

#### Bitwig Studio 5 | Reviews



#### THE PROS & CONS



MSEGs become more and more inspiring the more you use them

## Wavetable LFO is a great addition

Modulating mixer parameters offers lots of powerful potential



Depth and complexity won't be for everyone

Browsing user sample folders could be slicker

itwig Studio is nearly ten and, at this fifth iteration, has shed its reputation as an upstart Abletonalike. Relative user base numbers aside, as an application it certainly warrants being considered up there with the top-tier

likes of Cubase, FL Studio or Reason.

More so than many rival DAWs,
Bitwig Studio is an application with a

DAWs; perhaps unlikely to unseat the

truly big names, but sat alongside the

very distinct personality. Detractors may argue that much of that personality is based on that of Ableton Live, given their shared history, but from its second iteration onwards Bitwig has been heading in its own distinct direction. Think of the two like a pair of twins, one who has joined the police force and lives a lawful life, one sucked into a life of crime – two different sides of a coin.

Bitwig in 2023 puts a major emphasis on the interplay of its various systems, the flexibility of its modular devices and its ability to be tailored to a wide variety of platforms and use cases. As well as Ableton Live, the likes of Reaktor, Max and the hardware modular realm are equally obvious points of comparison.

The headline new feature for Bitwig 5 is the addition of MSEGs, or multi-stage envelope generators. In typical Bitwig fashion, these don't look like much at first glance, but become far more interesting once you consider how they interact with Bitwig Studio's other systems.

There are five MSEG types, named Curves, Segments, Slopes,

Transfer and Scrawl. These share the same basic interface, but differ in application. Each is focused around a pop-out window that offers a space to draw a custom modulation curve. This can be snapped to a grid set to various beat divisions, then shaped using an assortment of tools for both freehand drawing and quickly inserting various common shapes, such as squares, saw waves and triangles. As a setup, it's not dissimilar to the custom shapers in CableGuys' ShaperBox or the Function generators of Pigments.

#### THE ALTERNATIVES



**Ableton Live** From 89€

Live shares a lot of DNA with Bitwig but is more accessible at the expense of some creative depth, though Max for Live makes up for that.

ableton.com



**VCV Rack** Free (with paid versions available)

A more straightforward, hardware-inspired take on some of the modular concepts offered by Bitwig Studio. It's free to start too

vcvrack.com



#### Cableguys Shaperbox 3 \$99

The custom curve concept used by Bitwig's MSEGs is used brilliantly in Cableguys' popular multi-effect plugin

cableguys.com

Curves is a modulator, available to add to any device, for use within the Grid, or to modulate track and project settings (more on that shortly). It's essentially a custom LFO, constantly cycling based on a rate that can be free running or set to sync to a variety of timing parameters.

Segments is another modulator and functions in a very similar manner to Curves, albeit acting as an envelope triggered by each new note input, rather than a constantly cycling LFO. Curves has a few additional functions, such as multiple playback modes. These control how the envelope behaves during an assignable 'sustain' region of the modulation curve. In One-Shot mode it simply plays through once, start to finish. In Hold the modulation will stay at the end of the assigned sustain section until the note is released. Loop mode will cycle through the set sustain section, while Ping-Pong sees the modulation cycle bounce back and forth through the sustain section.

While both Curves and Segments are fairly straightforward at first glance, the fact that both can be used pretty much anyway in the DAW, and in unlimited numbers, makes them hugely capable. They can, for example, be routed to control any synth or effect parameter, including

all Bitwig devices, any third party plugin or – via the DAW's MIDI or CV utilities – any modulation input on a hardware synth. Curves and Segments, like Bitwig's other modulators, are also open to modulation themselves, allowing, for example, the timing or phase of the modulation to be controlled via MIDI expression or another modulator. Both feature 'smoothing' options too, allowing the rough edges of curve changes to be flattened out over a specified time period.

Version 5 ups the potential for these modulation routings by allowing modulators to be attached to both track and project-level settings. These are accessed via nested modulation slots found in each track's device chain. Attaching a modulator at the appropriate level means they can now be routed to things like a track's mixer level or pan, or even global settings like project tempo. How useful is all of this in practice? It's

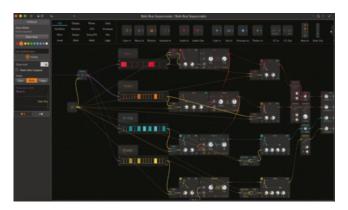
certainly neat to be able to apply LFOs to a track's pan position, and using long envelopes to modulate levels in the mixer is a nice way to bring elements in and out. I'm not sure how practically useful it is to be able to modulate or randomise project tempo, but the fact the possibility exists adds to the overall sandbox approach of the DAW.

Returning to the MSEGs, Slopes is a custom pattern sequencer available in Bitwig's modular Grid devices. It effectively allows users to draw a shape and then route it to modulate whatever they desire within that modular setup - from pitch to parameter settings, or even the rate of another sequencer. Scrawl and Transfer are probably the most interesting. These both work similarly to the other MSEGs, allowing users to draw custom curve shapes, but here they're used for audio purposes, as an oscillator and waveshaper respectively. Scrawl can be deployed

# The fact that Bitwig Studio isn't for everyone is actually to its credit

#### **VERSION TIERS**

With version 5, Bitwig is introducing a tiered system of versions at different price points – not unlike Ableton's Intro, Standard and Suite versions of Live. Here they're labelled Essentials, Producer and simply Bitwig Studio. There are no track limits on any version, but Essentials trims the device list to 40 instruments and effects and 10 modulators. Producer ups that to 92 devices and 18 modulators, but forgoes the deepest of Bitwig



devices. Studio has the full suite, and is the only version to include The Grid modular devices. In a neat touch, users of Essentials or Producer can still open projects created in more advanced versions, and any devices they don't have access to will still function, albeit in 'player' modes with limited parameters.

as an oscillator type both within the Grid and in Bitwig's Polymer synth (which can also use Segments in its envelope module). Transfer is exclusively for use within The Grid, although it can easily be used as an effect elsewhere via the Grid FX device, and will reshape audio around the custom curve, with a drive control that can really push the effect when cranked up. Both tools are lots of fun to play around with, making it easy to sketch out weird and elaborate shapes and see what sort of harmonics arise.

Bitwig Studio has a new file type that allows custom curves to be saved, recalled and shared between MSEGs. There's also a generous offering of preset curves. The interchangeability is great and there's lots of experimental fun to be had, swapping curve shapes between modulation and audio duties.

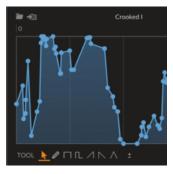
The MSEGs are a fantastic addition to the DAW overall, which prove more and more inspiring the more you play with them. Bitwig have included a bundle of new presets and sound content specifically aimed at showing off their capabilities, but the real fun comes from imagining the weird and unusual ways you can apply them into your own creations, and relying on presets is almost missing the point.

My one wish for future updates would be more capabilities to modulate the curve shapes themselves. You can modulate phase position and timing of each, but the actual curve shapes themselves are effectively static. It'd be great to, say, assign two or more curves and morph or modulate between them.

That said, you can do something similar using another new addition for v5, the Wavetable LFO modulator. This allows for any of the DAW's stock of wavetables to be used as an LFO source, with capabilities for modulating the table position. It's a fantastic tool for adding ever-shifting modulation to sounds - a potential secret weapon for ambient producers.

There are other, less high-profile changes and additions elsewhere though. Bitwig's browser has been overhauled and works brilliantly for finding instruments and presets, but isn't quite so slick when it comes to navigating through your own folders of samples. The Clip Launcher has been upgraded too with a new 'Alt' mode for launching scenes and clips via











MSEGs: All five MSEGs share a similar pop-out curve designer. allowing users to draw or import custom shapes

**MODULATION:** Nested modulators can now be added to control parameters at device, track or whole

BROWSER: The updated browser looks far smarter and makes it easy to search for instruments, presets and

CLIP LAUNCHING: New 'Alt' modes for the clip launcher add additional options to control the way scenes and

gestures, which offers some fun potential for live performers.

Taken as a whole, version 5 of Bitwig Studio is an unrivalled sandbox for creativity. It may be standing on the shoulders of giants, but no single piece of software before it has brought this level of all-round. accessible creative potential.

That said, the more tools Bitwig adds, the more elaborate the DAW gets. While the overall workflow is far from impenetrable, complicated projects can get somewhat unwieldy. Ultimately Bitwig is now at a point

where it offers capabilities that many music makers simply don't need, and those people are likely better served by more streamlined applications.

The fact that Bitwig Studio isn't for everyone is actually to its credit though – while some DAWs try to be all things to all music-makers. Bitwig have chosen to focus on a certain type of experimentally-minded, largely electronic user base. And it's all the better for that focus. For those interested in exploring its capabilities, there's nothing else on the market to match it. FM

### **FM VERDICT**

At v5, Bitwig Studio is hugely creative, experimental and deep. That won't suit everyone, but in its niche it's unrivalled