

**Applicant: UNION TOYZ LTD**  
**FCC ID: TF2-1201**

**CIRCUIT DESCRIPTION:**

**IN TRANSMIT MODE:**

After TX unit is switched "ON" and press either S1 or S2 the transmit frequency is oscillated by X1 and mixed with the encoded signal from SO port (pin 8) of U1 by Q2 then coupled through L4 to antenna.

The low pass filter made up of C7, L3 & C8, which is connected to the antenna.

4 x 1.5V Battery supplies energy.

**IN RECEIVE MODE:**

The receiver part is using a Super regenerator circuit and Q1 is Super regenerator & detector, D1 is the precision voltage regulator, U2 is the signal decoder. Q4, 7, is the tunnels of the motor driver. Q5, 6, 8 & 9 is the current driver of the left/right motor. Energy is supplied by 4 x 1.5V battery.

**ANTENNA AND GROUND CIRCUITRY.**

The unit makes use of an external 14-inch rod antenna, the antenna is inductively coupled, the unit relies on the Ground trace of the printed circuit board. No external ground is provided.

4 x 1.5V battery supplies energy.