

2. Description and Operation

The EBDSPiR-PRM PIR (passive infrared) detector provides automatic control of lighting loads with optional manual control. It can be used on incandescent, fluorescent and compact fluorescent lighting, and has the added benefit of being able to connect an external switch.

The /IP variant of these products is sealed to IP55 when installed flush in a ceiling.

Two modes of operation are available:

Presence detection:

When movement is detected the load will automatically turn on. When the area is no longer occupied the load will automatically switch off after an adjustable time period. If an external switch is connected, this can override the lights off (after the detection time period has elapsed it will revert to automatic operation). An integral adjustable photocell allows the lights to be kept off if there is sufficient ambient light.

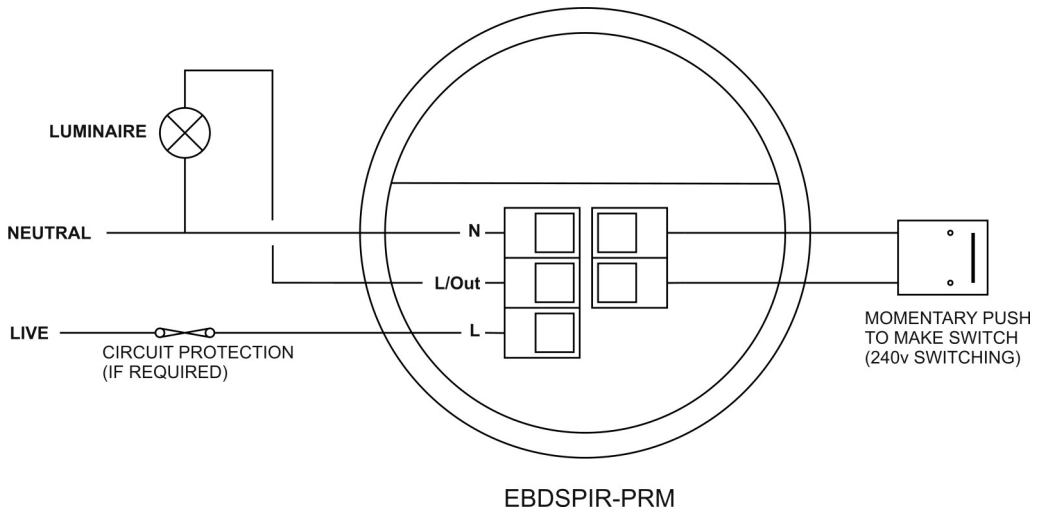
Absence detection:

The load is manually switched on using an external switch. When the area is no longer occupied the load will automatically switch off after the adjustable time period has elapsed. Pressing the switch again during occupancy override the lights off (after the detection time period has elapsed it will revert to automatic operation).

In both modes of operation a short button press turns the load on whilst a long button press turns the load off.

An integral infra-red sensor in the unit allows the unit to be programmed using the optional DD-LCDHS programming handset. This gives complete flexibility over many of the operating parameters. Without the handset, manual adjustments can be made to the sensitivity, lux and time settings using the controls on the rear of the sensor head.

The UHS user handset can be used to change output lux levels and override the lights on or off.



1. Wire the products using the diagram opposite.
2. To switch from more than one position simply wire two or more units in parallel using the Live, Neutral, Switched Live and manual switch wires only.
3. The detector should be sited so that the occupants of the room fall inside the detection pattern shown in section 5, at a recommended ceiling height of 2.8m. Note that the lower the sensor is installed the smaller the detection range will be, subject to the parameters shown on the diagram.
4. Avoid direct sunlight entering the sensor.
5. Do not site within 1m of forced air heating or ventilation.
6. Do not site within 1m of any lighting.
7. Do not fix to a vibrating surface.
8. To maintain the IP rating the unit must not be used on ceilings with an uneven surface.
9. Ensure that the unit is pushed tightly into place after commissioning.
10. Mount using one of the two options overleaf.
11. Connect the sensor via the terminal blocks. Live supply to the **L** terminal; load to the **L/OUT** terminal; Neutral to the **N** terminal on the green terminal block. External switch connections to the switch terminal.
12. Use a small screwdriver to set the LUX level adjuster fully anti-clockwise, the time to minimum (fully clockwise) and the sensitivity to maximum (fully anti-clockwise).
13. Power the unit up—the load should come on immediately.
14. Vacate the room or remain very still and wait for the load to switch off (should take no more than 2 minutes).
15. Check that the load switches on when movement is detected.
16. The LUX thumbwheel determines the ambient light level at which the lights turn on.
17. Select the time using the adjuster, fully anti-clockwise is the maximum.
18. *Using the UHS or UHS3 infra-red handset: the override on button turns the unit on permanently; the override off button turns the unit off permanently; the cancel button cancels the overrides. When an override is selected an LED will flash inside the unit. The UHS handset can also be used to set the lux levels—see Section 4.3*

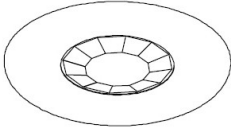
Absence detection

17. To use absence detection a retractive (momentary) switch must be connected between the 2 terminals on the diagram. Note that this will be switching mains voltage.
18. The unit ships with presence detection as default. To change to absence detection, press and release the external switch 5 times within the first minute of power up. The LED will turn on solid for 30 seconds to indicate absence mode has been selected.
19. To change back to presence detection, repeat the above procedure—the LED will flash for 30 seconds to indicate presence mode has been selected.

Note: the above adjustments can also be made using the DD-LCDHS handset instead of the manual adjusters or external switches. See section 4.

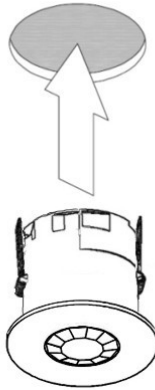
FLUSH FIXING

Warning - be careful bending springs when mounting unit.

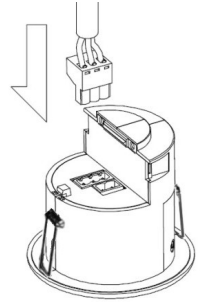


1

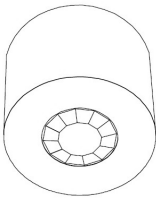
Hole Ø64mm



2

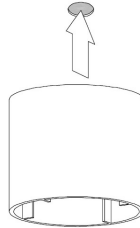


SURFACE FIXING

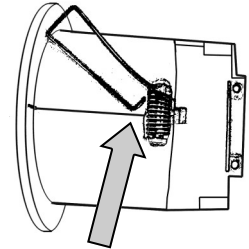


1

50mm or 60mm fixing centres



2




Pull out spring tab and rotate spring arm as shown

7. Specification

LOAD

10A of lighting and or ventilation including incandescent, fluorescent, compact fluorescent, low voltage (switch primary of transformer).

SUPPLY VOLTAGE	220-240 Volts AC 50 Hz
TIME OUT PERIOD	Adjustable 10 seconds to 99 minutes
LIGHT LEVEL	Light to dark
TERMINAL CAPACITY	2.5mm ²
MATERIAL	Flame retardant ABS
TYPE	Class 2
IP RATING	IP55
TEMPERATURE	-10°C to 35°C
CONFORMITY	EMC-89/336/EEC  LVD-73/23/EEC

8. Part Numbers

EBDSPIR-PRM/IP	PIR presence/absence detector
DD-LCDHS	IR remote control programming handset with LCD screen
UHS	IR remote control user handset with lux setting functionality
UHS3	IR remote control user handset with on/off override only

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7KLMHYLFHVKRXEHLWVDBEEDTXDLH □
HBEWULFLDLDFFRUDEMKWKBWVWVWLR □
RIWKI16 □ :LUL □ 5XHV □ D □ DSSLFDEH □
XLL □ 5HXDWLRV □

8LW □
ZDDYHUD5RD □
0DEFIXDULH3DUN16 □ □
XWUDEL
7
PMPDUWERPDX □

XHWRRXUSRLEBIFERWLXDSURXFWLPSURYHPPHW6PDUWUHVHUYHVWKHULKWWRDWHUWKHVSFLILFDWLRBIWKLVSURXFWLWKRXV