

Innuos PhoenixUSB and PhoenixNET

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This is the easiest review to write. The Innuos PhoenixUSB reclocker and PhoenixNET network switch have been featured in the magazine before (the PhoenixUSB in issue 184 and the PhoenixNET in issue 194) and have not changed since their reviews.

However, when used together, there is a commonality of purpose and a superb upgrade for existing Innuos server users and more.

However, a quick recap is needed for those who don't have every edition of *hi-fi+* on hand. Both are identical-looking, half-sized boxes resting on three chunky feet. The PhoenixUSB has a single USB input and output and features a regenerator, oven-controlled crystal oscillator 24MHz clock, and a very low noise 5V rail, all powered by separate linear power supplies. This replicates the USB stage within the Innuos Statement Next-Gen server (itself the subject of a review in issue 215).

Meanwhile, the PhoenixNET is an audio-dedicated network switch running at 100Mb/s instead of the noisier Gigabit Ethernet protocol. Noise is further minimised by short signal paths and clean power supplies feeding the chips. Avoiding traffic priority circuits and switching regulators (not needed for audio use) also contributes to noise reduction. Even the usual method of reducing noise (opto-coupling) is eschewed because converting light back into an electrical signal introduces more noise than it removes from the system. Once again, a custom clock runs the show like oven-controlled, crystal-oscillating clockwork!

Wait!

Innuos recommends that both products be powered up for two days before critical listening. This isn't about 'running in' a new product (neither sample was exactly 'new'), but it's partially necessary to ensure that those clocks are functioning at the correct temperature. I couldn't help myself and listened straight out of the box and... yeah, give it a couple of days! »



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» To evaluate the two as a pairing, I used them with both an Innuos Statement Next-Gen and an original Melco N10 outputting to the DAC. The PhoenixNET replaced a Nordost QNET network switch. The Melco perfectly showcased both the strengths of the two Phoenix products taken separately and together. The Innuos devices added a sense of order and calm to the sound without undermining the energy of the musical content. Given the many 'Zen' products in the Innuos range, it's almost ironic that the two that bring that nearly meditative calm to the sound are called 'Phoenix'. But it's also a very apt name as the sound is reborn from the ashes of noise.

The little 'tells' show how much this Phoenix duo helps improve the performance. I played the atmospheric 'Albo Gator' by Michael Brook [*Albino Alligator*, 4AD], which is essentially hang drum, percussion, and spoken voice, with clever use of reverb to give it a swampy feel. Prior to including the Innuos duo, the hang and voice are dominant, but with the PhoenixNET and PhoenixUSB in place, the cicada-like percussion becomes more a part of the mix; it's still insistent and ever-present, but more 'there' in the music than before.

While the two Phoenix products are not working in sync, they act in harmony. A lot of commonality of sound makes the two sound better than the sum of their parts.

That sense of quiet order grows on you the longer you spend with the two Innuos Phoenix products. Even when playing something choppy and deliberately disordered like 'Terminal Slam' by Squarepusher [*Be Up A Hello*, Warp], the Innuos duo make it seem more understandable and less like someone committing atrocities on a sequencer.

However, as an Innuos Statement Next-Gen user, I'm probably the least likely beneficiary of the powers of PhoenixUSB, and in truth, the PhoenixNET did most of the sonic heavy lifting here. Even when used with the Statement, there's a gain to be had by utilising both Phoenix models, providing a performance boost over using the PhoenixNET alone. I wouldn't automatically recommend both to Statement owners (the improvement is there, but it isn't as marked as in other systems). However, I would strongly recommend the PhoenixNET. It benefits the Statement Next-Gen through its no-noise approach to networking, and they are both visually and sonically on the same page.

That said, if you want to extract the last scintilla of performance from the Innuos Statement Next-Gen (maybe you prefer the more 'direct' sound of this model over the latest ZEN Next-Gen, tested in Issue 240), then the combination of the Statement Next-Gen, PhoenixUSB, and PhoenixNET represents the pinnacle of that design. If you are

using one of the original Innuos ZEN models and don't intend to make the jump to the higher-end models, the PhoenixUSB and PhoenixNET complete the system brilliantly. If you plan to do this in stages, go with PhoenixNET first; however, PhoenixUSB is excellent, but the lower the noise coming into the server, the better.

One more thing

There's one last element to consider. Most people who know about Innuos do so because of its server products. However, those with older rival models who might be looking for a replacement... well, the Innuos PhoenixUSB and PhoenixNET together serve as the perfect introduction to the line. The boost in performance will enhance your existing server, so you may not feel an urgent desire to switch server products quickly. However, when you do, the likelihood of not choosing an Innuos product after discovering what these two can do is slim. As a proof of concept for Innuos for someone with an existing server, this Dynamic Duo is hard to beat.

It seems like an unusual synergy, as Innuos' PhoenixUSB and PhoenixNET are not part of the same signal path; one is on the network side of the system, while the other likely ends up between the server and DAC. Nevertheless, they work in harmony, and the sound produced when both are in the system is unattainable with just one Innuos Phoenix box. Even with the Statement Next-Gen, which effectively includes one PhoenixNET and two PhoenixUSBs, the two additional boxes bring that dedicated PSU, 100mb/s rather than gigabit Ethernet, larger noise isolation transformers, no LEDs, heavier gauge sockets and more to the digital party and that is extremely appealing. Like all the best essentials for a system, the Innuos Phoenix duo does not fundamentally alter the devices' sound between them; instead, they enable those devices to perform better. +

Prices and contact details

Innuos PhoenixNET: £3,249, \$4,349, €3,599

Innuos PhoenixUSB: £3,249, \$4,349, €3,599

Both PhoenixNET and PhoenixUSB are sold with 20% saving if bundled with any Innuos music server or streamer

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