

ID20

Industrial Door Microwave Motion Sensor

INSTALLATION INSTRUCTIONS

Section 1

General Description

The ID20 is a long range microwave motion sensor for activating automatic industrial doors. Features include a speed selectable switch that makes the unit capable of detecting pedestrians and/or vehicles. Detection mode is selectable between approach-only or depart-only motion and the weatherproof housing makes it ideal for installation in exterior applications.

Microwave technology allows the ID20 to detect larger objects, such as forklift trucks, up to 60 feet away. Maximum pattern size is approximately 18 ft. wide at 60 ft. from the unit and is adjustable via a range potentiometer on the printed circuit board. The ID20 is not affected by air motion, change in temperature, humidity, color or background variations.

Section 2

Installation

Mounting (Fig. 1)

1. Remove 1/4-20 hinge bolt holding the mounting bracket to the sensor housing and detach the mounting bracket.
2. Using the mounting bracket as a template, mark and drill mounting holes in the desired location.
3. After attaching the mounting bracket in the desired location, re-attach the sensor housing to the mounting bracket with the 1/4-20 hinge bolt removed in step 1.

Wiring (Fig. 2)

Wiring the sensor must be done with the sensor cover off. Remove the four **hex head** screws. Two are located on the front plate and two are located on the back plate. The cover is then removed by lifting up slightly and sliding forward (Fig. 1).

1. With Power off, pull 4 conductor cable through the wire fitting and make all wiring connections to the terminal block located on the printed circuit board (Fig. 2).



NOTICE: Operating voltage is 12V to 24V AC or DC and should be applied through the transformer supplied with the unit. Allow the device 10 seconds to warm up once power is applied.



WARNING: Do Not ground one side of the secondary of the supply transformer. Circuit ground of the unit is electrically connected to the housing. Grounding one side of the transformer may create a direct short that will permanently damage the unit.



NOTICE: 4 conductor cable, 18 to 22 gauge conductor size, 3/16" to 5/16" cable O.D. is recommended.

For more information, call us toll-free at (800) 842-2545.

Set Up & Alignment (Fig. 2)

1. Set up the sensor parameters via the 4 dip switches and 2 position slide switch located on the printed circuit board (Fig. 2).



NOTICE: Dip switch #2 provides speed detection adjustment. ON = detection of vehicles & pedestrians traveling 3 mph+. OFF = detection of objects & pedestrians traveling 1 mph+. For installations where pedestrian detection is not desired, set dip switch #2 to ON.



NOTICE: Dip switches 3 & 4 are not used.

2. Align the ID20 by adjusting the range potentiometer and aiming angle to achieve the desired pattern placement and size. To adjust the sensor's aiming angle, loosen the 1/4-20 hinge bolt, adjust and retighten.



NOTICE: A time delay adjustment potentiometer is available to adjust the amount of time the relay stays energized after detection is lost.

3. An LED located on the main printed circuit board will illuminate when the relay has changed state in response to motion providing a visual indication that the unit is working.
4. Once set up and alignment is completed, replace the cover and ensure that all bolts and screws are tightened.

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Section 3

System Inspection and Instructions

*****EXTREMELY IMPORTANT*****

After final set-up, test unit(s) completely to ensure that proper coverage has been achieved (width, depth and location of the pattern must be tested).

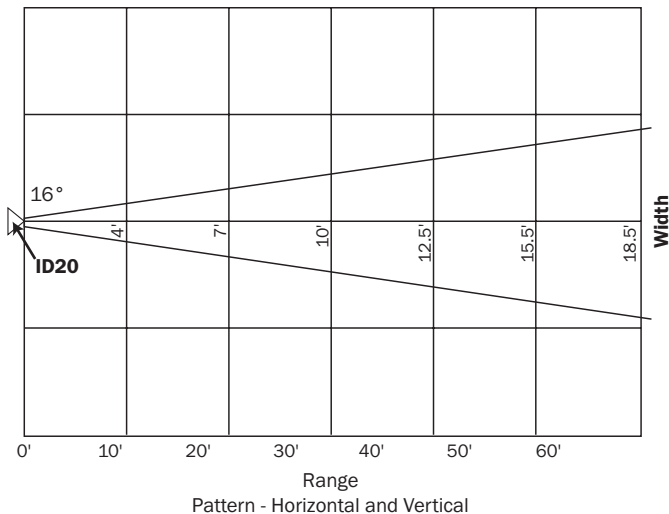
After the installation and operational check of the system:

1. Place the proper warning labels on the door.
2. Instruct the owner of the door system operation and how to test it. This should be checked on a daily basis.
3. Instruct the owner on what to do if the door or any of its components become damaged.
4. Strongly recommend to the owner that the complete entry be inspected twice a year as part of the service agreement.

TYPICAL PATTERN DIAGRAM

Mounting Height: 12 Ft.

Tip Angle: 16°



Section 4

Technical Data

Model.....	ID20
Frequency.....	10.525 GHz
Detection Pattern.....	Adjustable Range (see typical pattern diagram)
Detection Angle.....	Adjustable, Horizontal & Vertical
Detection Mode.....	Unidirectional (approach only or depart only)
Response Time.....	0.150 seconds
Hold Time.....	0 to 5 seconds
Power Requirements.....	12 to 24V AC or DC
Current Consumption.....	0.075 Amp @ 24V DC
Relay Contacts.....	Form C, rated at 3 Amps
Mounting.....	Heavy-duty bracket, predrilled & slotted
Temperature.....	-35 °F to 165 °F (-35 °C to 74 °C)
Weight.....	3.5 lbs. (1.6 kg)
Size.....	7" x 4" x 4" 17.8cm x 10.2cm x 10.2cm
Color/Enclosure.....	Aluminum, black powder coat finish

Section 5

Warranty

MS SEDCO guarantees this product to be free from manufacturing defects for one year from date of installation. Unless MS SEDCO is notified of the date of installation, the warranty will be in effect for one year from the date of shipment from our factory. If, during the first year, this device fails to operate and has not been tampered with or abused, the unit can be returned prepaid to factory and it will be repaired free of charge. After one year, the unit will be repaired for a nominal service charge. **This limited warranty is in lieu of all other warranties expressed or implied, including any implied warranty of merchantability, and no representative or person is authorized to assume for MS SEDCO any other liability in connection with the sale of our products. All warranties are limited to the duration of this written warranty. In no event shall MS SEDCO be liable for any special, incidental, consequential or other damages arising from any claimed breach of warranty as to its products or services.**

FIGURE 1
ID20 Housing

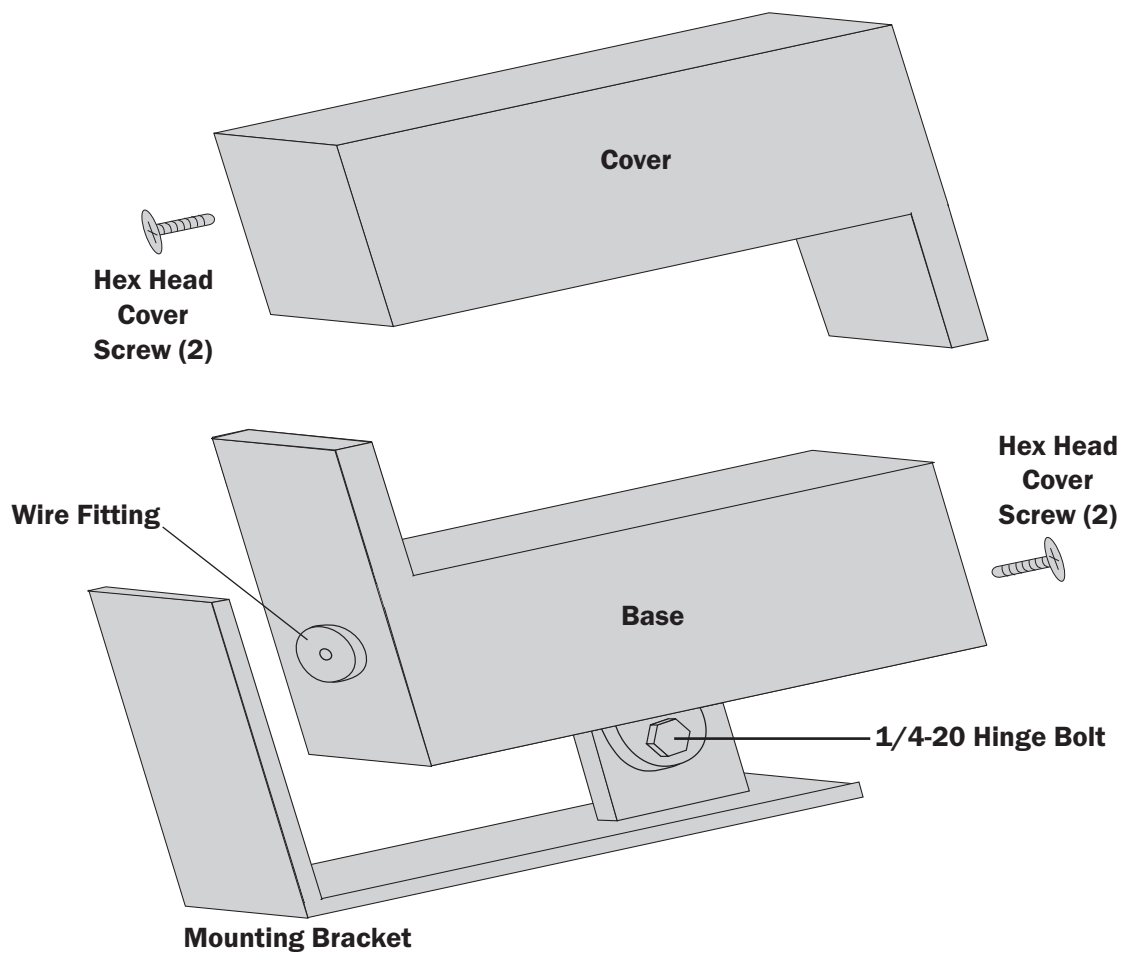


FIGURE 2

