

Equipment Reports

ELECTRONICS FOCUS

74

Rotel RA-1592MkII Integrated **Amplifier**

Neil Gader reports on this new integrated amp from the company whose name is synonymous with great sound and high value.

78

Audio by Van Alstine DVA M225 **Monoblock Power Amplifiers**

These diminutive monoblocks from industry legend Frank Van Alstine produce a sound that belies their size and price. Anthony H. Cordesman reports on a high-power amplifier bargain.



84

Vincent SV-737 Integrated Amplifier

This tube/transistor hybrid integrated amp with built-in DAC delivers muscle, an extensive feature set, and great sound in a compact and affordable package. Muse Kastanovich has the details.

92

Boulder Amplifiers 866 Integrated Amplifier and Factory Tour

The company known for its massive and expensive—electronics brings its stunning build-quality and superlative sound to a new, compact, and relatively affordable integrated amplifier. Steven Stone has a full report, along with a behind-the-scenes look inside the impressive new Boulder Amplifiers factory.

102

darTZeel NHB-468 Statement **Monoblock Power Amplifiers and NHB-18NS MKII Preamplifier**

Jacob Heilbrunn reports that these reference-quality electronics from the esoteric Swiss manufacturer take him closer to the music than ever before.

EQUIPMENT REPORTS

114

Wilson Audio Alexx V Loudspeaker

Wilson Audio brings its newly developed technologies, first seen in the mighty WAMM and Chronosonic XVX, to the Alexx V. Matt Clott reports on the loudspeaker that stole his heart—and his checkbook.

Monitor Audio Bronze 500 Loudspeaker

Priced at \$1495 per pair, Monitor Audio's new Bronze 500 is packed with advanced technology. Drew Kalbach reports on this overachiever.



Headphone Amplifier

The new headphone-oriented version of Naim's popular Atom can do much more than power a pair of cans; it can also serve as the heart of an ambitious highend speaker-based system. Alan Taffel brings you the fascinating details behind this unique product.

134

Focal Stellia Headphones

Can an audio component be perfect? No, but Focal's new Stellia headphones come mighty close, says Alan Taffel.

432 Evo Aeon Music Server

This Belgian music-server manufacturer's unusual name comes from its products' ability to re-tune recordings to A=432Hz. Andrew Quint brings you the fascinating history of this tuning and evaluates the musical effect of processing modern recordings to a different pitch.

146

YG Acoustics Sonja 2.2 DC2 Crossover **Upgrade**

YG offers its existing customers an upgrade path via a newly designed crossover with state-of-the-art components. Kirk Midtskog has the details.



Electronics Focus

darTZeel NHB-18NS MKII Preamplifier and NHB-468 Monoblock Amplifiers

Swiss Exceptionalism

Jacob Heilbrunn

n 1846, Charles Dickens spent several months traveling and writing near Lake Geneva in Switzerland. In a letter to his lifelong friend John Forster (who wrote the first biography of the great novelist after his death), Dickens made no secret of his admiration for the Swiss, declaring, "Don't be hard upon the Swiss. They are a thorn in the sides of European despots, and a good wholesome people to live near Jesuit-ridden kings on the brighter side of the mountains. My hat shall ever be ready to be thrown up, and my glove ever ready to be thrown down for Switzerland."

After listening to the latest darTZeel preamp and monoblock amplifiers for several months, I've begun to share Dickens' ardor for all things Swiss. Located near Geneva, darTZeel is part of a new wave of Swiss companies producing high-end audio equipment. Its chief designer Herve Deletraz—the company's name is an anagram of his last name—has been an ardent audiophile almost since he was in short pants. As a 10-year-old, he began tinkering with audio kits. By age 15, he commenced his formal studies at L'Ecole d'Ingénieurs de Genève, where he designed a digital amplifier in 1984 with no negative feedback as

a graduation project. His life's work had just begun. I don't know if young Deletraz was ever handed an envelope containing a tape that announced it would self-destruct in five seconds, but he did accept the almost impossible mission of making a solid-state amplifier sounds as good as, or better than, its tube counterpart. Over the next two decades, Deletraz beavered away on a solid-state analog stereo amplifier called the NHB-108, which he released in 2003 in the United States. Recently, the company moved into a more spacious facility that should permit it to increase its production capacity.

I had briefly heard darT-Zeel equipment several years ago at the late and lamented Rocky Mountain Audio Festival, but never got around to listening to it at home. That changed when Jonathan Tinn, who imports the line in his capacity as proprietor of Blue Light Audio and whom I've known for several decades, called me one evening last fall to announce summarily that he was shipping an NHB-108 Model Two stereo

amplifier to me, as another customer had just upgraded to the NHB-468 monoblocks. I rolled my eyes, gazed heavenward in supplication to the almighty, and...capitulated.

Like a certain other guy, Tinn grew up in Queens. Understatement, you could say, has never been his forte. So, you can hardly blame me if I approached the darTZeel stereo amplifier in a spirit that could best be described as acute skepticism. I plugged it in and listened. Time stopped. Befuddlement replaced skepticism. Then came reason and revelation. This was a very special device, indeed. Others agreed. A non-audiophile friend heard it and offered a lapidary verdict: "Get the gold boxes."

The audio gremlins went to work. If the diminutive stereo amplifier could sound like this powering the mighty Wilson WAMM Master Chronosonic loudspeakers, then what would the tandem of the battery-powered solid-state preamplifier and monoblocks produce? A hasty phone call to Tinn—he magnanimously did not demand repentance for my initial reservations—resulted in the receipt a few weeks later of a large crate containing two hefty NHB-468 amplifiers and an NHB-18NS MKII preamplifier. With the vital assistance of a friend, I carried them into my basement and proceeded to





set them up, a procedure that requires a little more fussing than is ordinarily the case with stereo equipment.

Though you can deploy either the preamp or amplifier separately, they are really made to work in tandem via a BNC connection. Indeed, the rear panel of the preamp abounds with 50-ohm matched-impedance BNC connections, as well as more conventional ones. In listening to the preamp, I found that running the dCS Vivaldi DAC and the CH Precision P1 phono- stage into the preamp via BNC 50-ohm cables produced sound that was superior to any conventional cabling. As the DS Audio Grandmaster phonostage does not feature a BNC out, I ran it into the balanced input of the darTZeel preamp. The preamp can be run with balanced, single-ended, or BNC connections. To achieve the widest possible bandwidth, the best way to run the preamp and amplifiers is to connect them with BNC 50-ohm cables for optimal impedance matching.

Powering up the battery-operated preamplifier is easy; it simply requires connecting a cable between the small battery power supply and the preamplifier. I experienced no issues whatsoever with the operation of the battery unit, which runs for about 10 hours before recharging for several hours. You can listen in recharging mode if you like, but the sound quality will be slightly diminished. The front panel features an optical volume knob that employs no switches, relays, or silicon devices, a balance control, and mono and stereo switches. The linestage has up to 11dB of gain. The preamp also includes a phonostage that can be adjusted for gain and loading on the rear panel. The phono- stage possesses up to 77dB of gain and is dead quiet, no matter the gain setting.

The idea is that full power can always be delivered to the loudspeaker—no matter the impedance curve or sensitivity.

As darTZeel emphasizes, the preamplifier and amplifier should be turned off when changing any connections. The only way you can really damage the amplifier is if you cross the speaker leads and create a dead short. With great power comes great responsibility. (I had an amplifier go up in smoke years ago when wires got accidentally crossed.) Otherwise, the amps seem bulletproof in operation. The amplifier transformer rests on a suspended platform that is supposed to shield it from deleterious vibrations. The amplifiers themselves are based on what the company calls a "secret weapon." That weapon is called Constant Power to Current. The amps don't behave like a voltage or a current source but, darTZeel says, "like a current source with very low output impedance. This is the equivalent of our matched impedance links, transposed to larger operating power." The idea is that full power can always be delivered to the loudspeaker—no matter the impedance curve or sensitivity. The WAMMs posed a good test as their dips in impedance at some frequencies can pose a stiff challenge to an amplifier.

What did the big amps and preamp sound like after I powered them up? The darTZeel manual puckishly

says that the 468 amplifiers need 468 hours to break in. Actually, my experience was that even 936 hours did not result in fully cooked amps. This was one of the most protracted break-in processes that I have ever undertaken. For the first couple hundred hours the amplifiers sounded somewhat restrained. The bottled lightning that I had heard with the stereo amplifier seemed to be on hold. They seemed to be saying that heaven can wait.

But not forever. After around 500 hours, the amplifier began to resemble a mini-nuclear reactor, producing the most lifelike sound that I've experienced in my listening room. I attribute much of this to the organic character and clarity of the sound, which can itself be traced back to the prowess of the preamplifier and amplifiers in further lowering the noise floor. Indeed, in the January issue of TAS in a highly pertinent editorial titled "Noise, the Final Frontier," Robert Harley noted the host of benefits associated with lowering his system's subliminal noise. "It's as though the noise obscures the micro-details," he wrote, "that cue the brain to the spatial characteristics of the recording." I could not agree more. In lowering the noise floor, the darTZeel preamplifier and amplifiers demonstrated that they can produce everything from the tiniest pianissimo to a thunderous orchestral crescendo not simply with aplomb but with suavity. The combination of tonal purity, linearity, and refinement was captivating. No amplifier has sounded more effortless in my system.

One of the most distinctive characteristics that I noticed

was the linearity of the sound. Rather than breaking up the music into its constituent elements—bass, midrange, and treble—the darTZeel equipment did not exaggerate or swell any segment of the frequency spectrum. Quite the contrary. I tried a variety of phonostages into the darTZeel, including the Ypsilon VPS 100 phono preamplifier. I had never heard the Ypsilon sound as sumptuous and winning as it did through the darT-Zeel preamp. On an EMI pressing of Tchaikovsky's Variations on a Rococo Theme played by Paul Tortelier with the Northern Sinfonia Orchestra, which is a kind of tribute to Mozart, whom Tchaikovsky once referred to as "The Christ of Music," I was mightily impressed by the ravishing sonority of the cello. The DS Grandmaster optical cartridge displayed a different set of characteristics—somewhat cooler but with shocking verisimilitude on vocals. The neutrality of the darTZeel preamplifier offered a potent lens into the characteristics of each of these units.

I played the great German tenor Peter Schreier's recording of Schumann's songs Dichterliebe on the Deutsche Grammophon label, and the palpability of his voice was moving. Through the proprietary darTZeel phonostage, the noise floor was subterranean and the sound a pinch warmer. Then there was the CH Precision P1—it provided probably the widest and deepest soundstage through the darTZeel equipment, landing somewhere between the DS Audio and the Ypsilon. While recently visiting,

my father was taken aback by the differences between the darTZeel phono and the DS Audio when I played him a jaunty Art Hodes and Milt Hinton album called *Just the* Two of Us on Muse Records. Those differences can sometimes be disorienting. but all these phonostages offered valid reproductions of the music. The darTZeel phonostage shouldn't be scanted or treated as an afterthought; it is worthy of the finest systems, particularly for its vanishingly low noise floor that allows very tiny details and nuances to emerge on a variety of recordings.

For all my love of vinyl, I've also been exploring the streaming world with no small measure of avidity over the

past few months. The wealth of performances is simply too powerful a lure to resist and the quality of playback very high. One nifty performance that I landed upon is called Royal Fireworks on the Warner Classics label. The British trumpeter Alison Balsom and her eponymously named ensemble play a variety of pieces, including a transcription of the Bach aria "Jesu, Joy of Man's Desiring." On this aria, the well-nigh obsessive exactitude of the darTZeel in parsing various timbres came to the fore.

Sometimes on brass recordings a kind of burr can emerge that distorts the harmonies. Not with the darTZeels. Instead, it was possible to distinguish clearly the various

Specs & Pricing

NHB-18NS MKII

Linestage/Phonostage

Inputs: Balanced on XLR input, single-ended on RCA jacks (x3), phono input (RCA x1 and BNC x1), single-ended on BNC jacks (x4)

Frequency response: 1Hz to 1MHz

+0, -6dB

Input impedances: 10k ohms (balanced), 30k ohms (single-ended), 50

ohms (BNC)

Outputs: Balanced on XLR jacks (x1), single-ended on RCA jacks (x1), single-ended on BNC jacks (x1) **THD+N:** <1% (7Hz–77Hz)

Signal-to-noise ratio: 92dB Dimensions: 440mm x 335mm x

170mm Weight: 23kg Price: \$61,000

NHB-468 Amplifier

Output power: 465 watts into 8 ohms, 625 watts into 4 ohms, 222 watts into 2 ohms (design limited)

Input impedance: 30k ohms (RCA), 10k ohms (XLR), 50 ohms (BNC) Gain: 26dB or 32dB (selectable) Output impedance: 0.28 ohms from

20Hz to 20kHz +0, -3dB **THD+N:** <1% 7Hz-77kHz

Signal-to-noise ratio: 115dB Dimensions: 277mm x 511mm x

Weight: 70kg each **Price:** \$230,000 per pair

BLUE LIGHT AUDIO (US Distribu-

4160 SW Greenleaf Drive Portland, OR 97221 (503) 868-0500 bluelightaudio.com dartzeel.com

Associated Equipment

Loudspeakers: Wilson Audio Master Chronosonic with two Wilson Master Chronosonic subwoofers, Wilson ActivXO crossover

Analog source: TechDAS Airforce Zero turntable with SAT CF1-12 and Graham Elite tonearms; TechDAS Reference TDC01 and DS Audio Grandmaster cartridges; CH Precision P1 phonostage with X1 external power supply, Ypsilon VPS 100 phono preamplifier, Mk. II, and Meitner DS-EQ1 Optical Equalizer; DS Audio ST-50 and Lyra stylus cleaners Digital source: dCS Vivaldi CD/SACD playback system, Roon Labs Nucleus Support: Stillpoints ESS Rack and amplifier stands and Ultra 6 footers, custom HRS VXR Rack and isolation

Cables: Transparent Audio Generation 6 Magnum Opus speaker and Magnum Opus interconnects, Nordost Odin speaker and interconnects Accessories: Audio Desk Systeme Premium Ultrasonic Vinyl PRO cleaner; Furutech LP demagnetizer Acoustic: Stillpoints Aperture II

Acoustic Panel

Thixar Amplifier Stand

In auditioning the estimable darTZeel NHB-468 amplifiers, whose heavy casework renders them quite impervious to most vibrations, I quickly discovered that when placed on a custom Thixar stand, manufactured in Düsseldorf, Germany, their performance did, indeed, go up another notch. The handsome stand matches the gold color of the amplifier, and four slight depressions in the top plate ensure that the darTZeel amplifier is precisely and securely situated. The company's CEO Dirk Ruedell explained to me that the stand is based on what he calls Adaptive Vibration Control technology. Thixar seeks to combine different kinds of technologies, materials, and scientific principles to reduce nettlesome vibrations that can intrude upon the musical signal. The aim is to reduce vibrations in a wide bandwidth of frequencies, he notes, to ensure that the stand can lower any "disturbing energy overall without affecting the sound."

To achieve this lofty goal, Thixar employs no fewer than five footers, which can be independently leveled, in the bottom plate. The principal task of the hefty bottom plate is to serve as a repository for a Thixar-specific gel, one that is said to offer an optimal balance between decoupling and absorbance to minimize any deleterious low frequency vibrations. The intermediate plate rests on this gel only without any stiff contact, so that there is no transmission from bottom to top. This layer is itself composed of a specific, multi-layer wooden material that absorbs high-frequency vibrations. Ruedell also applies a damping foil that, in tandem with the aluminium plate, addresses midrange distortions.

What are the results of all this Teutonic engineering wizardry? Upon installing the stands, my foremost impression was that the bass response was greatly improved when contrasted with my own custom maple stand. There were no two ways about it; the bass lines were faster and tighter, helping to clean up the sound throughout the frequency spectrum. I also noticed that the noise floor appeared to diminish—small details that had previously been obscured were now audible, and the solidity of imaging was improved. Anyone who purchases the NHB-468 would do well to consider procuring these superb stands. I did.

backing instruments uniting into a whole as Balsom played the solo line. Similarly, the precision of the preamp and amplifier was distinctly audible on the adagio movement of Telemann's concerto for trumpet and strings in D major. When I attended Tanglewood music camp in high school, the trumpeter Rolf Smedvig remarked that he considered this one of the most difficult passages in the solo trumpet literature. It requires tremendous breath control to play this solo lyrically, which takes place mostly in the furthest treble reaches of the piccolo trumpet. As it happens, Balsom uses an original trumpet similar to one that would have been used in the eighteenth century; it presents its

For all its refinement, make no mistake: The 468 amps can really bring it on in the nether regions.

own set of difficulties as there are no valves to divert and manipulate the air flow. What I found so intriguing in listening to these passages was the accuracy with which the darT-Zeel gear captured Balsom's intonation—the bending and twisting of the initial attack on the note, an approach that endowed her performance of this concerto with a lissome character. The lack of grain of the darTZeel gear also mean that instruments such as saxophone sounded both creamy and breathy, easing in, as it were, from the sidelines to make their entrance before launching into dramatic solos. Ditto for piano. Fast runs are clearly delineated without the smearing of individual notes that can be obtrusive, distracting from the emotional essence of the music. On a fine recording of Bach by the pianist Vikingur Olafsson, I noted the careful way in which the darTZeel gear highlighted the pearl-like clarity of his playing.

For all its refinement, make no mistake: The 468 amps can really bring it on in the nether regions. The opening march of Henry Purcell's Music for the Funeral of Queen Mary features some tympani that resound with thunderous impact on the Balsom recording. It was possible to hear the deep and tight impact of the initial strike of the mallet, then the vibration of the tympani skin,

followed by a shudder of air in the hall, then a melancholy backing brass chorus, perfectly in tune—all combining to offer as realistic a rendition of this music as I've experienced.

The fleetness and the tonal fidelity on acoustic bass have to be heard to be believed. When TAS' Andrew Quint visited me recently, he professed that he was gobsmacked by the incisiveness and weight of it.

As far as watts are concerned, I was never able to push the darTZeel beyond 80 watts or so. It can push up to 2000 peak watts. At 70–80 watts the sound pressure level reached 100 decibels, louder than I would care to listen to for any sustained amount of time. My point is that as near as I could tell, it's almost impossible to faze these amplifiers. Your room will give out long before the amps do. On albums such as Arturo Sandoval's Ultimate Duets, I pushed the amps as hard as I could tolerate. My understanding is the Deletraz himself is ready and willing to go to levels of sonic pressure that will leave lesser mortals wilting. Put bluntly, these amps have some real cojones. On the Sandoval album, everything was laid out spaciously with the loudspeakers basically pulling a disappearing act-drums, congas, deep bass, Prince Royce or Steve Wonder singing (not to mention the latter's lithe harmonica playing), plus Sandoval's trumpet soaring majestically over the proceed-

The darTZeel's capacity to deliver an immense soundstage was also displayed to fine effect on a Philips LP of Martha Argerich playing Tchaikovsky's Piano Concerto No. 1 with the Bayarian

Radio Orchestra, a live recording from 1981. The French horns came blazing out from the back of the orchestra and the piano had a grandeur to it that you seldom hear on a stereo system. On another live recording from 1985 of the Russian pianist Valery Afanassiev playing Schubert's piano sonata in B flat major, the dynamism of the 468s was eyebrow-raising. What my TAS colleague Jonathan Valin has felicitously termed the "action" of an instrument was wonderfully audible—the degree to which you could hear the hammers striking the strings made it sound as though the piano itself was reverberating right then and there in my room.

Perhaps the most impressive attribute of the darTZeel is its fidelity in conveying vocals, either solos or choruses. Time seems to slow down a little bit as each syllable is clearly enunciated with a relaxed character that is most enticing. On the classic album A Meeting of Giants, Frank Sinatra's voice emerges with a silky robustness on cuts such as "Fly Me to the Moon," while the backing Basie band is firmly locked into place. The ultimate treat was listening to the Dutch soprano Elly Ameling singing Schubert art songs, including "To Music," a tribute to the noble art that rescues us from gloom when we are caught up in the swirling whirlpool of life that threatens to divert us from a better world. The ease with which the darTZeel effaced any lingering sense of electronic reproduction, the creaminess of Ameling's voice, and

the scale of the piano created a credible simulacrum of listening in a concert hall. Put otherwise, it illuminated the inner light of the music.

As Swiss audio gear continues to set new standards, I'm starting to suspect that there be something in the water in Lake Geneva. How else it can be explained I do not know. But I am certain that Herve Deletraz has produced a uniquely satisfying combination of preamp and amplifiers, one that reaches the apex of refinement and beauty and elegance intended not for the audio snob but the musical connoisseur. I'm sold. In fact, I didn't just buy the preamp and amps. I have now taken the plunge and ordered a second set of 468 amplifiers to power my subwoofers for optimal integration with my main loudspeakers. Even Tinn gulped and asked if I was feeling OK when I proposed this course of action. But when I asked Deletraz himself if I was crossing the line into lunacy, he replied, "At a certain level, nothing anymore is lunacy. So, I would say...you will just improve your system by a great step further." Yeah, baby! As far as I'm concerned, when it comes to darTZeel, I happily surrender to its blissful charms. tas

NuPrime Omnia A300SE (\$1650)





MSRP \$1650

- Amplifier capable of 2×150 W @ 8 ohms and 2×200 W @ 4 ohms power
- Wi-Fi 24-bit/192kHz and Bluetooth 5.0 aptX HD streaming
- Multiple digital and analog inputs, with up to IIS 32-bit/768kHz, USB 24-bit/384kHz, and DSD256 decoding
- · Coaxial, Optical and analog Pre-Out
- Supports all major online streaming services (Amazon Music, Deezer, iHeartRadio, Qobuz, QQ Music, Spotify, TIDAL, TuneIn, Napster, Ximalaya), network DLNA streaming, and AirPlay 2
- Free iOS and Android app



www.nuprimeaudio.com

