

Operational Description

Product: Touch screen fireplace controller

Model Number: TS-TX

Transmitter Description:

1. Tx module power voltage 3.3V (U4);
2. TX carrier frequency 350MHZ(TX module board Y1);
3. TX modulating manner ASK
4. MCU main oscillator 4MHZ(main board Y1);

5. Work process

- 1) Power supply and Low Battery detect. 4XAAA batteries for power supply.
U3 regulate the voltage to 4.4V. Battery detect circuit detect the input voltage to MCU.
- 2) Temperature detect. Measure the temperature through a thermostat sensor(RT1) get the signal to MCU.
- 3) Input, back light, LCD display and RF signal output. Once any input from touch panel the back light should be on, MCU get the settings input from touch panel. 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.