ENGLISH

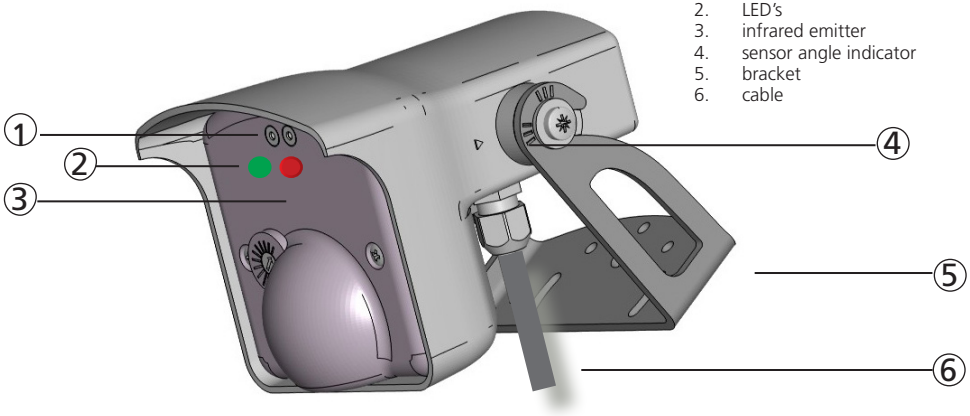
IS40-P

Presence sensor for automatic industrial doors

Other use of the device is outside the permitted purpose and can not be guaranteed by the manufacturer.
The manufacturer cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.

DESCRIPTION

1. push buttons
2. LED's
3. infrared emitter
4. sensor angle indicator
5. bracket
6. cable



TECHNICAL SPECIFICATIONS

Supply voltage:	12V to 24V AC ±10%; 12V to 24V DC +10% / -3%
Power consumption:	< 3.5 W
Mains frequency:	50 to 60 Hz
Output:	2 relays (free of potential change-over contact)
Max. contact voltage:	42 V AC/DC
Max. contact current:	1 A (resistive)
Max. switching power:	30 W (DC) / 48 VA (AC)
Output holdtime:	0.5 s
Mounting height:	8 ft - 16 ft
Temperature range:	from -22 °F to + 140 °F
Humidity:	0 - 95% non condensing
Degree of protection:	IP65 / NEMA 4
Dimensions:	5 in (L) x 4 in (H) x 3.8 in (W)
Materials:	ABS and polycarbonate
Weight:	14 oz
Cable length:	32 ft / 105 m
Norm conformity:	Electromagnetic Compatibility (EMC) 2004/108/EC, R&TTE: 1999/5/EC
Technology:	active infrared (AIR)
Transmitter frequency/wavelength:	875 nm
Transmitter power density:	< 250 mW/m²
Detection mode:	motion & presence
Detection field:	10 ft x 10 ft at max. mounting height of 16ft (emitting spots**)
Min. detection speed:	0 in/s to activate detection
Reaction time:	250 ms
Tilt angle:	15° - 45°

Specifications are subject to changes without prior notice.
Measured in specific conditions

** zone detected by spotfinder, i.e. slightly larger than actual detection field

PRECAUTIONS

- This device IS NOT intended for use as a safety sensor.
- Not recommended for dynamic envioronments. (snow, rain, fog, etc.)
- Shut off all power before attempting any wiring procedures.
- Maintain a clean & safe environment.
- Constantly be aware of pedestrian/vehicle traffic around the area.
- Always stop pedestrian/vehicle traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ESD electrostatic discharge: Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board ensure you dissipate your body's charge.
- Always check placement of all wiring before powering up to insure that moving parts will not catch any wires and cause damage to equipment.
- Ensure compliance with all applicable safety standards upon completion of installation.
- DO NOT attempt any internal repair of the sensor. All repairs and/or component replacements must be performed by BEA Inc. Unauthorized disassembly or repair:
  1. May jeopardize personal safety and may expose one to the risk of electrical shock.
  2. May adversely affect the safe and reliable performance of the product and will result in a voided product warranty.

LED- SIGNAL

Activation/Pulse detection

LED flashes quickly

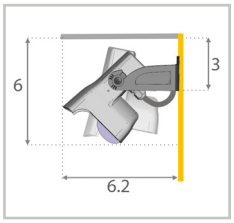
Presence detection

Setup

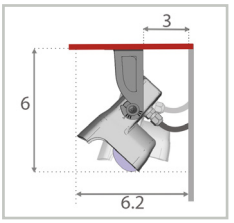
LED flashes
Parameter indication for manual setup

LED flashes
Value indication for manual setup

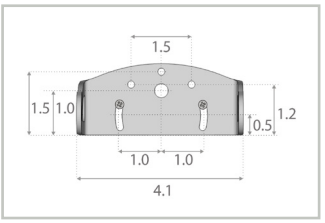
DIMENSIONS (inches)



Wall mounting



Ceiling mounting



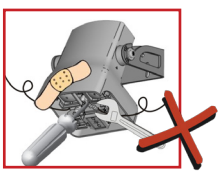
Bracket dimensions

SAFETY INSTRUCTIONS

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

After installation, save an access code to lock the sensor.

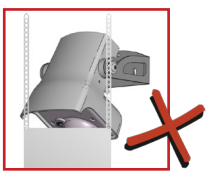
Test the sensor for proper performance before leaving the premises.



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

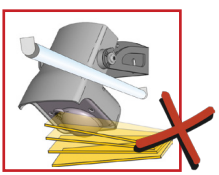
The installer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.

MOUNTING TIPS

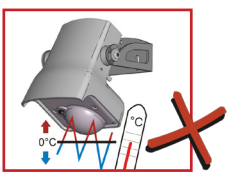


Do not cover the sensor.

Avoid extreme vibrations.



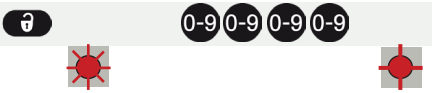
Avoid proximity to neon lamps or moving objects.



Avoid exposing the sensor to sudden temperature changes.

HOW TO USE THE REMOTE CONTROL

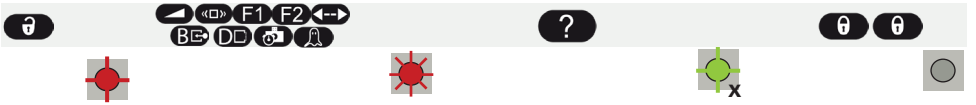
After unlocking, the red LED flashes and the sensor can be adjusted by remote control.



If the red LED flashes quickly after unlocking, enter an access code from 1 to 4 digits.
If you do not know the access code, **cut and restore the power supply** and within the first minute, you can access the sensor without introducing any access code.

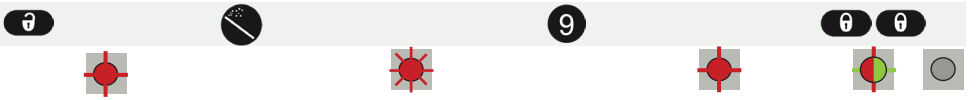
ADJUSTING ONE OR MORE PARAMETERS

CHECKING A VALUE



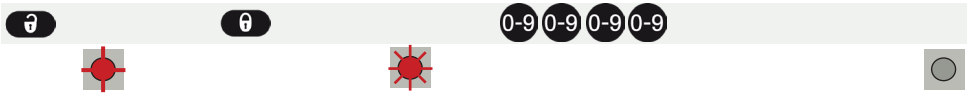
The number of flashes indicates the value of the chosen parameter.

RESTORING TO FACTORY VALUES



SAVING AN ACCESS CODE

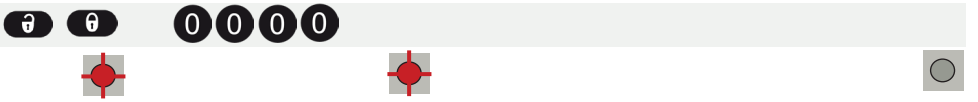
The access code is recommended for sensors installed close to each other.



DELETING AN ACCESS CODE

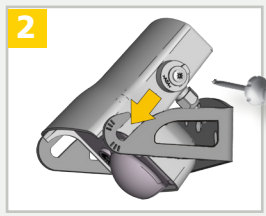
If you do not know the access code, **cut and restore the power supply** and, within the first minute, you can access the sensor without introducing any access code. Additionally, within this minute an unknown access code may be deleted via the remote following the steps outlined below. Press unlock, lock, 0, 0, 0, 0.

DELETING AN UNKNOWN ACCESS CODE



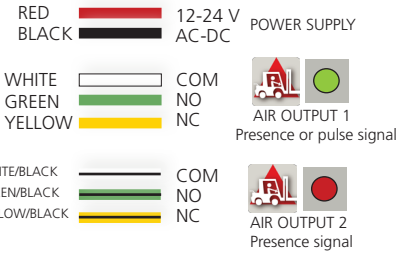
1 MOUNTING

Remove the bracket from the sensor. Drill 2 holes accordingly. Mount the bracket firmly. If necessary, drill an additional hole to facilitate wire routing



Position the sensor on the bracket and tighten the screws.

2 WIRING

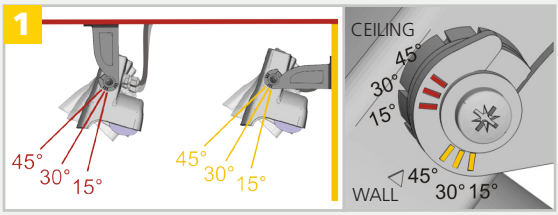


RELAY CONFIGURATION

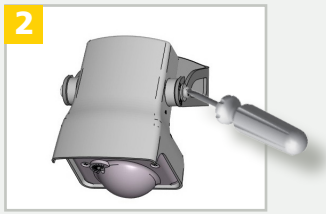
	Motion Relay	Presence Relay
1	Active	Passive
2	Passive	Active
3	Passive	Passive
4	Active	Active

Description	Detection	No Detection
Active Relay	COM NO NC	COM NO NC
Passive Relay	COM NO NC	COM NO NC

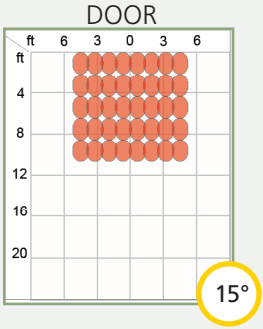
3 SENSOR ANGLE

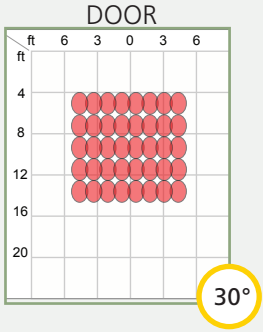


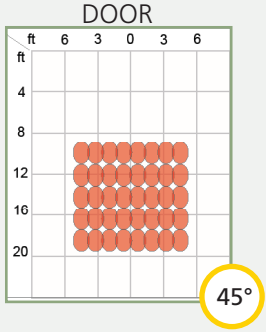
Adjust the angle of the sensor to position the detection fields.



Tighten the screws firmly.







- The graphics above are not to scale and for illustration purposes and represent an approximate AIR detection field when mounted at 16 ft.Infrared field = emitting spots detectable by using the Spotfinder. The actual detection field is slightly smaller and influenced by external factors.
- It's important to adjust the sensor angle to position the AIR field correctly for your application. Utilizing a mounting bracket, sensor location and reveal will dictate the sensor angle for your application.

AIR PATTERN SIZE AT 15° SENSOR ANGLE

Approximate default AIR pattern size using a 15° sensor tilt angle. The higher the mounting height the larger the AIR pattern.

Mounting Height	Width *	Depth *
8 ft	5 ft	5 ft
10 ft	7 ft	7 ft
11.5 ft	7.5 ft	7.5 ft
13 ft	8.5 ft	8.5 ft
16 ft *(max)*	10 ft	10 ft

* Dimensions are approximate.

4 SETUP

Launch a setup to make a reference picture.
Step out of the detection field and do not leave any tools inside the detection field.

Upon power-up, the sensor launches a short setup.

IMPORTANT: Perform a functional test for proper operation before leaving the site.

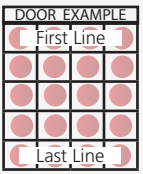
POSSIBLE REMOTE CONTROL SETTINGS

OUTPUT REDIRECTION

RELAY 1 / F1 / RELAY 2

0	1	2	3	4	5	6	7	8	9
presence	air entry pulse	air exit pulse	first or last line air entry pulse	first or last line air exit pulse	presence	presence			
presence	presence	presence	presence	presence	presence	presence			

DOOR EXAMPLE



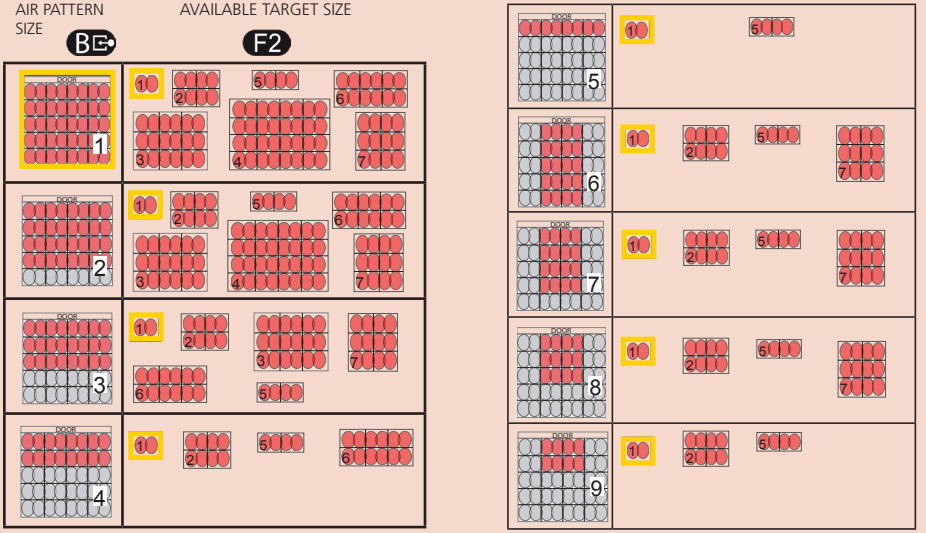
	0	1	2	3	4	5	6	7	8	9	
FREQUENCY (DD)		A	B								
MAX. PRESENCE DETECTION TIME	30 s	1 min	2 min	5 min	10 min	20 min	1 h	1 h 30	2 h	*no learn	* not guaranteed
IR-CURTAIN IMMUNITY		low	normal	high							
TARGET SIZE (F2)											The position of the target in the field is random.
AIR-DETECTION FIELD* (B)											

*AIR-DETECTION FIELD / TARGET SIZE CONTINUED ON NEXT PAGE

THE TARGET POSITION WITHIN THE "AIR" FIELD IS RANDOM

AIR PATTERN SIZE

AVAILABLE TARGET SIZE



NOTE: TARGET SIZE MUST BE CAPABLE TO FIT INSIDE THE CHOSEN AIR PATTERN SIZE

FACTORY VALUES

RESETTING TO FACTORY VALUES:

IMPORTANT: Always finish an adjustment session by launching a setup *(see step 4)* and test the proper operation of the installation before leaving the premises.

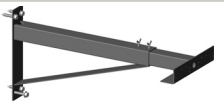
TROUBLESHOOTING

The door never closes and the LED is ON.	Object in the AIR detection area.	1 Move objects or reduce automatic learn time. 2 Wait for learn time to expire and/or Launch a setup or cycle power
The door remains closed and the LED is OFF.	The sensor power is off.	1 Check the wiring and the power supply.
The infrared sensor does not react.	The infrared power emission is too low according to the mounting height.	1 Launch a new setup. Step out of the detection field!
	Improper Target Size.	1 Ensure the target size is not to large or larger than the pattern size.
The door opens and closes constantly.	The sensor is disturbed by the door motion or vibrations caused by the door motion.	1 Make sure the sensor is anchored properly. 2 Increase the sensor angle. 3 Reduce the AIR detection zone.
Sporadic presence detections for no reason.	The presence detection is disturbed by rain or lamps.	1 Set the AIR-curtain immunity to value 3.
	The sensor is not installed properly.	1 Fasten the sensor firmly.
The red LED is permanently ON after a setup.	The sensor has failed the AIR-setup.	1 Launch a new setup and step out of the detection field.
The setup lasts more than 30 seconds.	The setup is disturbed.	1 Make sure the detection field is clear and launch a new setup.
	Another sensor causes interference.	1 Select a different frequency for each sensor.
The sensor does not unlock and the red LED flashes quickly.	The sensor needs an access code to unlock.	1 Enter the right access code. 2 If you do not know the access code, refer to page 3 and delete an unknown code.
The sensor does not respond to the remote control.	The remote control batteries are weak or improperly installed.	1 Check the batteries and change them if necessary.
	The remote control is poorly aimed.	1 Point the remote control towards the sensor.
	The sensor is not powered.	1 Check the power supply of the sensor.

ACCESSORIES

10REMOTE

10SPOTFINDER



10INDBRACKET

10MINIDBRACKET

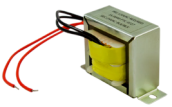
10BR3

SINGLE LED
TRAFFIC LIGHT

DUAL LED
TRAFFFIC LIGHT

COLUMN LIGHT

MODULAR
COLUMN LIGHT



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ANSI

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dhi Door and Hardware Institute

IDA International Door Association
Enhancing the Value and Professionalism of Door & Access Systems Dealers

Upon completion of the installation or service work, at a minimum, perform a safety inspection for the type of Door/Gate per the manufacturer recommendations and/or per ANSI/DASMA guidelines for best industry practices. Some examples but not limited to are ANSI/DASMA 102, ANSI/DASMA 107, UL 325. Make certain all appropriate industry warning labels are applied. It is the responsibility of the installer/service personell to be familiar with national and local codes, standards, and regulatory requirements. BEA Inc. recommends for installers and service personnel to be factory trained for the type of door/gate system prior to performing installation or service.

BEA hereby declares that the MILAN is in conformity with the basic requirements and the other relevant provisions of the directive 2004/108/EC.
Angleur, April 2011 Jean-Pierre Valkenberg, authorized representative
The complete declaration of conformity is available on our website: www.bea-industrial.be

OPEN UP NEW HORIZONS

Only for EC countries: According the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment (WEEE)

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