UNVEIL EQ

A 24-band parametric & dynamic EQ with real-time 3D analysis

User Manual · Version 1.0 · macOS (AU / VST3 / AAX)

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1. Installation & Activation

1.1 Installing the plugin

Unveil EQ ships as a signed, notarized macOS installer package (`.pkg`). Double-click the installer and follow the prompts. It installs:

- **Audio Unit (AU)** — `/Library/Audio/Plug-Ins/Components/Unveil EQ.component`
- **VST3** — `/Library/Audio/Plug-Ins/VST3/Unveil EQ.vst3`

A standalone application and an AAX (Pro Tools) build are also available — see §12 for AAX-specific notes.

After installing, re-scan plugins in your DAW if it doesn't appear automatically (in most hosts this happens on next launch).

1.2 Activating your license

The first time you open Unveil EQ, an activation card appears over the interface:

- Enter your license key in the format `UVEQ-XXXX-XXXX-XXXX` and click **ACTIVATE**.
- No key yet? Click **GET FREE TRIAL** to start a 14-day trial, or **BUY LICENSE** to purchase — both open unveilmusic.app in your browser.

> Each license activates on up to **2 devices**. Activating on a third device isn't blocked automatically from the UI — contact support to free up a slot.

Once activated, Unveil EQ checks in with the license server roughly once every 24 hours. If your machine is offline, the plugin keeps working normally for up to a week (a grace period) before requiring you to reconnect.

1.3 Demo mode

Without an active license or trial, Unveil EQ runs in demo mode: the interface is usable for exploration, but the activation card blocks interaction and a short noise burst is periodically mixed into the output as an audible reminder. Activating a license removes both immediately.

2. Getting Started

2.1 Your first band

1. Double-click anywhere on the 3D analyzer to add a new band at that frequency and gain.
2. Right-click (or double-tap on touch) the band to open its control panel — adjust type, channel, frequency, gain, Q, and dynamics.
3. Drag the band directly on the analyzer to move it; scroll to adjust Q.

2.2 Loading a preset

Click the preset name in the top toolbar to open the preset browser. Search or browse by category, click a preset to load it, and use the star icon to favorite it for quick access later.

2.3 Fullscreen

Click **Fullscreen** in the toolbar to expand the editor to the largest size your host (or the Standalone app) allows. Click **Restore** to return to the previous size.

3. Interface Overview

Top toolbar

Control	What it does
Preset name / ‹ ›	Opens the preset browser; arrows step to the previous/next preset in the current filtered list.
Save	Saves the current band configuration as a new user preset.
A / B	Switches between two independent band configurations for comparison.
A→B / B→A	Copies the currently active slot's bands into the other slot.
MONO CHECK	Folds the output to mono so you can check for phase cancellation.
SC · [source]	Shows the current sidechain input status; click to jump to the Collide tool.
Reset view	Returns the 3D analyzer camera to its default angle and distance.
Fullscreen / Restore	Toggles the largest available editor size.

The 3D analyzer

The main view plots your bands over a real-time spectrum. Each band appears as a draggable puck; its height shows gain, its position shows frequency, and its depth (front-to-back) shows which channel lane it's assigned to. Drag to orbit the view, scroll to zoom, or shift-drag while painting in Sculpt mode to orbit without painting.

Right-hand tool rail

Six tools live in the tool switcher at the top of the right rail: **EQ** (standard editing — the default), **Auto**, **Collide**, **Sculpt**, **Hunt**, and **Match**. Each is covered in its own section below.

Input / output rails

The narrow columns on the far left and right show input and output metering with a rotary gain control below each — drag vertically to adjust, double-click to reset to 0 dB.

Bottom analyzer bar

Controls the spectrum display itself: view source (pre/post/side), sweep speed, depth of history, and a Freeze toggle to hold the current curve in place for comparison.

4. Editing Bands

4.1 Adding and removing bands

Double-click an empty area of the analyzer to add a band (up to 24 at once). Right-click an existing band and choose **Remove**, or select it and press the × in its control panel.

4.2 Band types

Type	Use
Bell	Standard parametric boost/cut centered on a frequency.
Low Shelf	Boosts or cuts everything below the frequency.
High Shelf	Boosts or cuts everything above the frequency.
Low Cut	Removes content below the frequency (high-pass).
High Cut	Removes content above the frequency (low-pass).
Notch	A narrow, deep cut — ideal for Hunt-detected resonances.

4.3 Channel lanes

Every band can be targeted at one of six lanes: **Stereo** (both channels equally), **Mid**, **Side** (mid/side encoded), **Left**, **Right**, or **Ambience** (the diffuse, non-point-source content separated out by the Ambience Splitter). Set the lane from the band's control panel.

> With a mono input signal, only Stereo, Mid, Left, and Right bands remain active — Side and Ambience bands are automatically bypassed, since there's no stereo information to act on.

4.4 Frequency, gain, and Q

In the band control panel, drag vertically on the FREQ, GAIN, or Q readouts to adjust — or drag the band directly on the analyzer for frequency and gain together, and scroll on it to adjust Q.

4.5 Smart Notch tracking

Enable **TRACK** on a Notch band (or pin one via the Hunt tool, §6.2) to have it continuously follow a resonance as its pitch drifts — useful for feedback, resonant room modes, or an instrument that wanders slightly in pitch. A tracked band keeps following even with the editor closed.

5. Dynamic EQ

Any band can become dynamic: instead of a fixed gain, it compresses or expands based on level. Enable **DYNAMIC** in the band's control panel to reveal:

Control	Range	Effect
Threshold	−80 to 0 dB	Level at which the dynamic action engages.
Range	±24 dB	Maximum gain change the band can apply.
Ratio	1:1 to 20:1	How aggressively gain is reduced/increased past the threshold.
Attack	0.5–200 ms	How quickly the band reacts once the threshold is crossed.
Release	5–2000 ms	How quickly the band returns to its static gain.

The activity meter next to the DYNAMIC button shows live gain reduction/boost as the band works.

Sidechain keying

Enable **SC** on a dynamic band to have its detector listen to the plugin's sidechain input instead of the band's own signal — the basis of the ducking behavior used by the Collide tool (§6.3).

6. Smart Tools

6.1 Auto EQ

Auto EQ listens to your track and proposes a set of corrective and tonal moves toward a target curve.

1. Choose a **Target**: Balanced, Vocal, Warm, Bright, or Master.
2. Choose a **Mode**: Corrective (cuts only), Balanced, or Enhance (gentle boosts favored).
3. Choose a **Listen** duration (10–30 seconds) and click Listen.
4. Review the proposed bands (shown as a dashed preview curve), adjust the **Amount** slider to scale the intensity, then **Apply** or **Discard**.

Longer listen times cover more of the song and produce a more representative suggestion.

6.2 Hunt

Hunt scans for resonant peaks — frequencies that ring out above the surrounding spectrum.

1. Choose a scan duration (3, 4, or 5 seconds) and click **Hunt resonances**.
2. Detected peaks appear in a list with frequency and amplitude above the baseline.
3. Click **Pin** on any peak to add it as a tracking Notch band, or **Pin all** to add all of them at once.

Pinned notches are tagged `TRK` and continue following the resonance even after you close the editor.

6.3 Collide

Collide shows where your track masks — or is masked by — another signal, using the plugin's sidechain input.

1. Route the other track (e.g. a kick, a competing vocal) to Unveil EQ's sidechain input in your DAW.
2. Switch to the Collide tool and pick the sidechain source label (Kick, Snare, Vocal, or Off) for reference.
3. Click **Listen** to scan for the strongest masking overlap.
4. Click **Apply ducking cut keyed to sidechain** to add a dynamic band that only dips when the sidechain signal is present.

> The pale "ghost" surface on the analyzer during Collide is the sidechain's spectrum; red highlights show where it's masking your track.

6.4 Sculpt

Sculpt paints a gain curve over time instead of a fixed EQ move — frequency runs left to right, time runs front to back, across a loop of 2–32 bars.

- **Brush**: Cut or Boost. **Size**: S / M / L.
- **Sync**: Host (follows your DAW's transport and time signature) or Free (runs independently at a settable BPM).

- Paint directly on the analyzer; the white line shows what's currently playing. Shift-drag to orbit the view instead of painting.
- **Clear** erases the entire painted grid.

6.5 Match

Match compares your track's spectrum against a reference recording and lets you morph toward it.

1. Drop an audio file (WAV, MP3, AIFF, FLAC, or M4A) onto the Reference Track panel, or click to browse.
2. The whole file is analyzed into a long-term average spectrum (white line) and compared against your track (cyan line).
3. Use the **Morph** slider to blend toward the reference's tonal balance.
4. Click **Bake into bands** to convert the morph curve into up to 6 ordinary, fully editable bells — after baking, morph resets to 0 so you can keep tweaking normally.

7. Presets, A/B & Recall

7.1 Factory presets

152 factory presets are organized by category and sub-category, each tagged for easy searching. Open the preset browser from the toolbar, search by name/tag, or browse by category.

7.2 User presets & favorites

Click **Save** to store the current bands as a new user preset. Click the star next to any preset to favorite it — favorites appear in their own filter category for quick recall. User presets and favorites are stored at:

```
~/Library/Application Support/Unveil/Unveil EQ/UserPresets.json
```

7.3 A/B comparison

The A/B switch holds two complete, independent band configurations. Switch between them instantly to compare a change, and use A→B or B→A to copy one into the other as a starting point.

7.4 Session recall

Every parameter, the Sculpt grid, and the Match curve are saved as part of your plugin state in the host session — closing and reopening a project restores everything exactly as you left it.

8. Global Controls

Control	Range	Notes
Input Gain	±24 dB	Applied before all processing.
Output Gain	±24 dB	Applied after all processing, including Sculpt/Match.
Mono Check	on/off	Sums left and right to check for phase issues. Does not affect the actual mix — monitoring only.

9. The Analyzer

The bottom analyzer bar controls what the 3D view displays, independent of your EQ settings:

- **Source** — view the pre-EQ, post-EQ, or sidechain spectrum.
- **Speed** — how quickly the curve responds to incoming audio.
- **Depth** — how much history is shown in the lane views.
- **Freeze** — holds the current curve in place, useful for A/B'ing a static snapshot against live audio.

When a channel-specific tool is active, the analyzer also renders per-lane curves (Mid, Side, Left, Right, Ambience) so you can see exactly what a band assigned to that lane is reacting to.

10. Parameter Reference

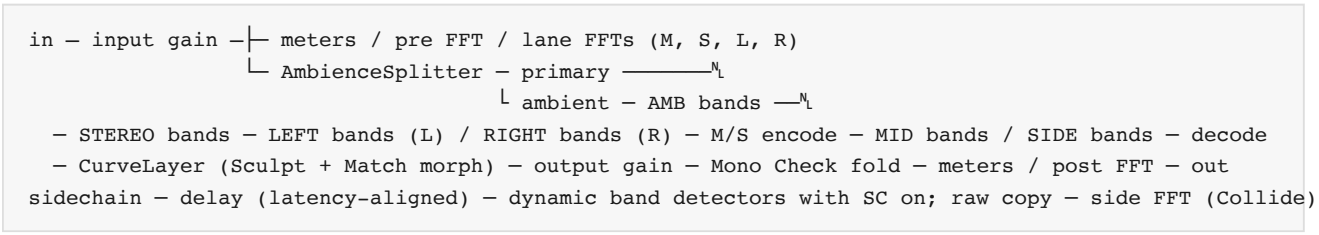
Per band (band numbers 1–24):

Parameter	Range	Notes
Active	on/off	Whether the slot is in use.
On	on/off	Bypass for this band.
Type	6 types	Bell, Low Shelf, High Shelf, Low Cut, High Cut, Notch.
Channel	6 lanes	Stereo, Mid, Side, Left, Right, Ambience.
Frequency	20–20,000 Hz	Logarithmic.
Gain	±24 dB	Gain-type bands only (not Cuts/Notch).
Q	0.1–18	Logarithmic.
Dynamic	on/off	Enables the dynamics section below.
Threshold	−80 to 0 dB	
Range	±24 dB	Maximum dynamic gain change.
Ratio	1–20	
Attack	0.5–200 ms	
Release	5–2000 ms	
Sidechain	on/off	Detector keyed from the sidechain input instead of the band's own signal.
Track	on/off	Smart notch — follows a drifting resonance.

Global parameters:

Parameter	Range	Notes
Input Gain	±24 dB	
Output Gain	±24 dB	
Mono Check	on/off	
Match Morph	0–100%	Blend amount toward the Match reference curve.
Sculpt Sync	Host / Free	Transport source for the Sculpt loop.
Sculpt Bars	2–32	Loop length.
Sculpt BPM	40–240	Tempo used in Free sync mode.

11. Signal Flow



- **Latency**: approximately 1024 samples, reported to your host automatically — this applies even with a mono input, where the Ambience Splitter is replaced by an equivalent delay for phase consistency.
- **Moving a band to a different channel** resets that band's internal filter state, avoiding a click or transient artifact from the discontinuity.
- **Dynamic bands** listen to their own stage's input signal by default, or the sidechain input if SC is enabled on that band.

12. Pro Tools / AAX Notes

Unveil EQ supports native AAX for Pro Tools alongside AU and VST3. A few Pro Tools–specific notes:

- **Avid S6 / control surfaces**: Input gain, output gain, mono check, and master bypass are mapped to hardware control pages. Full per-band parametric control from the console is not yet available in this release — band editing is via the plugin's own interface.
- **Categorization**: Unveil EQ reports itself under the EQ category in Pro Tools' plug-in menus.
- **Mono and stereo instances** are both supported as native (real-time) variants; AudioSuite (offline) variants are also included for destructive/file-based processing.

13. Troubleshooting

Issue	What to check
Plugin doesn't appear in my DAW	Re-scan/re-index plugins in your host. Confirm the format you expect (AU/VST3/AAX) actually installed — check the paths in §1.1.
Activation card won't go away	Confirm your key format is `UVEQ–XXXX–XXXX–XXXX` and that you have an internet connection for the initial activation request.
License keeps asking to reactivate	The plugin checks in roughly every 24 hours and tolerates up to a week offline. If you've been offline longer than that, reconnect briefly to refresh.
No sidechain / Collide shows "No sidechain signal"	Confirm you've routed a sidechain input to Unveil EQ in your DAW's routing — this is a per-host setup step, not a plugin setting.
Hearing periodic noise bursts	This is the demo-mode watermark — it means no active license/trial was found. See §1.2 to activate.
Fullscreen button doesn't resize the window in my DAW	Some hosts restrict programmatic plugin window resizing. Standalone mode and most modern hosts support it; a few older/restrictive hosts may not.

14. Support

For licensing issues, bug reports, or feature requests, visit **unveilmusic.app** or contact support through the site.