



Circuit Description

a. Emitter Circuit Description

In transmit mode the emitter is switched so when pressing buttons of L,R,B,F which connected to the IC code part modulate the crystal controlled oscillator Q1 by decoding four different codes. This oscillator produce HF 27.145MHZ to the input of the amplifier Q2. L3 C6 C7 emit the frequency after modulate the code.

b. Receiver Circuit Description

In transmit mode the antenna is transformer coupled to the oscillator, Antenna received HF 27.145MHZ to the input of Q1. Q1 is the ultra-regenerate detector. It modulate the code and decoded by IC U2 to control Q2, Q3, Q4, Q5 which release signal to drive the motor forward or backward or Q6 Q7 Q8 Q9 to drive the motor turn left and right by coil.

c. Emitter's Antenna and Ground Circuitry

The emitter makes use of an extendable 24.5cm long antenna. The antenna is inductively coupled. The unit relies on the ground tract of printed circuit board. No external ground circuit is provided. Emitter is supplied by two 1.5Volt AA batteries.

d. Receiver's Antenna and Ground Circuitry

The receiver makes use of a external flexible 15cm long antenna. The antenna is inductively coupled. The unit relies on the ground tract of printed circuit board. No external ground circuit is provided. Receiver is supplied by one 1.2Volt rechargeable battery.