



User Manual

mydlink Network Video Recorder

DNR-322L

Manual Overview

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Manual Revisions

Revision	Date	Description
1.00	August 02, 2011	• DNR-322L A1 with firmware version 1.00
2.00	November 26, 2013	• DNR-322L A2 with firmware version 2.00
3.00	July 23, 2015	• Revision B1

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Table of Contents

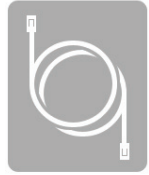
Product Overview	1	Live View	23
Package Contents.....	1	Video Playback.....	26
System Requirements	2	Video Playback Control.....	27
Introduction	3	Web Utility	28
Features.....	4	Live Video	29
Checking the Hardware Requirements	7	Playback.....	34
Hardware Overview	8	Menu Bar	36
Front View.....	8	Setup Wizard	37
Hardware Overview	9	Setup.....	38
LED Description.....	9	Network.....	38
Rear Panel.....	10	Camera	42
Bottom Panel.....	11	Schedule	44
Product Setup	12	Event.....	46
Setup Wizard - Windows	12	Maintenance.....	51
Setup Wizard - Mac	13	Camera Search.....	57
mydlink	14	Backup.....	58
mydlink Website.....	14	Help	60
NVR Status	15	Applications	61
Live Video	16	D-Link NVR Search Utility - Windows	61
Playback	17	D-Link NVR Search Utility - Mac	63
Open Recording	18	Playback Manager	64
Status	19	Remote Backup	66
NVR Info.....	20	Verification Tool.....	68
mydlink View - NVR App.....	21	Hard Drive Installation	70
First Use - Select Your Device.....	22		

- Knowledge Base 74**
 - What is RAID?74
 - RAID Options.....76
- Troubleshooting 78**
- Technical Specifications 79**

Package Contents



D-Link DNR-322L mydlink Network Video Recorder



Ethernet Cable



Power Adapter



Hard Drive Mounting Kit



Manual and Software on CD



Quick Install Guide

If any of the above items are missing, please contact your reseller.

Note: Using a power supply with a different voltage rating than the one included with the DNR-322L will cause damage and void the warranty for this product.

System Requirements

Hardware Requirements	<ul style="list-style-type: none">• One 3.5" SATA hard disk drive (Up to two 3.5" SATA hard disk drives supported)
Network Requirements	<ul style="list-style-type: none">• Broadband Internet connection (for remote access)• Network camera(s) (refer to the D-Link website for a list of supported cameras)• 10/100/1000 Mbit Ethernet switch or router
Web-based Configuration Utility Requirements/Remote PC Minimum Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none">• Microsoft Windows 7, 8, Vista, Mac OS X (10.7 or above)• PC with Pentium 4 – 2.4 GHz or above; at least 512 MB RAM• Internet Explorer 8, Firefox 12, or Safari 5 or higher• Existing 10/100/1000 Ethernet-based network <p>Note: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p>

Introduction

Congratulations on your purchase of the DNR-322L mydlink Network Video Recorder. The DNR-322L is a standalone wired Network Video Recorder (NVR) which supports multi-channel network cameras with M-JPEG, MPEG4, or H.264 recording to up to two high-speed 3.5-inch SATA hard disks. Thanks to the powerful embedded system, the NVR can record video from network cameras located in local or remote sites without requiring your PC to be turned on.

Powered by mydlink technology, the DNR-322L can be easily set up for remote access over the Internet. It supports real-time monitoring and playback from anywhere via an Internet browser. Simultaneous functionality means you can keep recording video while viewing live video or playing back recordings. The NVR's complete video management, display, and playback ability make it a convenient and reliable video recorder.

The availability of four different hard drive modes (Standard, JBOD, RAID 0, RAID 1) allows you to choose the configuration best suited to your needs. Standard mode creates two separately accessible hard drives. JBOD combines both drives in linear fashion for maximum space efficiency. RAID 0 combines both drives in a 'striped' configuration, which provides the highest performance when using a Gigabit Ethernet connection. RAID 1 causes the drives to mirror each other, providing maximum protection. If one drive fails while configured as RAID 1, the unaffected drive continues to function as a single drive until the failed drive is replaced. The new drive will then be re-mirrored, allowing the DNR-322L to return to its full protective state.

Features

Comprehensive IP Surveillance Solution

- **Total Solution:** The DNR-322L is a standalone network video recorder capable of 24/7 recording without a PC. The NVR can manage multiple network cameras, providing direct access to view live video and play recorded data through the Internet from anywhere, anytime.
- **Easy to Use:** A user-friendly GUI simplifies network and camera setup, allowing you to easily access multiple cameras for viewing, recording, playback, and configuration.
- **Centralized Interface for Configuration:** The DNR-322L provides a flexible and economic alternative to manage and configure multiple network cameras on a centralized device.
- **Megapixel Resolution Support:** The DNR-322L supports high-resolution megapixel recording for vivid video with high clarity.
- **Empowered by mydlink Technology:** The DNR-322L can be easily set up for Internet access. It supports real-time monitoring and playback from everywhere via your Internet browser. The recording is stored on your own HDD rather than on an online cloud, providing both security and privacy.

Complete Network Functionality

- **PPPoE Support:** The NVR can connect to the Internet via an ADSL modem over Ethernet.
- **DDNS Support:** Dynamic DNS is a solution for users without a fixed IP address. With the DDNS service, you can connect to the NVR over the Internet using an easy-to-remember domain name.
- **NTP Support:** Maintaining an accurate record of time is essential if recorded data is to be used as evidence. To ensure that the time recording is always accurate, the NVR can update the system clock from an Internet server using the Network Time Protocol (NTP).
- **DHCP Server:** The NVR can act as a DHCP server for easy deployment when placed in a basic network that has no existing DHCP server.
- **SNMP:** The Simple Network Management Protocol (SNMP) is an application layer protocol that facilitates the exchange of management information between network devices. It helps network administrators to remotely manage network devices and find and solve network problems with ease.

The SNMP consists of the following three key components:

- » **Manager:** Network-management station (NMS), a server which executes applications that monitor and control managed devices.
- » **Agent:** A network-management software module on a managed device which transfers the status of managed devices to the NMS.
- » **Managed device:** A network node on a managed network. For example: routers, switches, bridges, hubs, computer hosts, printers, IP telephones, network cameras, web server, and database.

Fully Functional Recording

- **Flexible Recording Schedule:** Once your cameras have been set up, a highly configurable scheduling system allows for continuous recording or recording during specifically allotted time frames. Each camera can be set to record independently at preset intervals. It also provides event recording based on specific triggers.
- **Recording Automatic Overwrite:** The NVR can be configured to overwrite the oldest data automatically when hard disk space runs out, allowing for continuous and uninterrupted recording.
- **Recording Stop Alert:** The NVR also provides the option to stop recording when the hard disk is full. When the disk reaches capacity, a notification can be sent via e-mail and an audible alarm will sound.

Comprehensive Data and Security

- **Auto Boot after Power Recovery:** The NVR will boot up automatically once the power is restored after a power outage.
- **Access List Control:** Users can specify safe and blocked IP addresses to filter external connections, increasing data security.
- **Multiple User Privilege Control:** Administrators may also choose access privileges for users by specifying the cameras they may have access to for live view, playback, audio, and PTZ functions.
- **Backup Recording Data:** Recorded data is stored in a secure database. This recorded data can be backed up

to additional storage locations periodically or whenever needed.

Flexible Event Management

- The NVR can monitor trigger events from all cameras, such as from motion detection. These can be used to trigger e-mail notifications and recordings, all centrally handled by the NVR.

Instant Live View

- **Full Screen:** Enlarge the display to view full-screen live and recorded video views.
- **Drag-and-Drop GUI:** With multiple channels enabled, users can change channels by dragging and dropping.
- **Camera Name and Status on OSD:** Camera name and recording status are displayed on the OSD (On Screen Display) to help identify the current camera's name and recording status.
- **PTZ:** Users can control pan/tilt/zoom (PTZ) functions for supported cameras from within the interface using the provided buttons or by directly clicking on the video.
- **Audio Support:** Audio picked up by a camera can be played back.
- **Preset Point:** Camera position presets allow you to instantly restore a previously saved view.
- **Digital Zoom:** Videos can be enlarged by digital zoom.

Intelligent Playback

- **AVI Outputs:** Raw video can be exported to AVI format.
- **Playback Speed Control:** Playback speed control allows for fast forward or fast rewind, and step playback can display video one frame at a time.

Checking the Hardware Requirements

To use your DNR-322L, you will need at least one hard drive installed. If you plan to use RAID 1, which protects your data against failure of one hard drive, you will need to install two hard drives.

This section will help you:

- Select the appropriate hard drives
- Determine how much hard disk space you will need
- Ensure your data is protected
- Understand the basic requirements for a router or switch

Selecting hard drives:

You can use hard drives from any manufacturer and with any capacity with your DNR-322L. The D-Link NVR supports standard 3.5" internal SATA drives. If you are unsure, check with your administrator or hard drive retailer/manufacturer to verify that your hard drives meet this standard

Warning - All data on the drives will be erased during installation.

Determining how much hard drive space you need:

In order to protect your data from hard drive failure, your DNR-322L requires more space than what you will use for your data, sometimes more than double the amount of space required. You should select hard drives that are larger in capacity than your maximum storage requirements.

Using a Router or Switch:

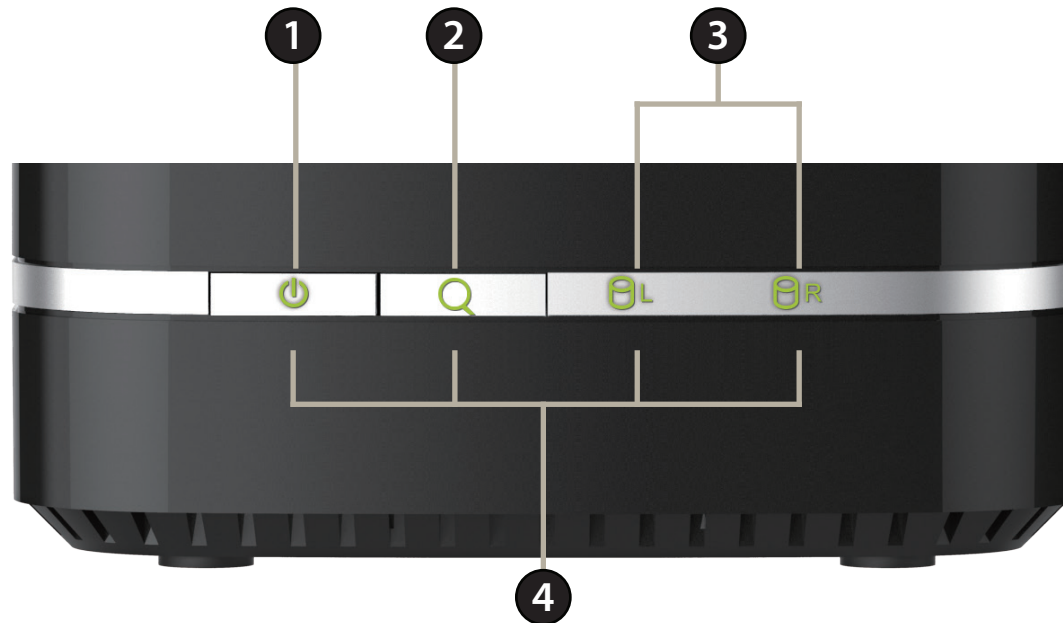
If you are connecting your NVR to a router or switch, your router or switch should support Gigabit Ethernet (1000 Mbit/s) for maximum performance. The NVR will auto-negotiate the highest connection speed available to your router or switch. If you are using port bonding, use a managed switch.

Using an Uninterrupted Power Supply (UPS):

We highly recommend that you use your NVR in conjunction with an Uninterrupted Power Supply (UPS), which will protect against sudden data loss in power outages surges.

Hardware Overview

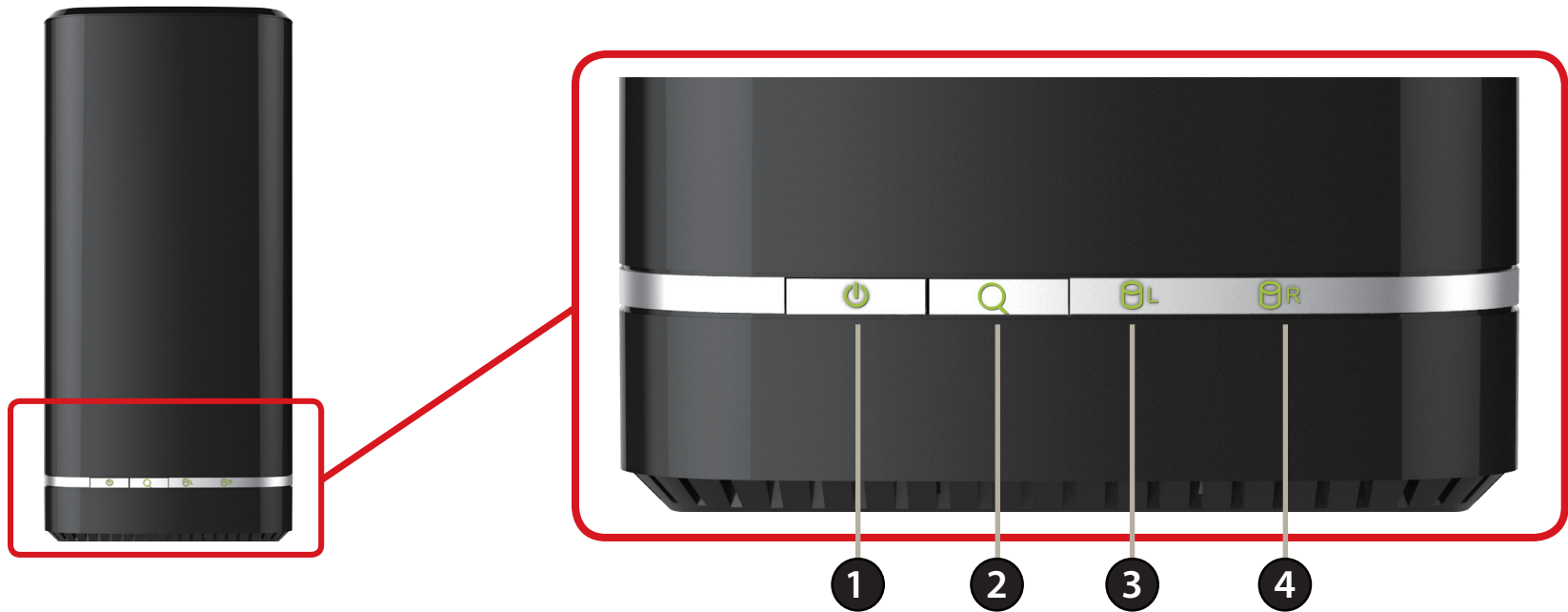
Front View



	COMPONENT	DESCRIPTION
1	Power Button	Press once to power on the NVR. Press and hold the button for more than 5 seconds to power it down.
2	Auto Scan Button	Press this button to automatically scan for cameras on the network.
3	Left/Right HDD	Identifies the left and right installed hard drives.
4	LED Indicators	Illuminates depending on activity (see next page for details).

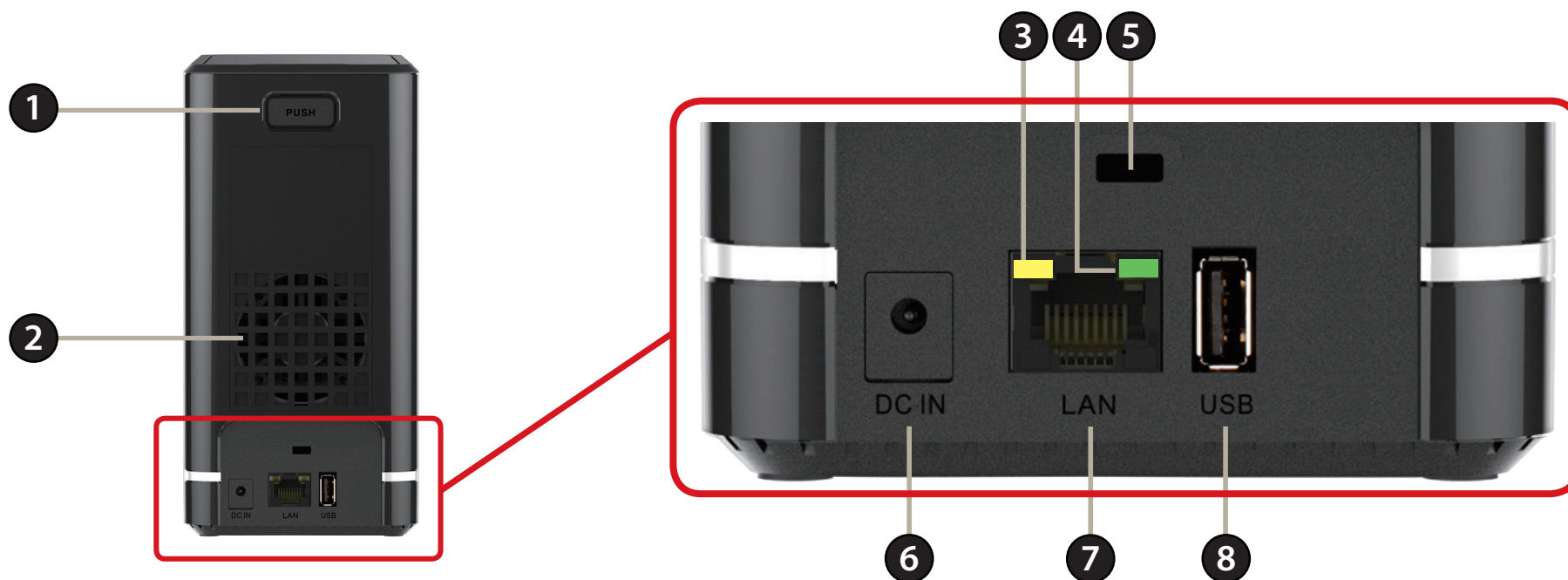
Hardware Overview

LED Description



	LED	Solid Green	Blinking Green	No Light	Solid Red
1	Power	Power on	Device booting or restarting	Power Off	
2	Camera Auto Scan	Searching for cameras		Not searching for Cameras Camera Search Finished	
3	Left HDD	HDD installed	Reading/Writing	No HDD installed	Installed Hard Drive has failed
4	Right HDD	HDD installed	Reading/Writing	No HDD installed	Installed Hard Drive has failed

Rear Panel



	COMPONENT	DESCRIPTION
1	HDD Access Latch	Press the latch to release the top panel for inserting or removing the hard drives.
2	Cooling Fan	A temperature controlled cooling fan cools the hard drive(s). Do not cover or obstruct this outlet. When the temperature inside the unit is below 49 °C the fans rotate at low speed. When the temperature inside the unit is above 49 °C the fans rotate at high speed.
3	10/100 Ethernet LED	A solid yellow light indicates a 10/100 Mbps Ethernet connection is established and will blink during data transmission. This LED will stay off when connected to a Gigabit device.
4	Gigabit Ethernet LED	A solid green light indicates a 1000 Mbps Gigabit Ethernet connection is established and will blink during data transmission.
5	Security Lock	A security device can be attached to the unit to prevent theft.
6	Power Receptacle	Connect the supplied power cord to the receptor.
7	Gigabit Ethernet Port	Use the Gigabit Ethernet port to connect the NVR to your local network.
8	USB 2.0 Port	The type A USB 2.0 port supports connections to UPS devices for power state monitoring.

Bottom Panel



COMPONENT	DESCRIPTION
Product Details	Information about the product - DNR-322L including serial number, part number, manufacturer number etc.
Reset Button	Press and hold this button for more than 10 seconds to restore the factory defaults to the unit.

Product Setup

Setup Wizard - Windows

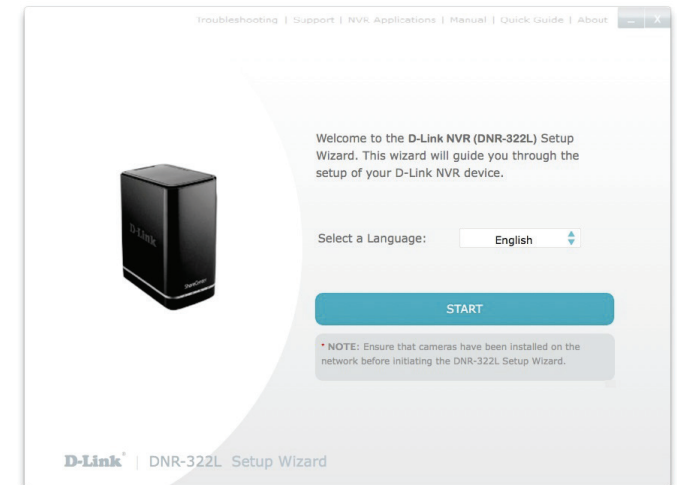
Run the NVR Setup Wizard from the CD-ROM included in your package. The NVR Setup Wizard will walk you through installing and configuring your DNR-322L, including installing the hard drive and connecting it to your network.

Step 1:

Insert the DNR-322L installation CD. If the Setup Wizard program does not automatically start on your computer, click the Start button and type D:\autorun.exe (where D: represents the drive letter of your CD-ROM drive) and press Enter.

Step 2:

Double-click the DNR-322L Setup Wizard file to start the Setup Wizard. When the wizard appears, click the Start button to begin the wizard, and follow the instructions from the Setup Wizard to finish setting up your NVR.



If you do not have a CD-ROM drive, or the CD is missing, visit <http://www.mydlink.com/support> to download the Setup Wizard.

Setup Wizard - Mac

Run the NVR Setup Wizard from the CD-ROM included in your package. The NVR Setup Wizard will walk you through installing and configuring your DNR-322L, including installing the hard drive and connecting it to your network.

Step 1:

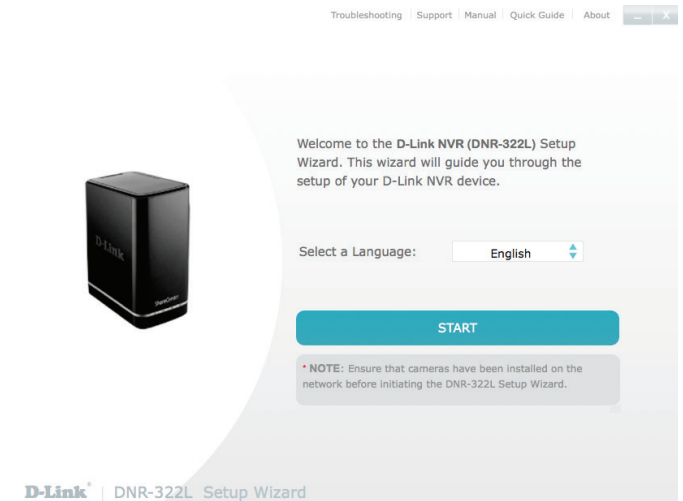
Insert the DNR-322L installation CD in the CD-ROM drive. After you have inserted the CD into your computer, go to the CD drive directory, and double-click the Mac Utility folder to enter.



SetupWizard

Step 2:

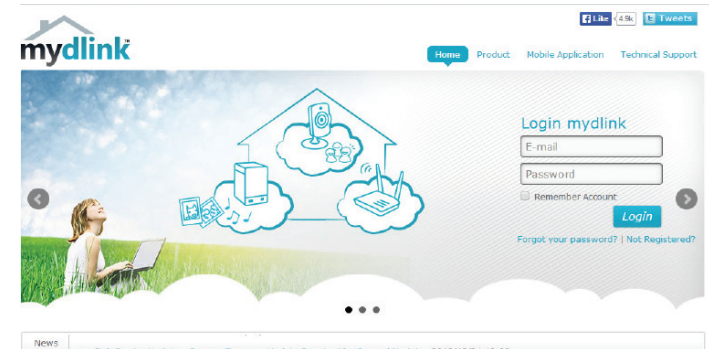
Click on the Start button to start the wizard, and follow the instructions from the Installation Wizard to finish setting up your NVR.



If you do not have a CD-ROM drive, or the CD is missing, visit <http://www.mydlink.com/support> to download the Setup Wizard.

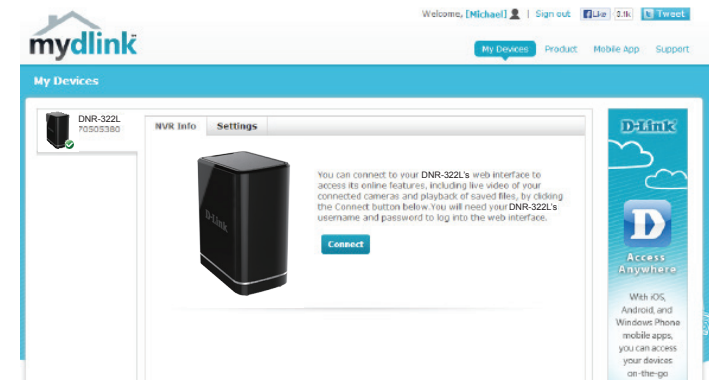
mydlink mydlink Website

After registering your NVR with a mydlink account in the NVR Setup Wizard, you can remotely access your NVR from **www.mydlink.com** from a computer, tablet, or smartphone.



After you log in to your mydlink account, you will be taken to the **My Devices** page.

To connect to your NVR, click on the **Connect** button and provide your password to complete the login process. After you have connected to the NVR, you will be taken to the Live Video page. (Refer to "Live Video" on page 29)



NVR Status

Here, you can see the online status of each NVR. Your online status may be one of the following:



A green checkmark indicates that your NVR is online and ready to use.



A yellow exclamation point indicates that your NVR is online, but the NVR password has changed. You will need to enter your new NVR password to access your NVR again.



A red X indicates that your NVR is offline and currently cannot be accessed remotely.

If your NVR is offline, try the following:

- Check to make sure that the Internet connection to your NVR is working properly.
- Try restarting your Internet router.
- Check your cable connections and make sure they are connected securely.
- Check to make sure that the LED on your NVR is lit solid green.







If you still cannot access your NVR, reset your NVR and run the NVR Setup Wizard again from the CD-ROM included in your package.

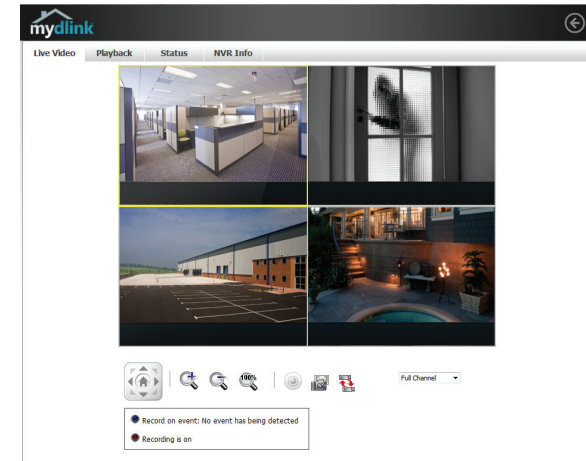
Live Video

After you have connected to your NVR, the Live Video tab will be selected by default and will display the Live Video feed. You can choose a different camera from the drop down list, or you can choose to view all the available channels.

A notice is displayed below the controls if any events have been recorded, or if the NVR is currently recording.











The available controls are detailed below.

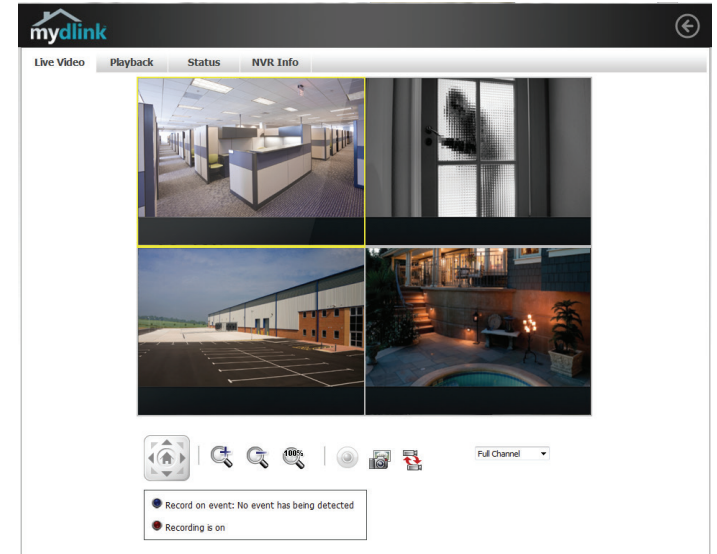
	Control Pad	This control pad can be used to pan, tilt, and zoom (PTZ) a dome camera, or electronically pan, tilt, and zoom (PTZ) within the camera's predefined view area, if one has been defined.
	Zoom Control	Use the + and - buttons to zoom in or out.
	Actual Size	Use this control to view video in its native resolution.
	Record	Use this control to start/stop recording.
	Save to Image	Use this option to save a snapshot image.
	Glance	Use this option to toggle glance mode.



Playback

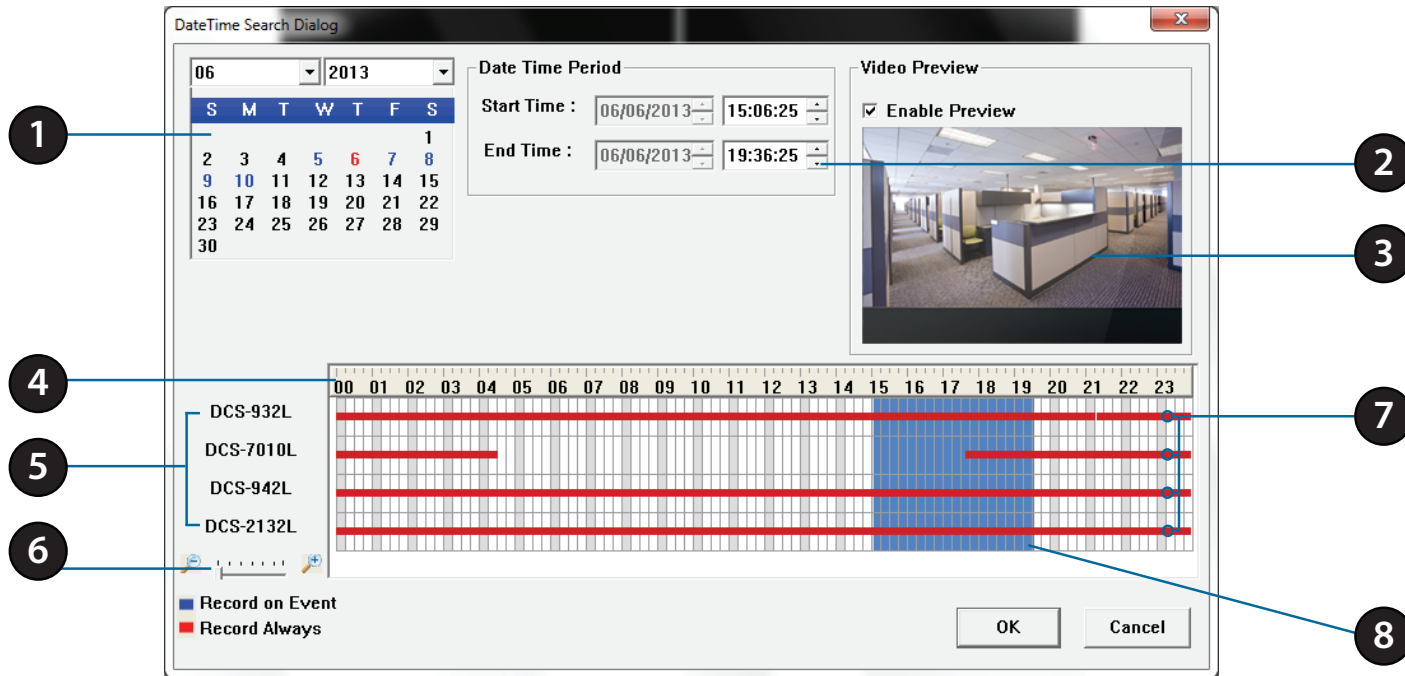
The Playback tab enables you to review pre-recorded video. The available playback controls are detailed below.

	Playback Seeker	Use the playback seeker to quickly jump to a specific point in the recording.
	Volume Control	Adjust the slider to increase or decrease the audio volume.
	Open Recording	Click on this control to open the saved recordings search dialog. Refer to "Open Recording" on page 18.
	Pause Playback	Use this control to pause playback.
	Stop Playback	Use this control to stop playback.
	Step Back/Forward	Use these controls to pause playback and either step back one frame or advance forward by one frame.
	Speed Down/Up	Use these controls to slow down or speed up playback.
	Zoom Control	Use the + and - buttons to zoom in or out.
	Actual Size	Use this control to view video in its native resolution.
	Save to Image	Use this option to save a snapshot image.



Open Recording

Click the **Open Recording** button to access the Date-Time Panel and select the video recordings which you would like to review.



1	Date Selection Area	Select the year, month and day of the recording you wish to view. Dates with recordings available for playback are highlighted blue.
2	Time Range Selection	Select a beginning and end time for the recording you wish to view.
3	Video Preview	When Enable Preview is checked, this area will display a preview.
4	Timeline	This timeline will adjust according to the level of zoom selected.
5	Available Streams	This area lists the recording devices available.
6	Zoom Slider	Use the zoom slider control to zoom in and out of the timeline.
7	Available Recordings	Available recordings are shown in the timeline. Blue bars indicate an event was recorded. Red bars indicate the camera is set to always record.
8	Selected Period	Click within the timeline to select a recording period.

Status

The Status tab shows information about storage drives and cameras connected to the NVR.

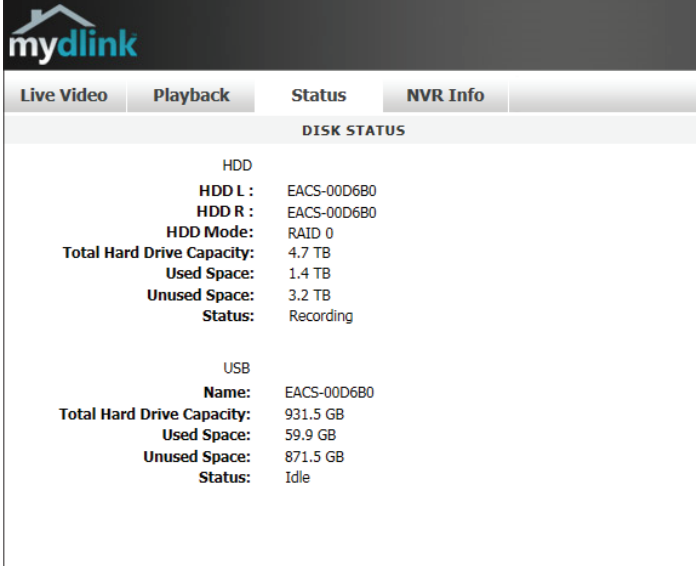
Name: This shows the name given to the storage device attached to the HDD or USB port.

Total Hard Drive Capacity: This shows the total amount of storage space available on the storage device attached to the HDD or USB Port.

Used Space: This shows the used storage space of the storage device attached to the HDD or USB Port.

Unused Space: This shows the amount of space available for recording on the storage device attached to the HDD or USB Port.

Status: This shows if the storage device attached to the HDD or USB port is currently being recorded on.



Live Video	Playback	Status	NVR Info
DISK STATUS			
HDD			
		HDD L :	EACS-00D6B0
		HDD R :	EACS-00D6B0
		HDD Mode:	RAID 0
Total Hard Drive Capacity:		4.7 TB	
Used Space:		1.4 TB	
Unused Space:		3.2 TB	
		Status:	Recording
USB			
		Name:	EACS-00D6B0
Total Hard Drive Capacity:		931.5 GB	
Used Space:		59.9 GB	
Unused Space:		871.5 GB	
		Status:	Idle

NVR Info

The NVR Info tab shows you information about your NVR.

Device Name: The Device Name is a unique name that can help you to identify your NVR.

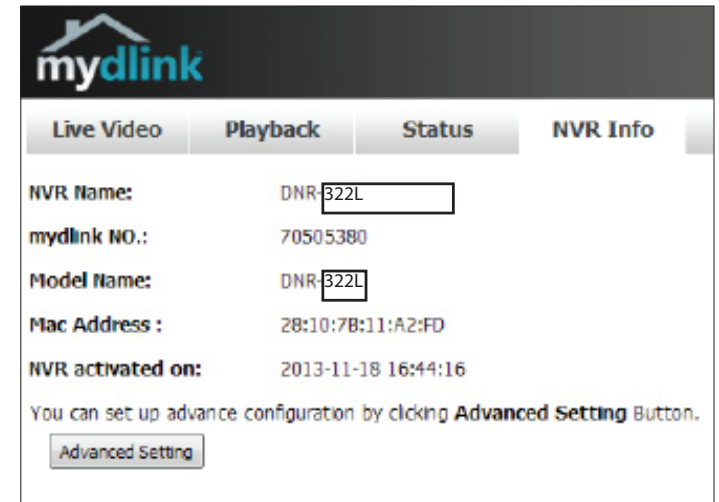
mydlink No.: Displays the mydlink number of your device.

Model Name: Displays the model name of your device.

MAC: Displays the MAC address of your device.

NVR activated on: Displays the time and date that your device was added to mydlink.

Advanced Setting: This section takes you to the login page for the NVR's Web GUI Interface. After you log in, you can adjust advanced settings for the NVR.



mydlink View - NVR App

Search for **mydlink View - NVR** in the App Store or Google Play to download and install the free app on your smartphone or tablet.



The mydlink View - NVR app requires iOS version 5.1.1 or above or Android version 4.01 or above.

Once the download has been completed, launch the “mydlink View - NVR” app and log in to your mydlink account. (Refer to “mydlink” on page 14 to learn how to add the NVR to your mydlink account.) Select your DNR-322L from the device list to access the live video from the connected cameras.

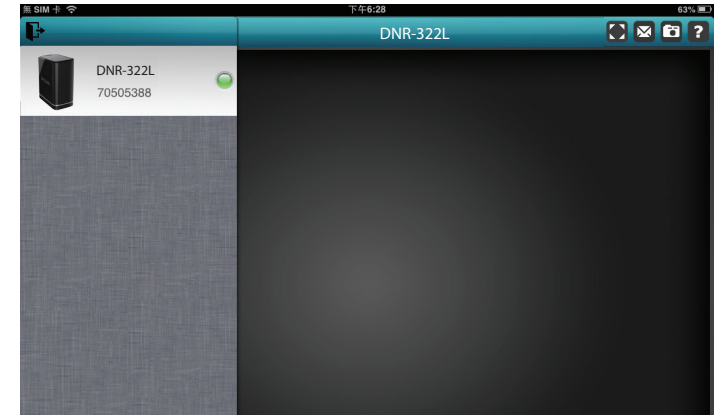
Now you can remotely access the live video, playback recorded videos, and manually enable or disable recording.



First Use - Select Your Device

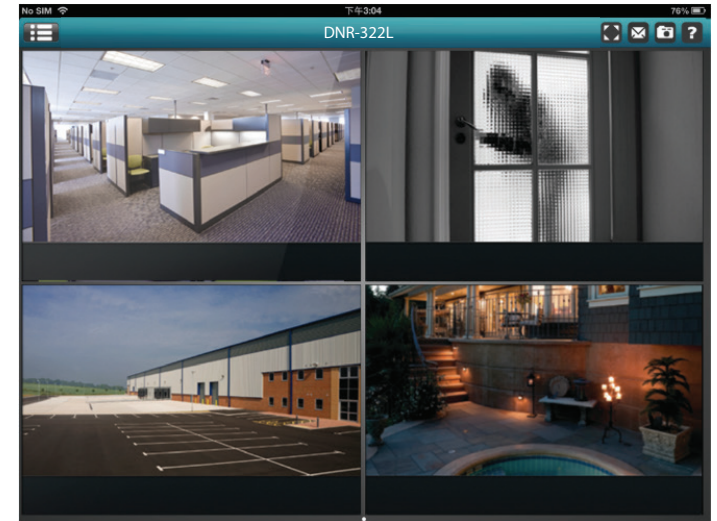
Before using the mydlink View - NVR app for the first time, please ensure to add your DNR-322L to your mydlink account first.

After starting the mydlink View - NVR app, your DNR-322L will be displayed in the My Device list. The app will connect to your DNR-322L, and you can then view live video and playback from your recordings archive via your device.



Live View

To view your camera feed on a tablet or smart phone, tap on the DNR-322L icon and the mydlink View-NVR will open the Live video panel.

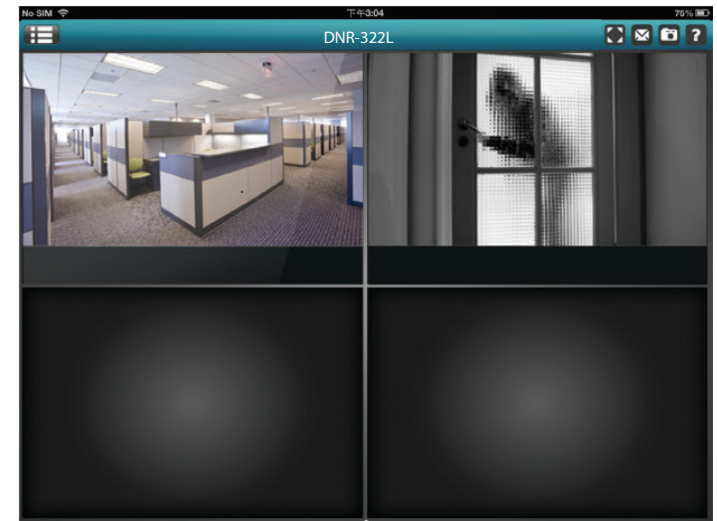


iPhone/iPad Touch Grid View

On an iPhone or an iPad, mydlink View-NVR can display the Device List of your mydlink account on the main screen. Tap on your DNR-322L to enter the 4-grid view.

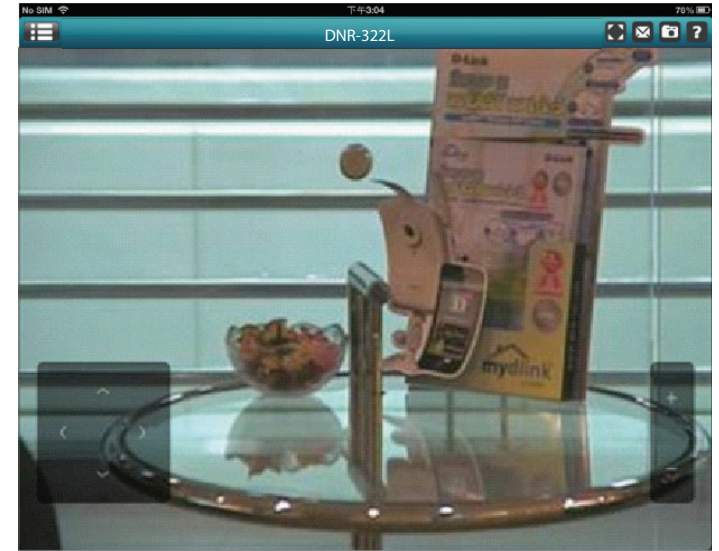
iPad Grid View

On an iPad, mydlink View-NVR can expand and shrink the Device List of your mydlink account at the left-hand side of the panel. Click on your DNR-322L to enter live the video view. Double-tap on one of the channels to start a single-channel live video. Double-tap again to return back to the grid view.



Channel selection

- In single channel mode, you can swipe through the video channels to see the previous or the next video channel of the cameras connected to the DNR-322L.
- Double-tap on one of the channels to select a single-channel live video stream.
- Tap on the **My Device** button to return to the Device List of your mydlink account.

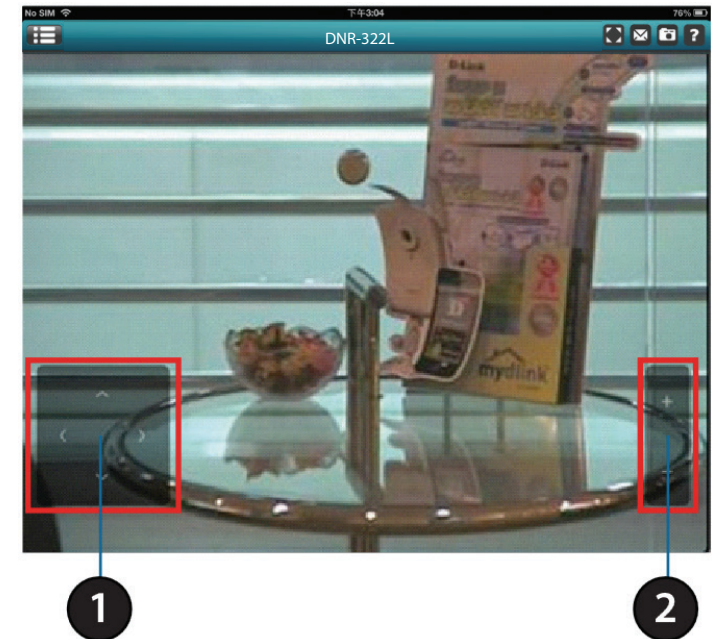


Pan Tilt Zoom (PTZ)


To access PTZ controls, use a two finger tap while streaming a single channel video stream and the PTZ control panel will appear.

Use a two finger tap on the video stream again to disable the PTZ control panel.

Note: The PTZ control function must be enabled on the camera connected to the DNR-322L in order for mydlink View-NVR to control the PTZ function. See "Live Video" on page 29 for more information.




Video Stretch

In live view or playback archive mode, you can tap on the video stretch button () to stretch the video to full screen. Tap the button again to disable stretch.

Note: This function may alter the aspect ratio of the video stream.


Snapshot


While streaming a single channel, tap the Snapshot button () to capture a snapshot. The image will be saved to the device's camera roll.

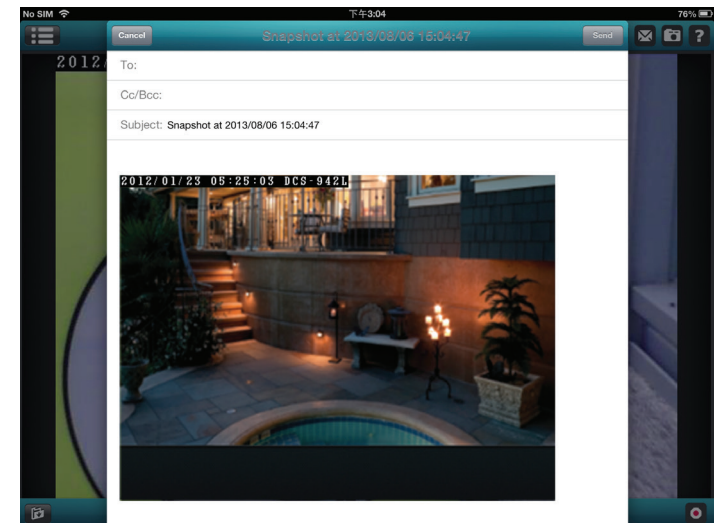
While viewing video in grid view, tap the Snapshot button () to take snapshots of all the channels. The images will be saved to the device's camera roll.

Note: The saved snapshot will be at the original resolution of the IP camera video.


E-Mail

While streaming a single-channel video, tap the e-mail button () to capture a snapshot and insert it into an e-mail. Complete the **To**, **Cc/Bcc** fields as required and click **Send** to send the e-mail with snapshot attached or click **Cancel** to cancel the operation.

While viewing in grid view, tap the e-mail button () to capture a snapshot of all the channels and insert all the snapshots into a single e-mail. Complete the **To**, **Cc/Bcc** fields as required and tap **Send** to send the e-mail with snapshot attached or tap **Cancel** to cancel the operation.

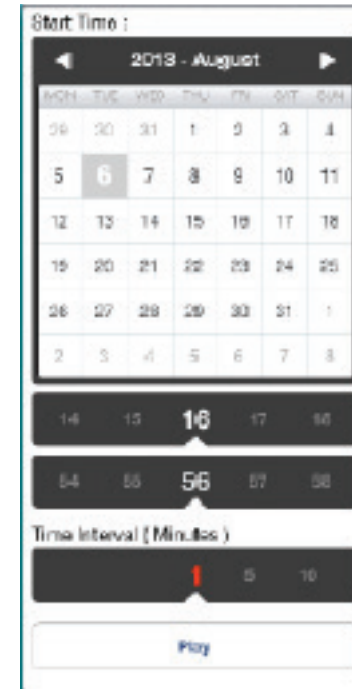


Video Playback

The video playback function is only available in single view mode. Tap the open recording button () while in single channel mode to bring up the playback selection panel.

Use the playback selection panel to scroll through your video recordings archive.

Scroll to the date and time you wish to play back, and tap **Play**.



Video Playback Control

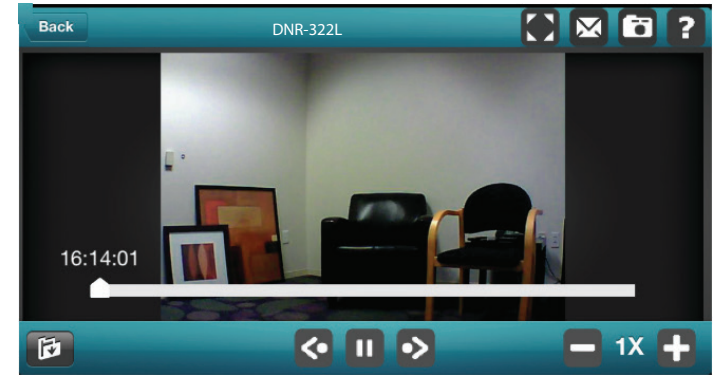
While the video recording is playing in single view mode, tap the playback control button (⏮ ⏸ ⏭) to control the direction of the video playback.

The control buttons are:

- Step backward for 1 second (⏮)
- Play/pause toggle (⏸)
- Step forward for 1 second (⏭)

Use the speed panel (⏪ 32X ⏩) to control the speed of video playback from x1 through x32 speed.

Note: *The quality of display performance will vary according to network bandwidth availability.*



Web Utility

You can access the configuration interface for the NVR on your PC by running the **NVR Search Utility** or manually opening a web browser and enter the IP address of your NVR. Enter **admin** as the username and enter the password you created during setup.

You can also control and manage the NVR locally by connecting it to a TV or monitor through HDMI and plugging in a USB mouse to control the interface.

This section will enable you to configure and view the live video from your network cameras.



LIVE VIDEO - Shows the live video of network cameras and controls PTZ functions.



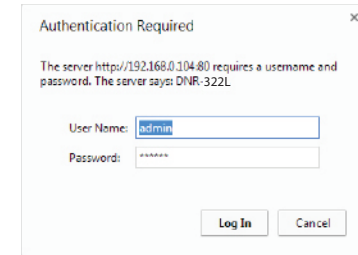
PLAYBACK - Displays recorded video and exports snapshots or video.



LOG OUT - Logs out of the NVR.



SHUT DOWN - Shuts down the NVR.



Live Video

This section describes configuring and viewing live video from your network cameras, the functions of the live video screen, and the PTZ functions.

Step 1: Click the **LIVE** button at the top of the screen.

Step 2: Select a camera(s) from the camera list on the right and then drag it to the location to where you want it to be displayed.

Step 3: You can change the video display position by dragging it to another position.



Notes

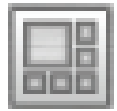
1. The selected video will be marked with a red line.
2. Enable EPTZ: Right-click on the video and click on **Enable EPTZ**. Click the + or – button to zoom in or zoom out the view. The lower right square flashing on the video grid indicates the correspondent view of the camera.
3. If the camera supports PTZ, you can control the selected camera from the PTZ panel.
4. If the camera supports audio, you can check **Enable Audio** from the right-click menu and listen to live audio of this channel.
5. Snapshot: Right-click on the video and select the snapshot function to capture a specific video image immediately.
6. Right-clicking on the video will show the option to **Full Screen**. Press the ESC button on the keyboard to return to normal display.
7. Swap: Right-click on the video and select **Swap** to display a different video channel.



Single Screen: Users can select to view single camera.



View as 2x2: View four cameras on one screen.



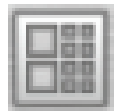
View as 1 + 5: View six cameras with one enlarged.



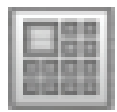
View as 3x3: View nine cameras on one screen.



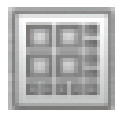
View as 2 + 8: View 10 cameras with two enlarged views along the top.



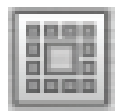
View as 2 + 8: View 10 cameras with two enlarged views along the left side.



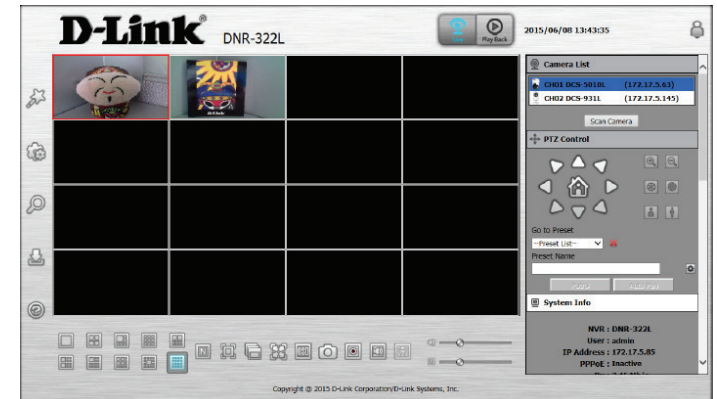
View as 1 + 12: View 12 cameras with one enlarged view in the top left.

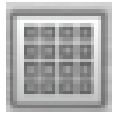


View as 4 + 9: View 13 cameras with four enlarged views in the top left.



View as 12 + 1: View 13 cameras with one enlarged view in the center.





View as 4x4: View 16 cameras on one screen.



View N: Cycle between 2x2, 3x3, and 4x4 channel view.



Full Screen: Select to display the video with full screen. Pressing the **ESC** button on the keyboard will return to normal display.



Glance: Activate auto scan to rotate the channels/cameras on the display screen.



Actual Size: Switch the video to the actual size or fill the window.



OSD: Display the information on the video.



Snapshot: Click to take a snapshot and save it to an album



Manual record: Click to enable or disable manual recording



Speaker On/Off: Turn the speaker on or off.



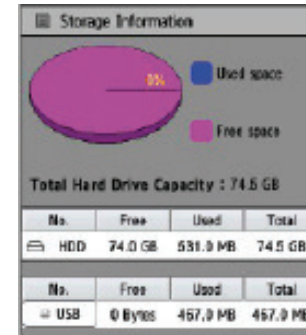
Mic On/Off: Turn the microphone on or off.



PTZ Control: You can control the camera view by utilizing the PTZ (pan, tilt, and zoom) camera control panel to adjust the camera angle. This function is only available with cameras that support the PTZ function.

System Info: Displays Storage Information, such as HDD and USB drive information.

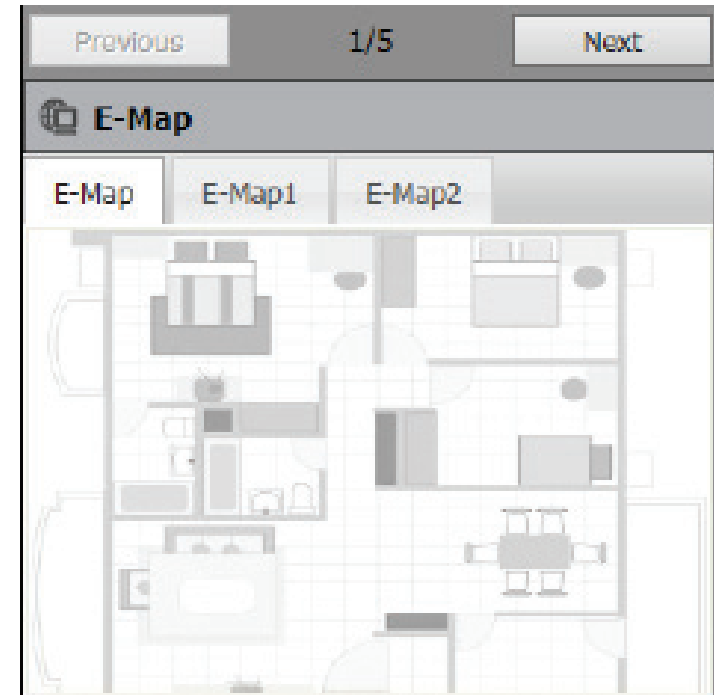
Log: Displays the System, NVR, and Event logs.



Log

Date	Time	Info
2014/02/14	10:26:58	system fan error.
2014/02/14	10:26:58	usb2 mounted success
2014/02/14	10:26:54	hdd mounted success
2014/02/14	10:26:52	network set to DHCP.
2014/02/14	10:26:49	system power on.
2014/02/14	10:26:46	system normal power
2014/02/14	10:24:17	camera device 192.1
2014/02/14	10:18:06	camera device 192.1
2014/02/14	10:17:55	camera device 192.1
2014/02/14	10:17:46	camera device 192.1

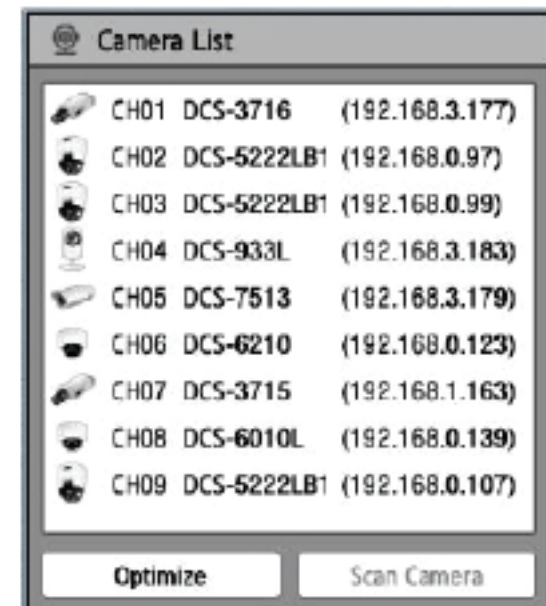
E-Map: Check E-map to see camera(s) location and connection status.



Camera List: Displays the cameras connected to the NVR and their respective IP addresses.

Optimize: Click **Optimize** to fine tune your camera settings for smoother live viewing and video recording.

Scan Camera: Click **Scan Camera** and the NVR will use Admin as the user name and a blank password to automatically add any network cameras from the same local area network. The device buzzer will sound to indicate scanning has been initiated.



Playback

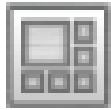
This section shows the NVR's recorded video feeds. You may select any of the available icons listed below to play back, adjust, and export the recorded video streams.



Display Single feed: Use this button to switch to a single camera feed in the live video display area.



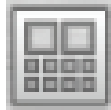
Display 2 x 2 feed: Use this button to switch to view four cameras in the live video display area.



Display 1 + 5 feed: View six cameras with one enlarged.



Display 3 x 3 feed: Use this button to switch to view nine cameras in the live video display area.



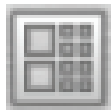
Display 2 + 8 feed: View 10 cameras with two enlarged views along the top.



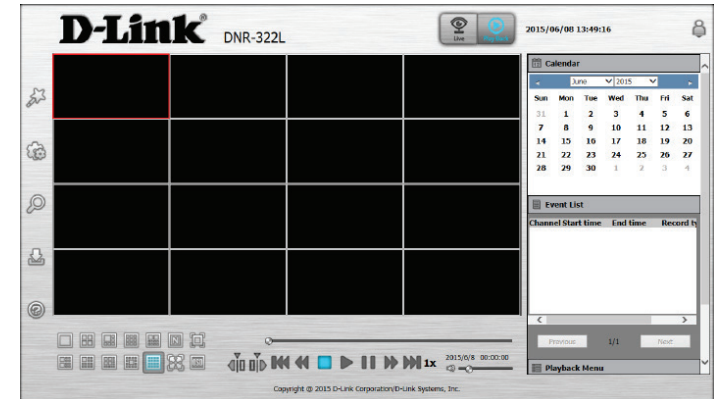
Display N feed: Cycle between 2x2, 3x3, and 4x4 channel view.

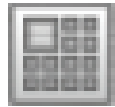


Actual Size: Use this button to display the recording in its original resolution.

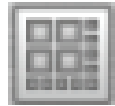


Display 2 + 8 feed left: View 10 cameras with two enlarged views along the left side.





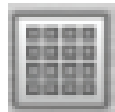
Display 1 + 12 feed: View 12 cameras with one enlarged view in the top left.



Display 4 + 9 feed: View 13 cameras with four enlarged views in the top left.



Display 1 + 12 feed: View 13 cameras with one enlarged view in the center.



Display 4 x 4 feed: Use this button to switch to view 16 cameras in the live video display area.



Full Screen: Use this button to switch to a full screen view of the live video feed.



On-screen Display Settings: Use this button to configure the various settings for the on-screen display.



Play/Stop/Pause: Select a camera/video and click this button to play/stop/pause a particular channel.



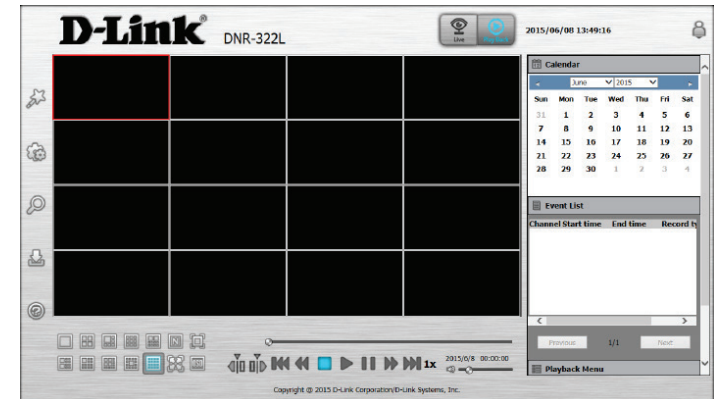
Speed: Click to increase or decrease the playback speed.



Cue in/Cue Out: Click the **Cue In** or **Cue Out** button to set the period for Save Video.



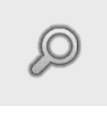




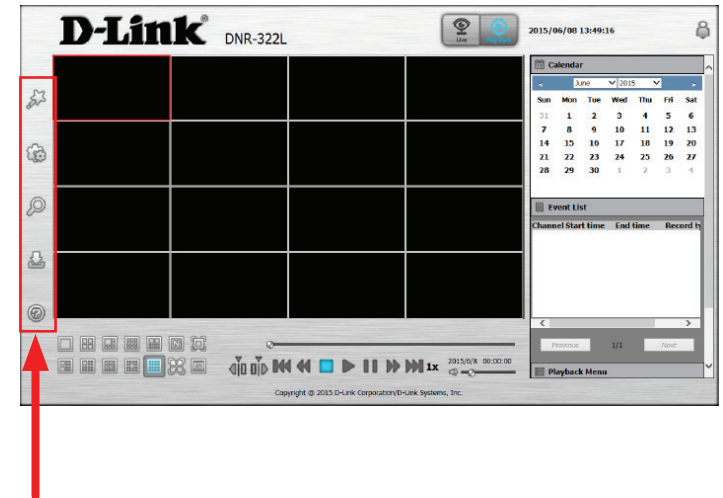
Reverse/Step Forward: Click to pause the playback and move to next frame or last frame.



Menu Bar

By moving your mouse to the left side of the screen, the Menu bar will appear. You can click the icons in this bar to access different sections, which are described in the following pages.

	Setup Wizard: This will start the Setup Wizard, which will help you set up and configure the basic settings of the NVR. Refer to "Setup Wizard" on page 37.
	Setup: This will open the settings page of the NVR, where you can manually configure the different settings and features of the device. Refer to "Setup" on page 38.
	Camera Search: This will let you automatically search for new cameras to add to the NVR. Refer to "Camera Search" on page 57.
	Backup: This will let you back up the recordings stored on the NVR to a USB drive, Samba server, or FTP server. Refer to "Backup" on page 58.
	Help: This shows more information about using the NVR. Refer to "Help" on page 60.



Setup Wizard

The Setup Wizard, helps you set up and configure the basic settings of the NVR. Select the language you want to use, then click the **Next** button to start the wizard.



Setup

Network

Network Setup

Network Setup lets you configure how you connect the NVR to the Internet.

DHCP: Select this connection if you have a DHCP server running on your network and would like a dynamic IP address to be automatically updated to your NVR.

Static IP: You may obtain a static or fixed IP address and other network information from your network administrator for your NVR. A static IP address will simplify access to your NVR in the future.

IP Address: The fixed IP address.

Subnet Mask: The default value **255.255.255.0** is used to determine if the destination is in the same subnet.

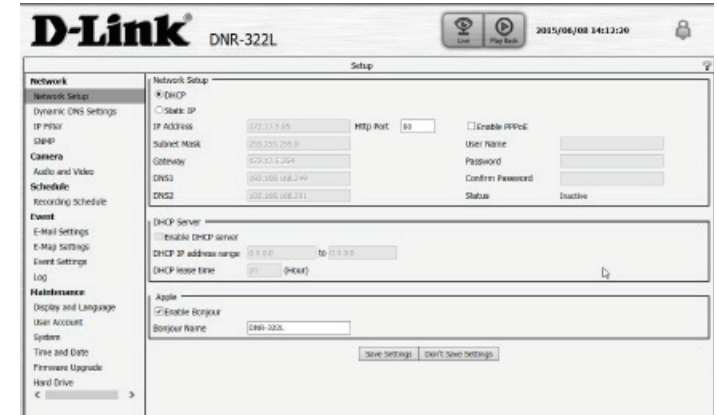
Gateway IP Address: The gateway forwards frames to destinations in a different subnet. Invalid gateway settings may cause the failure of transmissions to a different subnet.

DNS1: Primary domain name server that translates names to IP addresses.

DNS2: Secondary domain name server to backup the primary one.

Enable PPPoE Enable this setting if your ISP (DSL service) is using PPPoE. You may already have a Username and Password provided by your ISP, or you may need to contact your ISP. The connection status will be determined automatically by the system.

DHCP server: Enable or disable the DHCP server. If your network doesn't have a DHCP server, enable this feature for easier local network setup.



Enable Bonjour: Enable the Bonjour service to allow users to discover the DNR-322L with Apple devices.

Bonjour Name: Enter the name of the device that will be used to identify the DNR-322L when using Apple devices.

The screenshot shows the 'Setup' page for the D-Link DNR-322L. It is divided into three main sections: Network Setup, DHCP Server, and Apple. The Network Setup section includes fields for IP Address (192.173.85), Subnet Mask (255.255.255.0), Gateway (192.173.254), DNS1 (192.168.168.149), and DNS2 (192.168.168.251). It also has a field for HTTP Port (80) and a checkbox for 'Enable PPPoE'. The DHCP Server section has a checkbox for 'Enable DHCP server', a field for 'DHCP IP address range' (0.0.0.0 to 0.0.0.0), and a field for 'DHCP lease time' (24 hours). The Apple section has a checkbox for 'Enable Bonjour' and a text field for 'Bonjour Name' (DNR-322L). At the bottom, there are 'save settings' and 'don't save settings' buttons.

Dynamic DNS Settings

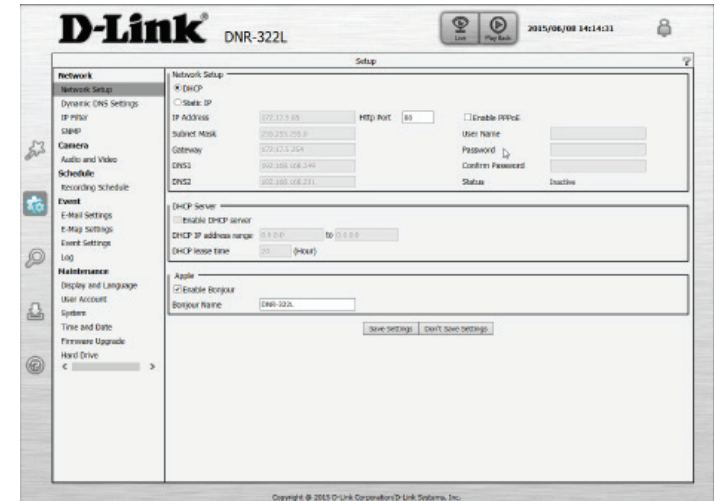
Enable this option only if you have purchased a domain name and registered with a dynamic DNS service provider. The following parameters are displayed when the option is enabled.

Server Select a dynamic DNS service provider from the drop-down menu or
Address: input a DDNS server IP address other than dyndns or dlinkddns.

Host Name: Enter your host name. For example: myhost.mydomain.net.

Username: Enter the username for your dynamic DNS account.

Password: Enter the password for your dynamic DNS account.



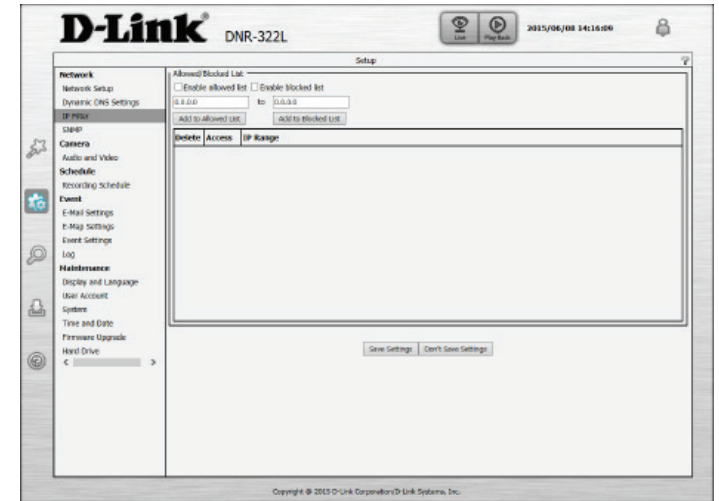
IP Filter

By enabling IP filtering you can allow or block visitors from accessing the NVR. To add IP addresses to the Allowed or Blocked lists, enter the IP address range you want to allow or block into the text boxes, then click on **Add to Allowed List** or **Add to Blocked List**.

Enable Allowed List: Enabling this will allow only the IP addresses in the allowed list to access your NVR.

List: Note: Make sure you enter the IP address of the PC you use to access the NVR before enabling this option, or you may not be able to access it afterwards.

Enable Blocked List: Enabling this will block all IP addresses in the blocked list from accessing your NVR.



Camera

Audio and Video

This section will allow you to configure and modify video, audio, and image settings for each camera.

The Video tab has the following settings:

Name: The name of the camera is displayed here.

Video Format: Select the video format.

Frame Rate: Select the frame rate. 15 is the default.

Resolution: Select the resolution. 1280 x 800 is the default.

Note: The system will adjust the frame rate automatically based on the maximum frame rate which the camera can support.

Quality: Select the bit rate and fixed quality.

The Audio tab has the following settings:

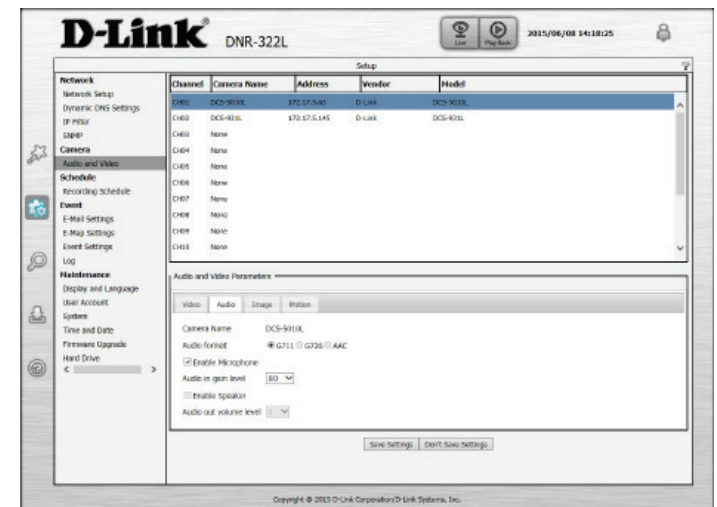
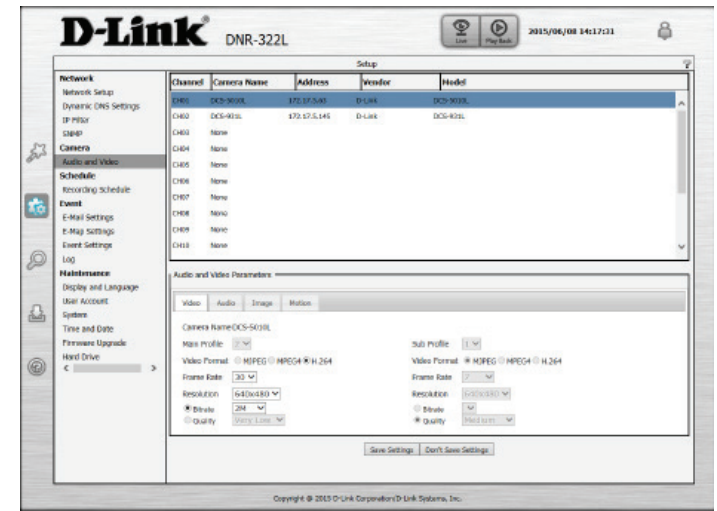
Audio Format: Select the audio format.

Enable Microphone: Turn the microphone on and off.

Audio in Gain Level: Select the audio in gain level.

Enable Speaker: Enable audio out on the camera (if supported).

Audio Out Volume Level: Adjust the volume.



The Image tab has the following settings:

Brightness: Adjust the brightness.

Contrast: Adjust the contrast.

Saturation: Adjust the saturation.

Sharpness: Adjust the sharpness.

Enable Video Motion: Click on the check box to enable or disable motion detection settings.

The Motion tab has the following settings:

Brightness: Adjust the brightness.

Contrast: Adjust the contrast.

Saturation: Adjust the saturation.

Sharpness: Adjust the sharpness.

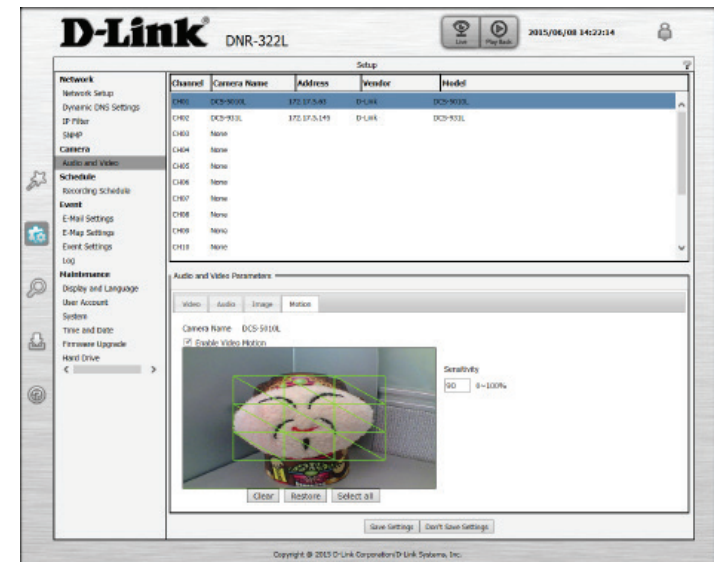
Enable Video Motion: Click on the check box to enable or disable motion detection settings.

Sensativity: Specify the amount of difference required to determine whether there was motion.

Clear: Clear all motion detection area selections on this channel.

Restore: Restore previous motion detection area selections on this channel.

Select All: Click on the check box to select all motion detection area selections on this channel.



Schedule

Recording Schedule

Once the cameras have been set up, a highly configurable scheduling system allows for continuous recording or recording during specifically allotted time frames. Each camera can be set to record independently at preset intervals. It also provides event recording based on specific triggers. The NVR also can be configured to overwrite the oldest data automatically when Hard Disk space runs out, allowing for continuous and uninterrupted recording. You can specify the number of days the recording should be kept (within the limits of the Hard Disk capacity).

Set Recording Mode

Enable Schedule Recording: Record according to a schedule.

Enable Automatic Overwrite: Select this option to automatically empty disk space when the disk space is full. This will overwrite the earliest recorded video with the latest video one day at a time.

Enable Audio Record: Set the duration to store recorded video clips. After the duration, the clips will be purged.

Store Video [x] Days: Keep at least [x] days of video footage on hard disk when the video recycles.

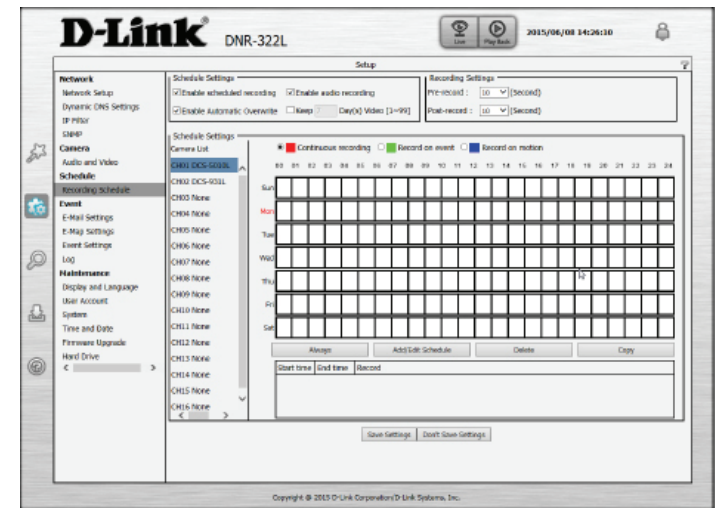
Set Recording Schedule

Always Record: Click this button to enable always on recording for all IP cameras.

Add/Edit Schedule: Select a camera from the camera list, and click **Add/Edit Schedule** to create a new schedule for the selected camera.

Delete Schedule: Select a camera from the camera list, and click **Delete Schedule** to delete the schedule for the selected camera.

Copy Schedule: Select a camera from the camera list, and click **Copy Schedule** to create a duplicate schedule.



Set Recording Schedule Configuration

1. Select one of the cameras from the list and click on **Add/Edit Schedule**.
2. Choose a recording mode, the available options are **Continuous Recording**, **Record on event**, and **Record on motion**.
3. Enter the desired **Start time** and **End time**, and choose a day of the week that the recording function will be active.
4. Press the **OK** button to save the new schedule.

Note:

- When configuring the Motion Detection event, be sure to set up the motion detection function on your camera first.
- After changing the motion detection settings of your camera, be sure to disconnect the camera from the NVR and then re-connect it to update all new changes.
- Alternatively, you can drag the time bar to change the recording period. The red bar represents the **Continuous Recording** feature and the blue bar represents the **Record on motion** feature.

Screenshot of the Schedule Settings dialog box. The dialog has a title bar "Schedule Settings" with a close button. It is divided into two main sections: "Mode" and "Time". Under "Mode", there are three radio button options: "Continuous recording" (selected with a red square), "Record on event" (with a green square), and "Record on motion" (with a blue square). Under "Time", there are two rows of time selection: "Start time" with dropdowns for "11" and "12", and "End time" with dropdowns for "14" and "26". Below the time selection, there are radio button options for the days of the week: Sunday, Monday (selected), Tuesday, Wednesday, Thursday, Friday, and Saturday. At the bottom right of the dialog, there are "OK" and "Cancel" buttons.

Event E-Mail Settings

If an event occurs, such as motion detection, or hard disk failure, you will receive an e-mail notification. Here you can configure your e-mail notification settings.

Sender Email Address: Input the sender's e-mail address.

Server Address: SMTP (Simple Mail Transport Protocol) server IP address.

User Name: Enter the user name for your SMTP account.

Password: Enter the password for your SMTP account.

Port: Enter the port used by your SMTP server. Tick the checkbox here this if your e-mail server uses SSL protocol.

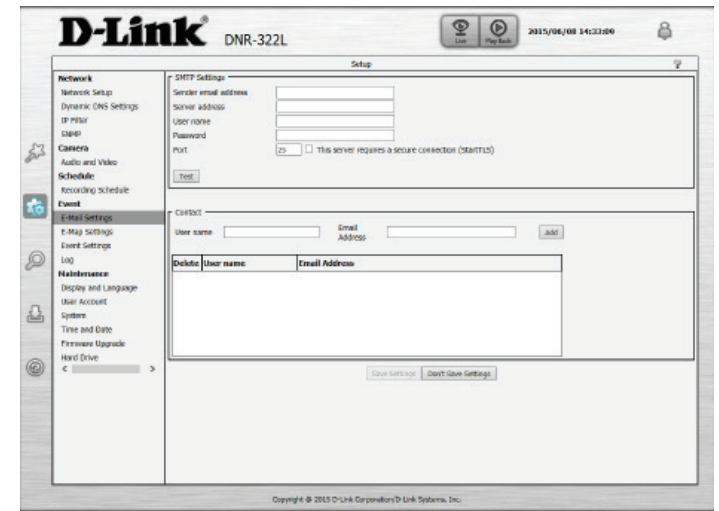
Test: Click this button and the system will send a test mail to verify whether your settings are correct.

Adding Contacts

Step 1: Insert the name of a new contact.

Step 2: Insert the e-mail address of this new contact.

Step 3: Click **Add**.

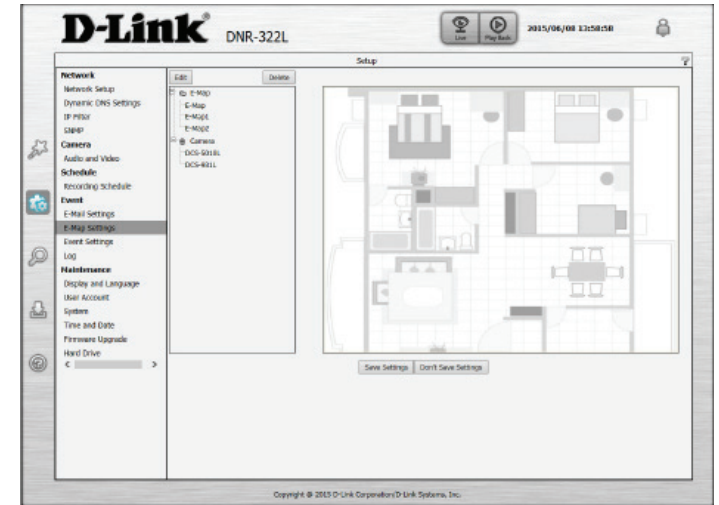


E-Map Settings

The E-Map lets you view where cameras are placed via a blueprint of your home or business. When an event occurs, the E-map event indicator will show the location of the event. You can upload your E-Map to the NVR. The maximum file size is 20K Bytes in BMP and JPG file format. You can then drag and drop camera icons onto the E-Map indicating camera placement.

Edit: Upload your graphic map.

Delete: Delete a camera icon from the map.



Event Settings

This page lets you configure what to do when an event is triggered by a camera, such as when motion is detected. The NVR can then perform an action, such as sending an e-mail notification.

For **Camera Event Settings** and **System Event Settings**:

Step 1: Select an event to listen for:

Connection Lost: Alert is sent when connection is lost.

Motion Detected: Alert is sent when motion is detected.

Passive Infrared: Alert is sent when passive infrared sensor is triggered.

Digital Input: Alert is sent when the signal voltage is above or below a specific threshold.

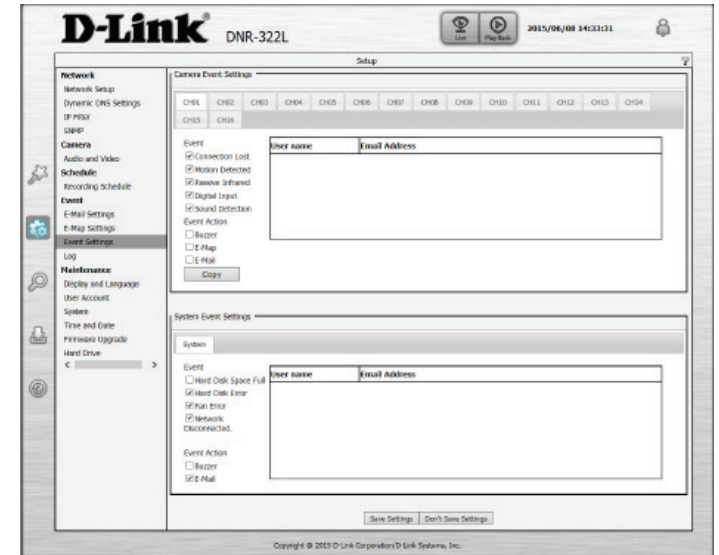
Sound Detection: Alert is sent when a sound is detected. Applies only to cameras which have audio recording enabled.

Hard Disk Space Full: When the Overwrite function is not enabled, the NVR will stop recording when the HDD is full and will send an alert.

Hard Disk Error: An alert will be sent if there is an error with the hard disk.

Fan Error: An alert will be sent if there is a fan error.

Network Disconnected: An alert will be sent if the network connection is lost.

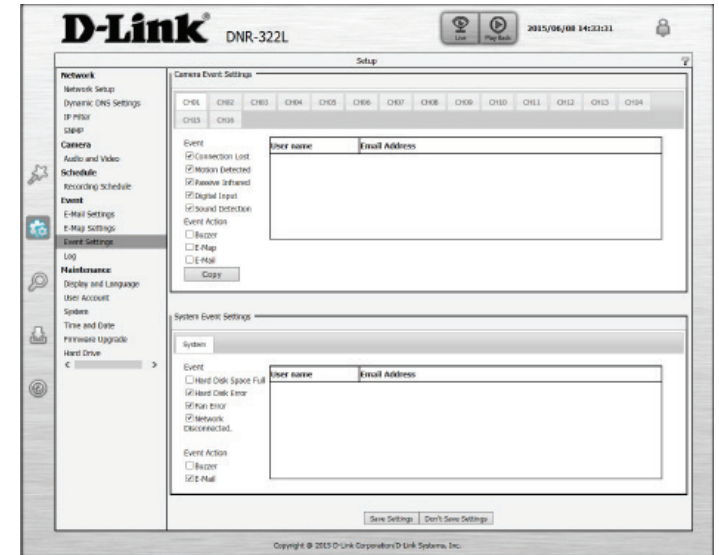


Step 2: Select an event action:

Buzzer: Buzzer will go off as an alert.

E-Map: Select this option to update the camera status on the E-Map.

E-Mail: Select this option to have e-mail sent to a specified SMTP account after receiving a camera event. Note: alerts will not be sent if network connectivity is lost.



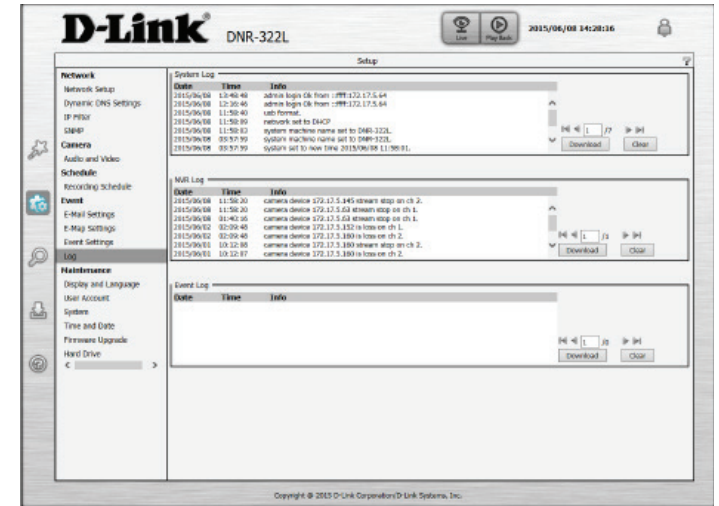
Log

This Log function displays the event log information including System, NVR, and event logs. It allows you to check the details of each log and download them through your web browser.

System Log: Displays the system log information.

NVR Log: Displays the NVR log information such as when recording stops or the NVR system starts.

NVR Event Log: Displays the event log information such as motion detection or if a camera is disconnected.



Maintenance

Display and Language

This section will show you how to change language, OSD, user account management, date and time adjustment, firmware upgrade and hard drive management for your NVR.

Language: Select the language.

Device Name: Change the device name of the NVR.

Auto Scan Interval: The auto scan feature allows you to monitor and scan the activity on all attached cameras for a specific time.

Enable Camera OSD: Enables or disables the camera's OSD.

Camera Name: Displays the name of the camera on the OSD.

Date: Displays the date.

Bitrate: Displays the bitrate.

Size: Displays the size in pixels.

Color: Change the color of camera's OSD.

Camera Number: Displays the camera number.

Time: Displays the time.

Frame Rate: Displays the frame rate.



User Account

User Account enables you to create user accounts to access your NAS device and set user privileges for them.

Adding a New User

Follow the steps to manage existing user accounts and give new users access to the NVR. Management options include adding and deleting users, and allowing access rights to users. You can also change admin and user passwords.

Step 1: Input the new user name.

Step 2: Input the password. Type the password again to confirm.

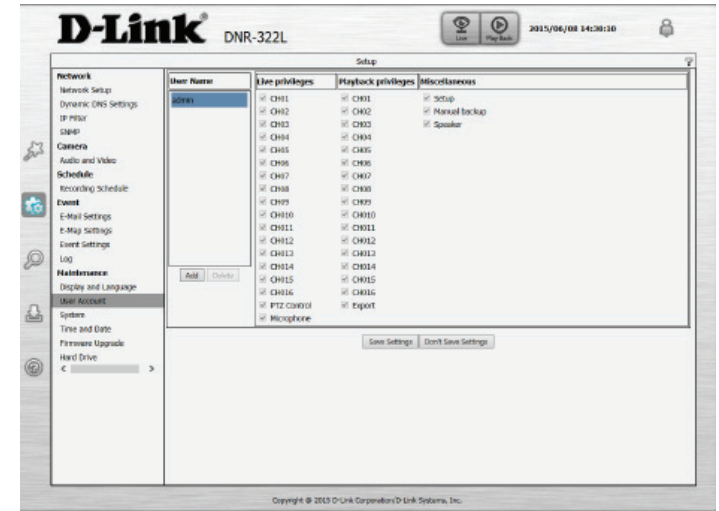
Step 3: Select the live view cameras and **PTZ/ IO Control** functions which this user can access.

Step 4: Select the playback channels and **Backup Data** function which this user can access.

Step 5: Click **Finish** to create a new user.

The Administrator account can configure all functions of the NVR. This account cannot be deleted. The default password for **admin** is blank. Setting a password after the first login is strongly recommended. If the administrator password is lost, you may hold the reset button on the rear panel of the device to reset the NVR to factory defaults.

Note: *Resetting the device will erase all previously saved settings.*



System

You can save the NVR configuration to a file and restore it when necessary, such as restarting the NVR in the event of a crash. Reset the NVR to restore all configurations to factory default.

System Restart: If the NVR is malfunctioning or crashes unexpectedly, click **Restart** on the NVR. Restarting the NVR will take about ninety seconds.

Restore to Factory Default Settings: This will reset all settings back to the factory defaults.

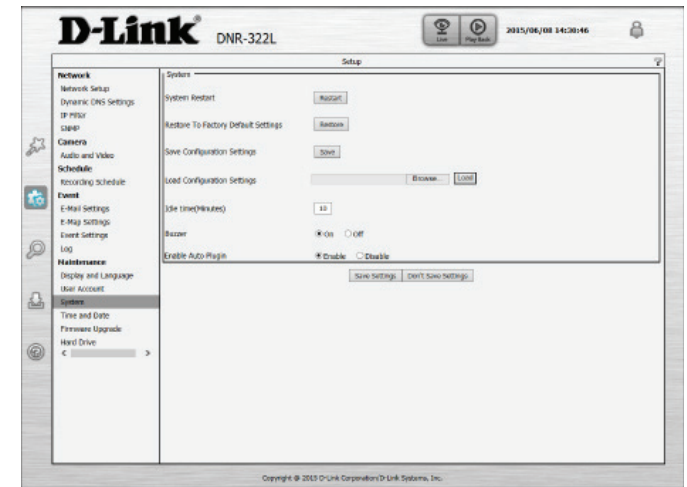
Save Configuration Settings: Click **Save** to save the file.

Load Configuration Settings: All the configurations can be saved as a file to the specified location. You can restore the configuration file after resetting to factory default file. Click **Browse** to select the configuration file and restore it by clicking **Load**.

Idle Time (Minutes): When the administrator enters all the Setup pages (except the Live Video and Playback Page), the NVR will keep track of the idle time when the user is not active. If this inactive period exceeds the specified limit, the user will be logged out and will have to log in again for security purposes. You can change the idle time limit here.

Buzzer: Enable or disable the buzzer. This is an audible alarm that sounds off when an event is triggered.

Enable Auto Plugin: Enable or disable auto plugin. Enabling auto plugin allows the NVR to automatically detect any connected cameras on the LAN. NVR will automatically change the secondary video profile of IP cameras once this option is enabled.



Time and Date

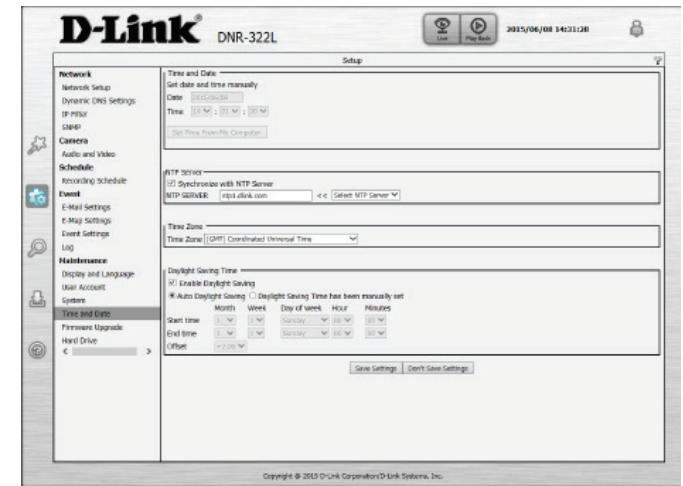
Configure time and date settings here.

Manually Set the Time and Date: Enter the complete time and date settings manually. Click **Save Settings** to apply the settings.

NTP Server: Select or enter an NTP Server here. An NTP Server is a server on the Internet that maintains time. The NVR will contact the server you entered and receive the correct time. Click **Save Settings** to save your entries.

Time Zone: Select your time zone from the drop-down menu. Click **Save** to apply the settings. There are three choices for setting the time.

Daylight Saving Time: Check the box to enable daylight savings time. You can select enable auto daylight saving, or manual daylight saving to manually set the month, week, day, hour and minute or when daylight saving starts.



Firmware Upgrade

The device firmware and device pack can be upgraded from this page. To update the firmware, you must save the firmware update to a USB drive, then connect it to the NVR's USB port. Click **Browse** to search the USB drive for the firmware update file. Click **Load** to upgrade. The new version number will be displayed. You can check for firmware updates on the D-Link Support Page.

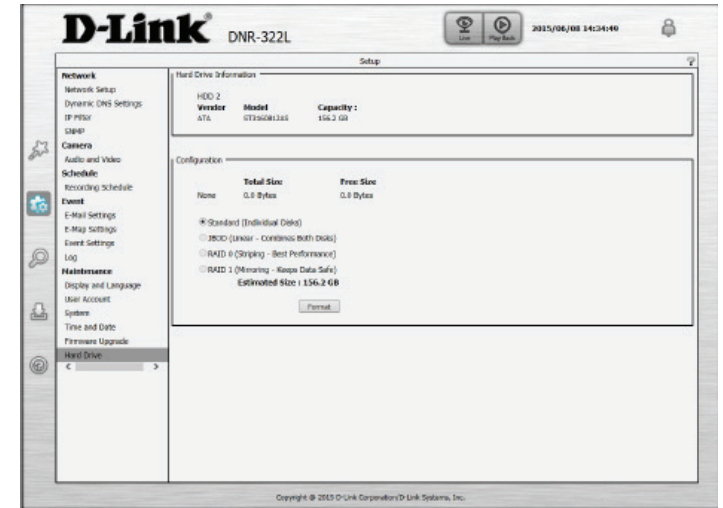


Hard Drive

You can format the HDD and USB drives in this section, as well as eject the USB drive. Formatting the HDD and USB drive will erase all data on the drive.

Refer to “What is RAID?” on page 74 for more information about hard drive setup options.

Note: Do not eject the USB drive without clicking eject first, or the files on the USB drive may become damaged.



Camera Search

The Camera Search function lets you automatically add cameras to the NVR. You can then view camera information and preview the camera's feed. To add cameras follow the steps below.

Step 1: Click **Search** to search for network cameras. The system will list all the available cameras at this moment. Click the **+** icon to add a camera to your camera list. If the cameras are already added, it will be marked in red.

Step 2: After clicking the icon, the camera setting page will pop up. Click on the camera that you want to add.

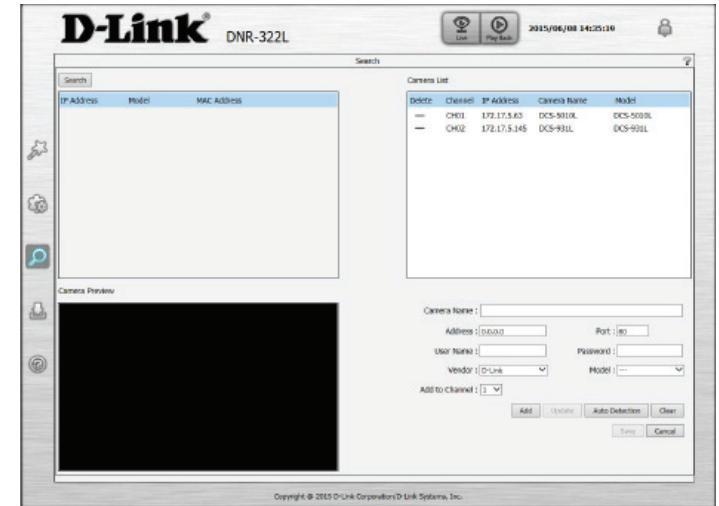
Step 3: Enter the camera name, user name, and password of the camera.

Note

- Some cameras will limit the login authority to the administrator only.
- To add cameras without the UPnP function, please go to the camera Setup menu and enter the IP address manually.
- You may not be able to see all the cameras on your first search. It may take a moment for the devices to respond to the UPnP request. Please click **Search** again if the cameras are not immediately displayed.

Step 4: Click **Add** to add the selected camera.

Step 5: After clicking **Add**, the updated information will be displayed in the camera list. Repeat steps 2 through 5 to add other cameras to your list.



Backup

Unlike the Save Video function, the Backup function will save all the recorded videos during the time period you select, instead of a single video clip. You can set the NVR to make daily backups by using Auto Backup, or you can make a single backup immediately by using Manual Backup.

Enable auto backup: Check the Enable option to backup your recording data according to a daily schedule.

Daily backup time: The daily scheduled time to start the backup process.

Start/End time: Select a time period of recordings to back up.

Camera: Select the cameras that you want to back up the recordings of.

Backup Type: You can select whether to back up to a USB drive, a Samba server, or an FTP site.

If you choose Manual Backup, you will see the following settings:

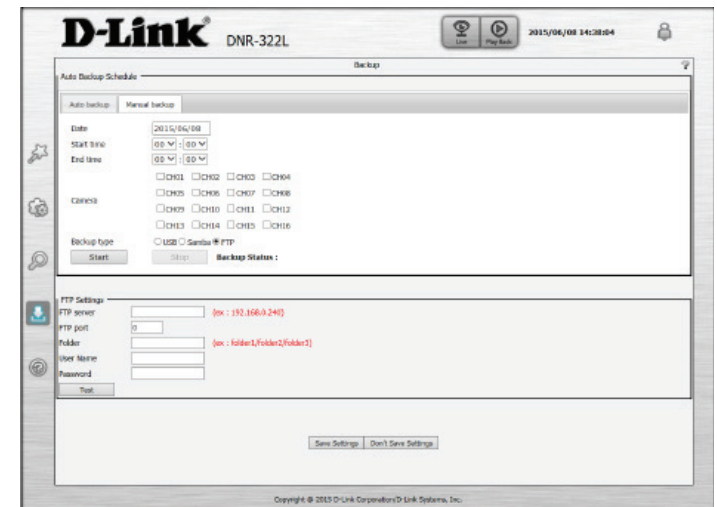
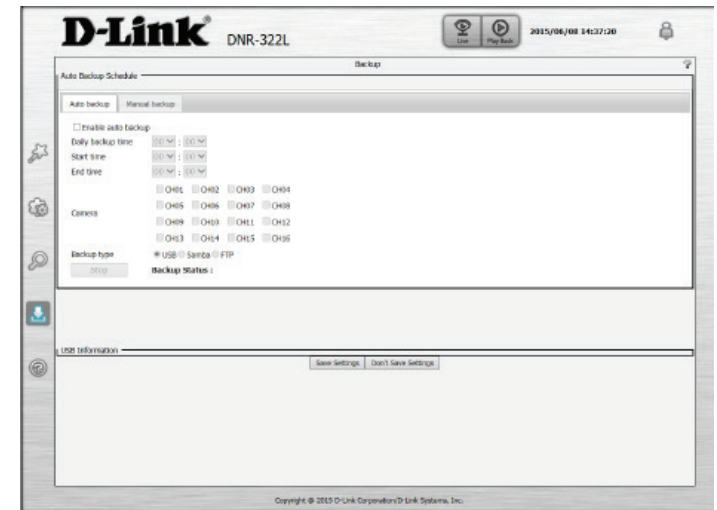
Date: The daily scheduled time to start the backup process.

Start/End time: Select a time period of recordings to back up.

Camera: Select the cameras that you want to back up the recordings of.

Backup Type: You can select whether to back up to a USB drive, a Samba server, or an FTP site.

Start/Stop: Click Start to start a manual backup using the settings specified, or click Stop to stop a currently running backup.



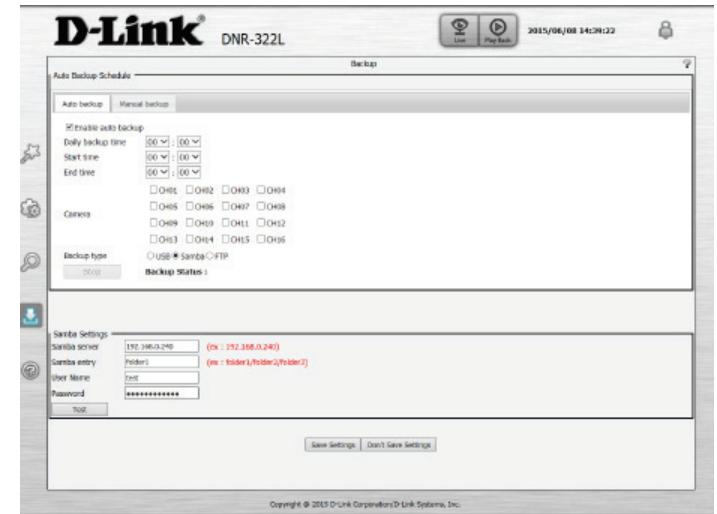
If you choose **Samba as the backup type**, you will see the following settings:

Samba server: Enter the address of your Samba server.

Samba entry: Enter the folder path for the Samba server that you want to back up your recordings to.

User Name: Enter the username for your Samba server account.

Password: Enter the password for your Samba server account.



If you choose **FTP as the backup type**, you will see the following settings:

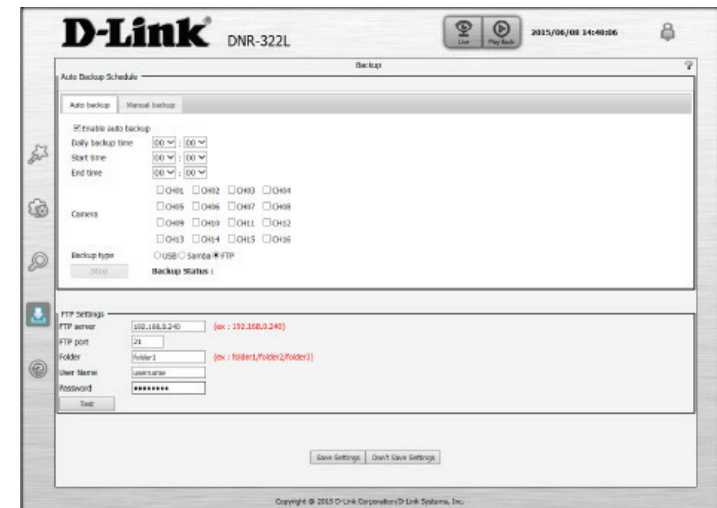
FTP server: Enter the address of your FTP server.

FTP port: Enter the port used by your FTP server.

Folder: Enter the folder path for the FTP server that you want to back up your recordings to.

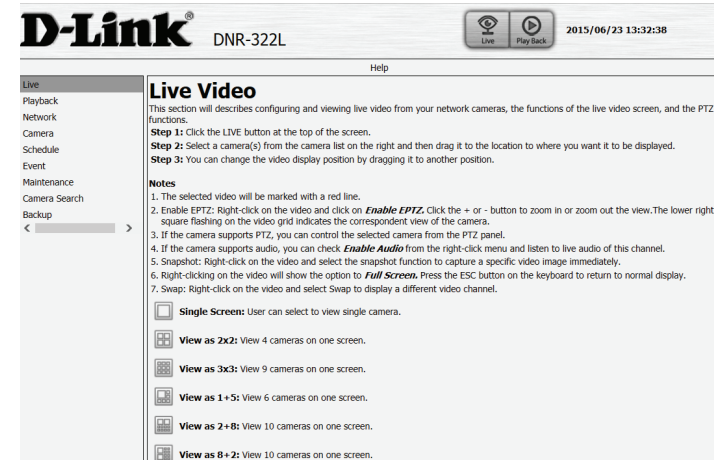
User Name: Enter the username for your FTP server account.

Password: Enter the password for your FTP server account.



Help

The NVR Help page provides a list of support topics.



The screenshot shows the D-Link NVR-322L web interface. At the top, the D-Link logo and model number 'DNR-322L' are visible on the left, and a 'Live' button, a 'Play Back' button, and the date/time '2015/06/23 13:32:38' are on the right. Below the header is a navigation menu with options: Live, Playback, Network, Camera, Schedule, Event, Maintenance, Camera Search, and Backup. The 'Live' option is selected. The main content area is titled 'Live Video' and contains the following text:

This section will describe configuring and viewing live video from your network cameras, the functions of the live video screen, and the PTZ functions.

Step 1: Click the LIVE button at the top of the screen.

Step 2: Select a camera(s) from the camera list on the right and then drag it to the location to where you want it to be displayed.

Step 3: You can change the video display position by dragging it to another position.

Notes

1. The selected video will be marked with a red line.
2. Enable EPTZ: Right-click on the video and click on **Enable EPTZ**. Click the + or - button to zoom in or zoom out the view. The lower right square flashing on the video grid indicates the correspondent view of the camera.
3. If the camera supports PTZ, you can control the selected camera from the PTZ panel.
4. If the camera supports audio, you can check **Enable Audio** from the right-click menu and listen to live audio of this channel.
5. Snapshot: Right-click on the video and select the snapshot function to capture a specific video image immediately.
6. Right-clicking on the video will show the option to **Full Screen**. Press the ESC button on the keyboard to return to normal display.
7. Swap: Right-click on the video and select Swap to display a different video channel.

Below the notes are several view options, each with a small icon and a description:

- Single Screen:** User can select to view single camera.
- View as 2x2:** View 4 cameras on one screen.
- View as 3x3:** View 9 cameras on one screen.
- View as 1+5:** View 6 cameras on one screen.
- View as 2+8:** View 10 cameras on one screen.
- View as 8+2:** View 10 cameras on one screen.

Applications

D-Link NVR Search Utility - Windows

In Windows, you can insert the CD and click NVR Search Utility to run another useful setup tool. When powered on, during the initial boot sequence, the device will wait to be assigned an IP address via DHCP. If it does not receive a DHCP-assigned IP address, the Auto-IP process will assign a 169.254.xxx.xxx address to the device. If you want to change the IP address before logging in, or are unable to connect to the NVR IP address, you can use the NVR Search Utility provided on the product CD to locate the device on your network and make any needed changes.

Network Video Recorder: The D-Link NVR Search Utility displays any NVR devices it detects on the network.

Refresh: Click to refresh the device list.

Configuration: Click **Configuration** to access the Web-based configuration of the NVR.

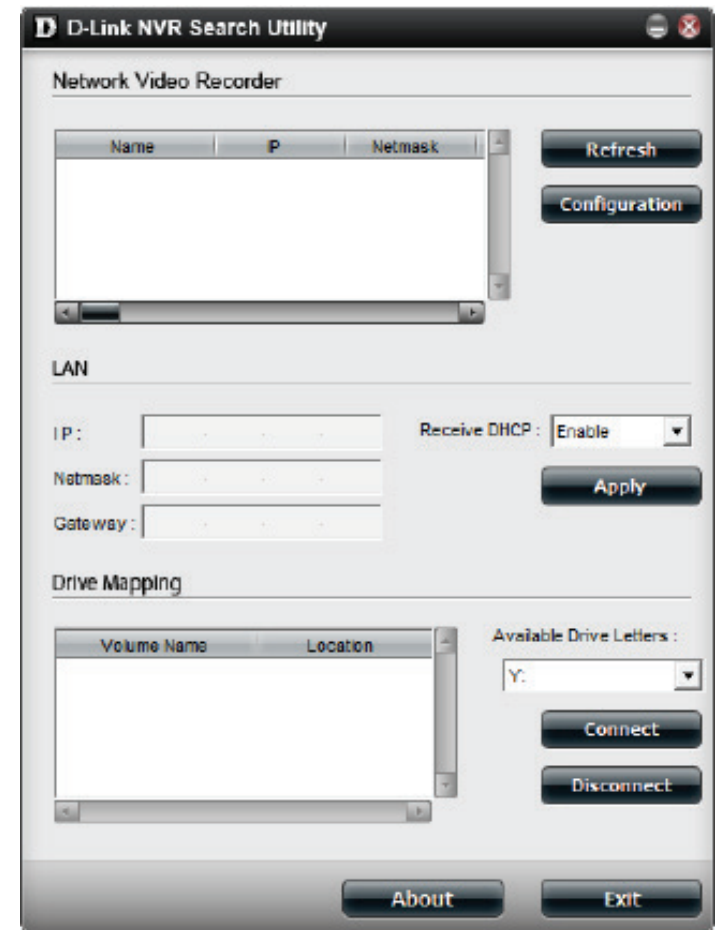
LAN: Configure the LAN Settings for the NVR.

Receive DHCP: Select **Enable** to use DHCP for your LAN IP settings, or **Disable** to use static IP

Apply: Click **Apply** to save and activate the changes to the LAN Settings.

About: Click **About** to view the software version of the NVR Search Utility.

Exit: Click **Exit** to close the utility.



Select a device from the list and click Configuration. This will launch the computer's default web browser and direct it to the IP address listed for the device. Make sure the browser is not configured to use a proxy server.

Note: *The computer used to access the NVR web-based configuration manager must be on the same subnet as the NVR. If your network is using a DHCP server and the computer receives IP settings from the DHCP server, the NVR will automatically be in the same subnet.*

D-Link NVR Search Utility - Mac

Insert the CD, go to the CD directory, then enter the Mac Utility folder. Click the NVR Search Utility file to run this useful setup tool. When first powered on, during the initial boot sequence the device will wait to be assigned an IP address via DHCP. If it does not receive a DHCP-assigned IP address the Auto-IP process will assign a 169.254.xxx.xxx address to the device. If you want to change the IP address before logging in or are unable to connect to the NVR IP address, you can use the NVR Search Utility provided on the product CD to locate the device on your network and make any needed changes.

Network Video Recorder: The D-Link NVR Search Utility displays any NVR devices it detects on the network.

Refresh: Click to refresh the device list.

Configuration: Click **Configuration** to access the Web-based configuration of the NVR.

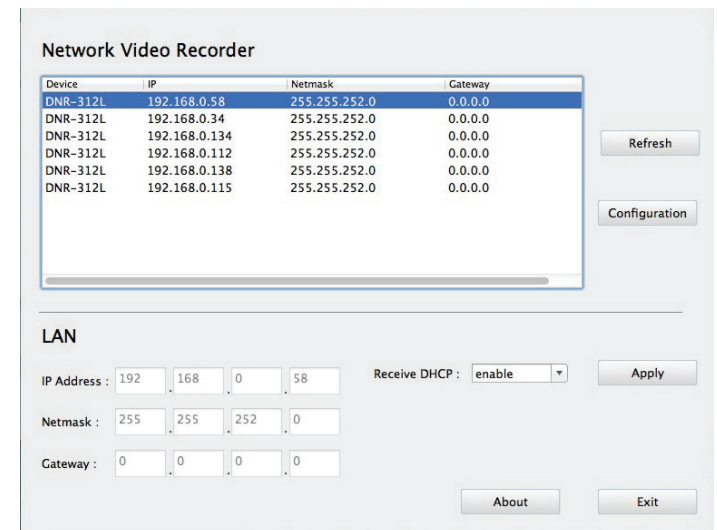
LAN: Configure the LAN Settings for the NVR.

Receive DHCP: Select **Enable** to use DHCP for your LAN IP settings, or **Disable** to use static IP.

Apply: Click **Apply** to save and activate the changes to the LAN Settings.

About: Click **About** to view the software version of the NVR Search Utility.

Exit: Click **Exit** to close the utility.



Select the device from the list and click **Configuration**. This will launch the computer's default web browser and direct it to the IP address listed for the device. Make sure the browser is not configured to use a proxy server.

Note: The computer used to access the remote backup application must be on the same subnet as the NVR. If your network is using a DHCP server and the computer receives IP settings from the DHCP server, the NVR will automatically be in the same subnet.

Playback Manager

This feature allows you to search and play back recorded video.

Play Recorded Video

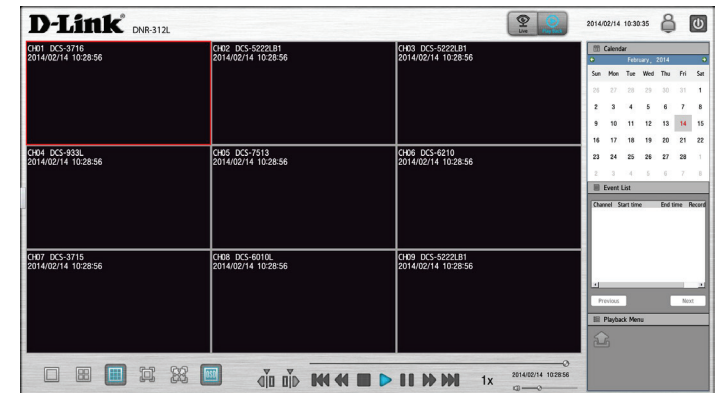
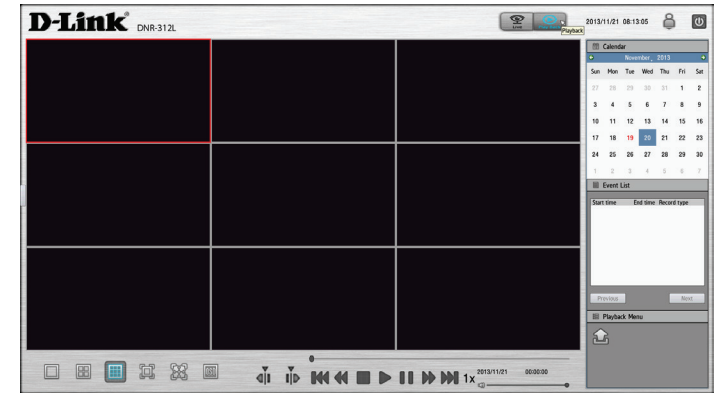
Click the **Playback** tab at the top of the menu.

Click the day highlighted in RED on the calendar.

The **View Recorded Files Window** will show information about the available video clips. Select the date you would like to find the video records of.

Highlight the video records that you would like to review.

Click the **OK** button.



Play



Stop



Select a camera/video and click this button to play/stop/pause a particular channel.



Step forward



Step backward



Fast forward



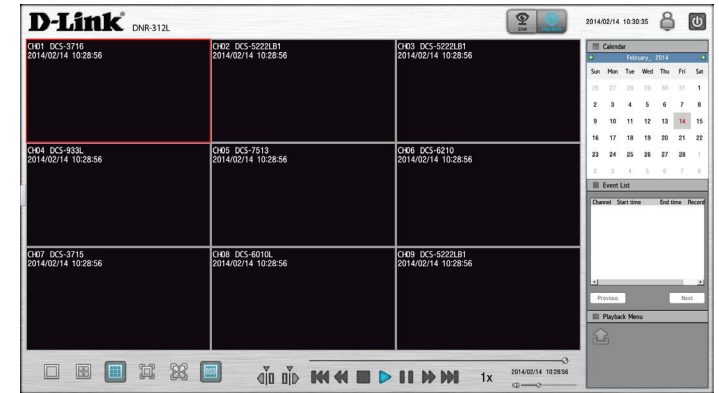
Rewind



Set the start point of the export file.



Set the end point of the export file.



Remote Backup

You can run the remote backup application to back up your files. Run the application by going to **Start > Programs > D-Link > DNR-322L > Remote Backup**.

Step 1: Input the IP address of your unit.

Step 2: Input the user name.

Step 3: Input the password and click **OK**.

Step 4: Click **New Period**.

Step 5: Select the record date.

Step 6: Set the **Start Time** and **End Time** you would like to back up (or highlight the video records that you would like to back up). The time period specified cannot exceed 24 hours.

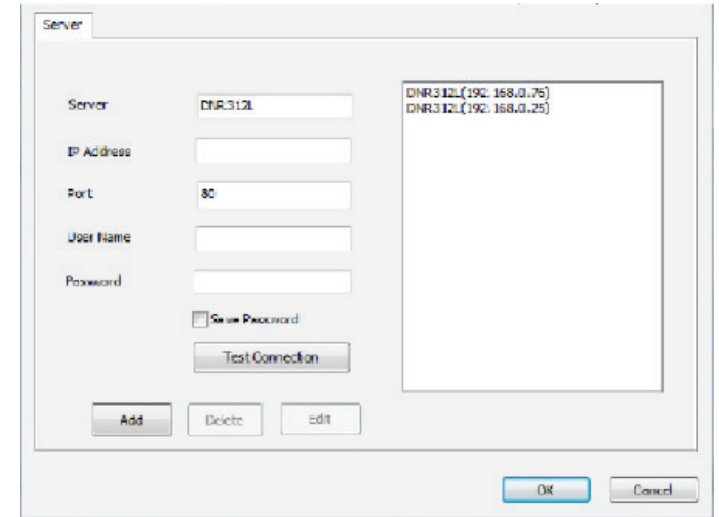
Step 7: Select the cameras you would like to back up and click **OK**.

Step 8: Select the time slot which you would like to back up.

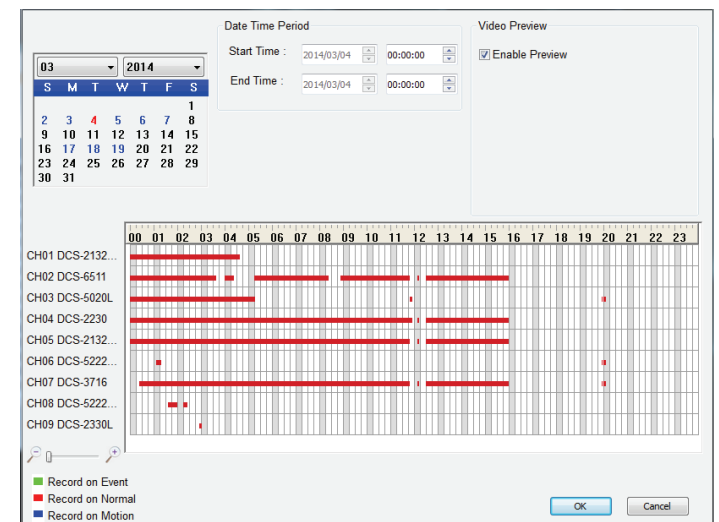
Step 9: Click **Backup**.

Step 10: Select the location where you would like to save the backup data.

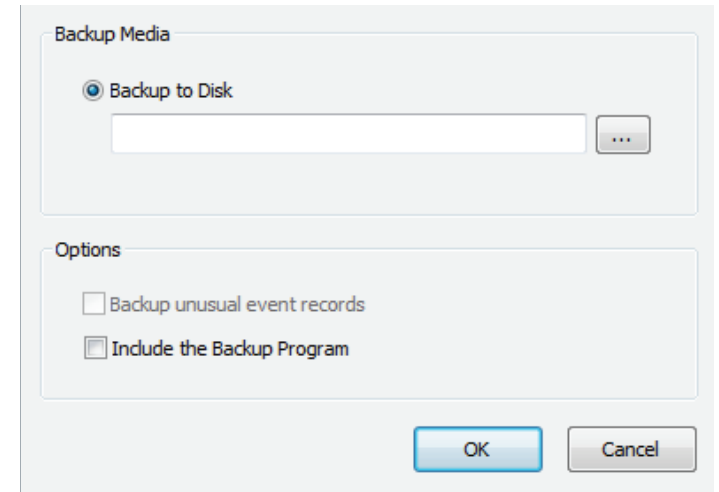
Step 11: Check the **Include the Backup Program** option, which will add a playback application into the backup folder.



Start Time	End Time	Camera	Disk Size
2014/03/05 08:25:54	2014/03/05 08:26:34	4	0.48 MB



Step 12: Click **OK**.

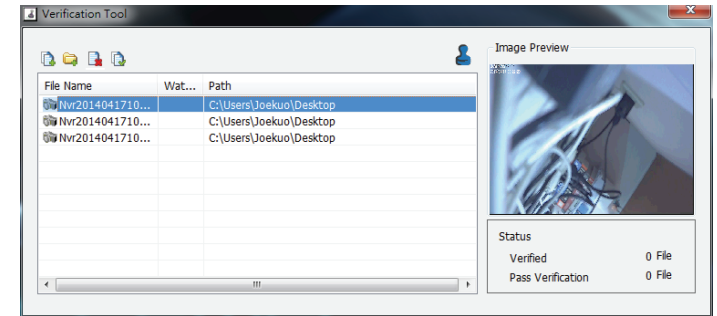


Verification Tool

The Verification Tool verifies whether the data created by the system has been tampered with. It's the process by which a digital watermark (a digital signature) is added to each recorded video frame to ensure its authenticity.

There are two types of data that can be verified by the Verification Tool:

1. Video files (.avi, .asf)
2. Image files (.bmp, .jpg)



Add File: Add a single file to the list for verification.

Add Folder: Choose a folder with multiple files to list for verification.

Remove File: Remove indicated file(s) from list.

Select All: Select all files in the list for verification.

Note: Choose the file type first before selecting files.

Upgrading from Standard Mode to RAID 1

Standard Mode doesn't offer any redundancy or security of data. If, after formatting for Standard Mode you find that you require the additional features of RAID 1, it is best then to migrate from Standard Mode to RAID 1. To do this, follow these instructions:

Insert a second hard drive into the DNR-322L as per the instructions for the initial installation. The existing hard drive should be the volume which you wish to create a mirror of using the RAID 1 format.

Replace the top cover and restart the DNR-322L.



Hard Drive Installation

This hard drive installation guide is provided for reference.

1. Attach the hard drive bracket to your hard drive with the included screws. Ensure that the bracket is aligned so that when the hard drive is inserted, the arrow on the top will point to the front of the NVR.



2. Remove the top cover from the NVR by pressing the PUSH button on the back and lifting the cover.



3. Once the faceplate is unlatched, remove it to expose the hard drive bays.



4. Insert the hard drive into an empty bay so that the top of the drive is facing the middle of the NVR and the arrow on the bracket is pointing towards the front of the NVR. Push the drive into the slot until you feel it lock into place.

Note: Make sure to align the drive connector to the SATA connector at the back edge inside the drive bay of the NVR. Gently push the drive in until it connects. When a drive is inserted properly, you will feel it “set” into the connector. Some hard drives that are thin or oddly shaped may need to be inserted carefully into position. If a drive is not properly set in place, the hard drive LED will not illuminate after powering on the device.



5. Reattach the top cover of the NVR.



6. Connect one end of the Ethernet cable to the NVR's Ethernet port, and the other end into your router.



7. Next, connect the power cable to the power adapter and connect it to the NVR's power port and then plug the power cable into your wall outlet or power strip. Press the power button on the front of the device to turn it on.



Knowledge Base

What is RAID?

RAID, short for Redundant Array of Independent Disks, is a combination of two or more disks with the aim of providing fault tolerance and performance improvement. There are several different levels of RAID, with each one providing a different method of sharing or distributing data amongst the drives. The DNR-322L supports Standard, JBOD, RAID 0, and RAID 1.

Standard Standard provides a single volume for each drive.

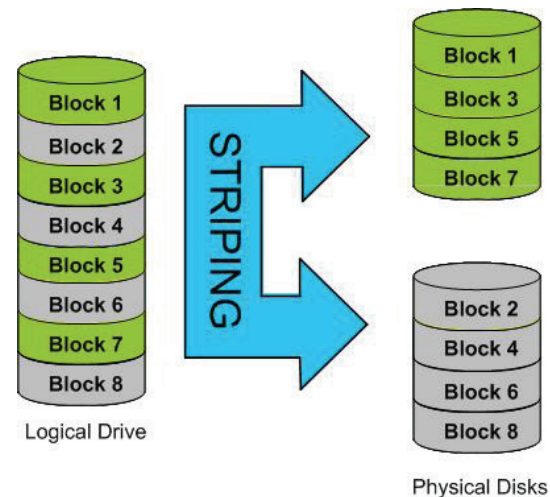
Although performance is improved, the lack of any RAID or mirroring means that if one drive fails, all data on the volume will be lost.

JBOD JBOD allows you to create a large virtual disk drive by concatenating two or more smaller drives together.

It offers no redundancy and limited data protection.

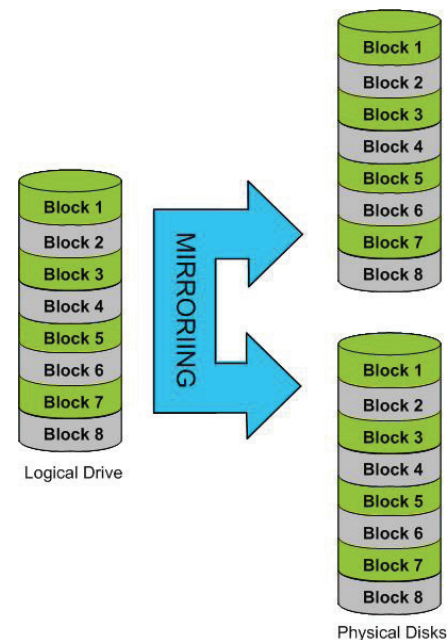
RAID 0 provides data striping, which spreads out blocks of data over all the drives, but does not provide data redundancy.

Although performance is improved, the lack of fault tolerance means that if one drive fails, all data in the array will be lost.



RAID 1 provides mirroring over multiple disks, with the same read/write speed of a single disk. A RAID 1 array can only be as large as it's smallest member disk.

Because the data is stored on multiple disks, RAID 1 provides fault tolerance and protection, in addition to performance advantages.



RAID Options

Here is a list of the RAID options available on the DNR-322L.

Standard RAID - creates a single volume for one drive or more drives.

Standard

Creates separate volumes (or one volume if only one hard drive is present). Each hard drive is its own volume.

JBOD - Allows you to create a large virtual disk drive by concatenating two or more smaller drives together. The individual hard drives that makes up a JBOD RAID can be different sizes and manufacturers. The total size of the JBOD RAID is the combined total of all the individual drives in the set.

JBOD

Combines 2 hard drives in a linear fashion to create one large volume thereby maximizing available disk space.

RAID 0 - Allows you to assign two or more disks as a striped set. Once you create the striped set, you will see it as a single disk drive. But when you write data to the RAID 0 striped set, the data will be distributed across all of the drives that make up the set. Because each disk has less to do, it takes less time to write the data. The same is true when reading data; instead of a single disk having to seek out and then send a large block of data, multiple disks each stream their part of the data stream. As a result, RAID 0 striped sets can provide a dynamic increase in disk performance.

RAID 0

Stripes data across 2 or more drives increasing performance.

RAID 1 - allows you to assign two disks as a mirrored set. Once you create the mirrored set, you will see it as a single disk drive. But when you write data to the mirrored set, it will duplicate the data across all members of the set. This ensures that your data is protected against loss if any hard drive in the RAID 1 set fails. In fact, as long as any single member of the set remains functional, you will continue to operate normally, with complete access to your data.

RAID 1

Copies exactly one of the data disks and produces a mirrored copy on another disk.

Troubleshooting

Replacing a failed disk drive

If a disk drive fails, the Disk Status LED will turn red. When replacing a failed disk drive, be sure to use a new drive of the same or slightly greater capacity.

Step 1: Power off the NVR.

Step 2: Open the unit's cover.

Step 3: Pull out the failed disk drive.

Step 4: Install a new disk drive into the slot.

If you forget the admin password for the device

If you forget the password, you can reset the device, which will reset the password for the **admin** account to its default(blank). Please note that this will reset all settings on the device back to the factory defaults, and it may cause data corruption; it is highly recommended that you back up your recorded data before resetting your device. To reset the device, make sure it is turned on then press and hold the reset button for 10 seconds until the Power LED flashes three times. The Administrator password will now be blank.

If you cannot log in to the NVR using Internet Explorer

Check the settings of your anti-virus software to make sure it isn't blocking access to the NVR web interface.

If you cannot see the complete web interface using Internet Explorer

If you cannot see the complete page of the system when using Internet Explorer, the ActiveX installation process may not be complete.

Step 1: Open Internet Explorer and connect to your NVR.

Step 2: The browser will ask whether to install ActiveX.

Step 3: Click the upper bar to begin the installation process.

Step 4: Click **Install** to complete the process.

Technical Specifications

NUMBER OF SUPPORTED CAMERAS:

- 16

SUPPORTED CAMERA TYPES

- Supports all D-Link network cameras. Includes support for auto-discovery via UPnP
- ONVIF Camera

USER INTERFACE

- mydlink web portal
- HTTP web browser
- NVR Search Utility
- Smart Phone

RECORDING PERFORMANCE

- First video profile:
 - H.264 1080p (frame rate): 240 fps
 - H.264 720p (frame rate): 480 fps
- Secondary video profile:
 - H.264 VGA (frame rate): 240 fps

COMPRESSION FORMAT

- H.264, MPEG-4, M-JPEG (for supported cameras)

STANDARDS

- IEEE 802.3/u/z
- Auto MDI/MDI-X

NETWORK SERVICE PROTOCOLS

- IPV4, ARP, TCP, UDP, ICMP
- DHCP Client
- NTP Client (D-Link)
- DNS Client
- DDNS Client (D-Link)
- SMTP Client
- HTTP Server
- PPPoE
- UPnP
- IP filtering

FLASH ROM

- 128 MB

RAM

- 512 MB DDRIII

DEVICE BUTTONS

- Power Button
- Camera Auto Scan Button
- Factory Reset Button

I/O PORTS

- USB for data backup

HARD DISK DRIVE BAY

- Supports 2 SATA I, II, III Hard Disk Drives¹
- RAID 0², 1², or JBOD configuration

NETWORK INTERFACE

- Gigabit Ethernet LAN port (10/100/1000 Mbps)

POWER INPUT

- DC 12 V/3 A

MAXIMUM POWER CONSUMPTION

- 25.2 W (0.23 W Standby)

DIMENSIONS (W X D X H)

- 193.2 (W) x 144.4 (D) x 90 (H) mm (7.61 x 5.69 x 3.54 inches)

WEIGHT

- 592 g (1.31 lbs)

OPERATING TEMPERATURE

- 0 to 40 °C (32 to 104°F)

STORAGE TEMPERATURE

- -20 to 70 °C (-4 to 158 °F)

HUMIDITY

- Operating: 5% to 90% (non-condensing)

PACKAGE CONTENTS

- Installation CD with:
 - Software
 - Product Documentation
- DNR-322L 2-Bay mydlink NVR
- Ethernet Cable
- Power Adapter
- Hard Drive Mounting Kit
- Quick Installation Guide

CERTIFICATIONS

- CE, FCC, RHoS

Software Features

OS

- Linux

CAMERA SEARCH

- UPnP, ONVIF

AUDIO & VIDEO RECORDING

- Synchronized audio & video recording.

VIDEO SETTING

- Resolution, quality, frame rate, enable audio, image parameters

RECORDING TYPE

- Record by schedule, manual record and event recording (motion detection from camera)

REMOTE LIVE VIEW

- Supported via IE Explorer (Max. 16 simultaneous channels)
- Supports mydlink portal

REMOTE LIVE VIEW CONTROL

- Live view, preset/go, patrol, focus, PTZ functions, snapshot, full screen, digital zoom, e-map, and multiple view with duplicated camera

REMOTE PLAYBACK

- Supported via IE and NVR client
- Playback system with timeline GUI, search by event, area, cameras, date and time
- IE & NVR client support 16 channel playback
- Digital zoom in to specific area

REMOTE PLAYBACK CONTROL

- Playback with normal, fast forward/rewind, and step forward/rewind

FILE EXPORT

- Export video to AVI
- Export image to JPG file

RECORDING TYPE

- Record by schedule, manual, and event-based recording
- Motion-triggered recording

REMOTE BACKUP

- HDD control & management via PC
- Remote software can back up raw data to redundant storage

OVERWRITE RECORDING

- Auto recycling when disk storage is full

USER ACCOUNT

- Additional accounts can be created to allow user access to the system, and specify authorization for the camera channels, PTZ, etc.

DDNS

- D-Link DDNS server support

SYSTEM TIME

- Set the system time (D-Link NTP, input time, sync with computer, Daylight Saving Time)

REMOTE BACKUP

- Remote software can back up raw data to redundant storage
- Auto back up video from the previous day to the FTP server

SYSTEM STATUS

- Camera status
- System status
- Still picture EMAP support

Regulatory Information

Caution: Do not remove the plug and connect it to a power outlet by itself; always attach the plug to the power adaptor first before connecting it to a power outlet.

Federal Communication Commission Interference Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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.

Non-modifications Statement:

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

Caution:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

Note:

The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all Wi-Fi product marketed in US must fixed to US operation channels only.

RF Frequency Requirements:

This device is for indoor use only when using all channels in the 5.150-5.250 GHz, 5.725-5.850 GHz frequency ranges. High power radars are allocated as primary users of the 5.150-5.250 GHz, 5.725-5.850 GHz bands. These radar stations can cause interference with and/or damage this device. This device will not operate on channels which overlap the 5600-5650 MHz band. It is restricted in indoor environments only.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 25 cm between the radiator and your body.

Customer Information:

- (1) This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On bottom of this equipment is a label that contains, among other information, a product identifier of 0. If requested, this number must be provided to the telephone company.
- (2) If this equipment 0 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
- (3) The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modification to maintain uninterrupted service.
- (4) If you experience trouble with this equipment, you disconnect it from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.
- (5) Please follow instructions for repairing if any (e.g. battery replacement section); otherwise do not alternate or repair any parts of device except specified.
- (6) Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service

commission or corporation commission for information.

(7) If the telephone company requests information on what equipment is connected to their lines, inform them of:

- (a) The telephone number that this unit is connected to,
- (b) The ringer equivalence number 0
- (c) The USOC jack required 0 and
- (d) The FCC Registration Number 0

Items (b) and (d) are indicated on the label. The ringer equivalence number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

(8) If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable alarm equipment, consult your telephone company or a qualified installer.

Safety Warning:

CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.

ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Jetez les piles usagées selon les instructions.

Industry Canada Statement:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

commission or corporation commission for information.

(7) If the telephone company requests information on what equipment is connected to their lines, inform them of:

- (a) The telephone number that this unit is connected to,
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- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Warning

This unit is to be used with a power supply, model AMS3-1201500FU.

Avertissement

Cet appareil doit être utilisé avec une source de courant, modèle AMS3-1201500FU.

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Jetez les piles usagées selon les instructions.

Japan Voluntary Control Council for Interference Statement

この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Japan Voluntary Control Council for Interference Statement

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

CE EMI Class B Warning

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

Safety Instructions

Please adhere to the following safety guidelines to help ensure your own personal safety and protect your system from potential damage. Any acts taken that are inconsistent with ordinary use of the product, including improper testing, etc., and those not expressly approved by D-Link may result in the loss of product warranty.

Unless expressly approved by an authorized representative of D-Link in writing, you may not and may not permit others to:

- Disassemble or reverse engineer the device or attempt to derive source code (underlying ideas, algorithms, or structure) from the device or from any other information provided by D-Link, except to the extent that this restriction is expressly prohibited by local law.
- Modify or alter the device.
- Remove from the device any product identification or other notices, including copyright notices and patent markings, if any.

To reduce the risk of bodily injury, electrical shock, fire, and damage to the device and other equipment, observe the following precautions:

Power Sources

- Observe and follow service markings.
- Do not push any objects into the openings of your device unless consistent with the authorized operation of the device. Doing so can cause a fire or an electrical shock by shorting out interior components.
- The powering of this device must adhere to the power specifications indicated for this product.
- Do not overload wall outlets and/or extension cords as this will increase the risk of fire or electrical shock.
- Do not rest anything on the power cord or on the device (unless the device is made and expressly approved as suitable for stacking).
- Position system cables and power cables carefully; route cables so that they cannot be stepped on or tripped over. Be sure that nothing rests on any cables.
- Operate the device only from the type of external power source indicated on the electrical ratings label.
- To help avoid damaging your device, be sure the voltage selection switch (if provided) on the power supply is set to match the power available at your location.
- Also be sure that attached devices are electrically rated to operate with the power available in your location.
- Use only approved power cable(s). If you have not been provided a power cable for your device or for any AC -powered option intended for your device, purchase a power cable that is approved for use in your country and is suitable for use with your device. The power cable must be rated for the device and for the voltage and current marked on the device's electrical ratings label. The voltage and current rating of the cable should be greater than the ratings marked on the device.

- To help prevent an electrical shock, plug the device and peripheral power cables into properly grounded electrical outlets. These cables are equipped with three-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3-wire cable with properly grounded plugs.
- Observe extension cable and power strip ratings. Ensure that the total ampere rating of all products plugged into the extension cable or power strip does not exceed 80 percent of the ampere ratings limit for the extension cable or power strip.
- To help protect your device from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Do not modify power cables or plugs. Consult a licensed electrician or your power company for site modifications. Always follow your local/national wiring rules.
- When connecting or disconnecting power to hot-pluggable power supplies, if offered with your device, observe the following guidelines.
- Install the power supply before connecting the power cable to the power supply.
- Unplug the power cable before removing the power supply.
- If the system has multiple sources of power, disconnect power from the device by unplugging all power cables from the power supplies.

Servicing/Disassembling

- Do not service any product except as expressly set forth in your system documentation.
- Opening or removing covers that are marked with the triangular symbol with a lightning bolt may expose you to an electrical shock. Only a trained service technician should service components inside these compartments.
- To reduce the risk of electrical shock, never disassemble this device. None of its internal parts are user-replaceable; therefore, there is no reason to access the interior.
- Do not spill food or liquids on your system components, and never operate the device in a wet environment. If the device gets wet, see the appropriate section in your troubleshooting guide or contact your trained service provider.
- Use the device only with approved equipment.
- Move products with care; ensure that all casters and/or stabilizers are firmly connected to the system. Avoid sudden stops and uneven surfaces.

Environment

- Do not use this device near water (e.g. near a bathtub, sink, laundry tub, fish tank, in a wet basement or near a swimming pool).
- Do not use this device in areas with high humidity.
- This device must not be subjected to water or condensation.
- Keep your device away from radiators and heat sources. Also, do not block cooling vents.

Cleaning

- Always unplug the power before cleaning this device.
- Do not use liquid or aerosol cleaners of any kind. Use only compressed air that is recommended for electronic devices.
- Use a dry cloth for cleaning.

Protecting Against Electrostatic Discharge

Static electricity can harm delicate components inside your system. To prevent static damage, discharge static electricity from your body before you touch any of the electronic components, such as the microprocessor. You can do so by periodically touching an unpainted metal surface on the chassis.

You can also take the following steps to help prevent damage from electrostatic discharge (ESD):

1. When unpacking a static-sensitive component from its shipping carton, do not remove the component from the antistatic packing material until you are ready to install the component in your system. Just before unwrapping the antistatic packaging, be sure to discharge static electricity from your body.
2. When transporting a sensitive component, first place it in an antistatic container or packaging.
3. Handle all sensitive components in a static-safe area. If possible, use antistatic floor pads, workbench pads, and an antistatic grounding strap.

ErP Power Usage

This device is an Energy Related Product (ErP) designed to be always on. It can be turned off through a power switch to save energy when it is not needed.

Switched Off: 0.48 watts”

Disposing of and Recycling Your Product

ENGLISH



This symbol on the product or packaging means that according to local laws and regulations this product should be not be disposed of in the household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it has reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health.

D-Link and the Environment

At D-Link, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimise this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

D-Link recommends that you always switch off or unplug your D-Link products when they are not in use. By doing so you will help to save energy and reduce CO2 emissions.

To learn more about our environmentally responsible products and packaging please visit www.dlinkgreen.com

DEUTSCH DE



Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher Gesetze und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen ist. Bringen Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt das Ende seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren. Durch ein auf diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die menschliche Gesundheit zu schützen.

D-Link und die Umwelt

D-Link ist sich den möglichen Auswirkungen seiner Geschäftstätigkeiten und seiner Produkte auf die Umwelt bewusst und fühlt sich verpflichtet, diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundlichkeit her und verwendet wiederverwertbare, schadstoffarme Materialien bei Produktherstellung und Verpackung.

D-Link empfiehlt, Ihre Produkte von D-Link, wenn nicht in Gebrauch, immer auszuschalten oder vom Netz zu nehmen. Auf

diese Weise helfen Sie, Energie zu sparen und CO₂-Emissionen zu reduzieren.

Wenn Sie mehr über unsere umweltgerechten Produkte und Verpackungen wissen möchten, finden Sie entsprechende Informationen im Internet unter www.dlinkgreen.com.

FRANÇAIS FR



Ce symbole apposé sur le produit ou son emballage signifie que, conformément aux lois et réglementations locales, ce produit ne doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet effet par les autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière, vous aidez à préserver l'environnement et à protéger la santé de l'homme.

D-Link et l'environnement

Chez D-Link, nous sommes conscients de l'impact de nos opérations et produits sur l'environnement et nous engageons à le réduire. Pour limiter cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et faiblement toxiques, tant dans ses produits que ses emballages.

D-Link recommande de toujours éteindre ou débrancher vos produits D-Link lorsque vous ne les utilisez pas. Vous réaliserez ainsi des économies d'énergie et réduirez vos émissions de CO₂.

Pour en savoir plus sur les produits et emballages respectueux de l'environnement, veuillez consulter le www.dlinkgreen.com

ESPAÑOL ES



Este símbolo en el producto o el embalaje significa que, de acuerdo con la legislación y la normativa local, este producto no se debe desechar en la basura doméstica sino que se debe reciclar. Llévelo a un punto de recogida designado por las autoridades locales una vez que ha llegado al fin de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su embalaje de esta forma, contribuye a preservar el medio ambiente y a proteger la salud de los seres humanos.

D-Link y el medio ambiente

En D-Link, comprendemos y estamos comprometidos con la reducción del impacto que puedan tener nuestras actividades y nuestros productos en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posible, utilizando materiales reciclables y de baja toxicidad tanto en los productos como en el embalaje.

D-Link recomienda apagar o desenchufar los productos D-Link cuando no se estén utilizando. Al hacerlo, contribuirá a ahorrar energía y a reducir las emisiones de CO₂.

Para obtener más información acerca de nuestros productos y embalajes ecológicos, visite el sitio www.dlinkgreen.com

ITALIANO IT



La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle normative locali, questo prodotto non deve essere smaltito nei rifiuti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, portare il prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i prodotti da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a salvaguardare la salute umana.

D-Link e l'ambiente

D-Link cerca da sempre di ridurre l'impatto ambientale dei propri stabilimenti e dei propri prodotti. Allo scopo di ridurre al minimo tale impatto, D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a basso tasso di tossicità sia per i prodotti che per gli imballaggi.

D-Link raccomanda di spegnere sempre i prodotti D-Link o di scollegarne la spina quando non vengono utilizzati. In questo modo si contribuirà a risparmiare energia e a ridurre le emissioni di anidride carbonica.

Per ulteriori informazioni sui prodotti e sugli imballaggi D-Link a ridotto impatto ambientale, visitate il sito all'indirizzo www.dlinkgreen.com

NEDERLANDS NL



Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden weggegooid met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduur heeft bereikt, dient u het naar een inzamelpunt te brengen dat hiertoe werd aangeduid door uw plaatselijke autoriteiten, sommige autoriteiten accepteren producten zonder dat u hiervoor dient te betalen.

Door het product en de verpakking op deze manier te recyclen helpt u het milieu en de gezondheid van de mens te beschermen.

D-Link en het milieu

Bij D-Link spannen we ons in om de impact van onze handelingen en producten op het milieu te beperken. Om deze impact te beperken, ontwerpt en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in product en verpakking.

D-Link raadt aan om steeds uw D-Link producten uit te schakelen of uit de stekker te halen wanneer u ze niet gebruikt. Door dit te doen bespaart u energie en beperkt u de CO₂-emissies.

Breng een bezoek aan www.dlinkgreen.com voor meer informatie over onze milieuverantwoorde producten en verpakkingen

POLSKI PL



Ten symbol umieszczony na produkcie lub opakowaniu oznacza, że zgodnie z miejscowym prawem i lokalnymi przepisami niniejszego produktu nie wolno wyrzucać jak odpady czy śmieci z gospodarstwa domowego, lecz należy go poddać procesowi recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie produkty nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze.

Poprzez proces recyklingu i dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko naturalne i dbać o ludzkie zdrowie.

D-Link i środowisko

W D-Link podchodzimy w sposób świadomy do ochrony otoczenia oraz jesteśmy zaangażowani w zmniejszanie wpływu naszych działań i produktów na środowisko naturalne. W celu zminimalizowania takiego wpływu firma D-Link konstruuje i wytwarza swoje produkty w taki sposób, aby były one jak najbardziej przyjazne środowisku, stosując do tych celów materiały nadające się do powtórnego wykorzystania, charakteryzujące się małą toksycznością zarówno w przypadku samych produktów jak i opakowań.

Firma D-Link zaleca, aby Państwo zawsze prawidłowo wyłączali z użytku swoje produkty D-Link, gdy nie są one wykorzystywane. Postępując w ten sposób pozwalają Państwo oszczędzać energię i zmniejszać emisje CO₂.

"Aby dowiedzieć się więcej na temat produktów i opakowań mających wpływ na środowisko prosimy zapoznać się ze stroną internetową www.dlinkgreen.com."

ČESKY CZ



Tento symbol na výrobku nebo jeho obalu znamená, že podle místně platných předpisů se výrobek nesmí vyhazovat do komunálního odpadu, ale odeslat k recyklaci. Až výrobek doslouží, odneste jej prosím na sběrné místo určené místními úřady k tomuto účelu. Některá sběrná místa přijímají výrobky zdarma. Recyklací výrobku i obalu pomáháte chránit životní prostředí i lidské zdraví.

D-Link a životní prostředí

"Ve společnosti D-Link jsme si vědomi vlivu našich provozů a výrobků na životní prostředí a snažíme se o minimalizaci těchto vlivů. Proto své výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické materiály."

"Společnost D-Link doporučuje, abyste své výrobky značky D-Link vypnuli nebo vytáhli ze zásuvky vždy, když je nepoužíváte. Pomůžete tak šetřit energii a snížit emise CO₂."

Více informací o našich ekologických výrobcích a obalech najdete na adrese www.dlinkgreen.com.

MAGYAR HU



Ez a szimbólum a terméken vagy a csomagoláson azt jelenti, hogy a helyi törvényeknek és szabályoknak megfelelően ez a termék nem semmisíthető meg a háztartási hulladékkal együtt, hanem újrahasznosításra kell küldeni. Kérjük, hogy a termék élettartamának elteltét követően vigye azt a helyi hatóság által kijelölt gyűjtőhelyre. A termékek egyes helyeken ingyen elhelyezhetők. A termék és a csomagolás újrahasznosításával segíti védeni a környezetet és az emberek egészségét.

A D-Link és a környezet

A D-Linknél megértjük és elkötelezettek vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére. Az ezen hatás csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony károsanyag-tartalmú termékeket gyárt és csomagolásokat alkalmaz.

A D-Link azt javasolja, hogy mindig kapcsolja ki vagy húzza ki a D-Link termékeket a tápforrásból, ha nem használja azokat. Ezzel segít az energia megtakarításában és a széndioxid kibocsátásának csökkentésében.

Környezetbarát termékeinkről és csomagolásainkról további információkat a www.dlinkgreen.com weboldalon tudhat meg.

NORSK NO



Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal kastes sammen med husholdningsavfall, men leveres inn til gjenvinning.

Vennligst ta det til et innsamlingssted anvist av lokale myndigheter når det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne produktet og forpakningen hjelper du å verne miljøet og beskytte folks helse.

D-Link og miljøet

Hos D-Link forstår vi oss på og er forpliktet til å minske innvirkningen som vår drift og våre produkter kan ha på miljøet. For å minimalisere denne innvirkningen designer og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske materialer både i produktene og forpakningen.

D-Link anbefaler at du alltid slår av eller frakobler D-Link-produkter når de ikke er i bruk. Ved å gjøre dette hjelper du å spare energi og å redusere CO₂-utslipp.

"For mer informasjon angående våre miljøansvarlige produkter og forpakninger kan du gå til www.dlinkgreen.com"

DANSK DK



Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bortskaffes som husholdningsaffald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted som angivet af de lokale myndigheder, når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet og dets emballage til genbrug på denne måde bidrager du til at beskytte miljøet og den menneskelige sundhed.

D-Link og miljøet

Hos D-Link forstår vi og bestræber os på at reducere enhver indvirkning, som vores aktiviteter og produkter kan have på miljøet. For at minimere denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvendelige materialer med lavt giftighedsniveau i både produkter og emballage.

D-Link anbefaler, at du altid slukker eller frakobler dine D-Link-produkter, når de ikke er i brug. Ved at gøre det bidrager du til at spare energi og reducere CO₂-udledningerne.

Du kan finde flere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på www.dlinkgreen.com

SUOMI

FI



Tämä symboli tuotteen pakkauksessa tarkoittaa, että paikallisten lakien ja säännösten mukaisesti tätä tuotetta ei pidä hävittää yleisen kotitalousjätteen seassa vaan se tulee toimittaa kierrätettäväksi. Kun tuote on elinkaarensa päässä, toimita se lähimpään viranomaisten hyväksymään kierrätyspisteeseen. Kierrättämällä käytetyn tuotteen ja sen pakkauksen autat tukemaan sekä ympäristön että ihmisten terveyttä ja hyvinvointia.

D-Link ja ympäristö

D-Link ymmärtää ympäristönsuojelun tärkeyden ja on sitoutunut vähentämään tuotteistaan ja niiden valmistuksesta ympäristölle mahdollisesti aiheutuvia haittavaikutuksia. Nämä negatiiviset vaikutukset minimoidakseen D-Link suunnittelee ja valmistaa tuotteensa mahdollisimman ympäristöystävällisiksi käyttämällä kierrätettäviä, alhaisia pitoisuuksia haitallisia aineita sisältäviä materiaaleja sekä tuotteissaan että niiden pakkauksissa.

Suosittellemme, että irrotat D-Link-tuotteesi virtalähteestä tai sammutat ne aina, kun ne eivät ole käytössä. Toimimalla näin autat säästämään energiaa ja vähentämään hiilidioksiidipäästöjä.

"Lue lisää ympäristöystävällisistä D-Link-tuotteista ja pakkauksistamme osoitteesta www.dlinkgreen.com"

SVENSKA SE



Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte skall kastas i hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsamlingsplats, vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att bevara miljön och skydda människors hälsa.

D-Link och miljön

På D-Link förstår vi och är fast beslutna att minska den påverkan våra verksamheter och produkter kan ha på miljön. För att minska denna påverkan utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara material med låg gifthalt i både produkter och förpackningar.

D-Link rekommenderar att du alltid stänger av eller kopplar ur dina D-Link produkter när du inte använder dem. Genom att göra detta hjälper du till att spara energi och minska utsläpp av koldioxid.

För mer information om våra miljöansvariga produkter och förpackningar www.dlinkgreen.com

PORTUGUÊS PT



Este símbolo no produto ou embalagem significa que, de acordo com as leis e regulamentações locais, este produto não deverá ser eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha designado pelas suas autoridades locais quando este tiver atingido o fim da sua vida útil, alguns destes pontos aceitam produtos gratuitamente. Ao reciclar o produto e respectiva embalagem desta forma, ajuda a preservar o ambiente e protege a saúde humana.

A D-Link e o ambiente

Na D-Link compreendemos e comprometemo-nos com a redução do impacto que as nossas operações e produtos possam ter no ambiente. Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente possível, utilizando materiais recicláveis e não tóxicos tanto nos produtos como nas embalagens.

A D-Link recomenda que desligue os seus produtos D-Link quando estes não se encontrarem em utilização. Com esta acção ajudará a poupar energia e reduzir as emissões de CO₂.

Para saber mais sobre os nossos produtos e embalagens responsáveis a nível ambiental visite www.dlinkgreen.com