

LES-311T DESCRIPTION

AUDIO

Audio signal from the microphone is coupled through C41 & C42 to PREAMP(IC1) .

Line signal from JK1 is coupled through C21 & R22 to PREAMP(IC1).

Output of audio is through VR1(level control) to MIX AMP IC2.

Output of Line signal is through VR2(level control) to MIX AMP IC2.

Output from pin 7 of IC2 applied to IC3 of compand.

Output from pin 10 of IC3 is through C32 & R103 applied to IC2 of PREAMP.

Output from pin 1 of IC2 is through C34 applied to MONITOR STAGE(IC4) , LED INDICATOR(IC5) , OSC&VCO stage .

VCO

The stage consist of varcap D91 & OSC Q91,Q92.

Q91 is a crystal controlled colpitts oscillator .The crystal frequency ranges from 216.0125 to 216.9875 MHZ .

The D2 is in series with C91 and parallel with L91 & C93 . the network appear as a parallel resonant circuit for oscillator.

The output carries is from Q91 apply to the buffer(Q92).

The frequency modulation was control by the audio signal applied to the D2.

PLL CIRCUIT

The output is from Q92 apply to the PLL IC (IC7).

IC7 was control by the microprocess IC(IC6).

The frequency was desire by DIP switch select.

FINAL AMP

The output of Q92 through loss pad apply to Q94 & Q95 is coupled through L96,L97 to antenna jack.

Low pass filter is consist of C122 , L96,L97 & C127,C128 to decrease spurious of RF carries.