

Vocal Smoother

User Guide | Parish Audio

Dynamic vocal smoothing for resonance, harshness, and sibilance that change from phrase to phrase.



Product page: <https://parishaudio.com/products/vocal-smoother>

Vocal Smoother is designed to smooth changing tonal problems without applying a permanent EQ cut across the entire performance. It detects resonance, harshness, and sibilance independently, reduces them when they become prominent, and backs away when they are not causing a problem.

1. Quick Start

1. Insert Vocal Smoother on a lead vocal, backing vocal, vocal bus, dialogue track, or other source that needs dynamic tonal smoothing.
2. Choose a Voicing. Balanced is the general-purpose starting point, Bright is tuned for brighter material, and Aggressive provides a stronger response for forward or difficult vocals.
3. Raise Smooth until the vocal begins to feel more controlled and consistent without losing its personality.
4. Use Resonance, Harshness, and Sibilance to decide which kinds of problems should receive the most attention.
5. Adjust Focus lower or higher to move the processor toward the part of the spectrum where the distracting energy lives.
6. Increase Preserve Air if the result becomes too dark or closed-in. Use Mix for gentler parallel-style smoothing.

7. Level-match with Output and judge the result in the full mix. The goal is a vocal that feels finished without sounding obviously processed.

2. How Vocal Smoother Works

A vocal changes constantly. Different notes, vowels, consonants, registers, and levels can make different frequency areas jump forward from one moment to the next. A static EQ cut can solve one phrase and make another phrase unnecessarily dull.

Vocal Smoother uses separate detector and processing regions for resonance, harshness, and sibilance. The processor follows activity in those regions and applies reduction only when the corresponding energy becomes prominent. The amount of reduction is controlled by the overall Smooth setting together with the individual Resonance, Harshness, and Sibilance controls.

The stereo detector is derived from the combined left and right signal, so both channels respond to the same detected events. Each channel is then processed through its own filters with the same reduction decisions, helping stereo material remain stable rather than pulling from side to side.

Preserve Air is more than a simple brightness control. Higher settings reduce how strongly upper-frequency material is attenuated and restore a portion of the high-frequency air after smoothing. This helps retain openness while still controlling distracting peaks.

3. Controls

Smooth (0-100%)

Sets the overall intensity of Vocal Smoother. Higher values increase the combined action of the resonance, harshness, and sibilance stages.

Practical note: Use Smooth as the first control to set the overall amount of finishing, then refine the three problem controls individually. Smooth at 0% is the lightest setting, not a hard bypass; use Power or Mix at 0% when you need the completely unprocessed signal.

Voicing (Balanced / Bright / Aggressive)

Changes the internal detector ranges, sensitivity, response, and air behavior to suit different vocal characters. Balanced is the general-purpose vocal profile. Bright shifts the processing emphasis higher and is designed to retain more openness on bright vocals. Aggressive lowers thresholds and allows stronger, faster control for more difficult material.

Practical note: Start with Balanced. Move to Bright when the vocal is naturally airy or polished, and Aggressive when sharp or dense material needs more assertive control.

Resonance (0-100%)

Controls the strength of dynamic reduction in the lower resonance region. This can help tame notes or vowels that suddenly sound boxy, honky, ringing, or disproportionately forward.

Practical note: Increase it until resonant moments sit more evenly, then back it off if the vocal begins to lose body.

Harshness (0-100%)

Controls dynamic reduction in the upper-midrange harshness region. It is intended for strident vowels, edge, and upper-mid energy that can become tiring when a vocal is pushed forward in a mix.

Practical note: This is often useful on bright, compressed, or close-miked vocals that need to stay present without becoming abrasive.

Sibilance (0-100%)

Controls dynamic reduction in the high-frequency sibilance region. Increase it when S, SH, T, and similar consonants become too sharp or inconsistent.

Practical note: Use enough to control the distracting consonants while keeping intelligibility and natural articulation.

Focus (0-100%)

Shifts the smoothing emphasis from lower problem areas toward higher ones. Lower values move the resonance, harshness, and sibilance regions downward; higher values move them upward and place more emphasis on upper-frequency control.

Practical note: If the processing seems to miss the problem, sweep Focus while listening in context rather than simply increasing Smooth.

Preserve Air (0-100%)

Controls how much openness and high-frequency detail are retained during smoothing. Higher values protect more upper-frequency energy and restore more air after the dynamic reduction stages.

Practical note: Raise Preserve Air when the smoothing is correct but the vocal feels slightly closed-in. Lower it when the top end itself needs stronger control.

Mix (0-100%)

Blends the processed and original signals. At 100% you hear the full Vocal Smoother result; lower settings mix more of the original performance back in.

Practical note: A Mix setting below 100% is useful for subtle finishing on an already good vocal or for smoothing stacked vocals without making them too uniform.

Output (-18.0 to +18.0 dB)

Adjusts final output gain after the dry/wet blend.

Practical note: Use Output to level-match processed and bypassed audio. Matching loudness makes it easier to judge whether the processing is actually improving the vocal.

Power (On / Off)

Engages or bypasses the processing with a smoothed transition.

Practical note: Use the power button for final A/B checks after level-matching with Output.

4. Visual Feedback

The main display contains four animated reduction halos: Resonance, Harshness, Sibilance, and Total. Each halo responds to the activity of its corresponding processing stage, giving you a quick view of which part of the processor is working at any moment.

The displayed dB values are intended as practical visual feedback rather than a replacement for listening. The Total display combines the activity of the three processing regions. Use the meters to confirm when and where Vocal Smoother is reacting, but make final decisions by ear in the mix.

5. Practical Workflows

Lead Vocal

- Start with Balanced Voicing and a moderate Smooth setting.
- Raise Resonance, Harshness, or Sibilance according to what is actually distracting in the performance.
- Move Focus until the processing reacts in the right tonal area.

- Add Preserve Air as needed so the vocal stays open and present.
- Level-match with Output before deciding whether the vocal is genuinely smoother and easier to listen to.

Bright or Aggressive Vocal

- Try Bright Voicing when the vocal has useful high-frequency air that you want to preserve.
- Try Aggressive Voicing when sibilance and upper-mid harshness remain difficult even at stronger settings.
- Increase Sibilance and Harshness independently rather than relying only on Smooth.
- Use Preserve Air carefully: higher settings maintain openness, while lower settings allow stronger top-end control.

Finishing an Already Good Vocal

- Use a lower Smooth value and moderate individual controls.
- Keep Mix below 100% if you want the original performance to remain more exposed.
- Treat the plugin as a final consistency stage rather than trying to make the meters move constantly.

Backing Vocals and Stacks

- Use gentle Smooth and a lower Mix to reduce small tonal differences across stacked parts.
- Smooth Bus is a useful factory starting point for blended processing.
- Avoid excessive Resonance reduction if the stack begins to lose body or size.

Dialogue and Narration

- Narration Softener is a useful starting point for spoken material.
- Use lower Focus values when the distracting energy sits lower than typical vocal sibilance.
- Favor smooth, unobtrusive settings that improve consistency without making consonants sound unnatural.

6. Factory Presets

Preset	Suggested use
Vocal Control	Balanced general-purpose vocal smoothing with assertive sibilance control.
Presence Lift	Bright-profile finishing that keeps the vocal forward while controlling upper-mid edge.
Bright Lead	Stronger Bright-profile treatment for polished, bright lead vocals.
Dialogue Rescue	More emphasis on harshness and resonance for spoken or mid-forward material.
Aggressive Hook	High-intensity Aggressive-profile smoothing for dense, bright, or heavily processed hooks.
Airy Pop	Gentler Bright-profile processing with high air preservation and a partial wet mix.

Preset	Suggested use
Acoustic Softener	Balanced processing with less sibilance emphasis and more attention to harshness and resonance.
Smooth Bus	Gentle, blended smoothing intended for buses, stacks, or subtle group processing.
Gentle Leveller	Low-intensity all-around smoothing for material that only needs a small amount of refinement.
Modern Shine	Bright-profile polish with high Focus and strong air preservation.
Narration Softener	Spoken-word oriented smoothing with lower-frequency focus and controlled air.

7. Presets, Undo, and Exact Value Entry

Vocal Smoother supports factory presets and user presets. User presets can be saved, loaded, renamed, and deleted. Parameter changes are integrated with the Parish Audio Undo/Redo system, and the current preset is marked as modified after an edit.

The numeric readouts under the visible knobs are editable. Click a value, type the desired number, and confirm the edit. This is useful when you need repeatable settings across tracks or sessions.

8. Troubleshooting and Setup Tips

Symptom	What to try
The vocal sounds dull or too soft.	Reduce Smooth, Harshness, or Sibilance; increase Preserve Air; raise Mix toward the dry signal by lowering the wet percentage; or try Bright Voicing.
Sibilance is still jumping out.	Increase Sibilance, raise Smooth, move Focus higher, or try Aggressive Voicing.
The vocal sounds thin or loses body.	Reduce Resonance, move Focus higher, or lower the overall Smooth amount.
The plugin seems to react to the wrong tonal area.	Sweep Focus lower or higher. The three processing regions move together with Focus.
The processing is useful but too obvious.	Reduce Smooth or lower Mix to blend more of the original signal back in.
The result sounds better only because it is louder.	Use Output to match the bypassed level before comparing.
I want no processing at all.	Use Power to bypass, or set Mix to 0%. Smooth at 0% is the lightest intensity setting but is not the same as a hard bypass.

9. Technical Reference

Control	Range	Default	Function
Smooth	0-100%	58%	Overall smoothing intensity.
Resonance	0-100%	48%	Dynamic control of lower resonant buildup.
Harshness	0-100%	54%	Dynamic control of upper-mid harshness.
Sibilance	0-100%	62%	Dynamic control of high-frequency sibilance.
Focus	0-100%	50%	Moves the processing emphasis from lower to higher frequency areas.
Preserve Air	0-100%	62%	Retains and restores upper-frequency openness.
Mix	0-100%	100%	Dry/wet blend.
Output	-18 to +18 dB	0 dB	Final output gain.
Voicing	Balanced / Bright / Aggressive	Balanced	Selects a tuned internal response profile.
Power	On / Off	On	Engages or bypasses processing.

Channel layouts: mono and stereo. Vocal Smoother is an audio processor and does not use MIDI. The internal processing uses smoothed parameter changes and a short smoothed power transition to reduce abrupt switching artifacts.

10. Product and Support

For the latest product information, downloads, and updates:

Product page: <https://parishaudio.com/products/vocal-smoother>

Parish Audio website:

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