

Radio-Control Presence Detector

Order no.: 0318 02 / 0318 04

1. Function

The radio-control presence detector (fig. 1.a) permits to achieve optimal energy savings by controlling the illumination of a room depending on the presence of persons.

1.a)



The detector is equipped with a passive infrared sensor (PIR) and responds to thermal movements triggered by persons, animals or objects. The detector transmits a radio data telegram which can be processed by all radio-controlled dimming and switching actuators from release R2 onwards (see. identification on actuator).

The presence detector activates a programmed radio-control actuator whenever the ambient brightness drops below an adjustable reference brightness and whenever movements are detected. The actuator then controls the light intensity depending on the reference brightness.

The light control remains activated as long as the presence detector detects movements.

If no movements are detected anymore, the detector switches off after the preset shut-off delay. The detector is equally switched off when the upper brightness limit is exceeded. .

For monitoring of large areas, several presence detectors can be used in common in the same system. In this case, one presence detector works as the master unit (main unit) whereas all other presence detectors work as slave units (extension units).

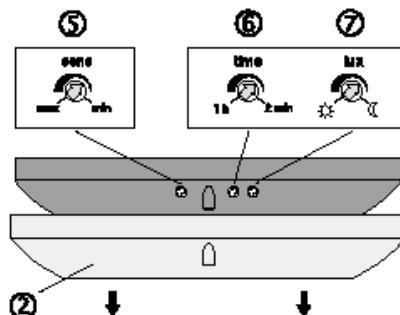
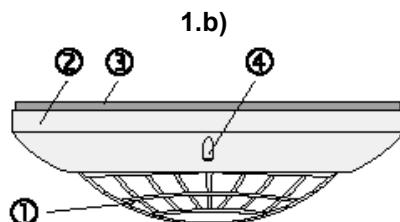
Description

The radio presence detector consists of:

- ① sensor window with LED
- ② ornamental ring
- ③ baseplate
- ④ pushbutton

Under ornamental ring ②, the detector has 3 controls for the setting of:

- ⑤ sensitivity
- ⑥ shut-off delay
- ⑦ brightness reference

**Important:**

If the user wants the light control to be active immediately after a person enters the monitored surface, it is recommended to switch on the light control by hand (cf. chapter 6.2 and 7.2) as it will otherwise take a few seconds until the light control is activated by the presence detector.

The reason for this is that - to avoid false triggering - the detector's sensitivity is initially reduced as compared to that of a movement detector.

**Important note:**

Please note that the number of radio presence detectors to be used inside a radio-control zone (zone in which radio telegrams can be exchanged between subscribers) is limited. As all these devices react in the same way to the same ambient conditions as, for instance, a sudden rise of the outside brightness level, and as they will then begin transmitting telegrams, the probability of the telegrams interfering with one another and thus causing malfunctions is considerably increased.

Depending on ambient conditions, a number of more than 8 radio-control presence detectors may already be sufficient to cause malfunctions.

2. Fitting and start-up

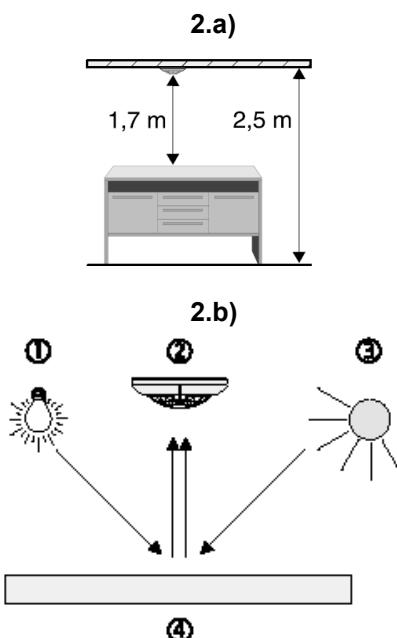
**Safety instructions**

Attention: Electrical equipment must be installed and fitted by qualified electricians only.

Place of fitting

The presence detector is fitted under the room ceiling and monitors the working surface below (fig. 2.a).

Fig. 2.b: the actual brightness measured at the detector ② is composed of reflected artificial light ① and daylight ③ and depends on the reflection properties of the working surface ④.



Avoid direct sunlight into the sensor window. The sensors might otherwise be irreparably damaged. If needed, the detection field can be confined by means of the mask supplied with the device (cf. section 3).

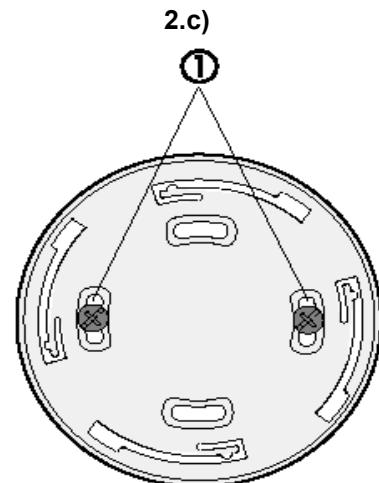
Install the presence detector free from vibrations and not in the immediate vicinity of heat sources (e.g. lamps, radiators), fans or ventilation ducts. Lamps cooling down after operation or draughts (e.g. caused by open windows) might be detected and lead to undesired switching.

Fitting

Attach the presence detector to the baseplate only after having installed the batteries and programmed the presence detector into a radio-control receiver.

To install the presence detector proceed as follows:

1. Fasten the baseplate to the room ceiling using the screws supplied (fig. 2.c ①).
2. Turn the presence detector on the baseplate approx. 45° counterclockwise until it is heard to engage.



Batteries

The radio-control presence detector operates on 4 alkaline micro batteries (LR 03) (not included in the scope of supply). Batteries of the carbon-zinc type (R 03) must not be used.



Safety and disposal instructions

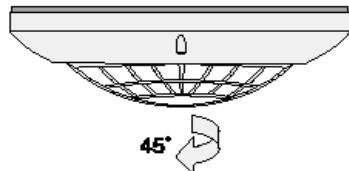
Attention: Keep batteries away from children. Remove used batteries immediately and discard without polluting the environment. Replace battery by identical or equivalent types only.

Inserting / replacing the batteries

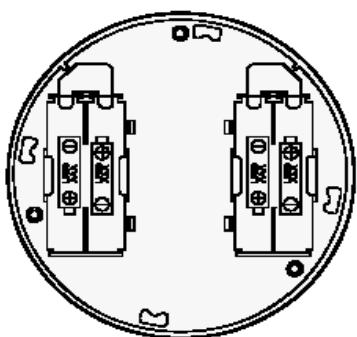
1. Detach the presence detector from the baseplate by turning the device approx. 45° clockwise on the baseplate (fig. 2.d).
2. Replace the old batteries located at the back of the housing. Wait ca. 2 minutes (capacitor discharge time) before inserting the new ones paying attention to correct polarity (fig. 2.e).
3. Refit the presence detector on the baseplate by turning the device approx. 45° counter-clockwise until it is heard to engage
4. After insertion of the batteries, the device starts transmitting programming telegrams for ca. 30 seconds.

To avoid undesired programming make sure that none of the actuators is in the programming mode during this time.

2.d)



2.e)



Programming a detector into a radio-control receiver

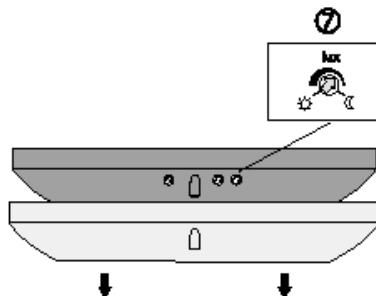
For light control applications, the presence detector must be programmed into only **one** radio-control receiver. The programming information is stored in the radio-control receiver only.

During programming of a radio-control presence detector, the sensitivity of the radio-control receivers is reduced to approx. 5 m. The distance between the receiver and the radiocontrol presence detector should therefore be not less than 0.5 m and not more than 5 m.

Programming procedure

1. When programming the first presence detector into the radiocontrol receiver make sure the brightness control (fig. 2.f ⑦) does not point to the „Moon“ symbol. A presence detector with this setting will be identified as a slave unit and can therefore not be programmed as first unit into a radio-control receiver.
For programming of a presence detector system (master/slave) please read also section 9.
2. Remove the battery for approx. 2 minutes from the presence detector (capacitor discharge time).
3. Switch the radio-control receiver into the programming mode (see „Radio-control receiver“ operating instructions).
4. Put the battery back in place. The presence detector now starts transmitting special programming information telegrams for approx. 30 seconds. The receiver confirms the programming cycle (see „Radio-control receiver“ operating instructions).
5. Switch the radio-control receiver back to the operating mode (see „Radio-control receiver“ operating instructions).

2.f)



**Important**

The radio-control presence detector cannot be operated together with a radio-control detector. For this reason, it is essential that this transmitter has not been programmed into the corresponding receiver before the presence detector is programmed. If this is the case, it must be deleted beforehand. Programming of the presence detector is otherwise not possible and the radio-control receiver remains in the programming mode.

Deleting a detector in the radiocontrol receiver

An already programmed presence detector can be deleted by starting a new programming cycle in the radio-control receiver.

3. Field of detection and snap-on mask

The presence detector has a detection field of 360°.

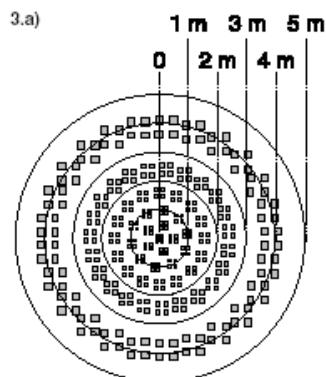
The PIR sensors are arranged in 6 detection levels with 80 lenses.

The detection range is ca. 5 m in diameter at desk height (ca. 80 cm).

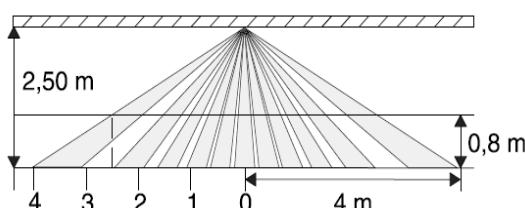
The diameter of the detection field at floor level is ca. 8 m.

These values are valid for installation under the ceiling and a fitting height of 2.5 m.

For fitting heights above 2.5 m, the detection field increases whereas the detection density and the sensitivity are reduced.



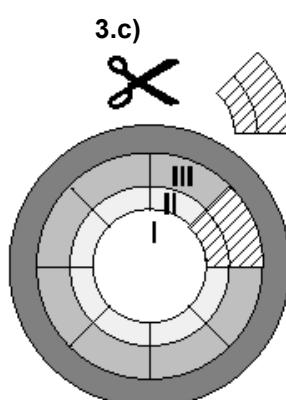
3.b)

**Snap-on mask**

The snap-on mask supplied with the detector can be used to blank out undesired zones of detection.

The mask is snapped onto the sensor window. Cut out the mask only along the marked lines (fig. 3.c).

The following data are referred to a fitting height of ca. 2.50 m. In this case, the detection field on the floor has a diameter of ca. 8.00 m.



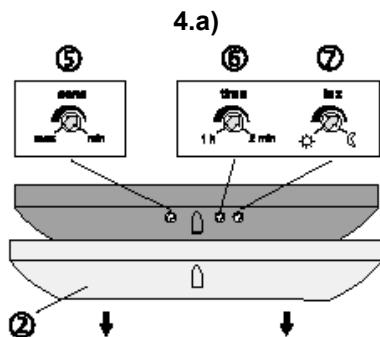
Cutting out the mask changes the diameter of the detection field on the floor as follows:

Full mask without cutouts, sector I:	\varnothing ca. 2.20 m
Sector II cut out:	\varnothing ca. 4.00 m
Sectors II and III cut out:	\varnothing ca. 6.00 m
Without mask:	\varnothing ca. 8.00 m

The size of the detection field can be checked when the detector works in the movement test mode.

4. Settings

To vary the brightness, the shut-off delay and the sensitivity start by removing the ornamental ring (fig. 4.a ②) from the presence detector to gain access to the controls.



⑤ Sensitivity „sens“

The potentiometer permits adjusting the sensitivity of the sensor between maximum and minimum.

When the sensitivity control is at minimum, the presence detector does not respond to movements.

⑥ Shut-off delay „time“

The potentiometer permits adjustment of the shut-off delay for automatic operation in fine steps between approx. 2 minutes and 1 hour. The center position corresponds to 15 minutes.

Recommendation:

For smaller rooms, a shut-off delay of approx. 5 minutes is recommended.

For larger rooms, a longer delay should be chosen.

⑦ Reference brightness „lux“

The potentiometer permits the adjustment of reference brightness values in fine steps between approx. 3 lux (moon symbol) to approx. 2000 lux (sun symbol). The center position corresponds to approx. 100 lux. The setting is taken over by the radio actuator only after activation of the „light control test mode“.

After performing the setting put the ornamental ring back in place. The protruding light sensor must fit into the corresponding recession in the ornamental ring.

5. Setmodes

5.1 Light-control test mode

The light control test mode is used to preset the reference brightness of the presence detector. Fine tuning can be done later by remote control when suitable radio-control transmitters have been programmed. For dimming actuators refer to section 6.5 and for switching actuators to section 7.5.

In this mode, the detector does not detect movements, but permits fast adjustment of the actual/reference brightness values (light control).

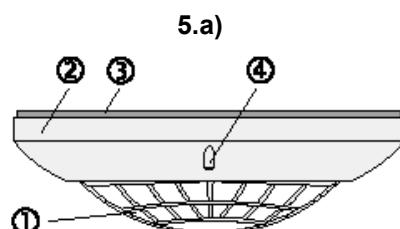
The reference brightness preset on the detector is transmitted to and stored in the radio-control receiver. The radio-control receiver compares the actual brightness value transmitted to the reference brightness stored and performs a light control.

Setting the reference brightness:

Important

The presence detector must have been programmed beforehand into the radio-control receiver.

1. Depress button (5.a ④) for at least 1 second. LED (5.a ①) first flashes up 10 times in a fast sequence and then periodically every 5 seconds. The presence detector is now for approx. 5 minutes in the light-control test mode.



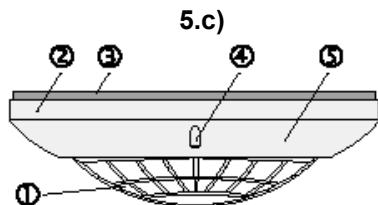
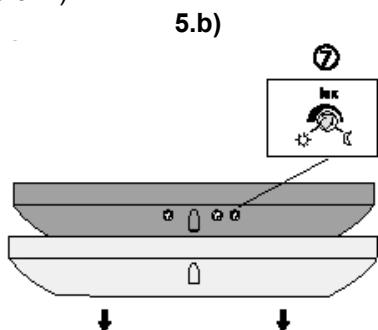
2. Adjust the reference brightness value on the presence detector (fig. 5.b ⑦) in such a way that the resulting level of illumination in the room corresponds to the desired lighting conditions (dimming actuator) or that the light is switched on (switching actuator).

For this setting it may be necessary to darken the room.

Important:

With dimming actuators, the time required for changing the reference brightness may be approx. 1 minute (brightness reference corresponds to actual brightness).

The light-control test mode ends automatically after approx. 5 minutes or after a short (< 1 s) depression of button (5.c ④).



5.2 Movement test mode

In the movement test mode, the detection field of the presence detector can be tested independently of the brightness.

When the detector senses a movement in the movement test mode, the programmed radio-control receiver will be activated for a fixed shut-off delay of 10 seconds.

Activating the movement test mode

To activate the movement test mode for about 10 minutes depress the button (fig. 5.c ④) shortly (< 1 s).

In the movement test mode, the LED (fig. 5.c ①) flashes 6 times during each transmission.

Deactivating the movement test mode

The movement test ends automatically after about 10 minutes or can be terminated by a brief depression (< 1 s) of the button.

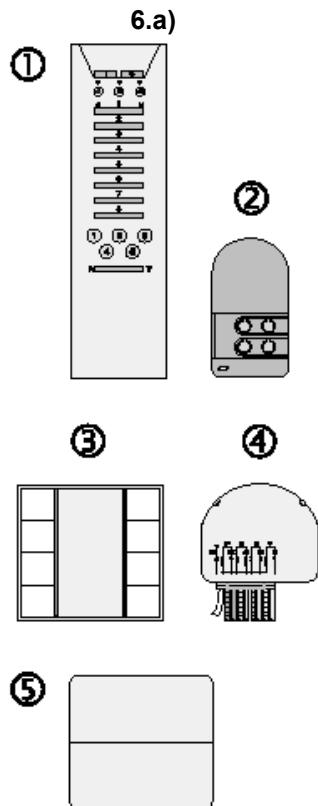
6. Light control with a dimming actuator

A dimming actuator from Release 2 (R2) onwards can be used to implement a light control function. For this purpose, the dimming value in the actuator is adjusted in such a way that the brightness measured at the presence detector corresponds to the stored reference value.

In so far as the functions listed in sections 6.2 to 6.6 require a control operation, the respective commands can be given by radio from the below-mentioned transmitters (Fig. 6.a):

- ① Handheld transmitter 'Komfort':
Channel key
- ② Handheld transmitter 'Mini':
Channel key
- ③ Wall-mounted transmitter
Channel key
- ④ Multifunction transmitter
Operating modes with doublesided actuation of standard rocker pushbuttons

If used in conjunction with a radiocontrol push-button for switching and dimming (fig. 6.a ⑤), these functions can also be operated locally.



6.a)

**Important**

When the actual brightness drops below the reference brightness during the shut-off delay, the load is switched on even if no presence is detected.

6.2 Manual activation of the light control

To activate the light control manually when the load is switched off (without presence detection), depress briefly a key on any of the radio-control transmitters programmed into the radio-control.

If used with a radio-control pushbutton for switching and dimming the light control can also be activated locally: when the presence detector is programmed into the device, the light control can be terminated by depressing briefly either the upper or the lower rocker of the pushbutton.

**Important**

If no presence is detected for a period of at least 2 minutes after manual activation, the dimming actuator is switched off.

6.1 Automatic mode

After a presence detector has been programmed into a radio-controlled dimming actuator, the actuator operates permanently in the automatic mode.

If the actual brightness value measured at the presence detector is below the reference brightness, the dimming actuator is started with full brightness (100 %) when presence is detected.

Thereafter, the degree of dimming is adjusted in such a way that the actual brightness corresponds to the reference value (constant lightintensity control).

If the actuator is switched off and if the shut-off delay is permanently retriggered by presence during the switch-off phase, the actuator restarts with the lowest dimming level when it is switched on again.

If - in the light control mode - no presence is detected any more during the preset shut-off delay, the dimming actuator shuts off, but remains in the automatic mode.

The dimming actuator is also switched off at minimal brightness and when the reference brightness is exceeded for at least 15 minutes by 40 %.

6.3 Manual deactivation of the light control

An active light control (load on) can be deactivated by a brief actuation of a programmed radio-control transmitter.

Using a radio-control push-button for switching and dimming also permits to deactivate the light control locally by hand: when the presence detector has been programmed, the light control can also be terminated by a brief depression of the upper or the lower rocker.

The actuator remains off as long as presence is being detected (e.g. slide presentation). If no presence is detected and a reset time of about 2 min. has elapsed, the actuator will return to the automatic mode.

6.4 Temporary change of the reference brightness setting

The reference brightness is adjusted at the presence detector when the device is in the light-control test mode (cf. section 5.1). This reference brightness can be temporarily (or permanently, section 6.5) changed.

With a prolonged depression of a key (> 1 s) on a radio transmitter programmed into the dimming actuator or by prolonged local actuation of a radio-control push-button for switching and dimming, the brightness of the connected lamps can be changed.

This new illumination level is temporarily stored in the actuator as reference brightness until the next shut-off. Since the storing procedure lasts about 1 minutes, the new brightness level should be maintained constant during ca. 1 minute.

6.5 Permanent change of the reference brightness setting

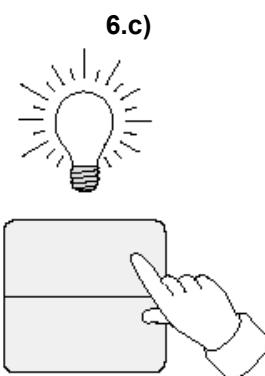
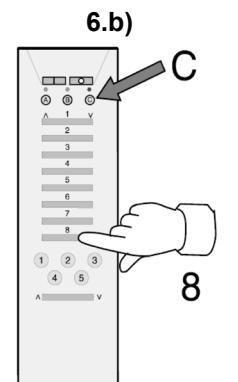
When the temporary reference brightness has been active for more than 2 minutes, it can be stored as permanent reference brightness with a 'Komfort' model of the handheld transmitter programmed into the dimming actuator.

Depress channel key 8 (\wedge or \vee) of channel group C longer (> 1 s) (fig. 6.b).

With a radio-control push-button for switching and dimming, the temporary reference brightness value can be stored as permanent reference brightness value by depressing both rockers together (double-sided actuation) for at least 3 seconds when the lamp is on (fig. 6.c)

This storage is confirmed by the LED at the dimming actuator lighting up for approx 1 second or by a short buzzing tone (lasting 0.5 seconds).

To go back to the reference brightness adjusted on the presence detector, activate the light-control test mode in the presence detector (cf. section 5.1).



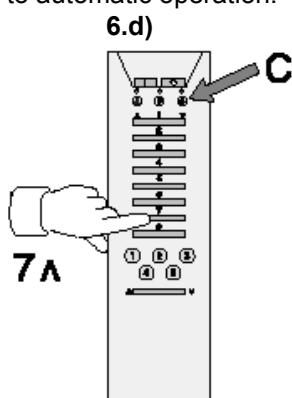
6.6 Switching on / switching off for 2 hours

After a presence detector and a handheld transmitter of the 'Komfort' type have been programmed into a dimming actuator for light control, the additional functions „Switching on for 2 hours“ and „Switching off for 2 hours“ can be selected.

Switching on for 2 hours (fig 6.d)

Depress channel key 7/ \wedge of channel group C longer (> 1 sec.).

The pertaining dimming actuator is activated for 2 hours with 100 % brightness. In this state, it does no longer respond to telegrams from the presence detector. When the 2 hours have passed, the presence detector goes back to automatic operation.

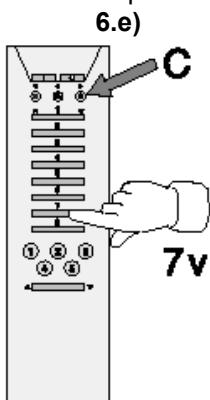


Switching off for 2 hours (fig. 6.e)

Depress channel key 7V of channel group C longer (> 1 s).

The pertaining dimming actuator is switched off for 2 hours. In this state, it does no longer respond to telegrams from the presence detector.

When the 2 hours have passed, the presence detector goes back to automatic operation.



To cancel these additional functions, depress a key on a programmed radiocontrol transmitter briefly (< 1 s)

With a radio-control push-button for switching and dimming these additional functions can also be cancelled by a brief depression of the upper or lower part of the rocker.

If these additional functions are terminated by 'switching on', the dimming actuator switches on for at least 2 minutes. When no presence is detected and after a retention time of appr. 2 minutes has elapsed, the dimming actuator switches off and returns to automatic operation.

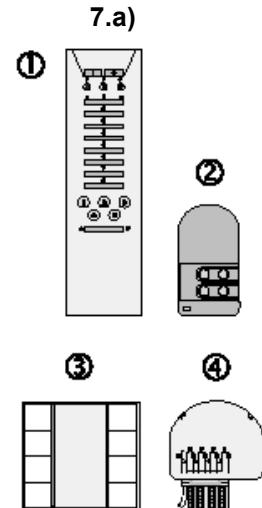
If the additional functions are terminated by 'switching off', the dimming actuator switches off for at least 2 minutes. It returns to automatic operation when no presence is detected anymore and after a fixed retention time of 2 minutes has elapsed.

7. Light control with a switching actuator

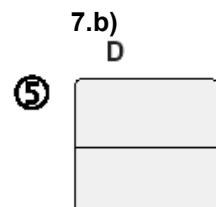
A radio-control switching actuator from Release 2 (R2) onwards offers the possibility of implementing a two-point light control with ON and OFF as the only two switching states available.

In so far as the functions listed in sections 7.2 to 7.3 require a control operation, the respective commands can be given by radio from one of the below mentioned transmitters (fig. 7.a):

- ① Handheld transmitter 'Komfort' :
Channel key
- ② Handheld transmitter 'Mini'
Channel key
- ③ Wall-mounted transmitter
Channel key
- ④ Multifunction transmitter
Operating modes with doublesided actuation of standard rocker pushbuttons



If used with a radio-control pushbutton for switching and dimming (fig. 7.b ⑤), these functions can also be operated locally.



7.1 Automatic operation

When a presence detector has been programmed into a radio-controlled switching actuator, the actuator in question is permanently in the automatic operation mode.

When the actual brightness measured at the radio-control presence detector is below the reference value, the actuator is switched on when a movement is detected. If no movement is detected anymore, the presence detector switches the actuator off after the adjusted shut-off delay.

When the measured actual brightness exceeds the current reference brightness for approx. 15 minutes by more than 100 %, the switching actuator is also switched off. It is restarted on detection of movements if the actual brightness measured at that time is below the reference brightness.



Important

If the light begins to 'toggle' when a switching actuator is used (lamp goes permanently on and off), the brightness reference value must be increased.

When the actual brightness drops below the reference brightness during the shut-off delay, the load is switched on even if no presence is detected.

7.2 Manual light control activation

Manual activation of the light control is the same as described for the dimming actuator (see section 6.2).

7.3 Manual light control deactivation

Manual deactivation of the light control is the same as described for the dimming actuator (see section 6.3).

7.4 Switching on and off for 2 hours

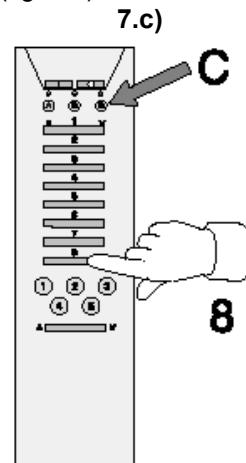
Switching on and off for 2 hours with a switching actuator is the same as described for the dimming actuator (cf. section 6.6).

7.5 Permanent change of the brightness reference value

The current actual brightness can be stored in the dimming actuator as permanent reference brightness. This value overwrites the reference brightness adjusted manually on the presence detector

- with a handheld transmitter 'Komfort':

Depress channel key 8 (/ \wedge or \vee) of channel group C longer (> 1 s) (fig. 7.c).

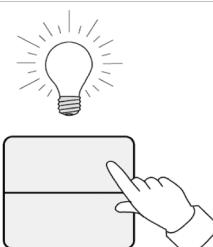


7.c)

- with a radio-control push-button for switching and dimming

Depress both buttons at the same time for at least 3 seconds while the lamp is on (double-sided actuation) (Fig. 7.d).

7.d)



This storage is confirmed by the LED at the dimming actuator lighting up for approx 1 second or by a short buzzing tone (lasting 0.5 seconds).

To go back to the reference brightness adjusted on the presence detector, activate the light-control test mode in the presence detector (see section 5.1)



Important

A temporary change of the reference brightness is not possible when a switching actuator is used.

8. Lightscape operation All-ON / All-OFF

During the retention time, the radio-controlled actuator involved in light control can be integrated together with other radio-controlled actuators into lightscapes and into the ALL-ON or ALL-OFF function. The recalled lightscape is statical, i.e. there is no light control function.

The lightscapes can be recalled, stored and changed with a handheld transmitter 'Komfort', a wall-mounted transmitter or a multifunction transmitter. Read the corresponding transmitter operating instructions.

Lightscape

A recalled lightscape will be switched on for at least 2 minutes with the actuator integrated into light control. If no presence is detected anymore and after elapsing of the preset retention time, the actuator switches off and returns to automatic operation.

All-ON

When a programmed All-ON key is pressed, the actuator integrated into light control switches on. If no presence is detected anymore and after elapsing of the preset retention time, the actuator switches off and returns to automatic operation.

All-OFF

When a programmed All-OFF key is pressed, the actuator integrated into light control switches off for at least 2 minutes. If no presence is detected anymore and after elapsing of a fixed retention time of 2 minutes, the actuator switches off and returns to automatic operation.



Important

When a multifunction transmitter is used it is necessary after recalling of a lightscape to wait until the shut-off delay has passed before it is possible to return to the light control mode. Switching off the lightscape earlier with a multifunction transmitter is not possible.

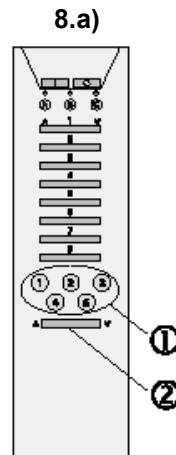
Master key special functions during lightscape operation

The special functions during lightscape operation listed below can only be operated with the Master key of a handheld transmitter 'Komfort' or a wallmounted transmitter with 4 channels.

Master key

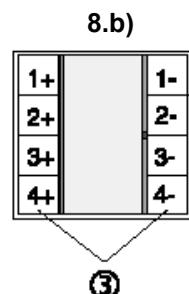
- Handheld radio-control transmitter 'Komfort'

When a lightscape key (fig. 8.a ①) is programmed, the Master key (fig. 8.a ②) is automatically stored in the radio-control receiver.



- 4-channel wall-mounted radio control transmitter

When at least one of channel keys 1 through 3 of the 4-channel wallmounted transmitter is set for lightscape operation and accordingly programmed in the actuator, channel key 4 (fig. 8.b ③) is automatically assigned in the radiocontrolled actuator to lightscape operation with Master key functions.



Functional description

The functions of the Master key are linked with the lightscape key last operated. The following special functions can therefore only be executed when the lightscape key last operated is programmed in the actuator. If this is not the case, a brief depression of the Master key starts the light control.

Handheld:

brief depression (< 1 s) of the left \wedge key (8.c)

Wall-mounted:

brief depression of key 4+ (8.d)

At first, all actuators are switched to 100 % brightness, i.e. ON, thereafter the light control starts up only with the actuator assigned to light control.

Handheld:

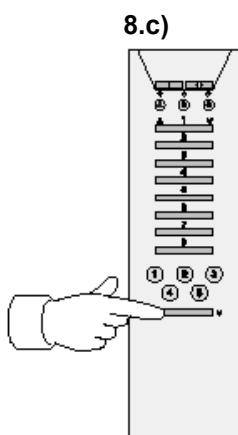
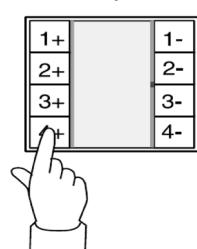
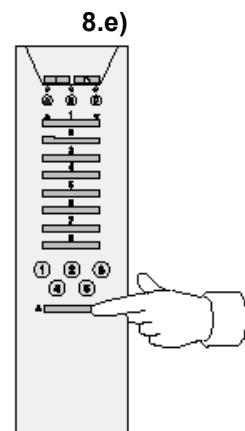
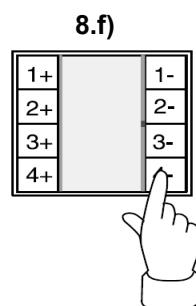
brief depression (< 1 s) of the right \vee key (8.e)

Wall-mounted:

brief depression of key 4- (8.f)

The lightscape is switched off and remains in this state as long as presence is detected (e.g. slide show). This is only possible when the lightscape key last pressed is programmed in the actuator. If no presence is detected and after the shut-off delay of 2 minutes has passed, the actuator involved in light control returns to automatic operation.

Returning to automatic is also possible by depressing briefly a key of a programmed radio-control transmitter.

**8.c)****8.d)****8.e)****8.f)****Handheld:**

long depression (> 1 s) of the left \wedge key (8.c)

Wall-mounted:

long depression of key 4+ (8.d)

The brightness of the whole active lightscape is increased (no light control).

Handheld:

long depression (> 1 s) of the right \vee key (8.e)

Wall-mounted:

long depression of key 4- (8.f)

The brightness of the whole active lightscape is reduced (no light control).

Important:

A brief or prolonged depression of the Master key produces no reaction when the lightscape is off.

9. Presence detector system (Master/Slave)

If larger areas are to be monitored, it is also possible to use several presence detectors together in the same system. In the presence detector system one presence detector must be specified as the master unit whereas all other detectors are used as slave units.

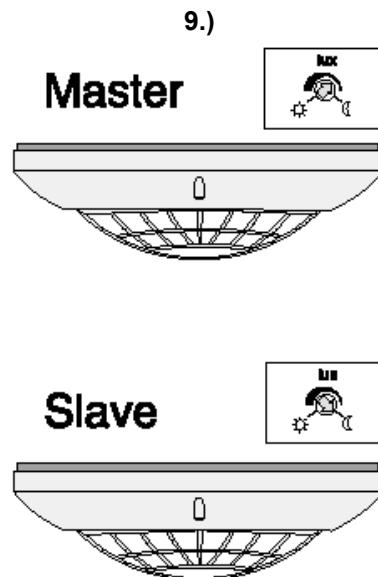
Reference brightness value

The desired reference brightness is adjusted on the master unit and is then valid for the whole system.

In all other presence detectors (slaves), the reference brightness must be set to minimum (moon symbol (fig. 9.).

Shut-off delays

The shut-off delay can be adjusted separately on all presence detectors used. If an actuator is switched by a presence detector, the shut-off delay of this device starts running.



Programming the presence detectors

When programming the presence detectors into the radio-control receiver (cf. section 2 „Programming a detector into a radio-control receiver“) make sure the presence detector specified as master unit is programmed first. The brightness reference control must therefore not be set to minimum (moon symbol) since the detector would otherwise be identified as slave, which means that it cannot be programmed as the first unit into an actuator.

The slave detectors can only be programmed thereafter. In the slaves, the brightness reference must be set to minimum (moon symbol).

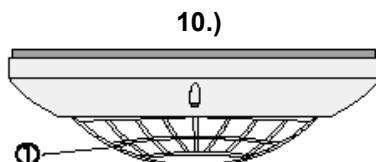
If a master has already been programmed, any further programming of a master overwrites the previous one, i.e. only one unit can be stored as master detector.

10. LED and LowBatt indicator

The LED behind the sensor window (fig. 10. ①) flashes up briefly 3 times during each transmission.

In the movement test mode, the LED flashes 6 times during each transmission.

If the LED flashes ca. 10 times during a transmission, the batteries are almost empty (LowBatt) and should be replaced (cf. section 2 „Inserting/replacing the batteries“).



11. Radio Transmission

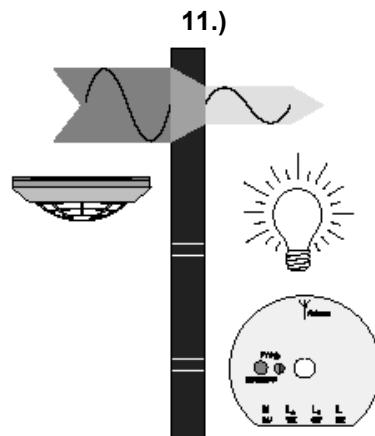
Radio transmission takes place on a non-exclusive path.

Therefore, interference cannot be excluded. This type of radio transmission is not suitable for safety applications such as emergency stops or emergency calls.

The range of a radio-control system depends on transmitter power, receiver characteristics, air humidity, fitting height and building conditions.

The figure illustrates the penetration of building materials by radio waves:

<u>Dry material</u>	<u>Permeability</u>
Timber, gypsum, gypsum-plasterboards	approx. 90 %
Brickwork, particle boards	approx. 70 %
Reinforced concrete	approx. 30 %
Metal, metal grating, aluminium lamination	approx. 10 %
Rain, snow	approx. 0 - 40%



Radio operation

- The inter-connection of this radio system with other communication networks must comply with national legislation.
- This radio system must not be used for communication beyond property boundaries.
- Operation in Germany is subject to the relevant regulations (Amtsblatt Vfg 73/2000).
- If utilized in conformity with its designated use, this unit fulfills the requirements of the R&TTE Directive (1999/5/EG). The complete declaration of conformity can be found in the internet under:
www.gira.de/konformitaet

The presence detector may be operated in all EU and EFTA countries.

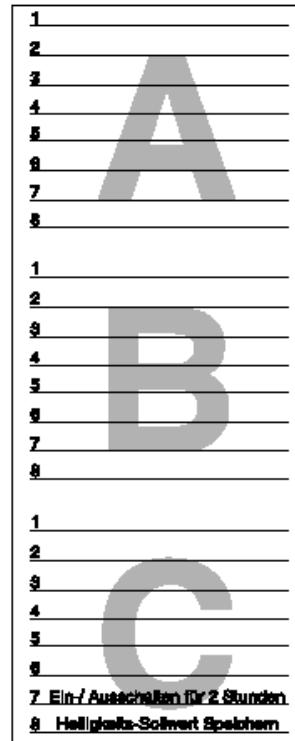
12. Technical specifications

Nominal voltage:	6 V DC	Nominal range	
Batteries:	4x1,5 V Micro LR03 (AAA) Alkaline	- at desk level:	approx. Ø 5 m
Note: Never use carbon-zinc batteries (R 03) or rechargeable batteries.			- at floor level: approx. Ø 8 m
Transmit frequency:	433.42 MHz	Fitting height for nominal range:	2.5 m
Modulation:	ASK	Shut-off delay:	approx. 2 min-1 h
Transmitting range:	max. 100 m free field	Brightness:	approx. 3-2000 lx
Coding:	> 1 billion	Temperature range:	0 °C ... 45 °C
Angle of detection:	360°	Degree of protection:	IP 20
		Dimensions	
		- diameter:	103 mm
		- height:	42 mm

12.)

N.B.

An adhesive label with the preset special light control functions for radio-control transmitters (Fig. 12.)
'Komfort' is supplied with the detector.



Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald

Gira
Giersiepen GmbH & Co. KG
Postfach 1220
D-42461 Radevormwald

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Internet: www.gira.de