

IXIO-S01 I

SAFETY SENSOR FOR AUTOMATIC INDUSTRIAL DOORS

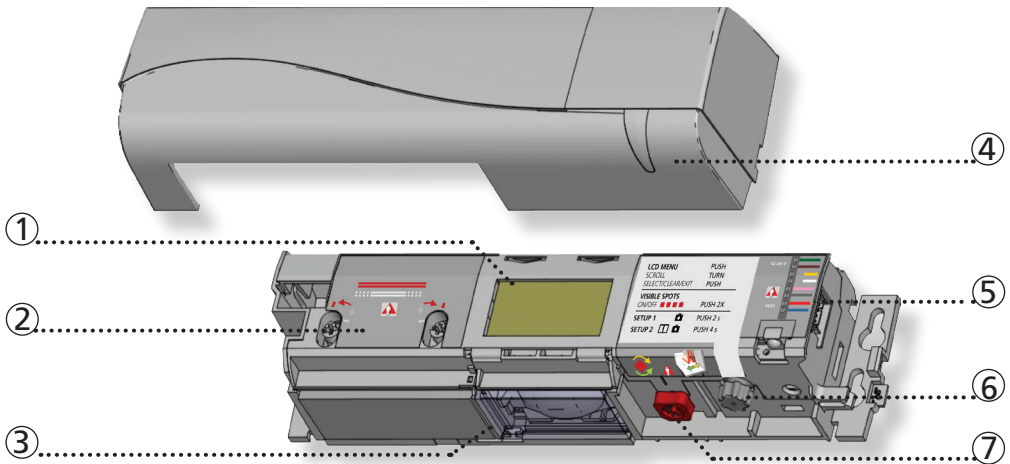
User's Guide for software version 0501 and higher
(refer to tracking label on product)



Download the BEA DECODER app for a quick overview of settings



DESCRIPTION



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

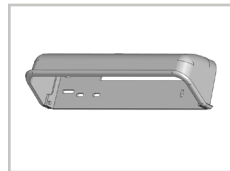
ACCESSORIES



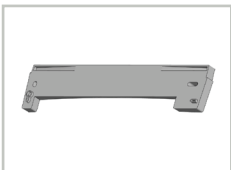
BA: Bracket accessory



CA: Ceiling accessory



RA: Rain accessory



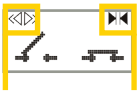
CDA: Curved door accessory



9 V battery

HOW TO USE THE LCD?

DISPLAY DURING NORMAL FUNCTIONING

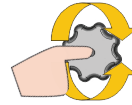


Opening impulse

Safety



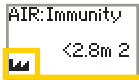
Negative display = active output



To adjust contrast, push and turn the grey button simultaneously.

During normal function only.

FACTORY VALUE VS. SAVED VALUE



displayed value = factory value



displayed value = saved value

NAVIGATING IN MENUS



Push to enter the LCD-menu



Enter password if necessary

Not during the first minute after power-on of the sensor.



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



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



Select **More** to go to next level:

- basic settings
- advanced settings
- diagnostics

CHANGING A VALUE



Scroll menu up-down



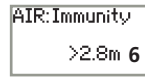
Push to select parameter



current value is displayed



Scroll values up-down



more values are displayed



Push to save new value

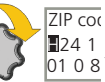
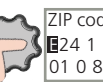


new value is displayed

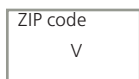
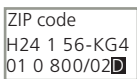
CHANGING A ZIP CODE



See application note on ZIP CODE



...



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.

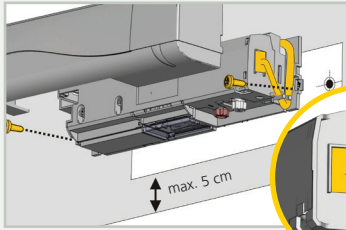
VALUE CHECK WITH REMOTE CONTROL



Pressing a parameter symbol on your remote control, displays the saved value directly on the LCD-screen.

Do not unlock first.

1 MOUNTING & WIRING



* Depending on OUTPUT CONFIGURATION settings

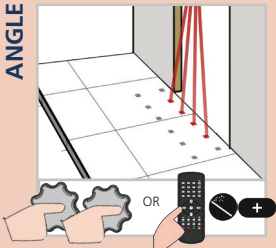
TIP!

Wiring is compatible with the IRIS.

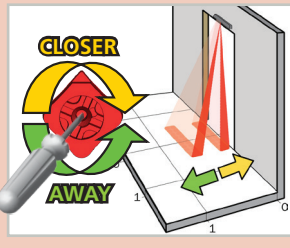


2 INFRARED SAFETY FIELD

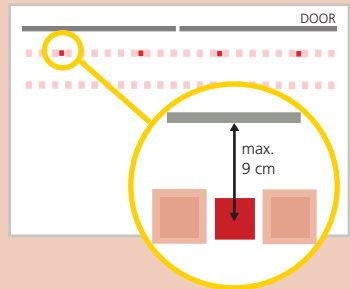
ANGLE



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

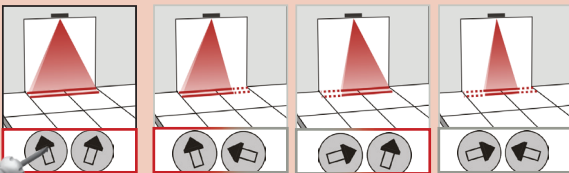


If necessary, adjust the IR-curtain angle (from -7° to 4° , default 0°).

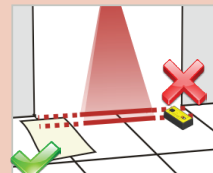


* Visibility depends on external conditions. When spots are not visible, use the Spotfinder to locate the curtains.

WIDTH



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



Additional adjustments are possible by LCD or remote control (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 SETTINGS

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



STANDARD: standard in- and outdoor installations

Presettings
Standard 1

CRITICAL ENVIRONMENT: critical installations due to surroundings or weather

Presettings
Critical env. 2

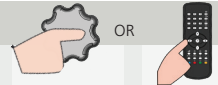
SHOPPING STREET: installations in narrow streets with pedestrian traffic

Presettings
Shopping str. 3

4 SETUP



STEP OUT OF THE INFRARED FIELD!



SETUP 1 (QUICK)

reference picture



2 s



SETUP 2 (ASSISTED)

test of full door cycle +
reference picture



4 s



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

OVERVIEW OF SETTINGS

BASIC



Back
More

PRESETTINGS

	0	1	2	3	4	5	6	7	8	9
PRESETTINGS		standard	critical env.	shopping street			factory values for IR immunity and IR number			
IR: IMMUNITY		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



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	safety	safety + opening		0 presence detection on safety input 1 presence detection on safety and opening input							
FACTORY RESET									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 remote 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.	<ol style="list-style-type: none"> 1 Replace sensor.
E2	 ORANGE LED flashes 2 x.	The power supply is too low or too high.	<ol style="list-style-type: none"> 1 Check power supply (in the diagnostics menu of the LCD). 2 Check wiring.
E4	 ORANGE LED flashes 4 x.	The sensor receives not enough IR-energy.	<ol style="list-style-type: none"> 1 Decrease the angle of the IR-curtains. 2 Increase the IR-immunity filter (values >2.8 m). 3 Deactivate 1 curtain.
E5	 ORANGE LED flashes 5 x.	The sensor receives too much IR-energy.	<ol style="list-style-type: none"> 1 Slightly increase the angle of the IR-curtains. 2 Decrease the IR-immunity filter (values 1-3 <2.8 m).
E5		The sensor is disturbed by external elements.	<ol style="list-style-type: none"> 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.	<ol style="list-style-type: none"> 1 Replace sensor.
	 ORANGE LED is on.	The sensor encounters a memory problem.	<ol style="list-style-type: none"> 1 Cut and restore power supply. 2 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.	<ol style="list-style-type: none"> 1 Move the IR-curtains away from the door. 2 Install the sensor as close to the door as possible. If needed, use a bracket accessory. 3 Launch a new assisted setup.
	 RED LED lights up sporadically.	The sensor vibrates.	<ol style="list-style-type: none"> 1 Check if the sensor is fastened firmly. 2 Check position of cable and cover.
		The sensor sees the door.	<ol style="list-style-type: none"> 1 Launch an assisted setup and adjust the IR angle.
		The sensor is disturbed by external conditions.	<ol style="list-style-type: none"> 1 Increase the IR-immunity filter to value 3. 2 Select presetting 2 or 3.
	 The LED and the LCD-display are off.		<ol style="list-style-type: none"> 1 Check wiring.
	The reaction of the door does not correspond to the LED-signal.		<ol style="list-style-type: none"> 1 Check output configuration setting. 2 Check wiring.
	The LCD or remote control does not react.	The sensor is protected by a password.	<ol style="list-style-type: none"> 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.

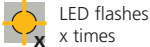
LED-SIGNAL



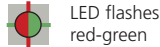
Presence detection



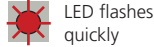
LED flashes



LED flashes x times



LED flashes red-green



LED flashes quickly

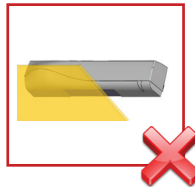


LED is off

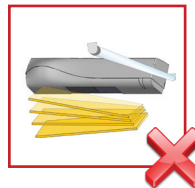
INSTALLATION



The sensor should be fixed firmly to avoid extreme vibrations.



Do not cover the sensor.

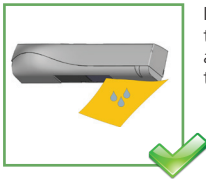


Avoid moving objects and light sources in the detection field.



Avoid highly reflective objects in the infrared field.

MAINTENANCE

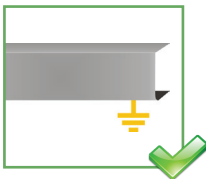


It is recommended to clean the optical parts at least once a year or more if required due to environmental conditions.



Do not use aggressive products to clean the optical parts.

SAFETY



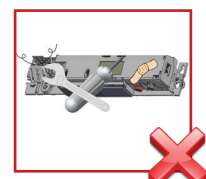
The door control unit and the door cover profile must be correctly earthed.



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.

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
Noise:	< 70 dB

* The Equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply. The supply current should be limited to max 3A.



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 AC/DC Holdtime: 0.3 to 1 s

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



BEA hereby declares that the IXIO-SO1 I is in conformity with European directives 2014/30/EU and 2011/65/EU.

The complete declaration of conformity is available on our website.



This product should be disposed of separately from unsorted municipal waste