

Circuit Description

1. Transmitter part

After the ppt (SW13) switch is active MCU (U1) control the U8 through phase lock loop (inside U8) generate channel frequency, a microphone (MIC1) pick up the voice and amplifier in U8 and FM modulator the generated frequency send to RF (Q1,Q2,Q3) power amplifier and pass through the loop filter (Q6, C8, C9) enter antenna (ANT1) to free air.

2 .receiver mode

hold the power switch (SW1) 1 second the walkie-talkie will power on the receiver part (Q18). The MCU (U1) control the U8 receiver part PLL to generate the receive channel frequency and the IF amp amplifier (inside U8) the IF frequency. After amplifier the demodulation signal (inside U8) send to the audio amplifier (U4) and Sound come out from speaker (SP1).

3 clock mode

When the battery (BT1) applied to the walkie-talkie, it will automatic enter clock mode. The timing system is base on the crystal (CX2D1) and the program counting (U1), the time and data will display on the LCD (CON1) by MCU (U1) build in LCD display

4 battery charging

When an external transformer connect to walkie-talkie (S1 RJ-35). It will automatic start to charge the battery (BT1). According to the battery voltage detector detected (U1) is fully charger internal power switch transistor (Q303) will cut off the charging and if the battery low is detected by the detector the walkie-talkie will enter clock mode only and save the battery life

Channel Frequency

1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125
15	462.5500
16	462.5750
17	462.6000
18	462.6250
19	462.6500
20	462.6750
21	462.7000
22	462.7250