AVIGILON™



Installation Guide

Avigilon H6SL Camera Models:

2.0C-H6SL-D1
3.0C-H6SL-D1
5.0C-H6SL-D1

2.0C-H6SL-D1-IR
3.0C-H6SL-D1-IR
5.0C-H6SL-D1-IR

2.0C-H6SL-DO1-IR
3.0C-H6SL-DO1-IR
5.0C-H6SL-DO1-IR
8.0C-H6SL-DO1-IR

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HTML-PROJECT-A

Revision: 1 - EN

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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 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.

- Installation must be performed by qualified personnel only, and must conform to all local codes.
- ESD to the camera when it is operating could cause a temporary loss of video. When servicing the camera, follow the appropriate ESD mitigation procedures. The operator should remove any static by grounding themselves before servicing 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 Power over Ethernet (PoE), 13 W min.
- 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 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 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.

Pendant mount models comply with EN 60529 IP66 and IP67 ratings.

This Class A digital apparatus complies with Canadian ICES-003 (A)/NMB-3(A).

This Class B digital apparatus complies with Canadian ICES-003 (B)/NMB-3(B).

The H6SL-DO1-IR models comply with EN 60529 IP66 and IP67 rating.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 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.

To meet the requirements of the EN 50130-4 Alarm Systems Applications standard, use an external uninterruptible power supply (UPS).

This equipment contains a coin cell battery. Risk of fire, explosion, and burns. Do not disassemble, crush, heat above 100°C (212°F), or incinerate.

The use of EMC compliant support and auxiliary equipment with this device is required in order to fully comply with the EMC regulatory standards.

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 12-24 VDC, 13 W min. or Power over Ethernet (PoE), 13 W min.

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

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며,
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.

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.

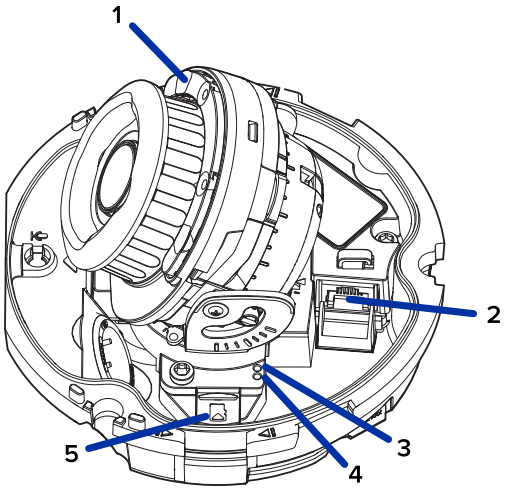
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Overview

Camera Base Front View



1. **IR Illuminator**

   Provides scene illumination in the IR spectrum.

   Only available on IR models.

2. **Ethernet port**

   Accepts power and Ethernet connection to the network. Server communication and image data transmission also occur over this connection.

3. **Link LED indicator**

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

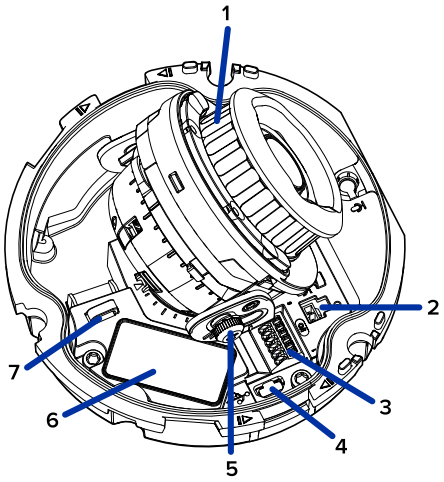
4. **Connection status LED indicator**

   Green LED provides information about device operation. For more information, see *Connection Status LED Indicator* on page 48.

5. **microSD card slot**

   Accepts a microSD card for onboard storage. For more information, see *(Optional) Configuring microSD Card Storage* on page 43.

Camera Base Rear View



Displayed IR illuminators only available on -IR models.

1. **Azimuth control**

   Provides control of the image angle.
2. **Microphone port**

   Provides connection to the Microphone accessory (ACMICR-1001). Indoor models only.
3. **I/O connector block**

   Provides connections to external input/output and audio devices.
4. **Micro USB port**

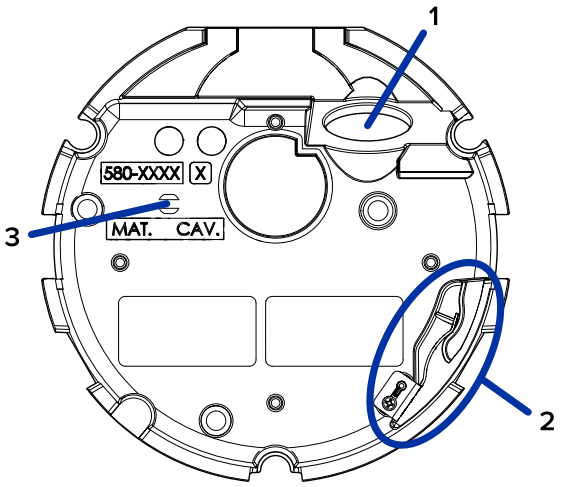
   Accepts a micro USB to USB adapter. Only required when using the USB Wi-Fi Adapter.
5. **Tilt lock thumb screw**

   Provides a locking mechanism for the image tilt adjustment.
6. **Serial number tag**

   Device information, product serial number and part number label.
7. **I/O Cable Management Clip**

   Clip to help secure the I/O cable in place.

Camera Base Bottom View



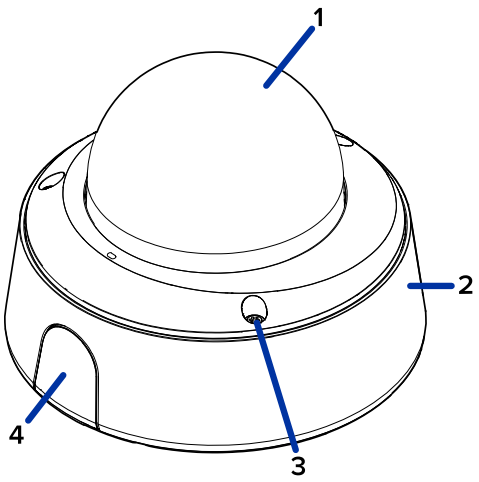
1. **Cable entry hole**

   An entry hole for the cables required for camera operation.
2. **Lanyard anchor**

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

   Vent to allow moisture vapor to escape the sealed housing and equalize pressure.

Cover View, Surface Mount



1. **Dome cover**

   Vandal resistant dome cover.
2. **Surface mount adapter**

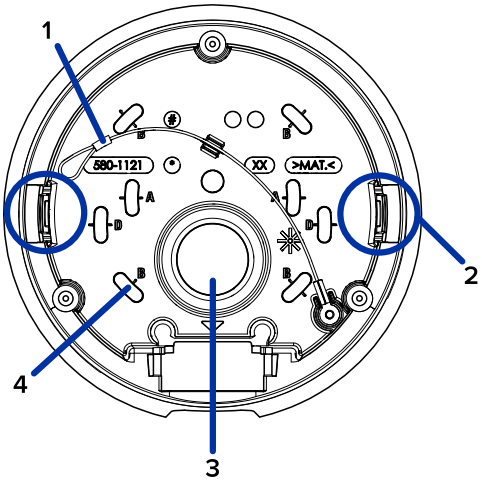
   Used to mount the dome camera to a wall, ceiling or electrical box.

3. **Tamper resistant screws**

   Star-shaped captive screws to fix the dome cover to the mount adapter.
4. **Side cable entry cover**

   Covers the side cable entry hole.

Mounting Adapter View, Surface Mount



1. **Lanyard**

   Connects to the lanyard anchor on the camera base.
2. **Camera housing clips**

   Snaps to hold camera module during installation.
3. **Cable entry hole**

   An entry hole for the cables required for camera operation.
4. **Mounting holes**

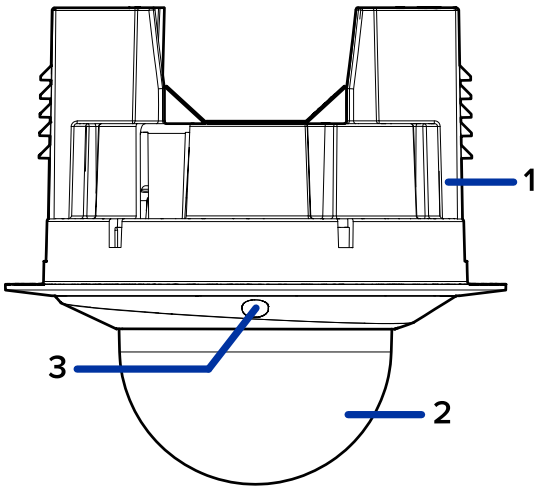
   Holes for mounting the adapter to the following:

   A – UK standard single gang box

   B – Octagon gang box

   D – US standard single gang box

(Optional) Cover View, In-Ceiling Mount



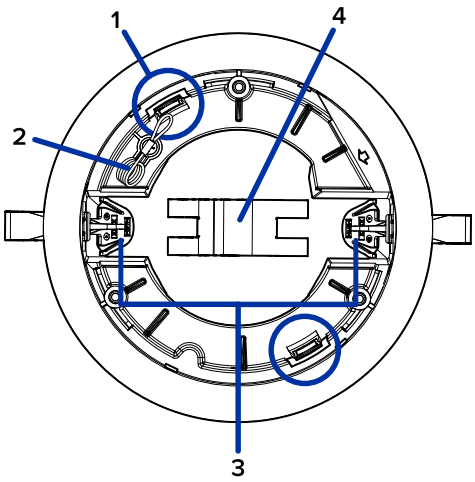
1. **In-ceiling mount adapter**

   Used to mount the dome camera to a wall, ceiling or electrical box.
2. **Dome cover**

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

   Star-shaped captive screws to fix the dome cover to the mount adapter.

(Optional) Mounting Adapter View, In-Ceiling Mount



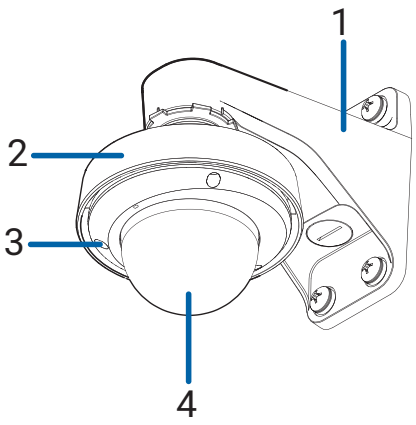
1. **Camera housing clips**

   Snaps to hold camera module during installation.
2. **Lanyard**

   Connects to the lanyard anchor on the camera base.

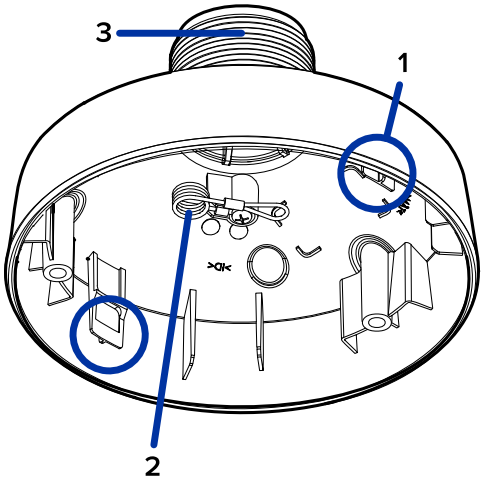
3. **Clamps**
   Manually adjustable clamps for securing the dome camera to the ceiling.
4. **Clamp retainer**
   Used to hold the clamps together before installation.

(Optional) Cover View, Pendant Wall Mount



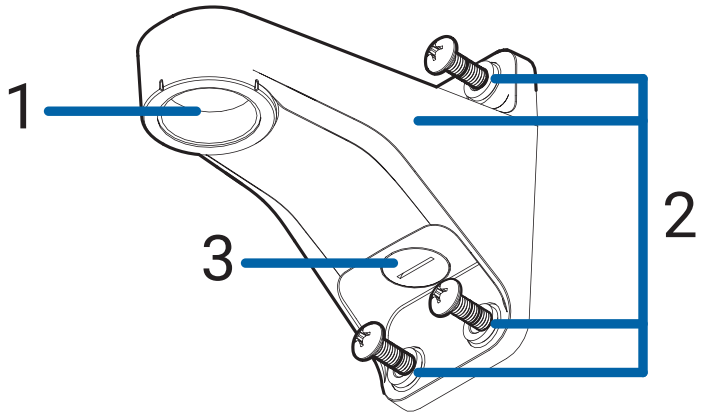
1. **Pendant wall mount**
   Used with the NPT adapter to mount the dome camera to a wall in pendant installations.
2. **NPT adapter**
   Used to mount the dome camera to NPT pipes.
3. **Tamper resistant screws**
   Star-shaped captive screws to fix the dome cover to the mount adapter.
4. **Dome cover**
   Vandal resistant dome cover.

(Optional) NPT Adapter View, Pendant Mount



1. **Camera housing clips**
   Snaps to hold camera module during installation.
2. **Lanyard**
   Connects to the lanyard anchor on the camera base.
3. **1-1/2" NPT thread mount**
   Standard male 1-1/2" NPT thread mount for mounting the dome camera to a pole or bracket.

(Optional) Pendant Wall Mount View



1. **1-1/2" NPS thread mount**
   Female NPS thread mount for pendant camera installations.
2. **Pendant wall mount screws**

Screws for securing the pendant wall mount to the mounting bracket.

3. **NPT pipe entry hole**

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

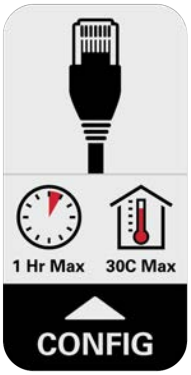
Preparing the Installation

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.

Note: The maximum recommended duration of in-box configuration is 1 hour. The maximum recommended ambient temperature is 30°C (86°F).

1. Locate and open the flap on the side of the camera packaging. Look for the *Config* label.



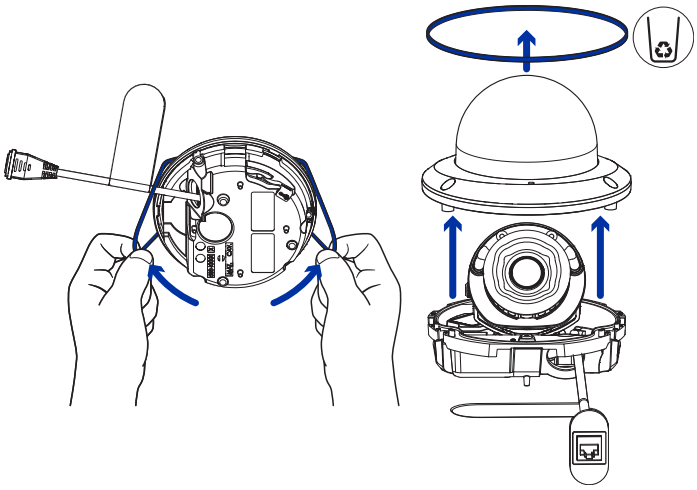
2. Connect a network cable to the RJ45 plug on the configuration cable. The network cable must provide PoE. IEEE 802.3af Class 3, to power the camera during configuration.
3. Connect to the camera using an ACC Client, Unity Video Client, the Camera Configuration Tool, or the camera's web browser interface to configure the camera's settings.
4. Once you have finished making configuration changes, unplug the network cable.

Note: 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 Dome Cover

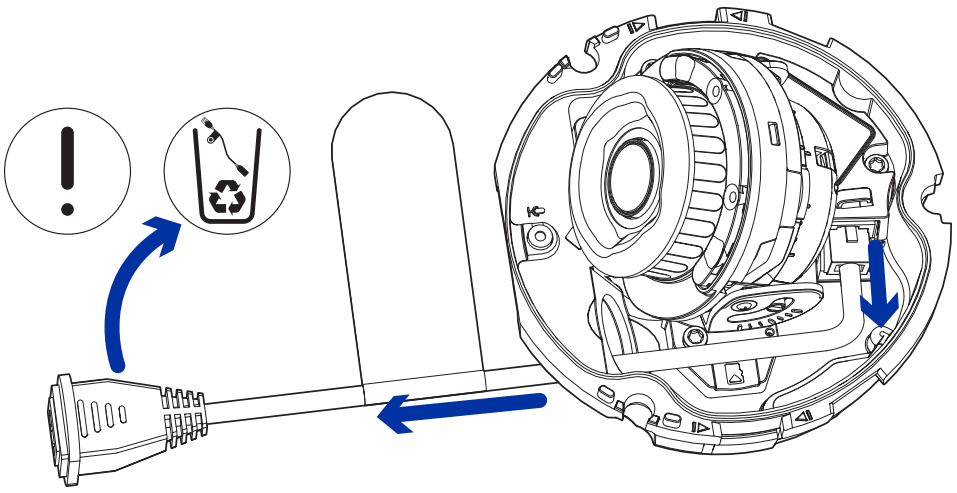
Note: Be careful not to scratch or touch the dome bubble. The resulting marks or fingerprints may affect the overall image quality. Keep the protective covers on the outside of the dome bubble until the installation is complete.

- Remove the dome cover by releasing the elastic strap holding the dome cover to the camera base.



Removing the Configuration Cable

Note: Remove the configuration cable by pushing down on the connector's tab and pulling it out of the port. Next, pull the cord out through the cable entry hole. This cable can be discarded.



Surface Mount Installation

Required Tools and Materials

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

- No. 2 Phillips screwdriver – for attaching camera to an electrical box or mounting surface.

Camera Package Contents

Ensure the package contains the following:

- Avigilon H6SL Dome Camera (Indoor models)
  - Mounting template sticker
  - 4 screws and anchors for solid walls
  - Surface mount adapter
  - Cable entry grommet
  - Side conduit cover
  - T20 Pin-In star-shaped driver
- Avigilon H6SL Dome Camera (Outdoor models)
  - Mounting template sticker
  - 4 screws and anchors for solid walls
  - Surface mount adapter
  - Side conduit cover
  - 1/2" Side conduit plate
  - Conduit grommet
  - Cable entry grommet
  - T20 Pin-In star-shaped driver

Installation Steps

Complete the following sections to install the device.

Using the Surface Mount Adapter

The dome camera is provided with a surface mount adapter that can be mounted to a wall, ceiling or electrical box.

If the dome camera needs to be installed in a different way, use one of the other mounting adapter options and refer to their sections in this manual for more information.

- In-ceiling mounting adapter (SLSPCIL-1001). For more information, see *In-Ceiling Mount Installation* on page 26.
- Pendant NPT mounting adapter (H6SL-MT-NPTA1). For more information, see *Pendant Mount Installation* on page 32.
    - Pendant wall mounting adapter (WLMT-1021) – must be used with NPT mounting adapter.

Mounting the Dome Camera Using the Bottom Cable Entry

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.

Perform the following steps to mount the dome camera to a ceiling or wall:

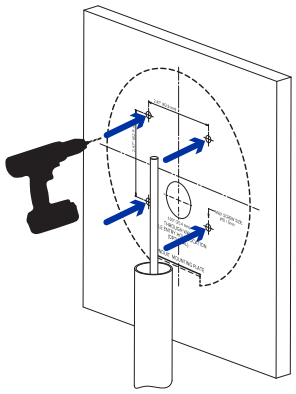
1. Use the mounting template to drill four mounting holes into the mounting surface and drill the cable entry hole.
2. Pull the required cables through the cable entry hole.
3. Drive four screws to fasten the mounting adapter to the ceiling or wall.

Mounting the Dome Camera Using the Side Cable Entry

Perform the following steps if you will be mounting to a surface with the required cables coming out of an external conduit pipe. Use this procedure if the mounting surface cannot be easily cut, or when cables must be brought along the outside of the mounting surface.

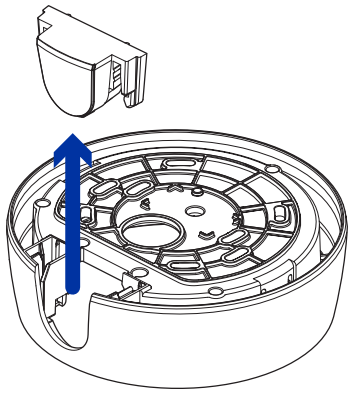
1. Use the mounting template to drill four mounting holes into the mounting surface.

   Make sure the mounting template is aligned to where the conduit will enter the mounting adapter.

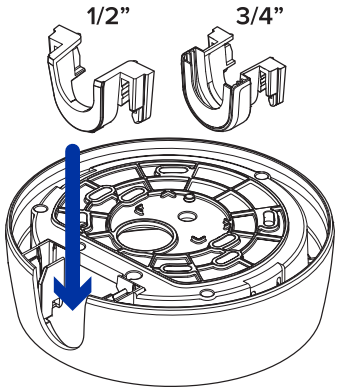


2. Pull the required cables through the conduit.

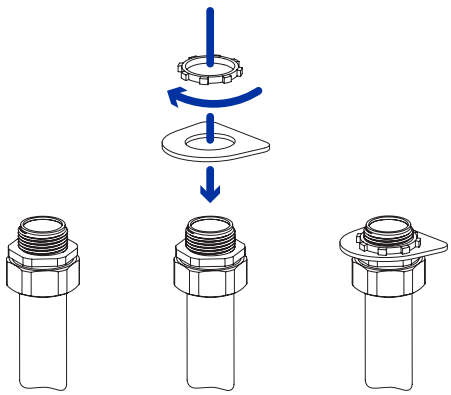
3. Slide the side cable cover off the mounting adapter.



4. Depending on the conduit used, make the required adjustments to the side cable entry hole:
    - If you are using an interior conduit, install the side conduit cover on to the mounting adapter. Proceed to step 5.

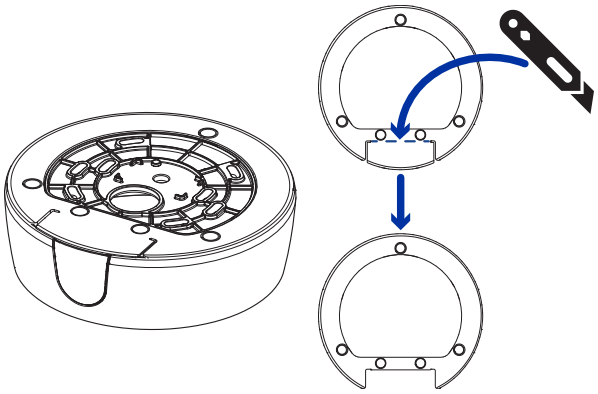


    - If you are using an exterior conduit:
        - Install a conduit plate to an external conduit adapter. Ensure the plate is compatible with the size of conduit used.



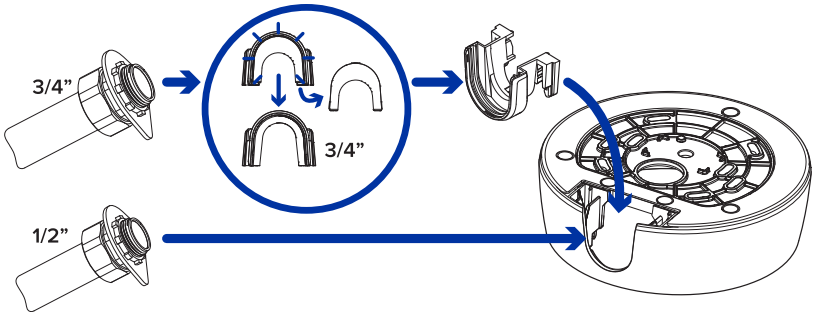
        - If you are installing an environmental model, you may need to cut off part of the rubber

gasket on the mounting adapter to make room for the plate.

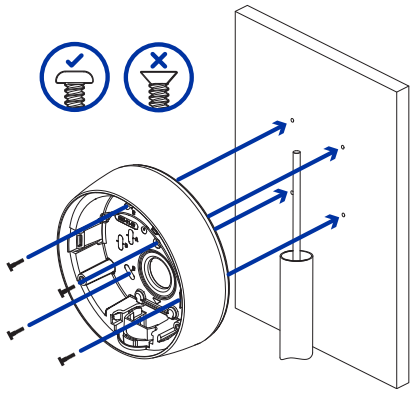


- For a 3/4" conduit, remove the center knockout piece on the side conduit cover. Next, install the side conduit cover on to the mounting adapter.

  A 1/2" conduit will fit into the mounting adapter without a side conduit.



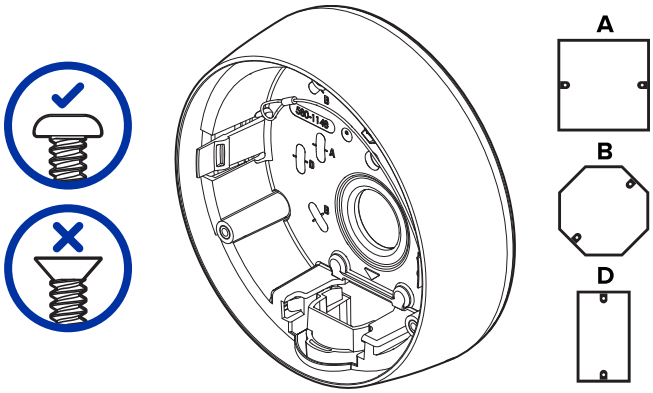
5. Drive 4 screws to fasten the mounting adapter to the ceiling or wall.



Mounting the Dome Camera to an Electrical Box

Perform the following steps if the required electrical components and cables will be contained in an electrical gang box inside the mounting surface.

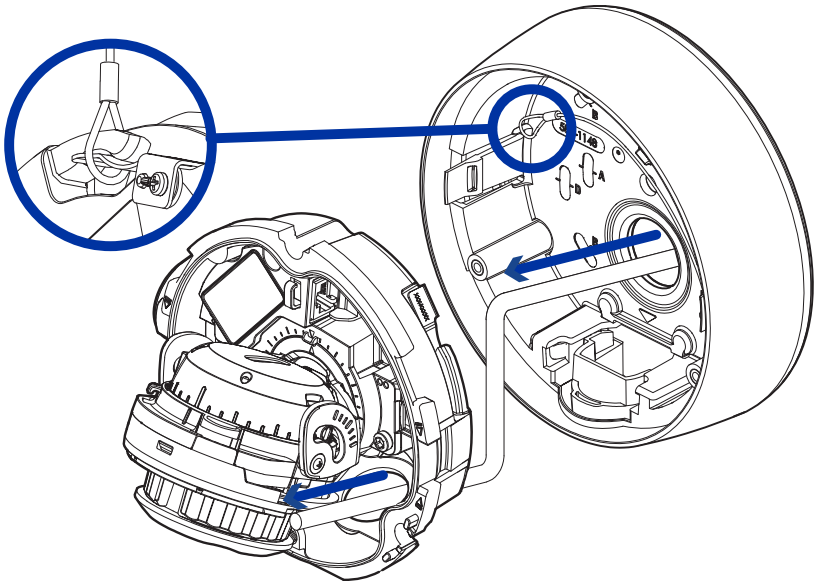
1. Pull the required cables through the cable entry hole.
2. Use pan head screws to install the mounting adapter to the electrical box.
   Select the hole configuration that matches the electrical box shape:
   - A – UK standard single gang box
   - B – Octagon gang box
   - D – US standard single gang box



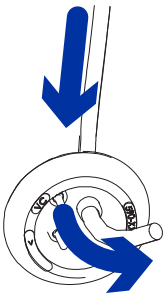
Installing the Camera Base to the Mounting Adapter

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

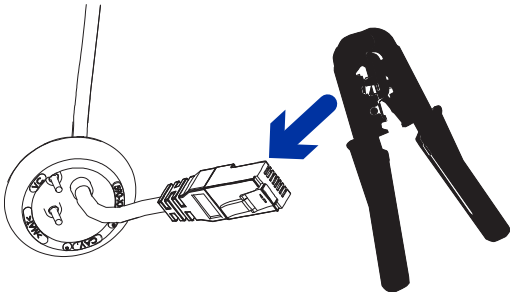
1. Attach the lanyard on the mounting adapter to the anchor on the camera base.



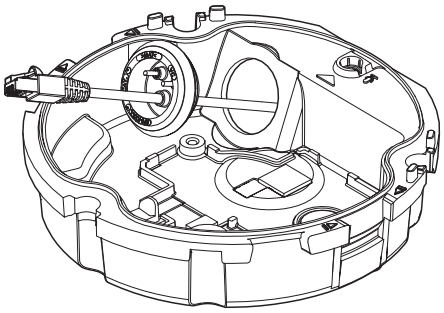
2. Pull the Ethernet cable through the cable entry hole on the camera base.
3. Push the Ethernet cable through the provided cable entry grommet.
   Always use the provided cable entry grommet to prevent dust and debris from entering the camera.

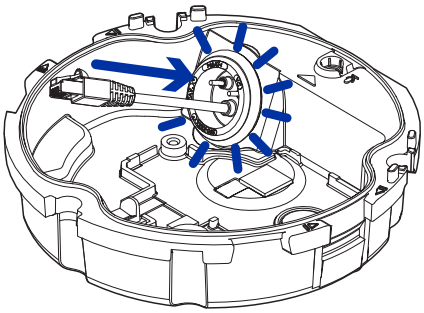


4. Crimp the Ethernet cable. Ensure that the orientation of the cable and grommet matches the one shown in the image.



5. Install the grommet into the cable entry hole on the camera base.



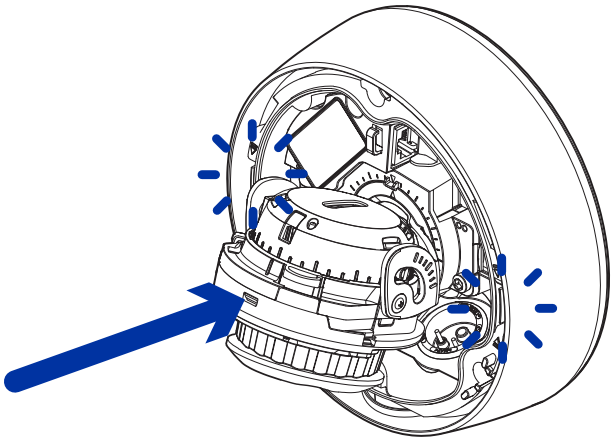


Make sure the grommet is securely seated on the inside and outside of the cable entry hole. Apply silicone sealant to seal any gaps in the grommet.

6. Connect the network cable to the camera's Ethernet port.

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

7. Align the arrow on the camera base to the side cable entry hole on the mounting adapter then press the camera base into the mounting adapter. The camera base clicks into place and is held securely.



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

Camera Package Contents

Ensure the dome camera package contains the following:

- Avigilon H6SL Dome Camera (Indoor models)
  - T20 Pin-In star-shaped driver
  - Cable entry grommet
  - Provided accessories that are not required for this installation:
    - Mounting template sticker
    - 4 screws and anchors for solid walls
    - Surface mount adapter
    - Side conduit cover
- Avigilon H6SL Dome Camera (Environmental models)
  - T20 Pin-In star-shaped driver
  - Provided accessories that are not required for this installation:
    - Mounting template sticker
    - 4 screws and anchors for solid walls
    - Surface mount adapter
    - Side conduit cover
    - 1/2" Side conduit plate

Ensure the mounting adapter (SLSPCIL-1001) package contains the following:

- In-ceiling mounting adapter for a H6SL Dome Camera
- Mounting template sticker

Installation Steps

Complete the following sections to install the device.

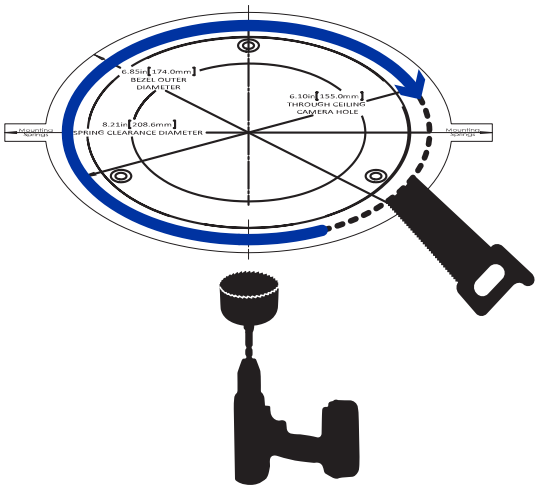
Using the In-Ceiling Mounting Adapter

If the dome camera needs to be installed into a ceiling, you can discard the surface mount adapter that is

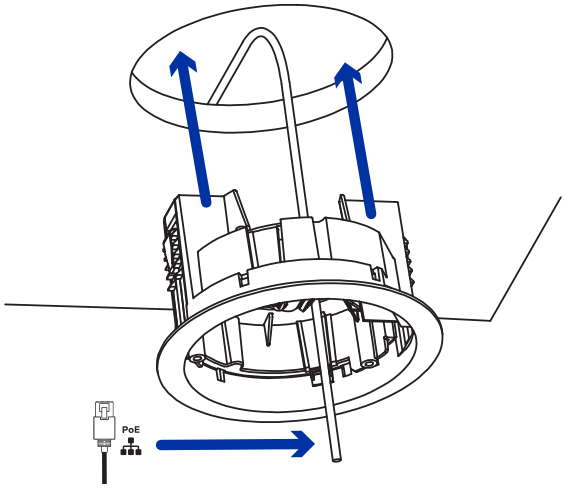
provided with the dome camera and use the in-ceiling mounting adapter instead (SLSPCIL-1001).

> **Note:** The maximum supported ceiling thickness is 32 mm (1.25").

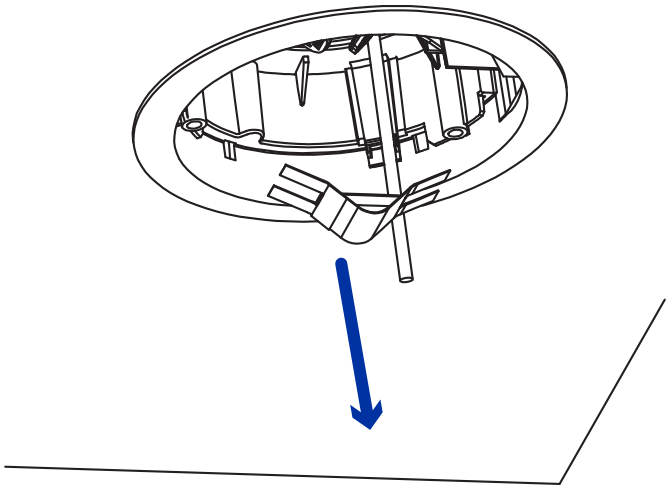
1. Use the in-ceiling mounting template to cut an entry hole for the camera into the ceiling.



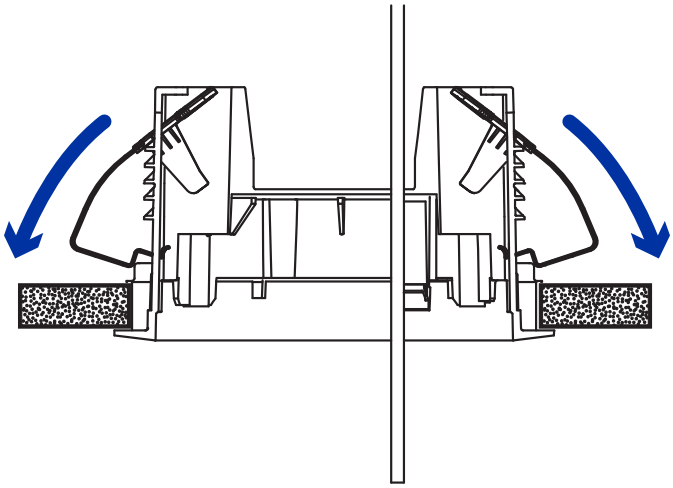
2. Insert the in-ceiling mounting adapter into the entry hole then pull the required cables through the adapter.



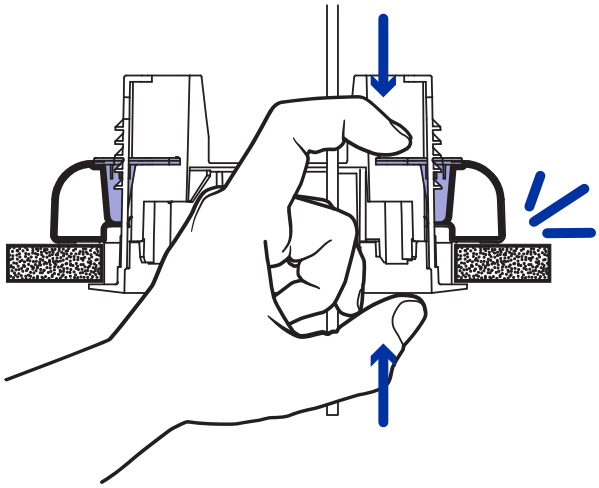
3. Pull off the clamp retainer holding the clamps in place.



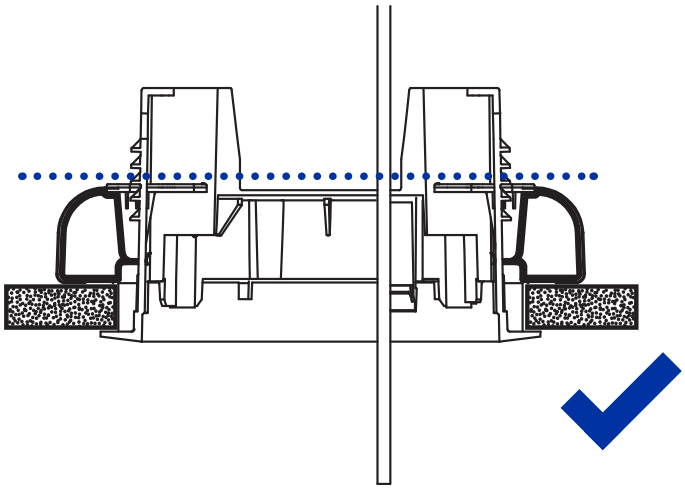
4. Push the orange clamp handles up so that the metal arms extend outside the mounting adapter.



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.



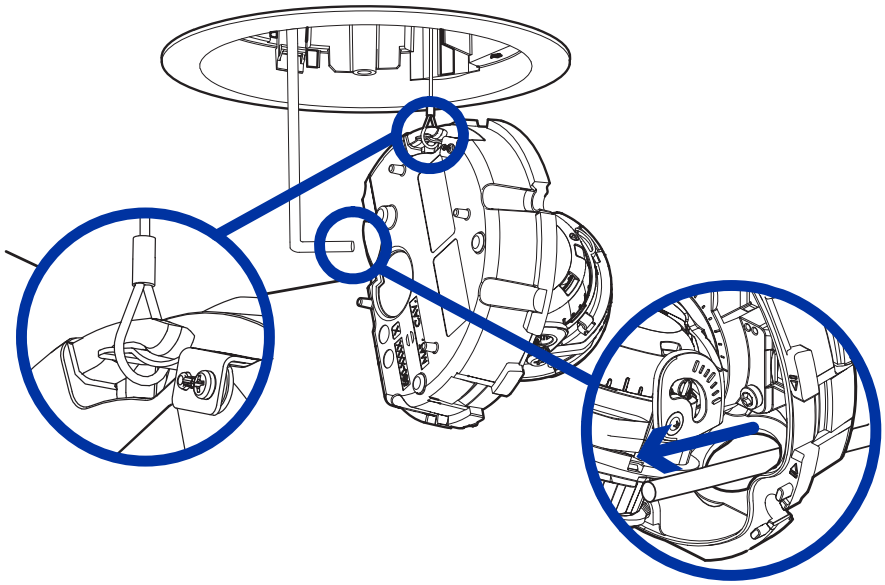
6. Repeat the previous step on the other side. Make sure both clamps are level and horizontal.



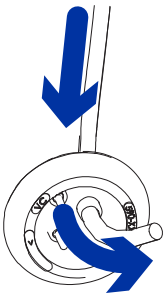
Installing the Camera Base to the Mounting Adapter

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

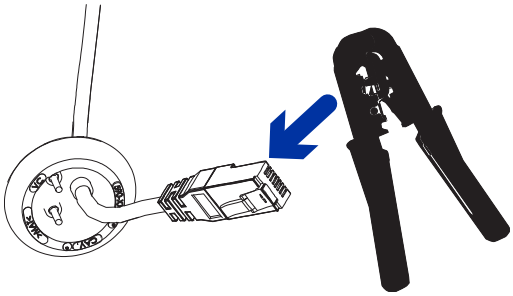
1. Attach the lanyard on the mounting adapter to the anchor on the camera base.



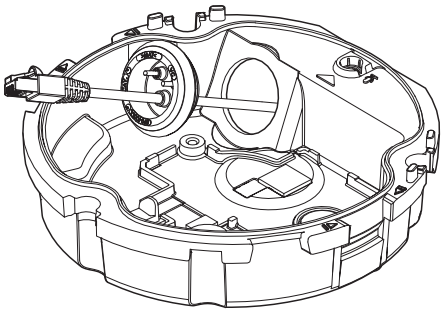
2. Pull the Ethernet cable through the cable entry hole on the camera base.
3. Push the Ethernet cable through the provided cable entry grommet.
   Always use the provided cable entry grommet to prevent dust and debris from entering the camera.

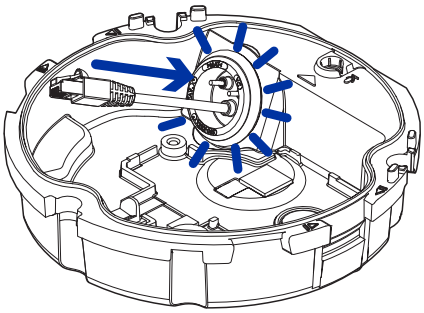


4. Crimp the Ethernet cable. Ensure that the orientation of the cable and grommet matches the one shown in the image.



5. Install the grommet into the cable entry hole on the camera base.



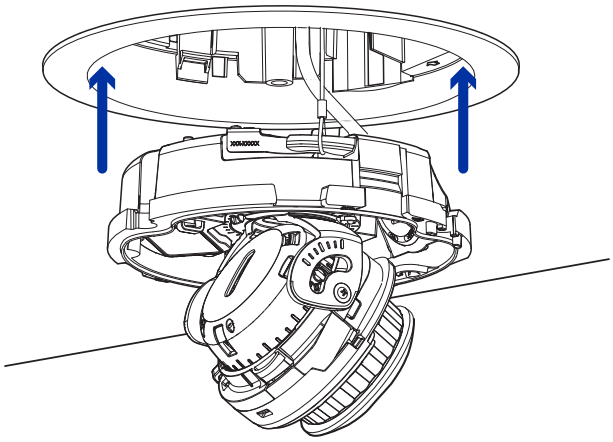


Make sure the grommet is securely seated on the inside and outside of the cable entry hole. Apply silicone sealant to seal any gaps in the grommet.

6. Connect the network cable to the camera's Ethernet port.

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

7. Align the arrow on the camera base to the arrow on the mounting adapter, then press the camera base into the mounting adapter. The camera base clicks into place and is held securely.



Pendant Mount Installation

Package Contents

Ensure the dome camera package contains the following:

- Avigilon H6SL Dome Camera (Indoor models)
  - T20 Pin-In star-shaped driver
  - Cable entry grommet
  - Provided accessories that are not required for this installation:
    - Mounting template sticker
    - 4 screws and anchors for solid walls
    - Surface mount adapter
    - Side conduit cover
- Avigilon H6SL Dome Camera (Environmental models)
  - T20 Pin-In star-shaped driver
  - Provided accessories that are not required for this installation:
    - Mounting template sticker
    - 4 screws and anchors for solid walls
    - Surface mount adapter
    - Side conduit cover
    - 1/2" Side conduit plate

Note: The NPT pipe (for pendant pipe mounted installations) and NPT-female to NPT-female adapter (for pendant pipe and wall mounted installations) are not supplied by Avigilon and should be sourced separately. However, if you are using the NPT adapter (H6SL-MT-NPTA1), the lock nut is included.

Ensure the NPT adapter (H6SL-MT-NPTA1) package contains the following:

- NPT adapter for the H6SL Dome Camera
- T20 Pin-In star-shaped driver
- Lock nut
- Teflon sealing tape

If you are also installing the pendant wall mount (WLMT-1021), ensure the package contains the following:

- Pendant wall mount

Installation Steps

Complete the following sections to install the device.

Mounting the Dome Camera to a Pipe

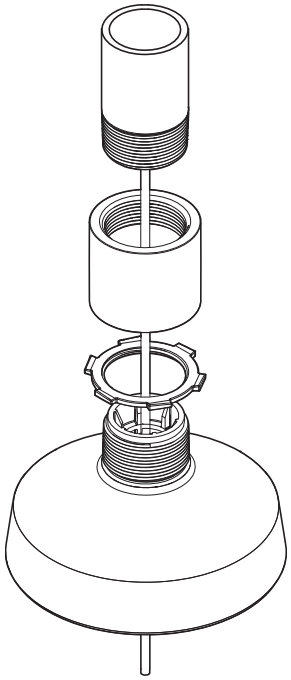
If the dome camera needs to be installed to a pipe for a pendant installation, you can discard the surface mount adapter that is provided with the dome camera and use the NPT adapter.

> **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 cables 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:

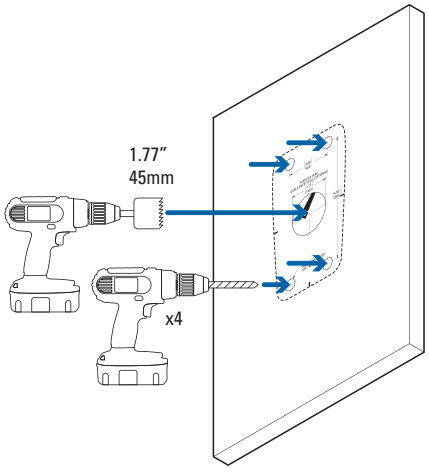
   a. NPT conduit pipe
   b. 1-1/2" NPT female to female pipe adapter
   c. Lock nut
   d. NPT adapter



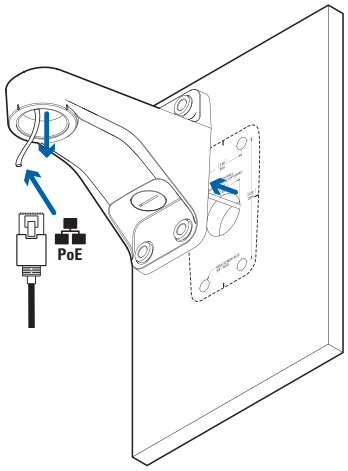
(Optional) Mounting the Dome Camera to the Pendant Wall Mount

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

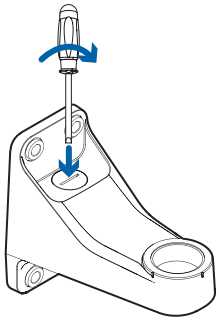
1. Determine where the cables will enter the pendant wall mount.
    - If the cables will be pulled from inside the mounting surface, use the cable entry hole at the rear of the pendant wall mount.
    - If the cables will be coming out of an external conduit pipe, use the 3/4” NPT pipe entry hole on 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.



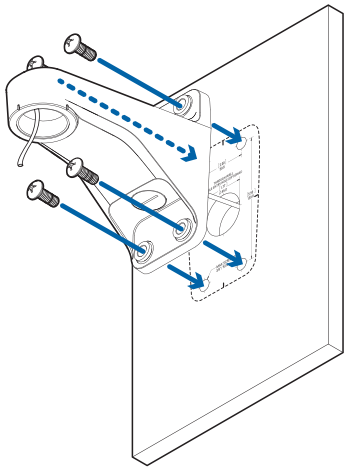
3. Ifusingrearcableentry,pullcablesthroughthependantwallmount.



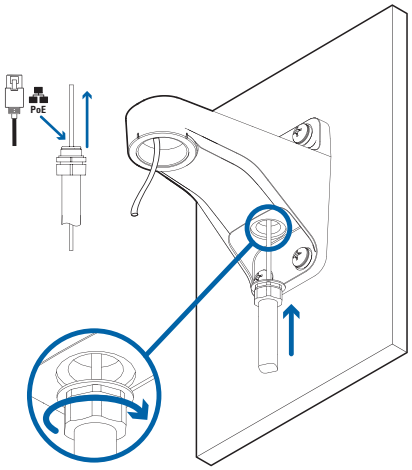
Or if using the pipe entry hole, remove the pipe entry hole cover on the underside of the pendant wall mount.



4. Attach the pendant wall mount to the wall using the provided screws.

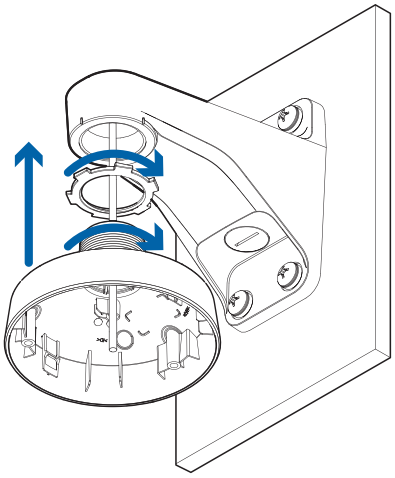


5. If you are using the pipe entry hole, apply thread seal tape to the pipe conduit and screw it into the pipe entry hole.



6. Loosely thread the lock nut onto the NPT adapter, then secure the NPT adapter into the pendant wall

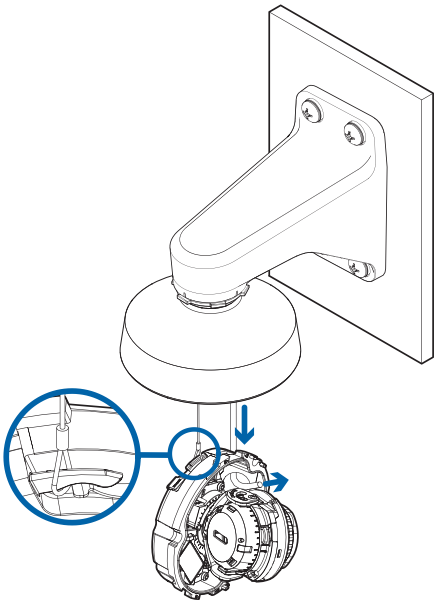
mount.



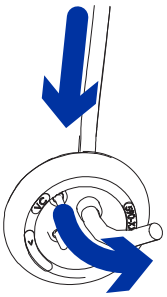
Installing the Camera Base to the Mounting Adapter

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

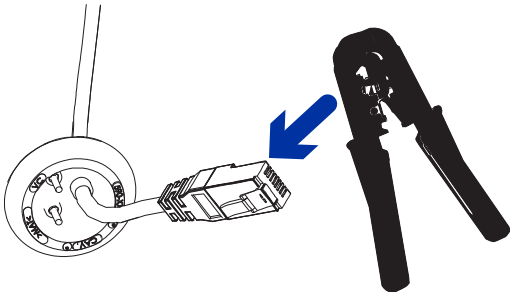
1. Attach the lanyard on the mounting adapter to the anchor on the camera base.



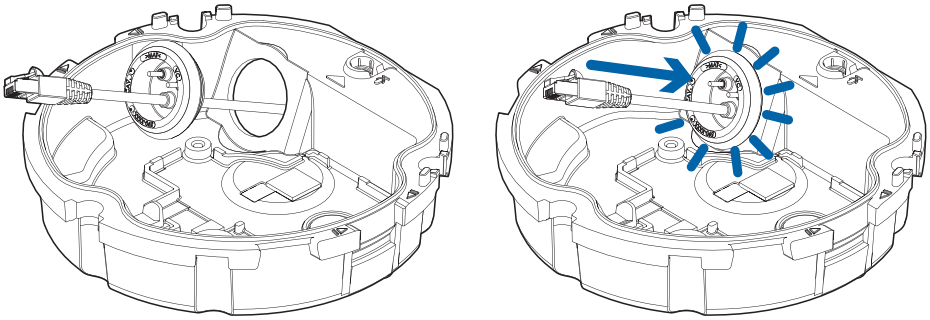
2. Pull the Ethernet cable through the cable entry hole on the camera base.
3. Push the Ethernet cable through the provided cable entry grommet.
   Always use the provided cable entry grommet to prevent dust and debris from entering the camera.



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



5. Install the grommet into the cable entry hole on the camera base.

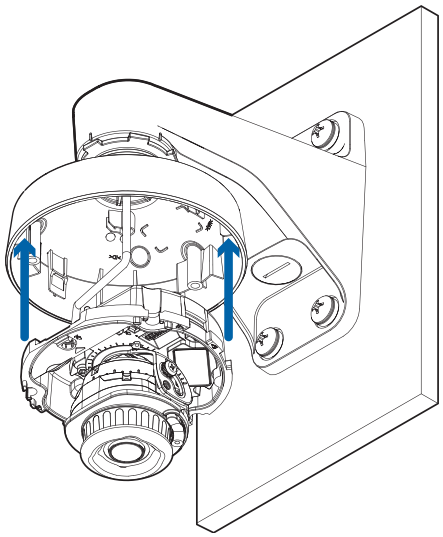


Make sure the grommet is securely seated on the inside and outside of the cable entry hole. Apply silicone sealant to seal any gaps in the grommet.

6. Connect the network cable to the camera's Ethernet port.

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

7. Align the arrow on the camera base to the arrow on the mounting adapter, then press the camera base into the mounting adapter. The camera base clicks into place and is held securely.



Connecting to the Camera

Initializing a Camera Username and Password

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

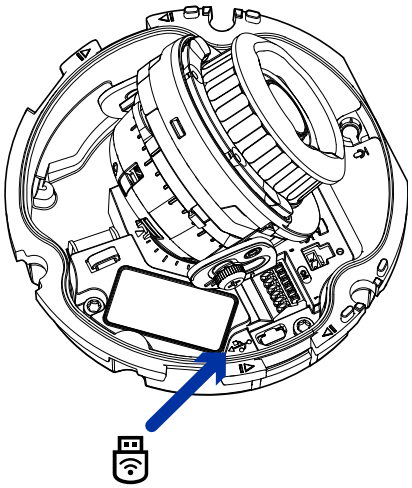
The first user can be created using any of the following methods:

- 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 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 device in the factory default state, the client software will ask you to create a new user. For more information, see the *Avigilon Unity Video Client User Guide* or 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.

(Optional) Using the USB Wi-Fi Adapter

If you have a USB Wi-Fi Adapter (USB-AC56-**-MSI), attach it to the camera's micro USB port to access the camera's mobile web interface.



After you connect to the Wi-Fi signal broadcast by the adapter, you can access the mobile web interface from any mobile device using the following address:

http://camera.lan

For more information about configuring the camera from the mobile web interface see *USB Wi-Fi Adapter System User Guide*.

Note: The camera will reserve the 10.11.22.32/28 subnet for internal use while the USB Wi-Fi Adapter is plugged in.

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 Wi-Fi Adapter* on the previous page.
- Device's web browser interface: http://*<camera IP address>*/.
- Network Video Management software application (for example, the Avigilon Unity Video software).

Accessing the Live Video Stream

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

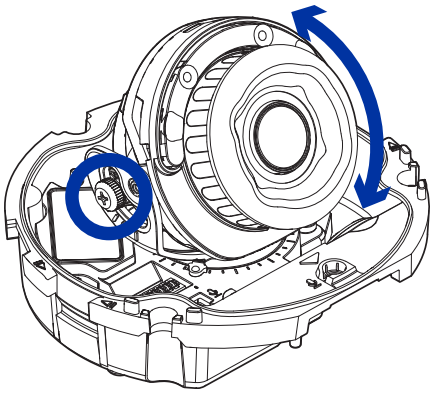
- The mobile web interface using the USB WiFi Adapter. For more information, see *(Optional) Using the USB Wi-Fi Adapter* on page 39.
- Web browser interface: http://*< camera IP address>/*.
- Network Video Management software application (for example, the Avigilon Unity Video software).

Aiming the Dome Camera

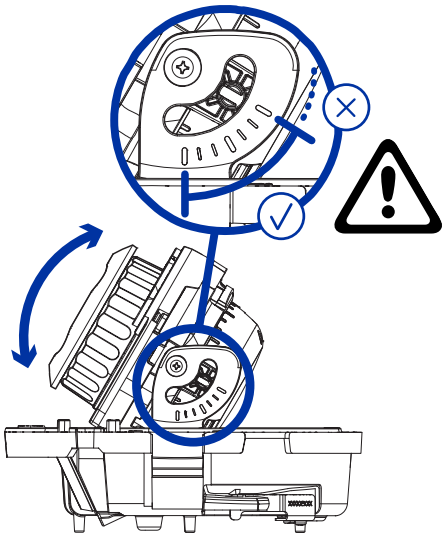
Reference the camera's live stream as you aim the camera.

1. Pan the lens until it is aimed in the correct direction.

   If the camera stops panning before it reaches its final destination, stop and pan the camera in the opposite direction. If the camera is unable to reach the desired position, check that no cables are being pinched while the camera turns.
2. Loosen the tilt lock thumb screw to tilt the lens.

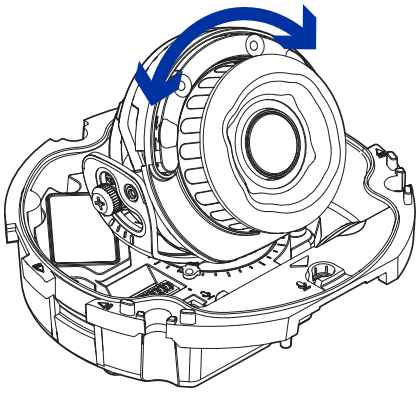


3. Adjust the tilt angle of the camera as needed.



   Avigilon recommends that you adjust the tilt angle within the range indicated by the markings for best results. Tilting the camera past these markings is possible, but may result in infrared reflections and viewing angle occlusions beyond an acceptable level.
4. Tighten the tilt lock screw to secure the dome camera’s position.

5. Rotate the azimuth control ring to set the image to the correct angle.



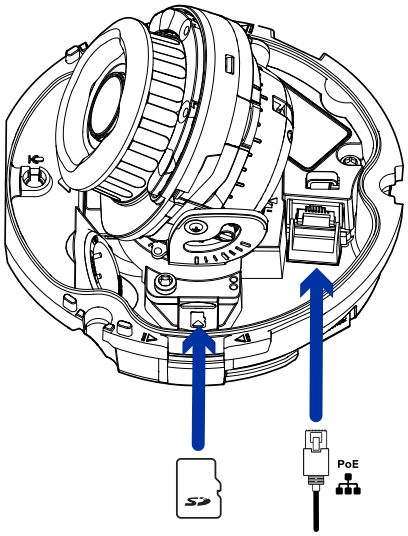
6. In the camera web browser interface or the Avigilon Control Center software, adjust the camera's Image and Display settings.

(Optional) Configuring microSD Card Storage

To use the camera's SD card storage feature, you must insert a microSD card into the card slot.

It is recommended that the microSD card have a write speed of class 10 or better. If the microSD card does not meet the recommended write speed, the recording performance may suffer and result in the loss of frames or footage.

1. Insert a microSD card into the camera. Do not force the microSD card into the camera or you may damage the card and the camera.

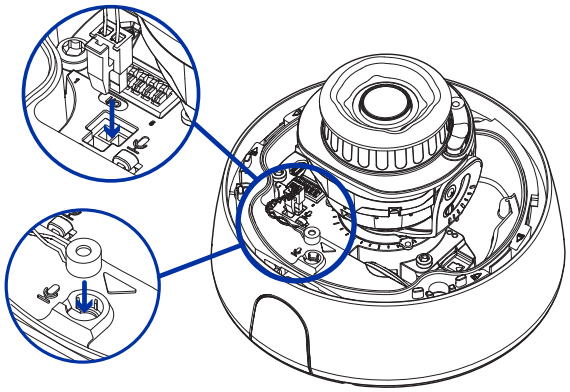


2. Access the camera's web interface to enable the onboard storage feature. For more information, see the *Avigilon High Definition H4 and H5 IP Camera Web Interface User Guide*.

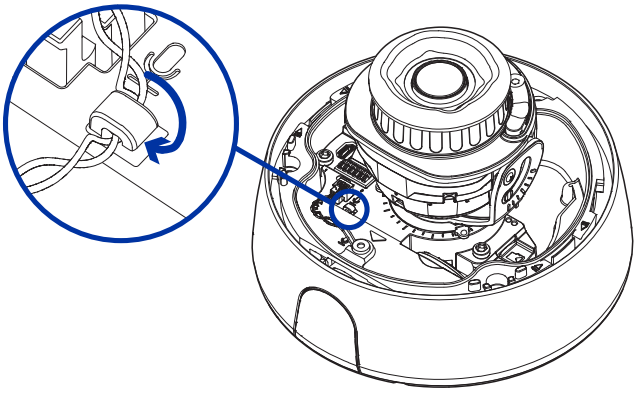
(Optional) Installing the Microphone Accessory

Note:
If you have a Microphone accessory (ACMICR-1001), attach it to the camera's microphone port before installing attaching the dome. This accessory is only compatible with Indoor models and should NOT be installed with an external audio device.

1. Seat the Microphone Accessory into the microphone slot located on the front of the camera base. Insert the Microphone Accessory's connector into the microphone port beside the I/O connector block.



1. Pull the Microphone Accessory's wire around the hook as shown to hold it in place.



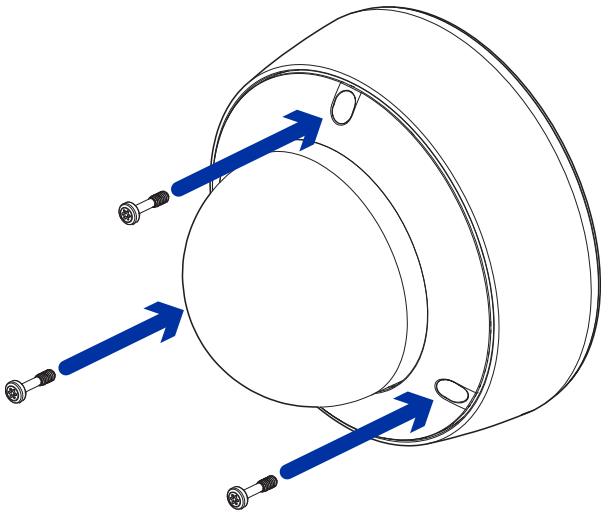
Installing the Dome Cover

Note:
Before installing the dome cover, we recommend that you first connect to the camera and adjust the aim, zoom, and focus so that the camera covers the required field of view. For more information, see:

- *Connecting to the Camera* on page 39
- *Aiming the Dome Camera* on page 42
- *Zooming and Focusing the Dome Camera* on the next page

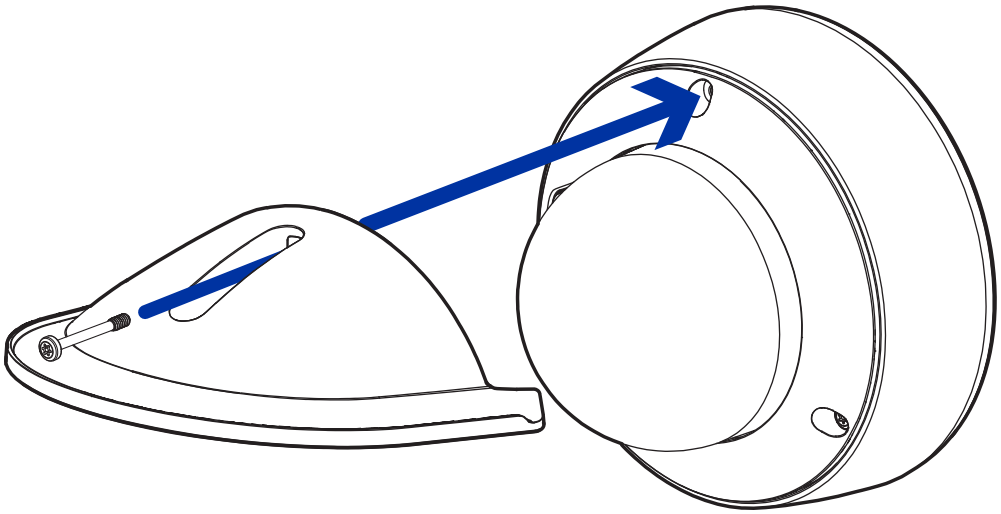
1. Align the dome cover screws with the screw holes in the camera base. Apply even pressure on the dome cover and tighten the screws with the star-shaped driver.

   If the optional Weather Shield accessory will be installed, only install the two screws closest to the mounting adapter's side conduit.



2. (Optional) If installing the Weather Shield accessory, align it and the provided screw with the center screw hole on the dome cover. If the captive screw is still in the center screw hole, unscrew it and discard it.

Place the shield on the dome and tighten the screw to secure the Weather Shield on to the camera.



3. Remove the protective cover on the outside of the dome bubble.

Zooming and Focusing the Dome Camera

Ensure this procedure is performed after the dome cover is installed so you can accommodate for the focus shift caused by the dome bubble.

Note: If an Environmental camera model is powered while the temperature is below -30°C (-22°F), the zoom and focus may be disabled for the first 45 minutes while the camera warms up.

- In the camera web browser interface, the Avigilon Unity Video or Avigilon Control Center software, use the camera's Image and Display settings to zoom and focus the camera.
    a. Use the zoom buttons to zoom the camera in or out.
    b. Click **Auto Focus** to focus the lens.
    c. Use the focus near and far buttons to manually adjust the focus.

Configuring the Camera

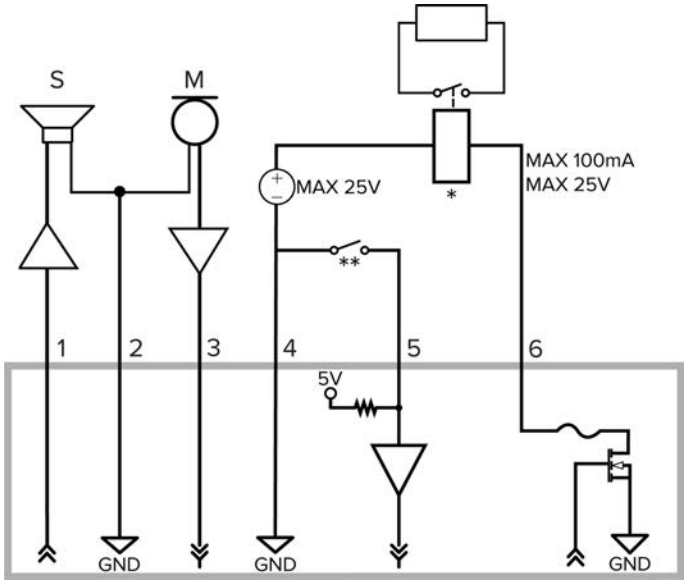
Once installed, use one of the following methods to configure the camera:

- 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 IP Camera Web Interface User Guide.*

Connecting to External Devices

External devices are connected to the camera through the power and I/O wires.
For the locations of the I/O connector block, see *Overview* on page 8.

The pinout for the I/O is shown in the following diagram.



1. Audio Output (line level)

   An external power amplifier should be used when connecting speakers and microphones, as shown in the diagram.
2. Audio Ground
3. Audio Input (line level)
4. Ground
5. Digital Input
6. Digital Output

- * – 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, a Unity Video Server, 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 IP Camera Web Interface User Guide*.

Troubleshooting Network Connections and LED Behavior

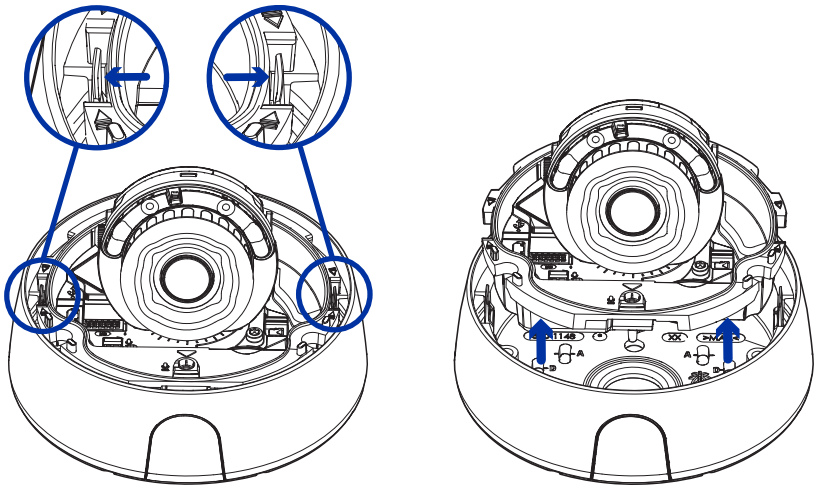
Note: For any of the below LED behaviors, ensure that the camera is getting power and is using a good network cable before trying another solution.

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.

Removing the Dome Camera from the Mounting Adapter

1. Loosen the star-shaped screws and remove the dome cover.
2. Locate the small arrows that point at the camera housing clips.
3. Push the camera housing clips outwards until the camera snaps out of place.

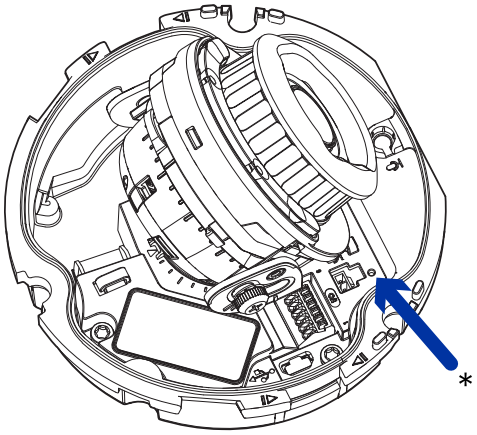


4. Lift the camera base out of the adapter.

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 device is powered on.
2. Using a straightened paperclip or similar tool, gently press and hold the firmware revert button.
3. Release the button after three seconds.

CAUTION – Do not apply excessive force. Inserting the tool too far may damage the camera.

For More Information

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

- *Avigilon Unity Video Client User Guide*
- *Avigilon Control Center Client User Guide*
- *Avigilon IP Camera Web Interface User Guide*
- *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.