

Assortment No: 83002  
Project: 9.6V Dub City Radio Control Car  
Frequency: 27.145 MHz  
Rev: 00

## **CIRCUIT DESCRIPTION**

### **IN TRANSMIT MODE:**

After TX unit is switched “ON” and press either K1, K2, K3 or K4 the transmit frequency is oscillated by X101 and mixed with the encoded signal from SO port (pin8) of U2 by Q101 then coupled through T101 to antenna.

The low pass filter made up of C108, T101 & C109, which is connected to the antenna.

A 9V Alkaline Battery supplies energy.

### **IN RECEIVE MODE:**

The receiver part is using a Super regenerator circuit and Q1 is the Super regenerator & detector, D1 is the precision voltage regulator, U1 is the signal decoder. Q5, 6, is the tunnels of the motor driver. JK1, JK2 (Relay) is the power control of the Forward / Backward motor. Q13, 14, 15 & 16 is the current driver of the left/right motor. Energy is supplied by 9.6V rechargeable battery.

### **ANTENNA GROUND CIRCUITRY**

This unit makes use of an external 20-inch rod antenna, the antenna is inductively coupled, the unit relies on the Ground trace of the circuit board. No external ground is provided.

A 9V alkaline battery supplies energy.