

Circuit introduce

TX part:

1. Audio frequency amplify and compress parts

MIC change tone signal through IC3B amplify, enter C7,R5,C10,R7 network, and deal with The signal by the control plus amplifier. So the audio frequency compress finish. Other way the plus of IC3A is controlled.

2. Modulate and RF parts:

The audio signal out of IC3A modulate In D1,Y1 decides the frequency of carrier wave. Q5 Finish oscillate and triple frequency. Q3,Q4 and Q2 finish double frequency. Q1 is power amplifier.

RX part:

1. RF and IF parts:

Antenna A or B through the RF switch diode D18 or D19 combine to LPF network, Q10 amplify, through C65,L8,L4,C66,C67 combine to LPF networking, sent to Q8, IF mining 71.4MHz.then send to Q17 and mix 60.7MHz signal through Y3,Q15,output 10.7MHz. Q9,F2,F3 combine to middle amplify. After choose-frequency,enter frequency amplify IC8, Output audio signal audio and field strength RSSI

2. Base oscillator

(1) Y2,L3,C26,C104,C106,L21,Q12 combine to capacitive oscillator, Transmit the frequency of the receive part want.
L20,C99,C98,L19,C93,VC2,L14,C94,C100,C101,C105,C96,VC1,C72 combine to Line pass network about triple or fourfold frequency, sent to Q8.
(2) Q15,Y3 generate 60.7MHz signal and output to Q17.

3. Channel contro part:

Field strength signal, Audio sent to IC6B and BS sent to IC6A after amplify, sent to the compare IC5C, the result control IC7B, IC7D IC7C combine to switch group. Finish the choose frequency. Better signal from 'A Audio in' and 'B audio in'.Send audio to IC3.

4. Quiescence noise part:

IC8A,IC8B combine to noise amplify circuit, sent to compare 'IC5A' , another mixing field signal AS and BS, sent to ' IC5D'. the results of the compares sent compares' IC5B', the result control 'IC7A' to finish quiescence noise control.

5. Audio process part:

IC4A is 20dB amplifier, 'IC4B' is control plus amplifier and finish audio expanding with ic1,C13,R10,C9,R11 dis-add network, IC2B is inversion.