

theben

309 271 01

LUNA

LUNA 111 top2

LUNA 112 top2

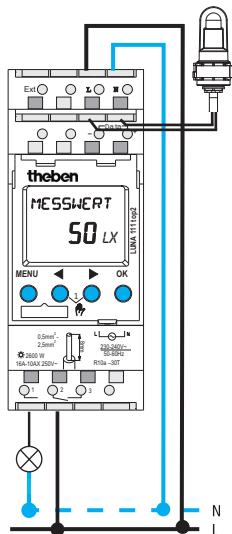
111 0 100, 111 0 200

112 0 100, 112 0 200

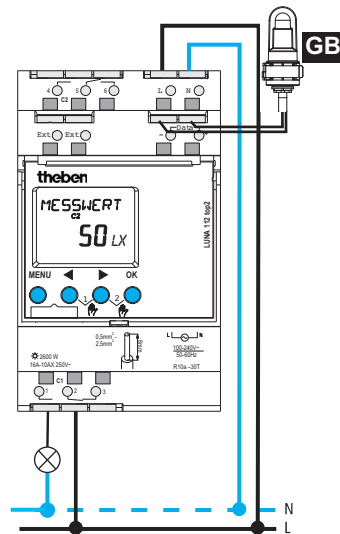
Assembly and operating instructions

Digital twilight switch

D GB F I E P



LUNA 111 top2



LUNA 112 top2



Current connection required for smooth zero-crossing switch operation
(see connection diagram)!

Contents

Basic safety instructions	3
Screen and keys/operating instructions	4
Overview of menu selection	5
Connection/installation	6
Connection/installation of light sensor	7
Initial start-up	8
Menu item LIGHT	
Set lux values/delay	9
Menu item MANUAL	
Manual and permanent switching	10
Menu item OPTIONS	
Enter PIN code	10
Allocate sensors	11
External output	12
OBELISK top2 memory card	13
Technical data	14
Service address/ Hotline	14

Basic safety instructions



WARNING

Danger of death through electric shock or fire!

- Installation should only be carried out by professional electrician!

- The device corresponds to EN 60669-2-1; it is designed for installation on DIN top hat rails (in accordance with EN 50022) and for use in normal environment

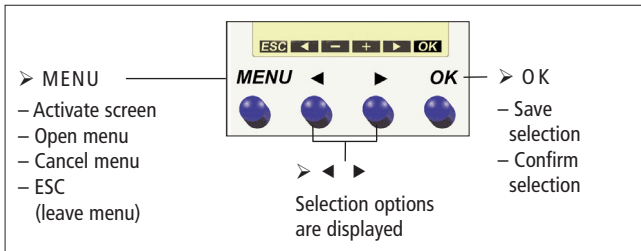
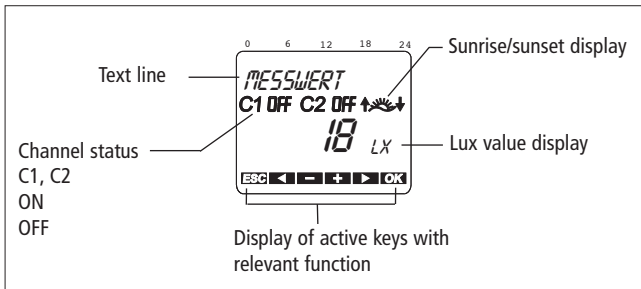
Designated use

- The twilight switch is used to control street lighting equipment, external staircases, display windows, entrances etc.
- Only use in enclosed dry spaces (equipment); sensor is installed in the open-air

Disposal

Dispose of equipment in an environmentally-friendly manner

Screen and keys



Operating instructions

1. Read text line

Flashing text/symbol represents query

2. Make a decision

YES

confirmation

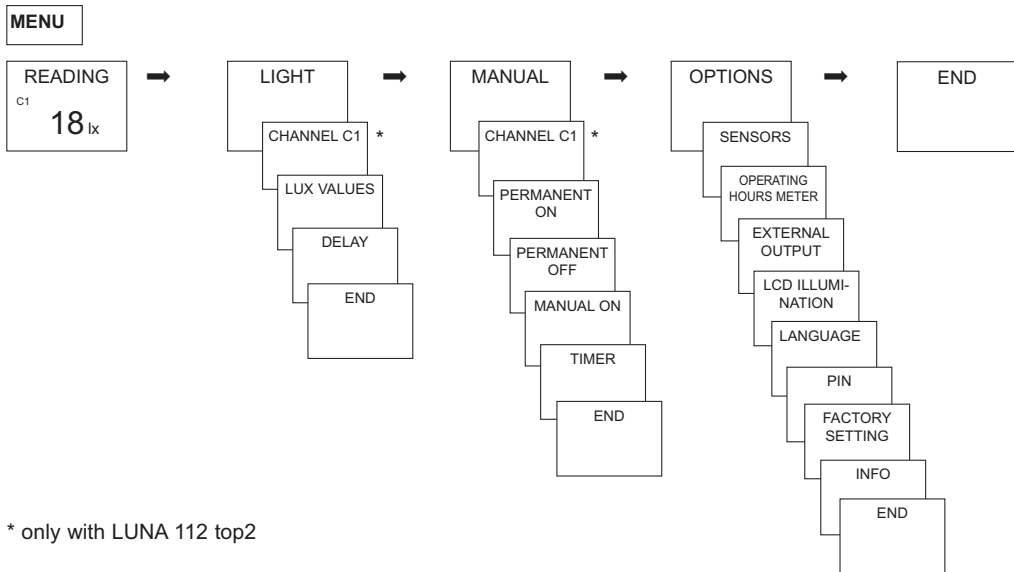
OK
press

NO

Revise/
change

← →
press

Overview of menu selection



Connection/installation



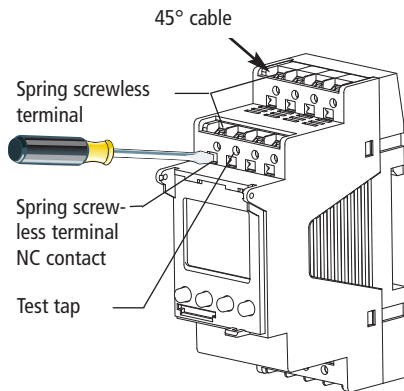
WARNING

Warning, danger of death through electric shock!

- Must be installed by professional electrician!
- Connect power source.
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on!
- Check power supply is disconnected!
- Earth and bypass!

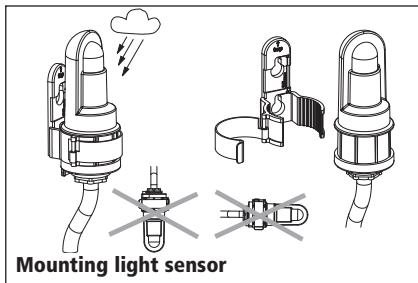
Connect cable

- Strip cable by 8 mm (max. 9).
- Insert cable at 45° in the open terminal (2 cables per terminal is possible).
- Press screwdriver downwards to open spring screwless terminal.

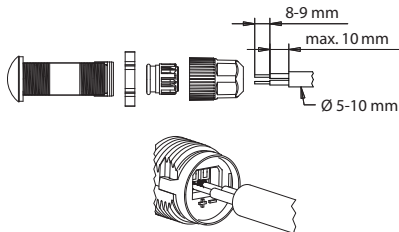


Connection/installation of light sensor

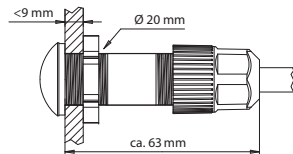
- Take length of connection cable into account:
max. 100 m (2 x 1.5 mm²), max. 50 m (2 x 0.75 mm²)
- Avoid running sensor wiring parallel to mains power cables.
- Connect power source. **Ensure correct polarity.**
- Mounting light sensor: 0.5-2.5 mm², strip cable by 10 mm (max. 11 mm).
- Installing light sensor: 0.25-1.5 mm², strip cable by 8 mm (max. 9 mm).



907 0 456 907 0 415



Installing light sensor



Initial start-up

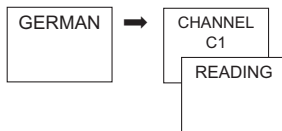
Set language, channel and measured value

The device is preset at 15 lx for switch on/switch off level.

- Press required key and display follows on screen (see picture).

If all settings are performed, the screen alternately shows the automatic display and **READING**.

If a sensor is connected, the measured lux value appears on screen (only during mains operation).

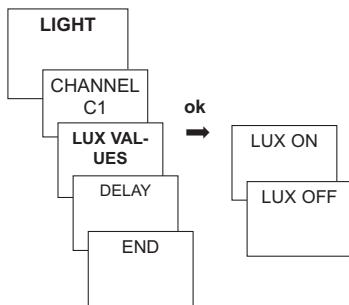


Typical brightness values

Daylight (bright)	80.000 lx
Office accommodation	500 lx
Hallways and stairs	100-150 lx
Street lighting	15 lx
Full moon	ca. 0.3 lx

Set lux values

- Press **MENU** (see picture).

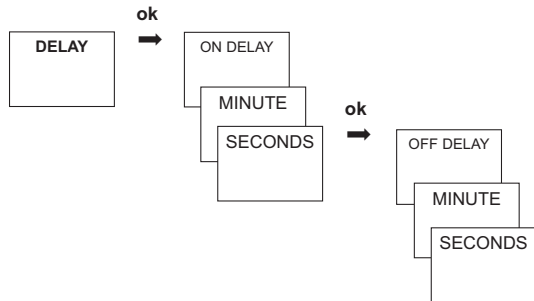


Set delay

- Press **MENU** (see picture).

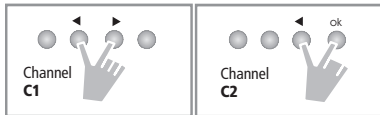
An on/off delay of **1 minute** is preset to avoid faulty operation caused by lightning, car headlights etc.

When the delay ends the channel status will flash ON/OFF.



Manual and permanent switching

Manual and permanent switching can be set using the menu in **MANUAL** or (in the automatic screen) by key combination (see picture).



Activate manual switching

- Briefly press both keys simultaneously.

Activate permanent switching

- Simultaneously press both keys for 2 seconds.

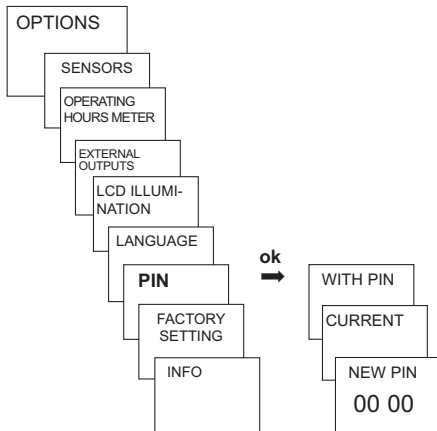
Cancelling manual/permanent switching

- Press both keys simultaneously

Enter PIN code

The **PIN code** is set via the menu in **OPTIONS** (see picture).

If you have forgotten the PIN please call the Theben Hotline.



Allocate sensors

The **SENSORS** are allocated in the menu under **OPTIONS**.

➤ Press **MENU** (see picture).

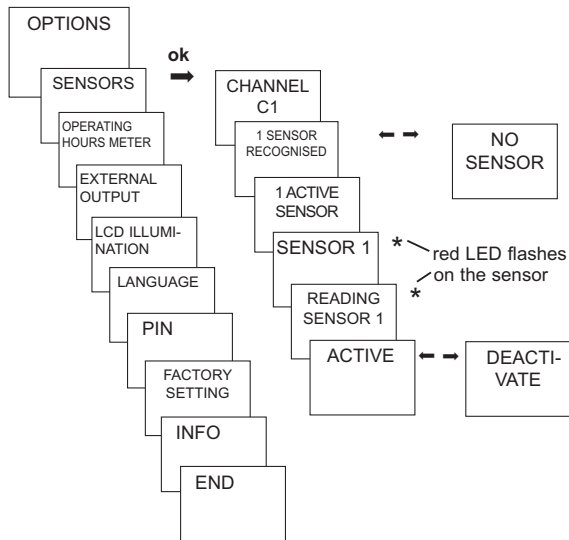
Connection options:

1 LUNA + 4 light sensors

10 LUNA + 1 light sensor

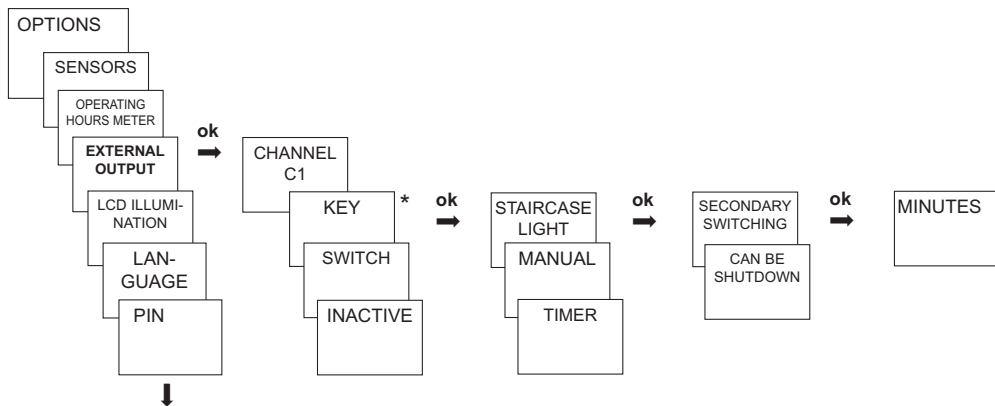
Σ max. 16 devices (LUNA + light sensors)

Presetting: all connected sensors are active for all channels. The sensor that sends the lowest lux value is active.



External output

The **EXTERNAL OUTPUT** is set via the menu in **OPTIONS** (see picture).

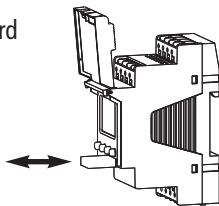


* Use key without glow lamp.

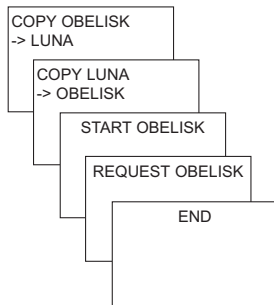
OBELISK top2 memory card

Use memory card

- Insert memory card in device.
- Request data, read into/from device or start Obelisk program.
- OBELISK top2 memory card (No. 907 0 404) remove-after programming etc. and store in cover.



Avoid mechanical stress or dirtying with other storage/transport methods.



COPY OBELISK -> LUNA

- Confirm menu item by pressing **OK**. The display shows **COPY LIGHT+PROG**
Only the delays, lux values and special programs are copied.

COPY ALL DATA

All data is copied.

END

Remove OBELISK

Technical data

Nominal voltage:	230–240 V~ (LUNA 111 top2)	
	100–240 V~ (LUNA 112 top2),	
	+10 %/-15 %	
Frequency:	50–60 Hz	
Brightness range:	1–99,000 lx	
On/off switch delay:	0–59 min	
Power consumption:	type 3 VA	
Switch output:	phase-independent	
	(zero-crossover switching)	
Contact:	two way switch	
Contact material:	AgSnO ₂	
Switching capacity:	16 A/250 V~ $\cos \varphi = 1$	
Fluorescent lamp		
switching capacity:	10 AX	
Switching capacity min.:	10 mA/250 V AC	
	100 mA/12 V AC/DC	
Glow lamp load:	2600 W	
Halogen lamp load:	2600 W	
Fluorescent lamps:	uncorrected:	2300 VA
KVG	series-corrected:	2300 VA
	parallel-corrected:	800 VA (80µF)
	Lead-lag circuit (duo):	2300 VA
Fluorescent lamps EVG:		650 VA
Mercury and sodium vapour lamps:		
	parallel-corrected:	800 VA (80µF)

Compact fluorescent tubes (EVG):	22x7 W, 18x11 W, 16x15 W, 16x20 W, 14x23 W
Permissible ambient temperature:	–30 °C ... +55 °C, –40 °C ... +70 °C (sensor)
Protection class:	II (light sensors III) if correctly mounted
Protection rating:	IP 20, IP 55 (Mounted light sensor), IP 66 (Installation light sensor) in accordance with EN 60529

Service address/Hotline

Service address

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