

### 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**



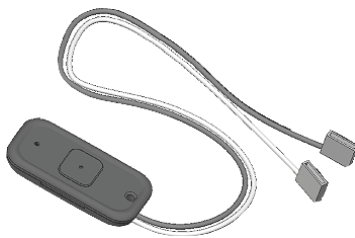
**8310-862  
TWO BUTTON**



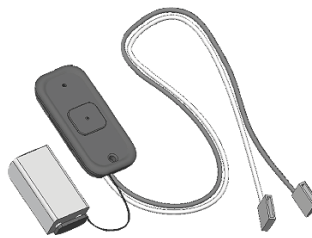
**8310-863  
THREE BUTTON**



**8310-864  
FOUR BUTTON**



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



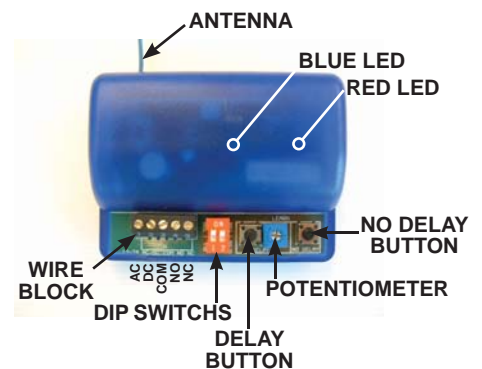
**8310-844 - ONE BUTTON,  
9 VOLT w / WIRE LEADS**



**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<br>BLUE - Relay Activation                                           |
| DIMENSIONS                                    | 2 3/4" X 1 3/8" X 9/16" (70mm x 35mm x 14mm)<br>2 3/4" x 2 1/8" x 1" (70mm x 55mm x 25mm) |
| CERTIFICATIONS                                | FCC, IC, <b>CE</b>                                                                        |



### 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



CAUTION

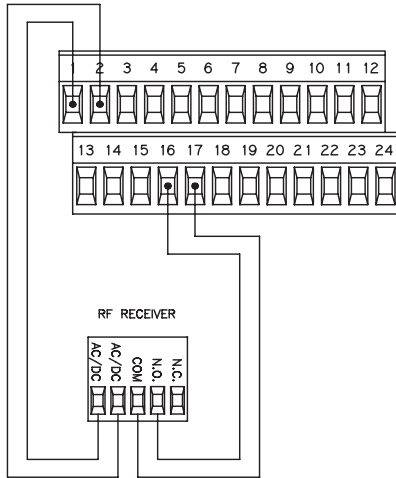
Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please contact LCN at 1-800-526-2400. If you must wait for the following workday to call LCN, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation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

For more information, visit [www.lcn.ingersollrand.com](http://www.lcn.ingersollrand.com).

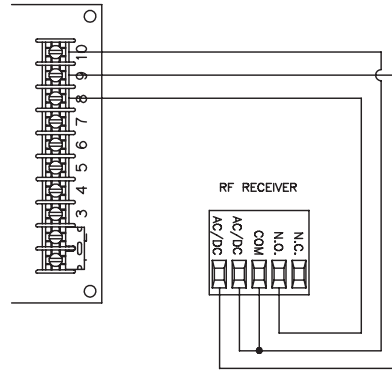
# Appendix - Wiring Diagram

## 8310-865 RF RECEIVER SINGLE DOOR WIRING

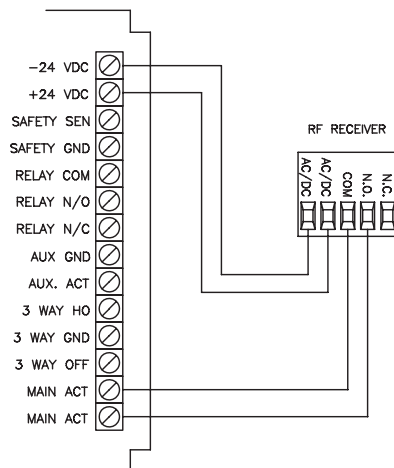
4630/4640 SERIES  
ELECTRIC AUTO-EQUALIZER



7900 SERIES  
PNEUMATIC AUTO-EQUALIZER



9100 SERIES  
BENCHMARK



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

