IR34A Icon remote circuit description

The 4MHz resonator act as an oscillation clock to the 128K MCU and the 32.768KHz crystal provide an oscillation clock to the LCD MCU.

The modulation provided by the 128K MCU. The output of RF circuitry has the matching network consisting of inductor and capacitor that limit the harmonic content and effect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a 17cm long enameled wire antenna for 418MHz and 11cm long enameled wire antenna for 310MHz.

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There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 4.5 Volt (" AA" size battery x 3) primary battery.

Operation Descriptions

The transmitter is a battery operating at 310 and 418MHz band. The transmitter is powered by a 4.5V battery ("AA" size battery x 3). When remote in x10 device mode, It will modulating signal on the 310MHz carrier frequency. Other then x10 device mode (like TV, VCR...etc), the modulating signal will on the 418MHz carrier frequency. The transmitter is a ON/OFF keying type transmitter. The EUT continues to transmit while keyboard is being pressed.