

BRIAN DAMKROGER

Shunyata Research Everest 8000

POWER CONDITIONER

Shunyata Research is the brainchild of Caelin Gabriel, whose résumé includes stints at NSA, in military R&D, and in the computer industry, first digging weak signals out of noise then developing very high-speed network devices. He is also a lifelong audiophile.

Shunyata's roots are in the scientific understanding and engineering base Gabriel has developed during his career. I've long been impressed by those scientific underpinnings—which extend not only in audio but also to other fields including medical devices—and by how open the company is in talking about its technologies.

Just as I was starting to think about new power systems and cables, I got advice from a friend whose ears I trust and who knows my system and what's important to me. When I asked him to share his thoughts, he didn't hesitate: He told me to check out Shunyata. That seemed like a fine idea.

System and setup

The AC power serving my audio room is by all accounts quite good. AC is supplied to the room by a dedicated load center (breaker box) connected directly to a Pacific Gas and Electric input box. The load center feeds two dedicated 30A circuits; each connects to a quad box equipped with hospital-grade outlets.

After discussing my system with Shunyata's Grant Samuelson, he concluded that the best match would be an Everest 8000 Power Distributor (\$8000), a Sigma v2 XC (\$3250) power cord to connect it to the wall, and Alpha v2 NR power cords (\$2000) between the Everest and my front-end components. My VTL amps would plug directly into the second circuit with Shunyata's Alpha v2 NR power cords.

The theory

Shunyata is known for having an extensive base of science and technology underpinning their products, including patents for some of their foundational technologies dating back to the 1990s. I'm the type of nerd who finds correct-



SPECIFICATIONS

Description AC power conditioning and distribution system. One IEC C19R 30A input, four duplex 8 NEMA5-20R 20A receptacles with six internal isolation zones, one each enclosing

four outlets, one each enclosing two duplex outlets.

Dimensions 20 ³/₄" (527mm) H × 8" (203mm) W × 14 ³/₄" (375mm) D (with cable cradle). Weight: 34lb (16kg).

Finish Brushed aluminum.
Serial number of sample reviewed 20EJ01. Designed and built in Washington.
Price \$8000.
Approximate number of US

dealers 52.
Manufacturer Shunyata Research, 26273 Twelve Trees Ln., Poulsbo, WA 98370.
Tel: (360) 598-9935.
Web: shunyata.com.

ing textbooks entertaining: This was going to be fun.

Descriptions of Shunyata's technologies and their implementation are available on the company's website; instead of going through every aspect of those technologies, I'll refer the reader there¹ and mention only a couple of key ones here, which merit a few paragraphs because of their importance in Gabriel's design goals, and which describe areas where his approach may vary from conventional wisdom.

One of these is his assertion that the majority of the noise problem in AC circuits in audio systems is generated by the components themselves; only a small portion is a gift from the power company. "The difference is that people usually go along with the norm. In this case, that's viewing a component's power cord as the end of a long chain that delivers AC to the component. That's not right. It's a complete circuit. The component connects two legs of the AC, the hot and the neutral." Noise goes both ways: From the AC into the component and from the component into the AC. Both lines and the ground have to be addressed to eliminate component-generated noise.

The Everest addresses component-to-component interference—Shunyata has taken a trademark on the initialism, CCI—in a couple of ways. The first is to partition the outputs into isolation zones. The Everest has six: one each for four individual receptacles and one each for two duplex outlets. The next is to bleed off noise on the powerlines, which is done primarily by the "CCI Filter." It's a potted module, so I couldn't take it apart, but it's described by Shunyata as "filter modules that consist of proprietary multi-stage filters that reduce power-supply-generated noise without the use of heavy transformers, coils, or large capacitors."

The other area where Shunyata follows a path less traveled arises from Gabriel's belief that one of the major factors limiting an audio system's performance, if not the major factor, is whether a component's power supply can draw enough instantaneous current from the incoming AC to keep up with the component's needs during musical



transients (especially in power amplifiers, the more powerful, the worse). In Shunyata lingo, this is called Dynamic Transient Current Delivery, or DTCD. Shunyata worked with a recently retired Tektronix engineer to develop a test system that measures DTCD; their results appear to show clear differences among power cords, AC plugs, and receptacles.

But how much does it matter?

I'm convinced that the science is real enough, and the engineering makes sense. But how significant is it in the real world? Do those technologies add up to real, tangible improvements in a high-quality audio system? The rubber hits the road when the derriere hits the listening seat.

After installing the Everest and the Shunyata cords, I started by casually listening to a batch of randomly selected albums, just to get a feel for how the performance of my system had changed. Casual listening was more than enough to hear the difference: My system sounded significantly better.

In a high-quality audio system, a reduction in noise can manifest in various ways, some of them indirect. Often, one notices an increase in inner detail and an improvement in precision. Perhaps a note's decay extends further, or, as with two oboes playing together, the identity of the individual instruments can be heard through more of the decay. I expected much the same with the Shunyata system—and indeed that's what I heard with the first few albums I played, all recordings of live, large-scale orchestral performances. Such recordings are inherently noisy, and yet I heard improvements of this kind.

When I switched to Dwight Yoakam's *Guitars, Cadillacs, Etc., Etc.* (Reprise 9 25372)—a well-recorded studio album—I was taken aback by the obvious absence of *actual noise*.

I switched back to my previous setup to see if I was really hearing what I seemed to be hearing. I was. With the old setup, it was as if a slab of smoke or haze was now encasing the performers, who were themselves flat and perhaps even a tiny bit out of focus. I repeated the experiment and got the same result each time: With the old configuration, smoky



¹ There's a guide to the company's core technologies at shunyata.com/technology-guide. Some of those technologies are discussed in more detail in papers at shunyata.com/technical-articles.

gunk surrounded performers; with the Shunyata setup, no gunk, or not enough that I noticed. And yes, this was all taking place while listening to an LP—not the quietest of media—and not an especially fancy one: just a well-cared-for early issue of a well-recorded popular album.

A few other things struck me about *Guitars, Cadillacs* Yoakam's way of seamlessly pulling you through a dramatic, 180° turn from pure rockabilly into classic country and western has always been a big part of why I've found his singing so captivating. These transitions, which couldn't possibly work but did, were always overt and kind of monolithic—just *there*. With the Shunyata power setup in place, these transitions, as well as the core characteristics of Yoakam's voice, went beyond captivating to exert an almost visceral pull. I was caught in the aural equivalent of being “unable to take my eyes off” something.

When I listened more clinically, I was able to pinpoint the pieces that added up to this dramatic, subjective change. Yoakam's transitions were anything but monolithic. It was as if his natural range and pacing had changed. I zeroed in on similar changes in how the system was reproducing spatial and temporal detail. I became aware of fine details that simply weren't there before; neither the clarity nor precision required to define them had been present.

One of the tools I use for setting up and evaluating a system is the “Walkaround” track on the *Sheffield Labs/XLO Test & Burn-in CD* (Sheffield Labs 10041-2-T). Doug Sax walks around a large, empty room while describing his movements and stops in a few places to strike a pair of claves. The goal is to create a soundstage perceived as the correct size and shape, to correctly locate Sax, and to get the claves' notes to clearly localize the adjacent walls.

I've never been able to get everything right at the same time, and installing the Shunyata system didn't magically make that possible. It did however uncover detail that opened up the back corners and made Sax's image more dimensional, allowing more precise localization. I don't know if I'll ever get to perfection, or even closer to it, but I'm starting from a much better spot.

I'd felt like I'd gotten a good sense of how the Shunyata improved my system's ability to produce microdynamics, listening for things like detail, clarity, precision, transparency, and so on, so I shifted to the macro: *large* transients, ones where the music goes rapidly from silence to *fff*. I dug out a few albums and CDs that rely on dynamic transients to really work and took a seat.

First up was “Under the Boardwalk” from Rickie Lee Jones's EP *Girl at Her Volcano* (Warner Brothers 23805-1 B). Early in the piece, Jones's vocals emerge from and drop back into silence with brief breathy edges. With my previous AC cord setup, if this detail registered at all, it was as a slight smearing at both ends of the note. At the trailing end, the transients are always impressive, but with the Shunyata setup, the absence of noise and the transparency around the leading edges had a “don't blink or you'll miss it” type of tension. I've always been aware of a sort of phantom echo in the microsecond after the staggering transients have vanished back into silence. With the Shunyatas, it wasn't on the edge of perception, it was crystal clear, an obvious part of the recording.

Al Di Meola, John McLaughlin, and Paco DeLucia's live album *Friday Night in San Francisco* (Columbia Half-Speed Mastered HC 47152) is a kind of torture test for a component's ability to reproduce dynamic changes. The tran-

ASSOCIATED EQUIPMENT

Digital sources Primare CD35 Prism CD player, Mytek Brooklyn DAC+.

Analog sources Spiral Groove SG-2.1 turntable and Centroid tonearm, VPI HR-X turntable and tonearm; Grado Epoch, The Reference, and Signature Reference, Benz Micro SL, Audio-Technica AT-MONO3/LP phono cartridges; Sutherland Phono Blocks Refined and Phono Loco phono preamplifiers; Sutherland Line Blocks line stage; VTL Ichiban power amplifiers.

Loudspeakers Wilson Audio Sasha DAW and SabrinaX, Elac Debut 2.0 F6.2.

Cables Shunyata Alpha v2 NR and Sigma v2 XC power cords; Shunyata Alpha v2 interconnect, phono, and speaker cables; Shunyata Alpha v2 S/PDIF digital cable; AC.

Accessories Audiodesksysteme Gläss LP cleaning system; Sutherland Timeline; LAST Stylus Cleaner, Stylus Treatment, and LP Treatment; Fozgometer Azimuth Range Meter; WallyTools cartridge alignment tools; Nordost ECO 3 antistatic fluid; Finite Elemente Pagode Master Reference equipment rack, Cerabase and Cerapuc equipment footers. —Brian Damkroger

sients are large with impossibly sharp leading edges. One challenge this album poses is that the transients combine changes in all the basic elements of music: volume, pitch, time, and the music's choral nature. Often, it seems like a transient begins just a bit before the previous one ends.

After I installed the Shunyata setup, I could easily hear the stop and start of successive transients. I could also hear a slight reverberation in the air surrounding the guitars' bodies.

I'd been listening through, or in some cases to, a layer of noise that was robbing the music of some of the cues that help create a clear picture of what was happening and, along with it, draining off the energy that can make a performance feel right and live.

Summing up

The changes the Shunyata system made to my system are easy to summarize. They weren't subtle. The magnitude of noise reduction was startling. The additional spatial and temporal details revealed when the noise was eliminated made performances richer and more involving and returned a lifelike energy that I hadn't realized was missing.

This is a review of the Everest power conditioner—but it, together with the Shunyata power cords, form a system, and so far I've said little about the power cords. That's because I made no attempt to separate out the contributions of the individual pieces, the power conditioner and each of the cords. So it's probably best to consider this a review of a power-conditioning *system*.

What we—what I—care most about is how the music sounds, but I'm a big believer in usability. Many power cables are stiff and heavy, requiring careful dressing to avoid pulling lightweight components off shelves. The Shunyata cables, though, are light, flexible, and easy to use.

The Shunyata Everest 8000, with power cords, checked all the boxes. I couldn't have been more delighted by its performance in my system, and I can't recommend it highly enough. ■