

**Motion detector top unit 1.10 m Standard**

Order no.: 5373 ..

**Motion detector top unit 2.20 m Standard**

Order no.: 5375 ..

**User manual****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.

Danger of electric shock. Always disconnect before carrying out work on the device or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and 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 Intended use**

- Automatic switching of lighting depending on the heat motion and ambient brightness
- Operation with flush-mounted insert for dimming or switching or 3-wire extension
- Wall installation on flush-mounted insert

**Product characteristics**

- Extension of the detection area in combination with 3-wire extension
- Operation with 2-wire or 3-wire extension, rotary dimmer extension or push-button
- Selectable brightness threshold
- Selectable sensitivity
- Fixed run-on time
- Switch on with last saved brightness or saved switch-on brightness, with dimming insert
- Switch-on brightness can be saved permanently via extension, with dimming insert
- Dimming light via extension with dimming insert

**Motion detector cover 1.10 m**

- Screen for limiting the detection area

**Automatic operation**

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

- The light is switched on if a person enters the detection area and the brightness is below the set threshold.
- The run-on time restarts with each detected motion.
- The light is switched off, if:
  - no more movement is detected in the detection area and the run-on time has elapsed or
  - the ambient light is too bright and the run-on time has elapsed.

To avoid any switch-on caused by a cooling illuminant, no movement signals are evaluated for a brief lockout time after switching off. The motion detector adjusts itself to the ambient conditions to keep the time as short as possible.

### Behaviour after a mains voltage failure

After mains voltage return, the device performs a self-test for a maximum of 60 seconds. After the self-test has been completed, the device is ready for operation.

The following applies during the self-test:

- The load is switched on.
- Movements are not detected

## 3 Operation

Precondition: A 2-wire or 3-wire extension with button cover or a push-button is connected.

Multiple extensions can be combined with each other. Operation with the rotary dimmer extension is described in the rotary dimmer extension instructions.

### Switching on light for the duration of the run-on time

- Press the button cover or push-button for less than 0.4 seconds.  
Light is switched on depending on brightness and motion. Movements are evaluated according to the brightness and prolong the run-on time.
- i** If the button cover or push-button is pressed again in the switched-on state, the run-on time is restarted. In combination with a dimming insert, switch-on brightness is switched on again.

### Dim the light

Only in combination with a main device with a dimming insert.

- Press the button cover at the top or bottom or the push-button for longer than 0.4 seconds. Light becomes brighter or dimmer as far as the respective limit value.
- i** Push-button: The dimming direction is changed with each new long actuation.

### Save switch-on brightness

Only in combination with a main device with a dimming insert.

In the state as supplied, the switch-on brightness is set to maximum brightness.

- Set light to the required brightness.
- Press the button cover over entire surface for longer than 4 seconds.  
Switch-on brightness is saved. For confirmation, the light is switched off briefly and switched on again.
- i** An push-button cannot be used to save the switch-on brightness.

### Delete switch-on brightness

Only in combination with a main device with a dimming insert.

- Press the button cover briefly: Light switches on at the saved switch-on brightness.
- Press the button cover over entire surface for longer than 4 seconds.  
The switch-on brightness is deleted. On switching on, the dimming insert switches to the last set brightness value. For confirmation, the light is switched off briefly and switched on again.
- i** A push-button cannot be used to delete the switch-on brightness.

## 4 Information for electrically skilled persons



### **DANGER!**

Mortal danger of electric shock.

Disconnect the device. Cover up live parts.

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## 4.1 Fitting and electrical connection

### Motion detection

The detection of heat sources through a motion detector and thus the extent of the detection field is influenced by the following criteria:

Geometry of the detection field, assembly height and set sensitivity (Figure 1) up to (Figure 8)

Direction of movement: If motion detector passes tangentially, this results in a heat signal which can be evaluated well. If movement is radial to the sensor, the heat signal is smaller and thus harder to evaluate, resulting in a smaller range.

- i** The following specifications on the extent of the detection field are general guide values. Discrepancies can occur depending on the installation environment and the intensity of the heat motion.

### Motion detector cover 1.10 m detection field and range

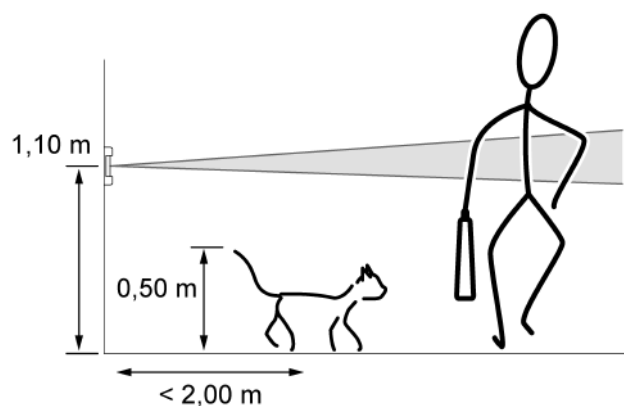


Figure 1: Motion detector cover 1.10 m detection field and installation height

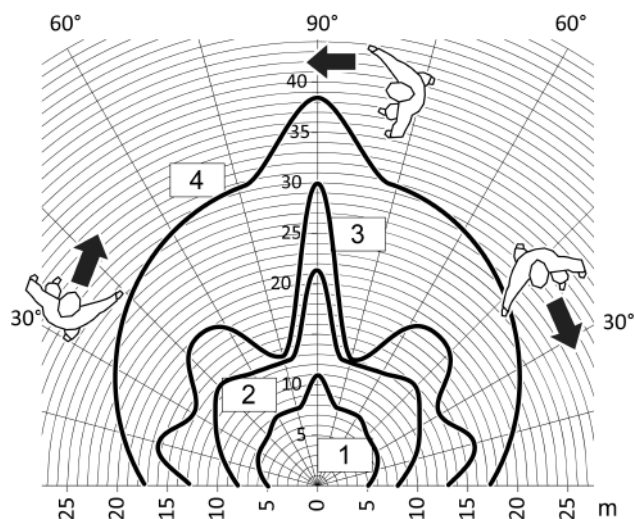


Figure 2: Range with tangential direction of motion motion detector cover 1.10 m

- 1 25% sensitivity
- 2 50% sensitivity
- 3 75% sensitivity
- 4 100% sensitivity

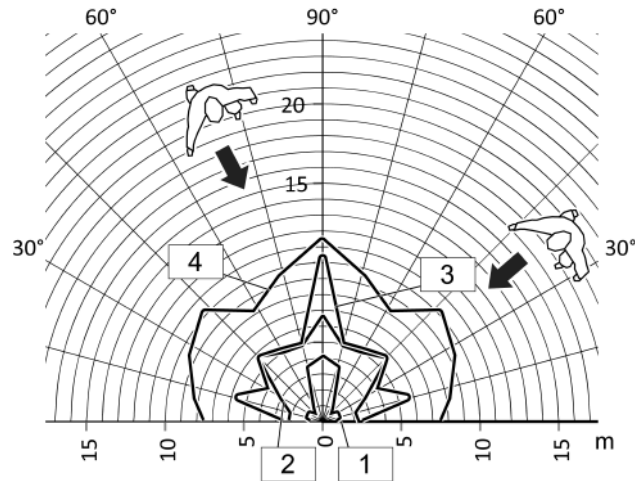


Figure 3: Range with radial direction of motion detector cover 1.10 m

- 1 25% sensitivity
- 2 50% sensitivity
- 3 75% sensitivity
- 4 100% sensitivity

**Motion detector cover 2.20 m detection field and range**

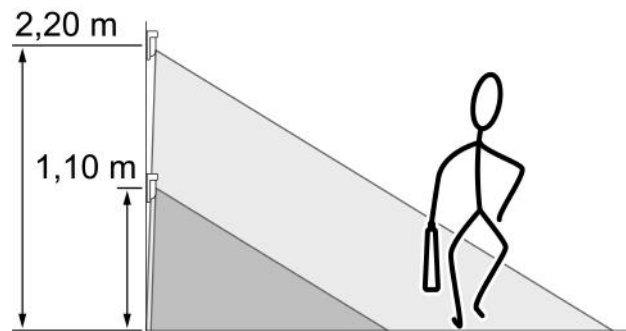


Figure 4: Motion detector cover 2.20 m detection field and installation height

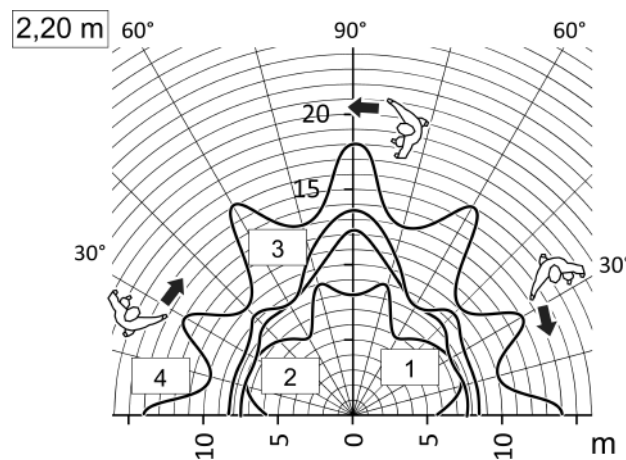


Figure 5: Range with tangential direction of motion detector cover 2.20 m, mounting height 2.20 m

- 1 25% sensitivity
- 2 50% sensitivity

- 3 75% sensitivity
- 4 100% sensitivity

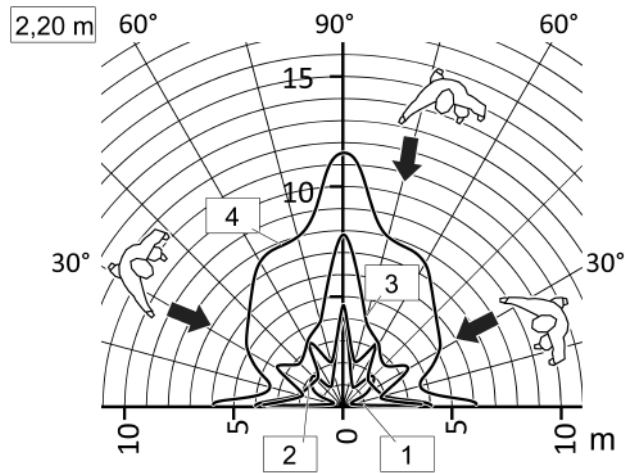


Figure 6: Range with radial direction of motion motion detector cover 2.20 m, mounting height 2.20 m

- 1 25% sensitivity
- 2 50% sensitivity
- 3 75% sensitivity
- 4 100% sensitivity

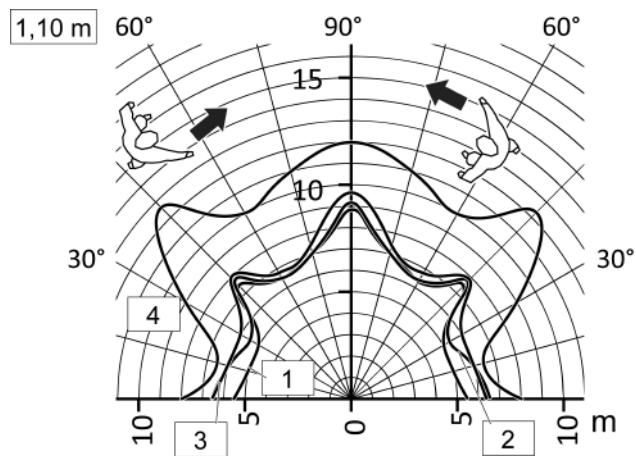


Figure 7: Range with tangential direction of motion motion detector cover 2.20 m, mounting height 1.10 m

- 1 25% sensitivity
- 2 50% sensitivity
- 3 75% sensitivity
- 4 100% sensitivity

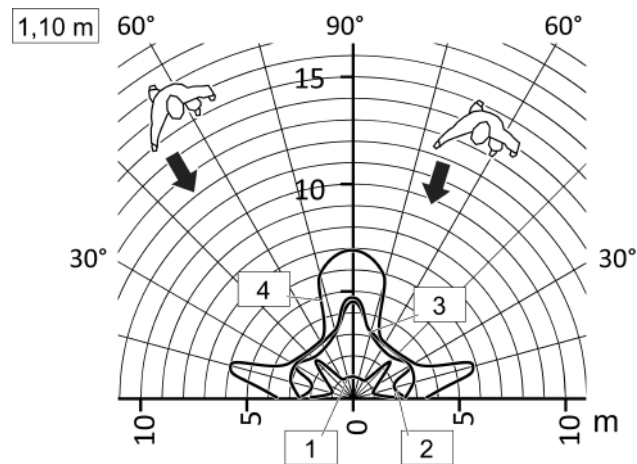


Figure 8: Range with radial direction of motion detector cover 2.20 m, mounting height 1.10 m

- 1 25% sensitivity
- 2 50% sensitivity
- 3 75% sensitivity
- 4 100% sensitivity

#### Selecting installation location

- Select a vibration-free installation location. Vibrations can lead to unwanted switching.
- To achieve optimum range, choose an installation location that is tangential to the direction of motion.
- Avoid interference sources in the detection area. Interference sources can trigger the motion detector, e.g. heat sources such as heating units, outlets from ventilation openings or air conditioners, copiers, printers, coffee machines, draughty doorways, animals etc.

#### Fitting the cover

- Connecting and mounting the FM insert properly (see flush-mounted insert instructions).
- Fit the cover with frame on the flush-mounted insert.

#### Expanding the detection field

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

#### Limiting the detection field motion detector cover 1.10 m

The detection field can be limited using a panel (Figure 9) and (Figure 10).

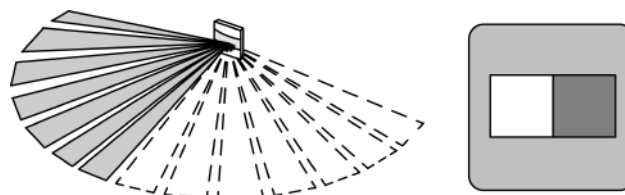


Figure 9: Limiting the detection field motion detector cover 1.10 m

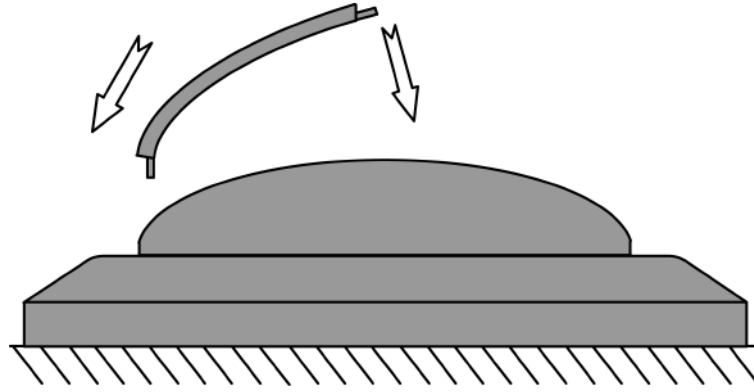
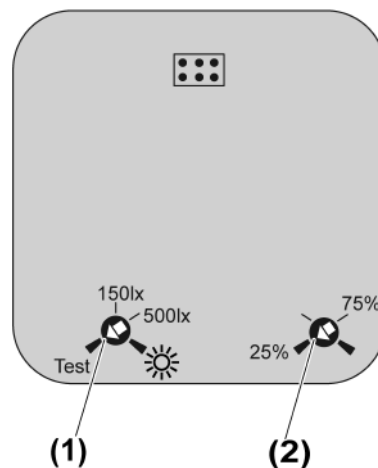


Figure 10: Mount the cover at 90°

## 4.2 Commissioning

### Make settings



The adjusters for the brightness threshold and sensitivity are located on the rear of the motion detector cover. The run-on time cannot be changed.

#### Setting the brightness threshold

Set the brightness threshold on the covers of the main device and all extensions. Different values can be set on the main device and extensions. There are 4 defined values for the brightness threshold. In setting ☀, the motion detector operates independently of the brightness (day operation). Setting **150lx** for stairways according to DIN EN12464-1, 2003-3.

- Turn adjuster (1).

#### Setting the sensitivity

Sensitivity can be set in 4 levels to minimize faulty switching.

- Turn adjuster (2).

#### Testing the detection area

- Make the test settings. For this, turn adjuster (1) to **Test**.  
The motion detectors operates independently of the brightness and switches on for approx. 1 second when motion is detected. The sensitivity setting remains intact.

## 5 Technical data

Ambient temperature	-20 ... +45 °C
Storage/transport temperature	-25 ... +70 °C



Degree of protection	
System 55, Gira E22, Flächenschalter (F100)	IP20
TX44	IP44
Brightness setting	approx. 5 ... 1000 lx and day operation
Sensitivity	25, 50, 75, 100 %
Run-on time	approx. 2 min
Installation height	
Order no. 5373 ..	1.10 m
Order no. 5375 ..	1.10 m / 2.20 m
Detection angle	180 °

## 6 Troubleshooting

### Motion detector does not switch on

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

Set brightness value (see Commissioning chapter).

Cause 2: Motion detector does not detect any motions.

Check detection area for any obstacles.

### Motion detector switches on without motion

Cause: Motion detector detects heat motions.

Pay attention to interference sources such as heaters, fans, air-conditioners and cooling illuminants in the detection area.

### Motion detector switches off despite motion

Cause: The ambient light is too bright and the switch-off threshold was exceeded.

Switch on motion detector.

### Motion detector does not switch off after the set run-on time has elapsed

Cause: Motion detector detects motions constantly.

Pay attention to interference sources such as heaters, fans and air-conditioners in the detection field.

## 7 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center. They will forward the devices to the Gira Service Center.



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