QUADStor™ NVR 400 SERIES
NETWORK VIDEO RECORDER

Networked IP Video Solution

- Capture
- Store
- View
Built for speed and ease-of-use, this embedded NVR is a cost-effective choice for your video surveillance and security needs. Featuring easy-to-upgrade and install Hard Disk Drives (HDDs) and a native On Screen Display (OSD) that’s easy to navigate with a mouse on any monitor you choose.

Linear’s QUADStor NVR comes with a Quick Setup menu for fast installation, and can support two networks, so that IP Cameras can be isolated on a separate network to reduce bandwidth on the Local Area Network (LAN), if desired.

The QUADStor makes it simple to view, search and archive video using today’s most popular web-browsers that support Flash®. Designed with your busy schedule in mind, the browser interface mimics the NVR’s OSD, so that you’ll only need to know one interface. Additionally, QUADStor is mobile-friendly; you can view video on your iPhone®, iPad® or Android® device using the free QUADView™ NVR app.

QUADStor NVR is designed to work with Linear IP cameras. Linear IP cameras are ONVIF compliant, so they integrate easily with third-party VMS solutions.
The Linear video eco-system provides the products, technology, and integration to make a system easy to deploy and support.

**Applications**
Ideal for small to mid-sized business, residential and commercial applications needing up to 16 IP cameras.

**INTEGRATE**
Integrate video with other platforms and software using ONVIF standards.

**CAPTURE**
The higher the megapixel number, the higher the resolution and larger the video files are to transmit and store. Pick from 2, 3 or 5 MP IP cameras.

**STORE**
Video is stored on the NVR for playback and forensic purposes. Linear uses Audio Video (AV Class) hard disk drives (HDDs) for optimum storage performance & reliability.

**VIEW**
View live video or retrieve video from the NVR using a multitude of software applications including iOS® (iPhone® & iPad®), Android®, PC and Mac platforms.
**QUADStor NVR 400 Features**

- H.264 video compression
- Native On-Screen Display with full mouse control
- 1080p high definition output, HDMI or VGA
- Removable HDDs, two drive bays
- Up to 8TB storage, AV Class HDDs
- Easy-to-use GUI

- Supports Linear 2, 3* & 5* megapixel Cameras
- Free DDNS, to create a domain name for the NVR instead of using an IP address
- Remote view from web browser
- Live view on your mobile devices via QUADView™ NVR app for iOS® or Android®

* Note: Video playback from 3 & 5 MP cameras is not supported by NVR OSD, instead use web browser GUI to view video playback.

**Browser GUI**

Browser GUI for NVR and IP cameras for remote monitor, playback of NVR video; uses Flash® technology and is compatible with Internet Explorer®, Chrome®, Safari®, Firefox® and Opera®.

> Browser GUI supports most popular Web Browsers.

**Quick Start**

Quickly and easily configure the QUADStor™ NVR using the On Screen Display’s Quick Setup tab to:

- Set & manage IP addresses
- Manage cameras
  - Motion detection
  - Stream configuration
- Sync cameras with NVR date & time
- Configure user accounts
- Manage storage and hard disk use
- Preview video

**Live Video**

View live video from multiple IP cameras:

- Full screen and various layouts
- Create video bookmarks
- Access alarm log
- Monitor recording status
- PTZ control
- Audio monitoring
- Adjust camera sensor configuration

**Search, Playback & Archive Video**

Search and playback recorded video from one or more cameras. Use the calendar to select the date. Manage video playback by using the timeline and video controls. Find events easily with video “event tagging” as shown in red on the timeline. Archive video to other media for long-term storage.

**Remote Access: QUADView™ NVR**

Remotely view and control video from your Apple® iPhone®, iPad®, Android® device, or computer. View video from multiple locations, search and playback video. See who, what, where, anytime you are not there.

> Download QUADView™ NVR today!
Available at Apple® App Store or Google® Play Store
Recording & Bandwidth Estimation Table
The NVR supports a maximum of 24 Mbps total bandwidth. The recording matrix below approximates the number of days for video storage for both constant recording and motion-based recording.

<table>
<thead>
<tr>
<th># IP Cameras</th>
<th>Video Resolution</th>
<th>FPS</th>
<th>Bit Rate (Mbps)</th>
<th>Total Mbps</th>
<th>Image Quality</th>
<th>Days of Storage</th>
<th>Record Hours/Day</th>
<th>2TB</th>
<th>4TB</th>
<th>6TB</th>
<th>8TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1920 x1080</td>
<td>5</td>
<td>2</td>
<td>8</td>
<td>Medium</td>
<td>24</td>
<td>23</td>
<td>46</td>
<td>69</td>
<td>93</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>30</td>
<td>5</td>
<td>20</td>
<td>Highest</td>
<td>9</td>
<td>19</td>
<td>28</td>
<td>37</td>
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</tr>
<tr>
<td>8</td>
<td>1920 x1080</td>
<td>5</td>
<td>2</td>
<td>16</td>
<td>Medium</td>
<td>24</td>
<td>12</td>
<td>23</td>
<td>35</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>3</td>
<td>8</td>
<td>Medium</td>
<td>8</td>
<td>15</td>
<td>23</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1920 x1080</td>
<td>5</td>
<td>1.5</td>
<td>18</td>
<td>Standard</td>
<td>24</td>
<td>10</td>
<td>21</td>
<td>31</td>
<td>41</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>30</td>
<td>2</td>
<td>8</td>
<td>Medium</td>
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<tr>
<td>16</td>
<td>1920 x1080</td>
<td>5</td>
<td>1.5</td>
<td>24</td>
<td>Standard</td>
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<td>1.5</td>
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<td>Standard</td>
<td>8</td>
<td>15</td>
<td>23</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table represents ideal video recording results based on H.264 Base Profile, audio off, I-Frame interval set to 1, and constant bit-rate. For constant recording, 24 hours per day is used. For motion-based recording, 12 hours per day is used. Reducing the frame rate and/or the number of hours video is recorded per day will provide more days of storage. Actual results may differ by ±10%.

System Diagram

NOTE:
System is shown with optional configuration using two networks. The IP camera network is connected to the NVR via LAN 2. The NVR is connected to the LAN, WAN or Internet via LAN 1 to offer better control of the video bandwidth.
MODEL: LV-QSN400 SERIES

VIDEO

Recording: 4 Cameras 1080p / 720p real-time video
Maximum Recording: Up to 16 Cameras, maximum bit rate is 24 Mbps for all cameras
Output Display: Switch to select VGA or HDMI
Output Resolutions: 1024x768, 1280x720p or 1920x1080p
Video Decoding: H.264, M-JPEG, MPEG-4 (Decode 2MP stream on supported cameras)
Supported Cameras: Linear LV series IP cameras, 2MP, 3MP* and 5MP*
Rate Control: CBR (Constant Bit Rate), VBR (Variable Bit Rate) as defined by IP device

STORAGE

HDD: 2 HDD Drive Bays; Removable; Supports up to 2x 4TB HDD (AV Class, SATA)
Recording Method: Constant recording or motion detection

CONNECTIONS

Power Switch: Power switch for main power
Network: 1x 1000 Mbps RJ45 Ethernet; 1x 100 Mbps RJ45 Ethernet
Video Outputs: One DVI connector with a DVI-VGA DB15 adapter, one DVI-HDMI adapter
Audio Input: 1x 3.5mm audio input (Mic)
Audio Output: 1x 3.5mm audio output
USB: 3 USB 2.0 ports. Supports USB mouse (included), supports USB keyboard (not included)

NETWORK

Web Server: Flash video, multi browser, ActiveX
Network Protocols: RTP/RTMP, RTSP, TCP/UDP, HTTP, DHCP, DNS client
DDNS Service Providers: NOIP (free service) & DynDNS

AUDIO

Audio Format: G711 A-Law, G711 U-Law, RAW_PCM

USER INTERFACE

Local GUI: Languages supported: English, Chinese and Russian
PC Software: Web browser
Remote Apps: QUADView NVR apps for Apple® iOS® (iPhone® & iPad®) & Android® devices (Free download)
Compatibility: Internet Explorer®, Google® Chrome®, Safari®, Firefox®, Opera®

PHYSICAL

Power: 12V DC ± 5%, 5A, external power supply unit requires 120 VAC
Mouse: USB mouse included
Cooling: Heat sink, cooling fan
Operating Humidity: 20% - 80% RH
Regulatory: CE / FCC / RoHS compliant
Product Dimensions (LxWxH): Chassis: 8.7” x 5.9” x 4.0” (220mm x 150mm x 100mm)
Product Weight: 9.9lbs / 4.5kg

WARRANTY

2 Years for NVR, 3 years for HDDs

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description (these models include AV HDD’S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV-QSN402T</td>
<td>QUADStor NVR series 400, H.264, 2 HDD Bays, 2 TB Storage</td>
</tr>
<tr>
<td>LV-QSN404T</td>
<td>QUADStor NVR series 400, H.264, 2 HDD Bays, 4 TB Storage</td>
</tr>
<tr>
<td>LV-QSN406T</td>
<td>QUADStor NVR series 400, H.264, 2 HDD Bays, 6 TB Storage</td>
</tr>
<tr>
<td>LV-QSN408T</td>
<td>QUADStor NVR series 400, H.264, 2 HDD Bays, 8 TB Storage</td>
</tr>
</tbody>
</table>

Accessories**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV-HDD-2T</td>
<td>Hard Drive, 2TB, AV Class for Video Storage Systems</td>
</tr>
<tr>
<td>LV-HDD-3T</td>
<td>Hard Drive, 3TB, AV Class for Video Storage Systems</td>
</tr>
<tr>
<td>LV-HDD-4T</td>
<td>Hard Drive, 4TB, AV Class for Video Storage Systems</td>
</tr>
</tbody>
</table>

* Playback of 3 and 5 megapixel camera streams recorded on NVR will not playback using QUADView apps. Use browser GUI.
** Audio / video class hard disk drives

Specifications subject to change without notice.