



## General project info

<b>Name</b>	KTAudioHealer	 
<b>Version</b>	1.0	
<b>Type</b>	VST effect plugin (LF/HF blocker and undenormalizer)	
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## Documentation

### Processing

KTAudioHealer is a simple VST plugin that makes the incoming audio healthier by applying DC / LF blocking, Nyquist / HF blocking and undenormalization. It is totally unoptimized and has no GUI...

#### DC / LF blocking

One rather experimental thing you can do with digital audio, is opening a non-audio file as an audio file pretending that the bits in that file represent audio samples. Starting from there, you can try to make some original sounds out of these raw bits by applying all kinds of sound transformations / effects on them. Now, normal audio data samples are more or less centered around a zero line: the sum of all samples is on average always zero. But for the "artificial sound sources" mentioned above, this might not be the case, as the original data is not really audio. The non-zero sum of all samples is called the DC offset. KTAudioHealer removes this DC offset and all other very low frequencies according to a cutoff frequency you specify. This makes sure that full headroom is maintained and that the sound will be healthier for your sound equipment.

#### Nyquist / HF blocking

At the other end of the spectrum, very high frequencies around half of the sample frequency (which is called the Nyquist frequency), can also cause problems. KTAudioHealer removes frequencies near Nyquist according to a cutoff frequency you specify.

#### Undenormalization

Extremely small audio sample values may cause the processor of your computer to enter a special mode in which it will operate slower than in normal conditions, and this manifests itself in very high CPU usage, which is something you obviously don't want, especially for samples you can't even hear... KTAudioHealer makes sure that, no matter what samples come in, the samples that come out will not be in such a denormalized state.

#### Input

- audio: stereo
- MIDI: none

#### Output

- audio: stereo
- MIDI: none

**Parameters**

- LF cutoff Frequencies below this value will be cut off (in Hz).
- HF cutoff Frequencies above this value will be cut off (in Hz).

**Tweaking**

This thing has no custom GUI, so you need to use the generic GUI your host provides.

**Remarks**

Although the purpose of this plugin is exactly to prevent DC and Nyquist frequencies to pass through, I would still advise to be very careful when dealing with strange signals. I am not responsible for any damage whatsoever that might be caused by using this software.

**Acknowledgements**

Mac versions were built by Marc from DestroyFX.

**Legal stuff**

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*Thanks for not skipping the "read me" file!*  
*Koen Tanghe - 20040420*