

# Key Chain Transmitter and Receiver Module

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[Model # KEY-TXRX]

Compact and rugged our 4-channel key chain transmitter and receiver modules are perfect for quickly and easily adding RF capability to your electronic projects. Connect the 4-channel output to micro-controllers, leds or relays/transistors to drive higher output loads, the possibilities are endless! The modules operate in the 433MHz band and are usable at distances of up to 135 feet. 256 possible address combinations allow multiple transmitter/receiver combinations to be utilized in the same area.

## Transmitter Specifications

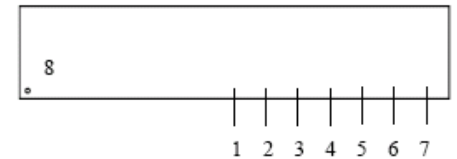
	MIN	TYP	MAX	UNIT
Operating Voltage	-	12	-	Volts
Current Consumption During Transmit	-	4	-	mA
Operating Temperature	-10	-	70	C
Transmission Frequency	-	433	-	MHz
Data Rate	-	4	-	kB/s
Transmission Power	-	10	-	mW
Transmission Type	-	ASK	-	-



Receiver Pinout

## Receiver Specifications

	MIN	TYP	MAX	UNIT
Operating Voltage	4	5	6	Volts
Current Consumption	2.7	4	7	mA
Operating Temperature	-10	-	70	C
Reception Frequency	-	433	-	MHz
Reception Type	-	ASK	-	-
Sensitivity	-	-95	-	dBm
Maximum Current Output	-	-	5	mA



1 - 5V                      2 - Data Valid  
3 - Gnd                    4 - Output D  
5 - Output B              6 - Output C  
7 - Output A              8 - Antenna

## NOTES

- Never draw more than 5mA from each receiver output pin.
- For higher output current a transistor should be used. A 2N2222 with a 1k base resistor works well.
- A 24 cm or 9.4 inch piece of wire can be used as the receiver's antenna.
- Transmitter uses a 12 volt alkaline battery model # 27A

**ALTHOUGH THIS DEVICE MIGHT COMPLY WITH CERTAIN LOCAL RF EMISSION REGULATIONS, NO GUARANTEE IS MADE AS TO ITS LEGALITY FOR USE. IT IS THE USER'S RESPONSIBILITY TO ASSURE THEIR USE COMPLIES WITH ANY LOCAL REGULATIONS.**

## Changing the Receiver and Transmitter Address

The default address of both the receiver and transmitter are pre-set to 0. There are 256 different address combinations that can be set.

The 256 combinations are derived from 8-bit “jumpers” which can be bridged with solder on both the receiver and transmitter.

The following is an example of a transmitter and receiver set to an address of “0x03”. Bit 1 and 2 are pulled high, where as the other bits are pulled low.

NOTE: When changing the address bits of the receiver, make sure it is not powered. The transmitters batteries should also be removed when changing the address bits.

