







QUIETER AND STRONGER



In many audiophile circles, it is commonly believed that power conditioners and various other power-line accessories often do more harm than good, robbing the music of its vitality, color, and that oh-so-important, wildly intangible "boogie factor."

AudioQuest's **Niagara Low-Z Power Noise-Dissipation Systems** are designed to do the exact opposite. Niagara kills the noise while *honoring* the music, so that the listening experience can be exactly as it should be: compelling, immersive, *fun*. "The difference was huge. AudioQuest's Niagara 1000 not only cleaned up the power, it did everything that is the *opposite* of killing the boogie.... It was as if my system had gotten a heart-shot of adrenaline."

Herb Reichert,
 Stereophile,
 April 2017

audioquest.

^{photo:} Cai Brockmann

The entrance hall to WBT's headquarters in Essen houses a centuries-old lathe. WBT's CEO, Wolfgang B. Thörner, is a keen admirer of this decorative piece, which is still fully functional... —>

-500

300 B.C.: First illustration of a lathe

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1000



—>...In its own nostalgic way, it embodies the virtues necessary to create top-quality connectors and jacks-precision and attention to detail. Today, of course, WBT manufactures its products on modern machines, most of which have been constructed in-house.

1490: First lathe with tool holder 1799: First screw cutting lathe made created by Leonardo da Vinci completely of metal by Henry Maudslay 1500 \bigcirc

> 1571: First lathe with feed mechanism created by Jacques Besson

 \bigcirc

1942: First cinch connectors from the Radio Corporation of America (RCA)

 $\bigcirc \bigcirc \bigcirc$ 2003: First nextgen connectors from WBT

1985: First precision

connectors from WBT 2000

⊲ BACK TO TABLE OF CONTENT | FIDELITY INTERNATIONAL № 08 | 01/2018 | EN

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004

Cai Brockmann

DEAR READERS,



In this edition of FIDELITY INTERNATIONAL, we once again present you with some tasty tidbits, or *"Schmankerl"* as the Bavarians call them. These delightful treats originate from around the entire world, which is, of course, fitting for an international magazine.

Niagara 1000, the small, well-made power filter from AudioQuest has arrived from the United States and is ready to clean up electricity. Denmark is inherently well known as a top address for exceptional hi-fi, with many audiophiles considering Gryphon to be at the absolute cutting edge of high-end. FIDELITY INTERNATIONAL carefully examines Gryphon's new "small" integrated amplifier Diablo 120.

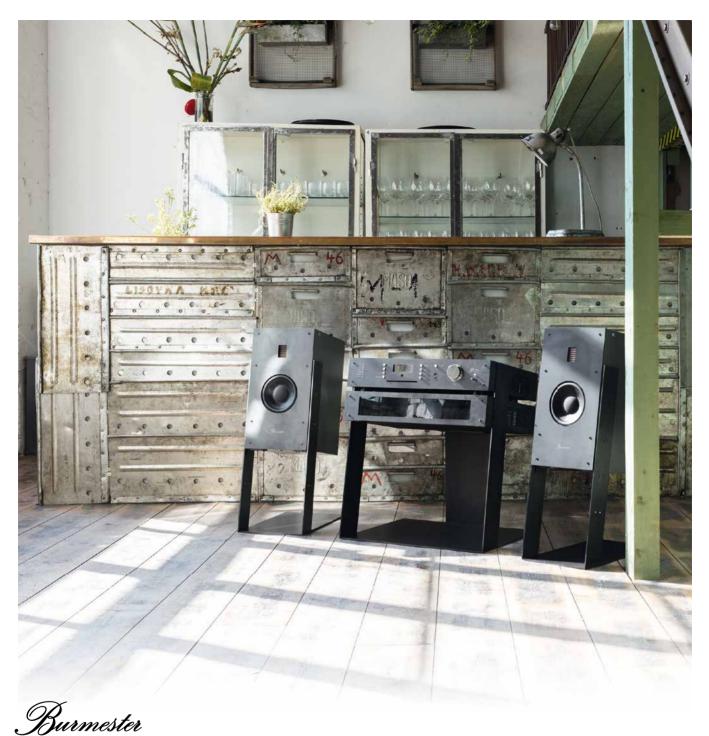
The Hugo2 from Chord Electronics is literally compact. This exceptional DAC from England has incredible talents that can be put to use both at home on a personal system as well as on the move. Speaking of on the go: Audeze presents the smaller, however by no means less high-end, LCDi4. The world's presumably best in-ear headphones appear capable of taking on the daunting role of classic jewelry for the ears. But what makes the ear buds true gems are the superb sound and innovative technology. From canned music to live experience: Professional drummer and world traveler Stefan Gawlick has a great appreciation for German traditions that extend far beyond Oktoberfest and the Autobahn. Reporting from Cologne, Stefan tells us what he likes about the local Philharmonic—not just in the concert hall, but also behind the stage. A vinyl production of

the jazz pianist and vocalist Anne Bisson sets new standards and incites our music critic's enthusiasm. Also along for the ride: Key players from Canada, Thailand, and the United States.

Danny Kaey, another globetrotter from the FIDELITY team, connects the dots to these far-flung locations around the world in three articles he wrote for the magazine. In his hometown of Vienna, Danny met up with the makers of Mysphere and had the opportunity to take a look behind the scenes. The author also offers us an insightful, entertaining overview of the current high-end audio scene in the United States, the country he now calls home. In addition, Danny visited one of his favorite stores in San Diego, where he arrived at an astonishingly clear conclusion concerning the topic of high end and how it can successfully master future challenges.

Interesting reading material? We hope you enjoy the eighth edition of FIDELITY INTERNATIONAL—the German Voice of Premium Audio.

Best regards, as Jodun



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CONTENT № 08

01/2018 February/March/April



Please note: All items are listed with German retail prices (including sales tax) at the time of equipment evaluation.

Standards

003 Fanfare
005 Editorial
024 Browser No. 1
065 Browser No. 2
112 Finale
114 Preview
116 Imprint



Equipment

010 Loudspeakers
028 In-ear Headphones Audeze LCDi4
052 Integrated Amplifier Gryphon Diablo 120
069 ··· DAC and Headphone Amplifier Chord Electronics Hugo2
098 Power Filter Panel AudioQuest Niagara 1000



CONTENT № 08





Stories
041 Report & Interview Mysphere company, Vienna
073 The American Corner

073	
088	An evening with Alma Audio, San Diego
103	······ Report Who is Who: WBT

Music

080	Covered Album
Dave Brubeck Quar	tet vs. Kühlich & Genc
082 Concert H	alls of the World
(Cologne Philharmonic
084 Anne Bisson Tric	: Jazzidelity b: Four Seasons In Jazz

Please note: All items are listed with German retail prices (including sales tax) at the time of equipment evaluation.

Reviews in this Issue
028 Audeze LCDi4: In-ear Headphones
007 AudioQuest Niagara 1000: Power Filter Panel
069 Chord Electronics Hugo2: DAC an Headphone Amplifier
010 Einstein The Pure: Loudspeaker
052 Gryphon Diablo 120: Integrated Amplifier





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SPE-CIAL-ISTS IN PURE-NESS

By Helmut Hack. Photos: Ingo Schulz



Einstein Creates the Perfect Sound Equation!







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.What the manufacturer is simply calling a semiactive three-way system is actually something more complex upon closer inspection: To be more precise, you'd have to call The Pure a full-range system with a high-frequency extension and active subwoofer. Surrounding a driver from Fostex bearing the model No. FW168HR, a piece of equipment Einstein has officially designated a woofer but still runs as a proper full-range model, is a high-frequency horn with alnico magnet from the top-class Japanese equipment supplier along with a powerful Peerless woofer equipped with a wide rubber surround and driven by a 700-watt class D power amplifier. The central Fostex driver featuring a prominent, relief-style membrane and surround demonstrates its strong good-naturedness with a minimum impedance of eight ohms between 200 hertz and 500 hertz, not noticeably crossing over the axis until some 12 kilohertz. The higher-level ring radiator gently takes over much earlier with six decibels per octave—just how much earlier can be regulated using a three-stage knob on the back standard for Einstein, one of three condensers is then laid on the signal path. The backward-sloping baffle and the recessed horn driver compensate for the slight phase displacement and place the voice

coils—that is, the moment when the electric signal is mechanically converted—on one vertical line.

Solid as a rock

The name says it all: The Pure strives to ensure the most undistorted music signal possible leaves the speakers. To achieve this, Einstein President Volker Bohlmeier chose to following what's essentially an ultraconservative approach: The housing doesn't get to play any kind of role or contribute anything, even in the face of strong temptation to draw out more color or efficiency. Solid, 12-millimeter-thick aluminum was used for the rear side of the flat housing as well as for the baffle, which is also enhanced with stainless steel and black acrylic. This impacts the resonance behavior—if you can still talk about resonance in view of this battle of materials—because the three different materials have a calming effect on one another. Forty-millimeter MDF board was used for the surrounding frame, with a honeycombed chamber structure ensuring quiet on the inside. In terms of stability, The Pure's housing is more likely to bring to mind a plane's black box than your conventional speaker. To keep the sensitive central area free of rearward noise or

any minimal housing resonance, the powerful woofer is placed in a separate chamber along with the power amp and an active, variable analog filter. The space seems tight and a glance at the textbook confirms that bass volume needs displacement. But that is just half the truth: The theoretically long-stroke woofer with a paper diaphragm acts like a suction cup in an ill-fitting cage. Every impulse has to penetrate strong resistance, every amplitude is immediately corrected with the raw power of the air volume's counter-pressure, with the result that the diaphragm is forced back into its starting position like Mariah Carey into an ill-fitting dress. These days, however, compensating for this stubborn inefficiency doesn't require a heavyweight power amp; a coolheaded, hearty switching amplifier takes care of this task in the woofer without cutbacks on quality. The bass range of The Pure is absurdly fast, features color and contour, and feels exceptionally sure-footed overall. And with 700 watts coupled with low volume, the power produced by The Pure enables the brute achievement of coaxing the woofer's sound pressure down to 20 hertz —that's less than its own resonance frequency! The level and frequency damping can be adjusted to the room or listening preferences **•**





using two knobs on the back. Admittedly, talking about a crossover frequency wouldn't be entirely correct in this case, since the bass midrange from Fostex, which approaches an aluminum high-frequency horn typical of a point source, plays very easily and is only underlaid in the bass. While this may sound like splitting hairs, it is an important design feature in my opinion and the simple but useful setting options offered by The Pure should be kept in mind. I will try to clarify this statement when I discuss my audio tests.

A brawny steel T-beam connects the two sectional housings to a monolithic unit; the thin but heavy pedestal rests on four spikes while a fifth bores upward into the bass compartment to directly divert vibrations. Given its weight of more than 100 kilos per channel, you'd better get a second and third person to help you set it up.

Skills management with no worry about contact

Before producing speakers with the Einstein logo and design, the Bochum-based tube manufacturer showcased systems from the American manufacturer Audiomachina, so it's no coincidence their design brings to mind The Pure. As is the case for the tonearm and cartridge, Bohlmeier also benefits from this fruitful cooperation with a choice partner when it comes to his speakers: Karl Schuemann, who founded Audiomachina in 2000, permitted Bohlmeier to extensively examine his designs and, with The Pure, extended him the right to build a type of clone from two models of the sound transducer from Colorado. This all happened just in time for the Rocky Mountain Audio Fest in October, where FIDELITY again sat on the International HiFi Press Award jury and Schuemann also announced an apparently groundbreaking new speaker called XTAC. If you happen to be in the area, a short detour to Fort Collins would certainly be worth it ... Now, back to the topic at hand: The baffle of The Pure's midrange module is aligned with the bass section and therefore wider than that of its American role models. That makes it slightly more efficient: The 89 decibels specified are either very conservative or the speakers are very good at utilizing power when relieved of their bass weight, which simplifies their setup

in European apartments. If absolutely necessary, The Pure can be positioned relatively close to a wall, an consideration that plays a less important role in a ranch home in the American Midwest. With its full-surface, angled baffle, The Pure presumably produces fewer edge reflections than the layered, pyramid-shaped design of the original. The Pure can obtain its signal entirely from the power amp, in which case a short cable jumper links the two housings employing huge screw terminals, or only partially for the mid-high unit. Cinch inputs for the bass can be directly connected with the preamp's output. Both options have their theoretical (and financial) pros and cons in terms of cable paths, lengths, and—please note!— phase position. Using a cable setup equivalent to that of in-akustik, Vovox, and AudioQuest (cinch), I could detect no differences worth talking about in a listening comparison. You could consider a bi-wiring scenario, but, I wouldn't advise it.

Unspoiled, pristine, uncompromising: The Pure

Powerful three-way systems can leave a lasting impression but often

017

⊲ BACK TO TABLE OF CONTENT | FIDELITY INTERNATIONAL №08 | 01/2018 | EN





display their deficiencies when given a closer listen, with the focus on musical contexts. This includes posing very specific questions, for instance: How is the singer likely positioned with respect to the drums? Does the background choir float above everything or do we hear it sing from a fixed location? In consideration of its uncommon functional principle described at the beginning, I expected a natural and markedly homogeneous playback and I wasn't disappointed. After a couple of attempts with the setup, a task that showed The Pure to be remarkably uncomplicated, I found my listening ears initially going to the two knobs for the active bass. The sensation in my feet, led me to realize that less could be more. It's worth resisting the temptation of a bass thunderstorm. Even if you may be enticed to add more power from down below to "dirty" hard rock discs—in particular, to Them Crooked Vultures, the only album to date from the super group of the same name that features Dave Grohl, John Paul Jones, and Josh Homme, the Cream of the new millennium-more delicate material

such as *Book Of Days* from the vocal ensemble with Meredith Monk— a serious version of Dead Can Dance, for those who don't know the album makes it painfully clear what one has to give up in exchange. Too much high bass drowns the wonderful expansive range and keeps it from unfolding its full potential.

This isn't quite as apparent in the incredibly pressing and lively playback of the roughshod, distorted "Scumbag Blues," which actually reminds me of "White Room," as it is with the polyphonic, fluent, and delicate choral music of the avant-garde vocalists who present an exceptional spectrum of tones as a compact, compositional unit. Expressing precisely the right amount of empathy, complexity, and intricacy, The Pure conveys this fragmentarily expanded soundtrack in high resolution as a cohesive, natural music ensemble—provided you leave the exclusive, expensive chassis from Fostex undisturbed to do its thing. It needs to stand upright on the foundation of the woofer and shouldn't be submersed into it up to its knees. It's fascinating to experience the ability

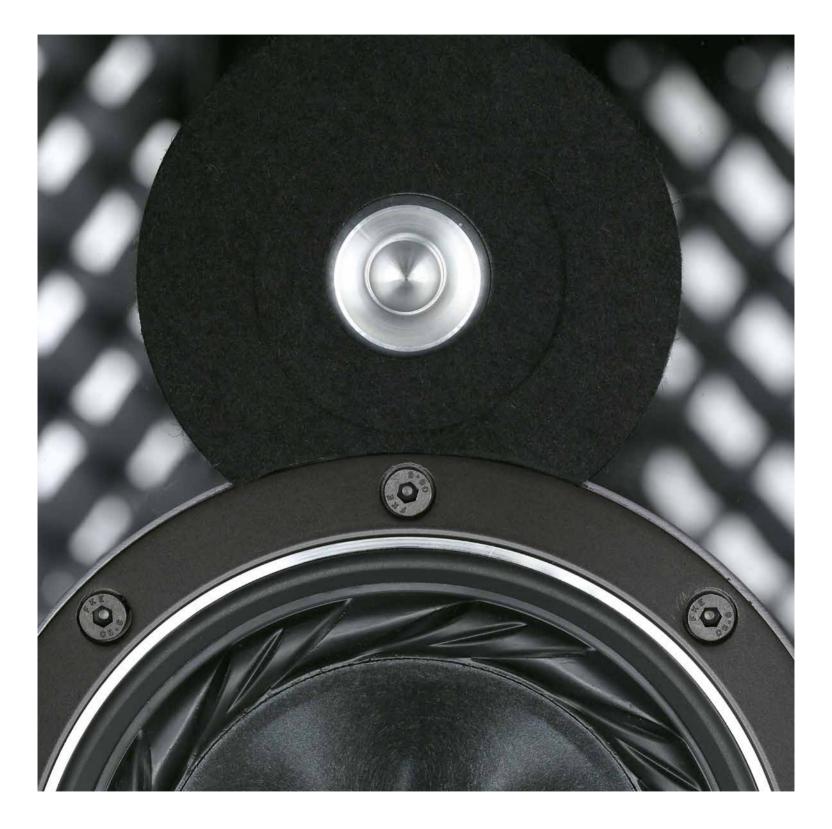
of The Pure to reproduce genuine controlled low bass with no bombshell effect.

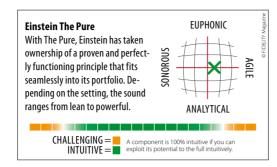
As with a subwoofer, a cautious approach is best when determining the ideal amount. To test this, I prefer to listen to recordings I know well. In so many ways, Ella Fitzgerald the perfect candidate. Even with active bass turned off at first, "All Through the Night" sounds exceedingly sweet, enticing, and rich in detail; The Pure could even win over listeners as a two-way monitor, with the sophisticated quality of the central Fostex driver playing to its full potential. But the voluminous jazz icon was lacking in body and substance—in groundedness. To feel that needed sensation in my gut, I turned on the active bass a bit too loud and tapped into that frequency range above which the bass is no longer needed then lowered the level to the point when the presence range flourishes from the voice's inherent musicality. Backed by her physical presence, Ella Fitzgerald now whispers to me from in front of the orchestra, her vocals stretching almost infinitely in powerful passages,











ACCOMPANYING EQUIPMENT

Turntables: TechDAS Air Force III | Tonearm: Einstein The Tonearm | Pickups: Einstein The Pick-up | Phono amplifier: Einstein The Phonostage | CD player: Ayon CD-3sx | Preamplifiers: Einstein The Preamp, Tidal Preos | Power amps: Einstein The Silver Bullet, Air Tight ATM-3211, Musical Fidelity M8-500s, Gato PWR-222, Audia Flight FLS4 | Loudspeakers: Avantgarde Acoustic Uno XD, MartinLogan Expression ESL 13A, Monitor Audio Platinum PL 300 II, Nubert nuLine 334, Nime Elite One | Cables: in-akustik, Vovox, AudioQuest | Accessories: AudioQuest, Sieveking Sound, Subbase Audio, Solidsteel





and remaining fully transparent as they glide into the highest ranges. Even when the horn sections blow through the background like a Dixieland band. The Pure has everything fans of full-range systems so treasure and a bit more: complete, all-encompassing credibility.

Amplifier-friendly load

The Pure's exceptional design demands some attention at first. But once you've found the right settings, it pays off with a seldom-heard, deeply pure sound profile that remains acoustically transparent down to the last detail while not losing sight of the great line, the wide melodic arch, the internal tension. Amplifier power is not its main focus, and it didn't get chased into the box horn by high-wattage heavyweights like the Musical Fidelity M8-500s, Gato PWR-222, and Audia Flight FLS4 (see FIDELITY No. 14, 34, and 33 respectively). Nor did it spit out tube amplifiers like the Air Tight ATM-3211 without giving them a try. In an achievement like that of the company's own Silver Bullet OTLs, The Pure has proven more than once over the last several weeks that it not only can follow ethereal melodies until they've lost themselves in perfected pleasure, but it can also let the walls tremble if you light it up. So you've heard there's no such thing as a speaker that can handle serious blues rock as well as chamber music for

cello and flugelhorn? Be open to what Einstein's The Pure can teach you.

Speakers | Einstein The Pure

Functional principle: modular three-way standing speaker, closed | Frequency range: 20 Hz-35 kHz | Impedance: 8 Ω | Sensitivity: 89 dB | Equipment: Peerless-Bass (26 cm, paper diaphragm), midrange and high frequency horn by Fostex | Special features: active bass, adjustable high frequency, disconnected midrange speaker, special pedestal with heavier weight and precise tilting | Finish: Stainless steel and black acrylic or a range of wood veneers | Dimensions (W/H/D): 40/125/35 cm (including stand) | Weight: 110 kg | Warranty period: five years | Price for pair: 44000 €

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BROWSER № 01



Two-Dimensional Speaker, Three-Dimensional Sound

Ultrathin speakers, as we all know, find it pretty easy to produce a plastic sound—and the superb examples built by Fonica from Italy are certainly no exception here. These 1-inch-thin magnetostatic speakers are newcomers to the German market, and they will thrill both music fans and interior designers with their outstanding sound quality and wide range of customization options. http://fonica-international.com

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Mobile Monitors

Whether you're at the mixing console, behind the camera, or on tour, the DT 240 PRO from Beyerdynamic gives you complete audio control with consistently high quality. What's more, its reasonable price tag also makes it affordable for musicians, podcasters, or filmmakers with a more modest budget. www.beyerdynamic.de

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Product Upgrades from Manger

Manger Audio has been building new and improved components into their speakers since the middle of 2017. Now, owners of its older models can also take advantage of an upgrade option that features new internal wiring from Furutech as well as improvements to the high-frequency signal path. Active models are additionally equipped with AHP high-end fuses. For its p1 and z1 passive models, Manger is also offering two filter designs—minimum phase or linear phase—for the Linn Exaktbox with differing time and phase responses. www.mangeraudio.com











BROWSER Nº 01

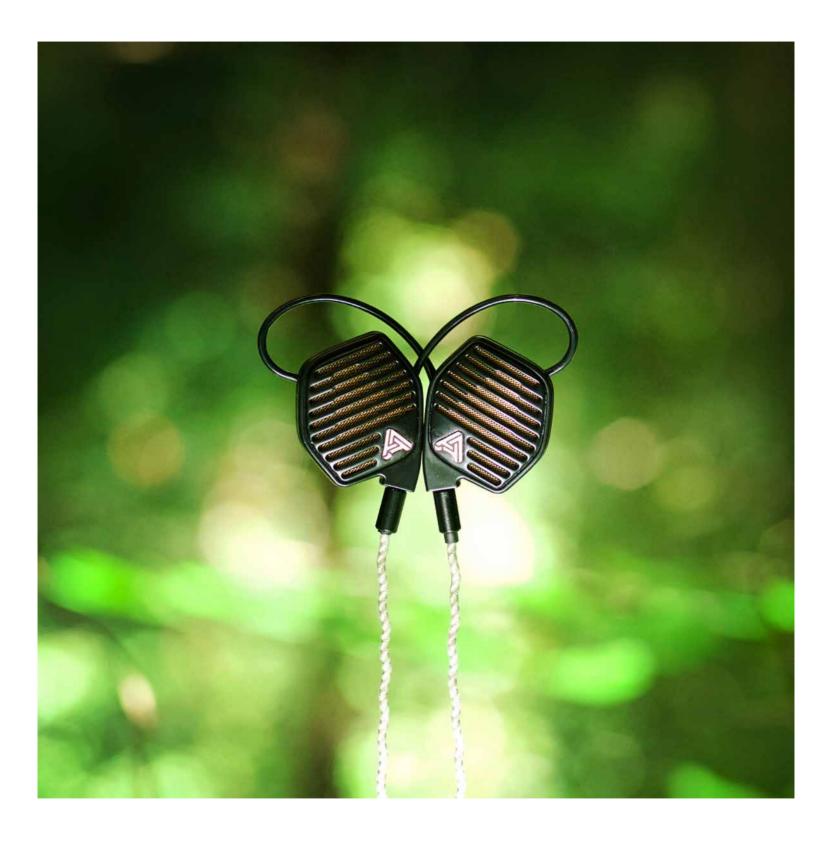
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SOUND EXPERIENCES WITH AUDEZE'S GREAT LITTLE IN-EAR BUDS POINT FAR INTO THE FUTURE ...







Audeze LCDi4



By Roland Schmenner. Photos: Ingo Schulz, manufacturer

______The two sound transducers couldn't be more different, even when their model names differ by just one letter. I'm referring to Audeze's luxury headphones LCD-4, which I wrote about in FIDELITY No. 28, and the new in-ear buds LCDi4, which I have worn unnoticeably nestled in my ear for several weeks now. The former is trimmed in lambskin and weighs 650 grams; the latter features rubberized plastic and weighs in at just 12 grams a side. You do, however, find some similarities when it comes to price—the over-the-ear model will set you back €4,000, the flyweights almost €3,000—and the optimized film technology that has long attracted recognition and praise for Audeze. Further development has now also led to an in-ear headphone with this technology. Whether these two namesakes sound the same despite their apparently different points of departure is something I will determine with help from my media player Calyx M.





It's fully loaded with a playlist of hi-res files and accompanies me on numerous train trips.

Summit cross

That brings us to the actual scope of use I've planned for the precious earplugs, at least the most obvious one. Although some premium headphones are fit for travel—that is, you can fold them—you're still left with a great deal of bulk and fussiness to deal with: Extra weight, space, awkwardness when opening the case on board an ICE or plane, packing them up again ... The two flyweights in a stylish leather case hardly bigger than a pack of cigarettes come at just the right time to lighten the load of the stressedout traveler. And let's be honest: Don't you sometimes have the

feeling that you spend more time on the go than in your own living room? So why not just take the high-end system with you? And, like the power naps taken by stressed-out managers, we audiophiles have refined the art of power listening—even if it's just 15 to 20 minutes when we can lose ourselves in the musical world of a great pop ballad, a jazz trio, or a symphony movement. And





longer trips give us twice or three times the joy, as we get to explore an entire Wagner opera or an epic rock concert.

You now need more than two hands to count the number of mobile hi-res players suitable for the job. The corresponding in-ear buds are, however, sadly lacking. Sure, Audeze itself has been offering the iSine line, promising superior in-ear pleasure, but up to now the summit atop the audiophile's Olympus hasn't yet been reached. A job for the great little Audeze. And, by the way, the premium lightweights are also a welcome enhancement for home, office, or the balcony. At home surrounded by my own four walls, it's a Chord Hugo2 that transmits the amplified, converted music files from a Linux laptop to the LCDi4. I mention this because the appropriate amplification is something we'll discuss in more detail later on.

Fine workmanship

Held snugly in precisely fitted foam molding inside a package with a transparent lid and magnetic closure, the LCDi4 reminds me of little elephant ears. The company even provides a genuine leather bag for carrying the extensive accessories delivered with the ear buds. These include three pairs of differently sized ear adapters, each in two different designs. This means you get a total of six versions, so you'll have an appropriately sized luxury bud for even the most angular ear canal. You also receive two different pairs of ear loops designed to accommodate variations in the outer ear. To determine the proper combination, it's worthwhile to take the time and try them all out, both without music for fit alone and with music to fine-tune transmission of the "sound trunk" from the LCDi4 into the ear.

Changing the rubberized "topcoat" is quick and easy, while a little more care is called for when switching out the ear loops. It's not befitting of the smart set to simply tear them off your ear-. just as you don't just toss around expensive designer glasses, either. Those who might be put off by the use of plastic in the Audeze LCDi4 should remember that every gram of weight matters with ear buds; after all, the melodious duo are meant to fit into the ear channels as imperceptibly as possible, and reinforced plastic is still the material of choice for that. A more stylish leather trim or similar finish would only add unnecessary weight.

Appetite for performance

To avoid any misunderstandings, let me state from the beginning: An earphone is not a closed





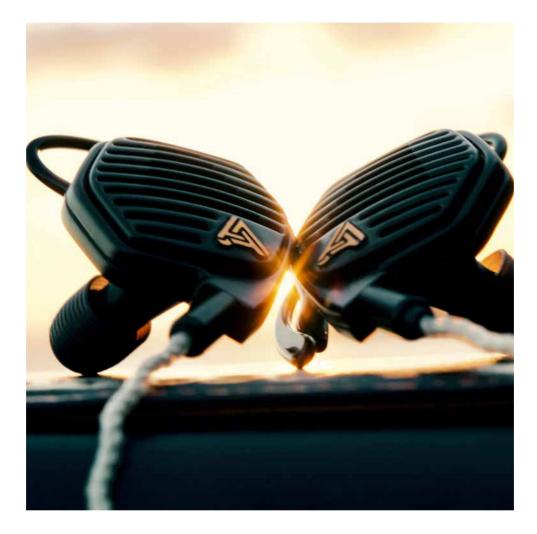
headphone. This means you have both a minimal amount of noise transmitted to the outside—, an aspect you can safely ignore with the LCDi4-and louder external noise that can still penetrate to your ear. The extent to which this bothers you depends on the source of the noise and on the music you've selected. Popular pop, rock, and electronic tracks produced at a more or less constant volume in the medium to high range are practically immune to annoyances from the outside; highly dynamic classical recordings in pianissimo or chamber jazz like ECM are more likely to be impacted. During train rides, occasional travel noise is perceptible; but, more often, it's those highly "clamorous" individuals who make themselves somewhat noticeable.

Particularly when it comes to dynamic recordings, it's quickly evident that the miniature magnetostats require substantial, even powerful, amplification to demonstrate their outstanding qualities to the fullest extent possible. Media players such as the Calyx M and Fiio X7 seem to have already reached the top of their available volumes on some tracks, and I have the feeling I'm still missing out on that decisive kick, especially with classic and jazz recordings. The dynamic and downright holographic experience from well-produced electronic music such as Yello's "Oh Yeah" from their album Stella that Calyx M serves up will simply not engage with Leonard Bernstein's Divertimento for Orchestra in the sensational recording of Eije Oue (on Reference Recordings). It's quite convenient that we happen to have Chord's Hugo2 in house for testing. On the LCDi4, the combined DAC and headphone amp show off (even better than its little brother Mojo) not only their outstanding transducing capability, but, in particular, their excellent amplifying power. Hugo2, playing "Turkey Trot" from Bernstein's orchestra suite on a Linux laptop using Clementine, produces a very special kind of experience: The Audeze LCDi4 comes very close to the utopia of having a hearing chip inserted directly in your brain. Drums and deep brass produce small, sensational sound explosions that seem to take place in your head between the temporal lobes. The result is an imaginary surround sound that locks into place in my head, making me

almost feel I'm part of the orchestra. Fantastic! But could this just be a coincidence, something that only happens with this specific recording? No way! Panoramic 360° sound also emerges from Melanie di Biasios' album A Stomach Is Burning. Interspersed percussion, meandering flutter-tonguing in the deep registers of a flute and hard-to-place bell-like sounds encircle my head, making it difficult to distinguish whether the music is penetrating into my ear from the outside or directly from the inside. A little perplexing at first, it's definitely a fascinating experience to have. The infinity of a sound is transported—a sound experience that will possibly be the standard in a few years, one already anticipating the cybernetics that will one day eliminate the boundaries between inside and outside, between human and machine. And Audeze's LCDi4 makes it possible to experience this utopia right now, provided proper amplification is available. Here, the in-ears prove to be almost as power hungry as their over-ear counterpart, the LCD-4.

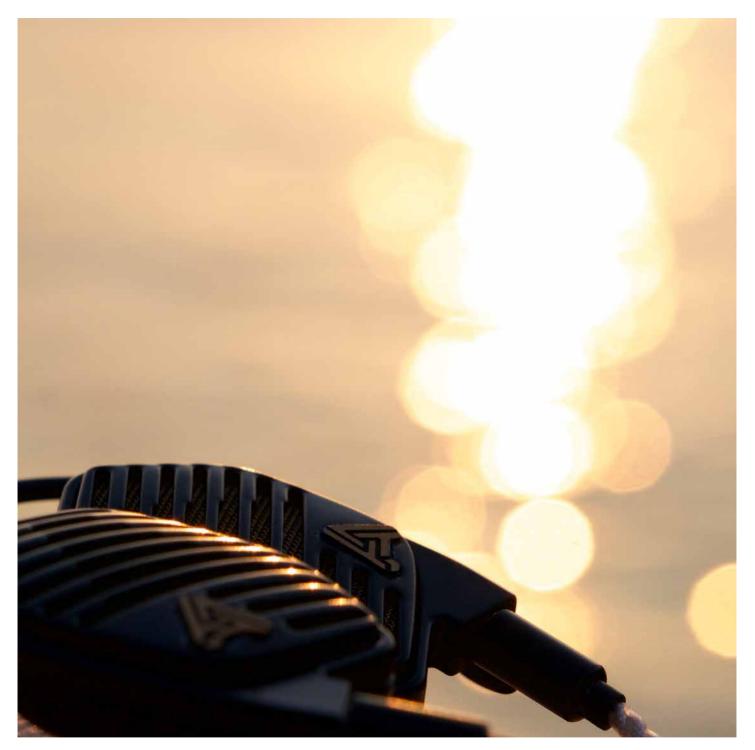
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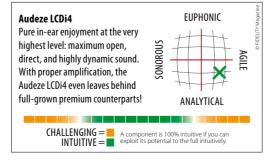




Winner of fours

But can we even acoustically compare the two foursomes from the US? To be honest: no. As exceptional as both the LCDi4 and LCD-4 are, they differ in their sound signatures. The small in-ears have a tidier, more transparent, and neutral effect. The on-ear model, on the other hand, produces a rounder and warmer tone, capable of topping off the deep bass with a little bit extra—extra sound that would seem a little too much of a good thing when directed right into the ear. Surprisingly, it's the LCDi4 that conveys the more spacious panorama, a quality that usually comes up short with traditional in-ear buds but one I find completely convincing here. I admit that I've generally refused to listen to music for lengthy periods with ear buds, having always preferred standard headphones for reasons related to both wearing comfort and sound. But the LCDi4 has captivated me to the extent that my limited but refined collection of over-ear headphones has remained "unemployed" for weeks on end. So I can't deny saying this: Audeze's new development harbors a certain potential for addiction. When it comes time for the (probably tearful) return of the magnificent LCDi4, I'll later remember how I got to eavesdrop on the future of music listening right now! •





In-ear headphones | Audeze LCDi4 Nominal impedance: 35 ohms | Sensitivity: 105 dB/1 mW | Power capability: 3 watts | Magnet type: Neodymium N50 | Diaphragm: Nano-Scale Uniforce | Cable length: 120 cm | Weight: 2 x 12 g | Warranty period: two years | Price: €2,990

www.audionext.de



...and now for something completely different...

Company Visit & Interview

COMPANY VISIT, NOVEMBER 2017

By Danny Kaey. Photos: Danny Kaey





magine the following—the year was 1989. I was off to college; vinyl was well on its way to being superseded by the Compact Disc; VHS became Super-VHS; high-end metal cassette tape formulations where all the rage and the internet merely existed as rudimentary electronic mail for a few thousand people at best. Meanwhile, Beats, the iPhone or Apple Music didn't even exist in lab form; the highend headphone market was barely touched upon and yet that same year Austria's venerable AKG—Akustische und Kino Geräte—introduced the world's first ear loudspeaker, the K1000. Led by Heinz Renner and

Helmut Ryback, this "headphone" proved rather revolutionary in just about every way imaginable. At the time of the K1000s launch, there simply was nothing to compare it to and thusly, in many ways, a legitimate legend was born.

Lash forward to 2017 and the power of the internet, now ubiquitous and abundant in the free world, lead to my discovery of an unassuming, nearly invisible new company "Mysphere". Twitter was the culprit, a short and sweet re-tweet by a hifi-magazine alerting me to yet another new headphone company. ►



Just what the world needs apparently. Unlike in 1989, 2017 offers so many headphone companies that your head would likely spin, you know, time travel and all. Personal HiFi has become an entirely new industry attracting wares from literally all walks of life and origin. What struck me with Mysphere was at that time the rather unassuming website, merely indicating a radical looking headphone in form of a CAD drawing made in my home country of Austria, Vienna to be precise. My ears perking up, my sticky fingers immediately sorted through Duckduckgo's search results yielding little if any intrigue. Vastly more was revealed through an email exchange with Heinz Renner, whom I pinged in my native German, nay, Viennese tongue. Turns out that Heinz had partnered up with his former AKG collaborator, Helmut Ryback, to form Mysphere with the intent of yet again revolutionizing the headphone space—now far more mature since the days of the K1000—and thusly soon launching their first such product, the Mysphere 3.1.

s luck would have it, a planned family trip back to the old Vaterland over Thanksgiving break at the end of November produced the opportunity to meet up with Heinz and Helmut at Mysphere's Vienna offices. Having had the chance to—albeit briefly—hear the 3.1s at last year's Denver based Rocky Mountain Audiofest, I eagerly anticipated another, more private and conclusive, listening session. Featuring a striking design that in some ways



echoes the K1000, Mysphere's 3.1 are far superior and much more advanced than their elder siblings. First, advances in manufacturing, development and computer aided design work has allowed for designs and tolerances simply not possible in the late 1980s; second, the market for such high-end headphones is vastly greater today, compared to when AKG's K1000 first saw daylight.

istening to Woo Audio's WA33 fully balanced preamp and headphone amplifier, I thoroughly enjoyed a solid forty-five or so minutes of uninterrupted listening with Mysphere's 3.1 and 3.2 headphones, the difference being a high vs. low impedance model. Striking too, is the shear quality of these final, late production prototypes I was given

to audition. From the solid, all metal and aluminum CNC construction, to the shear touchy'n'feel quality of the resistive spring operated earphone hinges, these headphones are vastly superior to K1000 and even at the price point of around \$3k US, I have no hesitation of calling them almost bargain priced. I, for one, am not aware of any other headphones at any price point that come close to the quality of Mysphere's first product. Sonically, my initial and obviously positive impressions at Rocky Mountain only seemed further validated during this extended audition. Fast, dynamic, open and producing a distinct out of your head sound experience, Mysphere's 3.1 will undoubtedly find many customers seeking the ultimate in quality and sound—of that I have no doubt. •





iven my visit to Mysphere's offices, I figured I would give Heinz and Helmut the opportunity to answer some of my questions directly—thusly, Viennese coffee

in toe, off I went with my questions, answers to which are transcribed here in a world's first interview:

1. Since the launch of K1000, the high-end headphone market has grown by vast numbers and offers—what made you decide to launch Mysphere? Heinz Renner: Our company is not new. LB-Systems [ed. Mysphere's parent company] was founded almost 40 years ago and the business segment of LB-acoustics almost 20 years ago. The basic idea to launch a new high-end headphone company was born from numerous customer requests asking for a successor to the famous AKG K1000. Following a detailed evaluation of possible business- and technical successes, we decided to go for a new business segment to produce and market headphones within the LB-acoustics group. Helmut Ryback: One other and obvious motivation was our common (Heinz and me) history at AKG and the reason that after the discontinuation of the K 1000 there was no longer a high-end headphone available "made in Vienna". I think Austria and especially Vienna has a great history and legacy concerning all things music, therefore we think it's necessary to continue this tradition. [ed. Completely agree, it was one of the main reasons for me contacting Heinz in first place ...]

2. What do you see as the next major development stages for headphones?

Heinz: we do not believe in big development steps for acoustic devices. It's not about revolutions, rather the continued advancement and evolution of existing technologies.

We hope that smaller and more comfortable, less heavy, products will be possible in the high-end segment, also with lower power consumption. Finally, we believe that battery technology will continue to drive an element of innovation in this space.





3. Today, many in the industry view the personal headphone space as a stepping stone to an actual HiFi system—what do you guys think?

Heinz: sorry, but we don't really have an opinion about this today, though one thing is very clear for us as technicians: a technology for great headphone drivers can be used for other applications as well in the acoustic environment.

Helmut: Anyway LB-acoustics will concentrate on our main strengths in the future; this basically means that we have no intention of expanding our product range to other products beyond headphones.

4. Developing headphones from zero to hero requires formidable resources—I find that particularly that part of the story sadly never reaches the customer or the high-end audio press. Could you elaborate on this for us?

Heinz: This statement is indeed very true! Most people completely underestimate the effort needed to develop a new product and brand! Without sharing specific

numbers, it's definitely at a minimum a full-time job around the clock for several years for many people. It really is so much more than a regular full-time, effort and the enthusiasm and energy required is most certainly beyond a day's work. It's definitely several orders of magnitude more extreme—I mean for people who have already (a combined) centuries worth of experience in designing headphones.

5. Since the days of K1000, the personal electronics and headphone market place has grown tremendously—today, everyone has an iPhone or other smartphone and many who own a pair of Beats headphones consider even those at \$200 to \$300 as "expensive". How do you then sell someone a pair of headphones costing ten times that? Heinz: we strongly believe that many customers who use affordable headphones today learn to enjoy the advantages of more expensive headphones. I do not believe that headphones will ever compete with discrete two channel loudspeakers, but we do believe



that a certain segment of customers can learn to enjoy music at even higher fidelity and someday, when they are ready, will eventually go down the upgrade path. **Helmut:** Mysphere realizes an acoustic quality which is not easy to achieve. As usual—when you go to extremes it requires a much higher effort than just to be "good enough". With Myspere, our goal from the very beginning was to go to extremes. For us, this means not onky acoustic quality, but also a mechanical quality and a very high wearing standard.

6. How did you decide to launch Mysphere?

Heinz: as I tried to explain earlier, the market asked us to develop something new based on the newest and latest technologies and of course based on our know how. Actually, this request came from US—California—customers first. We thus got interested in this project and realized at first very tiny prototypes just so we can prove our technical calculations and proof of concept. These prototypes sounded quite good actually and further demonstrated that the basic design ideas were correct; the natural conclusion was that we then started to build out a detailed plan for our business and venture.

Helmut: of course, let's not forget that you need a lot of personal commitment to realize such a project within a reasonable time table and with a finite capacity in money and man power.

7. Your favorite music?

Heinz: every person enjoys a different kind of music. Without saying too much, we all like a kind of real Jazz, [Helmut: classical music and] live recorded music and of course very good records. Ultimately, we believe that Mysphere allows you to hear the inherent quality of great recordings in a way that combines the highest quality of playback with the most in wearing comfort.



8. What's special about Mysphere?

Heinz: first, it's the most open headphone on the market. There is almost no acoustic cavity inside. This has the effect that the real moving mass is very small and in fact much smaller than other concepts, thus demonstrating an extremely fast impulse response. All other design details of this headphone are a result of this overall objective [of very little mass]. Also, there are no additional resonances caused by housings and other parts which must otherwise be damped. We just avoid this issue completely! Our targets for build material quality are also extraordinary high as well. All parts are made in batches using only the finest, high–end manufacturing technologies available only in Europe.

9. What's so special about headphones that their market has grown so exponentially?

Heinz: many consumers like a kind of intimacy. I think that in many cases headphones are used in addition to loudspeakers so naturally there's this progression built in. It's also important to know that most of the growth rate in the headphone market is coming from closed headphone types. Mysphere 3.1 does not touch that market segment at all. Obviously, sharing sound and listening experiences is still a large option used, but today it seems that intimacy and a personal experience matter greatly as well.

10. What's in your suitcase for that special island trip?

Heinz: ??? No idea!???

Helmut: of course Mysphere and a lot of good music!

pparently 2017 ended with a bang for Mysphere. Rumor has it that their order books are full and the company is off to a great start. Considering that most of those in the market for high-end headphones haven't yet heard Mysphere 3.1/.2, their presumptive success is nothing to sneeze at. Time will tell, but one thing is for sure: K1000, the old king is dead, long live the new king, Mysphere 3.1.

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Gryphon Diablo 120



By Thomas Richter. Photos: Ingo Schulz

►

WHAT THE MYTHICAL GRIFFIN HAS TO DO WITH THE ATHENS OPERA AND THE ATOMIC SECOND.



very day, I consider a "topic of the day" that I pick up either on the radio, in the newspaper, or from the world around me. On the day that Cai Brockmann told me we would be testing the Gryphon Diablo 120, I was thinking about the premiere of the opera *Elektra* in Athens. A very wealthy patron had bestowed the troubled Greeks a phenomenal opera house, an impressive edifice that need not fear comparisons with other leading houses of the world. That makes me extremely happy; I'd have liked to have been there. While I'm not exactly known as an opera lover, I am emotionally moved by any passionate performance—and that goes whether it's an opera in the Greek capital or a rock concert by a local band in the Australian outback town of Bourke. On the day the Gryphon

Diablo was delivered to me, I found out about the 50th anniversary of the atomic second. I always find these human achievements very exciting. The second was first referred to as a sixtieth of a minute in the year 1000; the first clock with a second hand appeared in 1585; and the official definition of the unimaginably precise "atomic second" was adopted on October 13, 1967.













Both events—opera and the atomic second—take us directly to the Diablo 120. After all, I can precisely summarize my expectations for the new little amplifier from Gryphon by referring to those two topics: a performance of emotional musicality along with embedded atomic accuracy. Can the new integrated amplifier live up to these lofty expectations?

With his Gryphon brand, Flemming E. Rasmussen has created a high-end company that enjoys an outstanding reputation throughout the world. To begin with, Rasmussen has incredible credentials: He honed his special skill set working in a broad range of positions, including as a photographer and illustrator, a fashion and industrial designer, a corporate manager, and a hifi importer, before founding Gryphon in 1985. Many will recall its launch with the small headphone amp, which went through the roof thanks to a test review in Japan rating it a "best buy." It's always amazing when serendipity makes an appearance at the right moment to set loose incredible dynamics and raise entirely new stars to the podium. And some can even survive up there at the top: Unlike any other, Rasmussen took a well-thought-out approach to design, quality, and durability; and today, Gryphon is a player in the hi-fi upper class,

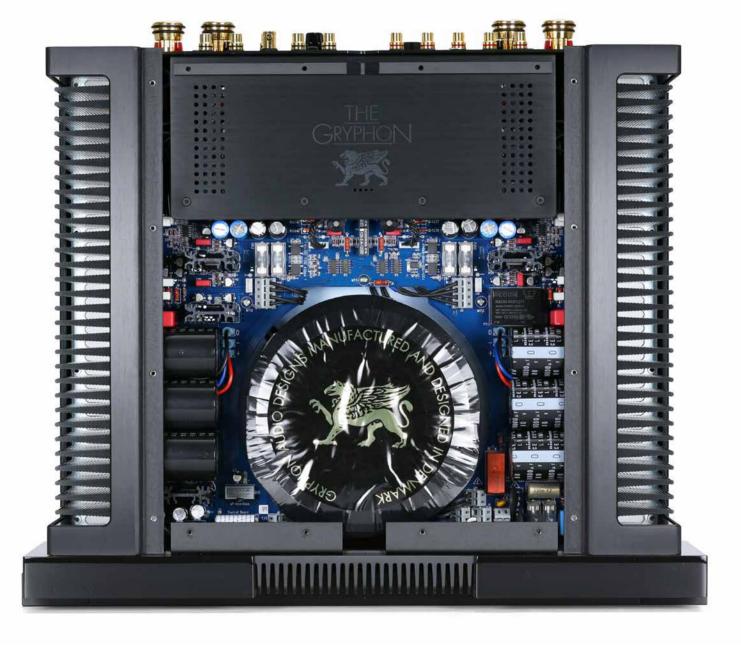
especially when it comes to amplifiers. Digital and speaker products along with cables and accessories complete the company's portfolio. Typical Gryphon prices currently begin at \notin 9,000 for the Scorpio CD player and move rapidly upward into the ultraluxury class; for instance, the Kodo speaker system costs more than \notin 300,000.

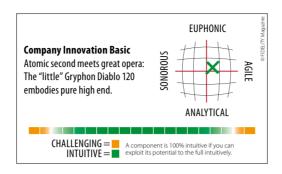
Although Gryphon's various preamps and power amplifiers all reflect stateof-the-art quality, Rasmussen has never forgotten the integrated amp or relegated it to second-class status. On the contrary, he raised it to the same level as the others, which is consistent with his company's approach. Gryphon then spread the word about the amp's strengths, which include shorter signal paths and handling and price advantages while maintaining the same reference-worthy sound quality. And success has proven Gryphon right: The (original) Diablo was sold by the thousands during its 10-year production run and is counted among the most successful high-end amplifiers of all time. It has been the subject of a number of euphoric tests worldwide and is as important for Gryphon as the 3 series is for BMW---it forms the centerpiece of the company. In 2016, the Diablo was replaced by the somewhat higher-positioned Diablo 300, which is heading

for an equally successful career run. A year later, it hit its first home run with a Rocky Mountain International HiFi Press Award (RIHPA) for the best integrated amplifier of the year. The greatest, most significant of all hi-fi awards, the RIHPA, is presented annually at the Rocky Mountain Audio Fest in Denver, Colorado, in the US. FIDELITY serves on the jury for the award and helps to jointly organize it.

The recently launched, smaller Gryphon, the Diablo 120, clearly draws from the 300 while simultaneously serving as a replacement for the discontinued Atilla, which has led its class since 2009. The Diablo 120 represents a very remarkable evolutionary step and contains identical design elements as its big brother: The 120 can, for instance, also be equipped with a phono or digital module. I was pleased the Gryphon sales team at TAD in Germany provided me with a 120 that had a D/A converter module that's said to have been derived from the highly lauded DAC Kalliope.

The amplifier's mechanical layout is a sight worth seeing. Consistent dual-mono technology, extremely short signal paths, and the highest-quality audiophile-grade components promise long-term reliability and thermal stability. Thanks to meticulous





electrical and mechanical grounding, the Diablo 120 boasts exemplary silence in terms of inherent noise. These aspects are important to me. I appreciate devices that have been thoughtfully designed from start to finish. As soon as I spot a technical weakness or something similar, it's a thumbs down from me. Which doesn't happen with the Diablo 120, even when I take a closer look.

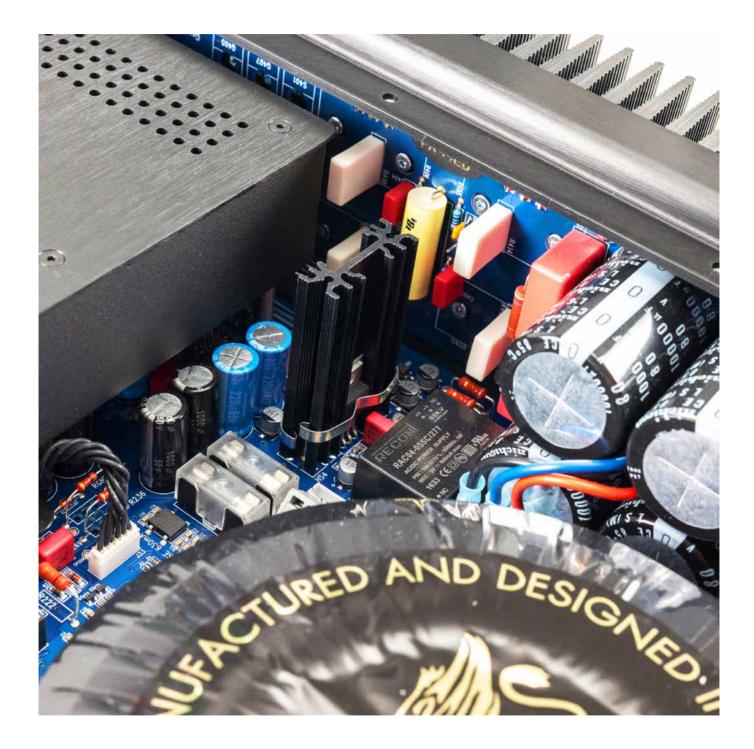
Output power is some 20 percent greater than the predecessor and doubles with every halving of the load, which ensures high current capacity. The enormous bandwidth of 0.1 Hertz to 250 Kilohertz, a 46-stage volume controller with maximum precision, and the lack of a negative feedback loop promise stable qualities. The number of connections and potential degree of customization are absolutely in line with practical use. The forward-looking D/A converter module offers four digital inputs and can handle any kind of DSD and PCM data available today. Because Gryphon also never loses sight of vinyl aficionados (you only have to remember milestones such as the Orestes), a phono preamp can also be installed instead of the DAC. Unfortunately, I don't have one of these available at the moment. As a vinyl fan, I'll plead for a second chance in one of the coming issues. In terms of design, I'm a follower of the Bauhaus philosophy, a paradigm

former Apple boss Steve Jobs had surely driven to marketing perfection. Design is not just looks, but everything: from the experience of unpacking a product to its first use, from the electrical and mechanical engineering that goes into it to its intuitive operation and long-term functioning. Here, the Diablo 120 is at the top of its class; craftsmanship and operation are a dream. I had always thought that nothing would work without a smooth-turning volume control. Until now: I find the touch-sensitive control logic of the little Gryphon just as compelling as the subtle clicking of the relay. The digital vacuum fluorescent display centered on the front appears to me to have the ideal size and, including the knob and input selection with the installed converter module, indicates important physical states such as sampling rate, bit resolution, and filter selection. The housing design with nesting cubes placed in an ideal setting with the cooling ribs is, in my opinion, a timeless masterpiece. Another jewel is the remote control. In terms of looks, minimalist design, and function, it doesn't get any better. The entire unit is also especially elegant in terms of functionality.

The connecting terminal is just perfect, exquisite, and very high quality. After connecting the cables, I press the solid power switch, positioned on the lower front of the unit's right side. And at first nothing happens. Aha, that activates standby mode. To get to work, the Diablo 120 has to be switched on either by remote control or by pressing the illuminated red logo on the front. After that, it needs about 10 seconds to initialize. And then the Gryphon finally roars ...

After its cold start, the Gryphon announces its reawakening and exhibits a homogeneous sound. That's good, because the loading process takes place live in our living room with a TID-AL hi-fi system and a radio program. I liked the note in the user's manual, "It's best to keep the unit plugged in;" and with such low power consumption, it's also justifiable.

After a 24-hour warm-up period, the hunt for new discoveries can begin. Using the line inputs, I connect my personal reference music on the Luxman DA-06, in my opinion one of the best DACs on the market—and I'm totally blown away. Why? I've owned countless amplifiers and alternate between the two worlds. I like tubes and transistors alike; I don't subscribe to the black-white war of words about which is better. For me, what counts is the result. And this one gets it right: The first impression is powerfully good and potent. When I switch the digital source to the BNC input of the D/A module, I listen to 96-kilohertz versions of Dead Can Dance (I have the complete discography



in MFSL high bit) and various pieces from Steven Wilson again. Sometimes I ask myself if the progressive musician Wilson, born in 1967, ever sleeps. He has six band projects, a solo career, and a music label; he produces countless bands (11, as far as I've been able to count), and all his work is outstanding-even live, Wilson sets standards. His two albums, The Raven That Refused To Sing and Hand.Cannot.Erase are masterpieces, telling suspenseful stories with every imaginable dynamic feature. Israeli singer Ninet Tayeb celebrates the woe and grace of society in a manner that instantly induces goosebumps ... The Diablo 120 beautifully transports all the inner tension and dynamics—it couldn't be any better; at most, just different. We continue with 44.1 kilohertz FLAC using TIDAL hi-fi and the piano-heavy instrumental crossover Open from the Grandbrothers followed by soft US metal from Puscifer with the LP Money Shot. This is where the highly transparent bass differentiation of the Diablo 120 becomes even more apparent, even exemplary. Switching back again and again to my reference DAC, there's no getting around the fact that the internal Diablo module plays at least in the same quality and all in all even boasts some advantages.

For me, though, there's got to be some vinyl in the mix; the famous "black level" has to have its place. My phono preamp Whest Three delivers the signal from the Ortofon Windfeld at 100 ohms. After the digital march I just experienced, nothing would surprise me anymore. Whether Opeth with The Roundhouse Tapes or the analog production "Blues from Siena Root" with the LP A New Day Dawning or the previously mentioned Hand.Cannot. Erase from Steven Wilson, vinyl magic has rarely given me so much delight. The amp's extraordinary sophistication, balance, and high contrast produce a harmonized richness that captivated me right from the start and still does weeks later. I found the "first watt" and a medium listening volume to be particularly valuable. Of course, the Diablo 120 can also do "loud" very well, but that's less important to me. Because long-term durability counts as a key criteria for me, I will state this on the basis of the Diablo 120's "soft qualities": It is a valid reference product. In terms of speakers: Due to their somewhat critical impedance behavior, exemplary speed, and highly precise effective strength, my Thiel CS 3.7 don't "like" every amp. Nevertheless, I consider the Thiel just as long lasting as the Harbeth M30. Surprised? Yes, you have every right to be. It took me

three years and eight amplifiers to find my optimal setup. In that time, it had concluded that a smooth-playing, neutral tube amp was the right solution for the Thiel, and I found a simple tube combination from McIntosh that appealed to me. But now, to my big surprise, the Diablo 120 has become the first transistor to match that performance, pulling me emotionally into the music and composing the sound with just the integrity I imagine it could have. Could this be a result of the missing feedback loop? Possibly. The two predecessor integrated amps couldn't accomplish this with such confidence. The Mark Levinson 585 was too dry with the Thiel, and the Pass INT60 cast too wide a sound for me personally. It might be different with other speaker concepts, but the closed and admittedly critical Thiel certainly embraces the little Gryphon from Denmark.

I can't say if the Diablo has a special inclination for any particular genre of music. And the same goes for cable sensitivities. For the power cable, I accessed my stock and tried the HMS Grand Finale Jubilee, the HMS Suprema, and the Graditech Voima, whereby the Voima seemed slightly more balanced and the Suprema offered the highest level of substance. It's all a matter of taste.







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The Gryphon Diablo 120 is a truly exceptional product and actually lives up to the quality its high price suggests. The characteristically high resale value of Gryphon products is sure to finance the difference in cost between a Diablo 120 and an XY amplifier at some point. But: sell? Or buy used? You may have already noticed how infrequently Gryphon owners like to separate themselves from their toys. That says everything.

With his Gryphon products, Flemming E. Rasmussen has fulfilled a lifelong dream. And he's pulled me into his dream: The Diablo 120 actually meets my high expectations. This means it's made not just for the moment, but for life's most important hours. There is no greater praise I can give. I don't need any more amplifier than this double "topic of the day." •

Integrated amplifier | Gryphon Diablo 120 Power output (8/4/2 ohm): 2 x 120/240/440 W | Analog inputs: 1 x high level symmetric (XLR), 4 x high level asymmetric (Cinch), thereof 1 x phono optional | Digital inputs (with optional DAC module): 2 x S/PDIF (coaxial BNC and optical), 1 x AES/EBU, 1 x USB | compatible digital formats: via USB PCM up to a max. 384 kHz/32bit, native DSD (DoP) up to DSD128 (currently only with Windows OS); via BNC, S/PDIF, AES/EBU: max. 192 kHz/32 bit | Special features: optional extension with D/A converter module 120 (€4,050) or phono

ACCOMPANYING EQUIPMENT **Turntables:** TW Acustic Raven GT | **Ton arms:** DBL The Wand Master 9.5, Thomas Schick Berlin 9.6 | **Pickup:** Grado Statement Reference S1, Ortofon Windfeld Series 1 | **Phono preamp:** Whest Three Signature | **DACs:** Luxman DAC-06 | **Bridge:** Moon MinD with TIDAL HiFi | **Preamplifier:** McIntosh C1100 | **Power amplifier:** McIntosh 275 Mk6 | **Speakers:** Thiel CS 3.7 | **Cables:** Graditech, HMS, Van den Hul | **Power supply:** PS Audio, Dectet | **Accessories:** Tabula Rasa Lowboard, Dereneville

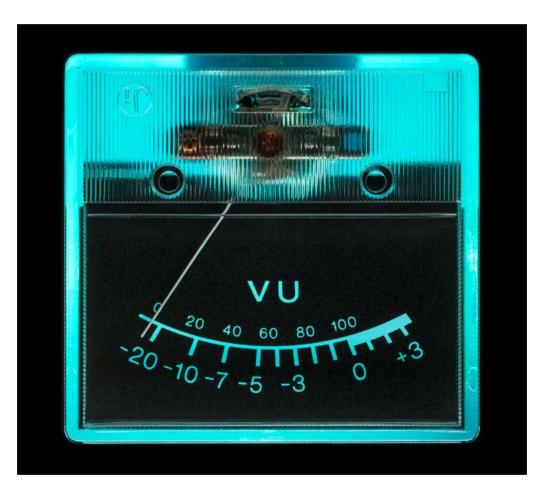
module PS2 (€2,200), full symmetric dual mono setup, no overarching feedback loop, relay controlled volume control with 48 levels, multiconfigurable, remote control, Standby consumption < 0.5 W | Finish: Black | Dimensions (W/H/D): 48/17.5/42 cm | Weight: 26.2 kg | Warranty period: three years | Price: from € 10,600

http://www.gryphonaudiodesign.de

Vintage Display

There was a time when every proper amplifier had analog display instruments. These days, though, people are hanging photos of VU meters on their walls as artwork. In his Silentium series, photographer Josh von Staudach presents razor-sharp images in impressive XL and XXL formats. He can even create special custom images in cinema-screen size or larger. If you're yearning for the good old days of hi-fi or looking for stylish decorations for your music room, take a look at the website and the XL price list. For those with less money to spend, there's a small but tasteful Silentium desk calendar.

www.vintagedisplay.de



BROWSER № 02

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BROWSER № 02

AVM Enhances Entry-Level Phono Preamp

AVM, the luxury manufacturer based in Baden, Germany, has thoroughly reworked its smallest phono preamp and dubbed it the P30. In addition to the shorter, optimized signal pathways, it now has a subsonic filter as well. The pluggable loading resistors for the MC section and the external silent power supply have been retained. At €699, the price also remains the same.

www.avm.de

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BROWSER № 02



LS50 at Night

The Nocturne is a fanciful special edition of the LS50 Wireless created by the internationally renowned product designer Marcel Wanders. The circular arrangement of KEF's Uni-Q driver and the musical notation symbols used team up with unique architectural and rhythmic elements to create an ingenious, unified design. Selected design elements even glow in the dark. Available as a limited edition for \leq 2,650. www.kef.com

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BROWSER Nº 02





Dual-Mono Equalizing Amplifier

Phasemation has launched a sensational phono amplifier with separate channel units, already enjoying considerable success with the product on the Asian market. The EA-500 has an internal transformer and can work with an MM pickup as well as up to two MC systems. As a bonus for vinyl fans, users can choose between three playback curves: RIAA, DECCA, and Columbia. The no-compromise dual-unit EA-500 weighs 5.5 kilograms and will cost around €7,500.

http://www.phasemation.jp

CHORD ELEC-TRONICS HUGO2

By Roland Schmenner. Photos: Ingo Schulz





_____No, this isn't about a German fashion brand or a mildly alcoholic cocktail mix of prosecco and lemon balm or elderberry blossoms. The clever boys from Chord Electronics took the name Hugo from the English "You go"—or perhaps "Take it wherever you go!"—as a way to communicate right from the start through their branding that the combined DAC-headphone amplifier is a unit you can operate anywhere. Hugo can be used as a stationary D/A converter with a regular in-home system or taken on the go as a mobile DAC-headphone amplifier that converts laptops, tablets, and smartphones into audiophile players. And, of course, Chord's digital mastermind Rob Watts was pulling the strings, particularly with his skills as a developer.

Originally developed to mark the 20th anniversary of the legendary D/A converter DAC 64, the Hugo from Chord has now been issued in a second development stage and boasts several technical refinements that put it far ahead of the successful starting model. For instance, the second-generation device can play hi-res files up to 768 kHz/DSD512; and, with the standard remote control, integrating it into stationary systems is even easier. But even in semi-mobile operation, such as outside on the deck or at the office, the remote control proves a welcome luxury you'd not want to go without—even if only to activate an alternative digital filter from your listening spot or to experiment with the cross-feed mode whenever you like. The Hugo2 offers all of these fine extras and,



on these merits alone, sets itself apart from most of the mobile devices in the same category. Chord also gave the Hugo2 a special Bluetooth module with aptX support that sends the digital music signals on the shortest path to the converter. This ensures, says Chord, that you get the best possible sound quality from a smartphone or laptop when using a cable-free connection. Very convenient: Whether on a Mac, Windows, or Linux, complicated driver installations have been eliminated. Here, true plug-and-play does its job.

The rather cheerful colors of the small lighting console on the side of the Hugo2 are a matter of taste and opinion; the display is there to show the various operating states and sampling rates. In contrast, the sound qualities of the ultrasolid aluminum case are definitely not a matter of taste. Whether as a stand-alone DAC for the home system or as a mobile DAC with integrated headphone amp, the Hugo2 does not produce any kind of sound mistake at any point. Using reference headphones such as Focal Utopia, the Hugo2 conjures up profoundly deep bass, a clean and straight medium- and high-frequency range, and a more than satisfied smile on the face of its owner.

Years after having forgotten it, I am rediscovering Goldfrapp's first album *Felt Mountain* and how fascinating the combination of the Hugo2 and Utopia reproduce the hi-res file without any kind of dynamic limitation. Soon Alison Goldfrapp's voice has seared itself into my



head for the rest of the day—amazing! Part of the fantastic sound and the highly precise spaciousness can surely be traced to the flawless battery power during portable operation. The slight inconvenience of recharging the battery every eight to ten hours is nothing compared with the sound virtues one otherwise brings home without the standard "dirty" USB power supply of portable devices that feed on the source device's power hub. Here, it's all really just clear. The headphone amplifier in particular audibly benefits from this, with even very demanding acoustic caps feeling a definite punch when it comes to power and performance. With the Hugo2, Chord has accomplished an all-round compelling power pack that I don't want to go without in the future—neither at home nor on the go. Splendid! •

DAC/headphone amplifier | Chord Electronics Hugo2

Digital inputs: Bluetooth aptX, optical (max. 24 bit/192 kHz), electrical (max. 24 bit/384 kHz), micro USB (max. 32 bit/768 kHz, DSD512) | Analog outputs: Headphone jack (6.3 mm) and mini jack (3.5 mm), asymmetric (Cinch) | Features: USB charge connector, digital volume control, status and sampling display with color-coded lights, digital-filter and cross-feed-filter switch, battery charge time approximately seven hours during playback; remote control included with delivery | Dimensions (W/H/D): 13 cm/10 cm/2.1 cm | Weight: 450 g | Warranty period: three years (two years for battery) | Price: €2,290

www.chordelectronics.co.uk



Fidelity



1, 2018 by Danny Kaey

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What a year 2017 turned out to be. It seems that no facet of high fidelity music playback has been left untouched. From ridiculously overblown fears over MQA (mostly relegated to online forum spats), to new product introductions from Auralic, YG, PS Audio, KEF, MySphere, Grado, Wilson Audio, MSB to amazing new music from companies like Acoustic Sounds, Mobile Fidelity and many of the major labels as well as all new ones, Intervention Records comes to mind, 2017 was definitely a year of accolades, accomplishments and foundational groundwork. Add to that several high-profile US based Audio shows, Axpona, Rocky Mountain Audiofest, LAAS, and it's clear that seemingly things are on the up and up for all things high end audio. The only

two elements missing to complete the circle are well rounded, forward thinking **dealers**, and of course **customers** to buy all these amazing wares. Unlike in Europe or elsewhere in the developed HiFi markets of the world, the US dealer network in particular is mostly wanting of new ideas and experimental solutions to gain grounds. As the mid to upper echelons of HiFi are becoming





more lifestyle luxury priced, so to are expectations of retail experiences, product support and service.

ealers like **The Audio Salon** with proprietor **Maier Shadi**, indicate the clear future of high end audio's retail experiences. Settled in Santa Monica's (Los Angeles) bustling, hustling arts district known as the Bergamont station, Maier has quickly carved out a name unlike any other HiFi retailer I know of. Exclusive, by appointment only, he hosts brilliant music events with incredible guest speakers, that genuinely seek to drive an all new audience to this amazing industry of ours, I wonder how long before others start realizing the potential for an all new wave of HiFi clients and customers alike. Just recently, for example, he converted his already bespoke salon to an art gallery, hosting LA artist Gena Milanesi to an audience of around 300 Angelians (you know, those people living in Los Angeles). Mind you, none of them had ever heard of Wilson Audio, dCS or Dan Dagostino, so these high-end lifestyle customers just got exposed to music and art in a way they never have before. Will other dealers follow these experimental concepts? Time will tell. One thing's for sure however: you can't be selling hundred



thousand dollar systems offering up McDonald's service and experience.

S imilar to The Audio Salon's quest for traction in unchartered waters, the concept of **HiFi shows** perhaps also needs a rethink. Given the abundance of regional and local audio shows, attendance is mostly by those already initiated into the hobby. During one of my keynote presentations at this year's **Rocky Mountain** Audiofest, I spoke with the show's Ramsay Thurber about exactly that topic. Why not host alternative, more exclusive, bespoke high-end audio lifestyle events catering to an all new clientele and crowd? For this industry to grow and remain healthy, we simply must attract new people (with the necessary disposable income) and lay the groundwork for crossover events. Think high end watch press junkets with the appropriate ambience. Think Beverly Hills Hotel as

opposed to the local airport Hilton or **nullachtfünzehn** Marriott. Think big title sponsors like **Intel**, **Audi** or **Design Within Reach**.

A nother way forward is fully upgradeable hardware-software based **platforms** like what **KEF** demonstrated with their amazing **LS50W**. Simply put, this product is a clear indicator of an all new direction for HiFi. Consider this: someone who purchased this speaker system early in the year,







ended up with not one, but **three** major software upgrades, each adding dramatic new functionality to an already full featured system. **Spotify? Roon? Tidal?** Indeed, all of these services were added with the simple download of new software—no hardware changes required. To boot, no additional monies changed hands; the customer benefited from buy once, get upgrades for free down the road. Think **Apple** and iOS, iPhone or iPad. Frankly, there is no doubt in my mind that hardware platforms will be augmented by software going forward. The modern-day customer demands it; high end audio must deliver. **Auralic's** and **Boulder's** new line of hardware are already on the software upgrade train. Who else will follow?

husly, closing out 2017, I am genuinely excited for what 2018 will bring. Rumors of new groundbreaking products abound; Analog Production's newly resurrected UHQR releases will see their light of day with an epic title by Jimi Hendrix due out sometime in the summer. MQA will undoubtedly continue to tally up wins and my favorite music library software, Roon, will no doubt see continued point releases. Join me next time as I continue to explore what's new, what's cool and what's hip in HiFi. Cheers all! Danny •

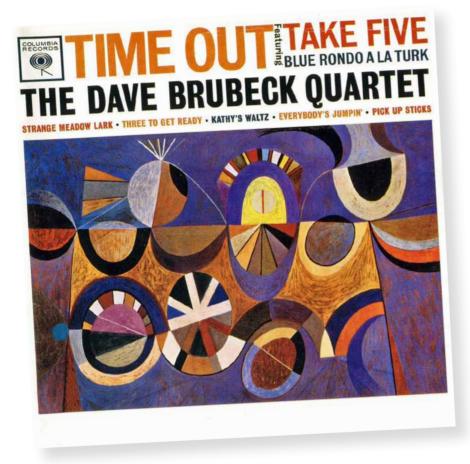




...and now for something completely different...



By Hans-Jürgen Schaal-Part I



Covering normally refers to songs being performed by other artists, but actual album covers attract their share of impersonators, too. The covered cover: Is it a witty reference, respectful homage or parody? Or is there a deeper meaning behind it?

Should some cool-minded Martian come to earth and check on the state of our music, he might play through 10,000 jazz records before he found one that wasn't in common 4/4 time.

______This is how the liner notes started to *Time Out*, the first jazz album that pretty much let go of using a consistent 4/4 tempo for all its pieces. The album was released at the end of 1959, when the word "out" had a signal effect. "Out"—that was the new jazz avant-garde, a movement that stood on the outside, far from the mainstream and, at times, even far from harmonic rules. For the Dave Brubeck Quartet, in contrast, (almost) only the time was out—the meter, the tempo. Inspired by a tour through various Asian and Middle Eastern countries, including India, Afghanistan, Iran, Iraq, and Turkey, the band began playing jazz in unusual meters. In terms of rhythm, this made *Time Out* practically a world music album. The opening piece, "Blue Rondo à la Turk," keeps time in a Turkish aksak rhythm (2-2-2-3), "Three to Get Ready" alternates between 4/4 and 3/4 tempos, "Pick Up Sticks" keeps a 6/4 tempo, and "Take Five" is in 5/4. In 1959, this album concept was considered a bold, unprecedented experiment. And it gave the people at Dave Brubeck's record company, Columbia, an uneasy feeling. They insisted the quartet first record a conventional album with very American standards that would be released at almost the same time as *Time Out*. And they had no idea which piece from *Time Out* they should promote as a single—none seemed appropriate as a dance song. The decision was made at the top level: Goddard Lieberson, president of Columbia, chose "Take Five," the only song on the album not composed by pianist Brubeck himself, but rather by saxophonist Paul Desmond who had been inspired by the beeping sounds of a gaming machine where he had lost a lot of money. He claimed to have written "Take Five" as payback for the loss inflicted by the machine. After coming up with two short motifs in 5/4 tempo, he made them into parts A and B of his theme. Joe Morello, the quartet's star drummer, really shined on the piece with his drum solo. Brubeck also made a few suggestions and proposed the song's title: "Take Five."

The album unnerved not only the record label, but the critics, too. One compared "Take Five's" 5/4 tempo with Chinese water torture. And crazy enough, precisely this song developed into the greatest hit in modern jazz at the time. To achieve success, it took "Take Five"



JAZZ CALLS FOR ABSTRACTION Part II

two whole years! But it climbed into the American Billboard charts, making *Time Out* one of the hottest selling jazz albums of all time. The piece "Take Five" has been played by numerous musicians, has developed into one of the most well-known jazz standards, and has even taken over elevator playlists. For *Time Further Out*, the follow-up album to *Time Out*, Brubeck wrote two new pieces in 5/4 tempo; throughout his lifetime, he composed dozens even.

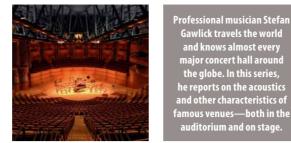
Because the album *Time Out* was so unusual, it needed an unusual cover. Sadamitsu Neil Fujita (1921–2010), the head of the art department at Columbia Records at the time, was convinced: "Jazz calls for abstraction, for modern painters." Fujita liked artists such as Paul Klee, Joan Miró, and Pablo Picasso and occasionally acquired licenses to use modern works of art on album covers. But for *Time Out*, the boss took matters into his own hands: The abstract image on the front is a genuine Fujita. That same year, he had done something similar for the Charles Mingus album *Ah Um*.

At the time, he couldn't know that, 55 years later, his image for *Time Out* would inspire two young jazz musicians to be photographed in colorful, abstract-patterned clothing. The album *In Your Own Sweet*

Way from Sabine Kühlich and Laia Genc does, of course, pay homage to Dave Brubeck. Four songs from *Time Out* reappear here, plus another eight Brubeck compositions from albums such as Dave Digs Disney, Time Further Out, Brubeck Time, Brubeck Plays Brubeck, and Jazz Impressions of Japan. For Kühlich, Brubeck was an important musical influence, a real eye- and ear-opener; Genc is particularly fond of his ballad, "In Your Own Sweet Way." Both musicians translate Brubeck's music into nimble, playful duets perfectly at home in a cozy, artistic space outside of the everyday jazz sound and far removed from the historical context of cool jazz and metric avant-garde. Kühlich seems to slip into the role of Paul Desmond as she plays the alto saxophone with the lightness usually reserved for a flute. On piano, Genc rivals Brubeck's forced block chords. Kühlich also puts her remarkable talent as a jazz singer on display. The texts for the Brubeck songs stem from Iola Brubeck (Dave Brubeck's wife), Kurt Elling, Al Jarreau, and Kühlich herself, among others.

The Dave Brubeck Quartet: Time Out (CBS 460611 1)

Sabine Kühlich and Laia Genc: In Your Own Sweet Way (Double Moon Records DMCHR 71164)



hoto: Stefan Gawlick

Great Concerto Hall

COLOGNE PHILHARMONIC

_____The Cologne Philharmonic is 31 years old and still appears young and fresh. Not all concert halls can do that, and it certainly has something to do with the exciting concert calendar that program head Annette Wolde has managed for many years. This is precisely what makes the Cologne Philharmonic a favorite hall among artists who travel internationally. But one thing at a time. For musicians, the quality of a hall comprises the sum of many components, just one of which is acoustics. It starts with the journey to the concert hall, which is often long and tedious. In Cologne, you just have to walk a short distance from the train station across the cathedral plaza and you're there already. Access to the airport is also easy. The issue of the hotel often turns out to be dicey, but in Cologne it's solved all quite pleasantly: Just across from the artist entrance is a very good hotel, and it also offers a top-rate breakfast at any time of the day (important on an early travel day).

Once at the Philharmonic, performers can enjoy a spacious dressing room, plenty of lockers, and a very agreeable backstage area. With the impressive number of restaurants around the Philharmonic, it's easy to overlook the facility's cafeteria and its microwave meals.

Now we come to the hall itself, the heart of the matter. The stage feels magnificent: bright, free of shadows, and bathed in cool light. With abundant space, a uniquely configured podium, wide doors, and, not least, one of the nicest and most helpful stage teams of any hall in the world: Musicians will feel well accommodated here. One has to be familiar with the acoustics to work with them, since they aren't too generous. Small ensembles seated behind a certain point on the stage (now marked) produce an anorexic sound, and, past the 10th row, come across as will-o'-the-wisps. In the last row before the back wall, which absorbs a great deal of the bass energy,





you have to put quite a bit of muscle into playing your instrument to keep it from sounding too flat out among the audience. By listening to the sound coming back to the stage from the hall, you get nice feedback from the hall that helps musicians modify their playing. Taking all this into consideration, you can, in fact, play anything well in the hall. And you need to, because Cologne still doesn't have a chamber music hall.

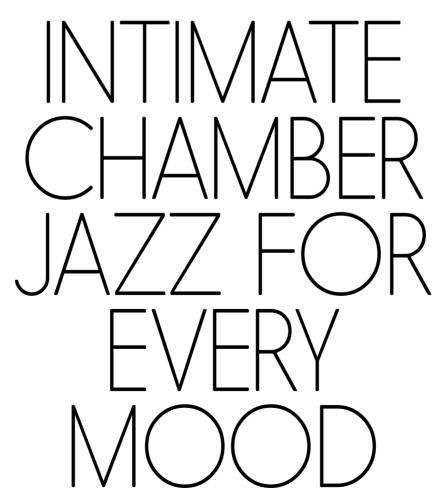
After leaving the stage following the concert, performers experience a distinctive Cologne perk that has made this hall famous among musicians from all over the world: Right on the other side of the stage door, backstage personnel await performers with trays holding glasses of Kölsch beer. Other halls (like in Dortmund) have started to copy the practice, but the special charm of this gesture is only found here. The exciting program planning mentioned above ensures that artists from around the world stream in and out, which, in turn, is a great plus for musicians. At any time, it's possible to meet a former fellow student or an old music friend you've lost touch with because your work takes you to different cities in the world. Where else can you find orchestras from London, Munich, Chicago, and Vienna converging in one place on just one weekend? •

Cologne Philharmonic | www.koelner-philharmonie.de

Music Tips | Recordings with characteristic concert-hall sound: The hall hosts a 400 concerts a year nonstop, meaning there is hardly time for "proper" productions. But WDR radio does record quite a bit here with its Symphony Orchestra Cologne (previously Cologne Radio Symphony Orchestra, KRSO), so a glimpse into its online archive is worthwhile: <u>http://www1.wdr.</u> de/orchester-und-chor/sinfonieorchester/diskografie/index.html



Anne Bisson Trio: Four Seasons In Jazz

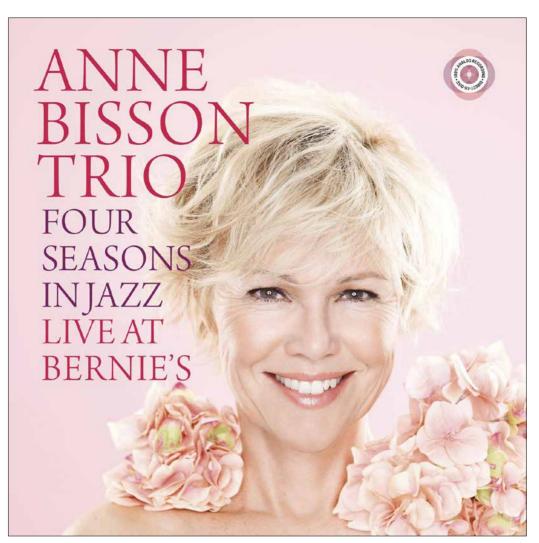




_____My first thought as I pick up the brand new double LP *Four Seasons In Jazz* from the Anne Bisson Trio: "This is heavy!" Three hundred grams of space vinyl with a molecularly sealed surface? No, it's just two "normal" 180-gram discs sandwiching a flip cover accommodating a particularly comprehensive album booklet.

And this production needs it, because the effort involved here is virtually unprecedented: A direct-to-disc production (D2D) involving several living audio legends that you'll certainly never find carelessly tossed into the vinyl junk bins of resale stores. Anyone lucky enough to own these *Four Seasons In Jazz* won't want to give it up. Not least because it's difficult to imagine a more present, natural sound from an LP. What got pressed into the grooves "Live at Bernie's" is likely to stand 50 years from now as a reference for the kinds of treasures created during the vinyl revival of the early 21st century.

And it's an especially eloquent testament to the theory that meaningful cooperations between art and commerce, between dedicated high-end makers and highly specialized artists, can bring about exhilarating results. *Four Seasons In Jazz* is a story of happy coincidences explained in detail in that dense booklet mentioned, a story that will keep readers grinning almost nonstop. First stroke of luck: Gary Leonard Koh, head of the US speaker manufacturer Genesis Advanced Technologies, demonstrated his products using the album *Blue Mind* from Canadian jazz pianist and singer Anne Bisson while at the Montréal Audio Fest and was asked if he would like to meet the singer personally. This marked the start of a successful collaboration. Later, Bisson would often indulge in some fun and sing with the products at Genesis presentations to demonstrate the very authentic reproduction of the speakers.



Anne Bisson Trio Four Seasons In Jazz Label: Brilliance Music & Studios (through Sieveking Sound) Format: Double LP (45 rpm)

Second stroke of luck: Koh met sound master legend Bernie Grundman through Wuti Larnroongroj, who is responsible for Genesis speaker sales in Thailand, and came up with the idea of creating a special direct-to-disc production in Grundman's sought-after mastering studio where the recording could be played directly into the stylus of the machine that cuts the LP master. Of course, this can only be carried off if the artists are disciplined enough to record one side of an LP all the way through without mistakes. In the case of *Four Seasons In Jazz*, that amounts to about 15 minutes, since it was recorded at 45 revolutions to produce a significantly better sound.

The side effect of this summit of high-tech pros and luxury-class, professional musicians rendezvousing in Grundman's mastering palace in Hollywood after it was converted into a high-end sound studio: I've never seen better benchmark data documented for a recording than on this double LP: From the grand piano that Steinway & Sons provided, to the mixing console where Michael C. Ross (also a legend) performed live direct cuts, through to the microphones used and the additional equipment: Everything—and I mean everything—was captured. What you won't read in the booklet: This ballad-heavy, contemplative album sounds brilliant and has almost no background noise thanks to its superior pressing. This recording is simply a wonder for creating goosebumps, regardless of the weather outside. By the way, those wanting to purchase a copy should hurry because the edition is limited to 3,000 copies at €120 each (a completely justified price considering the album's complexity). •

Hans von Draminski



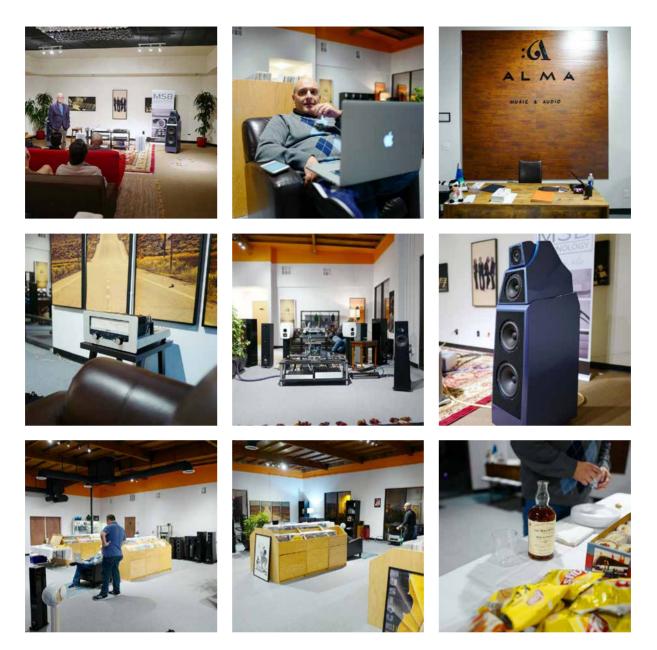
...and now for something completely different...

AN EVENING WITH ALMA AUDIO





_____Call me skeptical. America's HiFi show circus, nay, circuit, has apparently been booming. Who says HiFi is dying? Judging from the past half-decade of show after show, each one trying to usurp the previous, you'd be hard pressed to think that anything is wrong in HiFi land. Indeed, I would say that there are more shows today than at any other time in the history of HiFi. With attendance more or less even keeled, one would think that business is booming. Certainly, for some it is while others are struggling and yet others still are getting by, squeezing every dollar to pay their bills. What gives? Well, for one, we tend to lump all of HiFi into one big basket, whereas in reality, we are perhaps the most fractured and fragmented industry



I know of, Google's Android OS being the only other relevant comparison I can think of. Thus, the immense discrepancies in success far and wide: in this case, unfortunately, the tide is not nearly rising all boats—and that's perfectly fine.

Frankly, as I have been pondering these big questions for some time now, I have come to the conclusion that we need a bit of a seismic shift regarding all these shows. Sure, one easy alternative is to continue pressing on as we have: hustle (mega-buck) equipment from continent to continent, show to show and hope that the cumulative, all-for-one and one size fits all approach to marketing will leave enough crumbs on the table for everyone to benefit. Let's face it, if you aren't selling, you aren't paying your bills, its really quite that simple. Breadcrumbs, while not medium rare filet at LA's superb Baltaire, do hold off your favorite bank from calling in the chips. But, what if? What if we could somehow maintain the universal message of high-end music playback adding meaningful years to your life while at the same time tailoring the message—pivoting—the conversation just a little bit to cater the message to the audience on hand? Ask any manufacturer what they would love most and unequivocally, the answer always lands at more and better—read: higher-end—customers.

I think it's time to put a fork in the road and start advocating for shows catering to two, perhaps even **>**































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three distinct audiences: first, keep one or two shows a year for those already initiated and well into the hobby—call this the bread and butter audiophile. Second, setup shows on a far smaller, far more intimate and thus far more high-end scale that cater specifically to some existing but mostly new customers. These would be events where the focus would be much more on education, the "why" behind HiFi. Our current branding for those outside the industry simply stinks. Someone with necessary capital rightfully looks at our high-end segment as "these folks are nuts". Why? Because no one has connected the dots for them in the way that BMW, Apple, Louis Vuitton, Rolex or fill in your own favorite blank lifestyle brand has. This is the same reason that advertising in high-end magazines, like *Robb Report, Vanity Fair, Christopherus* (Porsche's rag) or *Departures* (AMEX's rag) won't do much of anything except cost you fair market luxury lifestyle marketing dollars. In English, that's bucko bucks. Basically, it would be lights out in six months, if you know what I mean. MQA compatibility or not, you'd be literally doomed.

In my first piece here at FIDELITY, I alerted to some dealers putting the right step forward. There's others who are trying, case in point, Alma Audio, San Diego's high-end premier destination dreamland. Owned and operated by Fabio Storelli and managed by his

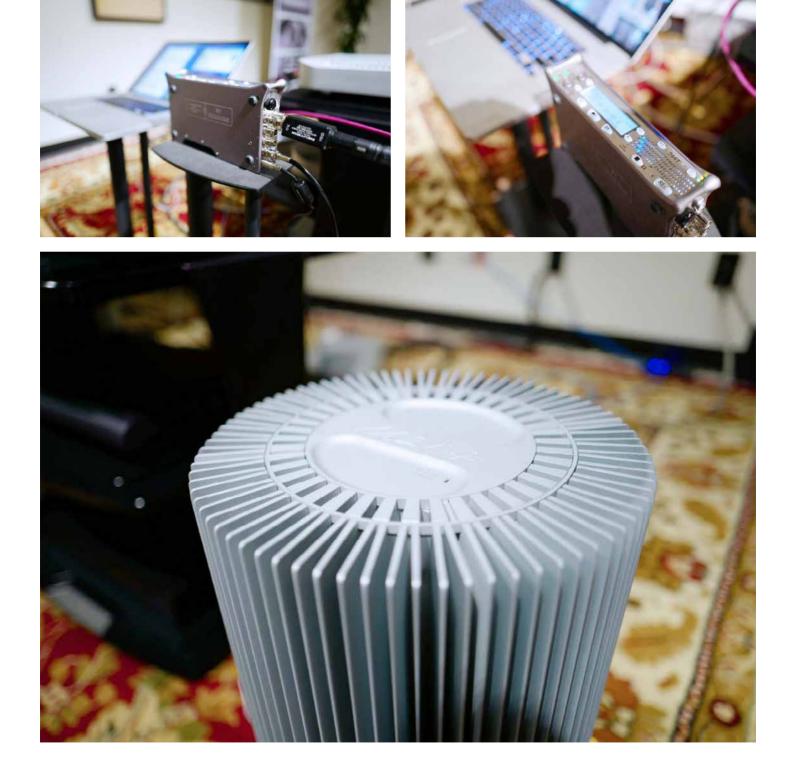




long time sidekick, Alex Siufy, this past Friday saw them host an event with Wilson Audio Specialties and MSB Technologies. Certainly, the hosts proved a great start to the event, as Wilson's Peter McGrath and MSB's Vince Galbo presented their latest and greatest wares to a house full of mostly the initiated, read, audiophiles. As each of the hosts took turns to advocate for high-end audio and their particular products specifically, I couldn't help notice the educational undertone of each presenter's monologues and discussions. Naturally, explaining the benefits of a 58k loudspeaker, a DAC costing 120k and a pair of monoblock amps ringing it at 39k, you have to really dig deep into each of the brand's specialties and overall missions and goals. Case in point, I felt that both Peter and Vince did a great job of highlighting the value of their

products and that in the end, when Peter played his own recordings (and many other commercial titles), the message they had first spun had seemed to stick.

And stick it did. The analog-like—an often-overused term to describe digital playback—sound, warmth and familiarity of each of the cuts played showed the tremendous capabilities of the system as a whole, with bass effortlessly reaching the deepest depths of the Hertz range. The dynamic swings this setup was capable of was nothing short of astounding, a definite testament to the full range character of the Alexia Series 2 and MSB electronics driving them. Speaking of driving, MSB's M204 are definitely amplifiers I would at some point be keen to audition as they appeared to have that holographic midrange imaging I am

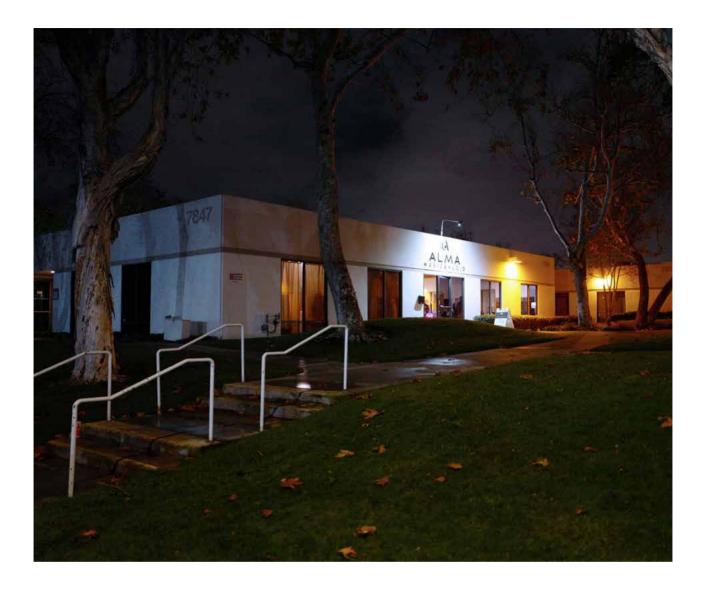




so fond of and my reference EINSTEIN The Silver Bullet Mk II OTL amplifiers are capable of delivering in spades. Smitten as I was with Wilson Audio's first-generation Alexia (which I upgraded to Alexx late last year), Alexia Series 2 proved that much better and more grown up. One size does not fit all.

Within an hour of the event kicking off, the main salon was standing room only, with guests and friends packing the auditioning room quite literally to the gills. Even so, the sound continued to impress with the Alexia 2 / MSB system unquestionably proving up to the challenge of such a large space without a hint of stress. Several tracks Peter and Vince em-c'd literally shook the house—on Boris Blank's (one half of the Swiss electronic music pioneers Yello) produced Malia collaboration album, bass and dynamics seemed quite literally off the charts, stupid good and more than plentiful.

Given Alma's new digs and generous size and space, guests had an easy time of mingling in the store's main—albeit very large—room; Alma's Alex and Fabio doing a great job of keeping customers engaged and actively participating in the conversations to be had. The fact that Alma also has a sizeable vinyl collection / selection for sale also proved an ace in the hole with many of the guests happily sifting through bin after bin scouring for that perfect album missing from their collection. Since Alma Audio are also



dealers for Devialet, Audio Research, YG and many other very fine brands, anyone looking for the best was easily swayed with the store's assortment of HiFi.

Could this—these types of events—be the way forward? Time will tell, though both Alex and Fabio have already committed to hosting many more of these events throughout 2018. Seems like there's a sticking stick, otherwise, why bother. Personally, I feel that with a few tweaks and twerks, these music and customer sessions could be further fine-tuned to produce the desired results. Depending on the audience, these events could contain even more education, in particular answering the often missing "Why" element in HiFi's equation. Simon Sinek would know. Ultimately, a person seeing a Ferrari knows the why. A person seeing mega-buck HiFi

gear not so much. South Coast Plaza, a local and very upscale, nay, high-end mall, has many answers for the lifestyle spender's "Why". As mentioned, the dots haven't been connected and thusly much of this is meaningless and just plain obscenely expensive to the uninitiated. We have our work cut out, but I firmly believe that there is in fact hope and a silver lining. As I had mentioned, one of my goals for 2018 has been to spend more time covering these types of events and exclusive showings for I believe this is where the answers ultimately lie. As Ted Turner famously said, only more is more. Consider this report the first among many more to come in this series. Meanwhile, ask yourself "Why" and spread the news. HiFi is in fact great and even better when Wilson Audio and MSB are making music courtesy of Alma Audio's fine proprietors.



...and now for something completely different...

AUDIOQUEST NIAGARA 1000

By Hans von Draminski. Photos: Ingo Schulz



SPOTLIGHT - ACCESSORIES

POWER FILTER PANEL



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_____Professionals who work with devices that really have earned the description "ultimate" are caught in a bind: As nice as it is to enjoy electronics for awhile that don't just command a high price, but actually sound like they should—getting back to normal is just that much harder. And so that's how I felt after testing one particularly accessory and discovering I no longer wanted to be without it: the AudioQuest Niagara 7000. "Just" a highly developed power filter, this was a device that could nonetheless iron out the electrical deficiencies in my old apartment so superbly, it made me forget it was even there and soon created my new normal.

Until I had to give it back. And end up tortured again with all the trivialities that had been banished into nonexistence for a few months thanks to that brilliant magic box. You know, little things like hissing female vocals and rather grinding high tones. Before getting completely depressed—a unit like the Niagara 7000 definitely lies outside of my price range—I luckily remembered the €9,000 heavyweight has a couple of smaller siblings. For instance, the Niagara 1000, which offers six power sockets instead of 12 (and generally looks somewhat more modest), but undeniably carries the same genes of its bigger sibling. And does so for one-seventh the price. When it comes to playback electronics I call my own, the "little" one is just the right size. Interestingly, all of the devices connected to it benefit, without exception, from its technology (as with the other Niagaras in the AudioQuest portfolio).

The first unit to sample a drink of electricity from the solid Niagara sockets was my bread-and-butter desk combination, the Marantz HD-CD1 and HD-AMP1: The sound from the class-D amplifier and from the CD player hooked up through the digital panel was quieter, more defined, and



generally tidier; it also offered that crucial bit to top off the stable bass range. Even at "critical" times of day, I didn't hear any more hissing, a characteristic that grew even more intense as I tested my way through my transistor equipment. The Niagara 1000 gives my pre- and end-stage combination AX1-BX1 from Advance Acoustic a significant boost in quality, as it did for my aging MusicLink units from Marantz. And even the little MyAmp from Micromega stepped up its game thanks to the cascade of electricity in the form of a somewhat heavier power socket. The same is true for a whole range of source devices, from the SACD player to the turntable. And it was all only a result of being able to drink clean, meticulously prepared electricity? That's right.

A fascinating side effect grew apparent as I tried out a range of different speakers from my collection, creating very adventurous combinations: Not only did the equipment sound better, it even seemed the compatibility of the devices improved despite their having been classic mismatches. And because the Niagara 1000 lets you reduce the volume level without limiting perceived force and structural clarity, soft listening is made easier. This is also particularly true of chamber-music-based classics where nuance of sound and clear tones are more important than sheer penetrating power. And if a small end-stage amp with, let's say, 50 watts didn't have to work at it limits, it could even drive a power-hungry sound converter, which is actually much too greedy for it. Its owners will be pleased with the delicate high-tone details and the full-bodied middle range. The fact my espresso tastes better since I've had the coffeemaker plugged into the Niagara 1000's open high-current outlet might just be my imagination at work.

Power filter panel | AudioQuest Niagara 1000 | Price: €1,200

www.AudioQuest.de

UCHZET, FROHLOCKE * cheer and rejoice

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103

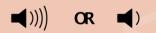
REVOLUTION OF THE DISREGARDED

By Patrick Pohlmann





Volume up or down? A very quick interview with Wolfgang B. Thörner, CEO of WBT, where we wanted him to respond as fast as possible.



Volume up or down? Up. Analog or digital? Analog. Tube or transistor? Tube (but good transistor amplifiers also work for me).

Vinyl or download? Vinyl (or a good CD). Prefer a well-made analog medium to a mediocre digital one.

Cross-country run or gym? *Walking.*

Trends or tradition? Tradition. Tea or coffee? Usually coffee. Salad or steak? Steak. Wine or beer? Beer. Mountains or the sea? Mountains. Book or screen? Book. Jazz club or opera house? Opera house.

Bach or Beatles? Beatles. Wagner or Wacken? Wagner. Stand-by or plug out? Stand-by.

THE WEAKEST LINK IN THE CHAIN IS...



... THE PLUG CONNECTION.

...THE COMMON RCA PLUG IS THEREFORE TO BLAME.



IN THE CASE OF A STEREO SYSTEM...

106



BEFORE WBT CAME ON THE SCENE, IT WAS USUALLY IGNORED.



hortcomings, which could easily be eliminated, are frequently accepted without complaint or pushed to the back of people's minds, because they seem irremediable. An ingeniously simple idea is sometimes all it takes to overcome the problem. When technology and music fan, Wolfgang B. Thörner, was no longer prepared to have his enjoyment of his hifi system ruined by non-standard RCA plugs, he soon realized that the solution to the problem didn't require rocket science but rather simple precision mechanics. Ultimately it was his father's fault that Wolfgang Bernhard Thörner launched his company, WBT, in 1985. Had the passionate do-it-yourselfer not bequeathed his penchant for technical details to his son, the latter would possibly never have hit on the idea of occupying his time with hifi component plug connections, despite his love of music. While the father lived out his passion on his model railroad, the son

was really into electronic devices from an early age and as a schoolboy spent his leisure time constructing loudspeakers and amplifiers. After finishing junior high school at a boarding school in Lippstadt, he then however opted for a career in a quite different profession. In his home town of Osnabrück he did a wholesale and export management traineeship at the vehicle component and fastening technology manufacturer, Gebr. Titgemeyer, and in 1965 he joined the vehicle and bodywork business, Karmann, which back then manufactured VW's Karmann Ghia model as well as Beetle convertibles. There he rose through the ranks from MRP controller and technical salesman to Assistant to the Purchasing Director. After gaining five years of career experience, he obtained an industrial management qualification from the CIC, without having to complete another three-year apprenticeship. Despite this additional qualification, he then realized however that his future career prospects were

very limited if he didn't obtain a university entrance qualification. Thörner therefore decided in his mid-twenties to go back to school after more than ten years on the career ladder, and belatedly gained his high school qualification at an adult education center. In parallel, he attended follow-up seminars at BBS Pottgraben (vocational college) in Osnabrück and then completed a college degree in business administration. After graduating in 1975, he initially returned to Karmann, before going on in 1983 to study psychology at Ruhr-Universität Bochum. Wolfgang Thörner associated that course of action with the vague idea of developing strategies to help improve the sometimes burdensome interpersonal relationships in industrial working environments. Even though this idea ultimately turned out to be an illusion and he prematurely terminated his degree course after just three semesters in favor of setting up his own business, some of the insights he gained would nevertheless later turn out



to be useful as he searched for ways to market his products.

All those years Thörner had mainly devoted his leisure time to his music collection, and whenever possible and necessary, he added new components to his hifi system. As early as his mid-twenties, he was the proud owner of a high-end system, consisting of a Michell Transrotor record player, a Tandberg receiver, a Braun tube amplifier and a pair of Acoustic Research AR-3a loudspeakers. While his electronic components got better and better in subsequent years, there was however no change as far as the lack of plug connection quality was concerned. The inconsistent workmanship in particular of the RCA plugs and jacks, which back then were almost without exception cheap makes from Asia, irrespective of brand, kept on resulting in signal transmission disruptions through complete loss of sound. While to start with this was still an annoying but acceptable inconvenience, he grew more and more aware with every technical enhancement of his stereo system of

what a key impact plug connections as the weakest links in the chain have on music reproduction. After his degree of acoustic suffering reached a critical point around 1980, Wolfgang Thörner decided to attend to the matter himself. He called former colleagues at Karmann and inquired about the address of a turning shop that might be able to manufacture premium plugs. However when he was asked about the exact diameters of the positive and negative poles, he was left with no alternative, in the absence of any official norms, to traipse round different hifi stores armed with a sliding caliper and measure the plug connections of as many devices on display as possible. This exercise revealed that the outer diameters of the center pins (incorporating the positive pole) on RCA plugs varied between 3.05 and 3.45 millimeters, while the diameters of the external contacts on the jacks (incorporating the negative pole) measured between 7.95 and 8.55 millimeters. The logical consequence of these findings should in actual fact have been to replace the RCA connection

with a new, precision-standardized plug format. In view of the fact that more than 98 percent of all audio devices feature RCA connectors, enforcement of a new standard had to remain an intellectual pastime. Instead of devising an alternative solution, it was therefore important to find a way of neutralizing the Cinch connection's weaknesses. Finally Wolfgang Thörner came up with the idea, modeled on the chuck of a drill, of adding a collet chuck mechanism to the outer contact of the plug, by means of which the plug could be adjusted to match the various outer diameters of the jacks. The prototype of his WBT-0100 plug was completed in less than three months. After registering the patent, he first of all asked himself whether he should sell his idea or market it himself. The enthusiastic reactions of various hifi dealers to whom he presented his invention quickly persuaded him to venture setting up his own business. Given that he had spent all his savings on developing the prototype, he first of all had to find a provider of a loan. As coincidence would have

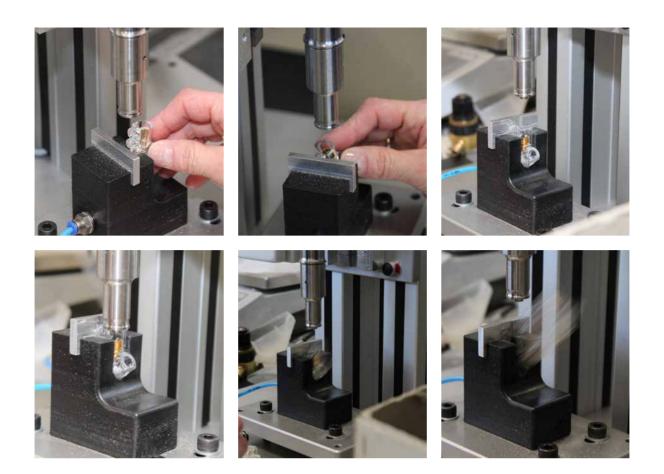


it, Sparkasse Essen was on the lookout for investment opportunities for its newly established investment company at this exact moment and provided Wolfgang Thörner with start-up capital of 500,000 DM, which enabled him to launch his company, WBT, and start production of his plugs in Essen. Subsequently Thörner's plug connections quickly gained a foothold in the market and attracted international attention, meaning the start-up was soon receiving orders from all over the world. More than 80 percent of the company's output is now exported to 42 countries particularly in Europe, North America, Asia and Oceania. In addition to selling through specialist retailers, OEM business, which now accounts for 60 percent of sales, rapidly gained importance. WBT's major success however soon attracted the attention of hardball-playing competitors, who were distributing significantly cheaper rip-off copies produced mainly in China, Taiwan and Singapore, and making WBT's life difficult. Given that there is still no Bilateral Legal Assistance Agreement between Germany

and China, Wolfgang Thörner believes the enforcement of patent rights in such cases continues to be extremely difficult, especially since all kinds of products can now be easily ordered on the Internet. "Although the well-known eCommerce platforms react quickly to notifications from rights owners and block the providers concerned," Thörner explains, "they quickly resume their illegal sales practices under new names." The only possibility of competing in the market place despite these dishonest methods is to keep on enhancing one's products, the company's founder believes. As part of their research for the purposes of continuously improving Cinch and loudspeaker connections, Thörner and his employees discovered that the solid metal connection elements in the Classic range that WBT initially

the Classic range that WBT initially sold also had disadvantages, despite their solidity. As in capacitors, the metal bodies act like temporary electric storage and therefore have a negative impact on signal dynamics. In addition to these "mass storage effects", eddy currents also have a more substantial

influence on signals than previously assumed, according to WBT findings. The magnetic field induced by these eddy currents that counteracts the surrounding magnetic field produces the so-called skin effect at higher signal frequencies—an increase in resistance inside the conductor causing the current flow to shift to the conductor's outer areas. According to Thörner, the consequences of this are non-linear signal distortions, which cannot be corrected. In order to minimize such effects, WBT invested a great deal of money in developing the nextgen range at the start of the new millennium. Instead of using turned connectors made of solid brass, this system uses signal conductors made of pure copper or fine silver, which are stabilized by special plastic sheathing. This method not only significantly increases conductivity but also reduces metal mass by around 90 percent, which according to the manufacturer noticeably increases both the substance and the three-dimensionality of acoustic patterns as a result of this lessened mass storage effect. Furthermore extensive elimination of eddy



currents delivers a clearer signal. According to Thörner, although metrological verification of these electromagnetic phenomena is still proving difficult, sound tests conducted with blindfolds however left no doubt as to the acoustic improvements achieved. Besides RCA plugs and jacks, the WBT range also includes jack plugs, cable lugs and pole terminals. Thanks to a wave impedance of 75 ohms, the plug connections and jacks are able to transmit broadband analog and digital signals of up to 1 gigahertz. Apart from the quality benefits, production of the nextgen range is even more resource-efficient and generates lower emissions by economizing on valuable copper and zinc-two points that are of major importance to WBT in addition to digitalization with the objective of setting up a smart factory featuring self-managing production facilities and logistics systems. 50 percent of WBT product manufacturing is currently performed at the company's Essen plant. The company,

which currently has a headcount of 17, has an assembly facility as well as its own plastics molding shop. Turned components are sourced from the Black Forest region, where this particular form of craftsmanship has a long-established tradition. A subcontractor from Germany also handles production of punched-bent components. In the next few years WBT is planning further enhancements of its nextgen range, which Wolfgang Thörner regards as having plenty of development potential. On that basis, the company wants to develop a surface conductor to minimize micro-vibrations that can have a negative impact on sound quality. The design engineer does not yet want to reveal more details at the present time—but once again the signs are that "less can sometimes be more". In his private life Wolfgang B. Thörner is a big fan of Italian opera, but he also appreciates rock and pop music and recently added Adele to his list of favorite singers, alongside Anna Netrebko and

Luciano Pavarotti. When this particular product developer decided 32 years ago that he was no longer prepared to have his music enjoyment ruined by the shortcomings of plug connections, he could not have imagined that he would trigger a revolution. While many highend manufacturers now deliver their equipment fitted with WBT-made jacks and plugs, competing products also feature noticeably higher quality overall than previously. Wolfgang B. Thörner, WBT for short, rightly gets the credit for taking any notice at all of the dark side of stereo systems. •

WBT-Industrie Elektromechanische Produkte GmbH, Im Teelbruch 103, 45219 Essen, Germany, Telephone 02054 875520, www.wbt.de

This is a reprint from "WHO IS WHO IN HIGH FIDELITY"— Vol. 2, the compendium from FIDELITY VERLAG GMBH, to highlight the heavyweights as well as the little guys who still pack quite a punch, and to introduce you to the people behind, to bring some order to the ever-expanding high-end business. Ask for your copy. May 28, 1967 H

A World Filled with Oscillations and Sound. The comprehensiveness of Karlheinz Stockhausen's grasp of music was like no other composer before him. This

ubiquitousness eliminated the boundaries between electronics and acoustics, between spirit and matter... —>

 1952/53: Serial music
 From 1960 onward: Process com-studie I and Studie II
 November 11, 1969: Scandalous pre-miere (and sole performance) of Fresco
 August 22, 1928: Karlheinz Stockhausen is born. 1940 1950 1960 1970 930 $\circ \circ$ \bigcirc \bigcirc -0 Θ 1955: Central early work *Gesang der Jünglinge* 1967: Marries Mary Bauer-meister in 2nd marriage. 1951: Marries Doris Andreae. ⊲ BACK TO TABLE OF CONTENT | FIDELITY INTERNATIONAL № 08 | 01/2018 | EN

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1920

lay 28, 1967 Håkonshallen,

-->...The free-thinking Stockhausen was once quoted as saying: "I was trained on Sirius to become a musician and want to return there." Ten years ago, on December 5, 2007, he returned to Sirius forever. May his works resound there for all eternity.

 1970: Spherical auditorium at Expo 70 in Osaka
 From 1977 onward: Work on *Licht*—the longest opera cycle in musical history

 1970
 1980

1974: Order of Merit of the Federal Republic of Germany

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1996: Honorary doctorate (Dr. phil. h. c.) 2005: Completion of the

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2001: Polar

Music Prize

seven-part *Licht* cycle

2010

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December 5, 2007: Karlheinz Stockhausen dies

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awarded by the Free University of Berlin

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1995: Bach Award of the city of Hamburg

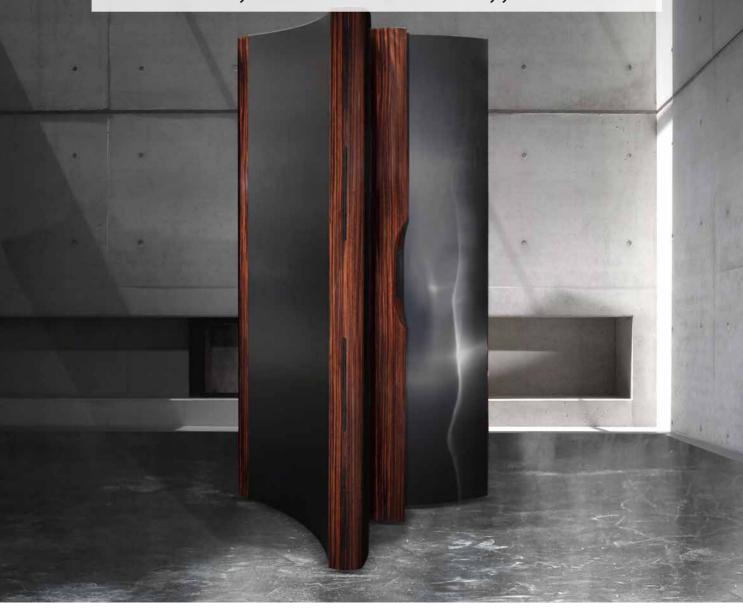
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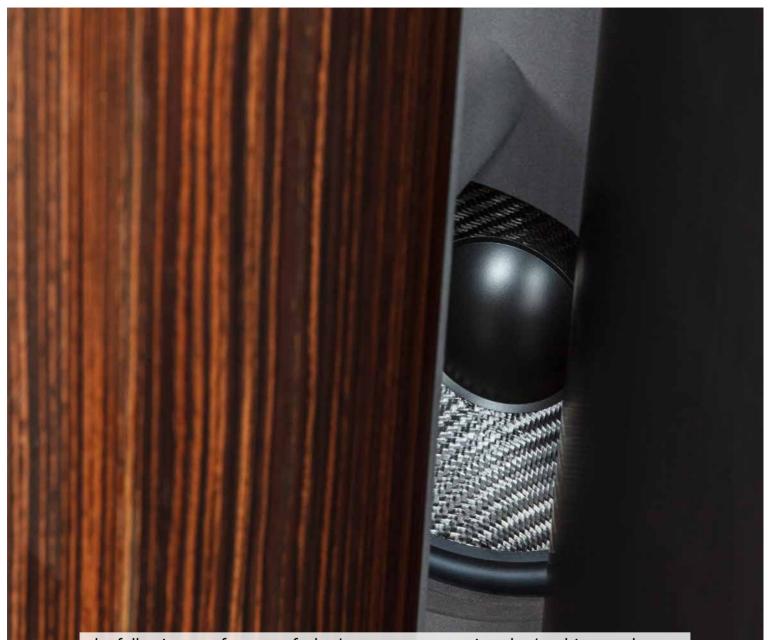
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PREVIEW

FIDELITY international No. 09

Dear global audiophile community, Selecting the topics to include in the international edition of our German-language magazine FIDELITY is always something we enjoy immensely. But, we might add, it also usually leads to heated discussions among the editorial team. We want to bring you the most exciting devices, reports, and music reviews from our stock of current FIDELITY issues. It should come as no surprise that members of the editorial team don't always share the same views. That's why you should view •





the following as a forecast of what's to come—a preview that's subject to change: **Backes & Müller** have made a lasting impression on us with their **BM Line 80**. These super loudspeakers are the most likely candidate to make it into the next issue. Also situated at the higher end of the price scale and offering superb quality is the **E-02** phono preamplifier from **Esoteric**. But top-class music enjoyment doesn't have to cost the world: **Technics** shows it's possible with their all-in-one music system **SC-C70** and **AudioQuest** with their tiny **Beetle** DAC. Suitable nonmainstream software, both digital and analog, will also feature in our extensive and interesting music section.

Look out for FIDELITY international No. 9, available in May 2018.



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THE END

Thanks for reading issue 08 of FIDELITY international. Issue 09 will be put online by May 2018 or when ready. Be prepared and subscribe to our newsletter to get the latest news at first.