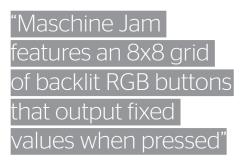# Native Instruments
Maschine Jam £319 PC MAC

Bringing 64-button step sequencing to the Maschine 2.0 DAW, can this new addition to the Maschine family change the game?

> If Native Instruments' awesome MPC-inspired hardware/software combo, Maschine (Mikro, MkII and Studio), has an Achilles' heel, it's that it's not ideal for step sequencing. With only 16 pads onboard, the non-real-time entry of note data into its grid has always been a secondary feature. Newer devices such as Ableton Push 2 and Novation's Launchpad make step sequencing far more viable with their 64-pad grids, so to fill this functional hole in Maschine's remit, NI have come up with a whole new branch on the Maschine family tree: Maschine Jam.

Like its siblings, Maschine Jam is intended for use with the Maschine 2.0 software, but can also be loaded with templates from NI's Controller Editor application, mapping its controls to other software, such as Ableton Live – see *Pushing it*. We're not going to get into the specifics of the software here, as it's already been covered in previous Maschine reviews, but in very brief summary, Maschine 2.0 is a 'mini DAW' that runs standalone or as a plugin, into which recorded (using Maschine's pads or any other controller input) MIDI data is used to trigger Groups of 16 Sounds, each Sound hosting Maschine's internal sampler, Drum Synth or any third-party plugin. Effects (both internal and third-party) are applied at the Group, Sound and Master levels, and Maschine 2.0 comes with a huge library of built-in sounds and presets, bolstered by an ever-expanding range of genre-specific Maschine Expansions, as reviewed monthly in our Mini reviews section.

Jam packed
The hardware looks great, with that characteristic understated NI styling, and the

> "Maschine Jam features an 8x8 grid of backlit RGB buttons that output fixed values when pressed"

buttons have a solid, positive feel to them. Oh, and it's USB-powered, so you can use it with your laptop without either being connected to a power supply. We do, however, wish the removable riser at the back was at a much steeper angle, and that there was a power button. We thought the days of 'unplug to turn off' USB devices were long gone...

While the regular Maschine centres on a 4x4 bank of velocity-sensitive pads for real-time note input, Maschine Jam instead features an 8x8 grid of backlit RGB buttons that output fixed values when pressed. This makes them far more conducive to step sequencing, where you generally want to 'click' steps in on the grid at a predictable velocity level.

Below the pads are eight touchstrips, which are used for manipulating mixer parameters, instruments and effects, as well as – interestingly – triggering notes and 'strumming' chords.

Also, unlike Maschine, Maschine Jam has no screen of its own, so clearly the traditional Maschine selling point of almost totally standalone workflow, requiring only the occasional glance at your computer display,

Get even more creative from your Maschine Jam by tweaking the awesome-sounding Perform FX

> "In Song mode, Maschine Jam is a pattern launcher. In Step mode, the top four rows become a step sequencer"
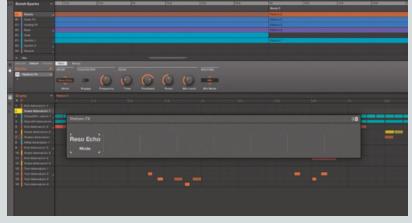
doesn't apply here. Instead, a series of on-screen overlays are popped up by the Maschine software, including a Komplete Kontrol-style browser, Scale mode controls, the Variation engine (see below) and more. These are navigated with Jam's single push encoder and directional D-Pad, the latter also used to shift the focus of the 8x8 grid in Piano Roll mode (see below) amongst other things.

Step up

What Maschine Jam's 64-button grid actually does at any time is determined by three top left buttons, which switch between Song, Step and Pad Modes, with the Shift modifier accessing further Piano Roll and Keyboard mode options.

In Song mode, Maschine Jam is a pattern launcher, with the patterns of the eight visible Groups arranged vertically in the 8x8 matrix (Group A, Pattern 1 on the top left button, Group A, Pattern 2 on the button below, Group B, Pattern 2 on the button right of that, etc). The numbered top row of buttons switches between Scenes, and the lettered bottom buttons select Groups (as they do in all modes). Working in Song mode is directly analogous to Ableton Live's Session View, with stacks of Patterns equating to stacks of clips, and Scenes roughly equating to, er, Scenes (but with free access to the shared pool of Patterns), launched and edited to build up arrangements on the fly. It's awesome, intuitive and fun, and live Maschine performers will love it – although unfortunately, there's no way to capture your jam as a linear project for later editing and refinement. We're told it's in the pipeline, though, in the shape of a whole new Song mode.

The incredibly powerful Lock function enables you to establish up to 64 project-wide

Perform FX

The effects equivalent of Maschine's Drum Synth, Perform FX is a brand new module (available to all Maschines, not just Jam) made for live processing of Groups using an array of purpose-built effects that are automatically assigned to the touchstrips in Perform mode, for immediate and spectacular Kaoss Pad-style results.

Simply hold Shift and press Perform to load Perform FX onto the selected Group, then choose an algorithm in the on-screen display (which just repeats the info in the main GUI and so feels redundant) from a list consisting of Filter, Flanger, vinyl-style Scratcher, two delays, ring modulator, Stutter (note repeats) and Tremolo.

With Perform mode active, touching a touchstrip engages the Perform FX loaded onto its Group, and sliding a

finger up and down controls a key parameter of it – cutoff Frequency for Filter, say, or 'needle' Position for Scratcher. Switching the strips to Control mode accesses the rest of the controls for the Perform FX on the selected Group, just like any other effect, including, in some cases, changing the parameter assigned to the main Perform mode touchstrip.

Like Drum Synth, Perform FX is designed and tuned to always sound 'good', so you can call it up in the heat of the moment, fling that main touchstrip control around and know exactly what you're going to get. And never mind 'good' – they sound fantastic, and we look forward to seeing what new algorithms get added to it in future updates, as they surely will.

'snapshots' (ie, the state of all mixer, instrument and effect parameters), then tweak levels, effects settings and all the rest of it, before snapping instantly or morphing smoothly over a user-specified amount of time back to any of those snapshots at the press of a button.

In Step mode, the top four rows of the grid

become a step sequencer (with the visible range shifted using the D-Pad), while the bottom-right 4x4 bank gives access to the 16 Sounds in the selected Group, each coloured to match the software, of course. The bottom-left 4x4 bank doesn't do anything yet, but we're told it'll eventually be used to switch between 16 velocity levels when sequencing, as it already can with Ableton Live's Drum Racks. This feels like a major omission, so we're very glad to hear it's being addressed. As it is, Maschine Jam's buttons default to entering notes at velocity 100, with Accent mode raising that to 127, but both can be adjusted.

Another marquee feature, Maschine Jam lets you simultaneously sequence multiple Sounds within a Group, dividing the grid up between them. Holding down the Step button lights up buttons 1, 4 and 8 on the top row, and pressing one sets the grid to represent that number of Sounds, dividing into four 16-step or eight eight-step horizontal lanes, for sequencing four or eight contiguous Sounds in the current Group. Obviously, this sacrifices the 4x4 Sound selector button bank, but it can be brought back momentarily by holding the Select button. Although it can feel a bit cramped in 8-Sound mode, with only eight steps visible at a time,

Maschine Jam's touchstrips provide plenty of hands-on functionality missing from previous Maschine incarnations

multi-Sound sequencing has already become our go-to mode for programming drums.

Melodic step sequencing is done in Piano Roll mode, which turns the grid over to pitched note entry, with time on the X axis, pitch on Y, the root note shown as a white-lit row, and a Scale mode for snapping the available notes to a wide range of scales. In both step sequencing modes, note length adheres to Maschine's grid setting, which can be adjusted from the hardware via the Grid button.

There's also a useful Variation engine that enables variable-probability randomisation and 'humanisation' of pitched and percussive patterns in terms of pitch, velocity, note length and more. By setting the Probability to 100%, the same engine can be used to quickly call up straight note repetitions – handy for hi-hats.

For real-time MIDI recording, the Pad and Keyboard Modes work just as they do with the other Maschines, albeit at fixed velocity. The first calls up a 4x4 bank of pad triggers that works like a kind of 'mini Maschine'; the second assigns the whole grid to a 64-note range for pitched play, and includes the aforementioned Scales functionality, as well as automatic generation of a variety of chords from single notes.

The function of the eight touchstrips is determined by the buttons on either side of them, and they can operate at the Master, Group and Sound levels. In Macro mode, they control Maschine's Macro knobs; in Level and Aux mode, they set volume, pan (Shift+Level) and Auxiliary send levels; in Control mode, they govern instrument and effect parameters. Holding down the Auto button records any touchstrip movements as automation. On the right-hand side, the Perform/FX Select button calls up and operates Maschine Jam's Perform FX (see *Perform FX*), Tune and Swing are self-explanatory, and Notes mode switches the strips to MIDI-triggering duties, where they're used to 'strum' defined chords, guitar-style, when swiped, or trigger individual notes within them when tapped – very cool.

A new paradigm

While Maschines Mikro, MkII and Studio are intended for real-time performance and MPC-style production, Maschine Jam is built for producers of techno, house and other styles to which step sequencing is fundamental. Like other Maschines, it's an empowering, inspirational and highly creative tool, enabling beats, basslines and melodic parts to be thrown together almost as fast as you can think them up, and offering a completely new way of controlling the Maschine 2.0 software that can only broaden the appeal of

Control Ableton Live using your Maschine Jam – and run Maschine plugins in Live at the same time

Pushing it

Like all Native Instruments controllers, Maschine Jam can be mapped to output whatever MIDI messages you like using the Controller Editor app. A template for Ableton Live is included 'in the box', enabling Jam to do a very passable impression indeed of Ableton's Push 2.

Pretty much every feature of the hardware works just as it does with Maschine 2.0. You get transport control; Session View clip and Scene launching; track selection and creation; and touchstrip control of all mixer (levels, pans, sends and auxiliaries) and plugin parameters, with full visual feedback through the adjacent LED strips (including level metering), and one-touch automation recording.

Most impressive of all, though, is the step sequencing, which employs the same split-grid setup for Drum Racks as Maschine's Step mode but with the bottom-left 4x4 bank of buttons used to change velocity, and full replication of the piano roll for other instruments. It's impressive stuff, and transitioning between control of Live and a Maschine plugin running within it – done at the touch of two Maschine Jam buttons – is a near-seamless experience.

Maschine Jam can't access Push's Scales modes, and doesn't have velocity sensitivity, access to Live's browser, or Push 2's gorgeous, informative displays and associated soft keys, but what it does have works brilliantly.

the platform as a whole.

Although you do, of course, need to look at your monitor and reach for the mouse far more than you do with Jam's screen-toting counterparts (eg, for editing notes and samples), that famous Maschine workflow is very much in effect, and after a short learning period (very short if you're already a Maschine user), you'll find yourself positively flying around the thing.

And the good news for existing Maschine users is that using Maschine Jam alongside one of its stablemates really does give you the best of both worlds, with Jam's buttons and touchstrips complementing the pads, displays and encoders of Maschine beautifully. Indeed, it almost feels like Jam represents a sort of 'macro' view of your Maschine projects, while the main Maschine acts like a 'details' view.

If Maschine has always struck you as too 'real-time' and performance-orientated, Maschine Jam may well be the hardware that convinces you otherwise. And if you already have a Maschine in your arsenal, we urge you to check out this truly excellent companion for it as soon as you can – it's a natural fit beside any of them. **cm**

In step mode, the bottom-right 4x4 grid lets you flick between the 16 sounds you've selected

Alternatively

Maschine MkII
cm185 » 10/10 » £469
The midrange Maschine, arguably the best in terms of bang for buck

Ableton Push 2
cm226 » 10/10 » £499
Maschine Jam is great with Live, but it doesn't top the in-house option

Verdict

For Superb step sequencing
Versatile, responsive touchstrips
A new take on Maschine's workflow
Complements Maschine perfectly
Also a great Live controller

Against No velocity adjustment yet
Needs more 'mouse time' than Maschine
No power button

A fabulous step sequencing controller for the Maschine software, and the perfect adjunct to any of its 16-padded brethren

9/10