

CARVEIR 2

CONTEXT CABINET DESIGNER · USER GUIDE

Build the cabinet around the song. Capture the context, shape the response and take the result into your rig.

Version 2.1.2 · Windows 10 / 11, 64-bit · macOS 11+ · Intel & Apple Silicon



The real CarveIR 2 interface.

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01 Your first cabinet

CarveIR 2 creates cabinet responses around an amp signal and the arrangement it needs to fit. Start with two separate references: the backing mix without the target guitars, and the amp sound without cabinet processing.

- 1 Insert CarveIR 2 after your amp stage on the guitar track or guitar bus. For a direct guitar input, load an amp-only NAM profile in **Amplifier**.
- 2 Import a representative backing file into **Mix reference**. Import an amp-only recording into **Amp reference**, or capture the main input while playing.
- 3 Choose **Generate Cabinets**. Audition **Dark**, **Natural** and **Raw** with **Preview** enabled. Keep the backing mix playing on its normal route.
- 4 Adjust Context Fit and Cabinet Sculpt in the arrangement. Lock a candidate you want to retain before generating again.
- 5 Choose **Export Cabinet** for one response, or **Batch & Blend** for several. Save a preset to retain the complete design.

Two references, two roles. The references guide tonal balance. They are not a measured transfer function of a physical cabinet. A successful design still depends on your listening decisions.

Windows includes a 64-bit VST3 effect and standalone application. macOS includes universal VST3, Audio Unit and standalone builds for Intel and Apple Silicon. Close the relevant DAW and application before installing.

WINDOWS

Windows 10 version 1809 or newer, or Windows 11, 64-bit. The installer checks for Microsoft Edge WebView2 and can install the runtime when required.

MACOS

macOS 11 or newer. Use the signed and notarized universal package on either Intel or Apple Silicon. CarveIR 2 has a separate identity from the original CarveIR.

INSIDE A DAW

The host controls the device, sample rate, buffer and sidechain. Choose CarveIR 2 under Develop Device in the effect list. AAX is not included.

STANDALONE

Open **Audio** and choose input/output devices, channels, rate and buffer. On Windows select **ASIO** and the interface maker's driver. Use one input for a single guitar, and a stereo output pair. The driver control panel is available when supported.

LATENCY AND MONITORING

Cabinet length, phase and a loaded amp profile affect processing delay. CarveIR reports latency to the host. Linear phase adds delay around its centred response; interface buffering adds further delay. Increase the buffer if the sound crackles.

Avoid hearing direct interface monitoring and the processed guitar simultaneously unless you deliberately want both paths. In standalone, import the backing reference from a file; the DAW sidechain workflow is not available there.

03 The workspace



The actual CarveIR 2 editor, with captured references and generated cabinets.

The left column holds the two references and the Amplifier launcher. The central display shows cabinet response or impulse. The right column holds candidates, generation and output controls. The lower panels shape context, cabinet tone and resonances.

CONTROL	USE
Header	Preset selection, Undo/Redo, A/B comparison, Audio, help, scaling and Bypass.
Response / Impulse	Switch between frequency response and the time-domain impulse.
Mix / Amp overlays	Compare the captured reference spectra with the cabinet response.
Scale	Change the complete editor size. The latest size is remembered separately from sound presets.

The display follows the rendered cabinet. It is not a live spectrum of the entire mix. Keep the guitar and backing paths separate when auditioning.

04 Capture useful references

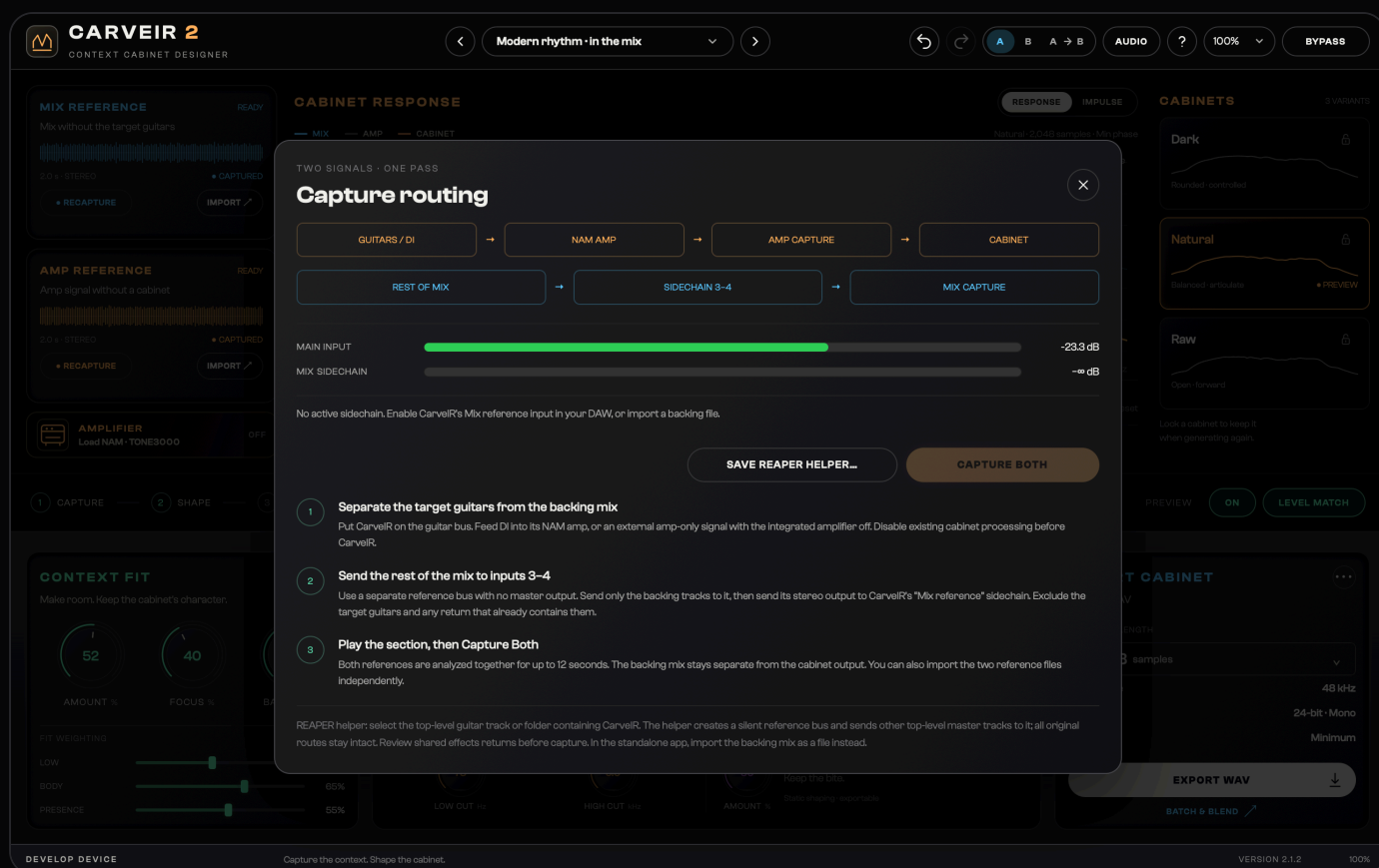
Choose a section that represents the sound you want to solve: a dense chorus, sustained chords or the part where the guitar fights the arrangement. Capturing unrelated passages can lead to less useful tonal choices.

CONTROL	USE
Mix reference	The backing arrangement without the target guitars. Import a file, or feed the optional Mix reference sidechain.
Amp reference	The main input after the optional NAM stage and before CarveIR's cabinet. Disable any earlier cabinet simulation.
Capture / Stop	Record a short analysis pass, up to 12 seconds. The progress indicator shows the current capture.
Import / drop	Load a supported audio file into the corresponding reference card. Dragging onto the correct card determines its role.
Capture Both	Use the Routing guide to capture backing sidechain and amp main input in one pass.

WHAT IS RETAINED

CarveIR stores compact reference spectra and overview data in the recipe. It does not retain the original audio recording in the preset. Keep your source files separately if you need to recapture a different passage.

Without a sidechain: Mix capture observes the main input and temporarily keeps cabinet preview dry. Importing a separate backing file is the simpler way to avoid capturing your guitar as the mix reference.



The native Routing guide shows the main and sidechain input meters.

Guitar → amp / optional NAM → CarveIR cabinet → master
Backing tracks → master + silent reference send → CarveIR sidechain

Place CarveIR on the guitar track or guitar folder. Send the backing to its optional Mix reference input without replacing the normal backing route to the master. Watch both meters while playing; main should follow the amp signal; Mix should follow the backing.

Enable the sidechain in your DAW. With a conventional stereo VST3 routing layout, the main input uses channels 1–2 and the auxiliary reference uses 3–4. Your host's pin mapping decides the actual channel pair.

Do not place the cabinet on the full master mix. Do not include the target guitar or its dedicated effects return in the backing reference. Shared reverb returns need a deliberate routing decision.

The REAPER routing helper

Open the Routing guide and choose **Save REAPER Helper**. This exports a Lua action you can load into REAPER's Action List. It prepares the reference route while retaining the existing audible mix.

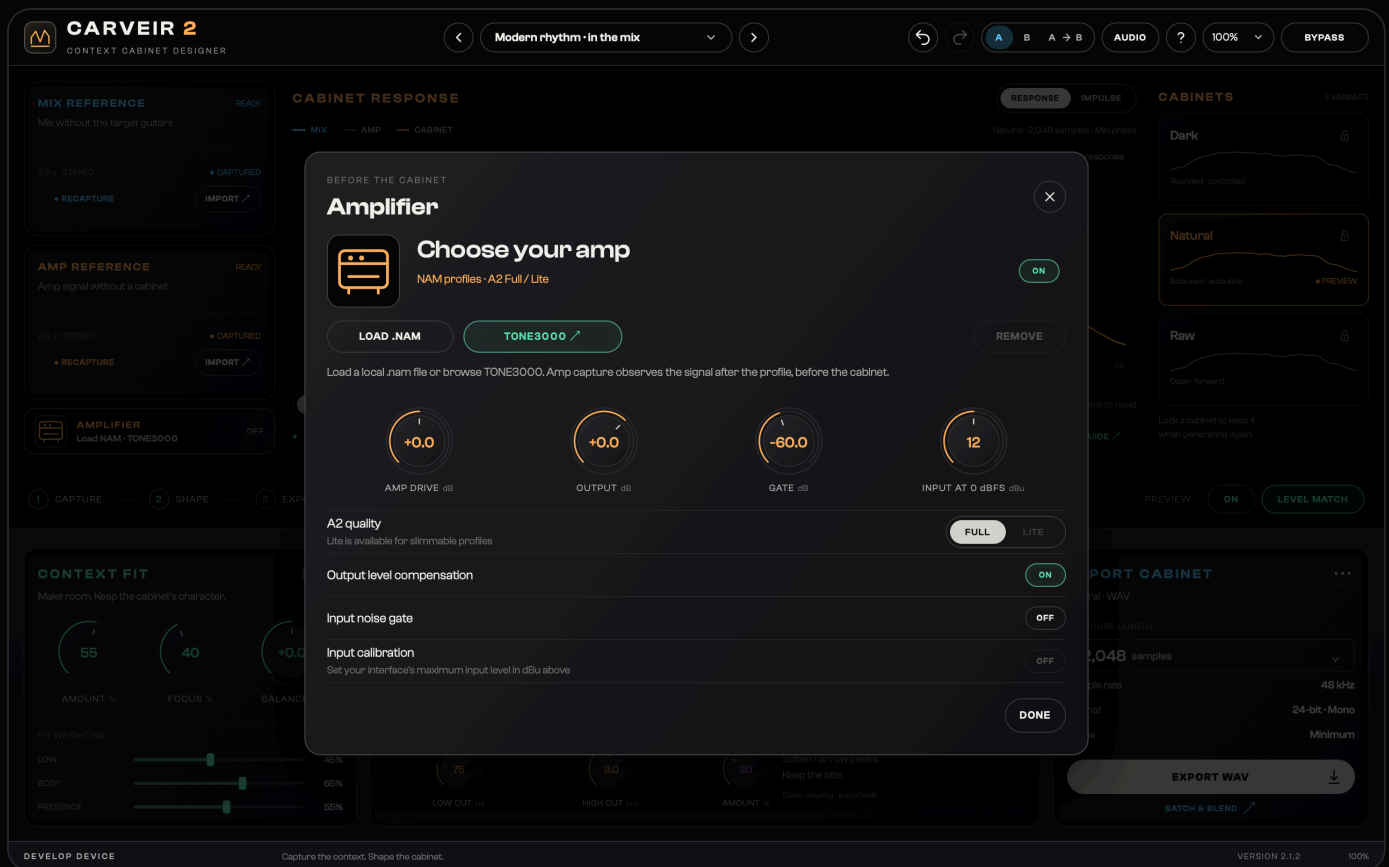
- 1 Save your project. Place CarveIR 2 on a top-level guitar track or guitar folder and select that track.
- 2 Load the saved Lua file through **Actions** → **Show action list** → **ReaScript** → **Load**, then run it.
- 3 The helper creates a silent backing reference bus, gathers the other independent top-level master contributors and sends that reference to CarveIR's auxiliary input.
- 4 Review shared effect returns and unusual routing. The helper excludes the target guitar's descendants and reachable effect returns to keep them out of the reference.
- 5 Play the project, check both meters in the Routing guide and choose **Capture Both**. Stop after a representative passage, then generate cabinets.

DESIGNED FOR AN EXISTING PROJECT

The helper preserves original sends, allocates an unused stereo channel pair and maps the CarveIR VST3 auxiliary input. Re-running it updates its managed route instead of duplicating it. The routing operation is grouped into one REAPER Undo step.

If your project has nested submixes or complex shared returns, importing a backing render remains a reliable alternative. Listen to the reference bus in isolation before capturing, then return it to silent reference duty.

07 Amplifier before the cabinet



The native Amplifier panel. A loaded profile supplies its available name and artwork.

Choose **Load .NAM** for a local profile, or **TONE3000** to browse. Prefer an **amp-only** profile: an amp-plus-cabinet profile already contains cabinet coloration and can sound overly filtered through another IR.

CONTROL	USE
Amp Drive / Output	Drive into the profile and trim its output independently.
A2 Full / Lite	Choose profile quality. Lite is available only for compatible slimmable profiles.
Output level compensation	Use available profile loudness information to compensate output level.
Input noise gate	Enable the gate and set its threshold for your guitar's noise floor.
Input calibration	When the profile supplies calibration metadata, enter the interface's maximum input level in dBu and enable calibration.

NAM is a nonlinear amp stage. It is included in live playback and full recipe recall, but it is **not baked into exported cabinet WAV files**.

08 Browse TONE3000

Open **Amplifier** → **TONE3000** and connect your account through the browser. Return to CarveIR after authorizing. The library starts with amp-only A2 profiles and trending results.

- 1 Search for an amp, maker or creator. Use the collection, gear, architecture and sort filters to narrow the results.
- 2 Select a tone to view its available models, creator, description and licence. Expand longer descriptions with **Read More**.
- 3 Download the model you want, then choose **Load**. A tone can contain multiple captures with different settings; select the specific model deliberately.
- 4 Return to Amplifier, set Drive and Output, then capture a new Amp reference for that profile before generating your cabinet.

COLLECTIONS AND NAVIGATION

All profiles, Favorites and My profiles are separate views. Previous/next buttons navigate result pages. The profile page opens the creator's original listing. Retry repeats a failed operation; Cancel stops the current operation where available.

OFFLINE USE

Browsing and downloads require an internet connection and a TONE3000 account. Local .nam loading and cabinet processing work offline. Presets retain the loaded model for recall; respect its licence before sharing a preset that contains it.

No results does not necessarily mean the service is empty. Try a broader search, another architecture or gear type, and check the connection message. Sign Out disconnects this product's account session.

09 Context Fit



Context Fit appears beneath the response display.

CONTROL	USE
On / Off	Enable or bypass context-driven spectral shaping.
Amount	How strongly the captured context influences the cabinet.
Focus	How concentrated the context shaping is across frequency.
Balance	Bias the overall tonal balance within the context adjustment.
Low / Body / Presence	Weight the corresponding regions in the context fit.

Start with a moderate Amount. Compare all three candidates in the arrangement, then adjust one region at a time. If the cabinet loses its own character, reduce Amount before making large compensating boosts elsewhere.

Context Fit responds to the references you supplied. Changing the amp profile or source guitar substantially is a reason to recapture the Amp reference.

10 Cabinet and resonance shaping

CONTROL	USE
Body	Low-frequency body and weight.
Bite	Midrange attack and definition.
Air	High-frequency openness.
Detail	Retain more fine spectral structure at higher settings; soften it at lower settings.
Low Cut / High Cut	Trim unnecessary low and high extremes.
Resonance Sculpt	Reduce pronounced peaks in the designed cabinet response. Amount controls the depth; its switch bypasses this shaping.

ONE DESIGN FOR PREVIEW AND EXPORT

Context Fit, Cabinet Sculpt, Resonance Sculpt and manual edits are rendered into the cabinet kernel. The live cabinet preview and WAV export share that design path.

Resonance Sculpt is **static response shaping**. It does not react dynamically to notes like a compressor. Its effect can therefore be included in a conventional cabinet IR.

USEFUL ORDER

- 1 Choose a candidate that is already close.
- 2 Adjust Body, Bite and Air for the arrangement.
- 3 Set the low and high limits.
- 4 Use Detail and Resonance Sculpt to control roughness.
- 5 Finish individual areas with Draw or Smooth, then compare at a sensible level.

11 Draw and Smooth

Select the Response view to edit the cabinet directly. Edits belong to the selected candidate, so check Dark, Natural or Raw before making a change.

CONTROL	USE
Draw	Drag across the graph to shape a continuous frequency response. Fast movements are filled between pointer positions.
Smooth	Brush a region to soften local response irregularities, including those in the generated response itself.
Undo / Redo	Undo or restore a complete gesture. Use this to compare a change before drawing again.
Clear Edits	Remove manual edits while retaining protected intervals.

A CONTROLLED EDITING PASS

- 1 Audition a short repeating section and locate the frequency area that needs attention.
- 2 Make a small Draw change or brush with Smooth. The actual rendered response follows the edit.
- 3 Compare with Undo/Redo. Keep changes that help in the mix, not only in solo.
- 4 Save the recipe before trying a substantially different direction.

Smooth is a response-editing tool. It does not remove a click from the source recording or act as a time-varying dynamics processor.

12 Protect regions and lock candidates

Protection and candidate locks solve different tasks. Use protection for a frequency region; use a candidate lock when you want to preserve a complete generated candidate during the next generation.

CONTROL	USE
Protect tool	Drag across a frequency interval. The labelled region is preserved during generation and excluded from manual response edits.
Remove one interval	Alt-click, right-click or double-click the protected interval.
Clear Protect	Remove all protected intervals.
Candidate lock	Retain that candidate when Generate Cabinets creates another batch.
Global controls	Cabinet Sculpt and other global recipe controls still affect locked candidates.

A USEFUL EXPLORATION WORKFLOW

- 1 Keep a candidate with a low end you like.
- 2 Protect the frequency interval you want to retain.
- 3 Lock any complete candidate you want to keep as a reference.
- 4 Generate again and audition the alternatives.
- 5 Unlock or clear protection when you want to explore that part of the design again.

A lock is not a global freeze of every audible parameter. Save a complete preset or use A/B when you need a whole-sound checkpoint.

13 Audition, compare and save

PREVIEW AND BYPASS

Preview applies the generated cabinet to the main input. With Preview off, the cabinet is removed from the audition path. The optional amp stage is a separate stage. **Bypass** bypasses the complete processing path for a host-aligned comparison.

Level Match is an audition utility. It helps compare cabinet choices without letting level dominate the decision; it is not a loudness target for the exported file.

A/B AND HISTORY

A/B holds two complete recipes. Use the copy button to put the current design into the other bank before experimenting. Undo/Redo works across grouped edits. The DAW session also retains plugin state.

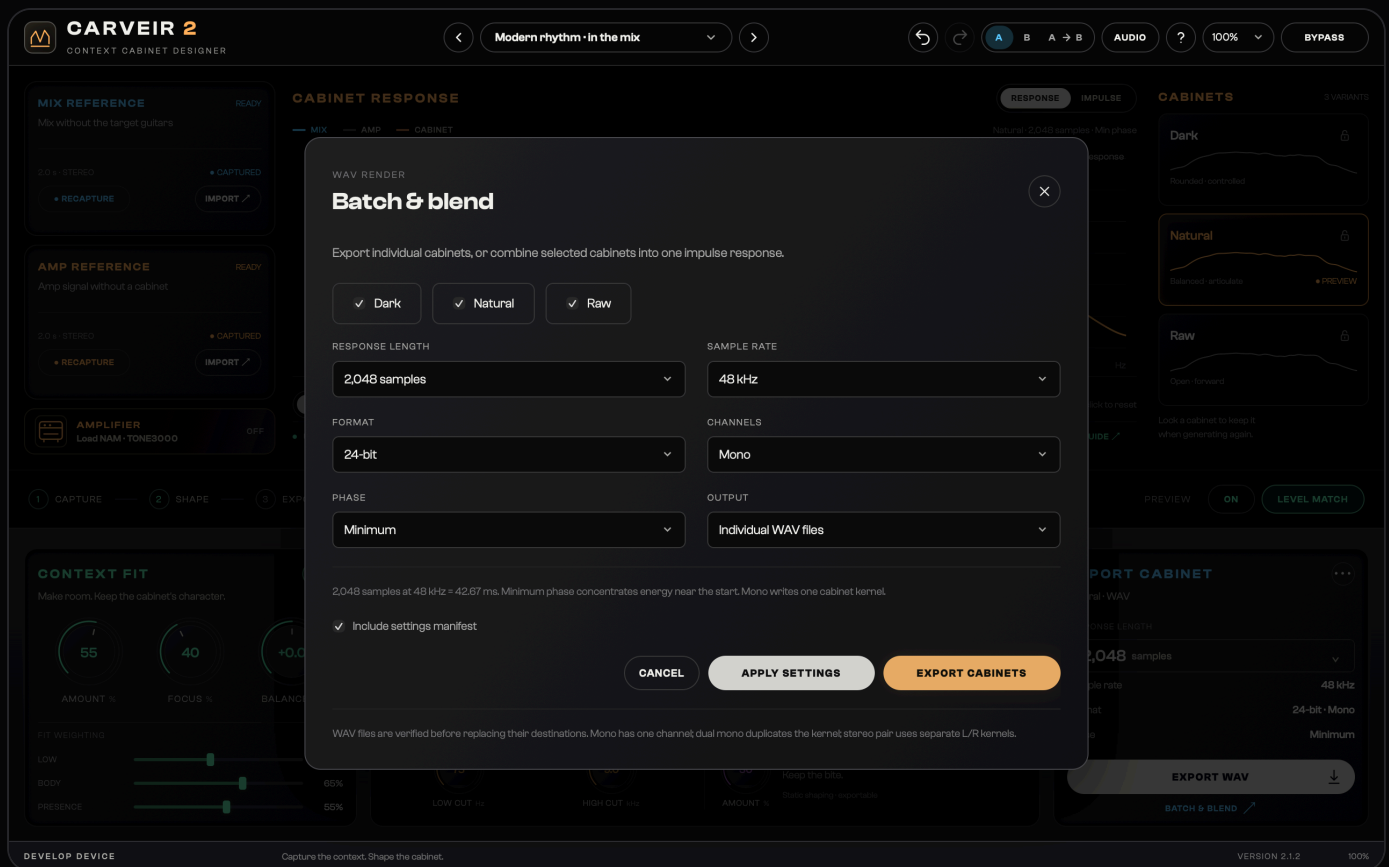
PRESET LIBRARY

Click the preset name to open the library. Factory recipes provide starting points. **Save As...** writes a portable `.carve2` recipe, and **Load Preset** restores one.

A recipe keeps reference spectra, variant locks, protected regions, edits and render settings. A loaded NAM model is embedded for recall. Save the full recipe as well as the WAV: the WAV alone does not preserve the editing workflow.

CONTROL	USE
Drag / Shift + drag	Adjust a knob / make finer adjustments.
Enter / right-click	Type a value for a focused knob.
Double-click	Reset a control to its default.
Command / Ctrl + Z	Undo the previous change.

14 Export one cabinet or a batch



Batch & Blend exports selected variants, a combined response, or both.

Export Cabinet writes the selected candidate. **Batch & Blend** lets you choose Dark, Natural and Raw individually, then export separate WAV files, a single blended IR, or both. A blend combines the selected rendered cabinet responses; it is not an amp-profile export.

CONTROL	USE
Rate	44.1, 48, 88.2 or 96 kHz.
Depth	16-bit, 24-bit or 32-bit float WAV.
Length	512, 1,024, 2,048, 4,096 or 8,192 samples.
Phase	Minimum or Linear.
Target peak	For single export, -1 or -3 dBFS caps the file peak without boosting a quieter response.
Settings manifest	Include a .carve2 recipe with the export so the design can be reopened.

Load exported WAVs into a cabinet IR loader. To hear the complete sound, place the desired amp stage before that loader. Check its supported rate, length, channel layout and bit depth.

15 Length, phase and channel layout

Response length is measured in samples. The same sample count lasts less time at a higher sample rate. Choose a format supported by the destination loader before judging the final result.

CONTROL	USE
512 samples at 48 kHz	10.67 ms; a short response.
1,024 samples at 48 kHz	21.33 ms.
2,048 samples at 48 kHz	42.67 ms; a practical starting point when supported.
4,096 samples at 48 kHz	85.33 ms.
8,192 samples at 48 kHz	170.67 ms; more time-domain detail, with a longer processing response.

PHASE

Minimum concentrates energy near the beginning. **Linear** uses a centred, symmetric response and adds delay. Length is not the same thing as total input-to-output latency: interface buffering, the host and the optional amp model also matter.

CHANNELS

Mono exports one channel. **Dual mono** duplicates the same kernel into two channels; it does not create stereo width. **Stereo pair** uses separate left/right kernels and requires both references to be valid stereo references.

For hardware, consult the manufacturer’s current IR import specification. A larger file is not automatically a better match, and a loader may truncate or resample it.

The cabinet is applied to the whole mix.

Move CarveIR to the guitar track or bus. Keep the backing on its normal master route and send a separate reference feed to the sidechain.

Capture Both is unavailable.

Enable the auxiliary Mix reference input in the DAW and check the Routing guide. Standalone can use an imported backing file instead.

Generation gives an unhelpful tone.

Check that the mix reference excludes the target guitars and the amp reference has no cabinet. Capture the relevant section again; reduce Context Fit Amount.

The sound is too dark after loading a NAM profile.

Use an amp-only model. An amp-plus-cabinet model followed by a second cabinet can be overly filtered.

Draw or Smooth leaves a region unchanged.

Check protected intervals and the selected candidate. Remove protection only where you intend to edit.

A locked candidate still changes.

Locks preserve the generated candidate during regeneration. Global controls still apply. Use A/B or a saved recipe for a complete checkpoint.

Stereo export is unavailable.

Both references must contain valid stereo information. Dual mono is two copies of one kernel, not a substitute for independent stereo references.

Windows shows a blank editor.

Install or repair Microsoft Edge WebView2 Runtime, then reopen the plugin.

Audio crackles.

Increase the host or standalone buffer. Use the hardware maker's ASIO driver on Windows. For a compatible A2 profile, compare Lite quality.

CONTACT

Include CarveIR version, OS, DAW, sample rate, buffer size and clear reproduction steps. Attach a recipe only when you have permission to share its embedded amp model.

[Develop Device support](#) · Licence and third-party notices are included with the installer.