Product Guide

EBR-CPIR-DALI & EBR-CPIR-DALI-IP

DALI network ceiling PIR with photocell

Overview

The EBR-CPIR-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.

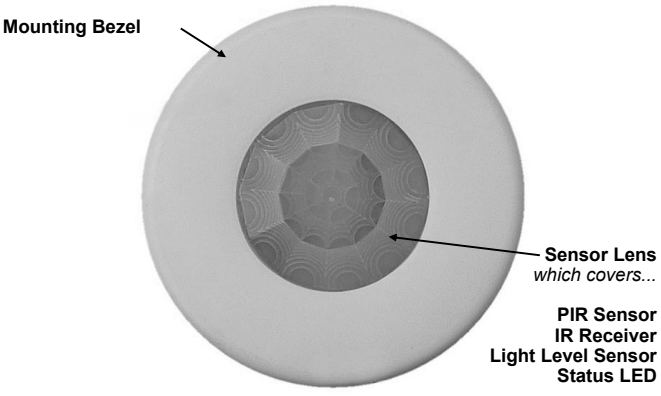
An adjustable internal light sensor provides light level information to the RAPID system to allow lights to be kept off if sufficient daylight is present, and to enable maintained illuminance for dimming systems.

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:

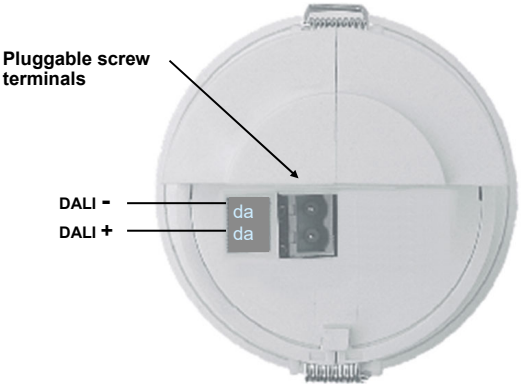
- Act as a conventional dimmer
- Override the unit on or off

Features

Front features



Back features



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 or **G**reen to indicate the following:

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

DALI connection
Connection to the DALI bus via pluggable screw terminals. The DALI bus is polarity insensitive.

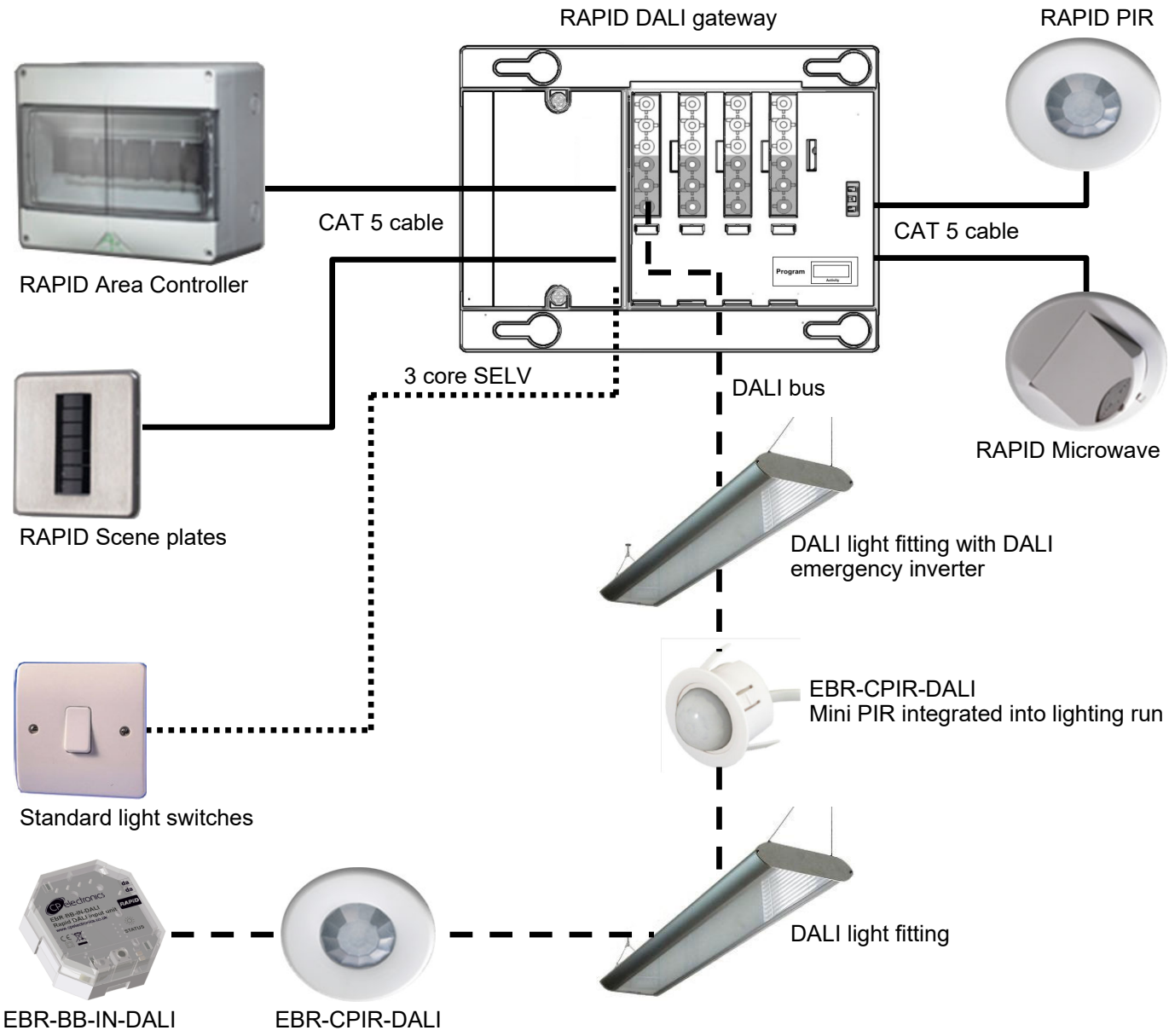
Installation

Choosing a Suitable Location

The EBR-CPIR-DALI is designed to be ceiling mounted and must satisfy the following criteria:

- Avoid positioning the unit where direct sunlight may enter the sensor element.
- 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.
- Do not exceed maximum length of cable (200m) on data bus.
- Do not exceed maximum bus loading (200mA).

System wiring example



Installation

The EBR-CPIR-DALI is designed to be mounted using either:

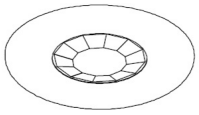
- Flush fixing, or
- Surface fixing, using the optional Surface Mounting Box (part no. DBB).

Both methods are illustrated below.

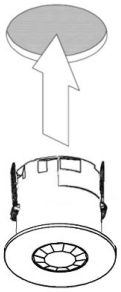
Note: EBR-CPIR-DALI-IP - use the supplied gasket to ensure IP rating (<u>not</u> compatible with Surface Mounting Box part no. DBB).

Flush Fixing

Warning - be careful bending springs when mounting unit.



1 Hole Ø64mm



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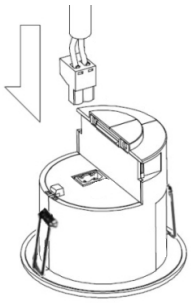

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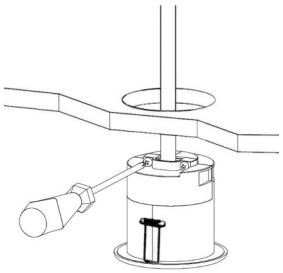

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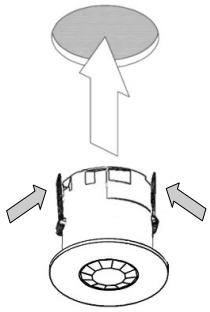
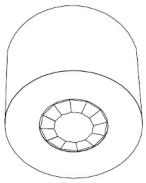
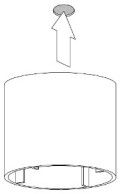


Surface Fixing



1 50mm or 60mm fixing centres



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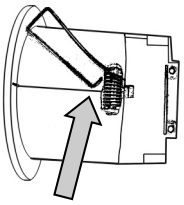
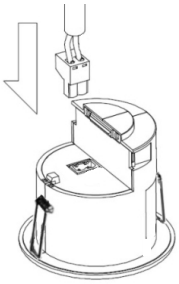


Pull out spring tab and rotate spring arm as shown

3



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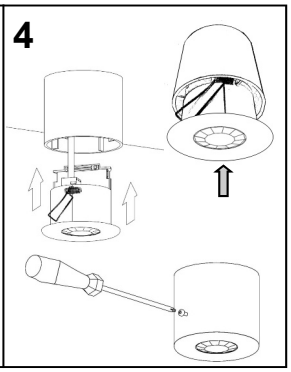
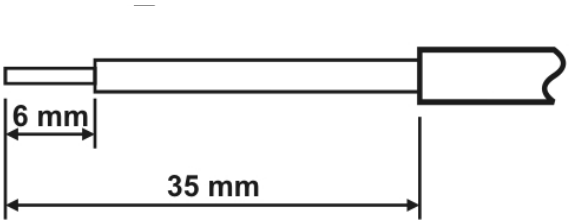
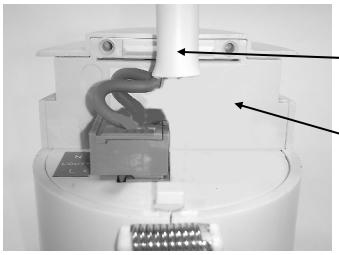


Wire stripping details





Important
Ensure that the cables are formed as shown before affixing the cable clamp. The clamp MUST clamp the outer sheath(s) only.

Bend cores as shown.

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

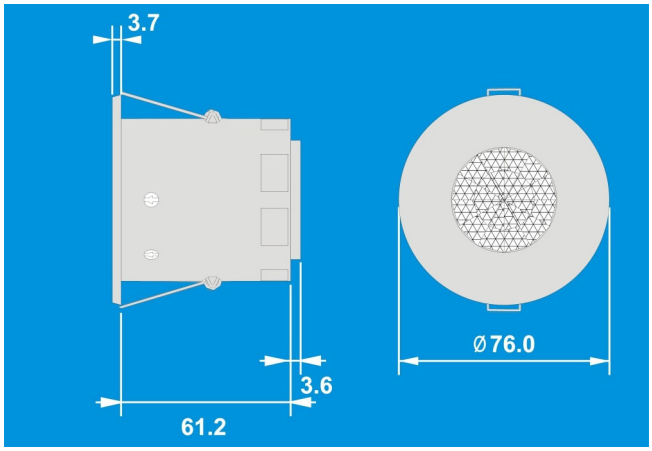
- 5 input units of 7 channels each
- 10 detectors

Technical data

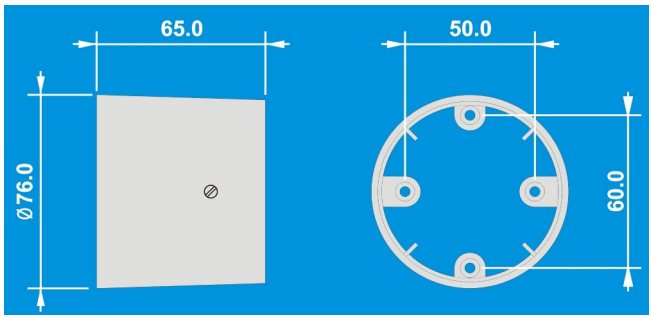
Dimensions	See diagrams opposite	
Weight	0.07kg	
Supply Voltage	9.5VDC—22.5VDC via DALI	
Current consumption	8mA	
DALI bus	Cannot be considered as SELV since DALI, ballasts only offer basic insulation, therefore all devices on the DALI bus must be wired as if carrying mains potential.	
Terminal Capacity	2.5mm^2	
Temperature	-10ºC to 35ºC	
Humidity	5 to 95% non-condensing	
Material (casing)	Flame retardant ABS and PC/ABS	
Type	Class 2	
IP rating	EBR-CPIR-DALI	IP40
	EBR-CPIR-DALI-IP	IP55
Compliance	EMC-2014/30/EU	
	LVD-2014/35/EU	

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

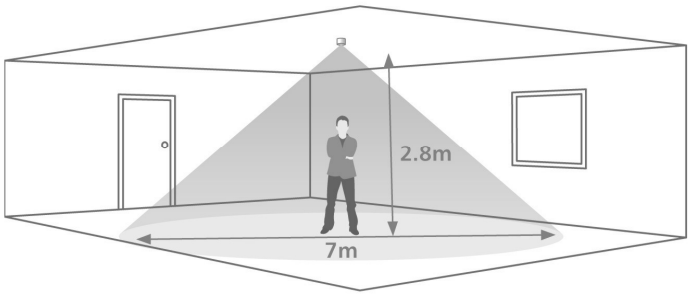
EBR-CPIR-DALI



DBB - Surface mounting box



Detection diagram



Area of high sensitivity

Area of lower sensitivity

Part numbers

	Part number	Description
Sensor	EBR-CPIR-DALI	DALI network ceiling PIR with photocell
	EBR-CPIR-DALI-IP	DALI network ceiling PIR with photocell sealed to IP55
Accessories	DBB	Surface mounting box
	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

IMPORTANT NOTICE!
This device should be installed by a qualified electrician in accordance with the latest edition of the IEE Wiring Regulations and any applicable Building Regulations.

bsi. ISO 9001 Quality Management FM 45789 | ISO 14001 Environmental Management EMS 534520 | ISO 45001 Occupational Health and Safety Management OHS 642036

ESTA energy systems trade association

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