

Circuit Description

The remote transmitter is a Surge protected strip (model NO. :RC-05) low powered by a 12-voltage battery within handheld box for remote controlling the domestic electrical appliances. Its signal could reach range of 80 feet at line of sight. While operating, the red LED lighted for indicate the ON/OFF status when buttons is pressed. And the remote will send a 433.92MHz signal out when pressing the ON/OFF button, the signal will automatically off within 5 seconds, The transmitter is designed to operate on a single fixed frequency at 433.92 MHz.

The ON/OFF button is generate address data which is unique and trigger the integrated circuit IC1 to produces the control signals then modulate with the carrier signal which generated by a SAW(Surface Acoustic Wave) resonator as RF control signal. The NPN transistor Q1 as amplifier to enhance control signal strength then output from Q1 and coupled to the PCB antenna on-boarded then transmit on the air. The couple network is comprised of C1, C2 and C3.

The transmitter is manually operated by button pressed in toggle style to cooperated with IC1 latch mode internally, and IC1 will control the signal which will send out.