

The receiver consists of below parts:

- 1) 4.2V battery
- 2) Power supply control circuit: IC3, Q7, Q14, Q18
- 3) Microprocessor controller (MICRO-CONTROL UNIT): IC7 and Reset Circuit: C127, Q3, Q22, X1 (4MHz crystals)
- 4) Audio signal processing circuit: IC1, IC2, IC8
- 5) Voltage-controlled oscillator( VCO )and Phase-locked loop( PLL ) integrated circuit IC6 and Q27, X2 (21.25MHz crystals)
- 6) RF signal amplification circuit: Q6, Q8
- 7) Matched circuit: L1, L3, L7, C219, C217, C218 and receiving antenna.

Power supply control circuit provides 3V stable voltage.

VDD1 is 3V stable voltage output by IC3, Provided to the MCU and RF amplification.

VDD2 provided to all other circuits except RF amplification and MCU.

X1 is 4MHz crystals oscillator as clock source of MICRO-CONTROL UNIT.

Audio signal processing circuit deal with the speech signal from the Microphone by amplified and compressed.

X2 is 21.25MHz crystals as reference frequency of IC6. This device gets matched frequency by VCO and PLL.

The device is battery-powered, speech signal are received by antenna, and reverted by matched network, then speed information input to the headset by amplified, extended processing.