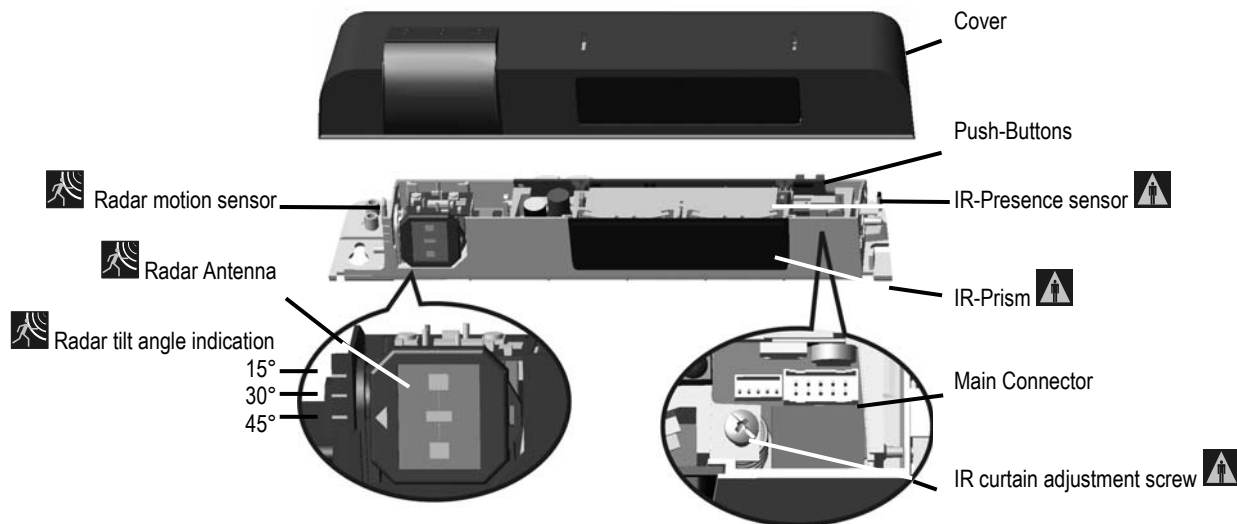


## 1 Description



## 2 Symbols and LED



LED turns on



LED flashing slowly



LED flashing quickly



Motion detection



Presence detection



Tip

### LED display during normal function



GREEN LED

Motion detection



RED LED

Presence detection



ORANGE LED

See chapter 4: Troubleshooting

## 3 Installation

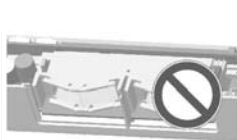
### 1 Tips



Use the Spotfinder to locate the safety curtains.



Avoid touching electrical parts!



Avoid touching optical parts!



Make sure the operator cover is fixed properly and electrically earthed.



Avoid vibrations!!!



Do not cover the sensor!



Avoid moving objects in proximity to the sensor!



Avoid discharge lamps and fluorescent lighting in proximity of the detection field!

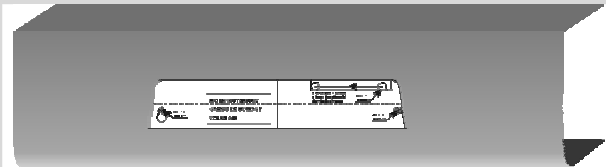


Avoid highly reflective objects in the infrared field!

## 2 Mounting the sensor

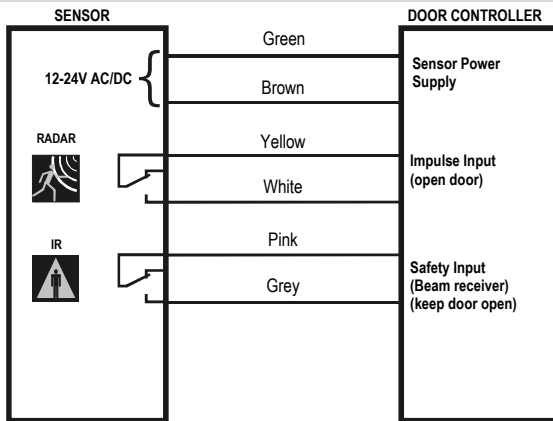


Mount the sensor at a maximum height of 5cm from the bottom line of the door operator.



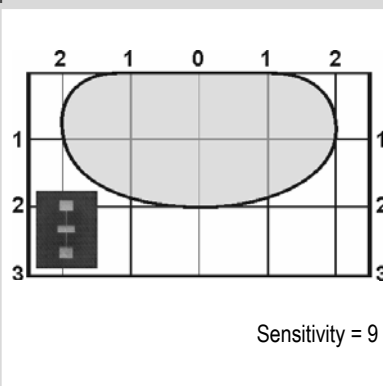
Use the mounting template to drill holes and position the sensor.

## 3 Wiring the sensor

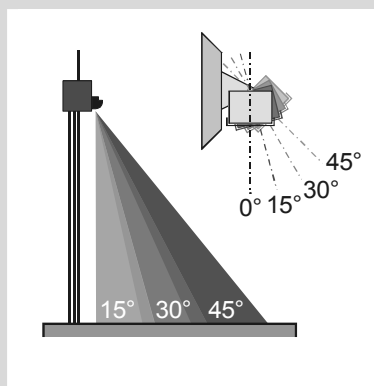


To ensure good water protection, place the cable as shown above.

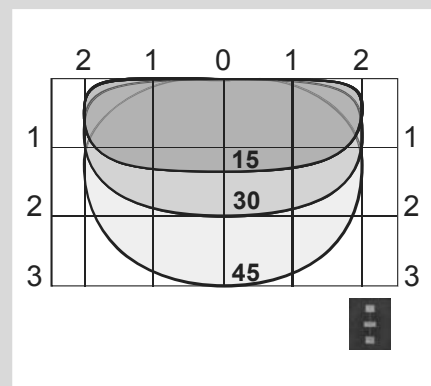
## 4 Radar motion sensing field



Width of sensing field



Depth of sensing field



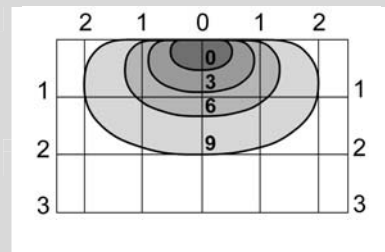
## 5 Setting the sensitivity by push button



Each press on the right button increases the sensitivity of the radar sensing field.



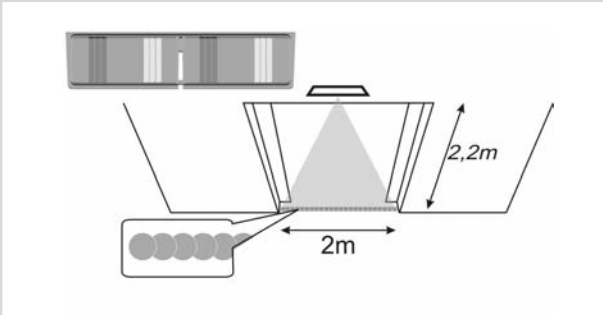
Each press on the left button decreases the sensitivity of the radar sensing field.



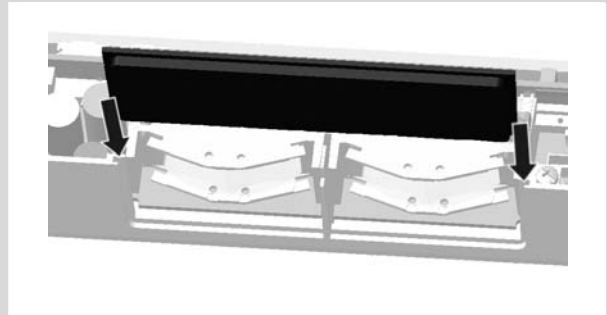
# 6



## IR presence sensing field : width



1 curtain of 24 overlapping spots  
(no gaps between the spots)

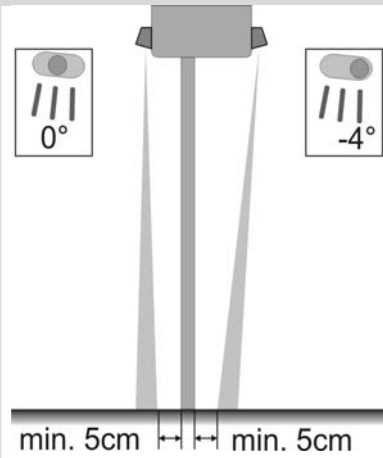


Make sure to introduce the front prism into the foreseen slides in front of the lenses!

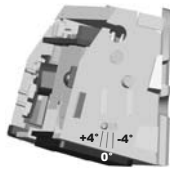
# 7



## IR presence sensing field : depth (negative angle available)



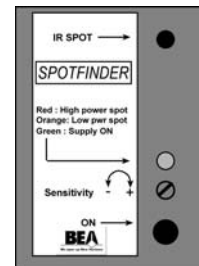
When mounting one sensor on each side of the door above a highly reflective threshold, select different frequencies to avoid crosstalk between the sensors.



The pin shown here above indicates the angle adjusted.



To approach the curtain to the door, turn the screw clockwise. To tilt the curtain out, turn the screw counterclockwise.



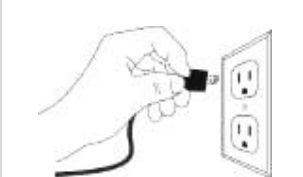
Use the Spotfinder (accessory) to locate the curtain.

Keep a **minimum distance of 5cm** between the door and the curtain.

# 8

## Launching a setup

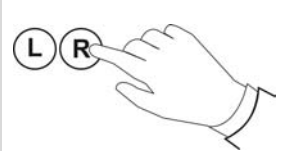
### Short setup



Cut and restore power.  
Recommended after adjustments by push buttons.

The sensor takes a new reference picture.

### Assisted setup



Press and hold the right push button until the LED flashes RED-GREEN.  
Recommended after first installation or mechanical adjustments of the IR-module.

The sensor performs a door opening and closing cycle to check the influence of the door leaves on the safety curtain.

### LED display during setup

Setup-process active: the sensor learns its environment.  
After finishing the setup process, the sensor shows the following behavior:

RED-  
GREEN  
LED



NO LED

The sensor successfully finished its setup.



RED LED flashing quickly

The sensor 'sees' the door movement and can not finish its setup (see troubleshooting).



ORANGE LED continuously on



The sensor encounters signal saturation (see troubleshooting).

## 4 Troubleshooting

SYMPTOMS	POSSIBLE CAUSES	CORRECTIVE ACTION
Red LED flashing quickly after an assisted setup.	The sensor 'sees' the door movement and can not finish its setup.	Adjust the position of the IR curtains.
Orange LED permanently ON after an assisted setup.	The sensor encounters a signal saturation.	Use the wide-field prism and/or slightly increase the IR curtains angle (turning the screw counterclockwise).
Orange LED ON	The sensor encounters a signal saturation.	Use the wide-field prism and/or slightly increase the IR curtains angle (turning the screw counterclockwise). Launch an assisted setup.
Orange LED flashes	The sensor signals an internal fault.	Cut and restore the power supply. If the orange LED lights up again, replace faulty sensor.
Red LED ON	The sensor detects a presence.	Wait the time set in "maximum duration of presence detection" setting or launch an assisted setup (with the remote control or right push button).
Unwanted presence detection	The sensor is not placed properly and/or the front face is not properly fixed.	Fasten the sensor firmly and/or check whether the front face prism is placed into the foreseen slides (see section 6) and not in the sensor cover.

## 5 Technical Specifications

Supply voltage	: 12V (-5%) to 24V (+10%) AC/DC
Mains frequency	: 50 - 60 Hz
Power consumption	: < 3 W
Mounting height	: 1.8 m to 3 m
3-color LED	: RED (presence detection) – GREEN (motion detection) – ORANGE (signal saturation, error)
Temperature range	: -25°C to +55°C
Degree of protection	: IP54
Dimensions	: 262 mm (L) x 55 mm (H) x 44 mm (D)
Weight	: 250 g
Housing material	: ABS + LURAN S
Minimum length of cable	: ± 2.6 m
Range of Remote Control	: 5 m

	 MOTION SENSOR	 PRESENCE SENSOR																								
Detection mode	Motion - Bidirectional Minimum detection speed: 5 cm/s (measured in sensor axis)	Presence Response time: < 128ms																								
Technology	Microwave and microprocessor Transmitter frequency: 24.175 GHz Transmitter radiated power: < 20 dBm EIRP Transmitter power density: < 5 mW/cm <sup>2</sup>	Focused active infrared and self-monitored microprocessor Spot diameter (standard): 0.1m max Number of spots: 24 or 12 spots by curtain Number of curtains: 1																								
Detection field	<table border="1"> <thead> <tr> <th></th> <th>Width</th> <th>Depth</th> <th></th> </tr> </thead> <tbody> <tr> <td>Wide</td> <td>4 m</td> <td>2 m</td> <td></td> </tr> <tr> <td>Narrow</td> <td>2 m</td> <td>2,5 m</td> <td>OPTIONAL</td> </tr> </tbody> </table>		Width	Depth		Wide	4 m	2 m		Narrow	2 m	2,5 m	OPTIONAL	<table border="1"> <thead> <tr> <th></th> <th>Width</th> <th>Depth</th> <th></th> </tr> </thead> <tbody> <tr> <td>Wide</td> <td>2 m</td> <td>0,35 m</td> <td></td> </tr> <tr> <td>Narrow</td> <td>1 m</td> <td>0,35 m</td> <td>OPTIONAL</td> </tr> </tbody> </table>		Width	Depth		Wide	2 m	0,35 m		Narrow	1 m	0,35 m	OPTIONAL
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Angle	From 15° to 50° in elevation (adjustable)	From - 4° to + 4° (adjustable)																								
Output specification	Relay (free of potential contact): Max. contact voltage: 42V AC/ DC Max. contact current: 1A (resistive) Max. switching power: 30W (DC) / 60VA (AC)	Relay (free of potential contact): Max. contact voltage: 42V AC/ DC Max. contact current: 1A (resistive) Max. switching power: 30W (DC) / 60VA (AC)																								
Output holdtime	0.5s	0.1/1s																								
Detection time		30s (standard) 10s (during 1h in case of disturbances)																								

Sensing field dimensions given at 2.2m mounting height.  
Specifications are subject to changes without prior notice.

## 6 Accessories (sold individually)



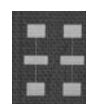
Spotfinder



ACA



ABA



Narrow field antenna



Narrow field prism