theben

Manual
Casambi module
LIGA.AIR.DALI.Theben
4960080

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Content

1 Casambi - Simple Lighting Control conveniently via Bluetooth

Casambi was developed as a radio-based lighting management system and is based on Bluetooth Low Energy (BLE). Bluetooth Low Energy is the only wireless technology characterized by low power consumption.

1.1 What exactly is Casambi?

Casambi is a light management system that allows you to control all luminaires equipped or connected with a Casambi module via an app or a light switch.

You can dim or adjust the light depending on the luminaire or lamp type. The Casambi modules can be easily integrated into many luminaires and form a wireless network for shared light scenes.
Commissioning and configuration are carried out via an app (based on BLE) on a tablet, smartphone, PC etc.

With Casambi, you can:
- Dim the lights
- Turn lights on/off
- Group luminaires
- Create and save lighting scenes
- Adjust colors and color temperatures
- And much more...

1.2 The Casambi Lighting Control

The Casambi system makes lighting control comfortable and easy. This includes the Casambi module and the Casambi app. With your mobile device, you can control up to 250 lights and devices at once and set parameters such as brightness and color for each fixture or group of luminaires.

The system is based on Bluetooth 4.0. Each light is equipped with a Casambi module. The Casambi modules and all other devices, such as light sensors, presence detectors, or switches, are both transmitters and receivers. This way, all devices form a mesh network where commands are easily passed on. This network operates without central control.

Retrofitting an existing lighting installation to Casambi can also be done quickly. The lighting network is set up via the Casambi app.

1.3 The Casambi App

The Casambi app works as a user interface in a Casambi lighting control system, as a commissioning tool, and as a remote gateway. The Casambi app works with iOS and Android devices such as smartphones, tablets, and smartwatches:
- iPhone 4 s or higher
- iPad 3 or higher
- Android 4.4 KitKat or devices equipped with full Bluetooth 4.0 support from 2013 onward

The app can be downloaded for free from Google Play and the Apple App Store.

You can find a detailed manual for the app here

https://support.casambi.com/support/solutions/12000001568

2 Product Features

The small Casambi module LIGA.AIR.DALI.Theben is controlled via the Casambi app and connected directly to 100-240 V AC (with up to 50 participants). It has a DALI bus output that can be loaded up to a maximum of 100 mA. The compact housing allows for installation in flush-mounted boxes or a cable duct.

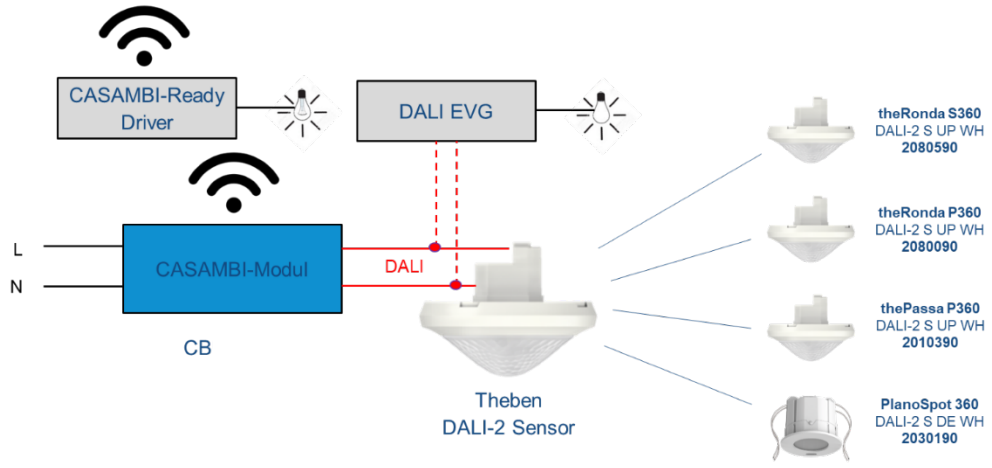
The focus of its use is in commercial buildings and private residential construction, particularly in renovations. Application areas range from office lighting and conference rooms to lighting in gastronomy, event, and entertainment technology, and residential houses.

The Casambi module is intended exclusively for the use agreed upon contractually between the manufacturer and the user. Any other or additional use is considered improper. The manufacturer is not liable for any damages resulting from such improper use.

2.1 Function

During commissioning, the Casambi module sends fixtures with integrated codes via the DALI bus to the DALI-2 sensor. This sensor then provides information on "presence" and "brightness" as a DALI telegram according to IEC 62386 Parts 303/304. The Casambi module transmits this information as a Casambi wireless signal. Casambi allows only one instance for "presence" and one instance for "brightness." The selection of the instance is set with the fixtures.

The Casambi module has an integrated DALI power supply and provides the necessary DALI current for the sensor. Additionally, optional DALI electronic ballasts (EVGs) can be connected.

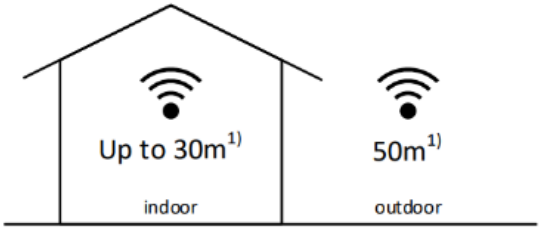


2.2 Compatible Theben DALI-2 Sensors

The following Theben DALI-2 sensors can be connected to the Casambi module:

theRonda S360 DALI-2 S	theRonda P360 DALI-2 S	thePassa P360 DALI-2 S	PlanoSpot 360 DALI-2 S
2080590	2080090	2010390	2030190

2.3 Range



1) The range strongly depends on the environment and obstacles such as walls and building materials.

The range between two Casambi modules or between a Casambi module and a smartphone can vary significantly depending on obstacles and materials in the surroundings. In an open field, the range between two modules can be more than 50 meters. However, if the module is enclosed in a metal structure, the range can be significantly reduced.

ⓘ Therefore, testing is recommended.

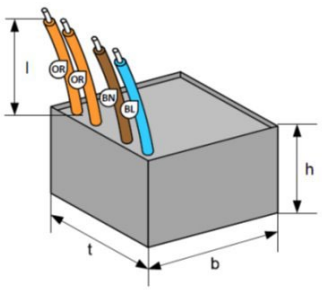
Casambi uses mesh network technology, so each Casambi module also functions as a repeater.

ⓘ During network testing, ensure that all modules can be controlled from any point in the network.

In a Casambi mesh network, data is automatically rerouted to maintain continuous mesh connectivity. Devices that power on receive the complete and current network status from the nearest Casambi device.

ⓘ Larger ranges can be achieved with additional Casambi devices.

2.4 Dimensions



h = 26 mm
b = 38 mm
t = 38 mm
l = 150 mm

2.5 Technical Data

Operating voltage	100–240 V AC, 50–60 Hz
Power consumption	max. 3 W
Standby power consumption	< 0,5 W
Max. output current of power supply	max. 100 mA
Number of supported ECGs	50
DALI output	wires 2 x 0,5 mm² (AWG20), L = 150 mm: 2 x orange, DALI bus voltage 17 V I out max. 100 mA (approx. 50 participants)
Connection type	screw terminal; wires 2 x 0,5 mm²
Max. wire cross-section	0,5 mm²
Mounting type	ceiling installation, in flush-mounted box (size 1)
Connections	wires 2 x 0,5 mm² (AWG 20). L = 150 mm: brown: L (pole conductor), blue: N (neutral conductor)
Transmission frequency/power BLE/range in open field	2402–2480 MHz/8 dB/50 m
Protection class	II
Protection rating	IP 64
Ambient temperature	–20 °C ... +50 °C
Standards	Low Voltage Directive 2014/35/EU according to EN 60669-2-1, EMC Directive 2014/30/EU
Dimensions	38 x 38 x 26 mm
Standard Casambi module	Bluetooth 4.0 Wireless Control

3 Connection and Installation

3.1 Safety

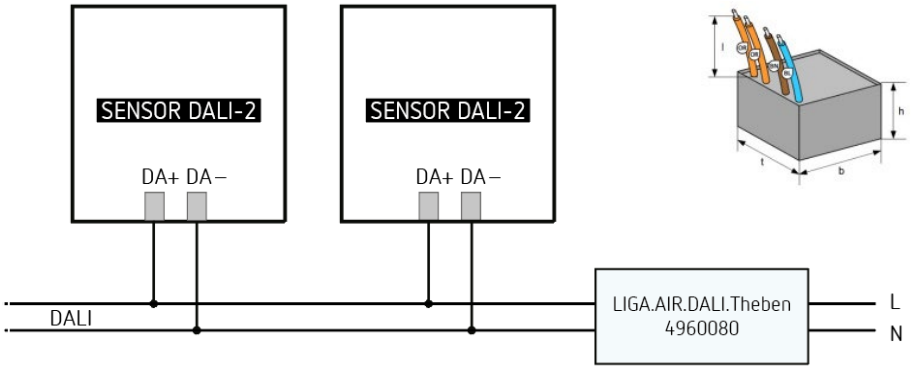
CAUTION

Mounting and installation should only be performed by a qualified electrician, a person with appropriate professional training, knowledge, and experience to recognize and avoid hazards associated with electricity.

Disconnect and ensure disconnection from the mains voltage before mounting/dismounting.

Read and follow the manual completely before commissioning and using the product.

3.2 Connection



The module is connected directly to 100-240 V AC and has a DALI bus output that can be loaded up to a maximum of 100 mA.

A total of up to 50 DALI end devices (ECGs and relays) can be connected.

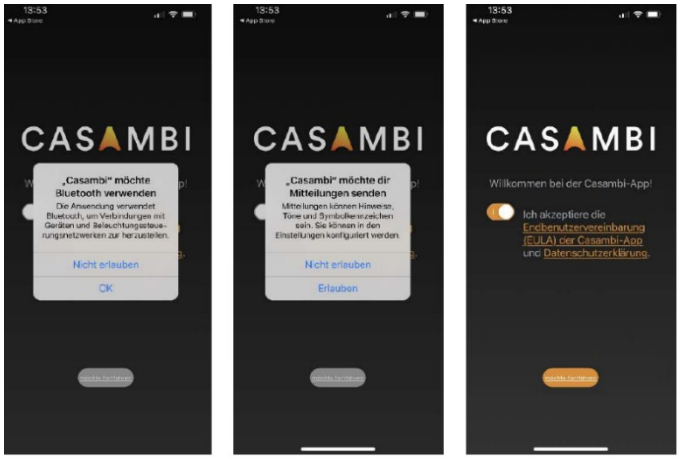
3.3 Flush-mounting

The flush-mounting of the Casambi module is done in a standard flush-mounted box in the ceiling.

4 Commissioning with the Casambi App

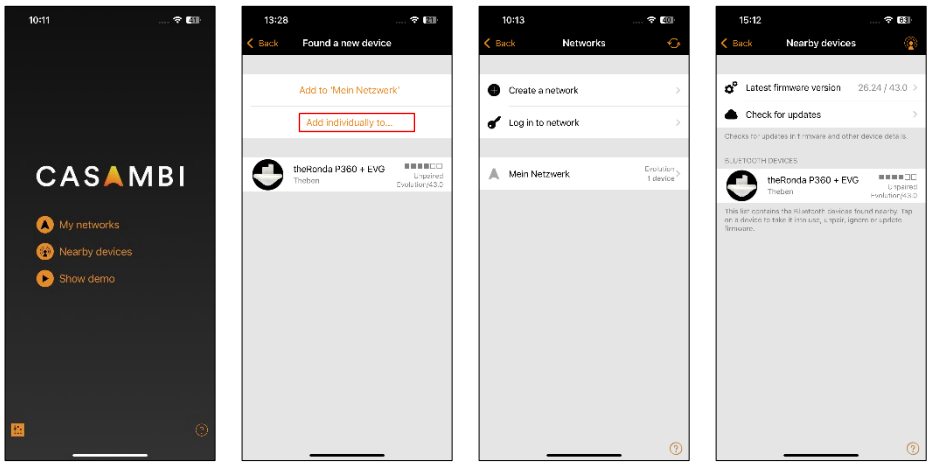
After the sensor theRonda S360 DALI-2 S, theRonda P360 DALI-2 S, thePassa P360 DALI-2 S, or the PlanoSpot 360 DALI-2 S sensor has been installed and connected, you can configure your settings via the "Casambi" app. To do this, proceed as follows:

When commissioning devices for the first time, you need to add them to a network, meaning the device will be in a "paired state." If you want to add the device to another network, it must first be removed from the existing network, i.e., "unpaired.".

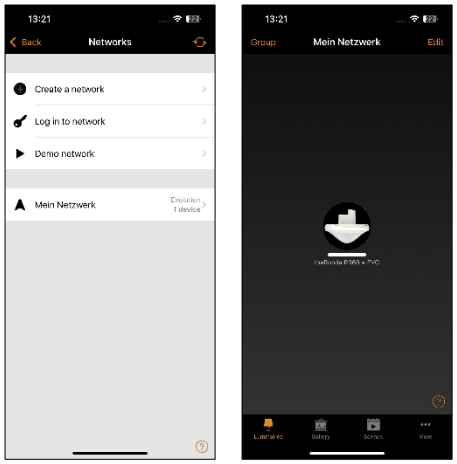


- Download the app from the Apple App Store or Google Play Store.
- Turn on your Casambi-enabled devices.
- Open the app.
  The Casambi app will automatically list all powered-on sensors nearby.
- Tap on "Add individually to...". You must now create a new network or select an existing one ("Add to My Network") and name your new network.
  (Only Casambi devices with the same firmware type as the network can be added)

It is recommended to share a new network with the setting "Administrator only." Now you can control and program your devices via the app.



➢ Tap on the desired device and add it to your network. If this does not work, you need to create a new network and also give it a new name.

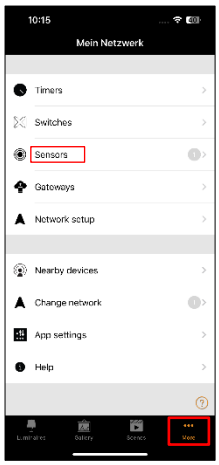


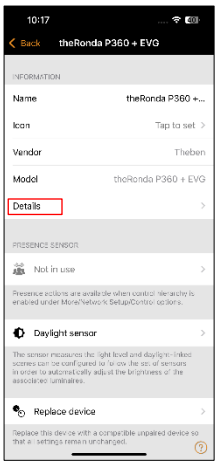
Once the device has been added to your network, you can now dim, turn on / off, create scenes, etc.

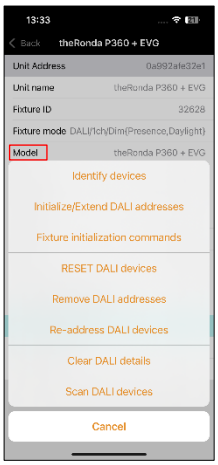
If your detector/sensor blinks ...

➢ please click on "More" at the bottom right of the display. A menu will open. Here, tap on "Sensors" and select the sensor.
Here you will find all information about your sensor.

➢ Click on "Details." In the new window, click on "Model." Here, click on "Fixture initialization commands".

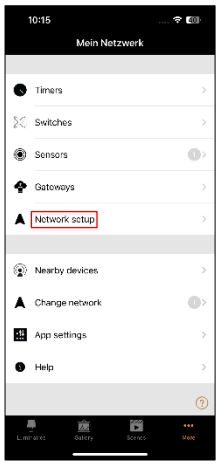


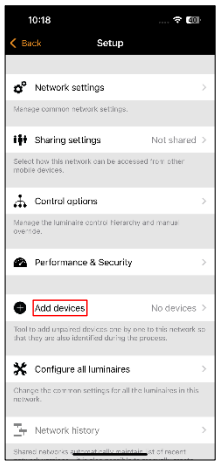




Adding more devices to the network ...

Under "Network setup," you will find the menu "Add devices." Here you can select another paired device and add it to your network.



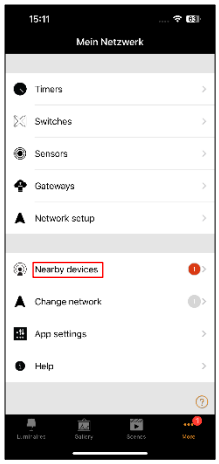


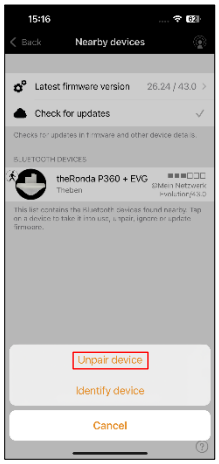
Unpair device

If you want to remove a device from your network, you can "unpair" it here.

➢ Tap on "Nearby devices." The paired device "theRonda" will appear.

➢ Tap on the "theRonda" image and unpair the device.

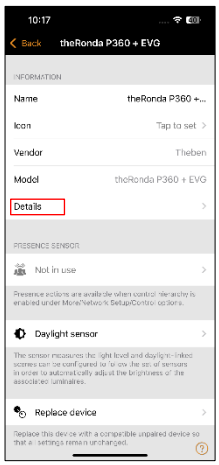


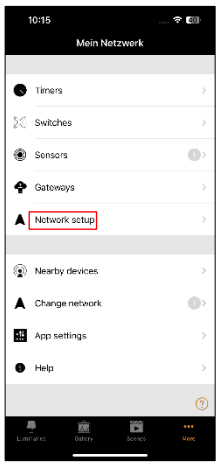


Enabling the "Motion Detector" function

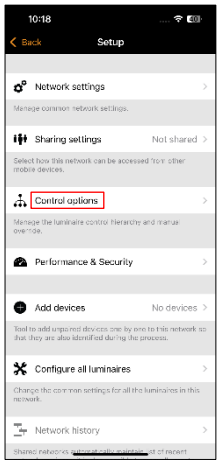
➢ Tap on "Details" to enable your motion detector (Motion Detector – Not active).

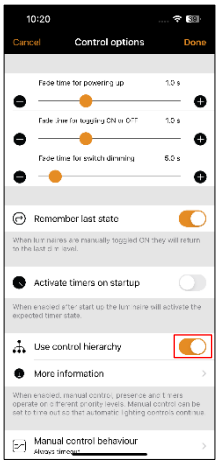
➢ Tap on "Network setup".





➢ Then tap on "Control options."
Here, "Use control hierarchy" must be activated.





How to control lights, create and recall scenes in lighting situations can be found in the detailed Casambi manual.

https://support.casambi.com/support/solutions/12000001568

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