

Theory of Operation

Product : Fireplace controller

Model Number: RCSIT-TX

EMITTER DESCRIPTION

1. Emitter Power Voltage: D.C 3.3V
2. Basic Frequency: 32.768KHZ
3. Emissive Frequency: 350MHZ Modulating manner: AM

4. Work process:

- a. Power supply and Low Battery detect. 3XAAA batteries for power supply. U1, regulate the voltage to 3.3V. Battery detect circuit detect the input voltage to MCU.
- b. System reset. When the reset button is pressed, the system will be reset.
- c. Temperature detect. Measure the temperature through a thermistor(TH1) get the signal to MCU.
- d. Input, settings, display and RF signal output. MCU get the settings input from rubber keys. Then display the message on LCD display. MCU encode the address setting and the command code, then send the signal out to RF transmit unit. The signal is modulated with 350MHz carrier frequency and sent out through antenna.