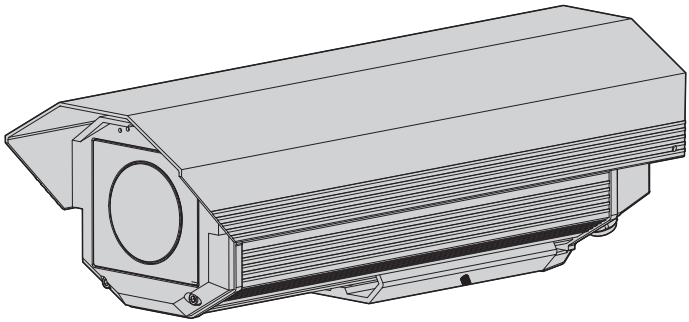


HTG
Installation Manual

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1 About this manual

Read all the documentation supplied carefully before installing and using this product. Keep the manual in a convenient place for future reference.

1.1 Typographical conventions

DANGER!
High level hazard.
Risk of electric shock. Disconnect the power supply before proceeding with any operation, unless indicated otherwise.

CAUTION!
Medium level hazard.
This operation is very important for the system to function properly. Please read the procedure described very carefully and carry it out as instructed.

INFO
Description of system specifications.
We recommend reading this part carefully in order to understand the subsequent stages.

2 Notes on copyright and information on trademarks

The mentioned names of products or companies are trademarks or registered trademarks.

3 Safety rules

CAUTION! Device installation and maintaining must be performed by specialist technical staff only.

- The manufacturer declines all responsibility for any damage caused by an improper use of the appliances mentioned in this manual. Furthermore, the manufacturer reserves the right to modify its contents without any prior notice. The documentation contained in this manual has been collected and verified with great care. The manufacturer, however, cannot take any liability for its use. The same thing can be said for any person or company involved in the creation and production of this manual.
- Before starting any operation, make sure the power supply is disconnected.
- Be careful not to use cables that seem worn or old.
- Never, under any circumstances, make any changes or connections that are not shown in this handbook. Improper use of the appliance can cause serious hazards, risking the safety of personnel and of the installation.
- Use only original spare parts. Non-original spare parts could cause fire, electrical discharge or other hazards.
- Before proceeding with installation, check the supplied material to make sure it corresponds to the order specification by examining the identification labels (4.2 Product marking label, page 4).

4 Identification

4.1 Product description and type designation

This housing has been designed to fit thermal cameras with large lenses for vision even in total darkness, fog, rain and smoke, or for long distances.

It can be used for a wide range of day/night surveillance systems, such as monitoring and rescue in the event of a fire, public safety or airport, industrial and environmental surveillance.

The opening system allows an easy access for installation and servicing.

It can be installed with cable sheaths, instead of regular cable glands using the junction box for the wiring harness.

4.2 Product marking label

See the label attached to the product.

5 Preparing the product for use

Any change that is not expressly approved by the manufacturer will invalidate the warranty.

5.1 Safety precautions before use

CAUTION! The electrical system to which the unit is connected must be equipped with a 15A max automatic bipolar circuit breaker. The minimum distance between the circuit breaker contacts must be 3mm (0.1in). The circuit breaker must be provided with protection against the fault current towards the ground (differential) and the overcurrent (magnetothermal).

5.2 Unpacking

When the product is delivered, make sure that the package is intact and that there are no signs that it has been dropped or scratched.

If there are obvious signs of damage, contact the supplier immediately.

When returning a faulty product we recommend using the original packaging for shipping.

Keep the packaging in case you need to send the product for repairs.

5.3 Contents

Check the contents to make sure they correspond with the list of materials as below:

- Housing
- Housing equipment:
  - Spacers
  - Hexagonal wrenches
  - Bolts and screws
- Desiccant bag
- Instruction manual

5.4 Safely disposing of packaging material

The packaging material can all be recycled. The installer technician will be responsible for separating the material for disposal, and in any case for compliance with the legislation in force where the device is to be used.

5.5 Preparatory work before installation

5.5.1 Mounting the bracket

The product must be fastened with suitable equipment. The fastening means must guarantee mechanical sealing when a force equal to at least 4 times the weight of the device is applied.

6 Installation

6.1 Housing opening

Unscrew the screws on the rear cover plate and loosen the 2 dowels on the outer slide. Slide out the housing body.

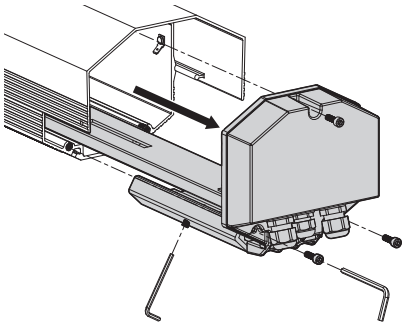


Fig. 1

After installation and wiring, close the product.

6.2 How to install the camera

Power supply can be provided by the board supplied with the product. Make sure the voltage values are appropriate.

Open the housing as described in the relative chapter (6.1 Housing opening, page 5).

Fasten the camera with the 1/4" screw (01). To position the camera and lens correctly, if necessary, use the supplied spacers. (02).

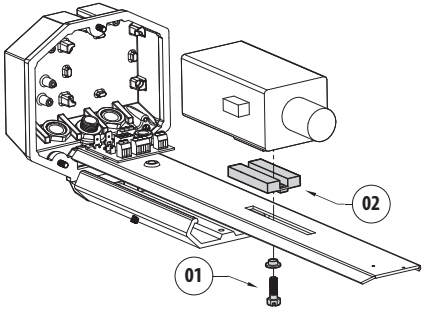


Fig. 2

Remove the conductors protective sheathing and connect them to terminal (camera power supply, 6.3 Board description, page 6).

The camera's power supply cable conductors must be tied up with a cable tie next to the terminal. Keep the signalling and power supply cables separated from each other.

Reposition the internal slide and tighten the screws that had been loosened previously.

6.3 Board description

The board may appear different to that illustrated.

Depending on the product version, the board may not be equipped with all functions.

BOARD DESCRIPTION		
Connector	**Function**	**Notes**
J1	Camera power supply (V_{OUT})	Depending on the power supply model the two connectors have different use. If powered in 12vdc connector A corresponds to polarity +, while connector B corresponds to polarity - . If powered in 24vac connectors A and B are equivalent and correspond to the voltage Vac.
J2	Heater power supply	
J3	Power supply for the board (V_{IN})	
J4	Auxiliary output (V_{OUT})	Same voltage applied on J3
J5	Power supply connector/ jumper	Jumper present only in ventilated models
J6	Fan power supply	

Tab. 1

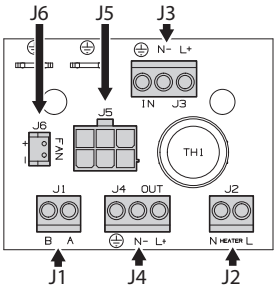


Fig. 3

Nominal section of the cables used: from 0.2mm² (24AWG) up to 2.5mm² (13AWG).

6.4 Connecting the power supply

CAUTION! The type of cable used must be compatible with the planned use. Comply with the national regulations in force on electrical installation.

Connect the safety earth to the relative terminal of the power supply connector.

Earth cable should be about 10mm longer than the other two, so that it will not be disconnected accidentally if pulled.

Insert the cables inside the housing using the cable glands. The cable glands are suitable for conductors with diameters of between 5mm and 10mm. The section of the cable inside the housing must be sufficiently long to allow connection. Suitably lock the cable glands.

6.5 Installation of the version with double filter for air renewal

During installation pay attention to the orientation of the air inlet filter fins.

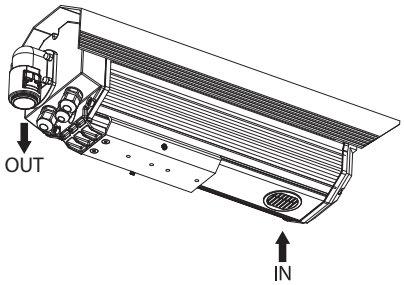


Fig. 4

To guarantee weatherproof protection, install the housing on the support following the inclination limits as shown in the picture.

Depending on the angle of inclination of the housing, the orientation of the filter fins must prevent water penetrating in case of rain:

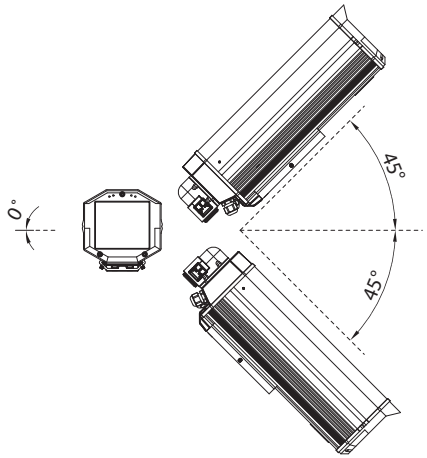


Fig. 5 Maximum tilt of the transversal axis: 0°.
Maximum tilt of the longitudinal axis: ±45°.

6.6 Desiccant bag

Take the dessicant salt bag out of its pack and insert it into the product.

6.7 Replacement of the germanium window

Unscrew the front window fastening screws using the hexagonal wrench included in the supply. Remove the window and position the replacement part, making sure the seal remains in its seat. Replace the housing and fasten in place using the previously removed fastening screws.

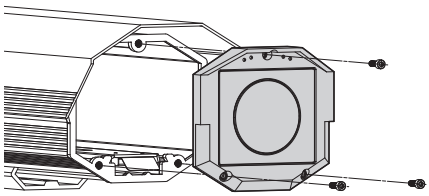


Fig. 6

7 Accessories

For further details on configuration and use, refer to the relative manual.

7.1 Heater

7.1.1 Heater installation

At the end of istallation, connect the wiring to the terminal (heater power supply, 6.3 Board description, page 6).

7.2 Camera power supply

7.2.1 Camera power supply installation

Not usable in housings with wiper device installed.

Pay attention to the voltage used to power the circuit. Depending on requirements use the correct power supply kit.

Usable power supplies:

- IN from 100Vac up to 240Vac, 50/60Hz - OUT 12Vdc, 1.25A
- IN 230Vac, 50Hz - OUT 24Vac, 50Hz, 400mA

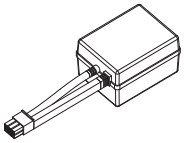


Fig. 7 Camera power supply.

After installation, connect the power supply to the connector (power supply connector, 6.3 Board description, page 6).

8 Maintenance and cleaning

Before doing any technical work on the device, disconnect the power supply.

8.1 Cleaning

8.1.1 Cleaning the window and plastic parts

Avoid ethyl alcohol, solvents, hydrogenated hydrocarbide, strong acid and alkali. Such products may irreparably damage the surface.

We recommend using a soft cloth with neutral soap diluted with water or specific products to clean the lenses.

9 Information on disposal and recycling

The European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) mandates that these devices should not be disposed of in the normal flow of municipal solid waste, but they should be collected separately in order to optimize the recovery stream and recycling of the materials that they contain and to reduce the impact on human health and the environment due to the presence of potentially hazardous substances.

The symbol of the crossed out bin is marked on all products to remember this.

The waste may be delivered to appropriate collection centers, or may be delivered free of charge to the distributor where you purchased the equipment at the time of purchase of a new equivalent or without obligation to a new purchase for equipment with size smaller than 25cm (9.8in).

For more information on proper disposal of these devices, you can contact the responsible public service.

10 Technical data

10.1 General

Die-cast aluminium back and front cover plates

Extruded aluminium body and external slide

Epoxypolyester powder painting, RAL9002 colour

Stainless steel external screws

10.2 Mechanical

Internal usable dimensions (WxH): 134x88mm (5.3x3.4in)

Internal usable length (with or without accessories): 273mm (10.7in)

Cable glands: 3xM16

Unit weight: 4.1kg (9lb)

10.3 Housing's window

Germanium window

- Usable diameter: 55mm (2.1in)
- Thick: 2mm (0.08in)
- External treatment: antiscratch (Hard Carbon Coating - DLC)
- Internal treatment: antireflection
- Spectral range: from 7.5µm up to 14µm
- Medium transmittance (from 7.5µm up to 11.5µm): 90%
- Medium transmittance (from 11.5µm up to 14µm): 77%

10.4 Electrical

Supply voltage/Current consumption (version with heater, Ton 15°C±3°C (59°F ±5°F), Toff 22°C±3°C (72°F±5°F)):

- 12Vdc, 1.6A max
- 24Vac, 0.85A max, 50/60Hz
- 120Vac, 0.35A max, 50/60Hz
- 230Vac, 0.18A max, 50/60Hz

Camera power supply

- IN from 100Vac up to 240Vac, 50/60Hz - OUT 12Vdc, 1.25A
- IN 230Vac, 50Hz - OUT 24Vac, 50Hz, 400mA

10.5 Environment

For indoors and outdoors installation

Operating temperature with heating: from -20°C (-4°F) up to +60°C (140°F)

10.6 Certifications

Electrical safety (CE): EN62368-1

Electromagnetic compatibility (CE): EN50130-4, EN61000-6-3

IP protection degree: EN60529 (IP66/IP67, with cable glands)

11 Technical drawings

The indicated measurements are expressed in millimetres.

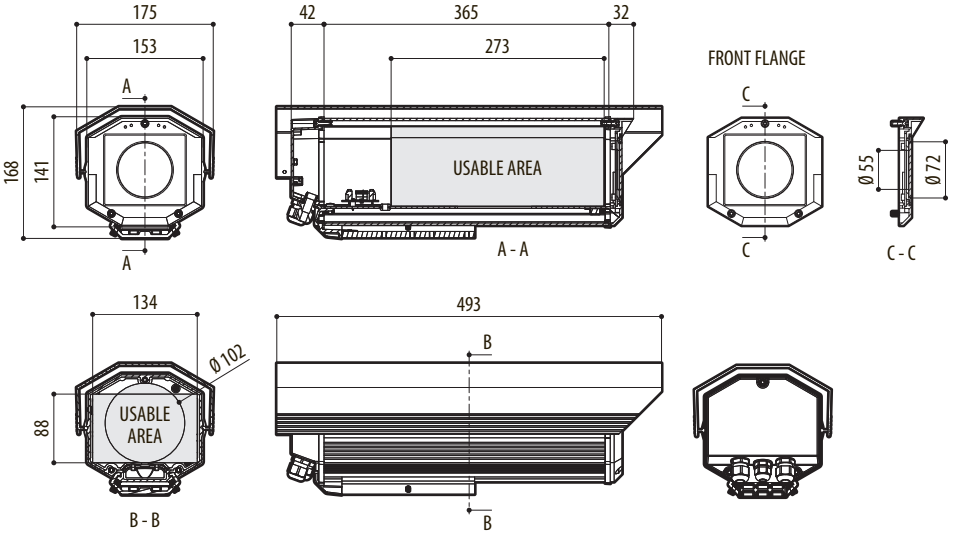


Fig. 8 HTG.

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