B.E.G. LUXOMAT® net



Operation manual

PD4-GH	PD4N
93471	93473
93472	93474

Subject to technical changes.

All device data can also be found here:

https://www.beg-luxomat.com/en-in/solutions/casambi/

© 2023

B.E.G. Brück Electronic GmbH
Gerberstraße 33
51789 Lindlar
GERMANY

Telefon: **+49 (0) 2266 90121-0**
Fax: **+49 (0) 2266 90121-50**

E-Mail: **support@beg.de**
Internet: **beg-luxomat.com**

Content

1 Introduction 5

2 Getting started/Add devices 5

3 Identifying devices 7

4 Luminaire control gestures 8

5 The control hierarchy 8

6 Instructions for different applications 9

6.1 Creating scenes 9

6.2 Triggering scenes by sensors 11

6.3 Orientation light / absence timeout 13

6.4 Daylight control 14

6.5 Time-based scenes 17

7 Setting the occupancy sensors 18

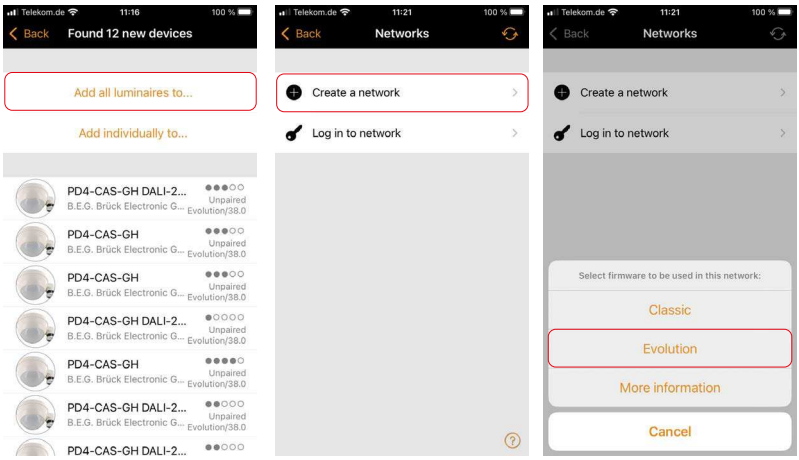
8 Change and share network 20

1 Introduction

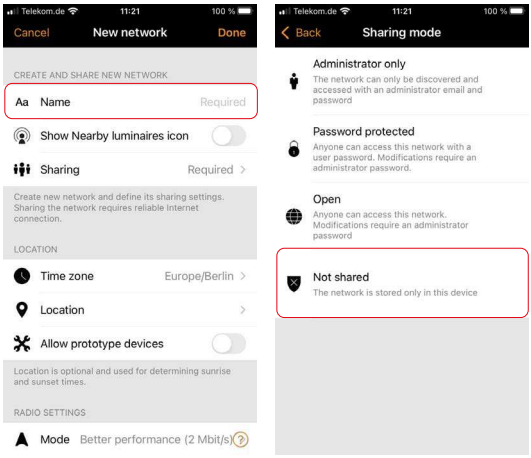
This manual is intended for users who have little or no experience with the Casambi system. It is assumed that the user has a device with Android or IOS operating system available. Despite the scope of this manual, it primarily refers to the use of the B.E.G. Casambi detectors after the initial installation and does not cover all functions. For functions not included in this manual, we recommend the Casambi manual, which can be found here: *https://support.casambi.com/support/home*

2 Getting started/Add devices

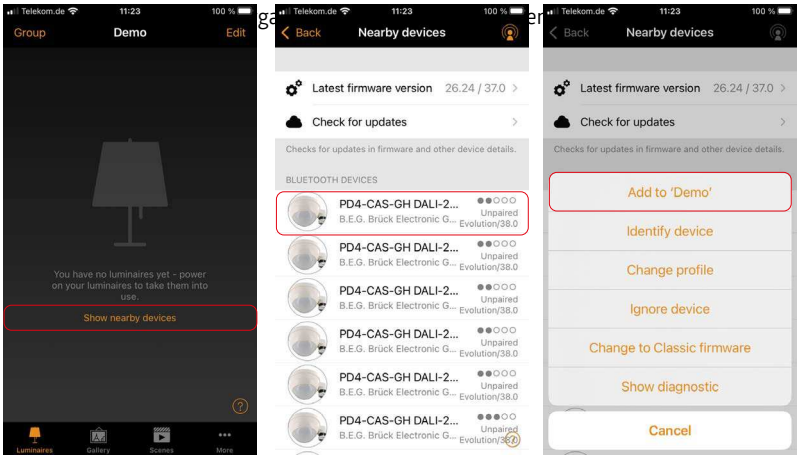
1. Download the app from the Apple App Store or Google Play Store.
2. Turn on your Casambi devices.
3. Open the app.
4. The Casambi app will automatically find all Casambi luminaires that are switched on.
5. Select the option **Add all luminaires to....**
6. If you have not yet created a network, select **Create a network.**
7. Select the firmware version **Evolution**. This supports important functions such as the flashing of the indication LED in the B.E.G. detector. Make sure that other Casambi components are suitable for use with Evolution firmware. Otherwise they cannot be integrated into an Evolution network.



8. Name the network.
9. We recommend that you set the release mode to **Not shared** until commissioning is complete. After that, the network can be shared if necessary.

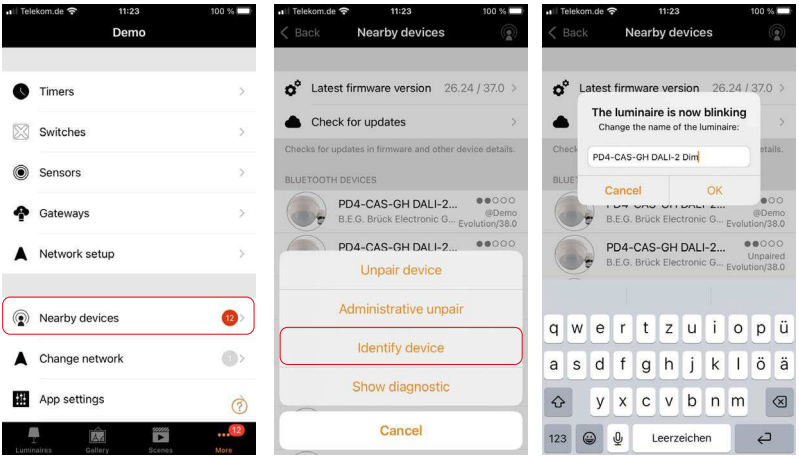


10. The Casambi app automatically adds all found luminaires to a network and opens the **Luminaires** tab.
11. If you created a network first without tapping **Add all luminaires to...**, you can pair the luminaires with the network individually with the following steps.
12. Tap on **Show nearby devices**.
13. Tap the device you want to add to the network, then tap the option **Add to ‚Your network name‘**.
14. Repeat the process with all the devices you want to add.



3 Identifying devices

1. Switch to the tab **...More** and go to the menu item **Nearby devices**.
2. To identify and rename the devices, **press** the corresponding button.
3. Select the option **Identify device**.
4. The **indication LED** under the lens of the B.E.G. device starts **flashing red**. For the devices **with DALI-2 power supply**, the connected **luminaires** flash in parallel.
5. Name the device and confirm with **OK**.
6. Repeat the procedure with all devices.

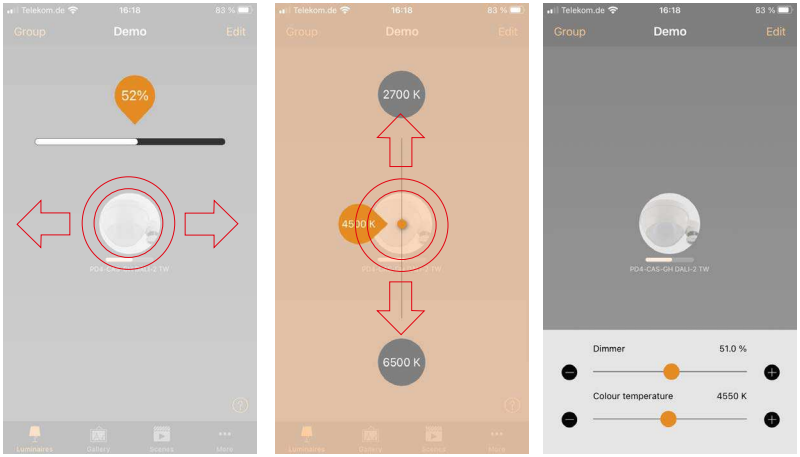


7. Switch to the tab **Luminaires**. The paired luminaires are displayed. For B.E.G. Casambi devices with integrated DALI-2 power supply, the control output of the device is displayed.



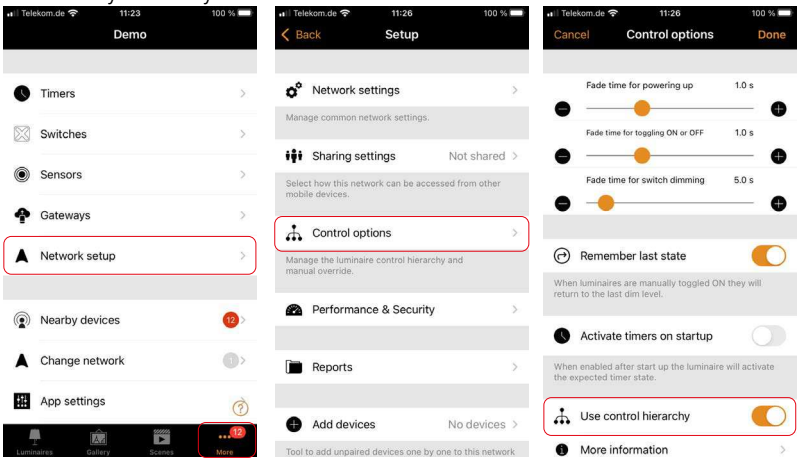
4 Luminaire control gestures

1. **Press and swipe left/right** to change the dimming level.
2. **Press and swipe up/down** to change the colour temperature for devices with colour control.
3. **Press and hold** opens the available controls.



5 The control hierarchy

1. Switch to the tab **...More** and call up the **Network setup**.
2. Call up the menu item **Control options** and activate the option **Use control hierarchy**. This is absolutely necessary for the use of sensors.



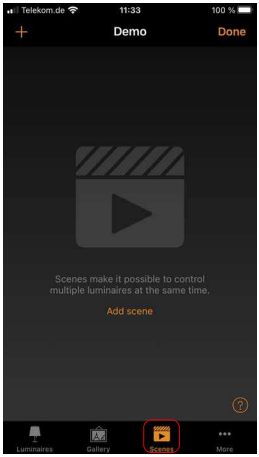
3. Now you should first create scenes that can then be called up by sensors, push-buttons or timers.

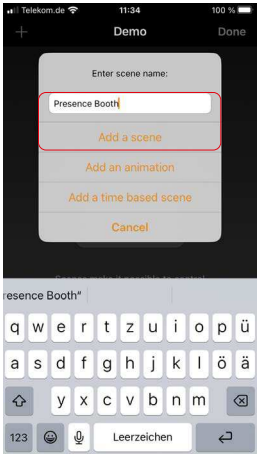
6 Instructions for different applications

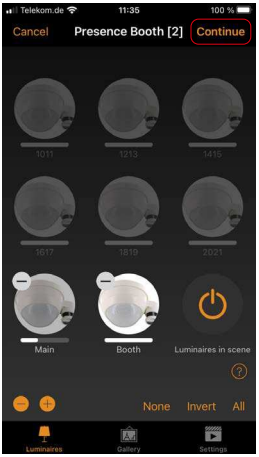
The following example steps refer to the main application of the PD4-CAS-GH (DALI-2) detectors. This is the use in high-bay warehouse aisles. The steps described below are also transferable to other application scenarios.

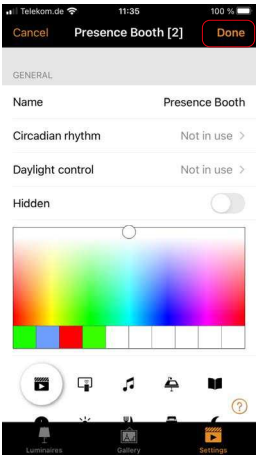
6.1 Creating scenes

1. Switch to the tab **Scenes**.
2. Tap **Add scene** to create the first scene.
3. **Name** the scene and tap on **Add a scene**.
4. The tab Luminaires opens. All available luminaires are displayed greyed out.
5. **Tap on the luminaires** you want to add to the scene and set the desired luminaire status.
6. Confirm the settings with **Continue** and **Done**.





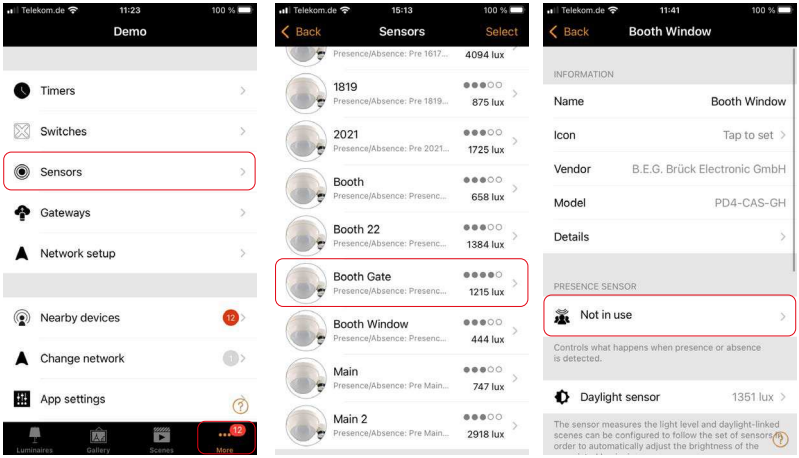




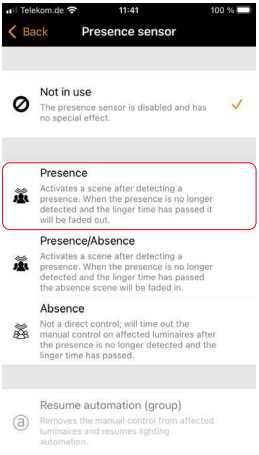
7. To create more scenes, tap the **+** symbol.
8. Repeat the process until you have created a scene for each aisle.
9. Confirm with **Done**.
10. You can create further scenes later in the same way using the **Edit** button and **+**.
11. You can edit scenes that have already been created via the **Edit** menu or by **double-tapping** on the scene symbol.
12. You can call up the scenes by tapping on the symbol in the Scenes tab and dim them completely by pressing and swiping to the left/right.

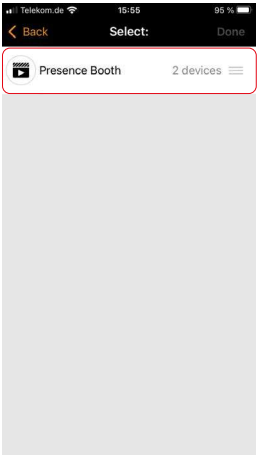
6.2 Triggering scenes by sensors

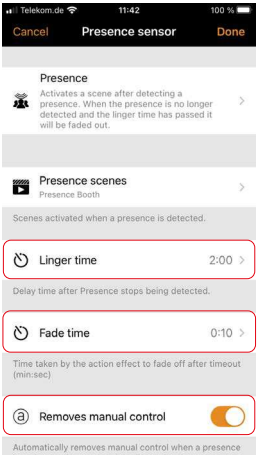
1. Switch to the tab **...More** and call up the menu item **Sensors**.
2. Call up the menu of a sensor by **tapping on it**.



3. Activate the operating mode **Presence** and select the appropriate **Presence scene** that is called up when the detector detects motion.
4. Select the desired **Linger time** (follow-up time after which the scene fades out again).
5. Set the **Fade time** within which the scene is faded out.
6. The option **Removes manual control** calls up the automatic again after manual override when no more presence is detected and the linger time is over. Activate it if you want the system to reactivate the automatic functions on its own.
7. Confirm the settings with **Done** and repeat the process for the other sensors.
8. A scene can be assigned to several sensors so that the detection range can be extended by further PD4-CAS-GH (DALI-2) devices. Each detected movement restarts the linger time of the corresponding detector.


Telekom.de 11:41 100 %
Back
Presence sensor
Not in use
The presence sensor is disabled and has no special effect.
Presence
Activates a scene after detecting a presence. When the presence is no longer detected and the linger time has passed it will be faded out.
Presence/Absence
Activates a scene after detecting a presence. When the presence is no longer detected and the linger time has passed the absence scene will be faded in.
Absence
Not a direct control; will time out the manual control on affected luminaires after the presence is no longer detected and the linger time has passed.
Resume automation (group)
Removes the manual control from affected luminaires and resumes lighting automation.


Telekom.de 15:55 95 %
Back
Select:
Done
Presence Booth
2 devices

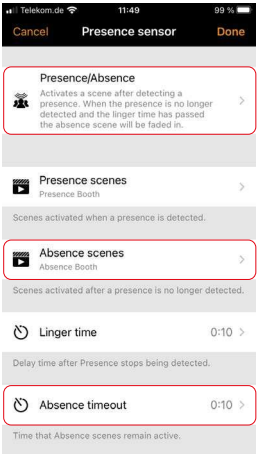

Telekom.de 11:42 100 %
Cancel
Presence sensor
Done
Presence
Activates a scene after detecting a presence. When the presence is no longer detected and the linger time has passed it will be faded out.
Presence scenes
Presence Booth
Scenes activated when a presence is detected.
Linger time
2:00
Delay time after Presence stops being detected.
Fade time
0:10
Time taken by the action effect to fade off after timeout (min:sec)
Removes manual control
Automatically removes manual control when a presence

6.3 Orientation light / absence timeout

1. In addition to the previous scenes, so-called absence scenes are possible, which allow orientation lighting before the light is switched off completely.
2. Create a scene with the lighting level that is to prevail in the time between the expiry of the linger time and the switching off of the light.
3. Switch to the setting of the sensors via the tab **...More**.
4. Select a sensor and change the mode of the motion detector from **Presence** to **Presence / Absence**.
5. In this mode, in addition to the scenes when motion is detected, you can also activate scenes that are called up after the linger time has elapsed.

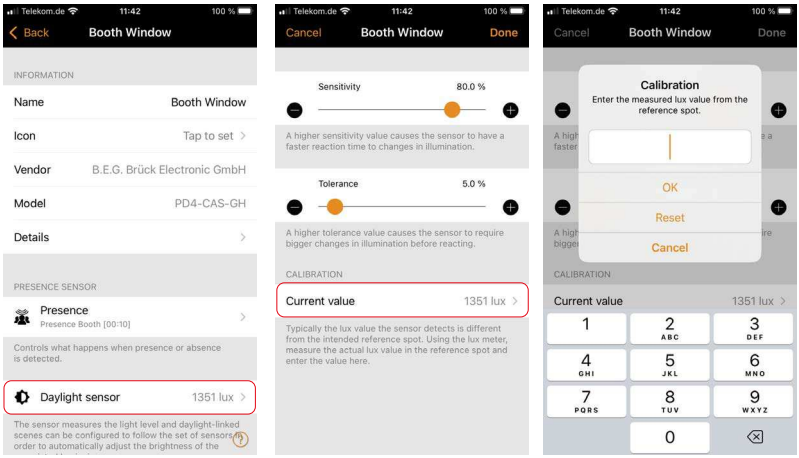
PLEASE NOTE	
	The absence scene can only control luminaires that are also included in the presence scene.

6. Tap **Absence scenes** and select the **scene** you just created.
7. Set the **Absence timeout** to the desired time. The absence timeout is the duration for which the selected absence scene remains active after the linger time, before it is faded out. If „0 s“ is selected, it is deactivated and the absence scene remains active permanently.
8. Confirm with **Done** and repeat the procedure for all sensors.

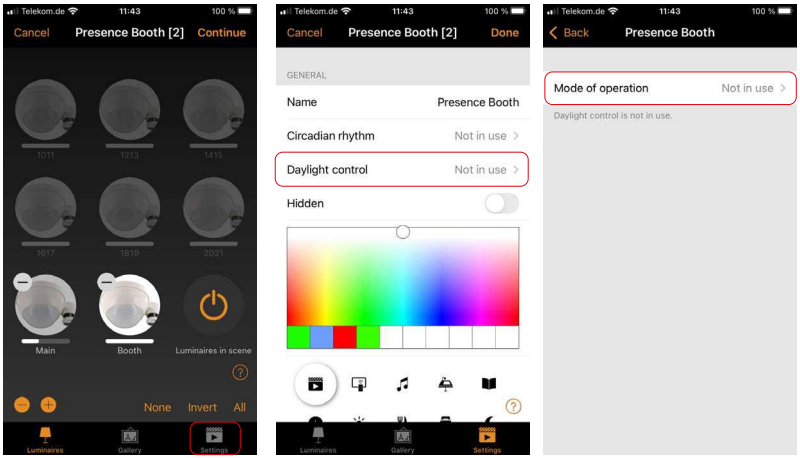


6.4 Daylight control

1. To add constant light control to the previous settings, switch back to the sensor settings in the tab **...More**.
2. Select a sensor and access the daylight sensor settings by tapping on **Daylight sensor**.
3. Increasing the **sensitivity** causes the sensor to react faster to changes in light. Select **80 %**.
4. The **Tolerance** value is used to set the percentage change from which the sensor reacts. Leave this at **5 %** for the time being.
5. With the help of a **luxmeter**, the actual **illuminance on the measuring surface** can be determined and entered under the **Calibration** option.
6. Repeat the process for each sensor.

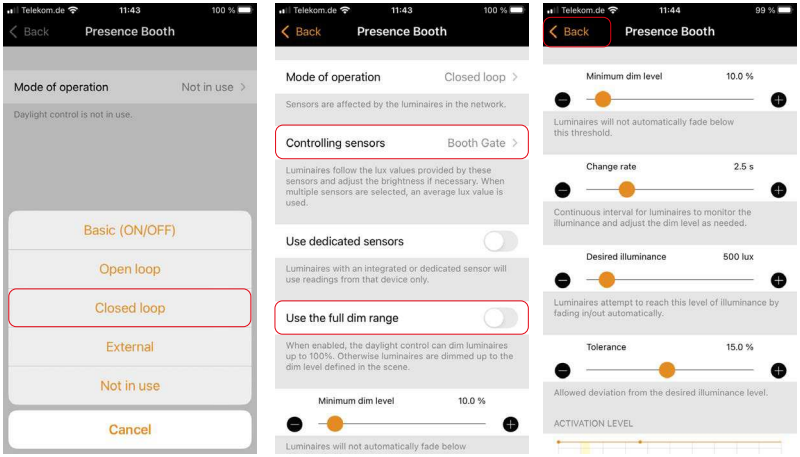


7. Switch to the tab **Scenes**, call up the **edit** mode of the scene to be controlled by double-tapping on the scene.
8. Switch to the tab **Settings** and call up the menu item **Daylight control**.



9. Select the operating mode **Closed loop**. In this operating mode, a target lighting level is set. The detector actively adjusts the dimming value of the luminaires in the assigned scene to reach this illuminance value and compares the target value with the actual value in parallel.
10. Select the sensor that is in the area of influence of the luminaires to be controlled as the **controlling sensor**.
11. Activate the option **Use full dimming range** to allow the sensor to control the luminaires independently of the dimming value set for the scene up to 100%. Depending on the situation, this also causes the orientation light in secondary areas to be dimmed up to 100%. If this is not desired, deactivate this option.
12. If you want a **minimum dimming level**, set it via the option Minimum dimming level. Otherwise, this value can be set to 0%.
13. The **Change rate** determines the interval in which the set value is monitored and the actual value is adjusted. The shorter this interval, the faster the system reacts to changes in the measured illuminance. On days with frequently rapidly changing lighting conditions (e.g., due to clouds), this can lead to undesirable dimming behaviour if the rate of change is very high.
14. Now set the **desired illuminance** and the permitted deviation from the target value via the **Tolerance**.

15. Tap on **Back** to close the menu and confirm with **Done**.

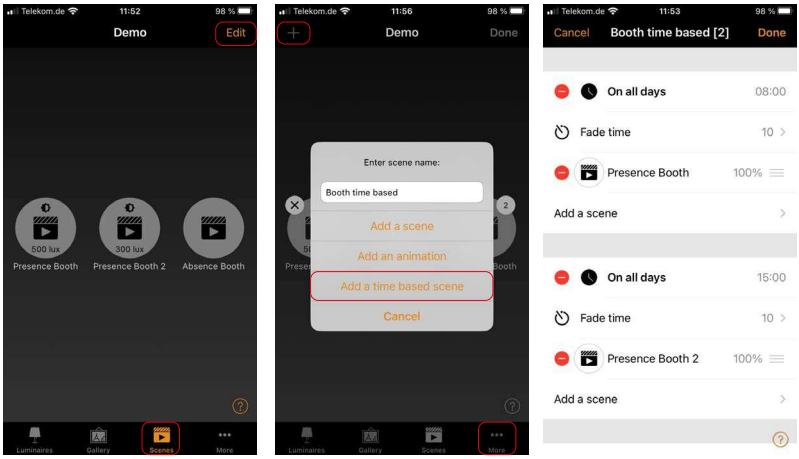


16. Repeat the procedure for all the scenes to be controlled.

6.5 Time-based scenes

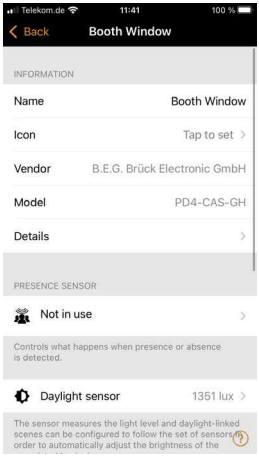
A time-based scene allows you to activate different scenes contained in it depending on the time. Unlike a timer, a time-based scene must be activated separately. It can be used, for example, to activate scenes with different control set values at different times of the day.

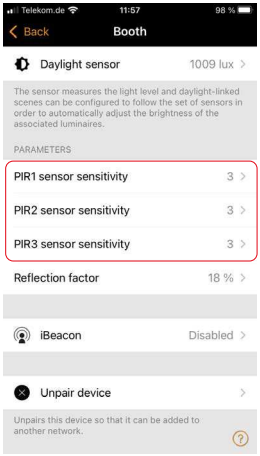
1. In the tab **Scenes**, open the menu for creating new scenes.
2. Name the scene and select the option **Add a time based scene**.
3. Select the time at which the scene should start to become active and insert the desired previously created scene.
4. Select the time at which the second scene becomes active and insert the desired scene as well. Further conditions and scenes can be added via the **Add a condition** button.
5. Tap on **Done** to confirm the settings.

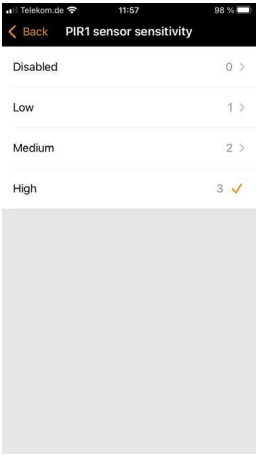


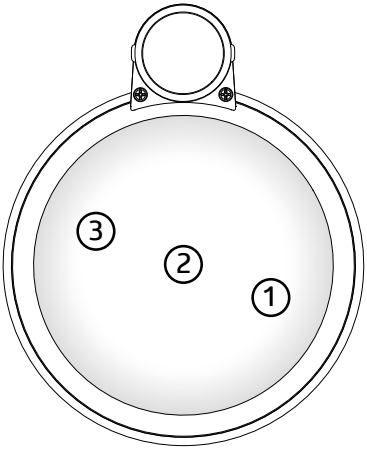
7 Setting the occupancy sensors

1. With B.E.G. sensors you have the option of setting the sensitivity of the PIR sensors individually in the levels **Low, Medium** and **High** as well as **deactivating** them. This allows you to adjust the range in a particular direction without completely excluding that direction from motion detection via the enclosed blinds.
2. These settings depend on the local conditions and must be carried out by the commissioning engineer.
3. To set the sensors, **scroll** down in the sensor settings. Under the item **Parameters** you will find the **PIR sensor sensitivity**, which you can adjust by tapping on the individual parameters.





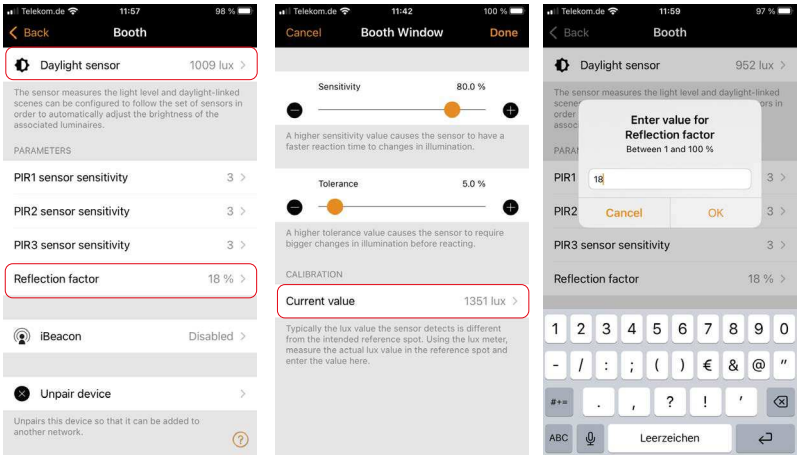




1: PIR sensor assignment

You also have the option of adjusting the reflection factor for the daylight sensor to improve the accuracy of the light measurement. The parameter can be found in the sensor settings under Parameters and is set to 18 % at the factory. To calibrate the value, follow these steps:

1. Dim down the light.
2. Measure the illuminance below the sensor with a luxmeter and insert the value via the calibration function of the daylight sensor (see point 6.3).
3. Dim the light up and compare the measured value of the sensor with the measured value of the luxmeter.
4. If the measured value displayed in the app is lower than the value measured with the luxmeter, the reflection factor must be decreased, otherwise increased.
5. Repeat steps 1 to 4 until both values are sufficiently close to each other in both the dimmed and undimmed state.



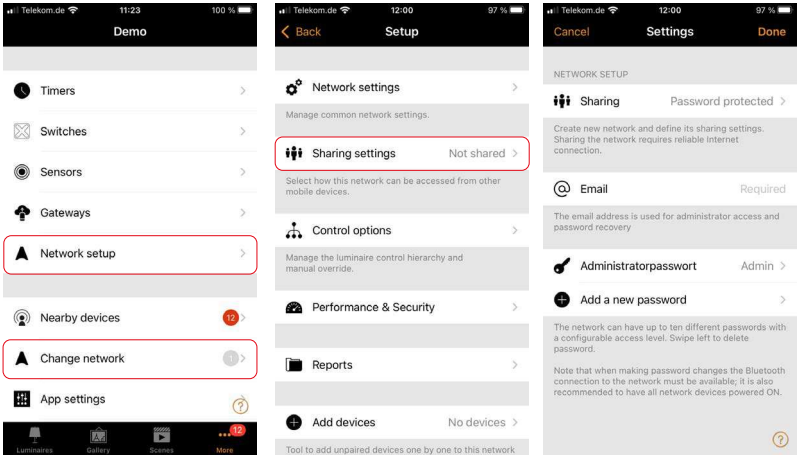
In addition, for the devices with two light sensors, it is possible to shift the weighting between the two from the external light sensor towards the internal light sensor in one percent steps in order to adapt the light measurement to the lighting conditions. By default, only the external light sensor is active.

8 Change and share network

1. To change the network, go to the tab **...More**.
2. Tap **Change network**.
3. Tap on the name of the corresponding network to call up the desired network.

Sharing a network

1. In order to enable additional users to control the network and to be able to create backups we highly recommend to share the network after commissioning. There are different user roles available:
   Admin: Has full control of all network aspects.
   Manager: Can configure the network (i.e. change programming), but not create new user accounts.
   User: Can only use the network but cannot make any programming changes.
   For more details on the different sharing modes, please check the infotexts in the app or the Casambi App manual
2. From the tab **...More**, select **Network setup** and tap **Sharing settings**.
3. Under **Sharing**, select the desired sharing mode and enter an email address and password. To be able to reset the password if necessary, it should be a real e-mail address.
4. Confirm the settings with **Done**.



Op_MAN_Casambi_en_V1 ■ 280623

B.E.G. Brück Electronic GmbH
Gerberstraße 33
51789 Lindlar

T +49 (0) 2266 90121-0
F +49 (0) 2266 90121-50

support@beg.de
beg-luxomat.com