

EAR AN MICANAN MK00650 N-4 INFRARED PHOTOBEAM SYSTEM Installation Instructions and Owner's Manual

Installation Safety Precautions

WARNING: MICANAN MK00650 NEMA-4 infrared photo system is for use only with MICANAN logic board operators or relay logic operators equipped with the Micanan failsafe interface module. Use of this device on other than recommended operators can lead to severe or fatal injury. Follow these instructions carefully.

IMPORTANT: For momentary activation on close, the MICANAN photobeams (or a Micanan 2-wire monitored edge), must be installed as part of the operator system. If a Micanan 2-wire monitored edge or the MICANAN infrared photobeam system is not installed (or not operating correctly), the operator will only operate in fault mode (constant pressure to close).

READ and FOLLOW all installation instructions.

- Before installing the photo beam, read the door or gate operator's instruction manual fully, so you are aware of all of the unit's functions and features.
- 2. Wear protective gloves and eye protection when using tools.
- 3. Before installing photo beam, disconnect all power to door operator to prevent unintended operation and have the door full open or close.
- 4. Do not reconnect power to the door or gate operator until instructed to do so.
- 5. Only install photobeams on a properly functioning door or gate operator.
- 6. Installation and wiring must comply with local building and electrical codes. This device is not intended and must not be installed in an explosive environment.

Package Contents:

- 1. MICANAN N-4 photobeam transmitter (TX) with red L.E.D
- 2. MICANAN N-4 photobeam receiver (RX) with green L.E.D
- 3.2 mounting brackets
- 4.2 extension brackets
- 5.2 photobeam mounting plates with welded threaded studs
- 6.2 hex head screws

- 7. 2 nails
- 8. 4 carriage bolts 1/4"
- 9. 4 serrated hex nuts
- 10. 8 phillips self tapping screws
- 11. 2 wing nuts
- 12. 4 wire caps

Installation

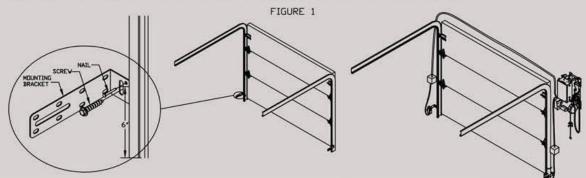
WARNING: Keep fingers and other body parts away from all moving parts of the door or gate operator system while the system is being operated.

WARNING: To prevent unintended operation, disconnect power to the door or gate operator prior to installing the photobeam system.

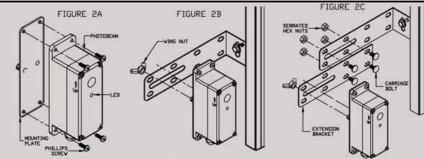
Note: Photo beams should be mounted as close to the door track inside the door to offer maximum entrapment protection.

Wall installation:

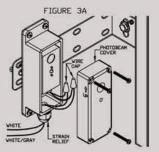
- 1. Select a location on the wall no more than 6 inches from the floor to install wall mounting brackets on the left and right side of the door. Both brackets must be mounted at the same height for proper alignment.
- 2. Drill holes in the wall and attach brackets to the wall using screws and nails provided as shown in Fig. 1.

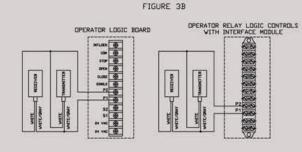


- 3. Using the 8 phillips head screws, attach the receiver and the transmitter to the two mounting plates (Fig 2A).
- 4. Using the wing nuts, attach the receiver and the transmitter of the photo system to the mounting L-brackets (with arrow pointing up) as shown in Fig 2B. Note that the receiver and transmitter can be installed on the left or right side of the door. For applications requiring the photobeams to be further away from the wall, use the extension brackets provided as shown in Fig 2C.



- 5. Adjust the position of the transmitter and receiver on the slot of the brackets and tightly secure the wing nuts
- 6. Loosen the 4 fastening screws and remove the cover from the photobeam transmitter and receiver housings and insert electrical wire through the strain relief (Fig 3A). Pair the two white/grey wires together from transmitter and receiver
- 7. Connect these paired wires to the P1 and P2 terminals on the logic board (or interface module if applicable) as shown in Fig 3B. Use minimum 18 gauge wires and secure the wires to wall or ceiling.





Aligning the photo beams

- Turn the power on to the operator. If the transmitter and receiver are installed properly, the lights on both the transmitter (red L.E.D.) and receiver (green L.E.D.) will be ON.
- 2. If the photo beams are not aligned properly, the receiver light (green) is OFF. Adjust the position of the transmitter and/or the receiver on the slot of the mounting bracket until the light on the receiver is ON and then secure to the bracket.

Photo system operation:

MICANAN photo beams must be connected for the door to close in momentary mode (unless a MICANAN monitored 2-wire edge is connected). When the photo system is properly installed and aligned, the infrared beam will detect any obstruction in the path of the beam. Upon detecting an obstruction, closing door will stop and reverse to full open. The MICANAN operator control circuit continuously monitors the correct operation of the photo system. If the photo beams are not connected or not functioning properly, the operator will go into fail-safe mode and closing door will reverse to full open. In fail-safe mode door can only be closed by constant pressure on close.

To test the photo system:

- 1. Open the door to full open position.
- 2. Close the door.
- 3. When door is closing, obstruct the beam. The door should stop and reverse.

Troubleshooting:

- 1. Lights are OFF on both transmitter and receiver
- · Verify the power to the logic board.
- Verify a short in white and white/grey wires.
- · Verify wiring to correct terminals on the operator.
- · Verify any cut in the wires from the photo system to the operator
- 2. Receiver light (green) is OFF
- · Verify the alignment of transmitter and receiver
- · Verify any cut wires from the receiver
- Verify any obstruction in the path of photo beam
- Photo system is connected properly but closing door does not reverse upon obstruction of beam. For Logic board operators:
- Verify if FAULT LED and SAFETY/PHOTO LED is ON upon obstructing the beam. If so, jump P1 and P2 terminals
 on the logic board while the door is closing. If the door does not reverse, call technician for further assistance.
- If the FAULT LED and SAFETY/PHOTO LED are OFF upon detecting an obstruction, call technician for further assistance.

For relay logic operators with interface modules:

. While door is closing, jump terminals P1 and P2 on the main terminal strip.

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