2-Bay Network Video Recorder (NVR)

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

Trustworthy Surveillance

+ Reliable network camera surveillance recorder for home and business
+ Record video from up to 8 network cameras to network storage (HDD is not included)
+ View real-time video of all 8 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[1]
+ 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

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. 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 is 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 8 local and remote IP cameras. A total of 2 NVRs can be combined and administered with D-Link's bundled 16 channel management software.

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.

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. Should the disk reach 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 abandoned object, lost focus or camera occlusion. (DNS-726-4 only)

After selecting a desired video period for display, the NVR can instantly begin playback. The DNS-726-4 supports 4 channel simultaneous playback and the DNS-722-4 supports 1 channel 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. 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.

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Easy Setup and Configuration

+ Directly connectable to the Internet (PPoE) without the need to install a remote router

+ Supports PPPoE, DHCP and Static IP assignment

+ 2-bay SATA 3.5" HDD interface

+ Up to 3TB of hard disk storage space of recorded video[2]

+ RAID 0/1 and JBOD support

Dependable Data Security

+ Protects important surveillance files with automatic backups to mirrored hard drives using RAID 1 technology[3]

+ USB connection to UPS possible for power failure notification

Flexible and Scalable

+ Allows connection of up to 2 NVRs together to 16 cameras and managing them as a group

+ Stand-alone device: Eliminates the need for a dedicated PC

+ Supports D-Link and 3rd party network cameras[4]

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 to 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. A front panel lock protects the HDD and a rear panel lock can be used to secure the NVR with a cable.

Complete Network Functionality

The D-Link NVR takes advantage of existing network architecture, taking advantage of 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 reached 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-LinkCam NVR software bundled with the D-Link NVR consists of three main components: Playback Manager, Backup and File Manager, and Multi-NVR Viewer. The "Multi-NVR Viewer" supports simultaneous display of up to 16 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.
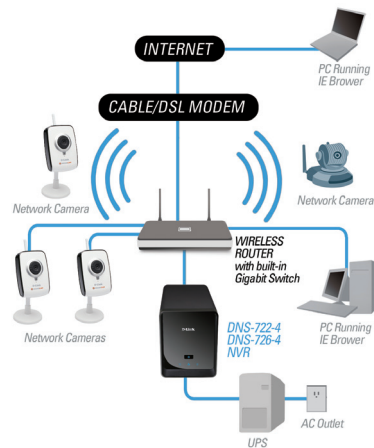
[1] Available only in DNS-726-4 and can view both DNS-722-4 and DNS-726-4

[2] Hard drive(s) not included with the NVR. Aninternal SATA drive is required to store video files. RAID 1 mirroring requires the use of two internal SATA drives. 3TB capacity when two 1.5TB 3.5" hard disks are installed in your NVR. Disk capacity may increase pending future advances in HDD technology.

[3] 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.

[4] Axis, Panasonic, Sony, Mobotix, Arecont, IQinVision, Cisco and Acti cameras support available on DNS-726-4 Professional NVR only.

Network Setup Using D-Link NVR

TECHNICAL SPECIFICATIONS

Firmware Specifications

OS
+ Linux

Supported Cameras
+ DNS-722-4: Supports all D-Link network cameras. Includes support for auto-discovery, and up to 1.3 megapixel resolution.
+ DNS-726-4: Supports known-brand network cameras including D-Link, Axis, Panasonic, Sony, Mobotix, Arecano, IQinVision, Cisco and Acti Specific feature support depends on software.

Recording Performance
+ Up to 120fps at D1/240fps at CIF for 8 channels

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
+ DNS-722-4: record by schedule, manual record and event-based recording (Motion detection from camera)
+ DNS-726-4: recording by schedule, manual and event (DI trigger, motion detection from camera)

Remote Live View
+ Supported via IE remote live viewer
+ Maximum 8 simultaneous channels

Remote Live View Control
+ Live view, preset/go, patrol, focus, PTZ functions, remote IO (DNS-726-4 only), snapshot, full screen, digital zoom

Remote Playback Control
+ Playback with normal, fast forward/rewind and step forward/rewind
+ Smart Search (DNS-726-4 only) 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
+ DNS-722-4: IE & NVR client support 1 channel playback
+ DNS-726-4: IE & NVR client support 8 channel simultaneous playback, and intelligent search by general motion, missing object.
+ Digital zoom to specified area

Overwrite Recording
+ Auto recycling when disk storage is full

File Export
+ Export videos to "AVI" or "ASF" file
+ Export images to "BMP" or "JPG" file

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

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

+ Auto backup the Video of previous day to FTP server

System Status
+ Camera status, System status
+ Still picture EMAP suppport

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

User Interface
+ Internet Explorer v6 or later
+ NVR Search utility

Hardware Specifications

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

Two Reset modes
+ Reset firmware GUI button
+ HW reset button (hold for 5 seconds)

Flash ROM
+ 32MB

RAM
+ 128MB DDR

Network Interface
+ Gigabit Ethernet LAN port (10/100/1000 Mbps)

I/O ports
+ RJ45 port x1
+ DC-in jack x1
+ USB port for UPS status update (optional)

Power Adapter
+ DC12V/3A, DC5V/3A

Reset Button
+ Reset to factory default

Security
+ Front panel lock
+ Device lock hole

Power Consumption
+ Max. power consumption: 23.59W
+ Standby state max. power consumption: 7.26W

Dimension (W x D x H)
+ 198 (W) x 104 (D) x 132 (H) mm (7.8 x 4.1 x 5.2 inches)

Weight
+ 1.23 kg (2.7 lbs)

Operating Temperature
0° to 55° C (32° to 131° F)

Storage Temperature
-20° to 70° C (-4° to 158° F)

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

Package Contents
+ 2-Bay NVR
+ Power Adapter
+ Ethernet Cable
+ Quick Installation Guide
+ Power Cable Holder
+ Keys
+ CD-ROM with:
  - Software
  - Product Documentation

TECHNICAL SPECIFICATIONS

D-Link NVR Comparison

Feature	DNS-722-4	DNS-726-4
Simultaneous Playback	1 Channel	4 Channels
Live View	✓	✓
UPS Support w/ USB	✓	✓
Export Image/Video	✓	✓
Physical Security	✓	✓
RAID Support	✓	✓
Remote Backup	✓	✓
Scheduled/Manual Recording	✓	✓
Event Recording (I/O, motion)	motion	motion, I/O
Supports D-Link Cameras	✓	✓
Supports Additional Cameras	–	✓
Smart Search	–	✓
Remote I/O Support	–	✓

Surveillance Product Comparison

Feature	D-Link NVR	DVR (CCTV)	PC NVR
Low Total Cost of Ownership	✓	–	–
Low Power Consumption	✓	–	–
Camera Power over Ethernet	✓	–	✓
High Stability	✓	✓	–
Compact Size	✓	✓	–
Feasible Redundant Power	✓	✓	✓
Immune to Viruses and Malware	✓	✓	–
Powerful Management Software	✓	✓	✓

Supported D-Link Cameras*

Model	Description	Model	Description
DCS-910 A1/ A2	Fixed Network Camera	DCS-5230 A1	Wireless N PTZ Network Camera
DCS-920 A1/ A2	Fixed Network Camera	DCS-5300 A3/ A4	10/100 Mbps Pan/Tilt Network Camera
DCS-1100 A1/ A2	Wired Network Camera	DCS-5300G B2	802.11g Wireless Audio Network Camera with Pan/Tilt
DCS-1130 A1/ A2	Wireless N Network Camera	DCS-5610 A1/ A2	2.6x PTZ PoE Network Camera
DCS-2102 A1/ A2	Wireless Megapixel Network Camera	DCS-5605 A1	10x PTZ Day & Night Network Camera
DCS-2121 A1/ A2	Wireless Megapixel Network Camera	DCS-5635 A1	Wireless N 10x PTZ Day & Night Network Camera
DCS-3110 A1/ A2	Megapixel PoE Network Camera	DCS-6110 A1/ A2/ A3	Fixed Dome PoE Network Camera
DCS-3410 A1/ A2	Day and Night PoE Camera	DCS-6111 A1/ A2	WDR Fixed Dome Day & Night Network Camera
DCS-3411 A1/ A2/ A3	Fixed Day & Night Network Camera	DCS-6410 A1/ A2	Fixed Dome Day and Night PoE Camera
DCS-3430 A1/ A2/ A3	Wireless N Fixed Day&Night Network Camera	DCS-7410 A1/ A2	Day & Night Outdoor PoE Network Camera
DCS-3710 A1	Megapixel Day & Night WDR Network Camera	DCS-7510 A1/ A2	Day & Night Outdoor PoE Network Camera
DCS-3415 A1/ A2/ A3	18x PoE Network Camera	DVS-210-1 A1	1 channel Video Server
DCS-5220 A2/ B1	Wireless PT Network Camera with 3G Mobile Video	DVS-310-1 A1	1 channel PoE Video Server

* Please visit the D-Link website for an updated list of supported cameras.