

Main Circuit Description:

Upon activation of one of the control switches, a 3V signal is sent to the micro controller. The micro controller flashes the LED in response. Depending on the switch input, the micro controller sends one of two signals patterns (high-low pattern) to the transmitter circuit, which results in a signal pattern transmission.

Transmitter Circuit Function:

Upon receiving a signal input (high) from the main circuit, the radio frequency amplifier and oscillator circuits are activated and an unmodulated signal at a frequency of 433.92 MHz is generated and transmitted via the antenna network, until the signal state from the main circuit changes (to low). The 433.92 MHz signal is generated from a crystal oscillator operating at 13.56 MHz base frequency, modulated 32x (to 433.92 MHz) via a voltage-controlled oscillator (VCO) and loop filter.