

# Safety Reversing Sensor Extension Bracket Kit

## ⚠ WARNING

Be sure power is not connected to the garage door opener BEFORE installing the safety reversing sensor.

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

- Correctly connect and align the safety reversing sensor. This required safety device MUST NOT be disabled.
- Install the safety reversing sensor so beam is NO HIGHER than 6" (15 cm) above garage floor.

## THE PROTECTOR SYSTEM®

The safety reversing sensor must be connected and aligned correctly before the garage door opener will move in the down direction. This is a required safety device and cannot be disabled.

When properly connected and aligned, the safety reversing sensor will detect an obstacle in the path of its electronic beam.

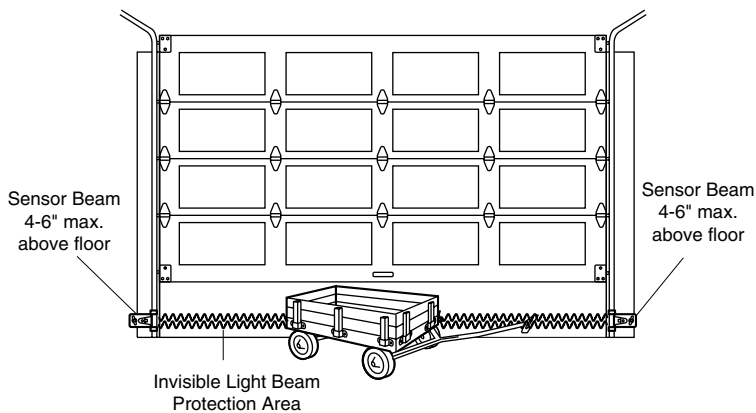
The sending eye (with a amber indicator light) transmits an invisible light beam to the receiving eye (with a green indicator light). If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position, and the opener light will flash 10 times.

The units must be installed inside the garage so that the sending and receiving eyes face each other across the bottom of the garage door, between 4 – 6" above the floor. Either can be installed on the left or right of the door as long as the sun never shines directly into the receiving eye lens. The invisible light beam path must be unobstructed. No part of the garage door (or door tracks, springs, hinges, rollers or other hardware) may interrupt the beam while the door is closing.

The mounting brackets are designed to clip onto the track of sectional garage doors without additional hardware. When mounting the units on the wall, the brackets must be securely fastened to a solid surface such as the wall framing.

Extension brackets provide additional clearance for wall mounting or additional height needed for floor mounting. If installing in masonry construction, add a piece of wood at each location to avoid drilling extra holes in masonry if repositioning is necessary.

Figure 1



Facing the door from inside the garage

## INSTALLING THE BRACKETS

**Be sure power to the opener is disconnected.**

Install and align the brackets so the sensors will face each other across the garage door, with the beam from 4 – 6" above the floor.

They may be installed in one of three ways, depending on your requirements, as follows.

1. (Preferred) Clipped onto the left and right garage door tracks. See Figure 2.
2. Fastened to the wall on each side of the garage. See Figure 3.
3. Fastened to the floor (see Figure 4). Concrete anchors and wood blocks or extension brackets will be needed.

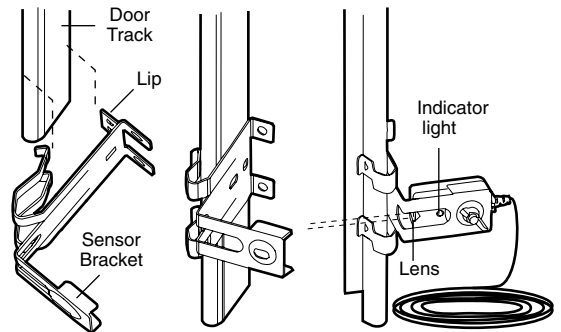
### Garage Door Track Installation:

- Slip the curved arms over the rounded edge of the door track. Snap into place against the side of the track. It should lie flush, with the lip hugging the back edge of the track, as shown.

If your door track will not support the bracket securely, wall installation is recommended.

Figure 2

### DOOR TRACK MOUNT (Right Side)

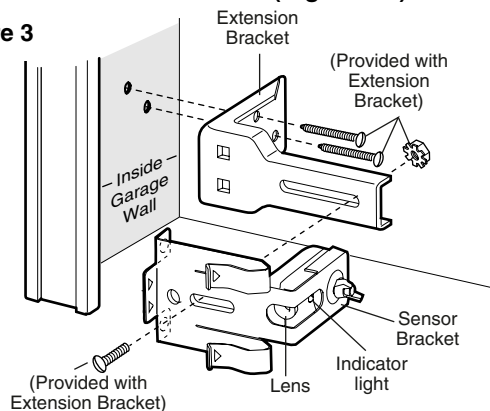


### Wall Installation With Extension Bracket:

- Place the bracket against the wall and make sure there is enough clearance for the sensor beam to be unobstructed.
- If additional depth is needed, an extension bracket or wood blocks can be used.
- Use bracket mounting holes as a template to locate and drill (2) 3/16" diameter pilot holes on the wall at each side of the door, from 4–6" above the floor.
- Attach brackets to wall with lag screws (provided with extension brackets).
- If using extension brackets or wood blocks, adjust right and left assemblies to the same distance out from the mounting surface. Make sure all door hardware obstructions are cleared.

Figure 3

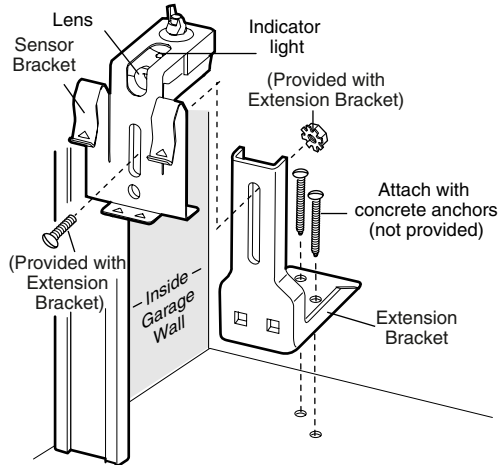
### WALL MOUNT (Right Side)



### Floor installation with Extension Bracket:

- Use wood blocks or extension brackets to elevate sensor brackets so the lenses will be 4-6" above the floor.
- Carefully measure and place right and left assemblies at the same distance out from the wall. Be sure all door hardware obstructions are cleared.
- Fasten to the floor with concrete anchors as shown.

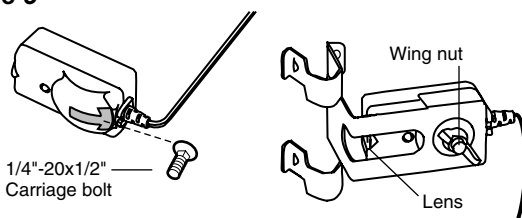
**Figure 4 FLOOR MOUNT (Right Side)**



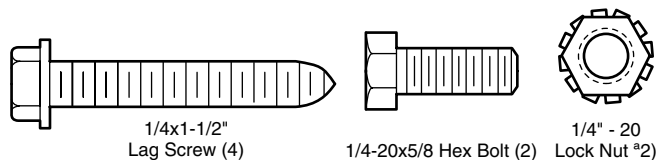
### MOUNTING AND WIRING THE SAFETY SENSORS

- Slide a 1/4"-20x1/2" carriage bolt head into the slot on both sensors. Use wing nuts to fasten sensors to brackets, with lenses pointing toward each other across the door. Be sure the lens is not obstructed by a bracket extension. See Figure 5.
- Finger tighten the sensor wing nuts.
- Run the wires from both sensors to the opener. Use insulated staples to secure wire to wall and ceiling.
- Strip 1/4" of insulation from each set of wires. Separate white and white/black wires sufficiently to connect to the opener terminal screws: white to 2 and white/black to 3.

**Figure 5**



### Hardware Shown Actual Size



### ALIGNING THE SAFETY SENSORS

- Plug in the opener. The indicator lights in both the sending and receiving eyes will *glow steadily* if wiring connections and alignment are correct.
- The *sending* eye amber indicator light will glow regardless of alignment or obstruction. If the green indicator light in the *receiving* eye is off, dim, or flickering (and the invisible light beam path is not obstructed), alignment is required.
- Loosen the *sending* eye wing nut and readjust, aiming directly at the receiving eye. Lock in place.
  - Loosen the *receiving* eye wing nut and adjust sensor vertically and/or horizontally until it receives the sender's beam. When the green indicator light *glows steadily*, tighten the wing nut.

### TROUBLESHOOTING THE SAFETY SENSORS

1. If the *sending* eye indicator light does not *glow steadily* after installation, check for:
  - Electric power to the opener.
  - A short in the white or white/black wires. These can occur at staples, or at screw terminal connections.
  - Incorrect wiring between sensors and opener.
  - A broken wire.
2. If the sending eye indicator light *glows steadily* but the receiving eye indicator light doesn't:
  - Check alignment.
  - Check for an open wire to the receiving eye.
3. If the receiving eye indicator light is dim, realign either sensor.

**NOTE:** When the invisible beam path is obstructed or misaligned while the door is closing, the door will reverse. If the door is already open, it will not close. The opener lights will flash 10 times. (If bulbs are not installed, 10 clicks can be heard.) See page 1.

**Figure 6**

