BENCHMARK UNIQUE FEATURES

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





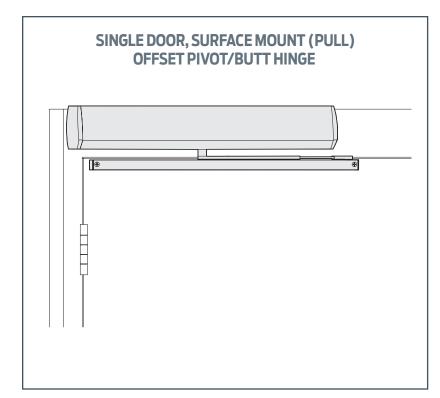


The 9130 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an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

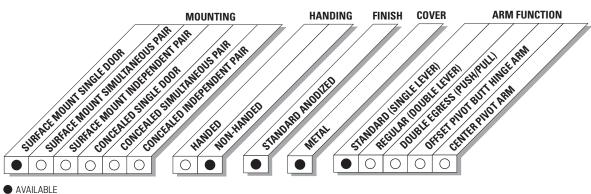


- Microprocessor control box ensures reliability and maintains customer settings.
- Power Boost allows for increased closing force near latch.

9130 Series is fully compliant with UL 325 and meets the provisions of ANSI A156.19. The 9130 Series is UL listed for fire-rated applications. The 9130 Series also meets the provisions of the Americans with Disabilities Act.



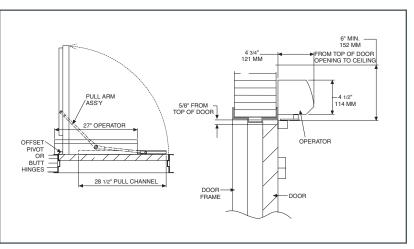
- 9130 Series operator is shipped with motor gearbox, control box, mounting plate, standard arm, metal cover, standard track, wood and machine screws. Actuators available separately, see pages 122-137.
- Single interior door, surface mounted.
- ADA compliant.
- On/Off switch included as standard.
- Non-handed for either right or left swinging door.
- 27″ cover is standard. 36" optional.
- All potentiometers clearly labeled with their functions.
- LED lights indicate power to control box and motor gearbox.



AVAILABLE
NOT AVAILABLE



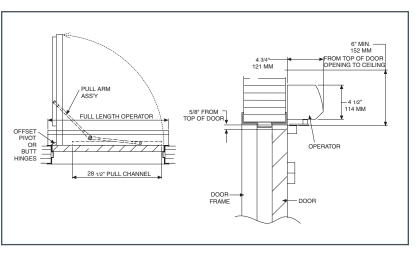
TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PULL, STANDARD COVER) MOUNTING



TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PULL, FULL COVER) MOUNTING

MAXIMUM OPENING

Template allows 90 degree power opening and 90 degree manual opening.



- 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 are variable by adjustments to the electronic control module located on the operator assembly. Maximum hold open time adjustable up to approximately 30 seconds.
- **System Diagram** see "AUTOMATIC OPERATORS" section pages 53 for typical system wiring and page 56 for electrical data.

Contact LCN Product Support for installation assistance.

LCN®



MOTOR GEARBOX

MOTOR GEARBOX ASSEMBLY, 9130-3454S

Driving mechanism for operator. (Switch included). For $27^{\prime\prime}$ unit.

MOTOR GEARBOX ASSEMBLY (W/O SWITCH), 9130-3454

Driving mechanism for operator. (Switch not included). For full length unit (36″).

BRACKETS MOUNTING BRACKET, 9130-3018

Standard mounting bracket.

SWITCH BRACKET – 29" CABLE, 9130-3351-1

Bracket used to locate switch at end of cover on full length unit.

SWITCH BRACKET - 41" CABLE, 9130-3351-2

Bracket used to locate switch at end of cover on full length unit.

CONTROL BOXES

CONTROL BOX, (120v), 9130-3462

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

COVERS

METAL COVER, 9130-72MC Standard, 27["], non-handed, extruded aluminum cover.

FULL METAL COVER, 9130-72FC

36", non-handed, extruded aluminum cover.

COVER INSERT 9130-163

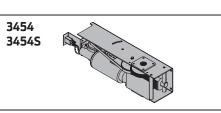
Used to cover operator shaft opening. (Includes 2 pieces).

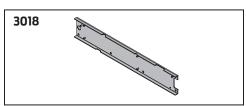
COVER END CAP INSERT, 9130-163-1

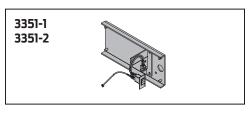
Used to cover switch hole opening.

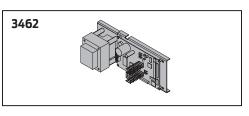
COVER END CAP, 9130-334

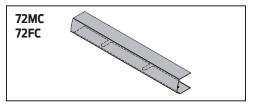
Black plastic end caps. (Includes 9130-163-1 cover and cap insert).

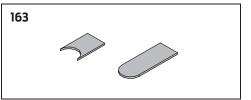


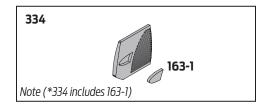












ACCESSORI



TRACKS

STANDARD TRACK, 9130-3038 Standard, non-handed track.

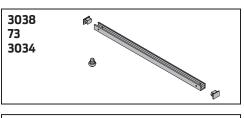
TRACK END CAP, 9130-73 Black plastic end caps.

ROLLER, 9130-3034 Quiet low friction roller assembly.

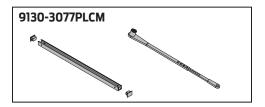
ARMS STANDARD ARM, 9130-3077T Non-handed arm. Track roller not included.

STANDARD ARM with 9130-3077PLCM

Non-handed arm and standard non handed track.











HOW-TO-ORDER 9130 SERIES OPERATORS 1. SPECIFY FINISH

Standard Anodized Finish _____ Aluminum or Dark Bronze.

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.

OPERATOR OPTIONS COVER

□ 36" Full Cover.

TABLE OF SIZES

DOOR WIDTH



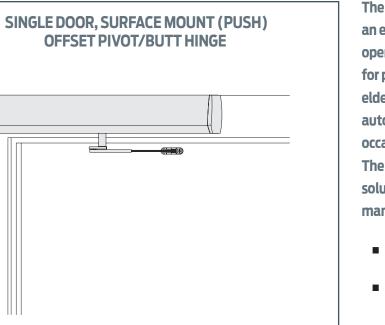
NOTE: For All Benchmark Series.

- *30″ minimum door width for 27″ pull operator.*
- 36" door width only for full length pull operator.

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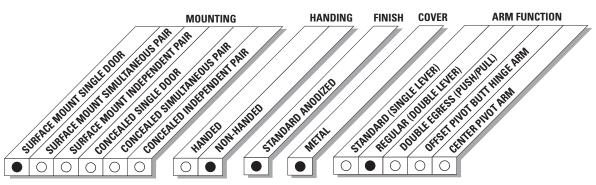


- 9140 Series operator is shipped with motor gearbox, control box, mounting plate, regular arm, metal cover, standard track, wood and machine screw pack. Actuators available separately, see pages 122-137.
- Single interior door, surface mounted.
- ADA compliant.
- On/Off switch included as standard.
- Non-handed for either right or left swinging door.
- 27["] cover is standard. 36["] optional.
- All potentiometers clearly labeled with their functions.
- LED lights indicate power to control box and motor gearbox.

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.

- Push 'N Go permits non-switch activation.
- Microprocessor control box ensures reliability and maintains customer settings.
- Power Boost allows for increased closing force near latch.

9140 Series is fully compliant with UL 325 and meets the provisions of ANSI A156.19. The 9140 Series is UL listed for fire-rated applications. The 9140 Series also meets the provisions of the Americans with Disabilities Act.



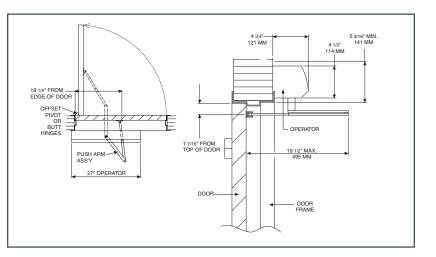
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AVAILABLENOT AVAILABLE



PHONE 877-671-7011 FAX 800-248-1460 www.allegion.com/us 2/14 FEATURES

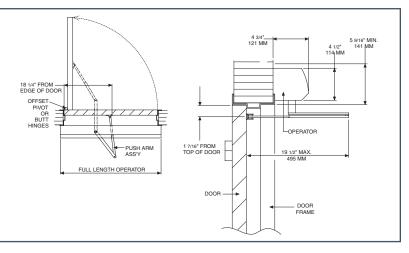
TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PUSH, STANDARD COVER) MOUNTING



TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PUSH, FULL COVER) MOUNTING

MAXIMUM OPENING

Template allows 90 degree power opening and 90 degree manual opening.



- Butt Hinges should not exceed 5" (127 mm) in width.
- **Reveal** for 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 minimum 2["] (51 mm). Flush ceiling installation requires 5-1/4["] (133 mm) minimum.
- Opening and Closing Time are variable by adjustments to the electronic control module located on the operator assembly. Maximum hold open time adjustable up to approximately 30 seconds.
- **System Diagram** see "AUTOMATIC OPERATORS" section pages 53 for typical system wiring and page 56 for electrical data.

Contact LCN Product Support for installation assistance.



ACCESSORIES

MOTOR GEARBOX

MOTOR GEARBOX ASSEMBLY, 9140-3454S

Driving mechanism for operator. (Switch included.) For 27" unit.

MOTOR GEARBOX ASSEMBLY (W/O SWITCH), 9140-3454

Driving mechanism for operator. (Switch not included.) For full length unit (36 $^{\prime\prime}).$

BRACKETS

MOUNTING BRACKET, 9140-3018

Standard mounting bracket.

SWITCH BRACKET - 29" CABLE, 9140-3351-1

Bracket used to locate switch at end of cover on full length unit.

SWITCH BRACKET – 41" CABLE, 9140-3351-2

Bracket used to locate switch at end of cover on full length unit.

CONTROL BOXES

CONTROL BOX, (120v), 9130-3462

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

COVERS

METAL COVER, 9140-72MC

Standard, 27["], non-handed, extruded aluminum cover.

FULL METAL COVER, 9140-72FC

36" Full length, non-handed, extruded aluminum cover.

COVER INSERT 9140-163

Used to cover operator shaft opening. (Includes 2 pieces).

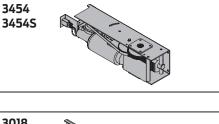
COVER END CAP INSERT, 9140-163-1

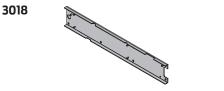
Used to cover switch hole opening.

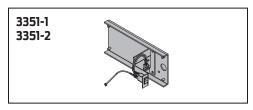
COVER END CAP, 9140-334

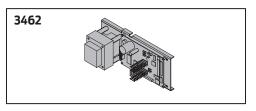
LCN

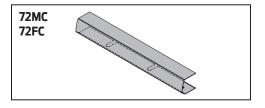
Black plastic end caps. (Includes 9130-163-1 cover and cap insert).

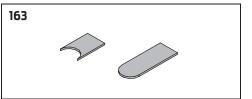


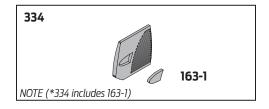
















ARMS REGULAR ARM, 9140-3077

Non-handed arm.

LONG PUSH ARM, 9140-3077L Non-handed long arm.

ROD & SHOE, 9140-79

Rod for use with regular arm.

LONG ROD & SHOE, 9140-79LR

Long rod used with long arm, for deep reveals.

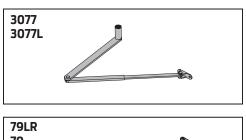






TABLE OF SIZES

DOOR WIDTH



NOTE: For All Benchmark Series.

- *30^{°′} minimum door width for 27^{′′} pull operator.*
- 36" door width only for full length pull operator.

9140 SERIES

HOW-TO-ORDER 9140 SERIES OPERATORS 1. SPECIFY FINISH

□ Standard Anodized Finish _____ Aluminum or Dark Bronze.

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.

OPERATOR OPTIONS

COVER 36 "Full Cover

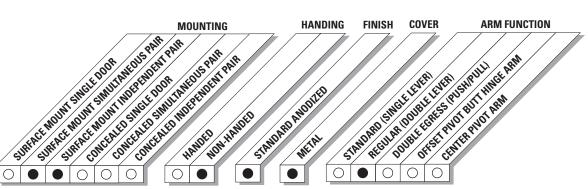
ARM

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

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.

- Push 'N Go permits non-switch activation.
- Microprocessor control box ensures reliability and maintains customer settings.
- Power Boost allows for increased closing force near latch.

9150 Series is fully compliant with UL 325 and meets the provisions of ANSI A156.19. The 9150 Series is UL listed for fire-rated applications. The 9150 Series also meets the provisions of the Americans with Disabilities Act.



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AVAILABLENOT AVAILABLE





 9150 Series operator is shipped with motor gearboxes, control boxes, mounting plate, regular arms, metal cover, wood and machine screw packs. Actuators available separately, see pages 122-137.

PAIR DOOR, SURFACE MOUNT (PUSH)

OFFSET PIVOT/BUTT HINGE

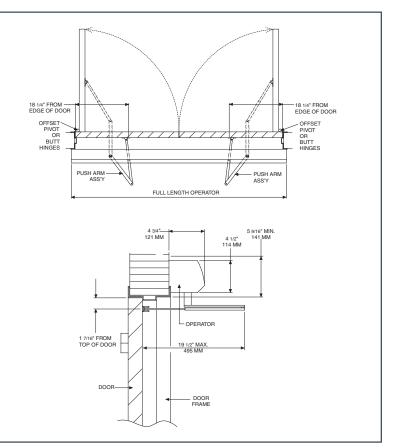
- Pair of interior doors, surface mounted.
- ADA compliant.
- On/Off switch included as standard.
- Non-handed for either right or left swinging door.
- 72″ cover is standard.
- All potentiometers clearly labeled with their functions.
- LED lights indicate power to control box and motor gearbox.

TOP JAMB, INDEPENDENT/ SIMULTANEOUS PAIR (OFFSET PIVOT/BUTT HINGE, CENTER PIVOT, PUSH) MOUNTING

Determined by wiring method during installation.

MAXIMUM OPENING

Template allows 90 degree power opening and 90 degree manual opening.



- **Butt Hinges** should not exceed 5["] (127 mm) in width.
- **Reveal** for 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).

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- **Top Rail** minimum 2["] (51 mm). Flush ceiling installation requires 5-1/4["] (133 mm) minimum.
- **Opening and Closing Time** are 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 53 for typical system wiring and page 56 for electrical data.

Contact LCN Product Support for installation assistance.

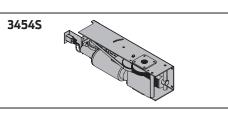
MOTOR GEARBOX MOTOR GEARBOX ASSEMBLY, 9150-3454S Driving mechanism for operator (Switch included)

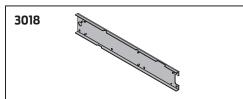
Driving mechanism for operator. (Switch included).

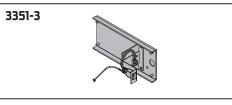
BRACKETS MOUNTING BRACKET, 9150-3018 Standard mounting bracket.

SWITCH BRACKET - 51" CABLE, 9150-3351-3

Bracket used to locate switch at end of cover on full length unit.







CONTROL BOXES CONTROL BOX, (120v), 9150-3462

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

COVERS

METAL COVER, 9150-72MC Standard, 72["], non-handed, extruded aluminum cover.

COVER INSERT 9150-163 Used to cover operator shaft opening. (Includes 2 pieces).

COVER END CAP INSERT, 9150-163-1

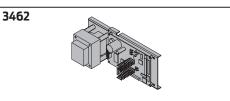
Used to cover switch hole opening.

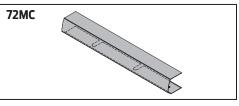
COVER END CAP, 9150-334

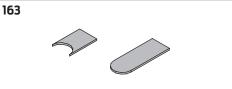
LCN

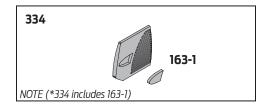
Black plastic end Caps. (Includes 9130-163-1 cover and cap insert).

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CESSORIE

ARMS

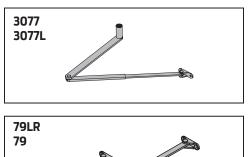
REGULAR ARM, 9150-3077 Non-handed arm.

LONG ARM, 9150-3077L Non-handed long arm.

ROD & SHOE, 9150-79 Rod for use with regular arm.

LONG ROD & SHOE, 9150-79LR

Long rod used with long arm for deep reveal.







DOOR WIDTH

TABLE OF SIZES



NOTE: For 9150 Benchmark Series.

72^{''} door width only for full length push double door operator.

HOW-TO-ORDER 9150 SERIES OPERATORS 1. SPECIFY FINISH

□ Standard Anodized Finish _____ Aluminum or Dark Bronze.

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.

OPERATOR OPTIONS

ARM

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