



**Echo Toys Limited**

力圖玩具有限公司

**Model No: 90333LC (49.860MHz)**

### CIRCUIT DESCRIPTION

In transmit push IC input pin F and L and R. Output of IC pin 8 drives Q2, output of Q2 drives the transformer T3, which modulates the crystal 49.860Mhz controlled oscillator Q1. This oscillator is the transmitter. The antenna is transformer coupled to the oscillator. In receive L1 turning 49.860Mhz frequency and Q1 are RF amplifier and detector stages. IC control receiver signal to output pin F and L and R., Q10, Q11, Q2, Q3 to driver Q12, Q13, Q14, Q15 and Q4, Q5, Q6, Q7 become driving the motor.

### ANTENNA AND GROUND CIRCUITRY

This unit makes use of an external flexible 17 centimeters long antenna. The antenna is inductively coupled. The unit relies on the ground tract of the printed circuit board. No external ground is provided. Energy is supplied in a 9-volt battery.