

2. TX UNIT

- Tx Match Filter is a filtering and matching circuit, which includes the capacitors C1-5 and filter of FL1
- RF Amp is achieved by using a transistor Q1. The RF signal is applied to the base of this transistor of Q1 for amplification only. The signal will be sent to the antenna via TX Match Filter.
- The Local Oscillator and Modulator is a combination of circuit components of Q2, D1 & L1 which are constructed to form a modulator circuit.
- OSC. & Phase Lock Loop are formed by X1 & U1
- Code Filter circuit is formed by R61, R62, C71 & C72.
- Audio Detector circuit is achieved by using Q10 & U5-D to sense the audio signal for CPU control.
- Audio Amp is achieved by U5-A, B to provide amplified audio signal to the modulator circuit. The AGC is controlled by Q3, Q4 for automatic level control.
- CPU (U4) provides a system control on several parts, like providing the coded signal, low batt voltage detection & indication, Audio signal Detection, Sensing the channel A & B selector setting, providing the PLL (Phase Lock Loop) control, Temperature Detector etc.
- Batt Low Voltage Indication + Voltage Detector are achieved by using the components of D9, U5C.
- Regulator Circuit includes the transistor Q6 and diode D4. They are acted to provide constant voltage to the circuit.
- Power ON/OFF Switch of S1 is used to switch the whole unit power on/off control. D5 is used to block the incorrect polarity of battery .