



INSTALLATION INSTRUCTIONS

Patriot-2 *Non-Contact* Z-Flap Edge Sensor

Model # MIRF-Z2 30/50Ft.

US PAT.# 6,920,717 6,651,385
CAN PAT.# 2,434,531

IMPORTANT:

READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

The Patriot 2 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" slide into the Z-Flaps. If the beam is interrupted by an object or person below the door, signals are sent to the door operator to stop and/or reverse the door.

1- Kit Contents

MIRF-Z2 (30 Feet)

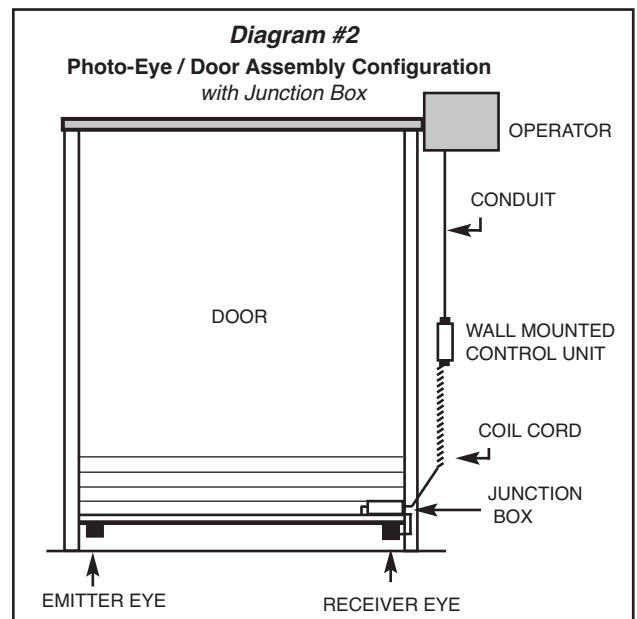
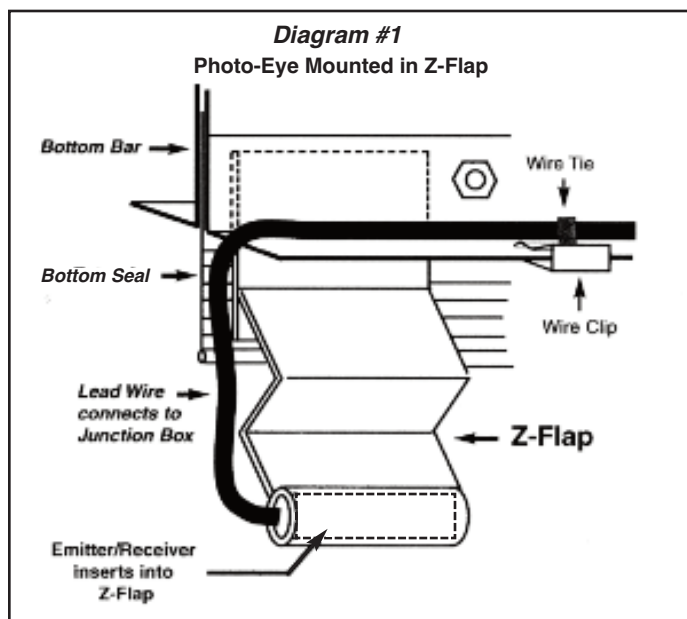
(1) Installation Instructions	
(1) MIRF-E2	PE MONITORED EMITTER EXT.30
(1) MIRF-R2	PE MONITORED RECEIVER
(1) MIR-Z2-ZK	PE Z-FLAP HOLDER
(1) JB-02-Z	JUNCTION BOX WITH COVER
(1) MIR-WK-Z2	Z2-HARDWARE KIT
(1) MIRCU-02	CONTROL UNIT
(1) C222-15B	15FT. COIL CORD

MIRF-Z2-50 (50 Feet)

(1) Installation Instructions	
(1) MIRF-E2-50	PE MONITORED EMITTER EXT.50
(1) MIRF-R2	PE MONITORED RECEIVER
(1) MIR-Z2-ZK	PE Z-FLAP HOLDER
(1) JB-02-Z	JUNCTION BOX WITH COVER
(1) MIR-WK-Z2	Z2-HARDWARE KIT
(1) MIRCU-02	CONTROL UNIT
(1) C222-15B	15FT. COIL CORD

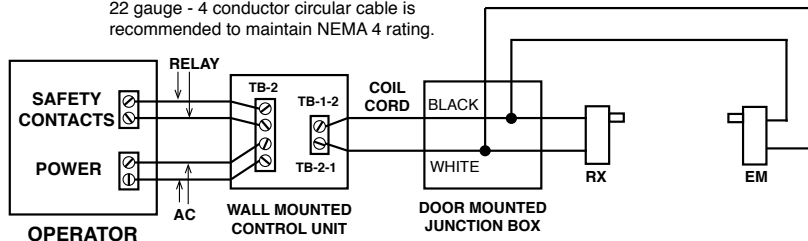
2- Mounting

1. Move the door to a comfortable working height.
2. Disconnect ALL Power to the operator.
3. Insert Z-FLAPS into the groove of each holder then install between the bottom bar of the door at each end.
(See Diagram #1).
4. Insert Receiver Eye (shorter wire) into the Z-FLAP mounted closer to the operator side of the door and the Emitter Eye (longer wire) on the opposite side.
5. Install supplied junction box horizontally on the bottom bar on the operator side of the door within reach of the Receiver Eye. **(See Diagram #2).**
6. Route Emitter photo-eye wire along door to junction box affixing to the bottom bar using supplied clips and wire ties. Cut wire to suitable length, and do the same for receiver photo-eye wire.
7. Install Control Unit on the wall half way up the height of the door on the operator side as shown in Diagram #2 in conjunction with all Federal, State and Local codes.
8. For wiring guide refer to Section #3.



3- Wiring Connections

NOTE: RELAY and AC Cables are not supplied.
22 gauge - 4 conductor circular cable is recommended to maintain NEMA 4 rating.



4- Technical Specifications

Detection Technology	Infrared Thru-Beam	Cable Length	Rx: 3 Ft. Em Ext: 32 Ft./ 52Ft.
Infrared Wavelength	940nm	Coil Cord	15 Ft.
Infrared Beam Range	30/50 Feet	Mounting Method	Z-Flap
Response Time	<20msec	Enclosure Material	PVC
Alignment Angle	± 10	Z-Flap	2 7/8" H x 2" W x 3/4" L
Operating Temperature	-40°F to 185°F (-40° C to 85° C)	Ratings	NEMA 4 Class 2
Power Supply	8-30 VAC 12-42 VDC		
Contact Rating	1A@ 24VAC/DC		

5- Trouble Shooting Tips

Emitter Photo-Eye Indicators

LED COLOR	OK STATUS	FAULT	SOLUTION
GREEN	ON = NORMAL OPERATION	OFF = NO POWER	CHECK WIRING

Receiver Photo-Eye Indicators

LED COLOR	OK STATUS	FAULT	SOLUTION
GREEN	ON = NORMAL OPERATION	OFF = NO POWER	CHECK WIRING
RED	OFF= NORMAL OPERATION	ON = OBSTRUCTION MISALIGNMENT	REMOVE OBSTRUCTION, CHECK ALIGNMENT
BOTH	OFF= NO POWER	NO POWER	CHECK WIRING

Control Unit Indicators

LED COLOR	OK STATUS	FAULT	SOLUTION
GREEN	FLASHING = NORMAL OPERATION	OFF = NO POWER	CHECK WIRING
RED	OFF= NORMAL OPERATION	ON = OBSTRUCTION	REMOVE OBSTRUCTION CHECK WIRING

6- Warranty

We will replace within two years of shipment from our factory, any Patriot subject to normal use which is found to have defective materials or workmanship, as determined solely by our factory representative. Replacements will be shipped via freight collect. This warranty is void where evidence of misuse or abuse is present.