Avigilon H6A and H6X Bullet Camera

Installation Guide

2.0C-H6A-BO1-IR	6.0C-H6A-BO1-IR	4.0C-H6X-BO1-IR
4.0C-H6A-BO1-IR	8.0C-H6A-BO1-IR	8.0C-H6X-BO1-IR

MOTOROLA SOLUTIONS

Legal Notices

Disclaimer

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.

> **CAUTION**
>
> 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.
- Any external power supply connected to this product may only be connected to another Avigilon product of the same model series. External power connections must be properly insulated.
- 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.

Avigilon Corporation hereby declares that the devices outlined in this user manual conform to FCC Part 15, subpart B, section 15.107(a), 15.107(d) and section 15.109(a).

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

This device complies with EN 60529 IP66, IP67 and IP68 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.

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, 25 W max. or Power over Ethernet (PoE), 25 W max.

For Korea

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

IR Safety Information

⚠ RISK GROUP 1 | NOTICE - IR emitted from this product.
GROUPE DE RISQUE 1 | AVIS - IR émis par ce produit.

Use appropriate shielding or eye protection.

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.
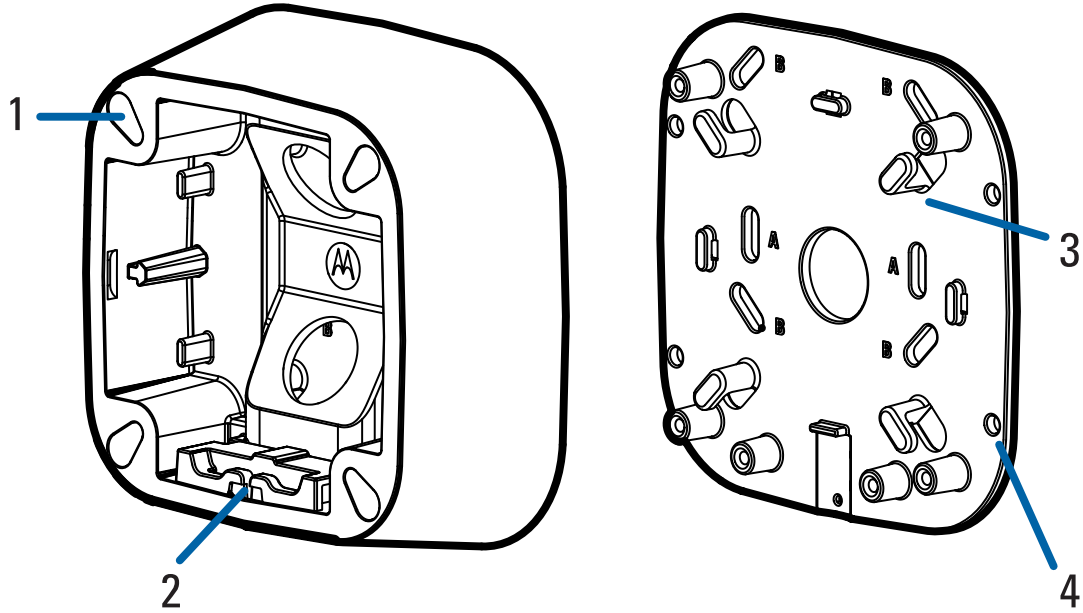
# Table of Contents

Overview

Junction Box View

1. **Camera Mounts**
   Points for installing the camera to the mounting bracket.
2. **Mounting hinge**
   Point to hold the camera to the junction box while connecting the required cables.
3. **Cable hooks**
   Points to wrap the excess cable length around.
4. **Mounting holes**
   Holes for securing the mounting bracket to the mounting surface.

Rear View
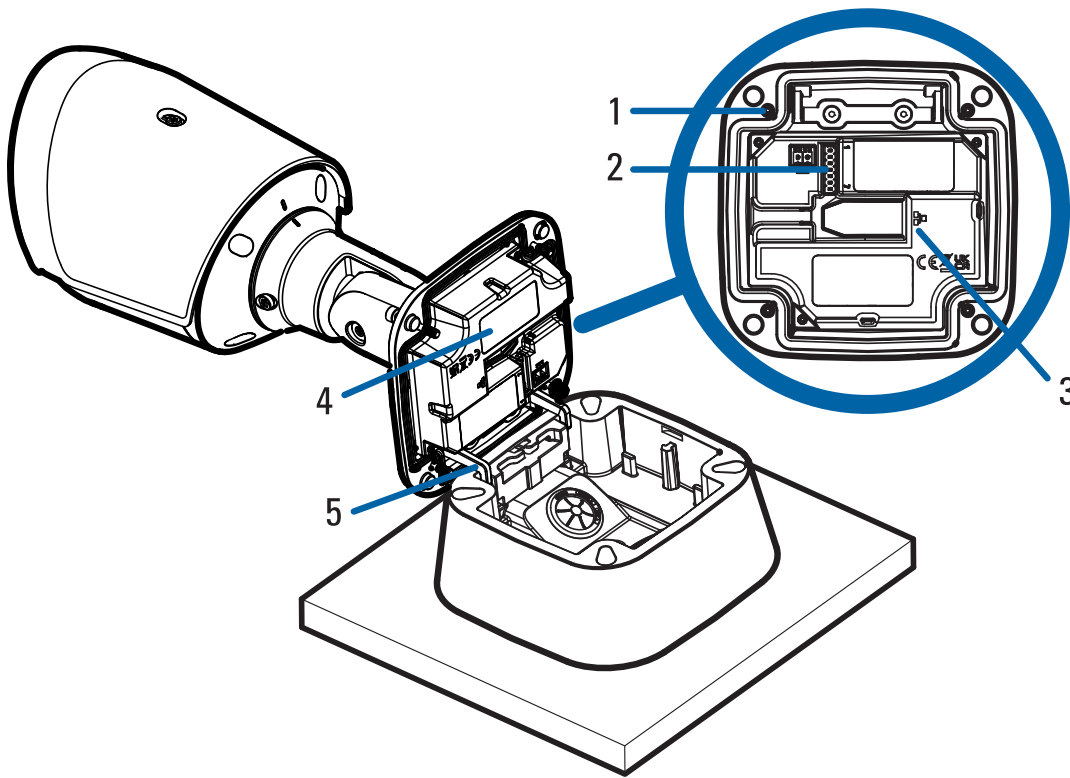
1. **Camera mounting screws**
   Screws for mounting the camera to the junction box.

2. **Power and I/O cable connectors**
   Cable connectors for connecting the camera cables to auxiliary power and I/O devices. For more information, see *Connecting to Power and External Devices* on page 20.

3. **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.

4. **Regulatory tag**
   Provides regulatory information.

5. **Mounting hooks**
   Hooks to attach the camera to the junction box while connecting the required cables.

Front View
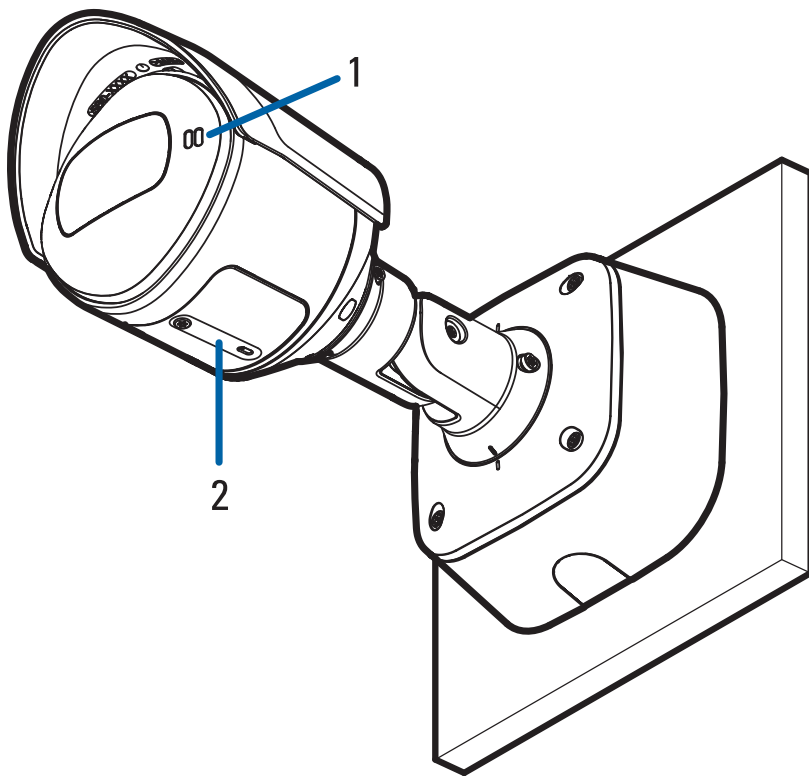
1. **Microphone**
   Built-in microphone records audio when enabled. For more information, see *(Optional) Enabling the Microphone* on page 18.

   > 📄 **NOTE**
   >
   > Microphone is not available on H6X camera models.

2. **Configuration panel cover**
   Covers the configuration panel. For more information on the configuration panel, see the *Configuration Panel View* on the next page.

Configuration Panel View
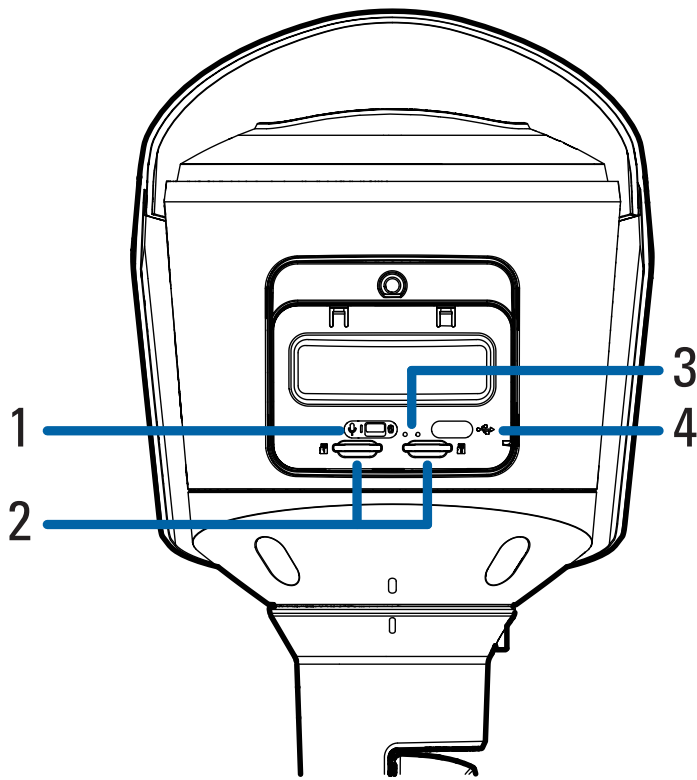
1. **Microphone switch**
   Switch to enable or disable the built-in microphone. For more information, see *(Optional) Enabling the Microphone* on page 18.

   > 📄 **NOTE**
   >
   > Microphone is not available on H6X camera models.

2. **microSD card slots (x2)**
   Accepts up to two microSD cards for onboard storage. Install microSD cards so the metal contacts are facing upward. For more information, see *(Optional) Configuring microSD Card Storage* on page 18.

3. **Connection status LED indicators**
   Provides information about device operation. For more information, see *Connection Status LED Indicator* on page 23.

4. **USB-C**
   Accepts a USB type-C to USB adapter. Only required when using the Avigilon USB Wi-Fi Adapter. For more information, see *(Optional) Using the USB Wi-Fi Adapter* on page 16.

Side View
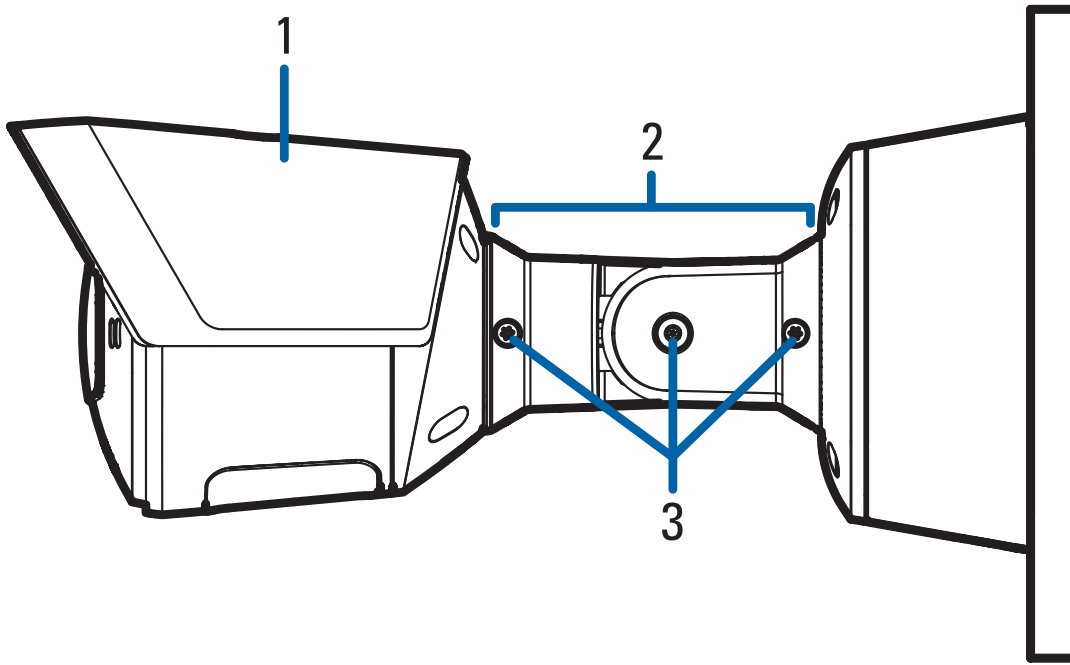
1. **Sun shroud**
   A cover to help protect the lens against glare from the sun.
2. **Mount arm**
   Adjustable mount arm for positioning the camera.
3. **Adjustment screws**
   Provides a locking mechanism for the mount arm.

Installation

Pre-Deployment In-Box Configuration

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

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

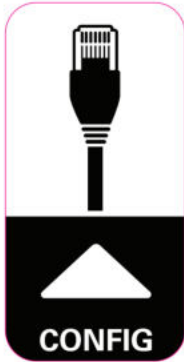2. Connect a network cable to the RJ45 plug on the configuration cable. The network cable must provide PoE power, IEEE 802.3af Class 3, to power the camera during configuration.

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. For more information about connecting to the camera, see *Assigning an IP Address* on page 16, and *Accessing the Live Video Stream* on page 17.

4. Once you have finished making configuration changes, unplug the network cable.

Camera Package Contents

- Avigilon H6A or H6X Bullet Camera
- Mounting template sticker
- 4 screws and anchors for solid walls
- T20 Pin-In star-shaped driver
- Junction Box
- Wall plate
- Aux terminal block
- I/O Terminal Block
- 1/2" conduit adapter
- Grommet piercing cap

Installation Steps

Complete the following sections to install the device.

Mounting and Aiming Video Analytics Cameras

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

- The camera should be installed above 2.74 m (9 feet).
- The camera should tilt downwards no more than 45 degrees.
- The camera image should be level with the horizon line.
- The camera should be mounted to a stable surface to minimize the physical movement of the camera after installation.

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

Installing the Junction Box

When installing the junction box, the cables for the camera can be accessed through either a hole in the wall or from a side conduit entry into the junction box. If your installation requires a side conduit to access the required cables, refer to *Accessing Cables through the Side Conduit* on page 10.

1. Use the mounting template to drill four mounting holes into the mounting surface.
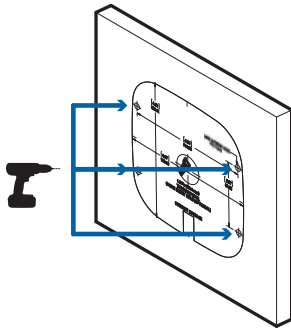
2. Drill the cable entry hole into the mounting surface then pull the required cables through the cable entry hole.
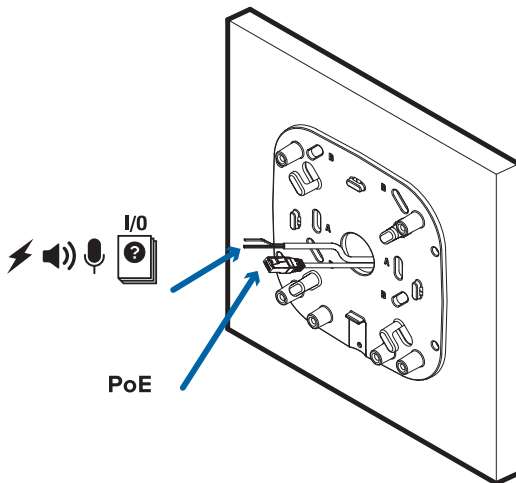
3. Fasten the junction box to the mounting surface and pull the cords through.
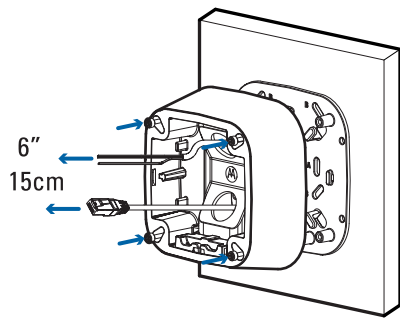
6″
15cm

> **NOTE**
>
> It is recommended that silicone sealant be applied around the edge of the junction box to prevent moisture from entering the mounting surface.

4. Hook the camera onto the junction box using the mounting hooks, and let the camera hang.

Accessing Cables through the Side Conduit

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

2. Secure the conduit pipe in place using a pipe clamp.

3. Pull the cables through the conduit and wrap the excess cable length around the cable hooks.
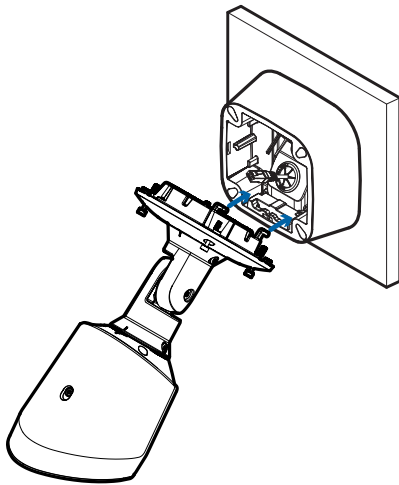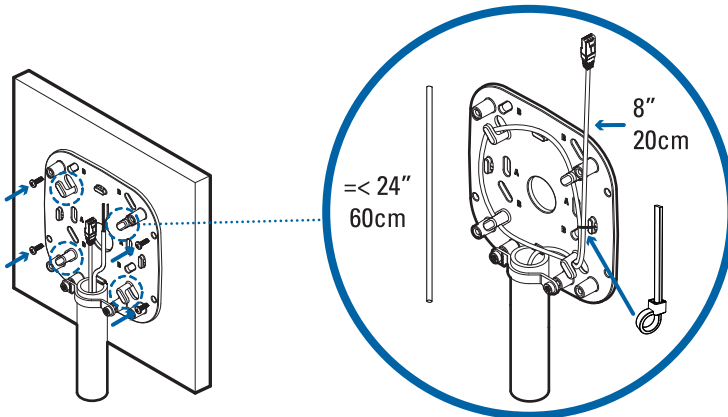
4. Fasten the cable with a zip tie.

5. Fasten the junction box to the mounting surface and pull the cords through.
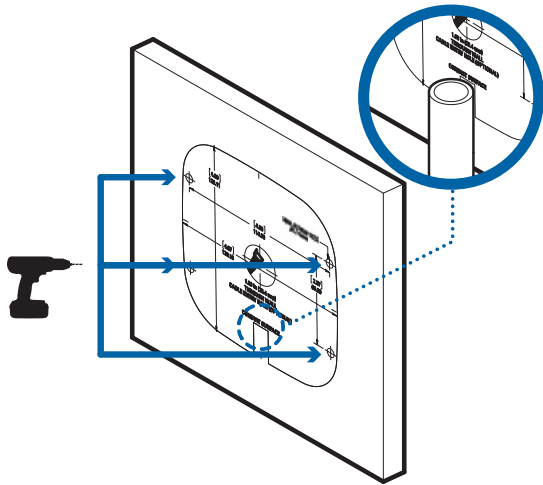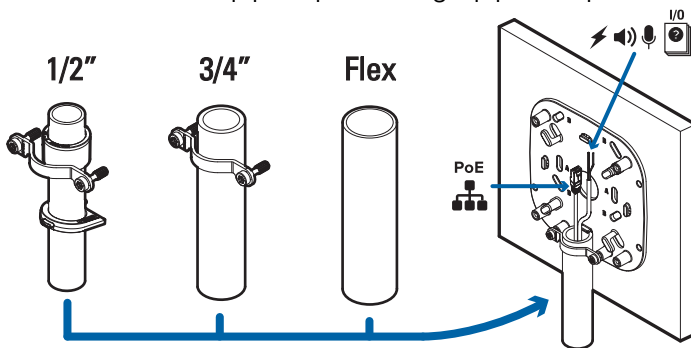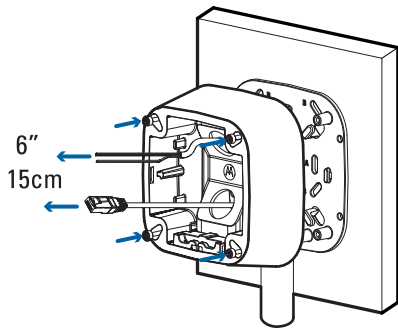
> **NOTE**
>
> It is recommended that silicone sealant be applied around the edge of the junction box to prevent moisture from entering the mounting surface.

6. Hook the camera onto the junction box using the mounting hooks, and let the camera hang.
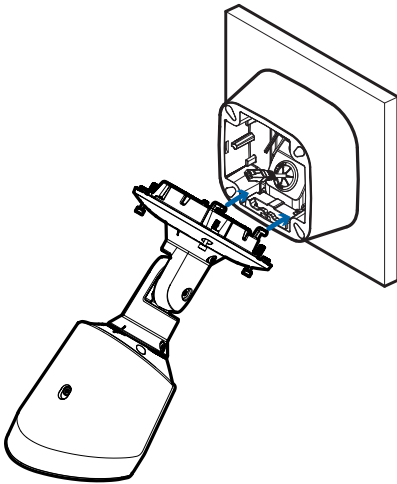
Connecting Cables

Before connecting any cables, ensure that the cable connections are properly protected from moisture and corrosion. Make sure the protective cable boot is installed over the Ethernet port to protect the connection from dust and moisture.

1. 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's digital I/O connector cables. For more information see _Connecting to Power and External Devices_ on page 20.

2. If an external microphone and/or speakers need to be connected to the camera, connect the devices to the camera's audio I/O cables. For more information, see _Connecting to Power and External Devices_ on page 20.

3. Pull the cables through the wall or side conduit.

4. Put the piercing cap through on the ethernet cable and push it through the grommet.
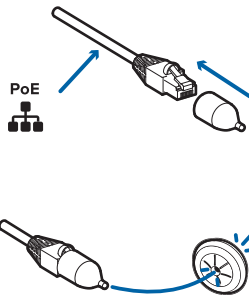
5. Thread the cable through the junction box and sit the grommet in the cable hole of the junction box.
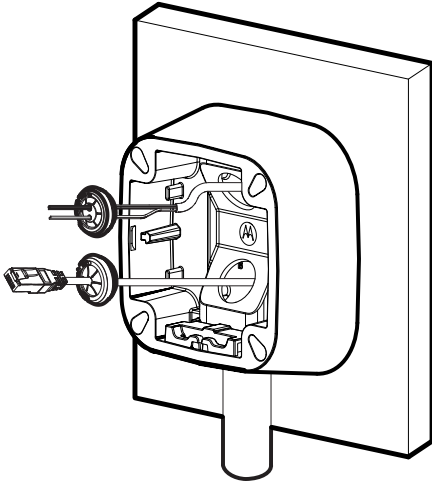
6. Connect a network cable to the Ethernet port (RJ-45 connector).
   The Link LED indicator will turn on once a network link has been established.
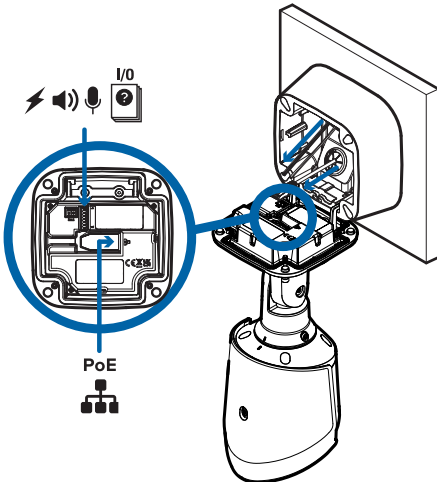
7. Connect power using one of the following methods:
   - Power over Ethernet (PoE) Class 3 or Class 4 — If PoE is available, the camera LEDs will turn on.
   - External Power — Connect an external 12 V DC to the terminal block.
8. Check that the Connection Status LED indicator indicates the correct state. For more information, see _Connection Status LED Indicator_ on page 23.

Mounting the Camera

Once all the cable connections have been made, secure the camera to the mounting bracket.

1. Tuck the extra lengths of cables into the cable entry hole.
2. Secure the camera to the mounting bracket:
    a. Raise the camera until it covers the mounting bracket.
    b. Use the camera mounting screws to fasten the camera to the bracket.
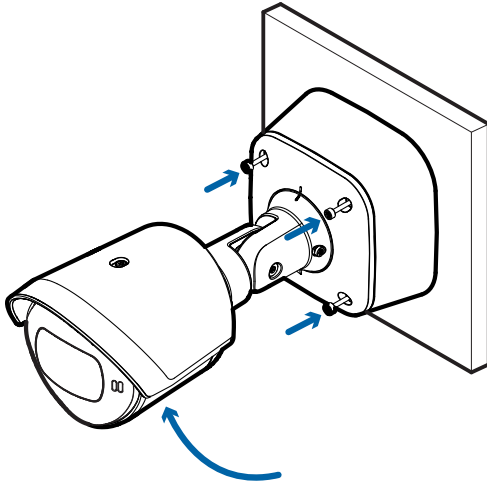
Aiming the Camera

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

1. To aim the camera, loosen the adjustment screws on the camera mount arm.
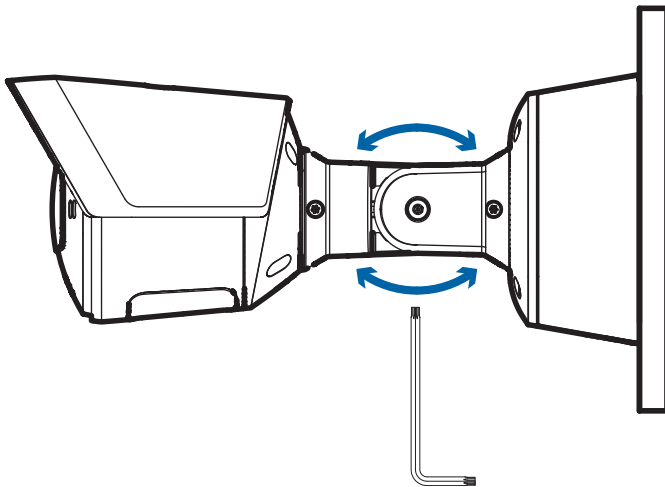
2. Rotate and move the camera and mount arm as required. Review the camera's live video stream to help aim the camera correctly.
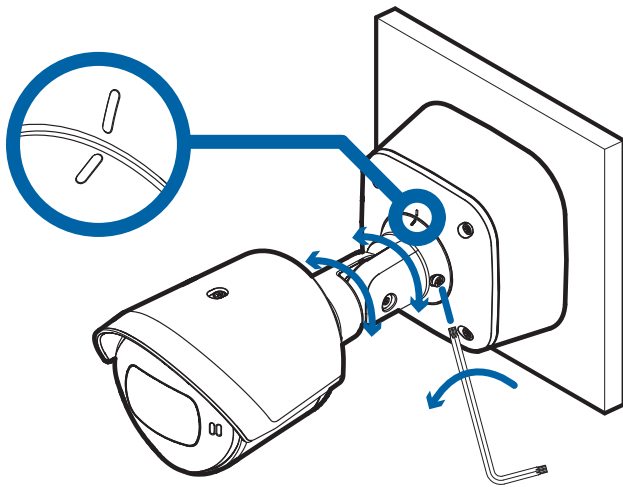
3. To use the camera in portrait mode instead of landscape mode:

    a. Use a T20 Pin-In star-shaped driver to unscrew and remove the sun shroud mount from the camera.

> 📄 **NOTE**
>
> The sun shroud should only be removed when the camera is installed indoors and space is limited.

    b. Rotate the camera.
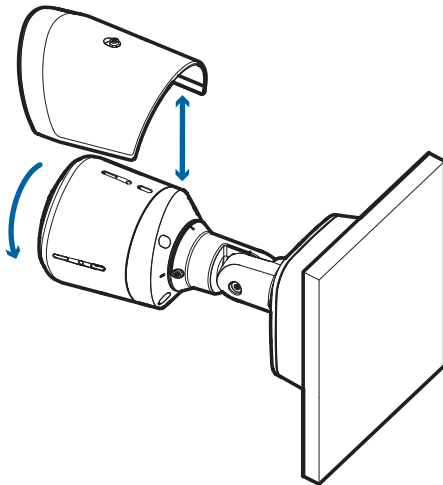
    c. Use a T20 Pin-In star-shaped driver to screw on the sun shroud mount.

4. Tighten the adjustment screws on the mount arm to secure the camera's position.
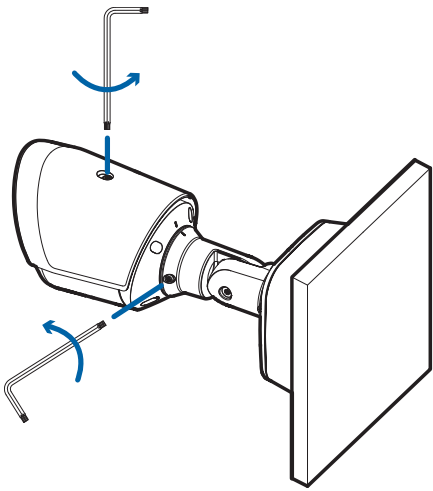
5. In the camera web browser interface, Avigilon Unity Video or the Avigilon Control Center software adjust the camera's Image and Display settings. You can set the zoom position, focus and change the image rotation.

Removing the Configuration Panel Cover

1. Use a T20 Pin-In star-shaped driver to unscrew the configuration panel cover.
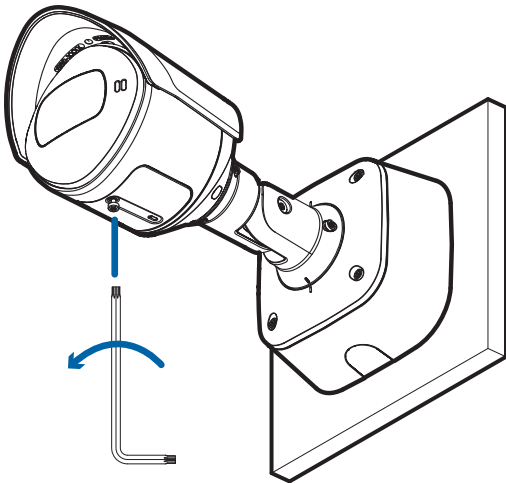
2. Remove the cover from the configuration panel.

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.*

- USB Wi-Fi Adapter: when connecting a camera in the factory default state, you will be redirected to the Create Administrator User page to create the first user. For more information, see *Avigilon USB Wi-Fi Adapter System User Guide.*

- Avigilon Unity Video or 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, USB Wifi Adapter, 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-NA-MSI or USB-AC56-EU-MSI or H4-AC-WIFI), attach it to the camera's USB-C 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 *Avigilon 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).
- ARP/Ping method. For more information, see *Setting the IP Address Using the ARP/Ping Method* on page 26.

> **NOTE**
>
> When you log in the first time, the camera will be in a factory default state and no password is required. You must create a user with **administrator** privileges before the device is operational. For more information, see *Initializing a Camera Username and Password* on page 15.

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 the previous page.
- Web browser interface: http://*< camera IP address>*/.
- Network Video Management software application (for example, the Avigilon Unity Video software).

> **NOTE**
>
> When you log in the first time, the camera will be in a factory default state and no password is required. You must create a user with **administrator** privileges before the device is operational. For more information, see *Initializing a Camera Username and Password* on page 15.

Zooming and Focusing the Camera

- In the camera web browser interface, Avigilon Unity Video or the 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.

(Optional) Enabling the Microphone

The H6A camera models feature an internal microphone, and include a switch to physically enable or disable the microphone. The microphone switch is set to OFF by default.

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

1. Locate the microphone switch on the camera assembly.
2. Slide the switch from the default OFF position to ON to enable the microphone.
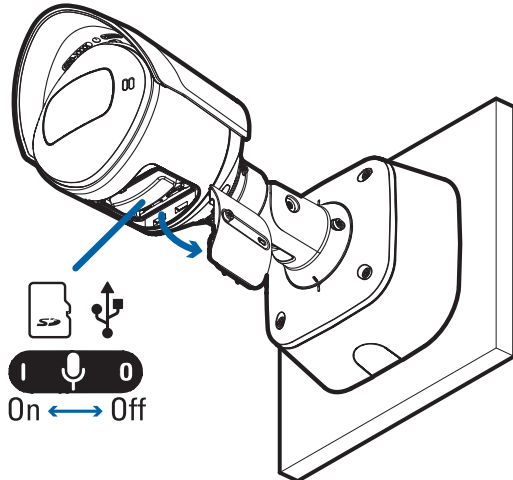
(Optional) Configuring the Microphone

You can configure the microphone or line-level audio input from the camera web interface or in the Unity Video or ACC Client software.

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

    For more information, see the *Camera Web Interface User Guide*.

- In the Unity Video or ACC Client software, the microphones are configured in the Microphone dialog box that can be accessed from the camera's Setup tab. You can adjust the microphone volume by changing the gain and link the audio to other cameras in the site.
    - **External Input** — configures the gain for any line level audio input that is connected to the audio input connector on the I/O terminal block.
    - **Internal Mic** — configures the gain for the microphone that is built into the camera.

    For more information, see the *Avigilon Unity Video Client User Guide* or the *Avigilon Control Center Client User Guide*.

(Optional) Configuring microSD Card Storage

To use the camera's onboard storage feature, you must insert 1 microSD card into a microSD card slot. While there are two microSD slots, currently the camera only supports a single microSD card in either slot for onboard storage. For the location of the microSD card slots, see *Camera Module* on page 1.

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.

> ⚠️ **CAUTION**
>
> Do not force the microSD card into the camera or you may damage the card and the camera. The microSD 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 IP Camera Web Interface User Guide*.

Configuring the Camera

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

- If you have the USB Wifi Adapter, you can access the mobile web interface to configure the camera. For more information, see *USB Wi-Fi Adapter System User Guide*.
- 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 the Avigilon Unity Video system, you can use the client software to configure the camera. For more information, see the *Avigilon Unity Video 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*.

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*
- *Web Interface User Guide — Avigilon High Definition H6A and H6X IP Cameras*
- *USB Wi-Fi Adapter System 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.

Connecting to Power and External Devices

If PoE is not available, the camera may be powered through the auxiliary power cable using 12 V DC. The power consumption information is listed in the product specifications.

> **IMPORTANT**
>
> 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 V DC, 13 W min. or PoE rated 48 V DC, 13 W min. The camera must not be powered with 24 VAC aux power or the camera could be physically damaged.

External devices are connected to the camera through pluggable terminal blocks. For the locations of the terminals, see _Overview_ on page 1. The pinout for the I/O terminal block is shown in the following diagram:
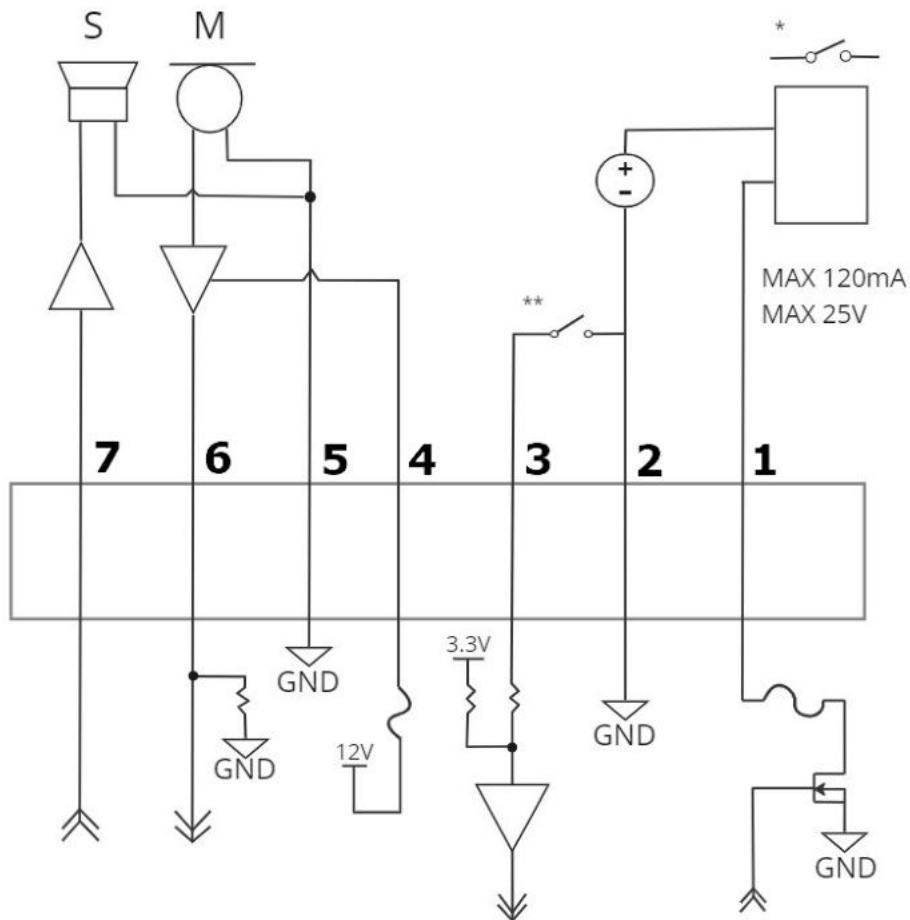
1. Digital Output
2. Ground
3. Digital Input
4. Voltage Output (Max 50mA)
5. Audio Ground
6. Audio Input (line level)
7. Audio Output (line level)

* — Relay
** — Switch
M — Microphone
S — Speaker

External Power 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. In the event that the camera loses power from the preferred Aux power supply it can transition to drawing power from the PoE PSE device.

H6A and H6X camera models respond differently if they lose power from the preferred Aux power supply. If an H6X camera loses power from the preferred Aux power supply, the camera is capable of a Seamless Failover, meaning the H6X can switch to drawing power from the PoE PSE device without interruption. Conversely, the H6A camera models experiences a Non-Seamless Failover, meaning the camera may power off while waiting to transition to PoE power.

Non-Seamless Failover for H6A models

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.

> **NOTE**
>
> Ensure that sufficient power is manually reserved on the PSE, as the camera will not request PoE power until the camera loses Aux power.

Seamless Failover for H6X Models

Seamless failover allows the camera to transition between PoE and auxiliary power sources without any interruption of camera operation or video recording. This is mainly useful if you want redundant power sources so that backup power will be available if one power source goes down.

NOTE

Seamless failover is only guaranteed when PoE Class 4 (25.5W) "full power" is available on the PoE port. Auxiliary (Aux) power is always assumed to be "full power," meaning that there is enough power available for all possible camera functions. PoE, on the other hand, has many different power classes and the product's functionality depends on the PoE power class that is available.

If the PSE demotes the camera to PoE Class 3 (13W), the camera will boot and display an "insufficient power" message. Therefore, if the camera is connected to a Class 3 PoE source while running on Aux power and using full IR power and the Aux power source is disconnected, the camera will most likely overload the PSE and reboot. However, if the camerais not using IR LEDs and Aux power is removed, the Class 3 PoE power source would be adequate to guarantee seamless failover.

IMPORTANT

There is a downside to having seamless failover if you aren't using this functionality and are connecting your cameras to PoE-enabled switches while running the camera on Aux power. Since the PoE connection remains active when running on Aux power, if the camera is connected to a PoE-enabled port on a switch, the switch by default will allocate some of its overall power budget to that port.

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.
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	Perform a factory reset of the camera using the physical firmware

LED Behavior	Suggested Solution
described above	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:

For models that feature an SD card slot, resetting the camera will not affect video that has been recorded to the SD card.
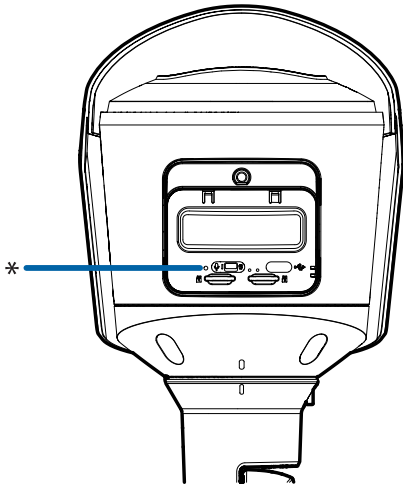

Figure 1: The firmware revert button in the Configuration Panel.

1. Ensure the camera is powered on.
2. Unscrew the configuration panel cover on the bottom of the camera.
3. Using a straightened paperclip or similar tool, gently press and hold the firmware revert button for 3 seconds.
4. Screw the configuration panel cover back into place.

> ⚠️ **CAUTION**
>
> Do not apply excessive force. Inserting the tool too far may damage the camera.

Setting the IP Address Using the ARP/Ping Method

> **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 device's web browser interface. For more information, see the *Avigilon IP Camera Web Interface User Guide*.

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

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>*`: ...`

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.