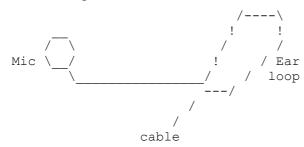
## **Mobile Microphone**

This homebrew design has the advantage that it has clear audio, as the treble has been lifted. Most /M mics are flat response & when placed near the mouth for background noise reduction, the LF bass is far too loud & very WOOLY audio is the result.

A 3 terminal electret mic is used, it is mounted (soldered) on to a thin wire (flower arranging type) stalk inside a thin AF lead. The end of the wire is placed in plastic insulation tube & shaped into a loop and tied off. I wear the loop around my ear. As the mic is mounted right in front of my mouth, there is next to no background noise.



Electrically the treble has been lifted by a 0.2uF tantelum cap on the electret mic's internal FET transistor, source to ground. This simple treble lift is only possible with a 3 terminal mic. The normal +ve rail drain input now becomes O/P as in a 2 terminal type. A shunt R of about 3.3K across the mic sets the AF O/P level, & a 10nF across the mic in the gear lever switch to roll off the AF lift above 3kHz.

The result is a clear punchy mic that has very little background noise. A small sponge covers the face of the mic to reduce popping/blow etc.

It is comfortable to wear, and I have to make sure I remove it before getting out of the vehicle. The only problem I have found is while eating Sandwiches!! If your rig does not supply power for a 2 terminal type mic & the PTT operation you will need a C & R as well.

The C needs to be about  $10 \, \mathrm{uF}$  (u1 if not treble lifting), & the R between  $1 \, \mathrm{K-33K}$  select for the gain you need.

The information contained upon this page is supplied in good faith, and to the best of our knowledge is accurate. However, We accept no responsibility for damage or injury, however caused, due to the use of this data. This design was originally posted on Packet radio by John G8MNY - Jan 2001.