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COMMUNITY!



# IXIO-D01 I

OPENING & PRESENCE SENSOR  
FOR AUTOMATIC INDUSTRIAL DOORS

ENGLISH

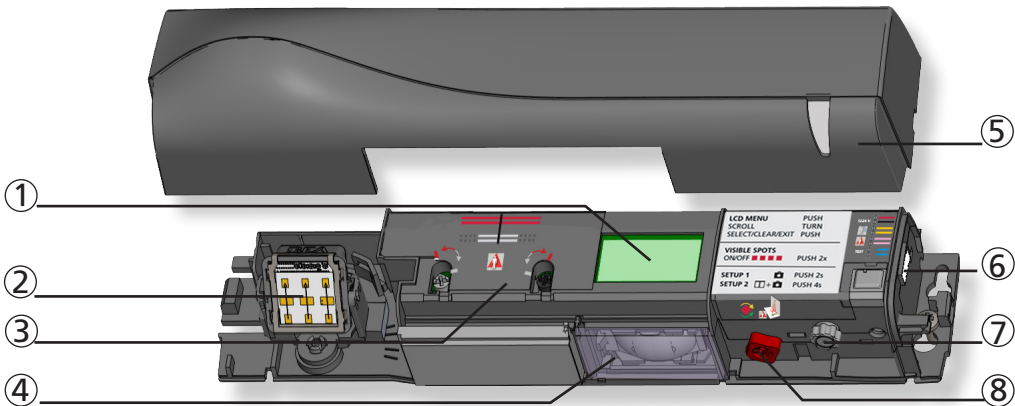


Download the BEA DECODER app  
for a quick overview of settings



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

## DESCRIPTION



- |    |                             |    |                                  |
|----|-----------------------------|----|----------------------------------|
| 1. | LCD                         | 6. | main connector                   |
| 2. | radar antenna               | 7. | main adjustment knob             |
| 3. | IR-curtain width adjustment | 8. | IR-curtain angle adjustment knob |
| 4. | IR-lenses                   |    |                                  |
| 5. | cover                       |    |                                  |

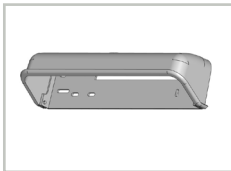
## ACCESSORIES



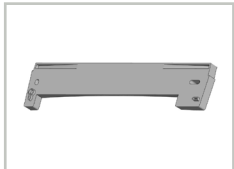
BA: Bracket accessory



CA: Ceiling accessory



RA: Rain accessory



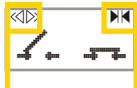
CDA: Curved door accessory




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




Push to select parameter

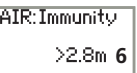


AIR:Immunity  
<2.8m 2

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 coc  
E24 1  
01 0 8




ZIP coc  
E24 1  
01 0 8




ZIP coc  
E24 1  
01 0 8




ZIP coc  
E24 1  
01 0 8



ZIP cod  
H24 1  
01 0 8



ZIP code  
H24 1 56-KG4  
01 0 800 02F




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

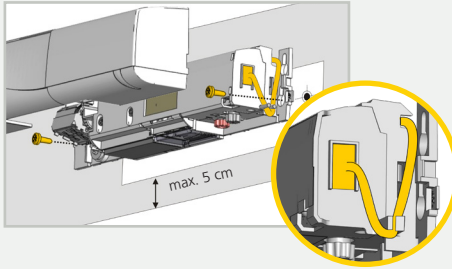


Pressing a parameter symbol on your remote control, displays the saved value directly on the LCD-screen.  
Do not unlock first.

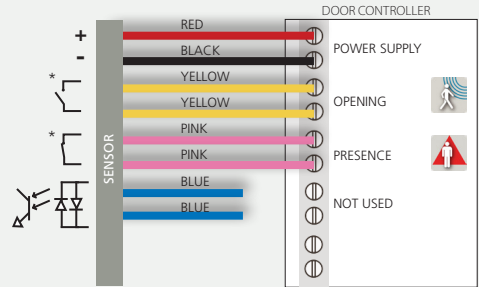


← → 2

## 1 MOUNTING & WIRING



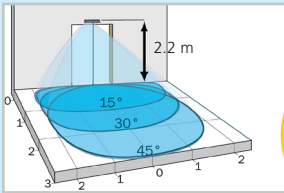
Fixation is compatible with the ACTIV8.  
Mount the sensor securely.



\* Depending on OUTPUT CONFIGURATION settings

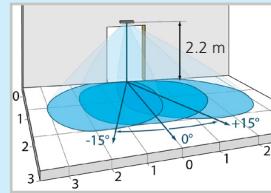
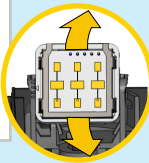
## 2 RADAR OPENING IMPULSE FIELD

ANGLE



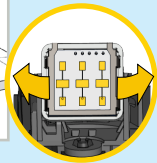
from 15° to 45°, default 30°

field size: 9  
immunity: 2

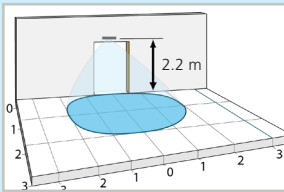


from -15° to 15°, default 0°

field size: 9  
immunity: 2

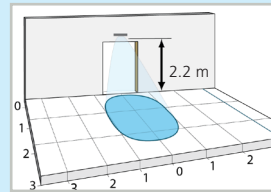


WIDTH



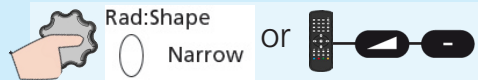
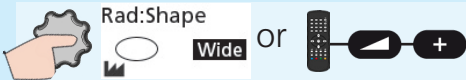
WIDE : 4 m x 2 m

field size: 9  
immunity: 2



NARROW : 2 m x 2.5 m

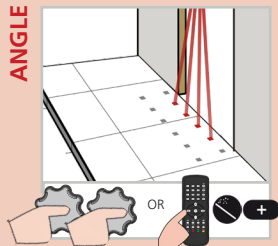
field size: 9  
immunity: 2



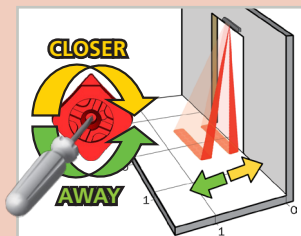
The size of the detection field varies according to the mounting height of the sensor.

### 3 INFRARED PRESENCE FIELD

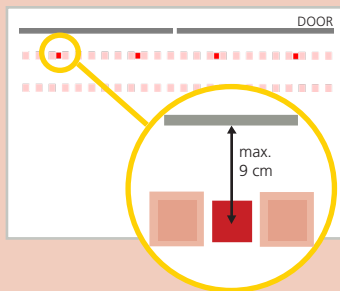
ANGLE



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

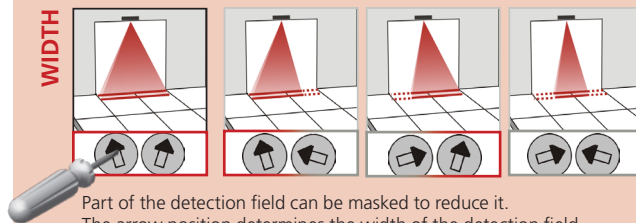


If necessary, adjust the IR-curtain angle (from -7° to 4°, default 0°).

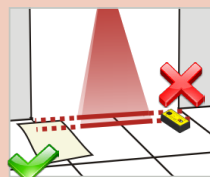


\* Visibility depends on external conditions. When spots are not visible, use the Spotfinder to locate the curtains.

WIDTH



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



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 (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.

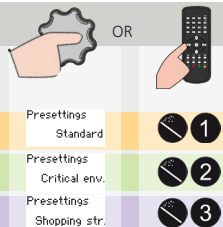
### 4 SETTINGS

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

**STANDARD:** standard in- and outdoor installations

**CRITICAL ENVIRONMENT:** critical installations due to surroundings or weather

**SHOPPING STREET:** installations in narrow streets with pedestrian traffic



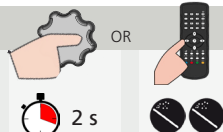
### 5 SETUP



STEP OUT OF THE INFRARED FIELD!

#### SETUP 1 (QUICK)

reference picture



#### SETUP 2 (ASSISTED)












test of full door cycle + reference picture



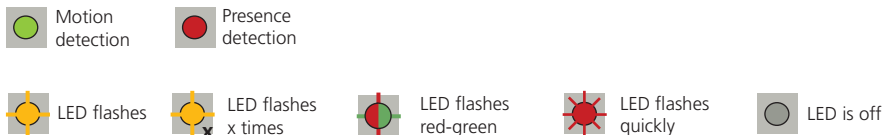
TEST THE GOOD FUNCTIONING OF THE INSTALLATION BEFORE LEAVING THE PREMISES!



## 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 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.	1 Decrease the angle of the IR-curtains. 2 Increase the IR-immunity filter (values $\geq 2.8$ m). 3 Deactivate 1 curtain.
E5	 ORANGE LED flashes 5 x.	The sensor receives too much IR-energy.	1 Slightly increase the angle of the IR-curtains. 2 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 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.	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.	1 Check if the sensor is fastened firmly. 2 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 Increase the IR-immunity filter to value 3. 2 Select presetting 2 or 3.
	 GREEN LED lights up sporadically.	The sensor is disturbed by rain and/or leaves.	1 Select presetting 2 or 3. 2 Increase radar-immunity filter.
		Ghosting created by door movement.	1 Change radar field angle.
		The sensor vibrates.	1 Check if the sensor and door cover is fastened firmly. 2 Check position of cable and cover.
		The sensor sees the door or other moving objects.	1 Remove the objects if possible. 2 Change radar field size or angle.
	 The LED and the LCD-display are off.		1 Check wiring.
	The reaction of the door does not correspond to the LED-signal.		1 Check output configuration setting. 2 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.

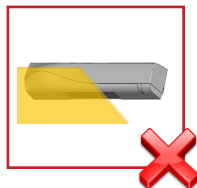
## LED-SIGNAL



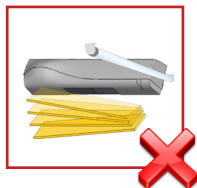
## INSTALLATION



The sensor should be fixed firmly to avoid extreme vibrations.



Do not cover the sensor.

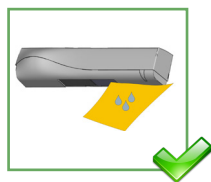


Avoid moving objects and light sources in the detection field.

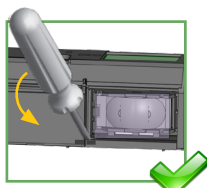


Avoid highly reflective objects in the infrared field.

## MAINTENANCE



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

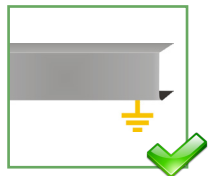


For complete cleaning, remove both windows by inserting a screwdriver into the notches located between the two windows.

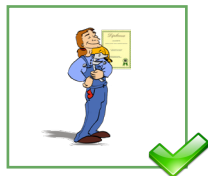


Do not use aggressive products to clean the optical parts.

## SAFETY



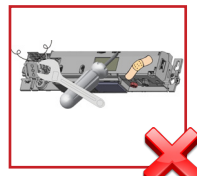
The door control unit and the door cover profile must be correctly earthed.



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% (50 - 60 Hz) ; 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:	Motion Min. detection speed: 5 cm/s	Presence Typical response time: < 200 ms (max. 500 ms)	
Technology:	Microwave doppler radar Transmitter frequency: 24.150 GHz Transmitter radiated power: < 20 dBm EIRP Transmitter power density: < 5 mW/cm²	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	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	

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

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



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BEA hereby declares that this product is in conformity with European directives :  
2014/53/EU (RED) 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