Application

This device is intended for use with LiftMaster Commercial Door Operators.

Install the Protector System®

When properly connected and aligned, the sensor will detect an obstacle in the path of its electronic beam. The sending eye transmits an invisible light beam to the receiving eye. If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position.

The units must be installed inside the garage so that the sending (emitting) and receiving eyes face each other across the door, no more than 6" (15 cm) 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. Maximum distance between eyes shall not exceed 30'.

The brackets must be securely fastened to a solid surface such as the wall framing. If installing in masonry construction, add a piece of wood at each location to avoid drilling extra holes in masonry if repositioning is necessary.

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. If it does, use a piece of wood to build out each sensor mounting location to the minimum depth required for light beam clearance.
INSTALLING THE BRACKETS

Figures 1, 2 and 3 show recommended assembly of the bracket(s) and "C" wrap based on the wall installation of the sensors on each side of the door as shown on page 1 or on the door tracks themselves. Figures 4 and 5 are variations which may fit your installation requirements better. Make sure the wraps and brackets are aligned so the sensors will face each other across the door.

Wall or Door Track Installation Procedure

- Fasten the "C" wraps to the mounting brackets having square holes, using hardware shown (Figure 1).

Wall Installation Procedure

- Connect each assembly to a slotted bracket, using the hardware shown (Figure 2). Note alignment of brackets for left and right sides of the door.
- Finger tighten the lock nuts.
- Use bracket mounting holes as a template to locate and drill (2) 3/16" diameter pilot holes on both sides of the garage door, 4"-6" (10-15 cm) above the floor. Do not exceed 6" (15 cm).
- Attach bracket assemblies with 1/4"x1-1/2" lag screws (Figure 2).
- Adjust right and left side bracket assemblies to the same distance out from mounting surface. Make sure all door hardware obstructions are cleared. Tighten the nuts securely.

Door Track Installation Procedure

- Discard slotted bracket. Drill 3/8" holes in each track and fasten securely with hardware (Figure 3).
MOUNTING AND WIRING THE SAFETY SENSORS

**NOTE:** All power and control wiring must be run in separate conduit in accordance with local electrical codes.

- Center each sensor unit in a “C” wrap with lenses pointing toward each other across the door.
- Secure sensors with hardware as shown. Finger tighten the wing nut on the receiving eye to allow for final adjustment. Securely tighten the sending eye wing nut.
- Run wires from sensor to junction box and connect to field wiring.
- Run wires through conduit to operator. Connect according to wiring diagram.

ALIGNING THE SAFETY SENSORS

- Power up the opener. Indicator lights in both the sending and receiving eyes will glow steadily if wiring connections and alignment are correct.
  
  If the receiving eye indicator light is not glowing steadily (and the invisible light beam path is not obstructed), alignment is required.
- Loosen the receiving eye wing nut to allow slight rotation of unit. Adjust sensor vertically and/or horizontally until the indicator light glows steadily.
- When indicator lights are glowing steadily in both units, tighten the wing nut in the receiving eye unit.

Figure 6
**Standard CPS-LR Connection Diagram**

CPS-LR PROTECTOR ONLY

![Standard CPS-LR Connection Diagram](image)

**Alternate CPS-LR Connection Diagrams**

CPS-LR PROTECTOR AND 2-WIRE FAIL SAFE DOOR EDGE

![Alternate CPS-LR Connection Diagram](image)

CPS-LR PROTECTOR AND 4-WIRE FAIL SAFE DOOR EDGE

![CPS-LR PROTECTOR AND 4-WIRE FAIL SAFE DOOR EDGE](image)