

## Operational description

This is a remote control to control light-bulbs wirelessly. The system included two parts of PCB circuitries, RF module board and main control board.

The RF module board supported by an ultra low power high performance IEEE802.15.4 wireless microcontroller, JN5168, operated at 2.4GHz to 2.48GHz, Oscillator is 32MHz. It had a printed circuit Antenna for the wireless transmission. The RF module board is soldered directly on the main control board.

The main control board included all the functional keys circuitry and LEDs eg on/off button, brightness control button and lighting group number buttons. These function keys are control by the wireless microcontroller through the GPIO data registers.

The whole system is operated at 3V with two AAA batteries.