

THUMP

DRUM HARMONIC GENERATOR · KICK / TOMS / SNARE · AU + VST3 · macOS

ZEROPINK

USER MANUAL



A drum built from its anatomy — batter head, reso head, beater — drawn next to the real one.

We all want the perfect mix.

What THUMP is

01

A drum is two heads and a stick. The **batter head** gives the note — the fundamental you tune the drum to. The **resonant head** sits a fifth away from it and gives the body: strike a C and the shell answers with a G. And the **beater** gives the attack — a burst of noise in the first few milliseconds that tells you a drum was hit, not a synth.

Every drum trigger and sample-replacer since the eighties has fixed a weak recording by layering something else over it. THUMP builds the missing drum from those three parts instead — **THUMP** for the batter head, **THUD** for the reso head, **THWACK** for the beater — each with its own level and decay, fired by the real hit, at the real hit's velocity, in the real drum's key.

Then the digital half: the glass shows the drum that arrived and the drum you are building side by side, TRACK reads the incoming fundamental and follows it, and REPLACE lets the generated low end own everything below the crossover while the original keeps its top. Familiar weight, precise control.

No meters, on purpose. The trigger is level-relative and velocity-follow is always on, so the generated hit scales with the real one. What matters is *what the hit is made of* and *how long each part rings* — so the glass is two waveforms, not a level meter.

GOOD AT

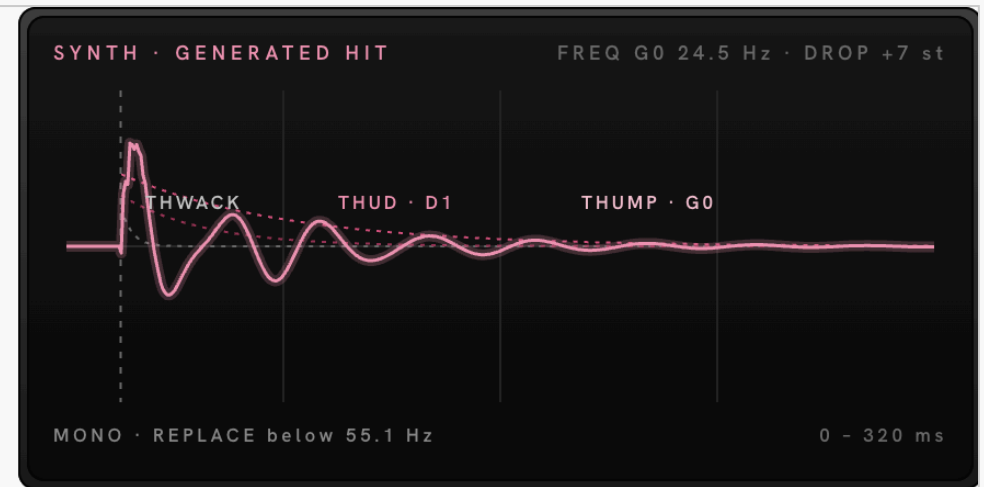
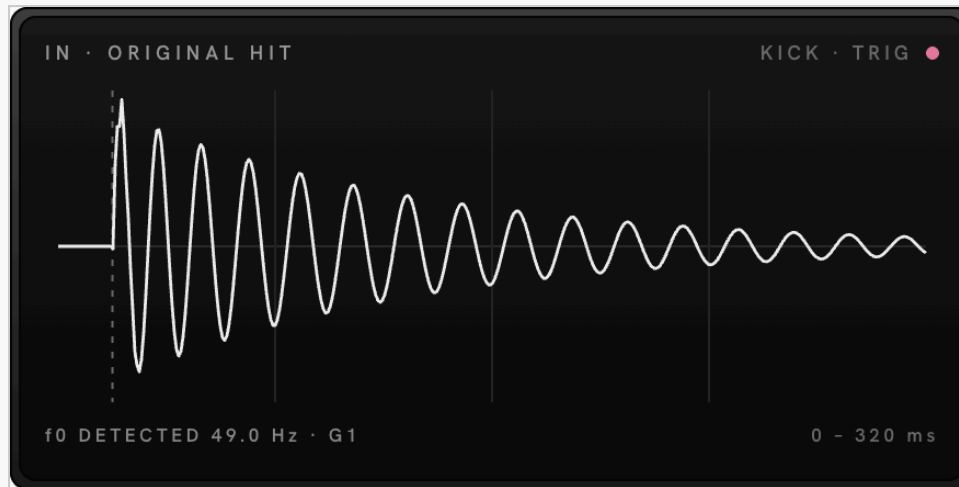
Kicks recorded thin, or through a small speaker. Toms that lost their note in the room. Snares that need a body under the crack. Electronic kicks that need a real beater.

NOT FOR

Anything without a hit. THUMP fires on transients — feed it a bass line or a pad and it will wait politely. It also does not tune the room; for that, reach for GraphEQ first.

THE GLASS — IN and SYNTH

02



READING IT

Two scopes, one time axis — 320 ms, onset at 20 ms. **IN** on the left is the drum as it arrives: the attack, the low oscillation, its natural pitch settling. Its header prints the **detected fundamental** in Hz and as a note — this is what **TRACK** locks to.

SYNTH on the right is the hit you are building. The bright trace is the sum; the three dashed envelopes behind it are **THWACK** in the first milliseconds, **THUD** ringing shorter, **THUMP** carrying the tail. Every knob redraws it live. With **SOLO** on, **IN** dims; with **ENGAGED** off, **SYNTH** dims.

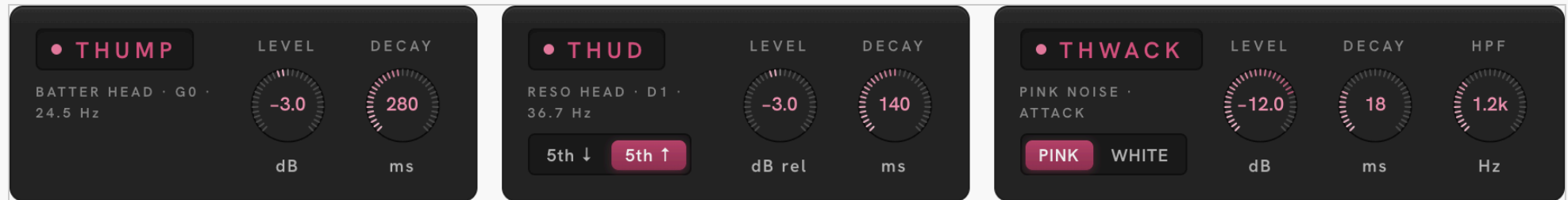
THE FOOTER LINE

Under **SYNTH** the glass prints the structure in words: the batter note and Hz, the reso head's note (a fifth up or down), the **DROP** start, and the **XOVER**. The crossover is not a knob — it is always $1.5 \times$ the highest generated tone, so **REPLACE** hands the generators exactly the band they fill and nothing more. Change **FREQ** or the **THUD** register and it moves with you.

Read the two scopes against each other. A good result is not **SYNTH** matching **IN** — it is **SYNTH** holding a clean note for exactly as long as the real drum's body did, with the attack landing on the same sample.

The deck — three parts of a drum

03



THUMP · BATTER HEAD

The fundamental — a pure sine at the **FREQ** note. **LEVEL** -24 to +12 dB on a Zero-Detent knob; **DECAY** 50 to 2000 ms is the body of the hit.

Each section has an **ON** switch with an LED in its title. Off removes that part from the hit and greys the well; nothing rearranges.

THUD · RESO HEAD

The fifth. **5th** ↑ puts it above the batter — the classic two-head dyad, mid impact. **5th** ↓ puts it below: the head sits under the sub and implies a fundamental beneath both. The subtitle prints the resulting note and Hz.

LEVEL is relative to THUMP, so the structure holds when you rebalance. **DECAY** 20 to 1000 ms — keep it shorter than THUMP and it stays a body resonance rather than a chord.

THWACK · BEATER

High-passed noise as the attack. **PINK** is softer, weighted to the low mids; **WHITE** is flat — a brighter click. **LEVEL** -48 to 0 dB, **DECAY** 5 to 1000 ms — tens of milliseconds is beater, hundreds is snare wash — and **HPF** 500 Hz to 8 kHz sets where the noise starts so it stays out of the note's way.

Working with THUMP

04

THE THIN KICK

TRACK on, SOURCE to REPLACE. THUMP DECAY to match the length of the real body on the IN scope; THUD 5th ↑ at -6, short. THWACK off — the original keeps its own beater. Raise MIX until the low end arrives without the mic ever having heard it.

THE RETUNED TOM

TRACK off, FREQ to the note the song wants. DROP 7 st so the pitch settles like a real head. THUD 5th ↓ for a floor tom, 5th ↑ for a rack. SOURCE ADD, MIX 60 — the room stays, the note moves.

THE SNARE BODY

FREQ up in the C3–C5 register, THUMP DECAY 120 ms, THUD off. THWACK on with WHITE, DECAY 150 ms, HPF 3 kHz for wires and air. SOURCE ADD. SOLO while you tune, then bring MIX back to taste.

FOOTER · SPECIFICATIONS

FREQ tunes the batter head, C0 to C5 with the Hz shown; **TRACK** follows the detected fundamental instead. **DROP** 0–24 st is the pitch envelope. **SENS** is level-relative trigger sensitivity. **SOURCE** REPLACE or ADD; **SOLO** auditions the generated hit alone. **OS LIVE** and **OS RENDER** set oversampling for playback and bounce; **GLOBAL** applies it to every ZEROPINK plugin. **PITCH** 440 or 432 Hz retunes every note on the panel.

AU + VST3 · macOS 11+ · Apple silicon native. Generated content is mono. Window 1024×580 — size the host view to the panel; never scale the artwork.

LICENSING

THUMP runs as a full 30-day trial; the remaining time shows in the nameplate. Click it — or BUY on the splash — to purchase, then paste your key into ACTIVATE. Once licensed the trial readout disappears and the wordmark opens your license details; unlicensed, it opens zeropink.net. The ! cap latches hover tooltips; the ? cap opens this manual.

Analog Sounds in a Digital World