



# Early Light Industrial Co., Ltd

Project No. : #0271,0272 & 0273  
Model Name : Crazy Cabby, Whistling Wolfy, Diamond deuce  
TEL (HK): 852-29448866 EXT 354 Frequency : 27.145, 40.685 & 49.86 MHz  
(China): 86-755-84651111 EXT 410 Date : 19 May,2004  
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(China) 86-755-84651847 REV : 00

## Electronics Department

### CIRCUIT DESCRIPTION:

#### IN TRANSMIT MODE:

After TX unit is switched "ON" and press either S1, 2, 3, 4, 5, 6 or 7 the transmit frequency is oscillated by Y1 and mixed with the encoded signal from IOD5 port (pin 14) of U1 by Q201 then coupled through T201 to antenna.

The low pass filter made up of C201, L201 & C202, which is connected to the antenna.

A 9V Alkaline Battery supplies energy.

#### IN RECEIVE MODE:

The receiver part is using a Supper regenerator circuit and Q1 is the Supper regenerator & detector, ZD1 is the precision voltage regulator, IC1 is the signal decoder. Q2, 3, 8 & 9 is the tunnels of the motor driver. Q4, 5, 6, 7, 10, 11, 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.