Model # PH-T-1-SP-50 Installation Instructions

Invisi-Guard photo optic system consists of one battery operated infrared emitter and one infrared receiver housed in separate units. The units are intended to be positioned in such a way that an obstruction in a hazardous area will interrupt the infrared light beam. An interruption of the beam will signal controls to stop and/or stop and reverse motion.

IMPORTANT:
READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

1- Parts List
Check to make sure all parts are included.
- Emitter (1) (Em)
- Receiver (1) (Rx)
- Mounting Brackets (2)
- Mounting Screws (4)
- Batteries (2) AA Lithium

2- Install Batteries in Emitter
- To open the unit, remove the front screw.
- Remove cover by tilting bottom portion out near front cover screw and lifting up.
- Install batteries aligning the PLUS sign (+) on the battery with the PLUS sign (+) shown on the PC board.
- Replace top cover and tighten screw.

3- Mounting
3a) Select a stable mounting location with a clear line of sight to detect obstructions, where the light beam could not be obstructed by plants, leaves, etc.
3b) Determine horizontal OR vertical bracket mounting direction. For ease of alignment, both transmitter and receiver should be attached in the same direction.
3c) Attach Mounting brackets to EMITTER and RECEIVER using horizontal or vertical mounting holes, using screws provided.
4- Typical Installations

5- Wiring Connections

TO AVOID THE RISK OF ELECTROCUTION, TURN OFF AND DISCONNECT ELECTRICAL POWER TO THE MOTOR BEFORE WIRING.

Follow the simple wiring connections for the receiver to connect it to the operator. The transmitter is battery powered and does not require any connections.

1- Under normal operating conditions - Power is OK and eyes are aligned properly.

6- Technical Specifications

Detection Technology: Infrared through-beam
Infrared Beam Range: 50 feet
Operating Temperature: -22°F to 144°F (-30° C to 60° C)
Voltage Supply (Em): 2 X 3.6V, AA Lithium
Power Supply (Rx) & (Em): 8-30 VAC, 200mA 50/60Hz
10-24VDC, 100mA
Low Battery Indicator: Alarm output@85dB
Enclosure: NEMA 4

WARRANTY
We will replace or repair within 1 year of shipment from our factory. Warranty is void where evidence of misuse or abuse is present as determined solely by our authorized factory representative. Batteries are not covered under this warranty.

7- Trouble Shooting Tips

Under normal operating conditions, the Green and Yellow LED indicator lights will remain lit. This product includes self-monitoring circuitry. A loss of power (green light off) will cause the relay to close to the “safe” mode.

<table>
<thead>
<tr>
<th>LED</th>
<th>Status</th>
<th>Diagnosis</th>
<th>Cause/Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREEN</td>
<td>ON</td>
<td>Power supply is OK</td>
<td>Check for loose or broken wire connections.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>No Power</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>ON</td>
<td>Fault = Relay Closed</td>
<td>Obstruction of the light beam.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Normal Operation</td>
<td>OK</td>
</tr>
<tr>
<td>YELLOW</td>
<td>ON</td>
<td>Eyes are aligned correctly</td>
<td>OK</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Eyes are not aligned</td>
<td>Reposition eyes until YELLOW light in ON.</td>
</tr>
</tbody>
</table>

Care and Maintenance:
- This unit is equipped with an audible low battery alarm. Use only 3.6V AA size lithium batteries.
- Use only a clean lint free cloth to clean transmitting and receiving units.