### **ELECTROMECHANICAL AUTOMATIC OPERATORS**

LCN's electromechanical products are designed primarily for automatic opening applications that occasionally require manual opening. A control box provides all electrical functions. These self-contained units are suitable for use on single leaf doors or pair of doors. These products combine all the control and power elements into a single operator package, only some actuators are required to complete the system.

- Surface mounted and overhead concealed mountings available.
- Available in two standard anodized finishes Aluminum and Dark Bronze.

# LOW ENERGY ELECTROMECHANICAL POWER OPERATORS

- Complies with ANSI 156.19.
- Opening time from full close to backcheck is no faster than 3 seconds.
- Less than 15 lbs of force to open door manually.

### **STANDARDS, LISTINGS & APPROVALS**

- UL listed for self-closing doors without hold open. UL 325.
- Tested and certified under ANSI.
- Low Energy Electromechanical Operators ANSI 156.19.
- ADA Compliant.
- Wiring is compliant with both UL 325 and the NEC. Separation of high and low voltage.
- Consult the factory for other listings.

### WARRANTY

2 year limited warranty. See General Information Section for complete details.

### MAINTENANCE

Low Energy Electromechanical Power Operators

- Operators mounted according to the LCN Installation instructions require no periodic maintenance or adjustments.
- Periodic visual inspections are recommended.
- No service contracts.



This page illustrates examples of typical Electromechanical LCN systems. Please consult your local SSC representative of LCN for assistance with specific installations and material requirements.

### SINGLE DOOR SYSTEMS



#### SINGLE DOOR SYSTEM (WIRELESS)

- An interior door
- Guide rails or safety devices not required
- Free swinging (or dogged) door

#### How It Works:

- Wireless actuators with receiver, powered by the transformer allows for easy installation
- For automatic door operation, touching either actuator signals the receiver and power operator to open the door to 90 degrees
- The door is held there until the system times out
- Door closes via spring return
- Door opening speed, closing speed and hold open time is adjustable on the control box
- If not actuated, the power operator functions as a manual door

Bill Of Materials:	Qty.	Part No.	Description
	1	9531	Automatic Operator (RH)
	28	310-3853W	S Wireless Actuators
	1	8310-865	Wireless Receiver

### **VESTIBULE ENTRY OPERATION**



#### VESTIBULE ENTRY SYSTEM (WIRED)

- Exterior & vestibule doors
- Sequential operation
- Guide rails or safety devices not required
- Controlled access, free egress

#### How It Works:

- This installation provides both accessibility and security for building occupants
- It allows for the integration of multiple automatic operators, a card reader and electric strike
- A sequencer allows sequential operation of the two automatic operators
- Vestibule actuators allow single door ingress/ egress from the vestibule as needed
- If not actuated the power operator functions as a manual door

<b>Bill Of Materials:</b>	Qty.	Part No.	Description
	1	9542	Automatic operator (RH)
	1	9531	Automatic operator (RH)
	3	8310-853	Wall Plate Actuators
	1	8310-849	Sequencer
	Othe	r products fr	om Von Duprin and
	Schla	ige Electroni	cs





#### CONTROL BOX - 2800, 9500 SERIES

- 1. Control Box, 115VAC 60Hz, or 240 VAC 50/60 Hz
- 2. Seven Segment Display
- 3. Power Indicator
- 4. Factory Default Push Button
- 5. Model Identification Label
- 6. 6-Pin Connector for Master Motor
- 7. 3-Pin Connector for 3 Position Switch
- 8. Breakaway Jumper Cable
- 9. 2-Pin Connector for Breakaway Switch
- 10. Accessory Direct Connect Diagram
- 6-Pin Connector for Companion Motor (supply only w/ simultaneous pairs)
- 12. Value Adjustment Push Buttons
- 13. Setting Adjustment Menu
- 14. Function Adjustment Push Buttons
- 15. Closing Speed Adjustment Dial (Master)
- 16. Closing Speed Adjustment Dial (Companion)
- 17. 3-Pin Connector for AC power



#### STANDARD CONTROL BOX - 9100 SERIES





### **GENERAL ELECTRICAL DATA**

- 1. The 115/240 volt power supply must be a dedicated circuit from the main circuit breaker panel and must not be connected into a building lighting system operating fluorescent lights.
- 2. Location of conduits determined by mounting. See installation instructions for location.

### 2800, 9500, SERIES Electrical Data

- 1. 120 VAC 60Hz input @ 2.5 amps (2800 and 9500 Series).
- 2. 240 VAC 50/60 Hz @ 2.5 amps (2800, and 9500 Series).
- 3. 24 V AC output @ 1.5 amps (protected by self-resetting thermal fuse).

4. 24 V DC available with SO kit included.

### 9100, SERIES Electrical Data

1. 120 VAC input @ 1 amp.

2. 24 VDC output @ 2.5 amps.



### **On-Board Power Supply**

Provides 24V DC output to power card readers, manual actuators and other peripherals.

### **Electronic Circuit Protection**

Fused input circuit protection and fused output protection for 24 VDC peripherals.

### **Visual Function Indicators**

There are 2 LED's for installation and trouble shooting feedback. The motor LED will illuminate when the motor drive circuit energizes. This is when the operator is activated it will remain on only during the opening of the door and the power LED this will illuminate when power is applied to the board and remains illuminated as long as there is power applied to the board.

### **Programming Mode**

Allow tailoring of the following functions to meet specific site conditions:

- Power Boost
- Opening Speed
- Backcheck Speed
- Hold Open Time Delay
- Backcheck Position
- Closing Speed
- Latch Position
- Push 'N Go
- Delayed Activation

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Features



The 9130 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an activated or manual door.

Certifications	Grade 1 - A156.19, UL325, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-Handed
Door Width	<ul> <li>30" - 48"</li> <li>30" minimum door width for 27"</li> <li>36" door width only for full length pull operator</li> </ul>
Warranty	2 years

-	
Cover	Metal 27", standard
	<ul> <li>Metal 36<sup>°</sup>, optional</li> </ul>
Fasteners	Wood and machine screws
Mounting	Single interior door, surface mount, offset
-	pivot / butt hinge (Pull Side)
	pivot, pottilige (i ottolde)
Arms	Standard arm and track
AIIIIS	Standard ann and track
Finishes/Colors/	Anodized aluminum, standard
Powder Coat	Dark bronze, optional



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### Mounting details

Top Jamb Single Door Mounting







Offset/butt hinge, center pivot, pull, full cover

Butt Hinges	Should not exceed 5" (127 mm) in width
Reveal	Should not exceed 1/8″ (3 mm)
Head Frame	Minimum 2″ (51 mm)
Top Rail	Minimum 2″ (51 mm)
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control module located on the operator assembly</li> <li>Maximum hold open time adjustable up to approximately 30 seconds</li> </ul>
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

Push 'N Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings

Power boost allows for increased closing force near latch

• On/off switch is included as standard

• All potentiometers are clearly labeled with their functions

· LED lights indicate power to control box and motor gearbox



#### Accessories

### **Motor Gearbox**



9130-3454S Motor Gearbox Assembly

- Driving mechanism for operator (switch included)
- For 27″ unit



9130-3454 Motor Gearbox Assembly (W/O Switch)

- Driving mechanism for operator (switch not included)
- For full length 36″ unit

### Control Box



9130-3462 Control Box (120v)

 Electronic controlling device with power supply output and power boost feature for Benchmark

### **Brackets**



9130-3018 Mounting Bracket

Standard

Covers



9130-3351-2

### Switch Bracket

- 41" cable
- Bracket used to locate switch at end of cover on full length unit



9130-72MC Metal Cover

- Non-handed
- **27**″
- Extruded aluminum
- Standard



9130-163-1 Cover End Cap Insert

 Used to cover switch hole opening



Full Metal CoverNon-handed

- **36**″
- Extruded aluminum



**9130-334** Cover End Cap

- Black plastic
- Includes 9130-163-1 cover and cap insert



9130-163 Cover Insert

 Used to cover operator shaft opening (includes 2 pieces)



### Accessories





### Ordering Information

### How-to-order 9130 Series closers

### **Specify Finish**

□ Standard Anodized Finish\_\_\_\_\_ Aluminum or Dark Bronze

### **Operator options**

### Cover

□ 36″ Full Cover

#### Operator will be shipped with:

- Standard motor gearbox
- Standard control box
- Mounting bracket
- 27" metal cover
- Standard arm (3077t)
- Standard track w/track roller
- Wood and machine screw pack
- unless options listed below are selected

### **Table of sizes**








Features



The 9140 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an activated or manual door.

Certifications	Grade 1 - ANSI A156.19, UL325/228, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-Handed
Door Width	<ul> <li>26" - 48"</li> <li>26" minimum door width for 27"</li> <li>36" door width only for full length pull operator</li> </ul>
Warranty	2 years

Fasteners	Wood and machine screws	
Mounting	Single interior door, surface mount, offset pivot / butt hinge (Push Side)	
Arms	Regular arm	
Finishes/Colors/ Powder Coat	<ul><li>Anodized aluminum, standard</li><li>Dark bronze, optional</li></ul>	











Offset/butt hinge, center pivot, push, full cover

Butt Hinges	Should not exceed 5" (127 mm) in width
Reveal	Push installations should not exceed 6" (152 mm) for REGULAR ARM and 9-3/4" (248 mm) for LONG ARM
Head Frame	Minimum 2″ (51 mm)
Top Rail	<ul> <li>Minimum 2" (51 mm)</li> <li>Flush ceiling installation requires 5-1/4" (133 mm) minimum</li> </ul>
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control module located on the operator assembly</li> <li>Maximum hold open time adjustable up to approximately 30 seconds</li> </ul>
System Diagram	See "AUTOMATIC OPERATORS" section pages 54 for typical system wiring and page 55 for electrical data
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening

#### Notes:

· Push 'N Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings

· Power boost allows for increased closing force near latch

• On/off switch is included as standard

• All potentiometers are clearly labeled with their functions

· LED lights indicate power to control box and motor gearbox



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#### Accessories

#### **Motor Gearbox**



9140-3454S Motor Gearbox Assembly

- Driving mechanism for operator (switch included)
- For 27" unit

### **Brackets**



9140-3018 Mounting bracket

Standard



9140-3454 Motor Gearbox Assembly (W/O Switch)

- Driving mechanism for operator (switch not included)
- For full length unit (36")

### Control Box



9130-3462 Control Box (120v)

 Electronic controlling device with power supply output and power boost feature for Benchmark





9140-72MC Metal Cover

- Non-handed
- **27**″
- Extruded aluminum cover
- Standard



9140-163-1 Cover End Cap Insert

 Used to cover switch hole opening



9140-3351-1

29" cable

Switch Bracket

Used with a 36" door

 Used to locate switch at end of cover on full length unit

Full Metal Cover

- Non-handed
- **3**6″
- Extruded aluminum cover



9140-334 Cover End Cap

- Black plastic
- Includes 9130-163-1 cover and cap insert



9140-163 Cover Insert

 Used to cover operator shaft opening (includes 2 pieces)



### Accessories



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### Ordering Information

### How-to-order 9140 Series closers

### **Specify Finish**

□ Standard Anodized Finish\_\_\_\_\_ Aluminum or Dark Bronze

### **Operator options**

### Cover

□ 36″ Full Cover

### Arm

□ Long Arm (3077L) (reveals 6" to 9-3/4")

### Operator will be shipped with:

- Standard motor gearbox
- Standard control box
- Mounting bracket
- 27″ metal cover
- Standard arm (3077)
- Standard track w/track roller
- Wood and machine screw pack
- unless options listed below are selected

### **Table of sizes**










The 9150 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an activated or manual door.

Certifications	Grade 1 - ANSI A156.19, UL325/228 ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-Handed
Templating	Peel-n-Stick templates - 2-3/8″ x 6-3/4″ Mounting Hole Pattern
Door Width	<ul> <li>Minimum door width 52<sup>"</sup> - 96<sup>"</sup></li> <li>72<sup>"</sup> door width only for full length double operator</li> </ul>
Warranty	2 years

Cover	Metal, standard
Fasteners	Wood and machine screws
Mounting	Pair of doors, surface mount, offset pivot / butt hinges (Push Side)
Arms	Regular arms
Finishes/Colors/ Powder Coat	<ul> <li>Anodized aluminum, standard</li> <li>Dark bronze, optional</li> </ul>



### Mounting details

Top jamb, Independent/ Simultaneous Pair Mounting



Offset pivot/butt hinge, center pivot, push

Butt Hinges	Should not exceed 5" (127 mm) in width
Reveal	Push installations should not exceed 6" (152 mm) for REGULAR ARM and 9-3/4" (248 mm) for LONG ARM
Head Frame	Minimum 2″ (51 mm)
Top Rail	<ul> <li>Minimum 2" (51 mm)</li> <li>Flush ceiling installation requires 5-1/4" (133 mm) minimum</li> </ul>
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control module located on the operator assembly</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>
System Diagram	See "AUTOMATIC OPERATORS" section pages 54 for typical system wiring and page 55 for electrical data
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

· Determined by wiring

Push N' Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings

Power boost allows for increased closing force near latch

· All potentiometers clearly labeled with their functions

· LED lights indicate power to control box and motor gearbox



Accessories

#### **Motor Gearbox**



#### 9150-3454S Motor Gearbox Assembly

Driving mechanism for operator (switch included)

### **Brackets**



#### 9150-3018 **Mounting Bracket**

Standard

### **Control Box**



9150-3462 Control Box (120v)

 Electronic controlling device with power supply output and power boost feature for Benchmark



Non-handed

LCN Door Control Catalog phone: 877-671-7011 = fax: 800-248-1460 = www.allegion.com/us = 009426 rev. 2/16



### Ordering Information

### How-to-order 9150 Series closers

### **Specify Finish**

□ Standard Anodized Finish \_\_\_\_\_ Aluminum or Dark Bronze

### **Operator options**

#### Arm

□ Long Arm (3077L) (Reveals 6" to 9-3/4")

### Operator will be shipped with:

- Standard motor gearbox (2 ea)
- Standard control box (2 ea)
- Mounting bracket (2 ea)
- 72″ metal cover
- Standard arm (2 ea)Wood and machine screw pack
- unless options listed below are selected

### Table of sizes

Notes:

For 9150 Benchmark Series
72<sup>"</sup> door width only for full length push double door operator.

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### **Digital Control Suite**

Provides exceptionally precise control of a large range of built-in functions combined with superior durability and performance. Visual indications and digital readouts of all control function settings and activity make adjustments easy, fast and accurate.

### **Dual Independent Program Memories**

Each unit is pre-programmed to factory default settings. The installer can adjust the unit to meet the job site requirements. These field settings are locked into the computer's memory. Any subsequent field adjustments replace the original field adjustments. The factory settings are always retained in memory and can be recalled to replace the field settings in just seconds, restoring the unit to its original programming.

### **On-Board Diagnostics**

Sophisticated built-in diagnostics program monitors the system microprocessor, power supplies, drive systems, actuators and safety circuits. Reduces the time required to make sure the installation is complete and correct.

### **On-Board Power Supply**

Provides 24V AC output or 24V DC output with rectifier to power card readers, manual actuators and other peripherals.

### **Plug and Play Sensors**

Motion sensors and safety sensors feature a "plug and play" concept allowing fast and accurate wiring connections in only seconds.

### **Electronic Circuit Protection**

High voltage (primary AC input) is protected by replaceable fuse. Low voltage (secondary AC output) is protected by self-resetting fuses.

### **Visual Function Indicators**

LED Display allows direct observation of these inputs while in visual function indicator mode:

- Key switch- set to Auto, OFF or HOLD
- Activate
- DMSS approach
- DMSS safety
- Bodyguard
- Power Boost Disable

### **Programming Mode**

Allows tailoring the following functions to meet specific site conditions

- Opening Speed
- Backcheck Speed
- Backcheck Position
- Hold Open Delay
- Latch Position
- Auto Reverse Closing
- Electric Lock Delay
- Power Boost
- Push N' Go
- Alternate Action
- Safety Slow/Stop
- Slow Down Disable

### Push 'N Go

Allows pedestrians to walk up to the door and push it open as if it were a manual door. After the door is manually opened approximately 5 degrees, the Push 'N Go feature takes over and continues to open the door – slowly and automatically to the full open position. With Push 'N Go, the door will stay fully open from one to 30 seconds, depending on the time delay chosen.

### **Auto Reverse**

A safety feature that reverses the direction of the door when it comes into contact with an object during either opening or closing.

### Safety Slow/Stops Function

Once the door starts opening, any person or object entering the swing area will cause the door to go into a safety slow speed. This function can be set to allow for a short stop once a person or object is sensed.

### **Power Boost**

Adds an additional latching force to ensure secure latching in severe wind or stack conditions. Power Boost is also ideal for overcoming slowing obstacles such as electric strikes. Provides approximately 25 lbs. of total closing force.

### Microprocessor

Control unit allows for quiet efficiency in operation. Combined with the all electromechanical unit, it eliminates unnecessary wear and prolongs the life of the unit.

### **Electric Lock Delay**

Causes a 1 second delay between activate signal and door opening to allow time for most electric locks to disengage before operator opens door.






Features

The 2810 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operator when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Handed
Door Width	Minimum door width 33" - 48" 49" with finger guard. Note: Single door width per leaf 33" minimum, 48" maximum
Warranty	2 years

Fasteners	Wood and machine screws
Mounting	Single door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center Pivot Arm or Offset Pivot Arm
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>





### Mounting details

Concealed Single Door Mounting



**Center pivot, emergency breakaway, pull** Shown w/ 3-3/4" pivot and finger guard



### Center pivot, fixed stop, push

Shown w/ 3-3/4" pivot and finger guard

Head Frame	Minimum 36″ (L) x 5-3/4″ (H) x 4-1/2″ (W) (914 mm x 146 mm x 114 mm)	
Top Rail	Minimum 2″ (51 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	ximum Opening Template allows 90 degree power opening and 90 degree manual opening	
Minimum header length 33 <sup>2</sup>	with applied stop by others and 36 with LCN fixed or breakaway stop	

Notes:

· Push N' Go permits non-switch activation

Power boost provides additional latch forcing for electromechanical unit with microprocessor control

• Double door header available up to 98", specify length 49" to 98" maximum (Consult factory regarding this option)

Fixed (positive) or breakaway stop available with center pivot arm

· Adjustable hold open time of 1-32 seconds







Head Frame	Minimum 33″ (L) x 5-3/4″ (H) x 4-1/2″ (W) (838 mm x 146 mm x 114 mm)
Top Rail	Minimum 2″ (51 mm)
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>
Door Stop	Required for each door panel
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening
<ul> <li>Minimum header length 33<sup>"</sup></li> </ul>	

Installations require bottom pivot and two intermediate pivots

Notes:

Push N' Go permits non-switch activation

Power boost provides additional latch forcing for electromechanical unit with microprocessor control

• Double door header available up to 98", specify length 49" to 98" maximum (Consult factory regarding this option)

· Fixed (positive) or breakaway stop available with center pivot arm

· Adjustable hold open time of 1-32 seconds



### Accessories





### **Pivots**



length and hand

2810-3107 **Bottom Pivot Assembly** 

- Includes pivot body, pivot post and bottom pivot plate
- For overhead concealed, center pivoted installations
- Includes; 2810-107, 2810-110 and 2810-117



2810-110 Pivot Post

 Connects pivot body to bottom pivot plate for center pivoted installations



**Bottom Pivot Body** 

For center pivoted installations

2810-12 Filler Plate Blank

 Completes length of header box

### 2810-11A Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" center pivot installations

#### 2810-11B Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations

- only

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2810-117 **Bottom Pivot Plate** 

 Applied to floor for center pivoted installations

2810-107

### Ordering Information

### How-to-order 2810 Series

Select installation type

### Specify arm

□ 3-3/4" (Offset pivoted) Arm (30770P) □ 2-3/4" (Center pivoted) Arm (3077CP) □ 3-3/4" (Center pivoted) Arm (3077CP)

### Specify hand

□RĤ □LH

### Specify header/length

□ HL\_ (Specify length 33" to 49" offset pivot)
 □ HL\_ (Specify length 36" to 49" center pivot)
 □ DD\_ (Specify length 49" to 98")

### Specify finish

Standard Anodized Finish \_\_\_\_\_\_
Aluminum or Dark Bronze

### **Operator options**

#### Stops

Positive Mechanical Stop (POS)
 Panic Breakaway Stop (BKY)
 \*Available with Center Pivoted installations only

### **Table of sizes**



NOTE: For all Senior Swing Series Single Door - Width per leaf 33<sup>°</sup> minimum, 48<sup>°</sup> maximum

### Operator will be shipped with:

- Motor gearbox,
- Control box,
- Header (at specified length, 36" standard),
- Wood and machine screw pack unless options listed below are selected.

Features



The 2850 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operator when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Fluid	All Weather Fluid
Handing	Handed
Door Width	<ul> <li>Combined width min 52" - 96"</li> <li>Simultaneous pair - width per leaf 26" minimum to 48" maximum</li> </ul>
Warranty	2 years

Fasteners	Wood and machine screw pack
Mounting	Double door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Offset Pivot Arm or Center Pivot Arm
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>



### Mounting details

Concealed Simultaneous Pair



	<b>Center pivot, fixed stop, push</b> Shown w/ 3-3/4 <sup>"</sup> pivot	
Head Frame	Minimum 52″ (L) x 5-3/4″ (H) x 4-1/2″ (W) (1524 mm x 146 mm x 114 mm)	
Top Rail	Minimum 2″ (51 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	

Fixed

Stop

\_1" 25 mm

¢

Swing Direction

Exterior

**Maximum Opening** Template allows 90 degree power opening and 90 degree manual opening

8'0" Door Opening (Max.)

Notes:

· Push N' Go permits non-switch activation with power boost providing additional latching force

3-3/4"

95 mm

1"

25 mm

· Electromechanical unit with microprocessor control

· 36 " header length is standard, specify length 33" - 49" max

• Double header available 98", specify length 49" - 98" max

• Fixed (positive) or breakaway stop available with center pivot arm

• Adjustable hold open time of 1-32 seconds

· Actuators available separately, see pages 115-131



Mounting details

Concealed Simultaneous Pair





Head Frame	Minimum 52″ (L) x 5-3/4″ (H) x 4-1/2″ (W) (1524 mm x 146 mm x 114 mm)	
Top Rail	Minimum 2″ (51 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	

Notes:

• Push N' Go permits non-switch activation with power boost providing additional latching force

• Electromechanical unit with microprocessor control

• 36 " header length is standard, specify length 33 " - 49 " max

Double header available 98", specify length 49" - 98" max

· Fixed (positive) or breakaway stop available with center pivot arm

• Adjustable hold open time of 1-32 seconds

Actuators available separately, see pages 115-131



### Accessories



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installations

2850-110 Pivot Post

 Connects pivot body to bottom pivot plate for center pivoted installations

2850-117 **Bottom Pivot Plate** 

 Applied to floor for center pivoted installations

#### 2850-11B Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations



### Ordering Information

### How-to-order 2850 Series

Select installation type 2853

### Specify arm

□ 3-3/4" (Offset pivoted) Arm (30770P) □ 2-3/4" (Center pivoted) Arm (3077CP) □ 3-3/4" (Center pivoted) Arm (3077CP)

### Specify hand

Specify header/length

□ HL\_ (Specify length 52" to 98")

### Specify finish

Standard Anodized Finish \_\_\_\_\_\_
Aluminum or Dark Bronze

## Operator will be shipped with:

- Standard motor gearbox (1 LH & 1 RH)
- Standard control box
- Companion cable
- Header (at specified length 72" standard)
- 2-3/4″ pivot point
- Wood and machine screw pack
- unless options listed below are selected.

### **Operator options**

#### Stops\*

□ Pair Positive Mechanical Stop (POS)

□ Pair Panic Breakaway Stop (BKY)

\*Available with Center Pivoted installations only

### **Table of sizes**



NOTE: For all Senior Swing Series

Simultaneous Pair – Width per leaf 26 " minimum to 48 " maximum.


Features



The 2860 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operator when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325/228, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Handed
Door Width	<ul> <li>Minimum combined door with 52" - 96"</li> <li>Simultaneous pair - width per leaf 26" minimum to 48" maximum</li> </ul>
Warranty	2 years

Fasteners	Wood and machine screw packs
Mounting	Independent pair, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Offset Pivot Arm or Center Pivot Arm
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>





# Mounting details

Concealed Independent Pair



**Center pivot, fixed stop, push** Shown w/ 3-3/4" pivot

Head Frame	Minimum 65″ (L) x 5 3/4″ (H) x 4 1/2″ (W) (1651 mm x 146 mm x 114 mm)	
Top Rail	Minimum 2″ (51 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	

Note:

• Push N' Go permits non-switch activation with power boosts providing additional latching force

· Electromechanical unit with microprocessor control

Digital keypad for easy setup

•72" header length is standard. Specify other length 65" - 98" max. Consult factory with this option

• Adjustable hold time of 1-32 seconds

Actuators available separately, see pages 115-131



Mounting details

Concealed Independent Pair



Offset pivot/butt hinge, push

Head Frame	Minimum 65″ (L) x 5-3/4″ (H) x 4-1/2″ (W) (1651 mm x 146 mm x 114 mm)	
Top Rail	Minimum 2″ (51 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	
Notes:		

Notes.

Offset pivot installations require a bottom pivot and two intermediate pivots

Push N' Go permits non-switch activation with power boosts providing additional latching force

Electromechanical unit with microprocessor control

Digital keypad for easy setup

72" header length is standard. Specify other length 65" - 98" max. Consult factory with this option

Optional fixed (POS) or breakaway stop (BKY) available (center pivot arm)

Header lengths 70 " - 98 " max with either POS or BKY

Adjustable hold time of 1-32 seconds

Actuators available separately, see pages 115-131



#### Accessories





### **Pivots**



2860-3107 Bottom Pivot Assembly

- Includes pivot body, pivot post and bottom pivot plate
- For overhead concealed, center pivoted installations
- Includes: 2860-107, 2860-110 and 2860-117



2860-110 Pivot Post

 Connects pivot body to bottom pivot plate for center pivoted installations



2860-107 **Bottom Pivot Body** 

2860-117

**Bottom Pivot Plate** 

Applied to floor for center

pivoted installations

 Pivot body for center pivoted installations



 Completes length of header box

#### 2860-11A Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" center pivot installations

# 2860-11B

- Hides bottom of motor gearbox
- Completes header box
- or center pivot with finger guard installations





Spindle Plate

- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge



# Ordering Information

## How-to-order 2860 Series

Select installation type 2863

#### Specify arm

□ 3-3/4" (Offset pivoted) Arm (30770P) □ 2-3/4" (Center pivoted) Arm (3077CP) □ 3-3/4" (Center pivoted) Arm (3077CP)

### Specify hand

Specify header/length

□ HL\_ (Specify length 65" to 98")

#### Specify finish

Standard Anodized Finish \_\_\_\_\_\_
Aluminum or Dark Bronze

#### Operator will be shipped with: - Standard motor gearbox (1LH & 1RH) - Standard control box (2 ea)

- Header (at specified length 72<sup>°</sup> standard)
- 2-3/4" pivot point
- Wood and machine screw pack unless options listed below are selected.

# **Operator options**

#### Stops\*

□ Pair Positive Mechanical Stop (POS)

□ Pair Panic Breakaway Stop (BKY)

\*Available with Center Pivoted installations only

# **Table of sizes**



NOTE: For all Senior Swing Series

Independent Pair – Width per leaf 32-1/2" minimum to 48" maximum



Features



The 9530 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operators when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325/228, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Fluid	All Weather Fluid
Handing	Handed
Door Width	<ul> <li>Minimum 33" - 48"</li> <li>Single door - width per leaf 33" minimum, 48" maximum</li> </ul>
Warranty	2 years

Fasteners	Machine screw pack
Mounting	Single door, surface mount, offset pivot. butt hinge, pull side
Arms	Standard arm (3077T)
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>



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# Mounting details

Top Jamb Single Door Mounting



Offset pivot/butt hinge, center pivot, pull

NOTE: Cannot be used with swing clear hinges, pocket pivots or balanced doors.



Suggested Installation.

Butt Hinges	Should not exceed 5" (127 mm) in width	
Reveal	Should not exceed 4" (102 mm)	
Head Frame	Minimum 1-3/4″ (44 mm). Face frame 6-3/4″ (171 mm) total operator clearance	
Top Rail	Minimum 2-3/4" (70 mm)	
Opening and Closing Time	<ul> <li>g and Closing Time</li> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds</li> </ul>	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	

Notes:

· Push N' Go permits non-switch activation with a power boost providing additional latching force

· Electromechanical unit with microprocessor control

Digital keypad for easy setup

· 36" header length is standard. Specify 33" - 48" max

• Double door header available up to 98", specify other length 49" - 98" max

Consult factory regarding this option

• Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

· Actuators available separately, see pages 115-131



#### Accessories

### **Motor Gearbox**



9530-3454 Motor Gearbox

- Senior swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

### **Control Box**



**9530-3462** Control Box

 Electronic controlling device for Senior Swing

# **Mount Brackets**



9530-275 Mounting Bracket

- Motor gearbox mounting bracket for 2-3/4" offset pivot or butt hinge installations
- Front bracket



9530-3018 Rear Mounting Bracket

- Motor gearbox mounting bracket
- Rear bracket



9530-334-1 Angled Bracket

 Mounting bracket for surface applications (includes 2 mounting brackets)





- Standard
- Single door, single operator
- Specify length 33" to 48" maximum



- Header
- Standard
- Double door, single operator
- Specify length 49" to 98" maximum

### **End Caps**



9530-334 Header End Caps

With openings for wiring



9530-334-2 End Dress Plate

Metal finish end cap



### Accessories

# Arms



9530-3077PLCM Standard Arm Assembly

- Handed
- Track roller included (includes 3038, 3077T, 3034 & 73)





9530-3038 Track

- Non-handed
- Includes 3034 & 73



9530-3077T Standard Arm

Handed

9530-73

Track End Cap

Black plastic end caps

Track roller not included



Roller

Quiet low friction roller assembly

9530-3034



# **LCN**<sub>®</sub>

# Ordering Information

### How-to-order 9530 Series closers

Specify hand

⊂ RH □ LH

### Specify header/length

□ HL\_(Specify length 33″ to 48″) □ DD\_(Specify length 49″ to 98″)

#### Specify finish

 Standard Anodized Finish \_\_\_\_\_\_ Aluminum or Dark Bronze

# **Operator options**

### **Mounting plate**

 $\Box$  Plate, \_\_\_\_ (Specify Length 33" to 101-1/2")

### Operator will be shipped with:

- Standard motor gearbox
- Standard control box
- Header (at specified length, 36" standard)
- Standard arm (3077T)
- 2-3/4″ pivot point
- Standard track w/track roller
- Machine screw pack
- unless options listed below are selected

# **Table of sizes**



Indicates recommended range of door width for operator.

NOTE: For all Senior Swing Series.

Single Door - Width per leaf 33<sup>"</sup> minimum, 48<sup>"</sup> maximum.








Features

The 9540 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operators when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325/228, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Fluid	All Weather Fluid
Handing	Handed
Door Width	<ul> <li>Minimum door width 33" - 48"</li> <li>Single door - width per leaf 33" minimum, 48" maximum</li> </ul>
Warranty	2 years

Fasteners	Machine screw pack
Mounting	Single door, surface mount, offset pivot, butt hinge (Push Side)
Arms	Regular Arm (3077)
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>



# Mounting details

Top Jamb Single Door Mounting





Butt HingesShould not exceed 5 " (127 mm) in widthRevealpush installations should not exceed 10 " (254 mm) for REGULAR ARM and 20 " (508 mm) for LONG ARMHead FrameMinimum 1-3/4 " (44 mm). Face frame 6-3/4 " (171 mm) total operator clearanceTop RailMinimum 2-3/4 " (70 mm)Opening and Closing Time• Variable by adjustments to the electronic control box<br/>• Maximum hold open time adjustable up to approximately 32 secondsSystem DiagramSee "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical dataMaximum OpeningTemplate allows 90 degree power opening and 90 degree manual opening

Notes:

• Push N' Go permits non-switch activation with a power boost providing additional latching force

· Electromechanical unit with microprocessor control

• Digital keypad for easy setup

· 36" header length is standard. Specify 33" - 48" max

· Double door header available up to 98", specify other length 49" - 98" max

· Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

Actuators available separately, see pages 115-131



#### Accessories

# **Motor Gearbox**



#### 9540-3454 Motor Gearbox

- Senior swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

### **Control Box**



- 9540-3462 Control Box
- Electronic controlling device for Senior Swing

# **Mount Brackets**



9540-275 Mounting Bracket

- Motor gearbox mounting bracket for 2-3/4" offset pivot or butt hinge installations
- Front bracket





#### 9540-3572HL Header

- Single door, single operator
- Specify length 33" to 48" maximum
- Standard



9540-3018 Rear Mounting Bracket

- Motor gearbox mounting bracket
- Rear bracket



#### 9540-334-1 Angled Bracket

 Mounting bracket for surface applications (includes 2 mounting brackets)



#### 9540-3572DD Header

- Double door, single operator
- Specify length 49" to 98" maximum
- Standard

# **End Caps**



9540-334 Header End Caps

With openings for wiring



**9540-334-2** End Dress Plate

Metal finish end cap



### Accessories



#### 9540-3077 Regular Arm Assembly

- Handed
- Includes 77 main arm assembly and 79 linkage assembly



**9540-79** Linkage Assembly - 15″

- Threaded rod attaches to door
- Extends from main arm



9540-3077L Regular Long Arm Assembly

- Handed
- Includes 77 main arm assembly and 79LR linkage assembly



**9540-77** Main Arm

- Handed
- Attaches to motor gearbox



#### 9540-79LR Linkage Assembly - 32″

- Threaded long rod attaches to door
- Extends from main arm.
- Used for reveal 10" to 20"

# **Installation Accessories**



# Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" offset pivot or butt hinge installations

#### 9540-12 Filler Plate Blank

 Completes length of header box (specify length)



# Mounting Plate

- For standard hollow metal door frames
- Specify length 55-1/2" to 101-1/2" maximum when using angle brackets
- Specify length 52" to 98" maximum when using dress plates
- Optional

NOTE: The length of a universal 18 plate will need to be ordered  $3-1/2^{\prime\prime}$  longer than the supplied header when using angle brackets.



# Ordering Information

Operator will be shipped with:

unless options listed below are selected.

- Header (at specified length, 36" standard)

- Standard motor gearbox

- Standard control box

- Regular arm (3077)

- Machine screw pack

- 2-3/4" pivot point

### How-to-order 9540 Series closers

#### Specify hand

### Specify header/length

□ HL\_(Specify length 33″ to 48″) □ DD\_(Specify length 49″ to 98″)

#### Specify finish

 Standard Anodized Finish \_\_\_\_\_ Aluminum or Dark Bronze

# **Operator options**

### **Mounting plate**

 $\Box$  Plate, \_\_\_\_ (Specify Length 33" to 101-1/2")

#### Arm

□ Long Arm (3077L)

# **Table of sizes**



NOTE: For all Senior Swing Series. Single Door - Width per leaf 33 ″ minimum, 48 ″ maximum.

#### LCN Door Control Catalog phone: 877-671-7011 = fax: 800-248-1460 = www.allegion.com/us = 009426 rev. 2/16




Features



The 9550 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operators when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Certifications	Grade 1 - ANSI A156.19, UL325/228, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Handed
Door Width	<ul> <li>Minimum combined door width 52" - 98" (push)</li> <li>Minimum combined door width 60" - 98" (pull; double egress)</li> <li>Simultaneous pair - width per leaf 30" minimum - 48" maximum</li> </ul>
Warranty	2 years

Fasteners	Machine screw pack	
Mounting	Simultaneous pair, surface mount, pull side, push side, double egress	
Arms	<ul> <li>2 Regular Arms (push)</li> <li>2 Standard Arms (pull)</li> <li>1 Regular and 1 Standard (double egress)</li> </ul>	
Finishes/Colors/ Powder Coat	<ul><li>Anodized Aluminum</li><li>Anodized Dark Bronze</li></ul>	



# Mounting details

Top Jamb Simultaneous Pair Mounting



Offset pivot/butt hinge, center pivot, push

Consult factory for all balanced door installations.



Offset pivot/ butt hinge, center pivot, pull

NOTE: Cannot be used with swing clear hinges, pocket pivots or balanced doors.

Butt Hinges	Should not exceed 5″ (127 mm) in width	
Reveal for push	Should not exceed 10″ (254 mm) for REGULAR ARM and 20″ (508 mm) for LONG ARM	
Reveal for pull	Should not exceed 4" (102 mm)	
Reveal	Double egress installations should not exceed 4″ (102 mm)	
Head Frame	<ul> <li>Minimum 1-3/4" (44 mm)</li> <li>Face frame 6-3/4" (171 mm) total operator clearance</li> </ul>	
Top Rail	Minimum 2-3/4″ (70 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	

Notes:

• Push N' Go permits non-switch activation with a power boost providing additional latching force

· Electromechanical unit with microprocessor control

Digital keypad for easy setup

• 72" header length is standard. Specify other length 52" - 98" (push), specify other length 60" - 98" (pull; double egress). Consult factory regarding this option

· Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

· Actuators available separately, see pages 115-131





# Mounting details

Top Jamb Simultaneous Pair Mounting



#### **RH double egress**

Double egress applications with safety sensors require LCN 9560 series. NOTE: Cannot be used with swing clear hinges, pocket pivots or balanced door.



Hollow metal frame

Suggested Installation.

Butt Hinges	Should not exceed 5" (127 mm) in width	
Reveal for push	Should not exceed 10" (254 mm) for REGULAR ARM and 20" (508 mm) for LONG ARM	
Reveal for pull	Should not exceed 4" (102 mm)	
Reveal	Double egress installations should not exceed 4″ (102 mm)	
Head Frame	<ul> <li>Minimum 1-3/4" (44 mm)</li> <li>Face frame 6-3/4" (171 mm) total operator clearance</li> </ul>	
Top Rail	Minimum 2-3/4" (70 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	
NI-+		

#### Notes:

• Push N' Go permits non-switch activation with a power boost providing additional latching force

Electromechanical unit with microprocessor control

· Digital keypad for easy setup

• 72" header length is standard. Specify other length 52" - 98" (push), specify other length 60" - 98" (pull; double egress). Consult factory regarding this option

· Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

Actuators available separately, see pages 115-131



#### Accessories



9550-3454 Motor Gearbox

- Senior swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

### **Control Box**



9550-3462 Control Box

 Electronic controlling device for Senior Swing





9550-275 Mounting Bracket

- Motor gearbox mounting bracket for 2-3/4" offset pivot or butt hinge installations
- Front bracket

9550-982 Companion Cable

boxes

Cable that allows one control

box to run two motor gear

For use with Senior Swing



9550-3018 Rear Mounting Bracket

 Motor gearbox mounting bracket



9550-334-1 Angled Bracket

 Mounting bracket for surface applications (includes 2 mounting brackets)

### Header



9550-3572HL Header

- Pair door, two operators
- Specify other length 52<sup>"</sup> to 98<sup>"</sup> (Push)
- Specify other length 60<sup>"</sup> to 98<sup>"</sup> (Pull; Double Egress)
- Standard

# **End Caps**



9550-334 Header End Caps

With openings for wiring



9550-334-2 End Dress Plate





### Tracks





- Non-handed
- Standard





- 9550-3077Plcm Standard Arm Assembly
- Handed
- Includes 3077 regular arm assembly, 3038 track, and 3034 track roller



9550-77 Main Arm

- Handed
- Attaches to motor gearbox



9550-3077 Regular Arm Assembly

Handed

9550-73 Track End Cap

Black plastic end caps

 Includes 77 main arm assembly and 79 linkage assembly



9550-79 Linkage Assembly

■ 15*‴* 

9550-12

Blank

**Filler Plate** 

Specify length

Threaded rod attaches to door

Completes length of header box

Extends from main arm



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9550-79LR
Linkage Assembly
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9550-3034

 Quiet low friction roller assembly

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**Regular Long Arm Assembly** 

Includes 77 main arm assembly

and 79LR linkage assembly

9550-3077L

Handed

Roller

- 32*″*
- Threaded long rod attaches to door
- Extends from main arm
- Used for reveal 10<sup>"</sup> to 20<sup>"</sup>



#### 9550-3077T Standard Arm

- Handed
- Track roller not included

Installation Assembly



#### 9550-11A Spindle Plate

- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" offset pivot or butt hinge installations



9550-18 Mounting Plate

- Optional mounting plate for standard hollow metal door frames
- Specify length 68-1/2" to 101-1/2" maximum when using angle brackets
- Specify length 65" to 98" maximum when using dress plates.

NOTE: The length of a universal 18 plate will need to be ordered  $3-1/2^{\sim}$  longer than the supplied header when using angle brackets.



9550 Series *Senior Swing* 



à

# Ordering Information

# How-to-order 9550 Series closers

Specify hand

□ RH □ LH

### Specify header/length

 $\Box$  HL\_ (Specify length 52" to 98") regular or long arm  $\Box$  HL\_ (Specify length 60" to 98") for standard or DE arm

#### Specify finish

□ Standard Anodized Finish\_\_\_\_\_ Aluminum or Dark Bronze

# **Operator options**

### **Mounting plate**

 $\Box$  Plate, \_\_\_\_ (Specify Length 52" to 101-1/2")

#### Arm

Standard Arm (2 ea) w/Standard Track (2 ea)
 Double Egress includes Standard Arm w/Track (1 ea) & Regular Arm (1 ea)
 Long Arm (3077L)

# **Table of sizes**





NOTE: For all Senior Swing Series.

Simultaneous Pair – Width per leaf 26" minimum (push) 30" minimum (pull) to 48" maximum.



- Standard motor gearbox (SF) (2 ea)
- Standard control box (SC)
- Metal cover (at specified length 72" standard)
- Regular arm (2 ea)
- 2-3/4″ pivot point
- Machine screw pack
- unless options listed below are selected

LCN



The 9560 SENIOR SWING by LCN is an ADA door operator that is a two-in-one swing door operator. SENIOR SWING operators when activated, opens doors automatically for wheelchair access, yet allows for manual operation for regular pedestrian traffic.

Grade 1 - ANSI A156.19, UL325/228, UL1998, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Cover	Metal, Standard
	Fasteners	Machine screw pack
	Mounting	Independent pair, surface, pull, push, double egress
	Arms	Single lever (push side), Double lever (Pull Side), Double egress (Push/Pull)
Handed	Finishes/Colors/	Anodized Aluminum
2 years	Powder Coat	<ul> <li>Anodized Administri</li> <li>Anodized Dark Bronze</li> </ul>
	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Handed	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Handed Handed Finishes/Colors/



# Mounting details

Top Jamb Independent Pair Mounting



**Offset pivot/butt hinge, center pivot, push** *Consult factory for all balanced door installations.* 



### Offset pivot/butt hinge, center pivot, pull

NOTE: Cannot be used with swing clear hinges, pocket pivots or balanced doors.

Butt Hinges	Should not exceed 5" (127 mm) in width	
Reveal for push	Should not exceed 10" (254 mm) for REGULAR ARM and 20" (508 mm) for LONG ARM	
Reveal for pull	Should not exceed 4 " (102 mm)	
Reveal	Double egress installations should not exceed 4" (102 mm)	
Head Frame	<ul> <li>Minimum 1-3/4" (44 mm)</li> <li>Face frame 6-3/4" (171 mm) total operator clearance</li> </ul>	
Top Rail	Minimum 2-3/4" (70 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	

Notes:

· Push N' Go permits non-switch activation with a power boost providing additional latching force

Electromechanical unit with microprocessor control

Digital keypad for easy setup

•72" header length is standard. Specify 65" - 98" max

· Pull, push, or double egress applications available

· Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

· Actuators available separately, see pages 115-131



# Mounting details

Top Jamb Independent Pair Mounting





Butt Hinges	Should not exceed 5" (127 mm) in width	
Reveal for push	Should not exceed 10" (254 mm) for REGULAR ARM and 20" (508 mm) for LONG ARM	
Reveal for pull	Should not exceed 4" (102 mm)	
Reveal	Double egress installations should not exceed 4" (102 mm)	
Head Frame	<ul> <li>Minimum 1-3/4" (44 mm)</li> <li>Face frame 6-3/4" (171 mm) total operator clearance</li> </ul>	
Top Rail	Minimum 2-3/4″ (70 mm)	
Opening and Closing Time	<ul> <li>Variable by adjustments to the electronic control box</li> <li>Maximum hold open time adjustable up to approximately 32 seconds.</li> </ul>	
Door Stop	Required for each door panel	
System Diagram	See "AUTOMATIC OPERATORS" section page 51 for typical system wiring and page 53 for electrical data	
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening	
Notes:		

Notes:

· Push N' Go permits non-switch activation with a power boost providing additional latching force

· Electromechanical unit with microprocessor control

Digital keypad for easy setup

• 72" header length is standard. Specify 65" - 98" max

• Pull, push, or double egress applications available

· Adjustable hold open period of 2 - 32 seconds in automatic or manual mode

· Actuators available separately, see pages 115-131



### Accessories



#### 9560-3454 Motor Gearbox

- Senior swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

### **Control Box**



**9560-3462** Control Box

 Electronic controlling device for Senior Swing

### **Mounting Brackets**



#### 9560-275 Mounting Bracket

- Motor gearbox mounting bracket for 2-3/4" center pivot installations
- Front bracket



9560-3018 Rear Mounting Bracket

 Motor gearbox mounting bracket



#### 9560-334-1 Angled Bracket

- Mounting bracket for surface applications
- Includes 2 mounting brackets



Header

#### 9560-3572HL Header

- Pair door, two operators
- Specify length 65<sup>"</sup> to 98<sup>"</sup> maximum
- Standard

### **End Caps**



9560-334 Header End Caps

With openings for wiring



9560-334-2 End Dress Plate

Metal finish end cap



### Tracks





- Non-handed
- Standard

### Arms



9560-73 Track End Cap





9560-3034 Roller

 Quiet low friction roller assembly



Accessories





#### 9560-3077T Standard Arm

- Handed
- Track roller not included



- **9560 -77** Main Arm
- Handed
- Attaches to motor gearbox

9560-3077 Regular Arm Assembly

- Handed
- Includes 77 main arm assembly and 79 linkage assembly



#### 9560-79 Linkage Assembly

- 15"Threaded rod attaches to door
- Extends from main arm
- Used for reveal 1" to 10"



9560-3077L Regular Long Arm Assembly

- Handed
- Includes 77 main arm assembly and 79LR linkage assembly





9560-3077PLCM Standard Arm Assembly

- Handed
- Includes 3077 regular arm assembly, 3038 track, and 3034 track roller

9560-79LR Linkage Assembly

**32**″

- Threaded long rod attaches to door
- Extends from main arm.
- Used for reveal 10<sup>"</sup> to 20<sup>"</sup>

#### Installation Accessories 9560-12 9560-18 9560-11A **Filler Plate** Spindle Plate Mounting Plate Hides bottom of motor gearbox Blank Optional mounting plate for standard hollow metal door frames Completes header box Completes length of header box Specify length 68-1/2" to 101-1/2" maximum when using angle brackets Specify length 65" to 98" maximum when using dress plates. Cutout allows for motor gearbox Specify length shaft NOTE: The length of a universal 18 plate will need to be ordered 3-1/2" longer than the supplied header when using angle brackets.

 For 2-3/4 offset pivot or butt hinge installations

> LCN Door Control Catalog phone: 877-671-7011 = fax: 800-248-1460 = www.allegion.com/us = 009426 rev. 2/16



# Ordering Information

# How-to-order 9560 Series

Specify hand

□ RH □ LH

### Specify header/length

□ HL\_ (Specify length 65″ to 98″) regular or long arm

### **Specify finish**

□ Standard Anodized Finish\_\_\_\_\_ Aluminum or Dark Bronze

### Operator will be shipped with:

- Standard motor gearbox (SF) (2 ea)
- Standard control box (SC)
- Metal cover (at specified length 72" standard)
- Regular arm (2 ea)
- 2-3/4" pivot point
- Machine screw pack
- unless options listed below are selected.

# **Operator options**

#### **Mounting plate**

□ Plate, \_\_\_\_ (Specify Length 65" to 101-1/2")

#### Arm

Standard Arm (2 ea) w/Standard Track (2 ea)
 Double Egress - Includes Standard Arm w/Track (1 ea) & Regular Arm (1 ea)
 Long Arm (3077L)

# **Table of sizes**



NOTE: For all Senior Swing Series

Independent Pair – Width per leaf 30" minimum to 48" maximum.



### The actuators and accessories on the following pages are to be used with LCN automatic operators. When using actuators supplied by others, such as card readers, consult the factory.

The desired function, traffic patterns and physical design of the opening will determine the type of actuators used. Generally, for twoway traffic, an actuator is required on both the interior and exterior side of the door. Each actuator is packaged with a decal to be applied to the controlled door. Scanners operate on 12V or 24V AC/DC and may be powered by the LCN electrohydraulic/electromechanical operators. The 7900 series control box requires separate power supply for scanners. Actuators provide normally open (N.O.) dry contacts.

# Auto Operator Actuators & Accessories

4-1/2" Surface and Flush Mounts

# **Automatic Operator Actuators & Accessories**



8310-856 Wall Mounted Actuator

- Hardwired low voltage actuator with round, stainless steel touch plate in 4-1/2" (114mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard



8310-856T Wall Mounted Actuator

Same as the 8310-856, with the added engraving of "Push to Open"



8310-868F Flush Mount Box

- Rugged Plastic Box, 4-1/2" Round
- Optional accessory can be used w/any 4-1/2" round actuator



8310-868S Surface Mount Box

- Rugged Plastic Box, 4-1/2" Round
- Optional accessory can be used w/any 4-1/2" round actuator



8310-800 Weather/Trim Ring

- Weather/Trim Ring, 4-1/2" Round
- Optional accessory must be used w/any 4-1/2" round plastic mounting box



8310-844 Transmitter

- Transmitter, Wireless, 1 Channel, 9v battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver



8310-865 Receiver

- Receiver, Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)



#### 8310-874 Escutcheon

- Tapered stainless steel escutcheon covers the gap between the wall and the back of the wall plate actuators when mounted in electrical boxes (by others) to minimize cart damage or vandalism
- Optional accessory can be used w/any 4-1/2 round actuator
- Not to be used with wireless function



Auto Operator Actuators & Accessories

4-1/2" Surface and Flush Mounts

### Automatic Operator Actuators & Accessories



#### 8310-3856WF Flush Mount Kit

- Actuator, 4-1/2" Round, Logo, Wireless
- Includes 8310-856 Actuator, 8310-844 Transmitter, 8310-868F Flush Box, 8310-800 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



8310-3856TWF Flush Mount Kit

- Actuator, 4-1/2" Round, Logo, Text, Wireless,
- Includes 8310-856T Actuator, 8310-844 Transmitter, 8310-868F Flush Box, 8310-800 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



#### 8310-3860T Surface Mount Kit

- Actuator Package, 4-1/2" Round
- Includes 8310-856T (2) Wall Mount Actuator, 8310-868S Surface Mount Box.

NOTE: Weather/Trim Rings are sold separately



8310-3856WS Surface Mount Kit

- Actuator, 4-1/2" Round, Logo, Wireless
- Includes 8310-856 Actuator, 8310-844 Transmitter, 8310-868S Surface Box, 8310-800 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



8310-3856TWS Surface Mount Kit

- Actuator, 4-1/2" Round, Logo, Text, Wireless,
- Includes 8310-856T Actuator, 8310-844 Transmitter, 8310-868S Surface Box, 8310-800 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



Surface Mount Kit

- Actuator Package, 4-1/2" Round, Wireless
- Includes 8310-856T (2) Wall Mount Actuator, 8310-868S (2) Surface Mount Box, 8310-800 (2) Weather/Trim Ring, 8310-844 (2) Transmitter, 8310-865 Receiver



### **Automatic Operator Actuators & Accessories**



8310-852 Wall Mounted Actuator

- Hardwired low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others) or double gang box (4<sup>x</sup> x 4<sup>x</sup> by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard.



#### 8310-852WP Wall Mounted Actuator

- Wireless, low profile, low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Surface mount box includes integral transmitter w/ battery and actuator switch
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard
- Requires 8310-865 Receiver



#### 8310-852T Wall Mounted Actuator

 Same as the 8310-852, with the added engraving of "Push to Open"



8310-852TWP Wall Mounted Actuator

 Same as the 8310-852WP, with the added engraving of "Push to Open"



8310-869S Surface Mount Box

- Rugged Plastic Box, 6<sup>"</sup> Round
- Optional accessory can be used w/ any 6<sup>r</sup> round actuator



#### 8310-869F Flush Mount Box

- Rugged Plastic Box, 6<sup>"</sup> Round
- Optional accessory can be used w/ any 6<sup>"</sup> round actuator



#### 8310-802 Weather/Trim Ring

- Plastic Weather/Trim Ring, 6<sup>"</sup> Round
- Optional accessory can be used w/ any 6" round plastic mounting box.



8310-8/444 Transmitter

- Transmitter, Wireless, 1 Channel, 9v battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver



8310/-865 Receiver

- Receiver, Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)



8310-876

- Escutcheon
- Tapered stainless steel escutcheon covers the gap between the wall and the back of the wall plate actuators when mounted in electrical boxes (by others) to minimize cart damage or vandalism
- Optional accessory Can be used w/ any 6<sup>"</sup> round actuator
- Not to be used with wireless function



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# 8310 Series

Auto Operator Actuators & Accessories

6" Surface and Flush Mounts

Auto Operator Actuators & Accessories

6″ Surface and Flush Mounts

### **Automatic Operator Actuators & Accessories**



#### 8310-3852WF Flush Mount Kit

- 6″ Round, Logo, Wireless
- Includes 8310-852 Actuator, 8310-844 Transmitter, 8310-869F Flush Box, 8310-802 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



#### 8310-3852WS Surface Mount Kit

- 6" Round, Logo, Wireless,
- Includes 8310-852 Actuator, 8310-844 Transmitter, 8310-869S Surface Box, 8310-802 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



8310-3852TWF Flush Mount Kit

- 6" Round, Logo, Text, Wireless,
- Includes 8310-852T Actuator, 8310-844 Transmitter, 8310-869F Flush Box, 8310-802 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



8310-3852TWS Surface Mount Kit

- 6" Round, Logo, Text, Wireless,
- Includes 8310-852T Actuator, 8310-844 Transmitter, 8310-869S Surface Box, 8310-802 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



Auto Operator Actuators & Accessories

1-1/2" x 4-3/4" Surface and Flush Mounts

NOTE: LCN recommends for all jamb mount actuators be used on an interior installation only.

# Automatic Operator Actuators & Accessories



8310-818 Jamb Mounted Actuator

- Hardwired low voltage actuator with rectangular stainless steel touch plate.
- 1-1/2" (38mm) wide by 4-3/4" (121mm)
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a frame cutout (template provided) projecting approximately 1/2" (12mm) from the frame
- Optional mounting in surface or flush mount box (sold separately)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard



8310-818T Jamb Mounted Actuator

 Same as the 8310-818, with the added engraving of "Push to Open"



#### 8310-819F Flush Mount Box

- Rugged Plastic Jamb Box
- 1-1/2" x 4-3/4" rectangle, optional accessory - can be used w/ any 1-1/2" x 4-3/4" jamb mount actuator



8310-8195 Surface Mount Box

- Rugged Plastic Jamb Box
- 1-1/2" x 4-3/4", rectangle
- Optional accessory can be used w/ any 1-1/2" x 4-3/4" jamb mount plastic mounting box



8310-844J Transmitter

- Wireless, 1 Channel, Jamb Mount, 3v battery included
- Used to convert standard jamb mount actuator to wireless when used w/ 819F or 819S boxes. Requires 8310-865 Receiver (interior use only)



8310-865 Receiver

- Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)



Auto Operator Actuators & Accessories

1-1/2" x 4-3/4" Surface and Flush Mounts

NOTE: LCN recommends for all jamb mount actuators be used on an interior installation only.

# Automatic Operator Actuators & Accessories



#### 8310-3818WF Flush Mount Kit

- Actuator, 1-1/2" x 4-3/4" Rectangle, Logo, Wireless
- Includes 8310-818 Actuator, 8310-844J Transmitter, 8310-819F Flush Box
- Requires 8310-865 Receiver (not part of kit)



8310-3818TWF Flush Mount Kit

- Actuator, 1-1/2" x 4-3/4" Rectangle, Logo, Wireless
- Includes 8310- 818T Actuator, 8310-844J Transmitter, 8310-819F Flush Box
- Requires 8310-865 Receiver (not part of kit)



8310-3818WS Surface Mount Kit

- Actuator, 1-1/2" x 4-3/4" Rectangle, Logo, Wireless
- Includes 8310-818 Actuator, 8310-844J Transmitter, 8310-819S Surface Box
- Requires 8310-865 Receiver (not part of kit)



8310-3818TWS Surface Mount Kit

- Actuator, 1-1/2" x 4-3/4" Rectangle, Logo, Wireless
- Includes 8310-818T Actuator, 8310-844J Transmitter, 8310-819S Surface Box
- Requires 8310-865 Receiver (not part of kit)



8310-3822T Surface Mount Kit

- Actuator Package, 1-1/2" x 4-3/4", Jamb Mount
- Includes 8310-818T (2) Jamb Mount Actuator, 8310-819S (2)
- Surface Mount Box





8310-3822TW Surface Mount Kit

- Actuator Package, 1-1/2" x 4-3/4", Wireless, Jamb Mount
- Includes 8310-818T (2) Jamb Mount Actuator, 8310-819S (2)
- Surface Mount Box, 8310-844J (2) Jamb Mount Transmitter, 8310-865 Receiver


## **Automatic Operator Actuators & Accessories**



8310-853 Wall Mounted Actuator

- Hardwired low voltage actuator with stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others) or double gang box (4" x 4" by others) or on an 8310-866 bollard post
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard



#### 8310-853WP Surface Mounted Actuator

- Wireless, low profile, low voltage actuator with round, stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Surface mount box includes integral transmitter w/ battery and actuator switch
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard
- Requires 8310-865 Receiver



### 8310-853T Wall Mounted Actuator

Same as the 8310-853, with the added engraving of "Push to Open"



Auto Operator Actuators & Accessories

4-3/4" Square Surface and Flush Mounts



#### 8310-853TWP Surface Mounted Actuator

- Same as the 8310-853WP, with the added engraving of "Push to Open"
  - 4-3/4" Square





8310-867F

Flush Mount Box

**Rugged Plastic Box** 

## 8310-801 Weather/Trim Ring

- Plastic Weather Ring, . 4-3/4" Square
- Optional accessory can be used w/ any 4-3/4" square plastic mounting box



8310-844 Transmitter

- Wireless, 1 Channel, 9v battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver



8310-865 Receiver

- Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)

8310-867S

Square

.

Surface Mount Box

Rugged Plastic Box, 4-3/4"

Optional accessory - can be used

w/ any 4-3/4" square actuator

### 8310-813 Touchless Wall Mounted Actuator

- Hardwired low voltage actuator with plastic plate in 4-3/4" (121mm) square
- Optional mounting in single gang electrical box (by others) or double gang box (4" x 4" by others)



Auto Operator Actuators & Accessories

4-3/4" Square Surface and Flush Mounts

## Automatic Operator Actuators & Accessories



#### 8310-3853WF Flush Mount Kit

- Actuator, 4-3/4 Square, Logo, Wireless
- Includes 8310-853, 8310-844 Transmitter, 8310-867F Flush Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



#### 8310-3853WS Surface Mount Kit

- Actuator, 4-3/4" Square, Logo, Wireless
- Includes 8310-853, 8310-844 Transmitter, 8310-867S Surface Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



### 8310-3853TWF Flush Mount Kit

- Actuator, 4-3/4" Square, Logo, Text, Wireless
- Includes 8310-853T, 8310-844 Transmitter, 8310-867F Flush Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



8310-3853TWS Surface Mount Kit

- Actuator, 4-3/4" Square, Logo, Text, Wireless
- Includes 8310-853T, 8310-844 Transmitter, 8310-867S Surface Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (not part of kit)



### 8310-3857T Surface Mount Kit

- Actuator Package, 4-3/4" Square
- Includes 8310-853T (2) Wall Mount Actuator, 8310-867S (2)
- Surface Mount Box

NOTE: Weather/Trim Rings are sold separately



Surface Mount Kit

- Actuator Package, 4-3/4" Square
- Includes 8310-853T (2) Wall Mount Actuator, 8310-867S (2) Surface Mount Box, 8310-801 (2) Weather/Trim Ring, 8310-844 (2) Transmitter, 8310-865 Receiver



Auto Operator Actuators & Accessories

4-3/4" Dual Square Surface and Flush Mounts

## **Automatic Operator Actuators & Accessories**



8310-855 Dual Wall Mounted Actuator

- Hardwired low voltage actuator with dual rectangle, stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol w/ text, conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in double gang box (4" x 4" by others) or on an 8310-866 bollard post
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard



8310-867F Flush Mounted Actuator

- Rugged Plastic Box, 4-3/4" Square
- Optional accessory can be used w/ any 4-3/4" square actuator



8310-867S Surface Mount Box

- Rugged Plastic Box, 4-3/4" Square
- Optional accessory -can be used w/ any 4-3/4" square actuator



8310-801 Weather/Trim Ring

- Plastic Weather Ring, 4-3/4" Square
- Optional accessory can be used w/ any 4-3/4" square plastic mounting box



8310-844 Transmitter

- Transmitter, Wireless, 1 Channel, 9v battery included
- Use to convert standard wall
- mount actuator to wireless Requires 8310-865 Receiver



8310-865 Receiver

- Receiver, Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)



Auto Operator Actuators & Accessories

4-3/4" Dual Square Surface and Flush Mounts

# Automatic Operator Actuators & Accessories



#### 8310-3855WF Flush Mount Kit

- Actuator, 4-3/4" Square, Logo, Text, Dual Vestibule, Wireless
- Includes 8310-855 Actuator, 8310-844 Transmitter (2), 8310-867F Flush Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (2) (not part of kit)



8310-3855WS Surface Mount Kit

- Actuator, 4-3/4" Square, Logo, Text, Dual Vestibule, Wireless
- Includes 8310-855 Actuator, 8310-844 Transmitter (2), 8310-867S Surface Box, 8310-801 Weather/Trim Ring
- Requires 8310-865 Receiver (2) (not part of kit)



### 8310-3853WB Actuator, Bollard Mount Kit

- 4-3/4" Square w/ Logo, Wireless actuator
- Use w/ 8310-866 Bollard (not included) Includes 8310-853 actuator, 8310-844 transmitter
- Requires 8310-865 Receiver (not part of kit)



### 8310-3853TWB Actuator, Bollard Mount Kit

- 4-3/4 Square w/ Logo, Text, Wireless actuator
- Use w/8310-866 Bollard (not included) Includes 8310-853T actuator, 8310-844 Transmitter
- Requires 8310-865 Receiver (not part of kit)



Auto Operator Actuators & Accessories

36″ x 6″ Full Length Actuators

# Automatic Operator Actuators & Accessories



### 8310-836T Full Length Actuator (FLA)

- Hardwired low voltage actuator with stainless steel touch plate with 36 x 6 activation surface
- Blue handicap symbol conforms with most accessibility codes
- Added "PUSH TO OPEN" lettering for enhanced identification
- Designed to meet California building codes and increase accessibility for wheelchair bound entrants
- Can easily be mounted to any flat surface or a bollard post



**8310-844** Transmitter

- Wireless, 1 Channel, 9v Battery included.
- Used to convert standard actuators to wireless
- Requires 8310-865 Receiver
- Recommended for exterior application with 8310-836T
- Used with the 866FLA bollard post



## 8310-866FLA FLA Bollard Post

- A powder coated steel 42" x 4" x 6": Bollard Post, mounting base pre prepped for the 8310-836T
- Includes 8310-866 CAP, 2 mounting screws & spacer for installation



8310-836TW Flush Length Actuator (FLA)

- Same as the 8310-836T with a built in wireless transmitter and 3v battery
- Use in conjunction with 8310-865 Receiver (not included)



8310-865 Receiver

- Wireless, 1 Channel, w/Sequencing Feature
- Used in conjunction w/ Wireless Actuators & Transmitter(s)



8310-3836T FLA Bollard Mount Kit

 36" x 6" Actuator with 8310-866FLA Bollard for wired applications



8310-3836TW FLA Bollard Mount Kit

- 36" x 6" Actuator with 8310-866FLA Bollard and 8310-844 wireless Transmitter
- Transmitter requires 8310-865 Receiver (not included)





Auto Operator Sensors & Accessories

Sensors

The sensors and accessories on the following pages are to be used only with LCN automatic operators. When using sensors supplied by others, consult the factory.

The desired function, traffic patterns and physical design of the opening will determine the type of sensors used.

## Automatic Operator Sensors & Accessories



8310-804-1 Door Mount Safety Sensor

 Contains one active sensor module to detect obstruction(s) on leading edge of door



8310-804-2 Door Mount Safety Sensor

 Contains two active sensor modules to detect obstruction(s) on full face of door



8310-854 Header Mount Activation Sensor

- Activation Sensor, 'K' Band Technology
- Used to detect objects either approaching or moving away from sensor
- Uses standard 'one way' detection but additional detection can be programmed
- Optional 8310-859 Handheld Remote Control can be used to program 8310-854 sensor from a distance



8310-877 Header Mount Safety Sensor

- Safety Sensor, 'Diffused Infrared' Technology
- Used to detect obstructions during door open and door closed position
- Nine selectable patterns
- 8310-859 Handheld Remote Control required to program 8310-877 sensor from a distance
- Includes 8310-846 Harness



8310-8775 Header Mount Safety Sensor Spacer

- Required when 8310-804-1 or 8310-804-2 Door Mount Safety
- Spacers are used w/ 8310-877 Header Mount Safety Sensor



8310-859 Handheld Remote Control

 Used to program 8310-877 Header Mount Safety Sensor or 8310-854 Header Mount Motion Sensor



8310-846 Header Mount Harness

 Comes with 8310-877 Header Mount Safety Sensor



8310-847 Door Mount Harness

- Used with 8310-804-1 or 8310-804-2 Door Mount Safety Sensor, must order separately.
- Used with Senior Swing only, must order separately



Auto Operator Sensors & Accessories

Packages

## **Automatic Operator Sensors & Accessories**



#### 8310-3881L Safety Sensor Package

- Activation/Safety Sensor Package, Single Door
- Includes 8310-854 (2) Header Mount Activation Sensor, 8310-877 Header Mount Safety Sensor, 8310-8775 Header Mount Spacer, 8310-804-2 Door Mount
- Safety Sensor (approach side), 8310-847 Harness (Used with Senior Swing only)



8310-3881 Safety Sensor Package

- Activation/Safety Sensor Package, Single Door
- Includes 8310-854 (2) Header Mount Activation Sensor, 8310-877 Header Mount Safety Sensor, 8310-877S Header Mount Spacer, 8310-847 Harness, 8310-804-2 (2) Door Mount Safety Sensor (approach/safety side) (Used with Senior Swing only)





8310-3883 Safety Sensor Package

- Activation/Safety Sensor Package, Low Energy Convenience
- Single Door, Includes 8310-804-1 Door Mount Safety
- Sensor (approach side), 8310-805C Door Position Switch (Concealed), 8310-845 Programmable Relay Module (Used with Senior Swing only)



Auto Operator Sensors & Accessories

Packages

## Automatic Operator Sensors & Accessories



8310-3882L Safety Sensor Package

- Activation/Safety Sensor Package, Double Door
- Includes 8310-854 (2) Header Mount Activation Sensor, 8310-877 Header Mount Safety Sensor, 8310-8775 Header Mount Spacer, 8310-847 (2) Harness, 8310-804-2 (2) Door Mount Safety Sensor (approach side) (Used with Senior Swing only)

NOTE: Not for use with Double Egress



8310-3882 Safety Sensor Package

- Activation/Safety Sensor Package, Double Door
- Includes 8310-854 (2) Header Mount Sensor, 8310-877 Header Mount Sensor, 8310-877S Header Mount Spacer, 8310-847 (2) Harness, 8310-804-2 (4) Door Mount Safety Sensor (approach/safety side) (Used with Senior Swing only)

NOTE: Not for use with Double Egress



8310-3891 Safety Sensor Package

- Activation/Safety Sensor Package, Health Care I, Simultaneous Pair
- Includes 8310-877 Header Mount Sensor, 8310-877S Header Mount Spacer, 8310-804-2 (4) Door Mount Sensor (approach/safety side), 8310-847 (2) Harness (Used with Senior Swing only)

NOTE: Not for use with Double Egress



8310-3892 Safety Sensor Package

 Activation/Safety Sensor Package, Health Care II, Independent Pair, Includes 8310-877 (2) Header Mount Sensor, 8310-8775 (2) Header Mount Spacer, 8310-804-2 (4) Door Mount Sensor (approach/safety side), 8310-847 (2) Harness (Used with Senior Swing only)



Auto Operator Sensors & Accessories

## Automatic Operator Sensors & Accessories



8310-805 Door Position Switch

- Surface mount
- Used when 8310-804-1 or 8310-804-2 Door Mounted Safety Sensor and 8310-845 Relay Module is installed in conjunction w/ either a electrohydraulic, pneumatic or Benchmark Automatic Operator
- Disables approach side sensor when door is closed



8310-854ECA Drop Ceiling Bracket

- Bracket used w/ 8310-854
  Header Mount Activation Sensor
- Optional



### 8310-3889 Safety Module Kit

- Used w/ 7901, 7902, 7981, 7982 Control Boxes.
- Includes 8310-3888 Safety Module Harness. Required when 8310-877 Header Mount Safety Sensor is used w/ Pneumatic
- Automatic Operators (2610, 4810, 4820 or 4840 Series)



8310-805C Door Position Switch

- Concealed
- Used when 8310-804-1 or 8310-804-2 Door Mounted Safety Sensor and 8310-845 Relay Module is installed in conjunction w/ either a electrohydraulic, pneumatic or Benchmark Automatic Operator
- Disables approach side sensor when door is closed



8310-824 Transformer, 24v,

- Hardwired
- Optional accessory Used to remotely power any 24v sensor/ receiver



# Transformer

- 24v, plug in
- Optional accessory Used to remotely power any 24v sensor/ receiver



8310-854ERA Protective Cover

- Cover used w/ 8310-854 Header Mount Activation Sensor
- Optional



#### 8310-3803 Wireless Conversion Kit

- Jamb mount, 3v
- Converts standard jamb actuator to wireless version
- Includes 8310-865 Receiver, 8310-844J (2) Jamb Mounted
- Transmitter Requires 8310-819S or 8310-819F Jamb Box



8310-3809 Wireless Conversion Kit

- Jamb mount, 9v
- Converts standard wall mount actuator to wireless version
- Includes 8310-865 Receiver, 8310-844 (2) Wall Mount Transmitter
- Requires Surface or Flush Box and Weather Ring

#### 8310-3888 Harness

- Safety module, service part
- Safety Module Harness for pneumatic control box





Auto Operator Sensors & Accessories

## **Automatic Operator Sensors & Accessories**



8310-861 Transmitter

- Wireless
- 1 Channel, Handheld, 3v. Requires 8310-865 Receiver



8**310-862** Transmitter

- Wireless
- 2 Channel, Handheld, 3v. Requires 8310-865 Receiver



Transmitter

- Wireless
- 3 Channel, Handheld, 3v. Requires 8310-865 Receiver



Transmitter

- Wireless
- 4 Channel, Handheld, 3v. Requires 8310-865 Receiver.



8310-866 Bollard Post

- A powder coated steel 42" x 4" x 6" Bollard Post, Mounting Base and 8310-866CAP
- Actuator cut out accepts 8310-3853WB or 8310- 3853TWB wireless actuators 4-3/4" square hard wired actuator

8310-866CAP Bollard Post

 Plastic Cap, Protective Cover, Service Part for 8310-866 Bollard Post



Auto Operator Sensors & Accessories

## Automatic Operator Actuators & Accessories



8310-806K Key Switch

- Type, 3 Position (On/Off/Hold-Open)
- Optional switch used w/ Senior Swing, Benchmark, or 4630/4640 Operators with (CS) option

#### 8310-806R Rocker Switch

- Type, 3 Position (On/Off/Hold-Open)
- Optional switch w/ Senior Swing, Benchmark, or 4630/4640
- Operators with (CS) option

#### 8310-807 Line Filter

 AC, 120v, Optional filter used w/ Senior Operators to reduce 'line noise'



### 8310-845 Programmable Relay Module

 Used to sequence door operation in Senior Swing and Benchmark for hard wired applications



8310-887 Retrofit Cable

 Allows newer style Senior Swing digital control to be activated by existing switches when replacing older control purchased prior to September, 2006



8310-3134 Retrofit Cable Kit

- Allows newer style Senior Swing Digital Control to be activated by existing switches when replacing older control purchased prior to September, 2006.
- Also includes cables to allow Safety Sensors to activate
- Includes 8310-887 plus Safety Sensor Cables





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