IM-VESM Surface Mount Adapter

C2251M (1/11)
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Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Only use attachments/accessories specified by the manufacturer.
6. Installation should be done only by qualified personnel and conform to all local codes.
7. Use only installation methods and materials capable of supporting four times the maximum specified load.
8. Only use replacement parts recommended by Pelco.

Description

The IM-VESM surface mount adapter is specifically designed for use with the Sarix™ IM-E/IM-V Series network dome cameras. The surface mount adapter modifies the network dome camera so it can be mounted directly to a ceiling.

You can install the IM-VESM surface mount adapter using one of the following methods:

- **Surface installation:** Pull the dome camera wiring through the top of the surface mount adapter (refer to Preparing the Adapter for Surface Installation on page 4).
- **Side conduit installation:** Pull the dome camera wiring through the side conduit of the surface mount adapter (refer to Preparing the Adapter for Side Conduit Installation on page 5).

PARTS LIST

The following installation tools and parts are supplied:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IM-VESM surface mount adapter</td>
</tr>
<tr>
<td>2</td>
<td>Machine screws, 8-32 x 1/2-inch, pan head, Phillips drive</td>
</tr>
<tr>
<td>1</td>
<td>Installation manual</td>
</tr>
</tbody>
</table>

USER SUPPLIED PARTS LIST

The following installation tool and parts are needed but not supplied:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IM-E/IM-V Series network dome camera</td>
</tr>
<tr>
<td>1</td>
<td>Screwdriver, #2 Phillips</td>
</tr>
<tr>
<td>1</td>
<td>Mounting hardware</td>
</tr>
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</table>
Installation

PREPARING THE ADAPTER FOR SURFACE INSTALLATION

1. Use the surface mount adapter as a template to mark the holes for the mounting hardware (not supplied), cable, and wiring on the mounting surface.

2. Prepare the mounting surface as follows:
   - **Standard ceiling:** When mounting the surface mount adapter to a standard ceiling, use 1/4-inch toggle bolts (minimum) or the appropriate hardware for the mounting substrate (not supplied). The head height must not exceed 0.873 cm (11/32 inch).
   - **Concrete ceiling:** When mounting the surface mount adapter to a concrete ceiling, use 1/4-inch bolts, screws, or anchors (not supplied). The head height must not exceed 0.873 cm (11/32 inch). Cut out the hole for the cable and wiring, and then pull the cable and wires through the mounting surface.

3. Pull the cable and wires through the surface mount adapter.

4. Attach the surface mount adapter to the mounting surface (hardware not supplied). Use stainless steel hardware when installing the system outdoors.

![Figure 1. Attaching the Surface Mount Adapter to the Mounting Surface](image)

5. Install the back box (refer to Installing the IP Dome in the Adapter on page 6).
PREPARING THE ADAPTER FOR SIDE CONDUIT INSTALLATION

1. Use the surface mount adapter as a template to mark the holes for the mounting hardware (not supplied) on the mounting surface.

2. Prepare the mounting surface as follows:
   - **Standard ceiling:** When mounting the surface mount adapter to a standard ceiling, use 1/4-inch toggle bolts (minimum) or the appropriate hardware for the mounting substrate (not supplied). The head height must not exceed 0.873 cm (11/32 inch).
   - **Concrete ceiling:** When mounting the surface mount adapter to a concrete ceiling, use 1/4-inch bolts, screws, or anchors (not supplied). The head height must not exceed 0.873 cm (11/32 inch).

3. Remove the conduit plug from the surface mount adapter.

4. Install a 0.75-inch or 25 mm threaded conduit connector (not supplied) into the conduit hole in the surface mount adapter.

5. Pull the cable and wires through the conduit and then through the surface mount adapter.

6. Attach the surface mount adapter to the mounting surface (hardware not supplied). Use stainless steel hardware when installing the system outdoors.

7. Install the back box (refer to Installing the IP Dome in the Adapter on page 6).

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Figure 2. Installing the Conduit Connector

1. 0.75-inch or 25 mm Conduit Connector (not supplied)
2. Conduit Plug
INSTALLING THE IP DOME IN THE ADAPTER

1. Connect the network cable to the RJ-45 network port located on the IP dome.

   ![Cat5 Cable Pin Descriptions](image1)

   **Figure 3.** Cat5 Cable Pin Descriptions

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>TX+</td>
</tr>
<tr>
<td>2</td>
<td>TX−</td>
</tr>
<tr>
<td>3</td>
<td>RX+</td>
</tr>
<tr>
<td>4</td>
<td>PoE 1-2</td>
</tr>
<tr>
<td>5</td>
<td>PoE 1-2</td>
</tr>
<tr>
<td>6</td>
<td>RX−</td>
</tr>
<tr>
<td>7</td>
<td>PoE 3-4</td>
</tr>
<tr>
<td>8</td>
<td>PoE 3-4</td>
</tr>
</tbody>
</table>

2. If you are installing an IM10-E or IM10-V Series model, connect the necessary wiring for audio (refer to Figure 4 and Figure 5).

   ![Line-In Audio Wiring](image2)

   **Figure 4.** Line-In Audio Wiring

   1. Microphone
   2. Amplifier
   3. 600-Ohm Impedance Matching Transformer
   4. Line In −
   5. Line In +

   ![Line-Out Audio Wiring](image3)

   **Figure 5.** Line-Out Audio Wiring

   1. Speaker
   2. Amplifier
   3. 600-Ohm Impedance Matching Transformer
   4. Line Out −
   5. Line Out +
3. Install the back box:
   a. Make all the necessary cable connections.
      (1) Route all cables and wires along the perimeter of the surface mount adapter.
      (2) Use the hooks inside the surface mount adapter to retain the cables and wires.
   b. Insert the RJ-45 connector into the metal clip inside the surface mount adapter to securely
      hold it in place.
   c. Install the back box in the surface mount adapter.
   d. Align the back box screws with the two mounting screw holes on the surface mount adapter.
   e. Install the 8-32 x 1/2-inch pan head Phillips drive machine screws (supplied).
   f. Tighten the machine screws completely to secure the back box to the surface mount adapter.

   ![Figure 6. Installing the Back Box](image)

4. Apply power to the camera.
   
   **NOTE:** If the camera is not connected to a Dynamic Host Configuration Protocol (DHCP) server and
   DHCP is enabled, the configuration sequence might take up to five minutes to complete.
5. Position the camera as needed:
   a. View the camera image using the service port.
   b. Manually rotate and tilt the camera module to position the camera. Do not over-rotate the module.

   **WARNING:** Excessively turning the module in one direction could result in damage to the wiring.

6. Adjust the field of view:
   a. Loosen the zoom locking screw.
   b. Turn the zoom adjustment ring clockwise or counterclockwise to adjust the field of view.
   c. Tighten the zoom locking screw.

7. Focus the lens:
   a. View the camera image using the service port or a Web browser.
   b. Manually adjust the zoom and focus of the lens to the desired field of view.
   c. The focus can be adjusted further using the settings in the Web interface.

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**Figure 7. Adjusting the Pan and Tilt**

1. Pan 355°
2. Rotate 120°
3. Tilt 164°
8. Align the dome liner with the camera, and then snap it into place.

![Figure 8. Installing the Dome Liner](image)

9. Install the bubble and trim ring:
   a. Place the bubble inside the trim ring.
   b. Align the trim ring screws with the three mounting screw holes on the back box.
   c. Push the bubble and trim ring onto the back box.
   d. Use the 1/8-inch hollow hex bit (supplied with IM-E and IM-V Series cameras) to tighten the tamper-resistant screws to secure the trim ring to the back box.

![Figure 9. Installing the Lower Dome](image)
Specifications

GENERAL

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Construction</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Finish</td>
<td>Light gray polyester powder coat</td>
</tr>
<tr>
<td>Unit Weight</td>
<td>0.34 kg (0.75 lb)</td>
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NOTE: VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

![IM-VESM Adapter (Side View)](image)

![IM-VESM Adapter (Top-Down View)](image)

REVISION HISTORY

<table>
<thead>
<tr>
<th>Manual #</th>
<th>Date</th>
<th>Comments</th>
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<tbody>
<tr>
<td>C2251M</td>
<td>1/11</td>
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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

- **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 (LS, LSC, LPC, and LPCD) integrated camera systems
  - DX Series digital video recorders (except DX9000 Series which is covered for a period of one year), Dvrs1000 Series digital video recorders, Digital Sentry Series hardware products, DXV 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
  - PMCL5xx Series FHD 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 and WW5700 Series window wipers (excluding wiper blades).
  - CM6700/CM6800/CM6900 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

- **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 tilt, 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.

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