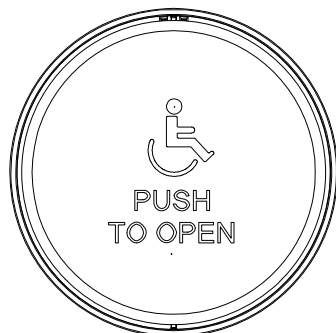


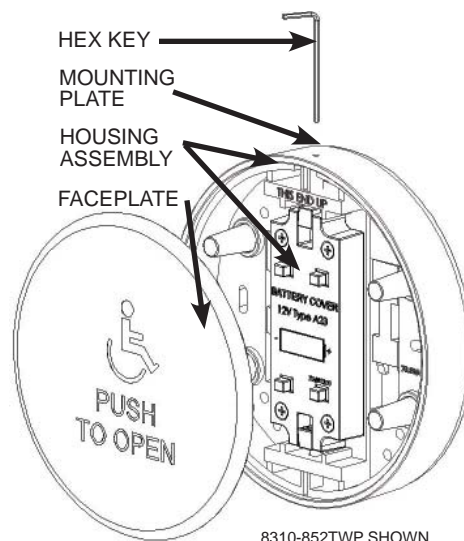
1 Description



6" ROUND
8310-852TWP (shown)
8310-852WP (not shown)



4.75" SQUARE
8310-853TWP (not shown)
8310-853WP (shown)



8310-852TWP SHOWN

2 Specifications

DESCRIPTION	SPECIFICATION
DIMENSIONS	6" Round: 6.33"R X 1.45"D (160.80m X 36.87mm) 4.75" Square: 5.12"H X 5.12"W X 1.42"D (130.0mm X 130.0mm X 36.1mm)
WEIGHT	6" Round: 1.2 lbs (0.54 kg) 4.75" Square: 1.04 lbs (0.47 kg)
MATERIAL	ABS Plastic and Stainless Steel
FREQUENCY	433 MHz
CERTIFICATION	FCC

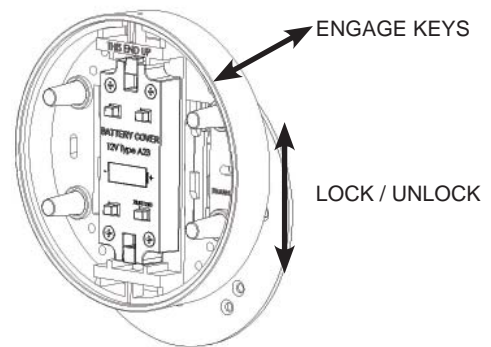
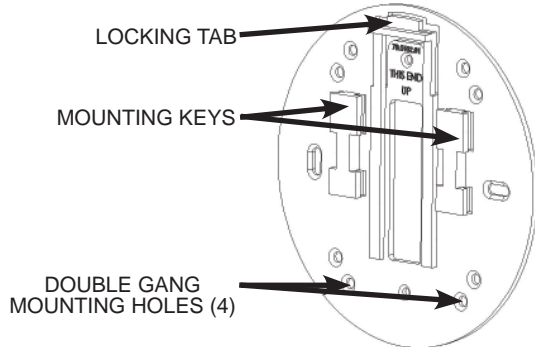
3 Precautions



- ☐ Shut off all power going to header before attempting any wiring procedures.
- ☐ Maintain a clean & safe environment when working in public areas.
- ☐ Constantly be aware of pedestrian traffic around the door area.
- ☐ Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ☐ ESD electrostatic discharge: Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board ensure you dissipate your body's charge.
- ☐ Always check placement of all wiring before powering up to insure that moving door parts will not catch any wires and cause damage to equipment.
- ☐ Ensure compliance with all applicable safety standards (i.e. ANSI A156.10/19) upon completion of installation.
- ☐ DO NOT attempt any internal repair of the sensor. All repairs and/or component replacements must be performed by LCN, Inc. Unauthorized disassembly or repair:
 1. May jeopardize personal safety and may expose one to the risk of electrical shock.
 2. May adversely affect the safe and reliable performance of the product will result in a voided product warranty.

4 Installation

1 Mounting the Pushplate

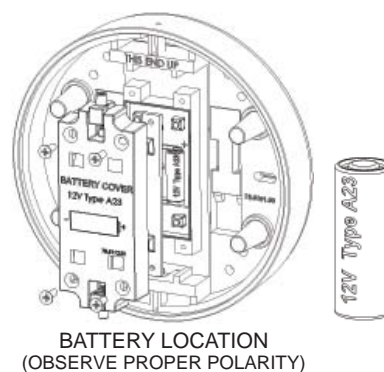
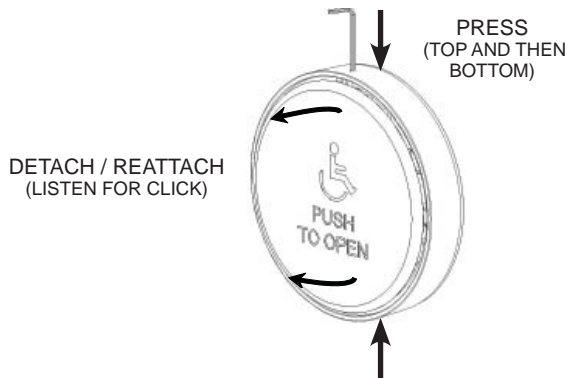


The Wireless Pushplate may be mounted WITH or WITHOUT the mounting plate. To use the mounting plate, screw a minimum of two (2) screws into a solid surface through the holes in the mounting plate (#8 countersunk head screws must be used). The mounting plate must be mounted so that the text side is facing up.

To attach the housing to the mounting plate, place the housing over the key tabs on the mounting plate and then slide the plate downward until the locking tab engages the housing. To remove the housing, press in the locking tab and reverse this procedure.

NOTE: To securely lock the plate, put an additional screw through both the housing and the mounting plate.

2 Pushplate Function



To assemble or disassemble the pushplate, use the enclosed hex key (or similar diameter tool) to press in and release the spring clips from the housing. The spring clip will need to be engaged / disengaged from the top and bottom, one at a time. When the spring clips are correctly engaged, they will make a CLICK. It may be necessary to rotate the faceplate slightly to have them lock correctly.

To replace the battery, remove the faceplate and the four (4) screws holding the battery cover to expose the transmitter assembly. Replace the battery with a fresh 12V (A23) battery and reassemble the pushplate.

WARNING: DO NOT OVER TIGHTEN THE SCREWS ON THE BATTERY COVER. THIS MAY CAUSE THE TRANSMITTER TO BE IN CONSTANT ACTIVATION. THE HEAD OF THE SCREWS SHOULD BE FLUSH WITH THE TOP OF THE PLASTIC COVER.

3 Receiver Setup

For complete Receiver (8310-865, sold separately) Setup & Installation procedures, refer to LCN publication 75.5315 (433MHz Transmitters & Receiver User's Guide).

5 Company Contact



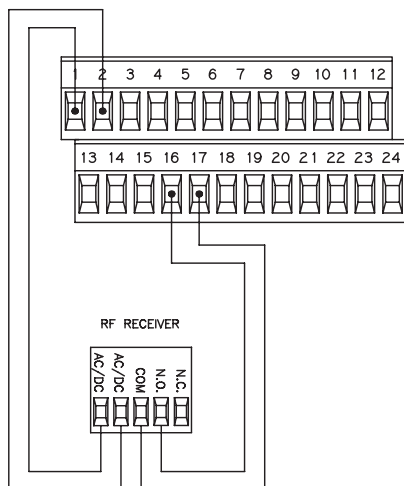
Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please contact LCN at 1-800-526-2400. If you must wait for the following workday to call LCN, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation of the automatic door or gate for an incomplete solution.

For more information, visit www.lcn.ingersollrand.com.

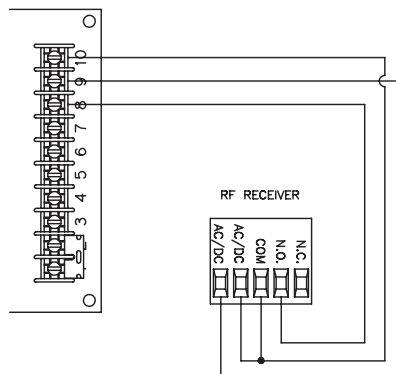
Appendix - Wiring Diagram

8310-865 RF RECEIVER SINGLE DOOR WIRING

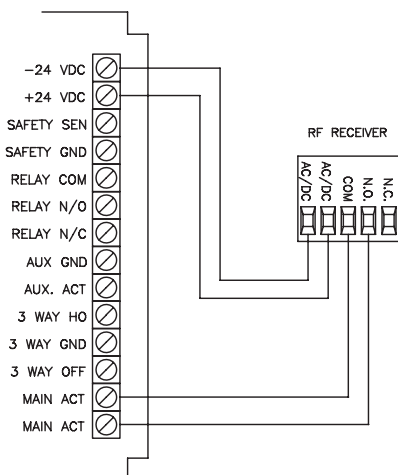
4630/4640 SERIES ELECTRIC AUTO-EQUALIZER



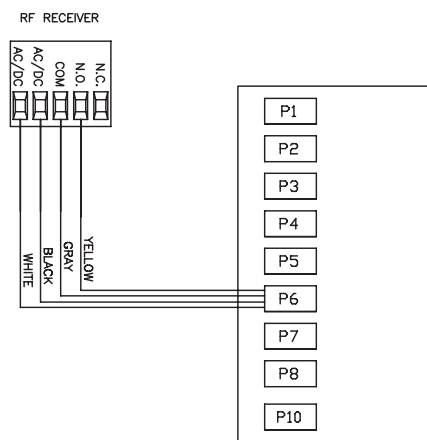
7900 SERIES PNEUMATIC AUTO-EQUALIZER



9100 SERIES BENCHMARK



SENIOR SWING – 2800/9500 SERIES MID SWING – 2900/9700 SERIES



1 Description

LCN introduces its new stainless steel pushplate line. These pushplates are designed to fit into standard electrical gang boxes, and/or LCN's line of plastic enclosures. The faceplate is made of 1/16" thick stainless steel for durability, and has concealed fasteners to minimize vandalism. The pushplates may be hard wired to the door operator or connected to LCN's line of radio-controlled transmitters. Part numbers are shown below.



2 Specifications

DESCRIPTION	4.5" ROUND	6" ROUND	4.75" SQUARE	JAMB
LOGO	8310-856	8310-852	8310-853	8310-818
LOGO AND TEXT	8310-856T	8310-852T	8310-853T	8310-818T
SIZE	4.50" X 0.62"	6.00" X 0.62"	4.75" X 4.75" X 0.62"	1.50" X 4.75" X 0.62"

3 Precautions



- ☐ Shut off all power going to header before attempting any wiring procedures.
- ☐ Maintain a clean & safe environment when working in public areas.
- ☐ Constantly be aware of pedestrian traffic around the door area.
- ☐ Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ☐ ESD electrostatic discharge: Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board ensure you dissipate your body's charge.
- ☐ Always check placement of all wiring before powering up to insure that moving door parts will not catch any wires and cause damage to equipment.
- ☐ Ensure compliance with all applicable safety standards (i.e. ANSI A156.10/19) upon completion of installation.
- ☐ DO NOT attempt any internal repair of the sensor. All repairs and/or component replacements must be performed by LCN Inc. Unauthorized disassembly or repair:
 1. May jeopardize personal safety and may expose one to the risk of electrical shock.
 2. May adversely affect the safe and reliable performance of the product will result in a voided product warranty.

4 Accessories

PLASTIC ENCLOSURES - Wide Range of Surface and Flush Mount Electrical Boxes.

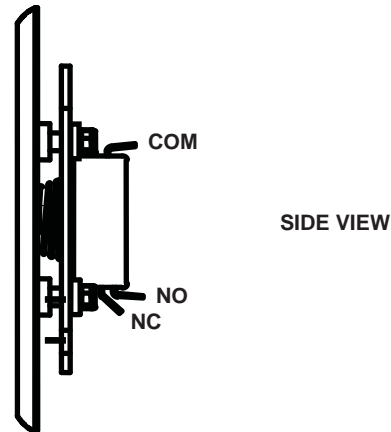
RADIO CONTROLLED TRANSMITTERS & RECEIVERS - 433 MHz Digital Transmitters and Receivers.

BOLLARD - Steel Pushplate Mounting Post Available in Black, Bronze and Silver for use with 4 1/2" Round & 4 3/4" Square Pushplates.

ESCUTCHEON - Stainless Steel Mounting Plate for 4.5" & 6" Round Pushplates.

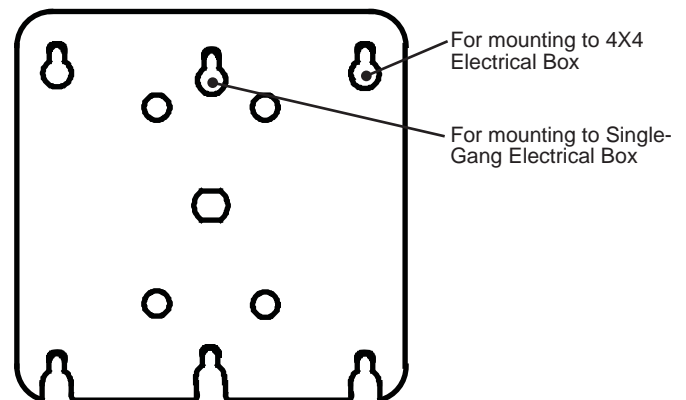
5 Installation

1. Wire the pushplate to the door controller or radio controlled transmitter using the NO or NC contacts and common.



2. Finger-tighten the enclosed hex-head screws into the electrical enclosure.

NOTE: The 6" round and the 4 3/4" square pushplate there are two different sized screws. The larger screws (#8) are for the corner locations on 4X4 electrical type boxes and the two smaller screws (#6) are for the single-gang electrical type boxes.



3. Place the pushplate holes over the hex-head screws. Use the enclosed hex key to fully tighten the screws.
4. Test for proper pushplate activation.

BACK OF SQUARE & ROUND PUSHPLATES

6 Cleaning Operations

The pushplates are constructed with durable stainless steel and painted with scuff-resistant coatings. To clean the plates, use only a damp, non-abrasive cloth. Regular cleaning with harsh solvents or abrasive materials may cause deterioration of the paint coating. Please make the end-user aware of this procedure.

7 Company Contact



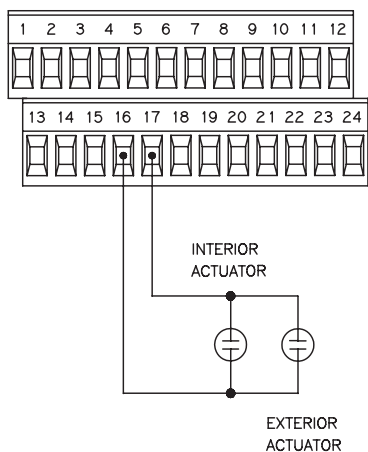
Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please contact LCN at 1-800-526-2400. If you must wait for the following workday to call LCN, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation of the automatic door or gate for an incomplete solution.

For more information, visit www.lcn.ingersollrand.com.

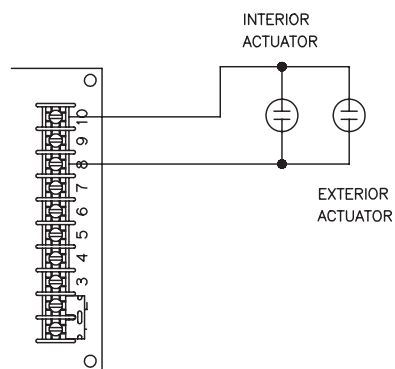
Appendix - Wiring Diagram

8310 SERIES HARDWIRED ACTUATOR SINGLE DOOR WIRING

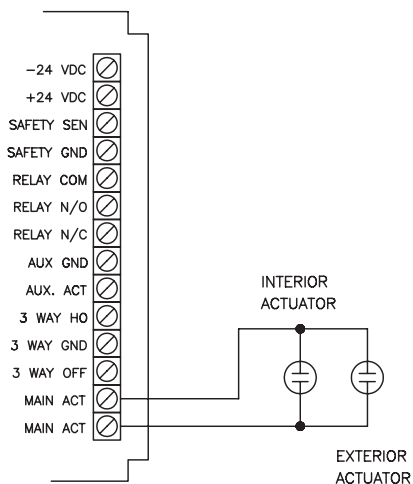
4630/4640 SERIES ELECTRIC AUTO-EQUALIZER



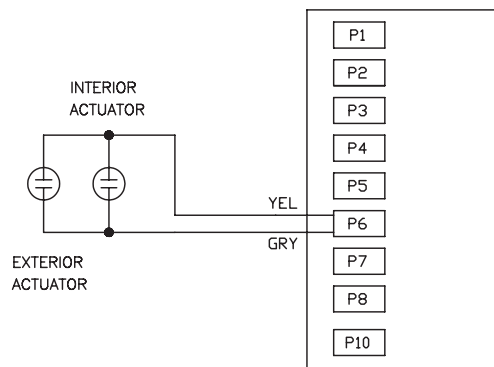
7900 SERIES PNEUMATIC AUTO-EQUALIZER



9100 SERIES BENCHMARK



SENIOR SWING – 2800/9500 SERIES MID SWING – 2900/9700 SERIES



1 Description

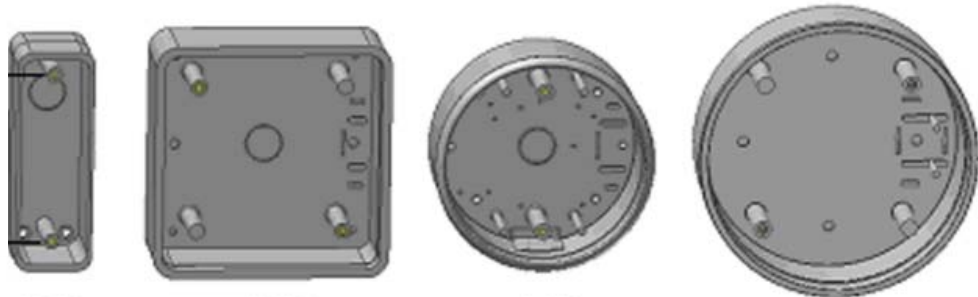
LCN's line of pushplate hardware is expanded by its line of surface and flush mount pushplate boxes. These boxes are made of durable ABS plastic and are made to securely mount a pushplate and a variety of optional transmitters to activate an automatic door. Many of the boxes have an optional weather ring to give even more weather protection to the switch. They are also designed to attractively recess the pushplate in the housing to and to minimize vandalism from prying up the pushplate.



PUSHPLATE MOUNTING BOX
(4.5" Round Surface Mount Shown)



9V BATTERY CLIP
(1 per box, not used on jamb sized boxes)



PART NUMBERS	4 3/4" JAMB	4 3/4" SQUARE	4 1/2" ROUND	6" ROUND
SURFACE	8310-819S	8310-867S	8310-868S	8310-869S
FLUSH	8310-819F	8310-867F	8310-868F	8310-869F
WEATHER RING <u>1</u>		8310-801	8310-800	8310-802

1 - Optional

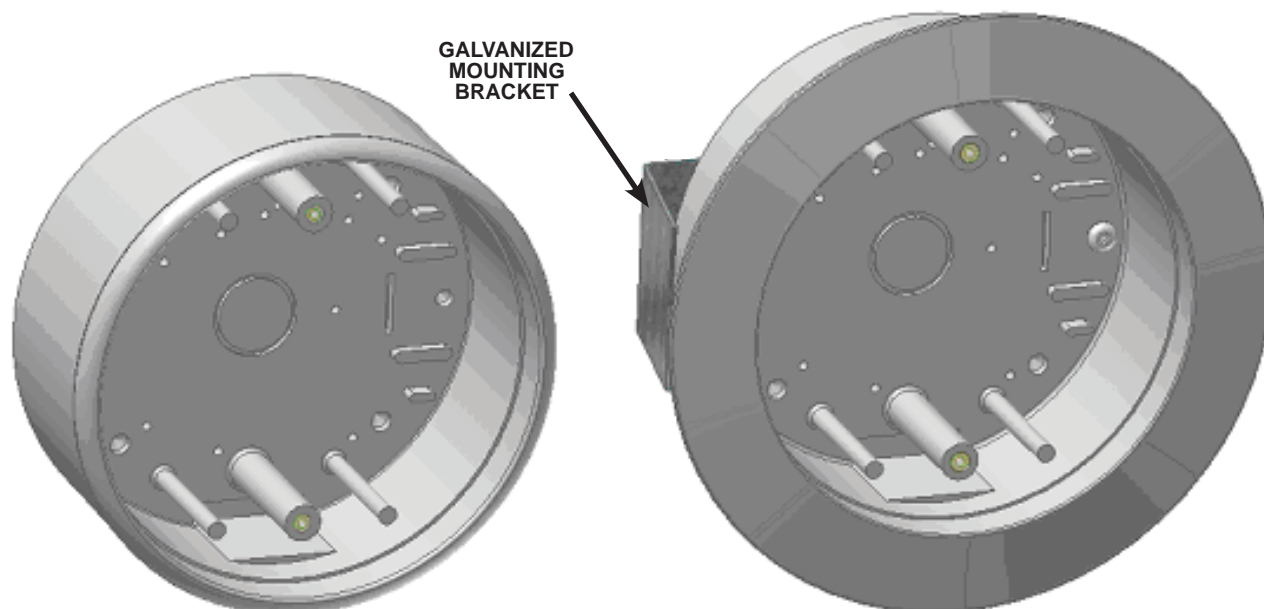
2 Precautions



- ☐ Shut off all power before attempting any wiring procedures.
- ☐ Maintain a clean & safe environment when working in public areas.
- ☐ Constantly be aware of pedestrian traffic around the area.
- ☐ Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ☐ ESD electrostatic discharge: Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board ensure you dissipate your body's charge.
- ☐ Always check placement of all wiring before powering up to insure that moving parts will not catch any wires and cause damage to equipment.
- ☐ Ensure compliance with all applicable safety standards (i.e. ANSI A156.10 / 19) upon completion of installation.
- ☐ DO NOT attempt any internal repair of the sensor. All repairs and/or component replacements must be performed by LCN, Inc. Unauthorized disassembly or repair:
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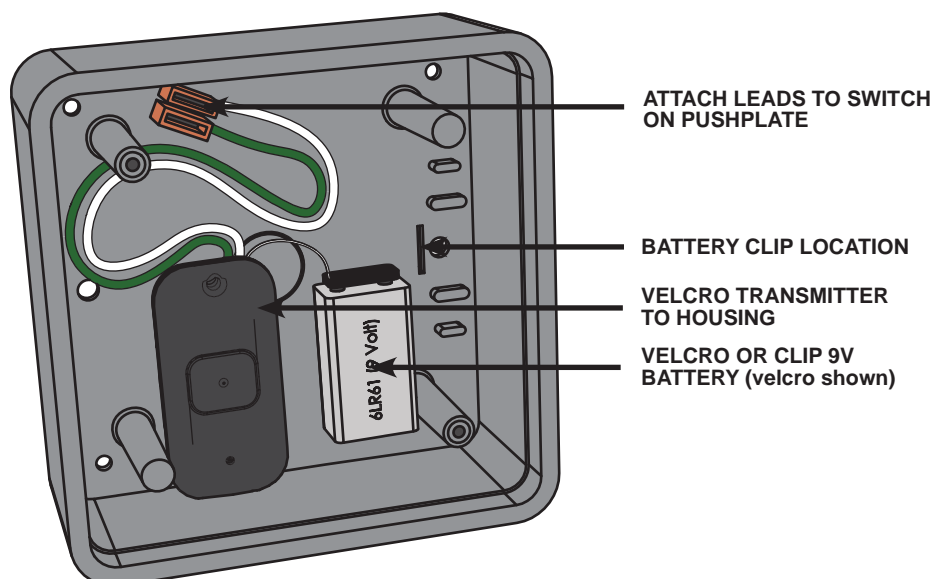
3 Installation

1. Prepare the box for installation. If the pushplate is to be hard-wired to the operator, remove either the knockout on the back or bottom of the box. Then route the appropriate wire to the box.
2. Attach the box to the mounting surface. For surface mounted boxes, securely attach the box to the surface using the corner holes. For flush mounted boxes, cut a hole in the mounting surface large enough that the galvanized steel bracket will pass through the hole. Then use a Phillips head screwdriver to tighten the two screws that tighten the bracket to the inside of the wall surface.



3. If Applicable, mount a radio frequency transmitter to the inside of the housing using either the Velcro enclosed with the transmitter kit or battery clip.

NOTE: For jamb sized boxes, use the 3V Transmitter (8310-844J).



4 Company Contact



Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please contact LCN at 1-800-526-2400. If you must wait for the following workday to call LCN, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation of the automatic door or gate for an incomplete solution.

For more information, visit www.lcn.ingersollrand.com.

1 Description

The 433MHz Series Transmitters and Receiver are ideal for the opening of automatic doors. The Transmitter is available in hand-held or pushplate style and transmits a unique rolling code each time the switch is closed to provide a secure door-opening signal. The transmitter is powered by either a 3-volt or a standard 9-volt battery and a red indicator light when the transmitter is activated.



**8310-861
ONE BUTTON**



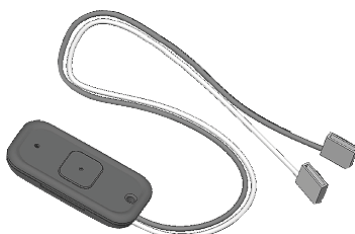
**8310-862
TWO BUTTON**



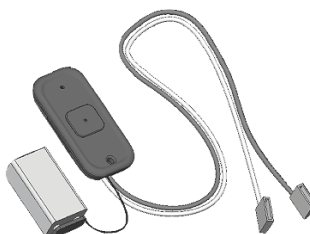
**8310-863
THREE BUTTON**



**8310-864
FOUR BUTTON**



**8310-844J - ONE BUTTON,
3 VOLT w / WIRE LEADS**



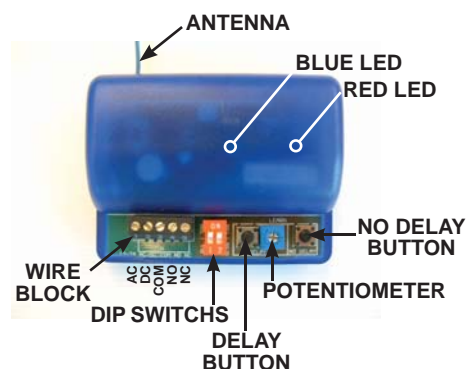
**8310-844 - ONE BUTTON,
9 VOLT w / WIRE LEADS**



8310-865 - RECEIVER

2 Specifications

DESCRIPTION	SPECIFICATION
FREQUENCY	433 MHz
EMMITTED RADIO POWER	-28.7 dBm
POWER CONSUMPTION	250mA
OPERATING TEMPERATURE	14°F TO 131°F (-10°C TO 55°C)
MAX No. OF PROGRAMMED UNITS FOR EACH RECEIVER	100 TRANSMITTERS
LEDs	RED - Receiver Learn BLUE - Relay Activation
DIMENSIONS	2 3/4" X 1 3/8" X 9/16" (70mm x 35mm x 14mm) 2 3/4" x 2 1/8" x 1" (70mm x 55mm x 25mm)
CERTIFICATIONS	FCC, IC,



3 FCC Compliance

FCC ID#: G9B-10TD433HH4 IC ID#: 4680A-10TD433HH4

- This Digital Transmitter complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
 - This device may not cause harmful interference and;
 - This device must accept any interference received including interference that may cause undesired operations.
 - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/ TV technician for help.
- This transmitter operates in the band 40.66 - 40.70 MHz & above 70 MHz and is restricted to periodic transmissions of up to 5 seconds.
- Changes or modifications not expressly approved by BEA, Inc. for compliance could void the user's authority to operate the equipment.

4 Precautions



CAUTION

- ❑ Shut off all power going to work area before attempting any wiring procedures.
- ❑ Maintain a clean & safe environment when working in public areas.
- ❑ To remain in compliance with Part 15.231, do not operate transmitter (hold down button) for longer than 5 seconds.
- ❑ Constantly be aware of pedestrian traffic around the area.
- ❑ Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ❑ ESD: Circuit boards are vulnerable to damage by electrostatic discharge. Before handling ensure you dissipate your body's charge.
- ❑ Always check placement of components before powering up so that moving parts will not catch any wires or cause damage to equipment.
- ❑ Ensure compliance with all applicable safety standards (i.e. ANSI A156.10 / 19) upon completion of installation.
- ❑ DO NOT attempt any internal repair of the components. All repairs and/or component replacements must be performed by LCN, Inc. Unauthorized disassembly or repair:
 1. May jeopardize personal safety and may expose one to the risk of electrical shock.
 2. May adversely affect the safe and reliable performance of the product will result in a voided product warranty.

5 Battery Replacement



CAUTION: THERE IS A RISK OF EXPLOSION IF AN INCORRECT BATTERY TYPE IS USED. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

3-VOLT TRANSMITTER

1. Remove screw from back of transmitter.
2. Separate housing and install a fresh 3-Volt (Type CR2032) battery making sure to observe properly polarity.
3. Reassemble housing and replace screw.

NOTE: Don't throw used batteries away with the general trash. Discard per your local municipal laws in order to protect the environment.

9-VOLT TRANSMITTER (8610-844 ONLY)

1. Remove old battery.
2. Connect a new / fresh 9-Volt (Type 6LR61) battery making sure to observe properly polarity.

6 Programming

HAND HELD CONFIGURATION

1. Set dip switches on the receiver to the desired activation cycle (dip switch 1 - position for toggle (1) or position for pulse (2) and dip switch 2 - 0.5 second hold (1) or 10 second hold (2)).
2. Press either delay switch or no delay switch on the receiver depending on the activation requirements (If delay learn is selected, adjust potentiometer for desired delay time 0-30 seconds).
3. Depress transmitter button several times until Blue LED on the receiver illuminates (this indicates reception of signal from transmitter).
NOTE: Repeat Step 2. before programming the next transmitter.
4. To test the system, depress transmitter button (Red LED on Transmitter will illuminate) and observe that the Blue LED illuminates on the receiver. This indicates that the relay has been activated.

NOTE: To erase all codes, press and hold both Delay Buttons for 10 seconds or until the blue indicator light turns on then off.

PUSH PLATE CONFIGURATION

1. Before beginning, it is easiest to have already prepared the installation of the pushplate.
2. Connect the wires from the transmitter to the NO and COM contacts of the pushplates switch.
3. Follow Step 1 thru 4 (Hand-Held Configuration); depress the pushplate to activate the transmitter.
4. Attach the transmitter to the inside of the electrical box and complete the installation.

7 Dip Switch Operation

# 1	DESCRIPTION	FUNCTION
OFF	Pulse Relay	Press the transmitter once and the relay will be active momentarily.
ON	Toggle Relay	Press the transmitter once and the relay output is active indefinitely, press it again and it will become passive.

# 2	DESCRIPTION	FUNCTION
OFF	0.5 sec Hold Time	Relay will remain active 0.5 second after the loss of activation.
ON	10 sec Hold Time	Relay will remain active 10 seconds after the loss of activation.



In Toggle Setting (1-ON), the Hold Time is inactive. Either setting for #2 dip switch will have the same result.



0.5 second Pulse Setting



10 second Pulse Setting

8 Company Contact

LCN



CAUTION

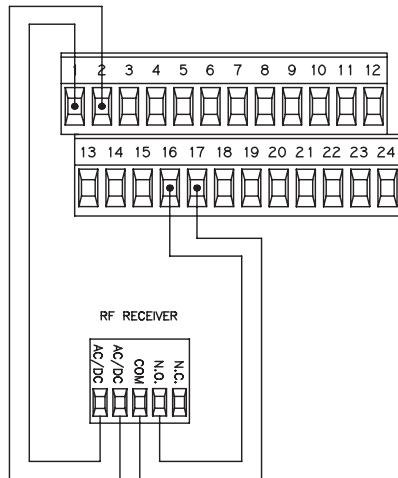
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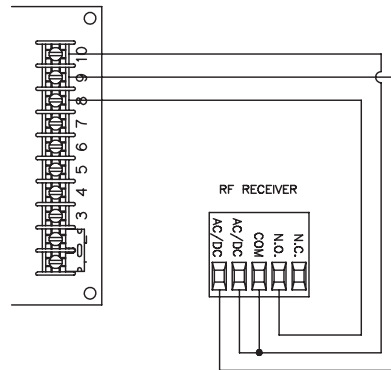
Appendix - Wiring Diagram

8310-865 RF RECEIVER SINGLE DOOR WIRING

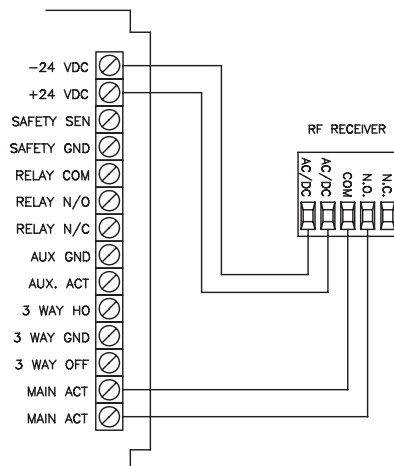
4630/4640 SERIES ELECTRIC AUTO-EQUALIZER



7900 SERIES PNEUMATIC AUTO-EQUALIZER



9100 SERIES BENCHMARK



SENIOR SWING – 2800/9500 SERIES MID SWING – 2900/9700 SERIES

