

# Early Light Industrial Co., Ltd

Project No. : #9001

Model Name : Chimpanzee head

TEL (HK): 852-29448866 EXT 354 Frequency : 27.145, 40.685 & 49.86 MHz

(China): 86-755-84651111 EXT 410 Date : 10 September, 2005

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# **Electronics Department**

## **CIRCUIT DESCRIPTION:**

#### IN TRANSMIT MODE:

After TX unit is switched "ON" SW1~26 the transmit frequency is oscillated from Q65. When press SW1 ~26 the encoded signal from port 4.3 (pin 25) of U7 then mixed with the transmit frequency by Q66 and coupled through T2 to antenna.

The low pass filter made up of C68, T101 & C67, 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 Q51 is the Supper regenerator & detector, U2 is the precision voltage regulator, U6 is the amplifier of the decoder signal, U1 is the signal decoder. Q11, 14, 23, 26, 35,38, 47, 50, 17, 20, 29, 32, 41, 44, 53 &56 is the tunnels of the motor driver. Q12, 13, 15, 16, 24, 25, 27, 28, 36, 37, 39, 40, 48, 49, 51, 52, 18, 19, 21, 22, 30, 31, 33, 34, 42, 43, 45, 46, 54, 55, 57 & 58 are the current driver of the eight motors. Energy is supplied by 4x1.5V D size Alkaline battery.

### ANTENNA AND GROUND CIRCUITRY.

This unit makes use of an external 18-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.