



**BY JACOB HEILBRUNN** 

## THIS PAST OCTOBER, I TRAVELED TO GERMANY

to visit the Avantgarde Acoustics factory in the quaint village of Lautertal, where I was quickly introduced to a rare historical object—a mint condition "agave green" 1956 VW Beetle, complete with turn signal bars that are flipped by hand, that serves as the unofficial company car. Somehow being ferried around in this venerable product of the postwar German *Wirtschaftswunder*, or economic miracle, seemed entirely appropriate.

Like the Beetle, Avantgarde loudspeakers are a tribute to Teutonic efficiency, able to play with just a few watts of power. Like the Beetle, they're based on fairly simple technology. And like the Beetle, they attract more than a few onlookers and admirers for their fetching looks and performance. But there the similarities end. Avantgarde loudspeakers are also prodigiously powerful products capable of delivering not simply finesse but also enormous plumes of sonic fortissimos that will have the walls of the stoutest stereo room quivering and begging for mercy.

It all goes back to Avantgarde founder Holger Fromme's avidity for open-air rock concerts during his youth—his dream was to recapture the same overpowering sensation in the home environment. The only speaker design capable of truly realizing Fromme's oneiric vision was a horn loudspeaker that could handle the kind of punishing blasts delivered by the likes of his musical heroes, Pink Floyd and Genesis. Fromme, you could say, wanted a wall of sound when he listened to *The Wall*. And he got it.

Avantgarde has steadily improved the appearance and performance of its loudspeakers, but they have often met with incomprehension or outright hostility in America, where the







dynamic driver has held pride of place since the 1960s. The high-end industry has focused, more or less, on producing fairly inefficient loudspeakers with ever-more-powerful amplifiers in train to compensate for the watts that get burned up in complicated crossover networks. Horn loudspeakers offer a radically different and more environmentally friendly approach, one that I was always intrigued by as I read up on loudspeaker and tube designs over the history of high-end audio.

As it happens, I first stumbled across the Avantgarde phenomenon several decades ago while strolling in the Frankfurt Airport between flights. No, I didn't literally walk into it, but a large glass display loomed before me that immediately captured my attention. It featured a blue set of large horn loudspeakers that looked like something out of a Pop Art exhibition. (Had Andy Warhohl, who illustrated a number of jazz albums in the 1950s, ever gotten a load of these beauties?) I was smitten both by their outlandish appearance and the promise of superlative performance that an accompanying brochure guaranteed.

It wasn't until I heard the Avantgarde Trios at an audio show in New York in 2000, however, that I truly began to understand what the fuss was all about. At that event, Steve Bednarski of Balanced Audio Technology explained to a large audience that we were about to transported into the very sonic heavens by a multichannel setup of Avantgarde Trio loudspeakers. Perched in the front and rear were enormous horns powered by BAT tubed gear. Soon enough, the opera singer Jose Carreras' voice, backed by a chorus, was floating through the room about as convincingly as I had heard vocals sound. It was goosebump territory.

Over the ensuing years, I embarked upon an audio odyssey that included listening to a passel of loudspeakers from everyone from Wilson to Aerial Acoustic, from Magnepan to Sonus faber. Lodged somewhere in the back of my mind, though, was a lingering memory of the Avantgarde loudspeakers. Periodically, I heard them at my friend Ali Leeman's homes in California. I heard various iterations of the Trios over the past 20 years or so but always came away thinking that the combination of beauty and the beast had never been fully reconciled. The imaging was a little iffy and the treble a little abrasive. "Get off the beach!" my pal Ron Rambach, the proprietor of Music Matters, always loved to exclaim when I mentioned Avantgarde loudspeakers, which was to say that he thought they resembled a lifeguard wielding a bullhorn. There matters rested.

Or did they? About two years ago, I started hearing rumblings that Avantgarde had completely redone the Trios new drivers, crossover, as well as a tweeter that could be slid fore and aft for fine-tuning. A visit to Toronto, where the North American importer Angie Lisi of American Sound has an Avantgarde Trio G3 system ready for demo at almost



any hour, seemed in order. I corralled my chum Michael Fremer, who has always looked askance at horns, to join me on the expedition, et voilà, we showed up at Lisi's expansive home near her store in the rustic suburbs of Toronto to saturate ourselves in the Avantgarde sound. There I became acquainted with the loudspeaker's dual identity. It can be run either with an internal iTron-a three-channel single-ended push-pull current-mode amplifier that locks onto each driver, allowing you to dispense with speaker cables-or a more traditional setup with an external amplifier of your choice that runs through the Trio's passive crossover. Listening at Angie's was enjoyable but not dispositive, as the seating position, not to mention the low ceiling, in her basement room was too close to the loudspeakers for the tastes of yours truly. A test-drive in my own home appeared more imperative than ever. After several months of expectant waiting on my part, a freight truck filled with no fewer than 8 large crates appeared at my home, and the festivities commenced.

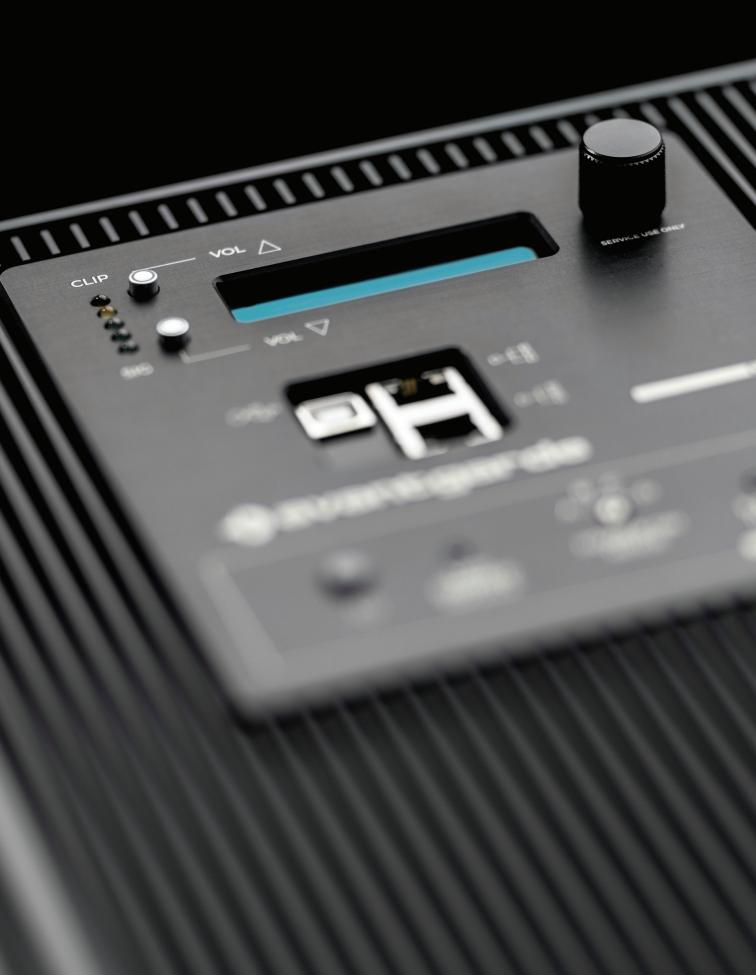
With the Wilson WAMM Master Chronosonic loudspeaker system from Provo, Utah, that I've been using for a good five years looming tall in the background, how did Lautertal stack up against Provo? Very well, indeed. The alacrity, scale, and dynamism of the Trio G3 came as no surprise to me. But there were a number of other things that did. The longer I listened, the more impressed I became by the prowess of the Trios. The result was that I...but why put the cart before the horse?

One of the most longstanding cavils about horn speakers has been their colorations which, in my experience, manifest themselves as shrillness in the treble, something that I find well-nigh intolerable, and discontinuity between drivers, a phenomenon that audibly reduces the sensation of listening to a live event and converts it into a jarring one. It is my firm conviction that the Trios have rendered those issues pretty much moot when you run them with your own amplifiers. With the iTron it was a different story. Several reviewers, including Eric van Spelde in a superbly comprehensive review of the Duo GT in the German publication image hifi, have extolled the iTron. I cannot. It's an ingenious device that may eventually, in a fresh incarnation, surpass the performance of an amplifier mated to the Trio's passive crossover network, but I could not produce the requisite bloom and musicality that classical and jazz music possess. The iTron creates a wide soundstage and may well be faster than any other amplifier I've heard, all of which made it a gas to listen to rock and pop music for a time. But for classical and jazz, I simply could not warm to the iTron. In chamber music, for example, the violin and viola sounded far steelier than anything resembling the real thing. If anything, it evoked the sensation for me of walking across the frozen tundra and hearing the crunch beneath my boots.

With more conventional amplification, the very first thing that I noticed after installing the Trios was that they possessed a liquidity, particularly in the treble, that I had not hitherto experienced. Put otherwise, I was braced for a prolonged and strenuous break-in experience that would involve grinning and bearing it when it came to the treble region. That turned out not to be the case. The treble was quite smooth and the midrange warmer than I had expected. And no, it wasn't because I was using some mushy SET amp that rolled off the high end. Initially, I employed both the iTron and the nifty Swiss darTZeel NHB-468 monoblock amplifiers, both firmly solid-state. If anything, I felt that the Trios revealed a new and entirely felicitous tube-like warmth in the darTZeel, a product of the speaker's 109dB sensitivity and 19-ohm load. The amp, in other words, was simply loafing, allowing it to flash its crystalline, pure, and filigreed control of the musical signal-much to my delight.

Here it befalls upon me to dispense with another myth, as long as we're dispensing with myths. While it is true that the Trios mate beautifully with SET amplifiers (including the 8-watt BWS 6384 monoblocks), there is no cogent reason to shun deploying higher-powered amplifiers on them as well (something, incidentally, that Viktor Khomenko, the chief designer at BAT, who has his own set of Trios at home, mentioned to me years ago). They provide extra grip and slam that can be quite exhilarating. Another (relatively) high-powered piece of gear that I used on the Avantgarde was the Pathos InPol Legacy integrated amplifier, which weighs 309 pounds and puts out 100 watts of pure Class A power. While I do think it is true that more than a few high-powered amplifiers would fail to cut the mustard with the Trios, it is not because of the loudspeaker's sensitivity or any inherent shortcoming on its part; rather, these horns ruthlessly expose everything upstream, and the blunt fact is that packing dozens, if not hundreds, of transistors into an amplifier may not always be the best recipe for sonic bliss. A slight occlusion, blurring, and haze tends to accompany such heroic efforts to produce a ton of juice to get dynamic speakers to take off from the landing pad.

Which gets us to one of the most agreeable characteristics of the Trios. I've made no secret of my soft spot for German Lieder, or art songs, in the past. I'm fluent in German, but listening to the greats of the past, such as Fritz Wunderlich or Dietrich Fischer-Dieskau or Elly Ameling, not to mention contemporary singers like Benjamin Appl, I've had





to rely on the accompanying booklet containing the lyrics of the works they are performing. What a pleasure it was to be able to dispose of those guides and sit back and revel in the songs, fully comprehending every last syllable! For that is what the Trios did. The transient precision of the Trios, which I ascribe in large part to their extreme efficiency, means that the amplifier is loafing along in its comfort zone, reproducing every syllable, no matter the frequency, with a degree of verisimilitude that was and remains simply jaw-dropping.

The wonderful lucidity of the Trios also translates into something else that I sensed but couldn't quite put into words. It was my fellow TAS reviewer Alan Taffel who put his finger on it when he visited me to audition the Trios. "It swings," he simply said after I played him a sassy rendition of Wynton Marsalis playing Louis Armstrong's "St. James Infirmary," which has been recently released. The reason it swings isn't merely because of the Trios' transient precision. That precision is also a direct function of the speed of the loudspeaker. The wealth of microdetail means that you hear the rhythm of the music to a remarkable extent. What I'm trying to say is that the Avantgarde doesn't produce detail as an end itself but as a means of profound musical communication. You hear what appears to be every shading in Marsalis' voice on the album Hot Fives, Hot Sevens, a tribute to Louis Armstrong's magnificent recordings from the late 1920s, as he sings the lyrics to "St. James Infirmary" or the extended quaver he produces through his mouthpiece, turning it almost into the equivalent of a wah-wah pedal. Something similar happened on the song "Weary Blues," which features an interplay between banjo and tuba at what seems like lightning speed. Nary a pluck from the banjo, nary a belch from the tuba seemed to go missing. There is also a certain ineffable lightness that accompanies that lightning speed, a fetching characteristic that never makes it seem like the music is getting bogged down, whether it's a jazz band or an orchestra playing.

The easy load that the amplifier faces means that the tonality of the Avantgarde—again another question-mark for many auditors of this loudspeaker—was seldom less than exemplary. As a fan of the German trumpeter Matthias Hofs, who I think may not get his due here in America, I greatly enjoyed a variety of his recordings, whether with the German Brass Band or his solo performances of Bach and Vivaldi. The Trios nailed the piping quality of his playing of



## AVANTGARDE TRIO G3 WITH ITRON AMPLIFICATION AND SPACEHORN SUBWOOFERS

Frequency range: 100-28,000Hz Sensitivity: 109dB Crossover frequencies: 100/600/4000Hz Nominal impedance: 19 ohms

Price: Trio G3, \$109,000/pr.; Nature Cap passive XOs, \$5000 per pair; iTron amplifiers, \$49,000/pr.; automated amplifier switches, \$3900/pr.; dual-driver SpaceHorns, \$88,000/pr.

## ASSOCIATED EQUIPMENT

dCS Vivaldi Apex four-box CD/SACD playback system; TechDAS Air Force Zero Turntable with SAT CF1-09 and Graham Elite tonearms; DS Audio Grand Master optical cartridge and TechDAS Reference TDC01 cartridges; darTZeel NHB-18NS preamplifier, NHB-468 monoblock amplifier; Phasemation 1500-MA and BWS 6384 mono block amplifiers; Pathos InPoL Legacy integrated stereo amplifier; Transparent Magnum Opus and Nordost Odin interconnects, speaker cables, and power cords; Klaudio Ulrasonic cleaner; and Ramar record brush





the piccolo trumpet, not to mention his extremely expressive style, derivative of the Italian opera *cantabile* style. Talk about getting closer to the emotional essence of the music!

Even as it is capable of extreme finesse and a spooky recreation of *pianissimo* passages, the obverse side of the Trios is that they can also bring down the hammer. I've never heard a brass chorus, as Paul Seydor mentions in his sidebar, sound more thrilling, more-dare I say it?-testicularly convincing than on the Avantgardes playing the fourth side of the Decca LP set of Wagner's Siegfried opera. Sir George Solti liked to let it rip, and it's hard not to be taken aback by the sheer power of the brass section as delivered by the six-yes, six-Spacehorn woofers. These formidable critters, each boasting its own internal Class D amplifier, feature two 12" drivers per unit, meaning that I have a total of twelve 12" drivers in my room. There is no replacement for displacement, as the old saying goes. While the space horns don't go down much below 20Hz-which is why you can, if you wish, supplement them with a REL sub-bass woofer-they supply resolute and resonant bass. There really is no limit to how many can be used apart from room size. Avantgarde's Armin Krauss is eager to add another (gulp!) six to create an uninterrupted front wall of space horns.

Still, integrating them into your system to blend in successfully with the front pair of speakers is not for the faint-hearted. Avantgarde supplies a passel of indispensable digital controls to adjust them. When Avantgarde's Armin Krauss alighted on my doorstep, he spent a good deal of time aligning them. Alas, as the bass woofers broke in, they needed, in my estimation, a complete overhaul, as they were overwhelming the front pair of loudspeakers.

Who better to summon than J.R. Boisclair, the head of WAM engineering? I had very good results when J.R. took a whack a few years ago at improving the integration of my Wilson subwoofers, so I felt little hesitation about letting him loose when he happened to be in the Washington area. The entire experience reminded me of why I've always been a proponent of pulling the bass out of the main loudspeakers in *any* four-tower system—the separation of the bass woofers from the front speakers helps to solve a lot of issues, ranging from vibrations to efficiency. We had full control from about 200Hz on down, which most loudspeakers, even four-tower ones, will not permit you to do. This wasn't the bass horns as a Band-Aid at the bottom but as a full-fledged participant in the sonic affair.

Boisclair spent a full day grappling with my predicament, studying waterfall plots and the time decay of the bass woofers. The results were hard to quarrel with. Very hard. When he was done, the midrange and treble opened up further and any residual lumpiness in the nether regions, as the late HP liked to call them, were banished. Take the Pablo album *Basie Jam.* On the cut "Hanging Out," Ray Brown's bass sound as though it is doing just that. The Trios captured his bass line with tremendous clarity and grip, even as the muted trumpet of Harry Edison plangently sounded the opening runs of this easygoing tune.

Even the imaging was better than expected. Nope, it's not the pinpoint source image that you'll get from a Wilson or a Rockport. Nor is the bass as, for lack a better, organized as what I got with the WAMM. But this loudspeaker comes as close to giving you it all as these little ears have heard.

Throughout, the lack of distortion of the loudspeakers was palpably evident on album after album. It was the ability to maintain the octave-to-octave balance that commanded my attention. There was a sense of ease, a lack of strain, a feeling of infinite headroom, even when trumpets were playing in the treble region, that was utterly beguiling. Perhaps the greatest showcase for the seemingly unlimited abilities of the Trios was an EMI LP featuring Paavo Berglund conducting *Finlandia*. Even Fremer was wowed—by the depth of the double basses, by the sweeping power of the brasses, and by the dynamism of the tympani. These are not your grandfather's Avantgardes. Instead, the company has set a new benchmark for performance—one that left me no choice but to take the plunge and purchase them. When it comes to loudspeakers, Avantgarde truly is avant-garde.



## Paul Seydor Comments

FOR THE BETTER PART OF MY 54 YEARS AS an audiophile, I have avoided horn-loaded loudspeakers for the usual reason: horn colorations. Not that I didn't appreciate their principal virtue: efficiency that translates into deafeningly loud playback levels on meagre wattage with little or no sense of strain. A corollary to this is that they make music sound really big, bold, and colorful, amazingly dynamic, extraordinarily present, and, for want of a better word, "liberated"from the usual constraints that beset the quest for wider dynamic windows. By comparison, many other kinds of speakers, particularly those of medium and lower efficiency, both pale and sound pale. I should point out that in my career as a film editor I have four decades professional experience with horns because most of the mixing stages where I supervise the final sound mixes of the films I've edited are equipped with large, high-efficiency horns. But what works for large venues like mixing stages and movie theatres doesn't for home listening, at least for me, because I find the basic horn sound itself neither neutral nor natural tonally, and to my ears not especially musical and rarely pleasing.

All that changed about a month ago when I had the opportunity to audition a pair of the latest version of Avantgarde Trios, the company's flagship all-horn system, in a private home, set up, adjusted, and tweaked to the nines, with four (!) of Avantgarde's massive horn-loaded Spacehorn woofers, buttressed by the biggest REL subbass system for truly subterranean bass. I didn't go with a "show me" attitude—I never want anything to sound bad—not least because my interest in Avantgarde Trios was already piqued by my friend and colleague Jon Valin's enthusiastic TAS review several years ago of an earlier version (Google "Jon Valin Avantgarde Trio"). But despite best efforts, I was never able to audition a pair until this recent experience. To say I was impressed might be my understatement of the year: I was invited back, which I accepted eagerly, then I asked to come back a third time.

My time with the Trios was brief, about four hours total over three visits, the source material always vinyl, the owner, an audiophile of long experience and an avid vinyl enthusiast, extremely knowledgeable about recordings and music, with a library of, I'd guess, around 10,000 LPs, many, if not most of them vintage, notably strong in opera, show music, and all sorts of voice from traditional American popular music (e.g., Sinatra) and jazz. His turntable setup (Continuum with top Lyra pickup) was done by a world-class expert, J.R. Boisclair of WAM Engineering. I also brought along several of my favorite reference recordings.

First, dynamic range. What I heard from this setup in a large but not immense room was without question the widest dynamic range I have ever heard from a home audio system. The reproduction was also the freest, most effortless in my experience—I was about to write the "least strained and constricted," except these characteristics were nowhere in evidence (unless it was in the source material). Headroom was limitless. How much power did this require? The main

amplifiers were Berning Hi Fi One Edition 20-watt SET References with Ypsilon silver chokes. The combination made me wonder if most of the very large speaker systems in my experience, driven with enormous amounts of power, didn't exhibit a subtle, or not so subtle, sense of strain and effort that are completely absent from the Trios. Clarity was likewise state of the art, at least in my experience, with eye-popping detail yet without sounding analytical as such. The Solti Ring Cycle, the sensational West Side Story 2020 soundtrack, Billy May's antiphonal brass on Sinatra's Come Swing with Me (which just leap out from the speakers), the fabulous new Oklahoma! from Chandos (on vinyl)-anything and everything I played on this setup was reproduced at any volume level with reach-out-and-touchyou tactility, presence, life, liveliness, body, and three-dimensionality like almost nothing I've ever heard.

One key phrase in the previous sentence is "at any volume." A related loudness issue with dynamic drivers, at least to some degree, lies at the other end of the loudness scale, namely tonal drop-out at very low levels, where at some point the combination of low efficiency, the drivers themselves (their mass, their materials, magnets, who knows what else), and maybe the additional circuitry in extremely powerful amplifiers all conjoin to rob the music of some presence, transparency, and body. (I believe Jacob will have a few things to say about the effects of very high-power amplifiers on transparency.) Some electrostatics, notably my beloved Quads, are immune from these effects, but they also have serious loudness limitations.

I've heard from colleagues who've attended Avantgarde Trio rooms at audio shows that the playback levels are frequently so loud they couldn't stand to be in the room for more than a few minutes. While it is understandable that the manufacturer or its dealers should want to show off the Trio's remarkable capabilities in this regard, I cannot emphasize strongly enough that if you have the opportunity to audition these speakers properly set up in a room that can accommodate them, do try to do some serious listening at moderate and low volumes, where they are equally, if not more impressive. Also, bear in mind that extremely loud sustained levels over long periods still involve a very real risk of hearing damage.

Soundstaging and imaging are state of the art. The aforementioned Chandos *Oklahoma!* was recorded in a theater with a judicious microphone placement that results in a completely natural perspective. Set the volume at a level that is realistic—truly realistic, not audiophile "knock your socks off"—and you feel you're sitting in the ideal seat in a real theater hearing a live performance. The

soundstage stretched across the room, rendition of depth was realistic—I could close my ears and believe I was in a theatre listening to a live performance: "stereo" in its root sense of solid.

What of tonal balance and coloration? The Trios are probably not completely free from horn colorations—I don't know that that's possible—but the colorations themselves, such as exist, are low enough that never did they intrude upon my enjoyment of the considerable virtues of the speakers—indeed, I was never particularly aware of them. Whether they would become bothersome with longer exposure I cannot say, but I can say something about the Trio's tonality and timbre. One of the principal things that separates electronically reproduced music from the real thing is that with the latter, tone, timbre, the basic character of voices and acoustic instruments do not change with changes in level. This is also true of the Trios, to a degree almost unique in my experience. Meanwhile, the overall tonal balance struck me as falling within the bounds of what I call "acceptable neutrality"—at no point did frequency-response anomalies distract me from the music.

Bass response in terms of power, reach, slam, definition, detail,

and clarity is again the best I think I've ever heard in a home music system. One of the things the owner played is a passage from *Siegfried* scored for the instruments that reach into the bowels of the orchestra. Registration of timbre, clarity, detail, and presence were to take the breath away. Accuracy requires I report that the owner of this system hired Boisclair to perform his room-optimization service, which at this location consumed 11 hours. I heard the setup before and after. Bass was quite excellent before; afterward, the improvement was astonishing (worth every penny).

I don't care for most large speakers. Especially as regards extremes of loudness, I tend to find them merely assaultive, rather than realistic as such. The Avantgarde Trio exhibits none of this characteristic. The owner likes to listen at rather louder levels than I do, but this setup is so clean, so low in distortion, so effortless that I found I could easily tolerate high levels without discomfort. I don't envy my colleagues most of the speakers they have to review, especially the monster ones, but I surely envied Jacob this assignment. At the opening of this comment, I said I was impressed by the Trios—that was mere footling. Truth is—I was blown away. **LBS**