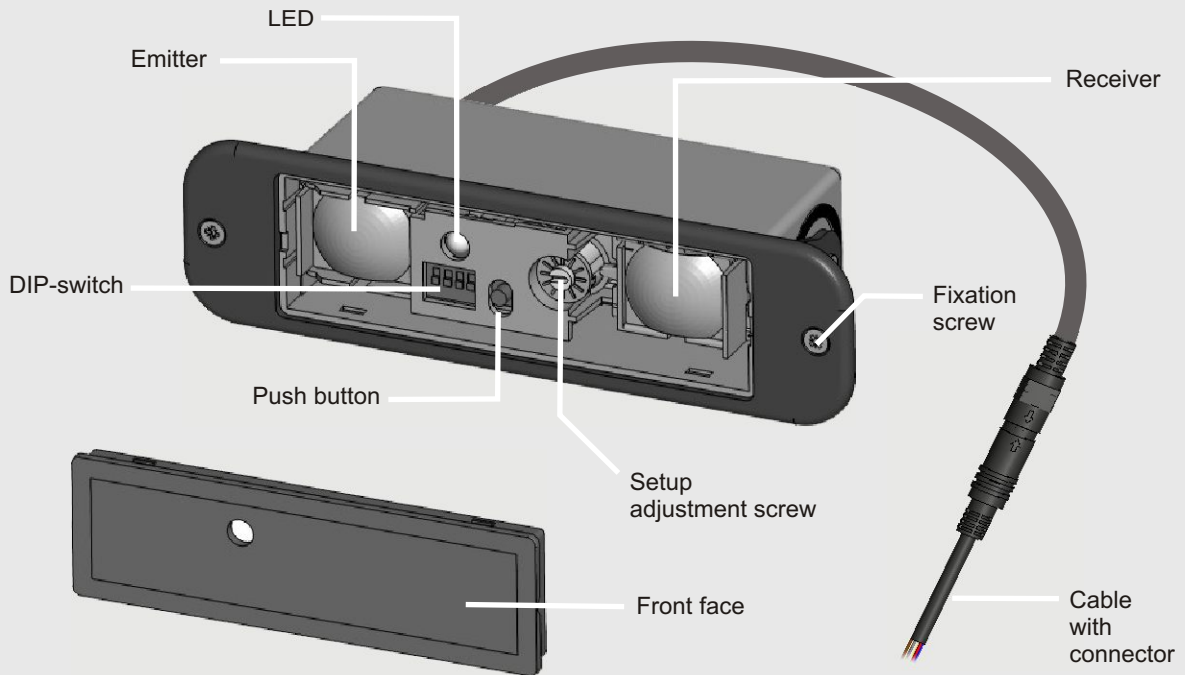




ACTIVE INFRARED SAFETY SENSOR FOR AUTOMATIC DOORS

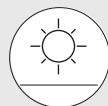
DESCRIPTION



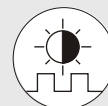
LED-SIGNAL

 RED LED is ON during detection

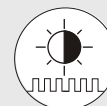
 ORANGE LED flashes 1X after power on



ON



FLASHES SLOWLY

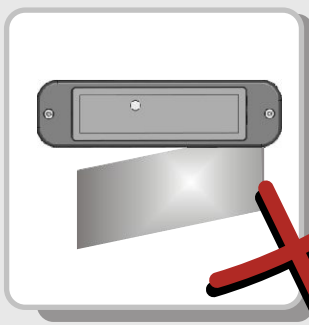


FLICKERS

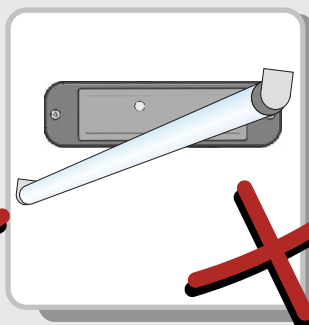


OFF

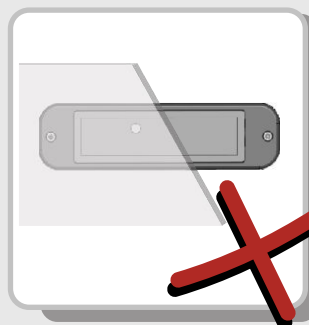
INSTALLATION TIPS



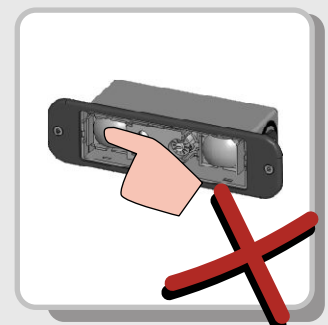
Avoid reflective background or objects in the detection field of the sensor.



Avoid high intensity lightning in the detection field.

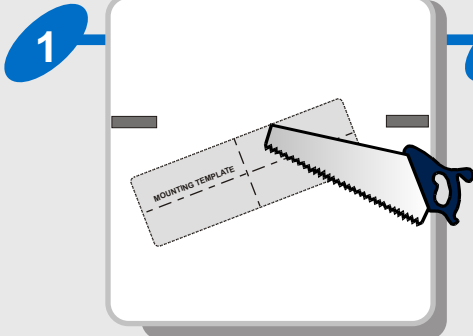


Do not cover the sensor.

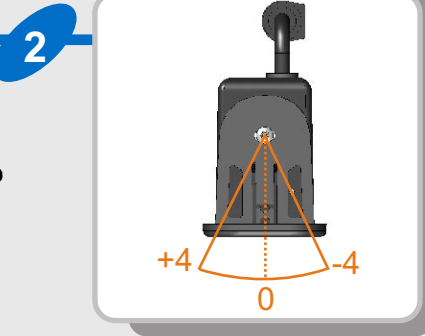


Do not touch the optical parts.

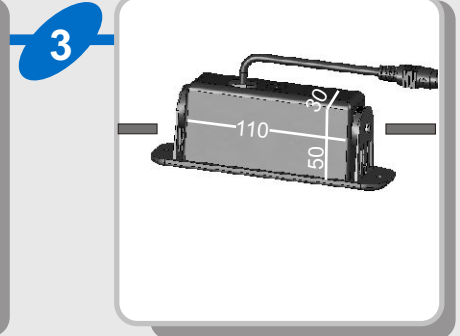
INSTALLATION



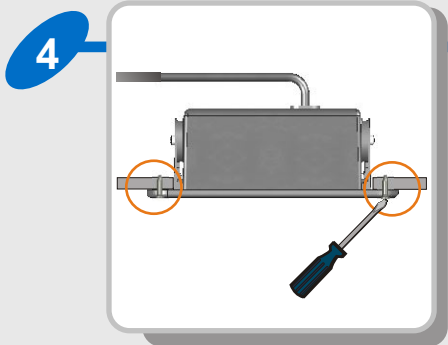
Use the mounting template to cut out the opening for the sensor.



Adapt the angle of the sensor.



Connect the cable and insert the sensor into the opening.

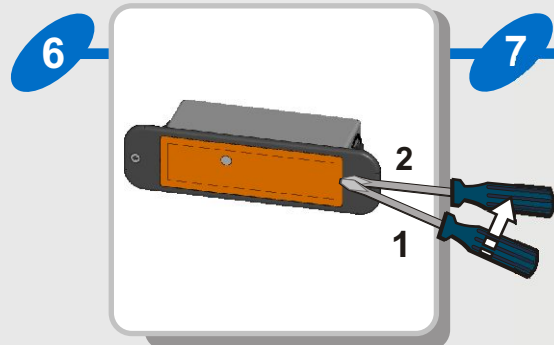


After inserting the sensor, fix the 2 screws firmly.

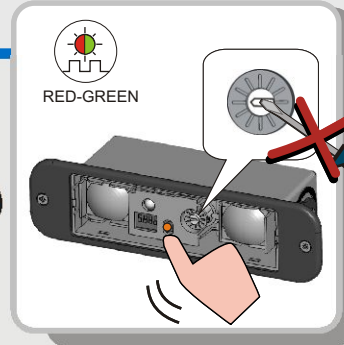
5

BROWN		Power supply
GREEN		12-24V AC/DC
YELLOW		COM
WHITE		NC
BLACK		NO
RED		Monitoring
BLUE		

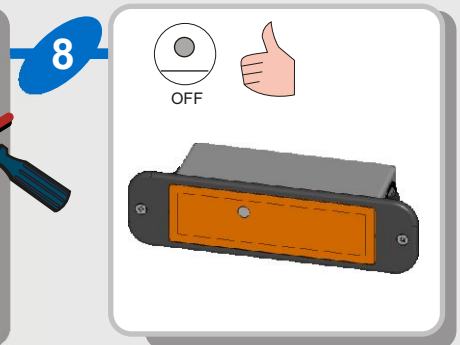
	NORMALLY OPEN ACTIVE LOGIC YELLOW-BLACK	NORMALLY CLOSED PASSIVE LOGIC YELLOW-WHITE
NO POWER		
NO DETECTION		
DETECTION		



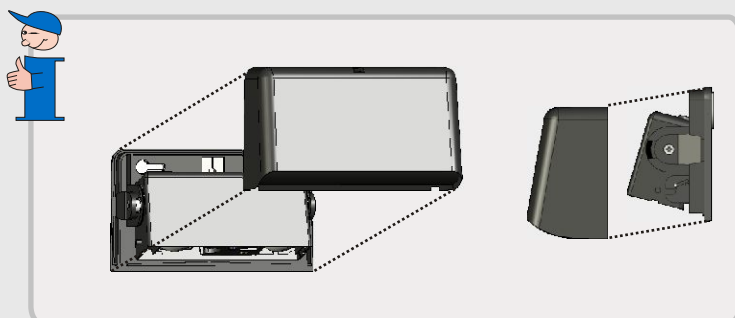
Unclips the front face by inserting a screwdriver as shown.



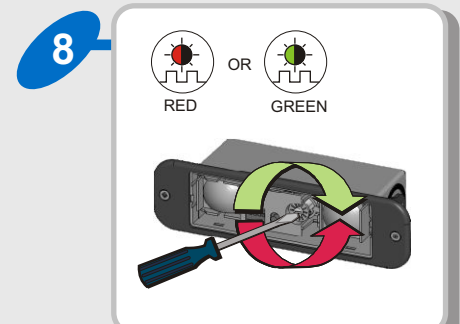
Push the push button shortly to launch an automatic setup. The LED will flash RED-GREEN.



When the LED turns OFF the sensor is correctly installed. Fasten the front face and test the good functioning of the sensor.



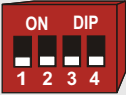
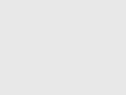

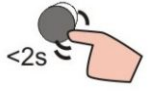






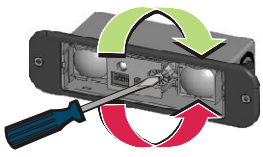
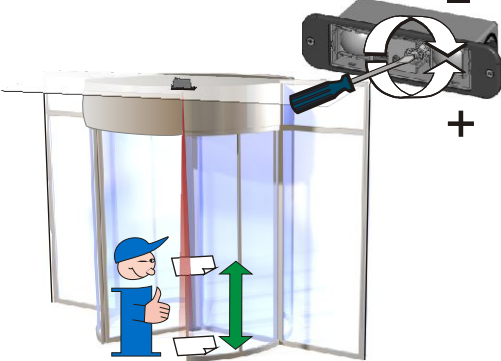







The sensor can also be installed on the surface by using the surface mount accessory (sold separately).



If the LED continues flashing, you have to adjust the sensor further (see SETUP next page).

ADDITIONAL ADJUSTMENTS

When the application requires specific adjustments, you can adapt the sensor by using the dip switches.






	OFF (Factory values)	ON
		
	1	1
	Automatic mode	Manual mode
SETUP	<p> Do not touch the screw. It should be positioned as shown.</p> <p> Push the push button shortly to launch an automatic setup.</p> <p> LED flashes RED-GREEN.</p> <p> RED-GREEN</p> <p>+</p> <p> OK</p> <p>OFF</p> <hr/> <p> GREEN</p> <p> RED</p> <hr/> <p> Switch to manual mode</p> <p>4x ORANGE</p> 	<p>When?</p> <ul style="list-style-type: none"> - low reflectivity of background - no background or mounting height > 3m - mounting height < 1.6m - uncovered zone > 40cm <p>How?</p> <p>Decrease (-) or increase (+) the uncovered zone and check it by moving a white paper up and down under the sensor.</p>  <p> Do not move the white paper horizontally!</p>
	UNCOVERED ZONE	<p>2</p> <p> Small (25cm at 2.2m)</p> <p>When?</p> <p>When increased door safety is required.</p> <p>Relaunch a setup after changing dip switch 2</p>
FREQUENCY	<p>3</p> <p> Frequency 1</p> <p>When?</p> <p>When 2 or more sensors are installed in proximity to each other, it is recommended to choose different frequencies to avoid crosstalk.</p> 	<p>3</p> <p> Frequency 2</p> <p>When?</p> <p>When 2 or more sensors are installed in proximity to each other, it is recommended to choose different frequencies to avoid crosstalk.</p> 
	MONITORING	<p>4</p> <p> Monitoring Active High</p> <p>When?</p> <p>When the monitoring input mode is active high or when no monitoring is required.</p>

TROUBLESHOOTING

SYMPTOM

POSSIBLE CAUSES

CORRECTIVE ACTION

The sensor detects erratically.			Launch setup and check adjustment. Check if proximate modules have different frequencies. Increase the uncovered zone.
The LED is OFF, but the relay "clicks".		The monitoring mode is wrong. The wiring is not correct.	Change the position of DIP 4. Check wiring: connect RED and BLUE to monitoring output. If the door control has no monitoring: do not connect RED and BLUE wires.
The red LED is permanently ON.		Bad adjustment of the uncovered zone. The signal received from background is too weak. The distance to the floor has changed due to external factors.	Launch a manual setup. Launch a manual setup. Launch a new setup.
The red LED flickers.		The sensors interfere with each other due to overlapping detection zones.	Increase the distance between the sensors or select a different frequency on each sensor.
The red LED flashes during setup.		You are standing inside the detection field. Range is too short.	Step outside the detection field. Check if the sensor is installed correctly.
The orange LED flashes 4x during setup.		The signal received from background is too weak.	Launch a manual setup.

TECHNICAL SPECIFICATIONS

Technology:	active infrared		
Detection mode:	presence detection by distance measurement		
Detection field:	35mm x 70mm (at 2.2m mounting height)		
Response time:	32ms - 64ms (depending on detection speed setting)		
Mounting height:	0.6m - 3m		
Supply voltage:	12V - 24V AC/DC -5% / + 10%		
Mains frequency:	50 - 60 Hz		
Max. current consumption:	120mA @ 24V AC / 80mA @ 24V DC		
Standard output:	relay (free of potential contact)	Monitoring input:	1 optocoupler (free of potential contact)
Max. contact voltage:	42V AC/DC	Max. contact voltage:	30V
Max. contact current:	1A (resistive)	Voltage threshold:	High state: >10V Low state: <1V
Max. switching power:	30W (DC) / 60VA (AC)		
Hold time:	0.5s		
Reflectivity:	min. 10% at IR-wavelength of 850nm		
Temperature range:	-25°C - +55°C; 0-95% rel. humidity, non condensing		
Degree of protection:	IP53		
Norm conformity:	Electromagnetic compatibility (EMC) according to 2004/108/EEC		
Dimensions:	144mm (L) x 40mm (H) x 50mm (D)		
Housing material:	ABS (black)		
Length of main cable:	2.5m		

Specifications are subject to changes without prior notice

The colour version of this user's guide and other technical documentation are available on our website (www.bea.be) or can be requested by phone (+32 4 361 65 65) or mail (info@bea.be).