

# Connecting Photo Eye Safety System

## **WARNING**

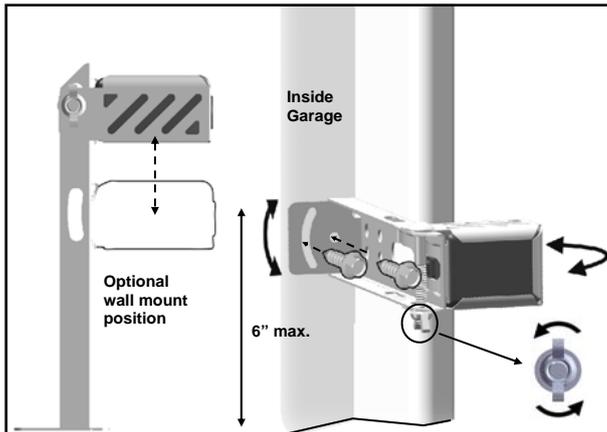
To prevent **SERIOUS INJURY** or **DEATH** from electrocution:

- Power **MUST NOT** be connected **BEFORE** Photo Eye Safety system is connected and aligned.
- The Opener will not operate until the Photo Eye Safety System is properly connected and aligned.
- Install the Photo Eyes **NO** higher than 6" (15cm) above the floor.

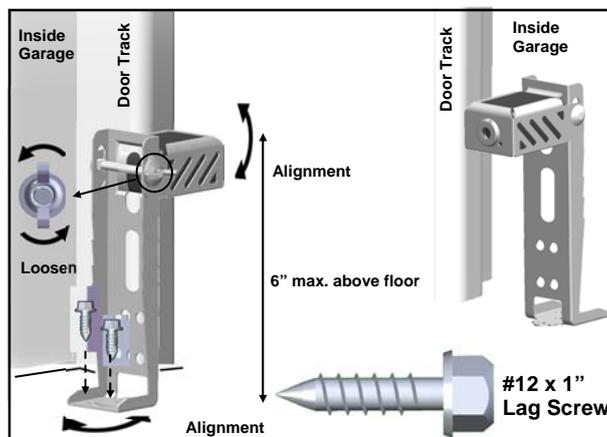


No part of garage door or other objects should obstruct the Photo Eye Safety System during door-closing.

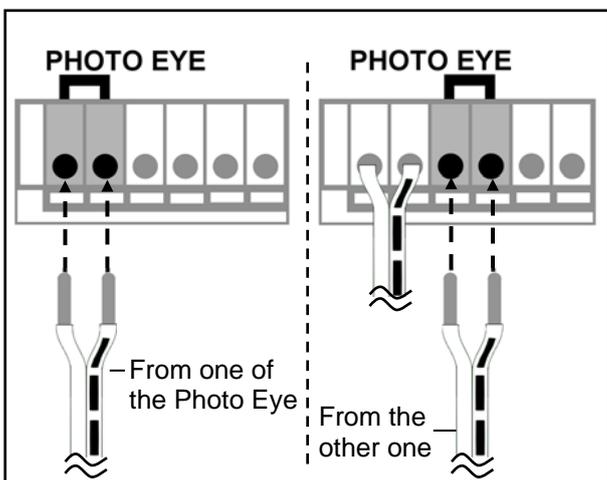
**NOTICE: The opener will not close until the photo eyes are installed. Photo eyes are required by federal law to be installed on all openers. The opener will not work properly using photo eyes from another brand of opener and may disable the safety system.**



**Fig. 1 (Wall Mount)**



**Fig. 2**



**Fig. 3**

### About the Photo Eye Safety System

The Photo Eye Safety System provides protection against entrapment while the door is closing. When properly connected and aligned, the Emitter Photo Eye emits an invisible infrared light beam while the Sensor Photo Eye monitors that beam.

If the beam is obstructed during door-closing, the entrapment protection will be triggered and the door will stop and reverse to the open position. The courtesy light will flash for 30 seconds indicating an obstruction.

### Installing The Photo Eye Safety System

#### Wall-mounting

1. Place the Photo Eyes facing each other on each side of the garage door. Position the sensors so they are no higher than 6" (15cm) above the floor, as shown in Fig.1.
2. Drill 3/16" holes using the mounting holes on the Bracket as a template. Secure with #12 x 1" Lag Screws (provided).
3. Be sure brackets, when mounted, are **NOT** in contact with the door track.
4. If necessary use the Optional Wall-mount Position (Fig.1) to better fit your door-track and improve obstacle avoidance. To adjust the position, loosen the wing nut, disassemble the Bracket and move the Photo Eye to the lower position on the holder.
5. If necessary, align the Photo Eyes by loosening the wing nut. (This step may be further required in **Aligning the Photo Eye Safety System** on page 17.)

#### Alternative Floor-mounting

1. Place the Photo Eyes facing each other on each side of the garage door, as shown in Fig.2.
2. If attaching to concrete, secure the photo eyes using concrete anchors and bolts (not provided).
3. Be sure brackets, when mounted, are **NOT** in contact with the door track.
4. If necessary, align the Photo Eyes by loosening the wing nut. (This step may be further required in **Aligning the Photo Eye Safety System** on page 17.)

#### To Connect Photo Eye Safety System

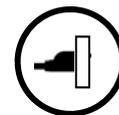
1. Connect a pair of wires from either one of the Photo Eyes to a pair of "PHOTO EYE" terminals on the rear of the Opener as shown in Fig. 3. Refer to **Wiring Instructions** on page 13 for proper connections.
2. Repeat above step to connect the other Photo Eye.
3. Refer to **Wiring Instructions** on page 13 to ensure wires are connected properly.

# Connecting Power

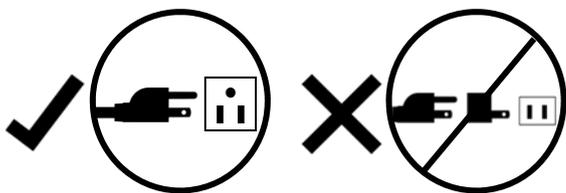
## WARNING

To prevent SERIOUS INJURY or DEATH from electrocution or fire:

- Power MUST be DISCONNECTED BEFORE proceeding with permanent wiring procedures.
- Garage Door Opener installation and wiring MUST be in compliance with all local electrical and building codes. Make sure the Opener is ALWAYS grounded.
- NEVER use an extension cord, 2-wire adapter or modify the power plug in any way to make it fit the outlet.



Ordinary Power Connection



**DO NOT OPERATE OPENER AT THIS TIME.**

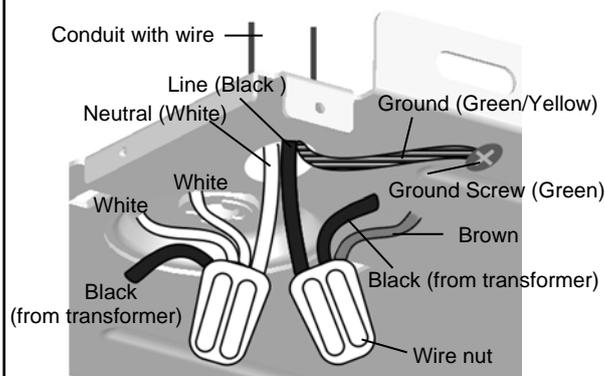
### To Connect Power

Plug the Opener into a grounded outlet ONLY. If there is no grounded outlet present, call a qualified electrician to replace the outlet. Use of a surge protector is highly recommended page 4.

### Permanent Wiring (If Required by Local Code)

1. Remove the enclosure by removing the 8 screws located on the sides and rear of the Opener.
2. Cut the two wire connectors found inside and remove the power cord.
3. Group neutral (white) wires from power source with 2 white wires and 1 black wire from transformer inside the Opener. Connect them with a wire nut (not provided).
4. Group line (black) wires from power source with another black wire from transformer and a brown wire inside the Opener. Connect them with a wire nut (not provided).
5. Secure the ground (green or bare) wire from the power source with a grounding screw.
6. Reinstall the enclosure.
7. Turn on power supply. If the wiring is properly connected, a "click" should be heard and the light will illuminate (if a bulb is installed). If there is no response from the Opener, check power source and wiring.

For Permanent Wiring ONLY



# Aligning the Photo Eye Safety System

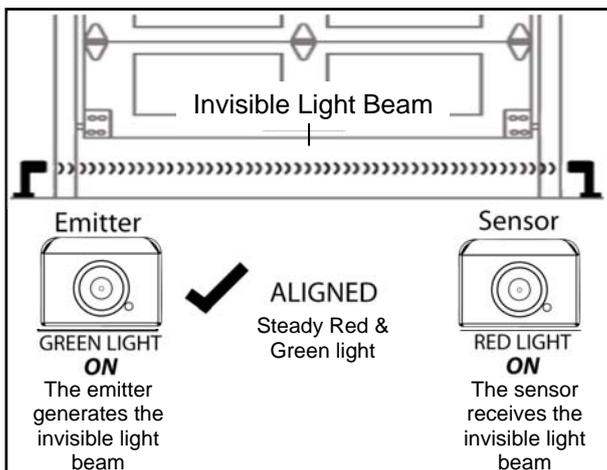
## WARNING

To prevent SERIOUS INJURY or DEATH from a closing garage door:

- The Photo Eye Safety System MUST be installed BEFORE connecting power.
- The Photo Eye Safety System MUST be properly connected and aligned BEFORE operating the Opener.



**NOTICE: The opener will not close until the photo eyes are installed. Photo eyes are required by federal law to be installed on all openers.**



### Aligning the Photo Eye Safety System:

1. When power is supplied, the Green photo eye (Emitter) will flash until it is aligned with the Red photo eye (Sensor). The red photo eye will not light until it is aligned with the green eye.
2. When the Photo Eye System is properly aligned the Green Photo Eye (Emitter) will emit a steady green light and the Red Photo Eye (Sensor) will emit a steady red light.
3. If either of the Photo Eye lights are unsteady, flash or dim, check for an obstruction and carefully adjust the position of the Photo Eyes until they give a steady green light and steady red light.

**Note: The path of the invisible light beam MUST NOT be obstructed. No part of the garage door or any hardware should interfere or block either sensor.**