INSTALLATION GUIDE

AXIS Q87–E Power Supply 230 V AC
AXIS Q87–E Power Supply 120 V AC

AXIS
COMMUNICATIONS

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 – This equipment has been tested using a shielded network cable 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.

Canada – This Class A digital apparatus complies with Canadian ICES-003.

Europe – CE This digital equipment fulfills the requirements for RF emission according to the Class A limit of EN 55022. Caution! This is a Class A product. In a domestic environment this product may cause RF interference, in which case the user may be required to take adequate measures.

This product fulfills the requirements for immunity according to EN 61000-6-1 residential, commercial and light-industry 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 – This digital equipment fulfills the requirements for RF emission according to the Class A limit of AS/NZS CISPR 22. NOTICE! This is a class A product. In a domestic environment this product may cause RF interference, in which case the user may be required to take adequate measures.

Safety

This product complies with EN/IEC 60950-1 and EN/IEC 60950-22, Safety of Information Technology Equipment.

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.

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 documentation 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.

RoHS

This product complies with both the European RoHS directive, 2002/95/EC, and the Chinese RoHS regulations, ACPEIP.

WEEE Directive

The European Union has enacted a Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE Directive). This directive is applicable in the European Union member states. The WEEE marking on this product (see right) or its documentation indicates that the product must not be disposed of together with household waste. To prevent possible harm to human health and/or the environment, the product must be disposed of in an approved and environmentally safe recycling process. For further information on how to dispose of this product correctly, contact the product supplier, or the local authority responsible for waste disposal in your area.
Business users should contact the product supplier for information on how to dispose of this product correctly. This product should not be mixed with other commercial waste.

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 firmware updates
• find answers to resolved problems in the FAQ database. Search by product, category, or phrases
• report problems to Axis support by logging in to your private support area

Contact Information

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Safeguards

Please read through this Installation Guide carefully before installing the product. Keep the Installation Guide for further reference.

NOTICE

- Store the Axis product in a dry and ventilated environment.
- Avoid exposing the Axis product to vibration, shocks or heavy pressure and do not install the product on unstable brackets, unstable or vibrating surfaces or walls, since this could cause damage to the product.
- Only use applicable tools when installing the Axis product; excessive force could cause damage to the product.
- Do not use chemicals, caustic agents, or aerosol cleaners. Use a damp cloth for cleaning.
- Only use accessories that comply with the 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 or your Axis reseller for service matters.

Important

- This Axis product shall be used in compliance with local laws and regulations.
- The Axis product should be installed by a trained professional. Please observe relevant national and local regulations for the installation.

Transportation

NOTICE

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

AXIS Q87-E Power Supply 230 V AC & AXIS Q87-E Power Supply 120 V AC Installation Guide

This Installation Guide provides instructions for connecting AXIS Q87-E Power Supply 230/120 V AC with AXIS Q87-E Dual PTZ Network Camera Series.
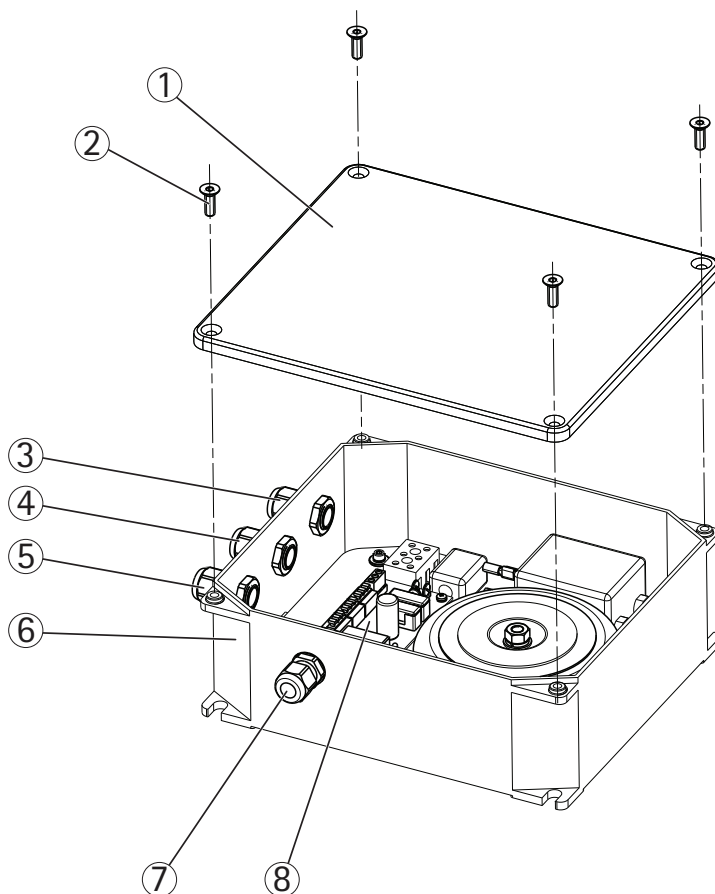
Installation Steps

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1. Check the package contents against the list below.
2. Hardware overview. See page 6.
3. Install the Power Supply. See page 7.

① Package Contents

Item	Models/variants/notes
Power Supply	Power supply (230/120 V AC) with built-in day/night sensor
Printed materials	AXIS Q87-E 230/120 V AC Installation Guide (this document)
Tools needed (not included)	Ratchet set Drill for drilling holes in mounting surface

❷ Hardware Overview

1	Power supply lid
2	Power supply lid screw (4x)
3	Cable gland (mains power)
4	Cable gland (unit power)

5	Cable gland (illuminator cable)
6	Power supply box
7	Day/night sensor
8	Connector board

③ **Install the Power Supply**

⚠ WARNING

The mains supply shall be disconnected during installation.

NOTICE

The supplied power supply shall be used. Using any other power supply will void the warranty and could leave the unit at a risk.

Important

The day/night sensor is attached to the power supply. If using the day/night sensor, place the power supply so that the sensor can track the changes in daylight.

1. Install the power supply in the desired location. Make sure that the screws and plugs are appropriate for the material (e.g. wood, metal, sheet rock, stone).
2. Unscrew the lid screws and open the power supply.
3. Route the network, power and, if applicable, the illuminator cables through the cable glands in the PTZ base.

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4. Connect the pan/tilt power supply to the pan/tilt connector (6) in the power supply.
5. If using the day/night sensor, connect the illuminator cable to the illuminator connector (J5) in the power supply.
6. If using the day/night sensor, adjust the potentiometer to increase or decrease the sensitivity of the day/night sensor. see *Connection Diagram,* on page 9.
   Connect the mains supply cable to the mains supply connector in the power supply.
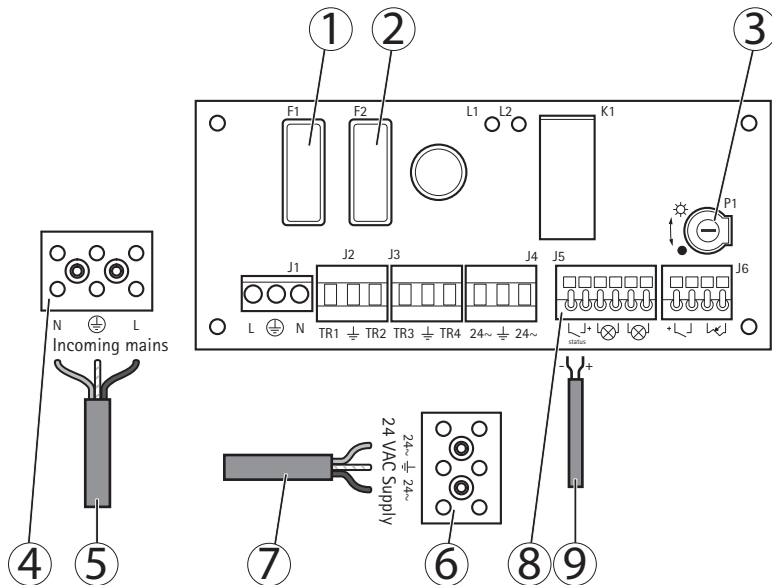
1	Fuse F1
2	Fuse F2
3	Potentiometer
4	Mains supply connector
5	Mains supply cable
6	Pan/tilt connector
7	Pan/tilt power supply cable (24 V AC)
8	Illuminator connector
9	Illuminator cable

7. Close the power supply and tighten the lid screws.
8. Screw the cable gland caps on firmly.

Connection Diagram
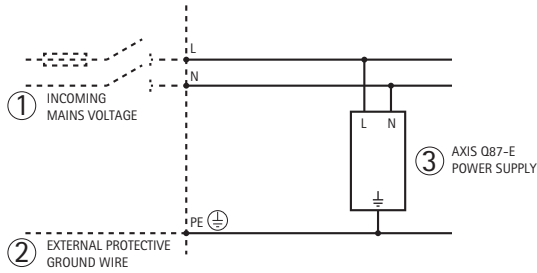
1	Incoming mains voltage
2	External protective ground wire
3	AXIS Q87-E Power Supply

Cable Specification

Notes:

- To maintain the products IP rating, the external diameter of the cables must be 5 – 10 mm.
- The Pan/tilt power supply cable can not be longer than 3 m (9 ft).

Cable	Number of wires	Cable area
Mains supply cable	3 (L, N, PE)	0.5 mm^2 – 1.3 mm^2 (AWG21 - AWG16)
Pan/tilt power supply cable (24 V AC)	3 (L, N, PE)	0.75 mm^2 – 2.0 mm^2 (AWG19 - AWG14)
Illuminator cable	2 (signal, GND)	0.5 mm^2 – 1.3 mm^2 (AWG21 - AWG16)

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Day/Night Sensor

The day/night sensor is configured in the factory for optimal performance in a range of conditions. However, settings can be adjusted to suit specific conditions on site.

To adjust the sensitivity of the day/night sensor, turn the potentiometer until it reaches the desired threshold. Turn the potentiometer clockwise to increase the threshold and advance the switch to night mode. Turn the potentiometer counterclockwise to decrease the threshold and delay the switch to night mode. The switch to night mode will activate the illuminators (sold separately).

Technical Specifications

Function/group	Item	Specifications
Power supply	Model	AXIS Q87-E Power Supply 230 V AC AXIS Q87-E Power Supply 120 V AC
General	Operating conditions	–30 °C to 45 °C (–22 °F to 113 °F) Humidity 50% – 100% RH (condensing)
	Overvoltage Category (OVC)	II
	Fuses	AXIS Q87-E Power Supply 230 V AC: F1 = 2 AT, F2 = 8 AT AXIS Q87-E Power Supply 120 V AC: F1 = 3,15 AT, F2 = 8 AT
	Approvals	EN 55022 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2 FCC Part 15 Subpart B Class A demonstrated by compliance with EN 55022 ICES-003 Class A demonstrated by compliance with EN 55022 C-tick AS/NZS CISPR 22 demonstrated by compliance with EN 55022 EN 61000-3-2, EN 61000-3-3 EN 60950-1, EN 60950-22 IEC/EN 60529 IP66
	Weight	4 kg (8.8 lb.)
	Dimensions (HxWxD)	278 mm x 242 mm x 90.5 mm (10.9" x 9.5" x 3.6")

Further Information

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

Warranty

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