

Architectural Specifications for Chamberlain/LiftMaster LA 400 Residential Linear Swing Gate Operator

(For Inclusion within Section 2829 Gate Operators)

Part 1 – General

1.1 Section Includes

- A. Swing gate operators with integral battery backup systems and accessories
- B. Sensors and Controls

1.2 Related Sections

- A. Section 02820 – Fences and Gates
- B. Section 03300 – Cast-In-Place Concrete – Concrete Mounting Pad
- C. Section 11150 – Parking Control Equipment
- D. Section 16131 – Conduits
- E. Section 16115 – Equipment Wiring

1.3 References

- A. UL325 – Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems

1.4 Submittals

- A. Submit under provisions of Section 01300
- B. Product Data: Equipment list, system description, block diagrams on equipment to be finished, electrical wiring diagrams for installation, and manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations
 - 2. Storage and handling requirements and recommendations
 - 3. Installation methods

1.5 Quality Assurance

- A. Provide documentation of maintenance and repair service availability for emergency conditions
 - 1. Installer Qualifications: Factory authorized contractor specifically trained in gate operation systems of the type found within this section
- B. Manufacturer is ISO9000 Certified

1.6 Warranty

- A. Warranty: Manufacturer's standard warranty for two years

Part 2 – Products

2.1 Manufacturer

- A. Acceptable Manufacturer: Chamberlain/LiftMaster, 845 Larch Avenue, Elmhurst, Illinois 60126. Telephone: (800) 282-6225
- B. Substitutions: Not permitted
- C. Requests for substitutions will be considered in accordance with the provisions of Section 01600

2.2 Residential Linear Swing Gate Operator

- A. Residential 24VDC Residential Linear Swing Gate Operator for Single or Double Gates (using Master/Second package)
 - 1. Chamberlain/LiftMaster LA 400 Residential Linear Swing Gate Operator
 - a. Gate capacities: For Open inside/Close outside or Open outside/Close inside operation of swing gates up to 550 lbs and lengths to 16 feet for each leaf.
 - b. UL Classification: (Note to Specifier: Select one)

- 1.) Conforms to Class I, when tested in accordance with UL325
 - 2.) Conforms to Class II, when tested in accordance with UL325
 - 3.) Conforms to Class III, when tested in accordance with UL325
 - 4.) Conforms to Class IV, when tested in accordance with UL325
- c. Operator: Low voltage 24V DC with variable speed soft start/stop with electronic limit switch system that provides extended gate system life; provides a travel speed of 15 seconds to provide a 90° opening for up to 100 cycles per day
- d. Control circuit: LiftMaster Security+ solid-state rolling code remote control board in a weatherproof housing; low-voltage control inputs to provide for connection of a full range of optional external devices including safety loop detector, photocell sensors, telephone entry access systems, access control systems, radio receivers, and a keyed manual disconnect (to provide release and manual operation of the gate in emergency situations); provides LED indication of all input, status, and diagnostic capabilities
- e. Additional required controls:
- 1.) Built-in LiftMaster 312HM Radio Receiver
 - 2.) Inherent obstruction sensing providing separate force adjustments for both open and closed directions, allowing a closing gate to reverse to open and an opening gate to stop
 - 3.) Timer-to-close providing adjustable timer settings between 0 and 120 seconds which resets upon receiving additional open commands
 - 4.) Battery Backup: The weatherproof control housing shall contain a standard, integral battery backup system to automatically engage in the event of a power loss and auto-reset to normal operation when power is restored; battery backup shall provide complete operation of the gate operator and all DC control devices and sensing devices, including all sensing loops, to insure proper and expected operation of the barrier gate system in the event of a power loss; battery charging shall be accomplished by an integral regulated battery management system that maintains proper battery levels to insure no disruption in service in the event of line power failure.
 - 5.) Bi-Part latch for dual or double gate applications requiring one leaf to open or close before the other
- f. Mounting: Left- or right-hand operation to provide flexibility in determining orientation either prior to or during installation
- g. Optional Equipment (Note to Specifier: Delete all not applicable)
- 1.) Master/Second option providing a cable extension kit consisting of a direct burial wire, junction box and connecting hardware to provide synchronized movement between two gate operators in a double gate installation at a single entrance (LA400-S)
 - 2.) Solar Panel Kit that allows for operation as an independent unit with the use of a 20 Watt DC adapter and 12V Solar Panel (SOLKIT12V)
 - 3.) Remote Antenna Mounting Kit includes antenna, 15 ft. cable, and mounting hardware for repositioning radio antenna (86LM)
 - 4.) Push-to-Open Bracket permitting gate to swing out from the property (50-19503)
 - 5.) Vehicle Sensing Driveway Probe (LM202)
 - 6.) 6" Post Mounting Kit for Control Box (50-19509)
 - 7.) 4" Post Mounting Kit for Control Box (50-19511)
 - 8.) 2.5" Post Mounting Kit for Control Box (50-19512)

Part 3 – Execution

3.1 Examination

- A. Do not begin installation until substrates have been properly prepared

- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding

3.2 Preparation

- A. Clean surfaces thoroughly prior to installation
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions

3.3 Installation

- A. Install in accordance with manufacturer's specifications
- B. Mount directly to concrete pad, firmly secured, plumb, and level
- C. Mount to mounting pedestal; provide base plate
- D. Wire in accordance with National Electric Code
- E. Enclose all splices in easily accessible junction boxes or on terminal boards
- F. Tag and identify all cable runs in all junction boxes
- G. Test system and adjust to assure components and accessories are properly connected and in working order

3.4 Preparation

- A. Protect installed products until completion of project
- B. Touch-up, repair, or replace damaged products before completion

3.5 Maintenance

- A. Provide Owner with two copies of operation, installation, and maintenance manuals including wiring diagrams
- B. Provide owner with two copies of risers, layouts, and special wiring diagrams showing any changes to standard drawings
- C. Maintain at three-month intervals, checking external reversing devices once per month