

10522 Walkie Talkies

Overview:

10522 Walkie Talkie is a half-duplex type Walkie Talkie. It include a transceiver, When have sound trig microphone, it will change to a transmitter from a receiver, if the sound signal stopped, it will change to a receiver.

Antenna:

The antenna type is a spring metal antenna. The maximum gain of the antenna is about 2dBi.

Transmitting working description

When U1 detect a sound signal from the microphone, the U3 will change it to a transmitter. When the microphone received the sound signal, the signal through C20/R7 to U1 PIN9, the signal was amplified and modulated to 462.6625MHz carry. The 462.6625 MHz RF signal form U1 Pin3 output, though Q2 amplify and C17 output, then filtered by L3 C16, then through D1, C14 output to the antenna.

Receiving working description

When the antenna received the transmitter's RF signal, it signal from C14, L2, C12, L1 to U1 PIN1. Then signal from U1 PIN8 to speaker.

Power supply unit

EC1 EC2 EC3 C9 C10 U2 L5 comprise the power supply unit.

U2 is a regulator, it supplied for U2 and U3. B2 is the battery. S1 is the power switch.