

Parametric Equalisers.

A parametric equaliser is a tone control which not only can change the level but also the frequency upon which it acts. Whereas a bass tone control will always act on the low frequencies, primarily near 100Hz, allowing this range to be increased or decreased. The parametric allows the frequency to be changed, normally over a reduced or set range. A single low frequency parametric equaliser may be adjustable between 20Hz and 800Hz. This means that the increase or decrease in signal can be centred on any frequency between these limits. This can be useful if the the lowest notes are fine but the slightly higher, but still low frequency notes need to be adjusted.

In addition to the adjustment in frequency and level, many parametric equalisers also allow the width of the adjustment to be changed. Again comparing it with the bass tone control; the bass tone control has a set frequency but also has a set width, i.e. when the bass control is adjusted it always changes the surrounding notes by the same amount. The parametric equaliser with width control allows the effect on the surrounding notes to be adjusted. When the width is set to narrow then the control only effects a minimal number of adjacent notes. When it is set to wide many more notes either side of the centre frequency will be affected by the adjustment of the control.

A narrow width is useful when there is a particular resonance in a building or when there is something like the C# resonance sometimes found when amplifying a violin using a microphone near the f hole. A wide width control is useful when a more general increase or decrease in a particular region is required.