

BootEQ mkII

MANUAL

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1 Introduction

1.1. License

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1.2. Installation

Requirements:

- Win32 and SSE2 support
- Tested and known to work in many VST compatible hosts

Put the “BootEQmkII.dll” file contained in this archive in the VST Plug-In folder of your host.

All common sample rates are supported since version 2.1.

1.3. Overarching topics

Warning: Lower your listening volume while operating the Plug-In to avoid hearing damage or damage of speakers or any other equipment.

Usage tips:

- Use the 'OUT' knob to level the outgoing audio and for handy A/B comparisons (works just for the pre-amp section, not for the EQ)
- Use <ctrl> + mouse left click on a knob or switch to restore default position
- Use <shift> + mouse left click on a knob to fine adjust values
- Use this plugin as an insert effect in any mono or stereo channel of your VST host
- Use the presets just as a basic reference: EQing is to be an individual approach each time, there is no magic setting

Some general tips on EQing (related to mixing, not mastering):

- Use your ears and not your eyes
You will make different EQ decisions either done by eye or by ear, but the hearing rulez
- Sweep through frequency spectrum with high EQ gain/peak settings to identify resonant or unpleasant frequencies, but:
- Make your specific EQ decision always in context of the rest of the mix. EQing is always relative and not absolute
- Use coloring EQ's to your advantage to obtain certain sound qualities whilst mixing (if necessary and wanted)
- Use technical EQ's for steep and surgical corrections

And always remember: garbage in, garbage out ;-)

On CPU usage:

All different selectable EQ bands are increasing slightly the overall CPU consumption of the plug-in. The other way around disabling them will save CPU cycles. There is just a slight overall overhead and you can disable the whole EQ section if not needed.

Activating the pre-amp section consumes higher CPU usage due to the complexity of the algorithms and the 4x oversampling used here.

1.4. Credits

Visual concept by Patrick Barca, www.suxesiv.ch – it was a pleasure to work with you.

Many thanks to Christian Budde for his famous Plug-In analyzer.

2 Reference

2.1. Overview

'BootEQ' – a musical sounding mixing EQ and pre-amp simulation.

At a glance:

- four parametric and independent EQ bands
- special selected and musical sounding EQ curves and phase responses
- capable of reproducing several 'classic' curves and EQ behavior
- well adjusted auto Q and versatile overlapping frequency ranges
- minimized curve warping near Nyquist frequency
- detailed modeled pre-amp simulation
- subtle and nice audio coloration enhancements

Plug-in specification:

- PC / VST compatible
- SSE and Assembler optimized sound engine
- state-of-the-art digital signal processing
- low CPU EQ and minimum latency processing
- musical sounding EQ curves (frequency and phase response)
- signal modeled pre-amp simulation

2.2. Quick reference



The EQ.

Q: Alter the HF frequency response (slope shape): Turning counter-clockwise broadens towards mid freq's. Turning clockwise features more 'air'. This affects the **High Frequency** shelving filter: Boost or attenuate frequencies around 10kHz up or down to 12dB.

High Middle Frequency EQ (bell shape): Boost or attenuate frequencies up or down to 12dB. Select the center frequency step-less from 800Hz up to 8.9 kHz.

Low Middle Frequency EQ (bell): Boost or attenuate frequencies up or down to 12dB. Select the center frequency step-less from 100Hz up to 1.5kHz. There is a switch on the left to change from steeper to broader curves.

Low Frequency filter section: This peak filter is switchable to high pass mode. The peak filter allows -12 to +12dB adjustments from 40 to 250Hz. In high pass mode the gain dial changes the curve and steepness of the filter.

ON/OFF turns the whole EQ on or off.



The pre-amp simulator

The **VU** style meter displays the internal gain level after the **DRV** dial. Hitting slightly the red metering area should be 'safe' distortion-wise. Hitting constantly the red mark causes audible distortion (all depending on the source material).

The **DRV** (drive) knob sets the internal and volume compensated gain level of the pre-amp model and changes the overall saturation behavior.

This introduces subtle or audible distortion depending on input level and source.

TUBE ON/OFF: Adds/removes tube style 2nd order harmonics.

VINTAGE/MODERN: Changes the frequency and phase response of the simulation as well as the HF saturation behavior.

LF: Low frequency transformer simulation response. Alters frequency and phase response plus the harmonic audio structure as well.

OUT boosts or attenuates the outgoing level up or down to 12dB.

ON/OFF turns the whole pre-amp on or off.

2.3. Further information

See my blog at varietyofsound.wordpress.com for some additional information, curve plots and tutorials on this plug-in.

Peace,
bootsy