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Spectrasonics PC MAC PERFORM AND PERFORM A

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ON THE DVD

AUDIO + DEMO

The creators of Atmosphere have finally unleashed their flagship synth, amid the sort of hype you might expect around a Hollywood movie

System requirements

PC 3GHz CPU, 2GB RAM, Windows XP (SP2)/Vista, VST 2.4/RTAS host, 50GB HD space

Mac 2GHz G5/Intel CPU, 2GB RAM, OS X 10.4.9, AU/VST 2.4/RTAS host, 50GB HD space

Test system

Mac 2.16GHz Intel Core 2 Duo iMac, 2GB RAM, OS X 10.4.11, Cubase 4, Live 7 Unless you've been in another galaxy for the past year or so, you've no doubt witnessed the Omnisphere hype machine in full swing. From cryptic full-page adverts and online videos to tantalising hints on web forums, anticipation has been at fever pitch. But can it live up to all that? Yes, in short, for Spectrasonics have wrought something of a sonic masterwork in this, their new flagship product. It's bursting with a brilliantly conceived sample library and possesses a crackingly good synthesis engine.

Despite rumours to the contrary, installing Omnisphere is not a full day's work. Spread across six DVDs, getting to the playtime stage occupied just over three hours of our afternoon. Once you've got it installed, it's available as a VST, AU or RTAS plug-in. Do note that the stated system requirements are a tad heavy, demanding a minimum of 2GB RAM. Still, we tried it on a machine with 1GB RAM, just to see, and it was quite usable, if not sprightly.

Architectural digest

Making use of Spectrasonics' new synthesis engine - known as the Steam Engine -

Omnisphere sports a familiar structure. A patch is composed of two layers, each housing a complete signal path consisting of up to five oscillators pumped through a dual multimode filter. Each oscillator can be based upon the much-lauded sample content or pure synthesis routines (see boxout for more on this).

At the most basic level, the Main Controls page offers quick access to global filtering, octave position, pitchbend range, velocity scaling and glide controls. You can select the desired sound sources and mix between the two layers.

Clicking into the Edit page brings up the basic synthesis parameters. All of the expected modulation sources are offered, including a sextet of LFOs and eight envelope generators. Though the latter appear at first glance to be of the four-stage ADSR variety, a click on the Zoom button reveals a thoroughly modern multistage affair, complete with loop points and the ability to sync. Likewise, clicking the modest Modulation section's Zoom button reveals a full mod matrix with no less than 28 sources and 64 targets.

This sort of hidden complexity is rife throughout the instrument's architecture. Rather

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"Here's a multi-layered instrument in which each level offers still deeper sound control"

than befuddle us with a bevy of parameters and lofty terminology, the developers have presented a multi-layered instrument in which each level offers still deeper control over the sound. Many users will no doubt be happy to make a few broad tweaks and hone the presets.

Pause for effects

In addition, FX and Arp pages are present and correct. There are over 30 different effects - you can choose up to four per layer and another four 'common' effects to slather over the lot, plus four Aux FX racks and a Mastering rack. A selection of preset single and multi-effects patches are provided. All of the usual suspects are in play, including reverbs, delays and EQs, along with some groovy extras, like a Valve Radio effect.

Unsurprisingly, Omnisphere has a built-in arpeggiator for each patch. 32 steps are provided, and you can spread your burblings across four octaves. Naturally, there's a swing function. Less predictably, the whole thing can groove-lock to the rhythm of a Spectrasonics Stylus loop or that of any MIDI file.

You can also have up to eight patches on the go at once using the Stack Mode, which also enables you to set up keyboard/velocity/controller splits and crossfades.

A sound design

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Omnisphere's collection of samples is nothing short of astonishing, amounting to over 40GB of content. From classic synths to electric/acoustic instruments, virtually any and every sound source imaginable has been tapped. The 'psychoacoustic' selection contains not only the now-famous burning piano, but also melting circuit boards, human screams, light dimmers and bowed, well, everything. The sound designers have avoided obvious gimmickry and instead crafted their samples into inspiring, musically useful instruments. There are hundreds upon hundreds of sound sources here and it was hard finding more than a handful that didn't intrigue, inspire and engage our imaginations. Oh, and did we mention that the entire Atmosphere Core Library is included? You



Hidden beneath Omnisphere's simple ADSR envelope generators are flexible multistage monsters!



Omnisphere's sample set is as cool as it gets, but don't overlook its dynamite DSP synthesis

Synthetic dreams

As noted, each layer in Omnisphere is equipped with up to five oscillators that can draw upon the sample library or synthesised waveforms. By selecting Synth rather than Sample in the oscillator section, you can choose up to four different waveforms, all generated in real time. There are, of course, triangle, sine and noise waveforms, along with hybrids called SawSquare Fat and SawSquare Bright, but that's only for starters.

When using synth waves, the oscillator controls adapt to include Hard Sync, Symmetry and Shape parameters, along with an Analog knob for adding a dash of desirable imperfection. Said

controls give the power to create a wide variety of rich, complex waveforms that can be further enhanced by frequency and ring modulation, waveshaping, and Omnisphere's wicked unison functions.

There's also something called Harmonia, which brings in additional polyphonic oscilators, with panning, level, detune and waveshaping controls for each of the four voices (Unison and Harmonia are likewise available to the sampled waveforms, along with a keen granular synthesis function). All of this appears at the oscillator level, so you can, of course, pump it through the rest of Omnisphere's architecture and combine it with the provided samples.

can download an update for all of Atmosphere's factory patches as well.

Omnisphere isn't without its faults, however. The default level of some of the patches is very high, even to the point of distorting the output bus, and the synth's demands on the host system can be considerable with some patches. Some users may also be fairly disappointed to learn that they can't import their own samples.

Nevertheless, it is a remarkable achievement, providing a wealth of material for both preset players and seasoned synthesists. Best of all, Omnisphere begs to be played, and it responds easily and naturally to MIDI control.

Omnisphere isn't the last word in virtual instruments. It won't give you The Perfect Piano or provide a 'band in a box'. It is, first and foremost, an evocative sound design tool, and we'll surely be hearing it all over movie trailers, soundtracks and advertisements in the coming months – for the professional, it's an obligatory purchase. The price tag might appear a little daunting, but anyone who coughs up the dough will get far more than they bargained for. **cm**

Contact Time+Space, 01837 55200 Web www.spectrasonics.net Info Upgrade from Atmosphere, \$249

Alternatively

Camel Audio Alchemy N/A >> N/A >> £127

Out soon, this employs additive, spectral and granular synthesis and has loads of sampled content

Dangerous Bear Prometheus N/A >> N/A >> \$100

This Windows-only instrument caters to those with unusual tastes

Verdict

For Brilliant, creative sample set
Excellent patch programming
Deep synthesis functions
Huge number of modulation options
Atmosphere sounds included, too!

Against Some patches too loud Requires plenty of RAM and speedy CPU

Omnisphere is a magnificent instrument and while it isn't easy on the wallet - or the CPU - you won't feel shortchanged

10/10

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