# SAFETY SENSOR FOR AUTOMATIC SLIDING DOORS (according to EN 16005 and DIN 18650)

User's Guide for product version 0204 and higher (refer to tracking label on product)



- 2. IR-lenses
- 3. cover
- 4. main connectors
- 6. DIP-switch
- 7. IR-curtain angle adjustment knob

### ACCESSORIES

DESCRIPTION









BA: Bracket accessory

CA: Ceiling accessory

RA: Rain accessory

BEA Remote control



CDA: Curved door accessory

### LED-SIGNAL







LED flashes red-green



LED flashes quickly



#### INSTALLATION



the sensor should be fixed firmly to avoid extreme vibrations.



Do not cover the sensor.



Avoid moving objects and light sources in the detection field.



Avoid highly reflective objects in the infrared field.

### MAINTENANCE



It is recommended to clean the optical parts at least once a year or more if required due to environmental conditions.



Do not use aggressive products to clean the optical parts.

### SAFETY



the door control unit and the door cover profile must be correctly earthed.



Only trained and qualified personnel may install and setup the sensor.



Always test the good functioning of the installation before leaving the premises.



the warranty is invalid if unauthorized repairs are made or attempted by unauthorized personnel.

- the device cannot be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
  - the manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.
  - the manufacturer of the sensor cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.

# **IXIO-S CAN: INSTALLATION GUIDE**





# **2** INFRARED SAFETY FIELD



Activate the visible\* spots to verify the position of the IR-curtain.



If necessary, adjust the IR-curtain angle (from -7° to 4°, default 0°).

\* Visibility depends on external conditions. When spots are not visible, use the Spotfinder to locate the curtains.
\*\* the distance between the inner curtain of the inside door sensor should always be smaller than 20 cm, the distance to the door leaf depends therefore on the thickness of the door leaf.



tIP! Additional adjustments are possible (see p. 5)

Always verify the actual detection field width with a piece of paper and not the Spotfinder, which detects the whole emitted field.

the size of the detection field varies according to the mounting height and the settings of the sensor. the full door width must be covered.



3	<b>3</b> DIP-SWITCH 1-4: CAN-ADDRESS										
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DIP-switches: each sensor needs a different CAN address depending on its position. After changing a DIP-switch, the orange LED flashes quickly. Cut and restore power supply to confirm the setting.											
	SENSOR 1	SENSOR 2	SENSOR 3	SENSOR 4	SENSOR 5	SENSOR 6	SENSOR 7	SENSOR 8			
	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5			
	address 0	address 1	address 2	address 3	address 4	address 5	address 6	address 7			
	SENSOR 9	SENSOR 10	SENSOR 11	SENSOR 12	SENSOR 13	SENSOR 14	SENSOR 15	SENSOR 16			
	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5	ON DIP 1 2 3 4 5			
	address 8	address 9	address 10	address 11	address 12	address 13	address 14	address 15			



5 PRESETTINGS							
You can choose one of the followir	ng presettings:						
STANDARD:	standard in- and outdoor installations factory values for IR immunity & IR number	0 0					
CRITICAL ENVIRONMENT:	critical installations due to surroundings or weather increased IR immunity	80					
SHOPPING STREET:	installations in narrow streets with pedestrian traffic increased IR immunity & 1 curtain	83					



#### **OVERVIEW OF SETTINGS**

		0	1	2	3	4	5	6	7	8	9	
A	IR IMMUNITY		low	t normal	<b>&lt; 2.8 m</b> high	higher	highest	t > normal	2.8 m high	≥ 2,8 m	: 6 + 7 (EN	116005)
DD	IR FREQUENCY		А	В		Sensors	mounted c	lose to ead	h other nee	d a differen	t frequency	ý.
BE	IR NUMBER	service mode	1	2		service this valu	mode = no ue exclude	o IR detect s conform	ion during ity of the d	15 minute oor system	s (mainten to EN 160	ance). 005 and DIN 18650.
đ	IR PRESENCE TIME	motion	15 s	30 s	1 min	2 min	5 min	10 min	20 min	60 min	infinite	min. value for DIN18650: 1 min min. value for EN16005: 30 s
-												
A⊡	IR WIDTH	Ħ	+		E		F	=	=	+	ŧ	Always additionally adjust the arrow position on the
	+	ww	NN	ww	ww	NN	NN	WN	NW	NN	NN	sensor with a screwdriver.
<b>E1</b>	REDIRECTION	safety	safety • opening		0 presen 1 presen	ice detection	on on safet on on safet	y input y and ope	ning input			
			facto	'y value		⚠		excludes / DIN 18 IR preser	conformi 650. IR Im Ice time o	ty of the o munity o n value 0	door syste n values 4	em according to EN 16005 4 or 5 is incompatible with
	Unlock	- A	<b>DD</b>	paramet	<b>) (E1)</b> er		<b>*</b> -	Select v	<b>)</b> value	•		D D O

## TROUBLESHOOTING

	×	The ORANGE LED flashes quickly.	DIP-switch setting awaiting confirmation.	Cut and restore power to confirm the DIP-switch setting
E1	<b>o</b>	ORANGE LED flashes 1 x.	the sensor signals an internal fault.	1 Replace sensor.
E2	<mark>.</mark> ₽	ORANGE LED flashes 2 x.	the power supply is too low or too high.	<ol> <li>Check power supply.</li> <li>Check wiring.</li> </ol>
E4	<mark>.</mark> ↓	ORANGE LED flashes 4 x.	the sensor receives not enough IR-energy.	<ol> <li>Decrease the angle of the IR-curtains.</li> <li>Increase the IR-immunity filter (values &gt;2.8 m).</li> <li>Deactivate 1 curtain.</li> </ol>
E5 🔶		ORANGE LED flashes 5 x.	the sensor receives too much IR-energy.	1 Slightly increase the angle of the IR-curtains.
			the sensor is disturbed by external elements.	1 Eliminate the cause of disturbance (lamps, rain cover, door controller housing properly grounded).
E8	$\circ_8$	ORANGE LED flashes 8 x.	IR power emitter is faulty.	1 Replace sensor.
	$\bigcirc$	ORANGE LED is on.	the sensor encounters a memory problem.	<ol> <li>Cut and restore power supply.</li> <li>If orange LED lights up again, replace sensor.</li> </ol>
	¥	RED LED flashes quickly after an assisted setup.	the sensor sees the door during the assisted setup.	<ol> <li>Move the IR-curtains away from the door.</li> <li>Install the sensor as close to the door as possible. If needed, use a bracket accessory.</li> <li>Launch a new assisted setup.</li> </ol>
		RED LED lights up sporadically.	the sensor vibrates.	<ol> <li>Check if the sensor is fastened firmly.</li> <li>Check position of cable and cover.</li> </ol>
			the sensor sees the door.	1 Launch an assisted setup and adjust the IR angle.
			the sensor is disturbed by external conditions.	<ol> <li>Increase the IR-immunity filter to value 3 (&lt; 2,8 m).</li> <li>Select presetting 2 or 3.</li> </ol>
	$\bigcirc$	the LED is off.		<ol> <li>Check power supply.</li> <li>Check wiring.</li> </ol>
		the reaction of the door does not correspond to the LED-signal.		1 Check CAN communication.
		the remote control does not react.	the sensor is protected by a password.	1 Enter the right password. If you forgot the code, cut and restore the power supply to access the sensor without entering a password during 1 minute.

## **TECHNICAL SPECIFICATIONS**

		The Equipment must be powered by a SELV limited power source ensuring double insulation between pri-						
Supply voltage*:	12 V - 30 V DC +/-10%	mary voltages and the Equipment supply. The supply						
Power consumption:	< 2.5 W	current should be limited to max 3A.						
Mounting height:	2 m to 3.5 m							
temperature range:	-25°C to +55°C; 0-95% relative humidity, non condensing							
Degree of protection:	IP54							
Noise:	< 70 dB							
Expected lifetime:	20 years							
Detection mode:	Presence typical response time: < 200 ms (max. 500 ms)							
technology:	Active infrared with background analysis Spot: 5 cm x 5 cm (typ) Number of spots: max. 24 per curtain Number of curtains: 2							
Communication interface:	CAN							
Safety standards:	EN 12978 EN ISO 13849-1 PL "c" CAT. 2 (under the condition that the door control system cycle) EN 16005 (protective devices) DIN 18650 (protective devices)	n monitors the sensor at least once per door						



Specifications are subject to changes without prior notice. All values measured in specific conditions and with a temperatre of 25°C.

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BEA hereby declares that the IXIO-ST is in conformity with European directives

2014/30/EU (EMC), 2006/42/EC (Machinery) & 2011/65/EU (RoHS).



Angleur, february 2021 Estelle GRAAS

The complete declaration of conformity is available on our website.

This product should be disposed of separately from unsorted municipal waste

