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PELCO®

by Schneider Electric

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by Schneider Electric

DX4104 Series
Digital Video Recorder

Contents

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Important Notices

REGULATORY NOTICES

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

VIDEO QUALITY CAUTION

FRAME RATE NOTICE REGARDING USER-SELECTED OPTIONS

Pelco systems are capable of providing high quality video for both live viewing and playback. However, the systems can be used in lower quality modes, which can degrade picture quality, to allow for a slower rate of data transfer and to reduce the amount of video data stored. The picture quality can be degraded by either lowering the resolution, reducing the picture rate, or both. A picture degraded by having a reduced resolution may result in an image that is less clear or even indiscernible. A picture degraded by reducing the picture rate has fewer frames per second, which can result in images that appear to jump or move more quickly than normal during playback. Lower frame rates may result in a key event not being recorded by the system.

Judgment as to the suitability of the products for user's purposes is solely the user's responsibility. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event user intends to use the video for evidentiary purposes in a judicial proceeding or otherwise, user should consult with its attorney regarding any particular requirements for such use.

Description

The DX4104 Series digital video recorder (DVR) is designed for the entry-level market. The unit provides one to four camera inputs, powerful video storage management with efficient H.264 compression, multi-event recording, a quick and easy-to-use common user interface, greater internal storage capacity, and network connectivity for up to 100 units. The DX4104 replaces the traditional VCR and multiplexer combination and can be used in stand-alone or networked installations.

The DX4104 is easily operated and configured using the mouse, remote control, or front panel. User-configurable disk partitioning is used to allocate specific hard disk space for storing normal (continuous) and event-initiated video data. The retention time can be different for normal and event-initiated recorded video. All recorded video is compressed and stored using the latest H.264 compression technology.

The DVR supports single-event and multi-event (a combination of normal, alarm, and motion) recording. You can immediately start and stop recording through the instant record feature. Each camera can be configured to record at a resolution, quality, and image rate specific to each event. By default, the DX4104 is configured for automated multi-event recording.

For surveillance applications requiring pan/tilt/zoom (PTZ) capability, the DX4104 addresses and controls PTZ equipment such as Spectra® domes, mini domes, or third-party cameras. The unit operates Pelco and third-party PTZ cameras that support Pelco D and Pelco P protocols.

Video critical to investigation and archiving can be exported from the DX4104 server to USB memory or an optional CD/DVD±RW device. Use the exported video preview feature to verify the video content and quality.

The DX4104 remote client can be used to remotely operate and administer the unit. The remote client includes an export viewer, Web client, and emergency agent application. You can play back exported video using the export viewer or a Microsoft® Windows®-based media player application.

The DX4104 remote client is Vista-compliant. At the remote client, users can easily and quickly capture a video scene, save it in JPEG format, and then store it on the hard drive. Additionally, the remote client can be used to preview and search backed up video. The DX4104 remote client also allows live viewing and video playback from up to 16 DX4104 units simultaneously. The remote client can connect to as many as 100 DX4104 units.

MODELS

DX4104-250	DVR with 250 GB Storage
DX4104-500	DVR with 500 GB Storage
DX4104-1000	DVR with 1000 GB Storage
DX4104-2000	DVR with 2000 GB Storage
DX4104DVD-250	DVR with DVD and 250 GB Storage
DX4104DVD-500	DVR with DVD and 500 GB Storage
DX4104DVD-1000	DVR with DVD and 1000 GB Storage

OPTIONAL ACCESSORIES

DX4104HDD-250	DX4104 SATA 250 GB upgrade
DX4104HDD-500	DX4104 SATA 500 GB upgrade
DX4104HDD-1000	DX4104 SATA 1000 GB upgrade
DX4104DVD	DX4104 DVD kit (all models except DX4104-2000)

Product Overview

Before you install and operate the DX4104, thoroughly familiarize yourself with the information in this manual. Make sure the package contains all of the items listed below.

PACKAGE CONTENTS
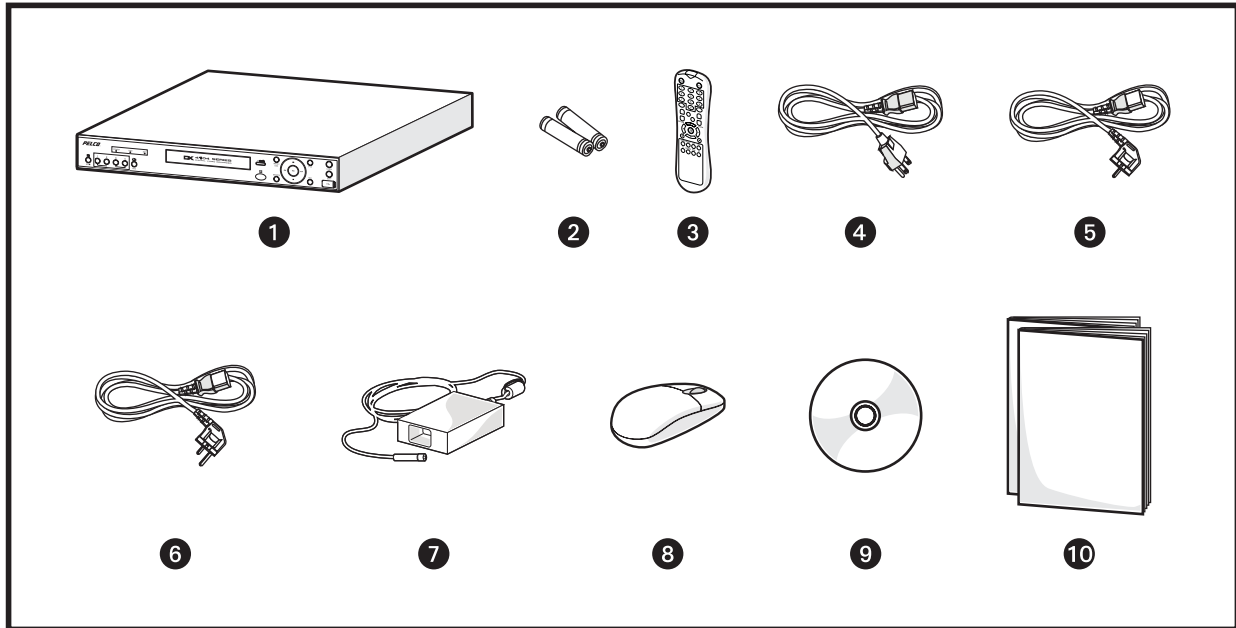
Figure 1. Package Contents

❶ DX4104 Digital Video Recorder (1 ea.)

❷ AAA Batteries for Remote Control (2 ea.)

❸ Remote Control (1 ea.)

❹ USA Standard Power Cord (1 ea.)

❺ European Standard Power Cord (1 ea.)

❻ UK Standard Power Cord (1 ea.)

❼ AC Adapter (1 ea.)

❽ PS/2 Mouse (1 ea.)

❾ Resource Disc (1 ea.): Includes documentation and PC Client, Emergency Agent, and DX4104 Export Viewer Applications

❿ Documentation (1 ea.): Includes Installation manual, Server Operation/Configuration manual, and Safety Instructions

FRONT PANEL

The DX4104 front panel includes indicators and controls. The controls let you perform most unit functions without the remote control or mouse (refer to Figure 2). For information on using the remote control, refer to *Remote Control* on page 9. For information on using the mouse and for general unit operation, refer to the DX4104 Server Operation/Configuration manual.
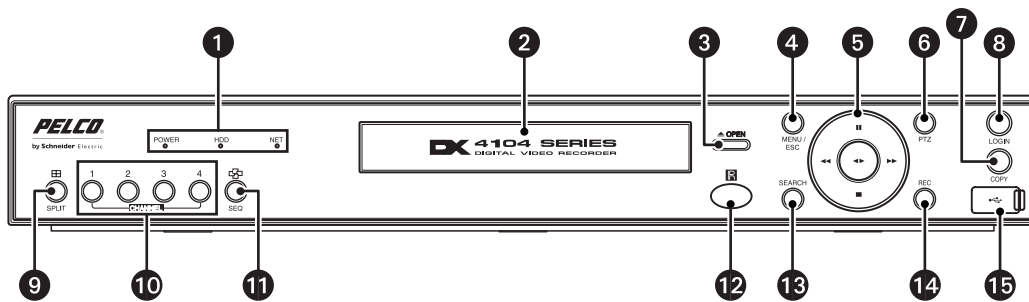

Figure 2. Front Panel

❶ **Status Indicators:**
- **POWER:** Glows when the unit is operating.
- **HDD:** Blinks when the hard drive is accessed.
- **NET:** Glows when the network is connected.

❷ **DVD Drive:** Accepts recordable media: CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, and DVD+RW (DVD models only).

❸ **OPEN:** Opens or closes the DVD drive (DVD models only).

❹ **MENU/ESC:** Displays or closes the Setup menu.

❺ **Playback Controls:**
- **Left Arrow:** Searches or plays back video in reverse.
- **Right Arrow:** Searches or plays back video.
- **Stop:** Stops playback.
- **Pause:** Pauses playback.
- **Play:** Plays back video. Press the button once to play back video; press it again to play back video in reverse.

NOTE: These buttons have additional functions. Refer to the DX4104 Server Operation/Configuration manual for more information.

❻ **PTZ:** Starts the PTZ mode for the selected device and displays the on-screen PTZ control.

❼ **COPY:** Starts the export operation.

❽ **LOGIN:** Displays the on-screen keyboard if a user is not logged on to the system. If a user is logged on, this button logs off the user.

❾ **SPLIT:** Displays all four channels in a 2 x 2 format.

❿ **CHANNEL:** Displays the selected camera in a full-screen display from any view, except an open dialog box or menu.

⓫ **SEQ:** Displays all channels in sequence in a full-screen display.

⓬ **(Infrared Sensor):** Receives signals for remote control operation.

⓭ **SEARCH:** Displays the Search menu.

⓮ **REC:** Starts and stops manual recording.

⓯ **(USB 2.0 Port):** Connects USB storage devices. The high speed USB port is located under the rubber cover.
NOTES:
- Two additional high speed USB ports are located on the rear panel.
- Do not install a USB-style mouse device.

REAR PANEL

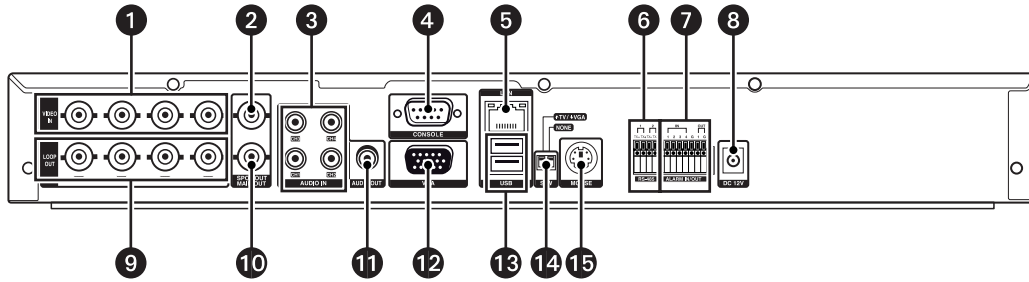Figure 3 shows the connectors on the DX4104 rear panel.

Figure 3. Rear Panel

1 **VIDEO IN:** Four BNC camera inputs.

2 **SPOT OUT:** Analog spot monitor BNC output.

3 **AUDIO IN:** Four RCA line-level audio inputs.

4 **CONSOLE:** Reserved for future use.

5 **LAN:** RJ-45 10/100Base-T network port.

6 **RS-485:** Two RS-485 serial ports for interfacing up to four serial PTZ devices.

7 **ALARM IN/OUT:** Four normally open (N.O.) or normally closed (N.C.) alarm inputs; one normally open relay output.

8 **DC 12V:** Power input from power adapter (12 VDC).

9 **LOOP OUT:** Four BNC camera looping outputs.

10 **MAIN OUT:** Analog main monitor BNC output.

11 **AUDIO OUT:** One RCA line-level audio output.

12 **VGA:** VGA main monitor 15-pin output.

13 **USB:** Two high speed USB 2.0 ports for connecting storage devices.
   NOTES:
   • One additional high speed USB port is located on the front panel.
   • Do not install a USB-style mouse device.

14 **S/W (switch):**
   • **TV/VGA:** Main monitor output selection switch. The up (TV) position enables main monitor output to the main out BNC connector. The down (VGA) position enables main monitor output to the 15-pin VGA connector.
   • **NONE:** Reserved for future use.

15 **MOUSE:** PS/2-style mouse device.

REMOTE CONTROL

The DX4104 remote control lets you perform most unit functions without the mouse or front panel controls (refer to Figure 4). For information on using the front panel controls, refer to *Front Panel* on page 7. For information on using the mouse and for general unit operation, refer to the DX4104 Server Operation/Configuration manual.
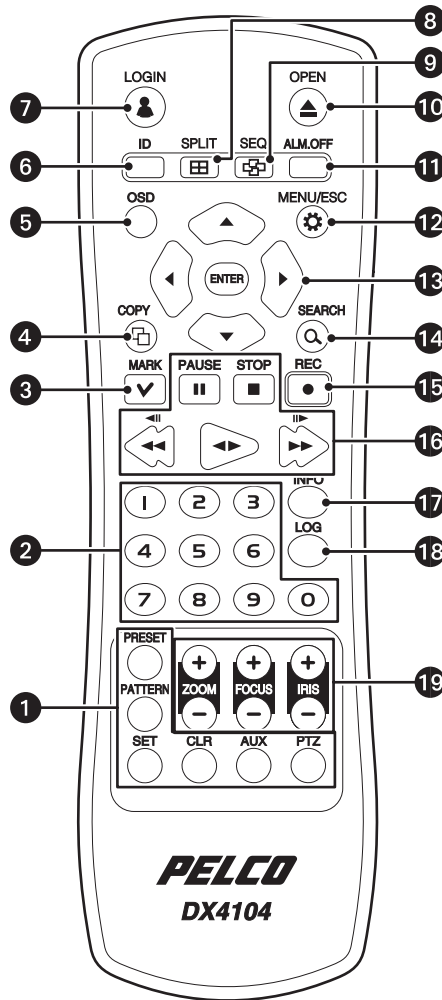

Figure 4. Remote Control

❶ PTZ Controls:
- **PRESET:** Assigns the position of the selected camera to a user-specified preset number.
- **PATTERN:** Assigns the recorded PTZ actions to the user-specified pattern number.
- **SET:** Starts the PTZ programming mode.
- **CLR:** Clears a programmed event.
- **AUX:** Sends an auxiliary command to the specified PTZ camera.
- **PTZ:** Starts the PTZ mode for the selected device and displays the on-screen PTZ control.

NOTE: PTZ controls are only available for cameras that support and are configured for PTZ operation.

❷ Numeric Keypad: Used for various unit functions, including camera selection, PTZ control, and numeric entry in selected dialog boxes.

❸ MARK: Bookmarks video with the starting location from which to conduct a search.

❹ COPY: Starts the export operation.

5 **OSD:** Displays the on-screen display (OSD) menu.
- **Control Bar On/Off:** Toggles the toolbar on and off.
- **Video Adjustment:** Displays the video adjustment dialog box.
- **Motion:** Displays the motion configuration grid.

6 **ID:** Links the remote control to one or many DX4104s. For information on setting the IR remote ID on the DX4104, refer to the DX4104 Server Operation/Configuration manual.

7 **LOGIN:** Displays the on-screen keyboard if a user is not logged on to system. If a user is logged on, this button logs off the user.

8 **SPLIT:** Displays all four channels in a 2 x 2 format.

9 **SEQ:** Displays all channels in sequence in a full-screen display.

10 **OPEN:** Opens the DVD tray (DVD models only).

11 **ALM.OFF:** Turns off an active alarm for the selected camera. Also cancels alarm activation and returns the system to the condition before the alarm was activated.

12 **MENU/ESC:** Opens and closes the Setup menu.

13 **Menu Controls:**
- **Arrow Buttons:** Selects menu options.
- **ENTER:** Selects the highlighted menu item.

14 **SEARCH:** Displays the Search menu.

15 **REC:** Starts and stops manual recording.

16 **Playback Controls:**
- **PAUSE:** Pauses playback.
- **STOP:** Stops playback.
- **Left Arrow:** Searches or plays back video in reverse.
- **Play:** Plays back video. Press the button once to play back video; press it again to play back video in reverse.
- **Right Arrow:** Searches or plays back video.

NOTE: These buttons have additional functions. Refer to the DX4104 Server Operation/Configuration manual for more information.

17 **INFO:** Displays the System Information.

18 **LOG:** Displays the System Log List.

19 **Lens Controls:**
- **ZOOM:** Zooms in (+) and out (–) on the video image in live and playback modes. This option does not change the actual video stream.
- **FOCUS:** Changes the camera's focus far (+) and near (–).
- **IRIS:** Opens (+) and closes (–) the camera's iris.

NOTE: Focus and iris functions only operate with supported cameras.

Installation

EQUIPMENT PLACEMENT

The DX4104 can be placed on any flat surface (desk or table); the unit is not designed for mounting in an equipment rack.

Position the unit to allow for cable and power cord clearance at the rear of the unit. Be sure that the air flow around the unit is not obstructed.

⚠ **WARNING:** Do not place the DX4104 on its side. In this position, the unit is likely to fall over and may cause equipment damage or personal injury.

CONNECTIONS OVERVIEW

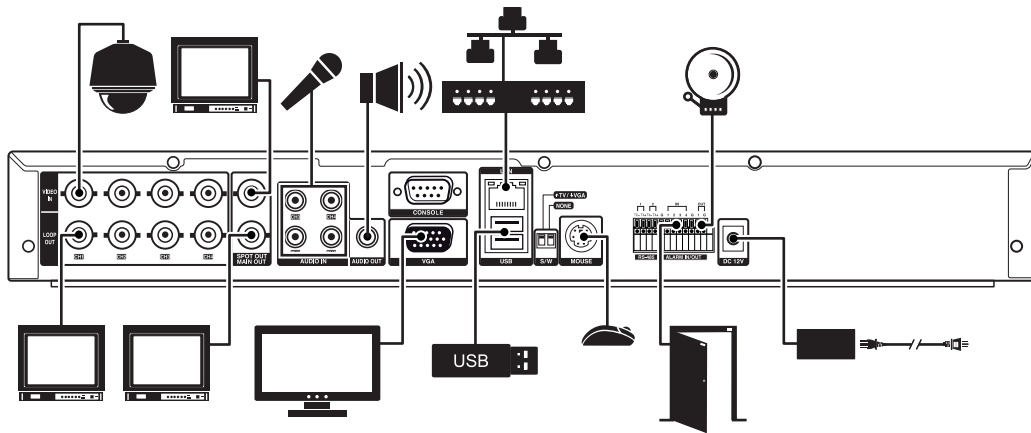Figure 5 shows the equipment connections for the DX4104.

Figure 5. Connections Overview

CONNECTING CAMERAS

The DX4104 supports up to four analog cameras. Be sure to disconnect power from each camera before connecting it to the unit. Also, use 75-ohm video coaxial cables with BNC connectors to connect the cameras to the unit. Refer to Table A for coaxial cable requirements.

Table A. Video Coaxial Cable Requirements

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

*Cable requirements:
  75-ohms impedance
  All-copper center conductor
  All-copper braided shield with 95% braid coverage.

Connect video cables from up to four cameras to the VIDEO IN connectors.

If using the video loop-through option, connect the devices to the VIDEO OUT connectors. Then terminate the video signal at the last device.

NOTE: Operational issues may occur when video devices are not correctly terminated. When connecting camera devices, use a normal termination of 75 ohms. When using the video loop-through option, make sure the signal is terminated at the last device. For additional information about terminating a specific device, refer to the device's installation manual.

CONNECTING SERIAL PTZ

The DX4104 has two RS-485 ports on the rear panel. You can connect multiple PTZ devices in a daisy chain from either port. Be sure to disconnect power from any camera before connecting its data leads to the unit.

To connect the data leads from a serial PTZ device to the DX4104:

1. Using a small screwdriver (or similar tool), push in the TX– wire retainer on the first data port on the terminal block.

2. Insert the RX– data wire from the PTZ device into the TX– retainer.

3. Push in the TX+ wire retainer on the first data port on the terminal block.

4. Insert the RX+ data wire from the PTZ device into the TX+ retainer.

5. To connect a PTZ device to the second data port, repeat steps 1 through 4.

6. To connect additional PTZ devices in a daisy chain, refer to the documentation supplied with the PTZ devices.

NOTES: Maximum distance for serial communication lines is 4,000 ft (1,219 m) between the DX4104 and the last PTZ device on the daisy chain.
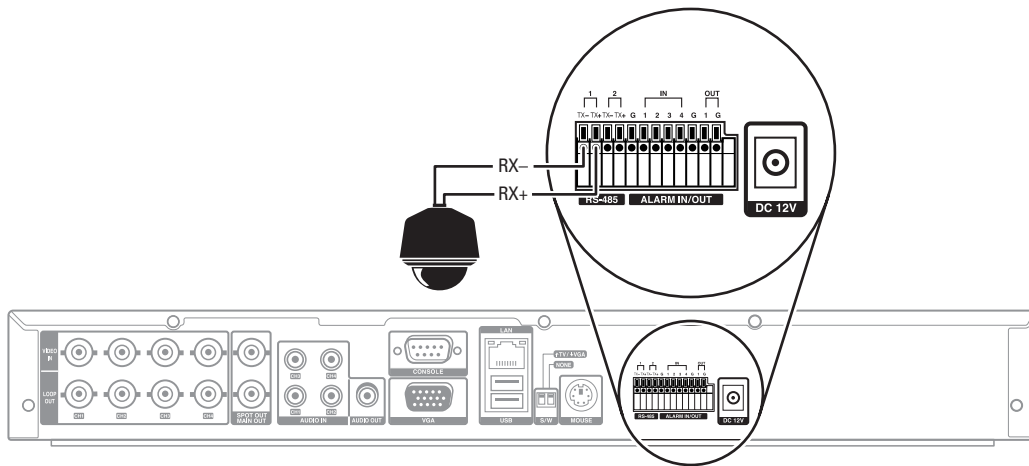

Figure 6. Connecting a Serial PTZ Device

After installation, you need to configure the communication settings and the PTZ protocol for the DX4104 as well as the PTZ device. The DX4104 supports Pelco D (2-wire control only), Pelco P, and other PTZ protocols (refer to Table B).

Table B. Supported PTZ Protocols

Protocol Name	Manufacturer	Protocol Name	Manufacturer
PELCO D	Pelco	GANZ_DSCP	CBC™
PELCO P	Pelco	GANZ_P360V1	CBC
LG_MULTIX	LG®	KALATEL_CYBERDOME	Kalatel™
LG_SD168	LG	PANASONIC_CS850	Panasonic®
LG_ZOOM	LG	SAMSUNG_SCC	Samsung™
LPT_A100L	LG	BOSCH_AUTODOME	Bosch®

NOTE: The BOSCH_AUTODOME protocol is not supported at this time.

For information about configuring the unit for PTZ operation, refer to the DX4104 Server Operation/Configuration manual. For information about configuring the PTZ device, refer to the documentation supplied with the device.

CONNECTING ALARM DEVICES

The DX4104 provides a numbered terminal block for connecting up to four alarm devices. You can configure alarms for normally open or normally closed operation. For information about configuring alarm inputs, refer to the DX4104 Server Operation/Configuration manual.

To connect an alarm device:

1. Using a small screwdriver (or similar tool), push in the IN wire retainer (1 to 4) on the terminal block.

2. Insert one wire from the alarm device into the retainer.

3. Push in the ground wire retainer (G) on the terminal block.

4. Insert the ground wire from the alarm device into the retainer.

5. Repeat steps 1 through 4 for each alarm device.

NOTE: Ground wires from all alarm devices should be connected to alarm ground wire retainer (G) on the terminal block.
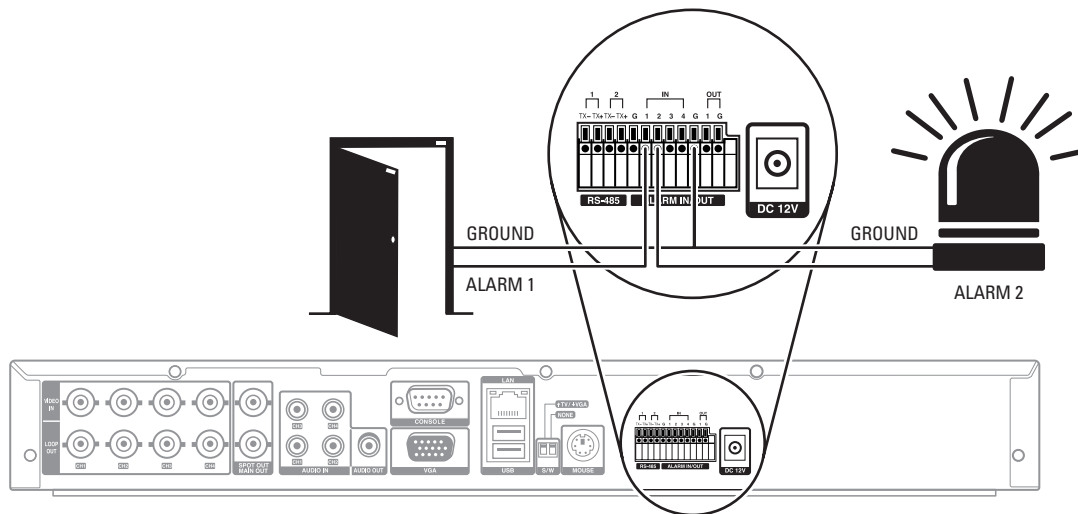

Figure 7. Connecting Alarm Devices

CONNECTING A RELAY OUTPUT

The DX4104 provides a single terminal block for connecting one relay device. The relay output is not programmable; it operates as a normally open circuit. A signal from the relay output will operate the relay device. The maximum relay power rating is 0.3 A at 125 VAC or 1 A at 30 VDC. For information about configuring the relay output, refer to the DX4104 Server Operation/Configuration manual.

NOTE: If the electric current in the relay circuit exceeds the maximum power rating, the unit can be damaged.

To connect a relay device:

1. Using a small screwdriver (or similar tool), push in the OUT wire retainer (1) on the terminal block.

2. Insert one wire from the relay device into the retainer.

3. Push in the ground wire retainer (G) on the terminal block.

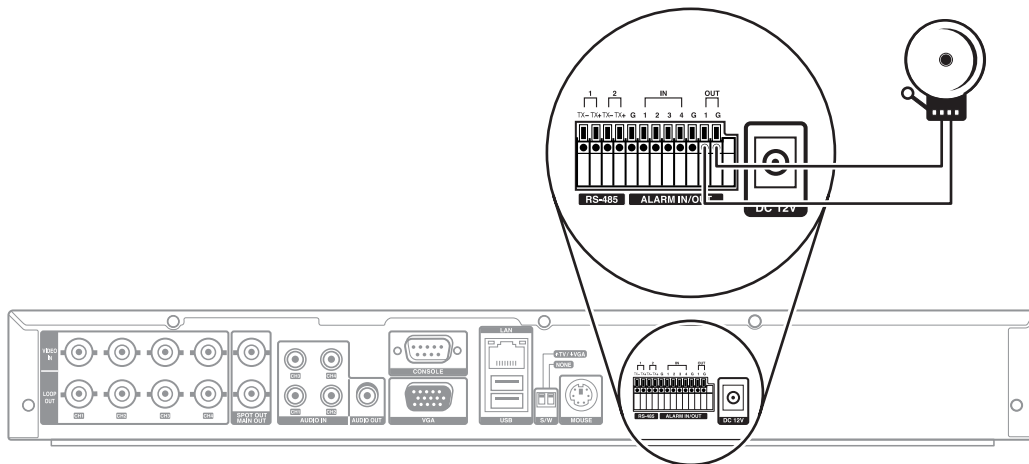4. Insert the ground wire from the relay device into the retainer.

Figure 8. Connecting the Relay Output Device

CONNECTING THE MAIN MONITOR

The DX4104 supports either an analog or a VGA main monitor. Connect one of the following monitors to the unit:

- **Analog Monitor:** Connect the monitor to the MAIN OUT connector. Use a 75-ohm video coaxial cable with BNC connectors. Then set the first S/W switch to the up position (TV).
- **VGA Monitor:** Connect the monitor to the VGA connector. Use a 15-pin VGA monitor cable. Then set the first S/W switch to the down position (VGA).

CONNECTING THE SPOT MONITOR

The DX4104 supports one optional analog spot monitor. You can configure the monitor to display individual video channels or a sequence of video channels.

Connect the optional spot monitor to the SPOT OUT connector on the rear panel. Use a 75-ohm video coaxial cable with BNC connectors.

CONNECTING USB DEVICES

The DX4104 has one high speed USB 2.0 port on the front panel and two high speed USB 2.0 ports on the rear panel. You can use a USB flash drive to upgrade the unit software or to export video. You can use a USB hard disk drive to back up video data.

To connect a USB device:

1. Connect a USB cable (not supplied) to one of the USB connectors on the front or rear panel.

2. Connect the other end of the cable to your USB device. The unit automatically recognizes it.

NOTE: Do not install a USB-style mouse device.

CONNECTING AUDIO DEVICES

The DX4104 supports up to four line input audio devices and one line output audio device. Each of the audio inputs can be associated with one or more video channels.

Connect up to four audio input devices to the AUDIO IN connectors on the rear panel. Connect one audio output device to the AUDIO OUT connector on the rear panel.

CONNECTING THE MOUSE

Connect the supplied PS/2-style mouse to the MOUSE connector on the rear panel.

NOTE: Do not install a USB-style mouse device.

CONNECTING TO A NETWORK

The DX4104 supports a 10/100Base-T network interface. You can use the DX4104 Client application to configure and operate the unit over the network. You can also use various network services, including Dynamic Host Configuration Protocol (DHCP) and Network Time Protocol (NTP), to support various DX4104 network features.

To connect the DX4104 to a network:

1. Connect a straight Ethernet cable (not supplied) to the local area network (LAN) port on the rear panel.

2. Connect the other end of the cable to your network device. The NET indicator on the front panel glows when the network establishes communication with the unit.

CONNECTING POWER

The DX4104 includes three power cords: one USA standard, one UK standard, and one European standard.

To connect power:

1. Connect the appropriate power cord to the adapter.

2. Connect the power adapter to the rear panel.

NOTE: The unit does not have a power switch; it is designed for continuous operation. Disconnect the power adapter to turn the unit off.

INSTALLING CLIENT SOFTWARE

The DX4104 includes the client, export viewer, and emergency agent software applications. The recommended system requirements for these applications are as follows:

- **Processor:** Intel® Pentium® 4 (or later), 2.4 GHz
- **Operating System:** Windows XP (SP2) or Windows Vista®; DirectX® 8.1 or later; 500 MB free disk space
- **Memory:** 512 MB RAM, minimum
- **Video:** VGA card with 128 MB video RAM

To install the DX4104 software applications:

1. Close all programs on the computer, including any antivirus software.

2. Insert the DX4104 resource disc into the DVD drive, and wait for the resource disc menu to appear.

3. Click Software. The DX4104 software installation options appear.

4. Click the Client/Emergency Agent/Viewer option. The Pelco DX4104 Client InstallShield Wizard appears.

5. Click Next. The Software License Agreement appears.

6. Click Yes to accept the terms of the license agreement. The "Ready to Install the Program" dialog box appears.

7. Click Install. The installation process starts. After the software is installed, the InstallShield Wizard Complete dialog box appears.

8. Click Finish to complete the installation process.

Refer to the DX4104 Client Operation/Configuration manual for information about using the client software applications.

Configuration/Operation

The DX4104 is ready for configuration and operation as soon as the unit is installed. Refer to the DX4104 Server Operation/Configuration manual for more information.

⚠ **WARNING:** Before you use the DX4104 to record video, read the Hard Disk Option Partition Notification (refer to Figure 9). Refer to the DX4104 Server Operation/Configuration manual for information about configuring the hard disk partition feature.
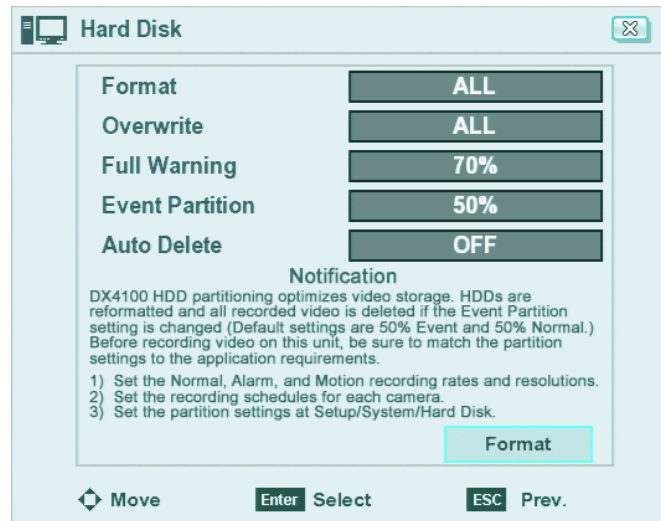

Figure 9. Hard Disk Option Partition Notification

UNIT STARTUP AND SHUTDOWN

The DX4104 does not have a power switch; it is designed for continuous operation.

To start the unit, connect the power adapter.

To shut down the unit, disconnect the power adapter.

LOGGING ON AND LOGGING OFF

You must log on to the DX4104 with a valid user name and password to operate the unit. User names and passwords are case sensitive. By default, the DX4104 includes one administrator logon account; the default administrator user name and password are both admin.

NOTES:

- The unit's front panel LOGIN and arrow buttons are available for logging on to the unit. The remaining front panel controls become available after you log on to the unit.

- When you log on for the first time, the system does not automatically prompt you to change the default administrator password. Anyone who knows the administrator user name and the default password can access the unit; therefore, Pelco recommends that you change the system administrator password and store it in a secure location. (The admin user name cannot be changed.) For information about user accounts, refer to the DX4104 Server Operation/Configuration manual.

To log on to the unit:

1. On the toolbar, click Login 👤 .

2. Type the password using the on-screen keyboard.

3. Click OK. The system logs you on and the Login icon turns blue.

To log off from the unit, click Login 👤 . The system logs you off and the Login icon turns black.

Specifications

VIDEO

Signal System	NTSC/PAL, switchable
Recording Resolutions	NTSC PAL

NTSC	PAL
352 x 240	352 x 288
704 x 240	704 x 288
704 x 480	704 x 576

Compression	H.264, on-board
Video Inputs	4 (looping with automatic termination)
PTZ Controls	Pelco P, Pelco D, other third-party protocols
Video Outputs	1, main, switch-selectable, VGA (DB15) or analog (BNC);
	1, analog spot (BNC)

AUDIO

Audio Bit Rate	8 Kbps
Audio Levels	Line-level input and output

ELECTRICAL

Input Voltage	12 VDC at 5 A (100 to 240 VAC 50/60 Hz adapter)
Power Consumption	Maximum 40 W (1 HDD and 1 DVD drive)
Alarm Input Terminals	4 N.C. or N.O.
Relay Output Terminal	1 N.C. or N.O.; 30 VDC/1 A, 125 VAC/0.3 A
Remote Administration	Full remote control through TCP/IP network

CONNECTORS

BNC	Video inputs and outputs
6-pin mini-DIN	PS/2 mouse
DB9	RS-232-C
DB15	VGA port
RJ-45	10/100 Megabit Ethernet
USB	3 high-speed USB 2.0 ports (1 front, 2 rear); connects USB backup and export devices
Audio	4 RCA jacks for line in; 1 RCA jack for line out

ENVIRONMENTAL

Operating Temperature	32° to 95°F (0° to 35°C)
Relative Humidity	Maximum 80%, noncondensing

PHYSICAL

Dimensions	12.5" D x 16.9" W x 2.1" H
	(31.75 x 42.93 x 5.33 cm)

Approximate Unit Weight

DX4104-250	7.36 lb (3.3 kg)
DX4104-500	7.36 lb (3.3 kg)
DX4104-1000	7.36 lb (3.3 kg)
DX4104-2000	8.88 lb (4.0 kg)
DX4104DVD-250	8.78 lb (4.0 kg)
DX4104DVD-500	8.78 lb (4.0 kg)
DX4104DVD-1000	8.78 lb (4.0 kg)

(Design and product specifications subject to change without notice.)

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years:
  - Fiber optic products
  - Unshielded Twisted Pair (UTP) transmission products
  - CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models
- Three years:
  - Pelco-designed fixed network cameras and network dome cameras with Sarix™ technology.
  - Pelco-branded fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
  - EH1500 Series enclosures
  - Spectra® IV products (including Spectra IV IP)
  - Camclosure® Series (IS, ICS, IP) integrated camera systems
  - DX Series digital video recorders, DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, and NVR300 Series network video recorders
  - Endura® Series distributed network-based video products
  - Genex® Series products (multiplexers, server, and keyboard)
  - PMCL200/300/400 Series LCD monitors
- Two years:
  - Standard varifocal, fixed focal, and motorized zoom lenses
  - DF5/DF8 Series fixed dome products
  - Legacy® Series integrated positioning systems
  - Spectra III™, Spectra Mini, Spectra Mini IP, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
  - Esprit Ti and TI2500 Series thermal imaging products
  - Esprit and WW5700 Series window wiper (excluding wiper blades).
  - CM6700/CM6800/CM9700 Series matrix
  - Digital Light Processing (DLP®) displays (except lamp and color wheel). The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
  - Intelli-M® eIDC controllers
  - PMCL542F, PMCL547F, and PMCL552F FHD monitors
- One year:
  - Video cassette recorders (VCRs), except video heads. Video heads will be covered for a period of six months.
- Six months:
  - All pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

10-19-09

⊠Green   The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.

This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

REVISION HISTORY

Manual #	Date	Comments
C4630M	11/09	Original version.

PELCO

by **Schneider** Electric

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