

# Coil-less FM Transmitter

The RF oscillator using the inverter N2 and 10.7Mhz ceramic filter is driving the parallel combination of N4 to N6 through N3. Since these inverters are in parallel the output impedance will be low so that it can directly drive an aerial of 1/4th wavelength.

Since the output of N4-N6 is square wave there will be a lot of harmonics in it. The 9th harmonics of 10.7Mhz (96.3Mhz) will hence be at the center of the FM band. N1 is working as an audio amplifier.

The audio signals from the microphone are amplified and fed to the varycap diode. The signal varies the capacitance of the varycap and hence varies the oscillator frequency which produce Frequency Modulation.

