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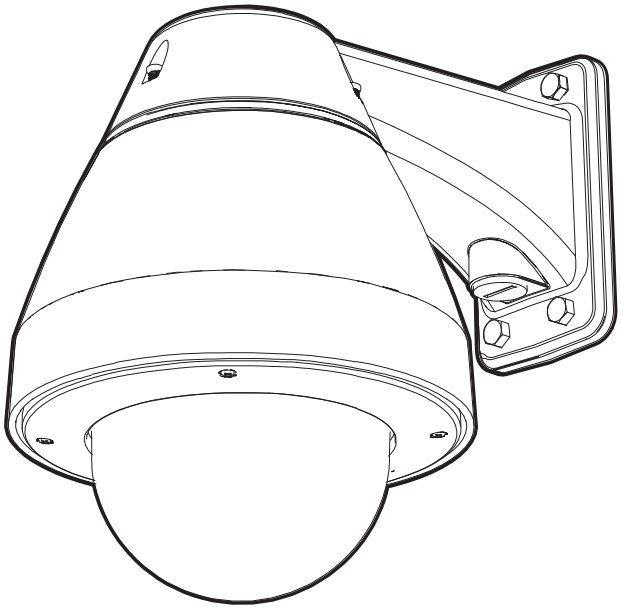

Installation Guide

Avigilon H5A-PTZ Camera Models:

2.0C-H5A-PTZ-DP36	2.0C-H5A-PTZ-DC36
4.0C-H5A-PTZ-DP36	4.0C-H5A-PTZ-DC36
8.0C-H5A-PTZ-DP36	8.0C-H5A-PTZ-DC36

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.

This Warning 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.

This Caution 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.

- 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 24VAC±10%, 75 VA min.; 24VDC±10%, 51 W min. or a 60W Power over Ethernet (PoE++) mid-span injector.
- Do not connect directly to mains power for any reason.

CAUTION — Failure to observe the following instructions may result in injury to persons or damage to the device.

- 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.
- 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), 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 Avigilon.

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.

The H5A-PTZ-DP36 camera model complies with EN 60529 IP66 and IP67 rating.

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 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 Avigilon Corporation or parties authorized by Avigilon Corporation could void the user's authority to operate this equipment.

To meet the requirements of the EN 50121-4 Railway Applications Standard, use an external power supply or POE injector that is also compliant with EN 50121-4. Please contact Avigilon for assistance regarding supporting equipment.

UK Product Security and Telecommunications Infrastructure (PSTI) Act: Avigilon cameras comply with the PSTI requirements. For more information, see the published **PSTI Statement of Compliance**.

For Korea

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모든 지역에서 사용할 수 있습니다.

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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avigilon.com

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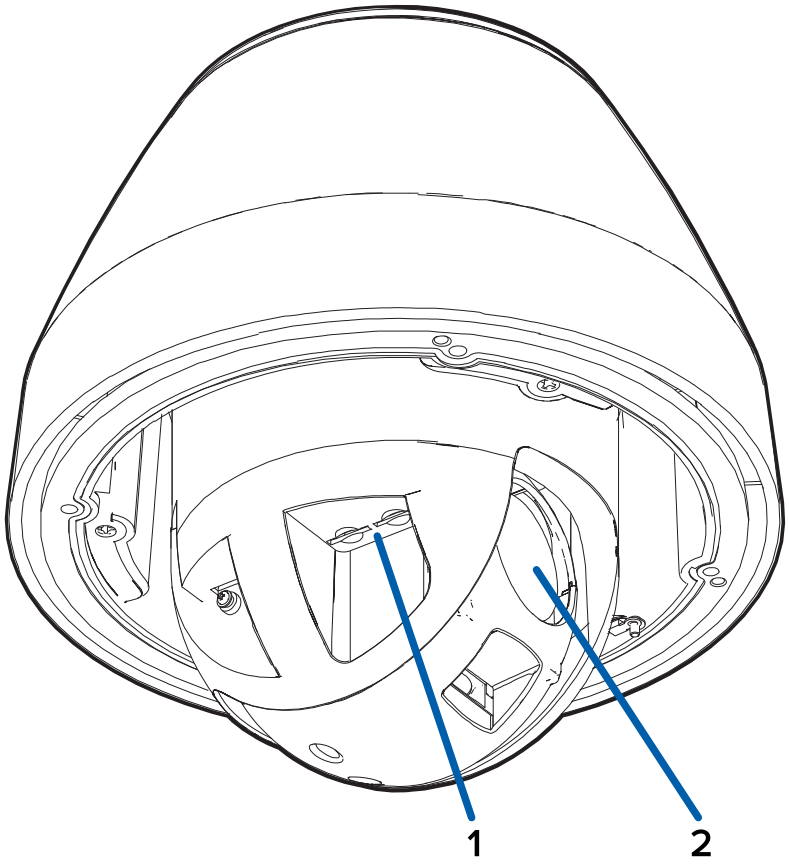
Overview

Bottom View - Pendant



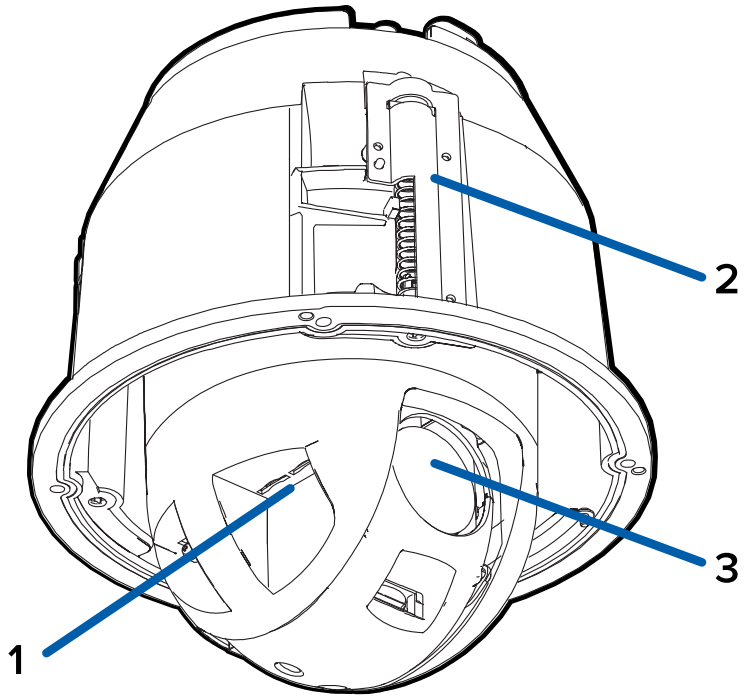
1. **microSD card slots (x2)**

   Accepts up to two microSD cards for onboard storage. Install microSD cards so the metal contacts are facing inward. For more information, see *(Optional) Configuring Onboard Storage* on page 32.

2. **Lens**

   The camera lens is housed behind a protective window.

Bottom View - In-Ceiling



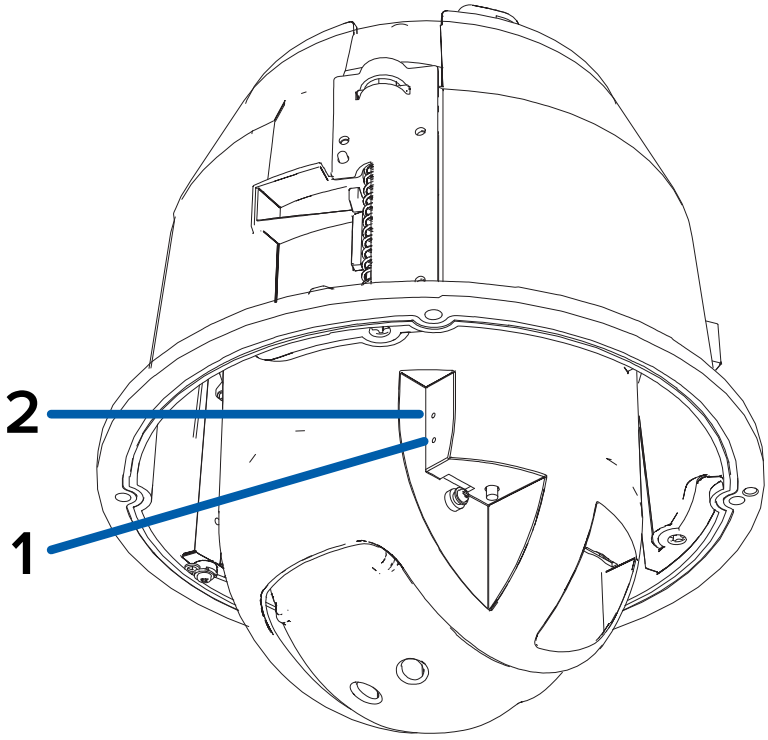
1. **microSD card slots (x2)**

   Accepts up to two microSD cards for onboard storage. Install microSD cards so the metal contacts are facing inward. For more information, see *(Optional) Configuring Onboard Storage* on page 32.
2. **Clamps**

   Spring loaded locking mechanisms that secure the camera to the mounting surface.
3. **Lens**

   The camera lens is housed behind a protective window.

Bottom View - LEDs



1. **Connection status LED indicator**

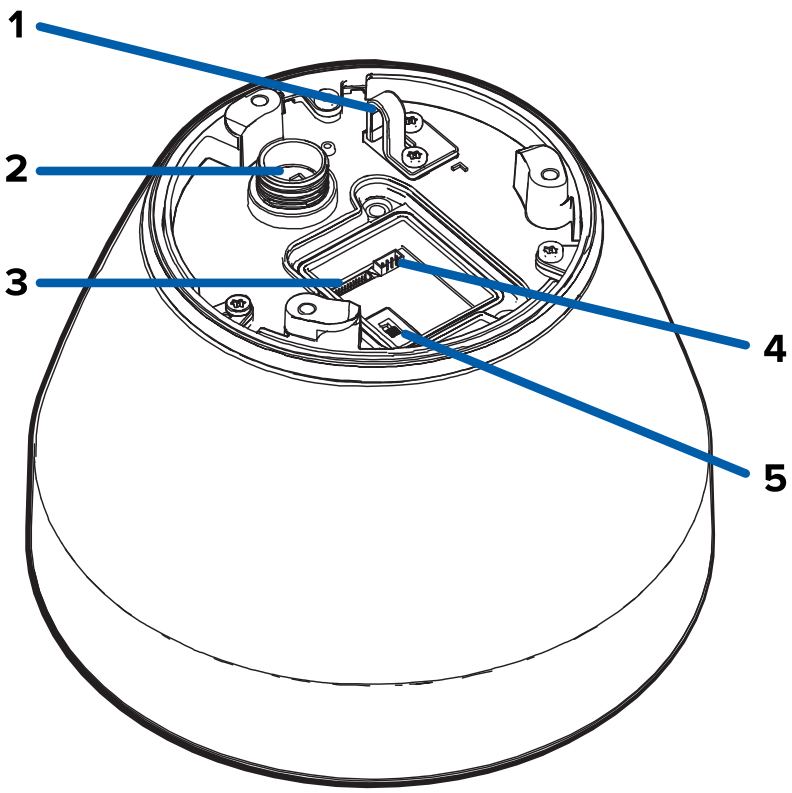
   Green LED provides information about device operation. For more information, see *Connection Status LED Indicator* on page 36.

2. **Link LED indicator**

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

Note: The camera LEDs will flash and provide status information when the camera is establishing a network connection. Once the camera starts streaming video the LEDs will automatically turn off.

Top View



1. **Lanyard anchor** (Pendant camera only)

   The safety lanyard attaches to the anchor to prevent the camera from falling during installation.
2. **Ethernet port**

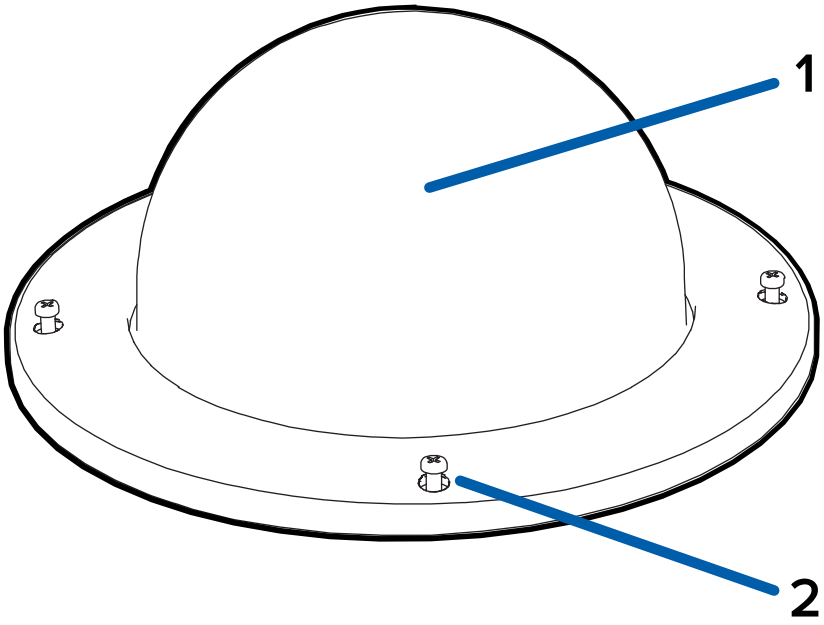
   Accepts an Ethernet connection to a network. Server communication and image data transmission occurs over this connection. Also receives power when it is connected to a network that provides Power over Ethernet.
3. **I/O connector block**

   Provides connections to external input/output devices.
4. **Power connector block**

   Accepts a terminal block with either an AC or DC power connection. DC input can be either polarity. Only required when Power over Ethernet is not available.
5. **PoE power mode switch**

   Switch to select from the two PoE power mode options: legacy 60W PoE++ (A) or IEEE802.3bt PoE++ (B). For more information, see *PoE Power Mode Switch* on page 28.

Dome Cover

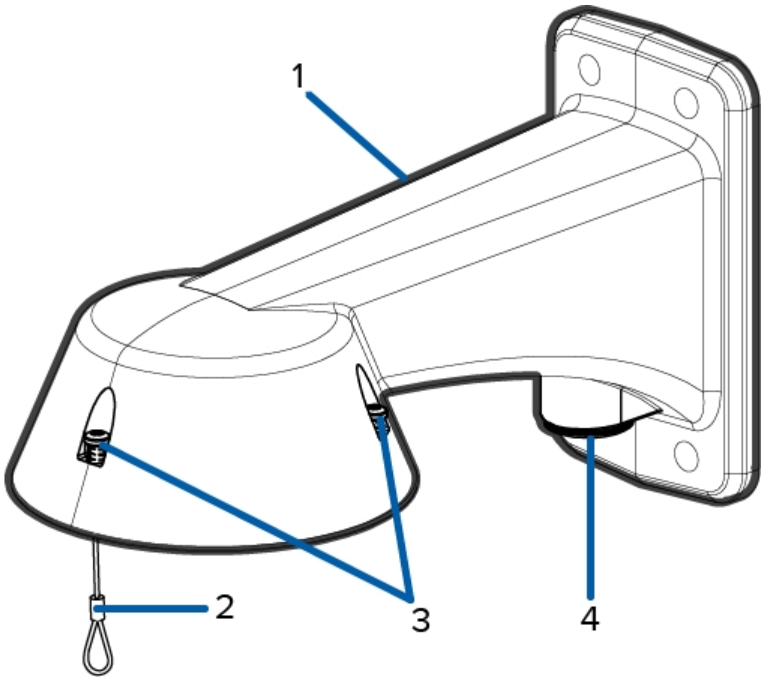


1. **Dome cover**

   Vandal resistant dome cover.
2. **Tamper resistant screws**

   Star-shaped captive screws to fix the dome cover to the base.

Pendant Wall Mount View



1. **Pendant wall mount**

   Camera mount for walls and other mounting surfaces.
2. **Lanyard**

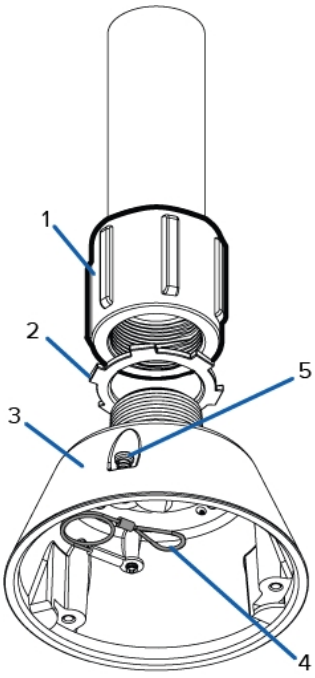
   Connects to the lanyard anchor on the camera base.
3. **Tamper resistant screws**

   Star captive screws to fix the dome camera to the mounting adapter.
4. **NPT pipe entry hole**

   A 3/4” NPT threaded hole for NPT pipe conduits.

Note: The pendant wall mount is sold separately.

NPT Mount View



1. **1-1/2” NPT-female to NPT-female adapter**

   An adapter for attaching the pendant NPT mount to an NPT pipe.

   > **Note:** The 1-1/2" NPT-female to NPT-female adapter is not supplied or sold by Avigilon and should be sourced separately.

2. **Lock nut**

   Locking nut for securing the pendant NPT mount on the NPT-female to NPT-female adapter.

3. **Pendant NPT mount**

   Dome camera mount for NPT pipes.

   > **Note:** The pendant NPT mount is sold separately.

4. **Lanyard**

   Connects to the lanyard anchor on the camera base.

5. **Tamper resistant screws**

   Star captive screws to fix the dome camera to the mounting adapter.

In-Ceiling Mount Installation

Camera Package Contents

Ensure the camera package contains the following:

- Avigilon H5A-PTZ In-Ceiling Camera
- T20 star key
- 2 x RJ-45 crimp-on plug
- Mounting template sticker
- Audio, external power, and I/O pigtail cable connector

Retrofitting an In-Ceiling H4 PTZ

The Avigilon H5A-PTZ In-Ceiling camera provides easy retrofitting with Avigilon H4 PTZ In-Ceiling camera installations. The following options are available to easily swap a new H5A-PTZ with an installed H4 PTZ:

- Re-uses the original mounting location. The H5A-PTZ is designed to install into the same mounting location as the H4 PTZ.
- The cable conversion kit accessory (PTZ-ACCS-IC-RETRO) makes it easy to connect an H4 PTZ audio cable into your H5A-PTZ camera.
- The PoE power mode switch ensures that you can select the legacy PoE mode on the H5A-PTZ camera in order to be backward compatible with legacy 60W/90W PoE power sources such as the Microsemi PD9501xx, PD9601xx and PDS-104GO that may have powered the H4 PTZ cameras. Legacy mode should not be required for 802.3at (30W PoE+) power sources. For more information, see *PoE Power Mode Switch* on page 28.

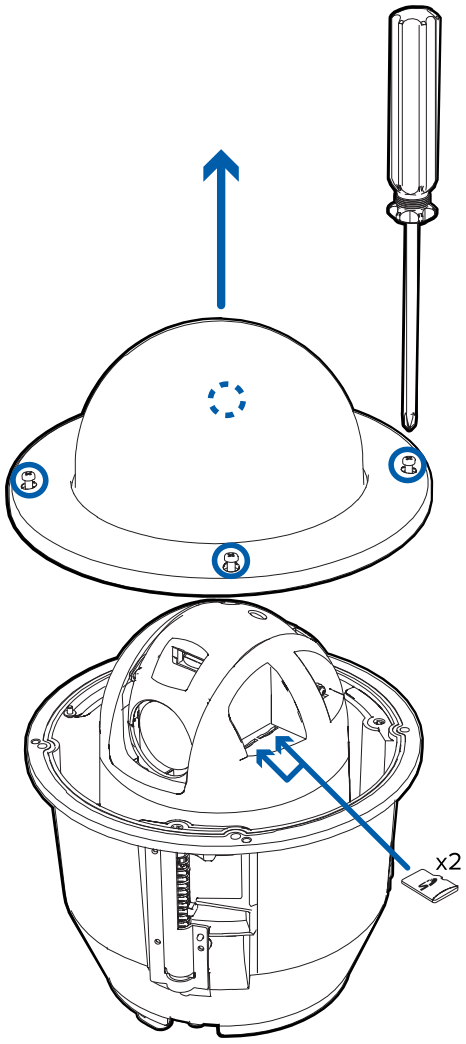
Installation Steps

Complete the following sections to install the device.

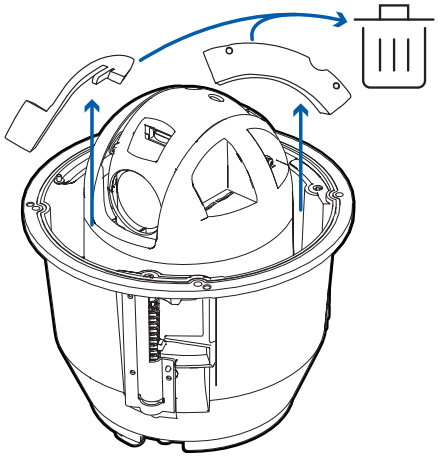
Preparing the Camera for Installation

Note: Be careful not to scratch the dome bubble.

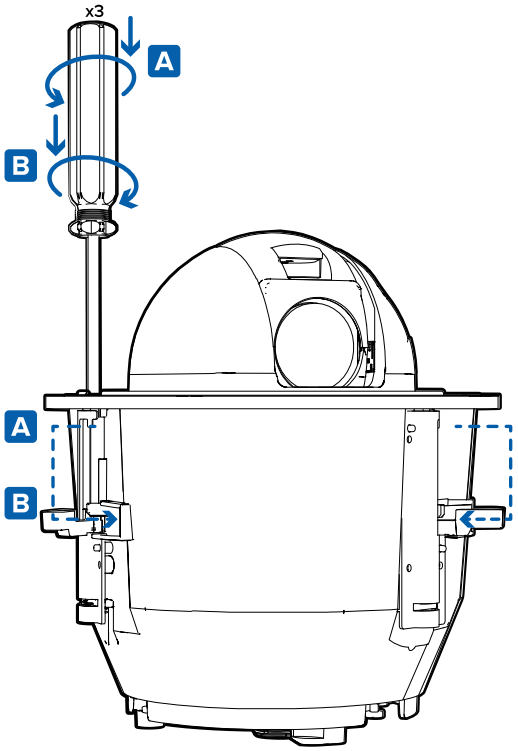
1. Place the camera on a flat surface with the dome facing up.
2. Use the T20 star key to loosen the 4 tamper resistant screws and then remove the dome cover.

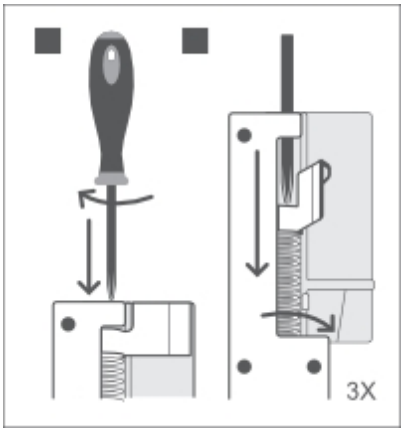


3. Remove the protective foam material inside the dome cover. Remove the plastic protective film from the inside of the dome cover.



4. If you are planning to use onboard storage, insert an SD card into one of the SD card slots on the PTZ camera. For more information, see *(Optional) Configuring Onboard Storage* on page 32.
5. Use a screw driver to push each of the clamps into the dome camera until the spring is fully compressed (A), then turn the clamp into the ready position (B).

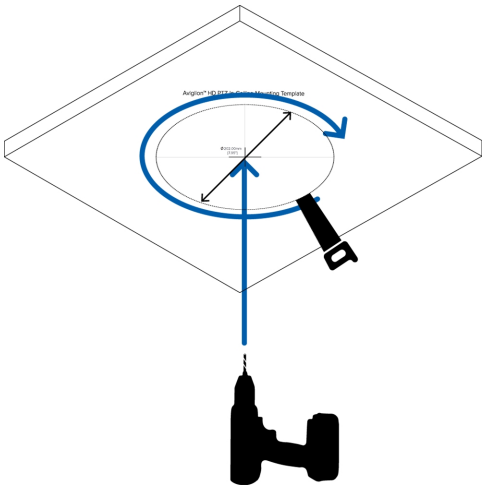




Cutting the Mounting Hole

This procedure is not required if you are planning to install the camera with a metal ceiling panel.

1. Use the mounting template to cut a hole in the mounting surface.



2. Remove the mounting template and pull the required cables through the mounting hole.

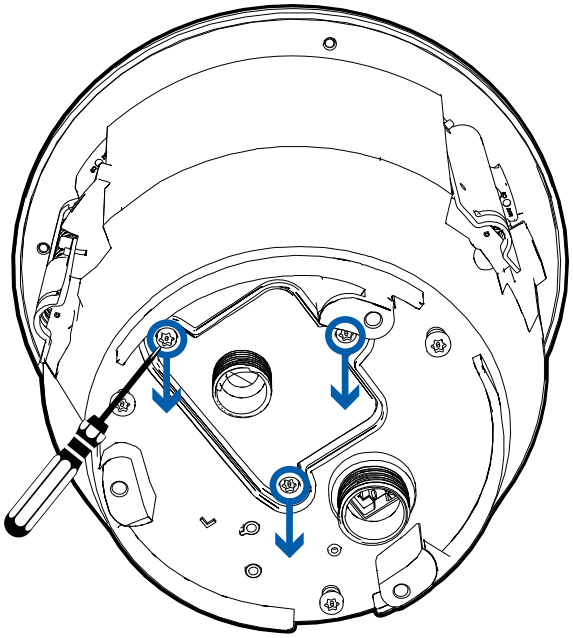
Connecting Cables

Refer to the diagrams in the Overview section for the location of the different connectors.

To connect the cables required for proper operation, complete the following:

> **Note:** The in-ceiling PTZ camera does not support cables with boots and strain reliefs.

1. Remove the cable connector cover from the top of the camera.



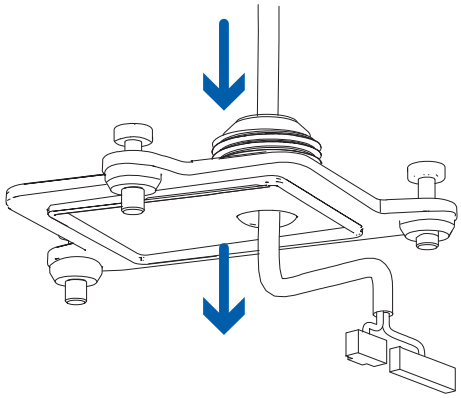
2. If there are external input or output devices that need to be connected to the camera (for example: door contacts, relays, etc.), connect the devices to the camera I/O connector cable.
3. Connect power using one of the following methods:
    - Gigabit 802.3bt 60 W PoE Injector (POE60U-1BTE) — Connect an Ethernet network cable to the injector.

      Important: When using PoE to power the camera, you must ensure that you have selected the correct option on the PoE mode switch for the type of PoE device you are using. For more information, see *PoE Power Mode Switch* on page 28.

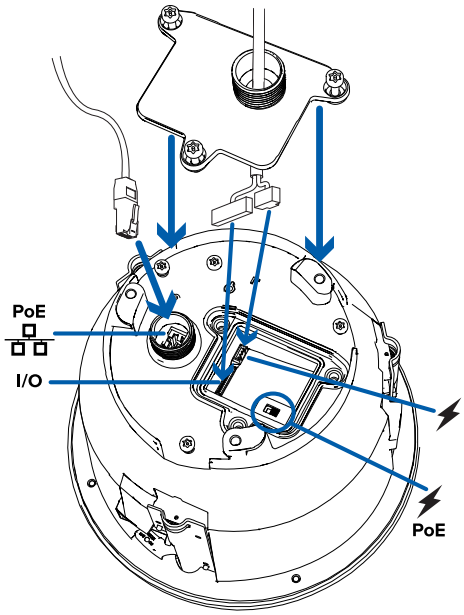
    - External Power — Connect a 24 V DC or 24 V AC (RMS) auxiliary power source that supports up to 51 W or 75 VA.

      For more information, see *Connecting to Power and External Devices* on page 28.

4. Feed the I/O connector cable through the cable connector cover.



5. Connect power and I/O to the camera, then tighten the I/O cover.



6. Connect a network cable to the Ethernet port (RJ-45 connector).

   The Link LED indicator will turn on once a network link has been established.

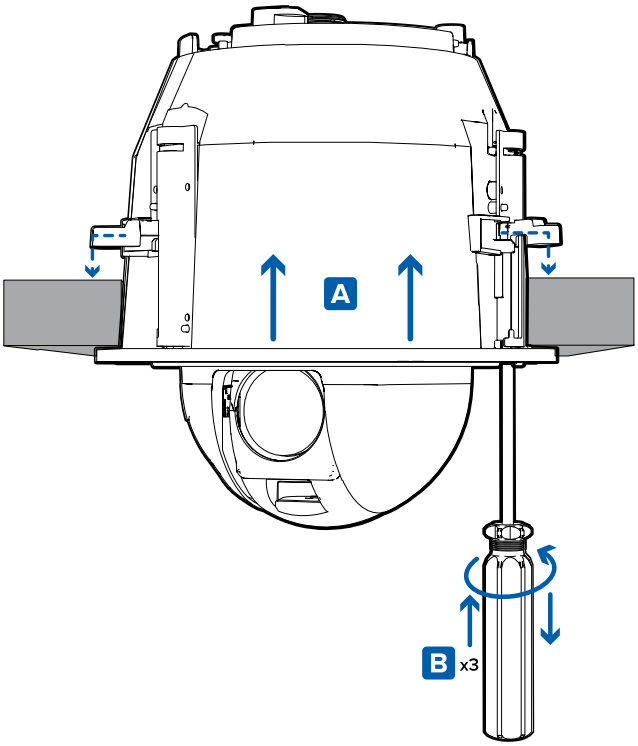
   Note: If you need to remove the RJ45 connector from the camera to check a network issue, use a small screwdriver to depress locking tab and release the RJ45 plug before pulling upwards.

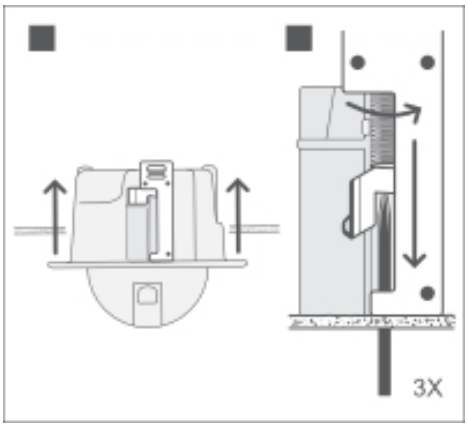
7. Check that the Connection Status LED indicator indicates the correct state. For more information, see *Connection Status LED Indicator* on page 36.

Mounting the PTZ Dome Camera

After the cable connections have been made, mount the PTZ dome camera.

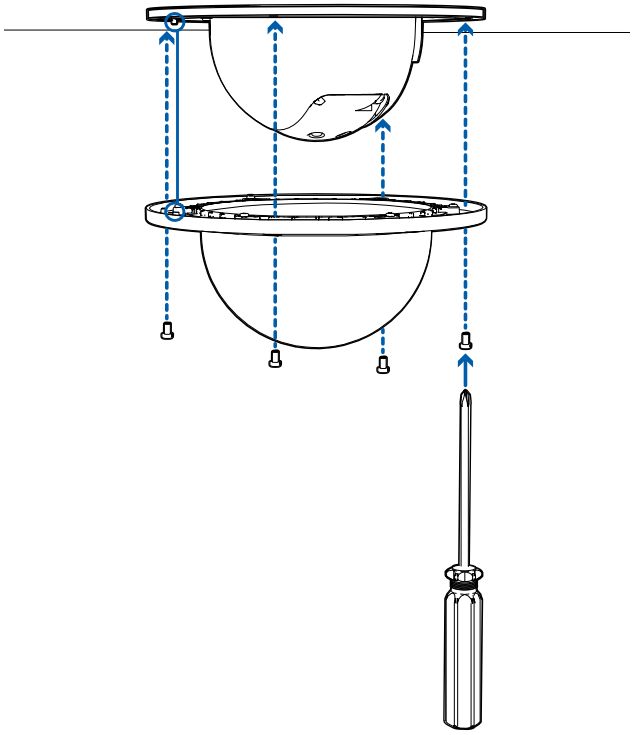
1. Push the PTZ dome camera into the mounting hole (A).
2. Use a screwdriver to release the 3 clamps to secure the camera into place (B).





Installing the Dome Cover

1. Align the notches on the base with the notch opening on the dome cover. The dome cover should be flush against the camera base.



2. Attach the dome cover to the base by tightening the screws with the star-shaped driver.
3. Remove the protective film from the dome cover.

Note: Be careful not to scratch the dome bubble.

Pendant Mount Installation

Camera Package Contents

> **Note:** The pendant wall mount and pendant NPT mount are sold separately.

Ensure the camera package contains the following:

- Avigilon H5A-PTZ Pendant Camera
- T20 star key
- 2 x RJ-45 crimp-on plug
- Audio, external power, and I/O pigtail cable connector

If you are installing the camera with the pendant wall mount, ensure the package includes the following:

- Pendant wall mount (IRPTZ-MNT-WALL1)
- Mounting template sticker

If you are installing the camera with the NPT mount, ensure the package includes the following:

- NPT mount (IRPTZ-MNT-NPTA1)
- Lock nut
- Thread sealing tape

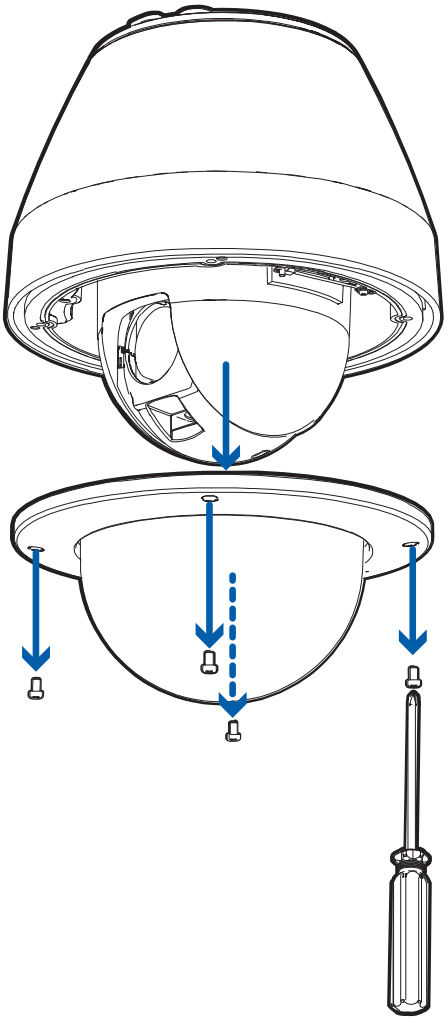
Installation Steps

Complete the following sections to install the device.

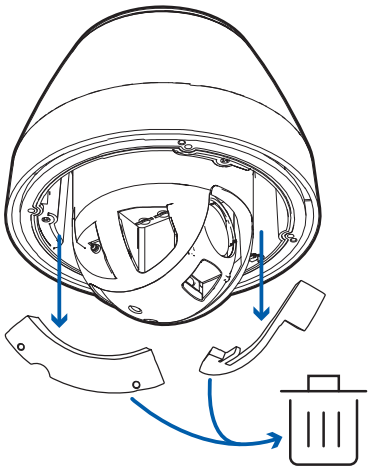
Preparing the Camera for Installation

> **Note:** Be careful not to scratch the dome bubble.

1. Place the camera on a flat surface with the dome facing up.
2. Use the T20 star key to loosen the 4 tamper resistant screws and then remove the dome cover.



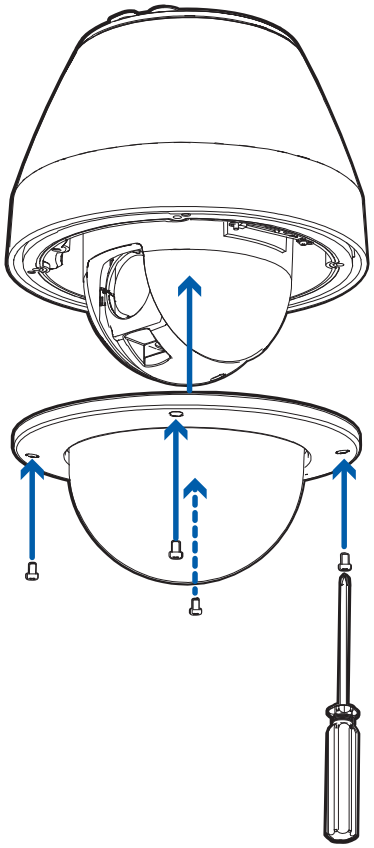
3. Remove the protective foam material inside the dome cover. Remove the plastic protective film from the inside of the dome cover.



4. If you are planning to use onboard storage, insert an SD card into one of the SD card slots on the PTZ camera. For more information, see *(Optional) Configuring Onboard Storage* on page 32.

   For the location of the SD card slots, see *Overview* on page 1.

5. Align the notches on the base with the notch opening on the dome cover. The dome cover should be flush against the camera base.
6. Attach the dome cover to the base by tightening the screws with the star-shaped driver.



Installing the Mounting Adapter

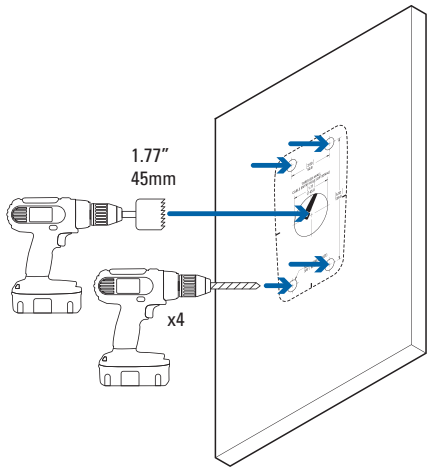
The PTZ camera can only be mounted to a pendant wall mount (IRPTZ-MNT-WALL1) or a pendant NPT mount (IRPTZ-MNT-NPTA1). The mounts are sold separately.

Use the pendant wall mount if you will be mounting the camera to a vertical mounting surface such as a wall.

Use the pendant NPT mount if you will be mounting the camera to a 1-1/2” NPT pipe for a free hanging installation.

Installing the Pendant Wall Mount

1. Determine where the cables will enter the pendant wall mount.
    - If the cables will be pulled from inside the mounting surface, use the cable entry hole at the rear of the pendant wall mount.
    - If the cables will be coming out of an external conduit pipe, use the 3/4” NPT pipe entry hole on the bottom of the pendant wall mount.
2. Use the provided mounting template to drill four mounting holes into the mounting surface.
    - If you are using the rear cable entry hole, also drill the cable entry hole into the mounting surface.



3. Pull the required cables through the preferred cable entry hole on the pendant wall mount.
    - If you are using the pipe entry hole, pull the cables through the pipe conduit then the wall mount. Next, apply thread seal tape to the pipe conduit and screw it into the pipe entry hole.

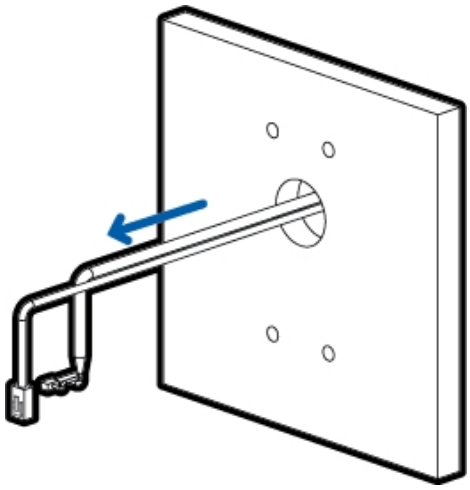


Figure 1: Cables pulled from the back entry hole.

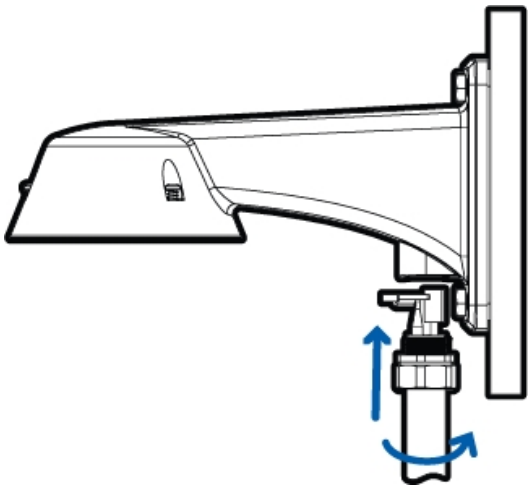
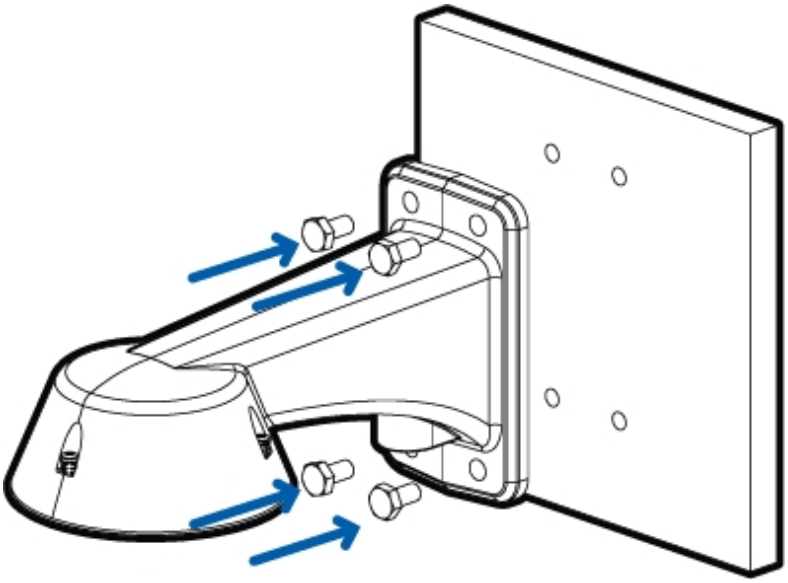


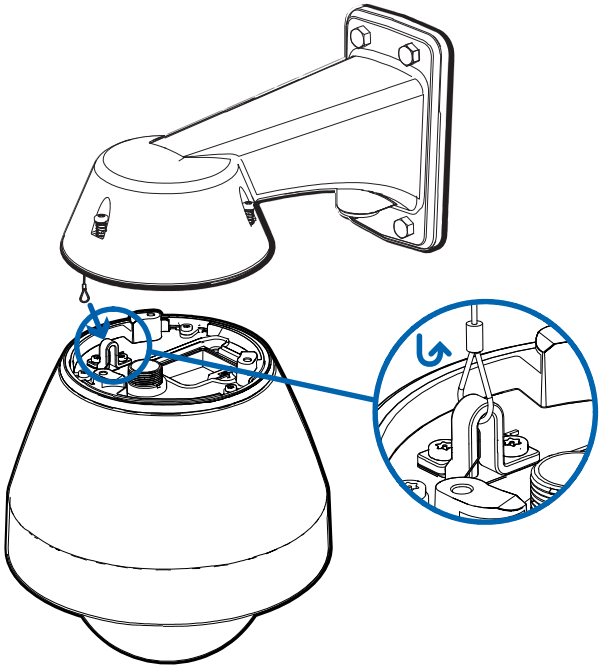
Figure 2: Cables pulled from the conduit entry hole.

4. Fasten the pendant wall mount to the mounting surface.



5. Tighten the wall mount screws to secure the wall mount to the wall.

6. Connect the safety lanyard from inside the wall mount to the anchor on the PTZ camera.



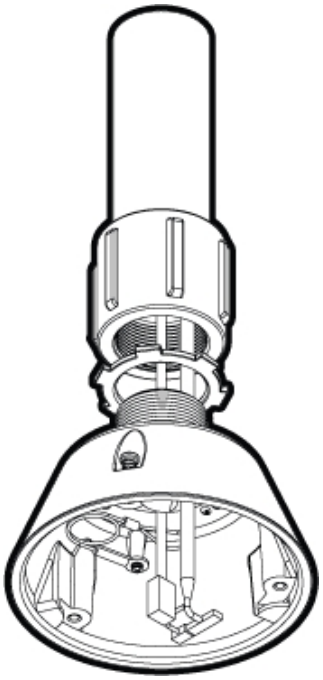
Installing the NPT Mount

Note: This procedure requires a 1-1/2” NPT-female to NPT-female pipe adapter. It is recommended that the NPT adapter be mounted to a 1-1/2” conduit pipe.

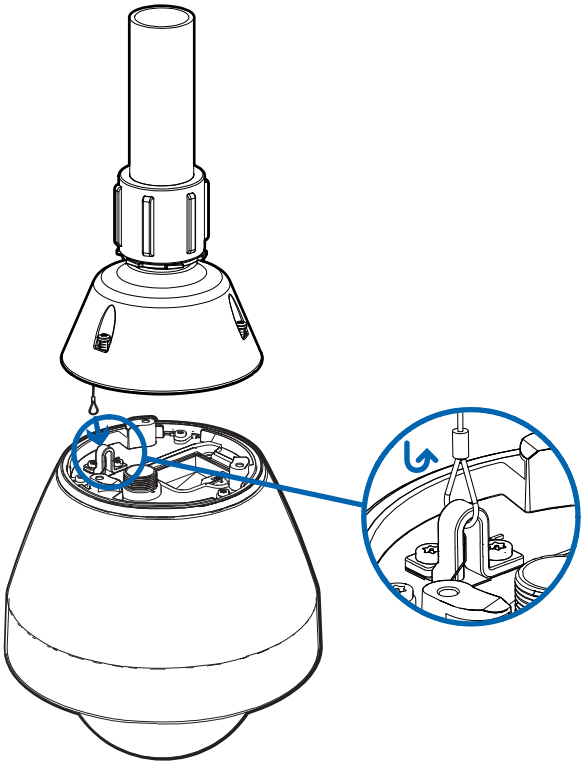
1. Pull the required cable through the NPT conduit pipe.
2. Apply thread seal tape to the pipe and screw on the 1-1/2” NPT female to NPT female pipe adapter.
3. Screw the lock nut onto the NPT adapter.
4. Apply thread seal tape to the NPT adapter and screw it into the pipe adapter.

   Make sure the parts are assembled in this order from NPT conduit pipe to camera adapter:

   a. NPT conduit pipe
   b. 1-1/2" NPT female to female pipe adapter
   c. Lock nut
   d. NPT adapter



5. Connect the safety lanyard from inside the NPT mount to the anchor on the PTZ camera.



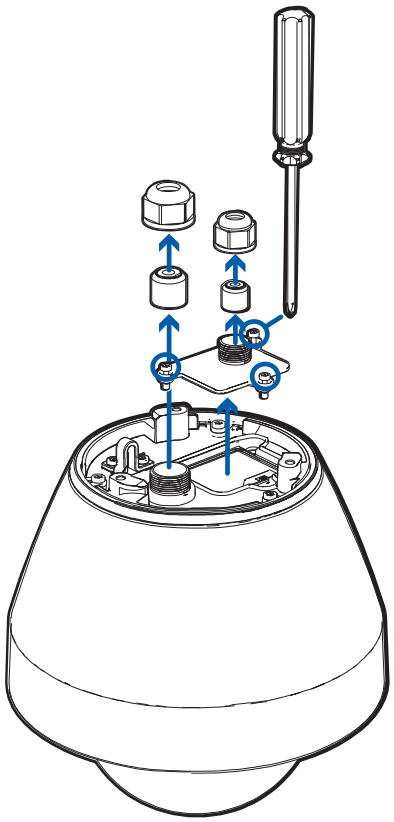
Connecting Cables

Refer to the diagrams in the Overview section for the location of the different connectors.

To connect the cables required for proper operation, complete the following:

> **Note:** The PTZ camera does not support cables with boots and strain reliefs.

1. Make sure the safety lanyard is connected to the camera.
2. Remove the sealing gland caps and cable connector cover from the top of the camera.



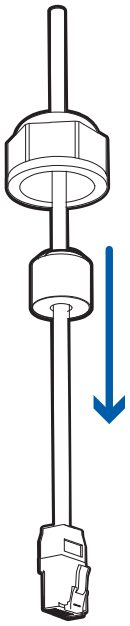
3. If there are external input or output devices that need to be connected to the camera (for example: door contacts, relays, etc.), connect the devices to the camera I/O connector cable.
4. Connect power using one of the following methods:
    - Gigabit 802.3bt 60 W PoE Injector (POE60U-1BTE) — Connect an Ethernet network cable to the injector.

      > **Important:** When using PoE to power the camera, you must ensure that you have selected the correct option on the PoE mode switch for the type of PoE device you are using. For more information, see *PoE Power Mode Switch* on page 28.

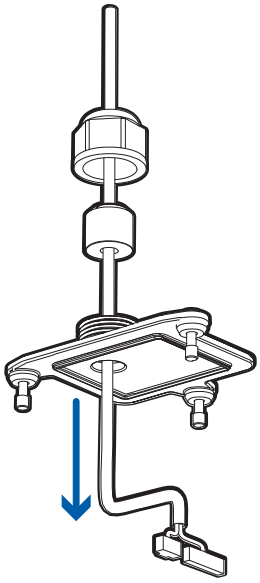
- External Power — Connect a 24 V DC or 24 V AC (RMS) auxiliary power source that supports up to 51 W or 75 VA.

  For more information, see *Connecting to Power and External Devices* on page 28.

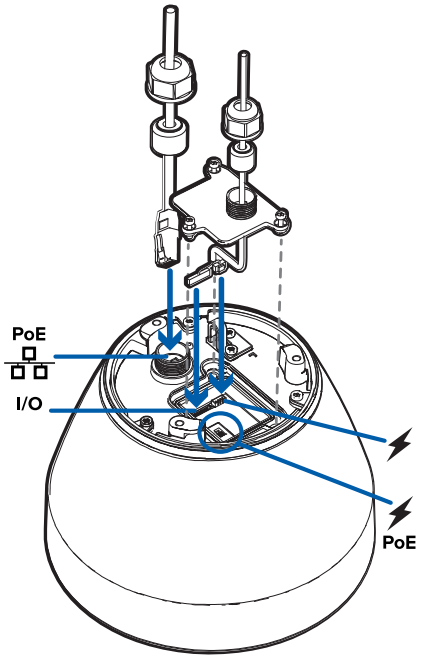
5. Feed the network cable through the gland cap and cable gland.



6. Feed the I/O connector cable through the gland cap, cable gland, and cable connector cover.



7. Connect power and I/O to the camera, then tighten the cable connector cover.



8. Connect a network cable to the Ethernet port (RJ-45 connector).

   The Link LED indicator will turn on once a network link has been established.

   > **Note:** If you need to remove the RJ45 connector from the camera to check a network issue, use a small screwdriver to depress locking tab and release the RJ45 plug before pulling upwards.

9. Check that the Connection Status LED indicator indicates the correct state. For more information, see *Connection Status LED Indicator* on page 36.
10. Tighten the cable glands around the cables.

Securing the PTZ Camera

1. Push the PTZ camera into the mount adapter.

> **Note:** Be careful not to trap any cables between the camera housing and the mount adapter.

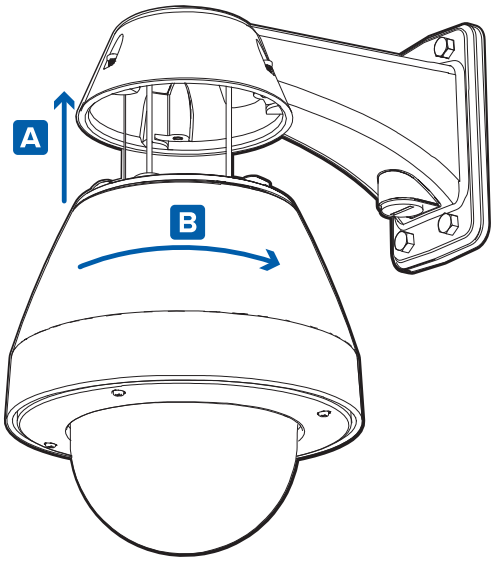


Figure 3: Pushing the camera into the wall mount adapter.

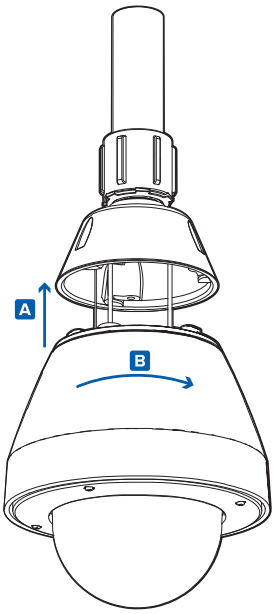


Figure 4: Pushing the camera into the NPT adapter.

> **Note:** Once the camera housing is aligned to the adapter, turn the camera until it locks into place.

2. Use the T20 star key to tighten the screws in the mount adapter.

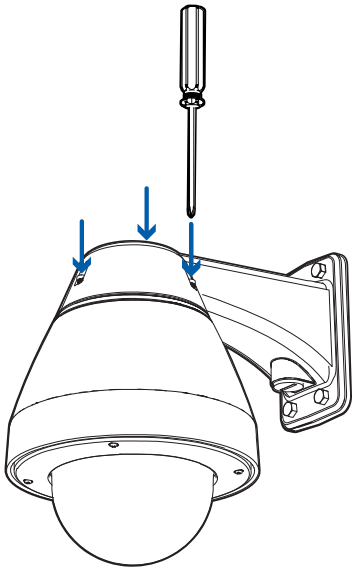


Figure 5: Securing the camera to the wall mount adapter.

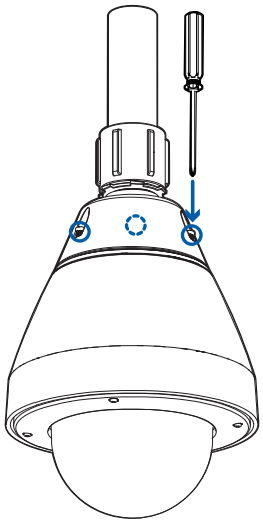
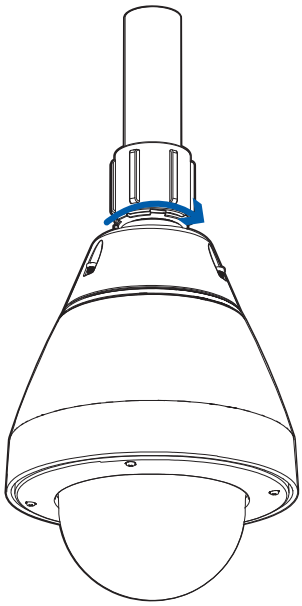


Figure 6: Securing the camera to the NPT adapter.

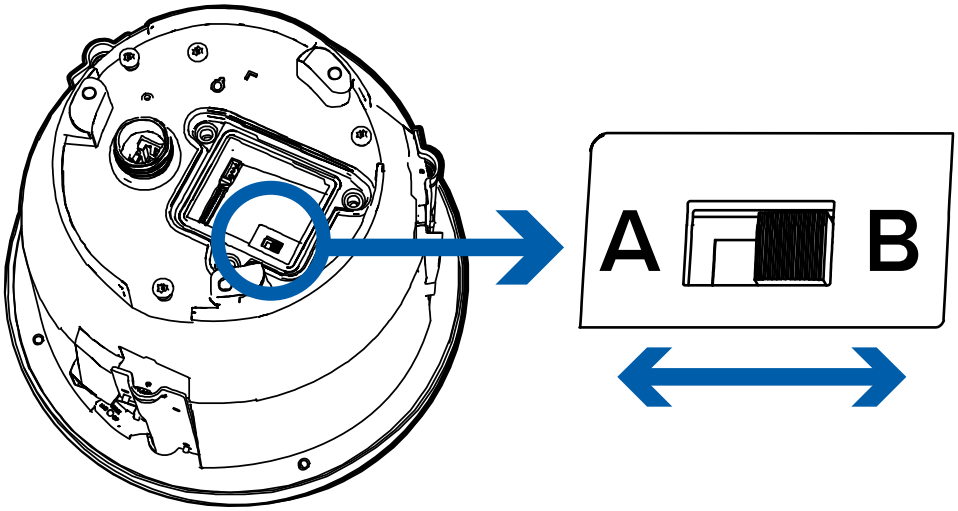
3. If you are installing the camera to an NPT mount, make sure the mount adapter is secured then tighten the lock nut to fix the camera to its final position.



Cable Connections

PoE Power Mode Switch

Your camera includes a PoE power mode switch where you can select from two 60W PoE options if connecting to a 60W midspan injector or switch.



- **A = Legacy PoE**

  Select Legacy PoE (A) to power your camera using legacy (prior to IEEE 802.3bt) 60W/90W PoE power sources such as the Microsemi PD9501xx, PD9601xx, and PDS-104GO. Legacy mode should not be required for 802.3at (30W PoE+) power sources.
- **B = IEEE 802.3bt PoE**

  Select IEEE 802.3bt PoE (B) to power your camera using a PoE switch or midspan injector that uses the new IEEE 802.3bt standard or IEEE 802.3at compliant PoE power sources up to 30W.

Connecting to Power and External Devices

⚠ **CAUTION —** Be careful to only connect power to the Auxiliary Power Wires or the camera will be damaged.

If PoE is not available, the camera may be powered through the auxiliary power cable using either a 24 V DC or 24 V AC (RMS) auxiliary power source that supports up to 51 W or 75 VA.

If auxiliary power and PoE are connected at the same time, Aux power will take priority and provide power to the camera. Connecting Aux power while the camera is running on PoE may cause the camera to reboot.

To power the camera, connect the two power wires to the red and black auxiliary power wires. The connection can be made with either polarity. 18 AWG or heavier wire is recommended for most cable runs between the 24VAC/VDC power source and the camera. If a longer cable run is required, a wire gauge table

should be consulted to ensure that the voltage at the camera does not drop outside of the specified range when the camera is operating at the maximum rated power draw.

WARNING — This product is intended to be powered by a UL Listed Power Unit marked “Class 2” or “LPS” or “Limited Power Source” with output rated 24VAC±10%, 75 VA min.; 24VDC±10%, 51 W min. or a 60W Power over Ethernet (PoE++) mid-span injector.

Power supplies and external devices are connected to the camera through the power and I/O wires. The pinout for the I/O and power wires is shown in the following diagram:

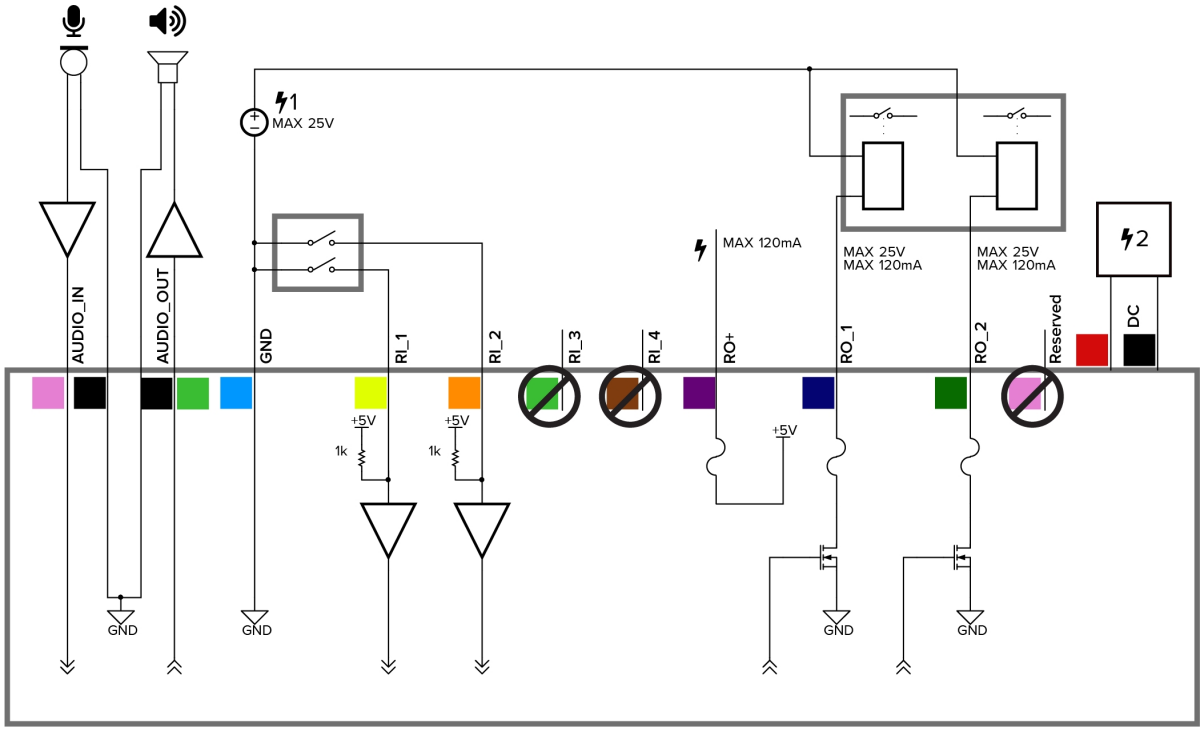


Figure 7: Example application.

- Pink (AUDIO_IN) — Audio Input (line level)

  An external power amplifier should be used when connecting speakers and microphones, as shown in the diagram.

  - Black — Audio Ground
- Light Green (AUDIO_OUT) — Audio Output (line level)
  - Black — Audio Ground
- Light Blue (GND) — Ground for digital inputs and outputs.
- Yellow (RI_1) — Digital Input, Relay 1. The input voltage must be below 0.7 V to register as a low input. The input voltage should not exceed 5 V when high.
- Orange (RI_2) — Digital Input, Relay 2
- Light Green (RI_3) — Unused Wire, do not connect.
- Brown (RI_4) — Unused Wire, do not connect.
- Purple (RO+) — +5V power output from camera.

- Blue (RO_1) — Digital Output
- Green (RO_2) — Digital Output
- Pink (Reserved) — Unused Wire, do not connect.
- Red (DC) — Auxiliary Power Wire, accepts DC and AC power.
- Black (DC) — Auxiliary Power Wire, accepts DC and AC power.
- **1** — External relay power supply
- **2** — Optional 24 V AC (RMS) or 24 V DC Aux. power supply

Non-Seamless Failover

- If the camera has power available from both an external Aux power supply and a PoE PSE (Power Sourcing Equipment) device, the camera will draw power from Aux.
- When the camera is using Aux power, PoE power negotiation is inhibited.
- If the camera loses Aux power, the camera will power-off while waiting to transition to PoE power.
- If the external Aux power re-energizes, the camera might reboot while transitioning back to using Aux power. The camera might not reboot if the external Aux power supply reacts quickly enough to the increase in load.
- Ensure that sufficient power is manually reserved on the PSE, as the camera will not request PoE power until the camera loses Aux power.

Connecting to the Camera

Initializing a Camera Username and Password

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

The first user can be created using any of the following methods:

- Camera's Web Interface: enter the camera's IP address in a web browser to access the web interface. If the camera is in the factory default state you will be redirected to the Add a new user page to create the first user. For more information, see the *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide.*
- Camera Configuration Tool: cameras discovered in the factory default state will be identified by . Select the **Admin Users** tab to create the first user. For more information, see the *Avigilon Camera Configuration Tool User Guide*.
- Avigilon Control Center software version 7.4 or later, or version 6.14.12 or later: when connecting a camera in the factory default state, the client software will ask you to create a new user. For more information, see the *Avigilon Control Center Client User Guide*.
- Avigilon Cloud Services (ACS) v3.0 or later: when adding a camera you will be asked to create a new user for cameras in the factory default state. For more information, see the *Avigilon Cloud Services User Guide*.

Tip: If you are connecting your Avigilon 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.

Note: 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:

- The mobile web interface using the USB Wifi Adapter. For more information, see *(Optional) Using the USB Wifi Adapter* on page 1.
- Device's web browser interface: http://*<camera IP address>/*.
- Network Video Management software application (for example, the Avigilon Control Center™ software).
- ARP/Ping method. For more information, see *Setting the IP Address Using the ARP/Ping Method* on page 39.

Accessing the Live Video Stream

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

- The mobile web interface using the USB Wifi Adapter. For more information, see *(Optional) Using the USB Wifi Adapter* on page 1.
- Web browser interface: http://*< camera IP address>/*.
- Network Video Management software application (for example, the Avigilon Control Center™ software).

(Optional) Configuring Onboard Storage

To use the camera's onboard storage feature, you must insert 1 or 2 microSD cards into the microSD card slots. Currently, the camera only supports 1 microSD card for onboard storage. For the location of the microSD card slots, see *Overview* on page 1.

It is recommended that the microSD card have a capacity of 64 GB or more, and a write speed of class 10 or better. 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.

   ⚠ **CAUTION —** 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 *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide*.

Configuring the Camera

Once installed, use one of the following methods to configure the camera:

- If you have installed multiple cameras, you can use the Camera Configuration Tool to configure common settings. For more information, see the *Camera Configuration Tool User Guide*.
- If the camera is connected to the Avigilon Control Center system, you can use the client software to configure the camera. For more information, see the *Avigilon Control Center Client User Guide*.
- If the camera is connected to a third-party network management system, you can configure the camera's specialty features in the camera's web browser interface. For more information, see the *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide*.

Setting the Home Preset Position

The PTZ camera supports self-learning video analytics from the home preset position. The home preset position is typically the field of view the PTZ camera returns to after being used for investigations.

Before you can configure the camera's home position, you must connect the camera to a site in the ACC™ Client software. For more information about adding cameras to a site and the following steps, see the *Avigilon Control Center Client User Guide*.

To set the home preset position, display the live video from the PTZ camera then complete the following steps:

> **Tip:** Name the preset position "Home" so that it will be easy to find when configuring the camera for other applications.

1. Move the camera's field of view into position.
2. In the **Presets** drop-down list, select a number then click .
3. In the dialog box, enter a name for the preset.
4. Select the **Set as home preset** checkbox if you want this to be the camera's Home preset.
5. Click **OK**.

After you've set the camera's home preset position, you can configure the required video analytics events in the ACC Client software.

Manually Returning to the Home Position

After the home preset position has been configured, you can set the PTZ camera to return to the configured field of view by clicking .

Automatically Returning to the Home Position

You can also configure the PTZ camera to automatically return to the home preset position after the camera is left idle for a set amount of time. This can be configured in two ways: through a PTZ tour or a rule.

A PTZ tour can be configured from the camera web interface or in the ACC Client software. To configure the PTZ camera to automatically return to the home position, create a new tour and add only the home position to the preset list. Next, select the **Set as default tour** checkbox and use the **Default Tour Idle Start Time (Minutes)** field to define the expected amount of idle time before the camera returns to the home position.

To use the rule method, you must have an Enterprise Edition or Standard Edition version of the Avigilon Control Center system. To configure the PTZ camera to automatically return to the home position, create a rule that includes the following settings:

- On the Select Rule Event(s) page, select **PTZ idle**.
- On the Select Rule Action(s) page, select **Go to Home Preset**.

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 or an ACC™ Server. The default connected setting can be changed to Off using the camera's web user interface. For more information see the *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide*.

Troubleshooting Network Connections and LED Behavior

Note: 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.

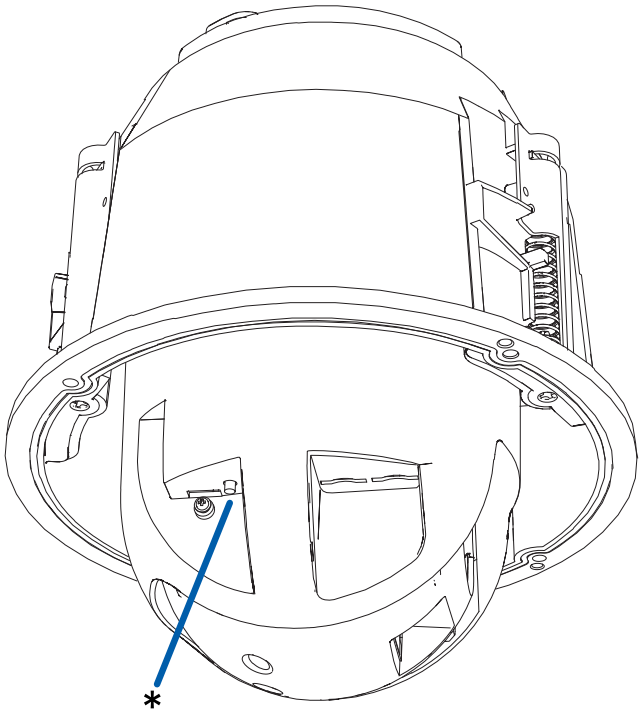
LED Behavior	Suggested Solution
Green LED is off and amber is on	Perform a factory reset of the camera using the physical firmware revert button. Resetting through the camera's web interface will not produce the desired result.
Both LEDs are off and the camera is not connected or streaming video	Check 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.

LED Behavior	Suggested Solution
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 dome cover.
3. Gently press and release the firmware revert button.
4. Re-install the dome cover.

Setting the IP Address Using the ARP/Ping Method

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

> **Note:** 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 *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide*.

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.

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.

Important: 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.

For More Information

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

- *Avigilon Control Center Client User Guide*
- *Web Interface User Guide — Avigilon High Definition H4 and H5 IP Cameras*
- *Web Interface User Guide — Avigilon High Definition H4 and H5 IP Cameras*
- *Avigilon Camera Configuration Tool User Guide*
- *Designing a Site with Avigilon Video Analytics*

These guides are available on **help.avigilon.com** and on the Avigilon website: **avigilon.com/support**.

Limited Warranty and Technical Support

Avigilon warranty terms for this product are provided at **avigilon.com/warranty**.

Warranty service and technical support can be obtained by contacting Avigilon Technical Support: **avigilon.com/contact**.