

Installation and Operating Instruction for B.E.G. - Photocells CdS-DALI/DSI-SM/-FC

1a. Features

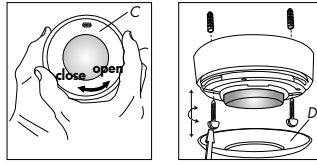
- For connection of up to 50 lamps
- Suitable for dimmable electronic ballasts and control modules
- DALI/DSI output
- Manual dimming by remote control
- Constant light control
- Manual dimming
- Luminance (brightness) set point adjustable
- Sensor and power sections in one housing
- Infrared remote control
- Dynamic delay

1b. Mounting preparations

Work on the 230V mains supply may only be carried out by qualified professionals or by instructed persons under the direction and supervision of qualified skilled electrical personnel in accordance with electrotechnical regulations.

Disconnect supply before installing!

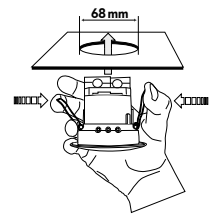
2a. Mounting LUXOMAT® CdS-DALI/DSI-SM



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

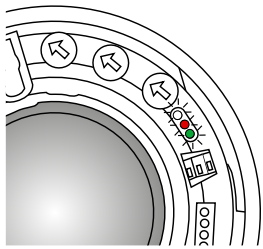
Having connected up the wires in accordance with regulations, secure the detector with 2 screws. After installation replace the lens and lock (turn clockwise). Mains to be connected.

2b. Mounting LUXOMAT® CdS-DALI/DSI-FC



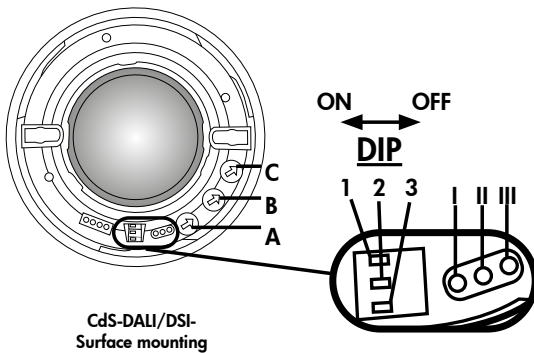
A circular opening of diameter 68 mm must be produced in the ceiling. Having connected up the cables in accordance with regulations, the detector is inserted into the opening as shown in the drawing opposite and fixed into position with the assistance of the spring clips.

2c. Self test cycle



The product enters an initial 60-second self-test cycle, when the supply is first connected. The occupancy detector is ready for operation.

2d. Position DIP-Switches, LEDs and Potentiometer SM



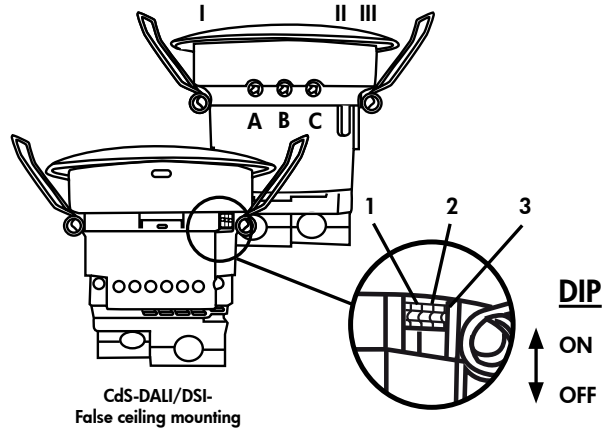
- DIP 1 100% ON/OFF
- DIP 2 LED ON/OFF
- DIP 3 DALI/DSI = Change between DALI/DSI mode

- Potentiometer A Lux
- Potentiometer B Follow-up time
- Potentiometer C Stoving time

- LED I green
- LED II red
- LED III white

The DIP switch settings are overridden using the remote control.

2e. Position DIP-Switches, LEDs and Potentiometer FC



3. Putting into operation / Settings



Delay OFF time for light control

The time can be set infinitely variably at between 1 and 30 minutes. Symbol TEST: 5 min.

The ON delay time is determined automatically. The sooner the brightness decreases, the shorter the time.

The ON delay time avoids further multiple On and Off switching in the area of brightness.



Twilight-switch for light control

The switch-on value for the light can be set at between 10 and 2000 Lux. Using the rotary control, the luminance set points can be set as desired.

Symbol ☾: Night-time operation
Symbol ☀: 300 Lux

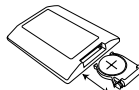


Stoving time 25 - 100h

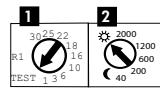
The stoving time can be set at between 25 and 100 h in 4 steps. Activation with remote control

4. Settings carried out using remote control (optional)

Remote control LUXOMAT® IR-CdS

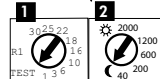


1. Check Battery: open battery compartment by pressing the plastic springs together and removing the battery-holder.



2. IMPORTANT

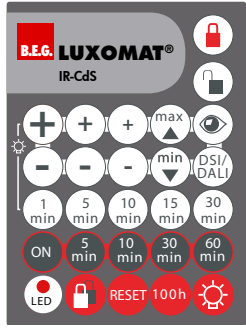
Please pay attention, that the setting is Potentiometer 1 at "TEST" and Potentiometer 2 **not** at "SUN". All values which have been programmed using the remote control will be deleted in the event of power failure in the position "TEST/SUN". Please switch Potentiometer 2 over to "MOON" or any other value.



Caution:

Settings with remote control override the potentiometer settings.

5. Option:

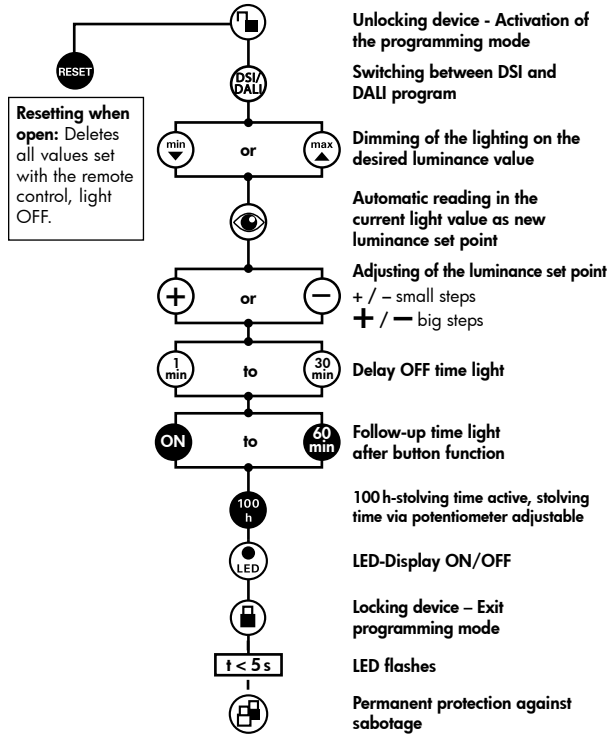


IR-CdS



Wall bracket for remote control IR-CdS

6. Settings by remote control when open

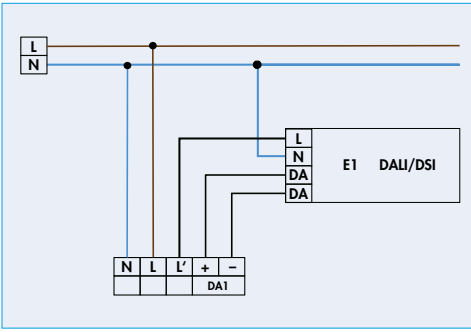


7. Description of the key functions

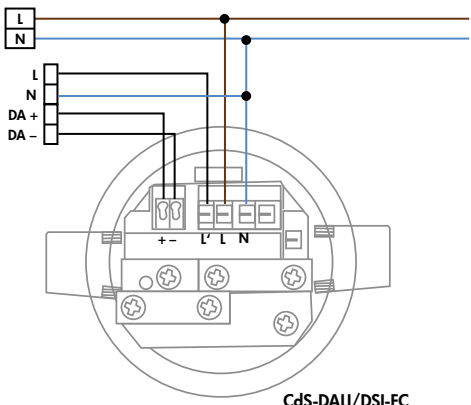
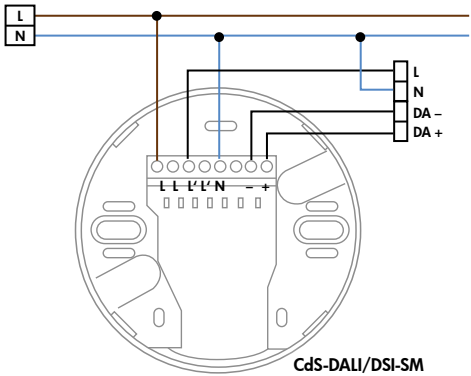
- Lock device**
- Dimming the lights to the desired brightness value**
- Set brightness value is saved**
- Permanent protection against sabotage**
This function blocks the unit permanently (green LED is illuminated). This operating mode can only be activated during the period of 5 seconds after pressing the "lock" button. This status will only permit actuating the function "Light on / Light off".
The procedure for leaving this mode is as follows:
 1. Switch off the current
 2. Apply current for 31 – 59 seconds
 3. Switch of the current again
 4. Apply current
 5. Open detector
- Light on/off when closed**
The light will remain switched on/off for as long as the follow-up time after button function is adjusted via the IR-CdS. Permanent light by pushing the ON-button. The follow-up time can be set back by pushing the RESET-button.
- The time can be reset with the RESET button.

8. Wiring diagram

Standard mode with CdS-DALI/DSI



9. CdS-DALI/DSI - Connections



10. Article / Part nr. / Accessory

Type	SM	FC
CdS-DALI/DSI	92563	92562

- LUXOMAT® remote control:**
IR-CdS (incl. wall bracket) 92577
- Accessory:**
BSK Ball basket guard 92199
Wall bracket for remote control as replacement 92100
SM-Socket IP54 92161

11. Technical data CdS-DALI/DSI

- Sensor and power supply in one case
Power supply: 230V - ±10%
Power consumption: < 1W
Ambient temperature: -25°C to +50°C
Degree of protection/class: SM/FC IP20, SM with accessory IP54 / II
- Recommended height for mounting:** 2 - 3 m
- Settings:** locally and by remote control
- Light values - IR-CdS:** 10 - 2000 Lux
Light measurement: Mixed light, daylight + artificial light
Lux values-Potentiometer: 10 - 2000 Lux
- Switch contact**
Type of contact: NOC
Contact load: 2300W cosφ=1 / 1150VA cosφ=0,5, μ-Contact
- DALI-Output**
 digital BUS control wire, 2-core, no polarity (broadcast only)
- Max. no. of series-connected electronic ballasts:** up to 50 digital electronic dimmable ballasts as a group.
1 - 30 min.
- Time-settings:**
Dimensions H x Ø [mm] SM FC
 CdS-DALI/DSI 48x102 75 x 80
Visible portion when built into ceiling: 6 mm

CE Declaration of Conformity: The product complies with the low voltage recommendation 2006/95/EC and the EMV recommendation 2004/108/EC.

WE RECOMMEND THAT BEFORE DIMMING OF THE CONNECTED LIGHTS A 100h BURN IN (T5 TUBES OR 80 HOURS FOR T8 TUBES) FUNCTION TAKES PLACE.
THE LIFESPAN OF THE LAMPS CAN BE REDUCED IF THE BURN IN DOES NOT TAKE PLACE.

12. LED-functional indicators

LED function indicators		
Process	Standard mode	Double-locked
Initialisation time unprogrammed	red flashes	
Initialisation time programmed	red flashes quickly	green flashes quickly
Too bright detected	green flashes 2x each second	green flashes 2x each second
Too bright / too dark / undefined in opened state	green flashes very quickly	green flashes very quickly
Switching DALI/DSI DSI active	red shines 3 sec.	
Switching DALI/DSI DALI active	green shines 3 sec.	
IR signal valid received	red shines 3 sec.	green shines 3sec.
IR signal invalid received	red shines 0,5 sec.	green shines 0,5sec.
Stoving phase active	red permanently on	red permanently on
Delay time switching-on active	red flashes quickly	red flashes quickly
Manuel switching / dimming	red flashes 2x each second	red flashes 2x each second
Default (Set Potentiometer on Sun and Test)	red and green lightning successively (10 sec. after setting the Potentiometer)	