Circuit Description

Model: Mini Bugs Prepared by: He Xian Rev.: 0

Transmit Circuit Description:

When TX unit is turned on, a RF format code signal is sent out. The crystal controlled oscillator Q2 output is coupled through C4 to the base of Q1. From the emitter of Q1, the modified RF signal is fed through L2 and antenna.

The low pass filter made up of C3, C5 and L2 which are connected to the antenna. The modulation is provided by IC TX2C. The RF signal is to be sent first when power on. When one of the control button is pressed, the modulation control signal will be sent to the base of Q1 that will modulate Q2 RF wave directly.

Energy is supplied by two 1.5V `AA alkaline batteries.

Receiver Circuit Description:

Q1 is the superregenerator and detector.. IC XC6385 is the step-up DC-DC converter. IC RX2C is the signal decoder. The transistor Q2 to Q9 is the motor driver circuit.

Energy is supplied by a 1.2V rechargeable Ni-Mh battery.

Charger Circuit Description:

Q6 and Q7 is Charger timer. Q4 is the electronic switch of charger loop. Q3 and Q5 is controller.

Energy is supplied by three 1.5V AAA alkaline batteries.