XPV MINI RAD

49.860MHz receiver operational description of mini plane

The mini RAD is a full function radio controlled toy RAD .It is 3.7 volts rechargeable Li-Po pack battery .This RAD is designed to operate on a signal fixed frequency in 49.82~49.90MHz .Please consult with added block diagram and schematic .

The modulated RF signal from the transmitter coupling to U1, then VR(forward), R(right),L(left) and tiny key(tact key) signal will be decoded by L1,T1 and Q1 makes up of oscillator ,which sends out basic oscillatory signal to U3. The signal of F,L and R from transmitter is processed by U1. the order signal of F,L and R will be generated in the form of an electronic signal and then enter into drive circuit. When the forward electronic signal enter into Q2,Q3. Here the motor 1 and motor 2 will be controlled run. When the L, R or tiny electronic signal enter into Q2, Q3. Here the Motor 1 and motor 2 will be controlled run on the one low and other one high speed.

U2 is Li-Po battery protect IC. When RX will charge about battery .it need join that TX jack. RX Charge finish(battery is 4.3V) that the U2 1 pin will to low volts. When battery volts is to low(2.5 or down) that the U2 3 pin will to low volts. Then RX will stop work. LED is act as a power-on indicator.

All tuning and verifications are performed by the manufacturer and there are no adjustments which can be made by the user . No external ground is required or used with this receiver .