

Circuit Description

Transmitter

When the mode switch is set to transmitting mode. Q1 will become a RF oscillator and the oscillating frequency is controlled by crystal (X1).

Voice, through speaker (it becomes a microphone), is converted to audio signal. This audio signal, through Q2 (audio pre-amp.) and Q3, Q4 (audio power amp.), feed into audio transformer and becomes a modulation signal. Then this modulation signal and RF signal will be mixed together through L1 feed into antenna.

Receiver

When the mode switch is set to receiving mode, Q1 becomes a super regenerative receiver. RF signal from antenna through L1 couple into Q1. Then, an audio signal will be detected from Q1. This audio signal, through Q2, Q3 and Q4 feeding to audio transformer, is converted to voice by speaker.