



**New World Industries Inc.**

## **RF-800 Wireless Controller**

The RF-800 wireless controller is a compact unit with two parts. One part is the Receiver unit and the other piece is the Transmitter. Receiver units are available with up to 16 DC outputs that can be used to trigger the I/O's on equipment that can be activated using DC voltage. These units can be built in various configurations. The 16-button transmitter is used to transmit a corresponding signal to the base unit or receiver.

Depending on the Receiver configuration of the remotely activated outputs, that number is reflected in the dash # suffix of the model. See suffixed coding per model showing wire colors to output function per configuration.



**Fig. 1 Standard 16 Button Transmitter & Receiver**

## **Set-up and Operation**

RF-800 wireless controllers come factory un-programmed. That means matching the Receiver to the Transmitter is done by the end-user. This gives a matched (1 of 16 million combinations @ 418MHz) interface between the Transmitter and Receiver unit. See **Transmitter button assignments** and **Programming** section for details.

## Transmitter Button Assignments

The RF-800 comes in 6 different standard configurations. These set-ups determine the output types the Receiver delivers to the component it is connected to and are designated by the part number suffix -1 thru -6. An example would be an RF-800-1 would configuration 1. With this there are 2 factors. 1<sup>st</sup> is the standard wire color that corresponds to the numbered button on the Transmitter. Below is the Receiver wire color to the Transmitter button number charted.

<b>#1 Button-Yellow</b>	<b>#9 Button-Yellow striped</b>
<b>#2 Button-White</b>	<b>#10 Button-White striped</b>
<b>#3 Button-Green</b>	<b>#11 Button-Green striped</b>
<b>#4 Button-Blue</b>	<b>#12 Button-Blue striped</b>
<b>#5 Button-Brown</b>	<b>#13 Button-Brown striped</b>
<b>#6 Button-Orange</b>	<b>#14 Button-Orange striped</b>
<b>#7 Button-Purple</b>	<b>#15 Button-Purple striped</b>
<b>#8 Button-Pink</b>	<b>#16 Button-Pink striped</b>

**\*\*\*\*When Double-pole circuit is used; #16 wire is Gray and Transmitter button does not function\*\*\*\***

**Red wire-DC power supply**  
**Black wire-DC ground**

2<sup>nd</sup>, below are the RF-800, 6 standard Receiver output configurations.

### **RF-800-1**

- Outputs #1 thru #15 momentary double-pole outputs. Receiver #16 is double-pole output (gray wire). Transmitter button #16 does not function.

### **RF-800-2**

- Outputs #1 & #2 reverse polarity circuit. Outputs #3 thru #12 are momentary double-pole circuits and Receiver #16 (gray wire) as the double-pole output and Transmitter button #16 does not function.

### **RF-800-3**

- Outputs #1 thru #16 momentary.

### **RF-800-4**

- Outputs #1 thru #12 momentary double-pole outputs. Outputs #13, #14 & #15 latching circuits and Receiver #16 (gray wire) as the double-pole output and Transmitter button #16 does not function.

### **RF-800-5**

- Outputs #1 & #2 reverse polarity circuit. Outputs #3 thru #9 momentary double-pole. #10 (no output wire) E-stop PWM circuit. Output #11 decrease PWM & Output #12 increase PWM (Maximum current output 2.0 amps over 3 seconds from 0 amp start). Output #13 momentary without double-pole. Output #14 latching circuit. Output #15 momentary ground circuit. Circuit #16 (gray wire) is the double-pole output and Transmitter button #16 does not function.

## **RF-800-6**

- Outputs #1 thru #8 latching. Outputs #9 thru #15 momentary double-pole and #16 (gray wire) as the double-pole output and Transmitter button #16 does not function.

### **Programming, Set-up of Transmitter to Receiver Address**

The next step to the RF-800 installation is to create a 1 in 16 million address between the keyfob and the base unit. All Transmitters are pre-programmed at the factory and require no set-up. To match the Transmitter to the receiver, (Up to 5 Transmitters can be addressed matched to a single receiver) follow these steps:

- Power-up the RF-800 receiver with top cover removed. If equipped, the green LED will light when power is supplied.
- Inside the receiver box (**See Fig. 1**) locate and push the black learn address button next to the red LED. The red LED will begin to flash.
- Firmly depress and release any button on the transmitter within 15 seconds while the red LED is flashing on the Receiver. Once Transmitter button has been pressed the black programming button on the Receiver can be depressed to shut off the LED or it will also shut off automatically after 15 seconds ending the programming mode.

**\*\*Every time a Transmitter button is depressed, the red Receiver LED will light if functioning correctly\*\***

Replace the Receiver cover and the RF-800 is now ready to use.

## **Battery Replacement**

The transmitter uses a standard 9VDC battery. In normal use it will provide 1 to 2 years of operation. To replace the battery, remove the Transmitter boot. Access to the battery compartment is at the lower rear. Once the battery is replaced, check operation. If the control does not operate, repeat the previous paragraphs steps to reset a new address.

## **Other Considerations**

Only one transmitter at a time can be activated within a reception area. Only one carrier of a particular frequency may occupy the same airspace at a given time. This means that if two transmitters are activated in the same area at the same time the signals could interfere and the receiver will not see a valid transmission and the RF-800 will not function as designed.

For further technical assistance please contact New World Industries Inc.

