Product Guide

CP Electronics
A brand of **legrand**

RAPID
Lighting Control System

DALI 2 ®

EBR-EBDMR-DALI

DALI-2 network input device mid range ceiling PIR

Overview

The DALI-2 RAPID PIR mid-range presence detectors provides automatic control of lighting. It is connected to the RAPID DALI-2 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.
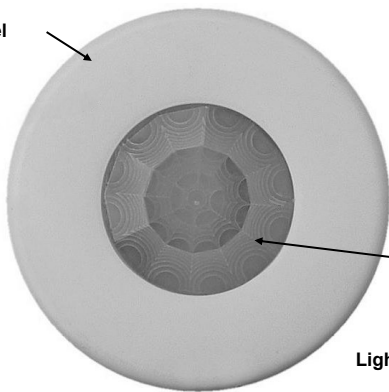
An integral IR sensor in the unit allows the unit to be commissioned, and used in conjunction with a remote control handset (part no: UHS) to:

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

Features

Front features

Mounting Bezel

Sensor Lens
which covers...

PIR Sensor
IR Receiver
Light Level Sensor
Status LED

Back features

Pluggable screw terminals

DALI –
DALI +

da
da

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
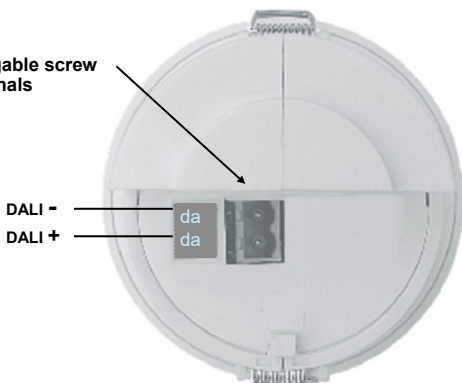Measures the overall light level in the detection area

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.
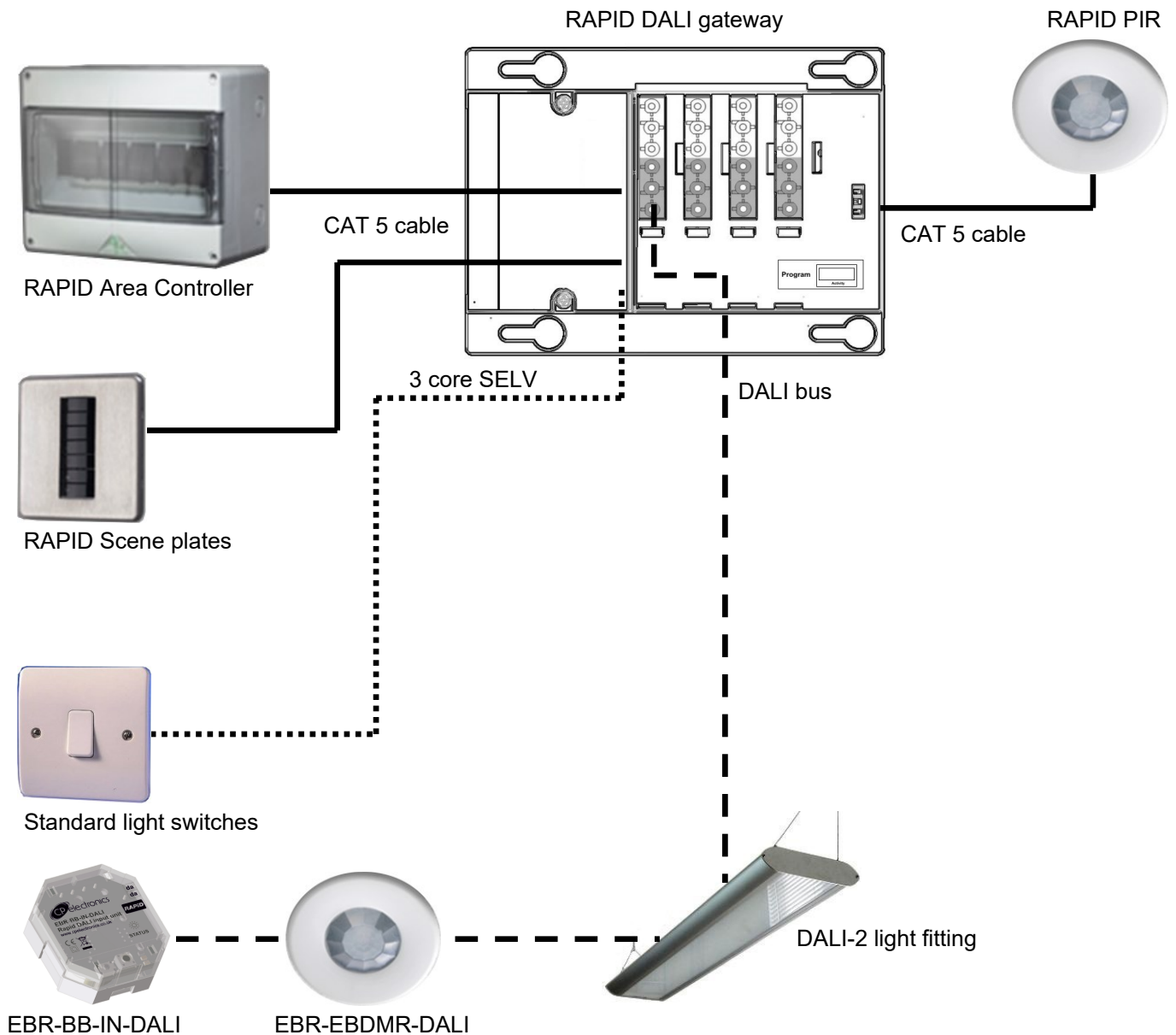
Installation

Choosing a Suitable Location

The EBR-EBDMR-DALI are 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 (240mA).
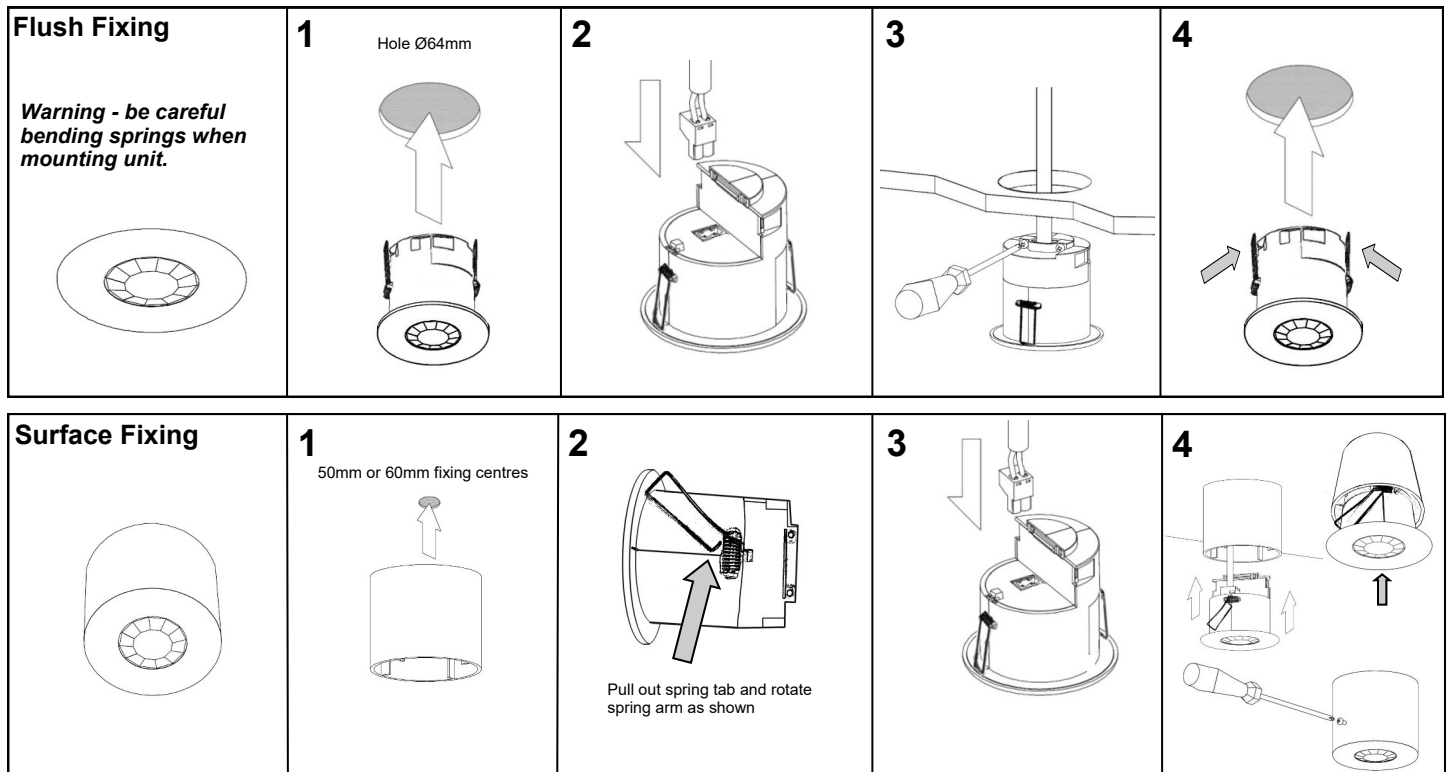
System wiring example (For reference)

RAPID DALI gateway

RAPID PIR

CAT 5 cable

CAT 5 cable

RAPID Area Controller

3 core SELV

DALI bus

RAPID Scene plates

Standard light switches

DALI-2 light fitting

EBR-BB-IN-DALI   EBR-EBDMR-DALI

IMPORTANT NOTICE!
This device should be installed by a qualified electrician in accordance with the latest edition of the IET Wiring Regulations and any applicable Building Regulations.
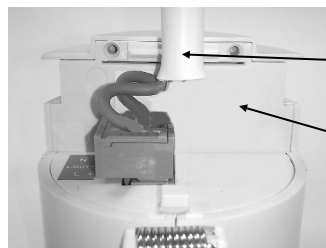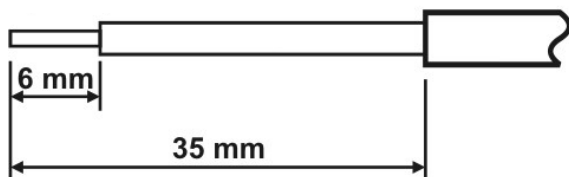
The EBR-EBDMR-DALI are designed to be mounted using either:

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

Both methods are illustrated below.

Flush Fixing	1	2	3	4
Warning - be careful bending springs when mounting unit.	Hole Ø64mm			

Surface Fixing	1	2	3	4
	50mm or 60mm fixing centres	Pull out spring tab and rotate spring arm as shown		

Wire stripping details

6 mm
35 mm

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

For reference only: Devices (detectors / input units) and driver 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 drivers
- 5 devices and up to 55 drivers
- 6 devices and up to 44 drivers
- 7 devices and up to 33 drivers
- 8 devices and up to 22 drivers
- 9 devices and up to 12 drivers
- 10 devices and up to 2 drivers

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 drivers
- 11 devices up to 60 drivers
- 12 devices up to 55 drivers
- 13 devices up to 50 drivers
- 14 devices up to 48 drivers
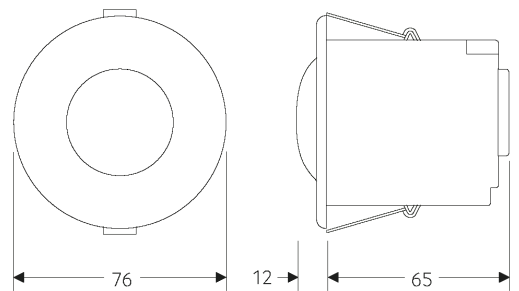- 15 devices up to 44 drivers

Addressing limits of DG64

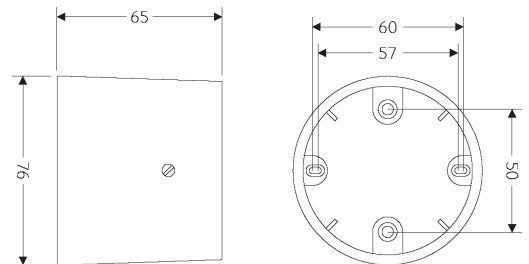- 5 input units of 7 channels each
- 10 detectors

Technical data

Dimensions:	See diagrams opposite
Weight:	0.15kg
Supply Voltage:	9.5V—22.5VDC over DALI Bus
Nominal Current Consumption:	8mA
Maximum (Peak) Current Consumption:	18mA
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:	IP40
Compliance:	CE & UKCA
DALI-2 Certification	IEC62386 Parts 101,103, 303 & 304

For further compliance information visit www.legrand.co.uk

EBR-EBDMR-DALI

76 12 65

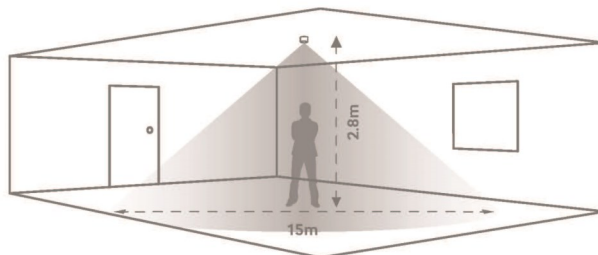EBDBB - Surface mounting box

65 76 60 57 50

Detection diagram

EBR-EBDMR-DALI

2.8m

15m

high < sensitivity > low

Part numbers

	Part number	Description
RAPID Detector Accessories	EBR-EBDMR-DALI	DALI-2 network, mid range, input device, ceiling PIR presence detector
	EBDBB	Surface mounting box
	UHS	User handset override on/off; lux up/lux down
	UNLCDHS	Universal LCD programming handset

CP Electronics

A brand of legrand

Ref: #WDA091 Issue 1