waves. Mobile phone uses high frequency RF wave in the micro wave region carrying huge amount of electromagnetic energy. The strongest radiation from the mobile phone is about 2 watts which can make connection with a base station located 2 to 3 km away.

5. **How the sniffer detect Mobile radiation**
The circuit is designed as a sensitive RF detector using signal diode IN 34, capacitor C1 and resistor R1. Since the signal variation is too low, a signal amplifier using the transistor BFR 96 is used to amplify the signal variation. BFR96 is the microwave amplifying transistor. The preamplified signals are coupled to a high gain inverting amplifier using the JFET input Op Amp TL0 71. This amplifier further amplifies the signals to give to the power amplifier made up of IC LA4440.

![Diagram showing RF detection in Digital Multimeter](image)

6. **How it works**
Normally, the RF sensor picks up the RF radiation available in the room which passes though the two amplifier stages and appears as a hissing noise in the speaker. When the Mobile phone is on use, the high energy RF in the form of pulses will disturb the RF in the room which generates a Motor boating noise through the speaker.