

ORRA AUDIO · PRODUCT MANUAL

Version 1.0.0

ORRA TONE ZONE PRO

TONAL BALANCE FOR MIXES AND MASTERS

Press SCOUT. Let AUTO finish.

Scout listens to your mix, builds six bands against a real-song target and checks them on the audio. AUTO keeps the balance in place as the song moves.

Orra Audio LLC · 2026

Welcome

Orra Tone Zone Pro is a **tonal balance processor for full mixes and masters**. It compares your mix with a **target curve**, the tonal balance of a real finished master in your genre, and brings the mix toward it. It sits on the mix bus or the master bus.

It works in two stages. **SCOUT** listens to a stretch of the mix, plans up to six EQ bands (cuts as EQ, dynamic where a problem comes and goes; boosts through saturation), checks the plan on the recorded audio and corrects it, all in about half a second. Then the **AUTO** engine keeps the balance in place as the song moves from verse to chorus, with a small, slow correction on top of Scout's bands.

Every band is also yours: nine saturation modes, a full dynamic EQ, smoothed filters that never click, and oversampling up to 8x when a band saturates. **AUTO GAIN** matches the output's loudness to the input's, so what you compare is tone, not level.

If you know the free Orra Tone Zone: Pro is a separate product with its own licence, settings and curves. Sessions made with Tone Zone keep using Tone Zone.

System Requirements

Formats	VST3, Audio Unit (AU) and AAX (Pro Tools) on macOS; VST3 and AAX on Windows.
macOS	10.13 or later (macOS 11 or later on Apple Silicon). Universal 2.
Sample rates	44.1 to 192 kHz. The analysis and the curves are the same at every rate.
Channels	Mono or stereo.
Latency	4096 samples at 44.1 and 48 kHz (93 and 85 ms), the same time at higher rates, plus 3 to 5 samples when OVERSAMPLING is on. Reported to the host, so delay compensation keeps every track in time.
Licence	One licence key activates the plugin on the machines your purchase allows. A 14-day demo can be started from the plugin without a key. Activating in one instance unlocks every open instance within about a second, and offline bounces always render.

Quick Start

From an empty master bus to a balanced mix in a minute:

1. Insert Orra Tone Zone Pro **last on your mix or master bus** (before a final limiter).
2. Open the **TARGET** menu and pick the genre and curve closest to your song. Not sure? Pick any curve in the genre; you can switch later and run Scout again.
3. Switch **AUTO GAIN** on (OUTPUT card), so every comparison is at matched loudness.
4. Play the **busiest part of the song**, usually the last chorus, and press **SCOUT**. The button counts down the seconds it still has to hear (8 by default; right-click to choose up to 60). Stopped playback does not count.
5. Scout thinks for a moment, sets the bands and hands over to AUTO. The line under the cards says what it did.
6. Play the whole song and compare with **BYP**. Too much? Right-click SCOUT and pick a gentler AUTO strength, or **Undo Scout** to go back exactly to where you were.

Everything Scout sets is an ordinary control afterwards: move any band, knob or button as you like.

Interface Tour

Header	The ORRA TONE ZONE PRO wordmark (click: licence and links), SCOUT , RESET , BYP , AUTO , the A B C D slots and STORE , the TARGET menu, ADD CURVE , and the ? key for tips.
Display	Your mix (blue), the target and its normal range (green), AUTO's correction (orange), the EQ curve with its six band nodes, the OUTPUT curve, the range handles at the edges and the DELTA overlay.
MASTER card	CORRECTION , SPEED and CEILING : how much, how fast and how far AUTO corrects.
BAND card	The selected band: shape, mode, on/off, FREQ , GAIN (DRIVE in a saturation mode), Q , and the DYNAMIC section.
OUTPUT card	OUTPUT trim, TO ORRA EQ , AUTO GAIN and OVERSAMPLING .
Status line	Under the cards: what Scout, RESET or TO ORRA EQ just did. It fades after 12 seconds.

SCOUT

Scout sets up the six bands so AUTO has little left to do. It only works on what it heard, so give it the part of the song the target describes: the busiest, fullest section.

What happens when you press it

1. **Listen.** Scout records the plugin's input for the chosen time. Press SCOUT again to cancel.
2. **Plan.** It measures the recording's tonal balance exactly like the target was measured, and fits up to six bands together. Needed cuts become EQ bands; where that region's level comes and goes, a **dynamic** cut that only works while it is louder than usual. Needed boosts use **saturation** (or plain EQ, your choice). Differences inside the genre's normal range, the spread between good masters of that genre, are mostly left alone.
3. **Check on the audio.** It plays the recording through the real EQ, measures what is left and corrects the plan, up to three rounds. This is what makes a dynamic cut or a saturation boost land where it should, since both do less on real music than on paper.
4. **Hand over.** It applies the bands, sets CORRECTION to your AUTO strength, SPEED to 10 % and CEILING to 50 %, and switches OVERSAMPLING to 4x if it used saturation while oversampling was Off.

Scout keeps its bands within safe limits: cuts up to 12 dB, clean EQ boosts up to 6 dB, saturation plus any EQ top-up up to 9 dB in one place. It respects the range handles on the display and never touches TARGET, OUTPUT, AUTO GAIN or the slots.

The right-click menu

Control	Range	What it does
Boosts via	Auto, EQ bell, Tape, Tube, Console, Transistor, Power Tube, Diode, Exciter	How Scout lifts what is missing. Auto (default) picks a saturator per band by frequency: Tape below 150 Hz, Tube to 700 Hz, Console to 2.5 kHz (Transistor for bigger lifts), Transistor or Power Tube to 7 kHz, Exciter above. EQ bell = no saturation at all.
Listen for	4, 8, 16, 30, 60 s	How much audio Scout records. 8 s by default; 16 s on a chorus is a good habit. Longer = steadier on busy, changing material.
AUTO strength	Gentle 25 %, Normal 50 %, Strong 75 %	The CORRECTION Scout leaves AUTO at. Normal by default.
Undo Scout		Puts all six bands, CORRECTION, SPEED, CEILING and OVERSAMPLING back exactly as they were before the last Scout run. One step; greyed out after it is used, while Scout is listening, and once a session, preset, slot or factory program has been loaded.

Your menu choices are remembered on this computer.

OVERSAMPLING and Scout

Oversampling only matters for saturation; plain EQ bands are exact without it. So Scout turns OVERSAMPLING on (4x) only when its plan uses saturation and oversampling is Off, and turns it back Off when a later plan uses no saturation, but only if it is still the 4x Scout set. A setting you chose yourself is never switched off.

Getting the best from Scout

- Scout the **full mix** at its busiest. Scout is built and tested for full mixes and masters, not single instruments or stems.
- Pick the target first. Changing the target afterwards changes what AUTO aims at, but not Scout's bands: run Scout again.
- Run it again after a big change to the mix. Each run replaces the six bands.
- The same capture always gives the same plan. Captures of different parts of a song can give slightly different plans that sound alike: a dynamic band draws its full range on the display, so it can look bigger than it sounds.
- Every run is written to **scout_log.txt** in the Tone Zone Pro folder (see *Files and Folders*): what it measured, each band and why, and what was left.

AUTO: the Auto EQ

AUTO compares your mix with the target all the time and applies a smooth correction curve (the orange area on the display). It listens **after your six bands and before its own correction**, so it only corrects what the bands leave. When Scout has set the bands, that is very little.

Control	Range	What it does
CORRECTION	0 to 100 %	How much of the difference AUTO removes. Scout sets it to your AUTO strength. 0 % = AUTO off in effect.
SPEED	0 to 100 %	How fast the analyzer and the correction follow the music: 0 % averages over about 3 seconds (mastering), 100 % over about 0.3 s (mixing). Scout sets 10 %: AUTO drifts gently with the song and never pumps.
CEILING	0 to 100 % (1 to 12 dB)	The most AUTO may move any one band. Cuts use the full ceiling, boosts half of it.
AUTO	On / off	Switches the correction on or off. The analysis, the display and your bands keep working when it is off, and the latency stays the same, so switching never glitches.

How AUTO behaves

- **Sparse sections.** Targets describe full mixes. When the spectrum thins out (an intro, a breakdown, a solo vocal) AUTO backs off instead of pushing a thin section toward a full-mix curve.
- **Section changes.** A sudden change in the arrangement briefly holds the correction, so AUTO does not lurch at every transition.
- **Pauses.** When playback stops, AUTO holds its correction. It carries on from where it was when you press play. The display settles to flat while nothing plays.
- **Range handles.** The two gold tabs at the left and right edges of the display set the range AUTO and Scout may work in. Drag them in to keep, say, the sub below 40 Hz or the air above 16 kHz untouched.

The Display

Blue curve	Your mix after the six bands: what AUTO hears.
Green line and zone	The target curve and its normal range, the tolerance a good master of the genre stays within.
Orange area	AUTO's correction right now: below the line cuts, above it lifts.
Gold curve and nodes	The EQ curve of the six bands. Each node is a band, coloured by its mode; saturation bands carry a letter.
Dynamic bands	A faint shape shows the band's full range; the filled part is what it is doing right now.
OUTPUT curve	The plugin's output, after AUTO and AUTO GAIN.
DELTA	Button at the top right: one bar per band from the target to the OUTPUT curve, green inside the normal range, orange outside.

Mouse and keys on the display

Gesture	Options	What it does
Drag a node		Frequency (left, right) and gain or drive (up, down). A dynamic band's node moves in frequency only: its static gain is the GAIN knob.
Shift + drag		Fine: the node moves at a fifth of the speed.
Scroll on a node	Shift = fine, Cmd / Ctrl = coarse	The band's Q (width).
Double-click a node		Gain or drive back to 0 dB.
Right-click a node		The band's mode: EQ or one of the nine saturators.
Drag a range handle		The frequency range AUTO and Scout may work in.
Drop audio files	WAV, AIFF, MP3, FLAC	Adds a target curve from them (see <i>Target Curves</i>).

The Six Bands

Click a node on the display to select its band; the BAND card shows it. Every band is a smoothed filter: automation never zippers, and switching a band on or off, its shape, mode, dynamics or drive fades instead of clicking.

Control	Range	What it does
Shape	Bell, Low Shelf, High Shelf	The filter shape.
Mode	EQ, Tube, VCA, British, Tape, Power Tube, Transistor, Diode, Console, Exciter	EQ, or a saturator on the band (see <i>Saturation</i>).
ON	On / off	The band in or out of the chain.
FREQ	20 Hz to 20 kHz	Centre (bell) or corner (shelf) frequency.
GAIN / DRIVE	-12 to +12 dB	The band's gain. In a saturation mode the knob reads DRIVE.
Q	0.1 to 10	Width. Higher is narrower.

Defaults: a low shelf at 80 Hz, bells at 250 Hz, 1 kHz, 3 kHz and 8 kHz, and a high shelf at 12 kHz, all at 0 dB.

Double-click a knob to reset it, or its readout to type a value; knobs drag at a steady rate (about 400 pixels for the whole range).

Dynamic EQ

With **DYN** on, a band listens to its own frequency range and moves only while that range is above the threshold: a harsh vocal gets tamed on the loud notes and left alone on the quiet ones.

Control	Range	What it does
DYN	On / off	Makes the band dynamic.
UP	On / off	Upward: the dynamic gain lifts instead of cutting. Off = classic ducking.
AUTO	On / off	Auto threshold: the threshold follows the band's own average level over about 1.5 s, and THRESH becomes an offset around it (-24 dB = no offset). The band acts whenever it is louder than usual; pauses hold the average. Scout's dynamic cuts use this.
THRESH	-60 to 0 dB	Where the band starts working. The detector hears the band's range, not the whole mix.
RANGE	0 to 24 dB	The most the band will move.
ATTACK	0.1 to 1000 ms	How fast it reacts when its range gets louder.
RELEASE	1 to 5000 ms	How fast it recovers.

The ratio (3:1 by default) is available as a host parameter. Scout sets attack and release by frequency: slow in the lows (55 / 85 ms at 100 Hz and below, clean on bass), fast in the highs (5 / 12 ms at 5 kHz and above).

Saturation

A saturation band runs a saturator in parallel on its own frequency range. **DRIVE** is the band's lift in dB at any frequency, so a +3 dB saturation boost is as loud as a +3 dB EQ boost; the harmonics come on top. Loud material pushes the saturator harder and lifts a little less, which Scout measures and allows for.

Mode	Character
Tube	Even harmonics: body and warmth. Scout's pick for 150 to 700 Hz.
VCA	A soft, symmetric push blended with the dry signal: clean and tight.
British	A console-style colour with a softened top.
Tape	Soft third harmonic with a head-bump shape: weight without fizz. Scout's pick below 150 Hz.
Power Tube	Denser, compressing drive. Scout's pick for an unsteady 2.5 to 7 kHz region.
Transistor	Odd harmonics: focus and bite. Scout's pick for presence and bigger mid lifts.
Diode	Germanium diode clipping: the grittiest edge of the set. Give it 4x or 8x on bright material.
Console	The cleanest of the set (about 0.4 % distortion at 6 dB). Scout's pick for 700 Hz to 2.5 kHz.
Exciter	Adds only what sits above the band: air. Scout's pick above 7 kHz.

OVERSAMPLING

Saturation makes harmonics, and harmonics above half the sample rate fold back into the audible range as aliasing. OVERSAMPLING (OUTPUT card) runs the six bands at 2x, 4x or 8x the sample rate to prevent that. Its filters are flat to 20 kHz and put anything that still folds above 20 kHz.

Setting	Extra latency	Use
Off	0 samples	Default. Plain EQ bands need nothing more: they are exact at the session rate.
2x	+3 samples	Clean for gentle saturation.
4x	+4 samples	What Scout switches on for saturation. The best balance of cleanliness and CPU.
8x	+5 samples	For the hard modes (Diode, Power Tube) on bright material.

Switching glides over about 10 ms, so it is safe during playback. At 88.2 / 96 kHz 8x runs as 4x, and at 176.4 / 192 kHz as 2x: the processing never runs above 384 kHz. Oversampling cannot be automated.

Target Curves

A target is the tonal balance of one real finished master: its **busiest 20 seconds**, the part a mix is usually judged on. Tone Zone Pro ships 60 hand-picked curves in 19 genres, plus Flat. The **TARGET** menu lists them by genre; a genre with several curves opens as a submenu. Your own curves appear in the same menu, in their genres.

Genre	Curves
90s Hip-Hop	4
Afro House	2
Alternative Rock	4
Classic Rock	3
Country	1
Drum & Bass	3
Dubstep (incl. Dubstep / Rap, Dubstep / UKG, Breakbeat)	8
Folk	3
House / UKG	4
Jazz	1
Metal	2
Modern Rap	5
Podcast	3
Pop	3
Punk Rock	3
Reggae	3
Reggaeton	3
Singer-Songwriter	3
Techno	2

Your own curves

Control	Range	What it does
ADD CURVE	One or several files	Analyses reference tracks (WAV, AIFF, MP3, FLAC) and loads the result as the target. Several files are averaged. Each file is measured over its busiest 20 seconds, like the factory curves. You can also drop files on the display.
SAVE	Name + genre	Keeps the loaded curve: in a factory genre, one of yours, or a new one. It asks before replacing a curve of the same name.
×		Clears the loaded reference; the TARGET menu's curve is aimed at again.
Manage curves...	Bottom of TARGET	Opens the CURVES browser.

The CURVES browser

- Genres on the left, the selected genre's curves on the right. Click a curve to preview it against the current target; double-click to load it.
- Make, rename and delete your own genres. Factory genres are locked, but your curves can live in them too.
- Rename, move (drag a curve onto a genre), duplicate, copy and delete your curves. Deleted curves go to the Trash. Factory curves can be loaded or copied into a genre.
- **Open Folder** shows the genre's folder on disk. Curves are plain **.otzcurve** files, one folder per genre: share them by copying the files. Curves saved in the free Orra Tone Zone use the same format and can be copied in.

Output and Workflow

Control	Range	What it does
OUTPUT	-12 to +12 dB	Final level trim, smoothed so automation never zippers.
AUTO GAIN	On / off	Matches the output's loudness to the input's, measured the way a LUFS meter hears (ITU-R BS.1770), up to 12 dB either way. Boosts and cuts can then no longer fool your ears into preferring the louder version. It holds its gain through pauses.
OVERSAMPLING	Off, 2x, 4x, 8x	See <i>Saturation</i> .
TO ORRA EQ		Saves the six bands as a preset for Orra EQ 1.5.0 or later: a dynamic band as a Dynamic EQ band (plus a plain band if its GAIN is not 0 dB), a saturation band as the matching Orra EQ saturator at the same lift. Orra EQ is sold separately; without it installed, the plugin offers GET ORRA EQ or SAVE ANYWAY (for another computer).

Comparing and resetting

Control	Range	What it does
A B C D	Click / Shift+click	Four slots with complete settings. Click to recall, Shift+click to overwrite a slot with the current settings.
STORE		Stores the current settings into the active slot.
BYP	On / off	Bypass: a 20 ms crossfade to the dry signal, delayed to match the plugin's latency, with everything still running underneath, so switching back is seamless. The host's own bypass does the same.
RESET		Every parameter back to its default: bands, knobs, toggles, oversampling, auto gain. The target and the slots are kept.

Tips in your language

Hover any control for half a second and a tip explains it. The **?** key switches the tips off and on; right-click it to choose English, Dutch, Japanese, Spanish, Brazilian Portuguese, German or French. Both choices are remembered on this computer.

Licence

- On first open, choose **Start 14-Day Demo** (everything works) or **Enter License Key**. Your key arrives by email after purchase at orraaudio.com.
- Click the **ORRA TONE ZONE PRO** wordmark for the licence panel: status, version, links, and **Deactivate** to move the licence to another computer.
- An unlicensed plugin is silent in real time, but offline bounces always render, so a session never loses the plugin in a bounce.

Files and Folders

macOS	~/Library/Orra Audio/Tone Zone Pro/
Windows	%APPDATA%\Orra Audio\Tone Zone Pro\
Contents	Curves (your curves, one folder per genre), scout_log.txt (every Scout run; rotated past 1 MB), editor_prefs.xml (window size, tips, language, Scout menu choices) and the licence files.

Questions and Answers

Scout says "not enough signal".

It heard too little non-silent audio. Play the mix while it listens; stopped playback does not count down.

The blue curve still differs from the target after Scout.

That is by design. Differences inside the genre's normal range (the green zone) are how good masters differ; Scout pulls them in only a little and leaves your mix its character. Use **DELTA** to see what is still outside the zone.

AUTO does little in the intro or a breakdown.

Intentional: targets describe full mixes, so AUTO backs off when the arrangement thins out, and engages fully again when the spectrum is full.

A Scout run looks very different from the last one.

A dynamic band draws its full range, so two plans that sound alike can look different. Compare by ear with BYP, check scout_log.txt, or Undo Scout.

I use Orra EQ before Tone Zone Pro. Do I get double correction?

No. AUTO listens after everything in front of it, including Orra EQ and the six bands, and only corrects what is still off target.

Can I use it on a single track?

It works on any track and delay compensation keeps it in time, but the targets and Scout are made for full mixes. On a single instrument, use a reference curve from ADD CURVE, or AUTO off and the bands as a precision EQ.

My exported preset does not show in Orra EQ.

It is in Orra EQ's Presets folder, in the Tone Zone category, and appears the next time you open Orra EQ's preset browser. The presets need Orra EQ 1.5.0 or later (a free update for owners).

Does oversampling change the sound when no band saturates?

Barely, but it is not needed then: plain EQ bands are exact without it, which is why it defaults to Off and Scout only turns it on for saturation.

Why does the plugin add latency?

AUTO needs a window of audio to measure and correct smoothly. The plugin reports it, so your DAW keeps everything in time. BYP keeps the latency too, so the timing never jumps; for tracking, take the plugin out of the monitoring path.

Tips for Great Results

Scout the chorus, judge the song

Scout what the target describes, the busiest part; then listen to the whole song. AUTO at a slow SPEED carries the balance through the quieter sections.

Level-match every decision

Keep AUTO GAIN on while you compare targets, strengths or your own band moves. A louder version always sounds better for a moment.

Gentle on masters, Normal on mixes

A finished master usually needs little: try Gentle AUTO strength. A raw mix often wants Normal.

Make your own targets

Drop 5 to 20 masters you love from one genre onto the display to average them, SAVE the curve into its genre, and it is in the TARGET menu from then on.

Orra Tone Zone Pro is a product of Orra Audio LLC.

For support, updates, and documentation: orraaudio.com