

Operation Description

Operation Frequency: 2410M-2470MHz

Modulation Type: MSK

The radio system is mainly composed of three parts: radio modem, frequency synthesizer and base band microprocessor. The radio modem is a MSK modem running at 250 kbps. The antenna is an embedded PCB antenna matching is done by using lumped inductors and capacitors.

The micro-controller scans keystrokes on the joypad, then packs the data by adding preambles, frame information, and error checking bytes. The radio system uses one of 57 channels (the frequency range is 2.410-2.470GHz) to send signal.

The joypad radio is powered by 2-AAA side batteries and regulated to 3.0V. The power consumption of RF module is about 4mA, the total power consumption of the joypad side radio system is about 8mA in normal working mode. It will enter sleep mode if no key be pressed after 5 minutes, in this mode the total power consumption of joypad is only about 40uA*.