

# FIDELITY

international

# 06

english



06

03/2017 • August/September/October 2017

The German Voice of Premium Audio... a free online magazine





*Burmester*

## Phase 3 Loftstyle

*PHASE 3 is an extension to the traditional Burmester product lines, joining ultimate demands on sound quality with musical culture and modern lifestyle in a perfect blend. The designoriented concept incarnates both the timelessness of the Bauhaus style steel tube furniture and the industrial charm of modern lofts.*

Analog fans know that vinyl cartridges also have their dark sides. But that doesn't necessarily have to be a bad thing. By around the end of the 1960s, Toshiba had already begun experimenting with opto-electronic pickups to conjure tones from the interplay of light and shadow... —>



1887: Gramophone and vinyl records created by Emil Berliner

1937: First cartridge with permanent needle: Telefunken TO 1001

1948: First MC cartridge (mono) created by Ortofon

1877: Edison phonograph with first mechanical cartridge

1925–26: First electromagnetic cartridge created by Kellogg and Rice

1937: First piezoelectric crystal cartridge



—>...While this was a groundbreaking technical achievement, the project bled the Japanese company dry. Decades would unfold before DS Audio managed to recently develop a stable and reliable optical cartridge that could be brought to market.



1959: First MC cartridge (stereo) from Ortofon and Grado

1986: First laser record player: Finial LT-1

1960

1980

2000

1957: Patent for MM cartridge secured by ELAC

1969: First photoelectric cartridge: Aurex Toshiba C-100 P

2014: First "optical cartridge": DS Audio DS-W1



Cai Brockmann

picture: Ingo Schulz

# DEAR READERS,

Welcome to the sixth edition of FIDELITY international, our young online offshoot of our German print magazine. We've gathered a fine collection of exceptional stories, once again slightly emphasizing analog equipment.

This issue features the TechDAS AirForce III, one of today's most exciting turntables. Capable of flattening out uneven records, it also comes equipped with The Tonearm from Einstein Audio. Another special record-playing machine is the famous Nakamichi TX-1000, a true 1980's hi-fi classic made in Japan. It has played a role as part of a stunning high-end audio system we've enjoyed in a cool and cozy "music bunker" this summer. This was also the place we experienced a pair of La Assolutas from Tidal Audio. Equipped with pure diamond drivers for tweeters and midrange, this handmade loudspeaker system sets you back a fortune (or two) and is as heavy as a full-size grand piano. The tiny DS Audio Master 1 is a much more affordable gem, although by no means cheap. The innovative light pickup clearly focuses on the word "light" while also taking good care of your vinyl collection.

But this issue's not all about big-buck audio and uber-high-end equipment. We also take a closer look at Clearaudio's top MM cartridge, Charisma V2; check out a strong, handsome duo from Sweden's Harmony Design; and let the music course through some excellent—and affordable—cables from in-akustik. And if you're going to visit London in the near future, you may take a different view of the Royal Festival Hall after reading our inside story about the concert halls of the world.

With any luck, we've just sparked your interest and placed an exceptionally enjoyable read at your fingertips!

Best regards,

FIDELITY international—  
the German Voice of Premium Audio.

# The Foundation Comes First



## Advancing the Science and Efficacy of Power Conditioning

There are many approaches to reducing the noise associated with AC power—conditioner-filters, regenerators, isolation transformers, battery inverters, and more—and all can yield meaningful results. However, some of these techniques also cause ringing, current compression, and non-linear (obnoxious) distortions. **Some cures are worse than the disease**—some are not as good as plugging straight into the wall.

Niagara Low-Z Power Noise-Dissipation Systems address the many variables and forms of interference that compromise **the very foundation upon which an entire audio/video system is built**. When power is optimized, when a system's foundation is a Rock of Gibraltar, the system is able to deliver maximum articulation and emotional stimulation.

Niagara designer Garth Powell has devoted 20 years of intense research to furthering the science of AC power. His exceptional ability to apply an insatiable thirst for knowledge, a musician's deeply personal passion for music, obvious brilliance, and many hard-won insights is clearly evident in the products he creates.

AudioQuest invites you to experience the proof that Garth has successfully advanced the art, the science, and the efficacy of power conditioning. We believe that by adding a Niagara 7000 or Niagara 1000 to your system, you'll experience **clarity**, dimensionality, frequency extension, **dynamic contrast**, and **grip** that your system was just waiting to reveal.

Sincerely, Bill Low

"The Niagara 7000 better resolved fine detail and threw a deeper, more expansive soundstage.... Transients of the struck notes sounded faster, less thick, more naturally expressed through the Niagara, as did the length of the notes' decays."

—Michael Fremer, *Stereophile*, February 2016



audioquest®

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03/2017

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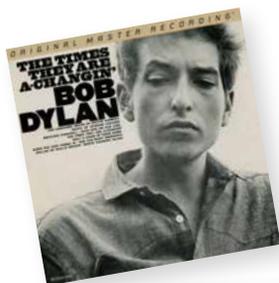


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**Please note:** All items are listed with German retail prices (including sales tax) at the time of equipment evaluation.



# Think Fink!



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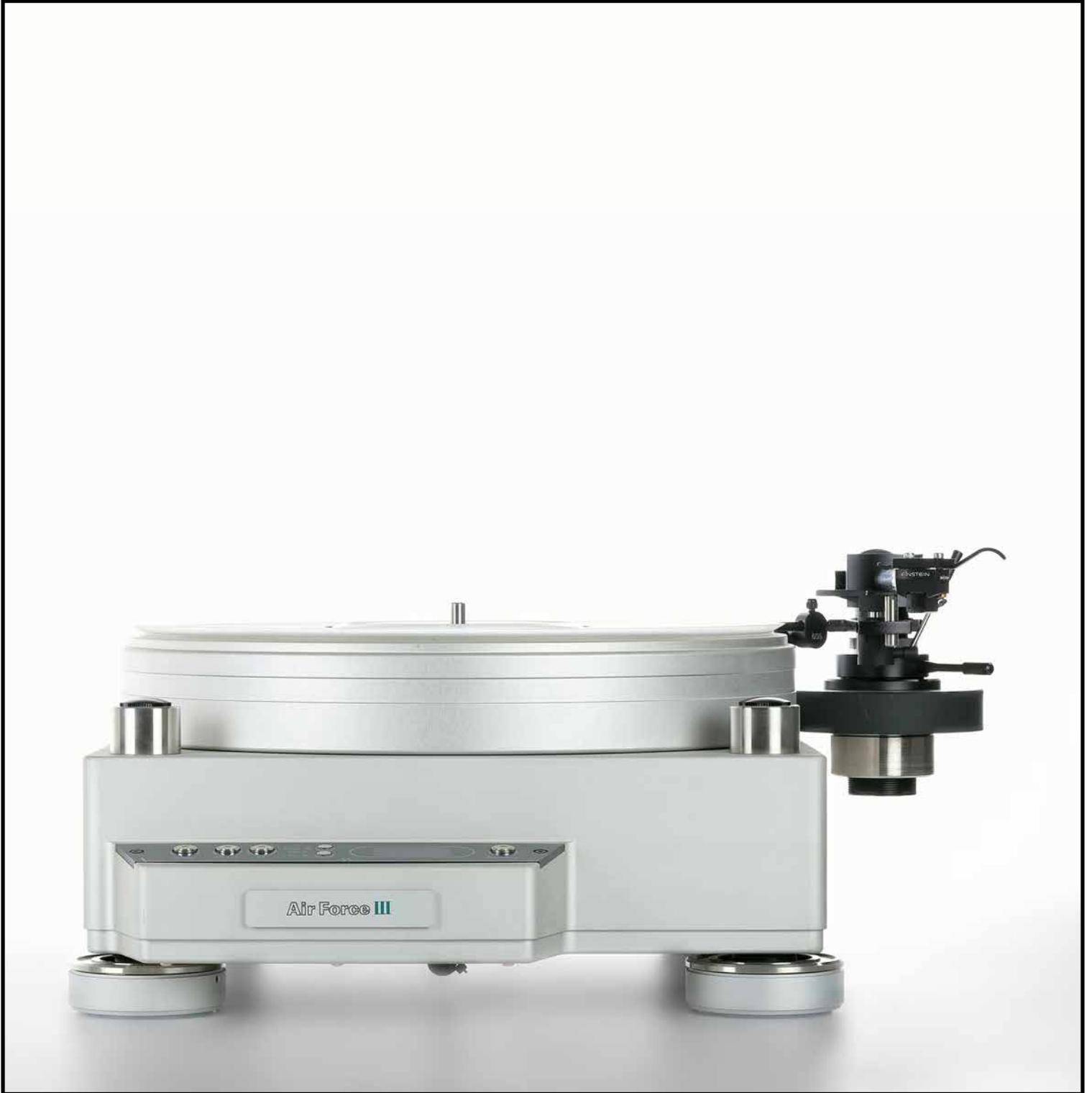
TechDAS Air Force III

# AIR, WA- TER, ZEN

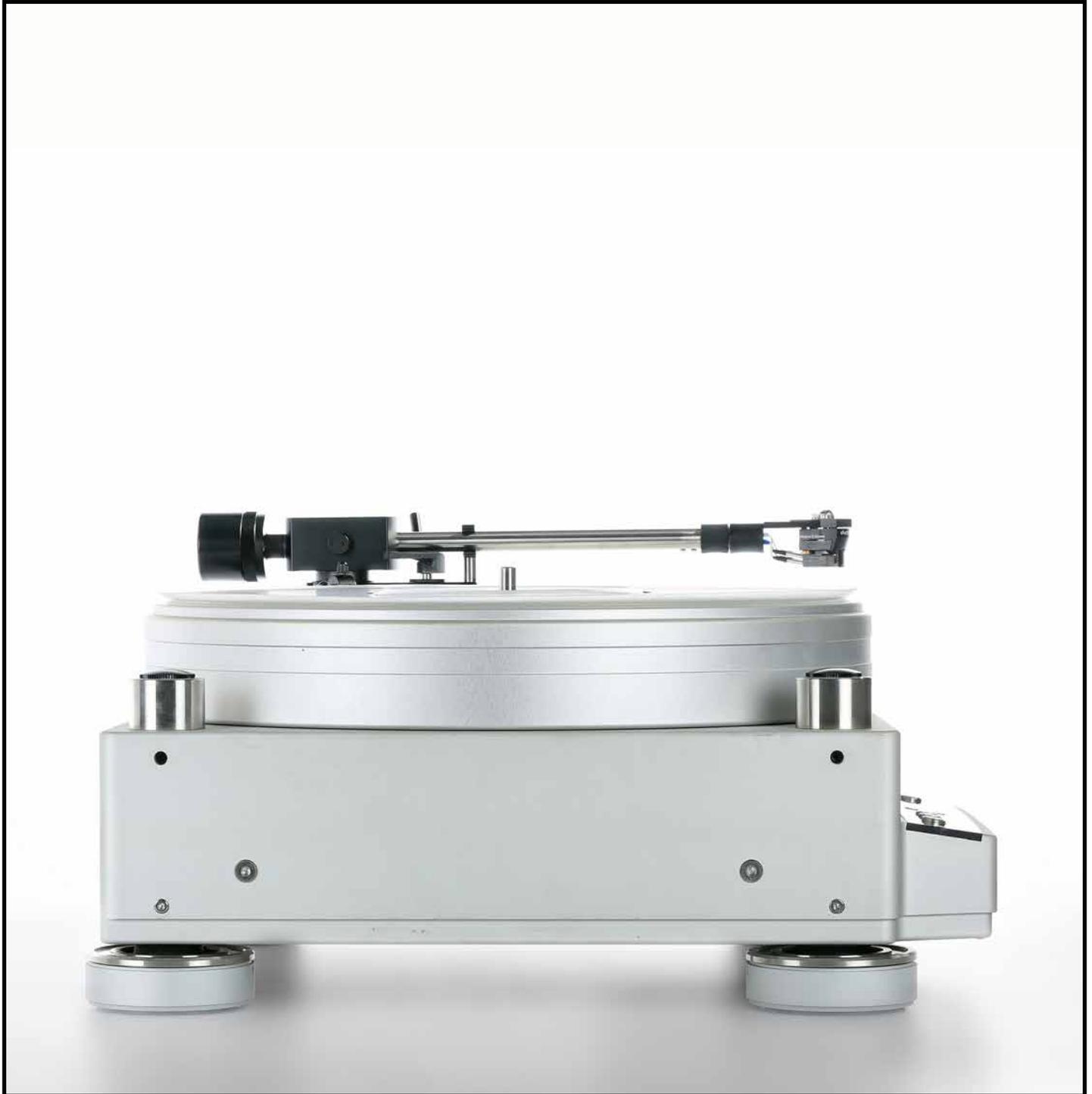
By Helmut Hack. Photos: Ingo Schulz

Over the last four years, a Japanese importer who spends his retirement building sophisticated turntables has been creating quite a stir in the high-end scene. Why are high-end fans so excited? Hideaki Nishikawa had at one time designed the massive turntables produced during the later years of Micro Seiki.













**D**uring the heyday of vinyl and shortly before it was stabbed in the back around 1980 by a ruthless parvenu called the CD, Japanese companies were demonstrating what has become a characteristically high-end obstinacy by stubbornly building analog turntables that were eclipsing all that had gone before. The trouble was, nobody wanted to buy them anymore. Renowned manufacturers turned to other disciplines, or disappeared completely, including such legendary names as Nakamichi, Hitachi, ELP, C.E.C., and Micro Seiki, which, supported by its broad product range, was perhaps the best-known brand of the time, proved to be a further victim. Times were far from rosy even then, of course: The world market was highly competitive, and managers were looking to slash costs everywhere. And large companies faced even greater cost pressure than smaller ones. Micro Seiki had been trying for years to establish itself on the market for low-cost turntables and had been manufacturing products for other brands. But while German turntable firms such as Thorens, Dual, and Perpetuum Ebner (all back

in business thanks to the analog revival!) are remembered primarily for their popular, inexpensive products, Micro Seiki's brand image has been shaped by its brilliant nonsuspended turntables that often never even reached the German market. These were products like the SX 8000 or 8000 II, the SX 5000 II, and particularly the RX 5000—which looks most similar to the Air Force III, but actually has the least in common with it. All these turntables were developed by Hideaki Nishikawa, now CEO of Stella Inc., which produces the in-house brand TechDAS.

## Ideas that endure

There's nothing particularly new about the Air Force III. You can see all its design features in the Micro Seiki SX 8000 II: the square base, the air bearing, the vacuum disc suction mechanism, the external drive unit (the original had a DC motor instead of a synchronous AC motor). The 8000 II had even demonstrated how to create space for air ducts in its complex bearing: by attaching the spindle in the final setup step, only ▶



stopping the current 9-kilogram aluminum platter from taking off when the compressed air cushion is activated. These great ideas have been around for a long time. The fact they have lost none of their fascination and relevance is actually a real slap in the face for the new analog school that has emerged since the 1990s. Returning to the scene after 35 years, Nishikawa says he was waiting for the necessary technology to reach maturity—which is Zen in its purest form.

If you wait by the river long enough, the corpses of your enemies will float by ...

... and their pierced, lifeless bodies will shine like silver in the red of the morning sun. This “wait until everything works itself out” attitude is inherent to Asian philosophy. But whatever you do, don’t try to force things! So, while Nishikawa was patiently waiting for advances in vacuum technology, his archenemy, the CD, suddenly started to fall out of favor. In 2013, the time had finally come to unleash the Air Force One on the world, closely followed by the scaled-down but, in my opinion, all the more attractive Air Force Two. The product we are testing, Air ▶



## ACCOMPANYING EQUIPMENT

**CD player:** Marantz HD-CD1, Audio Note CDT Three, Audio Exklusiv P8 | **DAC:** Soulution 560 | **Integrated amplifier:** Cayin CS-100A | **Preamp:** Tidal Preos | **Power amplifier:** Soulution 511 | **Loudspeakers:** Wilson Audio Yvette | **Cables:** AudioQuest, HMS | **Accessories:** Sieveking Quantum Noise Resonator, Isotek Aquarius Evo3, Subbase Audio, Solidsteel



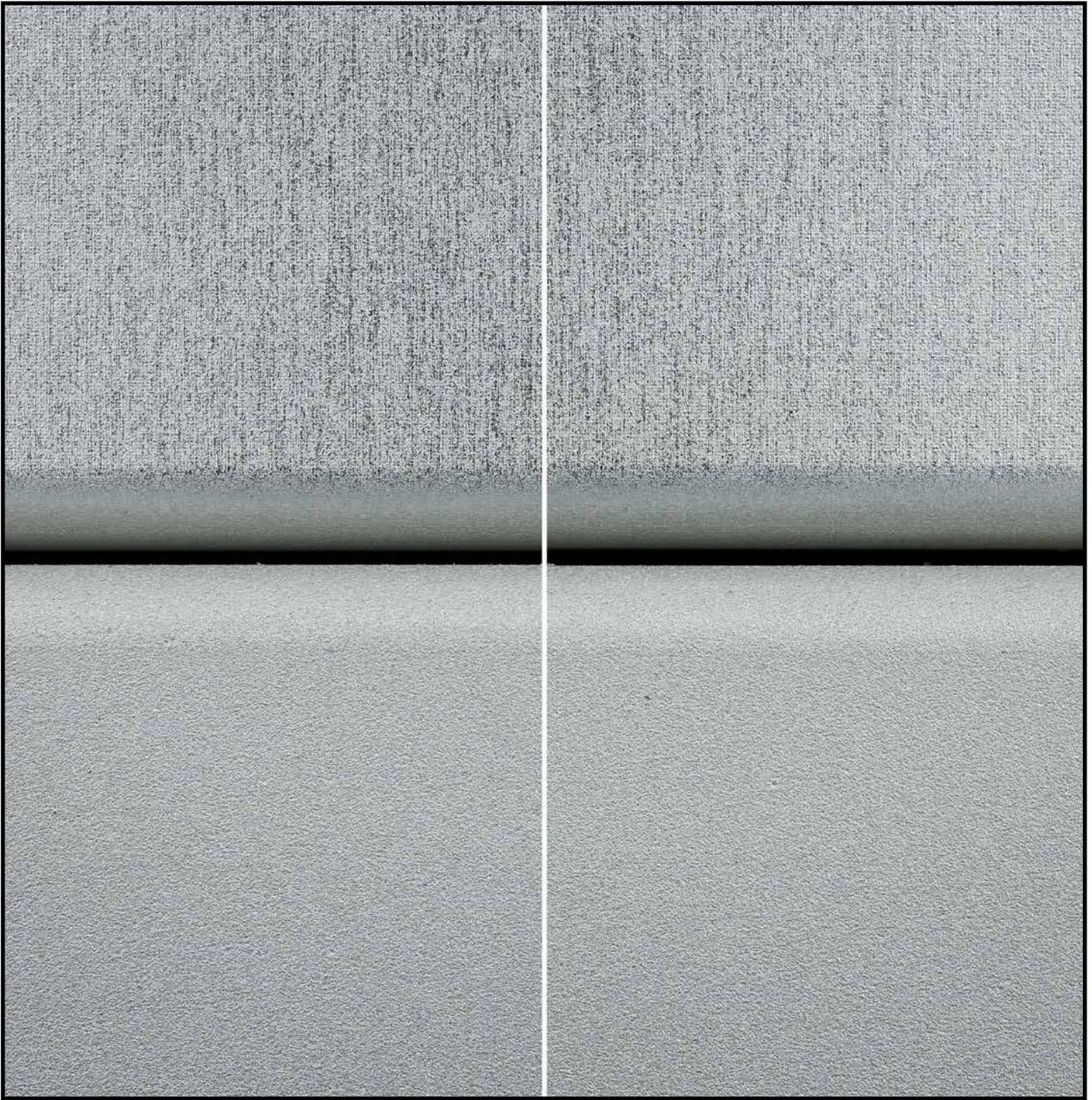


Force III, is therefore the second downgrade. Its compact housing boasts almost all the important features of the Air Force One but at a quarter the price. TechDAS has announced the release of an Air Force Zero later this year to extend the upper end of its product range.

## Controlling the airspace

The Air Force III's compressor sucks and blows like a Dirt Devil. But as it's more modern than a vacuum cleaner, it can even do both simultaneously and independently of each other. Two PVC lines (marked "V" for vacuum and "F" for floating) lead from the air-cooled compressor to the matching valves in the turntable's base. Adjacent to these lines is a serial connection cable that controls the compressor and powers the turntable. Another control cable runs from the turntable base (which

also houses the motor control) to the separate motor casing. The platter only moves when the compressor is running, first beginning to levitate when a 30-micron cushion of compressed air is pumped between the glass subplatter and the aluminum platter. This process is actually quite soundless. The compressor vibrates softly on the back of your hand, but the rest is all silent. Above the aluminum platter, the exact opposite happens. Also compatible with the old Micro Seiki turntable, two sealing lips on the label and outer edge suck the record down onto the platter when a button is pressed on the front panel. This suction button then changes color to green, and a brief plaintive cry, something akin to a startled guinea pig, is the only sound you hear from this amazingly smooth turntable mechanism. Extreme force would now be needed to remove the record from the platter, which is secured by a vacuum with controlled leakage rather than one with a hermetic seal. One of the ►



**TechDAS Air Force III**  
As pure, refreshing and neutral as a glass of water.

© FIDELITY Magazine

EUPHONIC  
SONOROUS  
AGILE  
ANALYTICAL

CHALLENGING = A component is 100% intuitive if you can exploit its potential to the full intuitively.  
INTUITIVE =

The Air Force III's soundless compressor works in two directions. It creates a vacuum between the platter surface and the record (above). You can see how the sealing lips are being pressed together on the right side of the photo. The compressor also pumps a continuous cushion of air below the platter to elevate it by 30 microns (below).

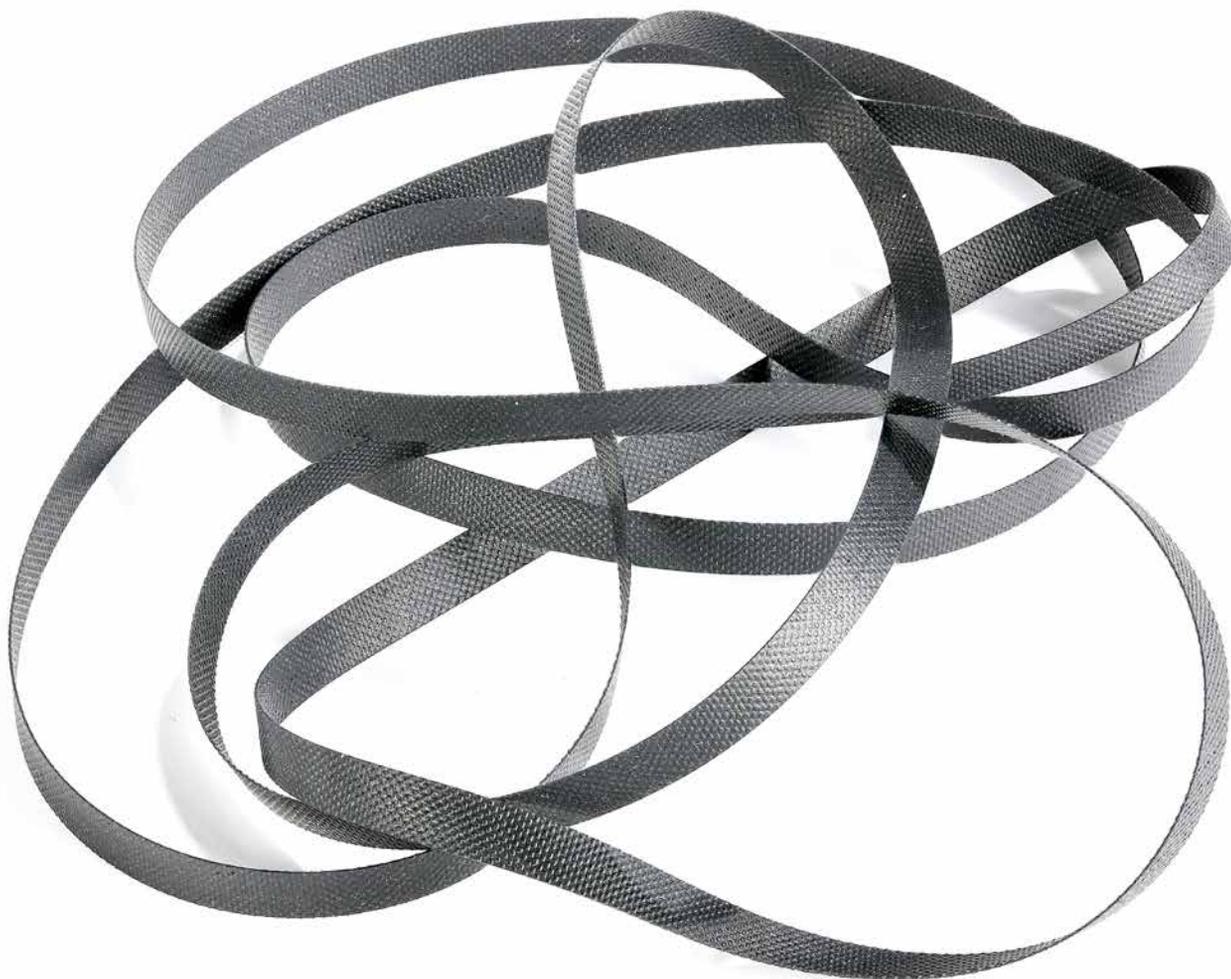


most important innovations in this TechDAS turntable is a tiny film of compressed air between the platter and the record that absorbs vibrations from the pickup. Keeping the surface of a platter as clean as possible is obvious; with this method of operation, though, it's absolutely critical. The powerful vacuum does not, however, have a problem evening out slight warps in records, and you can also apply a bit of extra pressure if necessary. But even seriously warped vinyl can be played, of course; the Air Force III works without the vacuum as well, and the optional disc stabilizer is highly recommended.

### Torque or vibration-free operation ...

... seems to be the ultimate question in current turntable development. The Air Force III effortlessly delivers a sufficient measure of both. Enclosed in a massive housing, the powerful synchronous motor with its own power stage drives an extremely thin, rigid polyurethane belt attached to a groove in the rim of the platter. You can adjust the distance

between the motor housing and the platter if you want to, but there's no real optimum distance. You need to find a good compromise between adequate belt tension and maximum operational smoothness. The position of the pulley itself can also be adjusted to within a range of about 2 centimeters using a grub screw. This gives you somewhat more space if you really want to attach four tonearms. The success of your adjustment efforts can be seen in the speed adjustment menu on the front display. Once the displayed speed settles into the correct value, you can save the adjustment with the memory function. The motor responds immediately, cutting tension by around 50% to only just maintain the speed. The sluggish control loop with hall sensor is ideally only needed to check that the adjustment is correct. If all this happens within 30 seconds, no problem. If it takes longer, you can adjust the drive belt tension. The normal rule of thumb—that a string drive should have around a finger's breadth of play in it—also applies to the Air Force III. Should you encounter any unexpected problems, you can run a short routine called “tension adjustment mode” to help you. ▶



A polyurethane drive belt reinforced with carbon fibers creates a powerful, rigid connection between the motor pulley and the platter.

## Room for improvement

For improvements to the mechanical stability of Air Force III, a glance at the turntable's larger brothers is all that's necessary. The major differences include weight and the cleverer way in which the siblings are decoupled from the mounting surface. One strategy worked for me at least. Although the Air Force III worked perfectly in the solid steel rack, a finger tap test yielded a somewhat noticeable effect on the speakers. Attaching an additional heavy base from Subbase Audio brought an immediate improvement. With a bit of effort and tinkering, the Air Force III could definitely be improved even further. Who knows. It may even be possible to reach the standard of the Air Force II through clever positioning.

## Curtain up ...

For the Air Force III's debut, we assembled a suitable reception committee in our listening room. Although it's an integrated component, the MC preamp in the Tidal Preos is one of the best phono equalizers on the market. You can only really assail the Soundation 511 stereo power amplifier and the amazing Yvette from Wilson Audio by employing far-fetched arguments based on taste. Apart from the five-pin tonearm cable, all cabling comprises premium components from AudioQuest or HMS. There's even a Quantum Noise Resonator blinking away on the window side of the room. All in all, a fabulous environment in which to conduct our in-depth listening test.



## The Tonearm—the grandmasters assemble

Just a few words about the special 9-inch tonearm, the first to carry the Einstein label. Volker Bohlmeier from Einstein Audio is even talking about a 12-inch version farther down the road (he regards a 10-inch model as a feeble compromise and refuses to consider it). Called “The Tonearm,” it’s a relatively new product. It has a solid bearing block located above the pivot and a thinly dampened double tube with stainless steel on the outside and aluminum on the inside. Like The Pickup cartridge, built by Ortofon, they don’t make The Tonearm themselves. If the company needs expertise outside its own core amplifier area, Einstein makes no bones about looking for outside help. This enables the relatively small manufacturer to offer nearly a complete range of products. For the tonearm, Volker Bohlmeier managed to obtain the assistance of another legendary figure from the analog scene in Japan, where high-end had its origins. Akiko Ishiyama has made products for such companies as Ikeda and Lyra. And some enthusiasts may have heard

his name in connection with classic products from Fidelity Research. As far as looks go, The Tonearm boasts a particularly idiosyncratic, angular design. We’ll probably be looking at Einstein’s Tonearm in its own right in an upcoming issue. So for the moment, let’s just say that the German distributor enabled two grandmasters of the Japanese audio tradition to come together in our Air Force III configuration. With these legends on your side, what could possibly go wrong?

### ... Clear the stage

While conducting my tests, I saw no reason whatsoever to make any changes to this winning team of tonearm and pickup. If you had also heard the first notes emanating from the Air Force III, I’m sure you would have felt the same: everything should stay exactly as it. Unfortunately, you couldn’t be there with me. Every now and then, we encounter a sublime high-end device that’s simply above reproach. Rather than being sensational in its own right, true high-end often involves an



absence of distinct attributes. In terms of sound, everything we could specifically single out about Air Force III would be rendered less true through the very act of calling attention to it. All the same, I'll give it a try. The complete sense of calmness this device exudes is easy to miss, but is particularly significant. While it's not exactly the black canvas we are familiar with from established nonsuspended turntables, the lead-in groove emanates pure, unadulterated stillness. After hearing just the first few notes, it becomes clear that categorizing the Air Force III will be a problem. On Bettye LaVette's "Do Your Duty," you can admire the brass section's expansive tones—sensual yet light-handed—but the horns make their entrance blaring like the Seventh Cavalry. The Yvette pampers us with a palette of tones and substance that extends to the deepest levels. Teaming up with the Soullution power amplifier, the pure energy

it manages to generate from this 1960s production is simply overwhelming. The Swiss power amp is so good there is only one possible criticism that could be made of it: Five decades down the road, neither the singer nor the producer would have ever wanted us to hear their music this way—the unmasking of all its imperfections, overmodulations, gloomy echoes and wildly enthusiastic drumming. Nevertheless, the soul diva's indestructible voice can be heard in shades ranging from brittle to tenacious. The impression of a well-rounded stage performance is even greater when Carla Thomas calls Otis Redding a "tramp." Both singers seem to stand farther apart than usual while still remaining in a well-defined oval from which only the rhythm section makes thrilling and dynamic attempts to escape. This sudden, extreme dynamism does seem to be a special feature of the Air Force III. But, unlike many snappy turntables,



even in this situation it doesn't seem to take a step nearer to the listener. This Japanese powerhouse never loses its cool, remaining a confident and sovereign baseline player at all times.

“Empty your mind, be formless, shapeless—like water. Be water, my friend.”

The source of this quote (Bruce Lee) and the Air Force III share one thing in common: They can instantaneously pacify a room in just one surprise attack. And, upon reflection, water is also the only true metaphor that can apply to the Air Force III. Pliant and yielding, these apparent weaknesses are actually the turntable's real strengths. Water always finds the path of least resistance. It prevails and exploits an opponent's strengths to its own advantage. Sparkling, water can flow through a thin straw, but it can also cut deep valleys through mountains. It refreshes swimmers with a soft place to land when they take a dive from a 3-meter board, but feels like concrete to those divers who take a record jump from 50 meters or higher. Water has no attributes that aren't contradicted by other characteristics. Even its physical state is changeable. And not

to be forgotten: Water is where life began, and it remains indispensable to everything that has emerged from it. In the beginning was clean, pure water. Shouldn't a turntable be like crystal-clear water? With a cool, fresh breeze blowing? ■

#### Turntable | TechDAS Air Force III

**Functional principle:** belt-driven nonsuspended turntable | **Drive:** synchronous motor with own DC power stage | **Material:** aluminum | **Speed:** 33 or 45 rpm | **Special features:** air-cushioned platter, vacuum disc suction mechanism, space for up to four tonearms, Micro Seiki DNA | **Dimensions (W/D):** 55/40 cm | **Weight:** 35 kg (including motor unit) | **Weight PSU and compressor:** 9 kg | **Warranty period:** three years | **Price:** € 26,500

#### Tonearm | Einstein Audio The Tonearm

**Functional principle:** gimbal pivot tonearm | **Length:** 9-inch | **Materials:** aluminum, stainless steel | **Warranty period:** five years | **Price:** € 6200

#### Cartridge | Einstein Audio The Pickup

**Functional principle:** MC cartridge | **Output voltage** 0.4 mV | **Weight:** 13 g | **Warranty period:** three years | **Price:** € 4400

#### Einstein Audio Components GmbH |

Prinz-Regent-Straße 50–60 | 44795 Bochum | Telephone +49 234 9731512 | [www.einstein-audio.de](http://www.einstein-audio.de)



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OBSESSED WITH HIGH RESOLUTION

# BROWSER

## Nº 01



### A Nearly One-to-One Ratio

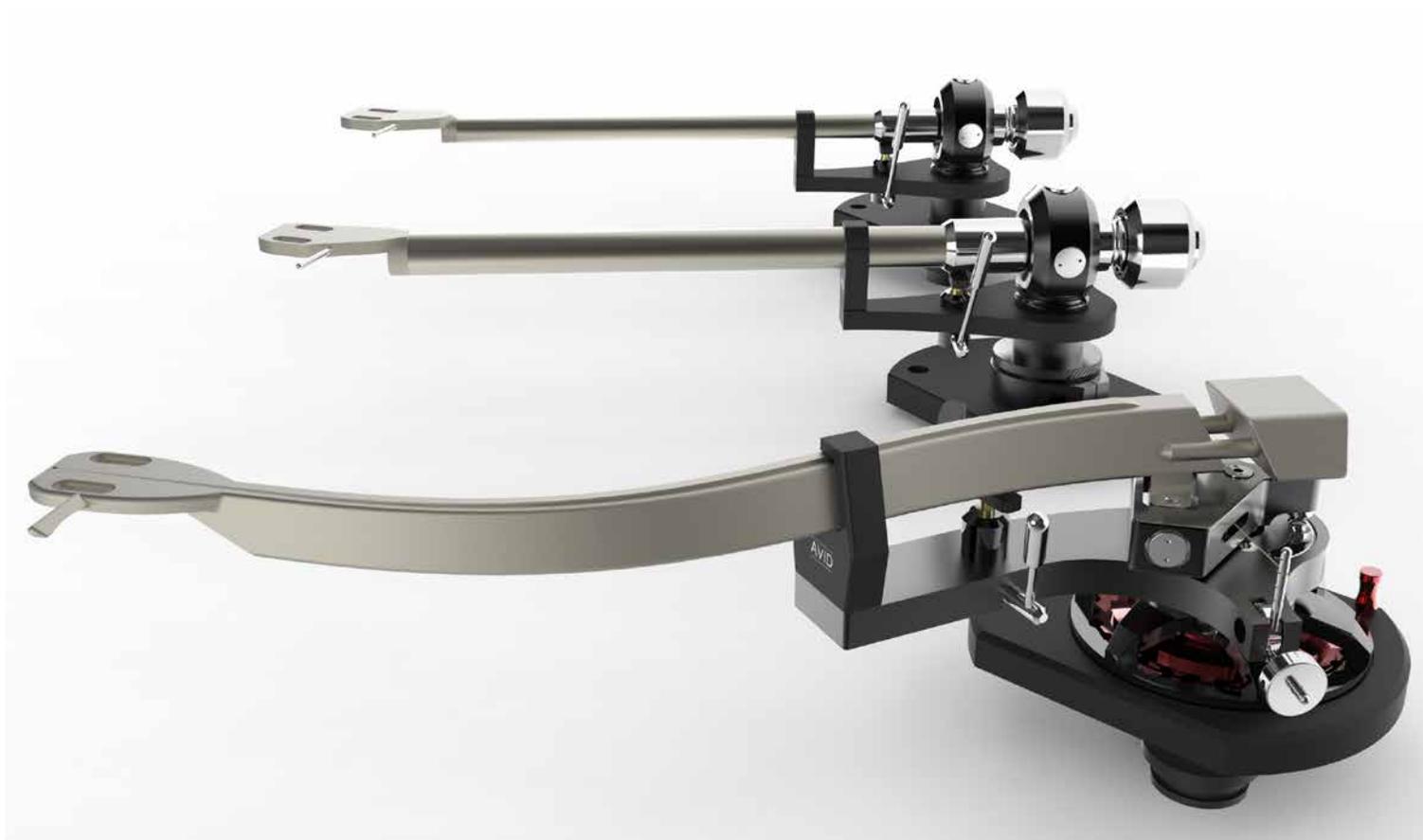
The Leica Noctilux-M 1:0.95, the world's most light-sensitive camera lens, set the stage for Leica to become known as the 0.95 brand that wed exceptional quality with iconic design. The camera company's collaboration with the New York company Master & Dynamic has now resulted in three headphone models featuring loving details made of precious materials as well as to a headphone stand. The 0.95 headphones cost €220 to €600.

[www.leica-camera.com](http://www.leica-camera.com)

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# BROWSER

## Nº 01



### Like It Were Printed

By developing their own tonearms, the English analog specialist AVID has taken another step toward becoming a full-range distributor. The three tonearm models Barytone, Paroxytone, and Oxytone are all gimbale and available exclusively in a nine-inch length. The top model, Oxytone, has an S-shaped tonearm tube made entirely of titanium and manufactured using a 3-D printer. Thanks to its unique locking mechanism, the AVID Oxytone's VTA can even be adjusted during the pickup process. All three tonearms are expected to be available near the end of 2017. Prices have not been determined yet.

<http://www.avidhifi.com>

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## Extreme Tube Amp

About 1,000 watts of output is quite a claim for a tube amp. The “jericho” project came to fruition through Michael Franken (MFE) and Willy Reisen. The data sheet for these absolutely uncompromisingly constructed monoblocks totally pulverizes all standards previously set for conventional tube amps. Just like the €175,000 price tag for each pair. However, the first 10 buyers do receive a 17.5 percent discount!

[www.mfe-jericho.de](http://www.mfe-jericho.de)

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# BROWSER N° 01

# BROWSER Nº 01



## Little Brother and Sister

Karl and Karlotta, Lyravox's newly introduced floor-standing loudspeakers, can only be compared with conventional boxes in terms of their appearance. That's because Karl and Karlotta are much more about complete, highly integrated, active audio systems that operate in a master-slave configuration. Karlotta has one unit that houses the electronics, including streamer and external analog and digital inputs, and another that contains a subwoofer from Scan-Speak. Karl, on the other hand, possesses more chassis, most of which are from the artisan manufacturer Accuton. Additional tweeters on the backside of Karl and Karlotta ensure they produce a "liberated" sound profile.

[www.lyravox.de](http://www.lyravox.de)

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Clearaudio Charisma V2

# MOVING MAGNETS WITH THAT SPECIAL SOMETHING

By Georg-Cölestin Jatta. Photos: Ingo Schulz



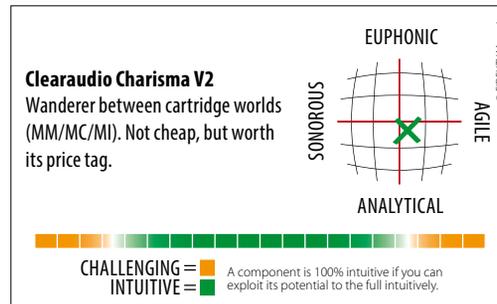
WITH A NEW HIGH-QUALITY MM SYSTEM, CLEARAUDIO IS LOOKING TO MAKE A SPLASH IN THE MARKET FOR ENTRY-LEVEL MCS— AND IT'S ALL THANKS TO CHARISMA.



That's the way I like my blues!

There are days when everything seems to take care of itself. Scarcely had I found a suitable turntable for the living room and driven back and forth across the length of Germany to fetch it. Now, an exquisitely restored Thorens TD 280 Exklusiv is proudly on display in my living room. On my return journey, I had six hours to think about what I could stick under the headshell. The Dynavector DV20X2 (see FIDELITY No. 28) was a definite possibility and appeared to be perfectly in tune with my musical tastes. When I had stopped for a bite to eat, I read an interesting e-mail that had been sent to all my coworkers at the magazine. It asked if anyone would like to take a look at the crème de la crème of Moving Magnet (MM) systems:

the magnum opus from the analog doyens at Clearaudio! A real gem of a component for high-end analog enthusiasts. Admittedly, I'm not usually the go-to guy for the really exclusive stuff that arrives at our magazine. This is probably because my colleagues are only too well aware of my opinion of top-of-the-range audio equipment: It leaves too big a hole when you have to give it back. And you end up thinking you'll never be able to listen to music again without it! It's nice to know about all that great stuff out there, of course. But it's not often that my rational side is slam-dunked by a "gimme, gimme" reflex. Back to the topic at hand, though. I sent a mail back to the magazine volunteering to test the device in question, but never seriously expected to be given the job. If it were to happen, ▶



however, I even had a “proper” turntable I could use should the luxury cartridge not be keen on partnering with my old Thorens.

A few days later, I was able to put all this to the test when I actually found myself attaching Clearaudio’s incredibly expensive Charisma V2 MM system to a second-hand record player costing €300. Simply because I could! Morning was shaking off its clammy nightgown as Glenn Gould stroked his way through Brahms’s piano concertos. Even though I’ve no great knowledge of classical music, I love the contemplative mood evoked by this particular record. Along with a cup of fresh-brewed coffee like Grandma used to make and a cigarette, it’s a great start to the day. At times like these, you’d like life to have a pause button. Gould’s

interpretation of Brahms’s concertos is surprisingly relaxed. Quoting from a 1992 review in the magazine “Zeit,” his “... clear nuance and accentuation of the thematic thread, particularly in the midrange that is usually dominated by descant and bass” puts me in a relaxed, almost Zen-like mood. At the same time, this legendary pianist “brings a transparent quality to the complex polyphonic tapestry” and contrasts “the nimble thematic embellishment of the right hand with the strikingly distinctive progression of the left.”

Over the last few years, I have been able to use a wide number of “affordable” turntables and cartridges. But, now that I knew what you could achieve by screwing a superb cartridge into a second-hand record player, all previous thoughts of whether I needed an ▶

The magnum opus of the analog doyens at Clearaudio! The Charisma features excellent handling as well as superb sound.



upgrade seemed to have been pretty much a waste of time. For the length of its 100-hour break-in period, the Charisma remained in my second turntable. During this time, my Scheu and its Benz MC proved a useful comparison. I placed both devices in the same location, used the same accessories, and played the same records. The Charisma V2 won all my comparisons by that well-known mile, despite the fact it was attached to the supposedly inferior Thorens turntable. I shelled out an awful lot of money on vinyl over the past few weeks! The record hype means you can now find just about anything you might want by just sifting through the sale tables at retail stores. It also means you frequently spend more money than you originally intended.

Who came up with the idea that MM systems were down-to-earth and unpretentious but delivered less resolution and fine dynamism in their performance

while MC cartridges would be completely the reverse as far as their strengths and weaknesses were concerned? Please forget any such preconceptions, especially if you have the good fortune of being able to try out the Clearaudio Charisma V2 in your own configuration. This cartridge really does set new standards in music, regardless of whether we're comparing it with MMs, MIs, or MCs. It's straightforward and precise and delivers a palette of tones I've never encountered to this extent before, tones that are accompanied by a fascinatingly high resolution and breadth of sound distribution. For me, the Charisma is the best analog pickup you can buy (across all the functional principles) in the category of up to €3,000. By this point, I'd become so fascinated with the earthy character of the V2 that my curiosity about how it would sound attached to my other turntable was increasing by the hour. When I get the urge ▶ to



The boron cantilever and the double polished Gyger S-shaped diamond stylus can also be found on the exceptional Goldfinger Statement cartridge.

#### ACCOMPANYING EQUIPMENT

**Turntables:** Scheu Cello, Thorens TD 280 | **Tonearms:** Scheu Classic Mk II, Thorens TP 28 | **Cartridge:** MC Scheu S | **Phono amplifiers:** Acoustic Solid Phono Amp, Trigon Vanguard Mk III, Project Phonobox DS2 USB | **CD players:** Marantz CD 17, Marantz CD 62, Marantz CD 50 | **USB DAC:** Henry Audio USB DAC | **Integrated amplifiers:** Einstein The Tune, NAD C 390DD, Cambridge Azur 640A | **Power amplifier:** Lehmann Black Cube Stamp | **Loudspeakers:** Audio Physik Seemon, Opera Seconda Mk II | **Cables:** German Highend, Audioquest, T+A, Horn Audiophiles, Black&White, Isotek | **Accessories:** Sun Leiste, Steinmusic, Millenium Carbon Mat, bFly Audio

tinker, I normally pick up a screwdriver and tackle a robust mountain bike. For people with limited motor skills (I'm definitely part of this group), the thought of regularly changing cartridges prompts sweaty hands and a dose of the jitters. If something goes wrong, it

can have really expensive consequences. But, here as well, the Charisma V2 demonstrated its exceptional qualities. I don't exactly know why, but I was able to attach it to the tonearm of my Scheu Classic more quickly than any other cartridge I've ever used. The Charisma boasts excellent handling as well as superb sound. With almost daily practice, I was soon able to switch between Scheu S and Charisma V2 in under 10 minutes. Correct azimuth adjustment is the only tricky bit, due to the weight (9 grams) of the Charisma and the Scheu Classic's delicate unipivot bearing. The gimbal bearing in the Thorens's tonearm is more robust in this respect. Having said that, attaching cartridges is not something most people do with any degree of frequency. Installed in the headshell, ▶

**I need pure, unadulterated emotion, not just faithful reproduction. I want to taste the sweat of the audience in the air around me.**



Clearaudio's top MM model is the spitting image of its smaller brother, the Maestro V2. Both have the same elegant ebony casing. So, turning the already excellent Maestro into what is arguably the world's best MM system was just a matter of coming up with a few more enhancements. How difficult can that be?

At Clearaudio, top-of-the-range products are often only differentiated from their less expensive siblings by the degree of stringency applied to the selection of components. In the case of the Charisma, however, the company put in considerably more effort than this. Engineers spent over a year experimenting, comparing and testing. Only the finest components and materials were used—which should come as no

surprise in view of the sound and the €1,500 price tag. The boron cantilever and the double polished Gyger S-shaped diamond stylus are also found on the exceptional Goldfinger Statement cartridge. Instead of gluing the tiny diamond in the usual way, it was precision-mounted on the cantilever and then pressed into the boron tube. Only a microscopically small drop of adhesive is used—to be on the safe side—without absorbing too much energy. Finding magnets powerful enough to deliver the impressively high output voltage must have taken quite some time; Clearaudio claims the pairs are 100% identical. A lot of work was also put into fine-tuning the resonance behavior. The resulting cartridge body of hand-polished ebony wood, ▶



set with a nickel silver inlay, harmonizes perfectly with drive and pickup quality to deliver the desired sound. No energy is wasted during the pickup process.

Thanks to its lavish magnetic drive, the Charisma V2 has an impressive output voltage of 3.6 mV, more than ample to create a great sound with the vast majority of phono preamplifiers. I'm in the happy position of being able to experiment with three external phono preamps and The Tune, my own integrated Einstein amplifier. The Charisma is unexpectedly unpretentious when partnering with the Acoustic Solid preamp. And when I completely switch to The Tune, things really start to buzz (my compliments to the Einstein team in Bochum!).

It takes only half an LP side for Johnny "Guitar" Watson to whip his cool Nordic audience into a frenzied group of soul sisters and funk brothers. You can almost hear the audience pushing toward the stage. Not that you can actually perceive movements in the room, of course. What you experience is the transfer of energy between band and audience, as if millions of capacitors with almost unlimited capacity have been connected up between them. The sound is explosive, gutsy, and right in your face.

That's the way I like my blues! Anyone not brought to his or her feet by this roaring, stomping, scintillating atmosphere would freeze to death in an active volcano! The Charisma coaxes super performances of ▶



The same location, the same accessories, and the same records: The Charisma V2 won every comparison by that well-known mile.

soul, funk, and blues from the vinyl's grooves. You feel as if you've been teleported from your armchair to the actual concert location.

That's exactly what I expect from music. I need pure, unadulterated emotion, not just faithful reproduction. I want to taste the sweat of the audience in the air around me. Transferring the exhilaration of a live concert to your own living room using technology alone is a really difficult thing to do. Really difficult, but not impossible. At least not when you have an exceptional cartridge like Clearaudio's Charisma V2. At our magazine, we have a problem with the word "reference." It's used as a label for more and more high-end equipment, but frequently doesn't have any real significance within the context of consumer hi-fi. My reference is and will remain what I experience at a live concert. As far as musical reproduction in my own living room is

concerned, from now on everything (whether analog, digital, turntable, or streamer) will be judged against the sound created by the Charisma V2. This is a cartridge I don't intend to give back! Should the publishers insist on reclaiming this truly charismatic object of my desire, they'll need to, as Charlton Heston said about his rifle, pry it from my cold, dead hands! ■

#### Cartridge | Clearaudio Charisma V2

**Functional principle:** Moving magnet | **Frequency response:** 20–20,000 Hz | **Output voltage:** 3.6 mV (5 cm/s) | **Rec. tracking force:** 2.4 g | **Load resistance:** 47 kΩ | **Cantilever:** Gyger S, double polished | **Compliance:** 17 μm/Nm | **Cartridge body:** Ebony wood with nickel silver inlay | **Weight:** 9 g | **Warranty period:** Two years | **Price:** € 1500

Clearaudio Electronic GmbH | Spardorfer Str. 150 | 91054 Erlangen | Germany | Phone +49 9131 40300100 | [www.clearaudio.de](http://www.clearaudio.de)



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



Focal Utopia

# THE SKY'S THE LIMIT

By Roland Schmenner. Photos: Ingo Schulz



FOCAL IS REVOLUTIONIZING THE  
WAY HEADPHONES ARE MADE.



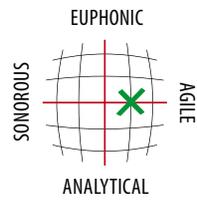


The main benefit of beryllium is its super-lightweight yet extremely rigid properties.



**Focal Utopia**

Weighty headphones that are very comfortable to wear and push the limits of what is technically possible. Perfect for long listening sessions and full of spirited enthusiasm. It's time to rediscover your record collection with headphones.



© FIDELITY MAGAZINE



CHALLENGING =  A component is 100% intuitive if you can  
INTUITIVE =  exploit its potential to the full intuitively.



The aim, it appears, was to design a set of loudspeakers to sit on the listener's head and perfectly integrate both three-dimensionality and immediacy, two factors that all too often are diametrically opposed to each other.



**M**ittendrin—“right in the middle” is the new approach to experiencing orchestra performances at the Konzerthaus Berlin, an approach that places members of the audience among the musicians. I couldn’t help but be reminded of past visits to such concerts when I first got to test Focal’s current top-of-the-range model, Utopia, as part of an extended listening session. Do you remember Utopia? It was and remains the loudspeaker series that has helped the high-end manufacturer from Lyon set standards for over 20 years, not least because of the legendary built-in beryllium tweeter. While the loudspeakers have been evolving over time and a third generation is now available, the headphones are a recent development. Here the planning engineers were deliberately told there were no limits. The aim, it appears, was to design a set of loudspeakers to sit on the listener’s head and perfectly integrate both three-dimensionality and immediacy, two factors that all too

often are diametrically opposed to each other. Focal therefore sees the Utopia headphones as a set of “ultra-near-field monitors” that combine the advantages of headphones with the benefits of high-quality loudspeakers. Another challenge was to transfer the technical and sound-related properties of beryllium and make them compatible with the design options available for headphones to give the Utopia’s drivers a globally unique selling point. The main benefit of beryllium is its super-lightweight yet extremely rigid properties. However, it is unfortunately very expensive and difficult to process. But, let’s not forget the command from above: no limits. So the engineers at Focal developed a driver with a purely beryllium diaphragm in an M shape that would expand the emission surface area and thus benefits the bass range in particular. The fact the developers did not shy away from looking beyond their own company’s audio technologies and took inspiration from positive experiences in the car hi-fi sector has clearly paid dividends. ▶



## Not only inner beauty

Despite its extravagant inner workings, the Utopia looks refreshingly normal from the outside and simply resembles a set of headphones and not some sculptural design object. Upon closer inspection, especially with your fingers and sense of touch, you will encounter an extremely nice feeling that clearly points to impeccable workmanship. This should actually come as no surprise in this market segment but I would still like to take a moment and sing their praises. Despite the use of beryllium, the headphones weigh in at 490 grams, not exactly making them a lightweight. Ultimately, this is due to the extremely strong magnets that generate a whopping flux density of 1.15 tesla. Even if most of the headphones I own are lightweight, none of them feel nicer or more comfortable—and I'm saying that as someone known for wearing glasses and having a square-shaped head. If you decide to search for clues by touching the

Utopia headphones' individual components while wearing them and give them a gentle jiggle here and there, you quickly realize it's the ear cushions that make them so comfortable. That has less to do with the soft lambskin leather they're made of and more to do with the memory foam cushions hidden underneath. What's more, the minimally asymmetrical design enables optimal weight distribution. With an impedance of 80 ohm, the Utopia headphones are a light sparring partner for the driving amplifier. Neither my studio specialist from Grace Design nor the Bryston BHA-1 are ever seriously put off their stride by them. Overall, the Utopia headphones react with impressive sensitivity to the tonal nuances of both headphone amplifiers: Grace Design makes the music appear ever so slightly faster, with the Utopia headphones also responding to their cross-feed option. Bryston, on the other hand, adds a little more bass, which prompts us to conclude that the Utopia headset is a ▶



particularly noteworthy recent release that doesn't sit at the top of a listening chain but rather synergistically interacts.

## Absolutely perfect balance of sound

Let's start with some piano music: Even a perfectly produced piano recording in terms of tone and dynamics is not a sure-fire success when it comes to playback. The balance of bass and treble, the relationship between instrument and room, and the presentation of nuances related to different playing techniques all represent Herculean tasks in and of themselves. For starters, we have the complete edition of Arthur Lourié's piano music with Moritz Ernst. This is a good example of an interpretive and technical recording. Here, the Utopia headphones are the ideal partner for the pianist. The left hand's powerful block chords fill the room as if produced out of thin air, while the right hand's impressionistic arpeggios effortlessly unfold with tonal nuances. In the treble range, excessive treble spotlighting is clearly not the Utopia headphones' thing. They don't try to light

up spaces that simply don't exist. The unpleasant effect of such a high-frequency accentuation in piano music can be experienced with older, poorly produced piano recordings, that occasionally tend to sound like they are rattling or are often even distorted. Keith Jarrett's first ever ECM recording *Facing You* is one such example. Far, far from the label's later ideal sound, a track like "Ritooria" features high-frequency distortions even in the reworked 24/192 remastered version. The Focal headphones nonetheless do not engage in overstatement and, as a result, allow the distortion to grow excruciating. But the headphones also don't try to do the opposite, and the music remains as it is. You certainly can't claim they try to sedate anything. Of course this also means that flimsy and spatially flat recordings such as Ryan Adams' *1989* are not artistically enhanced or enriched. Where no bass is to be found in the recording, none is developed, which brings us neatly to the Utopia headphones' bass: Open-back headphones sometimes have a design-related vulnerability. To avoid making any lazy compromises, we reach for the shelf where the old drum and bass disks are stored ▶





and grasp an absolute classic of this genre, LTJ Bukem's *Earth*. Though the break-beats sound like they are carved in stone, so dry and sharp, they don't push the drivers to their technical design limit, even at a high volume. I've never heard this CD sound like this before. That the bass can still swing loosely despite its stability becomes evident with Charlie Haden's legendary *Closeness Duets*. Without a doubt, these headphones prove they are true all-rounders across all genres.

### Placing the listener on the podium with the conductor

Since the Utopia headphones don't have any weakness at all in the low-frequency range and provide the music a coherent fundamental tone base in every situation, the open-back

headphone principle can unfold maliciously in terms of three-dimensionality and sound quality without the sound experience ever tending to be arbitrary in any way. Conversely, if anything were to describe the properties of these headphones, then it would have to be the defined and focused sound. You consistently get the impression you are in the immediate presence of the music, especially with orchestral music. A prime example of a showpiece is the "Turkey Trot" from Leonard Bernstein's *Divertimento*, especially the recording by Reference Recordings under conductor Eiji Oue. After my previous listening experience, I expected a formidable reproduction with the appropriate dynamics and proper grandeur when the trombones and tubas cheekily strike up with the timpani and bass drum. But I was truly bowled over by the exceptionally clean, clear, precise playback of the intricate, tricky rhythmic changes ▶



and the perceivable acoustic overtone spectrum of the small wooden percussion instruments and the xylophone in combination with the clarinets. You are definitely “right in the middle” here. Even if it was Focal’s philosophy from the outset to design loudspeakers to sit on your head, you never hear the music at an improper distance. You get more of a spatial impression from the conductor’s position—the privileged combination of spatial depth and stage breadth with a simultaneous sense of immediacy. It highlights the truly special and, as a result, is actually what is utopian about the design behind these headphones.

The fact that Focal’s development department was given free rein with no limits has really paid off: Even if the headphones answer to the name of Utopia, their utopian sound has now become a reality thanks to the know-how in Lyon. ■

#### Headphones | Focal Utopia

**Design principle:** open-back, circumaural | **Chassis:** beryllium M-shaped diaphragm, 40 mm | **Impedance:** 80 ohm | **Frequency response:** 5 Hz–50 kHz | **Sound pressure level:** 104 dB (1 mW, 1 kHz) | **Weight:** 490 g | **Cable:** 4 m, removable | **Plug:** 6.3 mm jack, 2 x 9.5 mm (Lemo) | **Warranty period:** two years | **Price:** €4,000

**Music Line Vertriebs GmbH | Hainbuchenweg 14–18 | 21224 Rosengarten, Germany | Telephone +49 4105 77050 | [www.music-line.biz](http://www.music-line.biz)**

►

A recent development  
for which the planning  
engineers were deliberately  
told there were no limits.





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

The system belonging to Mr. M from D.

# A PICTURE-BOOK BUNKER

By Cai Brockmann. Photos: Cai Brockmann



Slumbering dragons and rare species in a high-end terrarium





Mr. M discovered his love for music when he was a teenager. In the early 1980s, his father's grandiose stereo system became the center of his world. Back then he was given free rein to rummage through his father's vinyl collection and was even allowed to use his precious turntable, which he did without ever breaking it (unlike the author of this article). The money he'd earned from a summer job finally allowed him for the first time to buy a piece of equipment for himself: a cassette recorder to use along with his father's beloved hi-fi system. However, it wasn't just any old cassette deck.

It was the best that money could buy: a Nakamichi Dragon.

But his world imploded shortly after. His parents divorced and his father moved out of the family home, taking his hi-fi system along with him. Young Mr. M's entire sound system was now suddenly made up of nothing but the best cassette deck on the market and a pair of headphones. Nothing else. It's plausible that the experience was a decisive factor that led to his current situation.

For the sake of brevity, I'll keep my account of the decades that followed short. Mr. M went to college, got his PhD and then enjoyed a textbook career. This ►



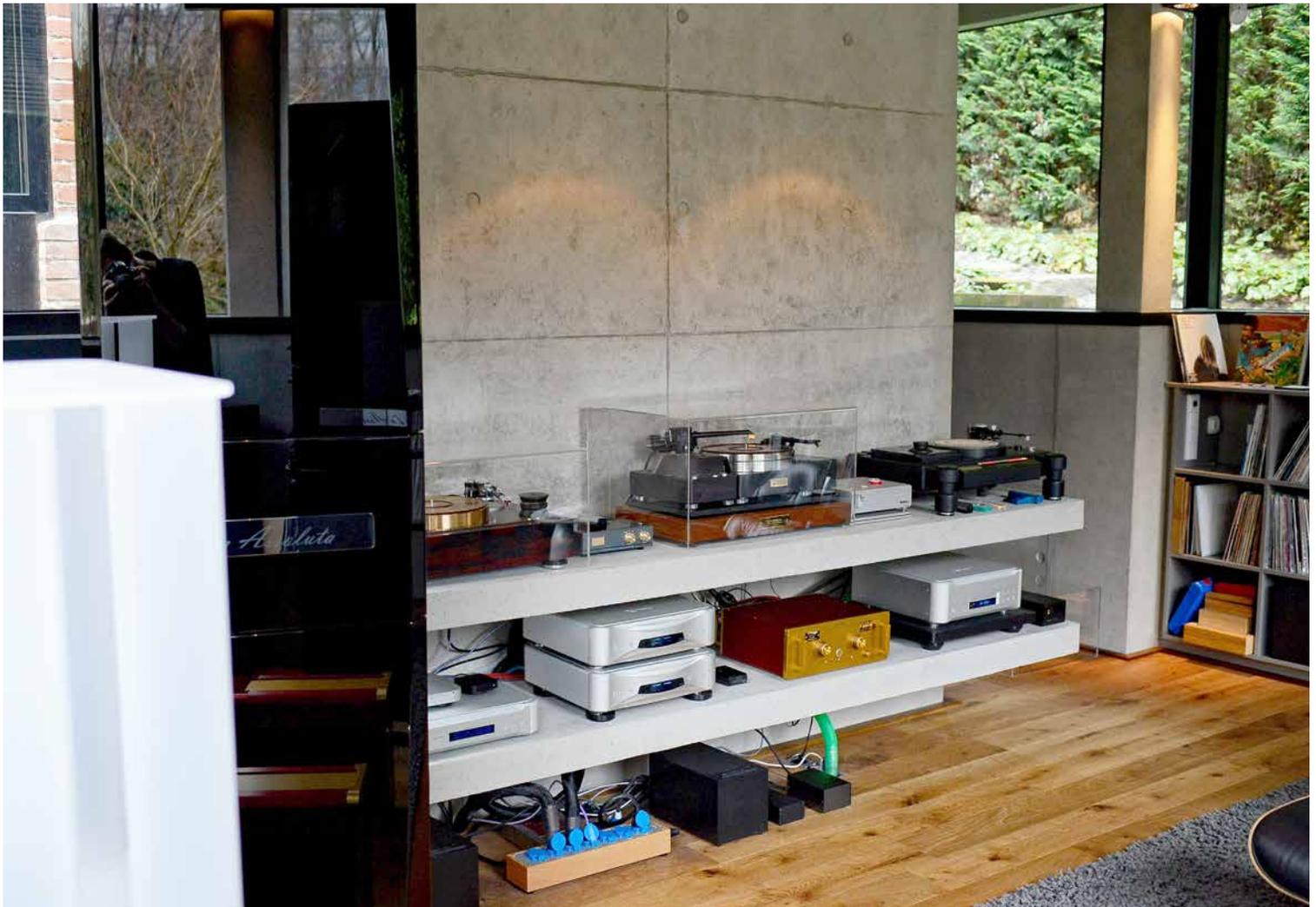
allowed him to treat himself to some truly stunning, euphonious and increasingly expensive hi-fi gems whenever the time was right. Aside from Mission Cyrus and Ecouton LQL150 (in birdseye maple), various exotic high-end devices (the EDGE NL 12.1 and Escalante Fremont, for example) have graced his collection. And things really start to heat up when we check out his turntables – but of course they’re all “vintage.” He’s looked after a few particularly brilliant sound machines, which he’s upgraded and customized with a great deal of care and attention to detail. And the Nakamichi Dragon? It has survived all of Mr. M’s career developments and moves to different locations probably the best of all.

Mr. M later fulfilled another dream of his by buying a beautiful old house and “finally putting down roots”

together with his young family. Although his hi-fi system may have put up with various job-related relocations in the past, it’s finally found the perfect spot to make itself at home. While the entire house boasts a flexible and family-friendly multi-room solution (from Bluesound) that plays music at the push of a button, it also has a very special separate listening room designed to meet Mr. M’s every desire.

Strictly speaking, it isn’t just a separate room but a separate adjacent building – which must have been a real challenge to build in light of restrictions imposed on an area surrounding a house built around 1900 and subject to historic preservation laws. But it was well worth the effort. The separate building, which is half-buried in the ground, is flooded with light, and its construction so perfectly executed, that it’s as if it ▶

It all depends on what you make of it: Exposed concrete enables you, for example, to have horizontal cantilevers ideal for mounting these kinds of turntables, but it is a real challenge acoustically, because sound easily bounces off the walls. Acoustic panels under the ceiling, bass absorbers in the corners and a thick rug are pleasant additions that can help combat this.



had always been a sort of architectural bridge linking the main building to the garden.

The high-end terrarium is accessed via an extra level underneath the basement, and the staircase leading down is located behind a sound-proofed door to the main house. And while we're on the subject of sound-proofing, the listening room, which measures approx. 35 m<sup>2</sup>, features ribbon windows that run nearly all the way around the entire room – allowing daylight (or starlight) to flood in and providing a stunning view of the green garden (or the night sky) – and is made of special sound-insulating glazing that meets the highest standards. Even if you play Jimi Hendrix at original volume, you won't hear a thing from the garden, which is great for preventing any issues with overly sensitive

neighbors. Whenever he needs some fresh air, Mr. M can use an electric motor to open up individual window segments. And when he wants to play some Jimi Hendrix – or any other musician, for that matter, who deserves to be played at original volume – he can close the windows again, ensuring the sound can't be heard from the outside. Mr. M feels most at home with modern jazz and enjoys browsing ECM or Scandinavian and Japanese music labels.

Exposed concrete is a versatile material with a fabulous look, but one which also requires a lot of extra labor and finishing work when used in interior design – after all, it has to look top notch. That said, it does come with a few extra perks. For example, two horizontal cantilevers jut directly into the room ▶





out of the wall on the right-hand side and support the majority of the system. Three analog super turntables (in nothing less than vintage mint condition) together with some phono equalizers sit on the top level. The bottom level features all his digital music devices as well as the Dartzel preamplifier. And once you've sunk down into the comfy lounge chair, which was designed no less by Charles & Ray Eames and is positioned right in the room's sweet spot, there are certain elements on the virtual stage that your eyes behold: solid Dartzel monoblock power amplifiers, TID-AL loudspeakers that stand taller than your average person and opaquely illuminated acoustic elements by Transparent Acoustic. And this brings us to the one major "invisible" subject that's just so unbelievably important: room acoustics.

Such a sturdily built room steered by enormously bass-heavy, high-resolution equipment can't reveal its full sound potential without putting a few acoustic measures in place. The well-traveled Mr. M, who's gathered up a wealth of experience with other listening rooms, has managed to acoustically tame this sophisticated and demanding room with a range of different measures. Customized absorption elements blending in nicely along the ceiling produce an incredibly positive and visceral effect. Spring traps in the corners of the room ensure strikingly clean low frequencies. And the "Septimus" diffusers developed by Transparent Acoustic, whose CEO Dmitry Valdin was involved in the planning of the room, balance out the powerful sound spectrum so well that this ultimate hi-fi system projects a virtually holographic sound ▶



Perfect listening position. Fabulous view. Mind-blowing sound... music as the elixir of life. It all started with the legendary Nakamichi Dragon—and whatever you do, don't call it a "cassette recorder"! (small image on the left)





profile into the room that's dynamic, energetic and practically boundless.

The “prime suspects” for this stunning 3D sound, which packs a real punch even at very low volumes and at minimal settings, are naturally the powerful La Assoluta loudspeakers from TIDAL Audio. Believe it or not, this is the only set ever to have been delivered to Germany, making this experience for us a real honor. Mr. M recently felt a slight urge to replace his then favorite loudspeakers, the TIDAL Sunrays, which themselves can be regarded as ultra-high-end devices, with the even more stratospheric La Assoluta loudspeakers. The “Dragon” of today, if you will.

They weren't something Mr. M urgently needed. But what would life be without its rewards and the knowledge that there is nothing higher than the stars in the

sky to reach for. And even this outlook is eclipsed a bit by the fact that TIDAL's La Assoluta loudspeakers boast top-notch sound and true added value that will last indefinitely thanks to their real carat diamond diaphragms. The flagship product's diamond tweeter is flanked by two unique diamond midrange woofers made exclusively for TIDAL. Even Marilyn Monroe would have appreciated this: Diamonds aren't only a girl's best friend – they can also be used to make music sound even better.

Just to put the price tag for you into perspective: For a pair of TIDAL La Assoluta loudspeakers, you could buy yourself a perfectly nice prime real-estate apartment downtown (but by no means a magical bunker for listening to music), or a Rolls-Royce fully customized to your heart's content. Just to give ▶



you more of an idea of just what an exclusive luxury they are: Master craftsmanship is flaunted down to even the smallest feature, in a way only the best of the best can. In terms of quality and attention to detail, it just doesn't get better than this. All this gives true connoisseurs a real sense of satisfaction.

With the TIDAL La Assoluta, fully unbridled musical pleasure is an absolute given – provided that all the other connected equipment is able to achieve an equally high level of quality. In fact, all the components in Mr. M's high-end hideaway complement each other so well, and the entire system is so symbiotically interwoven with the listening room, that you find you only reemerge from the subtle acoustic hypnotic trance during longer breaks between songs. But let's take a closer look at the other components. In

particular, the three turntables (what a disdainful word to use for these three gorgeous champions of vinyl playback) don't at all exist in our part of the world, and if at all, then only in extremely low numbers. The absolute star of the show in this high-end magical bunker is an extra-wide machine for playing vinyls, which in many ways is similar to the Dragon "cassette recorder" (still cherished by Mr. M). When it first launched, the Nakamichi TX-1000 was, from a technical point of view, one of a kind (think "center search"! ) and is as elaborate as it is ground-breaking while still being visually unique – and it will still be an expensive but worthwhile investment well into the future. Yes, even the Nakamichi TX-1000 is a piece of utter perfection and therefore worthy of being in the presence of a certain "loudspeaker" known as La Assoluta. ▀ ▶



Team player: Because the TIDAL La Assoluta has no signature sound of its own and completely refrains from adding anything tonally to the high-fidelity experience, its sound sources have an even greater influence. In addition to a large Dartzeel combo (in the classic gold-red color combination), the cables are naturally also included.

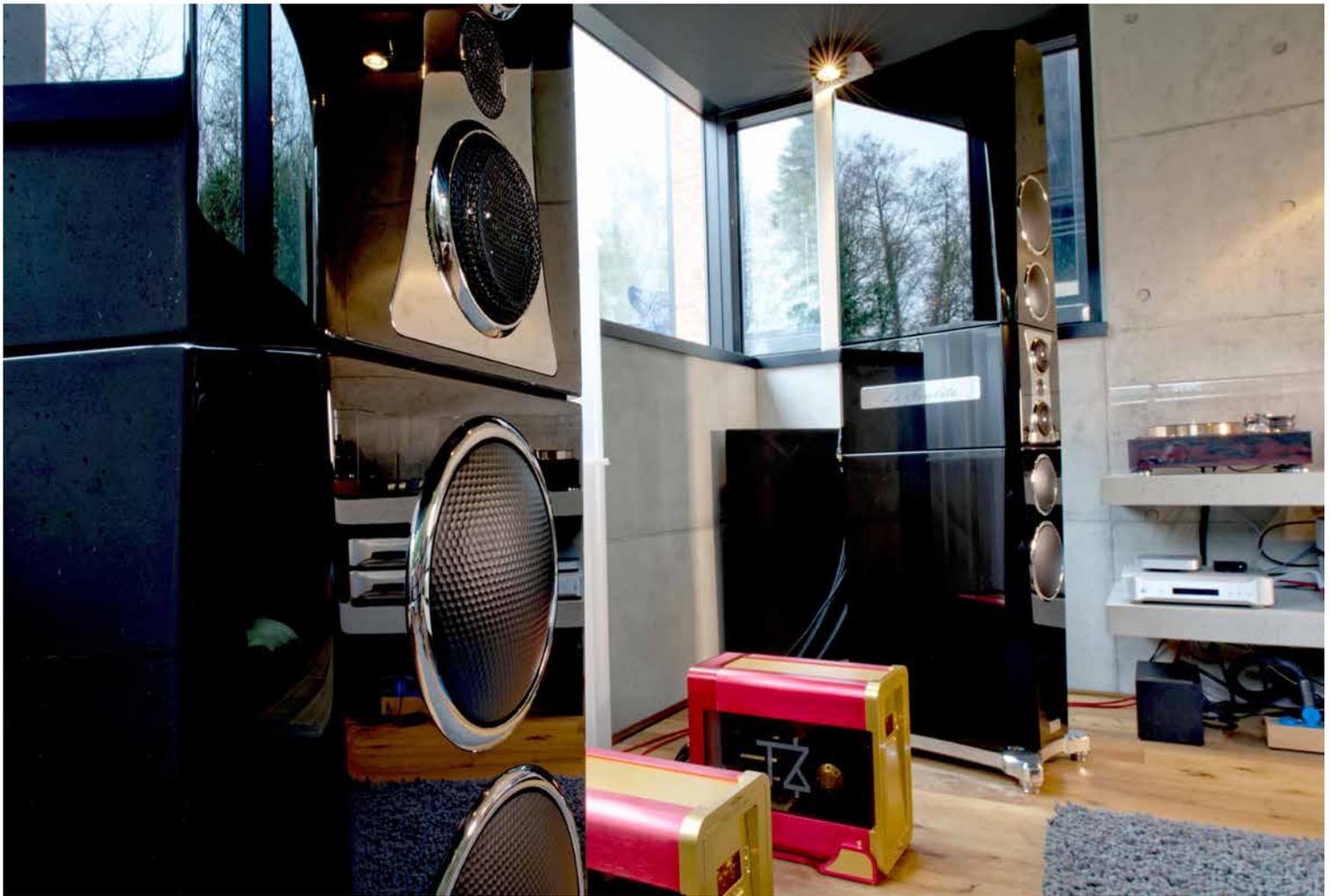


No joke: If you are able to find any object on this planet that is at least as well or even more expertly lacquered than a TIDAL Audio loudspeaker, Jörn Janczak says he will give you a pair of their speakers for free. Feel free to suggest piano manufacturers, Rolls-Royce dashboards and über-expensive designer furniture...



Two of the three analog high-end turntables are from Micro-Seiki; the SX-8000 II model has never existed in Germany (image above). The selection of cartridges is equally exclusive.





**ACCOMPANYING EQUIPMENT**  
**Analog turntables:** Micro Seiki SX-111 FV, Micro-Seiki SX-8000 II + RY-5500 II, and Nakamichi TX-1000 | **Tonearms:** Graham Phantom II, Kuzma 4Point, SME V, and TriPlanar | **Cartridges:** Air Tight PC1 Supreme, Koetsu Blue Lace Onyx, Lyra Etna SL, and Ortofon A90 | **Phono preamplifier:** Air Tight ATH-2 A Reference, and Nagra VPS | **Digital components:** Esoteric P-02 + G-02, and Esoteric Grandioso D-1 (mono DACs) | **Preamplifier:** Dartzeel NHB-18NS | **Power amplifier:** Dartzeel NHB-458 (monoblocks) | **Loudspeakers:** TIDAL Audio La Assoluta | **Cables:** Nordost, Lyra, TaraLabs, and Dartzeel

**TIDAL Audio La Assoluta loudspeaker system**  
**Functional principle:** 4-way floor-standing loudspeaker, passive, optional extension with “Subtowers” to create the TIDAL Assoluta Music System | **Drivers:** 3-cm dome tweeter with diamond diaphragm, 2 x 13-cm midrange woofers with diamond diaphragm, 2 x 19-cm woofers with TIRALIT diaphragm, 2 x 25-cm subwoofers with TIRALIT diaphragm, 4 x 25-cm passive radiators | **Dimensions (W/H/D):** 38/232/65 cm | **Weight:** each 485 kg | **Price for pair:** from €495,000 | [www.laassoluta.com](http://www.laassoluta.com)

TIDAL Audio GmbH | Jörn Janczak | Immendorfer Str. 1 | 50354 Hürth | Germany | Telephone +49 2233 9669225 | [www.tidal-audio.com](http://www.tidal-audio.com)

Transparent Acoustic | Dmitry Valdin | Louisenstr. 148b | 61348 Bad Homburg | Germany | Telephone +49 6172 9082697 | [www.transparent-acoustic.de](http://www.transparent-acoustic.de)

**TIDAL Audio La Assoluta**  
 The perfect combination of technology, elegance and luxury. Pure unadulterated high fidelity. Audibly high-caliber (and high-carat) loudspeakers for the very wealthy. The real Callas of all loudspeakers ... Call the TIDAL La Assoluta whatever you'd like—and continue to dream.

SONOROUS

AGILE

**CHALLENGING** = ■ A component is 100% intuitive if you can exploit its potential to the full intuitively.

**INTUITIVE** = ■

# UNCOMPROMISING DOWN TO THE VERY LAST SCREW

FIDELITY interview with Jörn Janczak, TIDAL Audio

**Jörn Janczak, born in 1974, founded TIDAL Audio in 1999. FIDELITY had the honor of meeting this friendly yet somewhat shy man, who stands two meters tall, as part of this feature. Cai Brockmann snagged the opportunity for a quick chat.**

**Cai Brockmann: Mr. Janczak, your products are known for always being of the highest quality and having some of the highest price tags around. Why is that exactly?**

**Jörn Janczak:** It simply comes down to the company's DNA. We always aspire to achieve absolute top quality, and over time everyone around the world has come to expect that of us. The high prices are an inevitable result of all the hard work, top-quality materials and manual craftsmanship involved. The price tag is actually the last piece of the puzzle, because everything we do, right down to the very last screw, is uncompromising and therefore expensive. But we never do anything just for the sake of it. If we did, we'd never be successful. Hitting the jackpot with expensive products among Asia's nouveau riche is one thing, but achieving a certain level of consistency and continuous growth is another.

**TIDAL Audio has named its new top-of-the-line loudspeaker "La Assoluta" instead of the more grammatically correct "L'Assoluta". Is that supposed to be reminiscent in some skewed way of Ferrari's LaFerrari?**

Ha! No, we actually did it first. We have been using the name since the project was launched back in 2011, and the Italian hybrid sports car came two years later. And if there's anything or anyone we want to be indirectly reminiscent of, then it is definitely the "Prima donna assoluta" Maria Callas. We prefer to leave the use of car

names to jazz up loudspeakers to others. (grins)

**It seemed a few years ago that things had reached a point at TIDAL where they were as good as they were ever going to get with the Sunray G2. You even said so yourself. So why add another model to knock it off its throne? When did it become the right time to do so?**

We had come up with the idea for La Assoluta a long time ago but it clearly entailed a financial risk in the six-figure region. La Assoluta is, like most luxury items, dependent on supplier-induced demand. This means that customers don't know whether they want something until they can see, hear and experience it. No one is waiting for 3D renderings or financing kickstarter projects. That said, I've got to be honest: If a large number of satisfied customers all over the world were to express a clear interest in a significant upgrade, then that would make the decision much easier. And regardless of that, if the human race weren't interested in knowing that things could be improved, or didn't want to set a higher benchmark, we'd still be stuck in the dark ages ...

**So you're saying it'll never stop?**

Well, in the intermediate-term there probably won't be any new loudspeakers like the La Assoluta or sports cars with 1,500 HP on the market. However, TIDAL will never cease wanting to further enhance the performance of its products. So, if we ever stop striving to achieve that, we could always branch out and make wellington boots ...

**What was the biggest technical challenge you faced in developing the La Assoluta?**

Getting every detail of the design right so that it could live up to its name. None of the components existed previously. Everything was designed and built for the

La Assoluta specifically: the special drivers with the desired parameters, the mounting options, the large diamond diaphragms constructed in close collaboration with the company Accuton, the housing, the switches – basically everything. But the biggest challenge was actually bringing all the parts together to form one harmonious whole. After all, parts – no matter how good they are – are just individual components. Making everything work like clockwork is something quite different altogether. Especially when the whole thing needs to be brought together in a timeless and elegant design and needs to be instantly recognizable as a TIDAL classic. Furthermore, all the technology needs to be neatly hidden away.

**And what was the easiest part?**

Having after-work drinks after the first successful prototype tests.

**OK, let's talk briefly about the diamond diaphragms. Do you they actually offer any real benefits? Or are they just a super-exclusive gimmick to mitigate any objections raised by customers' wives?**

Of course: Husbands can justify it by saying that 54 carats at Tiffany & Co. cost a heck of a lot more (grins) ... diamond diaphragms are just as unique as they are physically resilient and, thanks to their technical benefits, improve loudspeakers' performance. No other diaphragm material combines such perfectly polarized characteristics as hardness, low resonance and low weight. The voice coil also sits very close to the diamond diaphragm, the world's best thermal conductor, and is perfectly cooled. All these benefits were previously only available for the high-frequency range. The diaphragm surface and the maximum stroke of the diamond diaphragms in the La Assoluta, for the first time ever, cover an unbelievable range, i.e. from the top bass range. ▶



Jörn Janczak, TIDAL Audio

**People often talk about a “high-gloss piano lacquer finish” in conjunction with loudspeakers, but the reality hardly ever fits the description. What does TIDAL Audio have to offer in this department, in particular with regard to this top-of-the-line model?**

What people often refer to these days as a “high-gloss piano lacquer finish” wouldn’t cut it as a primer coat at our company! We’re extremely proud of the fact that for years now we’ve been setting the benchmark for finishes all over the world.

For a pair of La Assoluta loudspeakers, for example, we use 98 kilos of polyester lacquer – after we’ve sanded the surfaces – 60 kilos of which remain on the loudspeakers at a unique thickness of three millimeters. But

the whole process also involves 160 hours of sanding and polishing, which is all done purely by hand. We could even write a book about the lacquering and coating processes, the week-long drying times and the intermediate sanding. After all, when you strive for perfection, the complexity involved in achieving absolutely flat, smooth surfaces and such solid housing is off the charts.

**Speaking of “solid”, each La Assoluta loudspeaker is around two meters thirty tall and weighs around half a ton – what are the minimum ideal dimensions for a listening room for a pair of La Assoluta loudspeakers?**

Where possible, we recommend that rooms have a surface area of at least 25 m<sup>2</sup> and a ceiling height of at least 2.90 m. Our

installations range from “the world’s largest headphones” to living rooms that don’t feel much different than the Cologne Cathedral. But customers who buy systems in this price range normally have their own listening rooms.

**I noticed you named a new TIDAL power amplifier – the “Assoluta Monobloc”. Will there soon also be a corresponding preamplifier or even a complete series of electronics with this name?**

Yes, exactly. We will continue to expand the Assoluta series right down to the corresponding cables. Customers should soon be able to experience all our products at TIDAL’s new location firsthand.

**Jörn Janczak, many thanks for speaking with me. ■**

## Unicums Made of Specialty Wood

Only 1,000 of them worldwide, the Grado GH2 headphone is the second model in the heritage series. These headphones' dynamic drivers are encased by an unusual material: the rare tropical wood cocobolo, a material the company settled on after extensive experiments and lengthy listening comparisons. With its heritage series, the manufacturer Grado is celebrating its company's 60th anniversary.

<http://www.gradolabs.com>

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# BROWSER N° 02



# BROWSER Nº 02

## Heightened Perfection

Five years ago, Accuphase raised the bar so high with their A-200 mono amps it seemed insurmountable. But that didn't mean the developers of this Japanese brand were just going to sit still and do nothing. The new A-250 mono power amplifiers are said to fulfill even the most audacious expectations for sound, workmanship, and lasting value. Fully symmetrical signal pathways, Double MCS+ (Multiple Circuit Summing), circuit architecture, and two parallel-accessed power amplifier circuits, when combined, speak their own unique language.

[www.accuphase.com](http://www.accuphase.com)

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## United Forces of America

McIntosh, not really having attracted much attention over the last seven decades due to excessive restraint, is now presenting the largest integrated amplifier in the company's history. The McIntosh MA9000 delivers a double punch of 300 watts at practically every load and, beyond that, is truly impressive with its opulence. Aside from its distinctive pointer instruments, it also has an eight-band equalizer capable of being turned off as well as an extra powerful headphone jack worth marveling at. The MA9000 accepts up to 10 analog players—MC and MM systems included—plus six digital sources all at the same time. Fans will be thrilled about McIntosh's logos on the loudspeaker terminals, but especially excited about the new monogrammed heatsinks.

[www.mcintoshlabs.com](http://www.mcintoshlabs.com)

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# BROWSER N° 02





# BROWSER N° 02

## Rock 'n' Roll golden oldie

What would rock music be without James B. Lansing? Probably very subdued. JBL, a true institution of the loudspeaker world, will have been in business for 70 years in 2017. The American company is marking this special date with the anniversary model JBL 4312 SE. This monitor has its roots in the original JBL 4310 model from 1968 but features extensive refinements and significant improvements. The 4312 SE also comes complete with big company logos on the side and an autographed anniversary certificate.

[www.jblsynthesis.com](http://www.jblsynthesis.com)



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

# IN-AKUSTIK EXZELLENZ SIGNAL CABLES

By Georg-Cölestin Jatta. Photos: Ingo Schulz







\_\_\_\_\_ “Cables don’t resound and that’s that!” say the logic-minded technocrats among us. “Cables can affect the entire performance!” say those who harvest their garden herbs during a full moon. This is how religious wars get started. What we do know: Cables have the job of ensuring the signal is transmitted unscathed from the source to the speaker so it’s not compromised by the noise that will undoubtedly be emitted from the radio frequency or power line. Whether or not we can tell apart in a blind comparison all the various cables out there with all their assorted price tags is a different matter altogether.

Doesn’t in-akustik have something for this? The Black Forest-based connection specialist offers many products that can do the same thing as those from other suppliers that charge much more. The best example of this is the current Exzellenz series. Sure, you could find a fabric-coated, quadruple-shielded, absolutely secure plug and a certain rigidity from other manufacturers, but hardly at this price! And definitely not with a solid silver-plated copper wire as an internal conductor. None of this can be seen as an esoteric extra; rather, carefully designed proven technology.

For this reason, the Exzellenz cable makes quite an impression without even uttering a sound and before it disappears, with some effort due to its intractable nature, into the dusty realms behind the rack. While the massive internal conductor and dual coaxial construction help prevent high-frequency noise, they also substantially limit the cable’s flexibility.

In the living room there’s enough space among the hard drive, streamer, and amplifier for wide cable radii. After successfully connecting all the devices for an initial check, I can’t immediately say if I can detect an appreciable difference to my own, not-so-inexpensive cables. Let’s forget for a

moment the interminable opinions about break-in time and crystalline alignment, the mantras on burn-in process. I just totally stopped thinking about the excellent in-akustik cables for the first four weeks and listened contentedly to music every day. I was only reminded of their presence and their impending return date while taking care of some much overdue dusting. I didn’t find anything lacking in my music during that time, but it wasn’t really my intention to want to hear any differences. A few weeks had passed before I finally found myself curious enough to start investigating if I could actually hear a difference between the individual connectors. Every two hours, I took turns listening to the same track, first with one cable, then with the other. And I was wrong several times when it came to guessing whether or not the cable was made overseas or in the Black Forest. If a difference was perceptible at all, it was that the in-akustik connectors between streamer, hard drive and amp seemed a touch earthier. You actually had to know the piece quite well to detect if the bass rasped a bit more or the snare asserted more presence. Which is a real surprise considering the student-friendly pricing of the cable.

The bottom line: With its Exzellenz series, in-akustik delivers a flawless cable in all critical aspects, provided you exclude esoteric standards for material and surface feel. You don’t always need have the fur of a unicorn and fairy dust to enjoy an exquisite listening experience. Why not give it a try? ■

**Signal cables | in-akustik Exzellenz**

**Example of prices for LF cables (2 x 0,75 m, RCA/XLR plugs): €100/150 | Example of prices for digital cables (USB 1,5 m, S/PDIF 0,75 m): €50/60**

**in-akustik GmbH & Co. KG | Untermatten 12-14 | 79282 Ballrechten-Dottingen | Germany | Telephone +49 7634 56100 | [www.in-akustik.com](http://www.in-akustik.com)**

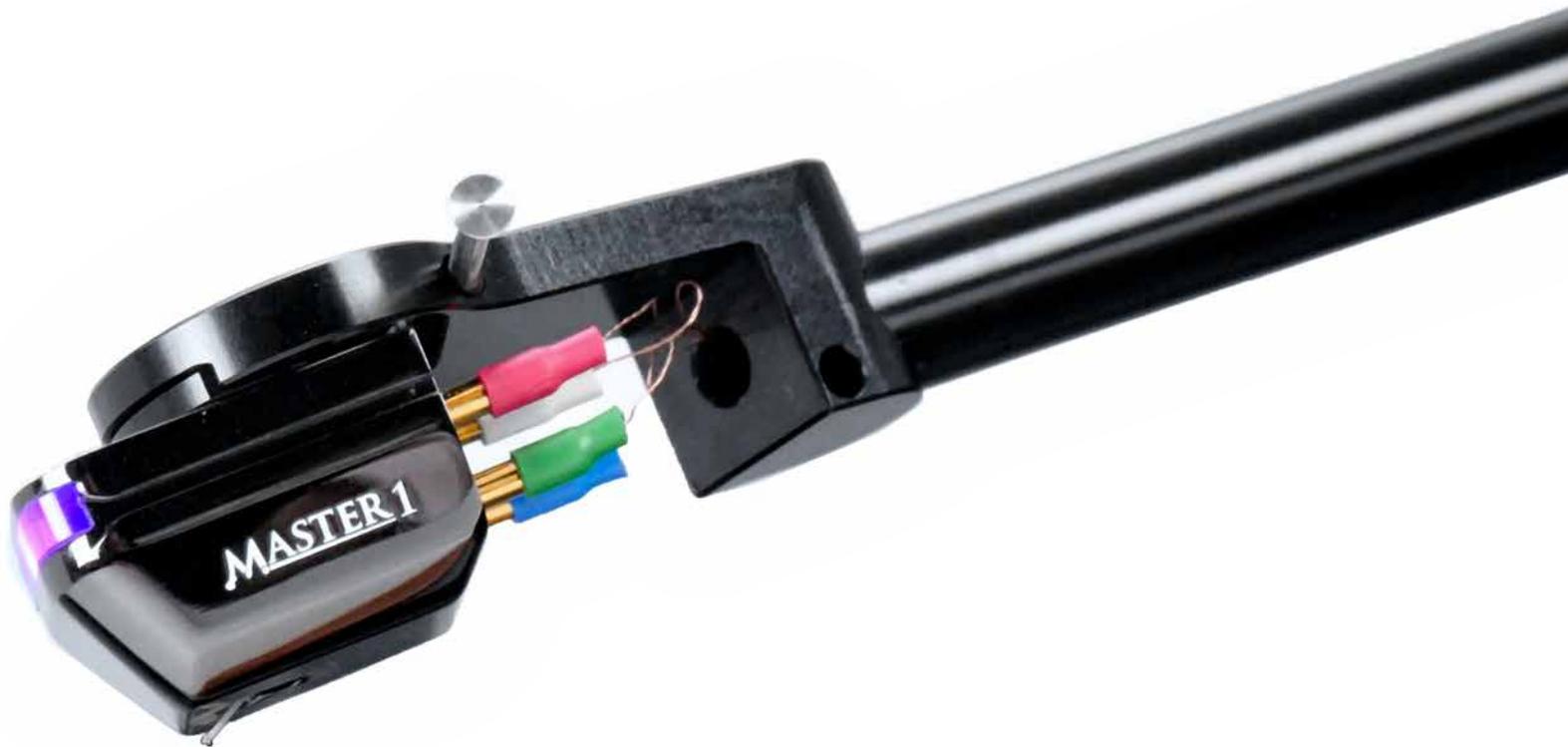
DS Audio Master 1

# SHADOWING WITH LIGHT

By Cai Brockmann. Photos: Ingo Schulz



BEFORE THE REVOLUTION STARTS  
TO BECOME PAR FOR THE COURSE,  
THE OPTICAL CARTRIDGE  
PIONEER UPS THE ANTE:



DS AUDIO RELEASES A NEW TOP-OF-THE-RANGE MODEL TO SIT ALONGSIDE ITS BRILLIANT DEBUT RELEASE.





The enthusiasm of the mastermind behind DS Audio for all things analog is also apparent in charming details: Tetsuaki “Aki” Aoyagi encloses a handwritten thank-you note addressed to the customer with every component.



“I’ve seen the future and it will be. I’ve seen the future and it works.”

– When the musical genius Prince uttered those words of wisdom on his 1989 *Batman* soundtrack, initial trials using optical cartridges were already old news. As far back as the late 1960s, Toshiba had released the C-100P model under its luxury brand Aurex. Unfortunately it was not suitable for general use due to technical limitations at the time: Aurex had chosen to use a small bulb as a light source and the heat it gave off each time the device was in use would cause undesirable side effects in a matter of minutes or at least before one side of the vinyl had even finished. The whole thing had simply been cobbled together too hastily.

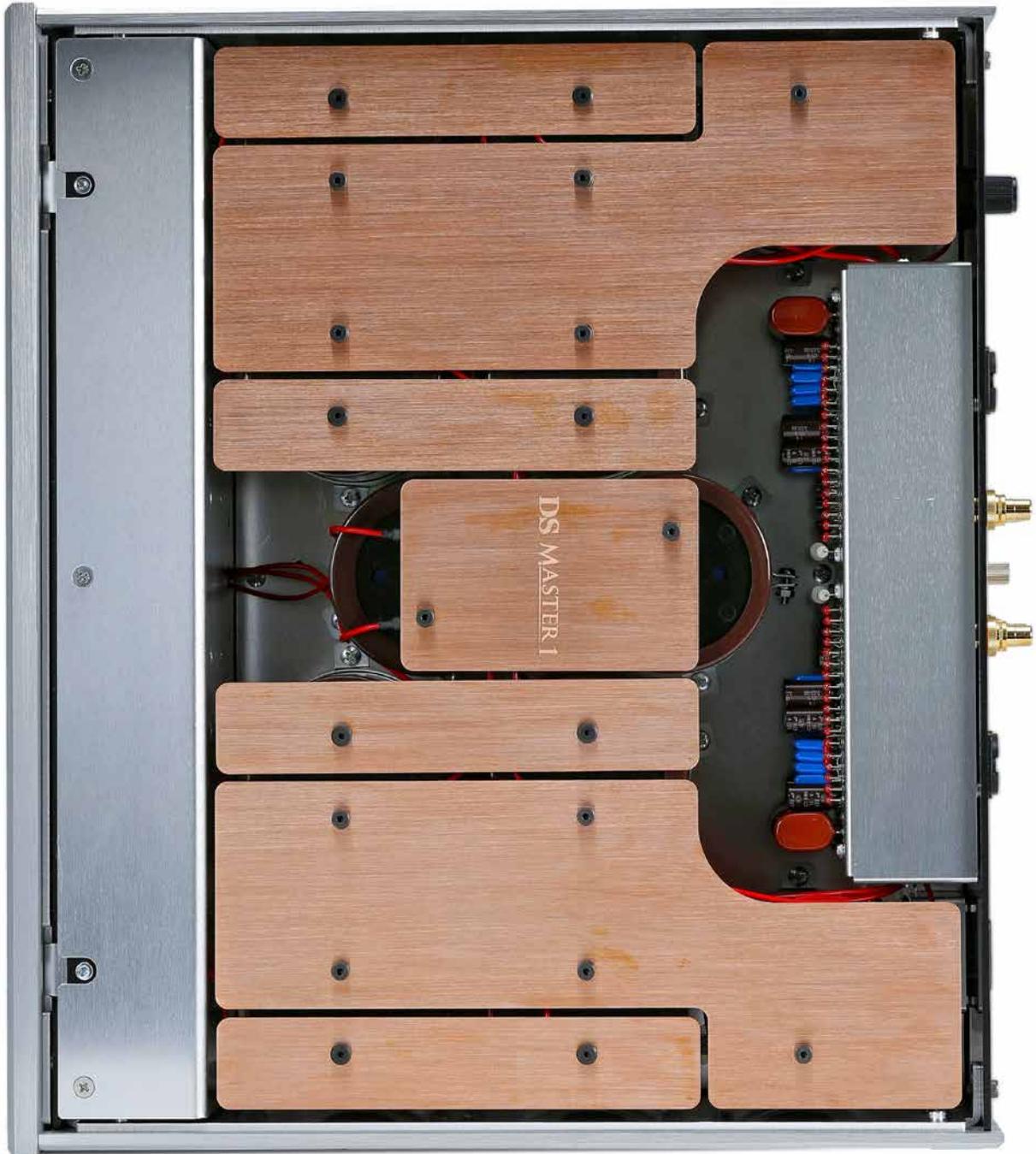
The principle behind the optical cartridge itself is, however, so incredibly simple that you have to wonder why DS Audio only just a few years ago decided to turn its hand to it, using modern, “cool” semiconductor technology and an extremely precise (and extremely reliable) approach. Presumably, the coinventor of the optical computer mouse must have had to actually decide to get involved in the high-end audio scene first. We have DS Audio’s parent company Digital Stream Corporation (DSC) and, in particular, the founder’s son Tetsuaki “Aki” Aoyagi, barely 30

years old and passionately committed to analog technology, to thank for this spectacular, next-level development. The step was actually not such a big one as the requirements of an optical mouse and an optical cartridge are very similar: Like with an optical mouse, the trick with an optical cartridge is to convert an object’s tiniest movements within a defined space into varying electrical voltages. In a moving magnet (MM) system, a magnet moves among fixed coils; in a moving coil (MC) system, the coils move in a stationary magnetic field; and in the less popular principle of the moving iron (MI) cartridge, coils and magnets are fixed and a moving piece of iron converts the movements of the stylus in the record’s grooves into an electrical depiction of the music. Uwe Heckers already described how an optical cartridge works in *FIDELITY* No. 23 (issue 1/2016), so I can repeat his explanation here (see: “The technology behind the DS Audio Master 1”). Here is a short summary: An LED emits a light on two channel-separate photodiodes; in between them is a razor-thin “screen,” a light-tight film with two tiny openings that is attached to the cantilever. The greater the movement of the cantilever (the “louder” the music signal), the more light flows through the precisely defined holes

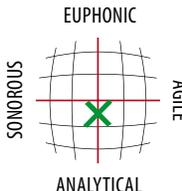
on the photodiodes and the greater the output voltage. Incidentally, this is anything but digital; it’s a genuine analog concept that manages without any digital “translators” and can register extremely accurate sampling thanks to an extremely low mass. This (and so much is being revealed here) gives the DS Audio Master 1 an exceptionally fast signal speed.

As a side effect of the unconventional signal processing, DS Audio optical cartridges always work as part of a team; they always come with their special phono equalizers. The standard EQ unit provides the LED in the cartridge with the necessary cleanest possible power in addition to performing all pre-amplifier tasks with optimal coordination—i.e., it is directly connected to a high-level input from a preamplifier or an integrated amplifier

For DS Audio, the sky was clearly the limit with the Master 1 flagship model. The improvements to the system and EQ unit compared with the already exquisite DS-W1 are correspondingly generous and expensive. For this reason, the stylus of the DS Audio Master 1 has an extra-sharp micro-ridge cut and the cantilever is made from sapphire. What’s more, the fully reworked optical-mechanical sampling ▶



**DS Audio Master 1**  
 With the Master 1 from DS Audio, well-healed audiophiles are putting the topic of cartridges to bed and the issue of correct equalization along with it. Equally pricey and fantastic analog avant garde products from Japan!



© FIDELITY Magazine

CHALLENGING =  A component is 100% intuitive if you can exploit its potential to the full intuitively.  
 INTUITIVE = 

unit has been moved considerably closer to the stylus, resulting in a much shorter optical path length. A glance at the EQ unit clearly shows why the set price of the Master 1 is more than double: The solid 24-kilo whopper looks more like a fully-fledged power amplifier. Apart from the fun purple light strip on the front, which you can adjust in terms of width and brightness, the electronics are very serious indeed. The EQ unit is gigantic. The fully symmetrical construction includes, for example, three completely separate power supplies for the left and right channels as well as for the “shadowing LED” in the cartridge. Solid electrolytic capacitor banks are connected to each other using thick copper bus-bars. The cartridge also features three differently filtered outputs with XLR and RCA connectors as well as a thick aluminum housing that keeps everything safely covered. The only disappointing thing about the overall package is the cover, which is not completely rattle-free. Otherwise, just switch it on, ogle at it, and—listen to music!

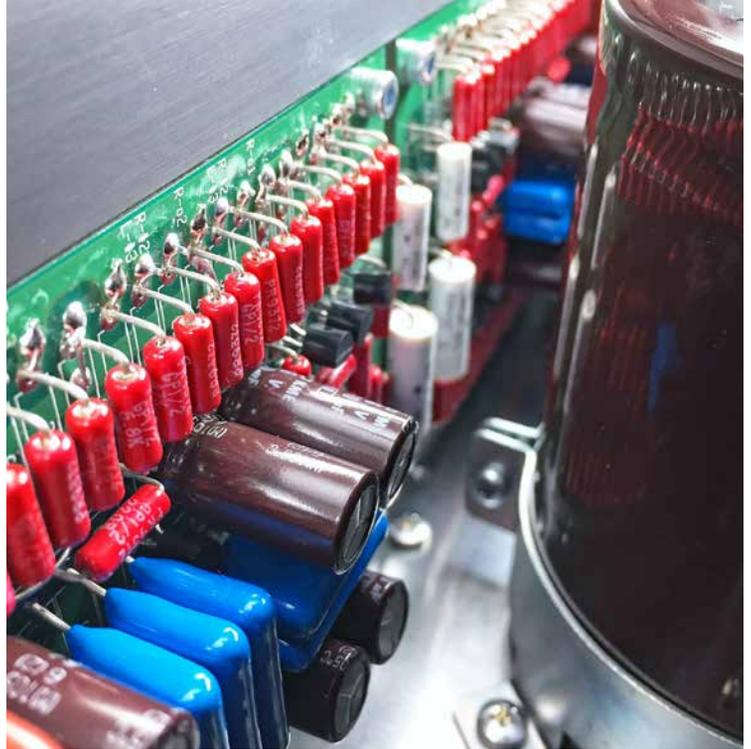
I get my first impression of the Master 1 from the current system in the FIDELITY listening room, where all

manner of top-of-the-range products are gathered, possibly not entirely by chance either. And as soon as the sound from the huge DS Audio system kicks in, I’m knocked off my feet: It sounds incredibly authoritative and somehow “definitive,” which people must be tired of hearing me say now. My acoustic memory, which saved only happy thoughts of the DS-W1 just two years ago, classifies the Master 1 on a higher level than what back then would have been barely imaginable but now is clearly discernible. That is, of course, also in view of the exorbitantly high price, reassuring. And at the same time thrilling. Bursting with sheer enthusiasm, I waste no time in reaching for the shelf of vinyls and putting together a little analog playlist for the next few hours. My incredibly positive first impression doesn’t change during the listening session. Before I begin my report on that, I’ll first outline the setup: The DS Audio Master 1 is mounted on a fitting combination that entails the AMG Viella V12 turntable equipped with the new 12-inch AMG 12JT Turbo tonearm. And yes, that really is the tonearm’s name. “Turbo” here primarily refers to the accelerated access options: any adjustments to the tonearm can be

made without tools, just your fingers. And for that reason alone I want to give it a massive kiss. Why has that only been the case with the exotic Micro-Seiki MA-505 up to now?

In this setting, the next big thing from another (cartridge) world feels audibly at home. This is high-end audio at its very best. It ensures every sound is suppressed, and it simply does not sound like *anything at all*. The new star affixed in the shining lights of the analog sky spans huge spaces presumably in original size, making you forget about the process behind the technical reproduction of sound events in just a matter of seconds. It focuses your concentration purely on the music. Oh yes! The overall tuning of this elaborate and by design visually striking pickup with its purple light strips on the front edge of the cartridge and EQ front plate is markedly unspectacular and is therefore perfect for relaxing, long listening sessions. A feature that the DS Audio Master 1 shares with only a few other top-class high-end products. Since other gems (such as Tidal Preos, Amplifon SET 140, and Wilson Audio Yvette) currently “parked” in the FIDELITY headquarters favor ▶

Signals from the optical cartridge cannot be processed with a conventional phono preamplifier.



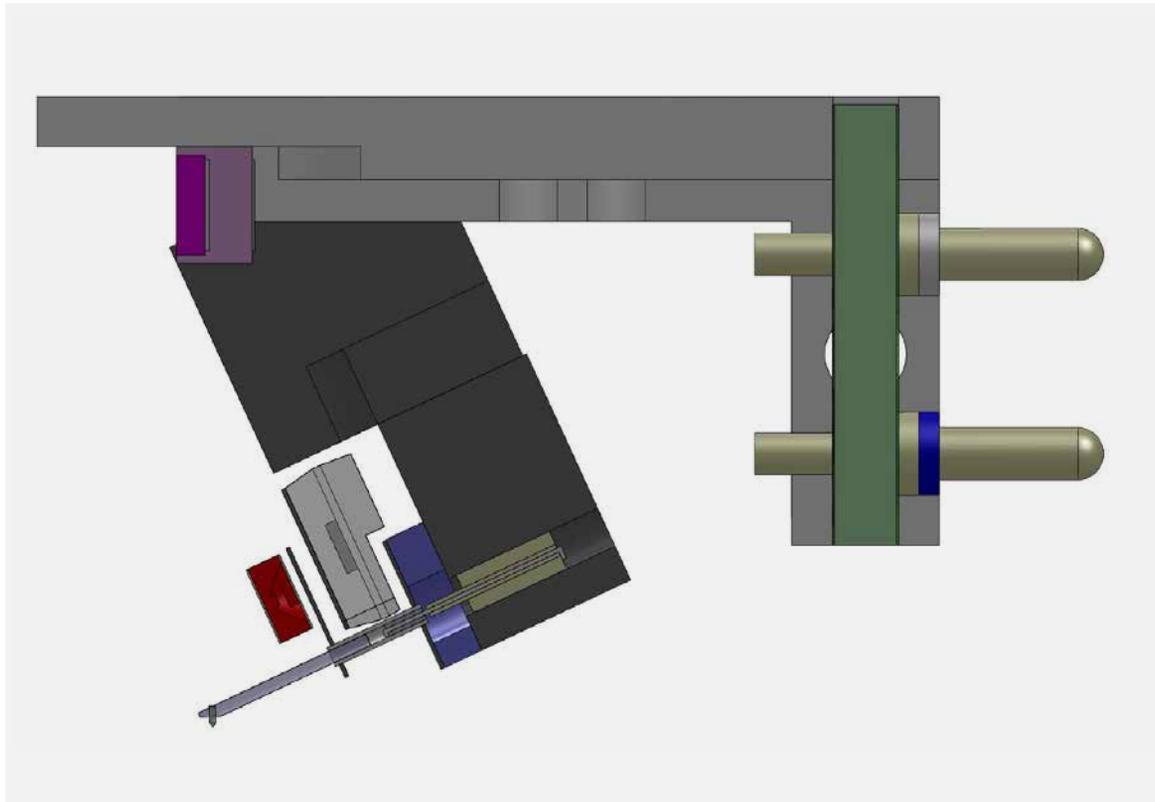
# FOR DS AUDIO, THE SKY WAS CLEARLY THE LIMIT WITH THE MASTER 1 FLAGSHIP MODEL.

this neutrality ideal, the road ahead is clear for playing lots of music that has a magnetic effect and positively and ceremoniously sucks the listener in. This happens, for example, quite superbly with the album *Careless Love* from the pop-jazz diva Madeleine Peyroux, which was rereleased by MFSL as an LP some time ago. The CD version of this collection of singer-songwriter classics recorded using a small line-up in a swinging fusion guise had good intentions with some frequencies. Since the double bass pushed too much, the voice sounded over-present, and the end result seemed to be aimed, with obvious loudness, at achieving an impact and being suitable for a ghetto blaster. The MFSL vinyl sets the shifted proportions straight, homogenizes the sound profile without flattening it, and clearly demonstrates the master tapes contain a very successful acoustic production. The DS Audio Master 1 set makes precisely that clear as well as highlights that there's no need to spruce things up here and no need to soften any passages. Despite that, it is quite apparent that behind Peyroux's expressive alto voice lies quite a complicated character, one who, on bad days, would trash a hotel room, but could also exude unbelievable charm in person. Another charm offensive came in the form of the young Harry Belafonte,

who had enchanted his audience with banana boat songs at Carnegie Hall in New York a good half a century ago. The audio recording of this memorable performance is far more than the excellent-sounding documentation of the vocal artistry of a singer with bags of charisma. To this day, *Harry Belafonte Live At Carnegie Hall* can still serve as a lesson on how to capture the special characteristics of a large room and how to properly present the proportions and spacings among (lots of) instruments. What's more, the large Ampex tape machines clearly captured a lot of fine details—details the DS Audio Master 1 showcases completely naturally without forcefully removing them from their overall, general context. It's just so fantastic and enjoyable!

Okay, with this audio messenger from the cartridge future I tend to prefer letting well-produced vinyls grace the AMG turntable. Yet in its “all-encompassing manner,” the Master 1 even makes records tolerable, sometimes even enjoyable, where the musical content and the recording quality are hardly compatible. Eddie Boyd's blues album *7936 South Rhodes* is one such example. It can't fail to give you goosebumps. On the only album that Boyd recorded for Mike Vernon's Blue Horizon label, the singer, known for

his distinctive raspy voice, played with a combo by the name of “Peter Green's Fleetwood Mac,” years before they became a pop super group. And with the maximum candidness of a true master that doesn't have to make a song and dance of its own ability because it knows its job all too well, the Master 1 extracts the intimacy and sense of closeness of this recording session from the record's grooves. I find its artistry instantly captivating. The same thing also happens quite spectacularly with very different critical material. Arvo Pärt, the exceptionally gifted Baltic neo-archean and minimalist, writes music that seems to capture a completely different time and world. His work is the ideal music to play in order to meditate, float away, and forget the here and now. Pärt's *Miserere* from 1989, which really gets under your skin and is dedicated to the legendary British Hilliard Ensemble, was recorded for all eternity on the audiophile vinyl label ECM in 1990 in the London church of Saint-Jude-on-the-Hill, a location that not only acoustically accommodates the exposed vocal lines of the singers but, in “*Dies irae*,” also accommodates the massive sound concentrations of the choir and orchestra. The DS Audio Master 1 demonstrates on two fronts exactly what an optical cartridge is capable of: it not only opens up ▶▶



## THE TECHNOLOGY BEHIND THE DS AUDIO MASTER 1

For each channel in the DS Audio optical cartridge, a type of “light beam” handles converting the cantilever’s movements into electrical voltages. The process involves the LED (light-emitting diode) emitting a light on two channel-separate photodiodes. Located between the sender and the receiver is a “screen”: a mere 50-micrometer-thick, light-tight, and ultralight film with two rectangular cutouts attached to the cantilever. The greater the movement of the cantilever, the more light flows through the screen’s “slits” onto the photoelectric cells and the greater their output voltage. The principle is therefore genuinely analog and can boast a few advantages compared with conventional MM, MI, or MC systems: Because the film on the cantilever weighs considerably less than magnets and coils, the system has an ultralow moving mass. There are no power-induced coils to build up a magnetic field and therefore no counter electromotive force to work

against the current flow on the basis of Lenz’s law. And the enormous output voltage eliminates the need for a preamplifier stage. However, the voltage curve produced is particularly advantageous. While the level of induced voltage with MM, MI, and MC systems depends on the frequency (the faster the cantilever moves, the higher the frequency and hence the higher the voltage, too), the voltage curve is not dependent on frequency in optical systems. Only the size of the movement influences the strength of the signal. That means optical cartridge developers can implement purely passive RIAA equalization, which in turn only minimally influences the actual signal. The disadvantages are that the LED needs to be supplied with power and the signals of the optical cartridge cannot be processed with a conventional phono preamplifier. This means an external power supply unit is always required. •

Dr. Uwe Heckers



Inspired: The new AMG 12JT Turbo tonearm can be adjusted without any tools at all.





Incredibly authoritative and somehow “definitive”: the DS Audio Master 1 in the new 12JT Turbo 12-inch arm from AMG.



## ACCOMPANYING EQUIPMENT

**Turntables:** AMG Viella V12, EnVogue Astra | **Tonearms:** AMG 12JT Turbo, Nottingham Analogue AnnaArm 12" | **Preamplifiers:** Tidal Preos, Primare Pre60 | **Power amplifiers:** Amplifon SET 140, Musical Fidelity M8 500s, Primare A60 | **Loudspeakers:** Live Act Audio LAS312, Stereofone Dura, Wilson Audio Yvette | **Cables:** AudioQuest, HMS, Vovox | **Power conditioning:** AudioQuest, Gecom, IsoTek | **Racks, bases and accessories:** LignoLab TT-100 and "Die Bank" ("The Bench"), Solidsteel HS Series, various products from Subbase Audio

an immensely wide and deep church interior and gets bells and percussion instruments ringing and chiming subtly and at length and provides voices with a direct route into the heart of the listener. No, the Master 1 truly snaps on the light with real feeling, lights up the physical room, even in the darkest corners, and at the same time makes musical structures transparent. The secret to achieving meta-level performance is, in turn, the systematic renunciation of any self-commentary: The directions are clearly found in the LP grooves where there are no detours. And the DS Audio Master 1 follows them unwaveringly, directly, and honestly to the farthest edges.

How do I know that? Even in my analog setup at home, the Master 1 demonstrates all of that with extreme precision (and reproduces it), which is why I have optimized my "analog castle" (EnVogue Astra with Nottingham Analogue Anna 12 inch on Subbase Analogique and LignoLab TT-100). The tonal character of this combo is hugely different from the AMG, is more earthy and more solid and simultaneously

amazingly nimble, provides excessive energy, and is hugely dynamic and incredibly thrilling. And so it should be!

In my opinion, the great DS Audio meets the high expectations of a top-end integrated cartridge solution also because the set, consisting of optical cartridge and EQ unit, manages everything with no "flavor enhancers."

If the price for the Master 1 set scares you a little, which would be totally understandable, DS Audio has also unveiled a much more reasonably priced version of the optical cartridge. The little sister of the Master 1 and DS-W1 is called DS-002. It comes with a pared-down EQ unit and will be cleaning up in considerably more mainstream price brackets (the small combo goes for just under a quarter of the price of the flagship model). The little sister has been designed by its creators to benefit from vertical technology transfer and boasts the decisive features that its big sisters also possess. What's more, every light system can be combined with every EQ unit, which also means the high-end manufacturer's typical upgrades can be carried out hassle free. Anyone who can reach for the purple stars in the analog

sky and afford the Master 1 set from the outset will be very happy indeed. I've seen the future. And it works. ■

**DS Audio Master 1 Optical Cartridge**

**Functional principle:** Cartridge with photoelectric voltage generation | **Housing material:** milled "ultra-duralumin" | **Cantilever:** Sapphire rod | **Stylus cut:** Micro-Ridge | **Output voltage (1 kHz, output via EQ unit):** 500 mV | **Channel separation:** > 25 dB | **Special features:** Photoelectric voltage generation, EQ unit from DS Audio required for operation | **Weight:** 8.1 g | **Recommended tracking force:** 16-18 mN

**DS Audio Master 1 EQ Unit**

**Functional principle:** External power supply unit and equalizer for Master 1 (and other models) | **Input:** 1 x unbalanced (RCA) plus ground connection | **Outputs:** 3 x unbalanced (RCA), 3 x balanced (XLR) with different subsonic filters (output 1: -6 dB/oct@30 Hz, output 2: -6 dB/oct@50 Hz plus -6 dB/oct@30 Hz; output 3: -6 dB/oct@50 Hz plus -6 dB/oct@30 Hz plus -12 dB/oct@25 Hz) | **Special features:** Adjustable light intensity of the LED band on the front side | **Dimensions (W/H/D):** 44/16/40 cm | **Weight:** 24 kg

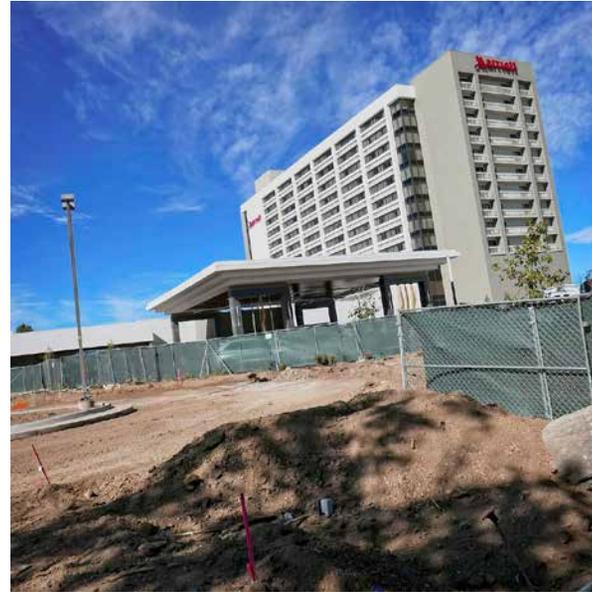
**Warranty period:** two years | **Price for Master 1 set:** €22,000 | **Exchange system price:** €5,900

**High Fidelity Studio | Dominikanergasse 7 | 86150 Augsburg | Germany | Telephone +49 821 37250 | [www.high-fidelity-studio.de](http://www.high-fidelity-studio.de)**

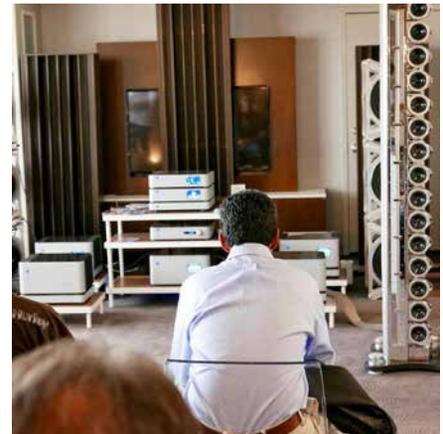
Rocky Mountain Audio Fest (RMAF): October 6–8, 2017

# THE ENTIRE BREADTH OF HI-FI

By Ingo Schulz. Photos: Ingo Schulz

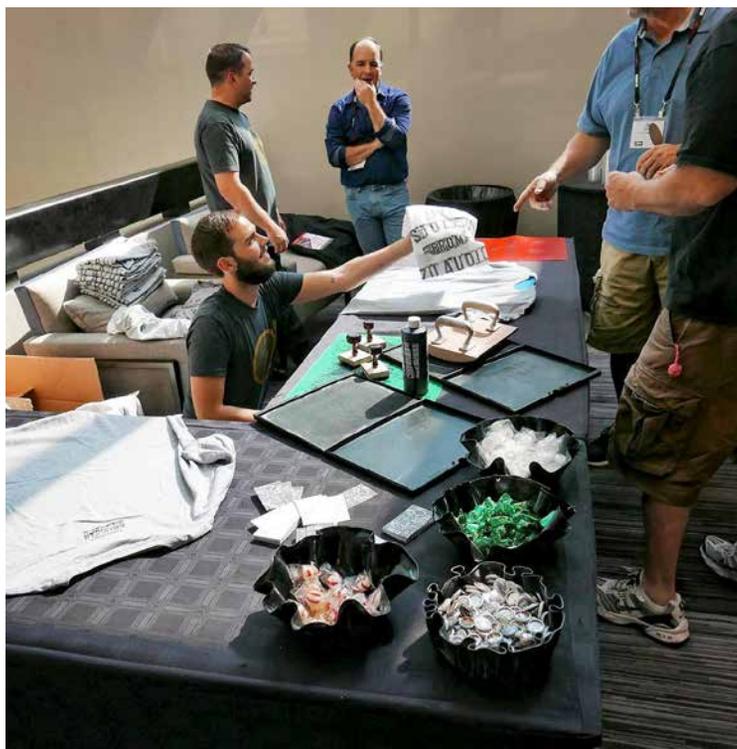


The Rocky Mountain Audio Fest (RMAF) enjoyed a special year in 2016. That's because the event location, the Denver Marriott Tech Center, was closed due to renovation and reconstruction. At least in part. While construction workers were busy toiling away, the RMAF was held in the other half of the hotel. Due to the acute shortage of space, the organizer quickly had a large tent set up in the hotel parking lot, where the CanJam—the headphone section of the fair—took place. All in all, last year didn't enjoy the best of conditions. But because people in the United States are used to improvising, both the event organizers and the attendees were satisfied with the RMAF. ▶

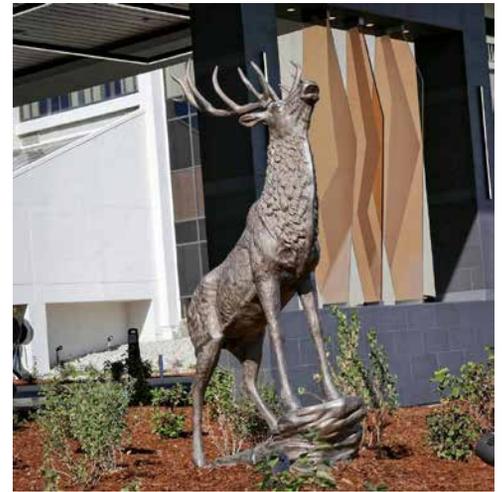
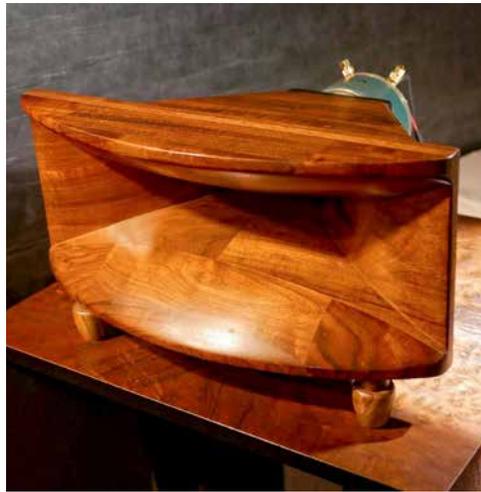
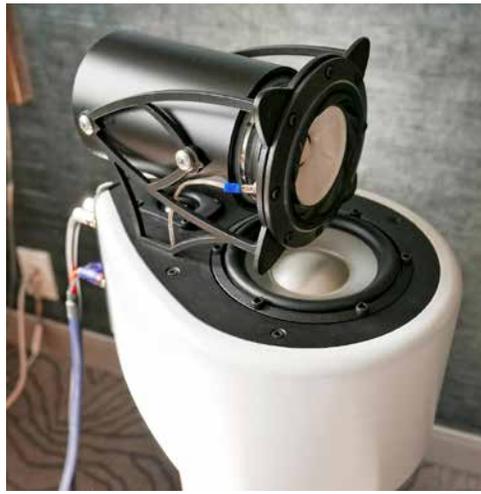


This year things are going to be nice, and the event will be bigger and even more interesting than before: The renovation of the hotel is complete and the entire space is now available for use. What's more, a number of rooms in the hotel's atrium were enlarged. This will surely benefit the planned presentations and improve attendees' listening experience.

The 2017 Rocky Mountain Audio Fest will be held October 6–8, 2017 (Friday to Sunday), in Denver, a city that will lend its breathtaking backdrop to creating a show that's sure to be one of a kind. The outstanding breadth of showcased audio equipment makes this an especially enticing event. It will have it all: congenial one-person ▶



hobby workshops with at times a truly surprising high level of quality, classic high-end audio in all its facets, and, of course, the completely absurd “US bling-bling monster hi-fi world.” Plus, some of the scene’s more notable figures will be on hand. At the 2017 RMAF you’ll have, for example, a chance to talk shop about cables, DACs, and power-supply conditioning with Bill Low from AudioQuest; deliberate on different filter theories with Siegfried Linkwitz; and chat about streaming qualities with Paul McGowan from PS Audio. And because everything in the United States is a little more relaxed, it’s a lot easier to strike up a conversation with big names in the scene when you’re at the RMAF. ▶



FIDELITY will once again be on hand in Denver this year and thoroughly report on the 2017 RMAF.

To get plugged in: check out our lengthy trade fair report on the 2016 RMAF here <https://www.fidelity-magazin.de/2016/10/23/rocky-mountain-audio-fest-rmaf-2016/>

The 2017 Rocky Mountain Audio Fest  
 October 6–8, 2017 (Friday to Sunday) | Denver  
 Marriott Tech Center | 4900 Syracuse St. | Denver,  
 CO 80237 | United States | [www.audiofest.net](http://www.audiofest.net)

Audes Maestro 116

THE  
PERFECT  
CURE  
FOR  
SLEEPY-  
HEADS

By Jochen Reinecke. Photos: Ingo Schulz







DON'T TELL US WE DIDN'T WARN  
YOU. THIS NEW LOUDSPEAKER  
FROM ESTONIA IS CAPABLE OF  
ROBBING YOU OF YOUR SLEEP  
AND THOROUGHLY CRUSHING  
ANY HI-FI PRECONCEPTIONS  
YOU MIGHT HAVE.





September 20, 2016, will be forever ingrained in my mind: I landed at Berlin Tegel Airport around midday after what seemed like an eternal red-eye special from Dallas via Frankfurt. I had been traveling for 14 hours and all I had to look forward to were some long days of work accompanied by dreaded jet lag. Many frequent flyers these days believe it's best to not waste any time in trying to acclimatize to the time at your destination and not give in to the immediate temptation to jump into bed at 1 in the afternoon. No sooner said than done: Worn out, I staggered sluggishly through my apartment and wondered what I could do for the rest of the day before it was finally

time to get some shut-eye. It's not that easy when your brain is all over the place and your body is trying desperately to deal with the seven-hour time discrepancy and 25°C temperature difference. After unpacking my suitcase and loading the washing machine, I spotted a few boxes on the floor. Oh yes, the new equipment from Audes for me to test was just waiting to be unpacked and wired up. Perfect. It was just what I needed to keep me busy on a day like this.

In addition to the neatly packed, almost one-meter-tall two-way pillars, the sales team had also sent me a third box containing the stand feet. So, I rolled up my sleeves and steadied myself for a bit of manual labor. Carefully slide the

loudspeakers headfirst out of the boxes, screw together the stand feet and spikes, then turn the loudspeakers and carefully place them on the supplied spike plates before pulling the wires through to the power amplifier: I spent a good hour on that sweat-inducing but constructive work. I flopped on the sofa, rather pleased with myself, and played Arcade Fire's "Neighborhood #2." Whoa! What the hell was that?

In just three seconds I was wide awake. It was as if the whole band was playing in my living room. The catchy drum intro that set the room vibrating pushed me back into my sofa. The guitar harmonics buzzed through the room, the accordion lurched toward me from the right and ▶



made me giddy, and the bass, which kicks in after 16 beats, sent butterflies aflutter in my stomach. What unbridled audio joyfulness, what amazing dynamics, and what wonderfully tight and firm playback. And how clearly and purely the little glockenspiel on the left pinged! And the strings, like little needle points piercing the sound! It was simple and simply fantastic. To get right to the point, I spent the rest of the day sitting blissfully on the sofa, erratically flicking through my music collection until I ordered a pizza at 6 p.m. and then knocked back a couple of glasses of Ardbeg Mór. Later on, a tad tipsy already, I sent Cai Brockmann an SMS asking him how much the speakers cost. “For the pair, €1,600” was the immediate answer. Huh? Was our editor in chief, a known prankster, trying to pull my leg?

The cheeky trickster. That sly fox! I went to bed totally confused. It was already past midnight!

Half sobered up and half asleep I looked into Audes, the company’s history and its products. Based in Tallinn, Estonia, Audes’s roots reach back to 1935. They started out with the rather cumbersome name “Raadio-Elektrotehnika Tehas/RET” and manufactured radio equipment: coils and transformers and the like, partly for military purposes. In the 1950s, they added tube radios, and in the 1960s compact units with receivers and turntables— however with purchased loudspeakers. In 1992, the brand name was changed to Audes; a year later they began to develop and produce their own loudspeakers. The manufacturer’s portfolio these days includes nine in-house

developed and manufactured woofers, various transformers, three tube amplifiers, and several ranges of loudspeakers. I had the pleasure of hosting at my apartment the Audes Maestro 116, a comparatively slim two-way bass reflex model with a housing that slightly tapers at the back. The Maestro series consists of one bookshelf model and two standing models and has been around for a few years now. It has, however, been reworked and updated by the acoustics engineer, Aleksei Tjurin, who is the son of the owner of Audes; the 116 model was his first-ever project. It includes a 6.5-inch in-house manufactured woofer as well as an off-center dome tweeter from Seas. The opening of the bass reflex channel is on the front, and it has the same centerline as the tweeter, so a few centimeters to ▶



As standard, the slim pillar comes adorned in black or white varnish as well as walnut veneer. Special finishes, such as this rather splendid Makassar ebony, are available for a fairly high additional fee, but are, given the sound performance, quite fitting.





the left or right depending on the version that's set up. The crossover frequency is relatively low: The dome tweeter already takes over at 1,800 hertz. Considering its low capacity, the Audes can make it all the way down to an impressive 40 hertz (-3 decibels). At 84 decibels, the efficiency level is average; the sine wave power capacity of 75 watts is also not hugely surprising for a loudspeaker of this size. When looking at such a configuration, one thing grows clear in theory: The woofer can actually fully concentrate on what it does best without being disturbed, namely producing profound, full, and dynamic sounds. And Lord knows, it certainly does that. Frankly, it not only gives my rather grown-up Tannoy Turnberry (which costs four times as much) a run for its money in terms of absolute depth, control, and speed, it actually seems to me to almost operate even more

directly. On the other hand, the tweeter has more to do as it needs to cover a large portion of the midrange. And it actually manages to do this with ease. The Seas dome tends to play more on the crisp, bright side but never overdoes it. That's clear when listening to "Chemicals" by The Notwist: Here, all kinds of synthetic, treble-heavy sound sources click and crack and compete with each other. And the band from Weilheim had actually hidden the good old dial-up and handshake sound of an analog modem in the song's bridge. This once again clearly contrasts with the lively and rhythmic hi-hat sounds and loops. When, really rather late, the bass finally kicks in, it's accentuated and deeply and rhythmically incorporated. Great matching! But this loudspeaker's real crowning glory is the tremendously deep and precise three-dimensionality of the overall

picture. If you take The Chameleons' "View From a Hill," you can let the lost, disparate delay guitar effects wash over you as they fill the room and the sound immerses you. Classical music also has a tremendous sonority in the room, making orchestral pieces a real pleasure to listen to.

Let's have a bit broader look and take in the overall picture. My Tannoy started to sweat in the comparison test: Now, it's no shrinking violet and at the time its explosive dynamics were one of the reasons I bought it. And yet, the little Audes can keep pace with surprising ease. Here's where the Tannoy does have the edge: It has more "composure" in the midrange, and overall it reproduces guitars, pianos, and wind and string instruments with more colorful and powerful brush strokes. The Go-Betweens' woefully sad "He Lives My Life" with its sparkling ▶





acoustic guitars is able to move you even more and produce a more emotional sound with the Tannoy. But at the frequency response ends, the Audes surprises you with fresh transparency in the treble range and lightning-swift accession in the bass range, at least if you listen at low-to-medium volume. If level stability is what it comes down to above all else, then the Tannoy has more reserves; it really doesn't make a difference if it gets fed 10 watts or 200 watts. The Audes feels more comfortable at medium volume levels, which is likely the standard scenario for most home users anyway.

Overall, the Audes 116 reminds me of the DeVore Gibbon 88, which I had tested a while ago, as well as the Neat

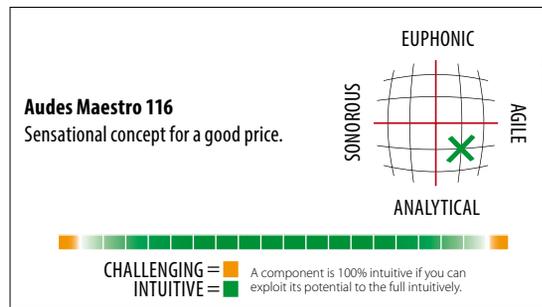
Acoustics Momentum 4i which I have been using as benchmarks for many years for test purposes and have fond memories of. The difference is that both comparison models are considerably more expensive.

Incidentally, the Audes plays as well on tubes as it does on transistors. It gave an electrifying, dynamic, and crisp performance with the Accoustic Arts Power 1 Mk4 integrated amplifier and also with the Abacus Ampollo power amplifier, but a somewhat rounder and fuller performance with my Audreal MS3 tube monos. That makes it a true all-rounder in practice.

So let's get right down to it: Of course a pair of loudspeakers priced at €1,600 won't be able to do everything perfectly.

All hi-fi components have their pluses and minuses, and we all ultimately have to make our decisions based on our own personal tastes. The real strengths that show the Audes in part punches well above its price tag include timing, three-dimensionality, spirited enthusiasm, profound bass, and sparkling trebles, but you have to be prepared to make some compromises in terms of absolute level stability if you're planning on cranking up the volume. And at times the midrange has better resolution and is further stretched by others out there. But for me personally it was clear that the Audes is so much fun and provides a welcome acoustic alternative to my Tannoy so it's staying put as I'm going to buy it. Basta! ■ ▶





### Loudspeakers | Audes Maestro 116

**Equipment:** 6.5-inch woofer, 1-inch dome tweeter | **Functional principle:** two-way floor-standing loudspeakers, bass reflex | **Nominal impedance:** 8 Ω | **Sine wave power capacity:** 75 W | **Frequency range:** 40–20,000 Hz | **Sensitivity:** 86 dB/W/m | **Finishes:** Walnut

veneer, black or white varnish, special finishes for an additional fee | **Dimensions (H/W/D):** 99/20/27 cm | **Weight:** 17 kg | **Warranty period:** 2 years | **Price for pair:** €1,600

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### ACCOMPANYING EQUIPMENT

**CD player:** C.E.C. CD5 | **DAC converters:** B.M.C. Audio PureDAC, Manunta EVO DAC | **Turntable:** Rega RP-2 | **Pickup:** Ortofon 2M Red | **Phono preamplifier:** Pro-Ject Phonobox | **Preamplifier:** Abacus Preamp 14 | **Power amplifiers:** Abacus Ampollo, Audreal MS3 | **Integrated amplifier:** Accustic Arts Power 1 Mk4 | **Loudspeaker:** Tannoy Turnberry Gold Reference | **Cables:** Goldkabel, Oehlbach, Ortofon, Real Cable



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

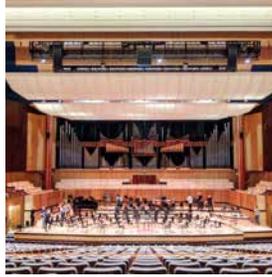


Photo: Stefan Gawlick

Professional musician Stefan Gawlick travels the world and knows almost every major concert hall around the globe. In this series, he reports on the acoustics and other characteristics of famous venues—both in the auditorium and on stage.

A much-loved yet also much-feared monster in the heart of the city

# THE ROYAL FESTIVAL HALL, LONDON

One of the first ever major projects undertaken in London after World War II, the Royal Festival Hall actually became the city's first listed post-war building. The hall is detested by many visitors and artists, but it's impossible to imagine the London skyline without it. The foundation stone was laid in 1949, and the building was refurbished and modernized in the 1960s and again in the 2000s. It enjoys a prominent setting on London's south bank of the river Thames next to the UK's busiest train station, Waterloo, and only a stone's throw away from the Houses of Parliament. This exceptional location has made the 2,500-seat monster an integral part of London's vibrant culture scene. In fact, it occupies an even more prominent position in that scene than the Barbican Centre, which actually features far better acoustics. To reach the hall itself, visitors stroll across the promenade with views over the Thames and enter various glass foyers. This area fronting the

Royal Festival Hall's actual concert hall is open nearly all day and plays host to an incredibly rich program of talks, arts and crafts, children's events, and the like. Countless restaurants in the area cater to everyone's tastes. This concert hall really exists right in the heart of the city.

The musicians enter from the other side. When they exit Waterloo Station, performers reach the stage entrance on the side opposite the Thames and take particular pleasure in being there on a Friday or national holiday. After all, that's when one of London's best street-food markets opens up shop behind the hall, giving performers a chance to avoid the hall's awful cafeteria.

The dressing rooms behind the stage are narrow, windowless, and full of nooks and crannies. The first few times you perform here you have to factor in a little extra time as you're sure to get lost more than once. ▶



Photo: Stefan Gawlick

After you've finally found the stage, you feel very small very quickly: It's not often you tread the floor of such a vast performance platform. Any orchestra could fit on this stage, which measures more than 17 meters wide and 10 meters deep. Even our huge group of 10 (!) double basses and a corresponding number of higher-pitched string instruments had plenty of room.

The acoustics take some getting used to, however. Even with sound at the heart of the last round of reconstruction work, the acoustics couldn't really be "rescued." This hall conjoins different voices beautifully, yet at the same time it's almost impossible to "fill" it. No matter how loud you play on the stage, listeners in the 14th row experience a neat poco forte at best. That, of course, impacts the choice of instruments and style of play—everything is given a little more oomph. Unfortunately, soft tones transmit incredibly well, which reduces the dynamics bandwidth a little and really demands everything of the musicians if they still want to

achieve a broad spectrum. You can hear yourself and your colleagues extremely well on stage. This makes things a little easier and is also a reason why so many recordings are made here.

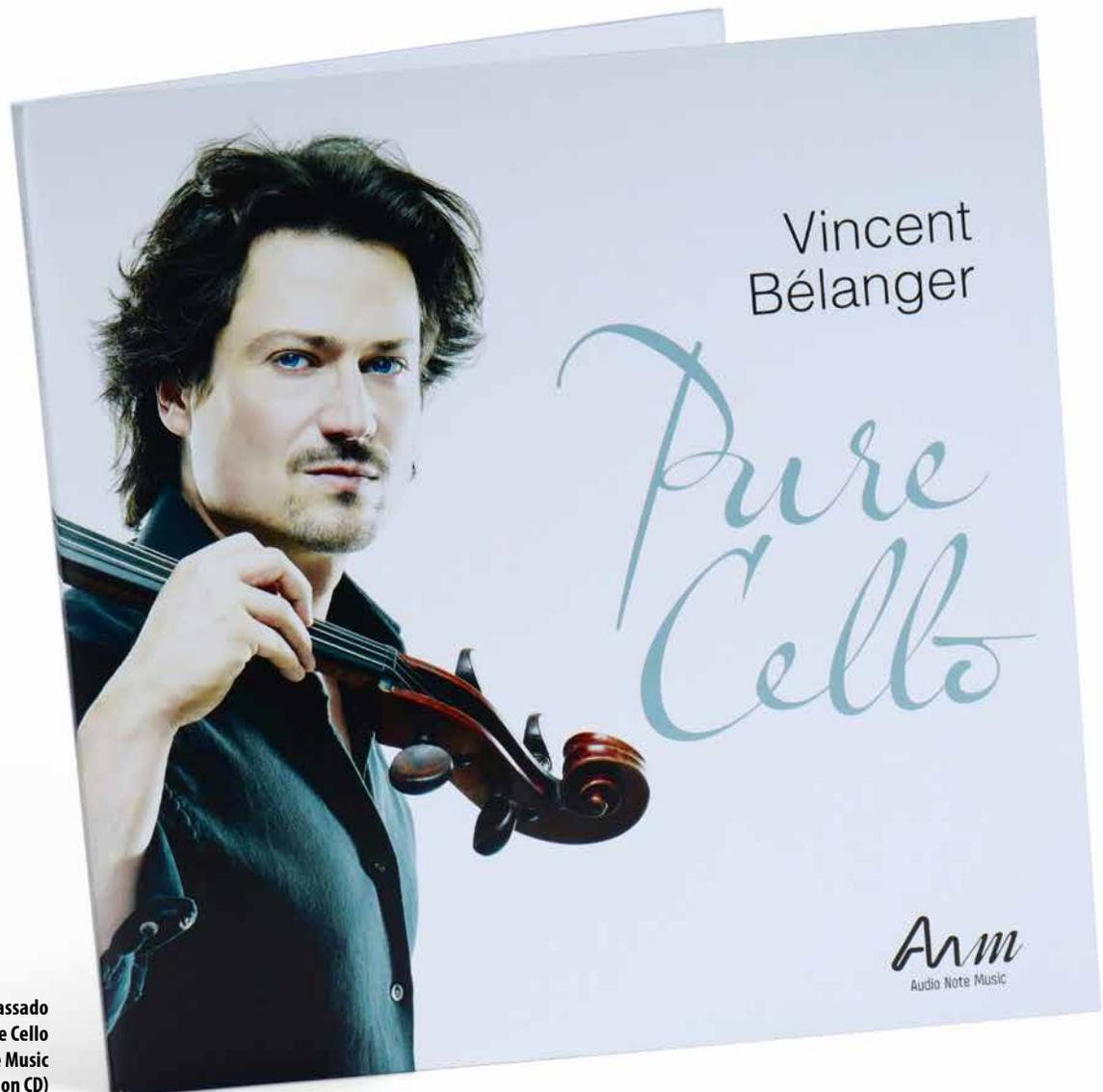
There's also one more thing that makes the Royal Festival Hall truly special: Whenever you step on stage at the beginning of a concert, you can't help but automatically glance up at the Royal Box at the back left (from the musicians' view). It's impossible to explain exactly why, but you play a little "differently", if the light's on up there. ■

**Royal Festival Hall | Southbank Centre | Belvedere Rd, Lambeth | London SE1 8XX | United Kingdom | [www.southbankcentre.co.uk/venues/royal-festival-hall](http://www.southbankcentre.co.uk/venues/royal-festival-hall)**

**Music tips – Recordings with concert hall sound | Béla Bartók:** The Miraculous Mandarin, Philharmonia Orchestra, Esa-Pekka Salonen, Signum Records, 2016 | **Gustav Mahler:** Symphonies Nos. 7, 8, and 9, Philharmonia Orchestra, Lorin Maazel, Signum Classics, 2015 | **John McLaughlin Trio:** Live at The Royal Festival Hall, London, Edition Winter & Winter, 1990.

Vincent Bélanger's new Cello Recital

# A DREAM COME TRUE



**Bach, Reger, Grützmacher, Cassado  
Vincent Bélanger—Pure Cello  
Double LP, 45 rpm, Audio Note Music  
ANM1601LP (also available on CD)**

When I heard Vincent Bélanger for the first time, with Audio Note UK at the 2016 German audio show hifideluxe, the exceptional young musician was playing his cello with himself. Or, depending on how you view it, against himself—against an older version of himself that had been previously recorded, to be more precise. The sound emanating from that hotel room in Munich back then was intended to

facilitate direct comparison of the almost holographic representational qualities of the Audio Note chain used for the playback with the original music being played live. And by the way, the results were astounding. Above all else, the artist sitting in front of us on that afternoon in May demonstrated more than just technical virtuosity. He shared his understanding of how to combine depth of expression with big cello ▶



sounds and how to convey a sense of the insanely fast, finger-breaking allegro sections as a whole serving the piece at hand while still remaining utterly relaxed throughout his performance.

The cooperation between Canadian-born Vincent Bélanger and Audio Note UK has now reached an initial culmination: The recital *Pure Cello* doesn't just document an artist mature beyond his years who cares very little or not at all for the "higher, faster, farther" ideals of his generation. It is also a recording that distinguishes a long-held dream come true: Peter Qvortrup, the slightly graying eminence of Audio Note UK and legendary music fan and vinyl collector, had at last recently founded his own label, Audio Note Music. *Pure Cello* is the debut release from this new competitor in the classical music market. This is a premiere that will prompt the other players on the market to have to stand up and take notice: It has set completely different standards compared with the universalistic classical mass productions of yellow, red, or different-colored labels. This means this disk, which as a vinyl is to be played at a sound-stimulating 45 rpm, was recorded with as few compromises

as possible and, precisely for that reason, also sounds incredible. The "recording studio" Qvortrup's team used was the chapel of the Pomfret School in Connecticut, United States, a building known for its exceptional acoustics. Digital haters should turn away at this point as Bélanger's stringed wizardry was retained for all eternity using Macbook Pro, Logic Pro X, and Apogee Ensemble Thunderbolt Audio Interface. I will spare FIDELITY readers the list of microphones used as this can be consulted on the lovingly designed album cover of *Pure Cello*. This level of editorial seriousness is urgently needed for other such productions.

The repertoire is as ambitious as the trappings: Bélanger serves up some excerpts from cello pieces by Gaspar Cassadó i Moreu, Johann Sebastian Bach, Max Reger, and Friedrich Wilhelm Ludwig Grützmacher on this musical masterpiece. The *elite études*, horrendously difficult demonstrations of skill that a good 75% of cellists would mercilessly fail at, have been recorded for vinyl by Bélanger for the first time. On the LP, everything sounds extremely present and immediate—all of which can't fail to put you in a never-ending good mood! ■

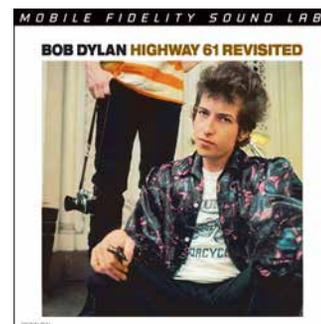
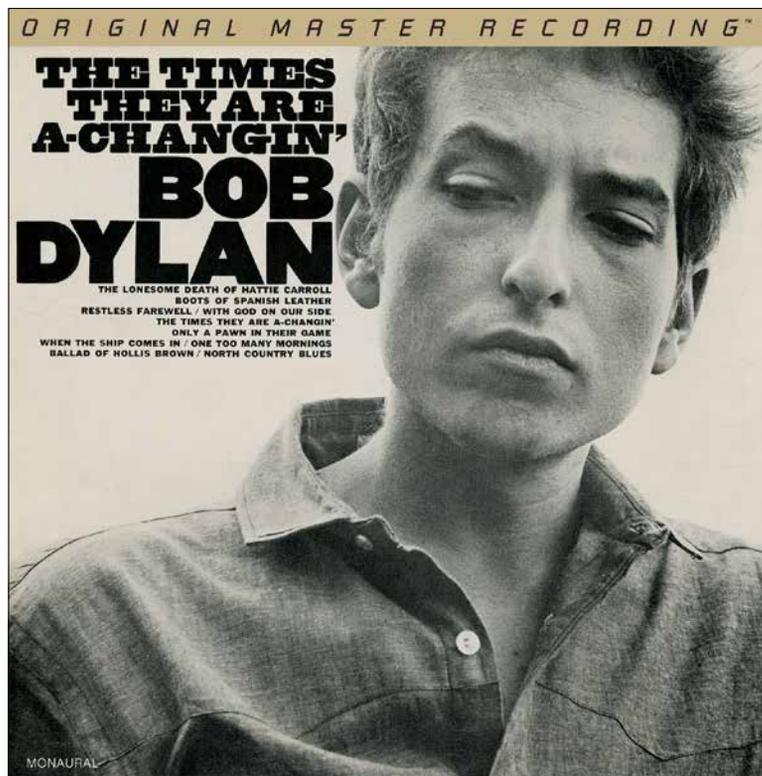
Hans von Draminski

# DYLAN—ONE DIMENSIONAL?

NOTHING SEEMS TO PASS UP THIS OLD POET: FIRST THE NOBEL PRIZE IN LITERATURE, THEN MAGNIFICENT RE-ISSUES OF HIS OLD ALBUMS BY MFSL. AND TO TOP IT ALL OFF, THEY APPEAR IN THE NEW, HIP, AND IN VOGUE SOUND: MONO. CAN THE BOB DYLAN OF THE PROTEST YEARS SURVIVE THAT? AND HOW DOES DYLAN THE ROCK STAR HANDLE ALL THIS?

Four albums portraying the remarkably short time frame between Dylan's initial career and the pinnacle of his second and beyond. Retrospectively, they also form a chronologically compressed key to the widely varied aspects of his convoluted oeuvre. When *Bringing It All Back Home* was released in 1965, many fans had still not actually quite grasped how times had changed. They had not

interpreted the title of his previous album *The Times They Are a-Changin'* freely enough: They thought it only applied to others. But Dylan greeted them at the Newport Folk Festival with a weird and distortedly rocking "Maggie's Farm," at which point the world came crashing down for the folk scene that featured the likes of Pete Seeger and Joan Baez. Legend has it that Seeger would have even taken an ax to Dylan's ►



**Bob Dylan**

- *The Times They Are a-Changin'*
- *Bringing It All Back Home*
- *Highway 61 Revisited*
- *John Wesley Harding*

Label: MFSL  
 Format: Double LP  
 (180 g, 45 rpm, price approximately €70)  
[www.sievekingsound.de](http://www.sievekingsound.de)

microphone cable if one had been available. Dylan's move was seen as an act of treason and he was met with calls of "Judas." It was the perfect scandal. *Bringing It All Back Home* was a two-part album and thus signaled the birth of the "electric" Dylan. On side one, he alienated his faithful fans with the frenzied "Subterranean Homesick Blues"; and on side two, he embraced those who had stuck with him with the formal, traditional, textual, and lyrical yet enigmatic "Mr. Tambourine Man" (which would become the Byrds' first single just a couple of weeks later) and with two of the best songs he has ever recorded: "It's Alright Ma (I'm Only Bleeding)" and "It's All Over Now, Baby Blue." Within the context of his entire back catalog of recordings, however, *Bringing It All Back Home* isn't one of Dylan's strongest albums. But in terms of mono pressings, it's possibly the most interesting for us audiophiles because it represents the interface between the "acoustic" Dylan and the "electric" Dylan.

*The Times They Are a-Changin'* exudes a wonderful sense of intimacy in the original mono mix, and a mono cartridge is truly worth its weight in gold when it comes to Dylan and his wandering guitar: You get a three-dimensional impression as if you were in an amorphous bubble instead of located along the rather narrow band you'd expect to get when you use a conventional stereo pickup. Without much lead time, Ortofon provided me with an MC Quintet Mono, which has made an unmistakably clear difference with various stereo pressings I own. The harmonica in "The Lonesome Death Of Hattie Carroll," for example, quietly creeps

up on you when using the immaculate MFSL mono pressing. It traces a featherlight, sad melody throughout the song that would just sound jarring and completely detached from the context if played on an older stereo LP.

The subsequent stereoization has not compromised *Highway 61 Revisited*, though. This album would not only represent the transition to rock 'n' roll, it would also present Dylan as a completely new songwriter,—one who was clearly not ready to relinquish the American blues to the British imitators popular at the time without putting up a good fight. Especially those who only drew from America's black heritage, someone like Keith Richards presumably, probably thought Hank Williams was a whiskey brand. For music historians, the new mono version on the heavy, 45-rpm double vinyl is a must-have. What's more, the immaculate pressing sounds sublime. Nevertheless, its superiority compared to the broader, wilder, and more jittery stereo mix is not intrinsic, just a question of taste.

After *Blonde On Blonde*, the milestone album where Dylan managed to let his wings fully unfold, he released two country albums. Like *Bringing It All Back Home*, *John Wesley Harding* represents a kind of interim stage. Although it contained the Dylan classic "All Along the Watchtower," it didn't achieve the consistency of *Nashville Skyline*, the album released barely two years later. However, the MFSL version thankfully allows you to rediscover this album, which tends to get overlooked. "I'll Be Your Baby Tonight" alone is worth the hefty purchase price. ■ Helmut Hack



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bFly-Audio / Reinhold Schäffer

# IT'S THE MINOR DETAILS THAT COUNT...

By: Bernhard Galler. Photos: bFly-Audio, Ingo Schulz









...that's what a wealthy customer of Reinhold Schäffer, founder and owner of bFly-audio by profession, also realized. This particular high-end buff, both well-heeled and skeptical in equal measure, doubted that

absorbers priced at 100 Euros "are any good". He nevertheless incorporated some on a trial basis in his system, worth a substantial five-figure sum in Euros, only to finally have his doubts confirmed and criticize

the manufacturer, asking "why they didn't include decent absorbers in their systems in the first place?" High-end products are often paraphrased as having, for example, "superb dynamics" or "great auditory ►



spaciousness” or similar – thoroughly inadequate descriptions in Schäffer’s opinion. “Natural sound” is the attribute of choice and the sound ideal he is striving for. A butterfly in the company logo symbolizes this easy naturalness, the company’s name also refers to a butterfly, albeit in abbreviated form. In his audiophile approach,

the human voice always serves as personal reference for Reinhard Schäffer. Even if musical instruments have their own particular sound, their own inherent frequency range and tonal structure, the human voice possesses a magic of its own, an X-factor that makes it all the more of a challenge to reproduce it as authentically and as

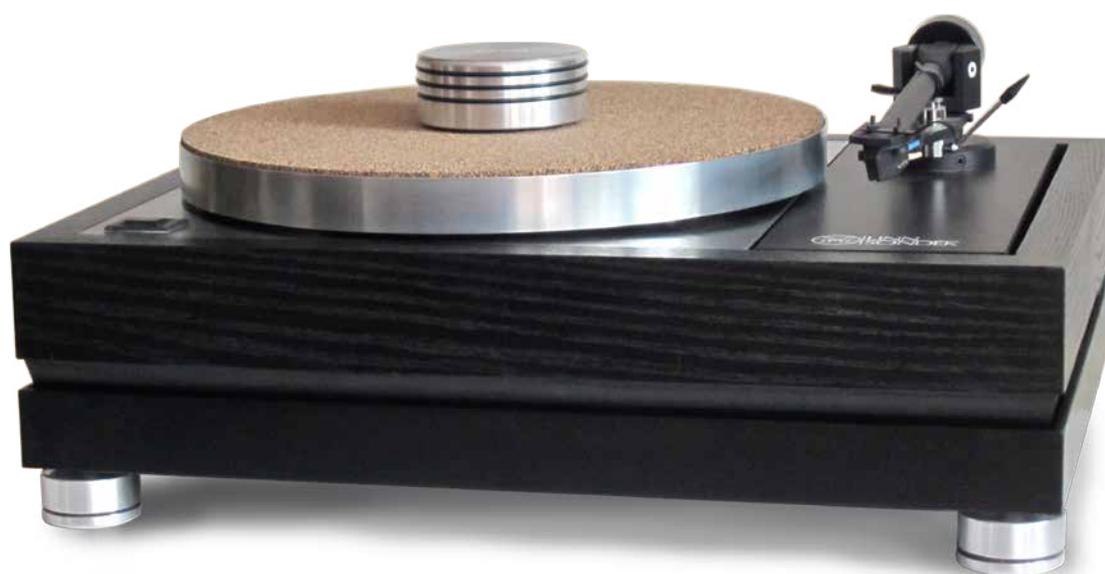
naturally as possible. An attitude that I can wholeheartedly relate to. His route to the high-end segment was a long one and in some respects one could see early on where he was headed. Graduate computer scientist Schäffer (economics major) managed a live-music bar from 1981 to 1986 and was its resident DJ at the ▶



same time. During this period his passion for analog technology in general and record players in particular germinated; both Thorens models, the TD 320 and the TD 160, appealed to him most. An absorber base specially designed for Thorens record players was therefore bFly-audio's debut product.

However it took a few more years before he turned his high-end passion into his profession. For starters all his hi-fi friends were thrilled to be asked to act as hi-fi accessory guinea pigs. It was not until 2009, when Schäffer set up his business, that this passion became a profession.

It soon became apparent that absorbers were his core business. Reinhold Schäffer came up with something called MLA technology for this small, sometimes unobtrusive and seriously underestimated accessory. MLA stands for Multi-Layer Adjustment. bFly-audio's absorbers consist of several ▶



matching layers made of different materials. Each individual layer – cork, rubber and Sorbothane are used – filters different frequency ranges, and so as a whole is more effective than an absorber using only one single material. The MLA absorbers are available in a choice of different versions and sizes to match

different equipment weights. With the aid of the company's currently most exciting product, STAGE absorber feet, Schäffer has managed to find a balanced compromise between coupling and decoupling: The hemispherical coupling conductor is attached to the bottom of the piece of hi-fi equipment and rests

on the circular add-on detail on the cylindrical absorber body that is responsible for decoupling – an ingeniously simple solution. Does he have to worry about plagiarism, also in relation to the MLA technology, which is a very recent innovation? “No”, Reinhold Schäffer explains, “if somebody wanted to ▶



imitate it, starting from scratch, he would have to go down the same laborious route I went down. If a well-known manufacturer were to pinch the idea, it would adopt a completely different pricing policy, so in that respect I am not fazed.” Patenting his own ideas is also only of limited benefit. “Patents,

even global ones, are time-limited. Patents have usually expired by the time products have proved to be commercial successes.”

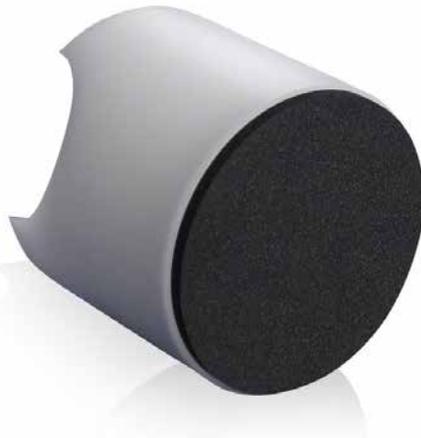
Reinhold Schäffer, as a private individual, is tolerant as far as musical taste is concerned. In response to my question about which music “is a complete

no-go”, came the following swift answer: “I don’t put music like that on in the first place.” And then after pausing for thought: “Well now, crooners and anything overly frothy or shallow ... Heino is not my bag – although he is only doing his best.” When Schäffer is not actually preoccupied with ▶



**Volume up or down?** *Down.*  
**Analog or digital?** *Analog.*  
**Tube or transistor?** *Tube.*  
**Vinyl or download?** *Vinyl.*  
**Cross-country run or gym?** *Gym.*  
**Trends or tradition?** *Trends.*  
**Tea or coffee?** *Coffee.*  
**Salad or steak?** *Steak.*  
**Wine or beer?** *Wine.*  
**Mountains or the sea?** *Mountains.*  
**Book or screen?** *Book.*  
**Jazz club or opera house?** *Jazz club.*  
**Bach or Beatles?** *Bach.*  
**Wagner or Wacken?** *Wacken.*  
**Stand-by or plug out?** *Plug out.*

Volume up or down? A very quick interview with Reinhold Schäffer where we wanted him to respond as fast as possible.



generating new ideas, the bon viveur in him comes out: he loves good food and going for a drive in the convertible. With a headcount of just three, bFly-audio supplies its dealer network in the important German-speaking and French markets, in line with the company's philosophy of "affordably priced high-end products, made in Germany". Alongside the core-skill absorbers, the

product range also includes record player accessories, absorber bases, fine-tuning details for Thorens and Linn turntables as well as the widely acclaimed Perla Musica tube phono amp. Reinhold Schäffer is understandably keeping his future sales strategy cards very close to his chest, yet one thing he does reveal: "I am eyeing up Asia..." ■

This is a reprint from "WHO IS WHO IN HIGH FIDELITY"—Vol. 1, 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.

<http://www.bfly-audio.com>

# HARMONY DESIGN D90 AND A90

By Hans von Draminski. Photos: Ingo Schulz



# Harmony Design D90 and A90



Little black boxes  
with a large sound  
spectrum





———Unspectacular, elegant—and carrying a very refined, subtle sound. If the pedigree of this DAC plus power amplifier combo were tied to an English-speaking country, that very handy word “sophisticated” would be sure to appear somewhere. However, the D90 digital-to-analog converter and the A90 stereo power amplifier hail from Scandinavia, more specifically from the Swedish high-end manufacturer Harmony Design. But the usual clichés that apply to certain Swedish brands certainly do not apply to these handy little minisized devices. It would be a waste of your time to thumb through the catalog of the all-too-well-known Swedish furniture company to try and find a product as solid and

high quality as these little melodic sound generators. Front panels made from brushed aluminum with softly rounded corners, cooling fins sans sharp edges, minimal controls, and a lack of unnecessary luxuries such as a remote control are proof that an exceptionally puristic and coherent design rests on the slim base. For this reason, the DAC fills every millimeter of the small surface area with a comprehensive array of digital connection options and can work with all possible sources—, from a laptop that sends hi-res files over USB to a CD drive. And because Harmony Design—the name says it all—is aimed more at people who simply enjoy listening to ▶



music for pleasure rather than analysts and nitpickers, the timbre of this little converter always stays on the warm and tonal side of the music without ever withholding details or overemphasizing individual sections of the frequency spectrum. Without applying any sound cosmetics, the Harmony Design D90 objectively passes on any strengths or weaknesses of the source devices and “software” without muddying the waters or excessively clearing anything up.

The perfect partner to the D90 is the A90 power amplifier, which has been part of the Harmony Design product range for somewhat longer than the DAC. As crystal clear as spring water, the A90’s contoured low-frequency range

is as enjoyable as its nicely crafted high frequencies and its solid mid-frequency range. Incidentally, this is also true of analog sources and conventional preamplifiers. The combo allows voices to be depicted in terms of their volume and character, orchestras in terms of their breadth and depth, and spaces in terms of their individual signature.

The DAC is docked to the power amplifier by means of a balanced XLR cable. Upgrades to the connection are immediately audible, even if the wires unfortunately cost significantly more than the devices they connect. Being much more than they appear to be is a feat the D90 and A90 manage to pull off exceptionally ▶

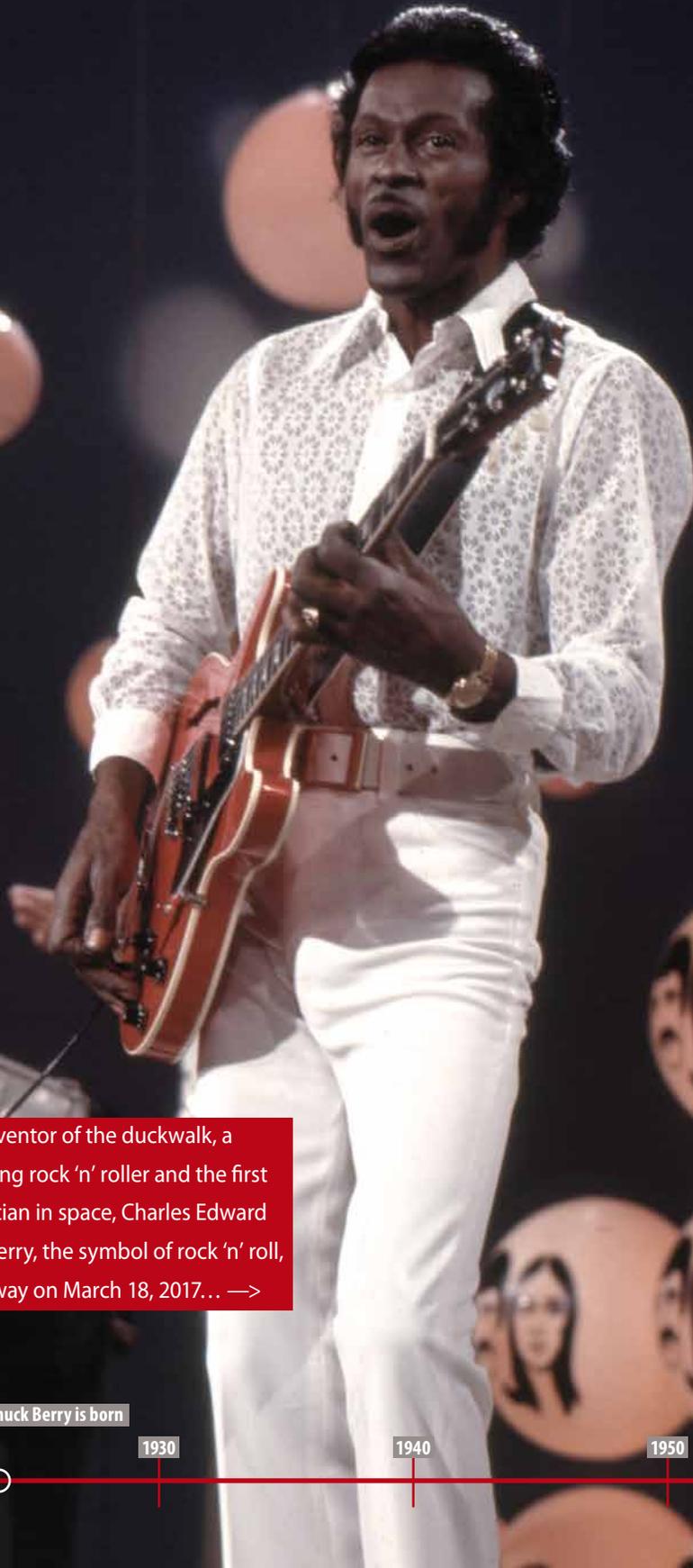


well. Even when connected to the brilliant Wilson Audio Yvette loudspeakers, which are in a completely different league, these little black boxes from Sweden make a fantastic impression—and you would have to replace them with significantly more expensive electronic devices to achieve a markedly better sound. On the other hand, both the DAC and the power amplifier will reward you for any improvements you make to the peripheral equipment used, including to sound sources and loudspeakers. Anyone who relegates the two Swedes to office work because of the devices' compact dimensions and extensive connectivity would be guilty of seriously underutilizing them. ■

**Harmony Design D90 pre-DAC and A90 stereo power amplifier | Warranty period: five years | Prices: €1,690 (D90), €2,250 (A90)**

**Applied Acoustics, Uwe Klose | Brandensteinweg 6 | 13595 Berlin | Germany | Telephone +49 30 4614874 | [www.applied-acoustics.de](http://www.applied-acoustics.de)**

photo: Chuck, 1973, Sonny & Cher Show



The inventor of the duckwalk, a hardworking rock 'n' roller and the first pop musician in space, Charles Edward Anderson Berry, the symbol of rock 'n' roll, passed away on March 18, 2017... —>

Oct. 18, 1926: Chuck Berry is born

1920

1930

1940

1950

1960

1970

1964: The Rolling Stones – “Carol”

1963: The Beatles – “Roll Over Beethoven”

1970: Jimi Hendrix – “Johnny B. Goode”

photo: Chuck, 1972, Beat-Club

—>...That his groundbreaking work wasn't adequately compensated during his lifetime sadly belongs to the standard. But if you ask any (white) musicians who shaped 20th century rock music who their influences were, they all bring up one name: "Chuck."



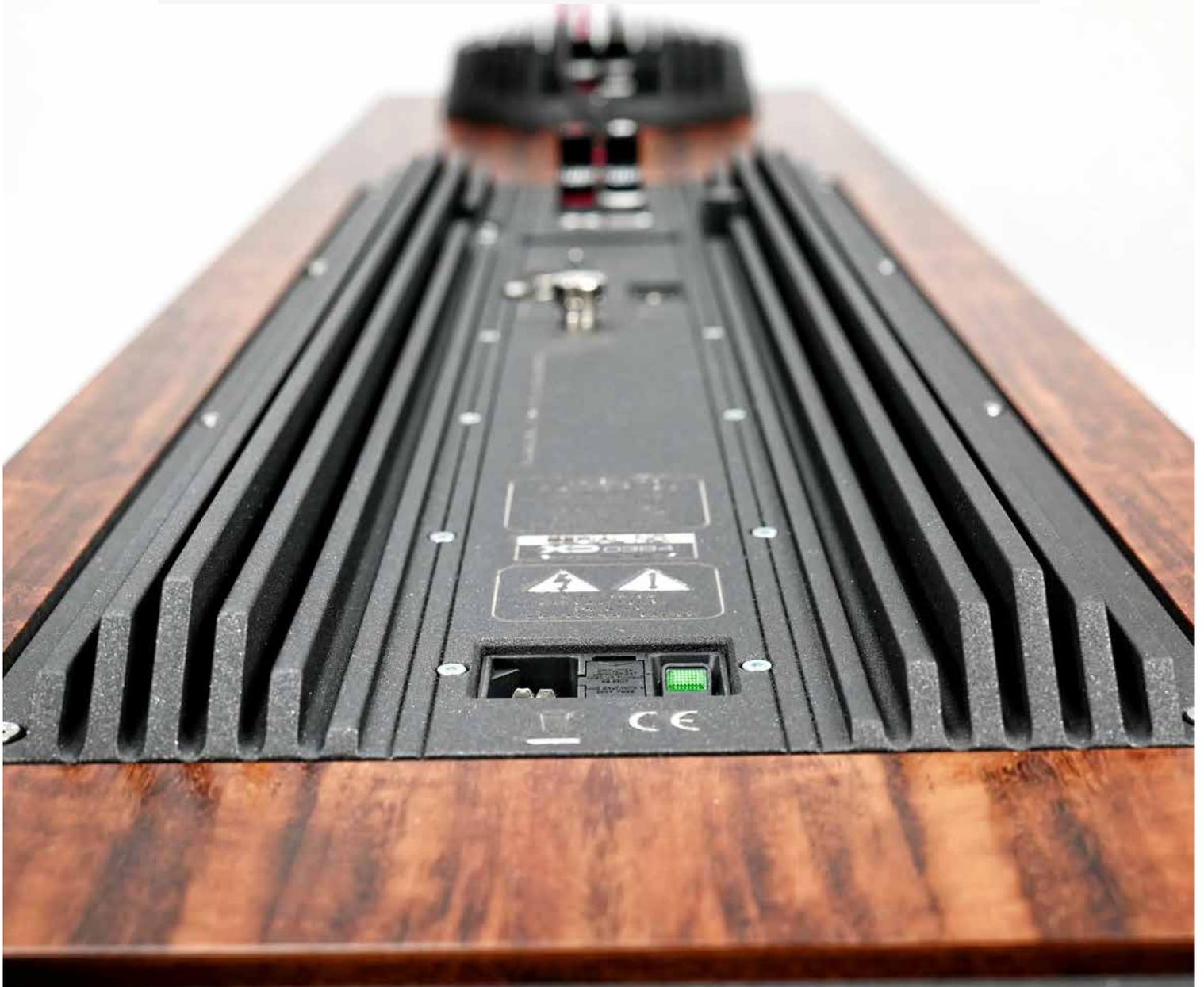
1971: David Bowie – "Round and Round"	1975: AC/DC – "School Days"	1979: Sex Pistols – "Johnny B. Goode"	1988: Judas Priest – "Johnny B. Goode"
1973: The Band – "Back to Memphis"	1977: Emmylou Harris – "(You Never Can Tell) C'est La Vie"	1983: Peter Tosh – "Johnny B. Goode"	1991: Motörhead – "Let It Rock"
March 18, 2017: Chuck Berry passes away			

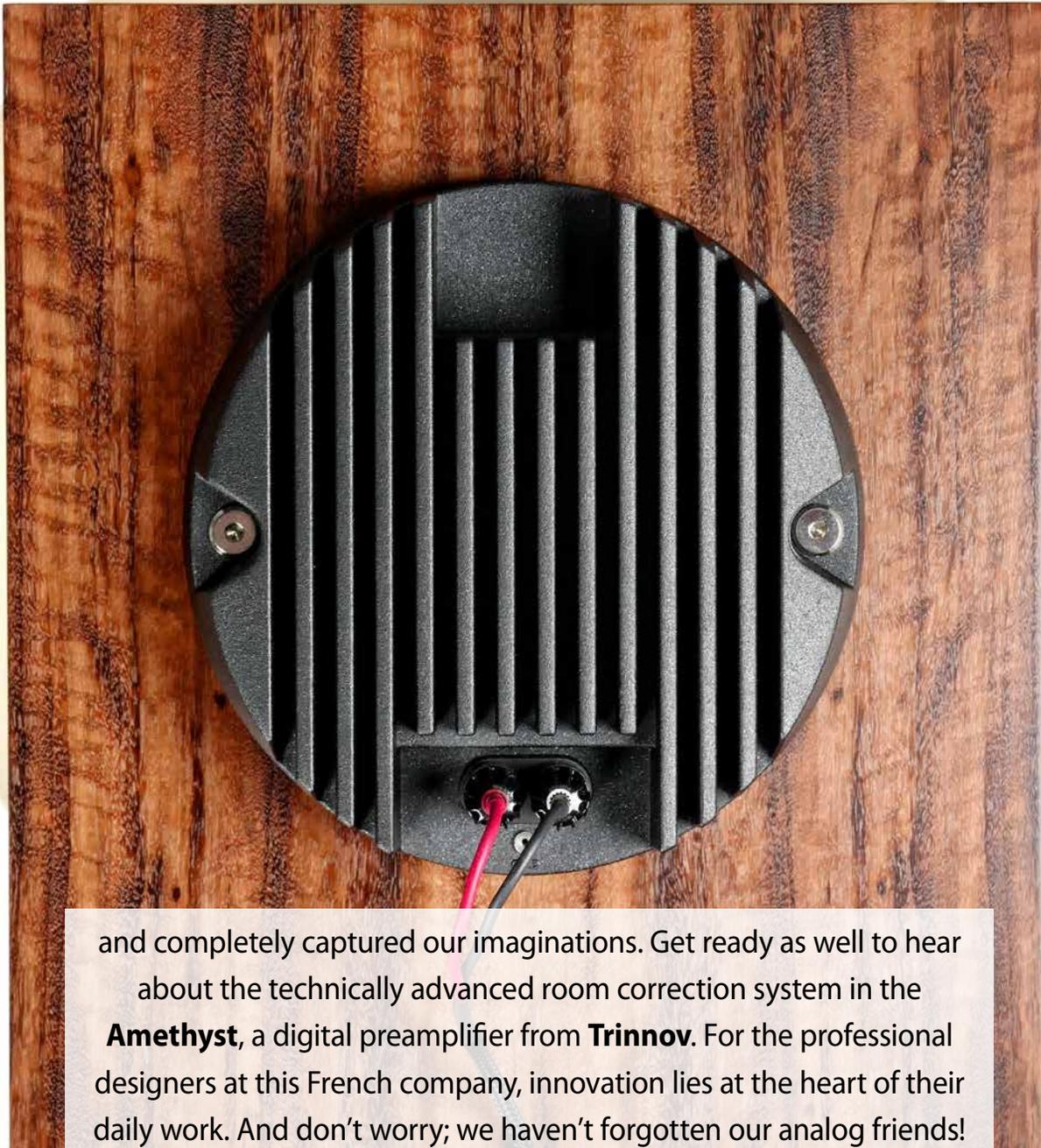
# PREVIEW

FIDELITY international No. 07

Dear cosmopolitan readers of the hi-fi universe,

Our free international version of FIDELITY, the well-respected German audiophile magazine, has secured a strong position in the high-end hi-fi world, and we're very excited about our steadily growing readership. The focus on carefully selected test devices and lovingly written expert articles will ensure this success story continues. Stay tuned for the **Avantgarde Acoustics Uno XD**: This set of horn speakers has cast a spell over us ▶





and completely captured our imaginations. Get ready as well to hear about the technically advanced room correction system in the **Amethyst**, a digital preamplifier from **Trinnov**. For the professional designers at this French company, innovation lies at the heart of their daily work. And don't worry; we haven't forgotten our analog friends!

The magazine has a special highlight for you: We examine the **ViV Laboratory Rigid Float Ha**, a tonearm that, in principle, shouldn't even work. But it does, and in the process it really lets those sounds rip.

We're confident that FIDELITY international No. 7 will again exceed your highest expectations. Go ahead now—let yourself get excited!



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# THE END

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