

Installation and Operating Instruction for B.E.G. -Occupancy detectors PD4N-LON

1. Product information

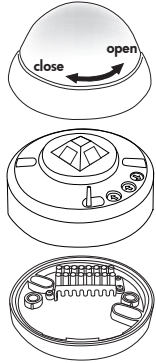
- LON occupancy detector with embedded light sensor for daylight-based lighting control.
- Full automatic or semi-automatic occupancy control modes.
- Switching or constant light control modes.
- Control of both inner and close-to-window light channels, with configurable offset.
- Easy interface to HVAC systems:
 - Configurable switch-on and follow-up times.
 - SNVT_occupancy output network variable with configurable output values for direct binding with HVAC-type controllers (Space Comfort Controller, Fan Coil Unit, and others).
- Configurable orientation light level and follow-up time when area is vacated.
- All configuration properties changeable via network variables.
- IR-PD-LON user remote control (optional):
 - Adjust dimming light level.
 - Turn on/off light.
 - HVAC: change temperature set value, fan speed, heat/cool, and others
 - Control up to 2 roller shutter groups.
 - Control up to 3 remote actuators/controllers.
 - Recall/save up to 3 scenes.

2. Operation

Files necessary for operation, like manufacturer resource files and product template to be imported in the LNS database, can be downloaded from the B.E.G. Homepage.

Depending on the application configuration, the detector can operate in different modes: full automatic, semi-automatic, as a photoelectric switch or simply as a slave to other detectors. Please refer to the LON application description for details about detector configuration and available network variables.

3b. Mounting SM

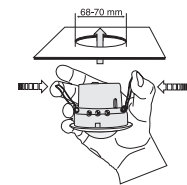


The detector must be installed on a solid and plane surface. The circular cover ring must be removed prior to assembly. To do this, twist the cover ring anticlockwise through approximately 5° and lift off.

Having connected up the wires in accordance with regulations, secure the detector with 2 screws. After installation replace the cover ring and lock (turn clockwise). Apply mains voltage.

! Please do not locate the detector near a heating or air conditioning source!

3b. Mounting FC



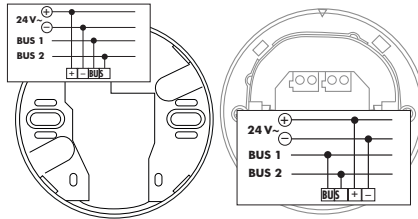
The detector has been designed and developed specifically for installation in suspended ceilings. A circular opening of diameter 68 – 70 mm must be produced in the ceiling.

Having connected up the cables in accordance with regulations, the detector is inserted into the opening as shown in the drawing above and fixed into position by means of the spring clips.

! Please do not locate the detector near a heating or air conditioning source!

4. Hardware configuration

LON connections, LED function indicators



Yellow LED (Service LED):

On: Device is application less and unconfigured.

Flashing: Device is unconfigured (but with an application).

Off: Device is configured / programmed, but in stop mode.

Red LED:

Flashes for 15 seconds after a reset or power-up condition.

Flashes briefly on motion detection (only when device is unconfigured).

Flashes briefly on IR command reception.

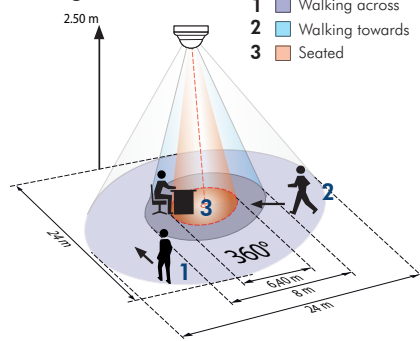
5. LON-Device functions

The following objects are made available:

- 1 x Light Sensor
- 2 x Occupancy Sensor
- 2 x Occupancy & Light Controller
- 2 x Occupancy Controller
- 1 x SCC Command Module
- 2 x Sunblind Switch
- 3 x User Switch
- 1 x Scene Panel

The software application conforms with the Lonmark Interoperability guidelines.

6. Range



7. Technical data

Sensor and power supply in one case

Power supply: 24 Vac/Vdc ±20%

Ambient temperature: +5°C – +50°C

Degree of protection/class: IP20 / II

LON Bus: TP/FT-10, Twisted pair cable.

LON Processor: FT5000

Settings: with the LON installation tool (The required template and resource files for the LON installation tool can be downloaded from the B.E.G. Homepage www.beg-luxomat.com)

Area of coverage: circular 360°

Range of coverage / H 2.5 m / T = 18°C (max.): Ø 24 m (walking across)

Recommended mounting height: 2 – 3 m

Light measure: Digital sensor, 0..8000 lux

Dimensions H x Ø [mm]: SM 63 x 98 FC 84 x 97

CE Declaration of Conformity:

This product respects the directives concerning

1. electromagnetic compatibility (2004/108/EU)
2. low voltage (2006/95/EU)
3. restriction of the use of certain hazardous substances in electrical and electronic equipment (2011/65/EU)

8. Article / Part-Nr. / Accessory

Type	SM	FC	FM
PD4N-LON	92834	92831	-

LUXOMAT® Remote control:

IR-PD-LON	92835
IR-Adapter for Smartphones	92726

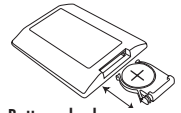
Accessory:

BSK Wire basket (Ø 200 x 90 mm)	92199
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9. Putting into operation the remote control IR-PD-LON (optional)



Wall bracket for remote control IR-PD-LON



Battery check: Open battery compartment by pressing the plastic springs together and removing the battery holder

10. IR-PD-LON functions

Button	Function
Special functions	
	Send Service message
Lighting functions	
	Increase output light level
	Decrease output light level
	Turn on/off light
	Save current ambient light level as brightness set value
HVAC functions (SCC Command Module)	
	Increase temperature set value
	Decrease temperature set value
	Cycle through fan speeds: Auto, 1, 2, 3
	Turn on/off the HVAC actuator
	Select Heat output mode
	Select Cool output mode
Functions Sunblind Switch	
	Move up blinds / roller shutters
	Stop blinds / roller shutters
	Move down blinds / roller shutters
Functions User Switch	
	Turn on actuator/controller
	Turn off actuator/controller
Functions Scene Panel	
	Recall/learn selected scene