

## **DESCRIPTION FOR THE MODEL SFT-8038**

### **TX UNIT (Transmitter A/B/C)**

- Tx Match Filter is a filtering and matching circuit, which includes the capacitors C1-C4, C63, C64 and filter of CF1.
- 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, DVC1 & DR1 which are constructed to form a modulator circuit.
- OSC. & Phase Lock Loop are formed by X1 & U1
- Tracking filter circuit is formed by C24, R11, C25, R9, C23.
- Audio Amp is achieved by U3-A, B to provide amplified audio signal to the modulator circuit. The AGC is controlled by Q5, Q6 for automatic level control.
- CPU (U) provides a system control on several parts, like providing sensing the channel A & B selector setting, providing the PLL (Phase Lock Loop) control.
- Regulator Circuit includes the transistor Q8 and zener diode Z1. They are acted to provide constant voltage to the circuit.
- Power ON/OFF Switch of SW3 is used to switch the whole unit power on/off control.