

GrandCab

Adaptive Cabinet Processor

VERSION 1.1 | ENGLISH



DUAL IR | REFINE | GUITAR EQ | HARSH | PALM | STEREO | POST

Dual IR engine, adaptive voicing and focused guitar post-processing.

1. Overview

GrandCab is an adaptive guitar-cabinet processor built around a dual impulse-response engine. It combines IR loading and blending with adaptive voicing, a dedicated guitar EQ, resonance control, palm-mute dynamics and stereo tools.

NORMAL SIGNAL FLOW

IR > REFINE > GUITAR EQ > HARSH > PALM > MONO MAKER > WIDTH

- Use one IR or combine two IRs with independent level and tilt.
- REFINE changes the broad cabinet voicing adaptively instead of acting like a fixed graphic EQ.
- POST mode bypasses the IR/REFINE engine and keeps the dedicated post-processing chain.

2. Quick Start

- 1** Load an IR into Slot A. Left-click the slot to replace it.
- 2** Set REFINE to taste. Around 100-170% is a practical starting area for strong adaptive voicing.
- 3** If you want a second cabinet, load Slot B and set IR BLEND, Level A/B and Tilt A/B.
- 4** Enable Guitar EQ, Harsh Control or Palm Mute Control only when the source actually needs them.
- 5** Choose DUAL MONO for normal A/B blending, or L / R IR for separate left/right cabinet assignment.
- 6** Right-click supported controls when you want direct numeric entry.

3. Interface



- Top bar: PRESETS, SAVE PRESET, FX BYPASS, POST and EXPORT IR.
- Upper section: IR A, REFINE / Fine Tuning, IR B, Blend, Level and Tilt.
- Processing section: Guitar EQ, Harsh Control and Palm Mute Control.
- Bottom row: Stereo Mode, Mono Maker and Width.

4. IR Engine

Two independent slots with folder navigation

SLOT A / SLOT B

Load WAV/AIF cabinet impulses into either slot. One loaded slot works normally; the second slot is optional.

MOUSE ACTIONS

Left-click a slot to replace its IR. Right-click clears it. The arrow buttons step through compatible files in the current slot folder.

FACTORY IR BANK

Factory IRs are embedded in GrandCab. Choosing a Factory preset can load its IR directly to Slot A or Slot B; the other slot is preserved.

PHASE ALIGNMENT

When both slots are used, GrandCab automatically aligns Slot B against Slot A before blending so the pair remains coherent.

5. REFINE & Fine Tuning

REFINE analyzes the cabinet response and applies broad adaptive voicing correction. It is designed to reshape the cabinet character while preserving the IR identity rather than replacing it with a fixed target curve.

REFINE 0-200%

Amount of adaptive voicing. 0% is the loaded IR; higher values progressively apply the adaptive correction.

BODY -100 ... +100

Biases the low and low-mid part of the Refine result. Use small moves when the cabinet feels too thin, heavy or congested.

SOUL -100 ... +100

Biases the upper-mid and high character of Refine. Use it to steer bite, openness and the upper character without rebuilding the IR.

6. Blend, Level & Tilt

IR BLEND

Crossfades between A and B in DUAL MONO mode. At the endpoints only one slot is heard. In L / R IR mode Blend is disabled.

LEVEL A / B -24 ... +12 dB

Independent gain for each IR before the post-processing chain. Use it to balance IRs before judging the blend.

TILT A / B -6 ... +6 dB

Independent broad tilt around approximately 500 Hz. Positive values brighten; negative values darken.

TILT LINK

Moves A and B Tilt together while preserving their current offset.

FX BYPASS

Bypasses REFINE and all post-processing, leaving the clean IR path. It is intended for fast A/B comparison without removing the loaded cabinet.

7. Guitar EQ

Guitar EQ is a cabinet-oriented post-EQ. The controls are placed directly on the response graph. Drag a point vertically to change its value.

HP

40-180 Hz. Steep low cut for rumble and unnecessary sub energy.

150 / 250 / 400 / 800

Fixed low and low-mid bands, each from -12 to +6 dB.

2.2k / 4k / 6k

Fixed upper-mid and presence bands, each from -12 to +6 dB.

LP

4-16 kHz. Steep high cut for cabinet top-end shaping.

OUTPUT COMPENSATION

Guitar EQ includes a fixed +2.0 dB output compensation used by the current reference curve.

WORKFLOW

Use the graph for broad tonal correction first; use HARSH for narrow resonant problems afterwards.

8. Harsh Control

HARSH is a narrow static resonance-control stage for upper-mid peaks. It is not a broadband compressor and does not depend on input level.

FREQ 2.0-8.0 kHz

Sets the centre frequency of the main notch.

CUT 0-24 dB

Amount of attenuation at the centre band. Side bands, when active, use half of the centre Cut.

BANDS 1 / 2 / 3

1: centre only. 2: centre plus the upper octave. 3: centre plus both lower and upper octave bands.

HF COMP 0-6 dB

High-frequency compensation shelf. Use it when strong Cut makes the overall top end feel too dark.

DELTA

Auditions the targeted resonant content. DELTA is a listening aid; it is not part of EXPORT IR.

9. Palm Mute Control

Palm Mute Control dynamically reduces excessive low-mid energy produced by palm-muted attacks. The detector is focused roughly on 65-286 Hz, while the program signal is changed smoothly rather than simply filtered away.

THRESH -60 ... 0 dB

Sets how easily palm-mute energy triggers reduction. Lower values trigger more often.

RANGE 0-12 dB

Maximum amount of dynamic reduction.

GAIN REDUCTION METER

Shows the actual instantaneous reduction. Set Threshold while playing real palm-muted passages, not isolated test tones.

EXPORT NOTE

Palm Mute Control is dynamic and is intentionally excluded when EXPORT IR bakes the static chain.

10. Stereo

DUAL MONO

Normal A/B operation. Both IRs are blended by IR BLEND and the result continues through the stereo section.

L / R IR

Assigns IR A to the left channel and IR B to the right channel. IR BLEND is disabled because the two slots become channel assignments instead of a crossfade pair.

MONO MAKER 0-400 Hz

Makes low frequencies mono below the selected cutoff. 0 is OFF; the UI shows OFF at the lowest practical range.

WIDTH 0-100%

Controls stereo width after Mono Maker. 0% is mono; 100% preserves full stereo width.

DUAL CAB WORKFLOW

For a true dual-cab stereo preset, load different IRs into A and B, switch to L / R IR, then save a User preset. User presets restore both slots together.

11. POST Mode



POST turns GrandCab into a post-processing stage for an already cabinet-processed signal. The IR slots, REFINE, Blend, slot Level/Tilt and L/R IR selection are removed from the signal path.

POST TILT EQ > GUITAR EQ > HARSH > PALM > MONO MAKER > WIDTH

- POST TILT EQ uses an approximately 500 Hz pivot: positive brightens, negative darkens.

12. Presets

GrandCab has two preset categories with deliberately different behaviour.

FACTORY

Built-in ZeroFX IR bank. Choose SLOT A or SLOT B first, then choose the Factory preset. Only the selected IR slot is replaced; the other slot remains loaded. Factory processing settings are applied.

USER

A complete snapshot of the plug-in. It stores all parameters and embeds the actual IR files from both slots, so a dual A/B or L/R configuration comes back exactly as saved.

SAVE PRESET

Enter a name and save the current full state as a User preset. Embedded IR data makes the preset self-contained instead of depending on the original IR folder.

FACTORY ARROWS

After loading a Factory IR, the slot arrows can browse the complete embedded Factory bank from the cache directory.

13. EXPORT IR & Exact Value

EXPORT IR

Renders the current static cabinet chain to a stereo 32-bit WAV IR. The current slots are not changed.

WHAT IS BAKED

Current IR A/B configuration, Refine, slot level/tilt, Guitar EQ, Harsh processing and static stereo processing are rendered into the file.

WHAT IS NOT BAKED

Palm Mute is dynamic and is excluded. HARSH DELTA is an audition function and is excluded. POST mode cannot be exported as a cabinet IR.

EXACT VALUE

Right-click a supported knob/slider to open the compact numeric entry window. The field uses a convenient format for that control: e.g. Refine 1.6, frequency 3.4 kHz, Width 85.

KEYBOARD

Type the value, press Enter or SET to apply, Esc or CANCEL to close. Comma is accepted and normalized to a decimal point.

14. License & Installation

GrandCab 1.1 is supplied as a 64-bit VST3 plug-in for Windows. The commercial edition uses ZeroFX server activation; one license supports up to three simultaneously activated computers.

- Run the GrandCab 1.1 MSI installer.
- The plug-in is installed under C:\Program Files\Common Files\VST3\ZeroFX\GrandCab.vst3.
- Factory IRs are embedded inside the VST3; no separate Factory WAV folder is required.
- Press ACTIVATE, enter your GC license key and wait for confirmation from the ZeroFX license server.
- After activation the button shows LICENSED. Open it again and use DEACTIVATE to release this computer activation.
- If GrandCab does not appear immediately, rescan VST3 plug-ins in your DAW.

SUPPORT

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zerofxaudio.com

15. Quick Reference

IR A / B Two cabinet impulse slots; left-click replace, right-click clear

REFINE 0-200%; adaptive cabinet voicing

BODY / SOUL Low/low-mid and upper-mid/high Refine bias

IR BLEND A/B crossfade in DUAL MONO

LEVEL A/B -24 to +12 dB

TILT A/B -6 to +6 dB, approx. 500 Hz pivot

GUITAR EQ HP, LP + 7 fixed gain bands

HARSH 2-8 kHz; Cut 0-24 dB; 1/2/3 bands; Delta audition

PALM Dynamic 65-286 Hz palm-mute control; Range 0-12 dB

STEREO DUAL MONO or L / R IR; Mono Maker + Width

POST No IR/Refine; Post Tilt > EQ > Harsh > Palm > Stereo

USER PRESET Full state + embedded IR A/B

EXPORT IR Static chain to stereo 32-bit WAV; Palm and Delta excluded