

## 1. User Manual

### Transmitter features

5-CH,6-CH,7-CH transmitter features:

- 1.The panel is easy to operate with multistage electricity indication.
- 2.The shape design accords with the ergonomics.
- 3.The DIP switches are available for various servos. It can perform the flight Actions such as ascending,descending,forward,backward,leftward,rightward and so on.
- 4.7-channel micro-computer as the encoder, PPM&PCM modulation,output power: <100mw, current drain:about 250mA, ,power source: 4.8~6V Ni-Mh battery.
- 5.Free to switch between left-hand and right-hand throttles.

Control identification and function:

#### MODEL 1

1. Left stick/Rudder. It controls your airplane/helicopter forward,backward,and right. Push up to fly your airplane/helicopter forward, pull down to fly backward, push leftward to fly left,and push rightward to fly right.
2. Right stick/Throttle. It controls your airplane/helicopter ascending,descending,left moving and right moving,Push up to ascend your airplane/helicopter,pull down to fly backward,push leftward to fly left,and push rightward to right.

#### MODEL 2

1. Left stick/Throttle. It controls your airplane/helicopter ascending,descending,left and right. Push up to ascend your airplane/helicopter, pull down to descend,pull leftward to fly left, and push rightward to fly right.
2. Right stick/Rudder. It controls your airplane/helicopter forward,backward,left moving and right moving . Push up to fly your airplane/helicopter forward,pull down to fly backward,push leftward to move your airplane/helicopter left,push rightward to move right.

## 9.Operation Description

### DESCRIPTION OF OPERATION

#### Power support;

The transmitter is fed by 1.5V×8AA Ni-Mh Battery, and the receiver use 4.8V to 6V Ni-Mh battery.

#### Antenna:

The transmitter and receiver utilize different antenna,dipole antenna for transmitter and wire line antenna for receiver.

The coding signal that CPU output the pulse arrive this flaps to proceed to mix with.frequency this flap,for 14.538MHZ,pass by for 5 times frequency conversion is for the frequency for needing of 72.690MHZ carrying of wave signal.carry a signal through the high frequency power the tube proceed to enlarge,and what L.Cconstitute choose the frequency network to select to validly carry a signal,output from the antenna.

RF signal will be received by the receiver of airplane/helicopter And then those signal will be demodulated and transferred into digital signal which will be decoded by the above mentioned IC.In result,it can control the driver machine connected. Thus ascending,descending, turn right,turn left,rotate etc,all kinds action can be done.

Ground:

There is no external ground connection. The ground is only that of the printed circuit board.

10. Tune up

#### **Transmitter Specification**

Frequency: 72.690 MHz

Modulation frequency coding :  $\pm 5$  KHz

Carrier frequency modulation model: FM

Working voltage: 9.6~12V

RF output power: <100 mW

#### **Information of Antenna**

Gain : -3 dB/-0.5 dB

DC Resistance: >0.3 OHM <1 OHM

Resistance: 50 OHM