

KORG SIGMA

Just over two decades ago, Korg released a preset monosynth that let you tweak and edit sounds to a staggering degree

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ost old-timers who rabbit on about their first in-depth synth experience usually wax lyrical about huge walls of Moogs and long-forgotten ARPs. For me though, it was a more humble beginning. I remember the day well (cue wobbly going back-in-time sound effects)... 1979, lurking around the music department at school, listening to Equinoxe — much to the annoyance of everyone within earshot — and in walks the deputy headmaster dragging a trolley behind him.

"Oi!" he shouts. "You! You're into these synthesizer type things aren't you? See if you can get this thing going." And there, on the trolley was a brand new Korg Sigma that had apparently been donated by the Parents Association. Things would never be the same again.

MONOSYNTH MANIA

Prior to the Sigma, Korg had produced two other preset monos. First there was the 900PS in 1975 followed, in 1977, by the popular M500 Micropreset (of OMD's *Enola Gay* fame). However, the Sigma was altogether something quite different. It's quite a big synth for a mono with rather chunky wooden end cheeks, an expansive sloping main panel

and a curiously cluttered performance panel off to the left of the keyboard.

Just looking at the Sigma, there are a few clues to tell you this is not your typical preset synth. The most obvious eyecatcher is the performance control panel with not one but two joysticks. Then there's the array of 29 knobs lurking above the extremely organ-type rocker tab switches. And then you realise that isn't this pretty damn big for a preset mono?

Well, friends, behind those Bontempi-style rocker switches does indeed lurk an amazingly powerful synthesizer. You can coax sounds out of



The Korg Sigma has powerful sounds and editing capabilities

this machine that you'd really have to go modular to recreate. So let's get busy with the Siggy.

SHOULD BE SECTIONED

The Sigma is divided into three sections: the Instrument section, Synthe (Korg speak for Synth) section and Effect section. The Instrument section has 11 rocker switches - one for each preset sound - and remarkably useful they are too. Select any combination of rockers for interesting multi-layered sounds.

Each of those little knobs I mentioned earlier lets you tweak a set parameter for each preset sound. So adjusting the knob on the Hammered Percussion preset changes the decay or the pulsewidth of the Clavi or the cutoff frequency of the Trumpet. Thankfully most parameters selected for each given preset are chosen well and this hugely increases the palette of sounds available.

The Synthe section has nine tab switches offering a various assortment of waveforms including pulse and square waves at various footages with various envelope shapes. As in the

Instrument section, each of the accompanying knobs lets you control a given parameter and, in the Synthe section, these are primarily envelope generator functions since filtering control for the Synthe section is carried out via the VCF joystick.

Here you also find Ring modulation (which uses the synth and instrument oscillators), a Noise Generator and Sample + Hold with a variable clock. As in the Instrument section, rockers can be activated in any combination.

The Effects section is better described as a control section, letting you Transpose up or down an octave, switch the delayed vibrato on or off, select multiple triggering and route the synth and/or the instrument sections to the pitchbend joystick. You also set the overall tuning here, with a separate knob for the Synthe sections. A good effect is to slightly detune the synth section for even bigger deeper sounds.

Now let's get to the cool stuff. Both the Instrument and Synth sections can be

mixed together with an adjustable Balance knob. As mentioned earlier, the filter cutoff frequency for the Synth section is controlled via the VCF joystick. However, this doesn't affect the Instrument section at all, so there is plenty of scope for interesting weird filtered sweeps. Over a deep bass drone, for example, the VCF joystick gives you control of the low-pass filter in the X axis and the high-pass filter in the Y axis, so we're not talking conventional low-pass sweeps. This is full-on multimode filtering.

The downside is you have to do this manually of course, and unfortunately there's no resonance control. But these are the very same filter chips that you will find in an MS20 ... and the Sigma has 10 of them!

Other neat things include the more conventional Korg joystick performance controller which is used for pitchbend and modulation effects, although here you can choose just to bend the Synth section or just the Instrument section. The Sigma also has an aftertouch sensor which can pitchbend down or up or add delayed vibrato. Again you can choose this for the Synth, Instrument or both.

Portamento can be switched on permanently via the effects section or temporarily using the large momentary button on the performance panel. After a while, you develop a nifty technique for manipulating the filter with your thumb and forefinger while stabbing the Portamento button with your middle finger and flicking the pitchbend stick with your pinkie. You might look like your left hand has been horribly jammed in a blender but you can't half put some funky expression into the dullest of basslines!

FIRST IMPRESSIONS DECEIVE

Although you might not think it by looking at it, the Sigma can sound massive with a broad spectrum of sounds. It can be as sweet and soulful as an ARP Axxe or as spiky and aggressive as a Moog modular. The Sigma has some limitations, especially the lack of resonance, and a half decent assignable envelope generator would have been handy, but let's not get too picky.

You can quickly access a huge variety of excellent sounds thanks to the presets but if you sit down and start exploring, it has the capacity to occasionally stagger you. That's what makes the Sigma special. It's one of the synth world's best kept secrets.