

# Interactive Toy Concepts (HK) Ltd

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## Circuit Description

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In receive mode

Q1 is rf super-regenesis receiver and output encoded signal to q2 for amplifier, Signal to U1 DECODE then output motor driver signal.

U5 is motor driver ic.

### Antenna and ground circuitry

This unit make use an extenal antenna, This antenna is inductively coupled.

This unit relies on the ground trace of the printed circuit board. No external ground is provided. energy is supplied by 6pcs aa alkaline battery.

### Background

The device described herein a wirless(RF)TOY AEROPLANE CONTROLLER TRANSMITTER

For use with the toy aeroplane controlled receiver. It has only one channel of operation which the user may choose only. And is used to send button-status data from the controller to a wireless receiver connected with motors.

### Typical operation

Typical operation would involve the user turning on the unit to the toy game when turned on, The unit comes up on the default channel and transmits a continuously stream data. The user can not, At will . Change to any other of the predefined channel.

### Configuration

The receiver circuit has include one LC oscillator for reference frequency

Some signal through antenna let out. The main characteristics

Of this configuration are shown as below:

Frequency ranges 49.860MHZ

Occupied bandwidth(-26db) 1MHZ MAX

Frequency stability +/- 0.5mhz

Modulation method AM

Output power 80DBuv/m max

### Reference oscillator

A Ic oscillator is used to generate the reference frequency

It has a stability of 0.5mhz

### Amplifier

This RF signal no amplifier to transmit.

### Microcontroller

The rx system is controlled by a small microcontroller running with internal 16mhz