

Q. As an avid shortwave listener I would like to know if there is any way that I can bring out an announcer's voice from the background in order to make a more reliable identification.

A. NASA had the same problem with one of the Apollo shots, and they came up with the circuit shown below. Actually, only three portions of speech are required: 300-400 Hz, 900-1700 Hz for a male voice (1100-1900 for a female), and 2500-3000 Hz. The bands between 40 and 900 Hz and 1900 and 2500 Hz seem to contribute very little to intelligibility. In the circuit, the potentiometer adjusts the null at about 600 Hz and the switch provides for male or female.

