Bitwig Studio 5.1



Bitwig announce Bitwig Studio 5.1, the second major update for their innovative DAW this year. This update introduces 10 new modules - four filters and six waveshapers - with 10 different sonic personalities. Some emulate classic structures, but most achieve their own, unique sonic qualities. They can be loaded into the new audio FX containers Filter+ and Sweep or used as patch modules within The Grid. The new four filters - plus a brand-new oscillator - are also accessible as modules in Polymer, Bitwig Studio's flagship semi-modular synthesizer. Additional voice stacking modulators have established a corresponding category, and important workflow improvements make audio editing faster and our mixer smarter.

5.1's filters and waveshapers offer more options for coloring sounds. All are available both as Grid modules or housed within the new Filter+ and Sweep devices. A cast of three new Character filters bring distinct personalities that can make a simple waveform dynamic and fresh, and a new formant filter speaks for itself. The six shapers provide different flavors, with each changing at various intensities.

- Fizz can sparkle, shimmer like a phaser, or vocalize like a formant filter. Two
 cutoffs give control over the main filter and the filter inside the feedback
 circuit.
- Rasp adds brightness and resonate nodes around its cutoff frequency.
 Additional modes and controls mean the filter can go from nasal to throaty, or take a scream down to a whimper.
- Ripple is a hyper-resonant circuit allowing both playful feedback or elemental destruction, with three modes: Earth, Wind, and Fire. Tends to lock onto harmonics. Good for acid sounds or acid rain.
- Vowels is a morphing formant filter with various models, pitch and

frequency offsets.

- Push is a soft clipper with a detailed curve. Push it lightly for juice and harder to elicit harshness.
- Heat is an S-shaped clipper that starts soft but can drive hard, adding some sizzle at high levels.
- Soar is a soft wavefolder that makes the quietest parts loud. Can bring out subtleties or add a zippy, metallic edge.
- Howl puts different parts of the signal into the loud focus. A glitchy and snappy finish.
- Shred is a non-linear wavefolder for subtle cancellation or big-time artifacts. Hissy and zappy.
- Diode models the classic circuit with modern, zero-delay math. Internal bias and filter controls make it a warm, familiar option.

Filter+ and Sweep bring The Grid's filters and waveshapers anywhere. These prepatched audio FX combine modular slots, clear interfaces, and built-in modulators, bringing color and movement to any track. Each filter and shaper can be swapped out or bypassed to suit your needs, and right-clicking the device will convert your settings to a modifiable FX Grid patch. Filter+ lets you pair any of our 14 waveshapers with one of the 10 filters. It's ready for any track, channel, or nested chain and even has stereo modulation options. Sweep is an expressive, performance-ready filter bank with two filter slots, one waveshaper, and a routing knob for smoothly blending through several configurations. With a joint frequency control for moving the filters together (or apart) and a one-knob stereo tilt, Sweep is great for detail work.



Bitwig Studio's unique voice stacking feature allows any polyphonic device (and even compatible plug-ins) to create multiple layers of sound. With 5.1, voice stacking is more powerful and easier to use. Up to 16 voices can now be layered for each note played, and there are more ways to shape these stacks. Eight new modes can be found in the Stack Spread modulator, putting harmonic, rhythmic, and even randomized relationships onto any parameter.

Three new Grid modules make creating a spread mode easy and offer full mixer controls for each voice, anywhere you want it. And whether you are using spread modes or reaching for the individual Voice Control modulator, any voice can be soloed for easy sound programming. And since Sweep and Filter+ are based on FX Grid, that makes three audio FX that can use voice stacking and polyphony. A great DAW gives you inspiring creative tools and an environment that allows you to work on music easily and efficiently. 5.1's workflow improvements target fundamental tasks like audio editing and mixing so that you can complete tasks your way.

A smarter, more flexible mixer allows you to customize Bitwig Studio's GUI so you can reduce visual noise and focus on the task at hand. Drag the track faders and meters taller to see levels in detail, or shrink track widths down to a sliver to see more at once. With multiple tracks selected, adjusting the width, volume, panning of one track will adjust them all. The mixer update also offers a cleaner layout with

scrollable sections for sends, better placement of comments at bottom, and redesigned track headers.

Bitwig Studio 5.0 saw improved onset detector analysis of audio, and this new update brings improved audio functions. This starts with audio playback, now offering a threshold setting to control which transients affect stretching. This fine control is also built into various Slice functions (Slice In Place, Slice to Drum Machine and Slice to Multisample), and each visualizes its operation in a dialog and on the timeline display. A new Quantize Audio function is now available as well. From that dialog, you select the beat interval to match, which onsets to move, and the amount they should slide.



Bite is a special dual oscillator available now in The Grid and Polymer. By giving its two morphing oscillators good anti-aliasing and connecting them to each other with feedback, a wealth of analog techniques are unlocked. Crisper hard sync. Audio-rate pulse width modulation, and with some very custom shapes. And exponential FM can go from polite to wicked in no time. Finish it off with volume controls for each oscillator, one for ring modulation level, and some pleasant analog drift when settings change.



Aside from Bitwig Studio 5.1 we've spent development time creating DAWproject, an open file format for taking your projects between Bitwig and other programs, like Studio One. And we worked with our friends at Derivative to make a native TouchDesigner integration with Bitwig Studio. Because the best thing audio performance software can do is work well with video performance software.

As of today, Bitwig Studio 5.1 is in beta and can be tested by anyone with a Bitwig Studio license and an active Upgrade Plan. Check the comparison chart to see which features, instruments and effects are available in the different Bitwig Studio editions.

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