Expressive E Osmose

Synthesizer and MPE MIDI Controller

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Osmose is a synthesizer and MIDI controller with 49 keys by Expressive E. The internal sound module is built by Haken Audio. While Osmose's software, sounds, and capabilities are evolving, the hardware itself is not brand new. Judging from the strong interest from composers and musicians, the expressive capabilities, the Augmented Keyboard Action (A.K.A.) keybed and what MPE can do is still new to most users. This is a review of Osmose but it is based on integrating it into a real-world music ecosystem with using third-party tools, MPE, and concrete workflow challenges.

MPE (MIDI Polyphonic Expression)

MPE distributes additional MIDI information for each note individually over different MIDI channels. You can play a chord and have one or two notes affected by pitch bends, for example, while the third note is not. In conventional MIDI, the pitch bend would affect all the MIDI notes. MPE offers a lot of control, but it is a little more tedious in some workflows. Fortunately, there is a mode in which Osmose acts as a conventional MIDI controller, and several modes between regular MIDI and MPE. In a day-to-day workflow, the following question arises: Do you want the editing ease of having your pitch bend on one MIDI channel, or the control to the pitch bend of every each note individually? I opted to switch between MPE, poly aftertouch, and classic MIDI keyboard settings based on what I was playing. Just like Osmose, MPE is a developing system. Synths like u-he's Hive 2 and Diva started to support MPE since 2024.

First Impressions

Osmose arrived well packaged, with a concise first-steps manual. The build is first class, and with 8.5kg this feels more substantial and lasting than most MIDI controllers. The design is both stunning and timeless. The keys and the mechanism feel solid and very thought out. Osmose has 49 keys and currently does not come in

any other configurations. The dimensions are 898 x 316 x 88mm.

When starting Osmose, it instructs you not to touch the keyboard - and you should listen to that as it is calibrating during booting. Once it asked me to boot again, probably to recalibrate. The high-end display features a clear and simple menu. It did not take very long for me to wonder why most keyboards have a mod wheel, when you can have a mod “slider”. I find Osmose’s slider much more ergonomic and user friendly.

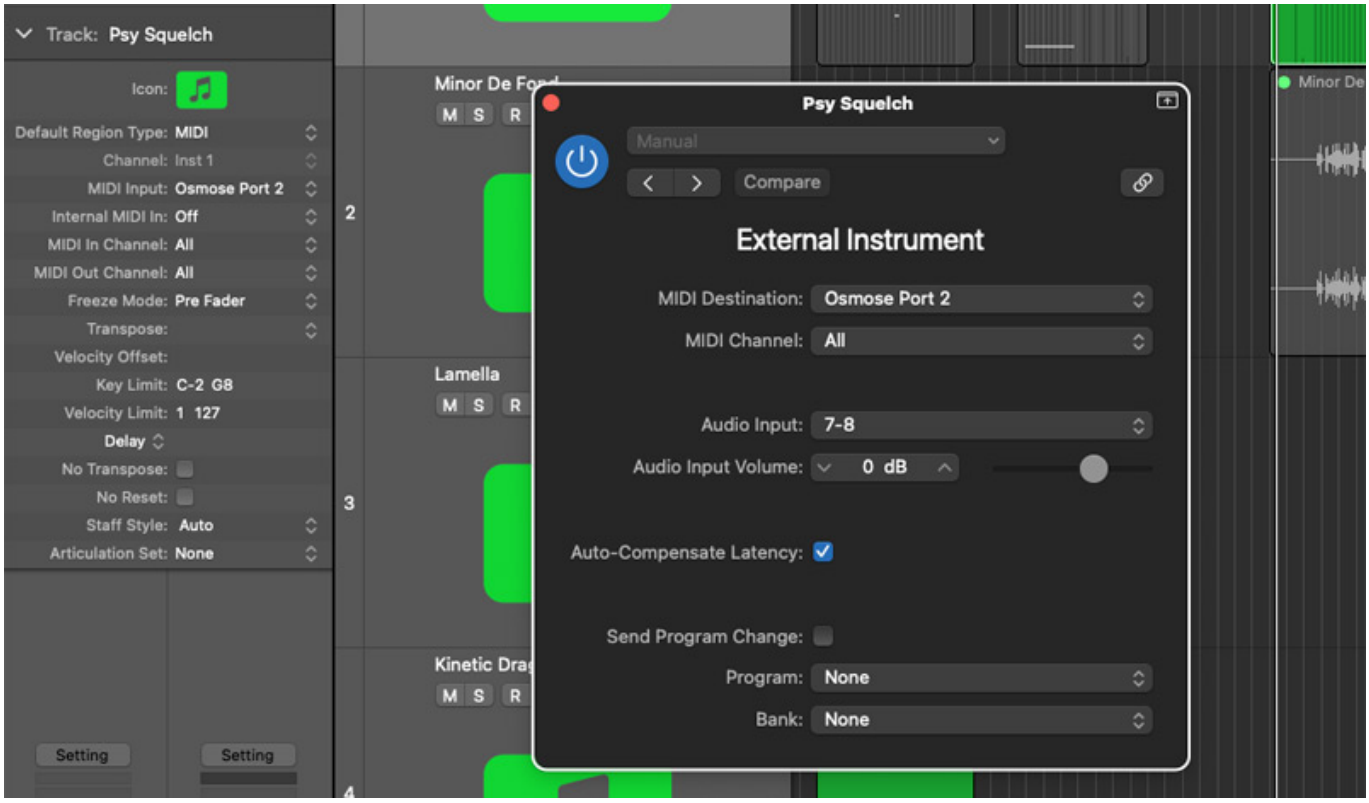
In my first tests, I wondered about a couple of omissions. After installing the latest firmware, a number of new features, sounds, and improvements appeared. Organizing presets is now as easy as one would expect in 2025. The video for the current firmware update teases further additions and improvements. In other words, Osmose is actively supported and developed.

Two MIDI ports

When you connect Osmose to a Mac, two MIDI devices automatically pop up in the system and Logic. Osmose MIDI port 1 lets you use it as controller for other sound sources. Osmose MIDI port 2 lets you control the synth via MIDI. The integration with Logic is easy - instantaneous with perfect delay compensation and flawless

bounce-in-place on port 2. It is almost as easy as using a virtual synth. I used Logic's External Instrument plug-in and assigned the two master outputs of the Osmose to a stereo input in my audio interface / Logic. It is possible to send MIDI program changes with Logic to Osmose to get one step closer to total recall.

Osmose as a Controller



An important workflow question is how much of the capabilities of Osmose and MPE translate into the day-to-day work of a composer / music producer.

Orchestral Tools' Sine Player does not support MPE, but with the poly aftertouch setting, you can still kind of a create a type of vibrato by "vibrating" the key left to right. This motion combined with a very delicate setting (1/48 bending), translates it into gentle pitch-wheel movements that often work well as a vibrato.

Technically, for high-end samples, the vibrato is often baked into the sound or trigged by a keyswitch or MIDI command, so it really depends on the patch, but in a number of string solo samples, the "key vibratos" were convincing and more expressive than without.

The same approach and settings worked well with Spitfire Audio's own player. Spitfire also does not support MPE, but the Abbey Road Flutes reacted in the same way to the "key vibrato", and it also helped with phrasing and expression.

Native Instruments currently offers five Kontakt libraries that do support MPE and

has released their own MPE controller.

Real Instruments

Composers work daily with high-end samples of traditional instruments (once) performed by real players. The trade-off is that total control like with a synth is not possible. Osmose gets more out of my virtual orchestral instrument plug-ins than a regular keyboard. It gets even more out of a synth that supports MPE, but the custom-onboard synth is not only more expressive, but it is also the best showcase for the controller.

The bansuri and flute transverse presets have a warm, rich, and detailed sound, but most importantly, they demonstrate what is possible with this controller. A “real instruments” soundset for the Osmose synth would be interesting. My number one wish would be a sampled classical instrument library or VSTs with the same control, created in cooperation with Expressive E and experts in sampling real instruments. I was very excited to hear about an upcoming cooperation between Audio Modeling / SWAM and Expressive E. SWAM models classical instruments without samples, which means that they could design custom controls that respond to every gesture / data point the controller has to offer.

Virtual - Synths

In the synth world Hive 2, The Legend, Phase Plant, and Expressive E’s own Noisy 2 have done exactly that - created custom presets especially for to the Osmose with Expressive E.

Dawesome's Myth is an MPE synth plug-in (see screenshot above) that has uses special Osmose settings and visualizes pitch bends per key.

Sound Particles' SkyDust supports MPE. So does Baby Audio's Atoms. With both synths, it was easy to get some extra color and expression. Newfangled Audio's Generate is a synth with a lot of bite, distortion, and interesting filters. Osmose and MPE added an entire new layer of mayhem to that. As mentioned before, Hive 2 and Diva now also support MPE. Both offer a simple MPE front panel activation, and in both cases, there are presets that really benefit from MPE. A brief test on Studio One's synth Mai Tai also yielded good results.

Overall, matching my performance to the filter movements of the patches led to another level of detail. For example: regular pressure, then higher aftertouch pressure for more brightness, regular pressure and then a gentle pitch bend up, in time, in quarter notes, on an evolving synth sound created powerful pulses and extra variety. Expressive solos with strategically placed vibrato, color changes, or

pitch slides worked well on for all the synths.

Osmose as a Synth

Initially, the built-in synth engine by Haken Audio was not high on my priority list. While talking to other composers and producers, their questions usually were also about the controller and the keys, rarely about the synth. Hardware has almost become a liability in a world of constant total recall and working on a laptop on the road. Having said that, playing with the built-in engine did change my perspective. The combination of the custom engine and the controller made me aware of how much fluid control and expression is possible. It sets a new benchmark and made me try to match that level with external sound sources.

The Eagan Matrix by Haken Audio offers 24 voice polyphony, plenty of synthesis options and 500 presets. There is an editor for Mac and Windows and 128 empty presets for custom presets. There are a number of electronic patches that I enjoyed. Just like with every synth, there are sounds that you just click through, and some you add to your favorites. The preset “flute transverse” adds more breath when using the mod slider, and when combined with a gentle finger vibrato, this creates a wonderful expressive sound. The overall quality of the engine is very convincing, and with Osmose MIDI port 2 integration into Logic I will use Osmose not only as a controller, but also as a synth.

As mentioned above, while you can integrate MIDI program changes, I would still bounce in-place and name tracks with the Osmose patch name to be able to

continue work on the road or when the Osmose is not available. I am close enough to total recall for my workflow. In an emergency, it will take less than a minute to revert to the MIDI file, fix it, and re-bounce in place with the correct synth preset.

In Practice

For some users, it may make sense to have both their old MIDI keyboard and the Osmose. Sometimes, I produce for hours and just play simple chords for seconds in between, for those cases a simpler bus-powered MIDI controller might be useful.

It is also an extra step to regularly change from MPE, to poly aftertouch and classic keyboard regularly, but it is well worth it. The keyboard of the Osmose almost instantly makes you play legato material with more expression and unlocks intuitive nuances without learning curve. There is no way I would use a regular MIDI keyboard for any solo or lead instrument with the Osmose available.

The controller worked flawlessly without any issues throughout all the tests. The Haken Audio module went silent on me once. Reinstalling of the firmware update fixed that issue. The only real glitch appears to be a feedback loop warning screen when you are using the synth with Logic. I have found other Osmose / Logic users with the same experience. When you confirm the screen, the synth works as expected.

Conclusion

This is a professional tool, and it takes a little bit of commitment to get the most out

of this device. Everything is clean and simple, but it needs a calm hand to wait for the synth to boot and to navigate through the menus. This also means getting used to changing from synth to controller and within the controller between the different modes, as well as checking which plug-in can and cannot receive MPE, and how to activate it.

I received the Osmose shortly before Christmas, and I caught myself a several times being transported to my childhood, where I could not wait to play with my latest toy. The additional control and expression opportunities are just too exiting. At some point during our Christmas party, the musicians and composers among the guests were in my studio marveling at this game changer. In the days after, I received follow-up questions and visitors for the Osmose. It is an inspiring piece of gear, and it instantly impacted my scores and productions.

Osmose gets you a step closer to the controls a guitarist or cellist has over the nuances of their performance. It can add life to electronic music and it offers a more direct way for a media composer to respond to an image. It makes all the difference if I have to draw all kinds of MIDI information with a mouse or if I can just play with the right feeling. Osmose is available from Expressive E’s website for around 1.800 Euros/ US$.

To get a sense of some of the playing techniques offered by Osmose and my tests, here are some videos:
https://s.disco.ac/uzkmxaolewrc

www.expressivee.com