

OR—2 User Manual

Organismi Instruments

1.7.0

Install

OR—2 is delivered as a single signed macOS installer package, `OR-2.pkg`. Double-click it and run through the standard macOS installer flow (welcome, license, done) — there is no format picker to fill out. Every plug-in format ships and installs together:

Format	Installed to
Audio Unit	/Library/Audio/Plug-Ins/Components
VST3	/Library/Audio/Plug-Ins/VST3
CLAP	/Library/Audio/Plug-Ins/CLAP
Standalone app	/Applications/OR-2.app

The installer also places OR—2’s factory preset library and this manual on your system automatically — there is nothing further to copy by hand. Rescan plug-ins in your DAW (or just relaunch it) and OR—2 will appear under Organismi Instruments.

Sample rate. OR—2 supports **44.1 kHz and above** — 44.1, 48, 88.2, 96, 176.4 and 192 kHz are all measured and covered. It will still load and make sound at lower rates, but the reverb tail outlasts the tail length OR—2 reports to the host there, so a bounce taken below 44.1 kHz can cut the reverb off before it has finished. If you work at a lower rate, render the tail with a little extra time at the end of the region.

First Launch & Microphone Permission

OR—2 is a live-input instrument: it granulates whatever is coming into its input, so it needs microphone/audio-input access to do anything.

On first launch (standalone app, or the first time your DAW routes audio into an OR—2 instance), macOS will prompt you for microphone permission. Allow it — without this permission OR—2 has no source material to granulate.

In a DAW, capture starts immediately once permission is granted: OR—2 is always listening, and its input meters come alive right away.

In the standalone app there is one more step. To avoid a speaker-feedback surprise on first launch, the standalone starts with **Mute audio input** switched on, and that setting silences the input *before* it reaches OR—2 — so nothing is captured and the input meters stay still until you turn it off. It lives in the standalone’s **Audio/MIDI Settings** dialog, not in OR—2’s own header. Untick it when your levels are set and you’re ready to feed the buffers.

The Header

The header is the strip across the top of OR—2's window, and it stays put whatever else you're doing. Reading left to right it carries the **OR—2** wordmark, the *Granular* label naming the macro set below it, the **Patch** pill and the **Random** button, and — over at the right — the two knobs that sit at the very end of OR—2's signal path: **Reverb** and **Mix**. The macros shape the grains; these two decide how much of that texture you hear, and what room it lands in.

OR—2 wordmark — Click it to switch the whole face between the light theme and the dark one: a dark background with lime controls. Click it again to switch back. Nothing about the sound changes. OR—2 remembers the theme on this Mac, so every OR—2 window and every new session opens in the one you last picked. It isn't stored in presets or in your DAW session: loading a preset or a project never changes it. If you have OR—2 open in two formats at once, say the AU and the VST3, a window of the other format picks up the new theme the next time you open it. On iPad, tap the wordmark; the app and the AUv3 share the same theme.

Mix — The balance between your dry input and the granulated texture. It's an equal-power blend, so the middle of the knob gives you both at full weight rather than half of each. All the way down you hear only what's coming in; all the way up you hear only grains. If you're automating OR—2 from a DAW, one thing to know: this control still appears in your host's parameter list under its original name, **Dry/Wet**. The face was relabelled, the parameter underneath it wasn't, so any automation you've already written keeps working.

Reverb — One knob, and it sweeps a continuous character rather than stepping between modes. Turning it up doesn't just add more of the same space; the space itself grows and takes on more colour as you go.

At 25 % you're in a small room: medium decay, tight diffusion, and a little old-tape colouring on the tail. Below that, nothing about the character changes — only how much of it you hear. At 50 % the room opens into a medium, ambient space with a longer tail and more of that tape flavour. At 75 % it's a big, lush space — long decay, looser diffusion, and the tape artefacts fully audible: wow, flutter, softened highs, a little saturation in the loop. At 100 % the space blurs out and a shimmer arrives on top of it: pitched swells and glistening harmonies an octave and an octave-and-a-fifth above what you played, damped dark so they glow rather than glare. The shimmer is silent below 75 % and rises to full at the top.

Reverb sits at the end of the chain, as a send and return placed after **Mix** and before Output Gain. Your dry signal is never attenuated to feed it, and Output Gain stays a plain trim on everything. That placement has a useful consequence: with **Mix** all the way down at 0 % you still get *just the room* on your dry input — no grains at all, just what you're playing, in the space.

Turning Reverb back down cuts the send, but it doesn't cut the sound. Whatever is already ringing keeps ringing and fades out on its own, holding roughly the character it was born with as the knob descends — a big space rings down into silence instead of being switched off mid-tail. There's no hard mute at zero and no click.

Patch — The preset pill, showing the name of whatever is currently loaded. Click it to open the preset browser (see *Presets*). An asterisk beside the name means you’ve changed something since it was loaded.

Random — Re-rolls the granular macros at once — Intensity, Size, Spray, Scan, Shape, Direction and Pitch — inside musically safe bounds, so you land on a new texture rather than on silence or a wall of noise. Hover it and the knobs it’s about to move light up, so you can see what’s in play before you commit. Reverb and Mix are deliberately left out of the re-roll: Random changes the texture, not the room it sits in or how much of it you’re hearing.

The Macro Set

OR—2’s global macro set drives all four buffers at once. Every macro below is also a modulation target (see *Modulation*), so nothing here is fixed — turn a knob for a static setting, or let the modulation engine breathe it for you.

Intensity — Overall grain density: how many grains are spawning and overlapping at once. Low intensity gives sparse, airy texture; high intensity thickens into a dense granular wash.

Size — Grain length. Short grains sound glassy and granular; long grains blur toward the source material’s own natural sustain.

Spray — Randomizes each grain’s start position around the scan point. Zero spray reads a clean, repeating position; more spray scatters grains across a wider window of the buffer for a looser, less mechanical texture.

Scan — Where in the buffer grains are read from. Moves the reading position through the captured audio, independent of Direction.

Direction — The rate and direction grains move through the buffer relative to the Scan point: forward, backward, or held still, at whatever speed you set.

Shape — The grain envelope/window, morphing between window shapes (from soft Hann-style curves toward a sharper Tukey-like plateau). Shorter, sharper shapes sound more percussive; softer shapes sound smoother and more ambient.

Pan Rate and Pan Width — Each grain is placed in the stereo field; Pan Rate sets how quickly that placement wanders, and Pan Width sets how wide across the stereo image it wanders. Together they give the texture its sense of stereo motion and space.

Pitch — Transposes the grains up or down from the buffer’s original pitch, independent of playback speed.

Feedback — Controls how much of a buffer’s own sound-on-sound decay persists as you keep recording into it (see *Buffers, Freeze & Sound-on- Sound* below) — higher feedback holds older layers longer before they fade.

Modulation

OR—2’s modulation engine has **five fixed slots: three LFOs and two Sample & Hold (S&H) generators**. Every one of the macros above — and every other modulatable parameter — can be assigned modulation depth from any slot, so the texture keeps moving on its own once you set it going.

- **LFO slots** cycle continuously through a shape (sine, triangle, ramp up, ramp down, or smooth-random drift) at a rate you set — free-running in Hz, or synced to your host’s tempo as a note division.
- **S&H slots** jump to a new random value on each clock tick; a Glide control lets you slew that jump from a classic stepped hold toward a smoothed, organic drift. S&H rate syncs to tempo the same way LFOs do.

Modulation depth is bipolar (it can push a parameter up or down from where its knob is set) and swings symmetrically around the knob’s own position — the knob is the center of the breathing, and depth sets how far it swings. A parameter with all its depths at zero simply isn’t moving; there’s no separate on/off switch to hunt for. OR—2 ships with a default patch that already assigns gentle modulation to a few macros, so the texture breathes the moment you load it — you don’t have to dial in modulation from scratch to hear it working.

Buffers, Freeze & Sound-on-Sound

OR—2 has four independent 10-second buffers, and **all four granulate simultaneously** — that’s the thickness in OR—2’s texture.

Every buffer is **always listening**: it continuously captures a rolling 10-second window of whatever is coming into OR—2’s input, whether or not you’re actively playing with it. **Freeze** a buffer to stop that rolling capture and hold exactly what’s in it — a frozen buffer keeps granulating the same held material until you unfreeze it.

While a buffer is capturing (not frozen), playing more material into it is **sound-on-sound**: new input layers on top of what’s already there rather than replacing it outright. The **Feedback** macro controls how quickly older layers decay away as new material keeps arriving — low feedback clears out fast, high feedback lets earlier takes linger and blend under newer ones for a long time.

Presets

OR—2 ships with a curated **factory preset library** and lets you save your own **user presets** alongside it. Click the preset name in the header to open the preset browser — a single scrollable list, split into Factory and User sections.

Loading is click-free. Selecting a preset replaces all four buffers’ audio and every macro/modulation setting with that preset’s own — you get exactly that preset’s sound, immediately. The swap itself is a brief, smooth crossfade between the outgoing and incoming texture, so nothing clicks or jumps even mid-play.

Saving your own preset is a single in-app text field: type a name and save — your current buffers, macros, and modulation all get captured into one self-contained preset file. User presets live separately from the read-only factory library, so **factory presets can't be overwritten** — only your own user presets can be renamed, overwritten, or deleted from the browser.

Factory presets ship **frozen**, so their demo audio is held in place the moment you load one and won't be overwritten by your own live input until you choose to unfreeze a buffer and record over it.

MIDI

OR—2 responds to MIDI — MIDI Learn and hardware control of its knobs and switches — in the **VST3 and standalone** versions. The CLAP version is built to do the same, but it is not yet verified in a CLAP host. The **Audio Unit receives no MIDI**. That is how Logic routes MIDI to audio effects, not something OR—2 withholds: an audio-effect Audio Unit is never handed raw MIDI. What each version does:

	Standalone	VST3	CLAP	Audio Unit
MIDI Learn (CC, 14-bit CC, Pitch Bend, after-touch)	Yes	Yes	Not yet verified in a CLAP host	No — receives no MIDI
Program Change switches presets	Yes	From the host's program list (128 entries)	Not yet verified in a CLAP host	No — use OR—2's preset browser
Follows the DAW's tempo, including a DAW slaved to external MIDI clock	No DAW — runs its own tempo	Yes	Not yet verified in a CLAP host	Yes

The Audio Unit receives no MIDI

In Logic, map OR—2's knobs with Logic's own **Controller Assignments** (Logic Pro ► Control Surfaces ► Controller Assignments...) or with track automation — exactly as you already do for other effect plug-ins. Logic sends those as parameter changes, so they work even though the Audio Unit receives no MIDI.

In the Audio Unit, the right-click menu still lists the MIDI Learn items, but nothing can arrive there to be learned. For MIDI Learn, use the VST3 or standalone version.

MIDI Learn

Right-click (or Control-click) any knob or switch and choose **MIDI Learn**. The control's label reads **Learning...** and a dot pulses beside it until you move a control on your hardware — then

the binding is made and the dot stays. Hover over a bound control and its label names the source: “CC 74”, or **Bend**, **AT** or **Poly AT**. Choose **Abort MIDI Learn** from the same menu to cancel; closing OR–2’s window while it is learning cancels too.

The same menu also offers:

- **Learn 14-bit CC** — for controllers that send a fine partner message alongside the coarse one (not offered on on/off switches).
- **MIDI Learn Inverted** — the hardware works the control upside down.
- **Assign to MIDI CC...** — type a CC number from 0 to 127 instead of moving hardware. A reserved number is refused on the spot.
- **Clear MIDI Learn (CC n)** — remove this control’s binding.
- **Clear all MIDI bindings** — remove every binding at once.

A hardware control drives one thing at a time: binding a source that is already in use moves it to the new control. In the standalone, choose your MIDI input in **Audio/MIDI Settings**.

Modulation depths. A knob’s menu also lists a “MIDI Learn LFO 2 depth”-style row for each modulation slot currently mapped to it, so hardware can ride how much a slot moves that knob. Depth bindings show no dot on the face — the dot always means the knob itself — so **Clear all MIDI bindings** is how you remove one you cannot see.

Reserved controller numbers. These are never bound, because they mean something else to MIDI gear: 0 and 32 (bank select), 6 and 38 (data entry), 64 (sustain), 96 and 97 (data increment and decrement), 98–101 (NRPN and RPN), and 120 and up (channel mode messages).

Jump-on-touch

When you move a bound hardware control, the parameter jumps straight to the hardware’s value. There is no pick-up or takeover mode, so if your hardware knob sits somewhere else, the parameter jumps the first time you touch it.

Where bindings live

MIDI bindings are saved with your DAW session. They never live in presets: loading a preset never changes them, so you can build your map once and audition presets freely.

Program Change

OR–2 switches presets when it receives a MIDI Program Change, even with its window closed:

- Program Change 0–13 (shown as 1–14 in most hosts) select the 14 factory presets, in name order.
- Program Change 14 onward select your own presets, in name order — so saving or deleting one of your presets moves the numbers of the presets after it. The factory numbers never move.
- A Program Change past the end of your library is ignored.
- A Program Change switches the sound’s settings only. It never touches what you recorded into the four buffers, and a frozen buffer stays frozen.
- VST3 hosts show the list as 128 programs. The Audio Unit receives no MIDI, so in Logic choose presets from OR–2’s own preset browser.

Tempo and external clock

OR—2's tempo-synced modulation follows your DAW's tempo — including when the DAW itself is slaved to an external MIDI clock. Sync the DAW, and OR—2 follows it. This is not yet verified in a CLAP host.

The standalone runs on its own tempo and does not follow external MIDI clock. To sync to a clock, run OR—2 inside a DAW that follows it.

Quick Start

Set it in motion and it breathes — here's the fastest way to hear it:

1. **Launch OR—2** (standalone, or insert it in your DAW) and allow microphone access when prompted.
2. **Standalone only:** open **Audio/MIDI Settings** and untick **Mute audio input**, or OR—2 will receive silence and capture nothing.
3. **Play or sing something into your input** for a few seconds, then press **Freeze** on a buffer to hold that take.
4. **Turn up Intensity and Size** a little and listen — grains are now granulating your frozen material continuously.
5. **Sit back.** The default modulation patch is already breathing the texture on its own — nudge Scan, Spray, or Pan Width if you want to steer it, or just let it evolve.

That's it: set it in motion, and it breathes.