EBR-MINPIR-DALI

DALI network miniature PIR with photocell

Overview

The EBR-MINPIR-DALI presence detector provides automatic control of lighting. It is connected to the Rapid DALI Gateway via a DALI network.

Functioning as a presence detector, the unit can turn lights on when a room is occupied and off when the room is empty.

An adjustable internal light sensor provides light level information to the Rapid system to allow lights to be kept off if sufficient daylight is present, and to enable maintained illuminance for dimming systems.

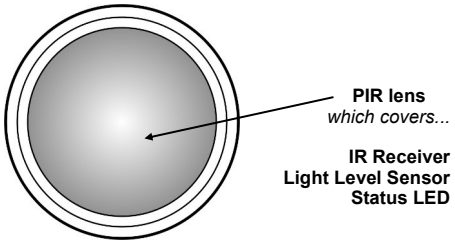
An integral IR sensor in the unit allows the unit to be commissioned, and used in conjunction with a remote control handset (part no: UHS) to:

- Act as a conventional dimmer
- Override the unit on or off

This detector is ideal for mounting in chill beams or continuous run lighting.

Features

Sensor head



PIR Sensor

Detects movement within the unit's detection range, allowing load control in response to changes in occupancy.

IR Receiver

Receives control and programming commands from an IR (infrared) handset.

Light Level Sensor

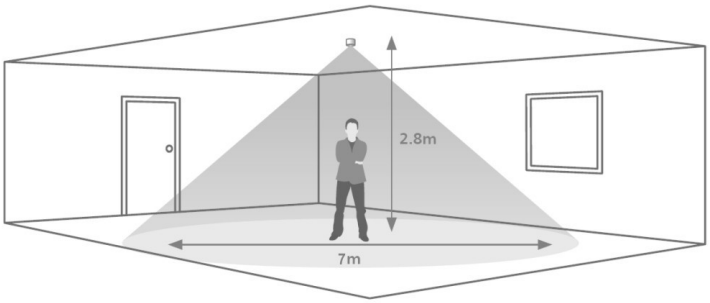
Measures the overall light level in the detection area

Status LEDs

The LED flashes **R**ed to indicate the following:

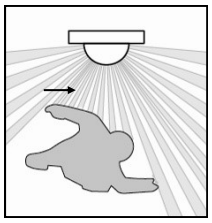
Walk Test LED active	*when movement is detected*
Valid setting received	

Detection diagram



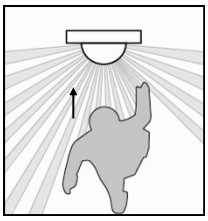
Note: illustration shows an average of the walk across and walk towards figures below.

Walk across



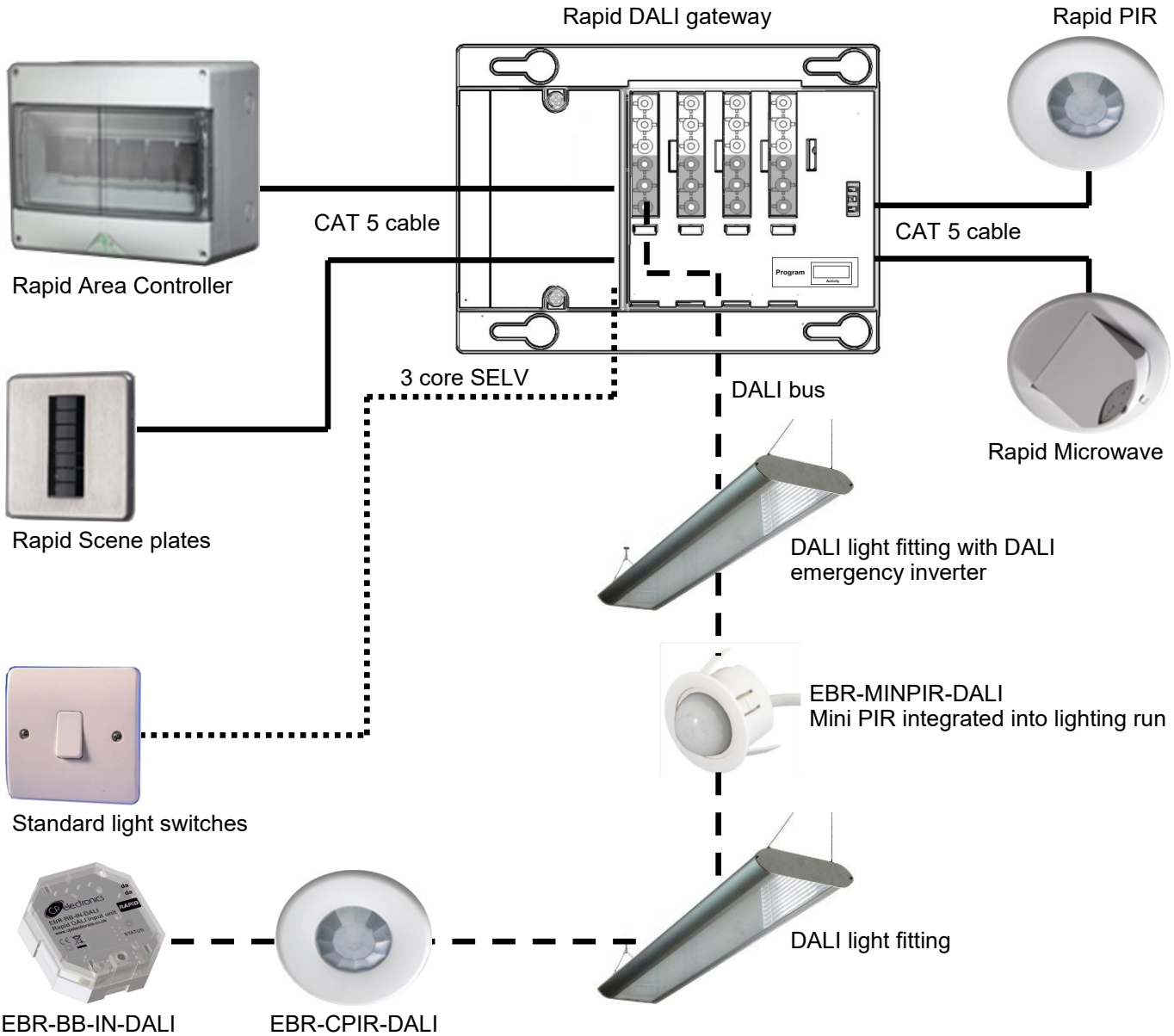
Height	Range Diameter
7m	16m
2.8m	9m

Walk towards



Height	Range Diameter
7m	10m
2.8m	5m

System wiring example



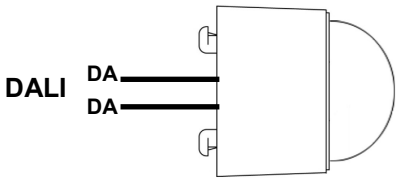
Installation

Choosing a Suitable Location
The detector should be sited so that the occupants of the room fall inside the detection pattern shown on page 1, 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 detection diagram.

- Avoid direct sunlight entering the sensor.
- Do not site within 1m of forced air heating or ventilation.
- Do not fix to a vibrating surface.
- Do not exceed maximum length of cable (200m) on data bus.
- Do not exceed maximum bus loading (200mA).

Wiring diagram

The EBR-MINPIR-DALI supplied with two 1m wires to connect to the DALI network. The device is designed to operate correctly with reversed polarity.



Mounting

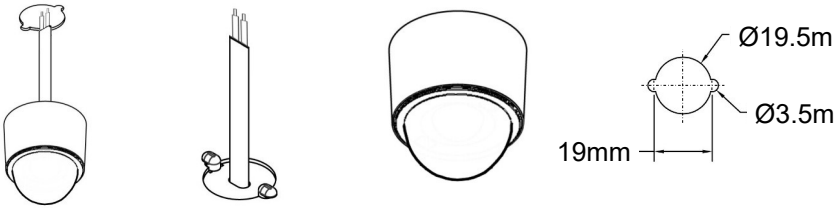
Standalone mounting
The product is designed to be mounted into a ceiling tile or plasterboard ceiling using the flush holder as shown below. If flush mounting in a panel >6mm thick, remove bottom of retention arms with side cutters.

Luminaire mounting
The product is also designed to be mounted directly to a luminaire, either on the inside or outside.

- The PIR lens must have a view outside the luminaire.
- For optimum lux measurement, the lens must be shielded as much as possible from the light source.
- If flush mounting in a panel >6mm thick, remove bottom of retention arms with side cutters.

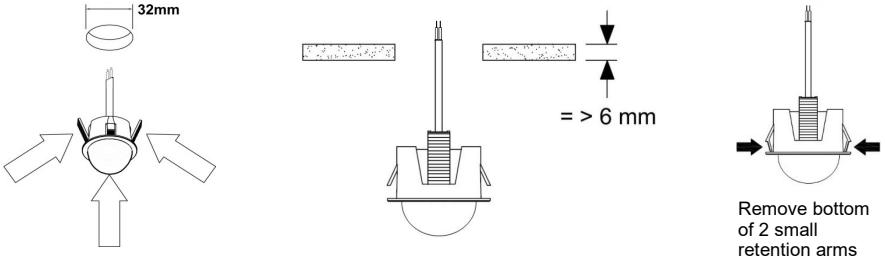
Surface mounting

Use the lugs on rear of detector to secure into thin sheet metal (1mm max.).



Flush mounting

The product can be mounted using the flush mount ring as shown. If flush mounting in a material that is greater than 6mm thick, remove bottom of retention arms with side cutters. A 32mm diameter hole will be required to mount the flush mount ring.



DALI bus loading

Devices (detectors / input units) and ballast combinations for 200mA supply.

This assumes that the sensor LEDs are all on, and the sensor is receiving IR communication.

- 4 devices and up to 64 ballasts
- 5 devices and up to 55 ballasts
- 6 devices and up to 44 ballasts
- 7 devices and up to 33 ballasts
- 8 devices and up to 22 ballasts
- 9 devices and up to 12 ballasts
- 10 devices and up to 2 ballasts

In most realistic scenarios, only one LED is on at a time and only one detector is receiving IR; guidance changes to.

- 10 devices up to 64 ballasts
- 11 devices up to 60 ballasts
- 12 devices up to 55 ballasts
- 13 devices up to 50 ballasts
- 14 devices up to 48 ballasts
- 15 devices up to 44 ballasts

Addressing limits of DG64

- 5 input units of 7 channels each
- 10 detectors

Technical data

Dimensions	See diagrams opposite
Weight	0.10kg
Supply Voltage	9.5VDC—22.5VDC via DALI
Current consumption	8mA
DALI bus	Cannot be considered as SELV since DALI, ballasts only offer basic insulation, therefore all devices on the DALI bus must be wired as if carrying mains potential.
Cable	1m cable 2 x 0.65mm^2
Material (casing)	Flame retardant ABS
Compliance	EMC-2014/30/EU LVD-2014/35/EU

For further compliance information visit www.cpelectronics.co.uk/compliance

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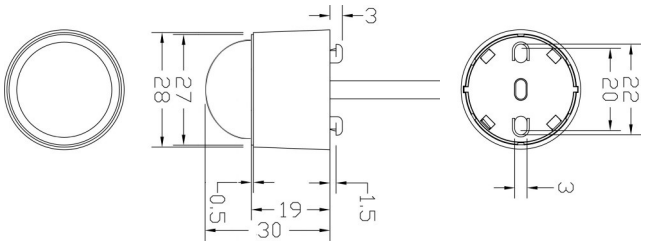
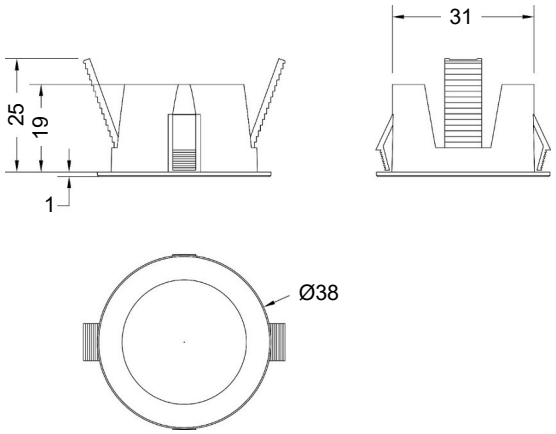
Sensor head



Flush ring



Part numbers

	Part number	Description
Sensor	EBR-MINPIR-DALI	DALI network ceiling PIR with photocell
Accessories	UHS	User handset override on/off; lux up/lux down
	UHS3	User override remote handset on/off
	UHS3 (2)	User override remote handset, off only
	UNLCDHS	Universal LCD programming handset

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