VEIRA

SATURATOR

VEIRA Saturator Gold

User Manual

The warm one of the four VEIRA colour saturators: a valve preamp, tape and a tube glow that blooms as you play, driven on the band you choose while the rest passes clean, level-matched so you hear the colour, not louder.



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: saturation in four moves 7
Using the controls 7
Where to put VEIRA Saturator Gold 8
How saturation works 9
Harmonics: the colour of a saturator 9
What happens inside VEIRA Saturator Gold 10
Controls 11
CHARACTER: MODE, DRIVE and TONE 11
AROUND THE DRIVE: LOW CUT and HIGH CUT 13
OUTPUT: MIX, OUTPUT and AUTO GAIN 15
Aliasing, and why it stays out of the way 16
Displays 17
TRANSFER 17
HARMONICS 18
Meter bridge (IN | OUT) 19
Presets 21
The preset browser 21
The preset menu 21
Saving your own presets 21
Presets in your DAW 22
The factory folders 22
Recipes 23
A bass that growls and keeps a clean bottom 23
Tape glue on a drum bus 23
A guitar from glow to crunch 23
A vocal that comes forward 23
Warmth on the mix bus or the master 23
A telephone voice 23
Specifications 24
Troubleshooting and questions 25

Welcome

Thank you for choosing **VEIRA Saturator Gold**. It adds warm saturation the gold way, with three characters: a VALVE PREAMP, TAPE, and a TUBE GLOW that blooms as you play. DRIVE sets how hard the signal hits the curve while AUTO GAIN keeps the level, so the knob changes the colour, not the loudness. TONE decides whether the highs or the lows are driven harder, and LOW CUT and HIGH CUT choose the band that is driven: what they cut passes clean around the drive, so a bass keeps a tight, clean bottom while its mids growl.

It is the warm one of the four VEIRA colour saturators, and it is painted like the rest of the Gold family: brushed gold with dark print and black knobs.

What makes it different

- **Three warm characters.** A triode preamp led by the 2nd harmonic, magnetic tape with odd harmonics and a soft knee, and a tube glow whose colour follows how hard you play.
- **Drive a band, keep the rest clean.** LOW CUT and HIGH CUT choose what is driven; below and above it the signal passes untouched. With LOW CUT at 400 Hz and DRIVE at 100 %, a 50 Hz note passes within 0.01 dB.
- **Hear the colour, not the volume.** AUTO GAIN gives back what the curve takes, so a sine keeps its level within 0.02 dB at any DRIVE.
- **Clean of aliasing.** Only what the curve changes is made at 8 × the session's rate; at DRIVE 50 % nothing folds back over −100 dBc.
- **Parallel in time.** MIX blends with the dry signal delayed to match, and at 0 % the output is the input, delayed, bit for bit.
- **See it.** TRANSFER draws the curve at your settings with your input's peak on it; HARMONICS measures the 2nd to 9th harmonics and the THD at your settings.
- **40 factory presets** in 9 folders, level-matched to bypass.

How this manual is organised. *Getting started* installs and activates the plugin. *The panel at a glance* names its parts. *How saturation works* explains harmonics and what happens inside. *Controls* and *Displays* explain every control and graph. *Presets*, *Recipes*, *Specifications* and *Troubleshooting* close the manual.

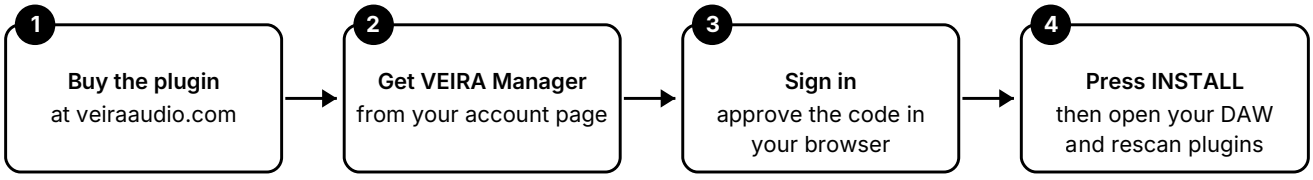
Getting started

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.

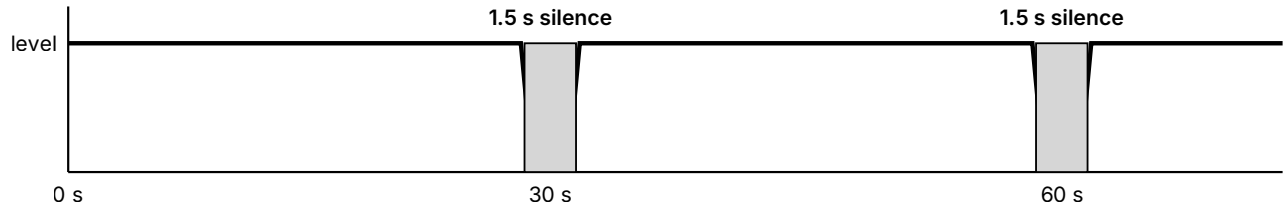
1. **Buy** VEIRA Saturator Gold at **veiraaudio.com**. It's a one-time purchase: you own it for good, with free updates.
2. **Download VEIRA Manager** from your account page (or veiraaudio.com/manager) and install it.
3. **Sign in.** VEIRA Manager shows a short code and opens your browser; confirm the code there. Your password is never typed into the app.
4. Find VEIRA Saturator Gold 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 Saturator Gold appears in your DAW under the manufacturer **VEIRA** (in Logic Pro: Audio Units ▸ VEIRA ▸ VEIRA Saturator Gold).

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 Saturator Gold 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.



Without a licence: short silences every 30 s, faded in and out so nothing clicks.

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 Saturator Gold. 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 Saturator Gold 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



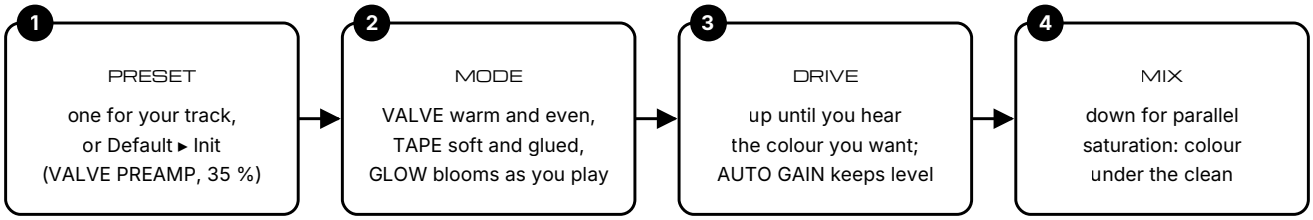
FIGURE 3 VEIRA Saturator Gold with *Default* ▸ *Init* on a rock mix: VALVE PREAMP at DRIVE 35 %, AUTO GAIN on.

	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	TRANSFER	The curve at your settings, with your input's peak on it.
4	HARMONICS	The 2nd to 9th harmonics and the THD at your settings.
5	Meter bridge	IN and OUT meters with short-term and integrated loudness.
6	MODE	VALVE PREAMP, TAPE or TUBE GLOW.
7	DRIVE	How hard the signal hits the curve: 0 to +36 dB.
8	TONE	Whether the highs or the lows are driven harder.
9	LOW CUT	The bottom of the band that is driven; below it passes clean.
10	HIGH CUT	The top of the band that is driven; above it passes clean.
11	MIX	The driven signal against the dry one, in time.
12	OUTPUT	The level after everything.

	Part	What it does
13	AUTO GAIN	Keeps the level while DRIVE changes.

The window has the TRANSFER and HARMONICS displays at the top and the meter bridge at the right. The controls sit in three groups along the bottom, under the captions CHARACTER, AROUND THE DRIVE and OUTPUT.

Quick start: saturation in four moves

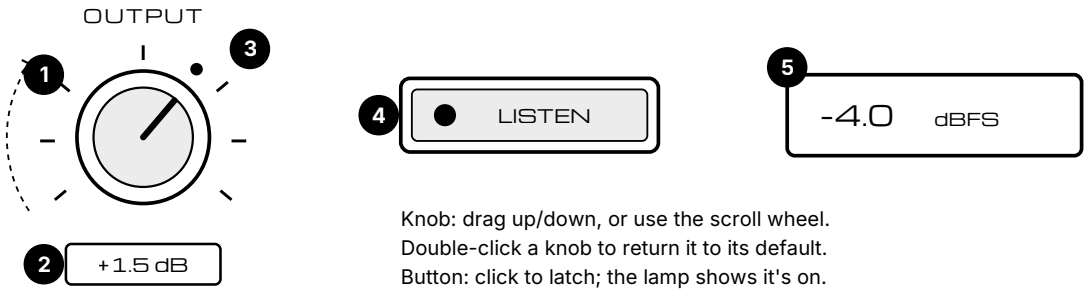


Then TONE for where the colour sits, and LOW CUT or HIGH CUT to keep the sub or the top clean.

FIGURE 4 The quickest way to warmth. *Default ▸ Init* starts with VALVE PREAMP, DRIVE 35 % and AUTO GAIN on.

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 Saturator Gold's panel the parts look a little different from the drawing above:

- **Knobs show their value in the middle** (35.0 %, Off, 0.0 dB): the knobs are black, and a dark ring printed on the gold around each one (in print, the dark arc) shows how far it is turned. The control's name is printed under the knob. DRIVE, the one you touch most, is the large one.
- **The MODE buttons:** the selected mode is filled with dark ink and light lettering (in print, the dark button); the others are light buttons with dark lettering. AUTO GAIN looks the same way when it is on.
- **LOW CUT and HIGH CUT read** Off at their ends: LOW CUT fully left, HIGH CUT fully right.
- **Type a value:** right-click a knob (Control-click on a Mac). A field opens with the current value; type the new one and press Return. The number is enough: **50** for 50 % of DRIVE, **−30** for a TONE of −30 %, **150** for a LOW CUT at 150 Hz. Double-click a knob for its default.
- **Tooltips:** rest the pointer on a control or a display for a short note on what it does.
- **The window size.** VEIRA Saturator Gold opens at 100 %, 1200 × 700 points, so it fits a 1280 × 800 screen. 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:** brushed gold with dark print and black knobs. The displays, the meter bridge and the preset window are dark screens set into the gold. Every text is at least 12 points and stands at least 4.5:1 against its ground (the WCAG AA contrast for text).

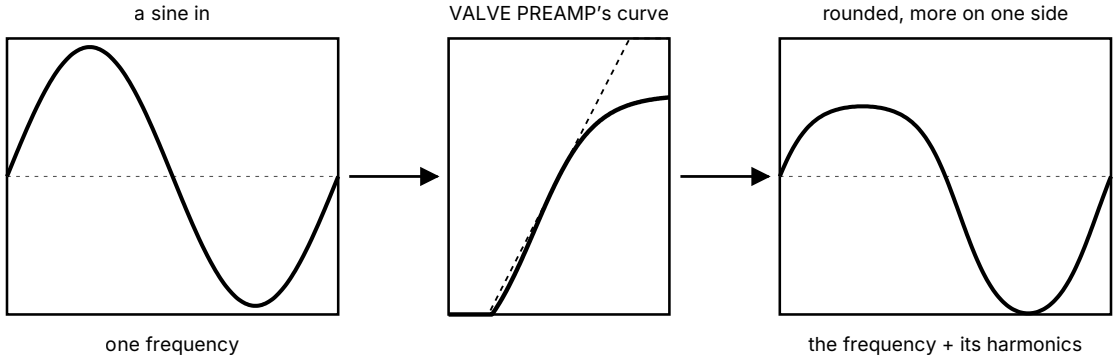
Where to put VEIRA Saturator Gold

Use it as an insert on anything that wants warmth, weight or edge: drums and the drum bus, bass, guitars, keys, vocals, the mix bus or the master. It has a small, constant latency (102 samples), reported to your DAW, which compensates it. Put an EQ before it to change what is driven, or after it to shape the result.

How saturation works

Harmonics: the colour of a saturator

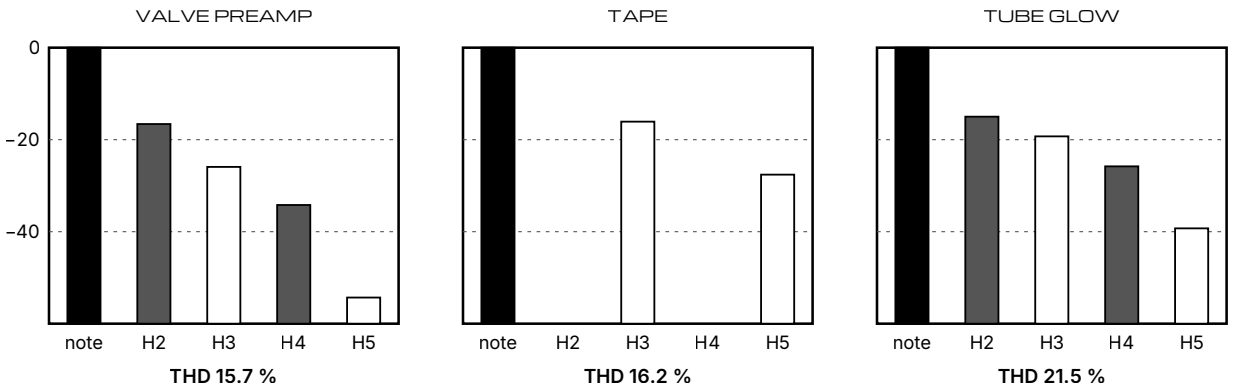
Every analog stage has a limit. Push a valve, a tape or a transformer near it and the signal bends: the peaks are rounded and the wave changes shape. A changed shape means **new frequencies**, at 2, 3, 4 … times each note: its **harmonics**. They are what you hear as warmth, weight, edge or fuzz.



Saturation bends the signal through a curve that runs out of room as the level rises. The bent wave holds new frequencies at 2, 3, 4 … times the note: its harmonics. A lopsided curve, like a triode's, makes even ones (the 2nd, 4th); a symmetrical one, like tape, only odd ones (the 3rd, 5th). Their mix is the colour of the saturator.

FIGURE 6 A sine through [VALVE PREAMP]'s curve.

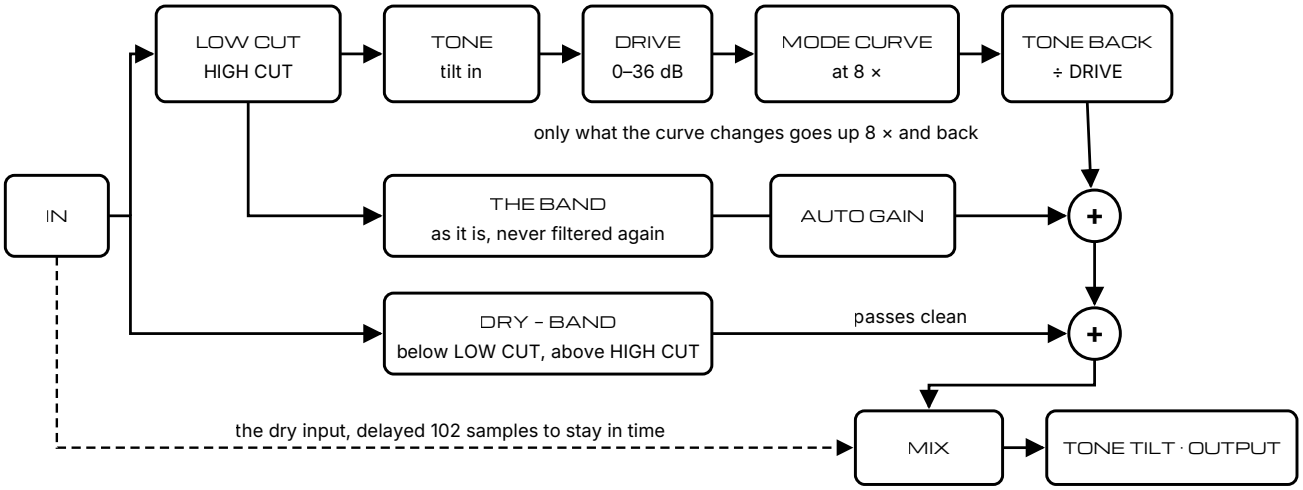
Which harmonics, and how loud, is the character of a saturator. **Even harmonics** (the 2nd, 4th) sit an octave and two octaves above the note: they thicken and warm it without changing its character much. **Odd harmonics** (the 3rd, 5th) sit at a twelfth and above: they make it firmer, edgier, more forward. A curve that is lopsided, like a biased triode's, makes both, led by the 2nd; a symmetrical one, like tape's, makes only odd ones.



DRIVE 50 % (+18 dB), a 1 kHz sine at −18 dBFS RMS, AUTO GAIN on, measured (dBc). Dark: even harmonics (warm, full); white: odd ones (firmer, edgier). VALVE PREAMP and TUBE GLOW lead with the 2nd; TAPE makes odd harmonics only.

FIGURE 7 The three modes' harmonics at [DRIVE] 50 %, measured.

What happens inside VEIRA Saturator Gold



The band between LOW CUT and HIGH CUT is driven; the rest passes clean around it. Only what the curve changes is made at 8 × the session's rate and filtered on the way down; the clean part never passes those filters. Latency: 102 samples at every rate (2.1 ms at 48 kHz), reported to your DAW.

FIGURE 8 The signal flow.

1. **The band.** LOW CUT and HIGH CUT (24 dB per octave) pick the band that is driven. The dry signal less that band, their exact complement, passes clean around the drive.
2. **Into the curve.** The band is tilted by TONE and multiplied by DRIVE (up to +36 dB).
3. **The curve, at 8 ×.** Only what the curve changes goes up to 8 × the session's rate, through the MODE's curve and back down; the linear part of the signal never passes those filters.
4. **Back to level.** What the curve added is tilted back by TONE and divided by DRIVE again, so quiet parts keep their level; AUTO GAIN gives back what the curve took.
5. **The sum.** The driven band and the clean rest are added back together.
6. **MIX, TONE and OUTPUT.** MIX blends with the dry input delayed by the latency; half of TONE's tilt stays on the result; OUTPUT sets the level.

The latency is **102 samples at every sample rate** (2.1 ms at 48 kHz), constant whatever the settings, and reported to your DAW. Your DAW's bypass is delayed by the same amount, so switching it has no gap.

Controls

CHARACTER: MODE, DRIVE and TONE

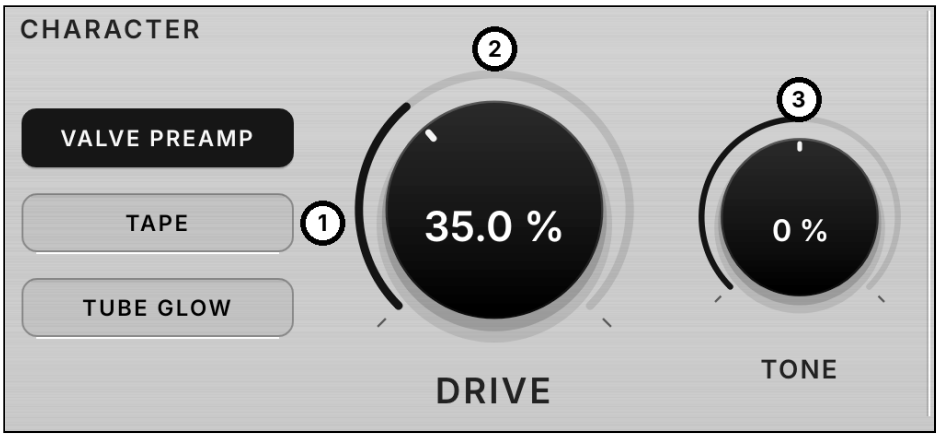
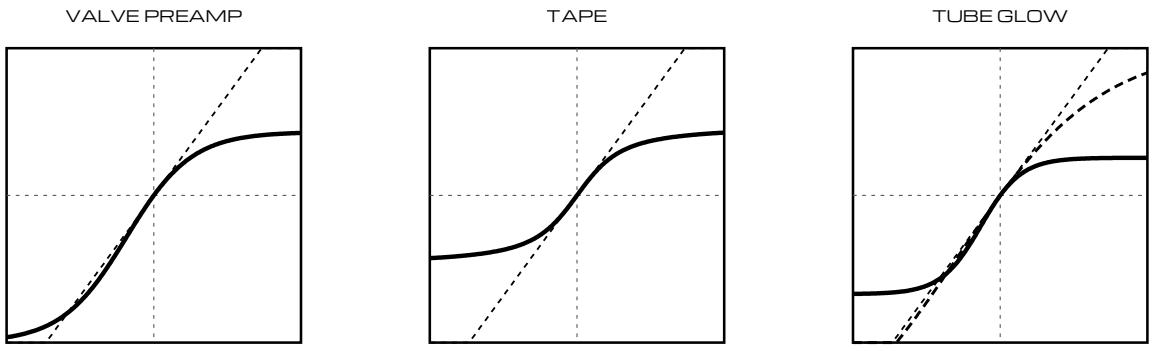


FIGURE 9 CHARACTER: 1 the MODE buttons (VALVE PREAMP selected), 2 DRIVE at 35 % and 3 TONE at 0 %.

Control	Range	Default	What it does
MODE	VALVE PREAMP, TAPE, TUBE GLOW	VALVE PREAMP	The kind of curve.
DRIVE	0 to 100 %	35 %	How hard the band hits the curve: 0 to +36 dB.
TONE	−100 to +100 %	0 %	Positive drives the highs harder, negative the lows.

MODE picks the curve. Switching crossfades over 30 ms, so you can switch while the music plays.

- VALVE PREAMP: a triode stage. The 2nd harmonic leads, the 3rd follows: warm and full at low DRIVE. Pushed hard, it rounds the peaks smoothly and unevenly, more on one side than the other.
- TAPE: magnetic tape's magnetisation curve. Mostly odd harmonics (the 3rd, 5th) and a soft knee that tucks the peaks in, with a little lag and a softening of the high end: glue, softness and a rounder top.
- TUBE GLOW: a triode whose bias follows the music. Quiet passages go through a nearly clean curve, loud ones through a rich one, blended by the level over 10 ms up and 250 ms down: the colour blooms as you play harder and clears when you play softly.



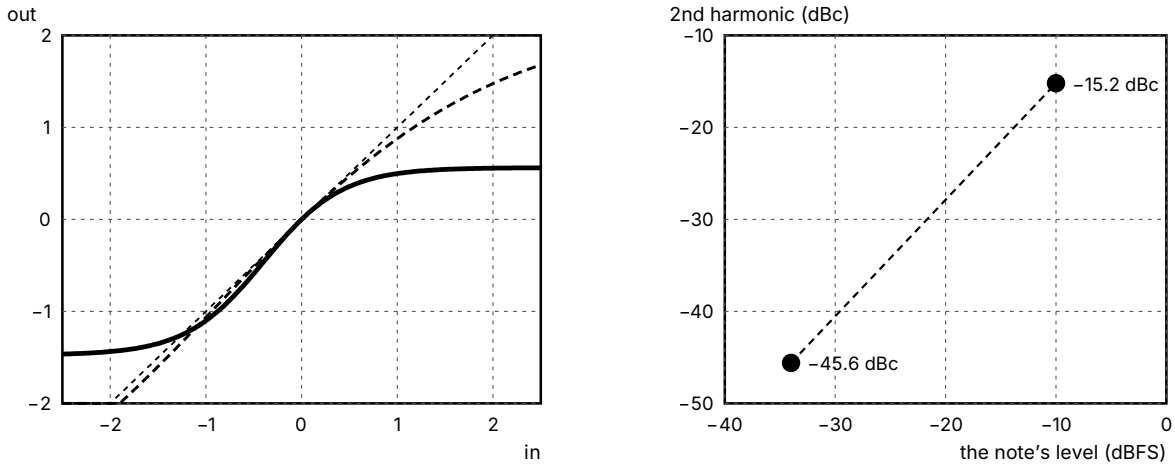
a biased triode: rounds the top sooner than the bottom

magnetic tape: symmetrical, a soft knee

dashed: quiet passages; solid: loud ones

The three curves against the driven signal (input across, output up; dotted: no change), computed from the plugin's own formulas. Each has a slope of one at zero, so quiet signals keep their level; DRIVE decides how far up the curve you go.

FIGURE 10 The three curves.



dashed: quiet; solid: loud

measured at DRIVE 40 %

TUBE GLOW blends two triode curves by the level's envelope (10 ms up, 250 ms down): a nearly clean one for quiet passages and a rich one for loud ones (computed from the plugin's formulas). Measured: a note 24 dB louder gets 30 dB more 2nd harmonic. The colour blooms as you play harder and clears when you play softly.

FIGURE 11 TUBE GLOW's two curves and its bloom.

DRIVE sets how hard the band hits the curve: 0 % adds 0 dB, 100 % adds +36 dB. The curve's output is divided by the same amount again, so the band's quiet parts keep their level and DRIVE changes the colour. Measured on a 1 kHz sine at −18 dBFS RMS with AUTO GAIN on:

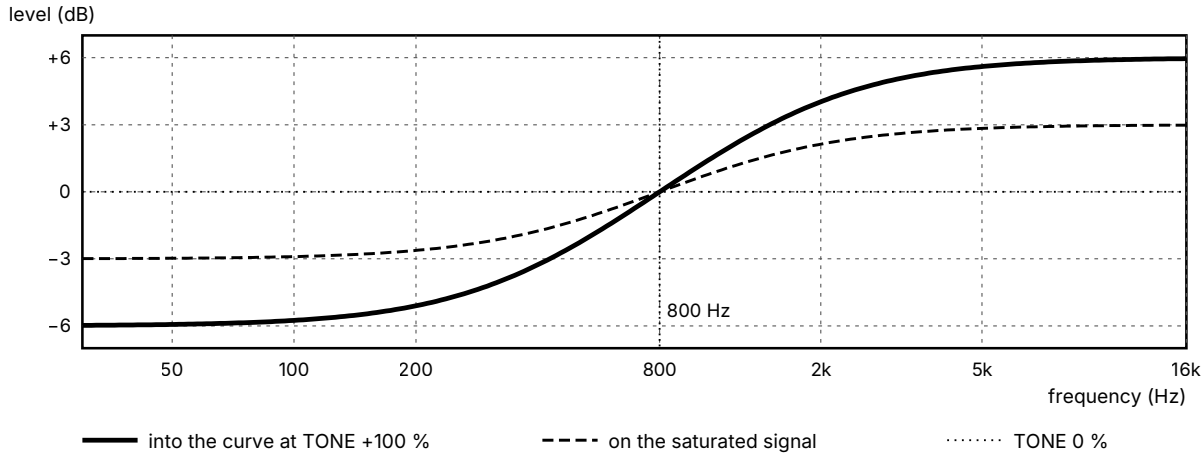
MODE	DRIVE 0 %	25 %	50 %	100 %
VALVE PREAMP	2.7 % THD	7.2 %	15.7 %	38.9 %
TAPE	0.8 %	4.7 %	16.2 %	36.8 %
TUBE GLOW	1.2 %	6.3 %	21.5 %	41.2 %

- **10–25 %:** a touch of warmth and glue; the mix bus and mastering presets sit here.

- **25–50 %:** clear colour on a track: a fuller bass, a warmer vocal, glued drums.
- **60–100 %:** drive and growl: crunch, fuzz and broken tape in the Creative FX presets.

The colour depends on how loud the track is: these figures are for a sine at −18 dBFS RMS, and hotter material is driven harder. On a hot track, lower DRIVE.

TONE decides where the colour is made. It tilts what goes into the curve around 800 Hz, up to 6 dB each way, and takes the same tilt back off what the curve adds. **Positive** TONE drives the highs harder: brighter, edgier harmonics; **negative** drives the lows: thicker, warmer ones. Half of the tilt (up to 3 dB each way) stays on the saturated band, so the knob is heard on quiet passages too. Measured: +100 % gives a 3 kHz note 7 dB more 3rd harmonic, −100 % a 100 Hz note 8 dB more.



TONE tilts what goes into the curve around 800 Hz (up to 6 dB each way, computed from the plugin's shelves) and takes exactly that tilt back off what the curve adds; half of it (up to 3 dB each way) stays on the saturated band. Positive TONE drives the highs harder (brighter, edgier harmonics), negative the lows (thicker, warmer).

FIGURE 12 TONE at +100 %.

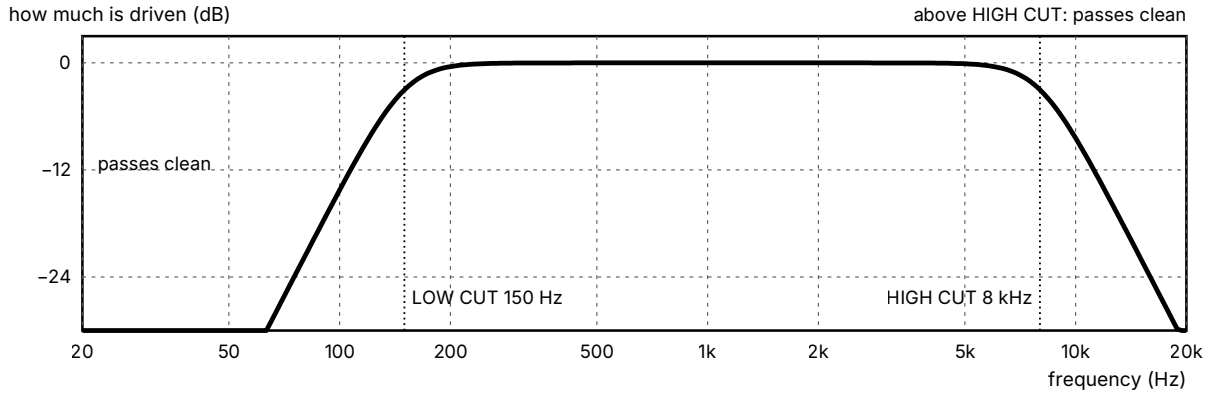
AROUND THE DRIVE: LOW CUT and HIGH CUT



FIGURE 13 AROUND THE DRIVE: 1 LOW CUT and 2 HIGH CUT, both Off.

Control	Range	Default	What it does
LOW CUT	Off, 20 Hz to 1 kHz	Off	The bottom of the band that is driven.
HIGH CUT	1 to 20 kHz, Off	Off	The top of the band that is driven.

LOW CUT and HIGH CUT choose the band that is driven, at 24 dB per octave. What they cut is **not lost**: the dry signal less the band passes clean around the drive, and the two are added back. So LOW CUT at 90 Hz on a bass growls its mids while the sub stays tight and clean; HIGH CUT at 8 kHz keeps a kick's click or a cymbal's top out of the drive. With both Off the whole signal is driven.



LOW CUT and HIGH CUT (24 dB per octave) choose the band that is driven. What they cut is not lost: the dry signal less the band passes clean around the drive, so the sum is your whole signal. Measured: with LOW CUT at 400 Hz and DRIVE 100 %, a 50 Hz note passes within 0.01 dB, its harmonics under −116 dBc.

FIGURE 14 The band that is driven, with LOW CUT at 150 Hz and HIGH CUT at 8 kHz.

Both filters always run, so switching them on or off never starts a filter cold, and every move glides without clicks.

> **Tip:** HIGH CUT is also the cure for fizz. The harmonics of a driven top end are what sound harsh; keep the top out of the drive and it stays smooth.

OUTPUT: MIX, OUTPUT and AUTO GAIN

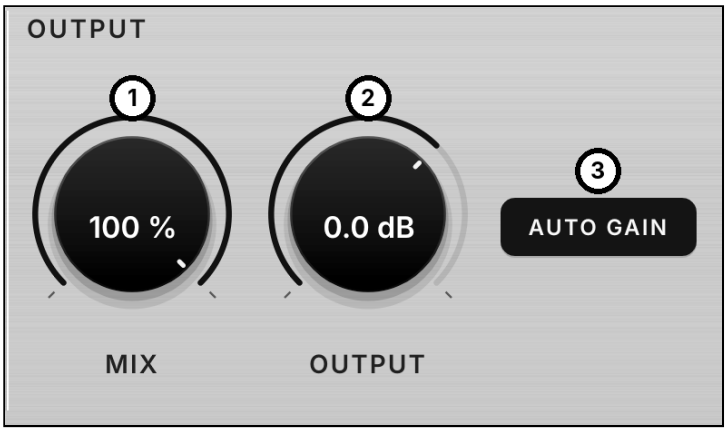
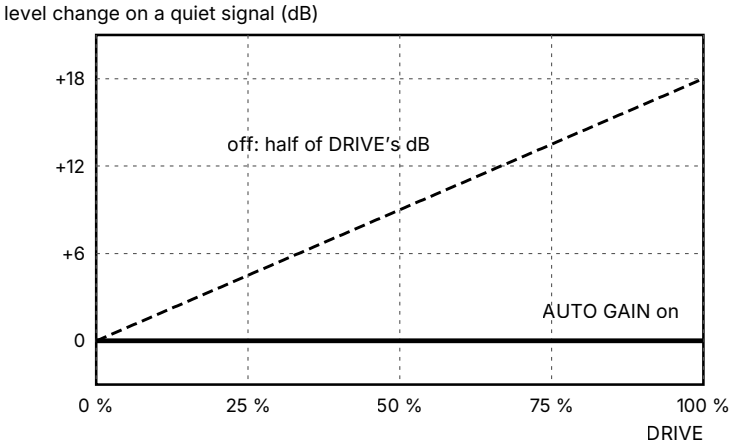


FIGURE 15 The OUTPUT group: 1 MIX, 2 OUTPUT and 3 AUTO GAIN (on).

Control	Range	Default	What it does
MIX	0 to 100 %	100 %	The driven signal against the dry input, delayed to match.
OUTPUT	−24 to +12 dB	0.0 dB	The level after everything.
AUTO GAIN	on, off	on	Gives back what the curve takes, so DRIVE changes the colour, not the level.

AUTO GAIN keeps the level while you turn DRIVE. When the plugin starts, it measures each curve at every DRIVE step on a 1 kHz sine at −18 dBFS RMS, and gives the band back what the curve took: that sine keeps its level within 0.02 dB at any DRIVE and MODE. On music it is close, not exact: a rock mix peaking at −6 dBFS, at DRIVE 60 %, stayed within 2 dB. With AUTO GAIN off, half of DRIVE's decibels come out as gain, as a real preamp gets louder when you turn it up.



AUTO GAIN (on by default) gives back what the curve takes. At prepare it measures each MODE at every DRIVE step on a 1 kHz sine at −18 dBFS RMS, so that sine keeps its level within 0.02 dB at any DRIVE. Off, half of DRIVE's dB comes out as gain, as a preamp gets louder.

On a mix the result is close but not exact: a rock mix at DRIVE 60 % stayed within 2 dB, so check the meter bridge's Δ.

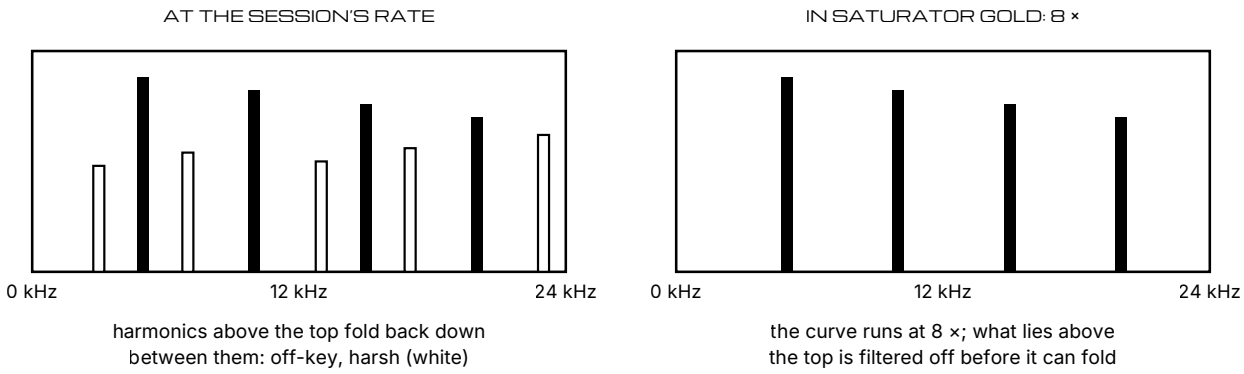
FIGURE 16 What AUTO GAIN does to the level.

MIX blends the saturated signal with the dry input, delayed by the latency so the two stay exactly in time: parallel saturation without comb filtering. At 0 % the output is the input, delayed, bit for bit. Around 20–45 % a heavily driven copy adds density under the clean sound, as in *Mix Bus ▸ Mix Glow Parallel* or *Drums ▸ Room Smash Blend*.

OUTPUT sets the final level. Set it 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.

Every control glides over 20 ms, so it can move while the music plays.

Aliasing, and why it stays out of the way



Drawn roughly. Measured with 5, 7, 11 and 15 kHz tones at −18 dBFS in every MODE: at DRIVE 50 % (+18 dB) nothing folds back over −100 dBc; at DRIVE 100 % (+36 dB), where a 15 kHz tone becomes nearly square, the worst folded component is −46 dBc (TAPE). On very bright sources driven hard, use HIGH CUT.

FIGURE 17 Why the curve runs at 8 × the session's rate.

A curve makes harmonics above the top of the audio band too. At the session's rate they would fold back down as off-key tones: **aliasing**. VEIRA Saturator Gold takes only what the curve changes up to 8 × the session's rate, runs the curve there and filters the top off on the way down. Up to DRIVE 50 % (+18 dB) nothing folds back over −100 dBc. At DRIVE 100 % (+36 dB) a loud 15 kHz tone becomes a near-square wave and the worst folded component measures −46 dBc (in TAPE; the other modes are lower). On music this is far below what you hear; on very bright sources driven hard, use HIGH CUT to keep the top out of the drive.

Displays

TRANSFER

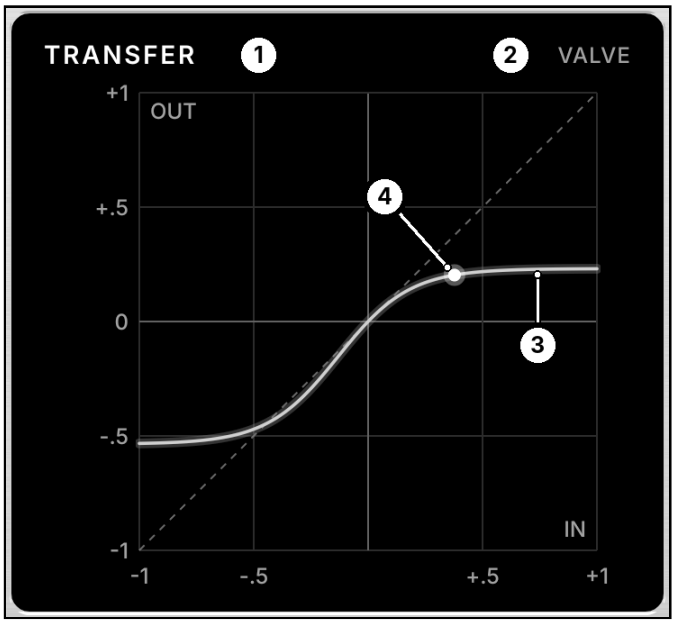


FIGURE 18 TRANSFER: 1 its title, 2 the mode's view (VALVE), 3 the curve at your settings and 4 your input's peak now.

TRANSFER draws what happens to each sample of the band: **input across, output up**, both from −1 to +1 (full scale at the edges). The dashed diagonal is 1:1, no change. The curve is computed from the plugin's own curves at your settings (MODE, DRIVE, AUTO GAIN):

- VALVE (in VALVE PREAMP): the triode's curve. Watch it flatten sooner on one side as DRIVE rises.
- TAPE LOOP (in TAPE): the loop tape draws for a full-scale sine: up one path, down another. The wider the loop, the more lag and softening.
- QUIET / LOUD (in TUBE GLOW): the two curves, thin for quiet passages and bold for loud ones.

The dot is your input's peak right now (fast up, slow down), placed on the curve: the further along the flat part it sits, the harder you are driving.

HARMONICS

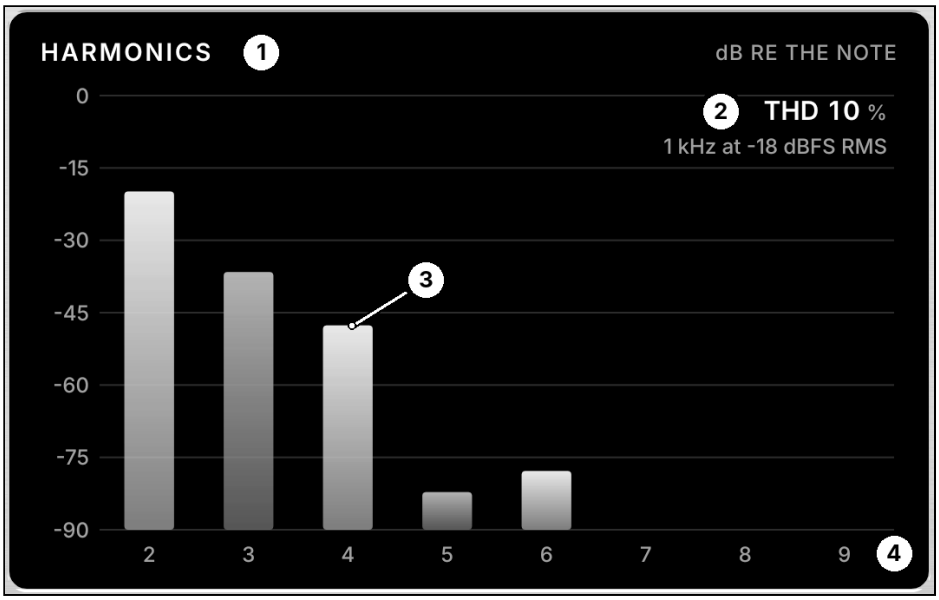


FIGURE 19 HARMONICS: 1 its title, 2 the THD and the test note, 3 the harmonics' bars (dB against the note) and 4 the harmonic numbers, 2 to 9.

HARMONICS measures what a **1 kHz sine at −18 dBFS RMS** gets from a copy of the plugin at your settings right now: the **2nd to 9th harmonics**, in dB against the note (dB RE THE NOTE), from 0 down to −90 dB, and the **THD** (total harmonic distortion) in %. Even harmonics are drawn in a lighter gold than odd ones (in print, the lighter bars). The bars ease to new values as you move a control.

Because the test note is fixed, the display shows the **character** of your settings, not your music's level: use it to compare modes and DRIVE settings, and TRANSFER's dot to see how hard your track drives the curve.

Meter bridge (IN | OUT)

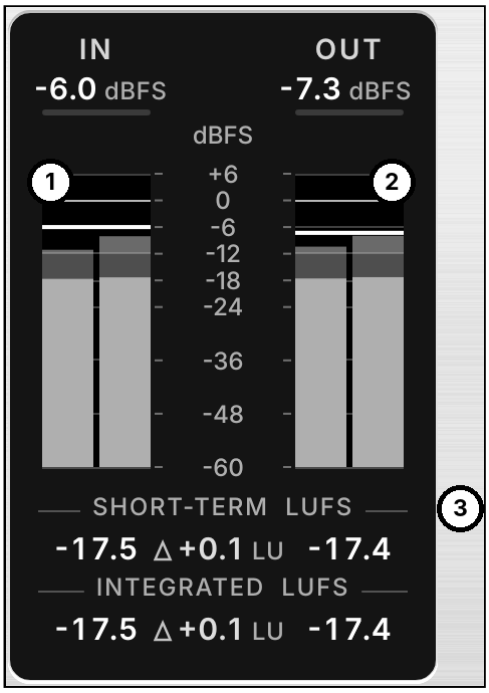


FIGURE 20 The meter bridge: 1 IN and 2 OUT, with 3 short-term and integrated loudness.

Reading the IN and OUT meters

The meter bridge measures what goes into VEIRA Saturator Gold 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.

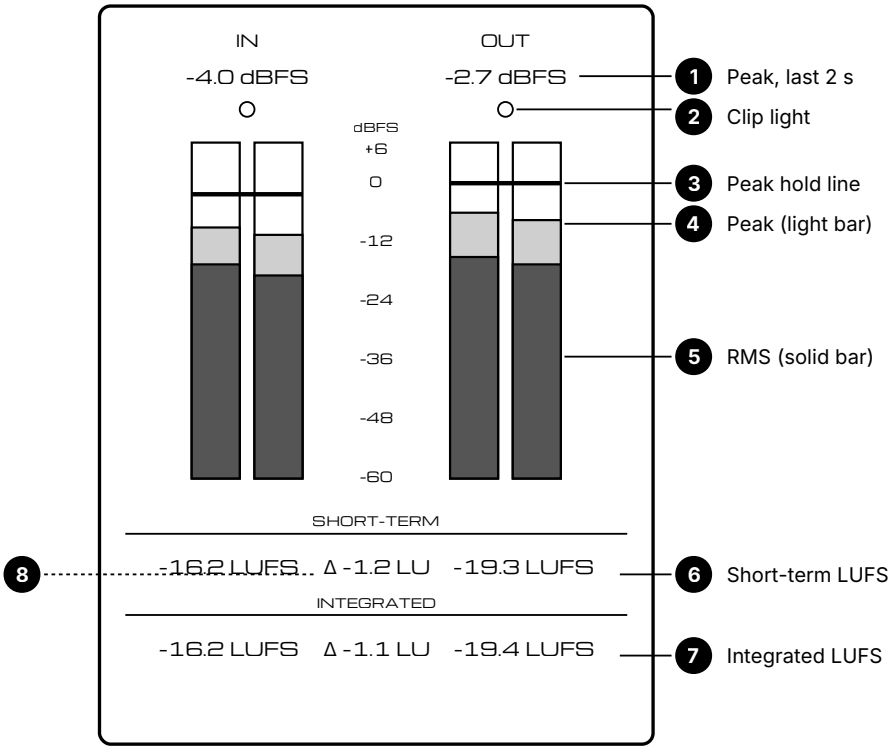


FIGURE 21 The meter bridge, left and right channel bars for input and output, with loudness below.

- 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 Saturator Gold 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.

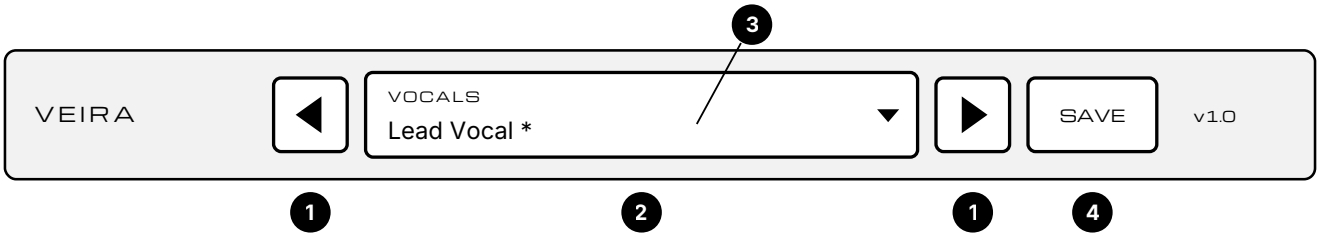
Clicks: click a level meter to reset its hold and clip light. Click the loudness readouts to restart the integrated measurement, for example at the start of a song.

Presets

VEIRA Saturator Gold comes with **40 factory presets** in 9 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 22 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 Saturator Gold 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 Saturator Gold/<Folder>/
Windows	%APPDATA%\VEIRA\VEIRA Saturator Gold\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	Drum Bus Warmth, Snare Crack, Kick Glow, Room Smash Blend, Overheads Tape
Bass	Bass Valve Grit, Round Tape Bass, Bass Presence Glow, Fuzzy Synth Bass, Upright Warmth
Guitar	Clean Guitar Glow, Crunch Preamp, Acoustic Tape, Lead Valve Push, Dark Rhythm Glow
Keyboards	Electric Piano Warmth, Organ Valve Drive, Synth Tape Glue, Piano Tape Softness
Vocals	Vocal Valve Presence, Vocal Tape Smooth, Vocal Glow Parallel, Rap Vocal Edge, Backing Vocal Tape
Mix Bus	Mix Tape Glue, Mix Valve Warmth, Mix Glow Parallel, Mix Bright Tape, Mix Low End Clean
Mastering	Master Tape Touch, Master Valve Sheen, Master Glow Blend, Master Mid Warmth
Creative FX	Valve Fuzz Box, Broken Tape, Telephone Glow, Parallel Destroy, Dark Glow Swell, Bright Tape Edge

Levels. The presets were made on tracks peaking at −8 dBFS (bass, guitars, keys, vocals), drums and buses at −4 dBFS and premasters at −3 dBFS. AUTO GAIN is on in every one, and each preset's OUTPUT was set so it comes out as loud as it went in on matching material (within 0.05 dB, K-weighted; *Init* is the plain defaults). On hotter material the colour is stronger: **lower** DRIVE. Fifteen presets use VALVE PREAMP (*Init* included), fifteen TAPE and ten TUBE GLOW.

Recipes

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

A bass that growls and keeps a clean bottom

1. Load *Bass* ▸ *Bass Valve Grit* (VALVE PREAMP, DRIVE 50 %, LOW CUT 90 Hz).
2. Raise DRIVE until the mids growl; the lows under LOW CUT stay clean and tight.
3. For a rounder, warmer bass, try *Bass* ▸ *Round Tape Bass*; for a bass that is heard in a dense mix, *Bass* ▸ *Bass Presence Glow*.

Tape glue on a drum bus

1. Load *Drums* ▸ *Drum Bus Warmth* (TAPE, DRIVE 35 %).
2. Watch TRANSFER's dot: on the loud hits it should reach the soft part of the curve.
3. For a smashed room under the kit, try *Drums* ▸ *Room Smash Blend* (DRIVE 75 %, MIX 45 %).

A guitar from glow to crunch

1. Load *Guitar* ▸ *Clean Guitar Glow* (TUBE GLOW, 30 %): the colour rises as the player digs in.
2. For crunch, try *Guitar* ▸ *Crunch Preamp* (VALVE PREAMP, 70 %), and set the bite with TONE.
3. For leads, *Guitar* ▸ *Lead Valve Push* keeps the fizz above 12 kHz out of the drive with HIGH CUT.

A vocal that comes forward

1. Load *Vocals* ▸ *Vocal Valve Presence* (VALVE PREAMP, 25 %, LOW CUT 150 Hz).
2. If the voice is sharp, try *Vocals* ▸ *Vocal Tape Smooth* instead; for density without changing the dry voice, *Vocals* ▸ *Vocal Glow Parallel* (MIX 35 %).
3. Compare with bypass at Δ INTEGRATED about 0.0 LU.

Warmth on the mix bus or the master

1. Load *Mix Bus* ▸ *Mix Tape Glue* (TAPE, 20 %) or *Mastering* ▸ *Master Tape Touch* (10 %).
2. Keep DRIVE low: on a mix the colour adds up fast. For warmth that leaves the low end alone, try *Mix Bus* ▸ *Mix Low End Clean* (LOW CUT 150 Hz).
3. For tape on the mids only, *Mastering* ▸ *Master Mid Warmth* lets the lows and the air pass clean.

A telephone voice

1. Load *Creative FX* ▸ *Telephone Glow* (TUBE GLOW, 85 %, LOW CUT 600 Hz, HIGH CUT 4 kHz).
2. Outside the band the voice passes clean, so for a real telephone sound, put an EQ after it that cuts below 600 Hz and above 4 kHz.

Specifications

Type	Saturator: valve preamp, tape and tube glow curves, run at 8 × the session's rate on what the curve changes
Channels	Mono and stereo
Latency	102 samples at every sample rate (2.1 ms at 48 kHz), constant, reported to the host; the host's bypass is delayed by the same amount
MODE	VALVE PREAMP (a biased triode; the 2nd harmonic leads), TAPE (the magnetisation curve with a memory; odd harmonics), TUBE GLOW (two triode curves blended by the level, 10 ms up, 250 ms down) (default VALVE PREAMP); switching crossfades over 30 ms
DRIVE	0 to 100 %: 0 to +36 dB into the curve (default 35 %)
THD (measured)	1 kHz at −18 dBFS RMS, AUTO GAIN on, DRIVE 50 %: VALVE PREAMP 15.7 %, TAPE 16.2 %, TUBE GLOW 21.5 %
TONE	−100 to +100 % (default 0 %): a tilt around 800 Hz into the curve, up to 6 dB each way, taken back after it; half of it (up to 3 dB each way) stays on the saturated band
LOW CUT	Off, 20 Hz to 1 kHz (default Off), 24 dB/oct
HIGH CUT	1 to 20 kHz, Off (default Off), 24 dB/oct; what both cut passes clean around the drive
AUTO GAIN	On or off (default on): a 1 kHz sine at −18 dBFS RMS keeps its level within 0.02 dB at any DRIVE; off, half of DRIVE's dB comes out as gain
MIX	0 to 100 % (default 100 %), against the dry input delayed to match; 0 % is the input, delayed, bit for bit
OUTPUT	−24 to +12 dB (default 0.0 dB)
Aliasing (measured)	5, 7, 11 and 15 kHz at −18 dBFS: under −100 dBc at DRIVE 50 %; −46 dBc at worst at DRIVE 100 % (TAPE, 15 kHz)
Metering	TRANSFER (the curve at your settings, the input's peak); HARMONICS (H2 to H9 and THD of a 1 kHz sine at −18 dBFS RMS at your settings); IN 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	40 factory presets in 9 folders, plus your own
Window	1200 × 700 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 Vsag

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 Saturator Gold 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**.

I hear little difference. DRIVE is low, or MIX is low, or your track is quiet: the presets were made on tracks peaking around −8 dBFS. Raise DRIVE, and watch TRANSFER's dot reach the curved part. On a band that LOW CUT and HIGH CUT leave narrow, most of the sound passes clean by design.

It gets louder (or quieter) when I turn DRIVE. AUTO GAIN is off: then half of DRIVE's decibels come out as gain, as a real preamp does. Switch it on, or set OUTPUT. On a mix, AUTO GAIN is close but not exact; trim with OUTPUT until Δ INTEGRATED reads about 0.0 LU.

It sounds harsh or fizzy. Lower DRIVE, turn TONE towards negative, or set HIGH CUT to keep the top out of the drive.

The low end gets muddy. Set LOW CUT (80–150 Hz): the lows then pass clean around the drive.

Does it add latency? Yes: 102 samples at every sample rate (2.1 ms at 48 kHz), the oversampling filters. It never changes and is reported to your DAW, which compensates it. Your DAW's bypass is delayed by the same amount, so a bypassed track stays in time.

Does TAPE at DRIVE 0 % pass the signal untouched? Nearly: tape's memory keeps a little lag and high-end softening even on quiet signals, by design. For a clean pass, set MIX to 0 % (the input, delayed, bit for bit) or bypass the plugin.

Does it work on a mono track? Yes, mono and stereo.

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 (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 Saturator Gold · 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.