



NIR™

Reflective Photo eye

UL 325 Non-compliant



Operating Instructions



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

Product Overview

Product may be used for activation of gates or doors when the beam is interrupted. The NIR uses an Infrared signal that is returned from a reflector mounted on the opposite side of the opening to be monitored.



WARNING ... Not to be used for Personnel Protection

Never use product as sensing devices for personnel protection. Doing so could cause serious injury or death. These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. UL 325 Non-compliant

Technical Specifications

| | |
|--------------------------|-------------------------------------|
| Power Supply | 12 - 240 VDC 24 - 240 VAC |
| Power Supply Tolerance | + / -10% |
| Current Draw | 28mA standby 15mA detected @ 12 VDC |
| Housing Material | ABS and Acrylate on lenses |
| Relay Type | SPDT 2A @ 24 VDC 0.6A @ 220VAC |
| Temperature Range | -20 - +60C |
| Connector | Cable 2 Meter (6 feet) |
| Environmental Protection | IP 66 IEC |
| Size | 1.6" x 2.6" x 0.8" |
| Response time | 10ms maximum |
| Range | 0.3 - 30 feet |
| Certifications | CE |

Controls, Indicators and Connections

Top

| |
|---------------------------------------|
| Sensitivity |
| Clockwise increases sensitivity |
| Normally set to maximum (single turn) |

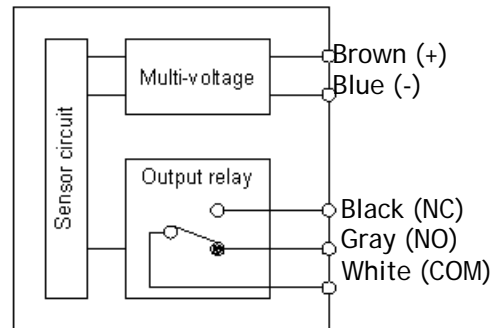
| |
|---|
| Yellow LED |
| LED is on when unit is energized and signal is stable |

| |
|---|
| Red LED |
| Is on when is energized and alignment is correct |
| LED is off when unit is energized and object is detected or not aligned |

Wiring

| Wire Color | Connections |
|------------|---|
| Brown | Power Positive (+) |
| Blue | Power Negative (-) |
| Black | Internal Relay Contact Normally Closed (NC) |
| Gray | Internal Relay Contact Normally Open (NO) |
| White | Internal Relay Contact Common (COM) |

Comments: The Blue wire and Brown wire are not polarity sensitive. Unit is designed to operate on AC power



Shown energized and aligned

Installation

Recommended alignment technique is to mount the NIR at the desired location and hold reflector about 2 or 3 feet in front of the unit and while watching the lights to assure that both remain lit, move backward to the desired mounting location for the reflector. You may have to move the reflector up, down, left or right to keep the reflector in the middle of the signal path. This assures the least troublesome set up by keeping the reflector off the edges of the signal where any movement may take it out of alignment.
 Note: the signal pattern is only 2 feet diameter.

Installer notes:

TROUBLE SHOOTING GUIDE

| Symptoms | Possible cause | Possible Solution |
|----------------------|---|--|
| Unit stays in detect | Unit out of alignment Reflector covered with dirt, dust, snow or water Water inside reflector | Verify alignment Clean reflector surface of contaminants Replace reflector Add Reflector O-HD |
| No Output | No power Bad Connection, wires broken Mis-wired | Check Wiring as per chart on page 2 Check connections Verify wired to correct inputs on operator |
| No Detection | Unit not powered Other reflective surface causing signal return | Check Power Check surrounding area for reflective surface |

Ordering Information

NIR
 Reflector-O
 NIR-HD
 Reflector-O-HD

Accessories



NIR-HD



Reflector-O-HD



Reflector-O

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