This function is **On** by default. To enable ARP/Ping to set the IP address service:

1. Get an IP address. Set up the network camera and the PC in the same LAN.
2. Get the physical address (MAC) from the label on the network camera.
3. Open the **Run** interface (**Start menu** ► **Run**), and then type the following commands:
 - a. `arp -s <IP Address> <MAC>`
 - b. `ping -l 480 -t <IP Address>`

For example:

 - a. `arp -s 192.168.0.125 11-40-8c-18-10-11`
 - b. `ping -l 480 -t 192.168.0.125`
4. Reboot the camera. If the setup was successful, output information such as **Reply from 192.168.0.125 . . .** will appear in the command output lines.
5. Close the command line.
6. Open your browser, type `http://<IP address>` in the address bar, and then press **Enter**.

P2P

P2P is an easy connection method that can make it simple to connect to your network devices with your mobile device with the HonView Touch App. First you will need to download the HonView Touch app and then register/create an account. When the app is setup, select to add a device and use the mobile device's camera to view the QR Code on the P2P screen of your camera's web client (see [Figure 5-16](#)). The device's information and connection will automatically be downloaded to the HonView Touch app and you can now connect to the network camera using your mobile device.

Figure 5-16 P2P Configuration Interface



Connection

Figure 5-17 Connection Configuration Interface

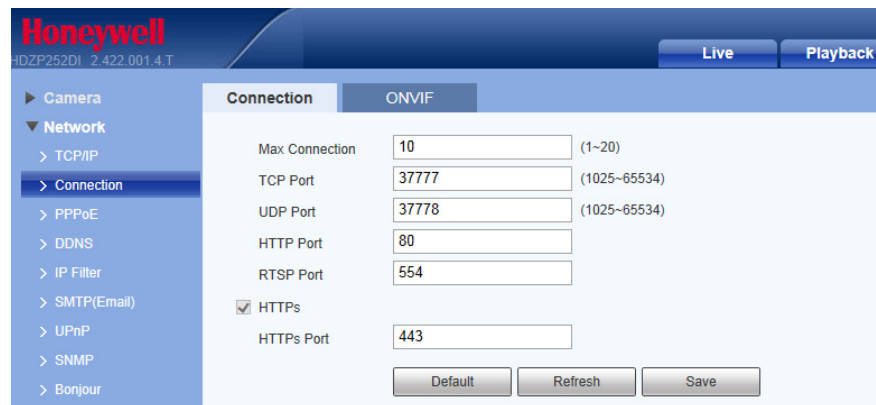


Table 5-14 Connection Configurations

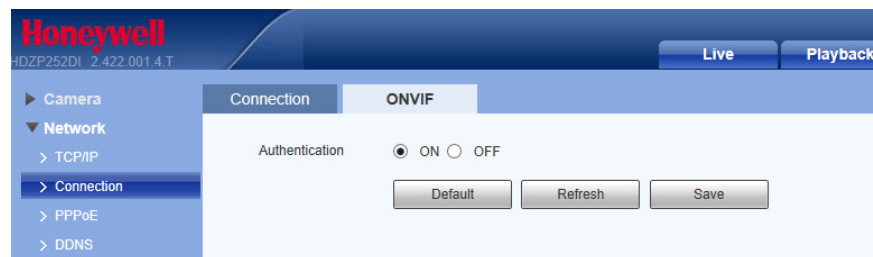
Parameter	Function
Max Connection	This shows the maximum number of network connections for the same camera. The value ranges from 1 to 20. The maximum number of connections is 20.
TCP Port	The default setting is 37777. You can modify this setting as necessary.
UDP Port	The default setting is 37778. You can modify this setting as necessary.
HTTP Port	The default setting is 80. You can modify this setting as necessary.

Table 5-14 Connection Configurations (cont'd)

Parameter	Function
RTSP Port	<p>The default setting is 554. The RTSP stream query format is:</p> <p>Main stream: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=0</p> <p>Sub stream: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=1</p> <p>You are required to manually enter the following four items: Username, Password, IP, and Port.</p> <p>IP: The camera's IP address.</p> <p>Port: The default is 554. You can leave this field blank if you are using the default value.</p> <p>Follow standard RTP protocols. When the encode mode is MJPEG, the maximum supported resolution is 2040×2040.</p>
HTTPs	Enable the HTTPs port.
HTTPs Port	The default is 443 .

ONVIF

ONVIF (Open Network Video Interface Forum) is a global open standard for the interface of IP-based security products. The ONVIF specification aims at network video products interoperability regardless of manufacturer.

Figure 5-18 ONVIF Configuration Interface

The ONVIF setting is disabled by default. To enable ONVIF, click **Enable** on the **ONVIF** tab. To disable ONVIF, click **Disable**.

PPPoE

Figure 5-19 PPPoE Configuration Interface

The screenshot shows the Honeywell web interface for PPPoE configuration. The top navigation bar includes 'Live' and 'Playback' buttons. The left sidebar shows a menu with 'Camera' and 'Network' expanded to 'PPPoE'. The main content area is titled 'PPPoE' and contains the following fields and buttons:

- Enable
- Username:
- Password:
- Buttons: Default, Refresh, Save

1. Enter the **PPPoE Username** and **Password** that you received from the Internet Service Provider (ISP), and enable the **PPPoE** function.
2. Click to **Save** the current setup, and then reboot the camera to activate the PPPoE setup. The camera connects to the Internet via PPPoE after rebooting.
3. Find the IP address in the WAN from the IP address column.

Note When **PPPoE** is enabled, disable **UPnP** so that it does not interfere with **PPPoE**.

Note You must go to the IP address to check the camera's current information. You can access the web client through this address.

DDNS

Manually Configuring the DDNS

Figure 5-20 DDNS Configuration Interface

The screenshot shows the Honeywell web interface for DDNS configuration. The top navigation bar includes 'Live' and 'Playback' buttons. The left sidebar shows a menu with 'Camera' and 'Network' expanded to 'DDNS'. The main content area is titled 'DDNS' and contains the following fields and buttons:

- Server Type: Honeywell DDNS (dropdown)
- Server Address:
- Mode: Auto Manual
- Domain Name: .hennvr-ddns.com
- Username: (Optional) Please input the mailbox
- Buttons: Default, Refresh, Save

To set the DDNS, go to the corresponding service website to apply a domain name, and then access the system through that domain. This works even if your IP address has changed.

Table 5-15 DDNS Configurations

Parameter	Function
Server Type	You can select the DDNS protocol from the drop-down list, and then enable the DDNS function. Select the Honeywell DDNS server (which is free) to enable the DDNS function.
Server Address	The DDNS server IP address.
Domain Name	Your self-defined domain name.
Username	The user name for logging into the server.
Password	The password for logging into the server.
Update Period	The frequency at which the camera regularly sends out the life signal (heartbeat) to the server. You can set the interval value between the camera and the DDNS server here. This field is not available if Honeywell DDNS is selected as the Server Type.

Using Honeywell DDNS to Configure DDNS

Set the DDNS to connect to the **Honeywell DDNS** server so that you can access the system through the servers.

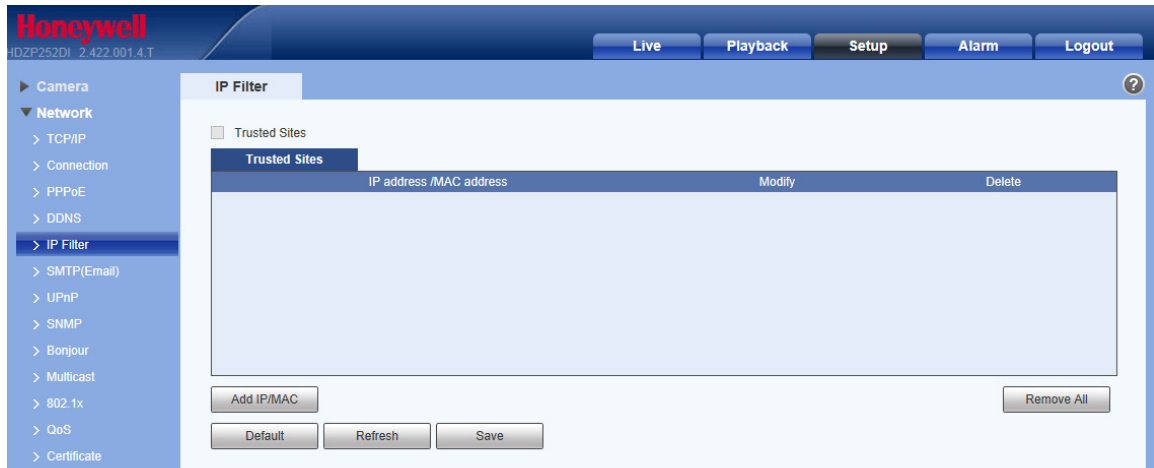
Table 5-16 Honeywell DDNS Configurations

Parameter	Function
Server Type	You can select the DDNS protocol from the drop-down list, and then enable the DDNS function. Select the Honeywell DDNS server (which is free) to enable the DDNS function.
Server Address	This is the DDNS server IP address. Under Honeywell DDNS , the default server address is www.hennvr-ddns.com .
Mode	Select Auto or Manual . The default is Auto . If you select Manual , then you must enter a domain name.
Domain Name	Auto and self-defined domain names are both MAC address.hennvr-ddns.com . You can define the prefix.
Username	The user name you enter to log in the server (optional).

IP Filter

Enable the IP filter function so that only the specified IP/MAC addresses can access the network camera. You can specify an IP address or an IP address segment (for example, from 192.168.1.1 to 192.168.1.100). If you do not check the box to enable **Trusted Sites**, there will be no access limitation for the camera.

Figure 5-21 IP Filter Configuration Interface



Before you can restrict access to the cameras through the IP filter, you must first configure the Trusted Sites here (see [Figure 5-21](#)). Under **Trusted Sites**, click **Add IP/MAC** to add the IP or MAC addresses of the sites that will be trusted to access the camera.

Note Add the addresses that will be allowed to access the camera before enabling **Trusted Sites**.

Note If you specify a MAC address limitation here, the computer with the specified MAC address must be in the same network subnet as the IP camera.

CAUTION If you setup the IP Filter/Trusted sites options and forget the IP/MAC address that is allowed to access the camera, you will have to return the camera to the factory to repair the problem.

SMTP (Email)

Figure 5-22 SMTP Configuration Interface

The screenshot shows the Honeywell camera configuration interface for SMTP (Email) settings. The interface includes a navigation menu on the left with options like Camera, Network, TCP/IP, Connection, PPPoE, DDNS, IP Filter, SMTP (Email), UPnP, SNMP, Bonjour, Multicast, 802.1x, QoS, Certificate, PTZ, Event, Storage, System, and Information. The main configuration area for SMTP (Email) includes the following fields and options:

- SMTP Server: none
- Port: 25
- Anonymity:
- Username: anonymity
- Password: ••••
- Sender: none
- Authentication: None (dropdown)
- Title: Message (with checked Attachment checkbox)
- Mail Receiver: (empty field with + and - buttons)
- Interval: 0 (Second(0-3600))
- Health Mail: Update Period: 60 (Second(1-3600))

Buttons at the bottom include Email Test, Default, Refresh, and Save.

Table 5-17 SMTP (Email) Configurations

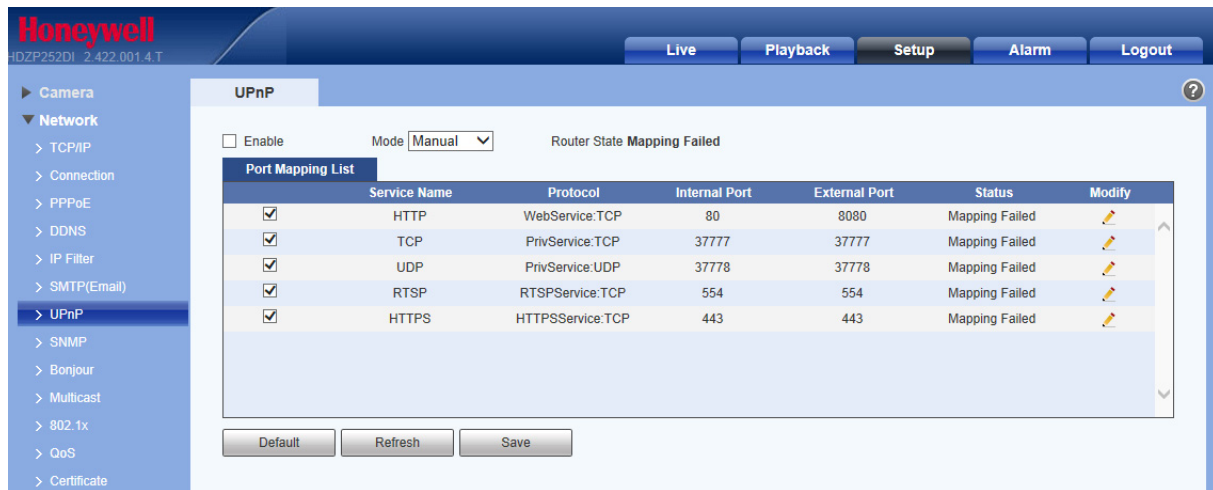
Parameter	Function
SMTP Server	Enter the server address.
Port	The default Port setting is 25 . You can modify this setting as necessary.
Anonymity	Supports the anonymity function for the server when enabled. You can automatically login anonymously. You do not need to enter the user name, password, and the sender information.
Username	The username for the sender's email account.
Password	The password for the sender's email account.
Sender	The sender's email address.
Authentication	This is the encryption mode. Select SSL , TLS , or None .
Title	Enter the subject line for the email here.
Attachment	Check this box to have the system send out an email with the snapshot picture attached.
Mail Receiver	Enter the receiver's email address here. You can add up to three addresses. To add an address, enter it in the field and click +. To delete an address, select it from the list and click -.

Table 5-17 SMTP (Email) Configurations (cont'd)

Parameter	Function
Interval	<p>The delay interval for sending the email ranges from 0 to 3600 seconds. 0 seconds means that there is no delay interval.</p> <p>The system will not immediately send the email when the alarm occurs. When an alarm, motion detection, or abnormality occurs to activate an email, the system sends the email according to the interval that you have specified here. This reduces the load on the email server when numerous emails are triggered simultaneously.</p>
Health Mail	<p>Select the check box to enable the health email function.</p> <p>This allows the system to send a test email to check the connection.</p>
Update Period (interval)	<p>Select the check box to enable this function, and then set the corresponding email interval.</p> <p>You can set the Update Period so that the system sends out regularly scheduled emails.</p>
Email Test	<p>The system will automatically send an email to test the connection. Before you can send an email test, you must save the email setup information.</p>

UPnP

UPnP lets you establish the mapping relationship between the LAN and the public network. In the UPnP configuration interface, you can add, modify, or remove a UPnP item.

Figure 5-23 UPnP Configuration Interface

Enabling UPnP in Windows

When UPnP is enabled in Windows, the camera can be detected automatically through **My Network Places**.

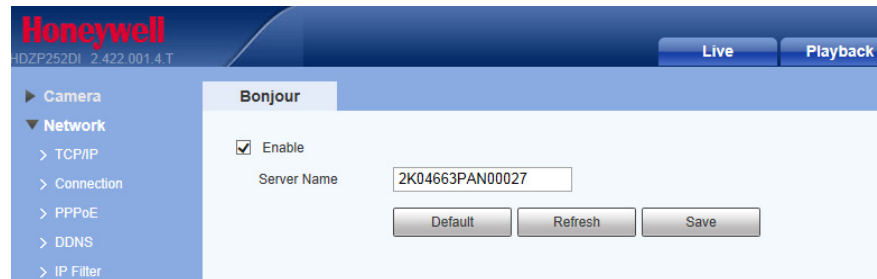
Note UPnP is enabled by default on Windows 7 systems. This procedure applies to Windows XP.

1. Go to **Start > Control Panel > Add or remove programs**.
2. Click **Add or remove programs**, and then select **Network Services** from the **Windows Components Wizard**.
3. Click **Details**, and then click to select **Internet Gateway Device Discovery and Control client** and **UPnP User Interface**.
4. Click **OK** to begin the installation.

Bonjour

Bonjour is based on the multicast DNS service from Apple. It can automatically broadcast its service information and listen to the camera information from the other camera.

Figure 5-24 Bonjour Configuration Interface



If you do not know the network camera's information, such as its IP address, you can use Bonjour's browser in the same LAN to search for and access network cameras. After the network camera is detected by Bonjour, you can see the server name.

1. Click **Display All Bookmarks** in your browser.
2. Open **Bonjour**. The system should automatically detect network cameras through Bonjour on the LAN.

Multicast

Multicast is a transmission mode for data packets. When there are multiple hosts to receive the same data packet, multiple cast (multicast) is the best option for reducing the bandwidth and the CPU load. The source host can send out just one data packet. This function depends on the relationship between group members and the router's group.

In the **Multicast** configuration interface, you can set the multicast address and port.

Note You also need to go to the **Live** interface to set the protocol to **Multicast**. See Protocols in *Video Encoder Controls on page 22*.

Figure 5-25 Multicast Configuration Interface

The screenshot displays the 'Multicast' configuration page in the Honeywell web interface. It features a navigation menu on the left with options like Camera, Network, TCP/IP, Connection, PPPoE, DDNS, IP Filter, SMTP(Email), UPnP, and SNMP. The main content area is titled 'Multicast' and is divided into two sections: 'Main Stream' and 'Sub Stream'. Both sections have an 'Enable' checkbox checked. The 'Main Stream' Multicast Address is set to '224.1.2.4' with a range of '(224.0.0.0~239.255.255.255)' and the Port is '40000' with a range of '(1025~65534)'. The 'Sub Stream' Multicast Address is also '224.1.2.4' with the same range, and the Port is '40016' with the same range. At the bottom of the configuration area, there are three buttons: 'Default', 'Refresh', and 'Save'.

Table 5-18 Multicast Configurations

Parameter	Function
Enable	Select the check box to enable the multicast function. Note Main stream and sub stream cannot be used at the same time.
Multicast Address	The main/sub stream multicast address is 239.255.42.42 and its range is 224.0.0.0~239.255.255.255 .
Port	The Multicast port. The main stream is 36666 ; the sub stream is 36667 , and the range is 1025~65534 .

IEEE802.1X

IEEE802.1X is the access control and authentication protocol for local and metropolitan area networks. It uses a port-based network access control protocol to restrict unauthorized user and/or device access to the LAN.

IEEE802.1X supports the client's ability to manually choose how authentication works for accessing the LAN or not. IEEE802.1X supports the ability to:

- authenticate
- calculate the fee
- ensure security
- maintain requirements

Figure 5-26 802.1X Configuration Interface
Table 5-19 802.1X Configurations

Parameter	Function
Enable	Check to enable the IEEE802.1X function.
Authentication	PEAP (protected EAP protocol)
Username	Enter a username to log in. This username is authenticated by the server.
Password	Enter a password.

QoS

Quality of Service (QoS) is a network security mechanism. It fixes problems with network delay and jams. For network service, for example, the quality of service includes the transmission bandwidth, delay, and packet loss. Through QoS, we can guarantee the transmission bandwidth, reduce the delay, reduce the loss of data packets, and enhance the quality with packet prioritization.

Figure 5-27 QoS Configuration Interface
Table 5-20 QoS Configurations

Parameter	Function
Realtime Monitor	This value ranges from 0 to 63 . The router or the switcher can provide different service for different packets.
Command	This value ranges from 0 to 63 . The router or the switcher can provide different service for different packets.

Configuring Storage Settings

Recording Schedule and Snapshot Schedule

You can add or remove schedules for recording and snapshots. There are three recording modes: **General** (auto), **Motion Detection** and **Alarm**. You can configure up to six recording periods per day.

Note Ensure that you have enabled the corresponding recording mode in **Setup > Storage > Conditions**.

Figure 5-28 Recording Schedule Configuration Interface



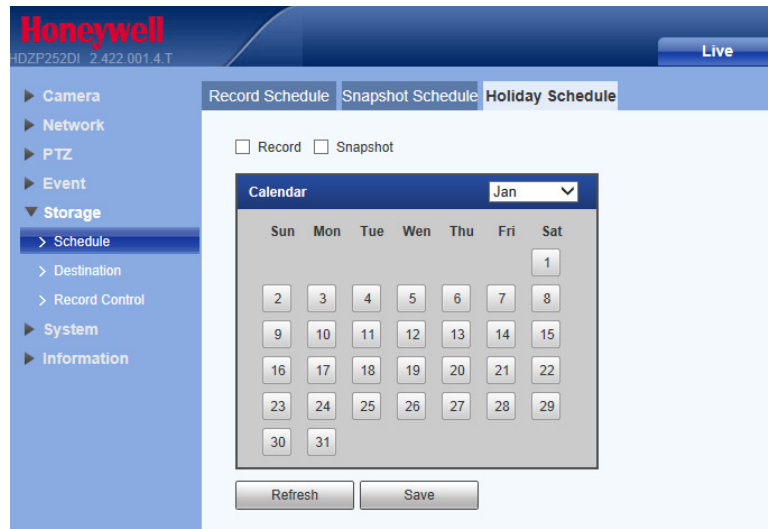
Recording Schedule Color Codes:

- **Green:** General recording/snapshot
- **Yellow:** Motion detection recording/snapshot
- **Red:** Alarm recording/snapshot

Setting Holidays

You can set specific days as holidays, for which the recording schedule can have a different setup. When enabled, the selected/configured dates will record according to the Holiday schedule setup.

Figure 5-29 Holiday Schedule



Destination

Path

On the **Path** tab, you can assign where recorded video files or snapshots will be saved. Depending on your camera model, you can save recorded video or snapshots to a Micro SD card, an FTP server, and/or an NAS disk.

You can also set up the system to save recorded video and snapshots files according to event type (Scheduled, Motion Detect, Alarm), corresponding to the three record modes in the Schedule Interface (General, Motion, Alarm).

Figure 5-30 Path Configuration Interface

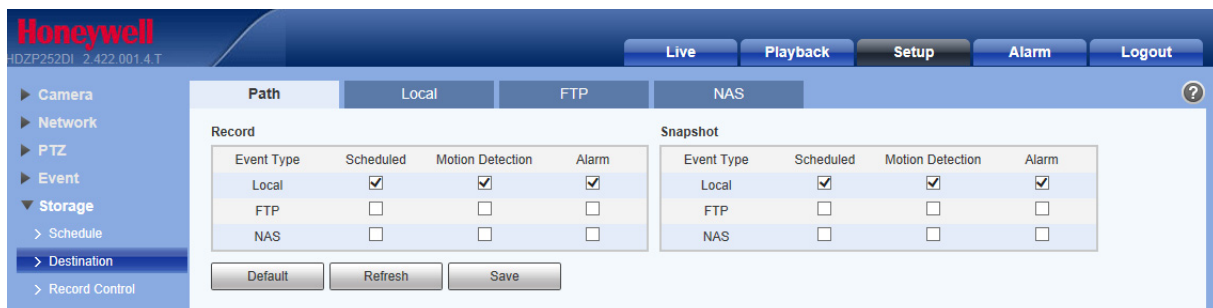


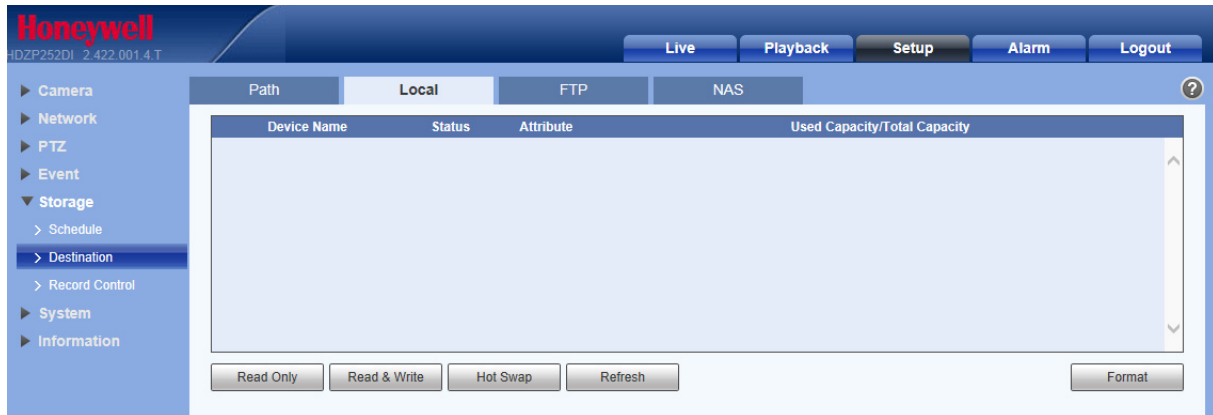
Table 5-21 Path Configurations

Parameter	Function
Event Type	Select Scheduled , Motion Detect , or Alarm .
Local	Select to saves files to the Micro SD card
FTP	Select to save files to the FTP server.
NAS	Select to save files to the NAS disk.

Local

On the **Local** tab, you can view local Micro SD card disk information (such as capacity). You can also access the **Read Only**, **Read & Write**, **Hot Swap**, and **Format** functions.

Figure 5-31 Local Storage Configuration Interface



FTP

On the **FTP** tab, you can enable the FTP storage function. When enabled, event-triggered video and snapshots (either scheduled or motion detection, depending on what you chose in [Path on page 65](#)) will be saved to the specified FTP server.

Figure 5-32 FTP Configuration Interface

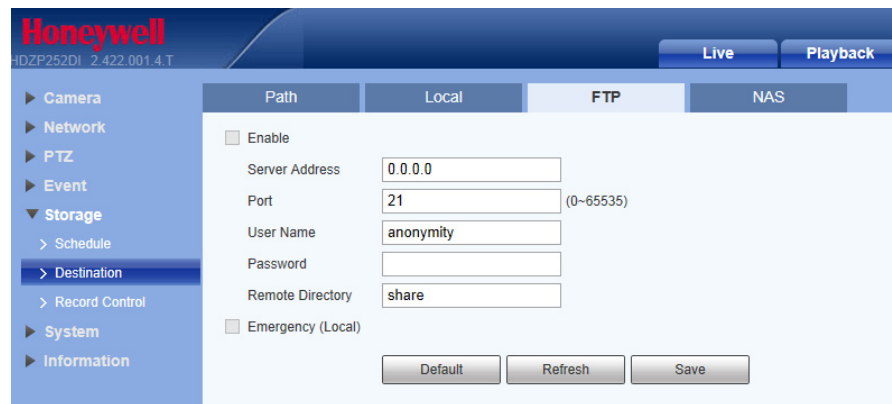


Table 5-22 FTP Configurations

Parameter	Function
Enable	Check this box to enable the FTP option.
Server Address	Set the IP address of the FTP server.
Port	The default setting is 21. You can modify this setting as necessary.
User Name	Enter the server user name.
Password	Enter the server password.

Table 5-22 FTP Configurations (cont'd)

Parameter	Function
Remote Directory	Set storage directory where recorded video and snapshots will be stored.
Emergency (Local)	Enable Emergency (Local) to save to the local Micro SD card when the network connection to FTP is unavailable.

NAS

On the **NAS** tab, you can enable the NAS storage function. When enabled, event-triggered video and snapshots (either scheduled or motion detection, depending on what you chose in [Path on page 65](#)) will be saved to the specified NAS server.

Figure 5-33 NAS Configuration Interface

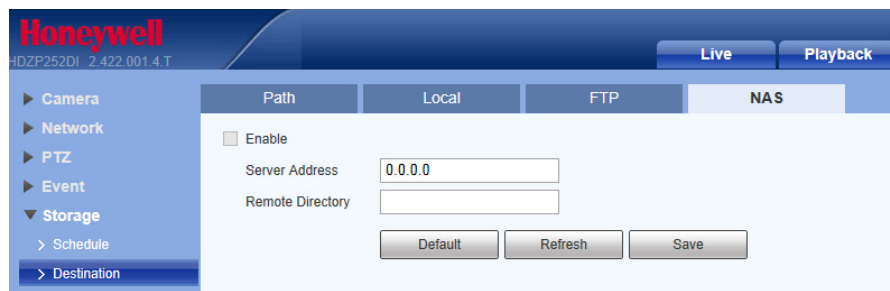


Table 5-23 NAS Configurations

Parameter	Function
Enable	Check this box to enable the NAS option.
Server Address	Set the IP address of the NAS server.
Remote Directory	Set storage directory where recorded video and snapshots will be stored.

Record Control

Figure 5-34 Record Control Configuration Interface

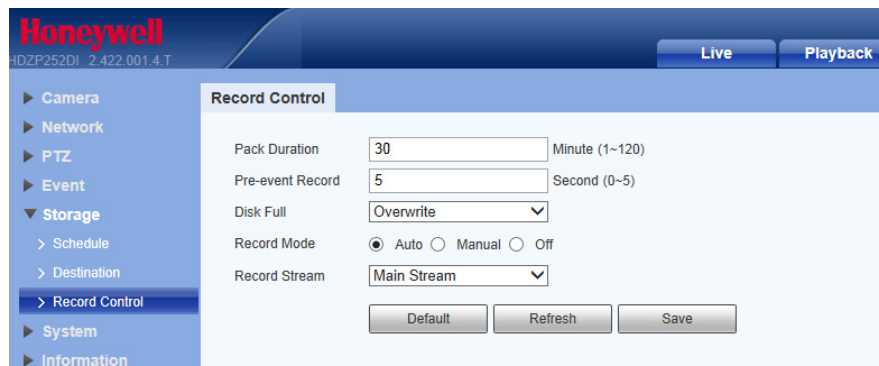


Table 5-24 Record Control Configurations

Parameter	Function
Pack Duration	Select the file size. The default is 30 minutes .
Pre-event Record	Enter a pre-record value. The number of seconds to be recorded before the event trigger. For example, the system can record the four seconds of video in the buffer. Recording begins up to five seconds before the event trigger.
Disk Full	Select to Stop Recording or Overwrite the previous files when the HDD is full. Overwrite: If the current working HDD is full, then the system will overwrite the oldest file. Stop: If the current working HDD is full or is overwriting, the system will stop recording.
Record Mode	Select Auto , Manual , or Off .
Record Stream	Select to record from the Main Stream or the Sub Stream .

Configuring System Settings

General System Setup

The general system interface includes the local host setup (including the camera name and GUI language), and the date/time setup.

General

Figure 5-35 General System Configuration Interface

Table 5-25 General System Configurations

Parameter	Function
Device Name	Enter the camera's name.
Language	Select a language from the drop-down list.
Video Standard	Select the video standard: NTSC or PAL .
TVOut	Select the TV output as either OFF (default) or TV .
Max Log Quantity	Enter the maximum number of logs that will be stored by the camera.

Date and Time

Figure 5-36 Date and Time Configuration Interface
Table 5-26 Date and Time Configurations

Parameter	Function
Date Format	Select a date format from the drop-down list.
Time Format	Select a time format, either 24-hour or 12-hour .
Time Zone	Select the time zone for the camera.
Current Time	Set the camera's time and date. Click Save to activate this time.
Sync PC	Click to sync the camera's time with your PC's time.
DST	Set when Daylight Saving Time begins and ends. Select either Date or Week mode. For Date mode, you can enter the specific dates in the year for DST changeover. For Week mode, you select the relative week and date so it can be repeated for every year (2nd Sunday in March, for example).
NTP	Click to enable NTP.

Table 5-26 Date and Time Configurations (cont'd)

Parameter	Function
NTP Server	Enter the NTP time server name/address.
Port	Configure the port for the NTP time server.
Update Period	Configure the synchronization periods between the camera and the time server.

Account Setup

The system supports up to 15 characters for the user name or user group name. You can use letters, numbers, and the underscore character (_) for the user or group name.

You can configure up to 18 users and eight groups (default factory settings). The factory default setup includes two user levels: **user** and **admin** (case-sensitive).

When configuring groups, you can configure the rights of those groups. You can also set the rights for individuals within groups.

Note User management adopts group/user modes. The user name and the group name should be unique. A user can be included in only one group at a time.

User Name

In the **Username Configuration** interface, you can enable anonymous login, add/remove users, and modify a username.

Figure 5-37 Username Configuration Interface

The screenshot displays the Honeywell web interface for user management. The top navigation bar includes 'Live', 'Playback', 'Setup', 'Alarm', and 'Logout'. The left sidebar shows a tree view with 'System' expanded to 'Account'. The main panel is titled 'Account' and contains the following elements:

- An unchecked checkbox for 'Anonymous Login'.
- A table listing existing users:

No.	User Name	Group Name	Remark	Modify	Delete
1	admin	admin	admin's account		
- An 'Authority List' table defining permissions for various system functions:

Function	Live	Playback	Record Control	Backup	PTZ
Account					
General					
Video/Audio Detection					
Log Search					
Clear Log					
Upgrade					
Schedule/Destination					
Network					
Conditions					
Auto Maintain					
Abnormality					
IR Light Control					
- An 'Add User' button at the bottom.

Enable Anonymous Login: Click to enable. When enabled and you enter an IP, no username or password is required. You can log in anonymously (with limited rights). Click **Logout** to end your anonymous session.

Add User: Add a user to a group and configure that user's rights (see [Figure 5-38](#)).

Figure 5-38 Add User Configuration Interface

There are two types of default user groups to add users to:

- **admin**
- hidden user "default"

The hidden user "default" is for internal system use only and cannot be deleted. When there is no login user, this hidden user "default" is automatically used for logging in. You can configure some rights for the hidden user, such as monitoring ability, so that the user can view channels without logging in.

To add a user, in the **Add User** configuration interface (see [Figure 5-38](#)), enter a user name and password, then select a group. Ensure that the general user has fewer rights than the admin user.

Note User rights cannot exceed the rights of the group to which that user belongs.


Modifying Users: Click  to modify a user's properties, including their group, password, and rights.

Figure 5-39 Modifying User Interface

The 'Modify User' dialog box includes the following fields and options:

- User Name:
- Modify Password
- Group:
- Remark:
- Authority List:
 - All
 - Live
 - Playback
 - Record Control
 - Backup

Buttons: Save, Cancel

Modifying a Password: Enter the old password once, and then enter the new password twice to confirm the new password. Click **Save** to save the new settings.

Note Passwords can contain up to 32 characters, using only numbers and letters.

Only users with account rights can modify other users' passwords.

Group

In the **Group** configuration interface, you can add, remove and modify groups.

Figure 5-40 Group Configuration Interface

The 'Group Configuration Interface' displays the following components:

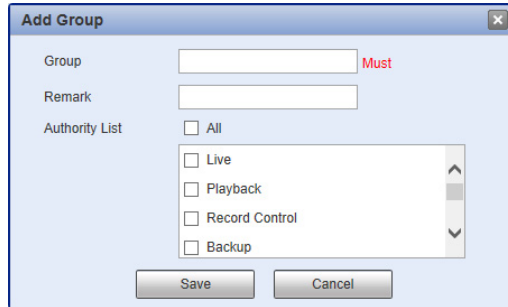
- Navigation Menu:** Camera, Network, PTZ, Event, Storage, System (General, Account, Default, Import/Export, Auto Maintain, Upgrade), Information.
- Top Bar:** Live, Playback, Setup, Alarm, Logout.
- Account Tab:**
 - Anonymous Login
 - User Name / Group Table:**

No.	Group Name	Remark	Modify	Delete
1	admin	administrator group		
2	user	user group		
 - Authority List:**

Live	Playback	Record Control	Backup	PTZ
Account	Log Search	Clear Log	Upgrade	Auto Maintain
General	Video/Audio	Schedule/Destination	Network	Abnormality
Video/Audio Detection	PTZ Settings	Default/Import/Export	Conditions	IR Light Control
 - Buttons:** Add Group

Adding a Group: Add a group and configure that group’s rights. Enter the group name, and then check the box to select the corresponding rights for the group (such as **Live**, **Record Control**, and **Account**).

Figure 5-41 Add Group Interface




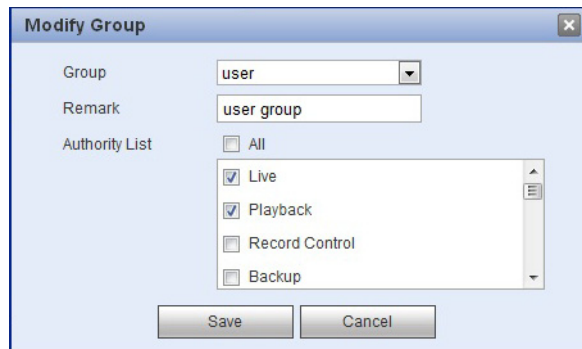
Modifying a Group: Click **Modify Group** () to open the **Modify Group** interface (see [Figure 5-42](#)).

Figure 5-42 Modify Group Interface



In the **Modify Group** Interface, you can edit the Remarks and/or Rights.

Restoring Default Settings

Click **Default** to restore the camera to its factory default settings.

Figure 5-43 Default Interface



Note The system cannot reset some information, such as the network IP address.

Import/Export

You can save the configuration (export) so it can be used later or import a previously exported configuration to the camera.

Figure 5-44 Import/Export Configuration Interface



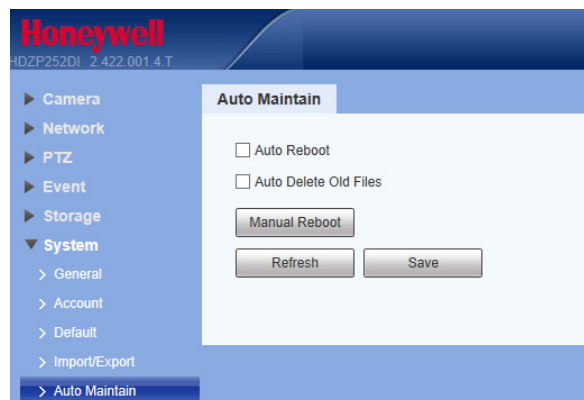
Table 5-27 Import/Export Configurations

Parameter	Function
Import	Click to import local setup files to the system.
Export	Click to export the current system setup to your local PC.

Automatic Maintenance

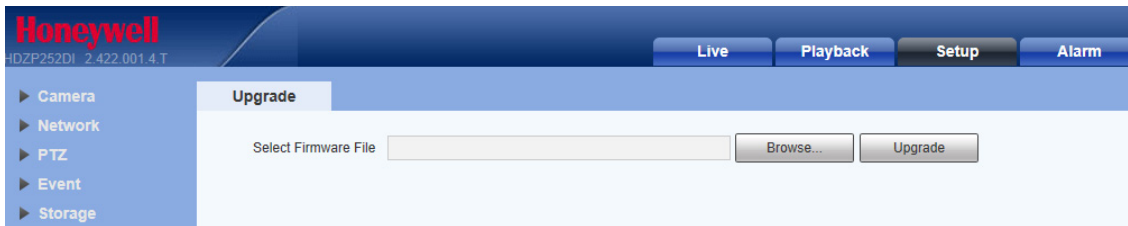
You can perform either **Auto Reboot**, **Auto Delete Old Files**, or **Manual Reboot** from this configuration screen.

Figure 5-45 Auto Maintain Configuration Interface



Upgrade

Figure 5-46 Upgrade Interface



Click **Browse** and select the upgrade file, and then click **Upgrade** to begin the firmware update.

CAUTION Selecting the incorrect upgrade file might cause a camera malfunction.

Viewing System Information

Version

In the **Version** interface, you can view the system hardware features, the software version, and the release date. This information is for reference only.

Figure 5-47 Version Interface



Log

Use the Log interface to search through the log entries.

Figure 5-48 Log Interface

The screenshot shows the Honeywell Log Interface. The top navigation bar includes 'Live', 'Playback', 'Setup', 'Alarm', and 'Logout'. The left sidebar lists various system components, with 'Log' selected under the 'Information' category. The main content area features search filters for 'Start Time' and 'End Time', both set to 2017-02-08 10:16:08. A 'Type' dropdown menu is set to 'All'. Below the search filters is a table with columns for 'No.', 'Log Time', 'User Name', and 'Event'. The table is currently empty. Below the table is a 'Detailed Information' section with fields for 'Time:', 'User Name:', 'Type:', and 'Content:'. At the bottom of the interface are 'Backup' and 'Clear' buttons.

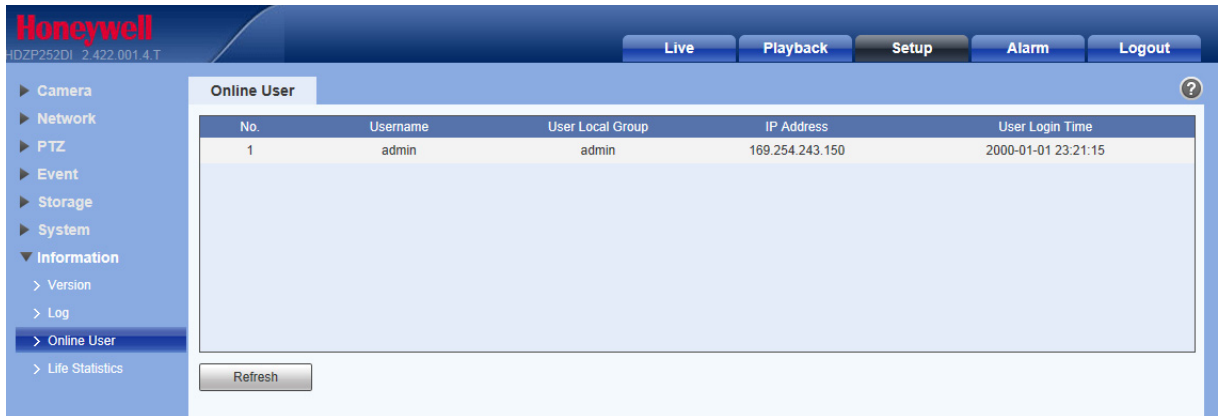
Table 5-28 Log Interface Configurations

Parameter	Function
Start Time	Configure the start time for the requested log.
End Time	Configure the end time for the requested log.
Type	Select a log type: System, Operation, Configuration Operation, Data Operation, Event Operation, Record Operation, Account Management, Log Clearing and All .
Search	Select a log type from the drop-down list, and then click Search to view the log list that is generated by the search. Click Stop to terminate the current search.
Detailed Information	Select one item to view its detailed information.
Backup	Click Backup to back up log files to the currently selected PC.
Clear	Click Clear to delete all the displayed log files.
	Note The system does not support clearing by type.

Online User

You can view the current online user, group name, IP address, and login time on this page (see [Figure 5-49](#)).

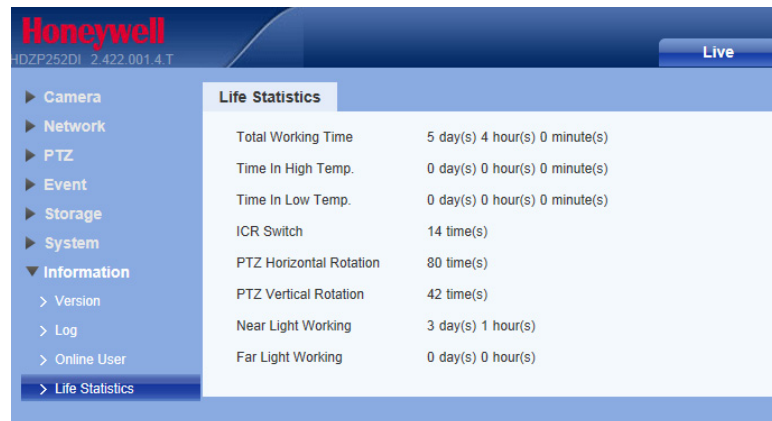
Figure 5-49 Online User Interface



Life Statistics

You can view the PTZ camera statistics, such as the number of horizontal and vertical rotations performed, the amount of working time, time that IR LEDs have been working, and time spent in high/low temperature ranges (see [Figure 5-50](#)).

Figure 5-50 Life Statistics Interface



6

PTZ Functions

This chapter contains the following sections:

- *Programming PTZ Preset Positions, page 79*
- *Programming PTZ Tours, page 81*
- *Configuring PTZ Scans, page 82*
- *Configuring PTZ Patterns, page 83*
- *Configuring Pan Settings, page 85*
- *Configuring the PTZ Movement Speed, page 85*
- *Configuring PTZ Idle Motion Actions, page 86*
- *Configuring Power Up Actions, page 87*
- *Configuring Time Task Actions, page 88*
- *Restarting the PTZ Camera, page 89*
- *Restoring PTZ Default Settings, page 89*

Configuring PTZ Functions

Programming PTZ Preset Positions


You can program up to 300 preset points for the pan/tilt/zoom camera. A preset point is a pre-programmed position that your PTZ camera can move to automatically when a user selects a preset to go to.

Programming a Preset Point


1. Navigate to **Setup > PTZ > Function > Preset** (see *Figure 6-1*).
2. Click **Add** to add a new Preset to preset list. If multiple presets are listed, or you want to modify a preset that was previously configured, make sure the line for the preset you want to program is selected before performing steps 3 and 4.

Figure 6-1 Preset Position Configuration Interface



3. Under the video screen, use the PTZ controls to move the image to the desired preset position.
4. Adjust the **Zoom**, **Focus** and **Iris** settings using the + and – buttons for each setting, as required.
5. If required, double-click the **Preset Title** to enter a specific preset title.
6. If required, double-click the Preset **No.** to enter a different preset number for the current preset.
7. Click the **Save** icon () for the preset to save it.

Deleting a Preset Point

1. Navigate to **Setup** > **PTZ** > **Function** > **Preset** (see [Figure 6-1](#)).
2. Click the **Delete** icon () for the preset you want to delete.

Note Alternatively, you can click **Clear** to delete all of the presets in the list.

Go to a Preset Point

1. Navigate to **Setup** > **PTZ** > **Function** > **Preset** (see [Figure 6-1](#)).
2. Select the preset that you want the camera to move to from the **Preset** list. The camera will move to point at that preset position.

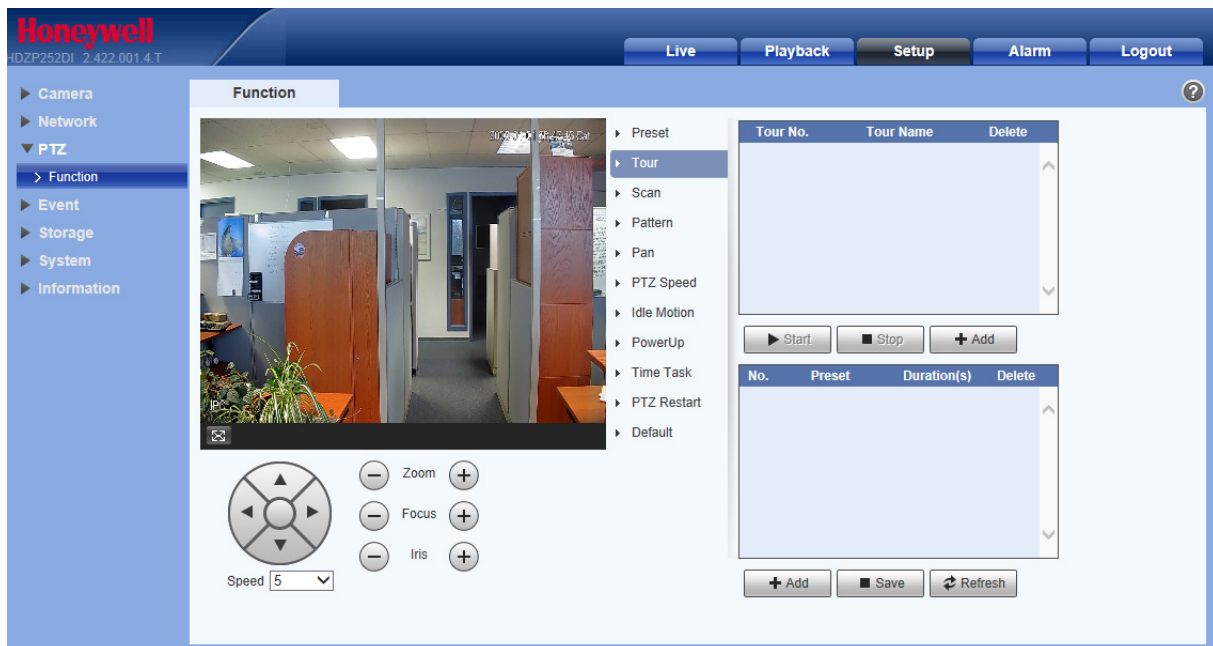
Note You can also go to a preset on the Live View page of the PTZ web client interface. See *PTZ Functions: Preset on page 26* for more information.

Programming PTZ Tours

You can program up to eight tours that can consist of between 2 and 32 preset points in each tour.


Note You must define the presets before you can program a preset tour. See *Programming a Preset Point on page 79* for more information on programming preset points.

Figure 6-2 Tour Configuration Interface



Programming a Tour

1. Navigate to **Setup > PTZ > Function > Tour** (see *Figure 6-2*).
2. Under the Tour No. and Tour Name table (upper table), click **Add**. A new tour line is added to the table. Make sure that the tour line for the tour you want to program is selected before moving on to the next step.
3. Under the Preset table (lower table), click **Add** to add a preset to the tour. Continue to click **Add** until you have the number of presets that will be needed for the tour (up to 32).

If an added preset line is not needed, click the **Delete** icon () that is next to the preset you want to delete.

4. For every preset in the tour, double-click on the **Preset** name to bring up a drop-down list of all programmed preset positions. Select the preset position that is needed for each point in the tour.
5. The default **Duration** for each preset point is 10 seconds. To change the duration for a preset, double-click the **Duration** for that preset and enter a new duration, in seconds, in the field that appears.
6. Click **Save** under the Preset table to save all of the changes to the tour.

Running a Tour


1. Navigate to **Setup** > **PTZ** > **Function** > **Tour** (see [Figure 6-2](#)).
2. In the Tour table, select the tour that you want to run and click **Start**.

Note You can also run a tour on the Live View page of the PTZ web client interface. See [PTZ Functions: Tour on page 26](#) for more information.

Stopping a Running Tour

Use the PTZ controls to move the camera in any direction, or click the **Stop** button located next to the **Start** button to stop the tour.

Deleting a Programmed Tour

1. Navigate to **Setup** > **PTZ** > **Function** > **Tour** (see [Figure 6-2](#)).
2. Click the **Delete** icon () for the tour you want to delete.

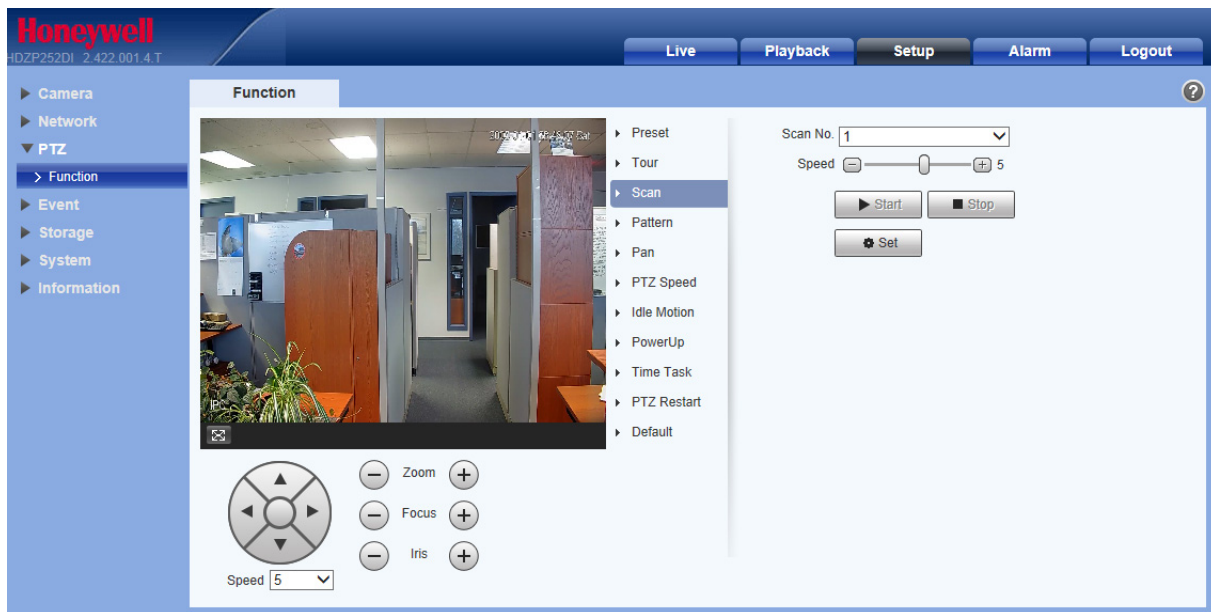
Configuring PTZ Scans

You can program up to five scan paths. A scan is a short tour that runs on a horizontal line, back and forth between two points that you program.

Programming a Scan Path

1. Navigate to **Setup** > **PTZ** > **Function** > **Scan** (see [Figure 6-3](#)).
2. In the **Scan No.** drop-down list, select the number of the scan that you want to program (from **1** to **5**).
3. Select the speed of the scan from the **Speed** bar, from **1** (slow) to **8** (fast).

Figure 6-3 Scan Configuration Interface



4. Click **Set**. The **Set Left Limit** and **Set Right Limit** buttons will appear.
5. Under the video screen, use the PTZ controls to move the image to the desired left or right limit position. Adjust the **Zoom**, **Focus** and **Iris** settings using the + and – buttons for each setting, as required. Click either **Set Left Limit** or **Set Right Limit** for the limit position you have programmed.
6. Repeat step 5 to set the other limit position, so that you have now programmed a left and right point for the PTZ camera to scan between.

Running a Scan

1. Navigate to **Setup** > **PTZ** > **Function** > **Scan** (see [Figure 6-3](#)).
2. In the **Scan No.** drop-down list, select the scan that you want to run and click **Start**.

Note You can also run a scan on the Live View page of the PTZ web client interface. See [PTZ Functions: Scan on page 26](#) for more information.

Stopping a Running Scan

Use the PTZ controls to move the camera in any direction, or click the **Stop** button located next to the **Start** button to stop the scan.

Configuring PTZ Patterns

You can program up to five pattern tours that can be recalled at a later time. A pattern tour records your PTZ movements so they can be repeated at a later time.

Programming a Pattern Path

1. Navigate to **Setup** > **PTZ** > **Function** > **Pattern** (see [Figure 6-4](#)).
2. In the **Pattern No.** drop-down list, select the number of the scan that you want to program (from 1 to 5).

Figure 6-4 Pattern Configuration Interface



3. Click **Set**. The **Start Rec** and **Stop Rec** buttons will appear.
4. Click **Start Rec**.
5. Under the video screen, use the PTZ controls to move the camera through the PTZ movements that you want included in the pattern. If needed, adjust the **Zoom**, **Focus** and **Iris** settings using the + and – buttons during the pattern recording, as required.

Make sure to program the PTZ pattern as you want it to move when recalled. If you want the camera to pause at a certain point, make sure to pause before continuing the pattern movements.
6. Click **Stop Rec** when you have finished all of the PTZ pattern movements. The pattern number is now saved.

Running a Pattern

1. Navigate to **Setup** > **PTZ** > **Function** > **Pattern** (see [Figure 6-4](#)).
2. In the **Pattern No.** drop-down list, select the scan that you want to run and click **Start**.

Note You can also run a pattern on the Live View page of the PTZ web client interface. See [PTZ Functions: Pattern on page 26](#) for more information.

Stopping a Running Pattern

Use the PTZ controls to move the camera in any direction, or click the **Stop** button located next to the **Start** button to stop the pattern.

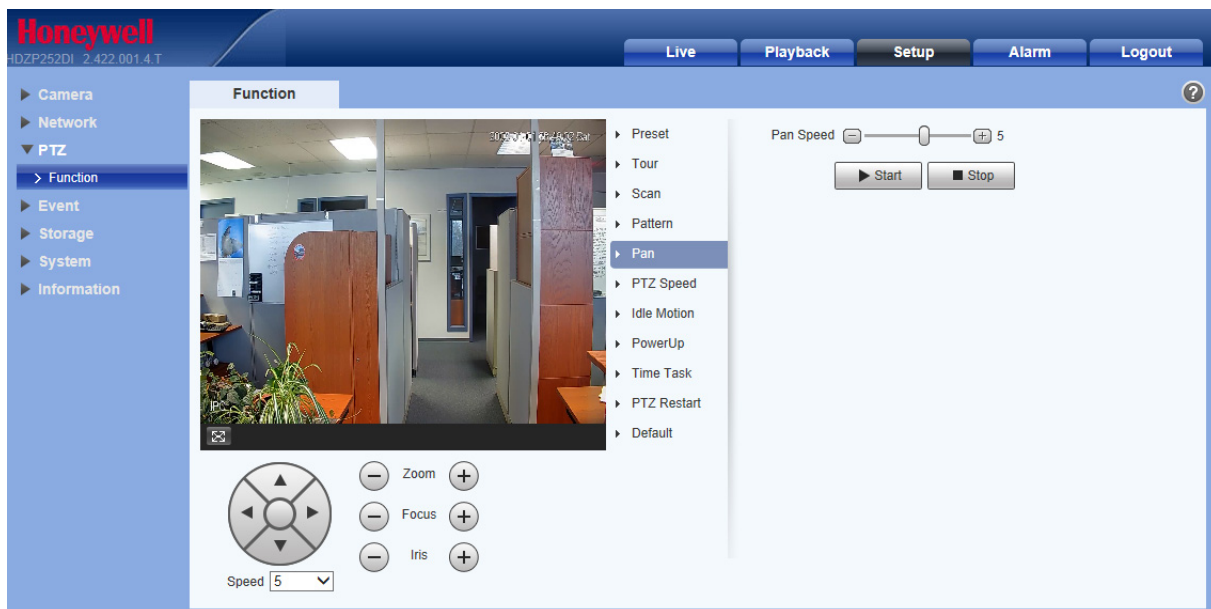
Configuring Pan Settings

You can set the PTZ to continuously pan around on its horizontal axis at a set speed.

Running a Pan

1. Navigate to **Setup > PTZ > Function > Pan** (see [Figure 6-5](#)).
2. Select the speed of the pan from the **Speed** bar, from **1** (slow) to **8** (fast).
3. Under the video screen, use the PTZ controls to move the image to the desired position to start the pan from. The pan will continuously rotate around horizontally from the position you set. Adjust the **Zoom**, **Focus** and **Iris** settings using the + and – buttons for each setting, as required.
4. Click **Start** to start the pan function. When the pan is no longer needed, click **Stop**.

Figure 6-5 Pan Configuration Interface



Note You can also run a pan on the Live View page of the PTZ web client interface. See [PTZ Functions: Pan on page 26](#) for more information.

Configuring the PTZ Movement Speed

You can set the speed that the PTZ will move when manually controlled with the PTZ controls.

1. Navigate to **Setup** > **PTZ** > **Function** > **PTZ Speed** (see [Figure 6-6](#)).
2. Select the speed of the PTZ from **Low** (slow), **Middle**, and **High** (fast).

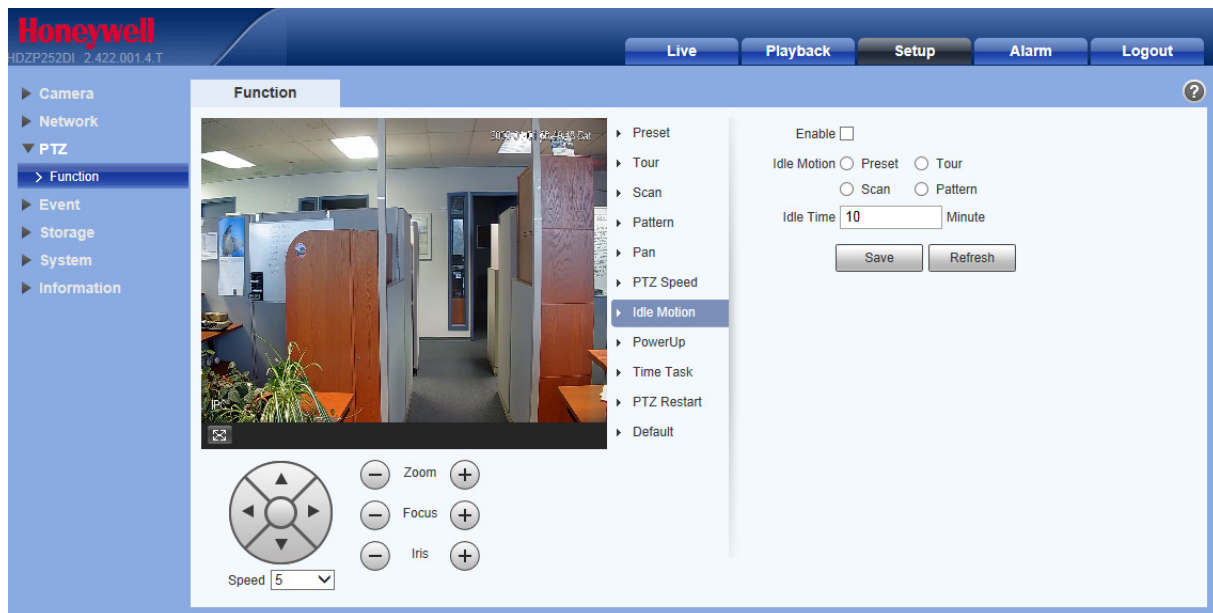
Figure 6-6 PTZ Speed Configuration Interface



Configuring PTZ Idle Motion Actions

Idle Motion actions can be configured for the PTZ to perform a programmed action when a set number of idle time has passed between PTZ movements or functions.

Figure 6-7 Idle Motion Configuration Interface



1. Navigate to **Setup** > **PTZ** > **Function** > **Idle Motion** (see [Figure 6-7](#)).

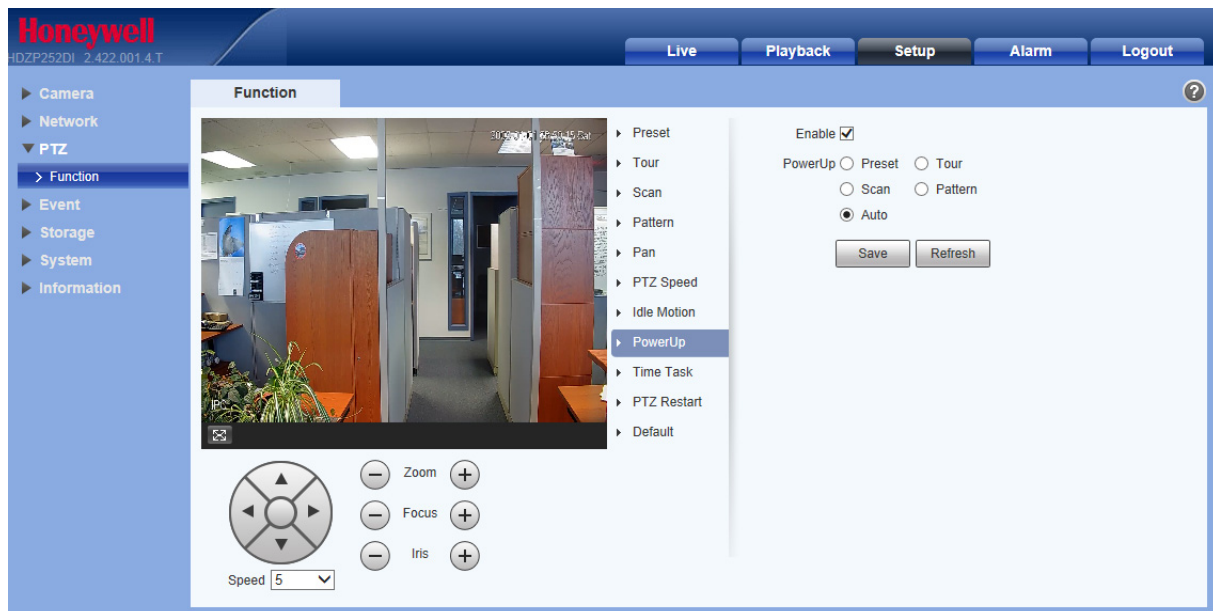
2. Check the **Enable** check box to enable the Idle Motion function.
3. In the **Idle Time** field, enter the amount of time to pass before the Idle Motion action will occur, from 1 to 60 minutes.
4. Select the **Idle Motion** action to perform after the set time has passed, from **Preset**, **Tour**, **Scan** and **Pattern**. After the action type is selected, use the drop-down list to select the Preset, Tour, Scan or Pattern number to perform after the Idle Time has passed.
5. Click **Save** to save your settings.

Note You must have a Preset, Tour, Scan or Pattern programmed before you can set it up as an Idle Motion action.

Configuring Power Up Actions

Power Up actions can be configured for the PTZ to perform a programmed action when the camera is powered up.

Figure 6-8 PowerUp Configuration Interface



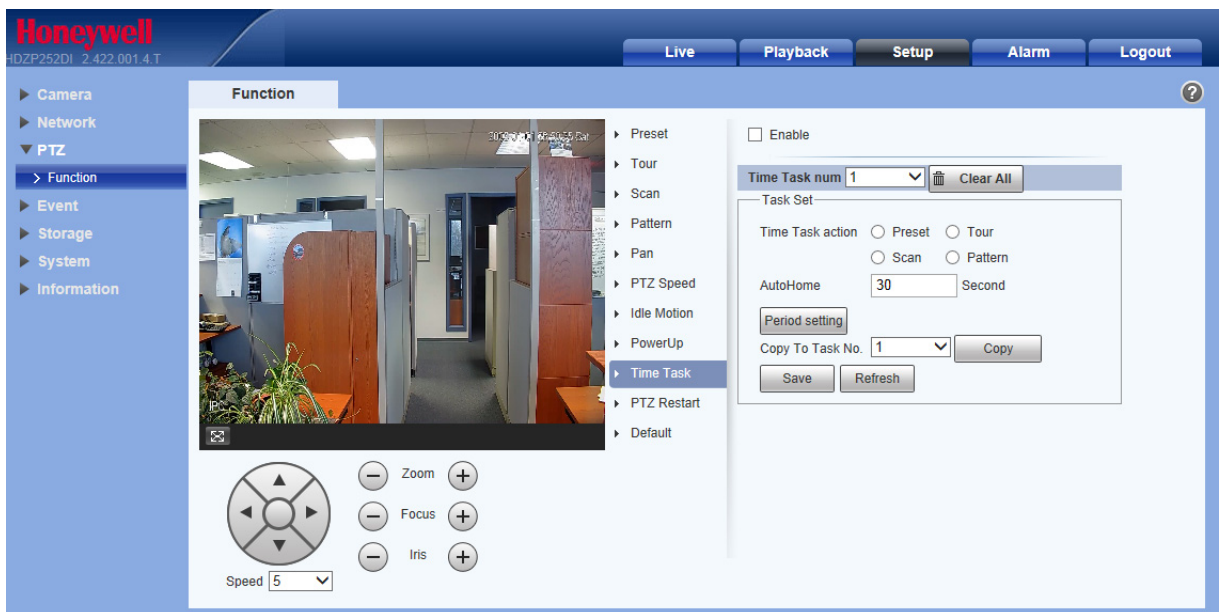
1. Navigate to **Setup** > **PTZ** > **Function** > **PowerUp** (see [Figure 6-8](#)).
2. Check the **Enable** check box to enable the Power Up function.
3. Select the **PowerUp** action to perform after PTZ is powered up, from **Preset**, **Tour**, **Scan**, **Pattern** and **Auto**. After the action type is selected, use the drop-down list to select the Preset, Tour, Scan or Pattern number to perform when the PTZ powers up. If **Auto** is selected, the PTZ will perform an automatic rotation before coming to a stop.
4. Click **Save** to save your settings.

Note You must have a Preset, Tour, Scan or Pattern programmed before you can set it up as a Power Up action.

Configuring Time Task Actions

Time Task actions can be configured for the PTZ to perform during a specified time period. Up to four time tasks can be programmed, each with up to six time periods.

Figure 6-9 Time Task Configuration Interface



1. Navigate to **Setup > PTZ > Function > Time Task** (see [Figure 6-9](#)).
2. Check the **Enable** check box to enable the Time Task function.
3. Select the Time Task to be programmed from the **Time Task num** drop-down list.
4. Select the **Time Task action** to perform at the set time, from **Preset**, **Tour**, **Scan** and **Pattern**. After the action type is selected, use the drop-down list to select the Preset, Tour, Scan or Pattern number to perform.

Note You must have a Preset, Tour, Scan or Pattern programmed before you can set it up as a Time Task action.

5. Enter an **AutoHome** value in the field from **1** to **3600** seconds. After the Time Task period has ended, the PTZ camera will move back to its original position after the AutoHome time has passed.
6. Click **Period setting** to open the Period Setup window.
7. Click **Save** to save your settings.

Deleting Time Tasks

1. Navigate to **Setup > PTZ > Function > Time Task** (see [Figure 6-9](#)).
2. Click **Clear All** to delete all of the programmed time tasks.

Copying Time Task Settings to Another Time Task

1. Navigate to **Setup > PTZ > Function > Time Task** (see [Figure 6-9](#)).
2. Select the Time Task to be copied from the **Time Task num** drop-down list.
3. Select the Time Task to be receive the copied settings from the **Copy To Task No.** drop-down list.
4. Click **Copy**.

Restarting the PTZ Camera

When the PTZ camera needs to be restarted, you can perform this restart function.

Figure 6-10 PTZ Restart Interface



1. Navigate to **Setup > PTZ > Function > PTZ Restart** (see [Figure 6-10](#)).
2. Click **PTZ Restart** to restart the PTZ camera.

Restoring PTZ Default Settings

When the PTZ camera needs to be reset to its default settings, you can perform this default function.

Figure 6-11 Default Interface



1. Navigate to **Setup** > **PTZ** > **Function** > **Default** (see [Figure 6-11](#)).
2. Click **Default** to apply the default settings to the PTZ camera.

7

Configuring Events and Alarms

This chapter contains the following sections:

- *Configuring for Motion Detection on page 91*
- *Configuring Video Tampering on page 95*
- *Configuring Audio Detection on page 96*
- *Configuring a Smart Plan on page 97*
- *Configuring Face Detection on page 98*
- *Configuring for Abnormalities on page 99*
- *Configuring Alarms on page 101*

Configuring Events

Configuring for Motion Detection

Configure the motion detection options to set up motion detection alarms and recording when the specified motion is detected.

Video Motion Detection

Figure 7-1 Motion Detection - Video Detection Configuration Interface

Table 7-1 Motion Detection Configurations

Parameter	Function
Enable	Check to enable motion detection.
Working Period	Configure the arm/disarm schedule. Click Setup to open the Working Period page. See Configuring the Working Period on page 93 for more information.
Anti Dither	The system logs and records only one event during the anti-dither period. Choose an anti-dither period from 0 to 100 seconds.
Area	Configure the motion detection region, its sensitivity, and area. The default settings covers the entire area. See Configuring the Motion Detection Area on page 94 for more information.
Manual Control Excluded	Select the Manual Control Excluded check box to disable manual PTZ control while the Motion Event is active.
Record	When Record is enabled, motion detection will trigger a recording.
Record Delay	The system can delay stopping a recording for a specified time after the alarm has ended. Choose a delay period from 10 to 300 seconds.
Send Email	When this function is enabled, the system sends an email alert to you when an alarm occurs. The email settings must be configured for this feature to be used (see SMTP (Email) on page 59).
PTZ	Select the PTZ check box to program the camera to perform a PTZ action, from Preset, Tour, or Pattern when the motion event is active. Select the action from the drop-down list and then the number of the Preset, Tour, or Pattern to perform from the second drop-down list.
Snapshot	Check to enable the system to save motion detection snapshot files (still images) while the motion detection event is activated. See Path on page 65 for information about configuring where snapshots are saved.

Configuring the Working Period

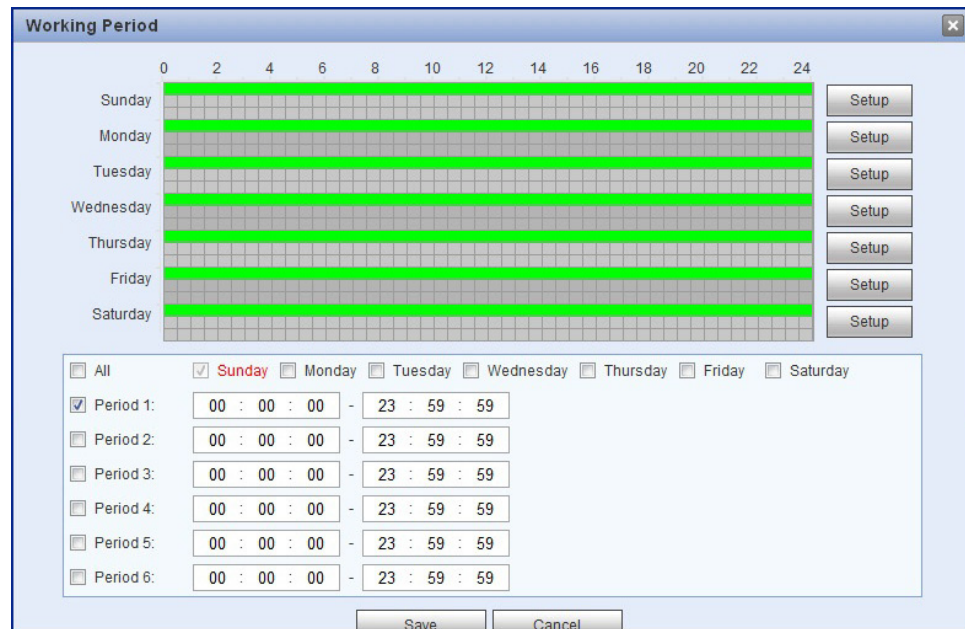
Configure the arm/disarm schedule. Click **Setup** to open the Working Period page. See [Recording Schedule and Snapshot Schedule on page 64](#) for more information.

You can configure up to six periods per day. Draw a circle in the table to enable the corresponding time period.

Select a date. If you do not select a date, the current setup will be applied to today only. You can select **All** to apply the working period to the whole week.

Click **Save** to save the changes. The system goes back to the **Motion Detection** interface. Click **Save** to exit.

Figure 7-2 Configuring the Working Period



Configuring the Motion Detection Area

Configure the motion detection region, its sensitivity, and area. The default settings covers the entire area. You must click **Save** to enable any changes to these settings.

Figure 7-3 Configuring the Motion Detection Area

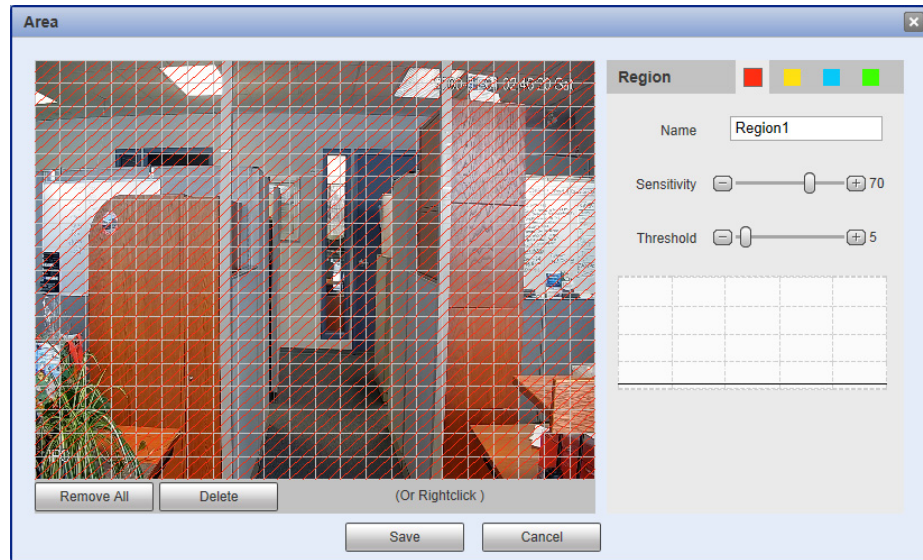


Table 7-2 Motion Detection Area Configuration

Parameter	Function
Region	You can configure up to four regions with different motion detection settings (sensitivity and threshold).
Sensitivity	Adjust the brightness sensitivity. You might need to increase the brightness sensitivity to trigger motion detection. You can configure a different sensitivity for each of the four regions. The sensitivity ranges from 0 to 100 . We recommend that you choose a sensitivity between 30 to 70 . The default is 50 .
Threshold	The threshold determines how much change in a scene is required to trigger a motion detection alarm. The lower the threshold setting, the easier it is to trigger an alarm. You can configure a different threshold for each of the four regions. The sensitivity ranges from 0 to 100 . We recommend that you choose a sensitivity between 10 to 50 .
Delete All	Delete all motion detection areas.
Delete	Delete the selected motion detection region.

Configuring Video Tampering

Figure 7-4 Tampering Configuration Interface

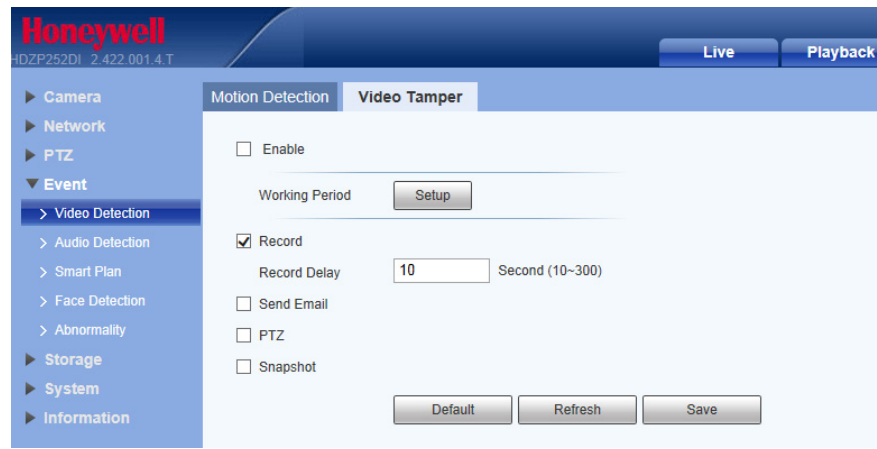


Table 7-3 Tampering Configurations

Parameter	Function
Enable	Check to enable the Video Tamper function.
Working Period	<p>The video masking feature is activated during the specified period. See Configuring the Working Period on page 93.</p> <p>You can configure up to six periods per day. Draw a circle in the table to enable the corresponding time period.</p> <p>Select a date. If you do not select a date, the current setup will be applied to today only. You can select All to apply the working period to the whole week.</p> <p>Click Save to save the changes. The system goes back to the Video Tamper interface. Click Save to exit.</p>
Record	When Record is enabled, video tampering will trigger a recording.
Record Delay	The system will wait for the specified time before it ends recording. Select from 10 to 300 seconds.
Send Email	When this function is enabled, the system sends an email alert to you when an alarm occurs. The email settings must be configured for this feature to be used (see SMTP (Email) on page 59).
PTZ	Select the PTZ check box to program the camera to perform a PTZ action, from Preset, Tour, or Pattern when the tampering event is active. Select the action from the drop-down list and then the number of the Preset, Tour, or Pattern to perform from the second drop-down list.
Snapshot	Check to enable the system to save tampering snapshot files (still images) while the video tampering event is activated. See Path on page 65 for information about configuring where snapshots are saved.

Configuring Audio Detection

The audio detection feature detects audio changes in the camera scene that can generate events and corresponding actions.

Figure 7-5 Audio Detection Configuration Interface

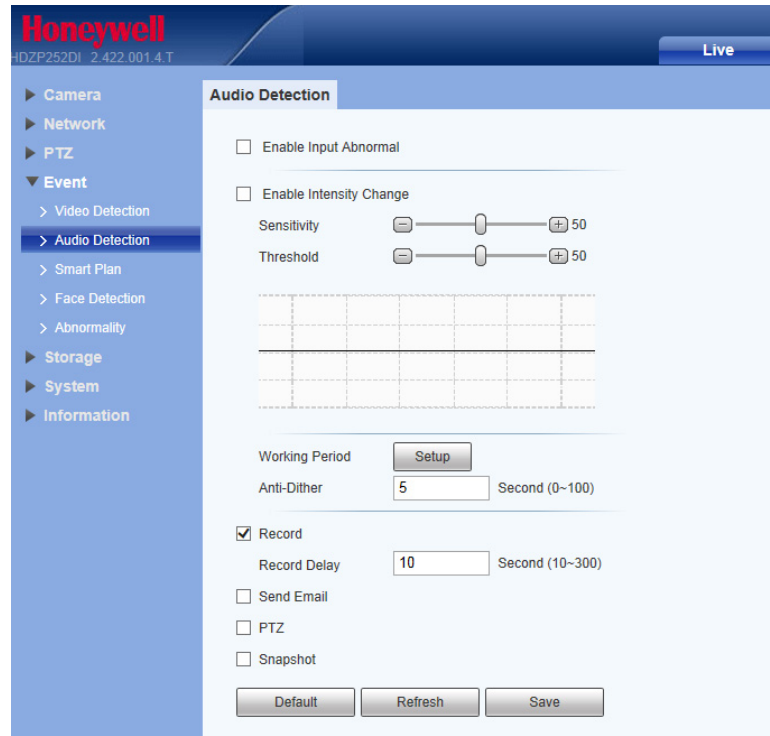


Table 7-4 Audio Detection Configurations

Parameter	Function
Enable Input Abnormal	Check to enable the audio input abnormal function. This detects if the audio input changes from the "normal" audio that is typically generated at the camera site.
Enable Intensity Change	Check to enable the audio intensity change function. This detects if the audio intensity changes, meaning the volume level becomes stronger than the typical level.
Sensitivity	Set the Sensitivity level from 1 to 100 for the audio detection. Sensitivity refers to the audio recognition sensitivity (as a percentage). Moving the Sensitivity slider to a higher sensitivity setting increases the audio detection sensitivity which will detect more events.
Threshold	Set the Threshold level from 1 to 100 for the audio detection. Threshold is the intensity change threshold, or the amount of audio required to trigger an event notification. The smaller the Threshold value, the more events will be detected.
Audio Detection Graph	The best way to configure audio detection is to experiment with the sensitivity and threshold settings while someone is generating sound in front of the camera. Use this graph to compare the audio that is generated to the Threshold line displayed in the graph.

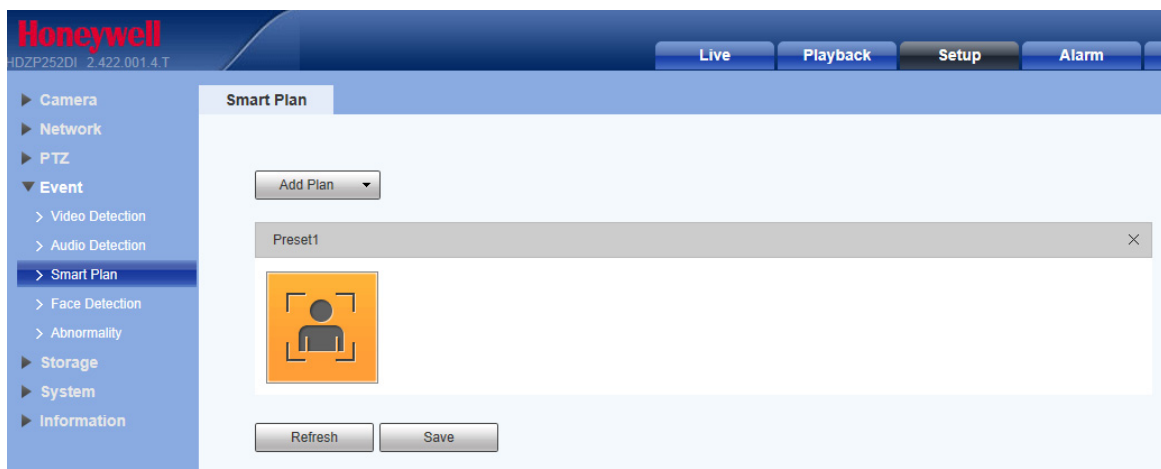
Table 7-4 Audio Detection Configurations (cont'd)

Parameter	Function
Working Period	<p>The audio detection is activated during the specified period. See Configuring the Working Period on page 93.</p> <p>Click Setup. You can configure up to six periods per day. Draw a circle in the table to enable the corresponding time period. Select a date. If you do not select a date, the current setup will be applied to today only. You can select All to apply the working period to the whole week.</p> <p>Click Save to save the changes. The system goes back to the Audio Detection interface. Click Save to exit.</p>
Anti-Dither	The system logs and records only one event during the anti-dither period. Choose an anti-dither period from 0 to 100 seconds.
Record	When Record is enabled, audio detection will trigger a recording.
Record Delay	The system will wait for the specified time before it ends recording. Select from 10 to 300 seconds.
Send Email	When this function is enabled, the system sends an email alert to you when an alarm occurs. The email settings must be configured for this feature to be used (see SMTP (Email) on page 54).
PTZ	Select the PTZ check box to program the camera to perform a PTZ action, from Preset, Tour, or Pattern when the audio event is active. Select the action from the drop-down list and then the number of the Preset, Tour, or Pattern to perform from the second drop-down list.
Snapshot	Check to enable the system to save snapshot files (still images) while the audio detection event is activated. See Path on page 62 for information about configuring where snapshots are saved.

Configuring a Smart Plan

Smart Plan is a switch that enables the camera to use analytic features, such as face detection. To enable a Smart Plan:

1. Navigate to **Setup** > **Event** > **Smart Plan** (see [Figure 7-6](#)).

Figure 7-6 Smart Plan Configuration Interface

2. Select a Preset position to enable the Smart Plan for from the **Add Plan** drop-down list. You must have at least one preset programmed to enable smart plans (see [Programming PTZ Preset Positions on page 79](#) for information on programming presets).
3. Click the face detection icon so that it turns orange and click **Save**.
4. Repeat these steps for other presets if more than one smart plan is needed.

Note Smart Plan must be enabled if you want to use the Face Detection function. Configure the face detection settings (see [Configuring Face Detection on page 98](#)) and then enable Smart Plan to complete face detection setup.

Configuring Face Detection

The Face Detection feature analyzes the video to detect if there are any human faces appearing in the video. If a face appears it will capture the face with either snapshots, recordings, or alarms so it can be processed or analyzed by an NVR or user.

Figure 7-7 Face Detection Configuration Interface

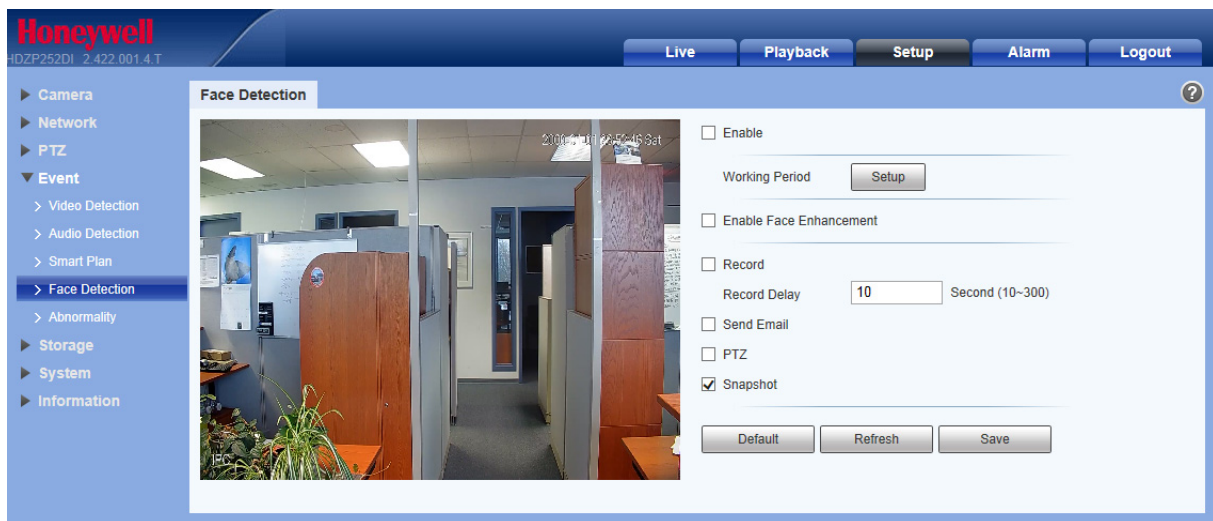


Table 7-5 Face Detection Configurations

Parameter	Function
Enable	Check to enable the Face Detection function.
Working Period	<p>The face detection is activated during the specified period. See Configuring the Working Period on page 93.</p> <p>Click Setup. You can configure up to six periods per day. Draw a circle in the table to enable the corresponding time period. Select a date. If you do not select a date, the current setup will be applied to today only. You can select All to apply the working period to the whole week.</p> <p>Click Save to save the changes. The system goes back to the Face Detection interface. Click Save to exit.</p>

Table 7-5 Face Detection Configurations (cont'd)

Parameter	Function
Enable Face Enhancement	Check Enable Face Enhancement to ensure the face is clearly displayed by priority, even when the stream resolution is low.
Record	When Record is enabled, face detection will trigger a recording.
Record Delay	The system will wait for the specified time before it ends recording. Select from 10 to 300 seconds.
Send Email	When this function is enabled, the system sends an email alert to you when an alarm occurs. The email settings must be configured for this feature to be used (see SMTP (Email) on page 54).
PTZ	Select the PTZ check box to program the camera to perform a PTZ action, from Preset, Tour, or Pattern when the event is active. Select the action from the drop-down list and then the number of the Preset, Tour, or Pattern to perform from the second drop-down list.
Snapshot	Check to enable the system to save snapshot files (still images) while the face detection event is activated. See Path on page 62 for information about configuring where snapshots are saved.

Note Smart Plan must be enabled if you want to use the Face Detection function. Configure the face detection settings and then enable Smart Plan to complete face detection setup (see [Configuring a Smart Plan on page 97](#)).

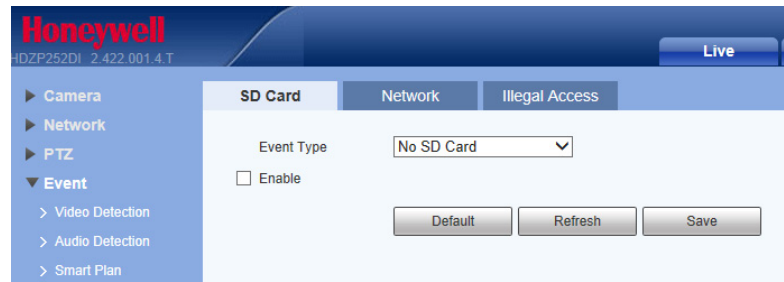
Configuring for Abnormalities

Abnormalities include **No SD Card**, **Capacity Warning**, **SD Card Error**, **Network Disconnection**, **IP Conflict**, and **Unauthorized Access**.

Configuring for Micro SD Card Abnormalities

Micro SD card Abnormalities include **No SD Card**, **SD Card Error**, and **Capacity Warning**.

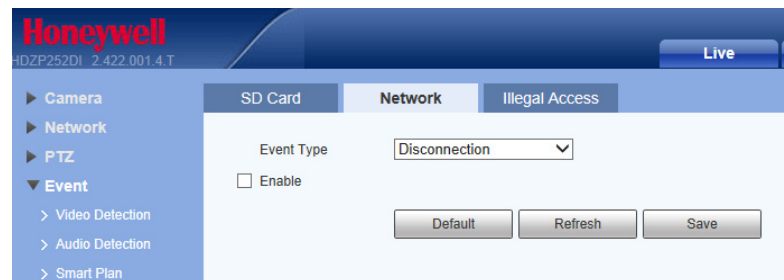
Note Only cameras with Micro SD cards can detect the following abnormalities: **No SD Card**, **Capacity Warning**, and **SD Card Error**.

Figure 7-8 No SD Card Warning Configuration Interface

1. Select the SD card **Event Type** from the drop-down list.
2. Click **Enable** so that an alarm is triggered when the selected Micro SD card error occurs.
3. Enter a **Capacity Limit** for the **Capacity Warning** Micro SD card error as the threshold for how full the SD card will get before the Capacity Warning is sent.
4. Click **Save** to save your settings.

Configuring for Network Abnormalities

Use these options to configure for Network Abnormalities such as network **Disconnection** and **IP Conflict**.

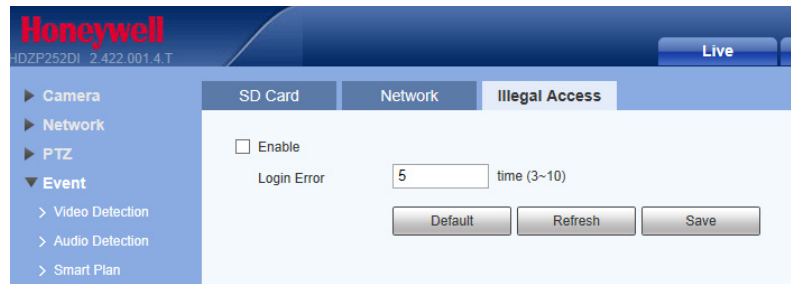
Figure 7-9 Network Disconnection Configuration Interface

1. Select the Network **Event Type** from the drop-down list.
2. Click **Enable** so that an alarm is triggered when a network disconnection or an IP conflict occurs.
3. Click **Save** to save your settings.

Configuring for Illegal Access

If someone attempts multiple times to login using an incorrect password, and **Illegal Access** is enabled, an alarm will occur. You can specify how many attempts can be made before the Illegal Access alarm occurs.

Figure 7-10 Illegal Access Configuration Interface



1. Select the **Enable** check box so that an alarm is triggered when someone tries to illegally access the camera.
2. Enter the number of times a user can attempt to log in before **Illegal Access** is triggered. Select from **3** to **10** login attempts.
3. Click **Save** to save your settings.

Configuring Alarms

Click the **Alarm** tab to open the alarm configuration interface.

Figure 7-11 Alarm Configuration Interface

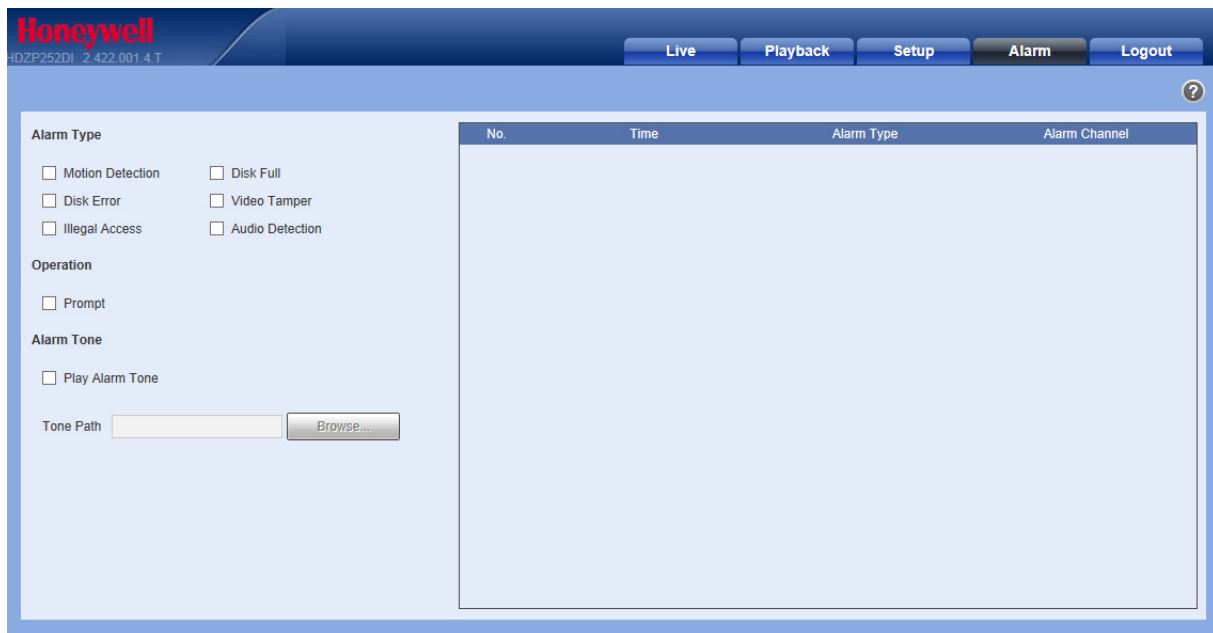


Table 7-6 Alarm Configurations

Type	Parameter	Function
Alarm Type	Motion Detection	System alarms when a motion detection event occurs.
	Video Tamper	System alarms when the camera has been tampered with.
	Disk Full	System alarms when the disk (Micro SD card) is full.
	Disk Error	System records alarm information when a disk error occurs.
	Illegal Access	System alarms when someone attempts to illegally access the camera.
	Audio Detection	System alarms when an audio detection event occurs.
Operation	Prompt	System pops up an alarm dialog box when an alarm occurs.
Alarm Tone	Play Alarm Tone	When an alarm occurs, the system automatically generates an audible sound. You can select a tone from your PC for the alarm tone prompt.
	Tone Path	Click Browse to select the alarm sound file.



Troubleshooting

Refer to the following guidelines to troubleshoot any performance issues. If you require additional assistance, contact Honeywell Technical Support (see back cover for contact information).

Cannot play downloaded file.	<ul style="list-style-type: none">• Use the player located on the CD that came with your camera.• Ensure that DirectX8.1 or higher is installed on your PC.• Install the DivX503Bundle.exe plugin for playing AVI files.• If you are running Windows XP, install the ffdshow codec.
Cannot set camera frame rate above 20 fps when Embedded NVR resolution set at 1080p or lower.	<ol style="list-style-type: none">1. On the NVR, go to NVR setup and set the resolution to 1080p and click Save.2. Go to Remote Device and click Delete to remove the camera. Then select the camera in the Searched Device area and click Add.3. Click Modify for the camera in the Added device area. Select ONVIF from the drop-down list of manufacturers and click Save. <p>You can now set the frame rate at 20 fps or above for 1080p or lower resolutions at the NVR end.</p>
Cannot get 3 MP resolution at the NVR.	<ol style="list-style-type: none">1. Make sure the NVR supports 3 MP (2304×1296) resolution.2. On the NVR, go to NVR setup ► Remote Device and click Modify for the 3 MP camera in the added device area. Select ONVIF from the drop-down list of manufacturers and click Save. You can now setup 3 megapixel resolution on the NVR end.
IR video is poor.	<ul style="list-style-type: none">• Ensure that the power supply is adequate. An inadequate power supply may not be able to support the IR lights.• Ensure that the objects to be illuminated are within the camera's IR range.• If the IR-cut filter does not switch to Night mode, the photosensitive chip at the front of the camera may be malfunctioning.
Cannot upgrade firmware through the network	<ul style="list-style-type: none">• If you cannot upgrade firmware over the network, try using port 3800.

Cannot install/log in to web client.	<ul style="list-style-type: none">• Ensure that your browser's security settings allow ActiveX controls.• Ensure that DirectX8.1 or higher is installed on your PC.• Ensure that you have a valid network setup and that you are using the correct login user name and password.
Water leaking into camera housing.	<ul style="list-style-type: none">• Ensure that the front glass cap and rear waterproof cap are tightly secured. Loosening or removing the front and rear caps will allow water to enter the housing.
Power supply is unstable.	<ul style="list-style-type: none">• The operating temperature range for the supplied power adapter is approximately 32°F to 104°F (0°C to 40°C). Replace with an industrial-level power adapter if operating the camera in temperatures below 32°F (0°C).• Use of a UPS power supply is strongly recommended.



Camera Specifications

HDZP252DI PTZ Dome Cameras

Table B-1 HDZP252DI Specifications

Camera	
Image Sensor	1/2.8" 2 megapixel progressive scan CMOS
Number of Pixels (H×V)	1920×1080 (1080p)
Min. Illumination	0.05 lux @ F1.4 (Color)/0 lux (B/W with IR LEDs on)
Lens	4.7–94 mm @ F1.4–F2.6
Focus Mode	Manual/Auto/Semiauto
Optical Zoom	25x
Digital Zoom	16x
Horizontal Angle of View	59.2°–2.4°
S/N Ratio	greater than or equal to 50 dB
IR Range	Up to 328 ft (100 m), depending on scene reflectance
Day/Night	Auto(ICR)/Color/BW
BLC/WDR	BLC/HLC/WDR
White Balance	Auto/Manual/Indoor/Outdoor/ATW
Noise Reduction	3D DNR
Motion Detection	Up to 4 areas
Privacy Masking	Up to 24 areas
PTZ	
Pan Travel	360° endless
Tilt Travel	-15° to 90°, Auto Flip 180°
Manual Pan Speed	0.1~200°/s
Manual Tilt Speed	0.1~120°/s
Presets	300
Preset Speed	Pan: Up to 240°/s Tilt: Up to 200°/s
Tours	8

Table B-1 HDZP252DI Specifications (cont'd)

Auto Pan/Scan	1/5
Pattern	5
Image Rotation	Flip
Audio In/Out	1/1
Alarm Input/Output	2/1
Video	
Compression	H.264/H.265/MJPEG
Resolution	Up to 1920x1080p
Frame Rate	Primary Stream: Up to 60/50 fps Second/Third Stream: Up to 25/30 fps
Bit Rate (H.264)	4-8192 kbps
Local Storage	microSD, 128 GB max.
Audio Compression	G.711a/G.711u(32kbps)/PCM(128kbps)
Audio Stream	Full duplex, Simplex
Network	
Ethernet	RJ-45 (10/100Base-T)
Supported Protocols	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Compatibility	ONVIF
User Access	20 users max.
Mobile App	HonView Touch for iPhone, Android Phone and Tablet
General	
Power Supply	12 VDC, PoE+ (802.3at)
Power Consumption	13 W/20 W max. (Heater On)
Operating Temperature Range	-40°F to 158°F (-40°C to 70°C)
Relative Humidity	Less than 95%, non-condensing
Ingress Protection Rating	IP66
Dimensions	6.7 × 11.6 in. (169 × 295 mm)
Weight	4.4 lb (2.0 kg)
Regulatory	FCC: Part 15B Class A
System Compatibility	HEN041**(X) H.264 4-Channel 1080p Embedded Network Video Recorder HEN081**(X) H.264 8-Channel 1080p Embedded Network Video Recorder HEN161**(X) H.264 16-Channel 1080p Embedded Network Video Recorder

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