



GAMA Electronics, Inc.

WEB: www.gamainc.com
E-MAIL: gama@gamainc.com

P.O. Box 1488 Crystal Lake, IL 60039 TEL: (815) 356-9600 FAX: (815) 356-9603

RF Receiver Model # RF340-4PR-NTO Instruction Manual

Overview:

The RF340-4PR-NTO is an RF receiver operating at a fixed frequency of 340 MHz. The receiver operates from 12VDC and provides four polarity reversing outputs. Up to twelve, twelve-button transmitters (model RFT340-4PR-NTO) can be used to activate the receiver's relay. The receiver has terminal blocks for connecting the power and relay contacts. Each transmitter has a unique address that is transmitted when a button is pressed. A "program" button is provided on the receiver to program the transmitter(s) address into the receiver's memory. An LED on the receiver indicates the receiver's programming status and illuminates when the receiver is energized. The receiver is encased in a small, waterproof enclosure. The operating range is at least 100 feet. Operating temperature range - 0° F to 160° F.

The transmitter has two buttons assigned to each of the four outputs. The up (^) button runs the motor in one direction and down (v) button runs the motor in the opposite direction. The transmitter has two buttons labeled "ALL" that activate all four outputs. The outputs are energized for as long as the buttons are depressed.

Current Detection:

The RF340-4PR-NTO incorporates a current detection circuit that will disconnect the outputs when any one output exceeds 30 Amperes. When multiple outputs are activated, the total current of all active outputs are monitored. The sum of the current for all outputs will trip the current shutdown when 80 amps is exceeded. When the current shutdown activates, all outputs are shut down for 5 seconds. After the 5 second time out the outputs will automatically be re-activated.

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.

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

Dimensions: Receiver dimensions are approximately 5" L x 5" W x 2" H.

Programming Instructions:

Each transmitter has its own unique internal address that is transmitted whenever a button 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 twelve 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 labeled "PROGRAM" on the receiver. Press and hold this button until the red LED next to the program button illuminates (approximately 2 seconds). The receiver is now in the transmitter program mode. Release the pushbutton. At this point all previously programmed transmitter addresses are erased from the receiver's memory.
2. Press and release any button on the transmitter and verify that the red LED on the receiver extinguishes and then illuminates (blinks once).
3. Repeat previous step for additional transmitters that will operate with this particular receiver. The red LED on the receiver will extinguish and illuminate one time for the first transmitter being programmed, twice for the second, three times for the third, four times for the fourth etc. The receiver will not respond to transmitters that have already been programmed.
4. After 5-seconds of no switch being pressed on the transmitter(s) the receiver will return to normal operation. The red LED on the receiver will blink rapidly, then extinguish. The receiver is now in the normal mode of operation. This completes the programming instructions. The receiver will retain all of its programming even when power is removed.