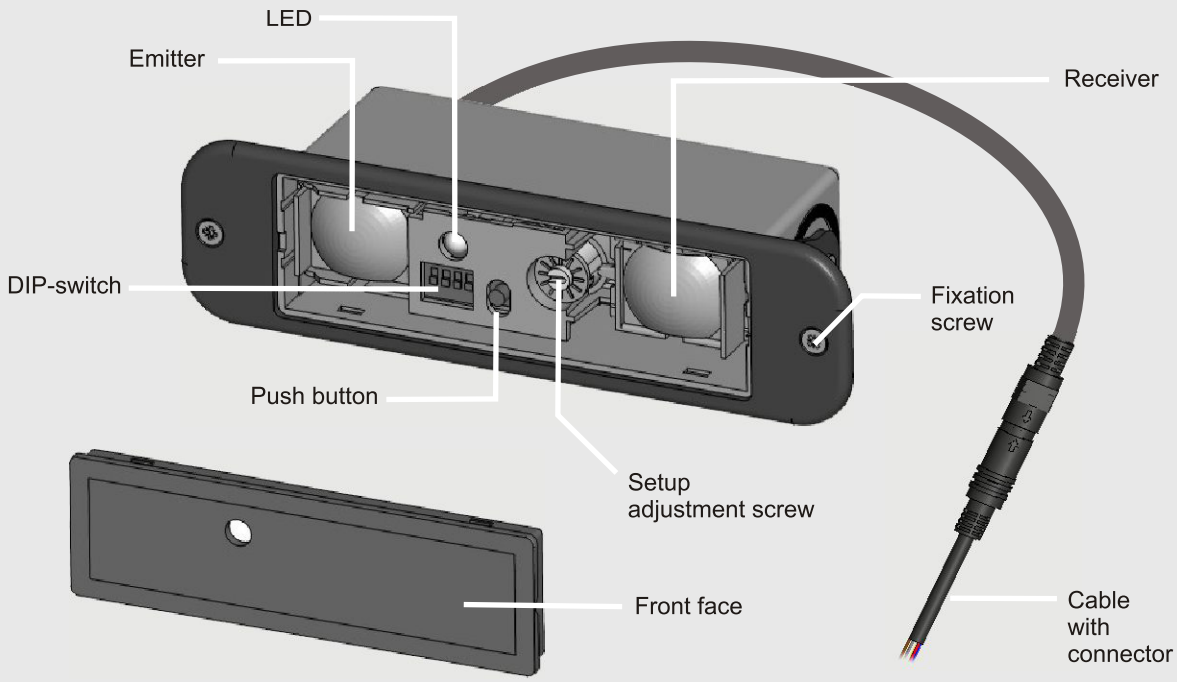
OPEN UP NEW HORIZONS

SMART FOCUS
USER'S GUIDE

ACTIVE INFRARED SENSOR FOR AUTOMATIC DOORS

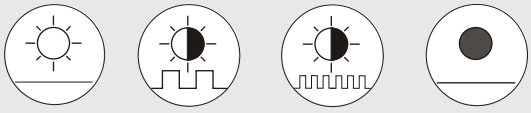
DESCRIPTION



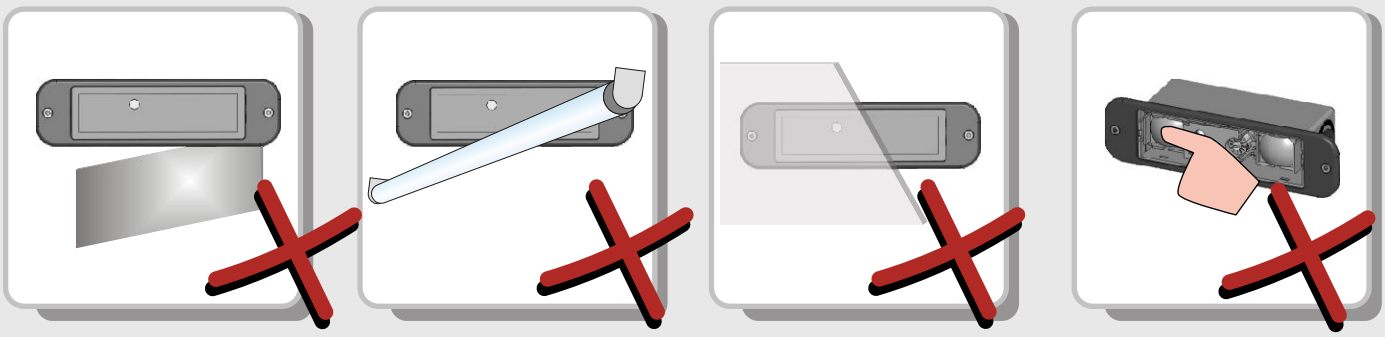
LED-SIGNAL

RED LED is ON during detection

ORANGE LED flashes 1X after power on



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.

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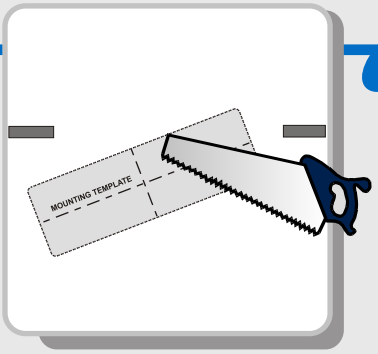
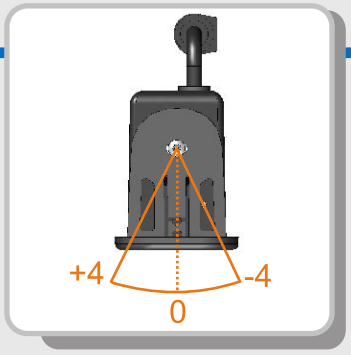
INSTALLATION

1



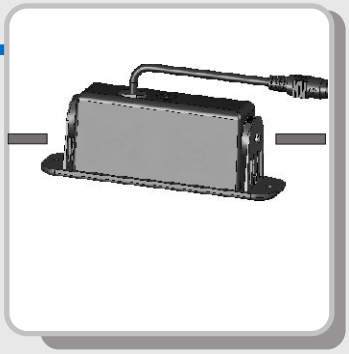
Use the mounting template to cut out the opening for the sensor.

2



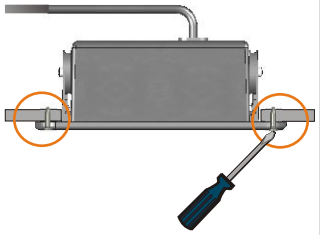
Adapt the angle of the sensor.

3



Connect the cable and insert the sensor into the opening.

4



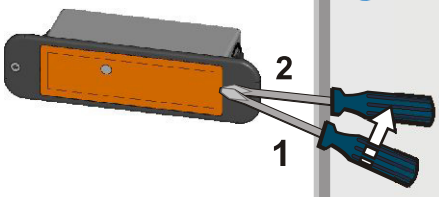
After inserting the sensor, fix the 2 screws firmly.

5

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

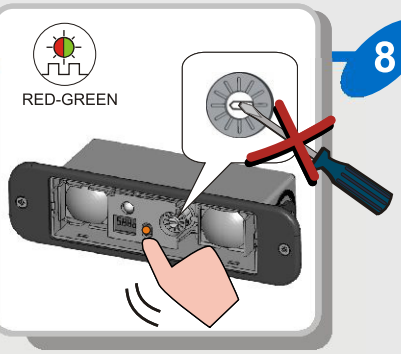
	NORMALLY OPEN ACTIVE LOGIC White-Green
NO POWER	
NO DETECTION	
DETECTION	

6



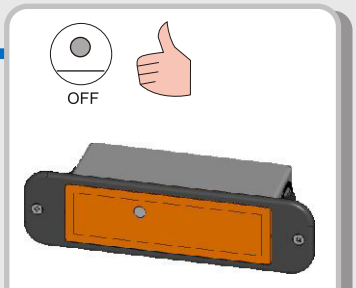
Unclips the front face by inserting a screwdriver as shown.

7

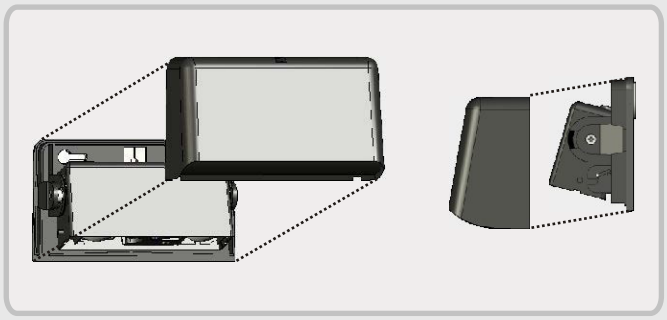


Push the push button shortly to launch an automatic setup. The LED will flash RED-GREEN.

8

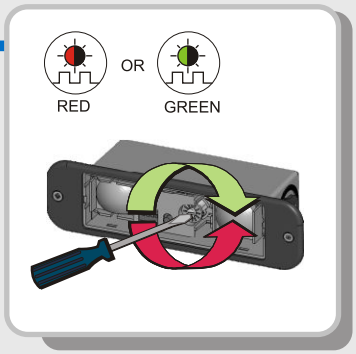


When the LED turns OFF the sensor is correctly installed. Fasten the front face and test the good functioning of the sensor.



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

9



If the LED continues flashing, adjust clockwise (flashing-green) or counter-clockwise (flashing-red).

ADDITIONAL ADJUSTMENTS

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

ON DIP 1 2 3 4	OFF (Factory values)	ON
1 SETUP	**Automatic mode** *Do not touch the screw. It should be positioned as shown.* Push the push button shortly to launch an automatic setup. (<2s) RED-GREEN + : LED flashes RED-GREEN. OFF : OK GREEN : CLOCKWISE RED : COUNTER-CLOCKWISE 4x ORANGE : Switch to manual mode	Manual mode When? - low reflectivity of background - no background or mounting height > 10′ - mounting height < 5.25′ - uncovered zone > 15.75″ How? Decrease (-) or increase (+) the uncovered zone and check it by moving a white paper up and down under the sensor. Do not move the white paper horizontally!
2 UNCOVERED ZONE	**Small (9.85″ @ 7.25′)** When? When increased door safety is required. Relaunch a setup after changing dip switch 2	**Big (15.75″ @ 7.25′)** When? When increased immunity to disturbances is required. Relaunch a setup after changing dip switch 2
3 FREQUENCY	**Frequency 1**	Frequency 2 When 2 or more sensors are installed in proximity to each other, it is recommended to choose different frequencies to avoid crosstalk. F1 F2
4 MONITORING	**Monitoring Active High** Not Used	Monitoring Active Low Not Used

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TROUBLESHOOTING

SYMPTOM		POSSIBLE CAUSES	CORRECTIVE ACTION
The sensor detects eratically.			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:	1.37″ x 2.75″ @ 7.25′ mounting height (35mm x 70mm @ 2.2m mounting height)
Response time:	32ms - 64ms (depending on detection speed setting)
Mounting height:	2′ x 10′ (0.6m - 3.0m)
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)
Max. contact voltage:	42V AC/DC
Max. contact current:	1A (resistive)
Max. switching power:	30W (DC) / 60VA (AC)
Hold time:	0.5s
Reflectivity:	min. 10% at IR-wavelength of 850nm
Temperature range:	-13℉ (-25℃) to 131℉ (+55℃); 0-95% Relative Humidity, Non-Condensing
Degree of protection:	IP53
Norm conformity:	Electromagnetic compatibility (EMC) according to 2004/108/EEC
Dimensions:	5.67″ (144mm) (L) x 1.57″ (40mm) (H) x 1.97″ (50mm) (D)
Housing material:	ABS (black)
Length of main cable:	8.2′ (2.5m)

Specifications are subject to changes without prior notice

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CAUTION

Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please call BEA, Inc. If you must wait for the following workday to call BEA, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation of the automatic door or gate for an incomplete solution. The following numbers can be called 24 hours a day, 7 days a week. For more information, visit www.beasensors.com.

US and Canada: 1-866-249-7937
Canada: 1-866-836-1863
Northeast: 1-866-836-1863
Southeast: 1-800-407-4545
Midwest: 1-888-308-8843
West: 1-888-419-2564