Standard automatic switch 180° 1.10 m
Art.-No.: ..1180..
Universal automatic switch 180° 1.10 m
Art.-No.: ..1180-1..

Operationsmanual

1 Safety instructions

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

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

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

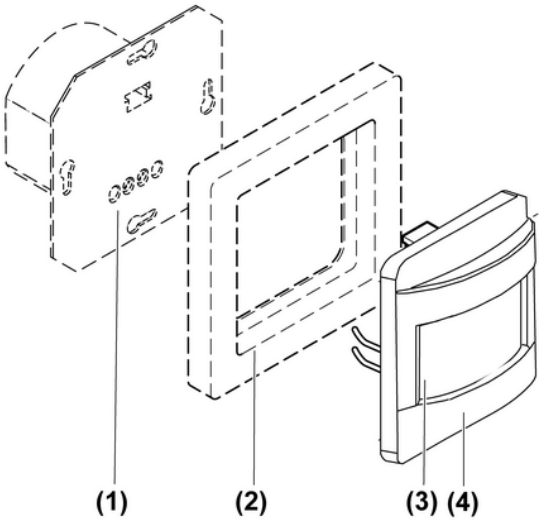
Danger of electric shock. Device is not suitable for disconnection from supply voltage. The load is not electrically isolated from the mains even when the device is switched off.

Do not press on the sensor window. Device can be damaged.

The device is not suitable for use as a burglar alarm or other alarm.

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

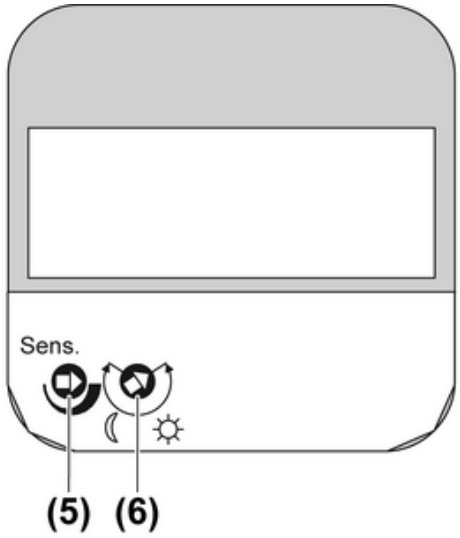
2 Device components



picture 1

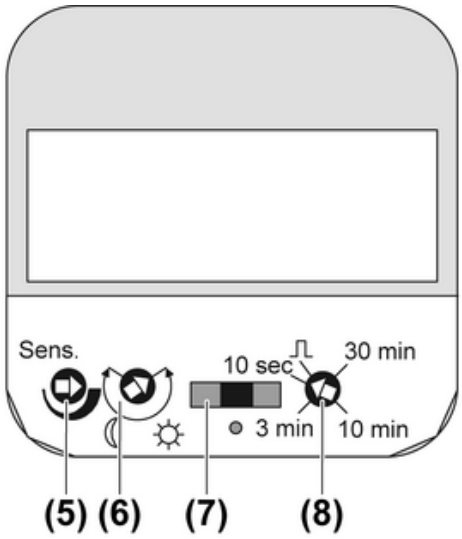
(1) Flush-mounted insert
(2) Frame
(3) Motion detector cover
(4) Cover plate / slide switch

Automatic switch standard



picture 2: Automatic switch standard

Automatic switch universal



picture 3: Automatic switch universal

(5) Adjuster, sensitivity
(6) Adjuster, brightness
(7) Operating mode switch
(8) Adjuster, run-on time

3 Function

Intended use

- Automatic switching of lighting depending on the heat motion and ambient brightness.
- Operation with concealed insert for dimming, switching or extension insert, 3-wire
- Interior mounting on flush-mounted insert at a height of 1.1 m.

Product characteristics

Automatic switch standard

- Sensitivity and brightness threshold settable
- Manual switch-on possible via extension insert, 2-wire, or installation button
- 18 lens segments in 2 recording levels
- Extension of the detection area in combination with the 3-wire extension insert
- Detection area can be limited using cover plate

i Dimming inserts can only execute switching functions.

Automatic switch universal

- Run-on time, sensitivity and brightness threshold settable
- Teach function to save the current brightness as the new brightness threshold.
- Operating mode switch for Automatic operation, Continuous on or Continuous off
- Short-time operation, e.g. to control acoustic signal encoders
- Manual switch-on possible via extension insert, 2-wire, or installation button
- With the dimmer insert, it is possible to change the brightness using a 2-wire extension insert
- Switch-on brightness can be saved with the dimmer insert
- With the dimmer insert, the dim-down function is possible at the end of the run-on time
- 18 lens segments in 2 recording levels
- Extension of the detection area in combination with the 3-wire extension insert
- Detection area can be limited using cover plate
- High protection against ambient light

Automatic operation

The controller detects heat motions of people, animals and objects.

- The light is switched on if a person enters the monitored detection area and the brightness is below the set threshold.
  Each detected movement restarts the run-on time.
- The light is switched off if no more movement is detected in the detection area and the run-on time has elapsed.

Light oscillations e.g. due to the cooling of bulbs are prevented via interlock times in the automatic switch. No switching commands are performed during the interlock.
Automatic switch standard approx. 3 seconds
Automatic switch universal: 0.2 to 3 seconds, dynamic.

Automatic switch universal: The day/night and night/day switch-over is performed only after the brightness is above or below the threshold for approx. 10 seconds. This prevents the motion detector from switching to Night mode is there is brief shadow or to Day mode if there is brief light.

Behaviour in case of mains failure for automatic switch standard

- Less than 0.2 seconds: the old switching position is restored after mains return.
- 0.2 seconds to approx. 1 seconds: when the power returns, the lighting is switched on again for the run-on time.
- Longer than 1 second: when the power returns, the motion detector carries out a self test for approx. 60 seconds. The lighting is switched on during the self test. Then the lighting switches off for the length of the run-on time.

Behaviour in case of mains failure for automatic switch universal

- Less than 0.2 seconds: the old switching position is restored after mains return.
- 0.2 seconds to approx. 2 seconds: when the power returns, the lighting is switched on again for the run-on time.
- Longer than 2 seconds: when the power returns, the motion detector carries out a self test for approx. 90 seconds. The lighting is switched on during the self test. Then the lighting switches off briefly, and then on again for the length of the run-on time.

i In the Continuous on and Continuous off operating modes, the light is switched on or off after the self-test.

i A power failure of longer than 2 seconds causes the loss of the switch-on brightness and the brightness threshold saved via the Teach function.

4 Automatic switch standard operation

Switch on the light via extension

A 2-wire extension or an installation button, NO contact is connected.

- Press extension or installation button.
  Light is switched on independently of the brightness. Automatic mode is active.

i Manual switch-on is not possible.

Setting the brightness threshold

The brightness threshold is infinitely adjustable in a range from approx. 0 to 80 lux and day operation☼. In so doing, the ☼symbol stands for brightness-independent switching and the ☾symbol for switching in case of darkness.

- Remove plate (4) (picture 1).
- Turn the adjuster (6) to the required position (picture 2).

i Should the motion detector no longer react to detected movements in Night mode, ☾setting, turn the adjuster back somewhat towards ☼.

- Snap cover on.

Setting the sensitivity

The sensitivity of the cover is infinitely adjustable using the adjuster **Sens.** (5).

- Remove plate (4) (picture 1).
- Set the sensitivity using the adjuster **Sens.** (5).
- Snap cover on.

5 Automatic switch universal operation

Switch on the light via extension

A 2-wire extension or an installation button, NO contact is connected.

- Press button for less than 0.4 seconds.
  The Light is switched on independently of the brightness for the run-on time.

i If the run-on time setting dial (5) is set to ⎍, Short-time operation (picture 6), then the light is switched on for approx. 0.5 seconds, even if the button is pressed for longer.

i Manual switch-on is not possible.

Switch light on with minimum brightness

Motion detector cover is combined with a dimmer insert.

A 2-wire extension is connected.

Light is switched off

- Press button at bottom for longer than 0.4 seconds.
  Light is switched on at minimum brightness and stays at this brightness for as long as motion is detected.

Adjusting brightness via extension

Motion detector cover is combined with a dimmer insert.

A 2-wire extension is connected.

- Press top button for a long time.
  The light gets brighter up to maximum brightness.
- Long press on bottom of button.
  Light gets darker to minimum brightness.

Save switch-on brightness

The light is switched to this brightness value on each switch-on. In the as-delivered state, the switch-on brightness is set to the maximum brightness.

Motion detector cover is combined with a dimmer insert.

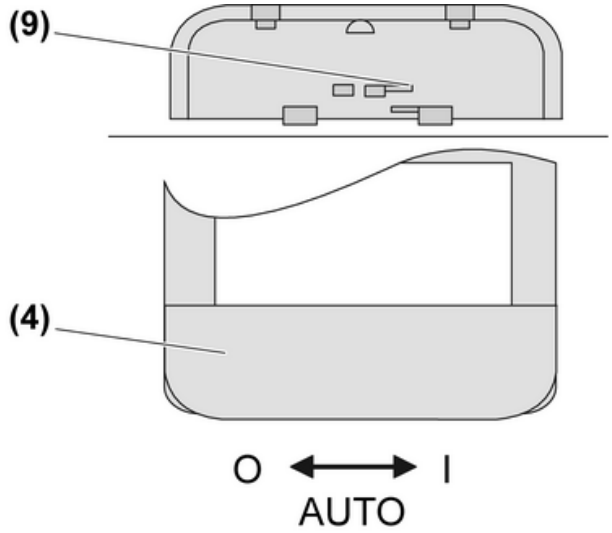
A 2-wire extension is connected.

- Set light to the required brightness.
- Press extension over entire surface for at least 3 seconds.

  For confirmation the lighting switches off briefly and then on again to the saved switch-on brightness.

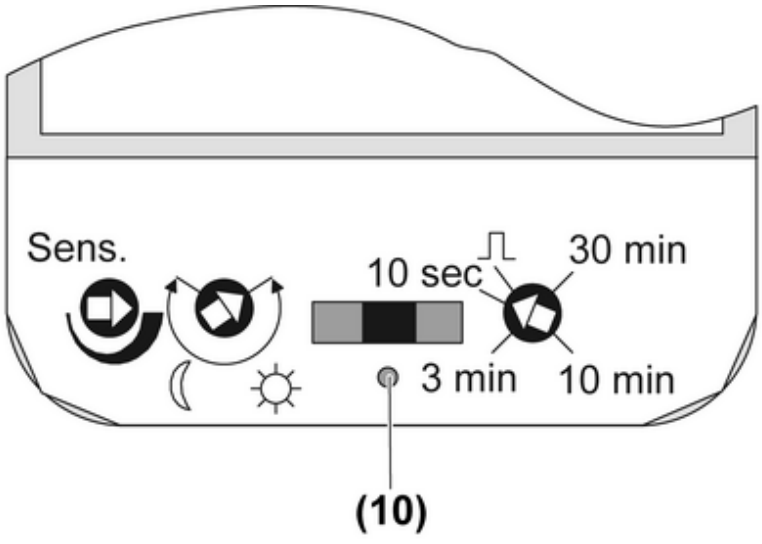
i The saved switch-on brightness is deleted after a power failure.

Setting the operating modes



picture 4: Slide switch

The motion detector has three operating modes that can be set using the slide switch (4) (picture 4). In the as-delivered state, the centre position is set and locked. The slide switch must be unlocked before a different operating mode can be set.



picture 5: Locking screw

- Remove slide switch (4).
- Unscrew locking screw (10) all the way (picture 5) and put it on the back of the slide switch (9) (picture 4).
- Snap on slide switch and set desired operating mode.

i The slide switch can only be locked in automatic mode.

Setting the Continuous off operating mode

- Move the operating mode switch left to the **O** position (picture 4).

  The lighting is switched off permanently.

  If a dimmer insert is used, then dimming will take place and the lighting will switch off after approx. 30 seconds.

i With Continuous off, switch-on via an extension is not possible.

Setting the Continuous on operating mode

- Move the operating mode switch right to the **I** position (picture 4).

  The lighting remains permanently switched on at the current brightness. If the lighting is switched off, then the switch-on brightness is set.

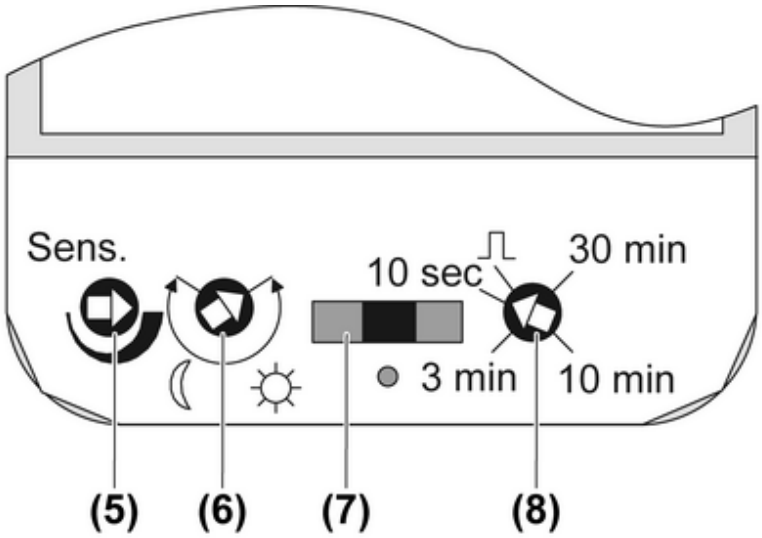
i Switching or dimming via an extension is not possible.

Setting the Automatic operating mode

- Move slide switch to the centre position (picture 4).

  The lighting switches automatically, operation via an extension is possible.

Setting the brightness threshold



picture 6: Adjuster under slide switch

The brightness threshold is infinitely adjustable in a range from approx. 0 to 80 lux and day operation☼. In so doing, the ☼symbol stands for brightness-independent switching and the ☾symbol for switching in case of darkness.

- Remove slide switch (4).
- Turn the adjuster (6) to the required position (picture 6).

i Should the motion detector no longer react to movements to be detected in Night mode, ☾setting, turn the adjuster back somewhat towards ☼.

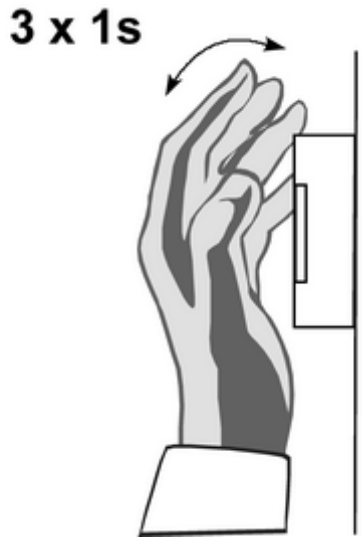
- Snap on slide switch.

Changing the brightness threshold with the Teach function

The Teach function can be used to save the current ambient brightness as a brightness threshold. The value set on the Brightness setter (6) is then no longer evaluated. Additional saving operations overwrite the previous value.

i A power failure of more than 2 seconds or changing the brightness adjuster (6) by at least a half turn causes the loss of the saved brightness threshold.

i If a brightness value of more than 80 lux is saved as the brightness threshold, then the motion detector is in Day mode and switches irrespectively of the brightness.



picture 7: Activating the Teach function

- Activating the Teach function: completely cover the motion detector three times within 9 seconds .

  The Teach function is active. As confirmation, the switched-off lighting is switched on for approx. 3 seconds or switched-on lighting switched off and then switched on for approx. 3 seconds.
- Move away from the motion detector for the next minute, so that it can measure the current brightness without being shaded.

  For confirmation of saving the lighting is switched on for 3 seconds.

  The motion detector then switches to the set operating mode.

Setting the sensitivity

The motion detector possess automatic adjustment to the ambient conditions. Normally, the adjuster **Sens.** should be set to maximum sensitivity.

- Remove slide switch (4).
- Set the sensitivity using the adjuster **Sens.** (6).
- Snap on slide switch.

i If there are unwanted switching operations, reduce the sensitivity.

Set run-on time

The run-on time can be set in a range from approx. 10 seconds to approx. 30 minutes. The setting is non-linear, longer times are specified in a more rough framework.

- Remove slide switch (4).
- Set the required run-on time using the run-on time adjuster (8).
- Snap on slide switch.

i If a dimmer insert is used, then dimming will take place after the run-on time has elapsed and the lighting will switch off after approx. 30 seconds. If, during dimming, movement is detected, then the motion detector switches back to switch-on brightness.

Presetting the short time operation

In conjunction with a switching insert, short-time operation can be set, e.g. to control an acoustic signal encoder. Short-time operation operates independently of the brightness.

- Remove slide switch (4).
- Set the run-on time adjuster (8) to the ⎍ symbol, short-time operation.
- Snap on slide switch.

  If motion is detected, the motion detector switches on for approx. 0.5 seconds. If further movement is detected, the switch-on will take place again after an immunity period of 3 seconds.

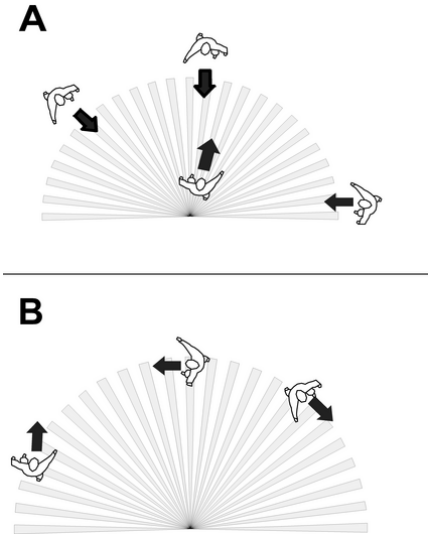
i No short-time operation is possible with the dimmer inserts.

6 Information for electrically skilled persons

6.1 Fitting and electrical connection

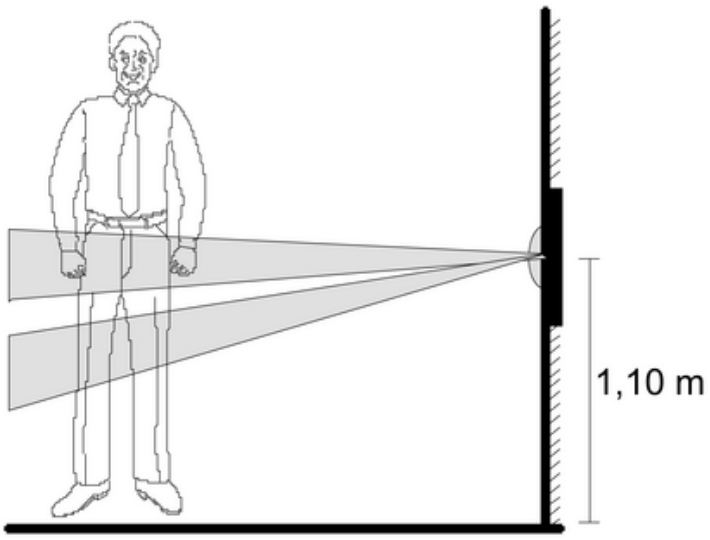
DANGER!
Electrical shock when live parts are touched.
Electrical shocks can be fatal.
Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

Selecting the installation location



picture 8: Detection area dependent on the direction of movement

i Observe the direction of movement: A distinction is made between Approach A and Transverse B (picture 8). Motions that are transverse to the motion detector can be detected more better than motions towards or away from the motion detector.



picture 9: Detection planes

- Select a vibration-free installation location. Vibrations can lead to unwanted switching.
- Avoid interference sources in the detection area. Interference sources, e.g. heaters, ventilation, air conditioners, and cooling light bulbs can lead to unwanted switching.

i If necessary, the detection area can be limited using the push-on top (see Limiting the detection area).

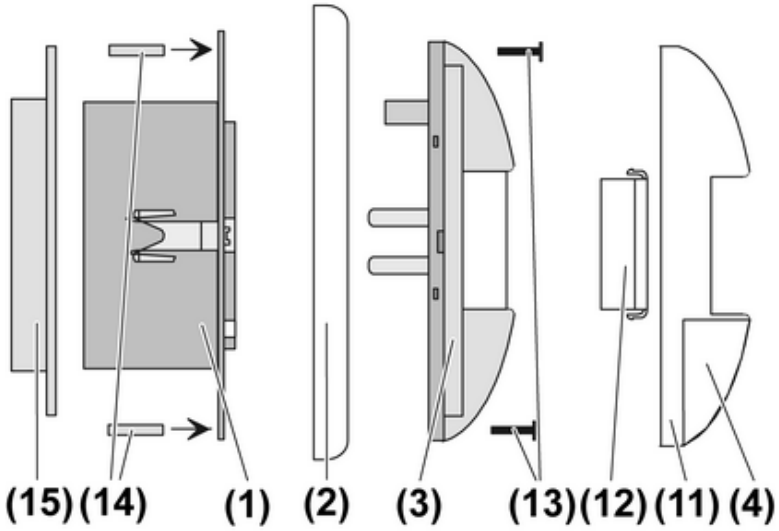
Installing the motion detector cover

i Use a surface-mounted housing for surface installation.

i Electrical connection of the flush-mounted insert see instructions for the insert.

The installation of the motion detector varies depending on the switch range, see (picture 10) and (picture 11).

Installation for CD and LS ranges:



picture 10: Installation, CD and LS ranges

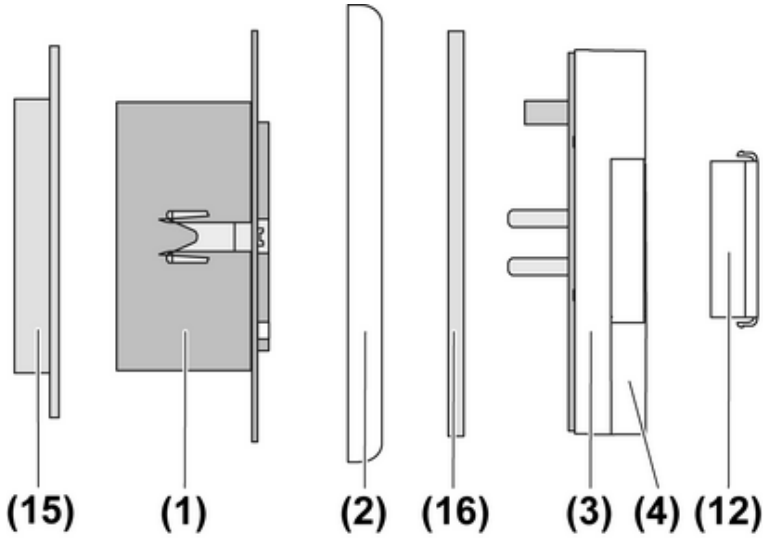
(11) Design cover
(12) Cover plate element
(13) Screws for anti-theft protection
(14) Red setscrews for anti-theft protection

(15) Sealing flange for IP44 installation (accessories)

i IP44 installation is only possible with IP44 automatic switches.

- Insert the supplied red setscrews (14) for the anti-theft protection into the boreholes of the insert (1) provided for that purpose (picture 10).
- In the case of IP44 installation insert the sealing flange (15) into an appliance box according to DIN 49073 and install the flush-mounted insert.
- Position the frame (2) and attach the motion detector cover (3).
- Fasten motion detector cover with the insert (1) using the enclosed screws (13). Do not tighten the screws too far, because otherwise the setscrews (14) will be damaged.
- If necessary, insert cover plate element (12) into the design cover (11) (see Limiting the detection area).
- Press design cover (11) onto the motion detector cover (3).
- Snap on slide switch (4).

Installation for AS, A ranges and SL500:



picture 11: Installation AS, A ranges and SL 500

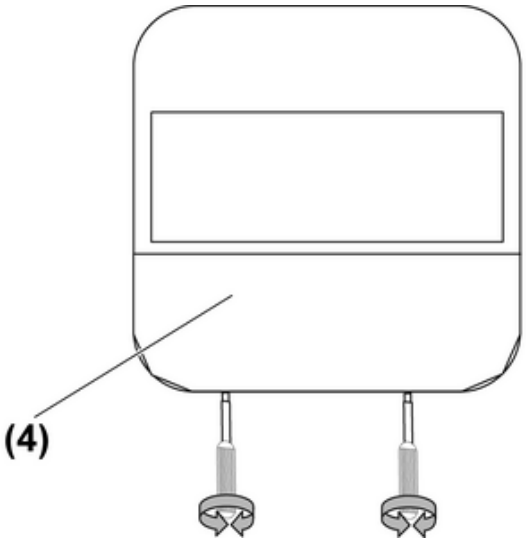
- In the case of IP44 installation insert the sealing flange (15) (accessories) into an appliance box according to DIN 49073 and install the flush-mounted insert (1) (picture 11).

i IP44 installation is only possible with IP44 automatic switches.

- Position the frame (2) and attach the motion detector cover (3). For IP44 installation, attach the motion detector cover together with the seal (16).
- If necessary, insert cover plate element (12) into the motion detector cover (3) (see Limiting the detection area).
- Snap on slide switch (4).

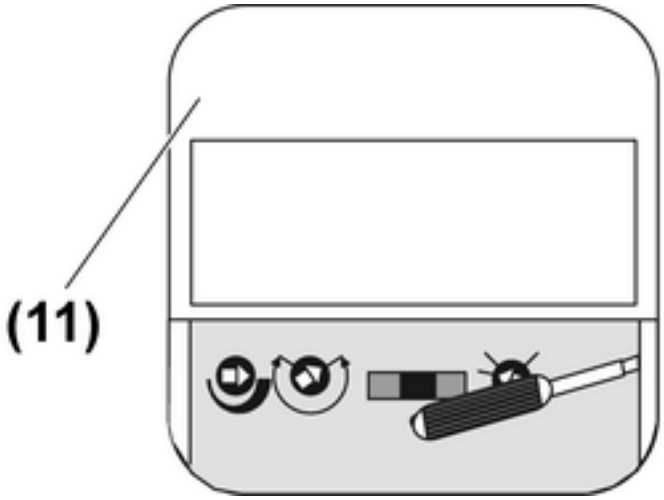
Removing the motion detector cover from the insert

CD and LS ranges:



picture 12: Removing the slide switch

- Remove slide switch (4) Do this by reaching with a screwdriver into the recesses provided in the cover (picture 12).



picture 13: Removing the design cover

- Remove design cover (11). Do this by reaching with a screwdriver into the point behind the design cover marked with a screwdriver symbol (picture 13) and lift out.
- Slacken screw (13) and pull motion detector cover off of the insert.

AS, A ranges and SL 500:

- Remove the motion detector cover from the insert by hand.

Expanding the detection area

To expand the detection area, connect a 3-wire extension insert with motion detector cover. The motion detector of the main unit also evaluates motion signals of the extension and, if necessary, switches the lighting on.

- Connect extensions (see instructions for 3-wire extension insert).

i The sensitivity of motion detectors on extensions can be set individually. The run-on time and the brightness threshold are only evaluated by the main device. The operating mode switch on the extension has no function.

i Do not connect any main units in parallel.

ⓘ When operating an extension with motion detector covers, it should be noted that the lighting can only be switched on after a lockout time of approx. 3 seconds.

6.2 Commissioning

Testing the detection area with automatic switch standard

The insert is installed and the cover is attached.

- Perform test settings (picture 2); remove cover plate (4) to do this.
  Move brightness adjuster (6) to ☼ symbol;
  Set **Sens.** adjuster to max.
- Switch on mains voltage.

  The motion detector carries out a self test for approx. 60 seconds.
- Leave the detection area and observe the switching behaviour.

  If the motion detector switches on, then sources of interference must be hidden (see Limiting the detection area) or the sensitivity reduced.
- Measure the detection area.

  Detection area is too large, limit the detection area (see Limiting the detection area).

  Detection area is too small, expand the detection area using an extension.
- Make the operating settings for the sensitivity and brightness threshold.
- Snap cover on.

Testing the detection area with automatic switch universal

The insert is installed and the cover is attached.

- Remove slide switch (4)
- Perform test settings (picture 6); remove cover plate (4) to do this.
  Adjuster, run-on time (8): 10 s;
  Move brightness adjuster (6) to ☼ symbol;
  Set **Sens.** adjuster to max.
- Switch on mains voltage.

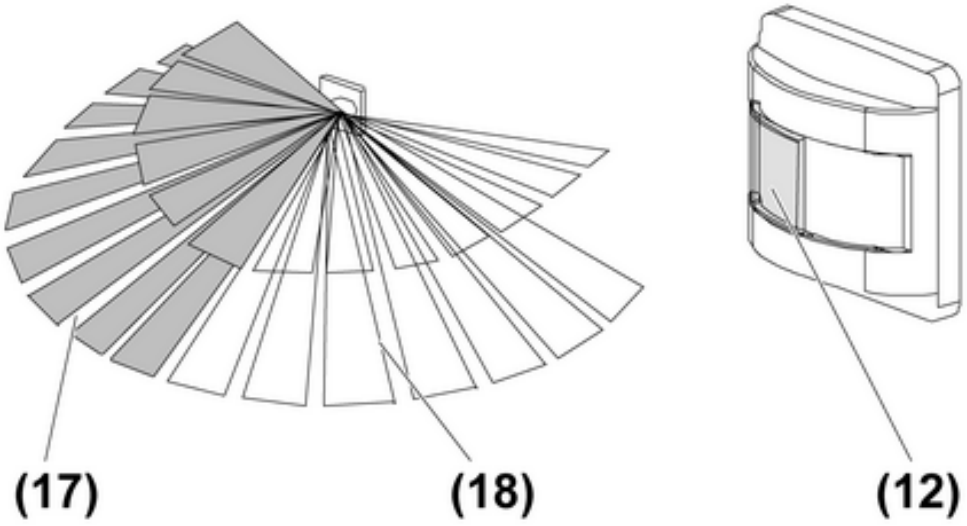
  The motion detector carries out a self test for approx. 90 seconds.
- Leave the detection area and observe the switching behaviour.

  If the motion detector switches on, then sources of interference must be hidden (see Limiting the detection area) or the sensitivity reduced.
- Measure the detection area.

  Detection area is too large, limit the detection area (see Limiting the detection area).

  Detection area is too small, expand the detection area using an extension.
- Make the operating settings for the run-on time, sensitivity and brightness threshold.
- Snap on slide switch.

Limiting the detection area



picture 14: Using cover plate element

The supplied cover plate element (12) (picture 14) can be used to cover up the left (17) or right half (18) of the detection field, 90° in each case.

- Install cover plate element (depending on switch range) (see Installing the motion detector cover).

i Only use the entire cover plate element. Shortening to a smaller angle will result in malfunctions.

7 Appendix

7.1 Technical data

Standard automatic switch 180° 1.10 m, Art.-No.: ..1180..

Ambient temperature	-20 ... +45 °C
Brightness setting	approx. 0 ... 80 lx (and day operation)
Follow-up time	approx. 2 min
Sensitivity	20 ... 100 %
Installation height	1.10 m
Detection angle	180 °
Detection area	approx. 10 x 12 m

Universal automatic switch 180° 1.10 m, Art.-No.: ..1180-1..

Ambient temperature	-20 ... +45 °C
Brightness setting	approx. 0 ... 80 lx (and day operation)
Follow-up time	approx. 10 s ... 30 min
Sensitivity	20 ... 100 %
Installation height	1.10 m
Detection angle	180 °
Detection area	approx. 10 x 12 m

7.2 Troubleshooting

The lighting does not switch on.

Cause 1: The ambient brightness is greater than the set brightness threshold.

Increase the brightness threshold using the adjuster (6).

Cause 2: Continuous off mode is set.

Switch the operating mode switch to the **AUTO** position.

Cause 3: Sensitivity is set too low.
Increase the sensitivity with the adjuster **Sens**.

Light switches on, although no-one is in the detection area.
Cause: Interference sources in the detection area, e.g. heating, ventilation, cooling light bulbs.
Reduce the detection area with a cover panel or reduce the sensitivity with the **Sens** adjuster.

7.3 Accessories

Sealing gasket Art.-No.: 551 WU

7.4 Warranty

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

We provide a warranty as provided for by law.

Please send the unit postage-free with a description of the defect to our central customer service office:

ALBRECHT JUNG GMBH & CO. KG
Service Center
Kupferstr. 17-19
D-44532 Lünen
Service-Line: +49 (0) 23 55 . 80 65 51
Telefax: +49 (0) 23 55 . 80 61 89
mail.vka@jung.de

General equipment
Service-Line: +49 (0) 23 55 . 80 65 55
Telefax: +49 (0) 23 55 . 80 62 55
mail.vkm@jung.de

KNX equipment
Service-Line: +49 (0) 23 55 . 80 65 56
Telefax: +49 (0) 23 55 . 80 62 55
mail.vkm@jung.de

The CE symbol is a free trade symbol, which is solely intended for the authorities and does not guarantee any properties.

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