GAMA Electronics, Inc.

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RF Receiver Model RF12V-2PR Instruction Manual

Overview:
The RF12V-2PR remote-control operates at a fixed frequency of 340 MHz. The input voltage is 12VDC and the control provides two polarity reversing outputs. Up to 12, 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 30-ampere ATC type fuse holder is supplied on the +12-volt DC 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 feet.

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

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

Programming Instructions: The remote-control outputs can be programmed for momentary or latching. Each transmitter has its own unique internal address. The receiver needs to be programmed to respond only to the specific transmitter it is intended to operate with. The following steps configure the receiver to operate with a transmitter or transmitters. Note: When programming the transmitter to the receiver, hold the transmitter about an arm's length away from the receiver, having the transmitter too close to the receiver will over-modulate the signal and transmitter may not program to the receiver.

Momentary and Latching Output: The remote control has two modes operation, momentary or latching. The momentary output of the receiver will be active for as long as the transmitter switch is depressed and will turn 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. Transmitter switches 1 through 4 are used to set the two outputs.

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 previously programmed transmitter addresses are erased from the receiver's memory.

2. **Both Outputs Momentary**. 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. **Both Outputs Latching**. 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 operation.

4. **M1 Output Momentary, M2 Output Latching**. The transmitter 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.

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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.