

Wireless Lights and Sounds of Christmas Circuit Description

Transmitter: Power Input from 12V AC (AC/AC adapter) and pass the rectify diode (D1 to D4) give direct current .

Using Regulator U4 LM 7809 provide 9V DC voltage to Audio Amplifier IC TDA 2822. Using Q1 8050 and zener diode Z1 6.2v and D2 diode 1n4148 provide 4.8 V DC voltage to RF transmitter module board and IC PT2262 and PT4450, also using U5 S78DL33 3.3V regulator provide 3.3v to Music IC GPR16256B and GPC11096A.

When unit is powered up, Music IC GPR16256B will detect sw1 and sw2 position. It will get music data from GPC11096A and send 6 bits control data code from IOC0 to IOC6 to encoder IC PT2262 D0 to D5 and A5 pins, and then IOC7 pin of GPR16256B will go low level voltage, PT2262 encode data to serial coded waveform through resistor RR17 pass to PT4450, PT4450 will modular data to ASK/OOK and then transmit .433Mhz is a SAW oscillator for PT 4450.