Presence and motion detector 360° top unit BT
Order no.: 5377 02

Operating instructions

1   Safety instructions

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. Always disconnect before carrying out work on the device or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

Danger of electric shock. The device is not suitable for disconnection from supply voltage. Depending on the insert used, the load is not electrically isolated from the mains, even when the device is switched off.

Do not press on the sensor window. Device can be damaged.

The device is not suitable for use as a burglar alarm or other alarm.

This manual is an integral part of the product, and must remain with the end customer.
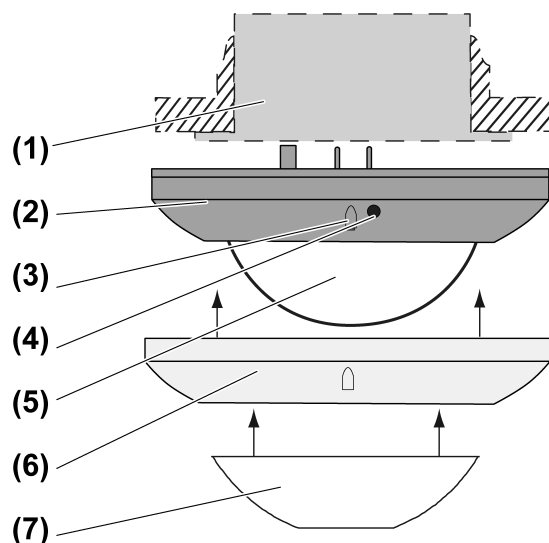
2   Device components

Figure 1: Device components

(1)   FM insert
(2)   Sensor top
(3)   Brightness sensor
(4)   Button **Bluetooth** ⚫
(5)   Sensor window and status LEDs
(6)   Decor ring
(7)   Push-on cover

Status LED

Red LED lights up	Self-test
Red LED flashes 3 s on / 3 s off	Alarm function active

Red LED flashes 0.5 s on / 0.5 s off	Alarm was triggered
Red LED flashes three times followed by a 1 s pause	Cover was previously connected to another insert
Yellow LED lights up	"Off" or "Off for 0.5 - 5 hours" function active
Yellow LED flashes	Presence simulation active
Green LED lights up	"On" or "On for 0.5 - 5 hours" function active
Blue LED lights up	Device is coupled with a mobile end device and active app
Blue LED flashes 0.5 s on / 0.5 s off	Bluetooth coupling mode active
Blue LED flashes quickly	Device update is being performed

3   Intended use

– Automatic switching of lighting depending on the heat motion and ambient brightness
– Operation with flush-mounted insert for dimming or switching or 3-wire extension
– Ceiling installation on flush-mounted insert
– Operation and programming with mobile end device (smartphone or tablet) via Bluetooth with app

Automatic operation

The device detects heat motions of people, animals and objects.
– The light is switched on if a person enters the detection field and the brightness threshold is below the set brightness threshold.
– The run-on time restarts with each detected motion.
– The light is switched off, if:
no more movement is detected in the detection field and the run-on time has elapsed or the ambient light is too bright and the run-on time has elapsed.

To avoid any switch-on caused by a cooling illuminant, no movement signals are evaluated for a brief lockout time after switching off. The motion detector adjusts itself to the ambient conditions to keep the time as short as possible.

Behaviour after a mains voltage failure

After mains voltage return, the device performs a self-test for a maximum of 20 seconds. After the self-test has been completed, the device is ready for operation.

[i]   If the red status LED flashes three times at repeated intervals, the cover was previously connected to another insert. To enable the function again, either place the cover onto the respective insert or press the Bluetooth button (4) for longer than 4 seconds.

The following applies during the self-test:
– The red status LED is illuminated.
– The load is switched off.
– Movements are not detected
– The device can be operated via extensions

4   Product characteristics

Functions directly on the cover
– Extension of the detection field in combination with 3-wire extension
– Operation with 2-wire or 3-wire extension, rotary extension or push-button, Bluetooth wall transmitter or push-button
– Resetting to factory setting
– Push-on cover for limiting the detection field

Functions via app

– Setting the device as presence detector or motion detector
– Setting the brightness threshold
– Separate adjustment of the sensitivity of the three PIR sensors
– Setting the run-on time
– Continuous ON, Continuous OFF
– Timer ON or OFF for 0.5 - 5 hours
– Switch-off pre-warning
– Dynamic run-on time
– Presence simulation
– Alarm function
– Call function enables a person to attract attention if required
– Time switch function enables functions to be switched on or off automatically
– Walking test

In combination with a switch insert

– Short time operation

In combination with a dimming insert / DALI Power control unit

– Switching on with the last set brightness/colour temperature or saved switch-on brightness/colour temperature
– Adjusting the minimum brightness
– Adjusting the maximum brightness
– Basic light function
– Night light function
– Constant light regulation
– Setting the minimum colour temperature
– Setting the maximum colour temperature
– Setting the switch-on colour temperature

[i] Colour temperature only in combination with a DALI Power control unit

5 Commissioning

Install app on a mobile end device

Requirement for operation via app is a mobile end device with Bluetooth interface, running the Android operating system or iOS.

■ Download and install the Gira System 3000 app from the iTunes App Store (iOS) or the Google Play Store (Android).

Couple mobile end devices via Bluetooth

Precondition: insert and cover must be ready for operation. The mobile end device is located close to the cover.

■ Activate coupling mode: Press the **Bluetooth** ⚫ button (4) (Figure 1) for more than 4 seconds.
  The blue LED flashes. The coupling mode is active for one minute.

■ Start the Gira **System 3000 app** and search for device to be coupled.
  Cover is coupled with the end device and shown in the app.

  The coupling mode is automatically exited after successful coupling. The blue LED lights up to confirm an active connection.

[i] A maximum of 8 mobile end devices can be coupled with a cover. When coupling the 9th device, the oldest device will be deleted.

6 Operation

The app is used for the configuration and operation of the device. Some basic functions can also be operated via connected extensions.

Operation using 2-wire or 3-wire extension with push-button cover, Bluetooth wall transmitter or push-button

Multiple extensions can be combined with each other. All operations described here are also possible via the app. Operation with the rotary extension is described in the rotary extension instructions.

Switching on light for the duration of the run-on time

- ■ Press briefly.
- ⓘ Motion detector operation: Pressing again briefly in the switched-on state restarts the run-on time. In combination with a dimming insert or DALI Power control unit, the brightness switches back to the switch-on brightness.
- ⓘ Short-time operation: When pressed, pulses are generated approx. every 3 seconds for 1 minute. Exception for 3-wire extension: only one pulse is generated.

Switching the light off for 3 minutes

- ⓘ This function can only be used in presence detector operation.
- ■ Press briefly.
  The light is switched off for the period of 3 minutes. When movements are detected, the time is restarted.

Adjusting the brightness

- ■ Press longer.
- ⓘ In the case of a push-button, the dimming direction is changed with each new long actuation.

Setting the colour temperature

- ⓘ Only with 2-wire extension, Bluetooth wall transmitter and push-button.
- ⓘ Only with DALI Power control unit.
- ■ In the switched-on state, press twice within 0.4 seconds (double-click). The light switches off and on again.
  The device switches to "Setting the colour temperature" mode.
- ■ Press longer to set the colour temperature.
- ⓘ In the case of a push-button, the setting direction is changed with each new long actuation.
- ⓘ After a further double click, the device switches back to normal operation. This is signalled by switching off briefly and back on again. The device also switches to normal operation after 1 minute without operation.

Saving the switch-on brightness/colour temperature

- ⓘ Only with 2-wire extension.
- ⓘ Colour temperature only with a DALI Power control unit.
- ■ Adjust the brightness.
- ■ Set the colour temperature.
- ■ Press the button cover over entire surface for longer than 4 seconds.
  Switch-on brightness and colour temperature are saved. The switch-on behaviour changes to "Switch on with the saved brightness and colour temperature".

Deleting the switch-on brightness/colour temperature

ℹ️   Only with 2-wire extension.

ℹ️   Colour temperature only with a DALI Power control unit.

■   Press the push-button cover briefly: Light switches on with switch-on brightness/colour temperature.

■   Without changing the brightness, press push-button cover over entire surface for longer than 4 seconds.

    Switch-on brightness and colour temperature are deleted. The switch-on behaviour changes to "Switch on with the most recently set brightness and colour temperature".

Call function

The function enables a person to attract attention if required. A call can be triggered via a 2-wire extension, Bluetooth wall transmitter or push-button.

Precondition: The call function has been activated via the app.

■   Press the button of the extension.

    Light flashes (1 second on, 1 second off) until the call is acknowledged by actuating the button **Bluetooth** ⌇ or the app has acknowledged that the call function was switched off and back on again.

7   Information for electrically skilled persons

⚠️ **DANGER!**

Mortal danger of electric shock.

Disconnect the device. Cover up live parts.

Detection field and range

The device has a detection field of 360°. The diameter of the detection field depends on the installation height and the direction of motion of persons in the detection field. The detection field becomes larger the greater the installation height, while the detection density and sensitivity are reduced at the same time.
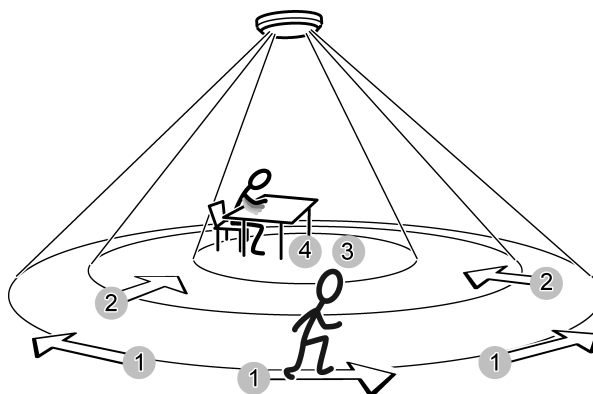

Figure 2: Detection range depending on the direction of movement

Diameter of detection field for direction of movement

Installation height	1:	2:	3:	4:
2.20 m	14.50 m	11.50 m	8.00 m	6.00 m
2.50 m	16.50 m	13.00 m	10.00 m	7.00 m
3.00 m	20.00 m	16.00 m	12.00 m	8.00 m

Installation height	1:	2:	3:	4:
3.50 m	23.00 m	18.50 m	14.00 m	9.00 m
4.00 m	26.00 m	17.00 m	14.50 m *)	– *)
5.00 m	28.00 m	18.00 m	15.00 m *)	– *)
6.00 m	29.00 m	19.00 m	– *)	– *)

1:          Range for tangential movement on the ground
2:          Range for radial movement on the ground
3:          Range for typical movements at desks, e.g. torso movement
4:          Range of fine detection at desks, e.g. mouse movements
*)   When used as a presence detector: Installation height should not be more than 3.5 m, otherwise fine detection is not possible.

Selecting installation location

For use as a presence detector, the device is installed, for example, above a workplace and monitors the surface below it. For use as a motion detector, the device is installed, for example, in the hallway.

- Select a vibration-free installation location. Vibrations can lead to unwanted switching.
- Avoid interference sources in the detection field. Interference sources can trigger the motion detector, e.g. heat sources such as heating units, outlets from ventilation openings or air conditioners, copiers, printers, coffee machines, draughty doorways, animals etc.

ⓘ The detection field can be limited in order to minimise the influence of interference sources. For this, use the push-on cover (see Limiting the detection field using the push-on cover) or switch off individual sensors (see Configuring device settings).

Aligning cover

The device has three independent sensors for motion detection. The arrangement of the areas A, B and C is clearly evident under the decor ring (Figure 4).
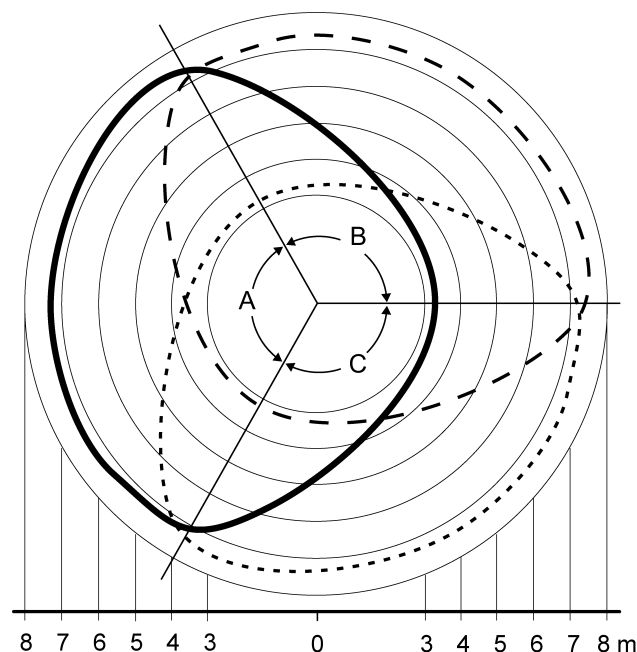

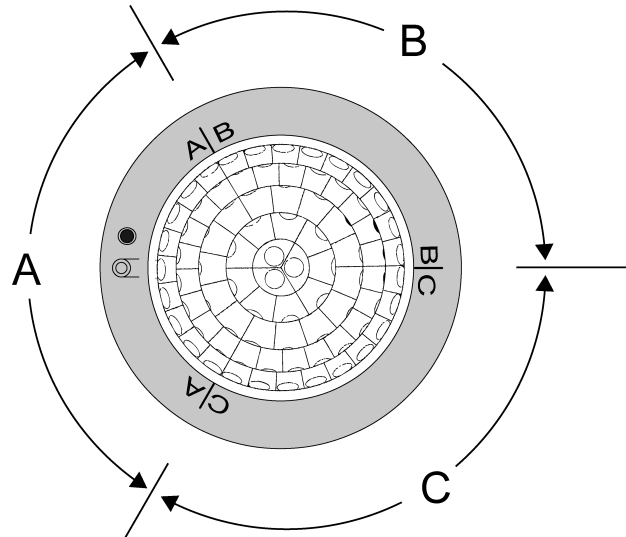Figure 3: Detection field: areas A, B and C; installation height 2.20 m

Figure 4: Arrangement of the areas A, B and C

- ■ Pay attention to correct alignment when mounting the appliance box and flush-mounted insert.
- ■ Align the cover so that the brightness sensor is on the side away from the windows. This reduces the effects of scattered light.

Fitting the cover

- ■ Connect flush-mounted insert properly and mount in accordance with the desired orientation of the cover (see instructions for flush-mounted insert).
- ■ Fit the cover on the flush-mounted insert.
- ■ Switch on mains voltage.
- [i] If the red status LED flashes three times at repeated intervals, the cover was previously connected to another insert. If the cover is to remain on the insert, press the Bluetooth button (4) for longer than 4 seconds.

Limiting the detection field using the push-on cover

The push-on cover can be used to limit the detection field, e.g. in order to mask out interference sources.
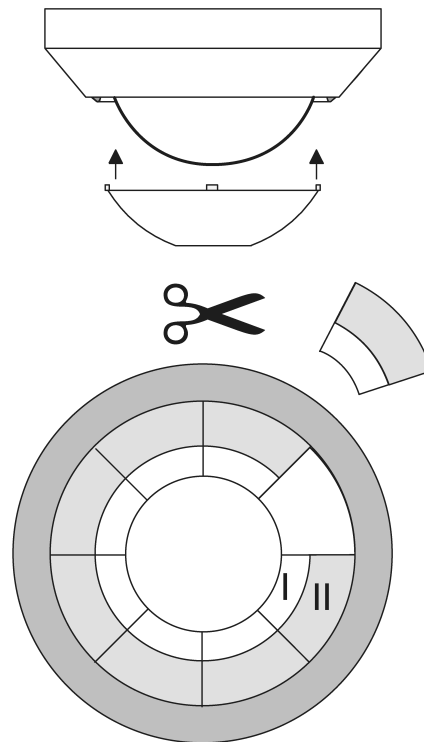
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Figure 5: Push-on cover

Size	Range on the ground (mounting height 3 m)
Complete push-on cover	Ø approx. 4.5 m
Area I cut out	Ø approx. 7.5 m
Areas I + II cut out	Ø approx. 12 m
without push-on cover	Ø approx. 20 m

- Pull off push-on cover.
- Using scissors, cut out push-on cover along the marked lines as required.
- Push on push-on cover.

[i] Alternatively, the detection field can also be limited via the app by reducing the sensitivity or switching off individual sensors.

Expanding the detection field

To expand the detection field, connect a 3-wire extension with presence or motion detector cover. The main device also evaluates signals of the extension and, if necessary, switches the lighting on.

Configuring device settings

Settings are configured via the app

Default settings

Function	Setting
Operating mode	Motion detector
Operating mode	Automatic operation
Sensitivity of sensors A-C	100 %
Detection angle	360°, sensors A-C active
Brightness threshold	10 lux

Function	Setting
Run-on time	2 minutes
Supplementary function	switched-off

Checking detection field

Any motions detected are displayed in the app and by the red LED. The lighting is switched on for approx. 1 second. If the light is not to be switched dependent on motion, the Continuous ON or Continuous OFF function should also be activated.

[i] 3-wire extension: detected motions are sent to the main device. This switches according to its settings.

■ Activate the walking test via the app and pace off the detection field. The function is automatically terminated after approx 5 minutes.

Restoring the device to factory settings

[i] After resetting the device to the default setting, it has to be removed from the app. On iOS equipment, the device also has to be removed from the list of paired Bluetooth devices (Settings/Bluetooth). Otherwise, re-pairing will not be possible.

■ Briefly disconnect the device from the mains voltage.
Red LED lights up, self-test runs.

■ Within 1 minute after switching on the mains voltage, press the **Bluetooth** ⌘ button for longer than 20 seconds.
At the conclusion of the self-test or after 4 seconds, the blue LED flashes slowly. Coupling mode is active; keep the **Bluetooth** ⌘ button pressed. After approx. 20 seconds, the blue LED goes out and the red LED flashes quickly.

■ Within 10 seconds, release the **Bluetooth** ⌘ button and press briefly once again.
The red LED flashes more slowly, device is reset to the factory settings and restarts.

8   Technical data

Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Dimensions Ø×H	103 × 66 mm
Installation height	3 m
Detection field	Ø approx. 20 m (installation height 3 m)
Detection angle	360 °
Sensitivity	0, 25, 50, 75, 100 %
Brightness threshold	
Motion detector operation	approx. 5 ... 500 lx (and day operation)
Presence detector operation	approx. 5 ... 1000 lx (and day operation)
Short time operation	
Pulse duration	approx. 0.5 s
Pulse stop	approx. 3 s
Bluetooth	
Radio frequency	2.402 ... 2.480 GHz
Transmission capacity	max. 2.5 mW, Class 2
Transmitting range	typ. 10 m

9 Parameter list

Adjustable parameter list via app

Depending on the insert, the following parameters can be changed with the app.

Settings for switch and dimming inserts

Parameters	Setting options, default setting	Explanation
EnOcean switch	MAC address Name Single rocker Left rocker Right rocker	The Bluetooth wall transmitter must be connected to the device in order to be able to operate it. Enter the MAC address of the Bluetooth wall transmitter here, select the device button to be used for operation and assign a name. Up to 8 Bluetooth wall transmitters can be connected to the device.
Operating mode	Automatic mode Timer OFF Timer ON Continuous OFF, Continuous ON Default setting: automatic mode	Automatic: The load is switched depending on motion and brightness. Continuous OFF or ON: The load is permanently switched off or on. Timer OFF or ON: The load is switched off or on for the specified time. Afterwards, the device is in automatic mode again.
Setting timer ON	0.5 - 5 hours Default setting: 2 h	Time for which the load remains switched on when the "Timer ON" function is activated.
Setting timer OFF	0.5 - 5 hours Default setting: 2 h	Time for which the load remains switched off when the "Timer OFF" function is activated.
Run-on time	10 s ... 60 min Default setting: 2 min	The load remains switched on for this time, even if no more motion is detected or the ambient light is bright enough.
Dynamic self-learning run-on time	On, Off Default setting: Off	Dynamic self-learning run-on time On: The device automatically determines a run-on time within specified limits and dynamically from detected motion. In so doing, the run-on time is increased if presence continues or decreased if absence is detected. The maximum run-on time is the set run-on time. The shortest run-on time is 10 seconds. For run-on times from 5 minutes, the brief presence detection function is also active.
Brightness threshold	Motion detector: 5… 500 lx Presence detector: 5… 1000 lx and day operation Default setting: 10 lx	The load is switched on if the brightness value falls below this value and if motion is detected.
Using the current brightness	The current brightness can be stored in a range of 5 to 500 lx or 1000 lx.	Sets the brightness threshold parameter in the app to the current brightness.

Parameters	Setting options, default setting	Explanation
Sensor sensitivity	0, 25, 50, 75, 100 % Default setting: 100%	Individually adjust the sensitivity in 5 steps for each sensor A–C. To restrict the detection field, switch off individual sensors. To do this, set the sensitivity to 0 %.
Reduced basic sensitivity	On, Off Default setting: Off	Reduced basic sensitivity On: Reduced basic sensitivity for use in environments with interference sources.
Presence simulation	On, Off Default setting: Off	The function can only be activated after more than 24 hours of time was saved. In automatic mode, the times at which the lighting was switched on are continuously saved. A maximum of 60 switching operations are saved over a period of 24 hours. If more switching operations take place, the oldest ones are overwritten respectively. If the presence simulation is activated, the lighting is switched on at the saved times depending on the brightness. Switch-off takes place after the run-on time has elapsed. Detected motions prolong the run-on time or the light is switched on depending on brightness. Times are not saved. The dynamic run-on time is not taken into account.
Activate day operation	On, Off Default setting: Off	In the setting **day operation** the device operates independently of the brightness.
Activate walking test	On, Off Default setting: Off	Function for checking the detection field. The function automatically terminates after 5 minutes.
Activate alarm operation	On, Off Default setting: Off	This function is used to monitor an area for unauthorised access during absence. If this is the case, the lighting flashes (1 second on, 1 second off) for the duration of the run-on time. When motions are detected, the run-on time is restarted.
Operating mode	Motion detector operation Presence detector operation Default setting: motion detector operation	Setting whether the device operates as a motion detector or presence detector.
Activate call function	On, Off Default setting: Off	The function enables a person to attract attention if required. If the function is activated, a call can be triggered via a 2-wire extension, Bluetooth wall transmitter or push-button. If a call has been triggered, the lighting flashes (1 second on, 1 second off) until the call is acknowledged by actuating the button **Bluetooth** ﹩ or switching the call function off and back on again in the app. A triggered call overrides all functions of the device. The functions continue

Parameters	Setting options, default setting	Explanation
		running in the background so that the device switches to the respective current state after acknowledgement.
Time change	On, Off Default setting: On	Activates automatic summer/wintertime changeover
Timers	16 switch points Default setting: none	With this function it is possible to automatically switch on functions such as night light/basic brightness or presence simulation for a defined period of time. A weekly timer is available for this purpose. The timer updates itself with every Bluetooth connection to a mobile end device. One function can be switched on or off per switch point. A time and one or more weekdays are assigned to each switch point.

Settings only for switch inserts

Parameters	Setting options, default setting	Explanation
Switch-off pre-warning	On, Off Default setting: Off	If the switch-off pre-warning is activated, the light is not switched off immediately after the run-on time has elapsed. Triple flashing at an interval of 10 seconds shows that the light will be switched off soon. The run-on time is thereby prolonged by approx. 30 seconds. If motion is detected during the switch-off pre-warning, then the run-on time is restarted and the light remains on.
Pulse operation	On, Off Default setting: Off	If motion occurs, then a short pulse of approx. 0.5 seconds is triggered depending on the brightness. The pulse is repeated approx. every 3 seconds as long as motions are detected.
Delay output 2 Only for 2-gang switch insert	Activating switch-on delay On, Off Switch-on delay 0 s ... 60 min Switch-off delay 0 s ... 60 min Default setting: Activating the switch-on delay ON, switch-on delay 2 minutes, switch-on delay 5 minutes	Activating the switch-on delay: Activating or deactivating the switch-on delay for output 2 Switch-on delay: Time to switch on output 2 with a delay when the switch-on delay is activated. Switch-off delay: Time to switch off output 2 with a delay.

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Settings only for dimming inserts, DALI Power control unit

Parameters	Setting options, default setting	Explanation
Switch-off pre-warning	On, Off Default setting: Off	If the switch-off pre-warning is activated, the light is not switched off immediately after the run-on time has elapsed. The light is first dimmed to minimum brightness within 30 seconds. The run-on time is thereby prolonged by approx. 30 seconds. If motion is detected during the switch-off pre-warning, then the run-on time is restarted and the light switches back to the switch-on brightness.
Switch-on brightness	5 ... 100 % Default setting: 100 %	The light is switched on to a stored brightness.
Maximum dimming value	1 ... 100% Default setting: 100 %	Specifies the maximum settable brightness.
Minimum dimming value	1 ... 67% Default setting: 100 %	Specifies the minimum settable brightness.
Night light/basic brightness	Do not use function Use basic brightness Use night light Default setting: Do not use function	Basic brightness: If the function is activated, the light is switched to the switch-on brightness when motion is detected. After the run-on time has elapsed, the light is not dimmed off but is dimmed to a defined brightness value. Night light: When the function is activated, the light is not switched on to the switch-on brightness but to a defined brightness value when motion is detected.
Adjusting basic brightness	5 ... 100% Default setting: 20 %	Determines the brightness of the basic brightness function.
Setting the night light	5 ... 100% Default setting: 20 %	Determines the brightness of the night light function.
Activating the constant light regulation	On, Off Default setting: Off	The motion detector determines the brightness value from artificial light and daylight. This value is kept constant at the set brightness level.
Setting the brightness value	5 ... 1000 lx Default setting: 600 lx	Value at which the light is kept constant.
Using the current brightness	Measures the current brightness value.	Applies the currently measured brightness as the brightness value for the constant light regulation.

Parameters	Setting options, default setting	Explanation
Colour temperature Only DALI Power control unit	Minimum colour temperature 2000 ... 4500 K Maximum colour temperature 5000 ... 10000 K Switch-on colour temperature 2000 ... 10000 K Factory setting: Minimum colour temperature 2000 K, maximum colour temperature 6000 K, switch-on colour temperature 2700 K	Minimum colour temperature: Defines the minimum colour temperature that can be set Maximum colour temperature: Defines the maximum colour temperature that can be set. Switch-on colour temperature: The light is switched on with a saved colour temperature.

10 Troubleshooting

Device does not switch on

Cause 1: The ambient brightness is greater than the adjusted brightness threshold.
>   Set the brightness value with the app.

Cause 2: Device does not detect any motions.
>   Increase sensitivity with the app.
>   Switch on all sensors with the app.

Cause 3: Timer OFF or Continuous OFF is activated.
>   Activate the automatic mode with the app.

Device switches on without motions

Cause 1: Presence simulation is activated. Device switches at saved times.
>   Switch off the presence simulation with the app.

Cause 2: Interference sources in the detection field.
>   Remove interference sources if possible.
>   Reduce sensitivity with the app.
>   Limit the detection field with the app.

Device switches off despite motion

Cause 1: The device does not detect any motion.
>   Increase sensitivity with the app.

Cause 2: Detection field is limited because a sensor was switched off.
>   Switch on all sensors with the app.

Cause 3: Detection field is limited by push-on cover.
>   Check the push-on cover.

Device does not switch off

Cause 1: Interference sources in the detection field, device detects motions constantly.

Remove interference sources if possible.

Reduce sensitivity with the app.

Limit the detection field.

Cause 2: Timer ON or Continuous ON is activated.

Activate the automatic mode with the app.

Device does not react to operation with mobile end device, the blue LED does not light.

Cause 1: The mobile end device is not coupled with the device.

Couple the devices.

Cause 2: The Bluetooth interface on the mobile end device is not switched on.

Switch on the Bluetooth interface.

11   Conformity

Gira Giersiepen GmbH & Co. KG hereby declares that the radio system type art. no. 5377 02 meets the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: www.gira.de/konformitaet

12   Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade. Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

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