

FANHILL LTD.

OPERATION DESCRIPTION FOR WIRELESS SPEAKER

Transmitter;

The transmitter is switched and connected to the input audio signal. The AF signal flows through the voltage control capacitor diode to modulate with an oscillation frequency which is controlled by a phase lock loop controller IC SA8803. This circuit is a transmitter for FM and amplifier by a transistor 9018G to transmit the RF signal by a rob antenna.

Receiver;

It received the signal from the wire antenna that is inside the speaker cabinet. The signal flows through a Transistor RF signal amplifier and goes into a mixer which combines with a crystal control local oscillator. It produces an IF signal and it goes into a FM receiver IC GC1088 to demodulate the AF signal. The TEA2025 amplifies the AF signal and flows through the speaker to provide the audio sound to the user.

Antenna and ground circuitry

This unit set makes use of an external flexible rob antenna for the transmitter and an external fixed wire antenna for the receiver. Those antennas are inductively coupled. The unit set relies on the ground track of the printed circuit board. No external ground is provided. Energy is supplied by a 9 Volt battery or AC/DC adaptor for the transmitter and 6 Volt batteries for the receiver.