



QuickStart Guide (RED PCB)

TIP:

In this guide, the acronym RX refers to the WEL-200 Receiver, and TX refers to the WEL-200 Transmitter.

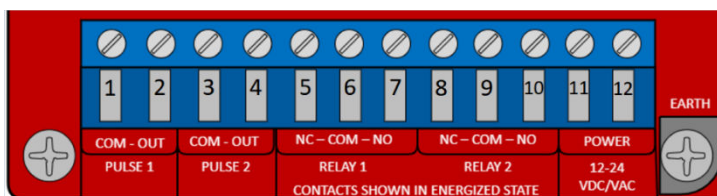
Mounting the RX and TX

1. Determine where the RX and TX will be located. Ensure there is direct line of sight (LOS) between the RX and all TX install locations. The cable grip on all RX and TX devices must be facing down to prevent water from entering the housing.
2. Mount the RX to the exterior of the operator housing using four #8 machine screws. The mounting holes can be found under the front cover. Have the RX's PCB antenna extend at least 1 inch above the operator housing to provide LOS to transmitters on the opposite side of the operator housing.
3. Mount the TX near the edge sensor using two #8 machine screws. Wire the edge into the TX's terminal blocks. There is no polarity on this wiring.

Receiver Wiring

WEL-200 Receiver Screw Terminal Block

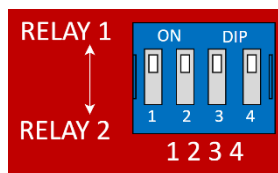
Reference the image below for terminal numbers in step 4 - 7



1. All wiring to WEL-200 devices must pass through the sealing cable grip to keep the devices waterproof.
2. Wire power from the operator to RX terminals **11 & 12**.

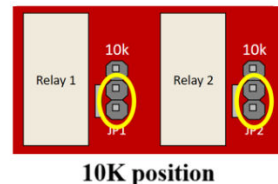
The acceptable input voltage range is **12-24VDC/AC**.

3. On the RX board, set **DIP switches 1 through 4** to "**RELAY 1**" position. This will make all four transmitter channels output through the **PULSE 1** and **RELAY 1** terminals. If more than one relay is required for the install (Open & Close Edges) refer to the WEL-200 operating instructions.

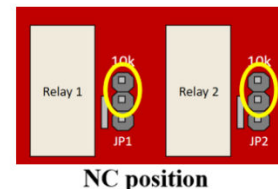


4. Determine the monitoring method the gate operator requires. The WEL-200 supports 10K and normally closed monitoring, as well as 4-wire 300/0Hz pulsed outputs.

5. For **10K monitoring**, wire operator common to terminal **6**, and the operator safety input to terminal **7**. Place the 10K enable jumper into the bottom or **ON** position (see top photo on the right).



6. For **NC monitoring**, wire operator common to terminal **6**, and the operator safety input to terminal **5**. Place the 10K enable jumper into the top or **OFF** position (see bottom photo on the right).



7. For **4-wire 300Hz/0Hz Pulsed monitoring**, wire the operator common to terminal **1** and the operator safety input to terminal **2**.

Getting the WEL-200 RX & TX Ready for Pairing (Factory Reset)

1. Insert two AA lithium batteries into the TX devices that will be paired. Apply power to the RX board.

TIP: AA Ultimate Lithium batteries must be used to obtain 2-years of battery life

2. After ~15 seconds of power being applied, the RX board should have its **SYSTEM STATUS LED** (below DIP switch) and the four **CHANNEL LEDs** (near push-buttons) blinking at the exact same rate, these are the five green LEDs on the board.

If any of the **CHANNEL LEDs** have a different blink-rate, press and hold both **CH1 and CH4 push-buttons** simultaneously until the **STATUS LED** starts blinking at a quicker rate.

This performs a factory reset and clears all previous connections. Give ~15 seconds for the device to return to a normal operating state. (Five green LEDs flashing in sync)

3. After inserting the batteries into the TX, observe the blink pattern on the **TX Status LED** (located near push-button and edge terminal). The LED should be blinking **twice quickly** every four seconds.

If you see any other blink pattern, press and hold the **TX Button** until the blink pattern described above is displaying. This removes any previous connection that may have been programmed to this transmitter.

Pairing the RX & TX

1. On the RX board, press and hold **CH1 Button** until you see the **SYSTEM STATUS LED** blink at a faster rate. This puts the RX into **PAIR MODE** for CH1. You will have two minutes to complete the pair on the TX before the pairing session times out.

2. On the TX that is to be paired, press and hold its push-button. The TX LED will begin blinking rapidly while the TX is trying to pair. Hold down the push-button until the TX's LED flashes once every four seconds, indicating a successful pair.

If the pair is failing, the TX LED will continue to blink fast while the TX Button is being held.

3. Observe the **CH1 LED** on the RX board to see the connected TX's status. One of the three states below should be seen.

- If an edge sensor is wired to the paired TX and is not shorted, then the **RX CH1 LED** should be **OFF**.
- If an edge sensor is not wired, the **RX CH1 LED** will **flash twice quickly every second**.
- If an edge sensor is wired but it is shorted (compressed), then the **RX CH1 LED** will be **ON** until the short is removed.

4. Start an open cycle and ensure shorting (compressing) the edge sensor stops the gate/door.

5. Repeat steps 1 through 4 using CH2, CH3, or CH4 for additional transmitters.