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# EAGLE & EAGLE HM

Unidirectional activation sensor for automatic, pedestrian doors and high-mount doors

#### DESCRIPTION



- 4. push buttons
- 5. cover

The image shown here is a standard Eagle. Antennae differ between the standard and high-mount versions of the Eagle.

#### **TECHNICAL SPECIFICATIONS**

Technology:	microwave and microprocessor	
Transmitter frequency:	24.150 GHz	
Transmitter radiated power:	< 20 dBm EIRP	
Transmitter power density:	< 5 mW/cm <sup>2</sup>	
Detection mode:	motion	
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:	< 2 W	
Output: max. contact voltage: max. contact current: max. switching power:	relay (free of potential changeover contact) 42V AC/DC 1A (resistive) 30W (DC) / 60VA (AC)	
Mounting height:	Eagle: 6' – 13' Eagle HM: 10' – 16'6"	
Degree of protection:	IP54	
Temperature range:	-4 – 131 °F	
Dimensions:	4.7" (L) × 3.1" (H) × 2.0" (W)	
Tilt angles:	0 – 90° vertical; -30 – 30° lateral	
Material:	ABS	
Weight:	7.6 oz	
Cable length:	Eagle: 8' Eagle HM: 30'	
Norm conformity:	R&TTE 1999/5/EC, LVD 2006/95/EC, RoHS 2 2011/65/EU	

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

## **INSTALLATION TIPS**

- Do not touch electrical parts.
- Avoid vibrations.

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- Do not cover the sensor.
- Avoid proximity to neon lamps or moving objects.
  - The sensor may be mounted horizontally or vertically (e.g. on a ceiling or on a wall, respectively).
    - ◊ If mounting horizontally, the sensor must be mounted in front of the door.
    - ◊ If mounting vertically, the sensor must be mounted <u>above</u> the door.

#### How to Open the Sensor:







AFTER MOUNTING

### **MOUNTING & WIRING**

If using EAGLE SPACER or EAGLE SPACER V, please refer to User's Guide 75.5981 before beginning.



Apply the mounting template. Drill 1 hole for the cable and pull it through. Drill 2 holes for the screws.



Connect the wires accordingly: 1: RED - POWER SUPPLY + 2: BLACK - POWER SUPPLY -3: WHITE - COM

4: GREEN - NO OR 5: GREEN - NC



Position the cable as indicated. Mount the sensor firmly.

# **MECHANICAL ADJUSTMENTS**

4 <u>Standard EAGLE only</u>: Choose the appropriate antenna (narrow or wide) for the correct detection zone width. Narrow: 6' 6" × 8' Wide: 13' × 6' 6"

EAGLE HM only offers narrow antenna.

See diagram below for how to change antennas.





# **MECHANICAL ADJUSTMENTS (cont.)**

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If desired, adjust the antenna angle (laterally and/or vertically) to position the detection field. When mounting at the maximum height, BEA recommends a 15° tilt angle. Observe antenna type (narrow or wide) in the illustrations below.

# LATERAL ADJUSTMENT VERTICAL ADJUSTMENT NULL Image: Constraint of the state of

### **SETTINGS (by remote control or push-buttons)**

6 Program the sensor for the desired application. When mounting at the maximum height, BEA recommends the following: Immunity = low Zone Size = XXL 2 8 0 1 3 4 5 9 A A 6 EAGLE def. = 8 S XL ZONE SIZE XXS XS > > > > L XXL FAGLEHM def. = 7 <<>>> XL IMMUNITY FILTER low normal hiah > > > L hiahest bi = two-way detection uni uni MTF & uni = one-way detection towards sensor uni MTF = one-way detection with motion tracking feature uni AWAY = one-way detection away from sensor DETECTION MODE bi uni MTF AWAY AWAY OUTPUT A = active output (NO-contact); relay energizes upon detection A Ρ CONFIGURATION P = passive output (NC-contact); relay de-energizes upon detection HOLD-OPEN TIME  $( \mathbb{O} )$ 0.5 s 1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s 9 s MOUNTING Standard Eagle default = < 10 ft < 10 ft > 10 ft HEIGHT High-mount Eagle default = > 10 ft open = the sensor detects constantly. The LED is ON. DOOR CONTROL auto closed open closed = the sensor is in standby and does not detect. The LED is OFF. FACTORY VALUES **RESETTING TO FACTORY VALUES** USING REMOTE CONTROL:  $\rightarrow$ -9 USING PUSH-BUTTONS: 2 se ACCCESS CODE -The access code (1 to 4 digits) is recommended to set sensors installed close to each other. θ ┣━┝━━ 0-9 0-9 0-9 0-9 ━┝━━┓ 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

IROOBLESHOOTING			
The door remains closed. LED is off.		Sensor power is off.	Check wiring and power supply.
	LED is off.	Door control setting (F2) is set to 3 (closed).	Change door control setting (F2) to 1 (automatic).
	Door does not react as expected	Improper output configuration on sensor.	Change the output configuration setting on each sensor connected to the door operator.
	Door opens and closes constantly	Sensor is disturbed by door motion or vibrations from door motion.	Ensure sensor is fixed properly.
			Ensure detection mode is unidirectional.
			Increase antenna angle.
			Increase immunity filter.
			Reduce zone size.
	Door opens for no discernable reason	It rains and the sensor detects the motion of the rain drops.	Ensure detection mode is unidirectional.
			Increase immunity filter.
			Install rain accessory.
		In highly reflective environments, the sensor detects objects outside of its detection zone.	Change the antenna angle.
			Reduce zone size.
			Increase immunity filter.
		In airlock vestibules, the sensor detects the movement of the opposite door.	Change the antenna angle.
			Change antenna.
			Increase immunity filter.
*	LED flashes quickly after unlocking	Sensor needs access code to unlock.	Enter correct access code.
			If you forgot the code, cycle the power to access the sensor without access code. Change or delete the access code.
	Sensor does not respond to the remote control	Batteries in the remote control are weak or installed improperly.	Check batteries and change if necessary.
		Remote control not pointed correctly.	Point remote control at sensor.



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