ORRA AUDIO · PRODUCT MANUAL

Version 1.0.0

ORRA FILTER

DUAL FILTER & MODULATION MATRIX

Two filter cells, eight circuits, six routings,
and a modulation matrix to drive them.

Orra Audio LLC · 2026

Welcome

Orra Filter is a **dual-cell filter** with a modulation matrix. Each cell can be one of **eight filter circuits**: a Moog-style ladder, a state-variable filter, a comb, a formant filter, a diode ladder, an MS-20-style Sallen-Key, a resonator bank, and a **Spectral** filter whose response is drawn by hand. A **routing** selector places the two cells in series, in parallel, on mid and side, on left and right, or morphs between them.

The modulation sources are four LFOs, an envelope follower, a 16-step sequencer, an ADSR envelope, MIDI velocity, the tracked pitch of the input, four macros, and up to four **Orra Link** tracks from elsewhere in the project. Any of them can be routed to a cutoff, resonance, drive, FM amount, morph or dry/wet, and to some of the other sources. A route can be made from the **MOD MATRIX** tab, by dragging a source tab onto a knob, or from a knob's right-click menu.

The response screen shows each cell's frequency response and the combined result, phase included, over the input and output spectra. Optional 2x or 4x oversampling runs the filter block at a higher sample rate; the added latency is a fixed number of samples and is reported to the host.

Also included: **DICE**, which builds a patch from one of six recipes; a preset browser with categories, favourites and notes; four **A/B/C/D** snapshot banks; undo; and tooltips in seven languages.

The manual runs front-to-back. The *Interface Tour* names the parts of the window, *How It Works* covers the two ideas the rest depends on, and *The Controls* lists every control with its range. Later chapters cover the eight circuits, the modulation sources, presets and DICE, Orra Link, and tips.

System Requirements

Formats	macOS: VST3, Audio Unit (AU), AAX (Pro Tools). Windows: VST3, AAX.
macOS	10.13 or later (Universal 2: Apple Silicon + Intel).
Windows	Windows 10 or later, 64-bit.
Channels	Mono or stereo. A mono track into a stereo output is duplicated first. An optional stereo sidechain input feeds the envelope follower.
Latency	None with oversampling off. 2x (the default) adds exactly 49 samples, 4x adds 91; the Spectral circuit adds about 17 ms; a Link A–D pick adds one host buffer. All of it is reported to the host for compensation.
Licence	14-day demo, then activation with your licence key (click the ORRA FILTER wordmark). Activation is shared by every open instance within two seconds.

Interface Tour

The window is organised top-down into five regions on a brushed-bronze faceplate: a header, the response screen, a tab strip, the control band, and a footer. Knobs and keycaps are raised out of the plate; the screen and the selectors are recessed into it.

1. Header

On the left, the **ORRA FILTER** wordmark — click it any time for the licence & info panel — then **BYP** (bypass), the four **A/B/C/D** snapshot banks and **RESET**. In the centre, the preset strip: **<** and **>** step through every preset, and clicking the name opens the *Preset Browser*. An edited preset is marked with a dot until you save. To the right: **LINK** (Orra Link picks), **DICE** (roll a patch; right-click for recipes), **UNDO** / **REDO**, the **UI scale** selector (75–200 %) and the circular **?** tips toggle — right-click it to choose the tooltip language.

2. Response Screen

The recessed screen draws the live input spectrum (cream), the output (gold), each filter's own curve in its circuit colour, and the combined response as a white line. Every curve follows modulation in real time. **Grab a filter's handle** and drag: horizontal sets cutoff, vertical sets resonance. Shaded bands show how far each cutoff is being swept by its modulation.

3. Tab Strip

Nine tabs choose what the control band shows: **FILTERS**, **MOD MATRIX**, **LFO 1–4**, **ENV FOLLOWER**, **SEQ** and **ADSR**. The source tabs are also **drag handles**: drag LFO 2 onto a knob and LFO 2 modulates it. A tab lights when its source is in use.

4. Control Band

On the FILTERS tab, three cards: **FILTER 1**, the **ROUTING** card in the middle (routing selector, MORPH, DRY/WET, STEREO, and the ANALOG / 2X / OSC keycaps), and **FILTER 2**. Each filter card has the circuit and type selectors, the slope, **CUTOFF**, **RESONANCE**, **DRIVE**, PORTAMENTO, and the ON, MIDI, AUDIO, FM and SHAPE keycaps. On every other tab the band shows that source's panel, with the DRY/WET and MORPH knobs kept in a column at the right so they stay within reach.

5. Footer

IN and **OUT** gain at the ends, the four **MACRO** knobs between them. Double-click a macro's label to rename it; drag the label onto any knob to route the macro there.

Every knob: double-click to return to default, double-click its value to type a number, Shift-drag for fine adjustment, right-click to add or edit modulation.

How It Works

Two ideas explain most of the plugin.

Two cells, one routing

Filter 1 and Filter 2 are independent cells. Each has its own circuit, type, slope, cutoff, resonance and drive, and each can be switched off without leaving the routing. The **ROUTING** selector decides how they meet: **Off** uses Filter 1 alone; **Series** runs 1 into 2 (a low-pass into a high-pass is a band-pass with two independent edges); **Parallel** sums them; **Mid-Side** puts Filter 1 on the mid and Filter 2 on the sides; **Stereo Split** puts them on left and right; **Morph** crossfades between their outputs under the MORPH knob. Switching a cell's circuit crossfades over a few milliseconds, so you can audition circuits on a held sound without a click.

Everything is a destination

Every cutoff, resonance, drive and FM amount, plus MORPH, DRY/WET and the output gain, is a modulation destination. A **route** is a source, a destination, a bipolar **depth** and a **curve**. The destination is offset around wherever its knob sits, so the knob remains the centre of the motion. Cutoff depths read in **octaves**: +1.0 oct sweeps one octave up from the knob at the source's peak.

Sources are more than the usual suspects. The four LFOs can be free or tempo-locked; the envelope follower listens to the track, the sidechain, or another track over Orra Link; the sequencer steps on the grid; the ADSR fires from MIDI notes or from the audio's own transients; the tracked pitch of the input and MIDI velocity are sources too. Routes can also target *other sources* — an LFO's rate or depth, the follower's attack and release — so an LFO can breathe another LFO.

The matrix has eight slots, but you rarely edit it directly. **Drag a source tab or a macro label onto a knob** and a small callout opens on the knob for depth and curve. **Right-click a knob** for the same thing as a menu, with a live depth slider for every existing route.

Signal flow

input → **IN** gain → Filter 1 and Filter 2 wired by **ROUTING** (each cell: drive → circuit; optional audio-rate **FM** of the cutoff) → **MORPH** (Morph routing only) → **DRY/WET** against the input → **OUT** gain. With 2X / 4X on, the whole filter block runs at the higher rate behind linear-phase filters. Modulation is computed every 32 samples, so the cells follow fast envelopes and sequencer steps inside a host buffer.

The Controls

Grouped across the two filter cards, the routing card, and the footer. All knobs are automatable; every automation lane reads in real units (Hz, dB, ms, %).

FILTER 1 & FILTER 2

Control	Range	Purpose
Circuit	eight topologies	The filter's underlying circuit model — see *The Eight Circuits*. Switching crossfades.
Type	depends on circuit	Moog / Diode: LP, HP, BP. SVF adds Notch, Peak, Allpass. MS-20: LP, HP. Comb: +, –, Allpass. Formant: one vowel morph. Resonator: the partial set (Harmonic … Unison).
Slope	12 / 24 / 36 / 48 dB	Steeper slopes ring more on resonance. 24 dB is the classic Moog voice; 12 dB is gentler.
Cutoff	20 Hz to 20 kHz	Centre / corner frequency, logarithmic. Draggable on the screen. *Hero knob.*
Resonance	0 to 100 %	Emphasis at the cutoff. Near full the ladders approach self-oscillation (see **OSC**); on the SVF it sets Q; on the Comb, feedback; on the Formant it narrows the vowel.
Drive	0 to 100 %	Saturation at the filter's input: up to +24 dB into a tanh shaper, half of it made up again, so it gets louder *and* dirtier. Level-dependent — hot sources bite sooner. Use 2X on the ladders.
Portamento	0 to 2000 ms	Glide between tracked notes, constant in semitones per second; only with tracking on.
ON	on / off	Enables the cell without removing it from the routing, so you can A/B one filter inside a chain.
MIDI / AUDIO	key tracking	**MIDI**: the cutoff follows incoming notes. **AUDIO**: it follows the pitch of the audio itself — on a printed bass or a vocal the filter rides the melody with no MIDI in the project (monophonic sources). Routes still sweep around the tracked pitch. Click the lit key again to turn it off.
FM	opens the FM panel	Audio-rate modulation of the cutoff from an internal oscillator or the input — see *Filter FM*.
SHAPE	Spectral only	Opens the drawn response of the Spectral circuit — see *The Spectral Circuit*.

ROUTING

The middle card: how the cells combine, the wet balance, the stereo behaviour, and three global keycaps.

Control	Range	Purpose
Routing	Off / Series / Parallel / Mid-Side / Stereo Split / Morph	How Filter 1 and Filter 2 combine (see *How It Works*). Mid-Side and Stereo Split need a stereo track; on a mono track they fall back to series.
Morph	0 to 100 %	Crossfade between the cells' outputs. 0 % is Filter 1 only, 100 % is Filter 2 only. Effective in the Morph routing; a favourite modulation destination.
Dry/Wet	0 to 100 %	Parallel blend of the input against the filtered output. Phase-true even with oversampling on, so a 50/50 blend does not comb-filter.
Stereo	–100 to +100 %	Pulls the left and right cutoffs apart (up to an octave) and reads every LFO up to a quarter cycle ahead on the right, so sweeps swirl across the image. Negative flips which side leads. No effect in Mid-Side or Stereo Split (each cell already has its own channel).
ANALOG	on / off	Hardware feel: each channel's cutoff drifts slowly and independently by a few cents, and a faint noise floor keeps resonant settings breathing. Subtle by design; off is bit-exact.
2X / 4X	Off / 2x / 4x	Click to cycle. Runs the whole filter block at two or four times the sample rate behind linear-phase filters: cleaner high resonance and hot drive at 44.1/48 kHz, at roughly 2x / 4x the filter CPU. Adds exactly 49 or 91 samples of latency, reported to the host. A global setting saved with the session, not changed by presets; the default is 2x. In Ableton Live, switch it with the transport stopped.
OSC	on / off	Lets the ladders self-oscillate. Past about 95 % resonance the Moog, Diode and MS-20 sing on their own at the cutoff — a clean sine, bounded by their loop limiters — and the SVF's Q ceiling rises to 100. Off, maximum resonance is a long ring that always dies out. Saved with the preset.

The Eight Circuits

The circuit selector chooses one of eight models per cell. They are separate designs with their own behaviour under resonance, drive and key tracking. Each draws its measured curve on the screen in its own colour, phase included, so the white combined line is what you hear.

Circuit	Character
Moog	The classic four-stage transistor ladder: warm, resonant, takes drive well. Low-, high- and band-pass ladders at 12 to 48 dB; unity passband at every slope, and the HP and BP ladders resonate right at the cutoff. With OSC on it sings from about 95 % resonance.
SVF	A clean state-variable filter with little colour of its own. Low, high, band, notch, peak and allpass, with resonance setting the Q (zero resonance is a Butterworth response, –3 dB at the knob). Anti-aliased drive. Suited to utility jobs and precise sweeps.
Comb	A short delay with feedback: metallic, robotic, tuned by the cutoff. Positive, negative and a damped allpass. Key-track it and it retunes like a played string; a slow LFO on the cutoff is a flanger.
Formant	Morphs the vowels A / E / I / O / U — the cutoff *is* the vowel position. Resonance narrows the formants. Sweep it slowly for talking pads; route Macro 1 to it and talk by hand.
Diode	A 303-style diode-coupled ladder: softer slope than the Moog, squelchy, the bass thinning as resonance rises. Squelch at 60–80 %; with OSC on it screams at 100 %.
MS-20	A Sallen-Key with a clipping feedback loop — aggressive, with a screaming resonance and a characteristic bite as it is driven. Low- and high-pass.
Resonator	Four tuned peaks at ratios of the cutoff: Harmonic, Odd, Bell, Fifths, Octaves, or Unison. Key-track it and it plays like a body — drums ring like metal, a voice becomes a choir.
Spectral	Draw the response yourself (SHAPE key): any curve, swept by the cutoff and peaked by resonance. Linear-phase, about 17 ms of reported latency. See *The Spectral Circuit*.

FOOTER

Control	Range	Purpose
In	–24 to +24 dB	Pre-filter gain. Drive the cells harder without changing the source level.
Macro 1–4	0 to 100 %	Performance macros. Drag a label onto a knob to route it, map a MIDI controller for one-knob control of several destinations, double-click the label to rename. DICE always routes Macro 1.
Out	–24 to +24 dB	Final gain after the dry/wet mix. Match levels with BYP for a fair comparison.

Modulation

Three ways to make a route, all ending in the same eight-slot matrix.

- **Drag and drop.** Drag an LFO, ENV FOLLOWER, SEQ or ADSR tab, or a MACRO label, onto any knob or onto a cutoff handle on the screen. A callout opens on the knob with the depth and curve.
- **Right-click a knob.** The quick-assign menu lists every source; existing routes to that knob show a live depth slider you can drag without the menu closing.
- **The MOD MATRIX tab.** Eight rows of source, destination, depth, curve and an on/off. **CLEAR** removes every route (undoable).

Field	Meaning
Source	LFO 1–4, Env Follower, Seq, ADSR, MIDI Velocity, the tracked input Pitch, Macro 1–4, or Link A–D (the level of an Orra Link sender picked in the header's LINK menu).
Destination	Filter 1 / 2 cutoff, resonance, drive and FM amount; Morph; Output gain; Dry/Wet; and the *mod-of-mod* targets — LFO 1–4 rate (free-running LFOs only) and depth, and the envelope follower's and ADSR's attack and release.
Depth	Bipolar. Cutoff routes read in octaves (100 % is the whole 20 Hz–20 kHz span, about ten octaves; +1.0 oct is a musical starting point). Negative depth inverts the source.
Curve	**Linear** is no shaping. **Exp** boosts the top of the source's range, **Log** the bottom, **S-curve** softens both ends. **Bipolar** recentres a one-sided source (envelope, ADSR, macro, velocity, pitch, Link level) to swing both ways around the knob.

The response screen shades each cutoff's sweep range, the knobs draw a ghost ring showing the live modulated value, and each source tab lights while its source is routed. Hover a modulated knob and the tooltip lists what is modulating it.

Mod-of-mod: route LFO 3 (very slow, free-running) to LFO 1's *rate* and the wobble wanders; route it to LFO 1's *depth* and the wobble breathes. Rate can only be bent on a free-running LFO — a synced one stays on the grid by design.

Modulation is evaluated every 32 samples, so a 1/32 sequence at a 1024-sample buffer still lands on the grid, and a square LFO has clean edges at any buffer size.

The Sources: LFOs

Four identical LFOs, one per tab: free-running or tempo-locked, with a drawable custom shape.

Control	Range	Purpose
ON	on / off	Runs the LFO.
Shape	Sine / Triangle / Saw / Square / Random / S&H / Custom	Random: a smooth new value each cycle. S&H: steps on every subdivision. Custom: the editor below.
Rate	0.01 to 20 Hz, or note values	In Free mode, Hz. With SYNC on, musical divisions from 1/64 to 8 bars; the effective Hz is printed under the selector.
Sync / Feel / Swing	Straight / Triplet / Dotted; 0–100 %	Locks the rate to the host tempo; FEEL multiplies the division by 2/3 or 3/2; SWING delays the off-beats. A synced LFO stays on the grid through transport jumps.
Mode	Loop / One-Shot / Ping-Pong / Reverse	One-Shot fires once per trigger, Ping-Pong reverses each cycle, Reverse runs backwards.
MIDI Trig	on / off	Resets the phase to zero on every MIDI note.
Phase	0 to 360°	Where in the cycle the LFO starts: offsets a synced LFO against the grid, or two LFOs against each other.
Unipolar	on / off	The LFO runs 0..100 % instead of −100..+100 %, so a route pushes its destination one way from the knob, like an envelope.
Depth	0 to 100 %	The LFO's overall amount before any route's depth. A mod-of-mod destination.

The waveform editor

With SHAPE on Custom, drag the handles to draw a Bezier curve. Double-click adds a point; right-click or Cmd-click removes one. The drawing is saved with the preset exactly as drawn; Cmd/Ctrl+Z undoes an edit.

The Sources: Follower, Sequencer, ADSR

ENV FOLLOWER

Turns a signal's level into a source. **SOURCE** chooses what it listens to: Main (the track), External (the host's sidechain bus), or Link A–D (another track over Orra Link — see *Orra Link*). **DETECTOR** is Peak (snappy) or RMS (smoother, ignores clicks); detection reads the louder channel. **ATTACK** (0.1–500 ms) and **RELEASE** (1 ms–5 s) shape the response. **THRESHOLD** gates out the noise floor and rescales above it, so raising it never lowers the envelope's ceiling — the marker on the meter shows where it sits. **OUTPUT** trims the envelope before the matrix. **LISTEN** band-limits what the follower hears (FREQ and Q) — sit it on the kick at 60 Hz or a vocal at 2 kHz; the audio you filter is untouched.

SEQ

A 16-step sequencer locked to the host grid. Drag the bars to draw each step's value (±100 %); **Alt/Opt-drag** a bar to set its **probability** — the chance it plays; a skipped step holds the previous value. Right-click the strip for pattern tools: zero, clear, invert, reverse, shift, randomise. **RATE** (1/64 to 8 bars) and **FEEL** set the step length; **STEPS** (1–16) sets the pattern length — odd lengths against 4/4 make evolving polyrhythms; **SWING** delays every second step; **MODE** is Loop, One-Shot (a MIDI note restarts it), Ping-Pong, Reverse or Random (a fresh step on every grid beat). **GLIDE** slews between steps: a hard step on a resonant cutoff can pop, and 4 % is enough to remove the click while still sounding stepped — factory presets and DICE never go below it.

ADSR

A triggered envelope. **TRIGGER** is MIDI (note-on starts it, note-off releases), Audio (a transient above **SENS** starts it, release when it fades), or both. **ATTACK**, **DECAY**, **SUSTAIN** and **RELEASE** are the stages; **CURVE** bends all of them, from logarithmic (fast start, slow finish) to exponential (slow start, snappy finish). **VELOCITY** sets how much the note's velocity, or the transient's strength, scales the peak. Audio triggering re-arms quickly enough for dense hi-hats, and SENS is relative to the raw input before the IN gain. Put the ADSR on a cutoff with Audio trigger and every hit plucks the filter open with no MIDI in the project.

Filter FM & The Spectral Circuit

Filter FM

The **FM** keycap on a filter card opens a small panel that modulates that cell's cutoff at *audio rate* — metallic, vocal and bell-like colours no LFO can reach. It works on the Moog, SVF, Diode, MS-20 and Comb circuits, and the keycap stays lit while the amount is above zero.

Control	Purpose
Amount	FM depth, up to ±3 octaves of cutoff swing. A modulation destination — drop an envelope on it so the FM only appears on hits.
Source	**Oscillator**: an internal sine at RATIO times the tracked note (with key tracking on) or the cutoff. **Input**: the signal being filtered modulates its own filter.
Ratio	0.25× to 8×. Whole numbers stay harmonic; in-between ratios go clangorous. The knob snaps to musical ratios while dragging; hold Alt for a free value.

The Spectral circuit

Choose **Spectral** as a cell's circuit and the **SHAPE** keycap opens a drawing window: the filter's magnitude across five octaves either side of the cutoff. The centre line is unity, the top is +12 dB, the bottom −60 dB. Drag the points to draw; double-click to add or remove one; Cmd/Ctrl+Z undoes. **LIBRARY** loads a starting shape — Lowpass, Highpass, Bandpass, Notch, Tilt Up, Tilt Down, Bell, Twin Peaks, Ripple, Stairs — or a fresh random one to draw on.

Once drawn, the shape behaves like any other filter: **CUTOFF** slides it along the frequency axis, **RESONANCE** adds a peak at the cutoff, key tracking and LFOs move it. It is an STFT filter, so it is linear-phase and adds about 17 ms of latency, reported to the host and identical at every sample rate. The drawing is saved with the preset and copied with the cell (right-click a card → Copy or Swap).

Right-click either filter card for **Copy F1 → F2**, **Swap** and **Reset**. All three are single undo steps.

Presets, Banks & Undo

The preset browser

Click the preset name in the header. The browser opens over the plugin: a **BROWSE** column (All, Favourites, Factory, User, then every category that has presets), the preset list, and an **INFO** column with the author, tags and notes. Click a preset to load it — auditioning is instant, and Cmd/Ctrl+Z undoes a load. The up and down arrows step through the list; the search box filters by name, tags, notes or category as you type. Click the **star** at the left of a row to mark a favourite — factory presets too. Esc closes.

Along the bottom: **INIT** (back to the transparent Default), **SAVE** (overwrite the current user preset), **SAVE AS** (a new preset with a name, category, tags, author and notes), **RENAME**, **DELETE**, **IMPORT** (a preset file from anywhere), **EXPORT** (write the current sound to a file to share) and **REVEAL** (show the file in the Finder / Explorer).

Forty-four factory presets ship in seven categories — Sweep, Rhythmic, Vocal, Texture, Bass, FX and Utility — and every one has a note explaining what it is for. User presets are stored one folder per category in **~/Library/Application Support/Orra Audio/Orra Filter/Presets** on macOS and **%APPDATA%\Orra Audio\Orra Filter\Presets** on Windows, as plain files you can copy between machines.

Link A–D picks are not saved in presets — they are track names of one song — and neither is the 2X / 4X setting. Both ride the session.

A/B/C/D banks

Four snapshot banks for comparing settings. Click a bank to switch: the outgoing bank saves itself first, so there is nothing to store by hand. A dot on the keycap marks a bank with content; Alt/Opt-click copies the current state into a bank; the keys **A**, **B**, **C**, **D** switch banks and **S** resets the active one (it asks first). The active bank and all four snapshots are saved with your session, each with its own preset name and edited dot. Park a starting tone in A, branch into B, compare with a click.

Undo

UNDO and **REDO** in the header, or Cmd/Ctrl+Z and Cmd/Ctrl+Shift+Z, step back through knob moves, routes, DICE rolls, RESET, preset loads and drawn shapes. Host automation is not recorded. Forty steps deep.

DICE

The **DICE** key throws a complete, musical patch — filters, routing, LFOs, sequencer, ADSR, envelope follower and macros — in one undoable step. It never touches gain staging, dry/wet, bypass, OSC or global settings, never lets a filter self-oscillate, and always wires **Macro 1** to something useful, so a roll is playable as it lands.

Every roll is built from a **recipe**: a musical archetype that decides which sections and sources belong together, instead of a random soup. By default the dice picks a recipe at random; right-click DICE to lock it to one.

Recipe	What you get
Pluck	An audio- or MIDI-triggered ADSR snapping a resonant low-pass open on every hit, sometimes with key tracking. Macro 1 opens the filter.
Talker	A Formant (or Resonator) with a slow vowel sweep and the follower pushing the resonance. Macro 1 is the vowel.
Rhythmic	The step sequencer — with probabilities, swing, glide and a playback mode — driving the cutoff, plus a synced unipolar LFO on resonance or morph.
Dub Sweep	A one- to eight-bar LFO on a driven low-pass, the follower on resonance, a comb or high-pass in the second cell, analog drift and stereo spread.
Drift	Everything free-running and slow: analog on, wide stereo, and LFO 3 and 4 bending LFO 1's rate and depth so nothing ever repeats.
Chaos	Any shape, mode and rate, sometimes filter FM, four to seven routes with curves. Wild, but bounded.

The right-click menu also lets you **keep** sections as they are — filters, routing or modulation — so a roll only reshuffles the rest. Hover DICE to see the last recipe rolled. The preset name stays and the edited dot appears, so a roll is an edit of what you loaded, not a new patch: park a keeper in a bank first and roll into another.

Orra Link

Orra Link is a tiny sender-only plugin shared across the Orra range. Drop it on any track and that track's audio is broadcast onto a shared bus every Orra plugin in the project can read — no host routing required, in any DAW.

Link A–D

The **LINK** key in the header opens a menu for four picks, **Link A** to **Link D**. Each lists the live **Orra Link 2** senders in your session by their *track name* and colour, plus the 36 manual Link channels. Picks are stored by name, so they survive session reloads and track moves; if a picked track's sender disappears, the pick simply reads as silent until it returns. The key lights while at least one pick is live.

A pick then works in two places:

- As the **ENV FOLLOWER**'s source — the filter on a lead ducks or opens with the kick on another track.
- As a **mod-matrix source** (Link A–D), the sender's level driving any destination directly — the factory preset *Link-Driven Wobble* is a Moog cutoff riding the kick.

Notes

Latency. To read a Link channel sample-accurately, Orra Filter delays its own audio by one host buffer while a Link pick is assigned, and reports it to the host. With no pick assigned there is no Link latency at all.

Sandboxed hosts. A few DAWs run AU plugins in sandboxes that can block the shared-memory connection. If the bus cannot be opened, Link sources read as silent — the host's sidechain bus (ENV source: External) is the fallback that always works.

Offline renders read Link audio aligned to the render timeline; a sender that is not running in the render pass contributes nothing rather than stale audio.

Keyboard & mouse

Double-click a knob	Return to default. Double-click its value to type an exact number.
Shift-drag	Fine adjustment on every knob.
Right-click a knob	Quick-assign menu: add or edit modulation.
A / B / C / D, S	Switch bank; reset the active bank (asks first). No modifier.
Cmd/Ctrl+Z, +Shift+Z	Undo, redo.
Alt/Opt-drag a step	Set that step's probability. Alt on FM RATIO: a free ratio.
Right-click ?	Tooltip language: English, Dutch, Japanese, Spanish, Portuguese, German, French.

Tips & Workflow

Start from Default, or from a roll

A fresh insert is transparent — Filter 1 wide open, Filter 2 off, nothing moving — so the plugin never changes a track just by being there. When you want a starting point fast, press DICE and keep what lands.

Drag, don't dig

The matrix is there when you want it, but a route is one drag: LFO tab onto CUTOFF, MACRO label onto MORPH, ENV tab onto RESONANCE. The callout that opens is the whole route.

Let the audio play the filter

AUDIO key tracking on a bass or a vocal makes the cutoff follow the melody with no MIDI. Add the ADSR with an Audio trigger on the cutoff and every note plucks. Add a little PORTAMENTO for slides.

Series for band-pass with two edges

A Moog low-pass into an SVF high-pass in Series gives a band-pass whose two edges you control separately — sweep one, hold the other. Telephone and radio effects are exactly this.

Read the screen

The curves include phase. If the white combined line dips where you did not expect, that is a cancellation between the cells or against the dry signal — useful for allpass phasers, worth checking in parallel mixes.

Keep 2X on for drive and resonance

At 44.1 and 48 kHz, drive on the ladders aliases audibly without oversampling. 2X (the default) removes it at a modest CPU cost; 4X is there for the hottest settings. The 49- or 91-sample latency is reported and phase-true, so a parallel dry/wet blend stays clean.

Glide the sequencer a little

A hard step on a resonant cutoff clicks. GLIDE at 4 % removes the click and still sounds stepped; factory presets and DICE never go below it.

Banks for decisions, undo for mistakes

Park a candidate in A, branch into B and push it further, compare with a click. Cmd/Ctrl+Z steps back through everything including DICE rolls and preset loads.

Orra Filter is a product of Orra Audio LLC.
For support, updates, and documentation: orraaudio.com