

Technical Description

Model No. : RS992W

The RF signal is received by the antenna (the center frequency is about 912.5MHz, frequency range is 1-3MHz). The RF signal will be passed the network filter and amplified by the RF amplifier (Q101 - FET) in the RF module (RS992U). The amplified signal will be coupled to the mixer circuit (Q102) to mix with the local oscillator signal. The local oscillator circuit is constructed by the transistor (Q103) and the VCO circuit. The VCO circuit is controlled by auto scanning circuit (IC3), the stereo signal (from the IC1) and the switch SW2 (manual scanning control). The local oscillated frequency is about 972.5MHz. After the mixing, the first IF frequency is coupled to the second IF circuit. The first IF frequency is about 60MHz.

The first IF signal will be demodulated by the IC1. The IC1 includes the local oscillator of the second IF (10.7MHz), the mixer, IF filter, discrimination and the stereo decoder circuit. After the audio signal is reproduced, the output audio signal (left or right channel) will be selected.

The audio signal passed the de-emphasis and the filter circuit to the audio power amplifier IC (IC2). The input audio level is controlled by the volume VR1. The amplifier circuit is used the BTL format. The amplified audio signal is coupled to the speaker by the capacitor C30 and C36.

The power supply has three sources. The first kind supply is used the AC/DC adapter (connect to JX5). The second is used the 9V battery (BT1). The last one is used the 6V 4Ah rechargeable battery (BT2).

If the rechargeable battery is located in the battery compartment, the charging circuit (IC4) will be operated when the AC/DC adapter is connected to JX5.