

**Presence detector Standard**

Art. no.: 3361 WW

**Presence detector Standard**

Art. no.: 3361 AL

**Presence detector Universal**

Art. no.: 3361-1 WW

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**Operating instructions****1 Safety instructions**

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

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 Battery safety instructions**

This device or its accessories are supplied with batteries in the form of button cells.

**DANGER! Batteries can be swallowed. This can lead directly to death by suffocation. Dangerous substances may cause severe internal burns leading to death within 2 hours.**

Keep new and used batteries away from children.

Do not use devices if the battery compartment does not close securely and keep away from children.

If you suspect that a battery has been swallowed or is in any orifice of the body, seek immediate medical attention.

**WARNING! Improper handling of batteries can result in explosion, fire or chemical burn due to leakage.**

Do not heat or throw batteries into fire.

Do not reverse polarity, short-circuit or recharge batteries.

Do not deform or disassemble batteries.

Replace batteries only with an identical or equivalent type.

Remove empty batteries immediately and dispose of in an environmentally friendly manner.

### 3 Device components

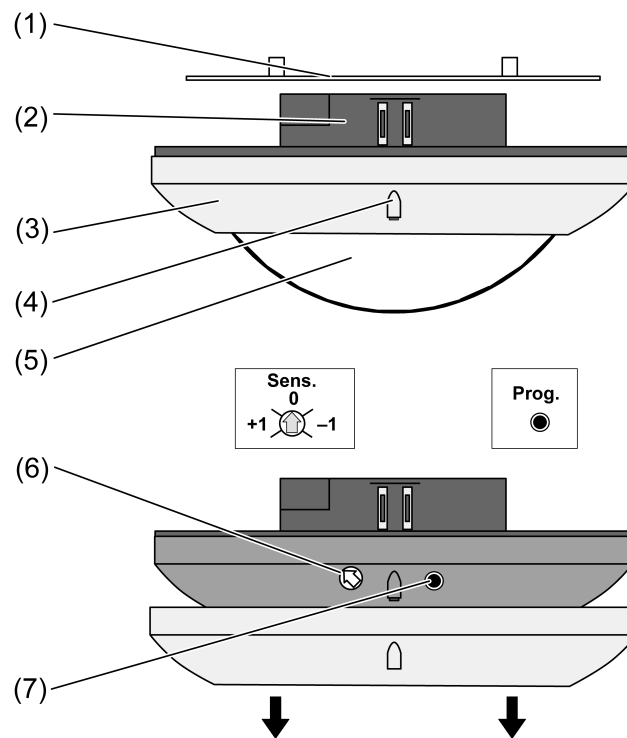


Figure 1: Device components

- (1) Supporting frame
- (2) Integrated bus coupling unit
- (3) Decor ring
- (4) Brightness sensor
- (5) Sensor window with  
Programming LED, red  
Status LED, blue
- (6) Adjuster **Sens.** for manual sensitivity adjustment
- (7) Programming button **Prog.**

### 4 Function

#### Intended use

- Requirement-oriented control of lighting, room thermostats and other electrical consumers in interior rooms
- Ceiling mounting on fixed ceilings in appliance box according to DIN 49073 or surface-mounted housing (see accessories)

#### Product characteristics

- Integrated bus coupling unit
- 3 PIR sensors
- Detection field 360°
- Integrated brightness sensor
- Deployed as presence detector, motion detector, or for alert operation
- Output functions: Switching, staircase function, switching with forced position, value transmitter, light scene extension, operating mode setting for room temperature controller
- Detection field extendible by parallel switching of several devices as main unit or extension unit

- Adjuster for manual adjustment of sensitivity
- Status LED: Flashes during motion detection; depending on programming in normal operation or only during the walking test mode

Additional characteristics of "Universal" version:

- Manual operation with IR remote control possible (accessories)
- 5 function blocks for motion or presence detection each with 2 outputs
- Function blocks switchable, e.g. for day/night operation
- PIR sensors can be evaluated separately
- Brightness sensor function with 3 limiting values
- Light control with max. of 3 channels, setpoint shift in operation, separate configuration of dimming-up, control and dimming-down phase
- Light control can be combined with presence detector function

Presence detector function:

- Detection of the smallest motions e.g. at a workplace for detecting the presence of persons
- Switch on: Motion detection and brightness threshold not reached
- Switch off: No motion in the detection field and run-on-time elapsed or brightness threshold exceeded

Motion detector function:

- Detection of motions for passageway security in buildings
- Switch on: Motion detection and brightness threshold not reached
- Switch off: No motion in the detection field and run-on-time elapsed

**i** After reacting and switching on, the motion detection works independently of the brightness.

Alert operation:

- Brightness-independent detection of motions in the detection field
- Switch on: After detection of an adjustable number of motions within the set monitoring period
- Switch off: No persons in the detection field and run-on-time elapsed

## 5 Operation

Only for "Universal" version:

- i** Obey the battery safety instructions.
  - Keep contacts of batteries and device free of grease.
  - Insert the supplied battery with correct polarity (see IR remote control imprint)

### Function buttons IR remote control

Button	Function
<b>ON</b>	Detection of a motion is sent for function block 1. The automatic mode is exited.
<b>OFF</b>	End of a motion is sent for function block 1. The automatic mode is exited.
<b>AUTO</b>	The automatic mode is activated again for function block 1. The ON state is first exited after a new motion detection.

### Adjustable buttons IR remote control

Button	Function
>	Increasing sensitivity
<	Reducing sensitivity
=	Resetting sensitivity to presetting
☾	Function block 1: Brightness threshold 10 lx
☀	Function block 1: Brightness threshold 50 lx
⚙	Function block 1: Brightness threshold 150 lx
☀	Function block 1: Brightness independent operation
TEACH	Function block 1: Set current brightness as brightness threshold
10 SEK, 30 SEK, 2 MIN, 5 MIN, 30 MIN	Function block 1: Extend minimum run-on-time (10 seconds) by the selected value
START, STOP	Function block 1: Extend minimum run-on-time (10 seconds) individually

### Set-up buttons of IR remote control

Button	Function
TEST	Walking test – Check detection field
RESET	Reset sensitivity, brightness threshold and run-on-time to presetting. Press for at least 3 seconds

### Operation with IR remote control

If enabled, function block 1 can be operated manually by remote control. In manual operation, brightness and motion detection for function block 1 are switched off until automatic mode is reset.

- Switch on, e.g. light: Press the **ON** button.
- Switch off, e.g. light: Press the **OFF** button.
- Set automatic mode: Press the **AUTO** button.

### Manually changing settings with IR remote control

If enabled, individual settings for function block 1 can be changed during operation using a remote control.

Sensitivity:

- Increase sensitivity: Press > button.
- Decrease sensitivity: Press < button.
- Recall set sensitivity again: Press = button.

The manual adjustment of sensitivity by the adjuster **Sens.** (6) is overwritten by the IR-remote control and vice versa.

Brightness threshold:

- Change brightness threshold: Depending on requirement, press ☾ button, ☀ button, ⚙ button or ☀ button.
- Set current brightness as brightness threshold: Press **TEACH** button.

Run-on-time: The preset run-on-time of 10 seconds can be extended individually.

- Extend run-on-time: Depending on requirement, press **10 SEK** button, **30 SEK** button, **2 MIN** button, **5 MIN** button or **30 MIN** button. Other values can be set with the **START/STOP** buttons.

## 6 Information for electrically skilled persons

### 6.1 Fitting and electrical connection

#### Detection field and range

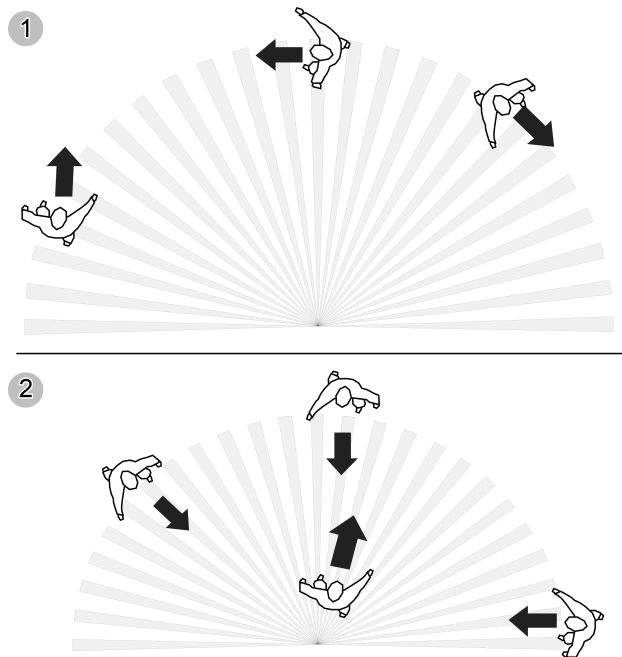


Figure 2: Tangential and radial direction of motion

The device has a detection field of 360°. The diameter of the detection field depends on the installation height and the direction of motion of persons in the detection field (Figure 3).

The detection field becomes larger the greater the installation height, while the detection density and sensitivity are reduced at the same time.

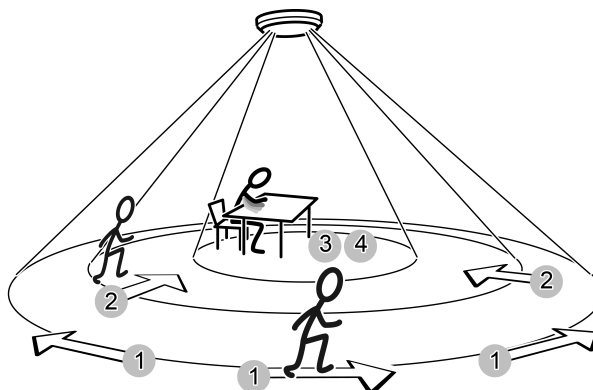


Figure 3: Detection range depending on the direction of movement

#### Diameter of detection field for direction of movement

Installation height	1:	2:	3:	4:
2.20 m	14.5 m	11.5 m	8 m	6 m
2.50 m	16.5 m	13 m	10 m	7 m

Installation height	1:	2:	3:	4:
3.00 m	20 m	16 m	12 m	8 m
3.50 m	23 m	18.5 m	14 m	9 m
4.00 m	26 m	17 m	14.5 m*)	- *)
5.00 m	28 m	18 m	15 m*)	- *)

- 1: Range for tangential movement on the ground
- 2: Range for radial movement on the ground
- 3: Range for typical movements at desks, e.g. torso movement
- 4: Range of fine detection at desks, e.g. mouse movements
- \*) When used as a presence detector: Installation height should not be more than 3.5 m, otherwise fine detection is not possible.

**Selecting installation location**

When used as a presence detector, the device is installed on the ceiling and monitors the surface below it. When used as a motion detector, the device is installed e.g. in the hallway on the ceiling.

- 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 detections.
- i** If necessary, the detection field can be limited using the push-on cover in order to minimise the influence of interference sources (see Limiting the detection field).

**Limiting the detection field**

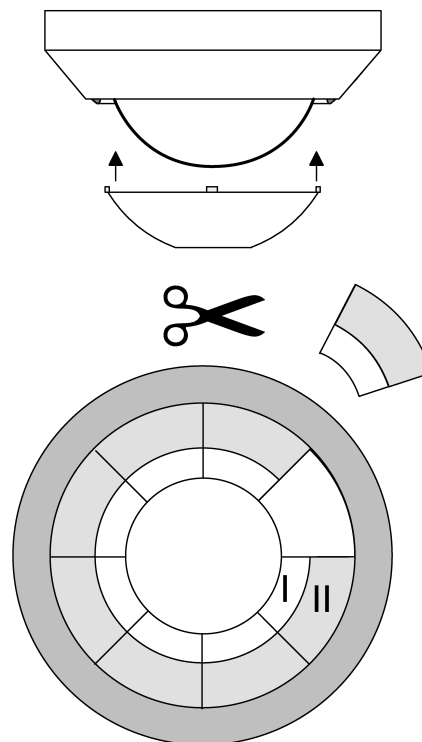


Figure 4: Push-on cover

The push-on cover can be used to limit the detection field, e.g. in order to mask out interference sources.

Cover size	Range on the ground (height 3 m)
Complete push-on cover	Ø approx. 4.5 m
Area I cut out	Ø approx. 7.5 m
Areas I + II cut out	Ø approx. 12 m
without push-on cover	Ø approx. 20 m

- Pull off push-on cover.
- Using scissors, cut out push-on cover along the marked lines as required.
- Push on push-on cover.

**Aligning the device**

The device has three independent sensors for motion detection. The arrangement of the areas A, B and C is clearly evident under the decor ring (Figure 6).

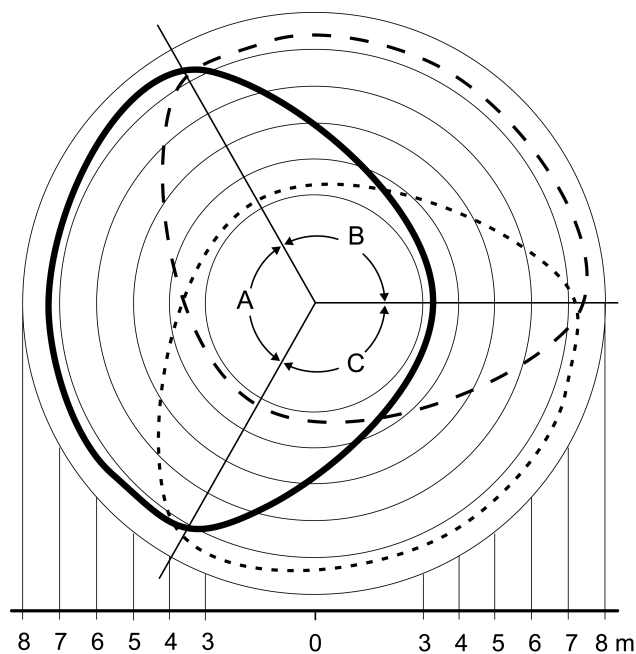


Figure 5: Detection field areas A, B and C, installation height 2.50 m

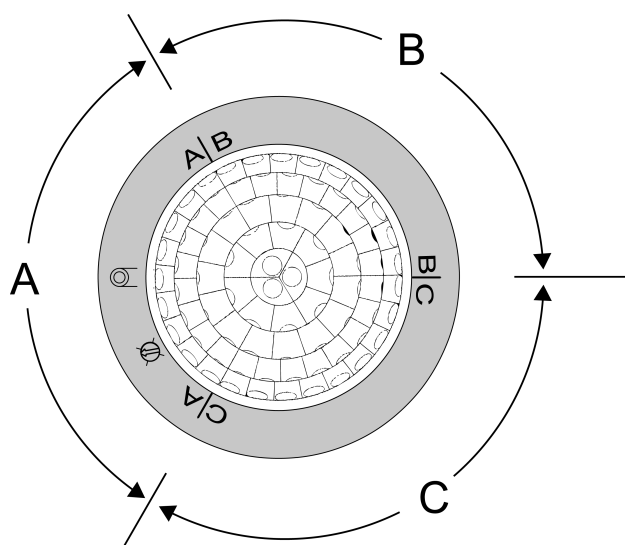


Figure 6: Arrangement of the areas A, B and C

- When mounting the device, align it so that the alignment of areas A, B and C match the project design.
- i** Already pay attention to correct alignment when mounting the appliance box and supporting frame.

### Connecting and fitting the device in a flush-mounted box

Flush-mounted appliance box is mounted on the ceiling at the designated installation location.

- i** In suspended ceilings, we recommend using air-tight, cavity wall appliance boxes.
- Pull off decor ring (3).
- When mounting the supporting frame (1), make sure that the areas A, B and C are aligned correctly.
- Run the bus cable through the supporting frame.
- Use connecting terminal to connect bus line to the bus connection on the rear side of the device.
- Press the device into the supporting frame correctly aligned until it locks in place.
- Attach decor ring (3).

### Fitting and connecting device in a surface-mounted housing

Using a surface-mounted housing (see accessories).

- Pull off decor ring (3).
- Guide the bus cable through the eyelet of the surface-mounted housing provided.
- Make sure that the areas A, B and C are aligned correctly when mounting the surface-mounted housing on the ceiling.
- Use connecting terminal to connect bus line to the bus connection on the rear side of the device.
- Mount the device correctly in the housing and screw down tightly.
- Attach decor ring (3).

## 6.2 Commissioning

### Load the address and the application software

- Switch on the bus voltage.
- Press the programming button (7).  
The programming LED in the sensor window (5) lights up.
- Assign physical address.  
The programming LED goes out.
- Write the physical address on the device label.
- Load the application software into the device.

### Testing the detection field

In the case of presence detectors connected in parallel, check the detection fields individually one after the other.


The presence detector is mounted and connected. The physical address and application software are loaded.

- Activate walking test:  
Activate parameter "walking test after download" and download application software.  
The presence detector operates independently of the brightness. All sensors are active according to their programmed sensitivity.
- Pace off the detection field, paying attention to reliable detection and interference sources.  
Any motions detected are displayed by the blue status LED in the sensor window.



- Limit detection area, if necessary, using the push-on cover. Adjust sensitivity with adjuster **Sens.** or IR remote control, or change the programming.
- Deactivate parameter "walking test after download" and download application software.

Only for "Universal" version:

-  If enabled, the walking test function can be activated with the button **TEST** of the IR remote control.

## 7 Disposal of batteries



Remove empty batteries immediately and dispose of in an environmentally friendly manner. Do not throw batteries into household waste. Consult your local authorities about environmentally friendly disposal. According to statutory provisions, the end consumer is obligated to return used batteries.

## 8 Technical data

KNX medium	TP256
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Current consumption KNX	max. 12.5 mA
Connection, Bus	device connection terminal
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Relative humidity	5 ... 93 % (no moisture condensation)
Protection class	III
Motion detection	
Detection angle	360°
Range	Ø approx. 20 m (installation height 3 m)
Brightness sensor	
Measuring range	0 ... 2000 lx
Detection area	Ø 2 m
Only for "Universal" version:	
IR remote control	
Battery type	1×Lithium CR 2450N

## 9 Troubleshooting

### Light does not switch on despite motion detection and low lighting

Cause 1: Wrong function block active.

Change function block switch-over.

Cause 2: Brightness threshold set is too low.

Increase the brightness threshold with the remote control or parameter setting.

### Light switches on despite sufficient ambient lighting

Cause 1: Signal function is active and the device therefore operates independently of the brightness.

Check programming.

Cause 2: Device operates independently of the brightness.

Adjust the brightness threshold with the remote control.

Adjust parameter setting for brightness threshold.

### Light switches off briefly and then on again immediately

Cause 1: Luminaires in the detection field.

Set the configuration barrier parameter so that cooling light bulbs are not detected.

Cause 2: The brightness threshold set is not reached after switching off. Device switches on again immediately during motion detection.

Increase brightness threshold.

### Light switches off early despite motion detection and low lighting

Cause 1: The set time is too short.

Increase the time with the remote control or parameter setting.

Cause 2: Detection problem, the surface to be monitored is not in the detection field, or furniture or pillars are in the way.

Check detection field, extend presence detector extension if necessary.

### Device responds even without any motion in the detection field

Cause: Interference sources in the detection field or device settings are too sensitive.

Limit detection field, remove interference sources.

Adjust sensitivity by one level with blue sensitivity switch (7) or with remote control.

Reduce sensitivity in parameter setting.

**i** The sensitivity should be reduced by 1 to 2 levels in small spaces.

### Light does not switch off despite sufficient ambient lighting

Cause 1: Device is set as motion detector and therefore does not evaluate the ambient lighting after reacting.

Check programming. Set and program device as presence detector.

Cause 2: Brightness threshold set is too high.

Decrease the brightness threshold with the remote control or parameter setting.

### Light does not switch on or switches on too late despite motion in the detection field

Cause 1: Device is set for alert operation and does not evaluate the first motion impulse detected.

Check programming. Set and program device as motion detector.

Cause 2: Evaluation delay is activated so that anyone briefly entering the detection field, for example, is not evaluated.

Correct the programming, shorten or deactivate evaluation delay.

## 10 Accessories

IR remote control

Art. no. KNX PM FB IR

Surface-mounted housing, white

Art. no. PM-KAPPE-1

Surface-mounted housing, aluminium

Art. no. PM-KAPPE AL-1

Protection cage

Art. no. SK 180-90 WW

## 11 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.



Presence detector

**JUNG**

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