



Seven-in-one

Product from Frequency Central brings together several of their existing modules into one semi-modular device



Frequency Central's new semi-modular device 'Product' is very much a 'best of' full synth voice in a semi-modular format,

as it has an updated version of the System X oscillator (based on the Roland System 100m), the Raging Bull VCF/VCA (based on the Moog Taurus filter and amplifier), the System X envelope (their super snappy Roland System 100m ADSR generator) among other things.

We've counted seven functions with the oscillator, LFO, mixer, filter, VCA, envelope generator and noise source. It's fully modular and patchable; however, it does have pre-patched normalised signal paths so you can simply plug in a keyboard or sequencer and get to fulsome synth voice action right

away. Plugging in your 1v/oct pitch source will control the oscillator and normal across for variable filter tracking. The LFO is normalised to the FM and PWM on the osc and the filter cutoff. Your gate signal not only starts the envelope generator but can also gate the VCA-like organ on/off behaviour and the VCA itself can be controlled by the envelope or gate, or be set to drone.

The filter really sings when you mix both the onboard oscillator and an additional one, giving you options to mix analogue and digital sources for wider ranges of tones and as this is modular you can run the output through a range of devices for effects, further filtering, distortion and more. Add Frequency Central's Klang Stadt oscillator and State 700 mk2 filter modules for a wider range of tones.

Getting to know Product

For our tutorial we have some additional Frequency Central modules on hand to push the tones of 'Product' further

01 >

Before trying to push beyond the norm it's important to understand the basics. Set the VCA to drone and play with the oscillator and filter sections to explore the tone and internal routing on Product. Add modulation with the onboard LFO to animate the sounds.



02 >

We're big fans of audio-rate modulation and while Product sings with external modulation, try patching the triangle output from the oscillator into one of the filter modulation inputs, any will do. Adjusting the filter cutoff, emphasis and modulation depths will result in new harmonic structures.



03 >

Let's turn Product into a percussive synth voice. Patch the envelope output into the oscillator FM input, and also use the pre-routed modulation of filter cutoff and VCA to create classic analogue synth drum sounds. Low sustain and fast attack will give good results.



04 >

We can create a thick unison phasing sound by using the saw wave and pulse waves mixed into the filter and modulating the pulse. Use the onboard LFO with a high depth of modulation and a slow to medium LFO to get things moving.



05 >

Having additional filter colours adds a lot to a synth, so we're going to add a high-pass filter module to the patch. Modulate Product's low-pass with the envelope and patch the LFO to modulate the external high-pass for shifting tonal band widths.



06

Another oscillator will add a new sound dimension. Use a digital wavetable oscillator for a new tonal palette to mix into the analogue voice. Try using the onboard oscillator as a sub against the external wavetables and use the filter to modulate the mixed sound.

