

ENFORCER®

Post-Mount Wave-to-Open Sensor with Access Box

SD-9963-KSGQ

Installation Manual



Intertek
5024193

Conforms to
UL Std. 294



The ENFORCER Post-Mount Wave-to-Open Sensor with Access Box is a full-featured exit plate using IR technology to allow egress from a protected area or activate a device with just a wave of a hand. Since it is touchless, it reduces contamination risks making it good for hospitals, clinics, labs, cleanrooms, schools, factories, or offices where no special clearance is required for exit or where a longer-range sensor may cause unwanted activation. A manual override button is also provided.

- Adjustable sensor range up to 7" (18cm)
- Front panel is IP65 weatherproof for outdoor use
- 1.2A Form C relay, adjustable output duration 0.5~30 seconds or toggle
- Gooseneck- or wall-mountable
- Manual override button
- LED-illuminated sensor area for easy identification
- Selectable LED colors (turns from red to green or green to red) on sensor activation
- Hinged stainless steel plate easily removable for easy wiring
- Includes heavy-duty steel box
- Power must be provided by low-voltage power-limited/Class 2 power supply
- Use only low-voltage field wiring and do not exceed 98.5ft (30m)

Parts List

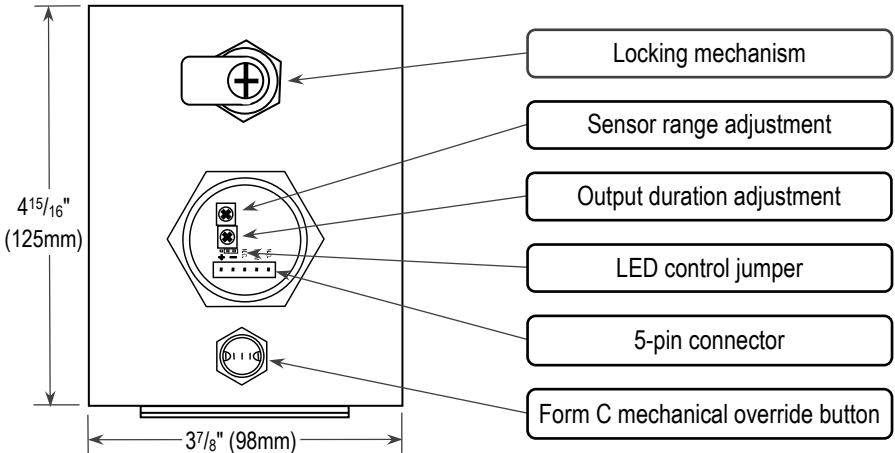
1x Wave-to-Open Sensor 1x Steel access box 4x Mounting screws 2x Keys 1x Manual

Specifications

Operating voltage		12~24 VDC
Current draw (max. $\pm 10\%$)	Standby red	18mA@12VDC / 23mA@24VDC
	Triggered green	23mA@12VDC / 29mA@24VDC
	Standby green	14mA@12VDC / 18mA@24VDC
	Triggered red	28mA@12VDC / 35mA@24VDC
Relay type		Form C dry contact (SPDT), 1.2A@24VDC
Response time		10ms
LEDs	Standby	Red*
	Triggered	Green*
Output duration		0.5~30 sec or toggle
Range		2"~7" (5~18 cm)
IP Rating		IP65†
Operating temperature		-4°~131° F (-20°~55° C)
Dimensions		4"x5½"x3" (102x134x77 mm)
Weight		1-lb 9-oz (710g)
Destructive attack level		Level I
Line security		Level I
Endurance level		Level IV
Standby power		Level I

*Color function reversible †Front panel only

Overview



INSTALLATION NOTES:

- This product must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-latest edition or the Canadian Electrical Code CSA C22.1.
- Due to the nature of IR technology, an IR sensor can be triggered by a direct light source such as sunlight, reflected light from a shiny object, or other direct light. Therefore, in some locations it may be necessary to install a hood or other barrier to shield the sensor from direct light sources.

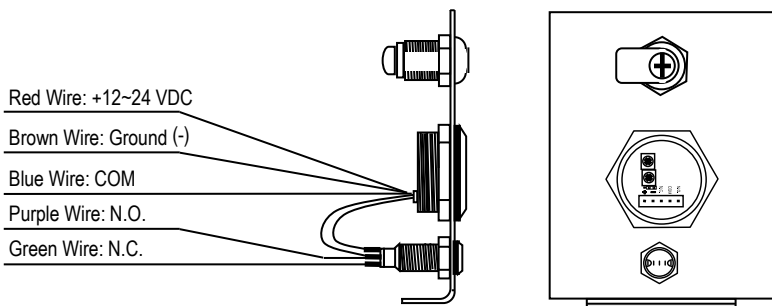
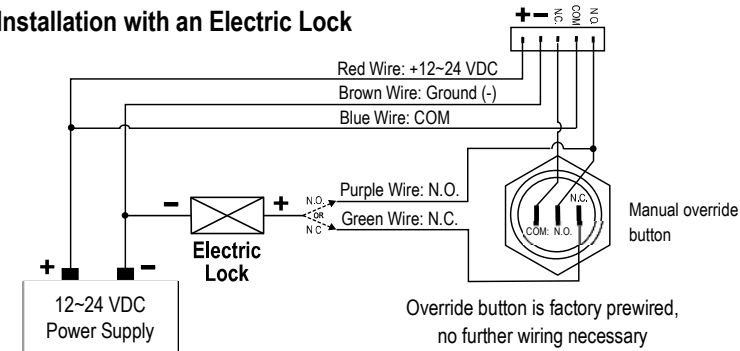
Installation

1. Run four wires through the wall to the access box. Use only low-voltage, power-limited/Class 2 power supply and low-voltage field wiring not to exceed 98.5ft (30m).
2. Unlock and remove the front plate from the access box.
3. Install the access box to the wall through the four mounting holes in the back, and thread the four wires through the center hole.
4. Replace the front plate but leave open and connect the four wires from the access box to the wave-to-open sensor according to the wiring diagram above.
5. Close and lock the front plate, taking care not to crimp the wires.
6. Remove clear protective film from the sensor before use.
7. Make a copy of the key in case of loss. SECO-LARM does not offer replacement keys.

WARNING: Do not connect any device that will exceed 1.2A@24VDC.

Sample Wiring Diagram

Typical Installation with an Electric Lock

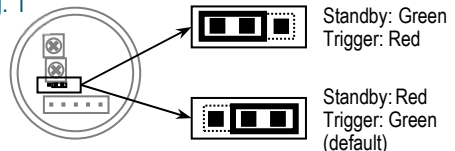


Changing the LED Color

In the default LED configuration, red indicates standby and green indicates triggered.

To change, simply move the LED control jumper as shown in Fig. 1.

Fig. 1

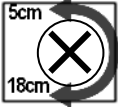


Sensor Adjustment

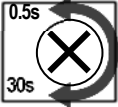
Adjusting the Sensor Range and Output Duration

1. The sensor range can be adjusted 2"~7" (5~18 cm).
2. Output duration adjustable from 0.5 to 30 seconds or toggle*

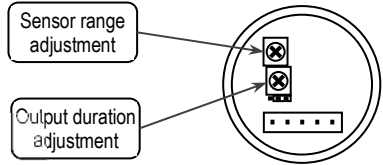
NOTE: Do not force the adjustment trimpots. Only minimal force is required.



Sensor range: 2"~7" (5~18 cm)
Default: 7 (18cm)



Output duration: 0.5~30 seconds, toggle*
Default: 0.5 seconds
*Toggle: turn clockwise all the way to maximum



Care and Cleaning

The sensor requires special care to ensure reliability and a long operating life.

1. Use a soft, clean, preferably microfiber cloth for cleaning. Use the mildest type of cleaner available.
2. When cleaning, spray the cleaning solution onto the cleaning cloth instead of the unit.
3. Wipe any excess liquid from the sensor. Wet spots may affect the sensor's performance.

Troubleshooting

Sensor triggers unexpectedly	<ul style="list-style-type: none">• Ensure that no strong direct or reflected light source is reaching the sensor.• Ensure that sensor is sheltered from direct sunlight.
Sensor remains triggered	<ul style="list-style-type: none">• Check that nothing is remaining in range of the sensor including a cone of 60° from the centerline.• Reduce the IR range of the sensor.• Ensure that the sensor's output duration potentiometer is not turned to maximum• Check that the power voltage is within the sensor's specifications.
Sensor will not trigger	<ul style="list-style-type: none">• Increase the IR range of the sensor.• Check that the power voltage is within the sensor's specifications.

IMPORTANT WARNING: For a weather-resistant installation, ensure that the unit is installed in a waterproof back box, and that the faceplate and faceplate screws are properly sealed. Incorrect mounting may lead to exposure to rain or moisture inside which could cause a dangerous electric shock, damage the device, and void the warranty. Users and installers are responsible for ensuring that this product is properly installed and sealed.

IMPORTANT: Users and installers of this product are responsible for ensuring that the installation and configuration of this product complies with all national, state, and local laws and codes. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.

California Proposition 65 Warning: These products may contain chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for one (1) year from the date of sale to the original customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM and the purchaser's exclusive remedy, shall be limited to the replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damage of any kind to the purchaser or anyone else.

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SECO-LARM® U.S.A., Inc.

16842 Millikan Avenue, Irvine, CA 92606
Phone: (949) 261-2999 | (800) 662-0800

Website: www.seco-larm.com
Email: sales@seco-larm.com

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