

T3-27A Tuning Procedure

There are 3 steps when tuning up transmitter:

1. PCB testing

- 1-1. Tune up the frequency of transmitter by modulating the local oscillator loop L1 on the PCB.

Frequency can be measured by using a frequency meter directly.

- 1-2. Tune up the power of transmitter by modulating the Antenna Loop L3.

Measure the Voltage between Antenna Load “Up”: $U=U_p \times 0.75 \times 2$ $P=U^2/R$, there into $R=47 \Omega$.

- 1-3. Measure the stability of frequency

Turn on the power of PCB, then measure frequency and mark it as f_1 . Measure frequency again after 15 minutes and mark it as f_2 :

$$f_2 - f_1 < 10 \times 10^{-6}$$

2. Check the Modulation by synchronous demodulation

Make transmitter and the suitable receiver work at the same frequency. After receiver receive the signals, there will be 4 pulse signals detected on the oscilloscope after demodulation. These 4 pulse signals would alter along with operation of the control sticks on the transmitter.

3. Check the whole device

Connect 1 motor and 2 servos to the output of suitable receiver, operate both the Control Stick and the Throttle Lever, and then the motor and servo will be running according to this control.

Transmitter could be considered eligible if it meets the above requirements!