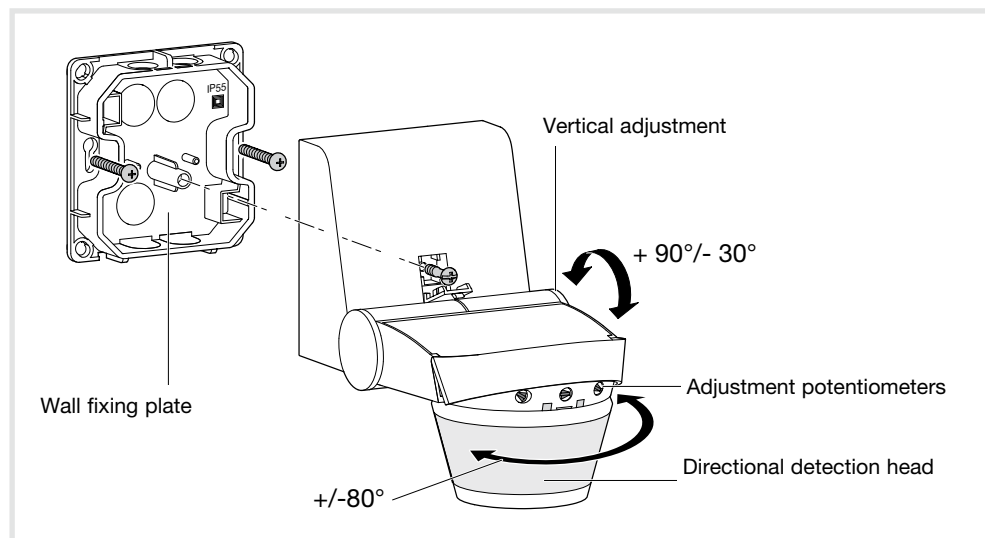# Berker

Operation instructions EN

KNX-RF controller 220° surface-mounted

KNX-RF controller 220°/switch actuator 1 gang surface-mounted
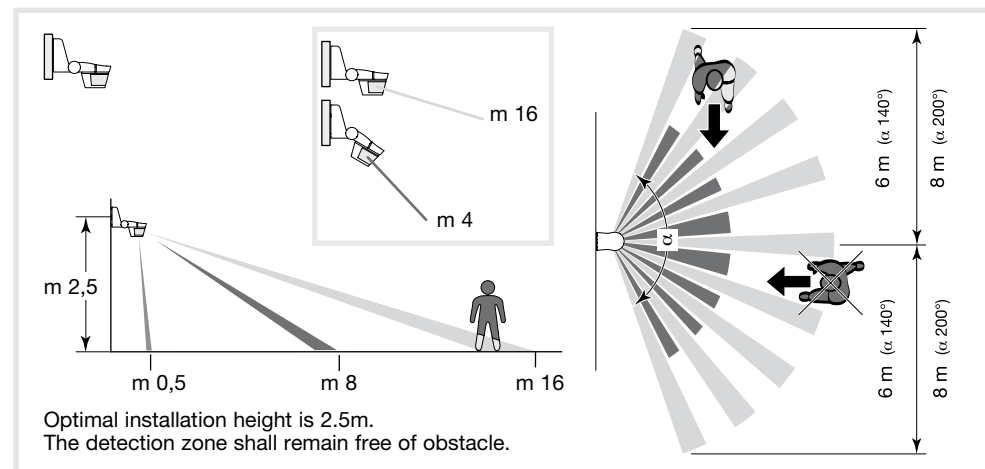
Order no.
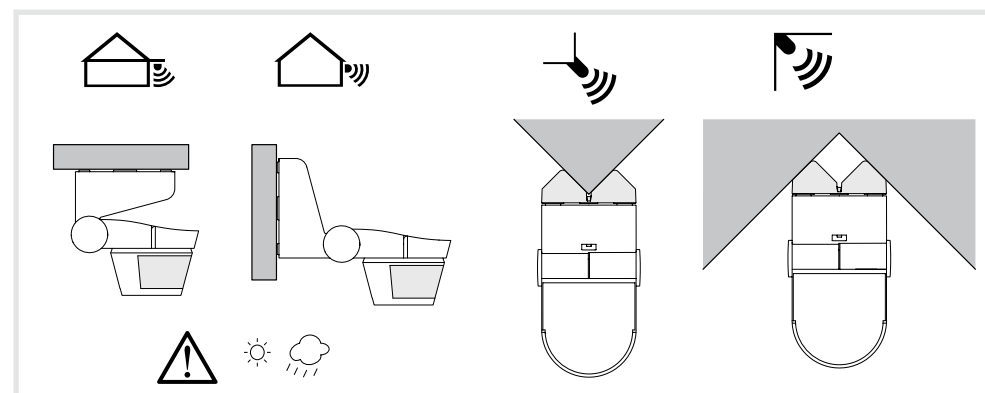8536 51 00, 8536 51 99

KNX quicklink
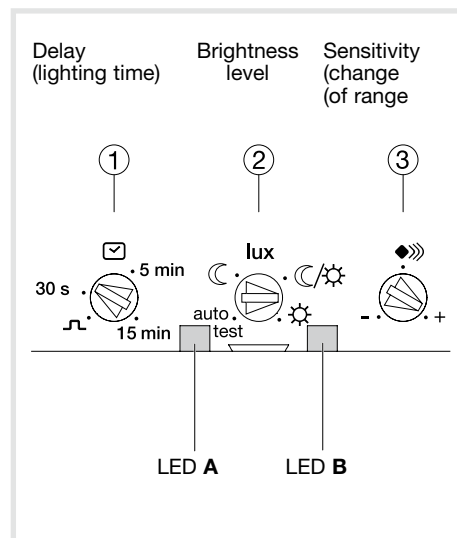
Description

Vertical adjustment

+ 90°/- 30°

Wall fixing plate

Adjustment potentiometers

Directional detection head

+/-80°

Detection zone

m 16
m 4
m 2,5
m 0,5   m 8   m 16

6 m (α 140°)   8 m (α 200°)
6 m (α 140°)   8 m (α 200°)

Optimal installation height is 2.5m.
The detection zone shall remain free of obstacle.

Installation

Adjustments

Delay (lighting time)   Brightness level   Sensitivity (change (of range

① ② ③

30 s • 5 min • 15 min
auto test
lux

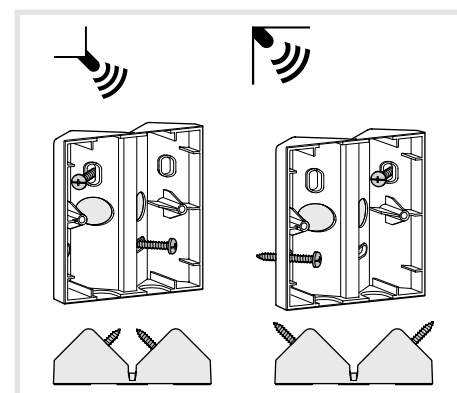LED **A**   LED **B**

Shutters

1   2
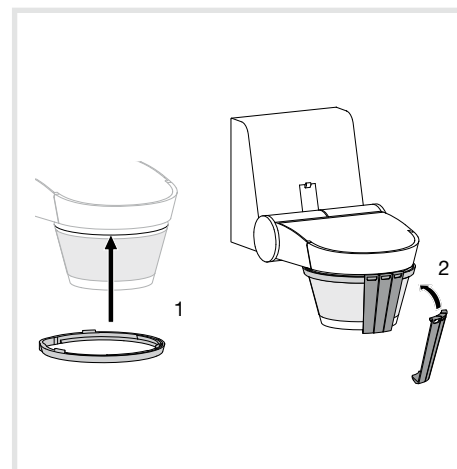
Angle fixing support 8590 02 00

> ⚠ **Caution:**
> - This device must be installed only by a qualified electrician according to the installation standards in force in the country.

Product Description and working principles

This detector allows remotely control of one or more receivers for a given time when a movement is detected in its detection zone. This product can be used in two types of configuration: one detector controls one/several receiver(s); several transmitters control the receiver(s).

Operation

The receiver(s) is(are) under control as soon as the brightness level as set by potentiometer ② is considered too low and a movement is detected.
Upon detection, the time delay is restarted.

If LED **A** flashes quickly during configuration, the position of potentiometer ① is not compatible with the selected function.

If LED **B** flashes quickly or nothing occurs when starting configuration, check that the batteries are correctly installed and replace them if necessary. Product factory reset is recommended before any new configuration.
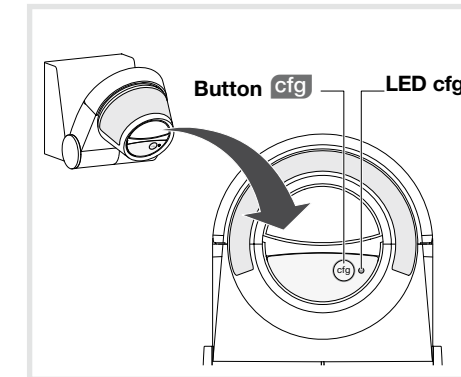
Factory reset

Maintain cfg button down until LED **cfg** flickers > 10 s, then release. **cfg** LED turns OFF to signal reset to factory settings end.
This operation removes the entire product configuration in any configuration mode.
After power switch-on or reset to factory settings, wait for 15 s before to do a new configuration.

Installing batteries
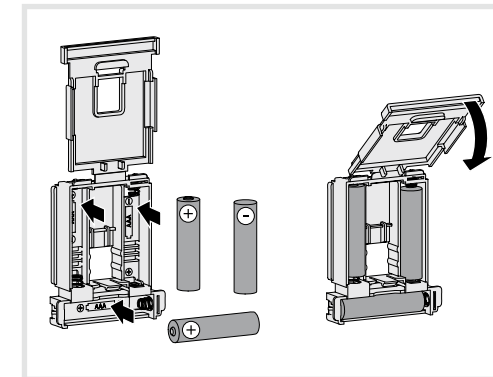
Configuration (button cfg)

These detectors can be configured in 3 different ways:
- **quick**link⌕ : configuration without tool, directly on the device via cfg button and LED (see configuration instructions **quick**link⌕).
- tebis TX: configuration using connection device from Hager
- ETS3/ETS4 via KNX-RF/TP gateway: database and description of application software available from the manufacturer.

Configuration by ETS

Press cfg button for addressing by means of radio/ KNX gateway

> ! **Product factory reset is required to change the configuration mode.**

cfg Button

Button cfg   LED cfg

Test and validation of detection zone

Set potentiometer ② to mode "**auto test**".

> ! **The test mode is available only once the product has been configured.**

The Test mode is available for 3 minutes time and does not take brightness level into account.
Each detected movement turns LED **A** on for 2 seconds.
The associated receiver is controlled.

After 3 minutes without detection, the product is set back to auto mode.
Limitation of detection zone:
You can limit the detection zone using the shutters supplied or by inclining the head.

Mounting

Projection or ceiling mount:
- Fix the wall plate using the supplied screws.
- Clip the detector onto the wall plate
- Tighten the screws to close.

For angle mounting, the wall fixing plate is fitted between the accessory and the detector.

Precautions for installation

For optimum detection conditions, please follow these recommendations:
- Keep the detector protected from solar radiation and bad weather, as it is sensitive to these conditions.
- Maintain 1m distance between the light source and the detector and keep the detector out of the light source.

 Correct Disposal of This product (Waste Electrical & Electronic Equipment).

(Applicable in the European Union and other European countries with separate collection systems).

This marking shown on the product or its literature indicates that it hould not be disposed with other household wasted at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes of disposal.

Action	Adjustments	Potentiometer
Use Auto (factory) settings to set automatic lighting turn-on for a given time. Only available when a detector's time delay is set.	**Auto Settings** Put the Lux potentiometer on "**auto test**". The settings are predefined: Lux = ☾, (operating at night only) time = 3 min, sensitivity = max	lux auto test
Turn automatic lighting on for a given time. Only available when a detector's time delay is set.	**Installer settings**	30 s • 5 min • 15 min lux auto test ◀» - +
Adjust sensitivity.	Allows setting the range to avoid disturbance.	◀» - +

Description of the set 8536 51 99

The detector and the receiver must be preset in order to operate together.

These two products are pre-configured to operate together. Only delay, brightness level and detection zones are to be set by user.
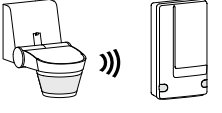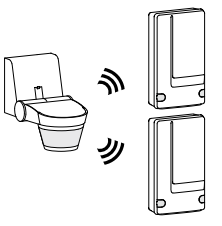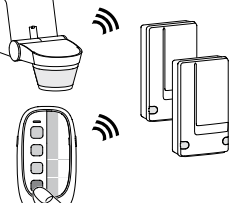
(Please refer to Detector User's Instructions). Other devices can be added to the kit.

Various configuration options are available

When a detector is associated with a receiver, only 2 functions are available, depending on potentiometer's position:

- (Red/Green LED) or timer ⧖ (Red flashing LED) according to the case
- Delete ☒ (LED is OFF)

The receiver will offer only the function set by the potentiometer.

		Setting detector's delay	**Setting receiver's delay**
⚠ When a product is factory reset, pre-configuration is removed. It should then be configured again.		30 s · ⌐· 5 min · 15 min	30 s · ⌐· 5 min · 15 min
	Set 8536 51 99	Pre-configured (ON/OFF switch function)	1. Clear the previous pre-configured function if Set 8536 51 99 is used (see configuration instructions **quick**link**Q**)
	1 detector 8536 51 00 + 1 receiver	**Recommended configuration:** 1. Set the potentiometer to a value different from ⊓ 2. Configure ON/OFF switch function (see configuration instructions **quick**link**Q**)	2. Set the potentiometer to position ⊓. 3. Configure the "timer" ⧖ (see configuration instructions **quick**link**Q**)
	Set 8536 51 99 + 1 or several other receivers	**In order to have the same delay on each receiver:** 1. Set the potentiometer to a value different from ⊓ 2. Configure the ON/OFF switch function (see configuration instructions **quick**link**Q**) on other receivers	**In order to have a different delay on each receiver:** 1. Clear the previous pre-configured function if Set 8536 51 99 is used (See the Configuration Instructions) 2. Set the potentiometer to position ⊓ 3. Configure the "timer" ⧖ function (see configuration instructions **quick**link**Q**)
	1 detector 8536 51 00 + several receivers		
	Several detectors 8536 51 00 + 1 or several receivers	Not recommended (conflict of delays)	1. Clear the previous pre-configured function if Set 8536 51 99 is used (See the Configuration Instructions) 2. Set the potentiometer to position ⊓ on both detectors. 3. Configure the "timer" ⧖ function (see configuration instructions **quick**link**Q**) on each receiver
	Set 8536 51 99 or 1 detector 8536 51 00 + 1 or several transmitters other than detectors + 1 or several receivers	**Timer function being not used on the other transmitter(s):** 1. Set the potentiometer to a value different from ⊓ 2. Configure the other transmitter(s) (see configuration instructions **quick**link**Q**) with a function other than timer	**Timer function used on the other transmitters:** 1. Clear the previous pre-configured function if Set 8536 51 99 is used (See the Configuration Instructions) 2. Set the potentiometer to position ⊓ 3. Configure the "timer" ⧖ function (see configuration instructions **quick**link**Q**) on each receiver for each transmitter involved

Note: During configuration of a detector, Step 2 of the configuration instructions **quick**link**Q** shall be ignored.

TROUBLESHOOTING...		
PROBLEM	**CAUSES**	**SOLUTIONS**
Unwanted lamp switch on.	- Permanent heat source is active in the detection area (trees, bushes shook by wind or presence of dogs, cats in the detection area). - The detector is located on top a ventilation grill.	- Limit detector's range by adjusting its inclination or by fitting shuttering blades to the lens, or by lowering sensitivity using the adjustment knob. - Move the detector to another location.
The range of the detector is too narrow.	- Detector's installation height is not suitable (too high or too low). - Sloppy ground.	- Modify installation height (2.5 m is optimal). - Adjust detector's direction.
Moving vehicle or person is not detected.	- Vehicle's motor is not enough yet (heat radiation is too weak). - People move forwards in front of detector. - Detector energy too low.	- Install the detector in such a way that objects move within the area in transverse direction. - Replace power cells.

Technical specifications

Electrical specifications

Power Supply: ▯ 3 x 1,5 V AAA

Operational characteristics

Dimensions (L x w x h): 153 x 91 x 130 mm
Luminosity threshold: 5 … 1000 Lux
Fixed time: 30 s … 15 min

Sensitivity: min. 20%, max. 100%
Limiting the detection zone: adjustable shutters supplied
Transmission frequency: 868-868.6MHz
Power émission: 25mW
Receiver category: 2
RF KNX Communication Media: RF1.R
Configuration mode: Quicklink, Easy link Controller, ETS via media coupler
Range: 100 m on open field
Fixing accessories: corner support

(sold separately) Order no. 8590 02 00

Environment

Operating temperature: -20 … +55 °C
Storage temperature: -20 … +60 °C
IK: 04
Protection class: IP55
Resistance to fire : 750 °C