

IRB-EXP

EXPLOSIVE ENVIRONMENT PHOTOSWITCH

IRB-EXP

- Designed to operate in areas with explosive environments.
- NEMA 4 and 7 housing
- NEC Class I, Groups B, C & D, Class II, Groups E, F & G CSA certified, CENELEC certified, EExd IIC.
- Copper free Aluminum with Epoxy finish.
- Potentiometer range adjustment to allow more precise tuning to site.
- Easy alignment and increased 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.



APPLICATIONS

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

TECHNICAL INFORMATION

Power	12- 24volts AC or DC
Current	TX = < 21mA 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 4 & 7 Cast Aluminum
Dimensions	W – 4.69" x H – 4.5" x D – 3.44"
Detection angle	18°
Gain Adjustment	Potentiometer
Certifications	CLASS I Groups B, C & D, CLASS II Groups E, F & G, CSA, CENELEC, EExd IIC

ORDERING INFORMATION

IRB-EXP Infrared transmitter and receiver units.

EMX INDUSTRIES, INC.
4564 Johnston Parkway
Cleveland, Ohio 44128

Telephone:
1-800-426-9912
216-518-9888

Fax: 216-518-9884

WEB: <http://www.emxinc.com>

Email: salesupport@emxinc.com

Technical Support: technical@emxinc.com

EMX
INDUSTRIES, INC.

Revision 1.0 04/08/2008

WE ACCEPT MASTERCARD. VISA. AMERICAN EXPRESS CARD ORDERS AND COMPANY PURCHASE ORDERS WITH APPROVED CREDIT.

IRB-EXP

INSTALLATION INSTRUCTIONS

Transmitter (Dwg 2)

1. Open the front cover.
2. Attach to desired mounting location.
3. Remove plugs and connect conduit as per local code.
4. Connect power 12 – 24V AC/DC to terminals (no polarity)
5. Replace cover.

Receiver (Dwg 3) Shown with timer option

1. Open the front cover.
2. Attach to desired location.
3. Remove plugs and connect conduit as per local code.
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 controller terminals per manufacturers instructions.
6. Adjust sensitivity as needed.
7. Replace cover.

Multiple unit installations

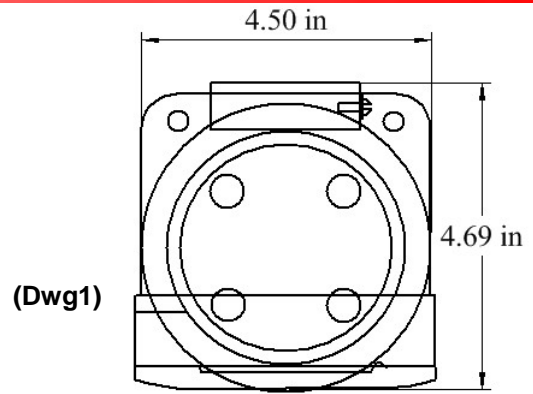
Multiple IRB-4X application. If more than one IRB-4X is installed on a location there is a possibility that the signal from one set IRB-4X will be received by the other unit. To prevent this situation mount the sets in a way that two receivers will see each other.



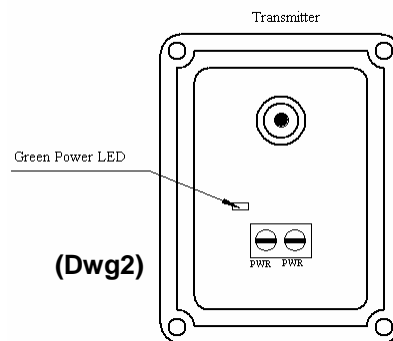
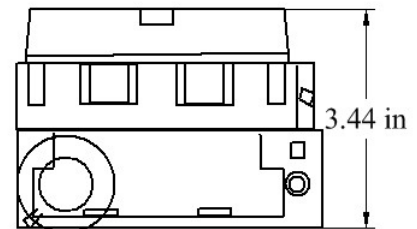
WARNING ... Not to be used for Personnel Protection

Never use product as sensing devices for personnel protection. Doing so could cause serious injury or death.

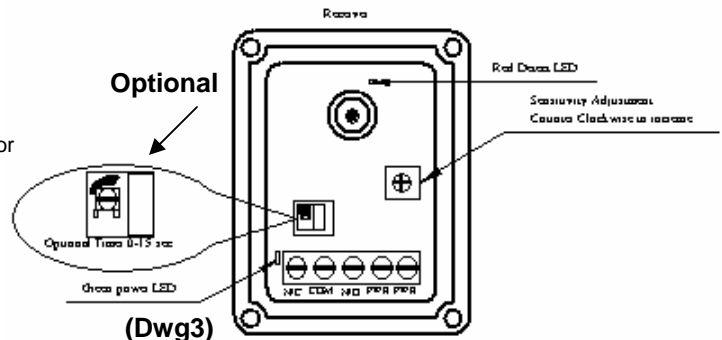
These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.



(Dwg1)



(Dwg2)



(Dwg3)

Always install photo beams per manufacturers recommended instructions and local codes.

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.