

# Earthquake Distortion Device — Quick Start

MEMORY MULTIBAND SATURATOR • VST3 • AU • AAX • MACOS & WINDOWS

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## The idea

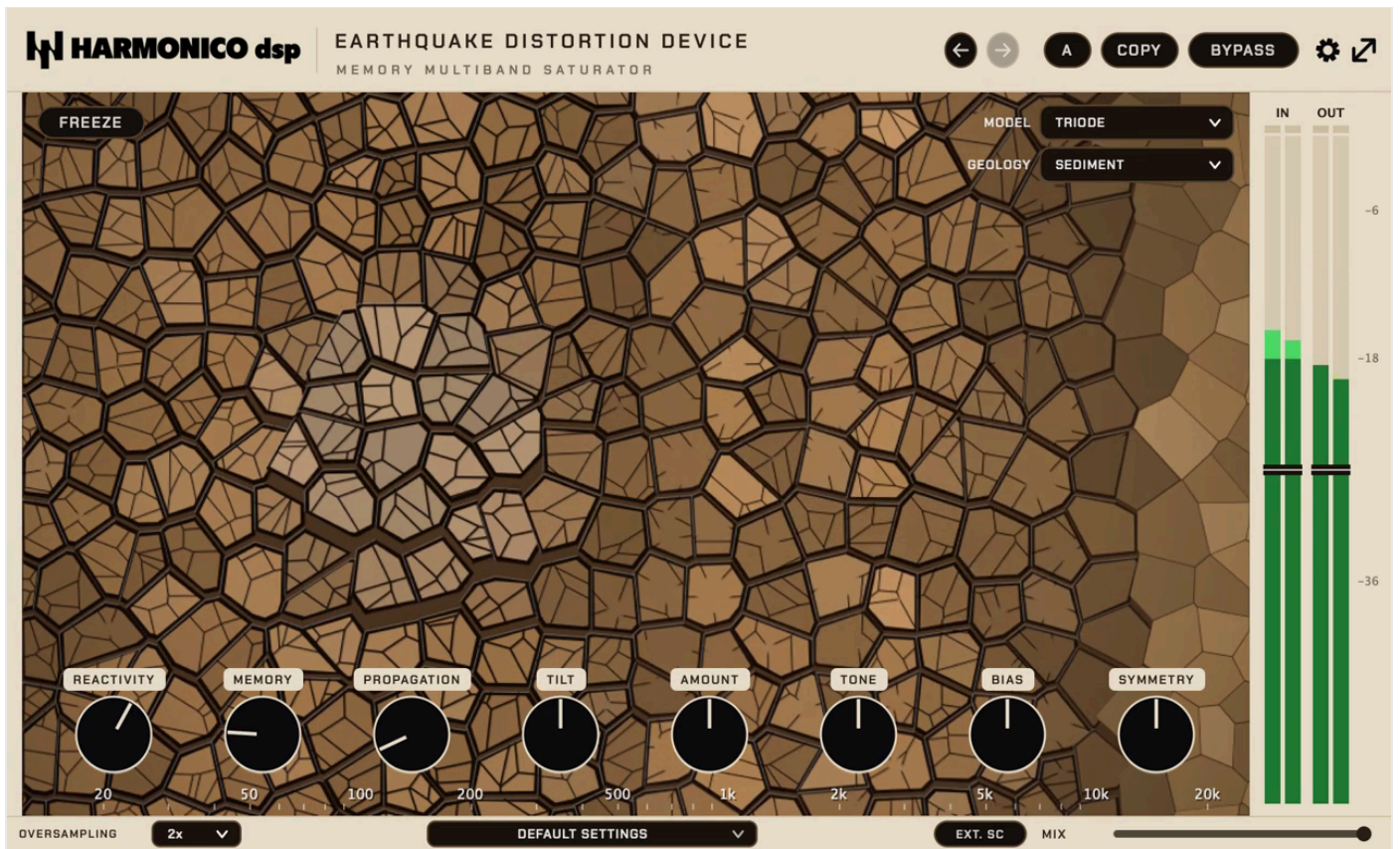
Earthquake Distortion Device splits your signal into frequency bands and drives each through a saturation model. What sets it apart is **memory**: a clay *terrain* accumulates the spectral energy of your signal over time and **fractures** where energy piles up. That damage gates how hard each band is driven — so an identical input saturates *differently* depending on what came before. The distortion has a memory (hysteresis), like real material fatiguing under stress.

**Transparent at rest — by design.** The output is *dry + distortion deltas*, so an un-fractured terrain is bit-close to your input. Out of the box **Reactivity is 0** — raise it first, or the plug-in stays clean and you'll "hear nothing".

## 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



- **Top bar** — Model, Geology, Freeze, A/B, Copy, Bypass, gear (settings), IN/OUT meters.
- **Centre** — the living *terrain*. It fractures where spectral energy builds up.

This is a **visualisation**, not a control — read it to see what the memory is doing.

- **Bottom knobs** (left → right) — Reactivity, Memory, Propagation, Tilt, Amount, Tone, Bias, Symmetry.
- **Bottom bar** — Oversampling, preset menu, Ext SC, Mix.

## Controls

| CONTROL    | WHAT IT DOES                                                                                                                                                                                                   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model      | The saturation character — 12 models (see below).                                                                                                                                                              |
| Geology    | The ground <b>material</b> — it doesn't replace your knobs, it <i>modulates the terrain laws</i> (fracture threshold, heal/fracture speed, how far shocks spread). See the four grounds below.                 |
| Reactivity | How easily the terrain fractures — turns energy sensitivity <b>up</b> and the fracture threshold <b>down</b> (things break sooner). <b>Starts at 0</b> : raise it to wake the plug-in up. Not a speed control. |

| CONTROL                | WHAT IT DOES                                                                                                                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Memory</b>          | How long damage persists (the hysteresis) — this is your time-evolution / character knob.                                    |
| <b>Propagation</b>     | How far a fracture spreads to neighbouring bands. Low = localised; high = the whole spectrum reacts together.                |
| <b>Tilt</b>            | Weights <i>where</i> the action lands along the spectrum (bass-weighted ↔ treble-weighted); centre is neutral.               |
| <b>Amount</b>          | Drive into the saturation — the main "how much".                                                                             |
| <b>Tone</b>            | Brightens/darkens <b>only the added harmonics</b> (never the dry) — lighten the distortion without thinning the fundamental. |
| <b>Bias / Symmetry</b> | Shape the curve's asymmetry — they add even-harmonic content and set how symmetric the clipping is (analog-style thickness). |
| <b>Freeze</b>          | Locks the current terrain so it stops evolving — for a fixed texture.                                                        |
| <b>Ext SC</b>          | Fracture the terrain from an external sidechain instead of the input.                                                        |
| <b>Oversampling</b>    | 2× / 4× for cleaner highs on aggressive settings.                                                                            |
| <b>Mix</b>             | Dry/wet (parallel saturation). Auto-gain is on by default (gear menu) — that's why level stays steady as you push Amount.    |

## The four grounds (Geology)

- **Sediment** — neutral default, your baseline identity.
- **Basalt** — hard: breaks rarely but intensely, stays local, long memory (great for "only the loud hits break up").
- **Ice** — cracks on a whisper and chains across bands (brittle, cascading).
- **Sand** — wide, shallow, almost no memory (soft, diffuse colour).

## The 12 models

- **Triode · Tape · Transistor · Pentode · Transformer** — warm/analog family, subtle → thick.
- **Fuzz** — hard clip: extreme, torn, almost square-wave, aggressive and raw.

- **Wavefold** — folding, synth-like harmonic richness.
  - **Waveshape** — Chebyshev polynomial shaping (adds specific harmonics), not folding.
  - **Rectifier** — full-wave (octave-up flavour).
  - **Sinkhole · Fractal · Lorenz** — experimental / chaotic shapers for sound design.
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## Quick recipes

- **Bus glue & warmth** — Model *Transformer* + **Sand** geology, Amount low (~0.3), Mix ~45 %.  
(Or *Tape*, Amount ~0.45, Mix ~65 %.)
  - **Drums that break only on accents** — Model *Transistor* or *Triode* + **Basalt** geology (Basalt's high threshold is what makes only the loud hits fracture — not low Propagation).
  - **Evolving texture (sound design)** — Model *Lorenz*, Reactivity ~0.6, Memory high, Amount ~0.6, then **Freeze** to lock a moment. (Reactivity must be up or there's nothing to freeze.)
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## Tips

- **Reactivity wakes it up** (default 0), then **Memory** gives it character. Reach for those two first.
  - If it feels harsh, raise **Oversampling** to 4x.
  - Use **Basalt** (or lower Reactivity) to break only on loud hits; **Ice** to make everything crackle.
  - Level jumping as you push Amount? **Auto-gain** is on by default — you can disable it in the gear menu.
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## Specs & support

VST3 · AU · AAX — macOS & Windows. 14-day full trial. Questions? See the **contact page** on [harmonicodsp.com](https://harmonicodsp.com).