

Circuit Description

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Q1 is rf super-regeneration 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 wireless(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. and the MCU working frequency is 16MHz.

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 rf circuitry consists of a Super-regeneration receiver circuit,

. The 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 this reference frequency

It has a stability of +/- 0.5MHZ

Amplifier

No rf signal Amplifier