# NIR-100 COMMERCIAL OVERHEAD DOOR PHOTOEYE SYSTEM

## **Applications**

NIR-100 is a microcontroller-based device designed to provide the safety features associated with highly reliable, thru-beam detection of obstacles in, commercial overhead doors, rolling doors and any weather protected installation. The fast response of the unit provides an immediate indication of the presence of an obstruction in the path of the gate, door or barrier allowing the operator to stop or reverse movement. Unlike retro-reflective types of photo eyes that can provide false indication when encountering highly reflective surfaces on a vehicle, the NIR-100 provides the highly reliable operation associated with a thru-beam configuration. The relay is normally energized and de-activates during beam obstruction, loss of power or other error condition. A green alignment indicator on the receiver provides status information at a glance, making set-up and alignment easy.

Whenever a cold lens is subjected to warm, moist air, the local environment around the lens creates excellent conditions for condensation. For example, A/C in the warehouse cools the lenses and when the overhead door opens in the summer the lenses fog and prevent the closing of the door. Not so with the NIR-100 lens-less design that eliminates issues such as fog, condensation or focusing often associated with lenses. A heavy-duty bracket and cover protects the transmitter and receiver from damage.



#### **NIR-100**

- · Microprocessor-based for fast response and high reliability
- Exclusive LENS-LESS technology for trouble-free operation
- · LED indication of proper alignment
- · Modulated infrared beam reduces the effects of sunlight, rain, fog, dirt and dust
- · Sturdy bracket and cover protects the units from damage



#### **Technical Data**

Light source NIR **Operating range** 5ft.(1,5m)....33ft. (10m) **Response time** 10mS Relay output configuration Form C (SPDT) **Relay contact rating** 1A @ 24VDC...120VAC **Power indicator** Green LED **Obstruction indicator** Flashing green LED **Supply Voltage** 12...24VDC/VAC **Operating Current** 60 mA **Operating temperature** -40°C...77°C (-40°F...170°F) 0...95% relative humidity Dimensions 2.0"(51mm) x 2.4"(61mm) x 1.0"(25mm) Weight 0.21 lbs. (95 g) Housing ABS (plastic) Connection 40" (1m)

### **Ordering Information**

- NIR-100 Includes transmitter and receiver
- 130-10220162 Mounting bracket kit

#### UL325 - NON-COMPLIANT

WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of manufacture. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In one ovent shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.