

# theben

307150 01

**EN** LED spotlight with  
motion detector

theLeda P12 WH/AL  
1020941/1020942  
theLeda P24 WH/AL  
1020943/1020944



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# 1. Basic safety information



**WARNING**

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

- Installation should only be carried out by a qualified electrician!



Only intended for installation out of arm's reach.



High temperature! Do not touch the metal parts of the device.



First, connect the device, then adjust the settings at the potentiometer.

- ① The LED spotlight with motion detector (PIR) conforms to EN 60598-1 and EN 60669-2-1 if correctly installed

## 2. Proper use

- For entrances, single-family houses, building front, hotel entrances, medical practices, etc.
- For use in normal ambient conditions
- LED spotlight is used for lighting, depending on presence and brightness

- ① Lamp cannot be replaced.

Replace entire spotlight if defective!

## Disposal

- Dispose of device in environmentally sound manner

### 3. Connection



**WARNING**

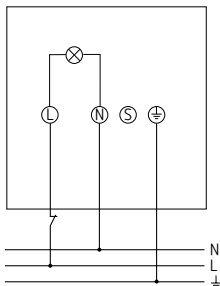
**Danger of death through electric shock or fire!**

- Installation should only be carried out by a qualified electrician!

- Disconnect power source!
- Ensure device cannot be switched on!
- Check absence of voltage!
- Earth and bypass
- Cover or shield any adjacent live components



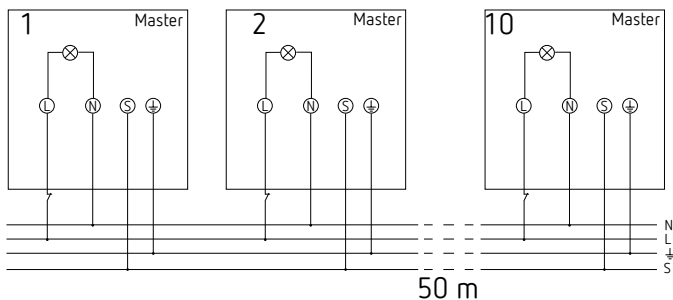
### Standard options



## Additional connection options

- ⚠ Ensure correct polarity. When ignored, the lamp flashes permanently.
- ⚠ Protect devices in Master/Slave operation with the same ground fault circuit interrupter.
- ⚠ Devices with PIR = Master, devices without PIR = Slave

## Connection Master/Master

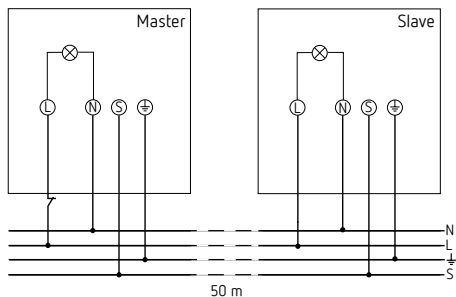


- ⚠ The S connection must be conducted through the same cable as the L and N line.
- ⚠ Max. 10 devices switchable as Master/Master

Several detectors can be switched at the same time by connecting the S terminal. If one detector detects motion, all LED spotlight will be switched on.

# Connection Master/Slave

① Optional: with Slave devices 1020741 – 1020744





## 4. Installation

### Installation instructions

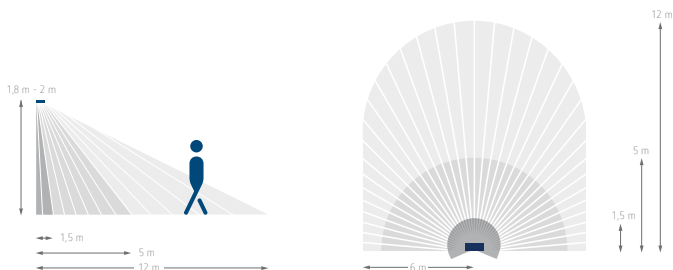


#### WARNING

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

- Installation should only be carried out by a qualified electrician!

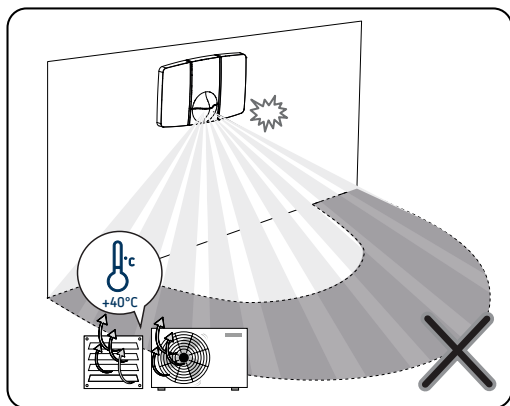
- ① Observe the recommended installation height of 1.8 m–2.5 m!



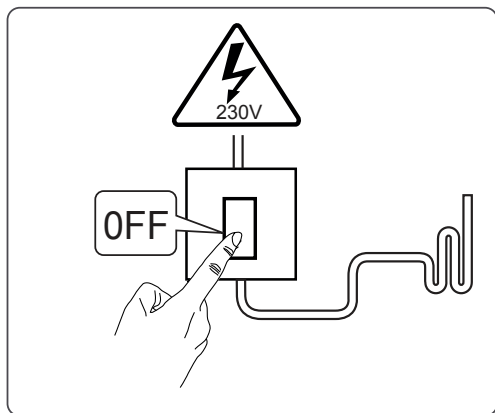
As the LED spotlight reacts to variations in temperature, avoid the following situations:

Do not direct motion detectors (PIR) of the LED spotlight at objects with highly-reflective surfaces, such as mirrors etc.

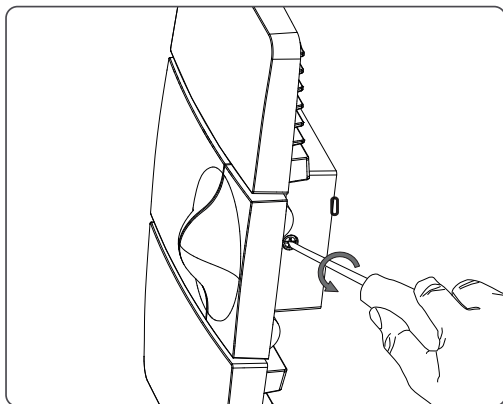
- ① Do not install the motion detector near heat sources, such as heating outlets, air conditioning systems, lamps, etc.
- ① Do not direct the motion detector at objects that move in the wind, such as curtains, large plants, etc.
- ① Pay attention to the direction of motion during the test run



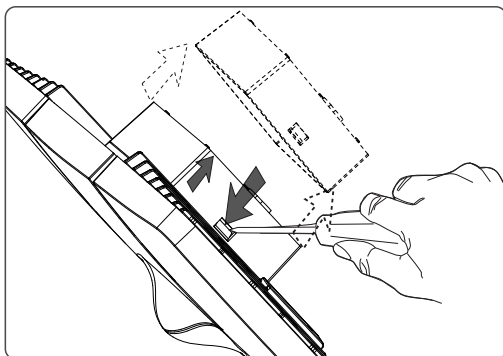
► Disconnect power source



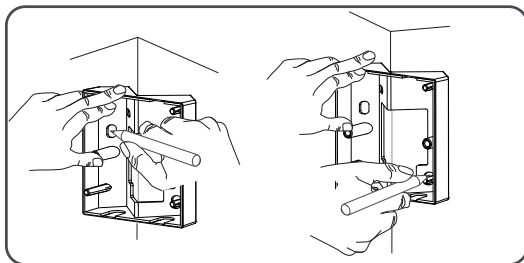
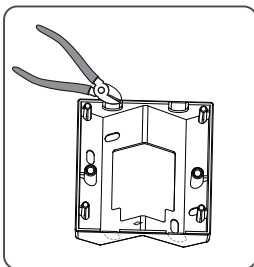
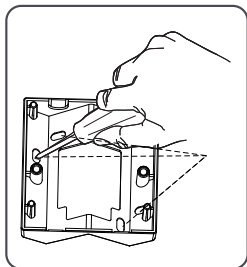
- Loosen screw



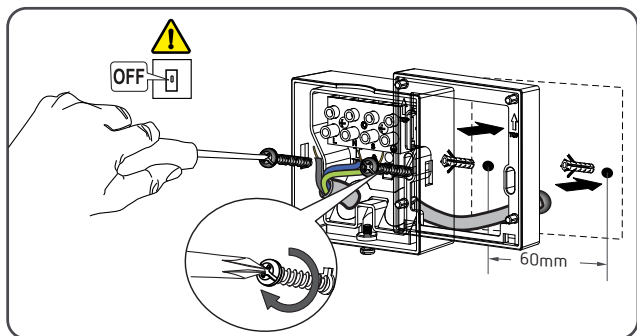
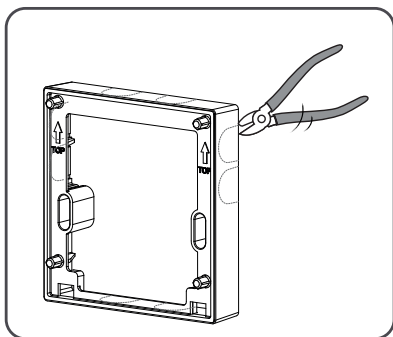
- Loosen catch mechanisms with a screwdriver and remove LED spotlight from base



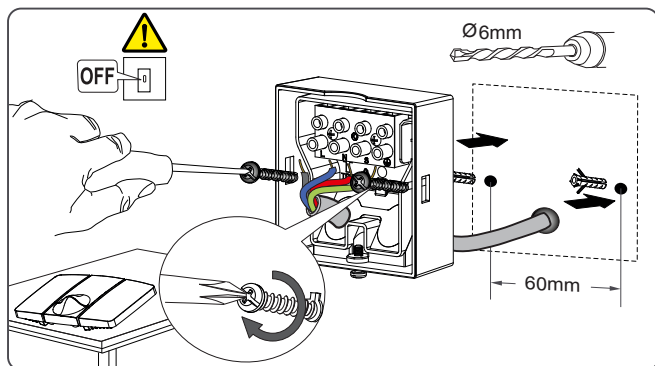
- Make marks for the holes and drill the holes
- ① If applicable, use optional corner bracket or spacer frame for flexible installation as well as cable entry from side or top/bottom.
- Mount the corner bracket (optional)



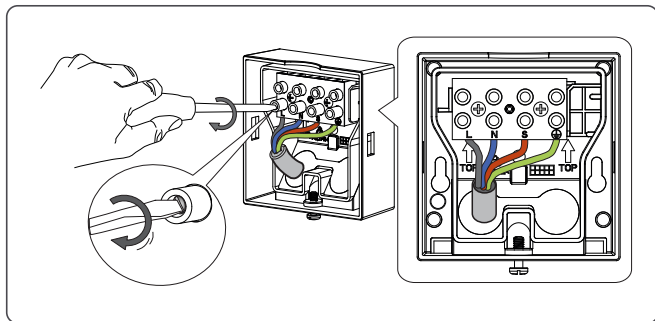
► Mount the spacer (optional)



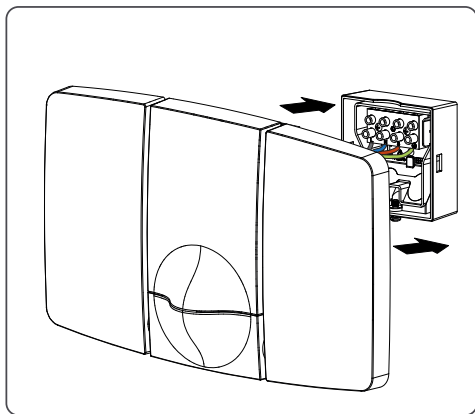
- Feed cable through the seal of the base
- Tighten screws



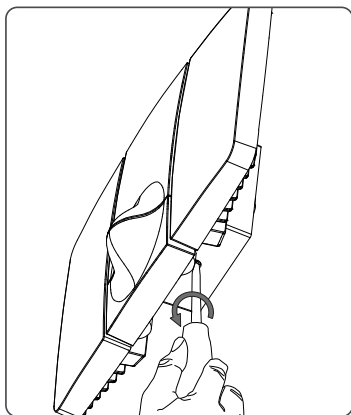
- Connect the individual wires to the appropriate terminal
- Tighten screws



- Place and engage the LED spotlight on the base

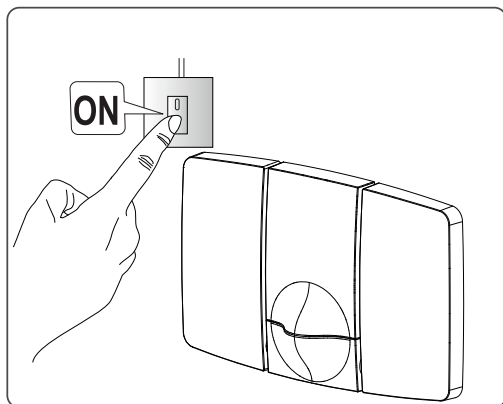


- Tighten screw
- Remove protective film



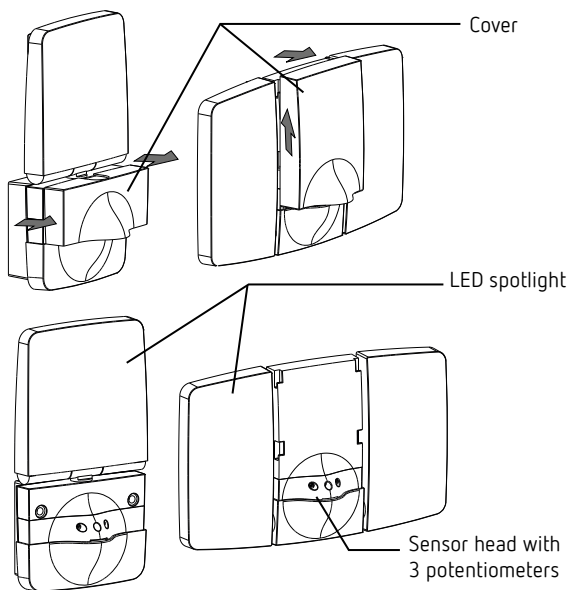
► Connect LED spotlight to mains

① The detector needs approx. 40 s of preheating time



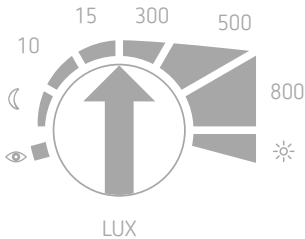



## 5. Description



- ① The LED spotlight has 3 potentiometers for setting time (min), brightness (lux), and function mode.

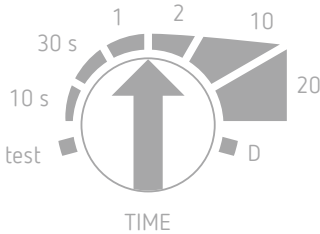
## Setting the brightness (LUX)



- Turn the potentiometer to „Teach-In “; after 15 s, the motion detector saves the current surrounding brightness as the new switch-on brightness
- Turn the potentiometer towards „Moon“; the LED spotlight only switches on when it is relatively dark.
- Turn the potentiometer towards „Sun“; the LED spotlight switches on when it is relatively bright
- Turn the potentiometer to „Sun“, and the device works independent of brightness



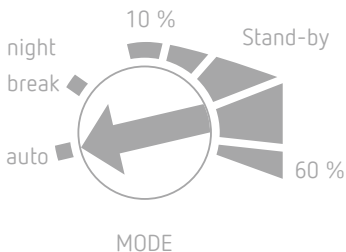
## Setting the time (TIME)



- Turn the potentiometer to „test“; the motion detector now only reacts to movements (walking test)
- Set the potentiometer to the desired time (10 s–20 min)
- Turn the potentiometer to „D“; the motion detector only reacts to brightness and is always on when the set brightness value has not been reached. (motion detector is deactivated)



## Function mode (MODE)



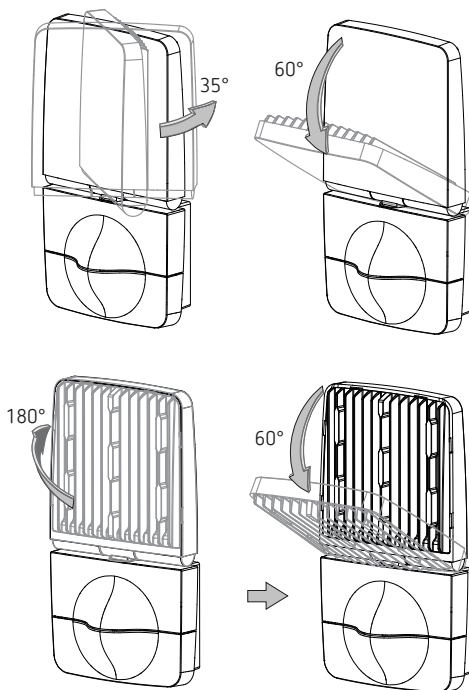
- Turn the potentiometer to „auto“; the LED spotlight switches on when there is motion in the dark
- Turn the potentiometer to „night break“; the LED spotlight temporarily switches off during the night
  - ① The duration of the „night break“ night switch-off is calculated by the device variably, depending on the current twilight times
- Turn the potentiometer to „standby“: In darkness, the LED spotlight switches to the set dimming value (10 %–60 %), and to 100 % if there is motion.



## 6. Aligning the LED spotlight

### theLeda P12

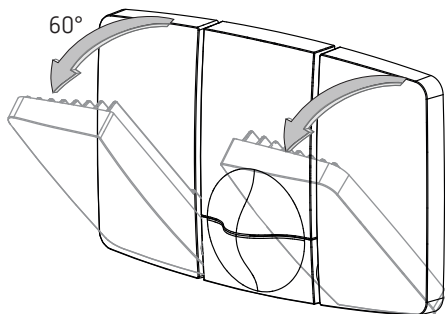
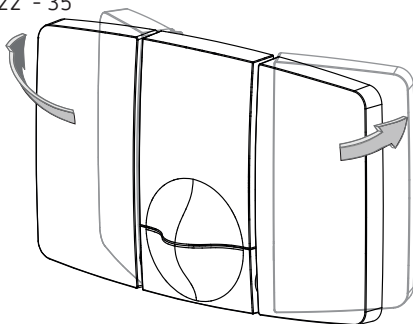
① 180° rotatable, e.g. for facade lighting



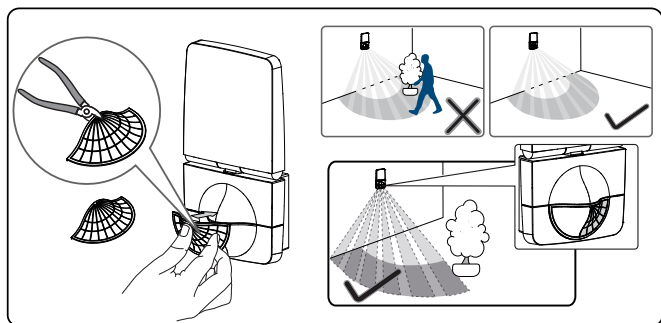
## theLeda P24

- ① 22° swivelling, without spacer
- 30° swivelling, with mounted spacer
- 35° swivelling in case of corner installation

22° - 35°



## 7. Using cover clip

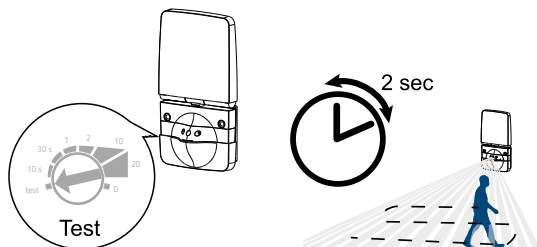


- Use the supplied cover clip, to adjust the motion detector to the desired detection area.
- Remove the required section of the cover clip by using pliers or the like.
- Then place on the lens.

## 8. Walking test

The walking test is used to test the detection area and to restrict it if necessary.

- Set the time potentiometer (TIME) to „test“.
    - The motion detector now always reacts to movements (independent of brightness).
  - Walk through the detection area at a right angle. After the motion detector has detected a movement, it switches on for 2 s.
- ① Pay attention to the direction of motion during the test.

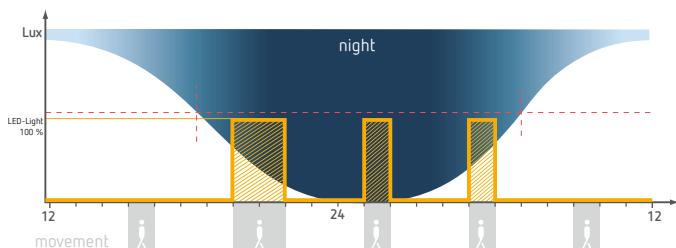
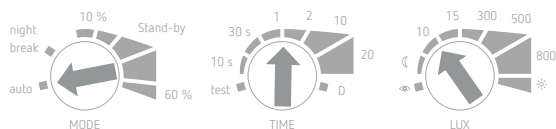




## 9. Settings and functions

### Normal operation

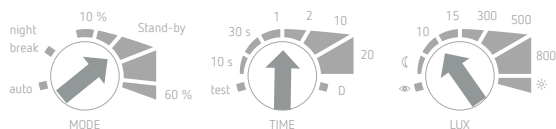
Setting:

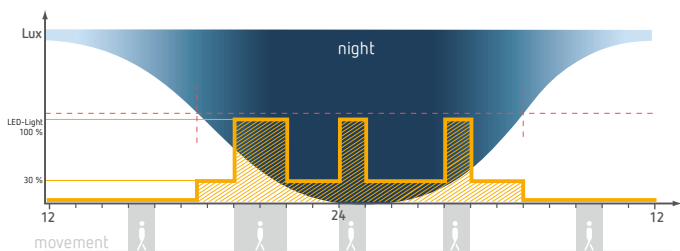


① The LED spotlight switches on when there is motion in the dark.

### With 30 % basic brightness (10 %–60 % possible)

Setting:

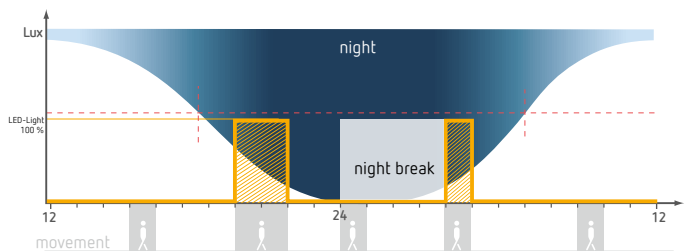
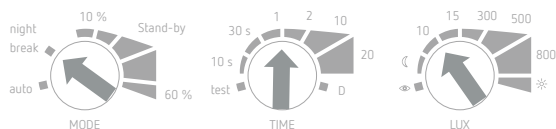




- ① The LED spotlight shines in darkness with the set 30 %. In case of motion, it switches to 100 %.

## Night switch-off „night break“

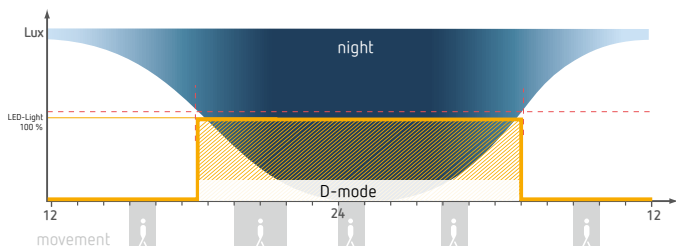
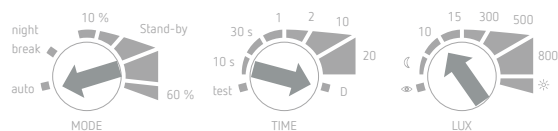
Setting:



- ① The LED spotlight temporarily switches off during the night.

# Twilight switch function

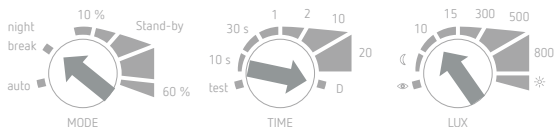
Setting:

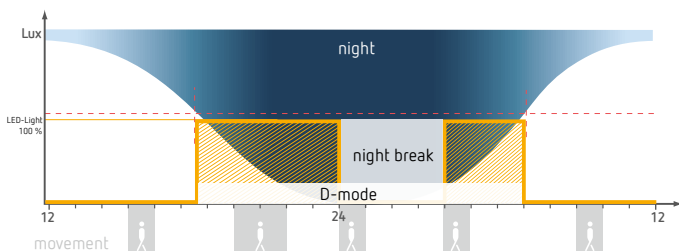


- ① The motion detector only reacts to brightness. The LED spotlight is always switched on when the set brightness value has not been reached.

## Twilight switch with night switch-off function

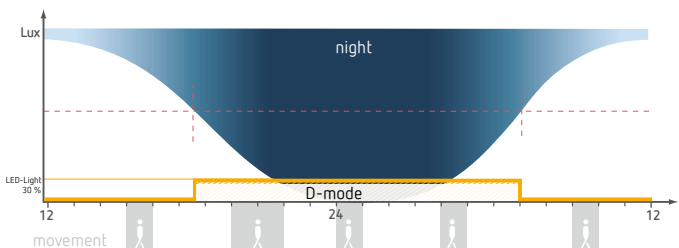
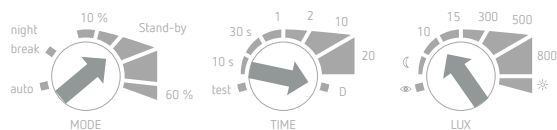
Setting:





## Twilight switch function on (e.g. 30 %)

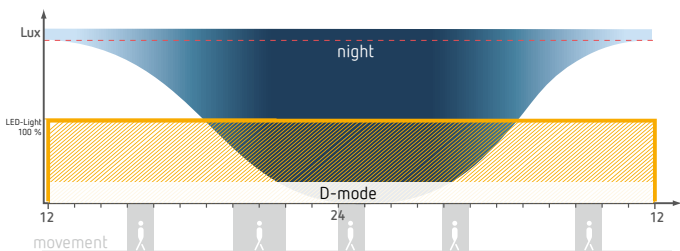
Setting:



- ① The motion detector only reacts to brightness. The LED spotlight is always set to 30 % when the set brightness value has not been reached.

## Permanent on 100 %

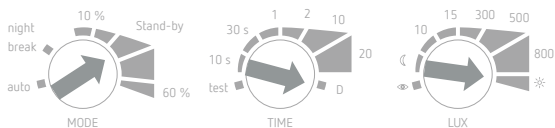
Setting:

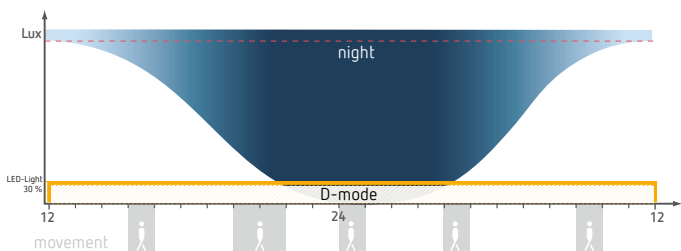


- ① The LED spotlight shines permanently at 100 % brightness.

## Permanent on (e.g. 30 %)

Setting:

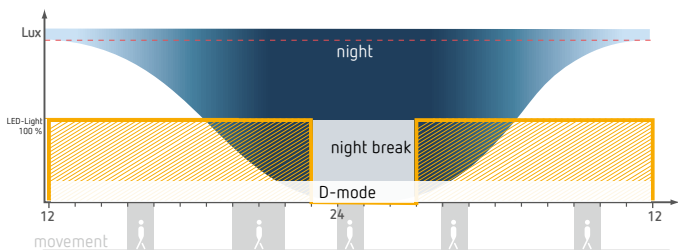
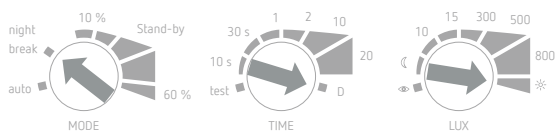




① The LED spotlight shines permanently at 30 % brightness.

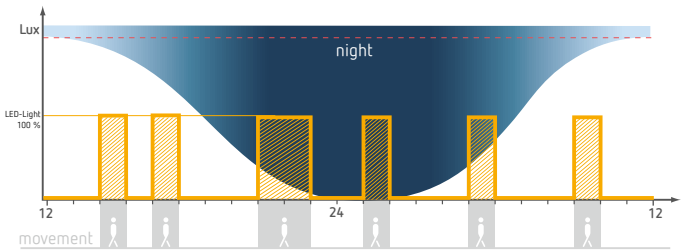
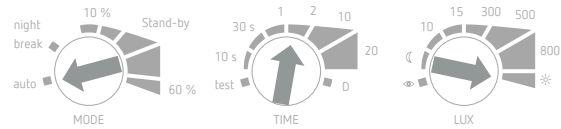
## Permanent on with night switch-off

Setting:



# Motion detector without brightness measurement

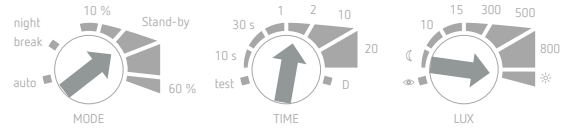
Setting:

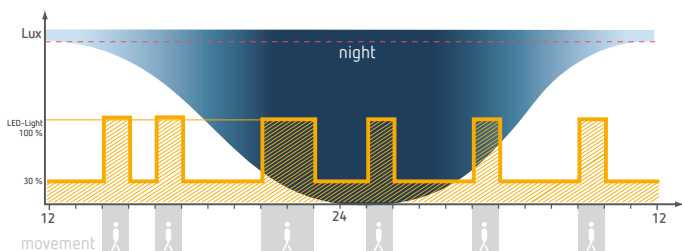


- ① The LED spotlight always switches on when there is motion, independent of the surrounding brightness.

# Motion detector without brightness measurement (e.g. 30 %)

Setting:



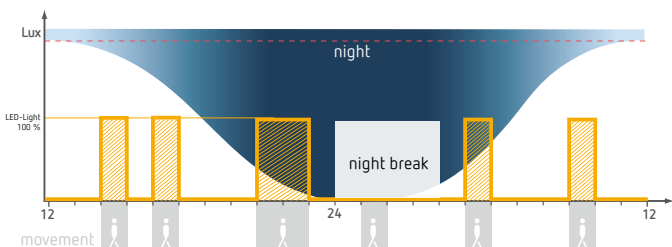
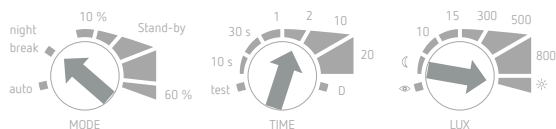


- ① The LED spotlight shines permanently with a basic brightness of 30 %. It always switches on when there is motion (to 100 % brightness), independent of the surrounding brightness.



## Motion detector without brightness measurement + night switch-off

Setting:

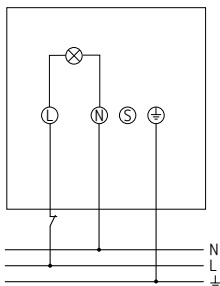




## Manual operation

The lighting can be switched on manually via a circuit breaker button.

① A circuit breaker button must be connected



- Press the circuit breaker button briefly (max. 1.5 s).
    - The light will come on for the set time.
  - Press the circuit breaker button 2 x briefly (within 1.5 s).
    - The lighting remains switched on for 6 hours.
  - In order to switch off the lighting, press the circuit breaker button 1 x briefly (max. 1.5 s).
    - The detector switches off after the set time delay.
- ① If the circuit breaker button is pressed longer than 2 s, the detector restarts (warm-up phase).

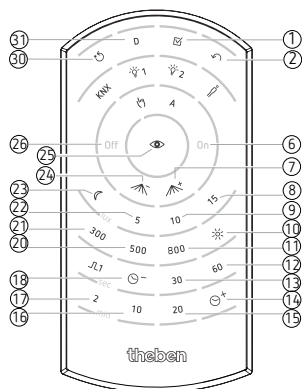
## 10. Settings with remote control

You can also enter the settings with remote controls theSenda P and theSenda S.

- ① If a new function/parameter is set, the detector flashes 3 x for confirmation.

### Settings using theSenda P (9070910)

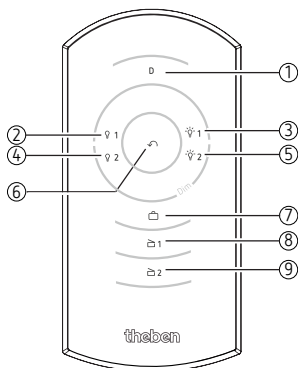
The following parameters or functions can be set with theSenda P:





①	Test	Test mode, ends after 10 min
②	Auto	return to Automatic mode
⑥	On	Switch on light (8 hrs)
⑦	Range +	Increase sensitivity
⑧	15 lux	Brightness setpoint value 15 lux
⑨	10 lux	Brightness setpoint value 10 lux
⑩	Lux On	Deactivation of brightness measurement
⑪	800 lux	Brightness setpoint value 800 lux
⑫	60 sec	Lighting time delay 60 sec
⑬	30 sec	Lighting time delay 30 sec
⑭	max. time	max. lighting time delay, 20 min
⑮	20 min	Lighting time delay 20 min
⑯	10 min	Lighting time delay 10 min
⑰	2 min	Lighting time delay 2 min
⑱	min. time	min. lighting time delay, 10 sec
⑳	500 lux	Brightness setpoint value 500 lux
㉑	300 lux	Brightness setpoint value 300 lux
㉒	5 lux	Brightness setpoint value 5 lux
㉓	min. lux	min. brightness setpoint value, 1 lux
㉔	Range -	Reduce sensitivity
㉕	Teach-in	Teach in of the brightness setpoint value
㉖	Off	Switch off light
㉚	Reset	Restart of the detector
㉛	D mode	Twilight switch (motion detector deactivated)

## Settings using the Senda S (9070911)



①	D mode	Twilight switch (motion detector deactivated)
② ④	Off	short button push -> switches off the light long button push -> dimming the light down
③ ⑤	On	short button push -> switches on the light long button push -> dimming the light up
⑥	Auto	return to Automatic mode
⑦	Holiday mode	Presence simulation
⑧	Lighting scenario 1	Pressing the button shortly -> the dimming value of 33 % is set
⑨	Lighting scenario 2	Pressing the button shortly -> the dimming value of 66 % is set

## Holiday mode

The holiday mode is a presence simulation, which is intended to prevent burglary during temporary absence.

# 11. Technical Data

Operating voltage:	230 V $\pm$ 10 %
Frequency:	50–60 Hz
Consumption with light On: theLeda P12: theLeda P24:	11 W 20 W
Standby output:	max. 0.4 W
LED output (lighting current): theLeda P12: theLeda P24:	900 lm 900 lm x 2
Colour temperature:	4000 K
Colour rendering index:	CRI < 80
Service life:	L80/B10/50 000 h
Protection rating:	IP 55 in accordance with EN 60529
Protection class:	II in accordance with EN 60598-1
Operating temperature:	–25 °C ... +45 °C
Brightness setting range:	5–800 lx/ $\infty$
Duty cycle range:	10 sec–20 min
Detection angle:	180°
Detection area: lateral: frontal:	max. 12 m max. 5 m
Installation height:	1.8 m–2.5 m
Energy efficiency class:	A+

## 12. Contact

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### **Hotline**

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**Addresses, telephone numbers, etc.**  
[www.theben.de](http://www.theben.de)

