elysia

PLUGIN MANUAL

niveau filter

introduction

First of all, thank you very much for using the niveau filter plugin - the EQ section of our famous mpressor!

Add punch to muffled snares, reduce the harshness from active pickups, create some wonderful Dub and LoFi sounds...

There are so many ways to benefit from this little tool. It's fast, efficient, and most important: it sounds great!

This filter is a specialist in changing the overall sonic character of a signal with ease. It features two controllers per channel and is capable of producing convincing results in no time at all. Whenever a classic shelving filter would be too limited and a fully parametric filter would be too much, the niveau filter is the perfect tool.

Its main function is to change the proportions between high and low frequencies. The principle is quite similar to a pair of scales: Dependent on the gain setting around a variable center frequency, the high frequencies are boosted whereas the low frequencies are attenuated (or vice versa) at the same time.

The center frequency can be shifted continuously between 26 Hz and 2.2 kHz or between 260 Hz and 22 kHz respectively (when the x10 switch is activated).

The characteristics of the filter change in the extreme positions of the EQ Gain controller: the fully counter-clockwise setting will give you a low pass filter; fully clockwise position will result in a high pass filter.

We hope you'll have a good time experimenting. Have lots of fun with it!

introduction

TRUE EMULATION

How has the hardware counterpart of the niveau filter been 'translated' into software? Being a part of the mpressor code, this plugin is actually a side effect of a pretty long and complicated development process... The following provides just the basic idea:

Transferring a complex analog hardware into digital code is not exactly trivial, especially if the model is a completely discrete design like the niveau filter.

The first important task in a project like this is to fragment the electronic circuitry into separate functional blocks. These blocks are translated into software step by step after which they will be reunited to become a functional plugin.

This first result is measured very accurately and then compared to the hardware, which leads to an extensive and very detailed matching process. The work on the graphical user interface (photography, retouching, rendering) takes place at the same time.

The final stage is the calibration of the behavior of all the controllers in order to give the software the 'feel' of the real thing. Finally, the finished code is ported to different plugin interfaces (RTAS/VST/AU/AAX...) and packed into installation routines.

OVERSAMPLING

The niveau filter plugin benefits from higher sample rates, as the signals running through it can be processed at higher resolutions which result in more precise and closer to analog EQing.

The niveau filter plugin employs the oversampling technique in order to enjoy this advantage even when lower sample rates are used. This means that the basic sample rate of a project is multiplied by a certain factor inside the plugin without the need to set the complete project to a higher frequency.

This method consumes a certain amount of CPU power, but the sonic result speaks for itself. The niveau filter plugin uses oversampling according to the following rules:

• Project sample rate lower than 50 kHz:
  4x oversampling

• Project sample rate lower than 100 kHz:
  2x oversampling

• Project sample rate higher than 100 kHz:
  No oversampling

MOUSEWHEEL SUPPORT

You do not necessarily have to click and drag the controllers of the niveau filter. Instead, try making your settings with the alternative mousewheel control without clicking on the specific controller first!

The following shortcuts provide some further comfort:

Fine mode
VST	Shift + mouse wheel
AU	Shift + mouse wheel
RTAS	Ctrl/Cmd + mouse wheel

Standard position
VST	Ctrl/Cmd + mouse click
AU	Alt + mouse click
RTAS	Alt + mouse click

**Linear/Circular mode**
VST	Alt

controls

1 **EQ Gain:** The characteristic of the niveau filter. Between the mid and fully counter-clockwise position, bass is boosted and treble is cut (vice versa in the other direction).

2 **EQ Freq:** The center frequency of the niveau filter. Around this reference point, the bass is boosted and treble is cut or vice versa.

3 **Filter On:** Sets the plugin from bypass to active.

4 **Freq x10:** Shifts the frequency range of the niveau filter. The printed values from 26 Hz to 2.2 kHz are multiplied by 10 to 260 Hz and 22 kHz.

The main function of the niveau filter plugin is to change the proportions between high and low frequencies. This happens similar to a pair of scales: Dependent on the gain setting around a variable center frequency, the high frequencies are boosted and the low frequencies are cut (or vice versa).

Using the plugin is very easy: First, set the desired center frequency with the EQ Freq controller (2). If you are looking for a center higher than 2.2 kHz, just activate the Freq x10 button (4) which will multiply the available frequency region times ten.

Now turn the EQ gain controller (1) clockwise to cut the low frequencies and boost the treble at the same time. When you turn the controller counter-clockwise, the effect will just be the other way round.

Please note that the characteristics of the filter change in the extreme positions of the EQ Gain controller: the fully counter-clockwise setting will produce a low pass filter (fully clockwise = high pass).
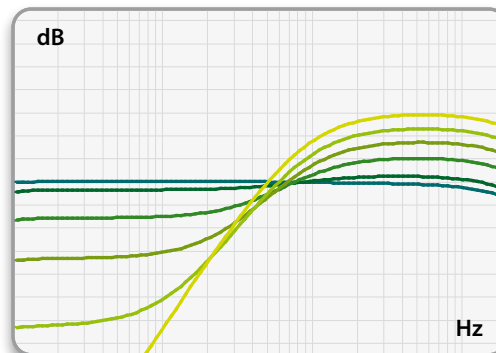
EQ Gain settings between 0 and Hi position @ 500 Hz
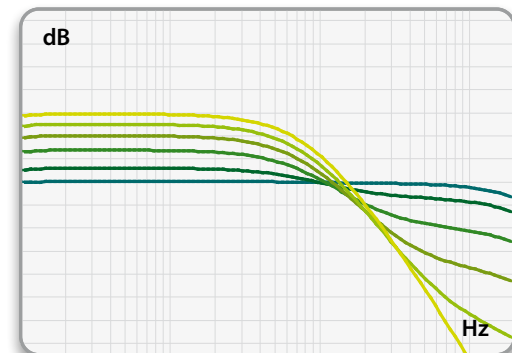
EQ Gain settings between 0 and Lo position @ 1.5 kHz

CONTACT

information

TECHNICAL SUPPORT

Please contact Plugin Alliance for help:
https://plugin-alliance.com/en/support.html

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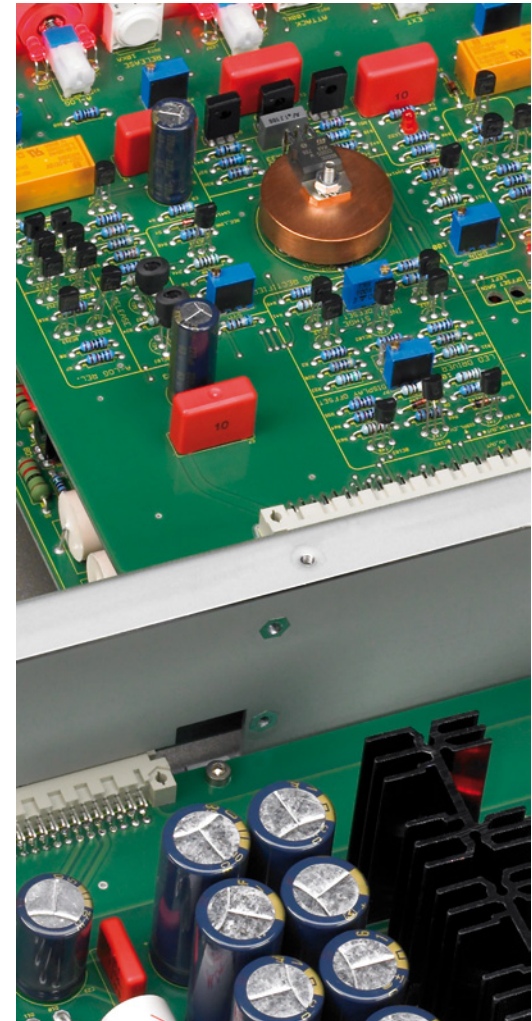Registration number:
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