

## **Circuit Description**

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Q1 is rf super-regenesis receiver and output encoded signal to Q5 for amplifier,IR receiver receive ir signal to U1 DECODE then output motor driver signal.  
Q2,Q3 is motor driver.

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 usermay choose only.And is used to send button-status dataform  
The controller to a wireless receiver connected with motors.and the MCU working frequency is16MHz.

Typical opeartion

Typical opeartion would innvolve 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 steam  
data.The user can not, At will .Change to any other of the predefined channel.

### **Configuration**

The Receiver rf circuitry consists of a Super-regeneration receiver circuit,  
.Tha main characteristics Of this configuration are shown as below:

Frequency ranges	49.860MHZ
Occupied bandwidth(-26db)	<500KHZ MAX
Frequency stability	+/- 0.5mhz
Modulation method	AM
Output power	<80DBuv/m

### **Reference oscillator**

A LC oscillator is used to generate ths reference frequency  
It has a stability of +/- 0.5MHZ

### **Amplifier**

No rf signal Amplifier