

Model No: 90448-49.860MHz

## CIRCUIT DESCRIPTION

In transmitter, U1 is a digital proportional remote IC. Turning the VR2, U1 pin 12 supply digital proportional encoding signal. Q1 & X1 is a crystal oscillator of 49.860MHz frequency. Q2 is a modulator. Output of Q2 drives the transformer L3. The antenna is coupled to the modulator by the transformer.

In receiver T1 is tuning 49.860MHz frequency. Q1 is a RF amplifier and detector stage. U1 is a signal amplifier and decoder, it controls the output of U1 pin10 which is a digital proportional signal. Q2, Q3, Q4 are motor driver.

## ANTENNA AND GROUND CIRCUITRY

This unit makes use of an external 99 centimeters long extension 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 a 9-volt battery.

ROOM 1108 PENINSULA CENTRE , 67 MODY ROAD , TSIM SHA TSUI EAST , KOWLOON , HONG KONG. TEL :  
( 852 ) 2723 8038 FAX : ( 852 ) 2665 4068  
E-MAIL ADDRESS: [general@echotoys.com.hk](mailto:general@echotoys.com.hk)