# **D-Link**®

# Trustworthy Surveillance

- Reliable network camera surveillance recorder for home and business
- Record video from up to nine network cameras
- View real-time video of all nine cameras from anywhere in your home or office, or remotely via the Internet
- Allows concurrent viewing and recording

# Convenient Interface

- Effortless network camera setup and management
- User-friendly interface provides simultaneous live view, recording, and playback
- Continuous or scheduled recording with automatic overwrite function
- Reliable backup and power failure recovery functions

# Precision Technology

- Smart Search technology accelerates and simplifies event investigation
- Green solution: Consumes less power and eliminates the need for a dedicated PC for continuous recording
- Live monitoring includes full-screen, snapshot, and pan/tilt/zoom (PTZ) control
- Precision playback with step/ fast forward/rewind and video enhancement
- Export video as AVI or ASF with timestamp
- Calendar search and video preview before playback

# 2-Bay Professional Network Video Recorder (NVR)



The answer to expensive, outdated analog CCTV surveillance systems has arrived. When coupled with D-Link's high-resolution and feature-rich network cameras or those of other brands, the DNR-326 2-Bay Professional Network Video Recorder (NVR) offers a comprehensive video display, storage, and management solution. D-Link's DNR-326 NVR provides reliable high-quality remote monitoring functionality at a fraction of the cost of conventional surveillance systems.

## Instant Live View

D-Link's intuitive GUI interface simplifies viewing live and recorded video from the NVR. The camera status page shows connection and recording status, along with frame rate and bit rate information for each camera. The total available recording time for the system is also clearly displayed for each NVR.

## Live Monitoring & Camera Adjustment

Users are provided with a variety of options for viewing and organizing camera footage on-screen. For a system with multiple channels, users can simply drag and drop selected cameras to the viewing area. Camera names and recording status are displayed via OSD to aid in identification. Presets from within the interface can be set to instantly restore a previously saved view. A single camera may be viewed full-screen with optional two-way audio. Users can control pan/tilt/zoom (PTZ) functions from within the interface using the provided interface buttons or by directly clicking on the video.

# **Extensive Recording Functionality**

A clear single-page interface assists with configuration including compression, resolution and frame rate for all connected cameras. The NVR records video from up to nine local and remote network cameras.

Once cameras have been set up, a highly configurable scheduling system allows for continuous recording or recording during specifically allotted timeframes. Each camera can be set to record independently at preset intervals. The NVR also provides event recording based on specific triggers such as when motion is detected.

The NVR can be configured to overwrite the oldest data automatically when HDD space runs out, allowing for continuous and uninterrupted recording. Users can specify the number of days the recording should be kept (within the limits of the HDD capacity).

For example, if the NVR has the capacity to store 7 days of recording, using the overwrite option, the NVR will record the 8th day and delete the 1st day.

The NVR also provides the option to stop recording when the HDD is full. When the disk reaches capacity, a notification can be sent via e-mail or to an external device such as an audible alarm or LED display via a DI/DO interface only.

#### Powerful Event Management

The NVR centrally controls the digital output, e-mail notifications, and recording for all the connected cameras. Input triggers from camera motion detection or digital input interfaces can additionally be monitored. These events will be logged, with optional notifications via e-mail or output devices. Users can set up multiple contact lists for event notification. A straightforward logging system organizes events by date for easy recall.

# Intelligent Playback

Searching through recorded data can be tedious and frustrating. However, the NVR's smart search function makes detecting notable events effortless. By selecting a target area on the video and setting search sensitivity, the smart search will traverse the video database based on specified search criteria to locate noteworthy events. Search criteria include options such as motion detection, missing or foreign objects, lost focus, or camera occlusion.

After selecting a desired video period for display, the NVR can instantly begin playback. The DNR-326 supports 4 channel simultaneous playback. Playback speed control allows for up to 16x speed fast forward or fast backward play. The step playback option displays one frame at a time. Additionally, users can enhance the recorded video with controls such as brightness, contrast, and sharpness.

During playback, if a user uncovers video that needs to be exported, two formats are available.

# **D-Link**®

# Easy Setup and Configuration

- Directly connectable to the Internet as PPoE support eliminates the need to install a remote router
- Supports PPPoE, DHCP, and Static IP assignment
- 2-bay SATA 3.5" HDD interface
- Up to 6 TB of hard disk storage space of recorded video<sup>1</sup>
- RAID 0/1 and JBOD support

# Dependable Data Security

- Protects important surveillance files with automatic backups to mirrored hard drives using RAID 1 technology<sup>2</sup>
- USB connection to UPS possible for power failure notification

## Flexible and Scalable

- Stand-alone device: Eliminates the need for a dedicated PC
- Supports D-Link and 3rd party network cameras

# 2-Bay Professional Network Video Recorder (NVR)

The AVI and ASF file formats will transpose a timestamp on the exported video. If a printer is connected to the user's PC, the NVR can also print the selected still image. The D-Link NVR ensures the security and integrity of IP camera footage. Administrators may filter external connections to the NVR by IP address, limiting access and thus increasing security. Administrators may also choose access privileges for users by specifying the cameras they may access for live view, playback, audio, and PTZ functions.

Recorded data is stored in a secure database. This recorded data can be backed up to additional storage locations periodically or whenever needed. The NVR also includes the option to protect data using a RAID 1 configuration. RAID 1 duplicates the recordings database onto two separate drives. In the event of an HDD failure, data integrity is maintained on the secondary HDD.

A UPS can be used as emergency power supply for the NVR. The UPS uses a USB interface to notify the NVR to perform a proper shutdown before battery power runs out. In the event of a power failure without a UPS, the NVR will boot up automatically once power is restored. Of course, the security of data is irrelevant unless the device itself is protected from theft. For this reason, the sleek NVR enclosure is compact and easy to conceal in a secure remote location. The rear panel features a cover lock that protects the HDD and a security lock that allows the device to be secured to a desk to prevent theft.

## **Complete Network Functionality**

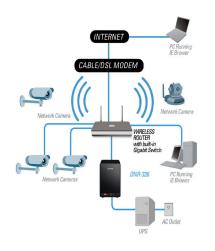
The D-Link NVR takes advantage of existing network architecture, using features such as PPPoE and ADSL services. The NVR can acquire an IP address from a DHCP server to become easily searchable during installation. Dynamic DNS is supported for systems operating without a fixed IP address. The NVR can then be accessed from the Internet using an easy-to-remember domain name provided by the DDNS service.

Maintaining an accurate record of time is essential if recorded data is to be used as evidence. To ensure that the recorded time is always accurate, the NVR can update the system clock from an Internet server using the Network Time Protocol (NTP).

#### D-ViewCam NVR Software

The D-ViewCam NVR software bundled with the D-Link NVR consists of five main components: Playback Manager, Backup and File Manager, Verification Tool, NVR Search, and Multi-NVR Viewer. The Multi-NVR Viewer supports simultaneous display of up to 128 channels. Easily organize the view by directly dragging and dropping video onto the display window. Cameras managed by the NVR can be viewed as individual sites or categorized into groups. The Playback Manager includes a clean and simple web GUI interface that allows users to play, search, or export video. The Backup and File Manager is a flexible backup utility that simplifies the process of backing up video data from the NVR to external storage. The Verification Tool verifies whether data created by the system has been tampered with by adding a digital signature to each recorded video frame. NVR Search allows you to search for NVR devices in the local area network.

# Network Setup Using D-Link NVR





Hard drive(s) not included with the NVR. An internal SATA drive is required to store video files. RAID 1 mirroring requires the use of two internal SATA drives. 6 TB capacity is provided when you install two 3 TB 3.5" hard disks in your NVR. Disk capacity may increase pending future advances in HDD technology.

<sup>&</sup>lt;sup>2</sup> To avoid data incompatibility in RAID 1 operation, use SATA drives from the same manufacturer. Formatted drive capacity for RAID 1 operation is dependant on the drive capacity of the lowest-sized drive. Older generation SATA drives may be incompatible. For a list of SATA drives that have been tested to work with your D-Link NVR, visit D-Link support web sites.





# 2-Bay Professional Network Video Recorder (NVR)

Technical Specifications		
General	Standards	IEEE 802.3/u/z Auto MDI/MDI-X SATA I, II
	HDD	HDD control & manage via PC Reformat Disk RAID 0, 1 JBOD
	Security	Cover lock Security lock
Performance	Processor	1.2GHz
	Flash ROM and RAM	128 MB and 256 MB DDR II
	Network Interface	Gigabit Ethernet LAN port (10/100/1000 Mbps)
	I/O Ports	RJ-45 port DC-in jack USB port for UPS status update
	Power Adapter	110-220v - DC 12 V/4 A
Physical & Environment	Maximum Power Consumption	25.20 W
	Standby State Maximum Power Consumption	0.234 W
	Operating Temperature	0 to 55 °C (32 to 131 °F)
	Storage Temperature	-20 to 70 °C (-4 to 158 °F)
	Humidity	5 to 90% (non-condensing)
	Dimensions	115 x 146.4 x 178.5 mm (4.52 x 5.76 x 7.03 inches)
	Weight	0.875 kg (1.92 lbs)
	Certifications	CE FCC RoHS





# 2-Bay Professional Network Video Recorder (NVR)

# Software Features

#### 0S

Linux

# SUPPORTED CAMERAS

- Supports all D-Link network cameras. Includes support for auto-discovery and megapixel resolution
- Supports known-brand network cameras including D-Link, Axis, Panasonic, Sony, Mobotix, Arecont Vision, IQinVision, Cisco, and Acti

#### RECORDING PERFORMANCE

- Max. capacity (NVR mode only):
- H.264 1080P (bitrate): 90 Mbps
- H.264 720P (bitrate): 90 Mbps
- MJPEG 1080P (frame rate): 90 fps
- MJPEG 720P (frame rate): 192 fps
- Max. capacity (NVR+File Server mode):
- H.264 1080P (bitrate): 68 Mbps
- H.264 720P (bitrate): 68 Mbps
- MJPEG 1080P (frame rate): 70 fps
- MJPEG 720P (frame rate): 150 fps

#### CAMERA SEARCH

UPnP

# AUDIO & VIDEO RECORDING

Synchronized audio & video recording

# COMPRESSION FORMAT

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

# VIDEO SETTING

 Resolution, quality, frame rate, enable audio, go to camera interface

## RECORDING TYPE

 Recording by schedule, manual and event (DI trigger, motion detection from camera)

#### REMOTE LIVE VIEW

- Supported via IE remote live viewer
- Maximum 9 simultaneous channels

## REMOTE LIVE VIEW CONTROL

 Live view, preset/go, patrol, focus, PTZ functions, snapshot, full screen, digital zoom

#### REMOTE PLAYBACK CONTROL

- Playback with normal, fast forward/rewind and step forward/ rewind
- Smart Search Intelligent detection function: General Motion, Missing Object, Foreign Object, Camera Occlusion. Lose Focus

#### 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 four channel simultaneous playback

#### OVERWRITE RECORDING

Auto recycling when disk storage is full

#### FILE EXPORT

- Export videos to AVI or ASF and images to BMP or JPG file
- Watermark verification tool

#### USER ACCOUNT

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

#### DDNS

D-Link DDNS server support

#### TWO RESET MODES

- Reset firmware GUI button
- HW reset button (hold for 5 seconds)

# SYSTEM TIME

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

# REMOTE BACKUP

- Remote software can backup raw data to redundant storage
- Backup recorded data to remote FTP site by daily schedule

#### SYSTEM STATUS

- Camera status
- System status

#### NETWORK SERVICE PROTOCOLS

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

#### **USER INTERFACE**

- HTTP Web browser
- Internet Explorer 7 or later
- NVR Search utility
- Multiple Language GUI

#### System Log

- User login/logout
- Modify/delete account
- System restart
- System reset to default
- System firmware update







No. 289 Xinhu 3rd Road, Neihu, Taipei 114, Taiwan No. 289 Xinhu 3rd Road, Neihu, Taipei 114, Taiwan D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries. All other trademarks belong to their respective owners. ©2011-2012 D-Link Corporation. All rights reservation. Release 04BR (July 2012)