

Circuit Description

Student Remote

The student's remote obtains power from two 1.5V AA batteries. The heart of the student's remote is the MCU, which obtains inputs from the keyboard and produces outputs to the LCD display. The device makes use of an NRF24RF chip antenna to communicate with the receiver in the 2.4GHz band, and is also capable in emitting and receiving in 100 different channels. The transmitting frequency is regulated by a crystal oscillator. There is no external ground connection, nor is there any protruding antenna assembly.

The operation is achieved by receiving and transmitting signals to and from the receiver in the 2.4GHz band. It also provides appropriate response to the user on the LCD display when user input occurs via the keypad.