

⚠ WARNING

This device is for use ONLY on LiftMaster Commercial Door Operators. Use on other than recommended equipment voids warranty, and may cause property damage or SERIOUS personal INJURY. Read and follow ALL instructions. Have door in full open or closed position and DISCONNECT power to the operator BEFORE installing the Commercial Protector System®.

Part #	Description	QTY
12B483	"C" Wrap Brackets	2
12B485	Slotted Bracket	2
12B484	Square Hole Bracket	2
41A4116	Safety Sensor Hardware	1
41K4654	Safety Sensor Kit (receiving and sending eyes)	1
1A6078	Option Board (CPSIII ONLY)	1
41K4629	Commercial Protector Interface (CPS ONLY)	1

Install the Protector System®

IMPORTANT INFORMATION ABOUT THE SAFETY REVERSING SENSOR

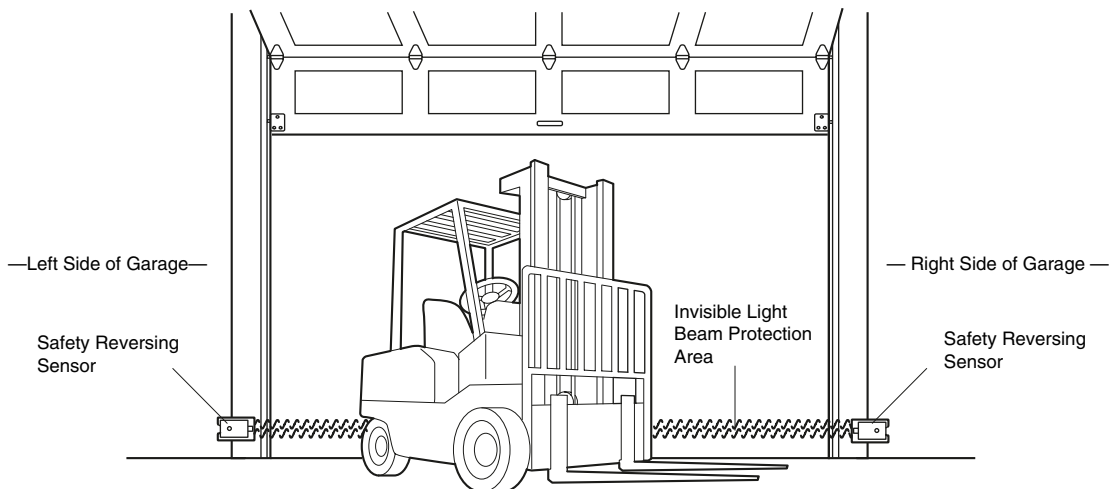
Be sure power to the operator is disconnected.

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.

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.



Facing the door from inside the garage (installation procedures are the same for all door types).

INSTALLATION FOR LIFTMASTER COMMERCIAL OPERATORS

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

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

WALL INSTALLATION

- Connect each assembly to a slotted bracket, using the hardware shown (Figure 2).
- Finger tighten the lock nuts.
- 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, no higher than 6" above the floor.
- Attach brackets to wall with lag screws as shown in 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

- Discard slotted bracket. Drill 3/8" holes in each track and fasten securely with hardware as shown in Figure 3.

Figure 1 WALL or DOOR Track Installation

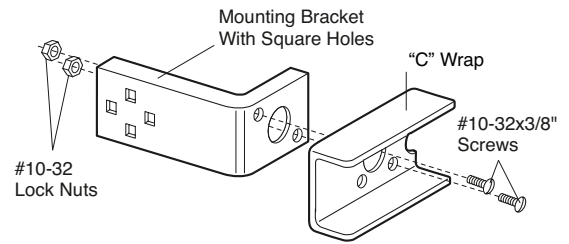


Figure 2 WALL Installation

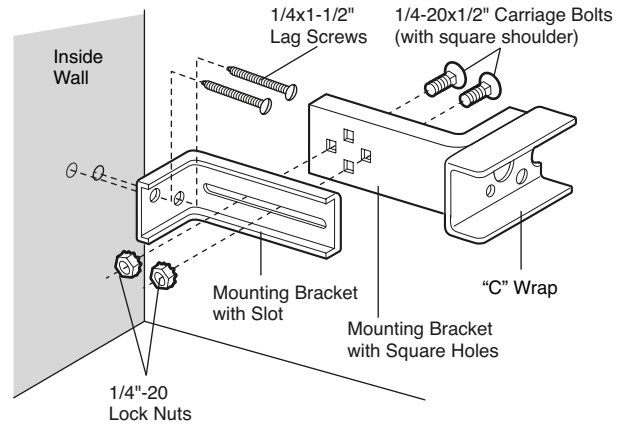


Figure 3 DOOR Track Installation

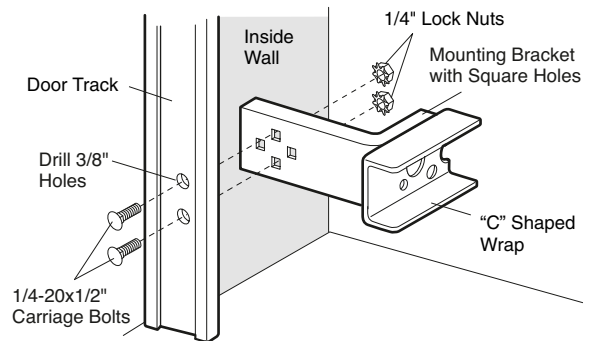


Figure 4 Alternate Wall Mount

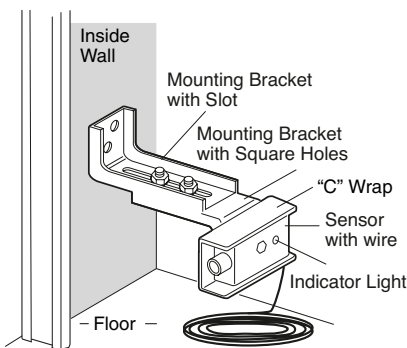
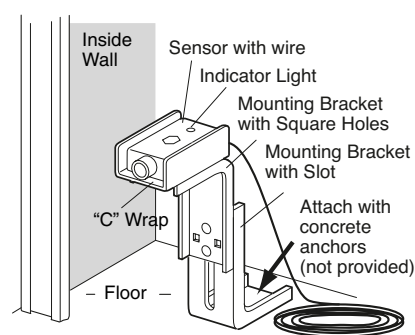


Figure 5 Alternate Floor Mount



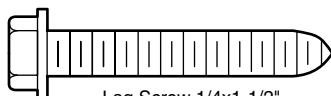
HARDWARE SHOWN ACTUAL SIZE



Screw
#10-32x3/8"



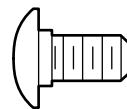
Lock Nut
#10x32



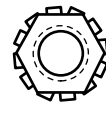
Lag Screw 1/4x1-1/2"



Staples



Carriage Bolts
1/4"-20x1/2"



Lock Nut
1/4"-20

WIRING FOR LIFTMASTER COMMERCIAL OPERATORS

Mounting and Wiring the Safety Sensors

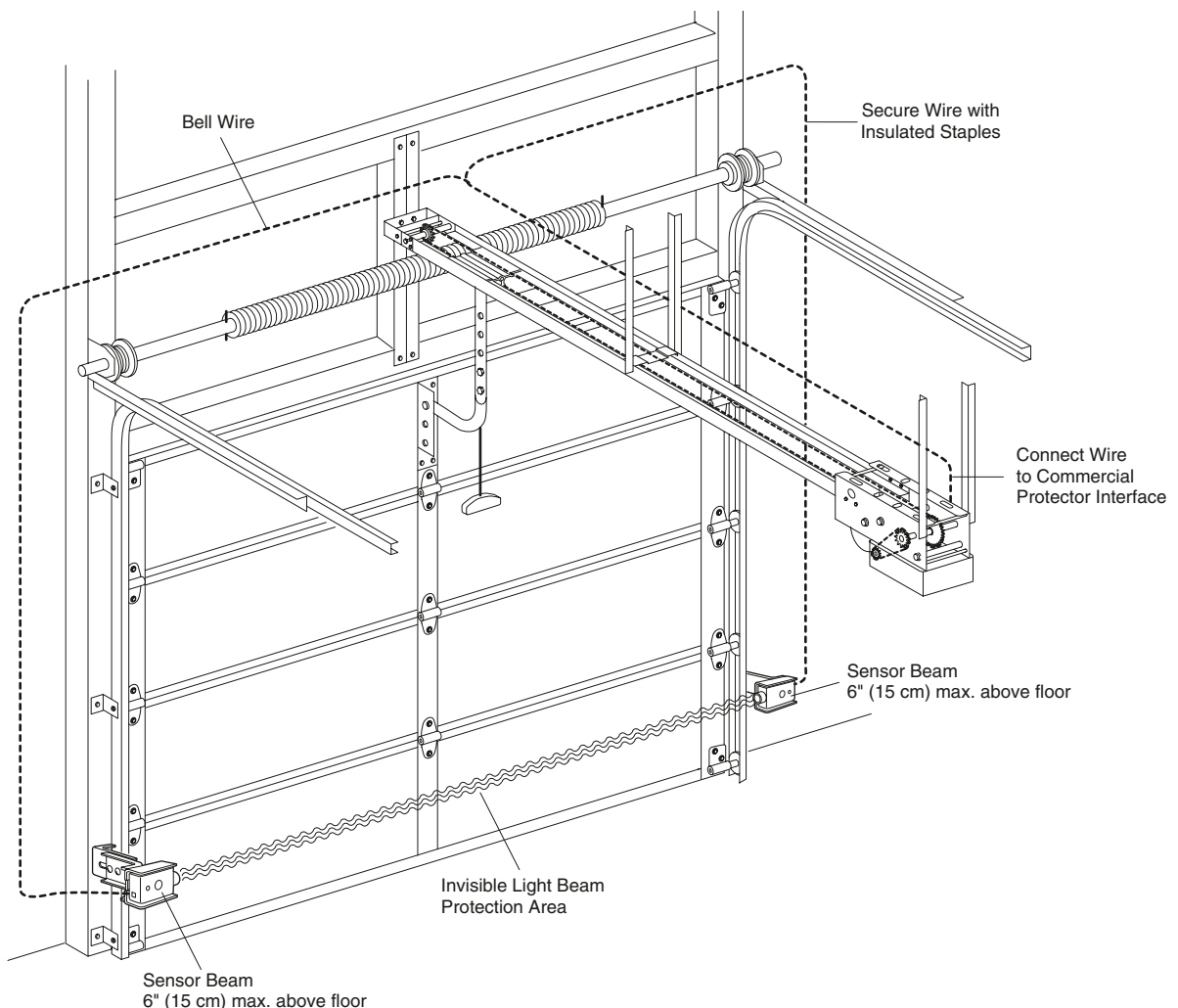
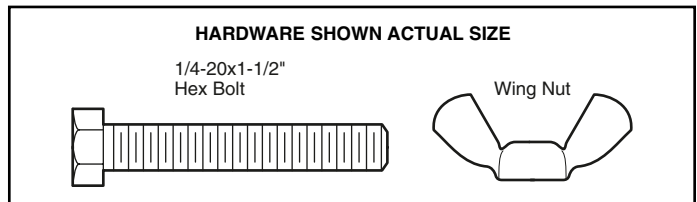
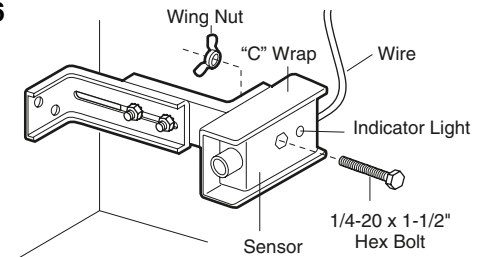
- Insert the wire connector into each sensor and push until you hear a click. The white tab on the sensor should be flush with the back of connector.
- Center each sensor unit in a “C” wrap with lenses pointing toward each other across the door (Figure 6).
- Secure sensors with hardware as shown. Finger tighten the wing nut on the *receiving eye* to allow for final adjustment. Securely tighten the *sending eye* wing nut.
- Run paired wires from both sensors to the operator (Figure 6). Use insulated staples to secure the wire to the wall and ceiling.
- For wiring connections, see following pages:
 - CPS page 4
 - CPS-L page 4
 - CPSIII-01 page 5

Aligning the Safety Sensors

- Power up the operator. Green 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.

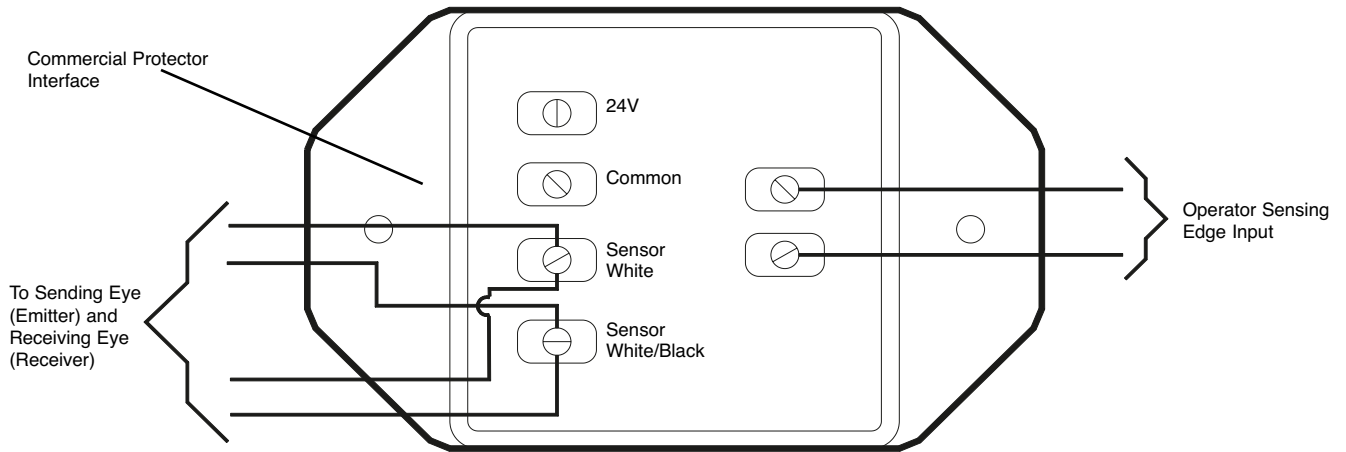
- Loosen the receiving eye wing nut to allow slight rotation of unit. Adjust sensor vertically and/or horizontally until the green indicator light *glows steadily*.
- When indicator lights are glowing steadily in both units, tighten the wing nut in the receiving eye unit.

Figure 6

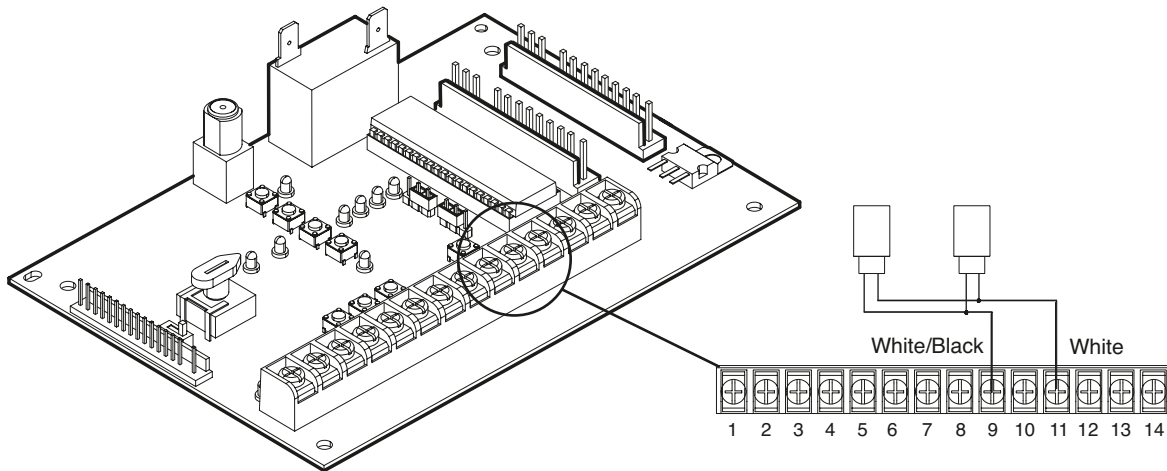


WIRING FOR LIFTMASTER COMMERCIAL OPERATORS

CPS Wiring Connections



CPS-L Wiring Connections for use with Solid State Operators (L2 or L3)

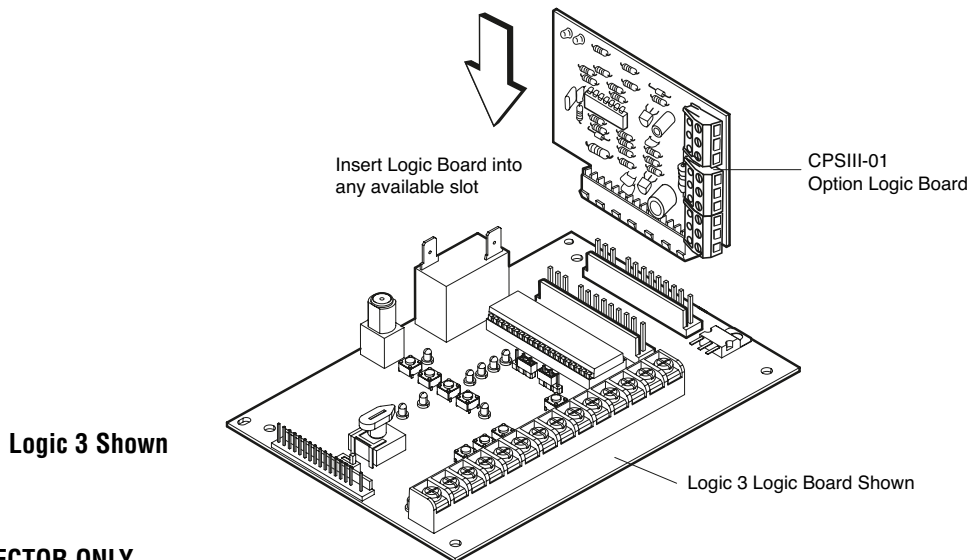


Logic 3 Shown

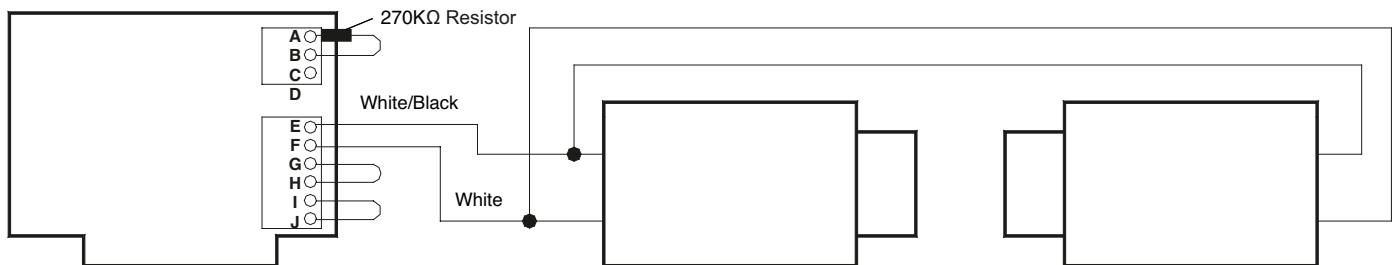
The eyes are required for all timer modes and fail-safe modes. The eyes are automatically learned once connected and operating correctly. To unlearn eyes, remove the eyes from the circuit. Set the selector switch to "Diag." mode, then press and hold the stop button for 5 seconds until the MAS LED blinks. The eyes LED should be off. Set the selector switch back to the desired mode.

WIRING FOR LIFTMASTER COMMERCIAL OPERATORS

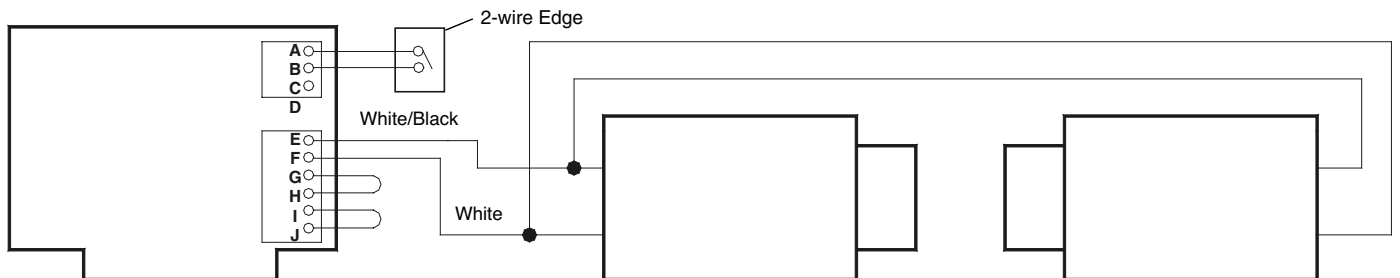
CPSIII-01 Wiring Connections for use with Solid State Logic 3 Control Board



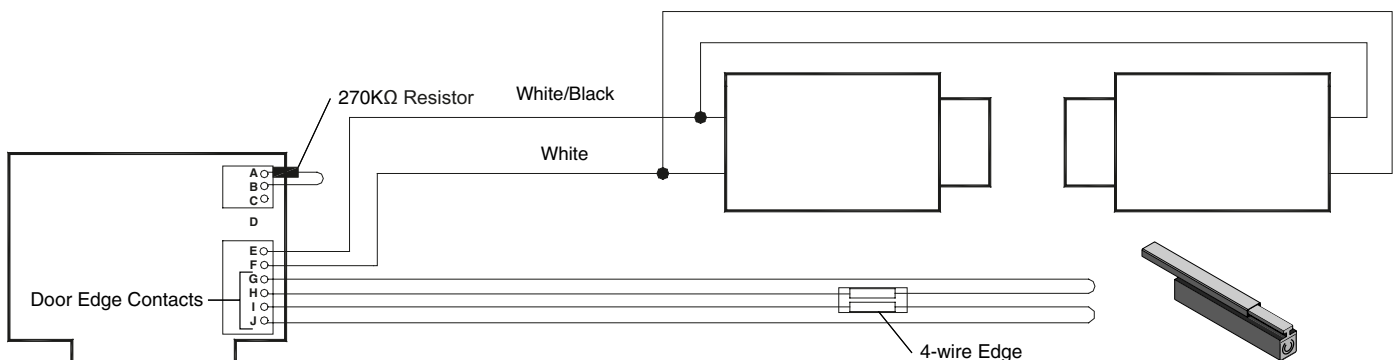
CPSIII-01 PROTECTOR ONLY



CPSIII-01 PROTECTOR AND 2-WIRE FAIL-SAFE DOOR EDGE



CPSIII-01 PROTECTOR AND 4-WIRE FAIL-SAFE DOOR EDGE

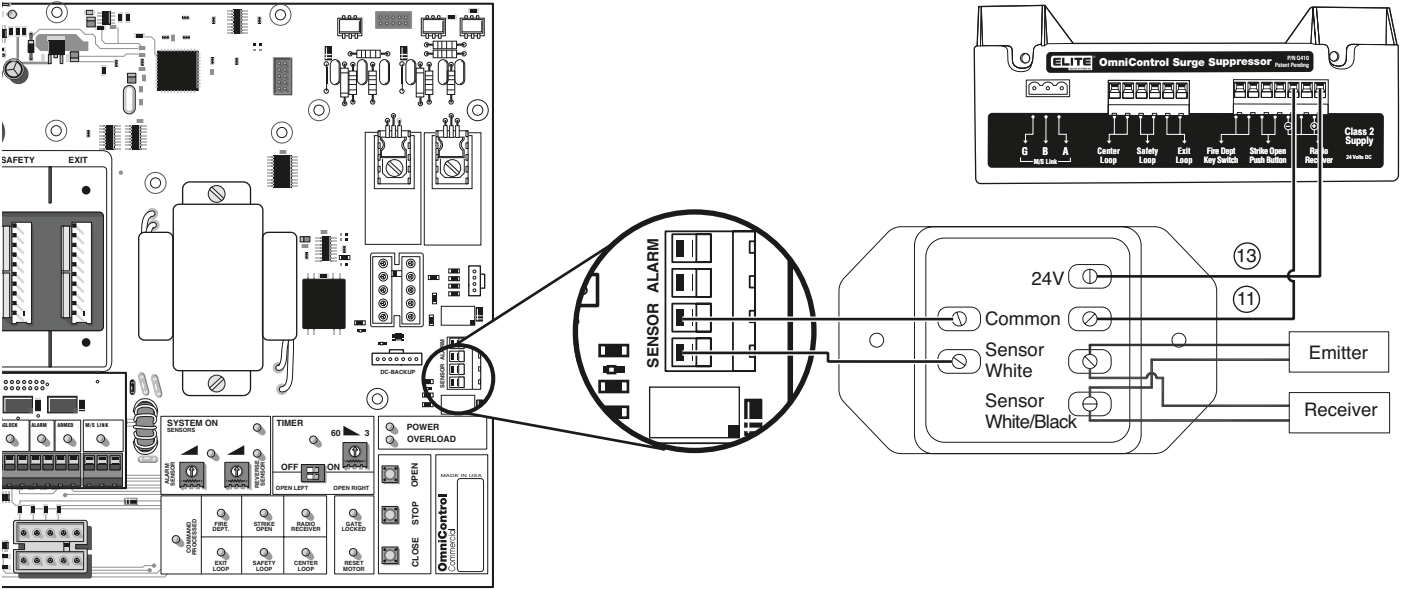


NOTE: The maximum door edge resistance should be less than 1000 ohms as measured between any 4 conductors. This measurement should be taken when the door edge is in the closed contact state.

WIRING FOR LIFTMASTER COMMERCIAL OPERATORS

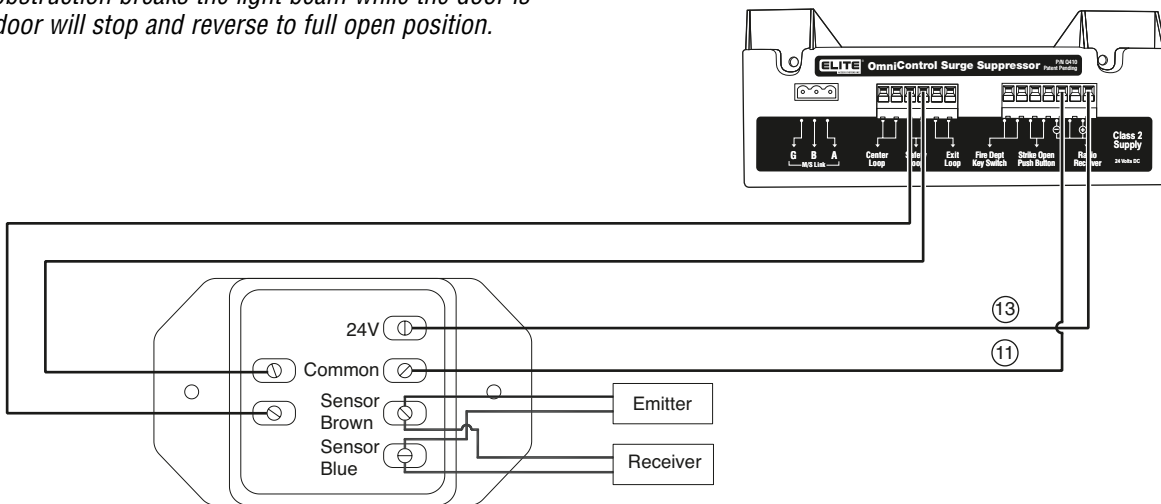
CPS Wiring Connections for use with Solid State Logic Control Board INDOOR APPLICATIONS ONLY

NOTE: Wiring the Protector Interface to the Sensor Alarm causes operator to reverse only a few inches before stopping.



OR

NOTE: If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position.



Testing the Protector System®

WARNING

Without a properly working Commercial Protector System®, persons (particularly children) could be SERIOUSLY INJURED or KILLED by a closing garage door. Repeat this test once a month.

Professional service is required if the operator closes the door when the Protector System® is obstructed.

Test the Commercial Protector System®

- Press the OPEN button to fully open the door.
- Press the CLOSE button to close the door.
- Obstruct the light beam while the door is closing. *The door should stop and reverse.*

The operator will not close if the indicator light in either sensor is not glowing steadily, alerting you to the fact that the sensor is misaligned or obstructed.

TROUBLESHOOTING

1. If the sending eye and receiving eye indicator lights do not glow steadily after installation, check for:
 - Electric power to the operator.
 - A short in the white or white/black wires.
 - Incorrect wiring between sensors and interface.
 - A broken wire (open wire).
2. If receiving eye indicator light is off (and the invisible light beam path is not obstructed), check for an open wire to the receiving eye.

NOTE: For non-solid state operators, if the door is stopped in a mid position, activation of the sensors will cause the door to open. This is similar to activating a sensor edge.

3. **CPS-L Only:** If the sending eye and receiving eye indicator lights are both lit but interrupting the photo eyes does not cause the door to reverse when closing, refer to page 4.

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WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE
FOLLOWING INFORMATION:

- PART NUMBER
- PART NAME
- MODEL NUMBER

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Tucson, Arizona 85706