

**Rave Generation**

***KNOCK***

User Manual

## Overview

Knock is a TR-909-based bassdrum synthesizer with transient shaping, analog-modeled drive, and a built-in reverb send. Designed for electronic music production, it delivers everything from classic house kicks to hard-hitting techno bassdrums in a single plugin.

Features include dual oscillator modes (Classic and ALT), 909-style click generator, six tick transient types (Classic, FM, Noise, HP, Chirp, Metal), adjustable body waveshaper, independent pitch sweep depth, a dedicated Punch FX section with multiple filter types and distortion algorithms, one-knob output drive with coloration, adjustable highpass filter, Clip 0dB protection, a built-in RRV-10 reverb send with 9 modes, a full Mackie-style strip EQ, a Mod Ring per-hit modulation system for dynamic tonal movement, a sample layer for layering samples on top of the synthesized kick, and a master output control.

## Signal Flow

**MIDI Note → 909 Oscillator → Body Waveshaper → Click/Body/Snap/Tick Transients → Punch FX → Disperse (Pre) → Tone + HP + Drive → Disperse (Post) → Sample Layer → Multimode Filter → Strip EQ → Reverb Send → Bus Saturation → Smart Clip → Master Output**

The bassdrum signal starts with the oscillator (Classic or ALT mode), optionally shaped by the body waveshaper for added harmonic content. Pitch is controlled by attack, decay, hold envelopes and the independent sweep depth parameter. Transient layers (click, body, snap, tick) are added on top, with six tick type characters available. The signal then passes through the Punch FX section for additional character. If Disperse is set to Pre, the allpass cascade processes the signal here, smearing transients before tone shaping. Next comes tone shaping with drive, coloration filters, and an adjustable highpass filter. If Disperse is set to Post, the allpass cascade processes the signal after drive, creating a grittier dispersion character.

Next, the sample layer output is mixed in. The combined signal passes through the Mackie-style Strip EQ (with configurable routing for the sample layer). The Mod Ring system applies per-hit envelope modulation to selected Strip EQ and Send parameters for dynamic tonal movement on each hit. An additive reverb send adds space, followed by analog bus saturation to keep the output naturally bounded. Clip 0dB ensures clean output when enabled. Finally, the Master output knob controls the overall level.



## ~ CORE Section

The Core section contains the fundamental 909 bassdrum synthesis engine and transient controls.

### Oscillator Controls

**TUNE:** Sets the pitch envelope decay time – how quickly the initial pitch chirp settles to the base frequency. Lower values give a tight, snappy hit; higher values produce a longer, more pronounced pitch dive that perceptually shifts the kick lower. Works together with SWEEP to shape the attack character.

**SWEEP:** Controls the pitch sweep depth (how far the frequency drops). At 0% there is no pitch sweep, producing a pure sub tone. At 33% (default) it matches the original 909 behavior. Higher values create increasingly aggressive pitch chirps, reaching laser/Simmons territory at 100%. Works together with TUNE to shape the attack character.

**FINE:** Fine-tunes the base pitch by up to  $\pm 100$  cents (one semitone) without changing the coarse tuning. Use it to nudge the kick's fundamental into tune with a track. The resulting pitch is shown live beside the knob as a note name and a frequency in Hz.

**ATTACK:** Controls the initial transient loudness. Higher values produce a sharper, more prominent click at the start of the kick.

**DECAY:** Controls how long the bassdrum rings out. Higher values produce longer, more sustained kicks.

**HOLD:** Sets the hold time (0-100 ms) before the decay begins. The sound stays at full volume for this duration before fading out. Creates a fatter, more sustained kick at higher values.

**BODY:** Adds weight and low-end presence to the kick. Crank it up for a heavier, more powerful sound.

**SNAP:** Controls the snap transient level. Adds a sharp, clicky attack for cut-through in a mix.

**LEVEL:** Master velocity/level control for the bassdrum output.

### Switches

**OSCILLATOR:** Selects between Classic (authentic 909 triangle tone) and ALT (cleaner, sine-like tone).

**CLICK:** Selects the click character. Classic gives the original 909 click sound, ALT provides a punchier, harder-edged alternative.

**MIDI:** Toggles chromatic MIDI note tracking. When ON, the oscillator follows incoming MIDI note pitch, allowing melodic/chromatic playing.

**TUNE x2:** Doubles the tuning range for higher-pitched kicks.

**DECAY x2:** Doubles the decay time range for longer, boomy kicks.

## \* PUNCH Section

The Punch section adds 909-style transient processing with filter and distortion effects.

### Controls

**TICK:** Controls the tick transient level, adding a sharp percussive click at the very start of the sound.

**TIME:** Sets the duration of the punch envelope. Short values create tight snaps, longer values create more drawn-out transient tails.

**FREQ:** Sets the frequency for the punch filter.

**RESO:** Filter resonance amount. Higher values create more aggressive, resonant character.

**GRIT:** Controls the distortion intensity within the punch section.

**tone:** Shapes the tonal balance of the punch effect.

**MIX:** Blends the punch effect with the dry kick signal.

### Selectors

**TICK TYPE:** Selects the tick transient character. Classic is the original 2kHz sine burst. FM produces a metallic FM-synthesized tick that tracks the oscillator pitch. Noise is a filtered noise burst for airy presence. HP is a highpass-filtered impulse for a sharp crack. Chirp is a fast downward pitch sweep for an electronic zap. Metal produces inharmonic bell-like partials for an industrial metallic texture.

**FILTER:** Selects the punch filter type: Off (bypass), LP (lowpass), HP (highpass), or BP (bandpass).

**ALGO:** Selects the punch distortion algorithm: Tube (warm valve saturation), Tape (magnetic tape compression), Clip (hard clipping), or Fold (wavefolding).

## ~ TONE Section

The Tone section provides waveshaping, drive, coloration, highpass filtering, and level control.

### Controls

**SHAPE:** Body waveshaper that adds harmonic richness to the oscillator tone. At 0% the oscillator is untouched. As you increase SHAPE, the waveform is progressively morphed from sinusoidal to parabolic, adding warm even harmonics that fatten and thicken the kick body. Inspired by the Jomox MBase Harmonics parameter.

**DRIVE:** One-knob distortion with a warm, tube-like character. Smoothly goes from clean to crunchy across the full range.

**HI MID:** Adds or removes midrange presence around 2.4 kHz. Most effective with the Classic oscillator which has richer harmonics.

**HIGH:** Brightens or darkens the overall tone by adjusting high-frequency content.

**HP FREQ:** Sets the frequency of the highpass (lo-cut) filter, ranging from 5 Hz to 200 Hz. Default is 75 Hz. Only active when HP POSITION is set to Pre or Post in the Strip EQ section. Use lower values to preserve sub energy, higher values to tighten the low end.

**VOLUME:** Master output level control.

**CLIP 0dB:** Enables Clip 0dB protection. Prevents the output from exceeding 0 dB to avoid digital clipping.

## DISPERSE Section

The Disperse section adds allpass cascade processing for transient smearing and laser sweep effects. Cascading up to 256 second-order allpass filters spreads high-energy transients through time, creating the characteristic falling-pitch sweep.

### Controls

**FREQ:** Center frequency of the allpass filter chain (20-5000 Hz, exponentially mapped). Lower frequencies create deeper, more sub-heavy dispersion sweeps. Higher values push the effect into the midrange. For bassdrum use, the sweet spot is typically between 50 and 500 Hz.

**AMOUNT:** Number of cascaded allpass filter stages (0-256). At 0 the effect is bypassed. More stages create a longer, more pronounced laser sweep as transient energy is smeared further through time. High values (150+) combined with high Spread can create resonant tail effects and unexpected tonal content from phase interactions between the filters.

**PINCH:** Controls how tightly the phase rotation concentrates around the center frequency. Low values produce a cleaner, broader effect. Higher values create a narrower, more aggressive resonant sweep. For clean effects, keep Pinch low and use Freq and Amount as the primary controls.

**SPREAD:** Distributes the allpass stages across a frequency range. At 0, all filters sit at the same frequency. As Spread increases, filters are logarithmically distributed across a wider band, creating a richer, more complex smearing effect. High Spread combined with high Amount can generate resonant feedback-like tails and new tonal content.

**MIX:** Dry/wet blend (0-100%). At 0% the effect is fully bypassed. At 100% only the dispersed signal is heard.

### Selector

**POSITION:** Selects where the dispersion sits in the signal chain. Pre places it before tone shaping and drive, processing the raw oscillator and transient signal for smoother, more musical sweeps. Post places it after drive and coloration, before the Strip EQ, creating a grittier, more aggressive dispersion character.

## STRIP EQ Section

The Strip EQ section provides a Mackie-style channel strip with gain, parametric EQ, shelving filters, and a highpass filter.

**GAIN:** Input gain with analog console saturation (0-40 dB). Drives the signal harder into the Mackie-style preamp circuit as gain increases.

**HI SHEL / LO SHEL:** High and low shelving EQ ( $\pm 15$  dB). Broad tonal shaping for the top and bottom end of the kick.

**HI MID / LO MID:** Parametric mid-band EQ ( $\pm 15$  dB) with adjustable frequency and Q. Two independent bands for precise tonal sculpting.

**HP POSITION:** Enables the highpass (lo-cut) filter and selects its position in the signal chain. Off disables the filter. Post places it after the gain stage (traditional Mackie behavior). Pre places it before the gain stage, preventing low-frequency energy from hitting the preamp saturation. Use Pre when working with very low HP FREQ values to avoid resonant slamming.

**EQ IN:** Enables or disables the EQ section. When off, only the gain stage and console saturation remain active. The highpass filter follows HP POSITION: in Pre mode it stays active even with EQ IN off (since it sits before the gain stage); in Post mode it is bypassed along with the rest of the EQ.

## **SAMPLE Section**

The Sample section provides a one-shot sample layer that triggers in sync with the kick. It can be used to layer punch, click, and transient samples on top of the synthesized 909 core for extra attack character and texture. Samples come from an embedded sample bank or custom WAV files.

### **Controls**

**LEVEL:** Controls the mix level of the sample layer into the kick signal.

**PITCH:** Pitch shift in semitones (-24 to +24). Adjusts the playback pitch of the selected sample.

**DECAY:** Amplitude decay envelope for the sample. Lower values create shorter, tighter transients; higher values let more of the sample tail through.

**HPF:** Highpass filter for the sample signal. Removes low-frequency content from the sample to avoid muddying the sub frequencies of the synthesized kick.

**LPF:** Lowpass filter (tone control) for the sample. Shapes the brightness of the sample from dark to bright.

**OFFSET:** Sample timing offset in milliseconds (0-10 ms). Controls when the sample triggers relative to the kick. Default is 1.2 ms (aligned with the kick transient). Lower values trigger earlier, higher values trigger later.

### **Selectors**

**SAMPLE:** Selects which sample to layer from the 50 included samples. The first option (Off) disables the sample layer entirely.

**STRIP EQ:** Controls how the sample is routed through the Strip EQ section. Off: the sample bypasses the strip entirely and is mixed in after strip processing. EQ: the kick passes through the full strip (gain + EQ + mod), while the sample passes through a clean copy of the EQ (without gain or mod). EQ+Mod: the kick gets the gain stage first, then the sample is mixed in and both pass through the modulated EQ stage together. EQ+Gain: the sample goes through the entire strip (gain + EQ + mod) together with the kick.

### **Switches and Additional Controls**

**PHASE:** Flips the polarity of the sample signal. Useful for aligning phase between the sample and the synthesized kick to avoid cancellation or to shape the combined transient.

**VEL:** Velocity sensitivity for the sample layer. At 0, the sample plays at full volume regardless of MIDI velocity. At higher values, softer hits produce a quieter sample layer.

**POGO:** Pitch bend envelope in semitones (-24 to +24). Applies a pitch envelope to the sample playback, sweeping the pitch up or down at the start of each hit for additional transient character.

**SMP STEREO:** Switches the sample layer between Mono and Stereo. In Stereo the sample plays its true left/right image for width; in Mono the two channels are summed to centre. This matters most with genuinely stereo one-shots – a mono sample sounds the same either way.

## FILTER Section

The Filter section is a dual multimode filter with a continuously morphing response, resonance, input drive and per-hit modulation. Each of the two filters sweeps from lowpass through bandpass to highpass, and the pair can run in parallel or in series. The section is off by default – the FILTER title acts as its bypass – and its place in the signal chain is selectable (see POSITION).

**FREQ 1 / FREQ 2:** Cutoff frequency of filter 1 and filter 2 (roughly 15 Hz to 16 kHz). Each carries a Mod Ring for per-hit cutoff sweeps.

**RESO 1 / RESO 2:** Resonance of each filter – the emphasis at the cutoff. Higher values ring harder and can approach self-oscillation. Both carry Mod Rings.

**MORPH (L / B / H):** The morph knob beside each FREQ/RESO pair. It morphs the filter's response from Lowpass (L, fully left), through Bandpass (B, centre), to Highpass (H, fully right).

**INPUT:** Drive into the filter. Adds saturation and pushes the resonance harder as it increases. Carries a Mod Ring.

**PAR-SER:** Blends the two filters from parallel (fully left) to series (fully right). In parallel their outputs are summed; in series filter 1 feeds filter 2 for steeper, stacked shapes.

**BYP-EFF:** Dry/wet blend for the whole section, from bypass (fully left) to full effect (fully right). It carries a Mod Ring, so the filter can fade in and out on each hit.

**POSITION:** Selects where the filter sits in the signal chain – Pre-Tone (before tone shaping), Pre-EQ (after tone, before the Strip EQ; the default), or Post-Smp (after the sample layer).

## SEND FX Section

The Send FX section provides a built-in reverb effect based on the RRV-10 vintage reverb engine, plus the master output control.

### Controls

**PRE-DLY:** Pre-delay time before the reverb effect begins. Adds separation between the dry kick and the reverb tail.

**TIME:** Reverb decay time (stepped 0-15). Controls how long the reverb rings out.

**TONE:** Shapes the reverb tone. Turn left for darker, warmer tails. Turn right for brighter, more present reverb. Center position is neutral.

**DRIVE:** Adds drive and saturation to the reverb signal for a grittier, more colored reverb tail.

**SEND:** Controls the reverb send level. This is additive (not a dry/wet mix), so the dry signal always passes through at full level.

**SEND HPF:** Highpass filter on the reverb send (20 Hz-2 kHz, exponential). Rolls low end out of the reverb tail so the kick's sub stays clean. Fully left it is off; a live Hz readout shows the cutoff.

**SEND LPF:** Lowpass filter on the reverb send (200 Hz-20 kHz, exponential). Tames the top of the reverb tail for a darker, more vintage space. Fully right it is off; a live Hz readout shows the cutoff.

**STEREO:** Switches the reverb between Mono and Stereo. In Stereo the reverb tail spreads across the left/right field for width; in Mono it stays centred. The HP, LP and TONE controls shape both channels equally, and the dry kick always stays centred.

**TAIL:** Controls how the reverb tail behaves on each new MIDI note trigger. Off lets the reverb ring naturally with full buildup between hits. Reset clears the reverb buffer on each trigger for a clean tail per hit. Duck uses a sidechain envelope follower on the dry kick to duck the reverb tail, letting it swell back up after each hit for a pumping, breathing effect.

## Selectors

**REVERB:** Selects the reverb algorithm: Room 1, Room 2, Hall 1, Hall 2, Plate 1, Plate 2, M Tap 1, M Tap 2, or Gated. Each mode offers a different spatial character from tight rooms to expansive halls and rhythmic multi-tap delays.

## Master Output

**MASTER:** Final master output level control. This knob sits at the end of the entire signal chain, after the reverb send and smart clip. At 50% (12 o'clock) the output is at unity gain. Turn up for additional headroom boost (up to +6 dB), turn down to attenuate the final output.

## ~ MOD RING Section

The Mod Ring section provides per-hit envelope modulation for dynamic tonal shaping. On each MIDI note trigger, a shared envelope fires and modulates selected Strip EQ and Send parameters by a configurable depth. This creates tonal movement that evolves with each hit, from subtle midrange sweeps to dramatic spectral shifts.

## Shared Controls

**MOD DECAY:** Controls the shared envelope decay time for all Mod Ring targets. At 0 the envelope is snappy (15 ms), at 0.5 it is medium (50 ms), and at 1.0 it is slow (100 ms). This single control sets the speed for all modulation targets simultaneously.

**MOD SHAPE:** Selects the envelope shape for all Mod Ring targets. Exp is an exponential decay from 1 to 0 with a fast attack and long tail, peaking on the beat. Lin is a linear ramp from 1 to 0 at even speed. Log is a logarithmic curve that holds high and drops fast at the end (opposite of Exp). Bump is a half-sine hump from 0 to 1 and back to 0, with a smooth rise and fall peaking in the middle of the envelope. Sine is a full cosine LFO cycle that resets phase on each trigger, starting at +1 (peak on beat) and reaching -1 (trough between beats). Flip the depth sign to invert the Sine shape so it peaks between beats instead.

**MOD SYNC:** Switches the shared Mod Ring envelope between Free and Sync timing. In Free mode, MOD DECAY sets the decay time directly (15-100 ms). In Sync mode, MOD DECAY becomes a note-division selector locked to host tempo – 1/1, 1/2, 1/4, 1/8, 1/8T, 1/16, 1/16T or 1/32 – so the modulation stays in time with the project.

**MOD AMOUNT:** Global depth control for the entire Mod Ring system (0-200%, default 100%). It scales every depth control at once, so you can raise or lower the overall amount of movement without re-balancing each target. At 0% all modulation is off; at 200% every depth is doubled.

## Depth Controls

Each depth control sets how much the shared envelope modulates a specific Strip EQ or Send parameter. Positive values boost the parameter on the beat (envelope peak), negative values cut on the beat. At 0, that target is unmodulated.

**MOD LO MID:** Modulation depth for the Strip EQ Lo-Mid gain ( $\pm 15$  dB).

**MOD HI MID:** Modulation depth for the Strip EQ Hi-Mid gain ( $\pm 15$  dB).

**MOD LO FRQ:** Modulation depth for the Strip EQ Lo-Mid frequency ( $\pm 10$ ).

**MOD HI FRQ:** Modulation depth for the Strip EQ Hi-Mid frequency ( $\pm 10$ ).

**MOD GAIN:** Modulation depth for the Strip EQ gain stage ( $\pm 40$  dB).

**MOD SEND:** Modulation depth for the reverb send level ( $\pm 100\%$ ). Positive values increase reverb send on the beat, negative values decrease it.

**MOD HI SHEL:** Modulation depth for the Strip EQ high shelf ( $\pm 15$  dB).

**MOD LO SHEL:** Modulation depth for the Strip EQ low shelf ( $\pm 15$  dB).

## Hardware Kick Presets

When MIDI is off, the top two MIDI octaves trigger 24 preset base frequencies.

MIDI Note (Logic/Cubase)	MIDI Note (Studio One/Live/Pro Tools)	Frequency (Hz)	Preset Name
C6	C5	47.85	Rob
C#6	C#5	48.58	Drop It
D6	D5	48.69	Thunderground
D#6	D#5	49.03	Evil Activities
E6	E5	49.34	Buzz Fuzz
F6	F5	50.00	Leviathan
F#6	F#5	50.20	Pitch-Hiker
G6	G5	50.93	REV 416653
G#6	G#5	50.79	Apocalypse Never
A6	A5	50.82	Stunned Guys
A#6	A#5	50.90	Neophyte
B6	B5	51.23	Shadowlands
C7	C6	51.32	Simold
C#7	C#6	51.97	Catscan
D7	D6	52.33	REV 2013
D#7	D#6	52.67	Cloud
E7	E6	52.73	CL&MT
F7	F6	52.94	Isaac
F#7	F#6	53.50	Raveworld
G7	G6	53.77	Bass-D
G#7	G#6	54.78	JDA
A7	A6	55.19	Simbiosis
A#7	A#6	56.25	Mad Dog
B7	B6	56.94	Jam Hype

## MIDI Implementation

**Note On:** Triggers the kick. Velocity scales the output with a hardware-modeled near-cubic response curve. With MIDI off, the top two MIDI octaves select 24 preset base frequencies (see Hardware Kick Presets above). With MIDI on, the oscillator tracks note pitch chromatically.

**Pitch Bend:**  $\pm 12$  semitones. Bends the base frequency in real time.

**Mod Wheel (CC1):** Morphs the diode clipping stage between two asymmetric clipping curves. At low values (0-10%) the response is the classic TR-909 asymmetric clip – controlled and clean. The middle range (10-90%) smoothly blends between the two styles. At high values (90-100%) the response shifts to an extreme asymmetric clip.

## Quick Start

### **Classic 909 kick:**

Set OSCILLATOR to Classic, TUNE around 0.5, DECAY to taste. Add BODY for weight, SNAP for attack.

### **Hard techno kick:**

Push the Tone DRIVE to 40-60% and enable CLIP 0dB. Push SWEEP above 50% for aggressive pitch character. Try SHAPE at 30-50% for a fatter body. Use the PUNCH section with LP filter and Tube algo. Set TICK TYPE to HP or Metal for hard-hitting transients. Set SEND FX TAIL to Reset for clean reverb per hit.

### **Deep room kick:**

Set SEND FX to Room 1 or Room 2, TIME around 5-8, SEND at 20-30%. Turn TONE left for a dark, subby reverb tail.

### **Gated reverb kick:**

Select Gated reverb mode, TIME at 3-5, SEND at 40-60%. Creates a tight, punchy reverb that cuts off sharply.

### **Dispersed laser kick:**

Set DISPERSE AMOUNT to 80-120 for a clear laser sweep. Set FREQ around 100-200 Hz. Keep PINCH low (near minimum) for cleaner results. Set POSITION to Pre for smooth sweeps or Post for grittier character. For experimental feedback tails, push AMOUNT above 200 and SPREAD above 3000 Hz.

### **Clean sub kick:**

Use ALT oscillator for a pure sine-like tone. Turn SWEEP to 0% for zero pitch drop. Keep DRIVE, SHAPE, and PUNCH minimal. Lower DECAY for a tight sub hit.

### **Layered transient kick:**

Combine SNAP, TICK, and BODY for complex transient layering. Use PUNCH TIME to shape the transient envelope length. Try different TICK TYPEs for unique attack flavors. Add a sample layer with LEVEL around 30-50% for extra impact. Adjust OFFSET to fine-tune the sample timing relative to the kick transient.

### **Sample-enhanced kick:**

Select a sample from the SAMPLE selector. Try PHASE flip if the combined sound feels thin - phase alignment can make a big difference.

## Technical Notes

The Classic oscillator is modeled after the original TR-909 bassdrum circuit for authentic sound and dynamics. The ALT oscillator uses a different synthesis method for a cleaner, purer tone.

Velocity response is modeled after the original hardware for authentic dynamics.

The reverb engine is modeled after the BOSS RRV-10 for an authentic vintage reverb character.

The output drive is designed for a warm, tube-like character without unwanted volume jumps.

Clip 0dB uses a two-stage approach for transparent limiting that prevents clipping without audible artifacts.

HI MID and HIGH controls are most effective with the Classic oscillator. The ALT oscillator produces a nearly pure tone with fewer harmonics to shape.

The SHAPE waveshaper adds even harmonics (primarily 2nd harmonic) by morphing the oscillator waveform from sinusoidal to parabolic. This is applied before the diode clip stage in the signal chain, so it interacts with the existing saturation for rich harmonic results.

The Disperse section uses cascaded second-order allpass filters. With Spread at 0, all filters share the same center frequency. With Spread above 0, filters are logarithmically distributed across the frequency range, creating richer phase interactions. At high Amount and Spread values, the cumulative phase rotation creates constructive interference that produces resonant, feedback-like tails and emergent tonal content not present in the original signal.

The six tick types each use different synthesis methods: Classic uses a 2kHz sine burst, FM uses two-operator FM synthesis, Noise uses filtered white noise, HP uses a highpass-filtered impulse, Chirp uses a fast pitch-swept oscillator, and Metal uses four inharmonic sine partials at bell-like frequency ratios.

The sample layer triggers a one-shot sample in sync with each MIDI note. Samples are pitch-shifted using variable-rate playback and filtered through independent highpass and lowpass stages. The STRIP EQ routing selector controls whether the sample passes through the Mackie strip's gain and/or EQ stages or bypasses them entirely.

The analog bus saturation stage after the reverb send provides gentle soft-clipping, preventing harsh digital overs while maintaining punch. The smart clip acts as a safety net below this stage.

The Mod Ring system uses a shared per-hit envelope that fires on each MIDI note trigger and modulates selected Strip EQ and Send parameters by configurable depth amounts. Five envelope shapes are available: Exp (exponential decay), Lin (linear ramp), Log (logarithmic hold-then-drop), Bump (half-sine hump), and Sine (full cosine LFO cycle that resets on trigger). The sign of each depth control determines whether the parameter is boosted or cut at the envelope peak. When the sample layer's STRIP EQ routing is set to EQ+Mod, the sample passes through the modulated EQ coefficients together with the kick; in EQ mode, the sample uses a separate clean copy of the EQ filters without modulation.

## Support

For technical support, updates, and additional information: [ravegeneration.io](http://ravegeneration.io)