



Early Light Industrial Co., Ltd

TEL: 812-28448866 EXT 354	Project No.	: 851815
49.86 MHz	Model Name	: Night Spinner
FAX: 812-24136147	Frequency	: 27.145, 40.885 &
	Date	: 01 June, 2003
	Prepared By	: S. H. Mok
	REV	: 02

Electronics Department (CIRCUIT DESCRIPTION)

CIRCUIT DESCRIPTION:

IN TRANSMIT MODE:

When TX unit is switched "ON", A CW signal is transmitted. The frequency oscillated by T1 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 4x1.5V 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.