

MCT91508

8-Channel, 915MHz Transmitter with Frequency Hopping

Features

- Eight channels with simultaneous channel transmission.
- Digital Coding, 12-way dipswitch.
- Can operate several transmitter next to each with no interferences or jamming.
- Red light, indicates transmission, flashing light is flat battery (Battery at 6 volts).

Applications

- Industrial Automation, eg Crane Control, winches, wireless cement truck operation
- Equipment and machinery control
- Home Automation and Security



Description

The transmitter uses frequency hopping to allow multiple transmitters to be used in close proximity with no interference or jamming. This technology is usually use in very expensive equipment and military applications. Elsema has developed a world first low cost hand held frequency hopping transmitter.

The transmitter uses a selective digital coding called Multicode Technology. A fixed code is set using the 12-way dipswitch and during transmission the code is transmitted over several different frequencies.

12-Way Dipswitch Setup Instructions

To program the transmitter to the receiver you simply match the transmitter and receiver dipswitches. To prevent other transmitters triggering your receiver make sure that the first 8 dip switches are different on the two separate systems.

More advanced programming features

Dip switch 9, 10, 11 and 12 will determine the position of the first channel on the Multicode transmitters and receivers. Other channels are sequentially placed.

Relay	DS 9	DS 10	DS 11	DS 12
Position 1	0	0	0	0
Position 2	0	0	0	1
Position 3	0	0	1	0
Position 4	0	0	1	1
Position 5	0	1	0	0
Position 6	0	1	0	1
Position 7	0	1	1	0
Position 8	0	1	1	1
Position 9	1	0	0	0
Position 10	1	0	0	1
Position 11	1	0	1	0
Position 12	1	0	1	1
Position 13	1	1	0	0
Position 14	1	1	0	1
Position 15	1	1	1	0
Position 16	1	1	1	1

1 = Dip Switch in "On" position 0 = Dip Switch in "Off" position

Example 1:

Using an 8-channel MCTR91508 receiver.

If the MCTR91508 has 0101 0100 1000 set to the 12 way dipswitch, this sets the receiver first relay (Ch.1) to position 9 i.e. 1000. The other channels are sequentially placed.

This is shown in the table below:

Relay Channel	Position	DS 9	DS 10	DS 11	DS 12
1	9	1	0	0	0
2	10	1	0	0	1
3	11	1	0	1	0
4	12	1	0	1	1
5	13	1	1	0	0
6	14	1	1	0	1
7	15	1	1	1	0
8	16	1	1	1	1

To program a 2-channel MCT91502 transmitter to the receiver relay channel 7 and 8 you need to set the 2 channel transmitters dip switch to 0101 0100 **1110**.

To program a 1-channel MCT91501 transmitter to receiver relay channel 3 you need to set the transmitters dip switch to 0101 0100 **1010**.

Example 2:

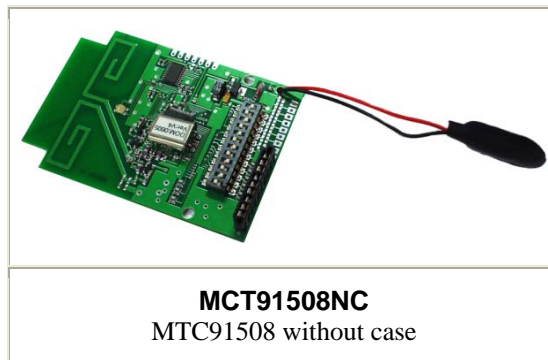
Using two separate 2-channel MCTR91502 receiver coded to one 4-channel MCT91504 transmitter.

If one of the MCTR91502 receiver has 0011 1100 1000 set to the 12-way dipswitch, this sets the receiver first relay (Ch.1) to position 9 i.e. 1000. The second relay (Ch.2) is sequentially placed to position 10 i.e. 1001.

Set the second MCTR91502 receiver to 0011 1100 1010 (position 11). Again, the other relay channel is sequentially placed to position 12 i.e. 1011.

Set the four channel MCT91504 transmitter to 0011 1100 1000. This sets the transmitters first button (Ch.1) to position 9 i.e. 1000. The other channels are sequentially placed i.e. button 2 is position 10, button 3 is position 11 and button 4 is position 12.

Products in the Range



MCT91508NC
MTC91508 without case

Technical Data

Supply Voltage	9-Volt Battery
Current Consumption	65.00mA
Flat battery indicator	Red light flashes at 6.0V
Standby Current	5 uA
Frequencies	915 to 927MHz
Operating Temperature Range	-20 to 70 degrees
Type of Emission	Frequency Modulation (FM)
Frequency Deviation	+/- 32 KHz Non-return to zero
Band Width	+/- 140 KHz (99% of power)
Dimensions MCT91508NC	80 x 55 x 10mm
MCT91508	130 x 67 x 27mm
Weight	20g
Useable Receivers	MCTR91508SS, open collector output with 10 – 28 AC/DC Supply MCTR91508R, Relay output with 11-28 Volt AC/DC supply
Operating range	150 metres

Many of the Multicode technical features are industry firsts, so take your time to read the datasheets and let the technology take you away. Watch your competitors follow you

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