

APPLICANT: WINATION TECHNOLOGY MFG. LTD.

FCCID: N57RY-1351

OPERATIONAL DESCRIPTION:

When Unit A is turned on by lifting the handset, it transmits on 49.86 MHz. this is the frequency generated by crystal oscillator formed by the components around Q3. 49.86 MHz serves as a receiver local oscillator signal which heterodynes an incoming 49.405 MHz signal to a 455 kHz IF. The IF amplifier, detector, are all in IC2. Q1 is the RF amplifier for the receiver. IC1 is a CMOS hex inverter IC that is being used as an audio amp for the receiver audio. T2 is used to couple the microphone audio with the RF. The antenna is a spring wound wire which acts as a electrically short monopole. It is inductively coupled to the RF output through L1 and T1. The only user controls is the ON/OFF/VOLUME CONTROL.

When Unit B is turned on it transmits on 49.405 MHz. This frequency again serves as both the transmitter carrier and the receiver Local Oscillator. This signal provides low side injection to produce a 455 kHz IF from an incoming 49.86 MHz. signal.