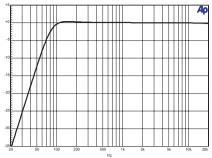
## 5. LO CUT 80 Hz

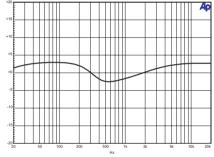
When the LO CUT switch is engaged, frequencies below 80 Hz are attenuated (18 dB octave slope). In most cases using the LO CUT filter with microphone channels is a good advice, since it efficiently suppresses popping sounds, rumbling noise and low-frequency feedback. The only exceptions are kick drum and acoustic bass. Sometimes it can be also very effective to combine the LO CUT filter with the voicing filter. For instance to provide vocals with more "body", without getting additional low pitched noise. Activating the LO CUT and raising the bass



level (LO EQ) provides you with a richer sound, without additional rumbling or popping noise. Another welcome side effect is, that the power amplifier and the connected loudspeakers do not get "polluted" with unnecessary low-pitched interference. Your audience will be thankful for the use of the LO CUT filter, too, since in this way they can enjoy a truly clear, natural, and powerful sound performance.

## 6. VOICING FILTER

This button activates an asymmetric microphone filter, which can be used in addition to the channel EQ. The voicing filter enhances the first harmonic oscillation and the treble of the human voice while slightly attenuating the mid frequency range. This voice shaping method provides powerful vocals that are clearly emphasized from the rest of the mix. This "pre-shaping" is not achievable using ordinary third or octave band equalizers. The use of this filter is not restricted to vocals only. Horns, woodwinds, and other acoustic instruments can profit from the voicing



filter as well. We leave it entirely up to your creativity and imagination to try the VOICING filter with as many different sound sources, as you want. Normally, you do not have to fear any problems with the occurrence of feedback.

## 7. EQ SECTION

The mixer's EQ section allows very differentiated shaping of the incoming audio signal within miscellaneous frequency bands. Turning one of the EQ level controls to the right enhances/ amplifies the corresponding frequency range while turning it to the left lowers/attenuates the signal of that specific frequency band. Before you begin to alter the sound, all EQ controls should be set to their neutral position, i.e. their marker points straight up (locked in place). Try not to set the EQ controls to extreme positions. Usually, minor changes are totally sufficient and produce the best results in the overall sound. You should use the natural reproduction as an orientation mark and rely on your musically trained ear. The moderate use of the MID control is the best remedy to avoid acoustical feedback. Especially in this frequency range you should try to avoid excessive enhancement. Lowering the level more or less in this band will provide you with high amplification rates without feedback. Use the LO control according to your pleasing, to add more "punch" to the sound of a kick drum or "body" to the vocals. Use the HI control in the same way to provide cymbals and the human voice with more treble and a more transparent sound. The MID EQ section offers parametric EQ-setting via separate rotary controls for the adjustment of level (MID) and frequency band (kHz) in the range between 100 Hz and 8 kHz.

