SECTION 08731

AUTOMATIC DOOR OPERATORS - COMMERCIAL



Display hidden notes to specifier by using “Tools”/“Options”/“Display”/“Hidden Text”.

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\*\* NOTE TO SPECIFIER \*\* LiftMaster Commercial Automatic Door Operators.

This section is based on the products of The LiftMaster Group, Inc., which is located at:

 300 Windsor Drive

 Oakbrook, IL 60523

 Tel: 800.282.6225

 Email: specs@LiftMaster.com

 Web: LiftMaster.com

 [{click Here} for additional information.](http://www.arcat.com/arcatcos/cos42/arc42485.html?src=spec)

LiftMaster’s full commercial and residential garage door operator/gate operator/access control product lines meet the needs of Architects, Designers, Engineers, and Specifiers in any design or conceptual plan, while offering 100 percent compliance with UL 325safety and construction codes.  Our entire product line also contributes to energy-efficiency credits for LEED green building certification from the U.S. Green Building Council.  LiftMaster is a registered presenter of the American Institute of Architects and is approved to present any of our AIA CEUs at your firm’s location. For learning objectives and to schedule a Lunch & Learn for your firm, please send a request to specs@LiftMaster.com.  To find a complete library of architectural specifications, shop drawings, CSI format 3-part specs, CAD, and BIM product renderings, visit LiftMaster.com.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Commercial overhead door and gate operators (LiftMaster Model HCT Series)
			1. Overhead door and gate operators (LiftMaster Model HCTDCPKGU08).
			2. Overhead door and gate operators (LiftMaster Model HCTDCPKGU10).
			3. Overhead door and gate operators (LiftMaster Model HCTDCPKGU12).
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 06100 - Rough Carpentry: Installation and requirements for blocking and nailers.
		2. Section 16050 - Basic Electrical Materials and Methods: Installation and requirements for electrical connections.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. International Electrotechnical Commission (IEC).
		2. National Electrical Manufacturers Association (NEMA): NEMA ICS 6 - Industrial Control and Systems: Enclosures.
		3. Underwriters Laboratories (UL): UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems.
	1. SUBMITTALS
		1. Submit under provisions of Section 01300.
		2. Product Data: 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.
			4. Cleaning methods.
		3. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, edge conditions, and accessories.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer’s unopened packaging with labels intact until ready for installation.
		2. Schedule delivery of door operator so that spaces are sufficiently complete that door operators can be installed immediately upon delivery.
	3. WARRANTY
		1. Manufacturer’s standard limited 2-year warranty against material and manufacturing defects.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: LiftMaster; 300 Windsor Drive; Oakbrook, IL 60523. Toll-Free: 800.282.6225. Email: specs@LiftMaster.com. Web: LiftMaster.com.

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01600.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. Commercial Overhead Operators: LiftMaster HCTDCU Series Heavy-Duty, High-Cycle Trolley Overhead Door/Gate Operators.
		+ 1. LiftMaster HCTDCU Overhead Door and Gate Operator

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - * 1. HCTDCPKGU08 – 8 feet (2438 mm) tall door/gate
				2. HCTDCPKGU10 – 10 feet (3048 mm) tall door/gate
				3. HCTDCPKGU12 – 12 feet (3658 mm) tall door/gate

\*\* NOTE TO SPECIFIER \*\* To be UL 325 Compliant for commercial/industrial applications while allowing momentary contact on a control to close, a minimum of one external monitored safety entrapment protection device must be installed to protect in the closing direction (the inherent reversing system in this operator does not replace this requirement). Alternatively, for commercial/industrial door applications, constant contact on a hard-wired control to close may be employed. To enable the use of momentary contact on a control to close, including portable transmitters and automatic actuation accessories, devices such as monitored photo eyes or edge sensors are required to be installed with this operator.

* + - 1. Compliance: UL Listed. Compliant to the UL 325, UL 991 and CSA C22.2 No. 247 standards.
				1. This model is intended for use in commercial and industrial door applications.
			2. Monitored Safety Inputs: 3 inputs per board (main board and expansion board) totaling 6 inputs with any combination of up to:
				1. Main Board:

1 Monitored Close Photo Eye input

1 Monitored Open Photo Eye input

1 Monitored Open Safety Edge or Open Photo Eye input

* + - * 1. Expansion Board

2 Monitored Safety Edge or Photo Eye inputs (selectable for Open or Close).

1 Monitored Photo Eye input (selectable for Open or Close).

* + - * 1. 8 Monitored edges available when Transceiver is added.
			1. Electrical Power Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete power option not required.

* + - * 1. 115V AC, single phase
				2. 230V AC, single phase.
			1. Motor: 24 DC, with soft start/stop operation.
				1. Duty cycle: Continuous
			2. Capacity:
				1. HCTDCPKGU08 – 8 feet (2438 mm) tall overhead door or gate up to 700 pounds (318 kg)
				2. HCTDCPKGU10 – 10 feet (3048 mm) tall overhead door or gate up to 700 pounds (318 kg)
				3. HCTDCPKFU12 - 12 feet (3658 mm) tall overhead door or gate up to 700 pounds (318 kg)
			3. Recommended Cycles per Day: Continuous
			4. Gate/Door Travel Speed: Selectable; Standard Open – up to 8 inches (305 mm) per second; Fast Open – up to 11 inches (279 mm) per second; Fast Close – up to 8 inches (305 mm) per second.
			5. Warranty: 5 years for commercial applications,
			6. Wormgear Reduction: Commercial oil bath gearbox with 28:1 ratio wormgear reduction running in synthetic oil bath.
			7. Battery Backup: Power Management system draws 14.8 mA when gate or door is idle with remote controls programmed. Provides 112 cycles on Battery Backup with two 7Ah batteries.
			8. Standby Time: Proves up to 24 days of standby power in the event of a power loss with two 7Ah batteries (excluding accessories).
			9. Accessory Electrical Power Requirements: 24V DC 500 mA output, switched and unswitched power.
			10. Dynamic Braking System: Adds substantial gate position control at all points in travel. The brake system also prevents the gate or door from being back-driven.
			11. Chassis: Constructed with 1/4 inch (6mm) gold zinc-plated steel for rust prevention.
			12. Trolley Assembly: Heavy-duty 12-gauge steel track with 6 UHMW rollers
			13. Noise Isolators: Designed for exceptionally quiet performance.
			14. Internet Connectivity: MyQ Technology
				1. 902 to 928 MHz
				2. 50-channel FHSS (Frequency Hopping Spread Spectrum).
				3. LiftMaster 828LM Internet Gateway enables monitoring and control of gate operators via internet-enabled smartphone, tablet or computer.
				4. Provides two-way communication between gate operator and MyQ accessories to enable remote open, close and monitoring of gate.
			15. Receiver:
				1. Security+ 2.0 3-channel on-board receiver, holds up to 50 remote controls, HomeLink compatible
				2. HomeLink compatible, version 4 and higher
				3. Transmits 310 MHz, 315 MHz, 390 MHz.
			16. Electronic limits: Maintains accurate limit position throughout travel, even after using the manual release handle.
			17. Soft Stop & Start during mid-travel reversal extends operator life under high-cycle, heavy gate use.
			18. LED Diagnostic Display: Simplifies installation and troubleshooting.
			19. Colored Terminal Blocks: Provides easy identification of safety and fire department inputs.
			20. Programmable Auxiliary Relays: 2 programmable relays with 6 settings each
				1. Pre-warning or gate-in-motion sounder.
				2. Switch on/off devices at open or Close Limits or while gate is in motion..
				3. Tamper detection if gate is pushed off Close Limit.
				4. Cycle quantity feedback.
				5. Red/Green light to control door and gate traffic.
			21. Quick Close, Anti-Tailgate: Closes the door or gate immediately after a vehicle pulls off of interrupt loop.
			22. Sequenced Access Management: Capable of sequentially controlling the operator in tandem with barrier gate.
			23. Plug-in Loop Detector Inputs: Programmed inputs for shadow, interrupt and exit.
			24. Alarm Reset Button: Instantly resets the built-in safety alarm siren.
			25. Fire Department Compliant: Selectable settings allow gate or door to auto open and power failure or battery depletion.
			26. Surge Suppression: Industrial strength on high and low voltage outputs.
			27. Keyed Manual Disconnect: Simple-to-use disconnect allows gate or door to be operated manually and maintain limit position once re-engaged.
			28. Operating Temperature Range: -4 degrees F (-20 degrees C) to 140 degrees F (60 degrees C)
			29. MyQ enabled Accessories:
				1. LiftMaster 828LM Internet Gateway: Allows remote monitoring from internet-enabled computer or smartphone.
				2. LiftMaster 829LM Door and Gate Monitor: Allows remote monitoring and operation.
				3. LiftMaster 823LM Remote Light Switch: Controls light remotely.
				4. LiftMaster 825LM Remote Light Control: Allows remote monitoring and operation.

\*\* NOTE TO SPECIFIER \*\* Delete optional accessories if not required.

* + - 1. Accessories: Safety Monitoring Devices:
				1. Monitored Photo Eyes and Wireless Edge Kits.

LiftMaster LMRRU Reflective Photo Eyes.

LiftMaster CPSUN4G Thru-Bean Photo Eyes

LiftMaster LMTBU Thru-Beam Photo Eyes.

LiftMaster CPS-OPEN4 Monitored Dual Sided Photo Eye

LiftMaster LMWEKITU Wireless Edge Kith with Transmitter and Receiver.

LiftMaster LMWETXU Wireless Edge Transceiver

* + - * 1. Wired Monitored Edges (can be used with LMWEKITU)

LiftMaster S50 Small Profile Monitored Edge

LiftMaster S504AL Small Profile Edge, 4 foot (1219 mm) aluminum channel

LiftMaster S505AL Small Profile Edge, 5 foot (1524 mm) aluminum channel

LiftMaster S506AL Small Profile Edge, 6 foot (1829 mm) aluminum channel

LiftMaster L50 Large Profile Monitored Edge

LiftMaster L504AL Large Profile Edge, 4 foot (1219 mm aluminum channel

LiftMaster L505AL Large Profile Edge, 5 foot (1521 mm) aluminum channel

LiftMaster L506AL Large Profile Edge, 6 foot (1829 mm) aluminum channel

LiftMaster WS4 Wrap-Around 4 foot (1219 mm) square monitored edge

LiftMaster WS5 Wrap-Around 5 foot (1524 mm) square monitored edge

LiftMaster WS6 Wrap-Around 6 foot (1829 mm) square monitored edge

LiftMaster WR4 Wrap-Around 4 foot (1219 mm) round monitored edge

LiftMaster WR5 Wrap-Around 5 foot (1524 mm) round monitored edge

LiftMaster WR6 Wrap-Around 6 foot (1829 mm) round monitored edge

* + - * 1. Optical Edges for Overhead Doors

LiftMaster OES-SD16; 16’ Sectional Door Edge Kit

LiftMaster OES-SD24; 24’ Sectional Door Edge Kit

LiftMaster OES-5104; 16’ 2” x 2” PVC Channel

* + - 1. Accessories: Provide the optional accessories listed below.
				1. LiftMaster LOOPDETLM Plug-in Loop Detector
				2. LiftMaster KPW250 Wireless Commercial Keypad
				3. LiftMaster RGL24LY Red/Green Traffic Light
				4. LiftMaster 892LT 2-Button Security+ 2.0 Learning Remote Control.
				5. LiftMaster 894LT 4-Button Security+ 2.0 Learning Remote Control.
				6. LiftMaster 811LM 1-button Encrypted DIP Remote Control.
				7. LiftMaster 813LM 3-Button Encrypted DIP Remote Control.
				8. LiftMaster IPAC Internet Protocol Access Control Entry System.
				9. LiftMaster IPACIPDCC IPAC 2 Door IPDC – Cloud
				10. LiftMaster EL2000SS Stainless Steel Commercial and Gated Community Telephone Entry System
				11. LiftMaster Star1000 Commercial Access Control Receiver
				12. LiftMaster PPWR Passport Receiver with Security+ 2.0 Technology
				13. LiftMaster PPV1 Passport 1-Button Remote
				14. LiftMaster PPK1 Passport 1-Button Mini Remote
				15. LiftMaster KPR2000 Single Access Remote Control Keypad and Proximity Reader
1. EXECUTION
	1. EXAMINATION AND PREPARATION
		1. Do not proceed with installation until substrates have been properly prepared and deviations from manufacturer’s recommended tolerances are corrected.
		2. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer’s recommended installation tolerances and conditions. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. Commencement of installation constitutes acceptance of conditions.
	2. INSTALLATION
		1. Install in accordance with manufacturer’s instructions and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained. Demonstrate operation to owner’s personnel.
	3. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch up, repair or replace damaged products before Substantial Completion.

END OF SECTION