

1. RECEIVER

Receiving and transmitting switch (sw1) is switched to position (R), the circuit is in receiving mode.

From antenna, high frequency signal will pass through coil (LA, L1A, L1B, L2) to regeneration detector (L3, Q1) for the process of detector.

RF modulation signal, audio signal will be detected. The audio signal will pass through (sw1B, C9, R5, R6, C12) for regulating. Then, through to audio amplifier consisting of (Q2, Q3, Q4) for amplification, a sufficient large amplified signal will pass output transformer (T1, R15, sw1D) to speaker.

2. TRANSMITTER

Receiving and transmitting switch (sw1) is switched to position (T), the circuit is in transmitting mode.

Voice will through speaker to generate a weak audio signal, this weak audio signal will be amplified by audio amplifier consisting of (sw1D, C12, Q2, Q3, Q4) for ensuring a sufficient large signal to modulated high frequency signal. The (sw1B, L3, Q1, XTA1) and related resistors, capacitors formed A high frequency oscillator to generate A 49.860 MHZ high frequency signal it will mix with the amplified audio signal to form a RF modulation signal. The RF modulation signal will through high frequency filter system consisting (L2, C1, L1B, C1B, L1A, C1A, LA) for filtering others unwanted frequency. The filtered frequency will be transmitted through the antenna.

This device operated with 9 volt 006p battery.