

CLASSIC COOL FROM SONUS FABER

hi-fi+

REPRODUCING THE RECORDED ARTS SEPTEMBER 2019 • 175
www.hifiplus.com



ISSN 1465-5950
9 771465 595042



NAIM THAT TUNE!

SUPERNAIT 3 – A MUSICAL MASTERPIECE



WIN!
1 MORE AND
KANTO PRODUCTS
WORTH ££££



GOLD NOTE'S IS-1000 DELUXE AMP
HI-TECH STREAMING MEETS ITALIAN STYLE



HIFIMAN JADE II

KUDOS TITAN 505

YG ACOUSTICS HAILEY 2.2

VITUS MASTERPIECE DAC



KIND OF BLUE AUDIOQUEST'S NEW DRAGONFLY COBALT



A Legend in the Making

Vantage™

New Product

Vantage™ is a compact 3-way loudspeaker incorporating 7 key technologies, along with the same materials & precision production methods utilised in the flagship, Sonja™ XV.

This results in a transducer which widens the opportunity for discerning music lovers to enjoy the sonic hallmarks of YG Acoustics™.

Distributed in the UK by



For your nearest UK dealer please
call Padood on +44 (0) 1223 653199
or visit www.padood.com



Carmel™ 2
Pure Clarity



Hailey™ 2 Series
Pure Harmony



Sonja™ 2 Series
Pure Seduction



Sonja™ XV Series
Pure Seduction

EDITOR

Alan Sircom
Email: editor@hifiplus.com

CONTRIBUTORS THIS ISSUE INCLUDE:

Dennis D Davis, Steve Dickinson,
Sean Hannam, Jimmy Hughes,
Jason Kennedy, Simon Lucas,
Chris Martens

GRAPHIC DESIGNER

Jenny Watson
Fonthill Creative, Salisbury

ADVERTISING MANAGER

Tom Hackforth
Tel: +44 (0)1425 655255
Email: tom@hifiplus.com

PUBLISHER

Pete Collingwood-Trewin
Tel: +44 (0)1425 655699
Email: pete@hifiplus.com

EDITORIAL DIRECTOR

Chris Martens
Tel: +1 (512) 419-1513
Email: cmartens@nextscreen.com

THE EDITORIAL OFFICE CAN BE CONTACTED AT:

Hi-Fi+ Editorial
Absolute Multimedia (UK) Ltd
Unit 3, Sandeath Industrial Estate,
Sandeath, Hampshire
SP6 1PA
United Kingdom
Tel: +44 (0)1425 655255
URL: hifiplus.com

Absolute Multimedia (UK) Ltd is a
subsidiary of TMM Holdings LLC,
2500 McHale Court, Suite 100
Austin, TX 78758, USA

CHAIRMAN AND CEO

Thomas B. Martin, Jr.

All Rights Reserved.

Not one word of Hi-Fi+ may be
reproduced without the written consent
of the Editor. We are perfectly happy
to co-operate, but we don't want
quotations to appear out of context.

Printed By
Pensord Press, Caerphilly

Hi-Fi+ is published twelve times a
year by: Absolute Multimedia (UK) Ltd

ISSN 1465 5950



hifiplus.com

editorial

The political world is awash with populist politicians railing against globalisation, but when it comes to audio, the notion of global brands dominating the audio scene is almost nothing more than a fantasy. Back in the 1950s and 1960s, good audio brands rarely ventured far outside their country of origin; those days are gone, but the notion of global brands dominating the world-wide market is absurd. We still listen parochially; local music for local people.

This makes it a struggle for a magazine with a genuine international outlook to avoid looking hopelessly partisan. There are a few brands slightly more universal than others; the Naim Supernait 3 on the cover this month comes from a UK brand with a global reach, but even here Naim doesn't have the same 'reach' as a Mercedes Benz.

Having opened the hackneyed 'car analogy' door... most audio brands seem to be closer to something like Peugeot. Very successful in their homeland, successful in a few countries, well-known in others, and either completely unavailable or virtually ignored in many other places.

This gives rise to the notion that audio performance varies from country to country, and that different brands better fit the musical tastes of different countries. I'm not convinced by this idea, however. I suspect the reason is simply that there is so much good audio out there, we can afford to be more parochial in outlook. Having heard some of the finest audio not sold in the UK, Europe, or America, the performance of such locally-grown audio is frequently of similar calibre to that of famous-name brands known closer to home.

The big difference is the best of the best have learned how to offer a product that appeals to a wider audience than just those within arm's reach... and often learned how to market those products successfully on an international stage. We, as enthusiasts, are often tempted to dismiss both as irrelevant, but they are the secrets to success for brands... and they both combine to allow us to keep buying the products we want from the brands we like.

If we only think locally, we fail!

Hi-Fi+ would like to congratulate David Flynn who wins a pair of the excellent Meze Empyrean headphones, and to Paul Emmerson who wins an outstanding Lumin D2 music server. Well done!

Errata: In our review of the Funk Firm turntable upgrades, we identified the FXR arm incorrectly. We also compared the P3+Rage 1 to a Rega P6+808 arm. Our apologies for any inconvenience caused.

Alan Sircom
editor@hifiplus.com

ISSUE 176 ON SALE OCT 3, 2019 (UK), OCT 31, 2019 (US)



FUTURE DREAM: Limited edition power, speaker, interconnect and phono cables with Crystal Cable's new and unique **hybrid technology**.



To find out more about Crystal Cable's products and special activities during this anniversary year visit:
www.crystalcable.com and www.crystalcable.com/futuredreamfundraising



Distributed in the UK and Ireland by Padood
www.padood.com | info@padood.com
+44 (0)1223 653199 | 20 Station Road, Cambridge CB1 2JD

contents ISSUE 175

EQUIPMENT+

COMMENT

6 **INCOMING!**
Your views on all things audio

10 **THE NORTH WEST AUDIO SHOW 2019**
The UK's friendliest audio event!

MUSIC

91 **MIKE GALE**
Hampshire-based multi-instrumentalist and singer-songwriter

99 **CONTEMPORARY AND AUDIOPHILE MUSIC**

+
84 **COMPETITION!**
Win! A Kanto TUK Bluetooth speaker worth £749!

86 **SUBSCRIPTIONS**

97 **ADVERTISER INDEX**

103 **COMPETITION!**
Win! One of three pairs of 1More Triple Driver BT earphones worth £109.99!

120 **NEXT MONTH**
Find out what's happening next month!

REVIEWS

15 **NAIM AUDIO SUPERNAIT 3**
integrated amplifier

25 **CH PRECISION L1 AND X1**
dual mono preamplifier and power supplies

35 **YG ACOUSTICS HAILEY 2.2**
floorstanding loudspeaker

43 **SONUS FABER ELECTA AMATOR III**
stand-mount loudspeaker

49 **VITUS MP-201 MASTERPIECE**
digital to analogue converter

55 **KUDOS TITAN 505**
stand-mount loudspeaker

61 **MELCO N100**
networked music server

67 **GOLD NOTE IS-1000**
integrated amplifier

73 **KUZMA STABI S/4POINT 9/CAR-40**
turntable, arm, and cartridge

79 **STACK AUDIO LINK**
USB streaming bridge

85 **SHUNYATA RESEARCH ALPHA USB**
USB cable

105 **Hi-Fi+’s Ultimate Headphone Guide**

107 Incoming: We answer your personal audio questions

110 HiFiMAN Jade II electrostatic headphone system

114 Pangea Audio headphone hanger

116 AudioQuest DragonFly Cobalt portable headphone amplifier/ DAC

118 Cleer FLOW noise-cancelling, Bluetooth headphones

North West Audio Show

**Saturday 20th & Sunday 21st
June 2020**

**The very best in audio set in
the wonderful surroundings
of De Vere Cranage Estate,
Holmes Chapel, Cheshire**

Free Entry & Free Parking

**Over 150 brands on demonstration
Live Performance
Interesting Lectures
Free Mobile App**

**For more information and to
secure your free ticket
please visit**



www.audioshow.co.uk



Hifi Pig
Magazine
Media Partner

Please send your letters to Hi-Fi+, Unit 3, Sandleheath Industrial Estate, Sandleheath, Hampshire, SP6 1PA, United Kingdom.
Or email them to editor@hifiplus.com

incoming!

in association with **audioquest**

LETTER OF THE MONTH WINS A DRAGONFLY BLACK

Both AudioQuest and *Hi-Fi+* are passionate about music and the sound it makes. We know what makes a good audio experience, and we know what makes it better. Most modern audio equipment is good, but with the right attitude, right advice, and the right components, the sound it delivers can move from 'good' to 'great' to 'fantastic'. AudioQuest has to deal with a lot of queries regarding audio systems, because almost everything in an audio system is connected with a cable. The company has amassed a wealth of information on a range of topics in audio, both in general terms and with a team comprising keen, specialist audio experts willing to impart their expertise.

Which is why we've teamed up with the good folks at AudioQuest to award the letter of the month a free AudioQuest Dragonfly Black headphone amp/DAC.

Full stream ahead

I have decided to finally take the plunge and go for music streaming. I have about 250 CDs and I want to use those as the base for my music, although I will add one of the online services soon. I currently use a Quad 66 CD player and preamp with a 606 power amplifier playing into original Harbeth HL-P3 loudspeakers and I listen to mostly classical music. I would intend to keep the electronics and add streaming to the system. What do you recommend in terms of hardware and software?

Derek Carter, via email

I'll be honest. Streaming classical music is often something of a pain on two counts. The first is 'metadata'; the information (such as title, artist, composer, conductor, etc) about a piece of music. Classical music metadata is often a mess, and it's not that uncommon for an opera to be refilled as a dozen different mini operas, depending on which singer is performing on a track. The other problem is 'gapless playback'; while your CD player will move seamlessly from track to track without a break, not all file-based systems do the same and you might hear an abrupt silence between tracks that doesn't exist in the music or recording. Gapless playback is not a part of the network streaming standard, although many (including AURALiC, Linn, Naim) have found a way around this problem.

This shouldn't be taken as too negative, but just an honest assessment of the present state of the classical art, and why many classical enthusiasts still remain firmly wedded to their CD collection. There is some light at the end of the tunnel because online music service Primephonic is designed to address the needs of classical listeners.

Robert Hay – AudioQuest



Don't count out hi-res yet!

I read Julian Ashbourne's article "The Truth About High-Resolution Audio" (Issue 174, August, 2019) with great interest and while his comments about frequency response of high sampling rate audio vs. human hearing are certainly well taken, I think he's missing the point. Certainly 48kHz is definitely a high enough sample rate (giving a frequency response flat to 24kHz), what is important about high sampling rates (above 48kHz) is that it moves the Nyquist frequency far away from the passband of human hearing acuity, eliminating the need for steep filters above the highest frequency being recorded.

However, what is really important in high-res audio is not so much the sampling rate as is the bit depth. 16-bit (CD) audio is a juggling act for the recording engineer. He must record at a high enough level to keep low level material out of the 'mud' where it only

Meet our new NAITs – with added love for vinyl



The third generation of the legendary Naim Audio NAIT integrated amplifiers is here, building on the success of its predecessors with extensive upgrades, all in service of the music.

As well as a significant step up in performance, the **NAIT XS 3** and **SUPERNAIT 3** both now offer built-in phono stages – making them perfect partners for turntables, as well as for streamers,

CD players, or just about any other music source you want to enjoy with the signature Naim sound.

Each component within the amplifiers has been scrutinised to identify and implement areas of improvement, from optimising transistors to doubling the speed of the voltage gain stage.

The result? The best-sounding integrated

amps Naim has ever produced, delivering greater pace and intimacy, whether they are driving a pair of speakers or headphones.

Handmade here in England, **SUPERNAIT 3** and **NAIT XS 3** are ready to power your favourite music – whatever format it is on – at specialist Naim retailers worldwide.

naimaudio.com

- toggles the one or two Least Significant Bits (LSBs) where distortion and noise figures are their poorest (necessitating the insertion of a small amount of low-level noise or 'dither' to keep the signal out of the mud). This manages the other end of the dynamic range to make sure that the highest level sounds don't exceed the use of more than 16-bits, which the system does not have and which will result in the most god-awful noise if exceeded!

Using 24-bit or even 32-bit depth recording gives the recording engineers a much larger 'container' to encompass the performance being recorded. Levels can be chosen that keep the quietest passages (and hall ambience, if present) out of the LSB territory while allowing an extra four bits or so of headroom on the top of the dynamic range envelope to avoid over modulating without the need to ride gain, or use compression or limiting to control modulation. In my opinion, these are the real advantages of high-resolution audio.

George Graves, via email

I agree in part, and there is much to the idea that higher-resolution gives the recording engineer a larger space to work with. However, a larger canvas doesn't automatically result in a better picture.

One of the problems in digital audio – and a problem that cuts far deeper than the bit depth or the sampling frequency – is that engineers have (often through demands made by artists and record companies) pushed files almost to the point of digital clipping, compressing the end result in order to make it appear louder. There are years of lost and unlistenable recordings because the engineer has wound up using just 3dB of dynamic range. – Ed

High-resolution audio sounds better...

I read Julian Ashbourn's article in issue 174 "The Truth About High-Resolution Audio" with interest. I've just listened to Joni Mitchell's live album *Shadows And Light* [Tidal MQA Studio, 192.0 kHz] through electronics from MOON by Simaudio (340i amp, 280D MiND 2) and Focal's Electra Be 1008 speakers. It sounded so very, very good that I was prompted to write this.

Julian's article was interesting; but ears can be receiving, and deceiving...

"God must be a boogie man".

Gary Saunders, via email

My personal take is a pragmatic one. Good music is enjoyable regardless of recording quality, but having a recording as good as the music itself is icing on the cake. If you have the option of playing that good piece of well-recorded music whereby it sounds great on one format and fantastic on another... go with the format that sounds best. There are scientific and intellectual arguments about different formats, but if one sounds better than another to you, go for it! – Ed

...or does it?

I read Julian Ashbourn's feature "The Truth About High-Resolution Audio" (issue 174) with great interest, and I am glad that finally someone has the balls to say what I think many of us feel; that high-resolution audio is yet another excuse for the record business to sell us the same music, and most of the hype about hi-res is just 'The Emperor's New Clothes'.

I have watched the whole sorry debate unfold over several years, both in print and especially on audio forums. I find it ridiculous that people who once gave up on LP and told everyone how much better CD was, then rediscovered how good vinyl is, and are now extolling the virtues of insanely large DSD files and MQA, in yet another round of telling the world how important they are. I have a large collection of CDs that I built over the years and feel no pressing need to change them for the sake of change.

Andy Handley, via email

While there's a lot to be said for keeping a collection, don't discount the possibility of better sound quality from newer, more high-resolution formats. Or, for that matter, older formats; both LP and recently reel-to-reel have made a significant comeback, not least because they can sound damn fine. I tend to look at this on a per-recording basis, rather than take arbitrary decisions based on file-size or choice of three-letter acronym. Where possible, though, I try to avoid multiple versions of the same recording unless they are recordings that I use for equipment evaluation! – Ed

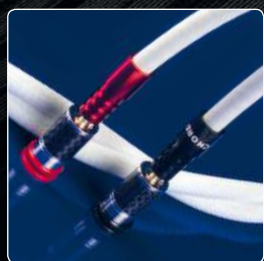
[master]

The definitive version. Ultimate performance, bespoke audiophile cable collection.

Chord Company Signature, Sarum and ChordMusic form the vanguard of our cable ranges. A master collection that features our latest conductor, insulation and connector technology.

High-end audiophile quality at a realistic price and each one built to **your** specific requirements. Book a demonstration and hear the difference for yourself.

Designed and hand-built in England since 1985 by a dedicated team of music-lovers. Arrange a demonstration at your nearest Chord Company retailer. Find out more: www.chord.co.uk



CHORDTM

COMPANY



A Grand Day Out – The North West Audio Show 2019

by Steve Dickinson

This year's North West Audio Show took place at the DeVere Cranage Hall Hotel over the last weekend in June. In the short few years since the inaugural one-day show, this event – a mere 30 minute drive from Manchester city centre and close to the M6 motorway – has grown into a quite substantial, two-day show, and the number of exhibitors, and rooms taken, has risen appreciably year on year. It's turning into one of the key events in the UK's audio calendar, with several exhibitors telling me it is becoming a favourite with them, partly perhaps because the free entry to the event is attracting a different crowd. Here you find lads and dads, or men with wives and partners, rather than the predominantly solo men of a certain age who largely stalk the corridors at other hi-fi shows. This gives the Cranage show a different, somehow less corporate and less constrained vibe. It's a viable family day out, albeit any cheese is likely to be Cheshire, not even Wensleydale.

It's also come to the attention of some seriously high-end exhibitors, brave enough to venture north of Watford and perhaps in search of the disposable income of the denizens of the semi-mythical Northern Powerhouse. Some of the kit on display, and on demonstration, also has a semi-mythical status in hi-fi circles, but here it was real enough. Kondo, for example, were here for the first time, and brought a system worth somewhat more than my house. There is also a huge range of offerings, from small one-man boutique makers to large and influential major distributors, and a few items being shown for the first time. Here's a quick round-up of some of the things that caught my eye, and ear, over the weekend. +

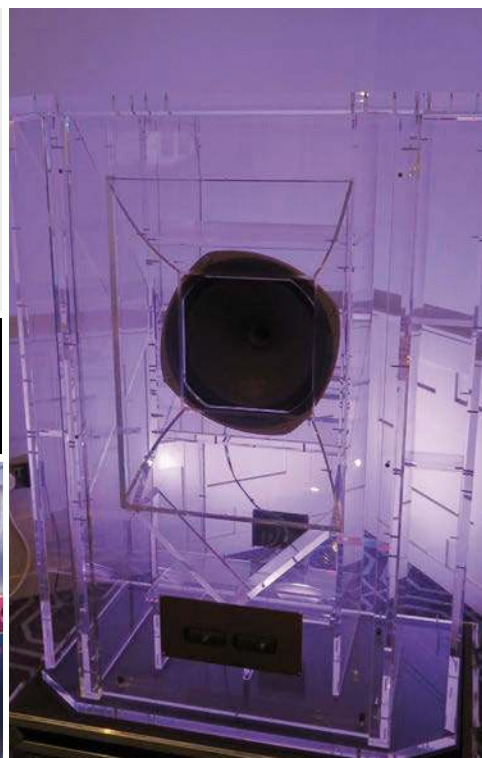




DS Audio's new ION 1 fires a stream of ions at your turntable, so your LPs remain static free while they are playing.



3 Square Audio launched the Ayal stand-mount loudspeaker at the show. With its beautifully built plywood cabinets, first-order crossovers, and time-aligned drivers, what's not to like?



We're not sure if this will remain just a mock-up or end up a real speaker in its own right, but this transparent version of the evergreen Tannoy Westminster Royal was a 'clear' winner!



G Point Audio brought a system featuring the luscious J Sikora Standard turntable and the all new Riviera Labs amplification from Italy, driving the substantial Diapason Dynamis floorstanders.



KEF's fabulous sounding and diminutive LSX loudspeaker and the array of colours in which it can be supplied.



What is it with small loudspeakers and bright colours? Neat Acoustics' ever-popular and tiny Iota has an array of cabinet and grille options. Perhaps small speakers that sound big need bold colours.



DarTZeel on display, but no DarTZeel on demo. There were many products on static display, but few were as distinctive as the quirky-cool gold and scarlet/orange Swiss electronics. Fortunately, you don't have to wait too long for more DarTZeel, as a review is scheduled for next month!



New to the show were Norfolk amplifier brand Ovation, with a sizeable range of amplification products from phono stages through integrated and pre-power options.



Bedroom systems are rarely smaller than this Aeron offering, which might be the world's first dolls house system.



A closeup of the excellent Kondo turntable, which was so good it gave many of its rivals a touch of Ginga-vitis. Cost? No object!



hORNS are not loudspeakers for the introverted, nor for a small room. Here a Symphony in mauve with Audio Detail electronics, courtesy of Malvern Audio Research.



Nu-Nu has been here since the first one-day event, but the new Liquid Music class D amplifiers stole their thunder this year with its £9,995 stereo Model 1, and £15,995 mono Model 2 models.



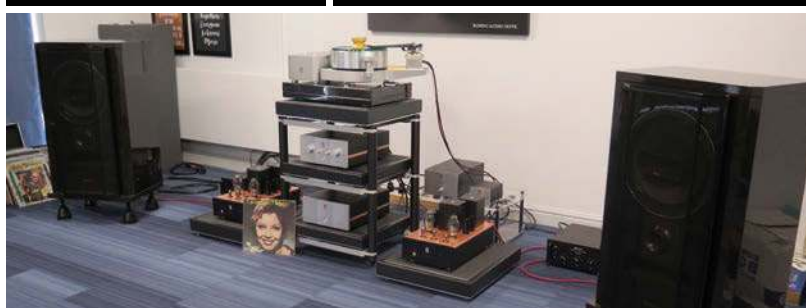
Distributor Absolute Sounds chose to demonstrate the (considerable) mettle of several of its slightly more affordable offerings from EAT, Metronome, Krell, and Sonus faber.



Hegel's 590 and Amphion's Krypton doing great things with the Innuos Statement server and the new AcouPlex supports.



Puresound was showing the Heco Direkt 'Dreiklang', and photographs don't really do justice to the unexpected size of the things. Your £9,500 buys a lot of loudspeaker real-estate.



Huddersfield dealer Brook Audio hosted Kondo, whose main system, courtesy of their new UK distributors Select Audio, consisted of the Ginga turntable, G-1000 preamp and Gakuoh II monoblocs, driving a pair of Maxonic TW1100 mk2 field coil loudspeakers. Seriously impressive and musical system, for the seriously well-heeled.



Tannoy's large Kingdom Royal mk2 loudspeakers need a bit of room to breathe, but at £59,995 a pair they're unlikely to find themselves in a suburban semi-detached.



Thought by many to be one of the better sounding rooms, Nu-Nu Distribution's smaller room featured Quadral loudspeakers.

Connoisseurs of Sound



The High-End Show That Never Ends

Our Central London showroom is constantly kept refreshed with the latest creations from the world's finest audio brands. We are proud to offer a sanctuary for audiophiles to try combinations impossible to find anywhere else in the UK.

Latest additions to the collection

Magico M2 Loudspeakers (USA)

Sonus Faber Electa Amator III Loudspeakers (ITA)

Dan D'Agostino Momentum S250 Stereo Amplifier (USA)

Naim Supernait 3 / Nait XS 3 Integrated Amplifiers (UK)

Audio Research CD9 SE CD Player (USA)



KJ West One

26 New Cavendish St, London W1G 8TY

T: +44 (0)20 7486 8262 E: info@kjwestone.co.uk

kjwestone.co.uk



soultion

nature of sound

Hiend Audio Equipment
made in Switzerland

Distributed by Select Audio
Tel 01900 601954
www.selectaudio.co.uk

Naim Supernait 3 integrated amplifier

by Jason Kennedy



You can chart the rise and fall of source popularity by looking at the variations in the three iterations of the Naim Supernait. The original version of Naim's largest integrated amplifier launched in 2007 with an onboard DAC. The inclusion of a DAC reflected the demand for enthusiasts at the time wanting to upgrade their CD players in what was effectively the second wave of DAC mania. The next iteration, 2013's Supernait 2, was a line-only affair, reflecting a more purist analogue approach where digital and analogue were considered best kept apart. For the Supernait's third coming this evergreen amp has sprouted a phono stage just in time for the second age of vinyl. At the press launch one wag pointed out that when Supernait 2 appeared without this facility, Naim said that including it would be problematic. The company claimed the sensitive nature of a phono stage would pick up hum from the transformer, and even that its inclusion could compromise the potential of the line inputs. Designer Steve Sells took this on the chin and said that now there was "a desire to do it", which probably means a commercial imperative. Naim has found ways around the problems by

careful placement of the phono stage, essentially putting it as far from the transformer as possible. Given that numerous other brands have achieved this without too much difficulty does suggest that it's not exactly rocket science.

The Supernait 3's phono stage supports moving magnet but not moving coil cartridges. Naim argues that a moving coil cartridge option introduces a plethora of loadings that are unwarranted given the demands of modern vinyl lovers. Those looking to combine the Supernait 3 with a moving coil cartridge have the option of using a Naim Stageline or Superline phono stage (for which a 24V output is available). You can, of course, use any other make of MC phono stage.

The MM phono stage has a standard 47k Ω impedance and 470pF of capacitive loading, again a typical figure which should work with virtually all moving magnets. Naim has chosen its own response curve for the RIAA LF EQ section, which is between the classic and IEC curves. The company described this curve as delivering "a good bass performance with enough very low frequency roll-off to protect the critical mid-band from rumble induced intermodulation." In the Supernait, the phono stage is mounted on a separate board ►

“Only the eagle-eyed (with their gripping hands) will notice the difference in appearance between a Supernait 3 and its predecessors.”



- ▶ and uses through-hole capacitors with low microphony. This is because with 30dB of gain, a phono amp is considerably more sensitive to vibration than regular line inputs.

Only the eagle-eyed (with their gripping hands) will notice the difference in appearance between a Supernait 3 and its predecessors because the change is limited to that phono stage input. Elsewhere, the Supernait 3 has four line inputs that use both RCA phono and Naim's preferred DIN sockets. These include an AV input that can be set for unity gain, turning the integrated into a power amp for surround duties.

There have also been some significant changes to the power amplifier based on research in Naim's Salisbury HQ into our perception of different types of distortion. This research suggests we are more able to adjust for harmonic distortion than for timing errors: this has been Naim's *raison d'être* since the beginning, but it now has evidence to back up its claims. As a result, Naim's electronics design director Steve Sells and his team *increased* second-harmonic distortion in the Supernait 3's power amp stage, in order to create a circuit that is twice as fast as its predecessor. Specifically, the Supernait 3 removes the cascode stage used in the Supernait 2 (to protect the more delicate devices used in lower level signals) in favour of a single higher power transistor. This approach is not dissimilar to that used in the NAP DR power amplifiers and derives ultimately from the mighty Statement.

Naim continues to use Reed relay input switching with a 'shock absorber' capacitor and constant current supply for a smoother DC supply. It retains the Alps Blue Velvet motorised volume pot from the Supernait 2. As before, power transistors

are insulated with 4mm ceramic (rather than mica) for reduced capacitance, and the PCB is specially mounted to reduce microphony as much as possible for a fixed position design – the bigger Naim products have suspended PCBs. The input sockets are wired rather than fixed directly to the board and the Powerline Lite mains cable connects to a wobbly IEC inlet and has a degree of decoupling in the 13A plug. The large toroidal transformer (as used in the Supernait 2) is aligned for the lowest radiated field in the direction of the phono stage. There is also a large toroidal mains transformer (also as used in the Supernait 2) with excellent power delivery and fast recovery. The output rating remains the same at 80W per channel. You can upgrade the Supernait with a HiCap power supply for the preamp section, but those looking for 'more' usually end up buying a separate pre and power amp. Naim's well-known upgrade path is popular with Naim users because of its products impressive residual value. Headphone users will be interested to note that there is more current available from the Class A amplifier so it will drive more challenging cans.

Before the Supernait 3 arrived at *chez Kennedy*, I heard it compared with its predecessor in the dem room of Audience in Bath. It was only a short session, and the speakers used were Focal Sopra No.1 stand-mounts with which I'm unfamiliar. The Sopras are, however, revealing enough to show that the Supernait 3 is considerably tauter and more potent than its predecessor. In particular, the new design has a stronger three-dimensionality of image, together with a more muscular bass. I recall that my first response when hearing the Statement amplifier at its CES, Las Vegas launch was "lummy, ▶

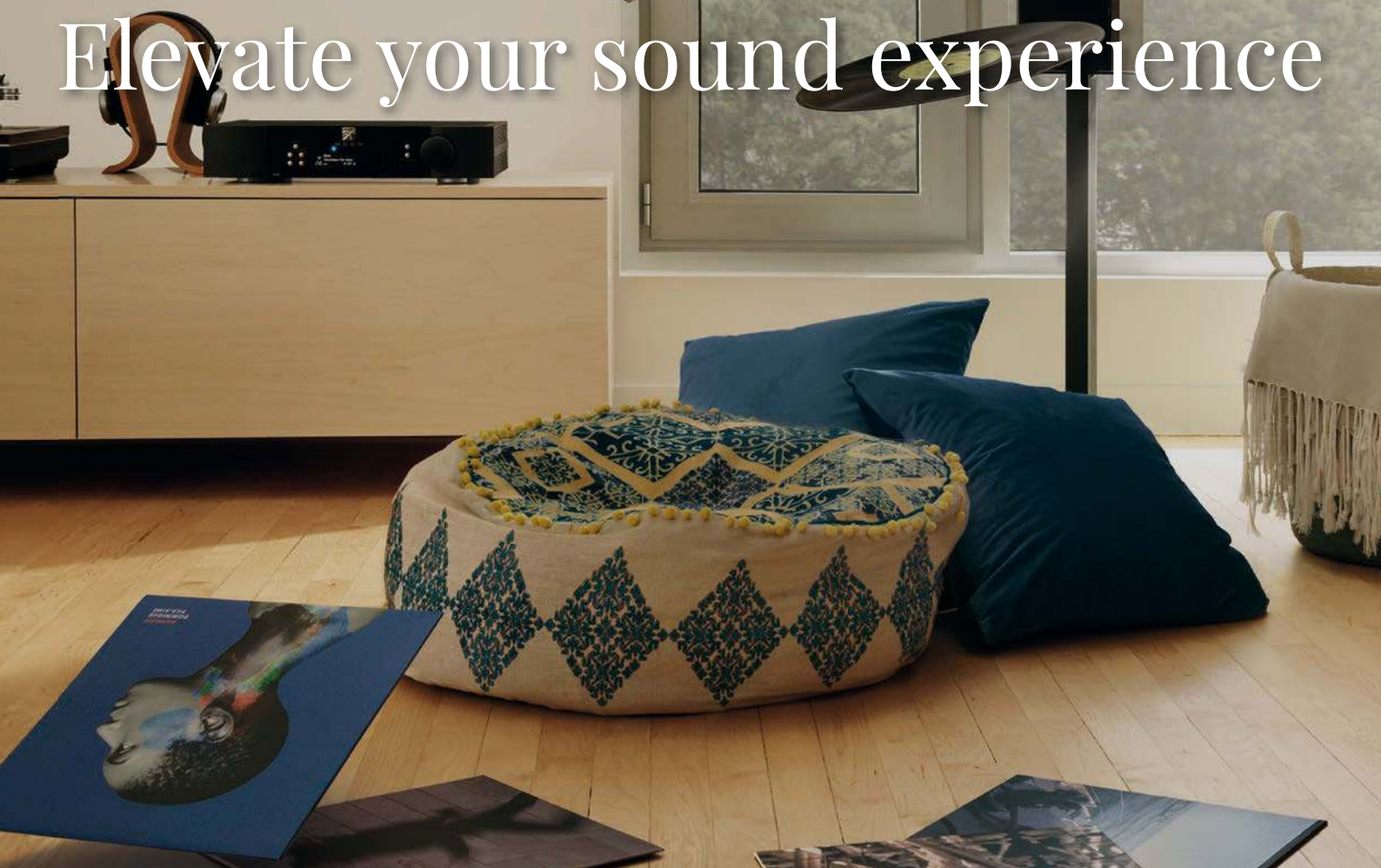


MOON

by SIMAUDIO



Elevate your sound experience



Distributed in the UK and Ireland by



Renaissance

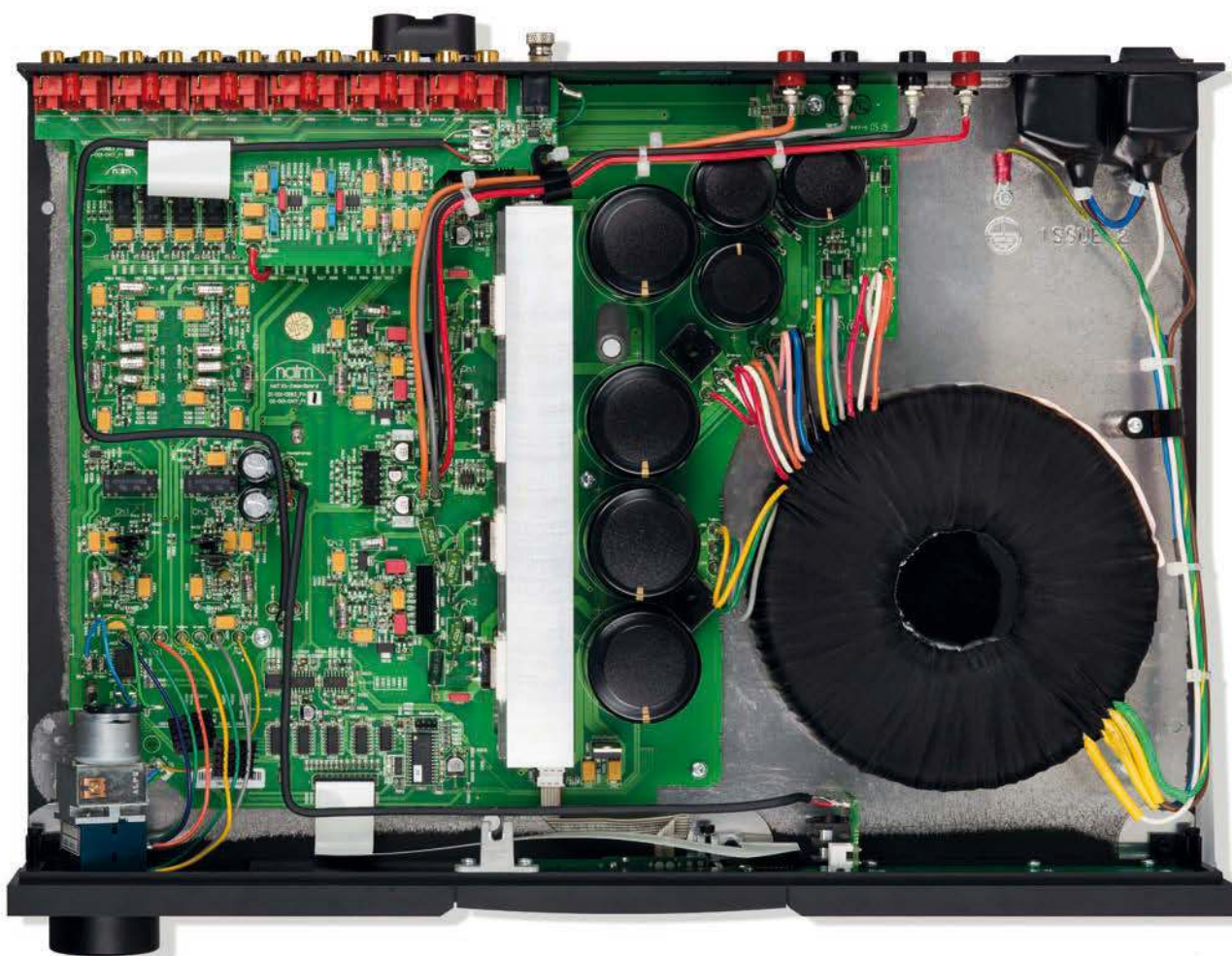
info@renaissanceaudio.co.uk
www.renaissanceaudio.co.uk

► a Naim with bass!”. This was a truth spoken in jest; Naim didn’t put much store in bass but preferred the speed and nimbleness of a relatively dry bottom end. With Statement, that ethos changed and subsequent DR upgrades to Naim’s power amps have imbued those models with bottom-end grunt. Now, the biggest integrated amp in the Naim catalogue has that grunt too. Fortunately, this doesn’t come at the expense of timing, as the Supernait 3 improves on the 2 in this crucial aspect of performance (that is especially crucial to Naim users).

This added heft was present as soon as the Supernait 3 was up and running in my system. My first notes contained words like ‘grunty’ and ‘solid’ when discussing drums and bass guitars. The amplifier provided a lot of drive for rhythm sections and an infectious groove from the speakers, which in the first instance were Bowers & Wilkins 802 D3. These proved a pricey but very revealing partner for this amp and

one that it seemed quite comfortable driving. The Supernait 3 is not the last word in transparency, but it gets to leading edges with gusto, and does indeed have a sense of speed that is in another league to its predecessor. The immediacy of a drum kit first made this obvious, but that sense of speed is a factor that becomes apparent in a lot of different pieces of music. It makes listening a far more engaging experience.

Naim amps have long had a tonal character in some ways the diametric opposite of valve amps, and Naim’s products do not tend to be very open or finessed, especially at higher frequencies. The new Supernait shares these traits partly because there is a slight emphasis on the lower mid which means the type of midrange detail that valve amps excel in is lower in the mix. This emphasis doesn’t become obvious frequently and makes the amp sound a little more relaxed at higher levels without masking too much in the way of detail. I was, however, constantly drawn to the bass lines ►



VISIT OUR NEW WEBSITE

BUY • SELL • EXCHANGE

GREAT VALUE NEW & PRE-OWNED HIGH END HI-FI

Huge range of high end brands • Expert system matching advice • Used High end hi-fi bought and sold Part exchange available • All items checked and guaranteed • Major credit cards accepted

INTEGRATED AMPLIFIERS

Symphonic Line RG10 mk4 Reference HD Master Integrated Amp	£7,990
B.M.C. Audio CS2 Integrated/Power Amp	£2,990
Audio Note Ongaku (X-Demo)	£39,990
Analog Domain Audio M75D mkII	£11,990

POWER AMPLIFIERS

VTL ST150 Stereo Power Amp	£3,490
VTL S200 Signature Stereo Amplifier	£8,990
VTL MB-450 Series III Monoblock Amplifiers	£12,500
Symphonic Line Kraft 300 Power Amp	£8,250
Sunfire 600 Signature	£1,200
Plinius SA250 mkIV (black)	£3,495
NAT Audio Magma SE Limited Edition	£19,900
NAT AUDIO MAGMA Limited Edition	£11,900
MBL Model 9011 Stereo/Mono-Block Power Amp (Price each)	£18,700
Mark Levinson Monaural Reference Amplifier No 33	£17,900
Luxman MQ88 Power Amplifier	£4,990
Linn Klimax Chakra 500 Twin (x4 Available)	£3,450
Linn C4200 Chakra	£1,990
Jeff Rowland Model 2 Power & Synergy III Pre	£3,990
Gryphon Antileon Signature Monoblocks	£22,990
Gryphon Antileon	£5,990
Boulder Amplifiers 2060 Stereo Power Amplifier	£16,990
Bel Canto EVO 6 Gen III	£1,990
Bel Canto Black- Ultimate Amplification System	£27,500
B.M.C. Audio M3 Monoblocks	£7,990
B.M.C. Audio CS2 Integrated/Power Amp	£2,990
Audio Research Reference 250SE Monoblocks	£18,950
Analog Domain Audio M75P MKII Stereo power (X-Demo)	£9,900

PRE AMPLIFIERS

VTL TL-7.5 Series III Reference Line Pre-Amplifier	£12,990
Symphonic Line RG3 mk4 Pre-Amp (Chrome)	£7,350
Plinius CD LAD	£1,290
NAT Audio Magnetostat SE Absolute Reference	£13,500
Linn Kisto System Controller	£2,990
Jeff Rowland Model 2 Power & Synergy III Pre	£3,990
Classe SSP 600	£1,490

Boulder Amplifiers 1008 Phono Pre-amplifier

Bel Canto Black- Ultimate Amplification System	£27,500
B.M.C. Audio DAC1PreHR	£2,250
B.M.C. Audio DAC1PreHR	£3,250
Audio Research Reference 10B Pre-Amplifier	£15,990

PRE & POWER COMBINATIONS

Orpheus Laboratories System (see details)	£7,990
Jeff Rowland Model 2 Power & Synergy III Pre	£3,990
Bel Canto Black- Ultimate Amplification System	£27,500

PHONO STAGE

Whest PS.30RDT Special Edition	£1,990
Whest MC RefV mkIV	£8,500
Plinius M14 MM/MC Phono Stage	£1,390
McCormack Audio Micro Phono Drive	£390
LFD MC1 phono	£490
Circaudio Balanced Reference Dual Mono Phono Stage	£2,500
Boulder Amplifiers 1008 Phono Pre-amplifier	£9,900
B.M.C. Audio MCCI Phono Stage	£1,990

TURNTABLES & ARMS

Wireworld Platinum Eclipse 7 RCA/SME DIN	£790
VPI TNT mkV-HR /JMW12.5/ SDS Controller	£3,990
VPI TNT 5HR/ SDS/ JMW12.5 Arm	£3,890
Thales Simplicity II	£7,990
SME Series V Tone-Arm	£3,250
SME Model 30/2	£16,500
SME Model 20/12A	£9,990
SME Model 15A	£6,990
Kodo The Beat MagDrive Turntable	£17,990
Graham Engineering Phantom Elite (TechDas Spec)	£8,999
Graham Engineering Phantom B44	£2,490
Bergmann Sindre Turntable & Arm (Air bearing)	£9,990

CARTRIDGES

Van den Hul Colibri XGW Koa Stradivarius (for heavy Tonearms)	£3,900
Van den Hul Colibri XGW	£2,490
Koetsu Black K	£1,090
Heed Audio Zene MC Cartridge	£450
Clearaudio Titanium V2 Cartridge	£2,490

CABLES- SPEAKER & INTERCONNECTS

Wireworld Platinum Eclipse 7 LR/XLR Audio Cable	£1,490
Wireworld Platinum Eclipse 7 RCA/SME DIN	£790
Transparent Music Wave Plus 25ft Bi-Wire	£900
Transparent Music Link Ultra XLR 15ft Pair	£1,490
Transparent Audio Reference MM2 8ft Speaker Cable	£3,500
Transparent Audio Reference 8ft Bi-Wire (MM technology)	£2,990
Transparent Audio Reference (MM) 20ft RCA Interconnect	£1,600
Transparent Audio MusicLink Super MM2 XLR	£850
Transparent Audio Music Link Ultra MM2 2m-RCA	£950
Townshend Audio Isolda DCT300 RCA 1m	£290
Townshend Audio Isolda DCT 8m Pair Speaker Cable Banana/Banana	£1,800
Townshend Audio Isolda DCT 5m Pair Speaker Cable Banana/Banana	£1,490
Townshend Audio Fractal 1m RCA Interconnect	£790
TelluriumQ Ultra Black 2x2m Spade/Spade	£750
Tara Labs The One Balanced 1m XLR + FGS	£990
Synergistic Research Atmosphere UEF Level 4	£3,050
Siltech Tripple Crown XLR/XLR Interconnect	£13,990
Nordost Valhalla 2 XLR 1m Interconnect	£3,450
Nordost Valhalla 1m RCA/RCA	£1,490
Naim Audio Hi-Line	£425
Graditech Kide 3 (1m RCA Interconnects)	£490
Entreq Challenger 3V Speaker Cable (3.7m pair)	£2,490
Entreq Challenger 3V Interconnect XLR	£1,650
Entreq Atlantis XLR Interconnect (1.65m)	£4,500
Entreq Atlantis Speaker Cable (3.7m pair)	£7,500
Entreq Atlantis Speaker Cable (2.5m pair)	£6,500
Entreq Atlantis Speaker Cable (1.65m Pair)	£5,900
Entreq Apollo XLR 2012	£2,990
Entreq Apollo USB Cable	£550

CD/SACD PLAYERS & DACS, STREAMERS/DIGITAL STORAGE

Weiss DAC202 Firewire	£2,650
-----------------------	--------

Weiss DAC2 Firewire	£1,100
Symphonic Line Belcanto CD	£5,500
Sony SCD1 (CD/SACD) Player	£1,990
Sony SCD 777ES CD/SACD (VSE Level 5+ Upgrade Chevin Audio)	£1,600
Proceed PDT3 CD Transport	£800
Proceed (By Madrigal) PDP2	£350
Prism Sound Callia DAC	£1,490
Orpheus Laboratories System (see details)	£7,990
Naim CDX2	£1,490
Mio Audio Systems La Clock	£1,590
Meridian Audio G96 DH DVD Transport	£990
Mark Levinson No.36 digital Processor	£1,295
Krell Connect Digital Streamer	£1,490
Exogal Comet DAC with Comet Power Supply	£1,990
Esoteric P03/ D03 (CD/SACD DAC/Transport)	£7,990
Esoteric P03/ D03	£9,900
EMM Labs XDS1 V1 (V2-MDAT DSP upgrade)	£16,990
DCS Paganini DAC	£5,500
B.M.C. Audio DAC1PreHR	£2,250
B.M.C. Audio BDCD1.1 CD Player	£2,750

LOUDSPEAKERS

Wilson Audio CUB Series II & Stands	£4,750
Vivid Audio Oval B1	£6,990
Vivid Audio Giya G3	£18,990
Townshend Audio Maximum Supertweeters	£990
Sonus Faber Electa Amator 2 & Iron-Wood Stands	£2,350
Sonus Faber Amati Anniversario GR	£11,990
Shahinian Acoustics Diapason Zebrano	£14,900
Shahinian Acoustics Diapason	£13,500
Rockport Technologies Mira	£4,990
Revel Ultima Voice 2	£4,500
Revel Ultima Studio 2	£8,500
Revel Ultima Salon 2	£10,900
Raidho Acoustics XT-3	£13,990
Neat Motive 2	£590
Martin Logan Fresco (x2)	£490
Martin Logan CLX Anniversary	£14,990
Linn Klimax 350P (Aktiv/Passive)	£9,990
Legacy Audio Aeris	£22,500
JBL Synthesis 4367	£8,490
Icon Audio MFV3	£590
Genesis Technologies 200	£14,900

Funk Audio 15.2 Dual opposed Subwoofers (x2) & 4.8kW RMS M1 Amplifier	£5,750
Focal Stella Utopia Be III EM	£28,990
Focal Diablo Utopia III & Stands	£4,900
EgglestonWorks Andra III SE (Signature)	£13,990
Dail Euphonia MS4	£2,990
Crystal Cable Arabesque Minissimo	£7,990
Crystal Cable Arabesque Glass Master	£59,900
B&W Nautilus 803	£2,250
B&W Matrix 800	£5,990
Avalon Time Loudspeakers	£37,990
Audiomachina CRM & CRS	£13,990
Audio Physic Scorpio II	£2,490
Audio Acoustics Sapphire Ti-C SE	£55,000
Audio Acoustic Sapphire Ti-C	£29,990
ATC SCM50A + P6 (Custom)	£20,990
ATC C6 Subwoofer (Piano black)	£3,990
Apogee Stage	£1,990
Apogee Caliper Signature	£3,000

HEADPHONES

Audioquest Night-hawk	£290
-----------------------	------

MAINS CABLES, FILTERS, POWER CONDITIONERS & GROUNDING

Torus Power AVR 16	£4,990
Tice Audio Solo	£390
Siltech Tripple Crown Power Cable	£9,990
Entreq Silver Tellus	£990
Entreq Silver Minimus	£325
Entreq Silver CleanUs	£1,450
Entreq Poseidon	£2,790
Entreq Olympus Tellus	£4,250
Entreq Everest	£195
Entreq Eartha Apollo 3.5mm to Spade Ground Cable	£270
Entreq Challenger 3V PowerUs (US Outlets)	£1,990
Entreq Challenger 3V Power Cables	£1,400
Entreq Apollo PowerUs (US outlets)	£3,500

STANDS, SUPPORTS & ISOLATION

Ian Edwards JT-6 Bespoke HIFI Racks	£690
-------------------------------------	------

TUNERS- ALL (ANALOGUE/ DIGITA/ DAB)

Revox B260 Tuner	£390
------------------	------

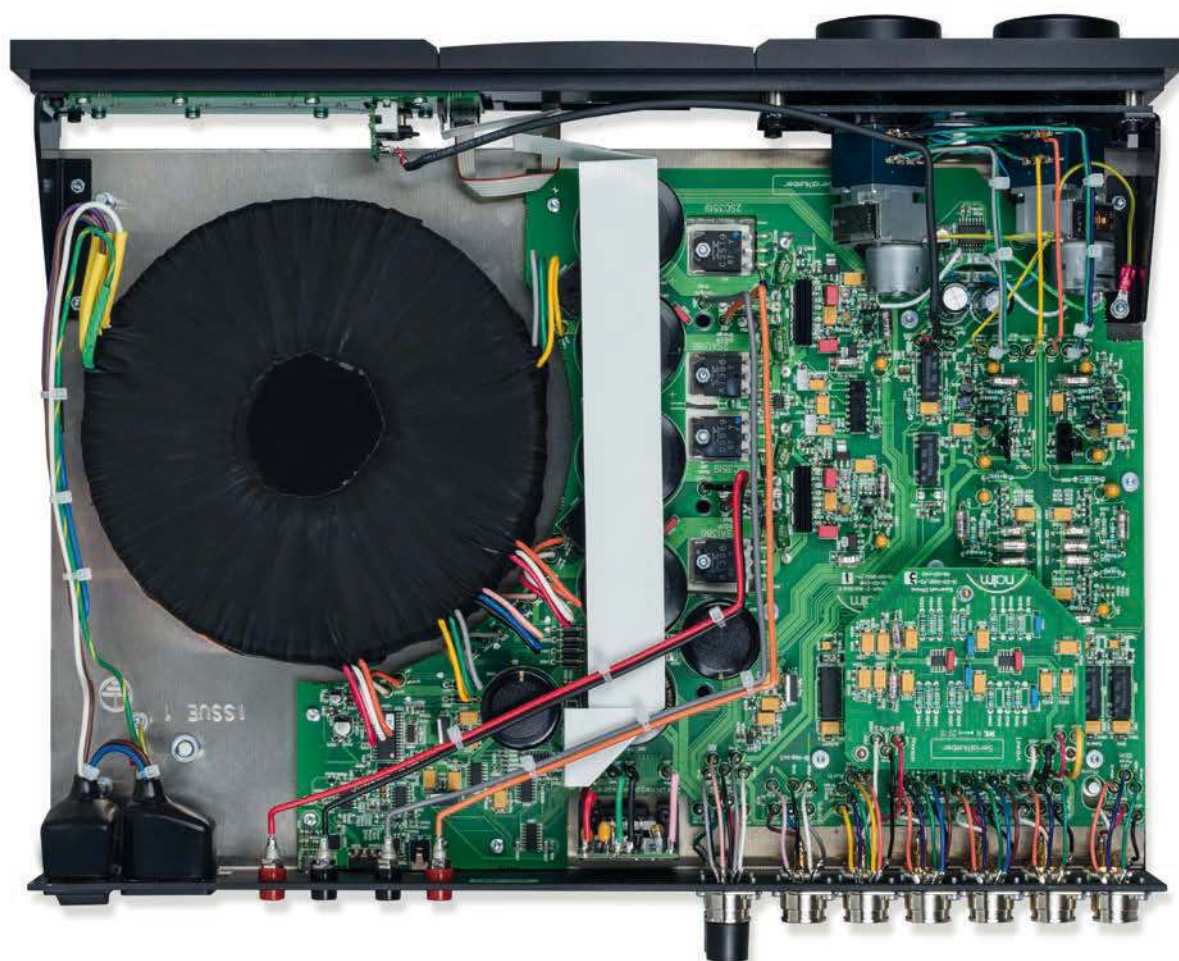
...much more at www.choicehifi.co.uk

Email info@choice-hifi.com

Telephone 020 8392 1959 / 07768 720456

STOCKIST OF Acapella Audio Analogue Domain ATC Audio Physic Aurosral Avalon B.M.C. Audio GmbH Burmester Cat Clear Audio Denon Entreq Estelon Exogal Graham Tonearms JBL JM Lab Kiseki Lexicon Mark Levinson Melco Monitor Audio Nad Note Audio Origin Live Ortofon Panasonic Parasound Pioneer Plinius Primare Pro-Ject Revel Roksan Shun Mook Audio SME Stillpoints T+A Telluriumq Tom Evans Townshend Transfiguration Ubiq Audio Velodyne VTL Yba AND MANY OTHERS

“We know that Naim amps boogie: what is more surprising is that they do it so well in integrated amplifier form and deliver robust imaging.”



► it produced. Bass lines are where speed really counts; a lot of amps do quick mids and highs but far too few can do the same at low frequencies, yet how do you expect the system to boogie without it?

We know that Naim amps boogie: what is more surprising is that they do it so well in integrated amplifier form and deliver robust imaging – another anathema to the chrome bumper brigade. I discovered as much by playing Keith Jarrett's Quartet release of *Eyes of the Heart* [ECM]. This track was spacious enough to paint a vivid picture of the live event and sufficiently rhythmically coherent to make the first sax solo enjoyable. It's not generally my favourite part, but this amp

proves that if you get all your ducks to arrive at the speaker terminals simultaneously, even brass horns can sound great. When the piano came in the experience changed from entertaining to transfixing, and the next 10 minutes or so were genuinely thrilling.

The results above were achieved with a Naim NDX 2 streamer (albeit not connected with DIN cable), which is known to amp up the timing by a goodly amount on its own. To get a rounder picture I moved over to a Stack Link streamer and iFi Pro iDSD DAC which is more in line with the Supernait 3 price-wise. This iFi/Naim/B&W combo allowed more tonal colour to shine through and maintained a strong sense of pace in the ►

DYNAUDIO



This is performance
This is Confidence

View all four models at
dynaudio.com/confidence

“Separation of detail is impressively strong with this combination of source, amp, and speakers.”

► context of broader imaging. However, timing wasn't as healthy but good enough to support the magnetic power of music with this amplifier. It was at this point that I finally noticed that only about a quarter of the volume control range could be used; this isn't a disaster, but it would be nice to have less gain. The remote volume is subtle enough to make this range usable, however, and low-level channel-tracking seems better than the previous Supernait.

Separation of detail is impressively strong with this combination of source, amp, and speakers. In this case, tracks display clear space in terms of depth, as well as width and solidity. This system is also very well focussed, which makes for a fully immersive experience that seems a lot more sophisticated than provided by the Supernait 2. This is especially obvious with live material like Frank Zappa's *Roxy by Proxy* [Zappa Records], where the band play individually as they're called out in the intro. Here you get an excellent sense of the placement of musicians on the stage and the atmosphere at the concert.

With PMC fact.8 speakers in place of the 802s the balance became more detailed with lots of presence and excellent rhythm, the bass is tighter yet also well extended. Once more, the timing reeled me in; Herbie Hancock's 'It Ain't Necessarily So' [*Gershwin's World*, Verve] swung with ease, delivering some fine piano playing in the process. I let the tape run (so to speak) and got into his earlier classic 'Chameleon' [*Headhunters*, CBS] where the synth is so juicy and the snap of the snare so immediate. Finally, Joni Mitchell's 'All I Want' [*Miles of Aisles*, Asylum], which inspired a sing-a-long that fortunately no one else had to endure. This system proved to be as compelling a pairing as the Bowers & Wilkins without the same level of detail, perhaps, but effortlessly as engaging.

I also put a Goldring 1042 moving magnet onto the Rega RP10 to get a feel for the phono stage. My immediate reaction is that you'd have to spend considerably more to get the same degree of musicality out of a digital source if it were possible at all. I don't often listen to MMs, but this one is a beauty; it doesn't have the treble extension of a good MC, but with this phono stage, it delivers an addictive groove that reveals precisely why vinyl is still the mass market format to beat.

TECHNICAL SPECIFICATIONS

Type: Solid-state, two-channel integrated amplifier with built-in phono stage, headphone amplifier and remote control

Analogue inputs: One MM phono input (via RCA jacks), four single-ended line-level inputs (via RCA jacks and DIN sockets), power amp in (DIN socket)

Digital inputs: none

Analogue outputs: line output (DIN socket), preamp output (DIN socket), bi-amp (DIN socket), sub (via RCA sockets), variable AV (DIN socket), stream (DIN socket), powered accessory socket 24V, speaker outputs (via 4mm sockets)

Supported sample rates: N/A

Input impedance: Not specified

Output impedance (preamp): Not specified

Headphone Loads: Not specified

Power Output: 80Wpc @ 8 Ohms, 130W @ 4 Ohms

Bandwidth: Not specified

Distortion: Not specified

Signal to Noise Ratio: Not specified

Dimensions (H×W×D): 87 × 432 × 314mm

Weight: 14kg

Price: £3,499

Manufacturer: Naim Audio

Tel: +44 (0) 333 321 9923

URL: naimaudio.com

I have to hand it to Steve Sells and the Naim engineering team. They have taken a design that was already quite refined and bettered it. The notion that speed is more important than harmonic distortion is right on the money. This research helps explain why so many amps that measure correctly leave you underwhelmed when it comes to reproducing music. However, in the context of the Supernait 3, quite simply it improves significantly on its forebears in every respect. Given the success of the Supernait that says a lot! +

ifi

Play like a Pro

Pro iCAN

Analogue headphone amp can be used on its own with an analogue source or combined with the Pro iDSD to upgrade the amp stage. Your favourite headphones have never sounded so good, as you drift away in your own personal sonic universe.

Pro iESL

Team this headphone energiser with the Pro iCAN and a pair of electrostatic headphones – such as those from Stax – for the ultimate in musical realism, or use it to ‘transformer-couple’ a pair of high-end dynamic headphones for enhanced performance.



Pro iRack

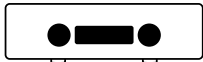
Designed specifically for the Pro Series, this compact, modular support system features marble pillars, stainless steel supports and a special resonance-damping sandwich construction.

Pro iDSD

Hi-res DAC, Wi-Fi streamer, preamp and headphone amp combines sophisticated digital and analogue circuitry to deliver exceptional sound, with a unique array of sonic tailoring facilities including DSD1024 upsampling and a switchable valve/solid-state output stage.



www.ifi-audio.com



Robin Hood



The H390 is a **REBEL**. A **REBEL** by offering so much of the sound performance and features from our Reference products, but at a lower price. A **REBEL** that offers in one integrated product what others do in two or

three. A **REBEL** that provides world class sound, jaw dropping power, and services such as Apple AirPlay, Spotify, Roon. All in a single chassis. All at a price you can afford.



SoundEngine2

CH Precision L1 Dual-Mono Line Preamplifier and X1 Power Supply

by Alan Sircom



This began as a kind of round two of the CH Precision/Wilson Benesch system we tested back in issue 159. The joy of both main parts of that system is the upgradability they bestow; every part of the CH Precision system can be upgraded through going monophonic and adding power supplies throughout. The WB loudspeakers can be similarly upgraded through the addition of one or more of the company's own Torus 'not a subwoofer' Infrasonic Generators. Where we left the system as a result was kind of half way up the ladder, even if this vantage point put the system well above many of its rivals.

As it happens, though, the upgrade path quickly focussed in on one specific section of the whole system; both because it is fascinating in its own right, and because it shows in microcosm just how significant upgrades to a system can be. There's also a deeper tale, the telling of which comes a little later. That section to receive ultimate focus is the L1 preamplifier.

By way of revision, the CH Precision L1 is a line-level, dual-monoaural, eight-input, Class A preamplifier that operates under and relies upon a logic control more in line with a computer than a traditional preamp. Far from

overcomplicating matters, this is what might best be called 'necessary complexity' as it allows the CH Precision L1 a level of flexibility that is unparalleled in audio. And it is that flexibility that is the subject of this exploration... and it is an exploration.

Harking back to that original review, the rest of the system remained more or less extant. The front-end was either a Neodio Origine disc player or a Grand Prix Audio Parabolica turntable, the amplification was all CH Precision (P1 phono stage and M1.1 mono amplifiers), the loudspeakers were from Wilson Benesch (Eminence loudspeakers each with a powered Torus), the cables were all Nordost Odin 2, and the equipment supports were Wilson Benesch's R1 Racks ►



► (for the electronics) and Grand Prix Audio (for the turntable). Roy Gregory reviewed that system originally, he re-received the system after 2019's Munich High-End, and this was a high time to pay him a visit in his excellent new listening room in France, from which the original review was conducted.

The flexibility is core to CH Precision's ethos in its own right. In the ten years the company has been in business, not a single product has been 'left behind'. No product has been discontinued, any products where the original circuitry has either become unavailable (due to components being discontinued) or is too outmoded to be relevant has been upgraded and those upgrades are fully retrofittable. In addition, when it comes to upgrades, there are no 'side-alleys'; no stepping-stone products that end up being surplus to requirements if and when you move up to the next level (the nearest to a side-alley is the recent integrated amplifier, which doesn't have a major and obvious upgrade pathway into the pre/power electronics, although you can add in DACs and power amplifiers). So, in the case of

the L1 preamplifier, there are options to add power supplies or a second L1 preamp to make it a pure monaural preamp, or even mono preamplifiers each with their own dedicated power supply. This could mean a few steps along the way that might work better or worse than others; what pathway is the right way?

But let's start with the base L1 preamplifier. It could be easy to get the wrong idea about any product as upgradable as this one and assume all the steps along the way were just hobbled versions of the four-box top of the tree, and that every step just tantalises you to make the next upgrade. In fact, nothing could be further from the truth, as the solo L1 preamplifier already begins as one of the very few truly outstanding preamplifiers you can buy. It has that remarkably stark honesty and clarity of something like a passive preamplifier but with the drive and dynamic weight of a good active preamplifier. It lets the music do the talking, with no noticeable sins of omission or commission, just that sense of realising the almost unattainable goal of a 'straight wire with gain' in preamp form. In fact, the L1 is perhaps most surprising when compared to other preamplifiers, because in almost every case you want to say 'other, lesser preamplifiers'. The tiny group that can go toe-to-toe with the base L1 are among the best; c-j, Zanden, D'Agostino, Air Tight, Soullution, VTL... that sort of grade. And in most cases, the reason they sound so good is they do so little. Unlike many of the best, the CH Precision concept doesn't include getting out a crucifix and holy water the moment someone utters the words 'remote control'.

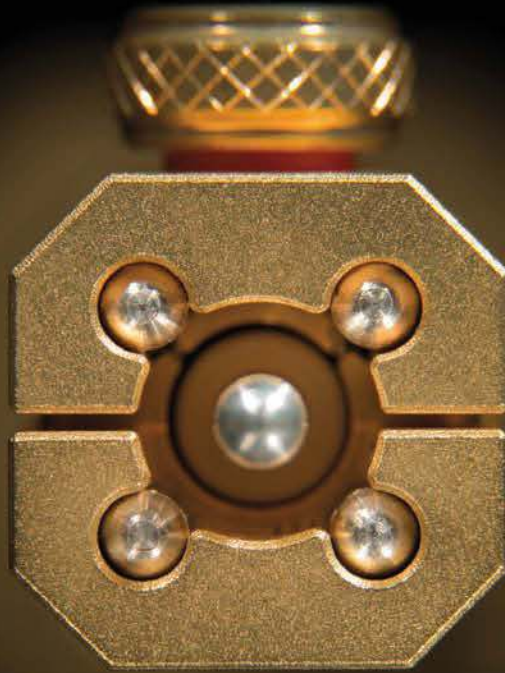
Also unlike most of these preamplifiers, the L1 can shift up a few gears thanks to upgrade options. The choice then becomes 'which options?' The first step gives the listener the choice of either adding a second L1 to make ►



SILTECH

EST. 1983

Years of excellence is no accident.



Products of sound engineering



EXPLORER
SERIES



CLASSIC
ANNIVERSARY
SERIES



ROYAL
SIGNATURE
SERIES



35th ANNIVERSARY
CROWN PRINCE
& PRINCESS



TRIPLE CROWN
SERIES

www.siltechcables.com



Distributed in the UK and Ireland by Padood
www.padood.com | info@padood.com

+44 (0)1223 653199 | 20 Station Road, Cambridge CB1 2JD

▶ a pure monaural system or keeping the stereo preamplifier as is and adding the X1 power supply. There are those who argue for both, but I'm going with the majority and recommend the stereo+power supply over PSU-less mono version. Physically, the difference is the additional power supply takes over the power feed duties for almost all of the L1 (the existing power supply of the L1 simply feeds the logic circuit). Sonically, it extends the performance of the L1 in terms of solidity and accuracy of sound by no small margin. It essentially takes what the L1 is striving to do and make more of it in almost every respect. By way of contrast, the mono version takes what the L1 is striving to do and makes more of the soundstage alone. This creates something close to an emphasis on

the soundstaging properties of the L1; in most other preamplifiers, this would seem like a triviality, but in a preamp as poised as the L1, the mono/no X1 route makes less sense than the L1+X1. That being said, in a system where soundstaging is a key function in and of itself, the paired L1's might be the better prospect; if, for example, they were being used to control a pair of the best Stax earspeakers and energiser, or systems of that ilk.

The X1 is, in its standard guise, a single-output, ultra-low-noise, ultra-regulated DC power supply designed to drive almost every block in the CH Precision front end and control (except for the T1 clock generator for the digital audio side). As with all CH Precision products, it shares a similar casework, and the inherent modularity – coupled with a pair of really beefy transformers – makes it heavier than many power amplifiers. There is provision for an upgrade card allowing the X1 to drive two separate units, and the nature of the X1 circuit layout means if you have that card in a X1 and it cannot detect a component taking feed from it, the optional board is switched out of circuit.

The next step is the interesting one. At this point, you either have a single L1 preamp and X1 power supply, or a pair of L1 preamps and no power supply. Where next? Logically, it should be an extra box (either an additional L1 in the



ALLNIC/C
DISCOVER US

ALLNIC AUDIO CABLES

TEL: +1.250.826.6872
www.hammertoneaudio.com

BLUE MOON
6
sixmoons.com
AWARD

hi-fi+
AWARDS
2018

L1/X1 system, or your first X1 in a L1/L1 system), but I'd argue strongly to just make the next jump to the full quartet, rather than the intermediary that ends with two L1s being driven by a single X1. If you upgrade to two X1s, you don't lose out here; you simply buy an 'empty' X1 and migrate one of the output cards.

In fact, the simplest part of the whole test was the move from two boxes, to three, to four. Because the move to three boxes is not worth the effort, unless it's a very short jump to four. Let's face it, three CH preamp boxes works out at £59,800 and four boxes works out at around £69,800. Curiously, if you were talking about the difference between a £7,500 and a £9,000 preamp, the increase in price might be too much to bear, but I suspect if you are already £59,800 deep down the CH preamp rabbit hole, the jump to the full four-box stack is not as unattainable in absolute terms. Another way of saying this is "no one ever saved up for a £43,800 preamp!"

OK, let's set this in context. The three-box system improves on either version of the two-box preamp. It adds depth to the soundstage of the L1/X1 system and adds some rootedness to the deft touch of the L1/L1. But these are relatively minor improvements, more finessing the icing on the cake, where the full four box stack just adds more cake, gives the recipe to a better baker,

and puts thicker icing all over. If you try the three-box, you'll likely stay with two, but if you hear the four box, there's no going back.

At this point an already extremely well balanced and poised preamplifier shifts up several gears. That poise becomes laser-guided, extracting every last piece of musical and physical information from the recording, making Joyce DiDonato's voice on *Stella di Napoli* [Erato] stand out effortlessly. Her voice – always powerful – is practically weaponised here, and yet not too big or small, just correct. It is also perfectly delineated from the horn player on the Bellini aria from *I Capuletti E I Montecchi*. But, in fairness, it's so hard to single out recordings to highlight what's good or bad about the CH Precision, because it's all good and none of it is bad. ▶

MAKE THE CONNECTION!



ALLNIC ZL CABLES
Benefitting great systems worldwide

“It moves from being one of the best preamps money can buy to being one of the best preamps ever made.”



TECHNICAL SPECIFICATIONS

CH Precision L1 Dual Monoaural Line Preamplifier

Inputs: 4x XLR, 2x RCA, 2x BNC
(double this in dual-mono mode)

Maximum input level: 16V RMS (XLR),
8V RMS (RCA, BNC)

Frequency Response: DC-1MHz

THD+N: <0.001%, 1kHz, Unity Gain

S/N ratio: 130dB

Input impedance: Balanced (XLR)
100kΩ or 600Ω, single-ended
(RCA and BNC): 50kΩ or 300Ω

Dimensions (WxHxD): 44 x 44 x 13.3cm

Weight: 20kg

Price: £26,500 per unit / £43,800 as a
Mono Pair

CH Precision X1 Power Supply

Connections: M23 connector for
connection to L1, P1, D1, C1, C1
Mono Controller in CH Precision
range. Supplied with 2m M23
connector. Optional plug-in
module for second M23 connector
to run two units

Dimensions (WxHxD): 44 x 44 x 13.3cm

Weight: 25kg

Price: £13,000 per unit / £16,000 with
additional regulation board
allowing the X1 to power two units

Manufactured by: CH Precision

URL: ch-precision.com

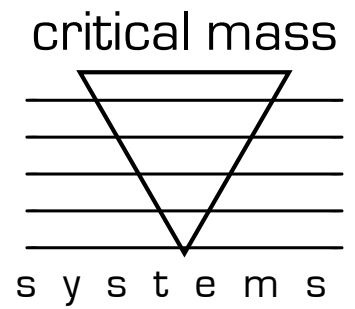
Distributed in the UK by: Singularity Audio
(trading name of Wilson Benesch)

URL: singularity-audio.com

Tel: +44(0)114 442 0129

► The last part in this exploration is placement. As discussed previously, the stock system is to use bars and stand-offs that fit into the feet and legs of the CH Precision chassis... but we quickly discounted that. Another way is to use a single stack of L1, X1, L1, X1 on a suitably high-performance equipment stand (such as Wilson Benesch R1s). This works well, but an even better way is to adopt a layout popularised by some Naim users (who, let's face it, know their way around a power-supply or three). They use what they call a 'brains stack' and a 'brawn stack', placing the L1/L1 on one table and the X1/X1 on an adjacent table in order to reduce interference from power supply transformers, for example. This proved an exploration worth making, as it lowered the noise floor... slightly. It wasn't a big change to the performance, and it didn't transform the performance of the full preamp stack, but it did help make an already almost-silent noise floor move a notch quieter. I've tried this on a number of power supplies (not just CH and Naim) and the improvement seems to happen across the board, so it's a low-impact tweak that's worth making... or at least experimenting with.

In the process of moving from one box to four, CH Precision's L1 preamplifier moves from a dual-mono stereo preamp to a full four chassis pure monaural preamp where nothing (even down to the cables) is shared. In the process, it moves from being among the best preamps money can buy to being one of the best preamps ever made, and with no products left behind along the way. I've not heard all the very best preamps in the world, but I've heard many of them, and this is the best I've ever heard to date. We're still not completely done here; does the P1 phono stage have the same steps up the ladder and is four boxes better than one here too? What about the full digital stack... all nine boxes of it? And then, this year CH Precision announced an even more up-market range – will that take CH to even new levels? Yet more sequels follow. +



Introducing **Center Stage²**

I can't help thinking that this is the best of the best.

– Alan Sircom, Editor, *Hi-Fi+*



ACCESSORY OF THE YEAR



DISTRIBUTED IN THE UK BY

Select Audio

Ross House, Flimby, Maryport, Cumbria CA15 8RX

Tel. 01900 601954

www.selectaudio.co.uk

REVOLUTIONARY AUDIO FEET | MADE IN THE USA | TOTAL IMMERSION EFFECT

WWW.CRITICALMASSSYSTEMS.COM

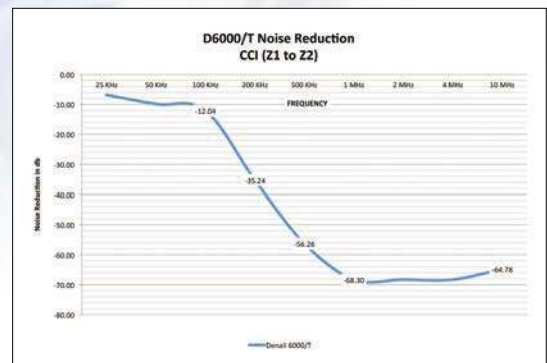
A BREAKTHROUGH IN MEDICAL IMAGING TECHNOLOGY ...



"Cardiac signals had jaw dropping improvements in both resolution and noise to a level that I have never seen, and that I didn't know was even possible."

~ Dr. Daniel P. Melby, MD,

Medical Director: Minneapolis Heart Institute



" After installing the CIS units, the bipolar noise levels on the mapping catheters went from fairly high at .13-.15 to less than 0.01 mV after installing the first of the two CIS units. The noise level for the bipolar signals is now below the threshold of what the system can measure. Thank you!"

~ Dr. Kent Morris, Electrophysiology Lab Director: Norton Health, Louisville, Kentucky

The new science and filter technology developed by Shunyata Research scientist Caelin Gabriel has delivered never before seen improvements to the resolution of heart-signals and heart-imaging in the field of Electrophysiology. These results were so dramatic that Shunyata Research has created a medical branch of its company, named Clear Image Scientific® (CIS). The CIS power conditioners and power cords are now finding their way into heart surgery labs across the United States.

These advances in noise reduction for medical systems are now available in Shunyata's critically acclaimed Hydra Denali Series of power conditioners for music and film systems, and now for the first time available in the UK.



Distributed in The UK and Ireland by The Shunyata Distribution Company
Guillaume Boyer // t. 0330 223 3769 // shunyata-uk.com

... TRANSFORMATIONAL PERFORMANCE FOR MUSIC & FILM SYSTEMS



Shunyata Research's breakthrough medical-filter science is just one of the many cutting-edge technologies applied within the Hydra Denali product range. Performance results have been transformational, offering jaw-dropping increases in resolution within all manner of professional recording, medical-imaging and music systems. When you consider the Hydra Denali Series' unprecedented noise reduction and patented technologies, it becomes clear these products are at the top of their class. Test the UK Hydra Denali for yourself and realise the true performance capability of your system!

~ No Hum, No Buzz, No Heat ~



shunyata.com

"In every sonic criterion, the Denali Series establish a new benchmark for performance"

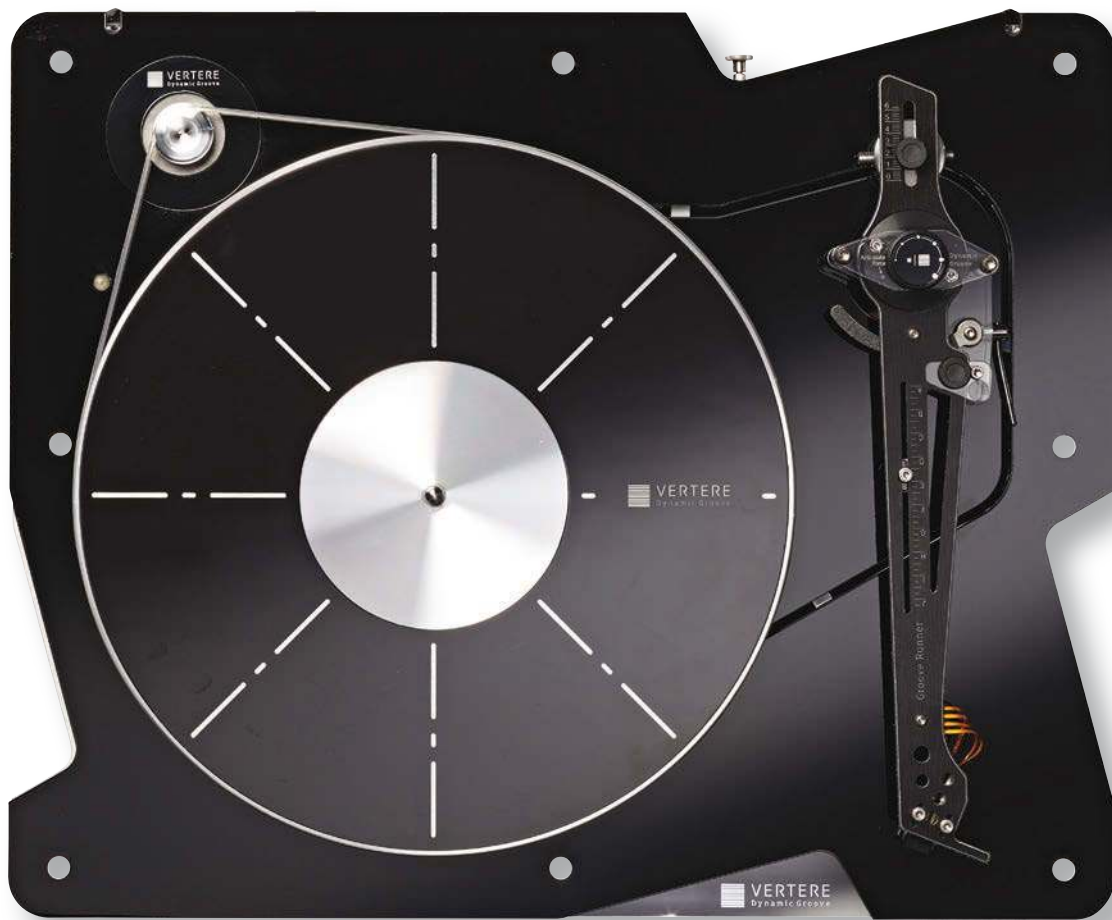
~ Robert Harley, Editor In Chief: *The Absolute Sound*

"The Hydra Denali really is the peak of power conditioning here and now."

~ Marc Mickelson, Editor In Chief: *The Audio Beat*

"This is sound less distorted, pure and simple. It sounds like your electronics are tampering with the sound less than before, almost irrespective of the type of electronics used. It's the system you bought in the first place, as it should be, and it works universally."

~ Alan Sircom, Editor: *Hi-fi Plus*

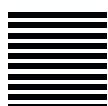


Introducing DG-1 Dynamic Groove, the first 'plug and play' record player from Vertere

The Vertere DG-1 is our most affordable record player yet; the easiest to set up and use, and also contains some of our most innovative thinking.

We have examined every element of the design, rethinking the way record players work, and removing every superfluous element that got in the way of our ultimate aim: getting you as close as possible to your music.

The result is an elegant record player that draws on the engineering of our flagship models to deliver outstanding performance and ease of operation in a fun and dynamic way.



VERTERE™

vertereacoustics.com

YG Acoustics Hailey 2.2 floorstanding loudspeaker

by Chris Martens

In *Hi-Fi+* Issue 145 (March 2017) Editor Alan Sircom and I decided to review loudspeakers that were contenders for state-of-the-art honours. Alan chose the Wilson Audio WAMM Master Chronosonic, while I opted for the YG Acoustics' four-tower Sonja XV loudspeaker system. Alan and I came away from our listening experiences impressed and delighted by what we had heard and speaking purely for myself I can say without hesitation that YG's Sonja XV was then and still remains the finest, most accomplished loudspeaker I have ever heard. With that said, however, two limiting factors about the Sonja XV do stand out: first, it's a very large speaker system that demands a big space in order to give of its best and second, the XV is dauntingly expensive, with a price tag (\$265,900) north of a quarter of a million dollars. For me, then, and probably for many of you, a key question is this: can the various technologies that make the XV the sonic wonder that it is be scaled downward to loudspeakers smaller in size and lower in price.

The unequivocal answer to that question is that yes, Sonja XV technologies can be scaled downward with excellent results—at least to a point. First came the Sonja XV Jr, which is mostly identical to the big XV, but with fewer woofer modules and an appropriately reworked crossover network, allowing for much shorter speaker towers and a concomitant price reduction. Next came the Sonja 2.2 (as reviewed in *Hi-Fi+* 155), which is essentially an original Sonja 2 that has been 'turbocharged' with essentially all of the technologies that make the XV so special. Importantly, the Sonja 2.2 demonstrates that nearly all of the desirable sonic qualities of the XV can be distilled down into a two-loudspeaker system (rather than a four-tower system), and one priced below \$80,000. Naturally, this leads to an inevitable follow-on question: can XV technologies successfully be scaled down even further?

The answer to that question is here in the form of the new Hailey 2.2 (\$46,800), which is a three-way, 3-driver, modular loudspeaker fitted out with XV-inspired improvements. The Hailey 2.2 features an upper tweeter-midrange enclosure that sits atop a lower acoustic suspension-type woofer module. Early on, I had been under the impression that the Hailey 2.2's upper and lower modules would arrive in separate crates that would eventually be stacked upon one another during installation and assembly, but this isn't the case. Instead, the Hailey 2.2's modules are locked together at the factory so that each Hailey 2.2 arrives as a completed loudspeaker ready to be moved into position for use.

Company founder Yoav Geva based the Hailey 2.2, like all YG Acoustics loudspeakers, on a number of essential 'building-block' technologies he has ▶



“The cabinet sides are surface finished to a satin sheen and then anodised in jet black.”



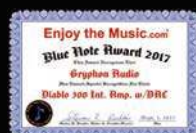
► painstakingly developed over time. As a starting point, all cabinet enclosure panels are CNC machined from solid aircraft aluminium and are fastened together using aircraft-type “vibration-free pressurised assembly” techniques. Internally, the cabinets use YG’s proprietary FocusedElimination™ anti-resonance technology, which is said to keep “mechanical losses lower than any competing speaker, by combining the minimised turbulence of a sealed design with the low friction otherwise associated with enclosure-free concepts.” At first glance the illusion is that the Hailey 2.2 enclosures are composed of carefully joined flat metal panels, but a closer look reveals that the cabinets surfaces actually use an artfully blended combination of subtle, graceful compound curves. The cabinet sides are surface finished to a satin sheen and then anodised in jet black (although YG has occasionally experimented with other anodised colours on a very limited production basis). Interestingly, YG’s speaker enclosure designs result in part from input from Porsche Design.

Each Hailey 2.2 uses a 7.25-inch mid-bass driver and 10.25-inch woofer, both of which feature proprietary YG BilletCore™ diaphragms, which are machined out of thick cylindrical billets of aircraft-grade aluminium and given black anodised finishes. Although this might seem an unnecessarily difficult and complicated way to manufacture driver diaphragms, YG maintains that machined diaphragms allow more precise dimensional tolerances and the use of complex 3D diaphragm shapes that improve rigidity and resonance control. Further, YG says, the machining process imposes fewer stresses on the aluminium materials used and makes for greater long-term structural integrity, meaning owners can expect years of trouble-free use without any sonic degradation over time. The Hailey 2.2 woofer is housed in its own dedicated acoustic suspension enclosure, while the mid-base driver resides in a sealed upper enclosure along with the tweeter.

Importantly, the Hailey 2.2 employs the very same BilletDome™/ ForgeCore™ tweeter used in the Sonja XV, which is arguably the finest piston-type tweeter on the planet. What make this tweeter special is the fact that it uses a hybrid design that combines a fabric dome (chosen for its desirable damping properties and smooth roll-off characteristics) with a precision-machined and ultra-low-mass (30 milligram) aluminium support frame that fits within the fabric dome, adding tremendous rigidity and strength. The upshot is a tweeter that offers better high-frequency extension than either a conventional fabric or metal dome tweeter could provide. Meanwhile, the term ForgeCore™ speaks to the fact that elements of the tweeter’s motor structure have been CNC-machined to receive special 3D geometries said to minimise distortion and to impart “a sense of ease to the sound”. Stated simply, the BilletDome tweeter is an essential key to the Hailey 2.2’s sound, in that it gives the speaker fast, highly detailed, and sharply focused highs, with profoundly extended high frequency response that is unfailingly smooth. ►

DIABLO 300

Integrity and Integration



THE
GRYPHON



www.gryphon-audio.com



“It was easy to hear the familial ties between the Sonja XV, the Sonja 2.2 and the Hailey 2.2.”

and ViseCoil™ low-frequency inductors in the crossover network. You might expect that these changes in the Hailey 2.2 would yield an incremental improvement in sound quality vis-à-vis the original Hailey, but to my ears the change was much more profound than that.

For my listening tests YG Acoustics installed the Hailey 2.2's in my home reference system, which consists of a Rega Osiris integrated amplifier and Isis CD player, an AURALiC Aries wireless bridge and Vega G2 DAC, Furutech cable and power conditioning equipment, and Auralex, RPG, and Vicoustic room treatments. Special thanks go to YG's Dick Diamond, who spent the better part of a day installing and then carefully positioning the speakers in my medium sized room.

From very beginning it was easy to hear the familial ties between the Sonja XV, the Sonja 2.2, and the Hailey 2.2. All three share similar and in some respects identical positive sonic characteristic, so that in a sense to describe one model among these three is more or less to describe them all. The only really substantial differences involve absolute dynamic capabilities and sizes of the spaces for which each speaker is optimised. The Hailey 2.2 proved ideal for my medium-sized room.

Like the XV and Sonja 2.2, the Hailey 2.2 conveys a sense of extraordinary sonic transparency, meaning the speaker will show you low-level transient, textural, and spatial details in recordings that you perhaps never knew existed. At the same time, though, the Hailey 2.2 consistently sounds smooth and natural, never edgy, analytical, or harsh. This is the beauty of the BilletDome tweeter in action.

As an example, listen to ‘Vent poussière à L.S.’ from Henri Texier’s *Remparts D’Argile* [Label Bleu, 16/44.1] and not ▶

▶ Crossover points are placed at 65Hz and 1.75kHz. YG points out that the Hailey 2.2 crossover network topology was developed through use of the firm's proprietary DualCoherent™ CAD/CAM design software, which offers the singular ability to co-optimize the loudspeaker's frequency response and phase coherency simultaneously (other packages can typically optimize one or the other, but not both at once). The Hailey 2.2 crossover network is fashioned from extremely high quality parts mounted on extra-thick circuit boards whose traces are milled—not photo-etched—into the surfaces of the boards. The special parts used in the crossover include YG's custom-made ToroAir™ air-core inductors and the same types of massive, vibration-resistant ViseCoil™ bass inductors first created for the Sonja XV. These inductors use a vise-like clamping mechanism to all but eliminate audible inductor noise and hum, thus yielding low bass response that is uncommonly pure-sounding and articulate.

In a nutshell, the Hailey 2.2 represents a careful downsizing of the design concepts that worked out so well in the Sonja XV and then the Sonja 2.2. Once again, the Hailey 2.2 benefits from the two distinguishing technical features that set the Sonja XV apart; namely, use of a BilletDome™ tweeter



SPENDOR

REVEALING EVERY DETAIL

Spendor D-Line loudspeakers reveal every nuance of the performance with absolute clarity and realism. With their transparent, superbly natural sound and extraordinary resolution, they create an airy, spacious soundscape, then invite you in to explore it, uncovering new depths, textures and definition in your music

MADE FOR MUSIC. DESIGNED FOR YOU.

spendoraudio.com



Primer - from £260

A Revolution in Musical Performance !

Digital and analogue cables that will redefine your expectations.



Primer Stockist

Audio Destination ... (Devon) ... www.audiodeestination.co.uk ... 01884 243584

Audio Therapy ... (Newcastle upon Tyne) ... www.audiotherapyuk.com ... 07976 496218

Choice HiFi ... (Richmond) ... www.choice-hifi.com ... 07768 720456

Future Shop ... (Hertfordshire) ... www.futureshop.co.uk ... 0208 9051555

HiFi Corner ... (Falkirk) ... www.hificorner.co.uk ... 01324 629011

HiFi Corner ... (Edinburgh) ... www.hificorner.co.uk ... 0131 5567901

Homesound ... (Edinburgh) ... www.hsound.co.uk ... 0131 6621327

Martins HiFi ... (Norfolk) ... www.martinshifi.co.uk ... 01603 627010

Rayleigh Hifi ... (Essex) ... www.rayleighhifi.com ... 01268 779762

Studio AV ... (Chobham) ... www.studioav.co.uk ... 01753 863300



Demand to hear Primer cables at your nearest dealer before you make your next cable purchase !

► both the instrumental textures and timbres you are hearing, plus the spatial characteristics of the recording. The track opens with delicate, shimmering high percussion from Tony Rabeson accompanying a sweet, meditative clarinet statement from Sébastien Texier. Later, Henri Texier enters with a thoughtful and carefully restrained acoustic bass contribution that echoes the phrasing of his son Sébastien's clarinet lines. Through this all, the YGs make the instrumental voices sound very nearly real, with dead perfect tonal colours and textures, realistic (but not overwrought) dynamics, and an uncanny sense of focus. The Hailey 2.2s also served up a masterful combination of imaging specificity (the instruments sounded reach-out-and-touch them present in the space) and believable soundstage scale. In fact, in my room the stage extended far to the left and right of the speakers with apparent stage depth that extended well beyond the back wall of my listening room.

Second, the Hailey 2.2s, like their bigger YG brethren, proved to be decidedly full-range loudspeakers that are capable of terrific extension at both high and low frequency extremes. For an example of this try Nils Frahm's 'Chant' from *Solo* [Erased Tapes Records, 16/44.1], where you will hear Frahm performing on both acoustic and electronic keyboards, with some left hand passages presenting forceful and exceptionally low-pitched bass information. The Hailey 2.2 handled these passages, and especially the low bass elements, with rock-solid power and precise pitch definition—all while maintaining grace and composure (as if the speaker was really not having to work very hard). Yet the speaker never sounds bass heavy; on the contrary, its low frequencies offer equal measures of power, refinement, and control. This is a rare combination of virtues and a joy to hear.

Third, the Hailey 2.2's offer energetic and expressive dynamics—subject only to the constraint that they should be used in appropriately sized spaces for best results. In my mid-sized space the Hailey 2.2's offered dynamic agility aplenty and more sheer dynamic clout than I really needed. To hear how the YG's dynamic agility and energy can bring a track alive, listen to 'Ice Pick Mike (Movie Version)' from Lalo Schifrin's soundtrack to the movie *Bullitt* [Aleph Records, 16/44.1]. This is an oldie but goodie recording from the 1960's, yet the YGs present it with all its power, clarity, intricacy, and dynamic drive intact. What is more, the Hailey 2.2s manage to make the track sound fresh and new, not dated or 'worn out'. Put on the track and in seconds you'll imagine you are prowling the streets of San Francisco in a British Racing Green 1968 Ford Mustang, looking for bad guys driving a black Dodge Charger. The YGs are that kind of vivid.

Last but not least, the Hailey 2.2's are capable—on good material—of delivering vivid, breath-taking, wraparound 3D imaging. I first noticed this quality on Elbow's 'Honey Sun' from *The Take Off and Landing of Everything* [Concord, 16/44.1]. This deceptively simple recording features a primary vocalist front and centre, with backing vocalists positioned far to left and right and a little behind the primary vocalist. On the song's choruses, however, the imaging (and the all around dynamic envelope) shifts to that backing vocalists and instruments now are even farther to the left and right and positioned well ahead of the primary vocalist—almost as if they are performing from the sides of the room. Through the YGs the presentation was so eerily realistic that I

TECHNICAL SPECIFICATIONS

Type: Three-way, three-driver, modular floorstanding loudspeaker with sealed acoustic suspension cabinet enclosures

Driver complement (per loudspeaker): One approximately 10.25-inch BilletCore woofer, one approximately 7.25-inch BilletCore mid-bass driver, and one approximately 1-inch BilletDome/ForgeCore tweeter

Frequency response: 20Hz to above 40kHz, ± 1 dB in the audible band, $\pm 5^\circ$ relative phase throughout the entire overlap

Impedance: 4 Ohms nominal, 3 Ohms minimum

Sensitivity: 87dB/2.83V/1m 2 $\varnothing$ anechoic

Dimensions (HxWxD): 122 x 33 x 54cm

Weight: 76kg per channel, unpackaged

Price: \$46,800/pair or £53,000/pair

Manufacturer Information:

YG Acoustics LLC

Tel: +1 801-726-3887

URL: www.yg-acoustics.com

UK Distributor: Padood

Tel: +44 (0) 1223 653199

URL: www.padood.com

found myself involuntarily looking for sound sources at the sides of the room that I knew, in an intellectual sense, were not really there. Stereo imaging just doesn't get much better than this.

The Hailey 2.2 shares more than a few sonic characteristics with the state-of-the-art Sonja XV. It is a terrifically revealing and musically expressive loudspeaker that is scaled perfectly—UK and European readers please take note—to deliver extraordinary results in moderately sized listening spaces. To hear them is to want them. +



Wherever you want to listen, Focal has a headphone that delivers your music with precision and purity. Our 40 years of innovation, development and manufacturing of high-end drivers and loudspeakers are distilled into the range



ELEGIA



ELEAR



CLEAR



STELLIA



**UTOPIA
ARCHE**

Comprised of three open-back models, two closed-back models, and our newly released 'Arche' DAC and headphone amplifier, Focal now offer a personal audio system to cater for all levels of serious listening.

Experience the full range at the following retailers

AV Online - Rochdale | **Hifonix** - Sutton Coldfield | **Audio Affair** - Birmingham
Hifi Lounge - Bedford | **The Audiobarn** - Harlow | **KJ West One** - Marylebone
Audio Sanctuary - New Malden | **Hifi Headphones** - Shoreham-by-sea

Distributed in the UK and Ireland by SCV Distribution | www.scvdistribution.co.uk | 03301 222500

Sonus faber Electa Amator III stand-mount loudspeaker

by Alan Sircom

The past is a wonderful place, a rose-tinted land where nothing bad ever happened and all hi-fi sounded wonderful. In fact, viewing past products with modern-day eyes can be an alarming reality-check, because many of those 'wonderful sounding' products fail to live up to their reputations. However, one of the 'sort-of' exceptions is the Sonus faber Electa Amator line. A core part of Sonus faber's original DNA, models like the Electa Amator II of 1987 made a sound that enticed in a cabinet that enthralled and helped cement Sonus faber's reputation among its many fans and followers.

Those days – sadly along with Sonus faber's original owner and designer, Franco Serblin, who died in 2013 – are gone. But Sonus faber lives on, and to celebrate its 35th anniversary in 2018, the brand announced its new Heritage collection, thus far comprising two models; the Minima Amator II and the Electa Amator III tested here. Both are two-way stand-mount loudspeakers that echo much of the design, technology, and sound of classic Sonus faber speakers of old.

However, simply preserving the 1980s and 1990s in aspic and producing what would be effectively clones of past masterpieces would be wholly wrong. Music and design (both industrial design and what's possible from a loudspeaker) have moved on, and to copy slavishly the past risks damaging both the present and past reputation. So, instead Sonus faber took the longer route, making a product that pays tribute to that past without pastiche, and bringing it up to date without undermining the core values of what Sonus faber stood for then, and stands for now. In other words, a complete re-evaluation from first principles.

If anything, this is one of the hardest tasks of their careers for both Sonus faber's Chief Design Officer Livio Cucuzza and R&D Manager Paolo Tezzon. The brand now has several key lines, from value-driven models to high-performance, cost-no-object designs, and many of these products are regularly refreshed and revised. This is different. The Electa Amator – alongside the Extrema – is to many the Platonic Form of a Sonus faber loudspeaker, and unlike the Extrema, the Electa Amator was less demanding and expensive than the Extrema and therefore more widely known and experienced. Not only does it demand to be a stand-mount with a sumptuous finish of wood, leather, metal, and stone, but if you mess up a product that carries the Electa Amator name, it's only one step removed from outright heresy among the cognoscenti. Fortunately, Cucuzza and Tezzon have good 'form' in terms of making great products (both visually and sonically) and they don't put a foot wrong here. ▶





“You are almost immediately aware that you are in the presence of Italianate luxury with the Electa Amator III.”

- ▶ The loudspeaker features Sonus faber's 28mm silk fabric dome tweeter that uses the company's 'Arrow Point' Damped Apex Dome technology... but this time connected to the tweeter horn by three points instead of two, to hark back to the originals. This tweeter sits in a wooden rear acoustic chamber of its own, which is just visible from the rear port (bring a torch!). The 180mm mid-woofer is unique to the design, using a cellulose pulp cone with a matching dust cap instead of a phase plug. It uses a cabinet made from 25mm thick sheets of solid walnut, with three constrained damping layers.

As with all modern Sonus faber loudspeakers, the crossover comes in for special treatment. It uses the company's patented anti-resonant Paracross technology, which is claimed to optimise phase and amplitude response “for optimal space/time performance”. This bristles with high-grade components, such as non-polarising capacitors from Clarity Cap and low-resistance inductors from Jantzen. The two drive units cross over at 2.5kHz.

You are almost immediately aware that you are in the presence of Italianate luxury with the Electa Amator III, arguably even more so than its predecessor from the 1980s. The puffy cheeks of the side panels of the Amator II are now removed to the leather-finished front baffle, and the rear driver is replaced by a rear port, but the basic layout remains almost identical. The additional luxury touch is the 30mm thick Carrara marble base plate (which echoes the marble base plate of the Amator III stand) and this is delineated from the Walnut side and top by a thin sheet of brass (similar in colour to the Sonus faber front logo and the bi-wire rear panel). In less design-capable hands this marbled base could look tacky, but here it just drips elegance. Yes, it means the Amator III isn't going to fit snugly into some chintzy shag-pile throwback of a home, but if you own an Eames lounge chair and it doesn't look out of place, the Amator III fits perfectly. A convex grille is also available for those who don't like the look of drive units.

Like its predecessors, the Electa Amator is designed to be relatively easy to drive, with an 88dB sensitivity and a nominal impedance of four ohms. This is more about quality than quantity and a good amplifier will drive these speakers well, rather than calling on a noted powerhouse. Curiously, Sonus faber recommends the speakers and the listener each sit at the vertices of an equilateral – rather than isosceles – triangle. This makes for a very near-field listening position, but in fairness it works. The more commonplace isosceles triangle (with the listener at the apex and the loudspeakers at each base vertex) works too, but in fairness to Sonus faber I tried the equilateral positioning and it worked better. This does need a room where there can be a good metre or so from the rear and side walls, and similar behind the listener's head, but the performance is well suited here. ▶



OUR RECOMMENDATION:
BUY TWO!



“This is a big loudspeaker that just happens to live in a small box The sound it produces is extraordinarily large.”

► The loudspeaker harks back to past glories in a hint of old-school Sonus faber warmth; there's a silken refinement to the midrange and upper registers that really brings out the richness and sublime nature of voices and acoustic instruments. Sonus faber was always really good at making a violin sound beautiful and there is no change here; Ruggiero Ricci's violin playing on *Paganiniana* [Water Lily LP] is never less than sonorous and precise, but here takes on a masterful quality. In truth, I'm a bit 'hot and cold' on this album; it's beautifully recorded but so close mic'd it rarely lets the musicianship shine through. Here, however, the beauty of the recording, the tonality of the instrument and the quality of the playing all meet in between the loudspeakers. This kind of sound is classic-era Sonus faber, but with more tonal accuracy and modern-day speaker honesty to keep going in today's world, meaning that violin sounds more like a violin and less like the sonic equivalent of a masterly oil painting of a violin.

The other major Sonus faber characteristic inherited from past masters is the uncanny way this is a big loudspeaker that just happens to live in a small box. The sound it produces is extraordinarily large, almost always right-sized, with the kind of holographic image so real sounding, you could sub-let the soundstage to a young family. In this, the Sonus faber occupies the best of both worlds; a stereo image that is almost coming from a tiny point-source, coupled with the sort of scale and bass depth that makes you think of big floorstanders. 'Congo Man' from Ernest Ranglin's *Below the Bassline* album [Island] highlights this well, with the underpinning of reggae bass lines and drums sounding vast and that sweet guitar sound picked out perfectly in the sound field.

There is no getting around the laws of physics; you can bend them, but you can't break them. In this case, that big and impressive sound comes at the cost of absolute beat-precision. In truth, this probably only really manifests if you are really into techno music, where the big port helping to make the huge sound begins to make its presence felt. However, this is not so much a typical chuffing sound you might hear from an intrusive port, and certainly has no lack of energy. In other words, it's perhaps more ZZ Top than Skrillex... which is no bad thing.

Most of all, though, Sonus faber has made a thoroughly modern time machine in the Electa Amator III. It retains much of the inviting sound of old, without showing up the limitations of the past in the present. It's detailed, dynamic, has a beautifully-constructed soundstage, and best of all sounds bloody lovely when playing music, which is kind of the point of a pair of loudspeakers. They say beauty is only skin deep; Sonus faber's Electa Amator III begs to differ. It's as lovely on the inside as it is on the outside. +

TECHNICAL SPECIFICATIONS

Type: Two-way, ported standmount loudspeaker

Drive unit complement: 1× H28 XTR-04 Damped Apex Dome 28mm silk tweeter, 1× MW18XTR-04 180mm cellulose pulp cone mid-bass driver

Frequency response: 40Hz–35kHz

Sensitivity: 88dB SPL (2.83V/1m)

Nominal Impedance: 4Ω

Amplifier power handling: 35–200W

Dimensions (H×W×D): 37.5 × 23.5 × 36cm (excl stands)

Weight: 14.6kg each (excl stands)

Price: £9,000 per pair

Manufactured by: Sonus faber SpA

URL: sonusfaber.com

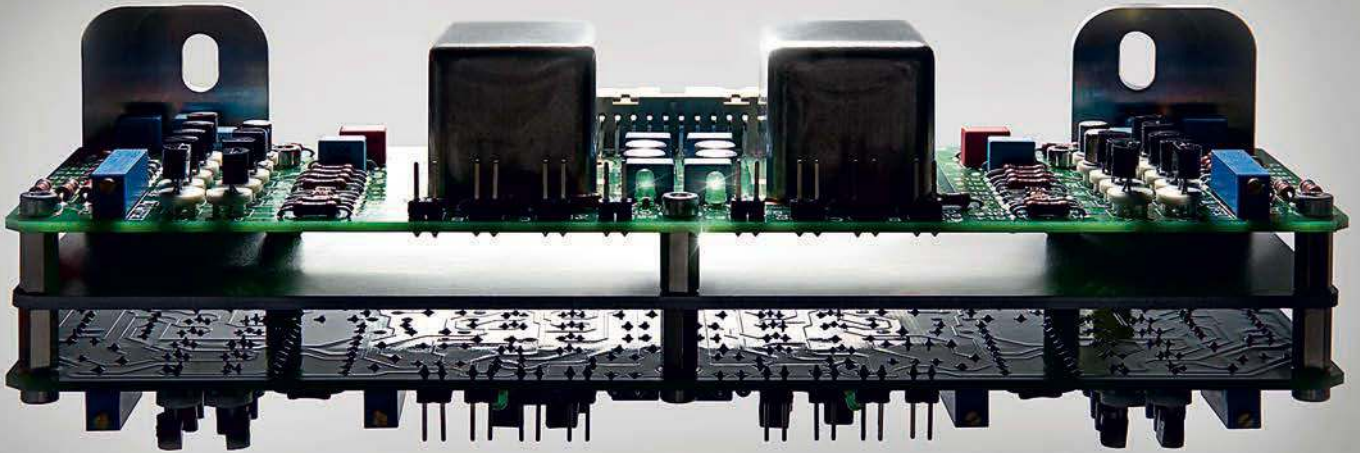
Distributed in the UK by: Absolute Sounds

URL: absolutesounds.com

Tel: +44(0)20 8971 3909



New level of sonic performance
Master-quality sound.



Formula xHD | new upgrade
analog module rev. 2





GOLD NOTE

il suono italiano



Available from the following approved Gold Note dealers:

Analogue Seduction ● Audio T ● Hard to Find Hi Fi ● Jordan Acoustics
Kronos AV ● Kingscote Audio ● Summer House Sounds

Visit our website to find your nearest dealer:

www.audiopinnacle.co.uk

Vitus MP-201 masterpiece D/A converter

by Chris Thomas



Masterpiece is a huge label to hang on any component, especially by the designer and manufacturer himself. But, over the years I have listened to and reviewed many of Hans-Ole Vitus' products and doubted that he would throw such a description around lightly. Masterpiece he named it and after hours and hours of experiencing it I would say that there is no exaggeration within that title, because a masterpiece it surely is.

The MP-201 DAC is typically Vitus. It's heavy, impeccably constructed inside and out and features let's say a generous deployment of metals and alloys within its semi-industrial design. Two hefty front panel side-elements house the six on-board controls while the small display sits in the middle as per usual. There are the expected set of inputs on the

rear panel allowing it to be connected to just about anything digital through a 24/192 USB or S/PDIF, both RCA or XLR. Everything that comes into the MP-201 is upsampled to 24bit/792kHz. Analogue outputs are via XLR or RCA.

There is also the intriguing option of fitting a module that provides a couple of pairs of analogue inputs (RCA and XLR) and a high quality volume control allowing it to function as a DAC/preamplifier. The MP-201 has a standard on-board volume for level trimming, but the optional preamplifier in one box option is much better and uses a series of discrete resistors that don't eat into resolution. This essentially means that you could forgo the expense of an undoubtedly expensive separate preamp and drive the power amplifier(s) from the DAC.

Vitus really knows what it is doing with volume controls and over the years we have found that volume control quality is critical to the performance of any pre-amplification. Factor in the cost of associated paraphernalia that a preamplifier brings and for the £2k that the additional board costs, the value of the MP-201 begins to look a lot better. Unfortunately for me, the review sample did not come equipped with that Analogue board but, if I was a potential customer, I would seriously look at it as an option, bearing in mind that brilliant sounding high-end preamplifiers are among the rarest and priciest components out there and that Vitus already makes some of the best.



► We listen to systems, not individual components. How can we make any sort of accurate determination as to the interplay between audio electronics when there are so many of them in operation at the same time, all doing such complex jobs with music, one of the most intricate, and transient art forms around?

I streamed Tidal from a Roon Nucleus straight through the USB and listened to a high-end CD player through the digital XLR input. Amplification was a Dartzel pre and power (a fantastic thing that I shall return to in a future issue). The electronics sat on a Stillpoints rack and the cabling was all Nordost. If you think this sounds like an interesting amalgamation then let me confirm that it certainly was that and much more. Rarely have I had such an intriguing music machine at home.

Let's talk system resolution for a moment. I believe that the word means different things to different people and barely an audio discussion passes without its absolute desirability being dropped into the mix. For me it encompasses just about everything that comes out of the speakers. It's not so much that you hear new details that you haven't heard before but rather that you hear them in a new light, perhaps with a new relevance to the piece. A high-hat figure from a drummer, a vocal inflection or a phrase from an instrument might suddenly knit a rhythmic passage together or resolve and answer a question asked within the music. It may be positioned within the soundstage differently to the way you heard it before. The Vitus can and will do these things. It really doesn't matter how complex and deep the music is, or how seemingly simple, this Vitus will get right in there between the notes to show you what is happening and not in a chilly forensic way either. Just about every facet of the way the music moves through time in a digital system, be it streamed or CD based, falls under the control of the DAC and the way it deals with the data that flows through its inputs. Having said that, I did have someone tell me recently that it's just a stream of ones and zeros so all DACs should sound the same. Good luck with that one.

As time has passed and sensibly configured digital-based systems have become a very serious option, the possibilities have grown and grown, alongside the very real sonic improvements from subscription services like

Tidal and Qobuz. It seems that we are really beginning to appreciate the absolutely vital role that the right DAC plays as the system conductor. The musical differences between them are as important as those you will find between other components and no amplifier or speakers can replace resolution that the DAC misses out on. Early DACs could be rather thin and mean-sounding devices, shimmering with unrealistic and brash detail that gave many of us a headache. They helped in no small way in giving digitally sourced music such a bad name, especially among analogue enthusiasts. As I said though, things have changed beyond all recognition and with products like this Vitus, the DAC finds itself at the heart of all top quality digital based systems by controlling everything further downstream, from timing to tone.

To say that this is a good DAC would be an understatement as it has such wonderful scope and potential for the music to develop and work its magic. The soundstage is broad, very, very deep and full of energy, ambience and pure airspace. Transparency and rhythmic movement are superb and its bass performance is epic. Rock solid stability and a feeling of tremendous power, bandwidth and sheer weight bring a real sense of involvement as do the musical complexities it unravels right in front of you. Tonality is a system thing really but the Vitus, despite its considerable and organic musical density, seems about as neutral as I have heard. It's this connection with the system that makes it all worthwhile emotionally. A really good system is one that has the capability to talk to you personally and the MP-201 is right on message here and what it has to say is profound.

Take the seeming simplicity of a single musical phrase whether it be from an instrument or a voice. It's all part of the story that the composition is telling. The Vitus spins the yarn explicitly. It seems to revel in showing the smallest details, joining them up and relating them to the whole, even on the simplest of songs by the most introspective ►



BRACE YOURSELF.

TUK

130 Watts RMS • AMT Tweeter • 5.25" Aluminum Concave Cone • Class D Amp • Bluetooth® with Qualcomm® aptX™ HD
RCA Line • RCA Phono • USB DAC • Optical TOSLINK • Sub-Out • USB Charge • Headphone-Out

kanto 
kantoaudio.com

“The Vitus is brim full of nuance and subtlety but it is certainly dense where sheer musical information is concerned.”

► of singer-songwriters. It has an almost surreal way of explaining the piece through the language of music and where the art itself is concerned the Vitus is supremely eloquent. High-end systems like this are simply wonderful at unravelling musical relationships and their place in the passing of time, or we may call it rhythm or tempo. The Vitus is brim full of nuance and subtlety but it is certainly dense where sheer musical information is concerned. From the texture and colour to the way that individual notes, whatever their source, are born, live and then fade to be replaced by something new. This is absolutely great when you listen to soloing and appreciate what a precious gift true phrasing is and how it is the very root of expression and pure musicianship.

The MP-201 is very, very quiet and the blacks are as inert as I have heard. There is no sense of a highly detailed and processed digital stream of data being reconstituted. It has the ability to adapt completely to any musical form. A simply miked recording of a singer with an acoustic guitar can literally shake you with its realistic scale, intimacy and beauty as it has this way of drawing you toward the artist by giving them shape and physical form within the soundstage. They exist as a three dimensioned feature and not just a mouth and a guitar. Depending on the quality of the recording there can be something so captivating and so emotionally powerful here. But give it bigger work to do, like an orchestra at full throttle and it digs deep and gives the amplifier a lot of dynamic work to do while maintaining levels of instrumental detail and separation that is truly special.

Like all great audio products it is endlessly dynamic but this doesn't only mean that can go loud or soft. Instruments or voices rarely maintain level evenly, but the Vitus copes heroically with no problem. It's the way it allows each instrument such latitude and freedom of power and expression that remains one of its most captivating charms. But, when I talk about its exceptional abilities I am also talking about getting the small and the very, very small things right. The beauty of note decay or subtle vibrato and the way that such delicacy sits very comfortably next to explosive transients bringing a real feeling of relaxation and once you have confidence in the system's potential and you know it isn't going to sound stressed or at its limits, it becomes so very easy to listen to.

Yes, the Vitus MP-201 is a masterpiece product as the name states but it can only work within the limitations of the system it sits at the heart of and this means that its likely destinations are high-end systems, or in other words, expensive systems assembled by those fortunate enough to be able to afford them. You are going to need to make sure that every detail has been thought through. This means from the router onwards. You really need to give the conductor the right tools and there are no short cuts. I have heard so many systems that cost more than a house that failed to deliver anything other than a loud and rather tiring facsimile of music. Brimmed full of the most outrageous

TECHNICAL SPECIFICATIONS

Type: Single box DAC/Pre

Inputs: USB, S/PDIF-RCA, S/PDIF-XLR
with optional RCA and XLR analog inputs

Outputs: 1 × XLR, 1 × RCA

DAC: Master Clock – Vitus module – upgradeable

Sample rate: 792khz

Resolution: 24-bit

DAC: 4 × AD1955 in mono configuration

Dimensions: 135 × 435 × 430mm
(H×W×D)

Weight: 25kg

Finishes: Silver or black

Price: £24,000

Manufactured by: Vitus Audio

URL: vitusaudio.com

Distributed by: Kog Audio

URL: kogaudio.com

Tel: +44 (0)24 7722 0650

detail but totally lacking in soul or humanity. Digital-based music can still be like this. It has always been that way since Digital began to show its (then) ugly face to the world through recordings on vinyl. I read the reviews and rushed out and bought this early stuff and ended up hating it, for years in fact. Early CD too was shockingly bad. But, where we are now is light years away from those days. What hasn't changed is that realising the potential out of any system includes the painstaking business of considering the infrastructure that surrounds the electronics themselves.

Credit where it's due. For me the Vitus MP-201 is a brilliant and notable product simply because it is so very emotionally engaging and attractive to listen to. If you are in the market for such a DAC/Pre you would be very wise to give it serious consideration by adding it to your audition list. I doubt you'll be disappointed. +

HANDCRAFTED SINCE 1967
SUGDEN
AUDIO

THE MASTERCLASS ANV-50

Rescuing Music From Technology



SUGDENAUDIO.COM



Ultra Black II Speaker Cable

Even taking in account all the awards that the old Ultra Black speaker cable won, this new version gives a whole new level of performance that is obvious from the first second of listening. Greater detail, more clarity, more organic but still sitting very firmly in the Black cable family.



Tellurium Q have been busy....

With new introductions such as the Silver and Silver Diamond power cables and an upgrade to the established classic Ultra Black speaker cable, we have the ability to achieve even greater performance from our systems. Contact Kog Audio for more information or ask your dealer to arrange a demonstration.

Silver Diamond Power Cable

The final piece in the puzzle for the Silver series of power cables. It has some of the "magic" of the Statement power cable because it came out of that same research and so is a smooth, detailed performer that brings your system to life.

Silver Power Cable

The new Silver power sits above the Black power cable in performance. The Silver power cable does a great job balancing the smooth attributes of the black cable while giving more energy, detail and dynamism that is the signature of the Tellurium Q Silver family. Add to that a more flexible construction and the new Silver power cable ticks every box.



Kudos Titan 505 stand-mount loudspeaker

by Alan Sircom

I've always wanted to say something like this, but the Kudos 505 comes from a race of Titans! It's the smallest and lone stand-mount in a four-strong Titan range, all of which use the same basic profile; a rear-ported isobaric design, like the 606 and 707 it's a two-way design, and all of them can be powered actively as well as basic passive operation. The Titan 505 arguably lends itself to passive drive slightly better than its bigger brothers (by virtue of not having those bigger cones to move in the two largest models), and this is the ideal model for the listener in smaller rooms.

Kudos uses SEAS drive units, custom made to Kudos specification, throughout the Titan range. They all use a 29mm K3 fabric dome tweeter (a 'Crescendo' K3 dome in the 808). Both the Titan 505 features two SEAS-Kudos 180mm mid-bass units, composed of double-coated paper cones, with a 39mm voice coil that uses a copper shorting ring, and an aluminium phase plug with Kudos three-lobed racetrack logo on the visible driver.

The second of the two mid-bass units is internally mounted in an isobaric bass reflex system. Isobaric loading requires two identical bass units wired in parallel inside a common cabinet, so that the front face of one unit and the rear face of the other operates within that cabinet. Kudos adopts a back-to-back driver arrangement, with a reflex port behind the isobaric chamber.

The cabinet itself is well-finished, and the side cheeks come in a range of five finishes, including the lovely shade of walnut in which our samples were supplied. However, the front baffle, top, and rear are all in a ▶





▶ contrasting flat black. Under the surface is some fairly powerful resonance control techniques deployed throughout the loudspeaker.

The crossover is a key feature, in part because it's inherently defeatable. If you go passive (as we did), the loudspeaker has a minimal, low-order crossover with high-grade components from Mundorf and Clarity Caps. However, the rear panel is festooned with links and connectors, and their removal gives the listener the chance to drive the loudspeakers actively. Thus far, active crossover networks have been developed with Linn's Exakt system, Devialet's Expert amplifiers, and Naim's SNAXO electronics. We relied on a single Devialet Expert instead. Naturally this means more amplifiers in the chain, but the exercise is generally considered more than worth the effort and expense.

The Titan 505 is designed to be used with an integral equipment stand, which is itself deceptively heavy when filled and features some stealthy engineering in its own right. It's a seven-pillar stand, with six of the seven pillars designed to be filled to the end user's requirements.

Like many loudspeakers reviewed today, the review sample was the demonstration sample and had been given many hours of use before we got it, so any discussions of the run-on process or the time it takes to come on song were long past. The loudspeaker takes a few minutes to come on song when either moved or left fallow for any length of time. Give it a quick blast of Faithless for a few minutes to wake up the bass units. You can tell when the isobaric section kicks in... in an appropriately sized room, it's like firing the bass afterburners. The sound fills in, drops an octave, and starts swinging a few gut-punches.

The first and most obvious point of the Titan 505 is its bass. For a stand-mount loudspeaker and a loudspeaker of its size, the bass is prodigious. Not overpowering or overblown, just that 'where did you hide the subwoofer' bass power and drive. This comes across on almost every piece of music played, but surprisingly showed up with the exposed click-track at the end of 'Georgio by Moroder' from Daft Punk's 2013 hit album *Random Access Memories* [Columbia]. The end of the track slowly decays to a synth bass drum and then a click track, and the heft of the drum fades almost imperceptibly, but with the Titan 505 the delineation between the two is easy to hear and you know when the fade out takes place. Other loudspeakers also do this, but all that do are invariably larger designs. It's at once a dry, taut bass and a 'phat' deep bass, largely depending on source material, which means it doesn't get in the way too much; using Trentemøller's 'Chameleon' [*The Last Resort*, Poker Flat] as a deliberate test of a port choking up and making 'chuff' sounds – and overall speed of transient attack at the low end – the Titan 505 behaved admirably well, and while it didn't exhibit the absolute lack of overhang of a sealed box, overhang and port choke-up were chuffin' minimal. In short, bass is deep, powerful, and very well handled. ▶



SOURCE

The first Linear Power Supply designed specifically for a hi-fi audio application

- Replacement for external switch-mode power supplies
- Provides a stable, clean output of DC power with extremely low noise levels
- Uses QRT technology to remove electrical anomalies and noise artifacts from the line
- Enhances audio imagery, heightens dynamics, and expands sound stage

POINT

This unique 'Resonance Synchronizer' eliminates electrical noise within your audio components

- Generates a field that manipulates electromagnetic resonances so they oscillate in unison
- Immediately maximizes performance of the components you already own
- Customizable results to complement different components
- Lowers noise floor and increases coherency and articulation in music

Nordost's new QPOINT and QSOURCE bring a new dimension to any sound system. Use them separately, or take advantage of their natural synergy to even further transform your components, ensuring that all of your electronics are working in harmony, and at their maximum efficiency.

NORDOST
MAKING THE CONNECTION

Distributed in the UK and Ireland by  Renaissance

0131 555 3922

info@renaissanceaudio.co.uk

www.nordost.com

Made in USA





► I don't want this review to focus on bass alone; although it's the Titan 505's signature dish, there's a whole musical menu to be sampled and enjoyed. The loudspeaker also has a dynamic range and shade far beyond that of most conventional two-way standmounts of similar size; just play any powerful orchestral piece, such as Mahler's Eighth symphony [Solti, LSO, Decca], and you are met with a loudspeaker that belies its size once again when the orchestra, organ, and choir go for it in the first and last movements. It's also a subtle performer, with sufficient detail and dynamic shading and contrast to pick out delicate string noises on a DG collection of Segovia's guitar playing. On a Bach Partita, the string squeaks are there, but at a far lower level than the playing; they should meld into the music like surface noise on vinyl on a good replay system. In effect, they make the track sound alive, but less dynamically precise loudspeakers make these squeaks sound too up front and become a distraction. Once again, the Kudos is all about the balance.

The treble is refined and extended too, without exaggeration or strong emphasis. This can be a problem with loudspeakers that deliver good bass for their size; the designer often can't resist adding a bit of zing to the top end. Here, the treble is both well-balanced and extremely poised, staying in the Goldilocks zone between 'strong' and 'rolled off'. Granted, we have become so used to a 'hot' treble these days it takes a few moments to remember what accurate and honest treble sounds like, but it sounds like this. The natural examples to show here are female vocals, which also highlight the 'do no harm' nature of the treble reaches down into the midband, too; the purity and simplicity of Joni Mitchell's voice on 'Help Me' from *Court and Spark* [Asylum] was left entirely untouched making the record exceptionally moving and extremely easy to follow.

Stereo imagery and separation are outstanding too, although 'outstanding' set in the context of an 'excellent' performance elsewhere. Sounds within the soundstage are exceptionally well rooted in place and image stability holds throughout. However, if you are looking for some kind of three-dimensional hologram of the stage, the Kudos Titan 505 get you about 85% of the way there. The image is wide of the speakers and has excellent depth, in the manner of good wide-baffled classic British loudspeakers, but pin-point precision to the soundstage is a little illusive. My new go-to recording here is Joyce DiDonato singing 'Tu sola, o mia Giulietta... Deh! tu, bell'anima' from Bellini's *Capuleti e Montecchi* [Stella Di Napoli, Erato]; as the song concludes, the orchestra fades into the background just leaving her voice centre-stage and a French horn behind

TECHNICAL SPECIFICATIONS

Type: Two-way isobaric bass reflex stand-mount loudspeaker with optional active operation

Drive units: 29mm fabric SEAS-Kudos K3 dome tweeter, 2x 180mm SEAS-Kudos double-coated paper cone mid-bass units

Frequency range: 40Hz–30kHz (average in-room response)

Nominal impedance: 6 ohms

Sensitivity: 87dB/W/m

Recommended amplifier power: 25W–250W

Side cheek finishes: Walnut, Tineo, Red Tineo, Black Ash, Satin White

Dimensions (HxWxD): 45 x 25.6 x 32cm

Weight: 18kg

Price: From £7,000 per pair

Manufactured by: Kudos Audio

URL: kudosaudio.com

Tel: +44 (0)845 458 6698

and slightly stage right of her voice. In the best imaging products, the two are precisely delineated in a three-dimensional space; here they blend slightly. That being said, to get a loudspeaker that improves on this without sacrifice elsewhere is only possible at nearer twice the price of the Titan 505.

The Kudos Titan 505, like the other models in the Titan range, is making a lot of friends when heard in shows but is typically heard in active mode. But not everyone who buys a Titan 505 will buy it as an active loudspeaker, because the price of entry and no small amount of audiophile inertia pushing back against active operation. Played passively however, the Titan 505 is a real star too. Whether you view it as a stepping stone to active drive of a passive loudspeaker end in its own right, the Kudos Titan 505 is one of the most impressively well-balanced loudspeakers in its price and beyond. +



New power distribution for your music system!

The NEW Ansuz Mainz8 A2/C2/D2 power distributors will become the heart of your music system, providing a steady flow of current to even the most demanding High End systems. With a massive capacity to ground through star grounding technology, these three new models holds the same principles as the Ansuz Mainz8 D-TC line, and delivers the perfect groundwork for High End performance.



Ansuz Mainz8

The NEW Ansuz Mainz8 A2/C2/D2 units exploits two different ways of conditioning the mains current, a passive and an active mechanism. The passive coil-based mechanism rounds of noise transients, so your HiFi-equipment better deals with transient current noise. The active mechanism samples the noise spike. A counter noise transient spike is added to further condition the current to an even lower noise floor for unmatched clarity and spatial focus.

The new Ansuz Mainz8 power distributors comes in three versions; A2, C2 and D2. All three models distributes mains power in 8 dedicated power outlets and an effective ground connection. Starting with the A2 version, you will experience that performance is way better than our previous Mainz8 D model. Moving up to C2 and D2 you will get more of the technology and experience significantly improved performance, gained from creating the Ansuz D-TC series and from the new Ansuz 2-series.

D2
C2
A2

Quality Digital Streaming



Clockwise from top left: Innuos Statement, AVM Evolution MP 5.2 Media Player, AVM Inspiration CS 2.2 4T Streaming CD Receiver, Innuos Zenith

After auditioning many of the best brands in this arena, two stood out to us on sound quality, **AVM** and **Innuos**. Both offer excellent sound quality from physical sources as well as offering highly commendable streaming from subscription services. Most importantly, both brands offer a more natural sound than other streaming products as they are solely audio-focussed in their design and build.

Innuos has its history in computer based equipment but has focussed on audiophile components and quality power supplies in their designs. Their models, with their striking chassis designed to reduce resonances, have the ability to quickly rip CDs to an internal storage and then serve this data direct to the audio system, or to a separate DAC, or to the network, along with streaming services such as TIDAL, QOBUZ, Deezer. Because they start from a physical CD basis, and have focused on audiophile qualities, they have achieved a similar sound from streaming to that with a CD, from their entry model ZENmini to the impressive Statement.

AVM is a true high-end audio company manufacturing since 1986. All models are handcrafted to the highest standards in Germany. By using simple, logical design principals to achieve optimal performance levels, the sound quality achieved is amongst the best in the industry. Their products offer a wide variety of options due to the modular design and have a more classic audiophile appearance. Their Media Players and All-In-One CD Receivers include a real TEAC CD Drive integrated into their streaming units which fully support TIDAL, QOBUZ, UPnP, Webradio.

Melco N100 networked music server

by Alan Sircom



If you get ten computer audio experts drunk – I mean really, tongue-looseningly, inhibition-dropping, just pre-unconscious honesty drunk – you’ll likely hear the same complaint; the problem is the computer. A computer has amazing advantages in the acquisition, storage, allocation, and replay of music, but it’s a little bit too flexible for its own good. A lot of the current trend in floating earths and isolation through power conditioners and regenerators comes about in an attempt to keep at arm’s length EMI and RFI generating components, such as the relatively cheap power supplies, graphics processing cards, and screens that go into a typical laptop. Many companies

go some ways toward compensation, by building more dedicated audio computers, but few go down the whole ‘computer-less computer audio’ route. Melco is the exception.

OK, so in reality ‘computer-less computer audio’ is an oversimplification; the architecture inside the Melco N100 is still very much that of a digital computer; it has inputs, outputs, memory, storage, a processor, and it operates using a series of programs running along an operating system. None of this reinvents the wheel, and the technology used comes from the computer world, not from Area 51. However, the difference with the Melco is every circuit pathway, every board, bus, and byte are tasked to home audio use. Put it this way; armed with a USB stick and malign intent, you could reprogram most music servers to act as a personal computer. But not here; the Melco’s architecture is too musically-directed.

The same has held with every Melco device since the first models appeared five years ago, but the N100 is the smallest and most affordable in the range; the half-sized device that manages to cram a lot of architecture ►



“Each device in the Melco chain has two USB 3.0 connectors.”

Instinctually, I like this way of doing things – the Melco is just another link in the chain providing good sounds but can be a means whereby sounds from networked sources can be heard with some of the noise of that network stripped away. The number of USB inputs could seem limiting at first, but in fact Melco has been smart here, too. Each device in the Melco chain has two USB 3.0 connectors, allowing a daisy chain of devices. So the lone input of the N10 attaches to a D100 drive, which then attaches to an E100 hard drive extension. Or vice versa. Even if the D100 is powered down, the E100 drive will still speak to the N10, and there’s always the front-mounted USB device. I’m sure there’s a finite limit to the number of units you could daisy chain this way, but as the two-box N10/E100 combination already gets you to 7TB of storage, and yet more accessed through UPnP on an Ethernet store, I think you run out of tracks and shelf-space before running out of Melco road.

I have been spoiled here in that I am a user of the Melco N10 and its separate power supply. The N100 brings that power supply in the same box and uses an external 12V power supply to drive that (upgrades are possible, and welcomed). This is very well isolated, but an order of magnitude below the power fed to the N10, and doesn’t include some of the powerful vibration isolation systems deployed in the two-boxer. That being said, the N10 is 3.75x the cost of the N100 and doesn’t deliver 3.75x the performance unless you are really pushing the envelope of audio performance elsewhere in your system. In the context where a £1,800 music library is wholly appropriate, the Melco N100 is a little miracle.

First, I don’t know how Melco managed it, but that little 2TB spinning drive in the ►

► into a very small box. What’s also shared with all Melco models is an ability to cope with tracks up to 32bit/384kHz PCM, or DSD 512. MP3, WMA, and OGG fall into the ‘squirt, not play’ category. There is a matching D100 CD/DVD/BD transport/ripper, and a E100 external 3TB hard drive (you can also use your own external USB hard-drives). There is also a bigger brother called the N10, which beefs up the size of the hard drive (from 2TB to 3TB) and comes with an external power supply. Both limit the number of inputs and outputs (one front and two rear USB sockets, and two LAN RJ45 connections).

Both the N10 and N100 are very much designed to have digital pathways ‘in’ and ‘out’ rather than the bi-directional connections usually seen in computer-based systems. In USB, that means there are front and rear USB inputs for memory sticks or hard drives, and an external USB out for a DAC alone, while for Ethernet there is one connection designed to link the Melco to a local network, and another connecting it to the relevant player. While there has to be some bi-directionality involved (if you connect the N100 to a player via Ethernet, that player needs to access whatever’s upstream of the Melco), the advantage here is the Melco acts like a semi-permeable barrier between the noisy world of Ethernet and the more sensitive souls in an audio system.



AMBITIOUS
AUDIO DESIGN

HIGHEND LOUDSPEAKERS

MADE IN DENMARK

“Flipping from track to track, it was pretty clear the Melco products edged ahead, and so much of the N10’s DNA made it to the N100.”

- N100 is whisper-quiet in use. Second, it completely nailed the sound of ‘Figure’ by Vök [Netwerk] ripped to the N100 through the D100, giving it that slick Portishead-meets-the-1980s vibe. This was quad-useful, as I could stream it from Tidal, play it from the N100, play it through UPnP from my Naim Uniti Core, and even play it from the original disc, all into the inputs of the Hegel H390. I could also compare N10 and N100, although for sake of trying not to inject too many conflicting shared sources, I did this through an A-B swap. The difference between them through this level of DAC and amplifier were more ‘how do you take your coffee’ than blowing things out of the water. If anything, the slightly compressed and boppy mix benefitted the N100 over its rivals; the even darker, quieter, stiller backgrounds of the N10 are not relevant here and while the Naim made a good attempt at the sound, the N10’s ability to cut through the compression benefitted greatly. Moving from this to Andras Schiff playing Beethoven’s Piano Sonatas [Vol VI, ECM] and the N10 showed where the money was spent in sonic terms in terms of tone and air around the piano, but the N100 was a close second. Flipping from track to track, it was pretty clear the Melco products edged ahead, and so much of the N10’s DNA made it to the N100.

I found the N100 worked best as a streamer in its own right, feeding a USB DAC. The app (iOS only) is a quick and intuitive controller of the Melco product and, through that, the outside world. If you already have a streamer, the Melco makes for a fine server in its own right too. The Melco’s software architecture is primarily Twonky based (there is a Miniserver port) and every server system has its detractors, but in use its stable, easy to navigate, stable, intuitive (small learning curve hurdle, but no biggie unless you come from something more authoritarian in approach), stable, and most of all stable. The stable thing is worth mentioning several times, although system robustness fortunately now seems to be more of a universal ideal than a guideline worth forgetting.

A word about the D100 drive. It’s a potent device in its own right, and very probably the best standalone ripping transport you can get at the moment. Yes, it’s geared up for coping with more than just CD (but, sadly, not SACD), but even as a ripping device for CD alone, it’s a star. While I have railed against the whole ‘Mac + DAC’ movement in favour of more dedicated solutions, pragmatism has to reign supreme and there are a whole lot of people who use computers as front-ends. And if more of them used the D100 as their USB drive, they might begin to realise just how much more there is to offer in good separates audio. I think in most cases it will be used with Melco systems, however, and it’s a perfect match.

It sounds a little odd, but a device like the Melco is hard to categorise. It’s an increasingly powerful music library in its own right, especially when used with Melco’s own app, but effectively acts as a UPnP server, or even just a high-performance storage device if you want to ‘roll your own’ using something

TECHNICAL SPECIFICATIONS

Type: Music server with HDD storage
Storage: 2TB
Network connection: RJ45 Ethernet
Digital Outputs: RJ45 Ethernet, USB
Back up connection: USB
Formats supported (player): DSF, DFF, FLAC, WAV, ALAC, AIFF, AAC
Formats supported (server): DSF, DFF, FLAC, WAV, ALAC, AIFF, AAC, MP3, WMA, OGG, LPCM
Sample rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 384kHz, 2.8MHz, 5.6 MHz, 11.3 MHz
Bit depths: 1bit, 16bit, 24bit, 32bit
Streaming services supported: Qobuz, Tidal
User Interface: Melco control application
Other Features: UPnP server, DLNA device compatible, Roon Core
Accessories: Quick Start Guide, USB 2.0 cable, Category 6 Ethernet cable, AC adapter
Dimensions (HxWxD): 61 × 215 × 269mm plus inline PSU
Weight: server 3kg
PRICE: £1,799

Manufacturer: Melco Audio
URL: melco-audio.com
Tel: +44(0)2477 220650

like Roon. In a way it makes it a bit like a butler in an English costume drama (without all the underlying and unresolved sexual tension, or the Jeeves-like dry wit); it does the job almost invisibly, effortlessly, and perfectly. And it’s built like a tank, too! **+**

R

Raidho
Acoustics

TD1.2

The truth?
– You can't handle
the truth!

Meet us on facebook

uk distribution:
www.decentaudio.co.uk



ELAC The life of sound.

First we created a class
leading powered speaker.
Then we made it wireless.

Navis

ELAC's new Navis Series answers every minimalist audiophile's dream of a no-compromise powered speaker driven by best-in-class amplifiers which are truly deserving of the name "high end." Whilst most powered speakers rely on Class D digital designs, ELAC engineers built in 300 watts of pure analog amplification for incredible power and exceptional sound.



Add the Discovery Connect wireless transmitter to your system, and Navis becomes a wireless speaker that lets you enjoy streaming content without a cable in sight.



Bluetooth



Airplay



dlna



Spotify



Roon



Discovery

For further information visit ELAC.com

Distributed by Hi-Fi Network

www.hifi-network.com HiFiNetworkLtd

info@hifi-network.com 01285 643088



Gold Note IS-1000 Deluxe Network streamer/amplifier

by Simon Lucas



Certain stereotypes are entirely and unarguably positive. The nation of Italy has more than its fair share of stereotypes attached, and to a lesser or greater extent they all suggest the same thing.

For example, think of the stereotypes around Italian cuisine. Or Italian shoes. Or Italian architecture, or Italian couture. Heck, even Italian haircuts. 'Italian' is a byword for smooth sophistication, aesthetic finesse, and unforced elegance.

To a lesser or greater extent, this complimentary cliché holds true for Italian hi-fi too – there are any number of high-end Italian brands to whom 'smooth', 'sophisticated' and all the rest apply.

Gold Note has only been crashing the high-end party since 2012. But in that time it's demonstrated the required dedication to engineering, styling, materials and, most of all, resultant sound for me to confidently say: yes. Yes, Gold Note can be counted as a stereotypically Italian hi-fi brand.

The all-in-one stereo item is a bit of a struggle for the high-end brigade, isn't it? It's all well and good sticking to established principles of separation and isolation of components in a drive for minimal signal corruption... let's face it, though, consumers have got used to being pandered to. Convenience may not be the be-all and end-all to the high-end hi-fi fancier, but *lack* of convenience can be a deal-breaker. Which is where Gold Note hopes to step in, its Italianate armour shining, with the IS-1000 Deluxe.

Gold Note's IS-1000 Deluxe is a 'just add speakers' one-box answer to the vexed question of convenience. In fact, there are two models, differing only in the type of DAC they employ (although the IS-1000 with its venerable Burr Brown PCM1796 is only available to special order in the UK), and this IS-1000 Deluxe model sports the equally venerable and undeniably superior PCM1792A). Having two similar models seems questionable – but then marketing was never my strong point.



► Of course, an integrated amplifier/network streamer/DAC/phono stage all under one lid is hardly a piece of original thinking – but it's generally been considered Kryptonite to the hi-fi high end. The IS-1000 Deluxe, then, has its work cut out: it has to have the feature-count and seamless functionality of any number of one-box solutions, it has to sound like it's worth the money it costs, and it mustn't alienate the hair-shirt high-enders in the process.

Taken on an individual, stage-by-stage basis, the IS-1000 Deluxe would seem to have what's required to hold its head up in the Naim Uniti Nova-dominated arena of the Truly Pricey All-In-One Stereo System. Power, for example, is Class A/B and rated at an ample 125 watts per channel into an 8ohm load. In addition there's adjustable damping factor – 'high' is intended for bigger, less sensitive speakers while 'low' (which Gold Notes claims enables the IS-1000 Deluxe to mimic a low-power tube amp) is for high-sensitivity/monitor-type speakers.

One of the two pairs of analogue RCA inputs is switchable between line level, moving magnet and moving coil – the phono stage circuitry is derived from Gold Note's PH-10. There's a balanced XLR input, alongside three digital optical sockets, a digital coaxial RCA input and a type-A USB socket. Digital audio files on a wider network are accessible using the Ethernet socket or integrated wi-fi. Some chunky speaker binding posts, and two pairs of RCA outputs (one variable, one fixed) complete the physical socketry picture.

The digital inputs feed the Burr Brown PCM1792A DAC – PCM up to 24bit/192kHz is available from the optical and coaxial inputs, while the USB and Ethernet sockets are also DSD 64-enabled. Streaming from Tidal, Qobuz, Deezer and Spotify is integrated, as well as Apple AirPlay (but not, as yet, AirPlay 2). The IS-1000 Deluxe is also Roon Ready, supports UPnP and DLNA, and has vTuner internet radio access too.

On the outside, the IS-1000 Deluxe is on the burly side of the Italian stereotype. It's a bit more Primo Carnera than

Roberto Baggio – at 18kg, 13.5cm high and 37.5cm deep it'll completely occupy a kit-rack shelf. The aluminium casework is extravagantly vented in a manner mimicking the catenary curve that so preoccupies Gold Note, and allows oblique views of an extremely hefty toroidal transformer.

So far, so promising. The IS-1000 Deluxe, though, falls a little off the pace set by the Naim Uniti Nova when it comes to user interface(s). On the Gold Note's fascia there's a bright, crisp but undeniably small display – it gives a lot of relevant information, but stops short of displaying any album artwork or other metadata when streaming music. It's accompanied by a single large-ish turn-and-press control, through which it's possible to scroll laboriously through the display's menus and make selections and/or adjustments with a push.

Gold Note does have its own app (for iOS; Android users will need to rely on the more generic mconnect control app for a while). Unfortunately, this was not available at the time of review, but was is now available. We cannot therefore comment on its performance, and instead also had to rely on mconnect, which is packed with information and easy to navigate, although can be somewhat mercurial in daily use. We'd say go with the app, even purely on spec.

The sound of the IS-1000 Deluxe, though, its overall authority and fidelity, is enough to make grumbles about the control interfaces seem the smallest of beer. This is a big-boned and lithe listen, with more than enough flexibility to do justice to any type of music via any of its many inputs.

From a 200gm reissue of Fripp & Eno's (*No Pussyfooting*) [Opal] to a tragically thin original pressing of Rickie Lee Jones' *Pirates* [Warner Bros], the moving magnet phono input handles the input of a Clearaudio Concept turntable in fulsome manner. There's shine and bite at the top of the frequency range, depth and texture at the opposite end, and (in the case of Rickie Lee Jones, at least) brilliantly communicative levels of detail and character to the voice in the midrange. ►

ELEMENT 118 Monoblocks

"There are a handful of amplifiers that create a sound as fast and as precise as this, but one of the few that is still in production is DarTZeel. The two have a lot in common sonically, although the Element 118 is perhaps even more neutral-sounding than the Swiss triumph."

HiFi Plus, Alan Sircom Editor in Chief.



MERRILL  AUDIO



FLORIDA 2019: The Best of The Show



www.MerrillAudio.net

“Surefootedness and command that makes the IS-1000 Deluxe reproduction sound effortless.”

► The Gold Note's rapidity and grip contribute to unforced, virtuoso timing, and while there's stereotypically Italian richness in the midrange, the IS-1000 Deluxe nevertheless gets through a Tidal/MQA file of Karen O & Danger Mouse's *Turn the Light* [BMG] at quite a clip. What at first might seem like a slightly matter-of-fact presentation is revealed, in pretty short order, to be a combination of surefootedness and command that makes the IS-1000 Deluxe's reproduction sound effortless.

The fairly iffy Dolby Digital soundtrack to Andrew Lau's *Infernal Affairs* [Tartan Asia Extreme] input via one of the IS-1000 Deluxe's Toslink sockets is served up in equally forthright fashion. The Gold Note delivers brooding atmosphere and pyrotechnic Hong Kong cinema excesses with deft manoeuvrability – pleasingly, the scene in the hi-fi shop near the beginning of the movie is given all the detail it needs to describe the size of the shop floor explicitly.

The Gold Note maintains its broadly neutral tonality, its effortless momentum and its pin-sharp soundstaging across all of its inputs, both physical and wireless. Perhaps the most concise illustration of its specific strengths comes from a CD copy of Joni Mitchell's *People's Parties* [Asylum] via the IS-1000 Deluxe's balanced XLR inputs. Guitars shine weightlessly, the harmonies Joni sings with herself are lustrously detailed – and Wilton Felder's exquisite bass guitar cascades like a waterfall, the entry into and exit from each individual note absolutely distinct and square-edged. The low-level dynamic ability required to make a pacy bassline flow this naturally is not to be understated.

It's possible some listeners will question the lack of Bluetooth connectivity. It's not easy to get music out of the IS-1000 Deluxe in a hurry, because its interfaces aren't that rapid. Some listeners may crave a little more excitement, a little more lapel-grabbing, from their expensive all-in-one than is on display here, too – which is a perfectly valid position to take. But the Gold Note IS-1000 Deluxe is a more considered, and more considerate, performer than that. It's not an undemonstrative listen, but it's not about to put a rocket up your favourite recordings unnecessarily. Instead, it sounds smoothly sophisticated and authentically elegant – in the manner of all the best Italian paraphernalia. +

TECHNICAL SPECIFICATIONS

Type: Solid-state two-channel integrated amplifier

Analogue inputs: One switchable MM/MC phono input (RCA), one single-ended line-level input (RCA), one balanced input (XLR)

Digital inputs: Three digital optical inputs (Toslink), one digital coaxial input (RCA), one USB input (type A), one ethernet (LAN), wi-fi (dual band)

Analogue outputs: One line-level unbalanced (RCA), one line-level balanced (XLR)

Supported sample rates:

Digital coaxial and optical: up to 24bit/192kHz

USB: up to 24bit/192kHz

Input impedance:

High-level: 22k ohms

Phono: 47k ohms (MM), 470 ohms (MC)

Power amp: 22k ohms

Output impedance (preamp): 100 ohms

Power Output: 125wpc @ 8 ohms

Bandwidth: 20Hz–20kHz

Distortion: THD </+ 0.015%, 20Hz to 20kHz; IM </+ 0.015%.

Signal to Noise Ratio: 100dB, (phono stage)

Type: Solid-state, switchable MM/MC

Input Sensitivity: 3mV for full power

Input impedance (MC): 47kOhm

Input capacitance (MM): 220pF

Output impedance: 100 ohms

Output level: 1V for 3mV input

RIAA linearity: +/- 0.1dB, 20Hz–20kHz

Distortion: </= 0.015% THD

Signal to Noise Ratio: 80dB (DAC)

Type: Solid-state high-resolution PCM and DSD-capable Burr-Brown digital-to-analogue converter

DAC resolution/supported digital formats: All PCM from 44.1KS/s to 192KS/s with word lengths up to 24-bit, DSD64 (2.8224MHz)

Frequency Response: 20Hz–20kHz, ± 0.005 dB

Distortion: (THD + Noise): <0.00015%, 20Hz – 20kHz at 0dBFS

Price: £4,718

Manufactured by: Gold Note

URL: goldnote.it

Distributed by: Audio Pinnacle

URL: audiopinnacle.co.uk

Tel: +44(0)1420 544140

Less Hi-Fi More Music



W www.german-physiks.com
T +49 6109 5029823

E info@german-physiks.com
Follow us on Facebook & Twitter

DDD-Manufactur-GmbH
Gutenbergstrasse 4, 63477 Maintal, Germany



1 x DDD driver

HRS-130
-LOUDSPEAKER-

1 x 10-inch downward firing woofer



The German Physiks range of omnidirectional loudspeakers comprises 14 models. All use our unique carbon fibre, ultra-wide bandwidth DDD driver. This creates an enveloping sound field that more closely mimics that found in the concert hall, bringing you closer to the music in a way that has to be heard to be believed. Its 7-octave bandwidth eliminates the mid-band crossover point conventional loudspeakers have, providing exceptional coherence and enhancing the musical experience. To find out more, visit our new website, or contact us for your nearest dealer and hear German Physiks for yourself.

Holger Mueller, founder

BETTER THAN A CONCERT!

" German Physiks have christened their new electronics "Emperor Extreme". The preamp is fast and sparklingly clean. The Monos have visceral power, but they are also exceptionally transparent. Sonically we are faced with the ultimate. No other electronics we have heard has displayed such presence, or provided such a huge amount of detail. "

Extract from a review by
Andreas Günther, Audio Dec 2018



This is the perfect streamer if you've turned your back on streaming. Vinyl lovers – you should listen.



All the emotion, purity, presence and realism you expect from vinyl but without its clicks, pops and pain. Plus a world of music choice at your finger tips on your tablet. The Quiescent streamer is revolutionary.



Designers at Quiescent Technologies researched in depth why many listeners dislike streamers currently on the market:

- hard, edgy sound
 - proprietary user interfaces
 - non-standard hardware
- then produced the open architecture two-box T-series that astonishes everybody who hears it.

Designed from the ground up to bring into your home the cleanest, sweetest, most natural streamed music that you've ever heard.

How? Huge care taken to remove the damaging effects of vibration and radio frequency interference (RFI), killing it at source within the circuits, and in the complex CNC-machined casework.



Scrolling outside and inside the casework panels helps to control cabinet resonance. The top panel is composite, non-metallic material to break circulating magnetic fields.

Notice that there are no display panels, because they produce damaging electrical noise. Control is via Roon on your tablet.



Cooling tubes, rather than fins that ring, are part of the passive cooling system that avoids vibrating fans. Each tube is scribed internally for further resonance control.

Quiescent are convinced from their trials that a linear, not switch mode, power supply in a separate case is essential.

Our demonstration at the Woodland Grange Audio Show in September will probably change your mind if you have been disappointed with streaming. The Quiescent streamer has astonished all who've heard it.

Read comments on our web site: [What Others Say](#).

HiFi Show 21-22 September, Woodland Grange, Leamington Spa, CV32 6RN

Customers say we make some of the best sounds at shows and in our studio they have ever heard, so you know we can do the same in your home. Our advice takes account of your best components and guides you where change is needed, in stages you can afford. Let us advise.

You avoid expensive mistakes, enjoy music and save money in the long run.

Just listen and you'll know

Digital: Accoustic Arts, Bel Canto, CEC, Quiescent, Vertex AQ DAC. Vinyl: B.M.C. Audio, Graham, My Sonic Lab, Spiral Groove, Transfiguration.

Tuners: Magnum Dynalab. Amplifiers: Bel Canto, B.M.C. Audio, Quiescent, Storm Audio, Vitus, VTL.

Loudspeakers: Kaiser – Vivace & Chiara, NEAT, Totem. Cables: Chord Co., DNM, Nordost, Quiescent, Siltech, Vertex AQ.

Mains: Quiescent, Vertex AQ. Supports: Arcici, Hi-Fi Racks, LeadingEdge, Quiescent, Stands Unique. Room Acoustics: LeadingEdge.

www.rightnote.co.uk

07976 205953 and 01225 874728



Black Rhodium



All cables obey the
Laws of Physics.
Some just sound
infinitely better.

Bespoke high end audio cables hand made in the U.K
www.BlackRhodium.co.uk

Kuzma Stabi S turntable, 4Point 9 tonearm, and CAR-40 MC cartridge

by Alan Sircom



There's an established hierarchy in vinyl replay that is almost inviolate. The expenditure goes from top down; spend most money on the turntable, then the arm, then cartridge, and so on. This comes from the days when the Linn LP12 held a nation of audiophiles in its thrall; I remember one magazine said (only half-jokingly) that if you were going to buy a system with limited funds, you should buy a LP12 turntable, and start saving for the amp and speakers! While this was an extreme example, the idea that the turntable should be the most significant investment in a vinyl-replay chain is still a pervasive and respected way of system building. This turntable begs to differ.

Kuzma has a substantial range of turntables, arms, and – most recently – cartridges in its portfolio, allowing for logical hierarchical systems ranging in price from the nursery slopes

of high-end right up to the peaks where additional oxygen is required. And typically, that means a turntable like the entry-level Stabi S is most likely to be used with the unipivot Stogi S arm, and maybe the CAR-20 cartridge, or even an MC or MM design from Ortofon or similar. That's the established way and it works unquestionably well.

This time, however, we paired that entry-point Stabi S with the far more up-scale 4Point 9 arm and the CAR-40 moving coil cartridge from the brand. Making the arm by far the most expensive part of the system, and the deck trailing not far behind the cost of the cartridge. OK, to facilitate this, we part-pimped up the Stabi S with its natural maple platform and optional external speed control, but this is only a couple of steps removed from the base model.

A quick refresh on all three components is in order. We first looked at the Kuzma Stabi S back in Issue 10, and since ►



► then 12" tonearm compatible versions, two arm versions, and most recently a double-height platter have been folded into the basic design. But, it's effectively the same turn-of-the-century design; if it ain't broke, don't fix it. The Stabi S is perhaps the simplest turntable on the market. It comprises two brass tubes, a bearing, a motor, an inner and outer platter, and a belt. The brass tubes have rubber O-rings at either end as an alternative to feet. The standard AC motor housing has an on-off switch, while the expensive external PSU uses a housing with a captive cable connecting to the external power supply with a locking DIN plug. This makes for an extraordinarily well-built product; other turntables might be more ornate, but the Stabi S has the kind of well-trained powerlifter solidity of build to it. You could imagine the Stogi S being air-dropped out of the back of a Hercules to bring aid to the musically starving; it wouldn't even need a chute! It comes supplied with a dust cover as standard worldwide, but unique to the UK Audiofreaks includes the optional brass record weight and composite support as part of the package, too.

The 4Point 9 is a recent award winner of this parish, having been tested in issue 155. It too has the same uncompromising build of the Stabi S. This four-pivot arm features two points

to allow vertical movement, in a manner similar to a double-unipivot design, the second pair allow horizontal movement. All four are designed to have minimal starting and moving friction, and zero play in any playing direction. The larger 4Point arms have a separate tower arrangement allowing for on-the-fly VTA adjustment; the 4Point 9 is a simpler design and the arm base is fully integrated into a single tower. This means the arm is still adjustable for VTA, but through loosening an Allen bolt rather than turning a knurled knob. Personally, I favour the 'less is more' approach.

The CAR-40 cartridge was also tested at the same time we looked at the 4Point 9 but was not the main focus of the review. It's a high-mass design in an aluminium body, custom made to strict Kuzma specification by a very reputable producer in Japan. The CAR range all use a similar body (with a unique aluminium stylus guard that needs to be bolted in place), varying in coil wiring, cantilever material, and stylus profile. The CAR-40 is the first model in the six-strong range to feature 4N silver coil wires, but with a boron cantilever and a microridge stylus profile (the two higher-end models move to sapphire and then diamond cantilevers). Aside from a single high-output model, all have an almost identical 0.3mV output. ►



Beautiful hand-matched, real wood veneers.
A choice of four classic finishes: Cherry, Oak, Rosewood or Ebony

Clarity by Design

Transparent Uncolored Accurate.

This is what made the sound of the original British Broadcasting Corporation monitors legendary. Graham Audio has made it their mission to continue this legacy, and to bring the Chartwell LS3/5 and LS3/5A, the Chartwell LS6, the LS5/8 and LS5/9 to a broader global audience.

Drawn from many years of BBC research, and through the engineering genius of Derek Hughes, these speakers have been recreated using state of the art materials and technology under license from the BBC. A new addition to this series is the Chartwell Sub 3, a bespoke compact, passive sub-woofer designed to be used in conjunction with the LS3/5 monitors.

Graham Audio are also proud to announce the VOTU, their flagship 1000 watts per channel, high-end monitor for large studios and listening rooms. Effortless dynamics and vast detail come as standard.

...hear the difference



Graham
AUDIO
ENGLISH HIGH FIDELITY

www.grahamaudio.co.uk



CHARTWELL
A DIVISION OF
GRAHAM AUDIO

“While you are listening, you are gripped by the Kuzma’s performance.”

► In fact, we used this trio of components in testing the 4Point 9 but didn’t really express just how well they worked together, as that review focused on just one part – the arm. This time, it’s how they work as a sum of the parts.

In fact, they work better than you might expect. Better than I expected. Possibly even better than Franc Kuzma himself might have expected. The turntable has an unflustered approach to music, taking the emphasises and inconsistencies out of turntable replay, creating a neutral platform for records. Those who want some immediacy to their sound in order to impress their friends will want to look elsewhere, but if you want a right-sized, correctly-scaled musical presentation that captivates, the Stabi S is excellent. The 4Point 9 arm adds a fluidity and openness to the sound that only adds to that neutral platform of the turntable. The best way I can describe the sound of this arm is that it seems to work with the grain of the music like a fine cabinetmaker, giving everything a brilliance and elegance that is waiting to be brought out. Meanwhile, the cartridge is just sublimely musical and tonally accurate, with excellent front-to-back imagery and effortless dynamic range.

Put the three bits together, though, and the magic starts to happen. The only difficulty for a reviewer is describing that magic because you can only really make notes while you are changing records, and then you are too keen to change records. While you are listening, you are gripped by the Kuzma’s performance. The Kuzma trio here never puts a foot wrong, with bass that is as tight as it is powerful and dynamic, a midrange that disappears, a treble that soars, detail as if you are standing by the cutting lathe, and all those filigree micro-details that are so beloved by audiophiles as a sign of good performance are portrayed with complete fidelity. For all that, it also presents that music *qua* music; not as some experiment in soundstage height or microdynamics. Which is why you can play audiophile records back-to-back with the spiky *Jane From Occupied Europe* by Swell Maps [Rough Trade].

Kuzma’s whole is greater than the sum of the parts; the sound you get from the three is outstanding and so well-balanced you might be forgiven for thinking you are listening to something closer to £15,000 or more. In a world full of ‘mug’s eye’ style over substance products, it’s great to recommend something this well made, as you know it will last a lifetime, and always sound great. Great! +

TECHNICAL SPECIFICATIONS

Stabi S turntable

Platter: 4kg, 30mm thick aluminium with mat

Bearing type: 10mm diameter pointed shaft with resin/textile material

Drive: flat rubber belt

Motor: Single AC motor

Speeds: 33rpm, 45 rpm

Armboard: optional (Kuzma arms fit directly)

VTA adjustment: yes

Max. tonearm length: 10" (12" option available)

Optional extras: second arm kit, PSU, 40mm natural maple platform

Finish: brass or black

Dimensions (WxDxH): 40 × 40 × 17cm

Weight: 13kg

Price: £2,149

4Point 9 tonearm with detachable headshell

Bearing type: four pivot

Maximum cartridge mass: 35g

Effective mass: 13g

Effective length: 229mm

Arm-mount distance: 212mm

Spindle-pivot distance: 212mm

Offset angle: 23°

Armtube: conical aluminium

Bias and VTA adjustment: Yes

Arm mount: Kuzma

Wiring: Silver as standard, options available

Connections: XLR, 5pin

Total mass: 920g

Price: £3,600

CAR-40 moving-coil phono cartridge

Frequency response: 10Hz–40kHz

Output: 0.3mV

Tracking force: 2 grams

Internal impedance: 6 ohms

Weight: 7 grams

Price: £2,395

Manufactured by: Kuzma Ltd

URL: kuzma.si

Distributed by: Audiofreaks

URL: audiofreaks.co.uk

Tel: +44(0)208 948 4153

brianandtrevors



relaxandlisten

www.brianandtrevors.com www.houseofflinn.com www.booplinth.com

ATC . booplinth . Chord Cables . Entreq . Graham Audio . Innuos . Kudos Audio . Linn . Melco . Naim Audio . Puritan Audio . Quadraspire . REL . Roon . Sugden Audio . Vitus Audio

LATERAL

audio stands

always for music



Redefining audio components and systems, unique low resonance audio structures, 'Direct Contact Points', energy grounding paths, combining to produce outstanding performance.

Full stand price range £575-£2,500

HiFi+ Issue 173 July 2019 Alan Sircom
LAS-4 Integral & LAS-4 Concert review

Select partners & where to buy...

Audiophilia Edinburgh
The Music Room Glasgow
Definitive Audio Nottingham
Strictly Stereo Stockport
Audio Destination Tiverton Devon
Midland Audio Xchange West Midlands
Guildford Audio Guildford
Oxford Audio Consultants Oxford
Signals Audio Ipswich

MADE IN GREAT BRITAIN



LAS-4 Concert | LAS-4 Integral PLUS | LAS-4 Integral | LAS-4 AV | LAS-9 Discovery

For further information visit www.lateralaudiostands.co.uk

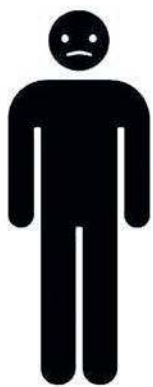
Enjoy the Music.com®

Reviews

News

Show Reports

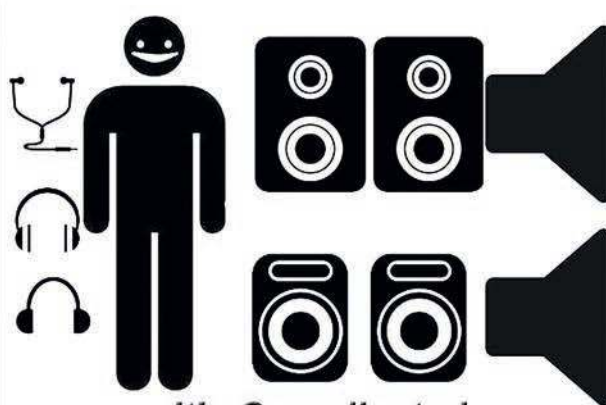
And More...



Single



In A Relationship



It's Complicated





SUNDARA

Beautiful Music to Your Ears



HIFIMAN

Innovating the Art of Listening


hifimanelectronics


hifimanofficial


www.hifiman.com


store.hifiman.com

Stack Audio Link USB streaming bridge

by Alan Sircom



Stack Audio is a small British company that does things to sources! It makes a series of clever upgrades for the ever-popular Linn LP12, but recently it turned to the digital side with the Link. The Link is an affordable bare-bones USB music streamer and network bridge for the home, and its genius lies with its simplicity.

In most music streamers, you end up with a multiplicity of inputs and outputs, allowing the listener to connect via S/PDIF, Toslink, AES/EBU, or – for those with built-in DACs – single-ended or balanced line outputs. The Link does none of that; it just outputs to USB, thinking that some of the best recent DAC designs all support USB. This not only saves on circuit board and casework real-estate, but also makes for a lot simpler design; that helps keep costs low, but it also makes it fast and reliable.

Similarly, a lot of companies go deep down the app rabbit hole, while Link just goes open source. That means you might not get the custom interface that people expect of the big guns, but you also don't have to wait for a month for the app designer to accommodate a new operating system update on your tablet. However, Stack has a custom-made open-source Volumio app for both iOS and Android. Apps like Bubble UPnP or Kinsky are fine and stable alternatives anyway. Along with UPnP, Link is both OpenHome compliant and a Roon endpoint, so it is not some digital backwater.

First, it's phenomenally well made, and not just 'well made for the price'. The solid aluminium billet clamshell case (looking and sized roughly like a Mac Mini which had a bit shaved from its side) is an unexpected bonus and helps keep the circuit away from too much resonance and vibration. This anti-interference goal is clearly a key part of Stack Audio's DNA, ►



“The Stack treats all of these sources in the same ‘get out of the way’ style.”

► as a big part of the design is what the company calls ‘signal detox’, which includes a lot of reclocking and otherwise jitter-busting the USB signal, and a lot of buffering and EMI filtration of the USB data pathways. Proof of that... if you use the Link simply as a buffer between the USB output of a computer and a USB DAC, the sound of that DAC is improved significantly. It’s more up-beat, more focused, and more natural sounding. Granted there are other dedicated jitter-busters that do a similar job for less money in this context, but they cannot do all the other things the Link can do.

Those ‘other things’ include front and rear USB connections, Bluetooth (to v4.0, but not aptX HD), and Ethernet (both wired and wireless). It also includes an HDMI output if you want to display its internal web-page interface. You set the Link up this way, too, by putting it on the network and getting your computer to search for it (or you can manually find the IP address). Set-up is straightforward, as it walks you through a six-point install process, and this allows you to add Tidal, Qobuz, and Spotify accounts, switch in USB Detox (or

not, if you’re weird... you can also access it from the front panel), and add and setup, network shares (music servers), Roon, UPnP and DNLA settings, Shairport-sync (for Apple devices), and so on. This is not as daunting as it sounds, and is about as hard to install as it was to write.

The lone output (as discussed) is USB. This has a rear-mounted power-off button if using a self-powered USB DAC (so the potentially noisy 5V power line inside the cable is quietened, although in reality this is pretty noise free through the Link anyway... but it’s nice to be thorough here). This supports files to DSD and MQA standards, alongside the usual suspects of PCM, Apple Lossless, FLAC, WAV, and the Compressed Twins (AAC and MP3). The DAC needs to support MQA hardware unfolding, because the Stack treats all of these sources in the same ‘get out of the way’ style.

And that’s the Stack’s big – make that huge – strength. It gets out of the way better than most. It helps push other parts of the chain that might get in the way out of the way (in particular, USB inputs). That makes it an extremely neutral ►

"ONE OF THE BEST TURNTABLES IN THE WORLD"

Long Live Vinyl Magazine

Helping you recreate the original sound

Origin Live's range of analogue products have consistently won awards for their exceptional performance, innovative design and outstanding musicality.

"A new benchmark for musical communication" **STEREO TIMES**

"One of the truly special products I've reviewed in the past 18 years" **STEREOPHILE**

"One of the best turntables in the world the sound is stunning. An incredible design with amazing insight in sonic terms" **LONG LIVE VINYL**

"The best tonearm I've heard" **HI FI WORLD**

"The singularly most addicting piece of gear I have ever heard" **10 AUDIO**

"The best musical results I've ever heard from any turntable regardless of price. Since I've been listening to turntables professionally for 32 years and am aware of the pitfalls of ultimate proclamations, I hesitate somewhat to make this statement. Nevertheless, it is true. The level of musical communication available from the Illustrious/Aurora Gold is in a class by itself. It sets a new reference." **STEREO TIMES**



Sovereign Turntable with Enterprise-C Tonearm

What Makes the Best Turntable?

Our success comes from better design.

- Light Speed Controller ensures your records spin at absolutely constant speed.
- Multi-Layer Platter absorbs vibration from your playback.
- Superior Materials bring you the best performance.

"Our turntables leave one wondering how such massive differences can possibly exist, when to all outward appearances things look the same" - Mark Baker M.D 1986-present

Read the full article "What makes the best turntable?" online at: www.originlive.com

Origin Live Tel: +44 02380 578877 E-mail: originlive@originlive.com

For full information see: www.originlive.com

TRIANGLE ART

Artisan Crafted Analogue



Experience the award winning sound.

839 S. Parkglen Place, Anaheim, CA 92808

Visit us online at: triangleart.net

Email us at: info@triangleart.net

714.553.6474



“That is enough to make a DAC sound one or two notches better than you might expect.”

- performer. And what you then discover is just how few ‘extremely neutral performers’ exist in streaming-land, or at least how few exist at anything close to real world prices.

The first thing you notice about this is it’s fast. Transients happen quickly here, a bit like a really well set-up CD player compared with first generation streaming. Play something with a lot of fast beats (‘Fuzzy Monkey’ by Morton Granau, streamed from Tidal) and it arrives with almost supernatural speed. This also highlights just how little the Link takes from the performance, because those big bass notes hit home with driver-busting force.

The quality of stereo separation and image size are often a criticism of streaming devices for good reason. But not here. A large-scale orchestral image [Mahler’s Eighth Symphony, Solti et al, Decca] is not constrained by the Link at all. It might be constrained by the up-stream source or by the DAC, but ‘gets out of the way’, remember?

The other big CD-lover’s observation about streamed audio is it loses the ‘magic’ or musicality in a performance. Yet again, the Link has nothing to say on the matter, in a wholly positive way. It lets the server provide music without any grace of favour, save for cleaning up that music to the best of its abilities and presenting it – ship-shape – for the DAC. That is enough to make a DAC sound one or two notches better than you might expect, and there’s a particular symmetry about using the Link with AudioQuest’s new DragonFly Cobalt.

The two combine together well; the clean-up of the signal made by the Link is presented to the clean and crisp sounding Cobalt, making for a digital front-end that takes on a lot of the opposition and wins. I’m a big fan of the built-in DACs of the Hegel H390 and find they effectively remove the need to add on a DAC. Some very good DACs have fallen by the wayside at the hands of the H390s on-board converter to the point where you really need to be looking at DACs that are the wrong side of five grand to compete. The Link/Cobalt combination is one of the rare exceptions. Feeding the Link into the H390 raised the game of the 390’s DAC too, but there was something so alluring about the Link/Cobalt combination it kind of shatters your perspective of how much you need to spend to beat it in open combat. I’d happily put this little duo up against a good £2,000 DAC and/or streamer combination. It might not win every battle, but could take surprising scalps.

TECHNICAL SPECIFICATIONS

Inputs: 2 x USB inputs; 1 x USB B detox input

Ethernet input: 18v 1amp- 1.5amp DC input

Outputs: 1 x dedicated USB audio output; HDMI output for connection to TV/video monitor/touch screens for control (not i2s)

Streaming Protocols and Services: • Shairport-sync (Apple compatibility); 14; Roon ready (In progress); UPnP AV protocol with audio streaming extension (OpenHome); Gapless Playback; On-Device Playlist; MQA (only if DAC supports hardware unfolding); TIDAL, Spotify, Qobuz

Web radio: Shoutcast

Communication Protocols: Ethernet; USB; Wi-Fi – 802.11 b/g/n/d/e/h/i; Bluetooth – Classic + EDR v2.1, v3.0, v4.0 and Low Energy

Supported Audio File formats:

Lossless: DSF (DSD), DIFF (DSD), DoP (DSD)

PCM Lossless: FLAC, Apple Lossless (ALAC), WAV, AIFF Compressed (lossy)

Audio: MP3, AAC (in M4A container) MQA (only if DAC supports hardware unfolding)

Price: £725

Manufactured by: Stack Audio

URL: stackaudio.co.uk

OK, so let’s climb down from planet rave for a moment and set the Link in context. No-one with the dCS Network Bridge will feel troubled by this product, because the Link doesn’t quite hit those levels of performance. Also, there will be people who want to connect a DAC that doesn’t support USB (that’s one of the key conditions of a lot of network bridge devices), there are people who want ‘name’ brands that come with a fixed ecosystem of apps and devices, and there are those who simply can’t process the notion that something that costs hundreds might do as well or better than something that costs thousands. Note here that the performance (in terms of connectivity and sound) are not a function of most of these concerns, and the one time the sound becomes almost an issue, we’re talking several times as much money.

In fact, my biggest gripe with the Link is that I was really hoping not to spend any money on audio equipment for a few months and let my bank account recover from yet another assault. That ain’t going to happen now. +

NEW

Balanced Mains Unit BMU1500 MKII

'Every home should have one'

Paul Rigby, theaudiophileman.com

- New, custom-wound twin balanced mains transformer
- 1500 or 3000 W balanced output
- Internally wired with Kimber Kable
- 2 stage magnetic and thermal protection
- Factory calibrated to match your mains voltage
- Pre-transformer filtering
- Redesigned, bespoke ABS casework with acoustic damping

Learn more online at www.russandrews.com/bmumk2
or call us on 01539 797300



60 DAY HOME AUDITION
WITH MONEY BACK GUARANTEE

Russ Andrews[®]
30 YEARS OF INNOVATION

WBT-PlasmaProtect™
A leap in quality for audio connectors
For further information visit wbt.de

WIN! A Kanto TUK worth £749



We have collaborated with the innovative folks at Kanto to bring you an exciting competition for a chance to win a pair of TUK active bookshelf loudspeakers worth £799.

Our Editor Alan Sircom reviewed the TUK in *Hi-Fi+* issue #174 where he wrote, “The TUK (pronounced, paying very close attention to autocorrect, ‘tuck’) is an active Class D two-way, rear-ported loudspeaker, with an electronic crossover network that rolls off

at 80Hz in that event of a subwoofer being connected (this doesn’t auto-detect, you need to tell the TUK about the sub from the remote handset). Otherwise, Kanto claims a 50Hz lower frequency point from the 133mm aluminium cone woofer, and in room – unless that room is a barn – that figure is achievable and surprisingly realistic.”

He went on to say, “The TUK system uses one active and one passive loudspeaker separated– perhaps unsurprisingly – by speaker connectors and cable. By default, the active speaker is the left channel, but you can swap over by pressing and holding the ‘Previous Track’ button on the remote for five seconds. You can also enable or disable the auto power up or power down from the remote. The TUK takes about six seconds to wake up or go to sleep.”

He concluded the review by saying, “I was extremely impressed by the Kanto TUK. It’s a very professional package with a very big, very powerful sound for so small a loudspeaker. It doesn’t rely on a tweaked balance to deliver that sound, and the overall balance of both the performance of the inputs and the quality of the drivers is such that they all work in a kind of dynamic balance. Top stuff!” +

Competition Question

How long does it take for the TUK to wake up or go to sleep?

- A. About 6 seconds
- B. About 10 seconds
- C. About 60 seconds

To answer, please visit the Kanto dedicated competition page at <https://kantoaudio.com/Hi-Fi-Kanto-TUK-Giveaway>. Alternatively, send your answer on a postcard (including your name, address, and contact details) to TUK Competition, Kanto Living, 110–2440 Canoe Avenue, Coquitlam, V3K 6C2, BC, Canada

Competition Rules

The competition will run from September 5th 2019 until October 31st 2019. The competition is open to everyone, but multiple, automated, or bulk entries will be disqualified. The winner will be chosen at random from all valid entries, will be contacted via email (where possible), and their name will be published in the magazine. The Editor’s decision is final and no correspondence will be entered into. Absolute Multimedia (UK) Ltd. is compliant with the Data Protection Act and UK laws apply. Our policy is such that we will not pass on your details to any third party without your prior consent.

Shunyata Research Alpha USB cable

by Alan Sircom



If there's one fixed point in the audio firmament, it's that nothing stays the same for too long. Models refresh, new products come along, and benchmarks move with the times; so it is with cables. I am guilty of a little complacency and inertia here in that my range of go-to USB cables (AudioQuest, Cardas, Crystal, Kimber, Nordost) have remained more or less unchanged for a few years, so I thought the Shunyata Research Alpha USB wouldn't shake that tree too violently.

Wrong!

If I'd thought about this carefully, Shunyata's explorations into power line noise reduction that gave us some fine power cables and conditioners would obviously apply to the USB cable; two of the four immediately adjacent conductors within the USB cable are there to deliver a 5V, 0.5A feed from some notoriously noisy USB chipsets. Worse, due to the high-speed nature of digital audio and the performance-lottery of USB terminals (especially from host computers not set-up specifically with audio in mind), the intrusion of interference from nearby devices can play havoc with performance.

In the Alpha line Shunyata shields this cable from any external interference thanks to a complete silver-mesh shield. It also plays extremely close attention to the nature of the USB conductors and terminations. Each conductor is silver-plated continuous cast copper set in a FEP dielectric. The cable is impedance matched using what Shunyata calls its 'Precision Matched Z (PMZ)' concept. This means that tolerances of the conductor surface, dielectric extrusion, and the precision of the braided shield are held to minute variances. This is performed by running the extrusion machinery at one-quarter normal speed during manufacturing. The conductors are then connected by hand to custom-designed USB A and B terminations, said to reduce junction-related distortions in the cable. Shunyata also uses the company's unique 'Kinetic Phase Inversion Process (KPIP)', which is said to be a cable-conditioning methodology based on Shunyata chief Caelin Gabriel's investigations into why burn-in, directionality, and cryogenics occur. As a consequence, burn in is not required or recommended.

PRICE AND CONTACT DETAILS

Shunyata Research Alpha USB cable:
£1,000/1.5m

Manufactured by: Shunyata Research
URL: shunyata.com

Distributed by: The Shunyata Distribution Company
URL: shunyata-uk.com
Tel: +44(0)330 223 3769

Plugged between a MacBook Pro and an APL DSD-S DAC, the change was remarkable. This excellent DAC had a jump in performance. Sounds that were already extremely open and natural sounding became that bit more natural and open sounding. The timing of this good, but sometimes perhaps a little laid-back DAC snapped into greater focus, the already quiet DAC just got that bit more chilled out in background noise resolution. Using it with the Melco N10 also made a big difference, but one that is relatively minor next to the huge change it makes when with off-the-shelf computer.

Those who hold out against USB-based audio because think it unfit for purpose. The Shunyata Research Alpha USB cable represents the last time that argument can be made with any validity. Put simply, it makes USB sound better! +

SUBSCRIBE

hi-fi+



1 YEAR
SUBSCRIPTION

Save
16%

2 YEAR
SUBSCRIPTION

Save
25%

In order to ensure prompt arrival of your copy of hi-fi+, it is best to take out a subscription. This lasts for a year (12 issues) and means that your magazine is delivered to your doorstep as soon as it is published. You never miss an issue again!



www.hifiplus.com

SUBSCRIPTION RATES

UK, Western Europe & Rest of the World

ONE YEAR SUBSCRIPTION /12 ISSUES

Within the UK	£50
Western Europe, USA & Canada	£60
Rest of the World	£80

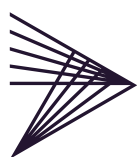
TWO YEAR SUBSCRIPTION/24 ISSUES

Within the UK	£90
Western Europe, USA & Canada	£105
Rest of the World	£140

SPECIAL OFFER

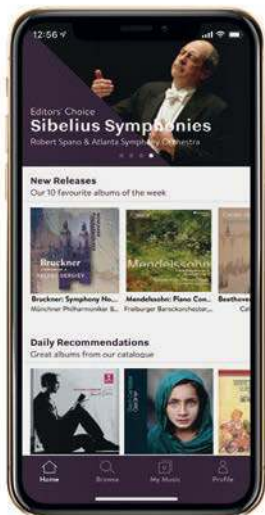
Save 16% (1 year subscription)

Save 25% (2 year subscription)



primephonic

The streaming service designed for classical music



FREE 3 months subscription to Primephonic

New subscribers and renewal subscribers will receive a free 3 month trial to Primephonic.

* The trial is only available to customers in the UK, North America and the Netherlands.

** People who take out a subscription to *Hi-Fi+* will receive a special code for a free 3 month trial to Primephonic via email once their subscription has been processed.



TO SUBSCRIBE COMPLETE THIS FORM BELOW AND RETURN TO:

HI-FI+ SUBSCRIPTIONS

Unit 4, College Road Business Park, College Road North, Aston Clinton, HP22 5EZ, UK

or call: +44 (0) 1442 820580
or email: hifiplus@webscribe.co.uk
via the web: www.hifiplus.com

I would like my subscription to start from **current** issue/**next** issue (please delete as appropriate)

One year ☐ Two years ☐

ABOUT YOU:

Title _____

Forename _____

Surname _____

Address _____

Country _____

Post code/Zip code _____

Daytime Tel _____

PAYMENT:

UK ☐ Europe, USA & Canada ☐ Rest of World ☐

Cheques made payable to Absolute Multimedia UK Ltd.

Visa ☐ Mastercard ☐

Card no

Expiry date

3 digit security number

Switch ☐

Card no

Expiry date

3 digit security number

Direct Debit ☐



Originators Identification No

Instruction to your Bank or Building Society to pay Direct Debits

Name(s) of account holder(s) _____

Bank/Building Society account number

Branch sort code

Name and full postal address of your Bank or Building Society branch.

To: The Manager

Bank/Building Society

Address _____

Country _____

Post code/Zip code _____

Instruction to your Bank or Building Society. Please pay Webscribe Ltd Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that the instruction may remain with Webscribe Ltd and, if so details will be passed electronically to my Bank/Building Society.

Signed _____

Date _____

Bank and Building Societies may not accept Direct Debit instructions for some types of account

The Direct Debit Guarantee



This Guarantee is offered by all Banks and Building Societies that take part in the Direct Debit scheme. The efficiency and security of the Scheme is monitored and protected by your own bank or Building Society • If there are any changes to the amount, date or frequency of your Direct Debit Webscribe Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Webscribe Ltd to collect a payment, confirmation of the amount and date will be given to you at the time of the request • If an error is made in the payment of your Direct Debit, by Webscribe Ltd or your bank or building society you are entitled to a full and immediate refund of the amount paid from your bank or building society. • If you receive a refund you are not entitled to, you must pay it back when Webscribe Ltd asks you to. • You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.

DEALER DIRECTORY



⑥

We are the only UK retailer where you can audition and compare the complete Vivid Audio speaker range.

WWW.SIXAUDIO.CO.UK

01403 713125



Audio Oasis
Beautiful Styling & Real Musical Enjoyment

sales@audiooasis.co.uk

T:01722 322215

www.audiooasis.co.uk

HAMPSHIRE WILTSHIRE DORSET

booplenth

"Finally, a new and advanced plinth upgrade reveals more recorded detail from any Linn LP12 and a transformational musical performance."



booplenth

booplenth LP12 performance upgrades and installation

www.brianandtrevors.com

info@brianandtrevors.com +44 (0) 161 766 4837



BROOKAUDIO

PURVEYORS OF
FINE AUDIO EQUIPMENT,
VINYL RECORDS
AND AUDIO ACCESSORIES.

VISIT
BROOKAUDIO.CO.UK

Choice hi-fi "where dreams meet reality"

The HiFi Exchange
New and Used HiFi

www.choicehifi.co.uk

Email info@choice-hifi.com
Telephone 020 8392 1959 / 07768 720456

VISIT OUR NEW WEBSITE

The Finest Hi-Fi & Home Cinema
Come and treat your senses!



Ceritech AUDIO

Drake House
1 Pavilion Business Park
Forest Vale
Industrial Estate
Cinderford GL14 2YD

www.ceritech-audio.co.uk 01594 540268

DB HIFI

SUFFOLK

01379 873451
WWW.DBHIFI.CO.UK

criterion audio



Criterion Audio is a premium hi-fi dealer in Cambridge.

From vinyl and valves to the latest in streaming and headphones, we can help you find the perfect system to suit your budget and needs.

www.criterionaudio.com
info@criterionaudio.com
01223 233730

DECO AUDIO



Kempson Close, Aylesbury, HP19 8UQ

www.decoaudio.com

01296 422 224

divine audio

AnalogueWorks
Creek Audio
Croft Acoustics
Graham Audio
Jelco Tonearms
Neat Acoustics
Omega Loudspeakers
Rogue Audio
Supra Cables

www.divineaudio.co.uk
07918 728860 tim@divineaudio.co.uk

hifi lounge here to listen...

Visit us in the Beautiful Bedfordshire Countryside for all your Hi-Fi needs

www.hifilounge.co.uk

01767 448121

With 5 Relaxing Listening Rooms




**Your ad
could be
here!**

Tel: **+44 (0) 1425 655255**
Mobile: **+44 (0) 7900 252975**
Email: **tom@hifiplus.com**

Infidelity
MUSIC & CINEMA SYSTEMS

020 8943 3530

www.infidelity.co.uk
info@infidelity.co.uk

9 High Street, Hampton Wick
Kingston upon Thames
Surrey KT1 4DA

Tuesday to Saturday 10-6

CEDIA MEMBER

clarity

hifisound

Stockton on Tees...the North's
hotbed of audio delights

- | | | |
|---------------|------------------|-------------------|
| • Anatek | • Koetsu | • Sonus Faber |
| • Audeze | • Kronos Audio | • Stax |
| • Chord | • Lyra | • Sugden |
| • Clearaudio | • Michell | • Transfiguration |
| • Dynavector | • Magneplanar | • Unison Research |
| • EAR | • Naim | • Usher Audio |
| • Esoteric | • Nordost | • & many more |
| • Focal JMLab | • Notts Analogue | |
| • Funk | • Pathos | |
| • Grado | • SME | |

t: 01642 267012 w: hifisound.co.uk
e: simon@hifisound.co.uk

MonoPulse
.co.uk

New Model SA
True hi-fi streaming
- reality on line

midlandhifistudio
.co.uk Wolverhampton

01902 380083

audioelevation

.co.uk Doncaster

0800 035 1620

zouchaudio

.co.uk Ashby

01530 414128

audiooasis

.co.uk Southampton

01722 322215

Refreshingly different



01865 790 879

www.oxfordaudio.co.uk

Cantay House, Park End Street, Oxford, OX1 1JD

rayleigh... sound & vision
Smart home technology

Superb range of world-class hi-fi
on demonstration.

Rayleigh, Essex SS6 7EA

01268 779762

rayleigh@rayleighhifi.com

www.rayleighhifi.com

Stores also at Chelmsford and Southend

studio **AV**

**SEE, HEAR AND
FEEL THE
DIFFERENCE**



Get in touch to arrange your
personal audition of some of the
world's most highly respected
Hi-Fi and Home Cinema products.

WWW.STUDIOAV.CO.UK

01753 863300

sales@studioav.co.uk

**SUBSCRIBE
AND SAVE!**

Get your copy delivered to your
door as soon as it is published



www.hifiplus.com

SONATA
high-fidelity

APPLAUSE

west hampstead london

0330 111 5653 www.sonatahifi.com



Zero-compromise isolation technology
A necessity — not an accessory.



"If your budget will stretch to accommodate their price range, then I don't know any better way for you to go.

I therefore give the Stillpoints ESS Rack System and Ultra 5 and SS Isolation Feet my highest recommendation, without hesitation, and with deep enthusiasm. If you are looking for the exceptional in this category of the audio arts, then this is the current top 'o the heap for me."

Positive Feedback, January 2016

"The Ultra 6 is a state-of-the-art isolation device. Deploy it under an audio chassis and it will disclose addictive new layers of detail and harmonic richness - in addition to improvements in dynamics and just about anything else that contributes to the lifelike reproduction of music."

Product of the Year Awards 2015, The Absolute Sound



To try Stillpoints for yourself, please contact your local stockist.

Analogue Seduction	Peterborough	01733 350878
Audio Destination	Tiverton	01884 243584
Audio Therapy	Newcastle	07976 496218
Castle Sound & Vision	Nottingham	0115 958 4404
Choice Hifi	Richmond	020 8392 1959
Homesound	Edinburgh	0131 662 1327
KJ West One	Marylebone	020 7486 8262

Lotus Hifi	Walton-on-Thames	07887 852513
Lintone Audio	Newcastle	0191 477 4167
Martins Hifi	Norwich	01603 627010
Nintronics	Welwyn	01707 320788
Oxford Audio	Oxford	01865 790879
Rayleigh Hifi	Rayleigh	01268 779762
Studio AV	Chobham	01753 863300



Distributed by
KOG AUDIO

www.kogaudio.com

info@kogaudio.com

024 7722 0650

Mike Gale

by Sean Hannam



Mike Monaghan

Summer *Deluxe*, the fifth solo album by Hampshire-based, UK singer-songwriter and multi-instrumentalist, Mike Gale, is one of the most gorgeous records I've heard this year.

Adding samples of strings, piano, and organ to drum machines, synths, guitars, and harmonies, Mike, formerly of Americana band Co-pilgrim and, before them, cult noughties indie-slackers Black Nielson, has crafted a blissed-out, lo-fi summer soundtrack that's heavily influenced by The Beach Boys.

There are pure pop moments ('Jump Start My Heart' and 'Shoot Shoot The Needle'), wonky synth sounds ('You Know How I'm Feeling Now') and jazzy tinges ('Every Cloud Has A Cloudy Lining'), but lurking beneath the sunny, surf's up melodies, there's an undertow of sadness and world-weariness.

I spoke to reclusive Mike to find out if he's made his *Pet Sounds*...

SH: *Summer Deluxe* was the soundtrack to my summer this year – it's been on my hi-fi a lot over the past few months...

Your last record, 2018's *Beachhead Galaxy*, was loosely a sci-fi-based concept album – it sounded like The Beach Boys and The Flaming Lips playing in outer space – but *Summer Deluxe* is much more Beach Boys and less out of this world... There aren't as many strange, spacey synth sounds on it...



“I think I managed to make some good wonky sounds with the streamer/synth combo.”

synths, percussion, and machines. What’s the process like? Talk me through it...

Getting a drum machine and a sampler really opened a couple of huge doors for me in terms of recording at home. Suddenly I could basically add any instrument I wanted, as long as I could find a sample and make it fit.

I’m not technically brilliant at recording, but I think I managed to make some good wonky sounds with the sampler/synth combo.

I have a 32-track TASCAM recorder. I’m not keen on using computers – I like the hands-on approach.

It’s pretty quick and easy recording that way, depending on the song and what I’m up to.

Sometimes I’ll record a song in a day, but sometimes I’ll take a week in little sessions.

I also have a Roland TR-8 drum machine, an Akai sampler, a Dave Smith Mopho synth, and my guitars. My dream – or my plan – is to get a Roland Juno-60 keyboard for the album after next.

My writing and recording process is pretty simple. I’ll just sit with a guitar for a while and see if anything happens – that’s basically it. If I like something enough it gets recorded. I don’t really end up discarding a lot of stuff that gets recorded, if it makes it that far it usually ends up being used for something.

You’ve been in bands – Co-pilgrim and Black Nielson. Do you prefer being a solo artist and doing it all by yourself?

I do prefer it now, but I loved being in bands and I was really lucky that everyone I’ve been in a band with have been really brilliant human beings and super-talented musicians. ►

► **MG:** The Beach Boys are such a massive influence on me – I think they’re just part of everything I’ve ever done, whether consciously or not. I used less spacey synth sounds and more weird samples on *Summer Deluxe* than *Beachhead Galaxy* and I toned down the sci-fi in general. I might do a summer in space album next, though.

Would you describe *Summer Deluxe* as a concept album? It has instrumentals at the start, in the middle, and at the end...

I wouldn’t say so – lyrically there are a couple of summer-themed songs I suppose, but it was more to do with the music having a warm July feel to it.

When I started to do the instrumentals that’s when I thought that maybe I could try and give it a musical shade going from spring through to autumn. It’s pretty loose.

I don’t think I started thinking of it as a summer album until I got the title, which was about halfway through writing it. Once I began thinking of it as summer-themed the rest of the songs just sort of fell into place. I’d always wanted to do a warm, summery album, so I took my chance.

Is this album your *Pet Sounds*?

Summer Deluxe is more like my *Smiley Smile* than my *Pet Sounds*...

On *Summer Deluxe*, you wrote, played, recorded, and produced everything yourself at home. You’re credited with vocals, guitars,

studio **AV**

EXPERIENCE THE NEW **dCS BARTOK**



The new dCS Bartok is available for immediate demonstration at our showroom in Chobham. Please contact us to arrange your exclusive audition of the dCS range and more.

WWW.STUDIOAV.CO.UK
01753 863300 sales@studioav.co.uk

ORANGES & LEMONS



oandlhifi.co.uk

02079242040 - London SW11

bowers & wilkins rega sonos linn naim atc pmc arcam tellurium q
chord co neat dynaudio rotel rel sennheiser chord electronics

CLONEY

AUDIO
HOME ENTERTAINMENT

Harbeth. 

A World of Natural Sound

For 40 years Harbeth has refined the BBC loudspeaker legacy, creating loudspeakers in worldwide demand for their unbeatable clarity and resolution.

www.harbeth.co.uk



Photo by Harbeth customer: @consideredthings

ARCAM - AUDIO RESEARCH - B&W - CAYIN
CLASSE CLEARAUDIO - COPLAND - DEVIALET - LAVARDIN
LEBEN - MARTIN LOGAN - MERIDIAN - NAIM - PRIMALUNA
QUAD - REGA - SME - SONUS FABER AND MANY MORE



THE BEST ADVICE, HOME INSTALLATION AND
AFTER-SALES SERVICE IN IRELAND - SINCE 1966.

55 Main Street, Blackrock, Co. Dublin, Ireland.
T: +353 1 28 88 477 www.cloneyaudio.com

► I'm really grateful to have got to work with Joe Bennett [producer, multi-instrumental, member of Co-pilgrim] for so long and to have had such an amazing musician and producer like him want to work with me.

I think a combination of things like not really wanting to play shows anymore, not wanting to travel, being pretty depressed with Co-pilgrim not really getting to the level I think we deserved and wanting to just have a bit more control on how the songs ended up sounding, led to me doing the solo thing and I'm really enjoying where I'm at right now. I'd love to work with Joe again some day, though, I think.

Some of the songs on *Summer Deluxe* were destined for a Co-pilgrim album, weren't they?

I wasn't really working on any solo stuff. Joe and I were actually very close to finishing mixes for a new Co-pilgrim album when I decided to jump ship for various reasons and just get on with recording stuff at home instead.

I took four or five songs from that session and re-recorded them myself, came up with the album title and went about adding the other songs.

This is your fifth solo album in five years. What's the secret to being so prolific?

I don't know if there is a secret. I just really, really love writing songs, so I want to do it all the time. That makes sense to me. It's the most fun in the world and I'm thankful every day that I seem to be all right at it. I've never really had time for the whole tortured artist bollocks.

Let's talk about some of the songs on *Summer Deluxe*. I love the wonky synth sounds on 'You Know How I'm Feeling Now'.

Where did that track come from?
In the lyric, it name-checks the late nineties Welsh indie band Murry The Hump and the children's book and TV character *Stig of the Dump*...



Less noise. More music.

"The difference that the Ground Controls make is so profound... they have become indispensable"

— HiFi+



Introducing a stunning innovation in high frequency noise reduction: the CAD GC1 and GC3 Ground Controls. Designed to help any audio system sound better. **Contact CAD for a dealer near you: +44 (0) 203 397 0334**
www.computeraudiodesign.com

CAD
COMPUTER AUDIO DESIGN

MAGNEPAN
INCORPORATED

“The 30.7s deliver sound quality competitive with (and in some respects superior to) loudspeakers ranging from two to nearly ten times their price.”

- Chris Martens, HiFi+



Life's just better with a
DECENT AUDIO System

t: +44 (0) 56 0205 4669
e: info@decentaudio.co.uk
www.decentaudio.co.uk

DECENT AUDIO
sound distribution
OFFICIAL UK DISTRIBUTOR

“I got lucky on that one with the sound of it. It was one of the first songs I recorded using the sampler.”

► That’s the one song on the album I wish I could record again, or mix again, at least. I love the sound of it, but it’s just missing a bit of oomph or something.

You know Murry The Hump? Hah – I didn’t think anyone would get that reference. They were a great band and they always played at Truck Festival [in Oxfordshire] in the very early years and were always great fun, so it seemed right that they get a mention in a song about feeling good.

Stig of the Dump scared me as a kid, but it rhymed and made me laugh.

There are some great, warm synth sounds on the gorgeous ‘Rareearaa’ – one of the singles from the album. What inspired that song and where did the strange title come from?

I got lucky on that one with the sound of it. It was one of the first songs I recorded using the sampler. There is actually only synth bass on there. I mostly fluked the lovely strings and accordion sounds and somehow also ended up with a beautiful kind of piano/synth sample that makes up the little melody. It often happens that a little incompetence leads to magical things while recording.

The song was inspired by my girlfriend Kerrylyn. She sent me a message one day where she was so excited she typed ‘Rareearaa’ to express it and I just thought it was funny and sweet – she’s the funniest person I know.

‘Jump Start My Heart’ and ‘Shoot Shoot The Needle’ are two great pure pop moments on the record.... ‘Heart’, ‘needle’, ‘jump start’, ‘shoot’.... I like the interesting imagery you use in those songs...

Thanks, man. I’ve always used the imagery of hearts in lyrics and titles, along with birds, the weather, and planets.

I think most people who write songs have recurring themes in their lyrics. I write the melodies before the lyrics, so I’m often just mumbling along with the tune and the words stick.

‘Shoot Shoot The Needle’ was definitely like that. I remember singing the “shoot shoot” part before I had any other words for it.

Those two songs were both on the abandoned Co-pilgrim album. I just wanted to make them a bit more how I heard them when I wrote them.

Underneath the summery sounds on the album, there seems to be some sadness, anxiety, and world-weariness. Is that a fair comment?

Yeah – for sure. I’ve always enjoyed bands and music that is kind of happy on the surface, but has an undertow of sadness.

I was also in a pretty bad place with music when I started recording the album. The last year or so of Co-pilgrim really got me down and I think this album helped me recover from that and fall in love with music again.

How was your summer? Was it deluxe?

It was very deluxe, thanks. This is the first album I’ve released without a label, or someone else taking over once the album was recorded. It was quite daunting at first, having to put the album together and get it ready for release etc., but I have loved every minute of it. It’s been such a positive experience from start to finish and the response to the album has blown me away. It’s been a good summer.

What are your plans for the rest of 2019 and beyond? Another album in 2020?

I’ve got seven of the 10 songs for the next album recorded, so the rest of the year will just be spent finishing that for another spring/summer release next year.

I’m just loving writing and recording so much again at the moment that I plan to keep on releasing stuff each year.

Finally, what are you listening to – old and new – and enjoying?

I’ve been listening to a lot of The Go-Betweens and some lo-fi hip-hop stuff like MF DOOM, Madlib, and J Dilla, etc. Mostly, though, I’ve been re-discovering Ween again on an almost spiritual level.

I’ve been a huge Ween fan since I was about 16, when my brother Peter brought home *Chocolate and Cheese* on vinyl. It was the most confusing, hilarious, and brilliant thing I’d ever heard.

Those two guys get dismissed by people who have never really listened to them properly as just comedy music, but I would put their catalogue up against anyone.

For me, Gene and Dean Ween are the best songwriting duo of the past 30 years and my favourite band of all time – even above The Beach Boys! +

Summer Deluxe is available now – CD, digital album and streaming, and download – under exclusive licence to Baboo Records from <https://mikegale.bandcamp.com>

WE'VE GOT THE PROS COVERED.

PRO Look.
PRO Build.
PRO Results.



Abbey Road Studios

"The wide selection of colours, sizes and modularity of their panels were a major factor in our decision to use GIK products."

LUCA BARASSI, ABBEY ROAD INSTITUTE

FREE ACOUSTIC ADVICE

GET HELP WITH ROOM SETUP



GIK Acoustics
Solutions. Innovations. Quality.

ORDER DIRECT

GIKACOUSTICS.CO.UK +44 (0) 20 3815 8608 (UK)



Award winning Pre Amplifiers



Call now for a home demonstration

01424 858260 info@mfaudio.co.uk www.mfaudio.co.uk

hi-fi+ ADVERTISING INDEX

6 Audio	88	ELAC.....	66	Oranges and Lemons	93
Absolute Sounds	OBC	Enjoythemusic.com.....	78	Origin Live	81
Allnic	28 & 29	Entreq	40	Oxford Audio Consultants Ltd.....	89
Ambitious Audio Design.....	63	FINKTEAM.....	45	Padood	IFC
Ansuz Acoustics	59	GIK Acoustics	97	Primephonic.....	93
Aqua HiFi	47	Graham Audio.....	75	Raidho Acoustics.....	65
Audio Oasis.....	88	Gryphon Audio.....	37	Rayleigh Hi-Fi.....	89
Audio Pinnacle	48	Hegel	24	Renaissance Audio	17 & 57
Auralic.....	IBC	HiFiMAN.....	78	Russ Andrews Accessoriess.....	83
Black Rhodium	72	Highend Headphone Shop/		Schiit Audio.....	109
Brian & Trevor's.....	77 & 88	HiFi Lounge.....	88	SCV London.....	42
Brook Audio.....	88	iFi	23	Select Audio.....	14
Cardas Audio Ltd.....	106	Infidelity.....	89	Shunyata.....	32 & 33
Ceritech Ltd	88	Kanto Living	51	Siltech	27
Choice HiFi	19 & 88	KJ West One.....	13	Sonata Hi-Fi	89
Cloney Audio.....	93	Kog Audio	54 & 90	Spendor Audio Systems Ltd	39
Computer Audio Design.....	95	Lateral Audio Designs	77	studioAV Ltd.....	89 & 93
Criterion Audio	88	Merrill Audio Advanced		Sugden Audio	53
Critical Mass Systems.....	31	Technology Labs.....	69	The Audio Consultants.....	60
Crystal Cable BV.....	2	Midland Audio Xchange	89	The Chord Company	9
Decent Audio	95	Monopulse.....	89	The Right Note.....	71
Deco Audio	88	Music First Audio	97	Triangle Art.....	81
Divine Audio	88	Naim Audio	7	Vertere Limited.....	34
Dynaudio International GmbH.....	21	NorthWest Audio Show.....	4 & 5	WBT-Distribution GmbH	83



“Classical music gets the intelligent app it deserves”

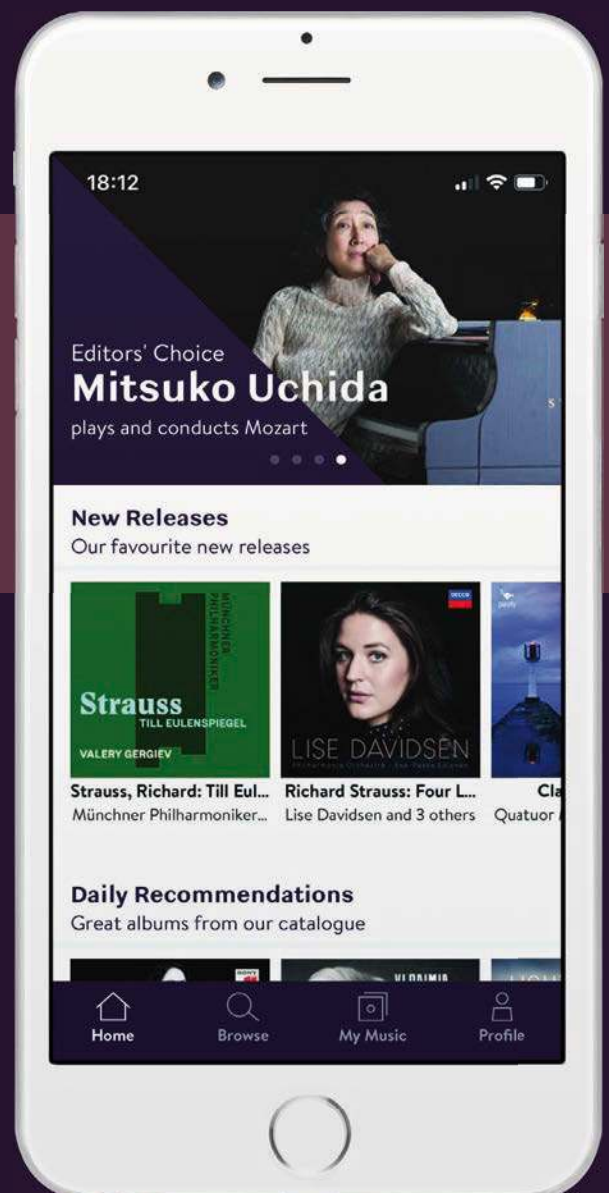
–Financial Times

Try 3 months for free

Go to: primephonic.com/hifiplus

Use code: **hifiplus2019**

**The streaming
service designed for
classical music**



4.6 ★★★★★



Download on the
App Store



GET IT ON
Google Play

record reviews

How To Read Them

The information contained in the record reviews is presented in the following way. Albums are identified by label and – where possible – serial number. Beneath this you will find one or more icons that denote the available formats for the recording. The first icon refers to the format reviewed.

The ratings at the bottom of each review reflect the reviewer's opinion of the recording quality, and musical merits of the album. You'll soon realise that a great many musically significant albums offer less than wonderful sound. Don't let it put you off! For your information, the scale rates a standard, good quality pop recording as slightly below average.

This issue's featured reviewers are:

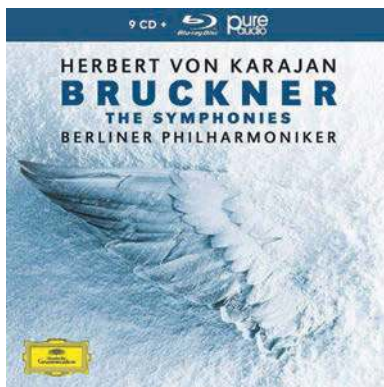
DD – Dennis Davis

SH – Sean Hannam

JMH – Jimmy Hughes

JK – Jason Kennedy

	CD		120g LP
	Gold CD		150g LP
	HDCD		180g LP
	XRCD		200g LP
	Double Disc		10" LP
	DVD		Availability As S/H LP
	SACD		Vinyl Double Album
	Hybrid SACD		45 RPM
	Multi-Channel		Download
	Blu-ray		High-Res Download



Bruckner Symphonies 1 to 9

Berlin Philharmonic

Herbert von Karajan

DG 00289 483 7137

x9

It's remarkable how many cycles of the Bruckner symphonies have been completed since Herbert von Karajan recorded these performances for DG between 1975 and 1981. Back then, choices were quite limited – maybe four or five alternatives – whereas now there are 25 or more complete cycles.

Yet, despite all this fresh competition, Karajan's cycle has held its place and still stands as a 'first choice'. So it's surprising to see DG issue it in a relatively simple clam-shell box and not re-master the CDs.

Symphonies 4 to 9 were recorded during the analogue era, with symphonies 1 to 3 being among Karajan's first digital recordings. The eighth symphony was recorded first – in Jan/April 1975. It's a great performance, and in many ways has the best sound of the cycle. Karajan used the Hass edition of the score.

Symphonies 4 and 7 were taped in April 1975, while the 5th and 9th were recorded in September 1975. Even on Blu-Ray, the fourth and ninth symphonies still sound a wee bit 'tight' and slightly congested. The sound doesn't open up and expand like the 7th and 8th.

However, Karajan's spacious and magisterial Bruckner 5 became the benchmark performance of this work, while the 6th symphony (the last of Karajan's analogue Bruckner

recordings, taped in September 1979) still stands among the finest accounts of this 'difficult' symphony.

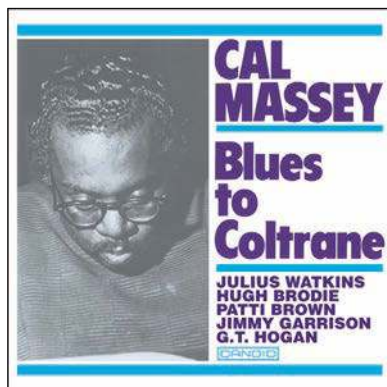
The digitally-recorded symphonies 1–3 had a much drier/brighter sound than the warmer and more spacious analogue recordings. For Blu-Ray, these 16bit 44.1kHz early digital recordings have been upsampled to 24bit, 96kHz, and the sound is definitely more open and cleaner than the original LPs. Climaxes still sound a bit 'tight' and the heavy brass can be a bit over-bearing, but the result is exciting if you like a crisp, forward balance.

Being able to hear Karajan's DG Bruckner recordings on Blu Ray Pure Audio is enticing, but do we need the CDs again – especially as the layout follows the original early '90s set. I'd rather have just the B-R disc on its own, with a nicely printed card booklet that reproduces all the original LP sleeves, a longer and more detailed note about each individual symphony, and maybe some rare and previously unseen session photographs. In other words, a set for serious collectors.

Alas, it's as though DG doesn't have the budget to do things properly, so they skimp and cut corners. If DG were releasing their earlier Jochum or Barenboim/Chicago Bruckner cycles in a budget format, I could understand it. But, Karajan's Bruckner cycle is the Gold Standard and deserves better. **JMH**

RECORDING
MUSIC





Blues to Coltrane

Cal Massey

Candid/Pure Pleasure 9029

180g

Calvin 'Cal' Massey has never been a household name. His reputation (as such) is based on his composing skills rather than his ability to break into the big time as a trumpet player. Indeed, during his short 44-year life he only recorded this one cut, and it sat on the shelf for a quarter century before being released. Born in Philadelphia, Pennsylvania in 1928, Massey first played trumpet with top big bands including those of Billie Holiday, Jay McShann, George Shearing, and Jimmy Heath, and then led a group with Jimmy Garrison and McCoy Tyner before they moved on to become part of John Coltrane's great band. Although he played with some of the greatest jazz players, he is best known as a composer, with his works recorded by Coltrane, Lee Morgan, Freddie Hubbard, Jackie McLean, McCoy Tyner, and Archie Shepp. His politics were progressive and confrontational—Black Panther leader Eldridge commissioned a suite of music from him and according to his widow, an altercation with an executive at Blue Note Records caused him to be 'white' listed by jazz recording companies.

Candid Records, the label that did record his one album, boasts an equally compelling story. Founded in 1960 in New York City by Archie Bleyer, the label's mandate was to record modern current jazz, and its roster included Charles Mingus,

Booker Little, Abbey Lincoln, and Cecil Taylor. Candid's A & R representative was Nat Hentoff, almost as well known for his civil rights activity as his jazz journalism. Candid released 27 titles between 1960 and 1963 and later sold its catalogue to Black Lion Records in 1989 when Bleyer passed away. Leaving aside reissues, Booker Little's *Out Front* (Candid 9027) recorded in January 1961 was its final release under original ownership. The Massey LP, recorded in 1961, was not released until after Black Lion acquired the catalogue. Pure Pleasure's Candid reissues have been some of its most successful releases, from both a musical and remastering standpoint, and this sixteenth dip into the archive is no exception.

Massey is joined on the session by bassist Jimmy Garrison, French horn player Julius Watkins, tenor saxophone player Hugh Brodie, Patti Brown on piano, and G.T. Hogan on drums. The final three players enjoyed as much anonymity in their careers as Massey, but it is Brodie's playing that stands out, sounding much like Massey's friend John Coltrane. They perform five Massey compositions, two of which will be familiar to many jazz fans. 'Bakai', Arabic for 'cry', was composed in memory of Emmett Till, a young boy killed by racists in 1955, was recorded by Coltrane for his first album on Prestige and Hugh Brodie's performance hews close to that performance. 'These Are Soulful Days' was recorded by Lee Morgan for his 1960 LP *Lee-way*, one of the classic titles of Blue Note's catalogue. Despite

Massey's reputation as a progressive force in jazz, all his compositions here are approachable—think Prestige Coltrane more than Impulse Shepp.

Like most Candid recordings, *Blues to Coltrane* was recorded by engineer Bob d'Orleans at the Nola Penthouse Sound Studio on the top floor of the Steinway building in New York City. These Candid recordings are uniformly excellent sounding as are other jazz titles done there (the recent Monk *Les liaisons dangereuses* 1960 being a good case in point). Despite being in the Steinway building, the piano had gone out of tune since the Monk sessions recorded in mid-1959, but otherwise the stereo sound is exceptional. Sound staging leaves little to be desired and tone quality (the piano apart) is everything you would expect from Nola's bank of Neumann and Western Electric microphones feeding an Ampex 300 tape machine. The LP was first issued in 1987 on a German pressing that followed the Candid record jacket format down to the New York address on the back cover. Given the UK ownership of these tapes I expect this pressing, mastered by Ray Staff at Air Mastering in London and pressed by Pallas, was from the master tapes. It has never sounded better and is a welcome restoration of Massey's small but important share in jazz history. **DD**

**RECORDING
MUSIC**





More Arriving

Sarathay Korwar

Leaf Label



Up until now percussionist and drummer Sarathay Korwar has played his political cards close to his chest. His last album was a live instrumental affair where he was joined by the UPAJ collective and covered some seminal jazz tracks; it's a fabulous album on the Gearbox label. For *More Arriving* he is putting the world to rights but fear not this is no rant; it consists of extremely well constructed, calmly delivered, and poetic declarations against the injustices experienced by the South Asian community in Britain today. The voices that Korwar has gathered for this project are highly articulate and intelligent, which makes their statements all the more powerful than if they were shouting MC-style into the mic. Behind this there is a backdrop of largely acoustic instruments – with percussion rarely out of the picture – that makes the message easier to appreciate: poetry alone is not enough.

More Arriving starts with 'Mumbai', where Mumbai-born MC Mawali plays with the colonial associations of the name that the British gave to that city. He raps in Hindi and Marathi using Carnatic rhythms that are carried by Tamar Osborn's baritone sax and Korwar's richly varied percussion. The piece increases in intensity as it proceeds and uses shades of dynamics to create variety and interest in the sound alone. It's a sound enriched by

Al McSween's keyboard playing and falls approximately into that lonely niche; jazz based South Asian hip hop. 'Coolie' is more muscular and powerful with an urban feel created by siren sounds on which Punjabi MC Delhi Sultanate and Jamaican-Indian rapper Prabh Deep tell of indentured Indian labourers working on British plantations in Jamaica.

'Bol' is about today and thus a lot more hard-hitting; here Zia Ahmed unleashes his wit and wisdom over a crunked-up Bollywood vibe, reeling off familiar phrases and names that make you realise just how deeply embedded is the prejudice against his race; "I am curry house of the year 2005, I am rogan josh, I am so damn lost". You have to hear the whole thing to get the message, but it is loud and clear; being an "Englalani" in Britain today is no easy ride. Thanks to excellent musical backing from Korwar, Osborn, MacSween, and Comet Is Coming's Danalogue on synths this doesn't feel like a tirade; it's more of a plea.

Sonically *More Arriving* benefits from the largely acoustic nature of the compositions. Compression is used and sometimes a little heavily but for the most part this is an open and appealing sounding recording. It does occasionally go for impact but like the words themselves restrains itself for extra emotional effect. 'Mango' with Zia Ahmed again is potent and concise poem about the travails of young Muslims, but thankfully it's mixed with barbed humour: "Go back home, Type NW2, What does

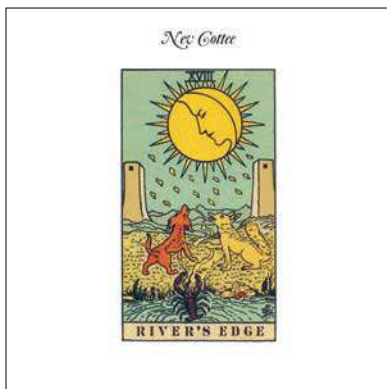
your satnav show?" and "In the old days everything was alright, I saw it in a documentary called Mary Poppins". Here the verbal delivery is so understated yet powerful that you barely notice the music.

The longest tune on the album is ironically titled 'City of Words'; ironic because it's largely instrumental, with no words for the first five minutes and only a deep sax and percussion intro with the slow pulse of double bass keeping the tempo down. It makes for a good contrast that's enhanced by Chris Williams' alto sax over a lush backdrop. 'Good Ol' Vilayati', where vilayati which means 'whitey' in Hindi slang, is performed by classical singer Mirande, who makes no comment, her voice keening and chattering but avoiding anything literal. Which gives the last piece, 'Pravasis,' all the more power; here Deepak Unnikrishnan unpacks this dialect term for immigrant in no uncertain terms. It's once again a poetic piece that this time links words that start out sounding harmless, but quickly twist into the narrative that dominates the immigrant's lot.

Korwar's ingenuity is to provide these artists with a platform that makes their message clear yet keeps it palatable; the opposite of Billy Bragg if you like. *More Arriving* is as musically engaging as it is emotionally charged. **JK**

RECORDING
MUSIC





River's Edge

Nev Cottee

(Wonderfulsound)



If you don't know Manchester-based, UK singer-songwriter Nev Cottee, then the first thing that'll grab you when you listen to his latest album, *River's Edge*, is his voice. A deep, rich, bar-room baritone that hits home right on the first track, the gorgeous, late night lullaby *Nightingale*.

Over soft piano backing, Cottee croons: "Time stands still – you're all alone. All the clocks stopped ticking, nobody's home and the world is listening to your soul. The moon keeps shining down on you..."

Strings and brass creep in and you're instantly transported to a dream-like, nocturnal world – it's a stunning way to open his fourth solo album, which is his best record yet.

It gets even better – the second song, *Roses*, is a beautiful, unashamedly romantic ballad. It is a duet, featuring the mysterious Nico-esque chanteuse Veronica, who Cottee discovered singing in the back-streets of Madrid. Their voices perfectly complement each other as they sing about falling off the Earth, hand in hand together.

Many of the songs for *River's Edge* were written while Cottee sat in his garden, strumming his guitar, listening to the birds, which explains the pastoral feel to several of the tracks.

The chilled-out, optimistic *Morning Sun* is a key song, as it sums up the overall, positive and optimistic feel of the album – with a warm

backing of simple, sparse acoustic guitar, bass, and tinkling piano.

Cottee cites Lee Hazlewood, Scott Walker, and Tom Waits as musical inspirations, but on *River's Edge*, the influence that looms large is Neil Young – particularly his classic '70s period.

Asked about his approach to making *River's Edge*, Cottee says: "I just wanted to make a Neil Young record – I was listening to *Comes A Time*, *On The Beach*, *Zuma*, and *After The Goldrush*, but other influences got in the way."

The short, haunting *The Hollywood Sign*, which clocks in at just over one minute, mentions 'prairie wind' in the lyric, which was the title of a 2005 album by Young, while, musically, with its acoustic guitar picking, it's a nod to Crosby, Stills & Nash's *Helplessly Hoping*, although it also tips its (Stetson) hat to the Spaghetti Western soundtracks of Ennio Morricone.

One of the highlights is the first single, *Hello Stranger*, which, with its brooding, psych-rock feel, ironically, harks back to the sound of Cottee's last album, but the superb, sprawling, lengthy, feedback-laced, electric guitar solo, which makes up half of the song and is played by US musician Alex Foote, is pure Young at heart.

You could be forgiven for thinking that *River's Edge* was made high in the Hollywood Hills, in Laurel Canyon, but it was actually laid down in Manchester.

To make the album, which was recorded in Vibe Studios over a

two-week period and overseen by his regular collaborator, producer Mason Neely (Wilco, Lambchop, Edwyn Collins), Cottee assembled a stellar cast.

James Walbourne (The Rails and The Pretenders) turns in a short and sweet acoustic guitar solo on the folky *You Can Help Me*, which also features some nice, Crosby, Stills & Nash-style three-part harmonies, while UK pedal steel maestro Chris Hillman (Billy Bragg, Ethan Johns) plays on several tracks, including the sublime, twilight country ballad *I'm Still Here*, which sounds like it could've come off *Scott 4*.

Ex-Verve guitarist Nick McCabe also played on the sessions, but, sadly, his contributions didn't make the final cut. Hopefully we'll get to hear them at a later date...

Talking about his thinking behind the album, Cottee says: "The songs are my way of working out what's going on in the world – finding some sense in all the crazy madness."

Reflective and life affirming, this is a record that deserves to be heard by a much wider audience – Cottee is one of the UK's best contemporary singer-songwriters, yet still remains largely under the radar. Hopefully this album will change that.

On the yearning title track, he sings: "River's Edge is where I want to be." What are you waiting for? Dive in – it's lovely. **SH**

RECORDING
MUSIC



COMPETITION

WIN! One of three pairs of 1MORE Triple Driver BT earphones worth £109.99/\$150

We have teamed up with our friends at 1MORE to bring you an exciting competition and a chance to win one of three pairs of their superb Triple Driver BT earphones worth £109.99/\$150.

Tom Martin reviewed these in *Hi-Fi+* issue 174 where he wrote, “Some audio products do a few important things well, and they do them at a price point that is so reasonable, that you look at them and ask, ‘Is there any point in spending more?’ Many times during the testing of the 1MORE Triple Driver BT Bluetooth wireless in-ear headphones, I had this feeling.

He went on to say, “The 1MORE Triple Drivers get the midrange ‘righter’ than many other earphones in this price category...in particular they have a refined sound where instruments sound whole and less like they’ve been through some digitizing process.”

The finish level is surprisingly high for this price point. The batteries, electronics and controls are all in a neckband which in turn runs via wires to the in-ear drivers which has the advantage of less weight in the ear. Eight sets of differently sized ear tips are included, making it relatively easy to fit the 1MORE to your ears”.

He concluded the review by saying, “In summary, a very likeable wireless in-ear headphone at an amazing price”. +



Competition Question

How many sets of differently sized ear tips are included with the 1MORE Triple Driver BT earphones?

- A. 3
- B. 6
- C. 8

To answer, please visit the 1MORE dedicated competition page at <https://usa.1more.com/blogs/reviews/hifi-plus-competition-win-a-pair-of-1more-triple-driver-bts> Alternatively, send your answer on a postcard (including your name, address, and contact details) to 1MORE Competition, 1MORE Inc., 10225 Barnes Canyon Road, Suite A202, San Diego, CA 92121, U.S.A.

Competition Rules

The competition will run from September 5th 2019 until October 31st 2019. The competition is open to everyone, but multiple, automated, or bulk entries will be disqualified. The winner will be chosen at random from all valid entries, will be contacted via email (where possible), and their name will be published in the magazine. The Editor's decision is final and no correspondence will be entered into. Absolute Multimedia (UK) Ltd. is compliant with the Data Protection Act and UK laws apply. Our policy is such that we will not pass on your details to any third party without your prior consent.

ULTIMATE HEADPHONE GUIDE

LIMITED STOCK AVAILABLE

**SPECIAL
OFFER**

Each issue RRP £9.95 – Discounted price £7 + P&P
Special Offer Issue 1 & 2 for £12 + P&P



BUY IT NOW!!

www.hifiplusstore.com

PERSONAL AUDIO SPECIAL!

Our exclusive section dedicated to the best in Personal Audio

HiFiMAN Jade II

A classic electrostatic
system reborn



- ◀ **Cleer FLOW**
Noise-cancelling Bluetooth wireless
headphones that honour the music



- ▲ **AudioQuest DragonFly Cobalt**
AQ builds its best portable USB
amp/DAC ever



Cardas Audio

Established 1987



High Performance
Cables



Golden Section
Litz Conductors



Ultra Pure
Copper & Silver



Premium
Connectors



Bulk Cables
& Chassis Wire



Quad Eutectic
Solder & Flux

Cardas Audio • Bandon, Oregon • 541-347-2484 • support@cardas.com • www.cardas.com

Please send your letters to Hi-Fi+, Unit 3, Sandleheath Industrial Estate, Sandleheath, Hampshire, SP6 1PA, United Kingdom.
Or email them to editor@hifiplus.com

Incoming!

Why do some headphones require amplifiers and others are easy enough to be driven by a phone or a tablet? Is ease of drive inversely proportional to performance? I use a pair of Sennheiser Momentum over-ear headphones (wired, not wireless) and they work well at home and on the move, but would I benefit from using more difficult to operate headphones at home?

Jaz Khan, via email

You raise an excellent though complicated question. The primary factor that determines whether headphones do or do not require external amplifiers is sensitivity, which typically you will see rated as a specified number of dB of output for 1mW of power applied at 1kHz. Generally speaking, the higher the sensitivity rating the less an external amplifier will be a strict necessity. Another factor that comes into play is the headphone's impedance rating. Oddly enough, both very low and very high impedance headphones often prove difficult to drive—the former because they demand lots of current and the latter because they demand large voltage swings.

In my experience, ease of drive is not necessarily directly linked to performance. For example, the HiFiMAN Susvara, which is one of the finest planar magnetic headphones on the planet, is extremely difficult to drive. But, when properly powered, the Susvara sounds amazing. On the other hand, the Focal Stellia headphone, which is relatively easy to drive, also sounds superb and does not require a 'mega-amplifier' in order to sound its best. Bear in mind that the reasons to choose a headphone amplifier have partly to do with providing adequate power, but also have much to do with achieving very high levels of sound quality—no matter what types of headphones you might use.

Personally, I would not recommend seeking out a 'hard-to-drive' headphone just for the sake of doing so, as this will not necessarily guarantee you any increase in sound quality. Rather, I would urge you to seek out headphones that demonstrably provide the levels of sound quality you need and want, and only then work on choosing appropriate amplification.

Chris Martens, Editor, Ultimate Headphone Guide

I get the notion of balanced operation when it comes to amplifiers, although arguably it's more important for eliminating noise on long cable runs between preamp and power amplifier. When it comes to headphones, what's the point? Is 'balanced' in headphone design a function of the amplifier or is there something unique to headphone drive units that doesn't apply to loudspeakers.

Guy Mitchell, via email

In simple terms, you can think of balanced mode headphone amplifiers as either providing more power or lower noise, both of which can potentially enhance sound quality. The trade-off, though, is that balanced mode amplifiers are typically more complex and thus more expensive than equivalent single-ended amplifiers.

To enjoy, or experiment with, balanced mode amplifiers for your headphones all you need, apart from a balanced mode amplifier, is an appropriately terminated set of balanced signal cables for your headphones (that is, if balanced cables did not already come from the factory with your headphones). Once you have installed balanced signal cables, no other physical changes to the headphones are required. Note that there are a large number of reputable, specialty cable makers (e.g., Cardas, The Chord Company, Effect Audio, Kimber, Nordost, Vertere, and more) who can supply balanced cables with terminations suitable for your headphones and your balanced mode amplifier.

Although this is not a hard, fast rule, many listeners report the sonic benefits of balanced mode operation for headphones to include a heightened sense of dynamic authority, greater perceived resolution, and/or quieter backgrounds.

Chris Martens, Editor, Ultimate Headphone Guide

Like the majority of modern loudspeakers, I find most headphones very 'boom-tizz' with a lot of sound at very high frequencies, a lot of sound in the bass, and not much in between. I understand that this kind of tonal balance might be good for rock and pop music but it is not for me. I listen almost exclusively to classical music, and primarily to string quartets and piano sonatas. What do you recommend?

Stephen Hobby, via email ►

► What you are describing are so-called 'V-shaped' frequency response curves that some find exciting in the short term, but that others find downright annoying in the longer term. Personally, I fall in the latter camp (as I think you also do), so that I prefer headphones that offer more evenly balanced and more sonically neutral voicing. Interestingly, neutral voicing usually turns out to be a blessing for all genres of music for purposes of long term listening.

You didn't specify a preferred price range for the headphones you seek, so—taking a guess—I will recommend some models priced at or below \$1000. Headphones whose neutrality I appreciate include the Meze 99 Classics, the PSB M4U 8, the HiFiMAN Sundara, the Quad ERA-I, the Focal Elegia and Elear, and the MrSpeakers AEON Flow.

Chris Martens, Editor, Ultimate Headphone Guide

Although I listen to closed-back headphones, the sound still leaks slightly. My partner seems very sensitive to this and although I bought a pair of Beyerdynamic T5p headphones (which sound excellent, by the way), she can still hear the music I play, no matter how quietly I play it. OK, I do listen to heavy metal, but I really don't play it loud in her presence, but she is still bothered by the sound. Would in-ear monitors help, and if so, do they have to be custom-made? What ones would you recommend for someone who loves their Slipknot!

Ash Barclay, via email

To get straight to the point, yes, I do think that either high-quality universal-fit earphones or custom-fit in-ear monitors would help. What about universal-fit earphones vs. CIEMs? That will be a very personal decision for you to make. Both should keep the sound of your music from bleeding through to the outside world, but the corresponding question is this: how much sound from the outside world do you wish to block out? Universal-fit earphones can do a good job of blocking out noise, but properly fitted Custom-Fit In-Ear monitors will do an even better job of noise isolation.

What models would do a good job with heavy metal music? I might suggest checking out some of Westone's new B-series (B is for enhanced bass) universal-fit earphones. In the CIEM world a great choice would be the expensive but excellent JH Audio Roxanne; the Roxanne features adjustable bass response (via a control mounted in the Roxanne signal cable) and sounds very good at relatively high volume levels. Which brings up one final point: by all means enjoy your Slipknot, but be careful with volume levels.

Modern earphones and CIEMs sound so clean and pure, even at high levels, that you can accidentally crank music up to levels that will for a fact cause long-term hearing damage. Go easy with the volume knob, for your sake.

Chris Martens, Editor, Ultimate Headphone Guide

What is the difference between a planar magnetic and an electrostatic headphone? What are their respective benefits and shortcomings? Is one intrinsically better than the other?

Daniel Tierney, via email

The differences between planar magnetic and electrostatic headphones have to do with fundamental differences between the ways their respective drive mechanisms or 'motors' work.

Because they are structurally similar, planar magnetic and electrostatic headphones share many benefits in common. Both use very low mass diaphragms that are driven over their entire surface area (not just at the edges or centres as in a dynamic driver), meaning that amplifiers can exercise a high degree of control over the diaphragm and that the headphones will typically have very fast transient response (that is, they can change directions quickly as the music dictates). Both design types are known for their characteristically open and transparent sound.

Still, there are several key differentiators. First, planar magnetic headphones can be driven by conventional headphone amplifiers, whereas electrostatic headphones—owing to their high bias voltage and audio signal voltage requirement—need dedicated, purpose-built electrostatic amplifiers. Second, though both headphone types use lightweight diaphragms, electrostatic diaphragms are the lightest and lowest mass of all, which gives electrostatic a narrow but audible edge in terms of sonic transparency and transient speed. Third, planar magnetic designs are typically thought to offer more robust dynamic performance, whereas electrostatic designs can potentially experience arcing between their diaphragms and stators if they are fed overly high signal levels.

Which design format offers the greatest performance potential overall? Two designers who each have created excellent planar magnetic and electrostatic headphones—namely Dr Fang Bian of HiFiMAN and Dan Clark of MrSpeakers—would say that in absolute terms electrostatic designs offer greater performance potential than planar magnetic designs, although in practical terms the performance gaps are relatively narrow ones.

Chris Martens, Editor, Ultimate Headphone Guide

APE 

Go ahead. Go ape.
Without spending a fortune.

 SCHITT
WWW.SCHITT.COM

HiFiMAN Jade II electrostatic headphone system

by Chris Martens

I first became aware of HiFiMAN roughly eleven years ago, when I sought to review one of the firm's earliest planar magnetic headphones. However, in the course of reaching out to the firm I learned that even earlier on HiFiMAN had once made a full-range electrostatic headphone called the Jade. At the time I discovered the Jade was no longer in production, but I soon found that it enjoyed an almost reverent cult following among high-end headphone enthusiasts. In fact, one of my happiest memories of that time period was attending a CanJam event where I met up with the great personal audio electronics pioneer Ray Samuels (of Ray Samuels Audio fame); Samuels handed me his personal pair of HiFiMAN Jades and said, with a sly smile, "Here, try these out; you need to hear them."

Singing sweetly when driven by a Samuels designed electrostatic amp, the Jades indeed proved to be something special. They offered the transient speed and transparency for which fine electrostatic headphones are famous, but without even a trace of the subtly edgy and analytical quality that makes some electrostatic headphones a sonic mixed blessing. On the contrary, the Jades had a certain mellifluous and full-bodied character that made them wonderfully musical and easy to enjoy. The only catch was that the Jade had essentially become 'unobtainium'; HiFiMAN wasn't making any more Jades and the lucky few—like Ray Samuels—who owned Jades had zero interest in parting with them. Ah, well, I suppose it is human nature to yearn for things we cannot have ...or can we?

Let's fast-forward to late 2018 and to the Rocky Mountain Audio Fest (RMAF) event held each Fall in Denver, Colorado. At that show, in the CanJam personal audio exhibit area, the HiFiMAN stand featured something many enthusiasts had dreamed of: namely a brand new electrostatic headphone called the Jade II and a matching electrostatic amplifier. The headphone and amplifier are potentially available as separate products, but HiFiMAN prefers to bundle the products as a specially priced, turnkey Jade II electrostatic headphone system (\$2499 or £2499). The Jade II system is the subject of this review.

The Jade II is an open back electrostatic headphone that looks like an updated version of the original Jade, but with more refined finishes and a distinctive iridescent blue-green diaphragm visible behind the headphone's open-mesh anodes (or stators). The Jade II's teardrop-shaped ear cups are finished in satin black, as is its top headband frame. Beneath the frame there is a simple but effective height-adjustable leather headband strap. The Jade II ear pads feature leather (or leather-like?) outer coverings, but with comfortable fabric inner surfaces and touch surfaces capable of wicking away perspiration. Following recent design trends, the Jade II headphone frame allows its ear cup to swivel in the vertical axis, but not the horizontal axis. Apparently, the train of thought is there is sufficient flex in the frame to accommodate horizontal positioning adjustments, while the elimination of horizontal pivots improves that overall strength of the frame.

HiFiMAN does not go into great depth on the technologies used in the Jade II, but describes the headphone as having a, "housing (made) from ABS and a steel frame composed of a stainless-steel honeycomb mesh for the anode casing." Expanding on this last statement, the product manual adds that, "The Honeycomb mesh can protect the headphone from airflow vibrations assuring that the sound reproduction remains true and accurate."

On the inside, the Jade II uses an ultra low-mass diaphragm less than 0.001mm thick and that is coated with nano-particles said to provide, "an extreme high frequency response and an excellent musical reproduction ability." Completing the picture is a nanometre-thick dust cover designed to prevent, "dust and other pollutants settling, thus avoiding ensuing distortion caused by electrostatic dust." The overall design goal, says HiFiMAN, was to create a headphone capable of delivering "highly resolving audio" along with extremely extended high-frequency response with soundstages said to be dramatically open and expansive compared to a traditional 'moving coil' type headphone.

The Jade II electrostatic amplifier is a balanced output, solid-state design, which comes as a surprise given that HiFiMAN's previous Shangri-La and Shangri-La Jr electrostatic

"Ah, well, I suppose it is human nature to yearn for things we cannot have... or can we?"

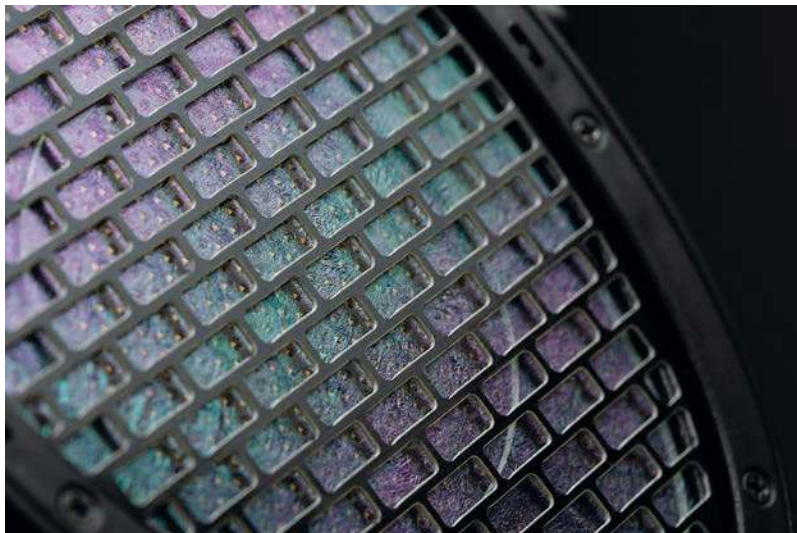


amplifiers were both valve-powered units. Compared to those two mega-amps, however, the Jade II amplifier is considerably lighter, more compact, and sports an elegant and attractive minimalist industrial design created by HiFiMAN's Boston, Massachusetts-based US design team. The amplifier chassis, states the manual, is formed from "aviation grade aluminium alloy" finished in satin black.

HiFiMAN says the Jade II circuit uses a Texas Instruments OPA2107AO high-precision dual op amp "for signal pre-amplification". In turn, discrete Cascode MOSFET devices power the amplifier's balanced output stage. HiFiMAN emphasizes that the amplifier uses a high voltage power supply that features an independent power supply regulator. What is more, HiFiMAN paid particular attention to the amplifier's PCB layout, which was developed, says the manufacturer, with an eye toward reducing "interference hum" thus enabling "a more transparent sound".

The amplifier provides two stereo pairs of analogue audio inputs—one single-ended (via RCA jacks) and the other balanced (via 3-pin XLR connectors). Also on the rear panel is an IEC power inlet socket and an AC 115V/230V power input selector switch. The Jade II amplifier's front panel sports a large power switch, a bright power light, two 5-pin Stax-type electrostatic headphone output jacks, a simple push-button input selector switch, and a moderately large, 21-step rotary volume control. In practice, the amplifier proved extremely easy to use while generating a commendably modest amount of heat.

For my listening tests, I was able to compare the Jade II electrostatic headphone with the substantially more expensive MrSpeakers VOCE electrostatic headphone. I was also able to compare the Jade II electrostatic amplifier with my reference iFi Audio Pro iCAN headphone amplifier driving an iFi Pro iESL electrostatic headphone adapter. In short, I compared ▶



"The Jade II's natural organic warmth attracts and holds the listener's attention in a deeply engaging way."

sounds with exemplary clarity, yet it also captures the varied and subtle dynamic moods and the spatial cues that are so vital to conveying the 'you-are-there' sense of being present at the original performance.

On this same track the MrSpeakers VOCE offers superior upper midrange and treble extension on the rapid-fire guitar passages and the sounds of the reverberant recording venue. The VOCE also delivers

▶ both electrostatic headphones as driven by both electrostatic amplifiers, which proved illuminating. Here's what I learned.

The Jade II follows much in the sonic footsteps of the original Jade, in that it offers a carefully judged combination of transient speed, transparency, exceptional midrange purity, superb spatial characteristics, and an inviting quality of natural, organic warmth. If you were hoping for a headphone that emphasizes bleeding-edge, razor sharp transient definition and sub-microscopic levels of detail retrieval, then the Jade II might not be your cup of tea—not because it does not possess those qualities in reasonable measure, but because it does not make them the centrepieces of its musical presentation. So, the Jade II is not about creating hi-fi-centric shock and awe experiences, but more about conveying the vibrant tonal and textural richness of well-recorded music, while also capturing the always-engaging dynamic shadings that help bring music alive. Also, more so than many top-tier headphones, the Jade II provides large, spacious soundstage envelopes that help keep the music from sounding as if it is trapped inside the listener's head. Several musical illustrations will perhaps help to show what I mean.

On 'Zapateados' from Pepe Romero's *Flamenco* [K2HD, 16/44.1], the Jade II presents Romero's exquisite flamenco guitar, recorded in a richly resonant natural acoustic space, juxtaposed against the striking handclaps and foot and toe taps of an expert flamenco dancer. Many transducers—loudspeakers and headphones alike—turn this track into a hi-fi-centric extravaganza, which sadly redirects the listener's attention away from musical event and toward a narrowly focused preoccupation with sound quality. The Jade II, however, is different. Yes, it captures textural and transient

slightly more taut and better-defined bass on the dancer's powerful, percussive foot stamps. With this said, though, I found the Jade II able to hold its own with the far more costly VOCE in terms of conveying the overall feel of the performance. What is more, the Jade II's natural organic warmth attracts and holds the listener's attention in a deeply engaging way.

On Mark O'Connor's *Fanfare for the Volunteer* [Mercurio, London Philharmonic, Sony Masterworks, 16/44.1], the Jade II does a fine job of capturing the gravitas and sonority of the orchestra's instruments—especially brass instruments and low percussion. The tricky part about rendering brass instruments effectively is finding the balance point between the natural 'bite' of the attack of the horns and the rich, burnished, harmonic 'glow' of their sustained voices—a balance point the Jade II found time and again. Similarly, the difficulty with reproducing low percussion instruments is capturing their weight, depth, and dynamic power while at the same time preserving vital textural, transient, and pitch information. Again, the Jade II did a fine job of finding the right balance point, where the headphone's slightly warmer than neutral tonal balance helped give low percussion the dynamic wallop it should have. Perhaps the best part of all involved O'Connor's solo violin passage, where the Jade II caught both the incisiveness and the sweet, lilting tonality of the violin.

On *Fanfare* the MrSpeaker VOCE showed again its superior upper midrange and treble extension, its greater bass purity and power, and its admittedly superior resolution. Even so, the Jade II offered enough of those qualities to be musically competitive with the VOCE, although the more than twice as costly VOCE is undeniably the superior headphone overall.

TECHNICAL SPECIFICATIONS**HiFiMAN Jade II electrostatic headphone system****Jade II electrostatic headphone****Type:** Open-back electrostatic headphone**Driver Complement:** Single full-range electrostatic driver with <0.001mm thick diaphragm and Nano-material coatings, thin metal mesh stators, and nano-material dust covers.**Frequency Response:** 7Hz–90kHz**Bias voltage:** 550V–650V**Weight:** 365 grams (12.9 oz.)**Price:** (The Jade II electrostatic headphone is included in the Jade II system, but is also available separately for \$1399 US or £1249 UK)**Jade II electrostatic amplifier****Amplifier dimensions:** 116 × 270 × 276 mm (4.6" × 10.6" × 10.9")**Amplifier Weight:** 6.5 kg (14.3 lb.)**Price:** (The Jade II electrostatic amplifier is included in the Jade II system, but is also available separately for \$1599 US or £1299 UK)**Jade II bundled electrostatic headphone system price:** \$2499 or £2499 UK**MANUFACTURER INFORMATION****HiFiMAN Corporation**

+1 (201) 443-4626

URL: www.hifiman.com

Finally, on Anne Bisson's rendition of Pink Floyd's classic 'Us and Them' [*Portraits and Perfumes*, Camilio, 16/44.1] the Jade II did something wonderful with Bisson's voice; namely, it captured Bisson's breathy delicacy, her slightly off-kilter inflections, and her uncanny ability to underscore the dark humor implicit in the song's lyrics. In contrast, the MrSpeakers VOCE offered greater extension and resolution, but at the expense of imparting very faint traces of glare on the edges of Bisson's voice. Once again, the inherent musicality of the Jade II shone through.

In comparing the Jade II electrostatic amp to the iFi Pro iCAN/Pro iESL combo, I found the HiFiMAN amp nearly equaled the iFi combo on most material, though the iFi was arguably quieter, more resolving, and substantially more flexible. Given that the iFi combo is more than twice as expensive as the Jade II amplifier, though, I think all might agree the HiFiMAN amplifier offers terrific value for money.

What about caveats? Some of you will have discovered an online review declaring the Jade II system is a "dangerous" product capable of shocking its users. Frankly, I'm going to call

Summary

Voicing: Very subtly tilted toward the warm side of strict neutrality, though not in a way that suggests overt coloration. Rather, Jade II's voicing suggests pleasing, natural organic warmth.



(All ratings relative to comparably priced electrostatic headphone systems.)

Resolution/Focus:**Sound staging/Imaging:****Dynamics/Expression:****Value:****Pros**

- Offers a well-balanced blend of sonic virtues: transparency, transient speed, dynamic acuity, soundstage width and depth, and natural organic warmth
- Light and very comfortable to wear for longer listening sessions
- Clean, simple design
- More about musical expression than hi-fi extravaganzas
- Excellent value for money

Cons

- Offers slightly less extension and resolution than today's flagship electrostatic offerings from MrSpeakers, Stax, and HiFiMAN itself
- Jade II's slightly warmer than neutral voicing will not suit all listening tastes

that review erroneous to the point of almost irrational hysteria. I've used the Jade II system—and many other electrostatic headphone systems—for hours on end in both humid and dry conditions with zero problems. My opinion is that about the only way you could hurt yourself with the Jade II system would be to take it with you into the shower, bathtub, or swimming pool—something no music lover in his or her right mind would ever attempt. Enough said.

While the Jade II system is not in the strictest sense a 'state of the art' product in the way that HiFiMAN's Shangri-La Jr or Shangri-La systems are (or in the way that MrSpeakers VOCE or Stax's SR-009S headphones are), the Jade II package offers such heaping helps of the qualities most listeners seek in electrostatic systems that it qualifies as an unequivocal success. For many listeners, the Jade II system offers so much musical insight and enjoyment for such a sensible price that it may well represent all the electrostatic headphone system many listeners will ever need or want. +

Pangea Audio HPBDSS1 headphone hanger

by Chris Martens



This review covers a product so useful and so intuitively right that it falls squarely in the 'Why-the-heck-didn't-I-think-of-that?' category. What is it? It is Pangea Audio's simple, smart, and sturdy clamp-on headphone hanger—a device that neatly answers that age-old question: Where do I put my headphones when I'm not using them? Now granted, there are lots of solutions on the market, many of which work, but many of which have also proven to be unexpectedly expensive, fraught with subtle design flaws, geared more for artistic good looks than for practical use, or—gulp!—are either complicated, flimsy, or both. Happily, the cost-effective (\$12.95) Pangea suffers from none of these problems and is pleased to roll up its figurative sleeves and get on with things.

The Pangea headphone hanger consists of two simple sub-assemblies: a non-marring clamping mechanism and a curved and padded headphone hanger upon which to place your headphones (the concept is that the headband of your headphones will gently and safely rest upon the hanger's

padded and curved support surface). A beefy, screw-on thumbwheel serves to tighten or loosen the clamp. There is some assembly required, but nothing too demanding. The written assembly instructions are pretty minimal, but in the manner of IKEA products worldwide there are pictographic instructions that are relatively easy to follow (even for those of us with, um, 'ten thumbs').

The Pangea hanger can clamp either to horizontal or vertical surfaces that range from 1/8-inch to 1-3/8-inch thick, which gives users plenty of placement options. Once you've decided upon a surface to which you wish to attach the Pangea hanger, installation can proceed smoothly. The first step is assessing the thickness of the surface to which the headphone hanger will be mounted, and then choosing the mounting hole for the headphone rest that best fits the thickness of the mounting surface (three mounting holes correspond to thin, medium, and thick mounting surfaces, respectively). The next step is to decide how to orient the headphone rest (there are four options per mounting hole, allowing the headphone rest to be positioned at 0, 90, 180, or 270 degrees relative to the main clamp).

The third step, which is the only tricky part of the installation, is latching the lower section of the clamp onto a mounting post that protrudes from the rear side of the headphone rest. This step takes a bit of finessing and a good bit of hand strength to ensure the lower section of the clamp seats properly (when done right, the lower part of the clamp snaps into place with a gentle "click"). Finally, the last step is to install the screw-on thumbwheel, hold the headphone hanger where you to mount it, and then tighten the thumbwheel until the hanger cinches firmly in place. Voila: that's all there is to it.

Having sufficiently tightened the thumbwheel (there is no need to go all macho and end up splitting the wood of your table), the Pangea Headphone Hanger provided a firm, stable, and pleasantly unobtrusive solution for storing my headphones while keeping them ready to hand. I use four Pangea Headphone Hangers in my system (along with a good number of tabletop headphone stands—all of which cost

Summary

Pros

- A simple headphone storage solution that's easy to assemble and to position
- Works on horizontal or vertical surfaces, giving lots of installation options
- Unlike many headphones stands, the Pangea's gently curved and padded top surfaces will not put creases in your headphone's headband straps or pads
- Excellent value for money

Cons

- The upper gripping surface of the Pangea clamp mechanism is padded, but the lower gripping surface is not. Ideally, both gripping surfaces should be padded to prevent scratching furniture
- The Pangea's padded headphone rest measures about 63mm in depth (front to back). Given the very wide top straps of some modern headphones (e.g., the Meze Empyrean) it would be nice to see the depth increased to 75–80mm
- Some complain that the thermoplastic materials used in the clamp feel cheap, though they are actually quite durable

more and take up more space than the Pangea Headphone Hangers do). The Hangers' padded surfaces mean my headphone's headband straps never get unwanted creases or sharp bends, which can be a problem with traditional headphone stands. What is nice, too, is that the Pangea Hangers suspend my headphones just below the top level of my audio rack, meaning the rack's upper surfaces remain free of clutter, while my headphones remain within easy reach.

There is nothing particularly earth-shaking about the Pangea Headphone Hanger. Instead, it is a simple, sturdy, straightforward, and highly cost-effective accessory that can make life more pleasant for headphonistas on a day-to-day basis. Not bad for just \$12.95! +

TECHNICAL SPECIFICATIONS

Type: Clamp-on padded headphone hanger

Price: \$12.95 US

MANUFACTURER INFORMATION

Pangea Audio Distributing

3427 Kraft Avenue

Grand Rapids, MI 49512 USA

+1 (616) 885-9818

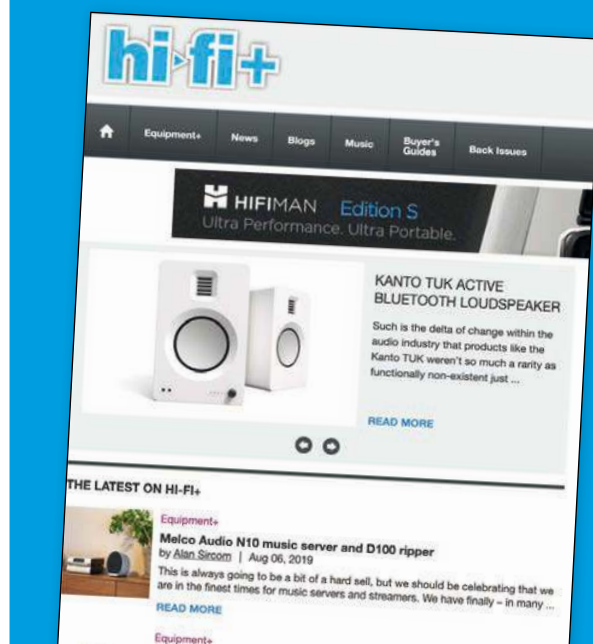
URL: pangeaaudio.com

hi-fi+

Want regular
updates on the
hottest audio
products?

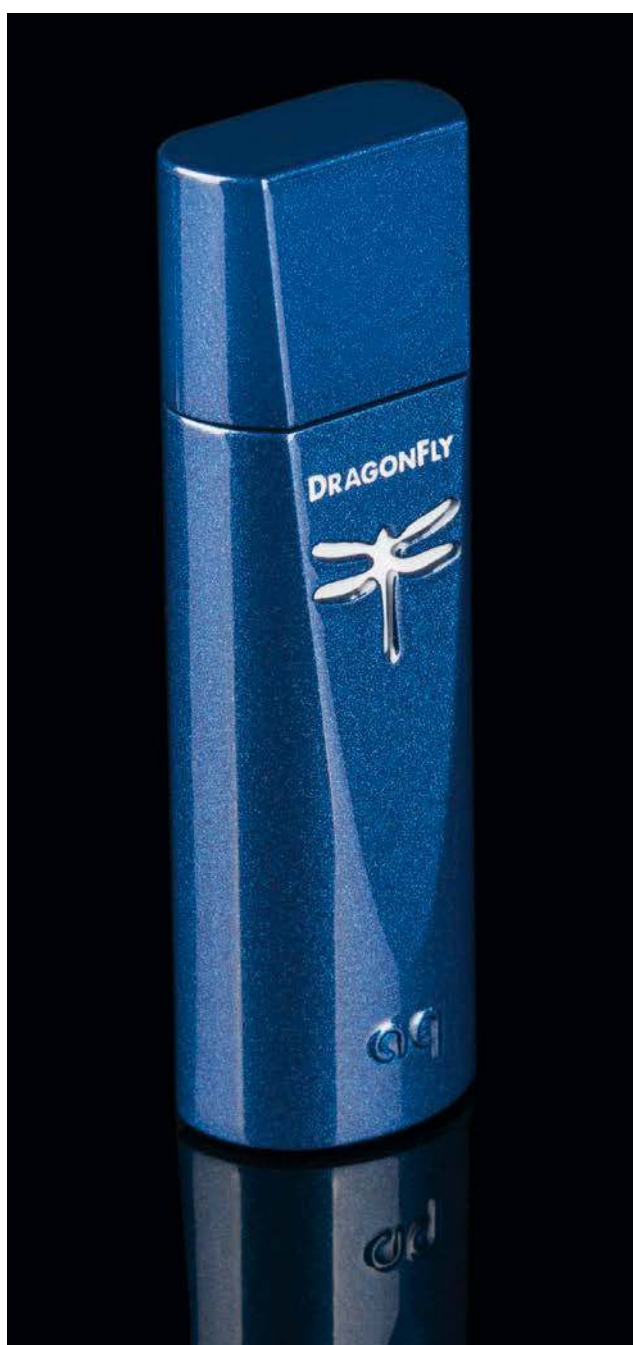
Sign up to our
weekly newsletter!

Go to
hifiplus.com
to sign up
today



AudioQuest DragonFly Cobalt USB DAC/headphone amp

by Alan Sircom



The Cobalt is the third and latest generation of DragonFly from AudioQuest since the original Dragonfly DAC first hit the streets back in 2012. That lone model eventually morphed into two models in 2016 – the entry-level DragonFly Black and the more up-scale DragonFly Red. Now, they are joined by the Cobalt; as the name suggests it is a vibrant blue USB converter, designed for a wealth of uses. This does not replace the existing models but sits above them in the hierarchy.

The DAC part of the DAC itself is the latest ESS ES9038Q2M (M for 'mobile') chip, fed by a Microchip PIC32MX274 USB receiver chip, with the company's monoClock ultra-low-jitter clock, StreamLength asynchronous USB (technology developed by one of the smartest cookies in the audio USB jar, Gordon Rankin), and also sports elements of AudioQuest's own jitter-busting Jitterbug, all in something that looks an elegant USB storage key. The two named chips result in a third more processing speed overall, meaning better sound from an ever-so-slightly smaller form factor. The filter is now 'slow-roll-off minimum phase' (previous iterations were fast roll-off only). There is no way to change this or any other function of the Dragonfly from the case; in fact, the only indication is the change in light of the Dragonfly on its top. Even volume is adjusted using the host computer, tablet, or smartphone.

Although it comes with a USB 3.0 'DragonTail' in the box, AudioQuest wanted maximum backwards compatibility, which means it works under USB 1.0 standards with ease. The advantage to this is 'no damn drivers' regardless of operating



"Armed with a Cobalt, a tablet, and a pair of noise-cancelling headphones, I can destroy the environment from 32,000ft for hours on end."

system and it means it works with practically everything that ever sported a USB output. The downside is, like the Red and Black before it, that 'hi-res' is limited to 24-bit, 96kHz PCM. It will support higher rate MQA files.

The Cobalt acquits itself very well. It is very probably the best of the powered-by-USB headphone DACs and gives some of the self/battery-powered DACs a run for the money. It doesn't make the existing Black or Red seem 'broken' by comparison, and it won't unseat the likes of the better-but-heavier Chord Mojo. The sound of the Cobalt is light, tight, lean, and fun.

It is exceptionally clean and detailed sounding, building heavily on the already clean and detailed Red. If the Black opened the window, and the Red cleaned the window, then the Cobalt builds a bigger window and brings industrial window-cleaning products to the window-cleaning party. There's also surprisingly good stereo presentation, with good depth and height when played through the right system, and very good image solidity. This comes through keenly when playing the live version of 'Anabasis' by Dead Can Dance, from the 2013 *In Concert* album [PIAS]. The roar of the crowd, the sound of the Hang drum, the vocals, and the whole orchestration is extremely well presented, both in terms of stereo staging and just the easy, unforced tonality.

You already know the downside here, and whether or not it's in the 'meh!' or 'dealbreaker' class largely comes down to your listening demands. If much of your music is streamed at MQA or 24/96 and below, or it's stored on your computer having been ripped from CD, the Cobalt is a shiny little wonder of a DAC; if you are looking for something to play all those DSD files you downloaded, your next DAC will not be insect-based. Personally, for on the go sounds, I'm generally travelling somewhere, and background noise and offline storage are more of an issue than absolutes in the audio numbers game. Ergo, the portability of the Cobalt make it a seat-back star.

In truth, I'm loving the AudioQuest DragonFly Cobalt and the way it revolutionises my travel plans. Armed with a Cobalt, a tablet, and a pair of noise-cancelling headphones,

Summary

Sonic Character: Neutral with slight emphasis toward brightness/clarity



(All ratings relative to comparably priced USB DAC/headphone amps.)

Resolution/Focus:



Dynamics/Expression:



Sound staging/Imaging:



Freedom of noise:



Features and versatility:



Value:



Pros

- Versatile headphone DAC for anything with a USB output
- Effortlessly neutral, but lithe sound
- Outstanding portability
- Stylish looks
- Light weight

Cons

- No PCM above 24/96 and no DSD replay options
- iDevices require an Apple Camera Connection kit or similar

I can destroy the environment from 32,000ft for hours on end, or I can be eco-chummy and take the train for a week or two. Either way I get to listen to my music and watch Netflix with effortless, unfatiguing sound. +

TECHNICAL SPECIFICATIONS

AudioQuest DragonFly Cobalt

Inputs: USB 1.0 female connector

DAC: ESS ES9038Q2M with minimum phase slow roll-off filter

Microcontroller: Microchip PIC32MX274

Headphone Amplifier chip: ESS Sabre 9601

Output Voltage: 2.1V

Sample rates supported (LED indicator colour codes):

Stand-by (Red), 44.1kHz (Green), 48kHz (Blue), 88.2kHz (Yellow), 96kHz (Light Blue), MQA (Purple)

Firmware Updatable

Supplied with: Pleather sleeve, USB-A male to USB-C female DragonTail

Dimensions (HxWxD): 12x19x57mm

Price: £269.95

MANUFACTURER INFORMATION

Manufactured by AudioQuest

URL: audioquest.com

Cleer FLOW noise cancelling Bluetooth wireless headphone

by Chris Martens



Friends and colleagues often approach me with inquiries like this: “I’m looking for noise cancelling Bluetooth headphones and have tried the Bose QuietComfort models (hasn’t everyone?), but are there other good models I ought to check out?”

In cases where headphone seekers say they care just as much about sound quality as about convenience and noise reduction I’ve got several good recommendations to offer and one of my favourites is the Cleer FLOW headphone (\$279 or £249). Another good option would be the just-released Cleer FLOW II, which is priced the same as the original FLOW (which continues in the product line). The FLOW II is now available in two colours – gunmetal and metallic silver – and provides a Google Assistant Voice Interface, but is otherwise almost identical to the original FLOW.

The FLOW is an attractive, satin black, closed back, noise cancelling, Bluetooth 4.2-capable wireless headphone that offers unusually good playing time with noise cancelling engaged (approximately 20 hours, which is excellent). The FLOW also can be driven directly from a 3.5mm audio mini-jack.

Inside, the FLOW uses a 40mm dynamic-type driver with Cleer’s patented ironless motor design, said to deliver, “bold and articulate playback via high-excursion with optimised control and exceptionally low distortion.” Honestly, the ‘Achilles heel’ for many noise-cancelling Bluetooth headphones is an element of sonic veiling that can make headphones sound as if you are hearing them through a wet pair of socks. Recognising this, Cleer has gone out of its way to give the FLOW greater measures of clarity and overall tonal neutrality than is typical for designs in its price range.

The FLOW is also admirably quiet owing to Cleer’s “hybrid noise cancellation technology and optimised passive isolation,” said to give listeners approximately 30dB of ambient noise suppression across a broad band of frequencies. For moments when one might need to hear what’s going on in

"One quickly forgets the FLOW is a Bluetooth headphone at all, which is as things should be."

the outside world, the FLOW features an Ambient Aware control switch, where the listener is offered three options for allowing ambient sound to pass through: Ambient Normal, Ambient Voice, or Conversation mode. I found the FLOW does an exemplary job of blocking out external sounds, yet does so with virtually no observable diminution of sound quality (something easier said than done).

Other controls include an on/off/pairing switch, a noise cancelling on/off switch, and touch controls on the outer surface of the left ear cup. Swiping up on the cup face increases volume (and vice versa), while sweeping a finger fore or aft provides previous or next track selections. Finally, tapping the left ear cup provides (depending on context) either play/pause or call answer/call end functions.

In day-to-day use the FLOW is a joy to use, partly because of its well thought-out ergonomics, which make the headphone all-day comfortable to wear, but also because of the fundamental simplicity of its user controls. But the best part of all is the sound. The FLOW offers very nearly neutral tonal balance with presence/treble region response that shows perhaps a subtle hint of downward shelving of response, but nothing too noticeable. The overall feel is one of balance and tonal 'completeness', with nothing exaggerated and nothing left out. There are also levels of clarity and articulation uncommon for wireless headphones.

As a result, one quickly forgets the FLOW is a Bluetooth headphone at all, which is as things should be. On 'Open Your Eyes, You Can Fly' from Gary Burton's *The New Quartet* [ECM, Tidal Hi-Fi], the ringing, almost chime-like quality of Burton's vibraphones is presented intact with full harmonic richness, while Abraham Laboriel's spectacularly energetic bass lines are presented with snarl, growl, and bite fully intact. The FLOW shows similar sonic excellence on the title track of Marilyn Mazur's *Flamingo Sky* [Stunt Records, Tidal Hi-Fi], capturing Mazur dynamically and texturally intricate percussion work and Krister Jonsson's penetrating and angular guitar lines with exemplary clarity and energy.

For those seeking a well-rounded and—most importantly—musically adept noise cancelling Bluetooth headphone, one priced comfortably below \$300/£300, Cleer's FLOW is a sure-fire, go-to recommendation. +

Summary

Voicing: Fundamentally neutral with very mild hint of upper midrange lift.



(All ratings relative to comparably priced noise cancelling Bluetooth wireless headphone.)

Resolution/Focus:



Sound staging/Imaging:



Dynamics/Expression:



Value:



Pros

- Good ergonomics, easy-to-understand controls
- A noise canceller that honours the music
- Clearer and more neutrally voiced than many competitors
- Long play time per battery charge
- Reasonably priced for the quality on offer. Good value for money

Cons

- Those wishing for even more sonic performance will find the next step up would be PSB's superb M4U8 headphone, priced at \$400
- What's not to like?

TECHNICAL SPECIFICATIONS

Type: Closed-back, dynamic driver-equipped, noise cancelling, Bluetooth wireless headphone.

Driver complement: 40mm Ironless™ dynamic driver.

Frequency response: 20Hz–40kHz (audio line in), 20Hz–20kHz (Bluetooth)

Connectivity: Analogue line in (3.5mm mini-jack), Bluetooth Bluetooth

Sensitivity: Not specified

Impedance: Not specified

Battery: 3.7V, 800mAh

Playback time, full charge: Up to 20 hours, with ANC and BT functions engaged

Weight: Not specified

Price: \$279 US, £249 UK

MANUFACTURER INFORMATION

Cleer, Inc.

+1 (888) 672-5337

URL: cleeraudio.com

hi-fi+

Next issue

We engage... The Borg!

FinkTeam is the brain-child of the design team headed up by the noted loudspeaker developer, Karl-Heinz Fink. The company's latest model is called the FinkTeam Borg. This high-end floorstander impressed all those who heard it at the Munich High-End Show this year, and we get to try out this new super-speaker. Resistance is futile. Prepare to be assimilated!



Plus:

Naim's Mu-so 2; amps from DartZeel, and Mark Levinson; loudspeakers from Audiovector, Bowers & Wilkins, and Wharfedale; vinyl from Technics and VPI... and more!

HI-FI+ ISSUE 176 ON SALE OCT 3 2019 (UK), OCT 31, 2019 (US)

Bring all your *music* to *life*

VEGA G1 STREAMING DAC

'The Vega G1 is a hard act to beat - put it with a decent server and it will deliver results that will revise your opinion of what can be done with digital audio.'

JASON KENNEDY, THE EAR

'Bloody hell ... this thing's good!'

ALAN SIRCOM, HIFI +



Built around the idea that true hifi should be accessible to everyone, **AURALiC** today enjoys a worldwide reputation for producing innovative digital and analogue components of the highest quality.

We build devices which further the exploration of digital streaming and discovery of new music. Combining progressive technologies that deliver on the promise of modern digital formats with premium analogue circuitry and hardware rooted in classic designs, **AURALiC** is always creating new ways to bring all your music to life.

For your nearest authorised dealer please visit auralic.com

AURALIC PRESS AWARDS



pure innovation.

'...one of the finest amplifiers I have ever heard, regardless of price.'
HiFi News - Ken Kessler



Audio Research's Reference Series demonstrates once again that it is worthy of the name. A reference is a benchmark by which others should be judged. The flagship models from ARC have always represented the state of the art in vacuum tube electronics, with the Reference 6 pre-amplifier continuing to serve as the control unit of choice for countless music lovers, reviewers and manufacturers who, indeed, demand a reference point for their listening.

Joining the existing Reference line-up is an all-new

design, heralding a major evolutionary step in the Series' development. With the 160M mono amplifier, powered by the jubilant KT150 tube, auto-bias has finally met all of ARC's demands, with the option to switch between Ultralinear and Triode modes. Now, the Reference amplifier owner can enjoy peerless operation without the need to monitor valve settings.

The look is captivating, with a glimpse inside the workings of one of the finest amplifiers ever created.

 **absolute sounds ltd.**

International Distributors & Consultants of Specialised Hi-End Audio & Video Systems

58 Durham Road, London, SW20 0TW T: +44 (0)20 89 71 39 09

W: www.absolutesounds.com E: info@absolutesounds.com

For Your Nearest Dealer Please Visit The [Absolute Sounds](http://www.absolutesounds.com) Website

audio research
HIGH DEFINITION®