

Radio motion detector power unit surface-mounted
Order-No. : 175 09

Operation- and Assembly Instructions

1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

Danger of electric shock. Always disconnect before carrying out work on the device or load. At the same time, take into account all circuit breakers that supply dangerous voltage to the device or load.

Danger of electric shock. Device is not suitable for disconnection from supply voltage.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

The radio communication takes place via a non-exclusively available transmission path, and is therefore not suitable for safety-related applications, such as emergency stop and emergency call.

These instructions are an integral part of the product, and must remain with the end customer.

2 Device components

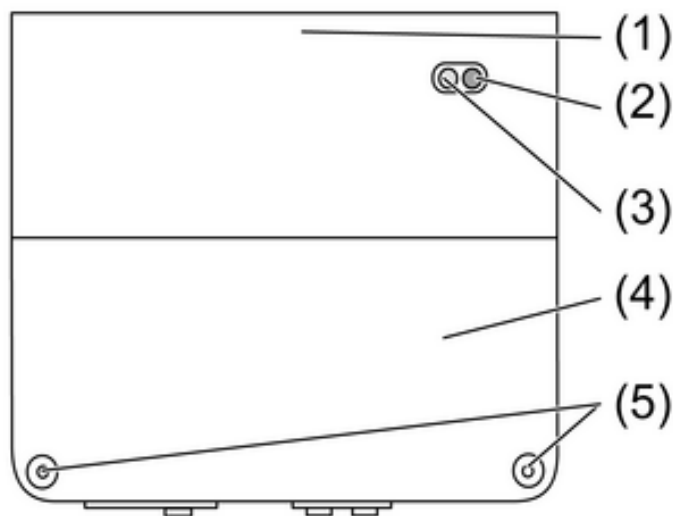


Figure 1

- (1) Radio power pack
- (2) red LED
- (3) green LED
- (4) Housing lid
- (5) Screws

3 Function

System information

By statute, the transmitting power, the reception characteristics and the antenna cannot be changed.

The device may be operated in all EU and EFTA countries.

The declaration of conformity can be viewed on our website.

The range of a radio system from the transmitter to the receiver depends on various circumstances.

The range of the system can be optimised by selecting the optimal installation location, taking into account the structural circumstances.

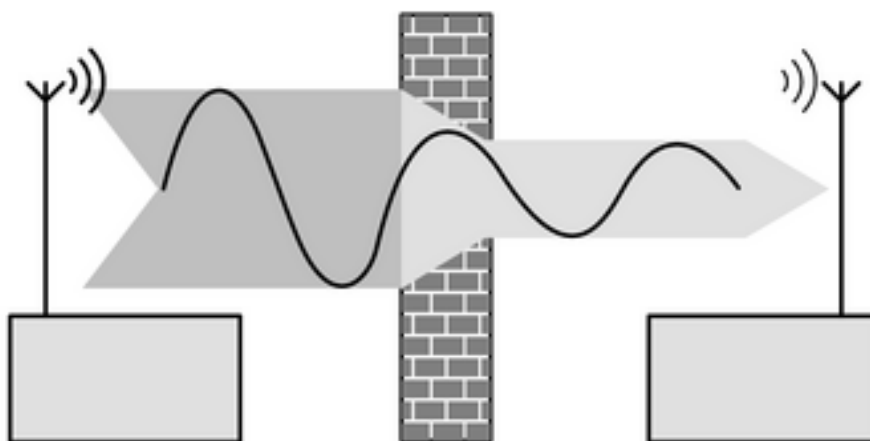


Figure 2: Reduced range due to structural obstacles

Example of penetration of various materials:

Material	Penetration
Wood, Plaster, Plasterboard	approx. 90%
Brick, Chipboard	approx. 70%
Reinforced concrete	approx. 30%
Metal, Metal grid	approx. 10%
Rain, Snow	approx. 1-40%

Intended use

- Radio-controlled switching of electrical loads for the duration of a settable time.
- Operation with suitable radio motion detectors, radio transmitters and installation buttons as an extension
- Surface-mounted

Product characteristics

- Device responds to radio telegrams from radio motion detectors
- Operation possible via radio manual and wall transmitters
- Brightness threshold settable
- Switch-on time settable
- Switch-on for 2 hours and switch-off for 2 hours possible
- Can be integrated into All On and All Off

 Combination with radio presence detector possible, but without light control

4 Operation

Normal operation

In normal operation the power pack switches the load on for the set switch-on time when a taught radio motion detector telegram is received. Switching-on takes place depending on the brightness.

Taught radio hand transmitters, radio wall transmitter or installation buttons, NC contacts, switch the load on the power pack independently of the brightness.

- i** Switching on the mains voltage of the power pack always triggers a switching operation on the power pack, regardless of the brightness setting.

The red LED (2) indicates the reception of a radio telegram and the green LED (3) indicates the state of the switching output, see the next table.

	red LED	green LED
Receives radio telegram	1 second to	No change
Battery of the motion detector weak	on	No change
Load is switched on	No change	on
Programming mode active	flashes	off
Transmitter taught	on	on
Transmitter deleted	on	off

Switch-on for set switch-on time

- Operation with installation button: press push-button one time briefly.

Or:

- Operation with radio transmitter: Press taught channel button Λ less than 1 second.
The load is switched on for the preset switch-on time independently of the brightness.
Motion telegrams of a taught radio motion detector or radio presence detector are detected and evaluated.

Switch on for 2 hours.

- Operation with installation button: press push-button twice briefly.

Or:

- Operation with radio transmitter: Press taught channel button Λ longer than 1 second.
The load is switched on for approx. 2 hours independently of the brightness. After that the device switches back to normal operation.

Switch off the load

- Press the taught channel button V of a radio transmitter for less than 1 second.
Load switches off and device changes over to normal operation.

Switch-off for 2 hours

- Operation with installation button: press push-button three times briefly.

Or:

- Operation with radio transmitter: Press taught channel button V longer than 1 second.
The load is switched off continuously for approx. 2 hours. After that the device switches back to normal operation.

All on

- Press the all on button of a taught radio transmitter.
All of the connected loads are switched on for the set switch-on time.

All off

- Press the all off button of a taught radio transmitter.
All of the connected loads are switched off.

5 Information for electrically skilled persons

5.1 Fitting and electrical connection



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Installing the power pack

Maintain a distance of at least 1 m between the radio transmitter and the power pack.

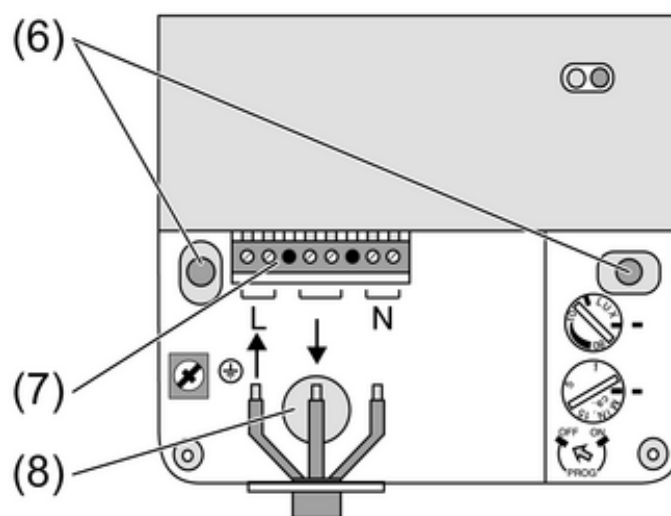


Figure 3: Installing the power pack

- Slacken the two screws (5) and remove housing lid (4) (Figure 1).
 - If necessary break out cable entry (8) for flush-mounted cable routing (Figure 3).
 - Fasten power pack with two screws (6).
 - Route cables into the housing and connect to the terminals (7) (see Connecting the power pack).
- i** The power pack has double terminals for looping the connecting cables through.
- Put the housing lid on and fasten with the screws.

Connecting the power pack

The power pack can be connected in various ways.

- Select the appropriate connection diagram depending on what installations are present.

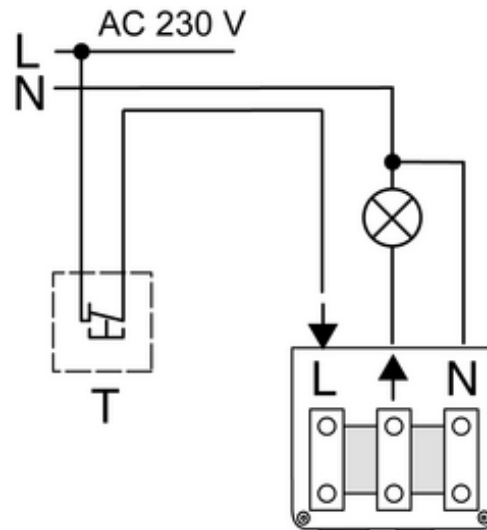


Figure 4: Connecting the power pack

Each time the push-button (normally closed contact) is pressed, a switching operation of the power pack is triggered (Figure 4).

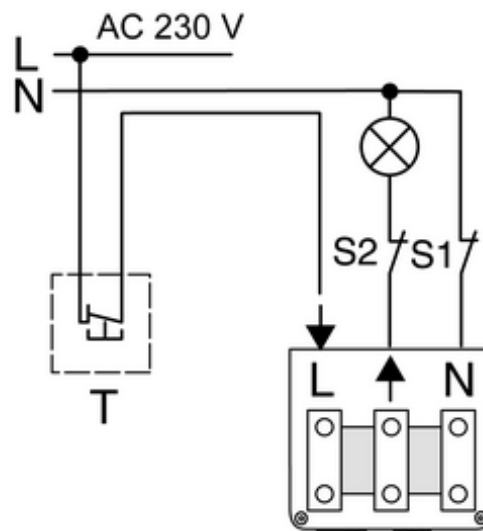


Figure 5: Switching off the power pack

The power pack can be switched off using switch S1 or S2 (Figure 5).
When the power pack is switched on again, switch S1 triggers a switching operation, while S2 does not.

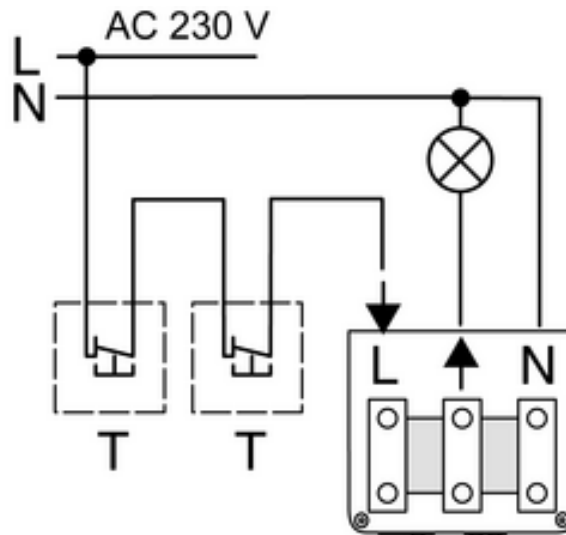


Figure 6: Changeover switch

Changeover switches that are present can be replaced by push-button T, a normally closed contact (Figure 6).

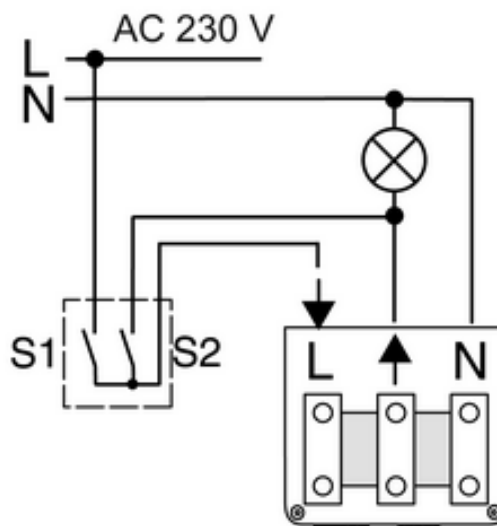


Figure 7: Automatic manual mode with two-circuit switch

S1 and S2 open: all off.

S1 closed, S2 open: normal automatic mode.

S1 and S2 closed: continuous light, manual mode, power pack without function (Figure 7).

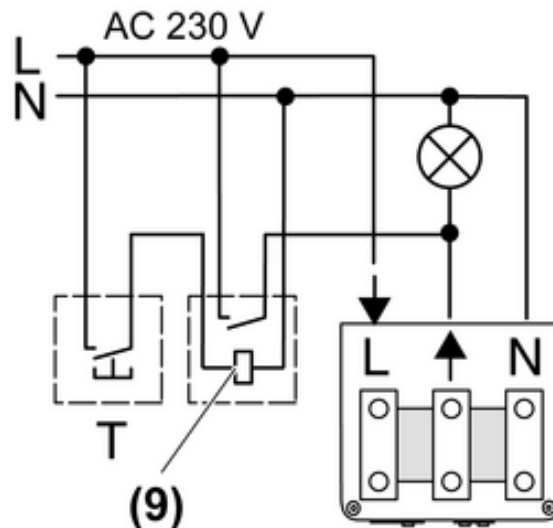


Figure 8: Connection in parallel with automatic staircase light switch / impulse relay

The lighting is switched on either by the automatic staircase light switch (9) or by the power pack in combination with radio motion detectors (Figure 8).

5.2 Commissioning

Setting the brightness and switch-on time

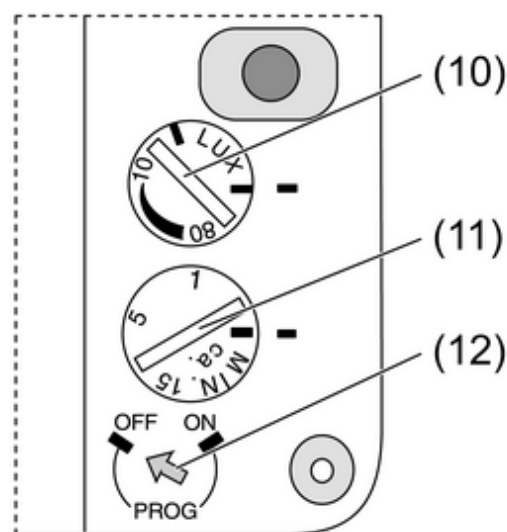


Figure 9: Adjuster

(10) Brightness adjuster

(11) Switch-on time adjuster

(12) Rotary switch programming mode **PROG**

- Slacken the two screws (5) and remove housing lid (4) (Figure 1).
- Turn brightness adjuster (10) to the desired value (Figure 9).
Recommendation: A setting of 10 lux activates the device at the start of twilight.
- Turn switch-on time adjuster (11) to the desired value (Figure 9). The switch-on time can be set from approx. 10 seconds to approx. 15 minutes.

Teaching a radio transmitter

When teaching a radio transmitter, the sensitivity of the power pack is reduced to about 5 m. The distance between the power pack and the transmitter being taught should therefore be between 0.5 m and 5 m.

- Slacken the two screws (5) and remove housing lid (4) (Figure 1).
 - Turn rotary switch **PROG** (12) to **ON** to activate the programming mode (Figure 9).
The red LED flashes.
 - Trigger a teach telegram with the radio transmitter being taught (see instructions for radio transmitter).
When the power pack receives the radio telegram, the green and red LEDs light up.
The connected load is switched on.
 - Turn rotary switch **PROG** (12) to **OFF** to exit the programming mode.
The green and red LEDs go out.
The load is switched off, the power pack is in normal operation.
The radio transmitter has been taught.
- i** After a radio motion detector has been taught, it may still be in walking test mode, and switches the lighting on briefly every time a motion is detected (see radio motion detector instructions).
- i** If all 30 memory slots of the power pack are occupied, a radio transmitter which has already been taught must first be deleted.
- i** When a radio transmitter is taught, All On and All Off buttons that are present are automatically also taught.

Deleting radio transmitters

- Teach-in again the radio transmitter to be deleted.

6 Appendix

6.1 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Power consumption	max. 2.5 W
Ambient temperature	-25 ... +55 °C
Protection rating	IP 55
Circuit breaker	max. 10 A
Switch-on time	approx. 10 s ... 15 min (Retriggering)
Brightness setting	approx. 3 ... 80 lx
Switch-on current 20 ms	max. 120 A
Connected load	
Incandescent lamps	2300 W
HV halogen lamps	2300 W
Inductive transformers	1000 VA
Fluorescent lamps, uncompensated	1200 VA
Fluorescent lamps, parallel compensated	920 VA
Fluorescent lamps, duo circuit	2300 VA
Connection	
Single stranded	max. 4 mm ²
Finely stranded	max. 2.5 mm ²
finely stranded with conductor sleeve	max. 2.5 mm ²
Teachable radio transmitter	max. 30

6.2 Troubleshooting

Load does not switch on, LEDs are off.

Cause 1: device has no mains voltage supply.

Connect device to mains voltage or check mains voltage supply.

Cause 2: no transmitters have been taught.

Teach transmitter (see section Teaching an radio transmitter).

Load does not switch on, LEDs indicate readiness for operation.

Cause 1: brightness is set too high when using radio motion detectors or radio presence detectors.

Reduce brightness setting.

Cause 2: device is in the function "Switch-off for 2 hours".

Wait, or switch device on manually.

Device does not switch off after the set switch-on time.

Cause 1: device is in the function "Switch-on for 2 hours".

Wait, or switch device off manually.

Cause 2: There is a continuous heat motion in the detection field of a taught radio motion detector or radio presence detector.

Eliminate the cause of the motion (see installation instructions in the appropriate manual).

6.3 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

Our products are under guarantee within the scope of the statutory provisions.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

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