



## Korg Wavestate £699

The Wavestation is reborn in a revamped package. **Si Truss** asks if this is more than just a trip down memory lane...

**CONTACT** WHO: Korg **WEB:** [korg.com](http://korg.com) **KEY FEATURES** Digital Wave Sequencing 2.0 synthesizer. 64 stereo voices across four timbral layers. **I/O:** Stereo TRS L/R outputs, headphone output, power, damper pedal input, USB. **DIMENSIONS:** 565 x 338 x 93 mm





## THE PROS & CONS



Nails the original Wavestation sound while offering lots of new tools

**Very well-priced considering the power onboard**

Randomisation tools are handy for generating ideas



**No aftertouch from the keyboard**

Born out of the ashes of Sequential and their Prophet VS vector synth, the original Korg Wavestation was one of the defining instruments of the early '90s. At a time when sample-based synthesis was coming of age, the Wavestation stood out primarily for the weirdness of its source material – where rivals were trying their hardest to recreate the sound of classic organs or nylon-string guitars, the Wavestation

layered up its more conventional instruments with oddball percussive sounds and ambient textures for a far more unique sound palette.

Key to the Wavestation's character were two elements: the vector synthesis inherited from Sequential, which allowed users to crossfade between four separate waves, and its own wave-sequencing engine, whereby multiple waves can be assigned to a sound sequentially to create evolving timbres, patterns or even simple drum grooves. It proved popular, particularly with ambient and

soundtrack producers, or those simply looking for a ready source of interesting pad sounds. Despite its success, the Wavestation never really received a proper follow-up, beyond a couple of rack versions and a slightly expanded EX model. Now some three decades after the original's heyday, Korg are rectifying that fact.

Wavestate sits on the spectrum between a remake and a sequel. On the one hand, this is very much designed to capture the sound and feel of its predecessor, right down to classic vector joystick and inclusion

of a fair few recognisable waves featured on the original (or one of its expansion cards). The Wavestate also expands on the underlying tech in a number of interesting ways though.

Korg are calling the engine here 'Wave Sequencing 2.0'. As with the original, the Wavestate makes use of multiple sound layers – up to four here – each of which can contain a wave sequence of multiple PCM samples or a standard multisample patch, and can be stacked or split across the keyboard. The main difference here is that the engine

## THE ALTERNATIVES


**Modal Electronics Argon8** £649

The Argon8 is a complex wavetable synth at a similar price point, albeit with just eight voices of polyphony.

[modalelectronic.com](http://modalelectronic.com)


**Sequential Prophet X** £2,800

Sequential's sample-powered polysynth is powerful with tons of modulation options. It comes at a steep price though.

[sequential.com](http://sequential.com)


**ASM Hydrasynth** £1299

An exciting new wavetable poly from a new brand founded by former Arturia and Akai developers. Includes polyphonic aftertouch.

[ashunsoundmachines.com](http://ashunsoundmachines.com)

uses a system of six lanes allowing sample selection, timing, pitch and modulation to be programmed independently. These allow the source waves and the playback conditions to be sequenced with independent timings or sequence/loop lengths. As a result, you can set up some interesting patterns which seem to transform indefinitely without repeating. Each layer makes use of an optional Master Lane too, which can control and reset the timing of the others. The steps in each lane can also be assigned a probability, which lets the user add an extra element of sonic randomisation.

The vector synthesis element of the original is present too. This allows modulation parameters to be assigned to the four A, B, C and D axis of the vector grid, movement between these can then be controlled manually using the front panel joystick, via the dedicated five-stage, looping vector envelope or via an external MIDI input. The joystick and envelope work

together, so that when envelope modulation is engaged, the joystick affects the modulation start position. In its most simple setup, vector modulation can control the relative volume of the four layers, allowing for morphing between four sounds. You can assign the four modulation signals to a whole host of destinations on both individual Layer and global Performance levels though, so the options of what you can achieve with the vector system are extensive.

There's a lot more to the Wavestate's modulation options aside from this though. There are per-voice envelopes and LFOs for amp, pitch

and filter, plus an additional LFO for pan position (each of the Wavestate's 64-voices is stereo). All of these feed into a flexible modulation matrix which not only lets users assign modulation sources, destination and intensity, but allows for a secondary modulation source to be applied to each routing to control the depth of the modulation. Along with the envelopes and vector grid, modulation can be controlled from the front panel mod wheel, MIDI and expression pedal inputs as well as six front panel modulation rotaries. These come with parameter names including 'shape', 'sample' and 'timing', although these

---

You can set up interesting patterns which seem to transform indefinitely

---

## RANDOMISE IT!

Despite being easier to get your head around than the original Wavestation, programming sounds for the Wavestate can be time-consuming. The addition of a parameter randomisation tool is handy, giving users an instant method of generating unique sounds. This is done simply by hitting the dice icon on the front panel and pressing enter. The results are truly random, so you're as likely to create an awful result as an inspiring one, but since the process is so quick, it can be lots of fun rapidly randomising patches until you land on something that sounds good enough as a starting point for manual refinement. You can dictate what, and by how much, parameters are randomised too. This is handy, as



it lets you set the boundaries of what is autogenerated, letting users apply randomisation to, say, just the effects, the arp or the wave sequencer of a layer. Percentage amounts dictate how far the randomiser strays from existing settings too. The tools can be used to add a little variation to existing sounds, offering a quick way to make the existing presets a little more unique, or simply inspire something new.



are suggestions rather than hard rules of what they control; the factory presets often adhere vaguely to these suggestions, but each rotary can be routed to anywhere in the mod matrix.

There is a pair of modulation processors onboard too. These allow for modulation sources to be transformed in a number of ways, such as offsetting, quantising or reshaping the incoming modulation curve, setting conditions or summing multiple input sources. This description only really scratches the surface of the synth's modulation abilities though, and there's not enough space to go into full depth here, suffice to say it all adds up to a deep and powerful instrument.

There's one omission on the modulation front though, in that there's no aftertouch from the built-in keyboard (although it does have velocity and release velocity). The Wavestate receives polyphonic aftertouch via external MIDI, but it's a shame not to have it built in.

One of the weaker aspects of the original Wavestation was its filter, which lacked resonance and character. Korg have remedied that here with the inclusion of multiple resonant filter models, including emulations of both the Polysix and MS-20 filters. A front panel button lets users flip quickly between Polysix LPF, MS-20 LPF and a 2-pole HPF model, as well as a fourth selection labelled 'more'. This fourth option actually reveals a total of 12 filter models, including multiple 2- and 4-pole variants, both low- and high-pass MS-20 models and a Multi Filter, which effectively offers three filters at once. The Polysix and MS-20 filters have a high gain option too, to emulate filter overdrive.

The final element in the Wavestate's signal path is a multi effects processor. This has three effect slots per-layer, labelled Pre-FX, Mod-FX and Delay, plus global Reverb and parametric EQ. There's a broad range of processing on offer here. The Pre-FX slot can act as various forms of compressor, amp modeler, EQ or tremolo/ring modulator, while the Mod-FX has a host of chorus, phaser and ensemble modes. There's a wide variety of emulated delays and reverbs included too, and most of the effects can be modulated from the synth's main mod matrix. It all adds up to yet more sound-shaping power for an already powerful instrument.



**LAYERS:** Double pressing any of the four layer buttons can quickly engage or bypass each of the sound engines

**JOYSTICK:** The look of the vector joystick control mimics that of the original, but it's even more powerful

**STEP BUTTONS:** Act as a setlist for recalling sounds or as a step sequencer for lanes of a wavesequence

**EFFECTS:** The synth packs three per-layer effect slots along with global reverb and parametric EQ processors

As with many digital instruments of its era, the original Wavestation lacked front panel controls and was laborious to program. Fortunately, Korg have done a lot to rectify that, with plenty of controls for hands-on manipulation. So a row of front panel buttons let you jump between steps in each Lane's sequence for quick editing, and the screen responds intelligently to movement from the rotaries and buttons, displaying the relevant editing page when needed. The same 'step' buttons used to edit sequences also act as a quick access Set List, allowing Performances to be arranged and recalled easily.

That said, the Wavestate remains a complex instrument and building sounds from scratch can still be time-consuming. One of my first experiments with the synth was to load a completely empty Init patch and build a complex custom sound from scratch. While the process wasn't frustrating, aided by copy/

paste functions and a well-designed sound browser, it also wasn't something that could be achieved quickly. While the Wavestate is far more accessible than the original Wavestation, the additional lanes and modulation also add a lot of extra complexity. The results certainly rewarded the effort put in though, and the additional hands-on control makes tweaking of existing presets more effective too, so creating your own unique sounds needn't always mean starting from scratch.

Taken as a whole, the Wavestate is an excellent instrument. Korg have done a fantastic job of walking the line between being faithful to a classic and offering something new. Sonically, the synth nails what Wavestation fans expect – even just as a preset machine, this is an awesome source of rich, pulsating pads, oddball textures and powerful multi-timbral patches. As with its predecessor, there's a distinctive,

digital quality to the overall sound (even with those emulated filters), though I don't mean that as a negative – the engine is capable of being detailed and complex in a way that isn't possible with an analogue poly. The price is a winner too; particularly so given the voice count and multi-timbral engine. This has future classic written all over it. **FM**

## FM VERDICT

# 9.6

**Pays tribute to a '90s classic and offers cutting-edge sound design tools. A fantastic update to a much-loved synth line**