

Power, Power, and More Power

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If amplification happens to be the topic, then mentioning anything other than tubes in Luke Manley's presence is apt to ensure that a look of mild distress starts to cross his face. Luke, who prizes the ability of tubes to act as voltage-controlled devices, can talk about their virtues for hours. Tubes, you could even say, run in his bloodlines. His father, David, was designing tube gear back in the 1960s and 1970s, when solid-state looked like the ticket for the future. Then, over a decade ago, Luke bought the Vacuum Tube Logic (VTL) company outright from his old man and set off on his own path. That path has remained resolutely grounded in the venerable tradition of two-channel high-end audio.

While other companies have moved on to newfangled things such as switching power supplies or shifted to an emphasis on the home-theater market, VTL, like Audio Research, has stuck to making what it knows best. That, as the company name indicates, is old-fashioned tubed equipment. Drawing on the basic circuit used by his father—two 6350 tubes and one 12AT7 in the input section—Luke first made a splash in the late 1990s by producing the 1250-watt Wotan amplifier, which is still probably the most powerful and refulgent tubed

amplifier ever constructed, as well as a baby-brother 750-watt version featuring half the number of output tubes as its big brother—a mere twelve 6550Cs in each chassis. Both models received high praise in TAS. (I have been using the Wotan and 750 in an actively biamped configuration with the Magnepan 20.1.)

Now, in a bold attempt to reinvigorate the VTL line, Luke has made another foray into the Wagnerian sphere. The result is the massive and spectacular sounding 800-watt Siegfried monoblock amplifier.

The first thing that should be said about the Siegfried is that it marks quite a break with past VTL amplifiers. It represents an audacious attempt to marry old with new technology. The Siegfried seeks to accomplish the age-old dream of uniting the slam and transparency of solid-state designs with the blissfulness of tubes. It can be run in either tetrode mode, which I preferred, or triode, which halves the power output. The technology behind the amplifier forms the basis for VTL's claim to have produced a fundamentally new high-powered tube amplifier rather than simply a modified design.

For starters, the models of yesteryear relied on brute force, regulating the input stage but not the output stage. The Siegfried, by contrast, regulates both. It boasts a precision power supply. The regulator, which is built around five MOSFETs, is placed between two massive banks of capacitors to ensure that the B+ voltage to the output tubes does not sag. In addition, the Siegfried has an automatic-biasing system—no more messing around with individual trim-pots and a voltage meter to bias the tubes manually. VTL says that the auto-bias system disengages whenever music is playing. When the amplifier is on, a microprocessor is supposed to ensure that the tubes are optimally biased. And that isn't all. The microprocessor also can sense when a tube has a low-current fault, or is about to blow. If the tube has a lowcurrent fault, the microprocessor shuts down just that tube. If the tube is about to blow, the microprocessor shuts down the entire amplifier. In either case, the tube that caused the problem is indicated so that it can be replaced. No more guesswork about which tube quietly failed or went up like a Roman candle. (Having seen more than one tube go nuclear in other amplifiers as I raced over to shut the amplifier off, I can attest that this is entirely a good thing. The sound of a B+ fuse blowing after a

tube fails is not for the faint of heart—more than once I've been convinced that my tweeter simply had to have blown, though so far it hasn't.)

Should the amplifier itself fail, you can hook up your computer to it via a bi-directional RS232 control port and send the diagnosis to VTL. In essence, the amplifier is like an Erector Set; any part can be dismantled and returned to the factory for repair without sending back the entire unit. The auto-bias and control hardware can be removed with basic tools—which, incidentally, come supplied by VTL in a separate case inside one of the amplifier crates—leaving the amplifier core and power supply intact as the components least likely to fail. (The amplifier requires 20-amp power cords, and the stock supplied cords should be replaced with something heftier—I used Shunyata Helix Alpha.) Unlike the older units, the Siegfried could not be more user-friendly. Nevertheless, the Siegfried, as befits its name, is hardly a cuddly amplifier. Instead, it looks intimidating. Weighing in at over 200 pounds, it's no lightweight—and it doesn't sound like one, either.

VTL has always been an exponent of power, power, and more power. The Siegfried delivers it in spades. Upon firing up the amplifier, it was immediately apparent that it threw a wider and more precise soundstage than the 750 amplifier. One of the first pieces I listened to was a lovely Handel organ concerto. With the Siegfried it was as though the aperture through which I was hearing the music had increased. It was also notably purer. The sheen and grit of the stringed instruments was simply more precise, more realistic, if one can use that word, or, to put it another way, closer to the absolute sound than the 750s. The Siegfried simply took command of the music and never got bogged down.

A lot of this can probably be ascribed to the exceedingly robust power supply of the Siegfried. On the Kharma Midi- Exquisites, it seemed as though the Siegfried produced another octave of bass. More than that, the bass that it produced was simply prodigious in heft and impact. This wasn't just a matter of more slam, but also considerably more solidity. No VTL amplifier that I have heard has matched the tautness of the Siegfried in the bass, whether it was

driving the Wilson MAXX II or the Kharmas. Yes, the Wotan was richer sounding, but not quite as iron-fisted in the subterranean regions. The Siegfried simply would not quit when presented with the most punishing loads. This is quite a contrast with most tubed amplifiers, which simply cannot provide the kind of punch that solid-state delivers. To be specific, on Jimmy Smith's sensational CD dot com blues [Blue Thumb Records], which was mastered by Bernie Grundmann (and sounds like it), the bass lines plunged down with an authority and impact that I have seldom heard. At the same time, the congas and background choirs never became hazy, congested, or indistinct, as can sometimes be the case when an amplifier becomes overwhelmed by the sheer amount of information that's being delivered to it by a good frontend.

Two pieces of vinyl were stunning. The first was The Soulful Moods of Gene Ammons, on a marvelous pressing released by Chad Kassem's Acoustic Sounds on 45 rpm. Via the Continuum turntable, the saxophone sounded meltingly sweet on the cut "Two Different Worlds," which has to be one of the prettiest jazz ballads around. It was possible to discern precisely where Ammons was standing in relation to Patti Brown's piano. On the next cut, "But Beautiful," which was, if possible, even more beautifully played, the Siegfried clearly revealed the clacking of the saxophone pads just as Ammons prepared to launch in. Audiophilia? No doubt. But such little details also provide a sense of realism and are a tribute to the vanishingly low noise floor of the Siegfried. Another album that left me marveling at the transparency of the Siegfried was John Lee Hooker's Burning Hell. In particular, on "Graveyard Blues," Hooker's piercing, gravelly voice had a you-are-there quality, with the guitar twangs vivid and forceful.

The new version of the VTL 7.5, Series II preamplifier also distinguished itself. Comprising a "clean" and "dirty" box (the former contains the audio circuits, the latter the microprocessor and control electronics), this preamplifier, which uses a 12AU7 tube as opposed to the first-generation's 12AX7 tube, nicely supplemented the strengths of the Siegfried. It was wide open, passing a tremendous amount of information—the most that I have heard from any preamplifier, excepting the Messenger, which passes a pinch more. Once

again the VTL trademarks were there: an extremely dynamic, transparent, and fast sound. No part of the frequency spectrum was unduly emphasized, but the presentation was far from the traditional tube one. Lovers of a more romantic sound will find the 7.5 to be too stark and neutral. I didn't. The verve and zest, the dynamic power and scale with which it reproduced music made it hard to fault. Using the 7.5 preamplifier also allowed me to run the Siegfried in balanced configuration, which is the way VTL prefers it to be used. VTL uses what it calls a "superbalanced input stage" in its newer amplifiers to create common-mode noise rejection and the additional 6dB of gain that is inherent with balanced operation.

To be sure, the lover of low-powered tubed equipment is never going to be convinced that the VTL sound is for him or her. VTL is striving to meld the best of solid-state and tubes. The result is, for lack of a better word, far more neutral than what tubed equipment customarily sounds like. This can translate into an opaque window on the music for some; and for others, it will simply be too much to bear. The 27-watt Audio Note Ongaku amplifier that I had on hand for a few months offers a radically different presentation. Nothing like the majesty, drama, and excitement of the Siegfried, but it does have a tonal sweetness that no high-powered tube or solid-state amplifier can match. (Is the Ongaku colored? Of course, it is.) Nor is the Siegfried going to convert the dyed-in-the-wool solid-state aficionado. Despite the excellent black backgrounds it produces, the Siegfried remains at heart a tubed amplifier. As someone who has a soft spot for the glowing filament, I believe this is very much a good thing.

But the Siegfried does close the gap between high-powered and lower-powered tubed equipment to a remarkable degree. It is a more refined and transparent amplifier than its predecessors. What's more, the grip and control that come with high power are very enticing.

If you want an even cleaner sound, you can substitute the KT-88 tube for the 6550s in the output stage. The KT-88 had about another octave of air on top and was a purer sounding tube, while the 6550 was more aggressive. My own preference hands-down was for the KT-88. In any case, whatever tube you

deploy, the Siegfried will allow any audiophile to poke about in the recesses of the soundstage to his or her heart's content. At such low levels of distortion, how much more can really be extracted is an open question, though designers seem to be doing their level best to find out, which is one reason audio equipment keeps sounding better and better.

Inside the VTL Factory

VTL may have a soft spot for Teutonic terminology, but the company's firmly rooted in sunny Chino, California, where its large factory is dedicated to turning out, on an assembly-line basis, amplifiers and preamplifiers. Unlike some other firms, VTL insists on doing its work in-house. I was impressed by the thoroughness with which the process of building, or repairing, a piece of equipment is conducted. No matter how often a technician has built a piece, VTL insists that he follows a picture guide to ensure that no one is relying on memory and, in addition, that each individual stage of work is tested upon completion. VTL relies upon a team of engineers to execute its designs, and I had the good fortune to get to watch one such confident employee stress a Siegfried to the max on the test bench. Even though the amp was sent into clipping by driving an enormous loudspeaker cone directly, the voltage to the tubes dropped less than 2 volts out of a maximum 600 volts—a testament to its rugged power supply. The sound, however, was, I can assure you, dreadful.

Fortunately, before I headed over to the factory, Luke had deposited me for a few hours at the eponymously named Brooks Berdan Ltd. Berdan, a well-known purveyor of audio goodies who is an expert on turntables, had the ravishing SPJ Centovani feeding the VTL 7.5 preamplifier into the Siegfrieds, which were powering the Wilson MAXX II loudspeaker. Though the room was a little on the smallish side, the system sounded splendid playing a Duke Ellington "Uptown" LP that I had brought along. The ability of the Siegfried to control the bass frequencies was once more brought home to me.

The factory itself boasts nothing along these lines; it's strictly business. Luke played me his small system in his office, which was enjoyable enough. But the

doublebreasted blue blazer hanging on the door made it clear that he is almost constantly on the go, regularly visiting Russia, Asia, or Europe. Meanwhile, his extremely capable wife Bea Lam, a former Hewlett-Packard employee, gourmande, and music lover, keeps everyone on their respective toes, serving as the ultimate judge of the sonic qualities of new equipment and ensuring that the factory is humming smoothly. To encounter her disapproval would be a daunting experience, indeed, which may help account for why VTL boasts such a successful track record

Conclusion

Anyway, if you're in the market for an amplifier on the level of the Siegfried but wonder whether you really need all that power, think again. The blunt fact remains that most loudspeakers need a lot more power than their designers would like to admit. On the Kharma loudspeaker, I found that running four VTL 750s was the only way to try and approximate the size of the soundstage delivered by the Siegfried. And it still wasn't as tight in the bass. Put bluntly, the Siegfried offers stratospheric performance, mating high power with finesse to deliver the musical goods. There are few other tubed amplifier in production that can challenge its dynamic sweep. It's not an amp for the equipmentswapper, but represents a destination point. If you have the floor space and the necessary change, the Siegfried should be on a very short list of exquisitely made high-powered amplifiers.