

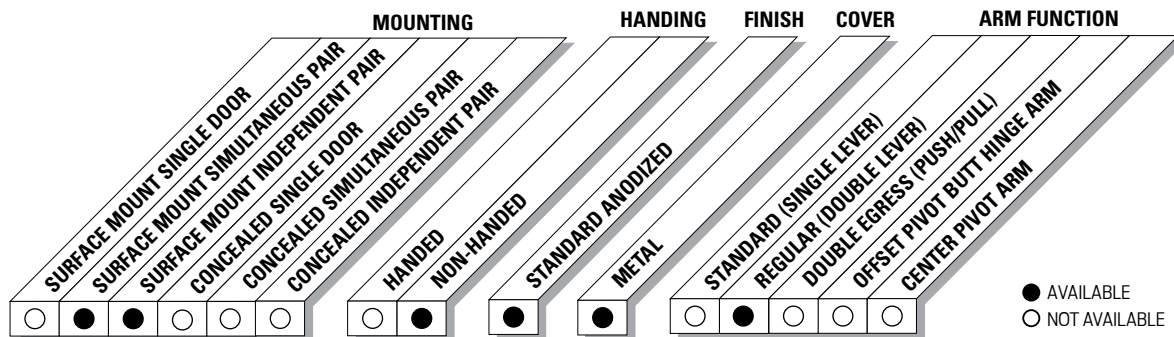
The 9150 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an 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 style="list-style-type: none"> ■ Minimum door width 52" - 96" ■ 72" door width only for full length double operator
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 style="list-style-type: none"> ■ Anodized aluminum, standard ■ Dark bronze, optional

**Special
Templates**

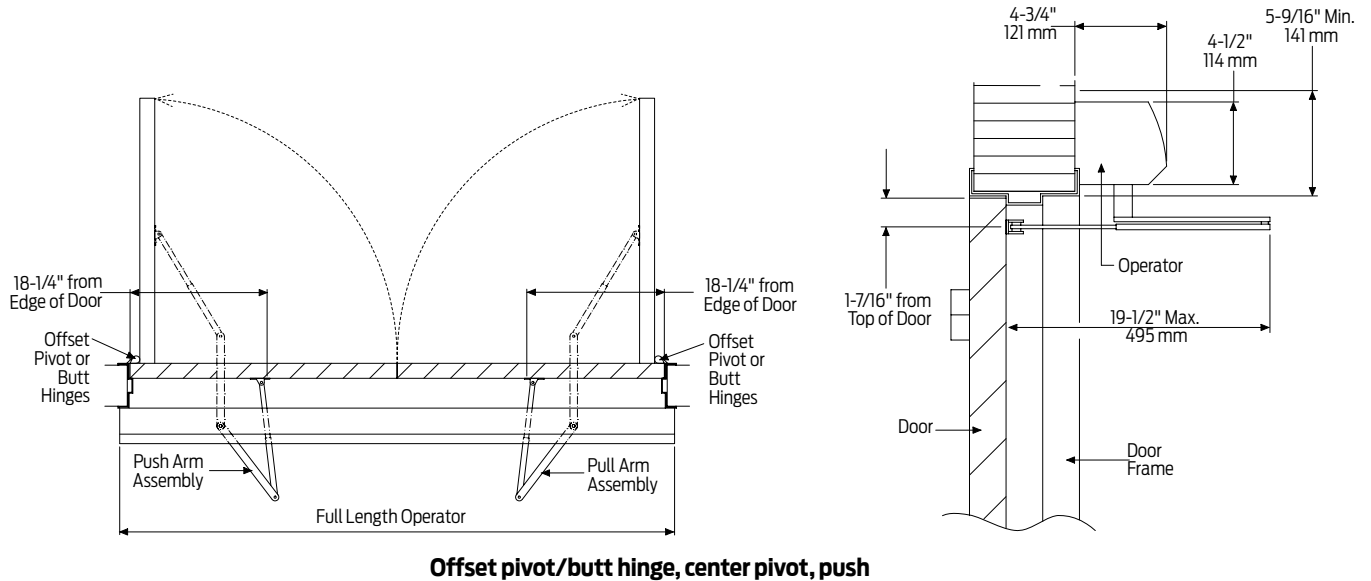
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



9150 Series Benchmark

Mounting details

Top jamb, Independent/
Simultaneous Pair
Mounting



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 style="list-style-type: none"> ■ Minimum 2" (51 mm) ■ Flush ceiling installation requires 5-1/4" (133 mm) minimum
Opening and Closing Time	<ul style="list-style-type: none"> ■ Variable by adjustments to the electronic control module located on the operator assembly ■ Maximum hold open time adjustable up to approximately 32 seconds
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

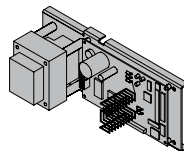
Motor Gearbox



9150-3454S
Motor Gearbox Assembly

- Driving mechanism for operator (switch included)

Control Box



9150-3462
Control Box (120v)

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

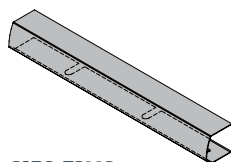
Brackets



9150-3018
Mounting Bracket

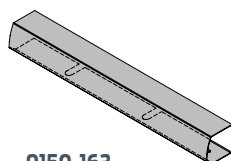
- Standard

Covers



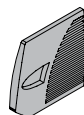
9150-72MC
Metal Cover

- Non-handed
- 72"
- Extruded aluminum cover
- Standard



9150-163
Cover Insert

- Used to cover operator shaft opening (includes 2 pieces)



9150-163-1
Cover End Cap Insert

- Used to cover switch hole opening



9150-334
Cover End Cap

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

Arms



9150-3077
Regular arm

- Non-handed



9150-3077L
Long arm

- Non-handed



9150-79
Rod and shoe

- For use with regular arm



9150-79LR
Long rod and shoe

- Used with long arm, for deep reveals

9150 Series Benchmark

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" door width only for full length push double door operator.

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.