This product is an accessory or part of a system. Always read and follow the manufacturer’s instructions for the equipment before connecting this product. Comply with all applicable codes and safety regulations. Failure to do so may result in damage, injury or death.

WARRANTY

EMX Industries Incorporated warrants all products to be free of defects in materials and workmanship for a period of two years under normal use and service from the date of sale to our customer. This warranty does not cover normal wear and tear, abuse, misuse, overloading, altered products, damage caused by incorrect connections, lightning damage, or use other than intended design. There is no warranty of merchantability. There are no warranties expressed or implied or any affirmation of fact or representation except as set forth herein. EMX Industries Inc. sole responsibility and liability, and the purchaser’s exclusive remedy shall be limited to the repair or replacement at EMX Industries option of a part or parts found not conforming to the warranty. In no event shall EMX Industries Inc. be liable for damages of any nature, including incidental or consequential damages, including but not limited to damages resulting from non-conformity, defect in material or workmanship.

HAWK 2  Operating Instructions REV1.3  10.17.13

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HAWK 2 INDUSTRIAL MOTION SENSOR

OPERATING INSTRUCTIONS

MATERIALS SUPPLIED
• Operating Instructions
• HAWK 2 Sensor

GENERAL DESCRIPTION

The HAWK 2 is a planar technology microwave detector working in the K band. It is the ideal solution for operating all types of fast doors and industrial gates. It detects the movement of people and vehicles in the monitored area. With an appealing style, it can also be used for operating automatic doors.

Easy to install at a height of up to 20ft (6 meters), it has a versatile mechanical orientation system for accurate positioning to the required coverage area. The detection sensitivity and direction of movement (toward, away or both) are programmed by DIP switch setting. A microprocessor processes the received Doppler signals and provides set of form C relay contacts for external connection.

The LED on the front of the HAWK 2 indicates detection.

SET-UP

The HAWK 2 motion sensor can be configured in the mono direction mode (one direction only) or in the bi-directional mode (both directions). Remove the rubber plug from the lower section of the detector (FIG. 1-A) and set the required function using the dip-switch (FIG. 1-B) settings per the following table.

Setting the detection range
It is possible to define the controlled area by changing the angle of the detector and the position of the dip-switch 4 (Fig. 3). Using trimmer TR1 (FIG. 1-F) the sensitivity can be optimized to activate detection only for the desired area.
## INSTALLATION

The HAWK 2 can be installed at a height of 10 to 20 ft. (3 to 6 meters) to cover an area of 10 to 100 sq. ft. (3 to 30 sq. meters).

The HAWK 2 can be installed at the center of the door to be controlled, or on the side on non-vibrating structures (walls or ceiling) at a maximum height of 20 ft. Use the template supplied with the unit for preparing the mounting holes.

Fasten the device using the prepared holes, remove the lower cover of the mounting base and loosen the screw that locks the detector orientation. Aim the detector toward the area to be controlled and lock the screw in that position.

For proper operation, do not install HAWK 2:
- Facing the moving parts of a door
- Facing fluorescent lights (minimum distance 6.5 ft.)
- Facing area where rain could provoke water fluxes

These conditions could cause undesired opening of the door.

## WIRING

Connect the pre-wired cable as indicated in table 1.

<table>
<thead>
<tr>
<th>WIRE COLOR</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>12-24VAC/DC</td>
</tr>
<tr>
<td>Black</td>
<td>12-24VAC/DC</td>
</tr>
<tr>
<td>Green</td>
<td>Relay contact COMMON</td>
</tr>
<tr>
<td>Brown or Yellow</td>
<td>Relay contact NORMALLY OPEN (unpowered)</td>
</tr>
<tr>
<td>Blue</td>
<td>Relay contact NORMALLY CLOSED (unpowered)</td>
</tr>
</tbody>
</table>

## SENSITIVITY PATTERNS

### SW3 ON (Normal operation)

![Normal operation diagram]

### SW3 OFF (Positive safety)

![Positive safety diagram]

**Adjusting activation period**

Trimmer TR2 (FIG. 1-E) is used to set the desired duration of the output contact, variable form 1 to 6 seconds.