ABACOM
Technologies

# 8CH-SRX RF Remote Control Receiver Module

The 8CH-SRX remote control receiver is extremely versatile with its eight independently configurable relay output channels. Each relay output may be configured to either latch or to pulse, in response to a valid received command from the companion transmitter. The 8CH-SRX remote control receiver assembly comprises of two stacked 4CH-SRX receiver assemblies with the antenna, RF receiver section and power supply regulator are populated on the lower printed circuit board. The 8CH-SRC is compatible with our remote control transmitters such as the 1CH-REML, WCTL-TX2, WCTL-TX4, 16CHTX, TX12E, 18CHTX and the LIBERTY series.

The top and bottom assemblies plug into each other via a 12 pin connector and the two are secured together via screw fastened aluminum standoffs to form one robust unit .

Two Versions

Economy version (pictured) is supplied with fixed screw terminals.

Plus version is supplied with right angle terminal headers and plug-in
screw terminal connectors.
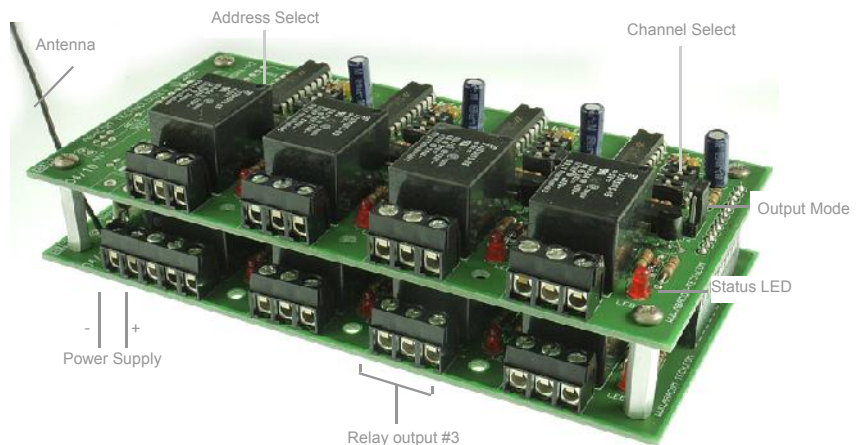
Connection Details

Power supply connection and relay outputs are all via the screw terminal blocks. The designation of each terminal may also be found on the underside of the printed circuit board. The external power supply may be 7.5VDC-28VDC, and be must be capable of supplying at least 350mA if all relays are to be energized simultaneously.

The loads connected to the relay outputs must not exceed the relay contact rating of 10A @ 24Vdc.

Configuration

The system is supplied pre-configured and therefore reconfiguration may only be necessary to suite the user's preferences.

System Address:

The 8 position address DIP switch configures the system address and must match that of the transmitter. We do not recommend address settings of *all* switches set to ON or *all* switches set to OFF. The units are supplied with default configuration of switch 2 and 4 set to ON position and switches 1, 3, 5-9 OFF.

Channel Configuration:

The 4 position 'channel DIP switch' configures each channel to operate according to a particular switch on the companion transmitter. Refer to the transmitter manual for switch/channel coding details.

Latched Mode / Pulsed Mode Configuration

Each channel may be independently configured to operate in latched mode or pulsed mode with the appropriate positioning of the 'mode' jumper.

Latched mode: Upon momentary activation of the associated transmitter key, the channel output relay will energize, and remain energized until the next momentary activation of the transmitter, at which time the associated relay will de-energize.

Pulsed Mode: Upon momentary activation of the associated transmitter key, the channel output relay will energize briefly (~0.5sec) and then de-energize automatically. If the transmitter key is held down, the relay will remain energized for 0.5s after the key is released.
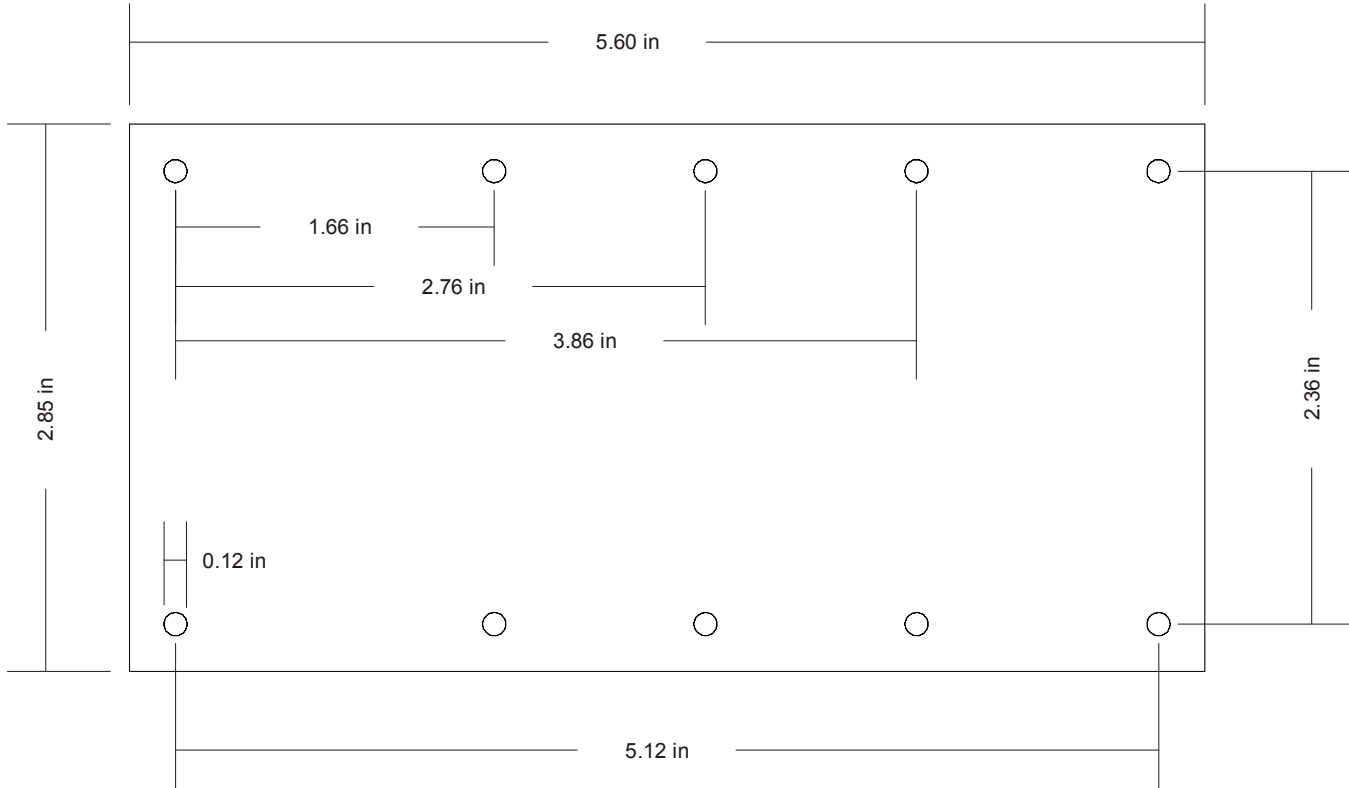
Antenna

The 8CH-SRX is supplied with a 1/4 wave wire antenna attached to the board. Optional external (off-board) antenna may be used. Contact ABACOM Technologies' technical support for further information on external antenna hookup.

Technical Specifications

Operating Voltage	7.5VDC-28VDC
Operating Current (standby, no relays energized)	10mA
Operating Current (8 relays energized)	320mA
Relay Contact Rating	10A @ 24VDC 16A@250VAC (resistive)
Relay Contact (single pole)	NO/NC/COM
Relay Output Mode	Jumper Selctable: Latch or Pulse
RF Receiver Section	
Operating Frequency	433.92MHz, 868MHz, 914.5MHz *
Sensitivity	-107dBm typical
RF bandwidth	+- 200KHz typical
FM Deviation	+- 25KHz typical
Dimensions	5.6in. x 2.85in. x 1.65in.

*version dependant

Mechanical Outline and Hole Dimensions

5.60 in

1.66 in

2.76 in

3.86 in

2.85 in

2.36 in

0.12 in

5.12 in