DS XPress Hybrid Video Recorder

VIDEO MANAGEMENT HARDWARE FOR USE WITH DIGITAL SENTRY® SOFTWARE

Product Features

- Hybrid Video Recorder (HVR) Supports up to 128 Video Inputs
- Advanced iVEX Compression
- 120 to 480 Images Per Second (ips) Recording of 16 to 128 Cameras at up to 704 x 480 (NTSC), 704 x 576 (PAL) Recording Resolution for Analog Cameras
- Supports Pelco IP Cameras with Sarix™ HD Technology
- Supports the Recording of MJPEG, MPEG-4, or H.264 Streams from IP Cameras and Encoders
- Internal Storage up to 4 TB
- Optional RAID Storage up to 18 TB for Long-Term Video Storage
- 4 Audio Inputs for Analog Connections and Support for Audio Recording from IP Cameras with Sarix Technology
- FlashGUARD Watchdog Sends Alerts When System Fails or Powers Down
- Immediate Video Authentication
- Quick Review of up to 90 Minutes of Video
- Remote Administration
- Optional Support for IP Camera and Active Alert™ Video Analytics
- Support for DS DataPoint Integration

DS XPress is a combination of a database server and video acquisition unit (VAU) that captures up to 480 ips (NTSC) or 400 ips (PAL), with up to 128 camera inputs and 4 audio channels. It provides unparalleled scalability, allowing you to increase the number of inputs as your needs grow. Image capture rates are adjustable per camera and can be increased automatically during an alarm event.

DS XPress supports up to 16 IP cameras in a hybrid configuration and up to four channels of video analytics. It is also HD-enabled, capable of recording and displaying exceptional high-quality images captured by Pelco IP cameras with Sarix™ HD technology. The MPEG-4 compression used for analog cameras provides excellent image quality, smaller storage requirements, and reduced network bandwidth. A single DS ControlPoint user can seamlessly manage any number of RealVue recorders, other Digital Sentry® recording platforms, and DX Series DVRs, providing customers the flexibility to pick and choose from a broad range of price and performance options to meet their unique requirements.

Integral Digital Sentry world-class security software provides IT-focused, scalable solutions that allow users to manage all data and hardware devices from a single client user interface. Open architecture is the cornerstone of the Digital Sentry design, and users can choose IP cameras or encoders that fit their application. **DS XPress** supports the majority of third-party IP cameras available today and will continue to add support for new cameras as they are released to the market. Digital Sentry customers also benefit from IT-focused software applications including the SNMP-based network health and event monitoring application, and Archive Utility, a flexible long-term storage application.

All DS systems run the same Digital Sentry software, allowing users to combine the DS hardware that fits their specific application. Users can also monitor video, audio, and transactional data from the DVMS through the DS ControlPoint client user interface.

TYPICAL SYSTEMS

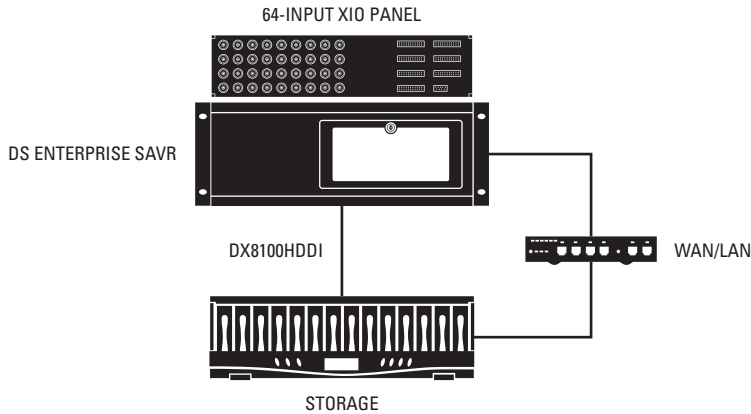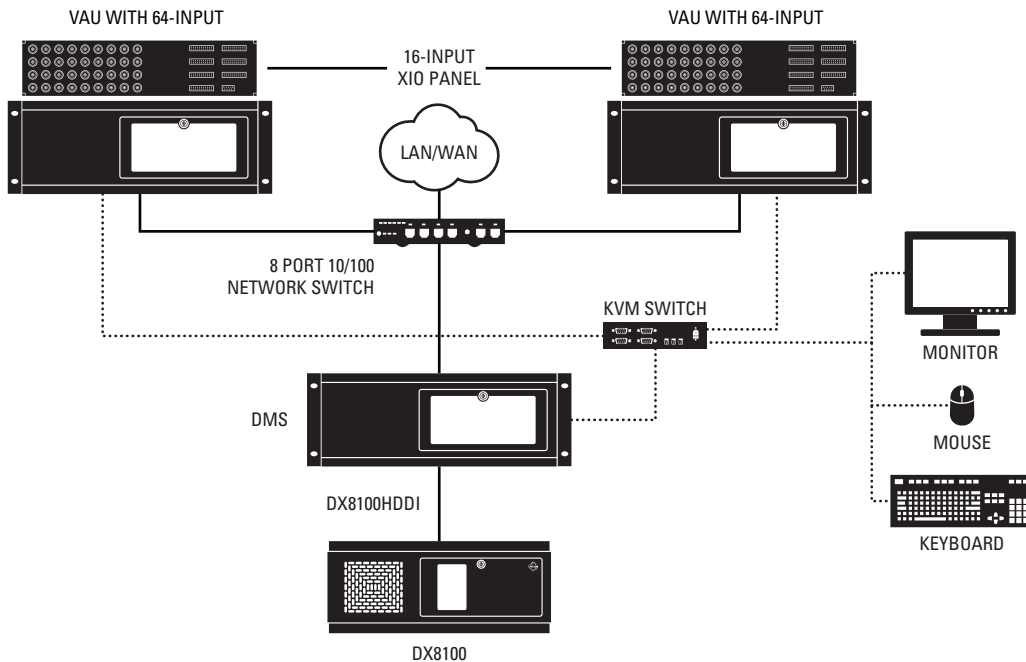The diagrams below illustrate conceptually how several types of DS systems can be connected. These illustrations cover only a small percentage of the possible combinations of DS components.

64-INPUT XIO PANEL

DS ENTERPRISE SAVR

DX8100HDDI

WAN/LAN

STORAGE

TYPICAL DS ENTERPRISE SAVR OR DS XPRESS SYSTEM

The server is the centerpiece of a DS system. Separate VAUs can connect to the server through a switch. The server stores large amounts of video on the optional VSAN storage unit. An optional RS-232 trigger input from an access control system and an XIO panel can also be connected to the server.

VAU WITH 64-INPUT

VAU WITH 64-INPUT

16-INPUT XIO PANEL

LAN/WAN

8 PORT 10/100 NETWORK SWITCH

KVM SWITCH

MONITOR

DMS

MOUSE

DX8100HDDI

KEYBOARD

DX8100

TYPICAL DS ENTERPRISE DISTRIBUTED SYSTEM

IMPORTANT NOTE. PLEASE READ. The network implementations are shown as general representations only and are not intended to show detailed network topologies. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the systems as illustrated. Please contact your local Pelco Representative to discuss your specific requirements.

TECHNICAL SPECIFICATIONS

SYSTEM

Operating System	Windows® XP Professional
User Interface	DS ControlPoint
Internal Storage	250 GB, 500 GB, 1 TB, 2 TB, or 4 TB
External Storage	Up to 18 TB (optional)

VIDEO/AUDIO

Video Standards	NTSC/PAL	
Video Encoding	iVEX	
Video Decoding	iVEX, MPEG-4, MJPEG, wavelet, H.264	
Video Resolutions		
Analog Cameras	NTSC	PAL
4CIF	704 x 480	704 x 576
2CIF	704 x 240	704 x 288
CIF	352 x 240	352 x 288
IP Camera Resolutions	Up to 10 Megapixels	
Analog Camera Inputs	16, 32, 64, or 128	
IP Camera Capacity	16	
Maximum Cameras	128 combined analog and IP	
Recording Rate Per Channel		
(16 Channels)	NTSC	PAL
4CIF Resolution	5 ips	4.2 ips
CIF Resolution	15 ips	12.5 ips
IP Recording Rate	Up to the maximum supported by the IP camera	
Audio Channels	4	
Codec	MPEG1 Layer 2	
Bits per Second	32 to 192 Kbps	
Sampling Frequency	32 kHz	

AUXILIARY CONNECTORS

PTZ Interface	RS-232, RS-422, RS-485
Network	10/100/1000Base-T
Alarm Inputs	16 dry contact

MECHANICAL

Connectors

BNC	Video inputs and outputs
Terminal Blocks	Input triggers, audio inputs, RS-422/RS-485, output relays
USB	4 high-speed USB 2.0 ports; connect mouse and keyboard
DB15	VGA port
RJ-45	Dual 10/100/1000 Megabit Ethernet ports
6-Pin Mini-DIN	PS/2 mouse and keyboard
Audio Connectors	Miniature phono plug for line in (unused), line out, and microphone in (unused)
DB25	Printer

Optional I/O Connectors

Audio Levels	
Input	Line-level input
Output	Line-level output
Audio Connectors	Terminal block
Inputs	4
Trigger Connectors	Terminal block
Inputs	Transistor-transistor logic (TTL), dry contact to GND
Outputs	Form C relay, contact closure
RS-422/RS-485	Terminal block

POWER

Input Voltage	100 to 240 VAC ±10%, 50/60 Hz
Power Consumption	300 W maximum

TECHNICAL SPECIFICATIONS

PHYSICAL

Dimension
  DS XPress   20" D x 19" W x 7" H (4 RU)
                   (50.80 x 48.26 x 17.78 cm)
  XMUX2   13.0" D x 19.0" W x 1.7" H (1 RU)
                   (33.02 x 48.26 x 4.32 cm)

Unit Weight
  DS XPress   40 lb (18.14 kg)
  XMUX2   6 lb (2.72 kg)
Shipping Weight
  DS XPress   54 lb (24.49 kg)
  XMUX2   10 lb (4.54 kg)

ENVIRONMENTAL

Operating Temperature	50° to 95°F (10° to 35°C)
Storage Temperature	−40° to 149°F (−40° to 65°C)
Operating Humidity	20% to 80%, noncondensing
Operating Altitude	−50 to 10,000 ft (−15 to 3,048 m)
Operating Vibration	0.25 G at 3 Hz to 200 Hz at a sweep rate of 0.5 octave/minute

REMOTE PC CLIENT REQUIREMENTS

CPU Speed	Intel Core 2 Quad Q9400, 2.66 GHz (4 cores)
VGA Card	NVIDIA® GeForce™ 9600 GT (512 MB, minimum)
Memory	4 GB RAM

CERTIFICATIONS

- CE, Class A
- FCC, Class A
- UL Listed

TECHNICAL SPECIFICATIONS

MODELS

DS XPress with External Video Inputs through XMUX2

Model Number	Video Inputs	Looping Outputs	Recording Rate (ips)	Alarm Inputs	Internal Storage (GB)
35401V1C1D0S	16	16	120	16	250
35401V1C2D0S	16	16	120	16	500
35401V1C4D0S	16	16	120	16	1000
35401V2C2D0S	32	32	240	32	500
35401V2C4D0S	32	32	240	32	1000
35401V2C5D0S	32	32	240	32	2000
35401V4C2D0S	64	64	480	64	500
35401V4C4D0S	64	64	480	64	1000
35401V4C5D0S	64	64	480	64	2000
35402V1C2D0S	32	0	120	16	500
35402V1C4D0S	32	0	120	16	1000
35402V1C5D0S	32	0	120	16	2000
35402V1C6D0S	32	0	120	16	4000
35402V2C2D0S	64	0	240	32	500
35402V2C4D0S	64	0	240	32	1000
35402V2C5D0S	64	0	240	32	2000
35402V2C6D0S	64	0	240	32	4000
35402V4C4D0S	128	0	480	64	1000
35402V4C5D0S	128	0	480	64	2000
35402V4C6D0S	128	0	480	64	4000

DS XPress with Internal Video Inputs

Model Number	Video Inputs	Recording Rate (ips)	Alarm Inputs	Internal Storage (GB)
35403V1C1D0S	16	120	16	250
35403V1C2D0S	16	120	16	500
35403V1C4D0S	16	120	16	1000
35403V1C5D0S	16	120	16	2000
35403V1C6D0S	16	120	16	4000
35403V2C1D0S	16	240	16	250
35403V2C2D0S	16	240	16	500
35403V2C4D0S	16	240	16	1000
35403V2C5D0S	16	240	16	2000
35403V2C6D0S	16	240	16	4000
35403V4C2D0S	16	480	16	500
35403V4C4D0S	16	480	16	1000
35403V4C5D0S	16	480	16	2000
35403V4C6D0S	16	480	16	4000
35404V2C1D0S	32	240	16	250
35404V2C2D0S	32	240	16	500
35404V2C4D0S	32	240	16	1000
35404V2C5D0S	32	240	16	2000
35404V2C6D0S	32	240	16	4000
35404V4C2D0S	32	480	16	500
35404V4C4D0S	32	480	16	1000
35404V4C5D0S	32	480	16	2000
35404V4C6D0S	32	480	16	4000
35501V2C6D06	32	240	32	4000

Note: To order the product as a video acquisition unit (VAU) for use with a Data Management Server (DMS), change the third digit of the model number to "5."

TECHNICAL SPECIFICATIONS

SUPPLIED ACCESSORIES

USB Keyboard
USB Mouse
Power Cord
Keys
Resource Disc
Recovery Disc
Documentation Disc
Also Included with Specific Models:
XMUX2 Units
XMUX Cables
Rack Hardware

OPTIONAL ACCESSORIES

KBD300A — KBD300A desktop keyboard with full switching and configuration capabilities, plus joystick control of PTZ functions; requires a KDB300USBKIT or a KBD300USBKIT-X

KBD300USBKIT — Remote keyboard wiring kit (120 VAC) for KBD300A

KBD300USBKIT-X — Remote keyboard wiring kit (230 VAC) for KBD300A

IP CAMERA LICENSES

DS-SW-CAM — IP camera license for an IP camera or each analog camera connected to an IP encoder

OPTIONAL EXTERNAL STORAGE

Part Number	Number of 2 TB Drives	Storage in GB	
		Internal	Video
DX8100HDDI-6TB	3	6000	4000
DX8100HDDI-12TB	6	12,000	10,000
DX8100HDDI-18TB	9	18,000	16,000
DX8100HDDI-24TB	12	24,000	22,000

OPTIONAL SOFTWARE AND HARDWARE

AUSRV-SW-1L — Archive utility server software license for first DVMS unit

AUS 2-10L — Archive utility server software license for second to tenth DVMS units

AUS-1L — Archive utility server software license for eleventh or greater DVMS units

3590-01067 — 2-channel DS ActiveAlert license

3590-01068 — 4-channel DS ActiveAlert license