MOTION SENSOR 360 PLASTER IN - CRESNET®

M360-PI-CRES

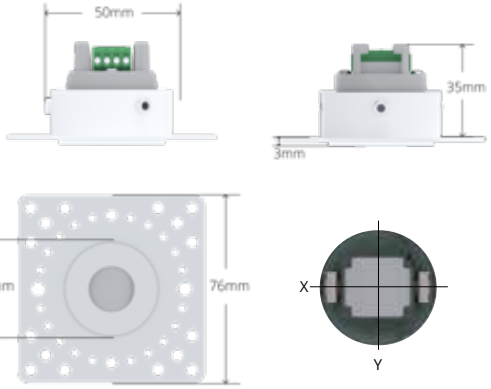
FARADITE

OVERVIEW

The Faradite Motion Sensor 360 Plaster in - Cresnet® is a low profile passive infrared ceiling mounted motion sensor. It's designed for use with **Crestron** and **Crestron home** systems and connects to the Cresnet® bus. An integrated temperature sensor and brightness sensor provide further powerful automation sensing. *Temperature sensor functionality is not available with Crestron Home.

TECHNICAL DATA

Power supply (consumption)	24V DC 5ma
Brightness Sensor Range	0 - 2000LUX
Ambient temperature	0-50 °C (indoor only)
IP rating	IP20
Range (Note 1)	5M
Max mounting height	3m (for optimal performance)
Mounting hole	51mm
Connectors	2 x 4 pin terminal blocks
Standards	EN 61000-6-1 EN 61000-6-3



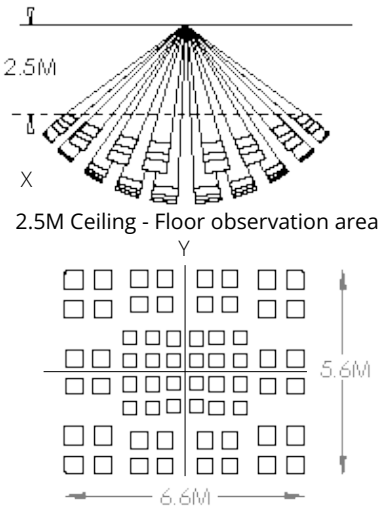
OBSERVATION AREA

At 2.5M it gives a 5.6M * 6.6M observation area.

The following conditions have to be met to detect motion:

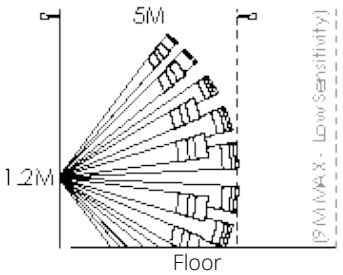
1.Movement speed: 1.0m/s
2.Target concept is a human body (Min object size: ~700×250mm)
3. The temperature difference between the target and the surroundings must be greater than 4 °C when mounted at 5M

Horizontal Installation



2.5M Ceiling - Floor observation area

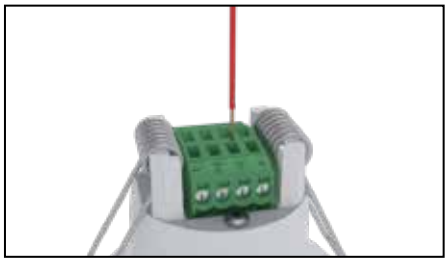
Vertical Installation



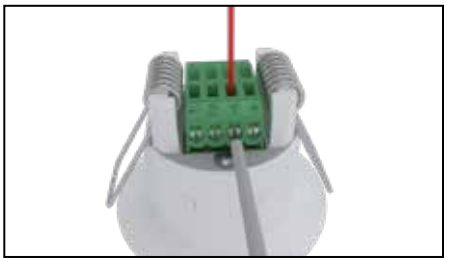
ELECTRICAL CONNECTIONS

Supports seamless integration into Crestron and Crestron Home® platforms through the Cresnet® communications chipset.

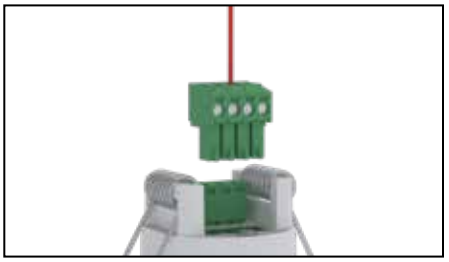
1: Strip the cable back 7mm
2: Push into cable hole



3: Tighten screws to create firm connections.

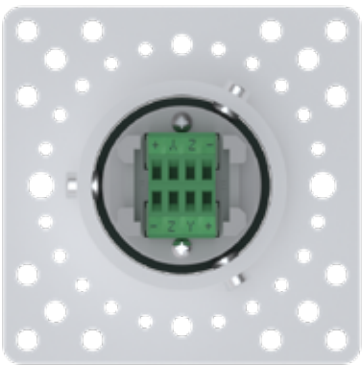


(Pull to remove connector from motion sensor)

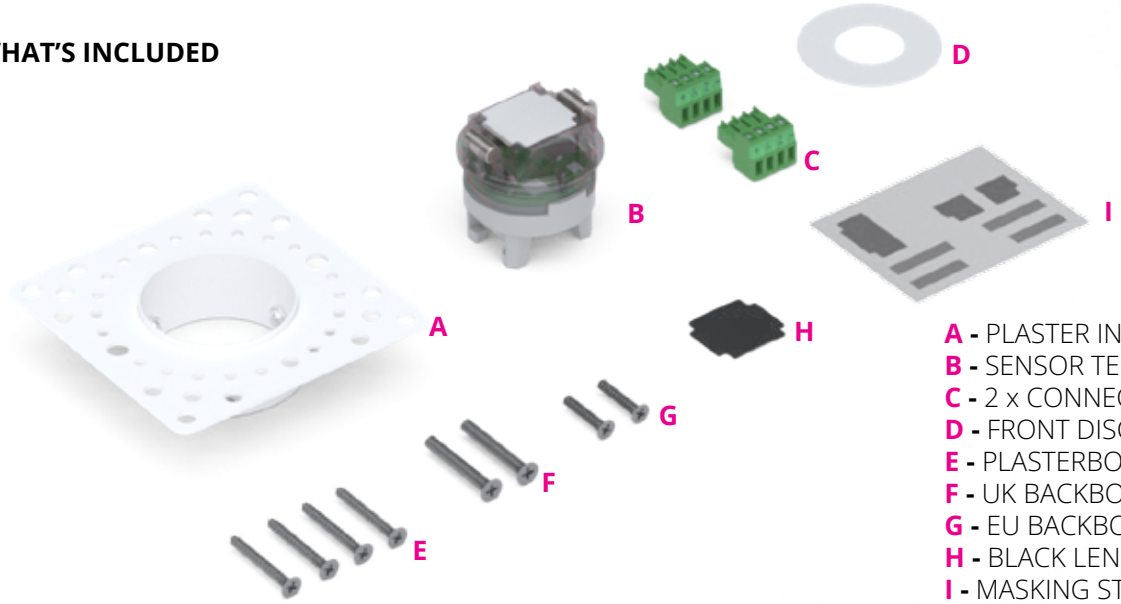


BUS WIRING

The sensor has 2 Cresnet® bus connectors that are intended to be used as loop-in and loop-out terminals.



WHAT'S INCLUDED

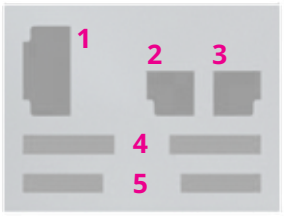


A - PLASTER IN MOUNT
B - SENSOR TECHNOLOGY INSERT
C - 2 x CONNECTORS
D - FRONT DISC
E - PLASTERBOARD SCREWS
F - UK BACKBOX SCREWS
G - EU BACKBOX SCREWS
H - BLACK LENS COVER (OPTIONAL)
I - MASKING STICKER SET

MASKING/BLOCKING

The PIR sensor used in this device detects the infrared heat that is emitted from people in the detection area. Unwanted detection can be avoided by applying the supplied infrared blocking stickers to the sensor to block the sensor detecting infrared heat in this area.

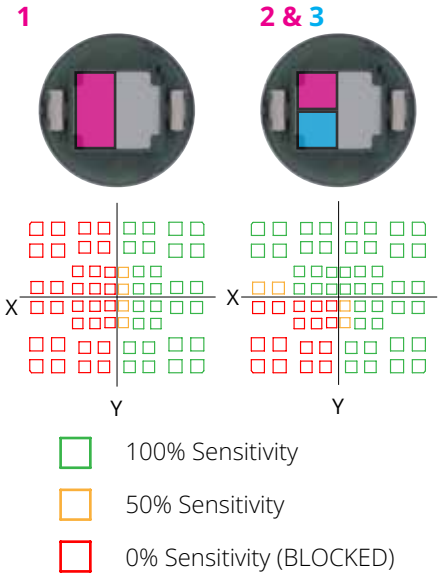
We have included a masking sticker set (H), these can be applied directly to the sensor technology insert, underneath the lens cover to tailor the detection area of the sensor without impacting the aesthetic of the installed device.



The following infrared blocking stickers are included in the masking sticker set (H)

1	Half Blocking
2	Quarter Blocking (left)
3	Quarter Blocking (right)
4	Long Blocking Strip
5	Short Blocking Strip

MASKING DETECTION AREAS



The long blocking strip (4) and short blocking strips (5) can be used freely to create custom blocking where required. Please note, exact beam patterns cannot be guaranteed when freely masking using these strips. Some examples of using the short and long blocking strips can be seen below:

**These variations may impact brightness sensor readings.*

APPLYING MASKING STICKERS

To apply the supplied infrared blocking stickers:

1) Remove the lens cover by carefully using a blade to lift the lens cover from the edge perpendicular to the magnets.

2) Peel your chosen infrared blocking sticker from the masking sticker set and apply to the sensor technology insert front.

Ensure sticker is applied to opposite side to the notch detail circled to avoid impacting light sensor.

3) Reinstall the lens cover in to the sensor technology insert by inserting one edge under the plastic lip and pushing in the opposite.

4) Insert the sensor technology insert back into plaster in mount, rotate to fine tune for desired blocking orientation.

MOUNTING & SAFETY PRECAUTIONS

1) Do not under any circumstance use the device outside the range of their ratings shown in the technical data.

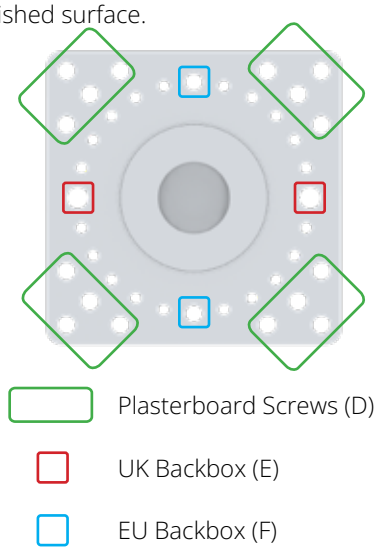
2) Faradite is committed to making products of the highest quality and reliability. Nevertheless, all electrical components are subject to natural deterioration, and the product durability will depend on the operating environment and conditions of use.

3) Please note that the motion sensor can detect heat sources other than the human body, such as:
a) Small animals
b) Direct sun light, incandescent lamps, car headlights (even if the heat source is outside the detection area)
c) Sudden temperature change inside or around the detection area i.e. hot or cold winds/drafts or vapour from a humidifier can affect the performance of the motion sensor.

4) Please note that the motion sensor will have difficulty sensing the heat source if it is behind glass, acrylic or similar materials, as these materials may not allow a correct transmission of infrared rays.

SCREW HOLES

It is essential that the correct screws are used in the correct holes. Using incorrect screw may mean screw tops are proud of finished surface.



Plasterboard Screws (D)

UK Backbox (E)

EU Backbox (F)

The UK back box holes (E) are larger than the EU backbox holes (F).

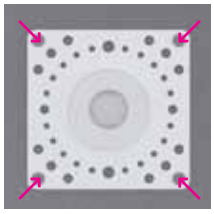
BACKBOX OPTIONS

The M360-PI can be installed directly in to plasterboard using the outer mounting holes. There are also holes for EU back boxes and UK back boxes. Please ensure correct screws (included) are used. See SCREW HOLES below for more information.

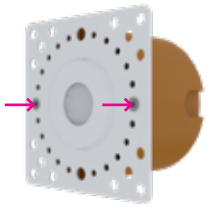
UK BACKBOX

47mm min depth

PLASTERBOARD



EU BACKBOX



47mm min depth

INSTALLATION STEPS - PLASTERBOARD

1

Cut 51mm hole in plasterboard for plaster in plate.

2

Use supplied screws to mount plate using outer corner holes.

3

Skim/plaster/apply mud to surface to be flush with front of plaster in plate.

4

Paint surface and ensure hole is clear of any debris.

5

Terminate cable and insert sensor unit until you hear a 'click'.

6

Rotate the sensor insert to desired direction.

7

Offer up front disk to magnets. Front disk can be painted to match ceiling colour.

8

Test and verify sensor functionality.

HOLE SAW SIZE

USE A 51mm HOLE SAW FOR INSTALLATION