The Safety Sensor Kit is compatible with LiftMaster Gate Access Systems LA412, LA412-S, and LA100. The Safety Sensors are designed to detect an obstacle in the path of the electronic beam and stop the gate operator.

**IMPORTANT INFORMATION ABOUT THE SAFETY SENSORS**

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

The sensors must be installed so that the sending and receiving eyes face each other across the gate, no more than 24" (61 cm) above the ground. The sensors can be installed on the left or right of the gate as long as the sun never shines directly into the receiving eye lens.

The safety sensors must be securely fastened to a solid surface such as metal or a treated wood post (not provided). The light beam path must be unobstructed during normal operation of the gate.

**NOTE:** Due to the variety of gates and mounting applications, PVC conduit, wire, mounting hardware and posts are not provided. Refer to your local hardware store for additional hardware.

**APPLICATIONS**

**ENTRAPMENT SAFETY SENSORS**

This will pause an opening gate until the obstruction has been removed. Upon removing the obstruction, the gate will continue to open. This will have no effect on the gate closing.

**OPEN (PHOTO INPUT) SAFETY SENSORS**

- **LA412/LA412-S** - This will pause an opening gate until the obstruction has been removed. Upon removing the obstruction, the gate will continue to open. This will have no effect on the gate closing.
- **LA100** - This will stop a closing or opening gate, once the obstruction is removed the gate will continue to operate normally upon the next command given.

**CLOSE (PHOTO INPUT) SAFETY SENSORS**

- **LA412/LA412-S** - This will reverse a closing gate to the full open position (open limit). This will have no effect on a gate opening.
- **LA100** - This will stop a closing or opening gate, once the obstruction is removed the gate will continue to operate normally upon the next command given.
**POWER**

Disconnect power and batteries to the operator.

**SAFETY SENSOR POSTS**

Use a metal or treated wood post (not provided) to elevate the sensors. Safety sensors must be installed no higher than 24” (61 cm) above the ground.

**NOTE:** For ideal protection the safety sensors should be installed as close to one another as possible with the maximum distance up to 30’ (9.1 m).

**TRENCH FOR WIRING**

Before digging, contact local underground utility locating companies. Dig a narrow trench 6” (15 cm) deep from control box to safety sensor posts. Be careful not to damage any buried wire. Run conduit from control box to safety sensor posts and run low voltage wire* (not provided) through conduit.

* UL approved Class 1 or Class 3 direct burial/underground, sunlight/UV resistant 16 gauge 2-conductor/standard wire.
ASSEMBLE SAFETY SENSORS
Insert hex head bolt through safety sensor and slide safety sensor into bracket. Secure with wing nut.

MOUNT SAFETY SENSORS
Mount safety sensor assembly to post using appropriate hardware (not provided). Safety sensors must be installed no higher than 24" (61 cm) above the ground.

**NOTE:** Install safety sensor assembly with the two holes in the bracket facing up and the LEDs visible at the top.

WIRE SAFETY SENSORS
1. Separate wires.
2. Strip 7/16" (11 mm) of insulation from low voltage wires.
3. Combine all like-colored wires and twist together with wire nuts.
MODEL LA100 ONLY
• Insert red lead wire into IR+ terminal.
• Insert black lead wire into IR- terminal.

MODELS LA412 AND LA412-S ONLY

Entrapment Safety Sensors
• Connect ENTRAPMENT safety sensor wires to P8 terminal.

Open Safety Sensors
• Connect OPEN (Photo Input) safety sensor wires to P7 terminal.

Close Safety Sensors
• Connect CLOSE (Photo Input) safety sensor wires to P9 terminal.

ALIGN SAFETY SENSORS
1. Reconnect power and batteries to the operator. The indicator lights in both the sending and receiving eyes will glow steadily if wiring connections and alignment are correct.

NOTE: The sending eye indicator light will glow regardless of alignment or obstruction. If the indicator light in the receiving eye is off, dim, or flickering (and the invisible light beam path is not obstructed), alignment is required.

2. Loosen the sending eye wing nut and readjust, aiming directly at the receiving eye. Lock in place.
3. Loosen the receiving eye wing nut and adjust sensor until it receives the sender’s beam. When the indicator light glows steadily, tighten the wing nut.

NOTE: When properly aligned, the indicator lights in both the sending and receiving eyes will glow steadily.

TEST THE SYSTEM
1. Press the remote control button to open the gate.
2. Place an obstruction in the path of the close or entrapment safety sensor.
3. Press the remote control button to close the gate. The gate should stop.
4. Remove the obstruction and the operator will resume normal function.

The gate operator will not function from a remote control if the indicator light in either sensor is off indicating the sensor is misaligned or obstructed. If the system continues to fail the test, call for a trained gate systems technician.

Verify all other safety devices operate correctly.

TROUBLESHOOTING
If the sending or receiving LEDs do not light up after installation, please check the following:
• Power supply to the operator. Operator may be in stand-by mode, press the reset button to wake up the operator. Verify voltage at inputs.
• A short in the wires. Check wires.
• Incorrect wire connections between the safety sensors and operator. Verify wiring.
• A broken wire. Check wires.
If both sensors are flashing:
• Align sensors.
• Remove obstruction.
• LA100 - Disconnect safety sensors then turn power on unit.
• LA412/LA412-S - Erase the programming for the safety sensors - remove safety sensor. Press learn limits button then press reset button.