# Spectra III™ EVS Pendant Back Box

# Important Safety Instructions

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Only use attachments/accessories specified by the manufacturer.

10. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

12. Installation should be done only by qualified personnel and conform to all local codes.

13. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.

14. Use only installation methods and materials capable of supporting four times the maximum specified load.

15. Use stainless steel hardware to fasten the mount to outdoor surfaces.

16. To prevent damage from water leakage when installing a mount outdoors on a roof or wall, apply sealant around the bolt holes between the mount and mounting surface.

17. **CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other that contained in the operating instructions unless you are qualified to do so.

18. Only use replacement parts recommended by Pelco.

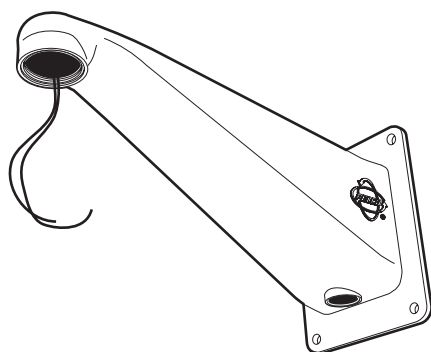The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit
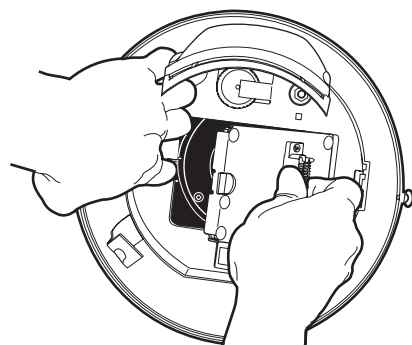
This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

| **CAUTION:** |
| --- |
| RISK OF ELECTRIC SHOCK. DO NOT OPEN. |

# Installation

**1** Install the mount for the pendant dome. Refer to the instructions supplied with the mount.

**2** Open the hinged door to the back box. Push the tab lock towards the wall of the unit and lift the door open. Pull power, alarm/auxiliary, and network cable into the back box.

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10 percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

| Total VA | 20 AWG (0.5 mm$^2$) | 18 AWG (1.0 mm$^2$) | 16 AWG (1.5 mm$^2$) | 14 AWG (2.5 mm$^2$) |
|---|---|---|---|---|
| 36 | 79 ft (24 m) | 125 ft (38 m) | 199 ft (60 m) | 316 ft (96 m) |
| 88 | 32 ft (9 m) | 51 ft (15 m) | 81 ft (24 m) | 129 ft (39 m) |

**NOTE:** Input power for the dome is 24 VAC only. Power consumption is 36 VA per dome for indoor models and 88 VA for outdoor models. Use a 24 VAC transformer with a minimum output of 36 VA per dome for indoor applications and a minimum of 88 VA per dome for outdoor applications.
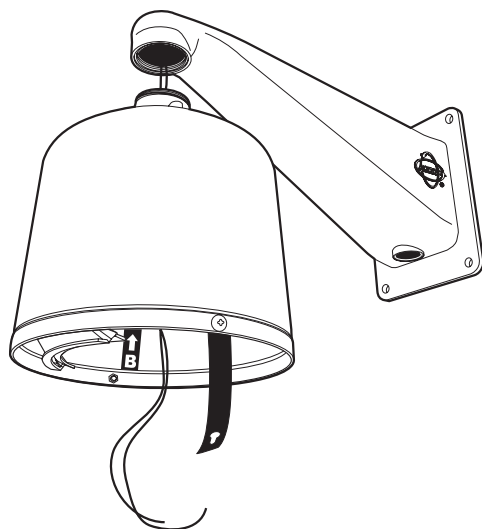
**3** Screw the back box onto the mount. For outdoor installations, apply thread compound (provided) to the threads on the back box.

**4** Connect the power wires to the circuit board inside the back box. Connect any alarm and auxiliary circuits. Turn on the power to the system. The green LED on the door indicates system power is on.

**NOTE:** Aux 1 – Maximum 2 A at low voltage (<40 V)

ALARMS
ALARM COM
AUX1
AUX COM
POWER
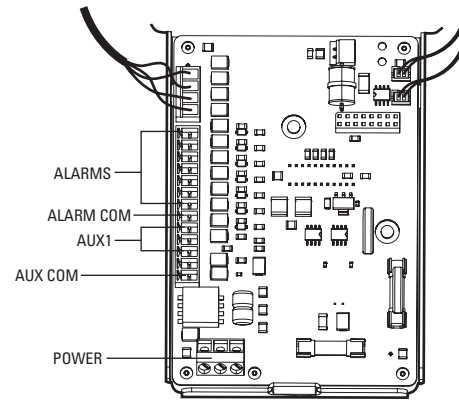
**5** Connect a 10/100/1000BaseT network Cat5e (or better) cable to the RJ-45 network connector located inside the back box. Check the LED indicators located inside the back box to check unit status, network status, and network activity.

CONFIGURATION
UNIT STATUS
NETWORK STATUS
NETWORK ACTIVITY
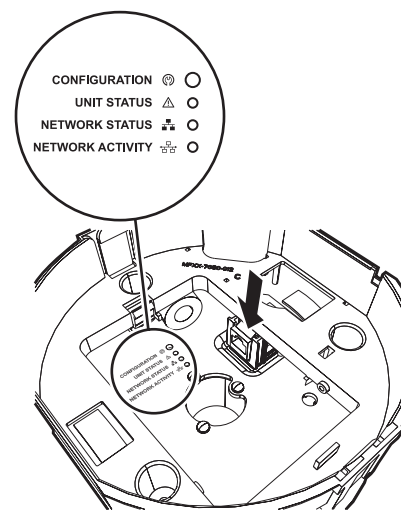
### Unit Status LED
Green     Unit is functioning normally.
Amber     Unit is in configuration mode.
Red       Unit is in an error condition.

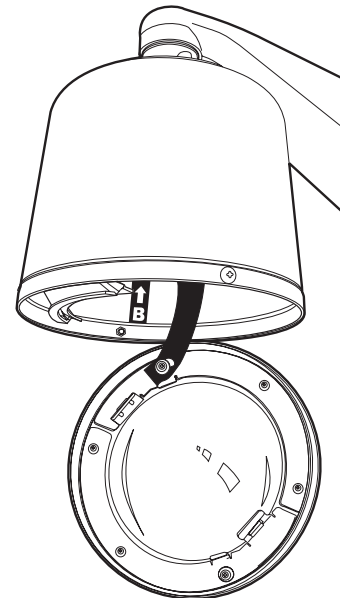### Network Status LED
Off       Unit is not connected to the network.
Amber     Unit is connected to a 100BaseT network.
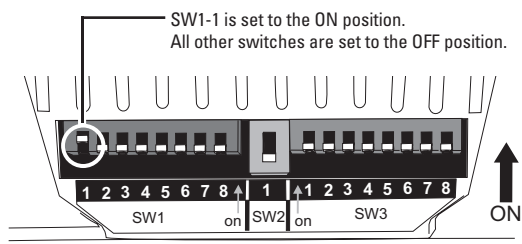Red       Unit is connected to a 10BaseT network.

### Network Activity LED
The LED flashes whenever the unit is sending or receiving network data.

**6** Close the door to the back box. Attach the back box leash to the lower dome.

SW1-1 is set to the ON position.
All other switches are set to the OFF position.



**ON**

1 2 3 4 5 6 7 8   1   1 2 3 4 5 6 7 8
SW1        on  SW2  on   SW3

**7** No DIP switch settings are required for the system. Before installing the dome drive verify that switch SW1-1 (SW1, switch 1) is set to the ON position and all other switches are set to the OFF position.

The switches set the dome drive for Pelco's D protocol, address 1, 2400 baud, and no termination.
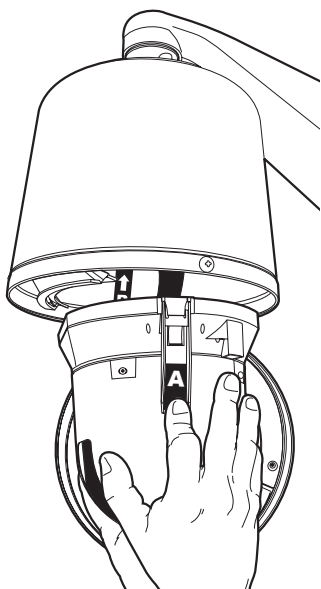


**8** Install the dome drive. Line up the blue (A) and red (B) tabs with the blue (A) and red (B) labels. Push in the tabs. Insert one side and then the other side. Continue pushing on the ends of the tabs until both sides click into place.
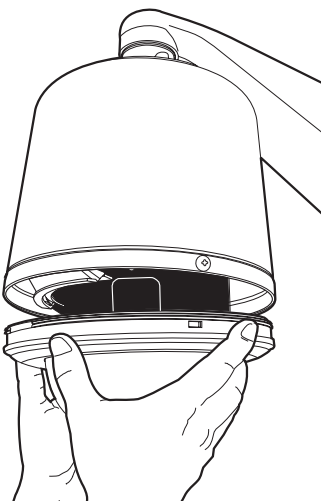


**9** Install the lower dome. Tighten the Phillips pan head screws to secure the lower dome to the back box.

To operate or program your Spectra III EVS dome drive, refer to the following manuals:

| Information Required | Where to Find Information |
|---|---|
| Spectra's programmable features, commands, and menu structure | Spectra III Operation/ Programming manual supplied with the dome drive or available at www.pelco.com |
| How to control the dome drive and access preset 95 with the WS5050 | Endura™ WS5000 Advanced System Software Operation manual supplied with the WS5050 workstation or available at www.pelco.com |
| How to control the dome drive and access preset 95 with the VCD5000 | Endura VCD5000 Video Control Display Operation manual supplied with the VCD5000 or available at www.pelco.com |

# Specifications

## SYSTEM

| | |
|---|---|
| Processor | PowerPC® 405EP |
| Operating System | Linux® |
| User Interface | Remote operation via WS5050 or VCD5000 |

## ELECTRICAL

| | |
|---|---|
| Input Voltage | 18-30 VAC; 24 VAC nominal |
| Input Power | 36 VA nominal (without heaters) |
| | 88 VA nominal (with heaters) |
| Fuse | 1.25 A |
| Auxiliary Outputs | 1 |
| Alarm Inputs | 7 |

## VIDEO

| | | |
|---|---|---|
| Video Standards | NTSC/PAL/EIA/CCIR composite | |
| Video Coding | MPEG-4 | |
| Video Streams | 2, simultaneous | |
| Video Resolutions | NTSC | PAL |
| 4CIF | 704 x 480 | 704 x 576 |
| 2CIF | 704 x 240 | 704 x 288 |
| CIF | 352 x 240 | 352 x 288 |
| QCIF | 176 x 120 | 176 x 144 |
| Video Inputs/Connectors | 2, BNC, looping, 75¾, 1 Vp-p | |
| Video Switch | Hi-Z, 75¾ | |

## VIDEO ACTIVITY DETECTION

| | |
|---|---|
| Zones | 3 plus background zone |
| Zone Types | Any shape, user-definable in 16 x 16 pixel blocks |
| Sensitivity | Adjustable |

## GENERAL

| | | |
|---|---|---|
| Construction | | |
| Back Box | Aluminum | |
| Dome Drive | Aluminum, thermo plastic | |
| Bubble | Acrylic | |
| Light Attenuation | | |
| Smoked | 1/2 F-stop light loss | |
| Clear | Zero light loss | |
| Chrome and Gold | 2 F-stops light loss | |
| Cable Entry (Back Box) | Through 1.5-inch NPT pendant mount | |
| Weight (approximate) | Unit | Shipping |
| Back Box | | |
| Standard Pendant | 4.1 lb (1.86 kg) | 6 lb (2.72 kg) |
| Environmental Pendant | 4.4 lb (2.00 kg) | 6 lb (2.72 kg) |
| Dome Drive | 2.4 lb (1.09 kg) | 4 lb (1.81 kg) |
| Lower Dome | 0.6 lb (0.27 kg) | 2 lb (0.90 kg) |
| Environment | Indoor/outdoor | |
| Operating Temperature | | |
| Standard Pendant | 32° to 140°F (0° to 60°C) absolute maximum operating temperature; 32° to 122°F (0° to 50°C) sustained maximum operating temperature | |
| Environmental Pendant | (Assumes no wind chill factor; for detailed test conditions, contact Pelco.) | |
| Maximum | 140°F (60°C) absolute maximum; 122°F (50°C) sustained maximum | |
| Minimum | -60°F (-51°C) absolute minimum; minimal icing at sustained minimum of 50°F (-45°C); prevents icing at sustained minimum of -40°F (-40°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up | |
| Effective Projected Area (EPA) | 92 square inches (without mount); 138 square inches (with IWM Series mount) | |

**ENVIRONMENTAL PENDANT**



13.0 (33.02)
6.00 (15.24)
9.4 (23.87)

**STANDARD PENDANT**



13.0 (33.02)
6.00 (15.24)
8.7 (22.09)
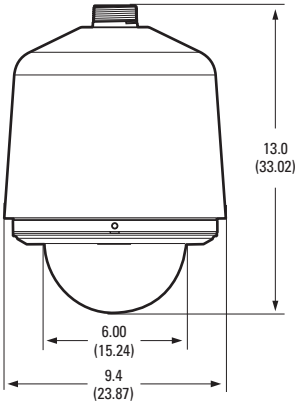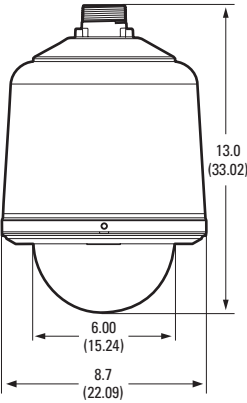
NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES.

# 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 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®, 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)þ289-9100 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

---

⊠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 |
|----------|------|----------|
| C2493M | 12/05 | Original version. |