

Circuit Description of 30121 4CH Transmitter

30121 Transmitter is used for radio control models. The circuit of 30121 was designed for good performance.

First, the CPU (U1,EM78P458) gets user control signals from VR1,VR2,VR3,VR4. According to the signal of VRs, CPU outputs a serial of pulses. The pulses pass through Q1 and Q2, their wave form will be regulated. Then the regulated wave pass through SVR1,R27,SVR2,R39,R18,R19 and applies to varactor ZD2.

Transistor Q4 and other part compose a high-frequency oscillator, its frequency is determined by crystal X3 and control signal on ZD2. The modulated high-frequency signal pass through T2,C29, C31,T3,C2, T1,C33, eliminated inutility signals and magnified by Q5, it be coupled to Q3 for power magnifying. The power signal that output from Q3 pass C35, T4, C36, C37, C39, T5, C40, L3 for filtering and impedance transforming, then be radiated to air by antenna.

The transmitter works under DC 12V.