soothe audio processor Manual

Thank you for using soothe!

soothe is a spectral processor for suppressing resonances in the mid and high frequencies. It works by automatically detecting the resonances in the audio material and applying a reduction that matches the input signal. **soothe** has been designed with vocal processing in mind, but solves problems in a range of situations. You can think of it as an **advanced de-esser**, or as an automatic **dynamic frequency notcher**.



Parameters



soothe has a number of parameters that are used to tweak the process.

depth control acts as the main threshold, controlling how much processing is applied to the signal. More depth means more reduction. It is like a *threshold* or *drive* of the process which is dependent on the input-level. The depth should be adjusted according to the input level, *even when using a preset.*

For convenience the depth is shown in dB. Please note that the dB value displayed is referential to make it easier and more familiar to read.

Frequency and reduction graph

soothe has a real time reduction graph - in blue in the picture below - showing the parts of the signal that are being processed.



The frequencies affected can be controlled with the EQ-like curve shown in white in the figure.

'Boosting' specific frequency areas, or a band, reduces resonances more on this area. So think of the curve as an **inverse EQ**, or **side-chain EQ**. The process won't exactly follow the curve, but rather, it is more sensitive to the frequency areas that are 'boosted', and less sensitive to the frequency areas' 'cut'.

See the picture above for demonstration on how the curve affects the reduction. Sensitivity is reduced around 4 kHz with the **yellow band**, so **soothe** will not try to process that area as much.

soothe has five **bands** that can be used to control the curve. Band parameters can be adjusted by **dragging** the dots on the graph. Bands can also be bypassed by **double clicking the dot**. The **grey** and **light blue** ones are low and high cut respectively. You can control their **slope** by dragging them up and down. The rest three (**red**, **yellow**, **purple**) are parametric bands.

You can also use the **mouse wheel** or **scrolling gestures** to adjust the dots and knobs.

Command clicking (ctrl key on Windows) and dragging the dots vertically allows you to adjust the

band 1
frequency
2k8 Hz
bandwidth
0
1.2
sens
4.1 dB

bandwidth of a parametric band. Also hovering on top of a dot and scrolling adjusts the bandwidth.

You can also control the bands with the strip to the left of the graph (See the picture on the left). The functions of the knobs change depending on the band that is selected. A band can be bypassed also by clicking the dot on top of the strip, here it is labeled "band 1".

You can **select a band** by clicking the dot on the frequency graph or by dragging a rectangle around them to **multiselect** bands (see picture on the right).



The *shift key* works as a **fine tune modifier** for the dots and knobs allowing smaller and more accurate adjustments while holding it down when dragging or scrolling.



You can change the size of the GUI by clicking the arrows found at bottom right.

Sharpness and selectivity

Sharpness and **selectivity** affect the way the reduction is applied.

Sharpness controls how sharp cuts the processing attempts to make. More sharpness leads to deeper, narrower cuts. By pulling this back all the way to <u>0.0</u>, soothe acts more like a **conventional dynamic eq**. With the sharpness cranked up all the way to <u>10.0</u>,



the cuts become very deep and narrow. This might sound distorted, as the process removes all the resonant frequencies in a very surgical manner – the distortion heard is actually noise and non-resonant residue in the sound material. This can be very useful setting e.g. for drum overheads.

An interesting effect may be to increase sharpness and mix the processed signal with the dry one, using the **wet**-control.

Selectivity refers to the frequencies suppressed and as the parameter name implies, controls how selective soothe is about them. Selectivity acts as a kind of threshold, with higher selectivity value cutting only the stronger and more prominent frequencies. If you dial the selectivity all the way down to 0.0, soothe will be more general with the reduction. This is a great way to treat uneven material to sound more balanced. With selectivity all the way up to 10.0, the processing is applied only to the most prominent of peaks. For **de-essing** purposes, selectivity may be best to be dialled to 5.0 and over.

Selectivity, sharpness and depth all have effect on each other, so after adjusting one, you may have to tweak the others as well!



Output stage

The output stage of the screen lets you adjust **monitoring** and levels. With the **wet**-parameter you can mix the original dry signal with the processed one. You could for example apply heavy processing with soothe and then mix some dry signal back in for more natural results. With wet on <u>100%</u>, only the processed signal gets to the output, and with <u>0%</u> only the dry one gets out.

Trim is the output gain compensation for A/B comparison and to compensate for the gain reduction due to the processing.

Delta toggle presents you with the delta, or difference, signal of the wet and dry. This is useful for hearing the part of the signal that **soothe** is removing. With this you can get an insight of the frequencies affected with the current settings, and adjust accordingly – much the same way as you might boost a frequency with EQ to know what to cut.

Bypass toggle is a soft bypass for quick A/B comparison without glitches that some platforms and DAWs might introduce when bypassing the signal. Please note that soothe continues to compute the output, so bypassing from this control won't save you any processing power. For disabling the plugin you should always deactivate it from the host.

Stereo link and oversampling

When running as a stereo instance, soothe can control the link of the two channels with the **stereo link** parameter. With stereo link on <u>100%</u> soothe will combine the side-chain signals and apply the same reduction for both channels. Stereo link on <u>0%</u> will act as a dual mono.

If you need more fidelity than the default configuration, you can add **oversampling** and **resolution** to the process. Please note that both of

these settings will add considerable amount of strain to your CPU! They will come handy in master bus and in mastering applications, when the sound material being processed is very complex. As a rule of thumb, the default settings are probably fine for individual tracks, you can evaluate this easily with the **delta** toggle.

Oversample calculates the reduction filter in higher resolution. This may give you smoother results when using high sharpness-values.

Resolution increases the temporal resolution. With resolution on <u>high</u> or <u>ultra</u>, **soothe** will more often refresh the reduction filter it internally uses. This can be easily audible with material that has lots of transients or very complex waveforms such as harpsichord, or even a grand piano.



Presets

soothe comes with a number of cross-format **factory presets**. You can access these presets from the menu

preset

that opens up from the icon shown on the right. Please note, that for compatibility reasons soothe doesn't reveal its presets to the host's native preset menu in some DAWs.

Loading presets

Presets can be changed from the **preset menu** (on the right) by either clicking a preset or by navigating with the *arrow keys*. Double clicking on the preset name or pressing return key closes the menu. While the preset menu is open, you can reset the parameters to the initial state that you had before opening the menu i.e. to discard the loaded preset by clicking **restore initial**.

Because the menu allows quick loading of the presets by just selecting them, it is good to know how to use the **restore initial** to avoid losing your unsaved changes. You can always ensure this by clicking **restore initial** and **save** to save the current state of the parameters before venturing forth to examine the existing presets.

	Beefy Guitars
Restore initial	Cheezy Piano
Save	De-ess Master
	Ear Friendly Top on Master
Set as default	Electric Bass Presence
user default preset	Electronic Refuge
factory default preset	Even More Ear Friendly Top on Master
drums	Female Voc De-Esser
Henkka's presets	For Placing Backing Vocals
Henkka's Presets II	Lady Rap De-Ess
lavalier microphones	Low Mid Cleanup
double bass	Make Room For The Vocals
full reset	Rocking Vocals
grand piano	Rocky Drums
vocals baritone	Salvage from the mp3
user presets	Soft Roof
	Vocal Mid-high Rescue
	Vocal Wide Rescue
	Wide Scale Solution

The menu uses different icons to represent if they're empty or contain presets (see picture below).

- 🗀 Empty Preset Folder
- Preset Folder with Presets

Saving presets

You can **save settings** useful to you as **user presets** by opening the **preset menu** and clicking "Save". This will let you choose a location and a name for the preset to save. Use the default location for the plugin to find your presets!

If you wish, you can also save a **user default preset**. This sets the default parameters that will be loaded when opening a new instance of the plugin. Store your current parameter settings as the user default preset by clicking the "Set as default". Please note, that the option to load a user default preset is not present before it's saved for the first time.

soothe manual updat Comparing settings with A/B switching

On the toolbar, in the right corner, there are three buttons as shown on the right. These buttons are from left to right: A/B Switch, A/B Copy and Configurations.

You can compare two different set of parameters by clicking the **A/B switch button**. Every change in the parameters is set for the A or B option - which ever is highlighted and underscored - while the parameters are changed.

You can copy the settings in the currently open option to another by clicking the **A/B copy button**.

Additional configurations

The **cog icon** leads to a page of additional configuration options. You can open this manual from the configuration options by clicking the **?** mark in

the top row of the options page. From the same top row you can also read **about** information of the plugin (build time and plugin type) as well as visit our **website**.

Below the top row there's two toggle options; You can **disable the tooltips** so they won't show up every time you hover the mouse pointer on the GUI and also force disabling of the **OpenGL** acceleration which works for some machine's e.g. when some intel HD graphics cards on Windows that have buggy drivers result in issues.

Miscellaneous details

Default preset folder

Presets represent folders and files on the hard drive. You can find the presets in the **user's home** folder at Documents/oeksound/soothe. Any folders created under the default preset folder will be shown in preset menu.

Removing user default preset

If for some reason you want to reset and remove the user default preset, you can do this by deleting the config file for soothe. This file can be found at:

Mac:
/Library/Application Support/oeksound/soothe/config.xml

Windows: C:\ProgramData\oeksound\soothe\config.xml

On Windows this folder is a hidden folder, so to access it you should setup the folder view options accordingly.









updated with version 1.3.0

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Uninstalling

Mac:

The installer media (.dmg) contains an uninstaller program. In case the package is not available to you, the uninstaller can be found on your machine from the folder: /Library/Application Support/oeksound/soothe/

Windows:

Open **control panel** and run the **add or remove programs** tool. The tool should show an installation of soothe and allows you to uninstall it from your system.

FAQ and support

The FAQ section has been moved to our support website: <u>oeksound.com/support</u>

If our support website doesn't answer your question, or if you find a bug, don't hesitate to email us at:

support@oeksound.com