

MUM 2600
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EQ & Compression Notes

Equalization (EQ) – the process of boosting or reducing the volume level of specific frequencies of an audio signal. The process of equalization creates clarity in a mix by improving blend and creating space.

Hi Pass/Low Pass filters – These filters help to eliminate unwanted hi or low frequencies respectively. Hi-pass filters allow high frequencies to pass and cut off low frequencies. Low-pass filters allow low frequencies to pass and cut off high frequencies.

Hi shelf - allows the engineer to add or subtract gain from frequencies below a chosen range.

Low shelf - - allows the engineer to add or subtract gain from frequencies above a chosen range.

Peak – Peak filters allow engineers to add or reduce gain around a selected frequency.

Compression – allows engineers to control the dynamic range of an audio signal. Along with compressors, limiters, gates and expanders serve similar functions.

DigiRack RTAS Compressor parameters:

Threshold - Level at which the compressor engages.

Ratio - The quantity that a signal volume is reduced in relation to the signal's original amplitude.

Attack – The speed at which a compressor reacts to a loud signal.

Release – The speed at which the compressor lets go of the compression.

Knee: The rate at which the compressor reaches full compression once the threshold has been exceeded.

DigiRack RTAS Limiter parameters:

Limiter – A limiter is a compressor that removes all signals exceeding a specified volume maximum.

DigiRack RTAS Gate parameters:

Gate – Allows audio signals above a certain level pass to through while reducing signals below that threshold.

Threshold – Volume level below which the gate closes and edits the signal.

Attack – Speed at which the gate reacts to a signal below the threshold.

Range - Amount of attenuation created by the gate in Decibels.

Decay – The rate at which the gate closes after the signal reaches the specified level.

Hold – Length of time the gate stays open after the signal falls below the threshold. This can cause a chopped-off sound.

DigiRack RTAS Expander parameters:

Expander – A gradual change in level of a sound falling below a designated level. Expanders reduce levels gradually as opposed to gates. Expanders tend to sound more natural on vocals and melodic instruments.

Based on the Pro Tools 6 for Macintosh & Windows by Steven Roback
ISBN 0-321-21315-7