



裕丰玩具实业有限公司

Uni-Fortune Toys Industrial Limited

香港九龙荃湾沙咀道21-27号昌盛中心21楼-C室
FLAT A-C, 21/F, CHEUNG HING SHING CENTRE,
21-27 SHA TSUI ROAD, TSUEN WAN,
N. T., HONG KONG

TEL: (852) 2413 0983
FAX: (852) 2414 4183
E-mail: sales@uni-fortune.com

Project Name:	RC Vehicle
Model No.:	3301 - 3310
Contact:	Raymond Yuen
Date:	21-Aug-03
Description:	Introduction

R/C transmitter:

Operation: 9V battery

Drawing Ref.: RC Vehicle - TX

U1 (TX2) is a 5 functional remote encoder IC, with transistor Q1, Q2 and other components combined as RF transmitter circuit. The IC Pin 14, 1, 4 and 5 control left, right, backward, forward and encoding signal output respectively. Data output from Pin 8 and modulate with 49.860MHz oscillator that achieved by Q2, Y1, R3, C2, and L1.

RF power amplifier Q1, L2, C3, C4, R8 is use to enlarge the transmission range, the output frequency through LC filter C3, C4 and L3, to eliminate the harmonic frequency then transmitted signal by aerial A1.

R/C receiver:

Operation: 6V AA Size battery

Drawing Ref.: RC Vehicle - RX

Superregenerative receiver use a special type of detector, in a straight regenerative circuit, the input signal couples to the detector, and some of the output signal is fed back to its input, in phase. This repeatedly amplifies the input signal. The result is very high gain in a single stage.

Q1 provides RF gain and helps prevent the receiver from radiating its signal out the antenna. The data signal obtained by detector then couples to RX2 (U1) pin 14 through the LPF circuit (R19, C17). The IC provides two high effective amplifiers and enhances signal input recognition capacity to enhance remote control distance. The signal input to the decoding circuit by pin3 and then the latch circuit separates the function to pin 6, 7, 10, 11 to order the motors circuit.

Specification of RC Vehicle

Model No:	3301 - 3310	
Description:	(Front, Back, Left, Right, Stop) Full function radio control car	
Radio Freq.:	49.860MHz \pm 30PPM at 25°C	
Control Range:	Over 10m control radius from R/C transmitter at open site	
Power Supply	Transmitter:	9V (6F22 battery)
	Receiver:	6V (R6P/ SIZE AA x 4 battery)



裕丰玩具实业有限公司

Uni-Fortune Toys Industrial Limited

香港九龙荃湾沙咀道21-27号昌盛中心21楼-C室
FLAT A-C, 21/F, CHEUNG HING SHING CENTRE,
21-27 SHA TSUI ROAD, TSUEN WAN,
N.T., HONG KONG

TEL: (852) 2413 0983
FAX: (852) 2414 4183
E-mail: sales@uni-fortune.com

Min. operation voltage:	Transmitter:	7.2V	
	Receiver:	4.8V	
Power consumption:	Transmitter:	Standby-	170mW approx.
		Operating-	260mW approx.
	Receiver:	Standby-	280mW approx.
		Operating-	12W approx.