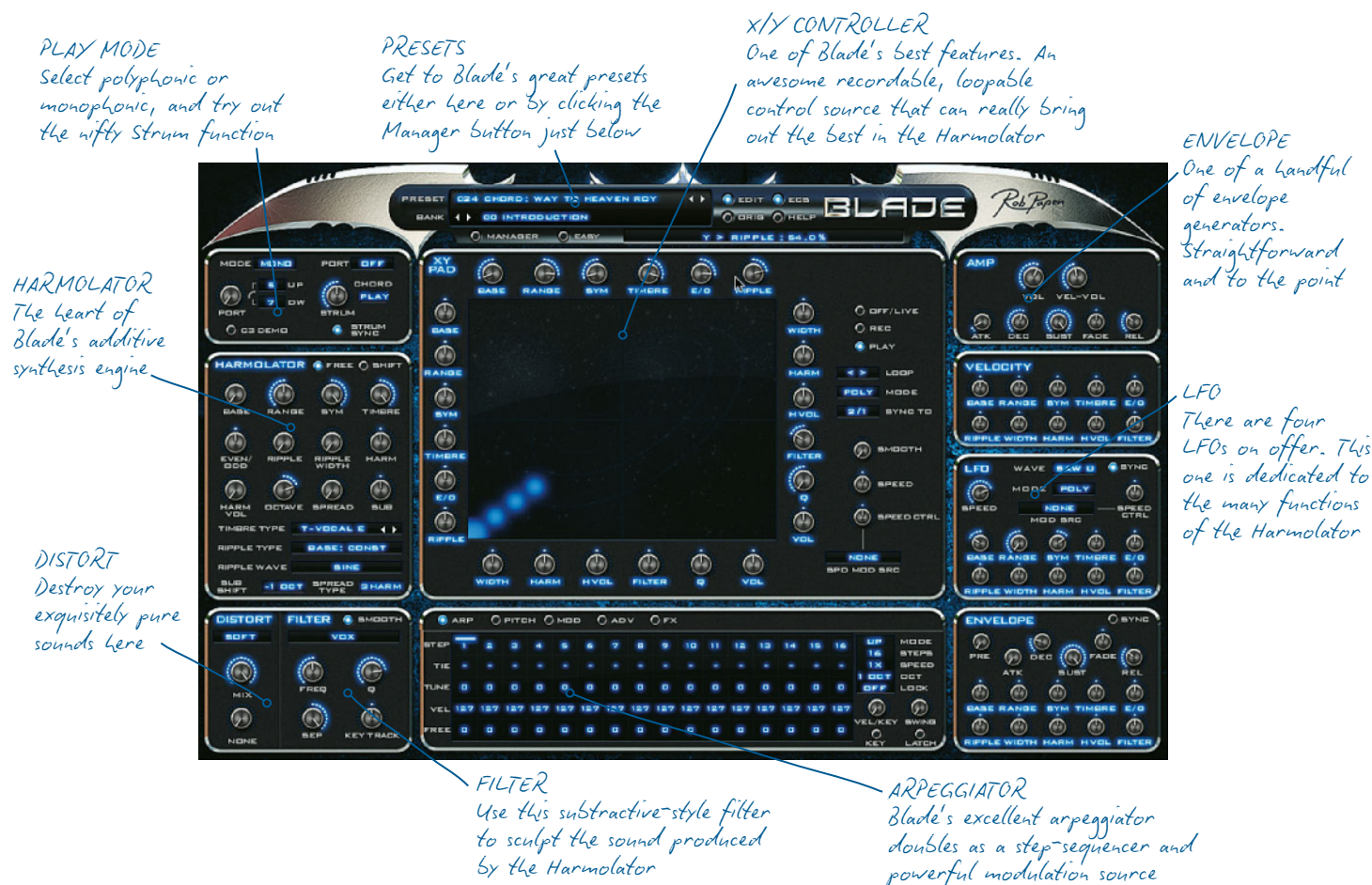




Rob Papen Blade £99

PC MAC

The team that brought you SubBoomBass hefts its additive axe – does their new synth have what it takes to cut through the mix?

> Has additive synthesis become the hipster darling of the music production world? You might think so, were you to tick off all of the variations on the technology currently available. Developers seem hell-bent on simplifying the technology, bringing users its uniquely rich sounds without the headaches traditionally associated with additive instruments.

Rob Papen and Jon Ayres' newest brainchild, Blade, represents a different approach to additive synthesis. Ayres is certainly qualified for the job: his killer additive synth, ConcreteFX Adder, championed the now-familiar approach of offering a set of individually adjustable partials that could be grouped together and then modulated en masse via envelopes, LFOs, etc. That seemed simple compared to 'true' additive instruments, which provide pitch, phase and amplitude envelopes for each of dozens or even hundreds of partials. This time around, the concept has been streamlined further.

"Blade entirely sidesteps the concept of manually adjusting individual partials"

Similar to other recent additive synths such as NI Razor and Image-Line Harmor, Blade entirely sidesteps the concept of adjusting loads of individual partials (aka harmonics) in isolation. Instead, you get an oscillator section known as the Harmolator. This provides a dozen controls that access the most important aspects of the additive engine, affecting the harmonics in sweeping swathes of sonic manipulation. It's an interesting take on the technique, and one

that's in keeping with Papen's desire to provide inspirational music software.

Sharp dresser

Blade comes in AU, VST and RTAS formats. 32- and 64-bit versions are offered for both PC and Mac (with the exception of RTAS, which isn't available in 64-bit for OS X). An AAX version is also in the pipeline.

The GUI is large and tightly packed with loads of (rather small) knobs. It's a tight fit, to be honest, and a little crowded with so many parameters to tweak. A tabbed area in the lower middle section helps with this to some extent, providing access to all the things that didn't fit on the main display – effects, modulation, pitch controls, an 'advanced' page offering control over envelope curves, velocity, and so on. As this is a Rob Papen synth, the sophisticated arpeggiator is front and (bottom) centre by default, topped by a massive X/Y controller.

"If you like deep, moving pads or wild wobulating effects, Blade is the place to find them"

The Harmolator is the source of Blade's power, and it's the equivalent of the analogue oscillator section in a traditional subtractive synth. It's designed to take the hassle out of additive synthesis, though some knowledge of how it works will go a long way towards creating sounds with any sort of intent.

There are controls for Even/Odd harmonic levels, Harmonic Vol, Timbre and Base frequency. There are some new things in here, too: Ripple and Ripple width, Sym and more. All of these provide easy, global control over the typical additive functions that lurk just beneath the Harmolator's surface. You can also choose from various Timbre and Ripple Types, and add a sub-oscillator. For more on the Harmolator, see *The difference (in the) engine* to the right.

Once you've gotten past the Harmolator, you'll find a familiar virtual analogue-style synth engine, including a fully loaded distortion section and a multimode filter with no less than 14 filter modes (expect several low-pass, high-pass and band-pass varieties, along with vocal and comb modes).

The envelope generators are fairly standard five-stage models (ADSR plus Sustain Fade). Amp, pitch and the Harmolator get dedicated EGs, while two others are freely assignable. The Harmolator's envelope benefits from an extra Pre stage that delays the action.

Pitch and Harmolator both have dedicated LFOs, and there are two free LFOs to work with as well. There are six different waveforms to choose from, and tempo sync is an option.

Here come the mods

Typically for a Rob Papen synth, Blade comes with an arpeggiator that can act as a mod source. It'll sync to host tempo, and it can be latched and have swing applied. It can also be used as a mini step-sequencer – a welcome option for those of us tired with the same old up/down arpeggiator patterns.

Another equally effective modulation source is provided in the form of an X/Y controller. This has routing knobs so that it can be sent to all of the Harmolator's functions, as well as filter



Rob Papen is a master patch programmer, and it shows in Blade's voluminous collection of presets



The Timbre Types help to determine the harmonic spectrum that you'll be working with

The difference (in the) engine

Additive synthesis is based on the fact that any sound can be broken down into dozens, hundreds and even thousands of sine waves, each changing pitch, amplitude and phase over time.

Traditional additive synths gave you access to these waves (called 'partials' or 'harmonics'), as well as means by which they can be modulated. Due to the sheer number of partials required to make typical sounds, the job became labour-intensive in a hurry.

The current crop of additive soft synths take a different approach, Blade included. Its Harmolator simplifies the process using ways to edit partials as a group. The 16 Timbre Types determine

which partials will be present. The Base frequency determines the frequency of the fundamental, while Range affects the width of the harmonic spectrum by determining how many partials will be affected relative to Base. Symmetry weighs the spectrum to lower or higher frequencies, and Ripple creates peaks in the harmonic spectrum.

While Blade can't replicate, say, a complex acoustic sound with the detail possible with traditional additive synthesis, it gives you easy access to the most important aspects. Blade makes quick work of the sorts of shimmering, digital tones that only additive synthesis can create.

cutoff and volume. You can program its action or record your own path in real time, and playback can be looped and locked to tempo.

Cutting edge

There's much more to Blade than we can cover in the space we have here, of course. It will come as no surprise to learn that the synth has two effects processors built in, each loaded with plenty of options. And, as a Papen product, you would rightly bet that it is weighed down with a ton of stellar presets (though there are some real stinkers in there, too, it must be said).

It all adds up to an instrument that excels at evocative, evolving soundscapes. If you like deep, moving pads or wild wobulating effects, this is the place to find them, and Blade will be of particular appeal to those who are growing weary of the same old virtual analogues and sample-playback instruments. If, however, you're after the absolute control offered by a full-on additive synth, you'll want to look elsewhere. Blade is about cutting through the academic minutiae and getting the job done – and that it does very well indeed. **cm**

Web www.robpapen.com
Contact Time+Space, 01837 55200

Alternatively

Native Instruments Razor
cm165 » 9/10 » €69
Additive synth with VA-style controls and a killer sound

Image-Line Harmor
cm174 » 9/10 » \$149
Another hybrid, with subtractive filters and resynthesising

Verdict

For Wicked arpeggiator/sequencer
X/Y controller is pretty slick
Great for pad sounds
Relatively easy to use
Isn't a virtual analogue or a ROMpler!

Against Envelopes are a bit 'standard'
Harmolator still takes some learning

Rob Papen's take on additive synthesis has some clever tricks up its sleeve and does the business sonically

8/10