

## The description of 2.4G helicopter product theory

This is a product of 2.4GHz wireless telecontrol, its working frequency is 2.4GHz. It is comprised of transmitter and receiver .The transmitter sends the telecontrol coding signal by high-frequency carrier wave. The receiver gets the high-frequency coding signal by the super regenerative receiver circuit and drives the motor after coding . The receiver uses the LI-PO battery of 800 MAH, and the transmitter uses four AA batteries.

### 1. The transmitter circuit composition:

Power supply: comprise six AA batteries and SW6, U3, C15 , C16, C17, C14, fuze Z1, R27

The coding part: comprises U1, Y2, C13, C18

Control keys: VR1, VR2, VR3, VR4, C1, C2, C3, C11

Voltage Show: U5,R1,R2,R3,R5,R10,R11,R12,R13,D1,D2,D3,D4,D5,D6,C12

Function choose switch: U4, SW2 SW3, SW4, SW5, SW6, SW7, SW8, R14, R15, R16, R17, R18, R19, R20

High frequency transceiver circuit: U2,Y1,C4,C5,C6,C7,C8,C9,C10,R9,R8,L1,L2,L3

### 2. The receiver circuit composition:

High frequency transceiver circuit: ANT, C2, C3, L1, L2 , L3, C6, C7, C8, C10, C16, R2, R3 ,Y1, U4

Gyroscope part: comprises Y2, U5, C19, C20, C23, C29, C30, C31, R10, R14, R15, R19, R20, R21, R22, R23

The coding part: U2, LED, R9, R26, C28, R13, R12, C18, C15, C17, R18, R11, L4, C5

The motor-driving part: comprises R1, R4, R5, R6, R7, R8, R16, R17, R24, R25, Q1, Q2, N1, N2, M1, M2, C9, C11, C12, C13, C32, C33, D1, D2

IC power supply: comprises U1, U3, C14, C21, C22, C24, C25, C26, C27