



Early Light Industrial Co., Ltd

project No. : 851815
Model Name : Night Spinner
Frequency : 27.145, 40.885 &
49.86 MHz
Date : 03 June, 2003
Prepared By : S. M. Moh
REV : 01

TEL: 852-28448866 EXT 354
49.86 MHz
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Electronics Department (CIRCUIT DESCRIPTION)

CIRCUIT DESCRIPTION:

IN TRANSMIT MODE:

When TX unit is switched "ON", A CW signal is transmitted. The frequency oscillated by V1 and modulated RF signal output from IC3 pin 5 (RF0) is coupled through L3 to antenna.

The low pass filter made up of C6, L2 & C7, which is connected to the antenna. The modulation is provided by IC3. The modulated RF signal will be send out if either SW1, 2, 3 or 4 is pressed.

A 9V Alkaline Battery supplies energy.

IN RECEIVE MODE:

Q1 is the Supper regenerator & detector, ZD1 & Q14 are the precision voltage regulator, IC1 is the signal decoder. Q4, 5 10 & 11 is the tunnels of the motor driver. Q2, 3, 6, 7, 8, 9, 12 & 13 are the current driver of the two motors. Energy is supplied by 6x1.5V AA size Alkaline battery.

ANTENNA AND GROUND CIRCUITRY.

This unit makes use of an external 8-inch antenna, the antenna is inductively coupled, the unit relies on the Ground trace of the printed circuit board. No external ground is provided.

A 9V alkaline battery supplies energy.