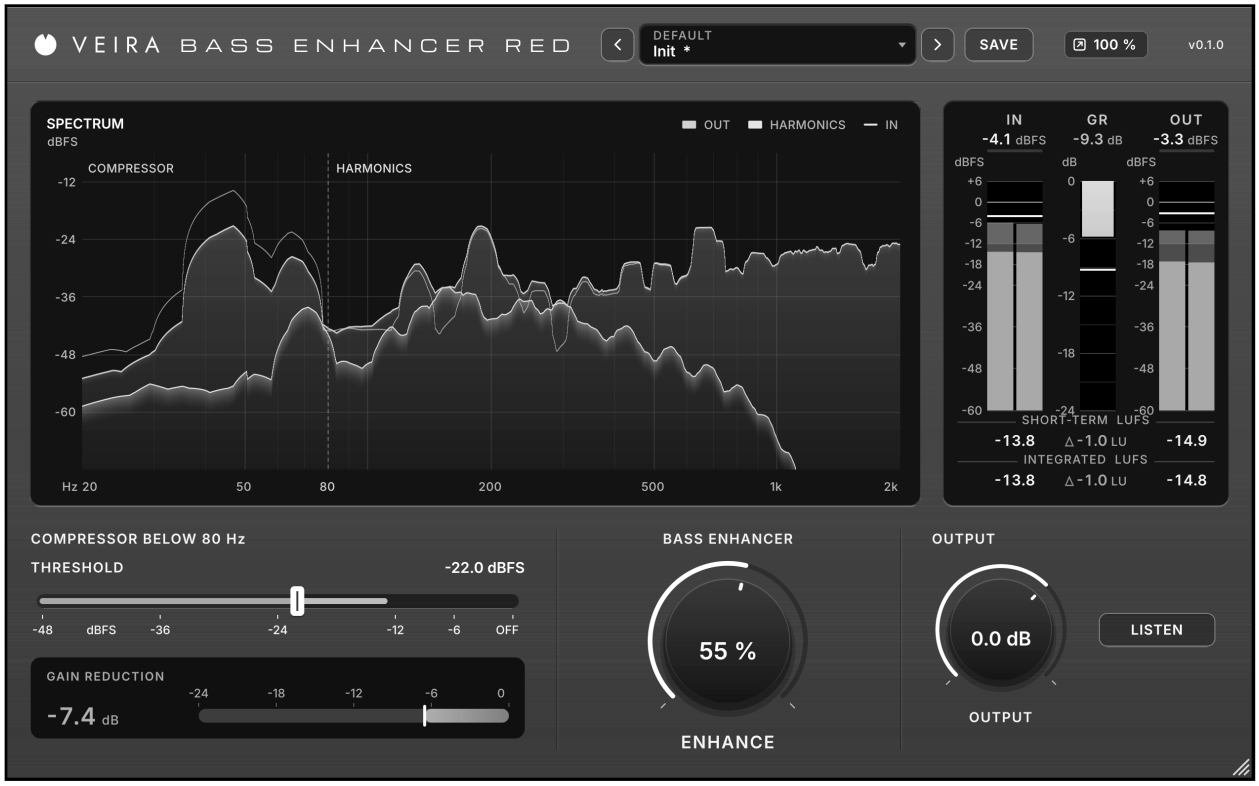
VEIRA

BASS ENHANCER

VEIRA Bass Enhancer Red

User Manual

The gritty one of the four VEIRA colour bass enhancers: a compressor that works on 80 Hz and below only, and one big ENHANCE knob that adds a transistor stage's harmonics of the lows, so the bass is heard on phones, laptops and earbuds.



Contents

Welcome 3
Getting started 4
What you need 4
Install with VEIRA Manager 4
Activation and the licence 5
Formats and where the files go 5
The panel at a glance 6
Quick start: a bass that carries in four moves 7
Using the controls 7
Where to put VEIRA Bass Enhancer Red 8
How bass enhancement works 9
Why the bass disappears on small speakers 9
What happens inside VEIRA Bass Enhancer Red 10
Controls 11
COMPRESSOR BELOW 80 Hz: THRESHOLD and GAIN REDUCTION 11
BASS ENHANCER: ENHANCE 13
OUTPUT: OUTPUT and LISTEN 16
Displays 17
SPECTRUM 17
Meter bridge (IN | GR | OUT) 18
Presets 20
The preset browser 20
The preset menu 20
Saving your own presets 20
Presets in your DAW 21
The factory folders 21
Recipes 22
A bass line that carries on phones 22
Even low notes on a DI bass 22
A kick with weight and knock 22
An 808 for earbuds 22
A steady low end on the mix bus 22
A gritty drone from a sustained sub 22
Specifications 24
Troubleshooting and questions 25

Welcome

Thank you for choosing **VEIRA Bass Enhancer Red**. It does two jobs for the low end of a bass, a kick, an 808, a drum bus or a whole mix. A **compressor that works on 80 Hz and below only** holds the deepest notes at one level, so the sub stops jumping out on one note and vanishing on the next. And one big ENHANCE knob adds the **harmonics** of those lows, made by a transistor stage, so the bass is still heard on speakers that can't play it: phones, laptops and earbuds.

It is the gritty one of the four VEIRA colour bass enhancers, and it is painted like the rest of the Red family: deep lacquered red, cream print and black knobs. There are only four controls: THRESHOLD, ENHANCE, OUTPUT and LISTEN.

What makes it different

- **Only harmonics are added.** ENHANCE makes the 2nd to 9th harmonics of each note, each one at its exact place against the note. The note itself is never added again, so it is never thinned or doubled by a shifted copy of itself.
- **A compressor for the lows alone.** 4:1 with a 6 dB knee, a fast 3 ms attack and a release that follows the music. It turns the lows down with a low shelf at 80 Hz, so nothing above them moves: with 7.5 dB of reduction, a 160 Hz tone moved 0.0002 dB and 1 kHz not at all.
- **Set it against what is there.** The lows' live level runs in the THRESHOLD fader's track, cream below the threshold and red over it.
- **See what it adds.** The SPECTRUM draws the output, the input and, in teal, the harmonics ENHANCE adds.
- **Untouched when idle, and no latency.** With ENHANCE at 0 % and THRESHOLD at OFF, the output is the input, bit for bit.
- **22 factory presets** in 6 folders, with a whole folder for small speakers.

How this manual is organised. *Getting started* installs and activates the plugin. *The panel at a glance* names its parts. *How bass enhancement works* explains why the lows disappear on small speakers and what happens inside. *Controls* and *Displays* explain every control and graph. *Presets*, *Recipes*, *Specifications* and *Troubleshooting* close the manual.

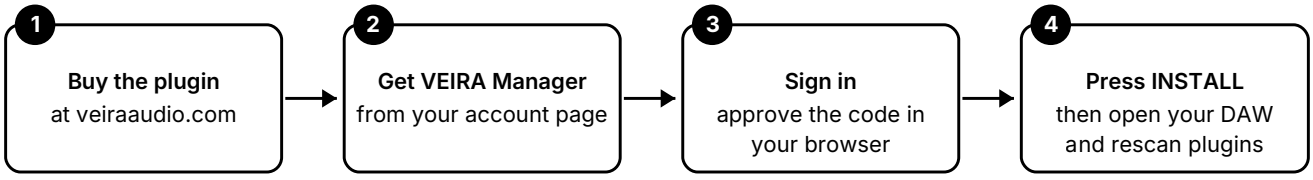
Getting started

What you need

macOS	macOS 11 Big Sur or later. Native on Apple silicon and Intel Macs (universal).
Windows	Windows 10 or 11, 64-bit.
Plugin formats	VST3 (macOS and Windows), Audio Units (macOS), and a standalone app. Pro Tools (AAX) versions arrive once they are signed for Pro Tools.
Hosts	Any DAW that loads VST3 or Audio Units: Logic Pro, Cubase, Nuendo, Ableton Live, Studio One, Reaper, FL Studio, Bitwig and others.
Account	A VEIRA account at veiraaudio.com, and the free **VEIRA Manager** app.
Internet	Needed to install and to refresh the licence. The plugin itself never goes online.

Install with VEIRA Manager

VEIRA plugins are not downloaded from the website one by one. You install them with **VEIRA Manager**, the free VEIRA app that installs, updates and activates everything you own. Its own manual covers it in full; the short version is:



One account works on up to three computers. Updates are free for life.

FIGURE 1 From purchase to first sound in four steps.

1. **Buy** VEIRA Bass Enhancer Red at **veiraaudio.com**. It's a one-time purchase: you own it for good, with free updates.
2. **Download VEIRA Manager** from your account page (or veiraaudio.com/manager) and install it.
3. **Sign in.** VEIRA Manager shows a short code and opens your browser; confirm the code there. Your password is never typed into the app.
4. Find VEIRA Bass Enhancer Red in the list and press INSTALL. When it says SHOW, it's installed. Open your DAW and let it rescan its plugins.

After installing, VEIRA Bass Enhancer Red appears in your DAW under the manufacturer **VEIRA** (in Logic Pro: Audio Units ▸ VEIRA ▸ VEIRA Bass Enhancer Red).

Activation and the licence

VEIRA Manager keeps a licence on your computer that the plugins check. It is refreshed every time VEIRA Manager opens and stays valid for 30 days offline, so you can work without internet as long as you open VEIRA Manager now and then.

Without a valid licence, VEIRA Bass Enhancer Red still loads and works, but **its sound fades out for 1.5 seconds every 30 seconds**, and a strip along the bottom of its window says why (for example, *NOT ACTIVATED ON THIS COMPUTER. SIGN IN WITH VEIRA MANAGER.*). Clicking the strip opens your account page.

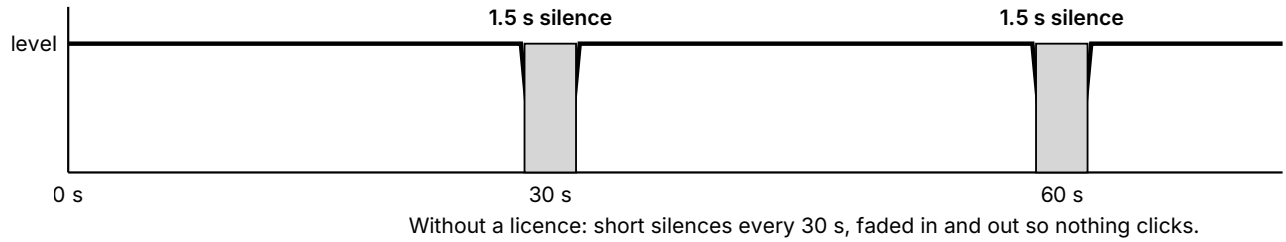


FIGURE 2 What an unlicensed copy does. With a valid licence the audio is never touched.

- **Activating while your DAW is open** takes effect within about two minutes. You don't need to reload the plugin.
- **"Not activated on this computer"**: open VEIRA Manager and sign in.
- **"Expired"**: open VEIRA Manager while online; it renews the licence at once.
- **"Not included"**: the signed-in account doesn't own VEIRA Bass Enhancer Red. Check that you're signed in with the account you bought it with.

Formats and where the files go

VEIRA Manager puts every format in the standard place, so you never need to copy files by hand:

Format	macOS	Windows
VST3	`~/Library/Audio/Plug-Ins/VST3` (just for me, the default) or `/Library/Audio/Plug-Ins/VST3` (all users)	`C:\Program Files\Common Files\VST3` (all users, the default) or `%LOCALAPPDATA%\Programs\Common\VST3`
Audio Units	`~/Library/Audio/Plug-Ins/Components` or `/Library/Audio/Plug-Ins/Components`	(Audio Units are macOS only)
Standalone	`~/Applications/VEIRA` or `/Applications/VEIRA`	`C:\Program Files\VEIRA` or `%LOCALAPPDATA%\Programs\VEIRA`

You choose *just for me* or *all users* in VEIRA Manager's install settings.

The standalone app runs VEIRA Bass Enhancer Red on its own, with your audio interface's input and output, which is handy for trying presets without a DAW.

The panel at a glance

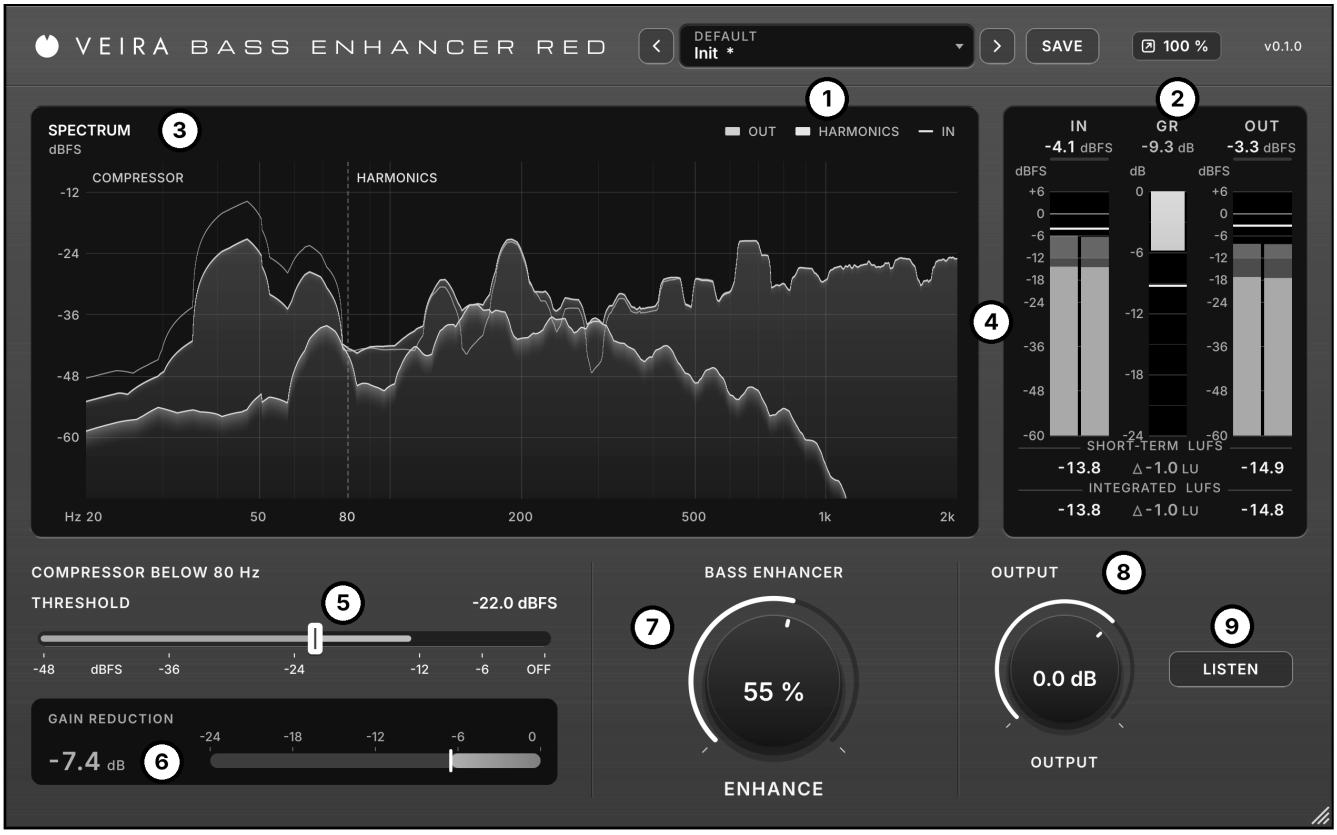
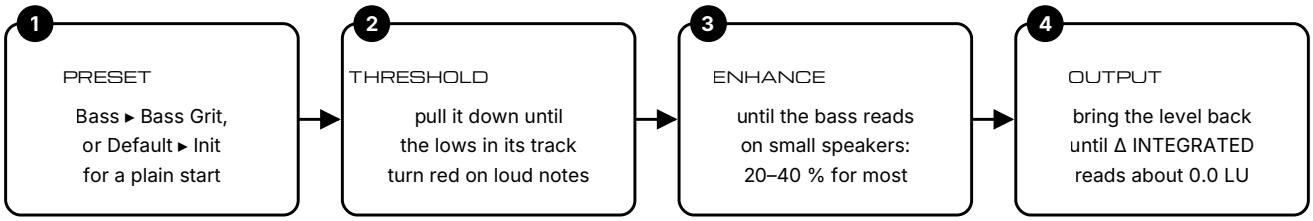


FIGURE 3 VEIRA Bass Enhancer Red on a bass line: THRESHOLD at −22.0 dBFS with 7.4 dB of gain reduction on the lows, and ENHANCE at 55 %.

	Part	What it does
1	Preset browser	Steps through and saves presets. See *Presets*.
2	Size button	The window's size: 75 to 200 %, or *Fit to screen*.
3	SPECTRUM	The lows and low mids, 20 Hz to 2 kHz: the output, the input and the harmonics ENHANCE adds.
4	Meter bridge	IN, GR and OUT meters with short-term and integrated loudness.
5	THRESHOLD	Where the compressor below 80 Hz starts. The lows' level runs in its track.
6	GAIN REDUCTION	How much the lows are being turned down right now.
7	ENHANCE	How much of the transistor stage's harmonics is added.
8	OUTPUT	The level after everything.
9	LISTEN	Hear only what the plugin works on: the lows and the harmonics.

The window has the SPECTRUM at the top left and the meter bridge at the right. The controls sit in three groups along the bottom, under the captions COMPRESSOR BELOW 80 Hz, BASS ENHANCER and OUTPUT.

Quick start: a bass that carries in four moves

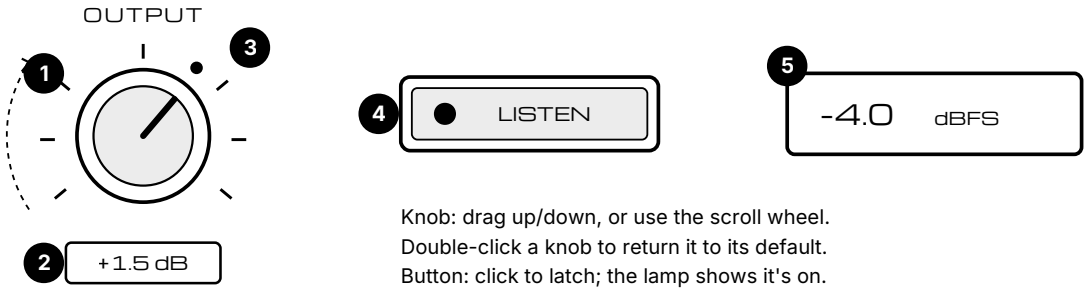


Check on earbuds or a phone: LISTEN plays only the lows and the harmonics, so you can hear what you add.

FIGURE 4 The quickest way to a bass that carries. *Default ▸ Init* starts with the compressor OFF and ENHANCE at 30 %.

Using the controls

Every VEIRA plugin is played like a piece of hardware. The same few parts appear on every panel:



Knob: drag up/down, or use the scroll wheel.
Double-click a knob to return it to its default.
Button: click to latch; the lamp shows it's on.
Readouts always carry a unit (dB, dBFS, LUFS, LU, ms, %).

FIGURE 5 The parts you'll find on every VEIRA panel (the labels are examples).

- 1 **Knob.** Drag up to turn it clockwise, down to turn it back, or use your mouse wheel. **Double-click** returns it to its default. The engraved pointer and the small dot on the scale show where it's set.
- 2 **Value window.** The backlit window under each knob shows its exact value with its unit.
- 3 **Silkscreen label.** The control's name, as it appears in your DAW's automation list.
- 4 **Push button.** Click to switch on; the lamp lights and the cap sits lower in its bezel. Click again to switch off.
- 5 **Readout.** Live numbers update ten times a second so you can read them while the meters move. A value over 0 dBFS shows as a warning.

Tooltips: hover over any control or display for a short explanation. On displays, the tooltip depends on where you point.

Automation: every knob and button is a host parameter, so you can automate it in your DAW and control it from a MIDI controller or control surface that your DAW maps.

Units: VEIRA never shows a bare number. **dBFS** is level against digital full scale (0 dBFS is the loudest a digital signal can be); **dB** is a change in gain; **LUFS** is loudness as streaming services and broadcasters measure it; **LU** is a difference in loudness (1 LU = 1 dB).

On VEIRA Bass Enhancer Red's panel the parts look a little different from the drawing above:

- **Knobs show their value in the middle** (55 %, 0.0 dB): the knobs are black, and a ring printed in cream on the paint around each one (in print, the light arc) shows how far it is turned. The control's name is printed under the knob. ENHANCE, the one you touch most, is the large one.
- **THRESHOLD is a fader**, not a knob: drag its cap left and right. Fully right is OFF. Its value is printed above the right end of the track (-22.0 dBFS). Double-click it for OFF.
- **Type a value:** right-click a knob or the fader (Control-click on a Mac). A field opens with the current value; type the new one and press Return. The number is enough: **−20** for a threshold of −20 dBFS, **40** for 40 % of ENHANCE; **off** sets THRESHOLD to OFF. Press Escape or click elsewhere to leave it unchanged.
- **The button has no lamp:** LISTEN fills with cream with red lettering when it is on (in print, a light button); when it is off it is a dark well in the paint with cream lettering.
- **The window size.** VEIRA Bass Enhancer Red opens at 100 %, 1260 × 780 points. To change it, click the size button 2 in the header and choose 75, 90, 100, 125, 150 or 200 % or *Fit to screen* (sizes that don't fit your display are left out); or drag the grip in the bottom-right corner (double-click it for 100 %); or press Cmd + = and Cmd + - (Ctrl on Windows) to step up and down and Cmd + 0 for 100 %. Your DAW saves the size with the session, and new instances open at the size you chose last.
- **The face:** deep lacquered red with cream print and black knobs. The SPECTRUM, the GAIN REDUCTION box, the meter bridge and the preset window are dark screens set into the paint, so the meters keep their usual colours. Every label on the paint stands at least 4.5:1 against it (the WCAG AA contrast for text).

Where to put VEIRA Bass Enhancer Red

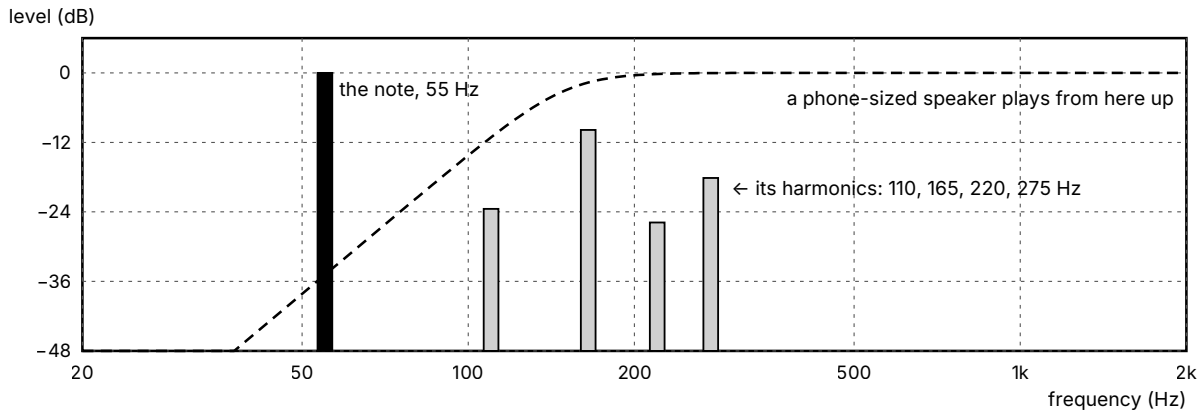
Use it as an insert on whatever carries the low end: a bass (DI or amp), a synth bass or 808, a kick, a drum bus, or the mix bus. It adds no latency, so it is fine while you record and play. If you also EQ the bass, an EQ before it shapes what the compressor and the harmonics are made from; an EQ after it shapes the result, harmonics included.

How bass enhancement works

Why the bass disappears on small speakers

A bass note's fundamental, the frequency you'd name it by, sits low: about 41 Hz for the low E of a bass guitar, 55 Hz for the A above it, and lower still for an 808. Small speakers can't move enough air to play those frequencies: a phone, a laptop or an earbud plays little or nothing below about 150 Hz. On those speakers the bass line simply goes missing.

Every real note also has **harmonics**: quieter tones at 2, 3, 4 … times its frequency. Those do fall where a small speaker plays, and the ear has a useful habit: from a row of harmonics at 110, 165, 220 Hz … it hears the pitch of the missing 55 Hz. A bass enhancer uses that habit. It makes more of the harmonics, so the bass line is heard, at its own pitch, on speakers that can't play its fundamental.

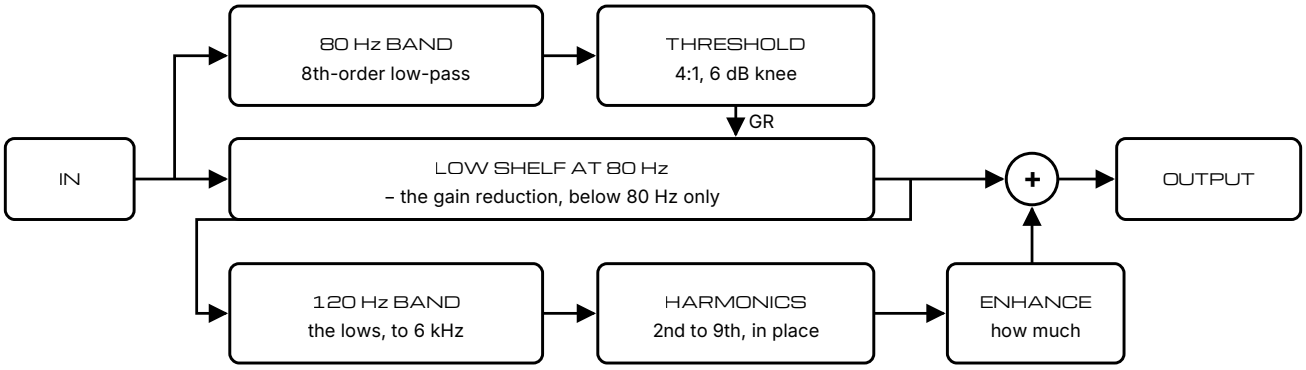


The speaker can't move air at 55 Hz, but it plays the harmonics, and the ear hears the pitch of the note from them. ENHANCE adds only those harmonics (grey; here at 50 %, from the stage's curve); the note itself (black) is left as it was.

FIGURE 6 A 55 Hz note on a phone-sized speaker (dashed: about how much of each frequency it plays; a 150 Hz, 24 dB per octave slope, the model the presets were checked with).

The second job is **level**. The lowest notes of a bass line rarely come out even: one note rings on in the room or the amp and jumps out, the next is weak. On big speakers that makes the low end bounce; on small ones, the harmonics would bounce with it. Holding the lows at one level first, and then making their harmonics, gives a steady low end that carries everywhere.

What happens inside VEIRA Bass Enhancer Red



The compressor turns down only the lows, with a shelf (no split, nothing to recombine). The harmonics are made from the compressed lows and added on top. With THRESHOLD at OFF and ENHANCE at 0 %, the output is the input.

LISTEN plays only the compressed lows and the harmonics. No latency.

FIGURE 7 The signal flow. The upper path is the compressor below 80 Hz; the lower path makes the harmonics.

1. **The lows are measured.** An 8th-order low-pass at 80 Hz picks out the lows of both channels; the louder side counts, so one gain is used for both and the stereo image doesn't move.
2. **The compressor works out its reduction** against THRESHOLD: 4:1 with a 6 dB knee, a 3 ms attack and a release that follows the music.
3. **A low shelf at 80 Hz applies it.** Instead of splitting the signal into bands and adding them back, the plugin turns the lows down with an 8th-order low shelf. A shelf has no crossing point where two bands could add up wrong, it never rises above 0 dB, and at 0 dB it is exactly no change.
4. **The harmonics are made from the compressed lows** (everything below about 120 Hz), by a model of a transistor stage, and only its harmonics (the 2nd to the 9th) are kept, each placed exactly against the note.
5. ENHANCE **adds them** to the full signal, then OUTPUT sets the level.

There is no latency, and with ENHANCE at 0 % and THRESHOLD at OFF the output is the input, bit for bit, even after the compressor and ENHANCE have worked and let go.

Controls

COMPRESSOR BELOW 80 Hz: THRESHOLD and GAIN REDUCTION



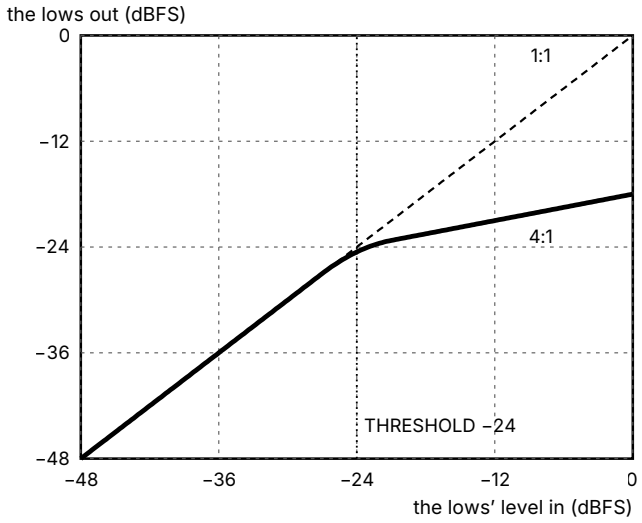
FIGURE 8 The COMPRESSOR BELOW 80 Hz group: 1 the THRESHOLD fader with its value, 2 the lows' live level in its track (here past the cap: red over the threshold), and 3 GAIN REDUCTION, here 7.4 dB.

Control	Range	Default	What it does
THRESHOLD	−48 dBFS to OFF	OFF	Where the compressor below 80 Hz starts, against the lows' own level. Fully right is OFF.
GAIN REDUCTION	0 to −24 dB (display)	–	How much the lows are being turned down right now.

THRESHOLD. The compressor reads the level of the lows alone (80 Hz and below) as the peak of a sine, in dBFS, and compares it with THRESHOLD. Over the threshold, the lows are turned down at **4:1**: for every 4 dB they rise, they come out only 1 dB louder. A **6 dB knee** rounds the corner, so the compression fades in rather than switching on. Nothing above the lows is touched.

You don't need to guess: **the lows' live level runs in the fader's track**, cream while it is below the threshold and red where it is over. Pull the cap down (to the left) until the loudest low notes turn the track red, and watch GAIN REDUCTION:

- **2–4 dB:** a firmer, steadier sub that still moves with the playing.
- **5–8 dB:** the lowest notes held at one level; the usual setting on bass, 808 and kick.
- **10 dB and more:** a flat, squashed low end. The fast attack starts to grip the slowest waves and adds a growl (see *Creative FX ▸ Squashed Lows*).



Over the threshold, the lows rise by 1 dB for every 4 dB they rise at the input.

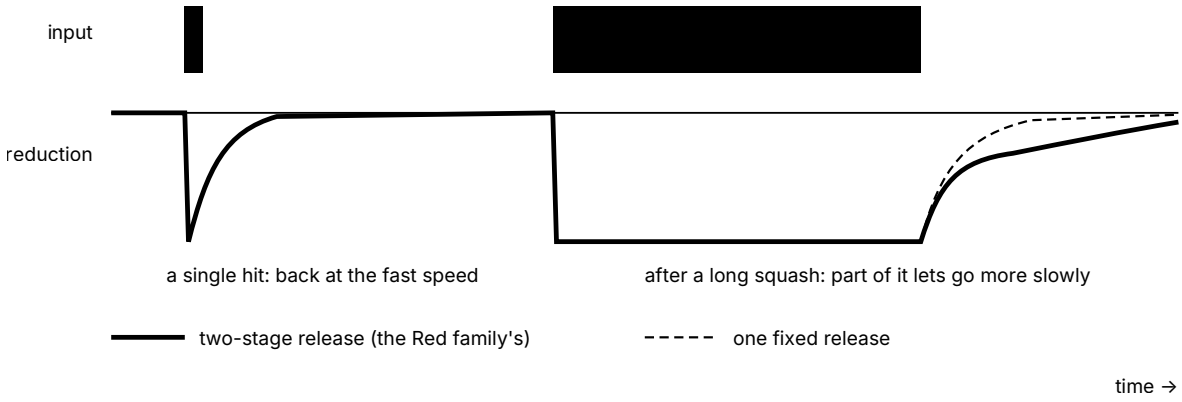
A 6 dB knee rounds the corner.

Measured: a 50 Hz sine 10 dB over THRESHOLD is turned down 7.4 dB (the 4:1 curve says 7.5).

Attack 3 ms: a tenth of a 30 Hz cycle, so the gain moves inside the slowest notes and adds a little growl, as a fast FET does.

FIGURE 9 The compressor's curve, here with THRESHOLD at −24 dBFS (dashed: no change).

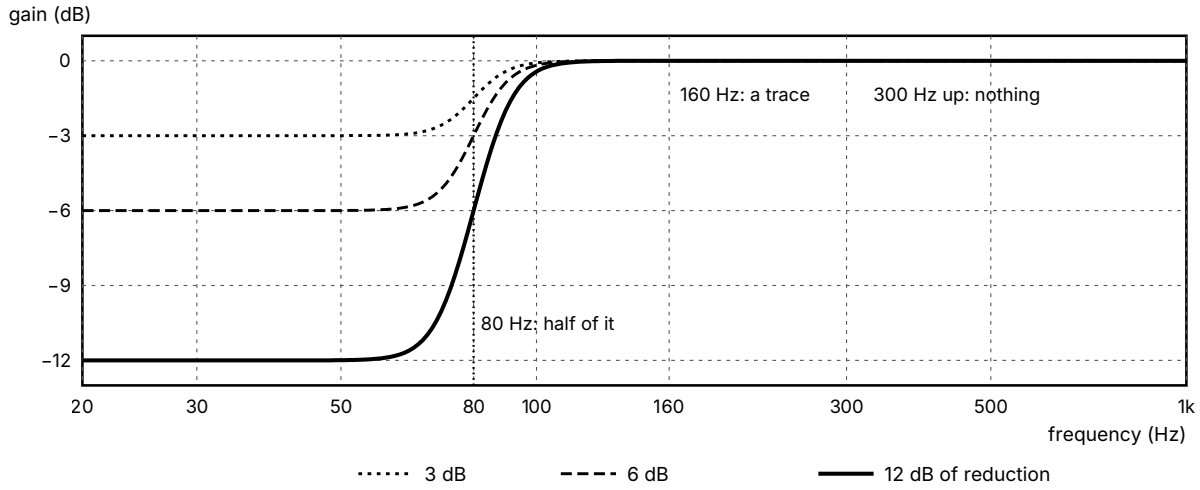
Timing. The attack is **3 ms**, about a tenth of a 30 Hz cycle: fast like a FET compressor, so the gain moves inside the slowest notes and adds a little growl when you push it. The release is **programme-dependent**: a single hit recovers in about 100 ms, while a long, loud passage lets go more slowly, so heavy settings don't pump.



Fast stage 100 ms; a slow stage charges over 300 ms while the compression lasts, holds back up to half of a long reduction and lets it go in 250 ms.

FIGURE 10 The two-stage release, roughly (down = more reduction).

Only the lows move. The reduction is applied by a low shelf at 80 Hz: all of it below about 55 Hz, half of it (in dB) at 80 Hz, a trace at 160 Hz, and nothing measurable from 300 Hz up. A bass's growl, a kick's click and a voice stay exactly where they were.



The compressor's gain, applied by an 8th-order low shelf at 80 Hz: all of it below about 55 Hz, half (in dB) at 80 Hz. A shelf never rises above 0 dB, so there is no bump where two bands would meet.

FIGURE 11 How the gain reduction spreads across frequency, for 3, 6 and 12 dB of reduction (computed from the plugin's shelf).

GAIN REDUCTION shows how much the lows are turned down right now: the number in dB at the left, and a bar on a 0 to −24 dB scale that grows from the right (red as it grows). The meter bridge's GR column shows the same reduction, with its peak of the last two seconds.

> **Tip:** Set THRESHOLD with ENHANCE where you want it: the harmonics are made from the compressed lows, so a steadier low end gives steadier harmonics.

BASS ENHANCER: ENHANCE

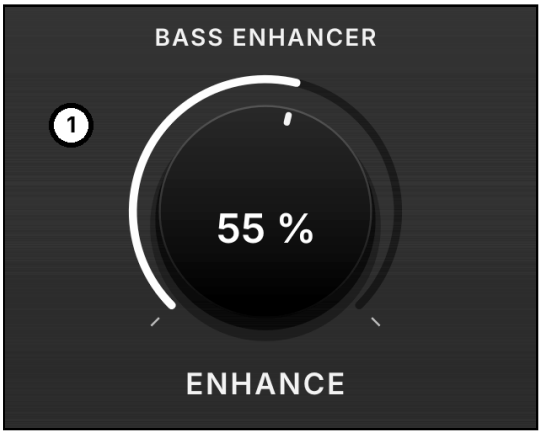


FIGURE 12 1 ENHANCE, here at 55 %.

Control	Range	Default	What it does
ENHANCE	0 to 100 %	30 %	How much of a transistor stage's harmonics of the lows is added.

ENHANCE is a saturator behind the scenes. The lows (the compressed signal below about 120 Hz) drive a model of a **transistor stage**: an asymmetric curve, soft on one side and harder on the other, which makes both even and odd harmonics. Turning ENHANCE up does two things at once: it drives the stage harder, and it mixes more of what the stage makes into your signal.

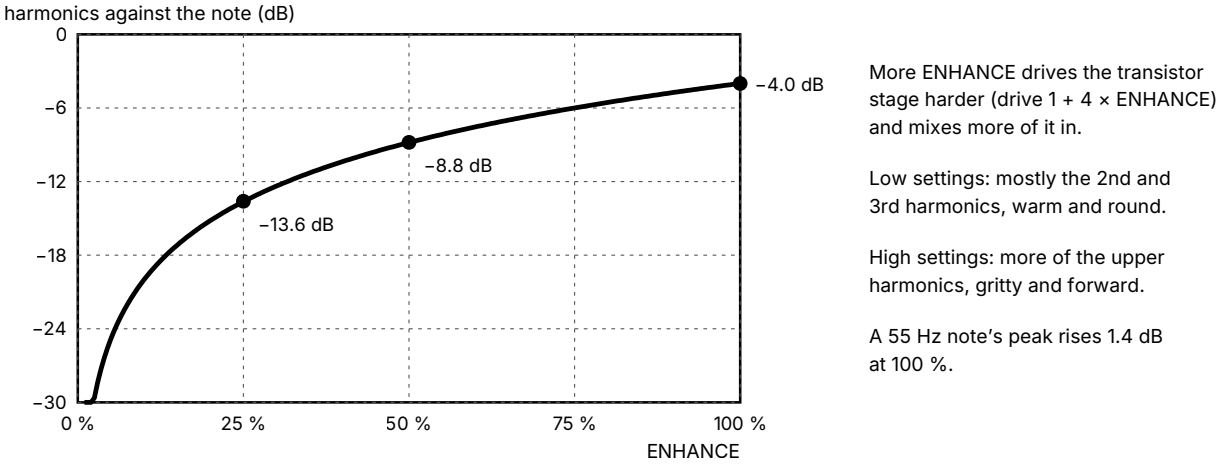
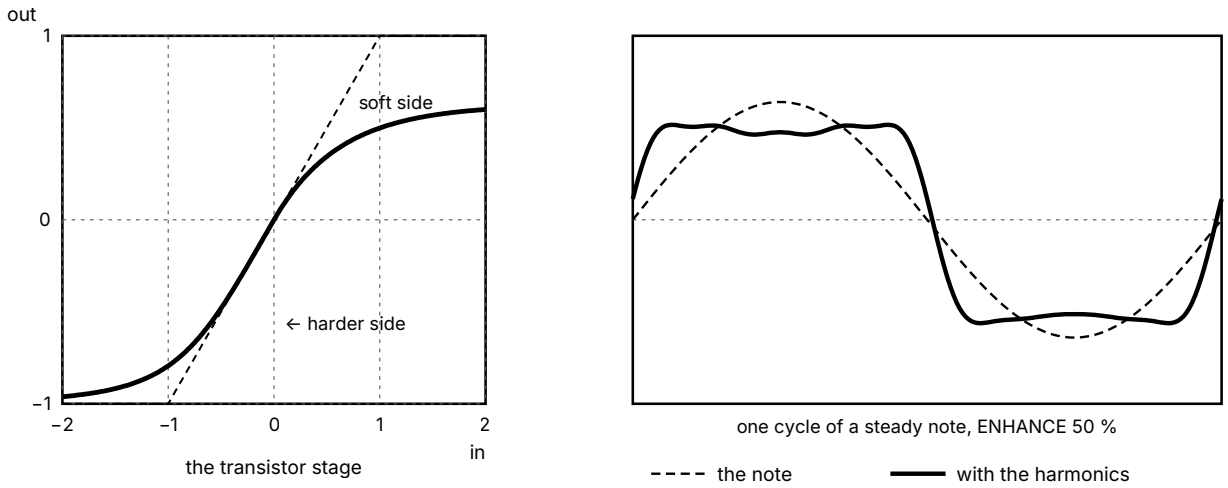


FIGURE 13 How loud the harmonics are against a steady note: −4 dB + 16 log10 (ENHANCE). 25 %: −13.6 dB; 50 %: −8.8 dB; 100 %: −4 dB.

- **10–25 %:** a little more weight and definition; on big speakers you hardly hear it, on small ones the bass line appears. Most mix bus presets sit here.
- **25–50 %:** a clear, present bass on any speaker, with some warmth and edge. The usual range for bass, 808 and kick.
- **50–100 %:** the transistor's grit becomes part of the sound: a growling, forward bass, and at the top a lo-fi buzz (see *Creative FX*).

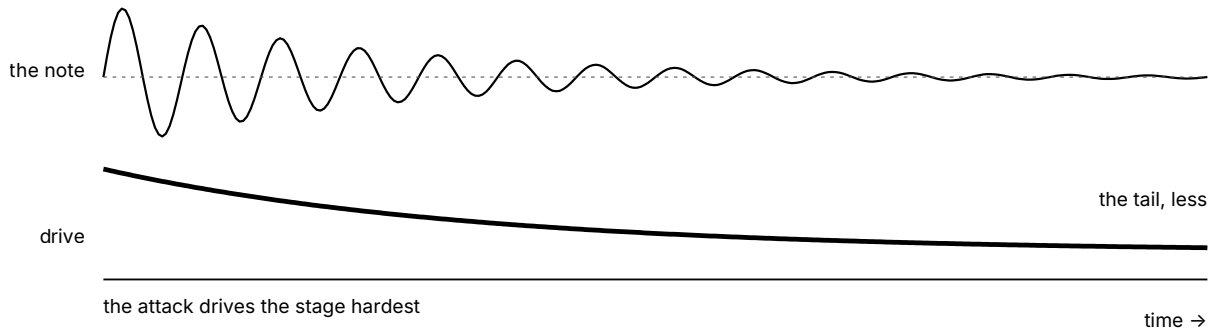
Only the harmonics are added. A plain saturator would distort the whole low end, the note included; mixed in, its shifted copy of the note would thin or thicken the bass depending on the pitch. VEIRA Bass Enhancer Red works out the curve's 2nd to 9th harmonics for every level once, follows the pitch of each note, and makes each harmonic directly at its exact place against the note. The fundamental is never made, so the note you recorded stays as it was, and nothing can alias, because nothing is distorted at the session's rate.



Only the curve's harmonics are made, each at its exact place against the note: the note's own frequency is never added again, so it is never thinned or doubled by a shifted copy of itself.

FIGURE 14 Left: the transistor stage's curve (dashed: no change). Right: a steady note and the same note with the harmonics added at 50 %, computed from the curve.

The drive follows the note. The stage is driven against each note's own recent peak, rising at once and falling over 400 ms. The attack of a note drives it hardest and its tail less, which keeps the harmonics musical, and the amount of grit doesn't depend on how loud the track is.



The drive is set against the note's own recent peak (instant up, 400 ms down), so the amount of grit doesn't depend on how loud the track is: a quiet bass and a loud one get the same character.

FIGURE 15 The drive into the transistor stage over one plucked note, roughly.

What the harmonics are made of. The harmonics are made from the lows below about 120 Hz and filtered: nothing above about 1.5 kHz, and nothing under 45 Hz, so ENHANCE never adds new sub of its own. A note's peak rises a little as the harmonics are added (a 55 Hz note's peak rose 1.4 dB at 100 %), so watch the output meter on a mix bus.

OUTPUT: OUTPUT and LISTEN

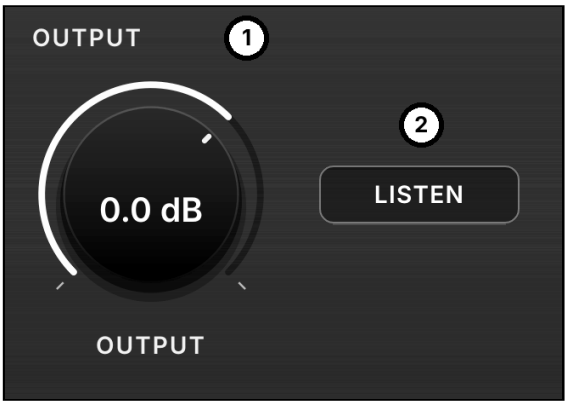


FIGURE 16 The OUTPUT group: 1 OUTPUT and 2 LISTEN (here off).

Control	Range	Default	What it does
OUTPUT	−24 to +12 dB	0.0 dB	The level after everything.
LISTEN	on, off	off	Plays only what the plugin works on: the compressed lows (80 Hz and below) and the harmonics.

OUTPUT sets the final level. Compression lowers the lows and the harmonics add level, so set OUTPUT until the meter bridge's Δ INTEGRATED reads about 0.0 LU, then compare with your DAW's bypass. The factory presets already do this: each one's OUTPUT was set so that it comes out at the level it went in (K-weighted, within 0.04 dB on the material it was made for).

LISTEN is a listening aid. It plays only the lows below 80 Hz, compressed, plus the harmonics ENHANCE adds: exactly what the plugin works on. Use it to hear what the compressor holds and what the harmonics sound like on their own, then switch it off. **Offline bounces always leave it out**, so a bounce never comes out as lows only by mistake.

Displays

SPECTRUM

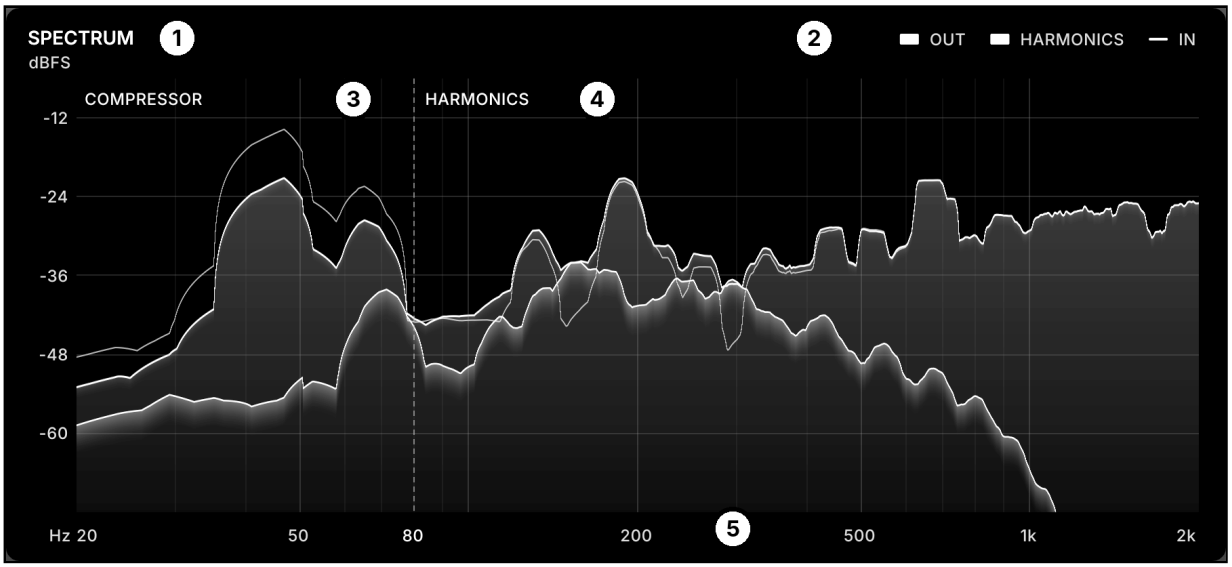


FIGURE 17 The SPECTRUM: 1 its title and the dBFS scale, 2 the key (OUT, HARMONICS, IN), 3 COMPRESSOR: below 80 Hz, where the compressor works, 4 HARMONICS: above it, and 5 the frequency scale, with 80 Hz printed in red.

The SPECTRUM shows the lows and low mids, **20 Hz to 2 kHz**, in sixth-octave steps, on a dBFS scale:

- **The output** is the filled red curve (in print, the dark filled area).
- **The input** is a thin light line. Below 80 Hz, where the compressor works, the light line above the red one shows how much the lows were turned down.
- **The harmonics** that ENHANCE adds are the teal line (in print, the lower, separate line that falls away towards 2 kHz). Turn ENHANCE up and it rises; set it to 0 % and it disappears.
- **The dashed line at 80 Hz** marks the compressor's band, with COMPRESSOR printed to the left of it and HARMONICS to the right.

Hover over the display for a read-out of where you are: below 80 Hz it reminds you that the compressor works there; above it, that this is where the harmonics carry the bass on speakers that can't play the lows.

What to look for. On a bass line, a gap between the light input line and the red output curve below 80 Hz is the compressor at work. A teal line that reaches into the 100–300 Hz range is what a phone or a laptop will play of your bass.

Meter bridge (IN | GR | OUT)

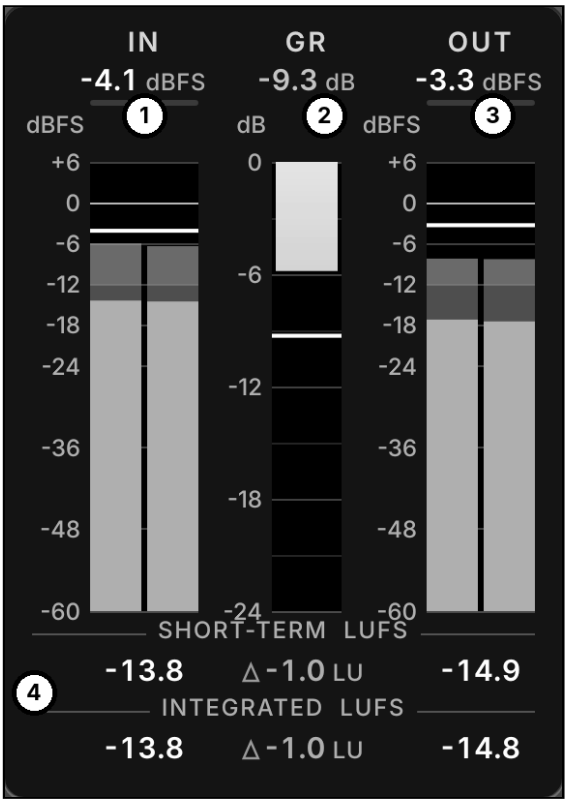


FIGURE 18 The meter bridge: 1 IN, 2 GR (the lows' gain reduction) and 3 OUT, with 4 short-term and integrated loudness.

The middle column, **GR**, is the compressor's reduction on the lows: an orange bar growing down from 0 on a 0 to 24 dB scale, with a hold line and, above it, its peak of the last two seconds. Click the column to reset it.

Reading the IN and OUT meters

The meter bridge measures what goes into VEIRA Bass Enhancer Red and what comes out, in level and in loudness. The drawing shows the input and output columns; any extra column on your plugin's bridge is described above.

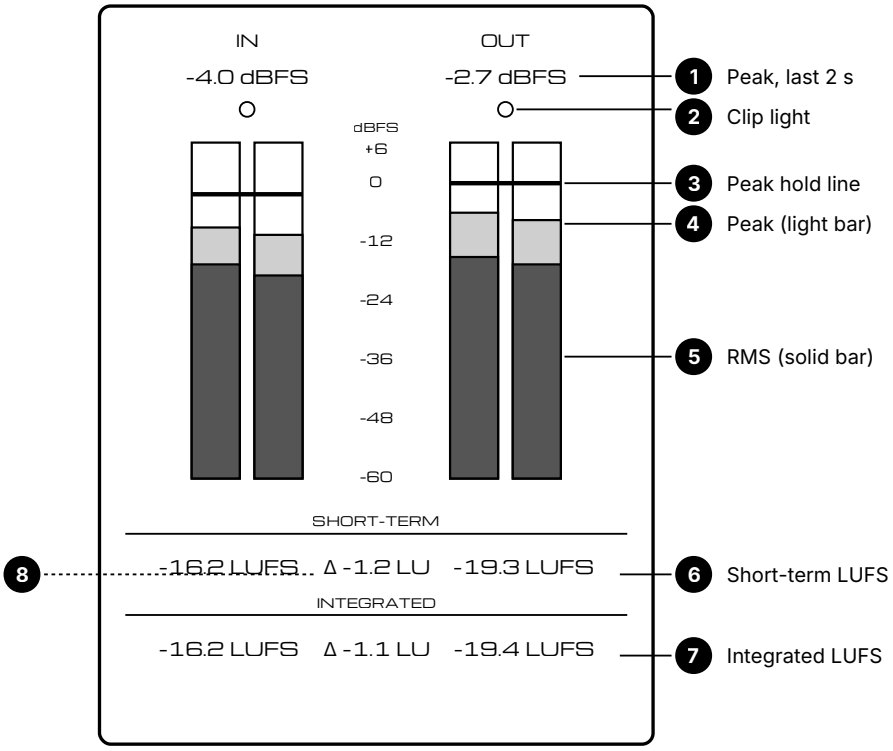


FIGURE 19 The meter bridge, left and right channel bars for input and output, with loudness below.

- 1 **Peak readout:** the highest sample peak of the last two seconds, in dBFS. It turns to a warning above 0 dBFS.
- 2 **Clip light:** lights on any sample at or over full scale. It stays lit until you click the meter.
- 3 **Hold line:** marks the recent peak on the bar.
- 4 **Peak bar** (the lighter part): the instantaneous sample peak of each channel.
- 5 **RMS bar** (the solid part): the average level over 300 ms, closer to how loud it sounds.
- 6 **SHORT-TERM:** loudness over the last 3 seconds, in LUFS, for the input (left) and the output (right).
- 7 **INTEGRATED:** loudness of everything since the measurement started, gated as the ITU-R BS.1770-4 and EBU R 128 standards require.
- 8 **Δ (delta):** OUT minus IN, in LU. It tells you how much louder (+) or quieter (−) VEIRA Bass Enhancer Red made the signal, so you can match levels fairly when you compare with bypass. It reads [--] while either side is too quiet to measure (below −70 LUFS).

The scale: on screen the bars are coloured like a studio console: green below −12 dBFS, yellow from −12 to −3, orange from −3 to 0 and red above 0 dBFS.

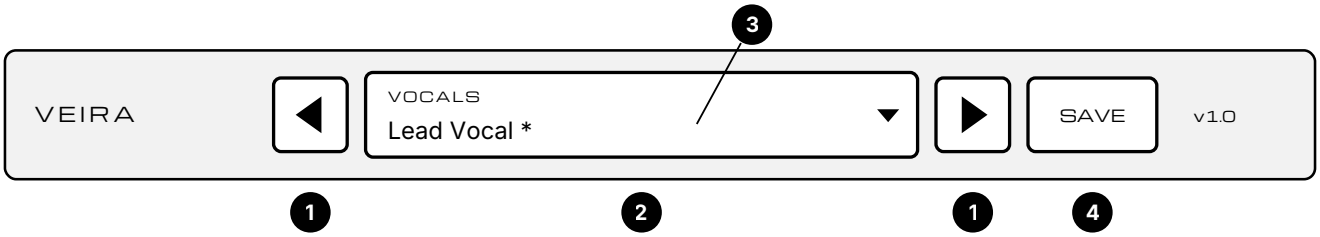
Clicks: click a level meter to reset its hold and clip light. Click the loudness readouts to restart the integrated measurement, for example at the start of a song.

Presets

VEIRA Bass Enhancer Red comes with **22 factory presets** in 6 folders. Each one is a starting point made for a real job. Load one close to what you need, then adjust the first control its note mentions.

The preset browser

The preset browser sits in the header, at the top of the window.



The header: logo and plugin name, then the preset browser, then the version.

FIGURE 20 The preset browser.

- 1 ◀ ▶ step to the previous or next preset, through every folder in order.
- 2 **The display** shows the folder (small, above) and the preset's name. Click it to open the preset menu. Hover over it to read the preset's note: what it's for and what to adjust first.
- 3 **An asterisk (*)** after the name means you've changed something since the preset loaded.
- 4 SAVE stores your current settings as a user preset.

The preset menu

Clicking the display opens a menu with:

- one submenu per **factory folder**, in the order shown below;
- **User Presets**, with your own presets in their folders;
- **Save...**, **Delete** (only for user presets: factory presets can't be deleted), **Rescan** (re-reads the user folder, if you copied presets in by hand) and **Show User Preset Folder** (opens it in Finder or Explorer).

Saving your own presets

1. Set VEIRA Bass Enhancer Red the way you like it.
2. Press SAVE. A dialog opens inside the plugin window.
3. Type a name, choose a folder or type a new folder name, and confirm.

Each user preset is one small .veirapreset file:

	Folder
macOS	~/Library/Audio/Presets/VEIRA/VEIRA Bass Enhancer Red/<Folder>/
Windows	%APPDATA%\VEIRA\VEIRA Bass Enhancer Red\Presets\<Folder>\

Copy these files to move your presets to another computer, or to back them up. Presets keep loading in future versions: any control added later simply starts at its default.

Presets in your DAW

The factory presets also appear in your DAW's own preset or program menu, named *Folder: Name* (for example *Vocals: Lead Vocal*). Whatever preset is selected is saved with your session and comes back when you reopen it, including the asterisk if you'd changed it.

The **Default ▸ Init** preset equals a fresh instance of the plugin: every control at its default.

The factory folders

Folder	Presets
Default	Init
Drums	Kick Weight, Kick Tight Low End, Floor Tom Growl, Drum Bus Low End
Bass	Bass Even Lows, Bass Grit, Synth Bass Push, Upright Warmth, Bass DI Focus
Mix Bus	Mix Low End Glue, Mix Sub Control, Mix Bass Presence, Club Low End
Small Speakers	Phone Bass, Laptop Lift, Earbud 808, Tiny Speaker Kick
Creative FX	Low End Crush, Gritty Sub Drone, Lo-Fi Bass, Squashed Lows

Levels. The presets were made on bass and 808 tracks peaking at −8 dBFS, and on kicks, drum buses and mixes peaking at −4 dBFS. THRESHOLD is set in dBFS against the lows' own level, so on a quieter or louder track **set** THRESHOLD **first**: watch the lows in the fader's track and move the threshold by the difference. Every preset but *Init* was level-matched to bypass (K-weighted, within 0.04 dB) on matching material by its OUTPUT; *Init* is the plain defaults and isn't trimmed. The presets with the compressor OFF (*Floor Tom Growl*, *Upright Warmth*, *Mix Bass Presence*, *Phone Bass*) only add harmonics.

Recipes

Each recipe starts from a factory preset; the numbers are a starting point for your track.

A bass line that carries on phones

1. Load *Small Speakers* ▸ *Phone Bass* (compressor OFF, ENHANCE 70 %), or *Small Speakers* ▸ *Laptop Lift* if the lows also need holding.
2. Press LISTEN and play the loudest part: you hear the lows and the harmonics alone. Switch it off again.
3. Lower ENHANCE until the bass just stops sounding papery, and check the line is still heard on earbuds or a phone.
4. Compare with bypass at equal loudness (Δ INTEGRATED about 0.0 LU).

Even low notes on a DI bass

1. Load *Bass* ▸ *Bass Even Lows* (THRESHOLD −22.0 dBFS, ENHANCE 15 %).
2. Play the passage with the boomiest note. Move THRESHOLD until the lows turn the track red on the loud notes only and GAIN REDUCTION reads 5–8 dB on them.
3. If it starts to pump, raise THRESHOLD a little (as *Bass* ▸ *Bass DI Focus*'s note says).

A kick with weight and knock

1. Load *Drums* ▸ *Kick Weight* (THRESHOLD −18.0 dBFS, ENHANCE 35 %).
2. For a shorter boom, try *Drums* ▸ *Kick Tight Low End*, or lower THRESHOLD further.
3. Raise ENHANCE for more knock on small speakers; *Small Speakers* ▸ *Tiny Speaker Kick* goes to 65 %.

An 808 for earbuds

1. Load *Small Speakers* ▸ *Earbud 808* (THRESHOLD −22.0 dBFS, ENHANCE 80 %).
2. Check the 808's longest notes: GAIN REDUCTION should hold them at one level.
3. If the full-range sound gets too buzzy on big speakers, lower ENHANCE until it's clean there and still heard on earbuds.

A steady low end on the mix bus

1. Load *Mix Bus* ▸ *Mix Low End Glue* (THRESHOLD −16.0 dBFS, ENHANCE 12 %), or *Mix Bus* ▸ *Club Low End* for dance music.
2. Keep THRESHOLD near the lows' peaks: a few dB of reduction on the kick and the bass is enough.
3. Watch the output peaks: harmonics raise them a little. A limiter after it takes care of the rest.

A gritty drone from a sustained sub

1. Load *Creative FX* ▸ *Gritty Sub Drone* (THRESHOLD −30.0 dBFS, ENHANCE 90 %).

2. Play a long sub note: the compressor holds it flat and the transistor stage turns it into a buzzing drone. For a crushed, gritty bottom end on a whole bass part, try *Creative FX* ▸ *Low End Crush*.

Specifications

Type	Bass enhancer: a compressor on the lows (80 Hz and below) and synthesised harmonics of a transistor stage
Channels	Mono and stereo (stereo linked: one gain for both sides, from the louder side)
Latency	None
Clean when idle	With ENHANCE 0 % and THRESHOLD OFF, the output is the input, bit for bit
Compressor	Level: 8th-order low-pass at 80 Hz, read as a sine's peak in dBFS; 4:1 with a 6 dB knee; attack 3 ms; two-stage release (100 ms, with a slow stage that holds back up to half of a long reduction and lets go in 250 ms); gain applied by an 8th-order low shelf at 80 Hz (all of it below about 55 Hz, half at 80 Hz, nothing measurable from 300 Hz)
Harmonics	2nd to 9th of a transistor stage, each at its place against the note; made from the lows below about 120 Hz; 45 Hz to about 1.5 kHz; total −4 dB + 16 log10 (ENHANCE) against a steady note
THRESHOLD	−48 dBFS to OFF (default OFF)
ENHANCE	0 to 100 % (default 30 %)
OUTPUT	−24 to +12 dB (default 0.0 dB)
LISTEN	On or off (default off); left out of offline bounces
Metering	SPECTRUM (20 Hz to 2 kHz, sixth-octave: output, input and harmonics); GAIN REDUCTION with a bar; the lows' level in the THRESHOLD track; IN, GR and OUT meters (peak, RMS); short-term and integrated loudness per ITU-R BS.1770-4 / EBU R 128
Sample rates	44.1 to 192 kHz
Presets	22 factory presets in 6 folders, plus your own
Window	1260 × 780 points at 100 %; 75 to 200 % or Fit to screen, from the size button, the corner grip or Cmd/Ctrl + = - 0; saved with the session and remembered for new instances
Formats	VST3, Audio Units, standalone; AAX once signed
Plugin ID	Manufacturer Veir, plugin Vber

Troubleshooting and questions

The sound drops out for a moment every 30 seconds. The plugin isn't activated on this computer. Open VEIRA Manager and sign in; the strip at the bottom of the plugin's window says exactly what's wrong. See *Getting started ▸ Activation and the licence*.

I don't see VEIRA Bass Enhancer Red in my DAW. Make sure VEIRA Manager shows SHOW (installed) for it, then rescan plugins in your DAW. In Logic Pro, open the Plug-in Manager and choose *Reset & Rescan Selection* if needed. Look under the manufacturer **VEIRA**.

GAIN REDUCTION **stays at 0.0 dB.** THRESHOLD is at OFF (fully right), or above the level of your lows. Pull it down until the lows in the fader's track turn red. A track with little below 80 Hz (a guitar, a voice) gives the compressor nothing to do.

Does it make the bass thinner? No. Only harmonics are added, each in its place against the note, and the note itself is never added again, so it can't cancel. The compressor only turns the lows down by what GAIN REDUCTION shows.

Does it touch the mids or the vocal? The compressor doesn't: its shelf applies half the reduction (in dB) at 80 Hz, a trace at 160 Hz and nothing measurable from 300 Hz. ENHANCE adds harmonics up to about 1.5 kHz; lower it if the low mids get crowded.

It sounds too gritty. Lower ENHANCE. Above about 50 % the upper harmonics grow and the grit becomes part of the sound, which is the point of the *Creative FX* presets but too much on a clean ballad.

The output peaks went up. The harmonics round the note's shape and add level: a 55 Hz note's peak rose 1.4 dB at 100 %. Lower OUTPUT, or put a limiter after it on the mix bus.

My bounce sounds different from playback. LISTEN is left out of offline bounces on purpose. If it was on while you listened, you heard only the lows and the harmonics.

Does VEIRA Bass Enhancer Red add latency? No. It works without latency, so it is fine while recording and playing live.

Does it work on a mono track? Yes, mono and stereo. On stereo, one gain is used for both sides, from the louder one, so the stereo image doesn't move.

The window is too small (or too big) on my screen. Click the size button in the header and pick a size or *Fit to screen*, or drag the bottom-right corner. The size is saved with your session.

How do I type an exact value? Right-click the knob or the fader (Control-click on a Mac), type the number and press Return.

Do my sessions keep my settings? Yes. Every control, the selected preset and the window size are saved with your session.

Contact: support@veiraaudio.com. Mention your computer (Mac or Windows and its version), your DAW and version, and what you see.



VEIRA Bass Enhancer Red · User Manual · Version 0.1.0

Support: **support@veiraaudio.com** · Web: **veiraaudio.com**

© 2026 VEIRA. Proudly made in the Dominican Republic. VST is a trademark of Steinberg Media Technologies GmbH. Audio Units, Logic Pro and macOS are trademarks of Apple Inc. Pro Tools and AAX are trademarks of Avid Technology, Inc. All other trademarks belong to their owners and are used only to describe compatibility.