AXIS Q1614–E Network Camera

Installation Guide

Legal Considerations

Video and audio surveillance can be regulated by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

This product includes one (1) H.264 decoder license and one (1) AAC decoder license. To purchase further licenses, contact your reseller.

Liability

Every care has been taken in the preparation of this document. Please inform your local Axis office of any inaccuracies or omissions. Axis Communications AB cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Axis Communications AB makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Axis Communications AB shall not be liable nor responsible for incidental or consequential damages in connection with the furnishing, performance or use of this material. This product is only to be used for its intended purpose.

Intellectual Property Rights

Axis AB has intellectual property rights relating to technology embodied in the product described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the patents listed at *www.axis.com/patent.htm* and one or more additional patents or pending patent applications in the US and other countries.

This product contains licensed third-party software. See the menu item "About" in the product's user interface for more information.

This product contains source code copyright Apple Computer, Inc., under the terms of Apple Public Source License 2.0 (see *www.opensource.apple.com/apsl*). The source code is available from *https://developer.apple.com/bonjour/*

Equipment Modifications

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

Trademark Acknowledgments

AXIS COMMUNICATIONS, AXIS, ETRAX, ARTPEC and VAPIX are registered trademarks or trademark applications of Axis AB in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies.

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SD, SDHC and SDXC are trademarks or registered trademarks of SD-3C, LLC in the United States, other countries or both. Also, miniSD, microSD, miniSDHC, microSDHC, microSDXC are all trademarks or registered trademarks of SD-3C, LLC in the United States, other countries or both.

Support

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and software updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrase
- report problems to Axis support staff by logging in to your private support area
- chat with Axis support staff
- visit Axis Support at *www.axis.com/techsup/*

Learn More!

Visit Axis learning center *www.axis.com/academy/* for useful trainings, webinars, tutorials and guides.

Regulatory Information

Europe

$C \epsilon$ This product complies with the applicable CE marking directives and harmonized standards:

- Electromagnetic Compatibility (EMC) Directive 2004/108/EC. See *Electromagnetic Compatibility (EMC) on page 2* .
- Low Voltage (LVD) Directive 2006/95/EC. See *Safety on page 3* .
- Restrictions of Hazardous Substances (RoHS) Directive 2011/65/EU. See *Disposal and Recycling on page 3* .

A copy of the original declaration of conformity may be obtained from Axis Communications AB. See *Contact Information on page 3* .

Electromagnetic Compatibility (EMC)

This equipment has been designed and tested to fulfill applicable standards for:

- Radio frequency emission when installed according to the instructions and used in its intended environment.
- Immunity to electrical and electromagnetic phenomena when installed according to the instructions and used in its intended environment.

USA

Using an unshielded network cable (UTP) – This equipment has been tested using an unshielded network cable (UTP) 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.

Using a shielded network cable (STP) – This equipment has also been tested using a shielded network cable (STP) 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.

To be used in a residential area or a demanding electrical environment, the product shall be connected using a shielded network cable (STP) that is properly grounded.

Canada
This digital apparatus complies with CAN ICES-3 (Class B). The product shall be connected using a shielded network cable (STP) that is properly grounded. Cet appareil numérique est conforme à la norme CAN NMB-3 (classe B). Le produit doit être connecté à l'aide d'un câble réseau blindé (STP) qui est correctement mis à la terre.

Europe
This digital equipment fulfills the requirements for RF emission according to the Class B limit of EN 55022. The product shall be connected using a shielded network cable (STP) that is properly grounded.

This product fulfills the requirements for emission and immunity according to EN 50121-4 and IEC 62236-4 railway applications.

This product fulfills the requirements for immunity according to EN 61000-6-1 residential, commercial and light-industrial environments.

This product fulfills the requirements for immunity according to EN 61000-6-2 industrial environments.

This product fulfills the requirements for immunity according to EN 55024 office and commercial environments

Australia/New Zealand
This digital equipment fulfills the requirements for RF emission according to the Class B limit of AS/NZS CISPR 22. The product shall be connected using a shielded network cable (STP) that is properly grounded.

Japan
この装置は、クラスB 情報技術装置です。この装置は、家庭環境で使用することを目 的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、 受信障害を引き起こすことがあります。 取扱説明書に従って正しい取り扱いをして下さい。 本製品は、シールドネットワークケーブル(STP)を使用して接続してください。また適切に接地してください。

Korea
이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다. 적절히 접지된 STP (shielded twisted pair) 케이블을 사용하여 제품을 연결 하십시오.

Safety
This product complies with IEC/EN/UL 60950-1 and IEC/EN/UL 60950-22, Safety of Information Technology Equipment. The product shall be grounded either through a shielded network cable (STP) or other appropriate method.

Disposal and Recycling
When this product has reached the end of its useful life, dispose of it according to local laws and regulations. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. In accordance with local legislation, penalties may be applicable for incorrect disposal of this waste.

Europe
This symbol means that the product shall not be disposed of together with household or commercial waste. Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) is applicable in the European Union member states. To prevent potential harm to human health and the environment, the product must be disposed of in an approved and environmentally safe recycling process. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. Businesses should contact the product supplier for information about how to dispose of this product correctly.

This product complies with the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

China
This product complies with the requirements of the legislative act Administration on the Control of Pollution Caused by Electronic Information Products (ACPEIP).

Contact Information
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Sweden

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Fax: +46 46 13 61 30

www.axis.com

Safety Information

Read through this Installation Guide carefully before installing the product. Keep the Installation Guide for future reference.

Hazard Levels

⚠DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a situation which, if not avoided, could result in damage to property.

Other Message Levels

Important	Indicates significant information which is essential for the product to function correctly.
Note	Indicates useful information which helps in getting the most out of the product.

Safety Instructions

⚠WARNING

- The Axis product shall be installed by a trained professional.

NOTICE

- The Axis product shall be used in compliance with local laws and regulations.
- Store the Axis product in a dry and ventilated environment.
- Avoid exposing the Axis product to shocks or heavy pressure.
- Do not install the product on unstable brackets, surfaces or walls.
- Use only applicable tools when installing the Axis product. Using excessive force with power tools could cause damage to the product.
- Do not use chemicals, caustic agents, or aerosol cleaners.
- Use a clean cloth dampened with pure water for cleaning.
- Use only accessories that comply with technical specification of the product. These can be provided by Axis or a third party.
- Use only spare parts provided by or recommended by Axis.
- Do not attempt to repair the product by yourself. Contact Axis support or your Axis reseller for service matters.

Transportation

NOTICE

- When transporting the Axis product, use the original packaging or equivalent to prevent damage to the product.

Battery

The Axis product uses a 3.0 V CR2032 lithium battery as the power supply for its internal real-time clock (RTC). Under normal conditions this battery will last for a minimum of five years.

Low battery power affects the operation of the RTC, causing it to reset at every power-up. When the battery needs replacing, a log message will appear in the product's server report. For more information about the server report, see the product´s setup pages or contact Axis support.

The battery should not be replaced unless required, but if the battery does need replacing, contact Axis support at *www.axis.com/techsup* for assistance.

⚠WARNING

- Risk of explosion if the battery is incorrectly replaced.

- Replace only with an identical battery or a battery which is recommended by Axis.

- Dispose of used batteries according to local regulations or the battery manufacturer's instructions.

Installation Guide

This Installation Guide provides instructions for installing AXIS Q1614-E Network Camera on your network. For other aspects of using the product, see the User Manual available at *www.axis.com*

Installation Steps

1. Make sure the package contents, tools and other materials necessary for the installation are in order. See *page 9* .
2. Study the hardware overview. See *page 10*.
3. Study the specifications. See *page 17*.
4. Install the hardware. See *page 20*.
5. Access the product. See *page 25*.
6. Set the focus. See *page 24*.

Package Contents

- AXIS Q1614–E Network Camera
- 4–pin I/O connector block for connecting external devices
- Wall bracket
- Torx screwdriver T20
- Printed materials
    - Installation Guide (this document)
    - Extra serial number label (2x)
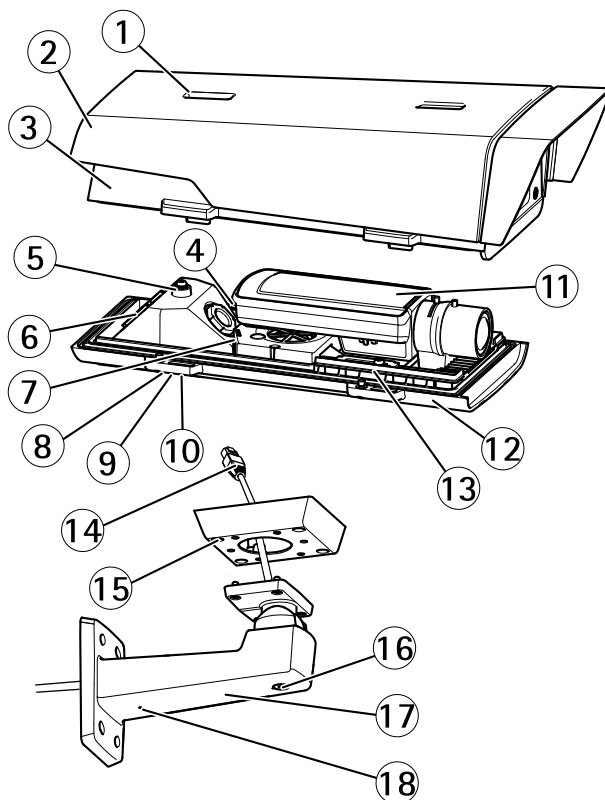   - AVHS Authentication key

Hardware Overview
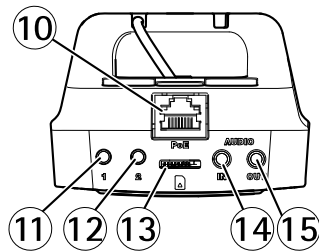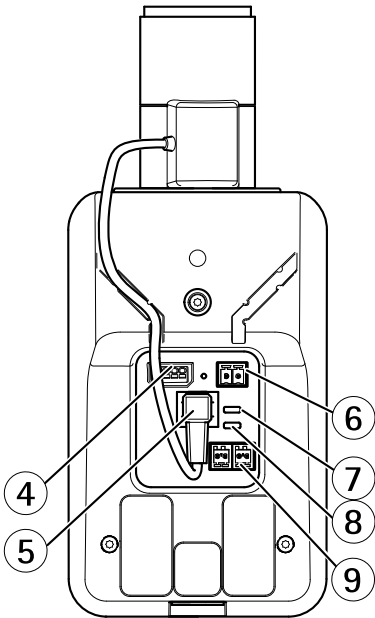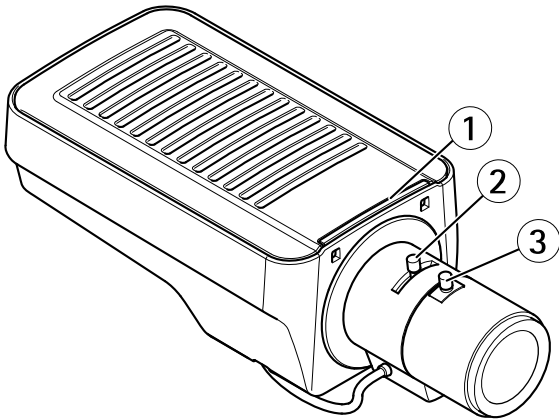
1   *Status LED indicator*
2   *Zoom puller*
3   *Focus puller*

4   *I/O connector*

5   *Iris connector*

6   *Power connector**

7   *Power LED indicator*

8   *Network LED indicator*

9   *RS485/RS422 connector*

10   *Network connector (PoE)*

11   *Control button (1)*

12   *Function button (2)*

13   *microSD Card slot*

14   *Audio in*

15   *Audio out*

* Not used for outdoor variants.

1   Sunshield adjustment
2   Sunshield
3   Top cover
4   Network connector (PoE IN)
5   Safety wire tab
6   Cable hole
7   Network connector (PoE OUT, connected at delivery)
8   Bottom cover screws (4x)
9   Cable cover
10 Cable cover screws (2x)
11 Network camera
12 Bottom cover
13 Heaters
14 Bracket adapter
15 Bracket screws (4x)
16 Bracket adjustment screw

17   Wall bracket
18   Alternative cable hole

LED Indicators

Note

- The Status LED can be configured to be unlit during normal operation. To configure, go to **Setup > System Options > Ports & Devices > LED**. See the online help for more information.

- The Status LED can be configured to flash while an event is active.

- The Status LED can be configured to flash for identifying the unit. Go to **Setup > System Options > Maintenance** .

Status LED	Indication
Green	Steady green for normal operation.
Amber	Steady during startup and when restoring settings.
Red	Flashes red for firmware upgrade failure.

Note

The Network LED can be disabled so that it does not flash when there is network traffic. To configure, go to **Setup > System Options > Ports & Devices > LED**. See the online help for more information.

Network LED	Indication
Green	Steady for connection to a 100 Mbit/s network. Flashes for network activity.
Amber	Steady for connection to a 10 Mbit/s network. Flashes for network activity.
Unlit	No network connection.

Note

The Power LED can be configured to be unlit during normal operation. To configure, go to **Setup > System Options > Ports & Devices > LED**. See the online help for more information.

Power LED	Indication
Green	Normal operation.
Amber	Flashes green/amber during firmware upgrade.

Status LED Behavior for Focus Assistant

Color	Indication
Green	Focus Assistant is enabled The lens is optimally adjusted
Amber	The camera has been moved, or an object has been placed in front of the lens. Exit and restart the Focus Assistant. The lens is less optimally adjusted.
Red	The camera has been moved, or an object has been placed in front of the lens. Exit and restart the Focus Assistant. The lens is poorly adjusted.

Buzzer Signal for Focus Assistant

Buzzer	Lens
Fast interval	Optimally adjusted
Medium interval	Less optimally adjusted
Slow interval	Poorly adjusted

Status LED Behavior and Buzzer Signal for Levelling Assistant

For information on the Function button used for levelling the camera, see *Connectors and Buttons*.

Color	Buzzer	Camera position
Fixed green	Continuous beep	Level
Flashing green	Fast interval	Almost level
Flashing orange	Medium interval	Not level
Flashing red	Slow interval	Far from level

LED Indicators

Note

The housing LED referred to in the table below is located in the housing.

Housing LED (fan and heater)	Indication
Green	Normal operation.
Flashing green	Single flash: Heater error Double flash: Fan error Triple flash: General error Alarm events will be triggered through the camera's input port. Contact your Axis reseller for information about spare parts and troubleshooting.

Connectors and Buttons

For specifications and operating conditions, see *page 17*.

Network Connector

RJ45 Ethernet connector with Power over Ethernet (PoE).

NOTICE

Due to local regulations or the environmental and electrical conditions in which the product is to be used, a shielded network cable (STP) may be appropriate or required. All cables connecting the product to the network and that are routed outdoors or in demanding electrical environments shall be intended for their specific use. Make sure that the network devices are installed in accordance with the manufacturer's instructions. For information about regulatory requirements, see *Electromagnetic Compatibility (EMC) on page 2* .

I/O Connector

Use with external devices in combination with, for example, tampering alarms, motion detection, event triggering, time lapse recording and alarm notifications. In addition to the 0 V DC reference point and power (DC output), the I/O connector provides the interface to:

- **Digital output** – For connecting external devices such as relays and LEDs. Connected devices can be activated by the VAPIX® Application Programming Interface, output buttons on the Live View page or by an Action Rule. The output will show as active (shown under **System Options > Ports & Devices**) if the alarm device is activated.

- **Digital input** – An alarm input for connecting devices that can toggle between an open and closed circuit, for example: PIRs, door/window contacts, glass break detectors,

etc. When a signal is received the state changes and the input becomes active (shown under **System Options > Ports & Devices**).

Note

The I/O connector is connected to the housing (fan/heater) on delivery. In the case of a fan or heater error, an input signal will be triggered in the camera. Set up an action rule in the camera to configure which action the signal shall trigger. For information about events and action rules, see the User Manual available on *www.axis.com*

Audio Connector

The Axis product has the following audio connectors:

- **Audio in (pink)** – 3.5 mm input for a mono microphone, or a line-in mono signal.
- **Audio out (green)** – 3.5 mm output for audio (line level) that can be connected to a public address (PA) system or an active speaker with a built-in amplifier. A stereo connector must be used for audio out.

RS485/RS422 Connector

Two terminal blocks for RS485/RS422 serial interface used to control auxiliary equipment such as pan-tilt devices.

SD Card Slot

NOTICE

- Risk of damage to SD card. Do not use sharp tools or excessive force when inserting or removing the SD card.
- Risk of data loss. To prevent data corruption, the SD card should be unmounted before removal. To unmount, go to **Setup > System Options > Storage > SD Card** and click **Unmount**.

This product supports microSD/microSDHC/microSDXC cards (not included).

For SD card recommendations, see *www.axis.com*

Control Button

For location of the control button, see *Hardware Overview on page 10*.

The control button is used for:

- Resetting the product to factory default settings. See *page 26*.
- Connecting to an AXIS Video Hosting System service or AXIS Internet Dynamic DNS Service. For more information about these services, see the User Manual.

Function Button

The function button has multiple functions:

- **Levelling assistant** – This function helps to ensure the camera is level. Press the button for about 3 seconds to start the levelling assistant and press again to stop the leveling assistant. The status LED (see *page 14*) and buzzer signal (see *page 14*) assist levelling of the camera. The camera is level when the buzzer beeps continuously.
- **Focus assistant** – This function is used for enabling the Focus Assistant. To enable the focus assistant, press and very quickly release the button. Press again to stop the focus assistant. For more information, see *page 25*.

Specifications

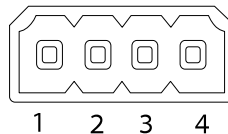| Product	Temperature	Humidity
AXIS Q1614-E	-30 °C to 50 °C (-22 °F to 122 °F) with PoE Down to -40 °C (-40 °F) with Axis High PoE midspan, max. 30 W	10-100% RH (condensing)

Power Consumption

Product	PoE
AXIS Q1614-E	Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3, max. 12.95 W or High PoE max. 25.5 W

Connectors

**I/O connector**

4–pin terminal block

1   2   3   4

For an example diagram, see *Connection Diagrams on page 19.*

| Function	Pin	Notes	Specifications
0 V DC (-)	1		
DC output	2	Can be used to power auxiliary equipment. Note: This pin can only be used as power out.	12 V DC Max load = 50 mA
Configurable (Input or Output)	3– 4	Digital input – Connect to pin 1 to activate, or leave floating (unconnected) to deactivate.	0 to max 30 V DC
		Digital output – Connected to pin 1 when activated, floating (unconnected) when deactivated. If used with an inductive load, e.g. a relay, a diode must be connected in parallel with the load, for protection against voltage transients.	0 to max 30 V DC, open drain, 100 mA

Audio Connector

3.5 mm audio connectors (stereo)

3 2 1
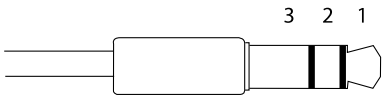
	1 Tip	2 Ring	3 Sleeve
Audio Input	Balanced: 'Hot' signal Microphone/Line in Unbalanced: Microphone/Line in	Balanced: 'Cold' signal Microphone/Line in Unbalanced: Unused	Ground
Audio Output	Line out (mono)		Ground

RS485/422 Connector

Two 2-pin terminal blocks for RS485/RS422 serial interface. The serial port can be configured to support:

- Two-wire RS485 half duplex
- Four-wire RS485 full duplex
- Two-wire RS422 simplex
- Four-wire RS422 full duplex point to point communication

RS485/422

RX/TX   TX
1   2   3   4
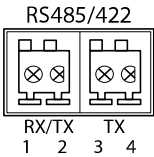
Function	Pin	Notes
RS485B alt RS485/422 RX(B)	1	RX pair for all modes (combined RX/TX for 2-wire RS485)
RS485A alt RS485/422 RX(A)	2	
RS485/RS422 TX(B)	3	TX pair for RS422 and 4-wire RS485
RS485/RS422 TX(A)	4	

Important

The recommended maximum cable length is 30 m (98.4 ft).

Connection Diagrams

I/O Connector
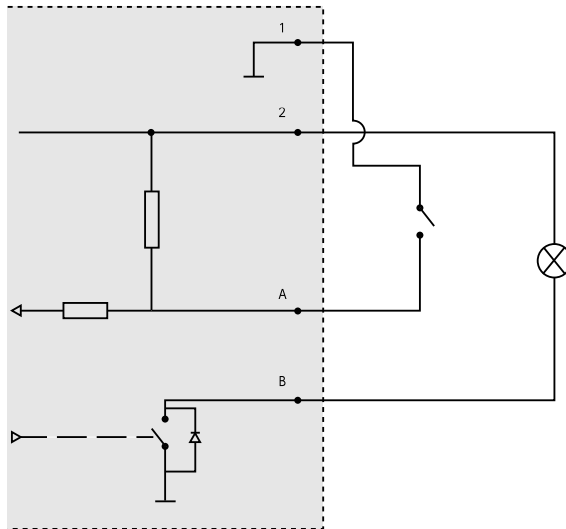
1   0 V DC (-)
2   DC output 12 V, max 50 mA
A   I/O configured as input
B   I/O configured as output

Install the Hardware

Install the Wall Mount

⚠ CAUTION

Make sure that the screws and plugs are appropriate for the material (e.g. wood, metal, drywall, stone) and that the material is strong enough to support the combined weight of the camera, housing, and wall mount.

Note

- See also the wall mount's Installation Guide supplied in the package and available on *www.axis.com*
- For technical specifications about the connectors, see the camera's User Manual available on *www.axis.com*

1. Prepare the wall for installation of the wall mount. Use the wall bracket as a template and mark the holes before drilling the holes.
2. Route the network cable and, if required, the power cable through the wall bracket. Leave approximately 30 cm (11.8 in) of cable for connecting the camera.
3. If connecting an auxiliary device, for example an I/O, audio, or external power device, to the camera, repeat the step above as applicable to the specific device.
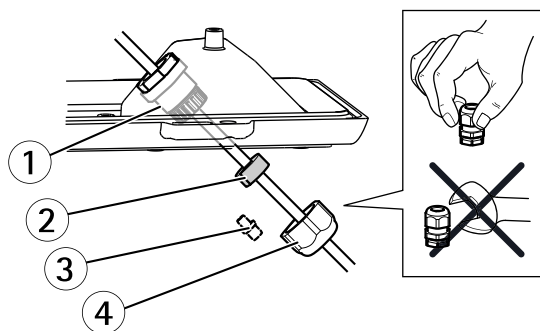4. Fasten the wall bracket to the wall by tightening the screws.

Route the Network Cable Through the Cable Hole

NOTICE

Using any other than the provided cable gland may cause water to seep in and damage the product. Cables must have a diameter of 4.0–5.5 mm.

Note

Check against the hardware overview image (see *page 10*) while following the steps below.

1 Cable gland
2 Gasket
3 Plug (discard)
4 Cap

1. Loosen the cable cover screws; detach the cable cover from the bottom cover.
2. Remove the cap, the plug and the gasket from the cable gland.
3. Route the network cable through the cap.
4. Slide the network cable through the slit on the gasket to attach the gasket to the network cable. See *Connectors on page 17* for information on network cable requirements.
5. Route the network cable through the cable gland.
6. Press the gasket into the cable gland and screw the cap on firmly.

Install the Camera on the Bracket

Note

To locate the different components see illustrations under *Hardware Overview on page 10*.

21
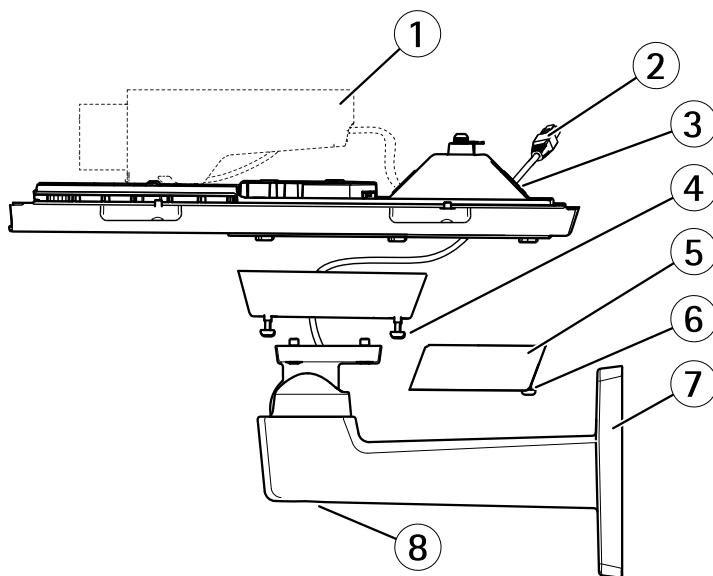
1   Axis network camera
2   Network cable (route through wall bracket)
3   Cable holes
4   Bracket screw (4x)
5   Cable cover
6   Cable cover screw (2x)
7   Wall bracket
8   Bracket adjustment screw

1. Install the camera with the bottom cover on the bracket and tighten the bracket screws.

2. Remove the gasket from one of the holes in the bottom cover.

3. Route the network cable through the hole and plug the cable gasket to the hole.

4. Connect the cables, see *Connect the Cables*.

5. Take the top cover and attach the safety wire to the tab on the bottom cover.

6. Loosen the bracket adjustment screw to point the camera in the right direction. See *page 25* for information on how to view the video stream.

   Adjust the focus, see *page 24*.

7. Install the top cover. Make sure to tighten diagonally opposite bottom cover screws a few turns at a time until all are tight. This will help ensure that the bottom cover gasket is compressed evenly. Do not tighten the screws completely the first time.

8. Install the cable cover and tighten the cable cover screws.

9. Loosen the sunshield adjustment screws and adjust the sunshield to the front position.

Connect the Cables
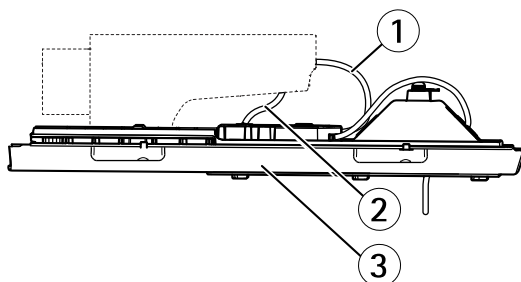
1   Network cables
2   I/O cable
3   Bottom cover
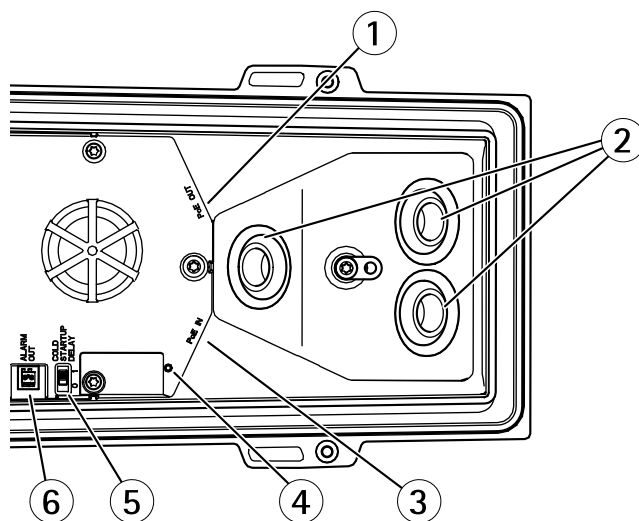
1   Network connector (PoE OUT, connected at delivery)
2   Cable holes
3   Network connector (PoE IN)
4   LED indicator
5   Arctic Temperature Control switch
6   Alarm output (connected at delivery)

1. Optionally insert an SD memory card (not included) into the SD card slot. A standard or high capacity SD card is required to store images locally in the camera.

2. Optionally connect external input/output devices. See *Connectors on page 17* for information on the connector pins. See *Route the Network Cable Through the Cable Hole on page 20* for information on preparing the network cable. Route the cables through the cable holes into the bottom cover and to the camera.

3. Connect the camera to the network using a shielded network cable and using the network connector (PoE IN) on the bottom cover. The network cable and the I/O cable between the bottom cover and the camera, are already connected at delivery.

4. Check that the indicator LEDs indicate the correct conditions. See *LED Indicators on page 13* for further details.

Adjust Focus

To adjust the zoom and focus follow these instructions:

Note

- Set the focus as precise as possible with the focus puller or Focus Assistant before starting automatic fine tuning. Using the focus puller normally gives the best result.

- The iris should always be opened to its maximum while focusing. This gives the smallest depth of field and thus the best conditions for correct focusing.

1. Open the product's home page and go to **Setup** > **Basic Setup** > **Focus**.

2. Under the **Basic** tab, click **Open iris**. If the button is inactive the iris is already open.

3. If focus has been set before, click **Reset** to reset the back focus.

4. Loosen the zoom and focus pullers (see *Hardware Overview on page 10*) on the lens by turning them counter-clockwise. Move the pullers to set zoom and focus and check the quality of the image in the image window.

   If the camera is mounted so that one cannot look at the image and move the pullers at the same time, use the Focus Assistant instead.

5. Re-tighten the zoom and focus pullers.

6. On the Focus page, click **Fine–tune focus automatically** and wait until automatic fine tuning is completed.

7. Click **Enable iris**. If the button is inactive the iris is already enabled.

8. If needed, make further adjustments under the **Advanced** tab. See the online help for more information.

Focus Assistant

Note

- The view in front of the camera should not be changed during focus adjustment (steps 5 and 6). If the camera is moved, or if a finger or other object is placed in front of the lens, steps 3–7 will have to be repeated.

- If movements in front of the camera cannot be avoided, the Focus Assistant should not be used.

- f the camera is mounted so that the function button cannot be accessed, you can still use the Focus Assistant. Follow the instructions below but mount the camera after step 4, pressing the function button instead and skip step 7.

To focus your network camera using the Focus Assistant, follow steps 1–3 under *Adjust Focus on page 24* before you start with the steps below. See *Hardware Overview on page 10.*

1. Mount or place the camera so that it cannot be moved.
2. Loosen the zoom puller by turning it counter-clockwise. Move the puller to set the zoom level. Re-tighten the zoom puller.
3. Set the camera to its extreme distant-focus position by loosening the focus puller and turning the lens fully clockwise.
4. Press and quickly release the function button. When the Status LED flashes green, the Focus Assistant is enabled.

   If the Status LED flashes either red or amber before you are able to adjust the lens, skip to step 7 to exit the Focus Assistant and repeat steps 3–7. See the notes above. See *Status LED Behavior for Focus Assistant on page 14.*
5. Gently turn the lens counter-clockwise until it stops.
6. Turn the lens slowly clockwise until the status indicator flashes green or amber (not red).
7. Retighten the focus puller.
8. Open the **Live View** page in the web browser and check the quality of the image.
9. On the Focus page, click **Fine–tune focus automatically** and wait until automatic fine tuning is completed.
10. Click **Enable iris**. If the button is inactive the iris is already enabled.
11. If needed, make further adjustments under the **Advanced** tab. See the online help for more information.

Access the Product

AXIS IP Utility and AXIS Camera Management are recommended methods for finding Axis products on the network and assigning them IP addresses in Windows®. Both applications are free and can be downloaded from *www.axis.com/techsup*

The product can be used with most operating systems and browsers. The recommended browsers are

- Internet Explorer® with Windows®
- Safari® with OS X®
- Chrome™ or Firefox® with other operating systems.

For more information about using the product, see the User Manual available at *www.axis.com*

Replace the Lens

It is possible to use optional lenses for the Axis product.

To replace the lens:

1. Disconnect the iris cable.
2. Unscrew the standard lens.
3. Attach and screw on the new lens.

Reset to Factory Default Settings

Important

Reset to factory default should be used with caution. A reset to factory default will reset all settings, including the IP address, to the factory default values.

Note

The installation and management software tools are available from the support pages on *www.axis.com/techsup*

To reset the product to the factory default settings:

1. Disconnect power from the product.
2. Press and hold the control button and reconnect power. See *Hardware Overview on page 10*.
3. Keep the control button pressed for 15–30 seconds until the status LED indicator flashes amber.
4. Release the control button. The process is complete when the status LED indicator turns green. The product has been reset to the factory default settings. If no DHCP server is available on the network, the default IP address is 192.168.0.90
5. Using the installation and management software tools, assign an IP address, set the password, and access the video stream.
6. Refocus the product.

It is also possible to reset parameters to factory default via the web interface. Go to **Setup > System Options > Maintenance**.

Further Information

For the latest version of this document, see *www.axis.com*

The User Manual is available at *www.axis.com*

Visit *www.axis.com/techsup* to check if there is updated firmware available for your network product. To see the currently installed firmware version, go to **Setup > About**.

Visit Axis learning center *www.axis.com/academy* for useful trainings, webinars, tutorials and guides.

Warranty Information

For information about Axis' product warranty and thereto related information, see *www.axis.com/warranty/*