



1&2-CH-xxx-REML RF Remote Control Modules

Not to be compared with basic keyfob type transmitters. The 2CH-xxx-REML industrial RF remote control transmitter and receiver system is a highly versatile design which establishes a reliable 2 channel remote control link, suitable for a multitude of applications. Built-in error checking and robust communication protocol ensures reliability and safeguards against false triggers.

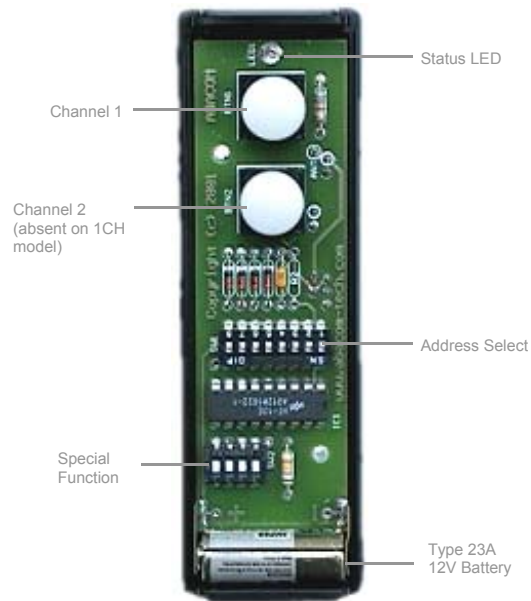
Transmitter Features

- 256 unique address combinations
- 1 or 2 channel configurations
- High Quality tactile pushbuttons
- Integral helical antenna
- Status LED
- Ergonomic handheld enclosure
- Black (standard) or Bone enclosure options
- Belt Clip (option)
- Special function switches for unique customization
- Compatible with the 16CHRX 16 channel receiver modules
- Lightweight and rugged
- AM or FM options
- 433.92MHz, 315MHz & 916.5MHz frequency options
- 300ft range (AM), 400ft range (FM); typical

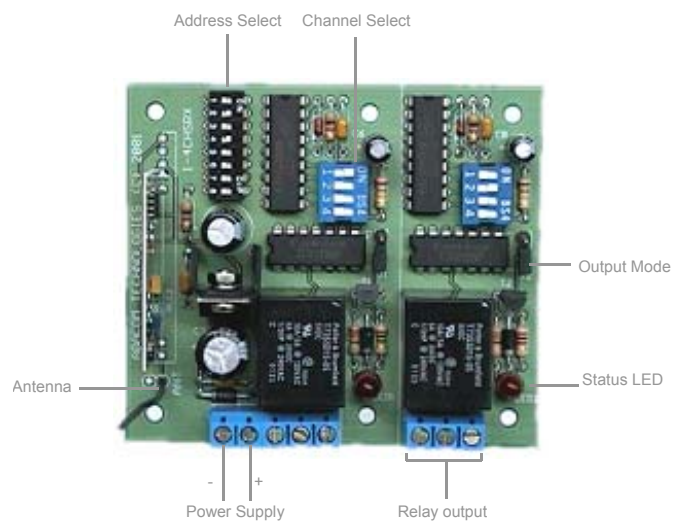
Receiver Module Features

- Latch or Pulse relay outputs
- Wide supply range: 7.5V-15V
- Individual channel selection
- Customizable pulse timing
- Available in 1,2,3,4 up to 16 channels
- Channel status LED's
- Single pole, normally open & normally closed, 10amp relay contacts
- AM or FM options
- Reverse polarity protected power input

Dimensions: 1" x 1" x 4.5"



Dimensions: 3.25" x 2.86" x 0.8"



System Configuration

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

The 8 position address DIP switch on the transmitter and receiver must be configured similarly to establish a link. One of up to 256 unique settings may be selected.

The 4 position channel select DIP switch is configured to match the code associated with the transmitter key switch: (see *special function* for further details)

Receiver Channel DIP Switch	Transmitter Key Switch 1	Transmitter Key Switch 2
1	ON	OFF
2	OFF	ON
3	OFF	OFF
4	OFF	OFF

Note: The 4 position DIP switch on the transmitter is intended for specialized functions when used with the 4channel receiver modules. The default positions are all OFF. Changing these positions will change the code associated each key would therefore will need to match the channel select DIP switches on the receiver. The above table is valid only for the default setting of all positions in the OFF state.

Special Function

When the 1CH-REML is used together with the 16CHRX receiver, the above table does not apply. The configuration of the 4 position DIP switch will determine which output of the 16CHRX receiver is active when the 1CH-REML button is pressed. For example, with all 4 switches set to OFF (which is equivalent to binary 1111 or decimal 15) output 16 of the 16CHRX receiver will go active (high). With all 4 switches set to ON (which will be equivalent to binary 0000 or decimal 0) output 1 on the 16CHRX will go active when the 1CH-REML transmitter button is pressed.

Power Supply Connection- Receiver

The two channel receiver draws approximately 200mA with both channels energized. (90mA per active channel plus 10-20mA for the radio receiver section).

A power supply that is able to source at least 250mA at a DC voltage of between 7.5V and 15V will be suitable. This may typically be a wall adaptor or battery. The supply polarity should be observed and connected according to the labeled image. The polarity of the power supply terminals is also labeled on the solder side of the receiver printed circuit board.

Relay output Connection:

Each relay has three terminals: Normally Open (NO), Normally Closed (NC) and Common (COM). The relay contacts are capable of switching current up to 5amps. With the receiver channel in its quiescent state—relay off, LED off—the NC and COM terminals will be connected to each other and the NO and COM terminals will be open. With the receiver channel energized—relay ON, LED ON—the NO and COM terminals will be connected to each other and the NC and COM will be open. Based on this operation, the connection to external device will depend on the application.

Latched Mode / Pulsed Mode Configuration

Each channel may be independently configured to operate in latched mode or pulsed mode by 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 is held down, the relay will remain energized until 0.5s after the key is released.