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Important Safety Information

This manual provides installation and operation information and precautions for the use of this device. Incorrect installation could cause an unexpected fault. Before installing this equipment read this manual carefully. Please provide this manual to the owner of the equipment for future reference.



Warning: This symbol indicates the presence of dangerous voltage within and outside the product enclosure that may result in a risk of electric shock, serious injury or death to persons if proper precautions are not followed.



Caution: This symbol alerts the user to the presence of hazards that may cause minor or moderate injury to persons, damage to property or damage to the product itself if proper precautions are not followed.



Warning: Failure to observe the following instructions may result in severe injury or death.

- Installation must be performed by qualified personnel only, and must conform to all local codes.
- This product is intended to be supplied by a UL Listed Power Unit marked “Class 2” or “LPS” or “Limited Power Source” with output rated 12 VDC, 11 W min. (26 W min. with -IR model) or PoE, 11 W min. (26 W min. with -IR model).
- Do not connect directly to mains power for any reason.



Warning: Failure to observe the following instructions may result in injury to persons or damage to the device.

- Do not expose the camera directly to high levels of x-ray, laser, or UV radiation. Direct exposure may cause permanent damage to the image sensor.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other sources of heat.
- Do not subject the device cables to excessive stress, heavy loads or pinching.
- Do not open or disassemble the device. There are no user serviceable parts.
- Refer all device servicing to qualified personnel. Servicing may be required when the device has been damaged (such as from a liquid spill or fallen objects), has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Do not use strong or abrasive detergents when cleaning the device body.
- Use only accessories recommended by Pelco.
- This product should be installed in restricted access locations.

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.

This Class B digital apparatus complies with Canadian ICES-003.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency

Pelco Fisheye Installation Manual

energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications made to this equipment not expressly approved by Pelco Corporation or parties authorized by Pelco Corporation could void the user's authority to operate this equipment.

Disposal and Recycling Information

When this product has reached the end of its useful life, please dispose of it according to your local environmental laws and guidelines.

Risk of fire, explosion, and burns. Do not disassemble, crush, heat above 100 °C (212 °F), or incinerate.

European Union:



This symbol means that according to local laws and regulations your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

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Pelco Fisheye Installation Manual

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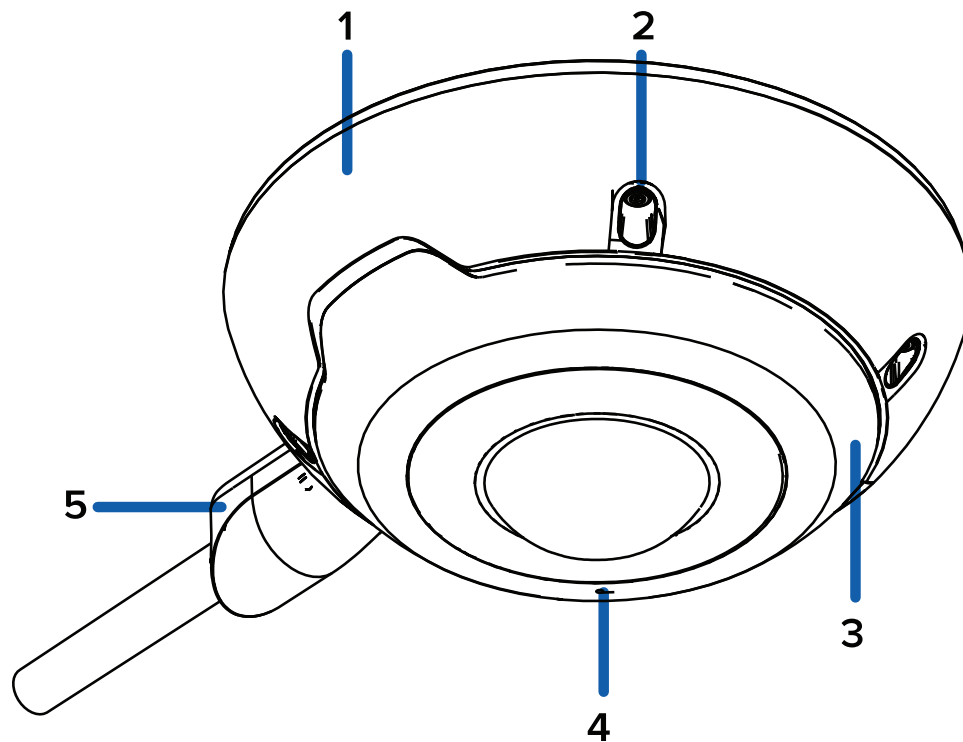
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Overview

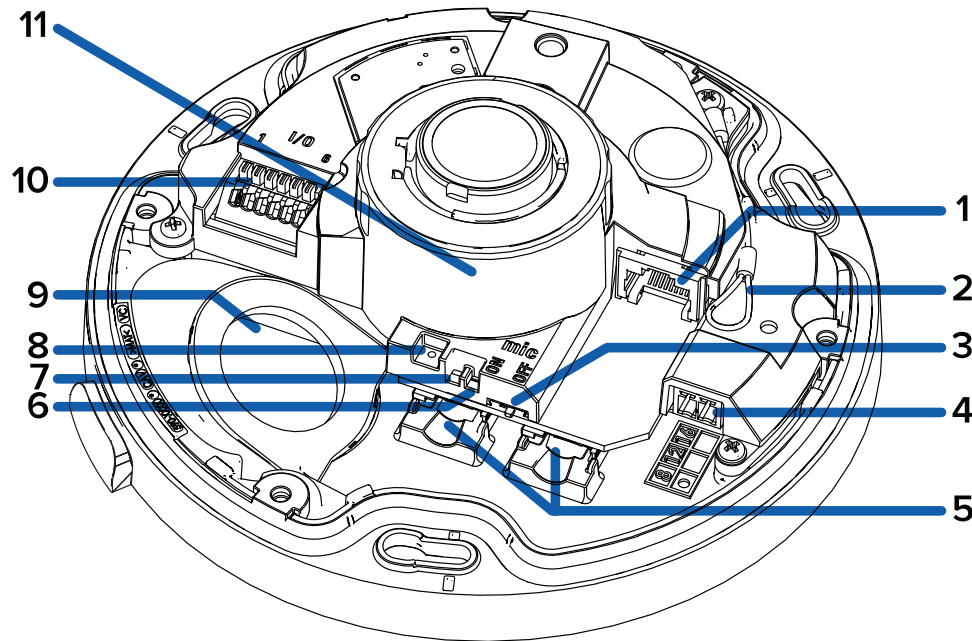
IMF82/IMF122 — Surface Mount

Cover View



1. **Dome cover**
Vandal resistant dome cover.
2. **Tamper resistant screws**
Star-shaped captive screws to fix the dome cover to the base.
3. **IR illuminator**
Provides scene illumination in the IR spectrum for supported camera models.
4. **Microphone**
Built-in audio receiver.
5. **Conduit shroud**
Optional shroud for connecting a side-entry 1/2" (18 mm) EMT conduit for cabling.

Internal View



1. Ethernet port

Accepts an Ethernet connection to a network. Server communication and image data transmission occurs over this connection. Also receives power when it is connected to a network that provides Power over Ethernet.

2. Lanyard

Anchors the cover to the camera base.

3. Microphone switch

Switch to enable or disable the built-in microphone. For more information, see [\(Optional\) Enabling the Microphone](#).

4. Power connector block

Accepts an external DC power connection when Power over Ethernet is not available.

5. microSD card slots (x2)

Accepts up to two microSD cards for onboard storage. Install microSD cards so the metal contacts are facing upward. For more information, see [\(Optional\) Configuring Onboard Storage](#).

6. Connection status LED indicator

Green LED provides information about device operation. For more information, see [Connection Status LED Indicator](#).

7. Link LED indicator

Amber LED indicates if there is an active connection in the Ethernet port.

8. Firmware revert button

Resets the camera to its factory default settings.

9. Cable entry hole

An entry hole for the cables required for camera operation.

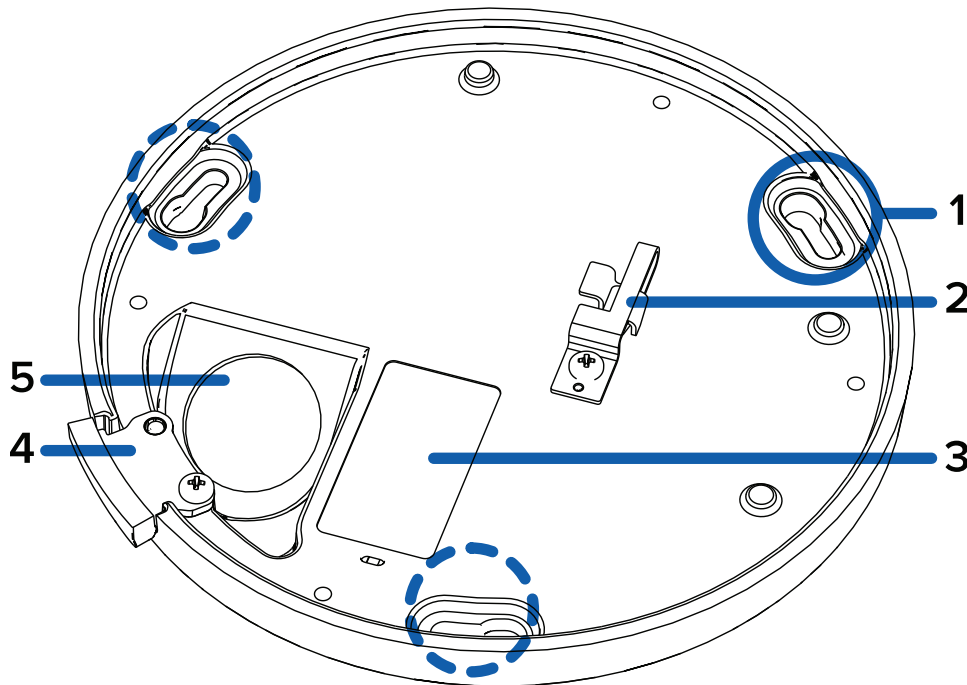
10. **I/O connector block**

Provides connections to external input/output and audio devices.

11. **Serial number tag**

Device information, product serial number and part number label.

Bottom View



1. **Mounting slots**

The mounting points for the camera.

If using the optional electrical box wall plate adapter or NPT adapter, align the mounting posts with the mounting slots.

If mounting directly to a wall or ceiling, insert the mountings screws through the slots to fix the camera to the mounting surface.

2. **Lanyard anchor**

The safety lanyard attaches to the anchor to prevent the camera from falling during installation.

3. **Serial number tag**

Device information, product serial number and part number label.

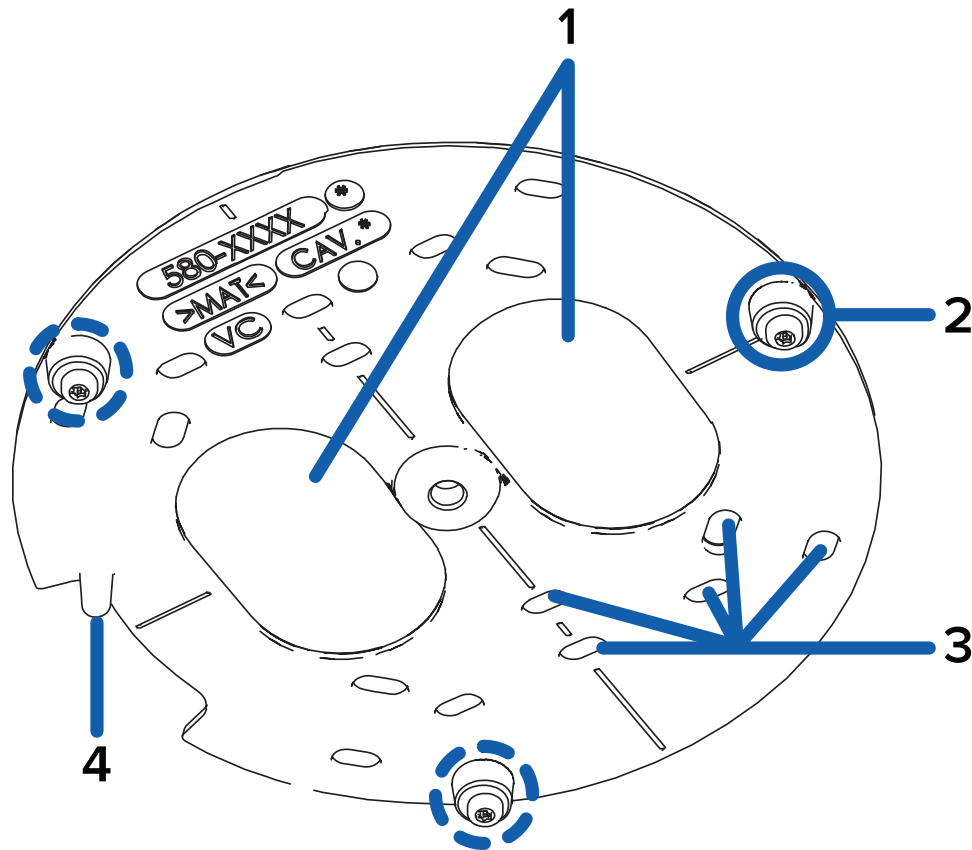
4. **Side conduit tab**

For installations that require cabling through a side conduit, this tab should be removed and replaced by the conduit shroud.

5. **Cable entry hole**

An entry hole for the cables required for camera operation.

Wall Plate Adapter View



1. Cable entry holes

Entry holes for the cables required for camera operation.

2. Camera mounting posts

Align the mounting posts on the wall plate adapter to the mounting slots on the camera base.

3. Mounting holes

Holes for mounting the wall plate to the following:

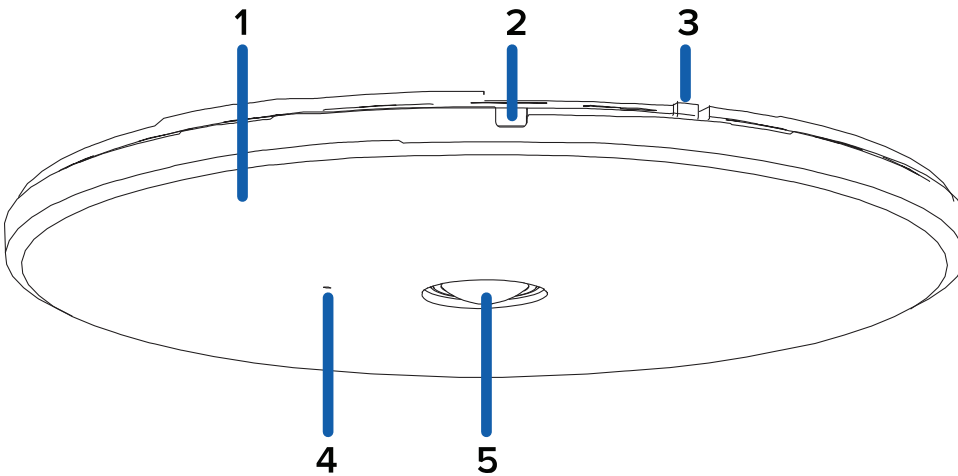
- UK standard single gang box
- Octagon gang box
- 4" gang box
- Mounting surface
- US standard single gang box

4. Orientation post

Orientation post that fits properly into the cable entry hole area of the camera base. Post will prevent installation in the incorrect orientation.

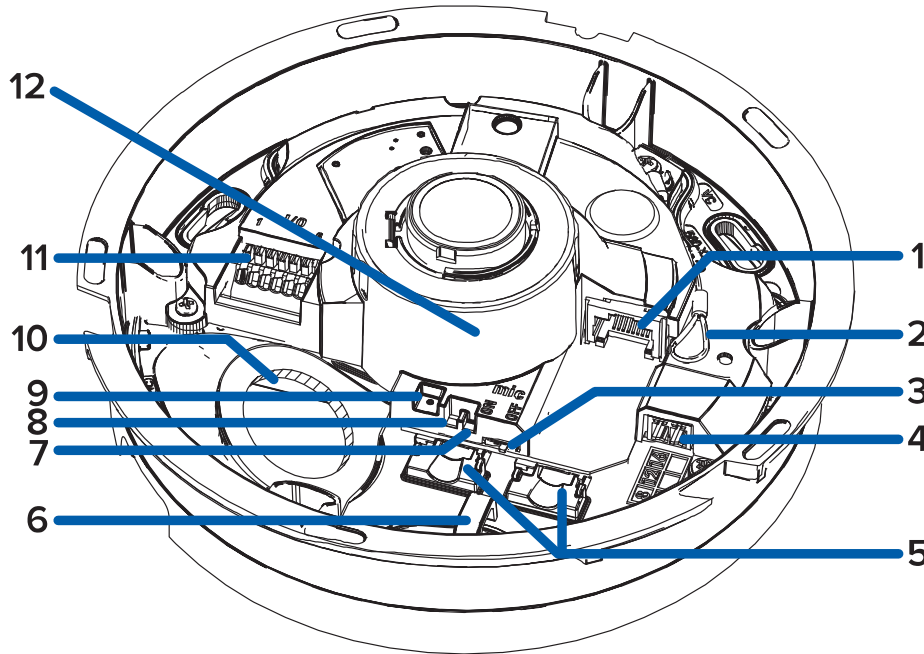
IMF82/IMF122 — In-Ceiling Mount

Cover View



1. **In-ceiling cover**
Discreet cover, which can be painted to blend into the mounting surface.
2. **Cover lock**
Locking point for securing the cover to the in-ceiling mount.
3. **Mount lock**
Locking point that the cover clicks into to secure the cover in place.
4. **Microphone**
Built-in audio receiver.
5. **Camera lens**
Fisheye camera lens.

Internal View



1. Ethernet port

Accepts an Ethernet connection to a network. Server communication and image data transmission occurs over this connection. Also receives power when it is connected to a network that provides Power over Ethernet.

2. Lanyard

Anchors the cover to the camera base.

3. Microphone switch

Switch to enable or disable the built-in microphone. For more information, see [\(Optional\) Enabling the Microphone](#).

4. Power connector block

Accepts an external DC power connection when Power over Ethernet is not available.

5. microSD card slots (x2)

Accepts up to two microSD cards for onboard storage. Install microSD cards so the metal contacts are facing upward. For more information, see [\(Optional\) Configuring Onboard Storage](#).

6. Ethernet cable clip

Clip to secure the Ethernet cable out of the way of other camera components.

7. Connection status LED indicator

Green LED provides information about device operation. For more information, see [Connection Status LED Indicator](#).

8. Link LED indicator

Amber LED indicates if there is an active connection in the Ethernet port.

9. **Firmware revert button**

Resets the camera to its factory default settings.

10. **Cable entry hole**

An entry hole for the cables required for camera operation.

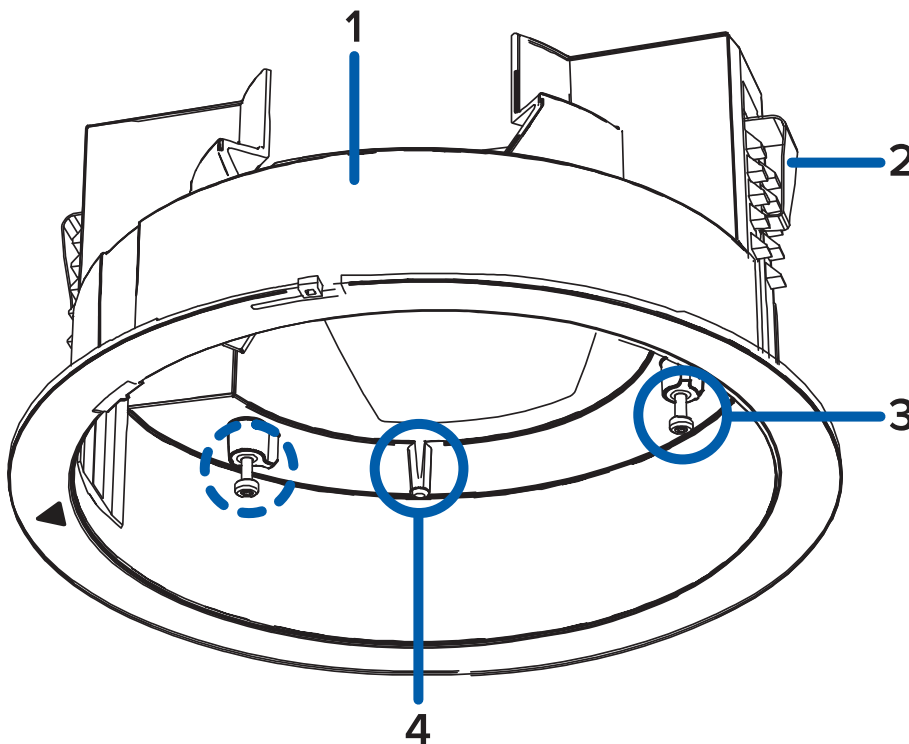
11. **I/O connector block**

Provides connections to external input/output and audio devices.

12. **Serial number tag**

Device information, product serial number and part number label.

In-Ceiling Mount View



1. **In-ceiling mount adapter**

Used to mount the camera to a ceiling.

2. **Clamps**

Manually adjustable clamps for securing the camera to the ceiling.

3. **Camera mounting posts**

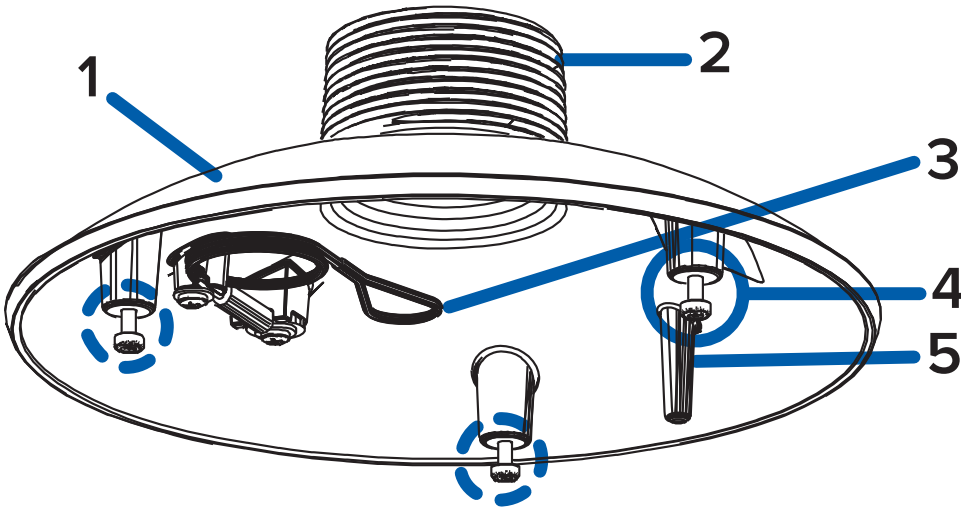
Align the mounting posts on the in-ceiling adapter to the mounting slots on the camera base.

4. **Orientation post**

Orientation post that fits properly into the cable entry hole area of the camera base. Post will prevent installation in the incorrect orientation.

IMF-PM — Pendant Mount

NPT Adapter View



1. Pendant NPT adapter

Camera pendant mount adapter for NPT pipes and wall arm installations.

2. 1-1/2" NPT thread mount

Standard female 1-1/2" NPT thread mount for mounting the camera to an NPT pipe or wall arm.

3. Lanyard

Connects to the lanyard anchor on the camera base.

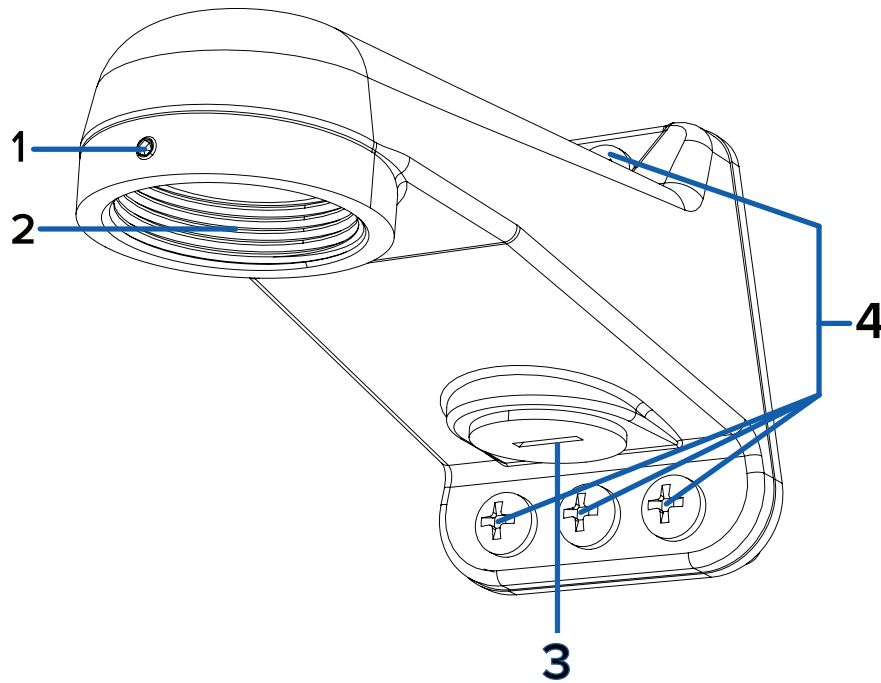
4. Camera mounting posts

Align the mounting posts on the pendant NPT adapter to the mounting slots on the camera base.

5. Orientation post

Orientation post that fits properly into the cable entry hole area of the camera base. Post will prevent installation in the incorrect orientation.

WMVE-AW Wall Mount View



1. **Set screw**
A 5/64" set screw for securing the pendant adapter thread.
2. **1-1/2" NPT thread mount**
Female NPS thread mount for pendant camera installations.
3. **NPT pipe entry hole**
A 3/4" NPT threaded hole for NPT pipe conduits
4. **Pendant wall mount screws**
Screws for securing the pendant wall mount to the mounting surface.

Preparing the Installation

Pre-Deployment In-Box Configuration

The camera comes equipped with an RJ45 configuration cable pre-installed for users that want to configure camera settings before installing the camera. The RJ45 connector on the configuration cable is accessible through the small flap on the side of the camera box for easy configuration before unpacking the camera.

We recommend that you do not exceed 3 hours of leaving your camera connected during in-box configuration with ambient temperatures between 20 °C – 25 °C (68 °F – 77 °F).

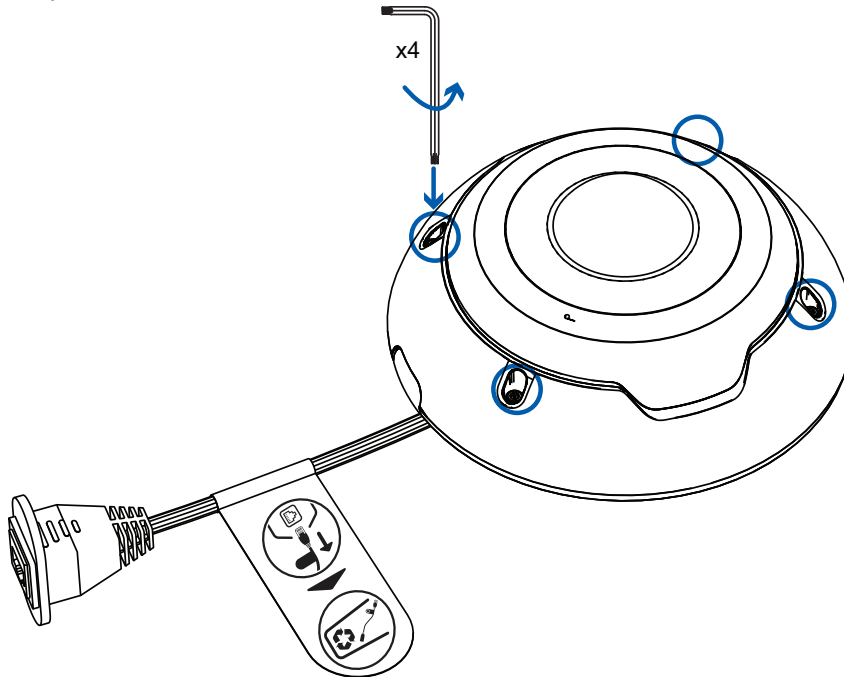
1. Locate and open the flap on the side of the camera packaging.
2. Connect a network cable to the RJ45 plug on the configuration cable. The network cable must provide PoE. IEEE 802.3af Class 3, to power the camera during configuration.
3. Connect to the camera using a video management system, the Camera Configuration Tool, or the camera's web browser interface to configure the camera's settings. For more information about connecting to the camera, see [Assigning an IP Address](#), and [Accessing the Live Video Stream](#).
4. Once you have finished making configuration changes, unplug the network cable.



Warning: Be careful when handling the camera after configuring it inside the packaging. The camera may be hot when handling it or removing from the packaging immediately after in-box configuration.

Removing the Fisheye Cover

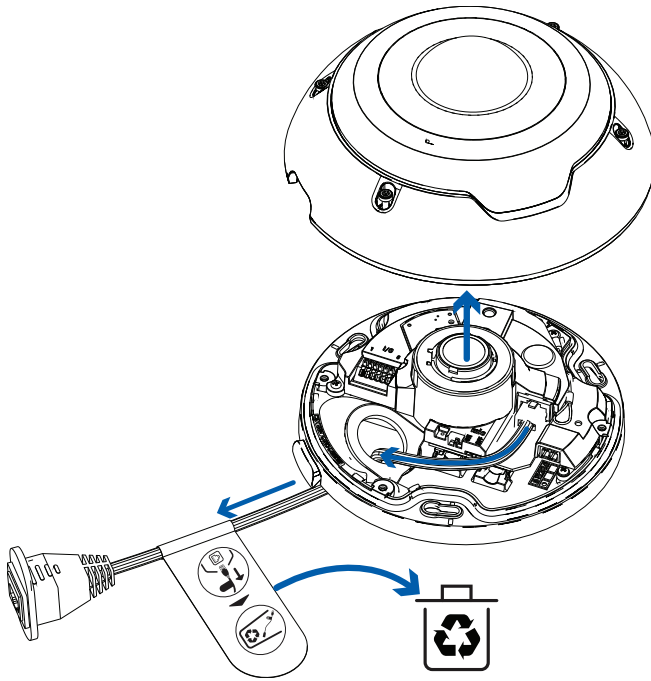
1. Remove the cover by loosening the screws that fix the cover to the base. Use the provided star-shaped screwdriver to loosen the screws.



Be careful not to scratch or touch the dome bubble. The resulting marks or fingerprints may affect the overall image quality. Keep the protective covers on the outside of the dome bubble until the installation is complete.

2. Lift the cover off the camera base and set it aside.

3. Unplug and remove the RJ45 in-box configuration cable that comes pre-installed on the camera.



Mounting and Aiming Video Analytics Cameras

When installing an Pelco IMF Fisheye video analytics camera, follow the listed mounting and aiming recommendations to maximize the camera's analytics capabilities:

- The camera should be mounted on a ceiling and look down on the scene.
Video analytics are not currently supported when the IMF Fisheye camera is mounted on a wall and looking horizontally at the scene.
- We recommend installing the camera above 2.74 m (9 feet).
- The camera should be installed parallel to the floor.
- The camera should be mounted to a stable surface to minimize the physical movement of the camera after installation.

For more details, see *Designing a Site for Video Analytics*. The document is available on the Pelco website.

Preparing the Cables

Before you connect the cables to the camera, you must prepare the cables for installation.

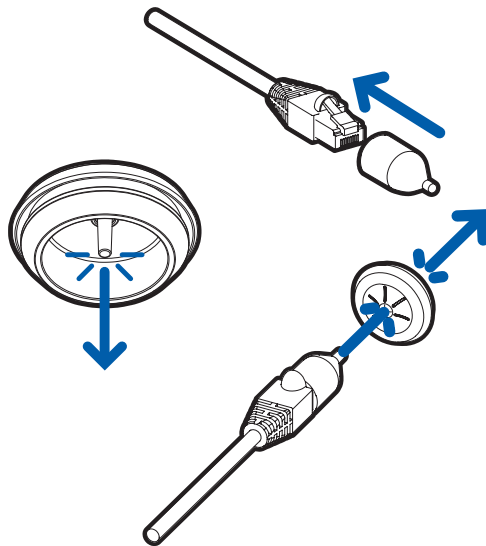
If the camera is installed outdoors, it is important that the cables be insulated against the weather. Provided with the camera are two rubber grommets for waterproofing the required cables:

- Use the single-hole rubber grommet for installations using PoE power and require only the Ethernet cable. For more information, see [Preparing the Cables](#).
- Use the 3-hole rubber grommet for installations that require more than one cable. For more information, see [Preparing the Cables](#).

Inserting an Ethernet Cable through the Single-Hole Grommet

You must pull the required Ethernet cable through the single-hole sealing grommet included with the camera.

1. Remove the sealing grommet from the accessory kit.
2. Pull the tab on the grommet to open a hole for the Ethernet cable.
3. Push an Ethernet cable through the grommet by one of the following methods:
 - a. If the Ethernet cable is uncrimped, push the cable through the grommet.
 - b. If the Ethernet cable is already crimped, place the grommet piercing cap on the Ethernet connector then push the cable through the grommet.



Ensure that the orientation of the cable and grommet matches the one shown in the image.

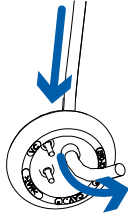
- c. If you require multiple cables, see [Preparing the Cables](#) to follow the 3-hole grommet procedure.

Inserting Cables through the 3-Hole Grommet

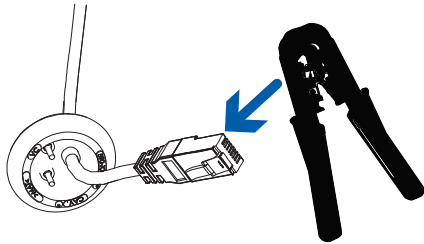
The Ethernet cable must be uncrimped to perform this procedure.

The camera includes an I/O terminal for input/output and audio connections, an external power connector, and an Ethernet connector. If you are connecting 2 or more cables to the camera, follow this procedure for using the 3-hole sealing grommet to insulate the cables from the weather.

1. Remove the sealing grommet from the accessory kit.
2. Thread the Ethernet cable into the largest hole in the 3-hole rubber grommet.
 - a. Push the Ethernet cable through the open hole in the rubber grommet.
Ensure the orientation of the cable and grommet matches the following image.



- b. Crimp the connector onto the Ethernet cable.



3. If you are using other cables, pull one or both of the tabs on the grommet to open the secondary holes for the additional cables.
4. Thread the additional cables through the secondary grommet holes.
Threading thin cables through the secondary holes may require the use of silicone sealant at the opening to ensure weather proofing.
5. Do not connect the cables to the camera until indicated in the installation procedure.

Surface Mount Installation

Required Tools and Materials

The following tools are required to complete the installation but are not included in the package:

- Appropriate tool for cutting the cable access hole
- Small slotted screwdriver with 5/64" or 2 mm blade width — for connecting power when not using Power over Ethernet
- No. 2 Phillips screwdriver — for attaching camera to an electrical box or mounting surface

Camera Package Contents

Ensure the surface mounted camera package contains the following:

- Pelco IMF Fisheye Camera
- Camera Base Mounting Template sticker
- Optional wall plate adapter — for electrical box installations.
- Star-shaped screwdriver
- Power terminal block
- Optional conduit shroud — for side-entry conduit cabling.
- 3x screws and anchors — for securing the camera to the mounting surface.

- 3-hole rubber grommet — for multi-cable installations.
- Single-hole rubber grommet — for installations with a single Ethernet/PoE cable.
- RJ45 grommet piercing cap — for use with single-hole rubber grommet only.

Installation Steps

Complete the following sections to install the device.

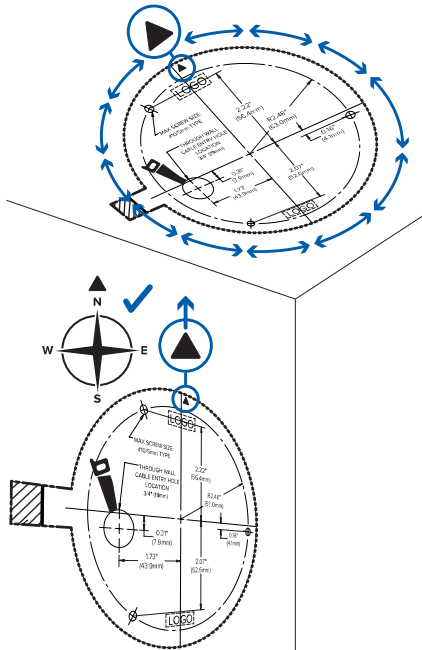
Mounting in the Correct Orientation

The IMF Fisheye camera provides 360° views of large areas. Because of the 360° view, it is not obvious which part of the camera should be facing up when installed on a wall. To help with this, the mounting template and the camera body have an up orientation arrow printed on them to signal which end should be facing up.

When installing the camera on a ceiling, the orientation arrow can go in any direction.

Before removing the mounting template after cutting or drilling the required holes, mark or otherwise make note of the direction the orientation arrow is facing. This will help you to align the camera body in the same orientation when installing.

When installing the camera to a wall, make sure that the orientation arrow is facing up, as shown in the diagram below.

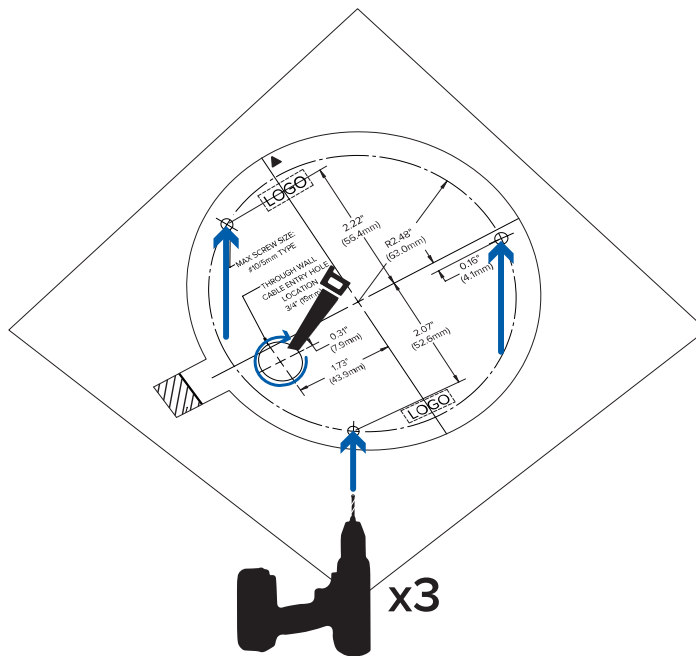


Mounting the Camera to a Ceiling or Wall

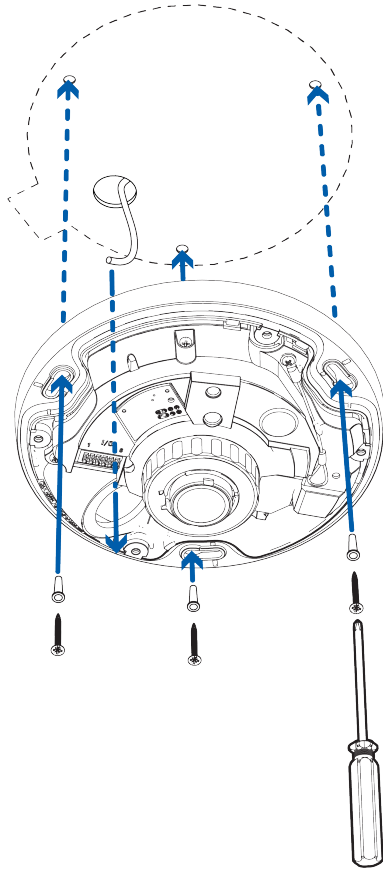
Perform the following steps if the required cables will be coming from inside the mounting surface and the camera will be mounted immediately over the cable hole. Use this procedure on surfaces that can be easily drilled into, and when the cables should be kept out of sight.

1. Using the Surface Mounting Template, drill 3 pilot holes into the mounting surface for the mounting screws.

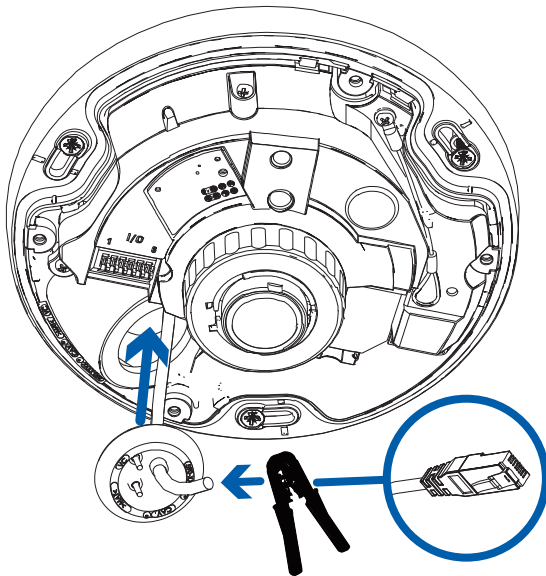
If you are mounting the camera to a wall, make sure the up orientation arrow is at the top, or the video image will be rotated. For more information, see [Mounting in the Correct Orientation](#).



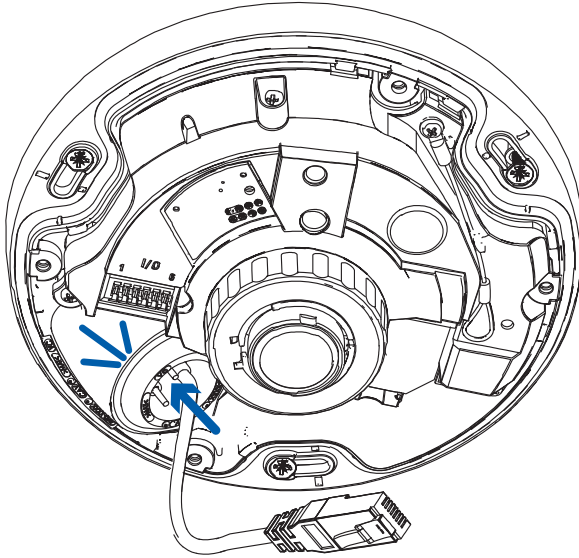
2. Hammer the supplied plastic anchors into the holes.
3. Drill the cable entry hole into the mounting surface.
4. Pull the required cables through the mounting surface and through the cable entry hole in the camera base.
5. Align the up orientation arrow on the camera base with the arrow on the mounting template. Align the mounting slots on the camera base to the drilled pilot holes and use the provided self-tapping screws to secure the camera to the mounting surface.



6. Pull the required cables through the rubber sealing grommet. For more information, see [Preparing the Cables](#).



7. Push the rubber sealing grommet with the required cables into the cable entry hole on the camera base. The thread around the grommet should line up with the cable entry hole. The rubber grommet should be pressed firmly into the cable entry hole to create a seal.

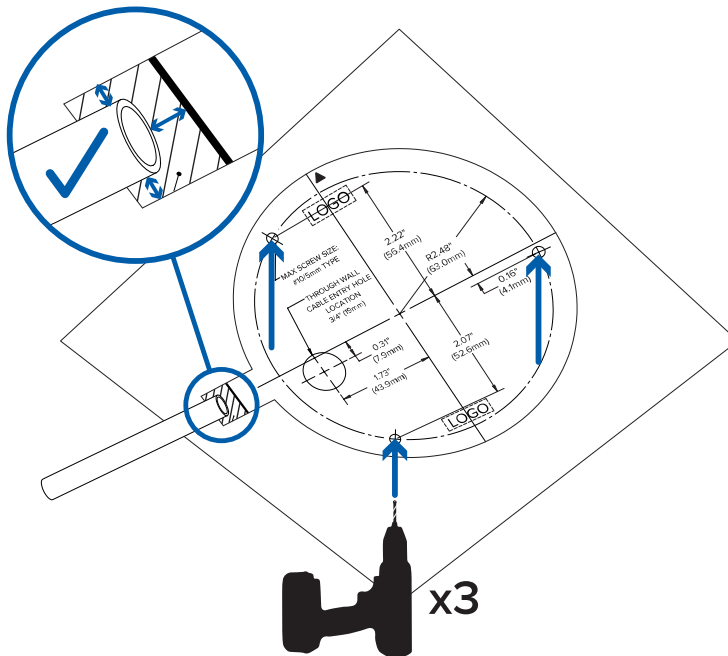


Mounting the Camera Using the Side Conduit Entry Hole

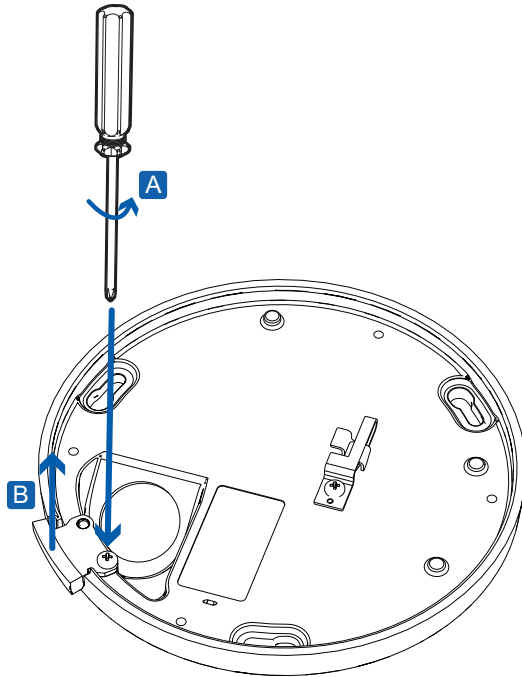
Perform the following steps if the required cables will be run along the mounting surface. Use this procedure if the mounting surface is difficult to drill into, or if the cables must be routed outside of the mounting surface.

1. Using the Surface Mounting Template, drill 3 pilot holes into the mounting surface for the mounting screws.

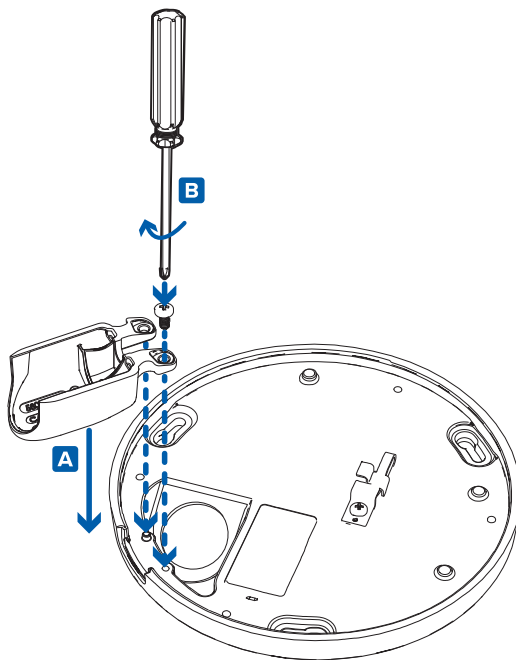
If you are mounting the camera to a wall, make sure the up orientation arrow is at the top, or the video image will be rotated. For more information, see [Mounting in the Correct Orientation](#).



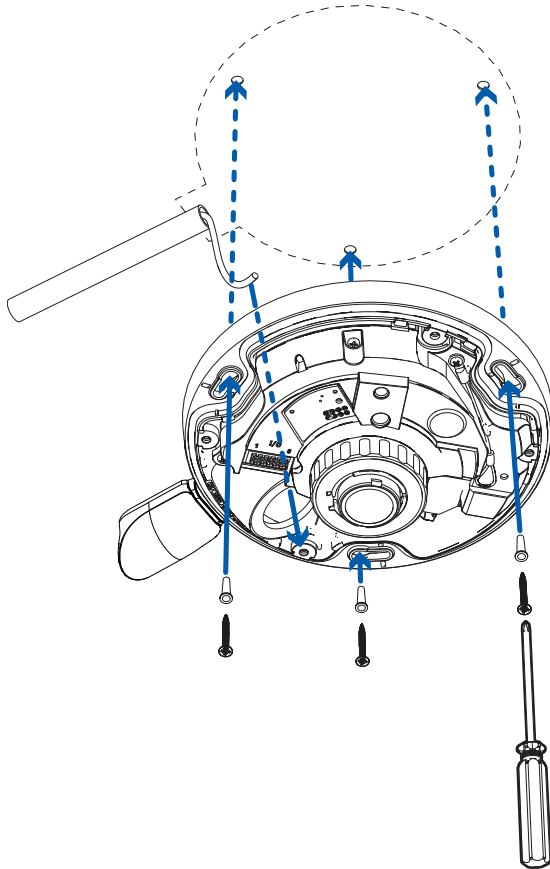
2. Align the conduit for the cables so that the end of the conduit falls inside the conduit landing area of the mounting template.
3. Hammer the supplied plastic anchors into the holes.
4. Arrange and feed the required cables through the conduit.
5. Loosen the screw holding the cable entry tab on the side of the camera base. Remove the cable entry tab.



6. Use the same screw to install the optional conduit shroud to the cable entry tab position. The conduit shroud is compatible with up to 1/2" conduits.

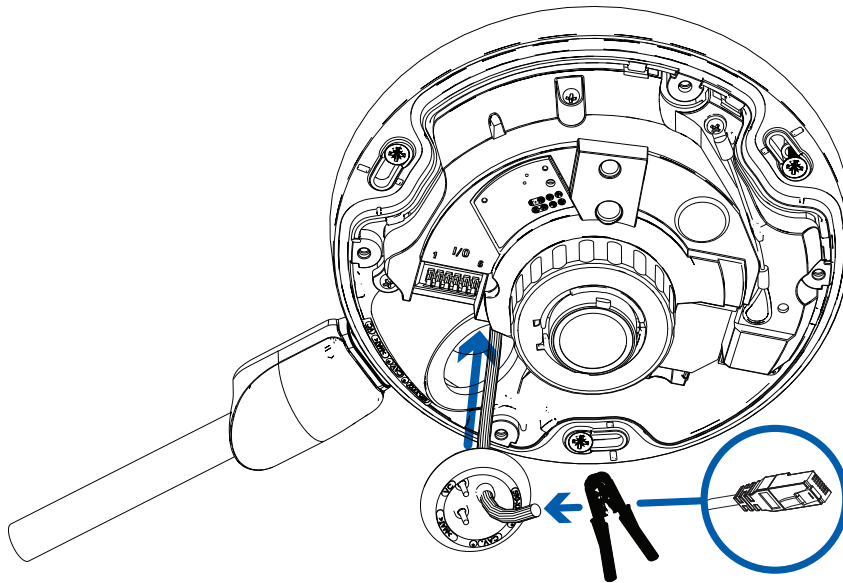


7. Pull the required cables through the cable entry hole on the camera base.
8. Align the up orientation arrow on the camera base with the arrow on the mounting template. Align the mounting slots on the camera base to the drilled pilot holes and use the provided self-tapping screws to secure the camera to the mounting surface.

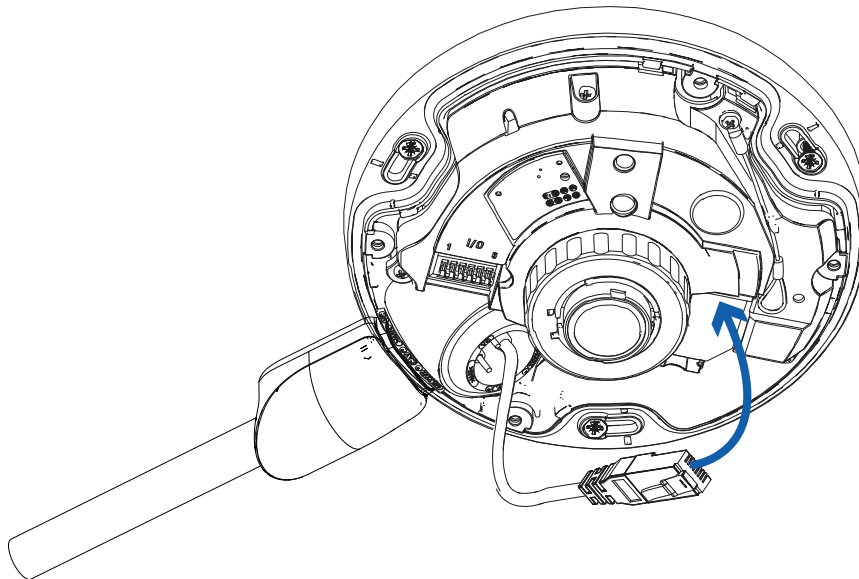


Make sure the cables run through the space provided by the conduit shroud and that they are not pinched.

9. Pull the required cables through the rubber sealing grommet. For more information, see [Preparing the Cables](#).



10. Push the rubber sealing grommet with the required cables into the cable entry hole on the camera base. The thread around the grommet should line up with the cable entry hole. The rubber grommet should be pressed firmly into the cable entry hole to create a seal.

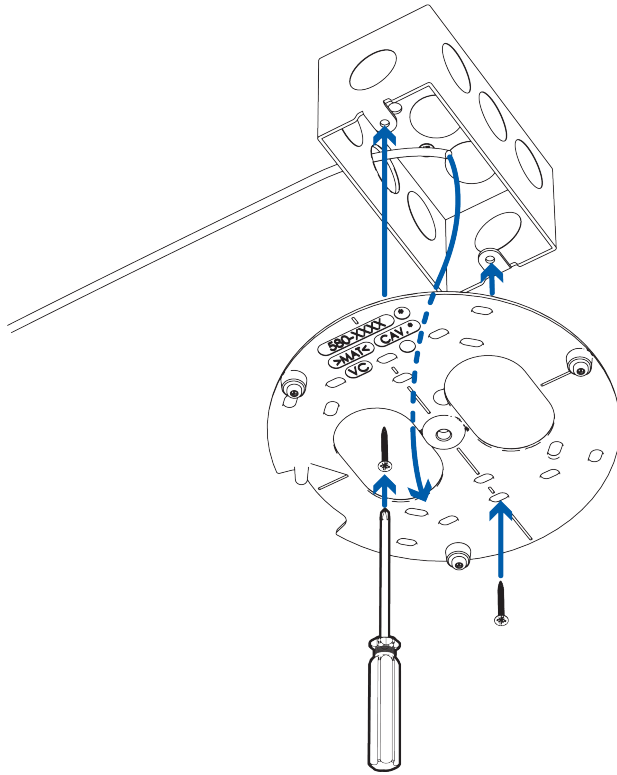


Mounting the Camera to an Electrical Box

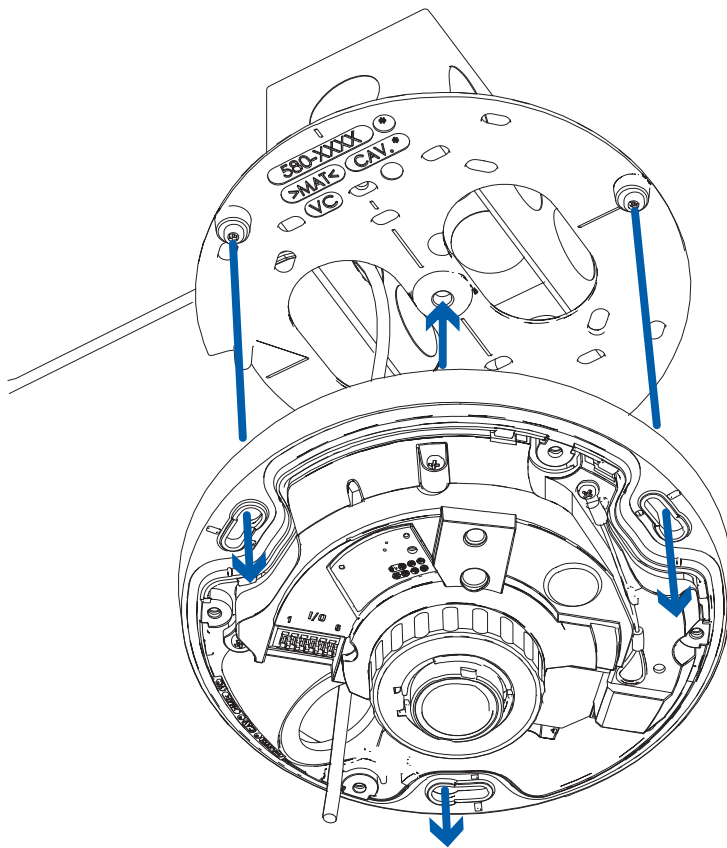
Perform the following steps if the required electrical components and cables must be contained in an electrical gang box. To mount the camera to an electrical gang box, you must use the provided wall plate adapter.

1. Install the electrical gang box as required.
2. Align the wall plate adapter mounting holes to the mounting points on the electrical gang box. If you are mounting the camera to a wall, make sure the up orientation arrow on the wall plate is at the top, or the video image will be rotated. For more information, see [Mounting in the Correct Orientation](#).

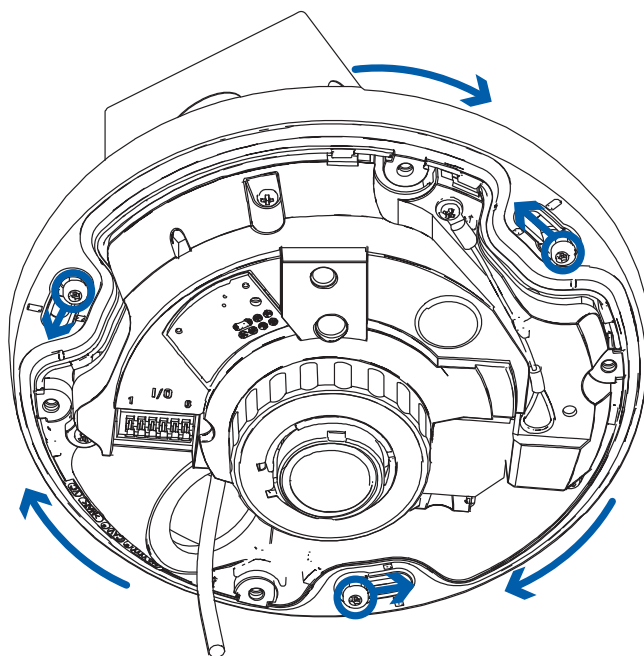
3. Use the provided machine screws to secure the wall plate adapter to the electrical gang box.



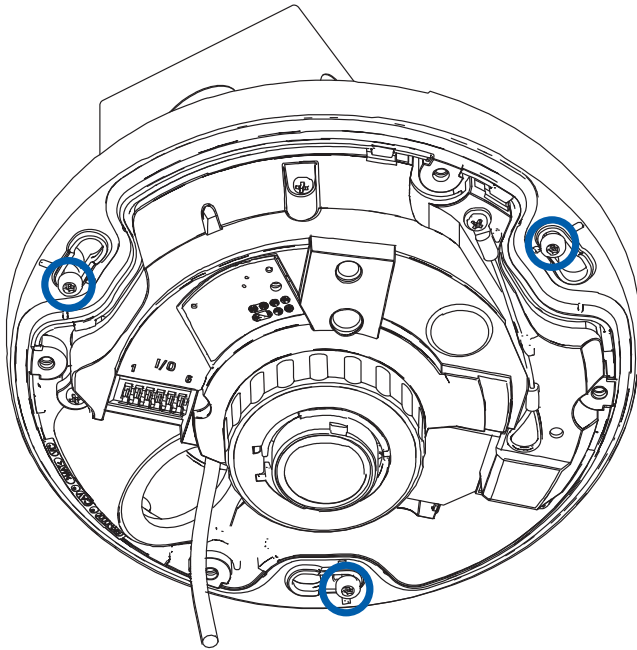
4. Pull the required cables through the electrical box and a cable entry hole on the wall plate. Then feed the cables through the cable entry hole on the camera base.
5. Align the up orientation arrow on the camera base with the arrow on the wall plate adapter. Align the mounting slots on the camera base to the mounting posts on the wall plate adapter and push the camera base onto the adapter.



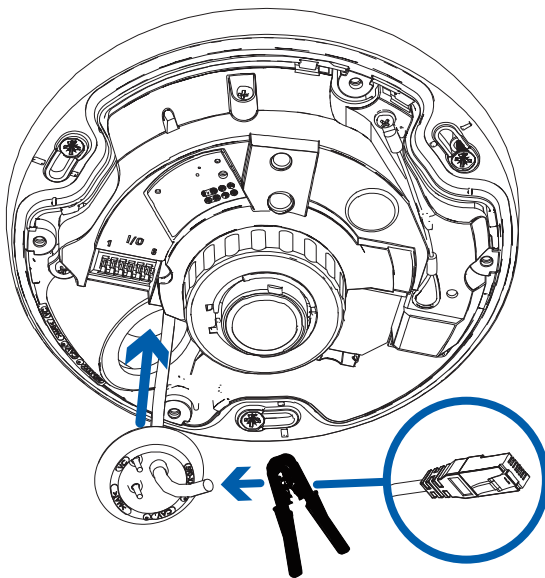
6. Twist the camera base clockwise until the posts come to the right end of the mounting slots.



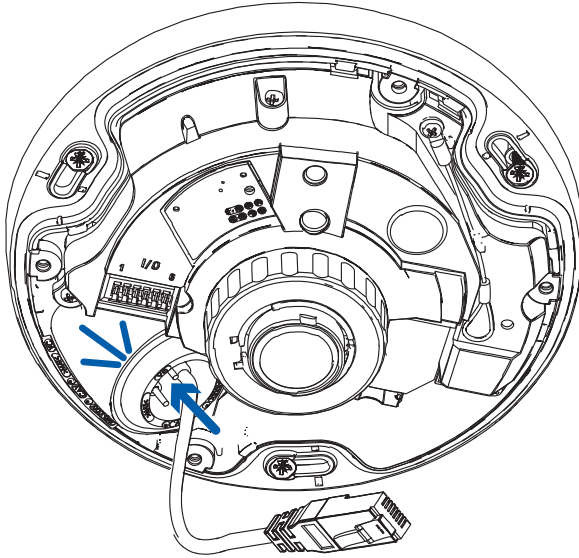
7. Tighten the mounting posts to fix the camera base into place.



8. Pull the required cables through the rubber sealing grommet. For more information, see [Preparing the Cables](#).



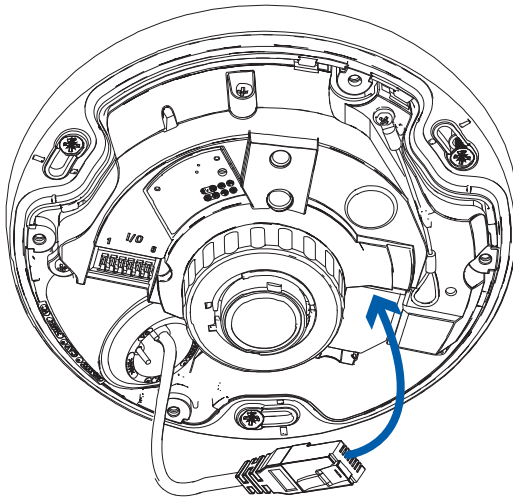
9. Push the rubber sealing grommet with the required cables into the cable entry hole on the camera base. The thread around the grommet should line up with the cable entry hole. The rubber grommet should be pressed firmly into the cable entry hole to create a seal.



Connecting Cables

Refer to the diagrams in the [Overview section](#) for the location of the different connectors and status LEDs on the camera base.

1. Connect a network cable to the camera's Ethernet port (RJ45 connector).



2. If the camera is connected to any external devices, connect the I/O or audio cables to the I/O connector block. For more information, see [Connecting to External Audio and I/O Devices](#).
3. Power the camera using one of the following methods:
 - Power over Ethernet (PoE) Class 3 — If PoE is available, the LEDs will turn on.
 - For cameras with IR LEDs, PoE+, IEEE 802.3at Class 4 power is required for maximum LED power.
 - PoE, IEEE 802.3af Class 3 is sufficient to power camera models without IR LEDs. IR-model cameras will have reduced LED power with IEEE 802.3af Class 3 PoE.

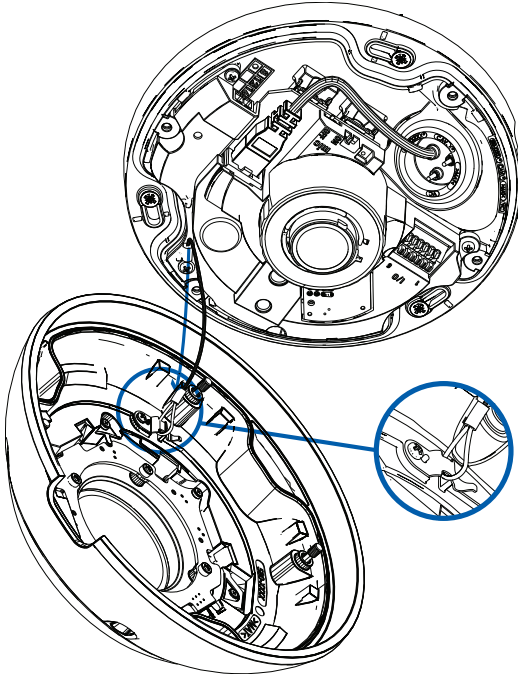
- External Power — Connect an external 12 V DC power source to the power connector block. For more information, see [Connecting External Power](#).

The status LEDs turn on when the camera receives power.

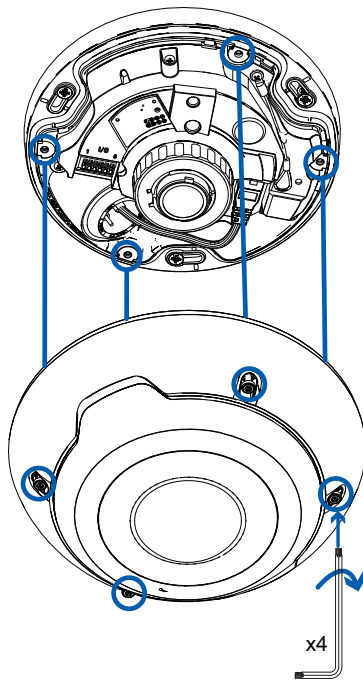
Installing the Fisheye Cover

Be careful not to touch or scratch the dome bubble. Any marks or fingerprints on the dome bubble may cause unwanted reflections from the IR illuminators.

1. Attach the lanyard to the cover.



2. Attach the cover to the base and tighten the screws with the star-shaped screwdriver.



3. Remove the plastic cover on the dome bubble.

In-Ceiling Mount Installation

Required Tools and Materials

The following tools are required to complete the installation but are not included in the package:

- Appropriate tool for cutting the entry hole in the mounting surface
- Small slotted screwdriver with 5/64" or 2 mm blade width — for connecting power when not using Power over Ethernet

Camera Package Contents

Ensure the in-ceiling mounted camera package contains the following:

- Pelco IMF Fisheye In-Ceiling Camera
- In-ceiling mounting adapter
- In-ceiling camera cover
- Star-shaped screwdriver
- Power terminal block
- 3-hole rubber grommet — for multi-cable installations.
- Single-hole rubber grommet — for installations with a single Ethernet/PoE cable.
- RJ45 grommet piercing cap — for use with single-hole rubber grommet only

Installation Steps

Complete the following sections to install the device.

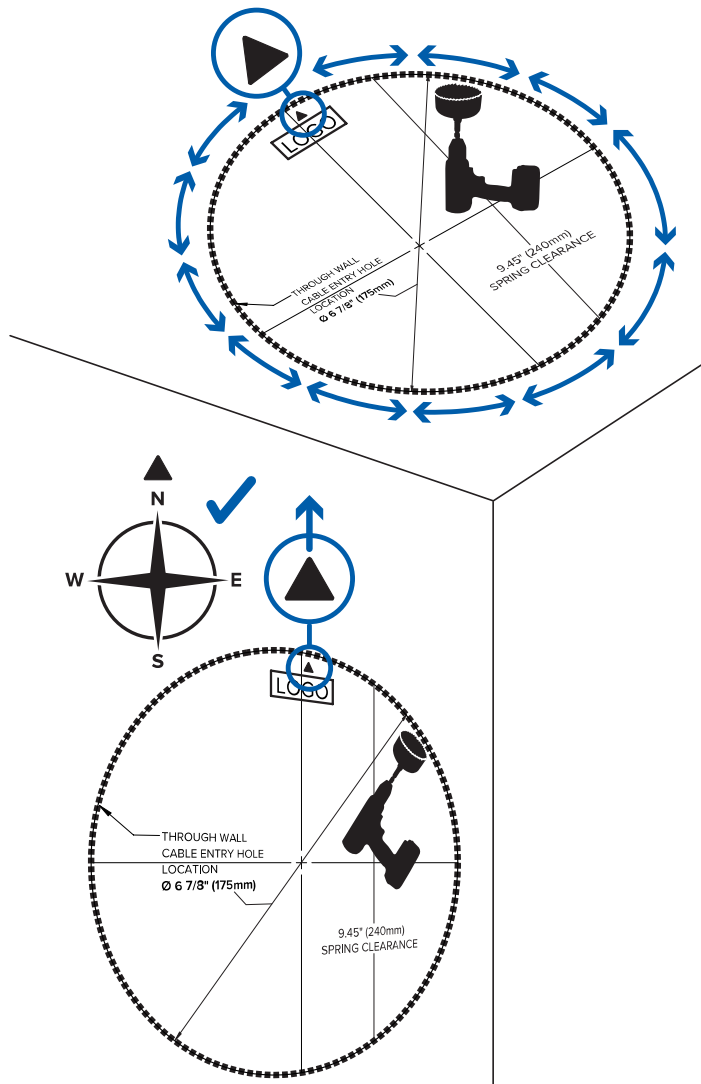
Mounting in the Correct Orientation

The IMF Fisheye camera provides 360° views of large areas. Because of the 360° view, it is not obvious which part of the camera should be facing up when installed on a wall. To help with this, the mounting template and the camera body have an up orientation arrow printed on them to signal which end should be facing up.

When installing the camera on a ceiling, the orientation arrow can go in any direction.

Before removing the mounting template after cutting or drilling the required holes, mark or otherwise make note of the direction the orientation arrow is facing. This will help you to align the camera body in the same orientation when installing.

When installing the camera to a wall, make sure that the orientation arrow is facing up, as shown in the diagram below.



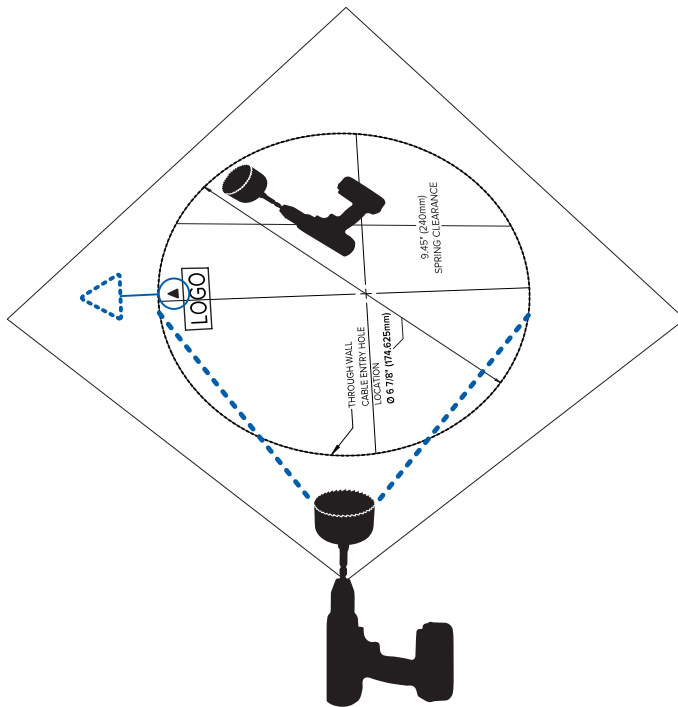
Using the In-Ceiling Mounting Adapter

If the camera needs to be installed into a ceiling, install the in-ceiling mounting adapter into the ceiling first.

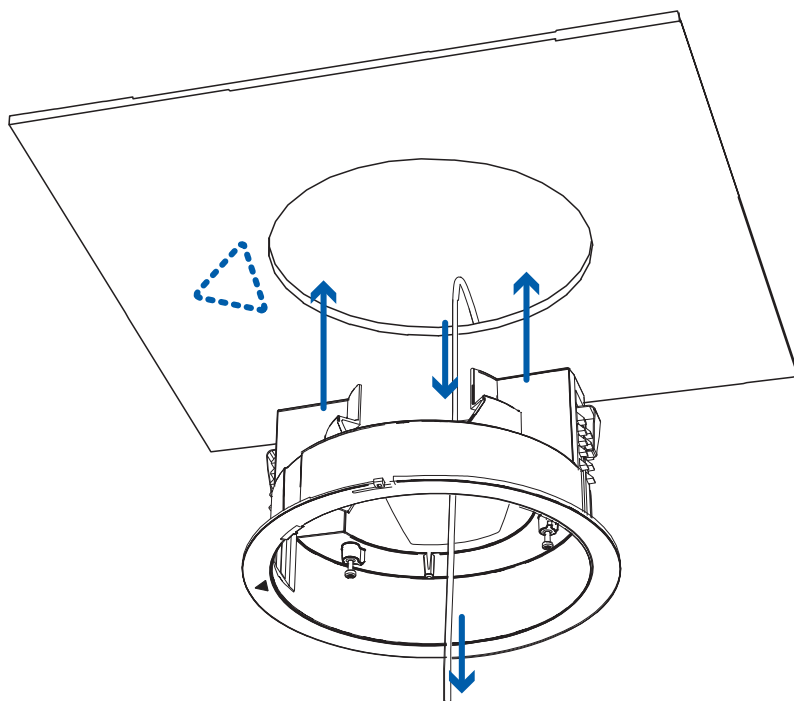
The maximum supported ceiling thickness is 32 mm (1.25").

1. Use the in-ceiling mounting template to cut an entry hole for the camera into the ceiling. Mark or otherwise make note of the position of the orientation arrow so that the other parts can be mounted in the same orientation.

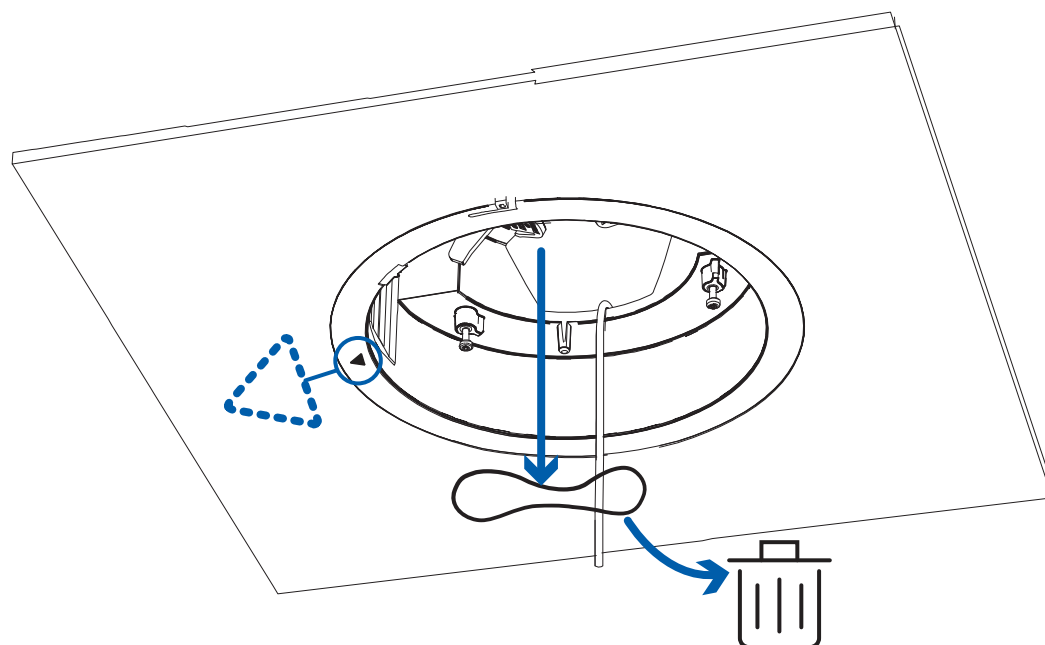
If you are mounting the camera to a wall, make sure the up orientation arrow is at the top, or the video image will be rotated. For more information, see [Mounting in the Correct Orientation](#).



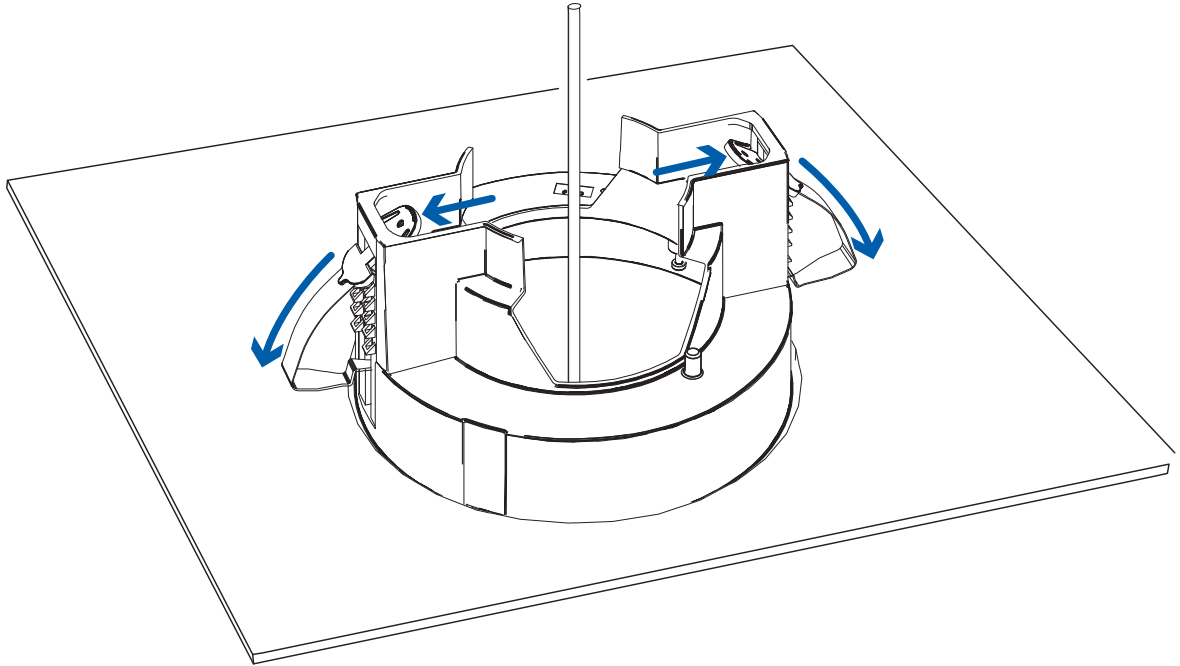
2. Insert the in-ceiling mounting adapter into the entry hole then pull the required cables through the adapter. Ensure the orientation arrow on the adapter is facing the same direction as it did on the mounting template.



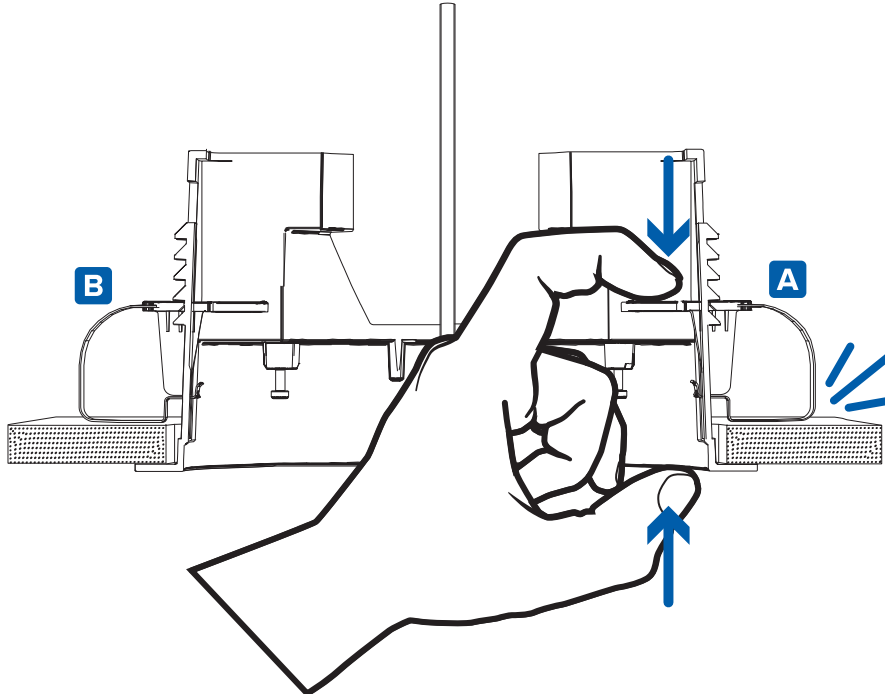
3. Pull off the elastic clamp retainer holding the clamps in place.



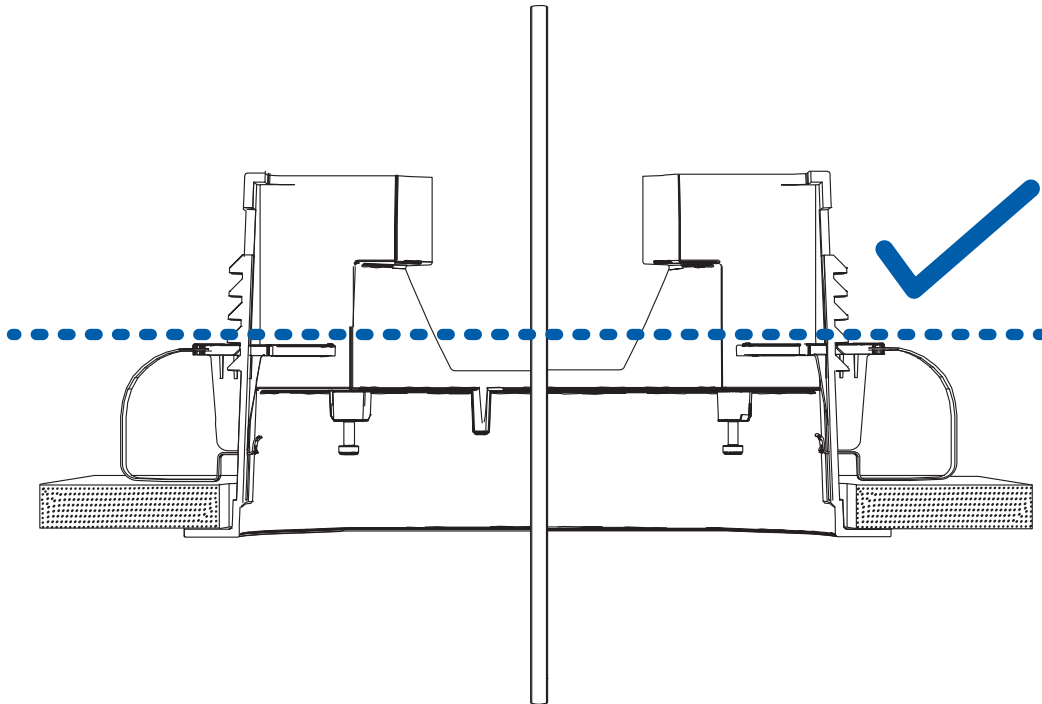
4. Push the orange clamp handles up so that the metal arms extend outside the mounting adapter.



5. With your thumb on the outside edge of the mounting adapter and your forefinger on one of the orange clamp handles, pinch the clamp down until the clamp is secured.



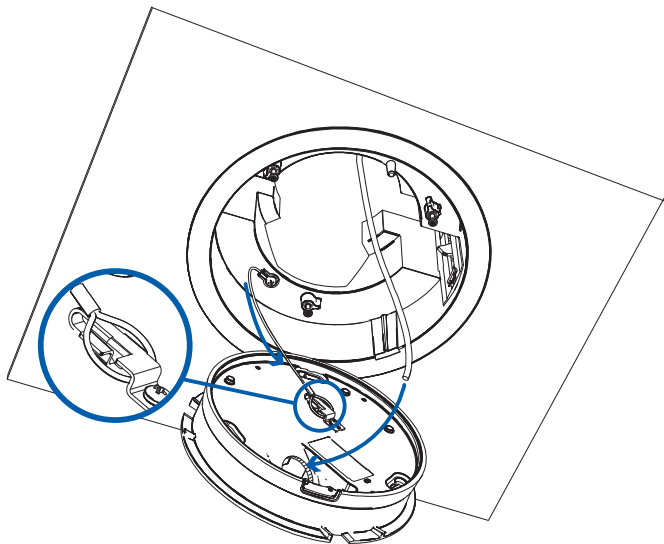
6. Repeat the previous step on the other side. Make sure both clamps are level and horizontal.



Installing the Camera Base into the Mounting Adapter

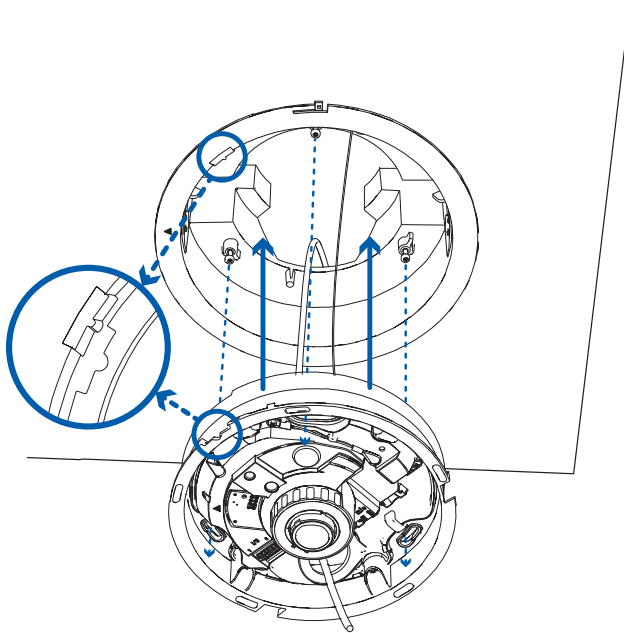
After you install the mounting adapter, mount the camera base to the adapter.

1. Attach the lanyard on the mounting adapter to the anchor on the camera base.

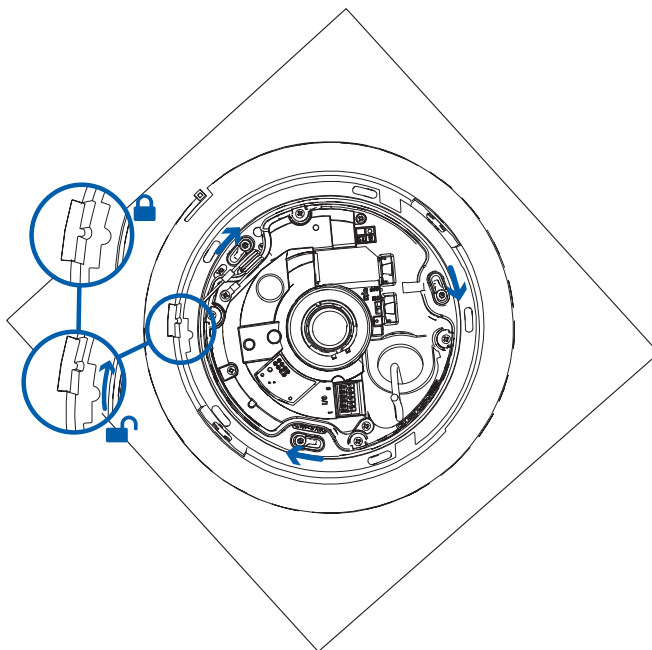


2. Pull the required cables through the cable entry hole on the camera base.
3. Align the up orientation arrow on the camera base with the arrow on the in-ceiling adapter. Align the mounting slots on the camera base to the mounting posts on the in-ceiling adapter and push the

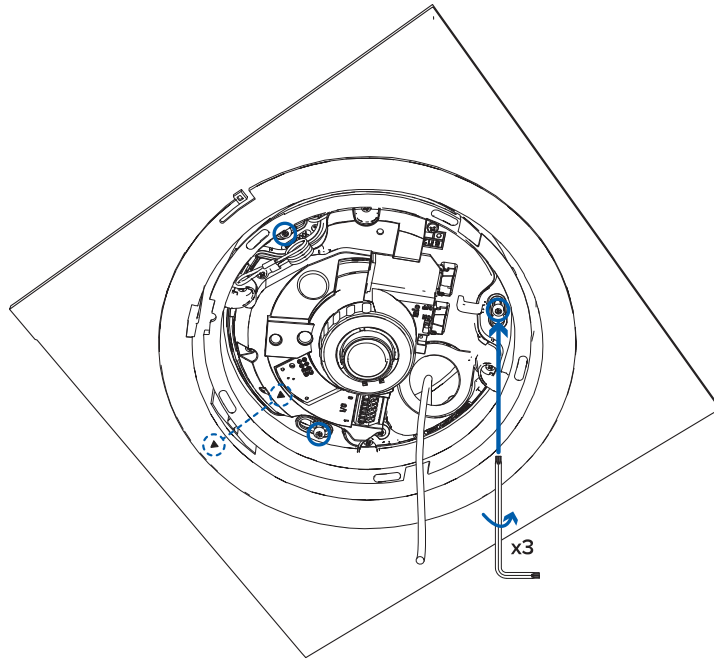
camera base onto the adapter.



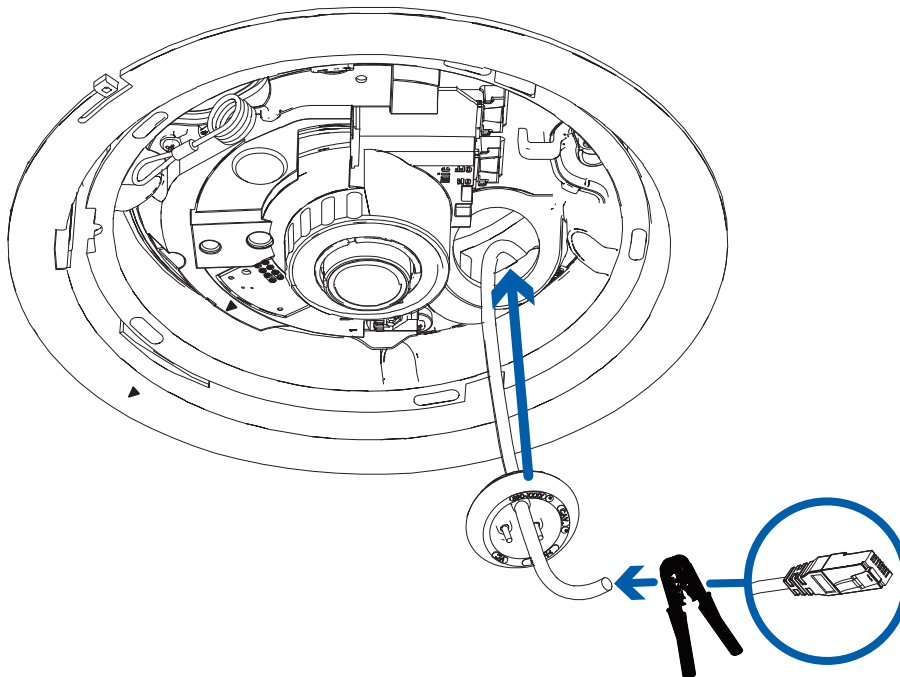
4. Twist the camera base clockwise until the posts come to the right end of the mounting slots and the alignment feature is in the locked position.



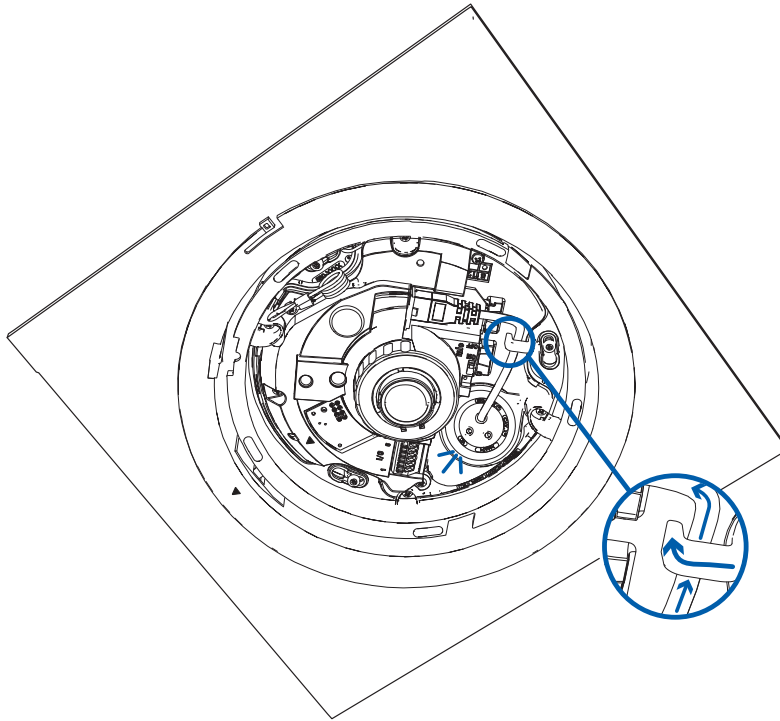
5. Tighten the mounting posts to fix the camera base into place. Ensure that the orientation arrows on the in-ceiling adapter and camera base point in the same direction.



6. Pull the required cables through the rubber sealing grommet. For more information, see [Preparing the Cables](#).



7. Install the grommet into the cable entry hole on the camera base. Make sure the grommet flange is securely seated on the inside and outside of the cable entry hole.

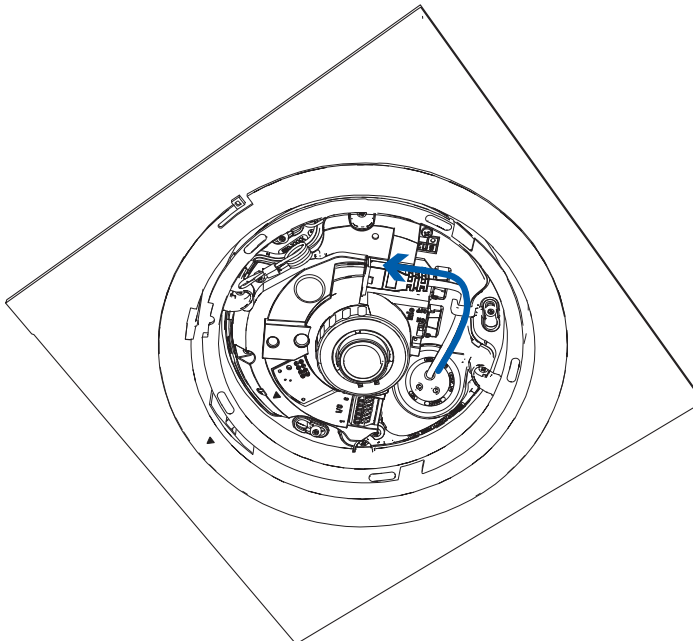


8. Use the cable clip to hold the Ethernet cable in the correct position.

Connecting Cables

Refer to the diagrams in the [Overview section](#) for the location of the different connectors and status LEDs on the camera base.

1. Connect a network cable to the camera's Ethernet port (RJ45 connector).



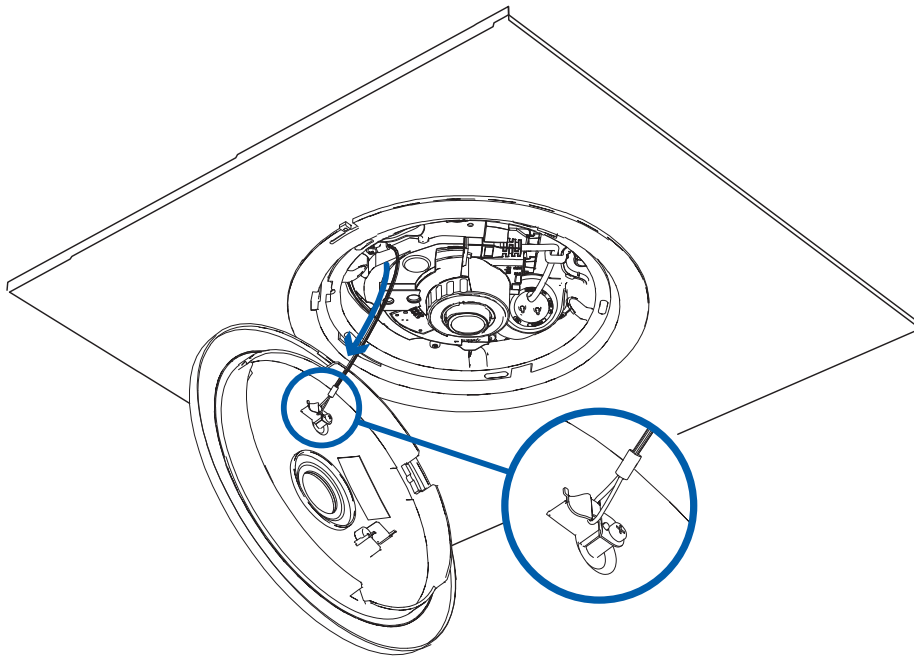
2. If the camera is connected to any external devices, connect the I/O or audio cables to the I/O connector block. For more information, see [Connecting to External Audio and I/O Devices](#).
3. Power the camera using one of the following methods:
 - Power over Ethernet (PoE) IEEE 802.3af Class 3 — If PoE is available, the LEDs will turn on.
 - External Power — Connect an external 12 V DC power source to the power connector block. For more information, see [Connecting External Power](#).

The status LEDs turn on when the camera receives power.

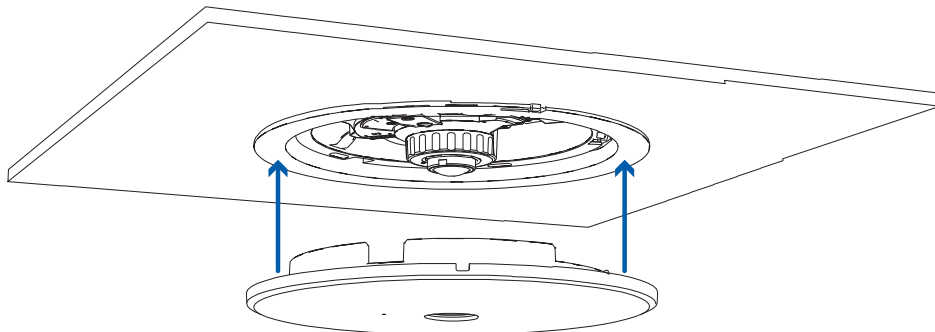
Installing the In-Ceiling Cover

Be careful not to touch or scratch the camera lens. Any marks or fingerprints on the lens may cause unwanted blurriness.

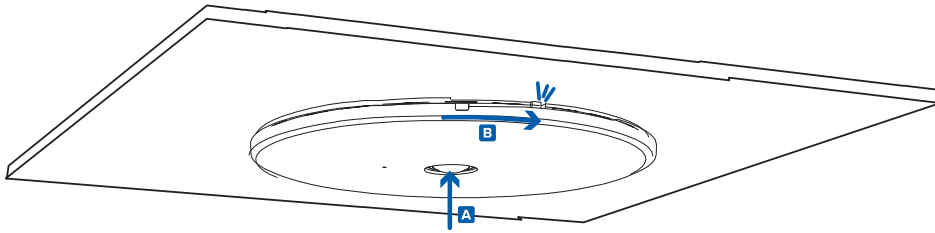
1. Attach the lanyard to the in-ceiling cover.



2. Push the in-ceiling cover onto the camera base.



3. Rotate the cover clockwise while pushing up so that it clicks into place.



Pendant Mount Installation

Required Tools and Materials

The following tools are required to complete the installation but are not included in the package:

- Appropriate tool for cutting the cable access hole, if required
- Small slotted screwdriver with 5/64" or 2 mm blade width — for connecting power when not using Power over Ethernet

Camera Package Contents

Ensure the surface mounted camera package contains the following:

- Pelco IMF Fisheye Camera
- Camera Base Mounting Template sticker
- Optional wall plate adapter — for electrical box installations.
- Star-shaped screwdriver
- Power terminal block
- Optional conduit shroud — for side-entry conduit cabling.
- 3x screws and anchors — for securing the camera to the mounting surface.
- 3-hole rubber grommet — for multi-cable installations.
- Single-hole rubber grommet — for installations with a single Ethernet/PoE cable.
- RJ45 grommet piercing cap — for use with single-hole rubber grommet only

If you are using the optional NPT adapter (IMF-PM), ensure the package contains the following:

- NPT adapter for the IMF Fisheye Camera

Installation Steps

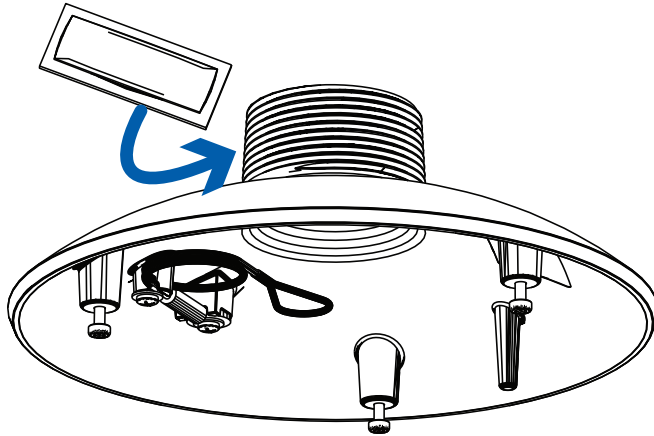
Complete the following sections to install the device.

Mounting the Camera to the WMVE Wall Mount

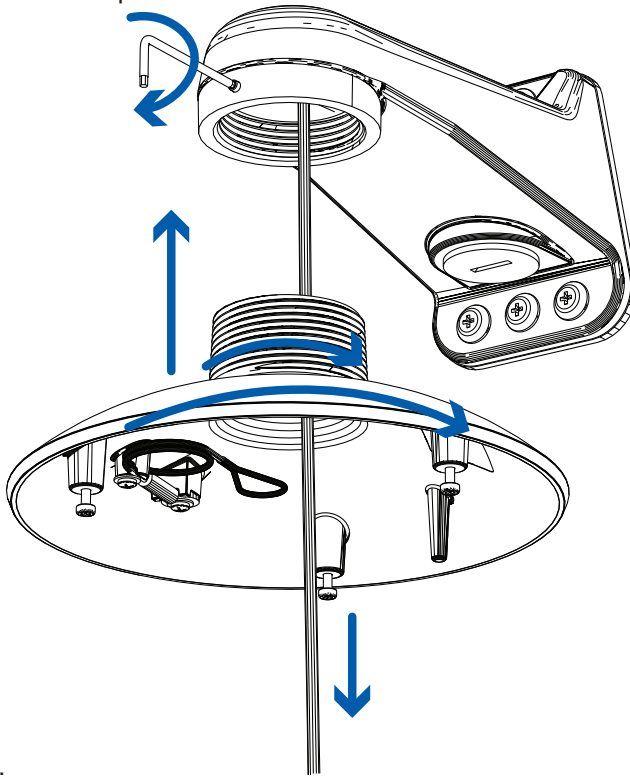
If the camera will be using the WMVE wall mount, you will need to install the NPT adapter as well.

For information about installing the WMVE wall mount, please refer to the Pelco WMVE Series Installation Manual.

1. Route the wiring through the pendant mount (IMF-PM).
2. To install the NPT adapter, apply anti-seize lubricant (supplied with the WMVE mount) to the threads of the pendant mount.



3. Use a 5/64-inch hex Allen wrench (not supplied) to loosen the setscrew, located on the front of the wall mount, enough to prevent obstruction to the threads of the pendant mount. Screw the pendant mount adapter onto the mount arm



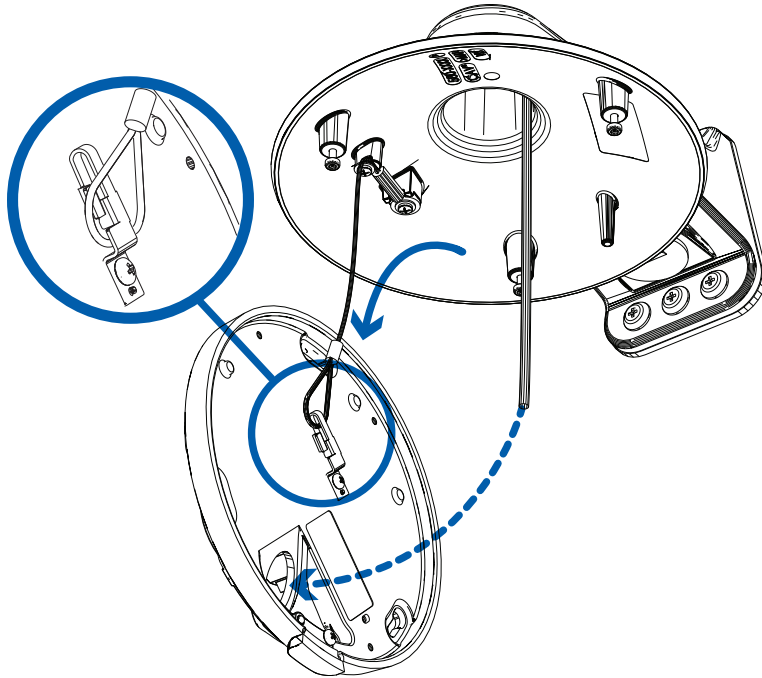
4. Tighten the setscrew located on the front of the wall mount to 16-18 inch-pounds (1.8-20. Nm).

Installing the Camera into the NPT Adapter

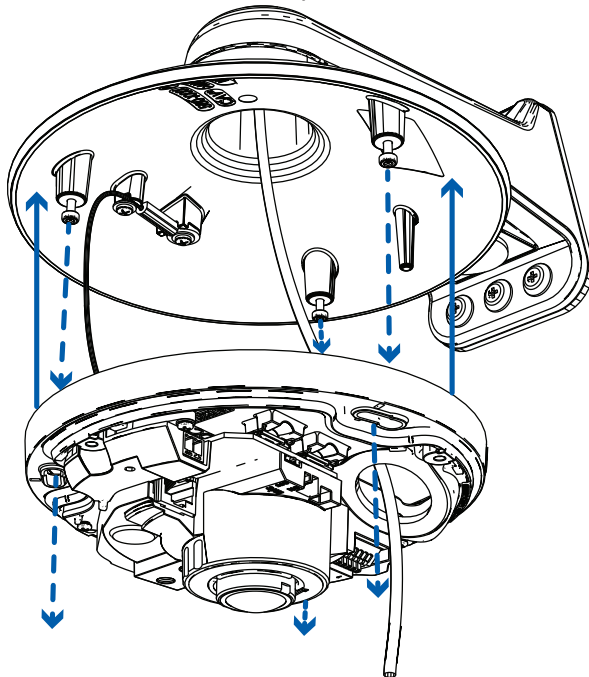
Before installing the camera, you must first prepare either the WMVE wall mount or a NPT pipe mount.

The following steps show installation of the camera into the IMF-PM NPT adapter installed onto the WMVE wall mount. The steps are the same for installing the camera into the IMF-PM NPT adapter installed onto a pipe.

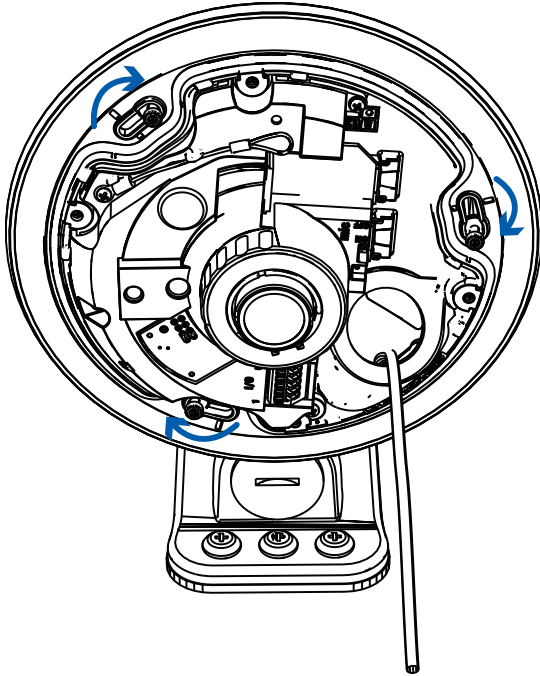
1. Attach the lanyard to the camera base. Pull the required cables through the cable entry hole.



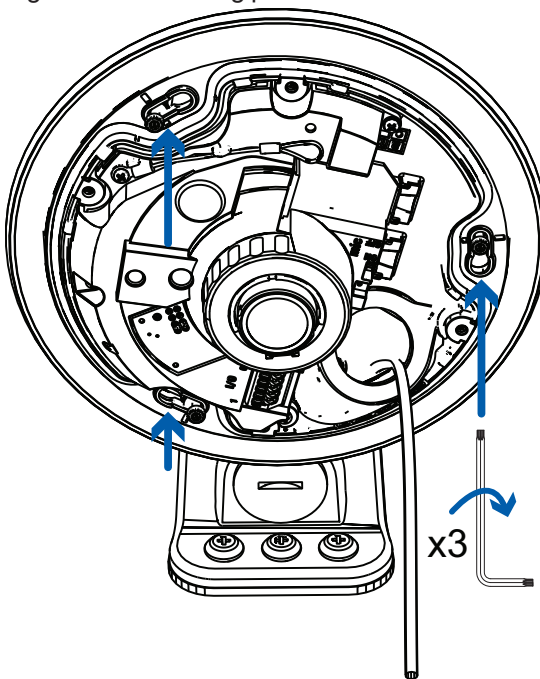
2. Align the mounting slots on the camera base to the mounting posts on the NPT adapter and push the camera base onto the adapter.



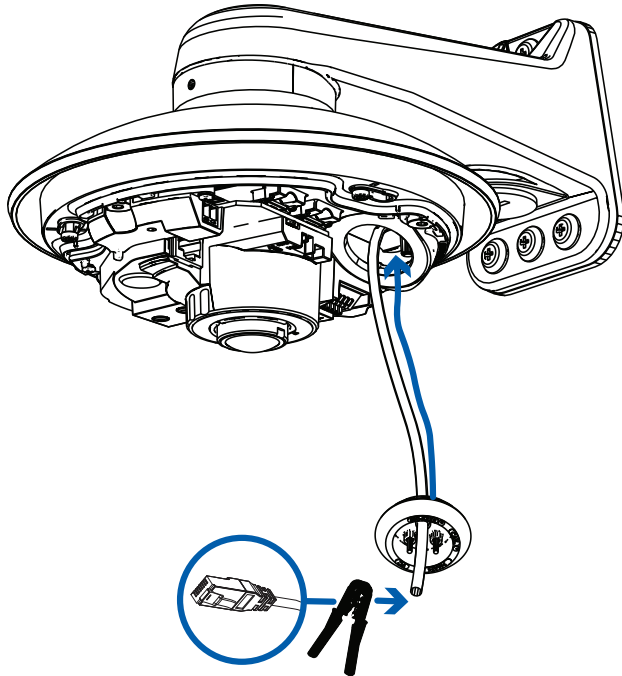
3. Twist the camera base clockwise until the posts come to the right end of the mounting slots.



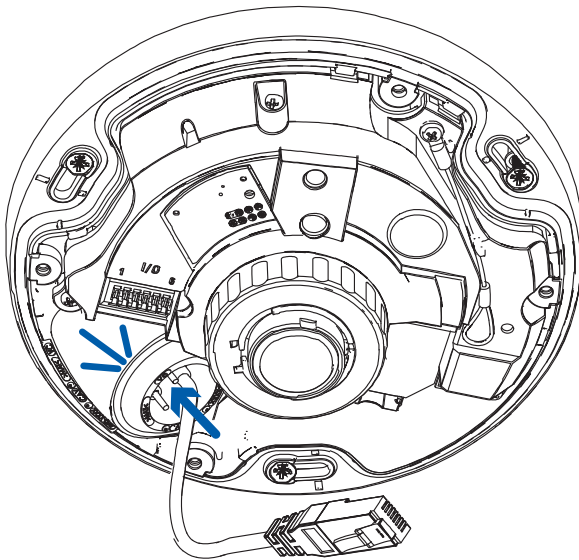
4. Tighten the mounting posts to fix the camera base into place.



5. Pull the required cables through the rubber sealing grommet. For more information, see [Preparing the Cables](#).



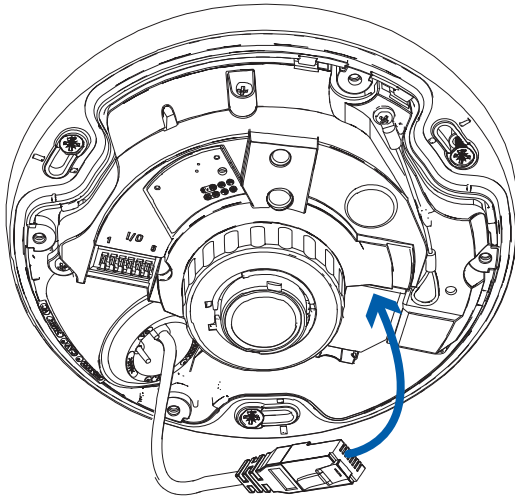
6. Push the rubber sealing grommet with the required cables into the cable entry hole on the camera base. The thread around the grommet should line up with the cable entry hole. The rubber grommet should be pressed firmly into the cable entry hole to create a seal.



Connecting Cables

Refer to the diagrams in the [Overview section](#) for the location of the different connectors and status LEDs on the camera base.

1. Connect a network cable to the camera's Ethernet port (RJ45 connector).



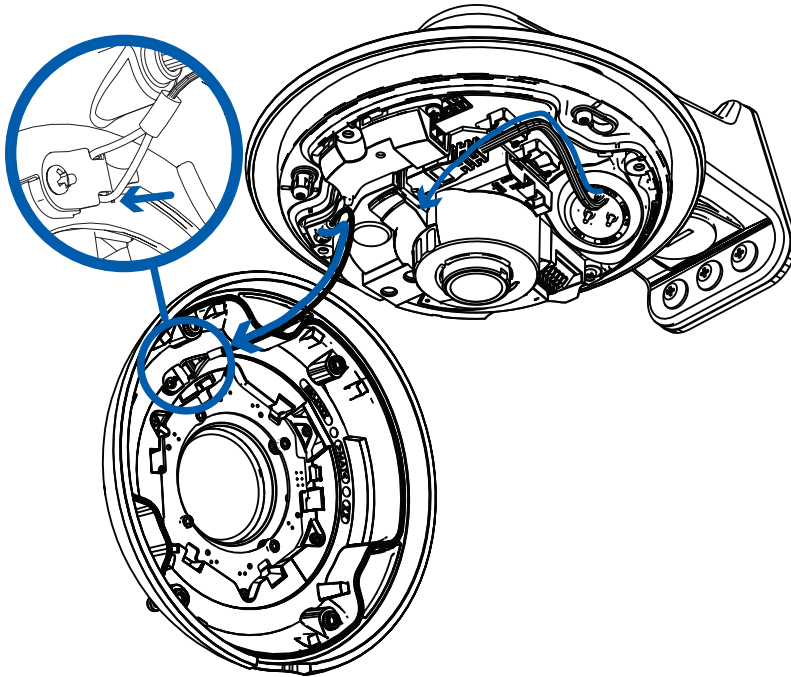
2. If the camera is connected to any external devices, connect the I/O or audio cables to the I/O connector block. For more information, see [Connecting to External Audio and I/O Devices](#).
3. Power the camera using one of the following methods:
 - Power over Ethernet (PoE) Class 3 — If PoE is available, the LEDs will turn on.
 - For cameras with IR LEDs, PoE+, IEEE 802.3at Class 4 power is required for maximum LED power.
 - PoE, IEEE 802.3af Class 3 is sufficient to power camera models without IR LEDs. IR-model cameras will have reduced LED power with IEEE 802.3af Class 3 PoE.
 - External Power — Connect an external 12 V DC power source to the power connector block. For more information, see [Connecting External Power](#).

The status LEDs turn on when the camera receives power.

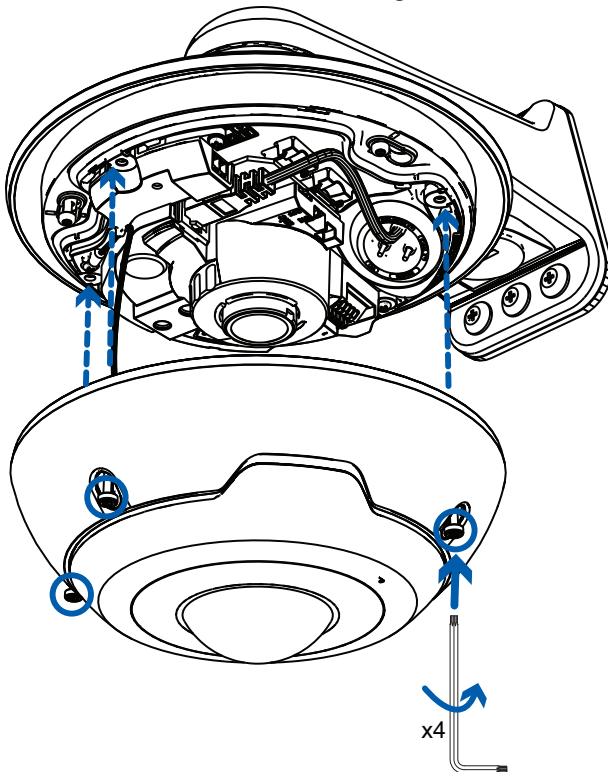
Installing the Fisheye Cover

Be careful not to touch or scratch the dome bubble. Any marks or fingerprints on the dome bubble may cause unwanted reflections from the IR illuminators.

1. Attach the lanyard to the cover.



2. Attach the cover to the base and tighten the screws with the star-shaped screwdriver.



3. Remove the plastic cover on the dome bubble.

Connecting to the Camera

Initializing a Camera Username and Password

You must create a user with administrator privileges before the camera is operational.

If the camera is in the factory default state, you will be redirected to the New User page to create an administrator user:

1. Enter a new User Name or keep the default administrator name.
2. Enter a new Password for the user. It is recommended to use a secure and complex password.
3. Confirm the new password.
4. For the first user, Administrator must be selected in the Security Group drop-down menu.
5. Click Apply. After creating the user, you will be asked to login.

If you are connecting your Pelco camera to a 3rd party VMS, you will need to set up the first user through the camera's Web Interface or Camera Configuration Tool before you connect to the 3rd party VMS.

Assigning an IP Address

The device automatically obtains an IP address when it is connected to a network.

If the device cannot obtain an IP address from a DHCP server, it will use Zero Configuration Networking (Zeroconf) to choose an IP address. When set using Zeroconf, the IP address is in the 169.254.0.0/16 subnet.

The IP address settings can be changed using one of the following methods:

- Device's web browser interface: <http://<camera IP address>/>.
- Network Video Management software application.
- ARP/Ping method. For more information, see [Setting the IP Address Using the ARP/Ping Method](#).

Accessing the Live Video Stream

Live video stream can be viewed using one of the following methods:

- Web browser interface: <http://<camera IP address>/>.
- Network Video Management software application.

(Optional) Configuring Onboard Storage

To use the camera's onboard storage feature, you must insert 1 microSD card into a microSD card slot. While there are two microSD slots, currently the camera only supports a single microSD card in either slot for onboard storage. For the location of the microSD card slots, see [Overview](#).

It is recommended that the microSD card have a capacity of 64 GB or more. Video Speed Class microSD card required, with Class V10 or better recommended. If the microSD card does not meet the recommended capacity or write speed, the performance of the onboard storage may suffer and result in the loss of frames or footage.

Ensure the microSD card is designed for continuous video recording or the microSD card life expectancy may be adversely affected.

1. Insert the microSD card into the camera.



Do not force the microSD card into the camera or you may damage the card and the camera. The card can only be inserted in one direction.

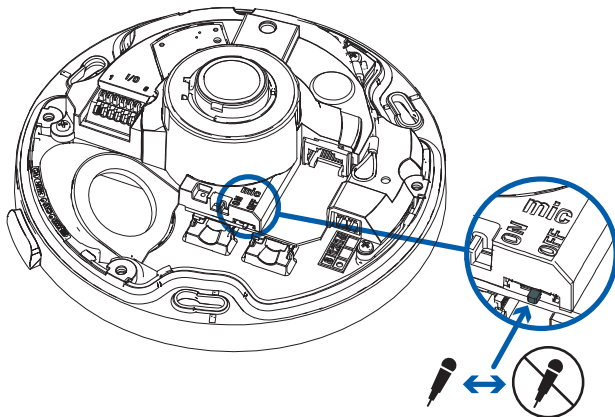
2. Access the camera's web interface to enable the onboard storage feature. For more information, see the *Pelco IMF Fisheye Operations Manual*.

(Optional) Enabling the Microphone

This camera features an internal microphone, and include a switch to physically enable or disable the microphone. The microphone switch is set to OFF by default.

It is recommended that you enable the microphone before installing the camera in its final location.

1. Locate the microphone switch on the camera assembly.



2. Slide the switch from the default OFF position to ON to enable the microphone.

Configuring the Microphone

The IMF Fisheye Camera features two microphones: a built-in microphone and an external audio input.

After you've connected the required microphones, you can configure the microphones or line level audio input from the camera web interface.

- In the camera web interface, the microphones are configured from the Microphone page. You can adjust the microphone volume by changing the gain.
 - **Internal Microphone Gain** — configures the gain for the microphone that is built into the camera.
 - **External Source Gain** — configures the gain for any line level audio input that is connected to the audio input connector on the I/O terminal block.

For more information, see the *IMF Fisheye Operations Manual*.

Configuring the Camera

After the camera is installed, configure it using the instructions in the current version of the *IMF Fisheye Camera Operations Manual*.

For More Information

Additional information about setting up and using the device is available in the following guide:

- *Pelco IMF Fisheye Operations Manual* available on the Pelco website: www.pelco.com.

Cable Connections

Connecting External Power

If PoE is not available, the camera needs to be powered through the removable power connector block. Refer to the [Overview section](#) for the location of the power connector block.

To connect power to the power connector block, complete the following steps:

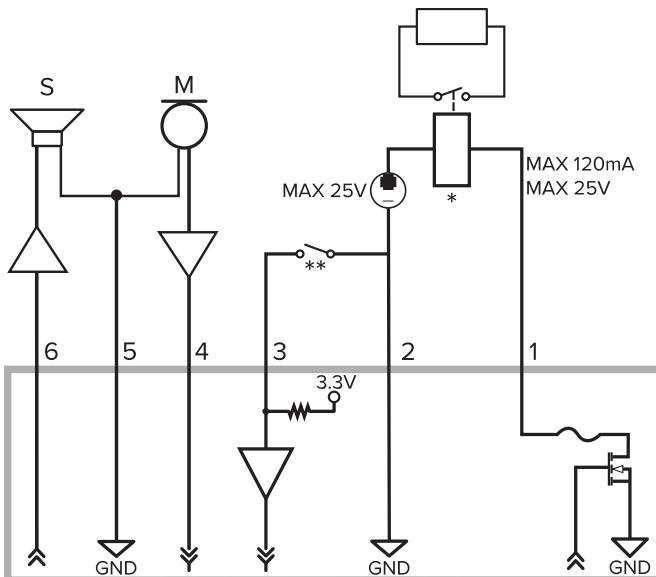
1. Remove the power connector block from the camera.
2. Remove the insulation from $\frac{1}{4}$ " (6 mm) of the power wires. Do not nick or damage the wires.
3. Insert the two power wires into the two terminals on the power connector block. The connection can be made with either polarity.
Use a small slotted ($\frac{5}{64}$ " or 2 mm blade width) screwdriver to loosen and tighten the terminals.
4. Attach the power connector block back into the camera.



This product is intended to be supplied by a UL Listed Power Unit marked "Class 2" or "LPS" or "Limited Power Source" with output rated 12 VDC, 11 W min. (26 W min. with -IR model) or PoE, 11 W min. (26 W min. with -IR model).

Connecting to External Audio and I/O Devices

External audio and I/O devices are connected to the camera through the audio and I/O connector block. The pinout for the connector block is shown in the following diagram:



1. Digital Output — When active, Output is internally connected with the Ground pin. Circuit is open when inactive. Maximum load is 25 VDC, 120 mA.
2. Ground
3. Digital Input — To activate, connect the Input to the Ground pin. To deactivate, leave disconnected or apply between 3-15 V.
4. Audio Input (line level)
5. Audio Ground
6. Audio Output (line level)
An external power amplifier should be used when connecting speakers and microphones, as shown in the diagram.
 - * — Relay
 - ** — Switch
 - M — Microphone
 - S — Speaker

Connection Status LED Indicator

Once connected to the network, the green Connection Status LED indicator will display the progress in connecting to the Network Video Management software.

The following table describes what the LED indicator shows:

Connection State	Connection Status LED Indicator	Description
Obtaining IP Address	One short flash every second	Attempting to obtain an IP address.
Discoverable	Two short flashes every second	Obtained an IP address but not connected to the Network Video Management software.
Upgrading Firmware	Two short flashes and one long flash every second	Updating the firmware.
Connected	On	Connected to the Network Video Management software. The default connected setting can be changed to Off using the camera's web user interface. For more information see the <i>Pelco IMF Fisheye Operations Manual</i> .

Troubleshooting Network Connections and LED Behavior

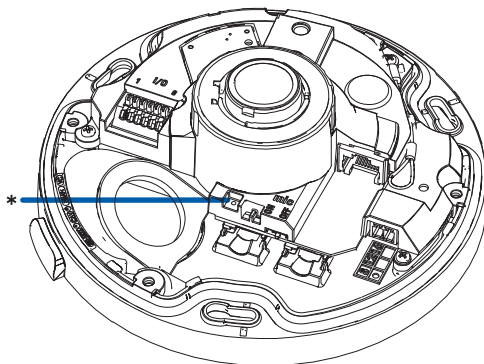
For any of the below LED behaviors, ensure that the camera is getting power and is using a good network cable before trying another solution.

LED Behavior	Suggested Solution
Green LED is off and amber is on	Perform a factory reset of the camera using the physical firmware revert button. Resetting through the camera's web interface will not produce the desired result.
Both LEDs are off and the camera is not connected or streaming video	Check the General setup page in the camera's web interface to ensure the LEDs are not disabled. If the LEDs are not disabled, perform a factory reset of the camera using the physical firmware revert button. Resetting through the camera's web interface will not produce the desired result.
Both LEDs are blinking several times at the same time, then pause and repeat the blinking	Perform a factory reset of the camera using the physical firmware revert button. Resetting through the camera's web interface will not produce the desired result.
A different LED blinking pattern than those described above	Perform a factory reset of the camera using the physical firmware revert button. Resetting through the camera's web interface will not produce the desired result.

Resetting to Factory Default Settings

If the device no longer functions as expected, you can choose to reset the device to its factory default settings.

Use the firmware revert button to reset the device. The firmware revert button is shown in the following diagram:



1. Ensure the camera is powered on.
2. Remove the cover.
3. Press the reset button.
4. The LEDs beside the reset button will turn off.

Wait while the camera reverts to the factory default settings.

Setting the IP Address Using the ARP/Ping Method

Complete the following steps to configure the camera to use a specific IP address:

The ARP/Ping Method will not work if the **Disable setting static IP address through ARP/Ping method** checkbox is selected in the camera's web browser interface. For more information, see the *Pelco IMF Fisheye Operations Manual*.

1. Locate and make note of the MAC Address (MAC) listed on the Serial Number Tag for reference.
2. Open a Command Prompt window and enter the following commands:
 - a. `arp -s <New Camera IP Address> <Camera MAC Address>`
For example: `arp -s 192.168.1.10 00-18-85-12-45-78`
 - b. `ping -l 123 -t <New Camera IP Address>`
For example: `ping -l 123 -t 192.168.1.10`
3. Reboot the camera.
4. Close the Command Prompt window when you see the following message:
Reply from <New Camera IP Address>: ...

Cleaning

Dome Bubble

If the video image becomes blurry or smudged in areas, it may be because the dome bubble requires cleaning.

Cleaning the dome bubble does not apply to in-ceiling models as they do not have a dome bubble. Use caution if needing to clean the lens. Obtain a lens cleaning swab and solution and follow the cleaning instructions provided.

To clean the dome bubble:

- Use hand soap or a non-abrasive detergent to wash off dirt or fingerprints.
- Use a microfiber cloth or non-abrasive fabric to dry the dome bubble.

Failure to use the recommended cleaning materials may result in a damaged or scratched dome bubble. A damaged dome bubble may negatively impact image quality and cause unwanted IR light reflecting into the lens.

Body

- Use a dry or lightly dampened cloth to clean the camera body.
- Do not use strong or abrasive detergents.



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