BEA Americas PHOENIX EX-IT Motion Sensor with Explosion-Proof User Guide

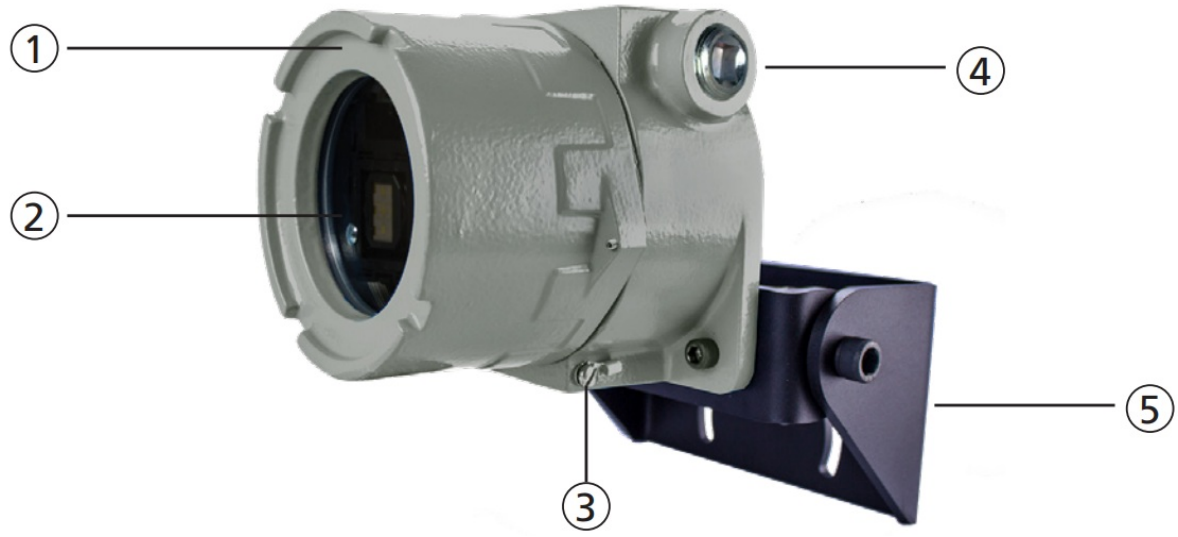
PHOENIX EX-IT
Motion Sensor with Explosion-Proof Housing and Tamper Alert
PHOENIX EX-IT: for normal to high mounting (11.5 – 23 ft)
PHOENIX EX-ITXL: for low mounting (6.5 – 11.5 ft)
PHOENIX EX-SITEWIDE: for wide detection field

http://esp.to/wxb8y5

Visit website for available languages of this document.

Contents

DESCRIPTION



1. Explosion-proof housing
2. Microwave sensor
3. Grounding lug
4. Cable port (¾” NPT pipe thread)
5. Adjustable bracket

MICROWAVE SENSOR SPECIFICATIONS

Technology:	microwave doppler radar
Transmitter frequency:	24.150 GHz
Transmitter radiated power:	< 20 dBm EIRP
Transmitter power density:	< 5 mW/cm²
Anti-tamper:	tamper alert via ouput
Mounting height:	PHOENIX EX-IT: 11.5 – 23 ft; PHOENIX EX-ITXL: 6.5 – 11.5 ft; PHOENIX EX-ITWIDE: 11.5 – 21 ft
Detection zone:	PHOENIX EX-IT: 13 x 16 ft @ 16ft; PHOENIX EX-ITXL: 13 x 6.5 ft @ 8. 2ft PHOENIX EX-ITWIDE: 30 x 11ft @ 21ft. (typical at 30° and field size 9)
Min. detection speed:	2 in/s*
Supply voltage:	12 – 24 VAC ±10%; 12 – 24 VDC +30% / -10%
Mains frequency:	50 – 60 Hz
Max. power consumption:	< 2W
Output**: max. voltage: max. current: max. power:	relay (free of potential change-over contact) 42V AC/DC 1A (resistive) 30 W (DC) / 60 VA(AC) End-of-line resistor(s) 1/8 Watt
Temperature range:	-22 – 140 °F
Housing certification:	(Adalet / Scott Fetzer Co., UL Listing # E81696) UL Class I, DIV 1 Group BCD; Class II, DIV 1 Group EFG; Class III; NEMA Type 4X; IP66; UL 1203; CSA C22.2 No.30&CSA C22.2 No.25 FM 3615; ATEX (FLAMEPROOF – DEMKO), Ex d IIC, IEC60529
Dimensions:	9 in (L) x 7.5 in (W) x 5.5 in (H)
Materials:	Copper-free aluminum (Housing); Powder-coated steel (Bracket)
Weight:	10 lbs
Cable length:	100 ft
Cable diameter:	1⁄4” max
Electrical Access:	3⁄4” NPT pipe thread
Norm conformity:	R&TTE 1999/5/EC; EMC 2004/108/EC

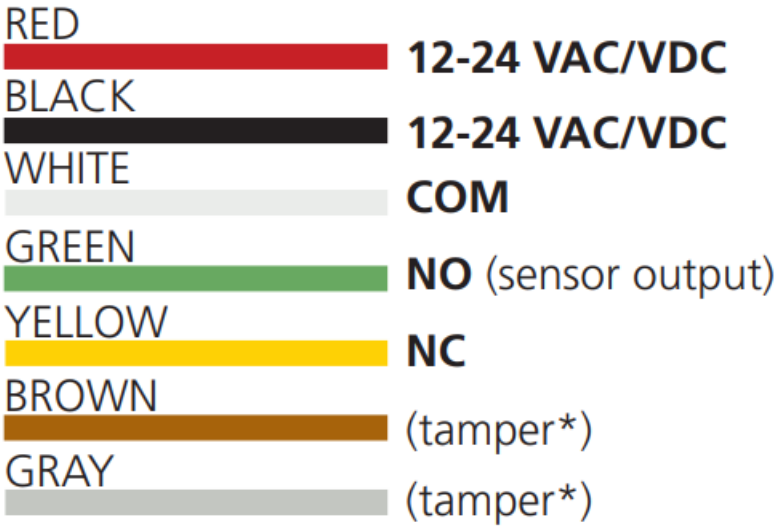
* Measured in optimal conditions
** Output ratings may vary depending on optional end-of-line resistor values
75.0046.03 PHOENIX EX-IT 20211207

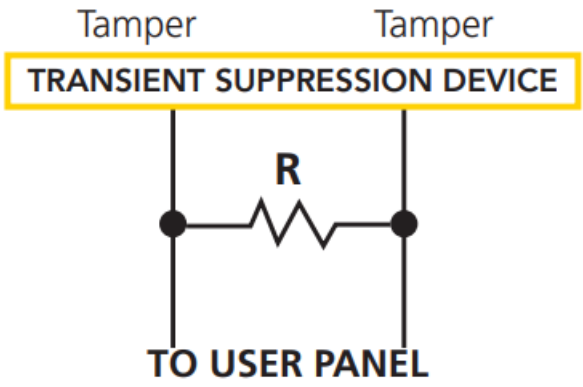
INSTALLATION TIPS

- The sensor must be firmly fastened in order not to vibrate.
- The sensor must not be placed directly behind a panel or any kind of material.
- The sensor must not have any object likely to move or vibrate in its sensing field.
- The sensor must not have any fluorescent lighting in its sensing field.
- The sensor housing cover is adjusted at the factory; there is no need to adjust it at the installation location.

WIRING

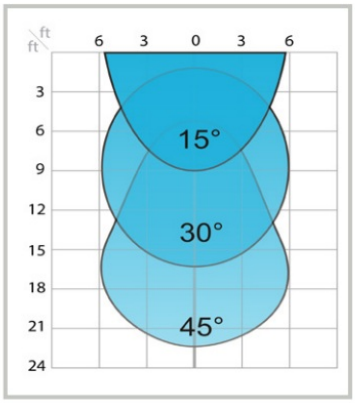
Connect the wires to the controller/PCB (i.e. intrusion detection system).
If necessary, an optional grounding lug is provided to ground the equipment to minimize the risk of electrostatic charge. The equipment must be installed in such a manner that accidental discharge will not occur.
The grounding lug is not required for product functionality but may be required for the application and/or local, national, and international regulations, codes, and standards.
* The Tamper Switch is N.C. with a housing face plate cover attached. Removing the housing face plate causes the switch to open. System resistors may be applied at the Tamper Switch inside the housing or outside at a given location.



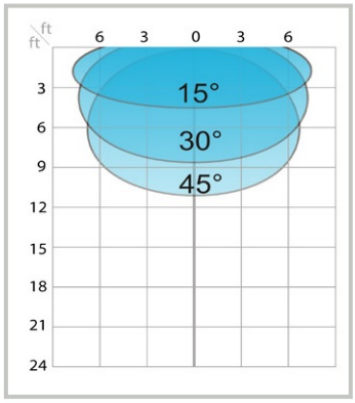


DETECTION FIELD DIMENSIONS

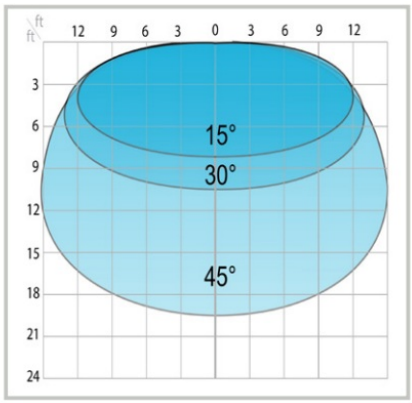
PHOENIX EX-IT
Mounting height: **16 ft**



PHOENIX EX-ITXL
Mounting height: **11.5 ft**

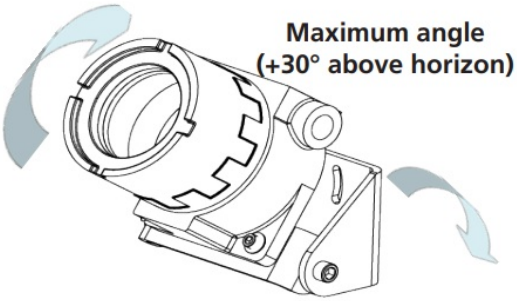


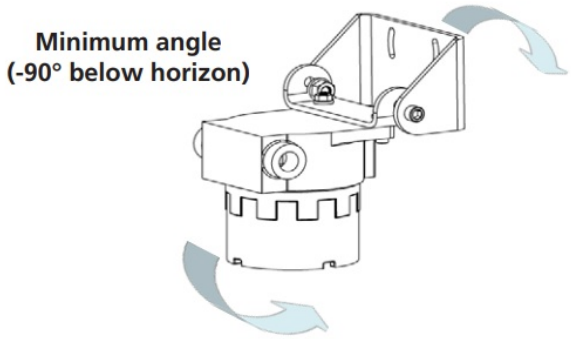
PHOENIX EX-ITWIDE
Mounting height: **8 ft**



MOUNTING ADJUSTMENT

a) Bolt the bracket securely to the wall or other rigid surface.
Make sure that the two 5⁄16 – 18 Allen head bolts are loose so that the sensor can rotate freely.
b) Rotate the sensor to the appropriate angle for the application. When the bracket rotates, it will click. Every click represents a 71⁄2'' angle adjustment.
c) Lock the angle adjustment by tightening the two5⁄16 – 18 Allen head bolts.
Horizontal angle adjustments can be made by loosening the mounting bolts on the base and twisting to the desired angle.





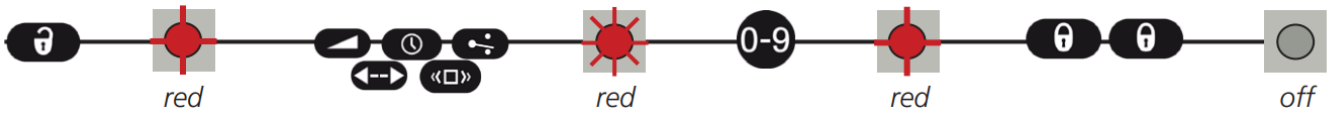
LED SIGNALS

	LED flashes quickly
	LED flashes
	LED flashes slowly
	LED flashes x times
	LED is off

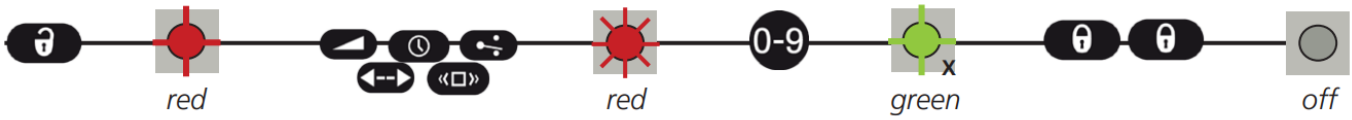
NORMAL MODE		
	no LED	no detection
	red	detection
	red & green blinking	power on / learn

POSSIBLE SETTINGS BY REMOTE CONTROL

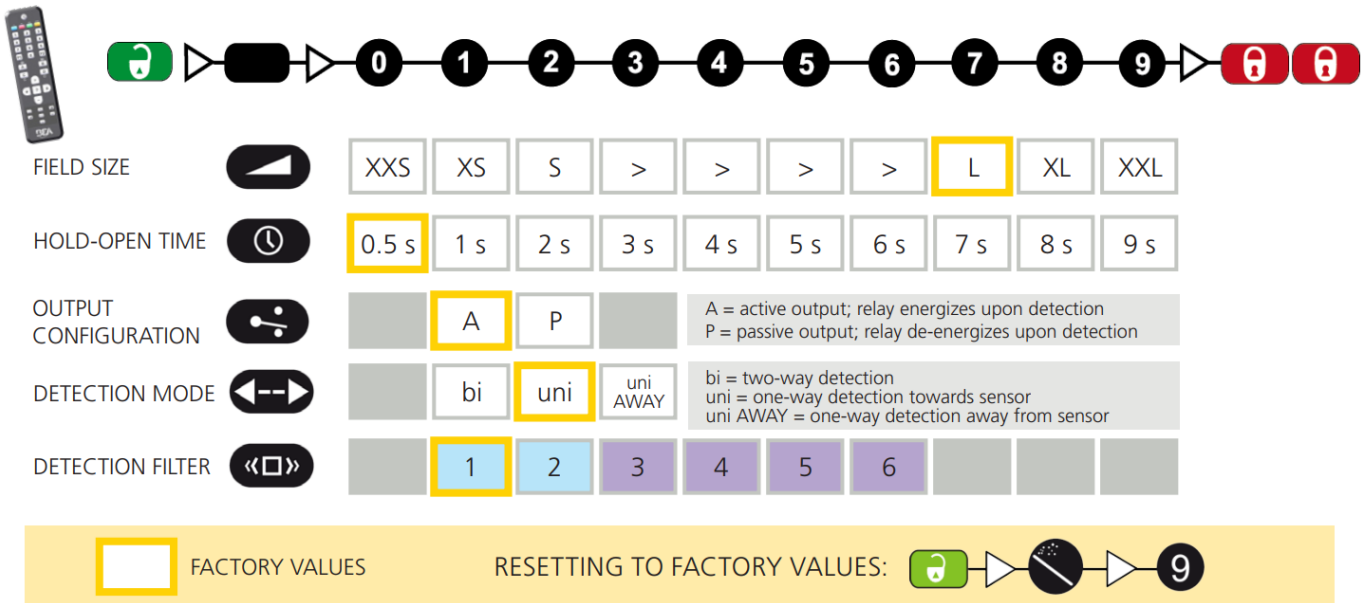
ADJUSTING ONE OR MORE PARAMETERS



CHECKING A VALUE



x = number of flashes = value of parameter



DETECTION FILTER (REJECTION MODE)

Choose the correct detection filter for your application with the remote control or push buttons

Detection of all targets
(pedestrians and parallel traffic are detected)

1. = no specific filter
2. = filter against disturbances (recommended in case of vibrations, rain etc.)

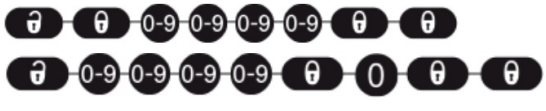
POSSIBLE SETTINGS BY PUSH BUTTONS

	TO START OR END AN ADJUSTMENT SESSION, press and hold either push button until the LED flashes or stops flashing.
	TO SCROLL THROUGH THE PARAMETERS, press the right push button.
	TO CHANGE THE VALUE OF THE CHOSEN PARAMETER, press the left push button .
	TO RESET TO FACTORY VALUES, press and hold both push buttons until both LEDs f lash.

	Parameter num ber	Value (factory values)	
1 FIELD SIZE			-7
2 HOLD-OPEN TIME			0
3 OUTPUT CONFIGURATION			-1
4 DETECTION MODE			-2
5 DETECTION FILTER			-1

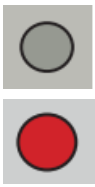
ACCESS CODE

The access code (1 to 4 digits) is recommended to set sensors installed close to each other.

SAVING AN ACCESS CODE:	
DELETING AN ACCESS CODE:	

Once you have saved an access code, you always need to enter this code to unlock the sensor.
If you forget the access code, cycle the power. For the first minute, you can access the sensor without an access code.

TROUBLESHOOTING

	Sensor appears unresponsive	The sensor power is off.	Check wiring and power supply.
	The discrepancy between sensor state and sensor output	Improper output configuration on sensor.	Change the output configuration setting on each sensor connected to the door operator.
	The sensor cycles in and out of detention	The sensor is disturbed by vibration, a moving object, or electrical noise from a nearby environment.	Ensure the sensor is fixed properly.
			Ensure detection mode is unidirectional.
			Increase tilt angle.
			Increase detection filter value.
			Reduce field size.
	The door opens for no discernable reason	It rains and the sensor detects the the motion of the rain drops.	Ensure detection mode is unidirectional.
			Increase detection filter value.
		In highly reflective environments, the sensor detects objects outside of its detection field.	Change the antenna angle.
			Reduce field size.
			Increase detection filter value.
	LED flashes quickly after unlocking	The sensor needs an access code to unlock.	Enter the correct access code.
			If you forgot the code, cycle the power to access the sensor without an access code. Change or delete the access code.
	The sensor does not respond to the remote control	Batteries in the remote control are weak or installed improperly.	Check batteries and change if necessary.

BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA, Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or incorrect adjustments of the sensor/device; therefore, BEA, Inc. does not guarantee any use of the sensor/device outside of its intended purpose. BEA, Inc. strongly recommends that installation and service technicians be AAADM-certified ed for pedestrian doors, IDA-certified ed for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor/ device system performance is compliant with local, national, and international regulations, codes, and standards. Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer's recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107, UL294, UL325, and International Building Code).

Verify that all appropriate industry signage, warning labels, and placards are in place.

Tech Support & Customer Service: 1-800-523-2462
General Tech Questions: techservices-us@BEAsensors.com | Tech Docs: www.BEAsensors.com
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Documents / Resources

	BEA Americas PHOENIX EX-IT Motion Sensor with Explosion-Proof [pdf] User Guide PHOENIX EX-IT, Motion Sensor with Explosion-Proof, Motion Sensor, Sensor with Explosion-Proof, PHOENIX EX-IT, Sensor

References

- Homepage | BEA Americas