

SF-318 Circuit Description

1. Receiver

Receiver receives the RF signal from transmitter, After amplification entered mixer (U5) with the vibration signal first intermediate frequency (65.75 MHz, then is SAW filter to filter to part of the circuit (U3) in the receiver to demodulate Audio Signal. Switch S2(DOWN)、 S3(UP)、 S4(SET) and UI (CPU) available for functions choosing, U1(CPU), U4(LCD driver) and LCD1to display manual, working status and frequency datum. When pressing S2,S3,S4 to choose frequency and confirm (LCD display the functions), U1 will control U2、 Q1、 Q2、 Q3、 Q4、 Q5、 D2、 L5 and its peripheral resistance and frequency selective components of the composition (phase-locked loop circuit)according to the datum, then have the vibration signal. Activated switch S1 (DATA), U1 will lock the current operating frequency data encoded and sent to amplify transistor Q6 to drive infrared emission of D4, this frequency settings for infrared data to the media to the transmitter.

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2. Transmitters

Microphones will convert sounds into electrical signals by U3, U4 amplified to D5, D7, Q13 comprising VCO modulation (FM) to Q7 and Q8, Q9 comprising of RF amplifier, then to enlarge and enlarge to the antennas.

IR infrared receiver to receive the setting data of IR frequency from the receiver, then send the data to U7 (CPU), U7 have this data set to control its external VCO resistive and capacitive components of the PLL circuit to lock the same frequency of the receiver.