

# **SmartSync™ Wireless User Manual**

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## Section 2 – Safety Check List

Rolling doors are large, movable objects. They move with the help of electric motors or manual operators (chain, crank, push up, etc), and most have springs under high tension. These items and their components can cause injury. In order to avoid injury to yourself and others, please follow the instructions in this manual.

- Review the potential hazards and preventative measures listed below:

**Table 2.1 - Potential Hazards and Preventative Measures**

Potential Hazard		Preventative Measure
	<b>⚠ DANGER</b> Pinned or crushed by closing door.	<ul style="list-style-type: none"> <li>• Keep yourself and others clear of opening while door is in motion.</li> <li>• Do not allow children to play near or operate door.</li> <li>• Do not operate if door becomes jammed or broken.</li> </ul>
	<b>⚠ WARNING</b> Struck by adjusting wheel bar while applying spring turns.	<ul style="list-style-type: none"> <li>• Be sure bar is adequate in strength and long enough to allow installer to apply the necessary torque.</li> <li>• Make sure bar is fully seated into the adjusting wheel slot before applying pressure.</li> <li>• Use two bars while applying turns to the adjusting wheel.</li> </ul>
	<b>⚠ WARNING</b> Electrical shock.	<ul style="list-style-type: none"> <li>• Make sure electrical operator is properly grounded.</li> <li>• Turn off source power completely prior to servicing the motor.</li> <li>• Make sure wires are clear of any moving or potentially moving parts.</li> <li>• Avoid pinching wires when installing the motor cover.</li> </ul>
	<b>⚠ WARNING</b> Pinched by moving components.	<ul style="list-style-type: none"> <li>• Make sure the motor is turned off and unplugged before working with moving parts such as roller chain and sprockets, drop-out mechanisms, adjusting wheels, etc.</li> <li>• Locate the possible pinch-points of the unit (Drive chain, coil area, bottom bar, etc.) Do not operate the door while someone is near these areas.</li> </ul>

- Check the following during installation and before leaving the job site:
  - a. If the unit has tension springs, be sure the proper amount of tension is applied to the torsion springs, in order to properly counterbalance the weight of the curtain.
  - b. Securely fasten the tension adjusting wheel in place with the appropriate hardware provided.
  - c. Check that the keys and/or cotter pins have been set in place and fit properly at all sprockets or gears.
  - d. Check that the setscrews in each sprocket or gear (one over the key and one offset from the key) have been tightened properly.
  - e. Check all fasteners holding the unit to the building structures.
  - f. Check all fasteners used to assemble the components of the unit together.
  - g. Instruct owner or representative in the proper method of operating the door.

## Section 3 – Introduction

- **Introduction**

CornellCookson SmartSync Sensing wireless kit includes a transmitter and a receiver. When the sensing edge is lowering with the bottom bar and an obstacle triggers the sensing edge, the transmitter will send the reverse signal immediately to the receiver. The receiver will output this reverse signal as a relay output to the door operator to interrupt the door closing process.

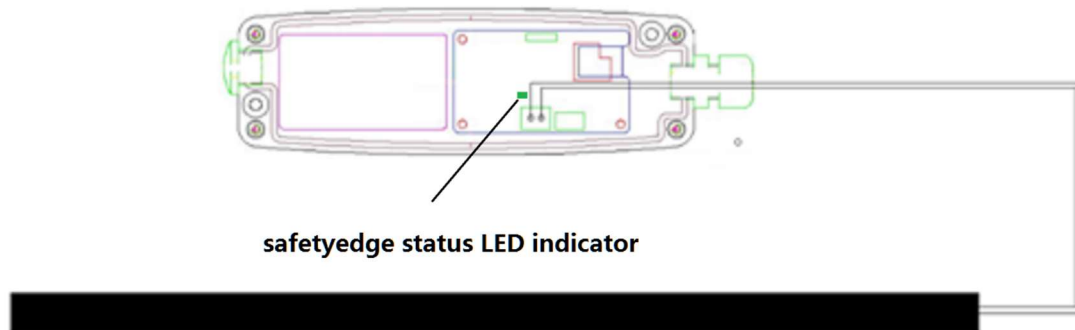
## Section 4 – Wiring & Installation

### ▪ Transmitter Wiring

1. To comply with UL 325, Rev5, the edge terminal should be with Miller monitored edge (ELR type).
2. Wire the sensing edge to the transmitter as shown in **Figure 4.1**.
3. Insert the battery that is provided into the battery pack.

**Note:** The LED light on the Printed Circuit Board will indicate the transmitter starts working. When the sensing edge is not triggered, edge triggering indicator light will be off.

**Figure 4.1 Transmitter Wiring**

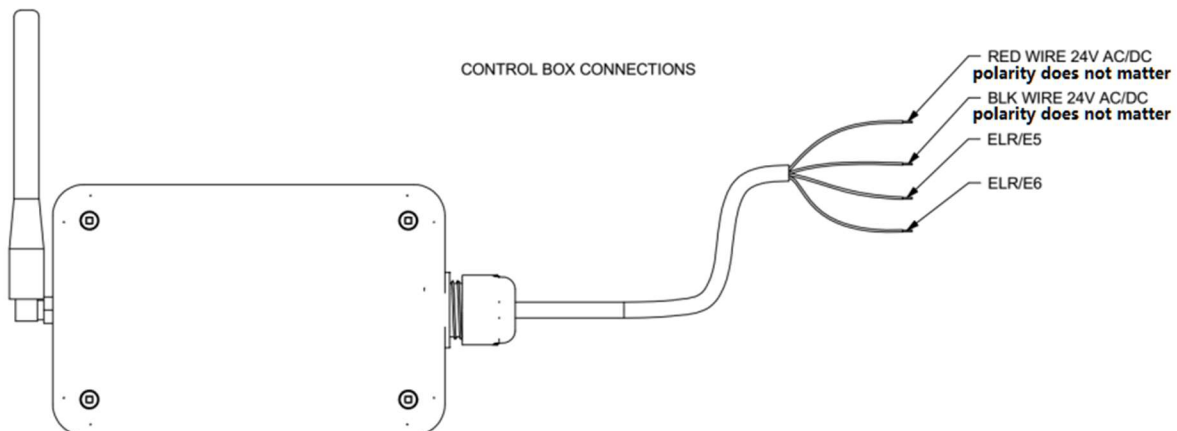


### ▪ Receiver Wiring

1. Connect the receiver to the operator control panel as shown in **Figure 4.2**.

**Note:** Refer to operator manual for connection points.

**Figure 4.2 Receiver Wiring**

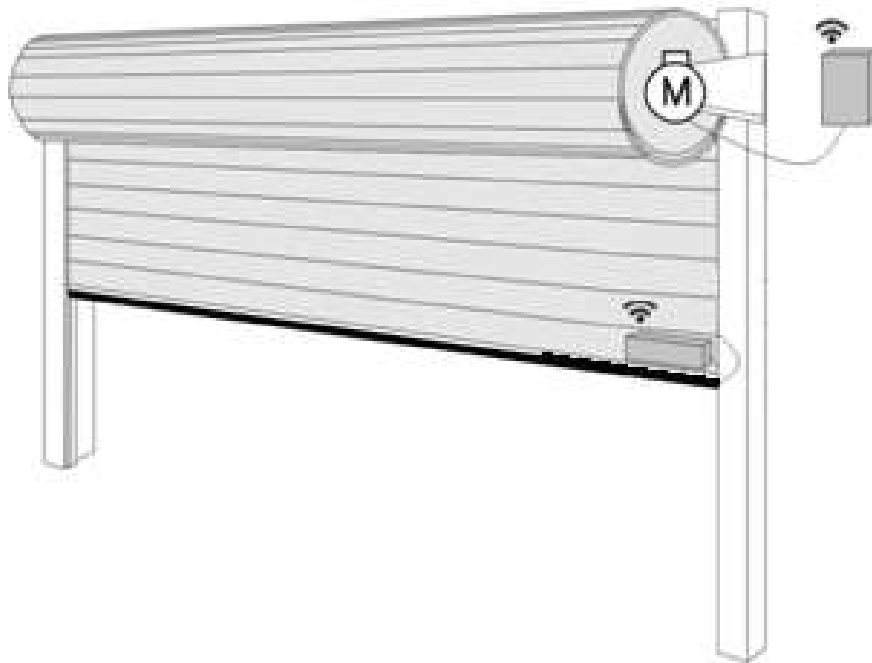


## Section 4 – Wiring & Installation

### ▪ Installation

1. Mount the transmitter on the door bottom bar as shown in **Figure 4.3**.
2. Mount the receiver on or near the door operator as shown in **Figure 4.3**.

**Figure 4.3 Receiver and Transmitter Mounting**



## Section 5 - Operation

### ▪ Pairing the Transmitter and Receiver

1. Wire the receiver and transmitter as figures 4.1 and 4.2.
2. Power off the motor.
3. Press and hold the transmitter pairing button. Green LED should start flashing. (Refer to Figure 5.2)
4. Power on the motor.
5. If pairing is successful, green transmitter LED should be solid green, and receiver should beep once.
6. If pairing is unsuccessful, yellow transmitter LED will flash. Go to step 2 to retry;

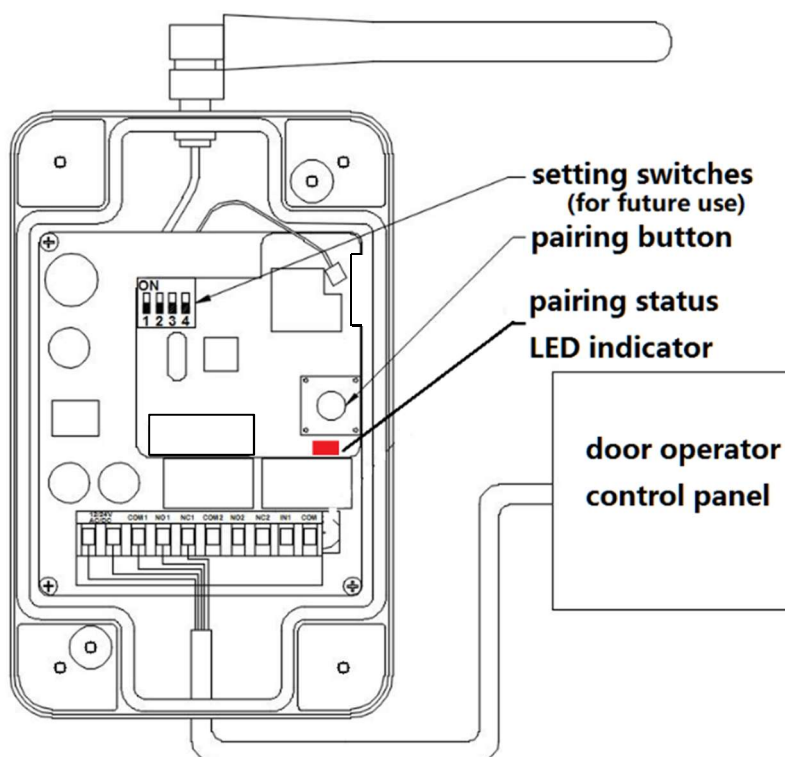
**Note:** If pairing isn't achieved after 3 attempts please contact customer service: +1-800-294-4358

### ▪ Unpairing the Transmitter and Receiver

1. Power on the motor.
2. Press and hold the transmitter pairing button for 5 seconds, then release. Yellow transmitter LED will flash;

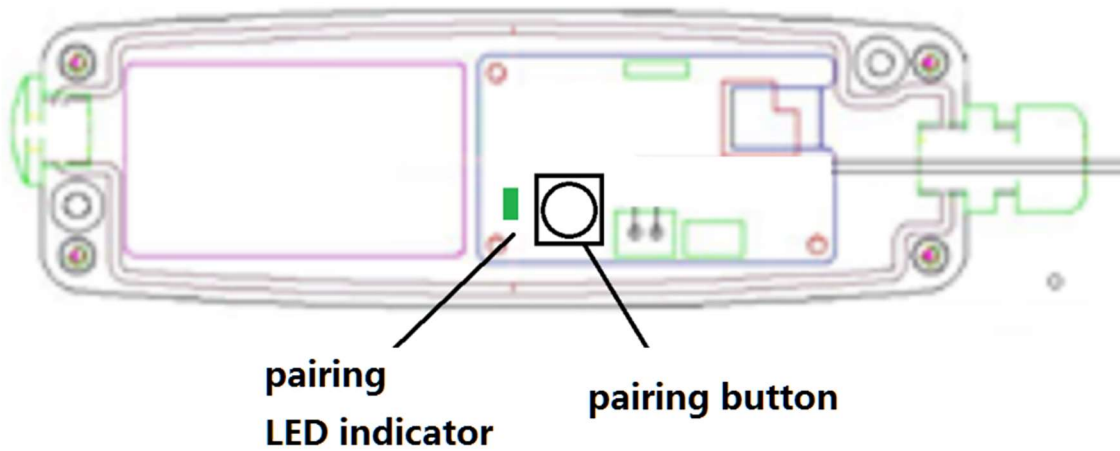
**Note:** The transmitter must be disconnected from one network in order to be connected to another.

**Figure 5.1 Receiver pairing button and LED indicator**



## Section 5 - Operation

Figure 5.2 Transmitter pair button and LED pair indicator



### ▪ **Test the Sensing Edge**

1. For your safety, do not test the Sensing Edge on a moving door in the beginning.
2. When the door is still, press the Sensing Edge. If the Receiver Green LED blinks, then the Sensing Edge is working properly.
3. Test the unit while the door is closing. When the door is closing, press the sensing edge, see if the door will stop and reverse. Make sure testing occurs above 6" of the ground.

Note: **USE TOOLS INSTEAD OF YOUR BODY TO TRIGGER THE SENSING EDGE!**

### ▪ **Indicators**

1. The Digit LCD on the receiver will show the status of the receiver:

Indicator	Meaning
noP	Not Paired
C01	1 sensing edge, normal operation
E01	Sensing edge trigger
E02	Transmitter offline
E03	Batteries low



## Section 6 – Electrical

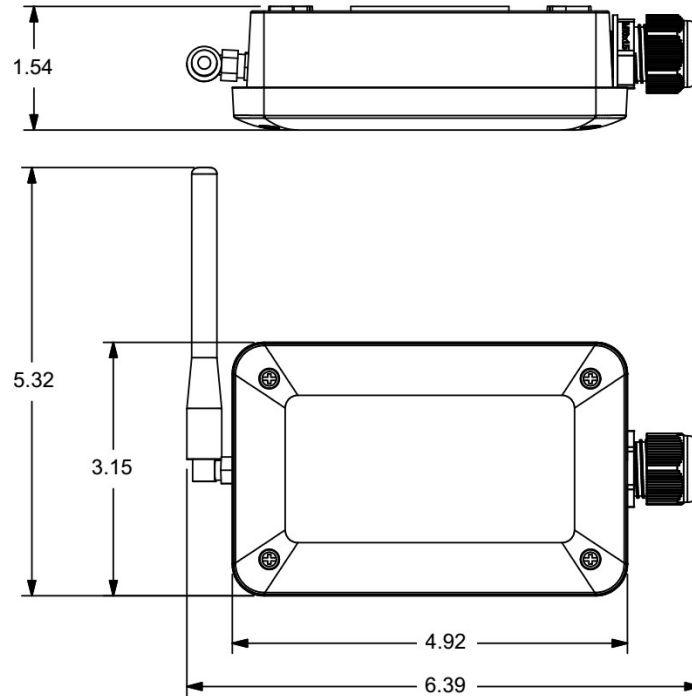
### ▪ Electrical Characteristics

Parameter	Description
Communication	Zigbee 2.4GHz
Trigger react time	140ms
Receiver Power Supply	24V AC/DC Current <100mA
Receiver Dimension	7.09"*3.15"*1.57" (18cm*8cm*4cm)
Transmitter Battery	3.6V Lithium-thionyl Chloride Battery 2400mAh * 2
Transmitter Dimension	1.77"*6.1"*1.07" (4.5cm*15.5cm*2.7cm)
Transmitter IP rating for	IP67 NEMA 4 equivalent

## Section 8 – Dimensions

### ▪ Dimensions

Receiver  
Units: Inch



Transmitter  
Units: Inch

