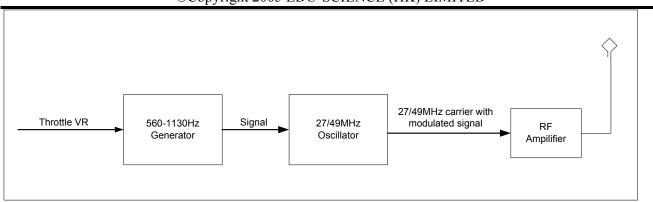
EL137 Wireless Ultralite, 27/49MHz Transmitter Operation Description ©Copyright 2005 EDU-SCIENCE (HK) LIMITED



The Radio Frequency of the transmitter is based on standard 27/49MHz FM (Frequency Modulation) citizen's band. It generates low power 27/49MHz AM carrier frequency via major components of CRY1, D1, C8, C9, C10, C11, C12, Q1, Q2, R6, R7 and R9 (*Figure 1*). Please note that the value of the components may vary. Please see the attached schematics for 27MHz and 49MHz.

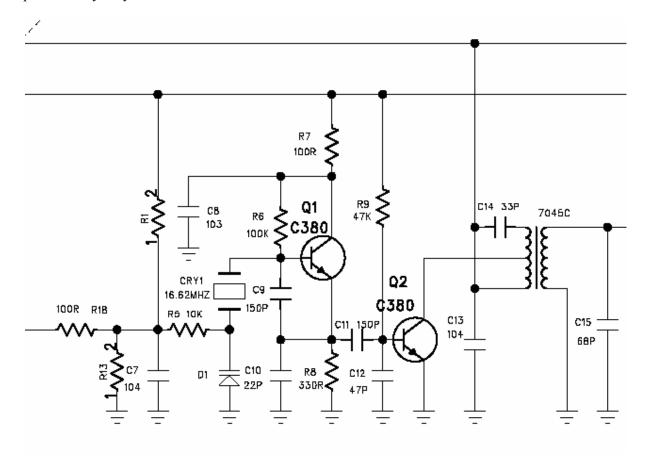


Figure 1

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The components Q4, Q5, R2, R3, R12, C4, C5 and VR (*Figure 2*) are responsible to generate "Throttle" control command (Frequency vary from 560Hz to 1130KHz) and will be modulated with 27/49MHz carrier frequency via R18, R13 and C7 to the RF amplifier (see *Figure 3*).

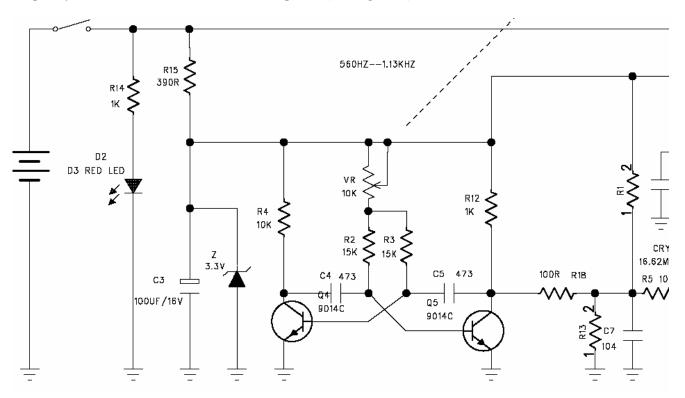


Figure 2

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The modulated signal is passed to the final stage of RF amplifier (*Figure 3*), which amplifies (Q3, L1, L2, L3, C14, C15, C16, C17, C20, R10 and R11), the signal and then couples the signal into the antenna (ANT).

