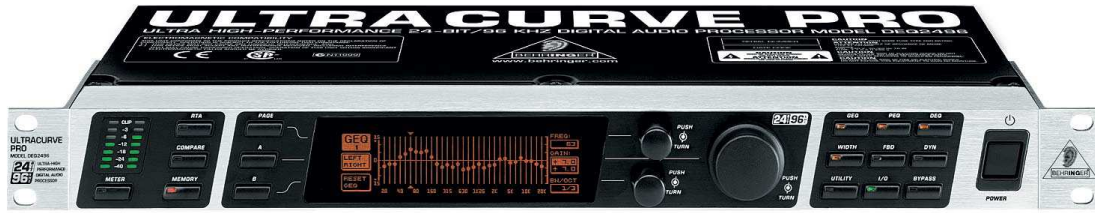
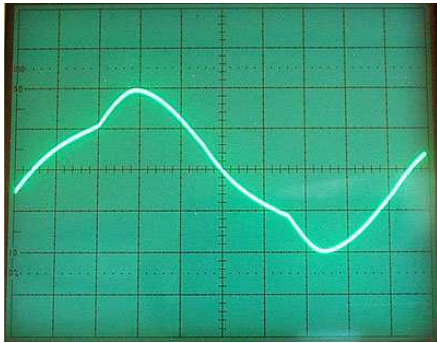


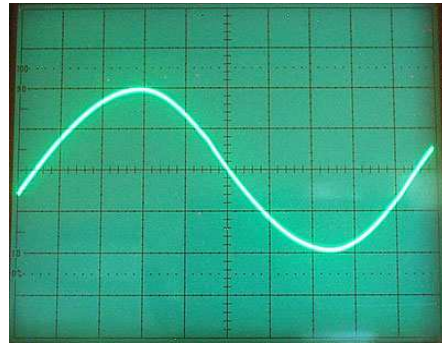
BEHRINGER DEQ2496 OPTIMAL PARAMETERS



Incorrect Parameters



Correct Parameters



Images, testing, and parameters courtesy of KAOKA

Downward Expander Section (If not using Compressor)

DYN Page 1 (EXPA)

Ratio: 1:1.6

DYN Page 2 (EXPA)

Attack: 13.18 ms

Release: 49.9 ms

Compressor Section (If not using Downward Expander)

DYN Page1 (COMP)

* Ratio: 1:X

DYN Page2 (COMP)

Attack: 2.77 ms

Knee: User preference

Release: 85 ms

* *Dynamic Ratio is user dependent on program material and preference...*

Ratios above 20:1 can be classified as soft to hard limiting

Ratios above 6:1 can be classified as soft to hard compression

Ratios above 2:1 can be classified as soft leveling to mild compression

DEQ #1 Section

DEQ Page 1, DEQ #1

M-Gain: -15dB

Ratio: 1:100

DEQ Page 2, DEQ #1

Attack: 2.77ms

Release: 105.4ms

DEQ Page 3, DEQ #1

Mode: BP

Frequency: 40.4

BW (OCT): 4

DEQ #2 Section

DEQ Page 1, DEQ #2

M-Gain: -15dB

Ratio: 1:100

DEQ Page 2, DEQ #2

Attack: 61.59ms

Release: 50.9ms

DEQ Page 3, DEQ #2

Mode: BP

Frequency: 408

BW (OCT): 5

DEQ #3 Section

DEQ Page 1, DEQ #3

M-Gain: -15dB

Ratio: 1:100

DEQ Page 2, DEQ #3

Attack: .30ms

Release: 20ms

DEQ Page 3, DEQ #3

Mode: BP

Frequency: 10023

BW (OCT): 5

Notes:

- *After entering all of the proper parameters, as given above, the individual thresholds for DEQ NO #1 and DEQ NO #2 should be reset to -5dB of gain reduction while a constant user program is feed into mic. (For example a solid ahhh...)*
- *Set DEQ NO #3 to the minimal threshold that eliminates any high frequency distortion.*
- *The DEQ center frequency and bandwidth values given above enables coverage as follows: DEQ1: 20Hz~300Hz, DEQ2: 300Hz~2.5kHz, DEQ3: 2.5kHz~20kHz*

Limiter Section

DYN Page 2 (LIMIT MENU)

Hold: 30.6 ms

Release: 304.2 ms

Notes:

- *All universal parameters (useful for all applications) were derived from extensive testing by Tyler, KAOKA, using his function generator and an oscilloscope to determine the best parameters for minimal distortion of a sign wave source at the output of the DEQ2496.*
- *In addition, the DEQ center frequencies, and their respective bandwidths, have been optimized to simulate a true multi-band compressor covering the entire 20Hz~20kHz audio spectrum.*

Thanks Tyler, nice job!