

Circuit Description of Remote Control Tank Transmitter

Model:

Version: 0

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The circuit employs a 9 function Remote Controller IC IC1. By using 8 switches and connecting TURBO to GND, the IC can generate 9 different encoding data. These encoding signal are output from SO pin to a 27MHz oscillator. The transmitter uses a 9V battery as the power source. The circuit has a Z1 3.9V Zener diode to convert 9V DC to 3.9V DC for IC1 VDD.

Q1, X1, L1, related resistors and capacitors form an RF oscillator, which generates a 27.145MHz signal as the carrier frequency. The oscillator will turn ON and OFF according to the SO data signal, hence the 27MHz signal becomes a modulated RF signal.

Q2 and other components form a RF amplifier. It amplifies the modulated RF signal and ready output to antenna.

There is a filter circuit between the RF amplifier and antenna. The filter circuit can filter and reduce the harmonics of RF signal. The components of the filter are C8, C9, T1 and L3.