

EH3508 Series

Environmental Enclosure

Installation/Operation Manual

C1435M-A (11/96)

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REVISION HISTORY

<u>Manual Number</u>	<u>Date</u>	<u>Comments</u>
C1435M	6/95	Original version.
C1435M-A	11/96	Changed height dimension, part numbers, and camera sled installation instructions per ECO #96-075.

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INSTALLATION/OPERATION MANUAL
MODEL EH3508 SERIES
ENVIRONMENTAL CAMERA ENCLOSURE

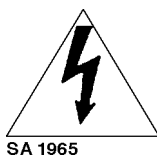
1.0 WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
2. 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.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
5. The installation method and materials should be capable of supporting four (4) times the weight of the enclosure, pan/tilt, camera and lens combination.

The product may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



CAUTION:
TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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.

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

2.0 SCOPE

The information contained within this manual covers the EH3508 Series camera enclosures.

3.0 DESCRIPTION

The EH3508 Series are indoor/outdoor light-duty camera enclosures designed for use with various cameras on the market and will accommodate fixed focal length lenses or motorized zoom lenses, with or without auto-iris operation.

The lid of the enclosure is hinged in the front providing easy access during installation and when camera/lens adjustments are necessary. The camera sled itself (see Figure 3, Item 7) can serve as an elevation block. It can be removed, inverted and flipped, then reinstalled. All wiring and cabling is brought into the enclosure through adjustable glands at the bottom rear of the enclosure.

The rear link-lock latch can be used with a padlock of suitable size for applications requiring additional security.

Options for this series include heater, defroster and sun shroud.

3.1 MODELS

EH3508	Enclosure, indoor/outdoor, 8.75" (22.22 cm) length.
EH3508-1	Same as EH3508 except unit is supplied with 120 VAC heater and defroster.
EH3508-2	Same as EH3508 except unit is supplied with 24 VAC heater and defroster.
EH3508-3	Same as EH3508 except unit is supplied with 230 VAC heater and defroster.

3.2 OPTIONS

AFW3512	Anti-fogging window
HK3512-1	Heater kit, thermostatically controlled, 120 VAC, 40 watts. Activates ON at 50°F (10°C); OFF at 80°F (26.67°C)
HK3512-2	Same as HK3512-1 except 24 VAC
HK3512-3	Same as HK3512-1 except 230 VAC
WD35-1	Window defroster kit, continuous duty, 3 watts, 120 VAC
WD35-2	Same as WD35-1 except 24 VAC
WD35-3	Same as WD35-1 except 230 VAC
SS3508	Sun shroud for EH3508 Series only

3.3 RECOMMENDED MOUNTS

CM4400	Light duty ceiling mount with cable feedthrough and manually adjustable tilt table. Supports up to 15 lbs (6.75 kg).
EM4400	Light duty wall mount with cable feedthrough and manually adjustable tilt table. Supports up to 15 lbs (6.75 kg).

3.4 RECOMMENDED CABLE SIZE/DISTANCE

CAUTION:

When using a single power source for both the camera and accessories, the camera power consumption must be taken into consideration when determining the wire gauge. However, the following chart does not include camera power because of the many variations available.

The following cable sizes are the minimum recommended for use with the combination of defroster and heater.

Model Number	Input Voltage	Power Consumption	Cable Size	Cable Distance	
EH3508-1	120 VAC at 60 Hz	43 watts	20 Awg	1,619 ft	(493.4 m)
			18 Awg	2,576 ft	(785.1 m)
			16 Awg	4,089 ft	(1,246.3 m)
			14 Awg	6,523 ft	(1,988.2 m)
EH3508-2	24 VAC at 60 HZ	43 watts	20 Awg	67 ft	(20.4 m)
			18 Awg	107 ft	(32.6 m)
			16 Awg	170 ft	(51.8 m)
			14 Awg	272 ft	(82.9 m)
EH3508-3	230 VAC at 50 HZ	43 watts	20 Awg	5,318 ft	(1,620.9 m)
			18 Awg	8,460 ft	(2,578.6 m)
			16 Awg	13,427 ft	(4,092.6 m)
			14 Awg	21,420 ft	(6,528.9 m)

4.0 INSTALLATION

The following hardware is supplied to mount the enclosure:

<u>Quantity</u>	<u>Item</u>
2	1/4-20 x .500 hex soc head screws (part # ZH1/420X.500CS)
2	1/4 flat washer (part # ZH260X562X65C)
2	1/4 split lock washer (part # ZH1/4LWSSL)

The following hardware is supplied to mount the camera:

<u>Quantity</u>	<u>Item</u>
2	1/4-20 x .375 pan head phillips (part # ZH1/420X.375SPP)

4.1 CAMERA/LENS INSTALLATION

To install the camera/lens, perform the following steps:

1. Unlatch lid and open.
2. Refer to Figure 3 for the location of the camera sled (item 7). Remove the camera sled from the rail:
 - a. Loosen the screws.
 - b. Slide the sled so that the screws are in the large part of the mounting holes.
 - c. Remove the sled.
 - d. Remove the parts tied to the sled.
3. If you are going to wire the enclosure with cable, remove the wiring glands and nuts from the parts bag and install them in the bottom of the enclosure. If you are going to wire the enclosure with conduit, do not install the glands.
4. Mount the camera to the sled with the 1/4-20 Phillips-head screws that are provided in the parts bag. You can mount the camera to either side of the sled. Note that the edges of the sled are bent and that one lip is wide and the other is narrow.

Normally you should mount the camera so that the wide lip of the sled fits over the mounting screws.

If you are installing a camera with a low optical center line or a camera with a large diameter lens, mount the camera so that the narrow lip of the sled fits over the mounting screws. This elevates the sled.

5. There are two threaded mounting holes on the bottom of the enclosure. Mount the enclosure to a pan/tilt assembly or fixed mount with the 1/4-20 screws and washers that are supplied with the enclosure.
6. Install the sled and camera in the enclosure:
 - a. If the camera's lens is adjustable, extend the lens to its maximum length.
 - b. Place the sled on the rail over the attaching screws.
 - c. Slide the sled so that the screws fit into the narrow slots of the mounting holes.
 - d. Tighten the screws just enough to hold the sled to the rail, but not too tight to keep the sled from moving.
 - e. Slide the camera sled forward until the lens almost touches the window.
 - f. Tighten the screws to secure the camera sled to the rail.
7. Pull the video and power cables through the glands or conduit and attach to the camera. Adjust the glands, if used, for a tight fit around the cables.

Where applicable, connect the enclosure power wires to pins 1 and 2 (AC IN) at TB1 on the PC board. (Refer to Figure 1.)

This power may also be used to power the camera if voltages are the same. The power may be "jumped" from pins 1 and 2 (AC IN) or pins 4 and 5 (AC OUT) to the camera power input. (Refer to Figure 1.)

Attach a BNC connector to the coax and connect to the camera.

8. Adjust camera focus and iris, if necessary. Connect auto iris, if applicable.
9. Close the lid and latch.

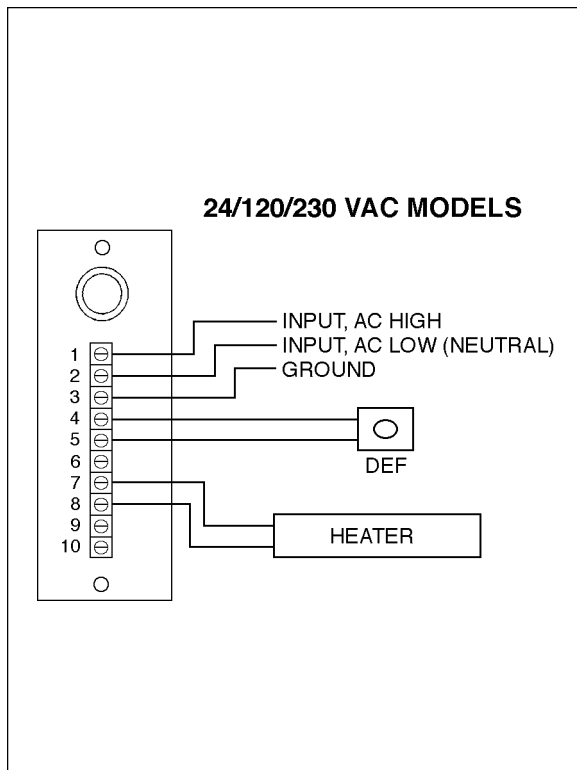


Figure 1. Heater and Defroster Wiring Diagram

5.0 CARE AND MAINTENANCE

Regularly scheduled maintenance will help prolong the operational life and appearance of the equipment. Clean the window regularly with a mild non-abrasive detergent in water and with a soft cloth to help maintain picture clarity.

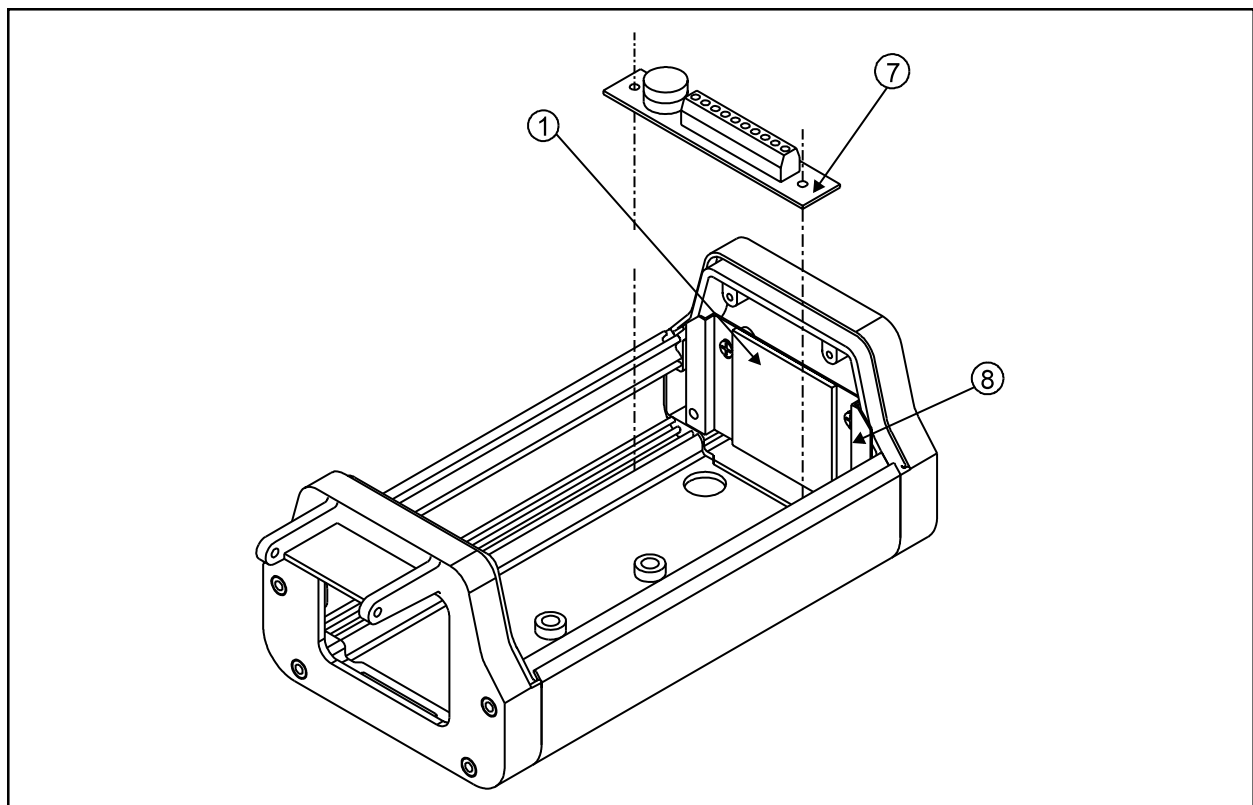


Figure 2. Heater Kit Installation

6.0 EXPLODED ASSEMBLY DIAGRAM

Refer to Figure 2 for exploded assembly diagram.

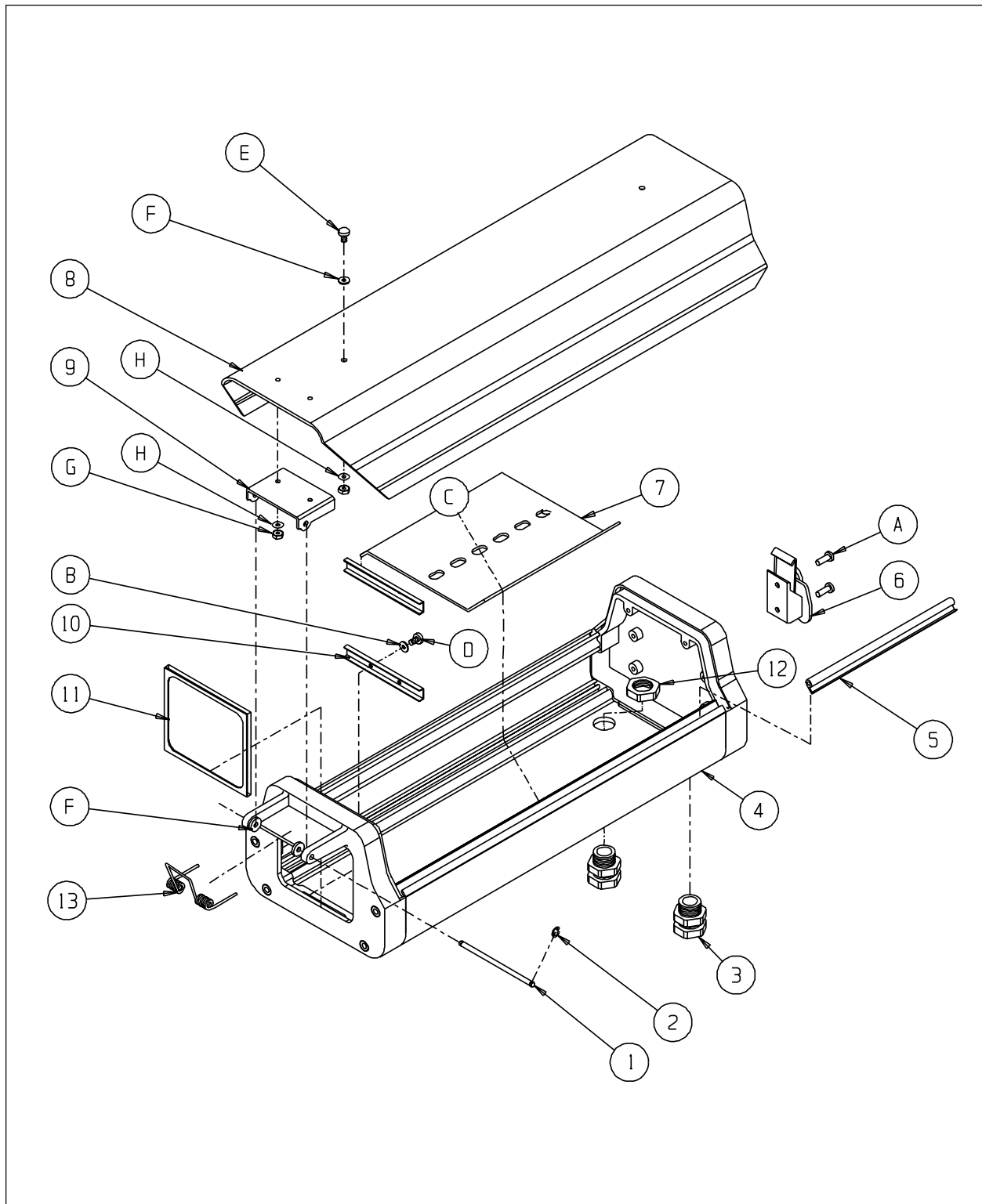


Figure 3. EH3508 Exploded Assembly Diagram

7.0 MECHANICAL PARTS LIST

The following parts list corresponds to the exploded assembly diagram in Figure 3.

<u>Item</u>	<u>Quantity</u>	<u>Description</u>	<u>Part Number</u>
1	1	Lid attachment pin	EH350010105
2	2	Clip	ZH.125ECLIP
3	2	Gland	EH470010007B
4	1	Body	37004001ASSY
5	27	Gasket (inches)	EH350010011
6	1	Latch	EH550010010
7	1	Camera sled	EH35064236COMP
8	1	Lid	EH35084135COMP
9	1	Lid hinge bracket	EH35004141COMP
10	2	Window bracket	EH35004142COMP
11	1	Window assembly	EH35001000ASSY
12	2	Gland nut	EH470010008B
13	1	Spring	EH350010107

Associated Hardware

A	2	Rivet	ZHRVT1/8X3/8CE
B	6	Internal tooth washer, #6	ZH6LWSIS
C	2	Screw, 6-32 x 3/8", pan head, Phillips	ZH6-32X.375SPP
D	4	Screw, 6-32 x 3/8", pan head, Phillips	ZH6-SFX.375SPP
E	2	Screw, 4-40 x 3/8" pan head, Phillips	ZH4-40X.375SPP
F	4	Nylon washer	ZH131X361X62N
G	4	Nut, 4-4	ZH4-40NUTSH
H	4	Internal tooth lock washer, #4	ZH4LWSIS

8.0 SPECIFICATIONS

MECHANICAL

Camera Mounting: Multiple holes on adjustable camera sled

Camera and Lens Size: Accommodates camera and lens combinations (including BNC connector) up to:

EH3508: 2.87" W x 3.00" H x 6.80" L
(7.28 cm x 7.62 cm x 17.27 cm)

EH3508-1/
EH3508-2/
EH3508-3 2.87" W x 3.00" H x 5.00" L
(7.28 cm x 7.62 cm x 12.70 cm)

Viewing Window: 3/16" (4.76 mm) thick, optically clear, impact resistant Lexan™ MR5 coated (U.L. 94HB rated).

Window Viewing Area: 2.25" H x 2.63" W
(5.71 cm x 6.68 cm)

Cable Entry: Two PG13.5 compression glands on bottom rear (maximum cable diameter 0.47")

Cable Entry Holes: Ø.875" (will accept 1/2" conduit fitting when compression gland is removed)

Latch: Rear link lock latch

GENERAL

Construction: Extruded and die cast aluminum

Dimensions: See Figure 4

Environment: -10° to 120° F
(-23.33° to 48.89° C)

Unit Weight:

EH3508 2.18 lbs (.99 kg) approximate

EH3508-1/
EH3508-2/
EH3508-3 2.51 lbs (1.14 kg) approximate

Shipping Weight:

EH3508 3.0 lbs (1.34 kg) approximate

EH3508-1/
EH3508-2/
EH3508-3 3.5 lbs (1.58 kg) approximate

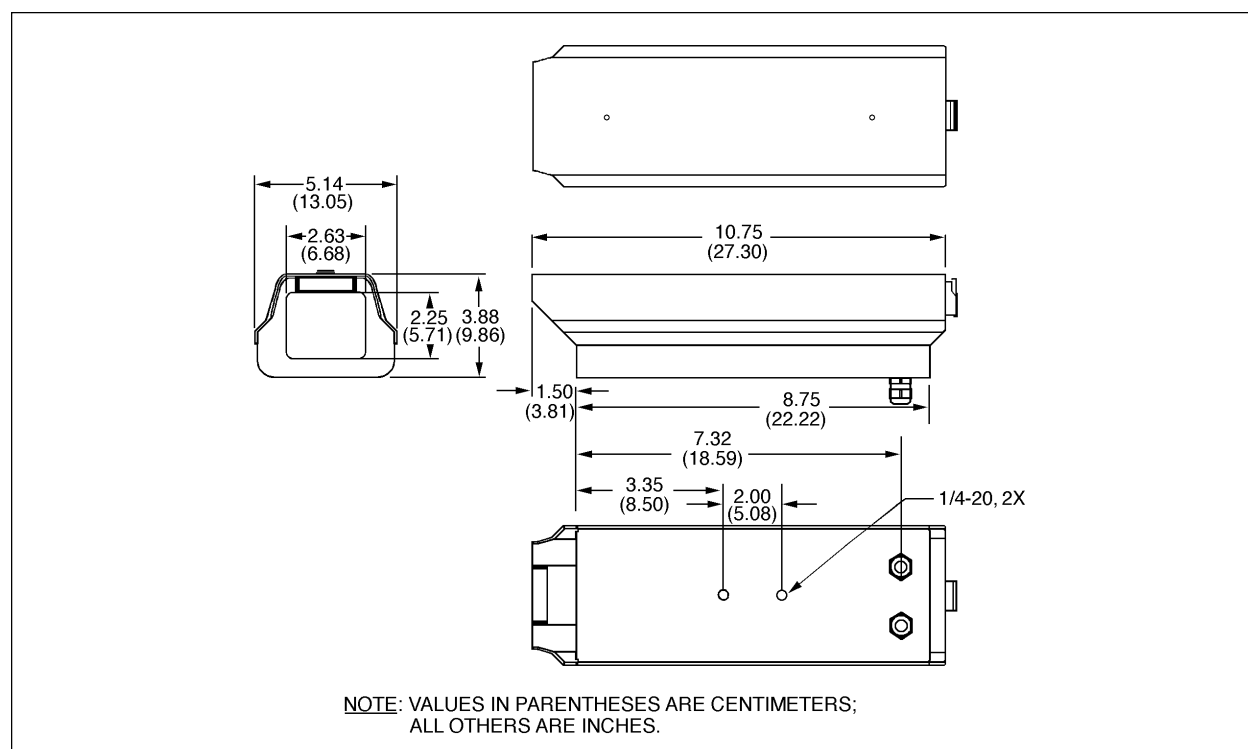


Figure 4. EH3508 Dimension Drawing

9.0 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 FT/FR8000 Series fiber optic 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.
- 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®, Espirit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Espirit® and WW5700 Series window wiper (excluding wiper blades).
- 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

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International customers call 1-559-292-1981 or FAX 1-559-348-1120

(Product specifications subject to change without notice.)

C1435M-A