

# DX8100 Series Digital Video Recorder

8/16/24/32 CAMERA INPUTS, 250 GB-3 TB STORAGE, ADVANCED SEARCH CAPABILITIES

## PRODUCT FEATURES

- Windows® XP Embedded
- Optional MUX Card Output
- 2 Built-In Audio Channels
- Optional Layer 2 Multicasting for Web Browser Access
- 16-Channel Expansion Box Option
- Maximum Increased Storage Capacity of 3 TB
- Increased Frame Rate for 2CIF and 4CIF Recording
- Standard Multiplexed Output for Analog Display
- Up to 704 x 480 Recording Resolution (4CIF)
- Third-Party Dome Support
- ATM/POS Data Interface Support

**The Choice for Professional Security**—As your business grows and becomes more diversified, you need a professional digital video recorder (DVR) that can grow with and also stay a step ahead of your business security requirements. Your security application might require more cameras or DVR software that provides even more sophisticated operation and control features. The **DX8100 Series** digital video recorders (DVRs) bring to market a new and innovative hardware platform that is powered by unparalleled and unique high-performance software. The DX8100 is expandable to meet your future security requirements.

The DX8100 is interoperable with your existing DX8000 DVRs, allowing you to build upon your existing DX8000 security system. A DX8100 client can operate and administer DX8100 and DX8000 servers in the same network.

When you need to quickly and easily add more security cameras, the DX8100-EXP 16-channel expansion unit extends the 8- or 16-channel DX8100 to 24 or 32 channels. With or without the channel expansion unit, all of the cameras can now take advantage of the increased frame rate of 2CIF and 4CIF recording. The DX8100 records video up to 480 images per second (ips) at a maximum CIF image size.

If your security project demands increased storage capacity, you can extend recorded internal storage up to 3 TB. For the DX8108 and DX8116, the optional DX9200HDDI further increases the storage capacity. Alternately, the DX9200HDDI can serve as a systems RAID solution.

If your security application requires enhanced audio recording, the optional audio cards provide one audio channel for each video channel. Optional audio cards disable the standard onboard audio channels.



(MONITOR, DX8100-EXP, AND KBD300A KEYBOARD NOT INCLUDED.)

Sophisticated video security applications require a network of DVRs to monitor multiple locations. The 10/100/1000 megabit Ethernet port supports today's high-speed networks. You can network your DX8100s and DX8000 systems and remotely operate the DVRs for continuous, motion detection, alarm, ATM/POS, normal scheduled recording, and administer and view live and playback video. For time-critical security applications, the DX8100 supports the Network Time Protocol (NTP), allowing all networked DX8100s to be synchronized to one accurate NTP time server.

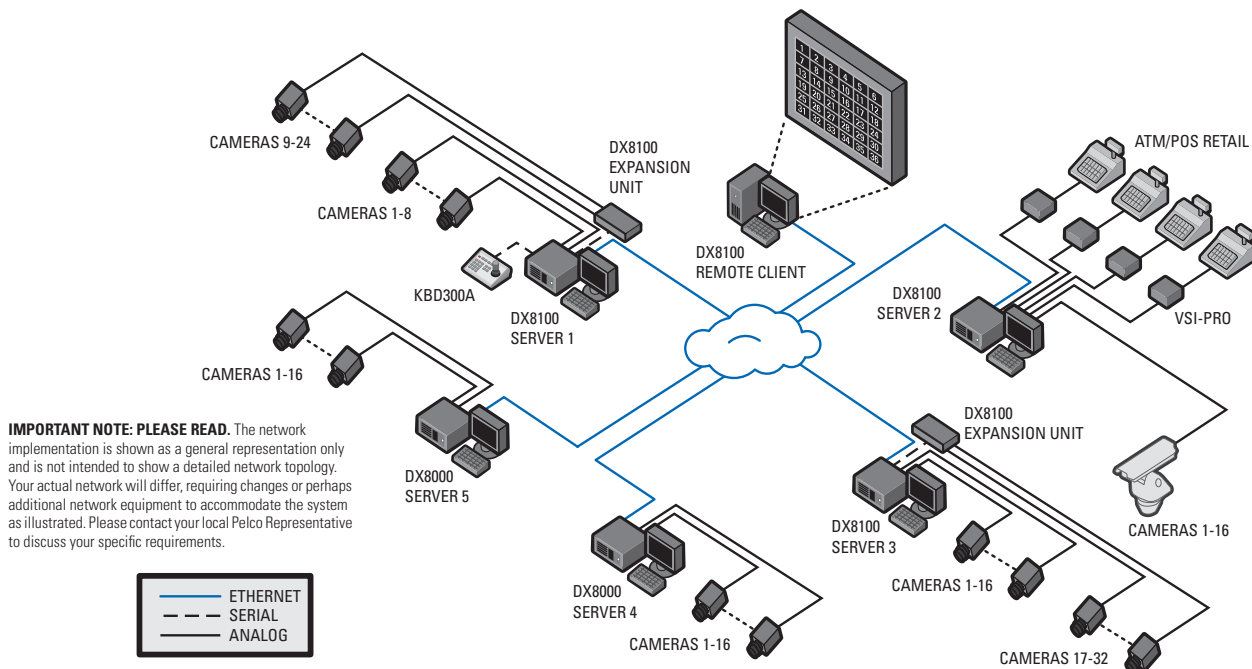
**New features and functionality**—DX8100 version 1.1 broadens the already extensive features by enhancing the DX8100 usability for the ever-changing security environment. New are full screen display of index and playback video at the click of a button, the ability to export and print from a copy of backed up video, and incremental setting of the global data retention time limit in one-day increments. Running on Windows XP Embedded, the DX8100 continues to advance technologically, allowing you to take advantage of optimized memory usage and CPU performance, and strong network support. The 8- or 16-channel MUX option sends video to the VGA and composite monitor port at up to 480 ips, for real-time viewing. As an added benefit, the MUX option provides a second, low resolution composite monitor output that displays cameras in CIF resolution and is ideal for viewing multiple cameras in live view.

Two standard audio channels in the base DX8100 are used for audio recording. Upgrade to the DX8108-AUD or DX8116-AUD audio option for 8 or 16 audio inputs.

These new feature innovations, coupled with a proven performance history, continues to make the DX8100 “the professional’s choice of DVR” for your security application.



# TECHNICAL SPECIFICATIONS



## APPLICATIONS

The DX8100 interacts as a comprehensive system, easily integrating into your existing DX8000 network. The DX8100 adds many new features, for example DX8100 server-to-DX8000 server connectivity, and carries forth all existing DX8000 features including KBD300A keyboard compatibility, viewing up to 36 images simultaneously, and direct connection to ATM/POS devices and other serial devices.

## ADDITIONAL FEATURES

- 36 Camera Views for DX8100 Server or Client
- Online Help
- Up to 32 Channels of Audio Recording (Optional)
- 8/16/24/32 Alarm Inputs and 8/16/24 Relay Outputs
- Camera View Favorites
- Instant Playback
- Quick Menu Option to Turn Relays On/Off
- Live Audio Over the Network
- Video Loss Event Start and Recovery Time
- Video Loss Event Linked to an Alarm
- Up to 480 ips Recording Rate at 320 x 240 Resolution (NTSC)
- Client Connects to up to 100 Servers
- Connect Any Five DX8100 Servers in a Network or Any Combination of DX8100 and DX8000 DVRs
- Network Bandwidth Throttling
- 10/100/1000 Megabit Ethernet Port
- Multi-Event Recording Schedules
- Multiple Displays for Live Viewing or Playback While Recording
- 6X Digital Zoom on Playback
- On-Screen PTZ Control with Positioning Device Programming Capability
- Includes Remote PC, Web, and Handheld Client Software
- Pelco-Engineered Compression Technology Offering High-Quality and Small File Sizes
- Local and Remote Administration, Live, Search, and Playback Viewing
- Individual Camera Channel Configuration
- Display Cameras from Different Sites on One Screen
- Dynamically Adjustable Frame Rate and Image Quality for Motion and Alarm Recording and Pre-Alarm Recording
- Pre- and Post- Alarm Recording up to 60 Seconds (up to 15 Minutes with Optional 512 MB RAM Upgrade)\*
- Monitor System Changes Using Activity Logs
- User-Friendly and Highly Intuitive Graphical User Interface
- Local and Remote Software Upgrade Capabilities
- Multilevel Password and User Configuration
- Automatic Image Watermarking
- Multilingual Support (English, French, German, Italian, Polish, Portuguese, Russian, and Spanish)
- User-Definable PTZ Presets, Patterns, and Preset Tours
- Print Still Images from Video
- Export Video and Still Images in Multiple Formats, Including DX8100 Native, AVI, ASF, BMP, TIFF, and JPEG
- DX8100 Viewer Included with Video Exports
- API Facilitates Development and Integration of Third-Party Applications
- Ability to Configure Any Number of Camera Inputs for Covert Mode
- Scheduled Backup
- Interoperable with DX8000 DVRs
- External Storage RAID Option with DX9200HDDI
- Standard DVD-R Burner Writes to CDR and DVD-R Media
- NTP Time Server Compatible
- Up to 32 Camera Inputs and Outputs with Auto Termination
- KBD300A Keyboard Support for Camera Selection and PTZ Control

\*Pre-alarm time estimate based on 16-channel recording at a resolution of 320 x 240 (CIF) and a frame rate of 5 ips.

# TECHNICAL SPECIFICATIONS

## ELECTRICAL/VIDEO

Input Voltage	100-240 VAC ±10%, 50/60 Hz, autoranging*
Power Consumption	Maximum 350 W
Signal System	NTSC/PAL
Operating System	Windows XP Embedded only
Recording Resolutions	NTSC PAL 320 x 240 320 x 288 640 x 240 640 x 288 640 x 480 640 x 576 352 x 240 352 x 288 704 x 240 704 x 288 704 x 480 704 x 576
Compression	Pelco engineered
Video Inputs	8/16/24/32 (looping with automatic termination)
VGA Outputs	1
Analog Video Outputs	1 with DX8108/DX8116; 2 with DX8124/DX8132
Alarm Input Terminals	8/16/24/32 (user selectable, N.O./N.C.)
Relay Output Terminals	8/16/24 (user selectable, N.O./N.C.)
Relay Contact Ratings <sup>†</sup> Rated (Resistive) Load	0.5 A at 120 VAC or 1 A at 24 VDC
Remote Administration	Full remote control through TCP/IP network

## MECHANICAL

Connectors	
BNC	Video inputs and outputs
6-pin mini-DIN	PS/2 mouse and keyboard
DB9	COM 1
DB15	VGA port
RJ-45	10/100/1000 Megabit Ethernet port and RS-485/RS-422 ports
USB	6 high-speed USB 2.0 ports (2 front, 4 back)
Audio Connectors	Miniature male phone plug for line in, microphone in, and audio output

## GENERAL

Environmental	
Operating Temperature	50° to 95°F (10° to 35°C)
Relative Humidity	Maximum 80%, noncondensing
Dimensions	
Desktop	19.9 (D) x 17 (W) x 7.0 (H) inches (50.55 x 43.18 x 17.78 cm)
Rack Mount	22 (D) x 19.0 (W) x 7.0 (H) inches (4 RUs) (55.88 x 48.26 x 17.78 cm)
Expansion Unit Dimensions	
Desktop	8.19 (D) x 17 (W) x 1.73 (H) inches (20.80 x 43.18 x 4.39 cm)
Rack Mount	8.19 (D) x 19.0 (W) x 1.73 (H) inches (20.80 x 48.26 x 4.39 cm)

Minimum and maximum unit and shipping weights are given for each model series.

Unit Weight (Approximate)	Unit	Shipping
DX8108-250	39.8 lb (18.1 kg)	61.0 lb (27.6 kg)
DX8108-3000	44.9 lb (20.4 kg)	67.0 lb (30.4 kg)
DX8116-250	40.3 lb (18.3 kg)	62.0 lb (28.0 kg)
DX8116-3000	45.4 lb (20.6 kg)	67.0 lb (30.4 kg)
DX8124-250	40.8 lb (18.5 kg)	62.0 lb (28.0 kg)
DX8124-3000	45.9 lb (20.8 kg)	68.0 lb (30.8 kg)
DX8132-250	41.3 lb (18.7 kg)	63.0 lb (28.5 kg)
DX8132-3000	46.4 lb (21.1 kg)	68.0 lb (30.8 kg)

\*It is recommended that an uninterruptible power supply (UPS) device be used with the DX8100 with a 700 VA or better rating.

<sup>†</sup>Relays are grounded.

## CERTIFICATIONS

- CE, Class B
- UL Listed
- UL Listed to Canadian Safety Standards
- FCC, Class B

At the time of this printing, other certifications are pending. Please consult the factory, our Web site ([www.pelco.com](http://www.pelco.com)), or the most recent B.O.S.S.<sup>®</sup> update for the current status of certifications.

## REMOTE PC CLIENT APPLICATION

### Recommended PC Requirements

Processor	Intel® Pentium® 4 with 2800 MHz minimum processor speed
Memory	256 MB RAM
Video	AGP or PCI-e VGA card with minimum 64 MB video RAM (nonshared memory), 1024 x 768 or 1280 x 1024 display resolution, and DirectX® 8.1 application programming interface.
Monitor	SVGA or XGA with 1024 x 768 or 1280 x 1024 resolution
Operating System	Windows 2000 (SP4) or Windows XP Professional DirectX 8.1 or better Microsoft® Internet Explorer 5.5 or later 500 MB free disk space
Mobile PDA Client Application	A Pocket PC with Microsoft PPC 2002 or higher, Intel XScale® CPU with minimum 64 MB of memory

## DX8100 SERVER MAXIMUM IPS RECORDING

Model	Format	NTSC IPS		PAL IPS	
		Total	Per Camera	Total	Per Camera
DX8108	CIF	240	30	200	25
	2CIF	120	15	100	12
	4CIF	60	7	50	6
DX8116	CIF	480	30	400	25
	2CIF	240	15	200	12
	4CIF	120	7	100	6
DX8124	CIF	360	15	300	12
	2CIF	180	6	150	6
	4CIF	90	3	75	3
DX8132	CIF	480	15	400	12
	2CIF	240	6	200	6
	4CIF	120	3	100	3

Resolution and frame rate values can be assigned evenly among all cameras or can be configured independently for individual cameras. Frame rate values can also be customized according to recording mode (normal, motion, alarm, and ATM/POS).

**NOTICE:** Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users should refer to the Operation manuals for cautionary statements regarding user selected options and how they might affect video quality. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.

# TECHNICAL SPECIFICATIONS

## MODEL NUMBERS

Use the following table to create a model number to specify your DX8100. For example, the model number for a 32-channel system with 1000 GB storage and audio input option is DX8132-1000A. Typically, if an audio option is ordered, a 32-channel system comes with a 32-channel audio option.

The model number for a customized system is specified differently. For example, a 32-channel system with 1000 GB storage and an 8-input audio option is stated as follows: DX8132-1000 (32 video channels) and you order the DX8108-AUD option (8 audio inputs) separately. For more information about ordering customized configurations, contact your Pelco sales representative.

DX81XX – XXXXX		
Channels		
Storage (GB)		
Options		
Channels	Storage in GB	Options
8	250	A = Audio
16	500	M = MUX
24	750	
32	1000	
	1500	
	2000	
	2250	
	3000	

## Supplied Accessories

Power cords (USA and European), keyboard, PS/2 mouse, DX8100 recovery CD, remote client application CD, audio input breakout cables (optional), alarm and relay terminal blocks, and rack mounting kit. (Monitor is not supplied with DX8100 Series DVR.)

## Optional Accessories

DX8100-EXP	DX8100 16-channel expansion unit kit; Racks, 1 RU per unit, rack ears and screws are provided
DX8100-ISCI	DX8100 internal Ultra 160 SCSI card*
DX8108-AUD	DX8100 8-channel audio input card
DX8116-AUD	DX8100 16-channel audio input card
DX8100XPEUP	Windows XP Embedded software upgrade for DX8100 only
DX8100-512RAM	DX8100 memory upgrade from 512 MB to 1 GB
DX8108-MUX	DX8100 8-channel multiplexed analog output display card
DX8116-MUX	DX8100 16-channel multiplexed analog output display card
DX9200HDDI	External RAID storage expansion unit*
DX81HDD250KIT	DX8100 SATA 250 GB upgrade
DX81HDD500KIT	DX8100 SATA 500 GB upgrade
DX81HDD750KIT	DX8100 SATA 750 GB upgrade
KBD300A	KBD300A Universal keyboard (requires KBDKIT/KBDKIT-X)
KBDKIT/KBDKIT-X	Remote keyboard wiring kit
VSI-PRO	AVE Video serial interfaces for ATM/POS†

## THIRD-PARTY DOME SUPPORT

The DX8100 Series is compatible with the third-party domes listed below. Consult the factory for information on additional dome compatibility.‡

Manufacturer	Model
GE (Kalatel)	CyberDome™ Day/Night
LG	LPT-SD163HM
Panasonic	WV-CW864
Samsung	SCC-641
American Dynamics (Sensormatic)	Speed Dome Ultra VII
Philips CSI	AutoDome Day/Night
Baxall	BPD1-RAS916

\*Not for use with DX8124 or DX8132 models.

†The VSI-PRO and required cabling is available from AVE.

‡This list is subject to change. Please check with Pelco Product Support.



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