

RF1 Remote Control - Eight Channels



Electrosol Technology

1. Overview

RF8 is a combination of RF transmitter with 8 switches and RF receiver contains 8 relays which can be controlled wirelessly. This makes the unit very easy to operate and integrate with existing systems.

Keys 1 to 8 on the remote control operate the corresponding relay on the receiver board, i.e. Button 1 operates relay 1, button 2 operates relay 2, etc.

Relay contact can control any equipment in momentary mode (On till key pressed) or Latch Mode (Toggle on each key press). Each relay has indicator LED showing current status.

The transmitter uses a RF transmitter working at 433 MHz with Manchester encoding to transmit data about which button is pressed.

At the receiver end the RF receiver module extracts the data signal from the carrier frequency. ET-RF CODEC from Electrosol Technologies decodes this signal and sets the corresponding output high. This active HIGH output is used to operate a relay via ULN2803 which is an octal transistor array.

2. Features

- ❖ Transmitter operating range up to 100 Mts
- ❖ On Board 3V Battery Operated Transmitter
- ❖ Receiver Indicates output status by LED
- ❖ Receiver operates from 12V AC or DC power supply
- ❖ Relay contact are brought out as Screw
- ❖ Terminals

3. Applications

- ❖ Burglar alarm system
- ❖ Smoke and fire alarm system
- ❖ Garage door controllers
- ❖ Car door controllers
- ❖ Car alarm system
- ❖ Security system
- ❖ Cordless telephones
- ❖ Other remote control systems

4. Specification

4.1. Transmitter

- ❖ Operating Voltage 3.0V DC Battery
- ❖ Idle Operating Current <0.1 mA @3.0VDC
- ❖ Active Operating Current on Key Pressed 4.6 mA @3.0V DC
- ❖ RF Carrier Frequency 433 MHz
- ❖ Range of Operation Approx. 100 Mts

4.2. Receiver

- ❖ Operating Voltage 12.0V DC Adapter
- ❖ Operating Current (All Relays Off) <14 mA @5.0VDC
- ❖ Operating Current (All Relays On) 250 mA @5.0V DC
- ❖ RF Receiver Frequency 433 MHz

5. Contact Information

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6. Ordering Information

Part No	Part Description
RF-1	RF Remote Control – Eight Channels