

Vocal Pro

User Guide | Parish Audio

Complete vocal processing channel strip for tone, dynamics, character, width, and space.



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

Vocal Pro brings the core stages of vocal processing into one focused channel strip: input gain, tone shaping, compression, de-essing, saturation, stereo width, reverb, and final output control.

1. Quick Start

1. Insert Vocal Pro on the vocal track you want to shape. Start with the plugin powered on and the section power buttons enabled.
2. Set Input so the vocal reaches a healthy working level without unnecessary clipping. The Input meters show the signal after the Input control.
3. Use the Tone section to remove unwanted lows or excessive highs, then make broad Low, Mid, High, and Air adjustments.
4. Use Compression to make the performance more consistent. Set Threshold and Ratio first, then adjust Attack and Release for the amount of movement you want to keep.
5. In Character, use the de-esser to control sharp sibilance and add Saturation when the vocal needs more density or edge.
6. Use Space last. Width shapes the stereo image, while Size, Damp, and Mix add reverb around the vocal.
7. Match the processed level with Output so you can compare the result fairly.
8. Bypass individual sections to hear what each stage contributes. Main Power returns to the untouched input signal.

2. Signal Flow at a Glance

- Input gain is applied first, followed by the Input meter.
- Tone processes the signal in this order: HPF, LPF, Low shelf, Mid bell, High shelf, then Air shelf.
- Compression follows Tone.
- Character follows Compression and processes the de-esser before the saturation stage.
- Space follows Character and processes Width before Reverb.
- Compression Makeup is applied near the end of the active chain, after Space and before the final Output control.
- Output gain is the last active processing stage before the Output meter.
- Main Power bypass crossfades back to the untouched signal captured before Input gain, so the fully bypassed state is a true unity-gain pass-through.

3. Input

Input -48 to +48 dB

Sets the level entering Vocal Pro. Input affects every processing section that follows it, so it can change how strongly the compressor, de-esser, and saturation react.

Practical note: Use Input for gain staging rather than automatically pushing it higher. The Input meters are measured after this control.

4. Tone

Control	What it does
HPF 20-500 Hz	High-pass filter for removing rumble, proximity buildup, and unnecessary low-frequency energy.
LPF 4-20 kHz	Low-pass filter for reducing excessive top end or deliberately darkening the vocal.
Low -18 to +18 dB	Broad low shelf centered at 120 Hz for adding or reducing vocal weight.
Mid -18 to +18 dB	Bell EQ centered at 2.5 kHz (Q about 0.9) for presence, articulation, or midrange control.
High -18 to +18 dB	High shelf centered at 6.5 kHz for broad brightness and upper presence.
Air -18 to +18 dB	Higher high shelf centered at 12 kHz for top-end openness and air.

5. Compression

Threshold -60 to 0 dB

Sets the level above which compression begins.

Ratio 1:1 to 20:1

Controls how strongly levels above the threshold are reduced.

Attack 0.1 to 100 ms

Controls how quickly compression responds. Faster values catch peaks more aggressively; slower values preserve more initial articulation.

Release 5 to 500 ms

Controls how quickly compression recovers after the signal falls back below the threshold.

Makeup 0 to +24 dB

Adds gain associated with the Compression section so reduced level can be restored.

Current implementation note: Makeup is applied after the Tone, Compression, Character, and Space processing stages, and before the final Output control.

6. Character

Character combines de-essing and saturation. The de-esser runs first, followed by the saturation stage.

De-Esser Freq 3 to 10 kHz

Sets the lower edge of the high-frequency detector used to identify sibilant energy. Higher settings make the detector focus farther up the spectrum.

De-Esser Amount 0 to 100%

Controls the strength of the de-essing response.

The current de-esser uses high-frequency detection to trigger linked broadband attenuation. It is designed to reduce sibilant moments without permanently cutting the vocal's high frequencies.

Saturation Drive 0 to +24 dB

Pushes the signal into a smooth nonlinear saturation stage. Higher values create progressively more harmonic color and density.

Saturation Mix 0 to 100%

Blends the saturated signal with the unsaturated signal. Lower values are useful for subtle parallel color.

Drive includes internal level compensation so increasing saturation behaves more like a character change and less like a simple volume increase.

7. Space

Width 0 to 200%

Controls stereo width. From 0-100%, Vocal Pro narrows the existing stereo Side information with Mid/Side processing. Above 100%, it widens existing stereo information and can add decorrelated Side information to mono or near-mono sources.

100% is the neutral Width setting. 0% produces a centered mono result from stereo material. Values above 100% should be checked in context and in mono.

Size 0 to 100%

Controls the room-size parameter of the built-in reverb.

Damp 0 to 100%

Controls reverb damping. Higher values produce a more damped, less bright decay.

Reverb Mix 0 to 100%

Increases the contribution of the reverb while retaining a dry vocal component.

This is intentionally not a conventional 0-100% dry-to-fully-wet send control. At 0%, the reverb path is unity dry; even at the maximum setting, dry signal remains present.

8. Output and Metering

Output -48 to +48 dB

Sets the final active-plugin level after all processing and Compression Makeup.

The Levels panel provides stereo Input and Output meters. The Input meters follow Input gain; the Output meters show the final signal after Output gain.

9. Section Power and Main Power

- Tone, Compression, Character, and Space each have their own power control so stages can be removed from the chain independently.
- Section switching uses a short smoothed crossfade to reduce clicks. Once a section is fully bypassed, its processing is skipped until re-enabled.
- Main Power bypasses the complete Vocal Pro chain, including Input and Output gain, and returns the untouched incoming signal.

10. Practical Starting Points

Goal	Suggested approach
Natural lead vocal	Start with modest HPF cleanup, small EQ moves, 2:1-4:1 compression, light de-essing, and subtle saturation. Keep Width near 100% and Reverb Mix low.
Bright modern vocal	Use High and Air carefully, then increase de-essing as needed so added brightness does not make consonants distracting.
Warm / intimate vocal	Add a little Low or Mid weight, soften High/Air if needed, use moderate compression, light saturation, and keep Width at or below 100%.
Dense rap or rock vocal	Use firmer compression, a faster Attack if peaks need stronger control, and more saturation Mix for density. Keep output level matched while judging.
Dry spoken voice / podcast	Focus on HPF, broad EQ, compression, and de-essing. Keep Reverb Mix at 0% and Width at 100% unless a special effect is wanted.
Wider backing vocals	Raise Width above 100% and add a small amount of reverb. For mono sources, Vocal Pro can create decorrelated side information above 100% Width.

11. Factory Presets

Preset	General direction
Airy	Open top end, moderate de-essing, light saturation, extra width, and a touch of reverb.
Bright	More upper presence and air with controlled sibilance.
Clean	Moderate, balanced processing with restrained character and space.
Dark	Reduced upper frequencies, warmer balance, restrained space.
Intimate	Closer, slightly narrower presentation with controlled dynamics and minimal ambience.
Podcast	Dry, centered spoken-voice starting point with firmer compression and no reverb.
Presence	Midrange and upper-presence emphasis with moderate character processing.

Preset	General direction
Rap	Stronger compression and saturation for a more assertive vocal.
Rock	Aggressive dynamics and saturation with controlled space.
Warm	Softer top end with added warmth and moderate saturation.
Wide	Expanded stereo width with additional air and reverb.

Factory preset loading leaves the current Input, Output, and Main Power settings unchanged. Factory presets enable the Tone, Compression, Character, and Space sections.

12. Presets, Undo/Redo, and Resizing

- Vocal Pro includes factory presets and user preset support.
- User preset loading preserves the current Input and Output settings while restoring the saved processing state.
- Current edits support undo and redo through the shared Parish Audio application framework.
- The interface is resizable within the limits provided by the host and plugin window.

13. Troubleshooting

Symptom	What to check
The vocal sounds too thin	Check HPF frequency first, then Low/Mid EQ. Also compare the Tone section bypassed.
The vocal sounds harsh or too bright	Reduce High or Air, lower Saturation Drive/Mix, and use the de-esser if the problem is concentrated in sibilant moments.
Compression sounds too obvious	Raise Threshold, lower Ratio, use a slower Attack, or lengthen Release. Compare at matched loudness.
Sibilance is still distracting	Move De-Esser Freq toward the strongest sibilant area and increase Amount gradually.
The whole vocal ducks when S sounds occur	Reduce De-Esser Amount. The current de-esser applies broadband gain reduction when the high-frequency detector is triggered.
Saturation gets too dense	Reduce Drive first, then lower Mix for parallel saturation.
The vocal becomes too wide	Move Width back toward 100%. Check the vocal in mono and in the context of the full mix.
Reverb feels too obvious	Lower Reverb Mix, reduce Size, or increase Damp for a darker, shorter-feeling space.
Output is clipping	Reduce Output, Compression Makeup, Input, or an earlier gain-adding stage.
Power Off sounds different in level	Main Power is true dry bypass. Any active Input, Makeup, or Output gain is intentionally excluded while the plugin is off.

14. Technical Reference

Item	Current implementation
Product	Vocal Pro by Parish Audio
Version	2.0.0
SKU	10005
Input / Output	-48 to +48 dB, defaults 0 dB
Tone filters	HPF 20-500 Hz; LPF 4-20 kHz; Low shelf 120 Hz; Mid bell 2.5 kHz Q 0.9; High shelf 6.5 kHz; Air shelf 12 kHz
Compression	Threshold -60 to 0 dB; Ratio 1:1-20:1; Attack 0.1-100 ms; Release 5-500 ms; Makeup 0-24 dB
De-esser	Detector frequency 3-10 kHz; Amount 0-100%; linked broadband reduction
Saturation	Drive 0-24 dB; Mix 0-100%; smooth tanh-style nonlinearity with partial drive compensation
Width	0-200%; M/S narrowing up to 100%; hybrid stereo/mono widening above 100%
Reverb	Size, Damp, Mix 0-100%; reverb follows Width
Meters	Stereo peak-style Input and Output meters
Bypass	15 ms smoothed section/main transitions; fully-off Main Power returns untouched dry signal

Support and current product information: parishaudio.com