N360T Description

Audio

Audio from the microphone is coupled through C4 & R3 to auto level control circuit (Q1,Q2)that it can provided a constant audio input level to audio amplifier stage.

Audio singal is through the ALC circuit applied to the audio amplifier stage (1/2 IC1).

Output from pin 8 of IC1 applied to IC2 of compand.

Output from pin 11 of IC2 is through C15, C56 & R41, r14 applied to IC1 of PRE-AMP.

Output from pin 7 of IC1 is through R15 & C12 applied to MOD & OSC stage.

MOD & OSC

The stage consist of varcap D3 & OSC Q3.

Q3 is a crystal controlled colpitts oscillator. The crystal frequency ranges from 24 to 24.111 MHZ and the crystal frequency is multiplied 3 times(71-72.333 MHZ).

With D3 is in series with L17 & X2 or L16 & X1. the network appear as a series resonant circuit for Oscillator.

The frequency modulation was control by the audio signal applied to the D3.

MULTIPLE

The OSC output is coupled through T1,T2 & C30 to base of Q4.

T1 & C26 and T2 & C30,C31 is tuned to 3 times the output frequency of OSC stage.

The Q4 output is coupled through L3 C35, C36 & L4, C37 to base of Q5.

L3 & C33 and L4 & C37,C38 is tuned to 9 times the output frequency of OSC stage.

FINAL AMP

The Q5 output is coupled through L5 & C40 to base of Q6 & Q7.

L5 & C40 and C43 is tuned to 9 times the output frequency of OSC stage.

L8 & L9 was a match circuit.

Low pass filter is consist of C46 , L10 & C47 , L11 , C48 to decrease spurious of RF carries.

The RF signal was output from Q6 & Q7 through low pass filter applied to the antenna(microphone)