softwarestudionews

Phoenix Rising

In his continuing Adventures in Software, Rich Tozzoli's path leads him to the Crane Song Phoenix plug-in.

In the never-ending mission to combine the best analog properties with those of digital, Crane Song has come up with an interesting set of TDM plug-ins—the Phoenix suite.

Designed by Dave Hill, well known for his electronics on ATR Service's Aria discrete tape recorders, Phoenix was specifically designed to digitally model analog tape compression. According to Crane Song, "the Phoenix process not only incorporates the nonlinear saturation characteristics created by magnetic tape itself, but also includes the interrelation of analog tape recorders' record/produce electronics and equalization curves." Whew, glad they said it!

The Phoenix suite features five separate plug-ins, all emulating different tape characteristics. *Luminescent* is the most "neutral" one of the bunch. *Iridescent* features a similar magnetic character, but with more mid and bottom. *Radiant* has a more determined compression curve and *Dark Essence* kicks that aggression up a notch. *Luster* begins smoothly, but becomes further like Dark Essence when pushed to full scale.

As you can see from the graphic, the Phoenix GUI is as easy to use as they come, with a large Process level knob, Input Trim value box and three choices of buttons; Gold is a flat frequency response, Sapphire is brighter and Opal features a warmer tone. The large Process Level knob determines the amount of process in your audio signal. It's that simple. The useful Input Trim can be pulled down to prevent clipping, and when set to zero with the Process Level set to OFF, the plug-in is bit accurate matching input to output.

When I first tried Luminescent on a Telecaster guitar track, I wasn't exactly sure if I was hearing anything different, even when switching the three selection buttons. It's a *very* subtle effect, but as I listened closer and put the mix back up, I "got it." It did increase apparent loudness with a very slight rounding of the top, yet there was no real volume increase. I then put Dark Essence on Fender Rhodes and thickened it up a bit. I found Radiant to work well on loops, pumping them up without becoming obvious. Varying Process levels with Gold, Sapphire and Opal, I discovered the overall Phoenix effect to be a cumulative one. It's one of those plug-ins you have to hear to understand its specific result. When trying to explain it to others, I often say it's not exactly a sound I get with an EQ, a compressor or a leveler. It's a warm sound that, well, sounds like analog tape.

Phoenix's overall coloration is also dependent on signal level, audio material and sample rate—higher sample rate resulting in smother sounds. Phoenix is quite DSP-efficient, with the company claiming 20 instances on a single chip at 44.1 kHz. To use it, you must have a Pro Tools TDM Mix or HD rig running 5.1.1 or higher on OS9 or Pro Tools 6.0 or later on OS 10.2.4, with a TDM version for Windows XP just made available as well. You also need an iLok USB Key and an iLok account (come on already, you folks who haven't done this!). Check out a demo for yourself at www.cranesong.com.

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Still Waters, Deep Currents

Last issue, we covered Apple's presence at NAMM, which was pretty much universally acknowledged as the biggest computer-oriented news at the show. After all, there weren't any significant host program upgrades from the other usual suspects. But while the world of software-based pro audio seemed quiet on the surface, there were actually some fairly profound developments.

One of the most intriguing was Roland opening up the architecture of its V-Studio hardware platform to outside plug-in developers. The plug-ins run on an expansion board with general-purpose DSP that supposedly offers relatively secure copy protection. Clearly, software thievery has plug-in manufacturers on the ropes, and this might provide a way to help amortize R&D costs a bit.

But this is also significant because it signals that the all-in-one studio is no longer a "just for hobbyists" product category. With many of these devices offering CD burners, DVD burners, high-resolution audio, video monitor support, and now, plug-ins (that show up on the monitors!), computer-based systems have some real competition in terms of feature set, not to mention the ergonomic advantages of an all-in-one setup. And at current prices, you don't need a lot of clients to amortize the hardware costs.

Virtual instruments remain big, too. Korg finally showed the Legacy Collection of virtual instrument plug-ins the company has promised since the 2003 Frankfurt show. The package includes a virtual MS-20 synthesizer, virtual Polysix and Wavestation, along with 20 processing plug-ins and a 4/5th-size hardware controller that's a replica of the MS-20 for under $500. It's an interesting trend: companies emulating their own synths (which Roland has also done with its VariOS system). What's next, a virtual DX7 from Yamaha (who also introduced a set of signal processing plug-ins)?

And plug-ins in general are getting more sophisticated. For example, the Spectrasonics Stylus RMX and PowerFX Miracle Beats are sample libraries/instruments in plug-in form with advanced audio engines that can separate out beats and filter them, send them to separate outputs, change mixes, and so on. This makes sample libraries far more flexible, putting them more in the categories of "instruments" than ever before.

Traditional sample libraries are stretching out, too, by throwing huge amounts of storage at the problem of creating realistic sounds. Although we've all heard sampled pianos before, Synthogy's sampled piano, Ivory, has 25GB of data spread over 3,500 samples.

And for playing back samples, one of the biggest announcements of the show was Tascam's updating of GigaStudio into three separate versions at different price points. The latest update adds 24-bit playback, real-time convolution processing, ReWire support and the ability to host VST plug-ins. It's pretty clear that hardware samplers are on the wane; even E-mu, long a holdout for hardware, introduced the Emulator X, a software instrument with a choice of hardware I/O. It samples (not just sample playback), and includes an integrated waveform editor with DSP tools, comprehensive format support (Giga, HALion, EOS, EIII, Akai, EXS24, etc.), over 2GB of samples, automated preset cataloguing across network drives, sampling engine with 50 Z-plane morphing filters, and hardware-accelerated multieffects. Impressive.

But there was more to NAMM than plug-ins. In other news, Minnetonka Audio introduced the first truly low-cost DVD-A authoring system. Its $99 discWelder Bronze app produces very basic DVD-Audio discs (nope, no fancy menus), but the price is certainly right. Windows is available now, with Mac next.

And are we about to see the beginning of vintage software reissues? Cycling 74 adapted Intelligent Music's innovative improvisational program M, long a victim of incompatibility with operating system advances, for OS X. It looks and feels just like the original.

But perhaps the news item with the most impact for the future is Yamaha's introduction of second-generation mLAN, which is faster and more developed than the original version. To underscore the point, the company showed the i88X, an mLAN-based audio and MIDI interface with two mic and six line inputs. It can serve as an expansion device in an mLAN network or as a standalone 18-channel computer I/O. It was wired up to a Motif keyboard and the 01X controller, and it was unsettling—but in a good way—to see multiple channels of audio and digital being carried over a single optical cable. If your credo is "simplify your life," the idea of replacing a zillion patch cords with a simple, efficient hookup is pretty appealing.

Craig Anderton's latest book is Sonar 3 Mixing and Mastering, *published by Wizoo/Music Sales; his latest sample CD is* AdrenaLinn Guitars, *released as part of M-Audio's ProSessions series. Check out his music at www.craiganderton.com.*