

# GAMA ELECTRONICS

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## RF12V-2PR-ASL Instruction Manual



### Included in this Kit:

- (1) RF340-4PR-ASL Receiver
- (1) 4-Button Transmitter

### Available accessories:

- Additional Transmitter KF340-4A-WP
- Package of 6 A23 12V Alkaline Batteries A23-6
- Clear Protective Transmitter Pouch ZLB-67

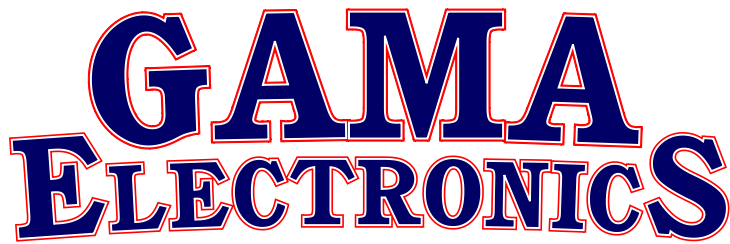
The RF12V-2PR-ASL remote control operates at a fixed frequency of 340MHz. The input voltage is 12VDC and the control provides two polarity reversing outputs. Up to 30, four-button keyfob transmitters (Model KF340-4A-WP) can be used to activate the receiver's relays. Input power and the two polarity reversing output connections are provided by wire leads; a 30A ATC type fuse holder is supplied on the +12VDC input power wire.

Each transmitter has a unique address that is transmitted when a button is pressed. A "program" switch with LED is provided on the receiver to program the transmitter(s) address into the receiver's memory. The program switch/LED indicates the receiver's programming status and illuminates when either relay is energized. The receiver is encased in a small, waterproof enclosure. The operating range is at least 100 ft.

**Maximum ratings:** Power for the receiver can be in the range of 10VDC to 15VDC. The receiver is reverse polarity protected. The relay contacts are rated at 30A @ 13.8VDC. The control can provide 30A maximum between the two outputs.

**Power Consumption:** 10mA when the relays are de-energized, 45mA when each relay is energized.

**Momentary and Latching Output:** The remote control has two modes of operation, momentary or latching. The momentary output of the receiver will be active for as long as the transmitter switch is depressed and will return off when the switch is released. For latching output, the output will turn on and stay when the transmitter switch is pressed, pressing the same transmitter switch again will turn off the output. Each output can be programmed for momentary or latching. For details on how to configure the unit for momentary or latching output, please see the programming instructions on page 2.



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## **Programming Instructions**

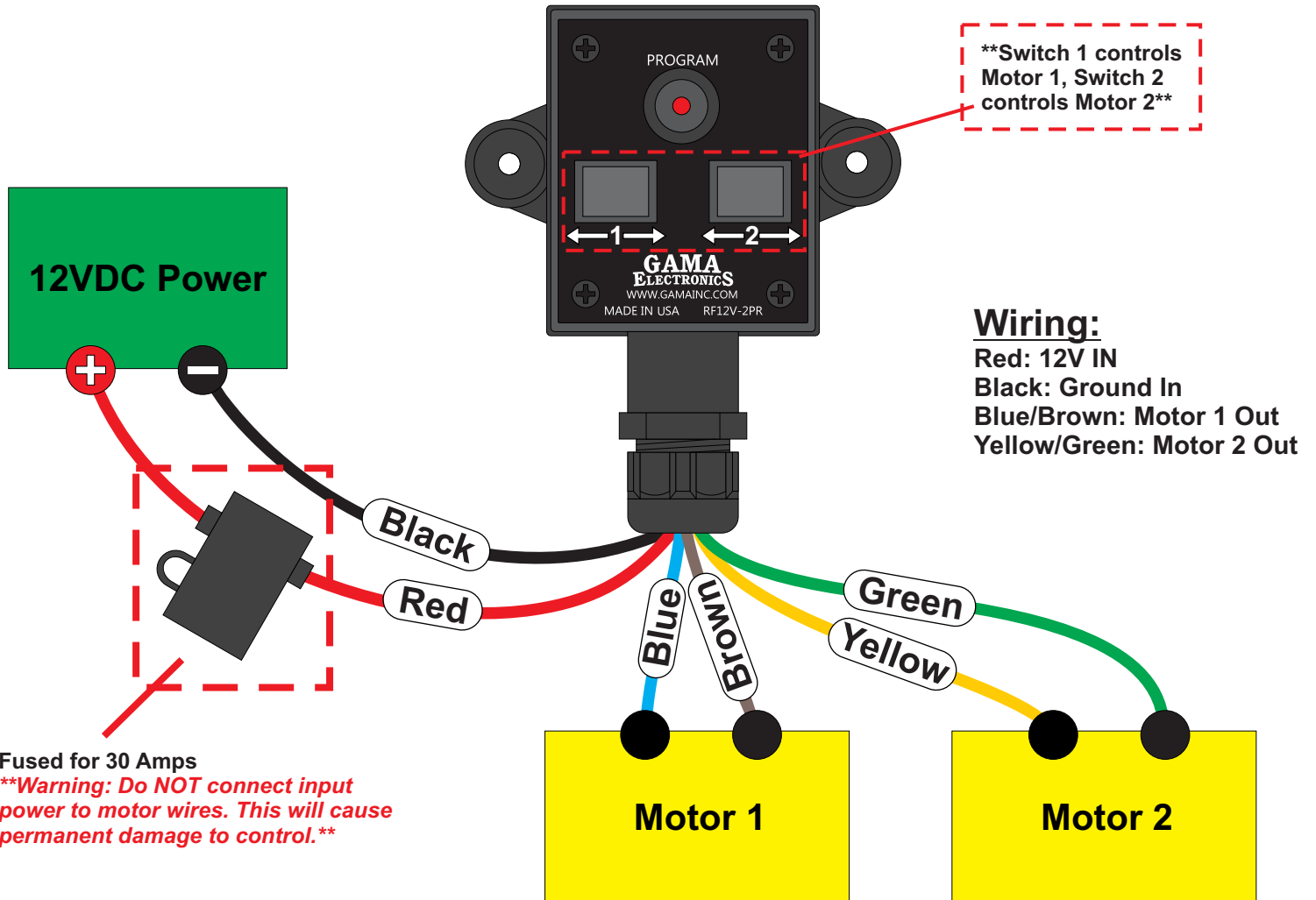
# **RF12V-2PR-ASL**

## **Instruction Manual**

Each transmitter has its own unique internal address that is transmitted whenever a switch is pressed. The receiver needs to be programmed to respond only to transmitters it is intended to operate with. The following steps configure the receiver to operate with a particular transmitter(s). Up to thirty transmitters can be programmed to one receiver. Please read the entire programming procedure before starting. Prior to programming the receiver, verify that the receiver is connected to the input power. When the receiver enters program mode, all previous transmitter addresses that were programmed will be erased from the receiver's memory.

1. Locate the pushbutton switch labeled "PROGRAM" on the receiver. Press and hold this switch until the red LED on the center of the switch button illuminates (approximately 3 seconds). The receiver is now in the transmitter program mode, release the switch. At this point, all the previously programmed transmitter addresses are erased from the receiver's memory.
2. **Two Momentary Outputs:** The transmitter up-arrow switch is used to select both outputs for momentary operation. Press and release the up-arrow switch and the program LED will blink once to indicate both outputs are set for momentary operation.
3. **Two Latching Outputs:** The transmitter down-arrow switch is used to select both outputs for latching operation. Press and release the down-arrow switch and the program LED will blink once to indicate both outputs have been set to latching operations.
4. **M1 Output Momentary, M2 Output Latching:** The transmitters left-arrow switch is used to select M1 output momentary and M2 output latching. Press and release the left-arrow switch to configure the outputs, the program LED will blink once to indicate M1 is momentary and M2 is latching.
5. **M1 Output Latching, M2 Output Momentary:** The transmitter right-arrow switch is used to select M1 output latching and M2 output momentary. Press and release the right-arrow switch to configure the outputs, the program LED will blink once to indicate M1 is latching and M2 is momentary.
6. For additional transmitters to be programmed, follow steps 2 through 5. The last transmitter programmed will determine how the outputs are configured.
7. The receiver will return to normal mode if no transmitter switches are pressed for 5-seconds. The red LED on the receiver will flash and then turn off. The receiver is now in the normal mode of operation. This completes the programming instructions. The receiver will retain the programming of the transmitter even when power is removed.

### Wiring Diagram



## **Troubleshooting**

All remote-control systems shipped by GAMA Electronics are 100% functionally tested just prior to shipment.

If your RF remote control system does not work out of the box, stops working or functions intermittently please take the following steps to resolve common issues. Please note that you must be 2-3 feet away from the receiver when operating the remote control. Operating within 2-3 feet may result in no operation or intermittent operation.

### **1. Replace the A23 12V Battery in the transmitter**

- The remote control can activate during shipping and drain the battery that is installed in the control. We send a replacement battery with the system if this occurs.

### **2. Check the voltage supply at the receiver**

- The receiver is designed to function at 10-15VDC. Voltage on the (+) and (-) terminals on the control should be within this range.

### **3. Reprogram the remote control**

- If the system is non-functional try to reprogram the remote control. The program may not have taken during the programming process or the program button may have been pressed. If the program button is pressed the memory of the remote controls programmed to the receiver are erased.

### **4. Listen and look for functionality on the receiver.**

- The LED that is used for programming the system will illuminate when the receiver is activated. You will also hear a “click” when the internal relays engage. If you can see the LED illuminate and you hear the relay “click” the issue is most likely in the wiring or device being controlled.