

BASS INSTRUMENT

HARMONIX

Build your bass from the fundamental up.

USER MANUAL / VERSION 1.0.0



NAVIGATION

FIND YOUR WAY

Start with the quick-start chapter, then use the reference sections as you work. Click a contents entry to jump to it.

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01 / BASS INSTRUMENT

WELCOME TO HARMONIX



The main synth page, with harmonics, note shape and performance controls.

HARMONIX is a bass and sub-bass synthesizer designed around direct control of the fundamental and its upper harmonics. It brings harmonic sound generation, saturation, performance controls and an effects rack into one instrument.

Start with the weight of a simple sine, introduce harmonics for definition, then shape the envelope, character and movement to suit your track. The same instrument can move from a restrained sub to a textured bass, an expressive sliding line or a more aggressive sound.

The sound engine combines sine components at harmonic intervals. Harmonics, Slope and Odd / Even let you change that structure directly. Octave Up adds another layer at twice the fundamental frequency. Saturation and effects take the result further.

THERE ARE TWO MAIN PAGES:

SYNTH - the harmonic engine, saturation, envelope, performance controls and visual displays.

EFFECTS - the processing rack and four drawable effects LFOs.

FORMATS

HARMONIX uses VST3 on macOS and Windows. Audio Unit is available on macOS only. The Mac package contains Apple Silicon and Intel code. Use the package supplied for your operating system and a compatible 64-bit DAW.

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WHY I MADE HARMONIX – ERB N DUB

I make the plugins I need in my own productions. Each one starts with something I want to achieve musically, with sound quality and ease of use guiding the design.

With HARMONIX, I wanted a direct way to create bass and sub-bass: begin with the fundamental, decide how much harmonic character the sound needs, and shape it into something that works in a track.

In my music, bass needs weight, definition and personality. Sometimes I need a simple foundation that supports the drums. Sometimes I want a bass that carries the energy of the track, with movement, texture and attitude. I wanted those choices to feel connected and easy to reach.

Building the sound around harmonics gives me a clear starting point. I can hear what each change does, work quickly, and keep my attention on the music.

HARMONIX brings that approach into an instrument for other producers: a practical way to build the bass you want, explore its character and make it your own.

ERB N DUB

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BUILD YOUR BASS FROM THE FUNDAMENTAL UP

The fundamental is the base frequency of a note. Its harmonics sit at whole-number multiples of that frequency.

FOR A NOTE WITH A 50 HZ FUNDAMENTAL:

First harmonic: 50 Hz - the fundamental itself. Second harmonic: 100 Hz. Third harmonic: 150 Hz. Fourth harmonic: 200 Hz.

A sine contains a single frequency. Adding upper harmonics changes the waveform and its tone. The fundamental supplies the base pitch and low-frequency weight; the upper harmonics contribute definition and character.

HARMONIX generates these components together. You control how many are present, how quickly their levels fall as they rise in frequency, and the balance between the odd and even upper harmonics.

A wavetable synth commonly selects and scans stored waveform shapes. HARMONIX's main oscillator builds its waveform by adding harmonic sine components. Its central sound-design decisions are harmonic count, harmonic balance and level slope.

You do not need to calculate anything to use it. Play a sustained note and move one control at a time. Listen for changes in weight, brightness, body and texture.

The engine adjusts the combined oscillator level as its harmonic structure changes. Adding harmonics does not simply stack more level on top of a fixed sine. Perceived loudness and the fundamental's share of the sound can still change, so compare settings at sensible levels.

At higher notes, the engine reduces the number of generated harmonics to keep the harmonic components within its frequency limit. Saturation and other processing can introduce additional frequencies afterward.

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YOUR FIRST BASS IN FIVE MINUTES

- 1) Load HARMONIX as an instrument on a MIDI or software-instrument track.
- 2) Choose Initialize Patch, then set HARMONICS to 1, OCTAVE UP and SAT MIX to zero. Turn Pitch Envelope and Portamento off, set the mod wheel to zero, and choose Mono for a single bass line.
- 3) Begin at a comfortable monitoring level. Set the main DRIVE / OUTPUT control to around -6 dB while exploring. Keep the master clipper enabled initially.
- 4) Play a low note or a short repeating bass phrase. Set the MIDI notes to the register you want.
- 5) Increase HARMONICS from 1 to 3 or 4. Move SLOPE upward for a darker balance, or downward for more upper-harmonic presence.
- 6) Adjust ODD / EVEN gently. Keep OCTAVE UP at zero while learning the main harmonic controls.
- 7) Shape the note with Attack, Decay, Sustain and Release. Start with a short attack and release, then adjust their length until the notes fit the groove.
- 8) Select WARM, add a little SATURATION, and increase SAT MIX to hear the processed character. Adjust COLOUR to control the high-frequency content.
- 9) Save the sound under a new preset name before exploring the effects page.

The goal is to hear how each stage contributes. Build the core sound first, then add processing with a musical purpose.

05 / BASS INSTRUMENT

SHAPE THE HARMONICS. SHAPE THE CHARACTER.

HARMONICS - 1 TO 16

Sets the number of harmonic components requested from the main oscillator, including the fundamental. At 1, the main oscillator is a sine. Raising the value adds successive harmonics above it.

If the sound still has harmonics at a setting of 1, check Octave Up, Saturation, Sat Mix, the master clipper and the effects rack. These can add or change harmonic content independently.

SLOPE - 0.20 TO 3.50

Controls how quickly the harmonic levels fall as harmonic number increases.

Lower values keep the upper harmonics stronger, usually producing a brighter, denser sound. Higher values reduce them more sharply, placing more emphasis on the fundamental.

With Harmonics at 1, there are no upper harmonics for Slope to rebalance. Raise Harmonics before using Slope to explore tone.

ODD / EVEN - -0.90 TO +0.90

Changes the relative levels of the odd and even upper harmonics. Positive values favour odd upper harmonics; negative values favour even upper harmonics. Zero gives neither group an extra weighting.

The fundamental's own weighting is unaffected by this control, although normalization of the combined oscillator can change its final level. The control changes the balance; it does not completely remove either harmonic group.

OCTAVE UP - 0 TO 100%

Adds a sine layer one octave above the fundamental. Use it to introduce more body or strengthen the octave component.

This layer is above the played fundamental. To move the whole sound into a lower register, lower the MIDI notes or use the host-exposed Octave parameter.

OCTAVE (HOST PARAMETER) - -2, -1, 0, +1 or +2

The host-exposed Octave parameter transposes the oscillator by whole octaves. It is retained for automation and older presets; there is no separate transpose selector on the current custom interface. Set the register with MIDI notes or the host parameter list. This is separate from the pitch-envelope octave range.

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SUB WEIGHT AND AUDIBLE DEFINITION

A strong bass sound needs to work in the arrangement and across the playback systems that matter to your music.

For a clean sub foundation, begin with Harmonics at 1, Octave Up at zero and Sat Mix at zero. Keep the effects chain empty and use enough level headroom to avoid master clipping. Choose a register that provides useful low-frequency weight without relying on frequencies your monitoring cannot reproduce.

For more audible definition, introduce a small number of upper harmonics. They can help communicate the bass line on systems that reproduce the fundamental weakly. This does not guarantee translation: check the whole mix on appropriate monitors, headphones and smaller speakers.

When adding harmonics, listen for what happens to the balance between the sub and the rest of the bass. A brighter sound may seem louder while its fundamental occupies less of the total level.

Keep checking the relationship with the kick. Note length, register and arrangement often matter as much as the synth's tone. Avoid allowing a long release to fill every gap between notes unless that is the sound you want.

Movement and stereo effects can change the bass's level and its behaviour in mono. Check the low end in mono after adding them. HARMONIX does not automatically preserve a separate clean sub through every effect.

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FROM CLEAN TO DRIVEN



SATURATION - 0 TO 24 DB

Controls how hard the oscillator enters the selected saturation character. Increasing it changes the waveform and can introduce additional harmonics. Its audible effect depends on the incoming waveform, Character and Sat Mix.

CHARACTER

CLEAN - a smooth, restrained shaping curve for exploring gentler changes. WARM - rounded saturation for density and harmonic colour. HARD - a firm clipping threshold for a sharper driven character. TUBE - asymmetric shaping that introduces a different harmonic balance. TAPE - rounded shaping with its own response as drive increases. FUZZ - stronger shaping for a more compressed, forceful texture. FOLD - folds the waveform as it is driven harder, producing more complex tones. DIGITAL - quantizes the driven waveform into discrete amplitude steps for a coarse digital texture.

These names describe available sound characters. They are not claims of modelling a particular hardware unit. CLEAN can still reshape the sound when blended in.

SAT MIX - 0 TO 100%

Blends the oscillator signal with its saturated version. At zero, the saturation contribution is removed. At 100%, you hear the saturated path. Intermediate values let you retain some of the original character while introducing the processed texture.

COLOUR - 300 HZ TO 18 KHZ

Sets the cutoff of the main low-pass tone filter after the saturation blend. Lower values reduce high-frequency content; higher values retain more brightness.

Colour still affects the sound when Sat Mix is zero. It is separate from the Filter module on the effects page.

Compare saturation settings at similar perceived loudness. The main DRIVE / OUTPUT control follows the complete effects rack and feeds the final clipper. Your digital audio workstation (DAW) track fader follows HARMONIX.

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GIVE EVERY NOTE ITS SHAPE

The amplitude envelope controls the level of each voice over time.

ATTACK - 1 MS TO 4 SECONDS

The time taken to rise from silence to the initial peak. A short attack gives an immediate start. A longer attack creates a softer entrance. A small increase can help soften the start of very low notes.

DECAY - 10 MS TO 4 SECONDS

The time taken to fall from the initial peak to the Sustain level. Use a short decay and lower sustain for a more pronounced initial hit, or a longer decay for a gradual settling of the note.

SUSTAIN - 0 TO 100%

The level held while the note remains down after the decay stage. It is a level, rather than a duration. At 100%, there is little amplitude drop for Decay to produce.

RELEASE - 10 MS TO 8 SECONDS

The time taken to fade after the note is released. Short settings create tighter endings. Longer settings let the bass continue between notes and may cause voices to overlap in polyphonic mode.

The amplitude envelope shapes the oscillator. Effects such as delay and reverb can continue after that envelope has finished.

09 / BASS INSTRUMENT

SLIDES, PITCH DIVES AND PERFORMANCE

MONO

Plays a single voice with last-held-note priority. When you hold several notes, the newest takes priority. Releasing it can return to an earlier note that is still held.

POLY is the default for a new instance and Initialize Patch. In Poly mode, the engine provides up to 12 voices. New notes can replace existing voices when that limit is reached.

LEGATO

In Mono mode, overlapping notes can continue the amplitude envelope instead of restarting it. Turn Legato off when you want a fresh envelope attack on each transition.

PORTAMENTO AND GLIDE - 0 TO 2,000 MS

Portamento enables pitch sliding during mono note transitions. Glide sets the transition time. Play overlapping notes to explore slides, and make sure Mono and Portamento are enabled.

A value of zero gives an immediate change. Longer times create more pronounced movement between pitches.

PITCH BEND - 0 to 24 semitones in either direction

Sets how far the MIDI or on-screen pitch wheel moves the note. A range of 2 semitones is a useful starting point for small bends. Larger ranges allow wider gestures. The on-screen pitch wheel returns to centre when released.

PITCH ENVELOPE

The drawable pitch envelope is hardwired to pitch. Its bottom line is the played note (zero pitch offset); its top is the selected octave range above that note. It is a single sweep for each voice, not a looping LFO. After the shape ends, pitch stays at the played note.

ON enables the envelope. New instances load with it OFF: the panel is greyed out and editing is locked until you enable it. Turning it off bypasses the pitch movement while preserving its saved shape. The last PLAYED NOTE point is fixed and cannot be moved or deleted.

SYNC is the initial timing mode, initially 1/4. LENGTH groups straight, dotted and triplet notes from 1/1 down to 1/32. The separate 1 BAR option follows the host time signature; 1/1 always means four beats. Without host tempo information, timing uses 120 BPM. FREE uses an editable 10-1,000 ms length.

OCTAVES selects 1, 2, 3 or 4 octaves above the played note. Two octaves is the initial range. This scales the height of the shape; it does not transpose the final played note.

Drag a point horizontally to change its timing and vertically to change its pitch height. The first point moves in both directions: move it to the right to create a rise from the played note before the downward section. Double-click empty graph space to add a point. Double-click or right-click an editable internal point to remove it. The graph holds up to 12 points. The first and final anchors cannot be deleted.

Drag between points to bend a segment. Two-finger vertical scrolling over a segment changes the curve in the same visual direction: upward movement lifts the curve and downward movement lowers it. Hold Shift for finer curve adjustment. While dragging a point, Shift snaps time to sixteenths of the shape and height to twelfths of the selected range.

Curves can become extremely steep, producing an almost immediate drop. Use small movements while listening. The historical Pitch Dive Curve automation range stays 0.35-4.00; the graph stores an extra curve scale to achieve tighter shapes without changing the old parameter mapping. Saved shapes and this scale are part of presets and project state.

RETRIGGER controls whether the envelope restarts during mono note transitions. With it off, a continuing mono transition can retain its progress. A fresh voice starts a new envelope. Retrigger is stored ON initially, but is inactive and locked while the envelope is OFF.

MOD WHEEL

Right-click the on-screen mod wheel to choose a destination. Available destinations include Harmonics, Slope, Odd / Even, Octave Up, Saturation, Colour, Sat Mix, Output, the four envelope controls, Glide, Pitch Dive Time and Pitch Dive Curve.

The wheel increases the selected control from its base setting toward its maximum across the control's range. Start with the wheel at zero, choose a suitable base value, then raise it while playing.

MIDI CC1 controls the mod wheel. Voice-level destinations follow the note's MIDI channel; shared Saturation, Colour, Sat Mix and Output destinations use channel 1. The on-screen wheel sends on channel 1.

The engine does not scale note amplitude with MIDI velocity. Different velocity values do not provide a softer or louder oscillator attack. Aftertouch can increase a voice's amplitude modestly; expressive-controller support should be checked with your own controller.

ON-SCREEN KEYBOARD

Click or drag across the keys to play. You can also use a MIDI controller or your DAW's computer-keyboard input. Host notes and mouse notes can be held together.

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BUILD YOUR EFFECTS CHAIN



The effects rack, shared LFOs and independent processing modules.

The effects page lets you assemble processing around your core bass sound. Click an effect in the library to add it, or drag it into the rack.

Audio effects process in chain order. Filter before Distortion changes the signal entering the distortion; Filter after Distortion shapes the frequencies produced by it. Both are useful, with different results.

Each module provides an enable/bypass control and controls appropriate to its process. Most also provide DRY / WET and OUTPUT.

DRY / WET blends the signal entering that module with its processed result. OUTPUT adjusts the level after the blend. Module bypass returns the incoming signal without applying that module's Output gain. PHAT retains its processing latency when bypassed, so the host can keep timing aligned.

Noise Forge uses an additive LEVEL control in place of the usual dry/wet blend. Movement also acts at the oscillator stage; both are explained below.

Use the drag handle or move buttons to change the order of ordinary audio effects. Drag any empty area of a collapsed card or an expanded card's top bar to reorder it; its buttons still work normally. Movement stays fixed. Duplicate creates another independent instance. Remove takes the module out of the active

chain. Collapse a card with its +/- button or by double-clicking the header background. Where available, DETAIL opens the expanded controls.

SCROLL THE RACK

Use the scrollbar at the right: drag its thumb, click its track, or use the mouse wheel over that scrollbar area. Ordinary wheel gestures over effects do not scroll the rack or change their dials. Deliberate Option-wheel shortcuts on macOS use Alt-wheel on Windows.

BYPASS ALL FX lets you compare the core synth with the rack processing. It also bypasses Movement. It does not bypass the main synth saturation, Colour filter or final master clipper. Bypassed effects keep advancing their internal state, so this control is an A/B comparison rather than a CPU suspension button. PHAT latency remains present in whole-rack bypass.

The rack supports up to 32 active modules, with up to 16 instances of an ordinary effect type. Movement has one controller and stays at the top of the rack.

UNDO and REDO in the main header and rack use the same per-instance history. They cover synth and effects controls, pitch and LFO shapes, routes, sample changes, rack structure and preset loads. The LFO editor uses this shared history.

MODULE PRESETS

PRESETS on an effect saves or loads a .hfxmodule file with its controls and embedded Noise Forge sample. Loading clears LFO assignments on that destination module, while shared LFO shapes and other modules stay unchanged.

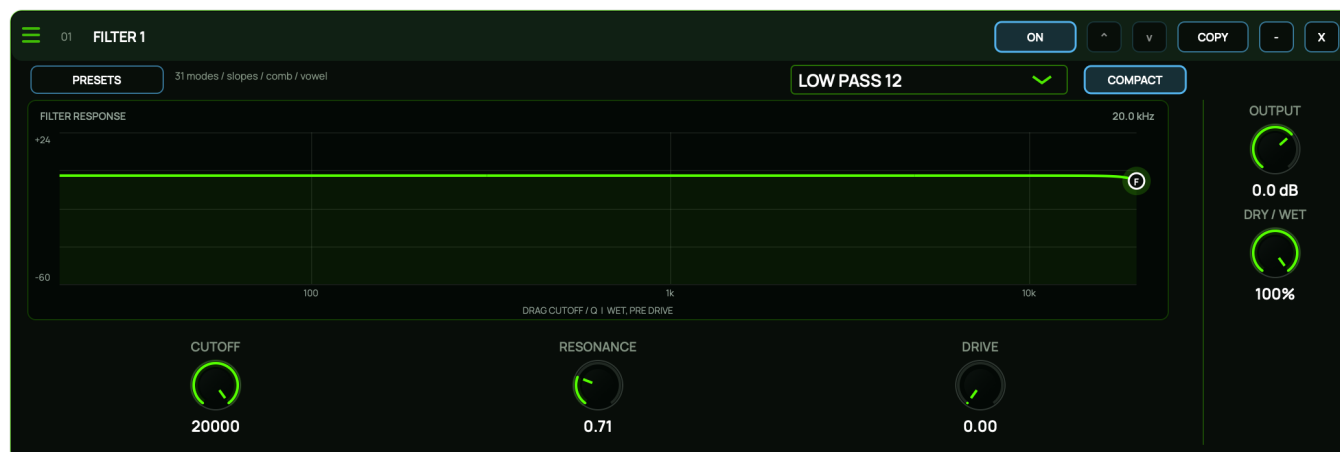
CHAIN PRESETS

CHAIN PRESETS uses .hfxchain files for rack order, effect controls, embedded samples and shared effects LFO shapes/routes. It leaves the main synth, pitch envelope and master controls unchanged. New instrument patches use .harm; legacy .hlfopreset patches still load.

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FILTER

FILTER



Filter module.

Offers 31 modes, including low-pass, high-pass, band-pass, notch, all-pass, comb and vowel-style filters. TYPE selects the response. CUTOFF sets its working frequency; RESONANCE emphasises the response around that region. Comb modes use resonance as a feedback-style amount. DRIVE changes the level entering the filter. Use DRY / WET and OUTPUT to blend and balance the result. Scroll the mouse wheel over the graph to adjust resonance; hold Shift for finer changes.

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EQUALIZER

EQUALIZER



Equalizer module.

Provides a low shelf, a parametric mid band and a high shelf. Drag each node for frequency and gain. Scroll the mouse wheel over the desired node to adjust that band's Q, including both shelves; hold Shift for finer changes. DRY / WET and OUTPUT control the contribution. Older presets retain the original shelf response until shelf Q is edited.

DETAIL hides the knob rows and expands the graph. Output and Dry / Wet remain available.

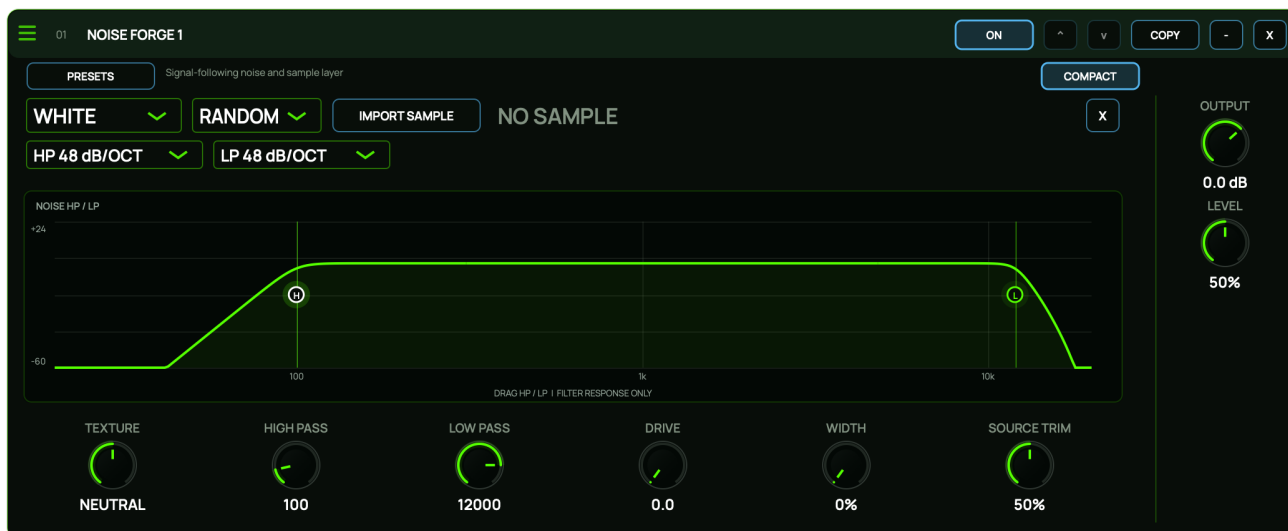
LIVE INPUT SPECTRUM

A subdued spectrum behind the EQ curve shows the signal entering this EQ instance. The brighter response curve and draggable nodes remain in front. This is an input display, so it does not show the output of your EQ changes. Analysis stops when the graph is hidden. Detail view gives the graph more room.

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NOISE FORGE

NOISE FORGE



Noise Forge module.

Adds a signal-following noise or sample texture to the incoming synth sound. Sources are WHITE, PINK, BROWN, STATIC, SAMPLE, BLUE, VIOLET, GREY, RADIO, GEIGER, IMPULSE, CRACKLE, DIGITAL, METALLIC, CHAOTIC, DUST and GRANULAR. The noise/sample layer interacts with the incoming signal rather than acting as an independent pitched sample instrument.

TEXTURE changes dark/bright weighting. HIGH-PASS and LOW-PASS define the frequency range, DRIVE adds shaping, and WIDTH adds stereo spread. SOURCE TRIM scales the source; LEVEL sets how much is added to the synth.

At LEVEL zero the noise layer is muted. OUTPUT scales the combined synth and noise.

REPEAT restarts the sequence or sample on each note-on. RANDOM lets it continue.

Use IMPORT to load a WAV, AIF or AIFF file in SAMPLE mode. Imported sample data is included when you save a user preset or plugin state. Use material you have permission to share if you distribute those presets.

The noise layer has independent high-pass and low-pass slopes of 12, 24, 36 or 48 dB/octave. The filter graph follows their response.

EXISTING AUTOMATION AND PRESETS

Original Type automation keeps its five choices. Extra Source adds the twelve generators; LEGACY TYPE uses the old Type setting. The on-screen menu controls both. Old presets load in LEGACY TYPE. Earlier versions cannot reproduce new sources or new LFO start modes; keep unchanged projects and the previous plugin.

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DISTORTION AND MULTIBAND

DISTORTION



Distortion module.

Provides 13 shaping modes: Soft, Hard, Sine Fold, Rectify, Bit Crush, Tube, Tape, Diode, Fuzz, Triangle Fold, Soft Sign, Cubic and Asymmetric Clip. MODE selects the curve; DRIVE sets how hard it is pushed; TONE controls brightness; BIAS offsets the signal entering the shaper. BITS applies to Bit Crush. Blend with DRY / WET and balance with OUTPUT.

MULTIBAND DISTORTION



Multiband Distortion module.

Splits the signal into Low, Mid, High and Air bands. Three crossover controls set the boundaries. Each band has its own CHARACTER, DRIVE and LEVEL, plus common DRY / WET and OUTPUT controls.

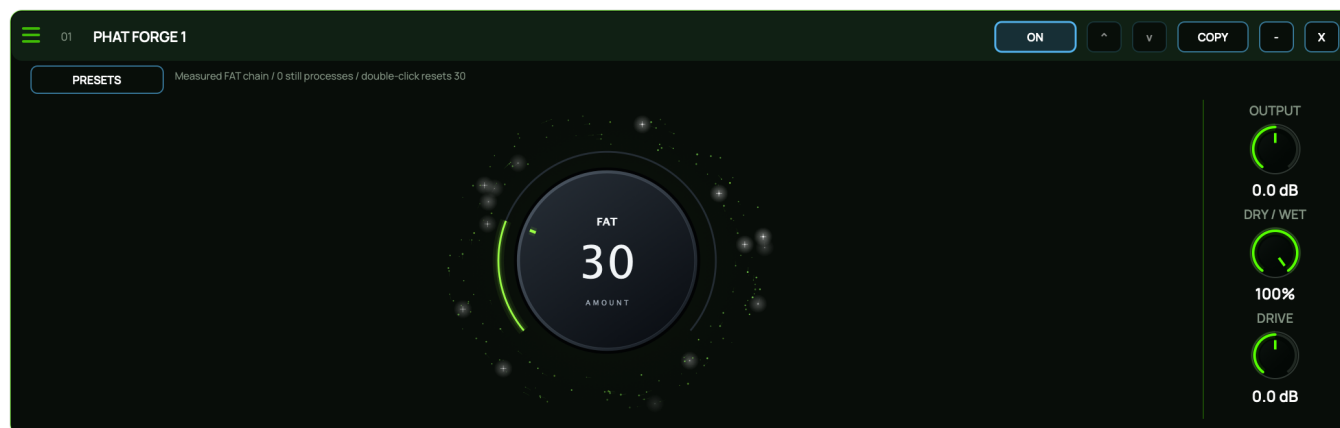
Use a restrained low band with stronger upper-band drive when you want to explore a defined fundamental and a more textured top. The bands still interact through the full signal path, so check the result in context.

The module's dry/wet reference passes through the phase-aligned crossover system. A zero-wet setting preserves the frequency magnitude response but can change phase. Module bypass returns the original incoming signal. Strong folding and digital distortion can introduce aliasing; this module has no oversampling selector .

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PHAT FORGE

PHAT FORGE



Phat Forge module.

PHAT FORGE integrates the PhatForge processing engine. FAT (0-127) changes the calibrated combined processing; zero remains active processing. DRIVE sets the input gain feeding PHAT processing; OUTPUT balances the module level after the dry/wet blend. New modules have PHAT clipping off, and its selector is no longer shown. Existing presets, projects and duplicated modules retain their saved clipping setting. DRY / WET blends the latency-aligned input and processed result. Use module bypass to compare with the incoming signal.

Drag the dial or ring to adjust FAT. A supported LFO can be dropped on FAT; use the numbered handles for depth and All Routes to inspect assignments.

Each instance contributes 288 samples at 48 kHz: three stages of 64 samples plus a 96-sample stage. At other rates this is $3 \times \text{round}(64 \times \text{sampleRate} / 48000) + 96$ samples. The host is notified and bypass retains this delay. Adding or removing the module can change compensation. Settle the chain before a timing-critical recording.

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MOVEMENT

MOVEMENT



Movement module.

Introduces two generated oscillator voices detuned equally below and above the central pitch. DETUNE sets their separation; DEPTH and MIX control their contribution; OUTPUT sets the oscillator-stage level after the blend.

Both voices remain centred. Their interference creates beating and natural level changes; Movement does not create its effect by panning them left and right. Higher notes beat faster at the same detune setting.

Movement acts before the main saturation, Colour and audio effects. It stays fixed in the first rack position. Its Output therefore changes how strongly the oscillator drives the later processing. Noise, delay and reverb added downstream are not detuned by it. It appears first in the module library and is labelled PRE-EFFECTS (FIXED POSITION); its position cannot be changed.

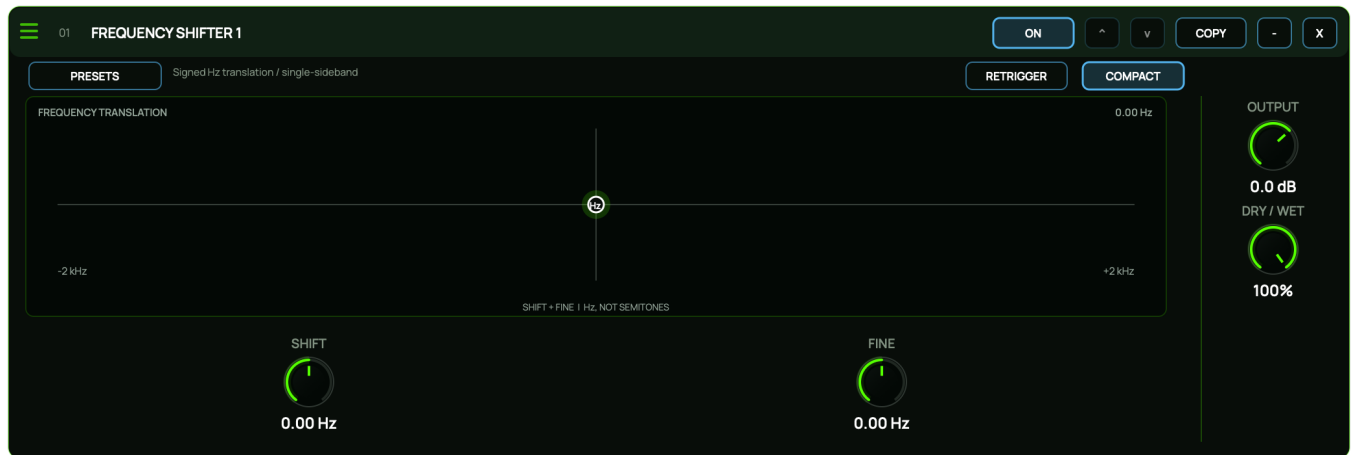
RETRIGGER

Enable RETRIGGER to align the detuned oscillator pair on each new MIDI note, including overlapping mono notes. Fresh voices already start aligned. Mono handovers use a short smooth transition. OFF retains the existing mono phase behaviour; older patches load with this option off.

Use small amounts for subtle life. Larger amounts create more obvious movement and can cause significant low-frequency cancellation. Check sub weight and mono playback while adjusting it.

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FREQUENCY SHIFTER



Frequency Shifter module.

Moves frequencies by a fixed number of hertz. SHIFT covers -2,000 to +2,000 Hz; FINE adds a further -10 to +10 Hz for small changes. This changes harmonic relationships differently from a musical pitch transpose.

Explore small amounts for beating and detuned textures, or larger shifts for less harmonic sounds. DRY / WET creates a blend with the input; OUTPUT balances the result. Even at zero shift, the processed path can change phase. Check partial blends carefully if maintaining low-frequency weight is important.

RETRIGGER restarts this effect's phase on every MIDI note-on. The new cycle takes over through a 5 ms smooth transition, preserving filter/delay history and avoiding an abrupt phase jump. It is shared across voices: a new note also restarts the effect heard on held notes and tails. OFF keeps the original continuous movement and is the default for older presets. No buffering latency is added.

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FLANGER AND ENSEMBLE

FLANGER

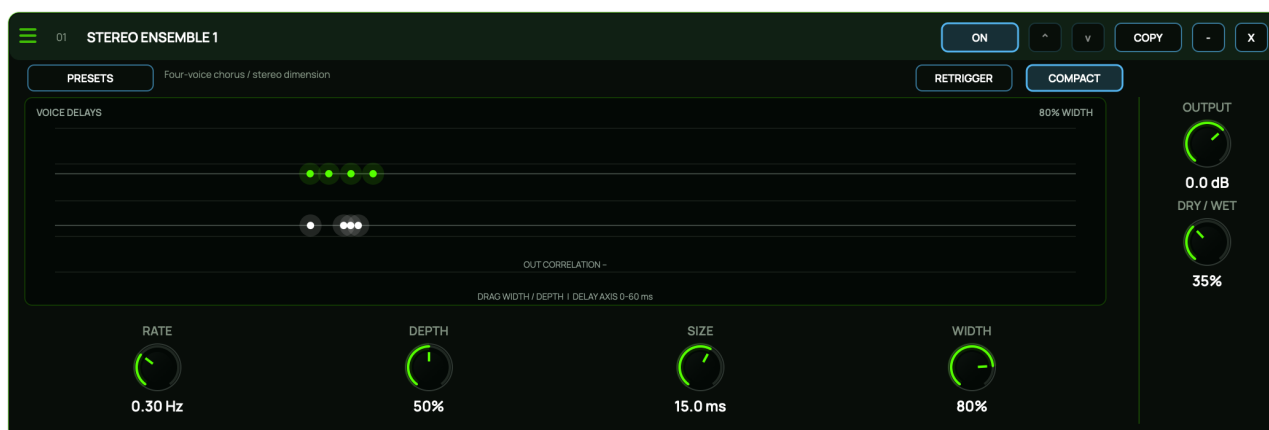


Flanger module.

Uses a short modulated delay for sweeping comb-filter colour. RATE controls movement speed, DEPTH controls its excursion, DELAY sets the base delay time, FEEDBACK strengthens the effect and WIDTH changes its stereo behaviour. Use DRY / WET to introduce the effect gradually.

FLANGER RETRIGGER restarts its movement on each MIDI note-on through a 5 ms smooth transition. Delay/feedback history is retained. It applies to all voices passing through the module; OFF preserves continuous movement. Stereo Ensemble has the same RETRIGGER option: its four modulation voices restart together while retaining their stereo spacing and delay history.

STEREO ENSEMBLE

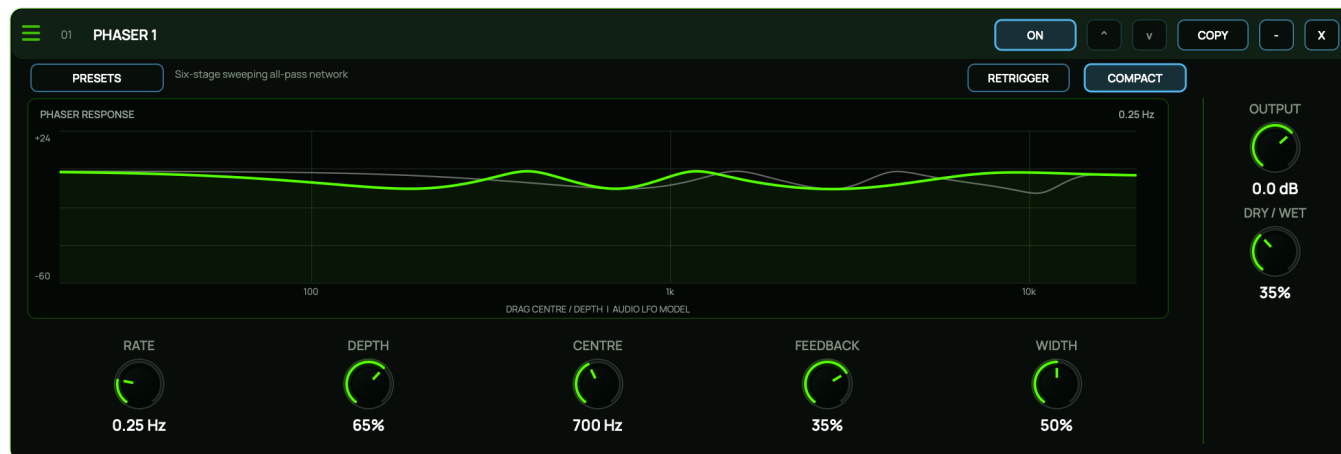


Stereo Ensemble module.

Creates a chorus-style texture using several modulated voices. RATE, DEPTH, SIZE and WIDTH control its motion, delay scale and spread. Useful for upper-bass thickness; check the fundamental and mono compatibility after increasing the effect.

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PHASER



Phaser module.

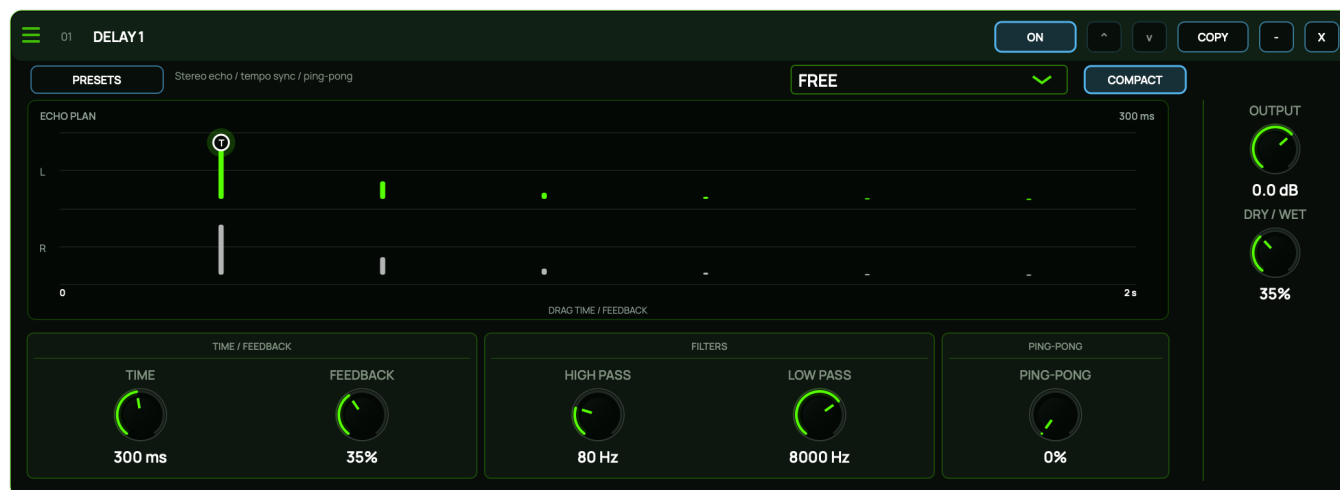
Creates movement through a sweeping all-pass filter network. RATE and DEPTH set its motion; CENTRE sets the frequency region; FEEDBACK increases emphasis; WIDTH controls stereo variation. Blend it for gentle animation or a stronger sweep.

RETRIGGER restarts this effect's phase on every MIDI note-on. The new cycle takes over through a 5 ms smooth transition, preserving filter/delay history and avoiding an abrupt phase jump. It is shared across voices: a new note also restarts the effect heard on held notes and tails. OFF keeps the original continuous movement and is the default for older presets. No buffering latency is added.

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DELAY AND REVERB

DELAY

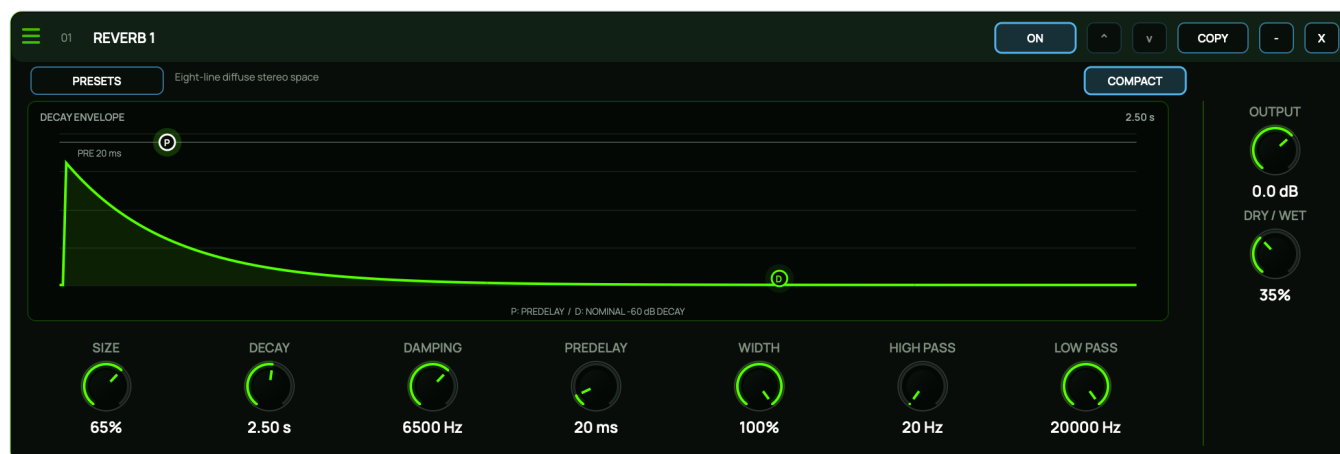


Delay module.

Creates stereo echoes. TIMING chooses FREE or a tempo division. TIME sets milliseconds in Free mode; in synced modes, the chosen division and host tempo determine the delay time. FEEDBACK sets repeat intensity. HIGH-PASS and LOW-PASS shape the repeats, and PING-PONG controls their stereo exchange. DRY / WET sets the echo contribution. Synced choices are grouped as STRAIGHT, DOTTED and TRIPLETS, each from 1/1 down to 1/32. A dotted whole note is six beats; the delay supports its full 12-second duration at 30 BPM.

For bass, filtering low frequencies out of the repeats can help leave space for the next note. Choose the division by listening to the groove.

REVERB



Reverb module.

Adds diffuse stereo space. SIZE sets the space's scale; DECAY controls its persistence; DAMPING reduces high-frequency energy in the tail; PREDELAY separates the initial sound from the reverb; WIDTH controls spread. Start with a low wet amount and check whether the tail fills useful rhythmic gaps.

HIGH-PASS and LOW-PASS filter only the wet path. Their endpoints at 20 Hz and 20 kHz bypass the respective cut; Damping independently changes the tail.

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DIFFUSER AND CLIPPER

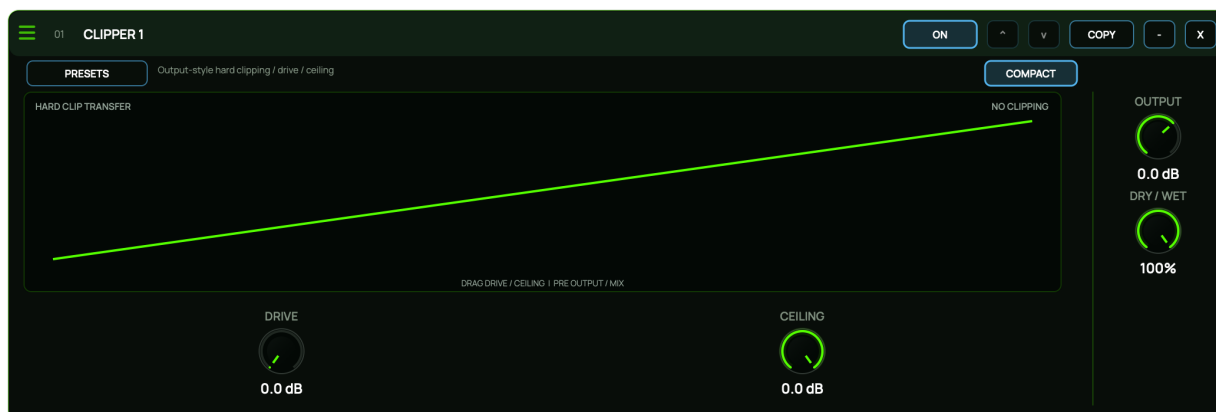
DIFFUSER



Diffuser module.

Spreads phase through a multistage all-pass network. FREQUENCY sets its region, STAGES sets the amount of processing, and FOCUS / Q controls the response. It can change the waveform and transient shape without functioning as a conventional EQ boost. Use DRY / WET and listen to its effect on the bass attack and low-end summation.

CLIPPER



Clipper module.

Adds a hard clipper at a chosen point in the rack. DRIVE pushes the signal into clipping; CEILING sets its clipping reference; DRY / WET blends the result; OUTPUT applies gain afterward.

Because Output follows the clipping and blend, positive Output gain can exceed the selected Ceiling. This module is separate from the final master clipper, which follows the rack. The rack clipper is not oversampled.

Scroll the mouse wheel over the diffuser graph to adjust Focus (Q). Hold Shift for finer adjustment. Stage count remains available from its control.

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COMPRESSION

COMPRESSOR



Compressor module.

THRESHOLD, RATIO, ATTACK, RELEASE and KNEE shape dynamics. MAKEUP raises the compressed path. DRY / WET blends it with the input; OUTPUT balances the module. Compare at similar levels when judging changes to attack and consistency.

MULTIBAND COMP



Multiband Comp module.

Three-band upward and downward dynamics. LOW CROSS and HIGH CROSS set band boundaries. DEPTH sets overall strength; UPWARD and DOWNWARD adjust the two contributions; TIME changes their timing. LOW, MID and HIGH GAIN rebalance the bands. DRY / WET and OUTPUT set the contribution.

Start with moderate Depth and check for unwanted noise or prominent tails. OTT Gentle, OTT Punch and OTT Extreme are starting points for this module's own dynamics; adjust Depth, timing and level to suit the sound.

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ADD RHYTHM AND MOVEMENT



Four drawable global LFOs modulate supported continuous effects controls.

HARMONIX provides four independent drawable LFOs on the effects page. Each can run continuously, restart on a note, or play its shape once.

Each LFO retains its own shape and selected preset name when you switch between LFOs. New or untouched LFOs start with Triangle. Loading a factory patch or using Initialize Patch restores the default LFO shapes and removes previous modulation routes. Loading a saved user patch restores the shapes and routes saved in that patch.

Open the LFO section with its +/- control or by double-clicking the header. Modulation keeps running when the section is collapsed.

TO MAKE A ROUTE:

- 1) Choose an LFO thumbnail and click it to open the shape editor.
- 2) Select a starting shape, or draw your own.
- 3) Drag the thumbnail onto a supported continuous effects dial.
- 4) Adjust the small numbered blue depth control beside that dial.
- 5) Play the phrase and adjust the base knob setting, rate and depth together.

The main knob remains the base setting. Modulation moves the effective value around or away from that setting without writing the motion back into the base knob or its automation.

RATE AND TIMING

FREE Hz sets the cycling speed independently of the DAW tempo, from 1/32 Hz to 100 Hz.

In BPM SYNC, choose STRAIGHT, DOTTED or TRIPLET; turn RATE clockwise for faster divisions. Changing family keeps the base note or nearest supported division. FREE Hz disables the family buttons. Each

mode remembers its rate; saved custom beat lengths remain exact until edited. LOCK TO SONG follows song position during playback in synced Free mode; disable it for independent phase. Sync uses 120 BPM if the host supplies no tempo. LOCK TO SONG and SNAP light green when enabled. ALL ROUTES toggles with one click. Depth readouts disappear on release; assignments remain.

START MODE

FREE loops during playback or while auditioning held notes. RETRIGGER restarts and loops on each note-on. ENVELOPE restarts on each note-on, plays once and holds the final value. Before the first note, note-triggered modes hold the start value. All modes support Free Hz and BPM Sync.

LFOs are shared across the rack and voices. With the DAW stopped, held or sustain-pedal notes run the LFO. Releasing the last note pauses phase and value. Playback resumes movement and song locking. Hosts without transport information run independently. Note-off adds no release stage. Control smoothing softens fast changes.

SHAPE EDITING

SHAPE PRESET groups Factory Shapes (Sine, Duck, Triangle, Ramp, Gate) and User Shapes. SNAP sits beside SHAPE EDITOR. SAVE SHAPE stores points, curves and segment types only; loading keeps timing, start mode and routes. Keep the proposed name to replace a user shape with confirmation, or rename for a variation. Files use .harmshape in the LFO Shapes subfolder of your HARMONIX preset folder on Windows and macOS; choose Show Presets Folder... from the menu. Drag points to reshape; double-click to add/remove internal points. Drag between points to bend a segment; right-click for linear, curved or hold response.

DEPTH AND ROUTES

Drag a blue depth control through zero to change its sign. Hold Shift for finer adjustment. Shift-Option-click on Mac toggles unipolar/bipolar behaviour; the same command uses Alt on Windows.

Unipolar movement works to one side of the base setting; bipolar movement works across both sides. Check the base setting and control limits when deciding how much depth to use.

Double-clicking a depth handle sets it to zero while retaining the route. Right-click it to change polarity, remove the assignment or inspect routes. Up to four numbered depth controls can sit beside a destination, one for each LFO. All Routes provides an overview of assignments. The patch supports up to 64 routes.

SUPPORTED DESTINATIONS

The drawable LFOs accept supported continuous effects parameters, including Movement's continuous controls. Synth-page controls, switches, effect-type menus and rack bypass do not accept these assignments. Use the mod wheel or suitable DAW automation for the available synth controls.

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SEE AND CONTROL YOUR SOUND



STATIC WAVE CYCLE

Shows a model of the core waveform based on the main synth controls. Its size is normalized for display. It is a useful guide to waveform shape, rather than a live recording of the complete effects chain or a reliable loudness display.

FREQUENCY ANALYSER

Shows the frequency distribution of the actual output signal, using a combined mono view of the channels. It helps you see how harmonics, saturation and effects change the spectrum. Stereo content can combine differently in this display, so use your ears and other metering when assessing stereo width or phase.

The band-count selector beside HARMONIC ANALYSER chooses 8, 16 or 32 frequency bands; 16 is the default. More bands show finer frequency divisions. The SPEED selector chooses 2, 5, 10, 20, 30 or 60 frames per second; the initial speed is 30 FPS. It changes display refresh, rather than the oscillator's sound. A lower rate reduces display activity.

DRIVE / OUTPUT - -24 TO +6 DB

This is the same main level control under two labels. With the master clipper enabled it is labelled DRIVE. With the clipper disabled it is labelled OUTPUT.

In both cases, master gain follows the Colour filter and the complete effects rack, immediately before the final master clipper. Adjust it to set the finished chain level or drive the final clipper.

MASTER CLIPPER

Applies a hard sample-peak clamp at 0 dBFS after the effects rack. When enabled, its red activity display indicates that the incoming signal actually exceeded that threshold. Enabling it alone does not indicate clipping.

It is a sound-shaping and peak-control stage. Heavy clipping changes the tone and may introduce aliasing. It is not a true-peak limiter or a loudness meter, and does not guarantee that later DAW processing will remain within a chosen output limit.

Use the DAW's track fader to set the instrument's final level in your mix. That fader follows HARMONIX and can trim the output without changing how the plugin's internal effects are driven.

EARLIER SAVED SOUNDS

Earlier versions applied master gain before Colour and the effects rack. Older presets and DAW sessions keep their stored gain value, but non-zero gain can now change their sound because insert effects receive a different input level. Keep the previous plugin and unchanged projects when comparing. No automatic level compensation is applied.

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BASS RECIPES

These are suggested starting settings, not measured guarantees or saved factory patches. Begin each recipe with Initialize Patch, the mod wheel at zero, Pitch Envelope off and a comfortable output level. Set Mono, Legato, Portamento and Octave explicitly to suit the example.

CLEAN SUB FOUNDATION

Harmonics: 1. Octave Up: 0%. Sat Mix: 0%. Colour: 12 kHz or higher. Attack: around 5 ms. Sustain: 85-100%. Release: around 40-80 ms. Effects: empty.

Set the register with MIDI notes or the host-exposed Octave parameter. Reduce the main Drive if the master clipper shows activity. Adjust release while listening with the drums.

DEFINED SUB WITH UPPER BODY

Harmonics: 3-4. Slope: around 2.0-2.6. Odd / Even: close to zero. Octave Up: 0% initially. Character: Warm. Saturation: around 3-6 dB. Sat Mix: around 20-35%.

Listen to how the upper detail helps communicate the line. Adjust Slope before adding more drive, then compare on smaller speakers and in the full mix.

SHORT, PUNCHY BASS

Harmonics: 4-6. Slope: around 1.5-2.2. Attack: around 2-5 ms. Decay: around 100-250 ms. Sustain: around 20-40%. Release: around 30-60 ms.

Choose Warm or Hard and blend saturation to taste. Shorten the MIDI notes if the bass crowds the groove. Check the envelope and note length together.

SLIDING BASS

Mono: on. Legato: on. Portamento: on. Glide: around 80-200 ms. Pitch Envelope: off.

Play or draw overlapping MIDI notes. Increase the overlap and Glide time for a more pronounced slide. Choose the harmonic character first, then adjust the slide against the rhythm.

PITCH-DIVE / 808-STYLE BASS

Harmonics: 1-3. Slope: around 2.0. Pitch Envelope: on. Dive Octaves: 1 initially. Envelope timing: FREE, around 20-80 ms. Shape: begin near the top-left and bend the descending segment for a tight fall. Retrigger: on. Attack: short. Release: adjusted to the required tail.

Start with a small amount of saturation. Increase the dive range only when the opening pitch needs more impact. For separate hits, turn Portamento off and use note lengths and envelope settings that leave space between attacks.

MOVING, DISTORTED BASS

Harmonics: 8-12. Slope: around 0.8-1.4. Odd / Even: adjusted by ear. Character: Warm or Hard. Sat Mix: moderate initially.

Add a Filter and Distortion module. Assign a synced LFO to Filter Cutoff or Distortion Drive and start with a shallow depth. Try a small amount of Movement, checking for low-end dips. Reduce excessive upper energy with Colour or a later Filter.

Change the processing order and compare. Keep the version that supports the musical phrase, then save it before trying a more extreme variation.

PRESETS, RANDOMISE AND PROJECT RECALL

PRESETS

Factory Presets contains the supplied sounds; User Presets contains your saved sounds. Use the previous/next buttons to browse. Factory content is part of the plugin and is separate from your writable user library.

INITIALIZE PATCH

Choose Initialize Patch at the top of the preset menu for a fresh starting patch. It restores sound-control defaults, clears the effects chain, imported samples and modulation routes, and restores the pitch envelope and Triangle LFO shapes. Your window size and tooltip preference stay unchanged. Undo restores the previous patch; no saved preset files are deleted.

Factory sounds provide starting synth settings and clear the active effects chain, LFO shapes and modulation routes. Check performance controls when changing sounds: older factory entries do not explicitly reset every Mono, Legato, Octave or Portamento setting.

SAVE

SAVE opens with the current preset name already filled in. Keep the name to replace a saved .harm preset, confirming replacement when asked, or type another name to save a variation. New saves use .harm. A patch contains synth and effect settings, rack order, pitch-envelope and LFO shapes, routing and embedded Noise Forge samples. Existing .hlfopreset files remain loadable. Save inside the user preset folder so the browser can find your sound.

User preset locations:

Windows: Documents/ERB N DUB/Presets/HARMONIX

macOS: ~/Library/Audio/Presets/ERB N DUB/HARMONIX

New preset extension: .harm. Legacy .hlfopreset files are also supported.

Choose Show Presets Folder... to open the exact location in File Explorer or Finder. Factory Presets and User Presets have separate submenus. Effects Presets and LFO Shapes are subfolders.

Earlier user preset folders are copied without deleting originals. Windows includes the former AppData location and Documents/ERB N DUB/HARMONIX/Presets. Migration records prevent repeated copies. Conflicting files are kept separately. Identical .harm and .hlfopreset copies appear once; different same-named sounds are labelled (.harm) and (legacy).

Share a sound by copying its .harm file; imported samples are embedded. Reopen the editor to refresh externally added files.

Blue and other generated noise sources do not require imported samples. An inactive historical SAMPLE selection does not require audio. A genuinely selected SAMPLE without embedded audio is still rejected; a failed load keeps the previous sound and its displayed name.

RANDOMISE

Randomise changes the core sound controls: Harmonics, Slope, Saturation, Colour, Odd / Even, Octave Up, Sat Mix and Character. It leaves the envelope and effects-chain design outside that randomization.

Save a useful sound before pressing it, then explore the new result at a comfortable level. Use a new preset name when keeping a variation.

DAW PROJECTS AND AUTOMATION

Saving the DAW project stores the plugin's patch state. Also save a user preset when you want a reusable sound independent of that project.

Use the DAW's parameter automation for repeatable changes. Effect instances retain their own automation identities when moved; deleting and replacing a module can create a different instance identity. Use rack Undo if you need to restore a removed module.

Older Distortion Mode automation may map differently after the mode menu was expanded. Check this selector when opening older projects.

Changing a sound while notes are held uses a brief fade-out, a silent changeover and a fade-in to prevent abrupt preset-change clicks. Rapid arrow presses keep the latest selection; held keys remain available across mono/poly changes. Factory Presets and User Presets have separate submenus.

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MANAGE AND TRANSFER YOUR PRESETS

OPEN YOUR USER LIBRARY

Choose Show Presets Folder... in the main preset menu. The folder is created when needed and opens in Finder on macOS or File Explorer on Windows. Effect and LFO-shape menus provide the same action for their own subfolders.

LOCATIONS

macOS: ~/Library/Audio/Presets/ERB N DUB/HARMONIX/

Windows: your Documents folder, then ERB N DUB/Presets/HARMONIX/. Windows uses your actual Documents location, including a redirected, OneDrive-managed or non-English folder.

FILES AND SUBFOLDERS

.harm stores a complete instrument patch; older .hlfopreset files remain readable. Effects Presets holds individual .hfxmodule and complete-chain .hfxchain files. LFO Shapes holds .harmshape files. These folders contain your user content; factory sounds remain separate.

IMPORT, EXPORT, RENAME AND DELETE

Use Finder or File Explorer to copy compatible preset files into the appropriate folder. Reopen the editor to refresh the main preset list; reopen the shape menu to refresh shapes. Effect Load opens a file chooser. Export by copying a saved file elsewhere. Rename or delete user files in the file manager; keep a backup before deleting. HARMONIX does not delete originals during migration.

SAFE FILENAMES AND REPLACEMENT

Use a descriptive filename inside the correct user folder. Spaces, punctuation and non-ASCII text are supported where the operating system permits them. Avoid path separators and reserved Windows device names. Saving writes a complete replacement before replacing the existing file; confirm replacement only when you intend to overwrite that sound.

BACKUP AND TRANSFER

Copy the complete HARMONIX user preset folder to your backup storage. To move between Mac and Windows, copy each preset family into the corresponding folder on the destination computer. Keep the same or a newer compatible HARMONIX version. Do not copy hidden migration records to a different computer.

SAMPLES TRAVEL WITH PRESETS

Imported Noise Forge audio is embedded in complete presets, relevant module presets, chain presets and DAW state. HARMONIX stores the sample name and audio, not an external library path. Once saved, the sound does not depend on the original sample file. Transfer the preset or project state; there is no separate HARMONIX sample library to copy.

MISSING OR INVALID AUDIO

A preset selecting SAMPLE without valid embedded audio cannot be restored. Re-import the intended source into a working patch and save again. Generated noise sources do not require a sample. A rejected load keeps the previous sound. Keep the original preset and contact support if it cannot be repaired.

MIGRATION

Only known older HARMONIX user-library locations are considered. Files are copied and verified; originals remain. Different same-named files receive a deterministic legacy suffix. A completed copy is recorded so future launches do not repeat it or recreate a preset you later renamed or removed. Factory resources and unrelated folders are not scanned.

UNDO, REDO AND SAFE EXPLORATION

ONE HISTORY FOR THE WHOLE INSTRUMENT

UNDO restores the previous user edit; REDO restores its exact result. Up to 64 meaningful edits are retained per instance. A new edit after Undo clears Redo.

WHAT IS INCLUDED

Synth, performance, effects and analyser controls; pitch-envelope and LFO points, curves and timing; modulation destinations, depths and polarity; effect insertion, removal, duplication and order; Noise Forge sample imports and clearing; complete instrument, module and chain preset loads; INIT and Randomise.

GESTURE GROUPING

One drag, one continuous wheel gesture, one preset load, one structural action or one Randomise is one step. Wheel changes are grouped until a short pause. Unchanged or cancelled edits do not add a step.

KEYBOARD SHORTCUTS

Use Command-Z on macOS or Ctrl-Z on Windows for Undo; add Shift for Redo while HARMONIX owns keyboard focus. Text fields retain their own text-editing behaviour. When your DAW owns focus, its shortcuts still apply.

HISTORY AND PROJECTS

History survives closing and reopening the plugin editor in the same instance. Loading a DAW project starts fresh history. History is not embedded in presets or projects. DAW automation and internal modulation do not fill this history. Undo and Redo restore saved settings, not a recording of sound already in progress. Restoring rack structure or a complete preset recreates effect buffers, so existing delay and reverb tails can restart or clear.

WHAT STAYS OUTSIDE HISTORY

Playing notes, pitch/mod-wheel performance, editor size, tabs, scrolling, card collapse, LFO inspection and the Show tooltips preference are outside sound-edit history. Analyser band-count and speed settings are included.

SAMPLE MEMORY LIMIT

Sample audio is shared between history steps. A 256 MiB limit on retained sample data can shorten history below 64 steps when many different large samples have been imported. Older steps are discarded first. The current sound remains intact.

OPEN FILE DIALOGS

If you undo, redo, restore a project or complete another edit while a load dialog is open, its older result is discarded. Open the load dialog again to import into the current sound.

TROUBLESHOOTING AND PRACTICAL TIPS

I CANNOT HEAR THE SYNTH

Check the instrument track's MIDI input, selection/arming and monitoring. Confirm that HARMONIX and the track are enabled, their levels are raised, and the DAW output reaches the correct audio device. Check the envelope Sustain and the mod-wheel destination. Bypass the effects rack temporarily to locate a processing-stage problem.

THE SUB IS WEAKER THAN EXPECTED

Check the register, harmonic balance and note length. Bypass Movement and stereo or phase-changing effects individually. Compare in mono. Raising Harmonics can change the fundamental's share of the normalized oscillator level, and strong saturation can change the balance further.

OCTAVE UP DOES NOT MAKE THE BASS LOWER

Octave Up adds a layer above the fundamental. Lower the MIDI notes or host-exposed Octave parameter to move the whole bass into a lower register.

MY LOW NOTE CLICKS

Try a slightly longer Attack or Release and check whether notes overlap. Low-frequency waveforms can make abrupt level changes audible. Also check for heavy clipping or short pitch dives, which can create a deliberately sharp attack.

GLIDE DOES NOT WORK

Enable Mono and Portamento, set a nonzero Glide time, and play overlapping notes. Legato affects the envelope behaviour during the transition.

THE LFO WILL NOT DROP ON A KNOB

Drawable LFOs work on supported continuous effects controls. They do not accept synth-page knobs, switches or type menus. Use a supported effects destination, the mod wheel or host automation as appropriate.

THE MOD WHEEL DOES NOTHING

Right-click the wheel and confirm a destination is assigned. A control already at its maximum has little or no remaining upward movement. Check the MIDI channel for shared post-synth destinations.

THE WAVEFORM DISPLAY DOES NOT MATCH THE EFFECTS

Static Wave Cycle models the core synth shape. Use the actual-output analyser and your ears to assess the effects chain. Display height is normalized, so the static waveform's visual size does not show the instrument's final level.

THE SOUND IS TOO BRIGHT OR ROUGH

Try fewer Harmonics, a higher Slope, less saturation or a lower Colour cutoff. Check folding and digital distortion stages individually. Add processing gradually and compare at a similar perceived loudness.

THE CLIPPER IS ENABLED BUT DOES NOT GLOW RED

Red indicates actual clipping activity. The clipper can be enabled without the signal reaching its threshold.

UNDO DID NOT RESTORE A KNOB CHANGE

The shared history covers user knob edits. DAW automation and internal modulation are excluded. History starts fresh after a project restore; very old steps can also fall outside the 64-step or sample-memory limit. Finish the gesture, then use the plugin Undo button or focus the plugin before using Command-Z on macOS or Ctrl-Z on Windows.

NOTES HAVE THE SAME LEVEL AT DIFFERENT VELOCITIES

The oscillator does not use MIDI velocity to scale its amplitude. Use envelope settings, suitable level automation or another deliberate performance approach for dynamics.

CPU USE IS HIGH

Reduce unnecessary active effects and overlapping voices. Mono can be appropriate for a single bass line. Reduce analyser frame rate if you do not need fast visual updates, and choose a suitable DAW buffer size for the session. Audition a complex patch with the rest of the arrangement playing.

PLUGIN NOT APPEARING

Confirm that you installed the correct operating-system package and a format supported by your DAW: VST3 on Mac or Windows, Audio Unit on macOS. Confirm processor architecture, restart/rescan the DAW and remove duplicate active copies. On macOS, check whether the DAW runs natively on Apple Silicon or through Rosetta. Do not disable operating-system security.

PRESET FOLDER OR SAVE PROBLEM

Choose Show Presets Folder.... If the folder cannot open or Save fails, check free space and permissions for your user folder. Confirm that a redirected or OneDrive-managed Documents folder is available on Windows. Save inside the HARMONIX user library. Preserve a valid existing preset if replacement fails.

PRESET OR PROJECT WILL NOT LOAD

Use a compatible HARMONIX version and the correct file type. A missing or invalid embedded sample prevents restoration; preserve the file and report the error. Confirm the same plugin format when reopening a project. For problems following an update, compare a backup project before saving over it.

AUDIO DROPOUTS OR CHANNEL ISSUES

Increase the DAW buffer size, reduce unnecessary effects and voices, and compare in an otherwise empty project. Confirm the intended mono or stereo output configuration and audio device sample rate. Record whether the problem occurs during playback, note input, preset loading or editor interaction.

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INSTALL AND OPEN

SYSTEM REQUIREMENTS AND FORMATS

Use a 64-bit DAW supporting your operating system and the selected format. The universal Mac package has a macOS 11 minimum and contains Apple Silicon arm64 and Intel x86_64 code. Windows uses 64-bit x86_64 VST3. Consult the product compatibility information for supported Windows versions and your DAW's requirements. Audio Unit is macOS-only.

BEFORE INSTALLATION OR UPDATE

Close your DAW and other plugin hosts. Back up important projects and user presets. Use the installer supplied for your operating system. Keep only one active copy of each format; preserve previous copies outside plugin scan folders.

MACOS INSTALLER

Run the HARMONIX .pkg and choose VST3, Audio Unit or both. The installer places HARMONIX.vst3 in /Library/Audio/Plug-Ins/VST3/ and HARMONIX.component in /Library/Audio/Plug-Ins/Components/. Both contain Intel and Apple Silicon code. Documentation is installed in /Library/Application Support/ERB N DUB/HARMONIX/.

If an earlier manual installation is in your user Library, preserve that copy outside the DAW's scan folders before running the system-wide installer. The installer stops when it detects a duplicate active user copy or a newer installed version. Existing system plugin bundles are copied to the product's Rollback documentation subfolder before replacement.

WINDOWS INSTALLATION

Use the Windows VST3 installer supplied with the Windows download and follow its instructions. The standard destination is C:/Program Files/Common Files/VST3. Windows may request administrator permission. Keep the complete HARMONIX.vst3 package and Resources intact. Do not put it in a VST2 DLL folder. Audio Unit cannot be installed on Windows.

OPEN IN YOUR DAW

Reopen your DAW and rescan its plugins if needed. Load HARMONIX on a MIDI or software-instrument track and route notes to it. Ableton Live and Cubase are examples of VST3 hosts; Logic Pro is a macOS Audio Unit host. Format availability depends on the DAW.

PROJECTS ACROSS PLATFORMS

Use VST3 on both systems and the same HARMONIX version. Audio Unit instances do not automatically become VST3 on Windows. Save .harm files to transfer sounds independently of projects; imported Noise Forge samples are embedded.

WINDOW AND DISPLAY SCALING

The readable content minimum is 1,100 x 750 logical pixels. Smaller work areas use scrollbars and recalled sizes fit the available display. macOS Retina and Windows scaling change physical pixels rather than the logical control size.

UPDATE, REMOVE AND REINSTALL

UPDATES

Close your DAW before running an update installer. Keep backups of projects and your user preset folder. After updating, confirm the version in Info, rescan if needed, and check your sound and automation before overwriting an existing project.

UNINSTALL ON MACOS

Close all DAWs. Remove HARMONIX.vst3 from /Library/Audio/Plug-Ins/VST3/ and HARMONIX.component from /Library/Audio/Plug-Ins/Components/. If you installed a user-only copy manually, check the matching folders under ~/Library/Audio/Plug-Ins/. Remove only HARMONIX. Documentation can be removed from /Library/Application Support/ERB N DUB/HARMONIX/ after preserving any needed rollback copies.

UNINSTALL ON WINDOWS

Close all DAWs. Use the removal instructions supplied with your Windows installer. For a manual VST3 installation, remove only the HARMONIX.vst3 package from C:/Program Files/Common Files/VST3. Do not delete the shared VST3 folder or another product.

KEEP YOUR CONTENT

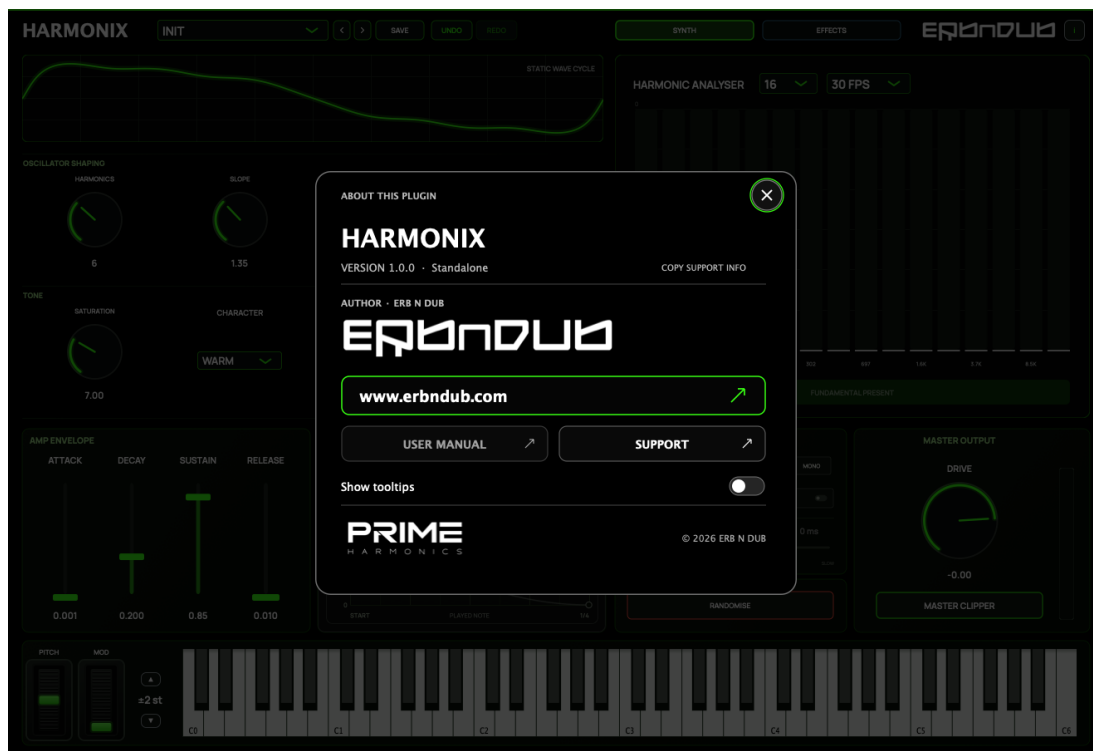
Removing the plugin does not require removing user presets, samples, settings or tooltip preferences. Keep your HARMONIX preset folder and backup copies. Reinstall the plugin without deleting that content; then reopen or rescan the DAW.

MANUAL AND ACKNOWLEDGEMENTS

Info → USER MANUAL opens the matching local PDF. The system-wide Mac documentation folder also includes the manual and Third-Party Notices. The Windows distribution supplies the same cross-platform manual and acknowledgements. Keep these files with the plugin.

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ABOUT AND SUPPORT



Info provides the local manual, support, product version and remembered tooltip preference.

THE INFO PANEL

Click the **i** button in the header. Info shows HARMONIX, its version and running format, with the ERB N DUB and Prime Harmonics logos. COPY SUPPORT INFO copies these details for support. Close with X or Escape.

LOCAL MANUAL AND SUPPORT

USER MANUAL opens the supplied PDF offline in your PDF reader. HARMONIX makes a versioned support copy in `~/Library/Application Support/ERB N DUB/HARMONIX/Manuals` on macOS, or `%APPDATA%/ERB N DUB/HARMONIX/Manuals` on Windows. If the bundled document is absent, open the supplied PDF directly. WEBSITE opens <https://www.erbdub.com> and SUPPORT opens <https://erbdub.com/contact/> only when clicked.

SHOW TOOLTIPS

Descriptive tooltips start OFF when no preference has been saved. Open Info and enable Show tooltips for help after roughly one second of hovering. Changes take effect immediately. HARMONIX remembers your choice across instances, DAW restarts and updates, outside presets, projects and Undo. Numerical control-value readouts and units remain available when tooltips are off.

CREATED BY ERB N DUB

Peter Chapman / ERB N DUB. Prime Harmonics.

ERB N DUB brings his experience as a producer, drummer, DJ and mixing and mastering engineer to the design of these tools.

WEBSITE

<https://www.erbndub.com>

SUPPORT

<https://erbndub.com/contact/>

HELP US REPRODUCE A PROBLEM

Include the product and plugin version, Windows or macOS and its version, computer model and processor architecture, DAW name/version, VST3 or Audio Unit, sample rate and buffer size. Describe exact steps and whether it happens in an empty project. Attach the relevant preset, sample location if importing, screenshot or screen recording, and crash report or DAW log where useful. Do not send passwords, licence secrets, payment details or unrelated personal files.

CONTACT

studio@erbndub.com

THIRD-PARTY NOTICES

Third-party software and font acknowledgements are supplied in the Third-Party Notices folder with the distribution. ERB N DUB is the product brand; Prime Harmonics is the secondary brand. Logos use the supplied original artwork.