

ENFORCER
SD-9773-KNEVQ
Surface Mount Wave
to Open Sensor



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ENFORCER SD-9773-KNEVQ Surface Mount Wave to Open Sensor



Features

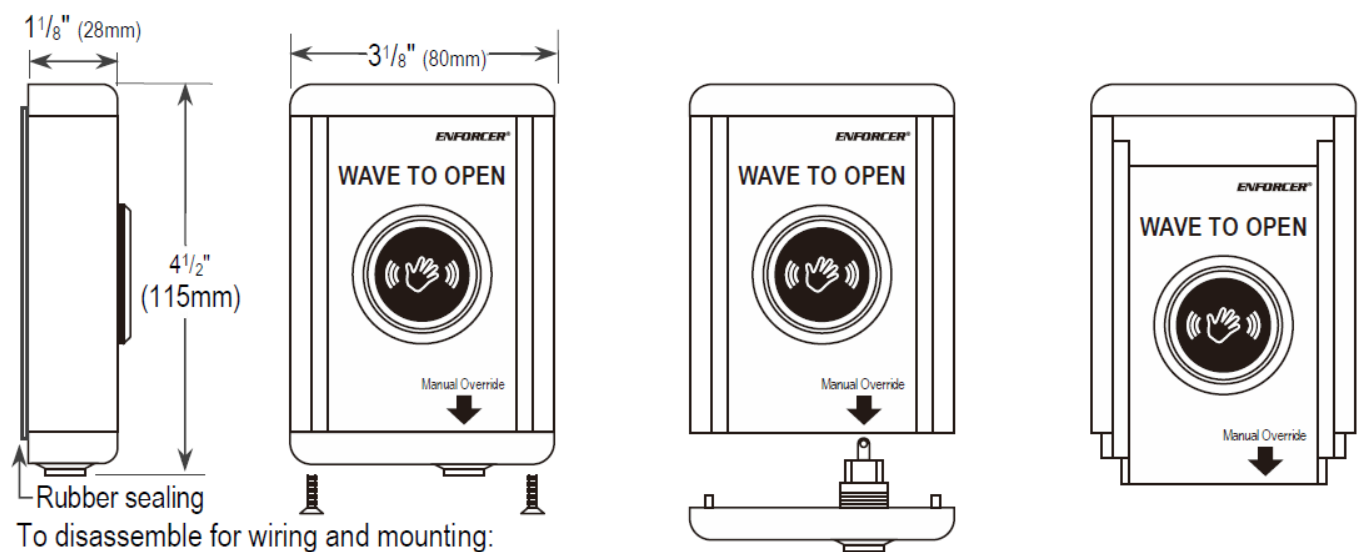
The ENFORCER Surface-Mount Wave-to-Open Sensor with Manual Override Button is a full-featured exit plate which uses IR technology to allow egress from a protected area or activate a device with the simple wave of a hand. Since no touch is required, this sensor is suitable for use in hospitals, clinics, labs, cleanrooms (to reduce the risk of contamination), schools, factories, or offices. A manual override allows for operation if the sensor is disabled.

- Adjustable sensor range up to 6" (15cm)
- 1A relay, adjustable trigger duration 0.5~30 seconds or toggle
- LED illuminated sensor area for easy identification
- Selectable LED colors (turns from red to green or green to red) when sensor is activated
- Aluminum alloy and polypropylene plastic housing
- IP54 Weather-resistant for outdoor use
- 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 Proximity sensor
- 4x Mounting screws
- 1x 5-Pin wiring harness
- 2x Screw plugs
- 3x Wires for override button
- 1x Manual

Overview



To disassemble for wiring and mounting:

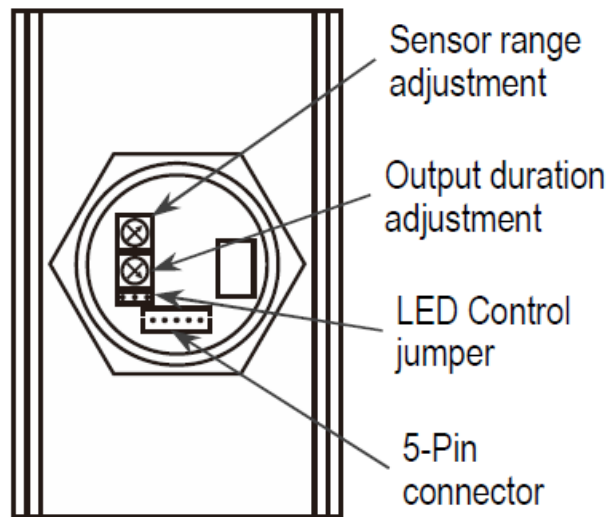
1. Remove the two screws at the bottom and remove the manual override assembly.
2. Slide the sensor plate downward along with the plastic rails to remove them from the housing.

Specifications

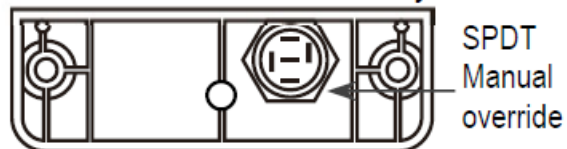
Operating voltage		12~24 VDC
Current drain (max.)	Standby (red)	20mA@12VDC / 26mA@24VDC
	Triggered (green)	26mA@12VDC / 32mA@24VDC
	Standby (green)	16mA@12VDC / 20mA@24VDC
	Triggered (red)	31mA@12VDC / 39mA@24VDC
Relay type		SPDT dry contact, 1A@24VDC
Response time		10ms
LEDs	Standby	Red*
	Triggered	Green*
Output duration		0.5~30 s, toggle
Destructive attack level		Level I
Line security		Level I
Endurance level		Level IV
Standby power		Level I
Range		19/16"~6" (4~15 cm)
IP Rating		IP54†
Housing material		Aluminum alloy / polypropylene plastic
Operating temperature		-4°~131° F (-20°~55° C)
Dimensions		31/8"x 41/2"x11/8" (80x115x28mm)
Weight		9.5-oz (270g)

- *Color function reversible
- †When properly installed

Sensor Back



Manual override assembly

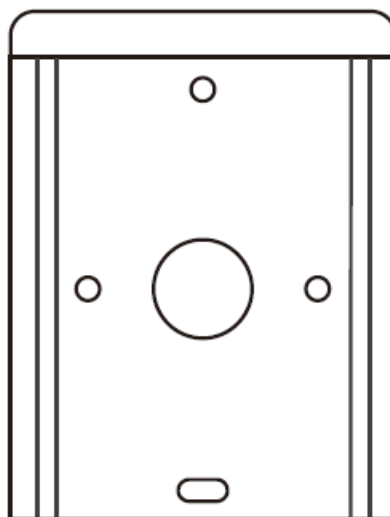


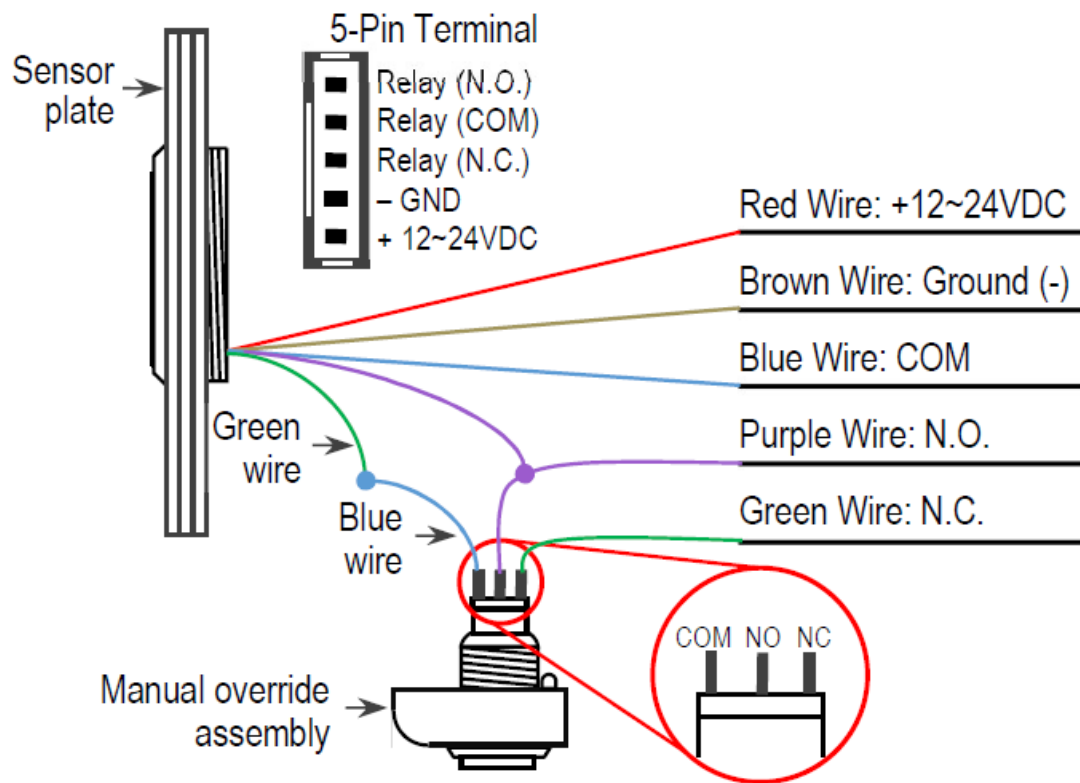
INSTALLATION NOTES

- 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

Mounting and Wiring Diagram

Use disassembled enclosure base as a template to mark the locations of the 4 mounting holes and wiring hole for drilling.





Installation

1. Drill holes as shown above and mount the enclosure base. For weatherproof installation, install to a flat surface so the rubber sealing pad has a good seal. Otherwise apply silicone sealant (not included) around the back of the base before installing. Thread the wires through the wiring hole.
2. Connect the wires to the Sensor according to the Wiring Diagram above and on pg. 4. Use only low-voltage, power-limited/Class 2 power supply and low-voltage field wiring not to exceed 98.5ft (30m).
3. Slide the sensor plate and plastic mounting rails into the enclosure base and use the two screws to attach the manual override assembly taking care not to crimp the wires (see Overview, pg. 2).
4. Tamp the screw plugs into the holes. Remove clear protective film from the sensor before use.
5. **WARNING:** Do not connect any device that will exceed 1A@24VDC.

Changing the LED Color

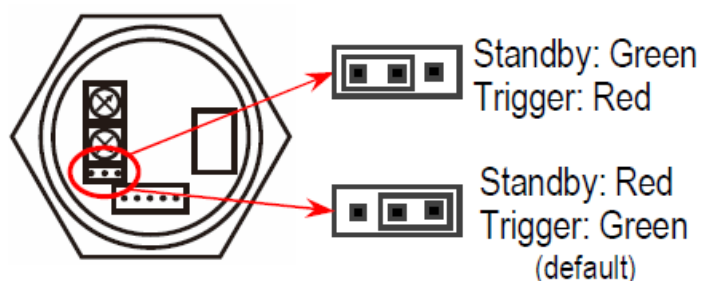
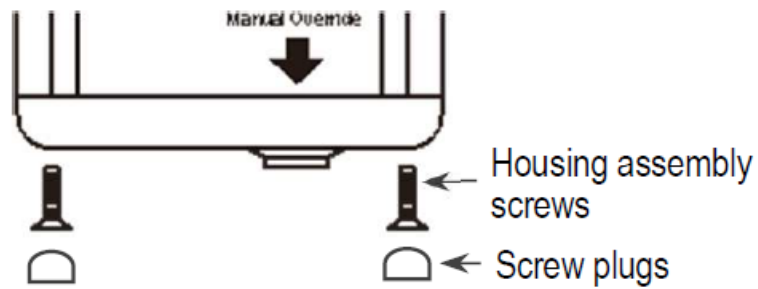


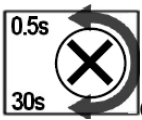
Fig. 1 Screw Plugs



Adjusting the sensor range and trigger duration

1. The sensor range can be adjusted from 19/16"~6" (4~15 cm).
2. Output duration can be adjusted from 0.5~30 seconds or toggle.

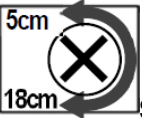
NOTE: Do not force the trimpots. Only minimal force is needed.



- **Output duration:** 0.5-30 seconds, toggle*

Default: 0.5 seconds

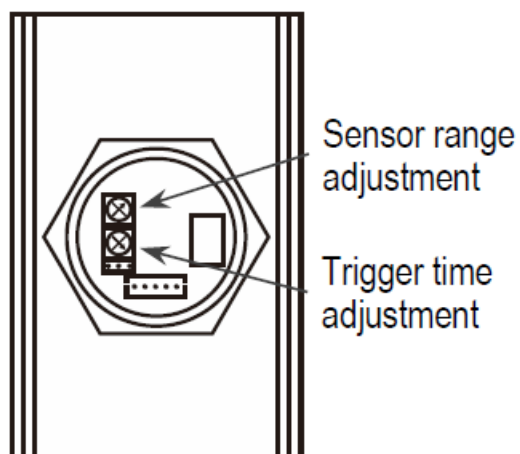
Toggle: turn clockwise to maximum position



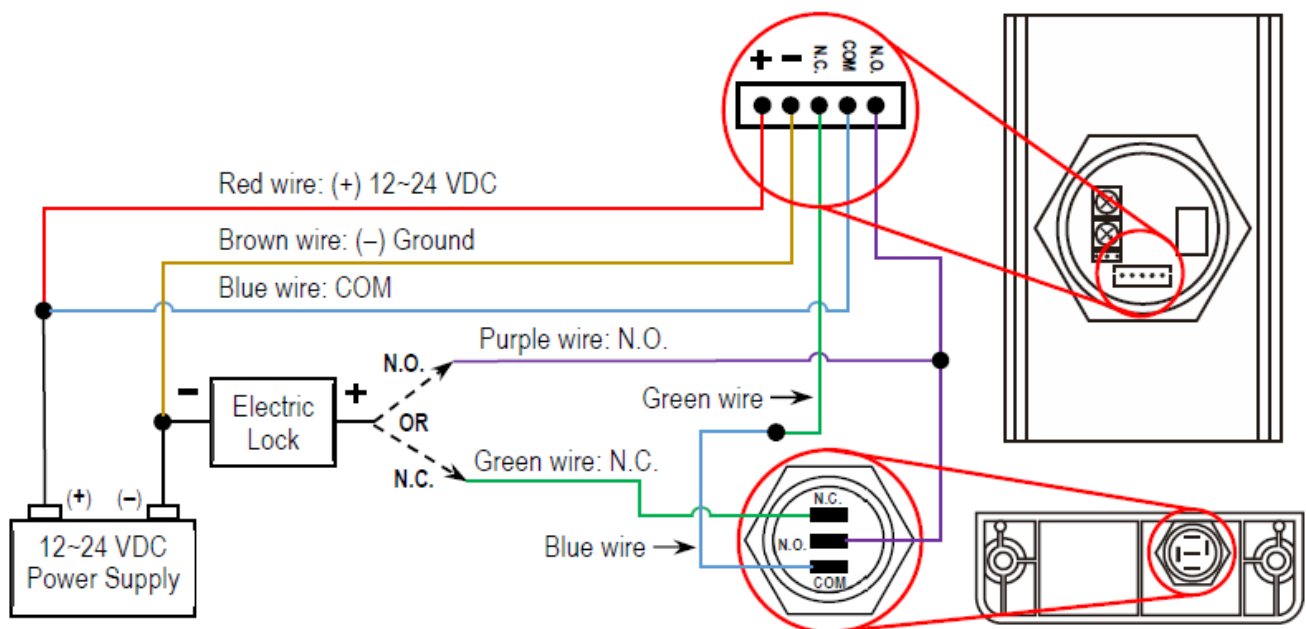
- **Sensor range:** 2"-7" (5-18 cm)

Default: 7" (18cm)

Fig. 2 Sensor Back



Wiring Diagram



Troubleshooting

Sensor triggers unexpectedly

- Ensure that no strong direct or reflected light source is reaching the sensor.
- Ensure that sensor is sheltered from direct sunlight.

Sensor remains triggered

- 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

- Increase the IR range of the sensor.
- Check that the power voltage is within the sensor's specifications

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. Be sure to wipe off any excess liquid from the sensor. Wet spots may affect the sensor's performance

- **IMPORTANT WARNING:** For a weather-resistant installation, ensure that the unit is installed so that the gap between the enclosure base and mounting surface is properly sealed and that the drain bottom drain hole is protected from spray. 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.

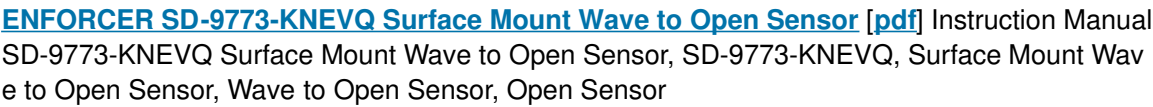
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FAQ

- **Q: Can direct light interfere with the sensor's functionality?**
 - A: Yes, due to the nature of IR technology, direct light sources like sunlight or reflected light can trigger the sensor. In such cases, consider installing a hood or barrier to shield the sensor from direct light sources.
- **Q: What is the recommended power supply for this sensor?**
 - A: Power must be provided by a low-voltage power-limited/Class 2 power supply. Ensure you only use low-voltage field wiring and do not exceed 98.5 feet (30m) in wiring length.

Documents / Resources



- [!\[\]\(7e21c3ba61cae16583010dbe84b5ee43_img.jpg\) Armería de Madrid](#)
- [!\[\]\(824f8cc723379fb5b0367122d1a66375_img.jpg\) P65Warnings.ca.gov](#)
- [User Manual](#)

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