# D-Link®
**Building Networks for People**

just connect+

## Product Highlights

**Concurrent Recording and Viewing**

Record and view real-time video streams from up to 16 cameras on a local network or remotely over the Internet

**Easy Setup and Configuration**

Embedded software enables easy setup via a connected monitor and four PoE ports eliminate the need for electrical wiring when adding cameras

**No Computer Needed**

Standalone solution with 2 integrated hard disk bays, USB mouse/keyboard support and HDMI/VGA monitor support

## DNR-2020-04P
# JustConnect 16-Channel PoE Network Video Recorder

## Features

**Trustworthy Surveillance**
- Reliable network camera surveillance recorder for small business users
- View real-time and recorded video of all 16 cameras from anywhere in your home or office, or remotely via the Internet
- M-JPEG, MPEG-4 or H.264 video format

**Convenient Interface**
- Effortless network camera setup and management
- User-friendly interface provides 16 channels of simultaneous live view, recording, playback, and PTZ control
- Continuous, scheduled, or event recording with automatic overwrite function

**Flexible Storage Options**
- Two-bay SATA 3.5" HDD interface, up to 16 TB of hard disk storage space for recorded video[2]
- Protects important surveillance files with automatic backups using RAID 1 technology

**Flexible and Scalable**
- Stand-alone device: Eliminates the need for a dedicated PC
- Integrated HDMI/VGA display output
- Supports D-Link network cameras[1]
- Power fail recovery recording

The DNR-2020-04P JustConnect 16-Channel PoE Network Video Recorder is an all-in-one network video recorder (NVR) that can record video from up to 16 network cameras[1] to its dual HDD storage[2]. With the integrated HDMI/VGA display output and USB port[3], users can view, control and configure the DNR-2020-04P without the need to turn on their PC. Featuring Power over Ethernet (PoE), the NVR supplies power to up to four PoE cameras, saving valuable time and electrical installation costs during setup. Powered by an embedded system, the DNR-2020-04P supports real-time remote monitoring and playback via a web browser using the NVR's web GUI. Additionally, support for audio in/out, DI/DO triggering, and external USB 3.0 storage for video export and backups fill the needs of small businesses. The bundled Multi-NVR Viewer is a comprehensive network surveillance software designed for SMB and enterprise users, making the DNR-2020-04P a convenient, versatile, and effective video recorder.

## Versatile Monitoring

Users are provided with a variety of options for viewing and organising camera footage on-screen. Featuring live viewing of multiple channels, users can simply drag and drop selected cameras to the viewing area. Users can also control pan/tilt/zoom (PTZ) functions from within the interface. A single camera may be viewed full-screen with two-way audio support. Optional Digital In/Digital Out (DI/DO) connections to triggers such as door and window sensors allow for easy event-based recording.

## Extensive Recording Functionality

The DNR-2020-04P's clear interface allows for easy configuration of many functions including compression, resolution, and frame rate for all connected cameras. Once the cameras have been set up, recordings can be made continuously, or according to a user-defined schedule. E-map support simplifies camera setup and management. The NVR also provides event recording based on specific triggers such as when motion is detected and notifications can be set so that an email will be sent to alert the administrator whenever an event occurs.

## Secure Storage

Administrators may filter external connections to the NVR by IP address, limiting access and thus increasing security. Administrators may also manage access privileges for users by specifying the cameras they may monitor. The NVR also includes the option to protect data using a RAID 1 configuration[4], which duplicates recorded data onto two separate hard drives. In the event of HDD failure, data integrity is maintained on the secondary HDD. The recorded data can be backed up to external USB disks or additional storage locations such as FTP servers whenever required.

## Bundled NVR Software

The included DCS-260 Multi-NVR Viewer is a comprehensive network surveillance software designed for SMB and enterprise users. Using an intuitive user interface, you can centrally manage up to 128 NVR devices and network cameras, allowing you to efficiently control multiple D-Link NVRs located in different areas. By enabling users to monitor multiple live camera views, receive real-time event notification, and manage camera locations using multiple eMaps, the software not only meets but exceeds the requirements of any modern security-conscious company.

## Smooth Streaming from Anywhere

The DNR-2020-04P also enables users to remotely view and manage the NVR from anywhere via a web browser. The Gigabit Ethernet port provides superior bandwidth for viewing 16 camera streams simultaneously, so critical moments can be monitored and captured at all times. Additionally, using the JustConnect+ app for iOS and Android mobile devices, allows administrators easy access for monitoring the DNR-2020-04P using mobile devices.



If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

### D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

### D-Link Assist Silver - for prompt same-day assistance

D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.
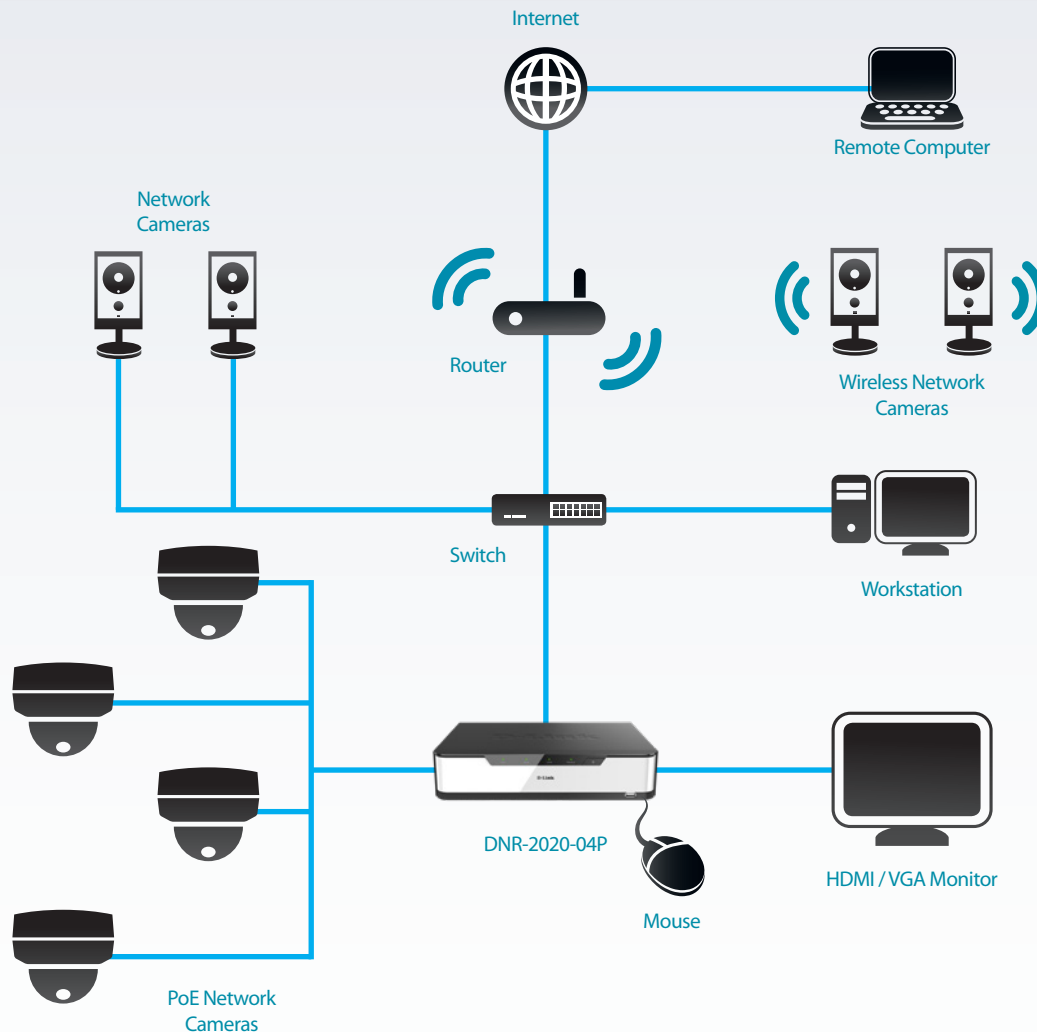
### D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying Switching, Wireless, Storage, Security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

## Network Setup

Internet

Remote Computer

Network Cameras

Router

Wireless Network Cameras

Switch

Workstation

DNR-2020-04P

PoE Network Cameras

Mouse

HDMI / VGA Monitor

## Technical Specifications

### General

| | | |
|---|---|---|
| Standards | • IEEE 802.3u/x/z<br>• IEEE 802.3af | • SATA II/III<br>• Auto MDI/MDI-X |
| HDD[2] | • Format Disk<br>• Up to 16 TB HDD | • EXT3 file system<br>• RAID 0, 1, JBOD[4] |
| Two Reset Modes | • Reset firmware GUI button | • HW reset button (hold for 10 seconds) |
| Reset Button | • Reset to factory default | |
| Flash ROM | • 128 MB | |
| RAM | • 1024 MB DDR3 | |
| Network Interface | • Gigabit Ethernet port (10/100/1000 Mbps) | |
| I/O Ports | • 1 x 10/100/1000 BaseT RJ-45 port<br>• 4 x 10/100 BaseT PoE port (802.3af )<br>• HDMI (supports 720p and 1080p resolution with 16:9 display ratio)<br>• D-sub for VGA output | • 1 x USB 3.0 port[3]<br>• 1 x USB 2.0 port[3]<br>• 3.5 mm audio input x 1, output x 1<br>• 4 x DI, 1 x DO |
| Cooling | • 1 x Smart Fan | |

## Software Features

| | | |
|---|---|---|
| Supported Cameras | • Please visit www.dlink.com for a list of supported cameras[1] | • Supports auto-discovery and megapixel resolution |
| System Requirements for Web Interface | • Operating System: Windows 8/7 or above | • Browser: Internet Explorer 8 or above |
| Recording Performance | • Max recording bitrate: 80 Mbit/s<br>• Primary video profile:<br>  • H.264 at 1080p at 480 fps | • Secondary video profile:<br>  • H.264 at VGA at 240 fps |
| Camera Search | • UPnP | • ONVIF |
| Audio and Video Recording | • Synchronised audio & video recording | |
| Compression Format | • H.264, MPEG-4, M-JPEG | |
| Audio Compression Format | • G.711, G.726 | |
| Video Setting | • Resolution<br>• Quality<br>• Bitrate | • Frame rate<br>• Enable audio<br>• Video profile selection |
| Recording Mode | • Record by schedule, manual, always, and event-based recording | • Motion-triggered recording |
| Alarm Recording | • Pre-alarm: 60 seconds per channel | • Post-alarm: 300 seconds per channel |
| Remote Live View | • Supported via browser and Multi NVR Viewer (DCS-260) software | |
| Remote Live View Control | • Live view<br>• Preset/Go to Preset<br>• Patrol/Auto Patrol<br>• Focus<br>• PTZ control<br>• Snapshot<br>• Full screen | • Auto scan<br>• Digital zoom (Zoom in & Zoom out)<br>• Manual Record<br>• Audio Enable<br>• Adjust audio volume<br>• Video layout<br>• e-map |
| Remote Playback Control | • Normal<br>• Fast forward/rewind | • Step forward/rewind |
| Remote Playback | • Supported via browser and Remote Playback application<br>• Playback system with timeline GUI, search by event, area, cameras, date, and time | • Browser or Remote Playback support 16-channel simultaneous playback<br>• Digital zoom |
| Overwrite Recording | • Auto recycling when disk storage is full | |
| File Export | • Local: Export videos to AVI / MP4 format<br>• Remote: Export videos to AVI or ASF file | • Export images to JPG file |
| Digital Watermark Tool | • Prevents recorded video files/snapshots from being tampered with | • Acts as a tool for verification |
| User Account | • Additional accounts can be created to allow users system access and specify authorization for camera channels, PTZ, etc. | |
| DDNS | • D-Link DDNS and DynDns server support | • Manual DDNS |
| System Time | • D-Link NTP<br>• Input time | • Sync with computer<br>• Daylight saving time |
| Auto Backup | • Backup recorded data to USB/SAMBA/FTP via a schedule | |
| Remote Backup | • Remote backup software can backup raw data to redundant storage | |
| System Status | • Camera status<br>• HDD status | • System status |

| Network Service Protocols | • IPV4, ARP, TCP, UDP, ICMP<br>• DHCP Server/Client<br>• NTP Client<br>• DNS Client<br>• DDNS Client<br>• SMTP Client<br>• FTP Client<br>• HTTP Server<br>• RTP<br>• RTCP<br>• RTSP | • IP filtering<br>• UPnP<br>• CoS<br>• QoS/DSCP<br>• HTTPS<br>• Samba<br>• Bonjour<br>• SNMP v1/v2c/v3<br>• PPPoE<br>• DDP |
|---|---|---|
| User Interface | • HTTP Web browser<br>• NVR Search Utility<br>• Remote Playback/Backup | • Verification tool<br>• Mobile app<br>• GUI via HDMI/VGA |
| Package Contents | • JustConnect 16-Channel PoE Network Video Recorder<br>• Power Adapter<br>• Ethernet Cable<br>• Quick Installation Guide | • CD-ROM with:<br>  • Software<br>  • Product Documentation |

## Physical

| | | |
|---|---|---|
| Weight | • 2.1 kg (4.63 lbs) | |
| Power Input | • Input: 100 to 240 V AC, 50 to 60 Hz | • Output: DC 48 V/1.85 A |
| Power Consumption | • Max. 90 W | |
| PoE Budget | • Per Port: Max. 15 W | • Total: 45 W |
| Temperature | • Operating: 0 to 40 ˚C (32 to 104 ˚F) | • Storage: –20 to 70 ˚C (-4 to 158 ˚F) |
| Humidity | • 5% to 90% non-condensing | |
| Certifications | • CE<br>• FCC | • RoHS |
| Dimensions | | |

300 mm

225 mm

63 mm

1 Please visit your regional D-Link website via www.dlink.com for a full camera compatibility list.
2 Hard disks are not included. Supports hard disks up to 8 TB each for a total of 16 TB.
3 This port is used for firmware updates, video exports to USB drives, and backups. Connection to a USB mouse/keyboard is supported.
4 RAID 0 and RAID 1 mirroring requires the use of two internal SATA drives. To avoid data incompatibility in RAID 1 operation, use identical SATA drives from the same manufacturer. Formatted drive capacity for RAID 1 operation is dependent on the drive capacity of the lowest-sized drive. Some older generation SATA drives may not be compatible. For a list of SATA drives that have been tested to work with the NVR, visit the D-Link support website.

## For more information: www.dlink.com

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