

# 8X2CHRX-8 8X2CHRX-16

## 8 Relay RF Remote Control Receiver 16 Relay RF Remote Control Receiver

Compatible with the 16CHTX and the 18CHTX transmitters, these receivers provide multiple channel outputs suitable for a broad range of remote control and remote triggering applications. The receiver may be configured for either latched or pulsed (momentary) mode via a jumper setting on the board. In momentary mode, the relay will be energized for as long as the associated key or input on the transmitter is keyed or active. In latched mode, the relay is energized and de-energized by successive keying or triggering of the associated key or input of the transmitter.

Only one relay may be energized at a time. On power up, **in latched mode**, relay 1 will automatically energize and remain energized until a signal is received from the transmitter. In pulsed mode, all relays will be de-energized on power-up.



### Features

- 16 x SPDT relays (-16 version)
- 8 x SPDT relays (-8 version)
- 16A / 230VAC relay contact rating
- 7.5VDC-16VDC operation
- 20mA consumption in standby : pulsed mode (no relays energized)
- 110mA max. consumption
- 110mA consumption in standby : latched mode (one relay energized)
- RPSMA antenna connector facilitates antenna choices and antenna extension cables
- FM or AM versions on 433.92MHz
- FM versions available on 433.92 or 868.35MHz
- 256 user configurable address setting for multiple unit operation
- Secure protocol prevents false triggers
- Screw terminal power and relay connectors
- Stacked top and bottom boards plug-in for easy separation and installation
- Open field range ~500 ft, typical
- Dimensions(-16 version): 6.5" x 3.2" x 1.65" (excluding antenna connector)
- Dimensions(-8 version): 6.5" x 3.2" x 0.8" (excluding antenna connector)

## Configuration

- 1. Set the receivers 8 position DIP address to match the address setting on the transmitter. If multiple transmitter and receiver sets are used within radio range of each other, the address setting of each set must be different to prevent cross triggering. (default setting is DIP switch 2 ON and 4 ON. The rest are set to OFF).
- 2. Set the mode jumper for momentary mode (default) or latched mode.
- 3. Connect external devices the relay screw terminals.
- 4. Connect an external 12VDC power supply to the power supply input screw terminal, observing polarity. The receiver is reverse polarity protected and reverse power connection will not cause harm the receiver will simply not power ON. Upon power ON, the Power LED will illuminate and the receiver will be standby, waiting for a signal from the transmitter. If latched mode is selected, relay 1 will energize automatically.

#### Antenna

There are several RPSMA antenna types suitable for direct connection to the receiver. For applications that require the antenna to be indirectly mounted, RPSMA antenna extension cable can be used. Experimentation will find the best position for the antenna, but generally, a vertically oriented antenna will produce the best results. It is important is to allow as much free space around the antenna as possible.

RPSMA antenna and antenna extension cables are available on our website at the following link: http://www.abacom-tech.com/Antenna-C23663.aspx

#### 8X2CHRX Anatomy

16CHTX



18CHTX

### **Mechanical Dimensions**



### **Electrical Characteristics**

	Minimum	Typical	Maximum
Operating Voltage	7.5VDC	12VDC	16VDC
Current Consumption		20mA	110mA
Operating Frequency– FM Versions		433.92MHZ 868.35MHz	
Operation Frequency- AM Version		433.92MHz	
Relay Contact		16A@250VAC	
Operating Temperature		-20 to +70 deg. C	
Antenna Connector		RPSMA	
Receive Sensitivity		-105dBm	