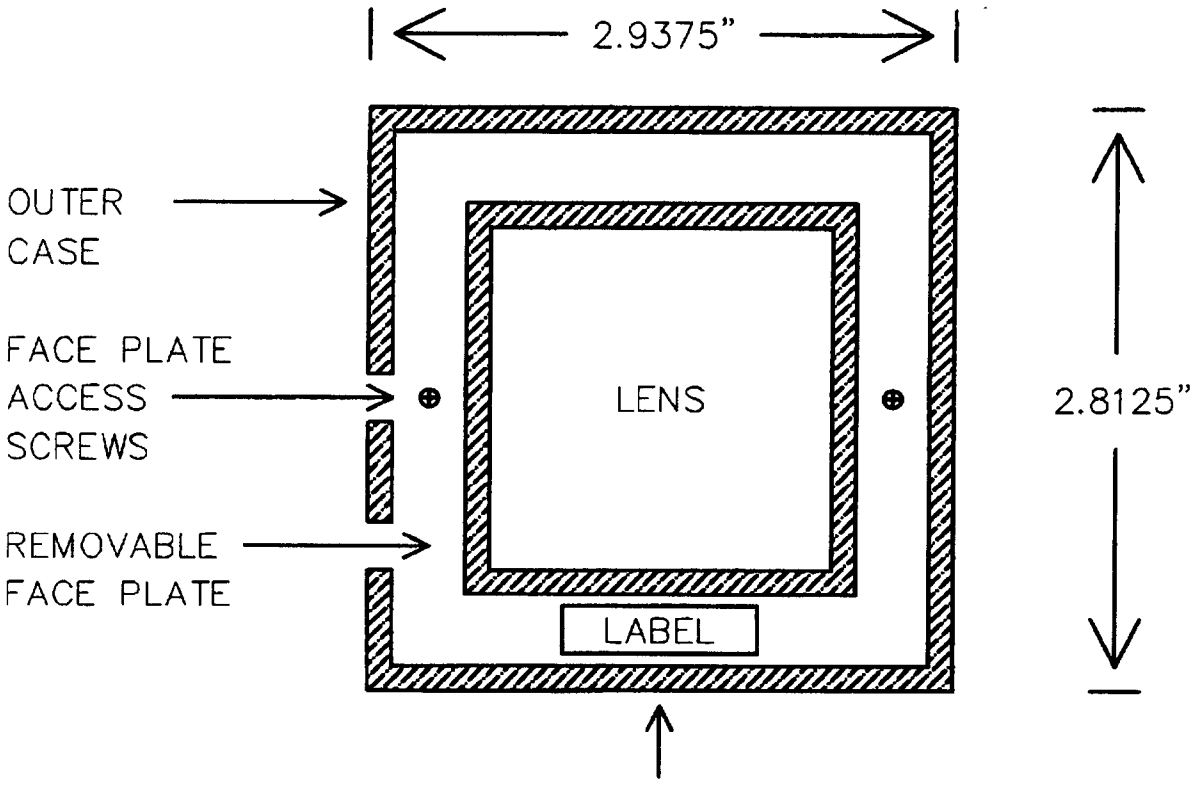
MODEL IR-55 INFRARED BEAM

"UL 325 Certified " Infrared Photoelectric Cell, Model IR-55, Rated for Outdoor Use

1. Power Supply can be 12 to 24 Volts A/C or D/C (Polarity does not matter)
2. Nylon fiberglass reinforced enclosure; Dimensions as shown
3. Dual SPDT Relays wired in series, each rated 1 Amp at 120 Volts
4. Heaters incorporated behind the lens in both the Transmitter & Receiver
5. Transmitter: Green LED shows the Power is applied & Transmitter is functional
6. Receiver: Yellow LED shows the Power is applied and drops out when system is "Aligned"
7. Maximum Operating Range is 165 feet



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MODEL IR-55 INFRARED BEAM

Instructions for the Alignment of the Model IR-55 Infrared Beam, Transmitter and Receiver

(1) Power must be present to both the Transmitter & Receiver prior to setting Alignment

If this is an initial installation, proceed to Pages 3 through 5, then return here

(2) Remove the two face plate screws and pull out the Removable Face Plate

(3) Behind it, you will find the Adjustable Lens (for both the Transmitter & Receiver)

(4) Loosen the Phillips Screw to be able to adjust the Transmitter / Receiver Alignment

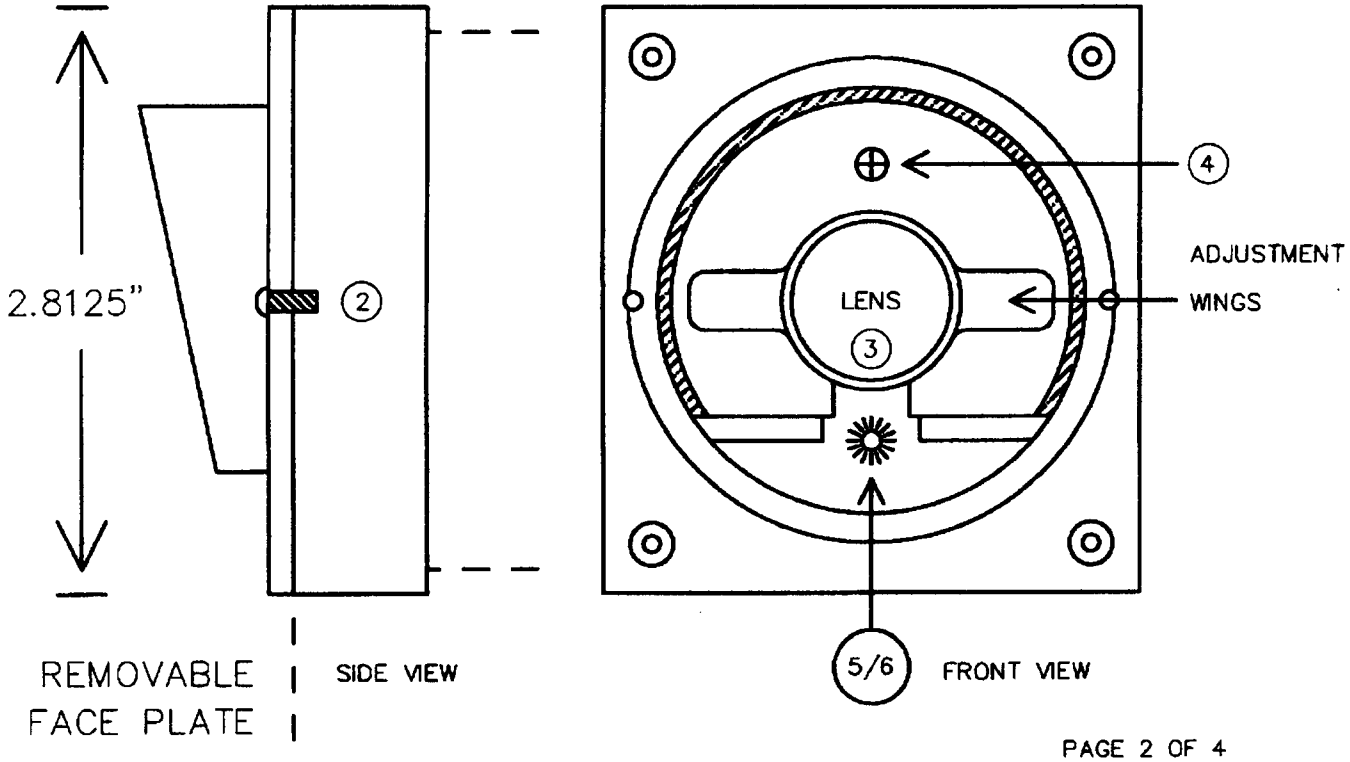
(5) Transmitter: The Green LED just below the Lens indicates Power is supplied

Receiver: The Yellow LED just below the Lens indicates when the Alignment is BROKEN

(6) NOTE: The Yellow LED switches OFF when the Alignment is correct !

(7) After obtaining the Alignment, tighten down the Phillips Screw to hold the Lens in place

(8) Replace the Face Plate (with gasket) and secure with the two face plate screws



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MODEL IR-55 INFRARED BEAM

Instructions to obtain access to the Field Wiring Terminals of the Model IR-55 Infrared Beam

(1) Remove the two face plate screws and pull out the Removable Face Plate

(2) See Page 2 for the appearance of the front panel with the Face Plate removed

(3) There is an Outer Case which contains an Inner Case as viewed from the Front

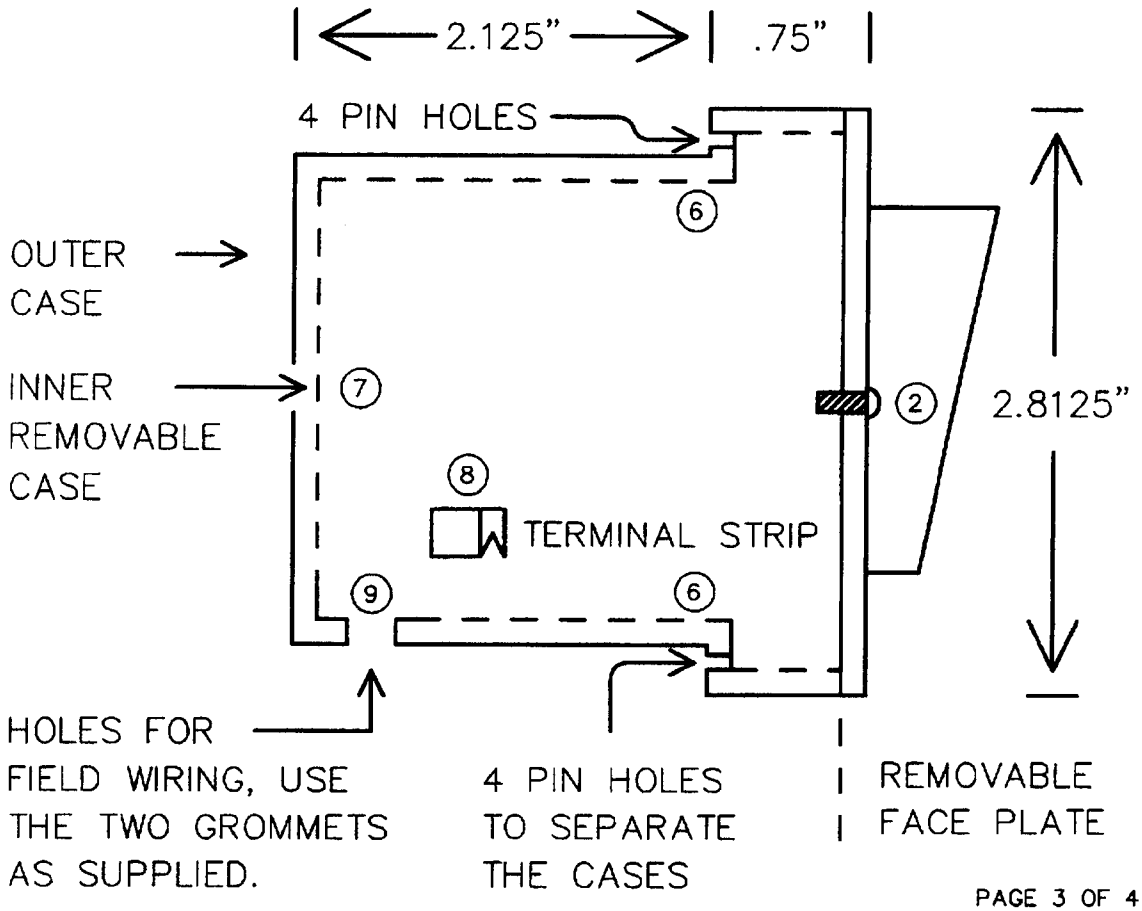
(4) To Remove the Inner Case, turn the entire assembly around to view from the back

(5) Locate the four holes (as shown below) and use a small diameter rod to push away

(6) The Inner Case can then be removed from the Outer Case by pulling them apart

(7) The Field Wiring Terminals are then accessible for your work

(8) Remember to use the two Grommets for the wiring into the two cases



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MODEL IR-55 INFRARED BEAM

Instructions for Wiring the Model IR-55 Infrared Beam - Transmitter

(1) Voltage: +24 Volts D/C

(2) Voltage: -24 Volts D/C

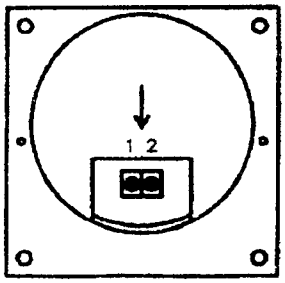
(3) Voltage Range is 12 - 24 Volts, A/C or D/C; however 24 Volts D/C is used

Polarity does not matter regardless of using A/C or D/C

(4) The Green LED (on the Lens Side) is "ON" when the power is supplied

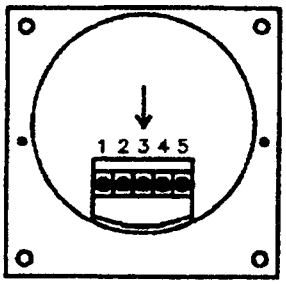
(5) Feed wiring through outer case first, and then onto these terminals. Allow an extra length of wires to be able to place inner case back into outer case. Use supplied Grommets.

INFRARED TRANSMITTER WIRING



INNER REMOVABLE CASE

INFRARED RECEIVER WIRING



Instructions for Wiring the Model IR-55 Infrared Beam - Receiver

✳ Labels of the Relay Contacts are with the Power "ON" and the Alignment "CORRECT"

(1) Dual Relays Contact, Normally Closed

(2) Dual Relays Contact, Normally Open

(3) Dual Relays Contact, Common

(4) Voltage: +24 Volts D/C

(5) Voltage: -24 Volts D/C

Voltage Range is 12 - 24 Volts, A/C or D/C; however 24 Volts D/C is used here

(6) Polarity does not matter regardless of using A/C or D/C

(7) The Yellow LED (Lens side) is ON when the Power is ON and the Alignment is BROKEN

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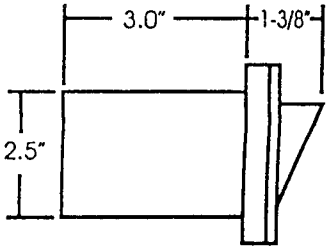
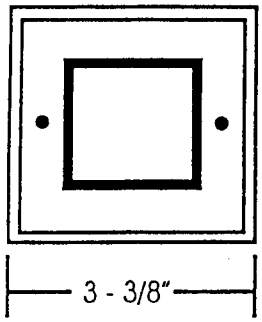
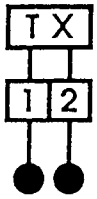
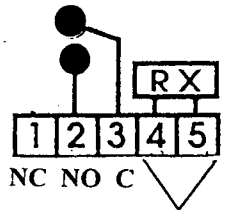
UL 325 Certified - INFRARED PHOTOELECTRIC CELL MODEL IR-55 FOR OUTDOOR USE



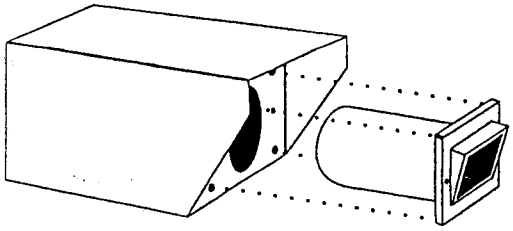




12-24 VAC/DC



12-24 VAC/DC



IMPORTANT INSTRUCTIONS

The Albano photoelectric beams Model AE/IR-55 are constructed to throw a single-pole relay when an object interrupts the beam. These units were constructed from high quality materials and rigorously tested before being placed in service.

TECHNICAL CHARACTERISTICS

- Nylon fiberglass reinforced enclosures
- Transmitter: Modulated pulsing Gallium Arsenide Infrared diode
- Transmitter: Green LED ON shows power applied and transmitter functioning
- Receiver: Yellow LED ON shows power applied. LED drops out when aligned.
- Heaters incorporated behind both transmitter and receiver lenses to eliminate dampness.
- Two relays incorporated in receiver parallel to avoid product failure by one relay.
- Maximum operation range 165 feet.
- Relay rating 1A at 120V
- ***Power 12 –24 VAC/DC. Polarity does not matter regardless of using AC or DC power.***

MOUNTING AND ALIGNMENT INSTRUCTIONS

Mount outside housing to a firm stand or wall. Check power line voltage with a meter to insure correct power. Remove front cover and when necessary loosen the three alignment screws. Aim transmitter toward receiver until red receiver LED turns off. (Make sure the green transmitter LED remains lit.) Tighten the three alignment holding screws in both receiver and transmitter. Use alignment test strip supplied to test alignment at different ranges.

If alignment is not satisfactory, repeat above procedure.

IR 55
WIRING INSTRUCTIONS

1. **Transmitter Side:**
   - **Connect power to terminals #1 (+) and #2 (-).**
   - **LED will illuminate when powered.**

2. **Receiver Side:**
   - **Connect power to terminals #4 (+) and #5 (-).**
   - **Connect terminals #2 (Normally open) and #3 (Common) to Safety reverse.**
   - **When power is applied LED will illuminate. When transmitter and receiver are aligned, the LED on the receiver will go out.**

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IB55 HOUSING DIMENSIONS

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