

Wireless Speakerphone System

Circuit description

Model: SP-68

General speaking, “Anywhere” is a wireless handsfree system. The main operating principle is to modulate and transmit the sound signal received from the mobile phone by the inner microphone, then demodulate and amplify the signal by the receiver, finally emit it by the speaker, without cable. The working frequency is FM 49.82 ± 0.05 MHz. Below is the detailed description:

1. Emission

- 1) The sound signal is received from the mobile phone by the inner microphone. It is then transmitted to the low frequency transistor through capacitors for audio frequency amplification.
- 2) After amplification, the audio frequency signal is transmitted to a section of oscillation and modulation, which consists of the crystal and the mixed frequency transistor.
- 3) The modulated signal will be transmitted to the high-frequency transistor for frequency selection and amplification. It will be emitted out through a loop antenna finally.
- 4) The power is controlled by a single-chip microcomputer.

2. Reception

- 1) The modulated frequency signal of 49.3 MHz received through the antenna will be transmitted to the high frequency amplifier transistor.
- 2) The amplified high frequency signal will be transmitted to the IC CD0988, through which the high frequency signal will be demodulated into the audio frequency signal.
- 3) The audio frequency signal is then transmitted to the low frequency amplifier transistor for initial amplification.
- 4) The initially amplified audio frequency signal will be transmitted to the power amplifier IC for further amplification, finally outputted through the speaker.