

B.E.G. LUXOMAT[®] net PD-DALISYS

Installation and Operating Instruction for B.E.G. PD4-DALISYS / PD4-DALISYS-C/ PD11-DALISYS-FLAT

1. Product information

- PD11-DALISYS-FLAT-DE: Low profile DALI multisensor (visible height: 0,85mm). Spring-clamps for easy and time-saving installation into false ceilings or directly built into light fittings, with accessory also suitable for in-wall sockets
- PD4-DALISYS: extra wide range DALI multisensors
- PD4-DALISYS-C: extra wide range DALI multisensors for corridors
- Seamless integration in B.E.G. LUXOMATnet DALISYS[®]
- Multimaster-capable with Slave function
- Semi-automatic, full-automatic or twilight switch
- DIP- and HEX-switch for quick commissioning with basic functionality
- Works out-of-the box in broadcast mode for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT[®]net DALISYS[®]

2. Operation

Especially flat, addressable DALI multisensor with integrated DALI application controller. The device is supplied with operating voltage via the DALI bus and requires a current of 7mA. If humans, animals or other sources of heat move in the area of detection, the device automatically switches on DALI lamps. If no movement is detected, the light is switched off again after 10 minutes. The destination address can be set via the HEX switch. Using DIP switches the device can be adjusted to different operating modes. To increase the detection range, all B.E.G. Multisensors with the identifier „DALISYS“ in the product description can be used. The complete functional range can only be activated using accessory.

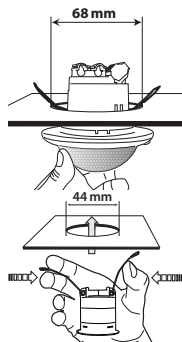
3. Safety advice

- Work on electrical equipment should only be undertaken by qualified electricians or by trained personnel under the instruction and supervision of a trained electrician, according to the regulations for electrical installation
- Turn off the mains supply before fitting
- This device is not to be used to isolate other equipment from the mains supply
- After inserting the connection cable, fit the supplied cover to the detector
- The DALI terminals must not be connected to the mains supply

4. Mounting

The ideal mounting location is inside, 2.5 to 3 metres high, on the ceiling. Ventilation units should not be in the immediate vicinity of the detector, as otherwise "false alarm" motion detection events may be triggered.

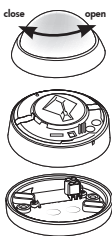
4.1. FC version



PD4: A circular opening of diameter 68 mm must first of all be produced in the ceiling. Having connected up the cables in accordance with regulations, the detector is inserted into the opening and fixed into position with the assistance of the spring clip.

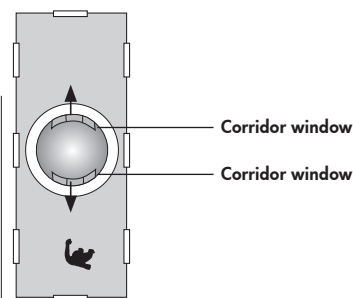
PD11: A circular opening of diameter 44 mm must first of all be produced in the ceiling. Having connected up the cables in accordance with regulations, the detector is inserted into the opening and fixed into position with the assistance of the spring clip.

4.2 SM-Version



The detector must be fixed on a smooth, solid surface. Before mounting, the lens must be removed. Turn the lens about 5° anticlockwise and remove it. Undoing two screws allows the detector to be removed from the socket. After properly connecting the wiring, and attaching the socket to the ceiling with 2 screws, the detector must be reattached to the socket with 2 screws. Then reattach the lens, turning it clockwise.

Attention: For adjusting the corridor detector correctly, please align the respective lens portions as indicated.



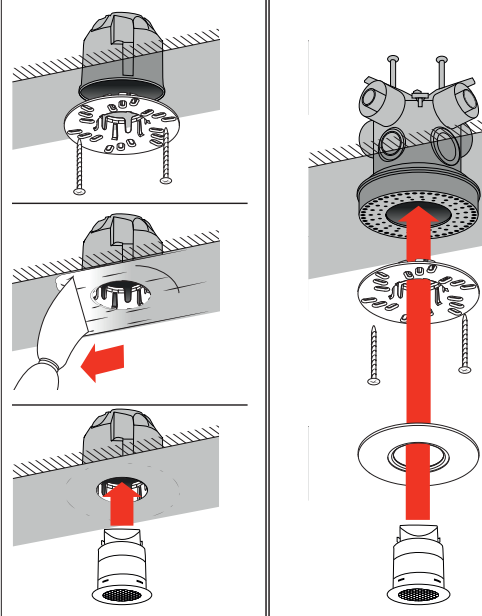
4.3 Mounting into luminaires (PD11)

For mounting the PD11-DALISYS-FLAT-FC into luminaires use the supplied clamp ring and remove the spring clips.

4.4 Mounting FM-adapter PD11

92832 Adapter Set 1

92833 Adapter Set 2



4.5 Settings with HEX and DIP switches by using the example of the PD11-DALISYS-FLAT

Fig. 1

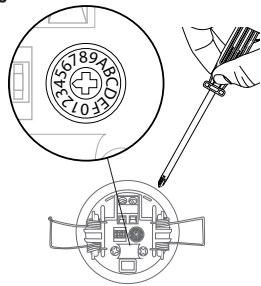


Fig. 1: Group is set on the HEX rotary switch with a small cross-screwdriver

Fig. 2

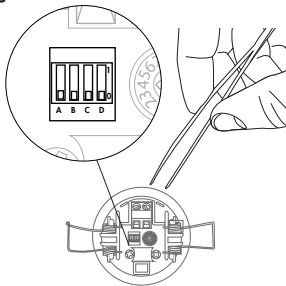


Fig. 2: Mode of operation is set on the DIP switches with a small and pointed forceps

Fig. 3

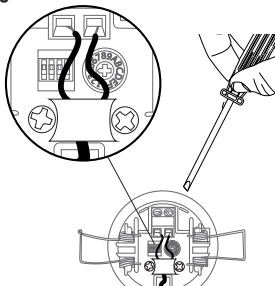


Fig. 3: DALI wires are connected with a small slotted screwdriver

Fig. 4

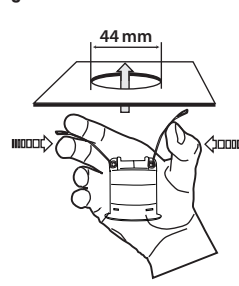


Fig. 4: Device is inserted into false ceiling

Fig. 5

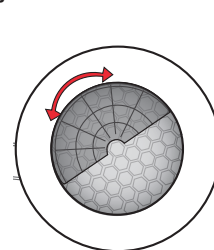
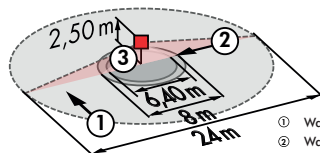


Fig. 5: Blinds are clipped to restrict detection area

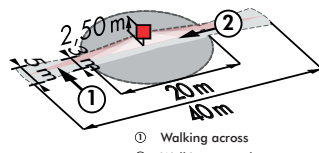
5. Range

5.1 PD4-DALISYS



- ① Walking across
- ② Walking towards
- ③ Smaller movements/ seated

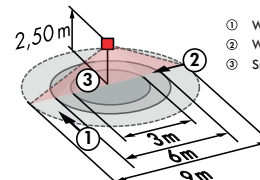
5.2 PD4-DALISYS-C



- ① Walking across
- ② Walking towards

2.50m	①	②
	Ø 40.00m	Ø 20.00m

5.3 PD11-DALISYS-FLAT-FC

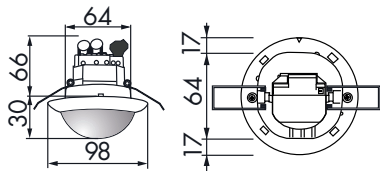


- ① Walking across
- ② Walking towards
- ③ Smaller movements/ seated

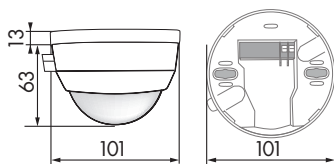
Mandatory mounting height: 2.4 - 2.6 m

6. Dimensions (in mm)

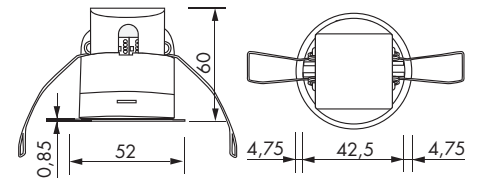
7.1 PD4-DALISYS(-C)-FC



6.2 PD4-DALISYS(-C)-SM

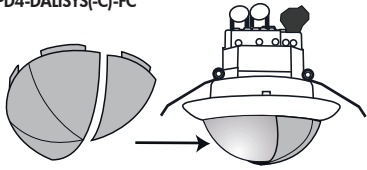


6.3 PD11-DALISYS-FC

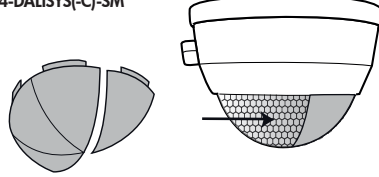


7. Blocking out sources of interference

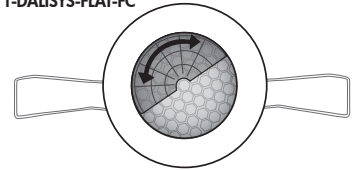
7.1 PD4-DALISYS(-C)-FC



7.2 PD4-DALISYS(-C)-SM

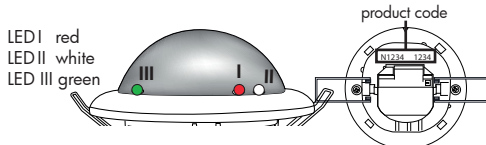


7.3 PD11-DALISYS-FLAT-FC

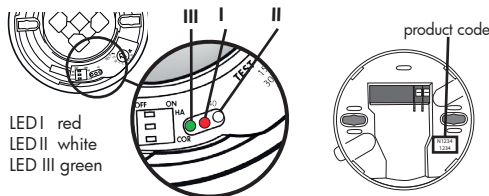


8. Position LEDs, product code

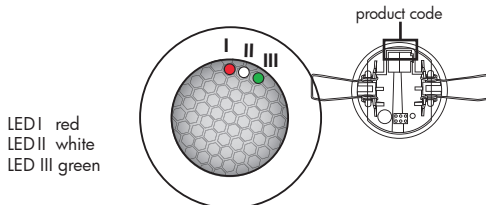
PD4-DALISYS(-C)-FC



PD4-DALISYS(-C)-SM



PD11-DALISYS-FLAT-FC



9. Self-test cycle

During the first 20 sec after connecting to the DALI bus power, the product will enter a self-test cycle. During this time the device does not respond to movement.

10. Initial operation

10.1 General

The device can be put into operation after mounting. The factory settings are active: Follow up time = 10 min; Brightness set value = 2500 LUX; Logical switch output is enabled (no control output)

10.2 DIP switches

The slave mode can be set with DIP switch A:

	Only motion events
	Motion and light value events

With the DIP switches B and C various master modes can be set:

	Full automatic - The light switches on automatically during motion detection and after a period of 10 minutes without motion detection the light is switched off.
	Semi-automatic - The light is switched on only after a switch has been actuated and after a period of 10 minutes without motion detection the light is switched off.
	Twilight switch - The light is switch on when the lux value is less than 2500 lux and when the value exceeds 2500 lux, the light goes out again after 10 minutes.
	Slave-Mode - The light is not directly controlled by this device. There are only provided motion detection and optionally also light values for other multi-sensors. DIP switch D is reserved for future functions.

10.3 HEX-switch

The HEX switch has no function and is preinstalled for future use.



HEX:	Group:
0	Broadcast
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
A	10
B	11
C	12
D	13
E	14
F	15

11. LED Indication (status LEDs)

LED function indicators

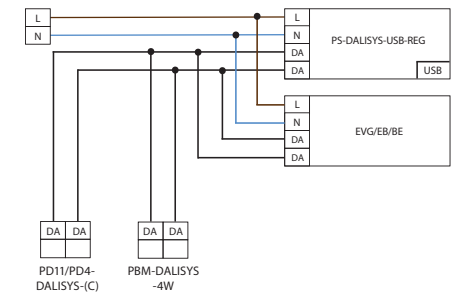
- Shortly on:
 - Green -
 - Red Movement
 - White -
- Permanently on:
 - Green -
 - Red Device disabled
 - White Semi-automatic
- Flashing slowly:
 - Green Localization
 - Red Initialization
 - Weiß Localization
- Flashing fast:
 - Green Too bright
 - Red -
 - White -

12. Article / Part nr.

Typ	Part	Info
92731	PD11-DALISYS-FLAT-FC	Ceiling-mount version
93375	PD4-DALISYS-FC	Ceiling-mount version
93379	PD4-DALISYS-SM	Surface-mount version
93378	PD4-DALISYS-C-FC	Ceiling-mount version for corridors
93370	PD4-DALISYS-C-SM	Surface-mount version for corridors
92842	PBM-DALISYS-4W	Push button interface
92832	Flush mount Adapter set 1 for PD11 white	Accessory
92833	Flush mount Adapter set 2 incl. design ring for PD11 white	Accessory
92199	Wire basket BSK (Ø 200 x 90 mm)	Accessory

13. Wiring diagram

Schematic diagram - when connecting the detector, please respect the labelling of the terminal connections at the detector



14. Technical data

Power supply:	10 - 22 V over DALI-Bus
Power consumption:	7 mA
Area of coverage:	360°
Range of coverage:	
PD4-DALISYS:	max. Ø 24 m across max. Ø 8 m towards max. Ø 6.4 m smaller movements/ seated
PD4-DALISYS-C:	max. Ø 40 m across max. Ø 20 m towards
PD11-DALISYS-FLAT:	max. Ø 9 m across max. Ø 6 m towards max. Ø 3 m smaller movements/ seated

Mandatory

mounting height: 2.4 - 2.6 m

Protection type/class:

PD11/PD4-FC/PD4-C-FC IP20
PD4-SM/PD4-C-SM IP54

class II / CE

Ambient temperature:

-25 °C to +50 °C

Housing:

Polycarbonate, UV-resistant

Brightness set value:

10 - 2500 Lux

EU Declaration of conformity:

This product respects the directives concerning

1. electromagnetic compatibility (2014/30/EU)
2. low voltage (2014/35/EU)
3. restriction of the use of certain hazardous substances in electrical and electronic equipment (2011/65/EU)

15. Potential problems

1. Power consumption on DALI line too high

Please be aware of the total power consumption of all the DALI units in your system.

2. Heat sources in the vicinity

If, for example, the detector is located in the immediate vicinity of ventilation slits or a projector, the warm air currents can trigger motion detection. Place the detector at a sufficient distance from potential sources of interference such as ventilation slits, projectors, beamers, copiers, printers, etc.