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IXIO-S01 I

PRESENCE SENSOR
FOR AUTOMATIC INDUSTRIAL DOORS

User's Guide for software version 0600 and higher
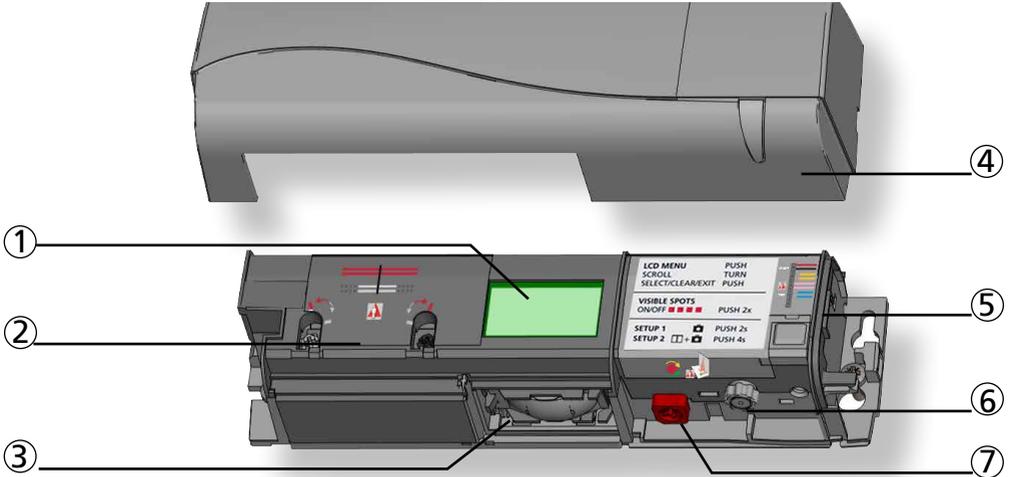(refer to tracking label on product)

DESCRIPTION

LCD MENU	PUSH
SCROLL	TURN
SELECT/CLEAR/EXIT	PUSH
VISIBLE SPOTS	
ON/OFF ▪▪▪▪ ▪	PUSH 2x
SETUP 1 📷	PUSH 2s
SETUP 2 ▯▯ + 📷	PUSH 4s

1. LCD
2. IR-curtain width adjustment
3. IR-lenses
4. cover
5. main connector
6. main adjustment knob
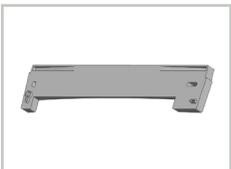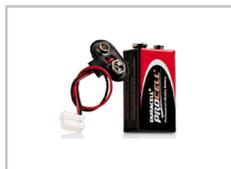7. IR-curtain angle adjustment knob

ACCESSORIES

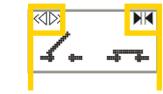BA: Bracket accessory

CA: Ceiling accessory

RA: Rain accessory

CDA: Curved door accessory

9 V battery

HOW TO USE THE LCD?

DISPLAY DURING NORMAL FUNCTIONING

Opening impulse Presence

Negative display = active output

To adjust contrast, push and turn the grey button simultaneously.
During normal function only.

FACTORY VALUE VS. SAVED VALUE

AIR:Immunity <2.8m 2 — displayed value = factory value

AIR:Immunity >2.8m — displayed value = saved value

NAVIGATING IN MENUS

Push to enter the LCD-menu

Password
XXXX
Enter password if necessary
Not during the first minute after power-on of the sensor.

English
Deutsch
Select your language before entering the first LCD-menu.
During the first 30 seconds after power-on of the sensor or later in the diagnostics menu.

Scroll menu items

Back
More
Select **Back** to return to previous menu or display.

Back
More
Presettings
Select **More** to go to next level:
- basic settings
- advanced settings
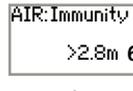- diagnostics

CHANGING A VALUE

Scroll menu up-down

AIR:Immunity <2.8m 2

Push to select parameter

AIR:Immunity <2.8m 2
current value is displayed

Scroll values up-down

AIR:Immunity >2.8m **6**
more values are displayed

Push to save new value

AIR:Immunity >2.8m 6
new value is displayed

CHANGING A ZIP CODE

See application note on ZIP CODE

Back
ZIP code
ID #

ZIP code
E24 1 56 KG4
01 0 800 02F

ZIP cod
E24 1
01 0 8

ZIP cod
E24 1
01 0 8

ZIP cod
H24 1
01 0 8

ZIP cod
H24 1
01 0 8

...

ZIP code
H24 1 56-KG4
01 0 800/02D
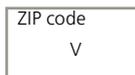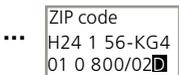
ZIP code
V

Validate the last digit in order to activate the new ZIP code:
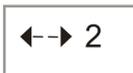- v = valid ZIP code, values will be changed accordingly
- x = invalid ZIP code, no values will be changed
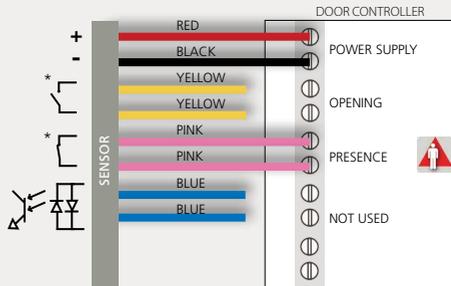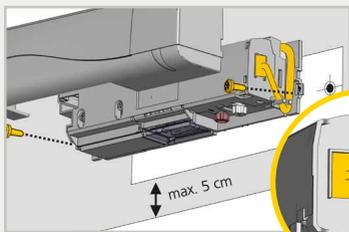- v/x = valid ZIP code, but from a different product.
  Only available values will be changed.

VALUE CHECK WITH REMOTE CONTROL

←→ 2

Pressing a parameter symbol on your remote control, displays the saved value directly on the LCD-screen.
Do not unlock first.

IXIO-SO1 I: INSTALLATION GUIDE

ENGLISH

1 MOUNTING & WIRING

max. 5 cm

DOOR CONTROLLER

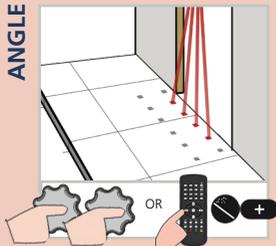| RED | | |
BLACK		POWER SUPPLY
YELLOW		
YELLOW		OPENING
PINK		
PINK		PRESENCE
BLUE		
BLUE		NOT USED

+
-
*
*

SENSOR

Mount the sensor securely.

* Depending on OUTPUT CONFIGURATION settings

2 INFRARED PRESENCE FIELD

ANGLE

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

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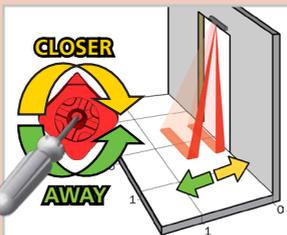
If necessary, adjust the IR-curtain angle (from -7° to 4°, default 0°).

DOOR

max. 9 cm
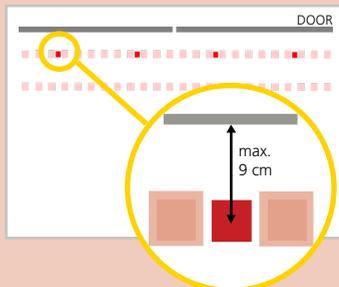
* Visibility depends on external conditions. When spots are not visible, use the Spotfinder to locate the curtains.

WIDTH
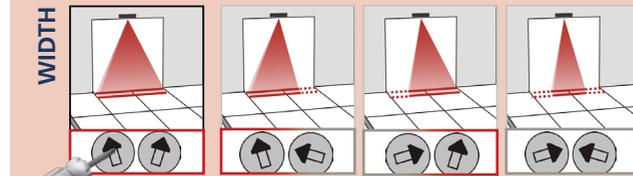
Part of the detection field can be masked to reduce it.
The arrow position determines the width of the detection field.

Always verify the actual detection field width with a piece of paper and not the Spotfinder, which detects the whole emitted field.
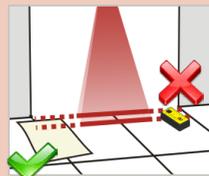
Additional adjustments are possible by LCD or remote control (see p. 5)

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

3 SETTINGS

OR

Choose one of the following presettings or adjust the sensor manually (see p.5):

STANDARD: standard in- and outdoor installations	Presettings Standard	⚫❶
CRITICAL ENVIRONMENT: critical installations due to surroundings or weather	Presettings Critical env.	⚫❷
SHOPPING STREET: installations in narrow streets with pedestrian traffic	Presettings Shopping str.	⚫❸

4 SETUP ⚠ STEP OUT OF THE INFRARED FIELD!

OR

SETUP 1 (QUICK) reference picture	📷 + 🔴⚪👉	⏱ 2 s	⚫⚫
SETUP 2 (ASSISTED) test of full door cycle + reference picture	⇔ ⇔ + 📷 + 🔴⚪👉	⏱ 4 s	⚫⓪

⚠ **TEST THE GOOD FUNCTIONING OF THE INSTALLATION BEFORE LEAVING THE PREMISES!**

OVERVIEW OF SETTINGS

BASIC
■□□

Back
More

	0	1	2	3	4	5	6	7	8	9

PRESETTINGS

	0	1	2	3	4	5	6	7	8	9
		standard	critical env.	shopping street		factory values for IR immunity and IR number				
						increased immunity				
						increased immunity, 1 curtain				

IR: IMMUNITY

		< 2.8 m					≥ 2,8 m			
		low	normal	high	higher	highest	normal	high		

IR: FREQUENCY

		A	B	Sensors mounted close to each other should have a different frequency.						

More
Back

ADVANCED
□■□

☐ factory value

Back
More

IR: WIDTH

Always additionally adjust the arrow position on the sensor with a screwdriver.

+

IR: NUMBER

	service mode	1	2	service mode = no IR detection during 15 minutes (maintenance).						

IR: PRESENCE TIME

	motion	15 s	30 s	1 min	2 min	5 min	10 min	20 min	60 min	infinite

IR: OUTPUT

		NO NC	NC NO	NC NC	NO NO			NO: normally open NC: normally closed		

REDIRECTION

	presence	presence + opening	0 presence detection on presence input							
			1 presence detection on presence and opening input							

FACTORY RESET

	0	1	2	3	4	5	6	7	8	9
									full reset	partial reset

partial: outputs are not reset

More
Back

DIAGNOSTICS
□□■

ZIP CODE — *all parameter settings in zipped format (see application note on ZIP CODE)*
ID # — *unique ID-number*
ERROR LOG — *last 10 errors + day indication*
IR: SPOTVIEW — *view of spot(s) that trigger detection*
IR: C1 ENERG — *signal amplitude received on curtain 1*
IR: C2 ENERG — *signal amplitude received on curtain 2*

— POWERSUPPLY — *supply voltage at power connector*
— OPERATINGTIME — *power duration since first startup*
— RESET LOG — *delete all saved errors*
— PASSWORD — *LCD and remotre control password (0000= no password)*
— LANGUAGE — *language of LCD-menu*
— ADMIN — *enter code to access admin mode*

TROUBLESHOOTING

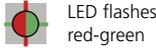|				
E1	ORANGE LED flashes 1 x.	The sensor signals an internal fault.	**1**	Replace sensor.
E2	ORANGE LED flashes 2 x.	The power supply is too low or too high.	**1** **2**	Check power supply (in the diagnostics menu of the LCD). Check wiring.
E4	ORANGE LED flashes 4 x.	The sensor receives not enough IR-energy.	**1** **2** **3**	Decrease the angle of the IR-curtains. Increase the IR-immunity filter (values ≥ 2.8 m). Deactivate 1 curtain.
E5	ORANGE LED flashes 5 x.	The sensor receives too much IR-energy.	**1** **2**	Slightly increase the angle of the IR-curtains. Decrease the IR-immunity filter (values 1-3 <2.8 m).
		The sensor is disturbed by external elements.	**1**	Eliminate the cause of disturbance (lamps, rain cover, door controller housing properly grounded).
E8	ORANGE LED flashes 8 x.	IR power emitter is faulty.	**1**	Replace sensor.
	ORANGE LED is on.	The sensor encounters a memory problem.	**1** **2**	Cut and restore power supply. If orange LED lights up again, replace sensor.
	RED LED flashes quickly after an assisted setup.	The sensor sees the door during the assisted setup.	**1** **2** **3**	Move the IR-curtains away from the door. Install the sensor as close to the door as possible. If needed, use a bracket accessory. Launch a new assisted setup.
	RED LED lights up sporadically.	The sensor vibrates.	**1** **2**	Check if the sensor is fastened firmly. Check position of cable and cover.
		The sensor sees the door.	**1**	Launch an assisted setup and adjust the IR angle.
		The sensor is disturbed by external conditions.	**1** **2**	Increase the IR-immunity filter to value 3. Select presetting 2 or 3.
	The LED and the LCD-display are off.		**1**	Check wiring.
	The reaction of the door does not correspond to the LED-signal.		**1** **2**	Check output configuration setting. Check wiring.
	The LCD or 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.

LED-SIGNAL

⬤	Presence detection				
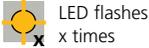
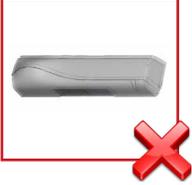LED flashes   LED flashes x times   LED flashes red-green   LED flashes quickly   LED is off

INSTALLATION

The sensor should be fixed firmly to avoid extreme vibrations.
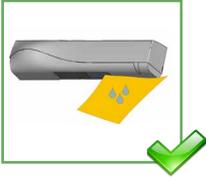
Do not cover the sensor.

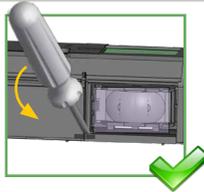Avoid moving objects and light sources in the detection field.

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.
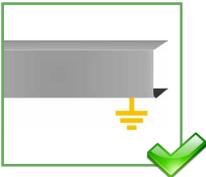
For complete cleaning, remove both windows by inserting a screwdriver into the notches located between the two windows.

Do not use aggressive products to clean the optical parts.
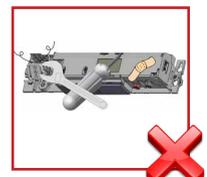
SAFETY

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 sensor cannot be used for purposes other than its intended use.
- The manufacturer of the door system incorporating the sensor is responsible for compliance of the system to applicable national and international regulations and safety standards.
- The installer must read, understand and follow the instructions given in this manual. Improper installation can result in improper sensor operation.
- The manufacturer of the sensor cannot be held responsible for injury or damage resulting from incorrect use, installation or inappropriate adjustment of the sensor.

TECHNICAL SPECIFICATIONS

Supply voltage*:	12 V - 24 V AC +/-10% ; 12 V - 30 V DC +/-10%
Power consumption:	< 2.5 W
Mounting height:	2 m to 4 m
Temperature range:	-25°C to +55°C; 0-95% relative humidity, non condensing
Degree of protection:	IP54 (IEC/EN 60529)
Noise:	< 70 dB

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
Output*:	Solid-state-relay (potential and polarity free) Max. contact current: 100 mA Max. contact voltage: 42 V DC / 30 V AC Holdtime: 0.3 to 1 s

* External electrical sources must be within specified voltages, max 15W and ensure double insulation from primary voltages.

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

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BEA hereby declares that this product is in conformity with the European directives :
2014/30/EU (EMC) and 2011/65/EU (RoHS).
The complete declaration of conformity is available on our website.

This product should be disposed of separately from unsorted municipal waste