



CP electronics EBDMR-DD Ceiling Mounted PIR Presence Detectors Installation Guide

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EBDMR-DD Ceiling Mounted PIR Presence Detectors



Product Information

Product Name: WD921 Issue 4 Installation Guide EBDMR-DD Digital Dimming PIR Presence Detector

Manufacturer: CPELEC Tronic

Website: <http://www.cpelectronics.co.uk/cp/921>

Features:

- High sensitivity
- Digital dimming
- PIR presence detection
- Basic insulation
- Low voltage, not SELV output
- Mains rated wiring
- Supports up to 10A circuit protection
- Optional override switch
- Optional retractive switches for dimming and switching channels

Product Usage Instructions

Installation

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.

Note: For specific installation instructions in different languages, refer to the user manual.

Wiring Connections

The wiring connections are as follows:

1. Neutral
2. Live
3. 10A circuit protection (if required)
4. Load
5. Centre biased retractive switch for absence detection (230V)
6. Dimming ballast

Switching and Dimming Channels

The product supports switching and dimming channels, which can be controlled using optional retractive switches. The channels are defined as follows:

- **Switching Channel (L-Out):** Switches the luminaire with occupancy and maintains illuminance.
- **Dimming Channel (DIM +/-):** Dims and switches using optional centre biased retractive switch.

Switching Channel 1

Switches channel 1 only with occupancy. No dimming output.

Switching Channels 1 and 2

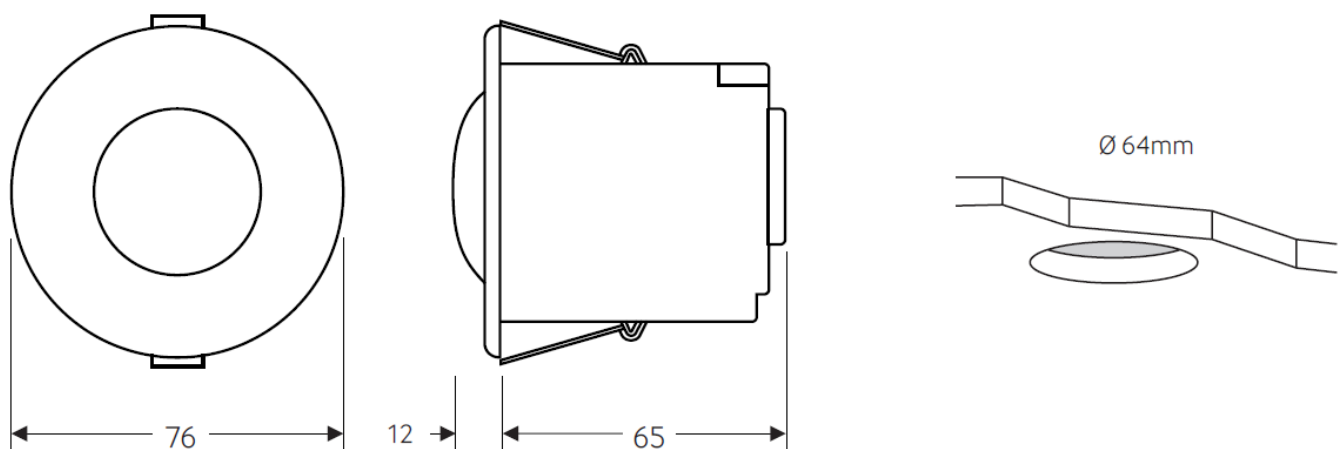
Switches both channels with occupancy. Maintains illuminance, dims, and switches the dimming channel using optional single position retractive switch (switch 2). Switches the switching channel using the optional single position retractive switch (switch 1).

EBDMR-PRM

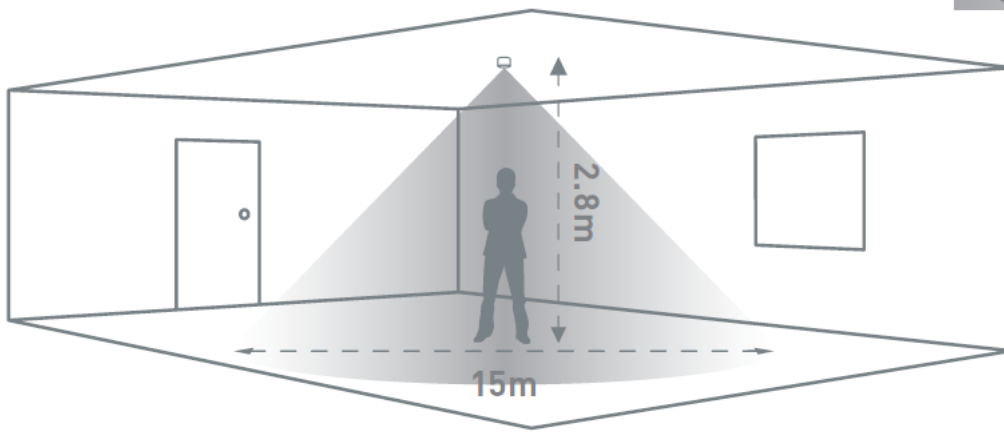
PRM switching, mid range, ceiling PIR presence/absence detector

Warning: This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.

Dimensions (mm)



Detection pattern



Wiring

Dimming outputs

Basic insulation only. Although low voltage, this is not an SELV output and should be treated as if mains potential. Use mains rated wiring

Single channel wiring

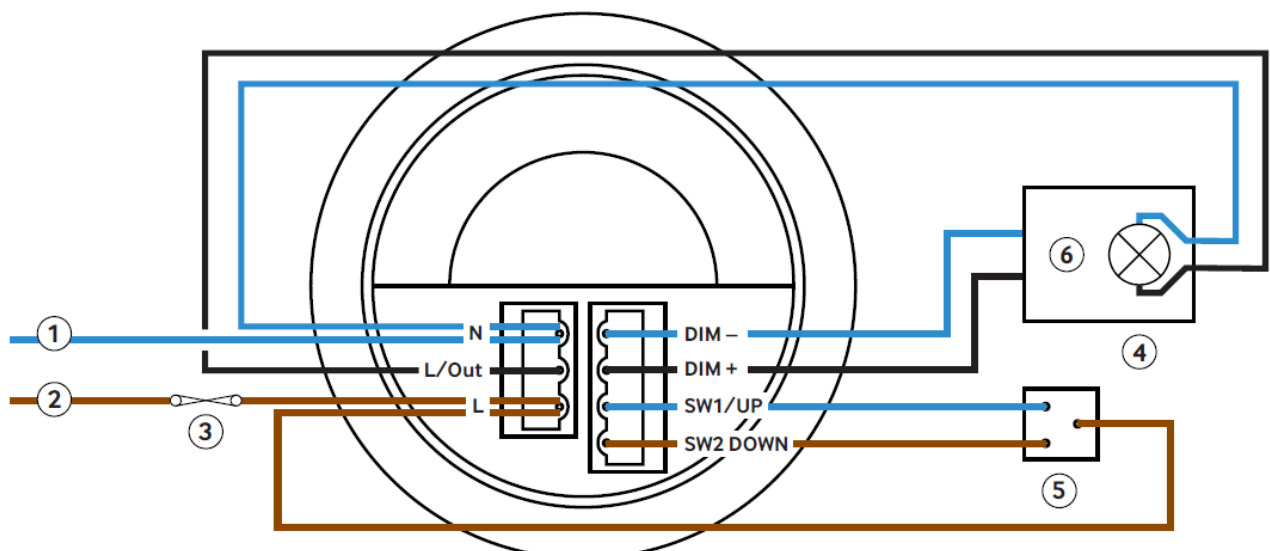
Key

1. Neutral
2. Live
3. 10A circuit protection if required
4. Load
5. Centre biased retractive switch, 230V (for absence detection)
6. Dimming ballast

Switching channel is L-Out, Dimming channel is DIM +/-

Single channel dimming

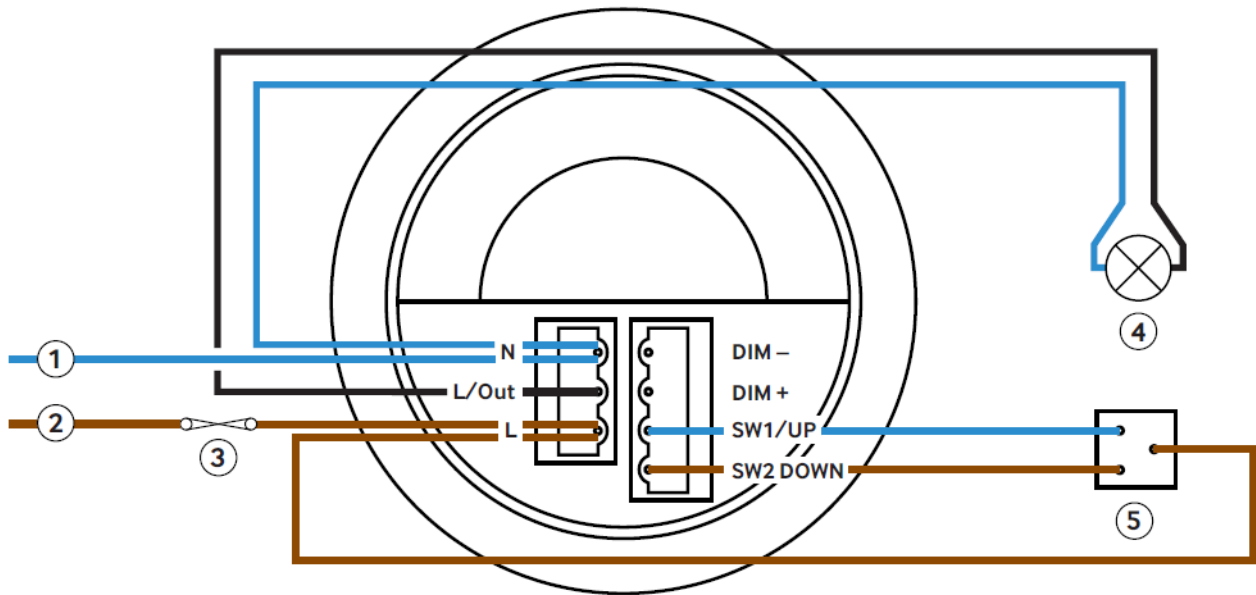
Switches the luminaire with occupancy and maintains illuminance. Dims and switches using optional centre biased retractive switch.



Single channel switching

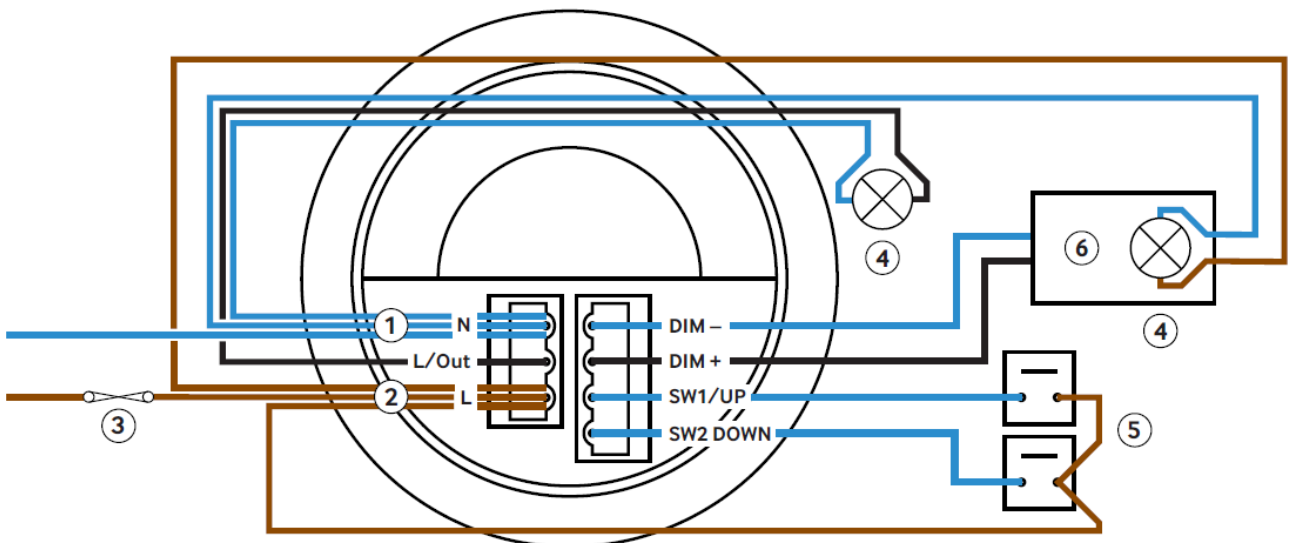
Switches channel 1 only with occupancy, optional override switch.

No dimming output.



Two channel, individual switches

Switches both channels with occupancy. Maintains illuminance, dims and switches the dimming channel using optional single position retractive switch (switch 2). Switches the switching channel using the optional single position retractive switch (switch 1).



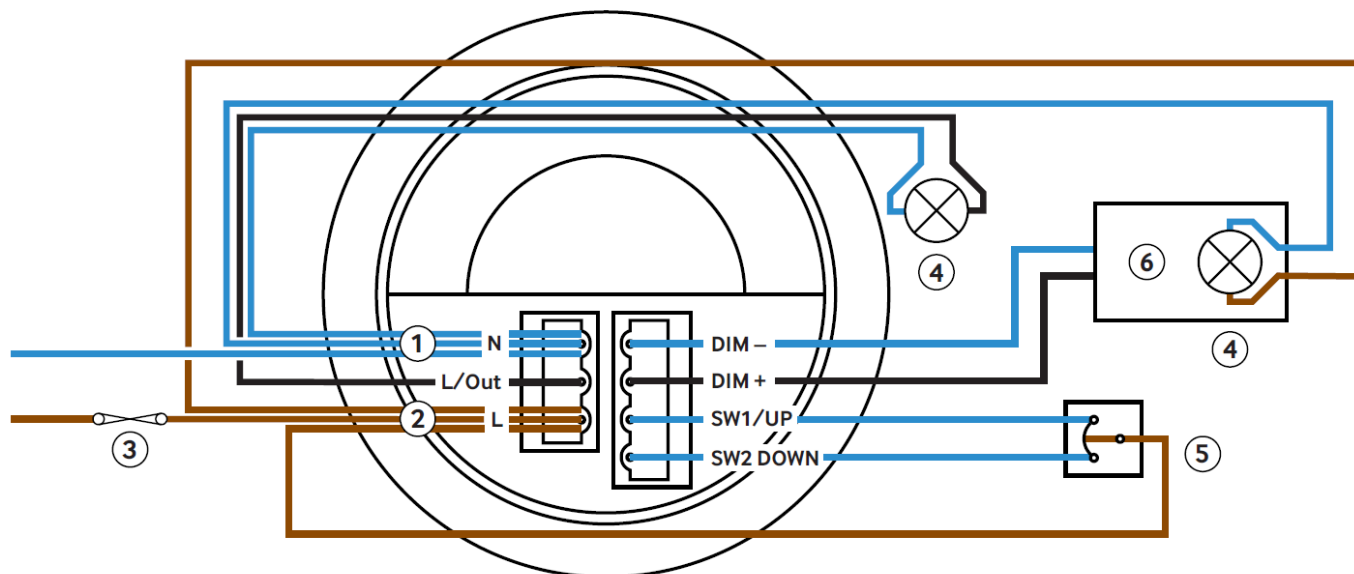
Key

1. Neutral
2. Live
3. 10A circuit protection if required
4. Load
5. Momentary push to wake switch (for absence detection)
6. Dimming Ballast

Switching channel is L-Out, Dimming channel is DIM +/-

Two channel, single switch

Switches both channels with occupancy. Maintains illuminance, dims and switches the dimming channel using optional centre biased retractive switch.



Key

1. Neutral
2. Live
3. 10A circuit protection if required
4. Load
5. Centre biased reactive switch (for absence detection)
6. Dimming Ballast

Switching channel is L-Out, Dimming channel is DIM +/-

Installation

This device is designed to be flush ceiling-mounted.

- Do not site the unit where direct sunlight might enter the sensor.
- Do not site the sensor within 1m of any lighting, forced air heating or ventilation.
- Do not fix the sensor to an unstable or vibrating surface.
- Occupancy is best detected when the ambient temperature is different to that of the human body, thus, use within -20 to 35°C ambient temperature.

Downloads and Videos

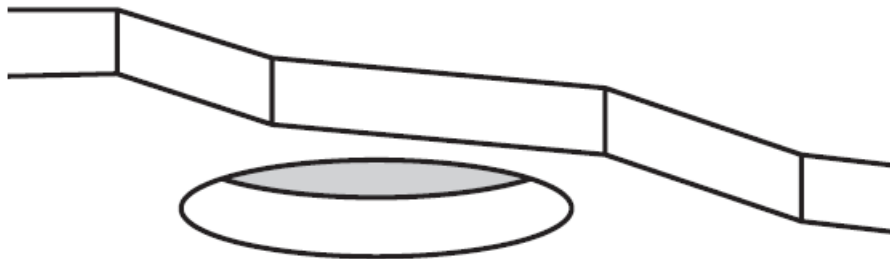


cpelectronics.co.uk/cp/922

Create cut out

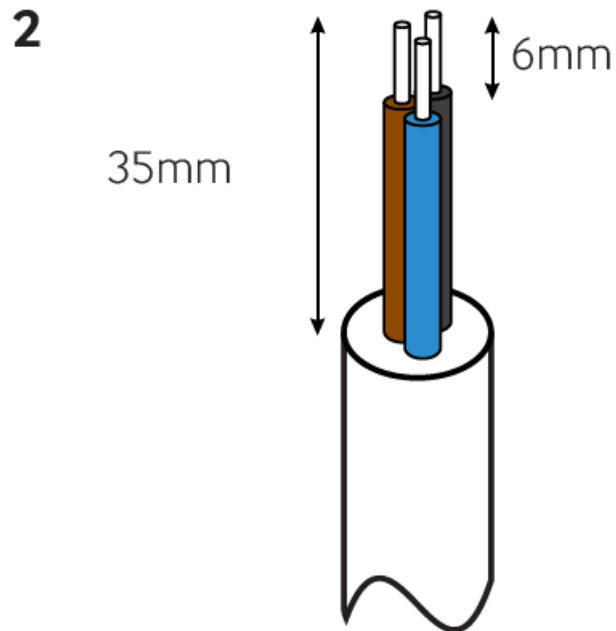
1

Ø 64mm



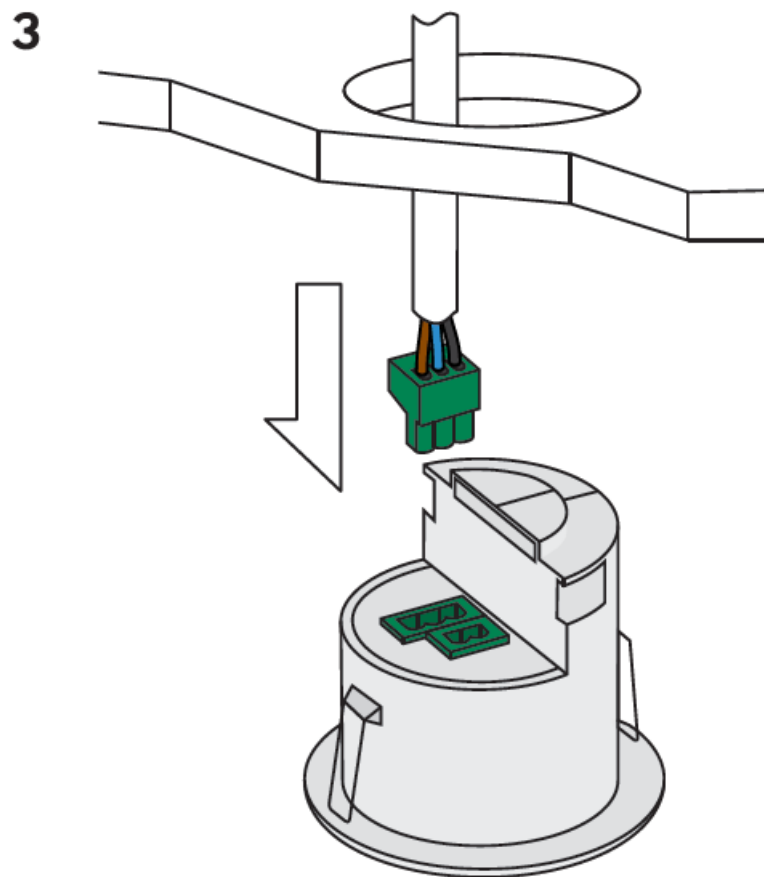
Cut a 64mm diameter hole in the ceiling.

Wire stripping



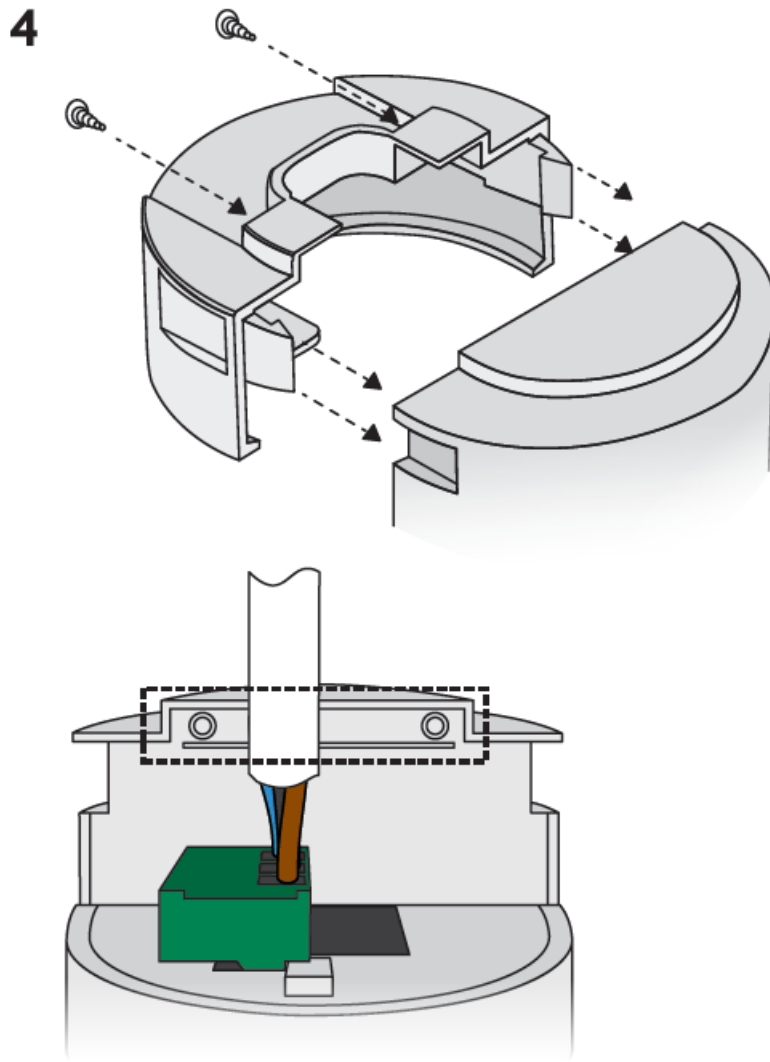
Strip the wires as shown opposite. Presence detector does not require earth conductor.

Wire in plugs & connect to detector



Wire in plug/s, using wiring diagram on page 3 as a guide. Connect the plug/s to the detector.

Clamp cable



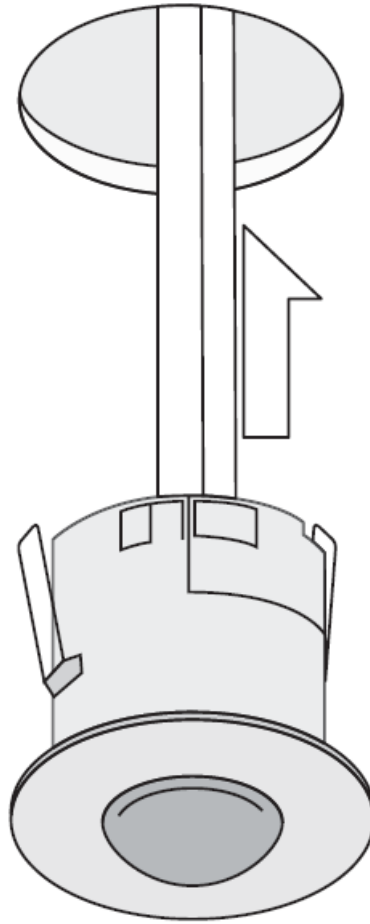
Continue tightening the screws until the clamp bar snaps out and is tightly engaged against the cable/s. The cable clamp must clamp the outer sheath only.

Install detector

Bend the springs up and push detector through hole in ceiling. When fully inserted the springs snap back to hold the device in place.

To avoid injury, take care when bending springs.

5



Default Settings

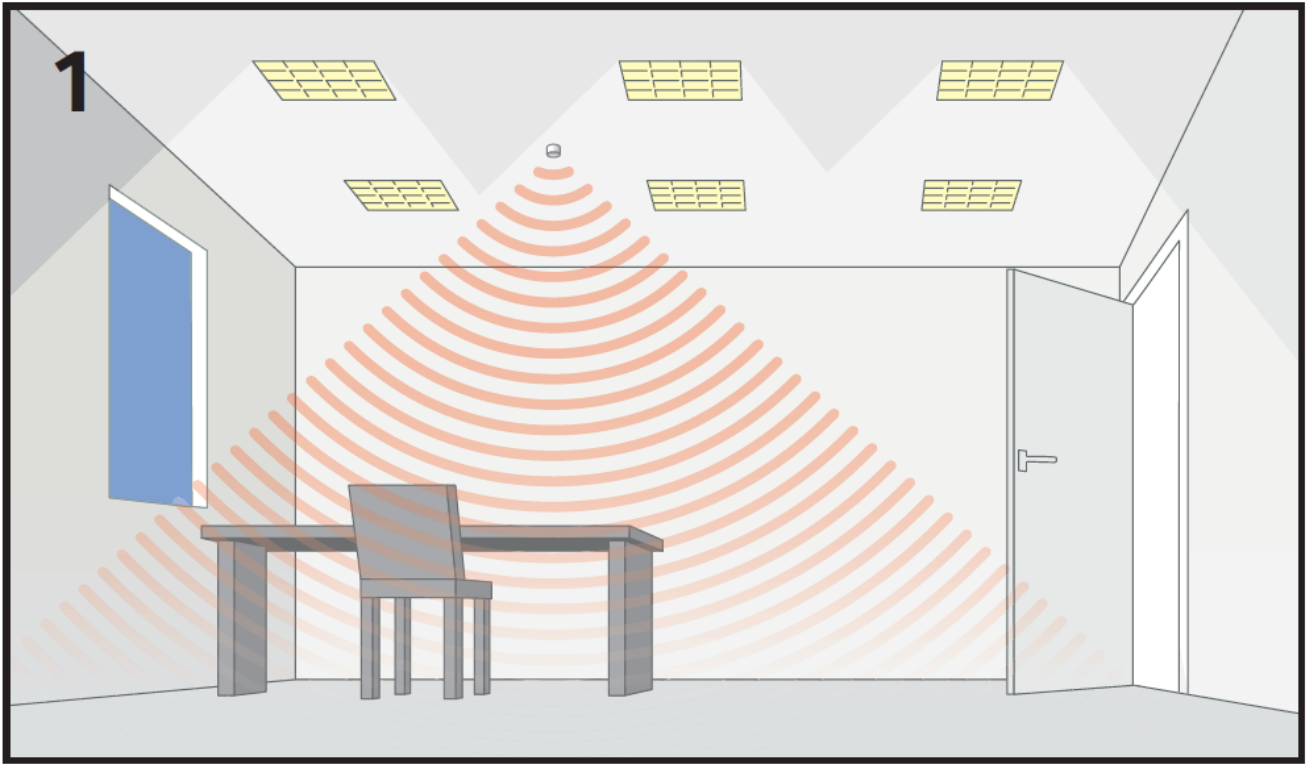
- Time out: 20 minutes.
- LUX on level: 999
- LUX off level: 999
- Sensitivity on: 9
- Sensitivity off: 9
- Detection: Presence

Adjustments can be made using the optional UHS5 or UNLCDHS handsets.

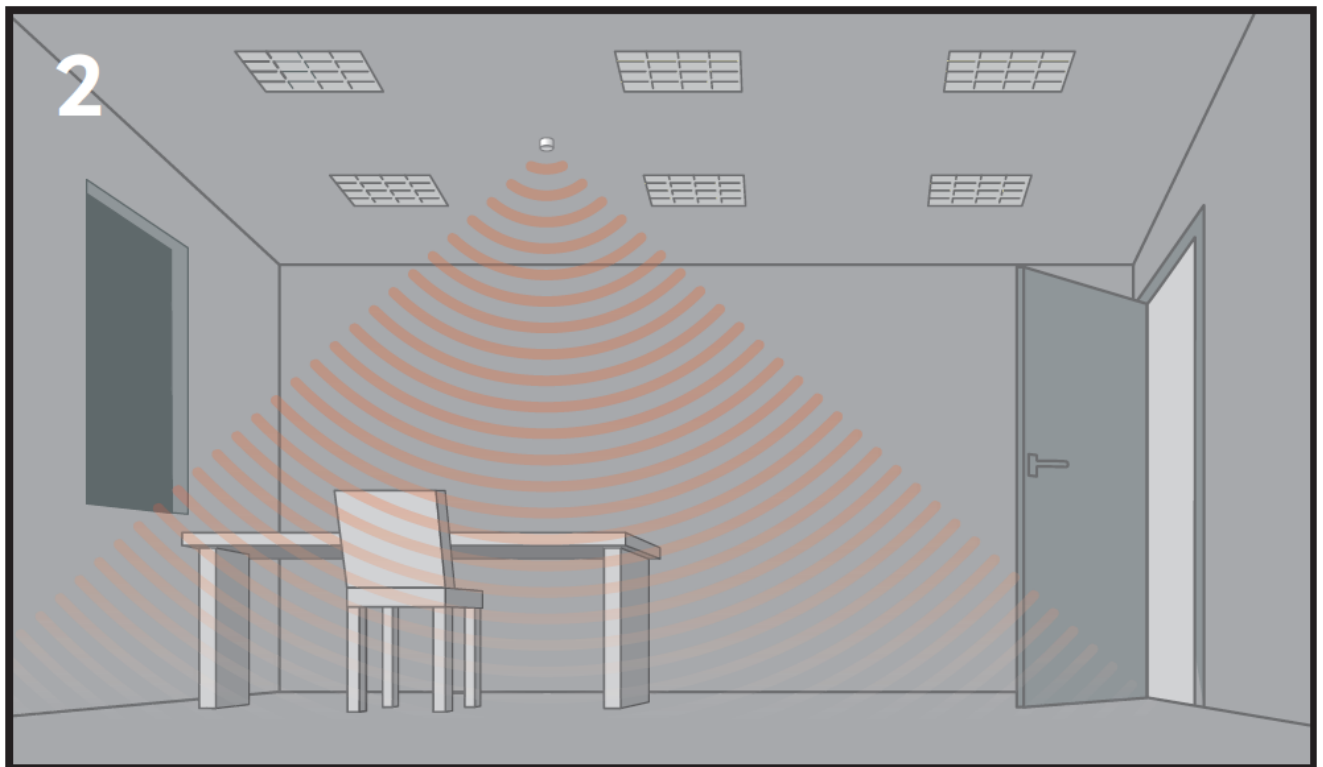
Testing

Presence Detection

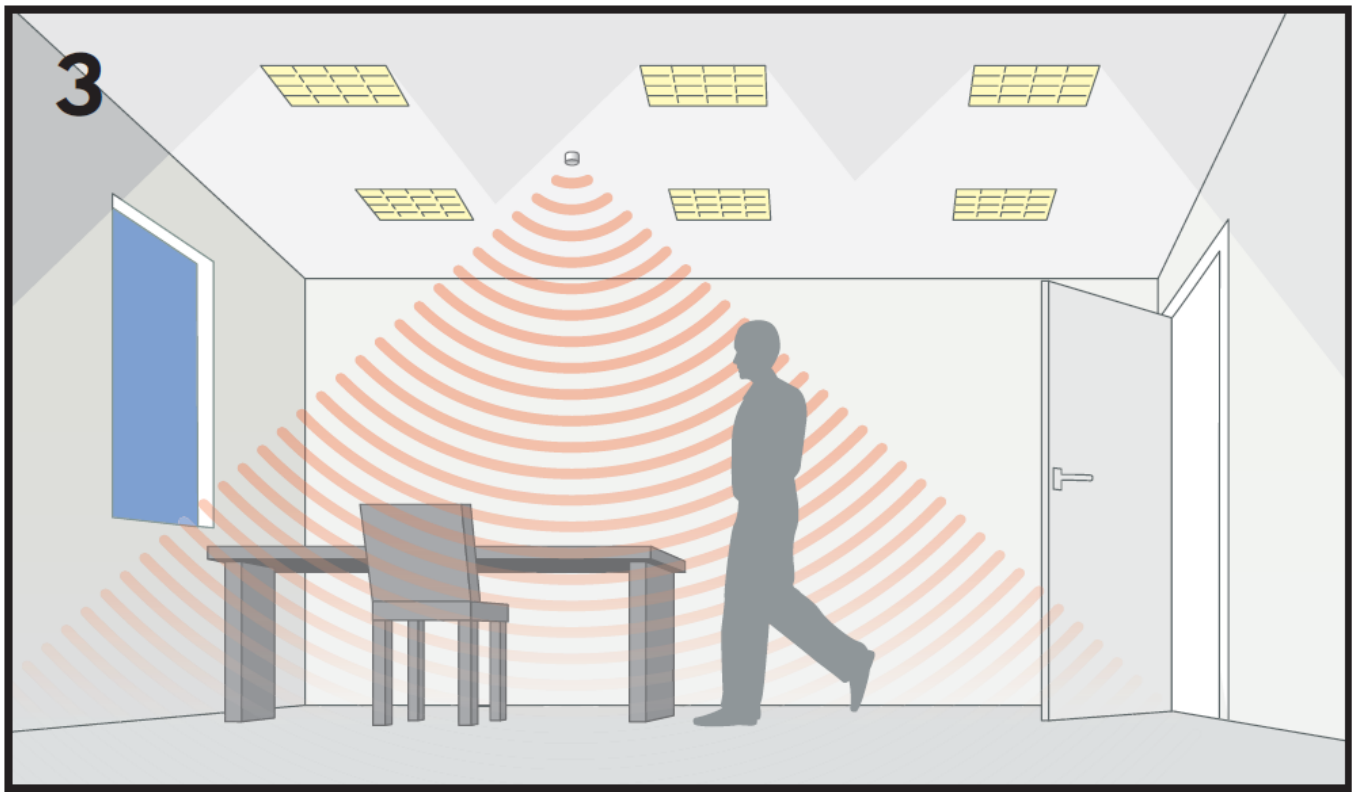
1. Power up the sensor. The load should come on immediately.



2. Vacate the room or remain very still and wait for the load to switch off (this should take less than 20 minutes).

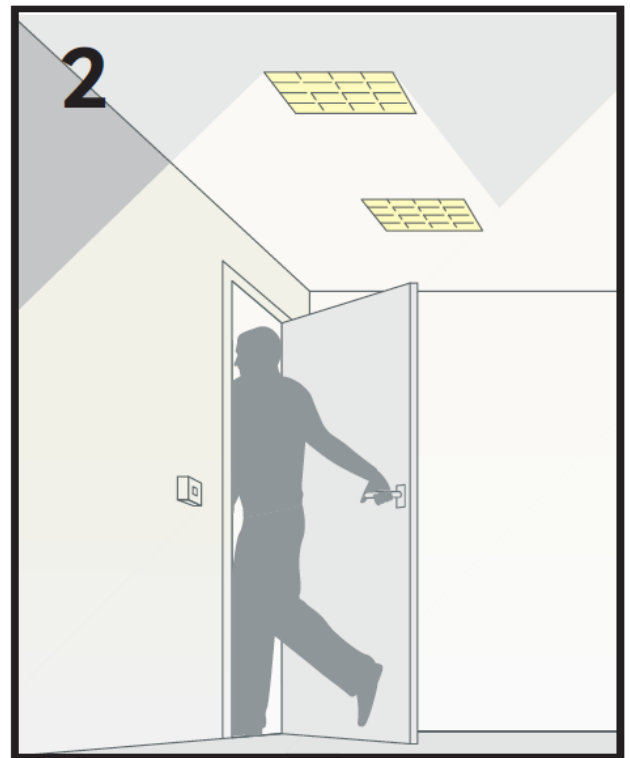
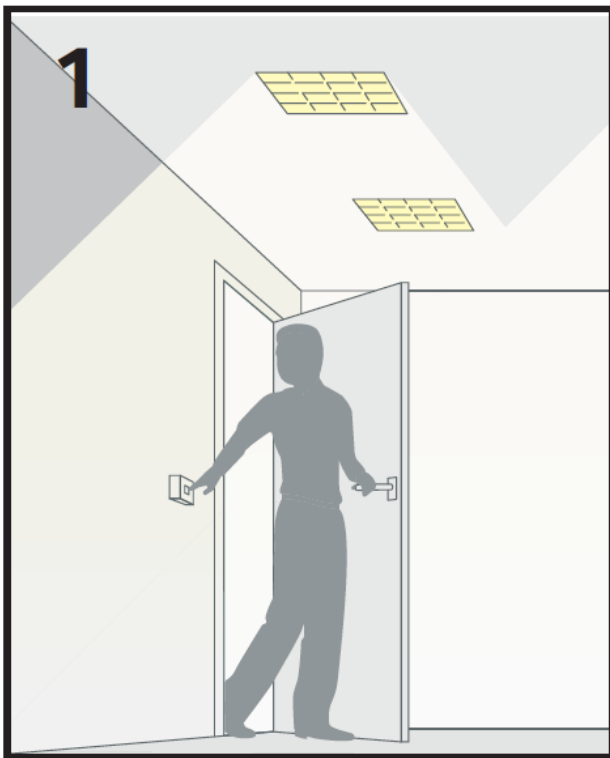


3. Enter the room or make some movement and check that the load switches on.

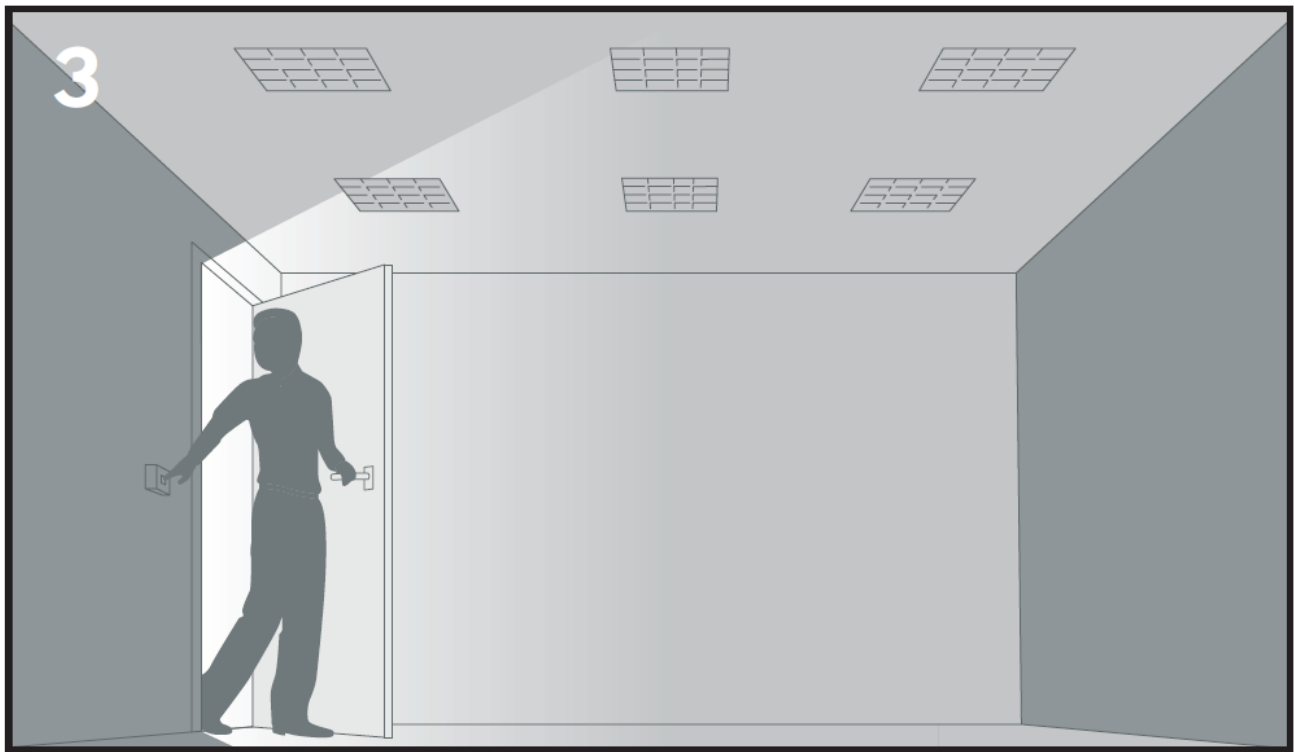


Absence Detection

1. Power up the sensor. Switch the load on.
2. Vacate the room and wait for the load to switch off (this should under than 20 minutes).



3. Enter the room, the load will remain off until you switch it on again.














Technical Data

Part code **EBDMR-PRM**

- Weight 0.15kg
- Supply voltage 230 VA C +/- 10%
- Circuit Protection $\leq 10A$, MCB Type B
- Supply frequency 50Hz
- Power consumption parasitic 807mW
- Terminal capacity 2.5mm²
- Max Switched load (L-Out)
 - Resistive: Incandescent [10A], Fluorescent [10A]
 - Capacitive, Electronic gear [10A], LED Lighting [10A]
 - Inductive Fan [10A]
 - Load inrush rating, 200A for 300μsec
- Light detection range: Usable 15-950 Lux
- Time out range: 10s–99m
- Working temperature range -10 to 35°C
- Humidity: 5 to 95% non- condensing
- Material (casing): Flame retardant ABS and PC/ABS
- Insulation class: 2
- IP rating: 40
- Compliance: EMC-2014/30/EU, LVD-2014/35/EU


Accessories & associated products

Part Number	Description
 DBB	Surface mounting box
 DBB-EXT	Surface mount back box extender
 EBD-ENCIP1	Pre-drilled 64mm hole IP65 detector enclosure
 EXD-HSC	Extended wiring housing
 UHS5	Compact, programming/commissioning handset
 UHS7	Compact, user handset
 UNLCDHS	Universal LCD IR handset/commissioning handset

	<p>CP Electronics</p> <p>Brent Crescent, London NW10 7XR t. +44 (0)333 900 0671</p> <p>enquiry@cpelectronics.co.uk</p>
<p>www.cpelectronics.co.uk</p>	<div data-bbox="746 320 1329 439">  </div> <p>connect with us</p> <div data-bbox="770 517 1225 640">  </div> <div data-bbox="826 696 1161 808">  </div>
<p>Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.</p>	

WD922 Issue 4 Installation Guide, EBDMR-PRM

Documents / Resources

	<p>CP electronics EBDMR-DD Ceiling Mounted PIR Presence Detectors [pdf] Installation Guide</p> <p>EBDMR-DD Ceiling Mounted PIR Presence Detectors, EBDMR-DD, Ceiling Mounted PIR Presence Detectors, Mounted PIR Presence Detectors, PIR Presence Detectors, Presence Detectors, Detectors</p>
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References

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[CP Electronics | Brands | Legrand United Kingdom](#)