4SAFE OFF SW
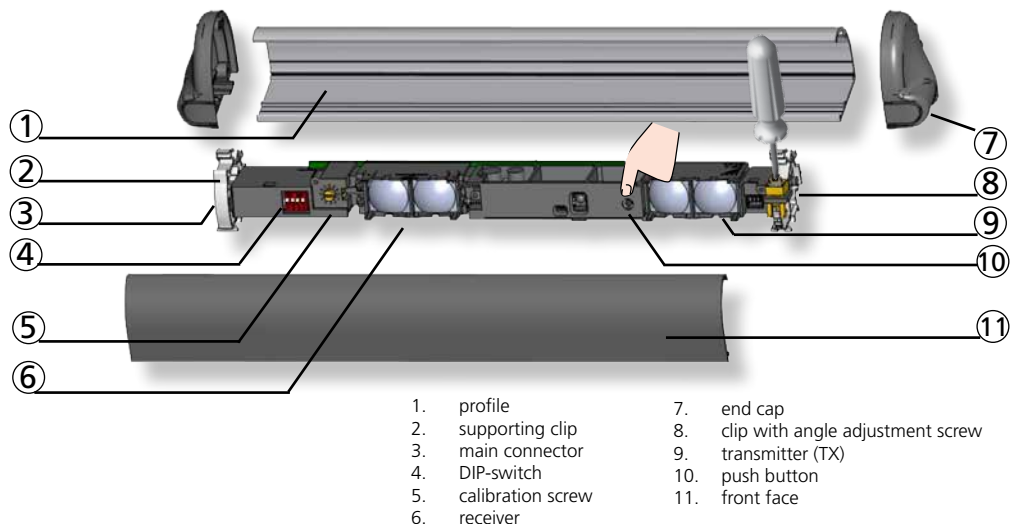
Safety sensor
for automatic swing doors

User's Guide for product version 0500 and higher
See product label for serial number

DESCRIPTION

1. profile
2. supporting clip
3. main connector
4. DIP-switch
5. calibration screw
6. receiver
7. end cap
8. clip with angle adjustment screw
9. transmitter (TX)
10. push button
11. front face

TECHNICAL SPECIFICATIONS

|	
Technology:	active infrared with background suppression
Emission field:	400 mm (W) x 70 mm (D) (at 2 m mounting height; 4 spots active)
Mounting height:	1.3 m to 3.5 m
Reaction time:	64 ms (typ)
Max. presence time:	infinite
Supply voltage:	12 V - 24 V AC +/-10% ; 12 V - 30 V DC -5%/+10% (to be operated from SELV compatible power supplies only)
Max current consumption:	95 mA @ 24 V AC/ 70 mA @ 24 V DC; 170 mA @ 12 V AC/ 130 mA @ 12 V DC (MASTER) 85 mA @ 24 V AC/ 60 mA @ 24 V DC; 180 mA @ 12 V AC/ 113 mA @ 12 V DC (other modules)
Output:	2 relays (free of potential contact)
Max. contact voltage	42 V AC/DC
Max. contact current	1 A (resistive)
Max. switching power	30 W (DC) / 42 VA (AC)
Max. number of modules:	4 (up to 6 if 24 V DC)
Reflectivity:	min. 5% at IR-wavelength of 850 nm
Degree of protection:	IP53
Temperature range:	-25 °C to +55 °C; 0-95% relative humidity, non condensing
Expected lifetime:	20 years
Norm conformity:	EN 61000-6-2; EN 61000-6-3; EN 50581

1 MOUNTING THE PROFILE

Mount the profiles as close as possible to the closing edge. Leave 2 cm for the black end caps. Take the position of the white clips into account before drilling and fastening the screws.

2 cm
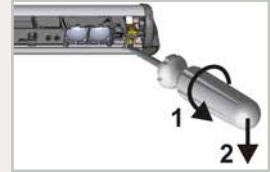
To loosen the modules, please use a screwdriver.
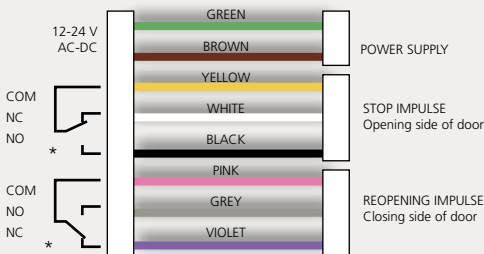
2 POSITIONING THE MODULES

TX
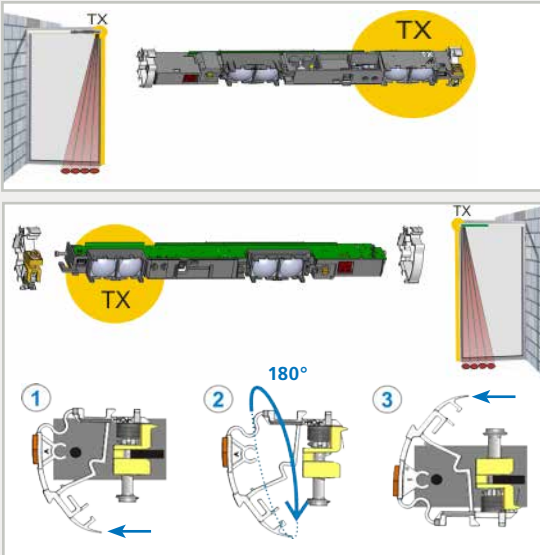
Place the transmitter (TX) next to the door edges that needs to be protected.

Position the angle adjustment clip next to the transmitter.

If necessary, turn the module and reposition the clips as indicated.

1. Detach the clips
2. Turn them by 180°
3. Reattach

180°

3 WIRING

GREEN	
BROWN	POWER SUPPLY
YELLOW	
WHITE	STOP IMPULSE Opening side of door
BLACK	
PINK	
GREY	REOPENING IMPULSE Closing side of door
VIOLET	

12-24 V AC-DC

COM
NC
NO
*

COM
NO
NC
*

* Output status when sensor is operational

The module connected to the door controller becomes the **MASTER**.

	NO	NC
NO POWER		
NO DETECTION		
DETECTION		
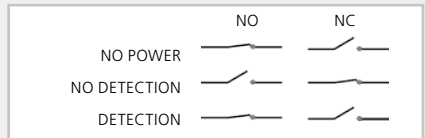
Plug the SLAVE CABLE between the modules in one of the two placements.

4 SETTINGS

		MOUNTING SIDE	FREQUENCY	BACKGROUND	UNCOVERED ZONE
ON		RELAY 1 🔴 STOP	FREQ A	ON	HIGH
OFF		RELAY 2 🟢 REOPENING	FREQ B	OFF	LOW

FACTORY VALUE

LED during detection: R1 > RED R2 > GREEN	Set different frequencies on modules close to each other.	Not enough background reflectivity: switch to OFF	Approximate values at 2 m: high= 40 cm, low = 15 cm

5 CALIBRATION

A SHORT push on the button of the **MASTER** launches a calibration on ALL MODULES.

Do not stand in the detection field!

RED-GREEN

OFF — When the LED is off on all modules, the detection zone is OK.

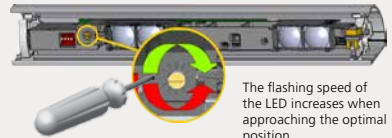GREEN — The detection zone is too short: turn the screw clockwise.

RED — The detection zone is too long: turn the screw anticlockwise.

The flashing speed of the LED increases when approaching the optimal position.

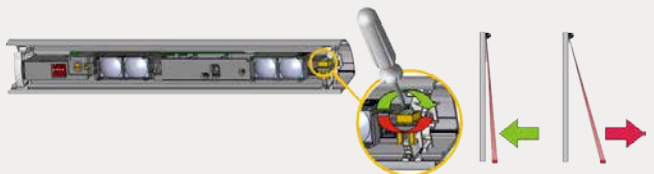ORANGE **4** — Step out of the detection field. If necessary, change angle or switch off background (DIP 3 = OFF).

5 — Launch a new calibration.

6 DOOR SAFETY CHECK

IMPORTANT: Test the good functioning of the installation before leaving the premises.

If necessary, position spots closer to or away from the door and **relaunch a calibration**.

LED-SIGNALS

🔴 🟢 The RED or GREEN LED is ON sporadicly or permanently.	Bad calibration	**1** Launch a calibration.
	Bad adjustment of the uncovered zone.	**1** Check if the DIP-switch 4 is in correct position. **2** Launch a calibration.
	The sensor is disturbed by lamps or another sensor.	**1** Select a different frequency for each module (DIP 2). **2** Launch a calibration.
🟡 The ORANGE LED is on permanently.	The sensor encounters a memory problem.	**1** Send the sensor back for a technical check-up.
🟡 **4** The ORANGE LED flashes 4 x every 3 seconds.	The sensor receives not enough IR-energy.	**1** Launch a new calibration and step out of the detection field. **2** Change angle of spots. **3** Switch off background (DIP 3: OFF).
🟡 **5** The ORANGE LED flashes 5 x every 3 seconds.	Calibration error	**1** Check mounting height. **2** Change position of calibration screw. **3** Launch a new calibration. **4** Switch off background (DIP3: OFF)

CE

BEA hereby declares that the 4SAFE OFF SW is in conformity with the basic requirements and the other relevant provisions of the directives 2014/30/EU and 2011/65/EU.

The complete declaration of conformity is available on our website.

Only for EC countries: According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE)

BEA