

Operation Description of Transmitter

Operation Frequency: 2402.399 MHz – 2437.79 MHz

The above frequencies can be set through the 6-dip SW on the back of the Remote Control

$$f = (26/2^{16}) * (6049476 + i * 3 * 504) \text{ MHz}$$

where $i = 4, 5, 6, \dots, 63$ adjust through the 6-dip SW

Frequency Channel: Total 60 Channels

Modulation Type: MSK or QPSK 500Kbps
GFSK or OOK 250Kbps

The transmitter is formed by 3 parts:

- 1).MCU:PIC16F73 and its around circuit
- 2).RF Module: CC2500
- 3).Frequency channel selection circuit

MCU PIC16F73 parameters of frequency channel, channel spacing and RF power according to frequency selection by users. data is sent to RFSDI,RFSDO,GDO2,GDO0, RFSCCK, RFnSEL of RF module from the pins RC3,RC0~RC4 of PIC16F73, PIC16F73F sent a control code to control its transmission, Pin XOSC-Q1 and XOSC-Q2 of CC2500 module output time baud rate. 2.4GHz is transmitted is transmitted by antenna. The transmission is stopped once key is released. PIC16F73 controls relevant red LEDs on.

RA0 of PIC16F73 connects to the driver of LED indication. 3 red LEDs indicate the time of the 3 relevant vibration. RC4~RC7 connects to the frequency channel selection.