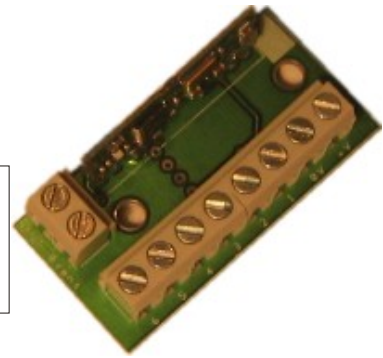


6 CHANNEL CODED RADIO TRANSMITTER

Part number ETR6-434

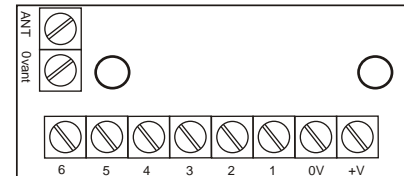


Description

A tiny PCB with a high quality licence free radio transmitter which can transmit up to 6 different channels. Comprising a high power FM transmitter and on board regulator on a PCB measuring only 48.5x24.5x23.5 LxWxH. Compatible with ERX2-433 and with a nominal range of over 700 Metres.

Specification

Parameter	
Current drain	
Transmitting	3.2mA
Not transmitting	2.5uA
RF frequency	434.075 Mhz
Operating temperature	-25 to +55C
Operating voltage range	6V to 12V
Code length	24 bit +control bits
Code frequency	8KBPs
Trigger current	max 0.5mA



Connections

+V	Positive supply (+6V to +12V)
0V	Supply 0V connection
1	Channel 1 trigger
2	Channel 2 trigger
3	Channel 3 trigger
4	Channel 4 trigger
5	Channel 5 trigger
6	Channel 6 trigger
ANT	RF antenna out
0Vant	Antenna ground connection

Operating instructions

To transmit, connect the channel input to 0V through, for example, a pushbutton or relay contacts. As soon as the channel is triggered, the code will continually transmit. Any number of channels can transmit at the same time in this way. When the trigger is removed, the circuit will go back into standby mode and consume only 2.5 uA.

An antenna must be connected to the ANT output to ensure maximum RF emitted power and range. For best results, use a piece of wire of length 155 mm. If greater range is required, connect the 155mm antenna perpendicular from the centre of a groundplane which is connected to the 0Vant output. Never connect the ANT input to 0V or 0Vant, as this could cause permanent damage to the radio module. If the antenna is to be connected at a distance from the PCB, then connect using co-axial cable of 50 ohms characteristic impedance.

See the connection example on the right which shows how to connect channels 3 and 5 using two normally open pushbuttons with a 9V PP3 battery for power.

