

# iGAZEB35 PHOTO EYES



MANUAL  
INSTALLATION

**iGAZEB35**  
WIRELESS, BATTERY OPERATED  
with Optional Hard-Wire



Thank you for choosing a Transmitter Solutions product.  
Please read the manual carefully before installing the product.

**NOTE:** Not all steps may apply for all installations.

**WARNING - To reduce the risk of severe injury or death.**

1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. Install only on a properly balanced garage door or gate. An improperly balanced door or gate has the potential to inflict severe injury. Have a qualified service person make repairs to cables, spring assemblies, and other hardware before installing the opener.
3. Remove all ropes and remove or make inoperative all locks connected to the garage door or gate before installing opener.
4. Where possible, install the door opener 7 feet or more above the floor. For products having an emergency release, mount the emergency release within reach, but at least 6 feet above the floor and avoiding contact with vehicles to avoid accidental release.
5. Do not connect the opener to source of power until instructed to do so.
6. Locate the control button: (a) within sight of door, (b) at a minimum height of 5 feet so small children are not able to reach it, and (c) away from all moving parts of the door.
7. Install the Entrapment Warning Label next to the control button in a prominent location. Install the Emergency Release Marking. Attach the marking on or next to the emergency release.
8. After installing the opener, the door must reverse when it contacts a 1-½ inch high object (or a 2 x 4 board laid flat) on the floor.

## SUMMARY

- 1 - DESCRIPTION
- 2 - TECHNICAL SPECIFICATIONS
- 3 - INSTALLATION STEPS
- 4 - ELECTRICAL CONNECTIONS
- 5 - ADJUSTMENT
- 6 - BATTERY INFORMATION

### 1 - DESCRIPTION

The infrared photo eyes type iGAZEB35 is a person and property safety device mainly for usage with automatic closing systems. The system is composed of two fixed optic infrared devices, TX and RX, operating at 880 nm wavelength. The transmitter is battery powered, equipped with 2 - 3.6V - 2.4Ah Thionyl Chloride Lithium batteries. The expected battery life is about 15 months in normal conditions. The rated range is 26ft (8mt) under all operating conditions ( rain, fog, dust). The small dimensions allow an easy installation on any type of structure.

PART	QTY
RUBBER GASKETS	2
TRANSMITTER (TX)	1
RECEIVER (RX)	1
COVER	2
COVER MOUNTING SCREWS	4
PHOTO EYE MOUNTING SCREWS	8
WALL ANCHORS	8



### 2 - TECHNICAL SPECIFICATIONS

Infrared emission with diode:	GaAlAs
Pulse modulation for diode:	128 Hz
Duty cycle	1:4000
Internal clock	32768 Hz
Wavelength emission:	880 nm
Power supply TX:	3.6V

Battery voltage	2 x 3.6V
Battery capacity	2.4Ah
Battery type	ER14505
Expected battery life	15 months
Power supply RX	12 - 24 VAC/DC
Current consumption Transmitter	400 µA
Current consumption Receiver	30 mA
Double contact relay with serial exchange:	Yes
RX output contacts:	1 NO / 1 NC
Max DC power on relay contacts:	24W / 48V
Max AC power on relay contacts:	60 VA / 48 V
Operating temperature:	-4°F / +131°F
Housing protection:	NEMA 12X(IP55)
Rated range in all conditions:	26 Ft
Dimensions (inches):	3½ x 2½ x ¾ "

### NOTE

The transmitter is equipped with an extra N.C. input which can be used for connection to a safety edge. See Fig. 9b

### 3 - INSTALLATION STEPS

- 1 - Locate the best mounting position taking into account the correct height distances from the ground;
- 2 - Mark the location of the mounting holes using the drilling template supplied with the photo eyes ( Fig. 2);
- 3 - Drill the mounting holes. (Hole diam: 3/16") ( Fig. 3);
- 4 - Locate the wall anchors ( Fig. 4);
- 5 - Assemble the gasket and the photocells ( Fig. 5);
- 6 - Mount the photo eye with the screws supplied ( Fig. 7);
- 7 - Make the electrical connections ( Fig. 9a and 9b);
- 8 - Mount the cover using the the screws supplied ( Fig. 8).

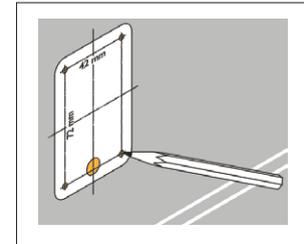


Fig. 2

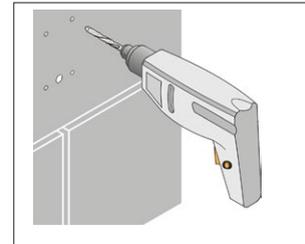


Fig. 3

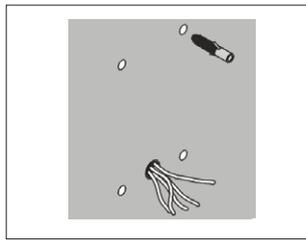


Fig. 4

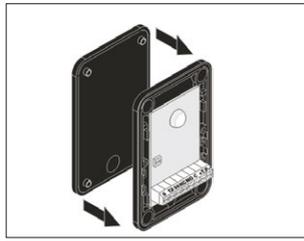


Fig. 5

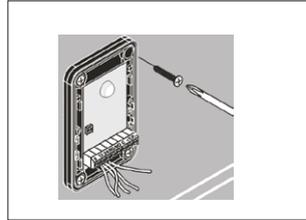


Fig. 7

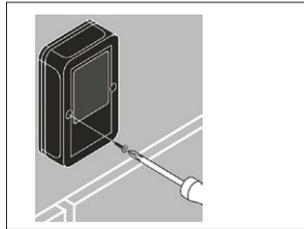


Fig. 8

**Notice:**

Use silicon to seal the holes where the cables go through.

When two sets of photo eyes are installed, cross the transmitter photo eyes with the receiver photocells and keep a distance of 3 feet between the sets, for a 26 foot separation (fig. 6).

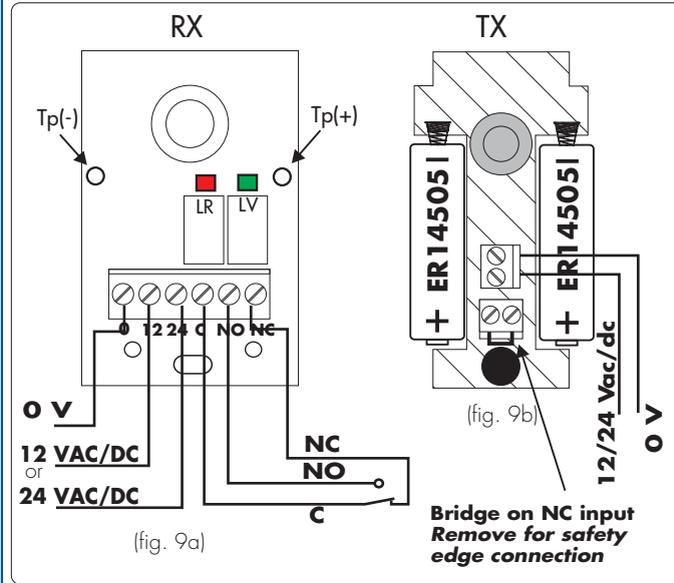
Power the receiver (fig. 9a):  
 12 VAC/DC Terminals 0 - 12  
 24 VAC/DC Terminals 0 - 24

Connect the output contacts (fig. 9a):  
 - N.C. Contact : Terminals C - N.C. (normally closed contact)  
 - N.O. Contact : Terminals C - N.O. (normally open contact)

**Notice**

Recommended cable size: 4 (each) 22 gauge wires

**4- ELECTRICAL CONNECTIONS**

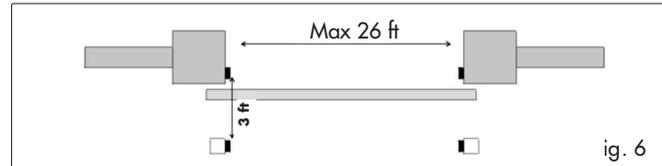


If deciding to use the power terminals on TX and the photo eyes are failing to communicate, please unplug and plug again the power for TX. This will help the photo eyes start-up.

**5- ADJUSTMENT**

**Alignment**

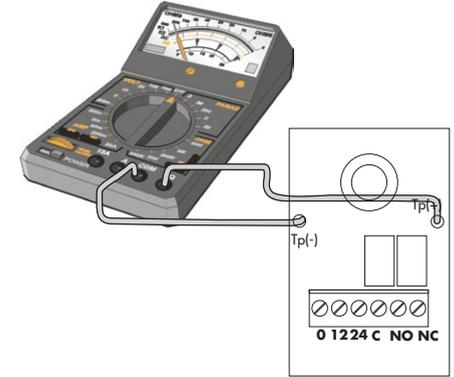
Align the transmitter and the receiver so that the beam is established and the red led (LR) goes off.



A voltmeter on the alignment test points will help the installation of the photo eyes:

- 0 V = no signal, Red led On, Green off
- 3 V = minimum useful signal, Red off, Green led On,
- 5 V = max alignment, Red off, Green led On

**V @ Test Point (Tp- / Tp+)**



**6- BATTERY INFORMATION**

**ATTENTION:** When the battery life is low, the range will be reduced and a photo eye alarm will sound.

If the batteries are not installed, place the 2 Thionyl Chloride Lithium batteries between the battery contacts, ensuring the correct polarity position.

**NOTE:** The batteries are NOT AA batteries, please dispose of them correctly, they are hazardous waste.

**WARRANTY**

The warranty period of this product is 24 months, beginning from the manufacturing date. During this period, if the product does not operate correctly, due to a defective component, the product will be repaired or replaced at the sole discretion of Transmitter Solutions. This warranty does not extend to the product casing which can be damaged by conditions outside of the control of Transmitter Solutions.



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