

# “NEW - Pre-Wired”

## Patriot Z-Flap



### Non-Contact Photo Optic Edge Sensor Installation Instructions

The Patriot Photo-Optic edge sensor is designed to transmit an infrared light beam from an emitter to a receiver housed below the bottom edge of the door. The emitting and receiving “eyes” plug into the ends of flexible flaps. If the beam is interrupted by such, as when an object or person is below the door, the control unit signals the door operator to stop and/or reverse.



### PARTS LIST

PART NUMBER	DESCRIPTION	QUANTITY
MIR-Z1	CONTROL UNIT W/EYES, FLAPS & MTG. CHANNEL	1
* MIRCUCU-01	CONTROL UNIT, NEMA 4	1
* MIRR-01	ASSEMBLY, CABLE W/RECEIVING EYE	1
* MIRE-01	ASSEMBLY, CABLE W/EMITTING EYE	1
* MIRFF	FLEXIBLE FLAPS	2
* MIRFF-C	CHANNEL, MOUNTING FOR FLEXIBLE FLAP	2
* C224-15B	COIL CORD, 22 AWG, 4 WIRE, 15 FT. EXT.	1
* JB-02Z	JUNCTION BOX, METAL W/COVER & CONDUIT FITTINGS, TERMINAL BLOCK, & CABLE CLAMPS	1

\* Indicates components included in the MIR-Z1 Kit

### Easy Step-by-Step Assembly Instructions

1- Install weather seal extrusion between the 2 angle iron pieces of the bottom bar.

2- Install 2 rigid mounting channel pieces of the bottom bar, tighten bolts ensuring that the Z-Flap holders are mounted straight and level.

**NOTE: The Emitter Eye should be located at the end farthest from the operator.**

3- Install the junction box on the bottom of the door with screws, on the same side as the operator .

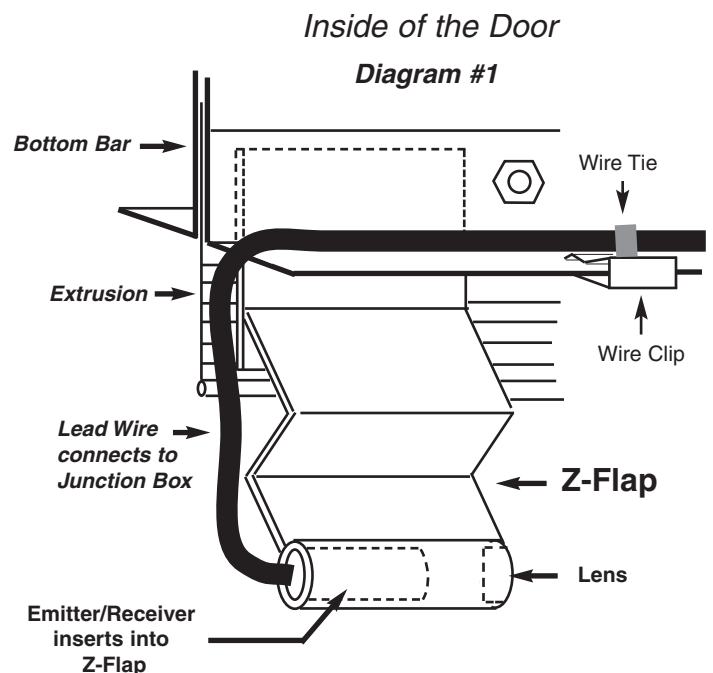
4- Insert the Emitter into the round cavity of the flap as shown in Diagram -1. Run wire across width of the door to the junction box. Connect the Red and Black wires to the same color pigtails inside the junction box with grey wire nuts.

5- Insert the Receiver into the round cavity of the flap as shown in Diagram -1.

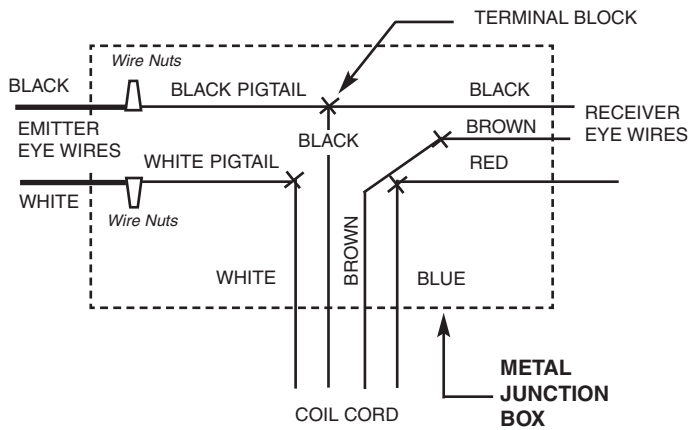
**NOTE: The Receiver Eye should be located at the end closest to the operator.**

6- Mount the Control Unit on the wall approximately 5ft. up the wall.

7- Wire the Control Unit to the Operator using the black/grey terminal block as shown in Diagram #3.



**Junction Box Easy Reference  
Wiring Diagram #2**



**EASY WIRING CONNECTIONS**

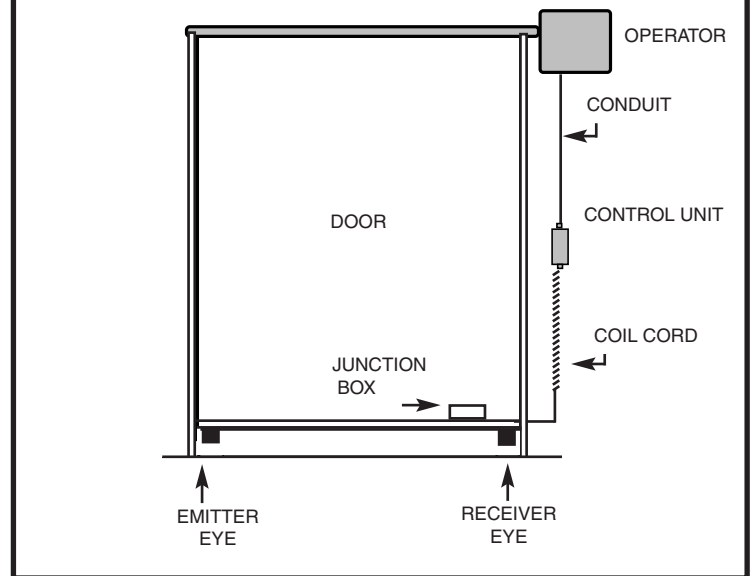
**Emitter Eye Wiring:**

(2 Conductor Lead Wire)  
BLACK wire to BLACK wire  
WHITE wire to WHITE wire

**Control Unit Wiring:**

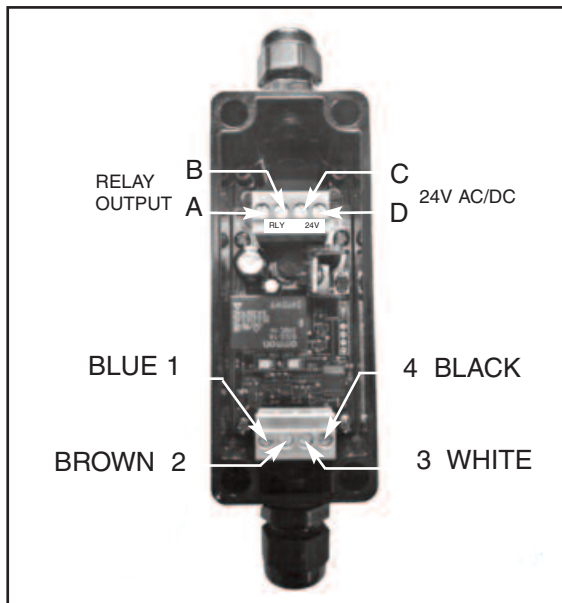
A,B,C,D - Require Installer Connections  
1,2,3,4 - Pre-Wired Factory Connections

**Photo-Eye / Door Assembly Configuration  
with Junction Box**



**NOTE:** Door overtravel may vary due to the operator being used  
Reference operator manufacturer specifications.

**Control Unit Wiring Diagram #3**



**LED OPERATION STATUS / DIAGNOSTICS**

LED COLOR	OK STATUS	FAULT	FIX
RED	OFF=RELAY ENERGIZED	ON=RELAY DE-ENERGIZED	
GREEN	FLASHING	OFF=NO 24VAC or DEFECTIVE CHIP	VERIFY POWER, IF OK REPLACE CONTROL UNIT

NOTE: LED indicators are located on the board inside the Control Unit

**NOTE: DO NOT** drill any holes in the transmitter box. Use only mounting holes provided, any additional holes in control unit will cause water to enter and a loss of warranty.



MIRZ1\_Inst\_20120409