TORMAX AUTOMATIC

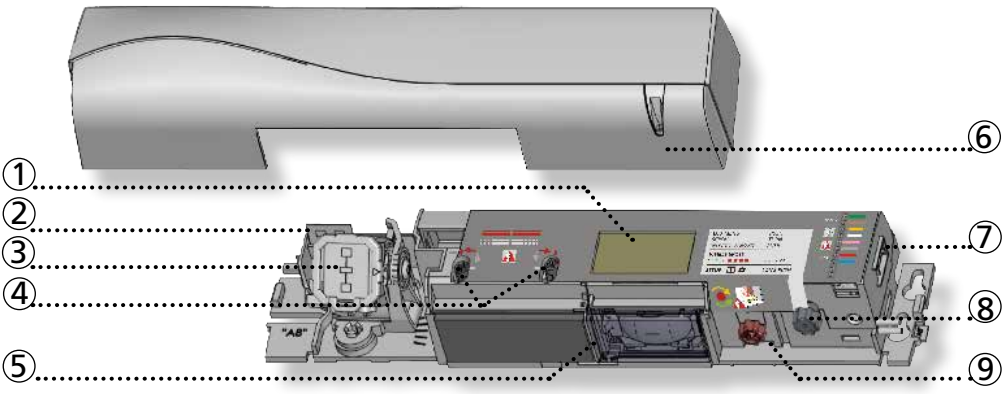
c UL us LISTED

IXIO-DT1 UL

Activation & safety sensor for automatic pedistrian sliding doors

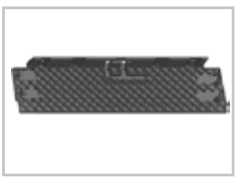
(US Version)

DESCRIPTION



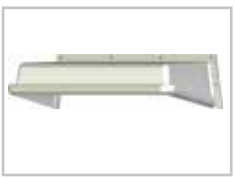
1. LCD
2. radar antenna (narrow field)
3. radar antenna (wide field)
4. AIR-curtain width adjustment
5. AIR-lenses
6. cover
7. main connector
8. main adjustment knob
9. AIR-curtain angle adjustment knob

ACCESSORIES

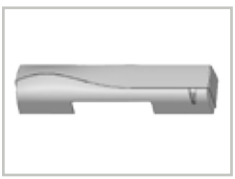


10IDMB: Mounting Bracket

10IDCA: Ceiling Adapter

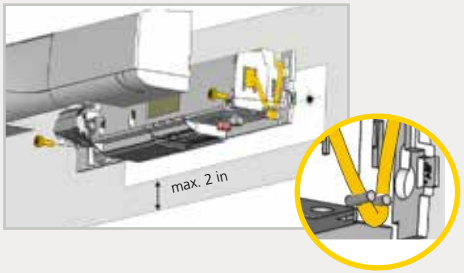


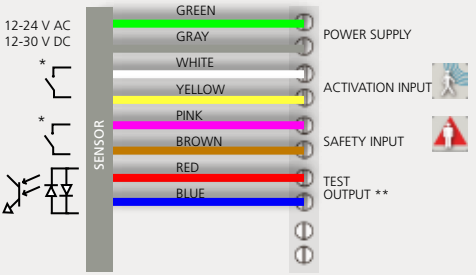
10WRC: Clear Rain Cover



35.1286: Black Cover
35.1302: White Cover
35.1303: Silver Cover

1 MOUNTING & WIRING





TIP!
Mounting and wiring are compatible with the Wizard.

* Output status when sensor is operational

REFERENCE TORMAX WIRING DIAGRAM 75.5743

** SEE APPLICATION NOTES OR CONTACT BEA FOR TECHNICAL SUPPORT

Sensor connectivity (power and relays) must utilize only the supplied harness.

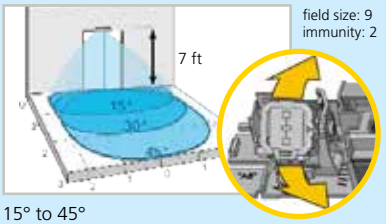
Sensor power must be supplied from a Class 2 supply source limited to 15 W.

Sensors is intended to be monitored for proper operation by the door operator or system.

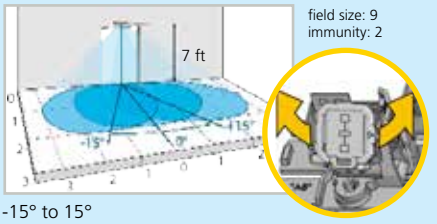
Harness shall be routed separated from any Mains or non-Class 2 voltage cable for correct operation or shall be rated for the Mains voltage, and suitable protection and routing means shall be used according to National and Local Codes to prevent damage to the harness.

2 ACTIVATION ZONE

ANGLE

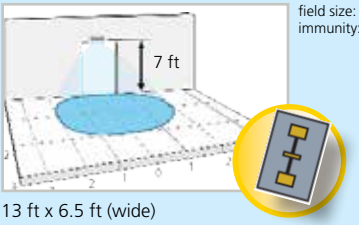


15° to 45°

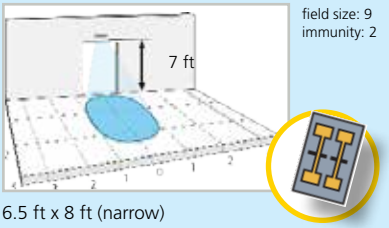


-15° to 15°

WIDTH



13 ft x 6.5 ft (wide)

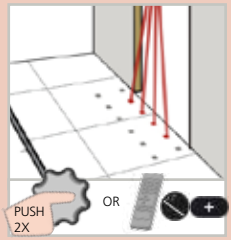


6.5 ft x 8 ft (narrow)

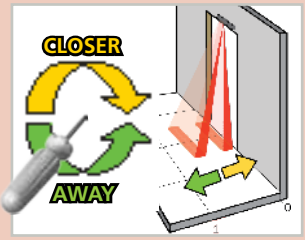
The size of the detection field varies according to the mounting height of the sensor.

3 SAFETY ZONE

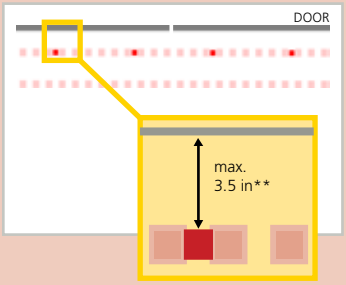
ANGLE



Activate the visible spots.*

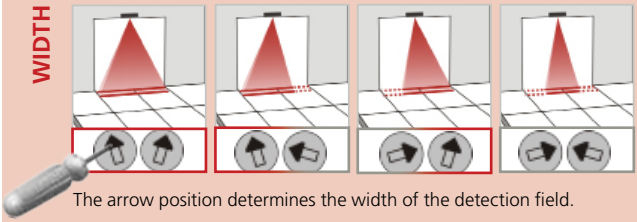


If necessary, adjust the AIR-curtain angle (from -7° to 4°).



* Visibility depends on external conditions
** The distance between the inner curtain of the inside door sensor and the inner curtain of the outside door sensor should always be smaller than 8 inches.

WIDTH



The arrow position determines the width of the detection field.

Always verify the actual detection field width with this user's guide and not the Spotfinder, which detects the whole emitted field.

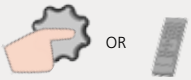
TIP!
Always remember to also adjust the width via the LCD or remote control
(see p. 5)

Mounting height	Detection width
6.6 ft	6.6 ft
7.2 ft	7.2 ft
8.2 ft	8.2 ft
9.8 ft	9.8 ft
11.5 ft	11.5 ft

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

4 SETTINGS

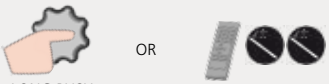
Adjust the sensor by LCD or remote control (see p. 4 and 5)



5 SETUP

IMPORTANT! Step out of the detection field immediately after launching a setup.

QUICK SETUP =

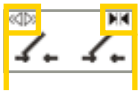


ASSISTED SETUP =

IMPORTANT! Walk test the proper operation of the installation before leaving the premises.

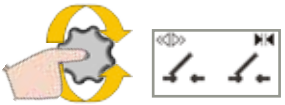
HOW TO USE THE LCD?

DISPLAY DURING NORMAL OPERATION



Activation Safety

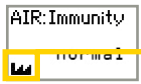
Negative display = active output



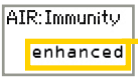
To adjust contrast, push and turn the grey button simultaneously.

During normal operation only.

FACTORY VALUE VS. SAVED VALUE



displayed value = factory value



displayed value = saved value

NAVIGATING IN MENUS

Push to enter the LCD-menu

Select your language before entering the first LCD-menu.

Available for the first 30 seconds after power-on of the sensor .

Scroll menu items

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

Select **More** to go to next level:
- basic settings
- all settings
- diagnostics

CHANGING A VALUE

SCROLL MENU UP-DOWN

PUSH TO SELECT PARAMETER

current value is displayed

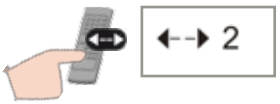
SCROLL VALUES UP-DOWN

more values are displayed

PUSH TO SAVE NEW VALUE

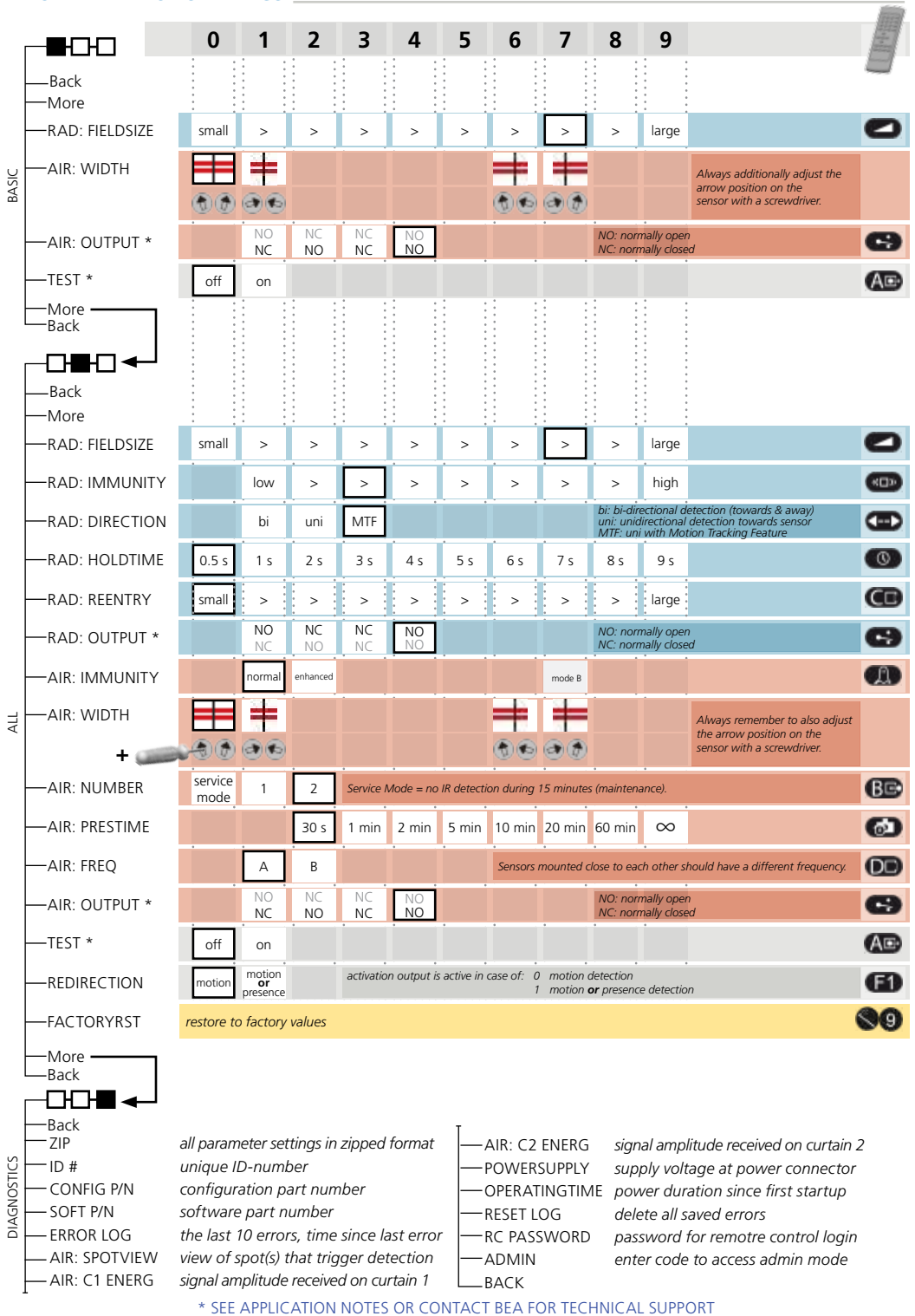
new value is displayed

VALUE CHECK WITH REMOTE CONTROL



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

OVERVIEW OF SETTINGS



* SEE APPLICATION NOTES OR CONTACT BEA FOR TECHNICAL SUPPORT

TROUBLESHOOTING

E1	The ORANGE LED flashes 1 x.	The sensor signals an internal fault.	1 Cycle power supply. 2 If orange LED flashes again, replace sensor.
E2	The ORANGE LED flashes 2 x.	The power supply voltage is too low or too high.	1 Check power supply (in the diagnostics menu of the LCD). 2 Check wiring.
E4	The ORANGE LED flashes 4 x.	The sensor does not receive enough AIR-energy.	1 Check the angle and width setting of the AIR-curtains. 2 Increase AIR-immunity filter to value 2 (enhanced).
E5	The ORANGE LED flashes 5 x.	The sensor receives too much AIR-energy.	1 Check the angle of the AIR-curtains. 2 Decrease the AIR immunity filter to value 1 (normal).
E8	The ORANGE LED flashes 8 x.	The AIR power emitter is faulty.	1 Relearn AIR. 2 Replace sensor.
	The ORANGE LED is on.	The sensor encounters a memory problem.	1 Cycle power supply. 2 If orange LED turns on again, replace sensor.
	The RED LED flashes quickly after an assisted setup.	The sensor sees the door during the assisted setup.	1 Check the angle of the AIR-curtains. 2 Launch a new assisted setup. *Attention: Do not stand in the detection field!*
	The RED LED flashes sporadically.	The sensor vibrates.	1 Check if the sensor is mounted firmly. 2 Check position of cable and cover.
		The sensor sees the door.	1 Launch an assisted setup and adjust the AIR angle.
		The sensor is disturbed by external conditions.	1 Increase the AIR-immunity filter to value 2 (enhanced).
	The GREEN LED flashes sporadically.	The sensor is disturbed by rain and/or leaves.	1 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 mounted 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 Cycle power supply. 2 Check wiring.
	The reaction of the door does not correspond to the LED-signal.		1 Check output configuration setting. 2 Check wiring.

Motion detection green

Presence detection red

LED flashes

LED flashes quickly

LED is off

INSTALLATION

Avoid extreme vibrations.

Do not cover the sensor.

Avoid moving objects and light sources in the detection field.

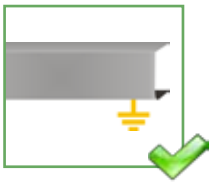
Avoid highly reflective objects in the infrared field.

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 grounded.

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

Always test the proper operation of the installation before leaving the premises.

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

- The device should not be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
- The installer 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.
- The Sensor should be properly installed and adjusted and the proper functioning of the Sensor, when installed with an end product, as intended in UL 325 standard, shall be verified by the installer.

TECHNICAL SPECIFICATIONS

Supply voltage:	12 V - 24 V AC +/-10% ; 12 V - 30 V DC +/-10%	
Power consumption:	< 2.5 W	
Mounting height:	6.5 ft to 11.5 ft (local regulations may have an impact on the acceptable mounting height)	
Temperature range:	Sensor: -31°F to +131°F LCD: 14°F to +131°F 0-95% relative humidity, non condensing	
Degree of protection:	IP54	
Applicable directives:	R&TTE 1999/5/EC; EMC 2004/108/EC; MD 2006/42/EC; RoHS 2002/95/EC	
Detection mode:	 Motion Min. detection speed: 2 in/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: 150 mA Max. contact voltage: 42 V AC/DC Adjustable Holdtime: 0.5 to 9 s	Solid-state-relay (potential and polarity free) Max. contact current: 150 mA Max. contact voltage: 42 V AC/DC Automatic Holdtime: 0.3 or 1 s
Test input *:		Sensitivity: Low: < 1 V; High: > 10 V (max. 30 V) Response time on test request: typical: < 5 ms

Specifications are subject to changes without prior notice.
All values measured in specific conditions.

* SEE APPLICATION NOTES OR CONTACT BEA FOR TECHNICAL SUPPORT

FCC

BEA Inc.

G9B

This device can be expected to comply with Part 15 of the FCC Rules provided it is assembled in exact accordance with the instructions provided with this kit. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

ANSI / AAADM

ANSI / AAADM Compliance ANSI AAADM *American Association of Automatic Door Manufacturers*

Upon completion of the installation or service work, at a minimum, perform a daily safety check in accordance with the minimum inspection guidelines provided by AAADM. Provide each equipment owner with an owner's manual that includes a daily safety checklist and contains, at a minimum, the information recommended by AAADM. Offer an information session with the equipment owner explaining how to perform daily inspections and point out the location of power/operation switches to disable the equipment if a compliance issue is noted. The equipment should be inspected annually in accordance with the minimum inspection guidelines. A safety check that includes, at a minimum, the items listed on the safety information label must be performed during each service call. If you are not an AAADM certified inspector, BEA strongly recommends you have an AAADM certified inspector perform an AAADM inspection and place a valid inspection sticker below the safety information label prior to putting the equipment into operation.

CONTACT

24/7 Technical Support:
1-800-407-4545

Customer Service:
1-800-523-2462

General Technical Questions:
Tech_Services@beainc.com

Technical Documentation:
www.beasensors.com

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