Circuit description

A · RF Circuit:

1. Q3 作爲振蕩及倍頻用，晶體 X1 利用 Q3 的非線性放大作用產生兩倍的基頻 (Q3 is use for base frequency oscillator, frequency doublers & amplification conjunction with X1)
2. Q1 为高頻放大用，信號經 Q1 放大後再从天線發射出去 (Q1 is use for RF (High frequency) amplification & transmission. Via telescope antenna)
3. L4 作頻率微调調整用途，使線路頻率微調至标准发射频率 (L4 is tunable RF filter)
4. L3 作振蕩线路中的选频微调用，使线路频率微调至所需的发射频率，并使输出幅度最高(L3 is for freq selection tuning among the oscillator circuit, which enable the circuit freq tuning to the required TX freq and make the O/P range to the MAX)
5. T2 作高频放大线路中的选频微调用， 使線路頻率進一步微調至所要求的發射頻率，并使输出幅度最高 (T2 is for freq election tuning among HF amplify circuit, which enable circuit freq to be further adjusted to the required TX freq and make the O/ P range to the MAX)
6. T1 作選頻及諧波調整用，使發射功率微調至最佳，諧波最小(T1 is for freq selection & harmonic alignment, which enable the TX power to the best and the harmonic to the min)

7. Z1 作頻率調製用，控制信號強弱的變化，引起 Z1 結電容的變化，從而改變载波頻率，實现二極管調頻(E1 is for freq modulation, which control the change of strong and weak signals, resulting in the variation of E1 junction capacitance and therefore, altering the carrier wave freq, and the diode amplitude modulation can then be achieved)
8. X1 为根據不同CH而不同，從而實現不同CH的頻率調製(X1 varies depending on the different CH and therefore different CH freq modulation can be achieved)

B．控制部份（Controlling)

U1 爲整個發射線路的中央微控制器（MCU），通過 U1 爲線路提供各種控制信號，包括向前，向後，左轉，右轉，加速，回中，充電和弱電指示信號，信號数据的輸出經 C15，R11 加至變容二極管 Z1 負極，進行調頻再發射出去 (U1 is Microcontroller, which convert A/D signal to PPM modulation & transmit through C15,R11 & Z1 to FM transmission).