



Hard Disk Drive Replacement Instructions



DVR5100 Series
ENDURA ENABLED

C2647M (10/06)

Contents

- Introduction 3
 - Models 3
 - Parts and Tools 3
- Getting Started 4
- Hard Disk Drive Replacement 6
 - Preparing the Unit to Install a Drive 6
 - Installing a Hard Disk Drive 7
 - Reassembling the Unit 11
 - Rear Panel Connectors for the DVR5100 12

Introduction

This manual provides instructions for installing a replacement hard disk drive or upgrading to a higher capacity hard disk drive in a DVR5100 Series DVR (digital video recorder).

MODELS

The following models numbers are available for hard disk replacements or upgrades for the DVR5100:

DVR5KRP-250	Replacement kit containing a 250 GB hard disk drive
DVR5KRP-400	Replacement kit containing a 400 GB hard disk drive
DVR5KRP-500	Replacement kit containing one 500 GB hard disk drive
DVR5KUP-250-500	Upgrade kit containing a 250 GB hard disk drive
DVR5KUP-250-800	Upgrade kit containing two 400 GB hard disk drives
DVR5KUP-250-1TB	Upgrade kit containing two 500 GB hard disk drives
DVR5KUP-500-800	Upgrade kit containing two 400 GB hard disk drives
DVR5KUP-500-1TB	Upgrade kit containing two 500 GB hard disk drives
DVR5KUP-800-1TB	Upgrade kit containing two 500 GB hard disk drives

PARTS AND TOOLS

NOTE: This kit includes one or more Pelco-certified hard disk drives. Using any other hard disk drive with the DVR5100 voids the manufacturer's warranty for the DVR5100.


Before proceeding, make sure that your replacement or upgrade kit contains the following parts:

QTY	Description
1 or 2	Pelco-certified hard disk drives, either 250, 400, or 500 GB (Refer to the model number to confirm the quantity and capacity of the included drives.)
4 or 8	6-32 x 3/16 Phillips pan head screws
1	ESD disposable wrist strap

To install the replacement drive, you will also need a Phillips screwdriver and an optional small container to store screws.

Getting Started

1. Familiarize yourself with the instructions throughout this manual.
2. Check that you have all the necessary parts and tools. Refer to *Parts and Tools* on page 3.
3. If possible, export all essential video before you install a new hard disk drive. If your unit contains two hard disk drives, export all essential video on the unaffected drive as well. Follow the instructions for exporting video in the operation manual.
4. Shut down the DVR5100 DVR unit. Refer to the DVR5100 installation or operation manuals for instructions on shutting down the unit.
5. Unplug the power cord from the wall socket and then from the rear of the DVR.

 **WARNING:** For safety reasons, you must remove the power cord because current continues to flow through the DVR5100 even when the unit is off. Remove the power cord from the wall socket first and then from the rear of the DVR. It is critical that the unit be unplugged for your safety.

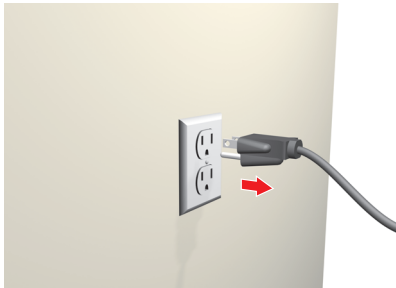


Figure 1. Removing the Power Cord

6. Ensure that the DVR5100 DVR and all of its components are protected from electrostatic discharge (ESD). Before handling any electronic components, you should take steps to ground yourself properly so that any built-up static electric charges are dissipated away from the unit. The most effective method for combating ESD is to use a properly grounded wrist strap (refer to Figure 2). These wrist straps are designed to be plugged into specially-designed mats.

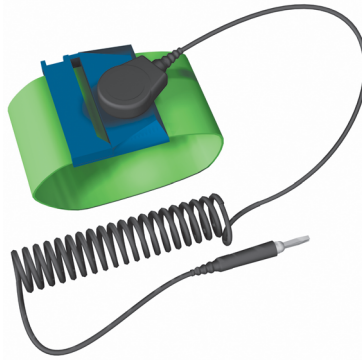


Figure 2. ESD Protection

A disposable ESD wrist strap (refer to Figure 3) is included with this kit. Attach the copper end of this wrist strap to any unpainted surface of an appliance that is grounded. An appliance is considered grounded if it can direct ESD to the earth, usually through its power cable. An appliance that is plugged into an electrical outlet is considered grounded. The DVR5100 is not considered grounded when it is unplugged. As an alternative, you can discharge built-up static by periodically touching an unpainted section of an appliance.

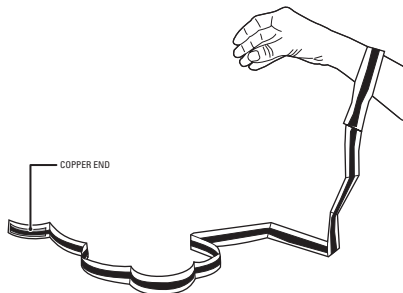



Figure 3. Disposable Wrist Strap for ESD Protection

Hard Disk Drive Replacement

PREPARING THE UNIT TO INSTALL A DRIVE

 **WARNING:** The chassis assembly includes parts with sharp edges. To avoid injury, use caution when handling the DVR5100 chassis or components.

1. Log off the system and shut down the machine. The power will turn off automatically.
2. As a precaution against electrostatic shock, remove the power cord from the rear panel of the unit, and then disconnect all devices attached to it. Use the enclosed disposable ESD wrist strap to dissipate ESDs.
3. If your unit is installed in a rack, place the unit on a counter or other flat surface, and then remove the rails.
4. Remove the top cover of the DVR (refer to Figure 4).
 - a. Remove all 10 screws from the DVR — four screws on each side and two on the back. Set aside the screws.



Figure 4. Removing the Screws

- b. Slide the top cover back and lift it up.



Figure 5. Removing the Top Cover

INSTALLING A HARD DISK DRIVE



WARNING: Install only hard disk drives received from the Pelco factory.

Any video on the hard disk drive will be lost when the drive is replaced. If possible, export important video recordings before you replace a hard disk drive. Follow the instructions for exporting video in the operation manual.

1. Follow the instructions at *Preparing the Unit to Install a Drive* on page 6 to open your unit.
2. Locate the hard disk drive cage in the front of the DVR.

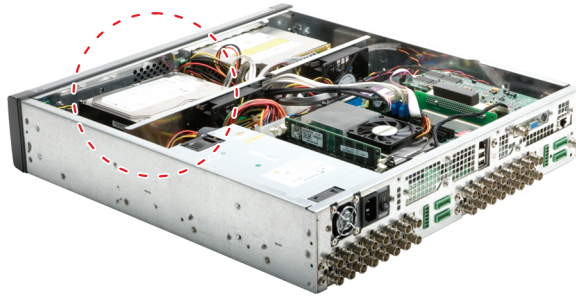


Figure 6. Locating the Hard Disk Drive Cage

3. To remove a hard disk drive do the following:
 - a. With a Phillips screw driver, remove and set aside the two screws that secure the cage in place along the bottom of the chassis.

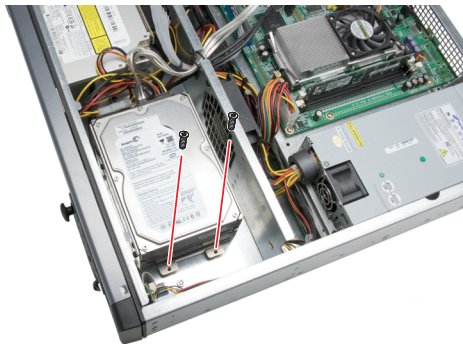


Figure 7. Loosening the Hard Disk Drive Cage

- b. Lift up and slide the cage out from under the retainer bracket. Notice that there are two tabs along the bottom of the cage that secure it in place.

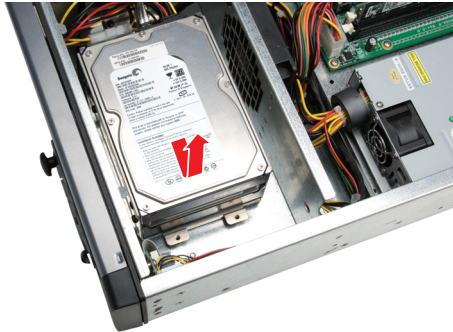


Figure 8. Removing the Hard Disk Drive Cage

- c. Remove the power and data cable from both of the drives in the cage.



Figure 9. Removing the Power Cable

- d. With a Phillips screw driver, remove and set aside the four screws that secure the drive to the sides of the cage.

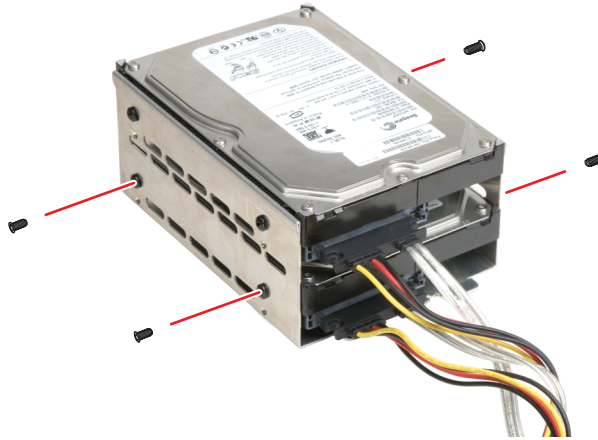


Figure 10. Removing the Screws from Hard Disk Drive in the Cage

- e. Slide the drive out of the cage being careful to avoid scratching the bottom of the drive against the metal of the cage.

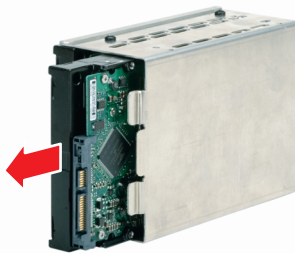


Figure 11. Removing the Hard Disk Drive from the Cage

- f. Repeat this step for each drive that is being replaced. In a two-drive system, you do not need to remove both drives if you are replacing only a single drive.
4. To install a replacement or upgrade hard disk drive do the following:
 - a. Carefully slide the drive into place taking precautions to avoid scratching the underside of the drive against the metal sides or bottom of the cage.
 - b. With a Phillips screw driver, attach two of the supplied screws on each side of the cage to secure the drive in place. Do not overtighten the screws.
 - c. Repeat this step for each drive that is being replaced.



WARNING: Never replace a hard disk with a formatted hard disk. Use only a Pelco-certified hard disk drive (250, 400, or 500 GB). Using any other hard disk drive with the DVR5100 voids the manufacturer's warranty for the unit.

5. To return the cage to the chassis do the following:
 - a. Attach the power and data cable to the drive or drives.
 - b. Place the cage in the chassis and guide the tabs under the retainer bracket.

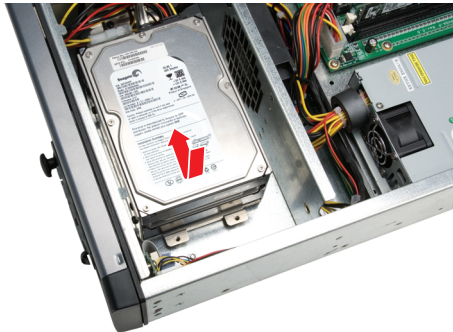


Figure 12. Inserting the Hard Disk Drive Cage in the Chassis

- c. Fasten the two screws to the chassis. Do not overtighten the screws.

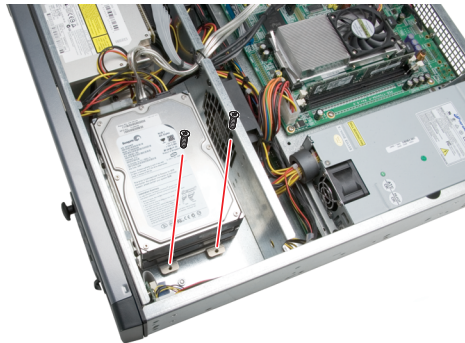


Figure 13. Securing the Hard Disk Drive in the Chassis

The unit is ready to be reassembled.

REASSEMBLING THE UNIT

1. Replace the lid, and use the original screws to secure the lid in place.
2. Reattach any devices that you disconnected from the unit (refer to Figure 15).
3. Reconnect the power cord.
4. Restart the DVR5100, and then enter a user name and password on the Login screen to log on to the system.

NOTE: Restarting the DVR5100 after replacing a hard disk drive can take a long time. The system might need to copy information from the flash disk to the hard disk drive or drives, or video might need to be deleted from the hard disk drives. It might be several minutes before the Login screen appears.

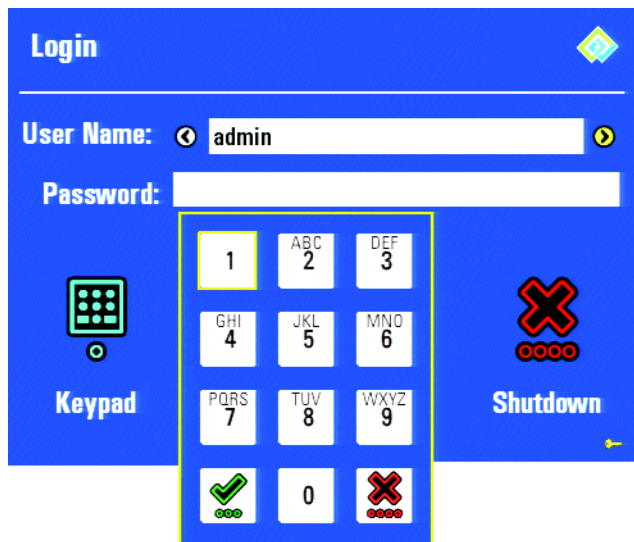


Figure 14. DVR5100 Login Screen With Keypad

REAR PANEL CONNECTORS FOR THE DVR5100

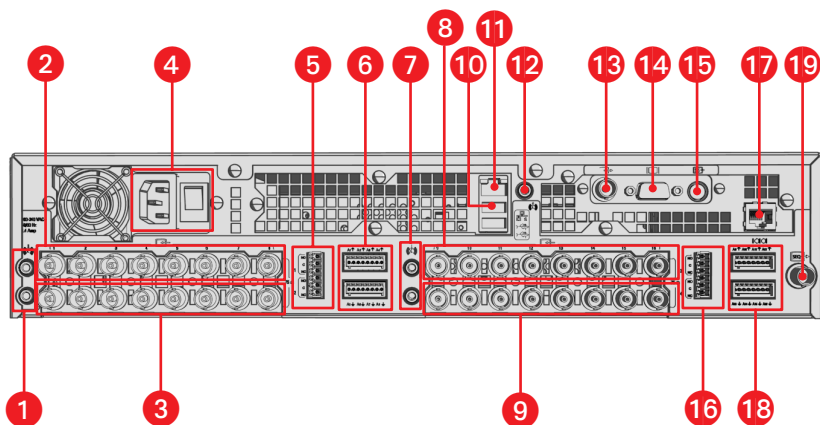


Figure 15. DVR5100 Rear Panel

The following table describes the DVR5100 back panel.

Table A. Parts of the DVR5100 Back Panel

Item	Part and Description
1	Audio Inputs 1 and 2: Audio inputs are assigned as follows: <ul style="list-style-type: none">Two audio inputs (1 and 2 for video input 1 and 2, respectively) are provided for a 4 and 8-channel DVR.Four audio inputs (1 and 2 for video input 1 and 2 and audio input 3 and 4 for video input 9 and 10, respectively) are provided for a 16-channel DVR.
2	Video Inputs 1–8: Camera inputs 1–8 for a 16 channel DVR. The 4 channel DVR provides camera inputs 1–4 and an 8 channel DVR provides camera inputs 1–8. The rear panel layout might be different for the 4 and 8 channel DVR.
3	Looping Video Outputs 1–8: One looping video output is provided for each camera input.
4	AC Power Connector and Switch: Provides power to the unit.

Table A. Parts of the DVR5100 Back Panel (Continued)

Item	Part and Description
5	<p>Relays 1–2: One relay is provided for every 4 channels:</p> <ul style="list-style-type: none">• One relay output is provided for a 4-channel DVR.• Two relay outputs (1, 2 for channels 1 and 2, respectively) are provided for an 8-channel DVR.• Four relay outputs (1, 2 for channels 1 and 2, respectively and 3, 4 for channel 9 and 10, respectively) are provided for a 16-channel DVR. <p>Relays are numbered from top to bottom.</p>
6	<p>Alarms 1–4 and 5–8: One programmable alarm input is provided for each video input. Alarm inputs for video input 1–8 are organized as follows:</p> <ul style="list-style-type: none">• Alarm input 1–4 is for video 1–4• Alarm input 5–8 for video input 5–8 <p>Alarms are numbered from the top left through the bottom right. The rear panel layout might be different for the 4 and 8 channel DVR.</p>
7	<p>Audio Inputs 3 and 4: Audio inputs 3 and 4 are for channel 9 and 10. For information about audio inputs for a 4 or 8 channel DVR5100, refer to item 3 in this table.</p>
8	<p>Video Inputs 9–16: Camera inputs 9–16 for a 16 channel DVR. The rear panel layout might be different for the 4 and 8 channel DVR.</p>
9	<p>Looping Video Outputs 9–16: One looping video output is provided for each camera input.</p>
10	<p>USB 2.0 Ports: Two USB 2.0 ports are provided for connecting an USB device, such as an optional KBD5000, USB PC keyboard, or USB storage media.</p>
11	<p>RJ-45 Port: Gigabit Ethernet RJ-45 port (1000BaseT).</p>
12	<p>3.5 mm Audio Jack: Provides mono audio output.</p>
13	<p>Analog Video Output: Output connector, for sending video to an analog device such as an NTSC or PAL monitor.</p>
14	<p>DB15 VGA: VGA connector for connecting a primary VGA monitor.</p>
15	<p>S-Video: Connects a primary monitor.</p>
16	<p>Relays 3–4: One relay is provided for every 4 channels. Relay output 3 and 4 for channel 9 and 10 are provided for a 16-channel DVR. Relays are numbered from top to bottom.</p>

Table A. Parts of the DVR5100 Back Panel (Continued)

Item	Part and Description
17	RJ-45 Port: Supports an RS-422 port for connecting a PTZ device.
18	Alarms 9–12 and 13–16: One programmable alarm input is provided for each video input. Alarm inputs for video input 9–16 are organized as follows: <ul style="list-style-type: none">Alarm input 9–12 for video 9–12Alarm input 13–16 for video input 13–16 Alarms are numbered from the top left through the bottom right. The rear panel layout might be different for the 4 and 8 channel DVR.
19	SEQ Monitor: Connects a spot monitor to display video sequentially from each video input.



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.

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 on FR/FT/FS Series fiber optic products and TW3000 Series unshielded twisted pair transmission products.
- Three years on Spectra® IV products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Three years on PMCL200/300/400 Series LCD monitors.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra III™, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit and WW5700 Series window wiper (excluding wiper blades).
- Two years (except lamp and color wheel) on Digital Light Processing (DLP®) displays. The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, 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 Pelco, Clovis, California. 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 which 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

In order to expedite parts returned to the factory for repair or credit, please call the factory 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).

All merchandise returned for credit may be subject to a 20% 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. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

REVISION HISTORY

Manual #	Date	Comments
C2647M	10/06	Original version.



Worldwide Headquarters
3500 Pelco Way
Clovis, California 93612 USA

USA & Canada
Tel: 800/289-9100
Fax: 800/289-9150

International
Tel: 1-559/292-1981
Fax: 1-559/348-1120

www.pelco.com

ISO9001

Australia | Canada | Finland | France | Italy | Russia | Singapore | Spain | Sweden | The Netherlands | United Arab Emirates | United Kingdom | United States