# IRB-4X EXTENDED RANGE INFRARED MODULATED PHOTOCELL

#### IRB-4X

- New enhanced features while maintaining the reliability you have come to expect.
- Longer range
- Improved interference rejection.
- Built in noise filter.
- Power indicator LEDs.
- Potentiometer range adjustment to allow more precise tuning to site.
- Wide 24° transmission angle allows easier alignment and increases reliability.
- Through beam design is not affected by shiny surfaces.
- Modulated infrared to reduce the effect of sunlight, fog, rain, dust and dirt.
- No focusing lens.



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shown with optional protective hood

### **APPLICATIONS**

The IRB-4X photocell is used as a safety, reversing, or opening device in conjunction with automatic operators. The IRB-4X will work with any control board that accepts dry contact on the input. The easy to install IRB-4X is used with garage doors, rolling doors, parking barriers and other equipment.

Not for use in applications requiring UL325 compliance.
Please use the IRB-325 for these installations.

#### **TECHNICAL INFORMATION**

Power	12-24volts AC or DC
Current	TX = 37mA
	RX = 23mA standby 17mA detect
Range	25 – 115 feet
Operating Temp	-40° F to +170° F
Relay contact rating	5A @ 30VDC/250VAC
Housing Material	NEMA 4X Polystyrene
Dimensions	3.7" x 2.56" x 2.24"
Detection angle	24°
Gain Adjustment	Potentiometer

# ORDERING INFORMATION

IRB-4X	Infrared transmitter and receiver units.
IRB-SH-SET	Gray "Powder Coat" steel hood
IRB-HD-SET	Gold anodized aluminum protective hood
IRB-BR	"L" shaped mounting bracket.
IRB-TRF	Wall plug in transformer 120VAC to 20VAC
IRB-SP	Liquid tight strain relief connector
IRB-S	Set of 8-32 Nylon mounting screws w/ nuts

# **IRB-4X INFRARED MODULATED PHOTOCELL**

## **INSTALLATION INSTRUCTIONS**

#### Transmitter (Dwg 1)

- 1. Open the front cover (4) Plastic screws
- 2. Place mounting screw into hole (4). (Dwg 3)
- 3. Attach to mounting location.
- 4. Connect power 12 24V AC/DC to terminals (no polarity)
- 5. Replace cover and tighten cover screws.

#### Receiver (Dwg 2) Shown with timer option

- 1. Open the front cover (4) plastic screws.
- 2. Place mounting screw into hole (4). (Dwg 3)
- 3. Attach to mounting location
- 4. Connect power 12 24V AC/DC to terminals 4 and 5 (no polarity)
- 5. Terminal 3 is connected to normally open relay contact terminal 2 is connected to the common relay contact and terminal 1 is connected to the normally closed relay contact.

These are connected to the operator terminals per manufacturer's instructions.

- 6. Adjust sensitivity as needed.
- 7. Replace cover and tighten cover screws.

#### Multiple unit installations

Multiple IRB-4X application. If more than one IRB-4X is installed on a location there is a possibility that the signal from one set IRb-4X will be received by the other unit. To prevent this situation mount the sets in a way that two receivers will see each other. (Dwg 4)

# **Optional Accessories**

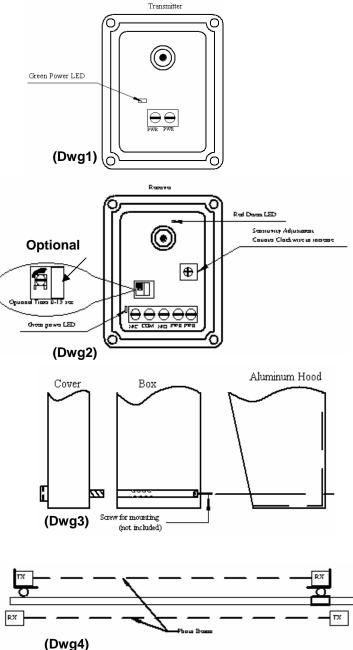




IRB-SP IRB-BR (watertight seal) ("L" mounting bracket)



IRB-SH-SET (steel hoods)



# Always install photo beams per gate and operator manufacturer recommended instructions.

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#### WARRANTY

EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage.

There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein.

EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.