

ZT-813T Wireless Camera

Circuit Description

The transmitter is made up of two parts: Audio & Video unit and RF unit. The audio signal from MIC1 is amplified, then modulated by the audio carry frequency oscillator (6.5MHz), the modulated carry frequency is added in the VT of voltage controlled oscillator VCO2 (2.4GHz, D1, Q1). The video signal from CMOS camera passes through the sharp network(R4, R5, C11,R16), also is added in the VT of VCO2, another signal is added in the VT of VCO2 is the error voltage output of loop filter (R1,R24,R25,R28,C17,C19,C25) of PLL(U2) which is programmed by CPU(U1), the channel data is decided by the encode switch(SW1) of CPU's peripheries. The feed back signal (R30,C28) from voltage controlled oscillator VCO2 is compared with reference crystal oscillator, the error frequency of oscillator VCO2 can be corrected. The carry frequency modulated of audio & video has been power amplified by Q2, filtered when through the band pass filter (C20, C18, C23, microstrip) to make the higher harmonica of signal reduce to lower level. The purer signal is emitted by antenna (RFOUT).