GB

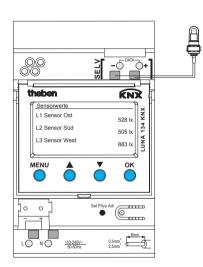
## theben

#### LUNA LUNA 134 KNX

1349200

Installation and operating instructions
Brightness sensor





**LUNA 134 KNX** 

## **Contents**

Basic safety instructions Display and keys Connection/installation Bus connection, programming physical address	3 4 5 6
Start-up 7 Home page – Sensor values Enter PIN	7
Menu – Settings	8
Language	9
Display	9
System	1
Sensors	1
Deactivate active sensor	1
Allocate new serial number to active sensor	1.
Menu – Switching channels	1.
Select light threshold (brightness)	1
Select delay	1!
Technical date	10
Service address/Hotline	10





### Danger of death through electric shock or fire!

- > Installation should only be carried out by a professional electrician!
- The device is designed for installation on DIN top hat rails (in accordance with EN 60715);
   device conforms with EN 60669-1
- Professional installation of bus lines and commissioning of devices requires compliance with the
  provisions of EN 50428 for switches or similar installation equipment for use in building systems
  technology. Tampering with, or making modifications to, the device will invalidate the guarantee.

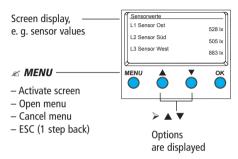
#### Designated use

- The device registers the brightness via up to 3 external brightness sensors; the measured values are transmitted via the bus.
- Only use the device in enclosed, dry spaces; brightness sensors are installed in the open-air.

### Disposal

Dispose of device in environmentally sound manner

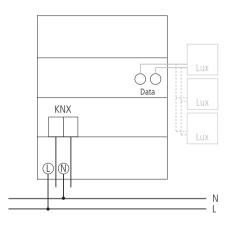
## Screen and keys



#### **∠** OK

- Store selection
- Confirm selection

### **Connection/installation**



#### **Connection/installation**



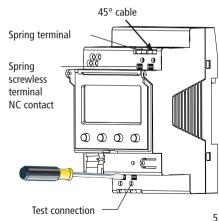
### **⚠** WARNING

#### Danger of death through electric shock!

- ➤ Must only be installed by professional electrician!
- Disconnect power source!
- Cover or shield any adjacent live components.
- > Ensure device cannot be switched again!
- Check power supply is disconnected!
- > Earth and bypass!
- > Observe SELV on data bus.

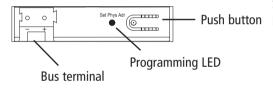
#### Connect cable

- > Strip cable by 8 mm (max. 9 mm).
- ➤ Insert cable at 45° in the open terminal (2 cables per terminal position possible).
- ➤ With flexible wires only: To open the spring terminal, press screwdriver downwards.



### **Bus connection**

- ➤ Insert bus line in the front of the device.
- ➤ Ensure correct polarity.



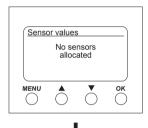
# **Program physical address**

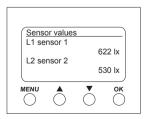
- ➤ Press button on front of the device.
  - → The programming LED lights up.
  - → Device is in program mode.

Start-up, diagnostics and configuration are Push button handled by ETS 3 and 4 (KNX tool software).

### Start-up

**The pages displayed depends on the programming by the ETS.** Please refer to the Product Handbook for detailed functional descriptions (at **www.theben.de**).





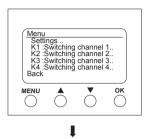
## **Home page – Sensor values**

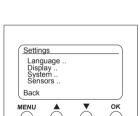
If an external sensor is connected, the sensor value (lux value) appears on screen. The sensor LED flashes.

#### **Enter PIN**

If **Access via PIN** is set on the ETS, the pin code (1000–9999) has to be entered before use.

 $\triangleright$  Enter the numbers with  $\blacktriangledown$  or  $\blacktriangle$  and confirm with OK.

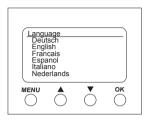




## Menu – Settings..

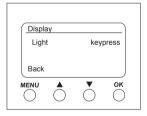
The **Settings** menu item can be used for setting the language, screen lighting or information on the device and sensors.

- Press *MENU* button.
  This brings up **Settings...**
- > Confirm **settings**.. by pressing **OK**.
- ➤ Use ▼ or ▲ to select language, display etc.
- $\triangleright$  Press **OK** to confirm or use  $\blacktriangledown$  or  $\blacktriangle$  to select **Back**.



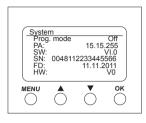
#### Settings-Set language

- > Use ▼ or ▲ to select language.
- > Press **OK** to confirm.
- ➤ Use ▼ or ▲ to select desired language.



### Settings- Set display

- ➤ Use ▼ or ▲ to select display.
- > Press **OK** to confirm.



Settings - System..

➤ Use ▼ or ▲ to select system.

> Press **OK** to confirm.

The display shows

Prog. mode (Programming mode)

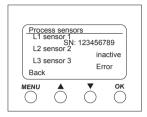
PA (Physical address)

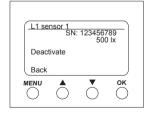
**SW** (Software version)

**SN** (Serial number)

**FD** (Finishing date)

**HW** (Hardware)





#### Settings - Sensors..

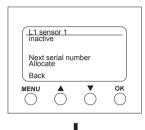
- ➤ Use ▼ or ▲ to select sensors.
- Confirm by pressing OK.

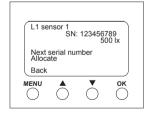
The **Sensors** menu item can be used to display the lux values for up to 3 connected sensors. The designation of the sensors can be changed using the ETS:

- active (serial number is displayed)
- inactive (sensor is not required)
- Error (sensor does send)

#### Deactivate active sensor

- ➤ Use ▼ or ▲ to select the desired sensor.
- Confirm L1 sensor 1 (active) by pressing OK. This brings up serial numbers, lux value and Deactivate.
- ➤ Use ▼ or ▲ to select Deactivate.
- Confirm by pressing OK.





#### Allocate new serial number to inactive sensor

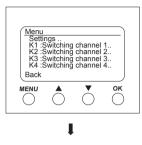
- ➤ Use ▼ or ▲ to select Next serial number.
- > Press **OK** to confirm.

The inactive sensor displays a new SN number.

- ➤ Use ▼ or ▲ to select Allocate.
- Press OK to confirm and, if reqd., select Back to leave menu.

If you want continue searching rather than accepting the sensor..

- > Select Next serial number.
- > Press **OK** to confirm.

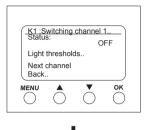


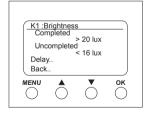
### **Menu – Switching channels..**

The **Switching channels** menu item displays the status of the channel (ON, OFF, disabled/invalid):



- Press MENU button.
  This brings up Settings.. and the Switching channels.. etc.
- > Use ▼ or ▲ K1: to select Switching channel 1.
- ➤ Press **OK** to confirm. It brings up **Status** (ON, OFF), **Light thresholds..** and **Next channel...**

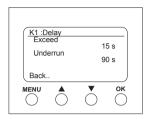




#### Select light thresholds (brightness)

The **Light thresholds** menu item can be used to set of the brightness of the relevant channel:

- ➤ Use ▼ or ▲ to select Light thresholds.
- > Press **OK** to confirm.
- > Use ▼ or ▲ to select lux value.
- > Press **OK** to confirm.
- ➤ Use ▼ or ▲ to change lux value.
- > Press **OK** to confirm desired lux value.



#### Select delay

The **Delay** menu item can be used to set the delay time:

- ➤ Use ▼ or ▲ to select Delay.
- > Press **OK** to confirm.
- > Use ▼ or ▲ to select Exceed or Underrun.
- > Press **OK** to confirm selection.
- ➤ Use ▼ or ▲ to change the delay values.
- > Press **OK** to select desired delay value.

### **Technical data**

• Operating voltage: 110–240 V~, +10 %/-15 %

Frequency: 50–60 Hz
Power consumption: typically 1 W
Standby min.: 0.8 W

• Data output: Safety Extra Low Voltage

(SELV)

• Permissible ambient temperature:

-5 °C ... +45 °C

• On/Off switching delay: 0–20 min

• Brightness measuring range: 1–100000

Protection class:
 Protection rating:
 Il subject to correct installation
 IP 20 in accordance with

EN 60529

• Pollution level: 2

Max. cable cross section: 2.5 mm<sup>2</sup>

Operating voltage KNX: bus voltage ≤10 mA

• Cable length: 100 m (YCYM 2 x 2 x 0.8 mm

2 pairs for DATA bus) 50 m (YCYM 2 x 2 x 0.8 mm

1 pair each for KNX and

DATA bus)

Max. number of connectable brightness sensors for
 LINA 134 KNX at DATA bus: 3

Service address

Theben AG

Hohenbergstr. 32 72401 Haigerloch DEUTSCHLAND

Phone +49 (0) 74 74/6 92-0 Fax +49 (0) 74 74/6 92-150

Hotline

Telephone +49 (0) 74 74 6 92 369

Fax +49 (0) 74 74 6 92 207

hotline@theben.de

Addresses, telephone numbers etc.

www.theben.de