

# BABY AUDIO®

# smooth operator<sup>pro</sup>



## USER MANUAL

March 5th, 2025

For help, please write us at: [support@babyaud.io](mailto:support@babyaud.io)

## The Definitive Clarity Tool

Smooth Operator Pro is the advanced edition of our harmonic signal balancer plugin. Built to give you direct access to the raw materials that make up your sound, Smooth Operator Pro takes resonance suppression and spectral dynamics into new territory. Leave harshness, mud and masking behind with a new and flexible approach for taming harmonic material in your mix.

## Watch the video tutorial

<https://youtu.be/1jx9ON7BOU8>

## Quick Start

Smooth Operator Pro lets you work directly with the spectral content of your sounds to powerfully reshape your mix and combat fatiguing frequency energy.

With compressor-style controls, you can easily reduce resonant frequencies and rebalance audio material to fix mistakes and improve results.

Use the graphical display to see concentrations of frequency energy in real time.

Double click to create a processing node and use the global threshold knob to detect harmonic peaks across your whole signal.

Drag a node downwards or turn up the threshold knob to start applying spectral peak reduction.

Adjust the onset and release characteristics, peak reduction ratio and knee shape with the Compression menu.

Choose the detection style and resolution with the Focus menu. Access the stereo field options with the Imaging menu. Adjust the overall behavior with the Config menu.

Set the global output and wet/dry mix or monitor the removed harmonic material in the Output menu. Change the node shape, adjust its dedicated settings or hear it in solo with the Node menu.

## Use Cases



Smooth Operator Pro works by breaking your signal down into its individual frequency components and changing their intensity over time.

It lets you apply compressor-style gain reduction to harmonics that cross the threshold while leaving the others untouched.

For some, it may feel like a new way to think about manipulating audio, but once you get the hang of it, you'll find new capabilities and creative ideas using Smooth Operator Pro. To get you started, here are a few of our favorite ways to use the plugin.

### Achieve clarity in any sound source

Most signals, whether individual tracks or full mixes, suffer from having excess frequency build-up in certain areas. You may not notice fatiguing frequency energy until you start trimming it away. When you do, you'll hear your tracks become lighter and clearer – almost as if removing a blanket from your speakers.

Smooth Operator Pro's most effective use-case is to make this job easier than ever. In fact, it'll do it for you! Because the plugin works dynamically, it will only target frequencies that surpass the threshold, updating its focus areas and intensity as your track changes.

Use Smooth Operator Pro as an instant track cleaner by selecting an appropriate preset and moving the global threshold knob. Or go as deep and surgical as you need to achieve perfect clarity.

## **Reduce harsh resonances**

Harshness can creep up in any source signal when there's lots of sonic information present. Notching it out band by band with EQ can wreak havoc on the sound's original character and introduce problems like phase shift.

Smooth Operator Pro lets you reduce harsh resonances without damaging EQ filters for a more natural sound.

## **Low-end control**

Smooth Operator Pro works equally well across the entire frequency spectrum.

Low end harmonics can often be a struggle to control, even with sophisticated tools like multi-band compression.

When you're dealing with conflicting kick samples or unruly bass that seems to change with every note, it may be a sign that harmonic resonance is building up in the wrong places.

Use Smooth Operator Pro's shelving filters to zoom in on your low end and carve out harmonic space where it matters most.

## **Sculpt the stereo field**

Sometimes your source sound is just right, except for one pesky area in the left or right channel. Reducing problematic material between channels rarely works well with traditional tools.

Smooth Operator Pro's powerful imaging controls let you adjust harmonics independently of their location in the stereo field.

With per-node L/R or M/S imaging options, Smooth Operator Pro can solve problems in complex stereo signals with ease.

## **Unmask your mix**

Masking is the phenomenon that explains why sounds cover each other up when mixed together. The culprit is the concentration of energy across similar parts of the spectrum.

Skilled engineers can reduce the effect of masking with EQ, but it's always a compromise between the two sounds in question.

Spectral dynamics control can't eliminate the cause of masking, but it can help reduce it faster and more effectively—especially when you're not an EQ expert.

## Unlock creativity in the spectral domain

There's a lot you can do with Smooth Operator to help your sounds fit into a mix. But that's just the start when it comes to the creative possibilities of spectral dynamics processing.

Smooth Operator is powerful enough to rebalance the harmonics in your signal into pure noise.

You probably don't want to go there most of the time—but you're welcome to try!

Add in the sidechain features and you open up a unique pathway for the sounds in your mix to interact with one another.

## Working With Smooth Operator Pro

Smooth Operator Pro is capable of both sweeping tonal shifts and surgically precise adjustments.

If you want to attenuate spectral peaks across your whole signal, simply turn up the threshold knob without creating additional frequency nodes.



Increase the intensity of the effect with the ratio control and adjust the attack and release just like a compressor to control resonant frequencies and rebalance your sound.

To focus Smooth Operator Pro's action on a specific frequency area, use the parametric node controls to define the range for processing.

Create nodes by double clicking anywhere on the spectrum. (Remove nodes by double clicking or right clicking).

As you drag the selected node downwards, the threshold for the affected frequencies will decrease, leaving the rest at the threshold value set by the global control.

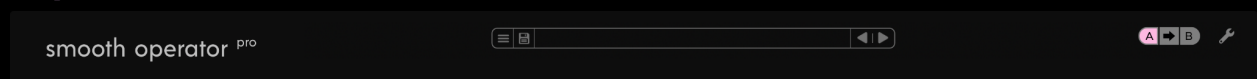
The characteristics of the spectral peak reduction blend seamlessly into the unaffected frequencies as the threshold decreases, so there's no need to worry about extreme settings causing inconsistent sound.

To set detailed controls per node, use the node menu bar along the bottom of the plugin UI with the Override Global option selected.



This way you can set custom peak reduction characteristics for each node and address any issue in your signal as needed.

## Top Menu

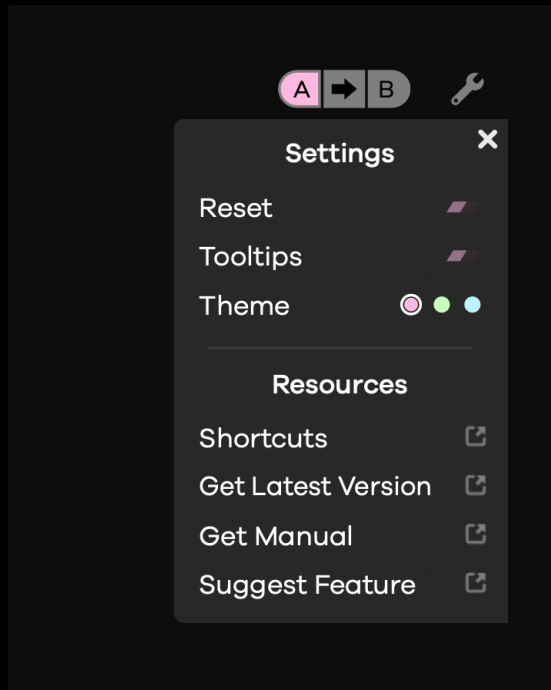


From left to right, the top menu gives you the following options:

- Show activation details (Smooth Operator Pro logo)
- Open the preset browser
- Save preset
- Navigate to the previous preset or the next preset

- Quick compare - click the A or B icon to toggle between settings and using the arrow to copy current settings to the opposing slot
- Show additional settings

## Settings Menu



### Reset

Return all settings to initialization state

### Tooltips

Show the tooltips for the parameter in focus

### Theme

Select the colorway for Smooth Operator Pro's UI

### Get Latest Version

Download the most recent build of Smooth Operator Pro

### Get Manual

Download the PDF manual

### Suggest Feature

Contribute to Smooth Operator Pro's development

## Frequency display

Double click anywhere in the frequency spectrum to create a node. Drag nodes to change their position, decreasing their threshold as you pull them down.

Double click or right click a node to delete it.

## Global threshold

Set the level where global spectral peak reduction begins for the entire signal

## Global menus

Global settings affect all active nodes as well as the behavior of the spectral peak reduction set by the Global threshold control.

## Global Setup



## Correction

Set the weighting of the frequency detection. Choose Even for a flat profile that targets all frequencies equally or Skew for a perceptually weighted curve that is calibrated to be more psychoacoustically pleasing.

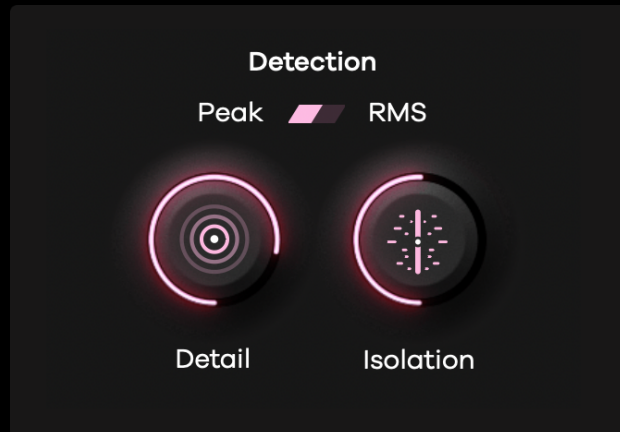
## Gain Comp

Add makeup gain to compensate for level changes after spectral peak reduction.

## Lo and Hi Preserve

Restrict the range of processing in the high and low end to hone in on specific frequency areas you want to target. Preserved frequencies will still be present in your output signal, they will just not be processed by the plugin.

## Global Focus



### Detection

Set the detection type for spectral peak reduction. Choose RMS for average spectral intensity or Peak to react to the highest magnitude in the signal.

### Detail

Set the resolution of the spectral peak detection. Low values detect broad trends in intensity, while high values isolate individual frequency peaks. The more you want to hone in on specific problems or resonances, the higher you'll want to set Detail.

### Isolation

Adjust the boundaries of the spectral peak detection to include adjacent frequencies. Maximum values target only the detected harmonics, lower values include more surrounding frequencies for a softer, more musical response.

## Global Comp



### Knee

Adjust how smoothly the spectral peak reduction transitions from unprocessed to processed. Choose soft for a gradual increase toward the set ratio or hard for a more abrupt transition.

### Ratio

Set the intensity of spectral peak reduction when the signal crosses the threshold. Use 1:1 to disable compression.

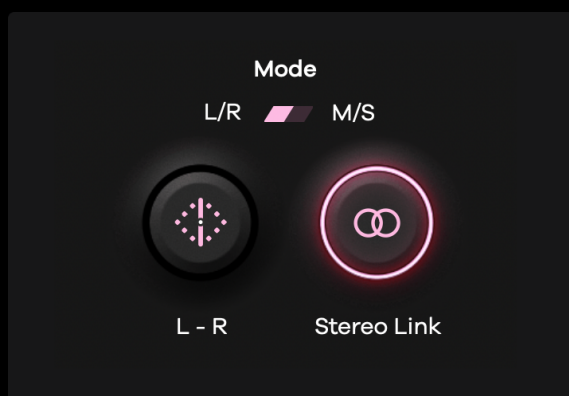
### Attack

Adjust the onset time of the spectral peak reduction

### Release

Set the time it takes for spectral peak reduction to return to normal after engaging.

## Global Imaging



### Mode

Set the stereo processing mode for dual channel audio. Choose L/R to adjust settings separately for left and right channels, or M/S to adjust center and sides.

## L/R or M/S

Skew the intensity of the spectral peak reduction between left and right in L/R mode. Skew the intensity of the spectral peak reduction between mid and sides in M/S mode.

## Stereo Link

Set the stereo balance of the spectral peak detector signal. 0% treats the L and R channels independently, 100% sums the detection signal to mono.

## Global Output



## Monitor

Monitor the plugin's output or hear only the spectral content Smooth Operator Pro has removed from the signal.

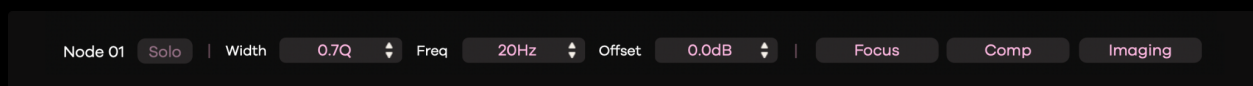
## Mix

Set the wet/dry mix to blend the original signal with the effect

## Out

Set Smooth Operator Pro's global output level

## Node Settings



## Node

Click the node label to turn the node processing on/off.

### Solo

Solo the selected node to hear its effect in isolation.

### Width

Set the bandwidth (Q) of node's frequency range for processing.

### Freq

Set the center frequency of the node's action.

### Offset

Set the spectral peak reduction threshold for the node's selected frequency range (measured as an offset from the global threshold).

### Node focus



Use custom Focus values for this node instead of Global Focus setting when Override Global is enabled.

### Node Comp



Use custom Comp values for this node instead of Global Comp setting when Override Global is enabled.

## Node Imaging



Use custom Imaging values for this node instead of Global Imaging setting when Override Global is selected.

## Shortcuts

Smooth Operator Pro comes equipped with several shortcuts to speed up your workflow.

- Double click a parameter to reset it to its default value.
- Control (PC)/Cmd (Mac) + click and drag on a parameter to fine tune adjustments.
- Use the scroll wheel to adjust values while hovering over a parameter.
- Add Node: Double-click anywhere on the spectrum

- Remove Node: Double-click or right click node
- Toggle Node ON/OFF: Ctrl+click node
- Change Node Width: Scrollwheel + hover on node

## Presets

Smooth Operator Pro comes loaded with X presets created by leading sound engineers.

Preset credits (and special thanks to):

- Craig Bauer
- Dacota G
- Eryck Bry
- John Nathaniel
- Matt Sim
- Max Jaeger
- Rob Kleiner
- Sam Sherbin

## Compatibility

- Plugin formats: VST, VST3, AU, AAX (64-bit).
- Platforms supported: Mac OS 10.11 and up (including Native Apple Silicon M1/M2 Compatibility). PC Windows 10 and newer.
- DAWs supported: All major DAWs, including Ableton Live, Pro Tools, Logic Pro, FL Studio, Cubase, Studio One, Bitwig, Reaper, Reason etc.

## Installation

A software download is emailed to you right after your purchase, however you can always go to [www.babyaud.io/downloads](http://www.babyaud.io/downloads) for the latest software updates. After downloading, unzip the file and select either Mac or PC depending on your system.

- MAC: Double click on the PKG installer and follow the instructions
- PC/WINDOWS: Double click on the setup file and follow the instructions

## Plugin Collection Plan Users

If you have an active subscription to the Plugin Collection Plan, Smooth Operator Pro will appear in your Baby Audio Manager app for download.

Make sure your machine is registered, get the software by clicking 'Download' and follow the instructions to install.

## Activation and Trial Version

Activate your software by entering the license key that was emailed to you when you bought Smooth Operator Pro. Serial keys are entered in the 'trial mode' open screen. If you have any problems activating, please email [support@babyaud.io](mailto:support@babyaud.io)

If you're running Smooth Operator Pro in trial mode, please note that the trial will output 5 seconds of silence every 60 seconds. To buy the full version, go to:  
<https://babyaud.io/smooth-operator-plugin>

## Uninstall Locations

### Mac OS

- AU: /Library/Audio/Plug-ins/Components/
- VST: /Library/Audio/Plug-ins/VST/
- VST3: /Library/Audio/Plug-ins/VST3/
- AAX: /Library/Application Support/Avid/Audio/Plug-Ins/

### Windows

- - Windows - VST: The file will be in the custom path selected during installation
- - VST3: \Program Files\Common Files\VST3\
- - AAX: \Program Files\Common Files\Avid\Audio\Plug-Ins\

## End User License Agreement

Please read our End User License Agreement here: [www.babyaud.io/eula](http://www.babyaud.io/eula)

We hope you'll enjoy Smooth Operator Pro. If you run into any issues or have questions along the way, you can always contact us at [support@babyaud.io](mailto:support@babyaud.io)