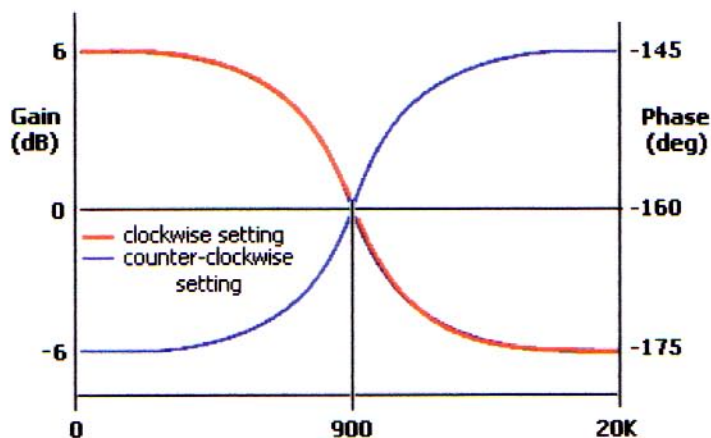


Tilt Control (one channel)

Figure 10

The tilt EQ can be very beneficial for correcting tonal flaws in headphone sound, such as excessive brightness or darkness, without being too sonically obtrusive. The above schematic (figure 11) is from a preamplifier design by Reg Williamson and Alan Watling. It is a tilt control with a center frequency of 900Hz and a maximum boost/cut of 6dB. The circuit produces a shelving characteristic on either side on the center frequency (see the graph below). When the pot is in the center position, the EQ's response is flat (the bypass switch takes the EQ filter out of the audio path entirely). Turning the control to the left (counter-clockwise) lightens the sound; to the right (clockwise) darkens it. Note that at the extreme settings, the tilt EQ does result in a phase inversion.



Frequency Response of Tilt EQ

Figure 11