

PELCOTM

by **Schneider** Electric

I N S T A L L A T I O N

Esprit[®] HD Series Network Positioning System



C1328M-B (10/14)

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Important Notices

LEGAL NOTICE

SOME PELCO EQUIPMENT CONTAINS, AND THE SOFTWARE ENABLES, AUDIO/VISUAL AND RECORDING CAPABILITIES, THE IMPROPER USE OF WHICH MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES. APPLICABLE LAWS REGARDING THE USE OF SUCH CAPABILITIES VARY BETWEEN JURISDICTIONS AND MAY REQUIRE, AMONG OTHER THINGS, EXPRESS WRITTEN CONSENT FROM RECORDED SUBJECTS. YOU ARE SOLELY RESPONSIBLE FOR INSURING STRICT COMPLIANCE WITH SUCH LAWS AND FOR STRICT ADHERENCE TO ANY/ALL RIGHTS OF PRIVACY AND PERSONALTY. USE OF THIS EQUIPMENT AND/OR SOFTWARE FOR ILLEGAL SURVEILLANCE OR MONITORING SHALL BE DEEMED UNAUTHORIZED USE IN VIOLATION OF THE END USER SOFTWARE AGREEMENT AND RESULT IN THE IMMEDIATE TERMINATION OF YOUR LICENSE RIGHTS THEREUNDER.

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.

In order to maintain compliance with FCC regulations shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and television reception.

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.

WARRANTY STATEMENT

For information about Pelco's product warranty and thereto related information, refer to www.pelco.com/warranty.

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

OPEN SOURCE SOFTWARE NOTICE

This product includes certain open source or other software originated from third parties that is subject to the GNU General Public License (GPL), GNU Library/Lesser General Public License (LGPL) and different and/or additional copyright licenses, disclaimers, and notices.

The exact terms of GPL, LGPL, and some other licenses are provided to you with this product. Please refer to the exact terms of the GPL and LGPL at <http://www.fsf.org> (Free Software Foundation) or <http://www.opensource.org> (Open Source Initiative) regarding your rights under said license. You may obtain a complete corresponding machine-readable copy of the source code of such software under the GPL or LGPL by sending your request to digitalsupport@pelco.com; the subject line should read *Source Code Request*. You will then receive an email with a link for you to download the source code.

This offer is valid for a period of three (3) years from the date of the distribution of this product by Pelco.

Description

The Esprit® HD Series network positioning system features a built-in, Web-based viewer for live video streaming to a standard Web browser (for example, Microsoft® Internet Explorer® or Mozilla® Firefox®).

The system features open architecture connectivity to third-party software. Pelco offers an application programming interface (API) and software development kit (SDK) that enables third-party systems to interface with Pelco's IP systems. The Esprit HD Series is also compatible with Endura®, DX Series, and Digital Sentry® systems to record, manage, configure, and view multiple live streams.

SYSTEM MODEL NUMBERS

Enclosure Type	Pedestal Mount		Wall Mount	
	24 VAC	120/230 VAC	24 VAC	120/230 VAC
With integrated optics package (IOP)	ES5230-02N*	ES5230-05N*	ES5230-02W†	ES5230-05W†
With wiper and IOP	ES5230-12N*	ES5230-15N*	ES5230-12W†	ES5230-15W†
With wiper and pressurized IOC	ES5230-12NP*	ES5230-15NP*	ES5230-12WP†	ES5230-15WP†

*Pedestal mount models include Esprit EPP pedestal adapter plate. Use with PM2000/PM2010 mount (not supplied) for pedestal application.

†Wall mount models include Esprit EWM wall mount. Optional mounting adapters for corner, pole, and parapet applications are available.

SUPPLIED PARTS LIST

Qty Description

- 1 Tube of Loctite® thread compound
- 3 10-32 x 1/2-inch flathead screws
- 2 Clamp connectors (120/230 VAC models only)
- 3 1/4-20 nuts and washers

INSTALLATION TOOLS AND PARTS NOT SUPPLIED

Qty Description

- 1 Network cable
- 1 Phillips screwdriver
- 1 Standard flat head screwdriver
- 1 Esprit HD mount
- 1 Mounting hardware

Installation

OVERHEAD CLEARANCE PROVISIONS

When installing the Esprit HD system, allow for sufficient clearance between the top of the unit and overhead obstructions. This will prevent interference when the enclosure is driven to its maximum elevation of 36 degrees.

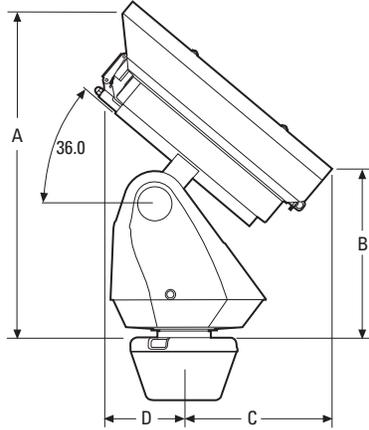


Figure 1. Clearance for Overhead Obstruction

	Without Wiper	With Wiper
A	42.5 cm (16.6 inches)	42.9 cm (16.9 inches)
B	23.9 cm (9.4 inches)	24.6 cm (9.7 inches)
C	18.1 cm (7.1 inches)	19.2 cm (7.6 inches)
D	10.7 cm (4.2 inches)	11.7 cm (4.6 inches)

INSTALLING THE 24 VAC POWER MODULE

1. Install the Esprit HD mount; refer to the installation manual supplied with the mount for instructions.
2. Remove the power module assembly from the base of the device by loosening the four Phillips screws and lifting the module.

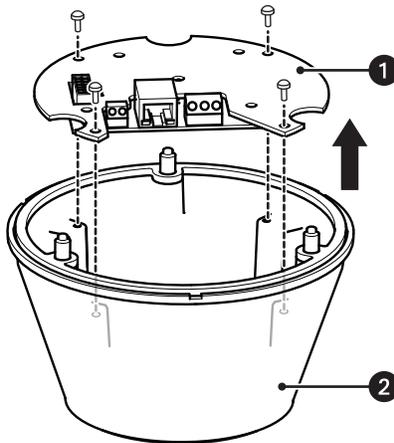


Figure 2. Removing the 24 VAC Power Module Assembly

- 1 Power Module Assembly
- 2 Base

3. Attach the base of the device to an Esprit HD mount:
 - a. Apply a drop of Loctite® thread compound (supplied) to each of the three mounting holes and 10-32 x 1/2-inch flathead screws (supplied).

NOTICE: Failure to apply Loctite to the mounting holes may increase the risk of damage to the unit.

- b. Align the mounting holes on the base with the holes on the mount.
- c. Attach the base of the device to the mount using the three flathead screws and washers (supplied).

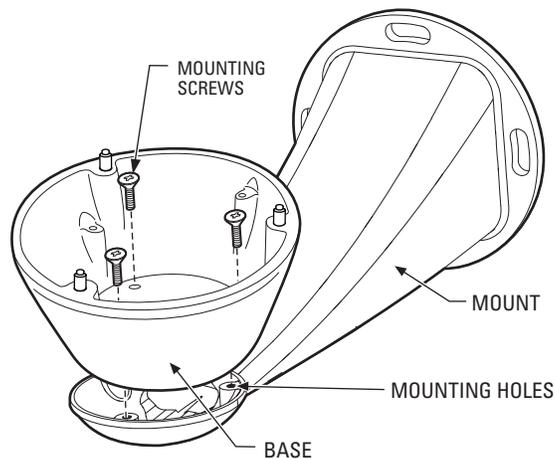


Figure 3. Attaching the Base to a Mount

4. Route the wires and network cable through the center of the Esprit HD mount.
5. Connect the AUX, Ethernet and 24VAC Power wires. Refer to *Connecting AUX 2 (Optional)* on page 10.

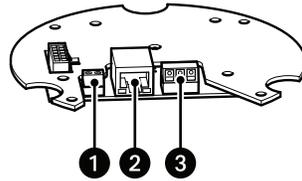


Figure 4. Wiring Connections: 24VAC

- 1 Connects one relay used to control an external circuit. Wire length between Esprit HD and relay must be less than 3 m (9.8 ft) to meet stated agency compliance regulations
- 2 Connects the system to the IP network
- 3 Connects power to the system

6. Reinstall the power module assembly into the base. The power module assembly can be positioned in the mount base in only one orientation.

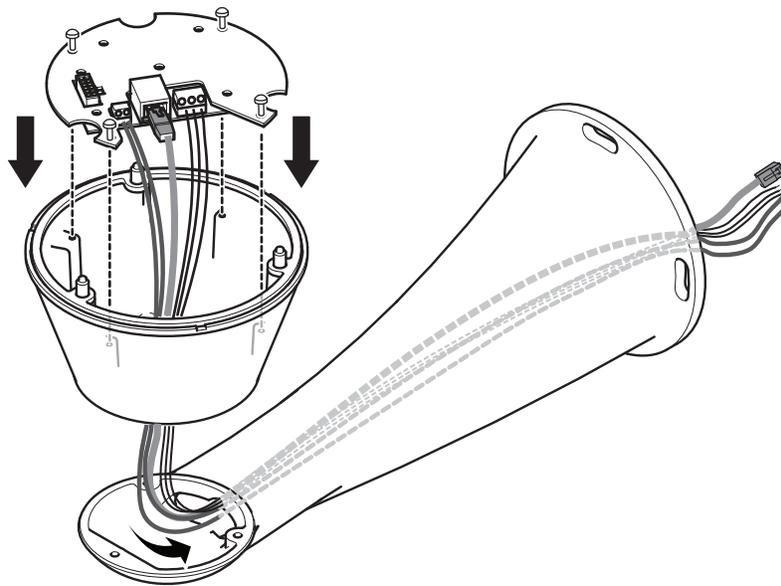


Figure 5. Reinstalling the Power Module

INSTALLING THE 120/230 VAC TRANSFORMER MODULE

1. Remove the transformer module from the base of the device by loosening the four Phillips screws and lifting the module.

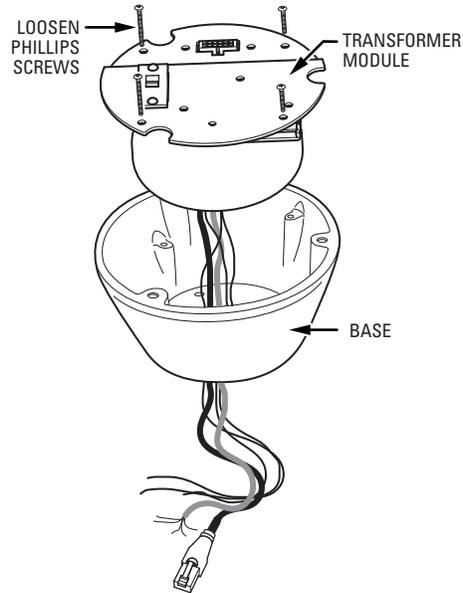


Figure 6. Removing the Transformer Module

2. Attach the base of the device to an Esprit mount (EWM or EPP):
 - a. Apply a drop of Loctite® thread compound (supplied) to each of the three mounting holes and 10-32 x 1/2-inch flathead screws (supplied)

NOTICE: Applying the Loctite thread compound is an important step in the installation process. Failure to apply Loctite to the mounting holes may increase the risk of damage to the unit. Attach the base of the device to the mount using the three screws.

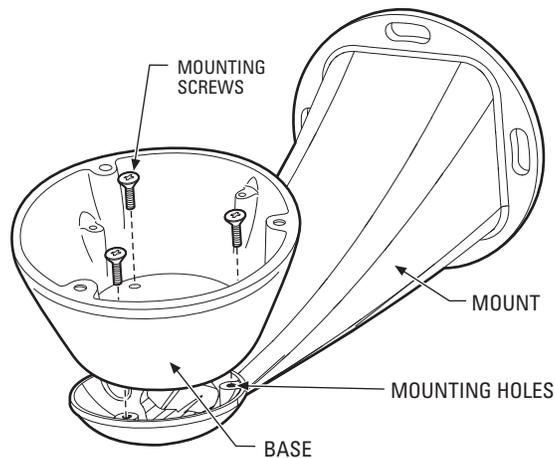


Figure 7. Attaching the Base to a Mount

3. Route the wires and cables through the center of the Esprit mount. Reinstall the transformer module into the base. The transformer module can be positioned in the mount base in only one orientation.

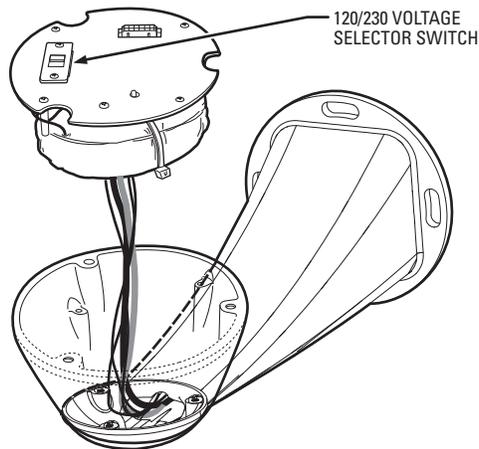


Figure 8. Reinstalling the Transformer Module

4. Set the 120/230 voltage selector switch on the transformer to the appropriate voltage.
5. Connect wires and cables.
 - a. Connect to power. Use the two supplied clamp connectors to connect the AC line and neutral.

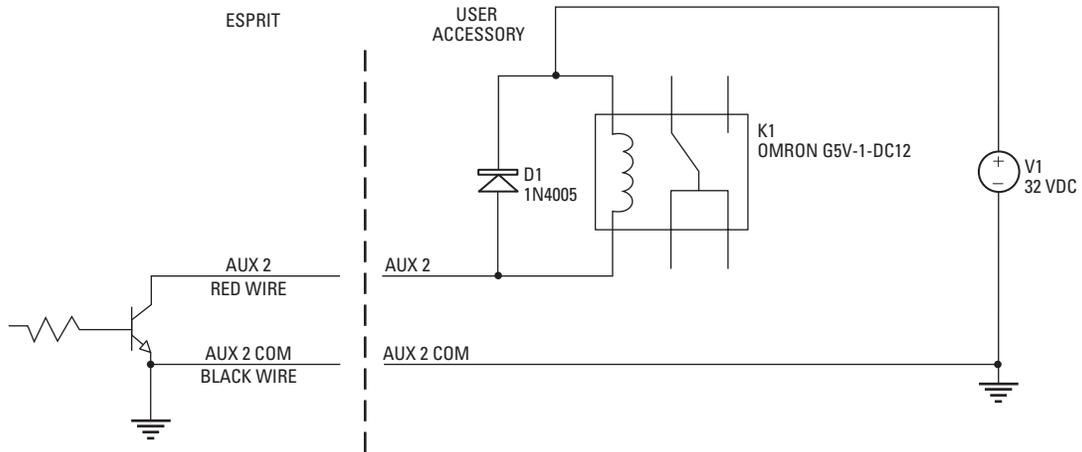
120/230 VAC	
Black wire	AC Line
White wire	AC Neutral
Green wire	Ground

- b. Connect the Cat5e cable to the RJ-45 connector.
 - c. Connect AUX 2 (*optional*). Refer to *Connecting AUX 2 (Optional)* on page 10.
6. Install mount; refer to the installation manual supplied with the mount for instructions.
 7. Turn on the power. If the light turns red, turn off the power, and proceed with installation.

CONNECTING AUX 2 (OPTIONAL)

1. Connect AUX 2 (*optional*). Refer to Figure 9.
 - a. Open collector output with 2-second activation.
 - b. Connected relay requires no more than 32 VDC and 40 mA to energize relay coil.
 - c. Wire length between Esprit and relay must be less than 3 m (9.8 ft).

Red wire	AUX 2
Black wire	AUX 2 COMMON



NOTE: CURRENT MUST NOT EXCEED 40 mA

Figure 9. AUX 2 Wiring

2. Turn on the power. If the light turns red, turn off the power, and proceed with installation.

INSTALLING THE PAN AND TILT MODULE

1. Connect the male system connector, located on the bottom of the pan/tilt, to the female system connector, located on the transformer and power module.
2. Align the screw hole of the pan/tilt with the screw hole of the transformer and power module.
3. Attach the pan/tilt to the base with three 1/4-20 nuts and washers (supplied).

NOTICE: When installing the pan/tilt, avoid damaging the base gasket during installation. Damaging the gasket may create a water ingress point, which could cause the gasket to leak.

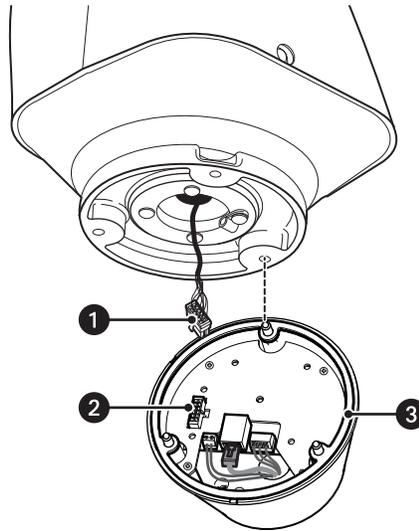


Figure 10. Installing the Pan/Tilt Module

- 1 Male System Connector
- 2 Female System Connector
- 3 Base Gasket

REVISION HISTORY

Manual #	Date	Comments
C1328M	7/14	Original version.
C1328M-A	9/14	Removed specification section as it is no longer required.
C1328M-B	10/14	Made wiring sections more specific to Aux 2 where applicable.

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