

Murmuration — Quick Start

SWARM REVERB ENGINE · VST3 · AU · AAX · MACOS & WINDOWS

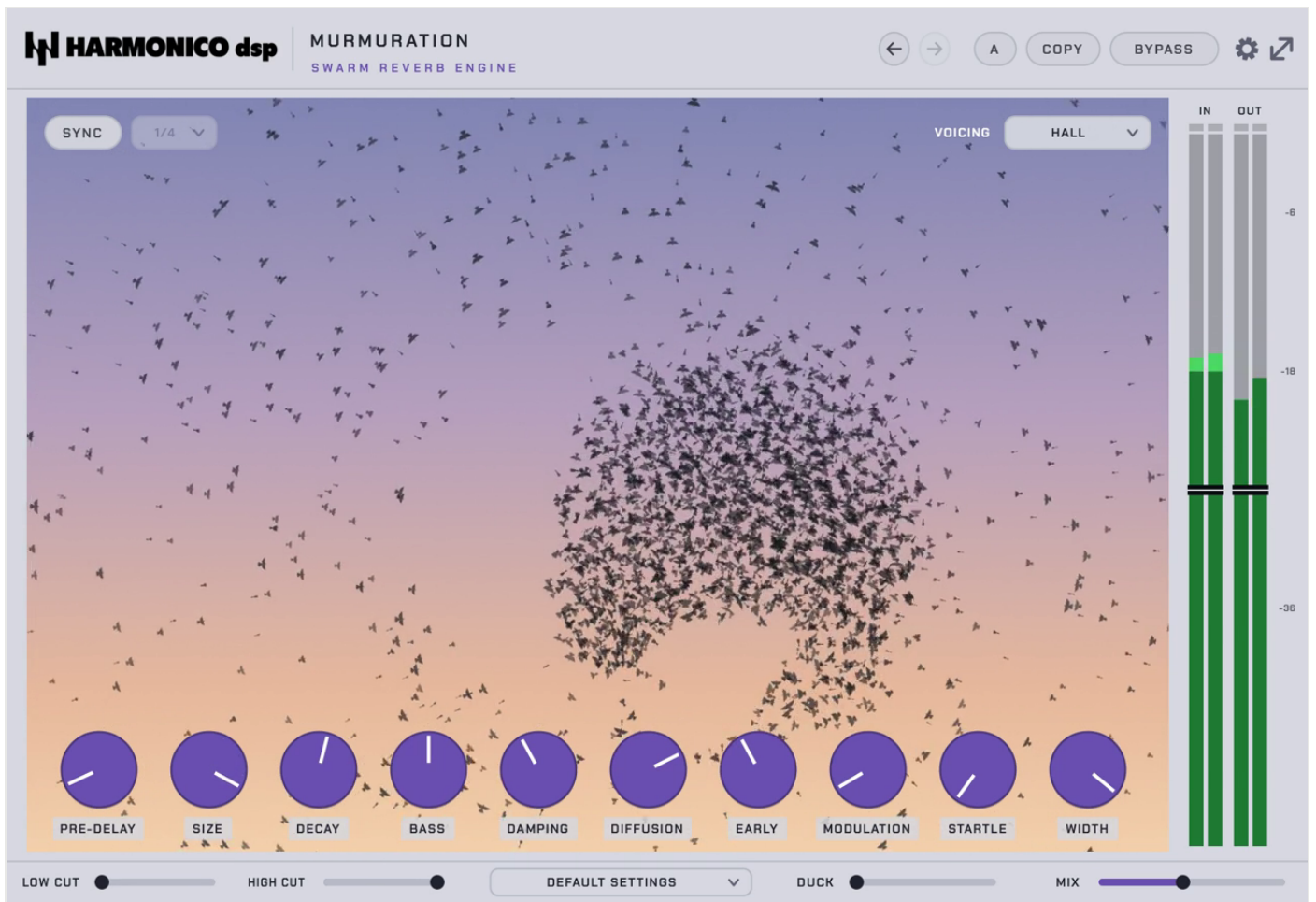
The idea

Murmuration is a **64-line feedback-delay-network (FDN) reverb** whose tail is shaped, moment to moment, by a **self-organising flock of boids**. Every delay line is modulated and panned by the swarm, so the reverb **never sits still** — a detailed room model gives the realism, the swarm gives it life. Seven voicings cover the essentials, plus a gated **Non-Linear** mode for big, abrupt drum-room sounds.

Install & activate

1. Run the installer (**macOS .pkg / Windows**). It installs VST3, AU (mac) and AAX. 2. Open the plug-in in your DAW — it's **fully featured for 14 days**. 3. To activate: click the **gear icon** → **Import License...** → select the **.license** file from your purchase email. Unlocks instantly, offline.

The interface



- **Mode** — the voicing (7, see below).
- **Space** — Size, Decay, Pre-Delay (with Tempo Sync).
- **Tone** — Low Cut, High Cut, Bass, Damping.
- **Character** — Diffusion, Early, Modulation, Startle.
- **Output** — Duck, Width, Mix, Input/Output. Two visual **themes**: *Sunset Sky* and *Sardine Sea*.

Controls

CONTROL	WHAT IT DOES
Mode	The voicing — 7 (see below).
Size	Physical size of the space — small booth ↔ vast hall.
Decay	Reverb time (how long the tail rings).
Pre-Delay	Gap before the reverb starts; Sync / Sync Div locks it to tempo (1/1 ... 1/16).
Low Cut / High Cut	Filter the reverb's lows and highs. Send-only — your dry stays full-band.

CONTROL	WHAT IT DOES
Bass	Low-frequency decay / weight of the tail.
Damping	How quickly highs fade over the tail — darker as it decays.
Diffusion	Density and smoothness of the tail (grainy ↔ glassy).
Early	Level of early reflections added to the wet — a precursor, not the body (the diffuse tail stays dominant).
Modulation	How much the swarm modulates the delay lines — this is what makes the tail <i>move</i> and breathe. Always on.
Startle	A transient flight reflex : how hard the swarm scatters when it hears an attack. Off by default (0) and ignores pads/sustained sounds — it only fires on hits.
Duck	Ducks the reverb under the incoming signal so the source stays clear.
Width	Stereo width of the reverb.
Input / Output	Gain trim in/out. Pushing Input drives the tank harder → a warmer, denser tail.
Mix	Dry/wet.

The 7 voicings

- **Room · Chamber · Hall · Cathedral** — natural spaces, small → epic.
- **Plate** — classic bright plate sheen.
- **Ambience** — short and early-reflection-dominated: "air" and depth without a long tail.
- **Non-Linear** — gated / abrupt. Controls are reinterpreted: **Decay = wall length (≈50–800 ms)**, **Size = wall density**, Damping/Diffusion = the wall's colour. It's a flat held wall then a hard cut, **triggered by transients** (so it ignores drum spill).

Quick recipes

- **Vocal hall** — Mode *Hall*, Decay mid, Pre-Delay ~40 ms (or **Sync 1/8**), Duck up so the vocal stays forward, Mix ~25 %.
 - **Living plate on snare** — Mode *Plate*, Modulation up, High Cut to taste.
 - **80s gated drums** — Mode *Non-Linear*, Size large, **Decay = the wall length** (short-to-mid); it fires on the hits.
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Tips

- **Modulation** is what makes it *move* — a static reverb has none. Nudge it for life. (**Startle** only adds a reaction *to hits*.)
 - Use **Duck** on busy sources (vocals, drums) to keep the dry signal clear.
 - **Sync** the Pre-Delay to the track for rhythmic, in-time reflections.
 - Want it warmer/denser? Push **Input** to drive the tank harder.
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Specs & support

VST3 · AU · AAX — macOS & Windows. 14-day full trial. Questions? See the **contact page** on harmonicodsp.com.