Qu-Bit Electronix Mojave



Qu-Bit Electronix announces availability of the Mojave module as its latest Daisy platform- based Eurorack entry - effectively kicking up a granular sandstorm as a live granular processor drawing inspiration from vast swathes of its American Southwest desert namesake by using microscopic bits of audio to create beautifully-crafted sonic landscapes while reinventing the way we interact with sound,

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seriously backing up the self-proclaimed ‘Future Coast’ modular synth-maker’s philosophy of building bespoke devices that push the boundaries of design beyond what is presently possible in the process - as of October 10…

It is fair to say that Mojave is a stereo live granular processor at its creative core, but, in reality, it is capable of so much more - not least when being pressed into play as a stochastic event generator. Mojave makes it possible for explorative users to patch together feedback-driven glitch textures or compose harmonic symphonies from a single droning oscillator. Other possibilities include creating a granular delay or scrubbing a locked audio buffer to create time-stretching effects - and all directly from the front panel of this 14HP-wide module.

Mojave can - in many ways - behave exactly like other granular processors, but what sets it apart in this realm is its ability to take complex granular manipulations and make then accessible to even the most novice of users. “Our first module ever was Nebulae, a granular looper; we've always wanted to do a fully-committed, live granular processor but with a ‘New-Bit’ twist,” confirms Qu-Bit Electronix CEO - and company co-founder - Andrew Ikenberry. Indeed, that ‘New-Bit’ moniker really reflects the company’s collective internal name for its new design philosophy of focusing on hands-on, approachable devices that leave room for users to push their own technique and explore sound design in new ways.

With this in mind, Mojave is no exception to this rule; for its front panel includes the fundamental controls for generating and manipulating grains - themselves the tiny building blocks of granular synthesis. Adjust a grain size, shape, and generation rate while also having control over the grain pitch, the position in time where the grain grabs audio, and the audio playback direction. Though these controls are essentially found in any granular processor, they only scratch the surface of Mojave’s potential.

Put it this way, then: the key to Mojave’s magic resides in the controls at the centre of the module. The two larger knobs there are absolute attention-grabbers - and for good reason, providing aleatoric grain manipulations in exciting, unquestionably ‘Qu-Bity’ ways. Turn the distribute knob to add rhythmic displacement to the grain rate; depending on which Mojave mode is selected, distribute’s displacement can either be asynchronous movements through time or quantised ratchets, repeats, and rolls that liven up the simplest of rhythms. Representing the flip side of the granular coin, as it were, the structure knob adjusts each grain’s pitch within a defined system. structure can - at its smallest setting - provide subtle semitone pitch changes, perfect for thickening up a sound, creating chorus/flanging effects, and more. But by turning up structure beyond halfway, Mojave begins to sing. structure starts to play through a quantised scale, introducing arpeggios and trills as the knob ventures further up; with the grain size large enough for grains to overlap, Mojave effortlessly transforms into a polyphonic sound generator -regardless of input.

Said structure knob and its rate (speed) neighbour are connected to Mojave’s Sky Mode - itself selected using the button in between distribute and structure - that determines what scale Mojave is quantised to. The default modes include major,

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minor, and chromatic scales, as well as the aptly-named, non-quantised Twilight Mode. Moreover, each mode will be fully customisable - alongside a host of configurable settings - within Narwhal, Q-Bit Electronix’s module web app for custom settings.

Since Mojave boasts true stereo I/O, it includes a couple of controls that emphasise this characteristic. drift does exactly as its name implies; it drifts the grains through the audio buffer, and the more the knob is turned, the more Mojave begins to slip into the past, grabbing random bits of audio from both signal channels to fill its grains. An adjacent whirl control provides random stereo panning to each generated grain; the more this knob is turned, the more frequent and wider the grains are panned, creating huge stereo sounds from any sound source - stereo or monophonic.

Mojave has more than one way to inject sound into its granular sandstorm, speaking of sound sources. Indeed, it even has an onboard, high-quality MEMS (Micro- Electro-Mechanical System) microphone that is positioned just above its USB port; simply removing any patch cables from Mojave’s audio inputs makes the microphone active, ready to pick up any acoustic audio! Try talking or singing into Mojave - or even play an acoustic instrument in a live setting - to bring granular flair to compositions.

Clearly, then, Mojave is primarily designed for live granular processing, yet users are afforded an ability to not only freeze the grains in place for glitch stutter effects, but they are also able to lock the audio buffer in place, thereby using Mojave as a granular buffer scrub; Mojave - at the right settings - can even mimic the time-stretching effects of its bigger granular sampler and DSP (Digital Signal Processing) platform sibling, Nebulae, now benefitting from v2.1.2 firmware itself. It is worth noting here that future firmware updates and alternative firmware for Mojave are accessible via its USB drive.

Meanwhile, Mojave’s granular engine can generate a plethora of audio effects that will transform any sound. Saying that, Q-Bit Electronix even included one final end-of- chain control to add some sparkle to an already dazzling device - namely, the gust knob. Which way it is turned determines control over either an internal feedback loop designed to tear grains apart in the best way or a lush reverb effect to fill the voids between the audio - alternatively, granular-textures-into-a-wash-of sound-morphing.

“Mojave is the module that’s gotten me excited about patching again,” admits Andrew Ikenberry, alluding to its configurable dune CV/Gate output and more connectivity besides, before enthusiastically continuing towards a natural conclusion: “There is something to be said about designing individual aspects of a module, not fully knowing how each part will interact with another; as such, Mojave has created sounds that I’ve never heard before, and it’s this journey into the unknown that - as a designer - gives me the opportunity to sit down and discover every corner of this amazing device along with everyone else.”

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Mojave is available worldwide from Qu-Bit Electronix’s growing global network of distributors with a price of $399.00 USD or directly via its dedicated webpage. (Note that with each Mojave purchased, a portion of the proceeds will go towards converting a portion of the Mojave desert that the company collectively holds dear to its heart through the Joshua Tree National Park Association.)

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