

## Operation Description of transmitter

Operation Frequency: 433.050M, 433.150M, 433.250M, 433.350M, 433.450M, 433.550M, 433.650M, 433.750MHz; 434.050M, 434.150M, 434.250M, 434.350M, 434.450M, 434.550M, 434.650M, 434.750MHz.

Modulation Type: FSK

The transmitter is formed by 3 parts:

- 1) MCU PIC16F72 and its around circuit;
- 2) RF module;
- 3) Frequency channel selection circuit.

MCU PIC16F72 sets parameters of frequency channel, channel spacing and RF power according to frequency selection by users. Data is sent to pins of SDI, SCK and NSEL of RF module from the pins of RA0, RA1 and RA2 of PIC16F72. PIC16F72 sends a control code to the RF module to control its transmission. Pin nIRQ of the RF module outputs time baud rate. Transmission signal is written to pin FSK at the decreasing time of the baud rate. 433 MHz is transmitted by antenna. The transmission is stopped once key is released. PIC16F72 controls relevant red LEDs on.

RB of PIC16F72 connects to keys. RC of PIC16F72 connects to frequency channel selection and the driver of LED indication. 3 red LEDs indicate the time of the 3 relevant vibrations.